FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	State Road (SR) 39, LaPorte County
Designation Number(s):	2100806
Project Description/Termini:	Small structure replacement involving structure number CV 039-046-169.10 located at the intersection of SR 39 and County Road (CR) 1400 South (S) over Marquadt Ditch, approximately 0.09 mile south of United States (US) 30. Project termini extend approximately 98 linear feet north, 145 linear feet south, and 102 feet east of the center of the structure.

X	**Categorical Exclusion, Level 2** – Required Signatories: INDOT DE and/or INDOT ESD
	Categorical Exclusion, Level 3 – Required Signatories: INDOT ESD
	Categorical Exclusion, Level 4 – Required Signatories: INDOT ESD and FHWA
	Environmental Assessment (EA) – Required Signatories: INDOT ESD and FHWA
	Additional Investigation (AI) – The proposed action included a design change from the original approved environmental document. Required Signatories must include the appropriate environmental approval authority

Approval

INDOT DE Signature and Date

INDOT ESD Signature and Date

FHWA Signature and Date

Release for Public Involvement

SFM 05/07/2025
INDOT DE Initials and Date

INDOT ESD Initials and Date

Certification of Public Involvement

INDOT Consultant Services Signature and Date

INDOT DE/ESD Reviewer Signature and Date:

Name and Organization of CE/EA Preparer: Jeegar Panchal, SJCA Inc.

Note: Refer to the most current INDOT CE Manual, guidance language, and other ESD resources for further guidance regarding any section of this form.

Part I – Public Involvement

Every Federal action requires some level of public involvement, providing for early and continuous opportunities throughout the project development process. **The level of public involvement should be commensurate with the proposed action.**

	Yes	No
Does the project have a historic bridge processed under the Historic Bridges PA*?		X
If No, then:		
Opportunity for a Public Hearing Required?	X	

**A public hearing is required for all historic bridges processed under the Historic Bridges Programmatic Agreement between INDOT, FHWA, SHPO, and the ACHP.*

Discuss what public involvement activities (legal notices, letters to affected property owners and residents (i.e. notice of entry), meetings, special purpose meetings, newspaper articles, etc.) have occurred for this project.

Notice of Survey letters were mailed to potentially affected property owners near the project area on June 9, 2023, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Survey letter is included in Appendix G1.

The project will meet the minimum requirements described in the current Indiana Department of Transportation (INDOT) *Project Development Public Involvement Procedures Manual* which requires the project sponsor to offer the public an opportunity to submit comments and/or request a public hearing. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement. This document will be revised after the public involvement requirements are fulfilled.

Public Controversy on Environmental Grounds

Discuss public controversy concerning community and/or natural resource impacts, including what is being done during the project to minimize impacts.

At this time, there is no substantial public controversy concerning impacts to the community or to natural resources.

Part II - General Project Identification, Description, and Design Information

Sponsor of the Project: INDOT INDOT District: LaPorte

Local Name of the Facility: SR 39 over Marquadt Ditch

Funding Source (*mark all that apply*): Federal [X] State [X] Local [ ] Other* [ ]

*If other is selected, please identify the funding source: _____

PURPOSE AND NEED:

The need should describe the specific transportation problem or deficiency that the project will address. The purpose should describe the goal or objective of the project. The solution to the traffic problem should NOT be discussed in this section.

Need:
The need for this project is due to the deteriorating conditions of the existing structure that carries drainage under CR 1400 S, parallel to the east side of SR 39. The structure number CV 039-046-169.10 is a state asset, located at the intersection of SR 39 and CR 1400 S, approximately 0.09 mile south of US 30. According to the October 16, 2024, Culvert Inspection Report by INDOT, the

existing structure exhibits signs of deterioration including perforation throughout the structure and has an overall condition rating of 4 (poor) out of 9 (excellent) (Appendix I2-I6). The condition rating scale provides a numerical value to the condition of culverts with 0 representing failed condition and 9 excellent condition.

Purpose:
The purpose of the project is to address the deterioration and to provide a structure that has an overall structural condition rating of at least 7 (good) out of 9.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: LaPorte Municipality: Hanna

Limits of Proposed Work: From approximately 130 feet north and 301 feet south of the center of the existing structure along SR 39.

Total Work Length: 0.08 Mile(s) Total Work Area: 0.9 Acre(s)

	Yes[1]	No
Is an Interstate Access Document (IAD)[1] required?		X
If yes, when did the FHWA provide a Determination of Engineering and Operational Acceptability?	Date:	

[1] *If an IAD is required; a copy of the approved CE/EA document must be submitted to the FHWA with a request for final approval of the IAD.*

Describe location of project including township, range, city, county, roads, etc. Existing conditions should include current conditions, current deficiencies, roadway description, surrounding features, etc. Preferred alternative should include the scope of work, anticipated impacts, and how the project will meet the Purpose and Need. Logical termini and independent utility also need discussed.

INDOT and the Federal Highway Administration (FHWA) intend to proceed with a small structure replacement project involving the existing structure along SR 39 under CR 1400 S.

Location
The project is located at the intersection of SR 39 and CR 1400 S, approximately 0.09 mile south of US 30 in Sections 10, 11, 14, & 15, Township 34-N, Range 3-W of Hanna Township in LaPorte County, Indiana. Project location maps and photos can be found in Appendix B1-B6.

Existing Conditions
CR 1400 S is a rural minor arterial roadway with a posted speed limit of 55 miles per hour (mph) and provides two 10-foot-wide travel lanes within the project area. Guardrails are present along the north and south side of CR 1400 S. SR 39 is a rural minor arterial roadway with a posted speed limit of 55 miles per hour (mph). Within the project area, SR 39 provides two 12-foot-wide travel lanes with two-foot-wide shoulders on each side. Guardrail is present along the east side of SR 39 within the project area. No sidewalks, curb ramps, or bicycle infrastructure are present within or adjacent to the project area.

The existing structure No. CV 039-046-169.10 is a 63-foot-long, corrugated metal pipe (CMP) that is 7.5 feet in diameter. The pipe runs parallel to the east side of SR 39 under CR 1400 S. According to October 16, 2024, Culvert Inspection Report by INDOT, the existing structure has an overall condition rating of 4 out of 9. The existing structure exhibits deterioration such as perforation throughout the pipe (Appendix I2-I6).

Land use in the vicinity of the project is primarily agricultural with residential properties to the west of the project area. The Marquadt Ditch is located within the project area. Vegetation within the project area is dominated by smooth brome (*Bromus inermis*), Canada goldenrod (*Solidago canadensis*), sumac (*Rhus glabra*), Siberian elm (*Ulmus pumila*), amur honeysuckle (*Lonicera maackii*), and white mulberry (*Morus alba*). The project area is located on level terrain in a rural area. Public utilities are present within and adjacent to the project area including overhead electrical lines and communication lines along the east side of the roadway.

Preferred Alternative
The preferred alternative for this project is to replace the existing structure. The proposed structure will be a 93-foot-long reinforced concrete box (RCB) culvert with a 15-foot span and a 9-foot rise. Class 1 riprap over geotextiles will be installed at both ends of the

new culvert. The guardrail along the east side of SR 39, south of CR 1400 S, will be replaced in-kind. The guardrail along the east side of SR 39, north of CR 1400 S will be removed and the area will be regraded so that guardrail is not required. The shoulder within the investigated area will be reconstructed. Ditch regrading will occur along SR 39 and CR 1400 S. Please see the project plans in Appendix B7-B19 for additional details.

Overhead electric and telecommunications lines will be relocated to the west side of SR 39 and the south side of CR 1400 S. Temporary interruptions are expected to occur during the relocation of these utilities and will likely require tree clearing. Approximately 0.15 acres of tree removal is anticipated surrounding the structure. The project will require a road closure with a detour utilizing S 300 West (W) and W 1400 S. Please refer to the Maintenance of Traffic (MOT) section of this document and the project plans (Appendix B11-B12) for additional information regarding the MOT plan. The current anticipated letting date is scheduled for July 2025.

Approximately 73 linear feet permanent and 14 linear feet of temporary impacts will occur to the Marquadt Ditch. Approximately 0.51 acres of terrestrial habitat impact is expected. Impacts on resources will be minimized to the extent necessary to complete the project. This project will require 0.4 acres of new permanent, 0.182 acres of temporary, and 0.182 acres of re-acquired right-of-way (ROW) from adjacent agricultural properties. No relocation of businesses or residents will be required for this project. This alternative meets the purpose and need by addressing the current deterioration and providing a structure where all elements have a condition rating of 7 out of 9 or higher.

Logical Termini/Independent Utility
Project termini will extend approximately 98 feet north, 145 feet south, and 102 feet east of the center of the existing structure along SR 39. These termini allow for the replacement of the structure, ditch regrading, and guardrail replacement. The project does not rely on any other projects for completion. Therefore, this project has logical termini and independent utility.

OTHER ALTERNATIVES CONSIDERED:

Provide a header for each alternative. Describe all discarded alternatives, including the No Build Alternative. Explain why each discarded alternative was not selected. Make sure to state how each alternative meets or does not meet the Purpose and Need and why.

No Build Alternative
The No Build alternative was considered and would not require the use of any funds or impact any environmental, social, or cultural resources. However, this alternative does not address the deterioration present on the existing structure and would not provide a structure where all elements have a condition rating of 7 out of 9 or higher. Therefore, this alternative was removed from consideration as the purpose and need would not be met.

High-Density Polyethylene (HDPE) Liner
This alternative involves installing an HDPE liner with a 9.39-foot span by 6.61-foot rise within the existing structure. A beveled headwall and 2.5-foot bored pipe would be installed at both ends of the existing structure. This alternative would address the purpose and need of the project to improve the overall condition rating of the structure to at least 7 out of 9, but this alternative would result in a higher cost, an increase in impacts to the surrounding terrestrial habitat due to excavation, and increased maintenance due to the additional headwall. Therefore, it was discarded for further consideration.

Smooth Steel Liner
This alternative involves installing a steel liner within the existing structure with a 11.21-foot span by 7.17-foot rise. This alternative would address the purpose and need of the project to improve the overall condition rating of the structure to at least 7 out of 9, but this alternative would result in a higher cost, an increase in impacts to the surrounding terrestrial habitat due to excavation, and increased maintenance due to the additional headwall. Therefore, it was discarded for further consideration.

Three-sided Flat Top Structure Replacement
This alternative involves replacing the existing structure with a three-sided flat top structure with a 15-foot span. This alternative would address the purpose and need to improve the overall rating of the structure to at least a 7 out of 9, but this alternative would result in a higher cost, an increase in impacts to the surrounding terrestrial habitat due to excavation, and would likely require a road closure and detour for a longer period. The lengthier road closure and detour would cause a greater temporary impact to the traveling public. Therefore, it was discarded for further consideration.

Reinforced Concrete Arch Replacement
This alternative involves replacing the existing structure with a reinforced concrete arch with a 16-foot span. This alternative would address the purpose and need to improve the overall rating of the structure to at least a 7 out of 9, but this alternative would result in a higher cost, an increase in impacts on the surrounding terrestrial habitat due to excavation, and would likely require a road closure and detour for longer period. The lengthier road closure and detour would cause a greater temporary impact to the traveling public.

Therefore, it was discarded for further consideration.

The No Build Alternative is not feasible, prudent or practicable because (*Mark all that apply*):

It would not correct existing capacity deficiencies;	
It would not correct existing safety hazards;	
It would not correct the existing roadway geometric deficiencies;	
It would not correct existing deteriorated conditions and maintenance problems; or	X
It would result in serious impacts to the motoring public and general welfare of the economy.	
Other (Describe):	

ROADWAY CHARACTER:

If the proposed action includes multiple roadways, complete and duplicate for each roadway.

Name of Roadway: SR 39
Functional Classification: Rural Minor Arterial
Current ADT: 3161 VPD (2026) Design Year ADT: 3861 VPD (2046)
Design Hour Volume (DHV): 371 Truck Percentage (%): 3.63
Designed Speed (mph): 55 Legal Speed (mph): 55

Name of Roadway: CR 1400 S
Functional Classification: Rural Minor Collector
Current ADT: 1111 VPD (2026) Design Year ADT: 1312 VPD (2046)
Design Hour Volume (DHV): 132 Truck Percentage (%): 20
Designed Speed (mph): 50 Legal Speed (mph): 50

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	Asphalt Through Lane		Asphalt Through Lane	
Pavement Width:	24	ft.	24	ft.
Shoulder Width:	4	ft.	4	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

Setting:		Urban		Suburban	X	Rural
Topography:	X	Level		Rolling		Hilly

BRIDGES AND/OR SMALL STRUCTURE(S):

If the proposed action includes multiple structures, complete and duplicate for each bridge and/or small structure. Include both existing and proposed bridge(s) and/or small structure(s) in this section.

Structure/NBI Number(s): CV 039-046-169.10 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	CMP		RCB	
Number of Spans:	N/A		N/A	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	N/A	ft.
Shoulder Width:	N/A	ft.	N/A	ft.

Describe impacts and work involving bridge(s), culvert(s), pipe(s), and small structure(s). Provide details for small structure(s): structure number, type, size (length and dia.), location and impacts to water. Use a table if the number of small structures becomes large. If the table exceeds a complete page, put it in the appendix and summarize the information below with a citation to the table.

The project involves the replacement of the existing 7.5-foot-diameter, 69-foot-long CMP culvert (CV 039-046-169.10). The existing structure exhibits deterioration such as perforation throughout the pipe. According to October 16, 2024, Culvert Inspection Report by INDOT, the existing structure has an overall condition rating of 4 out of 9 (Appendix I2-I6). The Marquadt Ditch flows through the structure within the project area. The project involves replacing the existing CMP with a 93-foot-long, 15-foot span, and a 9-foot rise RCB. Class 1 riprap over geotextiles will be installed at both ends of the new culvert. The sump pump will be installed for the dewatering system during construction. Approximately 73 linear feet of permanent and 14 linear feet of temporary impacts will occur to the Marquadt Ditch. The guardrail along the east side of SR 39, south of CR 1400 S, will be replaced in-kind. The guardrail along the east side of SR 39, north of CR 1400 S will be removed and the area will be regraded so guardrail is not required. The shoulder within the investigated area will be reconstructed. Ditch regrading will occur along SR 39 and CR 1400 S. No other small structures or bridges are involved in this project.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

	Yes	No
Is a temporary bridge proposed?		X
Is a temporary roadway proposed?		X
Will the project involve the use of a detour or require a ramp closure? (describe below)	X	
Provisions will be made for access by local traffic and so posted.	X	
Provisions will be made for through-traffic dependent businesses.	X	
Provisions will be made to accommodate any local special events or festivals.	X	
Will the proposed MOT substantially change the environmental consequences of the action?		X
Is there substantial controversy associated with the proposed method for MOT?		X
Will the project require a sidewalk, curb ramp, and/or bicycle lane closure? (describe below)		X
Provisions will be made for access by pedestrians and/or bicyclist and so posted (describe below).		X

Discuss closures, detours, and/or facilities (if any) that will be provided for maintenance of traffic. Any known impacts from these temporary measures should be quantified to the extent possible, particularly with respect to properties such as Section 4(f) resources and wetlands. Discuss any pedestrian/bicycle closures. Any local concerns about access and traffic flow should be detailed as well.

The MOT plan for the project will require a road closure at SR 39 and CR 1400 s during construction. Traffic will be redirected along a detour route utilizing S 300 W, W 1400 S, W SR 18, US 35, and SR 39. The detour will add approximately 8.75 miles or 14 minutes of additional travel. Access to all residences in the vicinity of the project area will be maintained. The road closure is anticipated to be in place for six months. Refer to the MOT plan in Appendix B11-B12.

The closures/lane restrictions will pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no significant delays are anticipated, and all inconveniences and delays will cease upon project completion.

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: $ 42,000 (2025) Right-of-Way: $ 80,000 (2025) Construction: $ 961,225 (2026)

Anticipated Start Date of Construction: Fall 2026

RIGHT OF WAY:

	Amount (acres)	
Land Use Impacts	Permanent	Temporary
Residential		
Commercial		
Agricultural	0.4	0.182
Forest		
Wetlands		
Other:		
TOTAL	0.4	0.182

Describe both Permanent and Temporary right-of-way and describe their current use. Typical and Maximum right-of-way widths (existing and proposed) should also be discussed. Any advance acquisition, reacquisition or easements, either known or suspected, and their impacts on the environmental analysis should be discussed.

The existing typical and maximum ROW extends approximately 28 feet east and west of the centerline of the roadway of SR 39, and approximately 22 feet north and south of the centerline of CR 1400 S.

The project requires approximately 0.4 acres of new permanent and 0.182 acres of temporary ROW from adjacent agricultural properties. There will also be 0.182 acres of re-acquired ROW. The proposed permanent ROW boundaries will extend from 28 feet to 130 feet east of the centerline of SR 39. The proposed temporary ROW boundaries will extend 85 feet north and 135 feet south of the centerline of CR 1400 S. The permanent ROW is required for construction access, riprap placement, equipment staging, and ditch regrading. The temporary ROW is required for the dewatering system during construction. Existing and proposed ROW limits can be found in the plans in Appendix B13-B14.

If the scope of work or permanent or temporary ROW amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately.

Part III – Identification and Evaluation of Impacts of the Proposed Action

ECTION A - EARLY COORDINATION:

List the date(s) coordination was sent and all resource agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received.

Early coordination letters were sent on August 31, 2024. A sample early coordination letter is available in Appendix C1-C2.

Agency	Date Sent / Accessed	Response Date	Appendix
Indiana Geological & Water Survey (IGWS)	August 31, 2024	Automated Response	C3-C4
LaPorte County Surveyor	August 31, 2024	September 3, 2024	C5
LaPorte County Community School Corporation	August 31, 2024	September 3, 2024	C6

Natural Resources Conservation Service (NRCS)	August 31, 2024	September 12, 2024 October 17, 2024	C7-C9
Indiana Department of Natural Resources-Division of Fish and Wildlife (IDNR-DFW)	August 31, 2024	October 3, 2024	C10-C13
FHWA	August 31, 2024	No Response	N/A
Regional Environmental Coordinator Midwest Regional Office	August 31, 2024	No Response	N/A
U.S. Department of Housing and Urban Development (US HUD)	August 31, 2024	No Response	N/A
U.S. Army Corps of Engineers (USACE)	August 31, 2024	No Response	N/A
INDOT LaPorte District Environmental	August 31, 2024	September 4, 2024	N/A
INDOT Project Manager	August 31, 2024	No Response	N/A
Kankakee River Basin and Yellow River Basin Development Commission	August 31, 2024	No Response	N/A
LaPorte County Commissioner	August 31, 2024	No Response	N/A
LaPorte County Council	August 31, 2024	No Response	N/A
LaPorte County Highway Department	August 31, 2024	No Response	N/A
LaPorte County Emergency Management	August 31, 2024	No Response	N/A
LaPorte County Soil & Water Conservation	August 31, 2024	No Response	N/A
LaPorte County Sheriff	August 31, 2024	No Response	N/A
Northwestern Indiana Regional Planning Commission (NIRPC), Executive Director	August 31, 2024	No Response	N/A
Hanna Sand & Gravel	August 31, 2024	No Response	N/A

All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

SECTION B – ECOLOGICAL RESOURCES:

	Presence	Impacts	
		Yes	No
Streams, Rivers, Watercourses & Other Jurisdictional Features	X	X	
Federal Wild and Scenic Rivers			
State Natural, Scenic or Recreational Rivers			
Nationwide Rivers Inventory (NRI) listed			
Outstanding Rivers List for Indiana			
Navigable Waterways			

Total stream(s) in project area: 242 Linear feet Total impacted stream(s): 73 Linear feet

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)
Marquadt Ditch	Perennial	242	73	North to south flow direction. Likely jurisdictional under the USACE (Appendix F1-F39).

Describe all streams, rivers, watercourses and other jurisdictional features adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if the streams or rivers are listed on any federal or state lists for Indiana. Include if features are likely subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map of the project area (Appendix B3), and the Red Flag Investigation (RFI) report (Appendix E1-E10), there is one stream, river, watercourse, or other jurisdictional feature within the 0.5-mile search radius. There is one stream, river, watercourse, or other jurisdictional feature within or adjacent to the project area. That number was confirmed by the site visit on June 21, 2024, by SJCA Inc. No Federal Wild and Scenic Rivers; State Natural, Scenic, and Recreational Rivers; Outstanding Rivers for Indiana; navigable waterways or National Rivers Inventory waterways were identified within or adjacent to the project area during desktop review.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by the INDOT Ecology and Waterway Permitting and Stormwater Office (EWPSO) on September 11, 2024. Please refer to Appendix F1-F39 for the *Waters of the U.S. Determination / Wetland Delineation Report.* It was determined that one stream, Marquadt Ditch, is present within the project area (Appendix F-16). Marquadt Ditch flows from north to south through the project structure and is a perennial stream. The stream has no sinuosity within the investigated area and does contain riffles/pools complexes. The quality of the stream is rated as average due to the high in-stream coverage, moderate bank coverage, moderately eroded banks, and no sinuosity. The Ordinary High Water Mark (OHWM) is 16 feet wide and one foot deep. Marquadt Ditch flows into the Kankakee River. The Kankakee River is listed as a traditionally navigable waterway. Due to the perennial flow conditions, presence of an OHWM, and connectivity to a traditionally navigable waterway, it was determined that the Marquadt Ditch is likely jurisdictional under the authority of the USACE and is therefore a water of the U.S. The USACE makes all final determinations regarding jurisdiction.

Approximately 73 linear feet permanent and 14 linear feet of temporary impacts to Marquadt Ditch are anticipated due to structure replacement. These impacts are unavoidable, as avoidance would not address the purpose and need. The stream impacts have been minimized as much as necessary to complete the project.

The IDNR-DFW responded on October 3, 2024, with recommendations to avoid or minimize impacts to waterways within the project area. Recommendations included implementing all necessary measures to control erosion and construction debris from entering the stream, preferred structure type, riprap usage and placement, revegetating disturbed stream banks, minimizing in-channel disturbance, not working in the waterway from April 1 through September 30, and minimizing the movement of resuspended bottom sediment, and protecting all disturbed streambanks for the duration of construction (Appendix C10-C13). All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

Open Water Feature(s)	**Presence**	**Impacts**	
		Yes	**No**
Reservoirs			
Lakes			
Farm Ponds			
Retention/Detention Basin			
Storm Water Management Facilities			
Other: _____			

Describe all open water feature(s) identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are likely subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map of the project area (Appendix B3), and the RFI report (Appendix E1-E10), there are three open water features within the 0.5-mile search radius. There are no open water features located within or adjacent to the project area, which was confirmed by the site visit on June 21, 2024, by SJCA Inc. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by the INDOT EWPSO on September 11, 2024. Please refer to Appendix F1-F39 for the *Waters of the U.S. Determination / Wetland Delineation Report.* It was determined that no open water features are present within the project area. The USACE makes all final determinations regarding jurisdiction.

All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

	Presence	Impacts Yes	Impacts No
Wetlands			

Total wetland area: 0.0 Acre(s) Total wetland area impacted: 0.0 Acre(s)

(If a determination has not been made for non-isolated/isolated wetlands, fill in the total wetland area impacted above.)

Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments (i.e. location, likely Water of the US, appendix reference)
N/A				

Wetlands (*Mark all that apply*)	Documentation	ESD Approval Dates
Wetland Determination	X	**September 11, 2024**
Wetland Delineation		
USACE Isolated Waters Determination		

Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in (Mark all that apply and explain):

Substantial adverse impacts to adjacent homes, business or other improved properties;	
Substantially increased project costs;	
Unique engineering, traffic, maintenance, or safety problems;	
Substantial adverse social, economic, or environmental impacts, or	
The project not meeting the identified needs.	

Describe all wetlands identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are likely subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map of the project area (Appendix B3), and the RFI report (Appendix E1-E10), there are nine wetlands within the 0.5-mile search radius. There are no wetlands located within or adjacent to the project area, which was confirmed by the site visit on June 21, 2024, by SJCA Inc. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by the INDOT EWPSO on September 11, 2024. Please refer to Appendix F1-F39 for the *Waters of the U.S. Determination / Wetland Delineation Report.* It was determined that no wetlands are present within the project area. The USACE makes all final determinations regarding jurisdiction.

All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

	Presence	Impacts Yes	Impacts NO
Terrestrial Habitat	X	X	

Total terrestrial habitat in project area: 0.51 Acre(s) Total tree clearing: 0.15 Acre(s)

Describe types of terrestrial habitat (i.e. forested, grassland, farmland, lawn, etc) adjacent or within the project area. Include whether or not impacts will occur to habitat identified. Include total terrestrial habitat impacted and total tree clearing that will occur. Discuss measure to avoid, minimize, and mitigate if impacts will occur.

Based on a desktop review, a site visit on June 21, 2024, by SJCA Inc., and the aerial map of the project area (Appendix B3), the project area is bordered by roadside ROW, a forested riparian area, and agricultural fields. Vegetation along most of the roadside ROW is typical of maintained lawns. Vegetation within the project area is dominated by smooth brome (*Bromus inermis*), Canada goldenrod (*Solidago canadensis*), smooth sumac (*Rhus glabra*), Siberian elm (*Ulmus pumila*), amur honeysuckle (*Lonicera maackii*), and white mulberry (*Morus alba*).

Approximately 0.15 acres of tree removal is anticipated within the project area. The project will follow seasonal tree clearing restrictions (no clearing April 1 to September 30) to avoid direct effects to roosting bats. Mitigation is not anticipated to be required. Approximately 0.51 acres of terrestrial habitat is anticipated to be disturbed for the replacement of the existing structure and gaining access to the stream. These impacts are unavoidable, and avoidance would not allow the project to proceed. Impacts to terrestrial habitat have been minimized as much as necessary for the project to proceed.

The IDNR-DFW responded on October 3, 2024, with recommendations to construct a structure favorable for wildlife passage, to revegetate all disturbed areas as soon as possible upon completion of construction with plants native to central Indiana, to replace non-wetland trees, to minimize and contain all tree and brush clearing to be within the project limits, to use appropriately designed measures to control erosion and prevent sediment from leaving the construction site, and to not cut any trees suitable for Indiana Bat or Northern Long-Eared Bat roosting between April 1 and September 30 (Appendix C10-C13). All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

Protected Species

Federally Listed Bats	**Yes**	**No**
Information for Planning and Consultation (IPaC) determination key completed	X	
Section 7 informal consultation completed (IPaC cannot be completed)		X
Section 7 formal consultation Biological Assessment (BA) required		X

Determination Received for Listed Bats from USFWS: NE [ ] NLAA [X] LAA [ ]

Other Species not included in IPaC	**Yes**	**No**
Additional federal species found in project area (based on IPaC species list)	X	
State species (not bird) found in project area (based upon consultation with IDNR)	X	

Migratory Birds	**Yes**	**No**
Known usage or presence of birds (i.e. nests)		X
State bird species based upon coordination with IDNR		X

Discuss IDNR coordination and species identified. Describe USFWS Section 7 consultation and determination received for Indiana bat and northern long-eared bat impacts. Discuss if other federally listed species were identified. If so, include consultation that has occurred and the determination that was received. Discuss if migratory birds have been observed and any impacts.

Based on a desktop review and the RFI report (Appendix E1-E10), completed by SJCA Inc. on July 16, 2024, the IDNR LaPorte County Endangered, Threatened, and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response dated October 3, 2024 (Appendix C10-C13), the Natural Heritage Program's Database has been checked and total 33 species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity. IDNR recommended confining the project area as much as possible to avoid impacts to threatened and endangered species. No significant impacts are anticipated to the Upland Sandpiper or Shorebird Migratory Concentration Area due to this project. An INDOT 0.5-mile bat review occurred on April 22, 2024, and did not indicate the presence of endangered bat species within 0.5 mile of the project area.

Indiana Bat and Northern Long-Eared Bat

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C14-C28). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (NLEB) (*Myotis septentrionalis*). Other species were generated in the IPaC species list along with the Indiana bat and NLEB. Refer to the paragraph below.

The USFWS official species list generated from IPaC also identified five other species as potentially occurring in the project area (Appendix C14-C28). The project is in the range of the monarch butterfly (*Danaus plexippus*), tricolored bat (*Perimyotis subflavus*), western regal fritillary (*Argynnis idalia occidentalis*) and the salamander mussel (*Simpsonaias ambigua*), which are proposed endangered species. The project is in the range of whooping crane (Grus americana), which is a non-essential experimental population. No protected critical habitat has been proposed for the tricolored bat; therefore, no further action is required. The project area does not overlap with the proposed critical habitat for the salamander mussel or the monarch butterfly and the western regal fritillary has no designated critical habitat. The project is in the range of a "non-essential experimental population" of the whooping crane (*Grus americana*), but this population is not afforded protection under the Endangered Species Act. Therefore, no further coordination is required for these species.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. A structure inspection occurred on June 21, 2024, by SJCA Inc, and no bats or evidence of bats were observed in the structure (Appendix C43). An effect determination key was completed on October 16, 2024, and based on the responses provided, the project was found to "May Affect – Not Likely to Adversely Affect" the Indiana bat and/or the NLEB (Appendix C29-C42). INDOT reviewed and verified the effect finding on October 16, 2024, and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Minimization Measures (AMMs) were provided regarding tree removal restrictions and ensuring all operators, employees, and contractors are aware of all environmental commitments. AMMs and/or commitments are included as firm commitments in the *Environmental Commitments* section of this document.

USFWS Bridge/Structure Assessment are only valid for two years. If construction begins after June 21, 2026, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. This firm commitment is included in the *Environmental Commitments* of this document.

Migratory Birds
Structure No. CV 039-046-169.10 and the project's surrounding habitat is conducive for use (i.e., nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the Recurring Special Provision (RSP) "107-C-273 Migratory Bird Protection"

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act, as amended. If new information on endangered species at the site becomes available, or if project plans are changed, USFWS will be contacted for consultation.

Geological and Mineral Resources	**Yes**	**No**
Project located within the Indiana Karst Region		X
Karst features identified within or adjacent to the project area		X
Oil/gas or exploration/abandoned wells identified in the project area		X

Date Karst Evaluation reviewed by INDOT EWPO (if applicable): N/A

Discuss if project is located in the Indiana Karst Region and if any karst features have been identified in the project area (from RFI). Discuss response received from IGWS coordination. Discuss if any mines, oil/gas, or exploration/abandoned wells were identified and if impacts will occur. Include discussion of karst study/report was completed and results. (Karst investigation must comply with the current Protection of Karst Features during Planning and Construction guidance and coordinated and reviewed by INDOT EWPO)

Based on a desktop review and the Indiana Karst Region map, the project is located outside the designated Indiana Karst Region as outlined in the most current *Protection of Karst Features during Project Development and Construction*. According to the U.S Geological Survey (USGS) topographic map of the project area (Appendix B2), and the RFI report (Appendix E1-E10), there are no karst features identified within or adjacent to the project area. In the early coordination response on August 31, 2024, the IGWS did not indicate that karst features exist in the project area (Appendix C3-C4). The IGWS response noted a high liquefaction potential,

1% annual chance of flood hazard, high potential for sand and gravel resources, and active industrial minerals site within 0.5 mile of the project area. Impacts to bedrock, sand and gravel, and other mineral resources are not expected since no mineral resource facilities are located within or adjacent to the project area. The response from IGWS has been communicated to the designer on August 31, 2024. No impacts are expected.

SECTION C – OTHER RESOURCES

	Presence	Impacts	
Drinking Water Resources		Yes	No
Wellhead Protection Area(s)			
Source Water Protection Area(s)			
Water Well(s)			
Urbanized Area Boundary			
Public Water System(s)			

	Yes	No
Is the project located in the St. Joseph Sole Source Aquifer (SSA):		X
If Yes, is the FHWA/EPA SSA MOU Applicable?		
If Yes, is a Groundwater Assessment Required?		

Check the appropriate boxes and discuss each topic below. Provide details about impacts and summarize resource-specific coordination responses and any mitigation commitments. Reference responses in the Appendix.

Sole Source Aquifer
The project is located in LaPorte County, which is not located within the area of the St. Joseph Sole Source Aquifer, the only legally designated sole source aquifer in the state of Indiana. Therefore, the FHWA/Environmental Protection Agency (EPA)/INDOT Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project, a detailed groundwater assessment is not needed, and no impacts are expected.

Wellhead Protection Area and Source Water Area
The IDEM Wellhead Proximity Determinator website (https://www.in.gov/idem/cleanwater/pages/wellhead/) was accessed on August 31, 2024, by SJCA Inc. This project is not located within a Wellhead Protection Area or Source Water Area. No impacts are expected.

Water Wells
The Indiana Department of Natural Resources Water Well Record Database website (https://www.in.gov/dnr/water/3595.htm) was accessed on January 25, 2025, by SCJA Inc. No wells are located near this project. Therefore, no impacts are expected.

Urban Area Boundary
Based on a desktop review of the urban areas mapped on the IDEM Municipal Separate Storm Sewer Systems (MS4) Map (https://www.in.gov/idem/cleanwater/ms4s-boundaries-map-for-indiana) by SJCA Inc. on March 5, 2024, this project is not located in an Urban Area Boundary. No impacts are expected.

Public Water System
Based on a desktop review, a site visit on June 21, 2024, by SJCA Inc., the aerial map of the project area (Appendix B3), and the project plans (Appendix B7-B19), this project is not located within public water system. Therefore, no impacts are expected.

	Presence	Impacts	
Floodplains		Yes	No
Project located within a regulated floodplain			
Longitudinal encroachment			
Transverse encroachment			
Homes located in floodplain within 1000’ up/downstream from project			

If applicable, indicate the Floodplain Level?

Level 1 ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Level 5 ☐

Use the IDNR Floodway Information Portal to help determine potential impacts. Include floodplain map in appendix. Discuss impacts according to the classification system. If encroachment on a flood plain will occur, coordinate with the Local Flood Plain Administrator during design to insure consistency with the local flood plain planning.

Based on a review of the IDNR Indiana Floodway Information Portal website (https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e) by SJCA Inc. on September 11, 2024, this project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F9). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

	Presence	Impacts	
Farmland		**Yes**	**No**
Agricultural Lands	X	X	
Prime Farmland (per NRCS)	X	X	

Total Points (from Section VII of CPA-106/AD-1006*) **147**

**If 160 or greater, see CE Manual for guidance.*

Discuss existing farmland resources in the project area, impacts that will occur to farmland, and mitigation and minimization measures considered.

Based on a desktop review, a site visit on June 21, 2024, by SJCA Inc. and the aerial map of the project area (Appendix B3), the project will convert farmland as defined by the Farmland Protection Policy Act. An early coordination letter was sent on August 31, 2024, to NRCS. Coordination with NRCS resulted in a score of 147 on the NRCS-AD-1006 Form (Appendix C7-C9). NRCS's threshold score for significant impacts to farmland that result in the consideration of alternatives is 160. Since this project score is less than the threshold, no significant loss of prime, unique, statewide, or local important farmland will result from this project. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

SECTION D – CULTURAL RESOURCES

	Category(ies) and Type(s)	INDOT Approval Date(s)	N/A
Minor Projects PA	**A-4, A-6, and B-9**	**December 20, 2024**	

Full 106 Effect Finding

No Historic Properties Affected ☐ No Adverse Effect ☐ Adverse Effect ☐

Eligible and/or Listed Resources Present

NRHP Building/Site/District(s) ☐ Archaeology ☐ NRHP Bridge(s) ☐

Documentation Prepared (mark all that apply)		**ESD Approval Date(s)**	**SHPO Approval Date(s)**
APE, Eligibility and Effect Determination			
800.11 Documentation			
Historic Properties Report or Short Report			
Archaeological Records Check and Assessment			
Archaeological Phase Ia Survey Report	X	12/20/2024	N/A
Archaeological Phase Ic Survey Report			
Other:			

		MOA Signature Dates (List all signatories)
Memorandum of Agreement (MOA)		

If the project falls under the MPPA, describe the category(ies) that the project falls under and any approval dates. If the project requires full Section 106, use the headings provided. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of the paper(s) and the comment period deadline. Include any further Section 106 work which must be completed at a later date, such as mitigation from a MOA or avoidance commitments.

On December 20, 2024, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 9 under the Minor Projects Programmatic Agreement (MPPA) (Appendix D1-D5). A Qualified Professional (QP) who meets the Secretary of the Interior's Standards determined that this project also falls within the guidelines of Category A, Types 4 and 6 (Appendix D6-D7). Category A-4 involves roadway work associated with surface replacement, reconstruction, rehabilitation, or resurfacing, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking within previously disturbed soils. Category A-6 includes the repair, replacement, or upgrade of safety appurtenances such as guardrails, barriers, and crash attenuators in previously disturbed soils. Category B-9 project involves the installation, replacement, repair, lining, or extension of culverts and other drainage structures. The project will not occur adjacent to or within a National Register-listed or eligible district or individual above-ground resource, and the existing structure exhibits no wood, stone, or brick structures that might suggest historical significance. However, project activities will occur within undisturbed soil; therefore, an archaeological investigation was completed by SJCA Inc. The Phase Ia archaeological survey determined that there were no archaeological sites in the vicinity of the project, and no further investigation was recommended. No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.

SECTION E – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES

	Presence	**Use**	
Parks and Other Recreational Land		**Yes**	**No**
Publicly owned park			
Publicly owned recreation area			
Other (school, state/national forest, bikeway, etc.)			
Wildlife and Waterfowl Refuges			
National Wildlife Refuge			
National Natural Landmark			
State Wildlife Area			
State Nature Preserve			
Historic Properties			
Site eligible and/or listed on the NRHP			

	Evaluations Prepared
Programmatic Section 4(f)	
"De minimis" Impact	
Individual Section 4(f)	
Any exception included in 23 CFR 774.13	

Discuss Programmatic Section 4(f) and "de minimis" Section 4(f) impacts in the discussion below. Individual Section 4(f) documentation must be included in the appendix and summarized below. Discuss proposed alternatives that satisfy the requirements of Section 4(f). FHWA has identified various exceptions to the requirement for Section 4(f) approval. Refer to 23 CFR § 774.13 - Exceptions.

Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible and prudent alternative. The law applies to significant publicly owned parks, recreation areas, wildlife / waterfowl refuges, and National Register of Historic Places (NRHP) eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.

Based on a desktop review, the aerial map of the project area (Appendix B3), and the RFI report (Appendix E1-E10), there are no potential 4(f) resources located within the 0.5-mile search radius. According to additional research and by the site visit on June 21, 2024, by SJCA Inc., there are no Section 4(f) resources within or adjacent to the project area. Therefore, no use is expected.

Section 6(f) Involvement	Presence	Use	
		Yes	No
Section 6(f) Property			

Discuss Section 6(f) resources present or not present. Discuss if any conversion would occur as a result of this project. If conversion will occur, discuss the conversion approval.

The U.S. Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits conversion of lands purchased with LWCF monies to a non-recreation use.

A review of 6(f) properties on the INDOT ESD website (https://www.in.gov/indot/engineering/environmental-services/environmental-policy/) revealed a total of eleven properties in LaPorte County (Appendix I1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

SECTION F – Air Quality

STIP/TIP and Conformity Status of the Project	Yes	No
Is the project in the most current STIP/TIP?	X	
Is the project located in an MPO Area?	X	
Is the project in an air quality non-attainment or maintenance area?	X	
If Yes, then:		
Is the project in the most current MPO TIP?	X	
Is the project exempt from conformity?	X	
If No, then:		
Is the project in the Transportation Plan (TP)?		
Is a hot spot analysis required (CO/PM)?		

Location in STIP: MPO Amendment 31 (11/07/2024) p. 22

Name of MPO (if applicable): Northwestern Indiana Regional Planning Commission (NIRPC)

Location in TIP (if applicable): 2024-2028 Northwestern MPO (NIRPC), page 22

Level of MSAT Analysis required?

Level 1a [X] Level 1b [ ] Level 2 [ ] Level 3 [ ] Level 4 [ ] Level 5 [ ]

Describe if the project is listed in the STIP and if it is in a TIP. Describe the attainment status of the county(ies) where the project is

located. Indicate whether the project is exempt from a conformity determination. If the project is not exempt, include information about the TP and TIP. Describe if a hot spot analysis is required and the MSAT Level.

This project is included in the Fiscal Year (FY) 2024-2028 NIRPC Transportation Improvement Program (TIP) which was incorporated into the FY 2024-2028 STIP by reference through INDOT's MPO (Metropolitan Planning Organization) Amendment 31 (11/07/2024) (Appendix H1-H5).

This project is located in LaPorte County, which is currently a maintenance area for Ozone, under the 1997 Ozone 8-hour standard which was revoked in 2015 but is being evaluated for conformity due to the February 16, 2018, *South Coast Air Quality Management District V. Environmental Protection Agency, Et. Al. Decision*. The project's design concept and scope are accurately reflected in both the NIRPC TP and the TIP and both conform to the State Implementation Plan (SIP). Therefore, the conformity requirements of 40 CFR 93 have been met.

This project is of a type qualifying as a categorical exclusion (Group 1) under 23 CFR 771.117(c) or exempt under the Clean Air Act conformity rule under 40 CFR 93.126, and as such, a Mobile Source Air Toxics analysis is not required.

SECTION G - NOISE

Noise	**Yes**	**No**
Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?		X

Date Noise Analysis was approved/technically sufficient by INDOT ESD: N/A

Describe if the project is a Type I or Type III project. If it is a Type I project, describe the studies completed to date and if noise impacts were identified. If noise impacts were identified, describe if abatement is feasible and reasonable and include a statement of likelihood.

This project is a Type III project. In accordance with 23 CFR 772 and the current *Indiana Department of Transportation Traffic Noise Analysis Procedure,* this action does not require a formal noise analysis.

SECTION H – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors	**Yes**	**No**
Will the proposed action comply with the local/regional development patterns for the area?	X	
Will the proposed action result in substantial impacts to community cohesion?		X
Will the proposed action result in substantial impacts to local tax base or property values?		X
Will construction activities impact community events (festivals, fairs, etc.)?		X
Does the community have an approved transition plan?	X	
If No, are steps being made to advance the community's transition plan?		
Does the project comply with the transition plan? (explain in the discussion below)	X	

Discuss how the project complies with the area's local/regional development patterns; whether the project will impact community cohesion; and impact community events. Discuss how the project conforms with the ADA Transition Plan.

This project will not result in induced changes in the pattern of land use, the population density, or the growth rate of the area. It will not have a substantial impact on community cohesion, local tax bases, or property values. Minor decreases in property value may occurs for properties that will require ROW acquisition. ROW acquisition will conform with the Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act).

An approved Americans with Disabilities Act (ADA) Transition Plan was found on the LaPorte County government webpage (https://laporteco.in.gov/Resources/Highway/ADATransitionPlan.pdf). This project is not within any city limits and does not involve sidewalks or public facilities that would need to comply with an ADA Transition Plan.

The LaPorte County Government website (https://laporteco.in.gov/) was searched on January 25, 2025, by SJCA Inc. for local festivals, fairs, and events that could potentially be impacted by this project. No local festivals, fairs, or events were found. An early coordination letter was sent on August 31, 2024 to the LaPorte County Council and Commissioners. No response was received. No impacts are expected.

Public Facilities and Services

Discuss what public facilities and services are present in the project area and impacts (such as MOT) that will occur to them. Include how the impacts have been minimized and what coordination has occurred. Some examples of public facilities and services include health facilities, educational facilities, public and private utilities, emergency services, religious institutions, airports, transportation or public pedestrian and bicycle facilities.

Based on a desktop review, the aerial map of the project area (Appendix B3), and the RFI report (Appendix E1-E10), one railroad segment is located within the 0.5-mile search radius. There are no public facilities within or adjacent to the project area. A review of project plans and the June 21, 2024, site visit identified multiple utilities within and adjacent to the project area. A Frontier telecommunication line, Kankakee Valley REMC (KVREMC) and NIPSCO electric lines are located within the project area. The overhead KVREMC electric lines will be moved to the south side of CR 1400 S on both sides of SR 39. The overhead Frontier telecommunication lines will be removed, and relocations are proposed underground on the west side of SR 39. The Hanna Sand & Gravel mineral resource facility is located adjacent to the project area. An early coordination letter was sent to Hanna Sand & Gravel on August 31, 2024 and no response was received. Utility coordination is ongoing between the project designer and utility companies and will continue until the project is completed. Impacts to the public utilities in the project area will be temporary, and no permanent disruptions to service are anticipated. Access to all properties will be maintained during construction.

It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access.

Environmental Justice (EJ) (Presidential EO 12898)	**Yes**	**No**
During the development of the project were EJ issues identified?		**X**
Does the project require an EJ analysis?		**X**
If YES, then:		
Are any EJ populations located within the project area?		
Will the project result in adversely high and disproportionate impacts to EJ populations?		

Indicate if EJ issues were identified during project development. If an EJ analysis was not required, discuss why. If an EJ analysis was required, describe how the EJ population was identified. Include if the project has a disproportionately high or adverse effect on EJ populations and explain your reasoning. If yes, describe actions to avoid, minimize and mitigate these effects.

Due to the issuance of recent federal Executive Orders (EO) from January 2025, including EO 14154, EO 14148, and EO 14173, EO 12898 has been rescinded, and this section is no longer applicable.

Relocation of People, Businesses or Farms	**Yes**	**No**
Will the proposed action result in the relocation of people, businesses or farms?		X
Is a BIS or CSRS required?		X

Number of relocations: Residences: 0 Businesses: 0 Farms: 0 Other: 0

Discuss any relocations that will occur due to the project. If a BIS or CSRS is required, discuss the results in the discussion below.

No relocations of people, businesses, or farms will take place as a result of this project.

SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Hazardous Materials & Regulated Substances (Mark all that apply)	**Documentation**
Red Flag Investigation (RFI)	X
Phase I Environmental Site Assessment (Phase I ESA)	
Phase II Environmental Site Assessment (Phase II ESA)	
Design/Specifications for Remediation required?	

Date RFI concurrence by INDOT SAM (if applicable): July 16, 2024

Include a summary of the potential hazardous material concerns found during review. Discuss in depth sites found within, directly adjacent to, or ones that could impact the project area. Refer to current INDOT SAM guidance. If additional documentation (special provisions, pay quantities, etc.) will be needed, include in discussion. Include applicable commitments.

Based on a review of geographic information systems (GIS) data and available public records, the RFI was completed on July 16, 2024, and INDOT Site Assessment & Management (SAM) provided their concurrence on July 16, 2024 (Appendix E1-E10). No sites with hazardous material concerns (hazmat sites) or sites involved with regulated substances were identified in or within 0.5 mile of the project area. Further investigation for hazardous material concerns or regulated substances is not required at this time.

Part IV – Permits and Commitments

PERMITS CHECKLIST

Permits (mark all that apply)	**Likely Required**
Army Corps of Engineers (404/Section10 Permit)	
Nationwide Permit (NWP)	X
Regional General Permit (RGP)	
Individual Permit (IP)	
Other	
IN Department of Environmental Management (401/Rule 5)	
Nationwide Permit (NWP)	X
Regional General Permit (RGP)	
Individual Permit (IP)	
Isolated Wetlands	
Rule 5	
Other	
IN Department of Natural Resources	
Construction in a Floodway	
Navigable Waterway Permit	
Other	
Mitigation Required	
US Coast Guard Section 9 Bridge Permit	
Others (Please discuss in the discussion below)	

List the permits likely required for the project and summarize why the permits are needed, including permits designated as "Other."

The project will require a Section 401 Permit from IDEM and a Section 404 permit from USACE due to permanent impacts to Marquadt Ditch incurred by replacing the existing structure. An IDNR Construction in a Floodway (CIF) permit will likely not be required because this project is not impacting a floodway. No mitigation is anticipated for this project.

Applicable recommendations provided by resource agencies are included in the *Environmental Commitments* section of this document. If permits are found to be necessary, the conditions of the permit will be requirements of the project and will supersede these recommendations.

It is the responsibility of the project sponsor to identify and obtain all required permits.

ENVIRONMENTAL COMMITMENTS

List all commitments and include the name of agency/organization requesting/requiring the commitment(s). Listed commitments should be numbered.

Firm:

1) If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Service Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT LaPorte District)
2) It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction activity that would block or limit access. (INDOT ESD)
3) Any work in a wetland area within INDOT's right-of-way or in borrow/waste areas is prohibited unless specifically allowed in the US Army Corps of Engineers or IDEM permits. (INDOT EWPSO)
4) General AMM 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs. (USFWS)
5) Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
6) Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. (USFWS, IDNR-DFW)
7) Tree Removal AMM 3: Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). (USFWS)
8) Tree Removal AMM 4: Do not remove documented Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or documented foraging habitat any time of year. (USFWS)
9) USFWS Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction begins after June 21, 2026, an inspection of the structure by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD and INDOT LaPorte District)
10) Structure No. CV 039-046-169.10 and the project's surrounding habitat is conducive for use (i.e., nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the Recurring Special Provision (RSP) "107-C-273 Migratory Bird Protection". (INDOT ESD)

For Further Consideration:

11) Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR-DFW)
12) Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife. (IDNR-DFW)
13) The new, replacement, or rehabbed structure should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. (IDNR-DFW)

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Appendix A

INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4[1]
Section 106	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"	-	"Adverse Effect" Or Historic Bridge involvement[2]
Stream Impacts[3]	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	USACE Individual 404 Permit[4]
Wetland Impacts[3]	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
Right-of-way[5]	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
Relocations[6]	None	-	-	< 5	≥ 5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat)*	"No Effect", "Not likely to Adversely Affect" (With select AMMs[7])	"Not likely to Adversely Affect" (With any AMMs or commitments)	-	"Likely to Adversely Affect"	Project does not fall under Species Specific Programmatic[8]
Threatened/Endangered Species (Any other species)*	Falls within guidelines of USFWS 2013 Interim Policy or "No Effect"	"Not likely to Adversely Affect"	-	-	"Likely to Adversely Affect"
Environmental Justice	No disproportionately high and adverse impacts	-	-	-	Potential[9]
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Section 4(f) Impacts	None	-	-	-	Any[10]
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes[11]
Approval Level • **District Env. (DE)** • **Env. Serv. Div. (ESD)** • **FHWA**	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA

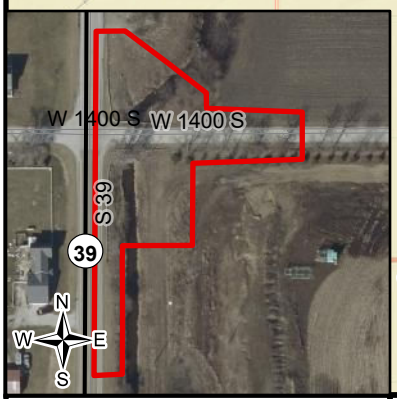
[1] Coordinate with INDOT Environmental Services Division. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.
[2] Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.
[3] Total permanent impacts to streams (linear feet) and wetlands (acres).
[4] US Army Corps of Engineers Individual 404 Permit
[5] Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.
[6] If any relocations are within an area with a known or suspected Environmental Justice (EJ) or disadvantaged population, or has greater than 5 relocations, a conversation with FHWA, through INDOT ESD, is needed to confirm NEPA classification and outreach plan for the project.
[7] Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.
[8] Projects that do not fall under a Species Specific Programmatic and results in a "Likely to Adversely Affect". Other findings can be processed as a lower-level CE.
[9] Potential for causing a disproportionately high and adverse impact.
[10] Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.
[11] Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.
* Includes the threatened/endangered species critical habitat
Note: Substantial public or agency controversy may require a higher-level NEPA document.

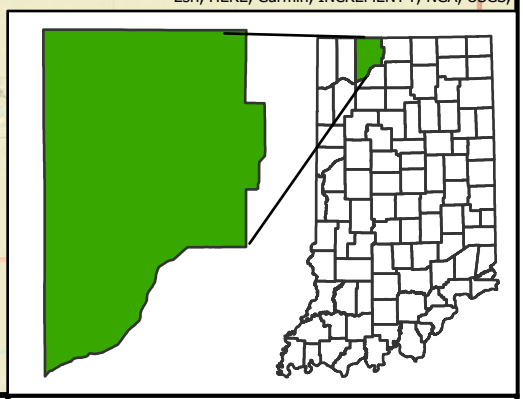
Des 2100806

Appendix B

Graphics

Project Location Map (1:100,000)
Small Structure Map
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: ESRI World Streetmap &
IGIO 2021-2023 Orthoimagery





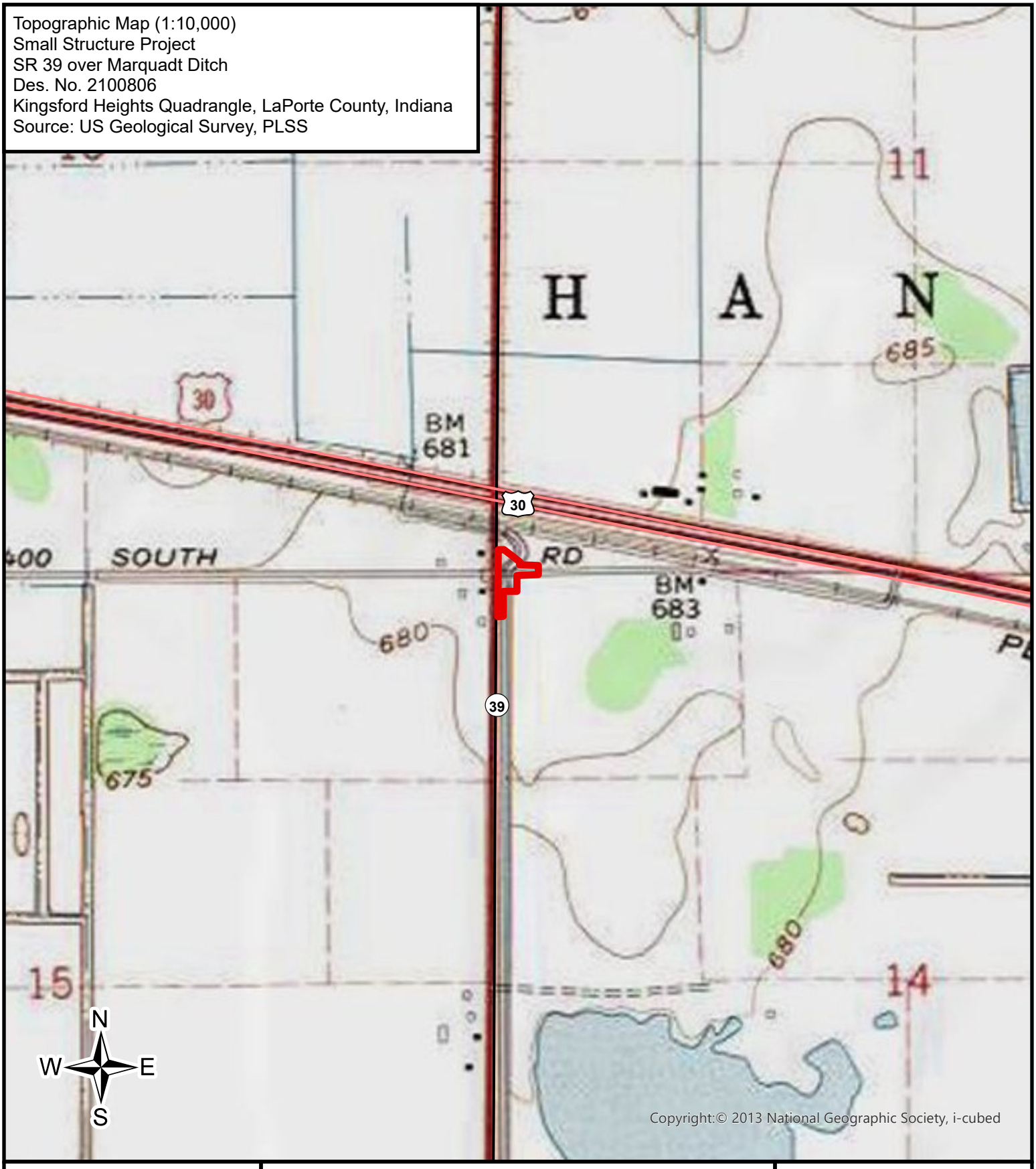
0 1 2 Miles

Project County
Project Area

8/30/2024

SJCA

Topographic Map (1:10,000)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
Kingsford Heights Quadrangle, LaPorte County, Indiana
Source: US Geological Survey, PLSS



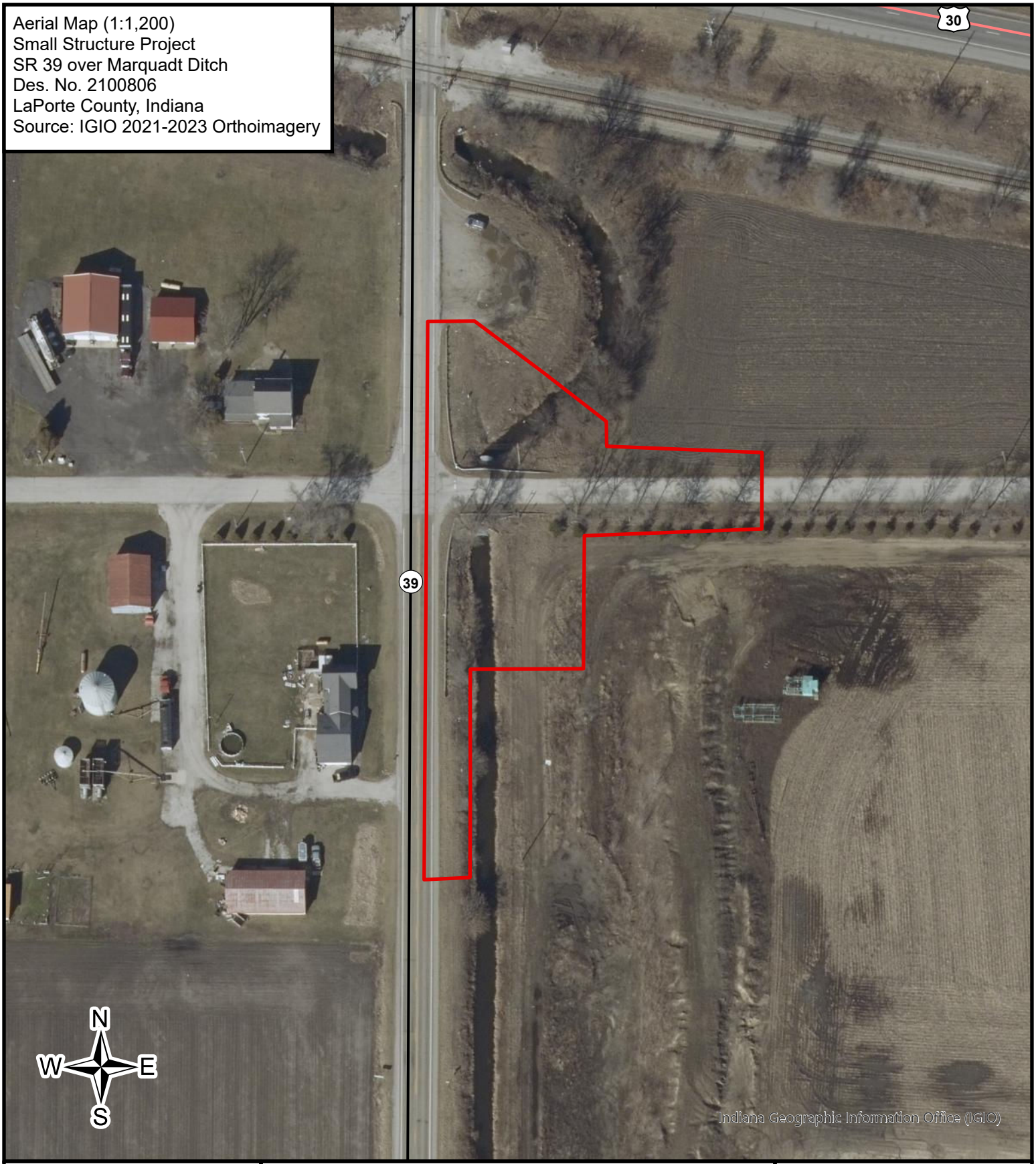
0 0.1 0.2
Miles

Project Area

SJCA

8/30/2024

Aerial Map (1:1,200)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: IGIO 2021-2023 Orthoimagery



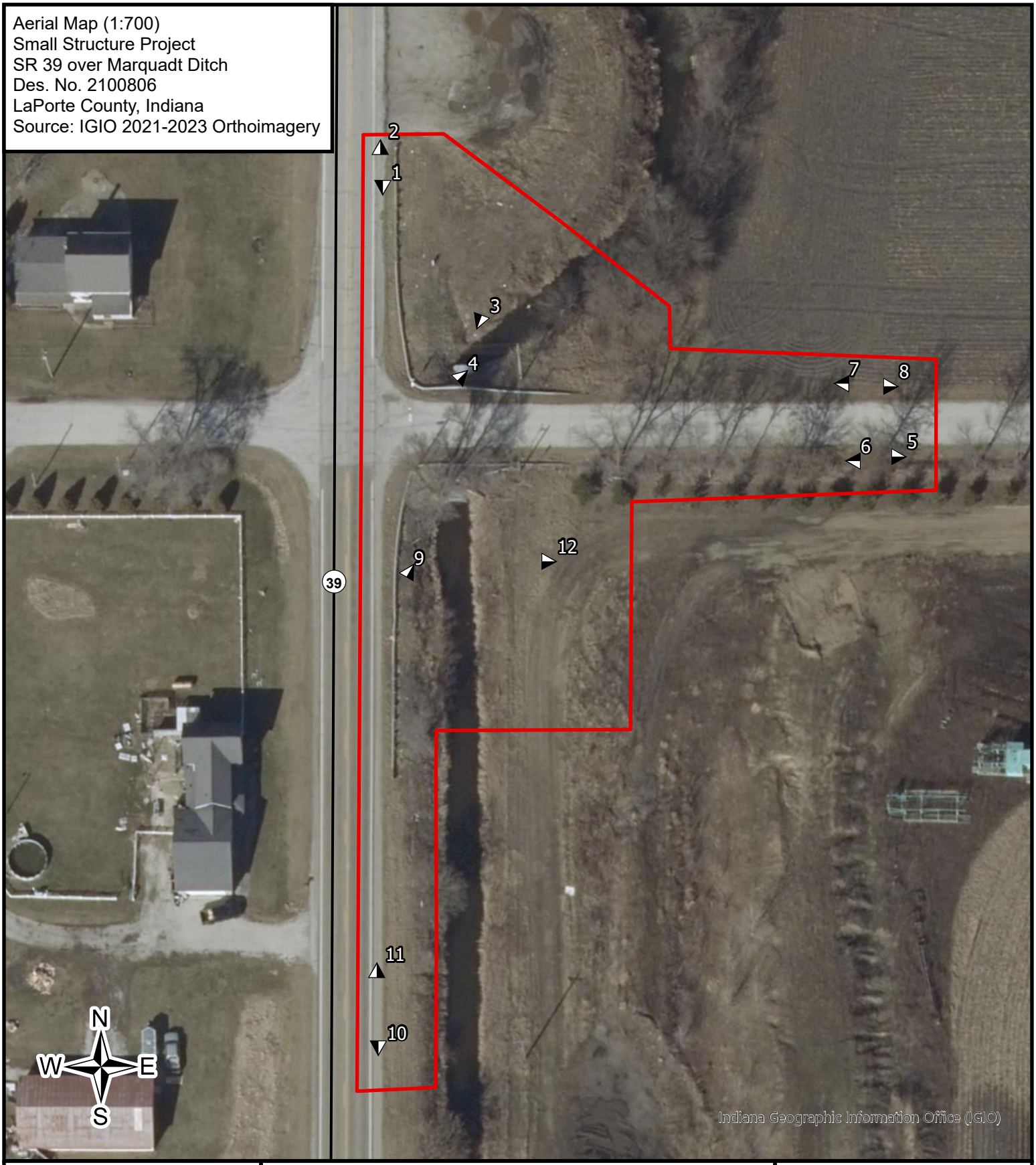
0 75 150 Feet

Project Area

SJCA

8/30/2024

Aerial Map (1:700)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: IGIO 2021-2023 Orthoimagery



0 45 90 Feet

Photo Point
Project Area

SJCA

8/30/2024

Photo 1. Facing south along SR 39 toward CR 1400 S from the northern terminus.

Photo 2. Facing north along SR 39 from the northern terminus.

Photo 3. Facing southwest toward the project structure (inlet) along Marquadt Ditch.

Photo 4. Facing northwest toward Marquadt Ditch from the project structure (inlet).

Photo 5. Facing east along the south side of CR 1400 S from eastern terminus.

Photo 6. Facing west toward SR 39 along the south side of CR 1400 S from the eastern terminus.

Photo 7. Facing west toward SR 39 along the north side of CR 1400 S from eastern terminus.

Photo 8. Facing east along the north side of CR 1400 S from eastern terminus.

Photo 9. Facing northeast toward the project structure (outlet) along Marquadt Ditch from the east side of SR 39.

Photo 10. Facing south along the east side of SR 39 from the southern terminus

Photo 11. Facing north along the east side of SR 39 from the southern terminus.

Photo 12. Facing east toward farm field from the south side of CR 1400 S.

PROJECT	DESIGNATION
2100806	2100806
CONTRACT	CULVERT ASSET ID
R-43904	CV 039-046-169.10

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
2100806	SMALL STRUCTURE REPLACEMENT ON SR 39 OVER MARQUADT DITCH - LEAD DES. NO.
2101078	SMALL STRUCTURE REPLACEMENT ON SR 39 OVER UNT TO KINGSBURY CREEK

INDIANA DEPARTMENT OF TRANSPORTATION

ROAD PLANS

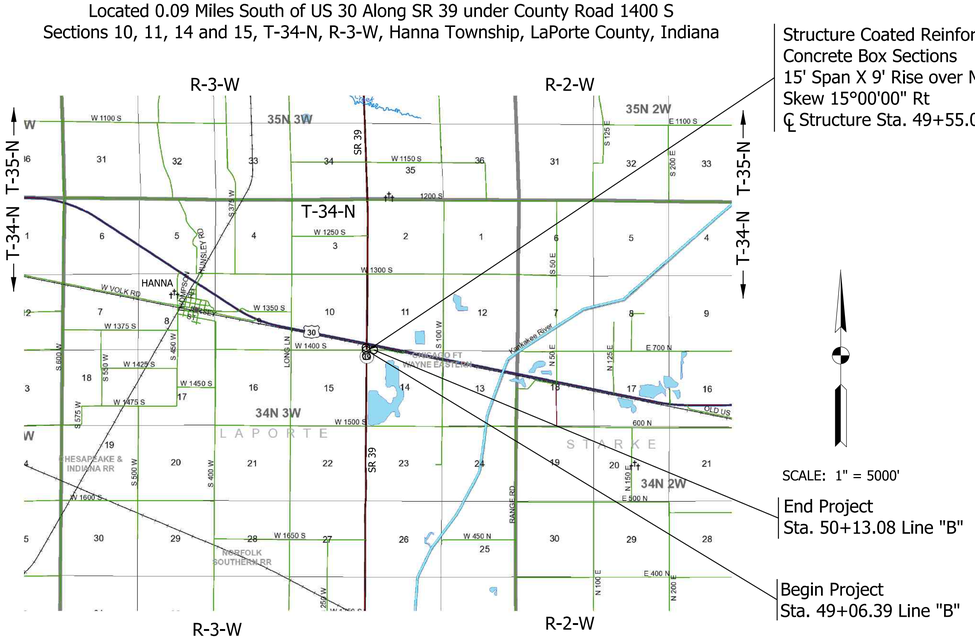
STAGE 2
AUGUST 2024

ROUTE: SR 39 AT: RP 169+10

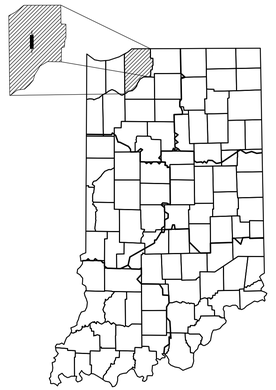
PROJECT NO. 2100806 P.E.
2100806 R/W
2100806 CONST.

RIGHT-OF-WAY REQUIRED FOR THIS PROJECT

Small Structure Replacement on SR 39 over Marquadt Ditch
Located 0.09 Miles South of US 30 Along SR 39 under County Road 1400 S
Sections 10, 11, 14 and 15, T-34-N, R-3-W, Hanna Township, LaPorte County, Indiana



TRAFFIC DATA		SR 39	CR 1400 S
A.A.D.T.	(2026)	3,161 V.P.D.	1,111 V.P.D.
A.A.D.T.	(2046)	3,861 V.P.D.	1,312 V.P.D.
D.H.V.	(2046)	371 V.P.H.	132 V.P.H.
DIRECTIONAL DISTRIBUTION		NORTH 49% SOUTH 51%	EAST 50% WEST 50%
TRUCKS		8.67% A.A.D.T.	15% A.A.D.T.
		3.63% D.H.V.	20% D.H.V.
DESIGN DATA			
DESIGN SPEED		55 M.P.H.	55 M.P.H.
PROJECT DESIGN CRITERIA		3R (NON-FREEWAY)	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION		MINOR ARTERIAL	LOCAL ROAD
RURAL/URBAN		RURAL	RURAL
TERRAIN		LEVEL	LEVEL
ACCESS CONTROL		PARTIAL	NONE



PROJECT LOCATION SHOWN BY
LaPorte County

LATITUDE: 41°24'15" N LONGITUDE: 86°44'10" W

GROSS LENGTH: 0.020 MI.
NET LENGTH: 0.020 MI.
MAX. GRADE: 3.30 %

HUC 071200010408

INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2024
TO BE USED WITH THESE PLANS.

CERTIFIED BY:
REGISTERED PROFESSIONAL ENGINEER
STATE OF INDIANA NO. 910382
COVERING OVERALL DESIGN
DATE

NOT FOR CONSTRUCTION
DLZ INDIANA, LLC

PLANS PREPARED BY:
DLZ INDIANA, LLC
2211 East Jefferson Boulevard
South Bend, Indiana 46615
(574) 236-4400

APPROVED
FOR LETTING:
INDIANA DEPARTMENT OF TRANSPORTATION
DATE

CULVERT ASSET ID	
CV 039-046-169.10	
DESIGNATION	
2100806	
SHEETS	
1	of 20
CONTRACT	PROJECT
R-43904	2100806

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UTILITIES

ELECTRIC
Kankakee Valley REMC
8642 W US 30
P.O. Box 157
Wanatah, IN 46390
Bri Travis
(800) 552-2622
btravis@kvremc.com

ELECTRIC
NIPSCO Electric
801 E 86th Ave
Merrillville, IN 46410
Dean Garrett
(219) 647-6260
utilitycoordination@nisource.com

TELEPHONE
Frontier
1503 Magnavox Way Fort, Suite 100
Fort Wayne, IN 46804
Brandon Tucker
(260) 450-7779
utilitycordreq@ftr.com

811 Know what's below. Call before you dig.

INDIANA UNDERGROUND
1-800-382-5544 OR CALL 811
24 HOURS A DAY 7 DAYS A WEEK

REQUIRED GENERAL NOTES

CONTRACTOR SHALL SAW CUT ALL PAVEMENT, AS SHOWN. CONTRACTOR SHALL PROVIDE ADEQUATE COMPACTED MATERIAL AT SAW CUT EDGE TO SHORE UP AND PREVENT THE DEGRADATION OF THE EXISTING PAVEMENT TO REMAIN. DAMAGE TO EXISTING PAVEMENT WILL BE REPAIRED AT CONTRACTOR'S EXPENSE.

UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE IN LOCATION AND ARE FOR INFORMATIONAL PURPOSES ONLY AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES AND LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY CONTACT THE RESIDENT PROJECT REPRESENTATIVE SHOULD A CONFLICT EXIST.

WHEN EXCAVATING NEAR UTILITIES, CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORTING, BRACING OR SHORING AS REQUIRED TO PREVENT DAMAGE TO THE UTILITIES.

EROSION CONTROL PROVISIONS SHALL BE IN PLACE PRIOR TO ALL OPERATIONS. THE CONTRACTOR SHALL FOLLOW THE MUNICIPALITY'S REQUIREMENTS FOR THE PROJECT AND PRACTICES OUTLINED IN THE "INDIANA HANDBOOK FOR EROSION CONTROL IN DEVELOPING AREAS" REQUIRED FOR THE PREVENTION OF SOIL EROSION AND SEDIMENTATION WITHIN AND DOWNSTREAM OF THE CONSTRUCTION SITE. SAID PRACTICES AND REQUIREMENTS SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT.

CONTRACTOR SHALL VISIT THE SITE PRIOR TO SUBMITTING A BID FOR WORK. BY SUBMITTING A BID, THE CONTRACTOR INDICATES THAT HE HAS VISITED THE SITE AND IS AWARE OF ALL EXISTING CONDITIONS.

NO OPEN TRENCHES WILL BE ALLOWED IN THE EVENING AFTER DAILY CONSTRUCTION OPERATIONS HAVE FINISHED, EXCEPT IN THE AREA OF THE TRENCHING BOX. CONTRACTOR TO PROVIDE CONSTRUCTION FENCING AROUND TRENCHING BOX AREA FOR PUBLIC SAFETY.

THE WORK SHALL BE ARRANGED SO AS TO CAUSE AS LITTLE DISTURBANCE TO THE NORMAL TRAFFIC FLOW AS POSSIBLE. CONTRACTOR SHALL NOTIFY ALL RESIDENCES,BUSINESS FIRMS, ETC. ON THE DAY PRIOR TO CLOSING THE VEHICULAR ENTRANCES TO SUCH HOMES, BUSINESS FIRMS, ETC. AND SHALL. MAINTAIN ACCESS FOR LOCAL TRAFFIC.

FLOWABLE FILL SHALL BE USED FOR BACKFILL OF EXCAVATIONS BENEATH EXISTING UTILITIES. FILL SHALL BE IN ACCORDANCE WITH INDOT SPECIFICATIONS.

ACCESS TO ALL RESIDENCES AND COMMERCIAL FACILITIES SHALL BE MAINTAINED AT ALL TIMES.

ALL RADII DIMENSIONS ARE FROM FACE OF CURB UNLESS OTHERWISE NOTED.

ALL EARTH SHOULDERS, MEDIAN AREAS, AND CUT AND FILL SLOPES SHALL BE PLAIN OR MULCHED SEEDED EXCEPT WHERE SODDING IS SPECIFIED.

INDEX

REVISIONS

SHEET NO.	DATE	REVISED

8/7/2024
X:\Projects\2021\2161\283970 INDOT 210112a OnCall\2100806 SR 39 Over Marquadt Ditch\01_ConstDocs\CAD\Sheet Files\2100806IS01.dgn

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

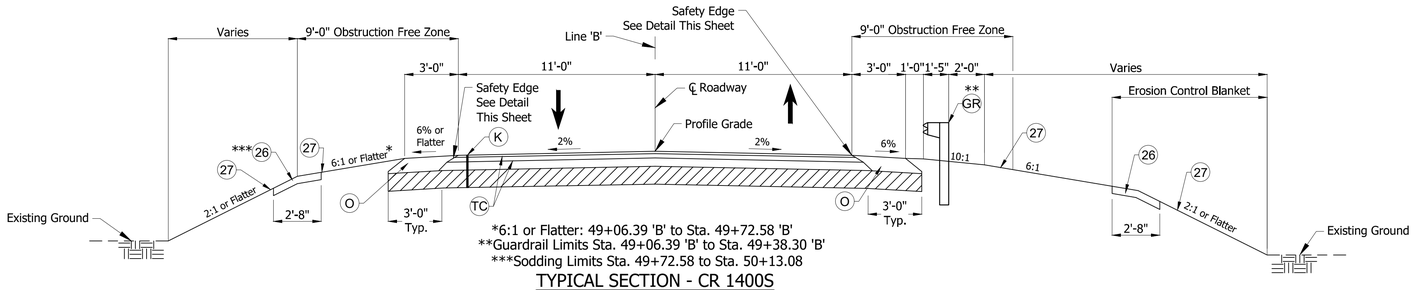
DESIGNED: AMM 7/2024 DRAWN: AMM 7/2024

CHECKED: TMN 7/2024 CHECKED: TMN 7/2024

INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX

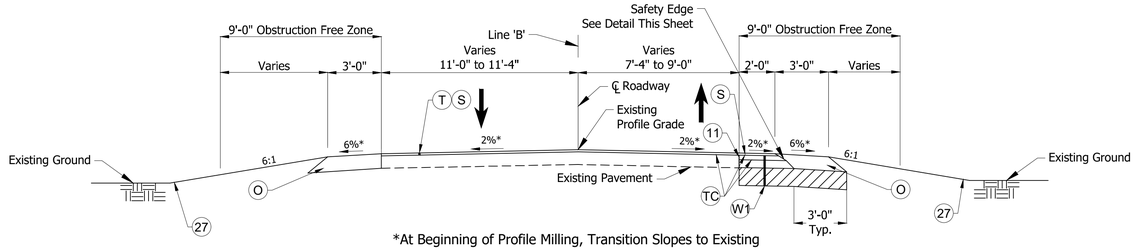
SCALE	BRIDGE NUMBER
NONE	CV 039-046-169.10
	DESIGNATION
	2100806
	SHEETS
	2 of 20
CONTRACT	PROJECT
R-43904	2100806



*6:1 or Flatter: 49+06.39 'B' to Sta. 49+72.58 'B'
**Guardrail Limits Sta. 49+06.39 'B' to Sta. 49+38.30 'B'
***Sodding Limits Sta. 49+72.58 to Sta. 50+13.08

TYPICAL SECTION - CR 1400S

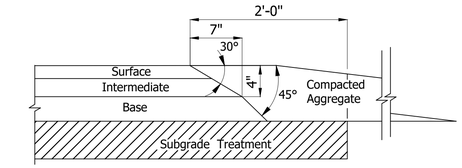
SCALE: ¼" = 1'-0"
Sta. 49+06.39 'B' to Sta. 50+13.08 'B'



*At Beginning of Profile Milling, Transition Slopes to Existing

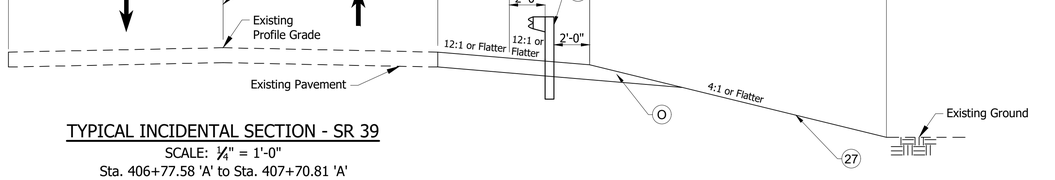
TYPICAL INCIDENTAL SECTION - CR 1400S

SCALE: ¼" = 1'-0"
Sta. 50+13.08 'B' to Sta. 50+38.08 'B'



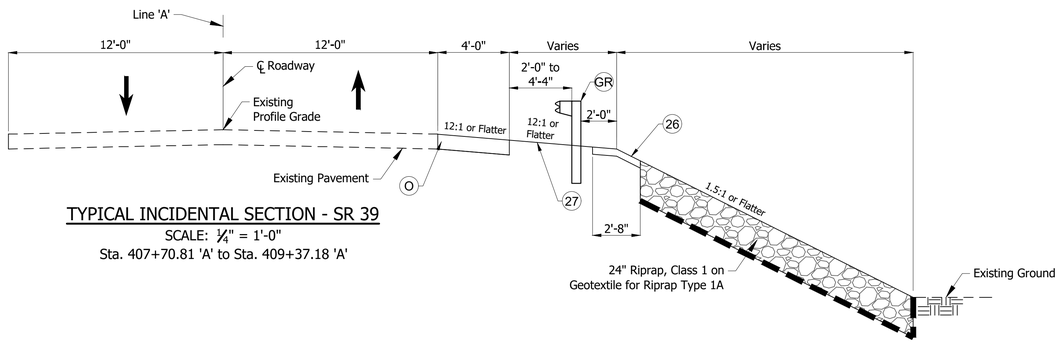
SAFETY EDGE DETAIL

Scale: None



TYPICAL INCIDENTAL SECTION - SR 39

SCALE: ¼" = 1'-0"
Sta. 406+77.58 'A' to Sta. 407+70.81 'A'



TYPICAL INCIDENTAL SECTION - SR 39

SCALE: ¼" = 1'-0"
Sta. 407+70.81 'A' to Sta. 409+37.18 'A'

Notes:

1. All pavements shall have a safety edge installed at the edge of the pavement or shoulder.
2. For each lane of traffic, the intermediate layer should be placed simultaneously for mainline and adjacent shoulder.
3. For each lane of traffic, the surface layer should be placed simultaneously for mainline and adjacent shoulder.

LEGEND:

- (GR) Guardrail (For Type, See Profile, Sheet 7)
- (K) 165 #/SYD QC/QA-HMA, 4, 58S, Surface, 9.5 mm on 275 #/SYD QC/QA-HMA, 4, 58S, Intermediate, 19.0 mm on 660 #/SYD QC/QA-HMA, 4, 58S, Base, 25 mm on Subgrade Treatment Type IC on Geotextile for Pavement, Type 2B
- (O) Variable Depth Compacted Aggregate, No. 53
- (S) 165 #/SYD QC/QA-HMA, 4, 58S, Surface, 9.5 mm
- (T) Profile Milling
- (TC) Asphalt for Tack Coat
- (W1) HMA for Widening, Type D Consisting of: 275 #/SYD QC/QA-HMA, 4, 58S, Intermediate, 19.0 mm on 660 #/SYD QC/QA-HMA, 4, 58S, Base, 25 mm on Subgrade Treatment Type IC on Geotextile for Pavement, Type 2B
- (11) Sawcut
- (26) Sodding
- (27) Mulched Seeding, R

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024 DRAWN: PEB 7/2024

CHECKED: TMN 7/2024 CHECKED: TMN 7/2024

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	CULVERT ASSET ID
1/4" = 1'	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
N/A	2100806
	SHEETS
	3 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
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Existing R/W
Existing R/W
45+00
50+00
POE Sta. 412+66.00 Line 'A'
Section Line
℄
Existing R/W
FERN A COX
FERN A COX
GERALD E JARNECKE
Existing R/W
1011
1514
Section Corner
Marquadt Ditch Flow
Temporary R/W
R/W
Sec. 10, T34N, R3W
Hanna Township
Laporte County
Sec. 11, T34N, R3W
Hanna Township
Laporte County
End Project
Sta. 50+13.08 'B'
Existing R/W
Existing R/W
FO(QLD)
Line "B"
410+00
Section Line
CR 1400 South
Section Line
Existing R/W
Existing R/W
Edge of Travelway
POB Sta. 44+00.00 Line 'B'
Begin Project
Sta. 49+06.39 'B'
End Construction
Sta. 409+37.18 'A'
Sec. 15, T34N, R3W
Hanna Township
Laporte County
R/W
Sec. 14, T34N, R3W
Hanna Township
Laporte County
POE Sta. 54+54.88 Line 'B'
SYBIL C
WILLOUGHBY
KURT M WELSH
RAYMOND W &
DEBBIE A RINKER
HANNA SAND & GRAVEL
℄
℄
Existing R/W
Line "A"
Marquadt Ditch Flow
Begin Construction
Sta. 407+18.01 'A'
15' Drainage Easement
℄
SR-39
Existing R/W
POB Sta. 405+81.00 Line 'A'

11/29/2023
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DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

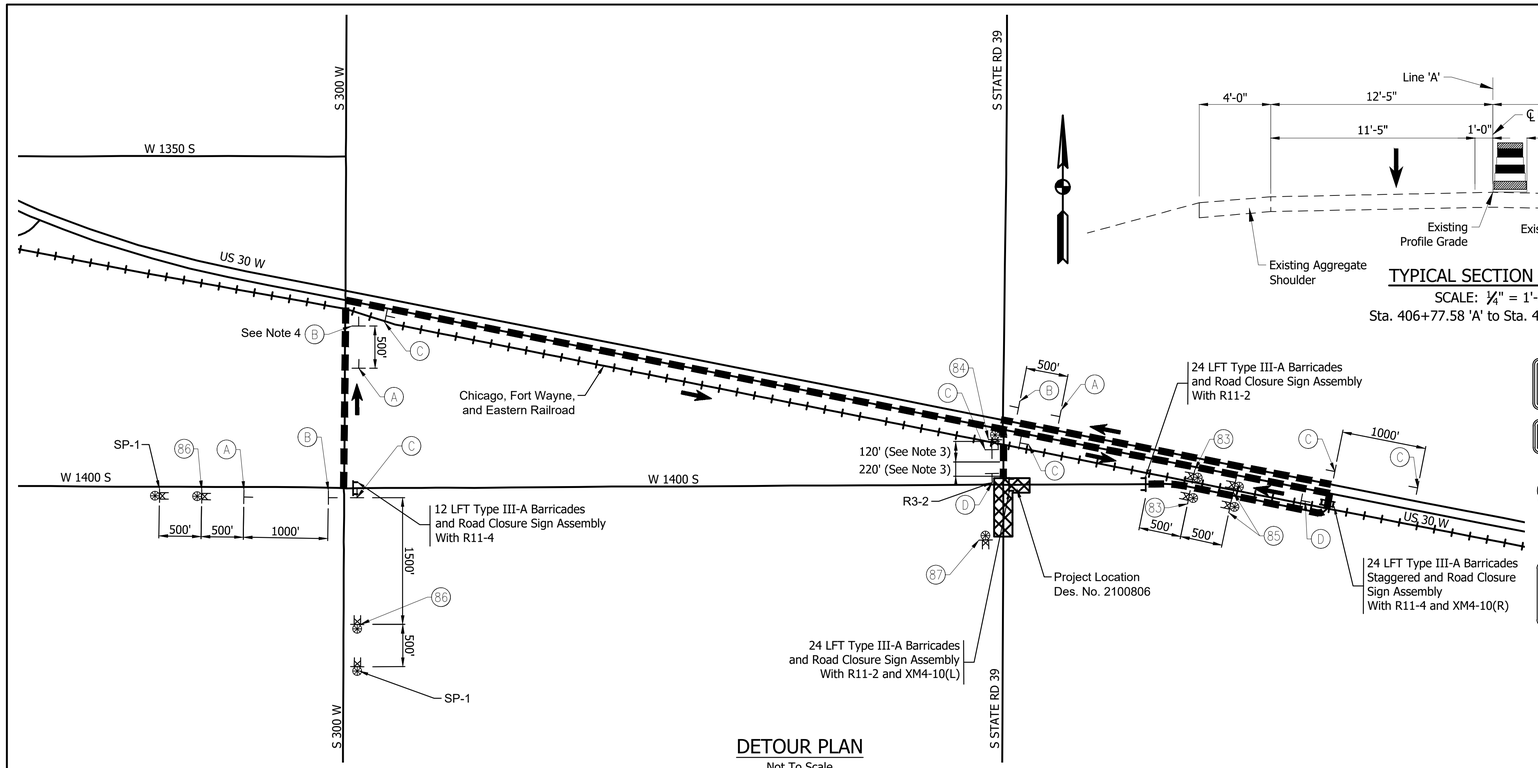
RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024
DRAWN: PEB 7/2024
CHECKED: TMN 7/2024
CHECKED: TMN 7/2024

INDIANA
DEPARTMENT OF TRANSPORTATION

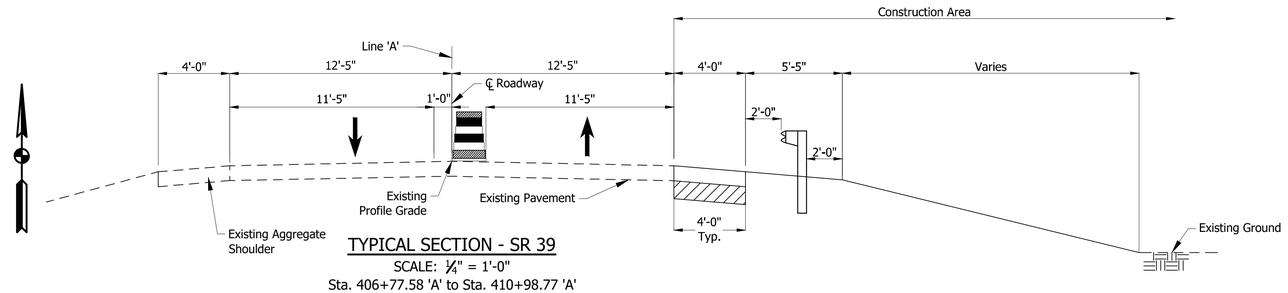
PLAT NO. 1

HORIZONTAL SCALE	CULVERT ASSET ID
1" = 50'	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
	2100806
	SHEETS
	4 of 20
CONTRACT	PROJECT
R-43904	2108006



DETOUR PLAN

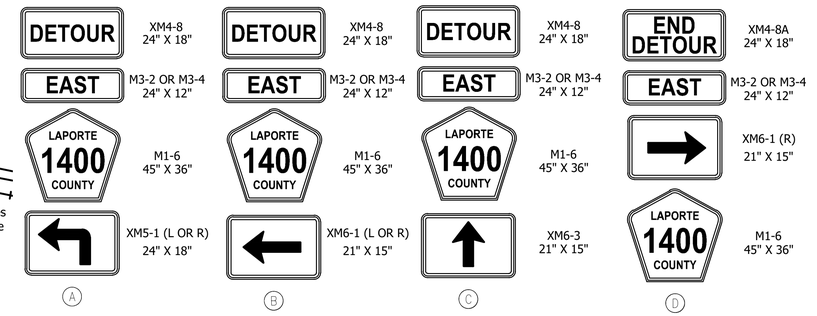
Not To Scale



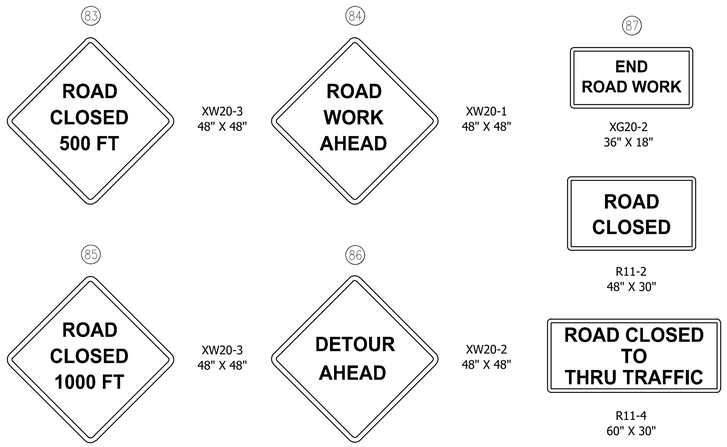
TYPICAL SECTION - SR 39

SCALE: ¼" = 1'-0"

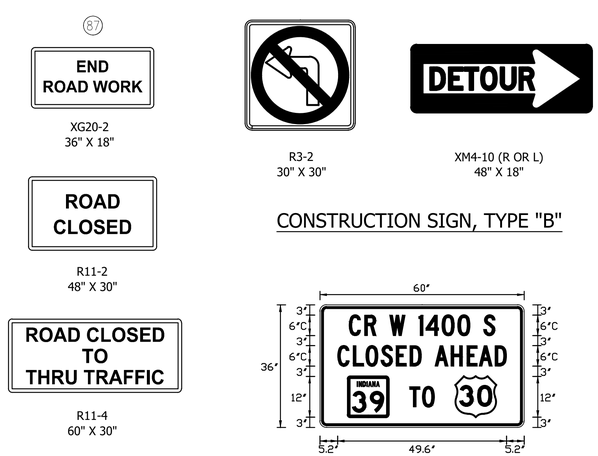
Sta. 406+77.58 'A' to Sta. 410+98.77 'A'



DETOUR ROUTE MARKER ASSEMBLY



CONSTRUCTION SIGN, TYPE "A"



CONSTRUCTION SIGN, TYPE "B"

SPECIAL SIGN DETAIL, SP-1

CONSTRUCTION SIGN SCHEDULE	
ITEM	TOTALS
Type 'A' Sign	
M1-6	14 EACH
R3-2	1 EACH
SP-1	2 EACH
XW20-1	1 EACH
XW20-2	2 EACH
XW20-3	4 EACH
R11-2	2 EACH
R11-4	2 EACH
Total Type 'A' Sign	28 EACH
Type 'B' Sign	
M3-2	6 EACH
M3-4	8 EACH
XG20-2	1 EACH
XM4-8	12 EACH
XM4-8a	2 EACH
XM4-10 (R)	1 EACH
XM4-10 (L)	1 EACH
XM5-1(R)	1 EACH
XM5-1(L)	2 EACH
XM6-1(R)	1 EACH
XM6-1(L)	2 EACH
XM6-3	6 EACH
Total Type 'B' Sign	46 EACH
Detour Route Marker Aseembly	14 EACH
Road Closure Sign Assembly	4 EACH
Type III-A Barricade	84 LFT

SIGN LEGEND		
SIGN	DESCRIPTION	SIZE (in x in)
M1-6	"LAPORTE 1400 COUNTY" County Route Sign	45 X 36
M3-2	"EAST" Sign	24 X 12
M3-4	"WEST" Sign	24 X 12
R3-2	"NO LEFT TURN" Sign	30 X 30
R11-2	"ROAD CLOSED" Sign	48 X 30
R11-4	"ROAD CLOSED TO THRU TRAFFIC" Sign	60 X 30
SP-1	"CR W 1400 S CLOSED AHEAD" Sign	60 X 36
XG20-2	"END ROAD WORK" Sign	36 X 18
XM4-8a	"END DETOUR" SIGN	24 X 18
XM4-8	"DETOUR" Sign	24 X 18
XM4-10 (L or R)	"DETOUR" Sign	48 X 18
XM5-1(L or R)	"ADVANCED TURN ARROW" Sign	24 X 18
XM6-1(L or R)	"DIRECTIONAL ARROW" Sign	21 X 15
XM6-3	"THRU DIRECTIONAL ARROW" Sign	21 X 15
XW20-1	"ROAD WORK AHEAD" Sign	48 X 48
XW20-2	"DETOUR AHEAD" Sign	48 X 48
XW20-3	"ROAD CLOSED AHEAD" Sign	48 X 48

NOTES

1. All signs, barricades, and pavement markings shall conform to the Indiana Manual on Traffic Control Devices for Streets and Highways, 2011 and any current supplements thereto.
2. Contractor shall maintain access to all commercial and private properties during construction.
3. Non-standard detour marker sign spacing recommended due to RR crossing and roadway length constraints.
4. Assembly to be placed between railroad crossing and US HWY 30.
5. See sheet set 6 for additional northbound SR 39 detour information.

LEGEND

- Direction of Detour
- Construction Sign
- Type 'A' Construction Warning Light
- Type III-_ Barricade
- Area Under Construction
- Detour Route
- Route Marker Assembly

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024 DRAWN: PEB 7/2024

CHECKED: TMN 7/2024 CHECKED: TMN 7/2024

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
CR W 1400 S DETOUR ROUTE

HORIZONTAL SCALE	CULVERT ASSET ID
N/A	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
N/A	2100806
	SHEETS
	5 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
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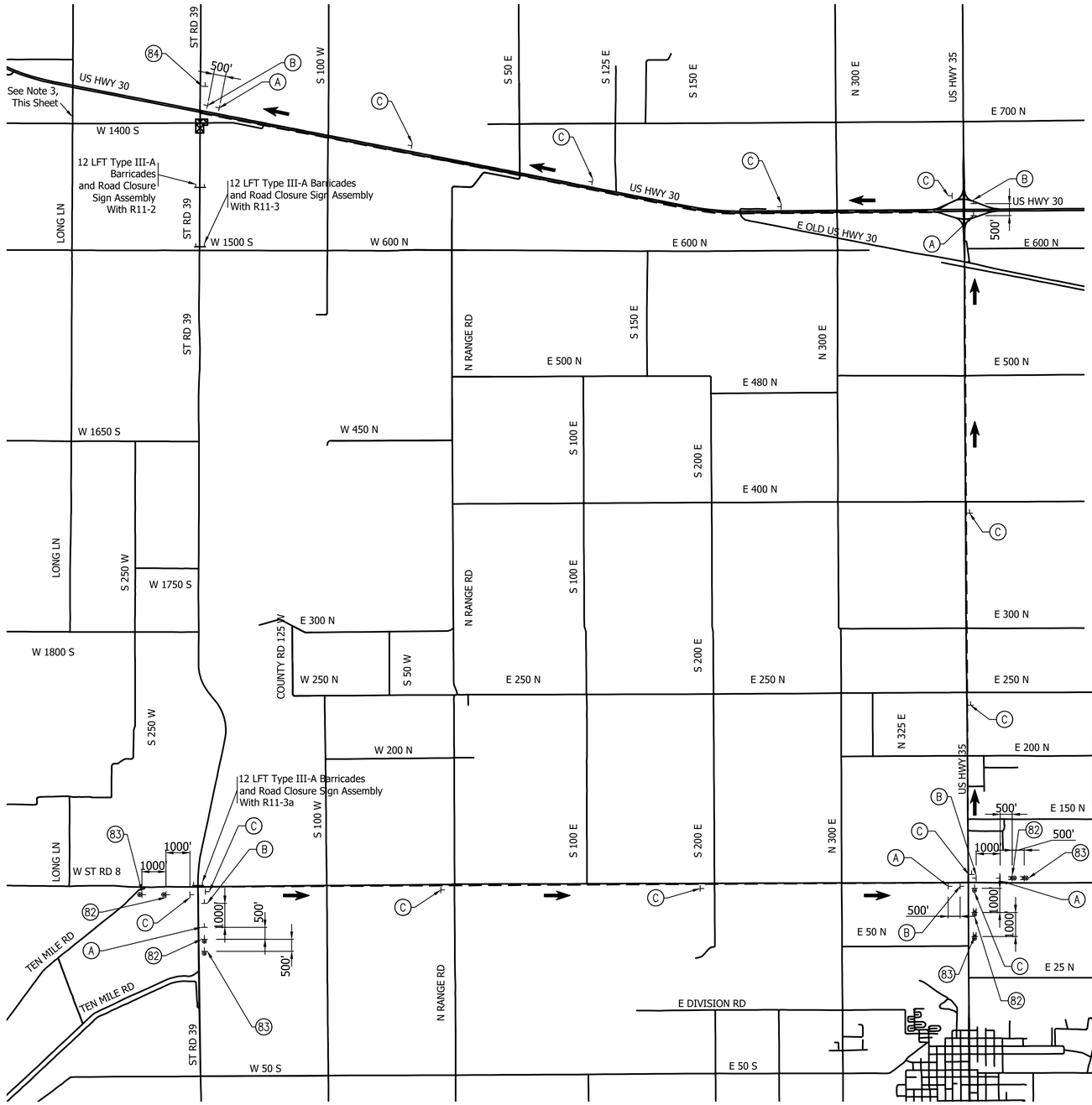
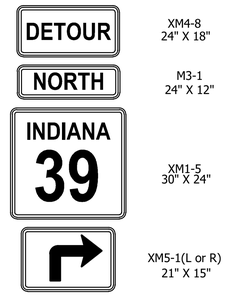




XM4-8 24" X 18"

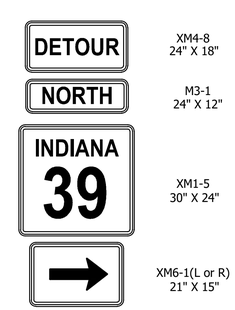
M3-1 24" X 12"

XM1-5 30" X 24"

XM5-1(L or R) 21" X 15"

Ⓐ ADVANCED TURN DETOUR ROUTE MARKER ASSEMBLY

SIGN LEGEND		
SIGN	DESCRIPTION	SIZE (in x in)
M3-1	"NORTH" Sign	24 X 12
R11-2	"ROAD CLOSED" Sign	48 X 30
R11-3	"ROAD CLOSED LOCAL TRAFFIC ONLY" Sign	60 X 30
R11-3a	"ROAD CLOSED, 6 MILES AHEAD, LOCAL TRAFFIC ONLY " Sign	60 X 30
XM1-5	"INDIANA 39" State Route Sign	30 X 24
XM4-8a	"END DETOUR" SIGN	24 X 18
XM4-8	"DETOUR" Sign	24 x 18
XM5-1(L or R)	"ADVANCED TURN ARROW" Sign	21 x 15
XM6-1(L or R)	"DIRECTIONAL ARROW" Sign	21 X 15
XM6-3	"THRU DIRECTIONAL ARROW" Sign	21 X 15
XW20-2	"DETOUR AHEAD" Sign	36 X 36
XW20-3	"ROAD CLOSED AHEAD" Sign	36 X 36



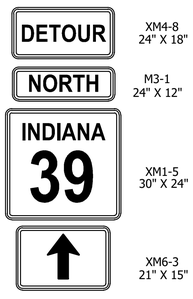
XM4-8 24" X 18"

M3-1 24" X 12"

XM1-5 30" X 24"

XM6-1(L or R) 21" X 15"

Ⓑ DIRECTIONAL DETOUR ROUTE MARKER ASSEMBLY



XM4-8 24" X 18"

M3-1 24" X 12"

XM1-5 30" X 24"

XM6-3 21" X 15"

Ⓒ CONFIRMING DETOUR ROUTE MARKER ASSEMBLY

CONSTRUCTION SIGN SCHEDULE	
ITEM	TOTALS
Type 'A' Sign	
R11-2	1 EACH
R11-3	1 EACH
R11-3a	1 EACH
XW20-2	4 EACH
XW20-3	4 EACH
Total Type 'A' Sign	11 EACH
Type 'B' Sign	
M3-1	22 EACH
XM1-5	22 EACH
XM4-8a	1 EACH
XM4-8	22 EACH
XM5-1(L or R)	5 EACH
XM6-1(L or R)	5 EACH
XM6-3	12 EACH
Total Type 'B' Sign	89 EACH
Detour Route Marker Assembly	22 EACH
Road Closure Sign Assembly	3 EACH
Type III-A Barricade	36 LFT

82

XW20-2 36" X 36"

83

XW20-3 36" X 36"

84

XM4-8A 24" X 18"

R11-2 48" X 30"

R11-3a 60" X 30"

GENERAL

1. Longitudinal field dimensions may be adjusted to fit field conditions.
2. Contractor shall maintain access to any commercial or residential property within the work zone or provide additional detour routes if use of the plan detour is not feasible.
3. See sheet 5 for additional CR 1400 S detour information.

LEGEND

- Direction of Detour
- Construction Sign
- Type 'A' Construction Warning Light
- Type III-_ Barricade
- Area Under Construction
- Detour Route
- Route Marker Assembly

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024 DRAWN: PEB 7/2024

CHECKED: TMN 7/2024 CHECKED: TMN 7/2024

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC NB SR 39 DETOUR ROUTE

HORIZONTAL SCALE	CULVERT ASSET ID
N/A	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
N/A	2100806
	SHEETS
	6 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
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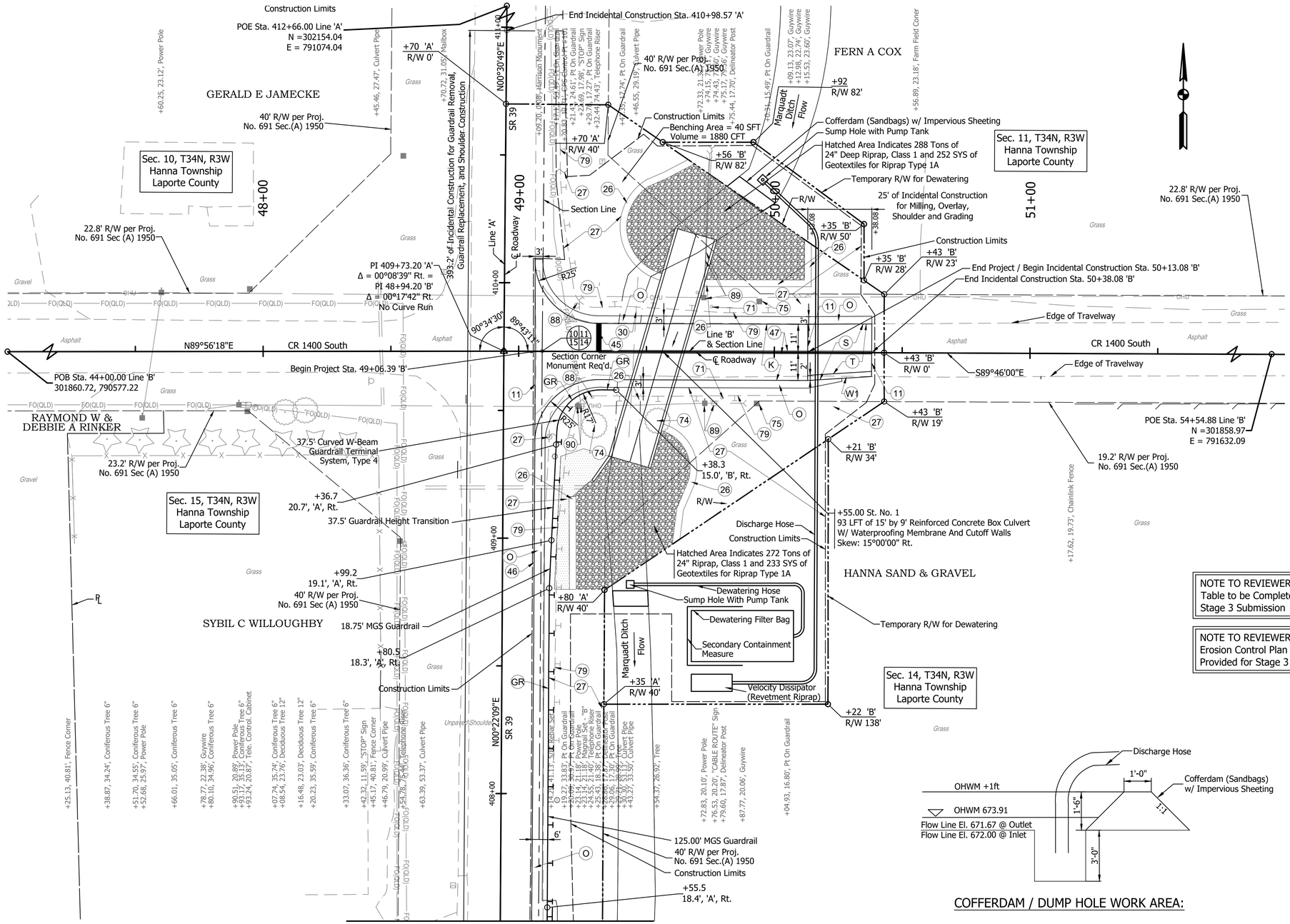


EARTHWORK SUMMARY TABLE	
COMMON EXCAVATION	
Line 'A'	112 CYS
Line 'B' Ditch Grading	70 CYS
TOTAL COMMON EXCAVATION	192 CYS
Unusable Excavation	41 CYS
Total Usable Excavation	151 CYS
FILL	
Line 'A'	301 CYS
Line 'B' Ditch Grading	119 CYS
Sub-Total Fill	420 CYS
Swell (25%)	105 CYS
Total Fill	525 CYS
Less Usable Excavation	151 CYS
TOTAL BORROW	374 CYS
Benching Cut	303 CYS
Benching Fill	303 CYS

GENERAL NOTES:

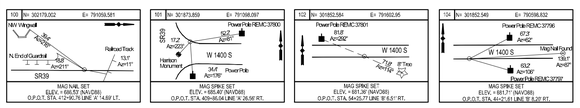
1. Present Structure at Proposed Site to be Removed.
2. Allowable Factored Soil Bearing Resistance for Footing is ___ psf.
3. For Additional Scour Protection Details, see INDOT Standard Drawing E 715-PCSP-01.
4. Contractor Shall Verify the Existing Flow Line Elevation to Set Appropriate Sump Depth.
5. Sodding to be Added in Place of Mulched Seeding R at Slope Breaks as Described in the Typical Sections
6. For Guardrail Working Width Details, see INDOT Standard Drawing E 601-MGSA-23

LEGEND:

- (GR) Guardrail (For Type, See Profile, Sheet 7)
- (K) 165 #/SYD QC/QA-HMA, 4, 58S, Surface, 9.5 mm on 275 #/SYD QC/QA-HMA, 4, 58S, Intermediate, 19.0 mm on 660 #/SYD QC/QA-HMA, 4, 58S, Base, 25 mm on Subgrade Treatment Type IC on Geotextile for Pavement, Type 2B
- (O) Variable Depth Compacted Aggregate, No. 53
- (P) Protect
- (S) 165 #/SYD QC/QA-HMA, 4, 58S, Surface, 9.5 mm
- (T) Profile Milling
- (W1) HMA for Widening, Type D Consisting of: 275 #/SYD QC/QA-HMA, 4, 58S, Intermediate, 19.0 mm on 660 #/SYD QC/QA-HMA, 4, 58S, Base, 25 mm on Subgrade Treatment Type IC on Geotextile for Pavement, Type 2B
- (11) Sawcut
- (26) Sodding
- (27) Mulched Seeding, R
- (30) Pipe, Remove
- (45) Transverse Marking, Thermoplastic, Stop Bar, White, 24 Inch
- (46) Line, Thermoplastic, Solid, White, 6 Inch
- (47) Line, Thermoplastic, Solid, Yellow, 6 Inch
- (48) Raised Pavement Marker, Thermoplastic, Yellow
- (71) Sign, Remove
- (74) Tree, Remove
- (75) R/W Monument, Remove
- (79) Guardrail, Remove
- (88) Sign, Ground Mounted, Reset
- (89) Relocate - By Others
- (90) Relocate - By Others At Min. Working Width of 5'
- Mulched Seeding, R With Erosion Control Blanket

Notes:

1. All R/W and existing topography described from Line 'B' unless otherwise noted. Line 'B' and 'A' to be constructed.
2. Contractor shall verify the existing flowline elevation to set the appropriate sump depth.



DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024 DRAWN: PEB 7/2024

CHECKED: TMN 7/2024 CHECKED: TMN 7/2024

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
LINE 'B'

HORIZONTAL SCALE	CULVERT ASSET ID
1" = 20'	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
N/A	2100806
	SHEETS
	7 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
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MATCHLINE STA. 407+50
SEE PREVIOUS SHEET

Sec. 15, T34N, R3W
Hanna Township
Laporte County

RAYMOND W &
DEBBIE A RINKER

SYBIL C WILLOUGHBY

KURT M WELSH

Existing R/W & ℄

℄

℄

Begin Incidental Construction Sta. 406+77.58 'A'

POB Sta. 405+81.00 Line 'A'
N =301469.06
E = 791068.89

393.2' of Incidental Construction for Guardrail Removal, Guardrail Replacement, and Shoulder Construction

27.9' of Incidental Construction for Shoulder and Grading

+05.46

+77.58

407+00

406+00

SR 39

N00°22'09"E

℄ Roadway

Line 'A'

Section Line

+75 'A'
R/W 0'

+75 'A'
R/W 40'

6"

GR

46

27

10'

O

50' G.R.E.T, Type OS
Construction Limits

40' R/W per Proj.
No. 691 Sec.(A) 1950

+05.5
19.4', 'A', Rt.

Construction Limits

15' Drainage Easement

HANNA SAND & GRAVEL

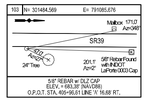
Sec. 14, T34N, R3W
Hanna Township
Laporte County

LEGEND:

- (GR) Guardrail (For Type, See Profile, Sheet 7)
- (O) Variable Depth Compacted Aggregate, No. 53
- (27) Mulched Seeding, R
- (46) Line, Thermoplastic, Solid, White, 6 Inch

Notes:

1. All R/W and existing topography described from Line 'B' unless otherwise noted. Line 'B' and 'A' to be constructed.



DLZ

DLZ INDIANA, LLC

NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024 DRAWN: PEB 7/2024

CHECKED: TMN 7/2024 CHECKED: TMN 7/2024

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN
LINE 'A'

HORIZONTAL SCALE	CULVERT ASSET ID
1" = 20'	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
N/A	2100806
	SHEETS
	8 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
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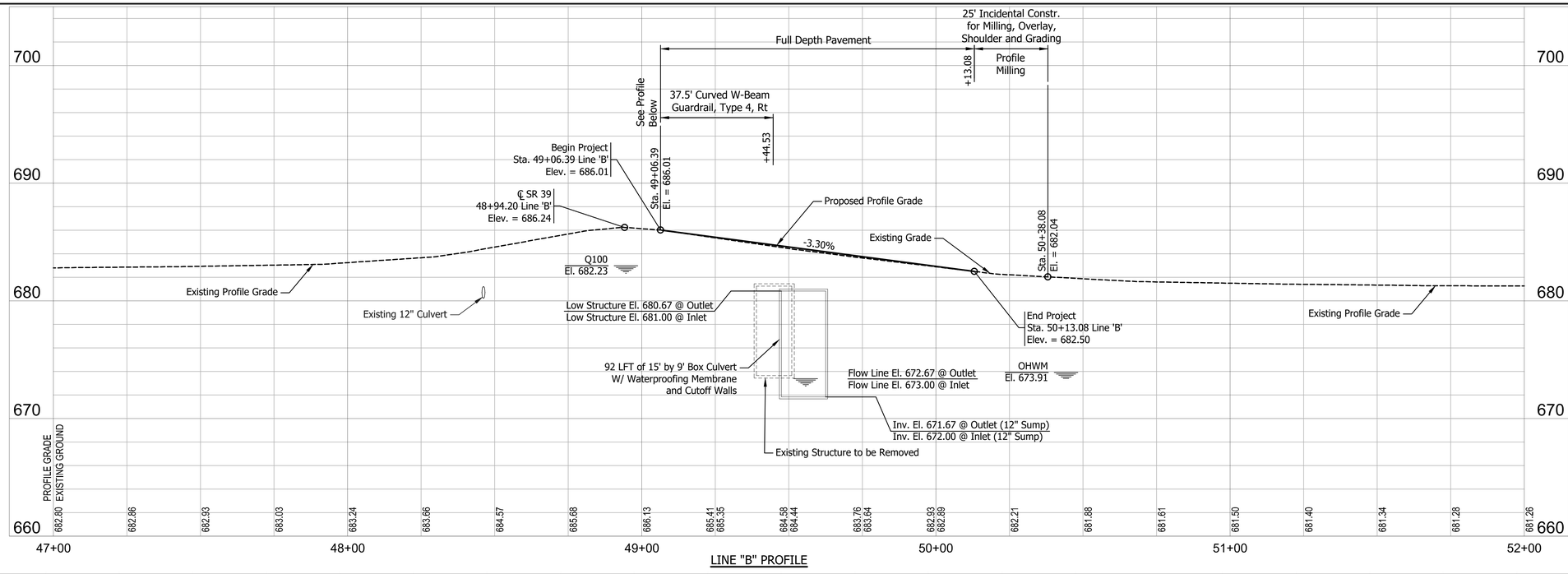
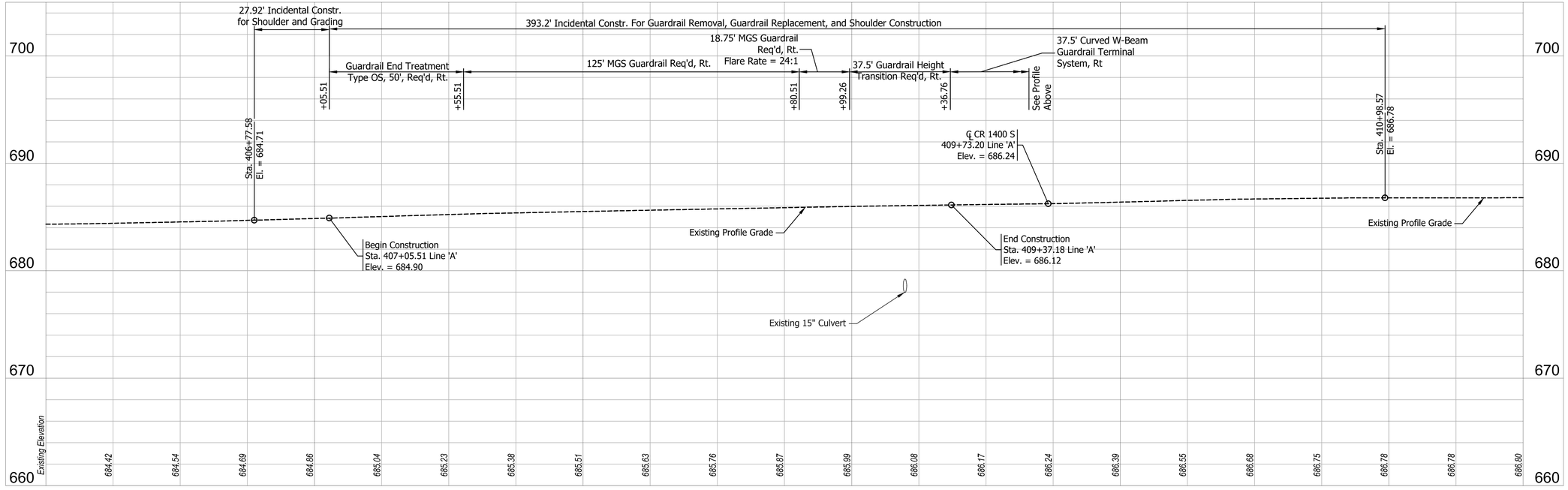


LINE "B" PROFILE



LINE "A" PROFILE

TBM 'A' ELEV = 682.23' (NAVD88)
MAG SPIKE SET IN THE SOUTH SIDE OF POWER POLE REMC 37801 LOCATED ON THE NORTH SIDE OF W 1400 S, APPROXIMATELY 440' EAST OF THE INTERSECTION OF SR 39 AND W 1400 S.
TBM 'B' ELEV = 686.71' (NAVD88)
MAG SPIKE SET IN THE WEST SIDE OF A POWER POLE LOCATED AT THE SOUTHEAST CORNER OF THE INTERSECTION BETWEEN SR 39 AND W 1400 S.
TBM 'C' ELEV = 682.26' (NAVD88)
MAG SPIKE SET IN THE SOUTH SIDE OF POWER POLE REMC 37796 LOCATED ON THE NORTH SIDE OF W 1400 S, APPROXIMATELY 380' WEST OF THE INTERSECTION OF SR 39 AND W 1400 S.

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024	DRAWN: PEB 7/2024
CHECKED: TMN 7/2024	CHECKED: TMN 7/2024

INDIANA
DEPARTMENT OF TRANSPORTATION

PROFILE
LINE 'B' & 'A'

HORIZONTAL SCALE	CULVERT ASSET ID
1" = 20'	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
1" = 4'	2100806
	SHEETS
	9 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
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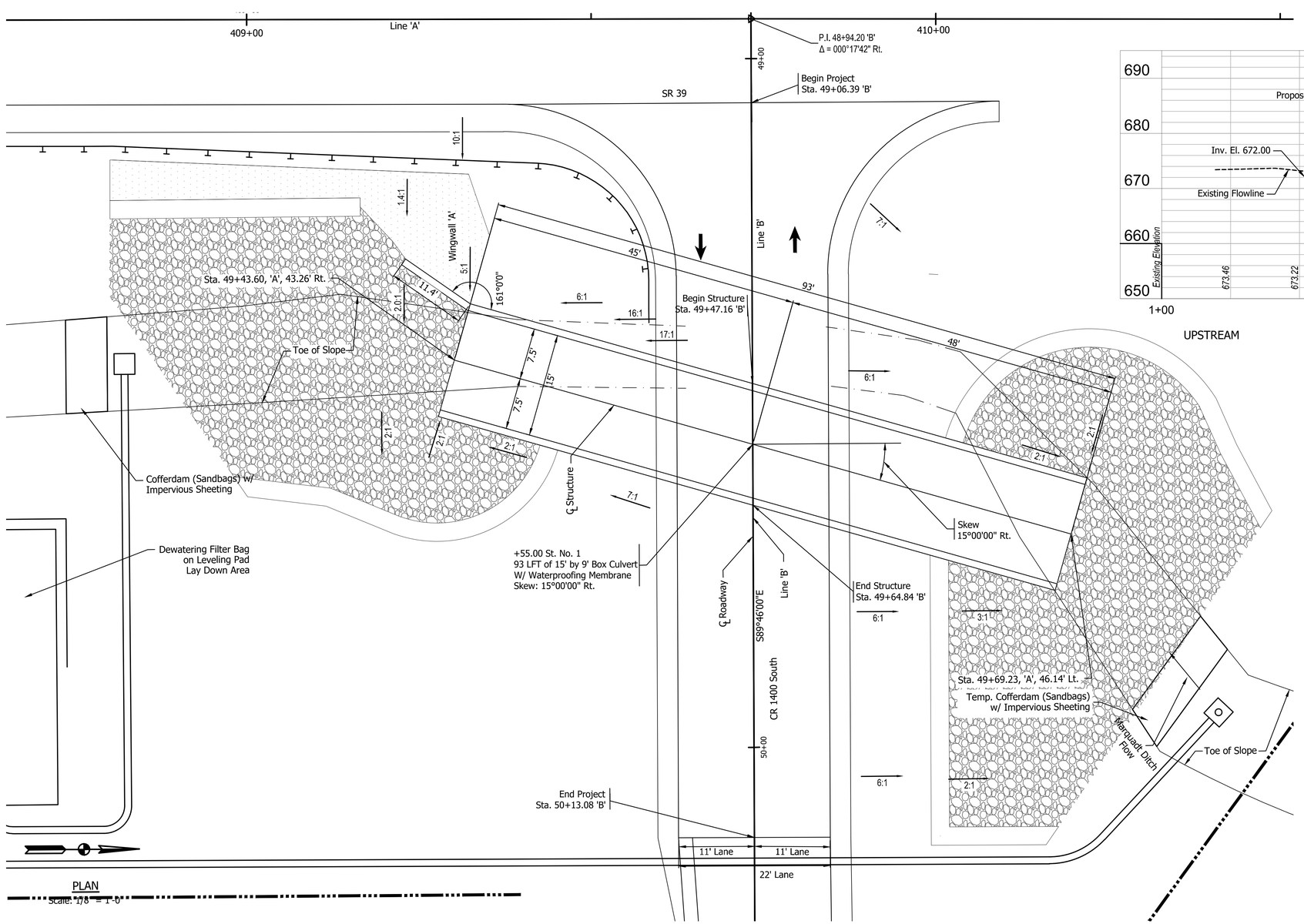
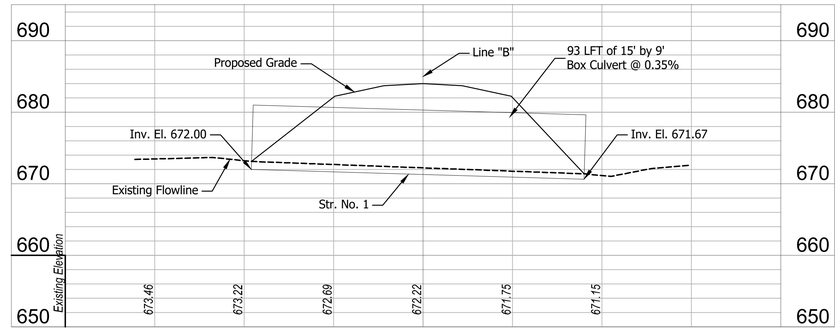


PLAN
Scale: 1/8" = 1'-0"



UPSTREAM

STREAM PROFILE OF MARQUADT DITCH
Horizontal Scale 1" = 20'
Vertical Scale 1" = 2'

DOWNSTREAM

HYDRAULIC DATA:

Drainage Area	=	3.54 sq. mi
Design Discharge Q100	=	1429.5 cfs
Velocity @ Q25	=	6.61 ft/s
Q100 Elevation	=	682.23 ft.
Backwater @ Q100	=	0 ft.
Waterway Opening Provided Below Q100 el.	=	120 sq. ft.
Proposed Low Structure	=	680.67 ft.
Skew	=	15°00'00" Rt.
Existing Waterway Opening Provided Below Q100 El.	=	109.44 sq. ft.
Existing Low Structure	=	680.27 ft.
Existing Backwater	=	0 ft.

NOTE TO REVIEWER:
End Elevation View of Wingwall 'A', Wingwall Dimension Table,
And Soil Parameter Table Will Be Provided For Next Submittal

REINFORCED CONCRETE BOX SECTION
SPAN: 15'-0", RISE: 9'-0", LENGTH: 93'-0"
SKEW: 15°00'00" RT.
26'-0" CLEAR ROADWAY
SR 39 OVER MARQUADT DITCH
LAPORTE COUNTY

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024 DRAWN: PEB 7/2024

CHECKED: TMN 7/2024 CHECKED: TMN 7/2024

INDIANA
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	CULVERT ASSET ID
AS NOTED	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
AS NOTED	2100806
	SHEETS
	10 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
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406+70

SR 39

Line 'A'

℄ Roadway

408+00

408+20

R/W

M.E. 684.59
+08.11, 12.29

11

M.E. 684.66
+18.01, 12.30

684.23
+18.01, 18.19

6.00%

6.00%

M.E. 684.99
+68.01, 12.33

Construction Limits

O

GR

684.55
+68.01, 18.35

10:1

4:1

684.22
+70.92, 21.77

684.00
+68.01, 22.36

Guardrail Shelf

27

683.81
+18.01, 22.36

Guardrail Shelf

Construction Limits

MATCHLINE STA. 408+20
SEE BELOW

MATCHLINE STA. 408+20
SEE ABOVE

SR 39

SR 39

409+00

Line 'A'

℄ Roadway

SR 39

M.E. 685.31
+24.26, 12.35

M.E. 685.59
+80.51, 12.34

M.E. 685.66
+93.12, 12.34

Construction Limits

M.E. 685.84
+30.80, 12.34

6.00%

684.87
+24.26, 18.35

685.15
+80.51, 18.35

685.17
+93.00, 18.87

684.85
+30.32, 23.84

685.19
+30.46, 20.43

10:1

6:1

12:1

Guardrail Shelf

Str. No. 1

684.52
+24.26, 21.77

684.81
+80.43, 21.77

684.82
+92.92, 22.29

684.10
+54.87, 37.86

684.37
+58.29, 37.85

684.51
+62.29, 37.84

684.75
+62.30, 44.09

684.51
+58.30, 44.10

684.30
+54.88, 44.11

R/W

LEGEND:

- (GR) Guardrail
- (O) Variable Depth Compacted Aggregate, No. 53
- (W) HMA for Widening, Type D Consisting of:
  165 #/SYD QC/QA-HMA, 4, 58E, Surface, 9.5 mm on
  275 #/SYD QC/QA-HMA, 4, 58E, Intermediate, 19.0 mm on
  1100 #/SYD QC/QA-HMA, 4, 58S, Base, 25 mm on
  Subgrade Treatment Type IC on
  Geotextile for Pavement, Type 2B
- (11) Sawcut
- (26) Sodding
- (27) Mulched Seeding, R
- Mulched Seeding, R With Erosion Control Blanket

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024

DRAWN: PEB 7/2024

CHECKED: TMN 7/2024

CHECKED: TMN 7/2024

INDIANA
DEPARTMENT OF TRANSPORTATION

GUARDRAIL DETAIL GRADING
LINE 'A'

HORIZONTAL SCALE	CULVERT ASSET ID
1" = 5'	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
N/A	2100806
	SHEETS
	11 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
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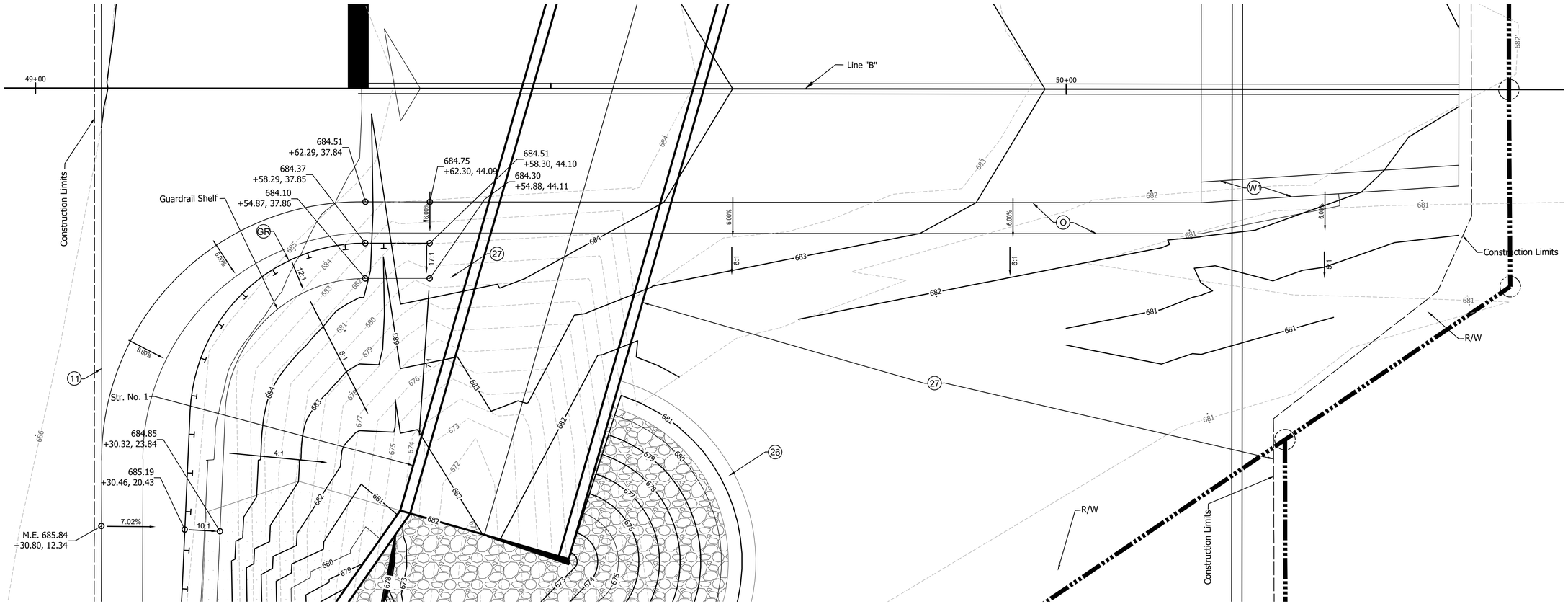

LEGEND:

- (GR) Guardrail
- (O) Variable Depth Compacted Aggregate, No. 53
- (W1) HMA for Widening, Type D Consisting of:
  275 #/SYD QC/QA-HMA, 4, 58S, Intermediate, 19.0 mm on
  660 #/SYD QC/QA-HMA, 4, 58S, Base, 25 mm on
  Subgrade Treatment Type IC on
  Geotextile for Pavement, Type 2B
- (11) Sawcut
- (26) Sodding
- (27) Mulched Seeding, R
- Mulched Seeding, R With Erosion Control Blanket

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024 DRAWN: PEB 7/2024

CHECKED: TMN 7/2024 CHECKED: TMN 7/2024

INDIANA
DEPARTMENT OF TRANSPORTATION

GUARDRAIL DETAIL GRADING
LINE "B"

HORIZONTAL SCALE	CULVERT ASSET ID
1" = 5'	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
N/A	2100806
	SHEETS
	12 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
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PAVEMENT QUANTITIES AND APPROACH TABLE

LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	DISTANCE BEYOND R/W LINE	GRADE				CLEAR ZONE AT DRIVE	SUBGRADE TREATMENT, TYPE IC AND GEOTEXTILE FOR PAVEMENT, TYPE 2B	PCCP FOR APPROACHES	PCCP FOR APPROACHES	MILLING, APPROACH	MILLING TRANSITION	QC/QA-HMA				HMA MATERIAL FOR:	COMPACTED AGGREGATE, NO. 53		DENSE GRADED SUBBASE	DENSE GRADED SUBBASE	GEOGRID, TYPE 1B	COMPACTED AGGREGATE, NO. 53, TEMPORARY FOR DRIVEWAYS	SIDEWALK, REMOVE	CURB AND GUTTER, REMOVE	SIDEWALK, CONCRETE	CURB RAMP, CONCRETE	CURB AND GUTTER, COMBINED	CURB	MULCHED SEEDING, TYPE R	PLANT GROWTH LAYER	REMARKS
																4, 5SS, SURFACE, 9.5MM	4, 5SS, INTERMEDIATE, 19.0MM	4, 5SS, BASE, 25.0MM	WIDENING WITH HMA, TYPE D	TACK COAT	DEPTH												
																LBS. PER SYD.																	
						1	2	3	4			9"	6"			165	275	660	935		8 IN.	14 IN.	9 IN.	6 IN.					4 IN.					
		FT	FT	FT	FT	%	%	%	%	FT	SYS	SYS	SYS	SYS	SYS	TON	TON	TON	TON	TON	TON	CYS	CYS	CYS	SYS	SYS	SYS	LFT	SYS	SYS	LFT	LFT	SYS	SYS	
LINE 'A'	Mainline																																	
406+77.58	409+37.18																				134.0													
LINE 'B'	Mainline																																	
49+06.39	50+13.08										405					26.0	42.0	101.0		0.5	57											1,955	2,023	
50+13.08	50+38.08										12				60	5.0			3		12													
Total											417				60	31	42	101	3	0.5	203											1,955	2,023	

GUARDRAIL SUMMARY TABLE

LOCATION						MGS W-BEAM GUARDRAIL LENGTH															CURVED W-BEAM GUARDRAIL SYSTEM							REMARKS
FROM STATION	TO STATION	LEFT	MEDIAN LEFT	MEDIAN RIGHT	RIGHT	STANDARD POST AT 6 FT 3 IN. SPA.	STANDARD POST AT 3 FT 1.5 IN. SPA.	DOUBLE FACED AT 6 FT 3 IN. SPA.	DOUBLE FACED AT 3 FT 1.5 IN. SPA.	HEIGHT TRANSITION	GUARDRAIL TRANSITION WITH CURB	GUARDRAIL TRANSITION WITHOUT CURB	STRUCTURE TOP-MOUNTED POST	CABLE TERMINAL ANCHOR	SHOP CURVED AT _____ FT. SPA.	LONG-SPAN GUARDRAIL	GUARDRAIL FLARE RATE	GUARDRAIL END TREATMENT TYPE OS	GUARDRAIL END TREATMENT TYPE MS	GUARDRAIL TRANSITION TYPE TGB	W-BEAM STANDARD POST AT 6 FT 3 IN. SPA.	TERMINAL SYSTEM		CONNECTOR SYSTEM		GUARDRAIL REMOVE	GUARDRAIL RESET	IMPACT ATTENUATOR TYPE ____	
						LFT	LFT	LFT	LFT	EACH	EACH	EACH	EACH	EACH	LFT	EACH		EACH	EACH	EACH	LFT	TYPE	EACH	TYPE	EACH	LFT	LFT	EACH	
LINE 'A'																													
407+18.01	409+57.31				X	125				1								1				4	1			408			
TOTALS						125				1								1				4	1			408			

STRUCTURE DATA

STRUCTURE NUMBER	LOCATION						DESCRIPTION		LENGTH	SKEW	FLOWLINE			TOP OF CASTING	SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL		FLOWABLE BACKFILL		CLASS I RIP-RAP	GEOTEXTILE FOR RIPRAP	VIDEO INSPECTION	PIPE END SECTION	GRATED BOX END SECTION			SAFETY METAL END SECTION		CONNECT TO STR.	NOTES/REMARKS
	STATION	LEFT	RIGHT	CROSS	OFFSET	SIZE	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE			COVER	UPSTREAM INVERT	DOWNSTREAM INVERT						TYPE	CYS	TYPE	CYS	TON	SYS	LFT	EA	TYPE	SLOPE	EA	SLOPE	EA		
					FT	IN			LFT		FT	ELEV.	ELEV.	ELEV.	YR																		
LINE	B'																		2	111													
1	49+56			X		180		SPECIALTY	93	15	2.0	672.00	671.67		75	NA	7.0		5	267													15' BY 9' BOX CULVERTW/ WATERPROOFING MEMBRANE
																							411	501									

R/W MARKERS

STATION	OFFSET	EACH
	ft	
LINE 'B'		
50+43.00	23, L	1
50+43.00	19, R	1
LINE 'A'		
406+75.21	40, R	1
408+80.00	40, R	1
410+70.00	40, R	1
TOTAL		5

MONUMENT TABLE

STATION	OFFSET	MONUMENT
Line "A"		
409+73.4	15 R	Section Corner
Line "B"		

PAVEMENT MARKINGS SUMMARY OF QUANTITIES

ALIGNMENT	LOCATION	L/R/C	LINE THERMOPLASTIC					TRANSVERSE MARKING, MULTI-COMPONENT, CROSSHATCH LINE	TRANSVERSE MARKING, THERMOPLASTIC, STOP BAR	TRANSVERSE MARKINGS, MULTI-COMPONENT, CROSSWALK LINE	PAVEMENT MESSAGE MARKING, LANE INDICATION ARROW	GROOVING FOR PAVEMENT MARKINGS
			SOLID YELLOW 6 IN	SOLID WHITE 6 IN	DOTTED WHITE 6 IN	BROKEN WHITE 6 IN	BROKEN YELLOW 4 IN	YELLOW 12 IN	WHITE 24 IN	WHITE 6 IN		
			FT	FT	FT	FT	FT	FT	ft	ft	EACH	LFT
A	STA 406+88.11 TO STA 409+37.18	R		119								119
A	STA 409+73.38 TO STA 409+84.38	R							11			
B	STA 49+31.31 TO STA 50+38.09	L	107									107
B	STA 49+31.31 TO STA 50+38.09	R	107									107
	TOTAL		214	119					11			333

NOTE TO REVIEWER: TABLES TO BE COMPLETED AT STAGE 3

DLZ

NOT FOR CONSTRUCTION

DLZ INDIANA, LLC

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: AMM 7/2024 DRAWN: PEB 7/2024

CHECKED: TMN 7/2024 CHECKED: TMN 7/2024

INDIANA DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS TABLES

HORIZONTAL SCALE	CULVERT ASSET ID
N/A	CV 039-046-169.10
VERTICAL SCALE	DESIGNATION
N/A	2100806
	SHEETS
	13 of 20
CONTRACT	PROJECT
R-43904	2108006

11/29/2023
X:\Projects\2021\2161\283970 INDOT 210112a OnCall\2100806 SR 39 Over Marquadt Ditch\01_ConstDocs\CAD\Sheet Files\2100806MISC.dwg

Des 2100806

Appendix C

Early Coordination

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

PHONE: (855) 463-6848
FAX: (855) INDOT4U

Eric Holcomb, Governor
Michael Smith, Commissioner

August 31, 2024

RE: Des. No. 2100806, State Road (SR) 39 over Marquadt Ditch, LaPorte County, Indiana.

Environmental Reviewer,

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a small structure project in LaPorte County, Indiana. The project is located at SR 39 and County Road (CR) 1400 South (S) over Marquardt Ditch, 0.09 mile South of US 30, in Sections 10, 11, 14 and 15. Township 34 North, Range 3 West in Hannah Township. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible effects associated with this project. **Please use the above designation number and description in your reply**. We will incorporate your comments into a study of the project's environmental impacts.

This section of SR 39 is a two-lane minor arterial roadway with a posted speed of 55 miles per hour (mph) consisting of one 12-foot-wide lane in each direction with approximately two-foot-wide shoulders on each side. A guardrail of approximately 115 feet (ft) is present on the east side of the road in the project area. The existing structure (Structure No. CV 039-046-169.10) is a corrugated metal pipe (CMP) that is 63 ft long and approximately 7.5 ft in diameter. The existing structure shows signs of deterioration including perforation through the entire pipe. The proposed scope of work includes replacing the existing structure with a 15 ft span by 9 ft rise reinforced concrete box (RCB). The guardrail along the east side of SR 39 south of CR W 1400 S will be removed and replaced. The guardrail along the east side of SR 39 north of CR W 1400 S will be removed and the area regraded so guardrail is not required. The shoulder within the project area will be reconstructed. Riprap will be installed at the inlet and outlet of the structure. Approximately 0.099 acres of permanent and 0.19 acres of temporary right-of-way (ROW) will be required for this project. No relocation of residents or businesses will be required. The Maintenance of Traffic (MOT) plan for this project will require a road closure on SR 39 and CR 1400 with a detour utilizing SR 37, US 30, and SR 62. Construction is anticipated to begin in fall 2025.

MOT Note- The detour willl be utilizing S 300 West (W) and W 1400 S

Land use in the vicinity of the project is primarily agricultural and residential properties to the west of the project area. SJCA Inc. will investigate the site's historic resources for compliance with Section 106 of the National Historic Preservation Act. A Waters of the US Report/Wetland Delineation Report will be completed to identify any ecological resources that may be present, and coordination with the INDOT Ecology, Waterway Permitting, and Stormwater Office will occur to determine the required water resource permits.

Please respond with comments, questions, and concerns **within thirty (30) calendar days** from the date of this letter. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions regarding this matter, please feel free to contact Jeegar Panchal at SJCA Inc. at jpanchal@sjcainc.com or 317-566-0629, or INDOT Project Manager, Micheal Grylewicz, at MGrylewicz@indot.IN.gov. Thank you in advance for your input on this project.

Note - The right-of-way amount have been changed later during designing. The project will require 0.4 acres of new permanent, 0.182 acres of temporary and 0.182 acres of re-acquired right-of-way

Sincerely,

Jeegar Panchal
Ecologist/Project Consultant
SJCA Inc.

Attachments:
Early Coordination Recipient List
Project Maps
Photo Location Map and Site Photographs

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-ES
Indianapolis, Indiana 46204

PHONE: (855) 463-6848
FAX: (855) INDOT4U

Eric Holcomb, Governor
Michael Smith, Commissioner

The following agencies received Early Coordination Letters:

Federal Highway Administration
Kari Carmany George – LaPorte District
k.carmanygeorge@dot.gov

Regional Environmental Coordinator
Midwest Regional Office
Mwro_Compliance@nps.gov

U.S. Department of Housing & Urban Development
Chicago Regional Office
Field Environmental Officer, Erik Sandstedt
erik.r.sandstedt@hud.gov

Natural Resources Conservation Service
State Conservationist
john.allen@usda.gov

U.S. Army Corps of Engineers
Detroit District
Aaron.W.Damrill@usace.army.mil
Regadmin.LRE_RegAdmin@usace.army.mil

Indiana Geological and Water Survey
Online Submission
https://igws.indiana.edu/eAssessment

IDNR Environmental Coordinator
environmentalreview@dnr.in.gov

IDEM Wellhead Proximity Determinator Tool
*Not in Wellhead Protection or Source Water Area
http://www.in.gov/idem/cleanwater/pages/wellhead/

INDOT LaPorte District
Environmental Section Manager,
Stewart Michels
SMichels@indot.IN.gov

INDOT Project Manager, Micheal Grylewicz
MGrylewicz@indot.IN.gov

Kankakee River Basin and Yellow River Basin
Development Commission
contact@kankakeeandyellowrivers.org

LaPorte County Commissioner
District 3, President, Joe Haney
jhaney@laporteco.in.gov

LaPorte County Council
District 3, Mark Yagelski
myagelski@comcast.net

Northwestern Indiana Regional Planning Commission
(NIRPC), Executive Director
twarner@nirpc.org

LaPorte County Highway
Department Superintendent
Charity Glaser
lfricke@laporteco.in.gov (Dept. Clerk)

LaPorte County Emergency Management
Director, Robert Sabie
rsabie@laporteco.in.gov

LaPorte County Surveyor
Anthony Hendricks, PS
ahendricks@laportecounty.org

LaPorte County Soil & Water Conservation
District Administration Manager, Chris Havens
chavens@laporteco.in.gov

LaPorte County Sheriff
Ron Heeg
rheeg@lcso.in.gov

LaPorte County Community School Corporation
Transportation Director, Cary Brinkman
cbrinkman@lpcsc.k12.in.us

Hanna Sand & Gravel
Shaker GT LLC
499 W Us 30, Hamlet, IN 46532

Organization and Project Information

Organization Name: SJCA Inc.

First Name: Jeegar

Last Name: Panchal

Phone: (317) 566-0629

Email: jpanchal@sjcainc.com

Address Line 1: 9102 N Meridian St

Address Line 2: Suite 200

City: Indianapolis

State: IN

Zip: 46260

Destination Id: 2100806

Project Title: SR 39 over Marquadt Ditch

Project Description: The proposed scope of work includes replacing the existing structure with a 15 ft span by 9 ft rise reinforced concrete box (RCB). The guardrail along the east side of SR 39 south of CR W 1400 S will be removed and replaced. The guardrail along the east side of SR 39 north of CR W 1400 S will be removed and the area regraded so guardrail is not required.

Environmental Assessment Report

Geological Hazards:

1. 1% Annual Chance Flood Hazard
2. High liquefaction potential

Mineral Resources:

1. Sand and Gravel Resource: High Potential

Active or abandoned mineral resources extraction sites:

1. Active Industrial Minerals Sites (2016) (Industrial Minerals)

Disclaimer:

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This information was furnished by Indiana Geological Survey

Address: 1001 E. 10th St., Bloomington, IN 47405

Email: IGSEnvir@indiana.edu

Phone: (812) 855-7428

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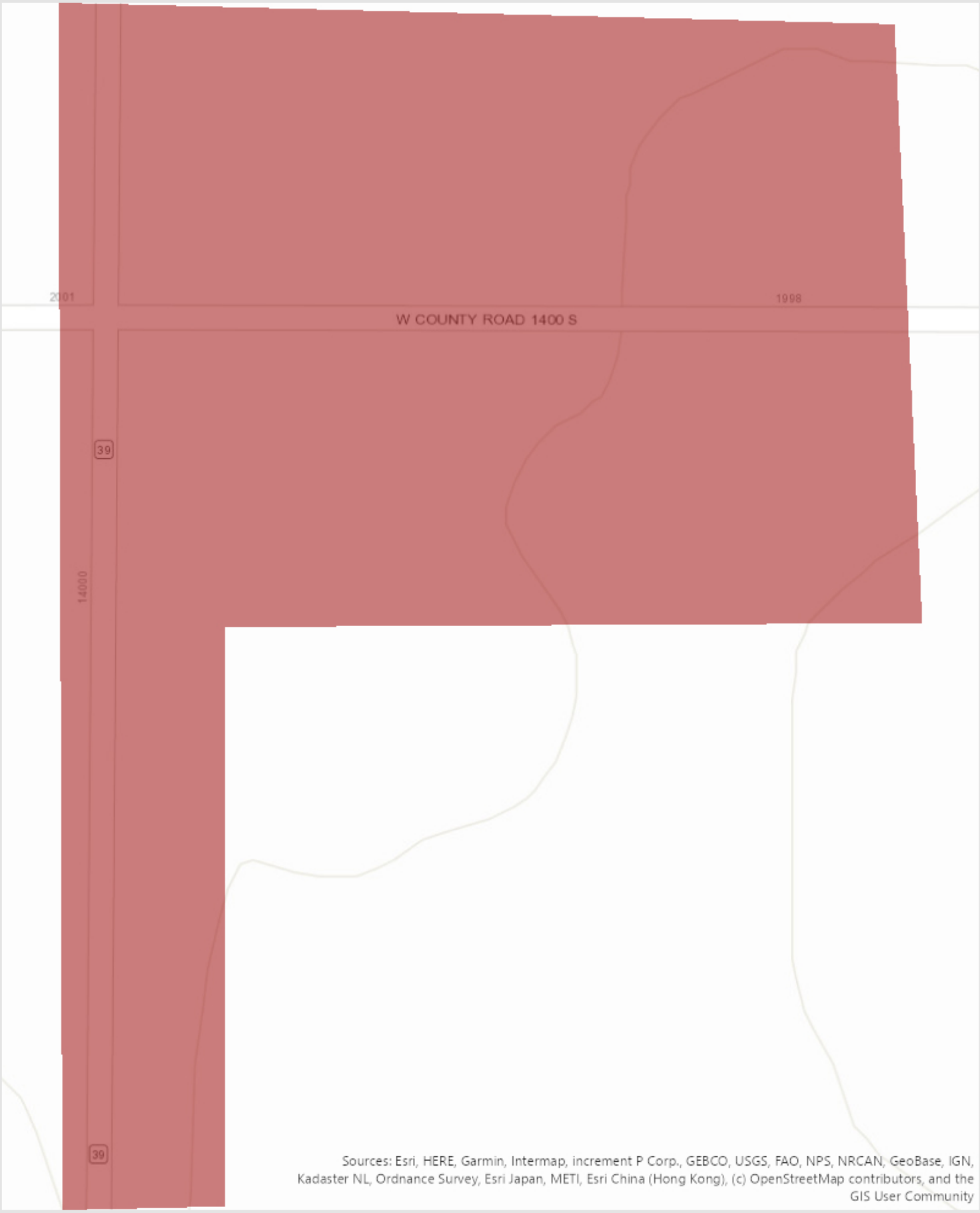

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Privacy Notice

Jeegar Panchal

From: South, John <jsouth@laporteco.in.gov>
Sent: Tuesday, September 3, 2024 10:34 AM
To: Jeegar Panchal
Cc: Hendricks, Anthony; Lahners, Adam
Subject: Re: [EXTERNAL]Des. 2100806, SR 39 over Marquadt Ditch, Small Structure Project, LaPorte County, IN Early Coordination

Jeegar,

We have received your Early Coordination Letter regarding the project on SR 39 & CR 1400 S. We do not have any regulated drains in your project area, so you will not need any permits from the La Porte County Drainage Board.

Thank you

John R South
Party Chief
La Porte County Drainage Board
813 Lincolnway, Room 210/211
La Porte, Indiana 46350
(219) 326-6808 X2285
Mobile: 219-575-0709
jsouth@laporteco.in.gov

Due to the nature of the work performed by the staff, occasionally there are times when no one will be in the office. Please call before making a special trip.

From: Hendricks, Anthony <ahendricks@laporteco.in.gov>
Sent: Monday, September 2, 2024 11:05 AM
To: South, John <jsouth@laporteco.in.gov>
Subject: Fw: [EXTERNAL]Des. 2100806, SR 39 over Marquadt Ditch, Small Structure Project, LaPorte County, IN Early Coordination

---

From: Jeegar Panchal <jpanchal@sjcainc.com>
Sent: Saturday, August 31, 2024 1:09 PM
To: Haney, Joe <jhaney@laporteco.in.gov>; Yagelski, Mark <myagelski@comcast.net>; Fricke, Laura <lfricke@laporteco.in.gov>; Robert Sabie <rsabie@laporteco.in.gov>; Hendricks, Anthony <ahendricks@laporteco.in.gov>; Havens, Chris <chavens@laporteco.in.gov>; Heeg, Ron <rheeg@lcso.in.gov>; cbrinkman@lpcsc.k12.in.us <cbrinkman@lpcsc.k12.in.us>

Jeegar Panchal

From: Cary Brinkman <cbrinkman@lpcsc.k12.in.us>
Sent: Tuesday, September 3, 2024 6:29 AM
To: Jeegar Panchal
Subject: Re: Des. 2100806, SR 39 over Marquadt Ditch, Small Structure Project, LaPorte County, IN Early Coordination

Thank you for reaching out, however that intersection is out of our school district. I will keep that in mind for any athletic events that may require us to use the route going south.

Cary Brinkman
LaPorte Community School Corporation

On Sat, Aug 31, 2024 at 1:10 PM Jeegar Panchal <jpanchal@sjcainc.com> wrote:

> Good afternoon,
>
> I am an Environmental Scientist/Ecologist with SJCA Inc. My company is working on SR 39, small structure project, LaPorte, Indiana. I am reaching out to you with the Early Coordination information for the subject project – see attached, for your review and comment.
>
> Please feel free to contact me via email if you have any questions. If you have concerns or comments on this project, your response is kindly requested within 30 days. I will incorporate your response in environmental impact documentation for this project.
>
> Thank you,
>
> SJCA
> **Jeegar Panchal**
> Environmental Scientist
> T 317-566-0629 • M 872-806-8020
> We're Hiring!

United States Department of Agriculture

Farm Production and Conservation

Natural Resources Conservation Service

Indiana State Office
6013 Lakeside Boulevard
Indianapolis, Indiana 46278
317-295-5800

September 11, 2024

Jeegar Panchal
SJCA Inc.
9102 N. Meridian Street, Suite 200
Indianapolis, Indiana 46260
jpanchal@sjcainc.com

Dear Jeegar Panchal:

The proposed Small Structure Project, SR 39 over Marquadt Ditch, in LaPorte County, Indiana, (Des No 2100806) as referred to in your letter received on August 31, 2024, will cause a conversion of prime farmland.

The attached packet of information is for your use competing Parts VI and VII of the AD-1006. After completion, the federal funding agency needs to forward one copy to NRCS for our records.

If you need additional information, please contact John Allen at 317-295-5859 or john.allen@usda.gov.

Sincerely,

JOHN ALLEN

Digitally signed by JOHN ALLEN
Date: 2024.09.12 07:25:59 -04'00'

JOHN ALLEN
State Soil Scientist

Enclosers

USDA is an equal opportunity provider, employer, and lender.

Jeegar Panchal

From: Allen, John - FPAC-NRCS, IN <john.allen@usda.gov>
Sent: Thursday, October 17, 2024 8:14 AM
To: Jeegar Panchal; Sims, Tracy (CTR) - FPAC-NRCS, IN
Subject: Re: Des No2100806, SR 39 over Marquadt Ditch, Small Structure Project, LaPorte Co
Attachments: DES2100806_SR39 over Marquadt Ditch_Revised_1006.pdf; DES2100806_SR39 over Marquadt Ditch_Revised_1006.pdf

Hi Jeegar,

Attached is the revised 1006 with the updated acreage.

John Allen
State Soil Scientist
USDA-Natural Resources Conservation Service
6013 Lakeside Boulevard
Indianapolis, IN 46278

317-295-5859
317-670-1924 (cell)

www.soils.usda.gov

Soil Explorer

SoilWeb: An Online Soil Survey Browser | California Soil Resource Lab (ucdavis.edu)

From: Jeegar Panchal <jpanchal@sjcainc.com>
Sent: Wednesday, October 16, 2024 3:26 PM
To: Sims, Tracy (CTR) - FPAC-NRCS, IN <Tracy.Sims@in.nacdnet.net>
Cc: Allen, John - FPAC-NRCS, IN <john.allen@usda.gov>
Subject: RE: Des No2100806, SR 39 over Marquadt Ditch, Small Structure Project, LaPorte Co

Hey John and Tracy,

Just letting you know that there are some changes in right-of-way after the early coordination letter was sent. Approximately 0.099 acres of permanent and 0.19 acres of temporary right-of-way was required for the subject project previously.

The new right-of-way amount is 0.4 acres of permanent, 0.182 acres of permanent-reacquired, and 0.182 acres of temporary ROW.

Would that change anything in the 1006 form? Attached is the 1006 form that you sent me in your response. Please let me know if you have any questions or need anything else.

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request	
Name of Project DES2100806_SR39 over Marquadt Ditch	Federal Agency Involved	
Proposed Land Use	County and State La Porte County, IN	
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 9/12/2024	Person Completing Form: JRA

Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☑	NO ☐	Acres Irrigated	Average Farm Size
				336 ac

Major Crop(s)	Farmable Land In Govt. Jurisdiction	Amount of Farmland As Defined in FPPA
Corn	Acres: 348280 % 90	Acres: 28329 % 73
Name of Land Evaluation System Used: LESA	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site				
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	0.40			
B. Total Acres Statewide Important or Local Important Farmland	0.00			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<0.001			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	17			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	91			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	15			
2. Perimeter In Non-urban Use	(10)	10			
3. Percent Of Site Being Farmed	(20)	0			
4. Protection Provided By State and Local Government	(20)	0			
5. Distance From Urban Built-up Area	(15)	10			
6. Distance To Urban Support Services	(15)	10			
7. Size Of Present Farm Unit Compared To Average	(10)	8			
8. Creation Of Non-farmable Farmland	(10)	0			
9. Availability Of Farm Support Services	(5)	3			
10. On-Farm Investments	(20)	0			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	0			
TOTAL SITE ASSESSMENT POINTS	160	56	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	91	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	56	0	0	0
TOTAL POINTS ***(Total of above 2 lines)***	260	147	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☑

Reason For Selection:

Name of Federal agency representative completing this form: Jeegar Panchal — Date: 1/25/25

(See Instructions on reverse side) **Form AD-1006 (03-02)**

THIS IS NOT A PERMIT

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Fish and Wildlife
Early Coordination/Environmental Assessment

DNR#: ER-26798

Request Received: August 31, 2024

Requestor:
Jeegar Panchal
SJCA, Inc.
1028 Virginia Avenue, Suite 201
Indianapolis, IN 46203

Project:
CR 1400 South & SR 39 small structure (CV 039-046-169.10) replacement over Marquardt Ditch with a reinforced concrete box (RCB), 0.09 miles south of US 30; Des #2100806

County/Site Info: LaPorte County

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

If our agency has regulatory jurisdiction over the project, the recommendations contained in this letter may become requirements of any permit issued. If we do not have permitting authority, all recommendations are voluntary.

Regulatory Assessment:
Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

Natural Heritage Database:
The Natural Heritage Program's data have been checked. The Division of Nature Preserves recommends confining the project area as much as possible to minimize impacts to the below-listed Western Silvery Aster. The following have been documented within .5 mile of the project area:

Flora
Western Silvery Aster (*Symphyotrichum sericeum*), State threatened

Fauna
Shorebird Migratory Concentration Area
Upland Sandpiper (*Bartramia longicauda*), State endangered

Insects
Four-lined Cordgrass Borer (*Resapamea stipata*), State endangered
Helianthus Leafhopper (*Mesamia straminea*), State endangered
Leadplant Webworm (*Sciota dammersi*), State endangered
Many-lined Photedes (*Photedes enervata*), State endangered
Nebraska Fritillary (*Boloria myrina nebraskensis*), State endangered
Obtuse Sedge Borer (*Oligia obtusa*), State endangered
Opalescent Apamea (*Apamea lutosa*), State endangered
Smoky-eyed Brown (*Lethe eurydice fumosus*), State endangered

The Kansas Prairie (*Prairiana kansana*), State endangered
Big Broad-winged Skipper (*Poanes viator viator*), State threatened
Black-dashed Apamea (*Apamea nigrior*), State threatened
Buff-edge Quaker (*Dargida rubripennis*), State threatened
Burgess' Apamea (*Apamea burgessi*), State threatened
Giant Sunflower Borer Moth (*Papaipema maritima*), State threatened
Golden Borer Moth (*Papaipema cerina*), State threatened
Golden Legged Mydas Fly (*Mydas tibialis*), State threatened
Newman's Brocade (*Meropleon ambifusca*), State threatened
Noted Sunflower Moth (*Tricholita notata*), State threatened
Pearly Wild Indigo Borer (*Sitochroa dasconalis*), State threatened
Silphium Borer Moth (*Papaipema silphii*), State threatened
The Prairie Panic Grass (*Polyamia herbida*), State threatened
Unarmed Wainscot (*Leucania inermis*), State threatened
Dusted Skipper (*Atrytonopsis hianna*), State rare
Gray Comma (*Polygonia progne*), State rare
Indiangrass Flexamia (*Flexamia reflexus*), State rare
Little Bluestem Polyamia (*Polyamia caperata*), State rare
Nebraska Conehead (*Neoconocephalus nebrascensis*), State rare
Purplish Copper (*Lycaena helloides*), State rare
Salt Marsh Wainscot (*Leucania amygdalina*), State rare
Sprinkled Locust (*Chloealtis conspersa*), State rare

Fish and Wildlife Comments:
Avoid and minimize impacts to fish, wildlife, and botanical resources to the greatest extent possible, and compensate for impacts. The following are recommendations that address potential impacts identified in the proposed project area:

A) Heritage Species
The Division of Fish and Wildlife does not anticipate any significant impacts to the Upland Sandpiper or Shorebird Migratory Concentration Area due to this project.

B) Stream Crossing Design
Bridges are preferred over culverts, and three-sided culverts are preferred over box or pipe culverts. Multiple culverts or culverts with multiple openings are not recommended for approval. These types of structures are often problematic for fish and wildlife passage as they tend to accumulate debris and become blocked. If box and pipe culverts are used, the culvert bottoms should be sumped a minimum of 6" (or 20% of the culvert height or diameter, whichever is greater up to a maximum of 2') below the stream bed elevation. Sumping is not required for bridges or three-sided culverts. Crossings must span the entire channel width (a minimum of 1.2 times the ordinary high-water mark width). Crossings must maintain the natural stream substrate within the structure (natural stream substrate must be replaced in sumped box and pipe culverts up to the existing flowline). Scour protection at the inlet and outlet must not extend above the existing flowline elevation. Stream depth, channel width and water velocities in the crossing structure during low-flow conditions must approximate those in the natural stream channel.

The replacement crossing structure, and any bank stabilization under or around the structure, must not create conditions that are less favorable for wildlife passage when compared to existing conditions. Upgrading wildlife passage for replacement/rehabilitated structures is recommended whenever possible to improve wildlife/vehicle safety. White-tailed deer passage must be incorporated into all new structures where no structure previously existed. Minimum structure dimensions for white-tailed deer passage are 20 feet of width clearance (overall span of the structure) and 8 feet of height clearance measured from the ordinary high-water mark (OHWM). Bank lines must be maintained or restored within structures to allow for wildlife passage above the OHWM. All wildlife passage designs must include a smooth level pathway preferably 3 feet wide but a minimum of 1-2 feet in width composed of natural substrate (soil, sand, gravel, etc.) or compacted aggregate fill over riprap (#2, #53, #73, etc.) tied into existing elevations both upstream and downstream. The width and location of the wildlife pathway is dependent on the wildlife species using the area.

There are several techniques and materials for incorporating wildlife passage into the design of a crossing structure. Coordination with a Regional Environmental Biologist to address wildlife passage issues before submitting a permit application (if required) is encouraged to avoid delays in the permitting process. The following links are good resources to consider in the design of stream crossing structures to maintain fish and wildlife passage:

https://www.fs.usda.gov/ccrc/tool/fishxing-fish-passage-learning-systems
https://www.fs.usda.gov/wildlifecrossings/library/index.php
https://www.fhwa.dot.gov/clas/ctip/wildlife_crossing_structures/
https://www.fhwa.dot.gov/engineering/hydraulics/pubs/11008/hif11008.pdf

C) Streambank Stabilization

Some form of bank stabilization is almost always needed with the construction, repair, replacement, or modification of a stream channel or crossing structure. For streambank stabilization and erosion control, regrading to a stable slope (2:1 or shallower) and establishing native vegetation along the banks are typically the most effective techniques and allow a vegetated stream bank to develop. A variety of methods to accomplish this include planting plugs, whips, container stock, seeding, and live stakes. In addition to vegetation establishment, some additional level of bioengineered bank stabilization may be needed under certain circumstances (inability to regrade to a stable slope, flow velocities that exceed the limits of vegetation alone, etc.). Combining vegetation with any of the following bank stabilization methods can provide additional bank protection while not compromising benefits to fish, wildlife, and botanical resources:

- Geotextiles (erosion control blankets and/or turf reinforcement mats that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles)
- Vegetated geogrids or soil lifts, fiber rolls, glacial stone, or riprap.

Riprap or other hard bank stabilization materials should be used only at the toe of the sideslopes up to the OHWM with the exception of areas directly under bridges for instance. The banks above the OHWM should be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to Northern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. Information about bioengineering techniques can be found at the following link to a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization: https://irrigationtoolbox.com/NEH/Part650_EngineeringFieldHandbook/H_210_650_16.pdf.

D) Riparian Habitat

We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at: https://www.in.gov/nrc/files/IB-17.pdf.

Impacts to non-wetland forest of one (1) acre or more in a rural or urban area should be mitigated at a minimum 2:1 ratio based on area of impact. Impacts to non-wetland forest under one (1) acre but at least 0.10 acre in a rural or urban area should be mitigated at a minimum 1:1 ratio based on area of impact. Impacts under 0.10 acre in a rural area typically do not require mitigation or additional plantings beyond seeding and stabilizing disturbed areas, though there are exceptions for high quality habitat sites. Impacts under 0.10 acre in an urban area should be mitigated by replacing each mature tree removed (trees that are 10” diameter-at-breast height (dbh)) with two trees of 3-gallon stock or larger. Seeding and stabilizing disturbed areas is required regardless of the impact amount and location.

The mitigation site should be located in the floodway, downstream of the one (1) square mile drainage area of that stream (or another stream within the 8-digit HUC, preferably as close to the impact site as possible) and adjacent to existing forested riparian habitat.

The additional measures listed below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:

1. Revegetate all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Northern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (3 inches or greater diameter-at-breast height, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Use minimum average 6-inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
6. Do not use broken concrete as riprap.
7. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
8. All excavated material must be properly spread or completely removed from the project site such that erosion and off-site sedimentation of the material is prevented.
9. Minimize the movement of resuspended bottom sediment from the immediate project area.
10. Do not deposit or allow construction/demolition materials or debris to fall or otherwise enter the waterway. Any incidental fallen material or debris in the waterway must be removed within 24 hours using best management practices, particularly lifting material out of the waterway and not dragging it across the streambed whenever possible.
11. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
12. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

Contact Staff:
Our agency appreciates this opportunity to be of service. Please contact me at RVanVoorhis@dnr.IN.gov or (317) 232-8163 if we can be of further assistance.

Rachel Van Voorhis **Date:** October 3, 2024
Rachel Van Voorhis
Environmental Coordinator
Division of Fish and Wildlife

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To: 03/07/2025 19:02:34 UTC
Project Code: 2025-0006463
Project Name: Des. No. 2100806, SR 39 over Marquadt Ditch, LaPorte County, Indiana.

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process. For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of

Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

- Official Species List
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
(812) 334-4261

PROJECT SUMMARY

Project Code: 2025-0006463

Project Name: Des. No. 2100806, SR 39 over Marquadt Ditch, LaPorte County, Indiana.

Project Type: Culvert Repair/Replacement/Maintenance

Project Description: The Indiana Department of Transportation, with federal funding intends to proceed with a small structure project (Des 2100806), located at SR 39 and County Road (CR) 1400 South (S), approximately 0.09 mile south of United States (US) 30, in Sections 10, 11, 14 and 15, Township 34 North, Range 3 West, Hannah Township in LaPorte County, Indiana. The existing structure (Structure No. CV 039-046-169.10) is a corrugated metal pipe (CMP) that is 63 feet long and approximately 7.5 feet in diameter. The existing approach cross section of SR 39 consists of one 12-foot-wide lane in each direction with approximately two-foot-wide shoulders on each side. The proposed scope of work includes replacing the existing structure with 15 feet span by 9 feet rise reinforced concrete box (RCB). The guardrail along the east side of SR 39 south of CR W 1400 S will be removed and replaced. The guardrail along the east side of SR 39 north of CR W 1400 S will be removed and the area will be regraded, so guardrail is not required. The shoulder within the project area will be reconstructed. Riprap will be installed at the inlet and outlet of the structure. Approximately 0.4 acres of permanent, 0.182 acre of permanent re-acquired and 0.182 acres of temporary right-of-way will be required for this project.

Suitable summer habitat is located within and adjacent to the project area. Approximately 0.06 acres of tree clearing will be required, and it will take place within 100 feet of the roadway. A review of the USFWS database by INDOT LaPorte District on April 22, 2024 did not indicate the presence of endangered bat species within 0.5 mile of the project area. The structure was inspected by SJCA Inc. staff on June 21, 2024. No bats or signs of bats were observed. No permanent or temporary lighting is anticipated during construction. Construction is anticipated to begin in Fall 2025. No mitigation is anticipated to be necessary.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.40345085,-86.73630758260418,14z

Counties: LaPorte County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered
Tricolored Bat *Perimyotis subflavus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/10515	Proposed Endangered

BIRDS

NAME	STATUS
Whooping Crane *Grus americana* Population: U.S.A. (AL, AR, CO, FL, GA, ID, IL, IN, IA, KY, LA, MI, MN, MS, MO, NC, NM, OH, SC, TN, UT, VA, WI, WV, western half of WY) No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/758	Experimental Population, Non-Essential

CLAMS

NAME	STATUS
Salamander Mussel *Simpsonaias ambigua* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Western Regal Fritillary *Argynnis idalia occidentalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/12017	Proposed Threatened

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

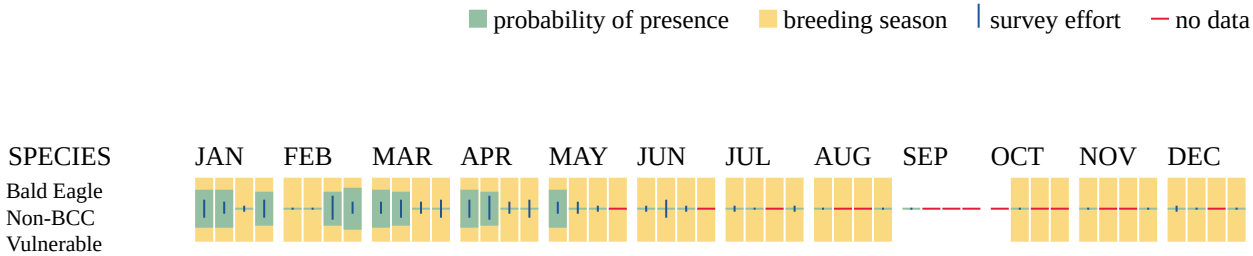
Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.



Golden Eagle
Non-BCC
Vulnerable

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

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1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Golden-plover *Pluvialis dominica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10561	Breeds elsewhere
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31

NAME	BREEDING SEASON
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere
Grasshopper Sparrow *Ammodramus savannarum perpallidus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/8329	Breeds Jun 1 to Aug 20
Henslow's Sparrow *Centronyx henslowii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Hudsonian Godwit *Limosa haemastica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9482	Breeds elsewhere
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper *Calidris melanotos* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper *Calidris pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere

NAME	BREEDING SEASON
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

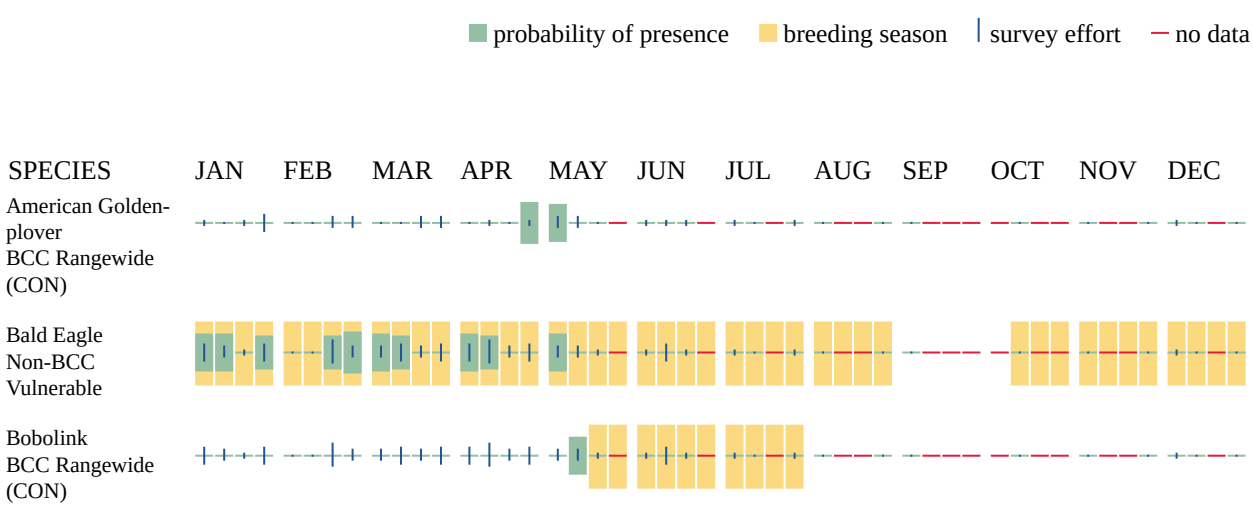
Probability of Presence (■)

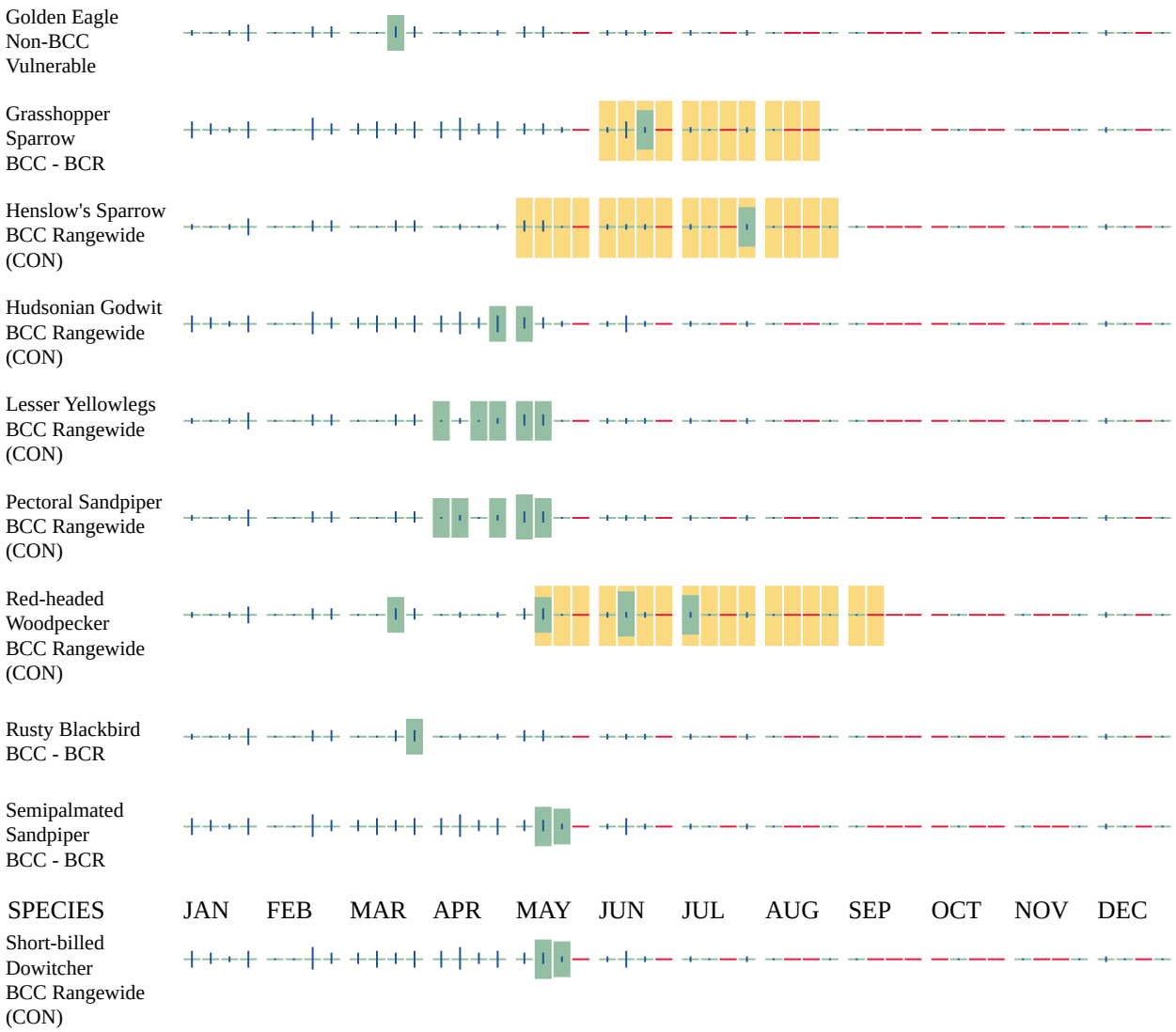
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

RIVERINE

- R2UBFx

IPAC USER CONTACT INFORMATION

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LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Transportation

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

In Reply Refer To: 10/16/2024 17:20:41 UTC
Project code: 2025-0006463
Project Name: Des. No. 2100806, SR 39 over Marquadt Ditch, LaPorte County, Indiana.

Subject: Consistency letter for the 'Des. No. 2100806, SR 39 over Marquadt Ditch, LaPorte County, Indiana.' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated October 16, 2024 to verify that the **Des. No. 2100806, SR 39 over Marquadt Ditch, LaPorte County, Indiana.** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures. **At least one of the qualification interview questions indicated an activity or portion of your project is consistent with a not likely to adversely affect determination therefore, the overall determination for your project is, may affect, and is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*)**. Consultation with the Service pursuant to section 7(a)(2) of the ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

This "may affect - not likely to adversely affect" determination becomes effective when the lead Federal action agency or designated non-federal representative requests the Service rely on the PBO to satisfy the agency's consultation requirements for this project.

Please provide this consistency letter to the lead Federal action agency or its designated non-federal representative with a request for review, and as the agency deems appropriate, submit for concurrence verification through the IPaC system. The lead Federal action agency or designated

non-federal representative should log into IPaC using their agency email account and click "Search by record locator". They will need to enter the record locator **819-151160695**.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities: If your initial bridge/culvert or structure assessment documented signs of bat use or occupancy, or an assessment failed to detect Indiana bats and/or NLEBs, yet are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of any potential take. In these instances, potential incidental take of Indiana bats and/or NLEBs is covered under the Incidental Take Statement in the 2018 FHWA, FRA, FTA PBO (provided that the take is reported to the Service).

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:
If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service. If the Proposed Action may affect any other federally-listed or proposed species and/or designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please advise the lead Federal action agency accordingly.

The following species may occur in your project area and **are not** covered by this determination:

- Monarch Butterfly *Danaus plexippus* Candidate
- Salamander Mussel *Simpsonaias ambigua* Proposed Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Western Regal Fritillary *Argynnis idalia occidentalis* Proposed Threatened
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

The following project name and description was collected in IPaC as part of the endangered species review process.

NAME

Des. No. 2100806, SR 39 over Marquadt Ditch, LaPorte County, Indiana.

DESCRIPTION

The Indiana Department of Transportation, with federal funding intends to proceed with a small structure project, located at SR 39 and County Road (CR) 1400 South (S), approximately 0.09 mile south of United States (US) 30, in Sections 10, 11, 14 and 15, Township 34 North, Range 3 West, Hannah Township in LaPorte County, Indiana. The existing structure (Structure No. CV 039-046-169.10) is a corrugated metal pipe (CMP) that is 63 feet long and approximately 7.5 feet in diameter. The existing approach cross section of SR 39 consists of one 12-foot-wide lane in each direction with approximately two-foot-wide shoulders on each side. The proposed scope of work includes replacing the existing structure with 15 feet span by 9 feet rise reinforced concrete box (RCB). The guardrail along the east side of SR 39 south of CR W 1400 S will be removed and replaced. The guardrail along the east side of SR 39 north of CR W 1400 S will be removed and the area will be regraded, so guardrail is not required. The shoulder within the project area will be reconstructed. Riprap will be installed at the inlet and outlet of the structure. Approximately 0.4 acres of permanent, 0.182 acre of permanent re-acquired and 0.182 acres of temporary right-of-way will be required for this project.

Suitable summer habitat is located within and adjacent to the project area. Approximately 0.06 acres of tree clearing will be required, and it will take place within 100 feet of the roadway. A review of the USFWS database by INDOT LaPorte District on April 22, 2024 did not indicate the presence of endangered bat species within 0.5 mile of the project area. The structure was inspected by SJCA Inc. staff on June 21, 2024. No bats or signs of bats were observed. No permanent or temporary lighting is anticipated during construction. Construction is anticipated to begin in Fall 2025. No mitigation is anticipated to be necessary.

Note - The clearing amount has been changed later during desining. Total 0.15 acres of tree clearing will be required

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.40345085,-86.73630758260418,14z

DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

1. Is the project within the range of the Indiana bat[1]?

   [1] See Indiana bat species profile

   Automatically answered
   Yes

2. Is the project within the range of the northern long-eared bat[1]?

   [1] See northern long-eared bat species profile

   Automatically answered
   Yes

3. Which Federal Agency is the lead for the action?

   A) Federal Highway Administration (FHWA)

4. Are *all* project activities limited to non-construction[1] activities only? (examples of non-construction activities include: bridge/abandoned structure assessments, surveys, planning and technical studies, property inspections, and property sales)

   [1] Construction refers to activities involving ground disturbance, percussive noise, and/or lighting.

   No

5. Does the project include *any* activities that are **greater than** 300 feet from existing road/rail surfaces[1]?

   [1] Road surface is defined as the actively used [e.g. motorized vehicles] driving surface and shoulders [may be pavement, gravel, etc.] and rail surface is defined as the edge of the actively used rail ballast.

   No

6. Does the project include *any* activities **within** 0.5 miles of a known Indiana bat and/or NLEB hibernaculum[1]?

   [1] For the purpose of this consultation, a hibernaculum is a site, most often a cave or mine, where bats hibernate during the winter (see suitable habitat), but could also include bridges and structures if bats are found to be hibernating there during the winter.

   No

7. Is the project located **within** a karst area?

   No

8. Is there *any* suitable[1] summer habitat for Indiana Bat or NLEB **within** the project action area[2]? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   [2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the User's Guide for the Range-wide Programmatic Consultation for Indiana Bat and Northern Long-eared Bat.

   Yes

9. Will the project remove *any* suitable summer habitat[1] and/or remove/trim any existing trees **within** suitable summer habitat?

   [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

   Yes

10. Will the project clear more than 20 acres of suitable habitat per 5-mile section of road/rail?

    No

11. Have presence/probable absence (P/A) summer surveys[1][2] been conducted[3][4] **within** the suitable habitat located within your project action area?

    [1] See the Service's summer survey guidance for our current definitions of suitable habitat.

    [2] Presence/probable absence summer surveys conducted within the fall swarming/spring emergence home range of a documented Indiana bat hibernaculum (contact local Service Field Office for appropriate distance from hibernacula) that result in a negative finding requires additional consultation with the local Service Field Office to determine if clearing of forested habitat is appropriate and/or if seasonal clearing restrictions are needed to avoid and minimize potential adverse effects on fall swarming and spring emerging Indiana bats.

    [3] For projects within the range of either the Indiana bat or NLEB in which suitable habitat is present, and no bat surveys have been conducted, the transportation agency will assume presence of the appropriate species. This assumption of presence should be based upon the presence of suitable habitat and the capability of bats to occupy it because of their mobility.

    [4] Negative presence/probable absence survey results obtained using the summer survey guidance are valid for a minimum of two years from the completion of the survey unless new information (e.g., other nearby surveys) suggest otherwise.

    No

12. Does the project include activities **within documented Indiana bat habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

13. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors?

    Yes

14. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented Indiana bat** roosting/foraging habitat or travel corridors occur[1]?

    [1] Coordinate with the local Service Field Office for appropriate dates.

    B) During the inactive season

15. Does the project include activities **within documented NLEB habitat**[1][2]?

    [1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    [2] For the purposes of this key, we are considering documented corridors as that where Indiana bats and/or NLEB have actually been captured and tracked to using (1) radio telemetry; or (2) treed corridors located directly between documented roosting and foraging habitat.

    No

16. Will the removal or trimming of habitat or trees occur **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors?

    Yes

17. What time of year will the removal or trimming of habitat or trees **within** suitable but **undocumented NLEB** roosting/foraging habitat or travel corridors occur?

    B) During the inactive season

18. Will *any* tree trimming or removal occur **within** 100 feet of existing road/rail surfaces?

    Yes

19. Will *any* tree trimming or removal occur **between** 100-300 feet of existing road/rail surfaces?

    No

20. Are *all* trees that are being removed clearly demarcated?

    Yes

21. Will the removal of habitat or the removal/trimming of trees include installing new or replacing existing **permanent** lighting?

    No

22. Does the project include wetland or stream protection activities associated with compensatory wetland mitigation?

    No

23. Does the project include slash pile burning?

    No

24. Does the project include *any* bridge removal, replacement, and/or maintenance activities (e.g., any bridge repair, retrofit, maintenance, and/or rehabilitation work)?

    Yes

25. Is there *any* suitable habitat[1] for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

    [1] See the Service's current summer survey guidance for our current definitions of suitable habitat.

    Yes

26. Has a bridge assessment[1] been conducted **within** the last 24 months[2] to determine if the bridge is being used by bats?

    [1] See User Guide Appendix D for bridge/structure assessment guidance

    [2] Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges that meet the physical characteristics described in the Programmatic Consultation, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that bridge/structure in subsequent years.

    Yes

    SUBMITTED DOCUMENTS

    - *SJCA Bat Inspection Form_6.21.24.pdf https://ipac.ecosphere.fws.gov/project/SJ5DALT6FJANHFONKMD6W2EHGY/projectDocuments/151160205*

27. Did the bridge assessment detect *any* signs of Indiana bats and/or NLEBs roosting in/under the bridge (bats, guano, etc.)[1]?

    [1] If bridge assessment detects signs of *any* species of bats, coordination with the local FWS office is needed to identify potential threatened or endangered bat species. Additional studies may be undertaken to try to identify which bat species may be utilizing the bridge prior to allowing *any* work to proceed.

    Note: There is a small chance bridge assessments for bat occupancy do not detect bats. Should a small number of bats be observed roosting on a bridge just prior to or during construction, such that take is likely to occur or does occur in the form of harassment, injury or death, the PBO requires the action agency to report the take. Report all unanticipated take within 2 working days of the incident to the USFWS. Construction activities may continue without delay provided the take is reported to the USFWS and is limited to 5 bats per project.

    No

28. Will the bridge removal, replacement, and/or maintenance activities include installing new or replacing existing **permanent** lighting?

    No

29. Does the project include the removal, replacement, and/or maintenance of *any* structure other than a bridge? (e.g., rest areas, offices, sheds, outbuildings, barns, parking garages, etc.)

    No

30. Will the project involve the use of **temporary** lighting *during* the active season?

    No

31. Will the project install new or replace existing **permanent** lighting?

    No

32. Does the project include percussives or other activities (**not including tree removal/ trimming or bridge/structure work**) that will increase noise levels above existing traffic/ background levels?

    No

33. Are *all* project activities that are **not associated with** habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives, limited to actions that DO NOT cause any additional stressors to the bat species?

    Examples: lining roadways, unlighted signage , rail road crossing signals, signal lighting, and minor road repair such as asphalt fill of potholes, etc.

    Yes

34. Will the project raise the road profile **above the tree canopy**?

    No

35. Are the project activities that are not associated with habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

    Automatically answered

    Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

36. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered

    Yes, because the tree removal/trimming that occurs outside of the Indiana bat's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

37. Is the habitat removal portion of this project consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered

    Yes, because the tree removal/trimming that occurs outside of the NLEB's active season occurs greater than 0.5 miles from the nearest hibernaculum, is less than 100 feet from the existing road/rail surface, includes clear demarcation of the trees that are to be removed, and does not alter documented roosts and/or surrounding summer habitat within 0.25 miles of a documented roost.

38. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered

    Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

39. **General AMM 1**

    Will the project ensure *all* operators, employees, and contractors working in areas of known or presumed bat habitat are aware of *all* FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable Avoidance and Minimization Measures?

    Yes

40. **Tree Removal AMM 1**
    Can *all* phases/aspects of the project (e.g., temporary work areas, alignments) be modified, to the extent practicable, to avoid tree removal[1] in excess of what is required to implement the project safely?

    Note: Tree Removal AMM 1 is a minimization measure, the full implementation of which may not always be practicable. Projects may still be NLAA as long as Tree Removal AMMs 2, 3, and 4 are implemented and LAA as long as Tree Removal AMMs 3, 5, 6, and 7 are implemented.

    [1] The word “trees” as used in the AMMs refers to trees that are suitable habitat for each species within their range. See the USFWS’ current summer survey guidance for our latest definitions of suitable habitat.

    Yes

41. **Tree Removal AMM 3**
    Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

    Yes

42. **Tree Removal AMM 4**
    Can the project avoid cutting down/removal of *all* (1) **documented**[1] Indiana bat or NLEB roosts[2] (that are still suitable for roosting), (2) trees **within** 0.25 miles of roosts, and (3) documented foraging habitat any time of year?

    [1] The word documented means habitat where bats have actually been captured and/or tracked.

    [2] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry biangulation/triangulation to estimate foraging areas; or (3) foraging areas with repeated use documented using acoustics. Documented roosting habitat is also considered as suitable summer habitat within 0.25 miles of documented roosts.)

    Yes

PROJECT QUESTIONNAIRE

1. Please describe the proposed bridge work:

   The proposed scope of work includes replacing the existing structure with 15 feet span by 9 feet rise reinforced concrete box (RCB).

2. Please state the timing of all proposed bridge work:

   Fall 2025

3. Please enter the date of the bridge assessment:

   06/21/24

4. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   N/A

5. Have you made a May Affect determination for *any* other species on the FWS IPaC generated species list?

   N/A

6. How many acres[1] of trees are proposed for removal between 0-100 feet of the existing road/rail surface?

   [1] If described as number of trees, multiply by 0.09 to convert to acreage and enter that number.

   0.06

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

This determination key result includes the committment to implement the following Avoidance and Minimization Measures (AMMs):

TREE REMOVAL AMM 1

Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

TREE REMOVAL AMM 3

Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits).

TREE REMOVAL AMM 4

Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or
documented foraging habitat any time of year.

GENERAL AMM 1

Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

DETERMINATION KEY DESCRIPTION: FHWA, FRA, FTA PROGRAMMATIC CONSULTATION FOR TRANSPORTATION PROJECTS AFFECTING NLEB OR INDIANA BAT

This key was last updated in IPaC on October 30, 2023. Keys are subject to periodic revision.

This decision key is intended for projects/activities funded or authorized by the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), and/or Federal Transit Administration (FTA), which may require consultation with the U.S. Fish and Wildlife Service (Service) under Section 7 of the Endangered Species Act (ESA) for the endangered **Indiana bat** (*Myotis sodalis*) and the endangered **northern long-eared bat** (NLEB) (*Myotis septentrionalis*).

This decision key should only be used to verify project applicability with the Service's amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

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Phone: 3175660629

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Transportation

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
6/21/24, 11 AM	Des. No. 2100806	SR 39	LaPorte
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
CV 039-046-169.10	41.404343, -86.736446	7.5 feet	63 feet

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other:	

Culvert Type

- ○ Box
- ● Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☐ Concrete
☐ Concrete	☐ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

- ○ Yes ○ No
- ○ Unknown

Culvert Material

- ☑ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

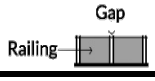
☐ Bare ground	☐ Open vegetation
☐ Rip-rap	☐ Closed vegetation
☑ Flowing water	☐ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

☑ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☐ Residential-urban	☐ Riparian/wetland
☑ Residential-rural	☐ Mixed use
☑ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	**Assessment Notes**	**Evidence of Bats** (include photos if present)
☑ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Concrete surfaces (open roosting on concrete)	☑ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between concrete end walls and the bridge deck	☑ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Crack between concrete railings on top of the bridge deck 	☑ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☑ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Spaces between walls, ceiling joists	☑ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Weep holes, scupper drains, and inlets/pipes	☑ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All guiderails	☑ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☑ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Jeegar Panchal

Signature: 

Des 2100806

Appendix D

Section 106 of the NHPA

SECTION 1

Submittal of this form is only required for projects where Category B applies. Projects qualifying under Category A do not require submittal of this form. SECTION 2 (for Conditions of Category B-1 for curb/sidewalk) or SECTION 3 (for Conditions of Category B-9 for drainage structures) may be required as determined by INDOT-Cultural Resources Office (INDOT-CRO) review. INDOT-CRO will notify applicant if the Minor Projects PA does not apply.

Part I: Project Information-Completed by Applicant (Consultant/PM/Project Sponsor/INDOT District Staff)*

**A qualified professional historian (QP) is not required to complete Part I. INDOT-CRO staff will be responsible for completion of Part II.*

Original Submission Date: August 28, 2024 **Amended Submission Date*:**
Consult with INDOT-CRO to determine whether an amendment is required. For revisions/updates to original form, please detail in applicable sections below.* ***Please use red font to distinguish the revisions/updates.*

Submitted By (Provide Name and Firm/Organization): Heather Dewey, SJCA Inc., 1028 Virginia Ave. Suite 201, Indianapolis, IN 46203; 317-566-0629 hdewey@sjcainc.com

Project Designation Number: 2100806

Route Number: State Road (SR) 39

Feature crossed (if applicable): Marquadt Ditch

City/Township: Hanna Township **County:** LaPorte County

Project Description: The Indiana Department of Transportation (INDOT), with funding from the Federal Highway Administration (FHWA), proposes to proceed with a small structure replacement on SR 39, 0.09 mile south of US 30. The small structure (CV 039-046-169.10 P) is a corrugated metal pipe (CMP) measuring 63 feet (ft.) long and 12 ft. wide. Within the project area, SR 39 consists of a two-lane roadway classified as a Major Collector with lane widths of 12 ft. and shoulder widths of 2 ft. SR 39 intersects with County Road (CR) W 1400 S within the project area.

The proposed project will include the replacement of the existing structure with a reinforced concrete box culvert that has a span of 15 ft. and a rise of 9 ft (**B9**). The guardrail along the east side of SR 39 south of CR W 1400 S will be removed and replaced in kind (**A6**). The guardrail along the east side of SR 39 north of CR W 1400 S will be removed and the area regraded so guardrail is not required. The shoulders of CR W 1400 S and SR 39 will be reconstructed within the project limits (**A4**).

The purpose of this project is to improve the overall condition of the structure to a "good" condition, which is an overall structure rating on a scale of 1-9 that is greater than 7. Structure CV 039-046-169.10 P currently has a rating of 4, indicating "poor" condition. The need of this project is due to areas of perforation that affect the entire pipe, with the majority of the perforations affecting the west side of the structure that sits under the roadway.

If the project includes any curb, curb ramp, or sidewalk work, please specify the location(s) of such work: N/A

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type: A corrugated metal pipe (CMP) CV 039-046-169.10 P over Marquadt Ditch

For bridge projects, is the bridge included in INDOT's Historic Bridge Inventory (https://www.in.gov/indot/2531.htm)?

☐ **Yes** ☐ **No**

If yes, did the inventory determine the bridge eligible for or listed in the National Register of Historic Places? Please provide page # of entry in Historic Bridge Inventory.

☐ **Yes** ☐ **No**

Inventory Page #_____

Will there be right-of-way acquisition as part of this project?

☒ **Yes** ☐ **No**

If yes was checked above, please check all that apply:

☒ **Permanent** ☒ **Temporary** ☒ **Reacquisition**

If applicable, identify right-of-way acquisition locations in text below and in attached mapping. Please specify how much (both temporary and permanent) and indicate what activities are included in the proposed right-of-way: 0.182 acre of temporary ROW, 0.4 acre of permanent ROW, and 0.182 acre of permanent re-acquired ROW

Is there *any* potential for additional temporary right-of-way to be needed later for purposes such as access, staging, etc.?

☐ **Yes** ☒ **No**

Archaeology (check one):

☐ **All proposed activities are presumed to occur in previously disturbed soils.***
**INDOT-CRO will notify you if project area incudes undisturbed soils and requires an archaeological reconnaissance.*

☒ **Project takes place in undisturbed soils and the archaeology report is included with the submission.***
** If an archaeology report is required, the Minor Projects PA Form will not be finalized until the report is reviewed and approved by INDOT-CRO. For INDOT-sponsored projects, INDOT-CRO may be able to complete the archaeological investigation. If you would like to request that INDOT-CRO complete an archaeological investigation, please contact the INDOT-CRO Archaeology Team Lead. See CRM Pt. 1 Ch. 3 for current contact information.*

Please specify all applicable categories and condition(s) (INDOT will highlight applicable conditions in yellow):

B-9. Installation, replacement, repair, lining, or extension of culverts and other drainage structures under the conditions listed below ***[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]***:

Condition A (Archaeological Resources)

One of the two conditions listed below must be met *(EITHER Condition i or Condition ii must be satisfied)*:

i. Work occurs in previously disturbed soils; *OR*

ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present

within the project area. If the archaeological investigation locates National Register-listed or potentially National Register- eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

One of the conditions below must be met *(EITHER Condition i or Condition ii must be satisfied)*:

i. Work does not involve installation of a new culvert and other drainage structure, and there are no impacts to unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under one of the following conditions *(Condition a, Condition b, or Condition c must be satisfied)*:
   a. The structure exhibits no wood, stone, or brick structures or parts therein; *OR*
   b. The structure exhibits only modern wood, stone, or brick structures or parts therein; *OR*
   c. The structure exhibits non-modern wood, stone, or brick structures or parts therein and the following conditions are met *(BOTH Condition 1 AND Condition 2 must be met):*
      1. Work does not occur adjacent to or within a National Register-listed or National Register- eligible district or individual above-ground resource; *AND*
      2. The structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.

ii. Work involves the installation of a new culvert and other drainage structures AND/OR there may be impacts to unusual features, including historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under the following conditions *(BOTH Condition a and Condition b must be satisfied)*:
   a. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *AND*
   b. The subject structure exhibits one of the characteristics described below *(Condition 1, Condition 2 or Condition 3 must be satisfied)*.
      1. The structure exhibits no wood, stone, or brick structures or parts therein; *OR*
      2. The structure exhibits only modern wood, stone, or brick structures or parts therein; *OR*
      3. The structure exhibits non-modern wood, stone, or brick structures or parts therein but lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.

Check ☐ if SECTION 2: Minor Projects PA Category B-1, Condition B-ii Submission is included.

Check ☐ if SECTION 3: Minor Projects PA Category B-9, Condition B-i-c-2 or B-ii-b-3 Submission is included.

Part II: Completed by INDOT-CRO

Information reviewed (please check all that apply):

General project location map ☒ USGS map ☒ Aerial photographs ☒ Soil survey data ☒

General project area photos ☒ Archaeology Reports ☒ Historic Property Reports ☐

Indiana Historic Buildings, Bridges, and Cemeteries Map/Interim Report ☒

Bridge inspection information/iTAMS ☒ Historic Bridge Inventory Database ☐

SHAARD ☒ SHAARD GIS ☒ Streetview Imagery ☒ County GIS Data/Property Cards ☒

Other (please specify):

Jackson, Christopher
2024 A Phase Ia Archaeological Reconnaissance Survey for the Proposed Small Structure Replacement on SR 39 over Marquadt Ditch, 1.4 Miles South of SR 114, Hanna Township, LaPorte County, Indiana (INDOT Des. No. 2100806). Report on file, Indiana Department of Transportation, Cultural Resources Office, Indianapolis, IN.

Are there any commitments associated with this project? If yes, please explain and include in the Additional Comments Section below. Yes ☐ No ☒

Does the project result in a de minimis impact to a Section 4(f) protected historic resource? If yes, please explain in the Additional Comments Section below. Yes ☐ No ☒

Additional Comments:

Above-ground Resources

An INDOT-Cultural Resources Office (CRO) historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 first performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for LaPorte County. No listed resources are present immediately adjacent to the project area, a distance that would serve as an adequate area of potential effects (APE) given the scope of the project and the surrounding terrain.

The *LaPorte County Interim Report* (2002; Hanna Township Scattered Sites) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The SHAARD information was checked against the Interim Report hard copy maps. No IHSSI documented resources are recorded immediately adjacent to the project.

According to the IHSSI rating system, generally properties rated "contributing" do not possess the level of historical or architectural significance necessary to be considered individually National Register eligible, although they would contribute to a historic district. If they retain material integrity, properties rated "notable" might possess the necessary level of significance after further research. Properties rated "outstanding" usually possess the necessary level of significance to be considered National Register eligible if they retain material integrity. Historic districts identified in the IHSSI are usually considered eligible for the National Register.

An INDOT-Cultural Resources Office (CRO) historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 performed a desktop review of the surrounding area. Based on a review of online street-view imagery and aerial photography, the area immediately adjacent to the subject structure consists of two early twentieth century mixed residential and agricultural properties. Neither property appears to possess the significance and/or integrity necessary to be considered National Register-eligible. No unusual features are present that may be impacted by the project.

INDOT's Indiana Total Assets Management System (iTAMS) was referenced to review CV 039-046-169.10. The subject structure carries SR 39 over Marquadt Ditch and is a 63-foot-long corrugated metal pipe (CMP) culvert with a 7.5-foot-wide by 12-foot-tall opening. The date of construction is unknown. The structure was examined via online street-view photography and iTAMS images. Examination of these images show the subject structure does not exhibit non-modern wood, stone, or brick structures or parts therein. In addition, the structure lacks a context that would suggest that it might have engineering or historical significance.

Based on the available information, as summarized above, no above-ground concerns exist so long as the project scope does not change.

Archaeological Resources

An INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the Phase Ia archaeological reconnaissance submitted by SJCA, Inc. on behalf of DLZ Corporation (Jackson 2024).

A 1.86-acre survey area was examined through a combination of systematic shovel probing (n=10), pedestrian survey, and visual inspection of disturbed areas. The area encompassing the intersection of SR 39 and CR W 1400 S has been previously disturbed from the construction of the state and county roads, existing culvert with associated drainage, embankments, residential infrastructure, landscaping, gravel driveways, and buried utilities. Pedestrian survey in 5 m intervals was utilized in the northeastern quarter of the survey area where the ground surface visibility was greater than 30 percent in an agricultural field. Shovel test probes were placed in all four quarters of the survey area in 15 m intervals in open, grassy fields and in a woodlot in the southeastern quarter along CR W 1400 S. No archaeological sites were documented as a result of the survey and no further investigation is recommended (Jackson 2024).

Therefore, there are no archaeological concerns as long as the project scope and footprint do not change.

Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction within 100 feet of the discovery will be stopped, and INDOT-CRO and the Indiana Department of Natural Resources-Division of Historic Preservation and Archaeology (IDNR-DHPA) will be notified immediately.

INDOT-CRO staff reviewer(s): Clint Kelly, Emily Minett, and KayLee Blum

INDOT Approval Date: 12/20/2024

Amendment Approval Date (if applicable):

****Be sure to attach this form to the National Environmental Policy Act documentation for this project. Also, the NEPA documentation shall reference and include the description of the specific stipulation in the PA that qualifies the project as exempt from further Section 106 review.*

Category A consists of projects that, by their nature, have no effect on properties listed in or eligible for inclusion in the National Register of Historic Places (hereinafter referred to as the "National Register") and do not require review by INDOT Cultural Resources Office. All of the work under this Category must occur in previously disturbed soils, which are defined as soils that have been completely altered or displaced by earthmoving or other modern manipulation.

1. Any work on bridges limited to substructure or superstructure elements without replacing, widening, or elevating the superstructure under the conditions listed below ***(BOTH Conditions A and B must be met).*** This category **does not** include bridge replacement projects (when both superstructure and substructure are removed):

   A. The project takes place in previously disturbed soils; *AND*
   B. With regard to the bridges, at least one of the conditions (i, ii or iii) listed below must be satisfied:
      i. The latest Historic Bridge Inventory identified the bridge as non-historic (see http://www.in.gov/indot/2531.htm);
      ii. The bridge was built after 1945, and is a common type as defined in Section V. of the *Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges* issued by the Advisory Council on Historic Preservation on November 2, 2012 for so long as that Program Comment remains in effect AND the considerations listed in Section IV of the Program Comment do not apply;
      iii. The bridge is part of the Interstate system and was determined not eligible for the National Register under the Section 106 Exemption Regarding Effects to the Interstate Highway System adopted by the Advisory Council on Historic Preservation on March 10, 2005, for so long as that Exemption remains in effect.

2. All work within interchanges and within medians of divided highways in previously disturbed soils.

3. Replacement, repair, lining, or extension of culverts and other drainage structures that do not exhibit wood, stone or brick structures or parts therein and are in previously disturbed soils.

4. Roadway work associated with surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking within previously disturbed soils where replacement, repair, or installation of curbs, curb ramps or sidewalks will not be required.

5. Repair, in-kind replacement or upgrade of existing lighting, signals, signage, and other traffic control devices in previously disturbed soils.

6. Repair, replacement, or upgrade of existing safety appurtenances such as guardrails, barriers, glare screens, and crash attenuators in previously disturbed soils.

7. Repair or in-kind replacement of fencing and hardscape landscaping elements and/or replacement of existing plant materials in previously disturbed soils and installation of new fencing and hardscape landscaping elements and plant materials limited to locations within interstate right-of way within previously disturbed soils.

8. Installation of new or modification of existing traffic control devices and systems, including signs, signals, markings, illumination, other warning devices and their supports, to improve safety at railway crossings in previously disturbed soils.

9. Installation, repair, or replacement of erosion control measures along roadways, waterways and bridge piers within previously disturbed soils.

10. Routine roadside maintenance activities necessary to preserve existing infrastructure or maintain roadway safety in previously disturbed soils.

11. Rehabilitation of existing rest areas and truck weigh stations within previously disturbed soils.

12. Removal and disposal of hazardous waste.

13. Work on concrete and asphalt decks of bridges identified in the Historic Bridge Inventory as National Register-listed or National Register-eligible (see http://www.in.gov/indot/2531.htm), which is limited to pavement resurfacing, overlay, pavement repair, pavement grinding, pavement marking, seal coating, joint repair, and in-kind replacement or repair of existing concrete curbs, curb ramps or sidewalks in previously disturbed soils, provided none of these actions impact structural members of the bridge.

14. Repair and/or replace existing MSE walls, retaining walls and noise walls in previously disturbed soils, using similar design, dimensions and materials.

Des 2100806

Appendix E

Red Flag Investigation

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: July 16, 2024

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: Jeegar Panchal
SJCA Inc.
9102 N Meridian St, Suite 200
Indianapolis, IN 46260
jpanchal@sjcainc.com

Re: RED FLAG INVESTIGATION
DES 2100806, State Project
Small Structure Project
State Road (SR) 39 over Marquadt Ditch, 0.09 Mile South of United States (US) 30
LaPorte County, Indiana

PROJECT DETAILS

Brief Description of the Project: INDOT and the Federal Highway Administration (FHWA) intend to proceed with a small structure project of an existing culvert (Structure No: CV 039-046-169.10). The project is located at SR 39 and County Road (CR) 1400 South (S) over Marquadt Ditch, 0.09 mile South of US 30, in Sections 10, 11, 14 and 15, Township 34 North, Range 3 West, in Hanna Township, LaPorte County, Indiana. The existing structure is a Corrugated Metal Pipe (CMP) that is 63 feet (ft) long and approximately 7.5 ft in diameter. The interior of the existing structure shows signs of deterioration including perforation through the entire pipe. The scope of work involves replacing the existing pipe with 15 ft span by 9 ft rise Reinforced Concrete Box (RCB). The guardrail along the east side of SR 39, south of CR 1400 S will be replaced. The guardrail along the east side of SR 39, north of CR 1400 S will be removed and the area will be regraded. The shoulder within the project area will be reconstructed. Ditch regrading will occur along SR 39 and CR 1400 S.

Bridge Work Included in Project: Yes ☐ No ☒ Structure #(s) _____
If this is a bridge project, is the bridge Historical? Yes ☐ No ☐ , Select ☐ Non-Select ☐
(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations Section of the report).
Culvert Work Included in Project: Yes ☒ No ☐ Structure #(s) CV 039-046-169.10
Proposed right of way: Temporary ☒ # Acres _< 0.5_ Permanent ☒ # Acres _< 0.5_, Not Applicable ☐

Type and proposed depth of excavation: Excavation will be required for the structure and riprap installation, with a maximum depth of approximately thirteen (13) feet.
Maintenance of traffic (MOT): MOT for the project is anticipated to be road closure at the project site.
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	**N/A**	Recreational Facilities	**N/A**
Airports	**N/A**	Pipelines	**N/A**
Cemeteries	**N/A**	Railroads	**1**
Hospitals	**N/A**	Trails	**N/A**
Schools	**N/A**	Managed Lands	**N/A**

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

Explanation:

Railroads: One (1) railroad segment is located within the 0.5 mile search radius. The nearest segment is located approximately 0.04 mile north 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:

Karst Springs	**N/A**	NWI – Wetlands	**9**
Canal Structures – Historic	**N/A**	Lakes	**3**
NPS NRI Listed	**N/A**	Floodplain – DFIRM	**1**
IDEM 303d Listed Streams and Lakes (Impaired)	**11**	Cave Entrance Density	**N/A**
Rivers and Streams	**1***	Sinkhole Areas	**N/A**
Canal Routes – Historic	**N/A**	Sinking-Stream Basins	**N/A**

If unmapped water features are identified that might impact the project area, direct coordination with INDOT ESD Ecology, Waterway Permitting, & Stormwater Office (EWPSO) will occur.

Explanation:

IDEM 303d Listed Streams and Lakes: Eleven (11) 303d Listed Streams are located within the 0.5 mile search radius. The Marquadt Ditch is located within the project area. The Marquadt Ditch is not listed as 303d anymore on IDEM Impaired Water e303d Tool. No impact is expected.

Rivers and Streams*: One (1) unmapped stream, Marquadt Ditch, is located within the project area. Direct coordination with INDOT ESD EWPSO will occur.

NWI – Wetlands: Nine (9) National Wetland Inventory (NWI) wetland polygons are located within the 0.5 mile search radius. The nearest wetland polygon is located approximately 0.17 mile northwest of the project area. No impact is expected.

Lakes: Three (3) lakes polygon are located within the 0.5 mile search radius. The nearest lake polygon is located approximately 0.22 mile southeast of the project area. No impact is expected.

Floodplain-Digital Flood Insurance Rate Map (DFIRM): One (1) floodplain polygon is located within the 0.5 mile search radius. The project area is located within the floodplain polygon. Coordination with INDOT ESD EWPSO 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	**1**
Mines – Surface	**N/A**	Mines – Underground	**N/A**

Explanation:

Mineral Resources: One (1) mineral resource facility is located within the 0.5 mile search radius. The facility, identified as Hanna Sand & Gravel, is mapped approximately 0.5 mile southwest of the project area; however, the adjacent property to the project area is owned by the same facility. Coordination with Hanna Sand & Gravel 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**	Open Dump Waste Sites	**N/A**
RCRA Generator/ TSD	**N/A**	Restricted Waste Sites	**N/A**
RCRA Corrective Action Sites	**N/A**	Waste Transfer Stations	**N/A**
State Cleanup Sites	**N/A**	Tire Waste Sites	**N/A**
Septage Waste Sites	**N/A**	Landfill Boundaries	**N/A**
Underground Storage Tank (UST) Sites	**N/A**	Confined Feeding Operations (CFO)	**N/A**
Voluntary Remediation Program	**N/A**	Brownfields	**N/A**
Construction Demolition Waste	**N/A**	Notice of Contamination Sites	**N/A**
Solid Waste Landfill	**N/A**	Institutional Controls	**N/A**
Infectious/Medical Waste Sites	**N/A**	NPDES Facilities	**N/A**
Leaking Underground Storage (LUST) Sites	**1**	NPDES Pipe Locations	**N/A**
Manufactured Gas Plant 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:

Leaking Underground Storage (LUST) Sites: One (1) LUST site is located within the 0.5 mile search radius. CITGO, 1799 US 30, Hanna, Agency Interest (AI) ID#33253, is located approximately 0.17 mile northwest of the project area and is an active gas station. IDEM issued a No Further Action letter to the Melco Truck Plaza on February 13, 2003. All laboratory analysis results were less than the detection limit of 20 parts per million Total Petroleum Hydrocarbon. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The LaPorte 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 (https://www.in.gov/dnr/nature-preserves/files/np_laporte.pdf). A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did indicate the presence of ETR species within the 0.5 mile search radius. Coordination with USFWS and IDNR occur.

A review of the USFWS database did not indicate the presence of endangered bat species with 0.5 mile of the project area. The project is located in a rural area surrounded by agricultural fields and residential properties. The October 20, 2022, inspection report for culvert CV 039-046-169.10 states that no evidence of bats was seen or heard in 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".

Evidence of Birds in Bridge Report: Yes ☐ No ☒ N/A ☐
*If yes, further coordination with INDOT Ecology and Waterway Permitting may be necessary.

RECOMMENDATIONS SECTION

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

INFRASTRUCTURE: N/A

WATER RESOURCES:

Direct coordination with INDOT ESD EWPSO will occur for the following features:

- One (1) unmapped drainage feature, Marquadt Ditch, is located within the project area.
- One (1) floodplain polygon is located within the project area (coordination only).

MINING/MINERAL EXPLORATION: One (1) mineral resource facility, Hanna Sand & Gravel, is located adjacent to the project area. Coordination with Hanna Sand & Gravel will occur.

HAZARDOUS MATERIAL CONCERNS: N/A

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".

Prepared by:
Jeegar Panchal
Ecologist
SJCA Inc.

INDOT ESD concurrence: Tracy Barnes Digitally signed by Tracy Barnes Date: 2024.07.16 09:13:56 -04'00' (Signature)

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

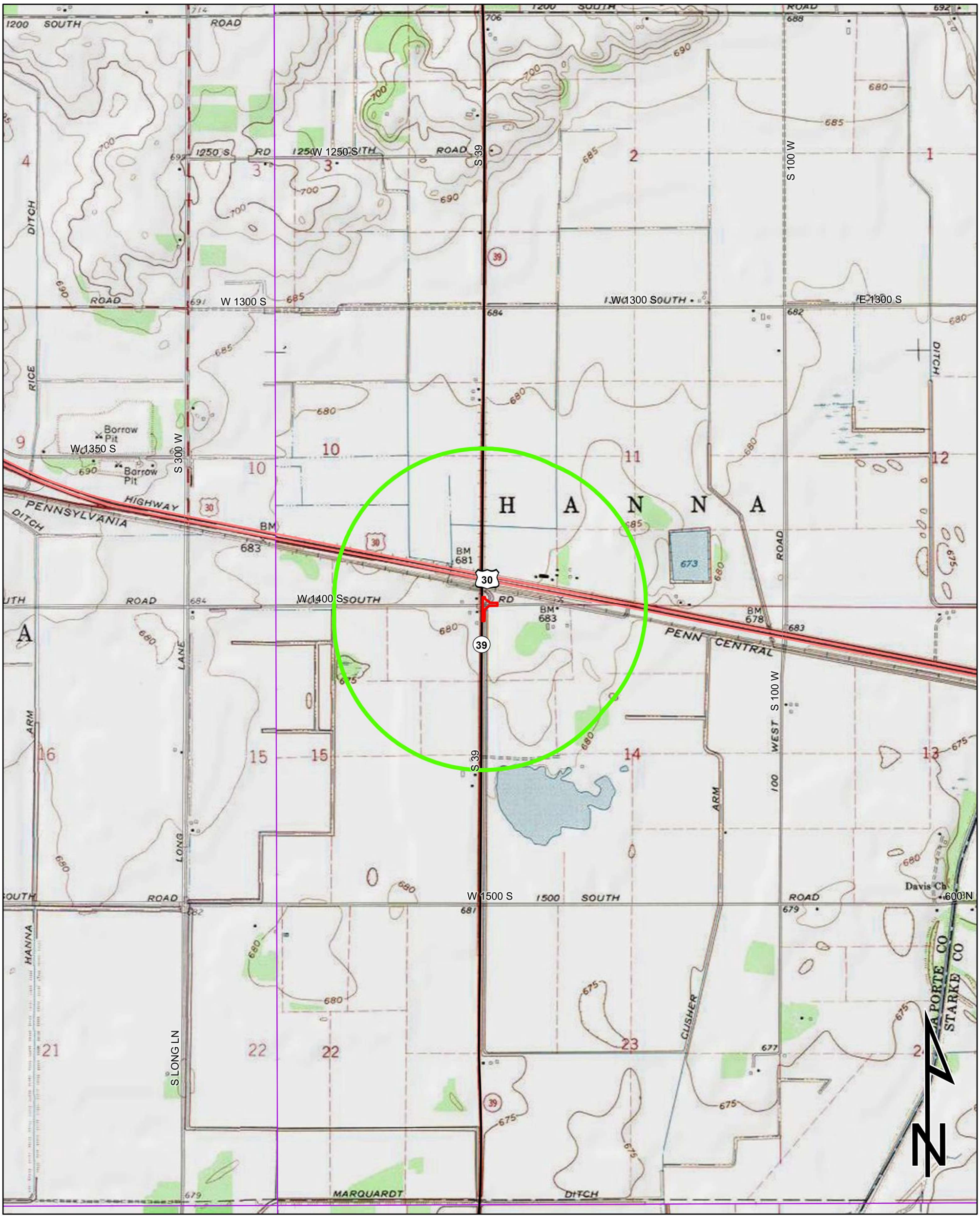
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Site Location
SR 39 over Marquadt Ditch, 0.09 Mile South of US 30
Des. No. 2100806, Small Structure Project
LaPorte County, Indiana



0 0.2 0.4 0.8 Miles

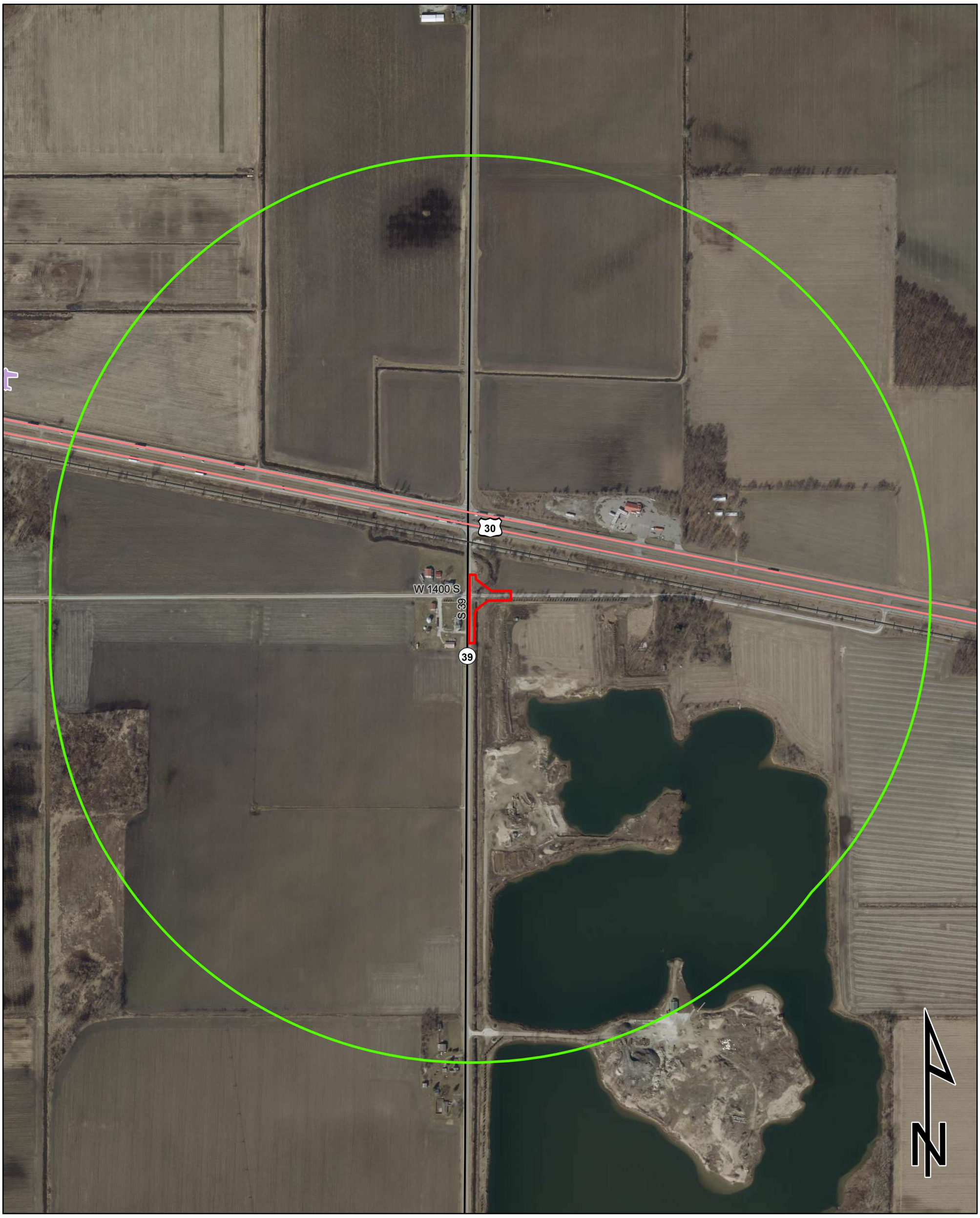
Sources:
Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

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

KINGSFORD HEIGHTS
QUADRANGLE
INDIANA
7.5 MINUTE SERIES

Red Flag Investigation - Infrastructure

SR 39 over Marquadt Ditch, 0.09 Mile South of US 30
Des. No. 2100806, Small Structure Project
LaPorte County, Indiana



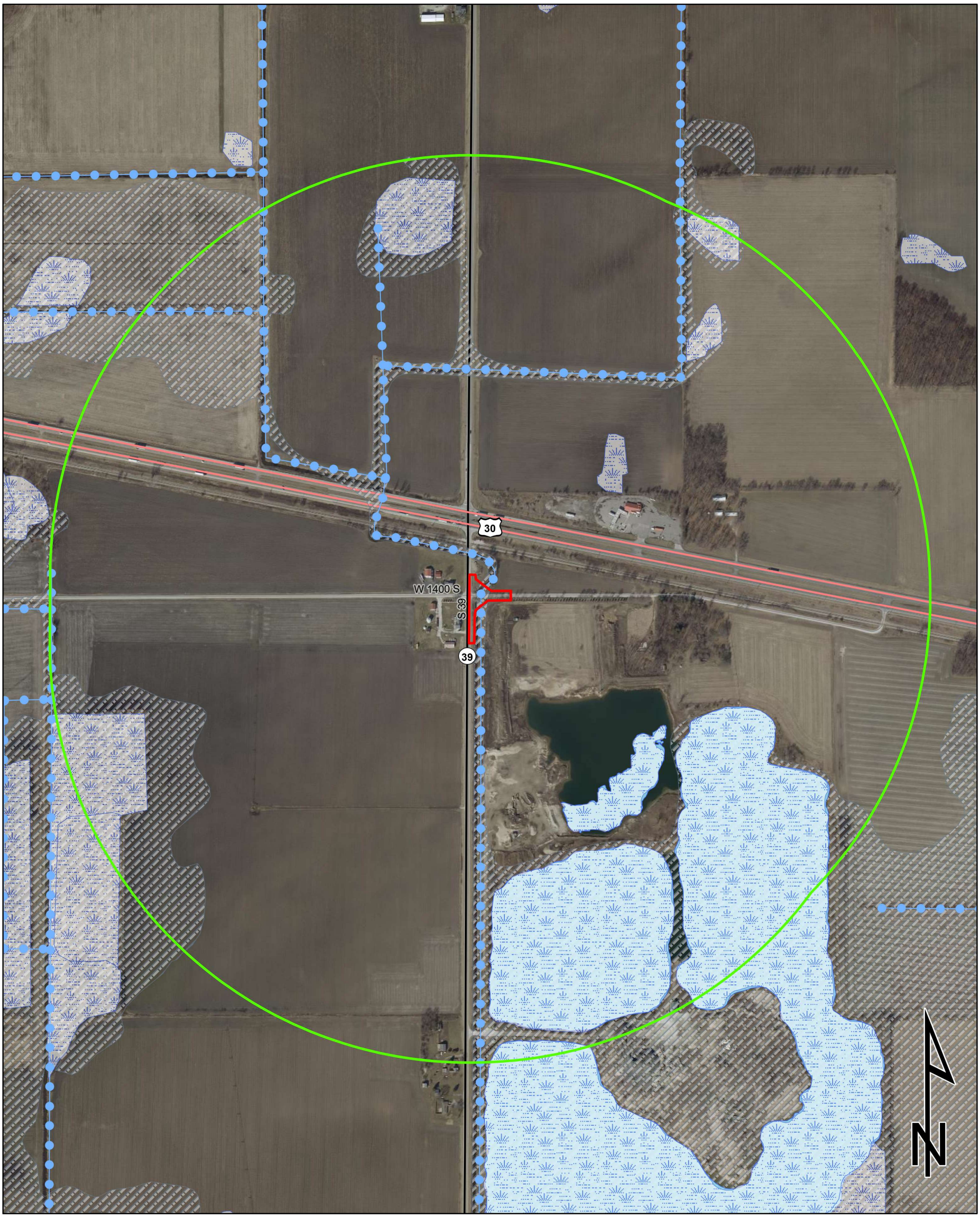
0 0.05 0.1 0.2 Miles

Sources:
Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
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.

- Religious Facility
- Airport
- Cemeteries
- Hospital
- School
- Recreation Facility
- Pipeline
- Railroad
- Trails
- Managed Lands
- County Boundary
- Project Area
- Half Mile Radius
- Toll
- Interstate
- State Route
- US Route
- Local Road

Red Flag Investigation - Water Resources
SR 39 over Marquadt Ditch, 0.09 Mile South of US 30
Des. No. 2100806, Small Structure Project
LaPorte County, Indiana



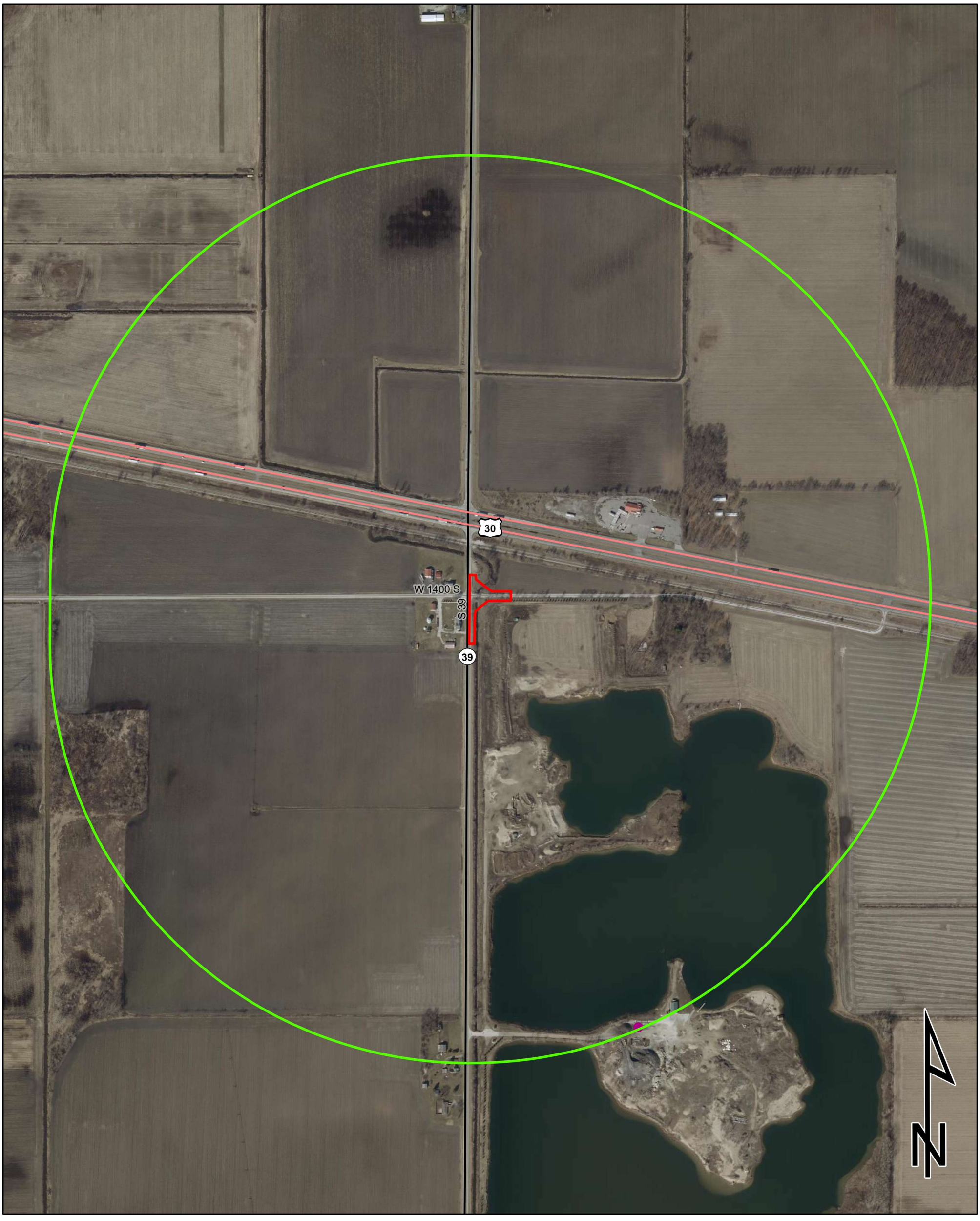
0 0.05 0.1 0.2 Miles

Sources:
Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
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.

- Karst Spring
- Impaired_Stream_Lake
- NPS NRI listed
- River
- Canal Structure - Historic
- Canal Route - Historic
- Wetlands
- Lake
- Floodplain - DFIRM
- Cave Entrance Density
- Sinkhole Area
- Sinking-Stream Basin
- County Boundary
- Project Area
- Half Mile Radius
- Toll
- Interstate
- State Route
- US Route
- Local Road

Red Flag Investigation - Mining and Mineral Exploration
SR 39 over Marquadt Ditch, 0.09 Mile South of US 30
Des. No. 2100806, Small Structure Project
LaPorte County, Indiana



0 0.05 0.1 0.2 Miles

Sources:

Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library

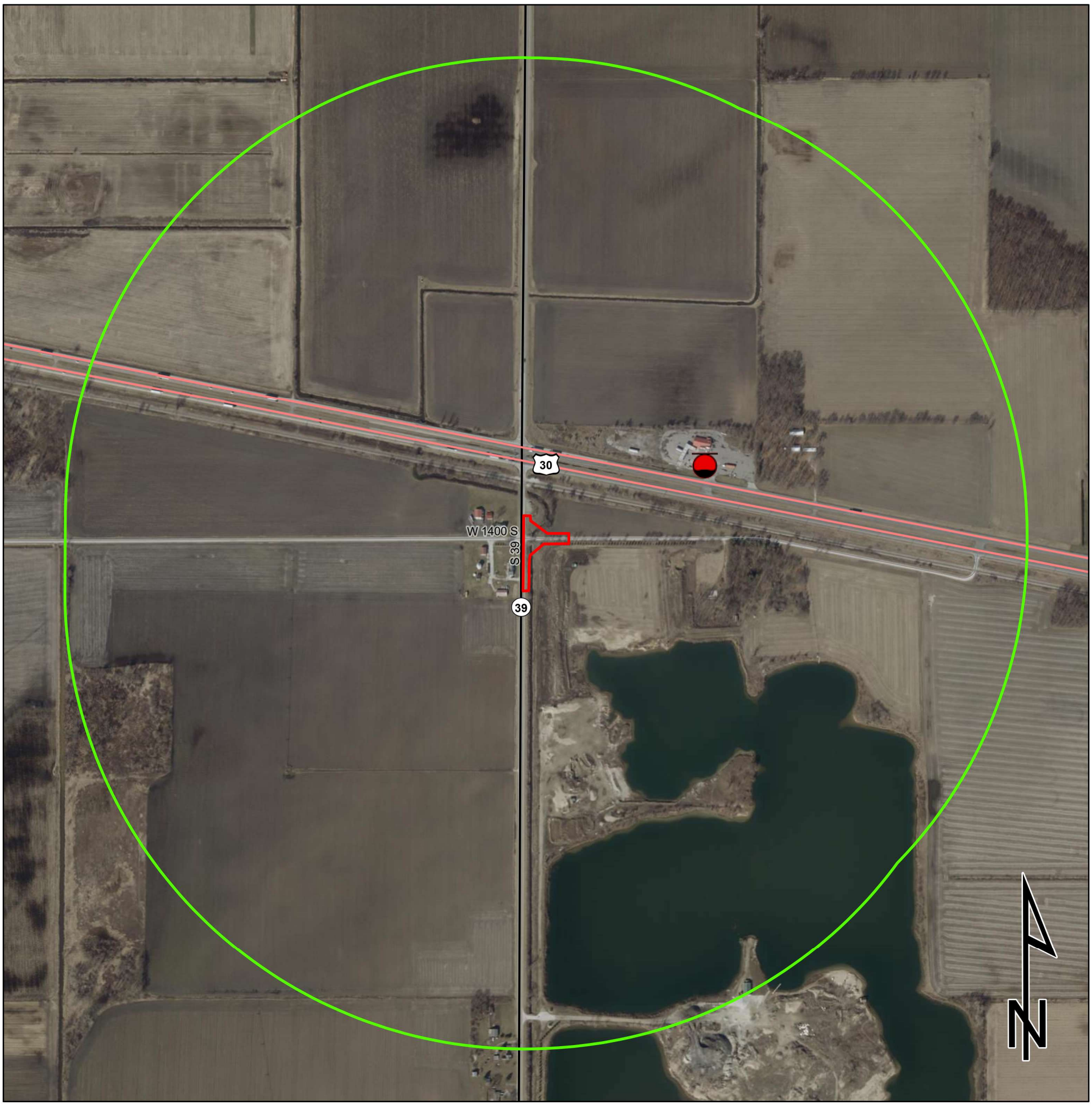
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

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.

- Oil and Gas Wells
- Mineral Resources
- Mine - Surface
- Mine - Underground
- County Boundary
- Project Area
- Half Mile Radius
- Toll
- Interstate
- State Route
- US Route
- Local Road

Red Flag Investigation - Hazardous Material Concerns
SR 39 over Marquadt Ditch, 0.09 Mile South of US 30
Des. No. 2100806, Small Structure Project
LaPorte County, Indiana



- 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 Facilities
- NPDES Pipe Locations
- Open Dump Waste Site
- RCRA Generator/TSD
- Restricted Waste Site
- Septage Waste Site
- Solid Waste Landfill
- State Cleanup Site
- Superfund
- Tire Waste Site
- Underground Storage Tank
- Voluntary Remediation Program
- Waste Transfer Station
- Institutional Controls
- County Boundary
- Project Area
- Half Mile Radius
- Toll
- Interstate
- State Route
- US Route
- Local Road

0 0.1 0.2 0.4 Miles

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

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

Des 2100806

Appendix F

Water Resources

Macayla Coleman
Approved on September 11, 2024

Waters Report
State Road (SR) 39 over Marquadt Ditch in LaPorte County, Indiana
Small Structure Project
Des. No. 2100806
Structure # CV 039-046-169.10

Prepared by: Jeegar Panchal, jpanchal@sjcainc.com
SJCA Inc., 317-566-0629
Report Completed on: September 11, 2024

Site Location:
Section 11 & 14, Township 34 North, Range 3 West
Kingsford Heights 24K Quadrangle
LaPorte County, Indiana
Latitude: 41.404343 Longitude: -86.736446

Date of Field Reconnaissance: June 21, 2024

Project Description

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a small structure project in LaPorte County, Indiana. The project is located at SR 39 and County Road (CR) 1400 South (S), approximately 0.09 mile south of United States (US) 30. The existing structure is a corrugated metal pipe (CMP) that is 63 feet (ft) long and approximately 7.5 ft in diameter. The proposed scope of work involves replacing the existing pipe with a 15 ft span by 9 ft rise reinforced concrete box (RCB). The guardrail along the east side of SR 39, south of CR 1400 S will be replaced. The guardrail along the east side of SR 39, north of CR 1400 S will be removed and the area will be regraded. The shoulder within the investigated area will be reconstructed. Ditch regrading will occur along SR 39 and CR 1400 S. The design for this project is still in the early stages; therefore, the investigated area for this report covers the anticipated construction limits and was widened to cover the survey limits, existing right-of-way limits, and to account for any possible access routes.

Desktop Reconnaissance

Topography: The topography within the investigated area is generally flat. The banks of Marquadt Ditch are steeply sloped within the investigated area.

Existing Land Use: Land use adjacent to the investigated area primarily agricultural and residential properties to the west of the investigated area. A sand and gravel quarry are located southwest of the investigated area.

Soils: According to the LaPorte County Soil Survey, soils mapped within the investigated areas include:

Table 1. Soil Types Within the Investigated Area.

Soil Abbreviation	Soil Unit Name	NRCS Drainage Class	Hydric Soil Category (IN091)	Hydric Rating
Gf	*Gilford fine sandy loam, 0 to 1 percent slopes*	Poorly Drained	Hydric	100% Hydric

Hydrology: According to the Indiana Department of Natural Resource (IDNR) Floodplain Map (see attached Floodplain Map), the investigated area is not located within the IDNR mapped floodplain; however, it is mapped on the Federal Emergency Management Agency (FEMA) floodplain map. According to the U.S Geological Survey (USGS) *StreamStats* site, (streamstats.usgs.gov) Marquadt Ditch has an upstream drainage area of 0.985 square miles, measured from the inlet of the project structure. Based on the USGS National Hydrography Dataset (NHD) data layer (see attached NHD Flowline Map), two classified flowline segments, labeled as Canal Ditch and one unclassified flowline segment are mapped within the investigated area. One of the classified segments corresponds with Marquadt Ditch and the other segment likely corresponds with buried farm or storm drainage. The unclassified segment likely corresponds with buried farm drainage.

Hydrologic Unit Code (HUC): Marquardt Ditch-Kankakee River Subwatershed, 12-Digit HUC: 071200010408.

National Wetland Inventory (NWI) Data: According to the NWI map, one stream feature, which is associated with Marquadt Ditch, is mapped within the investigated area, and is classified as R2UBFx (Riverine, Lower Perennial, Unconsolidated Bottom, Semi-permanently Flooded, Excavated). No wetlands are mapped within the investigated area. The nearest mapped wetland feature is approximately 0.21 mile northeast to the investigated area and is classified as PEM1A (Palustrine, Emergent, Persistent, Temporary Flooded).

Table 2. Nearest Mapped NWI Features to the Investigated Area.

Wetland Feature Type	Location
R2UBFx - Stream	Within the investigated area
PEM1A – Emergent Wetland	Approximately 0.21 mile northeast of the investigated area

Field Reconnaissance

Site Conditions: Site conditions were typical for late June with a total of 0.8-inch rain occurring within the five days prior to the field investigation (wunderground.com). Temperatures were below average for the time of year during the site investigation with temperatures reaching the high sixties (° F).

Site Analysis

The investigated area included roadside right-of-way along SR 39, the surrounding agricultural properties, the existing structure that carries SR 39, and banks of Marquadt Ditch. Hydrology

within the investigated areas is influenced by Marquadt Ditch, roadway runoff from SR 39, and nearby farm drainage. The investigated area is located within the Marquardt Ditch-Kankakee River Subwatershed. According to NWI map and USGS topographic map, there is one stream, Marquadt Ditch, mapped within the investigated area.

The vegetation along the roadside within the investigated areas is dominated by a mixture of FACU, FACW, and FAC vegetative communities common to roadsides in the region. Vegetation along the steep banks of Marquadt Ditch is dominated by FAC, FACW, and FACU vegetation. Marquadt Ditch itself was dominated by a large stand of OBL vegetation commonly found in slow moving streams.

Marquadt Ditch is mapped as a perennial stream (Riverine, Lower Perennial, Unconsolidated Bottom, Semi-permanently Flooded, Excavated; R2UBFx) on the NWI map and shown as solid-blue-line on the USGS topographic map. According to the USGS *StreamStats* site, (streamstats.usgs.gov), Marquadt Ditch flows south through the structure and has an upstream drainage area of 0.985 square miles. Approximately 242 linear ft of Marquadt Ditch is within the investigated area. The bankfull width is approximately 20 ft. Marquadt Ditch has an ordinary high water mark (OHWM) width of 16 ft measured downstream and 14 ft measured upstream side of the structure with a depth of 1 foot. The banks of the stream were moderately eroded, had high in stream coverage, and had moderate canopy coverage. The streambed is dominated by a large stand of American bur-reed (*Sparganium americanum*, OBL) within the investigated area and has a substrate of riprap and pebble. The stream has low flow velocity, no sinuosity within the investigated area, and does not contain riffle/run complexes. The quality of the stream is rated as average due to these features. Existing riprap is present at the inlet and outlet of the structure (see Photo 24). Marquadt Ditch flows into Kankakee River approximately 3.53 river miles south of the investigated area. According to the U.S. Army Corps of Engineers (USACE) Detroit District list of navigable waterways, Kankakee River is listed as a traditional navigable waterway (TNW) in LaPorte County. Due to the perennial flow condition of Marquadt Ditch, presence of an OHWM, and eventual connectivity to a TNW, it is likely that Marquadt Ditch is jurisdictional under the USACE and is therefore a Water of the U.S.

Table 3. Stream Summary Table.

Stream Name	Photos	Lat/Long	OHWM Width (ft)	OHWM Depth (ft)	Upstream Drainage Area (Sq miles)	USGS Blue-line?	Riffles? Pools?	Substrate	Quality	Likely Water of U.S.?	Length of Stream in Investigated Area (linear ft)
Marquadt Ditch	4-6, 15, 20-24-26, 35-36, 44, 47-48	41.404116 -86.736467	16	1	0.985	Yes, Perennial	No	Riprap/ pebble	Average	Yes	242

Soil Sample Points and Wetland Features

Sample Point 1 (SP 1) was taken in the northeast quadrant of the project structure, along roadside, as a suspected wetland point, due to the presence of FACW vegetation. This sample point did meet the criteria for hydrophytic vegetation but lacks hydric soil and wetland hydrology. Therefore, SP 1 is not within a wetland. The presence of FACW vegetation can be

explained by the invasive nature of reed canary grass (*Phalaris arundinacea*) which is common along roadsides and disturbed areas.

Other Water Features

The investigated area was reviewed for the presence of other water features such as open water, areas that do not have an OHWM but have concentrated flow, all roadside ditches, historic drainage, and unusual circumstances. No other water features and roadside ditches were identified within the investigated area.

Wildlife Observations

The investigated areas were observed for the presence of bats, birds, and other wildlife during the site investigation. No bats or birds or evidence of bats or birds were found on the project structure. The large project culvert seems conducive to aquatic fauna crossing under the roadway and may allow for smaller mammals and deer to cross under the road.

Conclusions

The site investigation identified one stream, Marquadt Ditch. Marquadt Ditch is likely jurisdictional resource and Waters of the U.S. Every effort should be taken to avoid and minimize impacts to this resource. If impacts are necessary, a permit from the USACE may be required. The USACE should be contacted immediately if impacts occur. Mitigation measures may be required for certain impacts. The final determination of jurisdictional waters is ultimately made by the appropriate regulatory staff of the USACE. This report is our best judgment based on the guidelines set forth by the Corps.

Acknowledgement

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

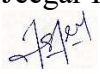
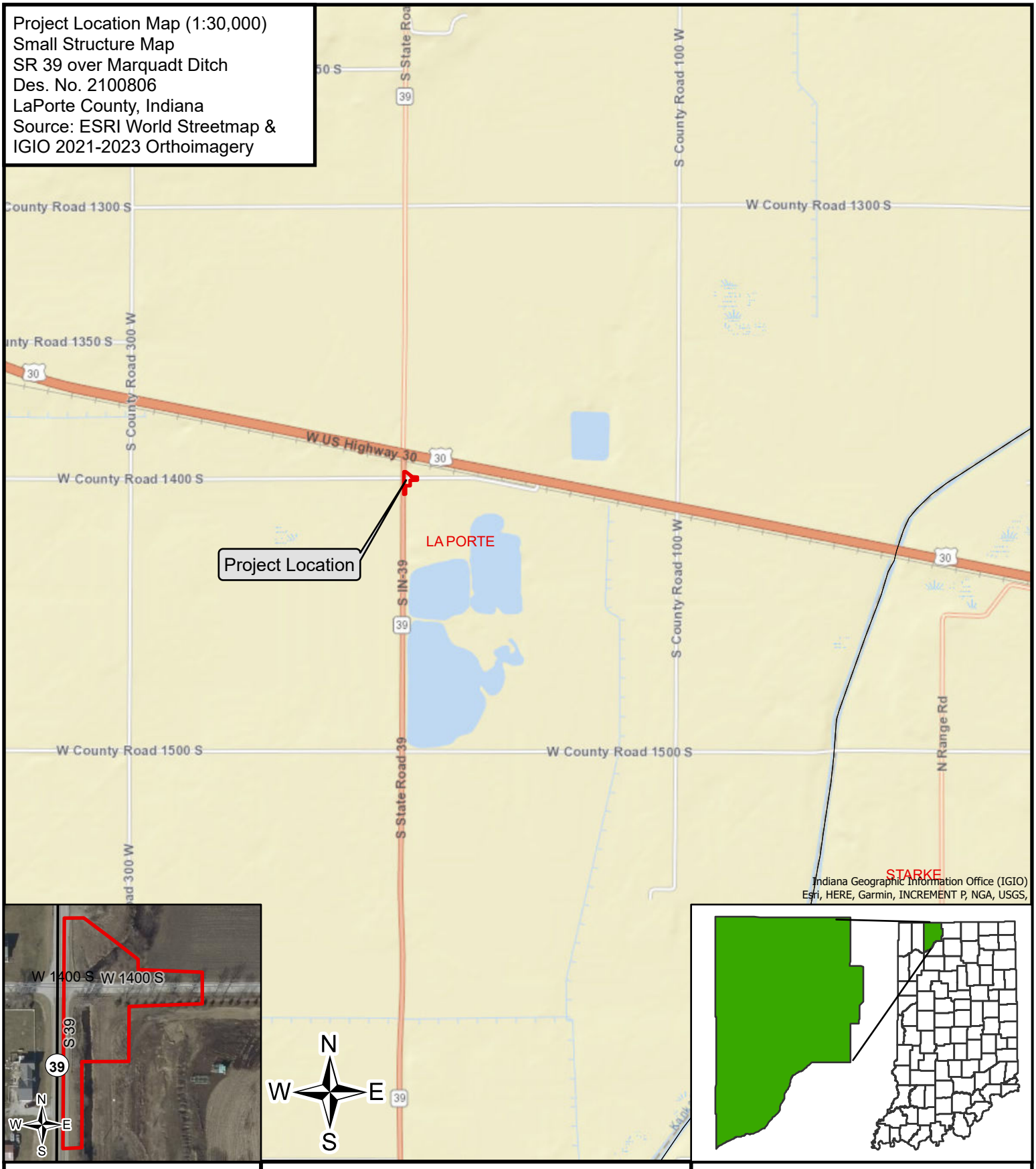
Jeegar Panchal

Ecologist
SJCA Inc.
Date: September 11, 2024

Table 4. Sample Point and Wetland Summary Table.

Wetland ID	Type	Acreage	Quality	Photo IDs	Associated Structure ID	Likely WOTUS?	Sample Point ID (SP)	Lat/Long	Dominant Vegetation	Hydrophytic Vegetation?	Hydric Soil Indicator(s)	Hydrology Indicator(s)	Within Wetland?	Notes
N/A	N/A	N/A	N/A	29-33	NA	N/A	SP 1	41.404483/-86.736505	*Phalaris arundinacea (FACW)*	Yes	N/A	D5	No	Upland point.

Project Location Map (1:30,000)
Small Structure Map
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: ESRI World Streetmap &
IGIO 2021-2023 Orthoimagery

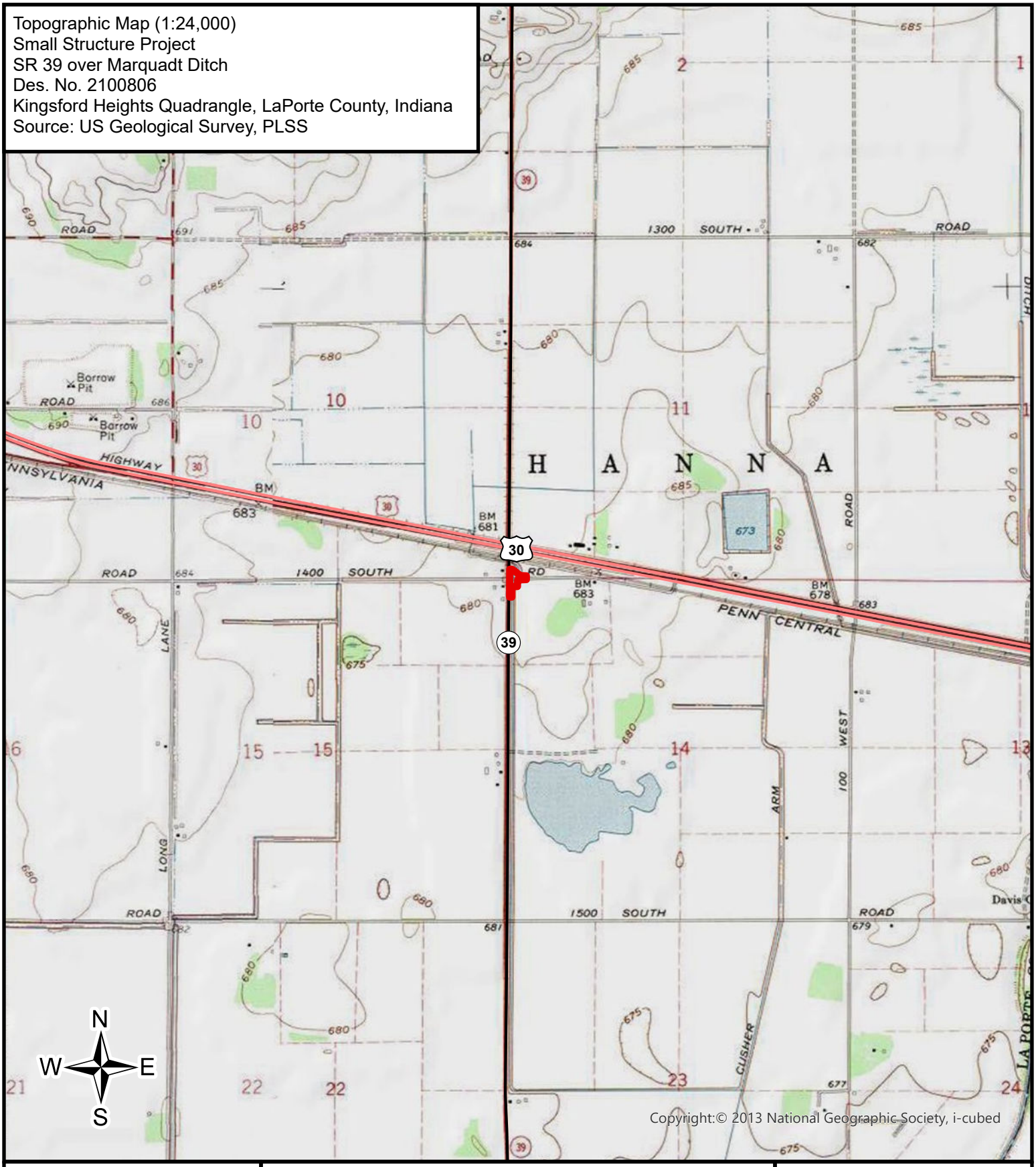


0 0.35 0.7 Miles

Project County
Investigated Area

Jeegar Panchal 9/10/2024

Topographic Map (1:24,000)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
Kingsford Heights Quadrangle, LaPorte County, Indiana
Source: US Geological Survey, PLSS



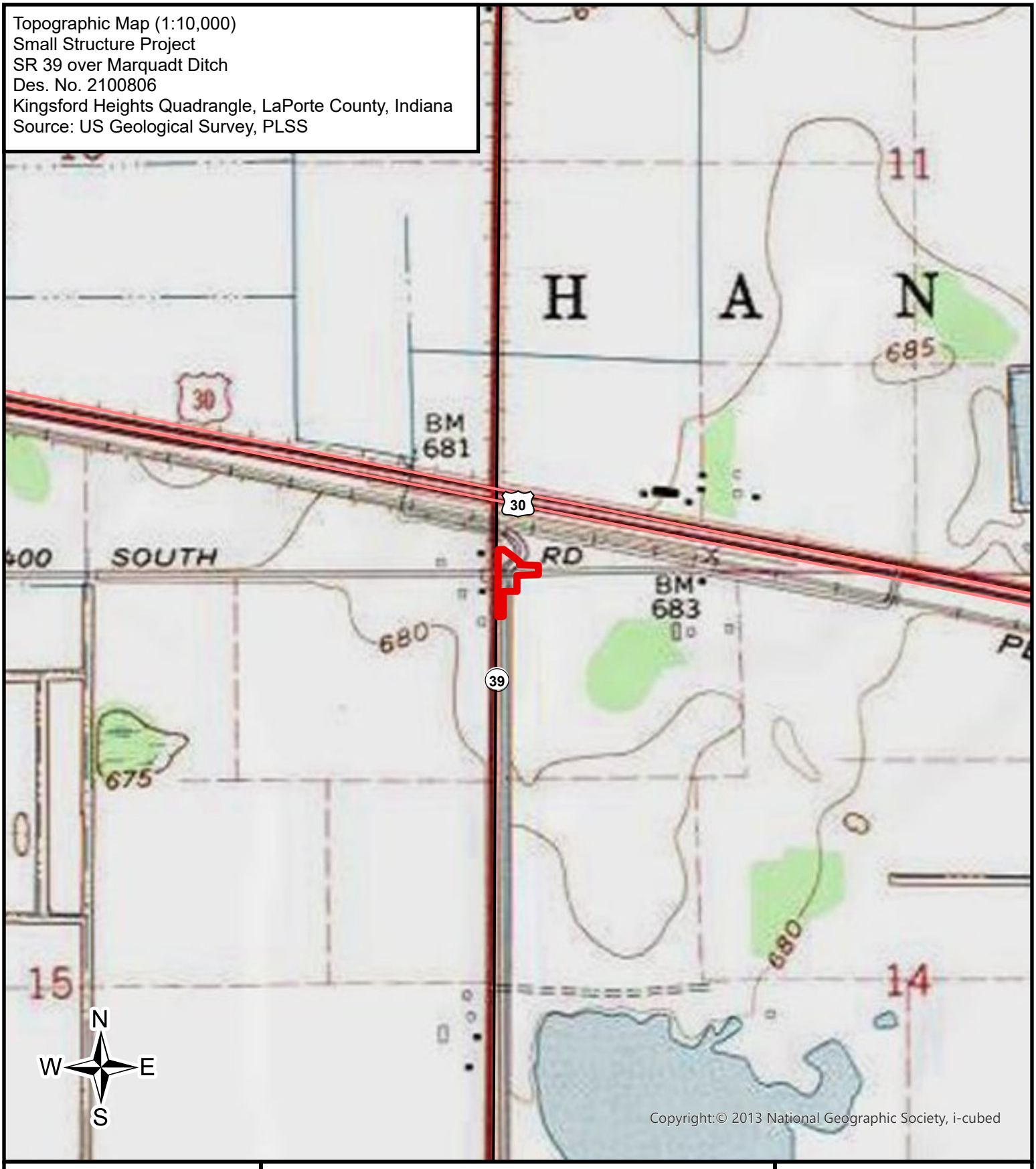
0 0.28 0.55 Miles

Investigated Area

SJCA

Jeegar Panchal 8/30/2024

Topographic Map (1:10,000)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
Kingsford Heights Quadrangle, LaPorte County, Indiana
Source: US Geological Survey, PLSS

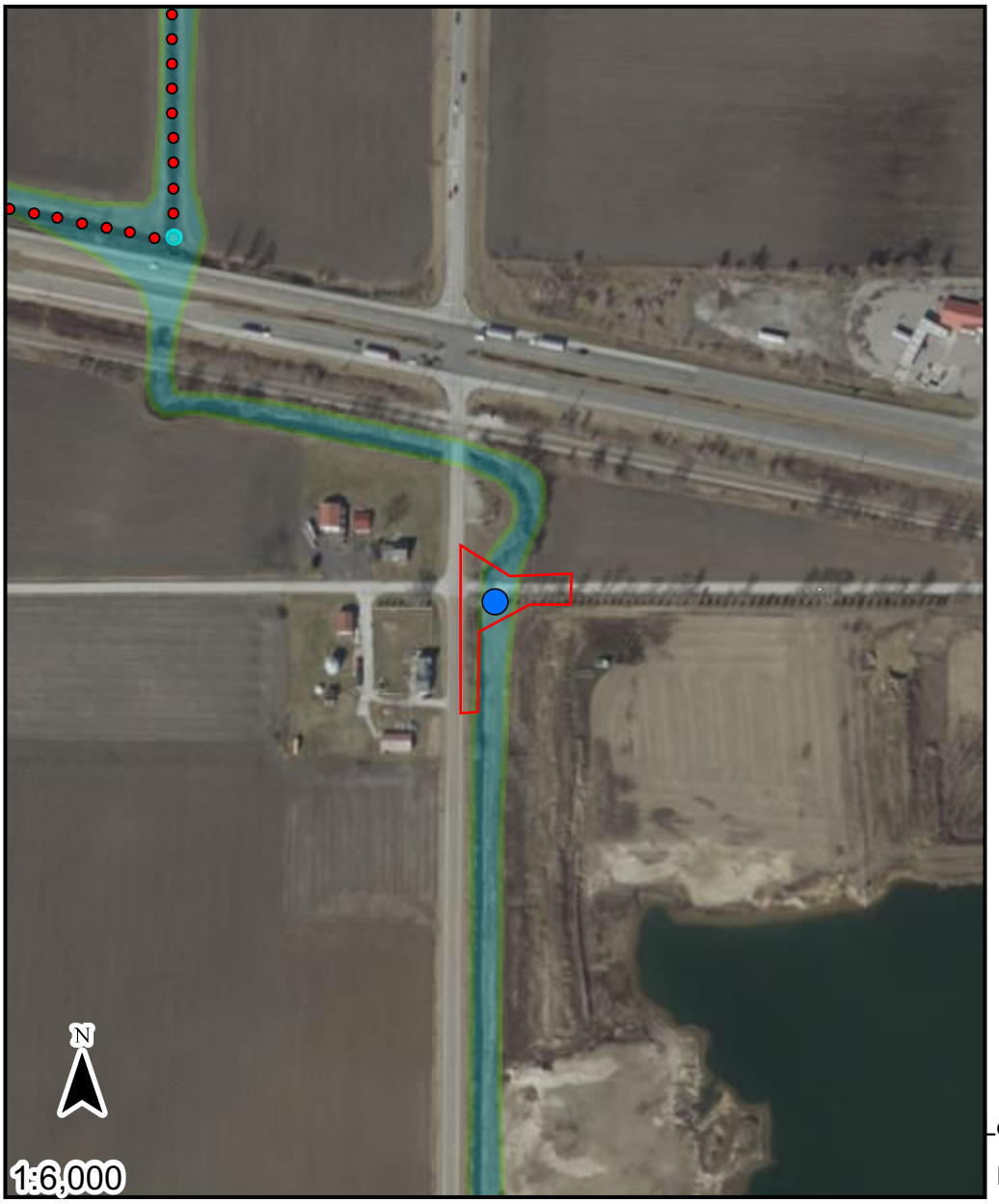


0 0.1 0.2 Miles

Investigated Area

SJCA

Jeegar Panchal 8/30/2024



Point of Interest

Base Flood Elevation Point

1.5

Best Available Flood Hazard Layers

- FEMA Zone AE Floodway; FEMA Administrative Floodway
- DNR Detailed Floodway
- DNR Approximate Floodway
- FEMA Zone A
- FEMA Zone AE
- DNR Detailed Fringe
- DNR Approximate Fringe
- Additional Floodplain Area; DNR .2 Percent Flood Hazard
- FEMA Protected by Levee
- FEMA Floodplain - Ponding (Depth)
- FEMA Floodplain - Sheet Flow (Depth)
- Not Mapped
- <all other values>
- Investigated Area

Long: **-86.73632732936086**

Lat: **41.40422313701059**

The information provided below is based on the point of interest shown in the map above.

County: **Laporte**

Stream Name:
Unnamed Tributary

Approximate Ground Elevation: **681.7 feet (NAVD88)**

Base Flood Elevation: **Not Available**

Drainage Area: **Not Available**

Best Available Flood Hazard Zone: **FEMA Zone A**

National Flood Hazard Zone: **FEMA Zone A**

Is a Flood Control Act permit from the DNR needed for this location? **See following pages**

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

Floodplain Administrator: **Michael Polan, Building Commissioner**

Community Jurisdiction: **Laporte County, County proper**

Phone: **(219) 326-6808**

Email: **mpolan@laporteco.in.gov**

US Army Corps of Engineers District: **Detroit**

Date Generated: 7/23/2024

NHD Flowline Map (1:1,000)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: IGIO 2021-2023 Orthoimagery, NHD Flowlines, USGS

0 0.01 0.02 Miles

Investigated Area
Unclassified Flowlines

Flowline
Connector
Canal Ditch
Underground Conduit

Pipeline
Stream/River
Artificial Path
Coastline
<all other values>
Road Centerlines of Indiana 2023

SJCA

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NWI Wetland Map (1:3,500)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: IGIO 2021-2023 Orthoimagery, NWI, USFWS

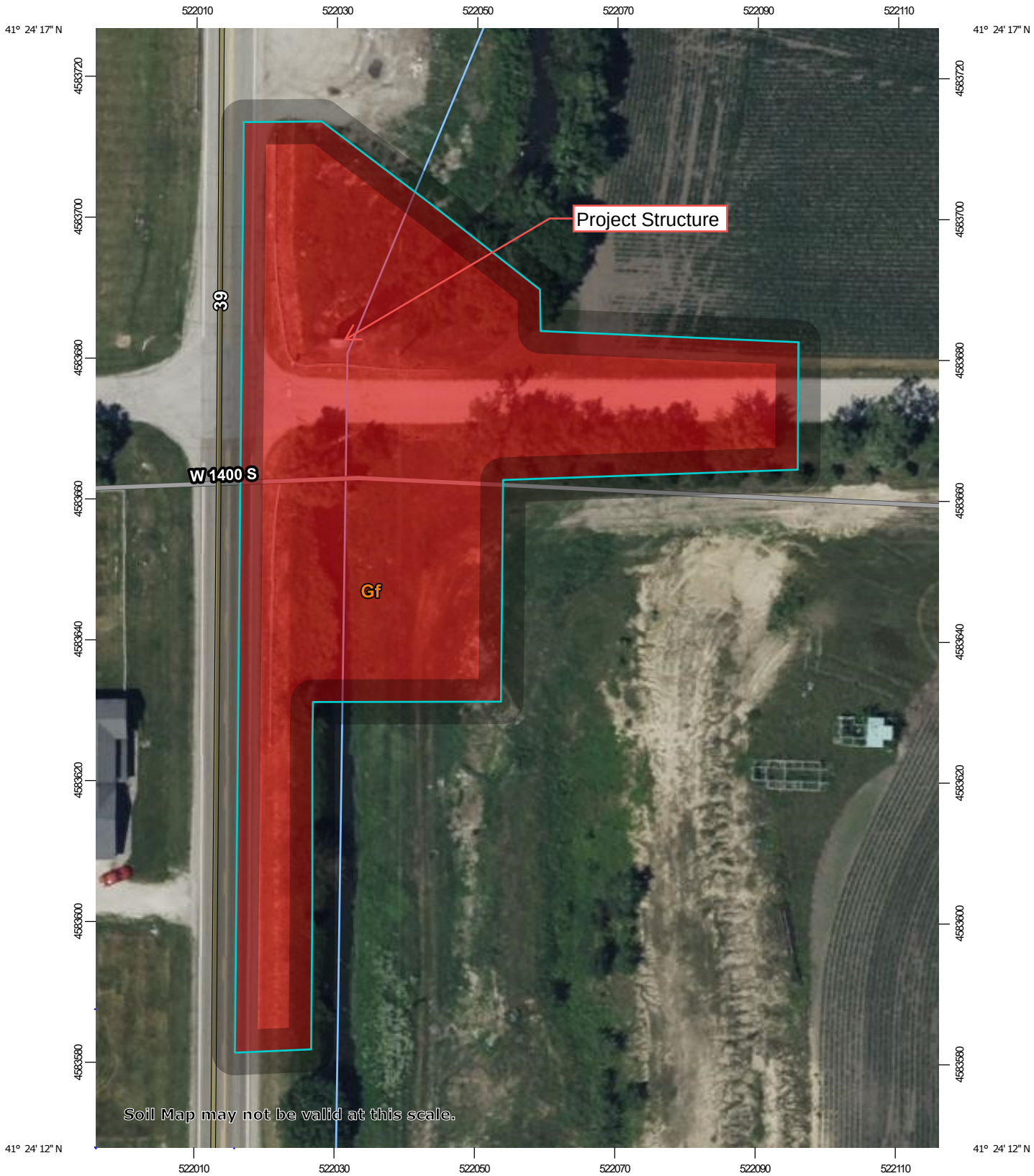
0 0.04 0.08 Miles

Investigated Area
NWI Wetlands
Freshwater Emergent Wetland
Freshwater Forested/Shrub Wetland
Freshwater Pond
Lake
Other
Riverine

SJCA

Jeegar Panchal 9/10/2024

Hydric Rating by Map Unit—La Porte County, Indiana
(Des. 2100806, SR 39 over Marquadt Ditch, LaPorte County, IN)



Map Scale: 1:775 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 10 20 40 60

Feet
0 35 70 140 210

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Lines
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Soil Rating Points
- Hydric (100%)
- Hydric (66 to 99%)
- Hydric (33 to 65%)
- Hydric (1 to 32%)
- Not Hydric (0%)
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: La Porte County, Indiana
Survey Area Data: Version 28, Sep 1, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 16, 2022—Jun 27, 2022

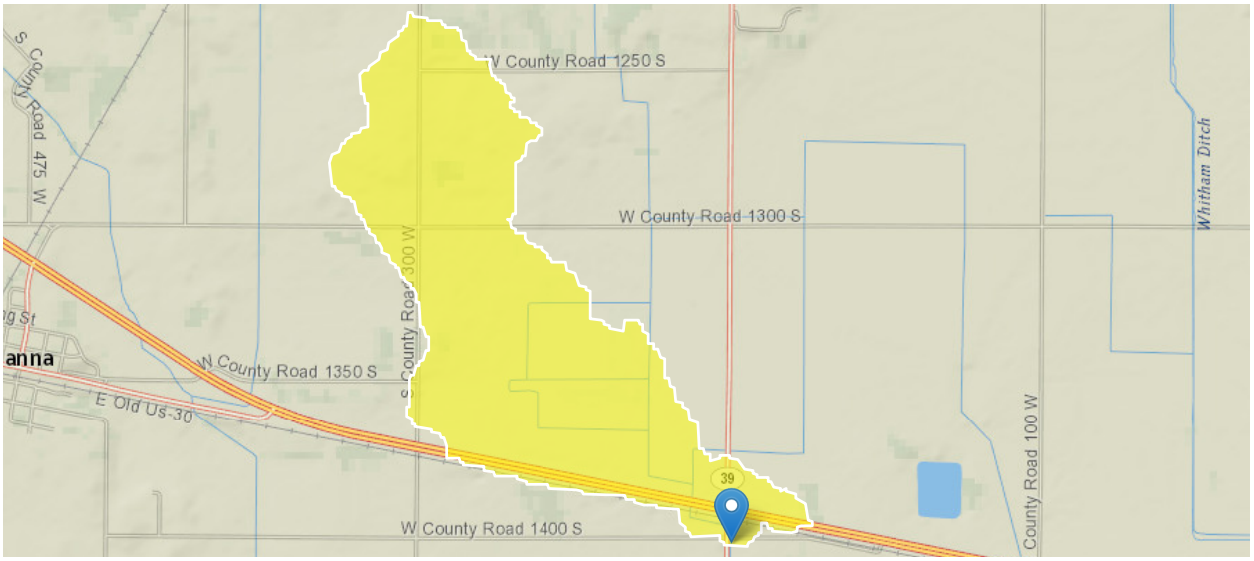
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Gf	Gilford fine sandy loam, 0 to 1 percent slopes	100	1.0	100.0%
Totals for Area of Interest			**1.0**	**100.0%**

StreamStats Report - SR 39 over Marquadt Ditch, LaPorte County, IN

Region ID: IN
Workspace ID: IN20240723201309585000
Clicked Point (Latitude, Longitude): 41.40405, -86.73635
Time: 2024-07-23 16:13:32 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.985	square miles
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	84	ft per day
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	3.1	percent
LOWREG	Low Flow Region Number	1728	dimensionless
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	15000	dimensionless
T2INDNR	Average transmissivity (ft2/d) for the full depth of unconsolidated deposits from InDNR well database.	3598	square feet per day

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.

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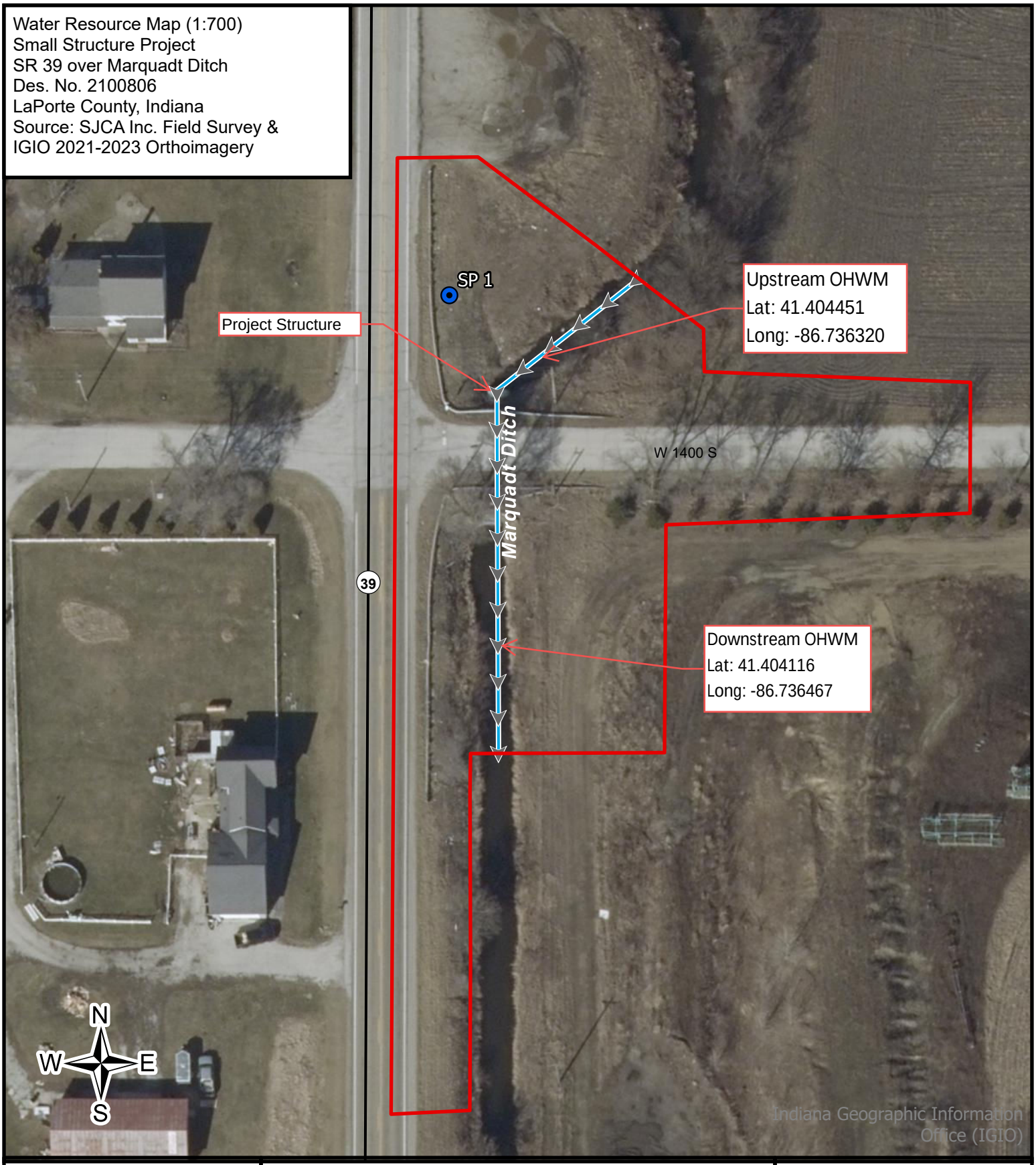
USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.21.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

Water Resource Map (1:700)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: SJCA Inc. Field Survey &
IGIO 2021-2023 Orthoimagery



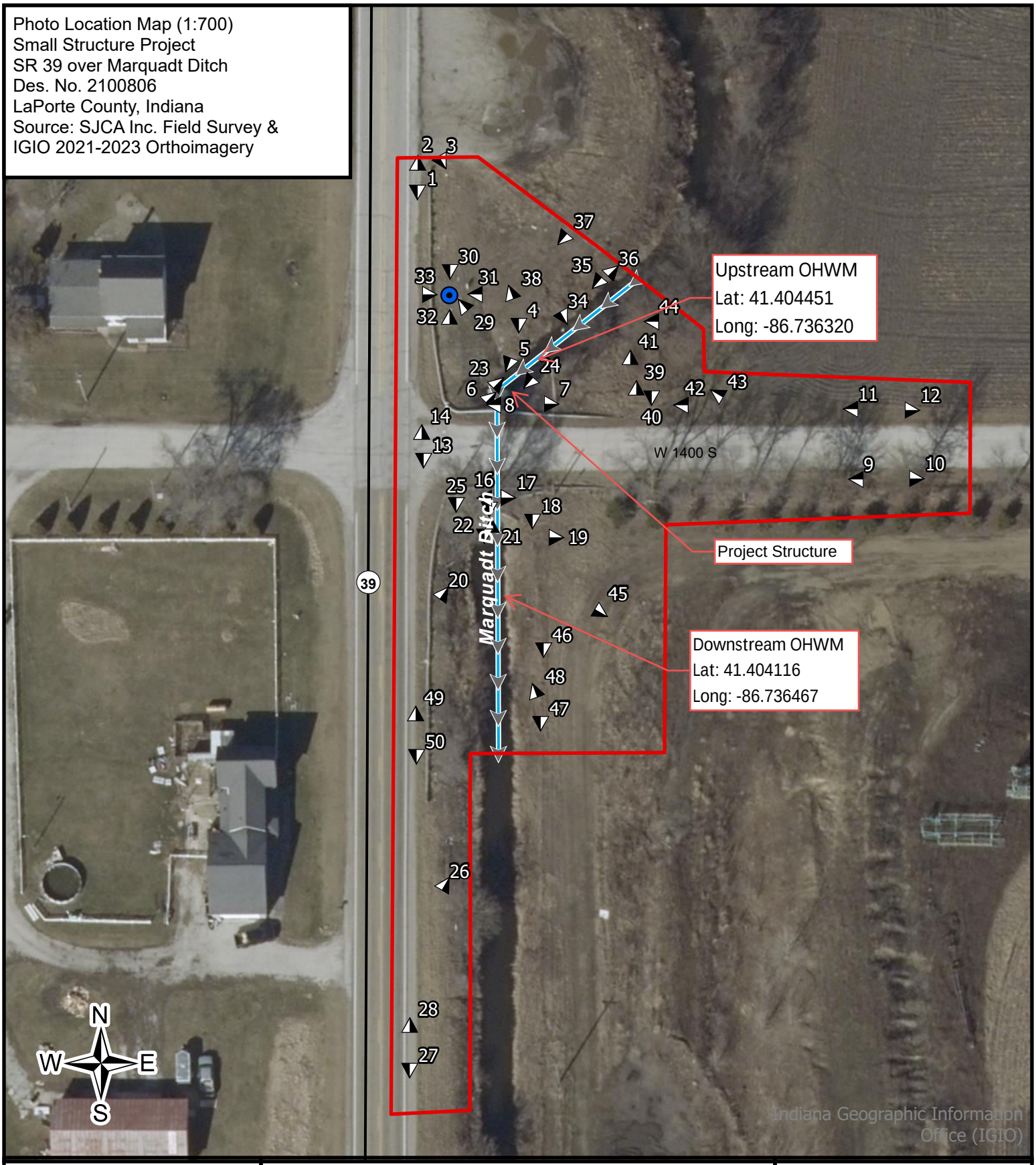
0 45 90 Feet

Sample Points
Stream Line
Investigated Area

SJCA

Jeegar Panchal 9/10/2024

Photo Location Map (1:700)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: SJCA Inc. Field Survey &
IGIO 2021-2023 Orthoimagery



0 45 90 Feet

Photo Point
Sample Points
Stream Line
Investigated Area

Jeegar Panchal 9/10/2024

SJCA

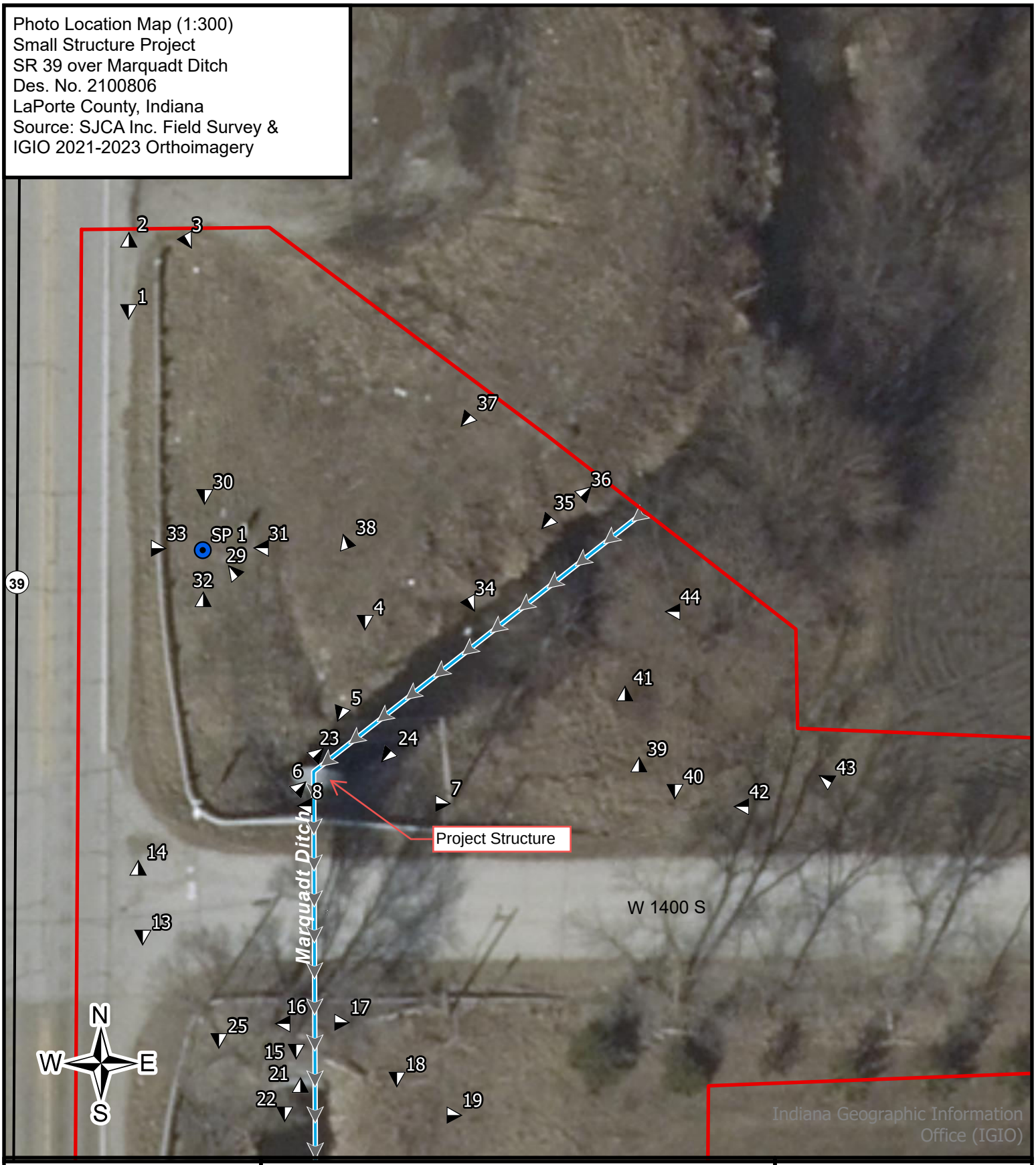


Photo Location Map (1:300)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: SJCA Inc. Field Survey &
IGIO 2021-2023 Orthoimagery
1
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SP 1
39
Project Structure
Marquadt Ditch
W 1400 S
N
W
E
S
Indiana Geographic Information Office (IGIO)
0
15
30
Feet
Photo Point
Sample Points
Stream Line
Investigated Area
SJCA
Jeegar Panchal 9/10/2024

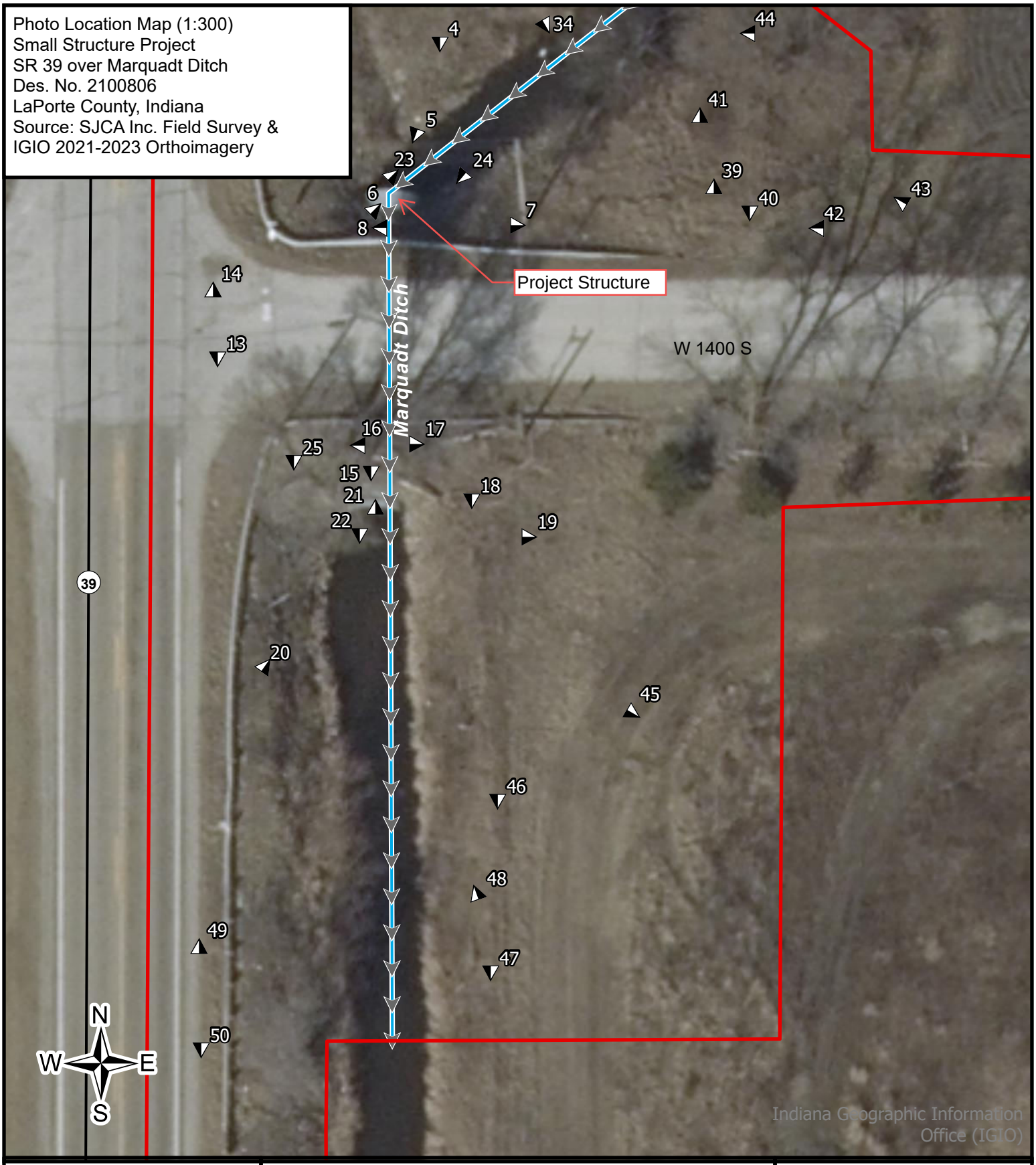


Photo Location Map (1:300)
Small Structure Project
SR 39 over Marquadt Ditch
Des. No. 2100806
LaPorte County, Indiana
Source: SJCA Inc. Field Survey &
IGIO 2021-2023 Orthoimagery
Project Structure
Marquadt Ditch
W 1400 S
39
N
W
E
S
Indiana Geographic Information Office (IGIO)
0 15 30
Feet
Photo Point
Stream Line
Investigated Area
SJCA
Jeegar Panchal 9/10/2024

Photo 1. Facing south along SR 39 toward CR 1400 S from northern terminus of the investigated area.

Photo 2. Facing north along SR 39 from the northern terminus of the investigated area.

Photo 3. Facing southeast toward the project structure from SR 39, near the northern terminus of the investigated area.

Photo 4. Facing south toward the project structure (inlet), along Marquadt Ditch from north side of CR 1400 S.

Photo 5. Facing southwest toward the project structure (inlet) along Marquadt Ditch.

Photo 6. Facing northwest toward Marquadt Ditch from the project structure (inlet).

Photo 7. Facing east along north side of CR 1400 S, near project structure (inlet).

Photo 8. Facing west from the project structure (inlet) along the north side of CR 1400 S, toward SR 39.

Photo 9. Facing west toward SR 39 along the south side of CR 1400 S from the eastern terminus of the investigated area.

Photo 10. Facing east along the south side of CR 1400 S from eastern terminus of the investigated area.

Photo 11. Facing west toward SR 39 along the north side of CR 1400 S from eastern terminus of the investigated area.

Photo 12. Facing east along the north side of CR 1400 S from eastern terminus of the investigated area. A corn field is located in the northeast quadrant of the investigated area.

Photo 13. Facing south along the west side of SR 39 from SR 39 & CR 1400 S intersection.

Photo 14. Facing north along SR 39 from SR 39 & CR 1400 S intersection.

Photo 15. Facing south toward Marquadt Ditch from the project structure (outlet) from the south side of CR 1400 S.

Photo 16. Facing west from the project structure (outlet), south side of CR 1400 S.

Photo 17. Facing east from the project structure (outlet), south side of CR 1400 S.

Photo 18. Facing south from the south side of CR 1400 S, near the project structure (outlet).

Photo 19. Facing west toward farm field from the south side of CR 1400 S.

Photo 20. Facing northeast toward the project structure (outlet) along Marquadt Ditch from the east side of SR 39 roadway.

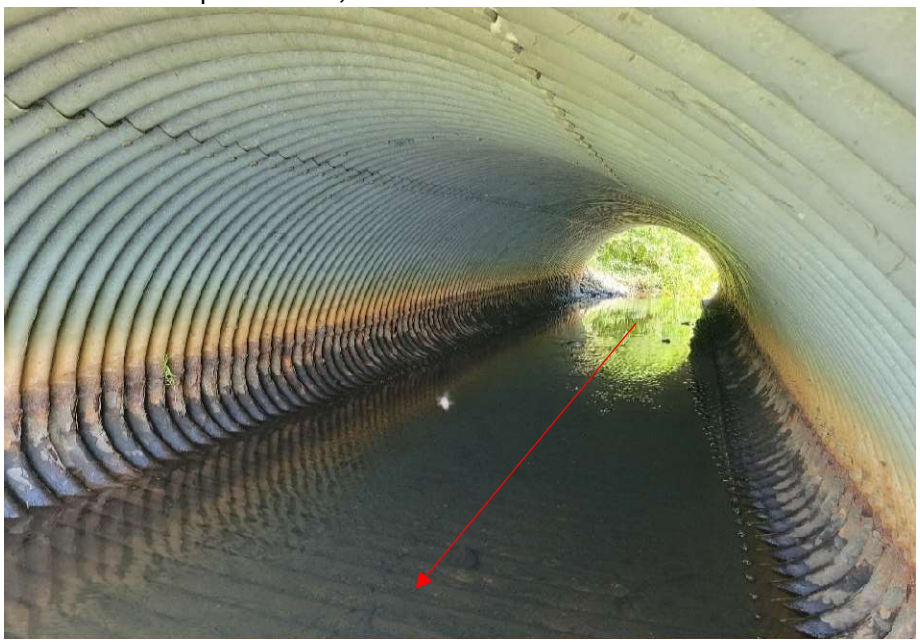


Photo 21. Facing north under the project structure along Marquadt Ditch.

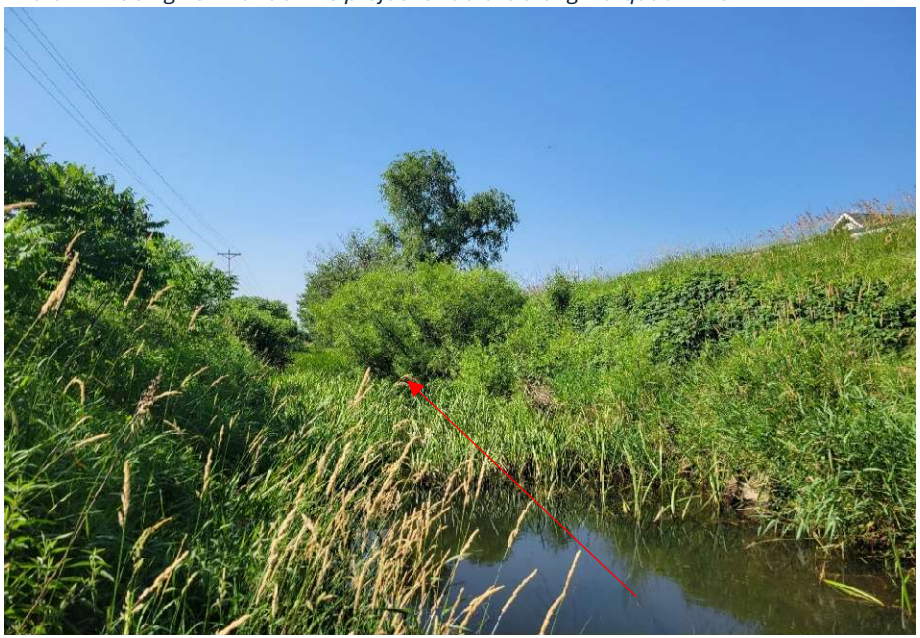


Photo 22. Facing south along Marquadt Ditch. American bur-reed (Sparganium americanum, OBL) is visible within the streambed.

Photo 23. Facing northeast along Marquadt Ditch. American bur-reed (Sparganium americanum, OBL) is visible within the streambed.

Photo 24. Facing southwest toward the project structure (inlet). Riprap is visible.

Photo 25. Facing south along the east side of SR 39, shows Marquadt Ditch.

Photo 26. Facing northeast toward Marquadt Ditch from the east side of SR 39.

Photo 27. Facing south along the east side of SR 39 from the southern terminus of the investigated area.

Photo 28. Facing north along the east side of SR 39 from the southern terminus of the investigated area.

Photo 29. View of SP 1 (upland) soil.

Photo 30. Facing south from SP 1 towards CR 1400, along the guardrail along SR 39.

Photo 31. Facing west from SP 1, towards the guardrail along SR 39.

Photo 32. Facing north from SP 1 along the guardrail on the east side of SR 39.

Photo 33. Facing east from SP 1.

Photo 34. Facing southeast from Marquadt Ditch toward CR 1400 S.

Photo 35. Facing southwest toward Marquadt Ditch from the northwest quadrant of the investigated area.

Photo 36. Facing northeast toward Marquadt Ditch from the northwest quadrant of the investigated area.

Photo 37. Facing southwest from the northwest quadrant of the investigated area.

Photo 38. Facing northwest from the toward SR 39.

Photo 39. Facing north from northeast quadrant of the investigated area.

Photo 40. Facing south toward CR 1400 S from northeast quadrant of the investigated area.

Photo 41. Facing north within the northeast quadrant of the investigated area.

Photo 42. Facing west toward the project structure along the north side of CR 1400S.

Photo 43. Facing northwest from northside of CR 1400 S.

Photo 44. Facing west toward Marquadt Ditch from the northeast quadrant of the investigated area

Photo 45. Facing southeast toward farm field, east side of SR 39.

Photo 46. Facing south within the southeast quadrant of the investigated area.

Photo 47. Facing south along Marquadt Ditch from southeast quadrant of the investigated area.

Photo 48. Facing northwest toward Marquadt Ditch from southeast quadrant of the investigated area.

Photo 49. Facing north along east side of SR 39.

Photo 50. Facing south along the east side of SR 39.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: SR 39 over Marquadt Ditch City/County: Laporte Sampling Date: 6/21/24

Applicant/Owner: INDOT State: IN Sampling Point: SP 1

Investigator(s): Kevin McLane, Jeegar Panchal Section, Township, Range: S-11, T-34 N, R-3 W

Landform (hillslope, terrace, etc.): Terrace Local relief (concave, convex, none): None

Slope (%): 0-2 Lat: 41.404483 Long: -86.736505 Datum: WGS 84

Soil Map Unit Name: Gf-*Gilford fine sandy loam, 0 to 1 percent slopes* NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☑ No ☐ (If no, explain in Remarks.)

Are Vegetation ☑, Soil ☑, or Hydrology ☐ significantly disturbed? Are "Normal Circumstances" present? Yes ☑ No ☐

Are Vegetation ☐, Soil ☐, or Hydrology ☐ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☑	No ☐	**Is the Sampled Area within a Wetland?** Yes ☐ No ☑
Hydric Soil Present?	Yes ☐	No ☑	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ☐	No ☑	

Remarks: (Explain alternative procedures here or in a separate report.)

Along SR 39 roadside, north of CR 1400 S, near guardrail.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)
- ☐ Sediment Deposits (B2)
- ☐ Drift Deposits (B3)
- ☐ Algal Mat or Crust (B4)
- ☐ Iron Deposits (B5)
- ☐ Inundation Visible on Aerial Imagery (B7)
- ☐ Sparsely Vegetated Concave Surface (B8)
- ☐ Water-Stained Leaves (B9)
- ☐ Aquatic Fauna (B13)
- ☐ Marl Deposits (B15)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres on Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in Tilled Soils (C6)
- ☐ Thin Muck Surface (C7)
- ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Surface Soil Cracks (B6)
- ☐ Drainage Patterns (B10)
- ☐ Moss Trim Lines (B16)
- ☐ Dry-Season Water Table (C2)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Stunted or Stressed Plants (D1)
- ☐ Geomorphic Position (D2)
- ☐ Shallow Aquitard (D3)
- ☐ Microtopographic Relief (D4)
- ☑ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ☐	No ☑	Depth (inches):
Water Table Present?	Yes ☐	No ☑	Depth (inches):
Saturation Present? (includes capillary fringe)	Yes ☐	No ☑	Depth (inches):

Wetland Hydrology Present? Yes ☐ No ☑

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION – Use scientific names of plants.

Sampling Point: SP 1

Tree Stratum (Plot size:)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size:)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 feet)			
1. *(Phalaris arundinacea)* Reed canary grass	100	Y	FACW
2. *(Poa pratensis)* Kentucky blue grass	5		FACU
3. (*Lolium perenne*) Perennial ryegrass	5		FACU
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	110 = Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species	x 5 =
Column Totals: (A)	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- [✔] Rapid Test for Hydrophytic Vegetation
- [✔] Dominance Test is >50%
- [ ] Prevalence Index is ≤3.0[1]
- [ ] Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- [ ] Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** [✔] **No** [ ]

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: SP 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Redox Features Type[1]	Redox Features Loc[2]	Texture	Remarks
0-10	10 YR 2/1	100					Sandy loam	
10-20	10 YR 2/1	80					Sandy loam	
	10 YR 3/3	20						

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: September 11, 2024

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Jeegar Panchal SJCA Inc.,9102 N Meridian St. Suite #200 Indianapolis, IN 46260 (317) 634-4110

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a small structure project (Des. 2100806) in LaPorte County, Indiana. The project is located at SR 39 and County Road (CR) 1400 South (S), approximately 0.09 mile south of United States (US) 30. The existing structure is a corrugated metal pipe (CMP) that is 63 feet (ft) long and approximately 7.5 ft in diameter. The proposed scope of work involves replacing the existing pipe with a 15 ft span by 9 ft rise reinforced concrete box (RCB). The guardrail along the east side of SR 39, south of CR 1400 S will be replaced. The guardrail along the east side of SR 39, north of CR 1400 S will be removed and the area will be regraded. The shoulder within the investigated area will be reconstructed. Ditch regrading will occur along SR 39 and CR 1400 S. The design for this project is still in the early stages; therefore, the investigated area for this report covers the anticipated construction limits and was widened to cover the survey limits, existing right-of-way limits, and to account for any possible access routes.

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

State: IN County/parish/borough: LaPorte City: N/A

Center coordinates of site (lat/long in degree decimal format):

Lat.: 41.404116 Long.: -86.736467

Universal Transverse Mercator: Zone 16; 522055.13 m E 4583569.54 m N

Name of nearest waterbody: Marquadt Ditch

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)
Marquadt Ditch	41.404116	-86.736467	242 linear ft	Non wetland - perennial stream	Section 404

1) 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 "pre-construction 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 aquatic 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 *"may be"* waters of the U.S. and/or that there *"may 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:

- [x] Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
  Map: see maps attached to Waters Report.
- [x] Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - [ ] Office concurs with data sheets/delineation report.
  - [ ] Office does not concur with data sheets/delineation report. Rationale: _____.
- [ ] Data sheets prepared by the Corps: _____.
- [ ] Corps navigable waters' study: _____.
- [ ] U.S. Geological Survey Hydrologic Atlas: _____.
  - [x] USGS NHD data.
  - [ ] USGS 8 and 12 digit HUC maps.
- [x] U.S. Geological Survey map(s). Cite scale & quad name: 24k, Kingsford Heights Quadrangle.
- [x] Natural Resources Conservation Service Soil Survey. Citation: LaPorte County Soil Survey.
- [x] National wetlands inventory map(s). Cite name: USFWS NWI Wetland Mapper.
- [ ] State/local wetland inventory map(s): _____.
- [x] FEMA/FIRM maps: IDNR Floodplain Map.
- [ ] 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- [x] Photographs: [x] Aerial (Name & Date): NAIP 2018 Aerial Photographs.
  or [x] Other (Name & Date): Site Photographs 6/21/2024.
- [ ] 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.

_____	9/11/24
Signature and date of Regulatory staff member completing PJD	Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

[1] 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.

Des 2100806

Appendix G

Public Involvement

(Note: this appendix will be updated upon completion of the public involvement process)

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

Sample Notice of Survey Letter

June 9, 2023

Shaker GT LLC
499 W US 30
HAMLET, IN 46532

Re: Survey Notice for S.R. 39 Culvert Rehabilitation
DLZ Project #2161-2839-70
Property Key # 46-18-14-100-005.000-049
Property Address: 1784 W 1400 S HANNA

Dear Property Owner:

Our firm has been retained by the Indiana Department of Transportation (INDOT) to prepare a survey for the culvert rehabilitation project of S.R. 39 over Marquadt Ditch, Des. No. 2100806.

Our information indicates that you either own or occupy property near this proposed highway project. Our employees will be conducting a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is allowed by law in accordance with Indiana Code IC 8-23-7-26 (see attached). They will show you their identification, if you are available, before coming onto your property. If you have sold this property, or it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we can contact them about the survey.

The survey work will include the location of features such as streams, wetlands, bridges, curb and gutter, buildings, trees, fences, utilities, sewer structures and drives, and obtaining ground elevations. We will also be re-establishing public street right-of-way lines by looking for and locating property irons and subdivision block corners. This survey is needed for the proper planning and design of this project.

Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If any problems do occur, please contact our field crew or myself at the number listed below. A copy of IC-8-23-7-26 thru 28 is provided to help with your understanding of the process. In accordance with IC 8-23-7-28, any request for damages shall be made in writing to the INDOT – LaPorte District – Matt Deitchley, Deputy Commissioner, 315 E. Boyd Blvd., LaPorte, IN 46350.

Sincerely,

DLZ INDIANA, LLC

Steve Jones, PS, CFedS
Survey & Right of Way Division Manager

Des 2100806

Appendix H

Air Quality

U.S. Department of Transportation
Federal Highway Administration

Indiana Division

575 N. Pennsylvania St, Room 254
Indianapolis, IN 46204
317-226-7475
317-226-7341

November 7, 2024

In Reply Refer To:
HDA-IN

Ms. Lyndsay Quist
Deputy Commissioner Capital Program Management
Indiana Department of Transportation (INDOT)
100 North Senate Avenue
Indianapolis, IN 46204

Dear Ms. Quist:

We have completed our review of the INDOT's MPO Amendment 31 to the FY 2024-2028 Indiana Statewide Transportation Improvement Program (STIP) dated November 06, 2024. This amendment is for the inclusion of the following documents by reference:

- Northwestern Indiana Regional Planning Council (NIRPC)
  NIRPC 24-02.1 exempt
  NIRPC 24-02.2 non-exempt
  NIRPC 24-03
  NIRPC Modification 24-15

INDOT and NIRPC have re-demonstrated fiscal constraint, air quality conformity, and provided opportunity for public comment and involvement, where applicable, regarding the documents identified above. The Federal Highway Administration (FHWA) considers this amendment to be in substantial compliance with the applicable requirements as sufficient to support a consistency finding for the STIP.

FHWA and the Federal Transit Administration (FTA) take formal action, through the development of the Federal Planning Finding (FPF), to evaluate and ensure that the STIP and MPO TIPs are developed according to statewide and metropolitan planning processes consistent with 23 U.S.C. 134 and 135, and 49 U.S.C. 5303 and 5304, as well as 23 CFR part 450, 500, and 49 CFR part 613. FHWA and FTA are required under 23 CFR 450.220 (b) to document and issue an FPF in conjunction with the approval of the STIP, or amended STIP. Based on the recently conducted FPF (dated August 31, 2023), FHWA and FTA find that the amended Indiana FY2024-2028 STIP substantially meets the transportation planning requirements and is approving the amended STIP (as recorded in MPO Amendment 31) subject to the corrective actions outlined in the FPF. FHWA and FTA will continue to partner with the INDOT to ensure the previously developed action plan is implemented to address the corrective actions. If progress is not made in addressing the corrective actions, future amendments to the FY2024-2028 STIP, or adoption of the FY2026-2030 STIP, may not be approved by USDOT.

FHWA only recognizes years 2024-2027 in the STIP. Any projects and/or phases of projects added in years outside of 2024-2027 are considered illustrative, and thus ineligible for federal funding at this time.

Should you have any questions regarding this approval please contact Erica Tait at 317-226-7481 or e-mail at erica.tait@dot.gov.

Sincerely,

Erica Tait
Digitally signed by Erica Tait
Date: 2024.11.07 15:36:53 -05'00'

For: Jermaine R. Hannon
Division Administrator

Enclosure

cc: Michael McNeil, INDOT
April Leckie, INDOT
La'Kesha Stewart, FHWA
Paige Story, FHWA

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Eric Holcomb, Governor
Michael Smith, Commissioner

November 6, 2024

Mr. Jermaine R. Hannon, Division Administrator
FHWA Indiana Division
575 North Pennsylvania St., Room 254
Indianapolis, IN 46204

Dear Mr. Hannon:

The Indiana Department of Transportation requests the projects listed in STIP Amendment 24-MPO-31 to be incorporated into the 2024-2028 Statewide Transportation Improvement Program (STIP). Any projects and/or phases of projects added in years outside of 2024-2027 are considered illustrative, and thus ineligible for federal funding at this time.

The required Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP) documents have been included in this request and duly noted in the Amendment. We have determined that the proposed amendments are: 1) consistent with the transportation plan; 2) the TIP remains fiscally constrained in that federal funding resources are sufficient to support the new or modified projects; and 3) conform to state and national air quality standards.

- Northwestern Indiana Regional Planning Commission (NIRPC)
  NIRPC 24-02.1 exempt
  NIRPC 24-02.2 non-exempt
  NIRPC 24-03
  NIRPC Modification 24-18
  The total dollar amount of this amendment is $154,453,316 for fiscal years 2024-2027, has been verified with FHWA.

The grand total dollar amount of this amendment is $154,453,316 for fiscal years 2024-2027, has been verified with FHWA.

We request your review and approval of the subject amendment. Should you have any questions pertaining to this amendment, please contact Michael McNeil, STIP Specialist at (317) 232-0223 or at mmcneil@indot.in.gov.

Sincerely,

Michael McNeil
for

April Leckie, Planning Manager
Intermediate Range Planning Division

2100806 (Ver 3) 24-03 STATUS **Programmed** **FEDERAL**

Title: District Small Structure Project **Route:** N/A

Description: Small Structure Pipe Lining on SR 39, over Marquadt Ditch, at CR 1400 S

Project Type: Small Structure Pipe Lining **AQ Exempt:** Exempt **District:** LaPorte

County: Laporte **Limits:**

Narrative: Changed RW from 2023 to 2025, add funds to CN

FED FY	REVENUE SOURCE	PE	RW	CN	CE	TOTAL
2025	NHPP Non Interstate	$0	$80,000	$0	$0	**$80,000**
2026	NHPP Non Interstate	$0	$0	$961,225	$20,000	**$981,225**
<2024	Prior	$42,000	$0	$0	$0	**$42,000**
	2024-2028 TOTAL	**$0**	**$80,000**	**$961,225**	**$20,000**	**$1,061,225**
	ALL YEARS TOTAL	**$42,000**	**$80,000**	**$961,225**	**$20,000**	**$1,103,225**

Region: Northwestern MPO **Lead Agency:** INDOT

Previously Approved Version

2100806 (Ver 2) 24-00

Title: District Small Structure Project **Route:** N/A

Description: Small Structure Pipe Lining on SR 39, over Marquadt Ditch, at CR 1400 S

Project Type: Small Structure Pipe Lining **AQ Exempt:** Exempt **District:** LaPorte

County: Laporte **Limits:**

Narrative: Amend FY22 PE, FY23 RW, FY24 CN, FY25 CN and FY26 CN and CE. New TIP

FED FY	REVENUE SOURCE	PE	RW	CN	CE	TOTAL
2024	NHPP Non Interstate	$0	$0	$10,000	$0	**$10,000**
2025	NHPP Non Interstate	$0	$0	$10,000	$0	**$10,000**
2026	NHPP Non Interstate	$0	$0	$862,400	$20,000	**$882,400**
<2024	Prior	$42,000	$70,000	$0	$0	**$112,000**
	2024-2028 TOTAL	**$0**	**$0**	**$882,400**	**$20,000**	**$902,400**
	ALL YEARS TOTAL	**$42,000**	**$70,000**	**$882,400**	**$20,000**	**$1,014,400**

Region: Northwestern MPO **Lead Agency:** INDOT

Des 2100806

Appendix I

Additional Studies and Information

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800200	1800200	LaPorte	Fox Memorial Park
1800228	1800228	LaPorte	Fox Memorial Park
1800265	1800265	LaPorte	Kesling Park
1800332	1800332	LaPorte	Rumley Park
1800351	1800351	LaPorte	Westville Park (Prairie Meadow Park)
1800373	1800373	LaPorte	Kesling Park
1800402	1800402	LaPorte	Nelson Park
1800405	1800405V	LaPorte	Galena Marsh Nature Preserve
1800453	1800453	LaPorte	Luhr Park
1800547	1800547	LaPorte	Hansen & Gifford Parks/Old Spur Trail
1800608	1800608	LaPorte	Luhr County Park

*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.

Culvert Inspection Report

Structure Information

Structure:	CV 039-046-169.10 P	Facility Carried:	SR 39
Structure Number:	93004391	Features Intersected:	UNT OF CUSHER ARM

Inspection Information

Inspection Date:	10/16/2024	Lead Inspector:	Ryan Arbour
Inspection Type:	Culvert	Additional Inspectors:	Amy Wines, Dylan (Cody) Graham, Ryan Arbour

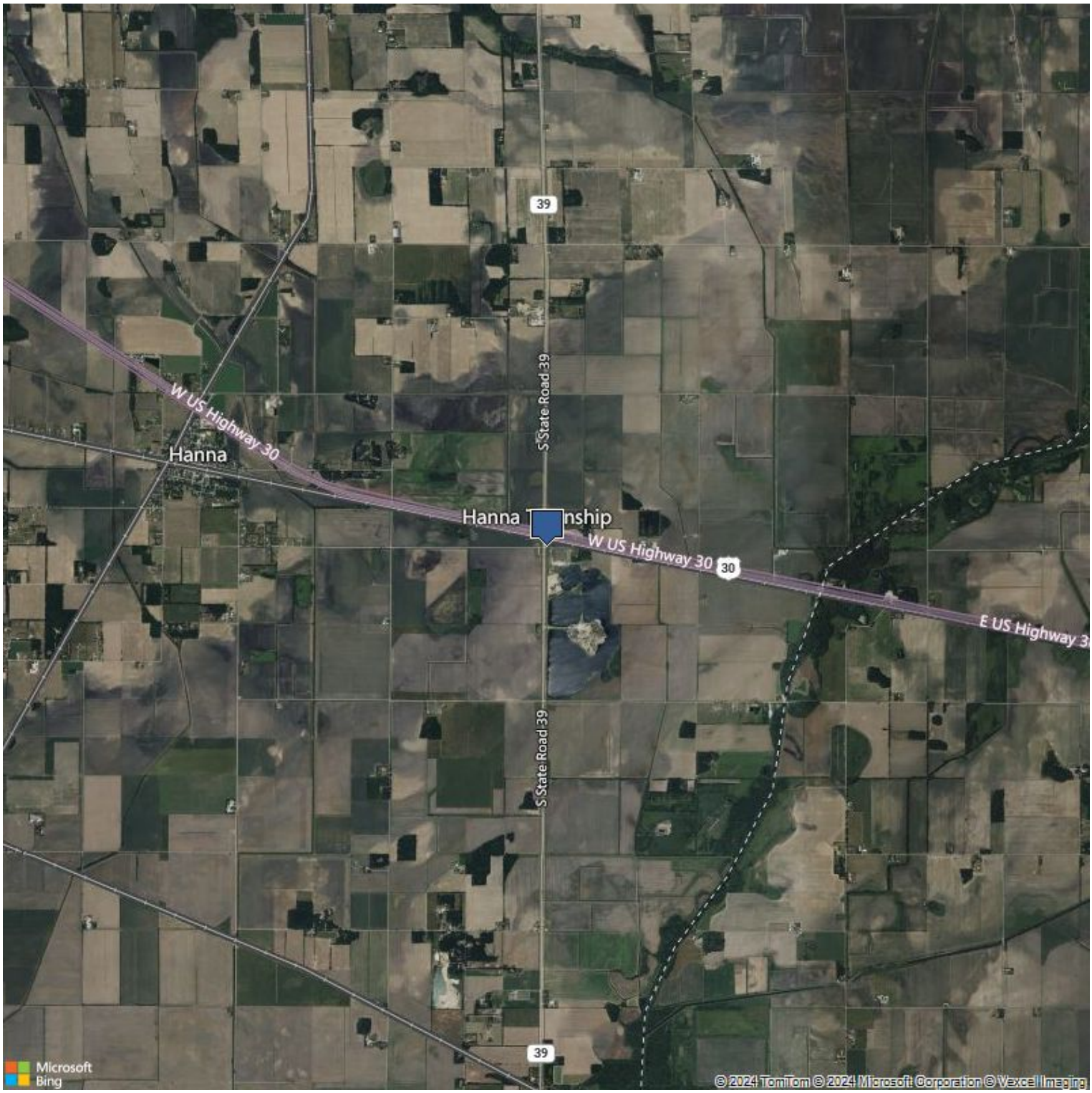
Condition Ratings Summary

Culvert:	**4**	Substructure:	**N**
Deck:	**N**	Channel & Channel Protection:	**7**
Superstructure:	**N**		

Note - Report Excerpt

Structure:	CV 039-046-169.10 P	Facility Carried:	SR 39	Inspector:	Ryan Arbour
Str. Number:	93004391	Features Intersected:	UNT OF CUSHER ARM	Inspection Date:	10/16/2024

Location Map



Location:	CR 1400 S	Latitude:	41.40431
County:	Laporte	Longitude:	-86.73642

Structure:	CV 039-046-169.10 P	Facility Carried:	SR 39	Inspector:	Ryan Arbour
Str. Number:	93004391	Features Intersected:	UNT OF CUSHER ARM	Inspection Date:	10/16/2024

Inspection Summary

Culvert Inspection:

There are areas of perforations through entire pipe. Perforations are mostly on the west side of pipe for approximately 20', (under the roadway). Corrosion below waterline. Cracks in pipe near bolts on ceiling of pipe.

Structure:	CV 039-046-169.10 P	Facility Carried:	SR 39	Inspector:	Ryan Arbour
Str. Number:	93004391	Features Intersected:	UNT OF CUSHER ARM	Inspection Date:	10/16/2024

Identification

Structure Number:	93004391	Year Built:	0000
Structure:	CV 039-046-169.10 P	Inspection Date:	10/16/2024
Highway Agency District:	04 - La Porte	Inspection Frequency:	12
Subdistrict:	4100 - Laporte Subdistrict	Addt'l Treatment Exist?	False
Type Of Service (Under):	0 - Other	County Code:	046 - Laporte
Facility Carried:	SR 39	Ramp Id:	
Features Intersected:	UNT OF CUSHER ARM	Offset:	10
Location:	CR 1400 S	Reference Post:	169
		Milepoint:	0
		Latitude:	41.40431
		Longitude:	-86.73642
Add'l Location Description:	runs under 1400S parallel to 39		

Classification

Maintenance Responsibility:	01 - State Highway Agency	Owner:	01 - State Highway Agency
National Highway System Inventory Route:	0 - Inventory Route is not on the NHS	Functional Classification:	02 - Rural - Principal Arterial - Other

Geometric Data

Kind Of Material:	3	Max Vertical Opening (FT):	12.0
Max Horizontal Opening (FT):	7.5	Original Culvert Shape:	Arch
Culvert Barrel Length (FT):	63.0	Skew:	
Minimum Estimated Fill Cover (FT):	4.00		
Measurement Remarks:			
Structural Additional Description:	Corrugated Metal Pipe		

Structure:	CV 039-046-169.10 P	Facility Carried:	SR 39	Inspector:	Ryan Arbour
Str. Number:	93004391	Features Intersected:	UNT OF CUSHER ARM	Inspection Date:	10/16/2024

Culvert Condition Ratings

Culverts:	4 - Poor Condition
There are areas of perforations through entire pipe. Perforations are mostly on the west side of pipe for approximately 20', (under the roadway). Corrosion below waterline. Cracks in pipe near bolts on ceiling of pipe.	
Deck:	N - Not Applicable
N	
Superstructure:	N - Not Applicable
N	
Substructure:	N - Not Applicable
N	
Channel / Channel Protection:	7 - Bank protection needs minor repairs
Banks have rip rap and grassy vegetation.	
Culvert Rails:	1 - Meets acceptable standards
Railings are in good condition.	
Transitions:	1 - Meets acceptable standards
Transitions are in good condition.	
Approach Guardrail:	1 - Meets acceptable standards
Approach guardrails are in good condition.	
Approach Guardrail Ends:	1 - Meets acceptable standards
Approach guardrail ends are in good condition.	
Is Culvert Obstructed?	False
N	
Overtopping Frequency:	1 - Remote - Greater than 100 years
Remote chances of overtopping	

Headwall / Anchor Rating:	N	Channel Alignment Rating:	7
Wingwall Ratings:	N	Birds Present?:	No
Bank Erosion Ratings:	7	Bats Present?:	No
Drift / Sediment Rating:	7		

ADDENDUM No. 1
TO ABBREVIATED ENGINEER'S REPORT

Project Number:	2100806
Route / Feature Crossed:	SR39
Project Location:	SR39 over Marquadt Ditch, Along SR 39 under County Road 1400 S
Date:	05/13/2022

ADDENDUM JUSTIFICATION:

1. Revisions to SPMS data in "work type" to match the base data provided in the scope document.
2. Work type is being change from Small Structure Pipe Lining to Small Structure to reduce the environmental impact of the project.

REVISION TO ORIGINAL SCOPE DOCUMENT:
The (Abbreviated) Engineer's Report is being revised as follows:

Work Type: Small Structure Replacement

Does the revision change the project's Purpose & Need statement?	☐ Yes	☒ No
Does the revision change the project's recommended alternative?	☒ Yes	☐ No

The following is the analysis of the alternatives provided in the project's hydraulic memo. This analysis does not change the recommended alternative.

	Structure Size & Type	Cost Estimate
Proposal 1	11.21-ft interior span by 7.17-ft interior rise smooth Steel Liner	Eliminated – Steel Pipe Liner not considered viable material
Proposal 2	9.39-ft interior span by 6.61-ft interior rise HDPE Liner with a beveled headwall and 2.5-ft Bored Pipe	Eliminated – Need for a bored pipe is not considered a viable option
Proposal 3	15-ft span by 9-foot rise Reinforced Concrete Box	$920,000
Proposal 4	15-ft span Three-sided Flat-top	$1,200,000
Proposal 5	16-ft span Reinforced Concrete Arch	$1,100,000

Does the revision change the project's cost estimate?	☒ Yes	☐ No
Does the revision change the project's environmental impacts?	☒ Yes	☐ No
Does the revision require additional Right-of-Way?	☐ Yes	☒ No
Does the revision change the project's schedule (design or construction)?	☐ Yes	☒ No

Does the revision require additional coordination with utility companies? ☒ Yes ☐ No

ADDENDUM CONCURRENCE

This document was prepared by:

Michael Miltz, PE
Scoping Engineer, LaPorte District

Reviewed by:

Christopher Nesper
Digitally signed by Christopher Nesper
Date: 2023.08.24 12:43:25 -05'00'

Chris Nesper, PE
Culvert Asset Engineer, LaPorte District

Reviewed by:

Paul South
Digitally signed by Paul South
Date: 2022.05.19 09:19:13 -04'00'

Paul South, PE
District Scoping Manager, LaPorte District

Approved by:

Steve J. Benczik
Digitally signed by Steve J. Benczik
Date: 2023.08.25 09:15:56 -05'00'

Steve Benczik, PE
System Asset Manager, LaPorte District

Bridge Scoping Application Report
NBI: 93004391 for 12/19/2019

5/26/2021

Bridge — Approved

Last Edited Date	1/15/2021	**Work Type**	Small Structure Pipe Lining
Last Updated By	System, DTIMS	**Work Category**	District Small Structure Project
Proposed FY	2026	**Score**	73
Pre-DES		**NBI #**	93004391

Bridge Project Details

Route	SR 39	**CL Measure From**		**Updated By**	kmunro@indot.in.gov
State Log Date	12/19/2019	**CL Measure To**			

Bridge Attributes

District	4	**Sub**	
County	46 - LaPorte	**Route**	SR 39
Reference Post	169	**Offset**	13
Latitude	41.404	**Longitude**	-86.736
Existing Structure	CV 039-046-169.10 P	**Structure Type**	
Route Over	SR 39	**Route Under**	
Year Built	0000	**Inspection Date**	9/30/2019
Year Reconstruct		**Load Rating**	Tons
Structure Length	88.00 Ft	**Deck Wear Surface**	6 - Satisfactory Condition
Deck Width		**Condition Of Deck**	
Area	Sq Ft	**Condition Of Super Structure**	N
Lanes Over		**Condition Of Sub Structure**	N - Not Applicable
Lanes Under		**Scour Critical Evaluation Rating**	7
Max Length Span	12 Ft	**Number Of Main Spans**	
Historical Significance			
Functional Class	3 - Principal Arterial - Other		

Past and Committed Projects Completed on this NBI

Des	Status	Contract	Letting	CN $	Work Type	ADT	ADT Year
2100806	A	43904	07/09/2025	$870,006.00	Small Structure Pipe Lining	2750	2019

Project Proximity Search using 0.00 mile radius

FY	Awarded	To Let	Call	Prop.	Prov.	CN $

Purpose/Need of Project

Full Scope Needed? No **Historic Bridge Alt Analysis needed?** No

Purpose The existing steel arch structure has heavily corroded areas with some areas of completes section loss.

The purpose of this project is to improve the condition of the small structure to good (rating 7 or higher) condition.

Own It:Alternatives

Preliminary Alternatives That Are Contemplated (Analyzed) With Costs
Good candidate for lining - replacement not warranted. Hydraulic analysis recommends a steel pipe liner.

Consequences If No Action Is Taken Do Nothing Alternative Is Selected)
The pipe will continue to deteriorate and will require emergency closure and replacement.

Secondary Considerations or Goals With Costs
None

Will Further Analysis/Assessment Be Required Beyond This Form? No

Solve It: Project Recommendations And Costs

Potential Design Exceptions and Open Road Ideas check to see if guardrail is needed

Estimated Total Project Costs

Phase	Amount	Comments
Right of Way Purchase	$ 50,000	
Right of Way Services	$ 20,000	
Preliminary Engineering 1	$ 42,000	
Railroad PE 1	$ 10,000	
Utilities PE	$ 10,000	
Utilities CN		no relocations anticipated
Construction Total $768,000		
Construction	$ 748,000	
RR Construction	$ 0	
Maintenance of Traffic	$ 20,000	
Environmental Mitigation	$ 0	
ADA	$ 0	
Sidewalks/ Multi Use Paths		
Construction Engineering	$ 20,000	
Other Considerations		
Total	$920,000	

Maintenance of Traffic

Can the road be closed to traffic?	Yes	Interstate Congestion Policy Waiver Required?	No
Traffic Management Plan Required?	Yes		
Anticipated MOT Scheme Value	Detour		

Culvert under CR approach to SR 39. Work containted outside of SR 39. Closure of CR 1400S with a detour to be coordinated with LaPorte County. This is not a traffic significant project.

Other Considerations

Anticipated Number of Construction Seasons To Complete	1
Anticipated Number of Years To Complete Design	2
Environmental Document Type	PCE
Environmental Factors	

Additional Anticipated Complications

Tree Clearing	Yes
Fish	Yes
Bats	No
Historical	No
Potential Hazardous Coatings	No

Additional Comments

Supporting Documents

Document Type	Document Name	Date
Photos	CV 039-046-169.10 P Photos.pdf	1/31/2020 11:07:24
InspectionReports	CV 039-046-169.10 P - Inspection Report.pdf	1/31/2020 11:07:40
CostEstimates	CV 039-046-196.10 - Cost Estimate Steel Liner.pdf	12/16/2020 2:54:2
HydraulicReports	HydroMemo CV 039-046-169.10 P 02-17-2020.pdf	2/17/2020 10:59:27
SupportingDocuments	Culvert Scoring Sheet (11-10-20).pdf	12/16/2020 2:54:3
MiniScopeProjectReport	93004391_Post Deliberation Project Scoping Report.pdf	4/5/2021 9:24:33P

Bridge Scoping Application Report
NBI: 93004391 for 12/19/2019

Report Prepared By and Approved By

Title	Signature	
Submitted By Asset Engineer	Vergon, Christopher	1/12/2021
Concur By Scoping Engineer	South, Paul	1/13/2021
Approved By SAM	Benczik, Steve	1/15/2021

Submittal Type	Major	Submittal Year	2026

Images

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642-BR
Indianapolis, Indiana 46204

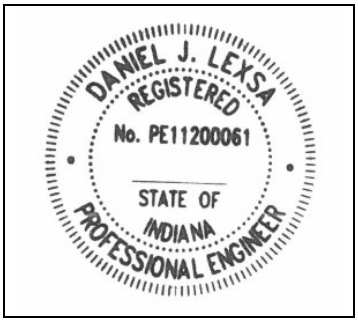
PHONE: (317) 233-2096
FAX: (317) 233-4929

Eric Holcomb, Governor
Joe McGuinness,
Commissioner

2/17/2020

TO: Steve Vanes
Small Structures Asset Engineer

FROM: Dan Lexsa, PE
Consultant Engineer
dlexsa@hntb.com
HNTB



THROUGH: Alex Schwinghamer
INDOT Engineer

SUBJECT: Hydraulic Review
Des. #: 1600401
Structure #: CV 039-046-169.10 P
County: LaPorte County
Location: Along SR 39 under County Road 1400 S
Crossing: Marquadt Ditch
DNR CIF Permit Required (Y/N): No
Legal Drain (Y/N): No

Site Parameters		
Drainage Area	3.54	sq. mi.
Q_{100} Discharge	1429.5	cfs
Q_{25} Discharge for velocity	904.0	cfs
Q_{100} Tailwater Depth	9.42	ft.
Edge of Travel Lane (SR 39)	684.64	ft.
Design Roadway Serviceability Elevation	684.64	ft.

Culvert Properties						
Parameter	**Existing**		**Proposal 1**		**Proposal 2**	
Structure Size & Type	12-ft span by 7.6-ft rise CMPA		11.21-ft interior span by 7.17-ft interior rise smooth Steel Liner		9.39-ft interior span by 6.61-ft interior rise HDPE Liner with a beveled headwall and 2.5-ft Bored Pipe	
Q_{100} Headwater Elevation	682.23	ft.	682.23	ft.	682.23	ft.
Q_{25} Headwater Elevation	681.82	ft.	681.82	ft.	681.82	ft.
Meets Roadway Serviceability @ Q_{25}	Yes		Yes		Yes	
Backwater	0	ft.	0	ft.	0	ft.
Minimal Low Structure Elevation (DS)	680.36	ft.	N/A	ft.	N/A	ft.
Assumed Flowline Elevation (DS)	672.78	ft.	N/A	ft.	N/A	ft.
Sump Depth	0	in.	N/A	in.	N/A	in.

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Eric Holcomb, Governor
Joe McGuinness, Commissioner

* - Revised to 682.12 to reflect survey for project

Culvert Properties								
Parameter	**Existing**		**Proposal 3**		**Proposal 4**		**Proposal 5**	
Structure Size & Type	12-ft span by 7.6-ft rise CMPA *		15-ft span by 9-foot rise Reinforced Concrete Box		15-ft span Three-sided Flat-top		16-ft span Reinforced Concrete Arch	
Q_{100} Headwater Elevation	682.23	ft.	682.23	ft.	682.23	ft.	682.23	ft.
Q_{25} Headwater Elevation	681.82	ft.	681.61	ft.	681.62	ft.	681.60	ft.
Meets Roadway Serviceability @ Q_{25}	Yes		Yes		Yes		Yes	
Backwater	0	ft.	0	ft.	0	ft.	0	ft.
Minimal Low Structure Elevation (DS)	680.36	ft.	680.78	ft.	680.78	ft.	680.78	ft.
Assumed Flowline Elevation (DS)	672.78	ft.	672.78	ft.	672.78	ft.	672.78	ft.
Sump Depth	0	in.	12	in.	0	in.	0	in.

The existing culvert is a 12-ft span by 7.6-foot rise corrugated metal pipe arch. Improvement and replacement alternatives are proposed due to poor existing pipe condition. Due to existing nearby structures, proposed replacements must not have a span less than 15 feet. Because of the deterioration in the existing pipe invert, paved invert options are not viable. Because the existing structure is too large to be lined with CIPP, a steel liner alternative is proposed.

Headwalls are not required for hydraulic efficiency for proposals 1, 3, 4, and 5, but may be added if required for alternate reasons (i.e. grading, right of way, etc). A beveled-edge headwall is required for hydraulic efficiency for proposal 2, as detailed below.

The design roadway serviceability elevation is based on the low edge of travel lane on SR 39. Elevations provided were collected as field survey on rod and level and related to LiDAR data, which is sufficient for this analysis, but should not be used for other purposes.

Riprap Design Recommendations

Riprap Properties										
Parameter	**Proposal 1**		**Proposal 2**		**Proposal 3**		**Proposal 4**		**Proposal 5**	
Outlet Velocity @ Q_{25}	7.01	ft/s	8.22	ft/s	6.61	ft/s	6.61	ft/s	6.55	ft/s
Outlet Riprap Size	Class 1		Class 1		Class 1		Class 1		Class 1	
Inlet Riprap Needed (Y/N)	Yes		Yes		Yes		Yes		Yes	
Natural Channel Velocity @ Q_{25}	3.09									ft/s
Minimal Inlet Riprap Size if Warranted	Revement									

Class 1 riprap on geotextiles should be used at the outlet and placed according to IDM Figure 203-2J for Proposals 1 and 2.

Class 1 or larger riprap should be placed as needed at dimensions specified by the designing engineer for Proposal 3, per INDOT Standard Drawing E 714-BCSP-01.

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Class 1 or larger riprap should be placed as needed at dimensions specified by the designing engineer for Proposals 4 and 5, per INDOT Standard Drawing E 723-CCSP.

Revetment or larger riprap should be placed at the inlet for all proposals to match the existing revetment riprap in order to maintain existing upstream conditions.

Alternative scour protection designs should be submitted to the INDOT Office of Hydraulics for review and approval.

Beveled Edge Headwall Detail

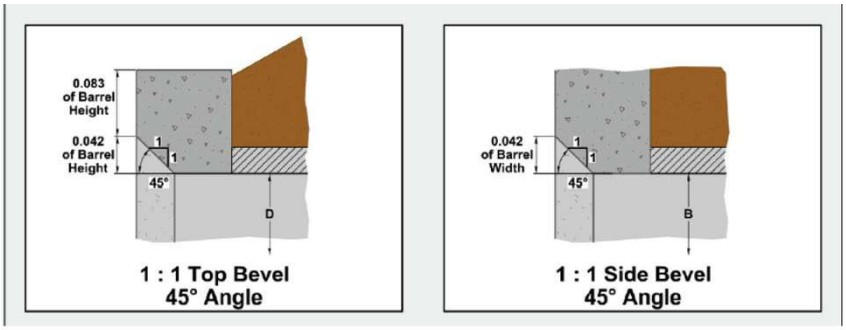

Figure 3.3. Beveled edges.

Source: J. D. Schall, *Hydraulic design of highway culverts*, 3rd ed. Washington, D.C.: U.S. Dept. of Transportation, Federal Highway Administration, 2012. Pg. 3.5, Fig. 3.3

If you have any questions or comments, please contact Alex Schwinghamer at (317) 233-6951.

cc: file