

FHWA-Indiana Environmental Document  
CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM  
GENERAL PROJECT INFORMATION

<b>Road No./County:</b>	County Road (CR) 1050 South/Wabash County
<b>Designation Number(s):</b>	2003065
<b>Project Description/Termini:</b>	Replacement of Wabash Co. Bridge No. 143 carrying CR 1050 South over Grant Creek (National Bridge Inventory (NBI) No. 8500465)/Approximately 375 feet west and 625 feet east of Wabash Co. Bridge No. 143

<b>X</b>	<b>Categorical Exclusion, Level 2</b> – Required Signatories: INDOT DE and/or INDOT ESD
	<b>Categorical Exclusion, Level 3</b> – Required Signatories: INDOT ESD
	<b>Categorical Exclusion, Level 4</b> – Required Signatories: INDOT ESD and FHWA
	<b>Environmental Assessment (EA)</b> – Required Signatories: INDOT ESD and FHWA
	<b>Additional Investigation (AI)</b> – 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**

N/A

\_\_\_\_\_  
INDOT DE Initials and Date

ADWP

February 8, 2024

\_\_\_\_\_  
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:**

\_\_\_\_\_  
Elizabet Biggio, Butler, Fairman, & Seufert, Inc.

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*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*?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If No, then: Opportunity for a Public Hearing Required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*\*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 Entry letters were mailed to potentially affected property owners near the project area on April 13, 2022, 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 Entry letter is included in Appendix G, 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.



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

Sponsor of the Project: Wabash County INDOT District: Fort WayneLocal Name of the Facility: Wabash Co. Bridge No. 143Funding Source (mark all that apply): Federal ☒ State ☐ 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 the project is evidenced by the deteriorated condition of Wabash Co. Bridge No. 143 and the limited vehicular crossings of Grant Creek in the vicinity. Wabash Co. Bridge No. 143 provides the only access to properties on the 1.92-mile section of CR 1050 South west of Grant Creek.

The existing bridge is below the base flood elevation of the Mississinewa Reservoir, located approximately 3 miles downstream, resulting in overtopping of the bridge. In 2015 flooding along Grant Creek caused by the operation of the Mississinewa Reservoir led to a failure of Wabash County Bridge No. 144, the former western bridge access to the area, which also crossed Grant Creek approximately 2.5 miles downstream of Wabash Co. Bridge No. 143. Wabash County Bridge No. 144 has not been repaired.

The National Bridge Inventory (NBI) rating system uses a rating scale of 0 to 9. Bridge inspectors give a rating to each major bridge element. A general description of these condition ratings\* is shown below:

Rating Code	Condition Description	Description
N	Not Applicable	Component does not exist.
9	Excellent	Isolated inherent defects.
8	Very Good	Some inherent defects.
7	Good	Some minor defects.
6	Satisfactory	Widespread minor or isolated moderate defects.
5	Fair	Some moderate defects; strength and performance of the component are not affected.
4	Poor	Widespread moderate or isolated major defects; strength and/or performance of the component is affected.
3	Serious	Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions.
2	Critical	Major defects: component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open.
1	Imminent Failure	The bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	Failed	The bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.

*\*From the Federal Highway Administration, Bridge Inspector's Reference Manual, March 2022, page 240*

The substructure of Wabash Co. Bridge No. 143 was given a condition rating of 4 (out of 9), or "poor", in the May 17, 2022, Bridge Inspection Report, and is experiencing advanced deterioration. The deck, wearing surface, and superstructure were given ratings of 5 (out of 9), or "fair". The bank has heavy erosion (Appendix I, I8-I13). The bridge is experiencing transverse and longitudinal cracking on the wearing surface, beams, and piers.

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### Purpose:

The purpose of the project is to address the condition of Wabash Co. Bridge No. 143 and to provide an improved crossing of Grant Creek with an overall condition of "good", or at least a 7 (out of 9) which will not be overtopped by operations of the Mississinewa Reservoir. Furthermore, the purpose is to provide an improved crossing that will perpetuate emergency access to the 1.92-mile section of CR 1050 South.

### PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Wabash

Municipality: Wabash Co.

Limits of Proposed Work: Approximately 375 feet west and 625 feet east of the center point of Wabash Co. Bridge No. 143

Total Work Length: 0.19 Mile(s)

Total Work Area: 2.50 Acre(s)

Is an Interstate Access Document (IAD)<sup>1</sup> required?

If yes, when did the FHWA provide a Determination of Engineering and Operational Acceptability?

<sup>1</sup>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.

Yes<sup>1</sup>

No

Date:

X

*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.*

The Wabash County Board of Commissioners and the Federal Highway Administration (FHWA) intend to proceed with the replacement of Wabash Co. Bridge No. 143 (Des 2003065).

### Location:

Wabash Co. Bridge No. 143 carries CR 1050 South over Grant Creek. It is located in Section 28, Township 26 North, Range 7 East in Liberty Township on the USGS La Fontaine Quadrangle. The project is approximately 0.14 mile west of CR 250 East and 1.2 miles west of the Town of La Fontaine.

### Existing Conditions:

Wabash Co. Bridge No. 143 is a three-span precast concrete channel beam bridge constructed around 1960. The bridge is approximately 67.5 feet long with a clear roadway width of 24.6 feet. It carries two 11.5-foot lanes of traffic with 1-foot shoulders and is on a 30-degree left skew. The deck is paved in asphalt, approximately 2 inches thick. The bridge has a steel w-beam railing and 40 to 60 feet of approach guardrail in each quadrant.

CR 1050 South is a two lane east-west Rural Local Road with a clear roadway width of approximately 20 feet. Land use in the area is forested, residential, and agricultural. Wabash Co. Bridge No. 143 provides the only access to properties on the 1.92-mile section of CR 1050 South west of Grant Creek. The former western bridge access to the area, on CR 50 East over Grant Creek approximately 2.5 miles downriver of Wabash Co. Bridge No. 143, washed out in 2015 and has not been repaired.

Wabash Co. Bridge No. 143 is experiencing transverse and longitudinal cracking on the wearing surface, beams, and piers. The deck has been patched numerous times. There is also spalling and exposed reinforcement on the underside of the deck. Seepage between the beams has led to efflorescence. Both end bents have been underpinned with concrete and sheet piles. There are large spalls on Columns 3 and 4 at Pier 2. There is minor erosion and silt buildup in the east span, as well as scour. The bank has experienced minor damage from heavy erosion.

Bridge No. 143 and the CR South North approaches are currently lower than the base flood elevation, which allows overtopping during flood events. The Wabash Co. Bridge No. 143 elevation is approximately 777.5 feet, while the spillway of the Mississinewa Dam is 779 feet. There is an existing driveway culvert south of CR 1050 South approximately 385 feet west of the bridge.

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### Preferred Alternative:

The preferred alternative is the replacement of Wabash Co. Bridge No. 143 on the same horizontal alignment. The new bridge will be a single span, concrete structure, 92.33 feet long. The out-to-out coping width will be 44.25 feet in order to accommodate phased construction (see below). The bridge will carry two 12-foot lanes of traffic with 8.63-foot shoulders (Appendix B, B23-B25). The bridge and approach roadway will be elevated to a maximum of 7.25 feet compared to the existing facilities to raise them above the base floodplain elevation.

Approximately 100 linear feet of riprap will be installed along each spill slope to a depth of 1.5 feet. Temporary wire walls will be installed in all quadrants, extending approximately 100 feet west of the bridge and 185 feet east of the bridge, to allow for maintenance of traffic for phased construction (Appendix B, B21-B22). Temporary wire walls consist of welded wire grid or metallic strip reinforcement connected to welded wire facing and may include soil reinforcement mats and/or filter fabric.

Approximately 105 feet of approach guardrail will be placed in each quadrant along CR 1050 South. CR 1050 South will retain its straight east-west horizontal alignment and the lanes widths will not change. A 2-foot-wide aggregate shoulder will be added to both sides of the approaches within the project area.

The total project length will be 0.19 mile. Approximately 1.88 acres of permanent and 0.59 acre of temporary right-of-way (ROW) acquisition will be required. The maximum depth of excavation for the installation of the new bridge, channel clearing, and benching will be approximately 6 feet. Impacts on other resources are discussed in the following sections. Maintenance of traffic (MOT) will require phased construction since Wabash Co. Bridge No. 143 provides the only access to the area west of Grant Creek. The bridge will be constructed one side at a time using an approximately 24-foot-wide causeway and temporary road widening (Appendix B, B12-B16; see MOT section below). Construction is anticipated to begin in the Fall of 2025.

The preferred alternative will meet the project purpose and need by providing Wabash County with a bridge crossing that can maintain access regardless of operations at the Mississinewa Reservoir. The new bridge crossing will have condition ratings greater than 7 (out of 9).

### Logical Termini/Independent Utility:

The logical termini are approximately 375 feet west and 625 feet east of the center point of Wabash Co. Bridge No. 143, which compose the approaches to the bridge and are consistent with a bridge replacement project, including the bridge itself with minimal roadway approach work to create a smooth transition between the new bridge and the existing roadway approaches. The project will have independent utility because it will fulfill the purpose of the project to provide an improved crossing of Grant Creek without relying on additional projects.

### 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

The No Build Alternative proposes no construction, leaving all elements of Wabash Co. Bridge No. 143 in their current state. No federal funds would be expended. This alternative would result in no environmental impacts. However, this alternative does not meet the project's stated purpose and need. This alternative would allow the condition of the bridge to continue to deteriorate. If no action is taken, weight restrictions and ultimately bridge closure will be necessary within approximately 10-15 years due to the poor condition of the substructure and repeated overloading and undermining of the foundation caused by scour. As a result, no stream crossing would be provided, and access to properties west of Grant Creek would be cut off. Therefore, the No Build Alternative was not considered prudent and was dismissed from further consideration.

#### Rehabilitation

The Rehabilitation Alternative proposes to repair the bridge by patching spalls in the pier columns and installing a crash tested bridge railing and approach railing. Debris would be removed from the channel. The deck would be milled and overlaid. This alternative would not raise the bridge higher than the base flood elevation. Therefore, the Rehabilitation Alternative would not meet the purpose and need of the project and was dismissed from further consideration.

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**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

It would result in serious impacts to the motoring public and general welfare of the economy.

Other (Describe): Would not meet Purpose & Need

X
X

## ROADWAY CHARACTER:

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

Name of Roadway County Road 1050 South  
 Functional Classification: Local Rural  
 Current ADT: 220 VPD (2022) Design Year ADT: 220 VPD (2045)  
 Design Hour Volume (DHV): 20 VPH Truck Percentage (%) 5  
 Designed Speed (mph): 55 Legal Speed (mph): 55 (not posted)

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	Through		Through	
Pavement Width:	20	ft.	20	ft.
Shoulder Width:	0	ft.	2	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

Setting: ☐ Urban ☐ Suburban ☒ Rural  
 Topography: ☒ 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): 85-00143 / 8500465 Sufficiency Rating: 63.9 (2022 Bridge Inspection Report)  
 (Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	Concrete Channel Beam		Prestressed Concrete Bulb Tee	
Number of Spans:	3		1	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	24.6	ft.	41.25	ft.
Outside to Outside Width:	26.6	ft.	44.25	ft.
Shoulder Width:	1.0	ft.	8.63	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.

Wabash Co. Bridge No. 143 is a c. 1960 three-span concrete channel beam bridge. The bridge was determined not eligible for the National Register of Historic Places in the Indiana Historic Bridge Inventory. The bridge is 67.5 feet long with a clear roadway width

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of 24.6 feet. It carries two 11.5-foot lanes of traffic with 1-foot shoulders and is on a 30-degree left skew. Wabash Co. Bridge No. 143 will be replaced on the same horizontal alignment and a raised vertical alignment. The new bridge will be a single-span, 92.33 feet long. The out-to-out coping will be 44.25 feet in order to accommodate phased construction. The bridge will carry two 12-foot lanes of traffic with 8.63-foot shoulders. Approximately 100 linear feet of riprap will be installed along each spill slope to a depth of 1.5 feet.

There is a driveway culvert south of CR 1050 South approximately 385 feet west of the bridge. No work on this culvert will take place.

No other bridges or small structures are present within the project area.

### MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

Is a temporary bridge proposed?  
Is a temporary roadway proposed?  
Will the project involve the use of a detour or require a ramp closure? (describe below)  
Provisions will be made for access by local traffic and so posted.  
Provisions will be made for through-traffic dependent businesses.  
Provisions will be made to accommodate any local special events or festivals.  
Will the proposed MOT substantially change the environmental consequences of the action?  
Is there substantial controversy associated with the proposed method for MOT?  
Will the project require a sidewalk, curb ramp, and/or bicycle lane closure? (describe below)  
Provisions will be made for access by pedestrians and/or bicyclist and so posted (describe below).

Yes	No
	X
X	
	X
	X
	X
	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 for the project will require three phases of construction. CR 1050 dead-ends approximately 1.92 miles west of the project area, and Wabash Co. Bridge No. 143 provides the only access to the properties west of Grant Creek. Therefore, the bridge will be constructed one side at a time, using a causeway for construction access and temporary road widening in order to maintain access to properties along CR 1050 on the west side of Grant Creek.

Phase 1 will maintain one lane of two-way traffic on the existing roadway and bridge while approximately 950 feet of up to 12-foot-wide temporary hot mix asphalt (HMA) pavement and a temporary causeway is installed on the north side of CR 1050 South. Phase 2 will maintain one lane of two-way traffic on the temporary HMA pavement and existing bridge while the south side of the new bridge and approach roadway is constructed. Phase 3 will maintain one lane of two-way traffic on the new roadway and bridge while the north side of the new bridge and approach roadway is constructed (Appendix B, B12-B16). Fixed temporary signals located at each end of the project will be used to allow for two-way traffic through a single lane in the work zone. A temporary wire wall will be constructed as part of Phase 2 to allow for the roadway elevation to be raised. Access to all properties will be maintained at all times.

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: \$ 165,000 (FY 2022) Right-of-Way: \$ 100,000 (FY 2024) Construction: \$ 1,894,000 (FY 2026)

Anticipated Start Date of Construction: Fall 2025

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### RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	0.00	0.00
Commercial	0.00	0.00
Agricultural	0.87	0.30
Forest	1.01	0.29
Wetlands	0.00	0.00
Other:		
Other:		
TOTAL	1.88	0.59

*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 on CR 1050 South is approximately 20 feet wide, 10 feet either side of the centerline. The proposed typical ROW is approximately 70 feet, 35 feet either side of the centerline. The proposed maximum ROW is approximately 160 feet, 90 feet north and 70 feet south of the centerline.

The project will require approximately 1.88 acres of permanent ROW acquisition along CR 1050 South, including approximately 0.87 acre of forested land and 1.01 acres of agricultural property. Approximately 0.56 acre of ROW will be from the northeast quadrant, 0.36 acre from the northwest quadrant, 0.37 acre from the southwest quadrant, and 0.59 acre from the southeast quadrant. The project also requires approximately 0.59 acre of temporary ROW, consisting of approximately 0.30 acre of forested land and 0.29 acre of agricultural property. ROW is needed to facilitate the widened bridge and for construction access.

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.

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

#### **SECTION 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 April 10, 2023 (Appendix C, C1-C2)

<u>Agency</u>	<u>Date Sent</u>	<u>Date Response Received</u>	<u>Appendix</u>
Federal Highway Administration	April 10, 2023	No Response	N/A
INDOT-Fort Wayne District	April 10, 2023	No Response	N/A
Indiana Department of Natural Resources (IDNR)	April 10, 2023	May 10, 2023	C7-C9
IDNR Oil & Gas Division	April 10, 2023	No Response	N/A
U.S. Department of Housing and Urban Development	April 10, 2023	No Response	N/A
U.S. Fish and Wildlife Service (USFWS)	April 10, 2023	April 24, 2023	C6
Indiana Geological and Water Survey	April 10, 2023	April 10, 2023	C3-C5
Indiana Department of Environmental Management (IDEM)	April 10, 2023	No Response	N/A
National Park Service	April 10, 2023	No Response	N/A
USDA-Natural Resources Conservation Service	April 10, 2023	May 31, 2023	C10-C11
U.S. Army Corps of Engineers-Louisville District	April 10, 2023	No Response	N/A
Wabash County Surveyor	April 10, 2023	No Response	N/A
Wabash County Council	April 10, 2023	No Response	N/A
Wabash County Emergency Management Agency	April 10, 2023	No Response	N/A
Wabash County Floodplain Administrator	April 10, 2023	No Response	N/A

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

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## SECTION B – ECOLOGICAL RESOURCES:

### Streams, Rivers, Watercourses & Other Jurisdictional Features

Federal Wild and Scenic Rivers  
State Natural, Scenic or Recreational Rivers  
Nationwide Rivers Inventory (NRI) listed  
Outstanding Rivers List for Indiana  
Navigable Waterways

#### Presence

X

#### Impacts

Yes	No
X	

Total stream(s) in project area: 420 Linear feet      Total impacted stream(s): 400 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)
Grant Creek	Perennial	170	150	Flows northwest; see Waters of the U.S. Determination in Appendix F.
UNT to Grant Creek	Ephemeral (not mapped)	250	250	Flows east; see Waters of the U.S. Determination in Appendix F.

*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, and the red flag investigation (RFI) report (Appendix E, E1-E8), there are 11 streams, rivers, watercourse, or other jurisdictional features within the 0.5-mile search radius. There are two streams within the project area. That number was confirmed by a site visit on April 19, 2023 by Butler, Fairman, & Seufert, Inc. (BF&S).

There are no Federal, Wild and Scenic Rivers; State Natural, Scenic, and Recreational Rivers; Outstanding Rivers for Indiana; navigable waterways or National Rivers Inventory waterways present in the project area. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was completed for the project on May 1, 2023. Please refer to Appendix F for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that there are two likely Waters of the U.S. within the project area. The U.S. Army Corps of Engineers (USACE) makes all final determinations regarding jurisdiction.

Grant Creek is a perennial stream that flows northwest across the project area. It is of poor quality due to a lack of an intact riparian corridor, moderate sinuosity, and extreme bank erosion. Additionally, the stream channel is entrenched. Grant Creek has an ordinary high-water mark (OHWM) width of approximately 18 feet and an OHWM depth of 1.5 feet. Approximately 100 feet of Grant Creek will be permanently impacted by the installation of riprap along the length of the proposed riprap toe. Approximately 50 linear feet (LFT) of temporary impacts are anticipated due to the causeway and dewatering. All areas impacted from temporary measures will be returned to their original condition before construction is complete.

An Unnamed Tributary (UNT) to Grant Creek is an unmapped stream beginning approximately 700 feet southwest of Wabash Co. Bridge No. 143 and flowing northeast to CR 1050 South and then east to discharge into Grant Creek. It is of poor quality due to heavy entrenchment. UNT to Grant Creek has an OHWM width of approximately 2.5 feet and an OHWM depth of 5 inches. Due to the low flowline, UNT to Grant Creek will be raised to prevent ponding and maintain drainage between the drive culvert located approximately 385 feet west of Grant Creek and Grant Creek. Approximately 250 linear feet of permanent impacts are anticipated (Appendix B, B17). No temporary impacts are expected.

Total permanent stream impacts include 150 linear feet to Grant Creek and 250 linear feet to UNT to Grant Creek. No temporary impacts are anticipated. These impacts will require permits from the USACE and IDEM. As a result, mitigation will likely be required, but will be determined during the permitting process.



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The Indiana Department of Natural Resources-Division of Fish and Wildlife (IDNR-DFW) responded to early coordination on May 10, 2023, and made recommendations to facilitate wildlife crossings, bank stabilization, and minimizing impacts to riparian habitat (Appendix C, C7-C9).

The U.S. Fish and Wildlife Service (USFWS) responded on April 24, 2023, indicating no comments would be provided because the proposed project will have minor impacts on natural resources (Appendix C, C6). This project will not meet the *U.S. Fish and Wildlife Service Interim Policy for the Review of Highway Transportation Projects in Indiana* dated May 29, 2013 because it will impact more than 0.5 acre of forested ROW.

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

Open Water Feature(s)	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retention/Detention Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm Water Management Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*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, and the RFI report (Appendix E, E1-E8), there are three open water features within the 0.5-mile search radius. There are no open water features within the project area. That number was confirmed by a site visit on April 19, 2023 by BF&S. Therefore, no impacts are expected.

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## Presence

## Impacts

Yes

No

### Wetlands

☐
☐
☐

Total wetland area: N/A Acre(s) Total wetland area impacted: N/A 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				

## Documentation

## ESD Approval Dates

### Wetlands (Mark all that apply)

Wetland Determination  
Wetland Delineation  
USACE Isolated Waters Determination

X

N/A, LPA Project

### 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, and the RFI report (Appendix E, E1-E8), there are eight wetlands within the 0.5-mile search radius. Two wetlands are located within the project area. No wetlands were identified during a site visit on April 19, 2023, by a Professional Wetland Scientist with BF&S. Therefore, no impacts are expected.

## Presence

## Impacts

Yes

NO

### Terrestrial Habitat

☒
☒
☐

Total terrestrial habitat in project area: 2.07 Acre(s) Total tree clearing: 0.90 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 measures to avoid, minimize, and mitigate if impacts will occur.*

Based on a desktop review, a site visit on April 19, 2023 by BF&S, and the aerial map of the project area (Appendix B, B3), there are two types of terrestrial habitats in the project area: grassland/agricultural land and forest.

The land use in the area is primarily agricultural and forested, with some residential properties. Approximately 0.41 acre of non-forested, terrestrial, agricultural land will be impacted by the bridge replacement and MOT. Temporary wire walls will be used to limit erosion during construction, preventing indirect impacts to the surrounding farm ground outside of the construction limits (Appendix B, B21-B22).

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A total of 0.90 acre of trees will be removed from within 100 feet of the roadway for construction and causeway access. As a result, mitigation will likely be required, but will be determined during the permitting process. The dominant tree species are sugar maple (*Acer saccharum*), northern hackberry (*Celtis occidentalis*), and black walnut (*Juglans nigra*). Avoidance of impacts is not practical because all four quadrants of the bridge contain tree cover. Tree clearing will be minimized by constructing the causeway on the north side of the bridge, where less clearing will be required. Mitigation is not anticipated.

The IDNR-DFW responded to early coordination on May 10, 2023, with standard recommendations to avoid, minimize, and mitigate impacts to terrestrial habitats (Appendix C, C7-C9).

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

### Protected Species

#### Federally Listed Bats

Information for Planning and Consultation (IPaC) determination key completed  
Section 7 informal consultation completed (IPaC cannot be completed)  
Section 7 formal consultation Biological Assessment (BA) required

Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Determination Received for Listed Bats from USFWS: NE ☐ NLAA ☒ LAA ☐

#### Other Species not included in IPaC

Additional federal species found in project area (based on IPaC species list)  
State species (not bird) found in project area (based upon consultation with IDNR)

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### Migratory Birds

Known usage or presence of birds (i.e. nests)  
State bird species based upon coordination with IDNR

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

*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 E, E1-E8) completed by BF&S on December 30, 2022 the IDNR Wabash County Endangered, Threatened, and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated May 10, 2023 (Appendix C, C7), the Natural Heritage Program's Database has been checked and no species have been documented within 0.5 mile of the project area. An INDOT 0.5-mile bat review occurred on May 24, 2022, and did not indicate the presence of endangered bat species.

#### 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 C, C12-C19). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*) and northern long-eared bat (NLEB) (*Myotis septentrionalis*). Two other species, the monarch butterfly (*Danaus plexippus*), which is listed as a candidate species, and the Tricolored bat (TCB) (*Perimyotis subflavus*), which is listed as proposed endangered, were generated in the IPaC species list along with the Indiana bat and NLEB.

The project qualifies for the Range-wide Programmatic Informal Consultation for the Indiana bat and NLEB, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. A bridge inspection was conducted on April 19, 2023, and no evidence of bats was observed (Appendix C, C33).

An effect determination key was completed on April 27, 2023, and based on the responses provided, the project was found "Not Likely to Adversely Affect (NLAA)" the Indiana bat and the NLEB (Appendix C, C20-C32). INDOT reviewed and verified the effect finding on June 16, 2023, 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) to inform workers, limit tree removal, and minimize effects from temporary lighting are included as firm commitments in the Environmental Commitments section of this document.

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Wabash County Bridge 143 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 "Potential Migratory Bird on Structure" USP/RSP.

The official species list generated from IPaC indicated two other species present within the project area, the monarch butterfly and the TCB. The bridge replacement project is not anticipated to significantly impact the monarch butterfly or its habitat. The USFWS recommends that the effects of projects on TCBs and their habitat be analyzed pending the final determination of status for the TCB, as regulations would take effect within 30 days of publication of the final rule. Further, since guidance specific to the TCB has not yet been developed, the USFWS Indiana Field Office recommends that any project that does not result in adverse impacts to Indiana bat and/or NLEB would not rise to the level of jeopardy for TCB. This project was found NLAA the Indiana bat and the NLEB. Therefore, jeopardy to the TCB is not anticipated.

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. This project will not meet the *U.S. Fish and Wildlife Service Interim Policy for the Review of Highway Transportation Projects in Indiana* dated May 29, 2013, because it will impact more than 0.5 acre of forested ROW.

### Geological and Mineral Resources

- Project located within the Indiana Karst Region
- Karst features identified within or adjacent to the project area
- Oil/gas or exploration/abandoned wells identified in the project area

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

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 topo map of the project area (Appendix B, B2) and the RFI report (Appendix E, E1-E8), there are no karst features identified within or adjacent to the project area. In the early coordination response dated April 10, 2023, the Indiana Geological and Water Survey (IGWS) did not indicate that karst features exist in the project area (Appendix C, C3-C5). IGWS identified a high potential for bedrock as well as sand and gravel resources and a moderate liquefaction potential. Petroleum exploration wells are located in the area. The nearest petroleum well is located approximately 0.04 mile south of the project area. The IDNR Oil & Gas Division did not respond to early coordination. No impacts to petroleum wells are anticipated because they are outside the project area and will be avoided by all project activities. The response from the IGWS has been communicated to the project designer on April 24, 2023. No impacts are expected.

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## SECTION C – OTHER RESOURCES

### Drinking Water Resources

Wellhead Protection Area(s)  
Source Water Protection Area(s)  
Water Well(s)  
Urbanized Area Boundary  
Public Water System(s)

#### Presence

X

#### Impacts

Yes	No
	X

Is the project located in the St. Joseph Sole Source Aquifer (SSA):

If Yes, is the FHWA/EPA SSA MOU Applicable?

If Yes, is a Groundwater Assessment Required?

Yes	No
	X

*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.*

The project is located in Wabash 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/EPA 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.

The IDEM Wellhead Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead/>) was accessed on March 15, 2023 by BF&S. This project is not located within a Wellhead Protection Area and is not located with a Source Water Area. No impacts are expected.

The Indiana Department of Natural Resources Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on March 15, 2023 by BF&S. Two wells are located near the project area; however, they are located outside the project construction limits. Therefore, no impacts are expected. Should it be determined during the right-of-way phase that these wells will be affected, a cost to cure will likely be included in the appraisal to restore the wells.

Based on a desktop review by BF&S on June 9, 2022 and the RFI report (Appendix E, E1-E8), this project is not located in an Urban Area Boundary. No impacts are expected.

Based on a desktop review, a site visit on April 19, 2023 by BF&S, the aerial map of the project area (Appendix B, B3), and early coordination, no public water systems were identified. Therefore, no impacts are expected.

### Floodplains

Project located within a regulated floodplain  
Longitudinal encroachment  
Transverse encroachment  
Homes located in floodplain within 1000' up/downstream from project

#### Presence

X
X

#### Impacts

Yes	No
	X
	X

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 desktop review of The IDNR Floodway Information Portal website (<https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e>) by BF&S on May 11,

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2023, and the RFI report, this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, F14). An early coordination letter was sent on April 10, 2023, to the local Floodplain Administrator. The floodplain administrator did not respond within the 30-day time frame.

This project qualifies as a Category 4 per the current INDOT CE Manual. Category 4 projects involve the replacement of drainage structures on essentially the same alignment. No homes are located within the base floodplain within 1,000 feet upstream or 1,000 feet downstream of the bridge. The proposed structure will have an effective capacity such that backwater surface elevations are not expected to substantially increase. As a result, there will be no substantial adverse impacts on natural and beneficial floodplain values; there will be no substantial change in flood risks; and there will be no substantial increase in potential for interruption or termination of emergency service or emergency evacuation routes; therefore, it has been determined that this encroachment is not substantial. A hydraulic design study that addresses various structure size alternatives was completed during the preliminary design phase and included with the Stage 1 plans.

### Farmland

Agricultural Lands

Prime Farmland (per NRCS)

### Presence

<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>

### Impacts

Yes

No

<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

141

*\*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 the desktop review, the aerial map of the project area (Appendix B, B3), and the site visit April 19, 2023 by BF&S, there is farmland as defined by the Farmland Protection Policy Act adjacent to the project. An early coordination letter was sent on April 10, 2023, to the Natural Resources Conservation Services (NRCS). The NRCS responded on May 31, 2023, and stated the project will cause a conversion of prime farmland (Appendix C, C10). Coordination with NRCS resulted in a score of 141 on the AD 1006 Form (Appendix C, C11). 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.

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### SECTION D – CULTURAL RESOURCES

Minor Projects PA	Category(ies) and Type(s)	INDOT Approval Date(s)	N/A
	<u>B-12</u>	<u>June 12, 2023</u>	<input type="checkbox"/>

**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)

APE, Eligibility and Effect Determination	<input type="checkbox"/>
800.11 Documentation	<input type="checkbox"/>
Historic Properties Report or Short Report	<input type="checkbox"/>
Archaeological Records Check and Assessment	<input type="checkbox"/>
Archaeological Phase Ia Survey Report	<input checked="" type="checkbox"/>
Archaeological Phase Ic Survey Report	<input type="checkbox"/>
Other:	<input type="checkbox"/>

**ESD Approval Date(s)****SHPO Approval Date(s)**

<u>June 12, 2023</u>	<u>N/A</u>

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

--

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 June 12, 2023, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B-12 under the Minor Projects Programmatic Agreement (Appendix D, D1-D6). Category B-12 covers bridge replacements where no properties eligible for the National Register of Historic Places are present within or adjacent to the project area. INDOT-CRO conducted a desktop review of above-ground resources and no properties listed in or eligible for listing in the National Register of Historic Places were identified (Appendix D, D4-D5). An Archaeological Report was completed on June 9, 2023, by Gray & Pape (Appendix D, D7-D9). No archaeological sites were located.

No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.

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

	<u>Presence</u>	<u>Use</u>	
		Yes	No
<b>Parks and Other Recreational Land</b>			
Publicly owned park	<input type="text"/>	<input type="text"/>	<input type="text"/>
Publicly owned recreation area	<input type="text"/>	<input type="text"/>	<input type="text"/>
Other (school, state/national forest, bikeway, etc.)	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Wildlife and Waterfowl Refuges</b>			
National Wildlife Refuge	<input type="text"/>	<input type="text"/>	<input type="text"/>
National Natural Landmark	<input type="text"/>	<input type="text"/>	<input type="text"/>
State Wildlife Area	<input type="text"/>	<input type="text"/>	<input type="text"/>
State Nature Preserve	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>Historic Properties</b>			
Site eligible and/or listed on the NRHP	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b><u>Evaluations Prepared</u></b>			
Programmatic Section 4(f)	<input type="text"/>		
"De minimis" Impact	<input type="text"/>		
Individual Section 4(f)	<input type="text"/>		
Any exception included in 23 CFR 774.13	<input type="text"/>		

*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 NRHP eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E, E1-E8), there is one potential 4(f) resource located within the 0.5-mile search. Mississinewa Lake is located approximately 0.30 mile northwest of the project area. Therefore, there will be no impact to 4(f) resources. According to additional research, Section 106 coordination, and a site visit on April 19, 2023, by BF&S, there are no potential 4(f) resources located within or adjacent to the project area. Therefore, no use is expected.

### Section 6(f) Involvement

### Section 6(f) Property

	<u>Presence</u>	<u>Use</u>	
		Yes	No
	<input type="text"/>	<input type="text"/>	<input type="text"/>

*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 Section 6(f) properties on the on the INDOT ESD website and the LWCF website (<https://lwcftplgis.org/mappast/>) revealed eight properties in Wabash County (Appendix I, I1). None of these properties are within or adjacent to the project area. Therefore, there will be no impact to 6(f) resources.



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### SECTION F – Air Quality

#### STIP/TIP and Conformity Status of the Project

Is the project in the most current STIP/TIP?

Is the project located in an MPO Area?

Is the project in an air quality non-attainment or maintenance area?

If Yes, then:

Is the project in the most current MPO TIP?

Is the project exempt from conformity?

If No, then:

Is the project in the Transportation Plan (TP)?

Is a hot spot analysis required (CO/PM)?

Yes

No

<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Location in STIP:

p. 264 (2024-2028 STIP)

Name of MPO (if applicable):

N/A

Location in TIP (if applicable):

N/A

Level of MSAT Analysis required?

Level 1a ☒ 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 Statewide Transportation Improvement Program (STIP) (Appendix H, H1).

The project is located in Wabash County, which is currently in attainment for all criteria pollutants according to IDEM's Current Nonattainment Areas map ([https://www.in.gov/idem/sips/files/nonattainment\\_areas\\_map.pdf](https://www.in.gov/idem/sips/files/nonattainment_areas_map.pdf)). Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

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?

☐☒

Date Noise Analysis was approved/technically sufficient by INDOT ESD: \_\_\_\_\_

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.

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### SECTION H – COMMUNITY IMPACTS

#### Regional, Community & Neighborhood Factors

Will the proposed action comply with the local/regional development patterns for the area?

Yes

☒

No

Will the proposed action result in substantial impacts to community cohesion?

☒

Will the proposed action result in substantial impacts to local tax base or property values?

☒

Will construction activities impact community events (festivals, fairs, etc.)?

☒

Does the community have an approved transition plan?

☒

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)

☒

*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 is not of regional significance and will not have a significant impact on community cohesion or property values. The Wabash County and Town of La Fontaine websites were reviewed on March 15, 2023 by BF&S and no community events were identified. The project is in a rural environment, and it is not anticipated the project will divide a community or impact any areas where the community hosts events.

It is not anticipated that the proposed project will result in substantial impacts to community cohesion, viewshed, property values, or community events. No increase in local taxes will occur as a result of this project, as all funds will come from the FHWA and established accounts (Appendix H, H1-H2). The project does not divide a community or impair any areas where the community hosts events. Access to all properties will be maintained.

Wabash County adopted an Americans with Disabilities (ADA) transition plan in 2013. There are no pedestrian facilities in the area and there are no proposed pedestrian facilities included in this project. Therefore, ADA compliance is not applicable to this project.

No response to early coordination was received from the Wabash County Council or the Wabash County Commissioners.

Based on the above investigations and coordination, no community or economic impacts are anticipated from this project.

#### 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, and the RFI report (Appendix E, E1-E8), completed by BF&S on December 30, 2022, there are no public facilities within the 0.5-mile search radius. This number was confirmed by the site visit on April 19, 2023 by BF&S. There are no public facilities within or adjacent to the project area; therefore, no impacts are expected. Access to all properties will be maintained during construction.

Initial notices to utilities were sent on November 7, 2022. There are two utilities within the project area: overhead electric lines owned by Heartland Rural Electric Membership Cooperative (REMC) and underground communications owned by Brightspeed. Utility relocations are expected. Work plans are currently in development with these utility providers.

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.

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## Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified?

Does the project require an EJ analysis?

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?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

*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.*

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent ROW. The project will require approximately 1.88 acres of permanent ROW. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exists and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Wabash County, Indiana. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 1029, Wabash County (Appendix I, I3). An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the U.S. Census Bureau 2019 ACS 5-year Estimates was obtained from the U.S. Census Bureau website on December 20, 2022, by BF&S (Appendix I, I4-I7). The data collected for minority and low-income populations within the AC are summarized in the below table.

	COC – Wabash County, Indiana	AC – Census Tract 1029, Wabash County, Indiana
Percent Low-Income	12.4 %	12.8 %
125% of COC	15.4 %	AC < 125% COC
EJ Population of Concern		No
Percent Minority	6.4 %	4.3 %
125% of COC	8.0 %	AC < 125% COC
EJ Population of Concern		No

Census Tract 1029 has a percent low-income of 12.8%, which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain a low-income population of EJ concern.

Census Tract 1029 has a percent minority population of 4.3%, which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain a minority population of EJ concern.

The census data sheets, map, and calculations can be found in Appendix I (I2-I7). No further environmental justice analysis is warranted.

## Relocation of People, Businesses or Farms

Will the proposed action result in the relocation of people, businesses, or farms?

Is a BIS or CSRS required?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

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.

## Indiana Department of Transportation

County Wabash

Route CR 1050 South

Des. No. 2003065

### SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

#### Hazardous Materials & Regulated Substances (Mark all that apply)

Red Flag Investigation (RFI)

Phase I Environmental Site Assessment (Phase I ESA)

Phase II Environmental Site Assessment (Phase II ESA)

Design/Specifications for Remediation required?

#### Documentation

X

Date RFI concurrence by INDOT SAM (if applicable): January 3, 2023

*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 GIS and available public records, the RFI was completed on December 30, 2022, by BF&S and INDOT SAM provided their concurrence on January 3, 2023 (Appendix E, E1-E8). 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 of hazardous material concerns or regulated substances is not required at this time.

## Indiana Department of Transportation

County Wabash

Route CR 1050 South

Des. No. 2003065

### Part IV – Permits and Commitments

#### PERMITS CHECKLIST

Permits (mark all that apply)

Likely Required

**Army Corps of Engineers (404/Section10 Permit)**

Nationwide Permit (NWP)  
Regional General Permit (RGP)  
Individual Permit (IP)  
Other

X

**IN Department of Environmental Management (401/Rule 5)**

Nationwide Permit (NWP)  
Regional General Permit (RGP)  
Individual Permit (IP)  
Isolated Wetlands  
Rule 5  
Other

X
X

**IN Department of Natural Resources**

Construction in a Floodway  
Navigable Waterway Permit  
Other

X

**Mitigation Required**

X
---

**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."*

It is anticipated an IDEM Construction Stormwater General Permit (CSGP) permit (formerly known as Rule 5) will be required, as the project will disturb more than 1 acre of land.

A Section 401 permit from IDEM and a Section 404 permit from USACE will be required for the construction of the causeway and installation of riprap below the OHWM of Grant Creek. Mitigation related to stream impacts will likely be required and will be determined during the permitting process.

A Construction in a Floodway permit from the IDNR will be necessary due to the impact on the regulated floodway associated with Grant Creek. Mitigation related to floodway habitat impacts will likely be required and will be determined during the permitting process.

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.

## Indiana Department of Transportation

County Wabash

Route CR 1050 South

Des. No. 2003065

### 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 Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT- Fort Wayne 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 that will block or limit access. (INDOT ESD)
3. (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)
4. (Tree Removal AMM 1) Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
5. (Tree Removal AMM 2) Apply time of year restrictions (November 15 to March 31) 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)
6. (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)
7. (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)
8. (Lighting AMM 1) Direct temporary lighting away from suitable habitat during the active season. (USFWS)
9. If construction will begin after April 19, 2025, 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)
10. Wabash Co. Bridge 143 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 "Potential Migratory Bird on Structure" USP/RSP. (INDOT-ESD)

#### For Further Consideration:

11. For crossing replacements, the new structure must include wildlife passage appropriate for the type of replacement structure being proposed. If the existing structure is sized to accommodate white-tailed deer passage, then it should be included in the design of the new structure. If whitetail deer passage is not possible with the existing structure, deer passage still needs to be considered in the design and at minimum the bank lines must be restored within structures to allow for smaller wildlife passage above the ordinary high-water mark. Minimum structure dimensions for white-tailed deer passage are 20 feet of width clearance (overall size of the structure span) and 8 feet of height clearance measured from the OHWM to the low chord elevation and where deer passage is provided. (IDNR-DFW)
12. 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 stream crossing repairs or modifications, 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 rehabilitated/modified structures is encouraged whenever possible to improve wildlife/vehicle safety. (IDNR-DFW)
13. While hard armoring alone (e.g., riprap, glacial stone) may be required in certain instances, soft armoring and bioengineering techniques should be considered first. Establishing vegetation along the banks is critical for stabilization and erosion control. A variety of methods to accomplish this include planting plugs, whips, container stock, seeding, and live stakes. In addition to vegetation establishment, floodway construction projects often require some level of bank stabilization. Combining vegetation with any of the following bank stabilization methods can provide additional bank protection while not

## Indiana Department of Transportation

County Wabash

Route CR 1050 South

Des. No. 2003065

compromising the benefits to fish, wildlife, and botanical resources: geotextiles (erosion control blankets, turf reinforcement mats; biodegradable preferred), vegetated geogrids or soil lifts, glacial stone, fiber rolls, or riprap. (IDNR-DFW)

14. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. Maintain the natural shape of the channel. (IDNR-DFW)
15. Leave in place or cut at the waterline any fallen trees, roots, logs, and/or stumps that are anchored or embedded in the bank or bottom of the waterway. (IDNR-DFW)
16. 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. (IDNR-DFW)
17. 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. Seeding and stabilizing disturbed areas is required regardless of the impact amount and location. If floodway impacts to forested wetland and non-wetland habitat areas combine to be 0.10 acres or more, mitigation should be done and coordinated with the biologist, as needed. (IDNR-DFW)
18. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High-Water Mark during this time unless the machinery is within the caissons or on the cofferdams. (USFWS)
19. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing. (USFWS)
20. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat. (USFWS)
21. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. (USFWS)
22. Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community. (USFWS)

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# **Appendix A**

## **INDOT Supporting Documentation**

## Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4 <sup>1</sup>
<b>Section 106</b>	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"	-	"Adverse Effect" Or Historic Bridge involvement <sup>2</sup>
<b>Stream Impacts</b>	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	Individual 404 Permit
<b>Wetland Impacts</b>	No adverse impacts to wetlands	< 0.1 acre	-	< 1 acre	≥ 1 acre
<b>Right-of-way<sup>3</sup></b>	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
<b>Relocations</b>	None	-	-	< 5	≥ 5
<b>Threatened/Endangered Species (Species Specific Programmatic for Indiana bat &amp; northern long eared bat)</b>	"No Effect", "Not likely to Adversely Affect" (Without AMMs <sup>4</sup> or with AMMs required for all projects <sup>5</sup> )	"Not likely to Adversely Affect" (With any other AMMs)	-	"Likely to Adversely Affect"	Project does not fall under Species Specific Programmatic
<b>Threatened/Endangered Species (Any other species)</b>	Falls within guidelines of USFWS 2013 Interim Policy	"No Effect", "Not likely to Adversely Affect"	-	-	"Likely to Adversely Affect"
<b>Environmental Justice</b>	No disproportionately high and adverse impacts	-	-	-	Potential <sup>6</sup>
<b>Sole Source Aquifer</b>	Detailed Assessment Not Required	-	-	-	Detailed Assessment
<b>Floodplain</b>	No Substantial Impacts	-	-	-	Substantial Impacts
<b>Coastal Zone Consistency</b>	Consistent	-	-	-	Not Consistent
<b>National Wild and Scenic River</b>	Not Present	-	-	-	Present
<b>New Alignment</b>	None	-	-	-	Any
<b>Section 4(f) Impacts</b>	None	-	-	-	Any
<b>Section 6(f) Impacts</b>	None	-	-	-	Any
<b>Added Through Lane</b>	None	-	-	-	Any
<b>Permanent Traffic Alteration</b>	None	-	-	-	Any
<b>Coast Guard Permit</b>	None	-	-	-	Any
<b>Noise Analysis Required</b>	No	-	-	-	Yes
<b>Air Quality Analysis Required</b>	No	-	-	-	Yes <sup>7</sup>
<b>Approval Level</b>  <ul style="list-style-type: none"> <li>District Env. Supervisor</li> <li>Env. Services Division</li> <li>FHWA</li> </ul>	Concurrence by INDOT District Environmental or Environmental Services	Yes	Yes	Yes Yes	Yes Yes Yes

<sup>1</sup>Coordinate with INDOT Environmental Services. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

<sup>2</sup>Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

<sup>3</sup>Permanent and/or temporary right-of-way.

<sup>4</sup>AMMs = Avoidance and Mitigation Measures.

<sup>5</sup>AMMs determined by the IPAC decision key to be needed that are listed in the USFWS User's Guide for the Range-wide Programmatic Consultation for Indiana bat and Northern long-eared bat as "required for all projects".

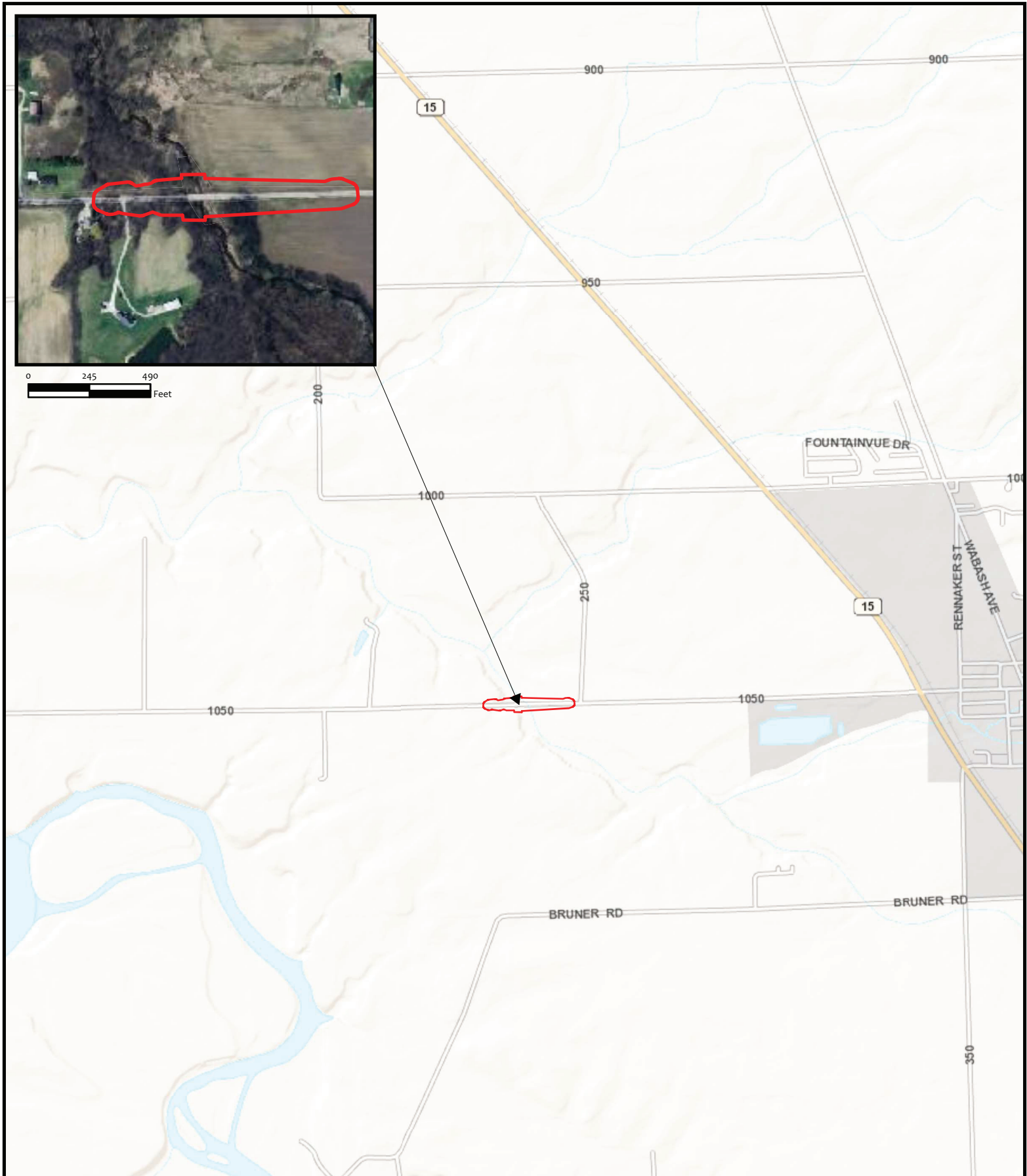
<sup>6</sup>Potential for causing a disproportionately high and adverse impact.

<sup>7</sup>Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

\*Substantial public or agency controversy may require a higher-level NEPA document.

# **Appendix B**

## **Graphics**



0 500 1,000 2,000  
Feet

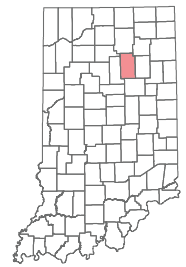


Map Source: Indiana Map

### State Map

Wabash Co. Bridge 143 Replacement  
County Road 1050 South over Grant Creek  
Des. 2003065





#### Legend

Project Location

Service Layer Credits: USA Topo  
Maps: Copyright: © 2013 National  
Geographic Society, i-cubed

0 500 1,000 2,000  
Feet

#### USGS 7.5-minute Quadrangles: La Fontaine and Somerset

Wabash Co. Bridge 143 Replacement County  
Road 1050 South over Grant Creek  
Section 28, Township 26 North, Range 7 East  
Des. 2003065





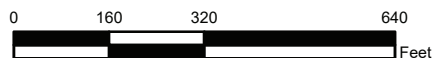


### Legend

 Project Location



Service Layer Credits: Orthos - Full Resolution - 2011-2013:



### Aerial Map

Wabash Co. Bridge 143 Replacement  
County Road 1050 South over Grant Creek  
Des. 2003065





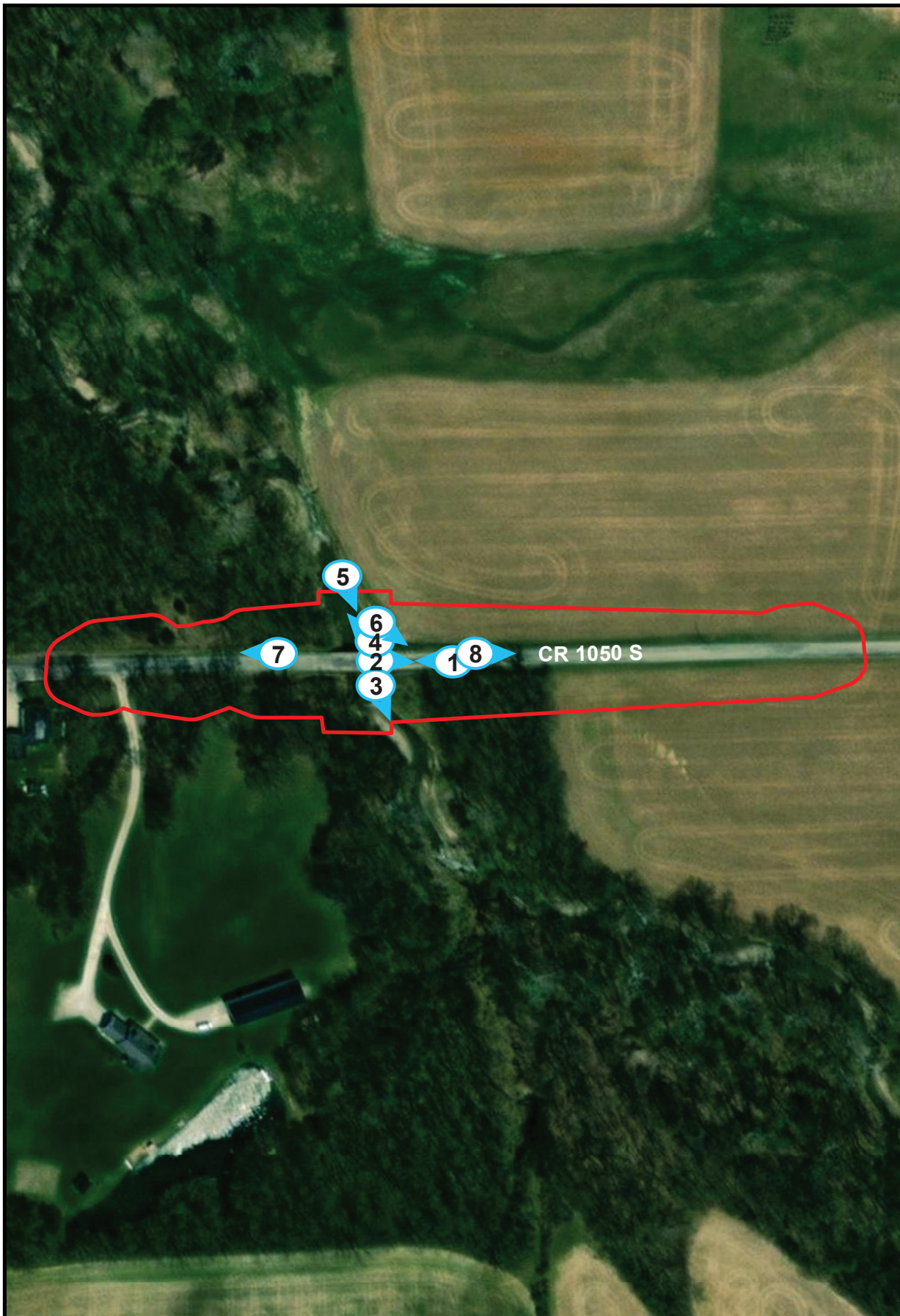


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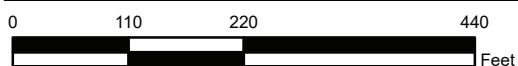
Project Area



Photo Numbers



Map Source: Indiana Geological Survey (IGS), IndianaMap, 2019  
ArcGIS Online (ESRI) World Imagery.



### Wabash County Bridge 143

CR E 1050 S over Grant Creek  
Section 28, Township 26N, Range 7E  
Wabash County, Indiana







Photo 1: Looking west along the deck of Wabash County Bridge 143.



Photo 2: Looking east along the deck of Wabash County Bridge 143.





Photo 3: Looking upstream along Grant Creek from Wabash County Bridge 143.



Photo 4: : Looking downstream along Grant Creek from Wabash County Bridge 143.





Photo 5: North elevation of Wabash County Bridge 143..



Photo 6: Looking east at the east pier of Wabash County Bridge 143.





Photo 7: Looking east along the western approach to Wabash County Bridge 143.



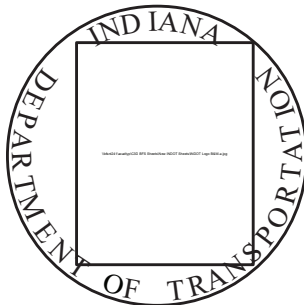
Photo 8: Looking west along the western approach to Wabash County Bridge 143.



PROJECT	DESIGNATION
2003065	2003065
CONTRACT	BRIDGE FILE
B-43610	85-00143

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN & SKEW	OVER	STATION
85-00143	PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE	1 SPAN: 90'-0" SKEW: 15°00'00" LT	GRANT CREEK	34+49.16 LINE "A"

# INDIANA DEPARTMENT OF TRANSPORTATION



## BRIDGE PLANS

FOR SPANS OVER 20 FEET

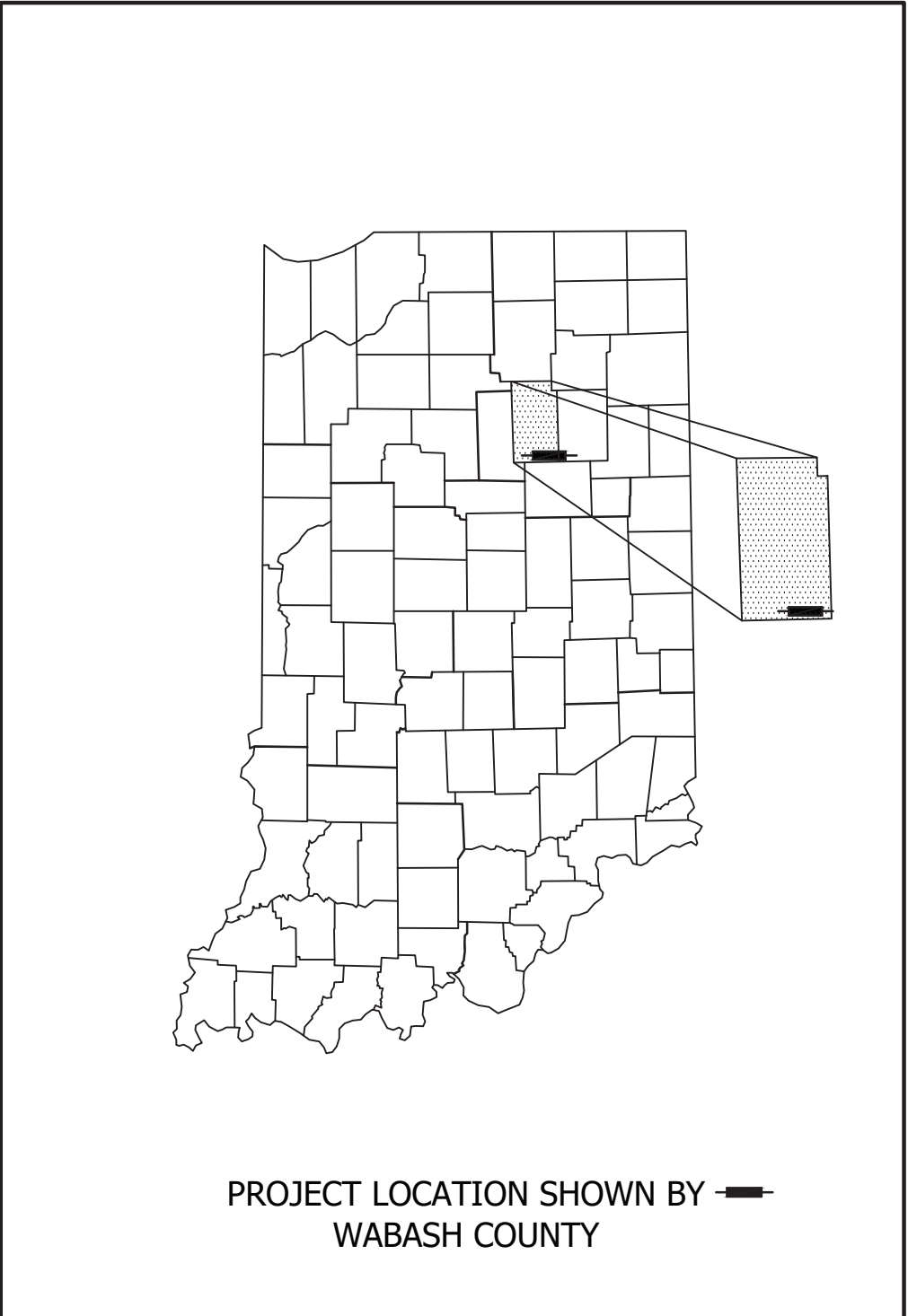
ROUTE: CR EAST 1050 SOUTH OVER GRANT CREEK

PROJECT NO. 2003065 P.E.  
2003065 R/W  
2003065 CONST.

REPLACEMENT OF BRIDGE CARRYING CR EAST 1050 SOUTH OVER GRANT CREEK  
PROJECT IS LOCATED 0.10 MILES WEST OF LAFONTAINE  
SECTION 28, TOWNSHIP 26 NORTH, RANGE 7 EAST  
LIBERTY TOWNSHIP, WABASH COUNTY, INDIANA

TRAFFIC DATA		
A.A.D.T.	(2025)	220 V.P.D.
A.A.D.T.	(2045)	220 V.P.D.
D.H.V.	(2045)	20 V.P.H.
DIRECTIONAL DISTRIBUTION		50 %
COMMERCIAL VEHICLES		5% A.A.D.T.
		50% D.H.V.

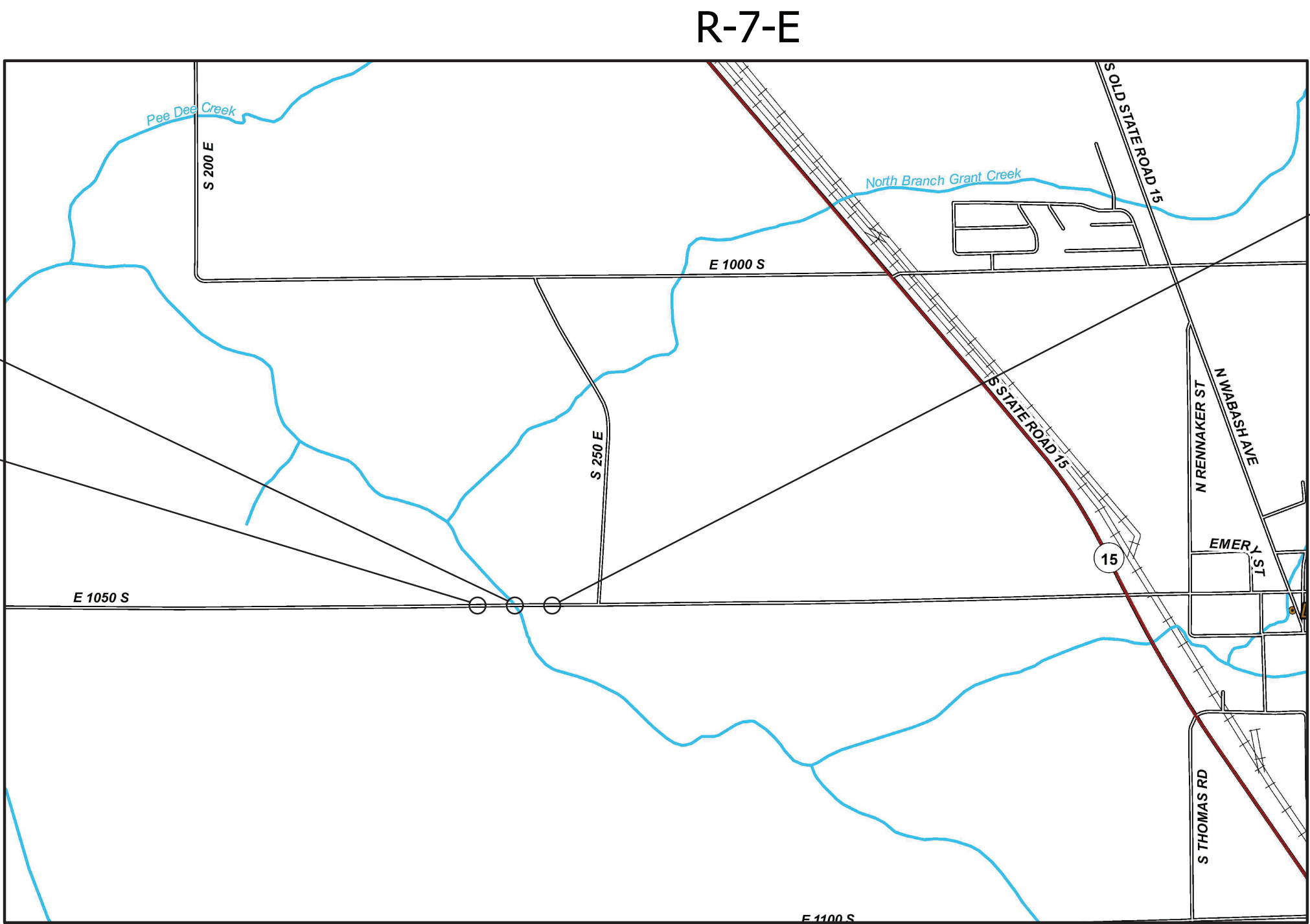
DESIGN DATA	
DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	LOCAL ROAD
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: 40°40'26.4"N LONGITUDE: 85°44'39.4"W

BRIDGE LENGTH: 0.017 MI.  
ROADWAY LENGTH: 0.162 MI.  
TOTAL LENGTH: 0.179 MI.  
MAX. GRADE: 4.25 %

HUC 12: 051201030603



END PROJECT  
STA. 40+50, Line "A"

STRUCTURE: 85-00143  
Sta. 34+49.16, Line "A"

BEGIN PROJECT  
STA. 31+00, Line "A"

SCALE: 1" = 1000'

FULL SIZE PLANS HAVE BEEN PREPARED USING  
STANDARD ENGINEERING SCALES. REDUCED SIZED  
PLANS WILL NOT CONFORM TO STANDARD SCALES.

PLANS PREPARED BY:	Butler Fairman and Seufert Inc.	(317)713-4615
		PHONE
CERTIFIED BY:		--
		DATE
APPROVED FOR LETTING:		--
	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

BRIDGE FILE	
85-00143	
DESIGNATION	
2003065	
SURVEY BOOK	SHEET
ELECTRONIC	1 OF 28
CONTRACT	PROJECT
B-43610	2003065

\\bfsr1241\jebss5\6778902\00001\ProDevelopment\Design\Drawings\67789101.dwg Dylan Piercefield Plot:5/18/2023 2:53 PM Save:10/26/2022 1:28 PM

## Preliminary Plans

## UTILITIES

ELECTRIC: HEARTLAND REMC  
4563 E. MARKLE RD.  
MARKEL, IN 46770  
PH: (260) 758-3652  
ATTN: ERIC WILSON  
EMAIL: ewilson@HeartlandREMC.com

COMMUNICATIONS: LUMEN  
EMAIL: relocations@lumen.com

## GENERAL NOTES

All earth shoulders, median areas, and cut and fill slopes shall be plain or mulch seeded except where sodding is specified.

This set of Plans shall not be construed to be a property retracement survey. Where apparent property lines, corners, subdivision or section corner information are shown, they are based on physical evidency or testimony.

These plans show the location of utilities as existing in the field by the respective utility companies; therefore, the firm of BF&S does not accept any responsibility for the accuracy of this information.

In accordance with Indiana Code 8-1, Chapter 26, the Contractor shall notify the Indiana Underground Plant Protection Service at 1-800-382-5544 at least two (2) full working days prior to any excavation or demolition

## INDEX

SHEET NO.	DESIGNATION
1	TITLE SHEET
2	INDEX
3	TYPICAL APPROACH DETAILS
4-8	TRAFFIC MAINTENANCE DETAILS
9-10	PLAN & PROFILE - LINE "A"
11-15	EROSION CONTROL DETAILS
16-17	WIRE WALL DETAILS
18	LAYOUT
19	GENERAL PLAN - PLAN & ELEVATION
20	GENERAL PLAN - TYPICAL SECTION
21-28	CROSS-SECTIONS

## REVISIONS

SHEET NO.	DATE	REVISED
-----------	------	---------

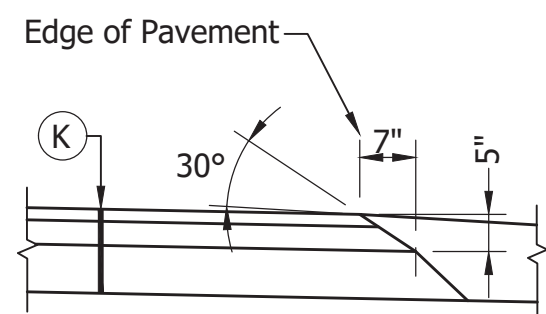
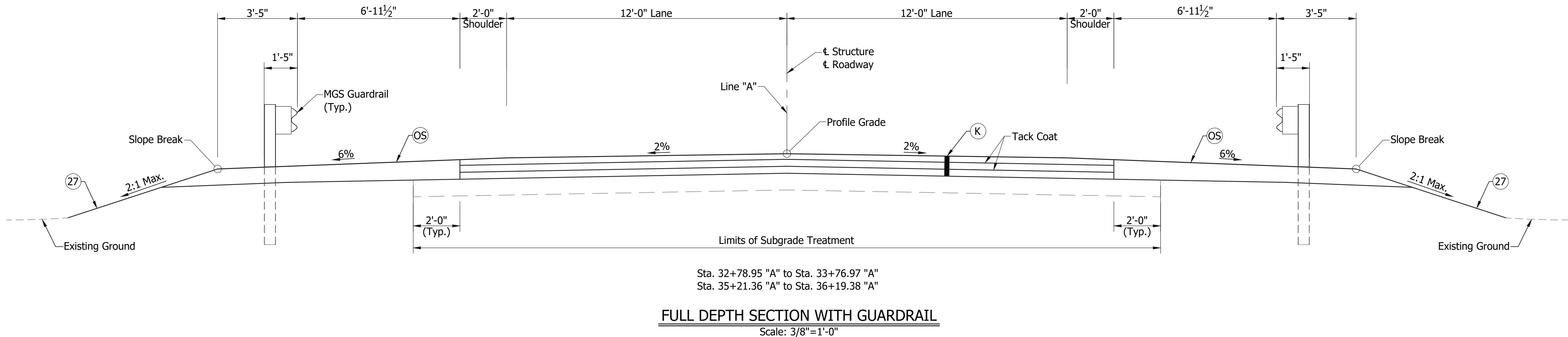
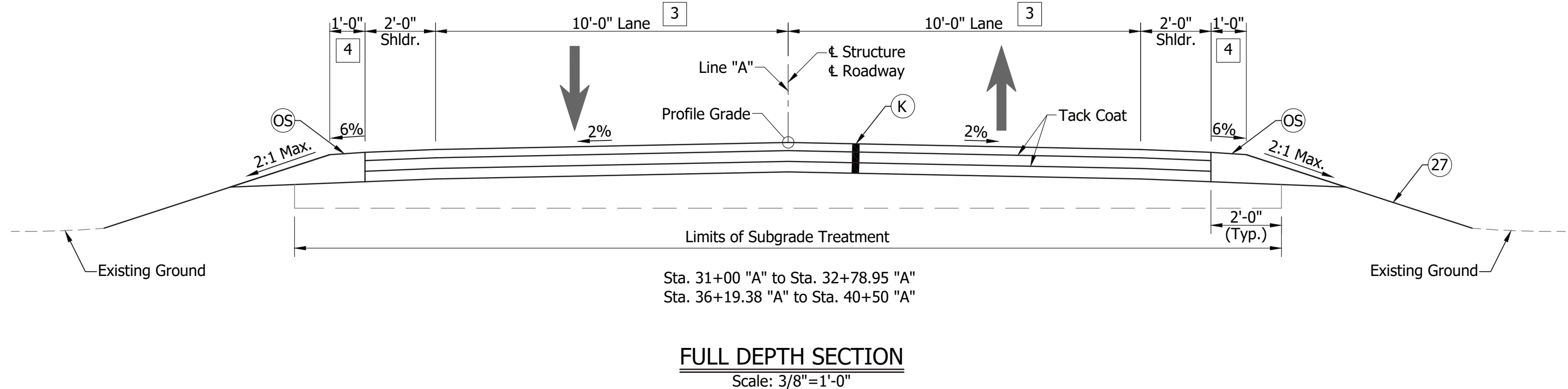
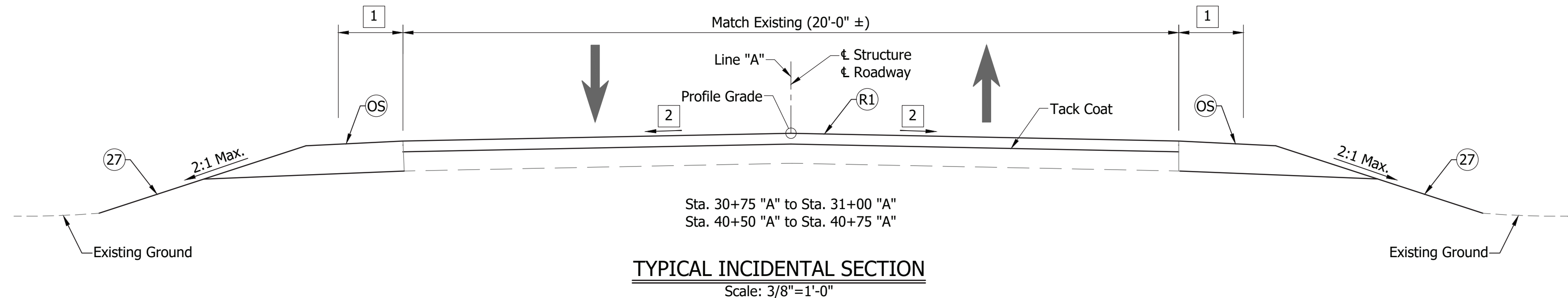


**Know what's below. 811 before you dig.**

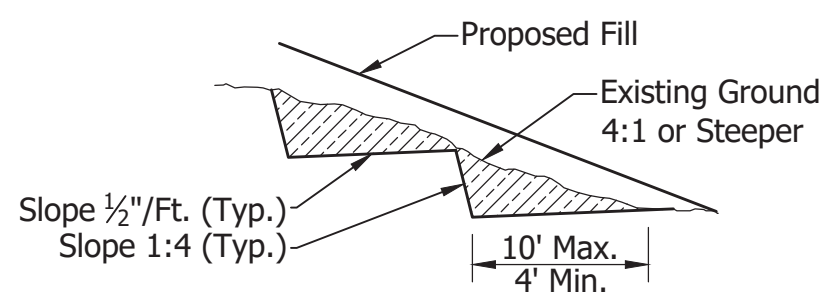
	RECOMMENDED FOR APPROVAL: _____		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE		BRIDGE FILE	
	DESIGN ENGINEER _____ DATE _____			N/A		85-00143	
				VERTICAL SCALE		DESIGNATION	
				N/A		2003065	
				SURVEY BOOK		SHEET	
				ELECTRONIC		2 OF 28	
DESIGNED: Q. O'BRIEN		DRAWN: K. COFFMAN	INDEX	CONTRACT		PROJECT	
CHECKED: B. BUTZ		CHECKED: BUTZ		8-47610		7003065	

LEGEND

- 1 Varies from 0'-0" at Begin/End Incidental to 3'-0" at Begin/End Project
- 2 Varies from Existing at Begin/End Incidental to 2% at Begin/End Project
- 3 Taper from 10'-0" to 12'-0"  
Sta. 32+28.95 "A" to Sta. 32+78.95 "A" and  
Sta. 36+19.38 "A" to Sta. 36+69.38 "A"
- 4 Taper Stone from 1'-0" to 6'-11½"  
Sta. 32+28.95 "A" to Sta. 32+78.95 "A" and  
Sta. 36+19.38 "A" to Sta. 36+69.38 "A"
- R1 165 #/SYS QC/QA-HMA, 3, 64 Surface, 9.5 mm on Milling, Transition
- K 165 #/SYS QC/QA-HMA, 3, 64 Surface, 9.5 mm on  
275 #/SYS QC/QA-HMA, 3, 64 Intermediate, 19 mm on  
660 #/SYS QC/QA-HMA, 3, 64 Base, 25 mm on  
Subgrade Treatment Type IC on  
Geotextile for Pavement Type 2B
- OS Variable Depth Compacted Aggregate #53
- 27 Seed Mixture, R



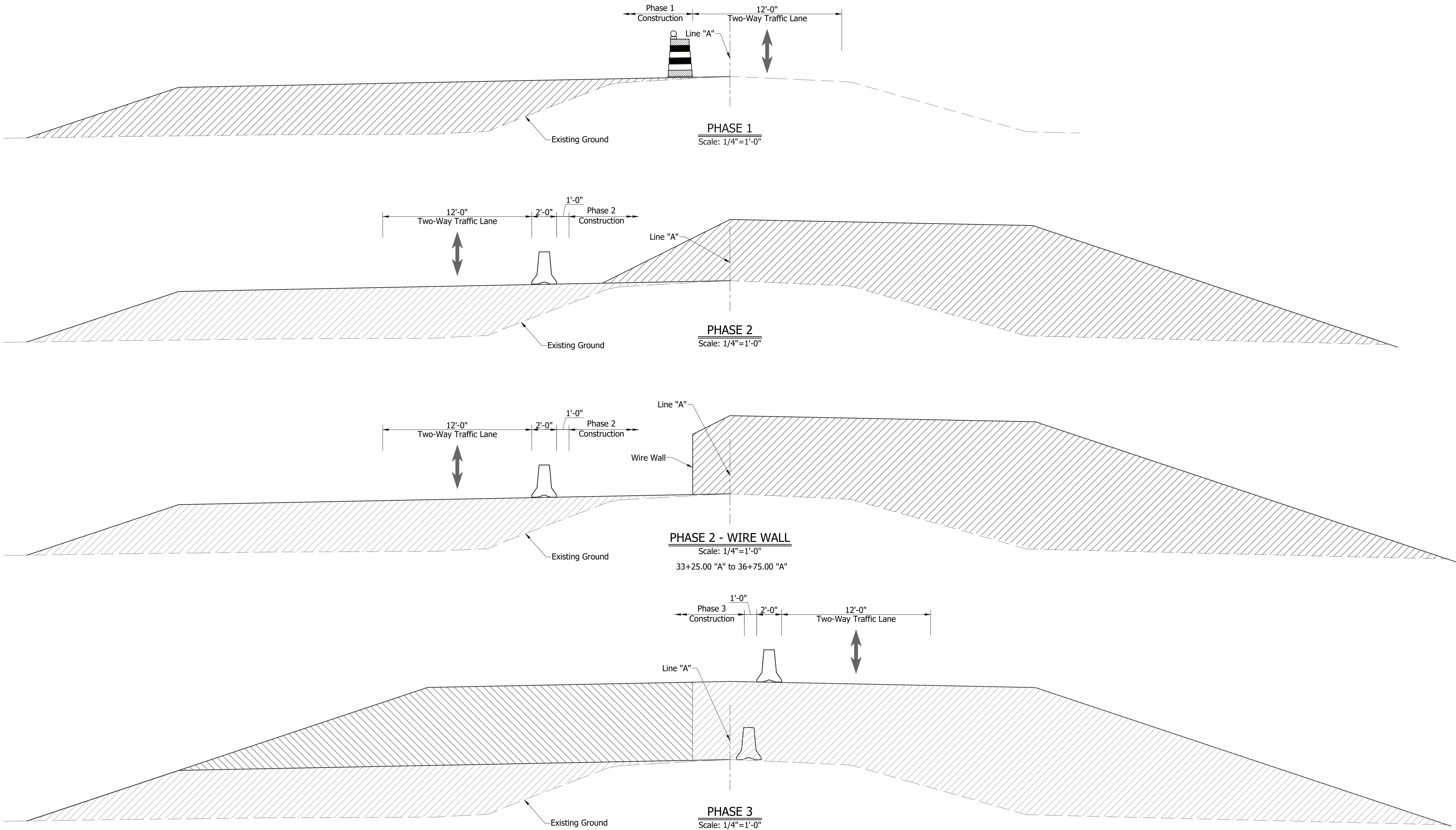
SAFETY EDGE DETAIL  
Scale: 1/2" = 1'-0"



TYPICAL BENCHING DETAIL  
Not to Scale

RECOMMENDED FOR APPROVAL: DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE AS NOTED	BRIDGE FILE 85-00143
			VERTICAL SCALE ----	DESIGNATION 2003065
	DESIGNED: Q. O'BRIEN	DRAWN: K. COFFMAN	SURVEY BOOK ELECTRONIC	SHEET 3 OF 28
	CHECKED: B. BUTZ	CHECKED: B. BUTZ	CONTRACT B-43610	PROJECT 2003065





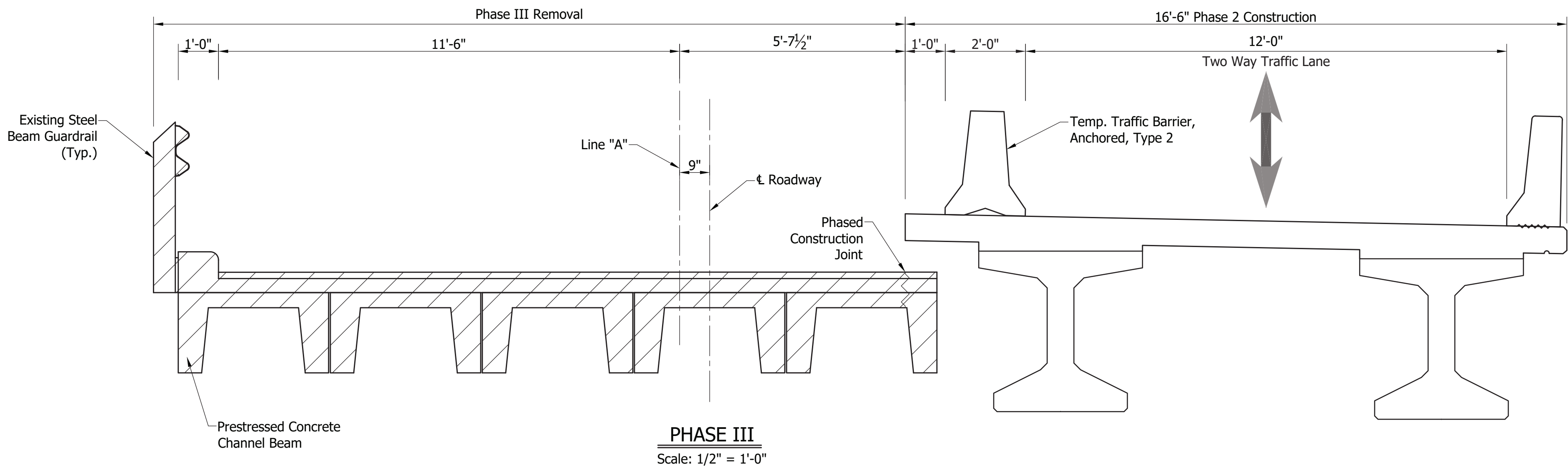
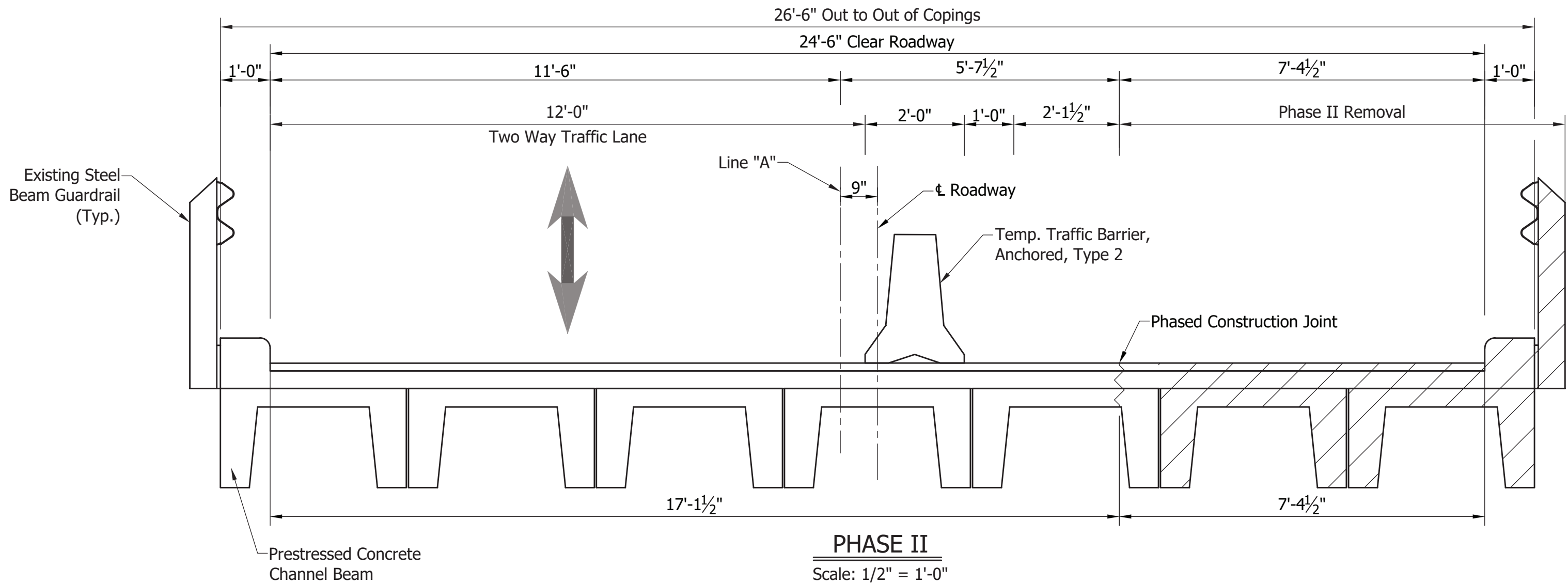
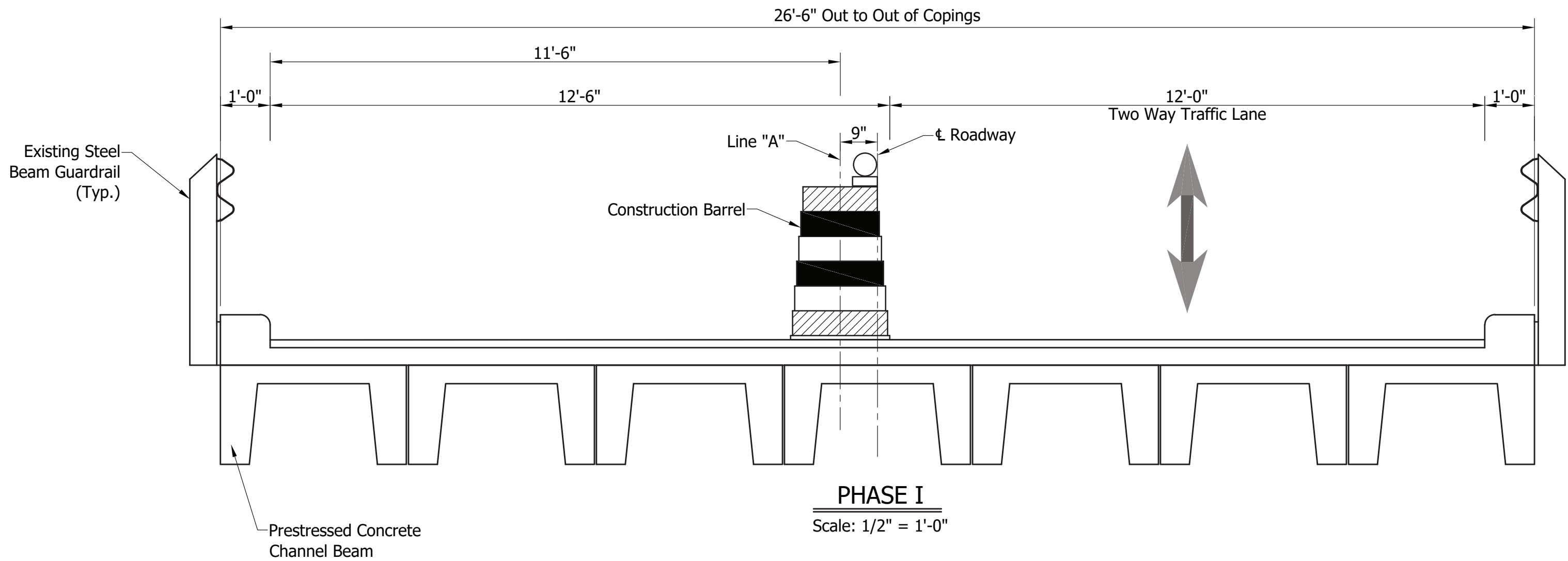
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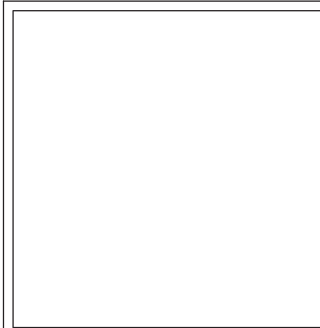
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	DESIGNED: Q. O'BRIEN		VERTICAL SCALE N/A	DESIGNATION 2003065	
	CHECKED: _____		SURVEY BOOK ELECTRONIC	4	OF 28
	CHECKED: _____		CONTRACT B-43610	PROJECT 2003065	
TRAFFIC MAINTENANCE DETAILS TYPICAL ROADWAY SECTIONS					

BFS NO. 6778

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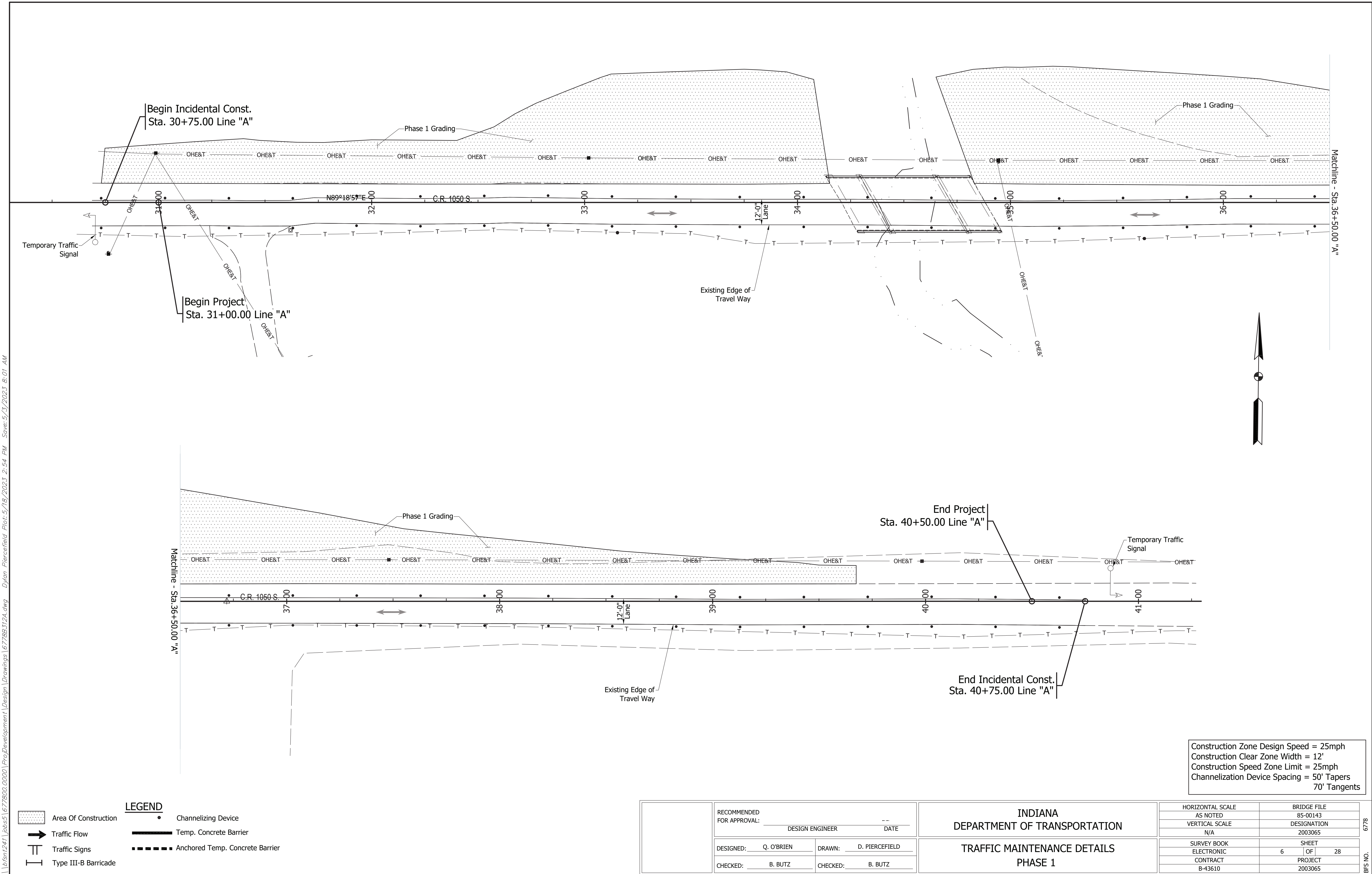
Note: Hatched Areas Indicate Portions to be Removed.



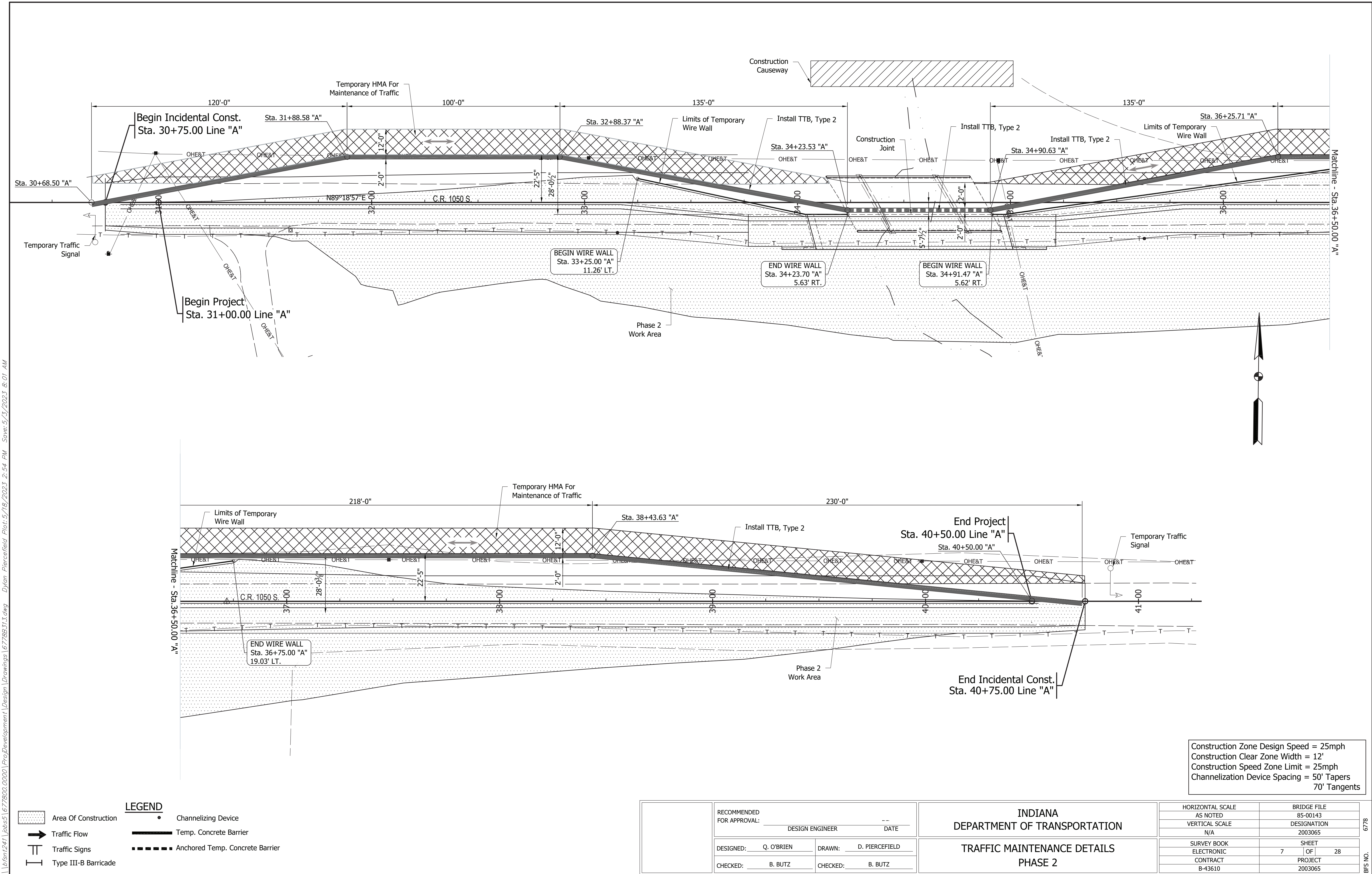
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	DESIGNED: Q. O'BRIEN		VERTICAL SCALE N/A	DESIGNATION 2003065	
	CHECKED: B. BUTZ		SURVEY BOOK ELECTRONIC	5	OF 28
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BFS NO. 6778

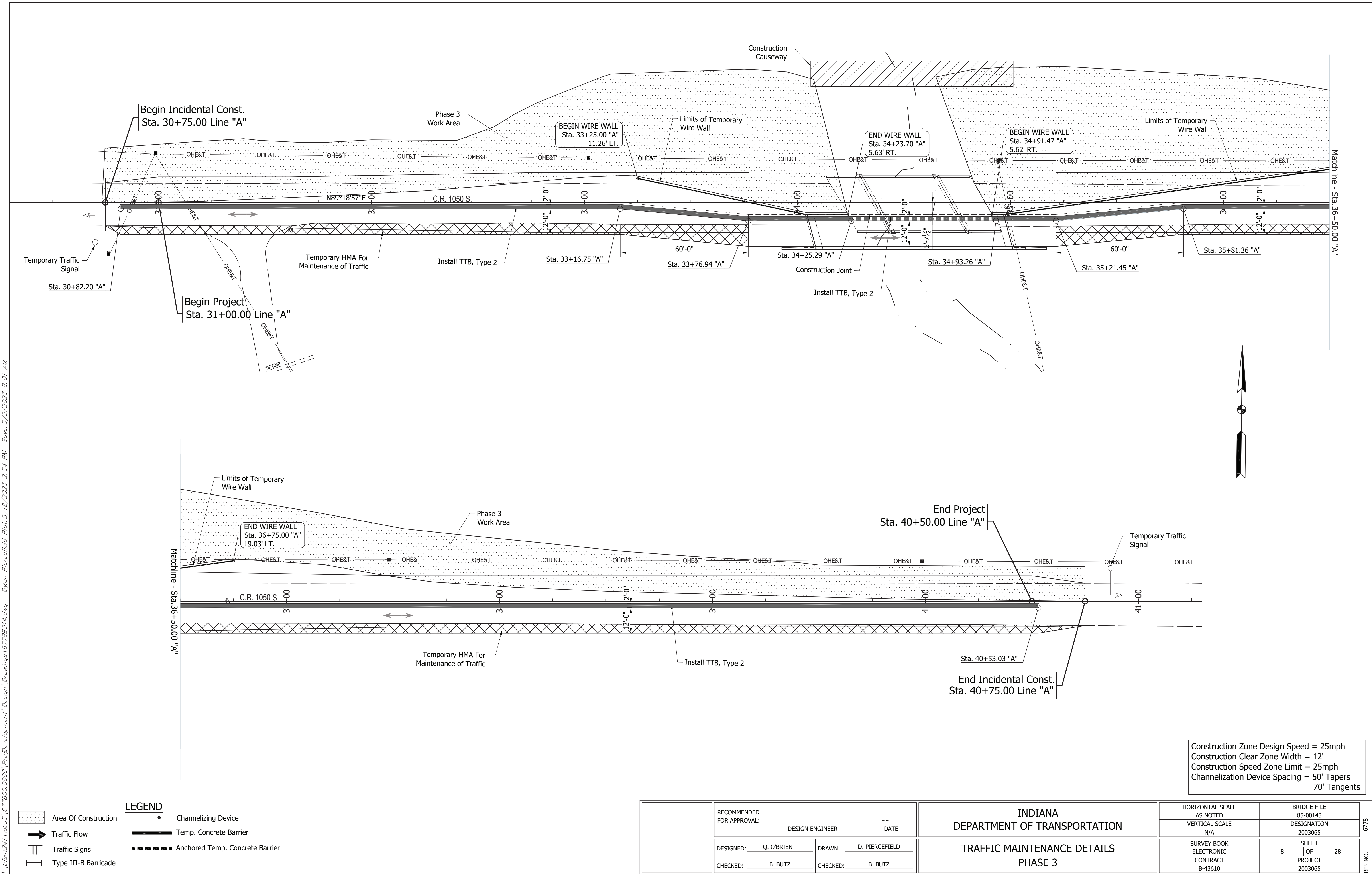




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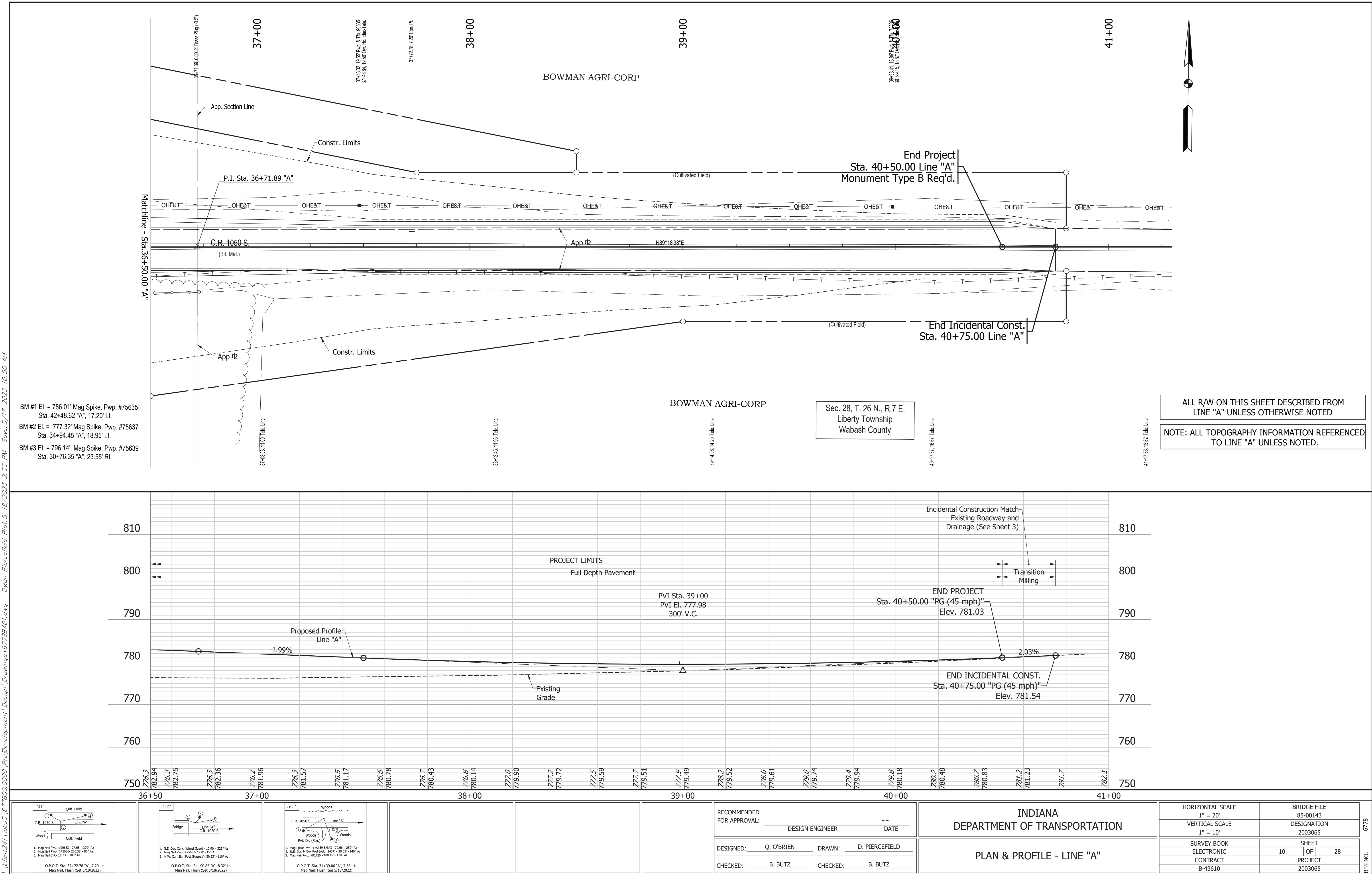






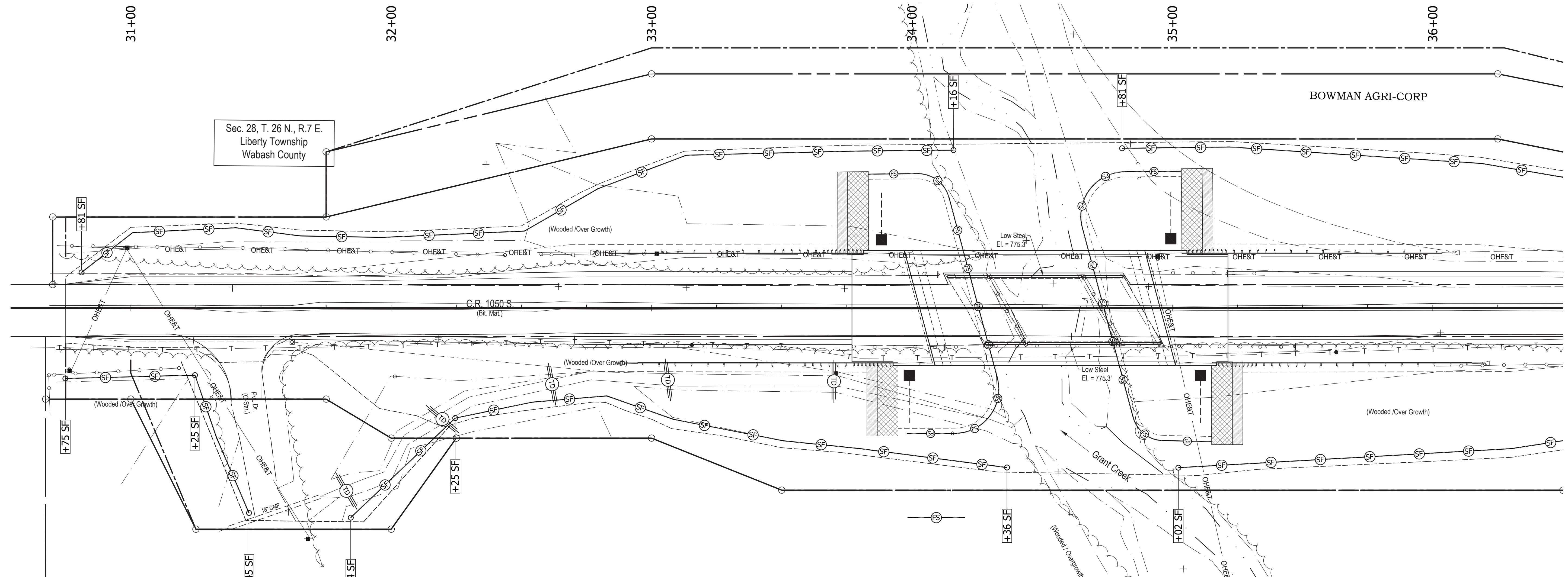













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### LEGEND

- |                                                                                     |                                         |
|-------------------------------------------------------------------------------------|-----------------------------------------|
|  | PROPOSED DITCH                          |
|  | PERIMETER PROTECTION (SILT FENCE) (SF)  |
|  | PERIMETER PROTECTION (FILTER SOCK) (FS) |
|  | TRAVERSABLE CHECK DAM (TCD)             |
|  | TEMPORARY SLOPE DRAIN (TSD)             |
|  | SODDED TURNOUT                          |
|  | PERMANENT RIPRAP                        |
|                                                                                     | SOIL TYPE DELINEATOR                    |
|                                                                                     | SOIL TYPE                               |

## SOIL EROSION CONTROL SUMMARY

1. Grade the site. Disturbed areas should be kept to a minimum at all times.
2. Contractor shall control soil accumulation on all roads surrounding project by installing stone surface at all locations where construction traffic leaves the site. Construction Entrances shall be in accordance with INDOT Standard Drawing E205-TECD-12.
3. Maintain all filters and traps during construction to prevent any blockages from accumulated sediment. Additional seeding and straw bales may be required during construction as specified by the Engineer or Indiana Dept. of Natural Resources, Division of Soil Conservation.

## SEEDING / SODDING SPECIFICATIONS

1. Shall be in accordance with section 621 of the current Indiana Department of Transportation Standard Specifications.

### RECOMMENDED EROSION CONTROL MEASURES

1. Shall be in accordance with current Indiana Department of Transportation Standard Specifications Section 205.
2. Topsoil Salvage and Utilization: Removal of topsoil from all areas to be excavated or filled. Topsoil should be stored at a location where it will not interfere with construction operations. Stockpiled topsoil must be stabilized with seed and/or mulch along with perimeter protection. Failure to cover the stockpiles could result in the severe degrading of the fertility of the topsoil. The use of a Perimeter Erosion Control Method shall be required and as directed by the project Engineer. Any excess excavation shall be disposed of outside of the R/W as directed in sections 203.08, 203.10 & 202.
3. Surface Roughening: All Slopes which are graded & not immediately stabilized with other erosion control measures shall be roughened as described in section 203.09 until permanent Erosion Control Measures are placed.
4. Tree Conservation/Protection: as per section 201.02 the Contractor shall, at the direction of the Engineer, endeavor to save and protect any vegetation which does not impair construction of improvements as designed.
5. Maintenance Schedule: Maintenance of all erosion control practices should be done as needed on a weekly basis and after all large storms. A construction supervisor should be assigned the task of seeing that all practices are maintained according to the design criteria and as described in section 205.04.

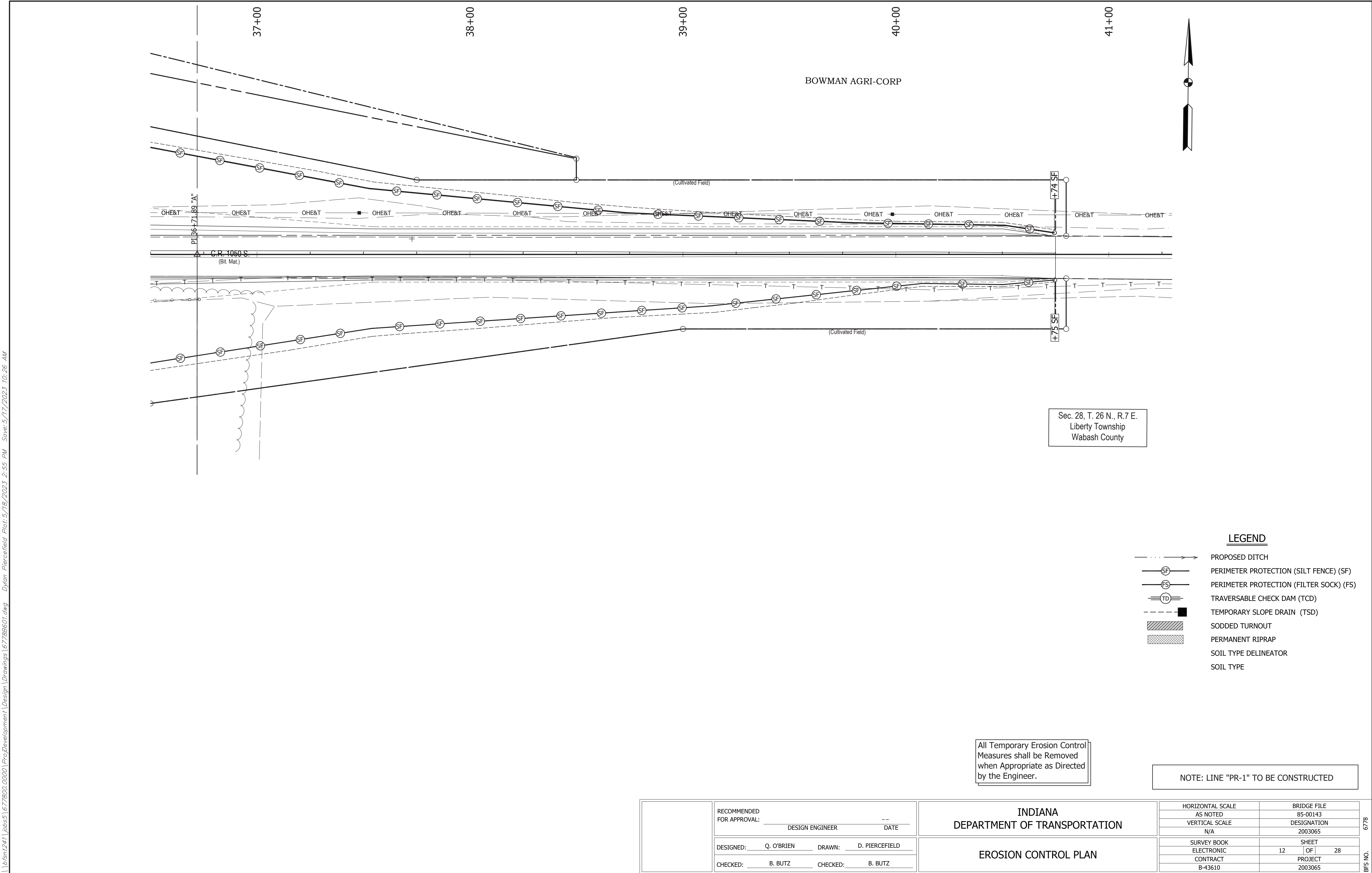
All Temporary Erosion Control Measures shall be Removed when Appropriate as Directed by the Engineer.

NOTES:

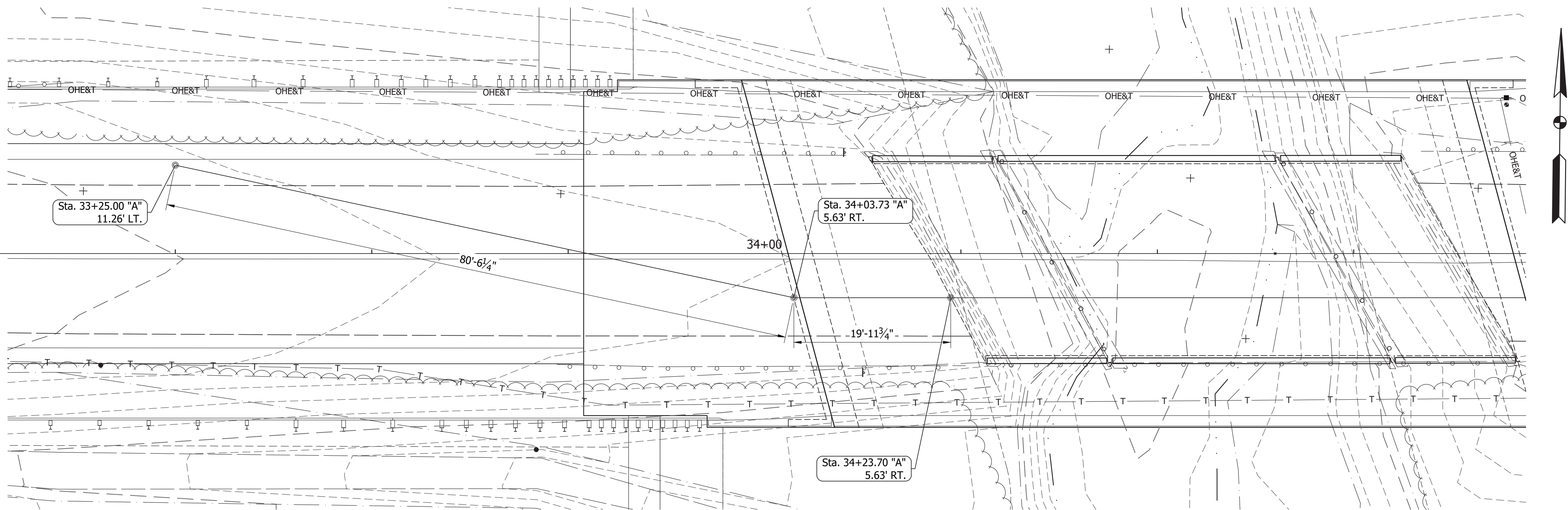
1. All quantities on this sheet are included in the Pay Item "Stormwater Management Budget".
2. \_\_\_\_ Tons of No.2 Stone and \_\_\_\_ Sys. of Temporary Geotextile Type 1A provided for the Construction of Stable Construction Entrances onto the Project Site. Location of Construction Entrances to be Determined.
3. All areas which are not Sodded within the Proposed R/W Shall be Seeded with Mulched Seeding, Type R (See Sheets 6 & 7).

NOTE: LINE "PR-1" TO BE CONSTRUCTED

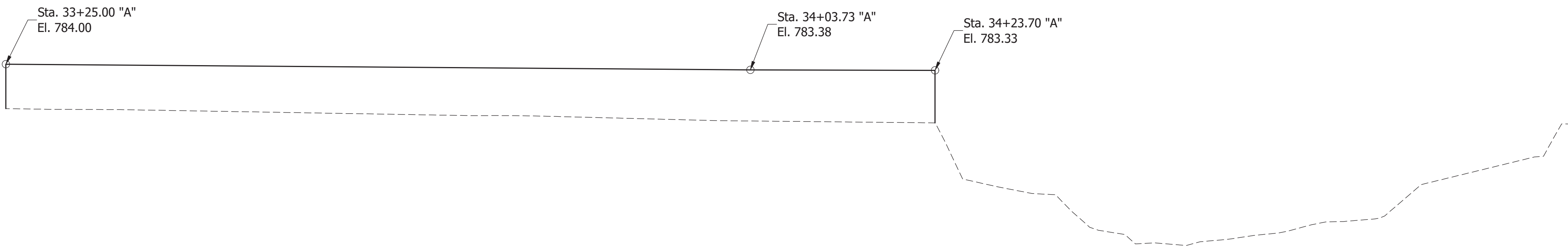
	RECOMMENDED FOR APPROVAL: _____	AS NOTED	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE 85-00143	
	DESIGN ENGINEER _____	DATE _____			VERTICAL SCALE	DESIGNATION 2003065	
					N/A		
	DESIGNED: Q. O'BRIEN	DRAWN: D. PIERCEFIELD	EROSION CONTROL PLAN		SURVEY BOOK ELECTRONIC	11	SHEET OF 28
	CHECKED: B. BUTZ	CHECKED: B. BUTZ			CONTRACT B-43610		PROJECT 2003065







PLAN  
WEST WIRE WALL  
Scale: 1/8" = 1'-0"



ELEVATION  
WEST WIRE WALL  
Scale: 1/8" = 1'-0"

**NOTES:**  
All Station & Offset Measurements are Measured at the Front Face of wall.  
See Sheet 13 For Sections "B-B" & "C-C".  
Leveling Pad Breaks and Elevations Shown are for Information Only.  
Final Leveling Pad Design to be Provided by Wall Manufacturer.

RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER DATE	
DESIGNED: D. PIERCEFIELD	DRAWN: D. PIERCEFIELD
CHECKED: _____	CHECKED: _____

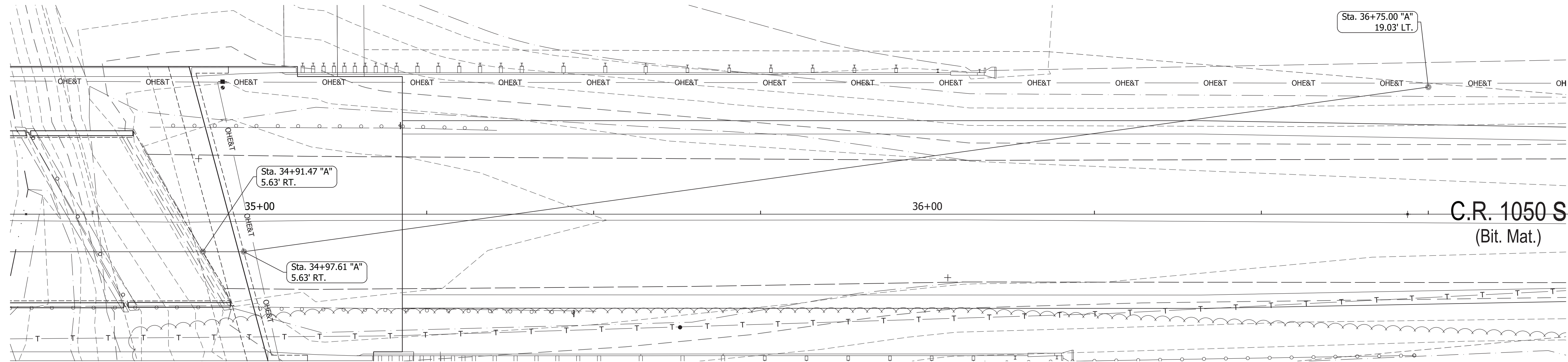
INDIANA  
DEPARTMENT OF TRANSPORTATION

WIRE WALL DETAILS

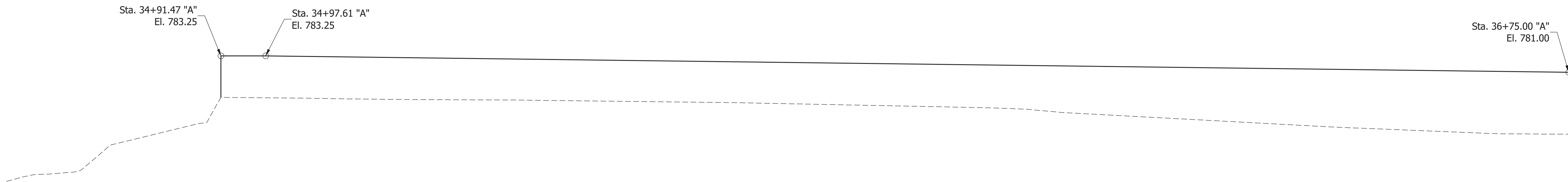
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VERTICAL SCALE N/A	DESIGNATION 2003065
SURVEY BOOK ELECTRONIC	SHEET 16 OF 28
CONTRACT B-43610	PROJECT 2003065

BFS NO. 6778





PLAN  
EAST WIRE WALL  
Scale: 1/8" = 1'-0"



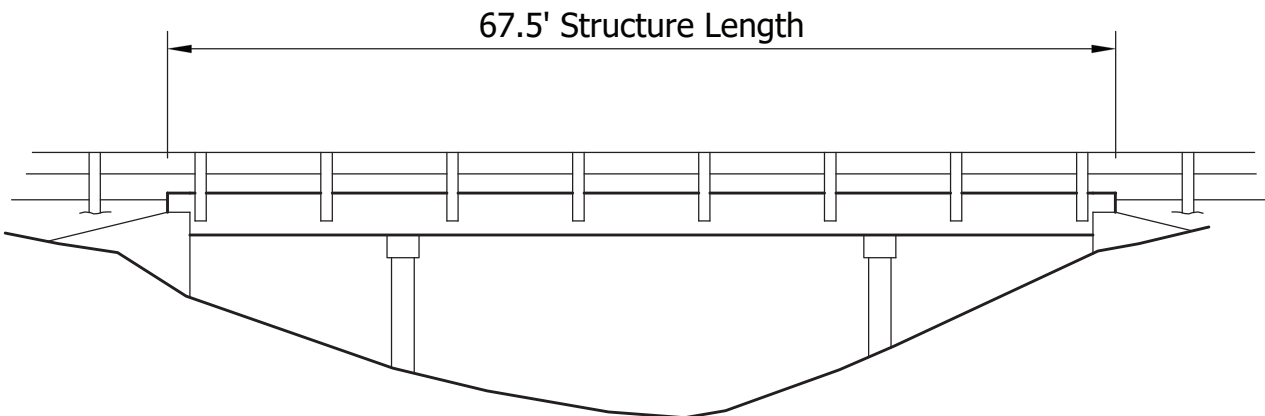
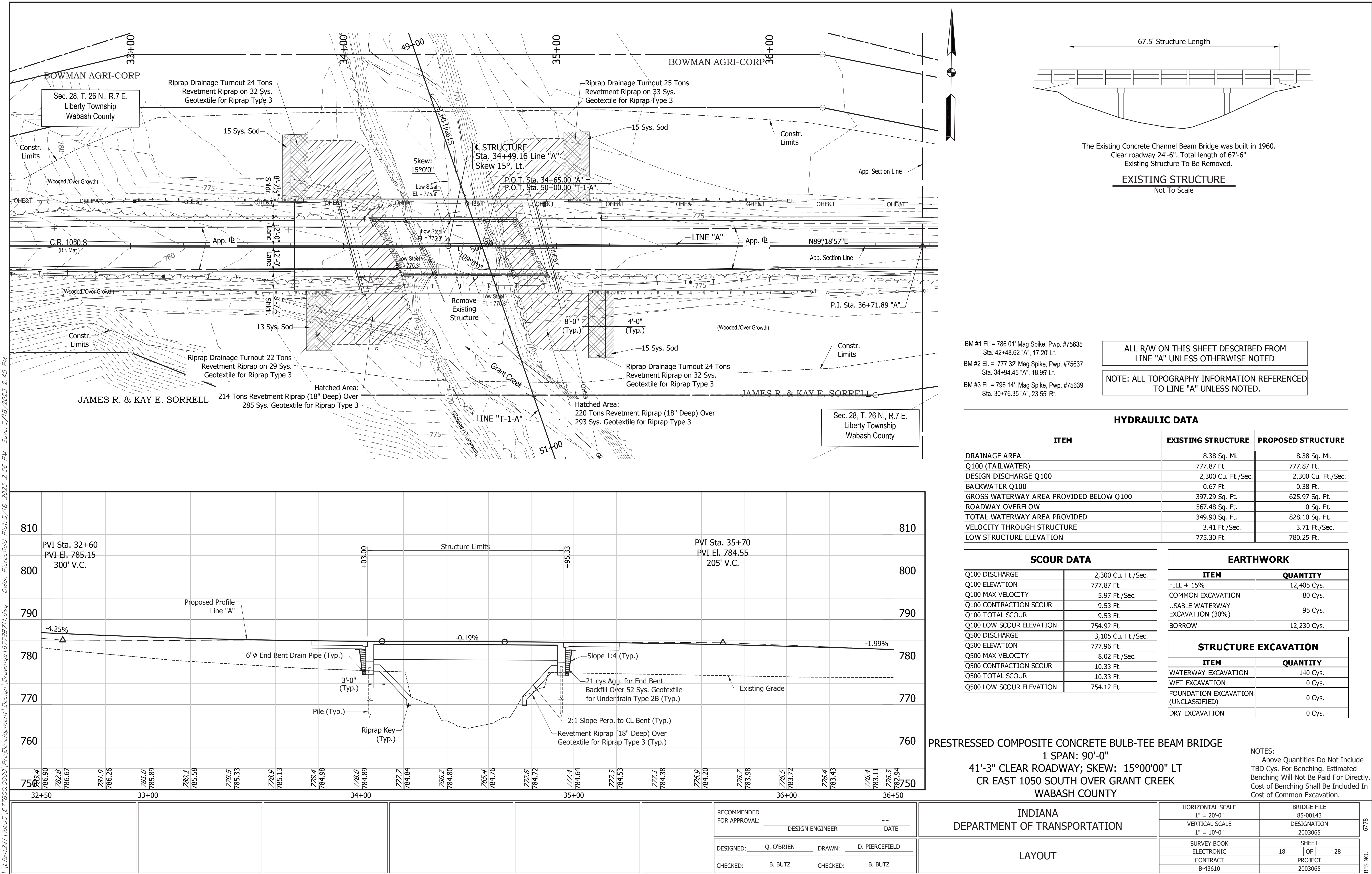
ELEVATION  
EAST WIRE WALL  
Scale: 1/8" = 1'-0"

NOTES:  
All Station & Offset Measurements are Measured at the Front Face of wall.  
See Sheet 13 For Sections "B-B" & "C-C".  
Leveling Pad Breaks and Elevations Shown are for Information Only.  
Final Leveling Pad Design to be Provided by Wall Manufacturer.

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE AS NOTED	BRIDGE FILE 85-00143
	DESIGNED: D. PIERCEFIELD DRAWN: D. PIERCEFIELD		VERTICAL SCALE N/A	DESIGNATION 2003065
	CHECKED: _____ CHECKED: _____		SURVEY BOOK ELECTRONIC	SHEET 17 OF 28
			CONTRACT B-43610	PROJECT 2003065

6778  
BFS NO.





The Existing Concrete Channel Beam Bridge was built in 1960.  
Clear roadway 24'-6". Total length of 67'-6"  
Existing Structure To Be Removed.

**EXISTING STRUCTURE**  
Not To Scale

BM #1 El. = 786.01' Mag Spike, Pwp. #75635  
Sta. 42+48.62 "A", 17.20' Lt.  
BM #2 El. = 777.32' Mag Spike, Pwp. #75637  
Sta. 34+94.45 "A", 18.95' Lt.  
BM #3 El. = 796.14' Mag Spike, Pwp. #75639  
Sta. 30+76.35 "A", 23.55' Rt.

ALL R/W ON THIS SHEET DESCRIBED FROM  
LINE "A" UNLESS OTHERWISE NOTED

NOTE: ALL TOPOGRAPHY INFORMATION REFERENCED  
TO LINE "A" UNLESS NOTED.

**HYDRAULIC DATA**

ITEM	EXISTING STRUCTURE	PROPOSED STRUCTURE
DRAINAGE AREA	8.38 Sq. Mi.	8.38 Sq. Mi.
Q100 (TAILWATER)	777.87 Ft.	777.87 Ft.
DESIGN DISCHARGE Q100	2,300 Cu. Ft./Sec.	2,300 Cu. Ft./Sec.
BACKWATER Q100	0.67 Ft.	0.38 Ft.
GROSS WATERWAY AREA PROVIDED BELOW Q100	397.29 Sq. Ft.	625.97 Sq. Ft.
ROADWAY OVERFLOW	567.48 Sq. Ft.	0 Sq. Ft.
TOTAL WATERWAY AREA PROVIDED	349.90 Sq. Ft.	828.10 Sq. Ft.
VELOCITY THROUGH STRUCTURE	3.41 Ft./Sec.	3.71 Ft./Sec.
LOW STRUCTURE ELEVATION	775.30 Ft.	780.25 Ft.

**SCOUR DATA**

Q100 DISCHARGE	2,300 Cu. Ft./Sec.
Q100 ELEVATION	777.87 Ft.
Q100 MAX VELOCITY	5.97 Ft./Sec.
Q100 CONTRACTION SCOUR	9.53 Ft.
Q100 TOTAL SCOUR	9.53 Ft.
Q100 LOW SCOUR ELEVATION	754.92 Ft.
Q500 DISCHARGE	3,105 Cu. Ft./Sec.
Q500 ELEVATION	777.96 Ft.
Q500 MAX VELOCITY	8.02 Ft./Sec.
Q500 CONTRACTION SCOUR	10.33 Ft.
Q500 TOTAL SCOUR	10.33 Ft.
Q500 LOW SCOUR ELEVATION	754.12 Ft.

**EARTHWORK**

ITEM	QUANTITY
FILL + 15%	12,405 Cys.
COMMON EXCAVATION	80 Cys.
USABLE WATERWAY EXCAVATION (30%)	95 Cys.
BORROW	12,230 Cys.

**STRUCTURE EXCAVATION**

ITEM	QUANTITY
WATERWAY EXCAVATION	140 Cys.
WET EXCAVATION	0 Cys.
FOUNDATION EXCAVATION (UNCLASSIFIED)	0 Cys.
DRY EXCAVATION	0 Cys.

PRESTRESSED COMPOSITE CONCRETE BULB-TEE BEAM BRIDGE  
1 SPAN: 90'-0"  
41'-3" CLEAR ROADWAY; SKEW: 15°00'00" LT  
CR EAST 1050 SOUTH OVER GRANT CREEK  
WABASH COUNTY

NOTES:  
Above Quantities Do Not Include  
TBD Cys. For Benching. Estimated  
Benching Will Not Be Paid For Directly.  
Cost of Benching Shall Be Included In  
Cost of Common Excavation.

RECOMMENDED FOR APPROVAL: \_\_\_\_\_  
DESIGN ENGINEER \_\_\_\_\_ DATE \_\_\_\_\_

DESIGNED: Q. O'BRIEN DRAWN: D. PIERCEFIELD

CHECKED: B. BUTZ CHECKED: B. BUTZ

INDIANA  
DEPARTMENT OF TRANSPORTATION

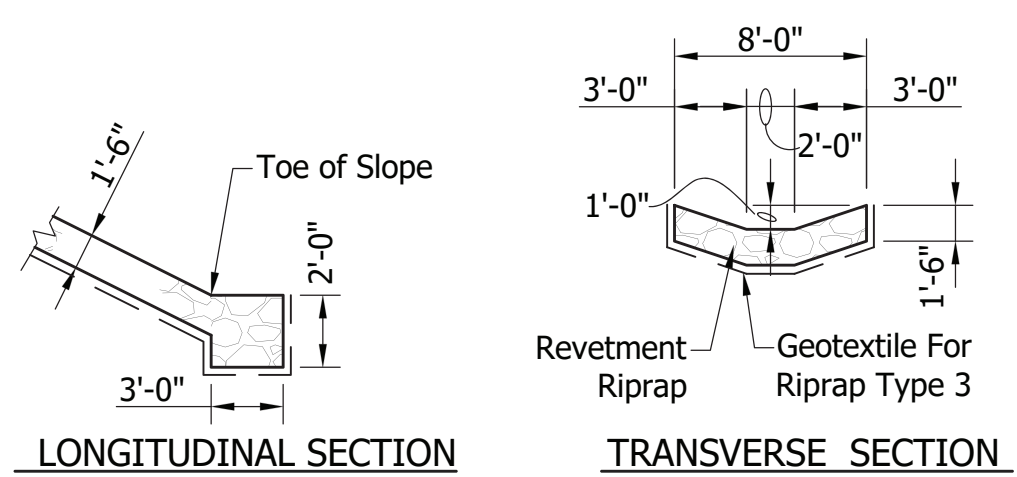
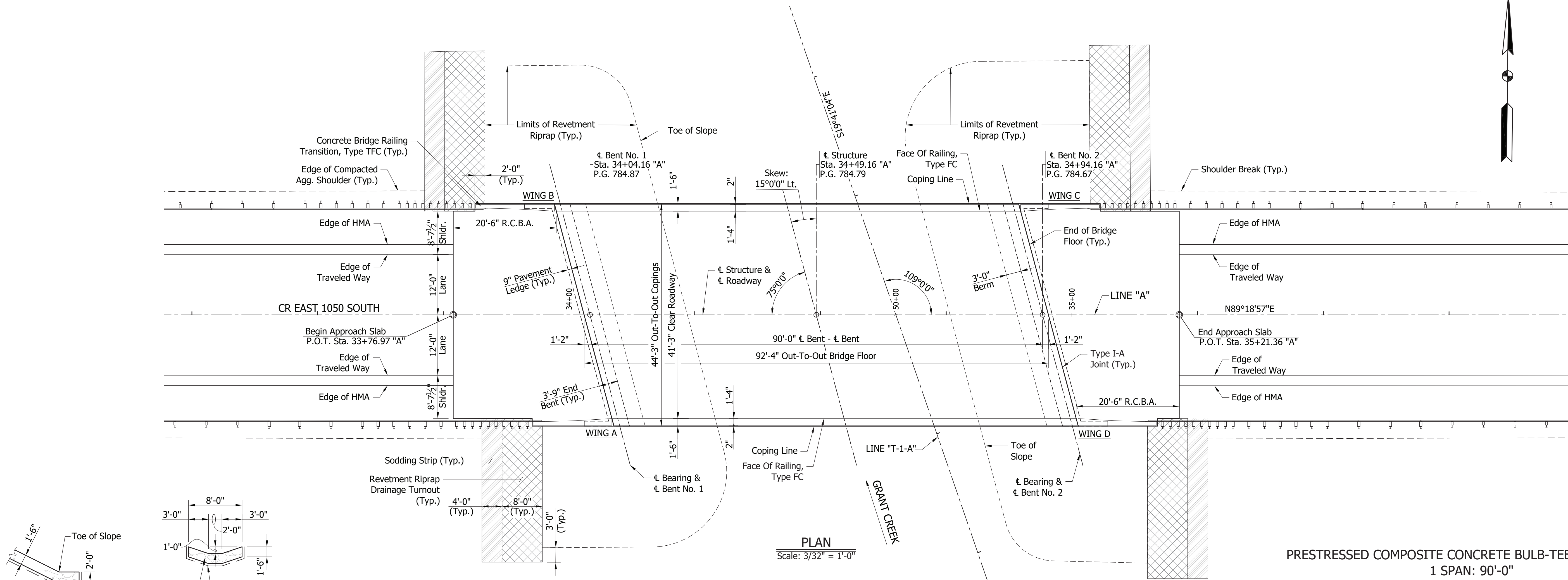
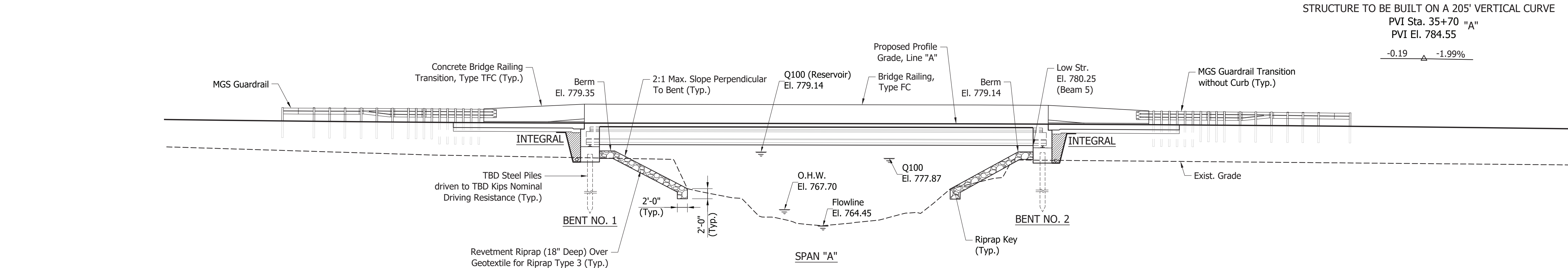
LAYOUT

HORIZONTAL SCALE 1" = 20'-0"	BRIDGE FILE 85-00143
VERTICAL SCALE 1" = 10'-0"	DESIGNATION 2003065
SURVEY BOOK ELECTRONIC	SHEET 18 OF 28
CONTRACT B-43610	PROJECT 2003065

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BFS NO.



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SECTION THROUGH RIPRAP  
DRAINAGE TURNOUT  
Scale: Not to Scale

NOTES:  
See Sheet 3 For Approach Roadway  
Lane and Shoulder Widths.  
See Sheet 20 For Typical Section

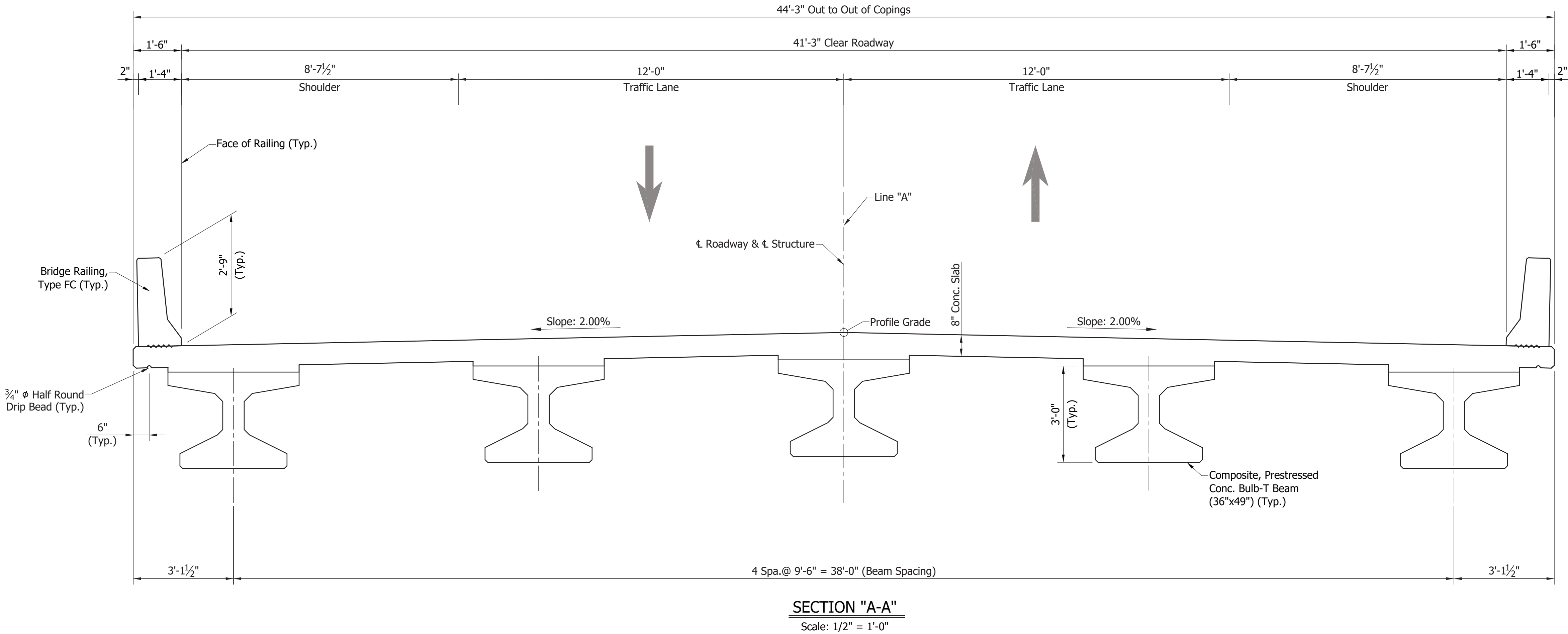
RECOMMENDED FOR APPROVAL:	DESIGN ENGINEER	DATE
DESIGNED:	Q. O'BRIEN	DRAWN: D. PIERCEFIELD
CHECKED:	B. BUTZ	CHECKED: B. BUTZ

INDIANA  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN - PLAN & ELEVATION

HORIZONTAL SCALE AS NOTED	BRIDGE FILE 85-00143
VERTICAL SCALE N/A	DESIGNATION 2003065
SURVEY BOOK ELECTRONIC	SHEET 19 OF 28
CONTRACT B-43610	PROJECT 2003065

BFS NO. 6778



GENERAL NOTES

- Epoxy coated reinforcing bars shall be required in various portions of the structure as shown.
- Reinforcing bars covering shall be 2 1/2" in top of approach slabs.
- Reinforcing bars covering shall be 2 1/2" in top and 1" in bottom of floor slabs and 2" in all other areas unless noted.
- Reinforcing bars shall be A.S.T.M. A615, Grade 60.
- Concrete shall be Class C in end bents and floor slab.
- Concrete shall be Class A in all portions of the project not noted above.
- Chamfer exposed corners of concrete 1" unless noted.
- As an alternative, permanent metal deck forms may be utilized.

DESIGN DATA

- LIVE LOAD:**
- Designed for HL-93 loading, in accordance with the AASHTO LRFD Bridge Design Specifications, 9th Edition, 2020 and its subsequent revisions.
- DEAD LOAD:**
- Actual weight plus 35 psf (composite) for future wearing surface and 15 psf for permanent metal deck forms.
- FLOOR SLAB:**
- Designed with a structural depth of 7 1/2" plus 1/2" sacrificial wearing surface.

SEAT ELEVATIONS

- All bridge seat elevations were calculated using design camber of beams, dead load deflection of slab and, where applicable, an allowance for Profile Grade Vertical curve and beam notches so that the top of beam will be 3/4" minimum below the bottom of slab at the center of span unless otherwise noted on the floor details.
- Fillet depth to vary along length of beam to compensate for residual camber of beams, beam notches and Profile Grade Vertical Curve. Actual cambers which are greater or less than design cambers will be accounted for by reducing or increasing the fillets. The beams shall not extend into the slab more than 1"

DESIGN STRESSES

- MATERIAL DESIGN STRENGTHS:**
- Class "C" Concrete F'c = 4,000 p.s.i.  
Class "A" Concrete F'c = 3,500 p.s.i.  
Reinforcing Steel (Grade 60) Fy = 60,000 p.s.i.
- SEISMIC DESIGN DATA:**
- Seismic Performance Zone TBD  
Acceleration Coefficient TBD  
Seismic Soil Profile Type TBD
- WIND LOAD:**
- Designed for 70 mph horizontal wind load in accordance with LRFD 3.8.1.
- CONSTRUCTION LOADING:**
- The exterior girder has been checked for strength, deflection, and overturning using the construction loads shown. Cantilever overhang brackets were assumed for support of the deck overhang past the edge of the exterior girder. Finishing machine was assumed to be supported 6 in. outside the vertical coping form. The top overhang brackets were assumed to be located 6 in. past the edge of the vertical coping form. The bottom overhang brackets were assumed to be braced against the intersection of the girder bottom flange and web.
- DECK FALSEWORK LOADS:**
- Designed for 15 psf for permanent metal stay-in-place deck forms, removable deck forms, and 2 ft. exterior walkway.
- CONSTRUCTION LIVE LOAD:**
- Designed for 20 psf extending 2 ft. past the edge of coping and 75 lb/ft vertical force applied at a distance of 6 in. outside the face of coping over a 30 foot length of the deck centered with the finishing machine.
- FINISHING-MACHINE LOAD:**
- 4500 lb distributed over 10 ft. along the coping.

	RECOMMENDED FOR APPROVAL: _____ DESIGN ENGINEER _____ DATE _____		INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE		BRIDGE FILE		6/7/78
					AS NOTED		85-00143		
			VERTICAL SCALE		DESIGNATION				
			N/A		2003065				
	DESIGNED: Q. O'BRIEN		DRAWN: K. COFFMAN		SURVEY BOOK		SHEET		
					ELECTRONIC		20 OF 28		
	CHECKED: B. BUTZ		CHECKED: B. BUTZ		GENERAL PLAN - TYPICAL SECTION		CONTRACT PROJECT		
						B-43610 2003065		BFS NO.	

# **Appendix C**

## **Early Coordination**



April 10, 2023

Elizabet Biggio  
Butler, Fairman, & Seufert, Inc.  
8450 Westfield Blvd., Suite 300  
Indianapolis, IN 46240  
ebiggio@bfsengr.com

Re: Early Coordination Letter, Des. No.: 2003065, Wabash County Bridge 143 carrying County Road 1050  
South over Grant Creek, Wabash County, Indiana

Dear Interested Agency:

The Wabash County Commissioners and the Federal Highway Administration (FHWA) intend to proceed with a project involving the aforementioned bridge in Wabash County. 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 environmental 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 project is located on County Road 1050 North over Grant Creek, approximately 1.2 miles west of La Fontaine in Wabash County, Indiana. Wabash County Bridge 143 is a c. 1960 three-span concrete channel beam bridge. The bridge is approximately 67.5 feet long with a clear roadway width of 24.6 feet. It carries two 11.5-foot lanes of traffic with 1-foot curbs and is on a 30-degree skew. County Road 1050 North is a two lane Local Road and has a clear roadway width of 18 feet.

The need for the project derives from the condition of the bridge, particularly the substructure, which was given a condition rating of 4 (out of 9) or "poor" in the May 17, 2022 Bridge Inspection Report. The purpose of the project is to provide an improved crossing of Grant Creek.

The proposed project will replace Wabash Co. Bridge 143. The new bridge will be a single span, approximately 92.33 feet long. The out to out coping will be approximately 44.25 feet. The bridge will carry two 12-foot lanes of traffic with 8.63-foot shoulders. Riprap will be installed. In order to construct the bridge one side at a time, use of a causeway and temporary road widening is anticipated. CR 1050 dead-ends to the west of the project area, and Wabash Co. Bridge 143 provides the only access to the properties west of Grant Creek.

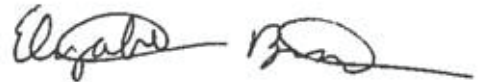
CR 1050 North will retain its straight horizontal alignment. The total project length will be approximately (0.25 mile) long. Approximately 2.1 acres of permanent and 0.6 acre of temporary right-of-way acquisition will be required. The maximum depth of excavation for the installation of the new bridge, channel clearing, and benching will be approximately 6 feet. Approximately 0.9 acre of tree clearing is required. Construction is anticipated to begin in the Fall of 2025.

The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's Information for Planning and Consultation (IPaC) System for Listed Bat Consultation for INDOT Projects". Butler, Fairman, & Seufert, Inc. will perform waters and wetlands determinations and a biological assessment to identify any ecological resources that may be present. Butler, Fairman, & Seufert, Inc. will also investigate the areas of additional right-of-way for archaeological and historic resources for Section 106

compliance. The results of this investigation will be forwarded to the State Historic Preservation Officer (SHPO) for review and concurrence.

Should we not receive your response within thirty (30) calendar days from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. 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 Elizabet Biggio at [ebiggio@bfsengr.com](mailto:ebiggio@bfsengr.com) or (317) 713-4616, or 8450 Westfield Blvd, Suite 300, Indianapolis, IN 46240. Alternatively, you may contact Phil Adams, Wabash County Employee in Responsible Charge (ERC), at 260-563-2091 or [padams@wabashcounty.in.gov](mailto:padams@wabashcounty.in.gov). Thank you in advance for your input.

On behalf of INDOT,  
Butler, Fairman, & Seufert,



Elizabet Biggio  
Architectural Historian II

*Enclosures:*

*USGS La Fontaine Quadrangle Map*  
*Aerial Map*  
*Site Photographs*  
*Photo Key*

*C:*

*Federal Highway Administration, Indiana Division*  
*INDOT Fort Wayne District*  
*Midwest Regional Environmental Coordinator, National Park Service*  
*Indiana Geological and Water Survey*  
*Indiana Department of Natural Resources Division of Fish and Wildlife*  
*Indiana Department of Natural Resources Oil and Gas Division*  
*Chicago Regional Office, US Department of Housing & Urban*  
*Development Natural Resources Conservation Service*  
*U.S. Army Corps of Engineers Louisville District*  
*Wabash County Commissioners*  
*Wabash County Council*  
*Wabash County Surveyor*

## **Organization and Project Information**

**Project ID:** 6778  
**Des. ID:** 2003065  
**Project Title:** Wabash Co. Bridge 143  
**Name of Organization:** Butler, Fairman, & Seufert  
**Requested by:** Elizabet Biggio

## **Environmental Assessment Report**

1. Geological Hazards:
  - Moderate liquefaction potential
  - 1% Annual Chance Flood Hazard
2. Mineral Resources:
  - Bedrock Resource: High Potential
  - Sand and Gravel Resource: High Potential
3. Active or abandoned mineral resources extraction sites:
  - Petroleum Exploration Wells

\*All map layers from Indiana Map ([maps.indiana.edu](https://maps.indiana.edu))

### **DISCLAIMER:**

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This information was furnished by Indiana Geological Survey

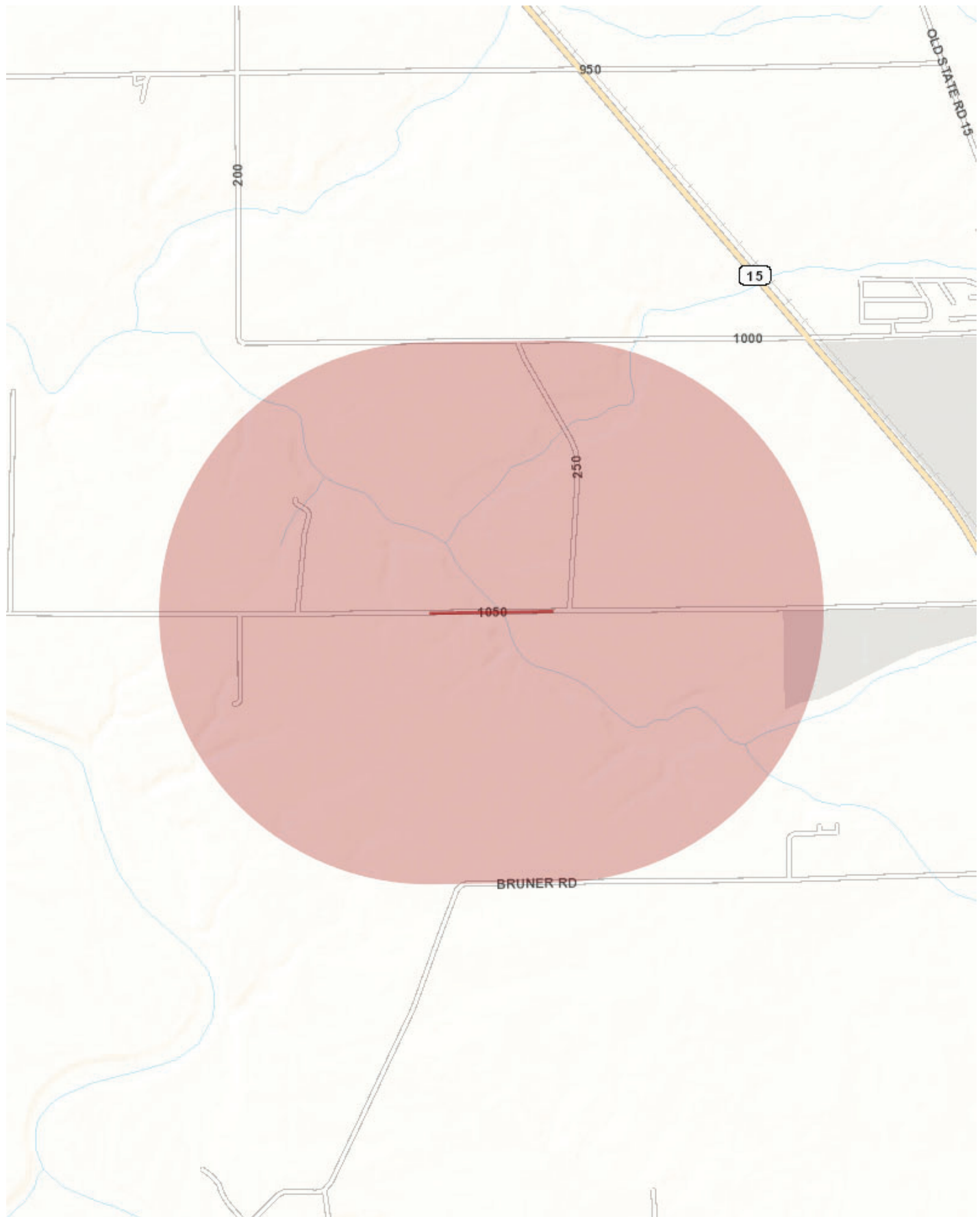
Address: 1001 E. 10th St., Bloomington, IN 47405

Email: [IGSEnvir@indiana.edu](mailto:IGSEnvir@indiana.edu)

Phone: 812 855-7428

Date: April 10, 2023





## Metadata:

- <https://igws.indiana.edu/pdms/>
- [https://portal.igs.indiana.edu/arcgis/rest/services/Seismic\\_Earthquake\\_Liquefaction\\_Potential/MapServer/info/metadata/metadata.xml?format=default&output=html](https://portal.igs.indiana.edu/arcgis/rest/services/Seismic_Earthquake_Liquefaction_Potential/MapServer/info/metadata/metadata.xml?format=default&output=html)
- [https://portal.igs.indiana.edu/arcgis/rest/services/Industrial\\_Minerals\\_SandAndGravel\\_Resources/MapServer/info/metadata/metadata.xml?format=default&output=html](https://portal.igs.indiana.edu/arcgis/rest/services/Industrial_Minerals_SandAndGravel_Resources/MapServer/info/metadata/metadata.xml?format=default&output=html)
- <https://www.arcgis.com/sharing/rest/content/items/53cea647df2b4051b0b86461613541a0/info/metadata/metadata.xml?format=default&output=html>
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## Elizabet Biggio

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**From:** McCloskey, Elizabeth <elizabeth\_mccloskey@fws.gov>  
**Sent:** Monday, April 24, 2023 2:08 PM  
**To:** Elizabet Biggio  
**Subject:** Re: [EXTERNAL] FHWA Project; INDOT Des 2003065; Wabash Co. Bridge 143 Early Coordination Letter

Good afternoon, because the proposed project will have minor impacts on natural resources, and no Federally listed endangered species are known to be present, the U.S. Fish and Wildlife Service will not be providing a comment letter.

Elizabeth McCloskey  
U.S. Fish and Wildlife Service  
Northern Indiana Suboffice  
Ecological Services  
Chesterton, Indiana

**THIS IS NOT A PERMIT**

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

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**DNR#:** ER-25532

**Request Received:** April 10, 2023

**Requestor:**

Elizabeth Biggio  
Butler Fairman and Seufert Inc  
8450 Westfield Boulevard, Suite 300  
Indianapolis, IN 46240

**Project:**

CR 1050 South bridge (#143) replacement over Grant Creek, 1.2 miles west of La Fontaine; Des #2003065

**County/Site Info:** Wabash 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:**

This proposal will require the formal approval of our agency for construction in a floodway pursuant to the Flood Control Act (IC 14-28-1), unless it qualifies for a bridge exemption (see enclosure). Please include a copy of this letter with the permit application if the project does not meet the bridge exemption criteria.

**Natural Heritage Database:**

The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

**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) Wildlife Passage and Crossing Structures:**

Maintaining or improving fish and wildlife passage at existing and proposed crossings is a priority for the Division of Fish and Wildlife (DFW) to reduce wildlife mortality along roadways. The DFW has outlined different requirements for different types of crossing structure impacts. For brand new crossings in areas that currently do not have a crossing, the new structure must accommodate white-tailed deer passage where appropriate. Minimum structure dimensions for white-tailed deer passage are 20 feet of width clearance (overall size of the structure span) and 8 feet of height clearance measured from the OHWM to the low chord elevation and where deer passage is provided. For crossing replacements, the new structure must include wildlife passage appropriate for the type of replacement structure being proposed. If the existing structure is sized to accommodate white-tailed deer passage then it should be included in the design of the new structure. If white-tailed deer passage is not possible with the existing structure, deer passage still needs to be considered in the design and at minimum the bank lines must be restored within structures to allow for smaller wildlife passage

above the ordinary high water mark. 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 stream crossing repairs or modifications, 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 rehabilitated/modified structures is encouraged whenever possible to improve wildlife/vehicle safety.

#### B) Bank Stabilization:

There are numerous bank stabilization techniques available which fall under hard or soft armoring. While hard armoring alone (e.g., riprap, glacial stone) may be required in certain instances, soft armoring and bioengineering techniques should be considered first. Establishing vegetation along the banks is critical for stabilization and erosion control. A variety of methods to accomplish this include: planting plugs, whips, container stock, seeding, and live stakes. In addition to vegetation establishment, floodway construction projects often require some level of bank stabilization. Combining vegetation with any of the following bank stabilization methods can provide additional bank protection while not compromising the benefits to fish, wildlife, and botanical resources: geotextiles (erosion control blankets, turf reinforcement mats; biodegradable preferred), vegetated geogrids or soil lifts, glacial stone, fiber rolls, or riprap. The following is a link to a USDA / NRCS website that outlines many different bioengineering techniques for streambank stabilization: <http://directives.sc.egov.usda.gov/OpenNonWebContent.aspx?content=17553.wba>

#### C) 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 trees that are 10" diameter-at-breast height (dbh) or greater by planting five trees, 1" to 2" in dbh, for each tree which is removed that is 10" dbh or greater. Seeding and stabilizing disturbed areas is required regardless of the impact amount and location. If floodway impacts to forested wetland and non-wetland habitat areas combine to be 0.10 acres or more, mitigation should be done and coordinated with the biologist, as needed.

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 with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.
2. Minimize and contain within the project limits in-channel 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. If possible, avoid removing sediment from May-October to prevent disturbance of turtle nests.
4. Do not cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. Maintain the natural shape of the channel.
6. Leave in place or cut at the waterline any fallen trees, roots, logs, and/or stumps that are anchored or embedded in the bank or bottom of the waterway.
7. 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.
8. Minimize the movement of resuspended bottom sediment from the immediate project area.

9. 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.
10. 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.
11. 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.
12. Do not excavate or place fill in any riparian wetland.

**Contact Staff:**

Our agency appreciates this opportunity to be of service. Please contact me at [mbuffington@dnr.in.gov](mailto:mbuffington@dnr.in.gov) or (317) 233-4666 if we can be of further assistance.

*Matt Buffington*

Matt Buffington  
Environmental Unit Supervisor  
Division of Fish and Wildlife

**Date:** May 10, 2023



May 31, 2023

Elizabeth Biggio  
Butler, Fairman & Seufert  
8450 Westfield Boulevard, Suite 300  
Indianapolis, Indiana 46240

Dear Ms. Biggio:

The proposed Wabash Co. Bridge 143 project in Wabash County, Indiana, (Des. No. 2003065) as referred to in your letter received May 24, 2023, 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](mailto:john.allen@usda.gov).

Sincerely,

**JOHN ALLEN** Digitally signed by JOHN ALLEN  
Date: 2023.05.31 11:51:24 -04'00'

JOHN ALLEN  
State Soil Scientist

Enclosures

**FARMLAND CONVERSION IMPACT RATING**

<b>PART I</b> (To be completed by Federal Agency)		Date Of Land Evaluation Request				
Name of Project <b>DES2003065 Wabash Co Bridge 143</b>		Federal Agency Involved				
Proposed Land Use		County and State <b>Wabash County, Indiana</b>				
<b>PART II</b> (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form: <b>JRA</b>		
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 <input checked="" type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size <b>292 ac</b>	
Major Crop(s) <b>Corn</b>	Farmable Land In Govt. Jurisdiction Acres: <b>250263</b> % <b>93</b>	Amount of Farmland As Defined in FPPA Acres: <b>215954</b> % <b>80</b>				
Name of Land Evaluation System Used <b>LESA</b>	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS <b>5/31/23</b>				
<b>PART III</b> (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						
<b>PART IV</b> (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland		<b>1.48</b>				
B. Total Acres Statewide Important or Local Important Farmland		<b>0.00</b>				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		<b>&lt;0.001</b>				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		<b>86</b>				
<b>PART V</b> (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		<b>66</b>				
<b>PART VI</b> (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)	<b>15</b>				
2. Perimeter In Non-urban Use	(10)	<b>10</b>				
3. Percent Of Site Being Farmed	(20)	<b>10</b>				
4. Protection Provided By State and Local Government	(20)	<b>0</b>				
5. Distance From Urban Built-up Area	(15)	<b>10</b>				
6. Distance To Urban Support Services	(15)	<b>15</b>				
7. Size Of Present Farm Unit Compared To Average	(10)	<b>10</b>				
8. Creation Of Non-farmable Farmland	(10)	<b>0</b>				
9. Availability Of Farm Support Services	(5)	<b>5</b>				
10. On-Farm Investments	(20)	<b>0</b>				
11. Effects Of Conversion On Farm Support Services	(10)	<b>0</b>				
12. Compatibility With Existing Agricultural Use	(10)	<b>0</b>				
TOTAL SITE ASSESSMENT POINTS	<b>160</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>0</b>	
<b>PART VII</b> (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		<b>100</b>	<b>66</b>	<b>0</b>	<b>0</b>	<b>0</b>
Total Site Assessment (From Part VI above or local site assessment)		<b>160</b>	<b>75</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>TOTAL POINTS (Total of above 2 lines)</b>		<b>260</b>	<b>141</b>	<b>0</b>	<b>0</b>	<b>0</b>
Site Selected: <b>A</b>	Date Of Selection <b>June 1, 2023</b>	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				
Reason For Selection: <b>No significant impacts to prime farmland</b>						
Name of Federal agency representative completing this form: <b>Elizabet Biggio</b>					Date: <b>June 1, 2023</b>	

(See Instructions on reverse side)

Form AD-1006 (03-02)



## 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:

April 27, 2023

Project Code: 2023-0064640

Project Name: Wabash Co. Bridge No. 143 carrying CR 1050 South over Grant Creek, Wabash Co, IN; Des 2003065

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 ECOS-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 ECOS-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](http://www.fws.gov/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:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.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/birds/policies-and-regulations.php>.

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/birds/bird-enthusiasts/threats-to-birds.php>.

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/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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
- 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: 2023-0064640

Project Name: Wabash Co. Bridge No. 143 carrying CR 1050 South over Grant Creek, Wabash Co, IN; Des 2003065

Project Type: Bridge - Replacement

Project Description: Wabash County proposes the replacement of Wabash County Bridge No. 143 carrying CR 1050 South over Grant Creek on the existing alignment. The existing bridge is a three-span concrete channel structure, approximately 67.5 feet long with a clear roadway width of 24.6 feet. The new bridge will be a single span, approximately 92.33 feet long. The out to out coping will be approximately 44.25 feet. The bridge will carry two 12-foot lanes of traffic with 8.63-foot shoulders. Bridge railing approximately 2.75 feet high will be mounted on both sides of the bridge. Riprap will be installed. In order to construct the bridge one side at a time, use of a causeway and temporary road widening is anticipated. CR 1050 dead-ends to the west of the project area, and Wabash Co. Bridge 143 provides the only access to the properties west of Grant Creek. Land use in the area is forested, residential, and agricultural.

The total project length is approximately 0.25 mile. Approximately 2.1 acres of permanent and 0.6 acre of temporary right-of-way acquisition will be required. The maximum depth of excavation for the installation of the new bridge, channel clearing, and benching will be approximately 6 feet. Construction is anticipated to begin in the Fall of 2025.

Suitable summer bat habitat is located adjacent to the project area. Wabash County Bridge No. 143 was inspected on April 19, 2023, and no bats or signs thereof were present. Approximately 0.9 acre of tree clearing is expected. The majority of these street trees are sugar maple (*Acer saccharum*), Hackberry (*Celtis occidentalis*), or black walnut (*Juglans nigra*). A review of the USFWS database on May 24, 2022 did not indicate the presence of endangered bat species in or within 0.5 mile of the project area.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.6740264,-85.74382981690046,14z>



Counties: Wabash County, Indiana

## ENDANGERED SPECIES ACT SPECIES

There is a total of 5 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<sup>1</sup>, 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.

- 
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 <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered
Tricolored Bat <i>Perimyotis subflavus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/10515">https://ecos.fws.gov/ecp/species/10515</a>	Proposed Endangered

## BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i> 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: <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	Experimental Population, Non- Essential

## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## 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.



## 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:

June 16, 2023

Project code: 2023-0064640

Project Name: Wabash Co. Bridge 143; Bridge Project, Wabash Co, IN; Des 2003065

Subject: Concurrence verification letter for the 'Wabash Co. Bridge 143; Bridge Project, Wabash Co, IN; Des 2003065' 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 June 16, 2023 to verify that the **Wabash Co. Bridge 143; Bridge Project, Wabash Co, IN; Des 2003065** (Proposed Action) 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 (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, and may affect, but 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 ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances,

Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

**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 any 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 contact this Service Office.

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

- Monarch Butterfly *Danaus plexippus* Candidate
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- 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**

Wabash Co. Bridge 143; Bridge Project, Wabash Co, IN; Des 2003065

### **DESCRIPTION**

Wabash County proposes the replacement of Wabash County Bridge No. 143 carrying CR 1050 South over Grant Creek on the existing alignment. The existing bridge is a three-span concrete channel structure, approximately 67.5 feet long with a clear roadway width of 24.6 feet. The new bridge will be a single span, approximately 92.33 feet long. The out to out coping will be approximately 44.25 feet. The bridge will carry two 12-foot lanes of traffic with 8.63-foot shoulders. Bridge railing approximately 2.75 feet high will be mounted on both sides of the bridge. Riprap will be installed. In order to construct the bridge one side at a time, use of a causeway and temporary road widening is anticipated. CR 1050 dead-ends to the west of the project area, and Wabash Co. Bridge 143 provides the only access to the properties west of Grant Creek. Land use in the area is forested, residential, and agricultural.

The total project length is approximately 0.19 mile. Approximately 2.1 acres of permanent and 0.9 acre of temporary right-of-way acquisition will be required. The maximum depth of excavation for the installation of the new bridge, channel clearing, and benching will be approximately 6 feet. Construction is anticipated to begin in the Fall of 2025. No permeant lighting will be installed. Temporary lighting may be utilized during construction.

Suitable summer bat habitat is located within the project area. Wabash County Bridge No. 143 was inspected on April 19, 2023, and no bats or signs thereof were present. Approximately 0.9 acre of tree clearing is expected from within 100 feet of the existing road during the inactive bat season. The majority of these street trees are sugar maple (*Acer saccharum*), Hackberry (*Celtis occidentalis*), or black walnut (*Juglans nigra*). A review of the USFWS database on May 24, 2022 did not indicate the presence of endangered bat species in or within 0.5 mile of the project area.



## 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<sup>[1]</sup>?

[1] See [Indiana bat species profile](#)

**Automatically answered**

Yes

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

[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<sup>[1]</sup> 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<sup>[1]</sup>?

[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<sup>[1]</sup>?

[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<sup>[1]</sup> summer habitat for Indiana Bat or NLEB **within** the project action area<sup>[2]</sup>? (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<sup>[1]</sup> 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<sup>[1][2]</sup> been conducted<sup>[3][4]</sup> **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**<sup>[1][2]</sup>?

[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<sup>[1]</sup>?

[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**<sup>[1][2]</sup>?

[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<sup>[1]</sup> 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<sup>[1]</sup> been conducted **within** the last 24 months<sup>[2]</sup> 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**

- *Bridge Culvert Bat Assessment Form April 2020 - fillable.pdf* <https://ipac.ecosphere.fws.gov/project/LW5OUEQERZDR3BNPZFCJDUWAJM/projectDocuments/125665343>

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

[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?

Yes

31. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?

Yes

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

No

33. 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

34. 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

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

No

36. 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*

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 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.*

38. 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.*

39. 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*

40. **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*

41. **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<sup>[1]</sup> 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

42. **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

43. **Tree Removal AMM 4**

Can the project avoid cutting down/removal of *all* (1) **documented**<sup>[1]</sup> Indiana bat or NLEB roosts<sup>[2]</sup> (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

44. **Lighting AMM 1**

Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

Yes

## PROJECT QUESTIONNAIRE

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

N/A

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

N/A



3. How many acres<sup>[1]</sup> 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.

0.9

4. Please describe the proposed bridge work:

*Wabash Co. Bridge 143 will be replaced on the same alignment.*

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

*Fall 2025*

6. Please enter the date of the bridge assessment:

*April 19, 2023*

## AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

### 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.

### TREE REMOVAL AMM 1

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

### LIGHTING AMM 1

Direct temporary lighting away from suitable habitat during the active season.

### 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.

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

This key was last updated in IPaC on April 03, 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 [February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion 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**

Agency: Indiana Department of Transportation

Name: Arianna Gill

Address: 5333 Hattfield Road

City: Fort Wayne

State: IN




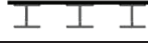





Zip: 46808

Email: [agill@indot.in.gov](mailto:agill@indot.in.gov)

Phone: 2609698262

## **LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Federal Highway Administration

Date & Time of Assessment <b>4/19/23 10:15am</b>		DOT Project Number <b>2003065</b>		Route/Facility Carried <b>CR 1050 S</b>		County <b>Wabash</b>	
Federal Structure ID <b>85-00465</b>		Structure Coordinates (latitude and longitude) <b>40.674; -85.74429</b>		Structure Height (approximate)		Structure Length <b>36 feet</b>	
<b>Structure Type (check one)</b>				<b>Structure Material (check all that apply)</b>			
<b>Bridge Construction Style</b>				<b>Deck Material</b>		<b>Beam Material</b>	
<input type="radio"/> Cast-in-place 		<input type="radio"/> Pre-stressed Girder 		<input type="checkbox"/> Metal		<input type="checkbox"/> None	
<input type="radio"/> Flat Slab/Box 		<input type="radio"/> Steel I-beam 		<input checked="" type="checkbox"/> Concrete		<input checked="" type="checkbox"/> Concrete	
<input type="radio"/> Truss 		<input type="radio"/> Covered 		<input type="checkbox"/> Timber		<input type="checkbox"/> Steel	
<input type="radio"/> Parallel Box Beam 		<input checked="" type="radio"/> Other: concrete channel beams		<input type="checkbox"/> Open grid		<input type="checkbox"/> Timber	
				<input type="checkbox"/> Other:		<input type="checkbox"/> Other:	
<b>Culvert Type</b>				<b>Culvert Material</b>		<b>Creosote Evidence</b>	
<input type="radio"/> Box		<input type="radio"/> Other Structure		<input type="checkbox"/> Metal		<input type="radio"/> Yes <input checked="" type="radio"/> No	
<input type="radio"/> Pipe/Round				<input type="checkbox"/> Concrete		<input type="radio"/> Unknown	
<input type="radio"/> Other:				<input type="checkbox"/> Plastic		<b>Notes:</b>	
				<input type="checkbox"/> Stone/Masonry			
				<input type="checkbox"/> Other:			
<b>Crossings Traversed (check all that apply)</b>				<b>Surrounding Habitat (check all that apply)</b>			
<input type="checkbox"/> Bare ground		<input type="checkbox"/> Open vegetation		<input checked="" type="checkbox"/> Agricultural		<input type="checkbox"/> Grassland	
<input type="checkbox"/> Rip-rap		<input type="checkbox"/> Closed vegetation		<input type="checkbox"/> Commercial		<input type="checkbox"/> Ranching	
<input checked="" type="checkbox"/> Flowing water		<input type="checkbox"/> Railroad		<input type="checkbox"/> Residential-urban		<input type="checkbox"/> Riparian/wetland	
<input type="checkbox"/> Standing water		<input type="checkbox"/> Road/trail - Type:		<input type="checkbox"/> Residential-rural		<input type="checkbox"/> Mixed use	
<input type="checkbox"/> Seasonal water		<input type="checkbox"/> Other:		<input checked="" type="checkbox"/> Woodland/forested		<input type="checkbox"/> Other:	
<b>Areas Assessed (check all that apply)</b>							
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.							
<b>Area (check if assessed)</b>		<b>Assessment Notes</b>		<b>Evidence of Bats (include photos if present)</b>			
<input type="checkbox"/> All crevices and cracks: <b>Bridges/culverts:</b> rough surfaces or imperfections in concrete <b>Other structures:</b> soffits, rafters, attic areas		<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #      dead #		<input type="checkbox"/> Audible      Species	
<input checked="" type="checkbox"/> Concrete surfaces (open roosting on concrete)				<input type="checkbox"/> Guano		<input type="checkbox"/> Odor	
				<input type="checkbox"/> Staining		<input type="checkbox"/> Photos	
<input checked="" type="checkbox"/> Spaces between concrete end walls and the bridge deck		<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #      dead #		<input type="checkbox"/> Audible      Species	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Odor	
				<input type="checkbox"/> Staining		<input type="checkbox"/> Photos	
<input type="checkbox"/> Crack between concrete railings on top of the bridge deck <div style="text-align: center;">Gap  Railing</div>		<input checked="" type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #      dead #		<input type="checkbox"/> Audible      Species	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Odor	
				<input type="checkbox"/> Staining		<input type="checkbox"/> Photos	
<input checked="" type="checkbox"/> Vertical surfaces on concrete I-beams		<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #      dead #		<input type="checkbox"/> Audible      Species	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Odor	
				<input type="checkbox"/> Staining		<input type="checkbox"/> Photos	
<input checked="" type="checkbox"/> Spaces between walls, ceiling joists		<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #      dead #		<input type="checkbox"/> Audible      Species	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Odor	
				<input type="checkbox"/> Staining		<input type="checkbox"/> Photos	
<input checked="" type="checkbox"/> Weep holes, scupper drains, and inlets/pipes		<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #      dead #		<input type="checkbox"/> Audible      Species	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Odor	
				<input type="checkbox"/> Staining		<input type="checkbox"/> Photos	
<input checked="" type="checkbox"/> All guiderails		<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #      dead #		<input type="checkbox"/> Audible      Species	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Odor	
				<input type="checkbox"/> Staining		<input type="checkbox"/> Photos	
<input checked="" type="checkbox"/> All expansion joints		<input type="checkbox"/> Not present		<input type="checkbox"/> Visual - live #      dead #		<input type="checkbox"/> Audible      Species	
				<input type="checkbox"/> Guano		<input type="checkbox"/> Odor	
				<input type="checkbox"/> Staining		<input type="checkbox"/> Photos	
Name: <b>Neal Bennett</b>				Signature: 			

## **Appendix D**

### **Section 106 of the National Historic Preservation Act (NHPA)**

## Minor Projects PA Project Submittal and Assessment Form

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### 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 1: 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-Cultural Resources Office (INDOT-CRO) staff will be responsible for completion of Part II.*

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**Original Submission Date:** April 1, 2023

**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):**

Elizabet Biggio  
Architectural Historian II  
Butler, Fairman, & Seufert, Inc.  
ebiggio@bfsengr.com

**Project Designation Number:** 2003065

**Route Number:** County Road 1050 South

**Feature crossed (if applicable):** Grant Creek

**City/Township:** Liberty Township

**County:** Wabash County

#### **Project Description:**

The Wabash County Board of Commissioners proposes a project involving Wabash Co. Bridge 143 carrying County Road (CR) 1050 South over Grant Creek in Wabash County, Indiana (NBI #8500465). The project is within Liberty Township on the USGS La Fontaine Quadrangle, in Section 28, Township 26 North, Range 7 East.

Wabash County Bridge 143 is a c. 1960 three-span concrete channel beam bridge. The bridge is approximately 67.5 feet long with a clear roadway width of 24.6 feet. It carries two 11.5-foot lanes of traffic with 1-foot shoulders and is on a 30-degree skew. Bridge 134 was determined non-historic in the Indiana Historic Bridge Inventory. CR 1050 South is a two-lane, east-west rural local road. The clear roadway width is 18 feet. The detour length is 3 miles. Land use in the area is forested, agricultural, and residential.

The need for the project derives from the condition of the bridge, particularly the substructure, which was given a condition rating of 4 (out of 9) or “poor” in the May 17, 2022 Bridge Inspection Report. The purpose of the project is to provide an improved crossing of Grant Creek.

The proposed project will replace Wabash Co. Bridge 143. The new bridge will be a single span, approximately 92.33 feet long. The out to out coping will be approximately 44.25 feet. The bridge will carry two 12-foot lanes of traffic with 8.63-foot shoulders. Riprap will be installed. In order to construct the bridge one side at a time, use of a causeway and temporary road widening is anticipated. CR 1050 dead-ends to the west of the project area, and Wabash Co. Bridge 143 provides the only access to the properties west of Grant Creek.



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CR 1050 North will retain its straight horizontal alignment. The total project length will be approximately (0.25 mile) long. Approximately 2.1 acres of permanent and 0.6 acre of temporary right-of-way acquisition will be required. The maximum depth of excavation for the installation of the new bridge, channel clearing, and benching will be approximately 6 feet. Approximately 0.9 acre of tree clearing will be required. Construction is anticipated to begin in the Fall of 2025.

**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:**

Grant Creek  
NBI No. 8500465  
Structure No. 85-00143  
Concrete Beam

**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 #** 1044

**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:**

Approximately 1.16 acres of permanent and 0.10 acre of temporary right-of-way acquisition will be required. Acquisition is expected on all sides of the bridge in order to accommodate the new structure and for construction access, largely for the causeway.

**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 includes undisturbed soils and requires an archaeological reconnaissance.*

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- ☒ **Project takes place in undisturbed soils and the archaeology report is included in submission or will be forthcoming\***

*\* 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) (highlight applicable conditions in yellow)\*:**

B-12. Replacement, widening, or raising the elevation of the superstructure on existing bridges, and bridge replacement projects (when both the superstructure and substructure are removed), under the following conditions [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)**

The conditions listed below must be met (BOTH Condition i and Condition ii must be satisfied)

- i. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; AND
- ii. With regard to the subject bridge, at least one of the conditions listed below is satisfied (AT LEAST one of the conditions a, b or c, must be fulfilled):
  - a. The latest Historic Bridge Inventory identified the bridge as non-historic (see <http://www.in.gov/indot/2531.htm>);
  - b. 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;
  - c. 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.

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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

*Amendments will be shown in red font.*

#### Information reviewed (please check all that apply):

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

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

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

Bridge inspection information/BIAS ☒ Historic Bridge Inventory Database ☒

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

#### Other (please specify):

Connolly, Jocelyn

2023 Phase Ia Archaeological Reconnaissance Survey for the Proposed CR E 1050 S over Grant Creek Bridge #143 Project, Wabash County, Indiana (INDOT Des. No. 2003065). 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

With regard to above-ground resources, an INDOT Cultural Resources Office (CRO) architectural historian, who meets the Secretary of the Interior's Professional Qualification Standards per 36 CFR Part 61, performed a desktop review. An area of potential effects (APE) of 0.25 mile was examined. First, the historian checked the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Wabash County. No listed properties are located within the APE.

The Wabash County data for the Indiana Historic Sites and Structures Inventory (IHSSI) was reviewed through the Indiana State Historic Architectural and Archaeological Research Database (SHAARD), and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). No IHSSI properties are recorded within the APE.

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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.

The eastern half of the APE, located on the north and south sides of CR 1050 S east of Grant Creek, is composed of wooded areas and agricultural fields. The western half of the APE, located on the north and south sides of CR 1050 S west of Grant Creek, contains six residential properties. Property record cards, which include photographs, found online for Wabash County were examined. The first property west of the bridge is 2407 E 1050 S, which contains a 1 ½-story house built in 1988 and outbuildings from the 2010s. The next house property is 2373 E 1050 S, which contains an early 20<sup>th</sup> century wood-frame house with modern outbuildings. The house has a hipped roof with a shed-roof front dormer. It also has a modern porch, vinyl siding and windows, and a large garage addition. The next house is located at 2326 E 1050 S. It is a 1970 ranch house with a pole barn. It appears to have some replacement doors and windows, and perhaps new siding. The next property is 2318 E 1050 S, which contains a 1988 ranch house and modern outbuildings. The next house is located at 2291 E 1050 S. It is a one-story structure built in 2009 with contemporary outbuildings. The final house within the APE is located at 2258 E 1050 S. It is an early 20<sup>th</sup> century T-plan structure that has been heavily altered. It has vinyl siding and windows and multiple additions that obscure its original massing. Based on their alterations and/or their lack of significance, none of the properties within the APE appear to rise to the level of significance to be considered National Register eligible individually; nor does the potential for a historic district appear to exist. None of the properties warrant an IHSSI rating higher than contributing.

With regard to the bridge itself, Wabash County No. 143 (NBI No. 8500465) is a 3-span reinforced concrete channel beam structure that was built in 1960. It was determined not to be National Register eligible in the Indiana Historic Bridge Inventory.

Based on the available information, as summarized above, no above-ground concerns exist.

### **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 Gray & Pape, Inc. on behalf of Butler, Fairman & Seufert, Inc. (Connolly 2023).

A 3.7-acre survey area was examined through a combination of systematic shovel probing (n=55), soil coring (n=2), and visual inspection of disturbed areas. The area encompassing CR E 1050 S and Wabash County Bridge #143 has been previously disturbed from the construction of the country road, existing bridge, Grant Creek, embankment, a gravel driveway, and buried utilities. The north and south sides of CR E 1050 S within the survey area boundaries were subject to visual inspection and shovel probing in 15 m intervals within untilled agricultural fields with 30 percent visibility and wooded tract areas. Two bucket auger probes were excavated on the northside of CR E 1050 S on a narrow floodplain west of Grant Creek due to the presence of alluvial soils. One of the augers was excavated by extending the floor of one of the shovel probes. All shovel tests and bucket augers were negative. No archaeological sites were documented as a result of the survey and no further investigation is recommended (Connolly 2023).

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

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**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 Division of Natural Resources-Division of Historic Preservation and Archaeology (DNR-DHPA) will be notified immediately.

**INDOT-CRO staff reviewer(s):** Mary Kennedy, Matt Coon, and KayLee Blum

INDOT Approval Date: 6/12/2023

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.*



# INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (R3 / 3-22)

## INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF HISTORIC PRESERVATION AND ARCHAEOLOGY

402 West Washington Street, Room W274

Indianapolis, Indiana 46204-2739

Telephone Number: (317) 232-1646

Fax Number: (317) 232-0693

E-mail: [dhpa@dnr.IN.gov](mailto:dhpa@dnr.IN.gov)

Where applicable, the use of this form is recommended but not required by the Division of Historic Preservation and Archaeology (DHPA).

Name(s) of author(s) Jocelyn Connolly		Date (month, day, year) 6/9/2023
Title of project Phase Ia Archaeological Reconnaissance Survey for the Proposed CR E 1050 S over Grant Creek Bridge #143 Project, Wabash County, Indiana (INDOT Des. No. 2003065)		
This document is being used to report on the results of: <input type="checkbox"/> Records check only <input checked="" type="checkbox"/> Records check and Phase 1a archaeological reconnaissance <input type="checkbox"/> An addendum to a previous archaeological report. For an addendum, provide the following information.		
Name(s) of author(s) of previous report		
Title of previous report		
Date of previous report (month, day, year)	DHPA number	

### PROJECT OVERVIEW

#### Description of project

The proposed project will replace Wabash Co. Bridge 143 (Figure 1). The need for the project derives from the condition of the ca. 1960 bridge, particularly the substructure, which was given a condition rating of 4 (out of 9) or "poor" in the May 17, 2022 Bridge Inspection Report. The bridge is experiencing transverse and longitudinal cracking on the wearing surface, beams, and piers. The existing bridge is also below the flood elevation of the downstream Mississinewa Reservoir, located approximately 3 miles downstream, resulting in overtopping. The purpose of the project is to provide an improved crossing of Grant Creek, with an overall condition of "good", or at least a 7 (out of 9). The new bridge will be a single span, approximately 92.33 feet long. The bridge will carry two 12-foot lanes of traffic with 8.63-foot shoulders. Riprap will be installed. The project area is approximately 0.21 miles long and will require 0.59 acres of temporary ROW, as well as 1.88 acres of permanent ROW. In order to construct the bridge one side at a time, use of a causeway and temporary road widening is anticipated. CR E 1050 S dead-ends to the west of the project area, and Wabash Co. Bridge 143 provides the only access to the properties west of Grant Creek.

INDOT designation number(s) 2003065	Project number 22-89006.001	DHPA number	DHPA plan number
Prepared for: (Company / Institution / Agency) Butler, Fairman & Seufert, Inc.			
Name of contact Elizabet Biggio			
Address (number and street, city, state, and ZIP code) 8450 Westfield Blvd., Suite 300, Indianapolis, IN 46240-8302			
Telephone number (317)713-4615	E-mail address ebiggio@bfsengr.com		
Name of principal investigator Jocelyn Connolly			
Name of company / institution Gray & Pape, Inc.			
Address (number and street, city, state, and ZIP code) 1318 Main St., Ste. 1			
Telephone number (513)287-7700	E-mail address jconnolly@graypape.com		
Signature of principal investigator (Required) 		Date (month, day, year) 6/9/2023	

### PROJECT LOCATION

County Wabash	USGS 7.5' series topographic quadrangle La Fontaine, IN	Civil township Liberty
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### Legal Location

Grid alignment						
1/4	1/4	1/4	1/4	Section	Township	Range



The pre- and industrial history of Wabash County through the 19th and early 20th centuries largely reflects broader statewide trends of shifts from subsistence agriculture to industry.

Records check (*Check all that apply*)

- ☐ The project area does not have the potential to contain archaeological resources. *Provide explanation / justification.*
- ☐ There are previously recorded archaeological resources within the project area, but those resources do not warrant additional archaeological investigation. *Provide explanation / justification.*
- ☒ The project area contains previously recorded archaeological resources that warrant additional investigation and/or the project area has the potential to contain archaeological resources. *Provide explanation / justification.*
- ☒ Based upon the records check results, a reconnaissance has been conducted.
- ☐ A cemetery is located within or adjacent to the project area.

Explanation / justification

A 1/2-mile radius of the survey area was examined for this Literature Review. Historical mapping suggests basic continuity over the past century in this region as an agricultural/residential area (USGS 1953a, 1953b). The earliest available maps of the project area show it as just east of the Mo-Shin-go-ma-sha Reserve No. 22, and not far north of the "Old Indian Village," located above the confluence of Josina/Jocinah Creek and the Mississinewa River (Figure 3) (Andreas 2022[1876]:64, Paul 2022[1875]:50). The records check did not identify any previously recorded archaeological resources within the project area, but, based on previous cultural resource surveys conducted in the general vicinity (Figure 2), and the presence of possible undisturbed soils, the project area has the potential to contain archaeological resources.

Phase 1a archaeological reconnaissance (*Check all that apply*)

- ☐ No Phase 1a reconnaissance was conducted.
- ☒ Phase 1a reconnaissance located no archaeological resources.
- ☐ Previously recorded sites were in the project area.
- ☐ Artifacts and/or features at a previously recorded site(s) within the project area were not discovered. *List the site(s) below.*
- ☐ Phase 1a reconnaissance has identified landforms conducive to buried archaeological deposits. *Describe below.*

List sites.

Describe landforms.

The project area consists of the Grant Creek floodplain on the otherwise flat to rolling till plain.

Number of shovel probes excavated  
55

Number of cores / auger probes  
2 auger probes (1 of which was in the floor of a shovel test pit)

Describe disturbances. Attach photographs documenting disturbances.

Much of the survey area was disturbed (Figure 4). The most significant agent of disturbance was the construction of Bridge 143 over Grant Creek. Field 2 experienced landscaping when the adjacent house and driveways were constructed. Installation of additional infrastructure including roadside ditches and above- and below-ground utility lines, have all been sources of disturbance in the survey areas. The disturbance was revealed by visual inspection, and is documented in the following section (Figures 4-7).

Actual area surveyed (hectares)  
1.5

Actual area surveyed (acres)  
3.7

Explain results of fieldwork.

Field 1 is in corn stubble with 30% visibility and was shovel tested at 15-m intervals (Figures 4 and 5). Field 1 is on the east side of the creek. Soils were eroded and very shallow. A total of 41 shovel tests were excavated in this area, which contained 5–25 cmbs of dark brown (10YR 3/3) silt loam over yellowish brown (10YR 5/6) clay subsoil. No artifacts or sites were identified.

Field 2 is in a wooded tract with a drainage cut on the south side of the road that was surveyed through visual walkover (Figures 4 and 6). The area on the immediate north side of the road has 30% slope and was pedestrian surveyed. The remainder of the wooded area was covered in leaf litter and was shovel tested at 15-m intervals. Soils were eroded and very shallow. Three shovel tests were excavated in this area, which contained 5–15 cmbs of dark brown (10YR 3/3) silt loam over yellowish brown (10YR 5/4) silty clay subsoil. No artifacts or sites were identified.

Field 3 is in a wooded tract located on both sides of the creek and was shovel tested at 15-m intervals (Figures 4 and 7). Two auger tests were excavated on the narrow floodplain west of the creek, one of which was placed in the floor of a shovel test pit (A14). Areas of excessive slope and the drainage were not shovel tested. Soils on the east side of the creek were eroded and very shallow. Eleven shovel tests were excavated in this area, two of which contained subsoil at the surface. The nine remaining shovel tests contained 5–20 cmbs of dark brown (10YR 3/3) silt loam over yellowish brown (10YR 5/6) clay subsoil. The auger found the aforementioned subsoil continued to a depth of 80 cmbs, followed by extremely compact sediments with redoximorphic features. The auger test was terminated at 80–90 cmbs. No artifacts or sites were identified.

## RECOMMENDATIONS

Records check (Check all that apply)

- ☐ No archaeological investigation is recommended before the project is allowed to proceed because the records check has determined that the project area does not have the potential to contain archaeological resources.
- ☐ A Phase 1a archaeological reconnaissance is recommended.
- ☒ Based upon the records check results, a Phase 1a archaeological reconnaissance was recommended and has been conducted.
- ☐ A cemetery development plan may be required under Indiana Code 14-21-1-26.5 because project ground disturbance will be within 100 feet of a cemetery.

Phase 1a archaeological reconnaissance (Check all that apply)

- ☒ It is recommended that the project be allowed to proceed as planned because the Phase 1a archaeological reconnaissance has located no archaeological sites within the project area and/or previously recorded sites that were investigated warrant no additional investigation.
- ☐ It is recommended that Phase 1c archaeological subsurface reconnaissance be conducted before the project is allowed to proceed. The Phase 1a archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits.

Other recommendations / commitments

**Pursuant to IC-14-21-1, if any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.**

REQUIRED ATTACHMENTS

- ☒ Figure showing project location within Indiana
- ☒ USGS topographic map showing the project area (1:24,000 scale)
- ☒ Aerial photograph showing the project area, land use and survey methods
- ☒ Photographs of the project area, including, if applicable, photographs documenting disturbances
- ☒ Project plans (if available)

Other attachments

Project landowners, historical map.

References cited (See short report instructions for required references to be consulted)

Andreas, Alfred Theodore

2022[1876] Map of Wabash County. Page 64 in Illustrated historical atlas of the State of Indiana. Baskin, Forster & Co., Chicago, Illinois. Reproduced by the David Rumsey Collection. <https://www.davidrumsey.com/luna/servlet/s/627t6g>. Accessed December 2022.

Crow, Warder

1934 Indians of Wabash County, Indiana, edited 1959 by Mary C. O'Hair. Wabash County Historical Society, Wabash, Indiana.

Cunningham, Wilbur M.

1948 A Study of the Glacial Kame Culture of Michigan, Ohio, and Indiana. Museum of Anthropology Occasional Contributions 12:31–32. University of Michigan Press, Ann Arbor.

Environmental Systems Research Institute (ESRI)

2018 Aerial Imagery flown May 2, 2018. ESRI, Redlands, California.

Faulkner, Charles H.

1972 The Late Prehistoric Occupation of Northwestern Indiana: A Study of the Upper Mississippian Cultures of the Kankakee Valley. Prehistory Research Series No. 5(1):13–122, Indiana Historical Society, Indianapolis.

Glenn, Elizabeth J.

1977 Ethnohistoric Report on the Battle of Mississinewa. In Ethnohistorical and archaeological descriptive accounts of the War of 1812 Mississinewa Campaign and aftermath: project report, edited by B. K. Swartz, Jr. Ball State University Archaeological Report 14.

Hixson, W. W. & Company

1920 Plat Books of Indiana Counties, Volume 6 (T–W). W. W. Hixson & Company, Rockford, Illinois.

Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology

2022a Guidebook for Indiana Historic Sites and Structures Inventory – Archaeological Sites.

[https://www.in.gov/dnr/historic/files/hp-archaeology\\_guidebook.pdf](https://www.in.gov/dnr/historic/files/hp-archaeology_guidebook.pdf). Accessed December 2022.

# **Appendix E**

## **Red Flag Investigation**

8450 Westfield Blvd, Suite 300  
Indianapolis, IN 46240  
317.713.4615  
bfsengr.com



INDIANAPOLIS | LAFAYETTE | MERRILLVILLE  
FORT WAYNE | PLAINFIELD | SOUTH BEND | LOUISVILLE

Date: December 30, 2022

To: Site Assessment & Management  
Environmental Policy Office - Environmental Services Division (ESD)  
Indiana Department of Transportation  
100 N Senate Avenue, Room 758-ES  
Indianapolis, IN 46204

From: Elizabet Biggio  
Butler, Fairman, & Seufert, Inc.  
8450 Westfield Boulevard, Suite 300  
Indianapolis, IN 46240  
ebiggio@bfsengr.com

Re: RED FLAG INVESTIGATION  
DES 2003065, Local Project  
Wabash Co. Bridge 143  
CR 1050 South over Grant Creek  
Wabash County, Indiana

## PROJECT DESCRIPTION

### Brief Description of Project:

The Wabash County Board of Commissioners proposes a project involving Wabash Co. Bridge 143 carrying County Road (CR) 1050 South over Grant Creek in Wabash County, Indiana (Structure #85-00465). The project is within Liberty Township on the USGS La Fontaine Quadrangle, in Section 28, Township 26 North, Range 7 East.

Wabash County Bridge 143 is a c. 1960 three-span concrete channel beam bridge. The bridge approximately is 67.5 feet long with a clear roadway width of 24.6 feet. The need for the project derives from the condition of the bridge, particularly the substructure, which was given a condition rating of 4 (out of 9) or "poor" in the May 17, 2022 Bridge Inspection Report. The purpose of the project is to provide an improved crossing of Grant Creek.

The proposed project will replace Wabash Co. Bridge 143. The new bridge will be a single span, approximately 92.33 feet long. The out to out coping will be approximately 44.25 feet. The bridge will carry two (2) 12-foot lanes of traffic with 8.63-foot shoulders. Riprap will be installed. The project area is approximately 0.25 mile long. In order to construct the bridge one side at a time, use of a causeway and temporary road widening is anticipated. CR 1050 dead-ends to the west of the project area, and Wabash Co. Bridge 143 provides the only access to the properties west of Grant Creek.

Bridge and/or Culvert Project: Yes ☒ No ☐ Structure #85-00465

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).



Proposed right of way: Temporary ☒ # Acres 0.10 Permanent ☒ # Acres 1.16, Not Applicable ☐  
 Type and proposed depth of excavation: To removal the existing and install a new bridge, channel clearing, and benching to a depth of approximately 6 feet  
 Maintenance of traffic (MOT): Phased construction, keeping one lane of traffic open at all times.  
 Work in waterway: Yes ☒ No ☐ Below ordinary high water mark: Yes ☒ No ☐  
 State Project: ☐ LPA: ☒  
 Any other factors influencing recommendations: The project description is subject to change

### **INFRASTRUCTURE TABLE AND SUMMARY**

<b>Infrastructure</b> 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	<b>N/A</b>	Recreational Facilities	<b>N/A</b>
Airports <sup>1</sup>	<b>N/A</b>	Pipelines	<b>N/A</b>
Cemeteries	<b>N/A</b>	Railroads	<b>N/A</b>
Hospitals	<b>N/A</b>	Trails	<b>N/A</b>
Schools	<b>N/A</b>	Managed Lands	<b>1</b>

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

Explanation:

**Managed Lands:** One (1) managed land is located within the 0.5 mile search radius. Mississinewa Lake is located approximately 0.30 mile northwest of the project area. No impact is expected.

### **WATER RESOURCES TABLE AND SUMMARY**

<b>Water Resources</b> Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	<b>N/A</b>	Canal Routes - Historic	<b>N/A</b>
Karst Springs	<b>N/A</b>	NWI - Wetlands	<b>8</b>
Canal Structures – Historic	<b>N/A</b>	Lakes	<b>3</b>
NPS NRI Listed	<b>N/A</b>	Floodplain - DFIRM	<b>3</b>
NWI-Lines	<b>3</b>	Cave Entrance Density	<b>N/A</b>
IDEM 303d Listed Streams and Lakes (Impaired)	<b>N/A</b>	Sinkhole Areas	<b>N/A</b>
Rivers and Streams	<b>11</b>	Sinking-Stream Basins	<b>N/A</b>

Explanation:

**NWI-Wetlands:** Eight (8) wetlands are located within the 0.5 mile search radius. Two (2) wetlands are located within the project area. A Waters of the U.S. Report is recommended and coordination with the appropriate agency, if applicable, will occur.

**Lakes:** Three (3) lakes are mapped within the 0.5-mile search radius. The nearest lake is approximately 0.33 mile northwest of the project area. No impact is expected.

**Floodplain-DFIRM:** Three (3) floodplain polygons are located within the 0.5 mile search radius. The project is located within one (1) floodplain polygon. Coordination with the appropriate agency occur.

**NWI-Lines:** Three (3) NWI-Line segments are located within the 0.5-mile search radius. One (1) NWI-Line segment is located within the project area along Grant Creek. A Waters of the U.S. Report is recommended and coordination with the appropriate agency, if applicable, will occur.

**Rivers and Streams:** Eleven (11) stream segments are located within the 0.5 mile search radius. Grant Creek is located within the project area. A Waters of the U.S. Report is recommended and coordination with the appropriate agency, if applicable, will occur.

#### **MINING AND MINERAL EXPLORATION TABLE AND SUMMARY**

<b>Mining/Mineral Exploration</b> 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	<b>4</b>	Mineral Resources	<b>N/A</b>
Mines – Surface	<b>N/A</b>	Mines – Underground	<b>N/A</b>

Explanation:

**Petroleum Wells:** Four (4) petroleum wells are located within the 0.5 mile search radius. The nearest petroleum well is located approximately 0.04 mile south of the project area. Coordination with IDNR Oil and Gas Division will occur.

#### **HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY**

<b>Hazardous Material Concerns</b> 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	<b>N/A</b>	Manufactured Gas Plant Sites	<b>N/A</b>
RCRA Generator/ TSD	<b>N/A</b>	Open Dump Waste Sites	<b>N/A</b>
RCRA Corrective Action Sites	<b>N/A</b>	Restricted Waste Sites	<b>N/A</b>
State Cleanup Sites	<b>N/A</b>	Waste Transfer Stations	<b>N/A</b>
Septage Waste Sites	<b>N/A</b>	Tire Waste Sites	<b>N/A</b>
Underground Storage Tank (UST) Sites	<b>N/A</b>	Confined Feeding Operations (CFO)	<b>N/A</b>
Voluntary Remediation Program	<b>N/A</b>	Brownfields	<b>N/A</b>
Construction Demolition Waste	<b>N/A</b>	Institutional Controls	<b>N/A</b>
Solid Waste Landfill	<b>N/A</b>	NPDES Facilities	<b>N/A</b>
Infectious/Medical Waste Sites	<b>N/A</b>	NPDES Pipe Locations	<b>N/A</b>
Leaking Underground Storage (LUST) Sites	<b>N/A</b>	Notice of Contamination Sites	<b>N/A</b>

Explanation: No hazardous materials were identified within the 0.5 mile search radius.

## **ECOLOGICAL INFORMATION SUMMARY**

The Wabash 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\\_wabash.pdf](https://www.in.gov/dnr/nature-preserves/files/np_wabash.pdf). A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services did not indicate the presence of ETR species. Coordination with USFWS and IDNR will occur.

A review of the USFWS Database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in a rural area surrounded by agriculture and forested area. The May 17, 2022 inspection report for Bridge 85-00143 states that no evidence of bats was seen or heard under the bridge. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

## **RECOMMENDATIONS SECTION**

INFRASTRUCTURE: N/A

WATER RESOURCES:

A Waters of the US Report is recommended based on mapped features and coordination with the appropriate agency, if applicable, will occur for the following features:

- Two (2) wetlands are located adjacent to the project area.
- The project area is located within a floodplain (coordination only).
- One (1) stream segment, Grant Creek, flows through the project area.
- One (1) NWI-Line segment is located within the project area.

MINING/MINERAL EXPLORATION: One petroleum well is located approximately 0.04 mile south of the project area. Coordination with IDNR Oil and Gas Division will occur.

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION:

Coordination with IDNR and USFWS 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".

INDOT ESD concurrence:

**Dariane  
Davis**

Digitally signed by  
Dariane Davis  
Date: 2023.01.03  
10:36:42 -05'00'

(Signature)

Prepared by:

Elizabeth Biggio

Butler, Fairman, & Seufert, Inc.

**Graphics:**

SITE LOCATION: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES


















HAZARDOUS MATERIAL CONCERNS: N/A



Red Flag Investigation - Infrastructure  
County Road 1050 South over Grant Creek  
Des. No. 2003065, Wabash Co. Bridge 143 Replacement  
Wabash County, Indiana

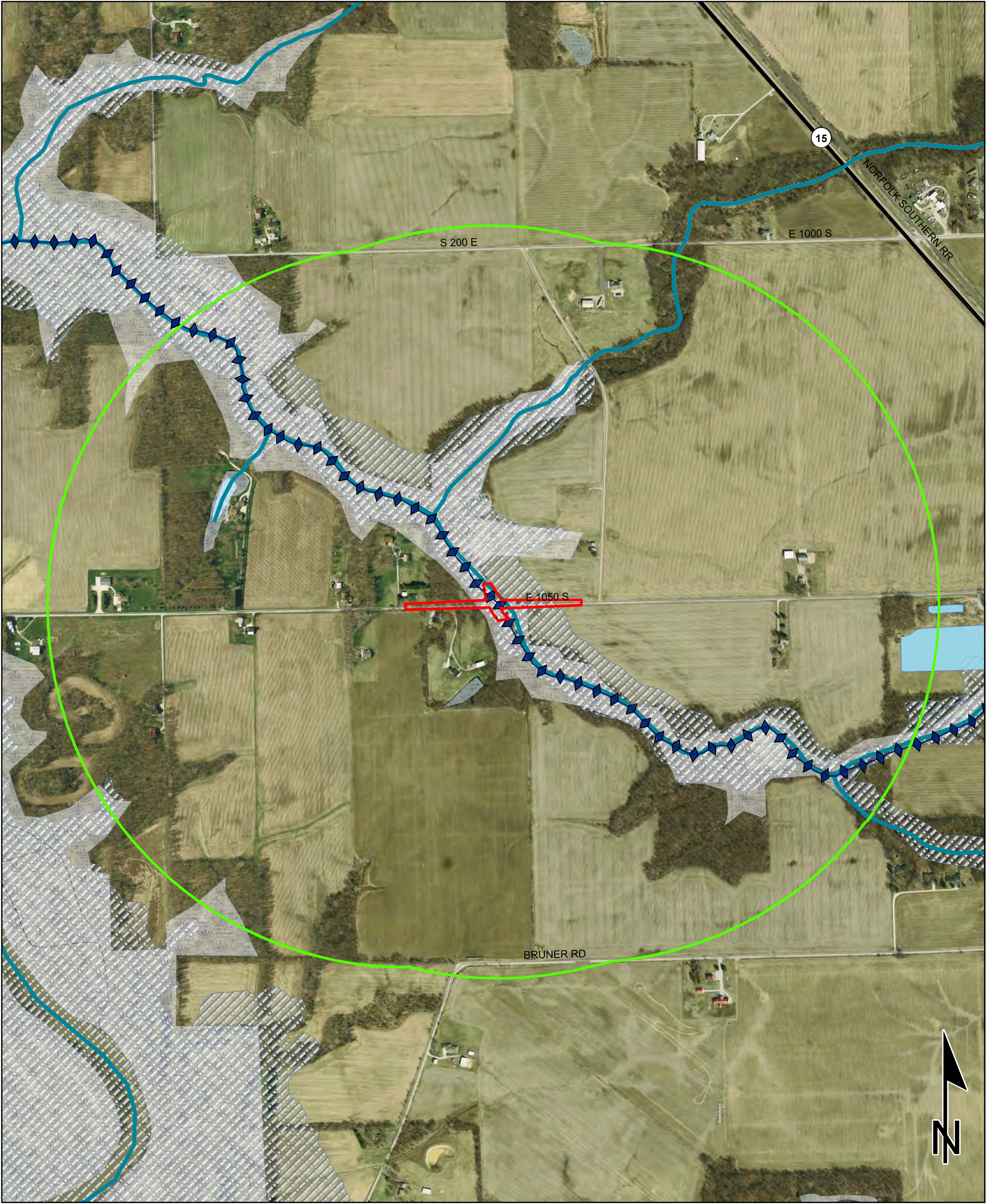


Sources:  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83  
**This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.**

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

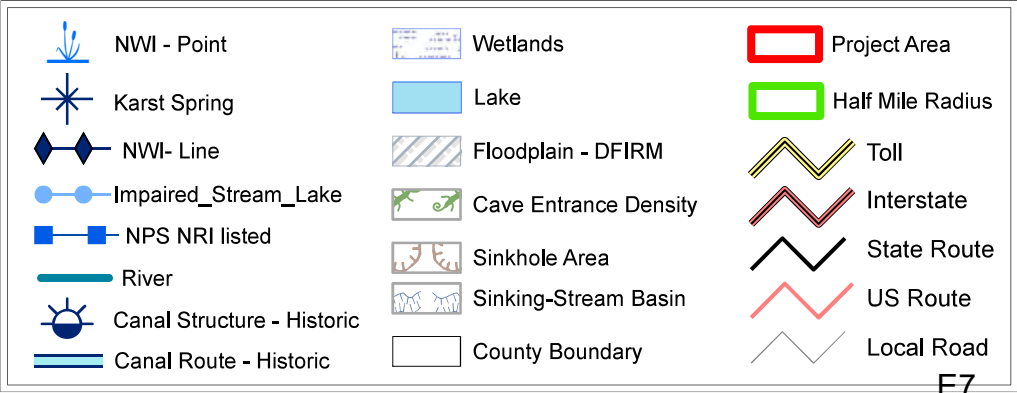


Red Flag Investigation - Water Resources  
County Road 1050 South over Grant Creek  
Des. No. 2003065, Wabash Co. Bridge 143 Replacement  
Wabash County, Indiana



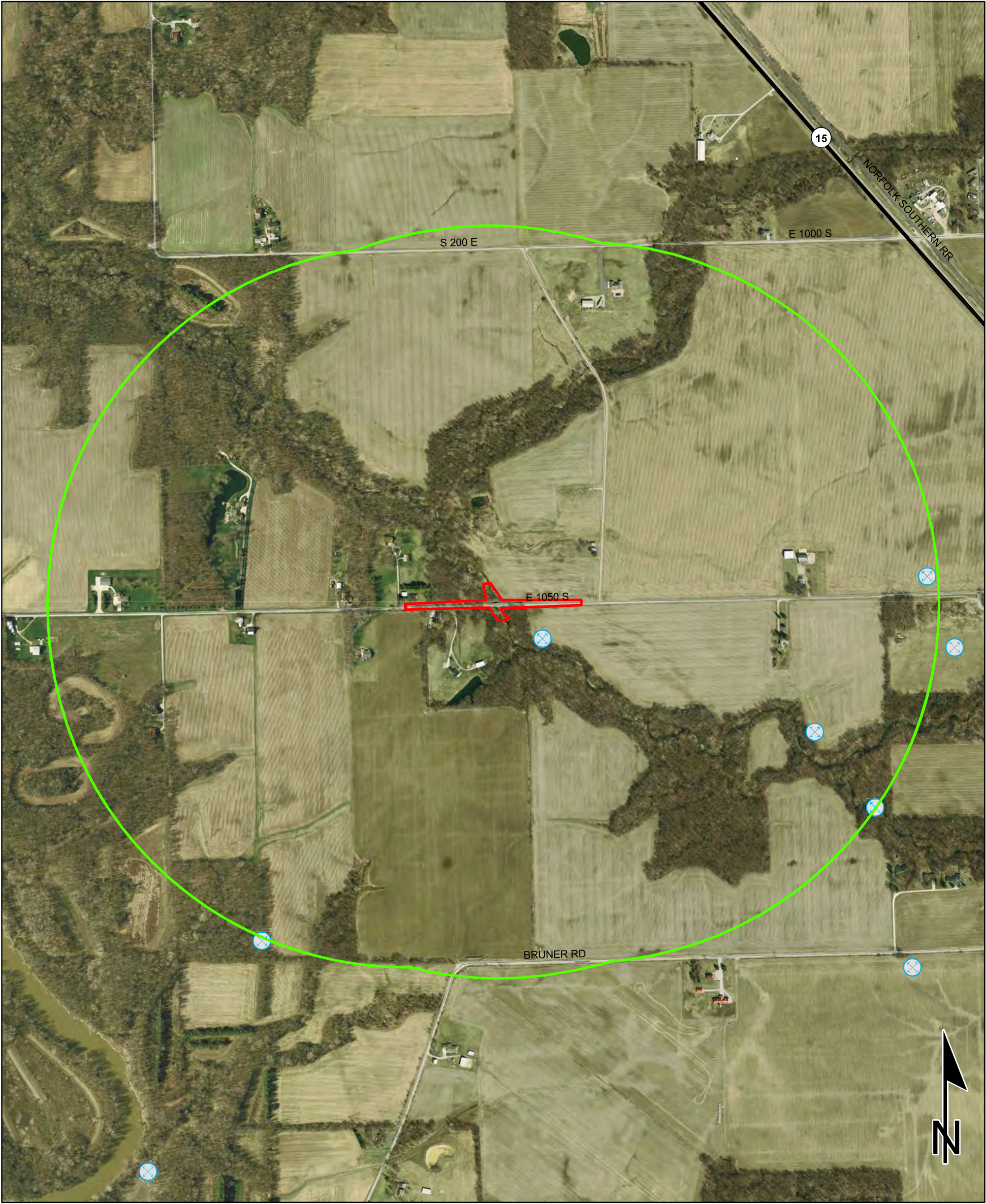
Sources:  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

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



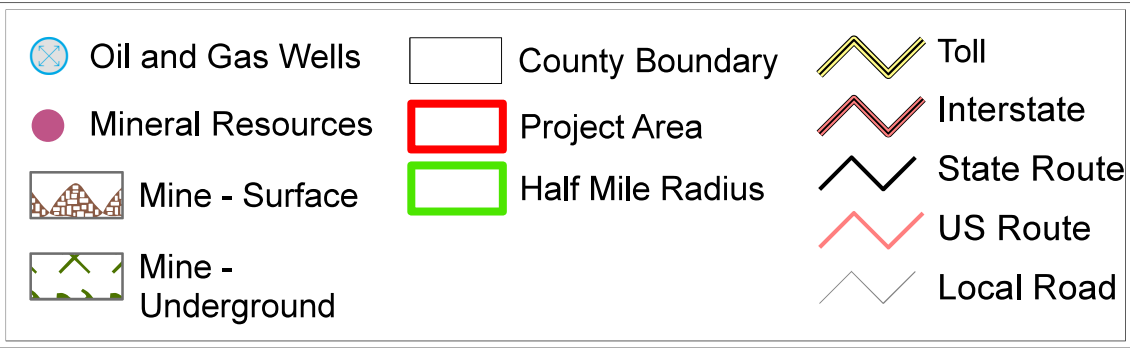


Red Flag Investigation - Mining and Mineral Resources  
County Road 1050 South over Grant Creek  
Des. No. 2003065, Wabash Co. Bridge 143 Replacement  
Wabash County, Indiana



Sources:  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://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.





# **Appendix F**

## **Ecological and Water Resources**

**“WATERS OF THE U.S.” DETERMINATION REPORT**  
**Wabash County Bridge 143 over Grant Creek, Wabash County**  
**Bridge Replacement Project**  
**Des. No. 2003065**

Prepared By: Neal Bennett, PWS #2425  
Butler, Fairman & Seufert, Inc.  
[nbennett@bfsengr.com](mailto:nbennett@bfsengr.com)  
May 1, 2023

**Date(s) of Field Investigation**

April 19, 2023

**Project Location**

Section 28, Township 26 North, Range 7 East on the United States Geological Survey (USGS) LaFontaine Indiana Quadrangle Map, within Wabash County, Indiana

LAT. 40.673994; LONG. -85.744228

**Area of Investigation**

The area investigated is located approximately 1.3 miles west of LaFontaine, Indiana. The study area consisted of agricultural ground, roadside slope, and forested areas along Grant Creek at CR 1050. Approximately 2.75 acres was investigated. The entire site was investigated by walking transects and making visual observations of the landscape looking for any visual evidence of wetland characteristics (Attachment 1). Sampling points, where necessary, were taken in all areas mapped as wetlands on the National Wetland Inventory (NWI), where wetland characteristics were observed, and in any potential problem areas. Any drainage feature that displayed a defined channel and ordinary high-water mark were considered potentially jurisdictional streams. Any features that did not meet these criteria were not considered as streams.

**Desktop Reconnaissance**

**Site(s) Background**

Prior to the field investigation, reference materials were consulted to gain information about the site. These include, the USGS LaFontaine, IN quadrangle map was used to determine contours of the site and locate any water bodies in the area, as well as to provide a legal description of the area. The Natural Resources Conservation Service's (NRCS) Web Soil Survey website<sup>1</sup> was consulted to determine if the project area contained any soils listed in either the *Hydric Soils of the United States* manual or the Indiana State list of hydric soils along with a description of characteristics displayed by the mapped soil types of the area (Attachments 3 – 5). The U.S. Fish and Wildlife Service (USFWS) NWI Map was used to find and classify any previously catalogued wetlands in the project area (Attachment 2). The Indiana Department of Natural Resources' (IDNR) floodplain map was consulted to gain an understanding of historic flood locations and frequency that may impact the study area (Attachment 7). The USGS National Hydrologic Dataset was used to find any mapped waterway features in or near the project area (Attachment 6). All this information provided a background for the hydrologic regime of the area.

<sup>1</sup> <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>



### **National Wetlands Inventory (NWI) Map**

The following is a list of mapped wetlands located either within or near the proposed project limits (Attachment 2).

- Riverine, lower perennial, unconsolidated bottom, permanently flooded (R2UBH) waterway known as Grant Creek
- Lacustrine, littoral, unconsolidated bottom, artificially flooded (L2UBK) waterway overlapping Grant Creek which is the backwater effected area of the Mississinewa Reservoir.

### **Soil Map Data**

According to the NRCS Web Soil Survey website<sup>2</sup> for Wabash County, Indiana (Attachments 3-5), the following table summarizes the soil types found in the investigation area, including characteristics such as Flooding Frequency, Drainage Class, Hydric Soil Category, and Hydric Rating.

Soil Unit Name	Symbol	NRCS Flooding Frequency	NRCS Drainage Class	NRCS Hydric Soil Category	SSURGO Hydric Rating
Genesee loam	Ge	Occasional	Well drained	Partially	7%
Hennepin loam	HeG	None	Well drained	Non-Hydric	0
Miami silt loam	MhB2	None	Moderately well drained	Partially	6%

Table 1: Soil Survey Summary Table

### **USGS National Hydrography Dataset (NHD) Map**

According to the USGS NHD map, there is one stream/river mapped in the study area (Attachment 6). The stream is Grant Creek, which flows northwest through the study area.

### **USGS 12-digit Hydrologic Unit Code (HUC-12)**

051201030603, Grant Creek – Mississinewa River

### **Attached Documentation**

- Maps of the study area (state, quad, aerial, NWI, floodplain, soil, StreamStats, NHD, photo/data point)
- Photographs of the study area
- Wetland Data Sheets
- Preliminary Jurisdictional Determination (PJD) Form

### **Field Reconnaissance**

The study area limits extend from the end of Bridge 143 approximately 200 feet east and west along CR 1050. At the bridge, the study limits were extended north and south for approximately 150 feet, to investigate the entire forested riparian areas along Grant Creek and to evaluate for the presence of any wetlands or streams. The area was investigated by walking transects west to east and north to south within the study limits for the project and looking for any visual evidence of waterway or wetland characteristics. Any wetland boundaries and sampling point locations were recorded in the field using a handheld Global Positioning System (GPS) unit with

<sup>2</sup> <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

submeter accuracy. Ordinary high-water mark (OHWM) and bankfull measurements were taken when present at a water feature and dominant substrate material was identified by conducting a pebble count. If present, roadside ditches were examined for possible jurisdictional status. Any areas that exhibited wetland characteristics (hydrophytic vegetation, hydrology, and hydric soils) were investigated to determine if the area should be classified as wetland. Field data collection was completed based on the methodologies presented in the 1987 *U.S. Army Corps of Engineers Wetland Delineation Manual* ('87 Manual) and the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Midwest Region Version 2.0* (Regional Supplement). Field methods did not deviate from the standard methods found in the '87 Manual or the Regional Supplement.

A field visit to the project area was conducted on April 19, 2023, to investigate for potential features that may classify as “Waters of the U.S.” or “Waters of the State” within the study limits. Based on the daily rainfall data obtained from the Community Collaborative Rain, Hail, and Snow Network<sup>3</sup>, the project location received 0.12 inches of rainfall in the 48 hours preceding the site visit. Jurisdictional wetland and stream determinations were based on the Pre-2015 “Waters of the U.S.” regulatory guidance as outlined in the Clean Water Act following the *Rapanos v. United States* Supreme Court decision (1986).

### **Waterway(s)**

One (1) mapped waterway was observed within the study area. This waterway is known as Grant Creek and is identified as a perennial USGS blue line stream that flows northwest through the project area, and discharges into Mississinewa River approximately 2.5 miles downstream of the study location. Grant Creek is within the backwater affected area of the Mississinewa River, making it flooded occasionally when the reservoir is allowed to fill to capacity. Grant Creek has a drainage area upstream of the study limits of approximately 8.382 square miles (as calculated using the web-tools on the USGS *Indiana StreamStats* website<sup>4</sup>) (Attachment 8). This waterway falls within the larger Grant Creek – Mississinewa River Watershed identified by the USGS HUC-12 051201030603. Grant Creek is classified as a riverine, lower perennial, unconsolidated bottom, permanently flooded (R2UBH) waterway. It is of average poor due to the lack of an intact riparian corridor, moderate sinuosity, and extreme bank erosion. Additionally, the stream channel is entrenched. The substrate is primarily gravel and assorted sizes of cobble. The creek has an approximate average 36.5-foot bankfull width and approximate average 2.24-foot bankfull depth. The OHWM depth is approximately 1.5 feet and width is approximately 18.0 feet. All stream measurements were taken at LAT/LONG 40.673860; -85.744168. During the site visit conducted on April 19, 2023, Grant Creek contained flowing water. Grant Creek is determined to be a “Waters of the U.S.” because it is a blue-line feature (jurisdictional stream) with an OHWM.

An unmapped stream feature was observed in the southwest quadrant of Bridge 143. It begins approximately 700 feet southwest of the bridge. It begins in an agriculture field, flows northeast for approximately 400 feet, passes beneath a driveway, then continues approximately 120 before meeting with CR 1050. It then flows east along the southside of CR 1050 for approximately 180 feet before discharging into Grant Creek. This unmapped stream feature is identified as Unnamed Tributary (UNT) to Grant Creek for the purposes of this report. UNT to Grant Creek as a 2.5-foot OHWM width and a 5-inch OHWM depth. The substrate was primarily mud with gravel overlain.

<sup>3</sup> [CoCoRaHS Maps](#)

<sup>4</sup> <https://streamstats.usgs.gov/ss/>

Stream Name	Photo Numbers	Latitude/ Longitude (UTM NAD 83)	OHHM width/depth	USGS ID	Presence of Riffles/Pools	Channel Substrate	Functional Quality	Likely Water of the U.S.	Linear Ft. in Study Area
Grant Creek	2 - 4	40.673860/ -85.744168	18.0 ft. / 1.5 ft.	Perennial (solid blue line)	Yes	Gravel/ Cobble	Poor	Yes	300 ft.
UNT to Grant Creek	9 - 10	40.673922/ -85.744384	2.5 ft. / 0.4 ft.	Not Mapped	No	Mud/Gravel	Poor	Yes	300 ft.

Table 2: Stream Survey Summary Table

### **Wildlife Evidence and Concerns**

Raccoon and deer tracks were observed beneath Bridge 143 during the site investigation. Therefore, there is adequate opening for wildlife to pass beneath the bridge. Some stone revetment is present around the abutments. One abandoned bird nest was observed. No other evidence of birds or bats was observed using the bridge (Attachment 12, photo #5).

### **Wetlands**

One area was identified as potential wetlands during the field investigation. A sampling point was taken in this area and was evaluated for all three criteria to be considered a wetland as described in the '87 *Manual* and as currently applied in the *Midwest Regional Supplement* manual.

Sampling Point 1 was taken in a low contour area that indicated the potential for frequent or prolonged hydrology within the floodplain of Grant Creek. The area is mapped as Genesee loam, which has a low hydric inclusion rating of 7%. The soil profile matched the description for Genesee loam and did not contain any hydric soil field indicators. The area did not contain an overstory or understory. The dominant species was *Phalaris arundinacea*. This community is hydrophytic dominant. The soil was loamy and appeared well-drained. No evidence of frequent or prolonged hydrology was observed as the floodplain surface is approximately 2.5 feet above the water surface elevation of Grant Creek under normal conditions. This indicates that groundwater is found at least 30 inches below the surface. As a result, Sampling Point 1 is a non-wetland data point (Attachments 17 – 18).

Data Point ID	Photo #	Latitude/ Longitude (UTM NAD 83)	Hydrophytic Vegetation Present	Hydric Soil Present	Wetland Hydrology Present	Is the Sampled Area within a Wetland?
1	11 - 13	40.673925 / -85.744134	Yes	No	No	No

Table 3: Wetland Data Summary Table

### **Floodplains**

The project is located within the regulated floodplain (Zone A) along Grant Creek ([INdiana Floodplain Information Portal](#)).

### **Open Water**

No open water areas were observed in the investigated area.

### **Roadside Ditches (RSDs)**

No roadside ditches were observed within or adjacent to the project area.

### **Conclusion**

A field investigation was conducted on April 19, 2023, by BF&S to evaluate the presence of Waters of the U.S. for the replacement of Bridge 143 carrying CR 1050 over Grant Creek in Wabash County, Indiana. Desktop reconnaissance and field observations identified two streams, Grant Creek and UNT to Grant Creek, within the study area. No wetlands were observed.

Based on its contribution of flow into the Mississinewa River, the blue-line perennial stream located approximately 2.5 miles downstream, Grant Creek should be considered "Waters of the U.S." Grant Creek and the UNT to Grant Creek are the only jurisdictional features identified during the investigation.

These waterways are likely *Waters of the U.S.* Every effort should be taken to avoid and minimize impacts to these features. If impacts are necessary, then mitigation may be required. INDOT Environmental Services Division should be contacted immediately if impacts occur. The final determination of jurisdictional waters is ultimately made by the USACE. This report is our best judgement based on the guidelines set forth by the USACE.

### **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 Instruction Guidebook*, and other appropriate agency guidelines.



May 1, 2023  
Neal Bennett, PWS  
Ecologist/Director of Environmental Services  
[nbennett@bfsengr.com](mailto:nbennett@bfsengr.com)



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# Wabash County Bridge 143

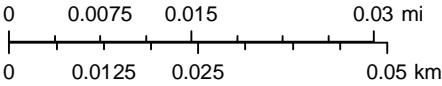


April 19, 2023

1:1,000

 2016 Orthophotography - Placeholder

 Sampling Point 1



Indiana Department of Transportation (INDOT), U.S. Census Bureau (USCB),  
Indiana Geographic Information Council (IGIC), UITS, Indiana Spatial Data  
Portal  
Indiana Office of Information Technology, Indiana University Spatial Data  
Portal, UITS, Woolpert Inc.,





April 19, 2023

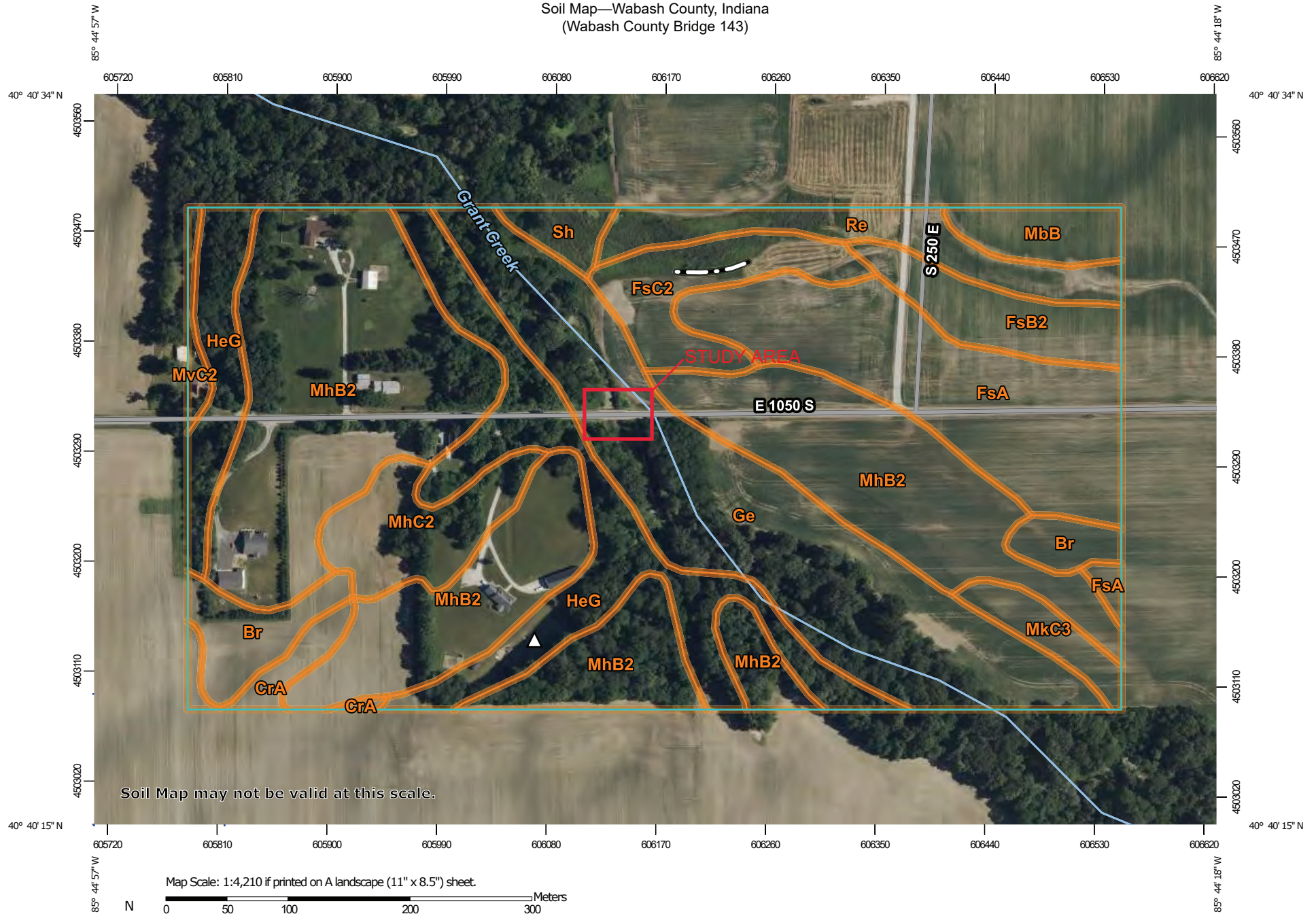
### Wetlands

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

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

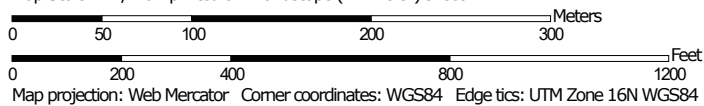


Soil Map—Wabash County, Indiana  
(Wabash County Bridge 143)



Soil Map may not be valid at this scale.

Map Scale: 1:4,210 if printed on A landscape (11" x 8.5") sheet.



Natural Resources  
Conservation Service


Web Soil Survey  
National Cooperative Soil Survey

4/19/2023  
Page 1 of 3


F10


## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### 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: Wabash County, Indiana

Survey Area Data: Version 27, Sep 2, 2022

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 21, 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.

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Br	Brookston loam	2.6	3.3%
CrA	Crosby silt loam, 0 to 3 percent slopes	1.0	1.3%
FsA	Fox loam, till plain, 0 to 2 percent slopes	8.4	10.7%
FsB2	Fox loam, 2 to 6 percent slopes, eroded	2.5	3.2%
FsC2	Fox loam, till plain, 6 to 12 percent slopes, eroded	3.0	3.9%
Ge	Genesee loam, 0 to 2 percent slopes, occasionally flooded	13.1	16.7%
HeG	Hennepin loam, 25 to 50 percent slopes	9.8	12.6%
MbB	Martinsville loam, 2 to 6 percent slopes	1.4	1.8%
MhB2	Miami silt loam, 2 to 6 percent slopes, eroded	27.7	35.5%
MhC2	Miami silt loam, 6 to 12 percent slopes, eroded	3.0	3.8%
MkC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	1.2	1.5%
MvC2	Morley silt loam, 6 to 12 percent slopes, eroded	0.4	0.6%
Re	Rensselaer loam, 0 to 1 percent slopes	3.2	4.0%
Sh	Shoals silt loam, 0 to 2 percent slopes, occasionally flooded	0.8	1.0%
<b>Totals for Area of Interest</b>		<b>78.1</b>	<b>100.0%</b>

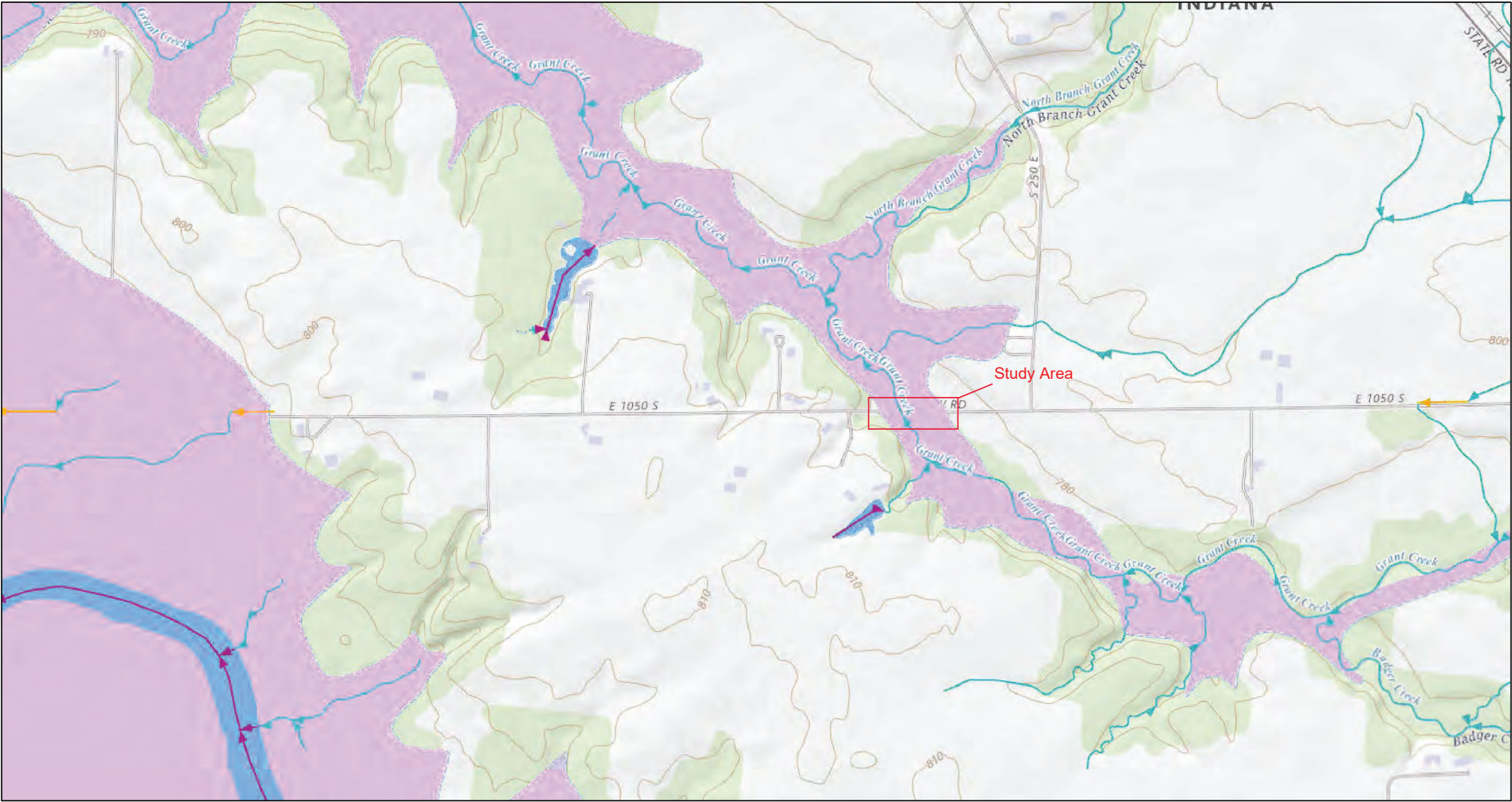
4/19/2023

Page 3 of 3





# The National Map Advanced Viewer



4/19/2023, 9:21:18 AM

Waterbody - Large Scale

Estuary

Ice Mass

Lake Pond

Playa

Reservoir

Swamp Marsh

Area - Large Scale

Area of Complex Channels

Area to be Submerged

BayInlet

Bridge

CanalDitch

DamWeir

Flume

Foreshore

Hazard Zone

Inundation Area

Lock Chamber

Rapids

SeaOcean

Special Use Zone

Spillway

StreamRiver

Submerged Stream

Wash

Water IntakeOutflow

Flowline - Large Scale

Perennial

Intermittent

Ephemeral

Artificial Path

Canal Ditch

Coastline

Connector

Pipeline

Underground Conduit

Flow Direction

Connector

CanalDitch

Underground Conduit

Line - Large Scale

StreamRiver

StreamRiver - Perennial

StreamRiver - Intermittent

StreamRiver - Ephemeral

Pipeline

Artificial Path

Line

Tunnel

Point Event

Dam/Weir

Other

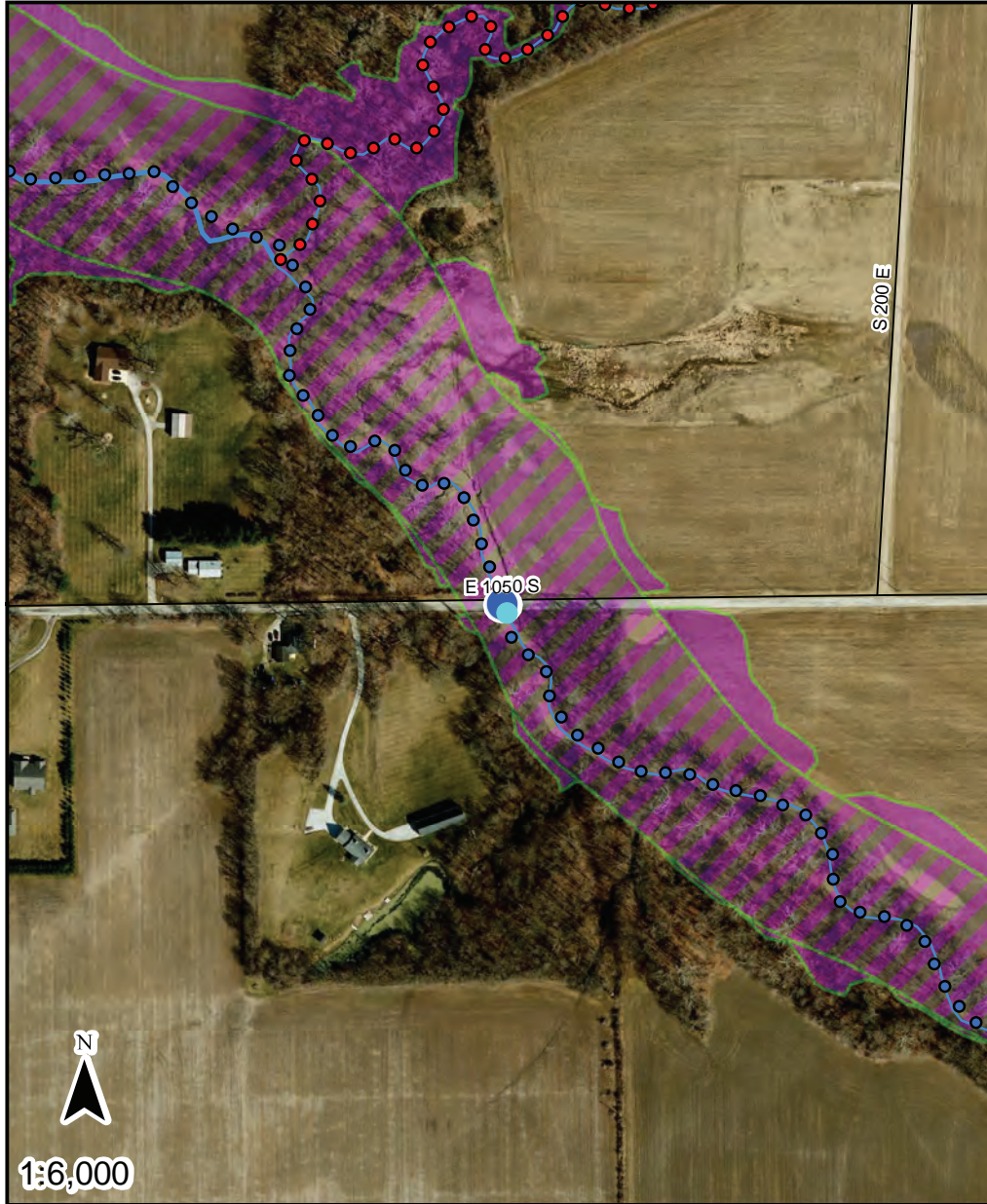
0 0.07 0.15 0.3 mi

0 0.13 0.25 0.5 km

USGS TNM - National Hydrography Dataset. Data Refreshed April, 2023., USGS The National Map: National Boundaries Dataset, 3DEP Elevation Program, Geographic Names Information System, National

F13  
USGS  
2021 USGS





- Point of Interest
  - Base Flood Elevation Point
- Flood Elevation Points**
- STUDIED STREAM
  - JURISDICTIONAL UNSTUDIED STREAM

**Rivers and Streams at  
least 1 square mile**

**Drainage Area (sq. miles)**

- 1 - 10
- 10 - 100
- DNR Approximate Floodway
- DNR Approximate Fringe

Point of Interest Coordinates  
(WGS84)

Long: **-85.7442706587**

Lat: **40.6739818632**

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

County: **Wabash**

Approximate Ground Elevation: **768.1 feet (NAVD88)**

Stream Name:  
**Grant Creek**

Base Flood Elevation: **777.7 feet (NAVD88)**

Drainage Area: **Not available**

Best Available Flood Hazard Zone: **DNR Approximate Floodway**

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

Is a Flood Control Act permit from the DNR needed for this location? **yes**

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

Floodplain Administrator: **Mike Howard, Plan Director**

Community Jurisdiction: **Wabash County, County proper**

Phone: **(260) 563-0661**

Email: **plandirector@wabashcounty.in.gov**

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

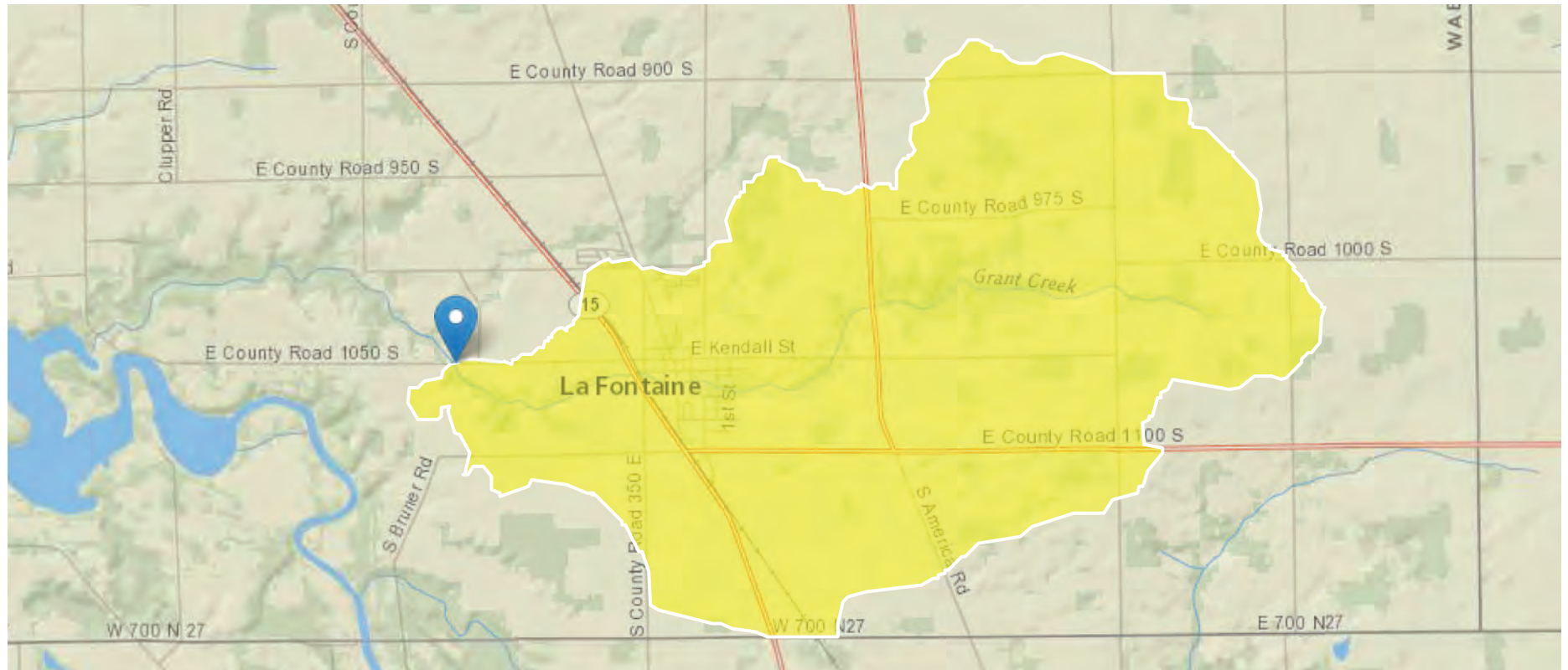
# StreamStats Report

Region ID: IN

Workspace ID: IN20230501173404472000

Clicked Point (Latitude, Longitude): 40.67397, -85.74383

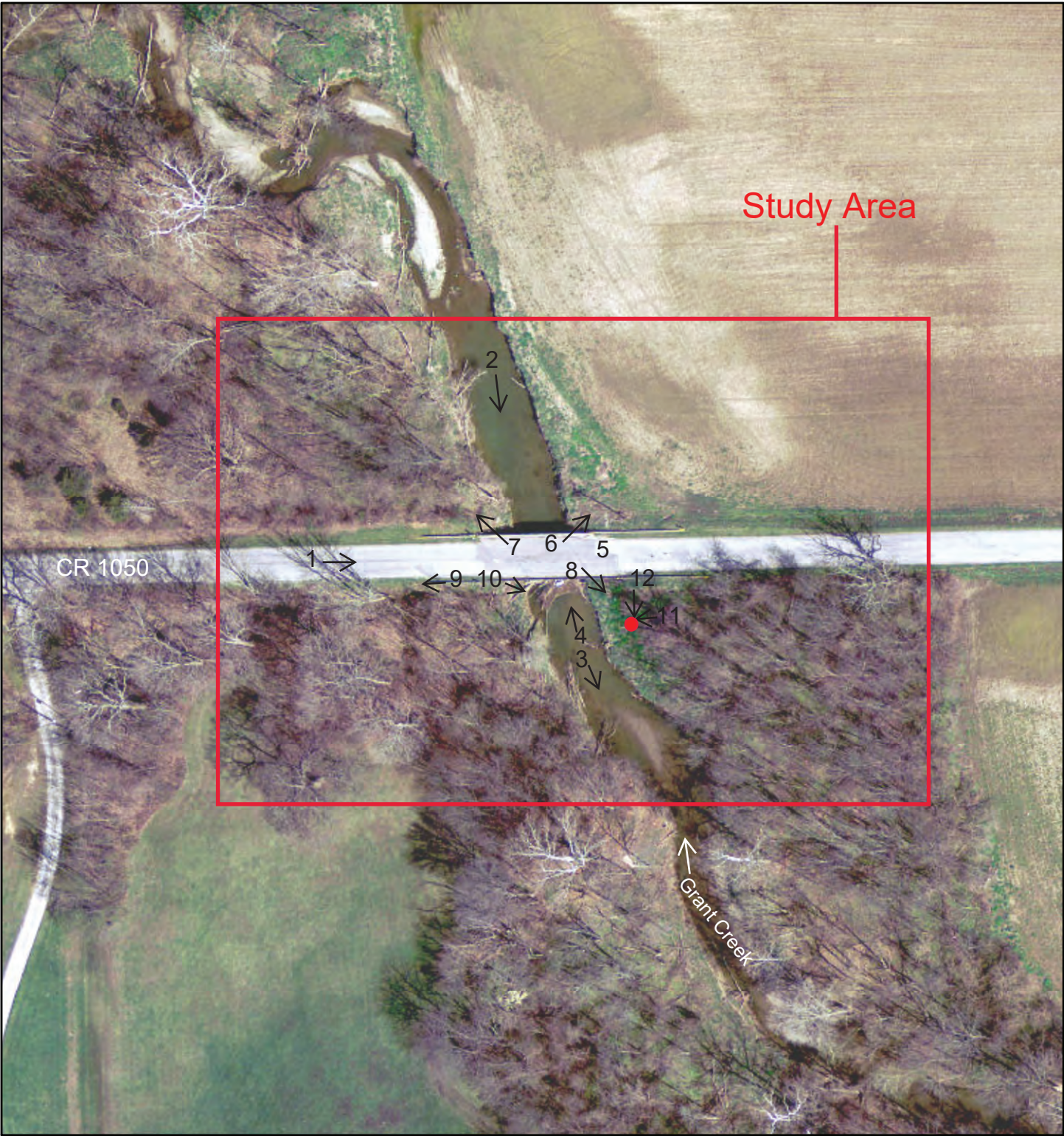
Time: 2023-05-01 13:34:27 -0400



+ Collapse All



# Wabash County Bridge 143

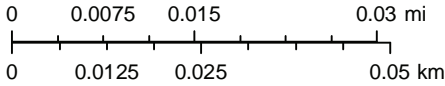


April 19, 2023

1:1,000

 2016 Orthophotography - Placeholder

 Sampling Point 1



Indiana Department of Transportation (INDOT), U.S. Census Bureau (USCB), Indiana Geographic Information Council (IGIC), UITS, Indiana Spatial Data Portal  
Indiana Office of Information Technology, Indiana University Spatial Data Portal, UITS, Woolpert Inc.,





1) Overview of project location, looking east along CR 1050



2) Looking south (upstream) at Grant Creek passing beneath Bridge 143





3) Looking southeast (upstream) at Grant Creek from the south side of Bridge 143



4) Looking north at the sandbar present along Grant Creek upstream of Bridge 143





5) Looking at animal tracks and revetment present beneath the east span of Bridge 143



6) Looking northeast from Bridge 143 at the northeast quadrant of the bridge.





7) Looking northwest from Bridge 143 at the northwest quadrant of the bridge.



8) Looking southeast from Bridge 143 at the southeast quadrant of the bridge





9) Looking west (upstream) at UNT to Grant Creek



10) Looking southeast (downstream) at UNT to Grant Creek





11) Looking west at Sampling Point 1 in the SE quadrant of Bridge 143



12) Looking south at Sampling Point 1 in the SE quadrant of Bridge 143





13) Looking at the soil sample taken at Sampling Point 1

# WETLAND DETERMINATION DATA FORM - Midwest Region

Project/Site Wabash County Bridge 143 City/County: LaFontaine/Wabash County Sampling Date: 4/19/2023  
 Applicant/Owner: Wabash County State: IN Sampling Point: 1A  
 Investigator(s): Neal Bennett Section, Township, Range: Sec. 28, Twp. 26N, Range 7E  
 Landform (hillslope, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave  
 Slope (%): 1% Lat: 40.673925 Long: -85.744134 Datum: UTM 16N  
 Soil Map Unit Name Genesee loam NWI Classification: Non-wetland

Are climatic/hydrologic conditions of the site typical for this time of the year? Y (If no, explain in remarks)

Are vegetation           , soil           , or hydrology            significantly disturbed?

Are "normal circumstances"

Are vegetation           , soil           , or hydrology            naturally problematic?

present? Yes

## SUMMARY OF FINDINGS

(If needed, explain any answers in remarks.)

Hydrophytic vegetation present?	<u>Y</u>	<b>Is the sampled area within a wetland?</b> <u>N</u> If yes, optional wetland site ID: <u>                    </u>
Hydric soil present?	<u>N</u>	
Indicators of wetland hydrology present?	<u>N</u>	

Remarks: (Explain alternative procedures here or in a separate report.)

Sampling Point 1A was advanced in the southwest quadrant approximately 30 feet from Bridge 143 in a low floodplain contour.

## VEGETATION -- Use scientific names of plants.

Tree Stratum	(Plot size: <u>30'</u> radius )	Absolute % Cover	Dominant Species	Indicator Status	<b>Dominance Test Worksheet</b> Number of Dominant Species that are OBL, FACW, or FAC: <u>1</u> (A) Total Number of Dominant Species Across all Strata: <u>1</u> (B) Percent of Dominant Species that are OBL, FACW, or FAC: <u>100.00%</u> (A/B)
1					
2					
3					
4					
5					
		<u>0</u>	= Total Cover		<b>Prevalence Index Worksheet</b> Total % Cover of: OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>92</u> x 2 = <u>184</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column totals <u>97</u> (A) <u>199</u> (B) Prevalence Index = B/A = <u>2.05</u>
Sapling/Shrub stratum	(Plot size: <u>15'</u> radius )				
1					
2					
3					
4					
5					
		<u>0</u>	= Total Cover		
Herb stratum	(Plot size: <u>5'</u> radius )				<b>Hydrophytic Vegetation Indicators:</b> <u>      </u> Rapid test for hydrophytic vegetation <u>X</u> Dominance test is >50% <u>X</u> Prevalence index is ≤3.0* <u>      </u> Morphological adaptations* (provide supporting data in Remarks or on a separate sheet) <u>      </u> Problematic hydrophytic vegetation* (explain) *Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic
1	<u>Phalaris arundinacea</u>	<u>80</u>	<u>Y</u>	<u>FACW</u>	
2	<u>Alliaria petiolata</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
3	<u>Laportea canadensis</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
4	<u>Rudbeckia laciniata</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
5	<u>Conium maculatum</u>	<u>2</u>	<u>N</u>	<u>FACW</u>	
6					
7					
8					
9					
		<u>97</u>	= Total Cover		
Woody vine stratum	(Plot size: <u>30'</u> radius )				<b>Hydrophytic vegetation present?</b> <u>Y</u>
1					
2					
		<u>0</u>	= Total Cover		

Remarks: (Include photo numbers here or on a separate sheet)

## SOIL

Sampling Point: 1A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-18	10YR 4/2	100					Loam	<1 inch ribbon test

\*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. \*\*Location: PL = Pore Lining, M = Matrix

**Hydric Soil Indicators:**

- |                                                            |                                                     |
|------------------------------------------------------------|-----------------------------------------------------|
| <input type="checkbox"/> Histisol (A1)                     | <input type="checkbox"/> Sandy Gleyed Matrix (S4)   |
| <input type="checkbox"/> Histic Epipedon (A2)              | <input type="checkbox"/> Sandy Redox (S5)           |
| <input type="checkbox"/> Black Histic (A3)                 | <input type="checkbox"/> Stripped Matrix (S6)       |
| <input type="checkbox"/> Hydrogen Sulfide (A4)             | <input type="checkbox"/> Loamy Mucky Mineral (F1)   |
| <input type="checkbox"/> Stratified Layers (A5)            | <input type="checkbox"/> Loamy Gleyed Matrix (F2)   |
| <input type="checkbox"/> 2 cm Muck (A10)                   | <input type="checkbox"/> Depleted Matrix (F3)       |
| <input type="checkbox"/> Depleted Below Dark Surface (A11) | <input type="checkbox"/> Redox Dark Surface (F6)    |
| <input type="checkbox"/> Thick Dark Surface (A12)          | <input type="checkbox"/> Depleted Dark Surface (F7) |
| <input type="checkbox"/> Sandy Mucky Mineral (S1)          | <input type="checkbox"/> Redox Depressions (F8)     |
| <input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)      |                                                     |

**Indicators for Problematic Hydric Soils:**

- |                                                                    |
|--------------------------------------------------------------------|
| <input type="checkbox"/> Coast Prairie Redox (A16) (LRR K, L, R)   |
| <input type="checkbox"/> Dark Surface (S7) (LRR K, L)              |
| <input type="checkbox"/> Iron-Manganese Masses (F12) (LRR K, L, R) |
| <input type="checkbox"/> Very Shallow Dark Surface (TF12)          |
| <input type="checkbox"/> Other (explain in remarks)                |

\*Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

**Restrictive Layer (if observed):**
 Type: n/a  
 Depth (inches):

Hydric soil present? N

## Remarks:

Well drained alluvial soils, lack of redox features.

## HYDROLOGY

**Wetland Hydrology Indicators:**Primary Indicators (minimum of one is required; check all that apply)

- |                                                                    |
|--------------------------------------------------------------------|
| <input type="checkbox"/> Surface Water (A1)                        |
| <input type="checkbox"/> High Water Table (A2)                     |
| <input type="checkbox"/> Saturation (A3)                           |
| <input type="checkbox"/> Water Marks (B1)                          |
| <input type="checkbox"/> Sediment Deposits (B2)                    |
| <input type="checkbox"/> Drift Deposits (B3)                       |
| <input type="checkbox"/> Algal Mat or Crust (B4)                   |
| <input type="checkbox"/> Iron Deposits (B5)                        |
| <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) |
| <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)   |
| <input type="checkbox"/> Water-Stained Leaves (B9)                 |

- |                                                                     |
|---------------------------------------------------------------------|
| <input type="checkbox"/> Aquatic Fauna (B13)                        |
| <input type="checkbox"/> True Aquatic Plants (B14)                  |
| <input type="checkbox"/> Hydrogen Sulfide Odor (C1)                 |
| <input type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) |
| <input type="checkbox"/> Presence of Reduced Iron (C4)              |
| <input type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) |
| <input type="checkbox"/> Thin Muck Surface (C7)                     |
| <input type="checkbox"/> Gauge or Well Data (D9)                    |
| <input type="checkbox"/> Other (Explain in Remarks)                 |

Secondary Indicators (minimum of two required)

- |                                                                    |
|--------------------------------------------------------------------|
| <input type="checkbox"/> Surface Soil Cracks (B6)                  |
| <input type="checkbox"/> Drainage Patterns (B10)                   |
| <input type="checkbox"/> Dry-Season Water Table (C2)               |
| <input type="checkbox"/> Crayfish Burrows (C8)                     |
| <input type="checkbox"/> Saturation Visible on Aerial Imagery (C9) |
| <input type="checkbox"/> Stunted or Stressed Plants (D1)           |
| <input type="checkbox"/> Geomorphic Position (D2)                  |
| <input checked="" type="checkbox"/> FAC-Neutral Test (D5)          |

**Field Observations:**

Surface water present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	
Water table present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	
Saturation present?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Depth (inches):	

 (includes capillary fringe)

Indicators of wetland hydrology present? N

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

## Remarks:

Floodplain surface approximately 2.5 feet above water elevation in Grant Creek. Heavy precipitation the previous day, no evidence of ponding or saturation.



# **Appendix G**

## **Public Involvement**

# Sample Notice of Survey

*April 13, 2022*

## *NOTICE OF SURVEY*

*RE: Topographic Survey for the Replacement of Bridge 143 Carrying C.R. 1050  
South over Grant Creek, 0.95 miles West of S.R. 15, Des. No. 2003065,  
Wabash County, Indiana*

*Dear Property Owner(s):*

*The Wabash County Board of Commissioners has selected Butler, Fairman and Seufert, Inc., to survey and design the referenced project. Courthouse records show that you are a property owner within the limits of the area where data will be collected for the project survey. It may be necessary for our employees to enter your property to complete this work. 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.*

*At this stage, we generally do not know what effect, if any, our project can eventually have on your property. If we determine later that your property is involved, you will be contacted with additional information.*

*The survey work will include mapping the location of features such as trees, buildings, fences and drives, and obtaining ground elevations. The survey is needed for the proper planning and design of this bridge project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If problems do occur, please contact our field crew or contact me at the telephone number or address shown above or the included e-mail address.*

*Sincerely,*

*Mark W. Neal, P.S.  
mneal@bfsengr.com*

# **Appendix H**

## **Air Quality**



Indiana Department of Transportation (INDOT)  
State Preservation and Local Initiated Projects FY 2024 - 2028

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Performance Measure Impacted: Pavement Condition																	
Location: US 24 US 24 @ Wabash St, 1.15 Miles E of SR 15 and US 24 From SR 115 to SR 13																	
Comments:Include DES 2000025, 2001847																	
Indiana Department of Transportation	43285 / 2001847	A 01	US 24	HMA Overlay, Preventive Maintenance	Fort Wayne	4.455	NHPP	\$2,254,162.00	Safety Consulting	PE	\$160,000.00	\$40,000.00	\$200,000.00				
Performance Measure Impacted: Pavement Condition																	
Location: US 24 US 24 @ Wabash St, 1.15 Miles E of SR 15 (2000025), US 24 From SR 115 to SR 13 (2001847-HMA)																	
Comments:Add PE \$200,000 FY2024. Des including 2000025 and 2001847.																	
Wabash County	43610 / 2003065	Init.	IR 1403	Bridge Replacement	Fort Wayne	.2	STBG	\$2,210,000.00	Local Bridge Program	CN	\$1,515,000.00	\$0.00			\$1,515,000.00		
									Local Funds	CN	\$0.00	\$379,000.00			\$379,000.00		
									Local Funds	RW	\$0.00	\$20,000.00	\$20,000.00				
									Local Bridge Program	RW	\$80,000.00	\$0.00	\$80,000.00				
Performance Measure Impacted: Bridge Condition																	
Location: Bridge #143 on CR E 1050 S, over Grant Creek																	
Comments:Include DES 2003065																	
Wabash County	44289 / 2101741	Init.	IR 1403	Bridge Rehabilitation Or Repair	Fort Wayne	.125	STBG	\$3,306,000.00	Local Funds	CN	\$0.00	\$576,000.00			\$24,000.00	\$552,000.00	
									Local Bridge Program	CN	\$2,304,000.00	\$0.00			\$96,000.00	\$2,208,000.00	
									Local Funds	RW	\$0.00	\$8,000.00			\$8,000.00		
									Local Bridge Program	RW	\$33,000.00	\$0.00			\$33,000.00		
Performance Measure Impacted: Bridge Condition																	
Location: Bridge #96; On East Hanging Rock Road over the Salamonie River																	
Comments:Include DES 2101741																	
Wabash County	44290 / 2101775	Init.	IR 8827	HMA Overlay Minor Structural	Fort Wayne	7.81	STBG	\$3,725,000.00	Group IV Program	RW	\$8,000.00	\$0.00		\$8,000.00			
									Local Funds	RW	\$0.00	\$2,000.00		\$2,000.00			
									Group IV Program	CN	\$2,812,000.00	\$0.00				\$2,812,000.00	
									Local Funds	CN	\$0.00	\$703,000.00				\$703,000.00	

\*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.

# **Appendix I**

## **Additional Studies**

## Section 6(f) Properties in Wabash County

Source: Land and Water Conservation Fund website (<https://lwcf.tplgis.org/mappast/>)

Project Number	Sponsor	Property
1800266	Roann Park Board	Roann Park
1800290	Wabash Park Board	Wabash City Park (Wabash City Park Log Cabin)
1800291	Wabash Park Board	Charley Creek Park
1800304	IDNR	Laketon Bog
1800363	IDNR	Mississinewa Reservoir
1800363	IDNR	Salamonie Reservoir
1800378	IDNR	Mississinewa Reservoir
1800449	IDNR	Red Bridge SRA



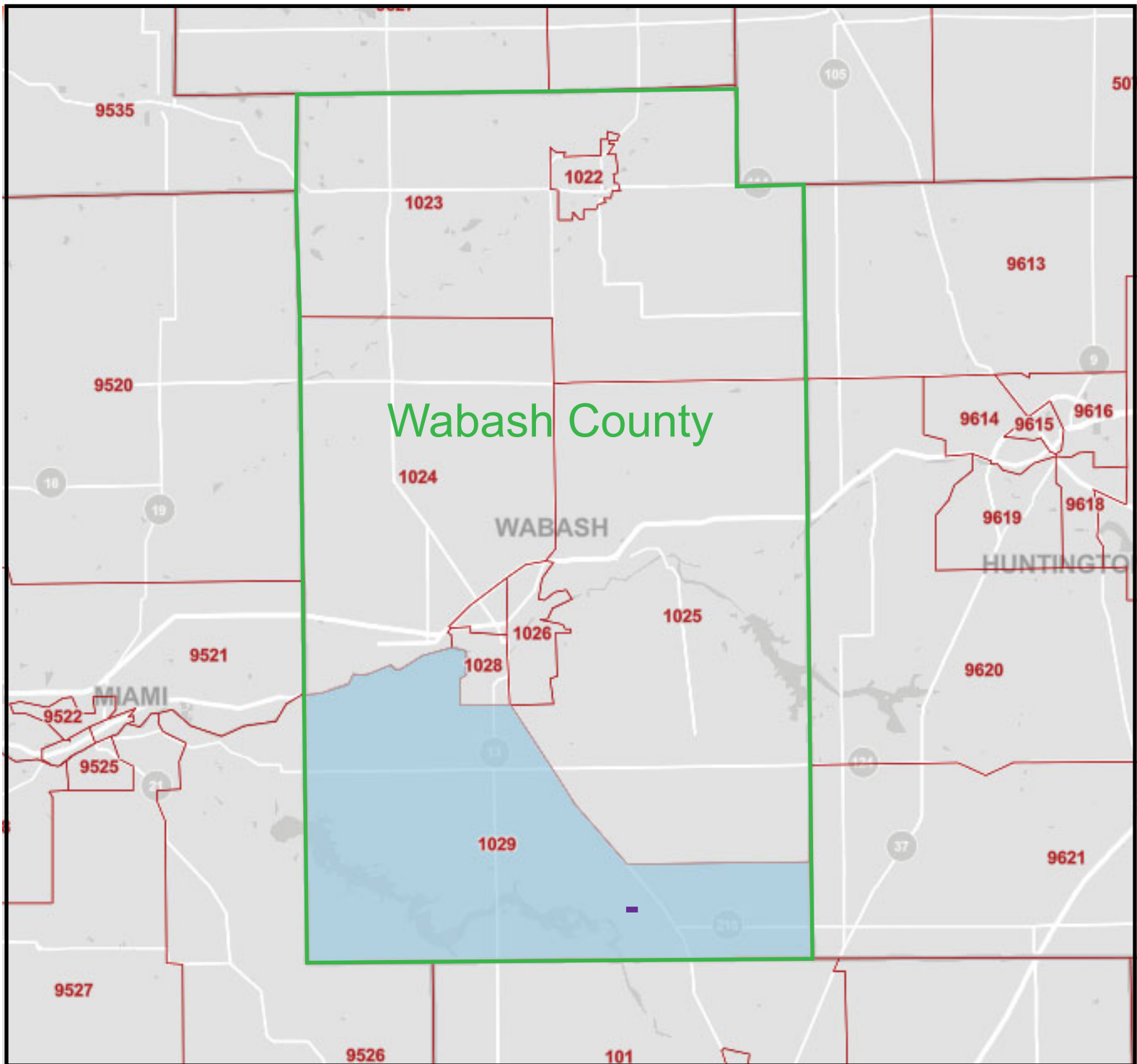
Environmental Justice Data Analysis

Des. No. 2003065: Wabash County Bridge No. 143

Source: U.S. Census Bureau 2021 ACS 5-year Estimates

		COC	AC
		Wabash County, Indiana	Census Tract 1029 Wabash County, Indiana
B17001	<b>LOW-INCOME</b>		
	Population for whom poverty status is determined: Total	29,222	3,304
	Income in the past 12 months below poverty level	3,616	424
	<b>Percent Low-income</b>	<b>12.4%</b>	<b>12.8%</b>
	<b>125 Percent of COC</b>	<b>15.5%</b>	<b>AC &lt;125% COC</b>
	<b>Potential Population of EJ Concern?</b>		<b>No</b>
B03002	<b>MINORITY</b>		
	Total population: Total	31,120	3,421
	Total population: Not Hispanic or Latino	30,273	3,389
	Total population: Not Hispanic or Latino; White alone	29,121	3,274
	Total population: Not Hispanic or Latino; Black or African American alone	314	12
	Total population: Not Hispanic or Latino; American Indian and Alaska Native alone	212	0
	Total population: Not Hispanic or Latino; Asian alone	161	26
	Total population: Not Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone	13	0
	Total population: Not Hispanic or Latino; Some other race alone	72	53
	Total population: Not Hispanic or Latino; Two or more races	380	24
	Total population: Hispanic or Latino	847	32
	Total population: Hispanic or Latino; White alone	412	21
	Total population: Hispanic or Latino; Black or African American alone	21	0
	Total population: Hispanic or Latino; American Indian and Alaska Native alone	15	0
	Total population: Hispanic or Latino; Asian alone	0	0
	Total population: Hispanic or Latino; Native Hawaiian and Other Pacific Islander alone	0	0
	Total population: Hispanic or Latino; Some other race alone	341	6
	Total population: Hispanic or Latino; Two or more races	58	5
	<b>Number Non-white/minority</b>	<b>1,999</b>	<b>147</b>
	<b>Percent Non-white/Minority</b>	<b>6.4%</b>	<b>4.3%</b>
	<b>125 Percent of COC</b>	<b>8.0%</b>	<b>AC &lt;125% COC</b>
	<b>Potential Population of EJ Concern?</b>		<b>No</b>

# Environmental Justice Community Map



- Community of Comparison
- Affected Community
- Project Area

**Wabash County Bridge 143**  
**Wabash County, Indiana**  
**Des No. 2003065**



# HISPANIC OR LATINO ORIGIN BY RACE

Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

## Wabash County, Indiana

## Census Tract 1029, Wabash County, Indiana

Label	Estimate	Margin of Error	Estimate	Margin of Error
▼ Total:	31,120	*****	3,421	±317
▼ Not Hispanic or Latino:	30,273	*****	3,389	±317
White alone	29,121	±144	3,274	±328
Black or African American alone	314	±51	12	±13
American Indian and Alaska Native alone	212	±71	0	±12
Asian alone	161	±48	26	±33
Native Hawaiian and Other Pacific Islander alone	13	±19	0	±12
Some other race alone	72	±77	53	±71
> Two or more races:	380	±148	24	±23
▼ Hispanic or Latino:	847	*****	32	±26
White alone	412	±102	21	±23
Black or African American alone	21	±26	0	±12
American Indian and Alaska Native alone	15	±23	0	±12
Asian alone	0	±26	0	±12
Native Hawaiian and Other Pacific Islander alone	0	±26	0	±12
Some other race alone	341	±110	6	±14
> Two or more races:	58	±66	5	±7

## Table Notes



Subtopic: Hispanic or Latino Origin by Race  
**HISPANIC OR LATINO ORIGIN BY RACE**

**Universe:** Total population

**Year:** 2021

**Estimates:** 5-Year

**Table ID:** B03002

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

The Hispanic origin and race codes were updated in 2020. For more information on the Hispanic origin and race code changes, please visit the American Community Survey Technical Documentation website.

The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

-

The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.

N

The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area.

(X)

The estimate or margin of error is not applicable or not available.

median-

The median falls in the lowest interval of an open-ended distribution (for example "2,500-")

median+

The median falls in the highest interval of an open-ended distribution (for example "250,000+").

\*\*

The margin of error could not be computed because there were an insufficient number of sample observations.

\*\*\*

The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.

\*\*\*\*\*

A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.



POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

Note: This is a modified view of the original table produced by the U.S. Census Bureau. This download or printed version may have missing information from the original table.

Wabash County, Indiana		Census Tract 1029, Wabash County, Indiana	
Label	Estimate	Margin of Error	Estimate
▼ Total:	29,222	±332	3,304
▼ Income in the past 12 months below poverty level:	3,616	±601	424
➤ Male:	1,537	±357	177
➤ Female:	2,079	±372	247
▼ Income in the past 12 months at or above poverty level:	25,606	±711	2,880
➤ Male:	12,923	±402	1,415
➤ Female:	12,683	±475	1,465

Table Notes

POVERTY STATUS IN THE PAST 12 MONTHS BY SEX BY AGE

Survey/Program: American Community Survey  
Universe: Population for whom poverty status is determined  
Year: 2021  
Estimates: 5-Year

Table ID: B17001

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities, and towns and estimates of housing units for states and counties.

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Technical Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Source: U.S. Census Bureau, 2017-2021 American Community Survey 5-Year Estimates

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see ACS Technical Documentation). The effect of nonsampling error is not represented in these tables.

The 2017-2021 American Community Survey (ACS) data generally reflect the March 2020 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas. In certain instances, the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineation lists due to differences in the effective dates of the geographic entities.

Estimates of urban and rural populations, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Explanation of Symbols:

- The estimate could not be computed because there were an insufficient number of sample observations. For a ratio of medians estimate, one or both of the median estimates falls in the lowest interval or highest interval of an open-ended distribution. For a 5-year median estimate, the margin of error associated with a median was larger than the median itself.
- N  
The estimate or margin of error cannot be displayed because there were an insufficient number of sample cases in the selected geographic area.
- (X)  
The estimate or margin of error is not applicable or not available.
- median-  
The median falls in the lowest interval of an open-ended distribution (for example "2,500-")
- median+  
The median falls in the highest interval of an open-ended distribution (for example "250,000+").
- \*\*  
The margin of error could not be computed because there were an insufficient number of sample observations.
- \*\*\*  
The margin of error could not be computed because the median falls in the lowest interval or highest interval of an open-ended distribution.
- \*\*\*\*\*  
A margin of error is not appropriate because the corresponding estimate is controlled to an independent population or housing estimate. Effectively, the corresponding estimate has no sampling error and the margin of error may be treated as zero.



# Bridge Inspection Report

85-00143  
CR 1050 S  
over  
GRANT CREEK



Inspection Date: 05/17/2022

Inspected By: Jason Petersen

Inspection Type(s): Routine

Inspector: Jason Petersen  
Inspection Date: 05/17/2022

Asset Name: 85-00143  
Facility Carried: CR 1050 S

### Bridge Inspection Report

WEARING SURFACE PATCHED, SPALLED, AND UNEVEN, CRACKS OVER PIERS, NUMEROUS LONGITUDINAL AND TRANSVERSE CRACKS, EXPOSED TOP OF BEAM AT NORTHEAST CORNER SPALLED. TRANSVERSE CRACKS, MINOR SPALLS WITH EXPOSED STEEL IN BOTTOM OF DECK, NO MAIN REINFORCING BARS EXPOSED, SEEPAGE BETWEEN BEAMS WITH EFFLORESCENCE. TRANSVERSE CRACKS, MINOR SPALLS WITH EXPOSED STEEL IN BOTTOM OF DECK, NO MAIN REINFORCING BARS EXPOSED, SEEPAGE BETWEEN BEAMS WITH EFFLORESCENCE. BOTH END BENTS UNDERPINNED WITH CONCRETE AND SHEET PILES, PIER 2 WITH MINOR EXPOSED STEEL, COLUMNS 3 AND 4 AT PIER 3 WITH LARGE SPALLS AT WATERLINE. MINOR EROSION, SILT BUILDUP IN EAST SPAN.

RECOMMEND REPLACING STRUCTURE IN 2026 DUE TO ADVANCING DETERIORATION.

Inspector: Jason Petersen  
Inspection Date: 05/17/2022

Asset Name: 85-00143  
Facility Carried: CR 1050 S

### Bridge Inspection Report

#### IDENTIFICATION

(1) STATE CODE:	185 - Indiana	(12) BASE HIGHWAY NETWORK:	0
(8) STRUCTURE:	8500465	(13A) INVENTORY ROUTE:	
(5 A-B-C-D-E) INV. ROUTE:	1 - 4 - 1 - 00012 - 0	(13B) SUBROUTE NUMBER:	
(2) HIGHWAY AGENCY DISTRICT:	02 - Fort Wayne	(16) LATITUDE:	40.674
(3) COUNTY CODE:	085 - WABASH	(17) LONGITUDE:	-85.74429
(4) PLACE CODE:	00000 - N/A	(98) BORDER	
(6) FEATURES INTERSECTED:	GRANT CREEK	A) STATE NAME:	
(7) FACILITY CARRIED:	CR 1050 S	B) PERCENT	%
(9) LOCATION:	00.10 W OF LAFONTAINE	(99) BORDER BRIDGE STRUCT. NO:	
(11) MILEPOINT:	0000.000		

#### STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE, MAIN:		(45) NUMBER OF SPANS IN MAIN 003 UNIT:	
A) KIND OF MATERIAL/DESIGN:	1 - Concrete	(46) NUMBER OF APPROACH SPANS:	0000
B) TYPE OF DESIGN/CONSTR:	22 - Channel Beam	(107) DECK STRUCTURE TYPE:	2 - Concrete Precast Panels
(44) STRUCTURE TYPE, APPROACH SPANS:		(108) WEARING SURFACE/PROT SYS:	
A) KIND OF MATERIAL/DESIGN:	0 - Other	A) WEARING SURFACE:	6 - Bituminous
B) TYPE OF DESIGN/CONSTR:	00 - Other	B) DECK MEMBRANE:	0 - None
		C) DECK PROTECTION:	0 - None

#### AGE OF SERVICE

(27) YEAR BUILT:	1960	(28) LANES:	
(106) YEAR RECONSTRUCTED:	0000	A) ON BRIDGE:	02
(42) TYPE OF SERVICE:		B) UNDER BRIDGE:	00
A) ON BRIDGE:	1 - Highway	(29) AVERAGE DAILY TRAFFIC:	000220
B) UNDER BRIDGE:	5 - Waterway	(30) YEAR OF AVERAGE DAILY TRAFFIC:	2022
		(109) AVERAGE DAILY TRUCK TRAFFIC:	05 %
		(19) BYPASS DETOUR LENGTH:	003 MI

Inspector: Jason Petersen  
Inspection Date: 05/17/2022

Asset Name: 85-00143  
Facility Carried: CR 1050 S

### Bridge Inspection Report

#### GEOMETRIC DATA

(48) LENGTH OF MAX SPAN:	00036.0	FT	(35) STRUCTURE FLARED:	0 - No flare
(49) STRUCTURE LENGTH:	00067.5	FT	(10) INV RTE, MIN VERT CLEARANCE:	99.99 FT
(50) CURB/SIDEWALK WIDTHS:			(47) TOT HORIZ CLEARANCE:	024.6 FT
A) LEFT	01.0	FT	(53) VERT CLEAR OVER BR RDWY:	99.99 FT
B) RIGHT:	01.0	FT	(54) MIN VERTICAL UNDERCLEARANCE:	
(51) BRDG RDWY WIDTH CURB- TO-CURB:	024.6	FT	A) REFERENCE FEATURE:	N
(52) DECK WIDTH, OUT-TO-OUT:	026.6	FT	B) MIN VERT UNDERCLEAR:	00.00 FT
(32) APPROACH ROADWAY	018.0	FT	(55) LATERAL UNDERCLEARANCE RIGHT:	
(33) BRIDGE MEDIAN:	0 - No median		A) REFERENCE FEATURE:	N
(34) SKEW:	30	DEG	B) MIN LATERAL UNDERCLEAR:	000.0 FT
			(56) MIN LATERAL UNDERCLEAR ON LEFT:	000.0 FT

#### INSPECTIONS

(90) INSPECTION DATE:	05/17/2022	(91) DESIGNATED INSPECTION	12 MONTHS
(92) CRITICAL FEATURE INSPECTION:		FREQUENCY:	
A) FRACTURE CRITICAL REQUIRED/FREQUENCY:	N	(93) CRITICAL FEATURE INSPECTION DATE:	
B) UNDERWATER INSPECTION REQUIRED/FREQUENCY:	N	A) FRACTURE CRITICAL DATE:	
C) OTHER SPECIAL INSPECTION REQUIRED/FREQUENCY:	N	B) UNDERWATER INSP DATE:	
		C) OTHER SPECIAL INSP DATE:	

#### CONDITION

(58) DECK:	5 - Fair Condition (minor section loss)	(60) SUBSTRUCTURE:	4 - Poor Condition (advanced deterioration)
(58.01) WEARING SURFACE:	5 - Fair Condition	(61) CHANNEL/CHANNEL PROTECTION:	5 - Bank eroded.. major damage
(59) SUPERSTRUCTURE:	5 - Fair Condition (minor section loss)	(62) CULVERTS:	N - Not Applicable

#### CONDITION COMMENTS

(58) DECK: 5 - Fair Condition (minor section loss)

##### Comments:

FAIR-TRANSVERSE CRACKS, MINOR SPALLS WITH EXPOSED STEEL IN BOTTOM OF DECK, NO MAIN REINFORCING BARS EXPOSED, SEEPAGE BETWEEN BEAMS WITH EFFLORESCENCE

Material: PRECAST CONCRETE CHANNEL BEAMS

(58.01) WEARING SURFACE: 5 - Fair Condition

##### Comments:

FAIR-PATCHED, SPALLED, AND UNEVEN, CRACKS OVER PIERS, NUMEROUS LONGITUDINAL AND TRANSVERSE CRACKS, EXPOSED TOP OF BEAM AT NORTHEAST CORNER SPALLED

Material: BITUMINOUS (2")



Inspector: Jason Petersen  
Inspection Date: 05/17/2022

Asset Name: 85-00143  
Facility Carried: CR 1050 S

### Bridge Inspection Report

(59) SUPERSTRUCTURE: 5 - Fair Condition (minor section loss)

Comments:

FAIR-TRANSVERSE CRACKS, MINOR SPALLS WITH EXPOSED STEEL IN BOTTOM OF DECK, NO MAIN REINFORCING BARS EXPOSED, SEEPAGE BETWEEN BEAMS WITH EFFLORESCENCE  
Material: PRECAST CONCRETE CHANNEL BMS

(60) SUBSTRUCTURE: 4 - Poor Condition (advanced deterioration)

Comments:

POOR-BOTH END BENTS UNDERPINNED WITH CONCRETE AND SHEET PILES, PIER 2 WITH MINOR EXPOSED STEEL, COLUMNS 1 AND 2 AT PIER 3 WITH LARGE SPALLS AT WATERLINE  
Material: CAP ON CONCRETE COLUMNS

(61) CHANNEL/CHANNEL PROTECTION 5 - Bank eroded.. major damage

Comments:

FAIR-MINOR EROSION, SILT BUILDUP IN EAST SPAN, CHANNEL MEANDERING  
Material: NATURAL/RIPRAP

(62) CULVERTS: N - Not Applicable

Comments:

N/A  
Material: N/A

### LOAD RATING AND POSTING

(31) DESIGN LOAD:	0 - Unknown	(66) INVENTORY RATING:	36
(70) BRIDGE POSTING	5 - Equal to or above legal loads	(65) INVENTORY RATING METHOD:	0 - Field evaluation and documented engineering judgment
(41) STRUCTURE OPEN/POSTED/CLOSED:	A - Open	(66B) INVENTORY RATING (H):	
(64) OPERATING RATING:	36	(66C) TONS POSTED :	
(63) OPERATING RATING METHOD:	0 - Field evaluation and documented engineering judgment	(66D) DATE POSTED/CLOSED:	

### APPRAISAL

SUFFICIENCY RATING:	63.9	(36) TRAFFIC SAFETY FEATURE:	
STATUS:	1	36A) BRIDGE RAILINGS:	0
(67) STRUCTURAL EVALUATION:	4	36B) TRANSITIONS:	0
(68) DECK GEOMETRY:	5	36C) APPROACH GUARDRAIL:	0
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL:	N	36D) APPROACH GUARDRAIL ENDS:	0

(71) WATERWAY ADEQUACY: 5 - Occasional Overtopping of Approaches - Significant Delays

Comments:

APPEARS BARELY ADEQUATE

(72) APPROACH ROADWAY ALIGNMENT: 8 - Equal to present desirable criteria

Comments:

GOOD-WORN, TRANSVERSE CRACKS Material: BITUMINOUS (72): VERY GOOD-STRAIGHT, RISE TO WEST

Inspector: Jason Petersen  
Inspection Date: 05/17/2022

Asset Name: 85-00143  
Facility Carried: CR 1050 S

### Bridge Inspection Report

(113) SCOUR CRITICAL BRIDGES: 5 - Scour within limits of footing or piles

Comments:  
STABLE-WITHIN LIMITS

### CLASSIFICATION

(20) TOLL:	3 - On Free Road	(21) MAINT. RESPONSIBILITY:	02 - County Highway Agency
(22) OWNER:	02 - County Highway Agency	(26) FUNCTIONAL CLASS OF INVENTORY RTE:	09 - Rural - Local
(37) HISTORICAL SIGNIFICANCE:	5 - Not eligible	(100) STRAHNET HIGHWAY:	Not a STRAHNET route
(101) PARALLEL STRUCTURE:	N - No parallel structure	(102) DIRECTION OF TRAFFIC:	2-way traffic
(103) TEMPORARY STRUCTURE:		(104) HIGHWAY SYSTEM OF INVENTORY ROUTE:	0 - Structure/Route is NOT on NHS
(105) FEDERAL LANDS HIGHWAYS:	0-Not Applicable	(110) DESIGNATED NATIONAL NETWORK:	Inventory route not on network
(112) NBIS BRIDGE LENGTH:	Yes		

### NAVIGATION DATA

(38) NAVIGATION CONTROL:	0 - No navigation control on waterway (bridge permit not required)	(39) NAVIGATION VERTICAL CLEAR:	000.0 FT
(111) PIER OR ABUTMENT PROTECTION:		(116) MINIMUM NAVIGATION VERT. CLEARANCE, VERT. LIFT BRIDGE:	FT
		(40) NAV HORIZONTAL CLEARANCE:	0000.0 FT

### PROPOSED IMPROVEMENTS

(75A) TYPE OF WORK:	31 - Replacement - Load/Geometry	(95) ROADWAY IMPROVEMENT COST:	\$ 000225
(75B) WORK DONE BY:	1 - Work to be done by contract	(96) TOTAL PROJECT COST:	\$ 000725
(76) LENGTH OF IMPROVEMENT:	000093. FT	(97) YR OF IMPROVEMENT COST EST:	2022
	0	(114) FUTURE AVG DAILY TRAFFIC:	000330
(94) BRIDGE IMPROVEMENT COST:	\$ 000500	(115) YR OF FUTURE ADT:	2042