

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

Road No./County:	State Road (SR) 250, Switzerland County
Designation Number(s):	1801013
Project Description/Termini:	Small structure improvement project involving the culvert carrying SR 250 over an Unnamed Tributary (UNT) to South Fork Laughery Creek, 9.11 miles east of SR 129.

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

Approval

_____	_____
INDOT DE Signature and Date	INDOT ESD Signature and Date

FHWA Signature and Date	

Release for Public Involvement

	 _____ INDOT DE Initials and Date	2021.09.15 10:58:39 -04'00' _____ 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: _____

Christian Radcliff, SJCA Inc.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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.**

Does the project have a historic bridge processed under the Historic Bridges PA*?	Yes	No
	<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 October 25, 2019, 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 G1.

The project will meet the minimum requirements described in the current *Indiana Department of Transportation (INDOT) Public Involvement 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.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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

Sponsor of the Project: INDOT INDOT District: Seymour

Local Name of the Facility: SR 250 over UNT to South Fork Laughery Creek

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

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

PURPOSE AND NEED:

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

Need

The need for this project is due to the deteriorating conditions of the existing culvert over which SR 250 crosses a UNT to South Fork Laughery Creek. In its most recent inspection on February 3, 2021 (Appendix I19 - I21), the culvert was given a rating of 4 out of 9 (poor condition). Perforations have occurred throughout almost the entire length of the structure, complete section loss has occurred on the north side, and a scour hole has developed above the header wall. If not addressed, these deficiencies could further deteriorate, which could result in more expensive maintenance repairs in the future or possible failure of the culvert or roadway. According to the February 2020 Abbreviated Engineer's Report (Appendix I12 - I18), the guardrail along the north side of SR 250 appears to have been hit recently, as several posts were no longer attached to the guardrail face.

Purpose

The purpose of this project is to improve the existing crossing of SR 250 over UNT to South Fork Laughery Creek in order to maintain a safe and functional roadway and stream crossing, as well as provide a crossing with an overall rating of 7 out of 9 (good condition) or higher.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Switzerland Municipality: N/A

Limits of Proposed Work: From approximately 195 feet west of the existing structure to approximately 305 feet east of the structure along SR 250.

Total Work Length: 0.08 Mile(s) Total Work Area: 0.68 Acre(s)

Is an Interstate Access Document (IAD)1 required? If yes, when did the FHWA provide a Determination of Engineering and Operational Acceptability?

Yes1 No X Date:

1If 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.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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.

Location

This project is located at the culvert carrying SR 250 over an UNT to South Fork Laughery Creek, approximately 9.11 miles east of SR 129. The project is located in Section 32, Township 3-N, Range 2-W and Section 5, Township 2-N, Range 2-W in Cotton Township, Switzerland County, Indiana. A project location map, U.S. Geological Survey (USGS) topographic map, and aerial map can be found in Appendix B1 – B3.

Existing Conditions

The existing structure is a 45-foot-long corrugated metal pipe (CMP) with a 51-inch diameter opening. In its most recent inspection on February 3, 2021, the culvert was given a rating of 4 out of 9 (poor condition). Perforations have occurred throughout the length of the structure, complete section loss has occurred on the north side, and a scour hole has developed above the header wall.

SR 250 is classified as a two-lane Major Rural Collector, with a posted speed limit of 55 miles per hour. The existing roadway crossing the structure over the UNT to South Fork Laughery Creek has two 9.5-foot travel lanes with minimal shoulders approximately 2 feet in width. Guardrails are located on the north side of the roadway. Land use immediately surrounding the project area is roadside and agricultural with level terrain. There are two residential properties adjacent to the project area, both east and west of the project culvert.

Preferred Alternative

The preferred alternative for this project is to install a new 6-foot by 5-foot reinforced concrete box culvert to replace the existing structure. Roadway approaches east and west of the new box culvert will be milled and overlaid, the roadway crossing the new structure will be reconstructed, and new guardrails will be installed within the project area. The reconstructed roadway will provide a two-lane cross section with two 11-foot travel lanes and two 2-foot paved, 3-foot usable shoulders. This slightly widened pavement will taper to tie into the narrower pavement sections east and west of the project area. Riprap will be placed within the UNT to South Fork Laughery Creek at the culvert outlet for erosion protection and control. New concrete headwalls will be constructed at the culvert inlet and outlet. A field entrance drive will be constructed approximately 90 feet west of the project culvert along the south side of SR 250, extending south approximately 32.5 feet from an existing paved drive entrance. A pipe will be installed under the new drive for drainage control, and the proposed structure will consist of a 46-foot-long pipe with a 24-inch diameter and two end sections. There are also several public utilities that will need to be relocated as a result of this project, including one (1) underground water line, one (1) underground copper communications line, two (2) electric utility poles with guywires, and one (1) underground fiberoptic line. Temporary interruptions are expected to occur during relocation of these utilities.

Plans for this project can be found in Appendix B8 – B14. The Maintenance of Traffic (MOT) plan for the project will require full road closure during construction, with a detour route utilizing SR 129 and SR 56. Please refer to the MOT section of this document or the project plans (Appendix B9) for additional information. Letting for this project is currently anticipated for December 2022.

This alternative meets the purpose and need, as the new culvert will extend the life of the roadway, improve the hydraulic standards, and will provide a structure with an excellent condition rating. The new structure will provide adequate flow requirements and require less predicted future maintenance, with improved ease of construction. Project termini will extend approximately 85 feet east and west of the proposed structure along SR 250, to allow for reconstruction of the lane taper. These termini allow for the replacement of the existing structure, reconstruction of this section of SR 250 over the UNT to South Fork Laughery Creek, and areas of incidental construction, and the project is not dependent on the construction of any other projects. Therefore, this project has logical termini and independent utility.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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.

Three other alternatives other than the preferred alternative were considered. The engineer's report in Appendix I12 – I18 investigated these alternatives.

No Build / Do Nothing Alternative

The No Build/Do Nothing alternative was considered, and would not require the use of any funds. However, this option does not address the deterioration present at the existing structure, nor the existing structural conditions. Therefore, this alternative was removed from consideration as the purpose and need would not be met.

72-Inch Circular Culvert Alternative

This alternative includes replacing the existing structure with a 72-inch circular culvert, as well as milling and overlay of full-depth hot mix asphalt (HMA) pavement on either side of the structure. The smooth and semi-smooth alternatives for this type of culvert would require Class 2 Riprap to be placed in the UNT to South Fork Laughery Creek in order to accommodate the increased flow velocity through the structure, whereas the corrugated culvert option of the preferred alternative would only require Class 1 riprap. This alternative would meet the purpose and need of the project by meeting the adequate flow requirements and increasing the condition rating of the structure. However, higher future maintenance costs are anticipated with this alternative; therefore, this option was removed from consideration.

95-Inch by 67-Inch Pipe Arch or 83-Inch by 53-Inch Ellipse Arch Alternative

This alternative includes replacing the existing structure with either a 95-inch by 67-inch pipe arch culvert or an 83-inch by 53-inch ellipse arch culvert. As with the previously mentioned alternative, this option would also include milling and overlay of full-depth HMA pavement and Class 2 Riprap placed in the UNT to South Fork Laughery Creek. This alternative was removed from consideration due to high future maintenance costs.

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):

X

ROADWAY CHARACTER:

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

Name of Roadway	<u>SR 250</u>			
Functional Classification:	<u>Major Collector</u>			
Current ADT:	<u>1,036</u>	VPD (2023)	Design Year ADT:	<u>1,108</u>
				VPD (2043)
Design Hour Volume (DHV):	<u>121</u>	Truck Percentage (%)	<u>7.88</u>	
Designed Speed (mph):	<u>55</u>	Legal Speed (mph):	<u>55</u>	

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	HMA Through Lane		HMA Through Lane	
Pavement Width:	23	ft.	30	ft.
Shoulder Width:	2	ft.	4	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

Setting:	<input type="checkbox"/> Urban	<input type="checkbox"/> Suburban	<input checked="" type="checkbox"/> Rural
Topography:	<input checked="" type="checkbox"/> Level	<input type="checkbox"/> Rolling	<input type="checkbox"/> Hilly

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

BRIDGES AND/OR SMALL STRUCTURE(S):

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

Structure/NBI Number(s): CV #250-078-55.80 Sufficiency Rating: N/A
 (Rating, Source of Information)

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

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

The existing structure (CV 250-078-55.80) is a 45-foot long corrugated metal pipe (CMP) with a 51-inch diameter. The existing structure is incorrectly labeled as a 60-inch CMP on the plan sheets.

The proposed scope of work for this project includes the installation of a new 6-foot by 5-foot reinforced concrete box culvert to replace the existing structure. Riprap will be placed within the UNT to South Fork Laughery Creek at the north culvert opening for erosion protection and control. Approaches east and west of the existing culvert will be milled and overlaid, and the roadway between the existing guardrails will be reconstructed. The reconstructed roadway will provide a two-lane cross section with 11-foot travel lanes and 4-foot shoulders. The widened pavement will taper to tie into the narrower pavement sections east and west of the project area. The field entrance west of the project culvert will be reconstructed and a new structure under the entrance will be installed. The new structure will consist of a 46-foot-long pipe with a 24-inch diameter and two end sections.

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

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

	Yes	No
Is a temporary bridge proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is a temporary roadway proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the project involve the use of a detour or require a ramp closure? (describe below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for access by local traffic and so posted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for through-traffic dependent businesses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made to accommodate any local special events or festivals.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there substantial controversy associated with the proposed method for MOT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discuss closures 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. Any local concerns about access and traffic flow should be detailed as well.

The MOT plan for the project will require a full road closure for this section of SR 250 during construction. Traffic will be redirected along a detour route utilizing SR 129 and SR 56, adding approximately 25.2 miles or 35 minutes of additional travel. Access to all residences in the vicinity of the project area will be maintained.

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.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 552,400.00 (2020, 2023) Right-of-Way: \$ 55,000.00 (2021) Construction: \$ 1,475,087.00 (2023)
 Costs above are for the bundle of projects in the contract. An administrative modification will be required to match the STIP cost to the project cost.

Anticipated Start Date of Construction: December 2022

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	0	0
Commercial	0	0
Agricultural	1.0	0
Forest	0	0
Wetlands	0	0
Other:	0	0
TOTAL	1.0	0

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 apparent ROW in the area of this proposed project extends approximately 10 feet from the centerline. Land use in the area surrounding the project is primarily agricultural, with some residences nearby.

The project requires approximately 1.0 acre of permanent ROW from adjacent privately-owned agricultural parcels. The proposed permanent ROW boundaries will extend approximately 40-50 feet north and south of the centerline of SR 250. No temporary ROW will be required for this project.

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.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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 January 11, 2021. A sample early coordination letter is available in Appendix C1 – C3.

Agency	Date Sent / Accessed	Response Date	Appendix
Indiana Geological & Water Survey (IGWS)	January 11, 2021	January 11, 2021	C4 – C6
Indiana Department of Environmental Management (IDEM)	January 11, 2021	January 11, 2021	C7 – C13
Natural Resources Conservation Service (NRCS), USDA	January 11, 2021	January 13, 2021	C14
U.S. Fish and Wildlife Service (USFWS)	January 11, 2021	February 8, 2021	C15 – C16
Indiana Department of Natural Resources (IDNR)	January 11, 2021	February 9, 2021	C17 – C19
Federal Highway Administration (FHWA)	January 11, 2021	No Response	N/A
INDOT ESD Ecology & Waterway Permitting Office	January 11, 2021	No Response	N/A
INDOT Project Manager	January 11, 2021	No Response	N/A
INDOT Seymour District	January 11, 2021	No Response	N/A
National Park Service (NPS)	January 11, 2021	No Response	N/A
Switzerland County Commissioner	January 11, 2021	No Response	N/A
Switzerland County Council	January 11, 2021	No Response	N/A
Switzerland County Highway Department	January 11, 2021	No Response	N/A
Switzerland County Soil & Water Conservation District	January 11, 2021	No Response	N/A
Switzerland County Surveyor	January 11, 2021	No Response	N/A
U.S. Army Corps of Engineers (USACE)	January 11, 2021	No Response	N/A
U.S. Department of Housing and Urban Development (US HUD)	January 11, 2021	No Response	N/A

Resource specific recommendations are included in the applicable sections of this Categorical Exclusion (CE) document, and all applicable recommendations are included in the Environmental Commitments section of this CE document.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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: 85 Linear feet Total impacted stream(s): 77 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)
UNT to South Fork Laughery Creek	Intermittent	85	77	South to north flow direction, draining into an open water feature north of the project area. Likely jurisdictional under the USACE (Appendix F4).

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 subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map of the project area (Appendix B3), and the RFI report (Appendix E2 – E3, E8), there are fifteen (15) river and stream segments mapped within the 0.5 mile search radius. One (1) stream segment, associated with the UNT to South Fork Laughery Creek, is located within the project area. This was confirmed by the site visit on September 3, 2020, by SJCA Inc.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on February 24, 2021. Please refer to Appendix F1 – F26 for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that one (1) stream flows through the project area, an UNT to South Fork Laughery Creek (UNT 1). According to the *Waters of the U.S. Determination / Wetland Delineation Report*, UNT 1 is an intermittent stream flowing north to south through the existing project structure, with approximately 85 linear feet of the stream within the project area, before draining into an open water feature north of the project area. It was determined during the field investigation that UNT 1 is of poor quality due to a silt substrate, low in-stream cover, low sinuosity, low erosion, and lack of riffle/run complexes. This feature is likely jurisdictional under the USACE due to exhibiting an ordinary high water mark (OHWM), semipermanent flow conditions, and eventual connectivity to the Ohio River, located approximately 8.40 miles northeast of the project area. The USACE makes all final determinations regarding jurisdiction.

Replacing the structure will require working within UNT 1 below the OHWM. Approximately 77 linear feet of permanent stream impacts and approximately 17 linear feet of temporary stream impacts will occur as a result of this project. This impact is unavoidable, and avoidance would not allow the project to proceed. Mitigation will not be required for stream impacts, as less than 300 linear feet and less than 0.10 acre will be impacted as a result of this project.

IDEM responded in their automated letter on January 11, 2021, with recommendations to obtain the proper permits for work in a waterway, stating that the physical disturbance of stream and riparian vegetation, especially large overhanging trees, should be limited to only what is necessary to complete the project (Appendix C7 – C13). The USFWS responded on February 8, 2021, with recommendations to restrict below low-water work in streams, restrict channel work to the minimum necessary, minimize the extent of riprap in bank stabilization by using bioengineering techniques, and to avoid all work within the inundated part of the stream channel during the fish spawning season (Appendix C15 – C16). IDNR responded on February 9, 2021, providing the standard recommendations to avoid work in the waterway from April 1 to June 30, avoid excavation in low flow areas, operate equipment used to replace the structure from the existing roadway, use the recommended amount and type of riprap, seed and protect disturbed streambanks and slopes for erosion control and to prevent sediment from entering the stream, and to meet the necessary IDNR recommendations regarding culvert size to allow for wildlife passage (Appendix C17 – C19). All applicable agency recommendations are included in the Environmental Commitments section of this CE document.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

Open Water Feature(s)	Presence	Impacts	
		Yes	No
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	X	<input type="checkbox"/>	X
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 subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map of the project area (Appendix B3), and the RFI report (Appendix E2 – E3, E8), there are six (6) lakes mapped within the 0.5 mile search radius. One (1) lake is located adjacent to the project area, on the north side of SR 250. This was confirmed by the site visit on September 3, 2020, by SJCA Inc.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on February 24, 2021. Please refer to Appendix F1 – F26 for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that one (1) pond was located within and adjacent to the project area, Open Water Feature 1 (referred to as “Pond” in this document). The pond is located immediately north of the project area on SR 250, with approximately 0.007 acre of this feature within the investigated area. UNT 1 conveys drainage into this feature, from which flow appears to eventually continue north towards South Fork Laughery Creek; the feature is also influenced by runoff from SR 250 and inflow from UNT 1. It was determined during the field investigation that the pond is of average quality due to providing a moderate habitat for aquatic flora and fauna, though it is subject to human disturbance in the form of runoff and the project area culvert. The pond is likely jurisdictional under the authority of the USACE due to its permanent inundation and connectivity to the Ohio River, located approximately 8.40 miles northeast of the project area. The USACE makes all final determination regarding jurisdiction. Due to the scope of the project, and all construction occurring on the existing culvert carrying SR 250 over UNT to South Fork Laughery Creek, no impacts to the pond are expected.

IDEM responded in their automated letter on January 11, 2021, providing standard recommendations to obtain the proper permits regarding water resource impacts (Appendix C7 – C13). Standard recommendations from early coordination responses were also received from the USFWS on February 8, 2021 (Appendix C15 – C16) and IDNR on February 9, 2021 (Appendix C17 – C19); however, these responses did not include recommendations regarding open water features. All applicable recommendations are included in the Environmental Commitments section of this CE document.

Wetlands	Presence	Impacts	
		Yes	No
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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

Wetlands (Mark all that apply)	Documentation	ESD Approval Dates
Wetland Delineation	<input type="checkbox"/>	<input type="checkbox"/>
USACE Isolated Waters Determination	<input type="checkbox"/>	<input type="checkbox"/>

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, businesses, 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.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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 subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

Based on the desktop review, the aerial map of the project area (Appendix B3), and the RFI report (Appendix E2 – E3, E8), there are five (5) National Wetland Inventory (NWI) lines, one (1) NWI point, and eighteen (18) NWI wetlands mapped within the 0.5 mile search radius. One (1) wetland is mapped within the project area. However, during a site visit and field investigation on September 3, 2020, by SJCA Inc., the wetland was determined to be an open water body; please refer to the Open Water Feature section above.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on February 24, 2021. Please refer to Appendix F1 – F26 for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that no wetlands are present within the project area. The USACE makes all final determinations regarding jurisdiction.

Standard recommendations regarding wetland impacts were received from IDEM on January 11, 2021 (Appendix C7 – C13), the USFWS on February 8, 2021 (Appendix C15 – C16), and IDNR on February 9, 2021 (Appendix C17 – C19); however, as there are no wetlands present within the project area, these recommendations are not applicable to this project. All applicable recommendations are included in the Environmental Commitments section of this CE document.

Terrestrial Habitat	Presence	Impacts	
		Yes	No
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Total terrestrial habitat in project area: 0.47 Acre(s) Total tree clearing: 0.0 Acre(s)

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

Based on a desktop review, a site visit on September 3, 2020, by SCJA Inc., the aerial map of the project area (Appendix B3), and the *Waters of the U.S. Determination / Wetland Delineation Report* (Appendix F1 – F26), the terrestrial vegetation in the project area consists primarily of herbaceous vegetation that are common in roadside ditches and within waste places. A small area of wooded vegetation forms a riparian area along the UNT to South Fork Laughery Creek at the existing culvert inlet. Terrestrial vegetation in the project area was dominated by Tall Fescue (*Schedonorus arundinaceus*), Yellow Foxtail (*Setaria pumila*), Curly Dock (*Rumex crispus*), Johnson Grass (*Sorghum halepense*), and Black Mustard (*Brassica nigra*). Approximately 0.47 acre of terrestrial vegetation will be disturbed in order to replace the existing culvert along SR 250 and widen the existing roadway of SR 250 within the project area. This project will require no tree clearing. Impacts to terrestrial habitat have been minimized to the maximum extent possible and will not extend beyond 100 feet from the existing roadway. Mitigation for these impacts is not anticipated to be necessary for this project. All disturbed areas will be revegetated upon project completion.

IDEM responded in their automated letter on January 11, 2021, with recommendations to obtain the proper permit for erosion control (Appendix C7 – C13). The USFWS responded on February 8, 2021, with recommendations to avoid or minimize impacts to terrestrial habitat, including minimizing tree and understory vegetation clearing and to implement temporary erosion control measures within areas of disturbed soils (Appendix C15 – C16). IDNR responded on February 9, 2021, with recommendations to revegetate all disturbed areas as soon as possible upon completion of construction with plants native to Southeastern Indiana, minimizing and containing all tree and brush clearing to within the project limits, and to not cut any trees suitable for Indiana Bat or Northern Long-Eared Bat roosting between April 1 and September 30 (Appendix C17 – C19). 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 type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

Determination Received for Listed Bats from USFWS: NE NLAA LAA

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

Other Species not included in IPaC

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

Migratory Birds

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

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 E4), approved by INDOT Site Assessment & Management (SAM) on February 21, 2021, the IDNR Switzerland County Endangered, Threatened, and Rare (ETR) Species List has been checked and is included in Appendix E9. According to the IDNR early coordination response dated February 9, 2021 (Appendix C17 – C19), the Natural Heritage Program’s Database has been checked and no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

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 C20 – C25). The project is within range of the federally endangered Indiana Bat (*Myotis sodalis*) and the federally threatened Northern Long-Eared Bat (NLEB) (*Myotis septentrionalis*). No additional species were generated in the IPaC species list other than the Indiana Bat and the Northern Long-Eared Bat.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana Bat and Northern Long-Eared Bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. A culvert inspection occurred on February 25, 2020, by SJCA Inc, and a subsequent inspection was conducted during the culvert inspection on February 3, 2021, and no bats or evidence of bats were observed in the structure (Appendix C35). An effect determination key was completed on February 3, 2021, by SJCA Inc and based on the responses provided, the project was found to “May Affect – Not Likely to Adversely Affect” the Indiana Bat and/or the NLEB (Appendix C26 – C34). Avoidance and Minimization Measures (AMMs) were provided regarding temporary lighting during construction. AMMs and/or commitments are included as firm commitments in the Environmental Commitments section of this document.

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

Geological and Mineral Resources

Project located within the Potential Karst Features Area of Indiana **Yes** **No**
 Karst features identified within or adjacent to the project area
 Oil/gas or exploration/abandoned wells identified in the project area

Date Karst Study/Report reviewed by INDOT EWPO (if applicable): _____

Discuss if project is located in Potential Karst Features Area of Indiana 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. Describe if any impacts will occur to any karst features. Include discussion of karst study/report was completed and results. (Karst investigation must comply with the current Karst MOU and coordinated and reviewed by INDOT EWPO)

Based on a desktop review, the project is located outside the designated karst region of Indiana as outlined in the October 13, 1993, Karst Memorandum of Understanding (MOU). According to the USGS topographic map of the project area (Appendix B2), the RFI report (Appendix E2 – E3, E8), there are no karst features identified within or adjacent to the project area. In the early coordination response dated January 11, 2021, IGWS did not indicate that karst features exist in the project area (Appendix C4 – C6). The IGWS indicated a high liquefaction potential, low potential for bedrock resources, no sand or gravel resources and no documented active or abandoned mineral resource extraction sites in the project area. No bedrock, sand, or gravel extraction sites are known to occur within the project area; therefore, no impacts are expected. Response from IGWS has been communicated with the designer on January 11, 2021.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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	
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?

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

Sole Source Aquifer

The project is located in Switzerland 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.

Wellhead Protection Area and Source Water

IDEM's Wellhead Proximity Determinator website (<https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wellhead-protection-program/source-water-proximity-determination-tool/>) was accessed on February 10, 2021 by SJCA Inc. This project is not located within a Wellhead Protection Area or Source Water Area; therefore, no impacts are expected.

Water Wells

The IDNR Water Well Record Database website (<https://www.in.gov/dnr/water/ground-water-wells/water-well-record-database/>) was accessed on February 10, 2021, by SJCA Inc. No wells are located near this project. Therefore, no impacts are expected.

Urban Area Boundary

Based on a desktop review of INDOT MS4 website (<https://www.in.gov/idem/cleanwater/ms4s-boundaries-map-for-indiana/>) on February 10, 2021, by SJCA Inc., this project is not located in an Urban Area Boundary. No impacts are expected.

Public Water System

Based on a desktop review, a site visit on September 3, 2020, by SJCA Inc., the aerial map of the project area (Appendix B3), and the Stage 2 project plans (Appendix B8 – B14), this project is located where there is a public water system. The public water system will be affected due to a 6-inch water pipe that is in conflict with the proposed construction of the project. Coordination between the project engineer and Patriot Municipal Utilities has been ongoing throughout the design process for this project, and relocation of the water pipe is planned. Temporary interruptions are expected to occur during relocation of the pipe, but no permanent impacts are anticipated.

Floodplains

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

Presence

Impacts

Yes	No

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.

The IDNR Indiana Floodway Information Portal website (<https://dnrmmaps.dnr.in.gov/appsphp/fdms/>) was accessed on February 10, 2021, by SJCA Inc. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F9). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

Farmland	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Agricultural Lands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Prime Farmland (per NRCS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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

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

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

Based on a desktop review, a site visit on September 3, 2020, by SJCA Inc., and the aerial map of the project area (Appendix B3), there is farmland as defined by the Farmland Protection Policy Act adjacent to the project. The project will not convert any farmland, as the ROW required for this project will come from the immediately adjacent roadside along SR 250. An early coordination letter was sent on January 11, 2021, to NRCS. NRCS responded on January 13, 2021, and stated that the project will not cause a conversion of prime farmland (Appendix C14). No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

SECTION D – CULTURAL RESOURCES

	<u>Category(ies) and Type(s)</u>	<u>INDOT Approval Date(s)</u>	<u>N/A</u>
Minor Projects PA	B – 4 and B – 9	April 21, 2021	<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
- 800.11 Documentation
- Historic Properties Report or Short Report
- Archaeological Records Check and Assessment
- Archaeological Phase Ia Survey Report
- Archaeological Phase Ic Survey Report
- Other:

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

X	April 21, 2021
	N/A

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 April 21, 2021, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 4 and Type 9 under the Minor Projects Programmatic Agreement (MPPA) (Appendix D1 – D5). MPPA Category B, Type 4 projects include installations of new safety appurtenances, such as guardrails, barriers, glare screens, and crash attenuators. MPPA Category B, Type 9 projects include installation, replacement, repair, lining, or extension of culverts and other drainage structures. Work for this project will occur in undisturbed soils, and the project area contains no National Register-listed or potentially National Register-eligible archaeological resources. An archaeological Phase Ia Survey Report was completed for this project on March 26, 2021, by SJCA Inc., and no archaeological sites were discovered within or adjacent to the project area. No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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

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

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 a desktop review, the aerial map of the project area (Appendix B3), and the RFI report (Appendix E2, E7), there are no potential 4(f) resources located within the 0.5 mile search radius. According to additional research and by the site visit on September 3, 2020, by SJCA Inc., there are no Section 4(f) resources within or adjacent to the project area. Therefore, no use is expected.

Section 6(f) Involvement

Section 6(f) Property

Presence

Use

Yes

No

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

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

A review of 6(f) properties on the INDOT ESD website (<https://www.in.gov/indot/2523.htm>) revealed a total of two (2) properties in Switzerland County (Appendix I1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

SECTION F – Air Quality

STIP/TIP and Conformity Status of the Project

	Yes	No
Is the project in the most current STIP/TIP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the project located in an MPO Area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the project in an air quality non-attainment or maintenance area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If Yes, then:		
Is the project in the most current MPO TIP?	<input type="checkbox"/>	<input type="checkbox"/>
Is the project exempt from conformity?	<input type="checkbox"/>	<input type="checkbox"/>
If No, then:		
Is the project in the Transportation Plan (TP)?	<input type="checkbox"/>	<input type="checkbox"/>
Is a hot spot analysis required (CO/PM)?	<input type="checkbox"/>	<input type="checkbox"/>

Initial FY 2020 – 2024 STIP, approved July 2, 2019;
listed under Lead Des. 1800289 (Appendix H1)

Location in STIP: _____

Name of MPO (if applicable): _____

Location in TIP (if applicable): _____

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.

STIP/TIP

The Fiscal Year (FY) 2020-2024 Statewide Transportation Improvement Program (STIP) is listed based on the lead Des. number in the contract. The lead Des. number for this contract is Des 1800289. The FY 2020-2024 STIP includes Des. 1801013 by reference with the contract number B-41448 (Appendix H1).

Attainment Status

This project is located in Switzerland County which is currently in attainment for all criteria pollutants according to IDEM's Current and Historical List of Nonattainment Areas by County and the Map of Current Attainment Areas (<https://www.in.gov/idem/airquality/information-about/nonattainment/nonattainment-status-for-indiana-counties/>), as well as the United States Environmental Protection Agency (EPA) Nonattainment Areas for Criteria Pollutants Green Book (<https://www.epa.gov/green-book>). Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

MSAT

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.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

SECTION H – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

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

Yes	No
X	
	X
	X
	X
	X
	X
	X

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

This project is not located within a Metropolitan Planning Organization (MPO); subsequently, it is not referenced in an MPO Transportation Improvement Program (TIP). An approved Americans with Disabilities Act (ADA) Transition Plan was not found on the Switzerland County government webpage. An email asking about the development of an ADA Transition Plan was sent to a representative of the Building Inspector, Planning, and Zoning Department of Switzerland County on August 3, 2021 and a follow up email was sent on August 6, 2021. No response was received. This project does not involve sidewalks or public facilities that would need to comply with an ADA Transition Plan.

This project will not substantially impact the tax base or property values. The project will require approximately 1.0 acre of permanent ROW from adjacent properties. The ROW acquisition will only impact roadside and agricultural use on the properties, and will not cause any relocation of businesses or residences. No temporary ROW is anticipated for this project.

A search of local festivals, fairs, and events that could potentially be impacted by this project was conducted on February 11, 2021, by SJCA Inc. The following sources were evaluated: the Town of Vevay website (<http://vevaytownhall.org>), the Switzerland County Government website (<http://www.switzerland-county.com>), and the Switzerland County Tourism website (<https://switcotourism.com>). Only one local recurring event was found, an annual Swiss Wine Festival in Vevay, Indiana. Although the festival will not be located adjacent to or nearby project construction, the official detour route will follow SR 56 through Vevay; therefore minimal impacts will occur, and will be limited to the time of construction. It was concluded that the project will not substantially impact community cohesion or adversely impact local community events.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

Public Facilities and Services

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

Based on a desktop review, the aerial map of the project area (Appendix B3), the RFI report (Appendix E2, E7), and project plans (Appendix B8 – B14), there are several public utilities that will need to be relocated as a result of this project, including one (1) underground water line, one (1) underground copper communications line, and two (2) electric utility poles and their associated guywires. Temporary interruptions are expected to occur during relocation of these utilities, but no permanent impacts are anticipated. One (1) underground fiberoptic line under the north side of the existing roadway will be impacted as well, and conflict analysis is still ongoing to determine if an impact to this utility will occur. Coordination with the appropriate utility companies and the project engineer is ongoing and will continue throughout the design process and construction. There is one (1) school, Switzerland County Elementary School, that is incorrectly mapped on Google Maps approximately 500 feet southeast of the project area, and is actually located approximately 2.68 miles east of the project area. Therefore, no impacts will occur.

The section of SR 250 within the project area may also be along routes utilized by emergency services. During construction, a road closure and detour of vehicular traffic, including emergency services, will be required; access will be regained following the completion of project construction. For details regarding the MOT plan for this project, refer to the Maintenance of Traffic section of this CE document or the project plans (Appendix B9).

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.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified?

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

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

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

Will the project result in adversely high and disproportionate impacts to EJ populations?

Indicate if EJ issues were identified during project development. If an EJ analysis was not required, discuss why. If an EJ analysis was required, describe how the EJ population was identified. Include if the project has a disproportionately high and 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 1.0 acre 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 exist 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 Switzerland County. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 9657, Switzerland County. An AC has a population of concern for EJ if the population is more than 50% minority or low-income, or if the minority or low income population is 125% of the COC. Data from the 2017 ACS 5-Year Estimates was obtained from the U.S. Census Bureau website (<https://data.census.gov/>) on February 11, 2021, by SJCA Inc. The data collected for minority and low-income populations are summarized in the table below.

Table: Minority and Low-Income Data (U.S. Census Bureau, 2017 ACS 5-Year Estimates)		
	COC – Switzerland County	AC – Census Tract 9657, Switzerland County
Percent Minority	4.3%	5.8%
125% of COC	5.4%	AC > 125% COC
EJ Population of Concern	--	Yes
Percent Low-Income	19.7%	25.1%
125% of COC	24.6%	AC > 125% COC
EJ Population of Concern	--	Yes

AC Census Tract 9657 has a percent minority of 5.8%, which is below 50% but is above the 125% COC threshold. Therefore, the AC has a minority population of EJ concern.

AC Census Tract 9657 has a percent low-income of 25.1%, which is below 50% but is above the 125% COC threshold. Therefore, the AC has a low-income population of EJ concern.

Conclusion

The EJ analysis, including census data sheets, maps, and calculations, can be found in Appendix I2 – I10. During EJ analysis calculations, the AC was found to have both a minority and low-income population of EJ concern. On March 9, 2021, the EJ analysis sent to INDOT Environmental Services Division (ESD), and in a response dated April 5, 2021, INDOT ESD determined that the project would not disrupt community cohesion or create a physical barrier (Appendix I11). With the information provided, INDOT ESD would not consider the impacts associated with this project as causing a disproportionately high and adverse effect on minority and/or low income populations of EJ concern relative to non-EJ populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further EJ Analysis is required.

Indiana Department of Transportation

County Switzerland Route SR 250 Des. No. 1801013

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.

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

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

Date RFI concurrence by INDOT SAM (if applicable): February 12, 2021

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, an RFI was concurred by INDOT SAM on February 12, 2021 (Appendix E3 – E4). No sites with hazardous material concerns (hazmat sites) or sites involved with regulated substances were identified in or within 0.5 mile of the project area. Further investigation for hazardous material concerns or regulated substances is not required at this time.

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

Part IV – Permits and Commitments

PERMITS CHECKLIST

Permits (mark all that apply)

Likely Required

Army Corps of Engineers (404/Section10 Permit)

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

IN Department of Environmental Management (401/Rule 5)

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

IN Department of Natural Resources

Construction in a Floodway	
Navigable Waterway Permit	
Other	

Mitigation Required

US Coast Guard Section 9 Bridge Permit

Others (Please discuss in the discussion below)

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

The project will require a Section 401 Nationwide Permit (NWP) from IDEM, and a Section 404 NWP permit from USACE. Mitigation will not be required as a condition of these permits. A Rule 5 permit through IDEM is not required because the project will disturb less than one acre in area. A Construction in a Floodway Permit through IDNR will not be required because the project does not occur in a regulatory floodplain.

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

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

Indiana Department of Transportation

County Switzerland

Route SR 250

Des. No. 1801013

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 ROW amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDOT 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 would 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) Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
- 5) A USFWS Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after (February 3, 2023), an inspection of the structure by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD and INDOT District)

For Further Consideration

- 6) 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)
- 7) 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)
- 8) 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)
- 9) 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)
- 10) Evaluate wildlife crossings under bridge/culvert 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)
- 11) 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. (IDNR)
- 12) Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR)
- 13) Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR)
- 14) Operate equipment used to replace the bridge from the existing roadway. (IDNR)
- 15) Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR)
- 16) If box or pipe culverts are used, the bottoms should be buried to a minimum of 6" (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2') below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossings should: span the entire channel width (a minimum of 1.2 times the bankful width); maintain the natural stream substrate within the structure; have a minimum openness ratio (height x width/length) of 0.25; and have stream depth and water velocities during low-flow conditions that are approximate to those in the natural stream channel. The new, replacement, or rehabbed structure should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. (IDNR)
- 17) If possible, the project design should avoid inclusion of a cofferdam. If a cofferdam is deemed critical for the construction to occur, please submit a justification for the necessity of the cofferdam with any permit application. (IDNR)

DES 1801013 CE-2 APPENDICES
TABLE OF CONTENTS

	<u>Page</u>
Appendix A – INDOT Supporting Documentation	
CE Level Threshold Chart.....	A1
Appendix B – Graphics	
Project Location Map	B1
USGS Topographic Map	B2
Aerial Map.....	B3
Site Photographs and Photo Orientation Map	B4 – B7
Stage 2 Project Plans	B8 – B14
Appendix C – Early Coordination	
Sample Early Coordination Letter.....	C1 – C2
Early Coordination Mailing List	C3
IGWS Automated Response	C4 – C6
IDEM Automated Response	C7 – C13
NRCS Response.....	C14
USFWS Response.....	C15 – C16
IDNR Response	C17 – C19
USFWS IPaC Official Species List.....	C20 – C25
USFWS NLAA Concurrence Letter.....	C26 – C34
Small Structure Bat Inspection Form	C35
Appendix D – Section 106 of the NHPA	
MPPA Determination Form	D1 – D5
Appendix E – Red Flag Investigation	
RFI Report.....	E1 – E5
Site Location Map.....	E6
Infrastructure Map	E7
Water Resources Map	E8
Switzerland County ETR List.....	E9
Appendix F – Water Resources	
<i>Waters of the U.S. Determination / Wetland Delineation Report</i> Narrative	F1 – F6
Supporting Graphics – Maps	F7 – F15
Supporting Graphics – Site Photos	F16 – F20
Wetland Determination Data Form.....	F21 – F22
Preliminary Jurisdictional Determination Form	F23 – F26
Appendix G – Public Involvement	
(This Appendix to be updated after the completion of public involvement activities)	
Sample Notice of Entry Letter.....	G1
Appendix H – Air Quality	
Indiana STIP (FY 2020 – 2024) Documentation.....	H1

Appendix I – Additional Studies and Information

Land & Water Conservation Fund (LWCF) Properties..... I1
Environmental Justice Analysis I2 – I10
 INDOT Environmental Justice Determination I11
February 2020 Engineer’s Report I12 – I18
Culvert Inspection Report..... I19 – I21

Des 1801013

Appendix A

INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4 ¹
Section 106	Falls within guidelines of Minor Projects PA	“No Historic Properties Affected”	“No Adverse Effect”	-	“Adverse Effect” Or Historic Bridge involvement ²
Stream Impacts³	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	USACE Individual 404 Permit ⁴
Wetland Impacts³	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
Right-of-way⁵	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
Relocations	None	-	-	< 5	≥ 5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat)*	“No Effect”, “Not likely to Adversely Affect” (With select AMMs ⁶)	“Not likely to Adversely Affect” (With any AMMs or commitments)	-	“Likely to Adversely Affect”	Project does not fall under Species Specific Programmatic ⁷
Threatened/Endangered Species (Any other species)*	Falls within guidelines of USFWS 2013 Interim Policy or “No Effect”	“Not likely to Adversely Affect”	-	-	“Likely to Adversely Affect”
Environmental Justice	No disproportionately high and adverse impacts	-	-	-	Potential ⁸
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Section 4(f) Impacts	None	-	-	-	Any ⁹
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes ¹⁰
Approval Level	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA

¹ Coordinate with INDOT Environmental Services Division. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

² Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

³ Total permanent impacts to streams (linear feet) and wetlands (acres).

⁴ US Army Corps of Engineers Individual 404 Permit

⁵ Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.

⁶ Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

⁷ Projects that do not fall under a Species Specific Programmatic and results in a “Likely to Adversely Affect”. Other findings can be processed as a lower level CE.

⁸ Potential for causing a disproportionately high and adverse impact.

⁹ Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.

¹⁰ Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

* Includes the threatened/endangered species critical habitat

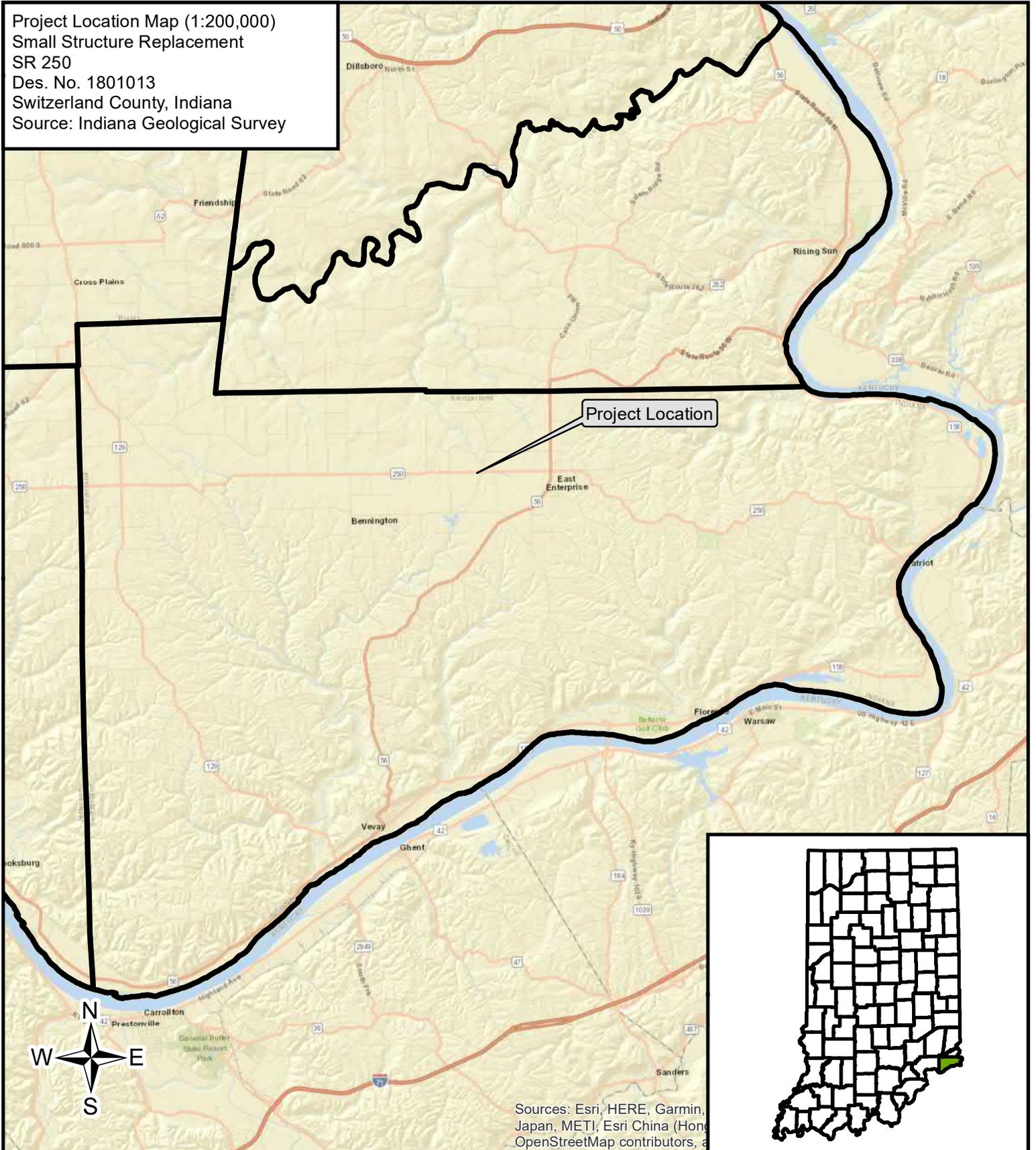
Note: Substantial public or agency controversy may require a higher-level NEPA document.

Des 1801013

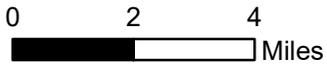
Appendix B

Graphics

Project Location Map (1:200,000)
 Small Structure Replacement
 SR 250
 Des. No. 1801013
 Switzerland County, Indiana
 Source: Indiana Geological Survey



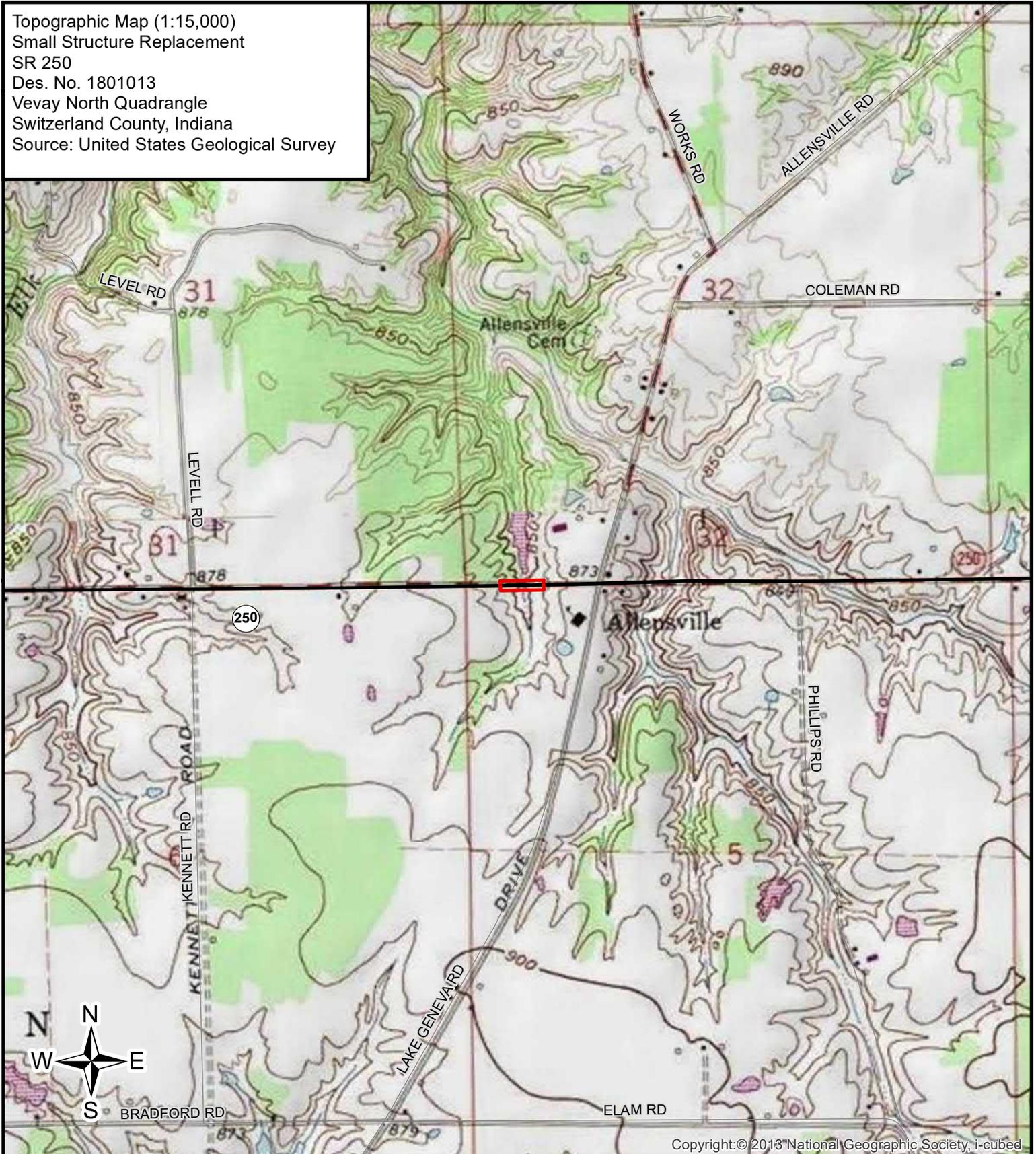
Sources: Esri, HERE, Garmin,
 Japan, METI, Esri China (Hong
 Kong), Swatch, Bing, OpenStreetMap contributors, and the
 National Geographic Society



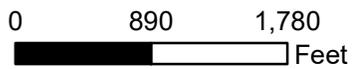
-  County Boundary
-  Project County



Topographic Map (1:15,000)
Small Structure Replacement
SR 250
Des. No. 1801013
Vevay North Quadrangle
Switzerland County, Indiana
Source: United States Geological Survey



Copyright: © 2013 National Geographic Society, i-cubed



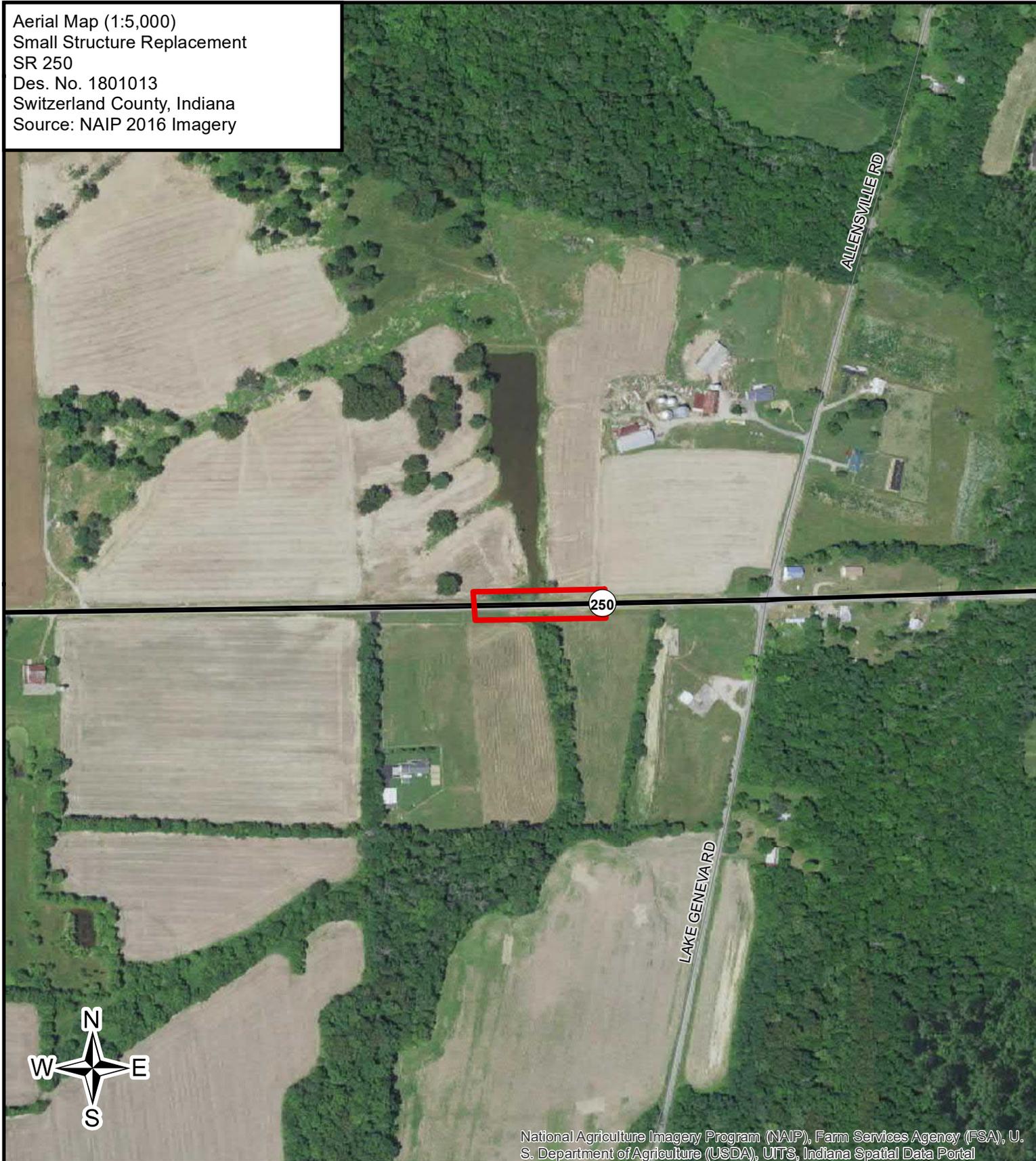
 Project Location



12/22/2020

B2

Aerial Map (1:5,000)
Small Structure Replacement
SR 250
Des. No. 1801013
Switzerland County, Indiana
Source: NAIP 2016 Imagery



National Agriculture Imagery Program (NAIP), Farm Services Agency (FSA), U. S. Department of Agriculture (USDA), UITS, Indiana Spatial Data Portal

0 290 580
Feet

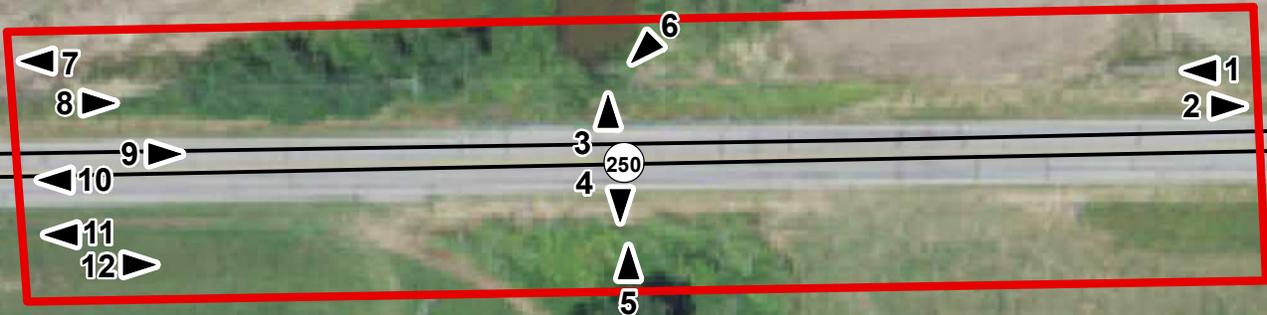
 Project Area



1/8/2021

B3

Photo Location and Orientation Map (1:779)
Small Structure Replacement
SR 250
Des. No. 1801013
Switzerland County, Indiana
Source: SJCA, Inc. Field Survey



National Agriculture Imagery Program (NAIP), Farm Services Agency (FSA), U. S. Department of Agriculture (USDA), UITS, Indiana Spatial Data Portal



-  Project Area
-  Photo Location



1/8/2021

B4



Photo 1. Right-of-way northeast of project, facing west.



Photo 3. Open water north of project, facing north.



Photo 2. Right-of-way northeast of project, facing east.



Photo 4. Stream south of project, facing south.



Photo 5. Project culvert outlet, facing north.



Photo 7. Right-of-way northwest of project, facing west.



Photo 6. Project culvert inlet, facing southwest.



Photo 8. Right-of-way northwest of project, facing east.



Photo 9. West project approach, facing east.



Photo 11. Southwest right-of-way, facing west.



Photo 10. West project approach, facing west.



Photo 12. Southwest right-of-way, facing east.

PROJECT	DESIGNATION
1801013	1801013
CONTRACT	BRIDGE FILE NO.
B-41448	

INDIANA DEPARTMENT OF TRANSPORTATION



SMALL STRUCTURE PLANS

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
CV 250-078-55.80	RC Box Culvert	1 Span @ 6'-0" Skew: 0°	South Fork Laughery Creek	16+95 "PR-A"

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
1800269	Small Structure Replacement on SR 250, 4.37 mi E. of SR 129
1500551	Bridge Superstructure Replacement on SR 250 over Indian Creek, 2.94 mi. E. of SR 129

TRAFFIC DATA		
A.A.D.T. (2023)		1,036 V.P.D.
A.A.D.T. (2043)		1,108 V.P.D.
D.H.V (2043)		121 V.P.H.
DIRECTIONAL DISTRIBUTION		49.75 %
TRUCKS		7.88 % A.A.D.T. 10.91 % D.H.V.

DESIGN DATA	
DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (Non-Freeway)
FUNCTIONAL CLASSIFICATION	Major Collector
RURAL/URBAN	Rural
TERRAIN	Level
ACCESS CONTROL	None

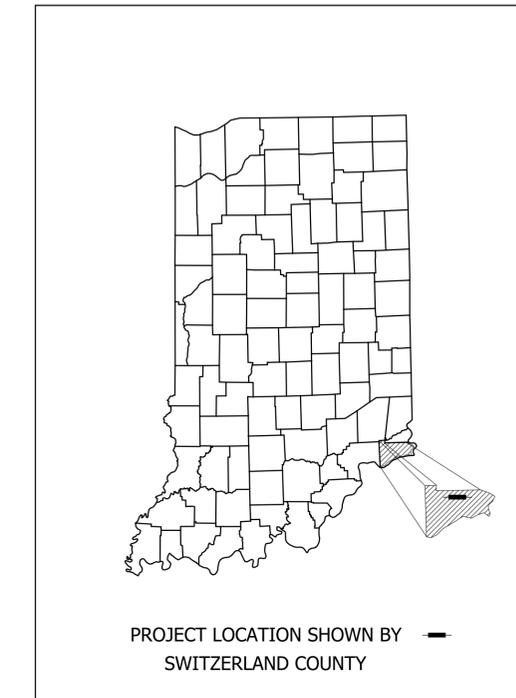
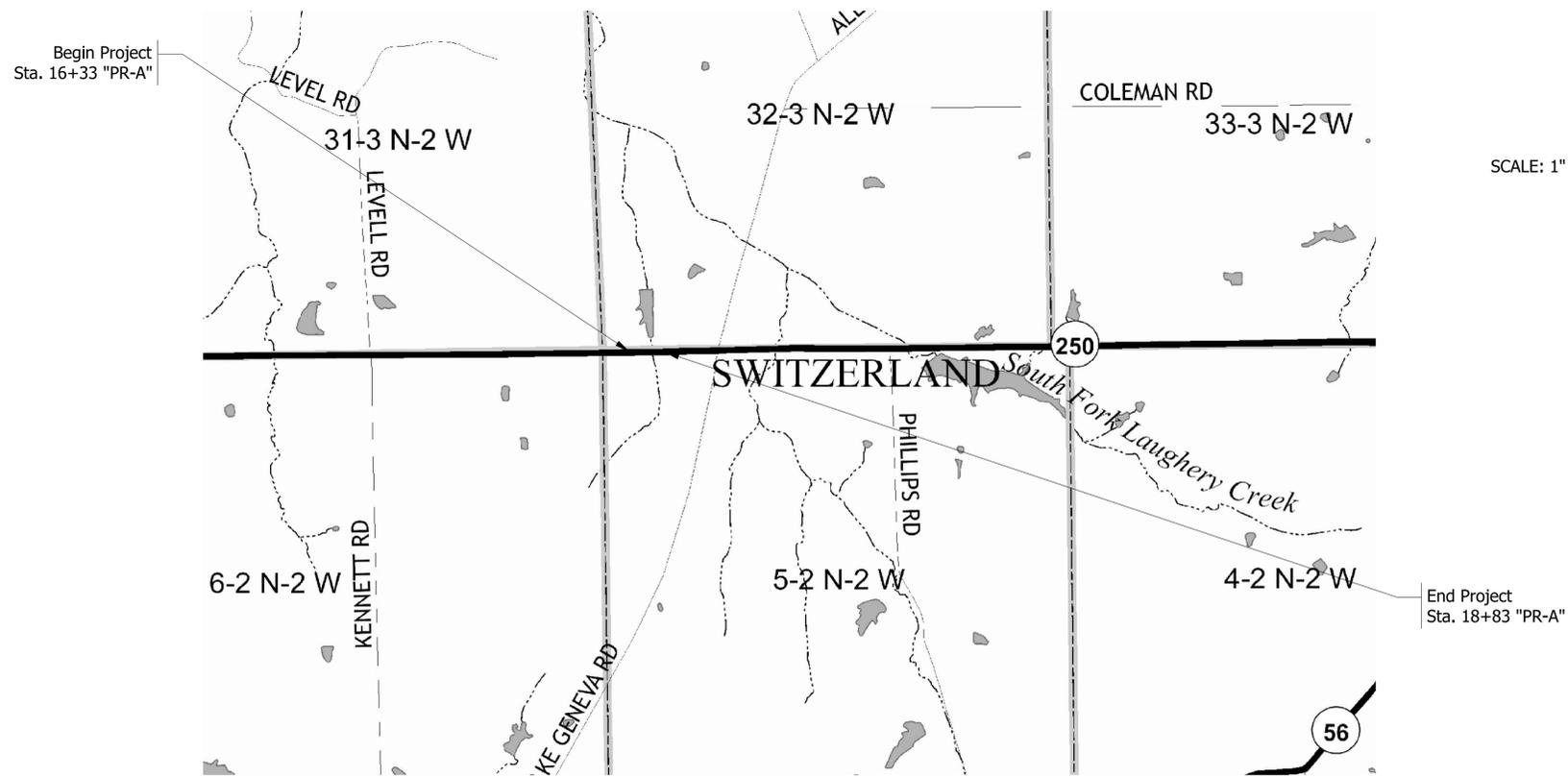
ROUTE: SR 250 AT: RP 55+80

PROJECT NO. 1801013 P.E.

 1801013 R/W

 1801013 CONST.

Small Structure Replacement on SR 250 over UNT South Fork Laughery Creek
 Located 9.11 Miles East of SR 129, at RP 55+80
 Section 32, T-3-N, R-2-W, & Section 5, T-2-N, R-2-W, Cotton Township, Switzerland County



LATITUDE: 38° 52' 23" LONGITUDE: 85° 01' 22"

BRIDGE LENGTH:	N/A	MI.
ROADWAY LENGTH:	0.08	MI.
TOTAL LENGTH:	0.08	MI.
MAX. GRADE:	6.87%	%

HUC: 050902030701

INDIANA DEPARTMENT OF TRANSPORTATION
 STANDARD SPECIFICATIONS DATED 2020
 TO BE USED WITH THESE PLANS

andreaab
 5:27:49 PM
 1/20/2021
 S:\COL\4000-4099\4060\344\Drawings\CAD\Micros\Plan\Shr Title.dgn



PLANS PREPARED BY: **STRAND ASSOCIATES, INC.** (812)372-9911
 629 WASHINGTON ST., COLUMBUS, IN 47201 PHONE NUMBER

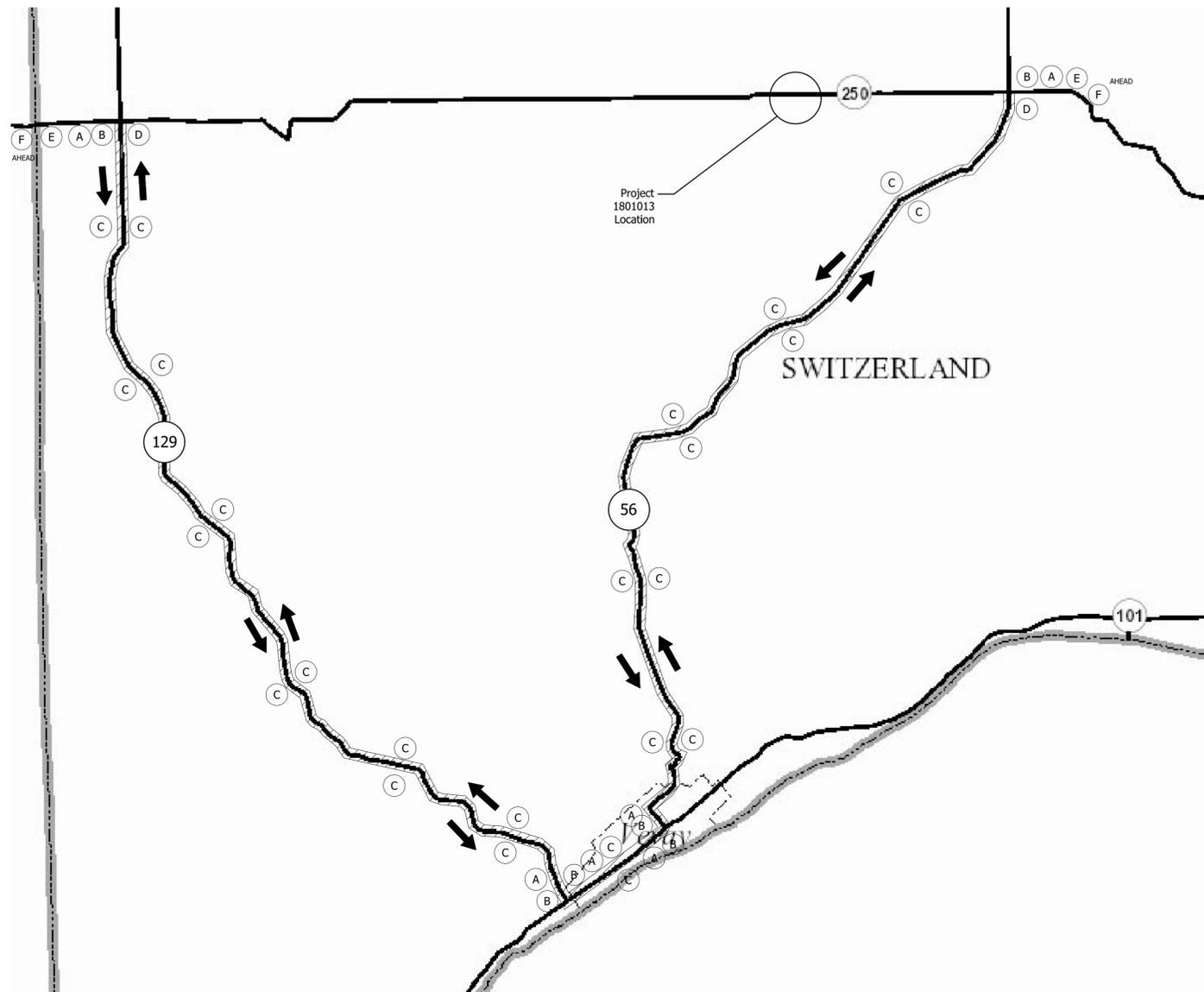
CERTIFIED BY: _____ DATE _____

APPROVED FOR LETTING: _____ DATE _____
 INDIANA DEPARTMENT OF TRANSPORTATION

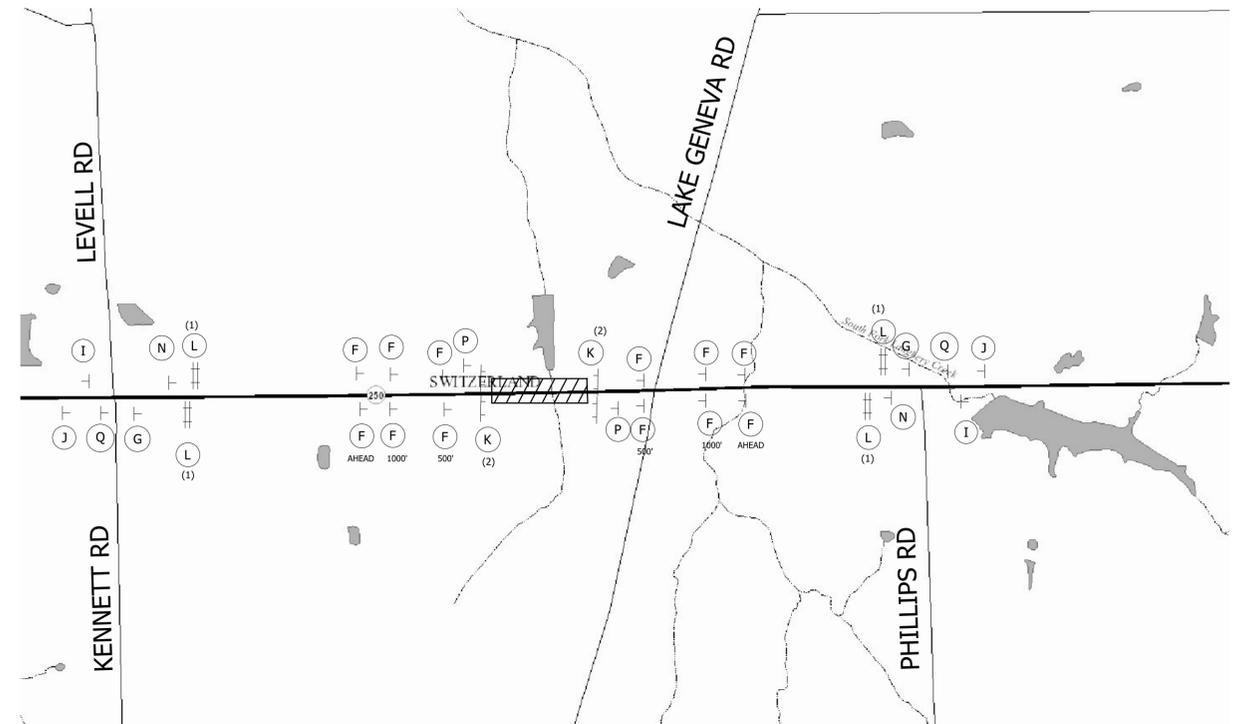
BRIDGE FILE NO.	
DESIGNATION	
1801013	
SURVEY BOOK	SHEETS
	1 of 16
CONTRACT	PROJECT
B-41448	1801013

1/20/2021 5:28:02 PM andreasb

S:\COL\4000-4099\4060\344\Drawings\CAD\Micros\Plan\Site_Detour.dgn



DETOUR MAP



PROJECT LOCATION MAP

Detour Route Marker Assemblies

A	DRMA (Advance Turn)	6	Ea.
B	DRMA (Directional)	6	Ea.
C	DRMA (Confirming)	24	Ea.
D	DRMA (End)	2	Ea.

Road Closure Sign Assemblies

N	RCSA (R11-4)	2	Ea.
P	RCSA (R11-2)	2	Ea.

Type A Construction Signs

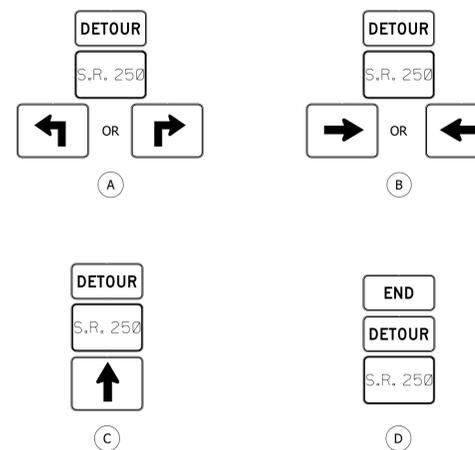
E	XW20-2 (Detour Ahead)	2	Ea.
F	XW20-3 (Road Closed _____)	14	Ea.
G	XG20-5 (Closure Date)	2	Ea.

Barricades

K	Barricade, Type III-A (No. of 12' Units)	-	Lft. (4)
L	Barricade, Type III-B (No. of 12' Units)	-	Lft. (4)

Type A Construction Signs

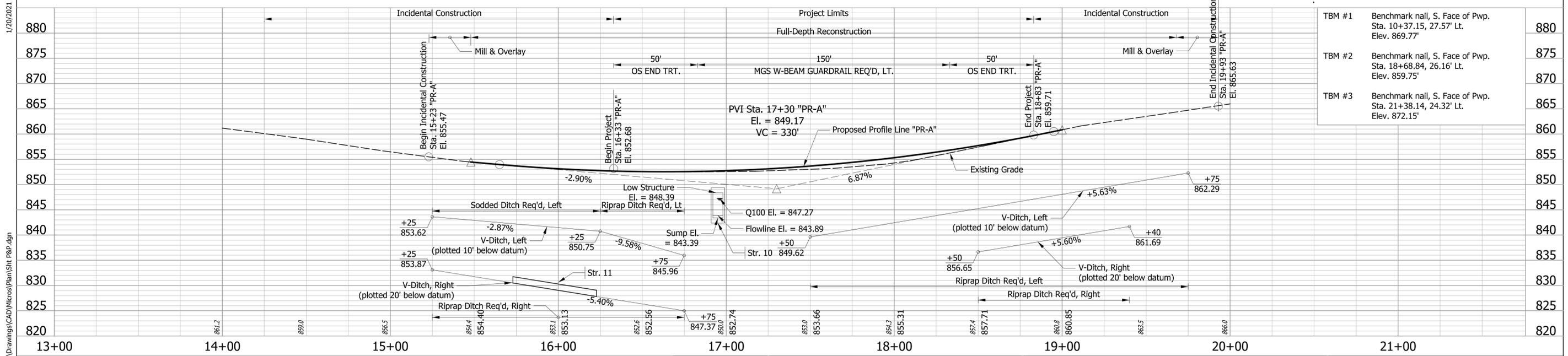
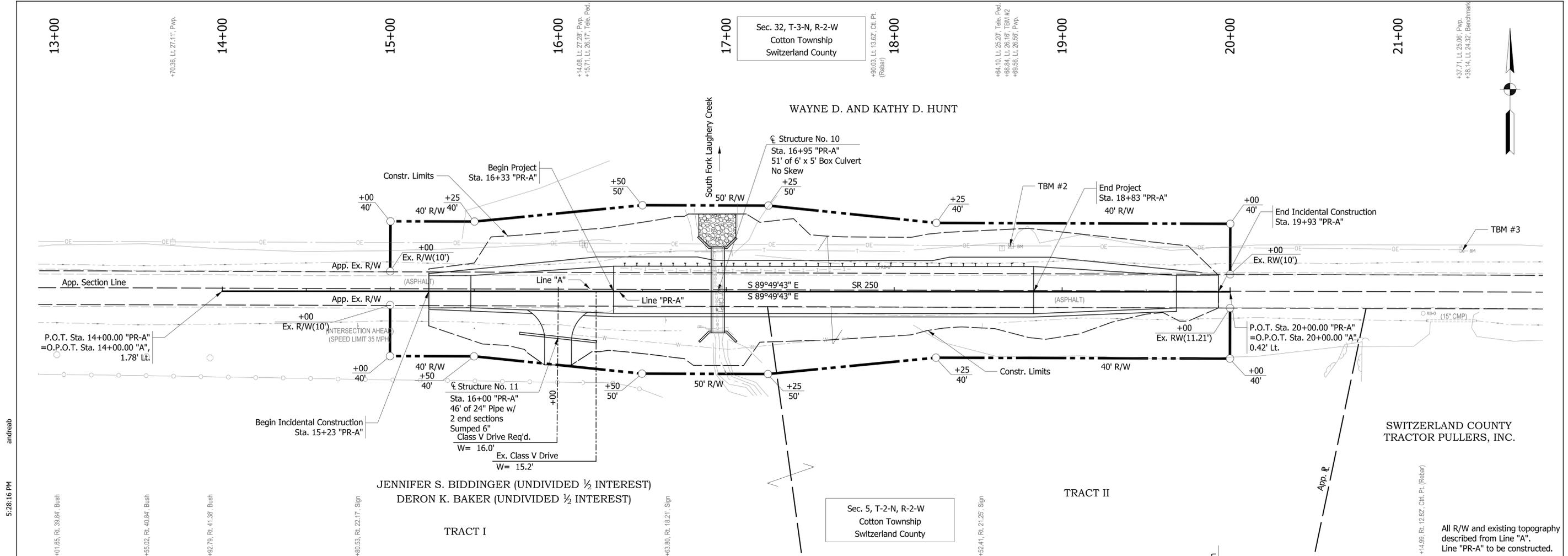
I	XG20-2 (End Construction)	2	Ea.
J	XW20-1 (Road Construction Ahead)	2	Ea.
Q	XW2-6-A Worksite Penalty Sign	2	Ea.



Legend

	Posted Detour Route		Construction Sign
	Traffic Flow Arrow		Barricade III-A
			Barricade III-B

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE NO.
		MAINTENANCE OF TRAFFIC SR 250 OVER UNT S. FORK LAUGHERY		1" = 5000'	
DESIGNED: ALB	DRAWN: ACB			VERTICAL SCALE	DESIGNATION NO.
CHECKED: DEB	CHECKED: ALB			NA	1801013
				SURVEY BOOK NO.	SHEETS
					5 of 16
				CONTRACT NO.	PROJECT NO.
				B-41448	1801013



TBM #1	Benchmark nail, S. Face of Pwp. Sta. 10+37.15, 27.57' Lt. Elev. 869.77'	880
TBM #2	Benchmark nail, S. Face of Pwp. Sta. 18+68.84, 26.16' Lt. Elev. 859.75'	875
TBM #3	Benchmark nail, S. Face of Pwp. Sta. 21+38.14, 24.32' Lt. Elev. 872.15'	865

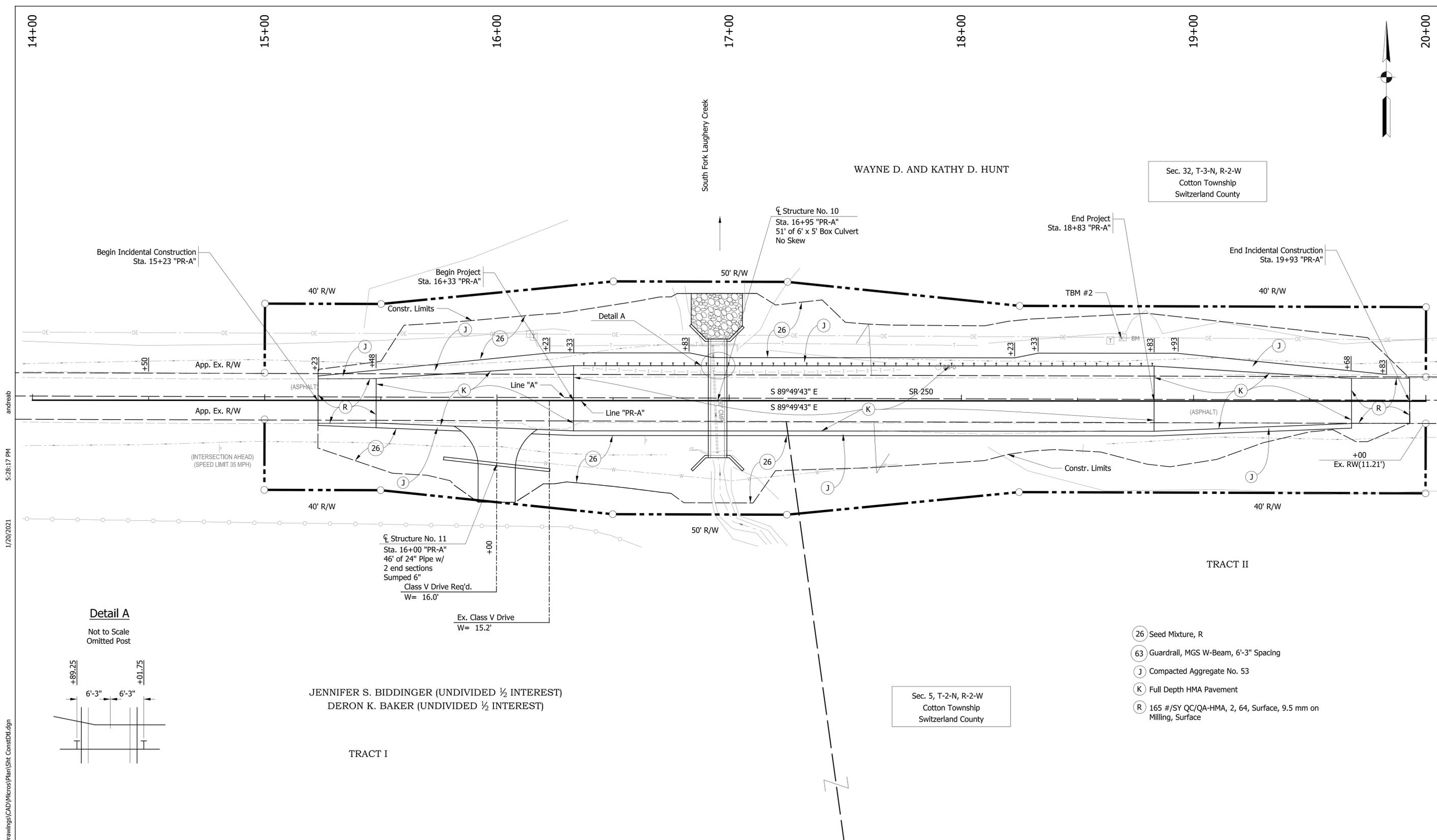
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ALB	DRAWN: ACB	
CHECKED: DEB	CHECKED: ALB	

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN & PROFILE LINE "PR-A"

HORIZONTAL SCALE	BRIDGE FILE NO.
1" = 30'	
VERTICAL SCALE	DESIGNATION NO.
1" = 10'	1801013
SURVEY BOOK NO.	SHEETS
	6 of 16
CONTRACT NO.	PROJECT NO.
B-41448	1801013

S:\COL\4000-1099\4060\344\Drawings\CAD\Micros\Plan\Shit P&P.dgn 1/20/2021 5:28:16 PM andreasb

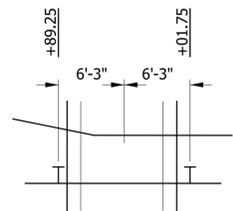


Sec. 32, T-3-N, R-2-W
Cotton Township
Switzerland County

Sec. 5, T-2-N, R-2-W
Cotton Township
Switzerland County

JENNIFER S. BIDDINGER (UNDIVIDED 1/2 INTEREST)
DERON K. BAKER (UNDIVIDED 1/2 INTEREST)

Detail A
Not to Scale
Omitted Post



- (26) Seed Mixture, R
- (63) Guardrail, MGS W-Beam, 6'-3" Spacing
- (J) Compacted Aggregate No. 53
- (K) Full Depth HMA Pavement
- (R) 165 #/SY QC/QA-HMA, 2, 64, Surface, 9.5 mm on Milling, Surface

1/20/2021 5:28:17 PM andreasb

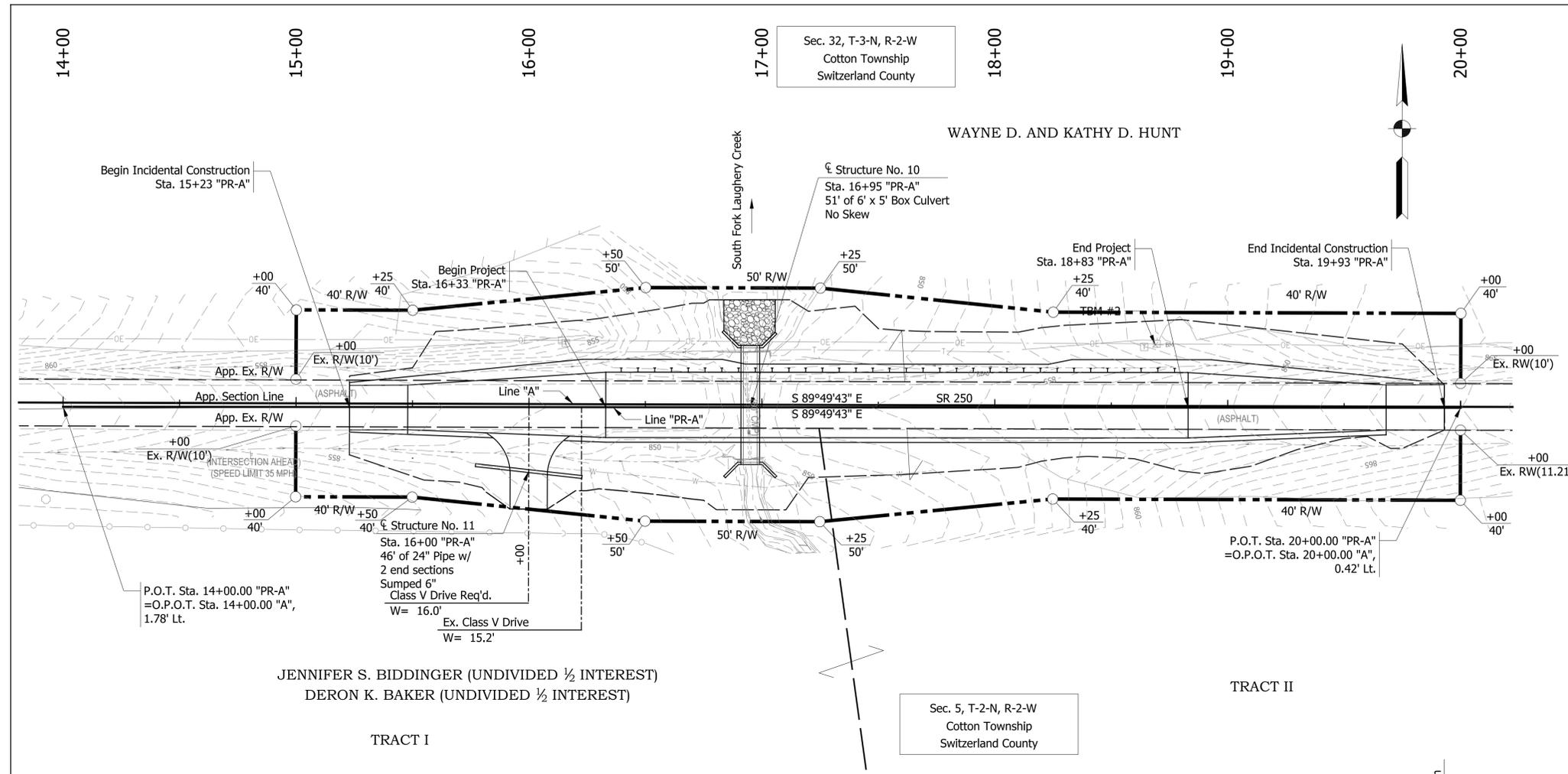
S:\COL\4000-1099\4060\344\Drawings\CAD\Micros\Plan\Shr_ConstDtl.dgn

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ALB	DRAWN: ACB	
CHECKED: DEB	CHECKED: ALB	

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE NO.
VERTICAL SCALE	DESIGNATION NO. 1801013
SURVEY BOOK NO.	SHEETS 7 of 16
CONTRACT NO. B-41448	PROJECT NO. 1801013



EXISTING STRUCTURE
 The existing culvert (CV 250-078-55.80) is a corrugated metal pipe that is of unknown age. The structure is approximately 4.25' in diameter and approximately 47 ft in length. Existing structure to be removed.

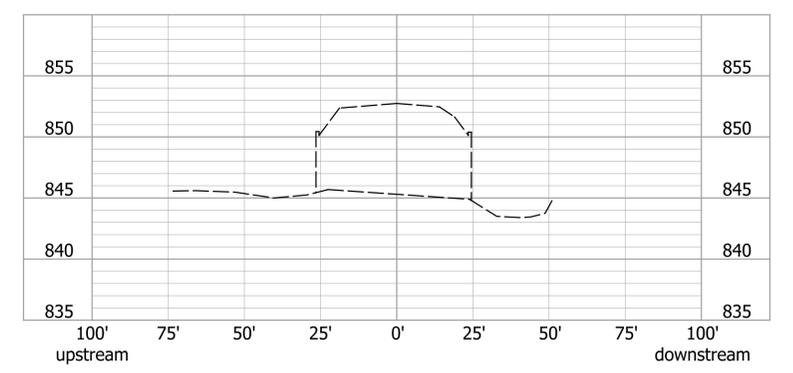
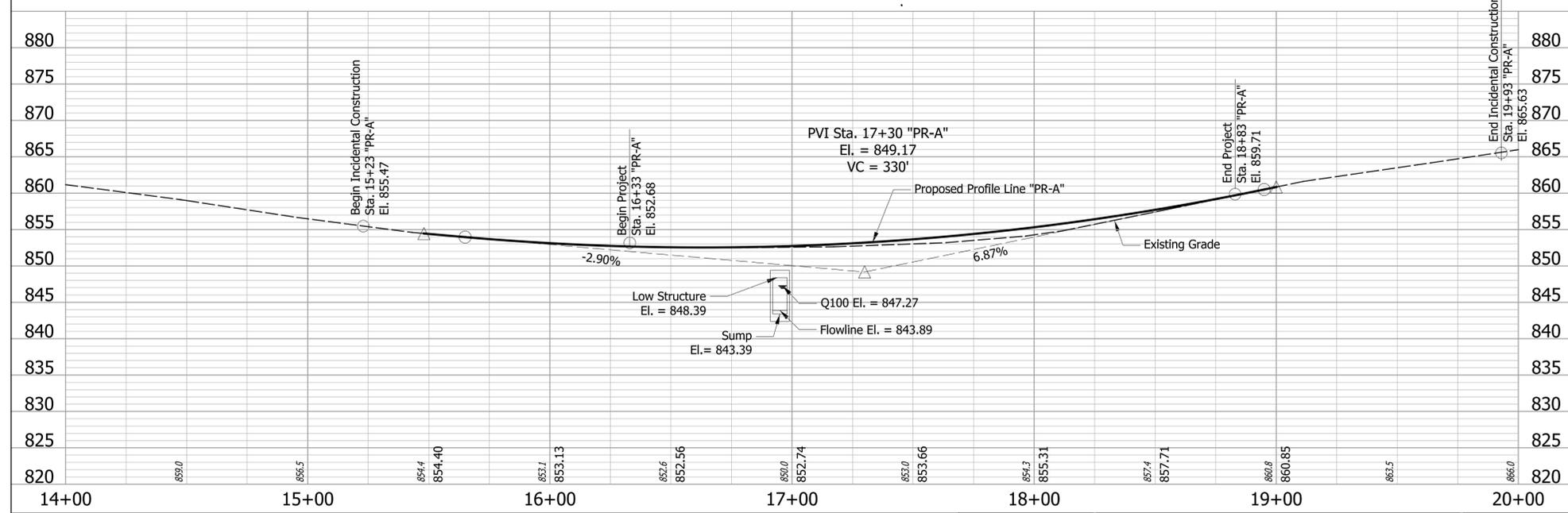
EARTHWORK TABULATION

Fill + 25%	766 cys
Usable Common Excavation	121 cys
Unusable Common Excavation	342 cys
Total Common Excavation	463 cys
Total Borrow	645 cys
Benching	158 cys

No direct payment for Benchng. Benchng will not be paid for as Common Excavation.

HYDRAULIC DATA

Drainage Area	=	0.17 sq. mi.
Q100 Discharge	=	128.7 cfs
Q100 Elevation	=	847.27 ft
2% EP Outlet Velocity		
Existing	=	10.00 fps
Proposed	=	9.12 fps
Backwater @ Q100		
Existing	=	2.64 ft
Proposed	=	1.45 ft



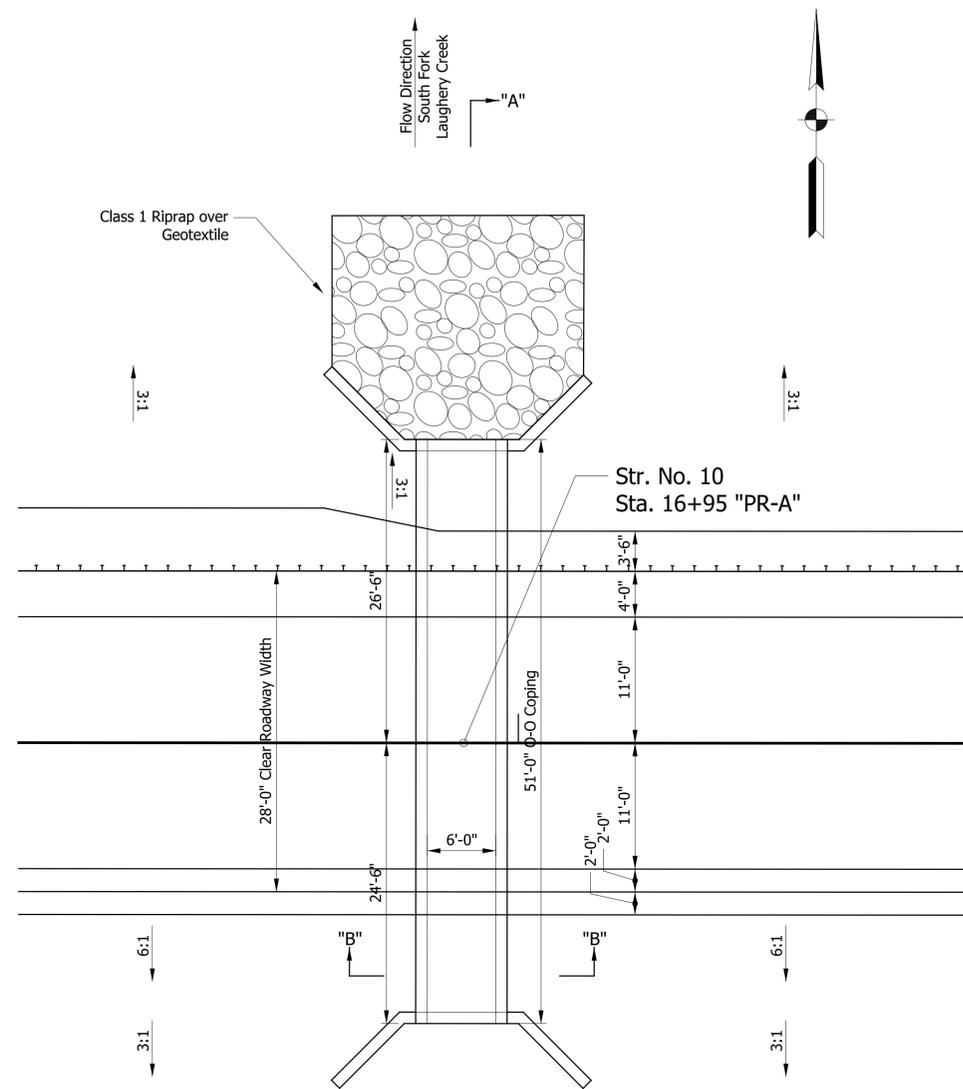
STREAM PROFILE
 H: 1"=20', V: 1" = 5'

REINFORCED CONCRETE BOX CULVERT
 SPAN: 6'-0"
 RISE: 5'-0", SUMP: 0'-6", CLEAR HEIGHT: 4'-6"
 LENGTH: 51'-0", SKEW: 0°
 SR 250 OVER SOUTH FORK LAUGHERY CREEK
 SWITZERLAND COUNTY

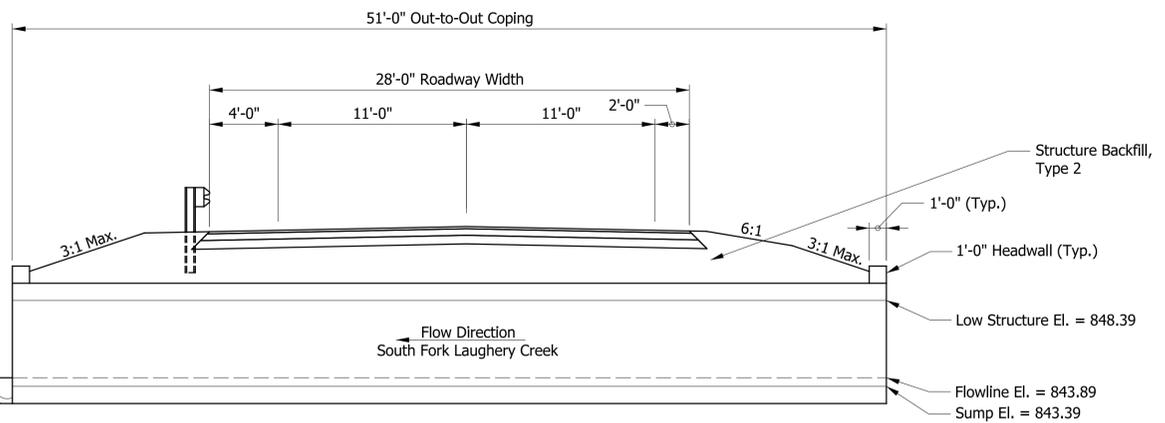
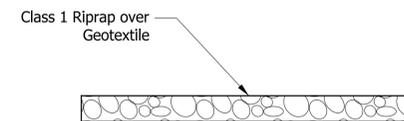
	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION LAYOUT	<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>HORIZONTAL SCALE</td> <td>BRIDGE FILE NO.</td> </tr> <tr> <td>1" = 30'</td> <td></td> </tr> <tr> <td>VERTICAL SCALE</td> <td>DESIGNATION NO.</td> </tr> <tr> <td></td> <td>1801013</td> </tr> <tr> <td>SURVEY BOOK NO.</td> <td>SHEETS</td> </tr> <tr> <td></td> <td>8 of 16</td> </tr> <tr> <td>CONTRACT NO.</td> <td>PROJECT NO.</td> </tr> <tr> <td>B-41448</td> <td>1801013</td> </tr> </table>	HORIZONTAL SCALE	BRIDGE FILE NO.	1" = 30'		VERTICAL SCALE	DESIGNATION NO.		1801013	SURVEY BOOK NO.	SHEETS		8 of 16	CONTRACT NO.	PROJECT NO.	B-41448	1801013
HORIZONTAL SCALE	BRIDGE FILE NO.																		
1" = 30'																			
VERTICAL SCALE	DESIGNATION NO.																		
	1801013																		
SURVEY BOOK NO.	SHEETS																		
	8 of 16																		
CONTRACT NO.	PROJECT NO.																		
B-41448	1801013																		
	DESIGNED: ALB CHECKED: DEB																		
	DRAWN: ACB CHECKED: ALB																		

andreasb 5:28:18 PM 1/20/2021

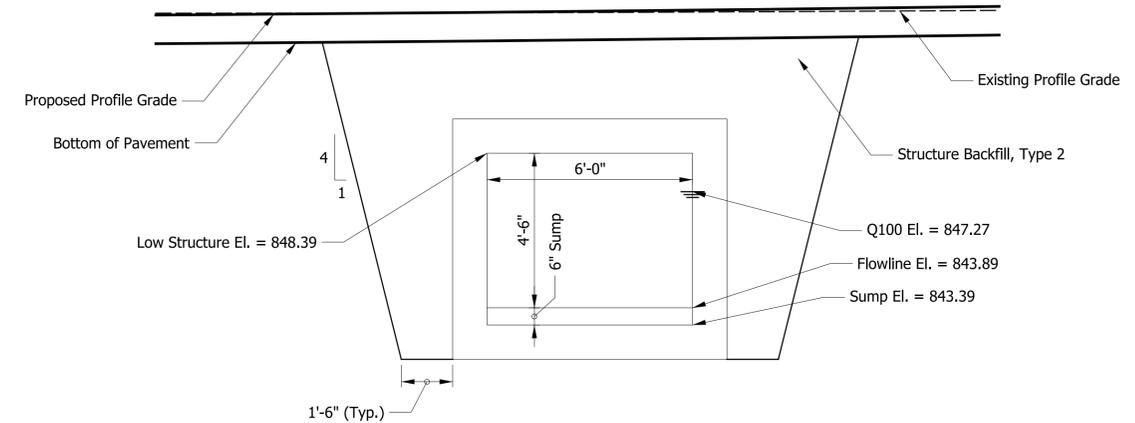
S:\COL\4000-4099\4060\344\Drawings\CAD\Micros\Plan\Sht General Plan.dgn



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



SECTION "A-A" (TRANSVERSE)
Scale: 3/16" = 1'-0"



SECTION "B-B" (LONGITUDINAL)
Scale: 3/8" = 1'-0"

GENERAL NOTES

- An alternate three-sided arch-top structure with a 6-ft perpendicular span and a 5-ft high opening may be substituted for the structure shown.
- Contractor shall verify the existing flowline elevation to set the appropriate sump depth.
- Manufacturer's dimensions for pre-cast structures (except opening size) shall override shown dimension.
- Waterproofing membrane shall be installed on the structure in accordance with the special provisions.
- If unsuitable materials are encountered at the base of excavation, the material shall be removed and replaced up to 12" with compacted aggregate No. 53 at the discretion of the Project Engineer.
- Footing shall be a minimum of 1'-6".
- Bottom of footing shall be a minimum of 4'-0" below the existing flowline.
- See Standard Drawing E 715-BKFL-01 for backfill trench elevation view.

DESIGN DATA

- Wingwalls and headwalls shall be designed in accordance with Standard Specification 714 for box culverts or 723 for three-sided structure.
- Live Load: Designed for HL-93 loading, in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017.
- Dead Load: Dead load increased 35 psf for future wearing surface.

DESIGN STRENGTH	
Reinforcing Steel (Grade 60)	$f_y = 60,000$ psi
Class C Concrete	$f'_c = 4,000$ psi
Class B Concrete	$f'_c = 3,000$ psi
Class A Concrete	$f'_c = 3,500$ psi

FOUNDATION DESIGN	
Nominal Bearing Resistance (Q_n)	-- psf
Resistance factor (ϕ)	--
Factored Bearing Resistance (Q_r)	-- psf
Friction angle between wingwall and soil backfill (δ)	--°
Friction factor at base of foundation (f)	--
Angle of internal friction of foundation soil (ϕ)	--°

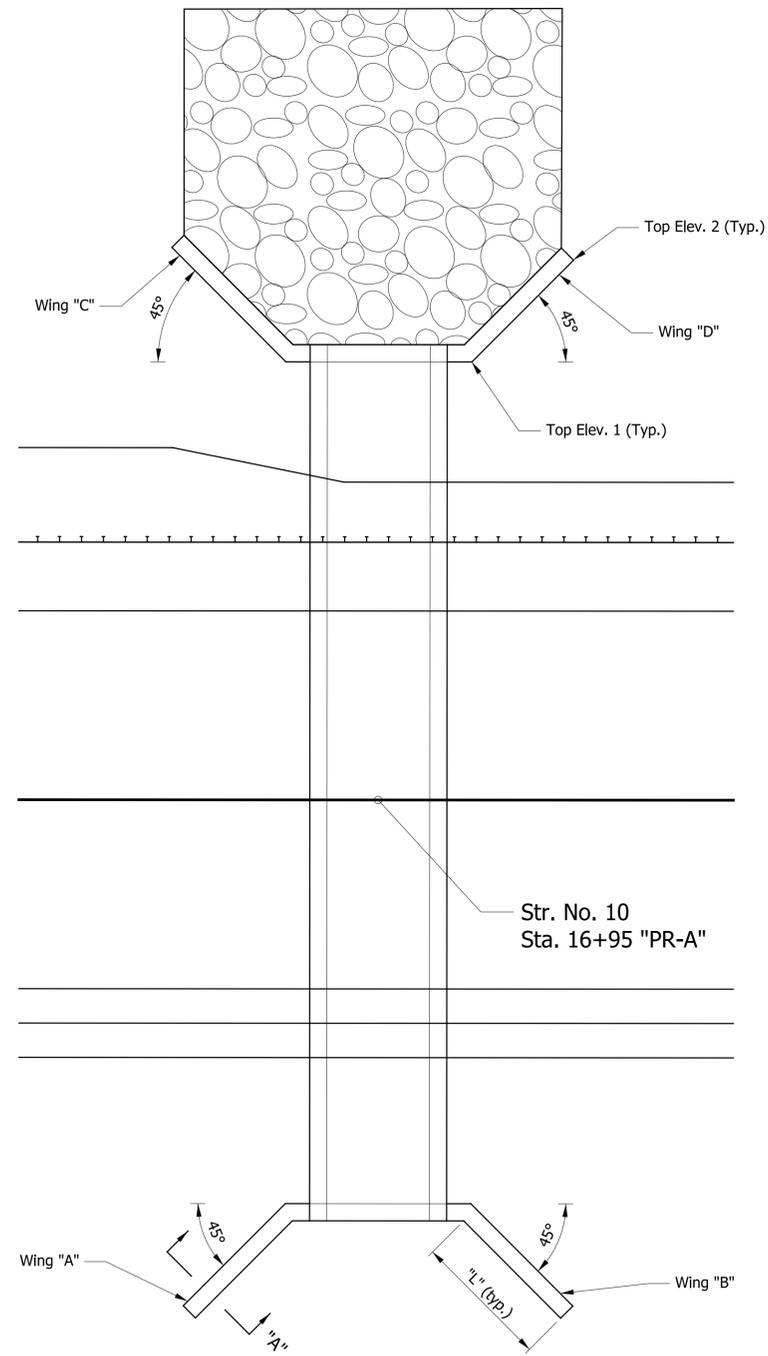
*This information is based on a minimum footing width of 3 feet.

REINFORCED CONCRETE BOX CULVERT
SPAN: 6'-0"
RISE: 5'-0", SUMP: 0'-6", CLEAR HEIGHT: 4'-6"
LENGTH: 51'-0", SKEW: 0°
SR 250 OVER SOUTH FORK LAUGHERY CREEK
SWITZERLAND COUNTY

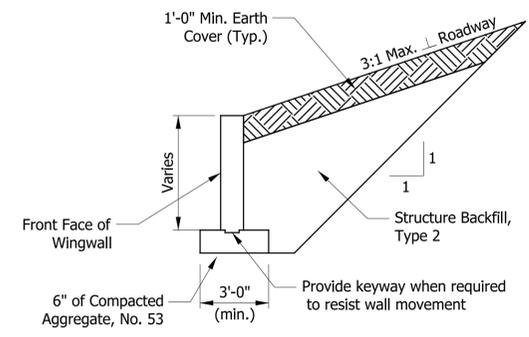
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE NO.
	DESIGNED: ALB	DRAWN: ACB		1/8" = 1'-0"	
CHECKED: DEB	CHECKED: ALB		STRUCTURE DETAILS	VERTICAL SCALE	DESIGNATION NO.
					1801013
				SURVEY BOOK NO.	SHEETS
			CONTRACT NO.	9 of 16	
			B-41448	PROJECT NO.	
				1801013	

andreasb 5:28:19 PM 1/20/2021

S:\COL\4000-4099\4060\344\Drawings\CAD\Micros\Plan\Site General Plan2.dgn

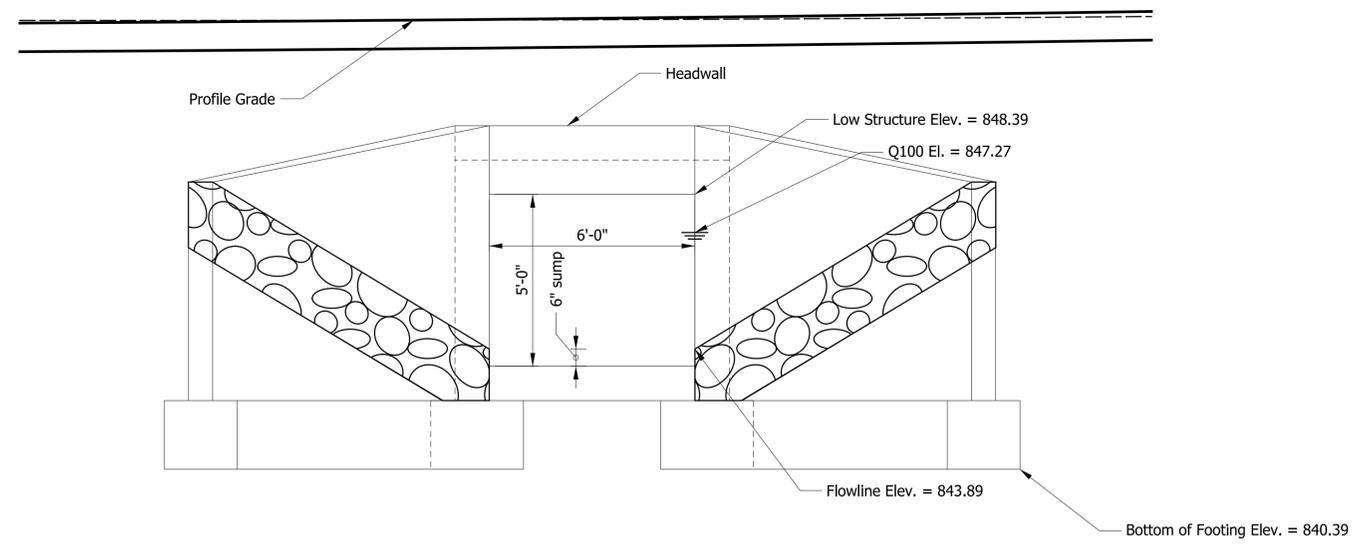


PLAN
Scale: 3/16" = 1'-0"



SECTION "A-A"
Not to Scale

WINGWALL TABLE				
WING	TOP ELEV 1	TOP ELEV 2	LENGTH "L"	AREA
"A"	850.39	848.25	8'	71.44 sft
"B"	850.39	848.25	8'	71.44 sft
"C"	850.39	848.50	9'	81.50 sft
"D"	850.39	484.25	8'	71.44 sft



ELEVATION
Scale: 3/8" = 1'-0"

RECOMMENDED FOR APPROVAL		DESIGN ENGINEER	DATE
DESIGNED: ALB	DRAWN: ACB		
CHECKED: DEB	CHECKED: ALB		

INDIANA DEPARTMENT OF TRANSPORTATION

WINGWALL DETAILS

HORIZONTAL SCALE	BRIDGE FILE NO.
3/16" = 1'-0"	
VERTICAL SCALE	DESIGNATION NO.
	1801013
SURVEY BOOK NO.	SHEETS
	10 of 16
CONTRACT NO.	PROJECT NO.
B-41448	1801013

Des 1801013

Appendix C

Early Coordination

Note: Appendix C1-C3 are a sample from the early coordination packets sent to agencies. Graphics from Appendix B1-B7 were also included.



INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204

Eric Holcomb, Governor
Joe McGuinness, Commissioner

January 11, 2021

RE: Des. No. 1801013, SR 250 Small Structure Project, 9.11 Miles east of SR 129, Seymour District, Switzerland County, IN.

Environmental Reviewer:

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a road project along SR 250 in Switzerland County, Indiana. 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.

The proposed project area includes a culvert with structural deficiencies along a section of SR 250 over Unnamed Tributary (UNT) to South Fork Laughery Creek, approximately 9.11 miles east of SR 129. The existing structure (CV 250-078-55.80) is a 47-foot-long corrugated metal pipe (CMP) with a 51-inch diameter. In its most recent inspection, the culvert was given a rating of 4 out of 9 (Poor Condition). Perforations have occurred throughout the length of the structure and could further deteriorate if not addressed, causing more expensive maintenance repairs in the future. The proposed scope of work involves improving the structural and hydraulic standards of the existing structure by replacing the existing structure with a 6-foot by 5-foot reinforced concrete box culvert that will be 56 feet in length. The size and shape of this structure will provide the adequate flow requirements, which will lower predicted future maintenance and greater ease of construction than other alternatives, such as a circular culvert or an arch culvert. Approaches east and west of the existing culvert guardrails will be milled and overlaid, the roadway between the existing guardrails will be reconstructed, and the guardrail on the north side of the road will be replaced and extended to provide adequate protection for westbound vehicles. Drives within the construction area will be reconstructed, and new drainage culverts will be installed under the drives. Riprap will be placed within the UNT to South Fork Laughery Creek on the north side for erosion control.

It is anticipated that approximately 1.0 acre of permanent right-of-way will be required for this project. No temporary right-of-way is expected. No relocation of residents or businesses will be required. The project construction length will be approximately 0.08 mile and will require full road closure during construction. Maintenance of traffic is anticipated to utilize a detour on SR 129 and SR 56 and will be approximately 25.2 miles in length. Letting for this proposed project is planned for December 2022.

Land use immediately surrounding the project area is roadside and agricultural. Due to the potential impact to water resources, a Waters of the U.S. Report will be prepared and coordination with INDOT ESD Ecology and Waterway Permitting will occur. The project qualifies for the application of the USFWS range-wide programmatic informal consultation for the Indiana Bat and Northern Long-Eared Bat and project information will be provided to the USFWS for review separately. SJCA Inc. will investigate the site for archaeological and historic resources for compliance with Section 106 and send findings to INDOT Cultural Resources staff and the State Historic Preservation Officer (SHPO) for review and concurrence.

Information specific to your agency's area of expertise concerning the effects of the project should be sent to Shelby Lutz at SJCA Inc. by email at shelby@sjcainc.com, or at 9102 N Meridian Street, Suite 200, Indianapolis, IN 46260. The INDOT Project Manager, Terry Summers, may also be contacted at tsummers@indot.in.gov. Your response is requested within **thirty (30) calendar days**, and we will incorporate any of your comments into a study of the

project's environmental impacts. **Should we not receive a response within 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.

Thank you for your assistance.

Sincerely,

Shelby Lutz
Environmental Scientist/Ecologist
SJCA, Inc.

Attachments:

Early Coordination Recipient List
Project Area Maps (Location, Topographic, Aerial)
Project Area Photographs

**SR 250 Small Structure Replacement
Des. No. 1801013
Early Coordination Notice sent to the Following Agencies:**

Federal Highway Administration
Seymore District, Erica Trait
Erica.Tait@dot.gov

Indiana Geological and Water Survey
(Online Submission)
<https://igws.indiana.edu/eAssessment>

Environmental Coordinator
IDNR Division of Fish and Wildlife
environmentalreview@dnr.in.gov

IDEM
(Online Submission)
<https://www.in.gov/idem/5283.htm>

Regional Environmental Coordinator
Midwest Regional Office
National Park Service
mwro_compliance@nps.gov

Groundwater Section
IDEM Wellhead Proximity Determinator Tool
<https://www.in.gov/idem/cleanwater/pages/wellhead>

Field Environmental Officer
Chicago Regional Office
U.S. Department of Housing & Urban Development
Melanie.H.Castillo@hud.gov

INDOT
Seymour District, David Dye
DDye@indot.in.gov

INDOT Project Manager, Terry Summers
TSummers@indot.in.gov

INDOT ESD Ecology and Waterway Permitting
Manager of Ecology & Permits, Sandra Bowman
SBowman@indot.in.gov

Field Supervisor
U.S. Fish and Wildlife Service
Bloomington Indiana Field Office
Robin_Mcwilliams@fws.gov

Natural Resources Conservation Service (NRCS)
State Conservationist, Rick Neilson
Rick.Neilson@in.usda.gov

Ms. Deborah Snyder
U.S. Army Corps of Engineers
Louisville District, Indianapolis Regulatory Office
RegulatoryApplicationsLRL@usace.army.mil

Switzerland County Government
Highway Department
Highway Superintendent, Darrell Keith
hwysuper@switzerlandcountycourthouse.org

Switzerland County Government
Soil and Water Conservation District
District Coordinator, Katie Collier
Katie.Collier@in.nacdnet.net

Switzerland County Government
Surveyor, Brian McAllister
McallistBrian@aol.com

Switzerland County Government
Commissioner, Josh South
commishsc@outlook.com

Switzerland County Government
County Council, Elizabeth Jones
Elizabeth.tharp.jones@gmail.com

County Council, Andy Haskell
vscfinc@embarqmail.com

County Council, Rachel Bladen Schuler
RachelSchuler09@aol.com



Organization and Project Information

Project ID:
Des. ID: 1801013
Project Title: SR 250 Small Structure Project
Name of Organization: SJCA Inc.
Requested by: Shelby Lutz

Environmental Assessment Report

1. Geological Hazards:

- High liquefaction potential

2. Mineral Resources:

- Bedrock Resource: Low Potential
- Sand and Gravel Resource: None documented in the area

3. Active or abandoned mineral resources extraction sites:

- None documented in the area

*All map layers from Indiana Map (maps.indiana.edu)

DISCLAIMER:

This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use. No attempt has been made in either the design or production of these data and document to define the limits or jurisdiction of any federal, state, or local government. The data used to assemble this document are intended for use only at the published scale of the source data or smaller (see the metadata links below) and are for reference purposes only. They are not to be construed as a legal document or survey instrument. A detailed on-the-ground survey and historical analysis of a single site may differ from these data and this document.

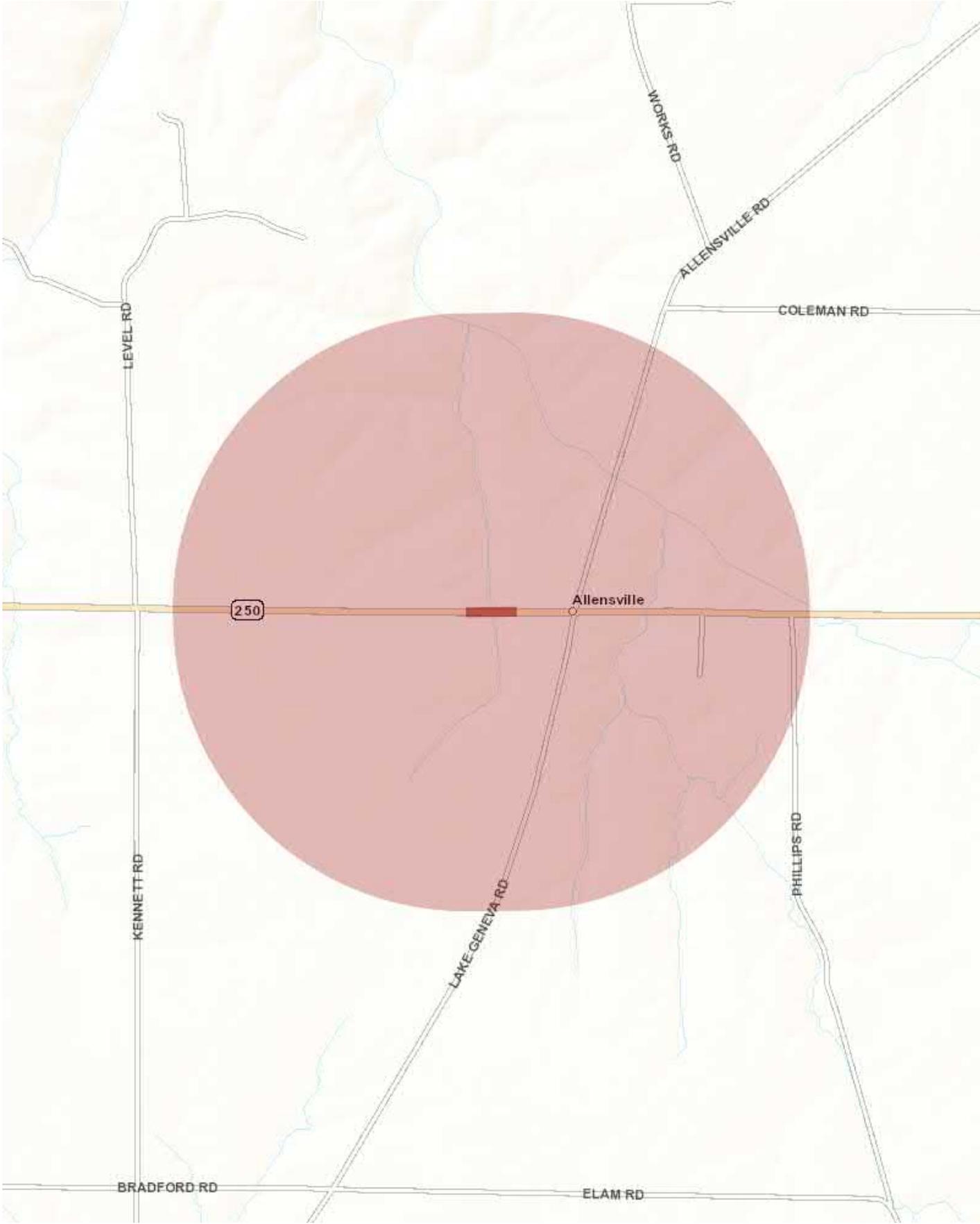
This information was furnished by Indiana Geological Survey

Address: 420 N. Walnut St., Bloomington, IN 47404

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: January 11, 2021



Metadata:

- https://maps.indiana.edu/metadata/Geology/Seismic_Earthquake_Liquefaction_Potential.html
- https://maps.indiana.edu/metadata/Geology/Bedrock_Geology.html



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 North Senate Avenue - Indianapolis, IN 46204
(800) 451-6027 - (317) 232-8603 - www.idem.IN.gov

Indiana Department of Transportation
Terry Summers
185 Agrico Lane
Seymour , IN 47274

SJCA Inc.
Shelby Lutz
9102 N Meridian St
Suite #200
Indianapolis , IN 46260

Date

Dear Grant Administrator or Other Finance Approval Authority:

RE: Des 1801013 involves a culvert with structural deficiencies along SR 250 over Unnamed Tributary (UNT) to South Fork Laughery Creek. The proposed scope of work includes replacing the existing structure, milling and overlaying the east and west approaches, reconstructing the roadway between the existing guardrails, and replacing and extending the guardrail on the north side of the road. Drives within the construction area will be reconstructed, new drainage culverts will be installed under the drives, and riprap will be placed within the UNT to South Fork Laughery Creek on the north side for erosion control.

The Indiana Department of Environmental Management (IDEM) is aware that many local government or not-for-profit entities are seeking grant monies, a bond issuance, or another public funding mechanism to cover some portion of the cost of a public works, infrastructure, or community development project. IDEM also is aware that in order to be eligible for such funding assistance, applicants are required to first evaluate the potential impacts that their particular project may have on the environment. In order to assist applicants seeking such financial assistance and to ensure that such projects do not have an adverse impact on the environment, IDEM has prepared the following list of environmental issues that each applicant must consider in order to minimize environmental impacts in compliance with all relevant state laws.

IDEM recommends that each applicant consider the following issues when moving forward with their project. IDEM also requests that, in addition to submitting the information requested above, each applicant also sign the attached certification, attesting to the fact that they have read the letter in its entirety, agree to abide by the recommendations of the letter, and to apply for any permits required from IDEM for the completion of their project.

IDEM recommends that any person(s) intending to complete a public works, infrastructure, or community development project using any public funding consider each of the following applicable recommendations and requirements:

WATER AND BIOTIC QUALITY

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are

disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.

USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE Permits and Public Notices (<http://www.lrl.usace.army.mil/orf/default.asp>) (<http://www.lrl.usace.army.mil/orf/default.asp>) and then click on "Information" from the menu on the right-hand side of that page. Their "Consultant List" is the fourth entry down on the "Information" page. Please note that the USACE posts all consultants that request to appear on the list, and that inclusion of any particular consultant on the list does not represent an endorsement of that consultant by the USACE, or by IDEM.

Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and Dekalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-6812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciusko, and Wells counties; smaller portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana) are served by the USACE Louisville District Office (502-315-6733).

Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at <http://www.in.gov/idem/4396.htm> (<http://www.in.gov/idem/4396.htm>). IDEM recommends that impacts to wetlands and other water resources be avoided to the fullest extent.

2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality. To learn more about the water quality certification program, visit: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>).
3. If the USACE determines that a wetland or other body of water is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana. A state isolated wetland permit from IDEM's Office of Water Quality is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the Office of Water Quality at 317-233-8488.
4. If your project will impact more than 0.5 acres of wetland, stream relocation, or other large-scale alterations to bodies of water such as the creation of a dam or a water diversion, you should seek additional input from the Office of Water Quality, Wetlands staff at 317-233-8488.
5. Work within the one-hundred year floodway of a given body of water is regulated by the Department of Natural Resources, Division of Water. Contact this agency at 317-232-4160 for further information.
6. The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project. The shade provided by the large overhanging trees helps maintain proper stream temperatures and dissolved oxygen for aquatic life.

7. For projects involving construction activity (which includes clearing, grading, excavation and other land disturbing activities) that result in the disturbance of one (1), or more, acres of total land area, contact the Office of Water Quality – Watershed Planning Branch (317/233-1864) regarding the need for of a Rule 5 Storm Water Runoff Permit. Visit the following Web page
 - o <http://www.in.gov/idem/4902.htm> (<http://www.in.gov/idem/4902.htm>)

To obtain, and operate under, a Rule 5 permit you will first need to develop a Construction Plan (<http://www.in.gov/idem/4917.htm#constreq> (<http://www.in.gov/idem/4917.htm#constreq>)), and as described in 327 IAC 15-5-6.5 (<http://www.in.gov/legislative/iac/T03270/A00150> [PDF] (<http://www.in.gov/legislative/iac/T03270/A00150.PDF>), pages 16 through 19). Before you may apply for a Rule 5 Permit, or begin construction, you must submit your Construction Plan to your county Soil and Water Conservation District (SWCD) (<http://www.in.gov/isda/soil/contacts/map.html> (<http://www.in.gov/isda/soil/contacts/map.html>)).

Upon receipt of the construction plan, personnel of the SWCD or the Indiana Department of Environmental Management will review the plan to determine if it meets the requirements of 327 IAC 15-5. Plans that are deemed deficient will require re-submittal. If the plan is sufficient you will be notified and instructed to submit the verification to IDEM as part of the Rule 5 Notice of Intent (NOI) submittal. Once construction begins, staff of the SWCD or Indiana Department of Environmental Management will perform inspections of activities at the site for compliance with the regulation.

Please be mindful that approximately 149 Municipal Separate Storm Sewer System (MS4) areas are now being established by various local governmental entities throughout the state as part of the implementation of Phase II federal storm water requirements. All of these MS4 areas will eventually take responsibility for Construction Plan review, inspection, and enforcement. As these MS4 areas obtain program approval from IDEM, they will be added to a list of MS4 areas posted on the IDEM Website at: <http://www.in.gov/idem/4900.htm> (<http://www.in.gov/idem/4900.htm>).

If your project is located in an IDEM-approved MS4 area, please contact the local MS4 program about meeting their storm water requirements. Once the MS4 approves the plan, the NOI can be submitted to IDEM.

Regardless of the size of your project, or which agency you work with to meet storm water requirements, IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. The use of appropriate planning and site development and appropriate storm water quality measures are recommended to prevent soil from leaving the construction site during active land disturbance and for post construction water quality concerns. Information and assistance regarding storm water related to construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM.

8. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317-232-4080) for additional project input.
9. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.
10. For projects involving effluent discharges to waters of the State of Indiana , contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.

11. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

AIR QUALITY

The above-noted project (see page 1) should be designed to minimize any impact on ambient air quality in, or near, the project area. The project must comply with all federal and state air pollution regulations. Consideration should be given to the following:

1. Regarding open burning, and disposing of organic debris generated by land clearing activities; some types of open burning are allowed under specific conditions (<http://www.in.gov/idem/4148.htm> (<http://www.in.gov/idem/4148.htm>)). You also can seek an open burning variance from IDEM.

IDEM generally recommends that you take vegetative wastes to a registered yard waste composting facility or that the waste be chipped or shredded with composting on-site. You must register with IDEM if more than 2,000 pounds is to be composted; contact 317-232-0066). The finished compost can then be used as a mulch or soil amendment. You also may bury any vegetative wastes (such as leaves, twigs, branches, limbs, tree trunks and stumps) on-site, although burying large quantities of such material can lead to subsidence problems.

2. Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized.

If construction or demolition is conducted in a wooded area where blackbirds have roosted or abandoned buildings or building sections in which pigeons or bats have roosted for three to five years, precautionary measures should be taken to avoid an outbreak of histoplasmosis. This disease is caused by the fungus *Histoplasma capsulatum*, which stems from bird or bat droppings that have accumulated in one area for three to five years. The spores from this fungus become airborne when the area is disturbed and can cause infections over an entire community downwind of the site. The area should be wetted down prior to cleanup or demolition of the project site. For more detailed information on histoplasmosis prevention and control, please contact the Acute Disease Control Division of the Indiana State Department of Health at 317-233-7272.

3. The U.S. EPA and the U.S. Surgeon General recommend that people not have long-term exposure to radon at levels above 4 pCi/L. For a county-by-county map of predicted radon levels in Indiana, visit <http://www.in.gov/idem/4267.htm> (<http://www.in.gov/idem/4267.htm>).

The U.S. EPA further recommends that all homes and apartments (within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L or higher, then U.S. EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L or higher, then U.S. EPA recommends the installation of radon-reduction measures. For a list of qualified radon testers and radon mitigation (or reduction) specialists, visit http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf

(http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf). Also, it is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure, visit <http://www.in.gov/isdh/regsvcs/radhealth/radon.htm> (<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>),

<http://www.in.gov/idem/4145.htm> (<http://www.in.gov/idem/4145.htm>), or <http://www.epa.gov/radon/index.html> (<http://www.epa.gov/radon/index.html>).

4. With respect to asbestos removal, all facilities slated for renovation or demolition (except residential buildings that have four (4) or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.

If no asbestos is found where a renovation activity will occur, or if the renovation involves removal of less than 260 linear feet of RACM off of pipes, less than 160 square feet of RACM off of other facility components, or less than 35 cubic feet of RACM off of all facility components, the owner or operator of the project does not need to notify IDEM before beginning the renovation activity.

For questions on asbestos demolition and renovation activities, you can also call IDEM's Lead/Asbestos section at 1-888-574-8150.

In all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition, using the form found at www.in.gov/icpr/webfile/formsdiv/44593.pdf.

Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of \$150 per project; projects below these amounts will be billed a fee of \$50 per project. Billings will occur on a quarterly basis.

For more information about IDEM policy regarding asbestos removal and disposal, visit: <http://www.in.gov/idem/4983.htm> (<http://www.in.gov/idem/4983.htm>).

5. With respect to lead-based paint removal, IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978, or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal, visit <http://www.in.gov/idem/permits/guide/waste/leadabatement.html> (<http://www.in.gov/idem/permits/guide/waste/leadabatement.html>).
6. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months of April through October. See 326 IAC 8-5-2, Asphalt Paving Rule (<http://www.ai.org/legislative/iac/T03260/A00080.PDF> (<http://www.ai.org/legislative/iac/T03260/A00080.PDF>)).
7. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (www.ai.org/legislative/iac/t03260/a00020.pdf (<http://www.ai.org/legislative/iac/t03260/a00020.pdf>)). New

sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.

8. For more information on air permits, visit <http://www.in.gov/idem/4223.htm> (<http://www.in.gov/idem/4223.htm>), or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or oamprod@idem.in.gov.

LAND QUALITY

In order to maintain compliance with all applicable laws regarding contamination and/or proper waste disposal, IDEM recommends that:

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ) at 317-308-3103.
2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit <http://www.in.gov/idem/4998.htm> (<http://www.in.gov/idem/4998.htm>).
3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.
4. If Polychlorinated Biphenyls (PCBs) are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.
5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes. (Asbestos removal is addressed above, under Air Quality.)
6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317-308-3039 (<http://www.in.gov/idem/4999.htm> (<http://www.in.gov/idem/4999.htm>)).

FINAL REMARKS

Should the applicant need to obtain any environmental permits in association with this proposed project, please be mindful that IC 13-15-8 requires that they notify all adjoining property owners and/or occupants within ten days of your submittal of each permit application. Applicants seeking multiple permits, may still meet the notification requirement with a single notice if all required permit applications are submitted with the same ten day period.

Please note that this letter does not constitute a permit, license, endorsement, or any other form of approval on the part of either the Indiana Department of Environmental Management or any other Indiana state agency.

Should you have any questions relating to the content or recommendations of this letter, or if you have additional questions about whether a more complete environmental review of your project should be conducted, please feel free to contact Steve Howell at (317) 232-8587, snhowell@idem.in.gov.

Signature(s) of the Applicant

I acknowledge that I am seeking grant monies, a bond issuance, or other public funding mechanism to cover some portion of the cost of the public works, infrastructure, or community development project as described herein, which I am working (possibly with others) to complete.

Project Description

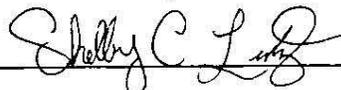
Des 1801013 involves a culvert with structural deficiencies along SR 250 over Unnamed Tributary (UNT) to South Fork Laughery Creek. The proposed scope of work includes replacing the existing structure, milling and overlaying the east and west approaches, reconstructing the roadway between the existing guardrails, and replacing and extending the guardrail on the north side of the road. Drives within the construction area will be reconstructed, new drainage culverts will be installed under the drives, and riprap will be placed within the UNT to South Fork Laughery Creek on the north side for erosion control.

With my signature, I do hereby affirm that I have read the letter from the Indiana Department of Environmental Management that appears directly above. In addition, I understand that in order to complete the project in which I am interested, with a minimum impact to the environment, I must consider all the issues addressed in the aforementioned letter, and further, that I must obtain any required permits.

Dated Signature of the Public Owner
Contact/Responsible Elected Official


Terry Summers

Dated Signature of the Project
Planner/Consultant Contact Person


Shelby Lutz

January 13, 2021

Shelby Lutz
SJCA
9201 North Meridian Street, Suite 200
Indianapolis, Indiana 46260
shelby@sjcainc.com

Dear Shelby Lutz:

The proposed project to address the deteriorating condition of the existing structure along State Road 250 in Switzerland County, Indiana, (Des No 1801013) as referred to in your letters received January 11, 2021 will not cause a conversion of prime farmland.

If you need additional information, please contact John Allen at 317-295-5859.

Sincerely,

RICHARD Digitally signed by
RICHARD NEILSON
NEILSON Date: 2021.01.14
10:27:51 -05'00'

RICK NEILSON
State Soil Scientist



Shelby Lutz

From: McWilliams, Robin <robin_mcwilliams@fws.gov>
Sent: Monday, February 8, 2021 5:00 PM
To: Shelby Lutz
Subject: Re: [EXTERNAL] Des 1801013, SR 250 Small Structure Project, Switzerland Co. Early Coordination

Dear Shelby,

This responds to your recent letter requesting our comments on the aforementioned project.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The project is within the range of the Indiana bat (*Myotis sodalis*) and northern long-eared bat (*Myotis septentrionalis*) and should follow the new Indiana bat/northern long-eared bat programmatic consultation process, if applicable (i.e. a federal transportation nexus is established). The Service has 14 days after a "Not Likely to Adversely Affect" determination letter is generated to review the project and provide additional comments or request additional information; if you do not receive a response from us within 14 days, we have no additional comments.

Based on a review of the information you provided, the U.S. Fish and Wildlife Service has no other comments on the project as currently proposed. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation. Standard recommendations are provided below.

We appreciate the opportunity to comment at this early stage of project planning. If you have any questions about our recommendations, please call (812) 334-4261 x. 207.

Sincerely,
Robin McWilliams Munson

Standard Recommendations:

1. Do not clear trees or understory vegetation outside the construction zone boundaries. **(This restriction is not related to the "tree clearing" restriction for potential Indiana Bat habitat.)**
2. 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. 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.
3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.

4. 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.
5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications.
6. 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.
7. 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

Robin McWilliams Munson
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
620 South Walker Street
Bloomington, IN 46142
812-334-4261

Mon-Tues 8-3:30p
Wed-Thurs 8:30-3p Telework

From: Shelby Lutz <Shelby@sjcainc.com>
Sent: Monday, January 11, 2021 9:58 AM
To: McWilliams, Robin <robin_mcwilliams@fws.gov>
Subject: [EXTERNAL] Des 1801013, SR 250 Small Structure Project, Switzerland Co. Early Coordination

This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.

Dear Environmental Reviewer,

Good morning! Attached is Early Coordination information for the abovementioned project on State Road 250, Switzerland County, IN for review and comment.

Please feel free to contact me via email or phone. Your response is kindly requested within 30 days.

Thank you,

Shelby C. Lutz
Environmental Scientist/Ecologist
shelby@sjcainc.com

SJCA Inc.
9102 N. Meridian St., Suite 200
Indianapolis, IN 46260
(317) 634-4110

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

DNR #: ER-23333

Request Received: January 11, 2021

Requestor: SJCA Inc
Shelby Lutz
9102 North Meridian Street, Suite 200
Indianapolis, IN 46260

Project: SR 250 small structure (CV 250-078-55.80) replacement over UNT South Fork Laughey Creek, about 9.11 miles east of SR 129; Des #1801013

County/Site info: Switzerland

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

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

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

Natural Heritage Database: The Natural Heritage Program's data have been checked. 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 & 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:

1) Crossing Structure:

For purposes of maintaining fish and wildlife passage through a crossing structure, the Environmental Unit recommends bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with shorter through lengths are better than culverts with longer through lengths. If box or pipe culverts are used, the bottoms should be buried a minimum of 6" (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2') below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossings should: span the entire channel width (a minimum of 1.2 times the OHWM width); maintain the natural stream substrate within the structure; have a minimum openness ratio (height x width / length) of 0.25; and have stream depth, channel width, and water velocities during low-flow conditions that are approximate to those in the natural stream channel. Banklines should be restored within box and pipe structures to allow for wildlife passage above the ordinary highwater mark.

The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. When determining an appropriate bridge or culvert size, consider whether or not wildlife/vehicle collisions are a concern at the crossing site. If feasible, a larger bridge or culvert opening can allow for the movement of wildlife under the roadway in order to minimize wildlife/vehicle collisions.

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

2) Bank Stabilization:

Establishing vegetation along the banks is critical for stabilization and erosion control. In addition to vegetation, some other form of bank stabilization may be needed. While hard armoring alone (e.g. riprap or glacial stone) may be needed in certain instances, soft armoring and bioengineering techniques should be considered first. In many instances, one or more methods are necessary to increase the likelihood of vegetation establishment. Combining vegetation with most bank stabilization methods can provide additional bank protection and help reduce impacts upon fish and wildlife. Information about bioengineering techniques can be found at <http://www.in.gov/legislative/iac/20120404-IR-312120154NRA.xml.pdf>. Also, the following is a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization: <http://directives.sc.egov.usda.gov/17553.wba>.

Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Riprap may be used only at the toe of the sideslopes up to the ordinary high water mark (OHWM). The banks above the OHWM must be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to Eastern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.

3) Riparian Habitat:

We recommend a mitigation plan be developed for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation guidelines (and plant lists) can be found online at: <http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf>.

Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees) or by using the 1:1 replacement ratio based on area depending on the type of habitat impacted (individual canopy tree removal in an urban streetscape or park-like environment versus removal of habitat supporting a tree canopy, woody understory, and herbaceous layer). Impacts under 0.10 acre in an urban area may still involve the replacement of large diameter trees but typically do not require any additional mitigation or additional plantings beyond seeding and stabilizing disturbed areas. There are exceptions for high quality habitat sites however.

4) Stream/Wetland Habitat:

For any stream and/or wetland impacts, you may need to contact the Indiana Department of Environmental Management (IDEM) 401 program and the US Army Corps of Engineers (USACE) 404 program. Impacts to wetland habitat should be mitigated at the appropriate ratio according to the 1991 INDOT/IDNR/USFWS Memorandum of Understanding.

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

1. Revegetate all bare and disturbed areas that will not be mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Southeastern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in regularly mowed areas only.

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

2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (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.
6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
7. Operate equipment used to replace the bridge from the existing roadway.
8. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
9. Do not use broken concrete as riprap.
10. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
11. Minimize the movement of resuspended bottom sediment from the immediate project area.
12. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
13. 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.
14. Do not excavate or place fill in any riparian wetland.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

Christie L. Stanifer

Christie L. Stanifer
Environ. Coordinator
Division of Fish and Wildlife

Date: February 9, 2021



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

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>

In Reply Refer To:

May 05, 2021

Consultation Code: 03E12000-2021-SLI-0684

Event Code: 03E12000-2021-E-05838

Project Name: Des 1801013 SR 250 over UNT to South Fork Laughery Creek

Subject: Updated 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 attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project "may affect" listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website <http://ecos.fws.gov/ipac/> at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - <http://www.fws.gov/midwest/endangered/section7/s7process/index.html>. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*) and Migratory Bird Treaty Act (16 U.S.C. 703 *et seq.*), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at <http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html> to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number 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

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

Consultation Code: 03E12000-2021-SLI-0684

Event Code: 03E12000-2021-E-05838

Project Name: Des 1801013 SR 250 over UNT to South Fork Laughery Creek

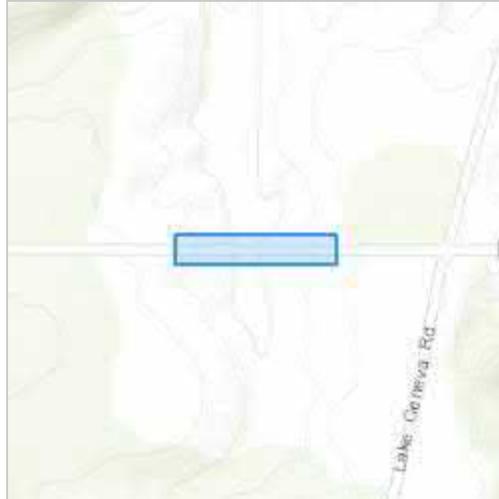
Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: Des 1801013 involves the replacement of the existing structure with a 6-foot by 5-foot reinforced concrete box culvert that will be 56 feet in length. The size and shape of this structure will provide the adequate flow requirements, which will lower predicted future maintenance and greater ease of construction than other alternatives, such as a circular culvert or an arch culvert. Approaches east and west of the existing culvert guardrails will be milled and overlaid, the roadway between the existing guardrails will be reconstructed, and the guardrail on the north side of the road will be replaced and extended to provide adequate protection for westbound vehicles. Drives within the construction area will be reconstructed, and new drainage culverts will be installed under the drives. Riprap will be placed within the UNT to South Fork Laughery Creek on the north side for erosion control. Project letting is in December 2022.

Suitable habitat within the project area includes stands of trees south of the roadway and individual trees within these stands of trees. No tree clearing will occur as a result of this project. Temporary lighting may be utilized to complete construction. Permanent lighting will not be installed as part of this project. A check into the USFWS bat database by INDOT Seymour District staff on September 10, 2020 did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. An inspection of the culvert by SJCA staff on February 25, 2020 did not indicate the presence of bats in the culvert.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.87304665,-85.02267192364414,14z>



Counties: Switzerland County, Indiana

Endangered Species Act Species

There is a total of 2 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. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, 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 final critical habitat for this species. The location of the critical habitat is not available. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ Incidental take of the NLEB is not prohibited here. Federal agencies may consult using the 4(d) rule streamlined process. Transportation projects may consult using the programmatic process. See www.fws.gov/midwest/endangered/mammals/nleb/index.html Species profile: https://ecos.fws.gov/ecp/species/9045	Threatened

Critical habitats

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



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

<http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html>

In Reply Refer To:

February 05, 2021

Consultation code: 03E12000-2021-I-0684

Event Code: 03E12000-2021-E-03367

Project Name: Des 1801013 SR 250 over UNT to South Fork Laughery Creek

Subject: Concurrence verification letter for the 'Des 1801013 SR 250 over UNT to South Fork Laughery Creek' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request to verify that the **Des 1801013 SR 250 over UNT to South Fork Laughery Creek** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion 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 threatened Northern long-eared bat (*Myotis septentrionalis*).

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/structure removal, replacement, and/or maintenance activities: If your initial bridge/structure assessments failed to detect Indiana bats, but you later detect bats during construction, please submit the Post Assessment Discovery of Bats at Bridge/Structure Form (User Guide Appendix E) to this Service Office. In these instances, potential incidental take of Indiana bats may be exempted 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. 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.

Project Description

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

Name

Des 1801013 SR 250 over UNT to South Fork Laughery Creek

Description

Des 1801013 involves the replacement of the existing structure with a 6-foot by 5-foot reinforced concrete box culvert that will be 56 feet in length. The size and shape of this structure will provide the adequate flow requirements, which will lower predicted future maintenance and greater ease of construction than other alternatives, such as a circular culvert or an arch culvert. Approaches east and west of the existing culvert guardrails will be milled and overlaid, the roadway between the existing guardrails will be reconstructed, and the guardrail on the north side of the road will be replaced and extended to provide adequate protection for westbound vehicles. Drives within the construction area will be reconstructed, and new drainage culverts will be installed under the drives. Riprap will be placed within the UNT to South Fork Laughery Creek on the north side for erosion control. Project letting is in December 2022.

Suitable habitat within the project area includes stands of trees south of the roadway and individual trees within these stands of trees. No tree clearing will occur as a result of this project. Temporary lighting may be utilized to complete construction. Permanent lighting will not be installed as part of this project. A check into the USFWS bat database by INDOT Seymour District staff on September 10, 2020 did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. An inspection of the culvert by SJCA staff on February 25, 2020 did not indicate the presence of bats in the culvert.

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 threatened 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 revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

Qualification Interview

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

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

Automatically answered

Yes

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

[1] See [Northern long-eared bat species profile](#)

Automatically answered

Yes

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

A) *Federal Highway Administration (FHWA)*

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

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

No

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

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

No

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

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

No

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

No

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

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

[2] The action area is defined as all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action (50 CFR Section 402.02). Further clarification is provided by the [national consultation FAQs](#).

Yes

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

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

No

10. Does the project include activities **within documented Indiana bat habitat**^{[1][2]}?

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

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

No

11. Does the project include activities **within documented NLEB habitat**^{[1][2]}?

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

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

No

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

No

13. Does the project include slash pile burning?

No

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

Yes

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

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

Yes

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

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

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

Yes

SUBMITTED DOCUMENTS

- *Des 1801013 Culvert Inspection.pdf* <https://ecos.fws.gov/ipac/project/OCZQRNFFYBCXVBOPHOOINIEU4/projectDocuments/98959415>

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

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

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

No

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

No

19. 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

20. Will the project involve the use of **temporary** lighting *during* the active season?
Yes
21. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **temporary** lighting will be used?
Yes
22. Will the project install new or replace existing **permanent** lighting?
No
23. 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
24. 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
25. Will the project raise the road profile **above the tree canopy**?
No
26. 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
27. 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
28. **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

29. 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. Please describe the proposed bridge work:

Des 1801013 involves the replacement of the existing structure with a 6-foot by 5-foot reinforced concrete box culvert that will be 56 feet in length. The size and shape of this structure will provide the adequate flow requirements, which will lower predicted future maintenance and greater ease of construction than other alternatives, such as a circular culvert or an arch culvert. Approaches east and west of the existing culvert guardrails will be milled and overlaid, the roadway between the existing guardrails will be reconstructed, and the guardrail on the north side of the road will be replaced and extended to provide adequate protection for westbound vehicles. Drives within the construction area will be reconstructed, and new drainage culverts will be installed under the drives. Riprap will be placed within the UNT to South Fork Laughery Creek on the north side for erosion control.

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

Winter 2022

5. Please enter the date of the bridge assessment:

February 25, 2020

Avoidance And Minimization Measures (AMMs)

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

LIGHTING AMM 1

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

GENERAL AMM 1

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

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

This key was last updated in IPaC on December 29, 2020. 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 threatened **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.

INDOT Bridge/Small Structure Bat Inspection Data Sheet (Rev 4/29/2016)

General Information		
Date of Inspection: 02/25/2020 Time of Inspection: 2 pm	Initial Inspection <input checked="" type="checkbox"/> Follow-up Inspection <input type="checkbox"/> Construction <input type="checkbox"/>	Temp: 46° F Wind: 6 mph from NE Precip: .62 in Sunrise: 7:17 am Sunset: 6:29 pm
County: Switzerland	Inspected by: Christian Radcliff, Victoria Veach	
GPS Northing: 4304547.17 m N Easting: 671519.53 m E UTM Zone: 16 S	Contract Number: B-41448 Des 1801013	Anticipated Start Date for Construction:

Bridge or Culvert	Bridge or Culvert
Stream or Road Crossed: UNT S Fork Laughery Ck	Station: N/A
Bridge/Culvert number: CV 250-078-55.80	Number of Spans: N/A
Type of Structure: <input type="checkbox"/> Concrete box beam <input type="checkbox"/> Steel beam <input type="checkbox"/> Concrete I-beam <input type="checkbox"/> Steel girder <input type="checkbox"/> Concrete bulb tee beam <input type="checkbox"/> Steel pony truss <input type="checkbox"/> Concrete arch <input type="checkbox"/> Welded steel thru girder <input type="checkbox"/> Concrete girder <input type="checkbox"/> Concrete box culvert <input type="checkbox"/> Concrete slab <input type="checkbox"/> Concrete pipe <input type="checkbox"/> Multi-plate arch <input checked="" type="checkbox"/> Corrugated steel pipe <input type="checkbox"/> Other (list):	Material: <input type="checkbox"/> Concrete <input checked="" type="checkbox"/> Steel <input type="checkbox"/> Other (describe): Shape: <input type="checkbox"/> Box Culvert <input checked="" type="checkbox"/> Pipe <input type="checkbox"/> Arch <input type="checkbox"/> Slab <input type="checkbox"/> Other (describe)
Searched entire structure? If not, why not? Yes	Location of bats or signs of use (w/drawing and photos): N/A
Bats Present? <input type="checkbox"/> Seen? <input type="checkbox"/> Heard? N/A	
In Clusters? Number of clusters: N/A	
Number of bats in largest cluster: N/A	
Approximate total number of bats found: N/A	
Signs of previous bat use? <input type="checkbox"/> Guano <input type="checkbox"/> Staining N/A	

If Bats Present
Date and Time Project Supervisor was notified: N/A
Name of Project Supervisor notified: N/A

Des 1801013

Appendix D

Section 106 of the NHPA

Minor Projects PA Project Assessment Form

Date: 4/21/2021

Project Designation Number: 1801013

Route Number: State Road (SR) 250

Project Description: Small Structure Replacement. 9.11 miles east of SR 129

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) Seymour District propose to proceed with a small structure replacement on SR 250 over the unnamed tributary to the South Fork of Laughery Creek in Cotton Township, Switzerland County.

This section of SR 250 is classified as a Major Collector route with a posted speed limit of 55 mph, lane-widths of 9.5 feet, minimal shoulders, and guardrail on the north side of the roadway. The existing structure (CV #250-078-55.80) is a 47-foot-long corrugated metal pipe (CMP) with a 51-inch diameter with stone headwalls. As stated above, this culvert carries SR 250 over an UNT to the South Fork of Laughery Creek.

The need for this project is due to the structural deficiencies of the existing structure. A recent inspection rated the structure at a 4 out of 9, indicating poor condition. The CMP displays perforations throughout the length of the pipe, and it is indicated by the project mini scope that if no action was taken, the structure would deteriorate and require increasingly greater maintenance effort to keep in future service. The purpose of the project is to address the deficiencies of the existing CMP by improving the culvert rating, and in the process, improving the structural and hydraulic standards to extend the life of the roadway. The current engineer-recommended alternative is to construct a new 6-foot by 5-foot reinforced concrete box with wingwalls to replace the standing structure. This newly built structure will provide adequate flow requirements.

The project will require approximately 1.0 acre of permanent right-of-way. No temporary right-of-way is expected to be required.

Feature crossed (if applicable): UNT South Fork Laughery Creek

City/Township: Cotton Township

County: Switzerland County

Information reviewed (please check all that apply):

- General project location map USGS map Aerial photograph Interim Report
- Written description of project area General project area photos Soil survey data
- Previously completed historic property reports Previously completed archaeology reports
- Bridge Inspection Information SHAARD SHAARD GIS Streetview Imagery

Other (please specify): Indiana Historic Building, Bridges, and Cemeteries Map (IHBBCM); County GIS data (accessed via <https://switzerlandin.wthgis.com/>); Bridge Inspection Application System (BIAS); Project information provided by SJCA, Inc., dated 2/25/2021 on file at INDOT-CRO;

Jackson, Christopher

2021 A Phase Ia Archaeological Reconnaissance for the Proposed SR 250 Small Structure Replacement over an Unnamed Tributary of the South Fork of Laughery Creek (Des 1801013) that is 9.11 Miles East of SR 129 in Cotton Township, Switzerland County, Indiana. SJCA, Inc. Submitted to Strand Associates. Report on file at IDNR, DHPA.

Please specify all applicable categories and condition(s) (**applicable conditions are highlighted**):

4. Installation of new safety appurtenances, including but not limited to, guardrails, barriers, glare screens, and crash attenuators, 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)

Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

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

Condition A (Archaeological Resources)

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

- i. Work occurs in previously disturbed soils; *OR*
- ii. Work occurs in undisturbed soils and an archaeological investigation conducted by the applicant and reviewed by INDOT Cultural Resources Office determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area. If the archaeological investigation locates National Register-listed or potentially National Register-eligible archaeological resources, then full Section 106 review will be required. Copies of any archaeological reports prepared for the project will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

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

- i. Work does not involve installation of a new culvert and other drainage structure, and there are no impacts to unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under one of the following conditions (*Condition a, Condition b, or Condition c must be satisfied*):
 - a. The structure exhibits no wood, stone, or brick structures or parts therein; *OR*
 - b. The structure exhibits only modern wood, stone, or brick structures or parts therein; *OR*
 - c. The structure exhibits non-modern wood, stone, or brick structures or parts therein and the following conditions are met (*BOTH Condition 1 AND Condition 2 must be met*):
 1. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *AND*

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

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

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

Additional comments:

Above-ground Resources

An INDOT-Cultural Resources Office (CRO) historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 first performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Switzerland County. No listed resources are present within 0.25 mile of the project area, a distance that would serve as an adequate area of potential effects (APE) given the scope of the project and the surrounding terrain.

The *Switzerland County Interim Report* (1979/2006; Cotton Township) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The SHAARD information was checked against the interim report hard-copy maps. The following IHSSI sites are recorded within 0.25 mile of the project areas: **1) #155-648-05028** (Allensville Church; NA SR 250; c.1900 Gothic Revival; rated 'contributing'); **2) #155-648-05029** (John Shaw Billings, M.D. Historical Marker; SW corner of SR 250 and Lake Drive; c.-1975; rated 'contributing'). No other surveyed IHSSI resources were recorded within 0.25 mile of the project location.

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 project area is rural with agricultural fields and scattered farms and residences present. Six (6) above-ground resources that border SR 250, Lake Geneva Road/Allensville Road have a view of the project area. Of these six, four (4) were constructed in the late 20th/early 21st centuries and will not be 50 years or older by the time of the proposed 2022 project letting.

The following two (2) above-ground structures near the project location are or will be 50 years of age in 2022: **1)** 10282 SR 250; c.-1907 vernacular Gothic Revival; **2)** 13090 Allensville Rd.; c.-1972 brick ranch. A review of available county GIS/property records and street-view imagery demonstrates that both of the resources lack material integrity due to physical alterations that have taken place over time; in addition, neither is an excellent example of a particular style, form, or type and are not considered to be architecturally significant for the purposes of this determination.

According to BIAS records and photographs, the subject structure (CV 250-078-55.80) is a 47-foot-long corrugated metal pipe (CMP) with a 51-inch diameter and stone headwalls. The structure's date of construction is unknown but it is likely 50 years old or older, as evidenced by the stone headwall materials. The culvert lacks material integrity (as evidenced by cracked-and-or-missing stones and mortar at both ends) and exhibits no discernible structural or engineering significance.

The construction of stone headwalls for pipe culverts 15 inches in diameter or more was a standard practice for INDOT culvert projects in the early-twentieth century.¹ Therefore, the presence of stone headwalls does not make this culvert structurally unique. For these reasons, it is believed that CV 250-078-55.80 would not be eligible for listing in the National Register.

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

Archaeological Resources

An INDOT CRO archaeologist, who met the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61, reviewed and concurred with the archaeological report provided by SJCA, Inc. (Jackson March 26, 2021). The records check found that the project area had not been previously examined and that no archaeological sites have been recorded within or near the project area.

The archaeologist examined the proposed undertaking through a series of shovel test probes and pedestrian survey. No cultural materials or features were documented. Obviously disturbed portions of the survey were documented through visual inspection

No archaeological sites were documented. It is recommended that the project proceed without additional archaeological investigation. However, if the project area is expanded that additional archaeological investigation may be necessary.

Accidental Discovery: If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, construction in the immediate area of the find will be

stopped and the INDOT Cultural Resources Office and the Division of Historic Preservation and Archaeology will be notified immediately.

INDOT Cultural Resources staff reviewer(s): Susan Branigin and David Moffatt

****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.*