

Indiana Department of Transportation

County Jackson

Route State Road 58

Des. No. 1701431

Part I - PUBLIC INVOLVEMENT

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

	Yes	No
Does the project have a historic bridge processed under the Historic Bridges PA*?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If No, then:		
Opportunity for a Public Hearing Required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

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

Remarks:

Notice of entry letters were mailed to potentially affected property owners near the project on July 30, 2018 notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of entry letter is included in Appendix G, page G-1.

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 comment 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

Will the project involve substantial controversy concerning community and/or natural resource impacts?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Remarks:

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

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

This is page 2 of 21 Project name: SR 58 over Branch Runt Run Bridge Replacement Date: October 13, 2020

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Sponsor of the Project: INDOT INDOT District: Seymour
Local Name of the Facility: State Road 58

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

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

PURPOSE AND NEED:

Describe the transportation problem that the project will address. The solution to the traffic problem should NOT be discussed in this section. (Refer to the CE Manual, Section IV.B.2. Purpose and Need)

Need: The need for this project is evidenced by the deterioration and structural deficiencies of the existing bridge originally built in 1967 and reconstructed in 1980. The January 7, 2020 Inspection Report noted the wearing surface as rated 5 out of 10 (fair condition), substructure as rated 5 out of 10 (fair condition, minor section loss), and channel/channel protection as rated 5 out of 10 (bank eroded, major damage).

Purpose: The purpose of the project is to sustain traffic flow and provide a hydraulically adequate structure with a minimum rating of at least 7 out of 10.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Jackson Municipality: N/A

Limits of Proposed Work: 331 feet west to 455 feet north of the centerline of Bridge

Total Work Length: 0.15 Mile(s) Total Work Area: 1.06 Acre(s)

	Yes ¹	No
Is an Interchange Modification Study / Interchange Justification Study (IMS/IJS) required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If yes, when did the FHWA grant a conditional approval for this project?	Date: _____	

¹If an IMS or IJS is required; a copy of the approved CE/EA document must be submitted to the FHWA with a request for final approval of the IMS/IJS.

In the remarks box below, describe existing conditions, provide in detail the scope of work for the project, including the preferred alternative. Include a discussion of logical termini. Discuss any major issues for the project and how the project will improve safety or roadway deficiencies if these are issues.

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Location: The project is located in Pershing Township in Jackson County, Indiana. The bridge is located on SR 58 over Branch Runt Run, approximately 2.28 miles east of SR 258. See Appendix B for project location maps (pages B-1 through B-3) and site photographs (pages B-4 through B-6).

Existing Conditions: The existing structure, Bridge 058-36-05873B, is a single span continuous prestressed concrete box beam structure with a total length of 28 feet and the span measuring 26 feet with clear roadway width of 28.5 feet. The structure has deterioration in the concrete at the ends of the bridge and longitudinal cracking across the wearing surface. There is a spall near the west end of the deck with exposed rebar. The substructure has vertical cracks in the breastwalls, cracks in the wingwalls, and a small spall in the east abutment at the ground elevation between beams No. 2 and 3. There is sloughing of the banks near the bridge and scour is occurring at the southeast corner of the bridge. The top of the footer is also exposed on the center of the east abutment. The roadway is a Major Collector in a rural area. The roadway consists of two 10-foot travel lanes with 3-foot, 1-inch shoulders on both sides of the roadway. The posted speed along the roadway is 45 miles per hour (mph). There is no documentation of ROW within the project area. The project area is surrounded predominantly by residential lawns with riparian forest adjacent to the waterway on the upstream and downstream sides of the bridge structure.

Preferred Alternative: The preferred alternative includes the replacement of the existing bridge with a single span reinforced concrete slab bridge, installation of new guardrail, installation of Class 1 riprap, and raising the profile of the existing roadway on both sides of the bridge structure. The new bridge will consist of a clear span of 39 feet and a clear roadway width of 30 feet. The bridge will consist of two 11-foot travel lanes with 4-foot, 4-inch shoulders on both sides of the roadway.

The Maintenance of Traffic (MOT) plan for this project is to implement a full road closure with a detour. See the MOT section of this document for additional information.

This alternative has an estimated 2022 construction cost of \$810,000 and a target construction date of Spring 2022. It will require the acquisition and reacquisition of permanent ROW. There are no relocations associated with this alternative.

The preferred alternative will provide a new bridge structure with new guardrail and channel protection. The preferred alternative will provide a structure with an overall condition rating of at least 7 out of 10, thereby meeting the purpose and need of the project.

OTHER ALTERNATIVES CONSIDERED:

Describe all discarded alternatives, including the Do-Nothing Alternative and an explanation of why each discarded alternative was not selected.

No-Build Alternative: Under the No-Build alternative, no improvements to the existing structure would occur and the structural condition of the bridge would continue to deteriorate. The No-Build alternative was discarded because it would not address the purpose or meet the need of this project.

The Do Nothing 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

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ROADWAY CHARACTER:

Functional Classification: Major Collector
 Current ADT: 700 VPD (2021) Design Year ADT: 700 VPD (2041)
 Design Hour Volume (DHV): 93 Truck Percentage (%): 1.09
 Designed Speed (mph): 45 Legal Speed (mph): 45

Existing **Proposed**

Number of Lanes:	2	2
Type of Lanes:	Non-Freeway	Non-Freeway
Pavement Width:	10 ft.	11 ft.
Shoulder Width:	3.08 ft.	2-4.33 ft.
Median Width:	0 ft.	0 ft.
Sidewalk Width:	0 ft.	0 ft.

Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

If the proposed action has multiple roadways, this section should be filled out for each roadway.

DESIGN CRITERIA FOR BRIDGES:

Structure/NBI Number(s): 058-36-10264/21050 Sufficiency Rating: 76.4, Bridge Inspection Report
 (Rating, Source of Information)

Existing **Proposed**

Bridge Type:	Continuous Prestressed Concrete Box Beam	Reinforced Concrete Slab Bridge
Number of Spans:	1	1
Weight Restrictions:	N/A ton	N/A ton
Height Restrictions:	N/A ft.	N/A ft.
Curb to Curb Width:	28.50 ft.	30 ft.
Outside to Outside Width:	30.30 ft.	33 ft.
Shoulder Width:	0 ft.	4.33 ft.
Length of Channel Work:	0 ft.	60 ft.

Describe bridges and structures; provide specific location information for small structures.

Remarks: The project will involve the replacement of the existing bridge. It is a single-span continuous prestressed concrete box beam structure with a span of 26 feet and a clear roadway width of 28.50 feet. This structure, originally constructed in 1967, was not included in the most recent listing of historic bridges either eligible for or listed in the National Register of Historic Places (NRHP). No other bridges or small structures are located within the project area.

There is one, 15-inch, corrugated metal pipe culvert measuring 20.5-foot long located at Station 15+00 south of SR 58 within the project area (Appendix B, page B-11). No impacts are anticipated to occur to the culvert. The culvert does not have a structure number associated with it and is not eligible for or listed in the NRHP.

Will the structure be rehabilitated or replaced as part of the project? Yes No N/A

If the proposed action has multiple bridges or small structures, this section should be filled out for each structure.

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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 in remarks)	<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 type="checkbox"/>	<input checked="" type="checkbox"/>
Provisions will be made to accommodate any local special events or festivals.	<input type="checkbox"/>	<input checked="" 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"/>

Remarks:
 The MOT for the project will require a full road closure with a detour using Interstate-65, SR 11, and SR 258. The total length of the detour will be approximately 26 miles.

 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 will cease upon project completion. Delays would occur during construction but will cease with project completion.

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 215,000 (2018) Right-of-Way: \$ 80,000 (2021) Construction: \$ 810,000 (2022)

Anticipated Start Date of Construction: March 2022

Date project incorporated into STIP July 3, 2017 and July 2, 2019

Is the project in an MPO Area? **Yes** **No**

If yes,
Name of MPO _____

Location of Project in TIP _____

Date of incorporation by reference into the STIP _____

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RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent (Reacquisition/New)	Temporary
Residential	0.22/0.59	0.01
Commercial		
Agricultural	0.05/0.15	
Forest	0.09/0.24	
Wetlands		
Other:		
Other:		
TOTAL	1.34	0.01

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 or reacquisition, either known or suspected, and there impacts on the environmental analysis should be discussed.

Remarks: There is no existing ROW along SR 58 for the entire length of the project area.

The project requires approximately 1.34 acres of permanent ROW to the north and south of the project area for the entire length of the project. 0.36 acre is under pavement and reacquisition of apparent ROW. The properties on either side of the roadway consist of residential yards, agricultural fields, and riparian wooded areas along the waterway with two private driveway entrances. The new permanent ROW varies from 35 feet from the centerline of SR 58 at the west project termini to 50 feet from the centerline of SR 58 adjacent to the bridge structure to 40 feet from the centerline of SR 58 at the east project termini.

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

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

SECTION A – ECOLOGICAL RESOURCES

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

Remarks: Based on a desktop review, a site visit on November 26, 2019 by Strand Associates Inc., the aerial map of the project area (Appendix B, page B-2), and the water resources map in the RFI report (Appendix E, page E-7), there are 10 streams located within the 0.5 mile search radius. The nearest stream, Branch Runt Run, flows through the project area. Branch Runt Run is not listed as a Federal Wild and Scenic River, a State Natural, Scenic, and Recreational River, an Outstanding River in Indiana, a navigable waterway, or on the National River Inventory.

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A Waters of the U.S. Determination Report was INDOT Ecology and Waterway Permitting approved on March 4, 2020. Please refer to Appendix F, page F-1 for the Waters of the U.S. Determination Report. It was determined that two unnamed tributaries and one named, perennial stream, Branch Runt Run, flow through the project area and are considered jurisdictional "Waters of the U.S." subject to Federal regulation under the Clean Water Act (CWA). One roadside ditch was identified in the northwest portion of the project area. No ordinary high water mark (OHWM) was observed for the ditch. Therefore, the ditch is considered non-jurisdictional. United States Army Corps of Engineers (USACE) makes all final determinations regarding jurisdiction.

Approximately 60 linear feet (0.03 acre) of Branch Runt Run will be permanently impacted by the placement of revetment riprap. Additional temporary impacts to Branch Runt Run may include 0.02 acre along the 60 linear feet permanently impacted as described above within the construction limits. Total impacts to the stream, including both permanent and temporary impacts, are 60 linear feet (0.05 acre). The area temporarily impacted will be restored to its pre-construction state upon completion of construction. Mitigation is not anticipated, but will be determined during permitting.

Approximately 23 linear feet (0.005 acre) of UNT 1 will be permanently impacted by the placement of revetment riprap. No additional temporary impacts to UNT 1 are expected. Therefore, the total impacts to UNT 1 are 23 linear feet (0.005 acre). Mitigation is not anticipated, but will be determined during permitting.

Approximately 204 linear feet (0.017 acre) of UNT 2 will be permanently impacted by the regrading along the shoulder of the existing roadway. No additional temporary impacts to UNT 2 are expected. Therefore, the total impacts to UNT 2 are 204 linear feet (0.017 acre). Mitigation is not anticipated, but will be determined during permitting.

Early coordination letters were sent to Indiana Department of Environmental Management (IDEM), Indiana Department of Natural Resources (IDNR), and USACE on December 30, 2019. USACE did not respond to the early coordination letter. IDEM and IDNR responded on December 30, 2019 and January 29, 2020 respectively with recommendations to avoid or minimize impacts to Branch Runt Run (Appendix C, pages C-9 through C-15 and pages C-5 through C-8). Recommendations from IDNR include construction measures to minimize impacts to the soil and vegetation in and around the stream channel including revegetation, riprap placement, tree removal, etc. Recommendations from IDEM include guidelines for managing a variety of contaminants/resources if found to occur within the project area. All applicable IDNR and IDEM recommendations are included in the Environmental Commitments section of this document.

	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
Other Surface Waters			
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detention Basins	<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"/>

Remarks: Based on a desktop review, a site visit on November 26, 2019 by Strand Associates Inc., the aerial map of the project area (Appendix B, page B-2), and the water resources map in the RFI report (Appendix E, page E-7), there are 7 lakes located within the 0.5 mile search radius. No surface waters are present within the project area, therefore, no impacts are expected.

USACE did not respond to the early coordination letter. IDEM and IDNR responded on December 30, 2019 and January 29, 2020 respectively with recommendations to avoid or minimize impacts to surface waters (Appendix C, pages C-9 through C-15 and pages C-5 through C-8). Recommendations from IDNR include construction measures to minimize impacts to surface waters and bank erosion. Recommendations from IDEM include guidelines for managing a variety of contaminants/resources if found to occur within the project area. All applicable IDNR and IDEM recommendations are included in the Environmental Commitments section of this document.

Presence Impacts
Yes No

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Wetlands

Total wetland area: _____ acre(s) Total wetland area impacted: _____ acre(s)

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

Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments

Documentation

ES Approval Dates

Wetlands (Mark all that apply)

- Wetland Determination
- Wetland Delineation
- USACE Isolated Waters Determination
- Mitigation Plan

X

March 4, 2020

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

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

Measures to avoid, minimize, and mitigate wetland impacts need to be discussed in the remarks box.

Remarks:

Based on a review of the National Wetlands Inventory (NWI) online mapper (<https://www.fws.gov/wetlands/data/Mapper.html>), a site visit on September 10, 2019 by Metric Environmental LLC., the United States Geological Survey (USGS) topographic map (Appendix B, page B-3), and the RFI report (Appendix E, page E-7), there are 13 wetlands located within the 0.5 mile search radius. There was one wetland adjacent to the project area.

A Waters of the U.S. Determination Report was INDOT Ecology and Waterway Permitting office approved on March 4, 2020. Please refer to Appendix F, page F-1 for the Waters of the U.S. Determination Report. No wetlands were identified within the project area. Therefore, no impacts are expected. The USACE makes all final determinations regarding jurisdiction.

The construction associated with the project will be limited to regrading the roadside ditches along SR 58 and replacing the existing bridge structure and all contaminants related to construction will be contained within the construction limits of the project. Therefore, no direct or indirect impacts are anticipated to other wetlands.

IDEM responded on December 30, 2019 with recommendations to avoid or minimize impacts to wetlands (Appendix C, pages C-9 through C-15). USACE did not respond within the 30-day time frame. Recommendations from IDEM include permitting requirements and management of wetlands found to be located within the construction limits. All applicable recommendations are included in the Environmental Commitments section of this document.

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	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Terrestrial Habitat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Unique or High Quality Habitat	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Use the remarks box to identify each type of habitat and the acres impacted (i.e. forested, grassland, farmland, lawn, etc).

Remarks:	<p>Based on a desktop review, a site visit on November 26, 2019 by Strand Associates Inc., and the aerial map of the project area (Appendix B, page B-2), there are riparian wooded areas on both the north and south sides of the structure. Approximately 0.87 acre of terrestrial habitat is within the construction footprint and will be temporarily impacted by the project. Approximately 0.11 acre of terrestrial habitat will be permanently impacted by the project by conversion to transportation use. Approximately 0.306 acre of trees will be required to be removed. Construction for the project would not be possible without terrestrial impacts. The vegetation impacted is limited to within the ROW and limited to disturbance for equipment access, installation of riprap and guardrail, and raising the profile of the existing roadway.</p> <p>IDNR responded with recommendations to avoid or minimize impacts to fish, wildlife, and botanical resources (Appendix C, pages C-5 and C-8). Recommendations from IDNR include construction measures to minimize impacts to the vegetation in and around the stream channel including revegetation, riprap placement, tree removal, etc. All applicable IDNR recommendations are included in the Environmental Commitments section of this document.</p>
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If there are high incidences of animal movements observed in the project area, or if bridges and other areas appear to be the sole corridor for animal movement, consideration of utilizing wildlife crossings should be taken.

	Yes	No
Is the proposed project located within or adjacent to the potential Karst Area of Indiana?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are karst features located within or adjacent to the footprint of the proposed project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If yes, will the project impact any of these karst features?	<input type="checkbox"/>	<input type="checkbox"/>

Use the remarks box to identify any karst features within the project area. (Karst investigation must comply with the Karst MOU, dated October 13, 1993)

Remarks:	<p>Based on a desktop review, the project is located outside the designated karst region of Indiana as outlined in the October 13, 1993 Memorandum of Understanding (MOU). According to the topo map of the project area (Appendix B, page B-3) and the RFI report (Appendix E, page E-7), there are no karst features identified within or adjacent to the project area. In the early coordination response, the Indiana Geological Survey (IGS) did not indicate that karst features exist in the project area (Appendix C, pages C-16 through C-18). IGS did indicate the project area had moderate liquefaction potential. Response from IGS has been communicated with the designer on December 30, 2019. No impacts are expected</p>
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	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Threatened or Endangered Species	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Within the known range of any federal species	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any critical habitat identified within project area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal species found in project area (based upon informal consultation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State species found in project area (based upon consultation with IDNR)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is Section 7 formal consultation required for this action?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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Remarks: Based on a desktop review and the RFI report completed by Strand Associates, Inc. on August 3, 2019, the IDNR Jackson County Endangered, Threatened, and Rare (ETR) Species List has been checked and is included in Appendix E, pages E-8 through E-10. The highlighted species on the list reflect the federal and state identified ETR species located within the county. According to the IDNR, Division of Fish and Wildlife (DFW) early coordination response, dated January 29, 2020 (Appendix C, pages C-5 through C-8), the Natural Heritage Program’s Database has been checked and to date, no plant or animal species listed as state or federally threatened, endangered, or rare, have been reported to occur in the vicinity of the project area. IDNR DFW provided recommendations to minimize the potential for impacts to fish and wildlife. All applicable IDNR recommendations have been included in the Environmental Commitments for this project.

Indiana Bat and Northern Long-Eared Bat

Project information was submitted through the USFWS’s Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, page C-35 through C-40). 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 found within or adjacent to the project area other than the Indiana bat and 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 Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and United States Fish and Wildlife Service (USFWS). An effect determination key was completed on February 4, 2020, 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. INDOT reviewed and verified the effect finding on February 10, 2020, and requested USFWS’s review of the finding (Appendix C, page C-21). No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Mitigation Measures (AMMs) 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.

SECTION B – OTHER RESOURCES

Drinking Water Resources	Presence	Impacts	
		Yes	No
Wellhead Protection Area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Water System(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Residential Well(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Source Water Protection Area(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sole Source Aquifer (SSA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If a SSA is present, answer the following:

	Yes	No
Is the Project in the St. Joseph Aquifer System?	<input type="checkbox"/>	<input type="checkbox"/>
Is the FHWA/EPA SSA MOU Applicable?	<input type="checkbox"/>	<input type="checkbox"/>
Initial Groundwater Assessment Required?	<input type="checkbox"/>	<input type="checkbox"/>
Detailed Groundwater Assessment Required?	<input type="checkbox"/>	<input type="checkbox"/>

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

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The IDEM Wellhead Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead/>) was accessed on December 30, 2019 by Strand Associates Inc. This project is not located within a Wellhead Protection Area or Source Water Area. No impacts are expected.

The IDNR Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on December 30, 2019 by Strand Associates Inc. No wells are located near this project. Therefore, no impacts are expected.

Based on a desktop review of the INDOT Municipal Separate Storm Sewer System (MS4) website (<https://entapps.indot.in.gov/MS4/>) by Strand Associates Inc. on December 30, 2019, and the RFI report; this project is not located in an Urban Area Boundary location. No impacts are expected.

Based on a desktop review, a site visit on November 26, 2019 by Strand Associates Inc., and the aerial map of the project area (Appendix B, page B-2), this project is not located where there will be public water system impacts. Therefore, no impacts are expected.

Flood Plains	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
Longitudinal Encroachment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Transverse Encroachment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Project located within a regulated floodplain	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Homes located in floodplain within 1000' up/downstream from project	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discuss impacts according to classification system described in the "Procedural Manual for Preparing Environmental Studies".

Remarks: Based on a desktop review of the IDNR Indiana Floodway Information Portal website (<http://dnrmmaps.dnr.in.gov/appsphp/fdms/>) by Strand Associates Inc. on December 30, 2019, and the RFI report; this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix I, page F-31) and will have transverse/longitudinal impacts. An early coordination letter was sent on December 30, 2019 to the local Floodplain Administrator. The floodplain administrator did not respond within the 30-day time frame.

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

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

Total Points (from Section VII of CPA-106/AD-1006* 139
**If 160 or greater, see CE Manual for guidance.*

See CE Manual for guidance to determine which NRCS form is appropriate for your project.

Remarks: Based on a desktop review, a site visit on November 26, 2019 by Strand Associates, Inc., the aerial map of the project area (Appendix B, page B-2), the project will convert 0.40 acre of farmland as defined by the Farmland Protection Policy Act. An early coordination letter was sent on December 30, 2019 to Natural Resources Conservation Service (NRCS). Coordination with NRCS resulted in a score of 139 on the *NRCS-AD 1006 Form* (Appendix C, pages C-3 through C-4). NRCS's threshold score for significant impacts to farmland that result in the consideration of alternatives is 160. Since this project score is less than the threshold, no significant loss of prime, unique, statewide, or local important farmland will result from this project. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

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Des. No. 1701431

SECTION C – CULTURAL RESOURCES

	Category	Type	INDOT Approval Dates	N/A
Minor Projects PA Clearance	B	12	May 29, 2020	

Eligible and/or Listed
Resource Present

Results of Research

Archaeology	
NRHP Buildings/Site(s)	
NRHP District(s)	
NRHP Bridge(s)	

Project Effect

No Historic Properties Affected No Adverse Effect Adverse Effect

Documentation
Prepared

Documentation (mark all that apply)

- Historic Properties Short Report
- Historic Property Report
- Archaeological Records Check/ Review
- Archaeological Phase Ia Survey Report
- Archaeological Phase Ic Survey Report
- Archaeological Phase II Investigation Report
- Archaeological Phase III Data Recovery
- APE, Eligibility and Effect Determination
- 800.11 Documentation

**ES/FHWA
Approval Date(s)**

**SHPO
Approval Date(s)**

Memorandum of Agreement (MOA)

MOA Signature Dates (List all signatories)

Describe all efforts to document cultural resources, including a detailed summary of the Section 106 process, using the categories outlined in the remarks box. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of paper(s) and the comment period deadline. Likewise include any further Section 106 work which must be completed at a later date, such as mitigation or deep trenching.

Remarks:

On May 29, 2020 the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 12 under the Minor Projects Programmatic Agreement, (Appendix D, pages D-1 through D-3). The type of work included within this category consists of replacing the existing bridge structure. Since work occurs in undisturbed soils, an archaeology report was required for the project. An archaeology report was completed on April 29, 2020 indicating no evidence of archaeological deposits within the project area (Appendix D, Page, D-2). Therefore, there are no archaeological concerns. No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.

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

Section 4(f) Involvement (mark all that apply)

Parks & Other Recreational Land

- Publicly owned park
- Publicly owned recreation area
- Other (school, state/national forest, bikeway, etc.)

Presence

Use

Yes	No

Evaluations Prepared

- Programmatic Section 4(f)*
- “De minimis” Impact*
- Individual Section 4(f)

FHWA Approval date

--

Wildlife & Waterfowl Refuges

- National Wildlife Refuge
- National Natural Landmark
- State Wildlife Area
- State Nature Preserve

Presence

Use

Yes	No

Evaluations Prepared

- Programmatic Section 4(f)*
- “De minimis” Impact*
- Individual Section 4(f)

FHWA Approval date

--

Historic Properties

- Sites eligible and/or listed on the NRHP

Presence

--

Use

Yes	No

Evaluations Prepared

- Programmatic Section 4(f)*
- “De minimis” Impact*
- Individual Section 4(f)

FHWA Approval date

--

**FHWA approval of the environmental document also serves as approval of any Section 4f Programmatic and/or De minimis evaluation(s) discussed below.*

Discuss Programmatic Section 4(f) and “de minimis” Section 4(f) impacts in the remarks box below. Individual Section 4(f) documentation must be separate Draft and Final documents. For further discussions on Programmatic, “de minimis” and Individual Section 4(f) evaluations please refer to the “Procedural Manual for the Preparation of Environmental Studies”. Discuss proposed alternatives that satisfy the requirements of Section 4(f).

Remarks:

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.

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Based on a desktop review, a site visit on November 26, 2019 by Strand Associates Inc., the aerial map of the project area (Appendix B, page B-2), and the RFI report (Appendix E, page E-2) there are no 4(f) resources located within the 0.5 mile search radius. There are no Section 4(f) resources within or adjacent to the project area. Therefore, no use is expected.

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

Discuss proposed alternatives that satisfy the requirements of Section 6(f). Discuss any Section 6(f) involvement.
 Remarks: 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 Land and Water Conservation Fund (LWCF) website at <https://www.lwcfcoalition.com/tools> revealed a total of 1 property in Jackson County (Appendix I, page I-1). This property is not located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources as a result of this project.

SECTION E – Air Quality

Air Quality

Conformity Status of the Project

	Yes	No
Is the project in an air quality non-attainment or maintenance area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If YES, then:		
Is the project in the most current MPO TIP?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the project exempt from conformity?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If the project is NOT exempt from conformity, 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"/>

Level of MSAT Analysis required?
 Level 1a Level 1b Level 2 Level 3 Level 4 Level 5

Remarks: The Fiscal Year (FY) 2018-2021 Statewide Transportation Improvement Program (STIP) and FY 2020-2024 STIP is listed based on the lead DES number in the contract. The lead DES number for this contract is 1600503. The FY 2018-2021 STIP and FY 2020-2024 STIP includes DES number 1701431 by reference with the contract number B-40407 (Appendix H, page H-1).

This project is located in Jackson County, which is currently a nonattainment area for the 1997 Ozone 8-hour standard according to IDEM's Nonattainment Status for Indiana Counties. This project has been identified as being exempt from air quality analysis in accordance with 40 CFR Part 93.126 and this project is not a project of air quality concern (40 CFR Part 93.123). Therefore, the project will have no significant impact on air quality.

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.

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SECTION F - NOISE

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

	No	Yes/ Date
ES Review of Noise Analysis	<input type="checkbox"/>	<input type="checkbox"/>

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

SECTION G – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

Will the proposed action comply with the local/regional development patterns for the area?	Yes	No
Will the proposed action result in substantial impacts to community cohesion?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the proposed action result in substantial impacts to local tax base or property values?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will construction activities impact community events (festivals, fairs, etc.)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the community have an approved transition plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If No, are steps being made to advance the community's transition plan?	<input type="checkbox"/>	<input type="checkbox"/>
Does the project comply with the transition plan? (explain in the remarks box)	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Remarks: Temporary disruption of emergency services and school bus routes will occur as the project will require a full road closure during the duration of the project.

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 will cease upon project completion. Access to all properties will be maintained during construction. Delays may occur during construction but will cease with project completion.

The There are no pedestrian facilities, existing or proposed, associated with the project; therefore, the project is in compliance with the *Jackson County Highway 2015 Transition Plan*.

Indirect and Cumulative Impacts **Yes** **No**
 Will the proposed action result in substantial indirect or cumulative impacts?

Remarks: Indirect impacts are effects which are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate. Cumulative impacts affect the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions.

The proposed bridge replacement project is expected to have neutral impact on the local community and economy as it is not of a type to increase development in the area or cause changes in the traffic pattern. Therefore, it is not expected to have indirect or cumulative impacts in the immediate or extended area.

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Public Facilities & Services

Will the proposed action result in substantial impacts on health and educational facilities, public and private utilities, emergency services, religious institutions, airports, public transportation or pedestrian and bicycle facilities? *Discuss how the maintenance of traffic will affect public facilities and services.*

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

Remarks:

Based on a desktop review, a site visit on November 26, 2019 by Strand Associates Inc., the aerial map of the project area (Appendix B, page B-2), and the RFI report (Appendix E, page E-2) there are no public facilities within the 0.5 mile search radius. There are no public facilities within or adjacent to the project area. Access to all properties will be maintained during construction. Therefore, no impacts are expected.

An early coordination letter was sent to Pershing Township Volunteer Fire Department on December 30, 2019. Pershing Township Volunteer Fire Department did not respond to the early coordination letter.

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

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"/>

Does the project require an EJ analysis?

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

If YES, then:

Are any EJ populations located within the project area?

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

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

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

Remarks:

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 right-of-way. The project will require 0.98 acre of additional ROW. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exists and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Jackson County. The community that overlaps the project limits is called the affected community (AC). In this project, the AC is Census Tract 9680. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the American Community Survey (ACS) 2017 5-year data was obtained from the US Census Bureau Website <https://data.census.gov/cedsci/> on June 1, 2020 by Strand Associates Inc. The data collected for minority and low-income populations within the AC are summarized in the below table.

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Table: Minority and Low-Income Data (U.S. Census Bureau, Data from ACS 2017 5-Year Results)		
	COC: Jackson County, Indiana	AC-1: Census Tract 9680, Jackson County, Indiana
Percent Minority	8.0%	1.5%
125% of COC	10.0%	AC < 125% COC
EJ Population of Concern		No
Percent Low Income	15.6%	17.4%
125% of COC	19.4%	AC < 125% COC
EJ Population of Concern		No

AC-1, Census Tract 9680, has a percent minority of 1.5%, which is below 50% and is below the 125% COC threshold. Therefore, AC-1 does not contain minority populations of EJ concern.

AC-1, Census Tract 9680, has a percent low-income of 17.4%, which is below 50% and is below 125% COC threshold. Therefore, AC-1 does not contain low-income populations of EJ concern.

The census data sheets and map can be found in Appendix I, starting on page I-3. No further environmental justice analysis is warranted.

Relocation of People, Businesses or Farms

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

Is a Business Information Survey (BIS) required?

Is a Conceptual Stage Relocation Study (CSRS) required?

Has utility relocation coordination been initiated for this project?

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

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

If a BIS or CSRS is required, discuss the results in the remarks box.

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

SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Documentation

Hazardous Materials & Regulated Substances (Mark all that apply)

Red Flag Investigation

Phase I Environmental Site Assessment (Phase I ESA)

Phase II Environmental Site Assessment (Phase II ESA)

Design/Specifications for Remediation required?

X

No Yes/ Date

ES Review of Investigations	August 3, 2019
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Include a summary of findings for each investigation.

This is page 18 of 21 Project name: SR 58 over Branch Runt Run Bridge Replacement Date: October 13, 2020

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Remarks: Based on a review of geographic information system (GIS) and available public records, an RFI was approved on August 3, 2019 by INDOT Environmental Services (Appendix E, page E-1). 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.

SECTION I – PERMITS CHECKLIST

Permits (mark all that apply) Likely Required

Army Corps of Engineers (404/Section10 Permit)	
Individual Permit (IP)	<input type="checkbox"/>
Nationwide Permit (NWP)	<input type="checkbox"/>
Regional General Permit (RGP)	<input checked="" type="checkbox"/>
Pre-Construction Notification (PCN)	<input type="checkbox"/>
Other	<input type="checkbox"/>
Wetland Mitigation required	<input type="checkbox"/>
Stream Mitigation required	<input type="checkbox"/>
IDEM	
Section 401 WQC	<input checked="" type="checkbox"/>
Isolated Wetlands determination	<input type="checkbox"/>
Rule 5	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>
Wetland Mitigation required	<input type="checkbox"/>
Stream Mitigation required	<input type="checkbox"/>
IDNR	
Construction in a Floodway	<input type="checkbox"/>
Navigable Waterway Permit	<input type="checkbox"/>
Lake Preservation Permit	<input type="checkbox"/>
Other	<input type="checkbox"/>
Mitigation Required	<input type="checkbox"/>
US Coast Guard Section 9 Bridge Permit	<input type="checkbox"/>
Others (Please discuss in the remarks box below)	<input type="checkbox"/>

Remarks: An IDEM, Section 401 Water Quality Certification (WQC) General Permit and a USACE, Section 404 Clean Water Act Regional General Permit are anticipated for the project. A Rule 5 Notice of Intent will be required as more than one acre of soil disturbance will occur as part of the project.

It is anticipated that this project qualifies for a Construction in a Floodway (CIF) exemption under IC 14-28-1 Section 22.

Applicable recommendations provided by IDEM and USACE are included in the Environmental Commitments section of this document. If a permit is 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 INDOT to identify and obtain all required permits.

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SECTION J- ENVIRONMENTAL COMMITMENTS

The following information should be provided below: List all commitments, name of agency/organization requesting the commitment(s), and indicating which are firm and which are for further consideration. The commitments should be numbered.

Remarks:

Firm:

1. If the scope of work or permanent or temporary right-of-way amounts change, the INDOT 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 activity that would block or limit access. (INDOT ESD)
3. USFWS Bridge/Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after September 10, 2021, 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 District)
4. General AMM 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs. (USFWS)
5. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
6. Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
7. Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and **outside of documented** roosting foraging habitat or travel corridors; visual emergence survey must be conducted with **no bats observed**. No tree clearing from April 1-September 30. (USFWS)
8. Tree Removal AMM 3: Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bridge colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). (USFWS)
9. Tree Removal AMM 4: Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or **documented** foraging habitat any time of year.

For Further Consideration:

1. 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)
2. Minimize the use of riprap for bank stabilization and use alternative erosion protection materials whenever possible. 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). Where riprap must be used, we recommend placing only enough riprap to provide stream bank toe protection, such as from the toe of the bank 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 the area and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. (IDNR)
3. Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction. (IDNR)
4. Post "Do Not Mow or Spray" signs along the right-of-way. (IDNR)

This is page 20 of 21 Project name: SR 58 over Branch Runt Run Bridge Replacement Date: October 13, 2020

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5. Do not excavate in the low flow are except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR)
6. Do not construct any temporary runarounds, access bridges, casuseways, cofferdams, diversions, or pumparounds. (IDNR)
7. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organism in the voids. (IDNR)
8. 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)
9. 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)
10. 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)
11. 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)

SECTION K- EARLY COORDINATION

Please list the date coordination was sent and all 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. INDOT and FHWA are automatically considered early coordination participants and should only be listed if a response is received.

Remarks:

AGENCY	DATE MATERIALS SENT	DATE OF RESPONSE
U.S. Fish and Wildlife Service (IPaC)	February 4, 2020	February 10, 2020
Natural Resources Conservation Service	December 30, 2019	January 13, 2020
Indiana Geological Survey	December 30, 2019	December 30, 2019
IDNR Division of Fish and Wildlife	December 30, 2019	January 29, 2020
U.S. Department of Housing and Urban Development	December 30, 2019	No Response
IDEM Automated Response	December 30, 2019	December 30, 2019
IDEM Groundwater Section Self-Service	December 30, 2019	December 30, 2019
Army Corps of Engineers, Louisville District	December 30, 2019	No Response
U.S. Eighth Coast Guard District	December 30, 2019	January 30, 2020
National Park Service	December 30, 2019	No Response
INDOT, Environmental Policy Manager	December 30, 2019	January 6, 2020
INDOT, Project Manager	December 30, 2019	December 30, 2019
Jackson County Floodplain Administrator	December 30, 2019	No Response
Pershing Township Volunteer Fire Department	December 30, 2019	No Response
U.S. Forest Service	December 30, 2019	January 13, 2020

SR 58 over Branch Runt Run (DES. NO. 1701428)

Page No.
or Following

APPENDIX A - INDOT SUPPORTING DOCUMENTATION

Threshold Chart	A-1
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APPENDIX B - GRAPHICS

Project Location Map	B-1
Aerial Map.....	B-2
Topographic Map.....	B-3
Site Photographs	B-4
Project Plans.....	B-7

APPENDIX C - EARLY COORDINATION

Copy of Early Coordination Letter	C-1
NCRS Early Coordination Response	C-3
IDNR Early Coordination Response	C-5
IDEM Roadway Letter.....	C-9
IGS Early Coordination Response	C-16
Bat Assessment Form	C-19
IPaC Concurrence Verification Letter	C-21
IPaC Official Species List	C-35
U.S. Coast Guard Early Coordination Response.....	C-41
U.S. Forest Service Early Coordination Response.....	C-42

APPENDIX D - SECTION 106 OF THE NHPA

Minor Projects PA Project Assessment Form	D-1
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APPENDIX E - RED FLAG AND HAZARDOUS MATERIALS

Red Flag Investigation Report	E-1
Jackson County ETR Species List.....	E-8

APPENDIX F - WATER RESOURCES

Waters Report	F-1
Wetland Determination Forms	F-24
IDNR Floodplain Map	F-31

APPENDIX G - PUBLIC INVOLVEMENT

Notice of Entry Sample Letter G-1
List of Individuals Receiving Notice of Entry Letter G-2

APPENDIX H - AIR QUALITY

STIP Project Listing H-1

APPENDIX I - ADDITIONAL STUDIES

LWCF Project List I-1
EJ Analysis COC and AC Area Map I-3
EJ Analysis Excel Spreadsheet I-4
EJ Analysis Census Data Sheet I-5

APPENDIX A
INDOT SUPPORTING DOCUMENTATION

Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4 ¹
Section 106	Falls within guidelines of Minor Projects PA	“No Historic Properties Affected”	“No Adverse Effect”	-	“Adverse Effect” Or Historic Bridge involvement ²
Stream Impacts	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	Individual 404 Permit
Wetland Impacts	No adverse impacts to wetlands	< 0.1 acre	-	< 1 acre	≥ 1 acre
Right-of-way³	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” (Without AMMs ⁴ or with AMMs required for all projects ⁵)	“Not likely to Adversely Affect” (With any other AMMs)	-	“Likely to Adversely Affect”	Project does not fall under Species Specific Programmatic
Threatened/Endangered Species (Any other species)	Falls within guidelines of USFWS 2013 Interim Policy	“No Effect”, “Not likely to Adversely Affect”	-	-	“Likely to Adversely Affect”
Environmental Justice	No disproportionately high and adverse impacts	-	-	-	Potential ⁶
Sole Source Aquifer	Detailed Assessment Not Required	-	-	-	Detailed Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Coastal Zone Consistency	Consistent	-	-	-	Not Consistent
National Wild and Scenic River	Not Present	-	-	-	Present
New Alignment	None	-	-	-	Any
Section 4(f) Impacts	None	-	-	-	Any
Section 6(f) Impacts	None	-	-	-	Any
Added Through Lane	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Coast Guard Permit	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes ⁷
Approval Level	Concurrence by INDOT District Environmental or Environmental Services	Yes	Yes	Yes	Yes
<ul style="list-style-type: none"> • District Env. Supervisor • Env. Services Division • FHWA 				Yes	Yes

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

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

³Permanent and/or temporary right-of-way.

⁴AMMs = Avoidance and Mitigation Measures.

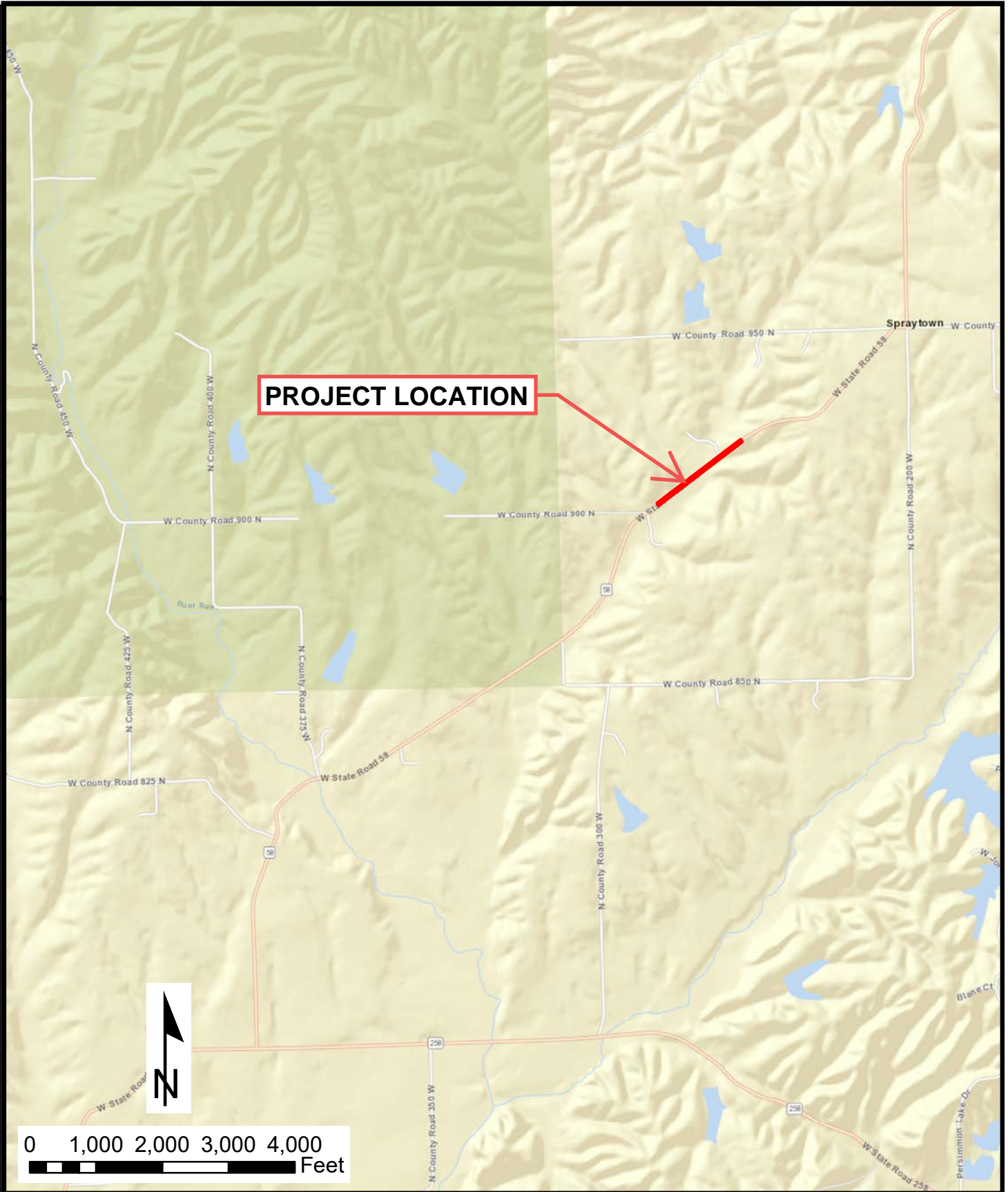
⁵AMMs determined by the IPAC decision key to be needed that are listed in the USFWS *User’s Guide for the Range-wide Programmatic Consultation for Indiana bat and Northern long-eared bat* as “required for all projects”.

⁶Potential for causing a disproportionately high and adverse impact.

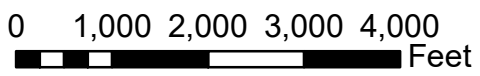
⁷Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

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

APPENDIX B
GRAPHICS



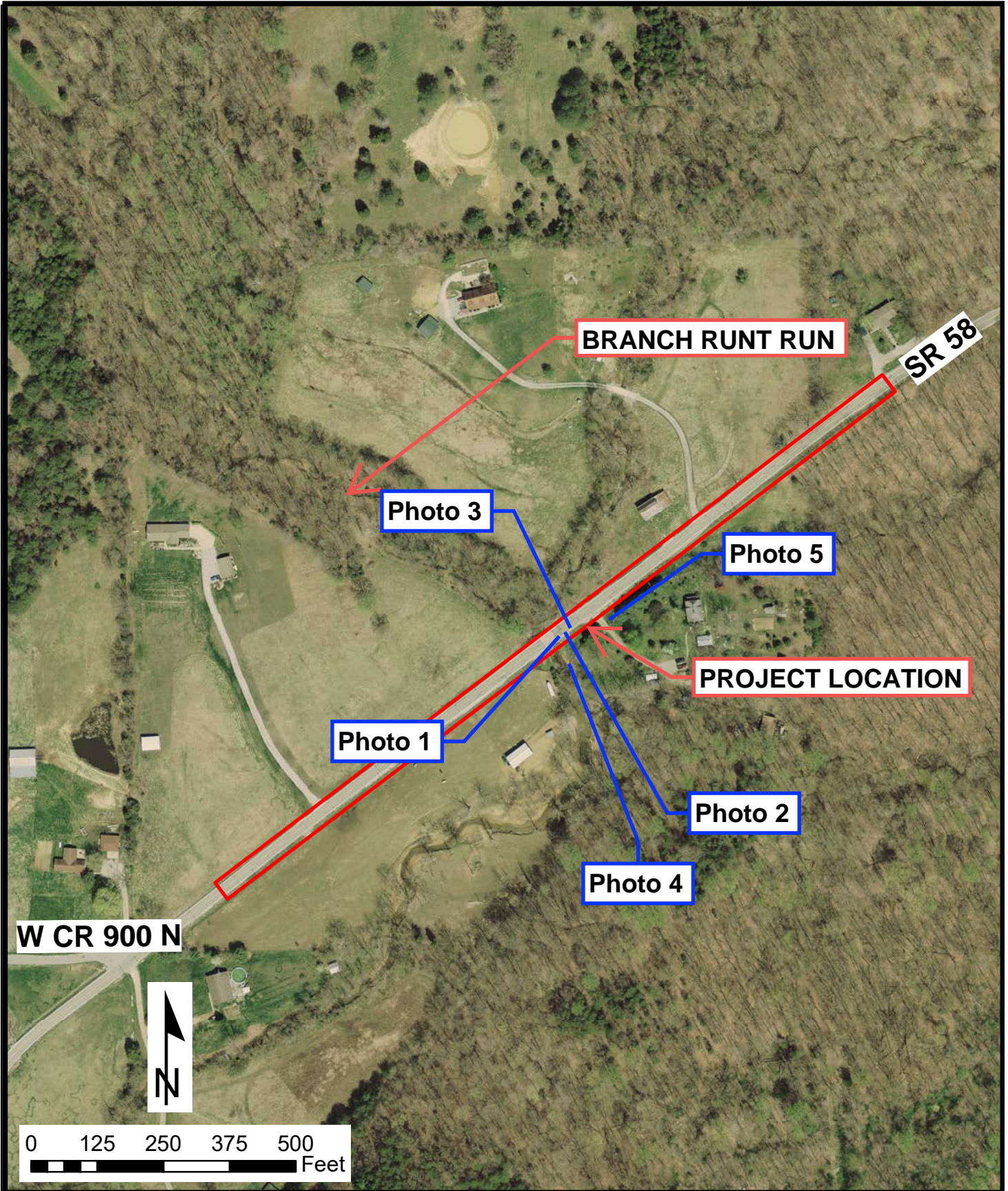
PROJECT LOCATION



BRIDGE PROJECT
 PROJECT LOCATION MAP
 DES. 1701431
 S.R. 58 OVER BRANCH RUNT RUN
 JACKSON COUNTY, INDIANA



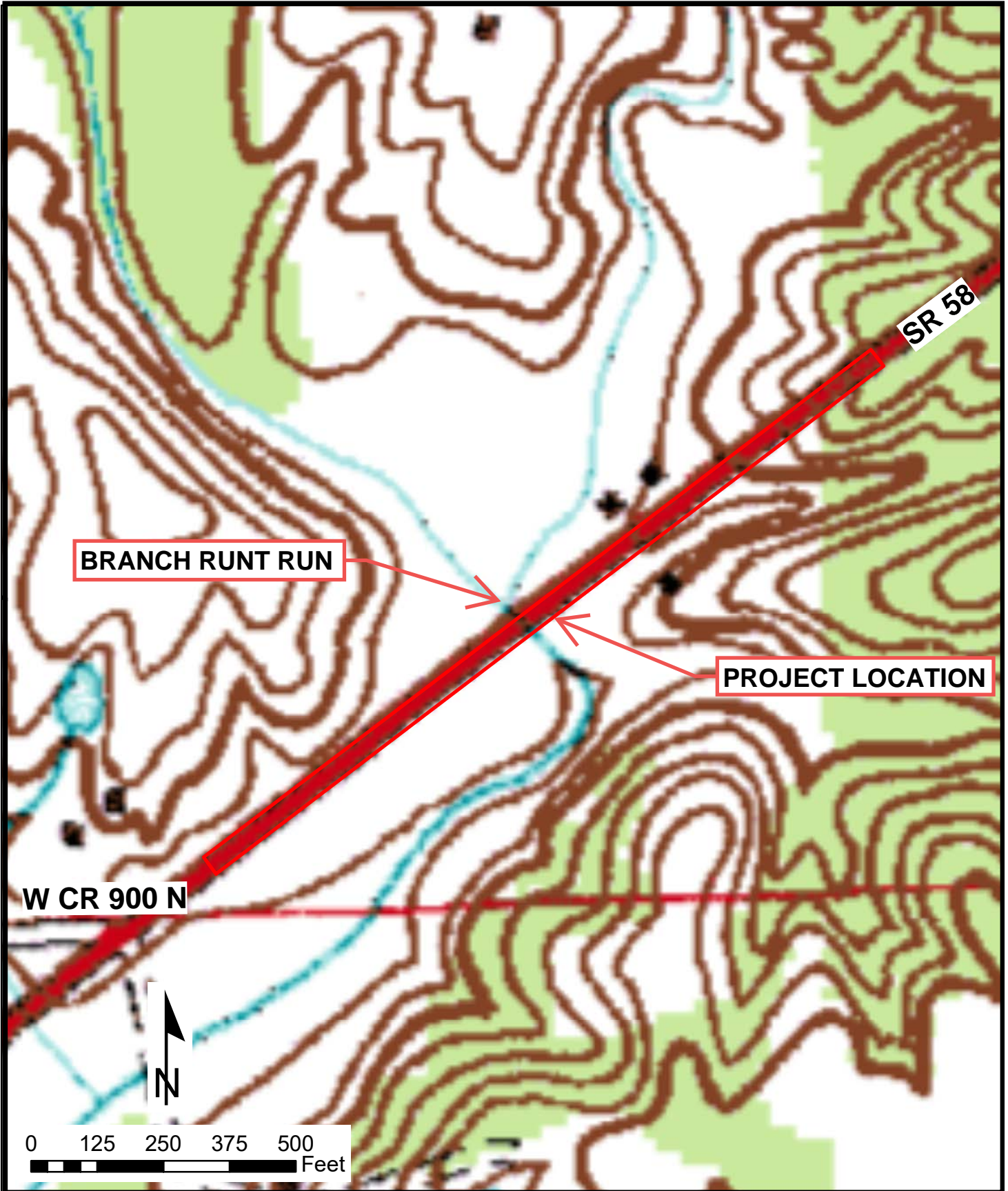
FIGURE 1
 4060.317



BRIDGE PROJECT
 AERIAL PHOTOGRAPHY MAP
 DES. 1701431
 S.R. 58 OVER BRANCH RUNT RUN
 JACKSON COUNTY, INDIANA



FIGURE 2
 4060.317



BRIDGE PROJECT
TOPOGRAPHIC MAP
DES. 1701431
S.R. 58 OVER BRANCH RUNT RUN
JACKSON COUNTY, INDIANA



FIGURE 3
4060.317

Date: January 10, 2018

Time:

Description:

Photo 1

Looking along the roadway across the structure facing northeast.



Date: January 10, 2018

Time:

Description:

Photo 2

Looking northwest along the stream from the roadway



**BRIDGE REPLACEMENT PROJECT
SITE PHOTOGRAPHS**

**S.R. 58 OVER BRANCH RUNT RUN
JACKSON COUNTY, INDIANA**



Date: January 10, 2018

Time:

Description:

Photo 3

Looking southwest along the stream from the roadway



Date: January 10, 2018

Time:

Description:

Photo 4

Looking northwest under the structure



**BRIDGE REPLACEMENT PROJECT
SITE PHOTOGRAPHS**

**S.R. 58 OVER BRANCH RUNT RUN
JACKSON COUNTY, INDIANA**



Date: January 10, 2018

Time:

Description:

Photo 5

Looking southwest beside
the structure



Date:

Time:

Description:

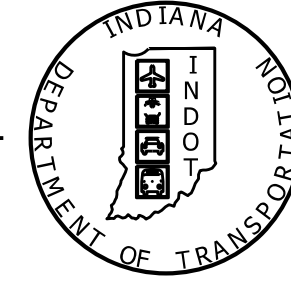
**BRIDGE REPLACEMENT PROJECT
SITE PHOTOGRAPHS**

**S.R. 58 OVER BRANCH RUNT RUN
JACKSON COUNTY, INDIANA**



PROJECT	DESIGNATION
1701431	1701431
CONTRACT	BRIDGE FILE
B-40407	058-36-10264

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE PLANS

FOR SPANS OVER 20 FEET

ROUTE: SR 58
PROJECT NO.

AT: RP 108 + 97
1701431 P.E.
1701431 R/W
1701431 CONST.

STRUCTURE INFORMATION

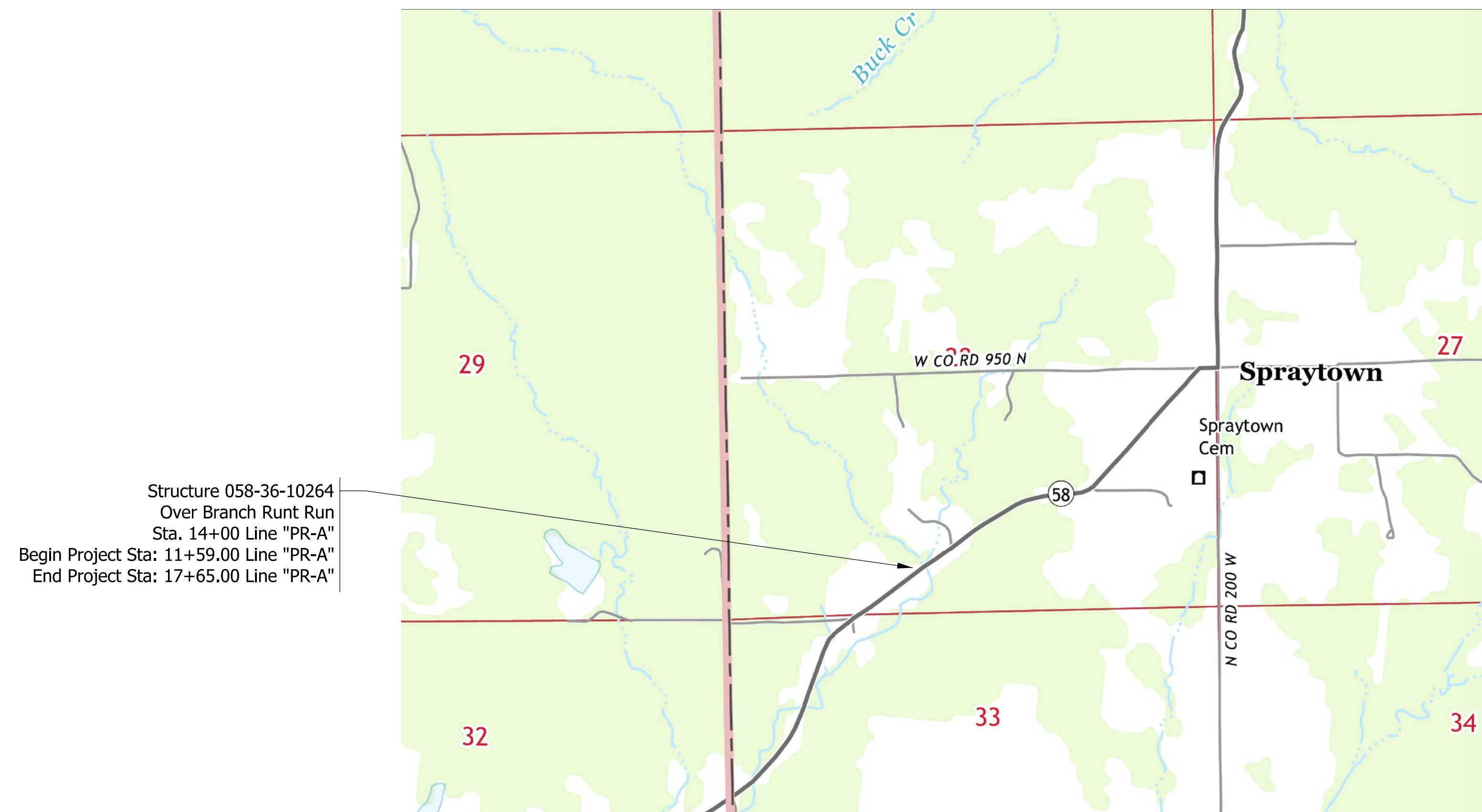
STRUCTURE	Des. #	TYPE	SPAN AND SKEW	OVER	STATION
058-36-10264	1701431	Reinforced Concrete Slab	Single Span : 41'-6" Square	Branch Runt Run	Sta. 14 + 00 Line "PR-A"

KIN PROJECT INFORMATION

PROJECT NO.	DESCRIPTION	DESIGNER
1600503	SR 58 over E Fork White Creek	(Lead Des #)
1700171	SR 58 over Runt Run	
1701431	SR 58 over Branch Runt Run	
1701428	SR 58 over Branch Runt Run	
1700012	SR 58 Small Structure Replacement	

Partial plan set with pages relevant to this document.

Bridge Replacement on
SR 58 over Branch Runt Run
Located 2.28 Miles East of SR 258
Section 28, T-7-N, R-4-E, Pershing Township Of Jackson County, Indiana



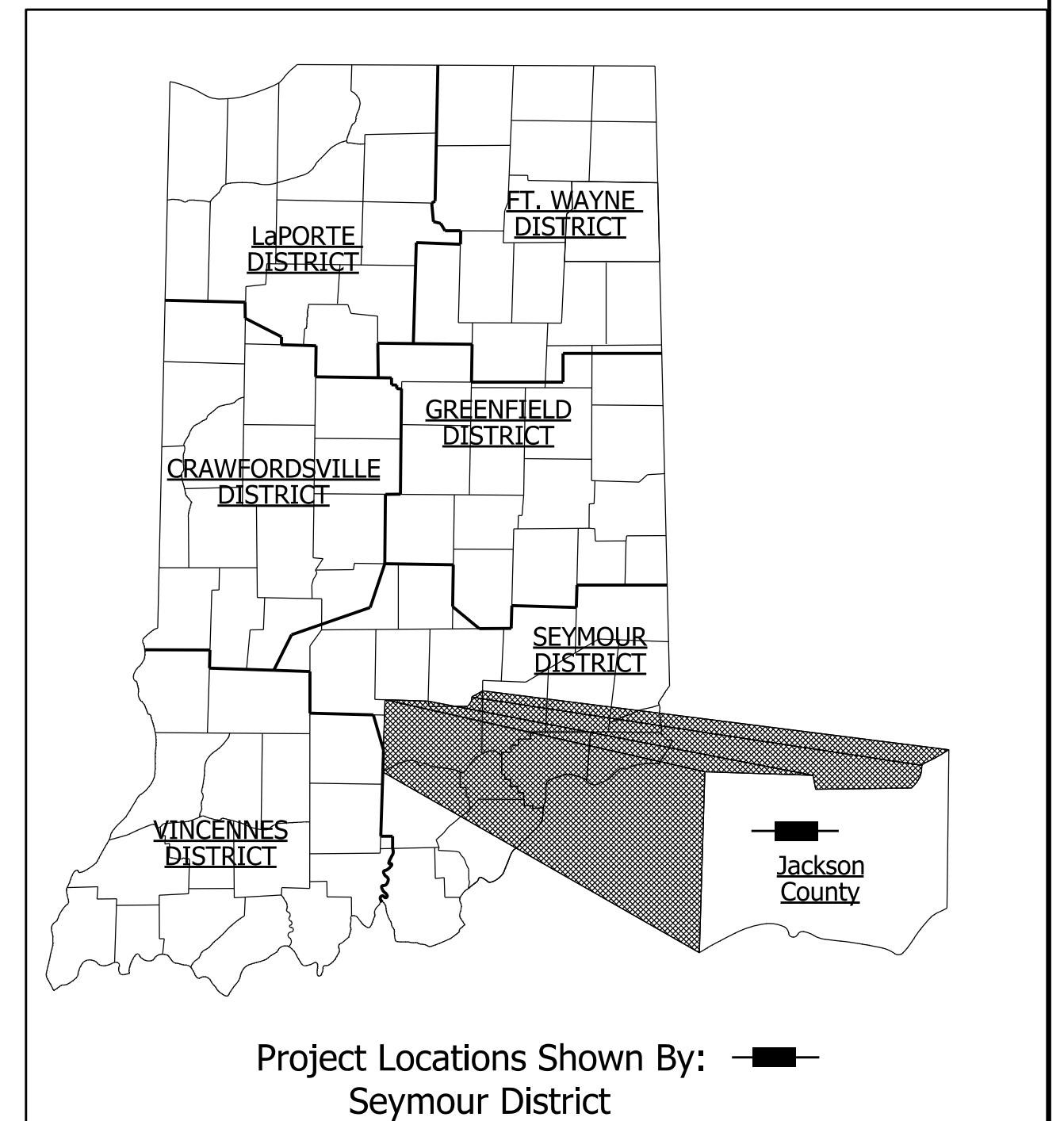
LOCATION MAP
SCALE: 1" = 1,000'

TRAFFIC DATA

A.A.D.T. (Traffic Forecast 2021)	700 VPD
A.A.D.T. (Traffic Forecast 2041)	700 VPD
D.H.V. (Traffic Forecast 2041)	93 V.P.H
DIRECTIONAL DISTRIBUTION	48.14 % (+)
TRUCKS	2.87 % A.A.D.T.
	1.09 % D.H.V.

DESIGN DATA

DESIGN SPEED	45 mph
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTION CLASSIFICATION	Major Collector
RURAL/URBAN	Rural
TERRAIN	Level
ACCESS CONTROL	None



LATITUDE: 39° 00' 29.52" N LONGITUDE: 86° 05' 26.21" W

BRIDGE LENGTH: 0.008 MI.
ROADWAY LENGTH: 0.094 MI.
TOTAL LENGTH: 0.102 MI.
MAX GRADE: 3.32%

HUC: 05120208060010

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

BURGESS & NIPLE
Engineers ■ Architects ■ Planners

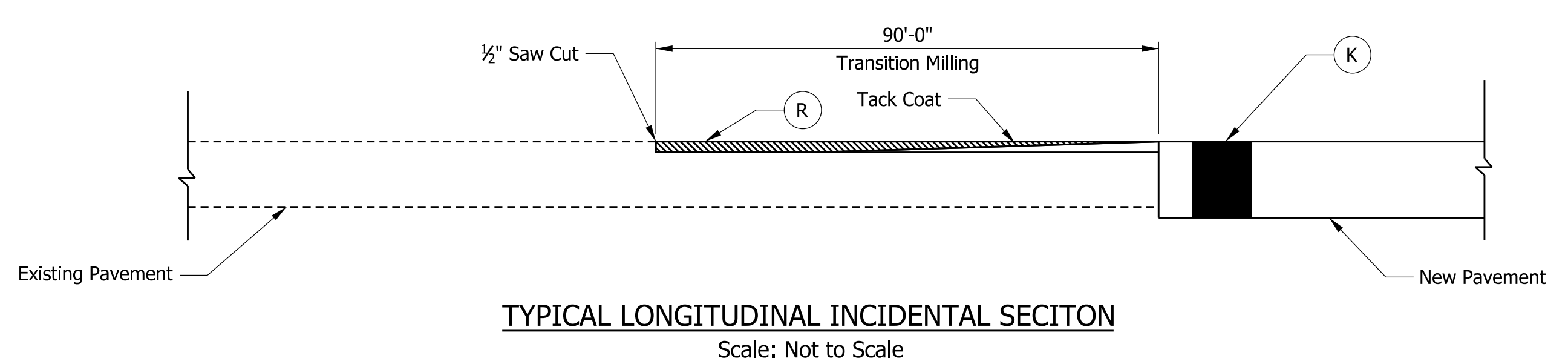
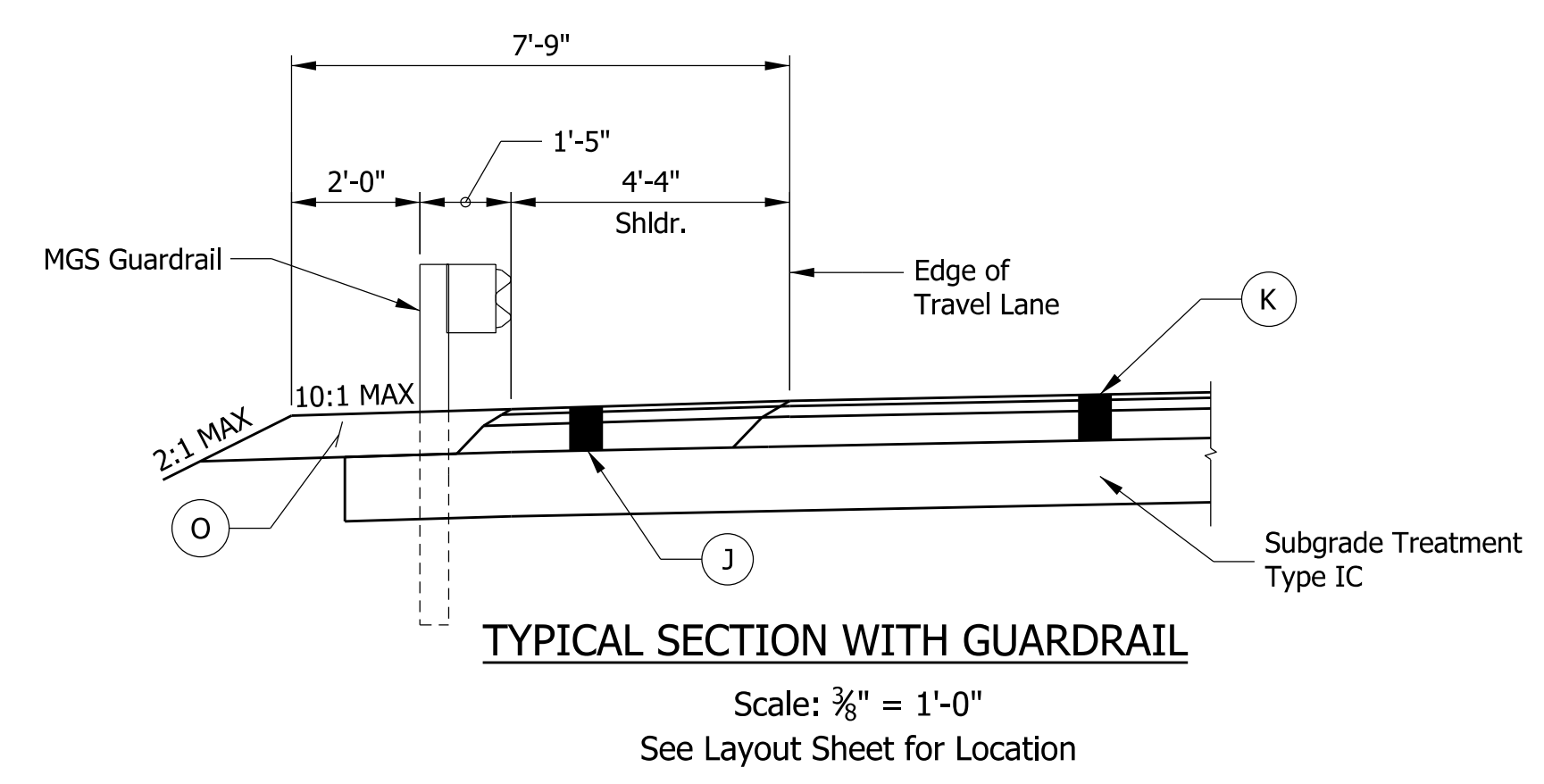
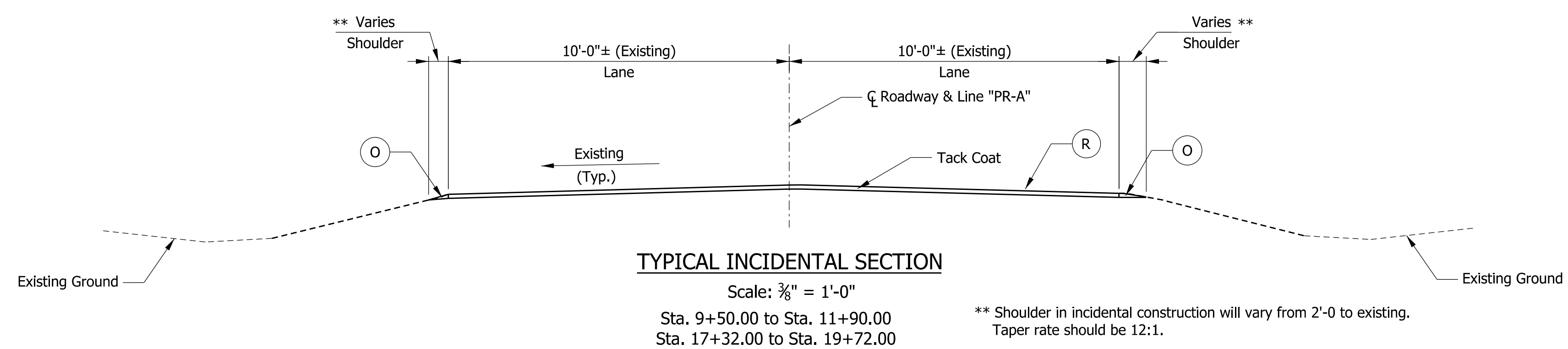
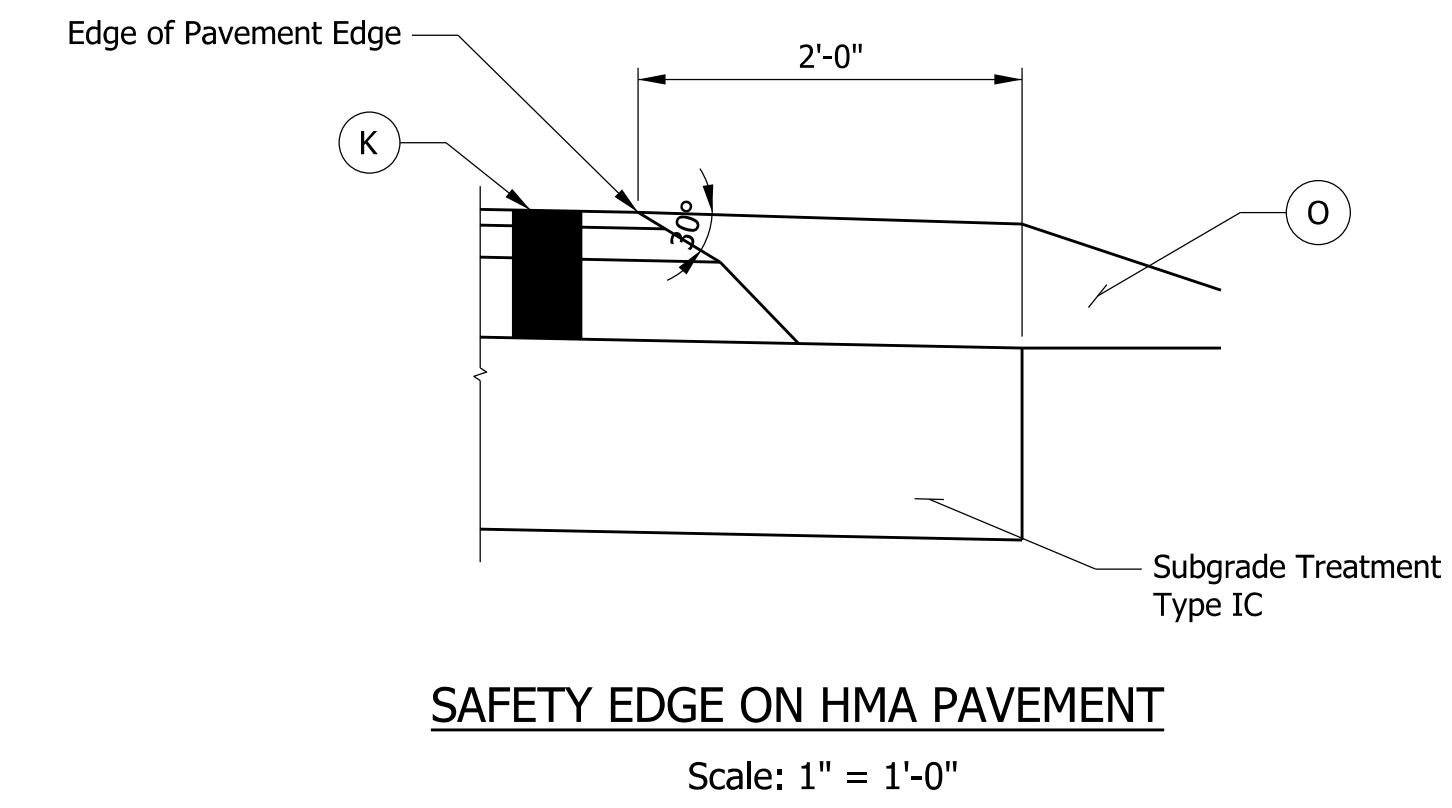
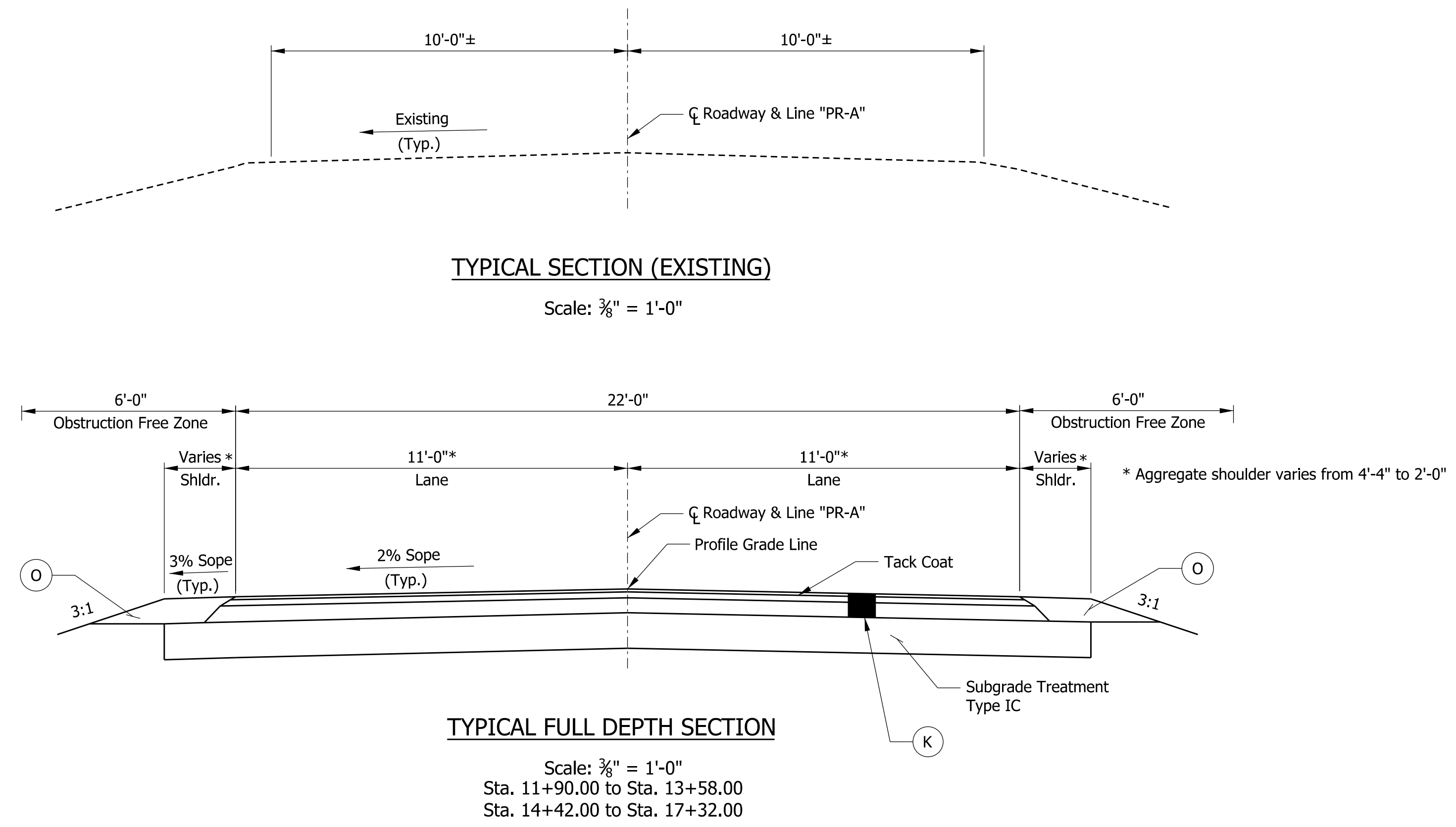
251 N. ILLINOIS ST.
CAPITOL CENTER SUITE 920
INDIANAPOLIS, IN 46221
PHONE (317) 237-2760
FAX (317) 237-2755

PLANS PREPARED BY:	BURGESS & NIPLE, INC.	(317) 237-2760
		PHONE NUMBER
PREPARED BY:		DATE
APPROVED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

BRIDGE FILE	
058-36-10264	
DESIGNATION	
1701431	
DWG. NO.	SHEET NO.
TI-01	1 of 13
CONTRACT	PROJECT
B-40407	1701431

1/29/2020
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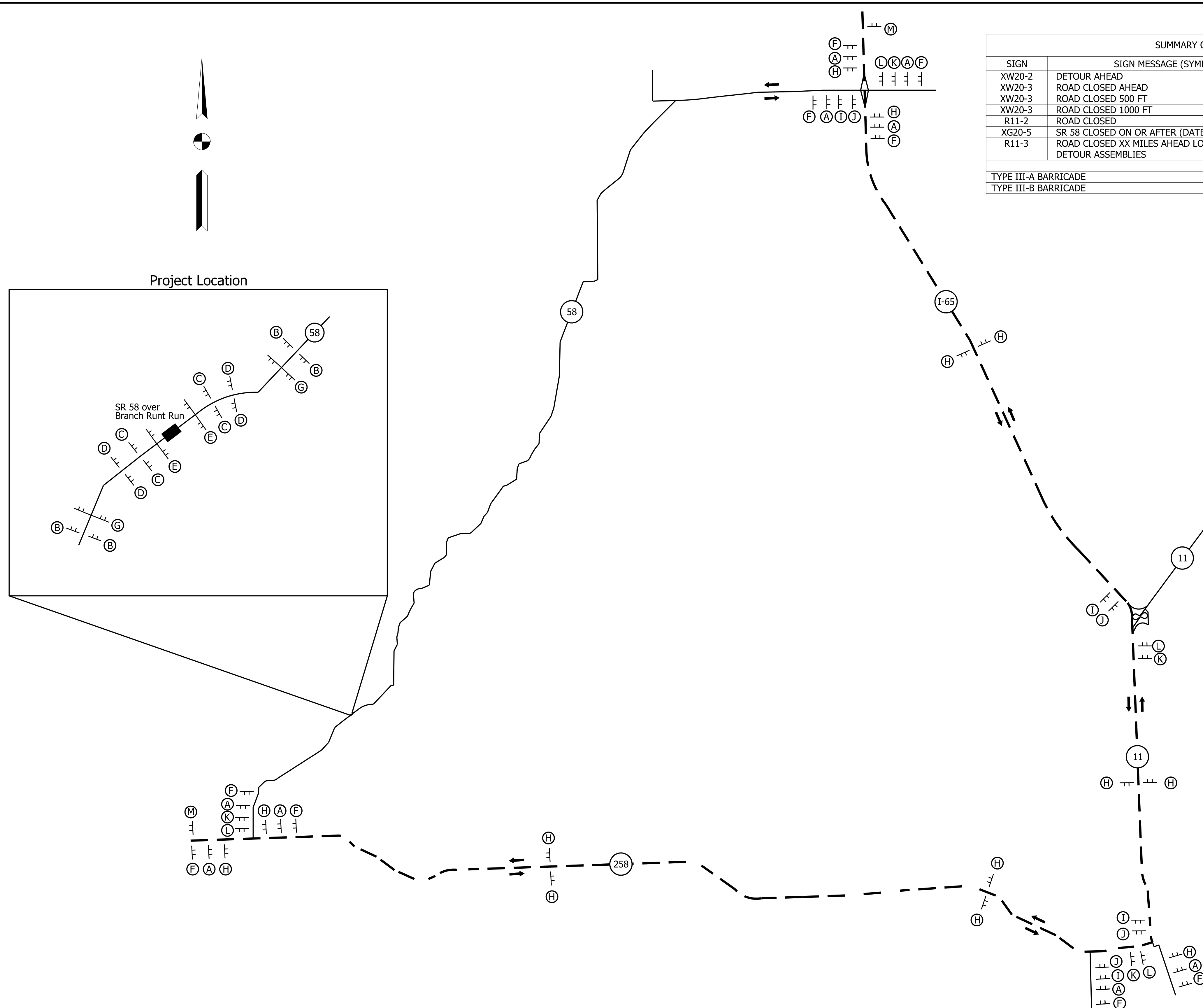
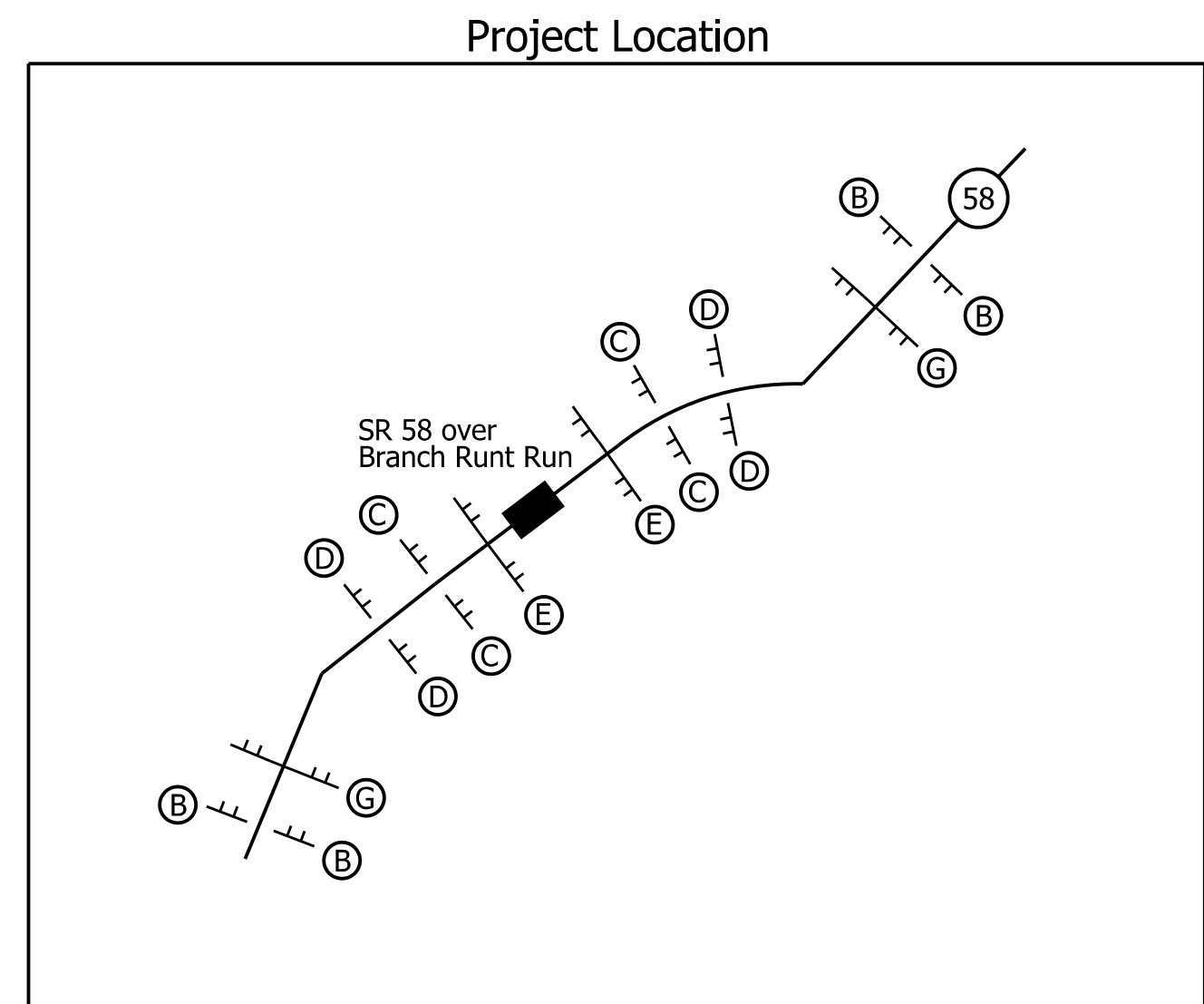
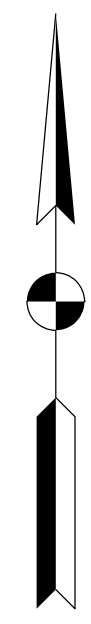
NOTE TO REVIEWER
 Existing pavement sections are not available. Pavement Design will be requested following Stage 2 Submittal. Pavement quantities shown are for estimating purposes only. Plans and supporting documents will be updated accordingly upon Final Pavement Design Approval.



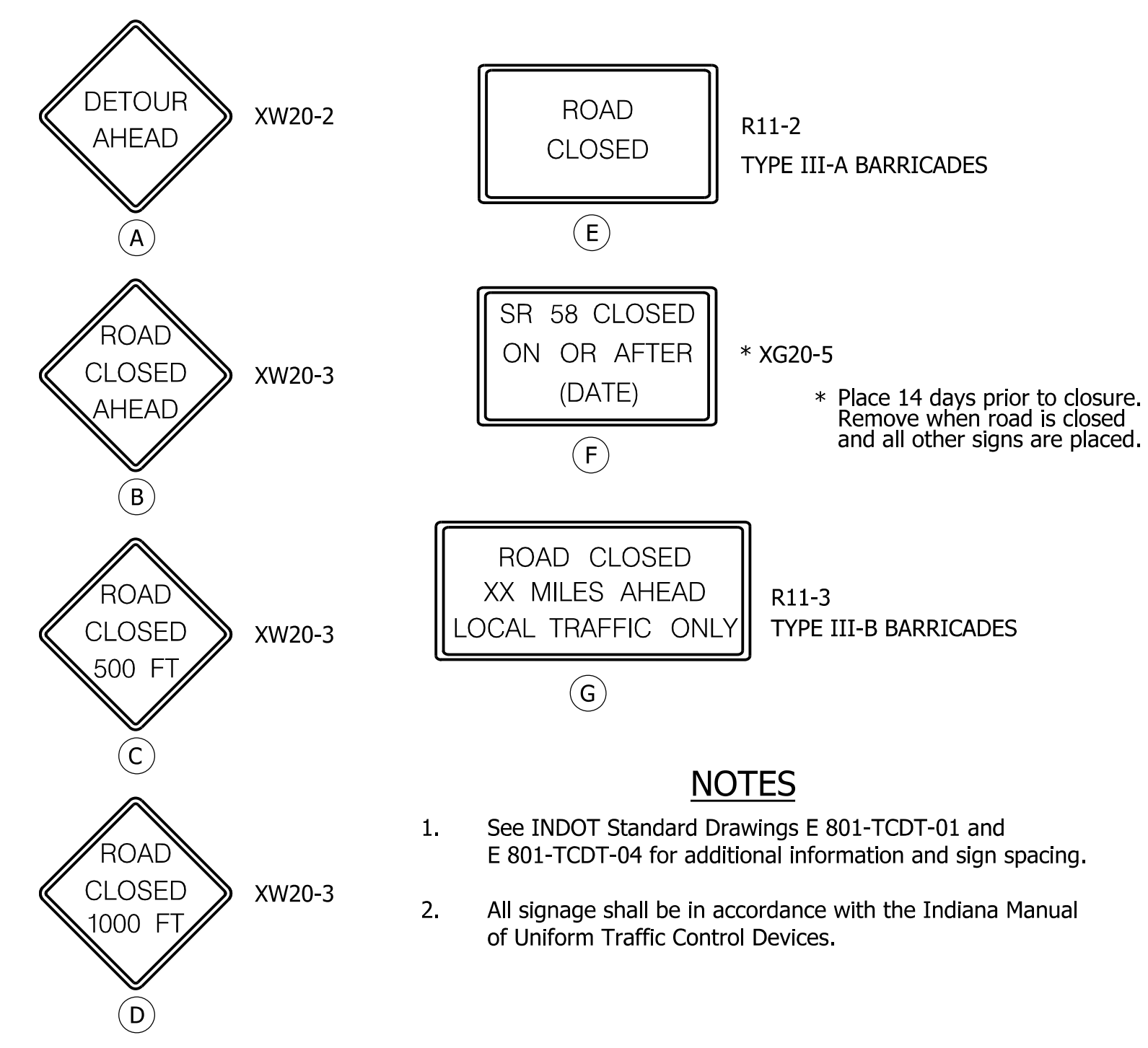
- LEGEND**
- (K) 165 lb/syd QC/QA - HMA 2, 64 Surface, 9.5mm on 275 lb/syd QC/QA - HMA 2, 64 Intermediate, 19mm on 660 lb/syd QC/QA - HMA 2, 64 Base, 19mm on
 - (J) 165 lb/syd QC/QA - HMA 2, 64 Surface, 9.5mm on 275 lb/syd QC/QA - HMA 2, 64 Intermediate, 19mm on 660 lb/syd QC/QA - HMA 2, 64 Base, 19mm on
 - (O) Variable-Depth Compacted Aggregate Base No. 53
 - (R) 165 lb/syd QC/QA - HMA 2, 64 Surface, 9.5mm on

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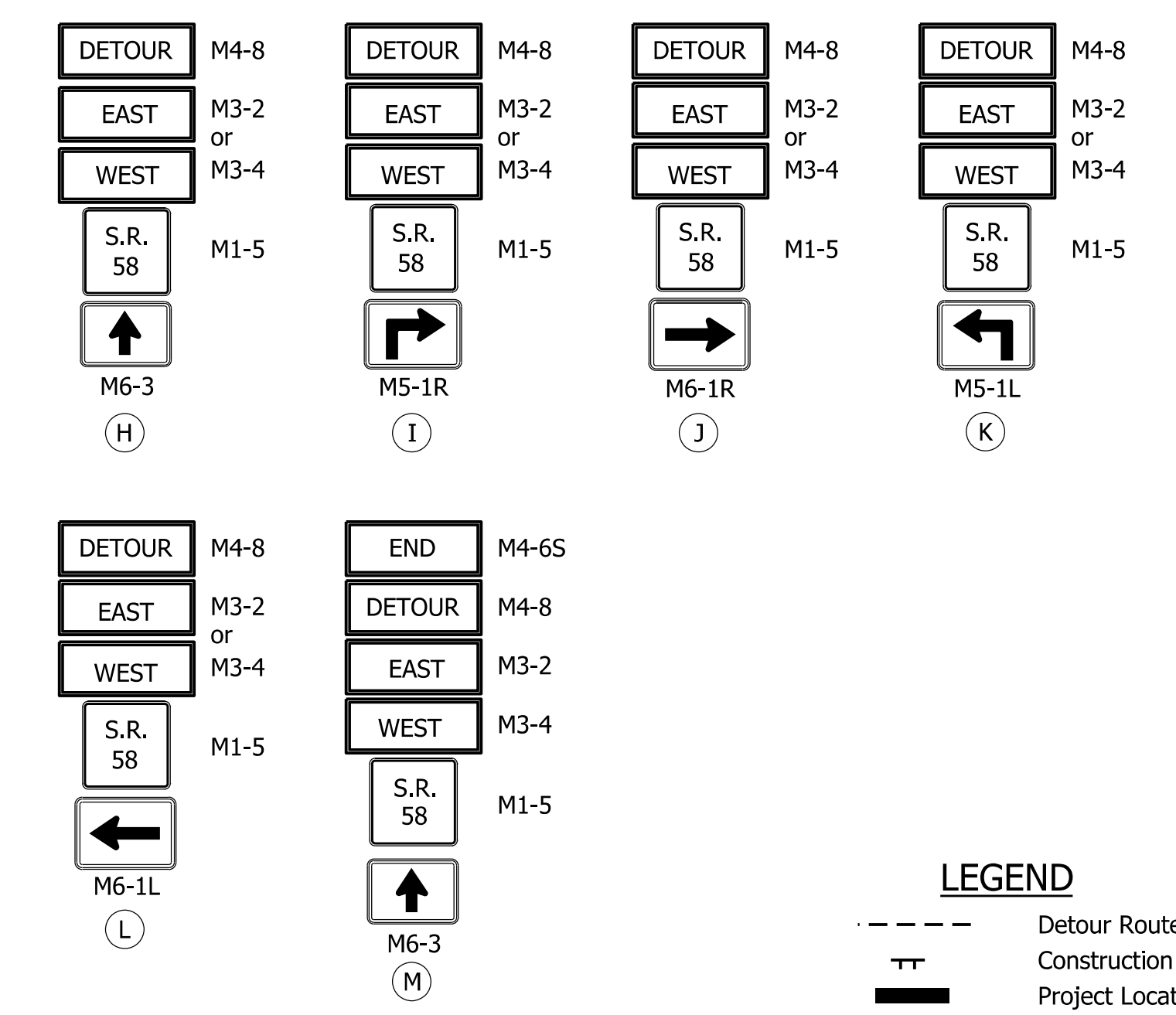
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE As Noted	BRIDGE FILE 058-36-10264
	DESIGNED: IP	DRAWN: IP	VERTICAL SCALE As Noted	DESIGNATION 1701431
CHECKED: NCE	CHECKED: NCE	SR 58 OVER BRANCH RUNT RUN TYPICAL SECTIONS		SURVEY BOOK
				DWG. NO. TS-01
				SHEET NO. 3 of \$Total\$
				CONTRACT B-40407
				PROJECT 1701431



SUMMARY OF QUANTITIES			
SIGN	SIGN MESSAGE (SYMBOL)	TYPE	QTY
XW20-2	DETOUR AHEAD	A	9 EA
XW20-3	ROAD CLOSED AHEAD	A	4 EA
XW20-3	ROAD CLOSED 500 FT	A	4 EA
XW20-3	ROAD CLOSED 1000 FT	A	4 EA
R11-2	ROAD CLOSED	B	2 EA
XG20-5	SR 58 CLOSED ON OR AFTER (DATE)	B	9 EA
R11-3	ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY	B	2 EA
	DETOUR ASSEMBLIES		31 EA
TYPE III-A BARRICADE			72 LFT
TYPE III-B BARRICADE			96 LFT



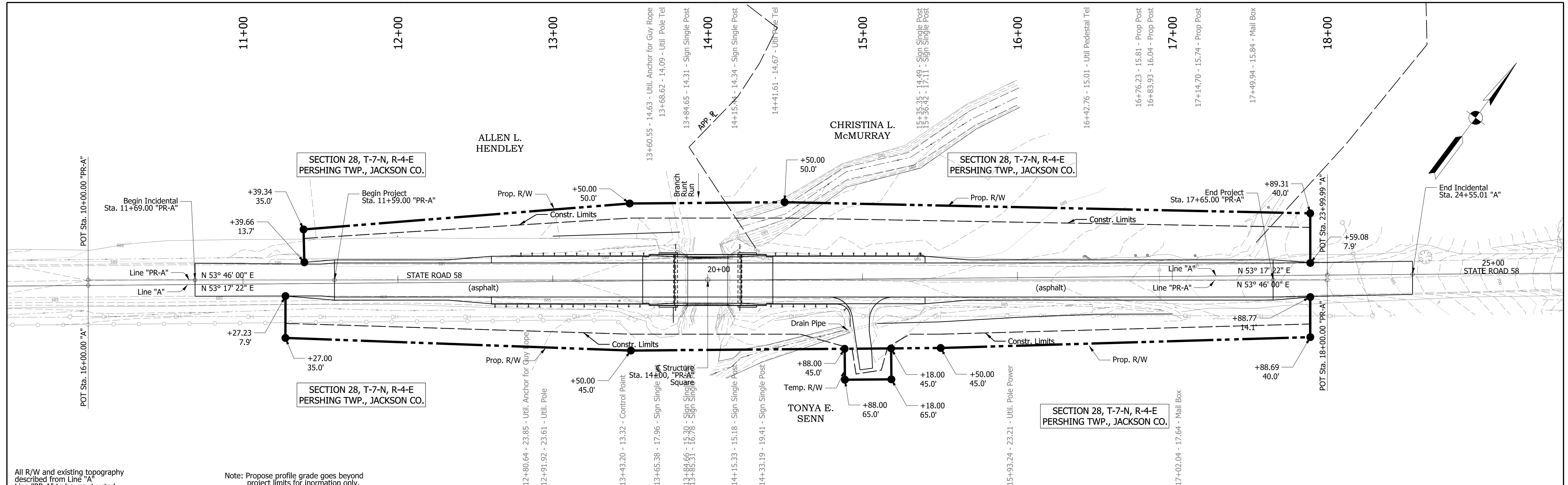
- NOTES**
- See INDOT Standard Drawings E 801-TCDD-01 and E 801-TCDD-04 for additional information and sign spacing.
 - All signage shall be in accordance with the Indiana Manual of Uniform Traffic Control Devices.



DETOUR FOR SR 58
Scale: 1" = 4,000'

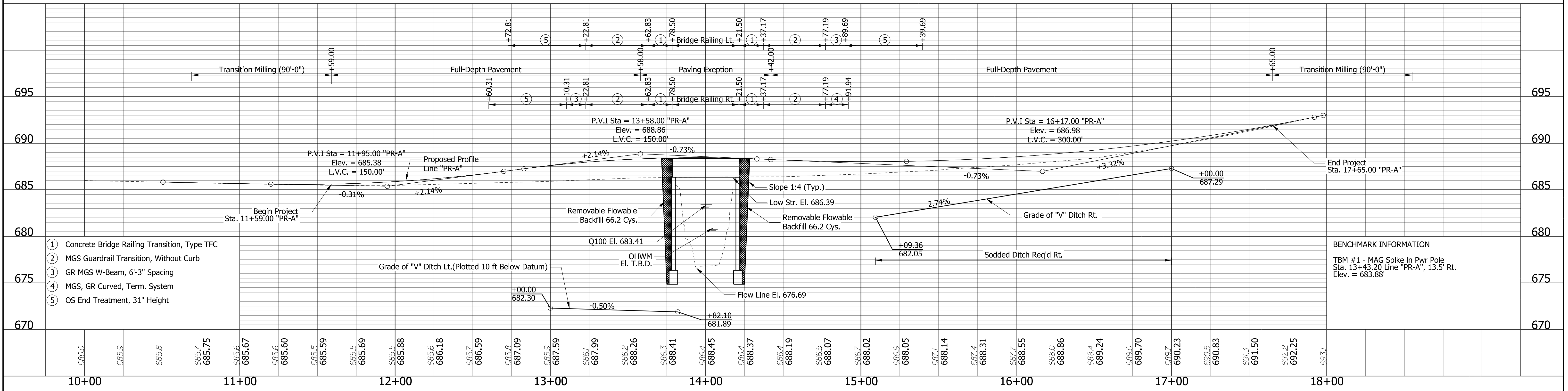
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RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION SR 58 OVER BRANCH RUNT RUN TRAFFIC MAINTENANCE DETAILS	HORIZONTAL SCALE As Noted	BRIDGE FILE 058-36-10264
DESIGNED: MDL DRAWN: MDL		VERTICAL SCALE As Noted	DESIGNATION 1701431
CHECKED: NCE CHECKED: NCE		SURVEY BOOK MT-01	DWG. NO. 4
		CONTRACT B-40407	PROJECT 1701431



All R/W and existing topography described from Line "A".
Line "PR-A" to be constructed.

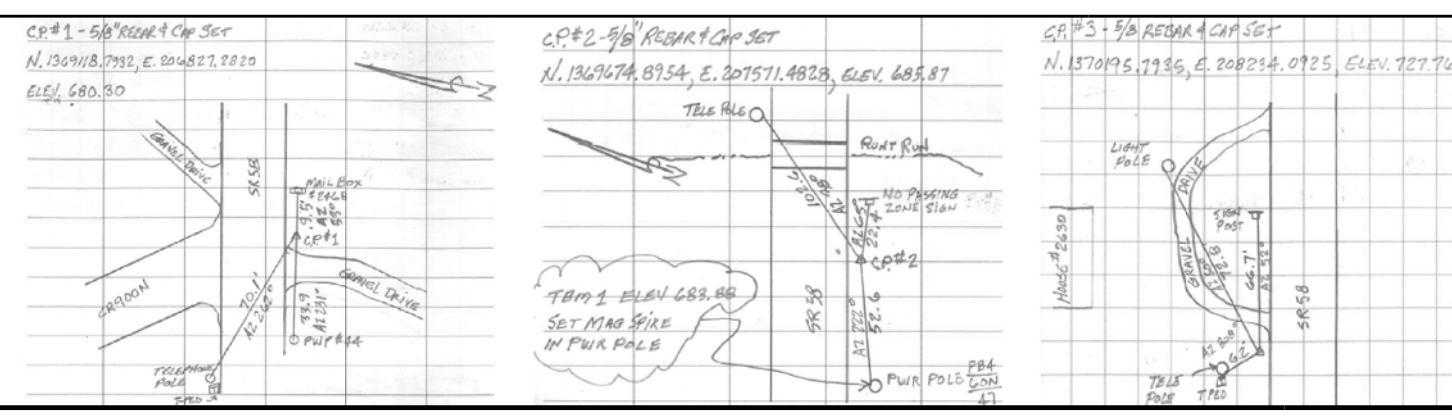
Note: Propose profile grade goes beyond project limits for information only.



- ① Concrete Bridge Railing Transition, Type TFC
- ② MGS Guardrail Transition, Without Curb
- ③ GR MGS W-Beam, 6'-3" Spacing
- ④ MGS, GR Curved, Term. System
- ⑤ OS End Treatment, 31" Height

BENCHMARK INFORMATION
TBM #1 - MAG Spike in Pwr Pole Sta. 13+43.20 Line "PR-A", 13.5' Rt. Elev. = 683.88'

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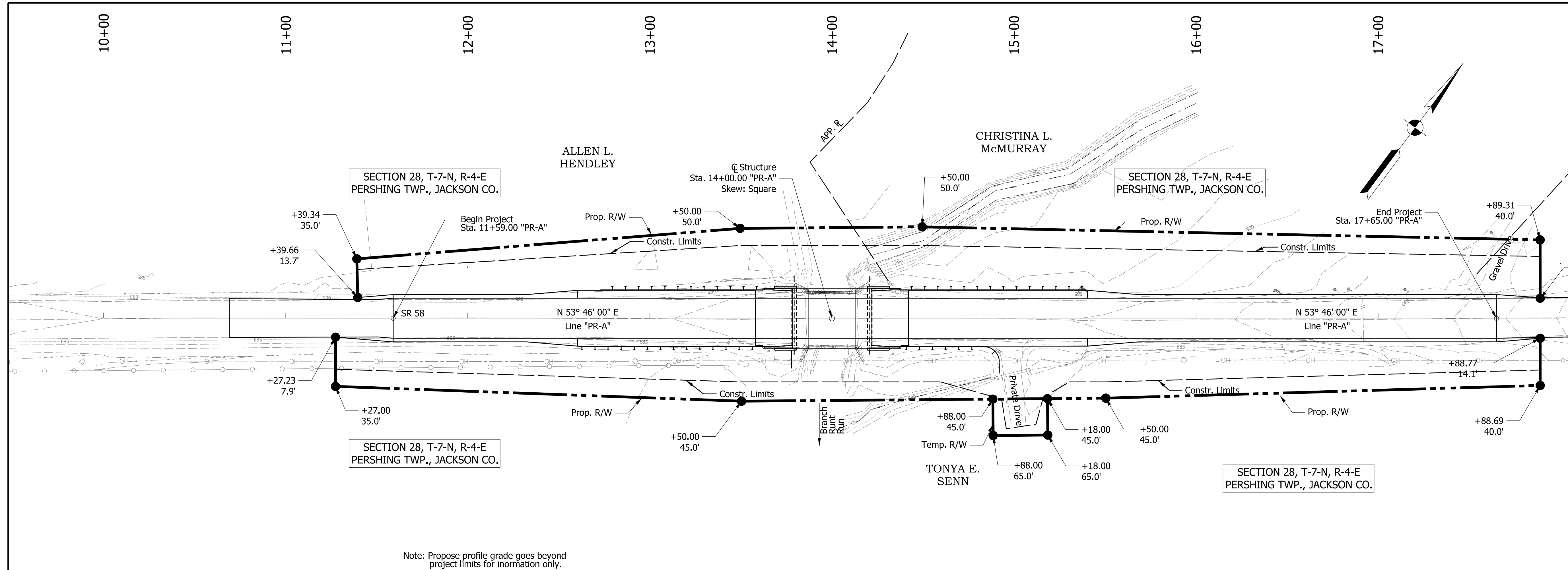


RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: IP	DRAWN: IP	
CHECKED: NCE	CHECKED: NCE	

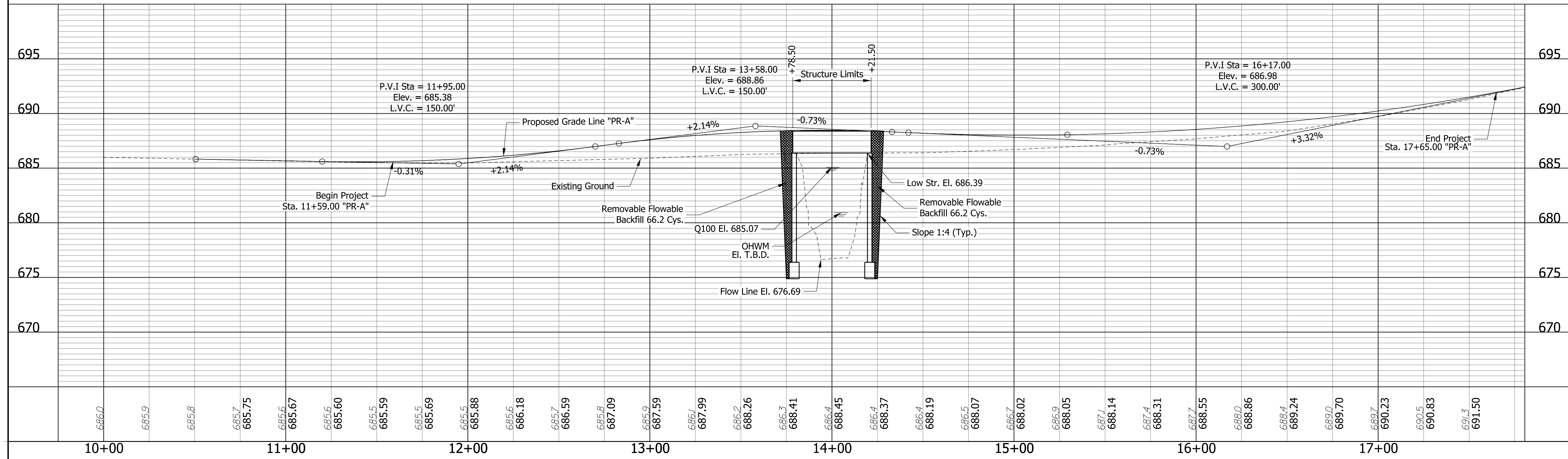
INDIANA
DEPARTMENT OF TRANSPORTATION

**SR 58 OVER BRANCH RUN RUN
PLAN AND PROFILE**

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE 058-36-10264	
VERTICAL SCALE 1" = 5'	DESIGNATION 1701431	
SURVEY BOOK	DWG. NO. PP-01	SHEET NO. 5 of 13
CONTRACT B-40407	PROJECT 1701431	



Note: Propose profile grade goes beyond project limits for information only.



EXISTING STRUCTURE

The existing structure (058-36-05873 B) is a single span prestressed concrete box beam bridge;
 Built in 1967
 1 Span @ 26'-0" ±
 O-O Coping: 30'-2" ±
 Clear roadway: 28'-6" ±
 Substructures: End Bents 1 & 2: Wall type abutments on spread footings.
 Existing structure to be removed.

HYDRAULIC DATA

Drainage Area	1.31 sq mi
Q100 Discharge	1900 cfs
Q100 Elevation	683.41 ft
Max Velocity at Q100	10.37 ft/s
Q100 Velocity	8.25 ft/s
Backwater at Q100	2.10
Waterway Opening Required	178.08 sq ft
Waterway Opening provided	193.84 sq ft
Min. Low Structure Elevation Provided	686.70 ft
Skew	Square
Estimated Scour Elev.	670.26 ft
Existing Waterway Opening	178.08 sq ft

HYDRAULIC SCOUR DATA

Q100 Discharge	1900 cfs
Q100 Elevation	683.41 ft
Max Velocity at Q100	10.37 ft/s
Q100 Scour Depth (Contraction)	6.43 ft
Q100 Scour Depth (Total)	6.43 ft
Q100 Low Scour Elevation	670.26 ft

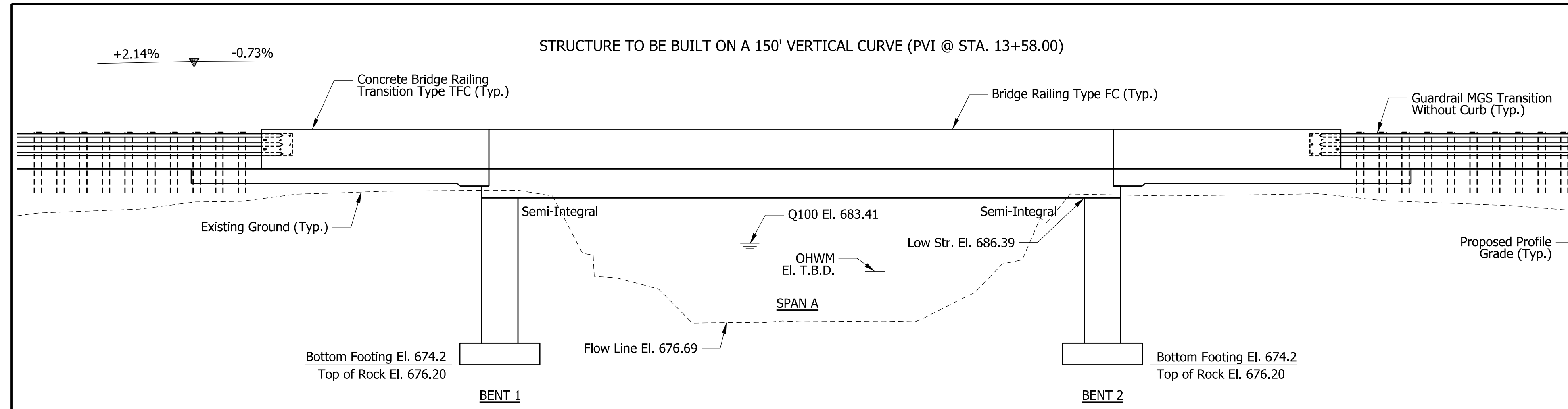
EARTHWORK TABULATION

Fill + 25%	xxxx cys
Common Excavation	xx cys
Usabel Waterway Excavation (70%)	xx cys
Surplus Foundation Excavation (70%)	xx cys
Borrow	xx cys
Total Waterway Excavation	xx cys
Excavation Unclassified	xx cys
Benching (Estimated)	xx cys

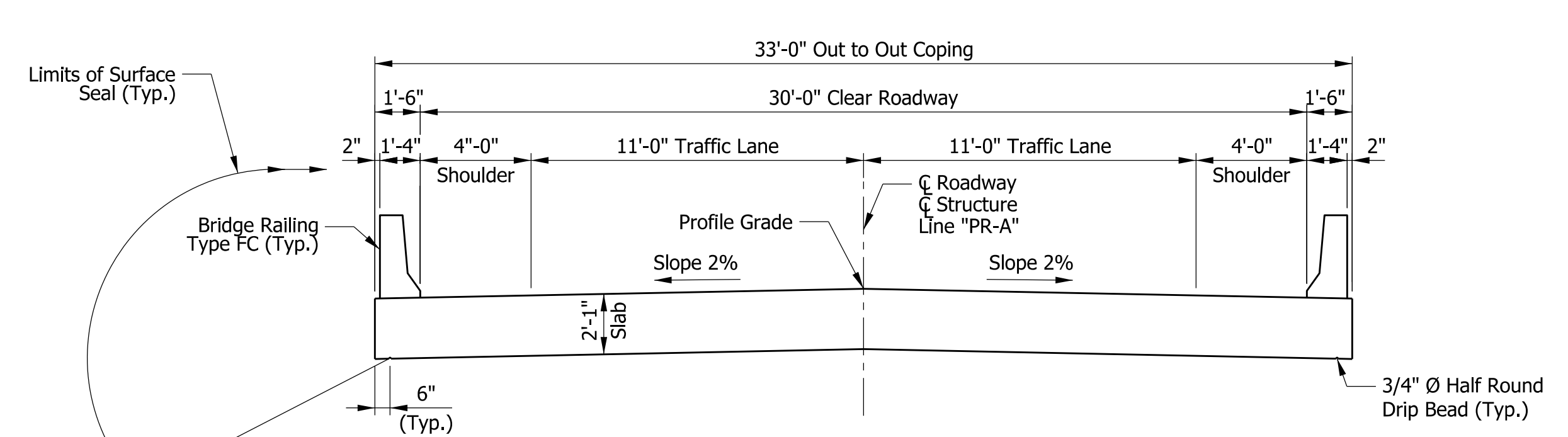
REINFORCED CONCRETE SLAB BRIDGE
 1 Span: 41'-6" CLEAR
 30'-0" Clear Roadway; Skew: Square
 SR 58 OVER BRANCH RUNT RUN
 Jackson County

1/2/16/18 PM
 1/29/2020
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RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1"=30' BRIDGE FILE 058-36-10264
DESIGNED: IP DRAWN: IP CHECKED: NCE CHECKED: NCE	SR 58 OVER BRANCH RUNT RUN LAYOUT	VERTICAL SCALE 1"=5' DESIGNATION 1701431
		SURVEY BOOK DWG. NO. SHEET NO. LY-01 6 of 13 CONTRACT PROJECT B-40407 1701431

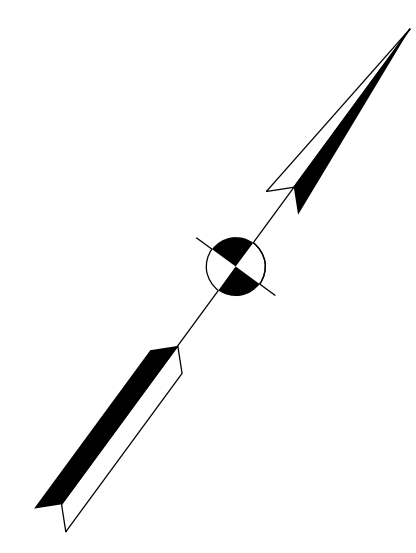


ELEVATION
Scale: 3/16" = 1'-0"



TYPICAL SECTION
Scale: 1/4" = 1'-0"

NOTE TO REVIEWER
Hydraulic approval is pending. Scour countermeasures are provided in the cost estimate. Plans and supporting documents will be revised upon hydraulic approval



Existing Structure

The existing structure (058-36-05873) is a single span continuous prestressed concrete box beam bridge built in 1967 with a 26' span and 28'-6" clear roadway with wingwalls. Existing structure to be removed.

GENERAL NOTES:

- Plans for existing structure are on file in the Central Office as Structure No. 058-36-05873 and are available upon request.
- Reinforcing steel cover shall be 2 1/2" in top and 1" minimum in bottom of floor slabs, 3" in footings except bottom steel which shall be 4", and 2" in all other parts, unless noted.
- The following surfaces shall be surface sealed: Top of bridge deck, copings, including underside of bridge deck from coping to drip bead, all exposed surfaces of concrete railings, concrete bridge railing transitions, and RCBA.

DESIGN DATA:

Design Strengths:
 Class "C" Concrete $f_c = 4,000$ PSI
 Class "A" Concrete $f_c = 3,500$ PSI
 Class "B" Concrete $f_c = 3,000$ PSI
 Reinforcing Steel $f_y = 60,000$ PSI

Live Load:
 Superstructure and Substructure designed for HL-93 loading, in accordance with the AASHTO LRFD Bridge Design Specifications 8th. edition, and its subsequent Interims.

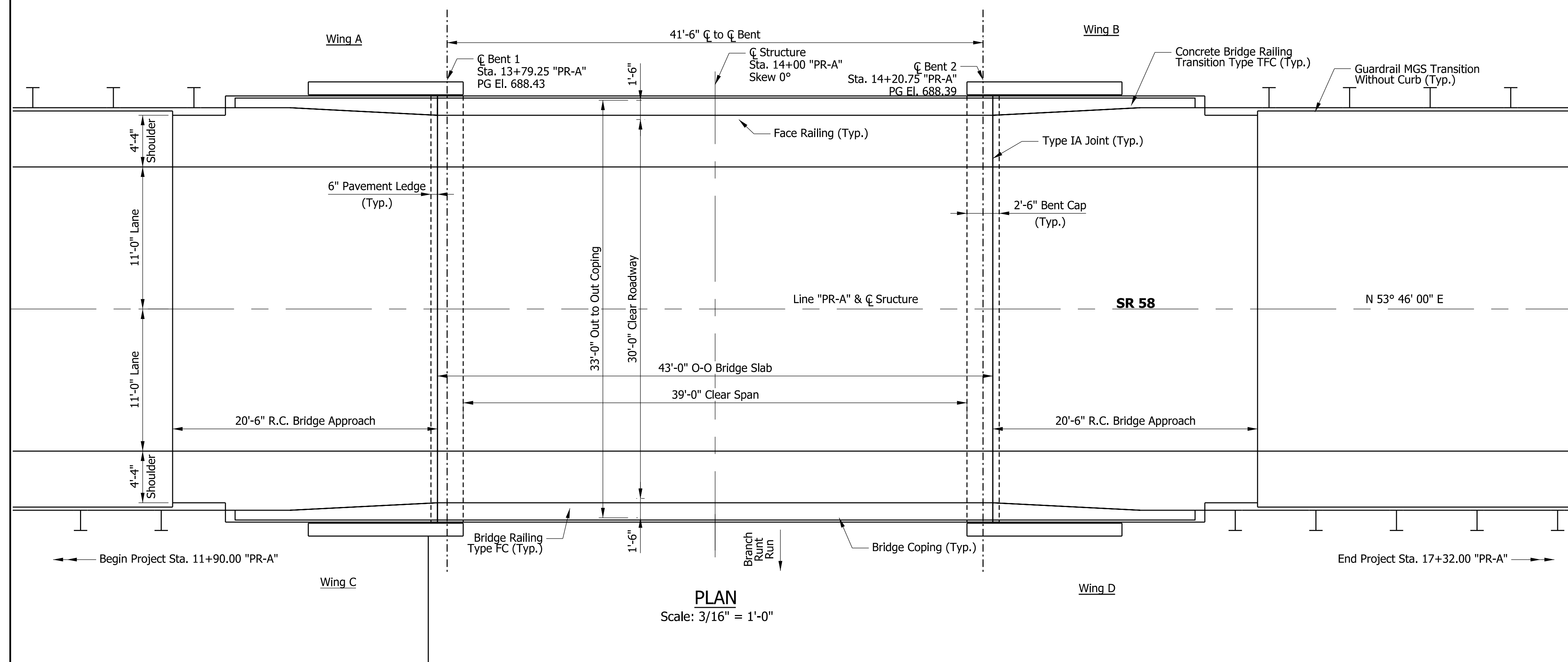
Dead Load:
 Actual weight plus 35 psf (composite) for future wearing surface.

Wind Load:
 Designed for 70 mph horizontal wind loading in accordance with LRFD 3.8.1.

Seismic Design Data:
 Seismic Performance Zone Zone XX
 Acceleration Coefficient XXXX
 Seismic Soil Profile Type Class XX

Floor Slab:
 Slab designed with a 24 1/2" structural depth Plus 1/2" of sacrificial wearing surface.

Earth Bearing Pressure
 Allowable Bearing Pressure XX.XX ksf
 Nominal Soil Bearing Pressure X.XX ksf



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

REINFORCED CONCRETE SLAB BRIDGE
 1 Span: 41'-6"
 30'-0" Clear Roadway; Skew: Square
 SR 58 OVER BRANCH RUNT RUN
 Jackson County

1/29/2020 12:16:20 PM P:\PH6676\Card\CDSDS\GP-01.dgn

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION		
	DESIGNED: IP	DRAWN: JCP			
CHECKED: NCE	CHECKED: NCE		SR 58 OVER BRANCH RUNT RUN GENERAL PLAN		
HORIZONTAL SCALE		BRIDGE FILE			
As Noted		058-36-10264			
VERTICAL SCALE		DESIGNATION			
As Noted		1701431			
SURVEY BOOK		DWG. NO.	SHEET NO.		
		GP-01	7 of 13		
CONTRACT		PROJECT			
B-40407		1701431			

**APPENDIX C
EARLY COORDINATION**



December 30, 2019

Indiana Department of Transportation
Environmental Section Manager
185 Agrico Lane
Seymour, IN 47274

Re: Bridge Project (Bridge No. 058-36-10264, NBI No. 21050)
State Road 58 over Branch Runt Run
Des. No. 1701431
Jackson County, Indiana

Dear Sir or Madam

The Indiana Department of Transportation (INDOT) and Federal Highway Administration intends to proceed with a project involving the aforementioned bridge in Jackson County. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the designation number and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts.

This project is located on State Road (SR) 58 over Branch Runt Run, approximately 2.28 miles east of SR 258 in Jackson County. This section of SR 58 is considered a rural two-lane Major Collector. The existing approach cross section consists of two 10-foot travel lanes with shoulders that vary between 0 and 4 feet. The existing cross section of the bridge consists of two 11-foot lanes with 3-foot 1-inch shoulders. The existing bridge structure was originally constructed in 1967 and reconstructed in 1980. The bridge consists of a single-span prestressed concrete box beam structure with a span of 26 feet and a clear roadway width of 28.17 feet. There is longitudinal cracking on the wearing surface and deterioration of the concrete on the wearing surface at each end of the bridge. The footer is exposed on the center of the east abutment and scour has occurred at the southeast corner of the structure. The existing edge of pavement is the approximate right-of-way on each side of the centerline throughout the project limits.

The current proposed bridge project would replace the bridge over Branch Runt Run. The project would include an approach section of two 11-foot travel lanes with 2- to 4-foot shoulders. Guardrail will be placed according to guardrail length of need calculations. The proposed bridge would be raised approximately 2 feet to provide an adequate hydraulic opening to provide 1 foot of freeboard for the 100-year storm event. The project limits would be approximately 1,600 feet in length. The project would require the reacquisition of approximately 0.09 acre of apparent right-of-way under pavement and the acquisition of approximately 0.715 acre of permanent right-of-way. Proposed right-of-way widths along SR 58 would be 40 feet from the centerline. The preferred method of traffic maintenance would be a complete road closure with an official state detour. A temporary runaround will not be used. Temporary disruption of emergency services and school bus routes will occur during construction but will cease upon project completion. Construction is anticipated to begin in summer 2022.

Land use in the vicinity of the project is primarily residential with a narrow wooded riparian area along the waterway. A waters and wetlands determination and a biological assessment to identify ecological resources that may be present will be performed for the project. This project qualifies for the application of the United States Fish and Wildlife (USFWS) range-wide programmatic informal consultation for the

Indiana Department of Transportation
Environmental Section Manager
Page 2
December 30, 2019

Indiana bat and northern long-eared bat, and project information will be submitted through USFWS's Information for Planning and consultation (IPaC) separately.

The INDOT Historic Bridge Inventory lists this bridge as a non-historic bridge. Any area of additional right-of-way will be investigated for archaeological and historic resources in compliance with Section 106. The results of this investigation will be forwarded to the State Historic Preservation Officer for review and concurrence.

Should we not receive your response **within thirty calendar days** from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request. If you have any questions regarding this matter, please feel free to contact me at (812) 372-9911 or at bryce.froderman@strand.com or the INDOT project manager, Zachary Hicks, at (812) 524-3972 or at zhicks@indot.in.gov.

Sincerely,

STRAND ASSOCIATES, INC.®



Bryce C. Froderman, E.I.T.

Enclosures
Maps (Location, Aerial, Topographic)

c/enc.: File

FHWA, Environmental Specialist (electronic coordination)
Indiana Geological Survey (electronic coordination)
IDNR, Division of Fish and Wildlife, Environmental Coordinator (electronic coordination)
Indiana Department of Environmental Management (IDEM) (electronic coordination)
IDEM, Groundwater Section, Chief
INDOT, Public Hearings, Manager
U.S. Department of Housing and Urban Development, Chicago Regional Office, Field Environmental Officer (electronic coordination)
National Park Service (NPS), Midwest Regional Office, Regional Environmental Coordinator
USFWS (IPaC electronic coordination)
United States Forest Service, Forest Supervisor Hoosier National Forest (electronic coordination)
Natural Resource Conservation Service, State Conservationist (electronic coordination)
U.S. Army Corps of Engineers, Louisville District (electronic coordination)
Eighth Coast Guard District, Bridge Program Section, Chief (electronic coordination)
INDOT, Central Office, Environmental Policy Manager (electronic coordination)
INDOT, Seymour District, Environmental Section Manager (electronic coordination)
INDOT, Seymour District, Project Manager (electronic coordination)
Jackson County Floodplain Administrator (electronic coordination)
INDOT Ecology and Waterway Permitting, Manager (electronic coordination)
Pershing Township Volunteer Fire Department



Natural Resources Conservation Service
Indiana State Office
6013 Lakeside Boulevard
Indianapolis, IN 46278
317-290-3200

January 10, 2020

Bryce C. Froderman, E.I.T.
Strand Associates, Inc.
629 Washington Street
Columbus, Indiana 47201

Dear Mr. Froderman:

The proposed project to make bridge (058-36-10264) improvements along State Road 58 over Branch Runt Run in Jackson County, Indiana (Des No 1701431) as referred to in your letter received December 30, 2019, will cause a conversion of prime farmland.

The attached packet of information is for your use completing Parts VI and VII of the AD-1106. After Completion, the federal funding agency needs to forward one copy to NRCS for our records.

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

Sincerely,

JERRY RAYNOR Digital signed by JERRY RAYNOR
Date: 2020.01.13 22:01:54 -05'00'

JERRY RAYNOR
State Conservationist

Enclosures

Helping People Help the Land.



USDA is an equal opportunity provider, employer and lender.

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request			
Name of Project		Federal Agency Involved			
Proposed Land Use		County and State			
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form:	
Does the site contain Prime, Unique, Statewide or Local Important Farmland? <i>(If no, the FPPA does not apply - do not complete additional parts of this form)</i>		YES <input type="checkbox"/>	NO <input type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount of Farmland As Defined in FPPA Acres: %			
Name of Land Evaluation System Used	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS			
PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly					
B. Total Acres To Be Converted Indirectly					
C. Total Acres In Site					
PART IV (To be completed by NRCS) Land Evaluation Information					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide Important or Local Important Farmland					
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value					
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)					
PART VI (To be completed by Federal Agency) Site Assessment Criteria <i>(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)</i>		Maximum Points	Site A	Site B	Site C
1. Area In Non-urban Use		(15)			
2. Perimeter In Non-urban Use		(10)			
3. Percent Of Site Being Farmed		(20)			
4. Protection Provided By State and Local Government		(20)			
5. Distance From Urban Built-up Area		(15)			
6. Distance To Urban Support Services		(15)			
7. Size Of Present Farm Unit Compared To Average		(10)			
8. Creation Of Non-farmable Farmland		(10)			
9. Availability Of Farm Support Services		(5)			
10. On-Farm Investments		(20)			
11. Effects Of Conversion On Farm Support Services		(10)			
12. Compatibility With Existing Agricultural Use		(10)			
TOTAL SITE ASSESSMENT POINTS		160			
PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)		100			
Total Site Assessment (From Part VI above or local site assessment)		160			
TOTAL POINTS (Total of above 2 lines)		260			
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>			
Reason For Selection:					
Name of Federal agency representative completing this form:					Date:

(See Instructions on reverse side)

THIS IS NOT A PERMIT

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

DNR #: ER-22093

Request Received: December 30, 2019

Requestor: Strand Associates Inc
Bryce Froderman
629 Washington Street
Columbus, IN 47201-6231

All projects included within one review due to minimal distance between each project location.

Project: SR 58 bridge projects:
1) Des #1700171: superstructure replacement over Runt Run
2) Des #1701428: superstructure replacement over UNT Runt Run
3) Des #1701431: bridge replacement over UNT Runt Run

County/Site info: Jackson

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

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

Fish & 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) Bank Stabilization & Wildlife Passage:
Facilitating wildlife movement under roads is a priority concern for the Division of Fish and Wildlife for the ecological health of wildlife populations in terms of movement and dispersal, for habitat connectivity, and for avoiding unnecessary wildlife mortality on roads. Wildlife passage benefits, cost-savings (in terms of structure cost versus deer-vehicle collision costs) and safety of life and property issues can be seen at http://www.virginiadot.org/vtrc/main/online_reports/pdf/06-r2.pdf.

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 current conditions. A level area of natural ground under the structure is ideal for wildlife passage. If channel clearing will result in a flat bench area above the normal water level under the structure, this area should allow wildlife passage and should remain free of riprap and other similar materials that can impair wildlife passage.

Minimize the use of riprap and use alternative erosion protection materials whenever possible. 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). Where riprap must be used, we

Attachments: A - Bridge Exemption Criteria

State of Indiana
DEPARTMENT OF NATURAL RESOURCES
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recommend placing only enough riprap to provide stream bank toe protection, such as from the toe of the bank 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 the area and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.

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. If hard armoring is needed, wildlife passage can be facilitated by using a smooth-surfaced armoring material instead of riprap, such as articulated concrete block mats, fabric-formed concrete mats, or other similar smooth-surfaced material.

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>.

2) Riparian Habitat:

We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Floodway Habitat Mitigation guidelines (and plant lists) can be found online at: <http://www.in.gov/legislative/iac/20190130-IR-312190041NRA.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).

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

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

1. Revegetate all bare and disturbed areas with a mixture of native grasses, sedges, wildflowers, and also native hardwood trees and shrubs if any woody plants are disturbed during construction as soon as possible upon completion. Do not use any varieties of Tall Fescue or other non-native plants, including prohibited invasive species (see 312 IAC 18-3-25).
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,

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

cofferdams, diversions, or pumpharounds.

7. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
8. Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction.
9. Post "Do Not Mow or Spray" signs along the right-of-way.
10. 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.
11. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

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.



Date: January 29, 2020

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

The Flood Control Act (IC 14-28-1) contains a provision (Section 22), which exempts certain bridge projects from its permitting requirement. Specifically, the Act states:

A permit is not required for "a construction or reconstruction project on a state or county highway bridge in a rural area that crosses a stream having an upstream drainage area of not more than fifty (50) square miles..."

Therefore, in order for a bridge project to be exempt, it must:

- be a state or county highway department project;
- be a bridge;
- be located in a rural area; and
- cross a stream having an upstream drainage area of less than 50 square miles.

The initial criterion is very specific - the structure must be a state or county highway department project.

The second requirement mandates that the project be a bridge (for this provision, the Department of Natural Resources considers a culvert to be a bridge). Projects such as bank protection, spoil disposal, borrow pits, etc. are not automatically exempt. Anyone proposing to undertake a non-bridge related activity should consult with the Division of Water's Technical Services Section staff at 317-232-4160 (or toll free at 1-877-928-3755) regarding the applicability of the exemption prior to initiating work.

The third criterion states that the project must be located in a rural area. The phrase "rural area" is defined as an area:

- where the lowest floor elevation, including a basement, of any residential, commercial, or industrial building impacted by the project is at least 2 feet above the 100 year flood elevation with the project in place;
- located outside the corporate boundaries of a consolidated or an incorporated city or town; and
- located outside of the territorial authority for comprehensive planning (generally, a 2 mile planning buffer around a city or town).

The final criterion limits the exemption to a project crossing a stream having an upstream drainage area of less than 50 square miles. The drainage area includes all land area contributing to runoff above the project site and is determined from the United States Geological Survey 7½ minute series quadrangle maps. The Department of Natural Resources will determine the drainage area upon written request.

This exemption has been grossly misunderstood and liberally applied in the past. As a result, the Department of Natural Resources is taking a firm stance on future violations. If challenged, it will be the responsibility of the person claiming the exemption to prove to the Department that all 4 criteria have been satisfied. Failure to do so will result in the Department initiating litigation with the potential for the imposition of fines in amounts up to \$10,000 per day.

Note: This exemption only applies to the Flood Control Act. If a bridge is to be constructed over a navigable waterway, or over or near a public freshwater lake, a permit will be required.



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

INDOT
Zachary Hicks
185 Agrico Lane
Seymour , IN 47274
Date

Strand Associates Inc.
Eric Brunn
629 Washington Street
Columbus , IN 47201

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: This project, Des. 1701431, is located on State Road (SR) 58 over Branch Runt Run, approximately 2.28 miles east of SR 258 in Jackson County. The proposed bridge project would replace the bridge over Branch Runt Run. The project would include an approach section of two 11-foot travel lanes with 2- to 4-foot shoulders. Guardrail will be placed according to guardrail length of need calculations. The proposed bridge would be raised approximately 2 feet to provide an adequate hydraulic opening to provide 1 foot of freeboard for the 100-year storm event. The project limits would be approximately 1,600 feet in length. The project would require the reacquisition of approximately 0.09 acre of apparent right-of-way under pavement and the acquisition of approximately 0.715 acre of permanent right-of-way. The preferred method of traffic maintenance would be a complete road closure with an official state detour. Construction is anticipated to begin in summer 2022.

This letter from the Indiana Department of Environmental Management (IDEM) serves as a standardized response to enquiries inviting IDEM comments on roadway construction, reconstruction, or other improvement projects within existing roadway corridors when the proposed scope of the project is beneath the threshold requiring a formal National Environmental Policy Act-mandated Environmental Assessment or Environmental Impact Statement. As the letter attempts to address all roadway-related environmental topics of potential concern, it is possible that not every topic addressed in the letter will be applicable to your particular roadway project.

For additional information on specific roadway-related topics of interest, please visit the appropriate Web pages cited below, many of which provide contact information for persons within the various program areas who can answer questions not fully addressed in this letter. Also please be mindful that some environmental requirements may be subject to change and so each person intending to include a copy of this letter in their project documentation packet is advised to download the most recently revised version of the letter; found at: <http://www.in.gov/idem/5283.htm> (<http://www.in.gov/idem/5283.htm>).

To ensure that all environmentally-related issues are adequately addressed, IDEM recommends that you read this letter in its entirety, and consider each of the following issues as you move forward with the planning of your proposed roadway construction, reconstruction, or improvement project:

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 Wetlands Program. To learn more about the Wetlands 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 water body 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 (OWQ) 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 OWQ Wetlands Program at 317-233-8488.
4. If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>) for the appropriate staff contact to further discuss your project.
5. Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the follow statutes:
 - o IC 14-26-2 Lakes Preservation Act 312 IAC 11
 - o IC 14-26-5 Lowering of Ten Acre Lakes Act No related code

- IC 14-28-1 Flood Control Act 310 IAC 6-1
- IC 14-29-1 Navigable Waterways Act 312 IAC 6
- IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
- IC 14-29-4 Construction of Channels Act No related code

For information on these Indiana (statutory) Code and Indiana Administrative Code citations, see the DNR Web site at: <http://www.in.gov/dnr/water/9451.htm> (<http://www.in.gov/dnr/water/9451.htm>) . Contact the DNR Division of Water at 317-232-4160 for further information.

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.

6. 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
 - <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.

7. 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.
8. 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.
9. 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.
10. 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 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 (<http://www.in.gov/idem/4148.htm>) under specific conditions. You also can seek an open burning variance from IDEM.

However, 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) onsite, although burying large quantities of such material can lead to subsidence problems, later on.

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.

Additionally, 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 3-5 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 3-5 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.

2. The U.S. EPA and the 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/4145.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, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, 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.) It also 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>).

3. With respect to asbestos removal: all facilities slated for renovation or demolition (except residential buildings that have (4) four 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.

However, 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 <http://www.in.gov/icpr/webfile/formsdiv/44593.pdf> (<http://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. All notification remitters will be billed 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>).

4. 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/isdh/19131.htm> (<http://www.in.gov/isdh/19131.htm>).

5. 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 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>)).
6. 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 (View at: 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.
7. 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 atdem.state.in.us.

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 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. See: <http://www.in.gov/idem/4999.htm> (<http://www.in.gov/idem/4999.htm>).

FINAL REMARKS

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

Should the scope of the proposed project be expanded to the extent that a National Environmental Policy Act Environmental Assessment (EA) or Environmental Impact Statement (EIS) is required, IDEM will actively participate in any early interagency coordination review of the project.

Meanwhile, please note that this letter does not constitute a permit, license, endorsement or any other form of approval on the part of the Indiana Department of Environmental Management regarding any project for which a copy of this letter is used. Also note that it is the responsibility of the project engineer or consultant using this letter to ensure that the most current draft of this document, which is located at <http://www.in.gov/idem/5284.htm> (<http://www.in.gov/idem/5284.htm>), is used.

Signature(s) of the Applicant

I acknowledge that the following proposed roadway project will be financed in part, or in whole, by public monies.

Project Description

This project, Des. 1701431, is located on State Road (SR) 58 over Branch Runt Run, approximately 2.28 miles east of SR 258 in Jackson County. The proposed bridge project would replace the bridge over Branch Runt Run. The project would include an approach section of two 11-foot travel lanes with 2- to 4-foot shoulders. Guardrail will be placed according to guardrail length of need calculations. The proposed bridge would be raised approximately 2 feet to provide an adequate hydraulic opening to provide 1 foot of freeboard for the 100-year storm event. The project limits would be approximately 1,600 feet in length. The project would require the reacquisition of approximately 0.09 acre of apparent right-of-way under pavement and the acquisition of approximately 0.715 acre of permanent right-of-way. The preferred method of traffic maintenance would be a complete road closure with an official state detour. Construction is anticipated to begin in summer 2022.

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

Date: 1/28/20

Signature of the INDOT

Project Engineer or Other Responsible Agent

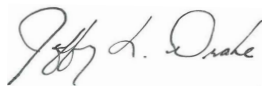


Zachary Hicks

Date: 1/28/2020

Signature of the

For Hire Consultant



Jeffrey L. Drake

Organization and Project Information

Project ID:

Des. ID:

Project Title: SR 58 over Branch Runt Run - Des. 1701431

Name of Organization: Strand Associates Inc.

Requested by: Bryce Froderman

Environmental Assessment Report

1. Geological Hazards:

- Moderate liquefaction potential

2. Mineral Resources:

- Bedrock Resource: Moderate 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.

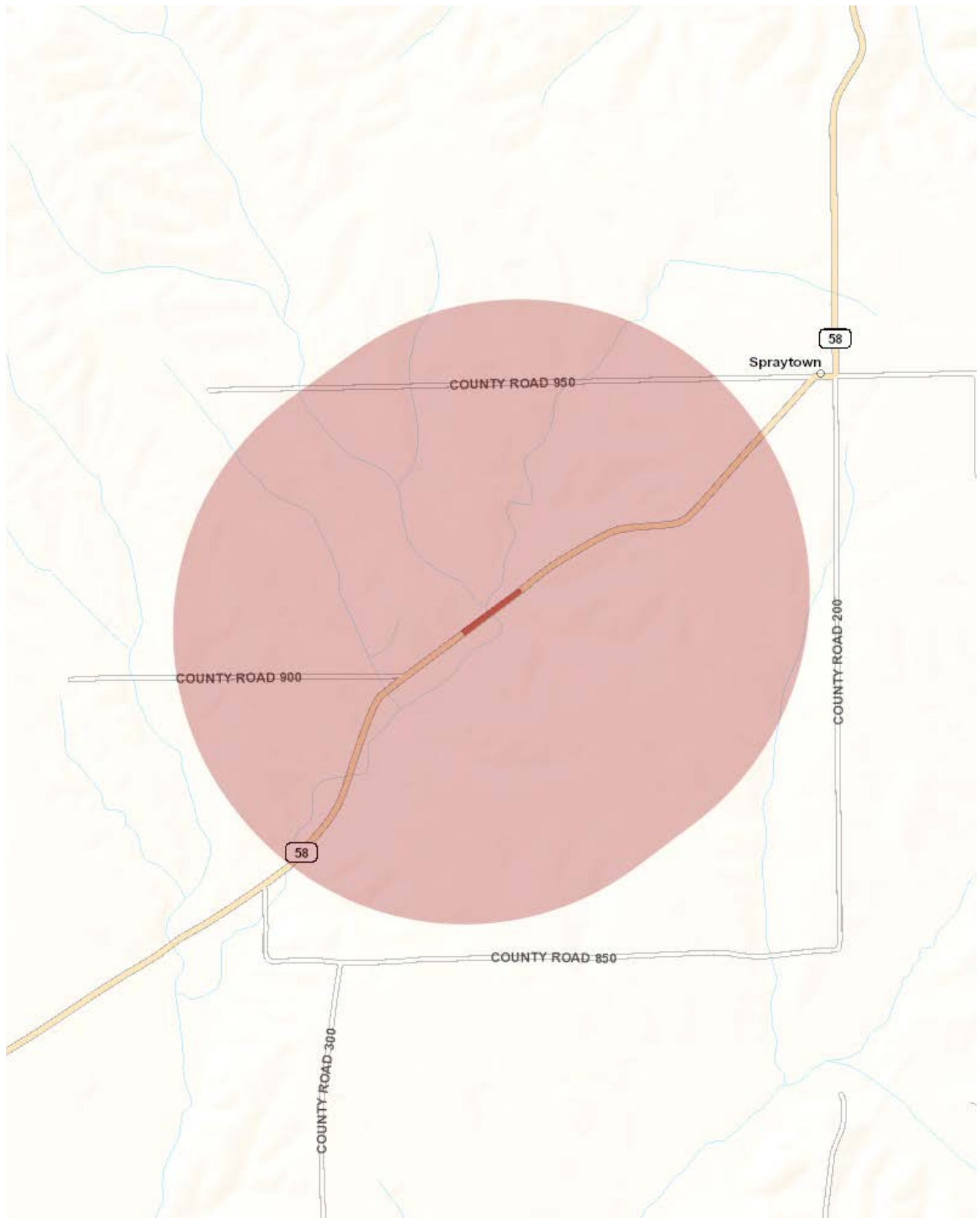
This information was furnished by Indiana Geological Survey

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

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: December 30, 2019



Metadata:

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

APPENDIX D: Bridge/Structure Assessment Form

This form will be completed and submitted to the District Environmental Manager by the Contractor prior to conducting any work below the deck surface either from the underside; from activities above that bore down to the underside; from activities that could impact expansion joints; from deck removal on bridges; or from structure demolition for bridges/structures within 1000 feet of suitable bat habitat.

DOT Project #	Water Body	Date/Time of Inspection	Within 1,000ft of suitable bat habitat (circle one)
Des. No. 1701431	Unnamed Tributary to Runt Run	September 10, 2019 / 1:15 PM	<input checked="" type="radio"/> Yes <input type="radio"/> No

Route	County	Federal Structure ID
S.R. 58	Jackson County	Bridge No. 058-36-05873 B / NIBI No. 021050

If the bridge/structure is 1,000 feet or more from suitable bat habitat (e.g., an urban or agricultural area without suitable foraging habitat or corridors linking the bridge to suitable foraging habitat), check box and STOP HERE. No assessment required.

Please submit to the U.S. Fish and Wildlife Service.

Areas Inspected (Check all that apply)

Bridges		Culverts/Other Structures		Summary Info (circle all that apply)			
All vertical crevices sealed at the top and 0.5-1.25" wide & ≥4" deep	X	Crevices, rough surfaces or imperfections in concrete	X	Human disturbance or traffic under bridge/in culvert or at the structure	High	<input checked="" type="radio"/> Low	None
All crevices >12" deep & not sealed	X	Spaces between walls, ceiling joists	X	Possible corridors for netting	None/poor	<input checked="" type="radio"/> Marginal	Excellent
All guardrails	X						
All expansion joints	X						
Spaces between concrete end walls and the bridge deck	X						

Last Revised May 31, 2017

Vertical surfaces on concrete I-beams	X						
---------------------------------------	---	--	--	--	--	--	--

Evidence of Bats (Circle all that apply) Presence of one or more indicators is sufficient evidence that bats may be using the structure.

None

Visual (e.g. survey, thermal, emergent etc.)

- Live 0 number seen
- Dead 0 number seen

Photo documentation Y/N

Guano

Odor Y/N

Photo documentation Y/N

Staining definitively from bats

Photo documentation Y/N

Audible

Assessment Conducted By: <u>Cory Shumate</u> Signature(s): <u><i>C Shumate</i></u>
District Environmental Use Only: Date Received by District Environmental Manager: _____

DOT Bat Assessment Form Instructions

1. Assessments must be completed no more than 2 years prior to conducting any work below the deck surface on all bridges, regardless of whether assessments have been conducted in the past.
2. Any bridge/structure suspected of providing habitat for any species of bat will be removed from work schedules until such time that the DOT has coordinated with the USFWS. Additional studies may be undertaken by the DOT to determine what species may be utilizing each structure identified as supporting bats prior to allowing any work to proceed.
3. Any questions should be directed to the District Environmental Manager.



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 10, 2020

Consultation Code: 03E12000-2020-I-0737

Event Code: 03E12000-2020-E-03528

Project Name: Des. 1701431 - SR 58 over Branch Runt Run

Subject: Concurrence verification letter for the 'Des. 1701431 - SR 58 over Branch Runt Run' 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. 1701431 - SR 58 over Branch Runt Run** (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. 1701431 - SR 58 over Branch Runt Run

Description

The project is located along SR 58 in Jackson County approximately 2.28 miles east of SR 258. The current proposed project will consist of a replacement of the existing Bridge #058-36-10264. The project will also include the replacement of the existing guardrail along the bridge and raising the road profile adjacent to the bridge for approximately 330 feet west of the centerline of the bridge and 365 feet east of the centerline of the bridge. The area adjacent to the project includes wooded riparian areas along the waterway providing suitable summer habitat. Approximately 0.306 acre of trees will be removed as part of the project. The review of the USFWS database on October 4, 2018 did not indicate the presence of ETR species in the project location. The project is scheduled to be let in December 2021 and constructed from March 2022 through November 2022. Temporary lighting may be used during the project, but will be limited to the active season (mid-April through October) and be directed away from any suitable summer habitat. No permanent lighting is anticipated to be installed.

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.

Yes

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

No

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

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

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

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

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

No

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

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

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

No

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

Yes

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

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

B) During the inactive season

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

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

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

No

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

Yes

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

B) During the inactive season

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

Yes

19. Will the tree removal alter *any* **documented** Indiana bat or NLEB roosts and/or alter any surrounding summer habitat **within** 0.25 mile of a documented roost?

No

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

No

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

Yes

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

No

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

No

24. Does the project include slash pile burning?

No

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

Yes

26. 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

27. 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 1701431 Bat Survey.pdf* <https://ecos.fws.gov/ipac/project/4ZTHOUUJPVDZNF4NI3SFD2XBPM/projectDocuments/20125898>

28. 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

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

No

30. 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

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

Yes

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

Yes

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

No

34. 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

35. 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

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

No

37. 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

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

Automatically answered

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

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

Automatically answered

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

40. 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

41. 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

42. Tree Removal AMM 1

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

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

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

Yes

43. Tree Removal AMM 3

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

Yes

44. Tree Removal AMM 4

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

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

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

Yes

45. Lighting AMM 1

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

Yes

Project Questionnaire

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

N/A

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

N/A

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

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

0.306

4. Please describe the proposed bridge work:

The project will also include the replacement of the existing guardrail along the bridge and raising the road profile adjacent to the bridge for approximately 330 feet west of the centerline of the bridge and 365 feet east of the centerline of the bridge.

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

The proposed work will likely take place in March 2022 through November 2022.

6. Please enter the date of the bridge assessment:

9/18/19

Avoidance And Minimization Measures (AMMs)

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

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.

LIGHTING AMM 1

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

TREE REMOVAL AMM 1

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

TREE REMOVAL AMM 2

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

TREE REMOVAL AMM 3

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

TREE REMOVAL AMM 4

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

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 02, 2019. 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.



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 04, 2020

Consultation Code: 03E12000-2020-SLI-0737

Event Code: 03E12000-2020-E-03285

Project Name: Des. 1701431 - SR 58 over Branch Runt Run

Subject: List of threatened and endangered species that may occur in your proposed project location, and/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: 03E12000-2020-SLI-0737

Event Code: 03E12000-2020-E-03285

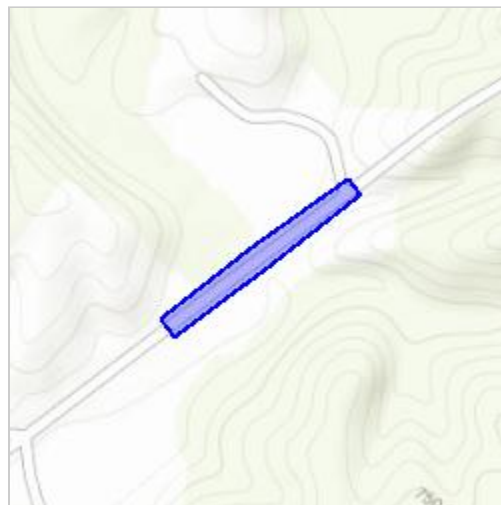
Project Name: Des. 1701431 - SR 58 over Branch Runt Run

Project Type: BRIDGE CONSTRUCTION / MAINTENANCE

Project Description: The project is located along SR 58 in Jackson County approximately 2.28 miles east of SR 258. The current proposed project will consist of a replacement of the existing Bridge #058-36-10264. The project will also include the replacement of the existing guardrail along the bridge and raising the road profile adjacent to the bridge for approximately 330 feet west of the centerline of the bridge and 365 feet east of the centerline of the bridge. The area adjacent to the project includes wooded riparian areas along the waterway providing suitable summer habitat. Approximately 0.306 acre of trees will be removed as part of the project. The review of the USFWS database on October 4, 2018 did not indicate the presence of ETR species in the project location. The project is scheduled to be let in December 2021 and constructed from March 2022 through November 2022. Temporary lighting may be used during the project, but will be limited to the active season (mid-April through October) and be directed away from any suitable summer habitat. No permanent lighting is anticipated to be installed.

Project Location:

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/39.008209003747254N86.09061997816191W>



Counties: Jackson, IN

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. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949 Species survey guidelines: https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf	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.

U.S. Department of
Homeland Security

United States
Coast Guard



Commander
Eighth Coast Guard District

1222 Spruce Street, Room 2.102D
St. Louis, MO 63103
Staff Symbol: (dwb)
Phone: (314) 269-2379
Fax: (314) 269-2737

16211
January 30, 2020

Strand Associates, Inc.
Attn: Mr. Bryce C. Froderman, E.I.T.
629 Washington Street
Columbus, IN 47201

Subj: Des. No. 1700171, ID 058-36-05871, SR 58, Runt Run, Jackson County, IN
Des. No. 1701428, ID 058-36-05872A, SR 58, Branch Runt Run, Jackson County, IN
Des. No. 1701431, ID 058-36-10264, SR 58, Branch Runt Run, Jackson County, IN

Dear Mr. Froderman:

This is in response to your email dated December 30, 2019 and corresponding information requesting whether the Coast Guard will require a permit and navigational lighting for the referenced bridge project. We have examined the proposed project area with regard to its status as a navigable water of the United States for purposes of Coast Guard bridge jurisdiction.

Our examination indicates that there is no sufficient factual support for concluding that Runt Run and Branch Runt Run, Jackson County, WI at the project location, has current or historic navigation occurring on this waterway. Since this is the case, a Coast Guard bridge permit or exemption will not be required for the referenced bridge project.

In consideration of the uses of the waterway, bridge lighting is not required.

Sincerely,

A handwritten signature in blue ink that reads "Eric A. Washburn".

ERIC A. WASHBURN
Bridge Administrator, Western Rivers
By direction of the District Commander



Froderman, Bryce

From: Amick, Kevin R -FS <kevin.amick@usda.gov>
Sent: Monday, January 13, 2020 8:52 AM
To: Froderman, Bryce
Subject: RE: Early Coordination Letter - Des. 1701431 - SR 58 over Branch Runt Run

The Hoosier National Forest has no comments or concerns regarding this project (Des. 1701431).
Thank you.



Kevin Amick
Environmental Coordinator
Forest Service
Hoosier National Forest
p: 812-276-4746
f: 812-279-3423
kevin.amick@usda.gov

811 Constitution Ave.
Bedford, IN 47421
www.fs.fed.us



Caring for the land and serving people

From: Froderman, Bryce <Bryce.Froderman@strand.com>
Sent: Monday, December 30, 2019 3:05 PM
To: Amick, Kevin R -FS <kevin.amick@usda.gov>
Subject: Early Coordination Letter - Des. 1701431 - SR 58 over Branch Runt Run

Good Afternoon,

Please see the attached early coordination letter for your review and comment regarding Des. 1701431 for the bridge project along State Road 58 over Branch Runt Run in Jackson County, Indiana. If you have any questions please don't hesitate to contact me.

Thanks,



Bryce Froderman

Strand Associates, Inc.®

812.372.9911 ext. 4380

bryce.froderman@strand.com | www.strand.com

Excellence in Engineering Since 1946.

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APPENDIX D
SECTION 106 OF THE NHPA

Minor Projects PA Project Assessment Form– Category B Projects with Archaeology Work

Date: 5/29/20

Project Designation Number: 1701431

Route Number: SR 58 approximately 2.28 miles east of SR 258

Project Description: The proposed project is located along State Road (SR) 58 in Jackson County, Indiana, approximately 2.28 miles east of SR 258. The existing bridge (INDOT Bridge No. 058-36-05873B; NBI 21050), built in 1967, is a continuous prestressed concrete box beam bridge with a single span. The single span is 26'-0", with a total out to out bridge floor length of 28'-0" and a bridge clear roadway width of 28'-6". The existing approach roadway cross sections have two 10'-0" travel lanes with shoulders that vary from 0' to 3'-3".

The purpose of the project is to improve the structural, geometric, and hydraulic capacities of the bridge. The need for this project is based on the bridge's poor condition and deterioration. This bridge has spalling of the existing parallel prestressed box beams, cracking on the breast-walls and wingwalls, spalling on the east abutment, and the top of the east abutment footer is exposed. The proposed project involves replacing the bridge with a new structure that would consist of a single span of 41'-6" with a 24" deep slab with integral cast-in-place wall type abutments. The new bridge will be on existing alignment, increasing the vertical profile by approximately 2 ft. The project will require acquisition of approximately 1.69 acres of permanent right-of-way, approximately 0.71 acre of which is reacquisition of existing right-of-way.

Feature crossed (if applicable): Branch of Runt Run

Township: Pershing Township

City/County: Jackson 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 (IHBBM); Bridge Inspection Application System (BIAS); 2010 INDOT-sponsored *Historic Bridge Inventory* (HBI); online property record cards: <https://jacksonin.wthgis.com/>; project information provided by Green Three, LLC, dated 5/5/2020 and on file at INDOT-CRO.

Jackson, Christopher

2020 A Phase Ia Archaeological Literature Review and Reconnaissance Survey for the Proposed Replacement of the Bridge on SR 58 over Branch of Runt Run (Des 1701431) that is approximately 2.28 miles East of SR 258 in Pershing Township, Jackson County, Indiana.

Results of the Records Review for Above-Ground Resources:

With regard to above-ground resources, an INDOT-Cultural Resources Office (CRO) historian examined a 0.25 mile radius Area of Potential Effects (APE) through a desktop review. The Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) and the Indiana Historic Sites and Structures Inventory (IHSSI) information for Jackson County was checked by the CRO historian, who meets the Secretary of the Interior's Professional Qualification Standards per 36 CFR Part 61. The information was referenced through the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Mapping (IHBBM).

The following framework is used when analyzing the IHSSI properties. 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.

No National Register-listed, State Register-listed, or IHSSI properties are located within the APE for this bridge replacement project. Much of the area within the southern half of the APE is composed of wooded land, while the northern half contains pasture land mixed with wooded areas and residential properties. A few residential properties are located south of SR 58 as well. The residence closest the bridge on the south side of the roadway at 2693 W State Rd 58 was reviewed through property records (with photographs) found online. The house is an early 20th century frame structure that has been heavily altered, such that it would not warrant an IHSSI rating of "contributing."

The existing bridge (INDOT Bridge No. 058-36-05873B; NBI 21050) was built in 1967 and had a deck replacement in 1980. It is a single span continuous prestressed concrete box beam structure with the only railing being modern guardrail. Due to its post-1965 construction date, it was not in the Indiana Historic Bridges Inventory conducted by Mead & Hunt on INDOT's behalf (2009). The structure would receive a rating of "non-contributing" in the IHSSI. Additionally, this bridge type falls under the Advisory Council on Historic Preservation's November 2012 "Program Comment for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges" (http://content.govdelivery.com/attachments/INSTATE/2013/04/17/file_attachments/204929/Post-1945%2BBridge%2BProgram%2BCommentFederalRegister.pdf). Therefore, no individual consideration under Section 106 is required for this bridge.

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

Archaeology Report Author/Date:

Christopher Jackson/April 29, 2020

Summary of Archaeology Investigation Results:

An archaeological records check and Phase Ia reconnaissance survey were conducted by Green Three, LLC (Jackson 2020). The records check found that the project area had not been previously examined for archaeological resources and that no previously recorded sites have been identified within or adjacent to it. An area larger than the anticipated project construction footprint was surveyed to facilitate any reasonable construction design plan changes. A 2.7 -acre survey area was examined through the excavation of twenty-two shovel probes and visual inspection of disturbed areas. No evidence for archaeological deposits was identified by the field reconnaissance. The report was reviewed by INDOT Cultural Resources personnel who meet the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61. It is our opinion that the report is acceptable, and we concur with the evaluations and recommendations made by Green Three, LLC (Jackson 2020). Therefore, there are no archaeological concerns.

Does the project appear to fall under the Minor Projects PA? yes no

If yes, please specify category and number (**applicable conditions are highlighted**):

B-12. Replacement, widening, or raising the elevation of the superstructure on existing bridges, and bridge replacement projects (when both the superstructure and substructure are removed), under the following conditions [***BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied***]:

Condition A (Archaeological Resources)

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

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

Condition B (Above-Ground Resources)

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

- i. **Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; AND**
- ii. **With regard to the subject bridge, at least one of the conditions listed below is satisfied (*AT LEAST one of the conditions a, b or c, must be fulfilled*):**
 - a. The latest Historic Bridge Inventory identified the bridge as non-historic (see <http://www.in.gov/indot/2531.htm>);
 - b. **The bridge was built after 1945, and is a common type as defined in Section V. of the *Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges* issued by the Advisory Council on Historic Preservation on November 2, 2012 for so long as that Program Comment remains in effect AND the considerations listed in Section IV of the Program Comment do not apply;**
 - c. The bridge is part of the Interstate system and was determined not eligible for the National Register under the Section 106 Exemption Regarding Effects to the Interstate Highway System adopted by the Advisory Council on Historic Preservation on March 10, 2005, for so long as that Exemption remains in effect.

If no, please explain:

Additional comments: 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): David Moffatt, Patricia Jo Korzeniewski and Mary Kennedy

****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.*

APPENDIX E
RED FLAG AND HAZARDOUS MATERIALS



INDIANA DEPARTMENT OF TRANSPORTATION

Driving Indiana's Economic Growth

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204-2216 (317) 232-5348 FAX: (317) 233-4929

Eric Holcomb, Governor
Joe McGuinness, Commissioner

Date: August 2, 2019

To: Site Assessment & Management
Environmental Policy Office - Environmental Services Division
Indiana Department of Transportation
100 N Senate Avenue, Room N642
Indianapolis, IN 46204

From: Bryce Froderman, E.I.T.
Strand Associates, Inc.
629 Washington St.
Columbus, IN 47201
bryce.froderman@strand.com

Re: RED FLAG INVESTIGATION
DES 1701431, State Project
Bridge Replacement Project
State Road 58 over Branch Runt Run (Bridge #058-36-05873 B)
Jackson County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: Bridge replacement of existing bridge on State Road 58, approximately 2.28 miles northeast of State Road 258, including replacement of guardrail and guardrail transitions, and widening of roadway shoulders.

Bridge and/or Culvert Project: Yes No Structure # 058-36-05873 B

If this is a bridge project, is the bridge Historical? Yes No , Select Non-Select

Proposed right of way: Temporary # Acres 0.1 (anticipated) Permanent # Acres 1.0 (anticipated)

Type of excavation: 3 feet at end bents (anticipated), 1 foot for road reconstruction (anticipated)

Maintenance of traffic: Maintenance of traffic will include a complete road closure with detour route.

Work in waterway: Yes No Above ordinary high water mark: Yes No

State Project: LPA:

Any other factors influencing recommendations: Project description subject to additional changes.

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	N/A	Recreational Facilities	N/A
Airports ¹	N/A	Pipelines	N/A
Cemeteries	N/A	Railroads	N/A
Hospitals	N/A	Trails	N/A
Schools	N/A	Managed Lands	1

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

Managed Lands: One (1) managed land is located within the 0.5 mile search radius. The Hoosier National Forest is located approximately 0.45 mile southwest of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	1	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	13
Canal Structures – Historic	N/A	Lakes	7
NPS NRI Listed	N/A	Floodplain - DFIRM	N/A
NWI-Lines	3	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	9	Sinkhole Areas	N/A
Rivers and Streams	10	Sinking-Stream Basins	N/A

NWI-Points: One (1) NWI point is located within the 0.5 mile search radius. It is located approximately 0.26 mile east of the project area. No impact is expected.

NWI-Lines: Three (3) NWI lines are located within the 0.5 mile search radius. The nearest NWI line flows through the project area. A Waters of the US Report will be prepared and coordination with INDOT Ecology and Waterway Permitting will occur.

IDEM 303d Listed Streams and Lakes (Impaired): Nine (9) 303d listed streams and lakes are located within the 0.5 mile search radius. The nearest stream, a branch of Runt Run, flows through the project area; however, it is not listed as impaired on the IDEM e303d Mapper. No impact is expected.

Rivers and Streams: Ten (10) rivers and streams are located within the 0.5 mile search radius. The closest stream, Branch Runt Run, flows through the project area. A Waters of the US Report will be prepared and coordination with INDOT Ecology and Waterway Permitting will occur.

NWI-Wetlands: Thirteen (13) wetlands are located within the 0.5 mile search radius. The nearest wetland is located approximately 0.16 mile north of the project area. No impact is expected.

Lakes: Seven (7) lakes are located within the 0.5 mile search radius. The nearest lake is located approximately 0.15 mile west of the project area. No impact is expected.

URBANIZED AREA BOUNDARY SUMMARY

The project area is not mapped within an Urbanized Area Boundary.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

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

No mining and mineral exploration facilities were identified within the 0.5 mile search radius.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

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

No hazardous material concerns were identified within the 0.5 mile search radius.

ECOLOGICAL INFORMATION SUMMARY

The Jackson County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is attached with ETR species highlighted. A preliminary review of the Indiana Natural Heritage Database by INDOT Environmental Services did not indicate the presence of ETR species. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project is located in a rural area surrounded by farm fields. The January 11, 2018 inspection report for

Bridge #058-36-05873 B states that no evidence of bats was seen or heard under the bridge. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects."

An inquiry using the USFWS Information for Planning and Consultation (IPaC) website did not indicate the presence of the federally endangered species, the Rusty Patched Bumble Bee, in or within 0.5 mile of the project area. No impact is expected.

RECOMMENDATIONS SECTION

INFRASTRUCTURE: N/A

WATER RESOURCES: The presence of the following water resources will require the preparation of a Waters of the US Report and coordination with INDOT ES Ecology and Waterway Permitting:

One NWI line flows through the project area.

One stream, Branch Runt Run, flows through the project area.

URBANIZED AREA BOUNDARY: N/A

MINING/MINERAL EXPLORATION: N/A

HAZMAT CONCERNS: N/A

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

INDOT Environmental Services concurrence: *Nicole Fohey-Breting* (Signature)

August 3, 2019

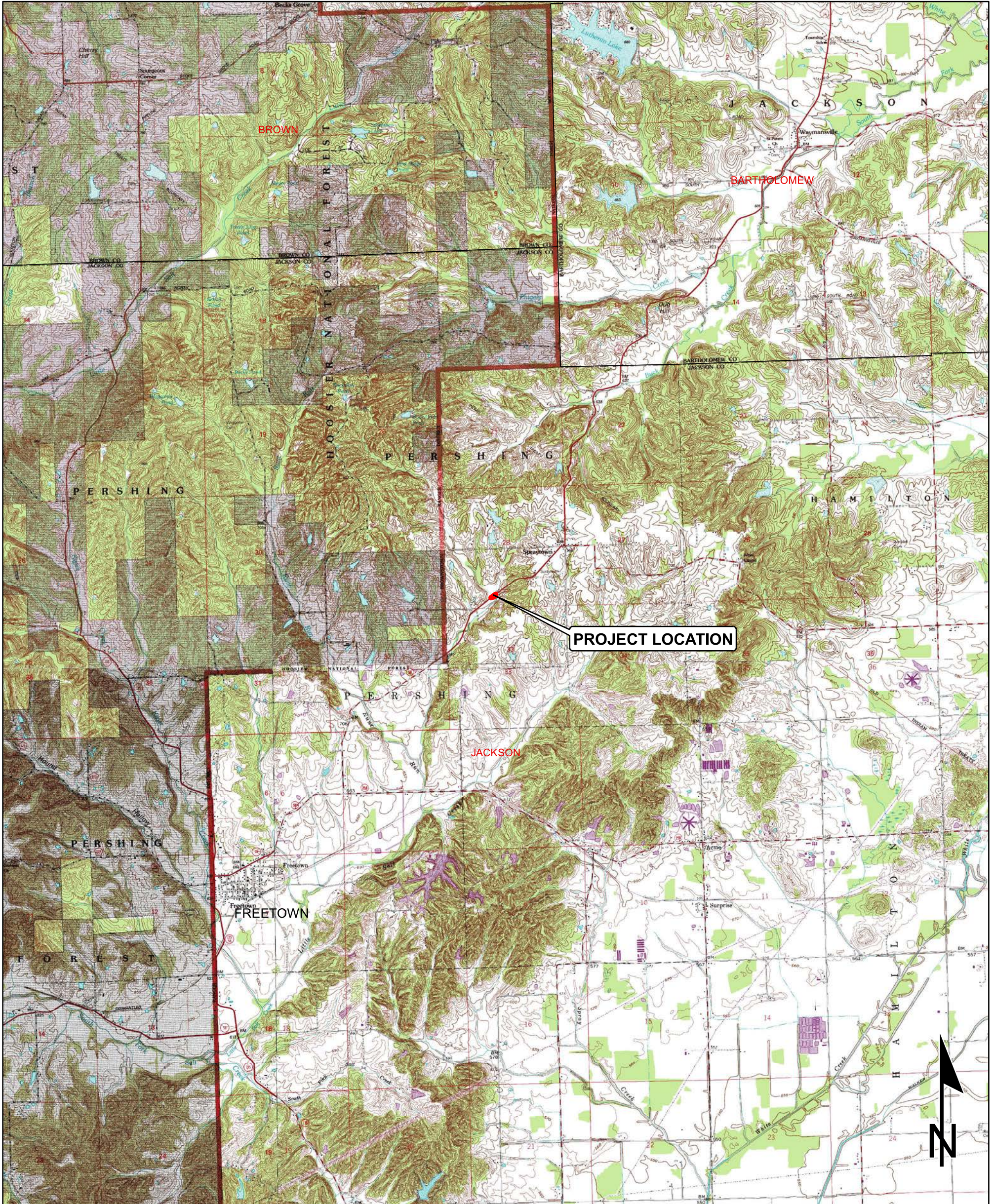
Prepared by:
Bryce Froderman, E.I.T.
Project Engineer
Strand Associates, Inc.

Graphics:

A map for each report section with a 0.5 mile search radius buffer around all project area(s) showing all items identified as possible items of concern is attached.

SITE LOCATION: YES
INFRASTRUCTURE: YES
WATER RESOURCES: YES
URBANIZED AREA BOUNDARY: N/A
MINING/MINERAL EXPLORATION: N/A
HAZMAT CONCERNS: N/A

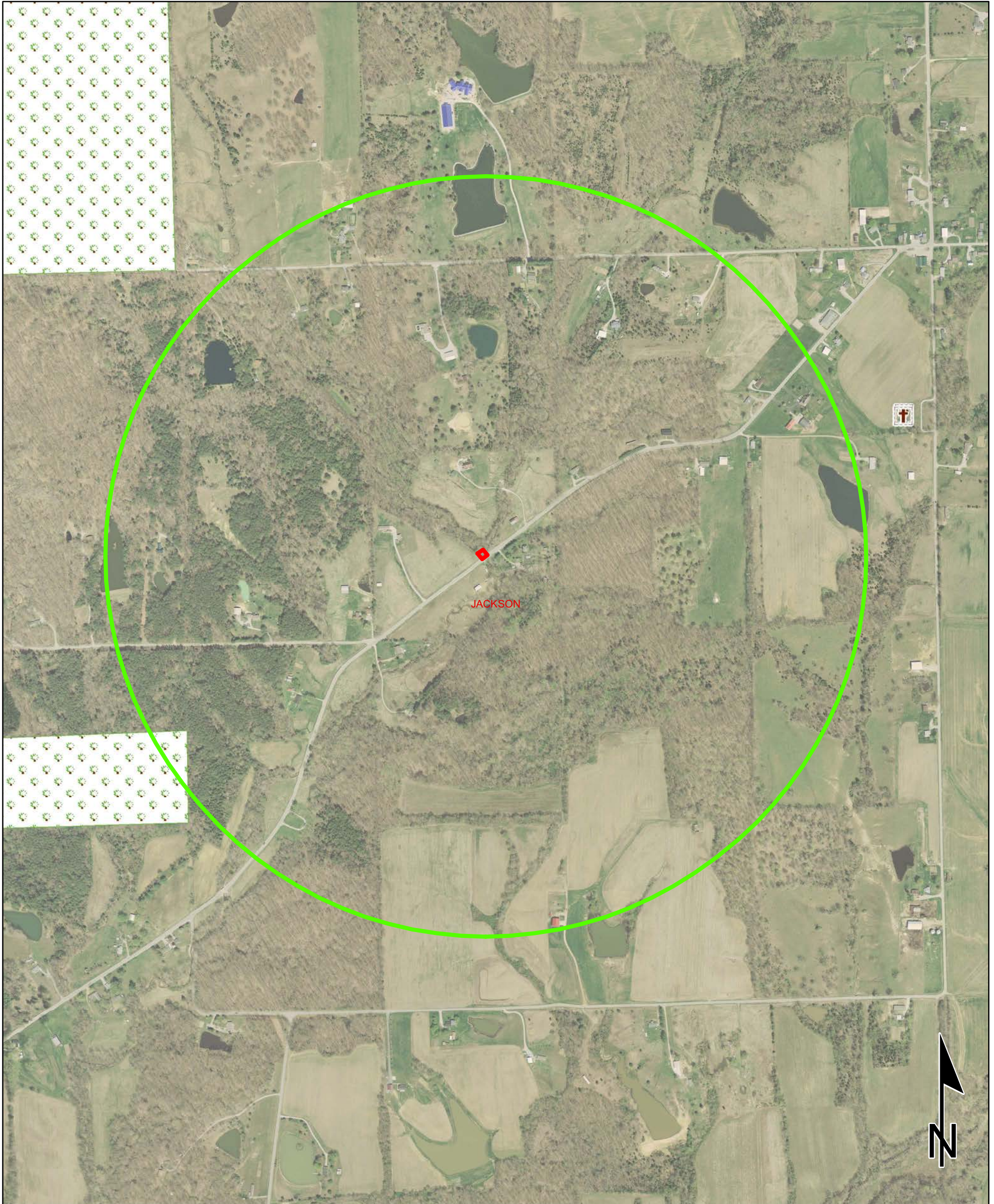
Red Flag Investigation - Site Location
 State Road 58 over Branch Runt Run
 Des. No. 1701431, Bridge Replacement
 Jackson County, Indiana



Sources: 1 0.5 0 1 Miles
Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

**WAYMANSVILLE QUADRANGLE
 INDIANA
 7.5 MINUTE SERIES
 (TOPOGRAPHIC)**

Red Flag Investigation - Infrastructure State Road 58 over Branch Runt Run Des. No. 1701431, Bridge Replacement Jackson County, Indiana



Sources: 0.15 0.075 0 0.15 Miles

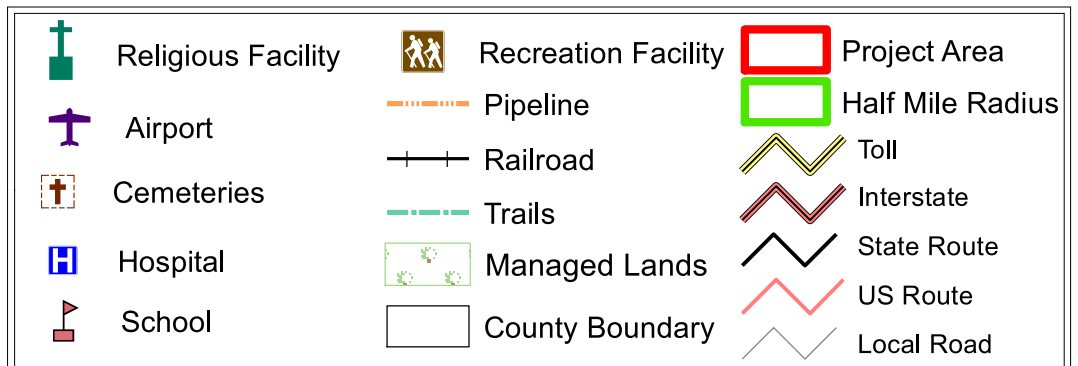
Non Orthophotography

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

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

Map Projection: UTM Zone 16 N **Map Datum:** NAD83

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

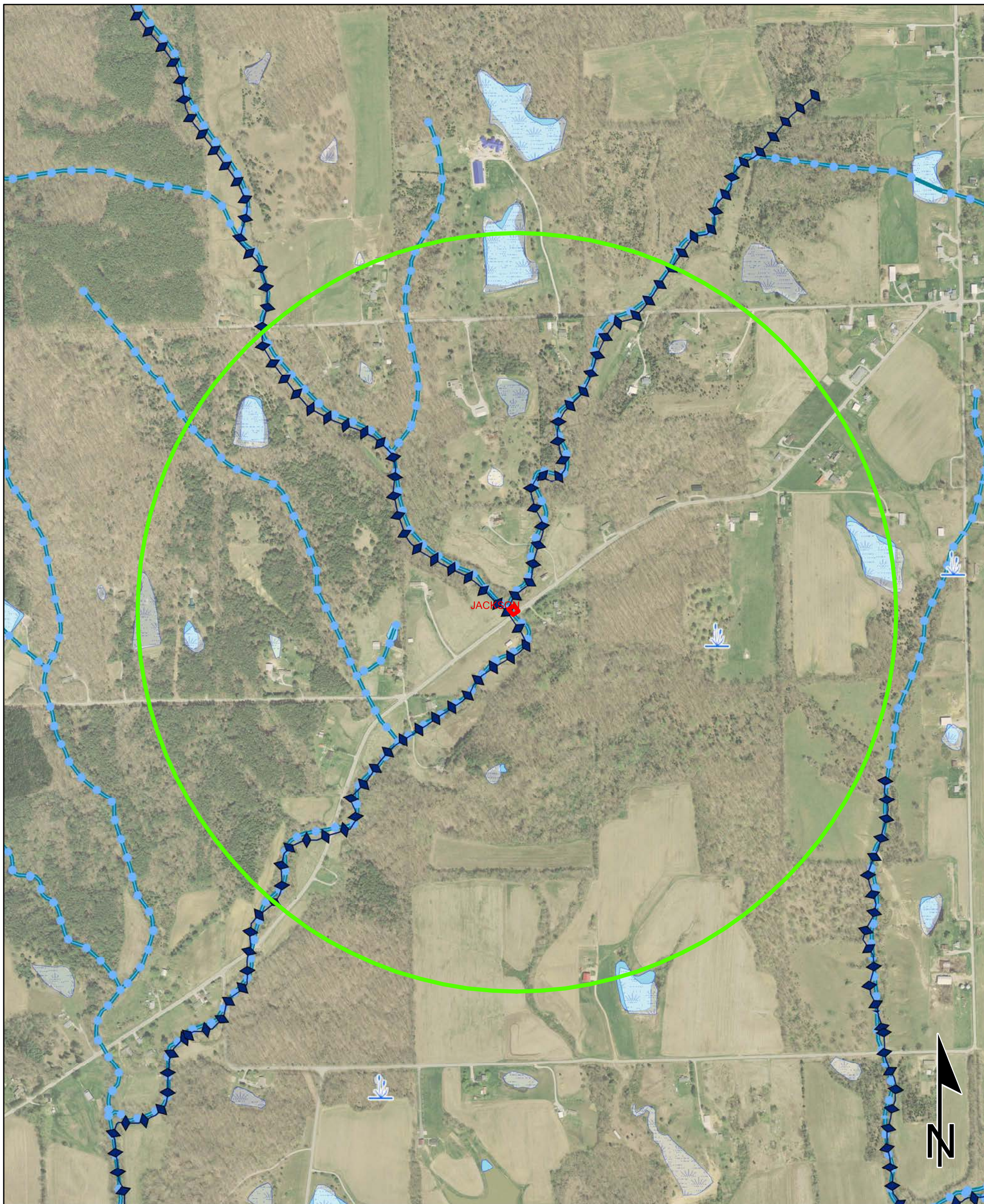


Red Flag Investigation - Water Resources

State Road 58 over Branch Runt Run

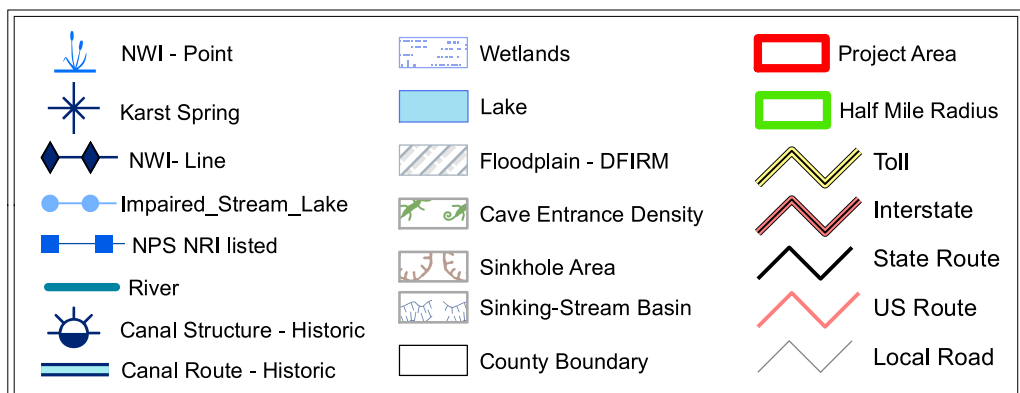
Des. No. 1701431, Bridge Replacement

Jackson County, Indiana



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

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



Indiana County Endangered, Threatened and Rare Species List

County: Jackson



Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
<i>Cyprogenia stegaria</i>	Eastern Fanshell Pearlymussel	LE	SE	G1Q	S1
<i>Epioblasma torulosa</i>	Tubercled Blossom	LE	SX	GX	SX
<i>Lampsilis fasciola</i>	Wavyrayed Lampmussel		SSC	G5	S3
<i>Obovaria subrotunda</i>	Round Hickorynut	C	SE	G4	S1
<i>Pleurobema clava</i>	Clubshell	LE	SE	G1G2	S1
<i>Pleurobema cordatum</i>	Ohio Pigtoe		SSC	G4	S2
<i>Pleurobema plenum</i>	Rough Pigtoe	LE	SE	G1	S1
<i>Pleurobema rubrum</i>	Pyramid Pigtoe		SX	G2G3	SX
<i>Ptychobranhus fasciolaris</i>	Kidneyshell		SSC	G4G5	S2
<i>Theliderma cylindrica</i>	Rabbitsfoot	LT	SE	G3G4	S1
<i>Villosa lienosa</i>	Little Spectaclecase		SSC	G5	S3
Insect: Lepidoptera (Butterflies & Moths)					
<i>Pieris virginiensis</i>	West Virginia white		ST	G3?	S3
Insect: Odonata (Dragonflies & Damselflies)					
<i>Epietheca canis</i>	Beaverpond Baskettail		SE	G5	S1
<i>Rhionaeschna mutata</i>	Spatterdock Darner		ST	G4	S2S3
Fish					
<i>Notropis ariommus</i>	Popeye Shiner			G3	SX
Amphibian					
<i>Acris blanchardi</i>	Blanchard's Cricket Frog		SSC	G5	S4
<i>Hemidactylium scutatum</i>	Four-toed Salamander		SSC	G5	S2
Reptile					
<i>Clonophis kirtlandii</i>	Kirtland's Snake		SE	G2	S2
<i>Crotalus horridus</i>	Timber Rattlesnake		SE	G4	S2
<i>Kinosternon subrubrum subrubrum</i>	Eastern Mud Turtle		SE	G5T5	S2
<i>Macrochelys temminckii</i>	Alligator Snapping Turtle	C	SE	G3G4	SH
<i>Nerodia erythrogaster neglecta</i>	Copperbelly Water Snake	PS:LT	SE	G5T3	S2
<i>Opheodrys aestivus</i>	Rough Green Snake		SSC	G5	S3
<i>Terrapene carolina carolina</i>	Eastern Box Turtle		SSC	G5T5	S3
Bird					
<i>Accipiter striatus</i>	Sharp-shinned Hawk		SSC	G5	S2B
<i>Aimophila aestivalis</i>	Bachman's Sparrow			G3	SXB
<i>Ammodramus henslowii</i>	Henslow's Sparrow		SE	G4	S3B
<i>Ardea alba</i>	Great Egret		SSC	G5	S1B
<i>Bartramia longicauda</i>	Upland Sandpiper		SE	G5	S3B
<i>Buteo platypterus</i>	Broad-winged Hawk		SSC	G5	S3B
<i>Certhia americana</i>	Brown Creeper			G5	S2B
<i>Cistothorus palustris</i>	Marsh Wren		SE	G5	S3B

Indiana Natural Heritage Data Center
Division of Nature Preserves
Indiana Department of Natural Resources
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State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; WL = watch list
GRANK: Global Heritage Rank: G1 = critically imperiled globally; G2 = imperiled globally; G3 = rare or uncommon globally; G4 = widespread and abundant globally but with long-term concerns; G5 = widespread and abundant globally; G? = unranked; GX = extinct; Q = uncertain rank; T = taxonomic subunit rank
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Indiana County Endangered, Threatened and Rare Species List

County: Jackson



Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Cistothorus platensis</i>	Sedge Wren		SE	G5	S3B
<i>Haliaeetus leucocephalus</i>	Bald Eagle		SSC	G5	S2
<i>Helmitheros vermivorus</i>	Worm-eating Warbler		SSC	G5	S3B
<i>Ixobrychus exilis</i>	Least Bittern		SE	G4G5	S3B
<i>Lanius ludovicianus</i>	Loggerhead Shrike		SE	G4	S3B
<i>Mniotilta varia</i>	Black-and-white Warbler		SSC	G5	S1S2B
<i>Nyctanassa violacea</i>	Yellow-crowned Night-heron		SE	G5	S2B
<i>Pandion haliaetus</i>	Osprey		SSC	G5	S1B
<i>Rallus elegans</i>	King Rail		SE	G4	S1B
<i>Setophaga cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Setophaga citrina</i>	Hooded Warbler		SSC	G5	S3B
<i>Tyto alba</i>	Barn Owl		SE	G5	S2
Mammal					
<i>Myotis sodalis</i>	Indiana Bat	LE	SE	G2	S1
<i>Nycticeius humeralis</i>	Evening Bat		SE	G5	S1
<i>Sorex hoyi</i>	Pygmy Shrew		SSC	G5	S2
<i>Taxidea taxus</i>	American Badger		SSC	G5	S2
Vascular Plant					
<i>Acalypha deamii</i>	Deam's two-seeded mercury		WL	G4?	S3
<i>Carex atlantica ssp. atlantica</i>	Atlantic sedge		SE	G5T5	S1
<i>Carex seorsa</i>	weak stellate sedge		ST	G5	S3
<i>Carex straminea</i>	straw sedge		ST	G5	S2
<i>Chelone obliqua var. speciosa</i>	rose turtlehead		WL	G4T3	S3
<i>Cyperus acuminatus</i>	short-point flatsedge		WL	G5	S3
<i>Dichanthelium bicknellii</i>	panic-grass		SE	G4?Q	S1
<i>Hydrastis canadensis</i>	golden seal		WL	G3G4	S3
<i>Juglans cinerea</i>	butternut		ST	G3	S2
<i>Magnolia acuminata</i>	cucumber magnolia		SE	G5	S1
<i>Mikania scandens</i>	climbing hempweed		SE	G5	S1
<i>Najas gracillima</i>	thread-like naiad		ST	G5?	S3
<i>Panax quinquefolius</i>	American ginseng		WL	G3G4	S3
<i>Platanthera flava var. flava</i>	southern rein orchid		SE	G4?T4?Q	S1
<i>Poa paludigena</i>	bog bluegrass		ST	G3G4	S3
<i>Rubus odoratus</i>	purple flowering raspberry		ST	G5	S2
<i>Tsuga canadensis</i>	eastern hemlock		WL	G5	S3
High Quality Natural Community					
<i>Barrens - bedrock siltstone</i>	Siltstone Glade		SG	G2	S2
<i>Forest - floodplain mesic</i>	Mesic Floodplain Forest		SG	G3?	S1
<i>Forest - floodplain wet</i>	Wet Floodplain Forest		SG	G3?	S3
<i>Forest - floodplain wet-mesic</i>	Wet-mesic Floodplain Forest		SG	G3?	S3

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Indiana County Endangered, Threatened and Rare Species List

County: Jackson



Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Forest - upland dry-mesic Highland Rim</i>	Highland Rim Dry-mesic Upland Forest		SG	GNR	S3
<i>Forest - upland mesic Bluegrass</i>	Bluegrass Mesic Upland Forest		SG	GNR	S3
<i>Forest - upland mesic Highland Rim</i>	Highland Rim Mesic Upland Forest		SG	GNR	S3
<i>Wetland - seep acid</i>	Acid Seep		SG	GU	S1
Other Significant Feature					
<i>Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade</i>	Water Fall and Cascade			GNR	SNR

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APPENDIX F
WATER RESOURCES

AM
3-4-2020

WATERS DETERMINATION REPORT

**S.R. 58 OVER BRANCH OF RUNT RUN
BRIDGE REPLACEMENT
DES. NO. 1701431
PERSHING TOWNSHIP, JACKSON COUNTY, INDIANA**

Prepared for:
Strand Associates, Inc.

February 14, 2020



Prepared by:

Metric Environmental, LLC

Complex Environment. Creative Solutions.

6971 Hillside Court
Indianapolis, IN 46256
Telephone: 317.207.4286
www.metricenv.com

WATERS OF THE U.S. DETERMINATION REPORT
S.R. 58 over Branch of Runt Run
Bridge Replacement
Pershing Township, Jackson County, Indiana
Des. No. 1701431
Prepared By: Zachary Root, Metric Environmental, LLC
February 14, 2020

Date of Waters Field Investigation: September 10, 2019

Location:

Section 28; Township 7 North; Range 4 East
Waymansville, IN 7.5 minute U.S.G.S. Topographic Quadrangles (**Exhibit 2**)
Pershing Township, Jackson County, Indiana
12-Digit HUC Watershed: 051202080401
Latitude: 39.00825 Longitude: -86.09053

FEMA Flood Insurance Rate Map (FIRM):

No mapped floodplain is located within the project study limits (PSL). The nearest floodplain, associated with Salt Creek, was located 1.7 mi. southwest of the PSL. The FIRM map for this area is provided as **Exhibit 3**.

National Wetlands Inventory (NWI) Information:

One mapped NWI polygon is located within the PSL, listed in the table below. The NWI map is provided as **Exhibit 4**.

Symbol	Wetland Type	Location Within PSL	Corresponding Feature
R2UBH	Riverine, Lower Perennial, Unconsolidated Bottom, Permanently Flooded	Central	Branch of Runt Run

Karst Feature Information:

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

USGS National Hydrography Dataset (NHD) Information:

Three mapped NHD flowlines are located within the PSL. They are listed by occurrence from west to east in the table below. The NHD map is provided in **Exhibit 4**.

Corresponding Feature	NDH Flowline Classification	Photo Nos.	USGS Blue line
Branch of Runt Run	Stream/River	8, 11-12, 33, 35-36	Yes
UNT 1	Stream/River	9, 14-16	No
UNT 2	Stream/River	21-25, 29-31	No

Soils:

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

Symbol	Map unit name	Hydric Rating
BcrAW	Beanblossom silt loam, 1 to 3 percent slopes, occasionally flooded	Hydric (0%)
WgwD2	Wellrock silt loam, 12 to 18 percent slopes, eroded	Hydric (0%)

Attached Documents:

- Maps of the project area (**Exhibits 1-5**)
- Photo Location Map (**Exhibit 6**)
- Site Photographs
- Wetland Determination Data Form(s)
- Preliminary Jurisdictional Determination Form

Project Description:

The proposed project (Des. 1701431) includes replacement of the existing structure, (058-36-05873 B), which carries State Route (S.R.) 58 over Branch of Runt Run in Pershing Township, Jackson County, Indiana, Des. No. 1701431. The existing structure is 28 ft. long with a 26 ft. max span, box beam or multiple girder bridge. The project would include an approach section of two 11-ft. travel lanes with 2- to 4-ft. shoulders. Guardrail will be placed according to guardrail length of need calculations. The proposed bridge would be raised approximately 2 ft. to provide an adequate hydraulic opening to provide 1 ft. of freeboard for the 100- year storm event. The project limits would be approximately 1,600 ft. long. The project would require the reacquisition of approximately 0.09 ac. of apparent right-of-way under pavement and the acquisition of approximately 0.715 ac. of permanent right-of-way. Proposed right-of-way widths along SR 58 would be 40 ft. from the centerline. The preferred method of traffic maintenance would be a complete road closure with an official state detour.



Field Reconnaissance:

The wetland determination field visit was conducted on September 10, 2019 by Zachary Root of Metric Environmental, LLC. The PSL consist of the area that has the potential to be impacted, based on the provided design scenario. This area was evaluated for the presence of wetlands and Waters of the United States. This investigation was conducted in accordance with the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and the April 2012 Eastern Mountains and Piedmont Region (version 2.0) Manual.

A Location Map showing the project location is provided as **Exhibit 1**. The proposed project is located in the north central portion of Jackson County, Indiana, on S.R. 58 over Branch of Runt Run. The PSL extended from S.R. 58 approximately 30 to 50 ft. northwest and southeast from the S.R. 58 centerline. The project study limits extended 230 ft. southwest and 330 ft. northeast from the center of the S.R. 58 bridge over Runt Run. An aerial map of sampling points and water features is provided as **Exhibit 5**. A photo location map is provided as **Exhibit 6** and site photographs are attached.

The site was investigated for evidence of hydrophytic vegetation, hydric soil, and wetland hydrology to determine if the project impacts wetlands and other Waters of U.S. The sampling point (SP) location was chosen in possible wetland areas within the PSL. The upland areas consisted of deciduous forest, residential lawn, and agricultural fields. Upland areas where sampling points were not taken, were investigated and determined to be upland due to upward sloping topography and/or presence of dominant upland vegetation. The dominant vegetation in the upland area consisted of hairy crab grass (*Digitaria sanguinalis*, FACU) and Kentucky blue grass (*Poa pratensis*, FACU). One sampling point was taken and is identified as SP-1. The sampling point, recorded on the USACE Wetland Determination Data Forms and shown on **Exhibit 5**, provided the following information:

Sampling Plot Data Summary Table

Plot #	Photo #s	Lat/Long	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Within Wetland
SP-1	26-28	39.008339 -86.090257	Yes	No	No	No

Wetlands:

No wetlands were observed within the PSL.

Additional Sampling Points:

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



Sampling Point 1 (SP-1)

SP-1 was located southeast of S.R. 58, on a concave hillslope adjacent to unnamed tributary (UNT) 1. The dominant vegetation at this sampling point was northern catalpa (*Catalpa speciosa*, FAC) and white ash (*Fraxinus americana*, FACU) in the sapling/shrub stratum, and lesser clearweed (*Pilea fontana*, FACW) in the herb stratum. This met the hydrophytic vegetation indicators of dominance test (67 percent) and prevalence index (2.63). To a depth of 21 in., the soil in the test pit was a silty clay loam. From 0 to 12 in., the soil exhibited a matrix color of 10YR 4/3 (90 percent) with 10YR 5/6 (10 percent) distinct redox concentrations. From 12 to 21 in., the soil exhibited a matrix color of 10YR 4/4 (95 percent) with 7.5YR 5/6 (5 percent) distinct redox concentrations. This did not meet the criteria for hydric soil. No primary indicators of wetland hydrology and one secondary indicator, FAC-Neutral Test (D5) was observed. Since the hydric soil and wetland hydrology were not met, this area did not qualify as a wetland.

Streams:

Three streams, Branch of Runt Run, UNT 1, and UNT 2, were observed within the PSL during the field reconnaissance. Descriptions of the streams are provided below.

Stream Summary Table

Stream Name	Photos	Lat/Long	OHWM Width	OHWM Depth	USGS Blue-line	Riffles Pools	Quality	Likely Water of the U.S.	Substrate	Potential Stream
			ft.	ft.						ft.
Branch of Runt Run	7-13, 32-36	39.008208 -86.09064	18	1.125	Yes (Perennial)	Riffles and Pools	Average	Yes	Cobble and Gravel	99
UNT 1	9, 13-16	39.008315 -86.090603	18	1	No	Pools	Average	Yes	Cobble and Gravel	56
UNT 2	21-25, 29-31	39.008423 -86.09011	3.5	0.08	No	None	Poor	Yes	Artificial and Gravel	302

Branch of Runt Run (99 LFT)

Branch of Runt Run flows from northwest to southeast and is approximately 99 linear feet (LFT) (0.041 ac.) within the PSL. Branch of Runt Run flows into Runt Run. Runt Run flows into South Fork Salt Creek, which flows into Salt Creek, which flows into East Fork White River, a Section 10 TNW. Therefore Branch of Runt Run should be considered a jurisdictional Waters of the U.S. Branch of Runt Run is associated with a solid blue line on the USGS topographic map, indicating it is likely perennial. Branch of Runt Run was classified by the NWI, as a Riverine, Unknown Perennial, Unconsolidated Bottom, Permanently Flooded (R2UBH). The Ordinary High Water Mark (OHWM) was an average of 18 ft. wide and 1.125 ft. deep within the PSL. Measurements of OHWM were collected outside the influence of the bridge that carries S.R. 58 over Branch of Runt Run. The stream substrate consisted of cobble and gravel with non-functioning riffles. Overhanging vegetation and undercut banks were the in-stream cover present. Low sinuosity and



interstitial water velocity was present. Species of fish, frogs, and water striders were found in the stream. According to USGS *Indiana StreamStats*, the drainage area upstream of Branch of Runt Run is 1.336 square miles. Qualities of the stream listed above contribute to this stream being classified as average quality.

UNT 1 (56 LFT)

UNT 1 flows from northeast to southwest and is approximately 56 LFT (0.023 ac.) within the PSL. UNT 1 flows southwest into Branch of Runt Run, and follows the connection described above to East Fork White River, a Section 10 TNW. Therefore, UNT 1 should be considered a jurisdictional Waters of the U.S. UNT 1 is associated with a solid blue line on the USGS topographic map, indicating it is likely perennial. This stream is classified by the NWI as a Riverine, Intermittent, Streambed, Seasonally Flooded (R4SBC) stream. The OHWM was an average of 18 ft. wide and 0.08 ft. deep within the project study limits. The stream substrate consisted of cobble and gravel. Overhanging vegetation and undercut banks were the in-stream cover present. Low sinuosity and interstitial water velocity was present. Species of fish, frogs, and water striders were found in the stream. According to USGS *Indiana StreamStats*, the drainage area upstream of Branch of Runt Run is 0.495 square miles. Qualities of the stream listed above contribute to this stream being classified as average quality.

UNT 2 (302 LFT)

UNT 2 flows from northeast to southwest and is approximately 302 LFT (0.024 ac.) within the PSL. UNT 2 flows southwest into the Branch of Runt Run, and follows the connection described above to East Fork White River, a Section 10 TNW. Therefore, UNT 2 should be considered a jurisdictional Waters of the U.S. UNT 2 is not associated with a solid blue line on the USGS topographic map, indicating it is likely ephemeral. UNT 2 was not classified by the NWI, but it can be classified as a Riverine, Ephemeral stream, Corps designation R6. At the time of the site visit, the stream was not flowing. The stream exhibited OHWM characteristics with an established flow line on the bank. The OHWM was an average of 3.5 ft. wide and 0.08 ft. deep within the PSL. The stream substrate consisted predominantly of artificial substrate consisting of rip rap and gravel, with a narrow riparian area of mowed residential lawn and right-of-way (ROW). Overhanging vegetation was the in-stream cover present. Sinuosity was at 1.5 bends per 200 ft. with a flat to moderate gradient, and water velocity was interstitial. No riffles or pools were observed, and no aquatic organisms were detected in the stream. According to USGS *Indiana StreamStats*, the drainage area upstream of the PSL is 0.053 sq. mi. All of the stream qualities listed above contribute to this stream being classified as poor quality.

Roadside Ditches:

One roadside ditch (RSD) was identified within the PSL. RSD 1 was located north of S.R. 58 in the northwest quadrant of the PSL. This feature was a concrete and vegetated drainage swale consisting of upland vegetation. RSD 1 runs parallel to S.R. 58, between S.R. 58 and an agriculture field. No OHWM was observed in this feature, so it is likely non-jurisdictional.

Culverts:

One culvert was identified within the PSL. The culvert consisted of corrugated metal and served to aid in roadside drainage and stormwater conveyance. This culvert did not carry jurisdictional waters due to lack of an OHWM and bed and bank characteristics. The location of this culvert is shown on **Exhibits 5 and 6**, and photos are in the attached photosheet.

Conclusion:

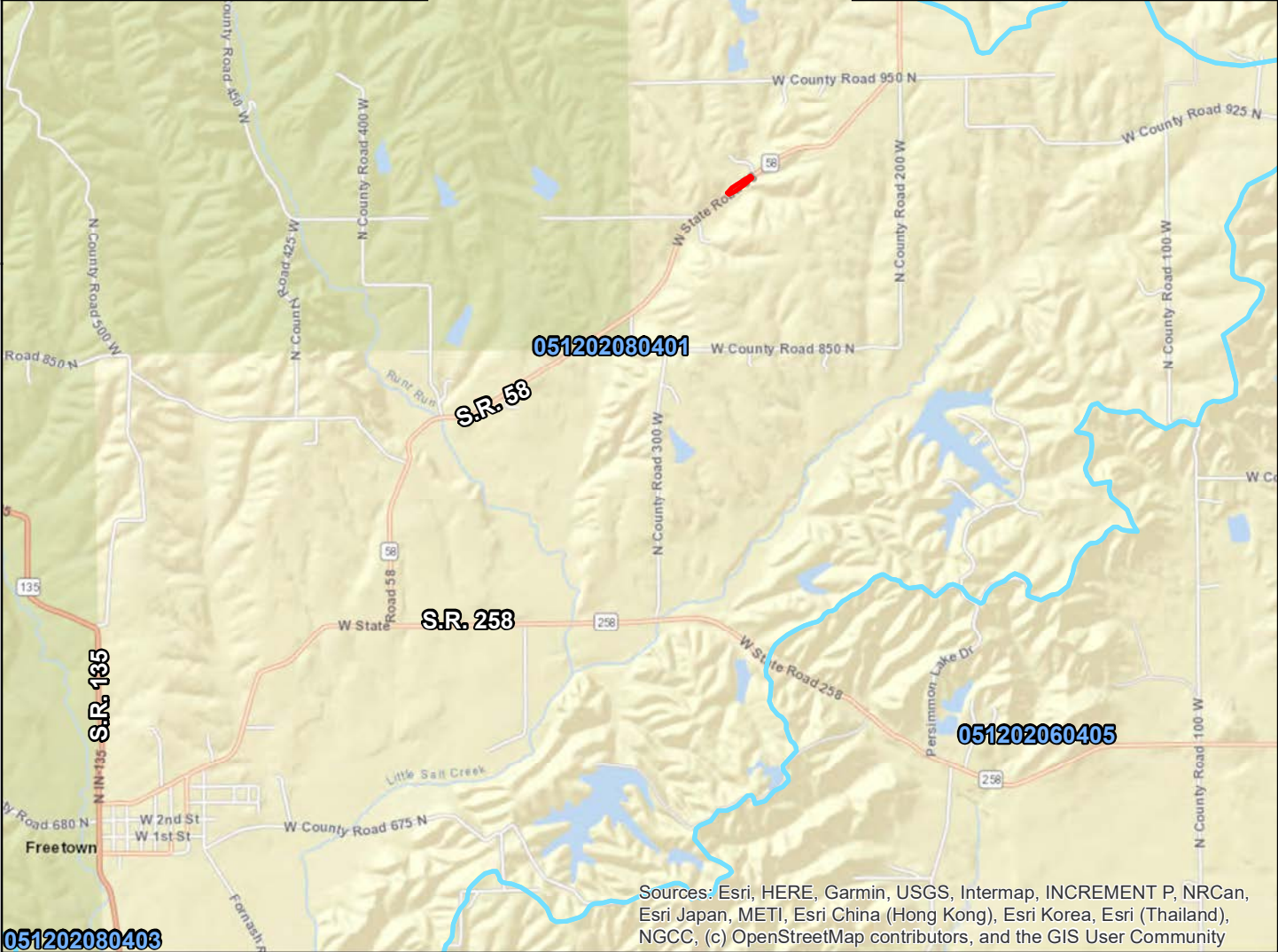
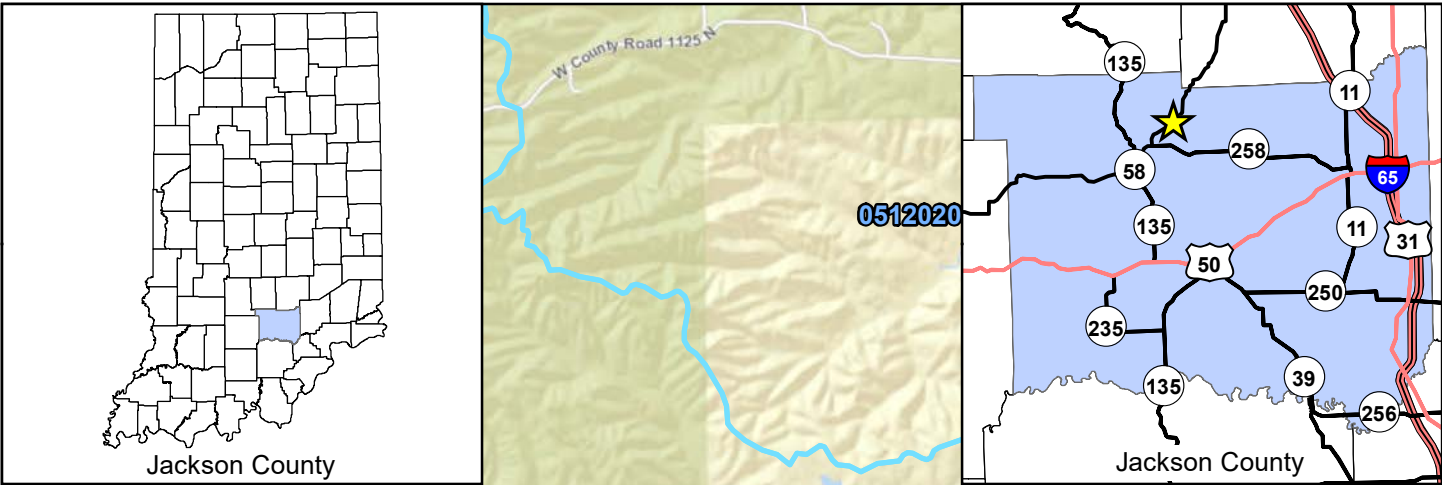
Three streams, Branch of Runt Run, UNT 1, and UNT 2, totaling 457 LFT, were identified within the PSL. These waterways are likely Waters of the U.S. Every effort should be taken to avoid and minimize impacts to the waterways. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the U.S. Army Corps of Engineers. This report is our best judgment based on the guidelines set forth by the Corps.

Acknowledgements:

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

Metric Environmental Staff	Position	Contributing Effort	Signature/Date
Amy Noel Smith	Natural Resources Project Manager II	Project Manager, Field Data Collection	<i>Amy Noel Smith</i> 2/14/2020
Alex Gray	Natural Resources Project Manager I	QAQC	<i>Alex M. Gray</i> 2/14/2020
Zachary Root	Environmental Scientist 2	Field Data Collection, Report Preparation	<i>Zachary Root</i> 2/14/2020



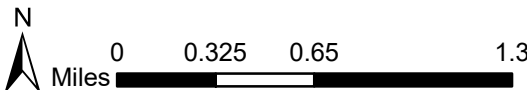


Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

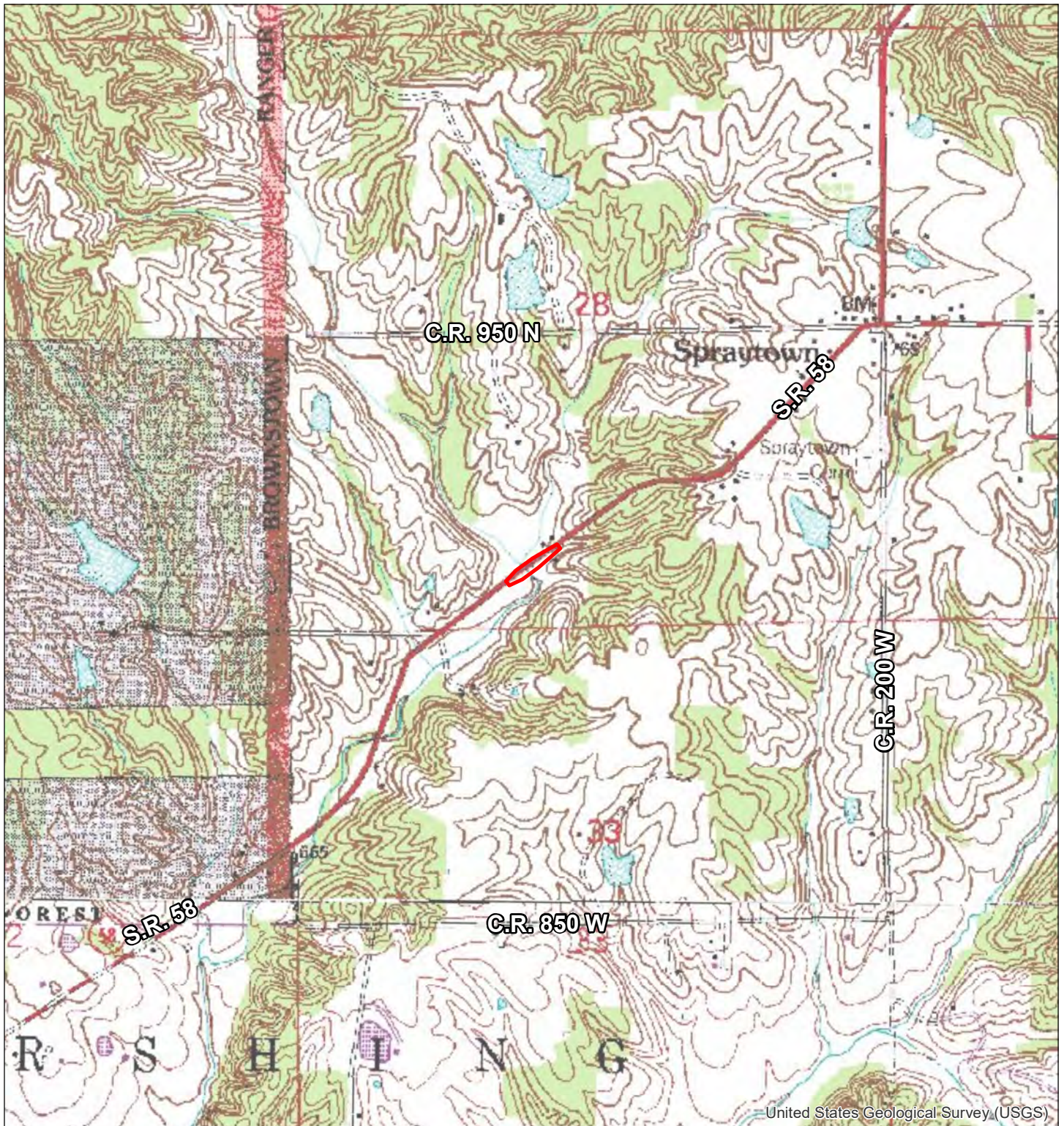
 Project Study Limits (PSL)  12-Digit HUC Watershed

Exhibit 1 - Location Map
 S.R. 58 over Branch of Runt Run
 Bridge Replacement
 Pershing Township, Jackson County, Indiana
 Des. No. 1701431
 Metric Project No. 18-0008-7
 Map Date: 6/17/19
 Map Author: Zachary Root

All locations approximate
 2018 Basemap
 Latitude: 39.00825 Longitude: -86.09053



Exh. 1



United States Geological Survey (USGS)


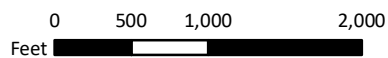
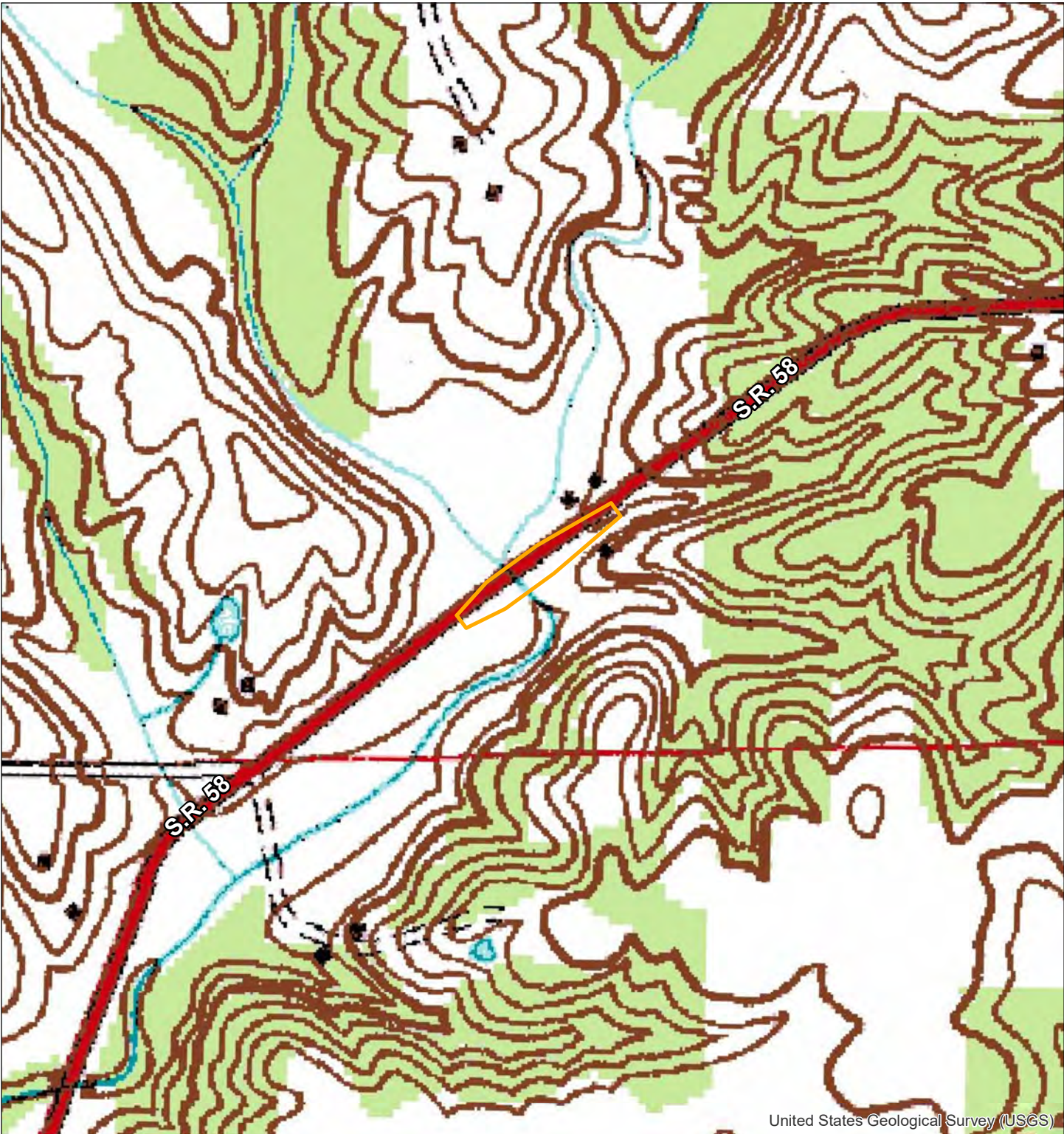
 Project Study Limits (PSL)

Exhibit 2A - USGS Topographic Map - Small Scale
 Waymansville, IN 7.5 minute Quadrangle
 S.R. 58 over Branch of Runt Run
 Bridge Replacement
 Pershing Township, Jackson County, Indiana
 Des. No. 1701431
 Metric Project No. 18-0008-7
 Map Date: 6/17/19
 Map Author: Zachary Root

All locations approximate
 Source: Indiana Spatial Data Portal (1996)



Exh. 2A



United States Geological Survey (USGS)


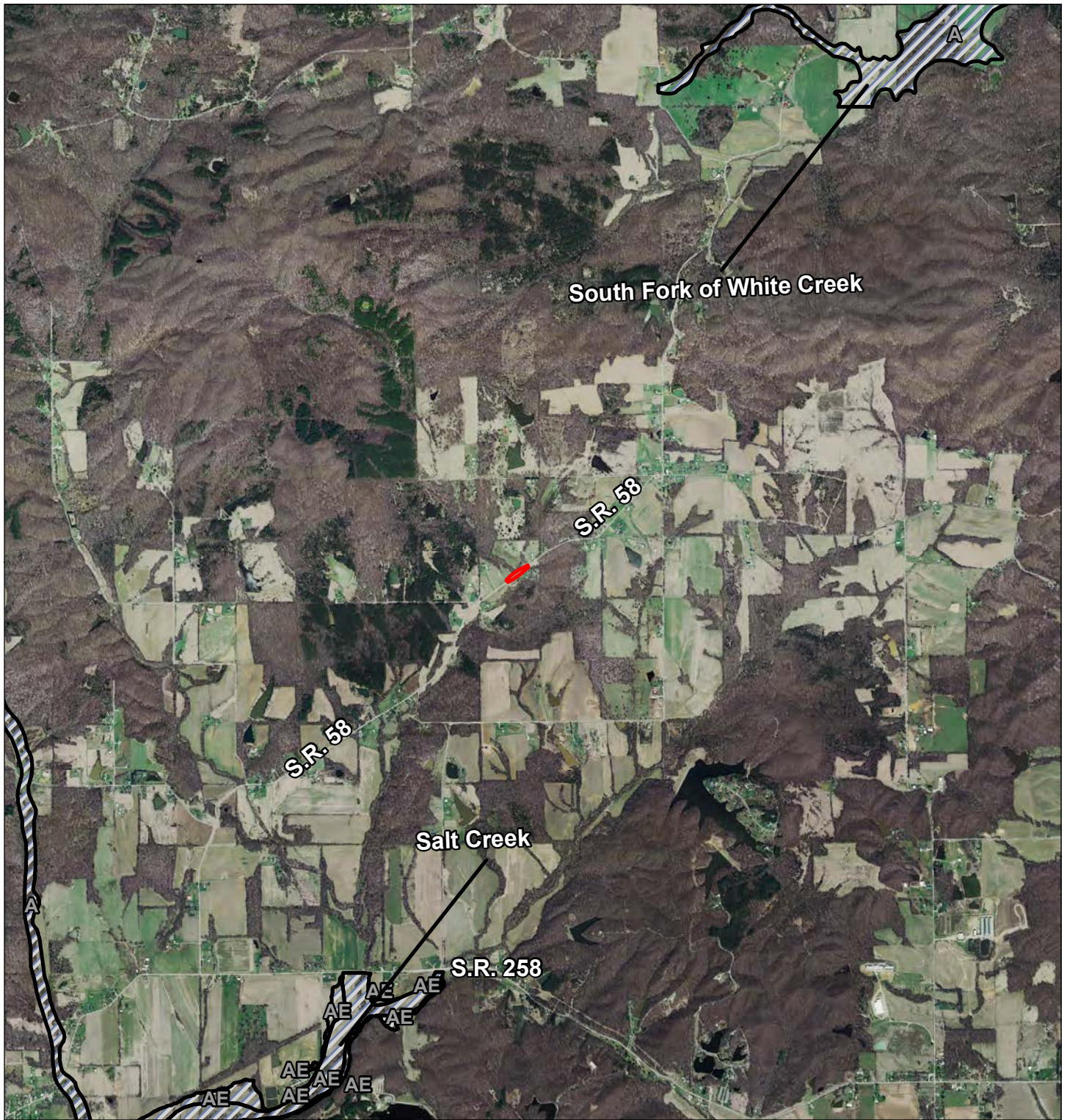
 Project Study Limits (PSL)

Exhibit 2B - USGS Topographic Map - Large Scale
 Waymansville, IN 7.5 minute Quadrangle
 S.R. 58 over Branch of Runt Run
 Bridge Replacement
 Pershing Township, Jackson County, Indiana
 Des. No. 1701431
 Metric Project No. 18-0008-7
 Map Date: 6/17/19
 Map Author: Zachary Root

All locations approximate
 Source: Indiana Spatial Data Portal (1996)



Exh. 2B





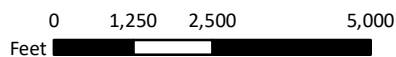
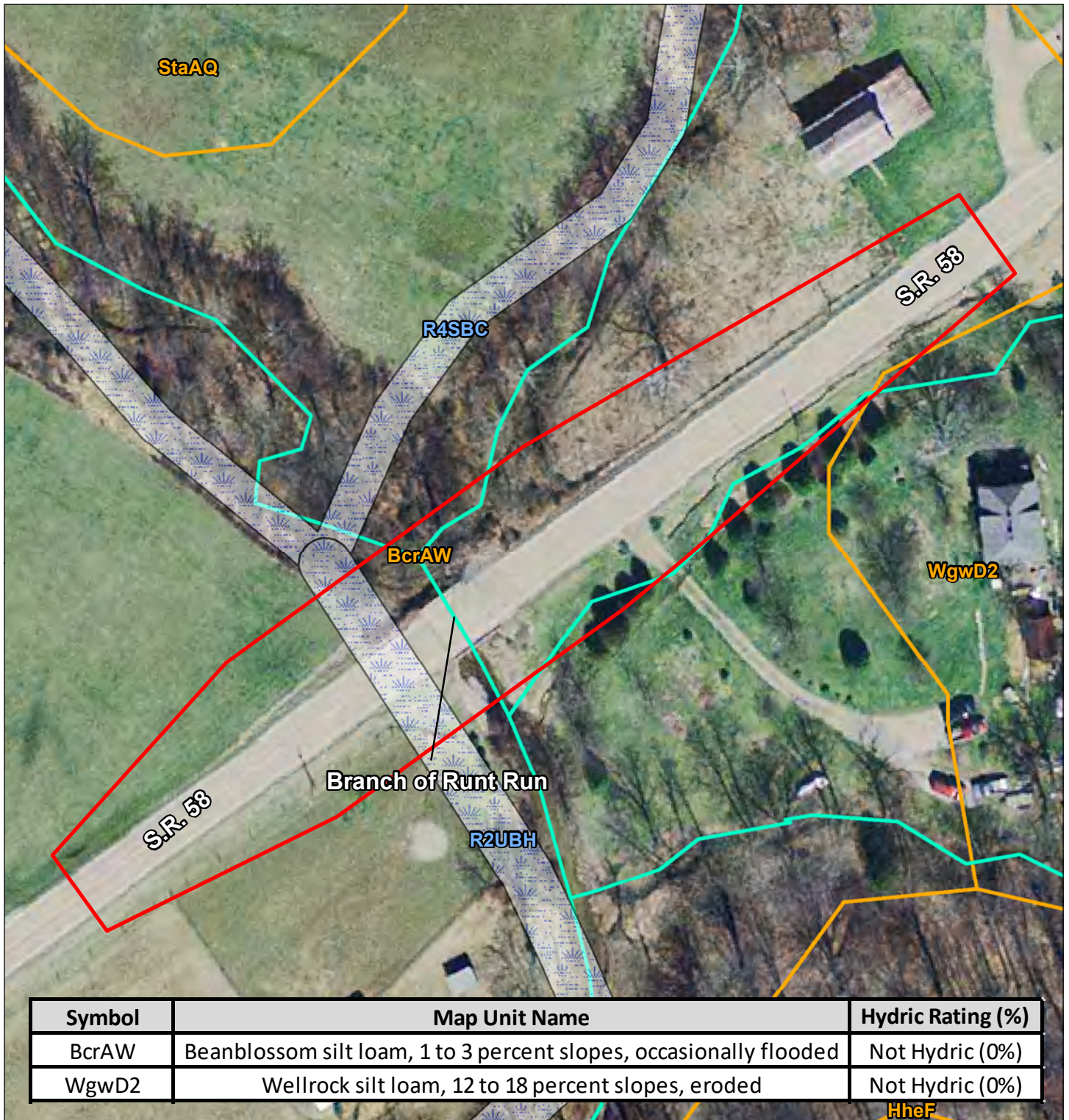
-  Project Study Limits (PSL)
-  Floodplain - Zone A & AE - 1% Chance Annual Flood

Exhibit 3 - FEMA Flood Insurance Rate Map (FIRM)
 S.R. 58 over Branch of Runt Run
 Bridge Replacement
 Pershing Township, Jackson County, Indiana
 Des. No. 1701431
 Metric Project No. 18-0008-7
 Map Date: 6/17/19
 Map Author: Zachary Root

All locations approximate
 Source: Indiana Spatial Data Portal (2016)



Exh. 3

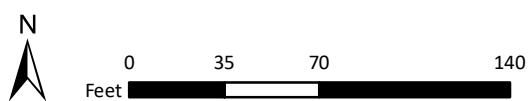


Symbol	Map Unit Name	Hydric Rating (%)
BcrAW	Beanblossom silt loam, 1 to 3 percent slopes, occasionally flooded	Not Hydric (0%)
WgwD2	Wellrock silt loam, 12 to 18 percent slopes, eroded	Not Hydric (0%)

Project Study Limits (PSL)
 NW1 Wetland
 NHD Flowline
 NRCS Soil Survey

Exhibit 4 - NW1 Wetland, NHD Flowline,
 and NRCS Soil Survey Map
 S.R. 58 over Branch of Runt Run
 Bridge Replacement
 Pershing Township, Jackson County, Indiana
 Des. No. 1701431
 Metric Project No. 18-0008-7
 Map Date: 6/17/19
 Map Author: Zachary Root

All locations approximate
 Source: Indiana Spatial Data Portal (2016)



Exh. 4



- Project Study Limits (PSL)
- Sampling Point (SP)
- Culvert
- Culvert Opening
- Roadside Ditch (RSD)
- Stream

Exhibit 5 - Waters Delineation Map
 S.R. 58 over Branch of Runt Run
 Bridge Replacement
 Pershing Township, Jackson County, Indiana
 Des. No. 1701431
 Metric Project No. 18-0008-7
 Map Date: 6/17/19
 Map Author: Zachary Root

All locations approximate
 Source: Indiana Spatial Data Portal (2016)



Exh. 5



- Project Study Limits (PSL)
- Sampling Point (SP)
- Culvert
- Culvert Opening
- Roadside Ditch (RSD)
- Stream

Exhibit 6 - Photograph Location Map
 S.R. 58 over Branch of Runt Run
 Bridge Replacement
 Pershing Township, Jackson County, Indiana
 Des. No. 1701431
 Metric Project No. 18-0008-7
 Map Date: 6/17/19
 Map Author: Zachary Root

All locations approximate
 Source: Indiana Spatial Data Portal (2016)



Exh. 6



1. View of S.R. 58 Right-of-Way (ROW) from the project study limits (PSL), looking northeast.



2. View of S.R. 58 ROW from the PSL, looking northeast.



3. View of RSD 1, looking southwest.



4. View of RSD 1, looking northeast.

SITE PHOTOGRAPHS—9/10/2019

S.R. 58 over Branch of Runt Run
Bridge Replacement
Pershing Township, Jackson County, Indiana
Des. No. 1701431





5. View of RSD 1, looking northeast.



6. View of RSD 1, looking southwest.



7. View of the S.R. 58 ROW and west bank of Branch of Runt Run, looking southwest.



8. View of Branch of Runt Run, looking northwest (upstream).

SITE PHOTOGRAPHS—9/10/2019

S.R. 58 over Branch of Runt Run
Bridge Replacement
Pershing Township, Jackson County, Indiana
Des. No. 1701431





9. View of Branch of Runt Run and UNT 1, looking northwest.



10. View of S.R. 58 ROW and south bank of UNT 1, looking northeast.



11. View of Branch of Runt Run from the PSL, looking southeast (downstream).



12. View of Branch of Runt Run from the PSL, looking northwest (upstream).

SITE PHOTOGRAPHS—9/10/2019

S.R. 58 over Branch of Runt Run
Bridge Replacement
Pershing Township, Jackson County, Indiana
Des. No. 1701431





13. View of Branch of Runt Run and UNT 1 from the PSL, looking southeast.



14. View of UNT 1, looking southwest (downstream).



15. View of UNT 1 from the PSL, looking south (downstream).



16. View of UNT 1 from the PSL, looking north (upstream).

SITE PHOTOGRAPHS—9/10/2019

S.R. 58 over Branch of Runt Run
Bridge Replacement
Pershing Township, Jackson County, Indiana
Des. No. 1701431





17. View of S.R. 58 ROW, looking southwest.



18. View of S.R. 58 ROW, looking northeast.



19. View of S.R. 58 ROW from the PSL, looking southwest.

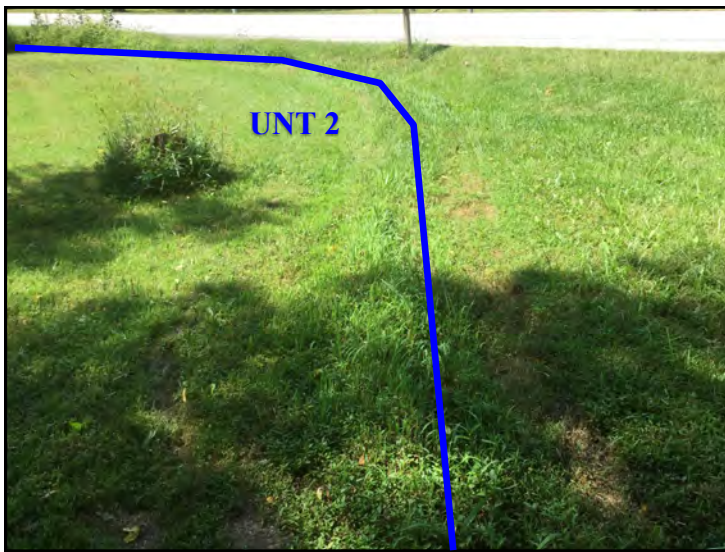


20. View of S.R. 58 ROW from the PSL, looking southwest.

SITE PHOTOGRAPHS—9/10/2019

S.R. 58 over Branch of Runt Run
Bridge Replacement
Pershing Township, Jackson County, Indiana
Des. No. 1701431





21. View of UNT 2 from the PSL, looking northwest (downstream).



22. View of UNT 2 and S.R. 58 ROW, looking northeast (upstream).



23. View of UNT 2 and S.R. 58 ROW, looking southwest (downstream).



24. View of UNT 2, looking northeast (upstream).

SITE PHOTOGRAPHS—9/10/2019

S.R. 58 over Branch of Runt Run
Bridge Replacement
Pershing Township, Jackson County, Indiana
Des. No. 1701431





25. View of UNT 2, looking southwest (downstream).



26. View of SP-1, Upland Sampling Point 1, soil profile.



27. View of SP-1, Upland Sampling Point 1, looking southwest.



28. View of SP-1, Upland Sampling Point 1, looking northeast.

SITE PHOTOGRAPHS—9/10/2019

S.R. 58 over Branch of Runt Run

Bridge Replacement

Pershing Township, Jackson County, Indiana

Des. No. 1701431





29. View of UNT 2 and Culvert 1 - inlet, looking northeast (upstream).



30. View of UNT 2 and Culvert 1 - outlet, looking east.



31. View of UNT 2 from the PSL, looking northeast (upstream).



32. View of the east bank of Branch of Runt Run, looking south-east.

SITE PHOTOGRAPHS—9/10/2019

S.R. 58 over Branch of Runt Run
Bridge Replacement
Pershing Township, Jackson County, Indiana
Des. No. 1701431





33. View of Branch of Runt Run, looking southeast (downstream).



34. View of the west bank of Branch of Runt Run, looking southwest.



35. View of Branch of Runt Run from the PSL, looking northwest (upstream).



36. View of Branch of Runt Run from the PSL, looking southeast (downstream).

SITE PHOTOGRAPHS—9/10/2019

S.R. 58 over Branch of Runt Run
Bridge Replacement
Pershing Township, Jackson County, Indiana
Des. No. 1701431



WETLAND DETERMINATION DATA FORM -- Eastern Mountains and Piedmont Region

Project/Site: S.R. 58 over Branch of Runt Run (Des. 1701431) City/County: Jackson County Sampling Date: 9/10/2019
 Applicant/Owner: INDOT State: IN Sampling Point: SP-1
 Investigator(s): Zachary Root Section, Township, Range: S 28, T 7 N, R 4 E
 Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 1
 Subregion (LRR or MLRA): LRR L Lat: 39.008339 Long: -86.090257 Datum: NAD 83
 Soil Map Unit Name: Beanblossom silt loam (BcrAW) 0 % hydric NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)
 Are Vegetation No, Soil No, or Hydrology No significantly disturbed? Are "Normal Circumstances" present? Yes X No
 Are Vegetation No, Soil No, or Hydrology No naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes <u>X</u>	No <u> </u>	Is the Sampled Area within a Wetland?	Yes <u> </u>	No <u>X</u>
Hydric Soil Present?	Yes <u> </u>	No <u>X</u>			
Wetland Hydrology Present?	Yes <u> </u>	No <u>X</u>			

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)	Secondary Indicators (minimum c
<u> </u> Surface Water (A1)	<u> </u> True Aquatic Plants (B14)
<u> </u> High Water Table (A2)	<u> </u> Hydrogen Sulfide Odor (C1)
<u> </u> Saturation (A3)	<u> </u> Oxidized Rhizospheres on Living Roots (C3)
<u> </u> Water Marks (B1)	<u> </u> Presence of Reduced Iron (C4)
<u> </u> Sediment Deposits (B2)	<u> </u> Recent Iron Reduction in Tilled Soils (C6)
<u> </u> Drift Deposits (B3)	<u> </u> Thin Muck Surface (C7)
<u> </u> Algal Mat or Crust (B4)	<u> </u> Surface Soil Cracks (B6)
<u> </u> Iron Deposits (B5)	<u> </u> Sparsely Vegetated Concave Surface (B8)
<u> </u> Inundation Visible on Aerial Imagery (B7)	<u> </u> Drainage Patterns (B10)
<u> </u> Water-Stained Leaves (B9)	<u> </u> Moss Trim Lines (B16)
<u> </u> Aquatic Fauna (B13)	<u> </u> Dry-Season Water Table (C2)
	<u> </u> Crayfish Burrows (C8)
	<u> </u> Saturation Visible on Aerial Imagery (C9)
	<u> </u> Stunted or Stressed Plants (D1)
	<u> </u> Geomorphic Position (D2)
	<u> </u> Shallow Aquitard (D3)
	<u> </u> Microtopographix Relief (D4)
	<u>X</u> FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes <u> </u>	No <u>X</u>	Depth (inches): <u> </u>	Wetland Hydrology Present?	Yes <u> </u> No <u>X</u>
Water Table Present?	Yes <u> </u>	No <u>X</u>	Depth (inches): <u> </u>		
Saturation Present? (includes capillary fringe)	Yes <u> </u>	No <u>X</u>	Depth (inches): <u> </u>		

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: SP-1

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 30' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	0% = Total Cover		
50% of total cover:	0%	20% of total cover:	0%
Sapling/Shrub Stratum (Plot size: 15' radius)			
1. <i>Catalpa speciosa</i>	10%	Yes	FAC
2. <i>Fraxinus americana</i>	5%	Yes	FACU
3.			
4.			
5.			
	15% = Total Cover		
50% of total cover:	8%	20% of total cover:	3%
Herb Stratum (Plot size: 5' radius)			
1. <i>Pilea fontana</i>	40%	Yes	FACW
2. <i>Microstegium vimineum</i>	15%	No	FAC
3. <i>Impatiens capensis</i>	15%	No	FACW
4. <i>Asclepias syriaca</i>	5%	No	FACU
5. <i>Ipomoea purpurea</i>	5%	No	UPL
6.			
7.			
8.			
9.			
10.			
11.			
	80% = Total Cover		
50% of total cover:	40%	20% of total cover:	16%
Woody Vine Stratum (Plot size: 30' radius)			
1.			
2.			
3.			
4.			
5.			
6.			
	0% = Total Cover		
50% of total cover:	0%	20% of total cover:	0%

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 67% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
That Are OBL, FACW, or FAC: <u>0.95</u> (A)	<u>2.5</u> (B)
OBL species <u>0.05</u>	x1 = <u>0.05</u>
FACW species <u>0.55</u>	x2 = <u>1.1</u>
FAC species <u>0.25</u>	x3 = <u>0.75</u>
FACU species <u>0.10</u>	x4 = <u>0.4</u>
UPL species <u>0.05</u>	x5 = <u>0.25</u>
Column Totals: <u>0.95</u> (A)	<u>2.5</u> (B)
Prevalence Index = B/A = <u>2.63</u>	

Hydrophytic Vegetation Indicators:

 1-Rapid Test for Hydrophytic Vegetation

2-Dominance Test is >50%

3-Prevalence Index is ≤3.0¹

 4-Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

 Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes No

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

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: February 14, 2020

B. NAME AND ADDRESS OF PERSON REQUESTING PJD:

Zachary Root
Metric Environmental, LLC
6971 Hillsdale Court
Indianapolis, IN 46250
317-350-4896
zacharyr@metricenv.com

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

The proposed project (Des. 1701431) includes the replacement of the existing structure, (058-36-05873 B), which carries State Route (S.R.) 58 over Branch of Runt Run in Pershing Township, Jackson County, Indiana, Des. No. 1701431. The existing structure is 28 ft. long with a 26 ft. max span, box beam or multiple girder bridge. The project would include an approach section of two 11-foot travel lanes with 2- to 4-foot shoulders. Guardrail will be placed according to guardrail length of need calculations. The proposed bridge would be raised approximately 2 feet to provide an adequate hydraulic opening to provide 1 foot of freeboard for the 100- year storm event. The project limits would be approximately 1,600 feet in length. The project would require the reacquisition of approximately 0.09 acre of apparent right-of-way under pavement and the acquisition of approximately 0.715 acre of permanent right-of-way. Proposed right-of-way widths along SR 58 would be 40 feet from the centerline. The preferred method of traffic maintenance would be a complete road closure with an official state detour.

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

State: IN County/parish/borough: Jackson County City: Spraytown

Center coordinates of site (lat/long in degree decimal format):

Lat.: 39.00825°

Long.: -86.09053°

Universal Transverse Mercator: 16 S 578744.15 E 4318085.49 N

Name of nearest waterbody: Branch of Runt Run

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

Office (Desk) Determination. Date:

Field Determination. Date(s):

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

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Branch of Runt Run	39.008208	-86.09064	99 feet (0.041 ac)	Non-Wetland Waters	Section 404
UNT 1	39.008315	-86.090603	56 feet (0.023 ac)	Non-Wetland Waters	Section 404
UNT 2	39.008423	-86.09011	302 Feet (0.024 ac)	Non-Wetland Waters	Section 404

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

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

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

- Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
 - Map: _____ Dated 1/30/2020
 - Data sheets prepared/submitted by or on behalf of the PJD requestor.
 - Office concurs with data sheets/delineation report.
 - Office does not concur with data sheets/delineation report. Rationale: _____
- Data sheets prepared by the Corps: _____
- Corps navigable waters' study: _____
- U.S. Geological Survey Hydrologic Atlas: _____
 - USGS NHD data.
 - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name: Waymansville, IN 7.5 min, 1980


- Natural Resources Conservation Service Soil Survey. Citation: SSURGO Jackson County

- National wetlands inventory map(s). Cite name: http://www.fws.gov/wetlands/
- State/local wetland inventory map(s): _____
- FEMA/FIRM maps: ; Effective _____

- 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- Photographs: Aerial (Name & Date): Indiana Aerial Photograph, 2016
or Other (Name & Date): Site Photographs, 9/10/2019
- Previous determination(s). File no. and date of response letter: _____
- Other information (please specify): _____

IMPORTANT NOTE: The information recorded on this form has not necessarily been verified by the Corps and should not be relied upon for later jurisdictional determinations.


Signature and date of
Regulatory staff member
completing PJD

 2/14/2020

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

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

Indiana Floodplain Information Portal



Find an address

Example: 300 Michigan Avenue, Auburn, IN, 46706

Go To Address

Jump to a county

Select your county from below

Adams ▼

View your county's [Flood Insurance Study](#).

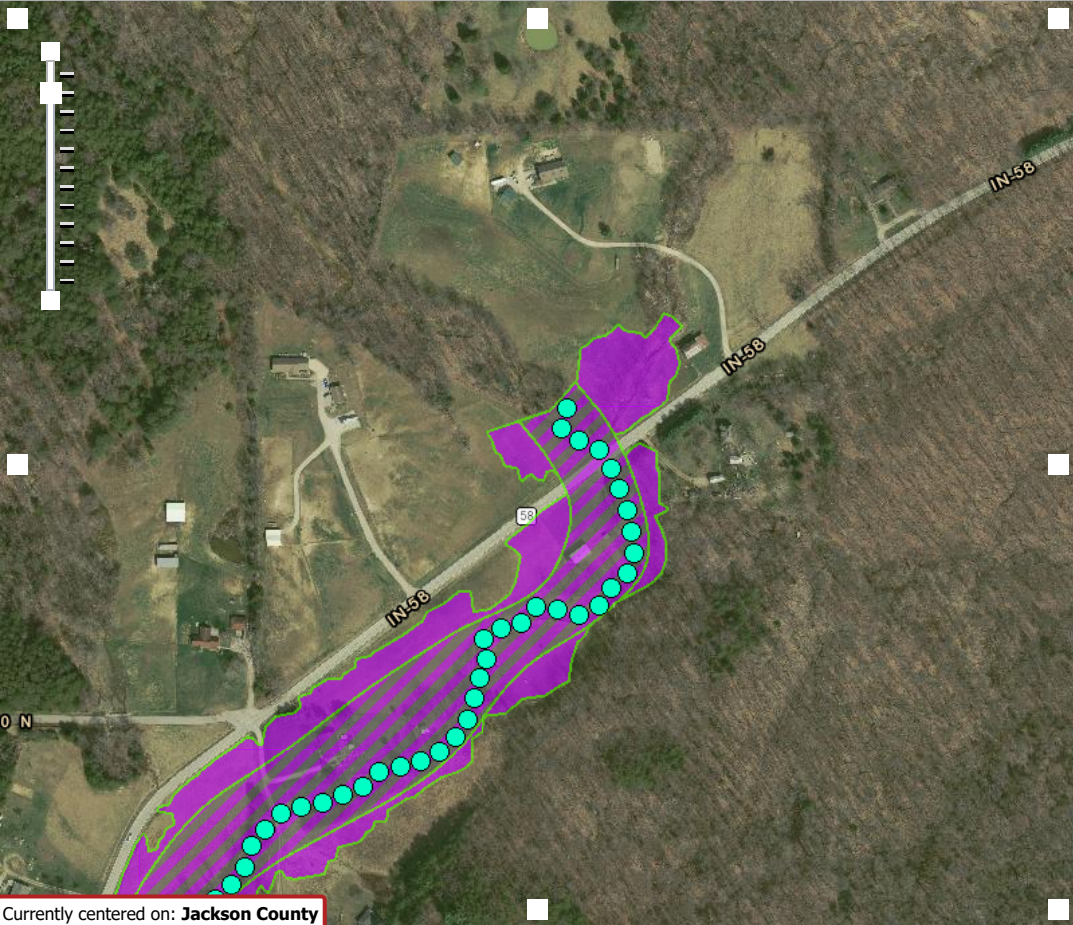
For the best feel and performance, use [FireFox 3.5+](#), [Internet Explorer 8+](#), [Chrome](#), or [Safari 4+](#).

[< Previous Tips](#)
[Next Tips >](#)

Map
FEMA Flood Insurance Study
Floodplain Layers
Frequently Asked Questions

Minimize

Profile Charter
Layers
Legend
Help



Currently centered on: **Jackson County**

Click on the map or enter an address to view Floodplain Information at that Point of Interest.

What does INFIP do?

The Indiana Floodplain Information Portal, INFIP, is a mapping application that provides floodplain information for waterways to help citizens determine flood risk in an effort to minimize flood damage. INFIP utilizes FEMA published floodplain data and floodplain data from various, IDNR approved resources in order to provide the most available, comprehensive coverage of floodplain information for the State of Indiana.

The main functions of INFIP enables you to:

- select a Point of Interest (i.e. residence or tract of land) to view floodplain mapping and the Base Flood Elevations (BFE)
- print a floodplain map for a Point of Interest
- submit a request for a Floodplain Analysis / Regulatory Assessment (FARA) from the Division of Water using the eFARA (electronic)

[Click to learn how to navigate the map](#)

[Click to learn how to submit eFARA](#)

[Click to learn about Special Flood Hazard Areas \(SFHA\) and Base Flood Elevations \(BFE\)](#)

[Click to learn about flood insurance](#)

[Click to learn about local community floodplain ordinance](#)

Download Report

To generate a report, please zoom in and select a point of interest on the map by clicking on a location.

[DOW Home](#) | [About Us](#) | [FEMA Map Service Center](#) | [FloodSmart.gov](#) | [Contact Us](#)

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APPENDIX G
PUBLIC INVOLVEMENT

Date: July 30, 2018

NOTICE OF SURVEY

RE: S.R. 58 over Runt Run, Des. # 170143

Christina L. McMurray
2890 W. State Road 58
Seymour, IN 47274

Our company has been contracted by the Indiana Department of Transportation to perform a survey for this proposed highway project. Our employees will be doing a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is allowed by IC 8-23-7-26. They will show you their identification, if you are available, before coming onto your property. If you have sold this property, or if it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we can contact them about the survey.

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

The survey work will include mapping the location of features such as trees, buildings, fences, drives and property boundary information, and obtaining ground elevations. It will also involve certain environmental work needed for the project. The survey is needed for the proper planning and design of the highway project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If you have any questions, please contact myself at the phone number or address shown below.

Sincerely,

Mark W. Teepe PLS / Survey Manager
BURGESS & NIPLE
www.burgessniple.com
251 N. Illinois Street
Indianapolis, IN 46204
Capital Center Suite 920
Indianapolis, IN 46204
317 237-2760 X 4431
www.burgessniple.com
mark.teepe@burgessniple.com

Notice of Entry Letter Mailing List

Name	Address	City	State	Zip Code
Christina L. McMurray	2890 W State Road 58	Seymour	IN	47274
Alan L. and Sarah M. Hendley	2710 W State Road 58	Seymour	IN	47274
Tonya E. Senn	2693 W State Road 58	Seymour	IN	47274

**APPENDIX H
AIR QUALITY**

Indiana Department of Transportation (INDOT)
 State Preservation and Local Initiated Projects FY 2018 - 2021

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2018	2019	2020	2021	
Comments:Amend CN phase in FY 2020 to the current STIP. Amended to CAMPO's TIP per Resolution 2018-01 dated February 12, 2018.																		
Indiana Department of Transportation	40407 / 1600503	A 04	SR 58	Bridge Replacement, Concrete	3.35 miles W of I-65 over E Fork White Creek	Seymour	0	STP	\$1,383,079.00	Bridge Consulting	PE	\$120,000.00	\$30,000.00	\$150,000.00				
										Bridge ROW	RW	\$20,000.00	\$5,000.00				\$25,000.00	
Comments:Amend PE in FY 2018 and RW in FY 2021. Amended to CAMPO's TIP per Resolution 2017-13 dated 7/10/17.																		
Indiana Department of Transportation	40407 / 1700012	A 04	SR 58	Small Structure Replacement	At 1.95 miles W of I-65	Seymour	0	STP	\$493,530.00	Bridge ROW	RW	\$8,000.00	\$2,000.00				\$10,000.00	
										Bridge Consulting	PE	\$108,000.00	\$27,000.00	\$135,000.00				
Comments:Amend PE phase in FY 2018 and RW phase in FY 2021 to current STIP. Amended to CAMPO's TIP per Resolution 2017-13 dated 7/10/17.																		
Indiana Department of Transportation	40450 / 1701168	A 04	I 65	Replace Superstructure	00.72 mile S of US 31 at CR 650N/Tannehill Rd	Seymour	0	NHPP	\$1,263,576.00	Bridge Consulting	PE	\$135,000.00	\$15,000.00	\$150,000.00				
												\$18,000.00	\$2,000.00		\$20,000.00			
										Construction		\$984,218.40	\$109,357.60			\$1,093,576.00		
Comments:Amend PE Phase in FY 2018, RW in FY 2019 and CN in 2020 to current STIP. Amended to CAMPO's TIP per Resolution 2017-13 dated 7/10/17.																		
Columbus	40463 / 1701061	M 12	ST 1011	Enhancement	People Trail Phase 1- Along 17th Street between Noblitt Park and Donner Park	Seymour	0	STP	\$227,500.00	Columbus MPO	PE	\$0.00	\$0.00	(\$22,500.00)	\$22,500.00			
										Local Funds	PE	\$0.00	\$0.00	(\$2,500.00)	\$2,500.00			
Comments:Move PE funding from FY18 to FY19. CAMPO FY18-21 TIP Modification dated 5/4/2018.																		
Columbus	40463 / 1701061	M 21	ST 1011	Enhancement	People Trail Phase 1- Along 17th Street between Noblitt Park and Donner Park	Seymour	0	STPBG	\$250,000.00	Columbus MPO	PE	-\$2,500.00	\$0.00		(\$2,500.00)			
										Local Funds	PE	\$0.00	\$2,500.00		\$2,500.00			
Comments:Adding local PE funds and subtracting Federal PE funds for FY 2019. CAMPO Administrative Modification Dated 3/29/2019																		
Columbus	40463 / 1701061	A 02	ST 1011	Enhancement	People Trail Phase 1- Along 17th Street between Noblitt Park and Donner Park	Seymour	0	Safety	\$250,000.00	Local Funds	PE	\$0.00	\$2,500.00	\$2,500.00				
										Columbus MPO	CN	\$202,500.00	\$0.00			\$202,500.00		
										Columbus MPO	PE	\$22,500.00	\$0.00	\$22,500.00				
										Local Funds	CN	\$0.00	\$22,500.00			\$22,500.00		
Comments:Amend FY18-21 STIP. Add FY18 PE funding for Columbus MPO & 100% Local Funds. Add FY20 CN funding for Columbus MPO & 100% Local Funds. This project is in the new CAMPO FY18-21 TIP.																		
Columbus	40464 / 1701062	M 12	ST 1025	Enhancement	People Trail Phase 2- Along 19th St. between Donner Park & Lincoln Park	Seymour	0	STP	\$227,500.00	Local Funds	PE	\$0.00	\$0.00	(\$2,500.00)	\$2,500.00			

Des. 1701431 falls under lead Des. 1600503. Project costs associated with Des. 1701431 can be found on Page 6 of this document.

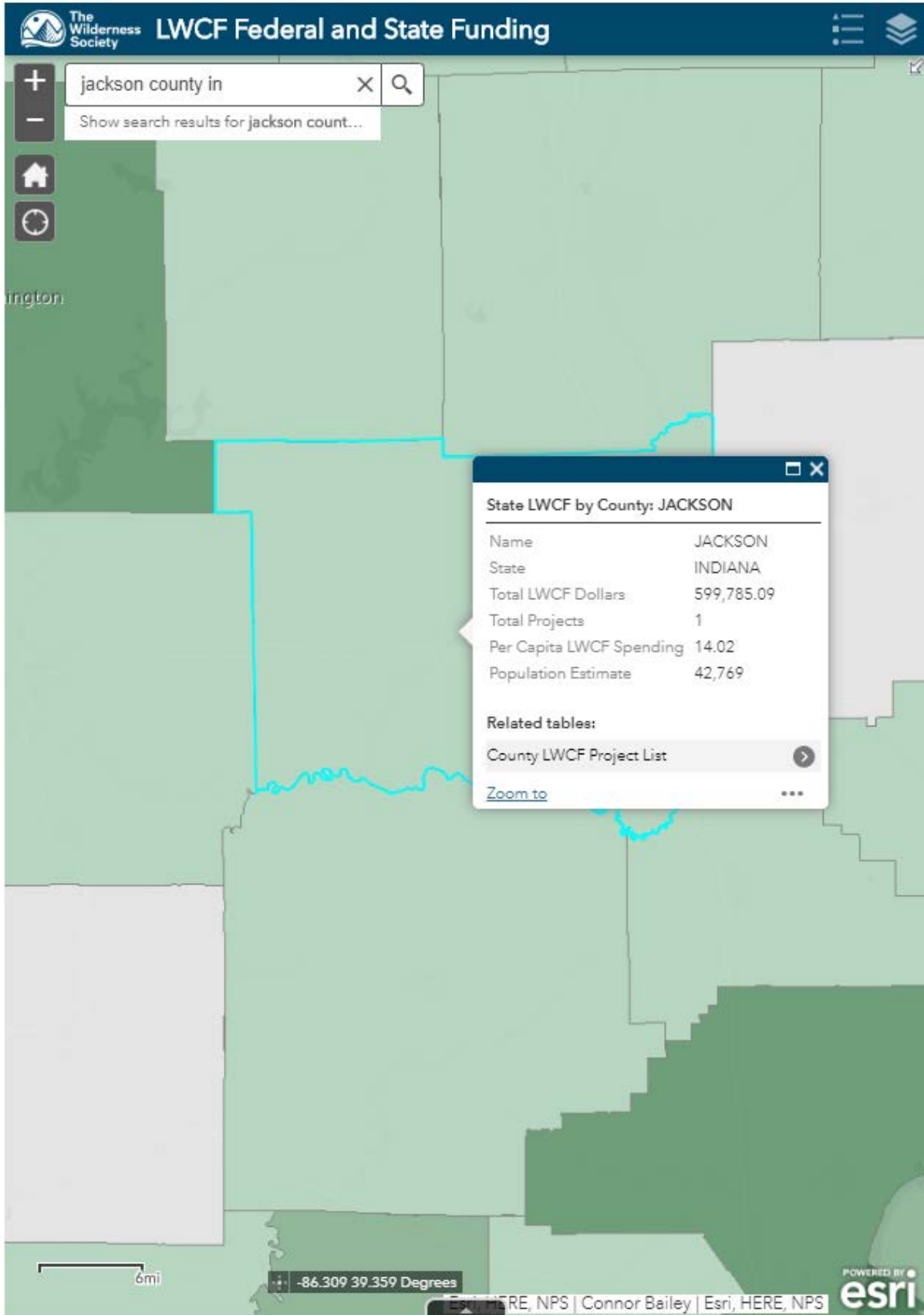
*Estimated Costs left to Complete Project column is for costs that may extend beyond the four years of a STIP. This column is not fiscally constrained and is for information purposes.

Indiana Department of Transportation (INDOT)
 State Preservation and Local Initiated Projects FY 2020 - 2024

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024	
Columbus	40375 / 1701323	Init.	ST 1026	Road Reconstruction (3R/4R Standards)	Talley Road between 25th Street and Rocky Ford Road	Seymour	1	STPBG		Columbus MPO	CN	\$777,600.00	\$0.00				\$777,600.00		
Indiana Department of Transportation	40389 / 1700139	Init.	SR 46	New Interchange Construction	At the intersection of SR 46 and SR 11 in Columbus	Seymour	0	NHPP		Bridge Construction	CN	\$5,614,760.80	\$1,403,690.20	\$7,018,451.00					
												\$12,000,000.00	\$3,000,000.00	\$15,000,000.00					
										Road Construction	CN	\$1,979,418.40	\$494,854.60	\$2,474,273.00					
Indiana Department of Transportation	40407 / 1600503	Init.	SR 58	Bridge Replacement, Concrete	3.35 miles W of I-65 over E Fork White Creek	Seymour	0	STPBG		Bridge Construction	CN	\$2,932,307.20	\$733,076.80			\$3,665,384.00			
										Bridge ROW	RW	\$68,000.00	\$17,000.00		\$85,000.00				
Indiana Department of Transportation	40450 / 1701168	Init.	I 65	Replace Superstructure	00.72 mile S of US 31 at CR 650N/Tannehill Rd	Seymour	0	NHPP		Bridge Construction	CN	\$1,026,285.30	\$114,031.70	\$1,140,317.00					
Columbus	40463 / 1701061	Init.	ST 1011	Enhancement	People Trail Phase 1- Along 17th Street between Noblitt Park and Donner Park	Seymour	0	STPBG		Local Funds	CN	\$0.00	\$22,500.00	\$22,500.00					
										Columbus MPO	CN	\$202,500.00	\$0.00	\$202,500.00					
Columbus	40464 / 1701062	Init.	ST 1025	Enhancement	People Trail Phase 2- Along 19th St. between Donner Park & Lincoln Park	Seymour	0	STPBG		Local Funds	CN	\$0.00	\$22,500.00		\$22,500.00				
										Columbus MPO	CN	\$202,500.00	\$0.00	\$202,500.00					
Columbus	40487 / 1702107	Init.	ST 1015	Pavement, Other	Taylor Road Phase 2- from 31st Street to Rocky Ford Road	Seymour	0	STPBG		Local Funds	CN	\$0.00	\$430,000.00		\$430,000.00				
										Columbus MPO	CN	\$1,720,000.00	\$0.00	\$1,720,000.00					
Indiana Department of Transportation	40992 / 1800340	Init.	I 65	Bridge Deck Overlay	01.01 mile N of SR 58, CR 350 S @ I-65	Seymour	0	NHPP		Bridge Construction	CN	\$620,787.60	\$68,976.40		\$689,764.00				
Indiana Department of Transportation	41164 / 1801374	Init.	VA VARI	Environmental Mitigation	Environmental Mitigation site for SR 46 Interchange Project	Seymour	0	STPBG		Road Construction	CN	\$1,422,624.80	\$355,656.20		\$1,778,281.00				
Indiana Department of Transportation	41638 / 1801784	Init.	US 31	New Signal Installation	Intersection of Lowell Rd	Seymour	.23	STPBG		District Other Construction	CN	\$313,500.00	\$78,375.00		\$391,875.00				
Indiana Department of Transportation	41849 / 1802958	Init.	I 65	Added Travel Lanes	From SR 58 to SR 46 in Bartholomew County	Seymour	4.05	NHPP		Major New - Construction	CN	\$7,425,000.00	\$825,000.00		\$8,250,000.00				
										Major New - Consulting	PE	\$450,000.00	\$50,000.00		\$500,000.00				
										Demonstration Fund Program	CN	\$18,000,000.00	\$2,000,000.00		\$20,000,000.00				

Des. 1701431 falls under lead Des. 1600503. Project costs associated with Des. 1701431 can be found on Page 6 of this document.

**APPENDIX I
ADDITIONAL STUDIES**



The Wilderness Society **LWCF Federal and State Funding**

Search: jackson county in [X] [Q]
 Show search results for jackson count...

Map showing Jackson County, Indiana. A cyan line highlights a specific grant element boundary. A popup window displays details for the selected element:

← STARVE HOLLOW RENOVATION

STARVE HOLLOW RENOVATION

State: Indiana
 County: Jackson
 Grant ID: 447
 Element:
 Type: R
 grant Element Title: STARVE HOLLOW RENOVATION
 Grant Sponsor: DEPT. OF NATURAL RESOURCES
 Amount: 599785.09
 Date Approved:

Related tables: ...

6mi | -86.427 39.359 Degrees

POWERED BY **esri**

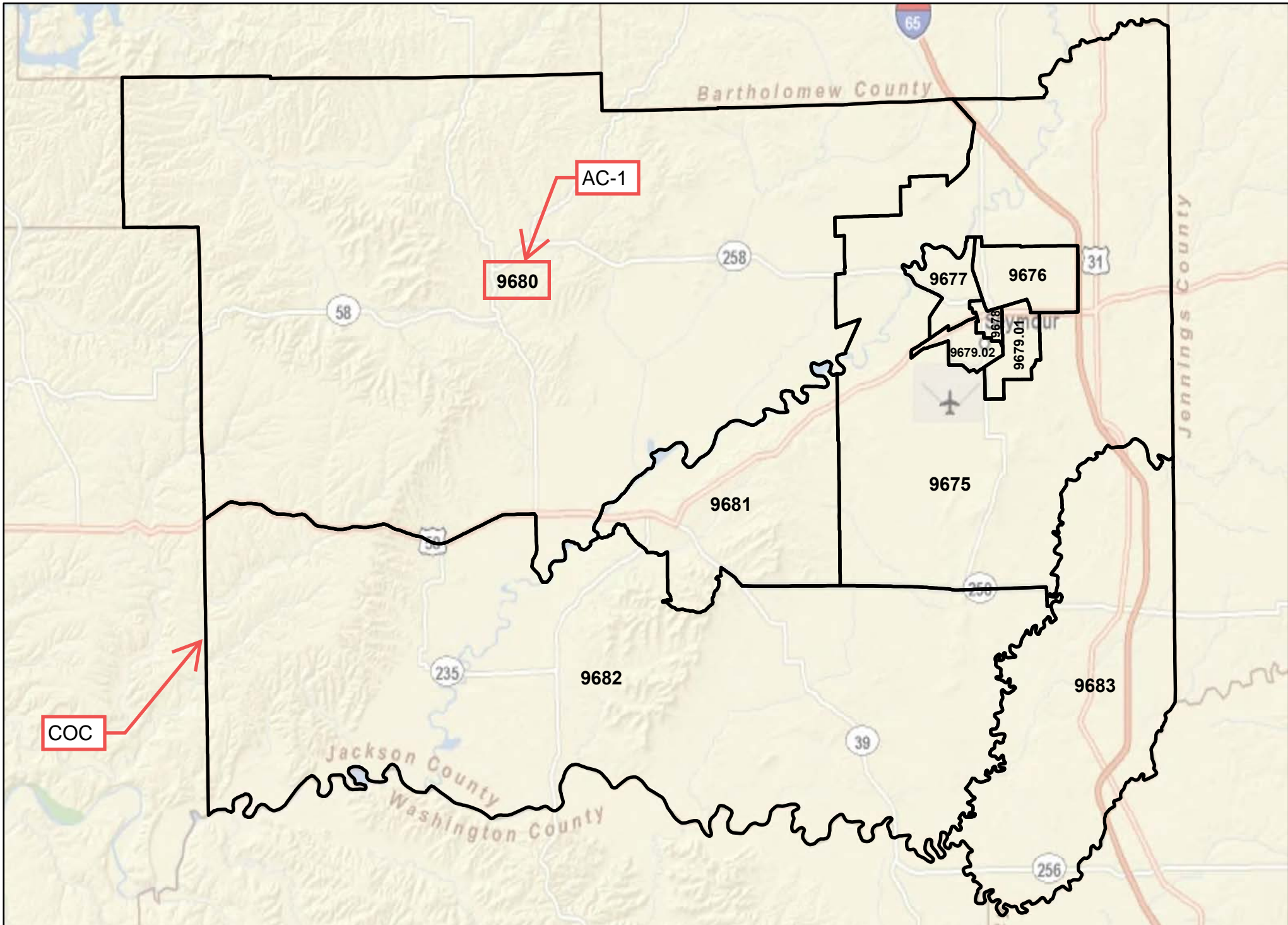
LWCF Federal Projects | State LWCF by County | **County LWCF Project List**

Options [v] | Filter by map extent | Zoom to | Clear selection [X] | Refresh [C]

State	County	Grant ID Element	Type	Grant Element Title	Grant Sponsor	Fiscal Year [i]
Indiana	Jackson	447	R	STARVE HOLLOW RENOVATION	DEPT. OF NATURAL RESOURCES	1985

1 records 0 selected

Jackson County, Indiana Census Tracts 2010



Minority & Low Income Data		
	COC - Jackson County, Indiana	AC-1: Census Tract 9680
Total Population	42740	5276
Total White	39319	5197
Total Minority	3421	79
Total Low-Income	6650	916
Percent Minority	8.0%	1.5%
125% of COC	10.0%	10.0%
EJ Population of Concern		NO
Percent Low-Income	15.6%	17.4%
125% of COC	19.4%	19.4%
EJ Population of Concern		NO

County and Census Tract <https://data.census.gov/cedsci/>



Note: This is a modified view of the original table produced by the U.S. Census Bureau.

Note: This download or printed version may have missing information from the original table.

POVERTY STATUS IN THE PAST 12 MONTHS

Survey/Program:
American Community Survey
Year:
2017
Estimates:
5-Year
Table ID:
S1701

Source: U.S. Census Bureau, 2018 American Community Survey 1-Year Estimates

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

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

Dollar amounts are adjusted to respective calendar years. For more information, see: Change to Income Deficit.

While the 2018 American Community Survey (ACS) data generally reflect the July 2015 Office of Management and Budget (OMB) delineations of metropolitan and micropolitan statistical areas, in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB delineations due to differences in the effective dates of the geographic entities.

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

Explanation of Symbols:
 An "*" entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
 An "-" entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution, or the margin of error associated with a median was larger than the median itself.
 An "-" following a median estimate means the median falls in the lowest interval of an open-ended distribution.
 An "+" following a median estimate means the median falls in the upper interval of an open-ended distribution.
 An "*" entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
 An "*" entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
 An "N" entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
 An "(X)" means that the estimate is not applicable or not available.

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

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

	Jackson County, Indiana			Census Tract 9680, Jackson County, Indiana		
	Total Estimate	Below poverty level Estimate	Percent below poverty level Estimate	Total Estimate	Below poverty level Estimate	Percent below poverty level Estimate
Population for whom poverty status is determined	42,740	6,650	15.6%	5,276	916	17.4%
AGE						
SEX						
RACE AND HISPANIC OR LATINO ORIGIN						
White alone	39,319	5,894	15.0%	5,197	865	16.6%
Black or African American alone	438	104	23.7%	0	0	-
American Indian and Alaska Native alone	155	74	47.7%	51	51	100.0%
Asian alone	812	198	24.4%	9	0	0.0%
Native Hawaiian and Other Pacific Islander alone	0	0	-	0	0	-
Some other race alone	1,553	327	21.1%	9	0	0.0%
Two or more races	463	53	11.4%	10	0	0.0%
Hispanic or Latino origin (of any race)	2,784	781	28.1%	0	0	-
White alone, not Hispanic or Latino	38,155	5,471	14.3%	5,197	865	16.6%
EDUCATIONAL ATTAINMENT						
EMPLOYMENT STATUS						
WORK EXPERIENCE						
ALL INDIVIDUALS WITH INCOME BELOW THE FOLLOW						
UNRELATED INDIVIDUALS FOR WHOM POVERTY STATU	7,009	2,153	30.7%	473	154	32.6%