



Indiana Department of Transportation

County Posey

Route SR 66

Des. No. 1593065

Note: Do not approve until after Section 106 public involvement and all other environmental requirements have been satisfied.

INDOT ES/District Env.

Reviewer Signature: Date:

Name and Organization of CE/EA Preparer: Richard Connolly, HNTB Indiana

Part I - PUBLIC INVOLVEMENT

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

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

\*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 area on May 1, 2019... The project will meet the minimum requirements described in the current Indiana Department of Transportation (INDOT) Public Involvement Manual...

Public Controversy on Environmental Grounds Will the project involve substantial controversy concerning community and/or natural resource impacts?

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

Sponsor of the Project: INDOT Local Name of the Facility: SR 66 INDOT District: Vincennes

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

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

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**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)*

The project is located on SR 66 approximately 4.85 miles east of SR 165. The need for this project is due to the deteriorated condition of the existing structure carrying SR 66 over Rock Bottom Creek. During the most recent INDOT inspection on March 15, 2019, INDOT inspectors indicated small areas of spall are present on the bridge deck, an exposed strand is visible along the widening joint near the center of the span on the superstructure, and a few cracks and scaling/efflorescence have been noted in various areas of the superstructure and heavy spalling has occurred on the substructure. Other goals and objectives of this project include minimizing the projects overall environmental effect to natural resources, neighboring properties, and the general community.

The purpose of this project is to maintain vehicular travel along SR 66 that meets current design standards, while maintain adequate function.

**PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):**

County:   Posey  

Municipality:   N/A  

Limits of Proposed Work:   Approximately 300 feet west and 300 feet east from the center of the existing bridge.  

Total Work Length:   0.11   Mile(s)

Total Work Area:   1.13   Acre(s)

Is an Interchange Modification Study / Interchange Justification Study (IMS/IJS) required?  
If yes, when did the FHWA grant a conditional approval for this project?

<b>Yes<sup>1</sup></b>	<b>No</b>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
Date: <input type="text"/>	

<sup>1</sup>If 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.*

INDOT and the Federal Highway Administration (FHWA) intend to proceed with a project involving reinforced concrete T-beam bridge (Bridge No. 066-65-01130) carrying SR 66 over Rock Bottom Creek in Posey County, Indiana. The project is located in Section 26, Township 5 South, and Range 12 West in Robinson Township, as shown on the United States Geological Survey (USGS) 7.5 Minute Kasson, Indiana Topographic Quadrangle Map (Appendix B, page 3). More specifically, the project is located on SR 66 approximately 4.85 miles east of SR 165 (Appendix B, page 2).

The existing structure is a single-span, reinforced concrete T-beam bridge that conveys Rock Bottom Creek beneath SR 66. The bridge was built in 1932 and a rehabilitation was performed in 1964 in order to widen the existing structure. SR 66 is classified as a rural major collector and has a posted speed limit of 55 miles per hour through the project area. The existing roadway consists of two, 12-foot through lanes with 3-foot, 4-inch paved shoulders. The existing structure is not identified in the *Indiana Historic Bridge Inventory* and is not eligible for listing in the National Register of Historic Places (NRHP).

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The preferred alternative includes replacing the bridge. The replacement structure will be a precast, reinforced concrete, three-sided, flat top structure. The new bridge (Bridge No. 066-65-10154) will be 24 feet long with an out-to-out width of 50 feet. Proposed work will include full-depth pavement replacement, pavement resurfacing, and the installation of Class 1 riprap over geotextile for scour protection.

Limits of proposed construction will be approximately 300 feet east and 300 feet west from the center of the existing structure. This project has independent utility because it meets the purpose and need of the project without being connected to or requiring any other actions in the area. The project termini are approximately 300 feet east and 300 feet west from the center of the existing bridge. The project will require the acquisition of right-of-way because the existing right-of-way ends at the edge of pavement. These termini are considered logical because they provide an adequate distance to complete the bridge replacement and associated work. See Appendix B, pages 24-30, for preliminary design plans.

Every effort to avoid, minimize, and/or mitigate project impacts will be made.

The project will require the closure of SR 66 with a state route detour. Details of the closure and detour are included in the Maintenance of Traffic (MOT) During Construction section of this CE document.

The preferred alternative meets the purpose and need of the project by replacing the bridge to provide a structurally sufficient and hydraulically adequate crossing of SR 66 over Rock Bottom Creek.

### OTHER ALTERNATIVES CONSIDERED:

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

#### Single-Span Cast-in-Place Slab Bridge:

Replacing the existing structure with a single-span, cast-in-place slab bridge was considered. This alternative meets the purpose and need because the replacement structure would maintain the safe and hydraulically adequate crossing of Rock Bottom Creek; however, it is less cost effective. This alternative was therefore eliminated from further consideration.

#### Single-Span Precast Arch:

Replacement of the existing bridge with a single-span, precast arch structure was considered. This alternative meets the purpose and need because the replacement structure would maintain the safe and hydraulically adequate crossing of Rock Bottom Creek; however, this alternative is less cost effective. This alternative was therefore eliminated from further consideration.

#### Single-Cell Precast Concrete Box Culvert:

Replacement of the existing bridge with a four-sided, concrete flat top box structure was considered. This alternative meets the purpose and need because the replacement structure would maintain the safe and hydraulically adequate crossing of Rock Bottom Creek; however, it is less cost effective, has constructability concerns and would not provide a natural channel substrate through the structure. This alternative was therefore eliminated from further consideration.

#### No Build Alternative:

The no build alternative proposes continued use of the bridge in the current condition. If selected, this alternative would result in continued deterioration of the bridge, eventually becoming a hazard to the traveling public. This alternative would not meet the purpose and need of the project and was therefore eliminated from further consideration.

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**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

**ROADWAY CHARACTER:**

Functional Classification:	<u>Rural Major Collector</u>				
Current ADT:	<u>7,273</u>	VPD (2023)	Design Year ADT:	<u>7,539</u>	VPD (2043)
Design Hour Volume (DHV):	<u>765</u>	Truck Percentage (%)	<u>4.77</u>		
Designed Speed (mph):	<u>55</u>	Legal Speed (mph):	<u>55</u>		

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	12-foot through lanes		12-foot through lanes	
Pavement Width:	30.8	ft.	36	ft.
Shoulder Width:	3.33	ft.	6	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

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

**DESIGN CRITERIA FOR BRIDGES:**

Structure/NBI Number(s): <u>066-65-01130 / 023350</u>	Sufficiency Rating: <u>78.5, INDOT Bridge Inspection Report March 15, 2019</u>
(Rating, Source of Information)	

	Existing		Proposed	
Bridge Type:	Reinforced Concrete T-Beam Bridge		Precast Reinforced Concrete Three-Sided Flat Top Structure	
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:	31.2	ft.	36	ft.
Outside to Outside Width:	33.2	ft.	50	ft.
Shoulder Width:	3.33	ft.	6	ft.
Length of Channel Work:			85	ft.

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

Remarks: The existing structure (Bridge No. 066-65-01130; NBI No. 023350) is a single-span, reinforced concrete T-beam bridge measuring 32 feet long and 33.2 feet wide. The existing bridge will be replaced with a

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precast, reinforced concrete, three-sided flat top structure (Bridge No. 066-65-10154) measuring 24 feet long and 50 feet wide.

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.*

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

	<b>Yes</b>	<b>No</b>
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 checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made to accommodate any local special events or festivals.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there substantial controversy associated with the proposed method for MOT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Remarks: The MOT plan requires the closure of SR 66 for approximately 4 months. The official INDOT detour route will be a state route detour utilizing SR 65, SR 165, and Interstate 64 (I-64) will be in place (Appendix B, page 26). The proposed detour will be approximately 33.15 miles long and will add approximately 27.57 miles to a trip through the area. Access for local traffic will be provided during construction per current INDOT Standard Specification 107.08(e).

The closure 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: \$ N/A Right-of-Way: \$ 20,000 (2022) Construction: \$ 1,170,000 (2023)

Anticipated Start Date of Construction: November 2022

Date project incorporated into STIP July 2, 2019

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

If yes,

Name of MPO Evansville Metropolitan Planning Organization\*

\*This project is in the planning commission area but is not in the metropolitan planning area. Therefore, the project is not included in the Transportation Improvement Program.

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Location of Project in TIP \_\_\_\_\_

Date of incorporation by reference into the STIP \_\_\_\_\_

**RIGHT OF WAY:**

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Agricultural	0.39	0
Forest	0.26	0
Other: Maintained Roadside	0.34	0
<b>TOTAL</b>	<b>0.99</b>	<b>0</b>

*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:

Existing plans and the project survey were reviewed to determine the presence of existing right-of-way. Approximately 0.44 acre of right-of-way will be required because it was not properly recorded and is not within legal chain of title. The required right-of-way includes 0.10 acre of forested land and 0.34 acre of maintained roadside. The existing right-of-way extends approximately 20 feet south and 15 feet north from the edge of the existing pavement. The land use of required right-of-way will be maintained roadside following construction.

The project requires approximately 0.55 acre of new permanent right-of-way. Based on a review of aerial imagery, the land use of new right-of-way includes 0.39 acre of agricultural property and 0.16 acre of forested property. Proposed right-of-way limits will extend approximately 50 feet north and 50 feet south from the center of the existing structure. Existing maintained roadside will continue to be maintained following construction. The agricultural land and a portion of the forested land will become maintained roadside property following construction. The project will not require the acquisition of temporary right-of-way.

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

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

**SECTION A – ECOLOGICAL RESOURCES**

	<u>Presence</u>	<u>Impacts</u>	
		<u>Yes</u>	<u>No</u>
<b>Streams, Rivers, Watercourses &amp; Jurisdictional Ditches</b>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Federal Wild and Scenic Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State Natural, Scenic or Recreational Rivers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Nationwide Rivers Inventory (NRI) listed  
 Outstanding Rivers List for Indiana  
 Navigable Waterways


**Remarks:**

Based on a desktop review, a site visit on September 6, 2019 by HNTB, the aerial map of the project area (Appendix B, page 2), and the water resources map in the Red Flag Investigation (RFI) report (Appendix E, page 8), there are eleven streams located within the 0.5-mile search radius. There are three streams present within or adjacent to the project area.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by the INDOT Ecology and Waterway Permitting Office (EWPO) on December 4, 2019 (Appendix F, pages 1-20). It was determined that two likely jurisdictional streams, Unnamed tributary (UNT) to Rock Bottom Creek and Rock Bottom Creek, are present within the investigated area. The United States Army Corps of Engineers (USACE) makes all final determinations regarding jurisdiction.

UNT to Rock Bottom Creek is mapped as a blue-line stream on the Kasson, Indiana USGS Topographic Quadrangle Map (Appendix B, page 3). UNT to Rock Bottom Creek outlets into Rock Bottom Creek approximately 80 feet northeast of SR 66. UNT to Rock Bottom Creek exhibited a 10-foot wide by 1-foot deep ordinary high-water mark (OHWM) during the site visit. UNT to Rock Bottom Creek is not visible on the USGS Streamstats Database, (<https://water.usgs.gov/osw/streamstats/indiana.html>); therefore, the upstream drainage area of UNT to Rock Bottom Creek is likely less than one square mile. UNT to Rock Bottom Creek is not listed as a Federal Wild and Scenic River, a State Natural, Scenic and Recreational River, nor is it on the Indiana Register's listing of Outstanding Rivers and Streams. UNT to Rock Bottom Creek will not be impacted by the project.

Rock Bottom Creek is mapped as a blue-line stream on the Kasson, Indiana USGS Topographic Quadrangle Map (Appendix B, page 3). Rock Bottom Creek enters the project area east of SR 66 and flows west underneath the existing structure. Rock Bottom Creek exhibited a 27-foot wide by 1-foot deep OHWM during the site visit. According to the USGS Streamstats Database, (<https://water.usgs.gov/osw/streamstats/indiana.html>), Rock Bottom Creek drains approximately 0.96 square mile upstream of the SR 66 bridge. Rock Bottom Creek is not listed as a Federal Wild and Scenic River, a State Natural, Scenic and Recreational River, nor is it on the Indiana Register's listing of Outstanding Rivers and Streams. Approximately 85 feet of Rock Bottom Creek will be permanently impacted by the project due to the placement of riprap for scour protection. Approximately 135 feet of the stream will be temporarily impacted due to the use of temporary cofferdams for the purpose of dewatering.

For stream impacts to Rock Bottom Creek, a section 404 Regional General Permit from the USACE and a Section 401 Water Quality Certificate from the Indiana Department of Environmental Management (IDEM) will be required. No mitigation is expected.

Early coordination letters were sent to the United States Fish and Wildlife Service (USFWS), Indiana Department of Natural Resources Division of Fish and Wildlife (IDNR-DFW), and the USACE on September 3, 2019 (Appendix C, pages 1-3). No response was received from USACE.

In their early coordination response dated May 19, 2020, USFWS provided standard recommendations pertaining to erosion and sediment control measures, bank stabilization, minimization of in-stream channel work, and evaluation of wildlife crossings (Appendix C, pages 4-5).

An automated letter was generated from the IDEM website on May 18, 2020 recommending appropriate storm water quality measures to be implemented during construction and after project completion (Appendix C, pages 11-15).

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

**Other Surface Waters**

- Reservoirs
- Lakes
- Farm Ponds
- Detention Basins
- Storm Water Management Facilities
- Other: \_\_\_\_\_

<u>Presence</u>	<u>Impacts</u>	
	<u>Yes</u>	<u>No</u>

Remarks:

Based on a desktop review, a site visit on September 6, 2019 by HNTB, the aerial map of the project area (Appendix B, page 2), and the water resources map in the RFI report (Appendix E, page 8), there are no other surface waters within the 0.5-mile search radius. No other surface waters are located within or adjacent to the project area. Therefore, no impacts are expected.

In their early coordination response dated May 19, 2020, USFWS did not provide recommendations pertaining to other surface waters (Appendix C, pages 4-5).

In their early coordination response dated December 27, 2019, IDNR-DFW did not provide recommendation pertaining to other surface waters (Appendix C, pages 7-10).

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

**Wetlands**

<u>Presence</u>	<u>Impacts</u>	
	<u>Yes</u>	<u>No</u>

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

**Wetlands (Mark all that apply)**

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

Documentation


ES Approval Dates


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**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 6, 2019 by HNTB, the USGS topographic map (Appendix B, page 3), and the RFI report (Appendix E, page 8), there are four wetlands mapped within the 0.5-mile search radius. No wetlands are present within or adjacent to the project area; therefore, no impacts are expected.

In their early coordination response dated May 19, 2020, USFWS did not provide recommendations pertaining to wetlands (Appendix C, pages 4-5).

In their early coordination response dated December 27, 2019, IDNR-DFW did not provide recommendation pertaining to wetlands (Appendix C, pages 7-10).

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

	<u>Presence</u>	<u>Impacts</u>	
<b>Terrestrial Habitat</b>		Yes	No
Unique or High Quality Habitat	X	X	

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

Remarks:

Based on a desktop review, a site visit on September 6, 2019 by HNTB, and the aerial map of the project area (Appendix B, page 2), there is primarily forested habitat and agricultural land within the project area. Vegetation within the project area consists primarily of *Juglans Nigra* (black walnut), *Gleditsia triacanthos* (honey locust), *Diervilla* (bush honeysuckle), *Ulmus americana* (American elm), *Toxicodendron radicans* (poison ivy), *Setaria parviflora* (green bristlegrass), and *Cirsium discolor* (field thistle). Approximately 0.26 acre of general vegetation clearing and tree clearing will be necessary for construction access. Avoidance alternatives for terrestrial habitat removal are not practicable due to the need for construction access to complete the bridge rehabilitation. Terrestrial habitat removal will not require mitigation.

In their early coordination response dated May 19, 2020, USFWS provided standard recommendations pertaining to erosion and sediment control measures, tree and understory vegetation clearing, and evaluation of wildlife crossings (Appendix C, page 4-5).

In their early coordination response dated December 27, 2019, IDNR-DFW provided recommendations to minimize potential effects to terrestrial habitat and wildlife passage within the project area (Appendix C, pages 7-10). These recommendations include post-construction revegetation measures including riparian habitat mitigation, placement of riprap and use of geotextiles, and erosion and sediment control measures.

An automated letter was generated from the IDEM website on May 18, 2020 recommending appropriate storm water quality measures to be implemented during construction and after project completion (Appendix C, pages 11-15).

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

*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.*

**Karst**

	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:

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 USGS topographic map of the project area (Appendix B, page 3), and the RFI report (Appendix E, page 8), and a site visit on September 6, 2019 by HNTB, there are no karst features within or adjacent to the project area. In the early coordination response dated May 18, 2020, the Indiana Geological Survey (IGS) did not indicate that karst features may exist in the project area (Appendix C, page 16). The IGS response indicated that there is moderate liquefaction potential, a one percent annual chance flood hazard, low potential for bedrock resources, no potential for sand and gravel resources, and active or abandoned petroleum exploration wells in the project area. The features will not be affected because of the shallow depth of excavation. Response from IGS was communicated with the designer on May 18, 2020. No impacts are expected.

	<u>Presence</u>		<u>Impacts</u>	
		Yes	Yes	No
<b>Threatened or Endangered Species</b>				
Within the known range of any federal species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Any critical habitat identified within project area	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>
State species found in project area (based upon consultation with IDNR)	<input type="checkbox"/>	<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"/>	<input type="checkbox"/>

Remarks:

Based on a desktop review and the RFI report (Appendix E, pages 1-13), completed by HNTB on October 7, 2019, the IDNR Posey County Endangered, Threatened and Rare (ETR) Species List has been checked and is included in Appendix E, pages 10-13. The highlighted species on the list reflect the federal and state identified ETR species located within the county. According to the IDNR-DFW early coordination response letter dated December 27, 2019, the Natural Heritage Program's Database has been checked and it was noted that 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 (Appendix C, pages 7-10).

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, pages 23-28). The project is within range of the federally-endangered Indiana bat (*Myotis sodalis*) and the federally-threatened northern long-eared bat (NLEB)

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(*Myotis septentrionalis*). No additional species were found within or adjacent to the project area other than the Indiana bat and NLEB.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and Northern Long-eared Bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), and USFWS. An effect determination key was completed on November 26, 2019, and based on the responses provided, the project was found to “*May Affect - Not Likely to Adversely Affect*” the Indiana bat and the NLEB. INDOT reviewed and verified the effect finding on November 26, 2019, and requested USFWS’s review of the finding (Appendix C, pages 29-43). No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Minimization Measures (AMMs) are included as firm commitments in the Environmental Commitments section of this CE document.

Structure 066-65-01130 at Rock Bottom Creek has shown evidence of use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA) during the March 15, 2019 inspection. Avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the “Potential Migratory Bird on Structure Unique Special Provision”. This firm commitment is included in the Environmental Commitments 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**

<b>Drinking Water Resources</b>	<b>Presence</b>	<b>Impacts</b>	
		<b>Yes</b>	<b>No</b>
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:

	<b>Yes</b>	<b>No</b>
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 Posey 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. 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 May 18, 2020 by HNTB. 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 May 18, 2020 by HNTB. No wells are located near this project. Therefore, no impacts are expected.

Based on a desktop review of the INDOT MS4 website (<https://entapps.indot.in.gov/MS4/>) accessed by HNTB on May 18, 2020 and the RFI report (Appendix E, page 3); this project is not located in an Urban Area Boundary location. No impacts are expected.

Based on a desktop review on May 18, 2020, a site visit on September 6, 2019 by HNTB, the aerial map of the project area (Appendix B, page 2), and the IDEM Indiana Public Water Supply Database website (<https://myweb.in.gov/IDEM/DWW/>) no public water systems were identified. Therefore, no impacts are expected.

<b>Flood Plains</b>	<b>Presence</b>	<b>Impacts</b>	
		<b>Yes</b>	<b>No</b>
Longitudinal Encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transverse Encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Project located within a regulated floodplain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Homes located in floodplain within 1000' up/downstream from project	<input type="checkbox"/>	<input type="checkbox"/>	<input 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 Indiana Department of Natural Resources Indiana Floodway Information Portal website (<http://dnrmmaps.dnr.in.gov/appsphp/fdms/>) by HNTB on May 18, 2020; this project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, page 9). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

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

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

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

*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 September 6, 2019 by HNTB, the aerial map of the project area (Appendix B, page 2), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The requirements of the FPPA do not apply to this project; therefore, no impacts are expected. An early coordination letter was sent on September 3, 2019, to Natural Resources Conservation Services (NRCS). NRCS responded on December 3, 2019, indicating the project will not cause a conversion of prime farmland.

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**SECTION C – CULTURAL RESOURCES**

	<b>Category</b>	<b>Type</b>	<b>INDOT Approval Dates</b>	<b>N/A</b>
Minor Projects PA Clearance	B	12	June 29, 2020	

**Results of Research**

Eligible and/or Listed  
Resource Present

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)

	<u>Documentation Prepared</u>	<b>ES/FHWA Approval Date(s)</b>	<b>SHPO Approval Date(s)</b>
Historic Properties Short Report			
Historic Property Report			
Archaeological Records Check/ Review	X	June 29, 2020	N/A
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			

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 June 25, 2020, INDOT Cultural Resources Office (CRO) determined that this project falls within the guidelines of Category B, Type 12 under the Minor Projects Programmatic Agreement (MPPA) (Appendix D, pages 1-3). MPPA Category B, Type 12 projects include the 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 certain conditions. No further consultation is required. The Section 106 process has been completed and the responsibilities of the FHWA under Section 106 have been fulfilled.

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<b>SECTION D – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES</b>
---

**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 September 6, 2019 by HNTB, the aerial map of the project area (Appendix B, page 2), and the RFI report (Appendix E, page 2) there are no Section 4(f) resources 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) list maintained by the IDNR Division of Outdoor Recreation for the identification of LWCF properties and provided by INDOT ESD revealed a total of four properties in Posey County (Appendix I, page 5). These properties are 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**

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

Yes
<input type="checkbox"/>

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

If YES, then:

Is the project in the most current MPO TIP?

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

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

Is the project exempt from conformity?

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

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

If 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:

This project is included in the INDOT FY 2020-2024 State Transportation Improvement Program (STIP) (Appendix H, page 1). Posey County is located within the Evansville Metropolitan Planning Organization; however, the project area is not included in the Metropolitan Planning Area. Therefore, the project is not included in the Transportation Improvement Program (TIP).

This project is located in Posey County, which is currently in attainment for all criteria pollutants according to the IDEM Office of Air Quality. Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

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

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**SECTION F - NOISE**

<b>Noise</b>	<b>Yes</b>	<b>No</b>
Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	No	Yes/ Date
<b>ES Review of Noise Analysis</b>		

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**

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

Remarks: 

The project is in a rural portion of Posey County, Indiana and will require the reacquisition of 0.44 acre of unrecorded permanent right-of-way and the acquisition of an additional 0.55 acre of new permanent right-of-way. The right-of-way acquisition is not anticipated to have a significant impact on tax base or property values.

The MOT plan requires the closure of SR 66 for approximately 4 months. The official INDOT detour route will be a state route detour utilizing SR 65, SR 165, and Interstate 64 (I-64) will be in place (Appendix B, page 26). The proposed detour will be approximately 33.15 miles long and will add approximately 27.57 miles to a trip through the area. Access for local traffic will be provided during construction per current INDOT Standard Specification 107.08(e).

According to the Visit Posey County website (<http://visitposeycounty.com/events/category/festival/list/>) accessed on May 26, 2020, no annual events in Posey County occur within 10 miles of the project area.

The proposed action is not expected to conflict with development patterns or have substantial impacts to property values. The project is not expected to affect American Disabilities Act (ADA) facilities in any way.

Early coordination letters were sent to the Posey County Surveyor, Posey County Sheriff, Posey County Highway Department, Posey County Commissioner President, and the Posey County Emergency Management Director on September 3, 2019 (Appendix C, pages 1-3). The Posey County Surveyor responded on September 9, 2019 and asked for the final version of any construction plans (Appendix C, page 17). Providing the final construction plans to the county surveyor has been included as a firm commitment in the Environmental Commitments section of this document. The Posey County Emergency Management Director responded on September 9, 2019 inquiring about the proposed construction start and end date (Appendix C, page 18). HNTB

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provided tentative start and end dates to the Emergency Management Director on September 10, 2019 (Appendix C, page 19).

**Indirect and Cumulative Impacts**

Will the proposed action result in substantial indirect or cumulative impacts?

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

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.

This project is not of a type that is likely to cause substantial indirect or cumulative effects. This project is not expected to affect growth, changes in land use, or population density. The project will not add capacity to the existing roadway network or provide additional access to any currently undeveloped area. Therefore, the project is not expected to increase development in the area or result in substantial indirect or cumulative impacts.

**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.*

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

Remarks:

Based on a desktop review, a site visit on September 6, 2019 by HNTB, the aerial map of the project area (Appendix B, page 2), and the RFI report (Appendix E, page 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.

A coordination letters was sent to the INDOT Office of Aviation on September 3, 2019 (Appendix C, pages 1-3). INDOT Office of Aviation responded on September 3, 2019 indicating there are no issues with surrounding airports or airspace (Appendix C, page 20).

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

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

During the development of the project were EJ issues identified?

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

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

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

Remarks:

Under FHWA Order 6640.23A, FHWA and INDOT, 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 0.55 acre of additional permanent right-of-way. Therefore, an EJ Analysis is required.

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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 Posey County. The community that overlaps the project limits is called the affected community (AC). In this project, the AC includes Census Tracts 401 and 403. 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 2014-2018 American Community Survey was obtained from the US Census Bureau Website <https://data.census.gov/cedsci> on May 15, 2020 by HNTB (Appendix I, pages 1-4). The data collected for minority and low-income populations within the AC are summarized in the below table.

Table: Minority and Low-Income Data (US Census Bureau - 2018)			
	COC: Posey County	AC-1: Census Tract 401, Posey County, Indiana	AC-2: Census Tract 403, Posey County, Indiana
Percent Minority	4%	1%	2%
125 percent of COC	13%		
EJ Population of Concern		No	No
Percent Low-Income	4%	1%	2%
125 percent of COC	5%		
EJ Population of Concern		No	No

Census Tract 401 has a percent minority of 1% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain minority populations of EJ concern.

Census Tract 403 has a percent minority of 2% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain minority populations of EJ concern.

Census Tract 401 has a percent low-income of 7% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain low-income populations of EJ concern.

Census Tract 403 has a percent low-income of 4% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain low-income populations of EJ concern.

The census data sheets, map, and calculations can be found in Appendix I, pages 1-4. 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"/>

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.

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**SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES**

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

Red Flag Investigation	<input checked="" type="checkbox"/>
Phase I Environmental Site Assessment (Phase I ESA)	<input type="checkbox"/>
Phase II Environmental Site Assessment (Phase II ESA)	<input type="checkbox"/>
Design/Specifications for Remediation required?	<input type="checkbox"/>

Documentation

	No	Yes/ Date
<b>ES Review of Investigations</b>		October 9, 2019

*Include a summary of findings for each investigation.*

Remarks: Based on a review of GIS data and available public records, an RFI was approved on October 9, 2019 by the INDOT Site Assessment and Management (SAM) Unit (Appendix E, pages 1-13). 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**

**Others (Please discuss in the remarks box below)**

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Remarks:

A USACE Section 404 permit and IDEM Section 401 Water Quality Certification (WQC) will likely be required for this project. Approximately 1.07 acre of soil disturbance will occur as a result of the project. Therefore, an IDEM Rule 5 permit will be required.

Applicable recommendations provided by IDNR-DFW are included in the Environmental Commitments section of this document. This project qualifies for a rural bridge exemption; therefore, a Construction in a Floodway permit will not be required.

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

## 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 Environmental Services Division ESD and the INDOT Vincennes District Environmental Section will be contacted immediately. (INDOT ESD and INDOT Vincennes District)
2. Project plans will be provided to the Posey County Surveyor when finalized. (Posey County Surveyor)
3. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
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 (April 1 through September 30) for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. (USFWS)
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 bright 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. (USFWS)

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10. 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 6, 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 ESD)
11. Structure 066-65-01130 at Rock Bottom Creek has shown evidence of use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA) during the March 15, 2019 inspection. Avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the “Potential Migratory Bird on Structure Unique Special Provision”. (INDOT EWPO)

**FOR FURTHER CONSIDERATION:**

1. 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. The photos provided do not show riprap-lined banks or bridge spill-slopes; therefore, the proposed placement of riprap will likely impair wildlife passage compared to current conditions. A level area of natural ground under the structure is ideal for wildlife. 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. (IDNR-DFW)
2. 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 organisms passage (riprap must not be placed above the existing streambed elevation). Where riprap must be used, IDNR recommends 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-DFW)
3. 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. (IDNR-DFW)
4. 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). (IDNR-DFW)

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5. 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-DFW)
6. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR-DFW)
7. Do not construct temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR-DFW)
8. Use minimum average 6-inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR-DFW)
9. Plant native hardwood trees along the top of the bank and right-of-way to replace the vegetation destroyed during construction. (IDNR-DFW)
10. Post "Do Not Spray" signs along the right-of-way. (IDNR-DFW)
11. Restrict below low-water work in streams to placement of culvert, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement or riprap. (USFWS)
12. Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community. (USFWS)
13. 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-level water elevation to provide aquatic habitat. (USFWS)
14. Avoid all work within the inundated part of the stream channel (in perennial streams and large 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 cofferdam. (USFWS)
15. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing. (USFWS)

## Indiana Department of Transportation

County Posey

Route SR 66

Des. No. 1593065

### 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:

Early coordination was initiated on September 3, 2019 with federal, state, and local resource agencies (Appendix C, pages 1-3).

Agency	Response Received
Indiana Department of Transportation Office of Aviation	September 3, 2019
Posey County Surveyor	September 9, 2019
Posey County Emergency Management	September 9, 2019
USDA – Natural Resources Conservation Service	December 3, 2019
Indiana Department of Natural Resources, Division of Fish and Wildlife	December 27, 2019
Indiana Department of Environmental Management	May 18, 2020
Indiana Geological Survey	May 18, 2020
U.S. Fish and Wildlife Service	May 19, 2020
U.S. Army Corps of Engineers – Louisville District	-
Indiana Department of Natural Resources, Division of Oil and Gas	-
Indiana Department of Transportation, Office of Public Involvement	-
Evansville Metropolitan Planning Organization	-
Metropolitan School District of North Posey County	-
Posey County Sheriff's Department	-
Posey County Highway Department	-
Posey County Commissioners Office	-
Posey County Floodplain Administrator	-

SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

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SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

**Appendix A: INDOT Supporting Documentation**

## Categorical Exclusion Level Thresholds

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

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

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

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

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

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

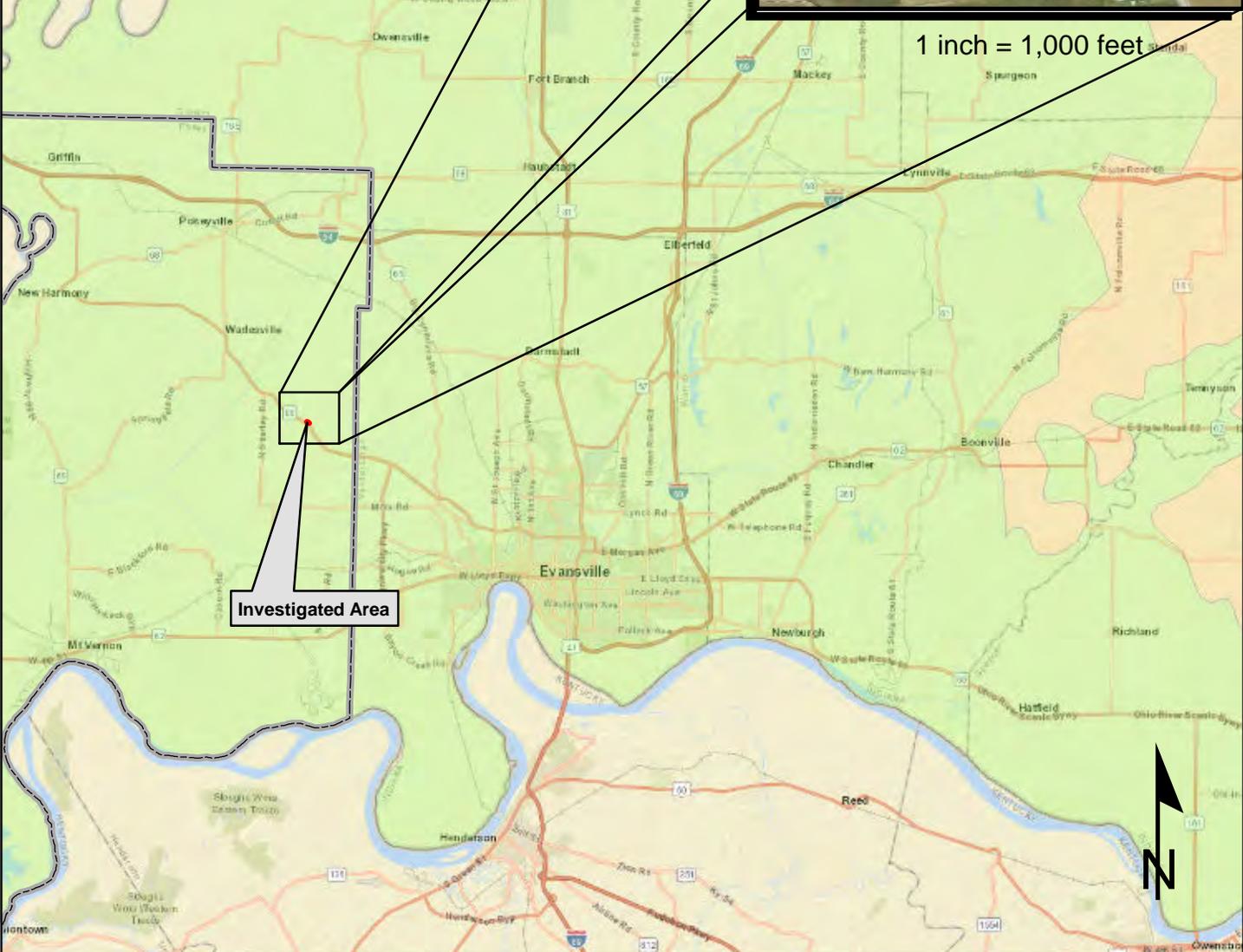
<sup>6</sup>Potential for causing a disproportionately high and adverse impact.

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

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

SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

**Appendix B: Graphics**



- |   |  |
|---|--|
|  Investigated Area |  Northeast and Northcentral     |
|  Posey County      |  Midwest                        |
|   |  Eastern Mountains and Piedmont |

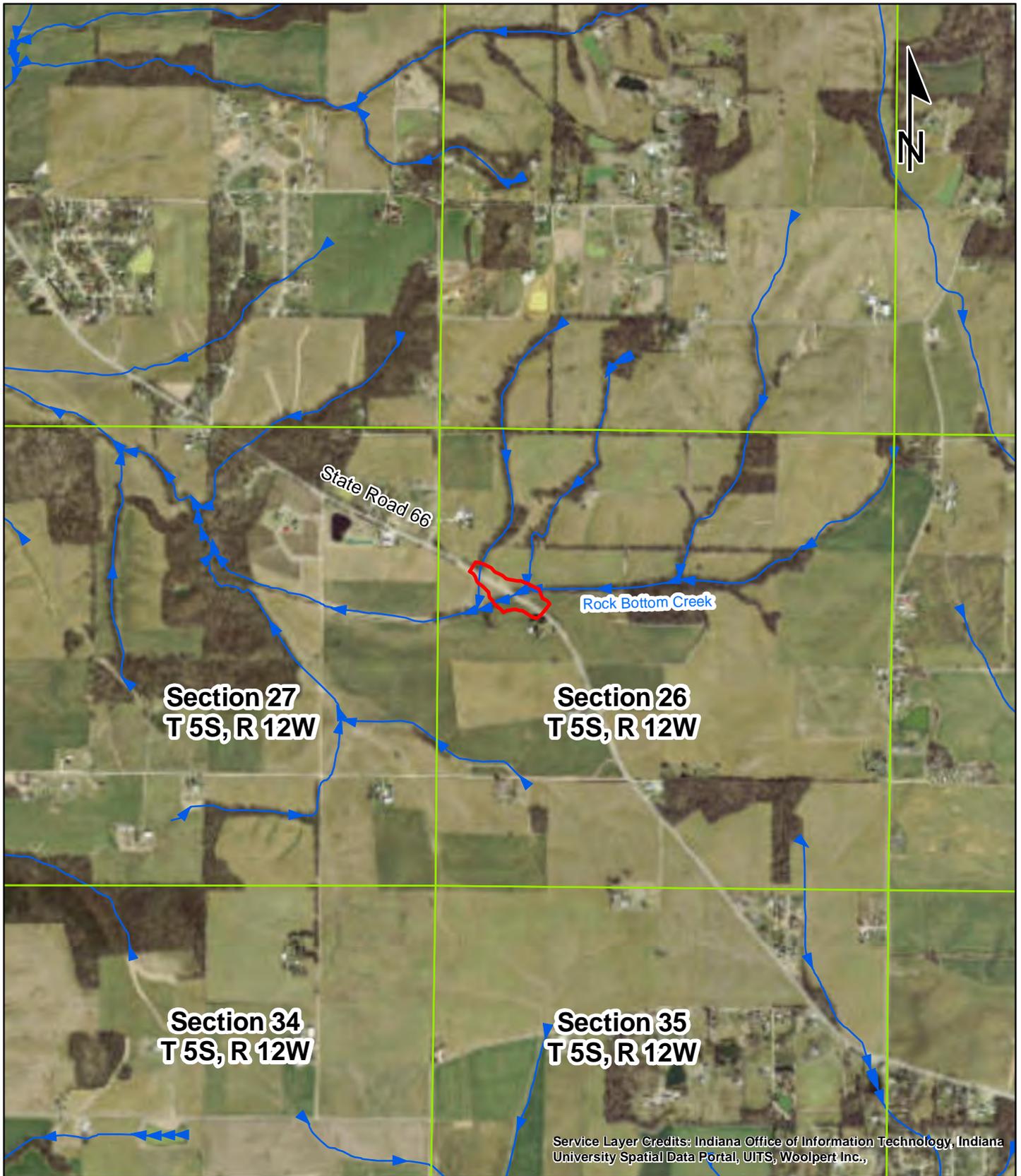


**Project Location Map**  
 SR 66 over Rock Bottom Creek  
 Bridge Replacement  
 Posey County, Indiana

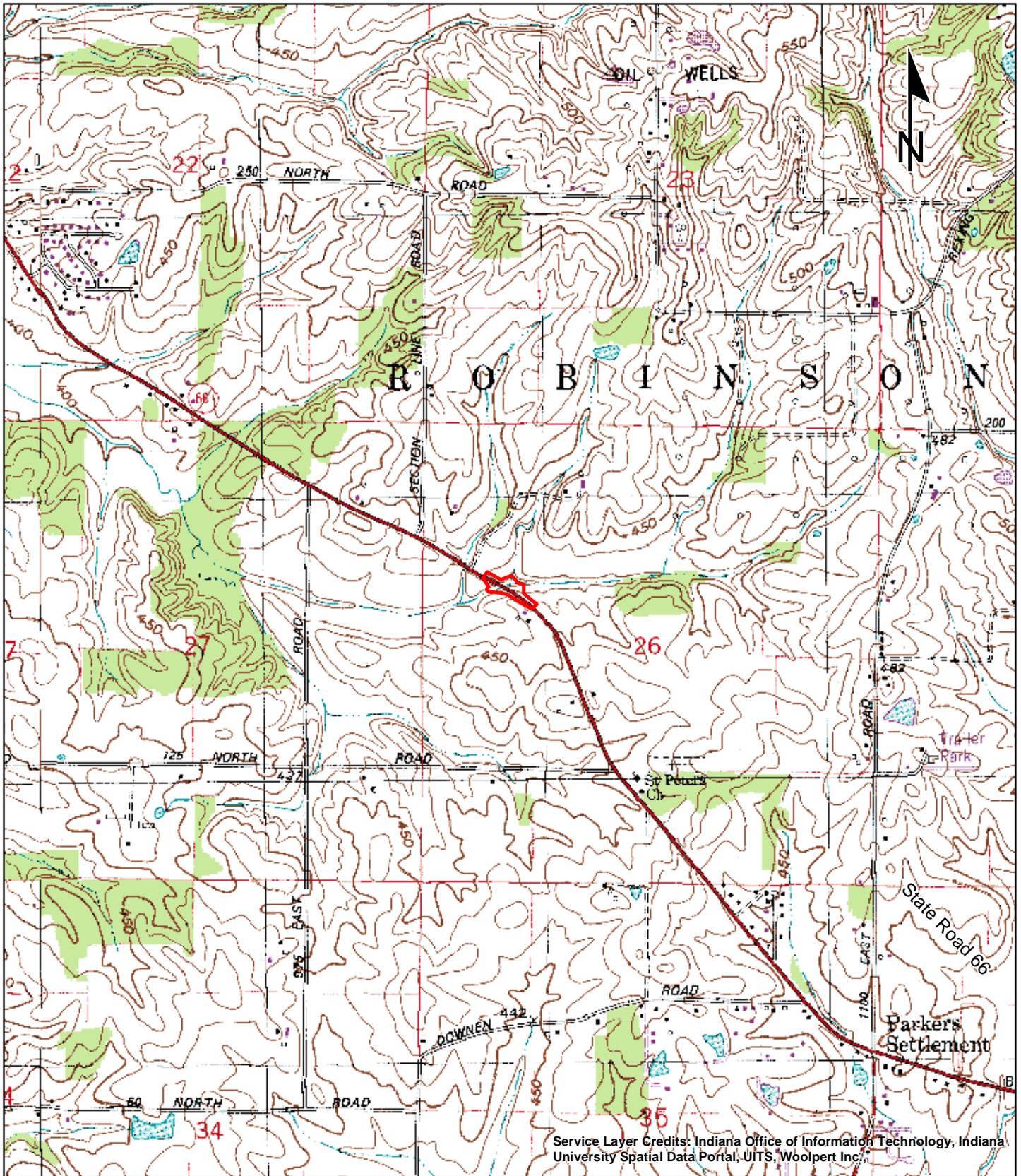
Des. No. 1593065  
 1 inch = 6 miles



Graphics created by HNTB Corporation (2020)

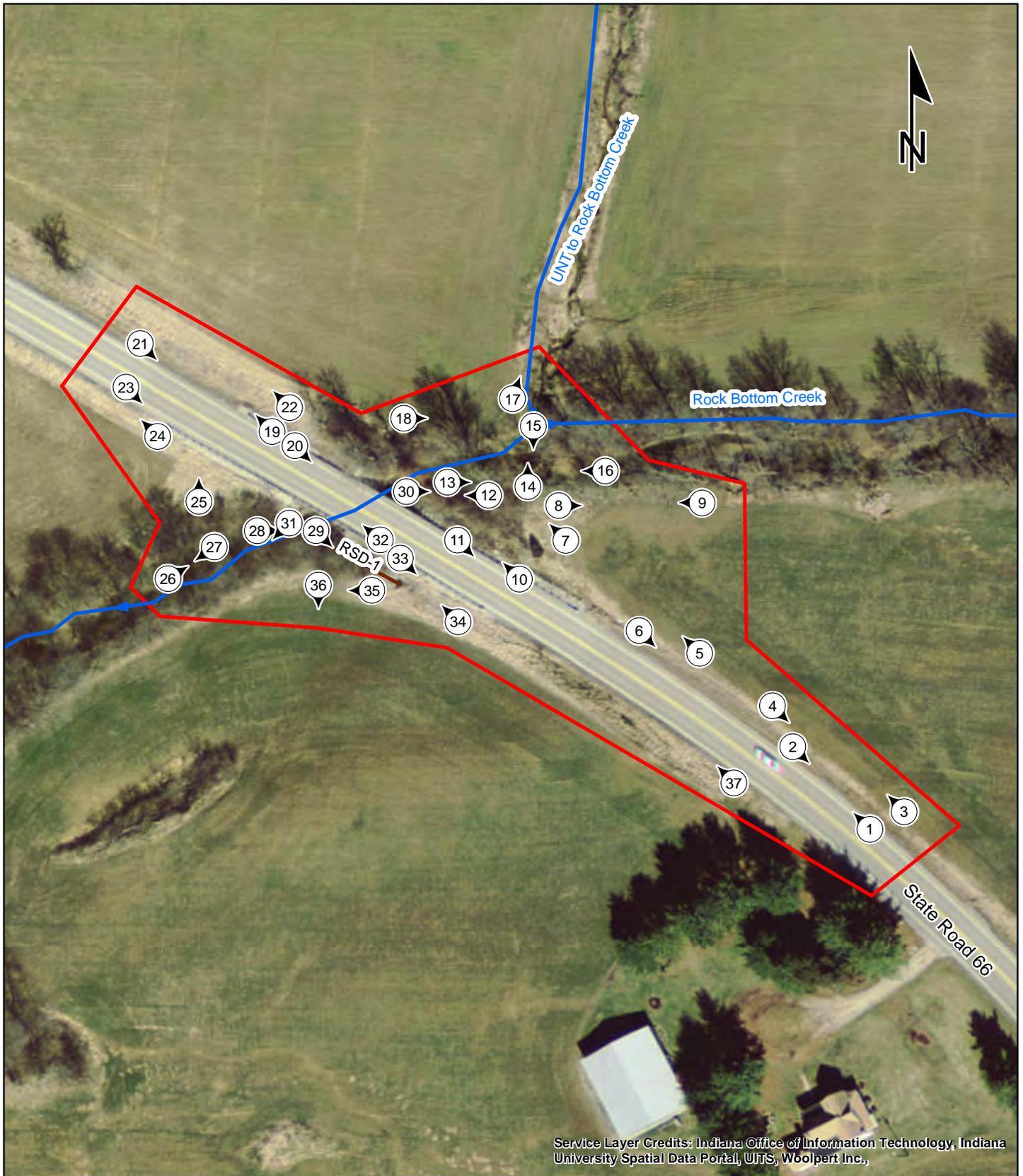


	Project Area		Hydrography Flowlines	<b>Project Aerial</b> SR 66 over Rock Bottom Creek Bridge Replacement Posey County, Indiana	
	PLSS Sections	0      1,000      2,000 Feet		Des. No. 1593065	
				1 inch = 2,000 feet	Graphics created by HNTB Corporation (2020)



 Investigated Area	<b>USGS 7.5 Minute Topographic Map (1:24,000 scale)</b> SR 66 over Rock Bottom Creek Bridge Replacement Posey County, Indiana	
	Des. No. 1593065 1 inch = 2,000 feet	 Graphics created by HNTB Corporation (2020)





Investigated Area	<b>Photo Location Map</b> SR 66 over Rock Bottom Creek Bridge Replacement Posey County, Indiana	
Photo Location		
Roadside Ditch	1 inch = 120 feet	Graphics created by HNTB Corporation (2020)
Hydrography Flowlines	0 60 120 Feet	



1. Looking north west at SR 66 bridge and northeast quadrant of investigated area



2. Looking southeast along SR 66 and roadside drainage.



3. Looking northwest at along SR 66 toward the northeast quadrant



4. Looking southeast along SR 66



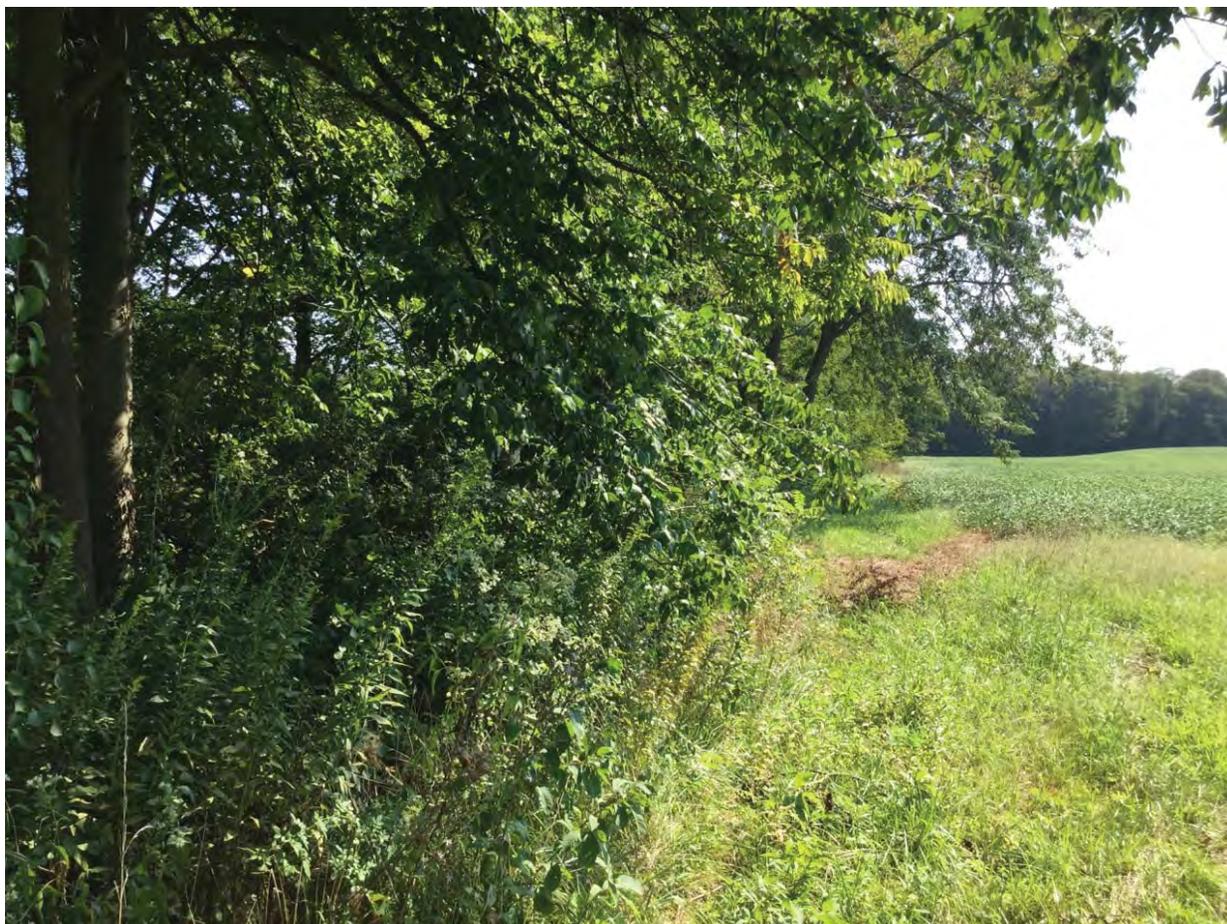
5. Looking northwest along SR 66



6. Looking southeast along SR 66



7. Looking northwest towards the Rock Bottom Creek riparian corridor



8. Looking east alongside the Rock Bottom Creek riparian corridor in the northeast quadrant



9. Looking west toward SR 66 bridge



10. Looking northwest from SR 66 bridge



11. Looking southeast from SR 66 bridge



12. Looking west at SR 66 bridge



13. Looking east of Rock Bottom Creek



14. Looking north up UNT to Rock Bottom Creek



15. Looking south down UNT to Rock Bottom Creek



16. Looking west down Rock Bottom Creek



17. Looking north up UNT to Rock Bottom Creek



18. Looking east along Rock Bottom Creek



19. Looking northwest along SR 66



20. Looking southeast over SR 66 bridge



21. Looking southeast at SR 66 bridge



22. Looking northwest along SR 66



23. Looking southeast at SR 66 bridge



24. Looking northwest along SR 66



25. Looking north at SR 66 bridge guard rail



26. Looking northeast up Rock Bottom Creek



27. Looking southwest down Rock Bottom Creek



28. Looking east at SR 66 bridge



29. Looking southeast at riprap side ditch



30. Looking east upstream Rock Bottom Creek



31. Looking southwest downstream Rock Bottom Creek



32. Looking northwest from SR 66 bridge



33. Looking southeast from SR 66 bridge



34. Looking northwest at riprap side ditch



35. Looking west along Rock Bottom Creek



36. Looking southwest along Rock Bottom Creek



37. Looking northwest at SR 66 Bridge

PROJECT	DESIGNATION
1593065	1593065
CONTRACT	BRIDGE FILE
B-39421	066-65-10154

# INDIANA DEPARTMENT OF TRANSPORTATION



STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
066-65-10154	PRECAST REINFORCED CONCRETE THREE-SIDED FLAT TOP STRUCTURE	1 SPAN: 24'-0" SKEW: 40°00'00" RT.	ROCK BOTTOM CREEK	713+50 LINE "A"

KIN PROJECT INFORMATION		
DESIGNATION	DESCRIPTION	
1593065	SR 66 OVER ROCK BOTTOM CREEK	LEAD DES
2000891	SR 66 HMA OVERLAY PROJECT	

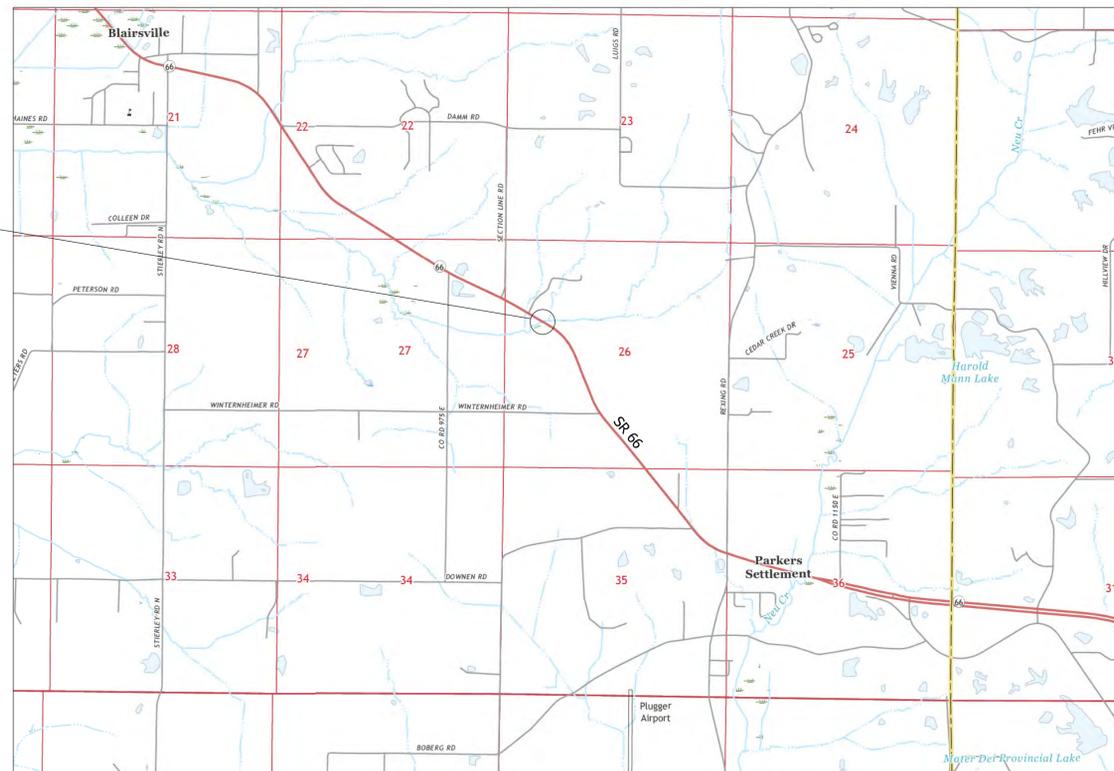
## BRIDGE PLANS

### FOR SPANS OVER 20 FEET

ROUTE: SR 66 AT: RP 13+63

### PROJECT NO. 1593065 (P.E., R/W, CONST.)

BRIDGE REPLACEMENT ON SR 66 OVER ROCK BOTTOM CREEK  
 LOCATED 4.85 MILES EAST OF SR 165,  
 IN SECTION 26, T-5-S, R-12-W, ROBINSON TOWNSHIP, POSEY COUNTY, INDIANA

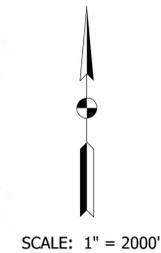


BRIDGE FILE NO. 066-65-10154  
 SR 66 OVER ROCK BOTTOM CREEK  
 STA. 713+50.00 LINE "A"  
 BEGIN PROJECT STA. 710+95.00  
 END PROJECT STA. 716+05.00

**NOTE TO REVIEWER**

PLEASE SEE  
 CORRESPONDENCE FILE  
 FOR DOCUMENTATION OF  
 DESIGN DECISIONS

**STAGE 1 PLANS**  
**APRIL 24, 2020**



TRAFFIC DATA		
A.A.D.T. (2023)		7,273 V.P.D.
A.A.D.T. (2043)		7,539 V.P.D.
D.H.V. (2043)		765 V.P.H.
DIRECTIONAL DISTRIBUTION		49.97 %
TRUCKS		4.77 % A.A.D.T. 3.56 % D.H.V.

DESIGN DATA		
DESIGN SPEED		55 M.P.H.
PROJECT DESIGN CRITERIA		3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION		MAJOR COLLECTOR
RURAL/URBAN		RURAL
TERRAIN		LEVEL
ACCESS CONTROL		NONE



LATITUDE: 38°03'41" LONGITUDE: -87°43'53"

BRIDGE LENGTH:	0.006	MI.
ROADWAY LENGTH:	0.091	MI.
TOTAL LENGTH:	0.097	MI.
MAX. GRADE:	0.13	%

HUC: 051201130704

LOCATION MAP  
(POSEY COUNTY)

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

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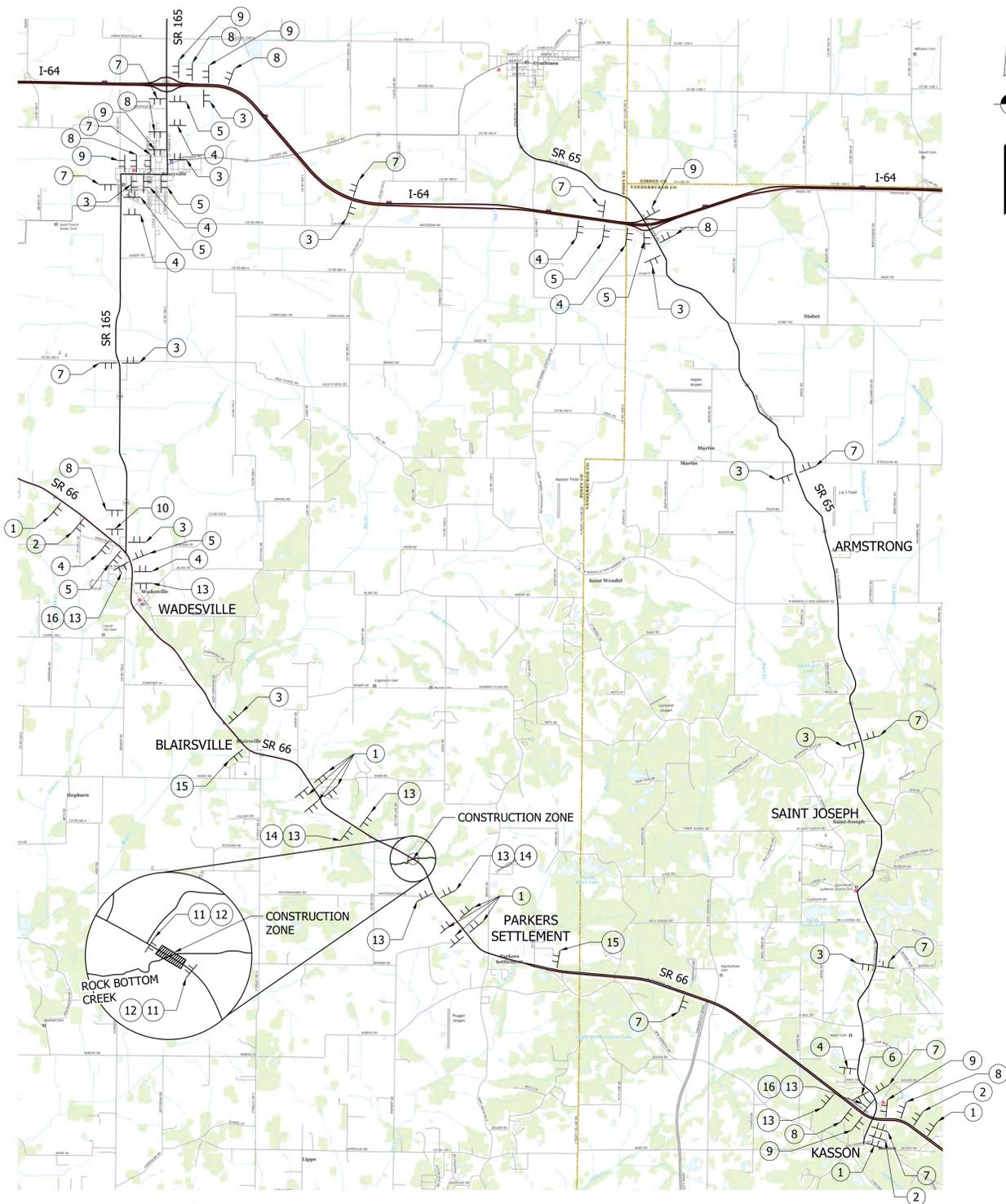
HNTB Indiana, Inc.  
 The HNTB Companies  
 Infrastructure Solutions  
 111 Monument Circle  
 Suite 1200  
 Indianapolis, IN 46204

**DRAFT**  
 NOT FOR CONSTRUCTION

PLANS PREPARED BY: HNTB Indiana, Inc. (317) 636-4682  
 PHONE NUMBER  
 CERTIFIED BY: \_\_\_\_\_ DATE  
 APPROVED FOR LETTING: \_\_\_\_\_ DATE  
 INDIANA DEPARTMENT OF TRANSPORTATION

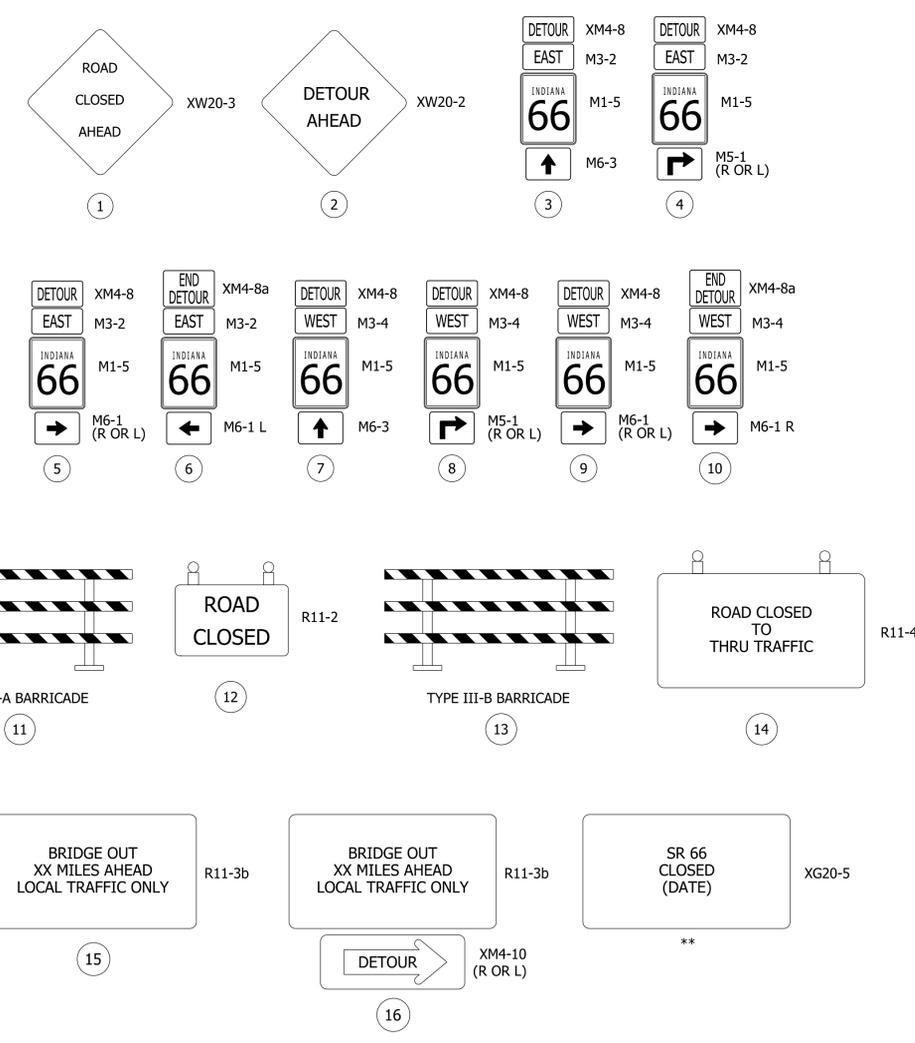
BRIDGE FILE	
066-65-10154	DESIGNATION
1593065	
SHEETS	
SURVEY BOOK	SHEETS
ELECTRONIC	1 of 13
PROJECT	
CONTRACT	PROJECT
B-39421	1593065





MOT SUMMARY		
ITEM	UNITS	TOTALS
DETOUR ROUTE MARKER ASSEMBLIES	EA	54
CONSTRUCTION SIGN, A	EA	22
CONSTRUCTION SIGN, B	EA	4
ROAD CLOSURE SIGN ASSEMBLY	EA	4
BARRICADE, III-A	LFT	72
BARRICADE, III-B	LFT	96
MAINTAINING TRAFFIC	LS	1

\*\* INCLUDES 2 XG20-5 ROUTE CLOSURE NOTICE SIGNS TO BE FIELD LOCATED BY ENGINEER.



**NOTE TO REVIEWER**

PROPOSED DETOUR ROUTE WILL BE COORDINATED WITH SR 65 OVER I-64 PROJECT (DES 1800142). DETOUR ROUTE WILL BE DISCUSSED AT PFC.

**LEGEND:**

CONSTRUCTION SIGN

**NOTES:**

1. FOR ADDITIONAL MAINTENANCE OF TRAFFIC DETAILS, SEE STD. DWG. E 801-TCDDT-01 THROUGH -04.

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**DRAFT**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: _____ CDC _____	DRAWN: _____ CDC _____	
CHECKED: _____ MEW _____	CHECKED: _____ MEW _____	

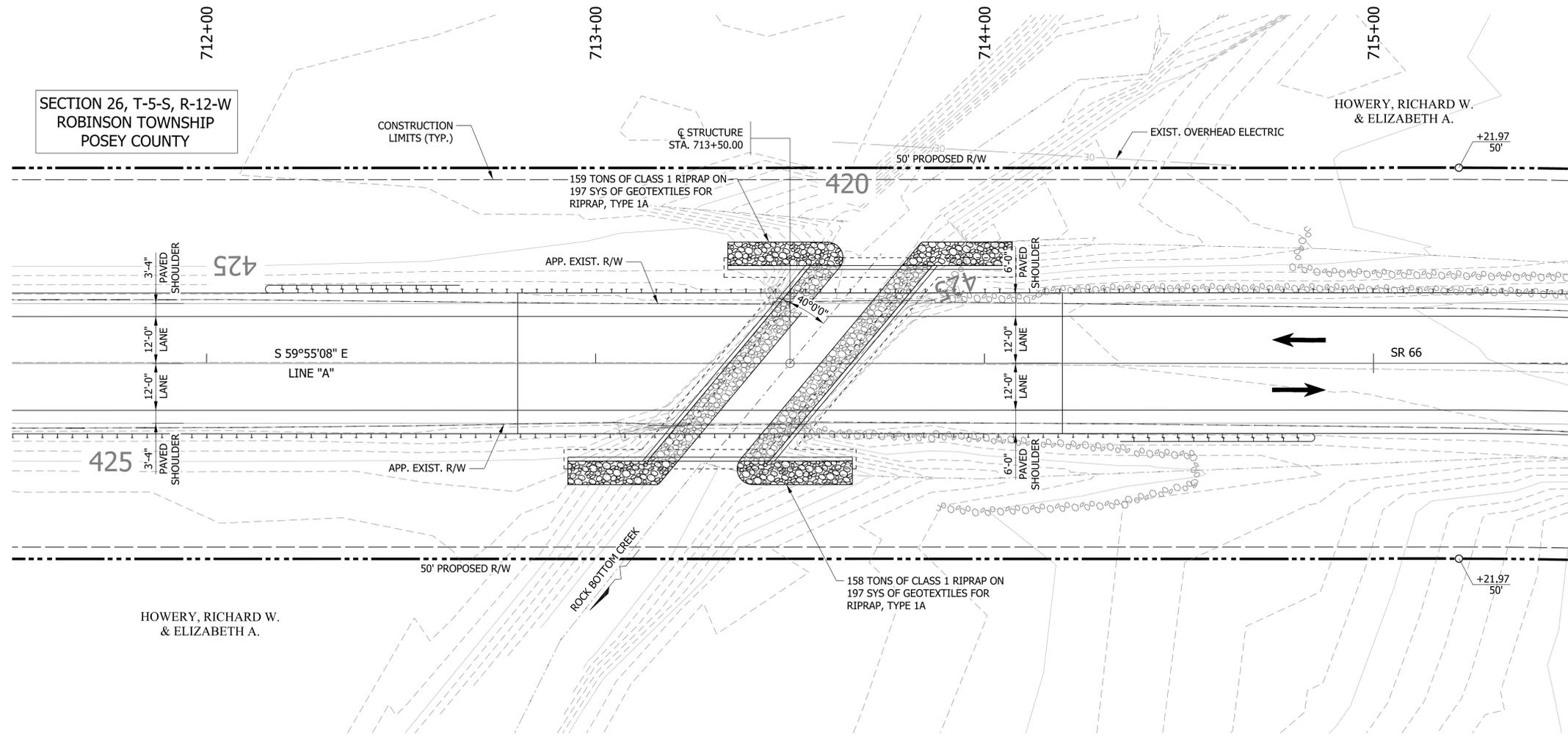
INDIANA  
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC

SCALE	BRIDGE FILE
NTS	066-65-10154
VERTICAL SCALE	DESIGNATION
NTS	1593065
SURVEY BOOK	SHEETS
ELECTRONIC	4 of 13
CONTRACT	PROJECT
B-39421	1593065



SECTION 26, T-5-S, R-12-W  
ROBINSON TOWNSHIP  
POSEY COUNTY



**EXISTING STRUCTURE**  
THE EXISTING STRUCTURE WAS BUILT IN 1932. THE STRUCTURE IS A SINGLE SPAN REINFORCED CONCRETE T-BEAM BRIDGE WITH A CLEAR ROADWAY WIDTH OF 31'-2" AND A CLEAR SPAN OF 32'-0". THE EXISTING STRUCTURE IS TO BE REMOVED.

**HYDRAULIC DATA**

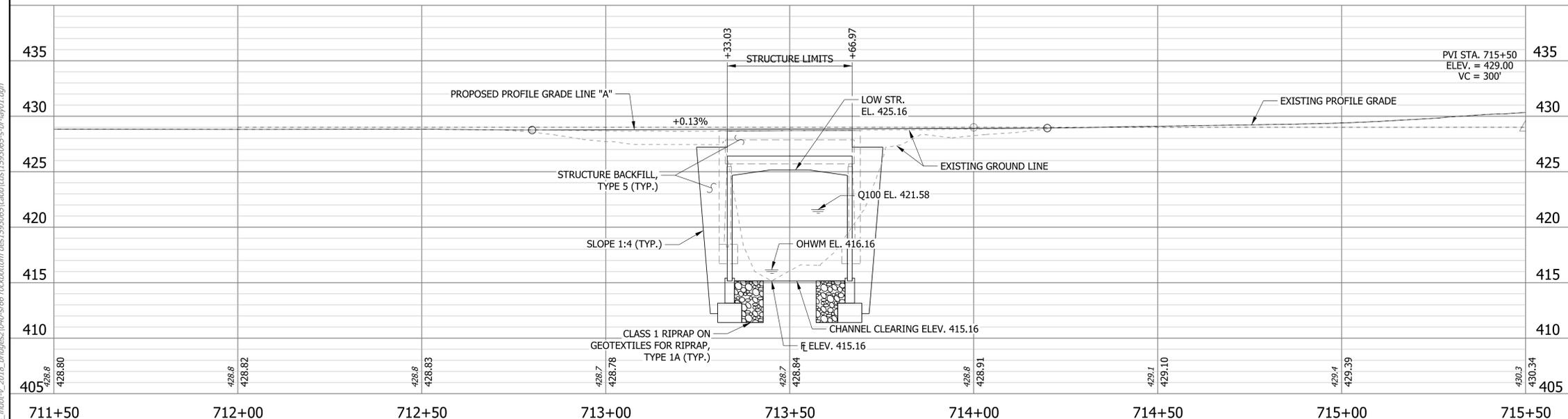
WATERWAY OPENING REQUIRED	108.69	SFT
WATERWAY OPENING PROVIDED	153.83	SFT
DRAINAGE AREA	0.96	SQ MI
DESIGN DISCHARGE, Q100	740	CFS
VELOCITY	7.53	FT/S
Q100 ELEV.	421.58	FT
BACKWATER AT Q100	0.54	FT
EXISTING WATERWAY OPENING	105.32	SFT
EXISTING BACKWATER	0.66	FT
MIN. LOW STRUCTURE ELEV. REQ.	425.16	FT
EXISTING LOW STRUCTURE ELEV.	426.66	FT

**NOTE TO REVIEWER**  
EARTHWORK QUANTITIES WILL BE PROVIDED IN A FUTURE SUBMITTAL.

**NOTE TO REVIEWER**  
LOW STRUCTURE ELEVATION DIFFERS FROM THE ELEVATION SHOWN ON THE APPROVED HYDRAULICS MEMO IN ORDER TO SAVE COST BY MAINTAINING EXISTING PROFILE GRADE. THIS WAS DISCUSSED WITH INDOT HYDRAULICS AND FREEBOARD REQUIREMENTS ARE STILL MET. SEE CORRESPONDENCE FILE.

**NOTE TO REVIEWER**  
NEW CONSTRUCTION WILL MATCH THE EXISTING PROFILE GRADE FOR ALL MILL AND RESURFACE WORK. FULL DEPTH PAVEMENT WILL BE CONSTRUCTED AT A 0.13% GRADE IN ORDER TO TIE INTO EXISTING PROFILE GRADE ELEVATIONS BASED ON SURVEY DATA.

PRECAST REINFORCED CONCRETE  
THREE-SIDED FLAT TOP STRUCTURE  
24'-0" SPAN X 12'-0" RISE  
SKEW: 40°00'00" RT.  
36'-0" CLEAR ROADWAY  
SR 66 OVER ROCK BOTTOM CREEK  
POSEY COUNTY



**DRAFT**  
NOT FOR CONSTRUCTION

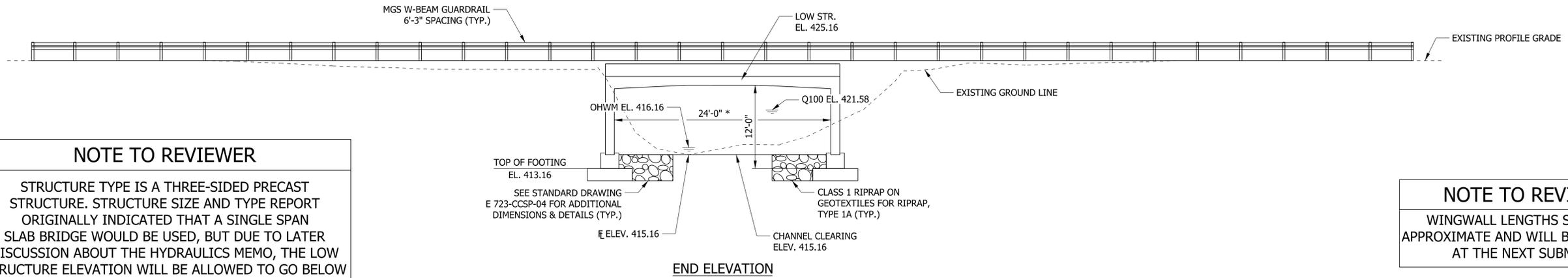
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: CDC	DRAWN: CDC	
CHECKED: MEW	CHECKED: MEW	

INDIANA  
DEPARTMENT OF TRANSPORTATION  
  
LAYOUT

SCALE	BRIDGE FILE
1/8" = 1'-0"	066-65-10154
VERTICAL SCALE	DESIGNATION
3/8" = 1'-0"	1593065
SURVEY BOOK	SHEETS
ELECTRONIC	6 of 13
CONTRACT	PROJECT
B-39421	1593065

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 file: \\indot\0\289\projects\72908\_inor-v\_2018\_bridges\2\10-sr66 rockbottom des\1593065-s-br-ly01.dgn

STRUCTURE BUILT TO A +0.13% GRADE

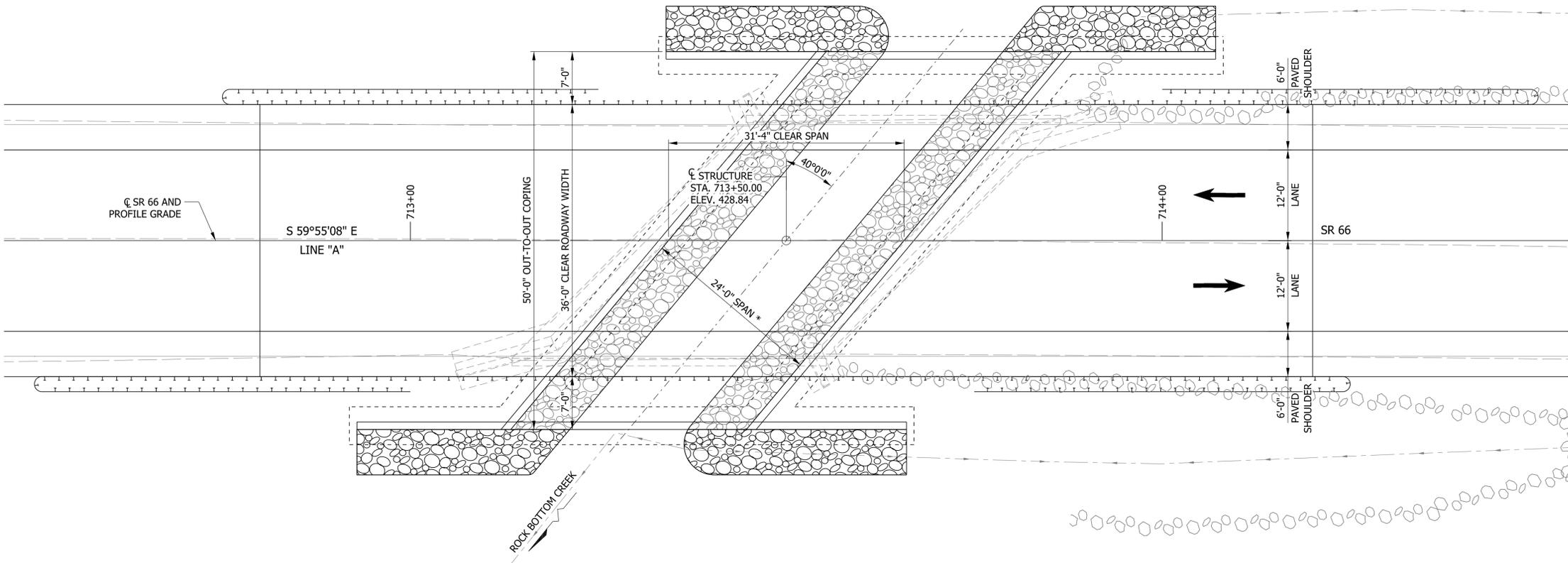
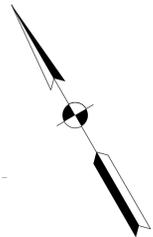


**NOTE TO REVIEWER**

STRUCTURE TYPE IS A THREE-SIDED PRECAST STRUCTURE. STRUCTURE SIZE AND TYPE REPORT ORIGINALLY INDICATED THAT A SINGLE SPAN SLAB BRIDGE WOULD BE USED, BUT DUE TO LATER DISCUSSION ABOUT THE HYDRAULICS MEMO, THE LOW STRUCTURE ELEVATION WILL BE ALLOWED TO GO BELOW THE ELEVATION ON THE HYDRAULICS MEMO, THUS ALLOWING THE EXISTING PROFILE GRADE TO REMAIN AND MAKING A THREE-SIDED PRECAST STRUCTURE MORE COST EFFECTIVE. SEE CORRESPONDENCE FILE.

**NOTE TO REVIEWER**

WINGWALL LENGTHS SHOWN ARE APPROXIMATE AND WILL BE DETERMINED AT THE NEXT SUBMITTAL.



**NOTE:**

\* DIMENSION MEASURED PERPENDICULAR TO PROPOSED STRUCTURE

PRECAST REINFORCED CONCRETE  
THREE-SIDED FLAT TOP STRUCTURE  
24'-0" SPAN X 12'-0" RISE  
SKEW: 40°00'00" RT.  
36'-0" CLEAR ROADWAY  
SR 66 OVER ROCK BOTTOM CREEK  
POSEY COUNTY

PLAN

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**DRAFT**  
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: _____ CDC _____	DRAWN: _____ CDC _____	
CHECKED: _____ MEW _____	CHECKED: _____ MEW _____	

INDIANA  
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

SCALE	BRIDGE FILE
1/8" = 1'-0"	066-65-10154
VERTICAL SCALE	DESIGNATION
1/8" = 1'-0"	1593065
SURVEY BOOK	SHEETS
ELECTRONIC	7 of 13
CONTRACT	PROJECT
B-39421	1593065

**NOTE TO REVIEWER**  
 DISTANCE BETWEEN FACE OF GUARDRAIL  
 AND HEADWALL OF STRUCTURE WAS  
 CHOSEN TO PROVIDE FULL WORKING WIDTH  
 FOR GUARDRAIL PARALLEL TO WINGWALLS.

**GENERAL NOTES**

PLANS FOR THE EXISTING BRIDGE ARE ON FILE IN THE RECORDS UNIT OF THE INDIANA DEPARTMENT OF TRANSPORTATION AS BRIDGE FILE 066-65-01130.

A THREE-SIDED ARCH-TOPPED STRUCTURE MAY BE USED AT THIS LOCATION IN PLACE OF THE THREE-SIDED STRUCTURE SHOWN ON THE PLANS. THE THREE-SIDED ARCH-TOPPED STRUCTURE MUST MEET THE HYDRAULIC REQUIREMENTS, SEE APPROVED HYDRAULICS MEMO.

FOOTING AND PEDESTAL DIMENSIONS SHALL BE DETERMINED BY THE PRECAST UNIT MANUFACTURER.

ALL DIMENSIONS AND ELEVATIONS ARE IN FEET (FT.), EXCEPT AS NOTED.

MAXIMUM NOMINAL SOIL BEARING RESISTANCE = TBD

**DESIGN DATA**

**LIVE LOAD**  
 STRUCTURE SHALL BE DESIGNED FOR HL-93 LOADING, IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, 2017 AND ITS SUBSEQUENT INTERIMS.

**DEAD LOAD**  
 DESIGNED FOR ACTUAL WEIGHT PLUS 35 PSF FOR FUTURE WEARING SURFACE.

**LEGEND**

(K1) FULL DEPTH PAVEMENT

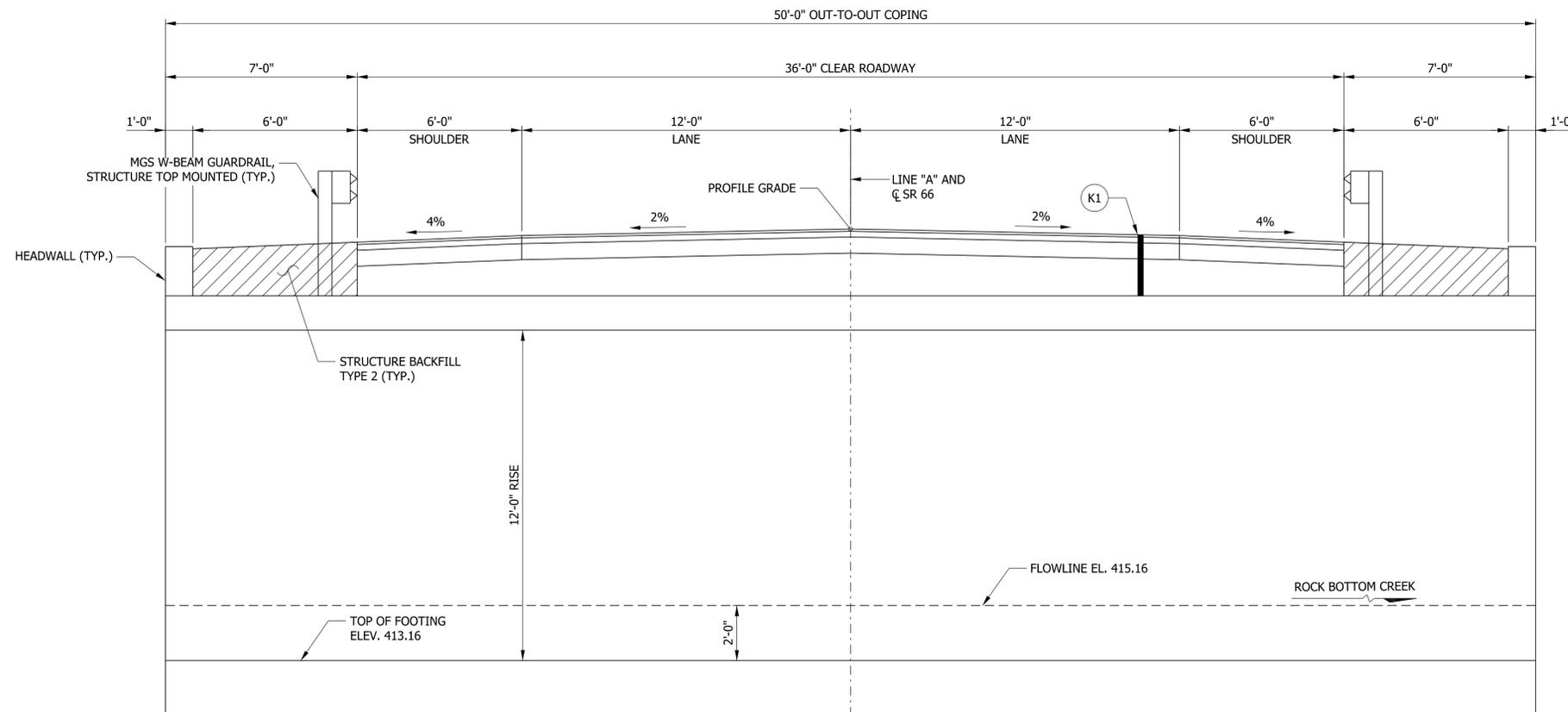
**SEISMIC DESIGN DATA**

SEISMIC PERFORMANCE ZONE = TBD  
 ACCELERATION COEFFICIENT = TBD  
 SEISMIC SOIL PROFILE TYPE = TBD

**DESIGN STRENGTHS**

THE MINIMUM DESIGN CONCRETE COMPRESSIVE STRENGTH FOR STRUCTURE SECTIONS SHALL BE 5000 PSI. FOR WINGWALLS, HEADWALLS, AND SPANDREL WALLS, IT SHALL BE 4000 PSI. THE YIELD STRENGTH FOR REINFORCING BARS SHALL BE 60000 PSI.

REINFORCING BARS  $f_y = 60,000$  PSI



TYPICAL SECTION THRU STRUCTURE

**NOTE TO REVIEWER**  
 PAVEMENT SECTIONS FOR FULL DEPTH AND  
 RESURFACING WILL BE UPDATED FOLLOWING  
 RECEIPT OF FINAL PAVEMENT DESIGN.

PRECAST REINFORCED CONCRETE  
 THREE-SIDED FLAT TOP STRUCTURE  
 24'-0" SPAN X 12'-0" RISE  
 SKEW: 40°00'00" RT.  
 36'-0" CLEAR ROADWAY  
 SR 66 OVER ROCK BOTTOM CREEK  
 POSEY COUNTY

ccenter  
 4/24/2020 1:33:44 pm  
 model: General plan 02  
 file: \\indw001\289\projects\22908\_innot\_v\_2018\_bridges2\140-sr66\_nocobottom\_dcs1593065\cadd\cadd\1593065-s-br-plan01.dgn

**DRAFT**  
 NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: _____ CDC _____	DRAWN: _____ CDC _____	
CHECKED: _____ MEW _____	CHECKED: _____ MEW _____	

INDIANA  
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

SCALE	BRIDGE FILE
3/8" = 1'-0"	066-65-10154
VERTICAL SCALE	DESIGNATION
3/8" = 1'-0"	1593065
SURVEY BOOK	SHEETS
ELECTRONIC	8 of 13
CONTRACT	PROJECT
B-39421	1593065

SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

**Appendix C: Early Coordination**

September 3, 2019

**Sample Early Coordination Letter**

Ryan Falls  
Design and Environmental Manager, Vincennes District  
Indiana Department of Transportation  
3650 S US Highway 41  
Vincennes, IN 47591

Re: Early Coordination Letter  
Des. No. 1593065  
SR 66 over Rock Bottom Creek  
Bridge Replacement  
Posey County, Indiana

Dear Mr. Falls:

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving the bridge (Existing Structure No. 066-65-01130) carrying State Road (SR) 66 over Rock Bottom Creek. The project is approximately 4.85 miles east of SR 165 in Posey County, Indiana. This letter is part of the early coordination phase of the environmental review process. We request comments from you within your area of expertise regarding any potential environmental or community effects associated with this proposed project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of the project's environmental effects.

**Project Location:** The project area is in a rural area of Posey County, Indiana. More specifically, the project is located in Section 26, Township 5 South, Range 12 West in Robinson Township.

**Existing Conditions:** The existing structure is a single-span, reinforced concrete girder bridge built in 1932 and reconstructed in 1964. This section of SR 66 is classified as a rural major collector per SPMS. Water flows under the existing structure from the east side of SR 66. There is heavy spalling at all four bridge corners at wingwall/abutment interface. Existing beams are cracking, spalling, and strands are exposed.

**Purpose and Need:** The preliminary need for this project is demonstrated by the poor condition rating as documented in the *INDOT Bridge Inspection Report* dated March 8, 2017. The bridge is reaching the end of its life and could potentially become a hazard to the traveling public if left in service. The purpose of this project is to provide an adequate hydraulic opening for Rock Bottom Creek, while maintaining a safe vehicular crossing of SR 66 over Rock Bottom Creek.

**Proposed Project:** Proposed activities include a 32-foot span bridge replacement. Riprap will be placed around the piers as well as the north and south bank. Approximately 0.26 acre of tree clearing is anticipated for this project. Utility coordination will be performed to verify location of surrounding utilities and determine any impacts. An overhead and buried communication line run parallel to the north side of the bridge.

**Right-of-Way (ROW):** The project is expected to require acquisition of greater than 0.5 acre of additional right-of-way. The exact amount has not yet been determined.

**Maintenance of Traffic (MOT):** During construction, SR 66 will be closed, and traffic will be detoured. The detour will likely utilize SR 165, SR 68, I-64 EB/WB, and US 41.

**Surrounding Resources:** Land use near the project is primarily residential/agricultural. Rock Bottom Creek is located within the project area. A wetland determination will be performed, and a Waters of the U.S. Report will summarize the findings. All applicable permits will be obtained before construction begins.

This project qualifies for the application of the United States Fish and Wildlife Services (USFWS) range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat. The USFWS Information, Planning, and Consultation System (IPaC) will be utilized to determine the project's potential to affect the Indiana bat and northern long-eared bat. 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 *INDOT Inspection Report* for Structure No. 066-65-01130 dated March 8, 2017, indicated that there was no evidence of bats using the bridge. Birds/nests were observed on the bridge during the March 8, 2017 bridge inspection.

**Comments Request:** You are asked to review this information and provide any comments you may have relative to the anticipated effects of the project on areas which you have jurisdiction or special expertise. Please send your comments to Landon Little, of HNTB Corporation, at [llittle@hntb.com](mailto:llittle@hntb.com) or 317-917-5328. Should we not receive your response **within thirty (30) calendar days** from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should your 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 Landon Little, of HNTB Corporation, at [llittle@hntb.com](mailto:llittle@hntb.com) or 317-917-5328; or Matt Bullock, INDOT Project Manager, at [mbullock1@indot.in.gov](mailto:mbullock1@indot.in.gov) or 812-830-9683. Thank you in advance for your input.

Sincerely,

HNTB CORPORATION



Landon Little

Scientist

Attachments have been removed to avoid duplication. Graphics and photos can be found in Appendix B of this document.

Attachments: Figure 1: Project Location Map  
Figure 2: Project Aerial  
Figure 3: USGS 7.5 Minute Topographic Quad Map  
Project Location Photographs

Cc: Adam Bigge, Posey County Surveyor  
Greg Oeth, Posey County Sheriff  
Posey County Highway Department  
Carl Schmitz, Posey County Commissioner President  
Mindy Bourne, Posey County Area Plan Commission Floodplain Administrator  
Todd Camp, Metropolitan School District of North Posey County Superintendent  
Posey County Emergency Management  
Seyed Shokouhzadeh, Evansville Metropolitan Planning Organization Executive Director  
Julian Courtade, INDOT, Chief Airport Inspector  
Rickie Clark, INDOT Manager of Public Hearings  
Brian Royer, Indiana Department of Natural Resources Division of Oil and Gas  
Indiana Geological Survey  
Indiana Department of Environmental Management  
Christie Stanifer, Indiana Department of Natural Resources  
Rick Neilson, Natural Resources Conservation Service  
Greg McKay, US Army Corps of Engineers Louisville District  
Antonio Johnson, Federal Highway Administration  
Robin McWilliams-Munson, US Fish and Wildlife Service  
Ryan Falls, INDOT Environmental Manger, Vincennes District  
Matt Bullock, INDOT Project Manager  
Angela Pearl, HNTB Corporation

## Landon Little

---

**From:** McWilliams, Robin <robin\_mcwilliams@fws.gov>  
**Sent:** Tuesday, May 19, 2020 10:53 AM  
**To:** Landon Little  
**Subject:** Re: [EXTERNAL] FW: Early Coordination Letter Des. No. 1593065 - Bridge Project, SR 66 over Rock Bottom, Posey County

Dear Landon,

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

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

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

Please note that bridge assessments for bats should be completed no more than two years prior to construction. If the assessment is older than that, you will need to re-assess the bridge before moving forward.

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

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

Sincerely,  
Robin McWilliams Munson

### **Standard Recommendations:**

1. Do not clear trees or understory vegetation outside the construction zone boundaries. **(This restriction is not related to the "tree clearing" restriction for potential Indiana Bat habitat.)**
2. Restrict below low-water work in streams to placement of culverts, piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community.
3. Restrict channel work and vegetation clearing to the minimum necessary for installation of the stream crossing structure.
4. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.

5. Implement temporary erosion and sediment control methods within areas of disturbed soil. All disturbed soil areas upon project completion will be vegetated following INDOT's standard specifications.
6. Avoid all work within the inundated part of the stream channel (in perennial streams and larger intermittent streams) during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High Water Mark during this time unless the machinery is within the caissons or on the cofferdams.
7. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels and diversion fencing

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

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

---

**From:** Landon Little <llittle@HNTB.com>  
**Sent:** Friday, May 15, 2020 10:48 AM  
**To:** McWilliams, Robin <robin\_mcwilliams@fws.gov>  
**Cc:** Daniel Logsdon <dlogsdon@HNTB.com>  
**Subject:** [EXTERNAL] FW: Early Coordination Letter Des. No. 1593065 - Bridge Project, SR 66 over Rock Bottom, Posey County

Good Morning Robin,

I am just following up regarding this Early Coordination Letter.

Let me know if you have any comments or concerns

Thank you,  
**Landon Little**  
Scientist  
Environmental Planning  
Tel (317)917-5328 Email [llittle@hntb.com](mailto:llittle@hntb.com)

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Thank you,

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**From:** Landon Little  
**Sent:** Tuesday, September 3, 2019 3:14 PM

December 3, 2019

Landon Little  
HNTB Corporation  
111 Monument Circle, Suite 1200  
Indianapolis, Indiana 46204

Dear Mr. Little:

The proposed project to replace the bridge that carries State Road 66 over Rock Bottom Creek in Posey County, Indiana, (Des No 1593065), as referred to in your letter received September 3, 2019, will not cause a conversion of primes farmland.

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

Sincerely,

**JERRY RAYNOR** Digitally signed by JERRY RAYNOR  
Date: 2019.12.12 08:34:35 -05'00'

JERRY RAYNOR  
State Conservationist



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

DNR #: ER-22035

Request Received: November 26, 2019

Requestor: HNTB Corporation  
Landon Little  
111 Monument Circle, Suite 1200  
Indianapolis, IN 46204-5178

Project: SR 66 bridge (#066-65-01130) replacement over UNT Big Creek (Rock Bottom Creek), about 4.85 miles east of SR 165; Des #1593065

County/Site info: Posey

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

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

Regulatory Assessment: This proposal may require the formal approval of our agency pursuant to the Flood Control Act (IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of a stream or other flowing waterbody which has a drainage area greater than one square mile, unless it qualifies for a bridge exemption (see enclosure). Please include a copy of this letter with the permit application, if required.

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, especially high-speed roads, is a priority concern both for the ecological health of wildlife populations in terms of movement and dispersal, and to avoid unnecessary wildlife mortality on roads. Maintaining or improving wildlife passage ability under roads means less wildlife crossing traffic lanes and consequently reduced driving hazards.

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. The photos provided do not show riprap-lined banks or bridge spill-slopes; therefore, the proposed placement of riprap will likely impair wildlife passage 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**  
**Division of Fish and Wildlife**  
**Early Coordination/Environmental Assessment**

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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,

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

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cofferdams, diversions, or pumparounds.

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:** December 27, 2019

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.*

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Indiana Department of Transportation  
Matthew Bullock  
3650 S US Highway 41  
Vincennes, IN 47591  
Date

HNTB Corporation  
Dan Logsdon  
111 Monument Circle, Suite 1200  
Indianapolis, IN 46204

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving the bridge (Existing Structure No. 066-65-01130) carrying State Road (SR) 66 over Rock Bottom Creek. The project is approximately 4.85 miles east of SR 165 in Posey County, Indiana. The project area is in a rural area of Posey County, Indiana. More specifically, the project is located in Section 26, Township 5 South, Range 12 West in Robinson Township. The existing structure is a single-span, reinforced concrete girder bridge built in 1932 and reconstructed in 1964. This section of SR 66 is classified as a rural major collector per SPMS. Water flows under the existing structure from the east side of SR 66. There is heavy spalling at all four bridge corners at wingwall/abutment interface. Existing beams are cracking, spalling, and strands are exposed. Proposed activities include a 32-foot span bridge replacement. Riprap will be placed around the piers as well as the north and south bank. Approximately 0.26 acre of tree clearing is anticipated for this project.

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>) 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
  - o IC 14-28-1 Flood Control Act 310 IAC 6-1
  - o IC 14-29-1 Navigable Waterways Act 312 IAC 6
  - o IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
  - o 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 a Rule 5 Storm Water Runoff Permit. Visit the following Web page
  - o <http://www.in.gov/idem/4902.htm> (<http://www.in.gov/idem/4902.htm>)

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

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

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

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

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

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 addition 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> (<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> (<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) ([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) (<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 is it 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.

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## 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

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving the bridge (Existing Structure No. 066-65-01130) carrying State Road (SR) 66 over Rock Bottom Creek. The project is approximately 4.85 miles east of SR 165 in Posey County, Indiana. The project area is in a rural area of Posey County, Indiana. More specifically, the project is located in Section 26, Township 5 South, Range 12 West in Robinson Township. The existing structure is a single-span, reinforced concrete girder bridge built in 1932 and reconstructed in 1964. This section of SR 66 is classified as a rural major collector per SPMS. Water flows under the existing structure from the east side of SR 66. There is heavy spalling at all four bridge corners at wingwall/abutment interface. Existing beams are cracking, spalling, and strands are exposed. Proposed activities include a 32-foot span bridge replacement. Riprap will be placed around the piers as well as the north and south bank Approximately 0.26 acre of tree clearing is anticipated for this project.

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: 05/18/2020

Signature of the INDOT  
Project Engineer or Other Responsible Agent 

Matthew Bullock

Date: 5/18/2020

Signature of the  
For Hire Consultant 

Dan Logsdon

## Organization and Project Information

**Project ID:**  
**Des. ID:** 1593065  
**Project Title:** SR 66 over Rock Bottom Creek - Bridge Replacement  
**Name of Organization:** HNTB Corporation  
**Requested by:** Dan Logsdon

## Environmental Assessment Report

1. Geological Hazards:
  - Moderate liquefaction potential
  - 1% Annual Chance Flood Hazard
2. Mineral Resources:
  - Bedrock Resource: Low Potential
  - Sand and Gravel Resource: None documented in the area
3. Active or abandoned mineral resources extraction sites:
  - Petroleum Exploration Wells

\*All map layers from Indiana Map ([maps.indiana.edu](http://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: May 18, 2020

## Landon Little

---

**From:** Adam M. Bigge <Adam.Bigge@poseycountyin.gov>  
**Sent:** Monday, September 9, 2019 9:55 AM  
**To:** Landon Little  
**Subject:** Early Coordination letter for SR66 bridge replacement

Landon,

Thank you for the notification of the upcoming project in Posey County. I have no issues with your project as I am sure your engineers are quite capable. I am also fairly certain that there are no monuments/markers in the area that would affect our state Section Corners. I would only request that my office be sent a copy of the final versions of any construction plans so that I may update them in my records.

Thanks!

Sincerely,

Adam M. Bigge  
Posey County Surveyor

## Landon Little

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**From:** Larry Robb <Larry.Robb@poseycountyin.gov>  
**Sent:** Monday, September 9, 2019 11:51 AM  
**To:** Landon Little  
**Subject:** [WARNING: UNSCANNABLE EXTRACTION FAILED]INDOT SR 66 bridge

In reference to the replacement of the bridge on SR 66 in Posey County,  
Do we have a proposed construction start and end date.  
This is so that we can give notice to the Emergency Services that use this road  
Thanks

Larry Robb  
Director  
Posey County EMA  
(W) 812-838-1333  
(C) 812-319-6975



## Landon Little

---

**From:** Landon Little  
**Sent:** Tuesday, September 10, 2019 9:48 AM  
**To:** Larry Robb  
**Subject:** RE: INDOT SR 66 bridge

Hello Mr. Robb,

I have reached out to the Project Manager regarding the construction start and end date. They do not have an exact date at this time, but she is anticipating November 15, 2022 thru June, 15, 2023. The Project letting is October, 13, 2022.

Thank you for your response!

**Landon Little**

Scientist

Environmental Planning

Tel (317)917-5328 Email [ltlittle@hntb.com](mailto:ltlittle@hntb.com)

**HNTB CORPORATION**

111 Monument Circle, Suite 1200, Indianapolis, IN 46024 | [www.hntb.com](http://www.hntb.com)

 **100+ YEARS OF INFRASTRUCTURE SOLUTIONS**



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**From:** Larry Robb <Larry.Robb@poseycountyin.gov>  
**Sent:** Monday, September 9, 2019 11:51 AM  
**To:** Landon Little <ltlittle@HNTB.com>  
**Subject:** [WARNING: UNSCANNABLE EXTRACTION FAILED]INDOT SR 66 bridge

In reference to the replacement of the bridge on SR 66 in Posey County,  
Do we have a proposed construction start and end date.  
This is so that we can give notice to the Emergency Services that use this road  
Thanks

Larry Robb  
Director  
Posey County EMA  
(W) 812-838-1333  
(C) 812-319-6975



## Landon Little

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**From:** Courtade, Julian <JCourtade@indot.IN.gov>  
**Sent:** Tuesday, September 3, 2019 2:57 PM  
**To:** Landon Little  
**Subject:** RE: Early Coordination Letter Des. No. 1593065 - Bridge Project, SR 66 over Rock Bottom, Posey County

Landon –

I reviewed over the ECL and found no issues with surrounding airports or airspace. Let me know if you have any questions!

Best,

**Julian L. Courtade**

Chief Airport Inspector  
INDOT, Office of Aviation  
IGCN Room N955  
100 North Senate Avenue  
Indianapolis, IN 46204  
**Office:** (317) 232-1477  
**Email:** [jcourtade@indot.in.gov](mailto:jcourtade@indot.in.gov)



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**From:** Landon Little [mailto:[ltlittle@HNTB.com](mailto:ltlittle@HNTB.com)]  
**Sent:** Tuesday, September 3, 2019 2:52 PM  
**To:** Courtade, Julian <JCourtade@indot.IN.gov>  
**Subject:** RE: Early Coordination Letter Des. No. 1593065 - Bridge Project, SR 66 over Rock Bottom, Posey County

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I am so sorry I forgot to attach the Location map. Here is the Early coordination with attachments.

Thank you

**Landon Little**

Scientist

Environmental Planning

Tel (317)917-5328 Email [ltlittle@hntb.com](mailto:ltlittle@hntb.com)

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111 Monument Circle, Suite 1200, Indianapolis, IN 46024 | [www.hntb.com](http://www.hntb.com)

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

General Information		
Date of Inspection: 09/06/2019	Initial Inspection <input checked="" type="checkbox"/>	Temp: 75 °F
Time of Inspection: 12:00 a.m	Follow-up Inspection <input type="checkbox"/>	Wind: 10 mph
County: Posey	Construction <input type="checkbox"/>	Precip: 0
Inspected by: R. Connolly, L. Little		Sunrise: 7:00    Sunset: 8:00
GPS Northing: 4212889	Contract Number:	Anticipated Start Date for
Easting: 435844	DES 1593065 & B-39421	Construction:
UTM Zone: 16		Fall 2020

Bridge or Culvert	Bridge or Culvert
Stream or Road Crossed: Rock Bottom Creek	Station: RP 13+0.628
Bridge/Culvert number: 066-65-01130	Number of Spans: 1
Type of Structure: <input type="checkbox"/> Concrete box beam <input type="checkbox"/> Steel beam <input type="checkbox"/> Concrete I-beam <input type="checkbox"/> Steel girder <input type="checkbox"/> Concrete bulb tee beam <input type="checkbox"/> Steel pony truss <input type="checkbox"/> Concrete arch <input type="checkbox"/> Welded steel thru girder <input type="checkbox"/> Concrete girder <input type="checkbox"/> Concrete box culvert <input checked="" type="checkbox"/> Concrete slab <input type="checkbox"/> Concrete pipe <input type="checkbox"/> Multi-plate arch <input type="checkbox"/> Corrugated steel pipe <input type="checkbox"/> Other (list):	Material: <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Steel <input type="checkbox"/> Other (describe):  Shape: <input type="checkbox"/> Box Culvert <input type="checkbox"/> Pipe <input type="checkbox"/> Arch <input checked="" type="checkbox"/> Slab <input type="checkbox"/> Other (describe)
Searched entire structure? If not, why not? Yes	Location of bats or signs of use (w/drawing and photos):  N/A
Bats Present? <input type="checkbox"/> Seen? <input type="checkbox"/> Heard? No	
In Clusters? Number of clusters: N/A	
Number of bats in largest cluster: N/A	
Approximate total number of bats found: N/A	
Signs of previous bat use? <input type="checkbox"/> Guano <input type="checkbox"/> Staining <b>No</b>	

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

## Landon Little

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**From:** Wright, Kristy <KWright@indot.IN.gov>  
**Sent:** Monday, July 22, 2019 8:36 AM  
**To:** Landon Little  
**Cc:** Ridgley, Brad; Falls, Ryan G; Richard Connolly; Bullock, Matthew K  
**Subject:** FW: USFWS Bat Database Inquiry for SR 66 over Rock Bottom Creek - Des No 1593065

RE: DES 1593065 SR 66 at RP 13+60, 4.85 miles east of SR 165 Posey County  
July 22, 2019

Mr. Little:

A review of the USFWS database did not indicate the presence of endangered bat species in or within the 0.5 mile search radius of the project area. The range-wide programmatic consultation for the Indiana bat and the Northern Long-eared bat will be completed according to "Using the USFWS IPaC System for Listed Bat Consultation, for INDOT Projects, dated May 10, 2018.

If needed, please use the language as given in the SAM Manual for Preparing Red Flag documents at <https://www.in.gov/indot/files/Site%20Assessment%20Management%20Manual.pdf>

Thank you.

**Kristy Wright**

**Capital Program Management- Environmental Manager II**

3650 South U.S. Highway 41

Vincennes, IN 47591

**Office:** (812) 895-7335

**Email:** [kwright@indot.IN.gov](mailto:kwright@indot.IN.gov)

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**From:** Falls, Ryan G  
**Sent:** Friday, July 19, 2019 12:04 PM  
**To:** Wright, Kristy <KWright@indot.IN.gov>  
**Subject:** FW: USFWS Bat Database Inquiry for SR 66 over Rock Bottom Creek - Des No 1593065

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**From:** Landon Little  
**Sent:** Friday, July 19, 2019 11:01:26 AM (UTC-06:00) Central Time (US & Canada)  
**To:** Wright, Kristy



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

Phone: (812) 334-4261 Fax: (812) 334-4273

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

In Reply Refer To:

May 15, 2020

Consultation Code: 03E12000-2020-SLI-0172

Event Code: 03E12000-2020-E-06839

Project Name: SR 66 over Rock Bottom Creek, Bridge Replacement (Des. 1593065)

Subject: Updated 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-0172

Event Code: 03E12000-2020-E-06839

Project Name: SR 66 over Rock Bottom Creek, Bridge Replacement (Des. 1593065)

Project Type: TRANSPORTATION

**Project Description:** The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving a bridge replacement of SR 66 bridge (NBI 023350) in Vincennes District, Posey County, Indiana. This project is located at the SR 66 bridge over Rock Bottom Creek, 4.85 miles east of SR 165, in a rural portion of Robinson Township. The proposed project will include a 32-foot span bridge replacement. Riprap will be placed around the piers as well as the north and south bank. The project is expected to require acquisition of greater than 0.5 acre of additional right-of-way. There is potentially suitable summer bat habitat located within the adjacent to the project area. The adjacent trees are contiguous to the riparian corridor of Rock Bottom Creek. Approximately 0.26 acre of tree clearing will be required for this project. Dominant tree species to be removed are as follows: Black Walnut (*Juglans nigra*, FACU), Honey Locust (*Gleditsia triacanthos*, FACU), Bush Honeysuckle (*Diervilla Mill*, FACU), American Elm (*Ulmus americana*, FACW). Tree removal will occur in the inactive bat season. No bats or evidence of bats were observed during the September 6, 2019 field visit.

The March 15, 2019 bridge inspection report for 066-65-01130 states that no evidence of bats were seen or heard under the bridge. A search of the USFWS database by INDOT Vincennes District on July 22, 2019, did not identify any documented sites within a half mile of the project area. Construction activities may increase noise levels above existing traffic/background levels. The project does not involve permanent lighting alterations, and temporary lighting will be necessary. Work is planned to begin in the Spring 2023.

**Project Location:**

Approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/place/38.061468663091226N87.73128272732191W>



Counties: Posey, 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 Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

## Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is <b>final</b> critical habitat for this species. Your location is outside the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a> Species survey guidelines: <a href="https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf">https://ecos.fws.gov/ipac/guideline/survey/population/1/office/31440.pdf</a>	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"> <li>▪ 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 <a href="http://www.fws.gov/midwest/endangered/mammals/nleb/index.html">www.fws.gov/midwest/endangered/mammals/nleb/index.html</a></li> </ul> Species profile: <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Threatened

## Critical habitats

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



# United States Department of the Interior



## FISH AND WILDLIFE SERVICE

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

Phone: (812) 334-4261 Fax: (812) 334-4273

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

In Reply Refer To:

November 26, 2019

Consultation Code: 03E12000-2020-I-0172

Event Code: 03E12000-2020-E-01385

Project Name: SR 66 over Rock Bottom Creek, Bridge Replacement (Des. 1593065)

Subject: Concurrence verification letter for the 'SR 66 over Rock Bottom Creek, Bridge Replacement (Des. 1593065)' 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 dated to verify that the **SR 66 over Rock Bottom Creek, Bridge Replacement (Des. 1593065)** (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, 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 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

SR 66 over Rock Bottom Creek, Bridge Replacement (Des. 1593065)

### Description

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving a bridge replacement of SR 66 bridge (NBI 023350) in Vincennes District, Posey County, Indiana. This project is located at the SR 66 bridge over Rock Bottom Creek, 4.85 miles east of SR 165, in a rural portion of Robinson Township. The proposed project will include a 32-foot span bridge replacement. Riprap will be placed around the piers as well as the north and south bank. The project is expected to require acquisition of greater than 0.5 acre of additional right-of-way. There is potentially suitable summer bat habitat located within the adjacent to the project area. The adjacent trees are contiguous to the riparian corridor of Rock Bottom Creek. Approximately 0.26 acre of tree clearing will be required for this project. Dominant tree species to be removed are as follows: Black Walnut (*Juglans nigra*, FACU), Honey Locust (*Gleditsia triacanthos*, FACU), Bush Honeysuckle (*Diervilla Mill*, FACU), American Elm (*Ulmus americana*, FACW). Tree removal will occur in the inactive bat season. No bats or evidence of bats were observed during the September 6, 2019 field visit.

The March 15, 2019 bridge inspection report for 066-65-01130 states that no evidence of bats were seen or heard under the bridge. A search of the USFWS database by INDOT Vincennes District on July 22, 2019, did not identify any documented sites within a half mile of the project area. Construction activities may increase noise levels above existing traffic/background levels. The project does not involve permanent lighting alterations, and temporary lighting will be necessary. Work is planned to begin in the Spring 2023.

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

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

**Automatically answered**

Yes

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

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

**Automatically answered**

Yes

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

*A) Federal Highway Administration (FHWA)*

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

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

No

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

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

No

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

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

*No*

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

*No*

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

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

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

*Yes*

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

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

*Yes*

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

*No*

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

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

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

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

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

*No*

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

[1] Documented roosting or foraging habitat – for the purposes of this consultation, we are considering documented habitat as that where Indiana bats and/or NLEB have actually been captured and tracked using (1) radio telemetry to roosts; (2) radio telemetry 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<sup>[1]</sup>?

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

*B) During the inactive season*

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

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

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

*No*

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

*Yes*

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

*B) During the inactive season*

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

*Yes*

19. Will 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<sup>[1]</sup> for Indiana bat or NLEB **within** 1,000 feet of the bridge? (includes any trees suitable for maternity, roosting, foraging, or travelling habitat)

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

Yes

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

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

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

Yes

#### **SUBMITTED DOCUMENTS**

- *INDOT\_Bridge\_Assessment\_Form.pdf* <https://ecos.fws.gov/ipac/project/BHNT7DSB6BBZHUA32RIJSLNJI/projectDocuments/19218668>

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

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

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

No

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?

Yes

35. Will the activities that use percussives (**not including tree removal/trimming or bridge/structure work**) and/or increase noise levels above existing traffic/background levels be conducted *during* the active season<sup>[1]</sup>?

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

No

36. 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

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

No

38. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) and/or increase noise levels above existing traffic/background levels consistent with a No Effect determination in this key?

**Automatically answered**

*Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the inactive season*

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 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 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 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*

41. 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*

42. **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

43. **Tree Removal AMM 1**

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

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

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

Yes

44. **Tree Removal AMM 2**

Can *all* tree removal activities be restricted to when Indiana bats are not likely to be present (e.g., the inactive season)<sup>[1]</sup>?

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

**Automatically answered**

Yes

45. **Tree Removal AMM 2**

Can *all* tree removal activities be restricted to when Northern long-eared bats are not likely to be present (e.g., the inactive season)<sup>[1]</sup>?

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

**Automatically answered**

Yes

**46. 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

**47. Tree Removal AMM 4**

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

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

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

Yes

**48. Lighting AMM 1**

Will *all* **temporary** lighting used during the removal of suitable habitat and/or the removal/trimming of trees within suitable habitat be directed away from suitable habitat during the active season?

Yes

**49. 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?

Yes

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

*No*

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

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

*0.26*

4. Please describe the proposed bridge work:

*Proposed activities include a 32-foot one span bridge replacement. Riprap will be placed around the piers as well as the north and south bank.*

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

*Spring 2023*

6. Please enter the date of the bridge assessment:

*September 6, 2019*

## **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 March 16, 2018. 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 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.

SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

**Appendix D: Section 106 of the NHPA**

## Minor Projects PA Assessment Form

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**Date:** 6/29/2020

**Project Designation Number:** 1593065

**Route Number:** SR 66

**Project Description:** Bridge Replacement, approximately 4.85 miles east of SR 165.

The proposed project is the replacement of the bridge (Existing Structure No. 066-65-01130) carrying SR 66 over Rock Bottom Creek in Posey County, Indiana. Proposed activities include a 32-foot span bridge replacement. Riprap will be placed around the abutments. Approximately 0.26 acre of tree clearing is anticipated for this project. Utility coordination will be performed to verify location of surrounding utilities and determine any impacts. An overhead and buried communication line run parallel to the north side of the bridge.

**Feature crossed (if applicable):** Rock Bottom Creek

**Township:** Robinson

**City/County:** Posey

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

General project location map  USGS map  Aerial photograph

Written description of project area  General project area photos

Previously completed archaeology reports  Interim Report

Previously completed historic property reports

Soil survey data  Bridge inspection information

**Other (please specify):** Bridge Inspection Application System (BIAS); Indiana State Historic Architectural and Archaeological Research Database (SHAARD); Indiana Buildings, Bridges, and Cemeteries Map (IBBCM) website; Arc Map GIS; Google online street-view imagery; MPPA application (including maps and photographs) sent by HNTB, dated May 7<sup>th</sup>, 2020 and on file at INDOT-CRO.

Moffatt, David

2020 Archaeological Records Check and Field Reconnaissance for the Proposed Replacement of the Bridge Carrying SR 66 over Rock Bottom Creek (Des No 1593065) in Robinson Township, Posey County, Indiana. INDOT, Cultural Resources office. Report on file at IDNR, DHPA.

**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**):

Last revised 1-2-07

- 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.

With regard to above-ground resources, an INDOT Cultural Resources historian who meets the Secretary of the Interior’s Professional Qualification Standards as per 36 CFR Part 61 performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for Posey County. No listed resources are located within 0.25 mile of the project area, a distance that would serve as an appropriate area of potential effects (APE) given the project scope and surrounding terrain.

The *Posey County Interim Report* (1984; resurveyed 2005; Robinson Township) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD), and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBM). The SHAARD and IHBBM information was checked against the interim report hard-copy maps. The following surveyed Robinson Township resource was recorded near the project location: **1) 129-305-25025** (Howery Farm (10301 SR 66; west side of road, ½ mile north of Winterheimer Road; includes c.-1890 T-plan house; c. -1900 transverse frame barn; c.-1910 English barn; rated ‘contributing’). The resource is estimated to be .10 mile west/southwest of the project location. No other IHSSI-surveyed resources were recorded within 0.25 mile of the project location.

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

The project area is located in rural Posey County. Area land-use is agricultural/wooded with a few farms and associated residences in the vicinity; however, no above-ground resources were recorded within 0.25 mile of the project location.

According to BIAS, the subject structure (Bridge #066-65-01130; NBI No. 023350, a concrete continuous stringer multi-beam/girder bridge, was built c.-1932 and was reconstructed in 1964. The structure was included in the 2009-INDOT Sponsored Historic Bridge Inventory (HBI), and was recommended not eligible for the National Register (Section 2, Vol. 2, page 874)

Based on the available information, as summarized above, no above-ground concerns exist as long as the project scope remains the same.

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

With regard to archaeological resources, an INDOT-CRO Archaeologist, who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 completed a records check found that the proposed project area has not been examined by a professional archaeologist and that there are no previously recorded archaeological sites within or adjacent to the area. An archaeological field reconnaissance did not record cultural resources and no further archaeological investigation was recommended. If the project scope changes INDOT, CRO will need to be consulted to determine if additional investigation is needed.

**Accidental Discovery**-If any archaeological artifacts or human remains are uncovered during construction, demolition, or earth moving activities, construction in the immediate area of the find will be stopped, and the INDOT Cultural Resources Office and the Division of Historic Preservation and Archaeology will be notified immediately.

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

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

SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

**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: October 7, 2019

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

From: Landon Little  
HNTB Corporation  
111 Monument Circle, Suite 1200  
Indianapolis, IN 46204  
ltlittle@hntb.com

Re: RED FLAG INVESTIGATION  
Des. No. 1593065, State Project  
Bridge Replacement  
State Road 66 over Rock Bottom Creek  
Posey County, Indiana

## PROJECT DESCRIPTION

Brief Description of Project: The Federal Highway Administration (FHWA) and Indiana Department of Transportation (INDOT), Vincennes District is planning to proceed with a bridge replacement project at the SR 66 over Rock Bottom Creek bridge, 4.85 miles east of SR 165, in a rural portion of Posey County, Indiana. Anticipated plans include removal of the superstructure and substructure. A new structure will be built in the place of the old bridge.

Bridge and/or Culvert Project: Yes  No  Structure # 066-65-01130

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

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

Proposed right of way: Temporary  # Acres N/A Permanent  # Acres greater than 0.5 acres

Type of excavation: Approximately 13 feet of excavation will be required for removal and replacement of the existing structure.

Maintenance of traffic: During construction, SR 66 will be closed, and traffic will be detoured.

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

State Project:  LPA:

Any other factors influencing recommendations: N/A

## **INFRASTRUCTURE TABLE AND SUMMARY**

<b>Infrastructure</b>			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Religious Facilities	<b>2</b>	Recreational Facilities	<b>N/A</b>
Airports <sup>1</sup>	<b>2</b>	Pipelines	<b>N/A</b>
Cemeteries	<b>1</b>	Railroads	<b>N/A</b>
Hospitals	<b>N/A</b>	Trails	<b>N/A</b>
Schools	<b>N/A</b>	Managed Lands	<b>N/A</b>

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

### Explanation:

- Religious Facilities: Two (2) religious facility icons are mapped within the 0.5 mile search radius. Although mapped within the project area, the icon associated with SR. Peter’s United Church of Christ is not mapped correctly and the site is located approximately 0.49 mile southeast. No impact is expected.
- Cemeteries: One (1) cemetery is located within the 0.5-mile search radius. Saint Peters Lutheran Cemetery is located approximately 0.49 southeast of the project area. No impacts are expected.

## **WATER RESOURCES TABLE AND SUMMARY**

<b>Water Resources</b>			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	<b>N/A</b>	Canal Routes - Historic	<b>N/A</b>
Karst Springs	<b>N/A</b>	NWI - Wetlands	<b>4</b>
Canal Structures – Historic	<b>N/A</b>	Lakes	<b>N/A</b>
NPS NRI Listed	<b>N/A</b>	Floodplain - DFIRM	<b>1</b>
NWI-Lines	<b>4</b>	Cave Entrance Density	<b>N/A</b>
IDEM 303d Listed Streams and Lakes (Impaired)	<b>N/A</b>	Sinkhole Areas	<b>N/A</b>
Rivers and Streams	<b>11</b>	Sinking-Stream Basins	<b>N/A</b>

### Explanation:

- NWI-Lines: Four (4) NWI-Line segments are located within the 0.5-mile search radius. Rock Bottom Creek is located within the project area. A Waters of the U.S. Report will be prepared and coordination with INDOT ES Ecology and Waterway Permitting (INDOT EWPO) will occur.
- Rivers and Streams: Eleven (11) river and stream segments are located within the 0.5-mile search radius. Three (3) streams, Rock Bottom Creek and two unnamed tributaries, are located within the project area. A Waters of the U.S. Report will be prepared and coordination with INDOT ES EWPO will occur.
- NWI-Wetlands: Four (4) NWI-Wetlands are located within the 0.5-mile search radius. The nearest wetland is located approximately 0.26 mile northwest of the project area. No impact is expected.

- Floodplain – DFIRM: One (1) floodplain polygon is located within the 0.5-mile search radius. The mapped floodplain is located approximately 0.27 west of the project area. No impact is expected.

**URBANIZED AREA BOUNDARY SUMMARY**

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

**MINING AND MINERAL EXPLORATION TABLE AND SUMMARY**

<b>Mining/Mineral Exploration</b>			
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	<b>10</b>	Mineral Resources	<b>N/A</b>
Mines – Surface	<b>N/A</b>	Mines – Underground	<b>N/A</b>

Explanation:

- Petroleum Wells: Ten (10) petroleum wells are located within the 0.5-mile search radius. The nearest petroleum well is located approximately 0.06 miles south of the project area. No impact is expected.

**HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY**

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

Explanation: No Hazardous Material Concerns were identified within the 0.5-mile search radius.

**ECOLOGICAL INFORMATION SUMMARY**

The Posey 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 endangered species. Coordination with USFWS and IDNR will occur.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in a rural area surrounded by farm fields. The March 15, 2019 inspection report for Bridge # 066-65-01130 states that no evidence of bats was seen or heard under the bridge. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

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**

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

INFRASTRUCTURE: N/A

WATER RESOURCES: The presence of the following water resources will require the preparation of a Waters of the U.S. Report and coordination with INDOT EWPO:

- Three (3) streams, Rock Bottom Creek and two unnamed tributaries, are located within the project area.
- One (1) NWI – line, Rock Bottom Creek, is located within 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

Digitally signed by  
Nicole Fohey-Breting  
Date: 2019.10.09  
08:57:44 -04'00'

\_\_\_\_\_(Signature)



Prepared by:  
Landon Little  
Scientist  
HNTB Corporation

**Graphics:**

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

SITE LOCATION: YES

INFRASTRUCTURE: YES

WATER RESOURCES: YES

URBANIZED AREA BOUNDARY: N/A

MINING/MINERAL EXPLORATION: YES

HAZMAT CONCERNS: N/A

Red Flag Investigation - Site Location  
 SR 66 over Rock Bottom Creek  
 Des. No. 1593065, Bridge Replacement  
 Posey County, Indiana



Sources: 0.5 0.25 0 0.5 Miles  
**Non Orthophotography**  
**Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83  
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

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

# Red Flag Investigation - Infrastructure

## SR 66 over Rock Bottom Creek

### Des. No. 1593065, Bridge Replacement

#### Posey County, Indiana



Indiana Office of Information Technology, Indiana University Spatial Data Facility, UTM38N, NAD83, 1200dpi, 10m

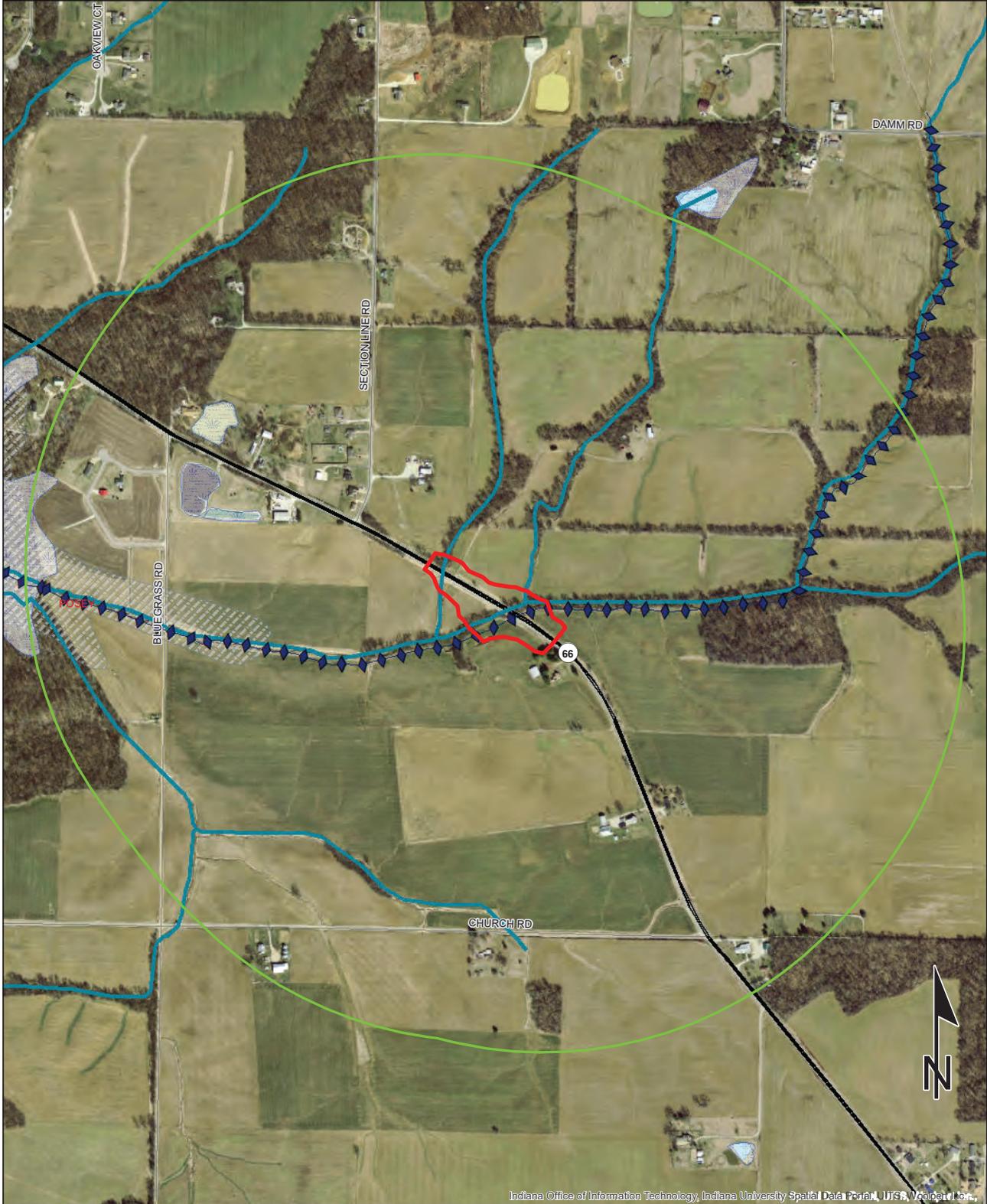
**Sources:**  
**Non Orthophotography Data** - Obtained from the State of Indiana Geographical Information Office Library  
**Orthophotography** - Obtained from Indiana Map Framework Data ([www.indianamap.org](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

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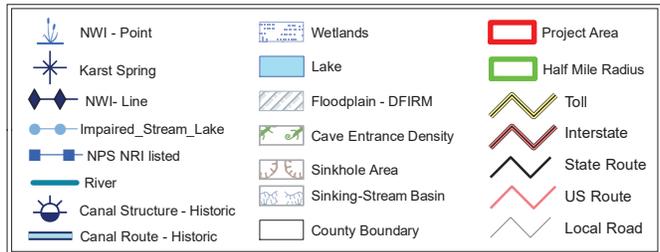
	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
	County Boundary				US Route
					Local Road

Red Flag Investigation - Water Resources  
 SR 66 over Rock Bottom Creek  
 Des. No. 1593065, Bridge Replacement  
 Posey County, Indiana



Indiana Office of Information Technology, Indiana University Spatial Data Portal, UTM8, NAD83, 10m

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](http://www.indianamap.org))  
**Map Projection:** UTM Zone 16 N **Map Datum:** NAD83  
 This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.



Red Flag Investigation - Mining/Mineral Exploration  
 SR 66 over Rock Bottom Creek  
 Des. No. 1593065, Bridge Replacement  
 Posey County, Indiana



Indiana Office of Information Technology, Indiana University Spatial Data Portal, UTM8, NAD83, 1/2016, 11/16/16



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

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

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

Indiana County Endangered, Threatened and Rare Species List

County: Posey

Species Name	Common Name	FED	STATE	GRANK	SRANK
<b>Crustacean: Malacostraca</b>					
<b>Orconectes indianensis</b>	<b>Indiana Crayfish</b>			<b>G3</b>	<b>S2</b>
<b>Mollusk: Bivalvia (Mussels)</b>					
Arcidens confragosus	Rock Pocketbook			G4	S2
<b>Cumberlandia monodonta</b>	<b>Spectaclecase</b>	<b>LE</b>	<b>SX</b>	<b>G3</b>	<b>SX</b>
<b>Cyprogenia stegaria</b>	<b>Eastern Fanshell Pearlymussel</b>	<b>LE</b>	<b>SE</b>	<b>G1Q</b>	<b>S1</b>
Epioblasma flexuosa	Leafshell		SX	GX	SX
Epioblasma propinqua	Tennessee Riffleshell		SX	GX	SX
Epioblasma sampsonii	Wabash Riffleshell		SX	GX	SX
<b>Epioblasma torulosa</b>	<b>Tubercled Blossom</b>	<b>LE</b>	<b>SX</b>	<b>GX</b>	<b>SX</b>
<b>Epioblasma triquetra</b>	<b>Snuffbox</b>	<b>LE</b>	<b>SE</b>	<b>G3</b>	<b>S1</b>
Fusconaia subrotunda	Longsolid	C	SX	G3	SX
<b>Lampsilis abrupta</b>	<b>Pink Mucket</b>	<b>LE</b>	<b>SX</b>	<b>G2</b>	<b>SX</b>
Lampsilis ovata	Pocketbook			G5	S2
<b>Leptodea leptodon</b>	<b>Scaleshell</b>	<b>LE</b>	<b>SX</b>	<b>G1G2</b>	<b>SX</b>
Ligumia recta	Black Sandshell			G4G5	S2
<b>Obovaria retusa</b>	<b>Ring Pink</b>	<b>LE</b>	<b>SX</b>	<b>G1</b>	<b>SX</b>
<b>Obovaria subrotunda</b>	<b>Round Hickorynut</b>	<b>C</b>	<b>SE</b>	<b>G4</b>	<b>S1</b>
<b>Plethobasus cicatricosus</b>	<b>White Wartyback</b>	<b>LE</b>	<b>SX</b>	<b>G1</b>	<b>SX</b>
<b>Plethobasus cooperianus</b>	<b>Orangefoot Pimpleback</b>	<b>LE</b>	<b>SX</b>	<b>G1</b>	<b>SX</b>
<b>Plethobasus cyphus</b>	<b>Sheepnose</b>	<b>LE</b>	<b>SE</b>	<b>G3</b>	<b>S1</b>
<b>Pleurobema clava</b>	<b>Clubshell</b>	<b>LE</b>	<b>SE</b>	<b>G1G2</b>	<b>S1</b>
Pleurobema cordatum	Ohio Pigtoe		SSC	G4	S2
<b>Pleurobema plenum</b>	<b>Rough Pigtoe</b>	<b>LE</b>	<b>SE</b>	<b>G1</b>	<b>S1</b>
Pleurobema rubrum	Pyramid Pigtoe		SX	G2G3	SX
<b>Potamilus capax</b>	<b>Fat Pocketbook</b>	<b>LE</b>	<b>SE</b>	<b>G2</b>	<b>S1</b>
Ptychobranchus fasciolaris	Kidneyshell		SSC	G4G5	S2
<b>Quadrula cylindrica cylindrica</b>	<b>Rabbitsfoot</b>	<b>LT</b>	<b>SE</b>	<b>G3G4T3</b>	<b>S1</b>
Simpsonaias ambigua	Salamander Mussel	C	SSC	G3	S2
Toxolasma lividus	Purple Lilliput	C	SSC	G3Q	S2
<b>Villosa fabalis</b>	<b>Rayed Bean</b>	<b>LE</b>	<b>SE</b>	<b>G2</b>	<b>S1</b>
<b>Mollusk: Gastropoda</b>					
Catinella gelida	Frigid ambersnail			G1Q	SH
<b>Xolotrema obstrictum</b>	<b>Sharp Wedge</b>		<b>SE</b>	<b>G4</b>	<b>S1</b>
<b>Insect: Coleoptera (Beetles)</b>					
<b>Necrophilus pettiti</b>	<b>A Carrion Beetle</b>		<b>ST</b>	<b>GNR</b>	<b>S1?</b>
<b>Nicrophorus americanus</b>	<b>American Burying Beetle</b>	<b>LE</b>	<b>SX</b>	<b>G2G3</b>	<b>SX</b>
Photuris walldoxeyi	Cypress firefly		WL	GNR	SU
<b>Insect: Ephemeroptera (Mayflies)</b>					

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

Fed: LE = Endangered; LT = Threatened; C = candidate; PDL = proposed for delisting  
State: SE = state endangered; ST = state threatened; SR = state rare; SSC = state species of special concern; SX = state extirpated; SG = state significant; 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  
SRANK: State Heritage Rank: S1 = critically imperiled in state; S2 = imperiled in state; S3 = rare or uncommon in state; G4 = widespread and abundant in state but with long term concern; SG = state significant; SH = historical in state; SX = state extirpated; B = breeding status; S? = unranked; SNR = unranked; SNA = nonbreeding status unranked

Indiana County Endangered, Threatened and Rare Species List

County: Posey

Species Name	Common Name	FED	STATE	GRANK	SRANK
Pentagenia vittigera	Common Spiny-headed Burrowing Mayfly		WL	G5	S3
Tortopsis primus	Manitoba White Burrowing Mayfly		ST	G5	S1
<b>Insect: Lepidoptera (Butterflies &amp; Moths)</b>					
Catocala marmorata	Marbled Underwing Moth		SE	G3G4	S1
Eosphropteryx thyatroides	Pinkpatched Looper Moth		ST	G4G5	S2
Hyperaeschra georgica	A Prominent Moth			G5	S2
Lesmone detrahens	Detracted Owlet		SR	G5	S2
Lethe appalachia appalachia	Appalachian Eyed Brown		ST	G4T4	S2
<b>Fish</b>					
Acipenser fulvescens	Lake Sturgeon		SE	G3G4	S1
Ammocrypta clara	Western Sand Darter		SSC	G3	S2
Crystallaria asprella	Crystal Darter			G3	SX
Elassoma zonatum	Banded Pygmy Sunfish		SSC	G5	S1
Etheostoma squamiceps	Spottail Darter			G4G5	S2S3
Percina evides	Gilt Darter		SE	G4	S1
Percina uranidea	Stargazing Darter			G3	SX
<b>Amphibian</b>					
Acris blanchardi	Blanchard's Cricket Frog		SSC	G5	S4
Ambystoma talpoideum	Mole Salamander		SE	G5	S1
Cryptobranchus alleganiensis alleganiensis	Eastern Hellbender	C	SE	G3G4T3T4	S1
<b>Reptile</b>					
Crotalus horridus	Timber Rattlesnake		SE	G4	S2
Kinosternon subrubrum subrubrum	Eastern Mud Turtle		SE	G5T5	S2
Macrochelys temminckii	Alligator Snapping Turtle	C	SE	G3G4	SH
Nerodia erythrogaster neglecta	Copperbelly Water Snake	PS:LT	SE	G5T3	S2
Opheodrys vernalis	Smooth Green Snake		SE	G5	S2
Pseudemys concinna concinna	Eastern River Cooter		SE	G5T5	S1
Thamnophis proximus proximus	Western Ribbon Snake		SSC	G5T5	S3
<b>Bird</b>					
Ardea alba	Great Egret		SSC	G5	S1B
Certhia americana	Brown Creeper			G5	S2B
Gavia immer	Common Loon		SX	G5	SXB
Haliaeetus leucocephalus	Bald Eagle		SSC	G5	S2
Ictinia mississippiensis	Mississippi Kite		SSC	G5	S1B
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Lanius ludovicianus	Loggerhead Shrike		SE	G4	S3B
Lophodytes cucullatus	Hooded Merganser			G5	S2S3B
Nyctanassa violacea	Yellow-crowned Night-heron		SE	G5	S2B

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

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Indiana County Endangered, Threatened and Rare Species List

County: Posey

Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Pandion haliaetus</i>	Osprey		SSC	G5	S1B
<i>Setophaga cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Sternula antillarum athalassos</i>	Interior Least Tern	LE	SE	G4T2Q	S1B
<b>Mammal</b>					
<i>Myotis sodalis</i>	Indiana Bat	LE	SE	G2	S1
<i>Nycticeius humeralis</i>	Evening Bat		SE	G5	S1
<i>Sylvilagus aquaticus</i>	Swamp Rabbit		SE	G5	S1
<i>Taxidea taxus</i>	American Badger		SSC	G5	S2
<b>Vascular Plant</b>					
<i>Azolla caroliniana</i>	Carolina Mosquito-fern		SR	G5	S3
<i>Calycocarpum lyonii</i>	Cup-seed		ST	G5	S2
<i>Carex aureolensis</i>	Land of Gold Sedge		SE	GNR	S1
<i>Carex bushii</i>	Bush's Sedge		ST	G4	S2
<i>Carex gigantea</i>	Large Sedge		SE	G4	S1
<i>Carex lupuliformis</i>	False Hop Sedge		ST	G4	S2
<i>Carex socialis</i>	Social Sedge		ST	G4	S2
<i>Catalpa speciosa</i>	Northern Catalpa		SR	G4?	S3
<i>Chamaelirium luteum</i>	Devil's-bit		SE	G5	S1
<i>Chelone obliqua</i> var. <i>speciosa</i>	Rose Turtlehead		WL	G4T3	S3
<i>Cimicifuga rubifolia</i>	Appalachian Bugbane		SE	G3	S1
<i>Clematis pitcheri</i>	Pitcher Leather-flower		SR	G4G5	S3
<i>Crataegus viridis</i> var. <i>viridis</i>	Green Hawthorn		ST	G5T5	S2
<i>Cuscuta cuspidata</i>	Cusp Dodder		SE	G5	S1
<i>Cyperus acuminatus</i>	Short-point Flatsedge		WL	G5	S3
<i>Cyperus pseudovegetus</i>	Green Flatsedge		SR	G5	S2
<i>Dichanthelium scoparium</i>	Broom Panic-grass		SE	G5	S1
<i>Didiplis diandra</i>	Water-purslane		SE	G5	S1
<i>Diervilla lonicera</i>	Northern Bush-honeysuckle		WL	G5	S3
<i>Echinodorus cordifolius</i>	Creeping Bur-head		SE	G5	S1
<i>Eleocharis wolfii</i>	Wolf Spikerush		ST	G3G5	S2
<i>Festuca paradoxa</i>	Cluster Fescue		ST	G5	S2
<i>Gleditsia aquatica</i>	Water-locust		SE	G5	S1
<i>Hottonia inflata</i>	Featherfoil		ST	G4	S2
<i>Hypericum virgatum</i>	Coppery St. John's-wort		ST	G4?	S2
<i>Iresine rhizomatosa</i>	Eastern Bloodleaf		ST	G5	S3
<i>Isoetes melanopoda</i>	Blackfoot Quillwort		ST	G5	S2
<i>Lemna minuta</i>	Least Duckweed		SE	G4	S1
<i>Leptochloa panicoides</i>	Amazon Sprangle-top		SE	G5	S1
<i>Lespedeza stuevei</i>	Tall Bush-clover		SX	G4?	SX
<i>Ludwigia decurrens</i>	Primrose Willow		WL	G5	S3

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Indiana County Endangered, Threatened and Rare Species List

County: Posey

Species Name	Common Name	FED	STATE	GRANK	SRANK
Ludwigia glandulosa	Cylindric-fruited Seedbox		ST	G5	S2
Monarda bradburiana	Eastern Bee-balm		SE	G5	S1
Nothoscordum bivalve	Crow-poison		SR	G4	S3
Orobanche riparia	Bottomland Broomrape		SE	G4?	S1
Panax quinquefolius	American Ginseng		WL	G3G4	S3
Perideridia americana	Eastern Eulophus		SE	G4	S1
Physaria globosa	Short's bladderpod	LE	SE	G2	S1
Platanthera flava var. flava	Southern Rein Orchid		SE	G4?T4?Q	S1
Prenanthes aspera	Rough Rattlesnake-root		SR	G4?	S3
Ranunculus laxicaulis	Mississippi Buttercup		SE	G5?	S1
Ranunculus pusillus	Pursh Buttercup		SE	G5	S1
Rhynchospora corniculata var. interior	Short-bristle Horned-rush		ST	G5TNR	S2
Scutellaria parvula var. australis	Southern Skullcap		WL	G4T4?	S2
Solidago buckleyi	Buckley's Goldenrod		SE	G4	S1
Spigelia marilandica	Woodland Pinkroot		SE	G4	S1
Styrax americanus	American Snowbell		SR	G5	S3
Taxodium distichum var. distichum	Bald Cypress		ST	G5	S2
Thalictrum pubescens	Tall Meadowrue		SR	G5	S3
Thyrsanthella difformis	Climbing Dogbane		SR	G4G5	S3
Trifolium reflexum var. glabrum	Buffalo Clover		SE	G5T2T4Q	S1
Vitis palmata	Catbird Grape		SR	G4	S3
Wisteria frutescens	American Wisteria		SR	G5	S3
<b>High Quality Natural Community</b>					
Forest - flatwoods southwestern lowland mesic	Mesic Southwestern Lowland Flatwoods		SG	G2?	S1
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland mesic Southern Bottomlands	Southern Bottomlands Mesic Upland Forest		SG	GNR	S1
Wetland - swamp forest	Forested Swamp		SG	G2?	S2
Wetland - swamp shrub	Shrub Swamp		SG	GU	S2
<b>Other Significant Feature</b>					
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

**Appendix F: Water Resources**

Some attachments have  
been removed to avoid  
duplication

# Waters of the U.S. Report

## SR 66 OVER ROCK BOTTOM CREEK BRIDGE REPLACEMENT



POSEY COUNTY

DES. NO.

1593065

ASSET ID

#066-65-01130

A handwritten signature in black ink, appearing to read "Nicholas J. Cozart".

Approved: 12/4/2019

Prepared by:

**HNTB**

111 Monument Circle, Suite 1200

Indianapolis, IN, 46204

317.636.4682

**November 26, 2019**

## 1. PROJECT INFORMATION

Date(s) of Field Reconnaissance: September 6, 2019

### Location

The project is located along SR 66, approximately 4.85 miles east of SR 165 in Posey County, Indiana.

- Section 26, Township 5 S, Range 12 W
- Kasson Quadrangle, Indiana
- 38.061483 N, -87.73127 W (NAD83)

### Project Description

The Federal Highway Administration (FHWA) and Indiana Department of Transportation (INDOT), Vincennes District are planning to proceed with a bridge replacement project and scour protection at the SR 66 bridge over Rock Bottom Creek bridge in Wadesville, Indiana.

## 2. DESKTOP RECONNAISSANCE

### 2.1 SOIL ASSOCIATIONS AND SERIES TYPES

According to the Soil Survey Geographic (SSURGO) Database for Posey County, Indiana, the following mapped soils series are within the Rock Bottom Creek investigated area (attachment pages 7-11).

- **Alford silt loam (AIC3):** very deep, well drained soils formed in loess. These soils are commonly on loess hills and less commonly on outwash plains. Slopes range from 0 to 60 percent. This soil type has a hydric rating of 0%.
- **Alford silt loam (AID3):** very deep, well drained soils formed in loess. These soils are commonly on loess hills and less commonly on outwash plains. Slopes range from 0 to 60 percent. This soil type has a hydric rating of 0%.
- **Iona silt loam (IoB2):** very deep, moderately well drained soils formed in loess on loess hills. Slope ranges from 0 to 6 percent. This soil type has a hydric rating of 0%
- **Wakeland silt loam (Wa):** very deep, somewhat poorly drained soils that formed in silty alluvium. These soils are on flood plain steps. Slopes are from 0 to 2 percent. This soil type has a hydric rating of 0%.

### 2.2 NATIONAL WETLANDS INVENTORY

Based on the U.S. Fish and Wildlife National Wetland Inventory (NWI) data ([www.fws.gov/wetlands/Data/State-Downloads.html](http://www.fws.gov/wetlands/Data/State-Downloads.html)) there are 4 wetlands mapped within the half-mile of the project area (attachment page 6). One wetland represents the channel of Rock Bottom Creek which flows through the project area. Below is the NWI area mapped within the investigated area.

- One wetland within the investigated area is mapped as palustrine, forested, broad-leaved deciduous, temporary flooded (PFO1A).

### 2.3 HYDROLOGY

The 12-digit Hydrologic Unit Code (HUC) for the entirety of the project area is #051201130704 which identifies the Big Creek Watershed (attachment page 12). According to the Indiana Floodplain Information Portal, the project is not within a 100-year floodplain or regulatory floodway (<http://dnrmaps.dnr.in.gov/appsphp/fdms/>).

## 3. FIELD RECONNAISSANCE

HNTB Indiana staff performed a field review of the investigated area on September 6, 2019. The purpose was to determine the presence of waters of the U.S. within the investigated area. HNTB Indiana staff collected data during the field review to appropriately characterize the investigated area and determine the presence or absence of jurisdictional waters. The field investigation area encompassed the area required for construction access and completion of the bridge replacement work. HNTB staff photographed select features and area of interest throughout the investigated area. A photo location map and selected photographs are included as attachment pages 13-32.

The proposed investigated area was analyzed using the methods outlined in the Routine Determination, On-site Inspection Necessary procedure in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual Midwest Region* (US Army corps of Engineers, 2010). Identification of indicator status of plant species utilized the 2016 Midwest Region National Wetland Plant List. Field GIS data was collected using a Trimble R1 GNSSGPS with submeter accuracy.

## 4. WATERS

The September 6, 2019 field reconnaissance for the SR 66 bridge replacement revealed two stream, Rock Bottom Creek and UNT to Rock Bottom Creek.

### 4.1 WETLANDS

Site investigations did not identify wetlands within the investigated area. Investigations shown that the investigated area is not within a floodplain or shows any presence of hydric soils. Dominant species of vegetation that was observed in the north quadrant was Black Walnut (*Juglans nigra*, FACU), Honey Locust (*Gleditsia triacanthos*, FACU), Bush Honeysuckle (*Diervilla Mill*, FACU), American Elm (*Ulmus americana*, FACW), poison ivy (*Toxicodendron radicans*, FAC), green bristlegrass (*Setaria parviflora*, FAC) and field thistle (*Cirsium discolor*, FACU). Dominant species of vegetation that was observed in the east quadrant was Eastern red Cedar (*Juniperus virginiana*, FACU), Black Walnut (*Juglans nigra*, FACU), Honey Locust (*Gleditsia triacanthos*, FACU), Bush Honeysuckle (*Diervilla Mill*, FACU), American Elm (*Ulmus americana*, FACW), poison ivy (*Toxicodendron radicans*, FAC), green bristlegrass (*Setaria parviflora*, FAC) and field thistle (*Cirsium discolor*, FACU). Dominant species of vegetation that was observed in the south quadrant is Black Walnut (*Juglans nigra*, FACU), Honey Locust (*Gleditsia*

*triacanthos*, FACU), Bush Honeysuckle (*Diervilla Mill*, FACU), green bristlegrass (*Setaria parviflora*, FAC) and field thistle (*Cirsium discolor*, FACU). Dominant species of vegetation that was observed in the west quadrant was Black Walnut (*Juglans nigra*, FACU), Honey Locust (*Gleditsia triacanthos*, FACU), Bush Honeysuckle (*Diervilla Mill*, FACU), American Elm (*Ulmus americana*, FACW), green bristlegrass (*Setaria parviflora*, FAC) and field thistle (*Cirsium discolor*, FACU).

## 4.2 STREAMS

The investigation resulted in the identification of two likely jurisdictional streams: Rock Bottom Creek and UNT to Rock Bottom Creek. A total of approximately 135 linear feet of Rock Bottom Creek and approximately 65 linear feet of UNT to Rock Bottom Creek were observed within the investigated area. Characteristics of Rock Bottom Creek and UNT to Rock Bottom Creek are summarized in Table 1. The ordinary high-water mark (OHWM) was obtained for the streams using GPS and a measuring tape, outside of the influence of the bridge.

### ROCK BOTTOM CREEK

Rock Bottom Creek is an intermittent stream feature that begins east of the structure in agricultural areas. Rock Bottom Creek meanders through the investigated area with bank erosion observed east and west of the bridge. The riparian corridor consists of black walnut (*Juglans nigra*, FACU), Honey Locust (*Gleditsia triacanthos*, FACU), Eastern red Cedar (*Juniperus virginiana*, FACU), Bush Honeysuckle (*Diervilla Mill*, FACU), American Elm (*Ulmus americana*, FACW). The primary source of hydrology for this stream is runoff from agricultural fields and runoff from SR 66. According to the USGS StreamStats website, (<https://water.usgs.gov/osw/streamstats/indiana.html>), Rock Bottom Creek drains 0.96 square miles upstream of the bridge (attachment page 12). Based on a qualitative assessment, this resource is a fair quality feature based on instream cover, some functional pools, overhanging vegetation and substrate. Rock Bottom Creek has connectivity to Wabash River, a traditionally navigable waterway, via Big Creek. According to the national wetlands inventory database Rock Bottom Creek is listed as a palustrine, forested, broad-leaved deciduous, temporary flooded (PFO1A), this appears to be an error, see photo log on attachment pages 14-32. The OHWM of Rock Bottom Creek was measured to be 27 feet wide by 1 foot deep.

### UNT TO ROCK BOTTOM CREEK

UNT to Rock Bottom Creek is an intermittent stream feature that begins north of Rock Bottom Creek in an agricultural area. The riparian corridor consists of black walnut (*Juglans nigra*, FACU), Honey Locust (*Gleditsia triacanthos*, FACU), Eastern red Cedar (*Juniperus virginiana*, FACU), Bush Honeysuckle (*Diervilla Mill*, FACU), American Elm (*Ulmus americana*, FACW). The primary source of hydrology for this stream is runoff from agricultural fields. Based on a qualitative assessment, this resource is a poor quality feature based on lack of functional pools and low quality instream cover. According to the national wetlands inventory database, UNT to Rock Bottom Creek is listed as a riverine, intermitten, streambed, seasonally flooded (R4SBS).

TABLE 1: STREAM AND WATERWAY SUMMARY TABLE

Stream Name	Photo #	Lat/Long	OHW	Quality	Linear feet in Investigated area	Substrate	USGS Blue Line	Riffles/Pools	Waters of U.S.
Rock Bottom Creek	12, 13, 14, 16, 26, 27, 28, 30, 31	38.061483 N, -87.73127 W	27 feet x 1 foot	Fair	135	Sand, silt, gravel	Yes	Yes	Yes
UNT to Rock Bottom Creek	14, 15, 17	38.06184 N, -87.73084 W	10 feet x 1 foot	Poor	65	Sand, silt, gravel	Yes	No	Yes

### 4.3 ROADSIDE DRAINAGE FEATURES

HNTB staff identified one roadside ditch (RSD-1) feature within the investigated area. RSD-1 conveys drainage downhill from the southeast quadrant of the investigated area and discharges into Rock Bottom Creek. Approximately 80 linear feet of RSD-1 lies within the investigated area. The roadside drainage feature conveys roadside drainage, RSD-1 did not exhibit a consistent OHWM, bed or banks. Photographs of the identified roadside ditch can be seen in attachment pages 14-32. RSD-1 is not likely to be a jurisdictional feature. No other roadside drainage features were identified within the investigated area.

TABLE 2: ROADSIDE DITCH SUMMARY TABLE

Stream Name	Photo #	Lat/Long	Quality	Linear feet in Investigated area	Substrate	USGS Blue Line	Waters of U.S.
RSD-1	29, 34	38.06134 N -87.73131 W	Poor	80	Riprap	No	No

### 4.4 OPEN WATERS

Site investigations did not identify open water features within the investigated area.

## 5. CONCLUSION

The September 2019 field review for the SR 66 over Rock Bottom Creek Bridge Replacement project identified two likely jurisdictional features within the identified survey area, Rock Bottom Creek and UNT to Rock Bottom Creek. Rock Bottom Creek is likely a water of the U.S. with hydrologic connectivity to the Wabash River, a TNW. Rock Bottom Creek flows north west into Big Creek which flows into Wabash River.

Every effort should be taken to avoid and minimize the impacts to the water resources listed above. Disturbance of a wetland or stream could result in a mitigation requirement to secure the required permits for the bridge replacement project. If construction exceed the limits of the survey review area illustrated in this document, further field investigation will be needed. This report is this office’s best judgement of water resources that are likely to be under federal jurisdiction, based on the guidelines set forth by the U.S. Army corps of Engineers (USACE). The final determination of jurisdictional Waters is ultimately the responsibility of the USACE. The INDOT Office of Environmental Services should be contacted immediately if impacts occur.

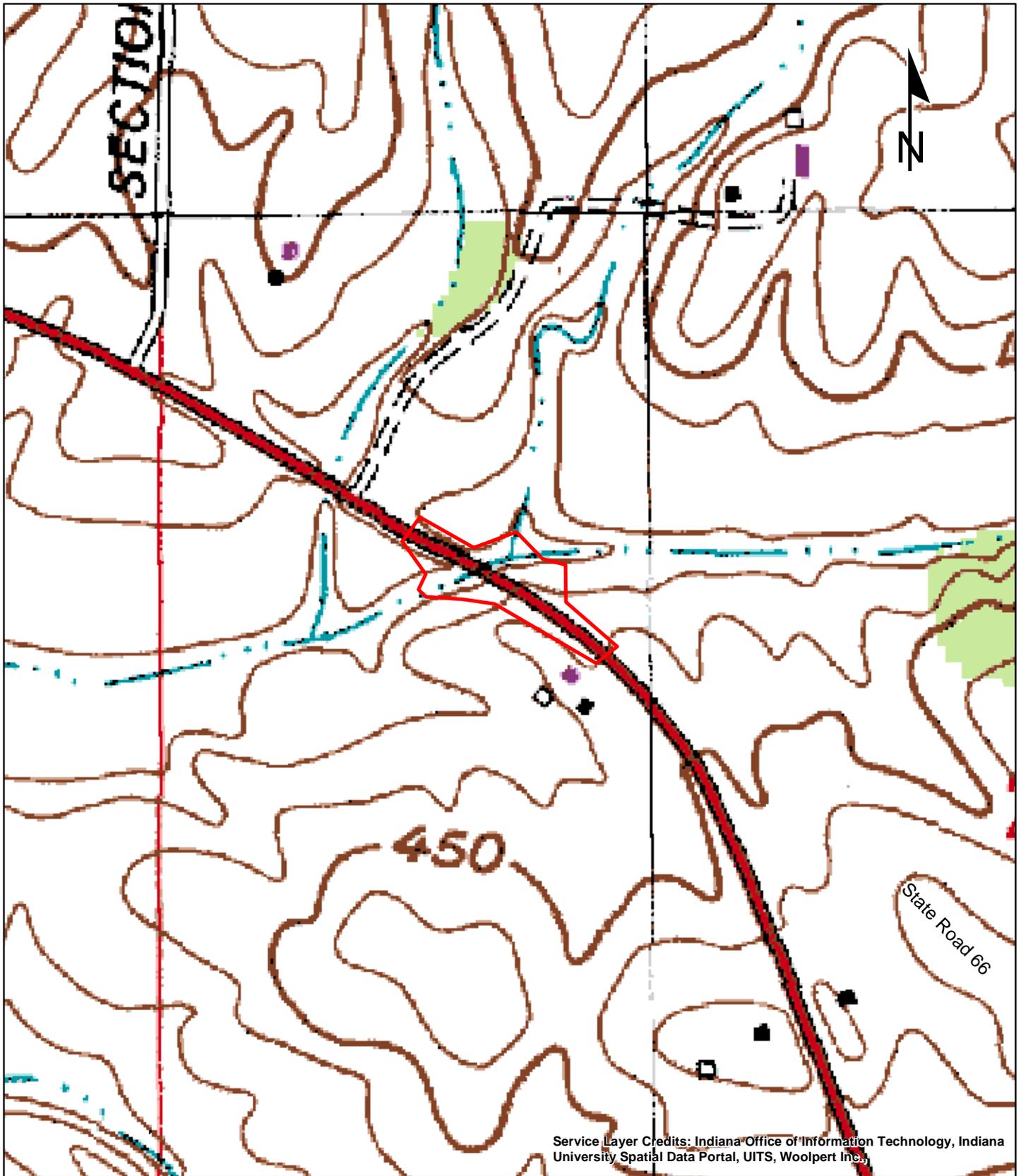
This waters determination has been prepared based on the best available information, interpreted in the light of the investigator’s training, experience and professional judgement in conformance with the 1987 Corps of Engineers Wetlands Delineation Manual, the appropriate regional supplement, the USACE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



Landon Little, Scientist I

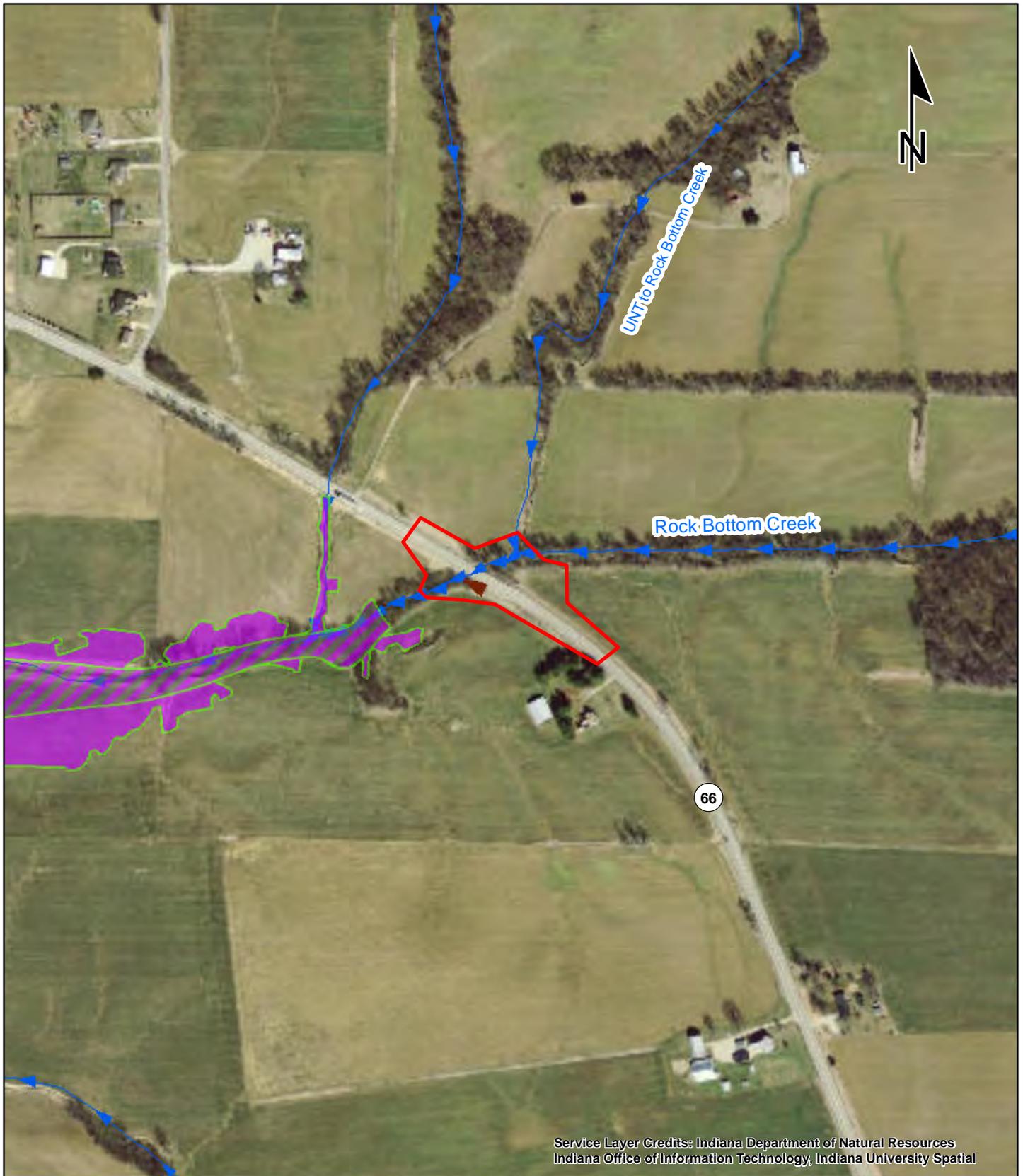
PREPARERS:

HNTB Inc., Staff	Position	Contributing Effort
Rich Connolly	Science Project Manager	Project Management Field Data Collection
Landon Little	Scientist I	Field Data Collection Report Preparation



 Investigated Area	<b>USGS 7.5 Minute Topographic Map (1:6,000 scale)</b> SR 66 over Rock Bottom Creek Bridge Replacement Posey County, Indiana	
	Des. No. 1593065 1 inch = 500 feet	 Graphics created by HNTB Corporation (2019)
		





<ul style="list-style-type: none"> <li><span style="border: 1px solid red; display: inline-block; width: 20px; height: 10px; margin-right: 5px;"></span> Investigated Area</li> <li><span style="display: inline-block; width: 20px; height: 10px; border-bottom: 2px solid brown; margin-right: 5px;"></span> Roadside Ditch</li> <li><span style="display: inline-block; width: 20px; height: 10px; border-bottom: 2px dashed blue; margin-right: 5px;"></span> Hydrography Flowlines</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 20px; height: 10px; background-color: #e0b0ff; border: 1px solid green; margin-right: 5px;"></span> DNR Approximate Fringe</li> <li><span style="display: inline-block; width: 20px; height: 10px; background: repeating-linear-gradient(45deg, transparent, transparent 2px, #90ee90 2px, #90ee90 4px); border: 1px solid green; margin-right: 5px;"></span> DNR Approximate Floodway</li> </ul>	<p><b>Floodplain map</b> SR 66 over Rock Bottom Creek Bridge Replacement Posey County, Indiana</p>	
<p>0      250      500 Feet</p>		<p>Des. No. 1593065 1 inch = 500 feet</p>	<p><b>HNTB</b> Graphics created by HNTB Corporation (2019)</p>



September 3, 2019

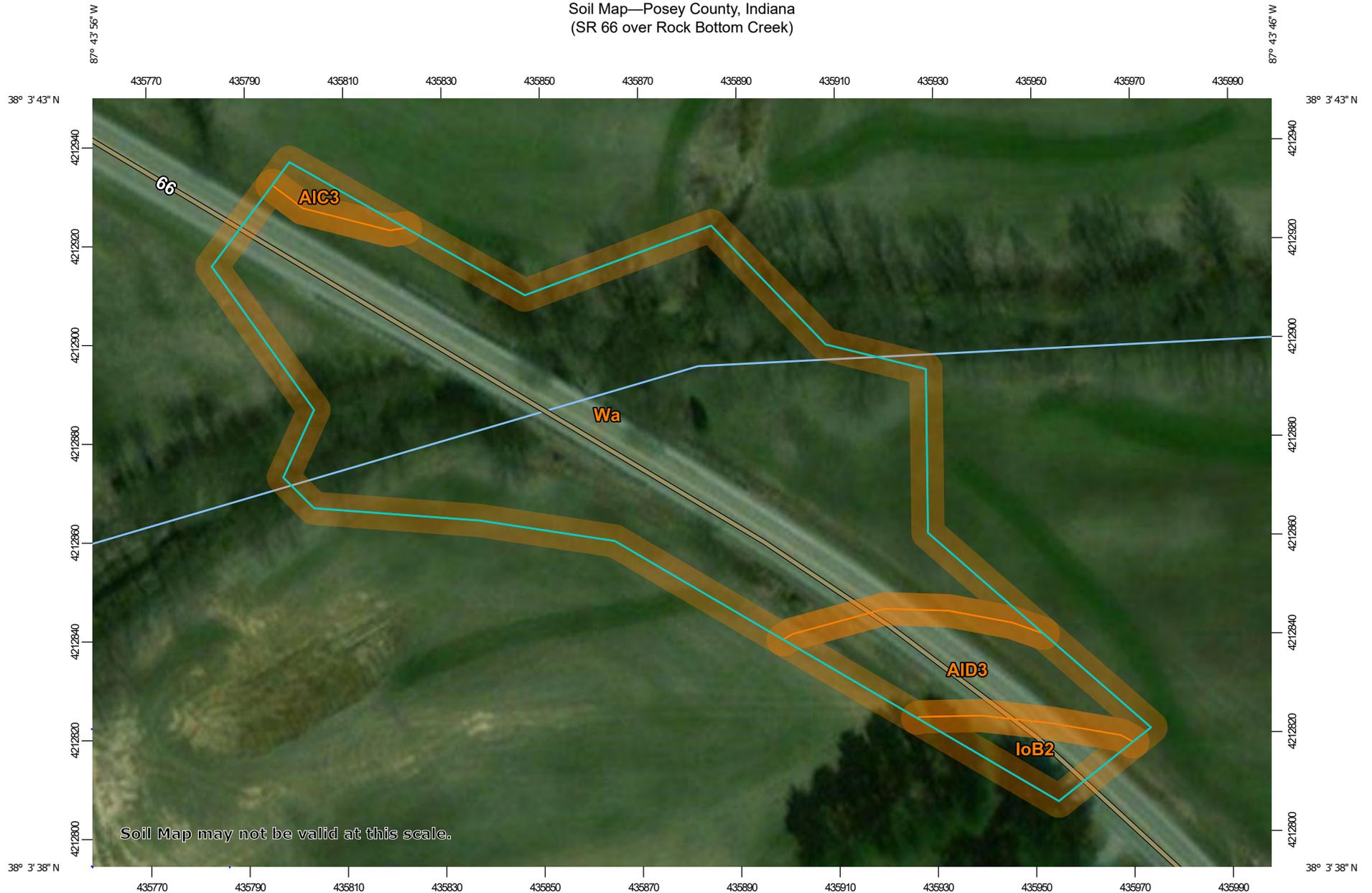
**Wetlands**

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

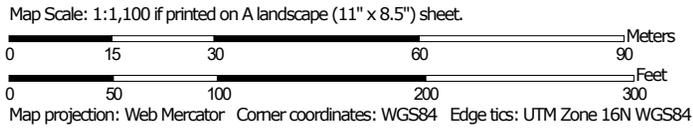
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)  
This page was produced by the NWI mapper

Soil Map—Posey County, Indiana  
(SR 66 over Rock Bottom Creek)



Soil Map may not be valid at this scale.



## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

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

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

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

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

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Posey County, Indiana

Survey Area Data: Version 18, Sep 7, 2018

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

Date(s) aerial images were photographed: Feb 12, 2016—Mar 9, 2017

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

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AIC3	Alford silt loam, 5 to 10 percent slopes, severely eroded	0.0	1.3%
AID3	Alford silt loam, 10 to 18 percent slopes, severely eroded	0.3	11.2%
IoB2	Iona silt loam, 2 to 6 percent slopes, eroded	0.1	3.8%
Wa	Wakeland silt loam, 0 to 2 percent slopes, frequently flooded	2.0	83.7%
<b>Totals for Area of Interest</b>		<b>2.4</b>	<b>100.0%</b>

Hydric Soils--Posey County, Indiana				
Map symbol and map unit name	Component	Percent of map unit	Landform	Hydric criteria
Wa--Wakeland silt loam, 0 to 2 percent slopes, frequently flooded				
	Birds, frequently flooded	5	Flood plains	2

## Data Source Information

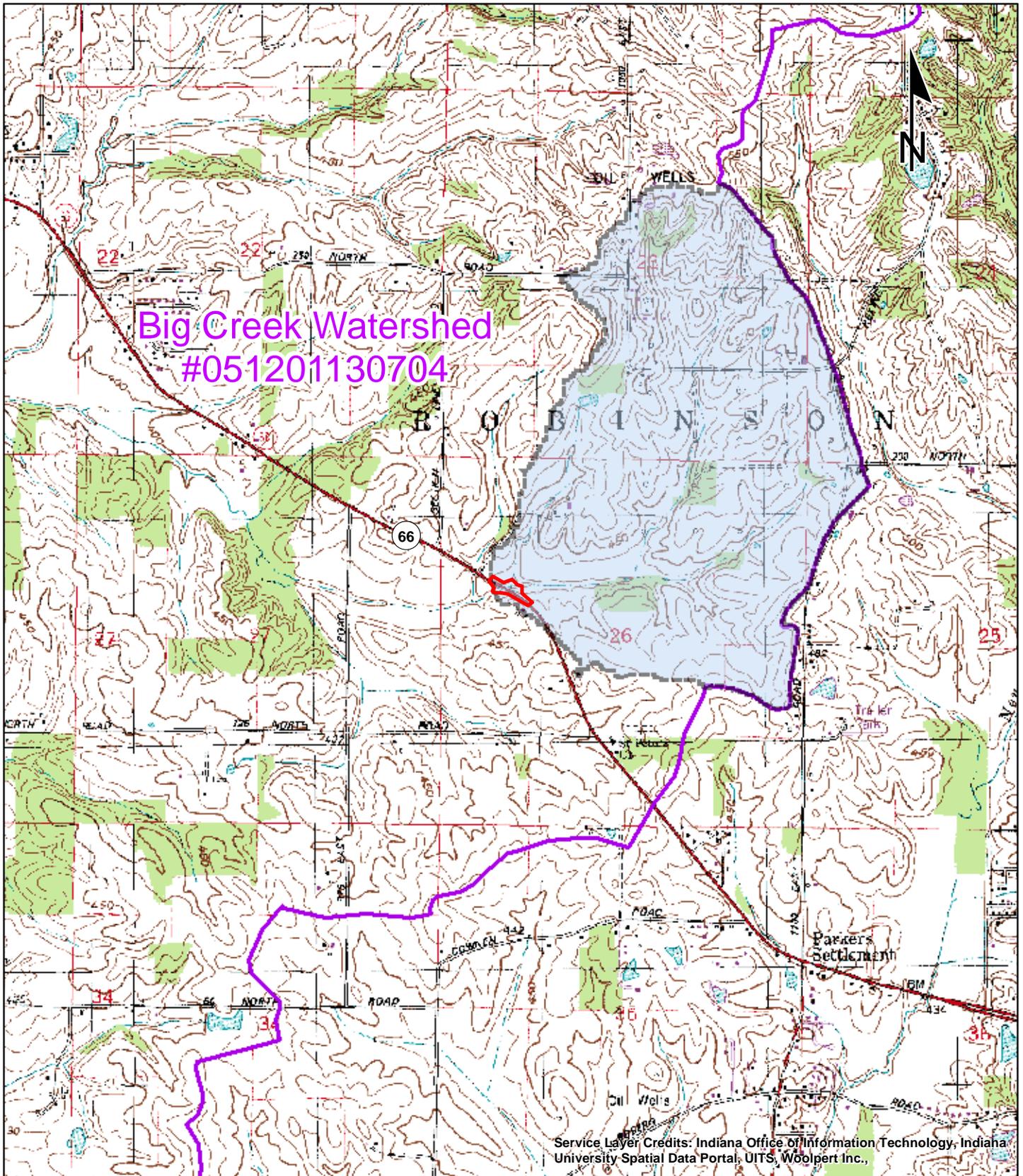
Soil Survey Area: Posey County, Indiana  
 Survey Area Data: Version 18, Sep 7, 2018

## Report—Hydric Soil List - All Components

Hydric Soil List - All Components—IN129-Posey County, Indiana					
Map symbol and map unit name	Component/Local Phase	Comp. pct.	Landform	Hydric status	Hydric criteria met (code)
AIC3: Alford silt loam, 5 to 10 percent slopes, severely eroded	Alford-Severely eroded	85-100	Loess hills	No	—
	Hosmer-Severely eroded	0-10	Loess hills	No	—
	Alvin	0-5	Hills	No	—
	Wakeland-Frequently flooded	0-5	Flood plains	No	—
AID3: Alford silt loam, 10 to 18 percent slopes, severely eroded	Alford-Severely eroded	85-100	Loess hills	No	—
	Wakeland-Frequently flooded	0-10	Flood plains	No	—
	Alvin	0-10	Hills	No	—
IoB2: Iona silt loam, 2 to 6 percent slopes, eroded	Iona	100	Loess hills	No	—
Wa: Wakeland silt loam, 0 to 2 percent slopes, frequently flooded	Wakeland-Frequently flooded	90-100	Flood plains	No	—
	Birds-Frequently flooded	0-10	Flood plains	Yes	2

### Data Source Information

Soil Survey Area: Posey County, Indiana  
 Survey Area Data: Version 18, Sep 7, 2018



 Investigated Area  Drainage Area	<b>Streamstats Map</b> SR 66 over Rock Bottom Creek Bridge Replacement Posey County, Indiana
0    1,250    2,500  Feet	Des. No. 1593065 1 inch = 2,500 feet
 Graphics created by HNTB Corporation (2019)	

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

**BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR PJD:** November 26, 2019

**B. NAME AND ADDRESS OF PERSON REQUESTING PJD:** Landon Little, 111 Monument Circle Suite 1200, Indianapolis, IN, 46202

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

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

This project is located on SR 66 over Rock Bottom Creek, near the city of Wadesville in Posey County, Des. No. 1593065. This section of SR 66 is carried by a single span Concrete bridge containing 2 lanes. Work that may affect water resources in the area includes a bridge replacement and scour protection.

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

State: **IN** County/parish/borough: **Posey** City: **Wadesville**

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

Lat.: **38.061483 N** Long.: **-87.73127 W**

Universal Transverse Mercator: Northing: 4212888 Easting: 435846 Zone: 16S

Name of nearest waterbody: **Rock Bottom Creek**

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

Office (Desk) Determination. Date:

Field Determination. Date(s):

**TABLE OF AQUATIC RESOURCES IN REVIEW AREA WHICH “MAY BE” SUBJECT TO REGULATORY JURISDICTION.**

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource “may be” subject (i.e., Section 404 or Section 10/404)
Rock Bottom Creek	38.061483 N	-87.73127 W	135 linear feet	Non-Wetland	Section 404
UNT to Rock Bottom Cre +	38.06184 N	-87.73084 W	65 linear feet	Non-Wetland	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:

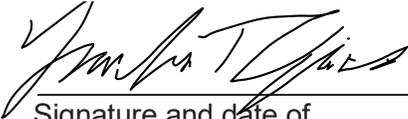
**SUPPORTING DATA. Data reviewed for PJD (check all that apply)**

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: HNTB Indiana
- 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: Kasson Quadrangle
- Natural Resources Conservation Service Soil Survey. Citation: PoseyCounty
- National wetlands inventory map(s). Cite name: USFWS GIS Database
- State/local wetland inventory map(s): \_\_\_\_\_
- FEMA/FIRM maps: \_\_\_\_\_
- 100-year Floodplain Elevation is: 421.5 ft (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date): 2016 USDA/NRCS ORTHO  
or  Other (Name & Date): September 6, 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

  
\_\_\_\_\_  
Signature and date of  
person requesting PJD  
(REQUIRED, unless obtaining  
the signature is impracticable)<sup>1</sup> 11-26-2019

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

SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

**Appendix G: Public Involvement**

**Sample Notice of Survey Letter**

May 1, 2019

A & L Huff Farm, LLC  
9901 Winternheimer Rd.  
Wadesville, IN 47638

Re: Posey County Tax Parcel – 65-06-26-300-007.000-016, 65-06-26-300-008.000-016

**NOTICE OF SURVEY**

Dear Property Owner:

HNTB, on behalf of The Indiana Department of Transportation (INDOT), will perform a survey for the proposed replacement of the bridge on SR 66 over Rock Bottom Creek, located .52 miles northwest of Winternheimer Rd. in Posey County, Indiana, Des No. 1593065. A portion of this survey work may be performed on your property in order to provide design engineers information for project design. The survey work will include mapping the location of features such as trees, buildings, fences, drives, ground elevations, etc. The survey is needed for the proper planning and design of this highway project.

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

Indiana Code 8-23-7-26 allows HNTB, as the authorized employees of INDOT, *Right of Entry* to the project site (including private property) upon proper notification. A copy of a Notice of Survey discussion sheet, as found on INDOT's website (<http://www.in.gov/indot/2888.htm>), is attached to this letter. Pursuant to Indiana Code 8-23-7-27, this letter serves as written notification that we will be performing the above noted survey in the vicinity of your property on or after May 6, 2019

HNTB employees will show you their identification, if you are available, before coming onto your property.

If you own but are not the tenant of this property (i.e. rental, sharecrop), please inform us so that we may also contact the actual tenant of the property prior to commencement of our work. If you have any questions or concerns regarding our proposed survey work or schedule, please contact the HNTB Project Manager. This contact information is as follows:

Angela Pearl, PE  
111 Monument Circle, Suite 1200  
Indianapolis, IN 46204  
(317) 636-468

Under Indiana Code 8-23-7-28, you have a right to compensation for any damage that occurs to your land or water as a result of the entry or work performed during the entry. To obtain such compensation, you should contact the Vincennes District Real Estate Manager; contact information is below. The District Real Estate Manager can provide you with a form to request compensation for damages. Once you fill out this form, you can return it to the District Real Estate Manager for consideration. If you are not satisfied with the compensation that INDOT determines is owed to you, Indiana Code 8-23-7-28 provides the following:

The amount of damages shall be assessed by the county agricultural extension educator of the county in which the land or water is located and two (2) disinterested residents of the county, one (1) appointed by the aggrieved party and one (1) appointed by the department. A written report of the assessment of damages shall be mailed to the aggrieved party and the department by first class United States mail. If either the department or the aggrieved party is not satisfied with the assessment of damages, either or both may file a petition, not later than fifteen (15) days after receiving the report, in the circuit or superior court of the county in which the land or water is located.

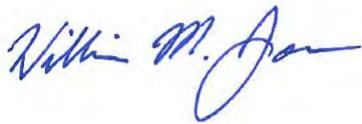
If you have questions regarding the rights and procedures outlined in this letter, please contact the Vincennes District Real Estate Manager. This contact information is as follows:

Jason Brown  
3650 S. Hwy 41  
Vincennes, IN 47591  
(812) 895-7371

Thank you in advance for your cooperation in this matter.

Sincerely,

HNTB Corporation

A handwritten signature in blue ink that reads "William M. Jones". The signature is written in a cursive style with a large, looping "J" at the end.

William M. Jones  
Supervisory Survey Technician

SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

**Appendix H: Air Quality**

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

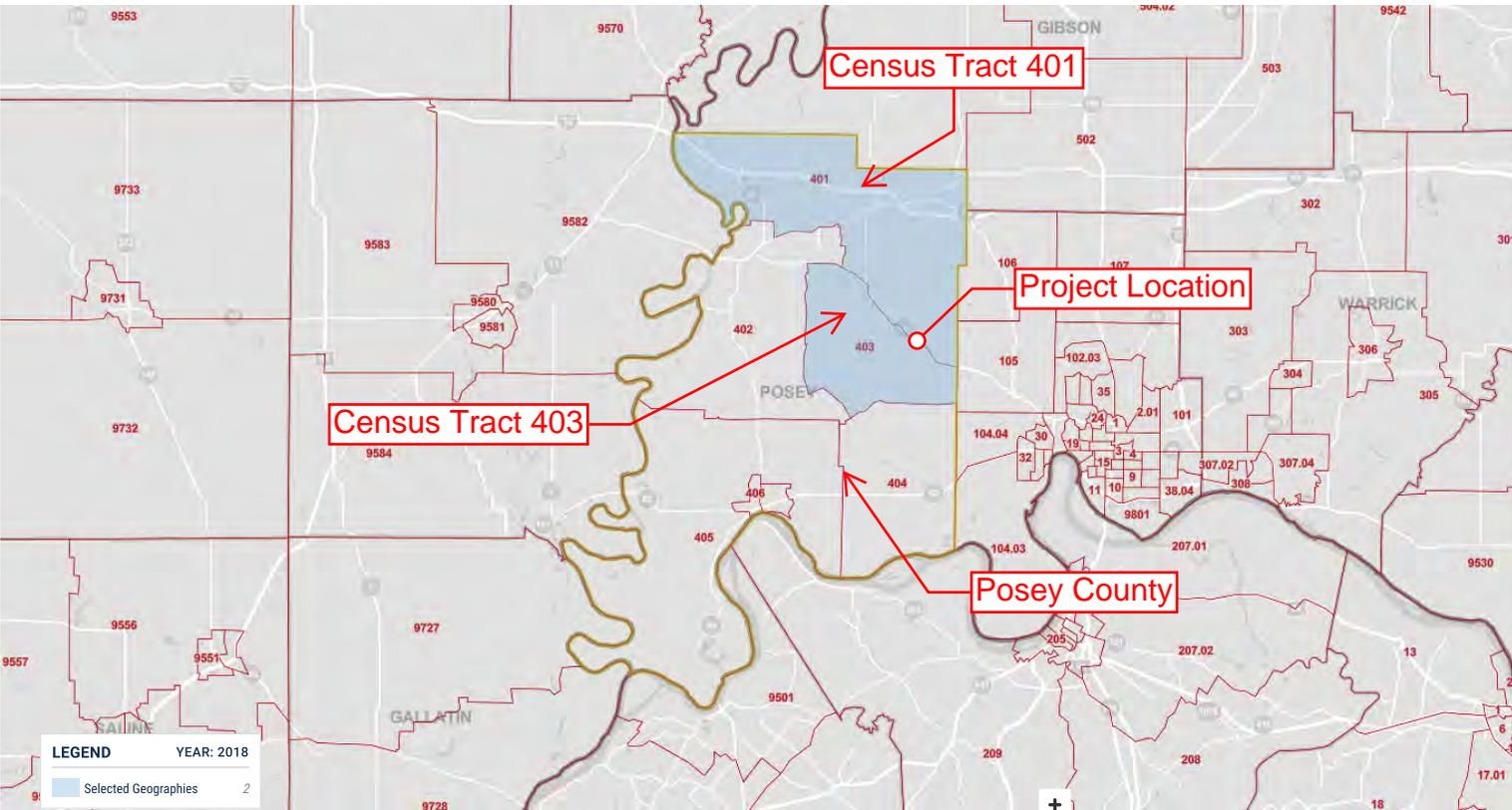
SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	LOCATION	DISTRICT	MILES	FEDERAL CATEGORY	Estimated Cost left to Complete Project*	PROGRAM	PHASE	FEDERAL	MATCH	2020	2021	2022	2023	2024
<b>Posey County</b>																		
Posey County	1593001	Init.	VA VARI	Bridge Inspections	Countywide Bridge Inspection and Inventory Program for Cycle Years 2018-2021	Vincennes	0	Multiple		Local Funds	PE	\$0.00	\$32,257.25	\$27,510.29	\$4,746.96			
										Local Bridge Program	PE	\$129,029.02	\$0.00	\$110,041.16	\$18,987.86			
Indiana Department of Transportation	39421 / 1593065	Init.	SR 66	Bridge Replacement, Concrete	Over Rock Bottom Creek, 4.85 miles E of SR-165	Vincennes	0	STPBG		Bridge Construction	CN	\$936,000.00	\$234,000.00				\$1,170,000.00	
										Bridge ROW	RW	\$16,000.00	\$4,000.00			\$20,000.00		
Indiana Department of Transportation	40042 / 1601990	Init.	I 64	HMA Overlay, Preventive Maintenance	From, 0.60 mile W of SR-165 to 3.32 mile E SR-65	Vincennes	9.652	NHPP		Road Construction	CN	\$6,836,513.40	\$759,612.60	\$7,596,126.00				
Indiana Department of Transportation	40567 / 1601062	Init.	SR 65	Pavement Replacement	From 0.6 mile S of W Jct with SR-68 to E Jct with SR-68	Vincennes	1.97	STPBG		Road Construction	CN	\$4,823,006.40	\$1,205,751.60		\$200,000.00	\$5,828,758.00		
										Road ROW	RW	\$18,400.00	\$4,600.00	\$23,000.00				
Indiana Department of Transportation	40898 / 1801246	Init.	I 64	Bridge Replacement, Other Construction	Payment to Illinois - I 64 EB over the Wabash River	Vincennes	0	NHPP		Bridge Construction	CN	\$36,000,000.00	\$4,000,000.00					\$40,000,000.00
Indiana Department of Transportation	41126 / 1800935	Init.	SR 62	Small Structure Pipe Lining	0.87 mi E IN edge, Wabash River	Vincennes	0	STPBG		Bridge Construction	CN	\$649,198.40	\$162,299.60		\$811,498.00			

**Posey County Total**

Federal: \$49,408,147.22      Match :\$6,402,521.05      2020: \$7,756,677.45      2021: \$1,035,232.82      2022: \$5,848,758.00      2023: \$1,170,000.00      2024: \$40,000,000.00

SR 66 over Rock Bottom Creek – Bridge Replacement  
Posey County, Indiana  
Des. No. 1593065

**Appendix I: Additional Studies**



5 mi



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 BY SEX BY AGE

**Survey/Program:**

American Community Survey

**Universe:**

Population for whom poverty status is determined

**Year:**

2018

**Estimates:**

5-Year

**Table ID:**

B17001

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.

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.

	Posey County, Indiana	Census Tract 401, Posey County, Indiana	Census Tract 403, Posey County, Indiana
	Estimate	Estimate	Estimate
∨ Total:	25,287	5,489	2,524
∨ Income in the past 12 months below poverty level:	2,546	374	108
∨ Male:	1,118	187	42
Under 5 years	86	16	7
5 years	53	0	0

6 to 11 years	142	6	21
12 to 14 years	41	1	0
15 years	0	0	0
16 and 17 years	32	0	0
18 to 24 years	128	29	4
25 to 34 years	93	10	0
35 to 44 years	67	1	7
45 to 54 years	167	40	0
55 to 64 years	195	43	3
65 to 74 years	61	36	0
75 years and over	53	5	0
▼ Female:	1,428	187	66
Under 5 years	77	10	0
5 years	0	0	0
6 to 11 years	96	10	0
12 to 14 years	81	1	0
15 years	49	0	19
16 and 17 years	22	2	0
18 to 24 years	180	21	19
25 to 34 years	158	14	5
35 to 44 years	230	5	19
45 to 54 years	127	8	0
55 to 64 years	192	67	4
65 to 74 years	122	21	0
75 years and over	94	28	0
▼ Income in the past 12 months at or above poverty level:	22,741	5,115	2,416
▼ Male:	11,510	2,754	1,199
Under 5 years	624	272	66
5 years	100	31	8
6 to 11 years	850	212	92
12 to 14 years	439	88	20
15 years	97	29	13
16 and 17 years	439	53	21
18 to 24 years	873	189	107
25 to 34 years	1,329	290	139
35 to 44 years	1,390	322	132

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.

## HISPANIC OR LATINO ORIGIN BY RACE

**Survey/Program:**

American Community Survey

**Universe:**

Total population

**Year:**

2018

**Estimates:**

5-Year

**Table ID:**

B03002

	Posey County, Indiana	Census Tract 401, Posey County, Indiana	Census Tract 403, Posey County, Indiana
	Estimate	Estimate	Estimate
∨ Total:	25,589	5,491	2,535
∨ Not Hispanic or Latino:	25,293	5,462	2,521
White alone	24,570	5,435	2,477
Black or African American alone	377	6	16
American Indian and Alaska Native alone	7	4	0
Asian alone	110	0	21
Native Hawaiian and Other Pacific Islander alone	0	0	0
Some other race alone	0	0	0
∨ Two or more races:	229	17	7
Two races including Some other race	0	0	0
Two races excluding Some other race, and three or more races	229	17	7
∨ Hispanic or Latino:	296	29	14
White alone	67	29	7
Black or African American alone	127	0	0
American Indian and Alaska Native alone	0	0	0
Asian alone	8	0	0
Native Hawaiian and Other Pacific Islander alone	0	0	0
Some other race alone	53	0	7
∨ Two or more races:	41	0	0
Two races including Some other race	30	0	0
Two races excluding Some other race, and three or more races	11	0	0

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated December 2019)

ProjectNumber	SubProjectCode	County	Property
1800004	1800004	Posey	Harmonie State Park
1800068	1800068	Posey	Brittlebank Park and Municipal Pool
1800096	1800096	Posey	Harmonie State Park
1800165	1800165	Posey	Harmonie State Park
1800171	1800171D	Posey	Harmonie State Park
1800177	1800177D	Posey	Harmonie State Park
1800214	1800214	Posey	Hovey Lake State Fish & Wildlife Area and Weyerbac
1800220	1800220	Posey	Harmonie State Park
1800309	1800309A	Posey	Harmonie State Park
1800312	1800312D	Posey	Harmonie State Park
1800327	1800327E	Posey	Harmonie State Park
1800363	1800363K	Posey	Harmonie State Park
1800405	1800405W	Posey	Twin Swamps Nature Preserve
1800328	1800328	Various*	Heritage program
1800594	1800594	Various*	Brown County State Park and Versailles State Park
1800611	1800611	Various*	Whitewater Memorial State Park/Salamonie Reservoir
1800626	1800626	Various*	Brown County S.P., Indiana Dunes S.P. and Cataract Falls SRA

*Please note, some of the property names are cut off on the ends due to character limits. Also, park names may have changed and is not reflected on the list.*

*\*Various - this may include multiple sites in multiple counties and should always be included in your searches by county. The Heritage Program, under various, may involve properties throughout most counties. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation should occur.*