FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	State Route (SR) 252 / Franklin County
Designation Number(s):	2000087
Project Description/Termini:	Slide Correction Project, 0.9 mile east of US 52

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

Approval

INDOT DE Signature and Date

INDOT ESD Signature and Date

FHWA Signature and Date

Release for Public Involvement

DGD 2024.05.20 09:49:55 -04'00'

INDOT DE Initials and Date

INDOT ESD Initials and Date

Certification of Public Involvement

INDOT Consultant Services Signature and Date

INDOT DE/ESD Reviewer Signature and Date:

Name and Organization of CE/EA Preparer: Kia Gillette, HNTB Corporation

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

Part I – Public Involvement

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

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

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

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

Notice of Entry letters were mailed to potentially affected property owners within the project area on September 21, 2021, and August 11, 2022, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. Sample copies of the Notice of Entry letters are included in Appendix G, pages 1-3.

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

Public Controversy on Environmental Grounds

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

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

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

Sponsor of the Project: INDOT INDOT District: Seymour

Local Name of the Facility: SR 252

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

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

PURPOSE AND NEED:

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

Need: The need for this project is due to the continued erosion of the roadway embankment on the south side of SR 252. The gradual erosion affects the roadway pavement integrity along this section of SR 252, posing safety hazards to the traveling public.

During a geotechnical exploration conducted by INDOT in 2022 (Appendix I, pages 2-3), there was visual evidence of distress within the pavement section via cracking within the eastbound lane of SR 252. The typical roadway condition shows the eastbound lane of SR 252 moving downhill. INDOT has completed multiple pavement overlays to address pavement distress due to slope movement along SR 252, but such routine maintenance activities are unable to address underlying slope instability hazards.

Purpose: The purpose of the project is to restore slope stability along this section of SR 252 and restore the rideability of SR 252 to minimize safety hazards to the traveling public.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Franklin Municipality: Brookville

Limits of Proposed Work: SR 252 between approximately 0.90 mile east of US 52 to 1.03 miles east of US 52

Total Work Length: 0.14 Mile(s) Total Work Area: 1.34 Acre(s)

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

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

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

INDOT and the Federal Highway Administration (FHWA) intend to proceed with a slide correction project along SR 252 in Franklin County, Indiana.

Location: This project is located along SR 252, approximately 0.9 mile east of US 52 and east of Brookville in Franklin County, Indiana. More specifically, the project is located in Section 28, Township 9 North, Range 2 West in Brookville Township (Appendix B, page 1).

Existing Conditions: Within the project limits, SR 252 is a two-lane state collector with a speed limit of 55 miles per hour. The existing roadway has 11-foot lanes with 1-foot aggregate shoulders and no guardrail (Appendix B, page 7). This section of roadway has been impacted by erosion, with a landslide occurring on the south side that affects the roadway pavement integrity (Appendix I, pages 2-3). Drainage on the north side of the road is conveyed through side ditches to two culverts within the project vicinity. CLV 1782 is a 30-inch corrugated metal pipe (CMP) crossing under SR 252 on the east end of the project and CLV 17195 is an 18-inch CMP located outside of the western project limits. CLV 1782 also conveys Unnamed Tributary (UNT) 1 to the East Fork (EF) Whitewater River under SR 252 (Appendix B, page 3). Drainage not conveyed by these culverts overtops the existing retaining wall south of SR 252 before draining into UNT 1 to the EF Whitewater River. There are overhead electric lines that run the length of the project along the north edge of roadway. Land use within and adjacent to the project area consists of rural residential areas, with heavily forested areas adjoining both sides of the right-of-way (ROW). There are two residential driveways located adjacent to the east end of the project area.

Preferred Alternative: The preferred alternative will stabilize the landslide along the south side of SR 252. Proposed project activities include the installation of a 615-foot-long structural drilled shaft retaining wall with unreinforced concrete plug shafts. The drilled shafts will be reinforced with H-Pile 12x53 steel I-Beams spaced 5 feet apart and installed at a minimum of 10 feet below bedrock. Guardrail will be placed along the south side of SR 252. The ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to the existing culverts. Both culverts will remain in place. Existing overhead electric utility poles along the north edge of roadway will need to be relocated for ditch regrading. The roadway

within the project limits will be milled and overlaid. The aggregate shoulder along the north edge of the road will be replaced with 2-foot paved shoulder with a 1-foot aggregate safety edge. The aggregate shoulder along the south edge of the road will be replaced with a 2-foot paved shoulder. Minimal excavation will occur on the slope south of SR 252 at the east end of the project area, and riprap will be placed along the excavated slope at the east end of the project area (Appendix B, pages 7-8).

The proposed maintenance of traffic (MOT) plan includes the closure of SR 252 within the project limits due to roadway constraints. Consequently, a detour will be provided (Appendix B, pages 9-10). Additional MOT details can be found in the "Maintenance of Traffic During Construction" section of this document.

The project has been designed to minimize impacts, and no residential relocations will be required. The impacts of the project will be reduced by minimizing work on the culverts and minimizing the extent of fill placed for permanent erosion control, as well as implementing temporary measures such as minimizing tree removal and directing temporary lighting from suitable bat habitat during the active season. Due to the nature of the drainage patterns through the area and the need to stabilize the slopes adjoining the roadway, it is not practicable to avoid all work within roadside drainages, but the level of impact is not anticipated to exceed thresholds requiring mitigation.

The project will meet the purpose and need by addressing the existing deficiencies in the roadway pavement and stabilizing the roadway embankment south of SR 252, which will minimize the potential for future slide activity and safety hazards to the travelling public along this section of SR 252.

Termini/Independent Utility: The project extends from 0.90 mile to east of US 52 to 1.03 miles east of US 52 and is approximately 690 feet long. The termini of the project provide the logical beginning and end point necessary to complete the slide correction and are of sufficient length to address potential environmental impacts on a broad scope. The project is independent of any other action and able to be constructed without relying on the completion of any other project.

OTHER ALTERNATIVES CONSIDERED:

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

Drilled Shaft Retaining Wall with Concrete Lagging: This alternative would involve the excavation of the slope south of SR 252 and the installation of a structural drilled shaft retaining wall with reinforced concrete plug shafts to stabilize the landslide (Appendix I, page 9). CLV 1782 would be extended beyond the proposed retaining wall. This design results in a vertical drop of 3 feet beyond the retaining wall edge, which would require the implementation of MGS rail. Concrete curb and gutter would be placed along the south side of SR 252.

There is a chance that the concrete lagging wall could fail over time due to the substrate present along this section of SR 252. This alternative would require additional maintenance, would create a hazardous 3-foot vertical drop beyond the retaining wall edge, and has a lower likelihood of correcting the slide over the long term. For these reasons, this alternative was discarded from further consideration.

Soil Nail Wall: A soil nail wall was initially investigated; however, it was discarded due to shorter design life and a lower level of confidence in this solution (Appendix I, page 9).

No Build: This alternative would not involve any improvements to the roadside slope or pavement in this section of SR 252. This alternative does not meet the purpose and need of the project to restore slope stability along this section of SR 252 and restore the rideability of SR 252 to minimize safety hazards to the traveling public. It does not address the existing and recurring slope failures that undermine the existing roadway. This alternative was discarded from further consideration because it does not meet the purpose and need of the project.

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

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

ROADWAY CHARACTER:

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

Name of Roadway: SR 252
Functional Classification: State Collector
Current ADT: 1,213 VPD (2021) Design Year ADT: 1,239 VPD (2046)
Design Hour Volume (DHV): 145 Truck Percentage (%): 9.81
Designed Speed (mph): 55 Legal Speed (mph): 55

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	11-ft through lanes		11-ft through lanes	
Pavement Width:	22	ft.	26	ft.
Shoulder Width:	1-foot (aggregate)	ft.	2-foot paved, 1-foot aggregate (WB lane) 2-foot paved, 1-foot aggregate safety edge (EB lane)	ft.
Median Width:	0	ft.	0	ft.
Sidewalk Width:	0	ft.	0	ft.

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

BRIDGES AND/OR SMALL STRUCTURE(S):

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

Structure/NBI Number(s): CLV 1782 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	30-inch CMP		N/A	
Number of Spans:	N/A		N/A	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	N/A	ft.
Shoulder Width:	N/A	ft.	N/A	ft.

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

CLV 1782 is 30-inch by 39-foot CMP conveying roadside drainage and UNT 1 to EF Whitewater River under SR 252 at the east end of the project area. CLV 1782 is not a historic structure. CLV 1782 will remain in place; however, the area adjacent to the outlet south of SR 252 will be regraded and riprap will be placed, resulting in 50 linear feet of permanent stream impacts. Temporary dewatering to provide a dry working area for regrading and riprap placement will result in 80 linear feet of temporary stream impacts.

Structure/NBI Number(s): CLV 17195 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	18-inch CMP		N/A	
Number of Spans:	N/A		N/A	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	N/A	ft.
Shoulder Width:	N/A	ft.	N/A	ft.

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

CLV 17195 is an 18-inch by 39.5-foot CMP conveying roadside drainage under SR 252 at the the west end of the project area, outside of the construction limits. CLV 17195 is not a historic structure. CLV 17195 will not be impacted by this project.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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

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

The MOT for the project will require the closure of this section of SR 252 during construction. Because of the road closure, a detour will be provided. The detour route will utilize US 52, SR 1, I-74, SR 128, and SR 126 and will extend east across the Ohio state border. The length of the detour will be approximately 48 miles (Appendix B, pages 9-10). The detour is expected to last two months. Coordination with the Ohio Department of Transportation (ODOT) will occur prior to implementation. This is included as a firm commitment in the Environmental Commitments section of this document.

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

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: $ 650,000 (2022/23) Right-of-Way: $ 30,000 (2024) Construction: $ 4,220,000 (2025)

Anticipated Start Date of Construction: Spring 2025

RIGHT OF WAY:

Land Use Impacts	Amount (acres) Permanent	Temporary
Residential	0	0
Commercial	0	0
Agricultural	0	0
Forest	1.22	0
Wetlands	0	0
Other:	0	0
Other:	0	0
TOTAL	1.22	0

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

The existing ROW on the north side of SR 252 consists of forested slopes with some grassy areas and varies from the edge of pavement to 22 feet from the edge of pavement within the project area. The existing ROW on the south side of SR 252 consists of forested, eroding slopes and varies from the edge of pavement to 56 feet from the edge of pavement.

The project requires approximately 0.66 acre of permanent ROW north of SR 252 for tree clearing and construction access. The land use within the vicinity of the project is primarily agricultural and forest, and includes one residence within the eastern project terminus and a few more residences further east of the project. The project requires approximately 0.56 acre of permanent ROW south of SR 252 for tree clearing, construction access, and slide correction activities. No temporary ROW acquisition will be required.

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

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

SECTION A - EARLY COORDINATION:

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

Early coordination letters were sent on March 8, 2023 (Appendix C, pages 1-3).

Agency	Date Sent	Date Response Received	Appendix
INDOT Seymour District Project Manager	3/8/2023	None	N/A

Agency	Date Sent	Date Response Received	Appendix
INDOT Seymour District Environmental Section Manager	3/8/2023	None	N/A
Federal Highway Administration (FHWA)	3/8/2023	None	N/A
Midwest Regional Office, National Park Service (NPS)	3/8/2023	None	N/A
U.S. Department of Housing and Urban Development (HUD)	3/8/2023	None	N/A
Natural Resources Conservation Service (NRCS)	3/8/2023	3/9/2023	Appendix C, page 7
U.S. Army Corps of Engineers (USACE)	3/8/2023	None	N/A
Indiana Department of Environmental Management (IDEM), Groundwater Section	3/8/2023	3/15/2023	Appendix C, pages 8-9
Indiana Geological and Water Survey (IGWS)	3/8/2023	3/8/2023	Appendix C, pages 12-13
Indiana Department of Natural Resources, Div. of Fish and Wildlife (IDNR DFW)	3/8/2023	4/5/2023	Appendix C, pages 4-6
Franklin County Highway Department	3/8/2023	None	N/A
Franklin County Commissioner's Office	3/8/2023	None	N/A
Franklin County Council	3/8/2023	None	N/A
Franklin County Department of Parks and Recreation	3/8/2023	None	N/A
Franklin County Surveyor	3/8/2023	3/8/2023	Appendix C, pages 10-11
Franklin County Sheriff's Department	3/8/2023	None	N/A
Franklin County Community School Corporation	3/8/2023	None	N/A
Brookville Police Department	3/8/2023	None	N/A
Brookville Fire Department	3/8/2023	None	N/A
Brookville Town Council	3/8/2023	None	N/A
Brookville Street Department	3/8/2023	None	N/A

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

SECTION B – ECOLOGICAL RESOURCES:

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

Total stream(s) in project area: 1,510 Linear feet Total impacted stream(s): 50 Linear feet

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)
UNT 1 to EF Whitewater River	Riverine, intermittent, streambed, cobble-gravel (R4SB3)	1,100	50	- Located north and south of SR 252. - Flows south under SR 252 and then west through the project area along the toe of slope of the SR 252 embankment. - Likely a Water of the US (Appendix B, page 3).
UNT 2 to EF Whitewater River	Riverine, ephemeral (R6)	70	0	- Located south of SR 252. - Flows north into UNT 1 to EF Whitewater River. - Likely a Water of the US (Appendix B, page 3).
UNT 3 to EF Whitewater River	R6	115	0	- Located south of SR 252. - Flows north into UNT 1 to EF Whitewater River. - Likely a Water of the US (Appendix B, page 3).
UNT 4 to EF	R6	75	0	- Located south of SR 252, west of the project limits.

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)
Whitewater River				- Flows south from SR 252 into UNT 1 to EF Whitewater River. - Likely a Water of the US (Appendix B, page 3).
UNT 5 to EF Whitewater River	R6	150	0	- Located south of SR 252, west of the project limits. - Flows northwest into UNT 1 to EF Whitewater River. - Likely a Water of the US (Appendix B, page 3).

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

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E, page 2) there are ten streams, rivers, watercourse, or other jurisdictional features within the 0.5-mile search radius. There is one stream within or adjacent to the project area. That number was updated to five streams by the site visit on November 1, 2022, by Little River Consultants.

A *Waters of the U.S. Determination/Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on March 14, 2023. Please refer to Appendix F, pages 1-17 for the *Waters of the U.S. Determination/Wetland Delineation Report*. It was determined that there are likely five jurisdictional streams (UNTs 1-5 to EF Whitewater River) and three likely non-jurisdictional roadside drainage ditches within the project area. The roadside ditches are manmade, have no defined bed and banks, and do not carry relatively permanent or seasonal flow. Additionally, one erosional feature was found within the investigated area. The erosional feature has no defined bed and bank and does not carry relatively permanent or seasonal flow, and is therefore excluded from the definition of Waters of the U.S. The USACE makes all final determinations regarding jurisdiction.

Four tributaries (UNT 2, UNT 3, UNT 4, and UNT 5 to EF Whitewater River) flow into UNT 1 to EF Whitewater River along the length of the investigated area. The EF Whitewater River is a traditional navigable water (TNW). UNT 1 to EF Whitewater River drains into EF Whitewater River approximately 0.4 mile west of the investigated area.

There are no streams listed as a Federal Wild and Scenic River, a State Natural, Scenic, and Recreational River, or on the Indiana Register's listing of Outstanding Rivers and Streams, nor are there any navigable waterways or National Rivers Inventory waterways present in the investigated area.

UNT 1 to EF Whitewater River

UNT 1 to EF Whitewater River is shown as intermittent (dashed blue line) on the United States Geological Survey (USGS) 1994 Whitcomb Quadrangle Map (Appendix B, page 2). Based on field observations, UNT 1 to EF Whitewater River appears to be intermittent as it did not have flowing water during the site visit. Per the USGS Streamstats Database (https://water.usgs.gov/osw/streamstats/indiana.html), the upstream drainage area of UNT 1 to EF Whitewater River is 0.097 square mile. UNT 1 to EF Whitewater River exhibited a maximum ordinary high-water mark (OHWM) of 10 feet 10 inches wide x 1 foot 9 inches deep. Approximately 1,100 feet of UNT 1 to EF Whitewater River are within the project area.

The project will result in approximately 50 linear feet of permanent impacts to UNT 1 to EF Whitewater River due to the placement of riprap along the excavated slope south of SR 252 and at the outlet of CLV 1782. Approximately 80 linear feet of UNT 1 to EF Whitewater River will be temporarily impacted due to the placement of temporary cofferdams, dewatering, and access to complete the slide correction activities. This project is anticipated to require USACE Section 404 and IDEM Section 401 permits. Impacts to UNT 1 to EF Whitewater River are not anticipated to meet the threshold requiring mitigation. Avoidance alternatives are not practical due to the scope of activities required to repair the landslide.

UNT 2 to EF Whitewater River

UNT 2 to EF Whitewater River is not shown on the USGS 1994 Whitcomb Quadrangle Map (Appendix B, page 2). Based on field observations, UNT 2 to EF Whitewater River appears to be ephemeral. It is not shown in StreamStats. UNT 2 to EF Whitewater River exhibited a maximum OHWM of 4 feet 4 inches wide x 8 inches deep. Approximately 70 feet of UNT 2 to EF Whitewater River are within the project area. UNT 2 to EF Whitewater River is located outside of the construction limits and will not be

impacted by the project. UNT 2 to EF Whitewater River will be marked as "Do Not Disturb" on the roadway plans.

UNT 3 to EF Whitewater River

UNT 3 to EF Whitewater River is not shown on the USGS 1994 Whitcomb Quadrangle Map (Appendix B, page 2). Based on field observations, UNT3 to EF Whitewater River appears to be ephemeral. It is not shown in StreamStats. UNT 3 to EF Whitewater River exhibited a maximum OHWM of 3 feet 2 inches wide x 1 foot 1 inch deep. Approximately 115 feet of UNT 3 to EF Whitewater River are within the project area. UNT 3 to EF Whitewater River is located outside of the construction limits and will not be impacted by the project. UNT 3 to EF Whitewater River will be marked as "Do Not Disturb" on the roadway plans.

UNT 4 to EF Whitewater River

UNT 4 to EF Whitewater River is not shown on the USGS 1994 Whitcomb Quadrangle Map (Appendix B, page 2). Based on field observations, UNT 4 to EF Whitewater River appears to be ephemeral. It is not shown in StreamStats. UNT 4 to EF Whitewater River exhibited a OHWM 6 feet 9 inches wide x 1 foot 2 inches deep. Approximately 75 feet of UNT 4 to EF Whitewater River are within the project area. UNT 4 to EF Whitewater River is located outside of the construction limits and will not be impacted by the project. UNT 4 to EF Whitewater River will be marked as "Do Not Disturb" on the roadway plans.

UNT 5 to EF Whitewater River

UNT 5 to EF Whitewater River is not shown on the USGS 1994 Whitcomb Quadrangle Map (Appendix B, page 2). Based on field observations, UNT 5 to EF Whitewater River appears to be ephemeral. It is not shown in StreamStats. UNT 5 to EF Whitewater River exhibited a maximum OHWM of 3 feet wide x 6 inches deep during the field investigation. Approximately 150 feet of UNT 5 to EF Whitewater River are within the project area. UNT 5 to EF Whitewater River is located outside of the construction limits and will not be impacted by the project. UNT 5 to EF Whitewater River will be marked as "Do Not Disturb" on the roadway plans.

IDNR-DFW responded on April 5, 2023, with recommendations pertaining to minimizing the use of riprap for bank stabilization, not working in the waterway from April 1 – June 30, not excavating in the low flow area, not constructing temporary runarounds, using six-inch grade riprap, not using broken concrete as riprap, underlaying riprap with well graded aggregate or geotextile, minimizing the movement of resuspended stream sediment, and erosion and sediment control measures (Appendix C, pages 4-6).

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

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

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

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E, page 2), there are six lakes within the 0.5-mile search radius. There are no open water features within or adjacent to the project area, which was confirmed by the site visit on November 1, 2022, by Little River Consultants. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on March 14, 2023. Please refer to Appendix F, pages 1-17 for the *Waters of the U.S. Determination/Wetland Delineation Report*. It was determined that there are no open water features within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

	Presence	Impacts Yes	Impacts No
Wetlands			

Total wetland area: 0 Acre(s) Total wetland area impacted: 0 Acre(s)

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

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

Wetlands (*Mark all that apply*)	Documentation	ESD Approval Dates
Wetland Determination	X	March 14, 2023
Wetland Delineation		
USACE Isolated Waters Determination		

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

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

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

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E, page 2), there are six wetlands located within the 0.5-mile search radius. There are no wetlands within or adjacent to the project area, which was confirmed by the site visit on November 1, 2022, by Little River Consultants. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on March 14, 2023. Please refer to Appendix F, pages 1-17 for the *Waters of the U.S. Determination/Wetland Delineation Report*. It was determined that there are no wetlands within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

	Presence	Impacts Yes	Impacts NO
Terrestrial Habitat	X	X	

Total terrestrial habitat in project area: 1.05 Acre(s) Total tree clearing: 1.05 Acre(s)

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

Based on a desktop review, a site visit on August 18, 2022 by HNTB and the aerial map of the project area (Appendix B, page 3) there is forested habitat within the project area. Dominant vegetation within the project area includes tall fescue (*Festuca arundinacea*), perennial ryegrass (*Lolium perenne*), Eastern white pine (*Pinus strobus*), boxelder maple (*Acer negundo*), American elm (*Ulmus americana*), green ash (*Fraxinus pennsylvanica*), and black walnut (*Juglans nigra*).

The project will require approximately 1.05 acre of habitat disturbance. All habitat disturbance will be tree clearing for construction access and slide correction activities. Avoidance alternatives are not feasible as the project limits are required for the correction of the landslide. Terrestrial habitat impacts have been minimized to the smallest extend possible to complete the proposed scope of work. Mitigation for terrestrial habitat impacts is not anticipated. All disturbed areas will be reseeded according to the current INDOT standard specifications.

IDNR-DFW responded on April 5, 2023, with recommendations pertaining to wildlife passage, riparian habitat mitigation, post-construction revegetation measures, minimizing tree and brush clearing, erosion and sediment control methods that minimize the entrapment and snaring of small-bodied wildlife (Appendix C, pages 4-6).

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

Protected Species

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

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

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

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

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

Based on a desktop review and the RFI report (Appendix E, page 4), completed by HNTB on February 10, 2023, the IDNR Franklin County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated April 5, 2023 (Appendix C, page 4), the Natural Heritage Program's Database has been checked and no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity. An INDOT 0.5-mile bat review occurred on June 9, 2022, and did not indicate the presence of endangered bat species (Appendix C, page 26).

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 14-25). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally endangered northern long-eared bat (NLEB) (*Myotis septentrionalis*). No additional species were generated in the IPaC species list 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), Federal Transit Administration (FTA), and USFWS. Culvert inspections occurred on August 18, 2022, and there were no bats/birds or signs of bats/birds found using the structures (Appendix C, page 27-28). An effect determination key was completed on March 27, 2023, and based on the responses provided, the project was found to *"may affect – not likely to adversely affect"* the Indiana bat and/or the NLEB (Appendix C, pages 29-42). INDOT reviewed and verified the effect finding on March 29, 2023, and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. The USFWS provided Avoidance and Minimization Measures (AMMs) pertaining to tree

removal, temporary and permanent lighting, and operator, employee, and contractor awareness of environmental commitments and AMMs while working in bat habitat area. AMMs and/or commitments are included as firm commitments in the Environmental Commitments section of this document.

Culvert inspections occurred on August 18, 2022, and no bats or signs of bats found using the structures (Appendix C, pages 27-28). USFWS Bridge/Structure Assessment are only valid for two years. If construction will begin after August 18, 2024, an inspection of the structures by a qualified individual, must be performed. Inspection of the structures should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. This firm commitment is included in the Environmental Commitments of this document.

The IPaC project description included 1.89 acres of tree clearing. This number was conservative and has been reduced to 1.05 acres of tree clearing. The "may affect – not likely to adversely affect" finding has not changed.

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

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

Date Karst Evaluation reviewed by INDOT EWPO (if applicable): _____

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

Based on a desktop review and the Indiana Karst Region map, the project is located outside the designated Indiana Karst Region as outlined in the most current *Protection of Karst Features during Project Development and Construction.* According to the topo map of the project area (Appendix B, page 2) and the RFI report (Appendix E, page 2), there are no karst features identified within or adjacent to the project area. In the early coordination response dated March 8, 2023, the Indiana Geological and Water Survey (IGWS) did not indicate that karst features exist in the project area (Appendix C, pages 12-13). IGWS also stated that there is high liquefaction potential, 1% annual chance of flood hazard, potential slope instability, low potential for bedrock resources, low potential for sand and gravel resources, and there are no documented active or abandoned mineral resources extraction sites located within the project area. The response from IGWS has been communicated with the designer on August 4, 2023. No impacts are expected.

SECTION C – OTHER RESOURCES

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

Indiana Department of Transportation

County Franklin Route SR 252 Des. No. 2000087

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

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

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

In an early coordination letter dated March 15, 2023, IDEM stated the project is not located within a Wellhead Protection Area or Source Water Assessment Area (Appendix C, pages 8-9). No impacts are expected.

The IDNR Water Well Record Database website (https://www.in.gov/dnr/water/3595.htm) was accessed on August 3, 2023, by HNTB. No wells are located near this project. Therefore, no impacts are expected.

Based on a desktop review of the INDOT MS4 Mapper (https://entapps.indot.in.gov/MS4/) by HNTB on June 16, 2023, this project is not located within an Urban Area Boundary location. No impacts are expected.

Based on a desktop review, a site visit on August 18, 2022, by HNTB and the aerial map of the project area (Appendix B, page 3), no public water systems were identified. Therefore, no impacts are expected.

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

If applicable, indicate the Floodplain Level?

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

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

The IDNR Indiana Floodway Information Portal website (https://secure.in.gov/dnr/water/surface-water/indiana-floodplain-mapping/indiana-floodplain-information-portal/) was accessed on June 13, 2023, by HNTB. 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.

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

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

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

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

Based on a desktop review, a site visit on August 18, 2022, by HNTB, and the aerial map of the project area (Appendix B, page 3), 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 March 8, 2023, to NRCS. The NRCS responded on March 9, 2023, stating the project will not cause a conversion of prime farmland (Appendix C, page 7).

SECTION D – CULTURAL RESOURCES

	Category(ies) and Type(s)	INDOT Approval Date(s)	N/A
Minor Projects PA	Category B, Types 3, 4, and 10	August 3, 2023	

Full 106 Effect Finding

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

Eligible and/or Listed Resources Present

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

Documentation Prepared (mark all that apply)		ESD Approval Date(s)	SHPO Approval Date(s)
APE, Eligibility and Effect Determination			
800.11 Documentation			
Historic Properties Report or Short Report			
Archaeological Records Check and Assessment	X	August 3, 2023	N/A
Archaeological Phase Ia Survey Report	X	August 3, 2023	N/A
Archaeological Phase Ic Survey Report			
Other:			

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

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

On August 3, 2023, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Types 3, 4, and 10 under the Minor Projects Programmatic Agreement (Appendix D, pages 1-6).

MPPA Category B-3 projects include construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration and deceleration lanes) and shoulder widening when work occurs in undisturbed soils and an archaeological investigation determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area.

MPPA Category B-4 projects include installation of new safety appurtenances, including but not limited to, guardrails, barriers, glare screens, and crash attenuators when work occurs in undisturbed soils and an archaeological investigation determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area.

MPPA Category B-10 projects include Slide corrections, slope repairs, and other erosion control measures, in undisturbed soils when an archaeological investigation determines that no National Register-listed or potentially National Register-eligible archaeological resources are present within the project area.

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

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

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

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

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

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

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, page 2), there is one potential 4(f) resource located within the 0.5-mile search radius. According to additional research and by the site visit on August 18, 2022, by HNTB, there are no Section 4(f) resources within or adjacent to the project area. Therefore, no use is expected.

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

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

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

A review of 6(f) properties on the INDOT ESD website revealed a total of six properties in Franklin County (Appendix I, page 1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

SECTION F – Air Quality

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

Location in STIP: FY 2024-2028 (Page 63) (Appendix H, Page 1)

Name of MPO (if applicable):

Location in TIP (if applicable):

Level of MSAT Analysis required?

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

Describe if the project is listed in the STIP and if it is in a TIP. Describe the attainment status of the county(ies) where the project is located. Indicate whether the project is exempt from a conformity determination. If the project is not exempt, include information about the TP and TIP. Describe if a hot spot analysis is required and the MSAT Level.

This project is included in the Fiscal Year (FY) 2024-2028 Statewide Transportation Improvement Program (STIP) (Appendix H, page 1).

This project is located in Franklin County, which is currently in attainment for all criteria pollutants according to IDEM's Current and Historical List of Nonattainment Areas by County (https://www.in.gov/idem/sips/nonattainment-status-of-counties/). Therefore, the conformity procedures of 40 CFR Part 93 do not apply.

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

SECTION G - NOISE

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

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

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

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

SECTION H – COMMUNITY IMPACTS

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

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

The project will ultimately be beneficial to local businesses and properties due to mitigating the potential for future slide activity along SR 252 within the project limits. Overall, the negative impacts to property owners within the project area will be minimal and will consist primarily of short-term construction impacts. Property owners will be provided access throughout the duration of the project to reduce impacts to the greatest extent feasible. The project is not anticipated to result in substantial impacts to community cohesion, because it will not change access to properties within the area. The project is not expected to impact the surrounding community or cause economic impacts to the surrounding area. If these project improvements are not implemented, there would be continued sliding of the roadway side slope and eventual failure of the road, which would incur long standing adverse community and economic impacts.

Per the *2021 Indiana Festival Guide* (https://indianafestivals.org/) accessed on June 5, 2023 by HNTB, there are seven scheduled festivals in Franklin County. The festivals are in Brookville, Indiana, which is located off of the SR 252, approximately two miles west of the project area. The project site is within two miles of the American Legion Post #77 (which holds Indiana's largest Canoe Race with 2,500 participants) and within two miles of the Franklin County Fairgrounds, which hosts two of the seven festivals listed in Brookville/Franklin County .

The Franklin County surveyor inquired about road closures in a March 8, 2023, response to the early coordination letter and timing of the project construction relative to work planned on US 52 (Appendix C, pages 10-11). INDOT responded with the anticipated schedule in a reply dated March 9, 2023.

The MOT may pose delays and temporary inconveniences to traveling motorists; however, all inconveniences will cease upon project completion. The MOT for the project is not anticipated to impact access to community events.

The contractor will implement the MOT in accordance with the current IDM and INDOT Standard Specifications.

Franklin County has an approved Americans with Disabilities Act (ADA) Transition Plan. However, the project is within a rural portion of Franklin County without pedestrian facilities and is not included in the ADA Transition Plan.

Public Facilities and Services

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

Based on a desktop review, the aerial map of the project area (Appendix B, page 3), and the RFI report (Appendix E, page 2), there is one public facility within the 0.5-mile search radius. There are no public facilities within or adjacent to the project area, which

was confirmed by the site visit on August 18, 2022, by HNTB. Therefore, no impacts are expected. Access to all properties will be maintained during construction.

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

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

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

Under FHWA Order 6640.23A, FHWA and INDOT, as 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 Preparation Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent ROW. This project will require approximately 1.22 acres of new permanent ROW. Therefore, an EJ analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exist and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city, or town and is called the community of comparison (COC). In this project, the COC is Franklin County. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 9697. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the American Community Survey five-year estimates data (2017-2021) was obtained from the U.S. Census Bureau website (https://data.census.gov/) on June 14, 2023. The data collected for minority and low-income populations within the AC are summarized in the table below.

	COC – Franklin County, Indiana	**AC – Census Tract 9697, Franklin County, Indiana**
MINORITY POPULATION		
Percent minority	3.75%	6.76%
125 Percent of COC	4.69%	
AC Percent Minority Greater Than 125 Percent of COC?		Yes
AC Percent Minority Greater Than 50 Percent?		No
Population of EJ Concern?		Yes
LOW- INCOME POPULATION		
Percent Low-Income	6.93%	11.67%
125 Percent of COC	8.67%	
AC Percent Low-Income Greater Than 125 Percent of COC?		Yes
AC Percent Low-Income Greater Than 50 Percent?		No
Population of EJ Concern?		Yes

The AC, Census Tract 9697, has a percent minority population of 6.76%, which is below 50% but is above the 125% COC threshold. Therefore, the AC Census Tract has a minority population of EJ concern (Appendix I, pages 13-18).

The AC, Census Tract 9697 has a percent low-income of 11.67%, which is below 50% but is above the 125% COC threshold. Therefore, the AC Census Tract has a low-income population of EJ concern (Appendix I, pages 13-18).

The project will require the acquisition of approximately 0.66 acre of permanent ROW (strip ROW) north of SR 252 and 0.56 acre permanent ROW (strip ROW) south of SR 252. Land use within the proposed permanent ROW consists of forested areas with scattered open grassy areas. Overall, the negative impacts to property owners within the project area will be minimal and consist primarily of short-term construction impacts and the loss of strip ROW. No relocations will be required. The ROW to be acquired will not substantially diminish the existing land use of the affected property owners. The MOT during construction will utilize a 48-mile official detour route along US 52, SR 1, I-74, SR 128, and SR 126. The detour may pose delays and temporary inconveniences to traveling motorists in both the EJ and non-EJ populations; however, local access will be maintained, and the detour will be temporary. Property owners will be provided access throughout the duration of the project to minimize impacts to the maximum extent feasible. No permanent impacts to community cohesion are anticipated. Long-term impacts from the project to any EJ community in this area will be beneficial due to improved safety of travel along this section of SR 252. It is expected that the project will not have a disproportionately high and adverse environmental impact to low-income or minority populations of EJ concern when compared to non-EJ populations.

The draft EJ analysis was submitted to INDOT ES for review on July 18, 2023, for review. INDOT ES concurred with the findings of the EJ analysis on October 10, 2023 (Appendix I, page 12).

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

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

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

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

SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

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

Date RFI concurrence by INDOT SAM (if applicable): June 30, 2023

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

Based on a review of GIS and available public records, the RFI was completed on June 9, 2023, by HNTB and INDOT SAM provided their concurrence on June 30, 2023 (Appendix E, pages 3-4). No sites with hazardous material concerns (hazmat sites) or sites involved with regulated substances were identified in or within 0.5 mile of the project area. Further investigation for hazardous material concerns or regulated substances is not required at this time.

Part IV – Permits and Commitments

PERMITS CHECKLIST

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

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

A USACE Section 404 Permit, IDEM Section 401 RGP Water Quality Certification Permit, and IDEM Construction Stormwater General Permit (CSGP) are anticipated to be required for the project.

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

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

ENVIRONMENTAL COMMITMENTS

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

Firm:

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

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

3. Coordination with the Ohio Department of Transportation (ODOT) will occur prior to implementation of the MOT plan. (INDOT ESD)

4. USFWS Culvert Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after August 18, 2024, 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)

5. 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)

6. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season (April 1 to September 30). (USFWS)

7. Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)

8. Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. (USFWS & IDNR-DFW)

9. 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)

10. 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)

11. UNT 2, 3, 4, and 5 to EF Whitewater River will be marked as “Do Not Disturb” on the roadway plans. (INDOT ESD)

For Further Consideration:

1. The slide correction should not create conditions that are less favorable for wildlife passage compared to current conditions. A level area of natural ground is ideal for wildlife passage. If the bank reshaping will result in a flat bench area above the normal water level, this area should allow wildlife passage and should remain free of riprap and other similar materials that can impair wildlife passage. (IDNR-DFW)

2. Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Where riprap must be used, we recommend placing only enough riprap to provide stream bank toe protection, such as from the toe of the bank up to the ordinary high water mark (OHWM). The banks above the OHWM should 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. 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. (IDNR-DFW)

4. Riparian Habitat: IDNR recommends that a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation Guidelines (and plant lists) can be found online at: https://www.in.gov/nrc/files/IB-17.pdf. Impacts to non-wetland forest of one (1) acre or more in a rural or urban area should be mitigated at a minimum 2:1 ratio based on area of impact. Impacts to non-wetland forest under one (1) acre but at least 0.10 acre in a rural or urban area should be mitigated at a minimum 1:1 ratio based on area of impact. Impacts under 0.10 acre in a rural area typically do not require mitigation or additional plantings beyond seeding and stabilizing disturbed areas, though there are exceptions for high quality habitat sites. Impacts under 0.10 acre in an urban area should be mitigated by replacing trees that are 10” diameter-at-breast height (dbh) or greater by planting five trees, 1” to 2” in dbh, for each tree which is removed that is 10" dbh or greater. and stabilizing disturbed areas is required regardless of the impact amount and location. If floodway impacts to forested wetland and non-wetland habitat areas combine to be 0.10 acres or more, mitigation should be done and coordinated with the biologist, as needed. (IDNR-DFW)

5. Do not excavate in the low flow area except for the placement of the retaining wall or riprap and reshaping the bank. (IDNR-DFW)

6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR-DFW)

7. 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)

SR 252 Slide Correction Project
Franklin County, Indiana
Des No 2000087

APPENDIX TABLE OF CONTENTS

Appendix A: INDOT Supporting Documentation

Appendix B: Graphics

Appendix C: Early Coordination

Appendix D: Section 106 of the NHPA

Appendix E: Red Flag and Hazardous Materials

Appendix F: Water Resources

Appendix G: Public Involvement

Appendix H: Air Quality

Appendix I: Additional Studies

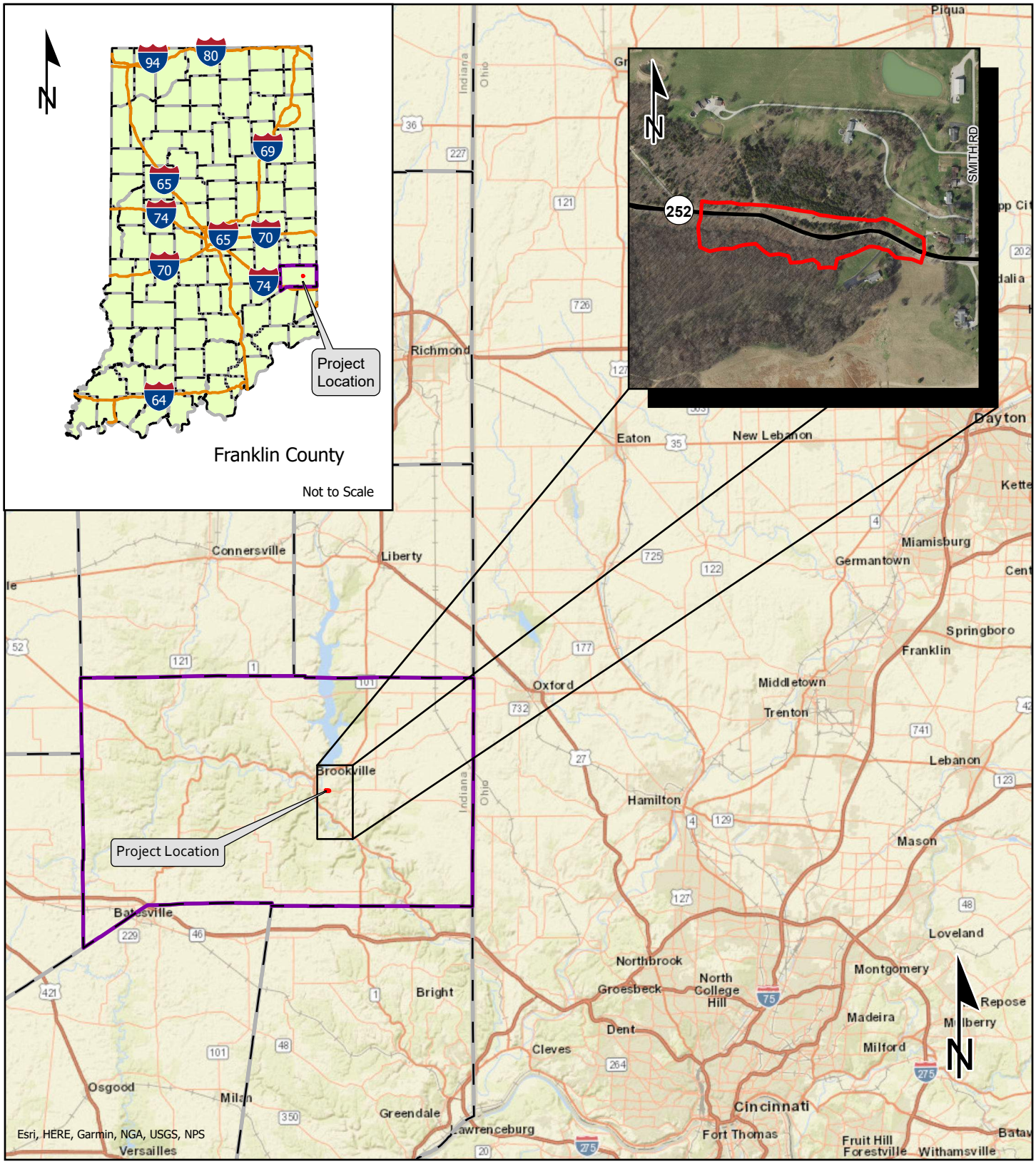
Appendix A: INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

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

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

Appendix B: Graphics



Project Area

Franklin County

County Boundary

0 4.5 9 Miles

Project Location Map

SR 252, 0.9 Mile East of US 52

Slide Correction

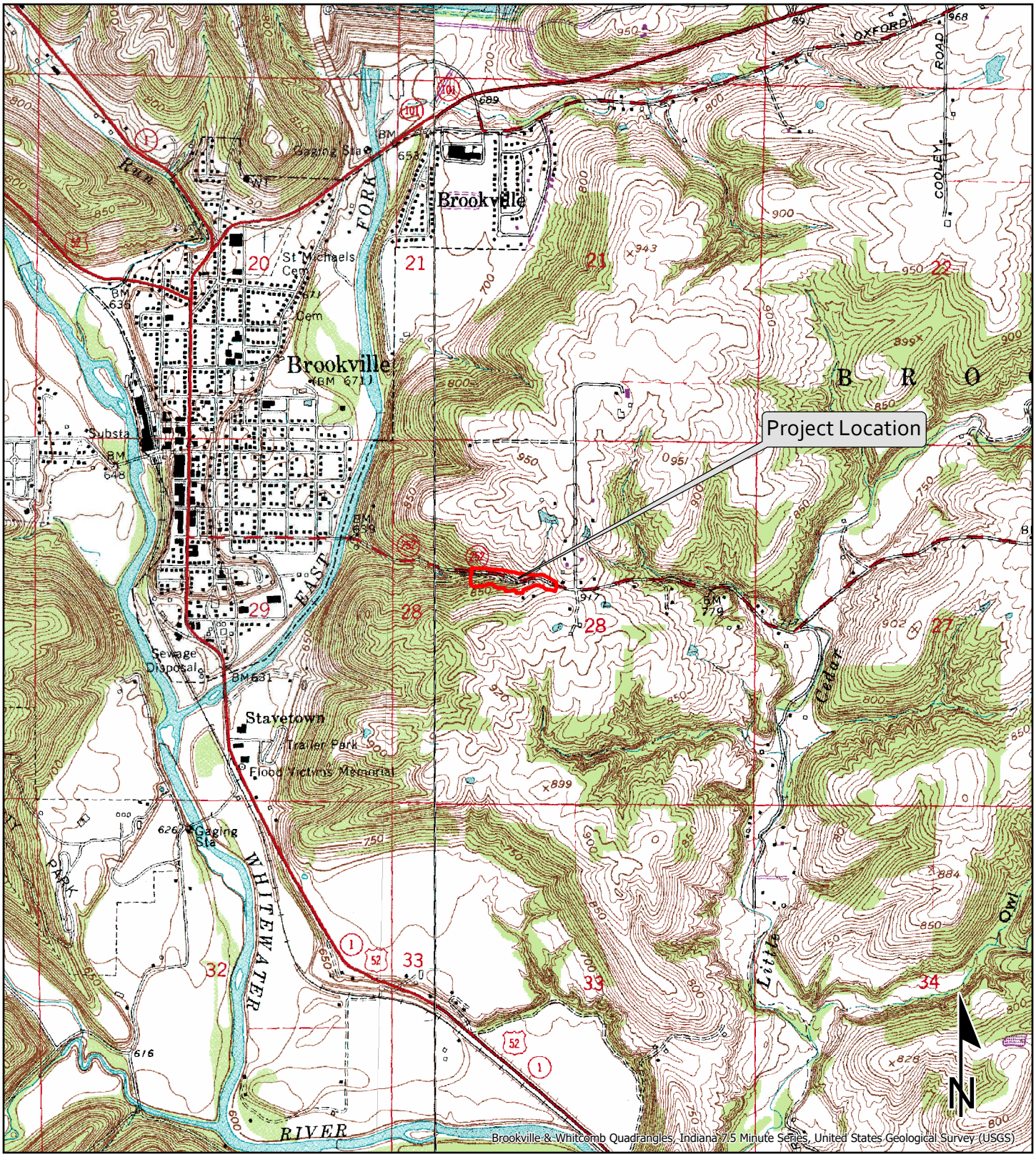
Franklin County, Indiana

Des. No. 2000087

1 inch = 9 miles

HNTB

Graphics created by HNTB Corporation (2023)



Project Area

0 1,000 2,000 Feet

USGS (1:24,000 scale) Topographic Map

SR 252, 0.9 Mile East of US 52

Slide Correction

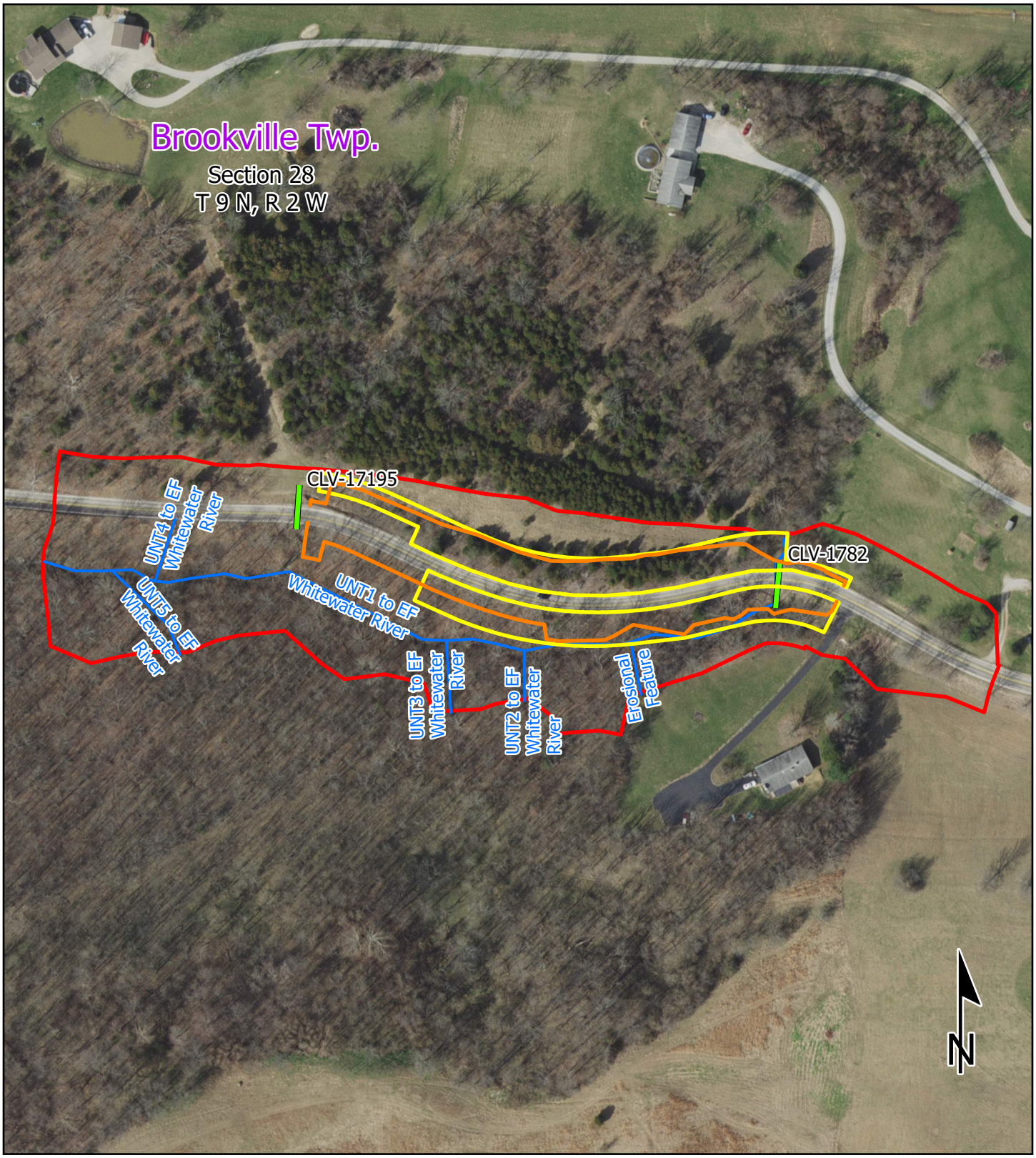
Franklin County, Indiana

Des. No. 2000087

1 inch = 2,000 ft

HNTB

Graphics created by HNTB Corporation (2023)



Project Area
Permanent ROW
Construction Limits
Culverts
Streams

0 90 180
Feet

Project Aerial Map
SR 252, 0.9 Mile East of US 52
Slide Correction
Franklin County, Indiana

Des. No. 2000087

1 inch = 180 ft

HNTB
Graphics created by HNTB Corporation (2023)

Project Area

Photo Location

0 125 250 Feet

Photo Location Map

SR 252, 0.9 Mile East of US 52
Slide Correction
Franklin County, Indiana

Des. No. 2000087

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)

1. North side of SR 252 looking east along the roadway

2. South side of SR 252 looking west along the roadway, note the steepness of the slope adjacent to the road

3. South side of SR 252 looking east along the roadway

4. South side of SR 252 looking east along the roadway

PROJECT	DESIGNATION
2000087	2000087
CONTRACT	
R-43365	

INDIANA DEPARTMENT OF TRANSPORTATION

ROAD PLANS
S.R. 252

ROUTE: S.R. 252 FROM: RP 38+12 TO: RP 38+12

PROJECT NO.

P.E. 2000087
R/W 2000087
CONST. 2000087

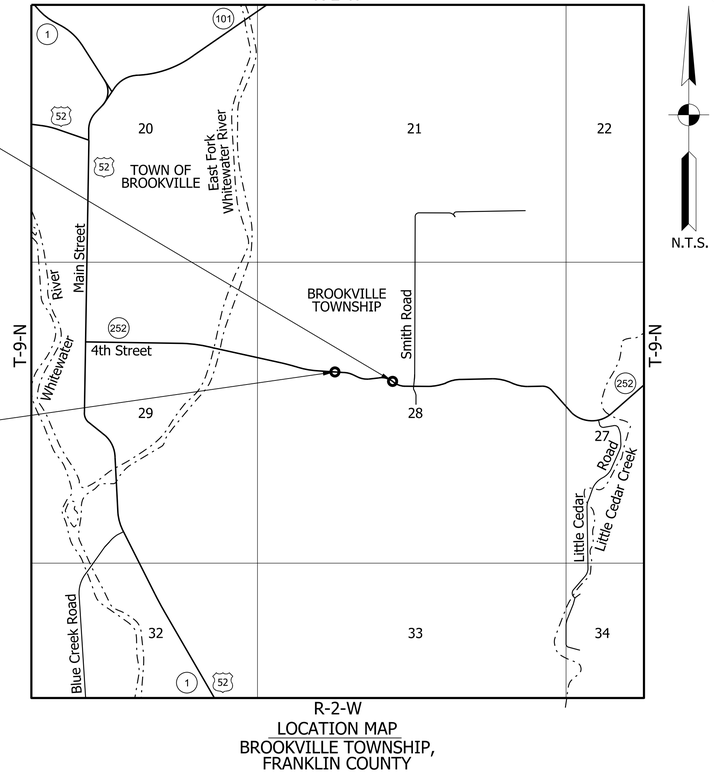
STAGE 2 PLANS
AUGUST 25, 2023

PROJECT DESCRIPTION

ROADWAY RESURFACING AND SLIDE CORRECTION IMPROVEMENTS ON S.R. 252 APPROXIMATELY 0.9 MILES EAST OF US 52 IN BROOKVILLE, FRANKLIN COUNTY, SEYMOUR DISTRICT, INDIANA. SECTION 28, TOWNSHIP 9 NORTH, RANGE 2 WEST.

END PROJECT
PROJECT NO. 2000087
P.O.T. STA. 111+35.00
LINE "PR-C"

BEGIN PROJECT
PROJECT NO. 2000087
P.O.T. STA. 105+20.00
LINE "PR-C"



N.T.S.

LOCATION MAP
BROOKVILLE TOWNSHIP,
FRANKLIN COUNTY

PROJECT LOCATION SHOWN BY

TRAFFIC DATA S.R. 252		
A.A.D.T.	(2021)	1213 V.P.D.
A.A.D.T.	(2046)	1239 V.P.D.
D.H.V.	(2046)	145 V.P.H.
DIRECTIONAL DISTRIBUTION		49.30%
TRUCKS		9.81% A.A.D.T.
		4.29% D.H.V.

DESIGN DATA S.R. 252	
DESIGN SPEED	55 MPH
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	STATE COLLECTOR
RURAL/URBAN	RURAL
TERRAIN	ROLLING
ACCESS CONTROL	NONE

LATITUDE: 39°25'00" N LONGITUDE: 84°59'44" W

GROSS LENGTH:	0.133 MI.
NET LENGTH:	0.133 MI.
MAX. GRADE:	10.00%

HYDROLOGIC UNIT CODE: 05080003070180

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

HNTB

THE HNTB COMPANIES
INFRASTRUCTURE SOLUTIONS
111 MONUMENT CIRCLE
SUITE 1200
INDIANAPOLIS, IN 46204-5178

DRAFT
NOT FOR CONSTRUCTION

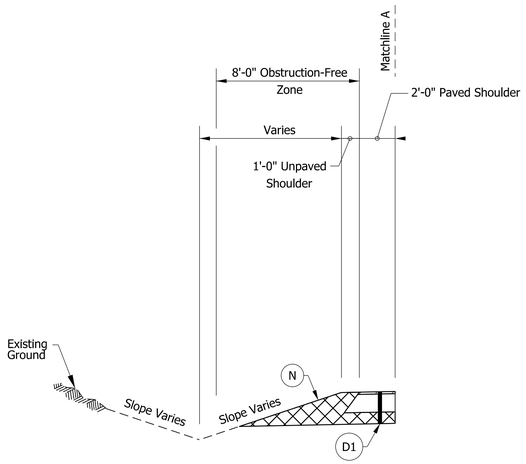
PLANS PREPARED BY: HNTB INDIANA, INC. (317) 636-4682 PHONE NUMBER

CERTIFIED BY: _____ DATE

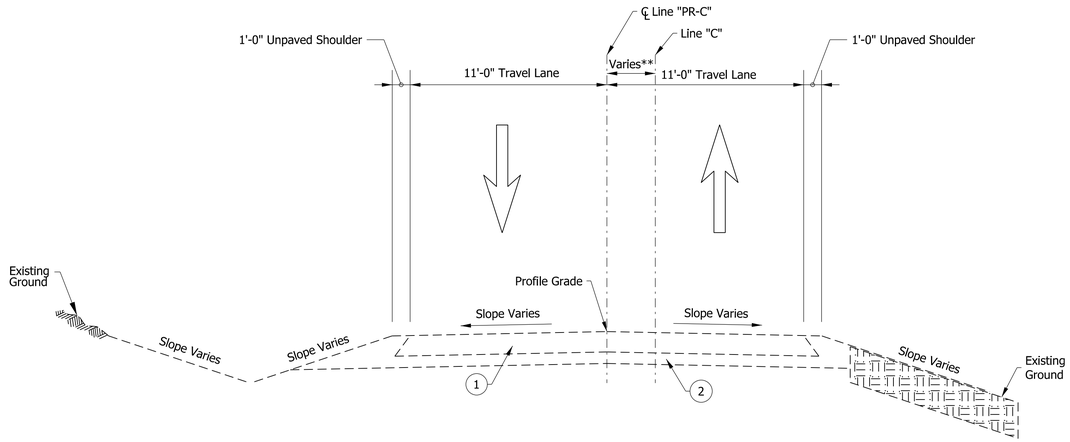
APPROVED FOR LETTING: _____ INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE
N/A
DESIGNATION
2000087

SURVEY BOOK	SHEETS
ELECTRONIC	1 of 28
CONTRACT	PROJECT
R-43365	2000087



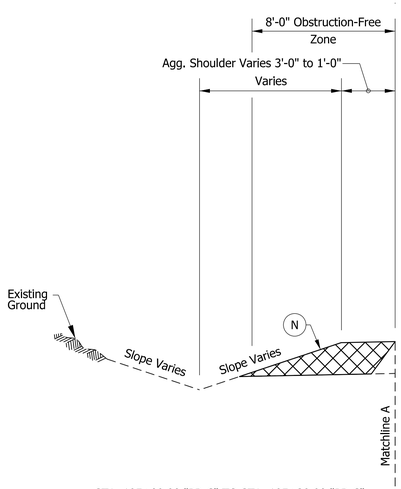
STA. 111+35.00 "PR-C" TO STA. 111+77.00 "PR-C"



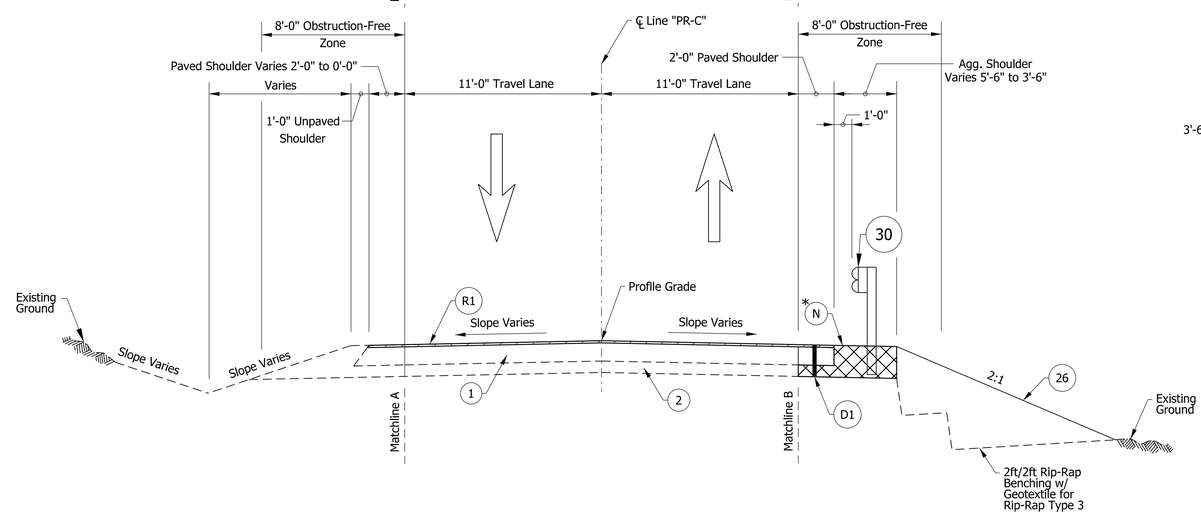
S.R. 252 EXISTING TYPICAL SECTION

STA. 105+00.00 "PR-C" TO STA. 112+25.00 "PR-C"

1	Existing HMA, 12-24"
2	Existing Aggregate Base, 4-12"
26	Seed Mixture, Native
N	Compacted Aggregate, No. 53
R1	Mill and Overlay, 1.5" Composed of: 165 #/Syd. QC/QA-HMA 3, 64, Surface, 9.5 mm
30	MGS W-Beam Guardrail
D1	165 #/Syd. QC/QA-HMA 3, 64, Surface, 9.5 mm, on Widening with HMA, Type C consisting of: 330 #/Syd. HMA Base, Type C, on 385 #/Syd. HMA Base, Type C, on 440 #/Syd. HMA Base, Type C, on Subgrade Treatment, Type II
*	Subgrade Treatment added to improve slope integrity.

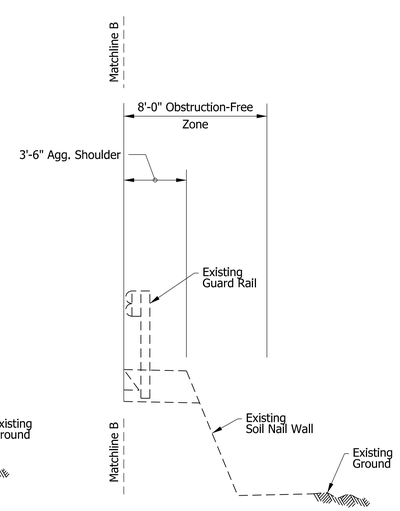


STA. 105+00.00 "PR-C" TO STA. 105+20.00 "PR-C"



S.R. 252 INCIDENTAL CONSTRUCTION TYPICAL SECTION

STA. 105+00.00 "PR-C" TO STA. 105+20.00 "PR-C"
STA. 111+35.00 "PR-C" TO STA. 112+25.00 "PR-C"



STA. 105+00.00 "PR-C" TO STA. 105+15.00 "PR-C"

**Note: Existing Line "C" varies from Line "PR-C" from a width of 0'-0" to 4'-2"

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

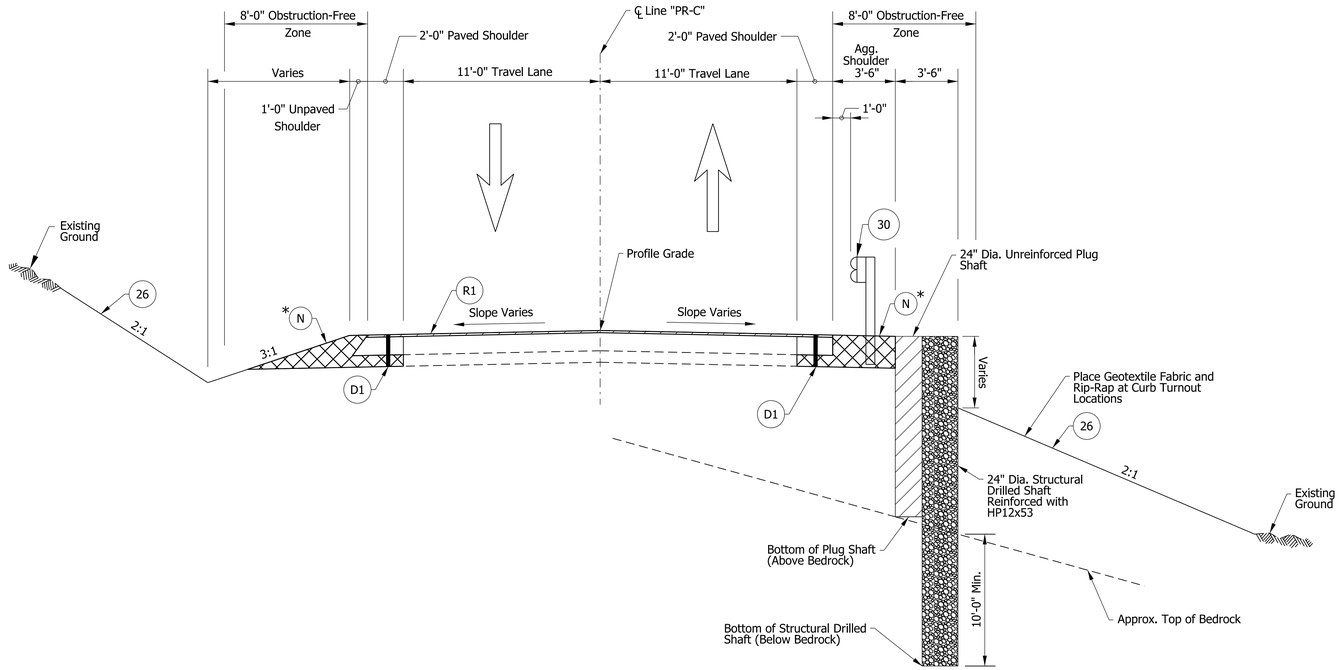
DESIGNED: ICH DRAWN: AJM

CHECKED: DLG CHECKED: DLG

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE	BRIDGE FILE
1/4"=1'-0"	N/A
VERTICAL SCALE	DESIGNATION
N/A	2000087
SURVEY BOOK	SHEETS TYP-01
ELECTRONIC	5 of 28
CONTRACT	PROJECT
R-43365	2000087



S.R. 252 PROPOSED TYPICAL SECTION

STA. 105+20.00 "PR-C" TO STA. 111+35.00 "PR-C"

R1 Mill and Overlay, 1.5" Composed of:
165 #/Syd. QC/QA-HMA 3, 64, Surface, 9.5 mm

N Compacted Aggregate, No. 53

30 MGS W-Beam Guardrail

D1 165 #/Syd. QC/QA-HMA 3, 64, Surface, 9.5 mm, on
Widening with HMA, Type C consisting of:
330 #/Syd. HMA Base, Type C, on
385 #/Syd. HMA Base, Type C, on
440 #/Syd. HMA Base, Type C, on
Subgrade Treatment, Type II

26 Seed Mixture, Native

* Subgrade Treatment added to improve slope integrity.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: ICH DRAWN: AJM

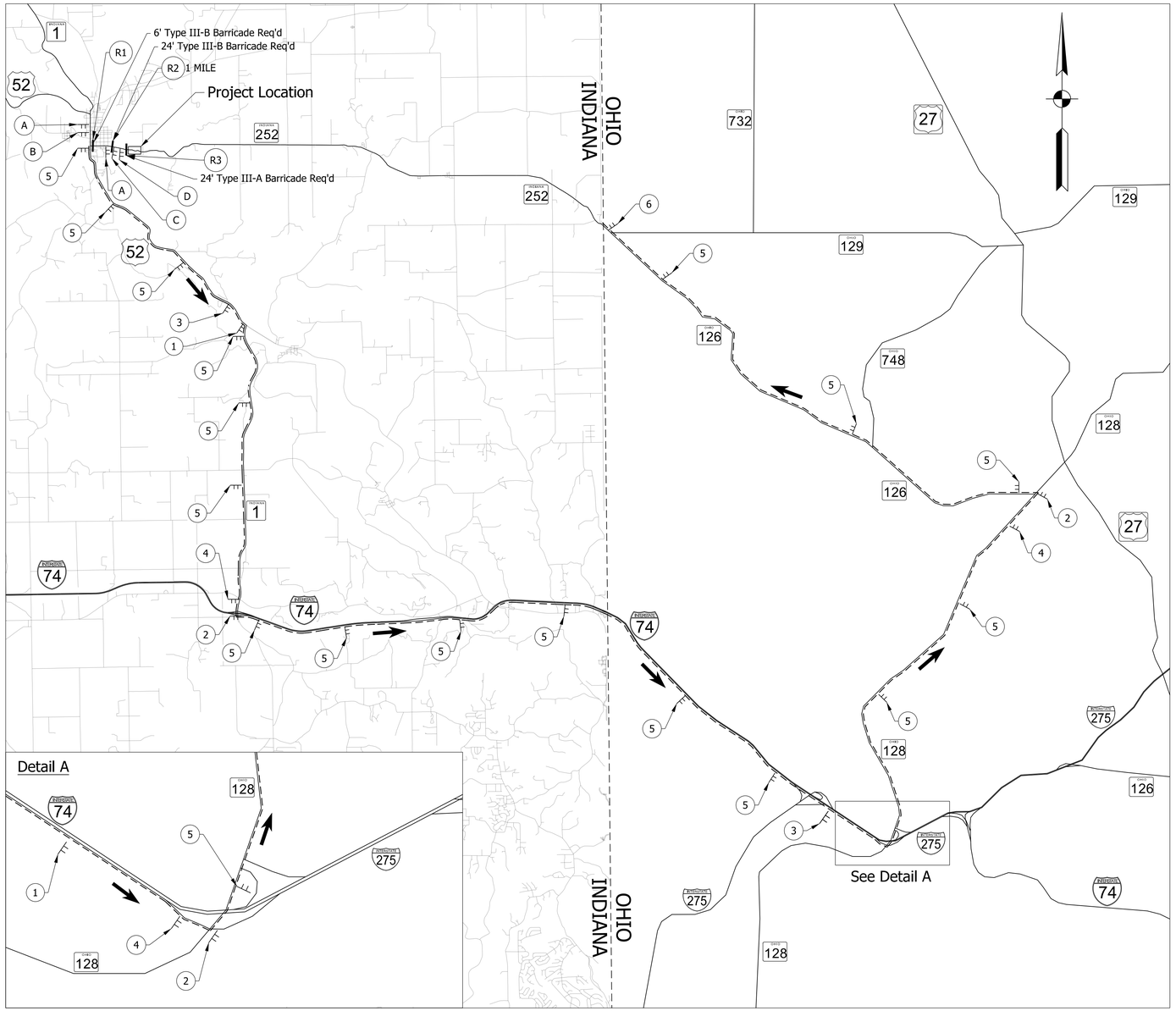
CHECKED: DLG CHECKED: DLG

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE	BRIDGE FILE
1/4"=1'-0"	N/A
VERTICAL SCALE	DESIGNATION
N/A	2000087
SURVEY BOOK	SHEETS TYP-02
ELECTRONIC	6 of 28
CONTRACT	PROJECT
R-43365	2000087

ihill
8/2/2023 1:16:27 pm
model:Sheet2
file:\\indot01\289projects\78638 indot-s_2020_oncall_rfp2005102\0_sr252_elvte_des20000871cad\0cds\78638-rd-s-ts01.dgn



DETOUR

NOTE TO REVIEWER

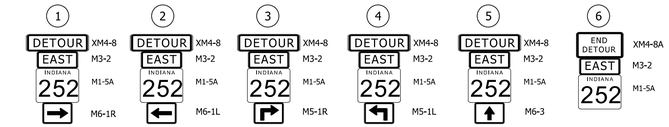
COORDINATION WITH THE DISTRICT TRAFFIC STAFF AND THE STATE OF OHIO ON OFFICIAL DETOUR ROUTE IS CURRENTLY ONGOING.

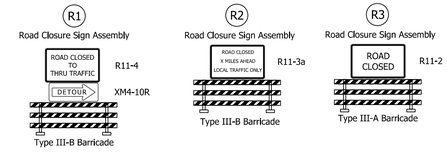
1. Project area along SR-252 shall be closed to thru traffic. Detour eastbound thru traffic East on US-52, to SR-1 South, to I-74 East, to SR-128 East, to SR-126 West. Detour westbound thru traffic East on SR-126, to SR-128 West, to I-74 West, to SR-1 North, to US-52 West.

2. Detour shall remain in place throughout construction.

3. Contractor shall maintain temporary access to all properties during construction.

4. For detour sign spacing see Standard Detail E 801-TCDT-01.





Summary of Detour Quantities

Item	Unit	Total Quantity
Detour Route Marker Assembly	Each	29
Road Closure Sign Assembly	Each	3
Construction Sign, A	Each	5
Barricade, III-A	LFT	24
Barricade, III-B	LFT	30

LEGEND

- Detour Route
- Detour Route Sign Assembly
- Type III-A Barricade

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: ICH DRAWN: AJM

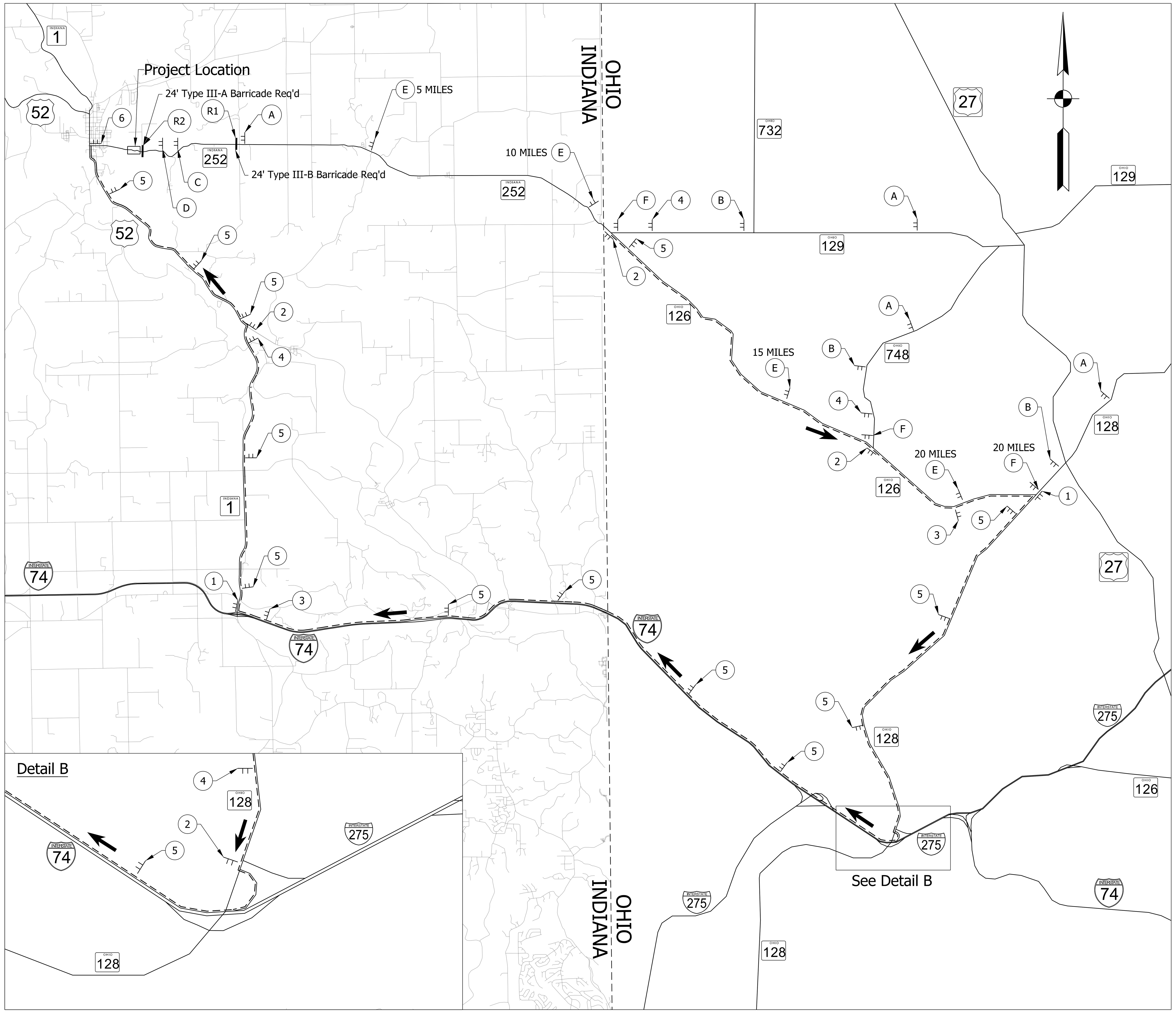
CHECKED: DLG CHECKED: DLG

INDIANA DEPARTMENT OF TRANSPORTATION

DETOUR ROUTE

SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	2000087
SURVEY BOOK	SHEETS MOT-01
ELECTRONIC	9 of 28
CONTRACT	PROJECT
R-43365	2000087

ihill
8/2/2023 1:17:27 pm
model: Sheet
file: \\indot01\289projects\78628 indot-s_2020_oncall_rfp20051020_sr252_dilde_desc20000871\cadd\cdcs\78628-rd-s-mot01.dgn



NOTE TO REVIEWER

COORDINATION WITH THE DISTRICT TRAFFIC STAFF AND THE STATE OF OHIO ON OFFICIAL DETOUR ROUTE IS CURRENTLY ONGOING.

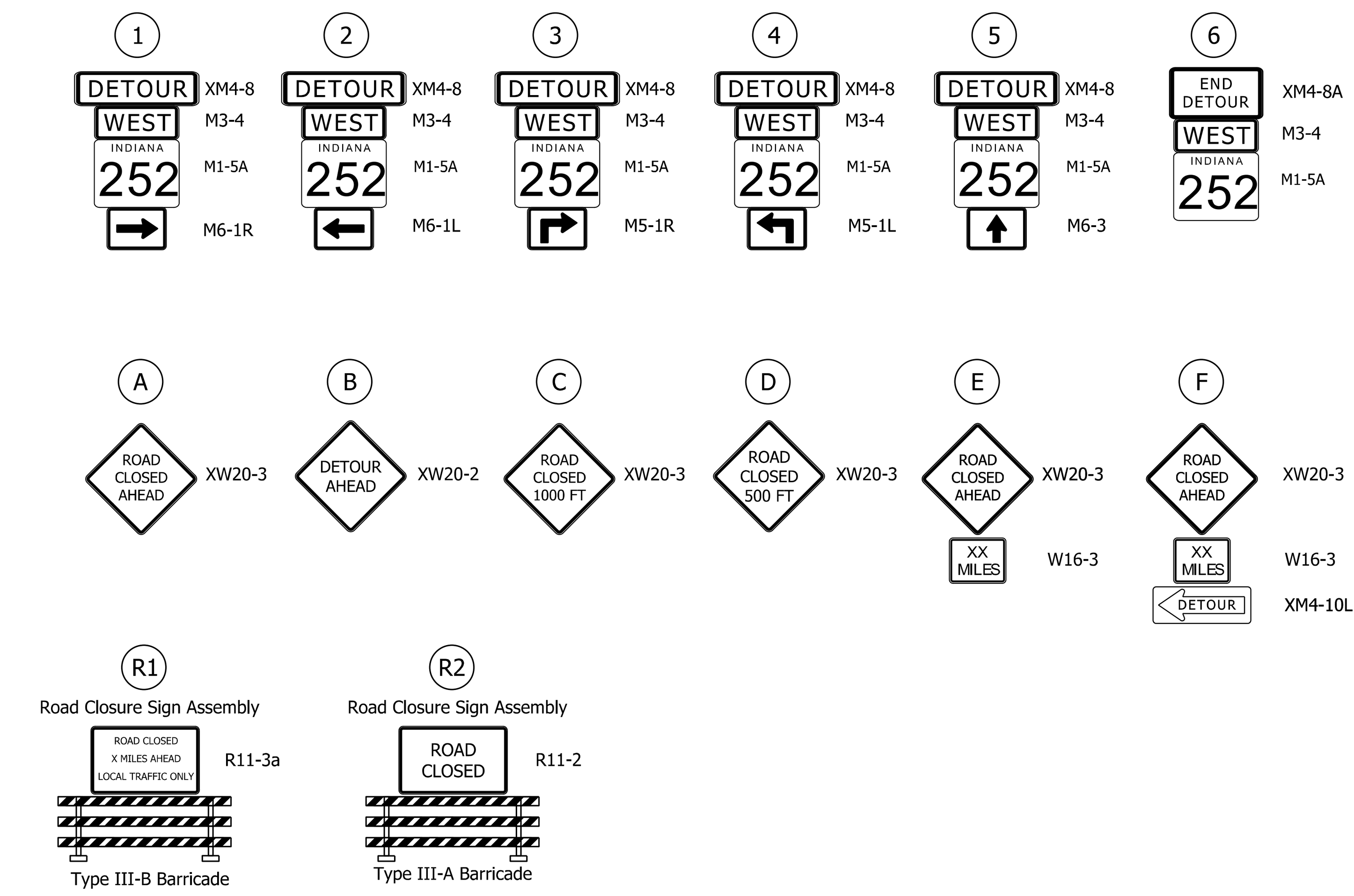
DETOUR

1. Project area along SR-252 shall be closed to thru traffic. Detour eastbound thru traffic East on US-52, to SR-1 South, to I-74 East, to SR-128 East, to SR-126 West. Detour westbound thru traffic East on SR-126, to SR-128 West, to I-74 West, to SR-1 North, to US-52 West.

2. Detour shall remain in place throughout construction.

3. Contractor shall maintain temporary access to all properties during construction.

4. For detour sign spacing see Standard Detail E 801-TCDT-01.



Summary of Detour Quantities

Item	Unit	Total Quantity
Detour Route Marker Assembly	Each	27
Road Closure Sign Assembly	Each	4
Construction Sign, A	Each	16
Barricade, III-A	LFT	24
Barricade, III-B	LFT	24

LEGEND

- Detour Route
- Detour Route Sign Assembly
- Type III-A Barricade

DRAFT NOT FOR CONSTRUCTION

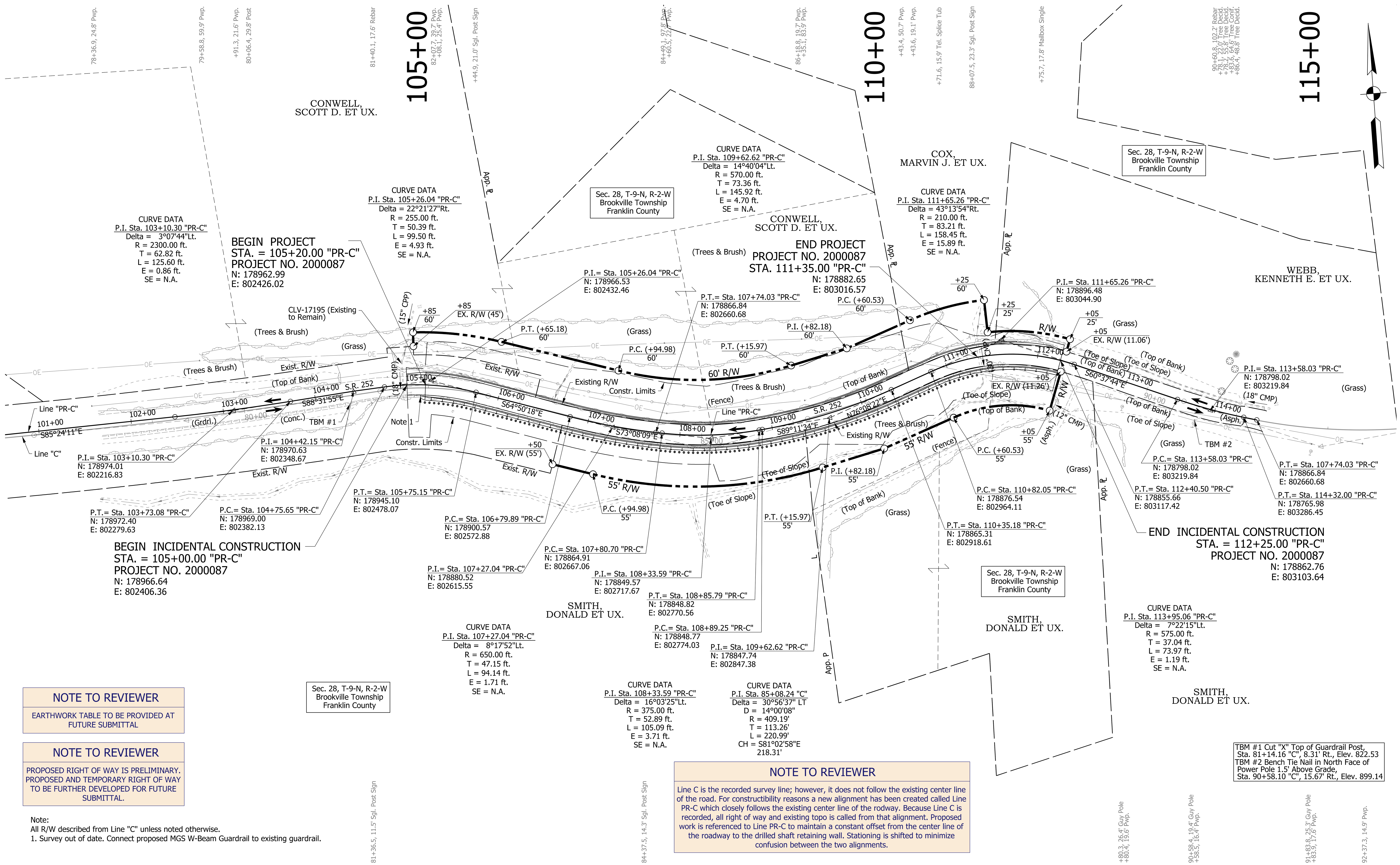
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: ICH	DRAWN: AJM		
CHECKED: DLG	CHECKED: DLG		

INDIANA DEPARTMENT OF TRANSPORTATION

DETOUR ROUTE

SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	2000087
SURVEY BOOK	SHEETS MOT-02
ELECTRONIC	10 of 28
CONTRACT	PROJECT
R-43365	2000087

ihill
8/2/2023 1:17:30 pm
model: Sheet2



NOTE TO REVIEWER

EARTHWORK TABLE TO BE PROVIDED AT FUTURE SUBMITTAL

NOTE TO REVIEWER

PROPOSED RIGHT OF WAY IS PRELIMINARY. PROPOSED AND TEMPORARY RIGHT OF WAY TO BE FURTHER DEVELOPED FOR FUTURE SUBMITTAL.

Note:
All R/W described from Line "C" unless noted otherwise.
1. Survey out of date. Connect proposed MGS W-Beam Guardrail to existing guardrail.

NOTE TO REVIEWER

Line C is the recorded survey line; however, it does not follow the existing center line of the road. For constructibility reasons a new alignment has been created called Line PR-C which closely follows the existing center line of the rodway. Because Line C is recorded, all right of way and existing topo is called from that alignment. Proposed work is referenced to Line PR-C to maintain a constant offset from the center line of the roadway to the drilled shaft retaining wall. Stationing is shifted to minimize confusion between the two alignments.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: ICH	DRAWN: AJM	
CHECKED: DLG	CHECKED: DLG	

INDIANA DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
LINE "PR-C"

SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2000087
SURVEY BOOK	SHEETS PLN-01
ELECTRONIC	11 of 28
CONTRACT	PROJECT
R-43365	2000087

jhill 8/2/2023 1:18:02 pm model: Sheet1 file: \\indot01289\projects\78628 indot-s_2020_oncall_rfp2005\020_sr252_slide_des2000087\cadd\cds\78628-rd-s-pln01.dgn

Appendix C: Early Coordination

INDIANA DEPARTMENT OF TRANSPORTATION

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

PHONE: (855) 463-6848
(855) INDOT-4U

Eric J. Holcomb, Governor
Michael Smith, Commissioner

March **8**, 2023

Via Email to Early Coordination List

Sample Early Coordination letter

Re: Early Coordination Letter
Des. No. 2000087, State Project
State Road (SR) 252, 0.9 Mile East of US 52
Slide Correction
Franklin County, Indiana

To Whom it May Concern:

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with a Slide Correction project on SR 252 in Franklin County, Indiana. This letter is part of the early coordination phase of the environmental review process. We request comments from you regarding any potential environmental or community effects associated with this proposed project of which you are aware. **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: This project is located on SR 252, approximately 0.9 mile east of US 52, in the Town of Brookville. More specifically, the project is located in Section 28, Township 9 North, Range 2 West, in Brookville Township, Indiana.

Existing Conditions: This section of SR 252 is a two-lane Minor Arterial with a speed limit of 55 miles per hours (mph). The existing roadway has 11-foot-lanes with 1-foot shoulders and no guardrail along the south roadway edge. The existing horizontal alignment does not meet minimum INDOT Design Manual horizontal alignment criteria as the existing horizontal curves have inconsistent super-elevations and less than minimum horizontal curve radii.

There are two existing drainage pipes located within the project area. CLV 1782 is a 30-inch corrugated metal pipe (CMP) located approximately 0.11 mile west of the Smith Road and SR 252 intersection. CLV 17195 is a 12-inch CMP located approximately 0.23 mile west of the SR 252 and Smith Road intersection. CLV 17195 was recently replaced under a previous slide correction project that occurred west of the current project area. CLV 1782 is in good condition.

Purpose and Need: The purpose of the project is to mitigate soil erosion on the south side of the SR 252 roadway. The need for this project is due to continued bank erosion along the south side of SR 252.

Proposed Project: The proposed project includes the excavation of the slope south of SR 252 and the installation of a structural drilled shaft retaining wall with reinforced concrete plug shafts to stabilize the land slide. Guardrail will be placed along the eastbound lane. The ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to the CLV 17195 and CLV 1782 within the project area. Both structures will be extended beyond the proposed retaining wall. Existing overhead electric utility poles along the north edge of the roadway will need to be relocated for ditch regrading. Curb and gutter will be installed along the southern edge of the roadway to prevent water from overtopping the proposed retaining wall. The roadway within the project area will be milled and overlaid. In addition, 2-foot paved shoulders with an aggregate safety edge will be added along the north edge of the roadway.

Right-of-Way: The project requires up to 1 acre of permanent right-of-way acquisition. No temporary right-of-way will be acquired for this project. Utility coordination will be performed to verify the location of surrounding utilities for potential relocation.

Maintenance of Traffic (MOT): The preferred method of traffic maintenance would be a road closure with an official state detour.

Surrounding Resources: Land use in the vicinity of the project is primarily agricultural. There is forested land adjacent to the north and south sides of the SR 252 roadway. A review of the Indiana Department of Environmental Management (IDEM) website has been conducted and the project is not located within a wellhead protection zone or source water area.

A waters and wetlands determination and a biological assessment will be completed to identify any ecological resources that may be present. This project qualifies for the application of the United States Fish and Wildlife Service (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.

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 Christina Lindstrom, of HNTB Corporation, at clindstrom@hntb.com or 317-636-4682. Please provide your response within thirty (30) calendar days from the date of this letter. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request.

If you have any questions regarding this matter, please feel free to contact Christina Lindstrom, of HNTB Corporation, at clindstrom@hntb.com or at 317-636-4682; or Nicole Carter, INDOT Project Manager, at ncarter@indot.in.gov or at 812-216-5017. Thank you in advance for your input.

Sincerely,

HNTB CORPORATION

Christina Lindstrom
Environmental Planner I

Attachments: Project Location Map
Project Area Aerial
USGS 7.5 Minute Topographic Quad Map
Photo Location Map and Project Photographs

Attachments were removed to avoid duplication. Attachments can be found in Appendix B of this CE document.

Cc: Nicole Carter, INDOT Project Manager
Doug Garvin, HNTB Project Manager
Kia Gillette, Environmental Task Lead
Caroline Tegeler, Environmental Task Lead

Environmental Consultation List

Federal
Patrick Carpenter, Federal Highway Administration
Midwest Regional Office, National Park Service
Erik Sandstedt, Chicago Regional Office, US Department of Housing & Urban Development
John Allen, Natural Resources Conservation Service
Deborah Snyder, US Army Corps of Engineers, Louisville District

State
Alisha Turnbow, Indiana Department of Environmental Management, Groundwater Section
Indiana Geological and Water Survey
Christie Stanifer, Indiana Department of Natural Resources, Division of Fish and Wildlife
Davie Dye, Indiana Department of Transportation, Seymour District Office

Local
Larry Smith, Franklin County Highway Department
John Heis, Franklin County Commissioner's Office
Dean McQueen, Franklin County Council
Ted Hensely, Franklin County Department of Parks and Recreation
Rob Seig, Franklin County Surveyor
Peter Cates, Franklin County Sheriff's Department
Terry Mitchum, Brookville Police Department
Mark Shires, Brookville Fire Department
Bridget Hayes, Brookville Town Council
Brent Riehle, Brookville Street Department
Tammy Chavis, Franklin County Community School Corporation

THIS IS NOT A PERMIT

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

DNR#: ER-25438

Request Received: March 8, 2023

Requestor:
Christina Lindstrom
HNTB Corporation
111 Monument Circle, Suite 1200
Indianapolis, IN 46204

Project:
SR 252 slide correction and two small structure (CLV 17195 & CLV 1782) extensions, 0.9 miles east of US 52, Town of Brookville; Des #2000087

County/Site Info: Franklin

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

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

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

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

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

A) Bank Stabilization; Fish and Wildlife Passage:
The slide correction should not create conditions that are less favorable for wildlife passage compared to current conditions. A level area of natural ground is ideal for wildlife passage. If the bank reshaping will result in a flat bench area above the normal water level, 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 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 should 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.

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

Impacts to non-wetland forest of one (1) acre or more in a rural or urban area should be mitigated at a minimum 2:1 ratio based on area of impact. Impacts to non-wetland forest under one (1) acre but at least 0.10 acre in a rural or urban area should be mitigated at a minimum 1:1 ratio based on area of impact. Impacts under 0.10 acre in a rural area typically do not require mitigation or additional plantings beyond seeding and stabilizing disturbed areas, though there are exceptions for high quality habitat sites. Impacts under 0.10 acre in an urban area should be mitigated by replacing trees that are 10” diameter-at-breast height (dbh) or greater by planting five trees, 1” to 2” in dbh, for each tree which is removed that is 10" dbh or greater. Seeding and stabilizing disturbed areas is required regardless of the impact amount and location. If floodway impacts to forested wetland and non-wetland habitat areas combine to be 0.10 acres or more, mitigation should be done and coordinated with the biologist, as needed.

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

1. Revegetate all bare and disturbed areas that will not be mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion. Turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in regularly mowed areas only.
2. Minimize and contain within the project limits in-channel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
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 the retaining wall or riprap and reshaping the bank.
6. Do not construct any temporary runarounds, access bridges, causeways, 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. Do not use broken concrete as riprap.
9. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
10. Minimize the movement of resuspended bottom sediment from the immediate project area.

11. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
12. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

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

Matt Buffington

Date: April 5, 2023

Matt Buffington
Environmental Unit Supervisor
Division of Fish and Wildlife

United States Department of Agriculture
Farm Production and Conservation
Natural Resources Conservation Service
Indiana State Office
6013 Lakeside Boulevard
Indianapolis, Indiana 46278
317-295-5800

March 9, 2023

Christina Lindstrom
HNTB Corporation
111 Monument Circle, Suite 1200
Indianapolis, Indiana 46204

Dear Ms. Lindstrom:

The proposed US 252 Slide Correction project in Franklin County, Indiana (Des. No. 2000087), as referred to in your letter received March 8, 2023, will not cause a conversion of prime farmland.

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

Sincerely,

JOHN ALLEN

Digitally signed by JOHN ALLEN
Date: 2023.03.09 10:38:08 -05'00'

JOHN ALLEN
State Soil Scientist

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Brian C. Rockensuess
Commissioner

March 15, 2023

HNTB CORPORATION
Attention: Christina Lindstrom
111 Monument Circle, Suite 1200
Indianapolis, IN 46204

Dear Christina Lindstrom:

Re: Wellhead Protection Area
Proximity Determination
Des No 2000087
State Road (SR) 252, 0.9 Mile East of US 52
Slide Correction
Franklin County, Indiana

Upon review of the above referenced project site, it has been determined that the proposed project area **is not located within** a Wellhead Protection Area. The information is accurate to the best of our knowledge; however, there are in some cases a few factors that could impact the accuracy of this determination. Some Wellhead Protection Area Delineations have not been submitted, and many have not been approved by this office. In these cases, we use a 3,000-foot fixed radius buffer to make the proximity determination. To find the status of a Public Water Supply System's (PWSS's) Wellhead Protection Area Delineation please visit our tracking database at http://www.in.gov/idem/cleanwater/2456.htm and scroll to the bottom of the page.

The project area **is not located within** a Source Water Assessment Area for a PWSS's surface water intake. The Source Water Assessment Area relates to the surface water drainage area that water could potentially flow and influence water quality for a PWSS's source of drinking water.

In the future, **please consider using this self-service tool** if it suits your needs. The Drinking Water Branch has a self-service tool which allows one to determine wellhead proximity without submitting the application form. Go to https://www.in.gov/idem/cleanwater/pages/wellhead/ and use the instructions at the bottom of the page.

If you have any additional questions, please feel free to contact me at the address above or at 317-233-9158 and aturnbow@idem.in.gov.

Sincerely,

Alisha Turnbow

Alisha Turnbow,
Environmental Manager
Ground Water Section
Drinking Water Branch
Office of Water Quality

From:	Carter, Nicole
To:	Rob Seig; Christina Lindstrom
Cc:	Douglas Garvin; Kia Gillette; Caroline Tegeler; Franklin County Commissioners; Edward Hollenbach
Subject:	RE: Early Coordination Letter - Des. 2000087, SR 252 Slide Correction Project
Date:	Thursday, March 9, 2023 8:08:58 AM
Attachments:	image002.png image003.png image004.png image005.png image006.png image007.png image008.png

Rob,

As of right now and barring no design delays, this project is set to go to letting 12/11/2024 with construction beginning in the spring of 2025.

Thank you,

Nicole A. Carter
Project Manager
185 Agrico Lane
Seymour, IN 47274
Office: (812) 524-3970
Cell: (812)216-5017
Email: ncarter@indot.in.gov

From: Rob Seig <rseig@franklincounty.in.gov>
Sent: Wednesday, March 08, 2023 6:22 PM
To: Christina Lindstrom <clindstrom@HNTB.com>
Cc: Carter, Nicole <NCarter@indot.IN.gov>; Douglas Garvin <dgarvin@HNTB.com>; Kia Gillette <kgillette@HNTB.com>; Caroline Tegeler <ctegeler@HNTB.com>; Franklin County Commissioners <commissioners@franklincounty.in.gov>; Edward Hollenbach <ema@franklincounty.in.gov>
Subject: RE: Early Coordination Letter - Des. 2000087, SR 252 Slide Correction Project

When is this scheduled to take place?

I know there is a project planned on US 52 just south of Brookville that is a planned road closure as well. Hopefully these are not planned at the same time. This would cut off travel east and south in and out of Brookville if they were to take place at the same time.

Thanks.

Rob Seig
Franklin County Surveyor
1010 Franklin Ave, Room 205
Brookville, IN 47012
765-647-5651 Office
812-209-9099 Cell

From: Christina Lindstrom <clindstrom@HNTB.com>
Sent: Wednesday, March 8, 2023 3:32 PM
Cc: ncarter@indot.in.gov; Douglas Garvin <dgarvin@HNTB.com>; Kia Gillette <kgillette@HNTB.com>; Caroline Tegeler <ctegeler@HNTB.com>
Subject: Early Coordination Letter - Des. 2000087, SR 252 Slide Correction Project

Good afternoon,

Please see the attached early coordination letter and supporting graphics for the SR 252 Slide Correction Project in Franklin County (Des. 2000087).

If you have any questions regarding this project, please feel free to contact me by phone or email.

Kind regards,

Christina Lindstrom
Environmental Planner I
Environmental Planning
Tel (317) 917-3676 **Email** clindstrom@hntb.com

HNTB CORPORATION
111 Monument Circle, Suite 1200, Indianapolis, IN 46204 | www.hntb.com

INDIANA GEOLOGICAL & WATER SURVEY
INDIANA UNIVERSITY

Organization and Project Information

Project ID:
Des. ID: 2000087
Project Title: SR 252 Slide Correction Project, 0.9 Mile East of US 52
Name of Organization: HTNB
Requested by: Christina Lindstrom

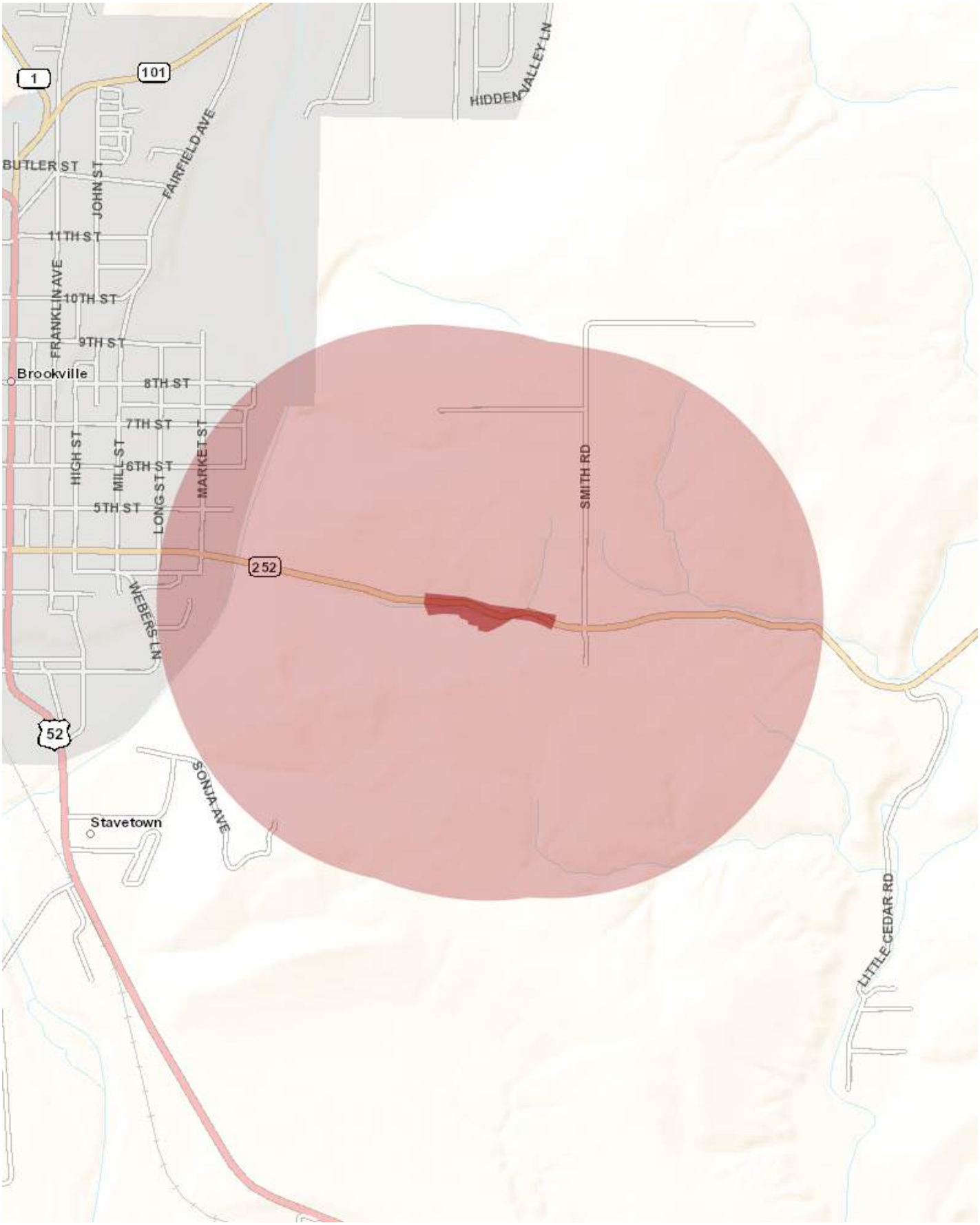
Environmental Assessment Report

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

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

This information was furnished by Indiana Geological Survey
Address: 1001 E. 10th St., Bloomington, IN 47405
Email: IGSEnvir@indiana.edu
Phone: 812 855-7428

Date: March 08, 2023


1
101
HIDDEN VALLEY LN
FAIRFIELD AVE
BUTLER ST
JOHN ST
11TH ST
FRANKLIN AVE
10TH ST
9TH ST
Brookville
8TH ST
7TH ST
HIGH ST
MILL ST
6TH ST
MARKET ST
LONG ST
5TH ST
SMITH RD
252
WEBERS LN
52
SONJA AVE
Stavetown
LITTLE CEDAR RD

United States Department of the Interior

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

In Reply Refer To: February 19, 2024
Project Code: 2023-0053663
Project Name: SR 252, 0.9 Mile East of US 52, Slide Correction (Des. 2000087)

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

To Whom It May Concern:

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

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

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

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

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

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

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

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

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

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

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

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

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

Attachment(s):

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

OFFICIAL SPECIES LIST

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

This species list is provided by:

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

PROJECT SUMMARY

Project Code: 2023-0053663
Project Name: SR 252, 0.9 Mile East of US 52, Slide Correction (Des. 2000087)
Project Type: Slide Repair - Land Management/Restoration
Project Description: The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with a Slide Correction project on State Road (SR) 252, 0.9 mile east of US 52 in Franklin County. More specifically, the project is located in Section 28, Township 9 North, Range 2 West in Brookville Township, Indiana.

The proposed project includes a slide correction of the slope south of SR 252 using a structural drilled shaft retaining wall. The ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to Culverts CLV 17195 and CLV 1782 within the project area. Both structures will be extended beyond the proposed retaining wall. Existing overhead electric utility poles along the north edge of the roadway will need to be relocated for ditch regrading. The roadway within the project area will be milled and overlaid. In addition, 2-foot paved shoulders with an aggregate safety edge will be added along the north edge of the roadway.

Note that tree clearing has since been reduced from 1.89 acres to 1.05 acres.

The HNTB inspection performed on August 18, 2022 resulted in no evidence of bats observed. A query of the USFWS Bat Database by INDOT Seymour District staff conducted on June 9, 2022 found no documented sites within a half mile of the project area.

There is suitable habitat within the project. Trees are located adjacent to the north and south sides of SR 252. Approximately 1.89 acres will be cleared to accommodate construction. Dominant species to be cleared include Eastern white pine (Pinus strobus), boxelder maple (Acer negundo), American elm (Ulmus americana), green ash (Fraxinus pennsylvanica), and black walnut (Juglans nigra). Tree clearing will occur within 100 feet of the existing roadway during the inactive bat season (October 1 to March 31). Temporary lighting may be needed during construction but no change in permanent lighting is anticipated. The signs may be replaced in kind. No new signals will be installed. Noise levels are anticipated to become elevated above normal levels. Construction is anticipated to begin in the spring of 2025 and conclude in the fall of 2025.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.41677425,-84.9959813637312,14z

Counties: Franklin County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 5 threatened, endangered, or candidate species on this species list.

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

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

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

---

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

MAMMALS

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

BIRDS

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

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

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

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

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

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

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental

Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

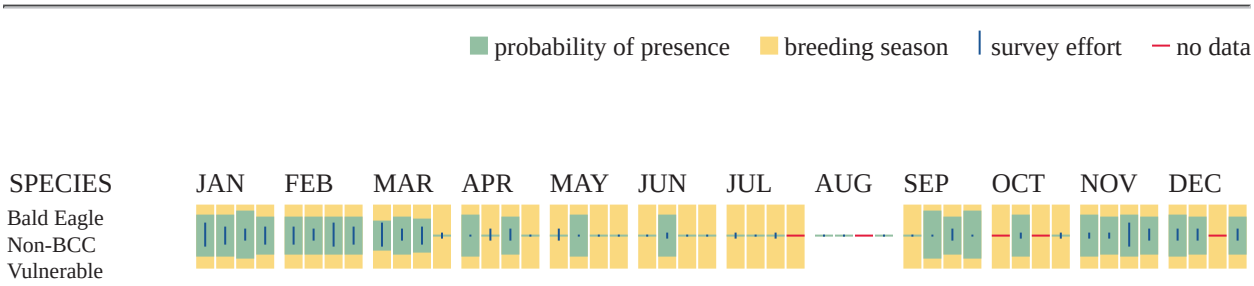
Probability of Presence (■)

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

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

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

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



Additional information can be found using the following links:

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

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "Supplemental Information on Migratory Birds and Eagles".

---

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

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Cerulean Warbler *Dendroica cerulea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 23 to Jul 20
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Field Sparrow *Spizella pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9446	Breeds Mar 1 to Aug 15
Prairie Warbler *Dendroica discolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

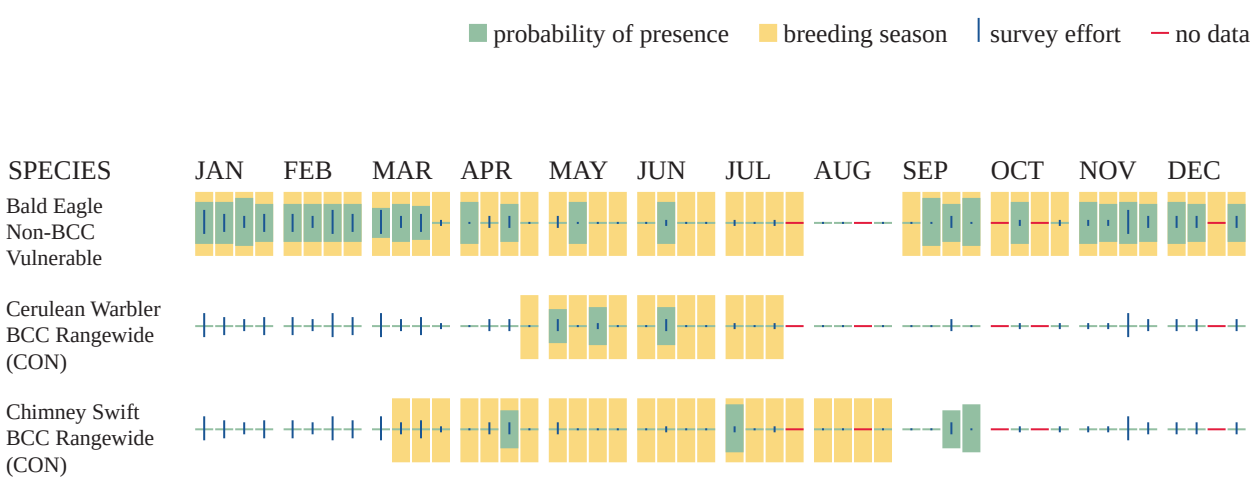
Probability of Presence (■)

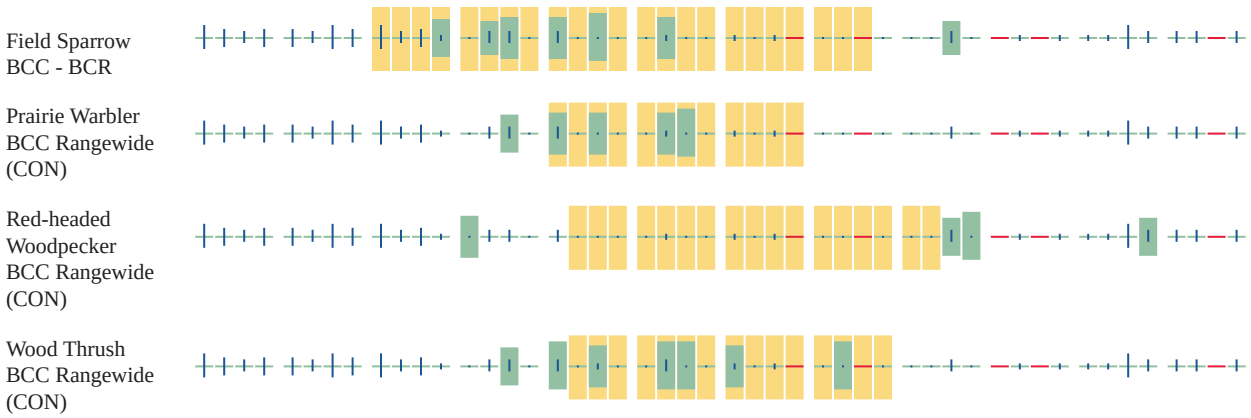
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

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

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

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





Additional information can be found using the following links:

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

WETLANDS

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

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

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

RIVERINE

- R4SBC

IPAC USER CONTACT INFORMATION

Agency: Federal Highway Administration
Name: Christina Lindstrom
Address: 111 Monument Circle
Address Line 2: Suite 1200
City: Indianapolis
State: IN
Zip: 46204
Email clindstrom@hntb.com
Phone: 3179173676

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Caroline Tegeler

From: Schwering, Taylor <TSchwering@indot.IN.gov>
Sent: Thursday, June 9, 2022 8:34 AM
To: Caroline Tegeler
Cc: Dye, David; Kia Gillette
Subject: RE: USFWS Bat Database Check - SR 252 Slide Correction Project - Des. No. 2000087

Caroline,

I have conducted a check of the USFWS confidential bat database for Des No. 2000087 and the results are stated below.

A review of the USFWS database **did not** indicate the presence of endangered bat species within 0.5 mile of the project area. Additional investigation to confirm the presence or absence of bats in or on any culverts, bridges or structures affected by the project will be necessary. 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".

Taylor Schwering
Environmental Manager
185 Agrico Lane
Seymour, IN 47274
Office: (812) 524-3794
Email: tschwering@indot.in.gov

From: Caroline Tegeler <ctegeler@HNTB.com>
Sent: Wednesday, June 8, 2022 11:12 AM
To: Schwering, Taylor <TSchwering@indot.IN.gov>
Cc: Dye, David <DDYE@indot.IN.gov>; Kia Gillette <kgillette@HNTB.com>
Subject: USFWS Bat Database Check - SR 252 Slide Correction Project - Des. No. 2000087

Good Morning Taylor,

I would like to request a query of the USFWS Bat Database for inclusion in the environmental documentation for Des. Nos. 2000087, SR 252 Slide Correction project, in Franklin County, Indiana.

Design details are still under development, but project activities are anticipated to involve the utilization of geotechnical solutions to stabilize the land slide along the south side of SR 252. Full depth pavement repairs are planned for the travel lane adjacent to the slide (eastbound lane), and an overlay is planned for the remainder of the pavement in the project area. Guardrail will likely be placed along the eastbound lane, and one drainage pipe will be replaced at the east end of project area. Riprap will likely be placed at the pipe outlet. The maximum excavation will be up to 20 feet for slide

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

General Information		
Date of Inspection: 08/18/2022 Time of Inspection: 9:00am	Initial Inspection ☑ Follow-up Inspection ☐ Construction ☐	Temp: 66 Wind: 0 Precip: 0 Sunrise: 7:53 am Sunset: 6:53 pm
County: Franklin		
Inspected by: K. Gillette and C. Tegeler		
GPS Northing: 4364951 Easting: 672625 UTM Zone: 16S	Contract Number: R-43365	Anticipated Start Date for Construction: Spring 2025

Bridge or Culvert	Bridge or Culvert
Stream or Road Crossed:	Station:
Bridge/Culvert number: CLV 1782	Number of Spans:
Type of Structure: ☐ Concrete box beam ☐ Steel beam ☐ Concrete I-beam ☐ Steel girder ☐ Concrete bulb tee beam ☐ Steel pony truss ☐ Concrete arch ☐ Welded steel thru girder ☐ Concrete girder ☐ Concrete box culvert ☐ Concrete slab ☐ Concrete pipe ☐ Multi-plate arch ☐ Corrugated steel pipe ☑ Other (list): Corrugated Metal Pipe	Material: ☐ Concrete ☑ Steel ☐ Other (describe): Shape: ☐ Box Culvert ☑ Pipe ☐ Arch ☐ Slab ☐ 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? ☐ Seen? ☐ Heard? No bats present	
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? ☐ Guano ☐ Staining No signs of bat use	

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

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

General Information		
Date of Inspection: 08/18/2022 Time of Inspection: 9:00am	Initial Inspection ☑ Follow-up Inspection ☐ Construction ☐	Temp: 66 Wind: 0 Precip: 0 Sunrise: 7:53 am Sunset: 6:53 pm
County: Franklin		
Inspected by: C. Tegeler and K. Gillette		
GPS Northing: 4364977 Easting: 672432 UTM Zone: 16S	Contract Number: R-43365	Anticipated Start Date for Construction: Spring 2025

Bridge or Culvert	Bridge or Culvert
Stream or Road Crossed:	Station:
Bridge/Culvert number: CLV 17195	Number of Spans:
Type of Structure: ☐ Concrete box beam ☐ Steel beam ☐ Concrete I-beam ☐ Steel girder ☐ Concrete bulb tee beam ☐ Steel pony truss ☐ Concrete arch ☐ Welded steel thru girder ☐ Concrete girder ☐ Concrete box culvert ☐ Concrete slab ☐ Concrete pipe ☐ Multi-plate arch ☐ Corrugated steel pipe ☑ Other (list): Corrugated Metal Pipe	Material: ☐ Concrete ☑ Steel ☐ Other (describe): Shape: ☐ Box Culvert ☑ Pipe ☐ Arch ☐ Slab ☐ 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? ☐ Seen? ☐ Heard? No bats present	
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? ☐ Guano ☐ Staining No signs of bat use	

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

United States Department of the Interior

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

In Reply Refer To: March 29, 2023
Project code: 2023-0053663
Project Name: SR 252, 0.9 Mile East of US 52, Slide Correction (Des. 2000087)

Subject: Concurrence verification letter for the 'SR 252, 0.9 Mile East of US 52, Slide Correction (Des. 2000087)' 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 March 29, 2023 to verify that the **SR 252, 0.9 Mile East of US 52, Slide Correction (Des. 2000087)** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*). Consultation with the 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.

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.

NOTE: The Service reclassified the NLEB as an endangered species on November 30, 2022. This ruling becomes effective on March 31, 2023. This NLAA determination does not require reinitiation. For projects requiring consultation after the effective date of March 31, 2023, please use the 2023 FHWA, FRA, FTA PBO.

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

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or Northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required. If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

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

- Monarch Butterfly *Danaus plexippus* Candidate
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

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

NAME

SR 252, 0.9 Mile East of US 52, Slide Correction (Des. 2000087)

DESCRIPTION

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with a Slide Correction project on State Road (SR) 252, 0.9 mile east of US 52 in Franklin County. More specifically, the project is located in Section 28, Township 9 North, Range 2 West in Brookville Township, Indiana.

The proposed project includes a slide correction of the slope south of SR 252 using a structural drilled shaft retaining wall. The ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to Culverts CLV 17195 and CLV 1782 within the project area. Both structures will be extended beyond the proposed retaining wall. Existing overhead electric utility poles along the north edge of the roadway will need to be relocated for ditch regrading. The roadway within the project area will be milled and overlaid. In addition, 2-foot paved shoulders with an aggregate safety edge will be added along the north edge of the roadway.

Note that tree clearing has since been reduced from 1.89 acres to 1.05 acres.

The HNTB inspection performed on August 18, 2022 resulted in no evidence of bats observed. A query of the USFWS Bat Database by INDOT Seymour District staff conducted on June 9, 2022 found no documented sites within a half mile of the project area.

There is suitable habitat within the project. Trees are located adjacent to the north and south sides of SR 252. Approximately 1.89 acres will be cleared to accommodate construction. Dominant species to be cleared include Eastern white pine (Pinus strobus), boxelder maple (Acer negundo), American elm (Ulmus americana), green ash (Fraxinus pennsylvanica), and black walnut (Juglans nigra). Tree clearing will occur within 100 feet of the existing roadway during the inactive bat season (October 1 to March 31). Temporary lighting may be needed during construction but no change in permanent lighting is anticipated. The signs may be replaced in kind. No new signals will be installed. Noise levels are anticipated to become elevated above normal levels. Construction is anticipated to begin in the spring of 2025 and conclude in the fall of 2025.

DETERMINATION KEY RESULT

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

QUALIFICATION INTERVIEW

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

   [1] See Indiana bat species profile

   Automatically answered
   Yes

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

   [1] See Northern long-eared bat species profile

   Automatically answered
   Yes

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

   A) Federal Highway Administration (FHWA)

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

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

   No

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

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

   No

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

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

   No

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

   No

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

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

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

   Yes

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

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

   Yes

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

    No

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

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

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

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

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

    No

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

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

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

    No

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

    Yes

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

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

    B) During the inactive season

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

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

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

    No

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

    Yes

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

    B) During the inactive season

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

    Yes

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

    No

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

    Yes

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

    No

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

    No

23. Does the project include slash pile burning?

    No

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

    Yes

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

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

    Yes

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

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

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

    Yes

    SUBMITTED DOCUMENTS

    - *INDOT_Bridge_Culvert_Asssessment_CLV_1782.pdf https://ipac.ecosphere.fws.gov/project/4Y2FDYVHIZHLZBVAH77YZQQXMA/projectDocuments/124060384*
    - *INDOT_Bridge_Culvert_Asssessment_CLV_17195.pdf https://ipac.ecosphere.fws.gov/project/4Y2FDYVHIZHLZBVAH77YZQQXMA/projectDocuments/124060385*

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

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

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

    No

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

    No

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

    No

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

    Yes

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

    Yes

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

    No

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

    Yes

34. 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[1]?

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

    Yes

35. Will *any* 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 inactive season[1]?

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

    Yes

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) consistent with a Not Likely to Adversely Affect 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 active season within undocumented habitat.

39. 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

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

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

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

42. 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

43. **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

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

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

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

    Yes

45. **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

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

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

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

    Yes

47. **Lighting AMM 1**
    Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

    Yes

PROJECT QUESTIONNAIRE

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

   N/A

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

   N/A

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

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

   1.89

4. Please describe the proposed bridge work:

   Small structures CLV 17195 and CLV 1782 will be extended beyond the proposed retaining wall.

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

   Construction is anticipated to begin in the spring of 2025 and conclude in the fall of 2025.

6. Please enter the date of the bridge assessment:

   08/18/2022

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

TREE REMOVAL AMM 4
Do not remove **documented** Indiana bat or NLEB roosts that are still suitable for roosting, or trees within 0.25 miles of roosts, or
documented foraging habitat any time of year.

GENERAL AMM 1
Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs.

TREE REMOVAL AMM 1
Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal.

LIGHTING AMM 1
Direct temporary lighting away from suitable habitat during the active season.

TREE REMOVAL AMM 2
Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/ rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

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).

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

This key was last updated in IPaC on February 02, 2023. Keys are subject to periodic revision.

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

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation
Name: Erin Carleton
Address: 185 Agrico Ln
City: Seymour
State: IN
Zip: 47274
Email ecarleton@indot.in.gov
Phone: 8125243988

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Appendix D: Section 106 of the NHPA

Minor Projects PA Project Submittal and Assessment Form

SECTION 1

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

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

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

Original Submission Date: April 13, 2023 **Amended Submission Date*:** June 27, 2023

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

Submitted By (Provide Name and Firm/Organization): Caroline Tegeler, HNTB Corporation

Project Designation Number: 2000087

Route Number: SR 252

Feature crossed (if applicable): N/A

City/Township: Brookville Township **County:** Franklin County

Project Description:*

Des. No. 2000087 involves a slide correction to stabilize the land slide along the south side of SR 252. This project is located on SR 252, approximately 0.9 mile east of US 52. More specifically, the project is located in Section 28, Township 9 North, Range 2 West in Brookville Township. Proposed project activities include the installation of a structural drilled shaft retaining wall with unreinforced concrete plug shafts. The drilled shafts will be reinforced with steel I-Beams. The roadway pavement will be milled and overlayed. The 1-foot aggregate shoulder along the north edge of the roadway will be replaced with a 2-foot paved shoulder and a 1-foot aggregate safety edge. The 1-foot aggregate shoulder along the south edge of the roadway will be replaced with a 2-foot paved shoulder. Midwest Guardrail System rail will be placed along the south edge of the roadway. The ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to the existing 18-inch (CLV 17195) and 30-inch (CLV 1782) corrugated metal pipes (CMPs). CLV 17195 and CLV 1782 will remain in place. Riprap will be placed on the excavated slope at the east end of the project area.

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

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type:
CLV 17195, 12-inch CMP, carries roadside drainage below SR 252

CLV 1782, 30-inch CMP, carries UNT 1 to East Fork White River

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

☐ **Yes** ☐ **No**

If yes, did the inventory determine the bridge eligible for or listed in the National Register of Historic Places? Please provide page # of entry in Historic Bridge Inventory.
☐ Yes ☐ No
Inventory Page #_____

Will there be right-of-way acquisition as part of this project?
☒ Yes ☐ No

If yes was checked above, please check all that apply:
☒ Permanent ☐ Temporary ☐ Reacquisition

If applicable, identify right-of-way acquisition locations in text below and in attached mapping. Please specify how much (both temporary and permanent) and indicate what activities are included in the proposed right-of-way:
0.66 acre of permanent ROW will be acquired north of SR 252 for tree clearing and construction access. 0.56 acre of permanent ROW will be acquired south of SR 252 for tree clearing, construction access, and slide correction activities.

Is there *any* potential for additional temporary right-of-way to be needed later for purposes such as access, staging, etc.?
☐ Yes ☒ No

Archaeology (check one):

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

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

Please specify all applicable categories and condition(s) (highlight applicable conditions in yellow)*:
**Include full category text, including any conditions. INDOT-CRO will finalize categories upon their review.*

B-3. Construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration and deceleration lanes) and shoulder widening under the following conditions ***[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]***:

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

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

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

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

Condition B (Above-Ground Resources)
Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

B-4. Installation of new safety appurtenances, including but not limited to, guardrails, barriers, glare screens, and crash attenuators, under the following conditions ***[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]***:

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

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

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

Condition B (Above-Ground Resources)
Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

B-10. Slide corrections, slope repairs, and other erosion control measures, in undisturbed soils under the conditions listed below ***[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]***:

Condition A (Archaeological Resources)
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 reports will be provided to the DHPA and any archaeological site form information will be entered directly into the SHAARD by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)
Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource.

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

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

Part II: Completed by INDOT-CRO

Amendments will be shown in red font.

Information reviewed (please check all that apply):

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

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

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

Bridge inspection information/BIAS ☐ Historic Bridge Inventory Database ☐

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

Other (please specify):

Travis, Sidney
2023 A Phase Ia Archaeological Reconnaissance for the Proposed Slide Correction on State Road 252, Approximately 0.9 Miles East of the US 52 and State Road 252 Intersection near Brookville in Franklin County, Indiana (INDOT Des. No. 2000087). Report on file, Indiana Department of Transportation, Cultural Resources Office, Indianapolis, IN.

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

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

Additional Comments:

Above-ground Resources

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

The National Register & IHSSI information for Franklin County is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The *Franklin County Interim Report* (1978; Brookville Township) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The SHAARD information was checked against the Interim Report hard copy maps. The IHBBCM contains the most up to date IHSSI information. No IHSSI documented properties are located within 0.25 mile of the project area.

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 INDOT-CRO historian reviewed structures adjacent to the project area utilizing online aerial, street-view photography, and the Franklin County GIS website. The project area is located in a wooded area with a thicket of trees along both the north and south sides. Due to scope of work and the thick line of trees to both the north and south sides of the project area limiting the viewshed, only properties immediately adjacent to the project area were reviewed. The immediately adjacent building stock consists of mid-nineteenth to early twenty-first century residential structures. None appear to possess the age or the significance and/or integrity to be considered National Register-eligible.

There are currently no above-ground concerns so long as the project scope remains unchanged.

Archaeological Resources

An INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the Phase Ia archaeological reconnaissance submitted by Cultural Resources Analysts, Inc. on behalf of HNTB Corporation (Travis 2023).

A 6.4-acre survey area was examined through a combination of systematic shovel probing (n=9) and visual inspection of disturbed areas. The area encompassing SR 252 has been previously disturbed from the construction of the state road, driveways, a transmission corridor, embankments, sloping hillsides, roadside ditches, and culverts. As a result, the majority of the survey area was subject to visual inspection. Nine shovel probes were excavated within the survey area boundaries in portions that were presumably in undisturbed soils, such as a wooded area and a residential lawn. Gravel fill was also located in a few shovel tests placed within the residential lawn on the north side of SR 252. No archaeological sites were documented as a result of the survey and no further investigation is recommended (Travis 2023).

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

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

INDOT-CRO staff reviewer(s): Haley Brinker, Matt Coon, and KayLee Blum

INDOT Approval Date: 8/3/2023

Amendment Approval Date (if applicable):

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

Please attach the following to this form:

- **General Location Map.** This map should allow the INDOT-CRO reviewer to quickly locate the project.
- **Aerial photography map(s) of project area.** This map must include project limits. It may also include SHAARD data, but SHAARD data is not required.
- **If bridge or small structure project, please attach photographs of bridge or small structure.** Photographs can be found in inspection reports located in INDOT's Bridge Inspection Application System (BIAS), as well as other project documents, such as engineering assessments or mini-scopes.

Map depicting potential temporary and/or permanent right-of-way acquisitions. In the email submission to INDOT-CRO, please also include:

- **A GIS polygon shapefile or KMZ file of the project area** (shapefiles are preferred). Shapefiles should use "NAD_1983_UTM" projected coordinate system. In addition, these files should contain the following *text* attribute field: DES_NO. The project designation number should be entered in this field.
- **If the project takes place in undisturbed soils, attach the results of the archaeological investigation, if completed.** *Note: The MPPA Submission Form may be submitted before the archaeology report. INDOT-CRO staff will process the above-ground portion of the form in advance of the archaeological portion of the form. However, a completed determination form will not be returned to the applicant until after the archaeology report has been reviewed and approved by INDOT-CRO.*

Appendix E: Red Flag and Hazardous Materials

INDIANA DEPARTMENT OF TRANSPORTATION

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

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

Eric Holcomb, Governor
Michael Smith, Commissioner

Date: June 9, 2023

To: Site Assessment & Management (SAM)
Environmental Policy Office - Environmental Services Division (ESD)
Indiana Department of Transportation (INDOT)
100 N Senate Avenue, Room N758-ES
Indianapolis, IN 46204

From: Caroline Tegeler
HNTB Corporation
111 Monument Circle, Suite 1200
Indianapolis, IN
ctegeler@hntb.com

Re: RED FLAG INVESTIGATION
DES # 2000087, State Project
Slide Correction
State Road (SR) 252, From 0.80 Mile East of US 52 to 1.04 Miles East of US 52
Franklin County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: INDOT and the Federal Highway Administration (FHWA) intend to proceed with a Slide Correction project on SR 252 in Franklin County, Indiana. The project is located along SR 252, from 0.80 mile east of US 52 to 1.04 miles east of US 52, east of the Town of Brookville. Proposed project activities include the excavation of the slope south of SR 252 and the installation of a structural drilled shaft retaining wall with reinforced concrete plug shafts to stabilize the land slide. Guardrail will be placed along the eastbound lane. The ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to the existing 12-inch stormwater pipe (CLV 17195) and 30-inch stormwater pipe (CLV 1782) within the project area. Design details are under development, but CLV 17195 and CLV 1782 may be replaced or extended beyond the proposed retaining wall. Riprap may be placed at the structure inlets and outlets. Existing overhead electric utility poles along the north edge of roadway will need to be relocated for ditch regrading. Curb and gutter will be installed along the southern edge of the roadway to prevent water from overtopping the proposed retaining wall. Grading may occur within the ditch south of SR 252 to facilitate drainage and tie the stabilized slope into to the existing ground elevation. The roadway within the project area will be milled and overlaid. Two (2) foot paved shoulders with an aggregate safety edge will be added along the north edge of roadway.

Bridge Work Included in Project: Yes ☐ No ☒ Structure #(s) _____
If this is a bridge project, is the bridge Historical? Yes ☐ No ☐ , Select ☐ Non-Select ☐

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

Culvert Work Included in Project: Yes ☒ No ☐ Structure #(s) CLV 1782

Proposed right of way: Temporary ☐ # Acres ___ Permanent ☒ # Acres >1, Not Applicable ☐

Type and proposed depth of excavation: Excavation to a depth of up to twenty (20) feet will occur for the slide correction activities.

Maintenance of traffic (MOT): The MOT plan will require a full road closure and a detour utilizing SR 1, I-74, SR 126, and SR 128.

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

State Project: ☒ LPA: ☐

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

Infrastructure
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:

Religious Facilities	**1***	Recreational Facilities	**N/A**
Airports[1]	**N/A**	Pipelines	**N/A**
Cemeteries	**N/A**	Railroads	**N/A**
Hospitals	**N/A**	Trails	**1**
Schools	**N/A**	Managed Lands	**N/A**

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

Explanation:

Religious Facilities*: Although not mapped on the GIS layer, one (1) religious facility is located within the 0.5 mile search radius. The religious facility, First Baptist Church, is located 0.41 mile northwest of the project area. No impact is expected.

Trails: One (1) trail segment is located within the 0.5 mile search radius. The open trail segment, Town Park Walking Trail, is located 0.47 mile northwest of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources
Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:

NWI - Points	**N/A**	Canal Routes - Historic	**N/A**
Karst Springs	**N/A**	NWI - Wetlands	**6**
Canal Structures – Historic	**N/A**	Lakes	**6**
NPS NRI Listed	**N/A**	Floodplain - DFIRM	**1**
NWI-Lines	**N/A**	Cave Entrance Density	**N/A**
IDEM 303d Listed Streams and Lakes (Impaired)	**N/A**	Sinkhole Areas	**N/A**
Rivers and Streams	**10**	Sinking-Stream Basins	**N/A**

If unmapped water features are identified that might impact the project area, direct coordination with INDOT ESD Ecology and Waterway Permitting will occur.

Explanation:

Rivers and Streams: Ten (10) river and stream segments are located within the 0.5 mile search radius. One (1) river and stream segment, an Unnamed Tributary (UNT) to East Fork Whitewater River, is located within the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

NWI-Wetlands: Six (6) wetlands are located within the 0.5 mile search radius. The nearest wetland is located 0.07 mile north of the project area. No impact is expected.

Lakes: Six (6) lakes are located within the 0.5 mile search radius. The nearest lake is located 0.09 mile south of the project area. No impact is expected.

Floodplains: One (1) floodplain polygon is located within the 0.5 mile search radius. The floodplain polygon is located 0.36 mile west of the project area. No impact is expected.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

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

Explanation: No mining and mineral exploration concerns were identified within the 0.5 mile search radius.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

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

Leaking Underground Storage (LUST) Sites	**N/A**	Notice of Contamination Sites	**N/A**

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

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

ECOLOGICAL INFORMATION SUMMARY

The Franklin County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is provided at https://www.in.gov/dnr/nature-preserves/files/np_franklin.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did not indicate the presence of ETR species within the 0.5 mile search radius. 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 with primarily forested with scattered residential properties. CLV 1782 and CLV 17195 did not have inspection reports due to their small sizes. Additional investigation to confirm the presence or absence of bats in the small culverts will be necessary. The rangewide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's System for Listed Bat Consultation for INDOT Projects."

RECOMMENDATIONS SECTION

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

INFRASTRUCTURE: N/A

WATER RESOURCES:
Rivers and Streams: One (1) river and stream segment, UNT to East Fork Whitewater River, is located within the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with USFWS and IDNR will occur. Additional investigation to confirm the presence or absence of bats in the culverts will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

INDOT ESD concurrence: Peter Washburn Digitally signed by Peter Washburn Date: 2023.06.30 15:35:26 -04'00' (Signature)

Prepared by:
Caroline Tegeler
Environmental Planner II
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

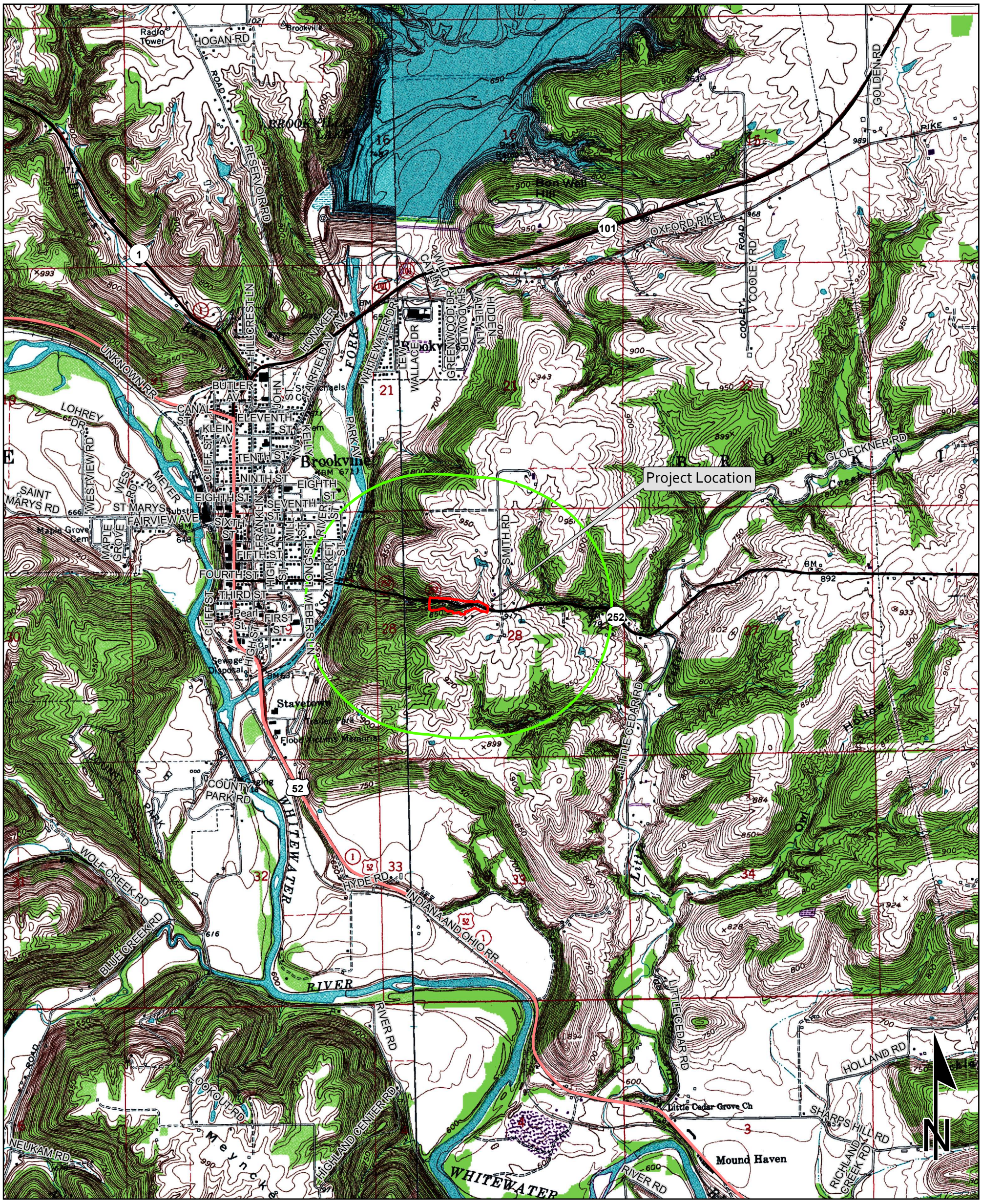
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

Red Flag Investigation - Site Location
SR 252, From 0.80 Mile East of US 52 to 1.04 Miles East of US 52
Des. No. 2000087, Slide Correction
Franklin County, Indiana



Sources:

0 0.25 0.5 1 Miles

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

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

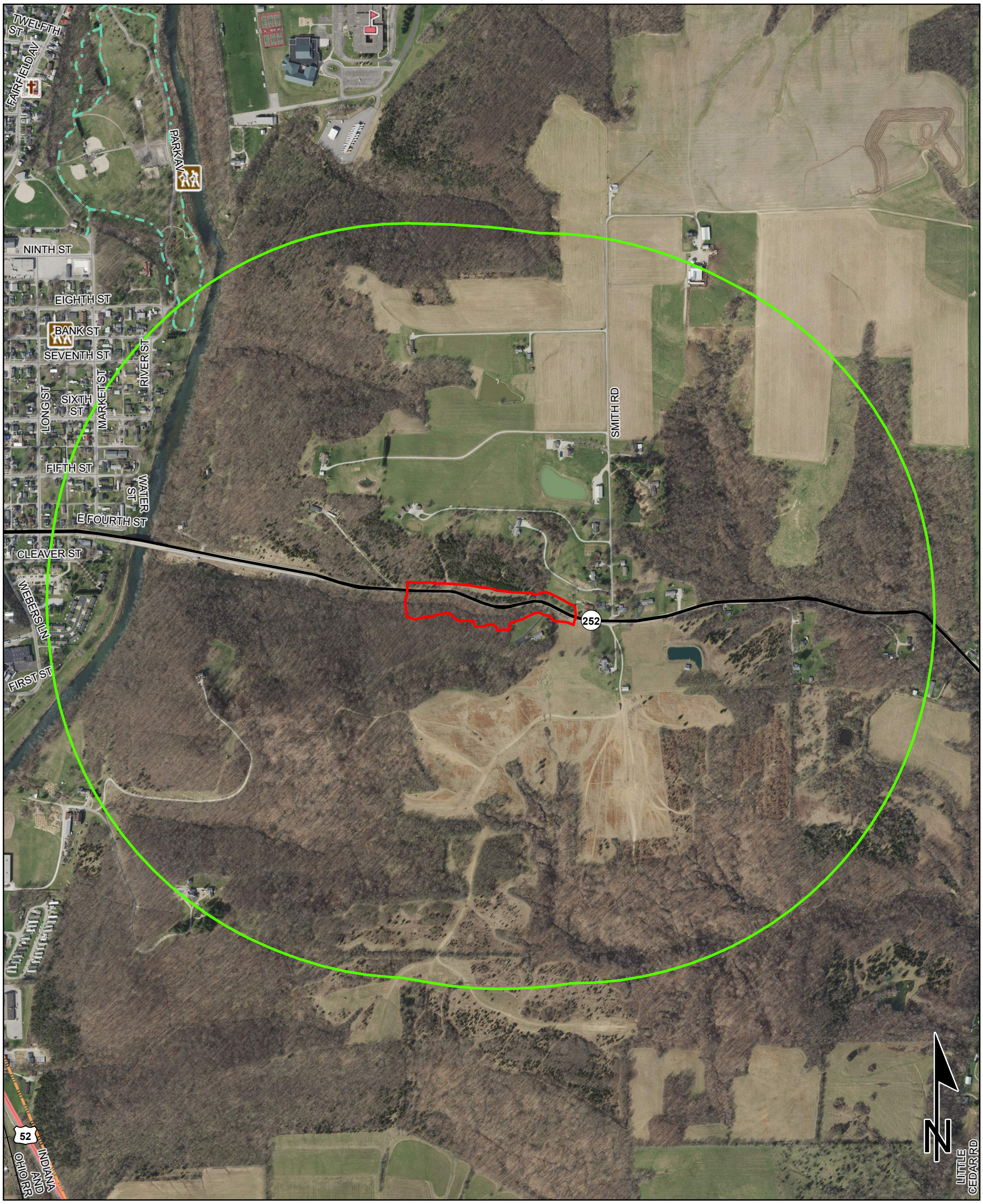
Map Projection: State Plane Indiana West (FIPS 1301 Ft US)

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.

WHITCOMB & BROOKVILLE QUADRANGLES INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Red Flag Investigation - Infrastructure
SR 252, From 0.80 Mile East of US 52 to 1.04 Miles East of US 52
Des. No. 2000087, Slide Correction
Franklin County, Indiana



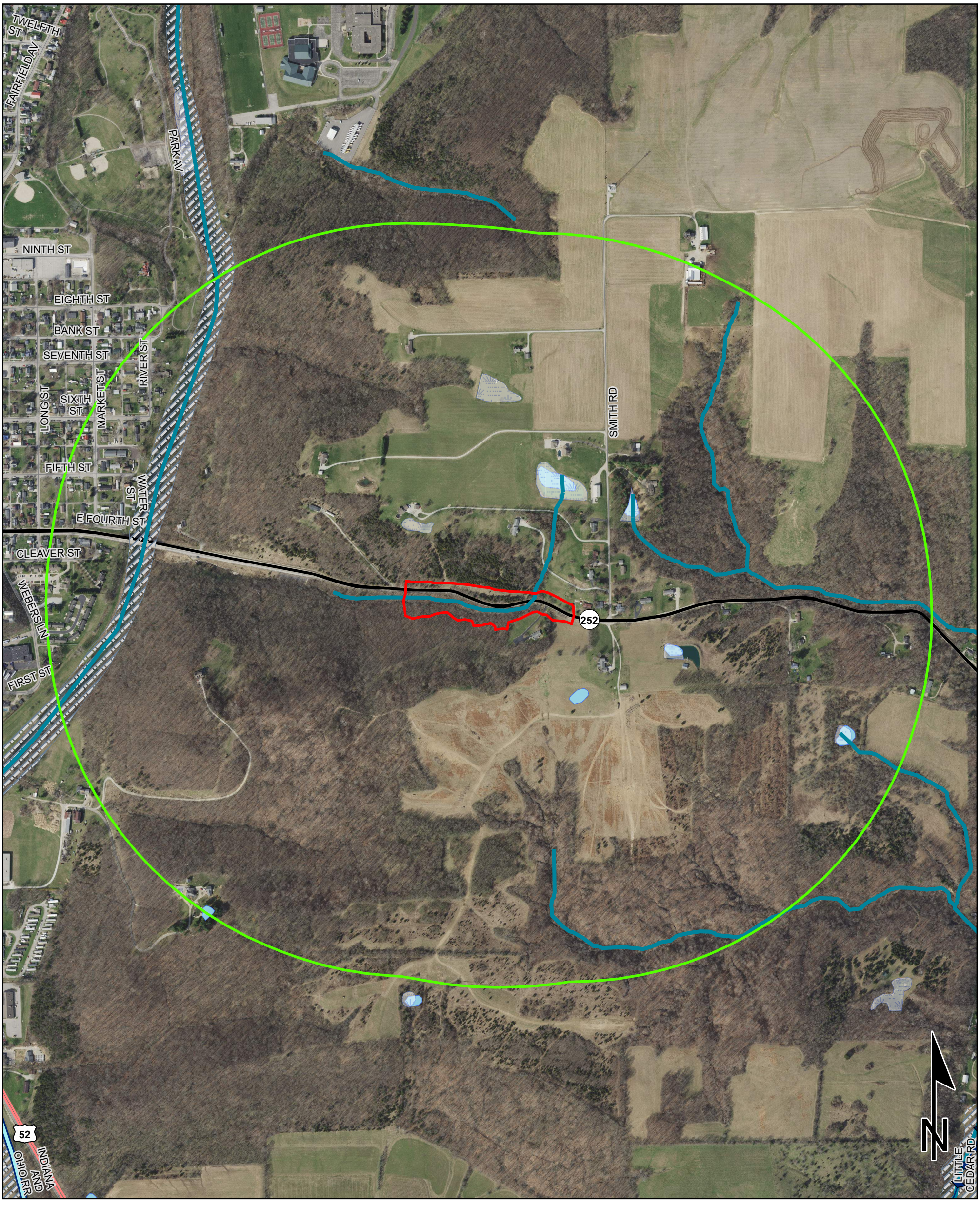
0.15 0.07 0 0.15 Miles

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

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

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

Red Flag Investigation - Water Resources
SR 252, From 0.80 Mile East of US 52 to 1.04 Miles East of US 52
Des. No. 2000087, Slide Correction
Franklin County, Indiana



0.15 0.07 0 0.15 Miles

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

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

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

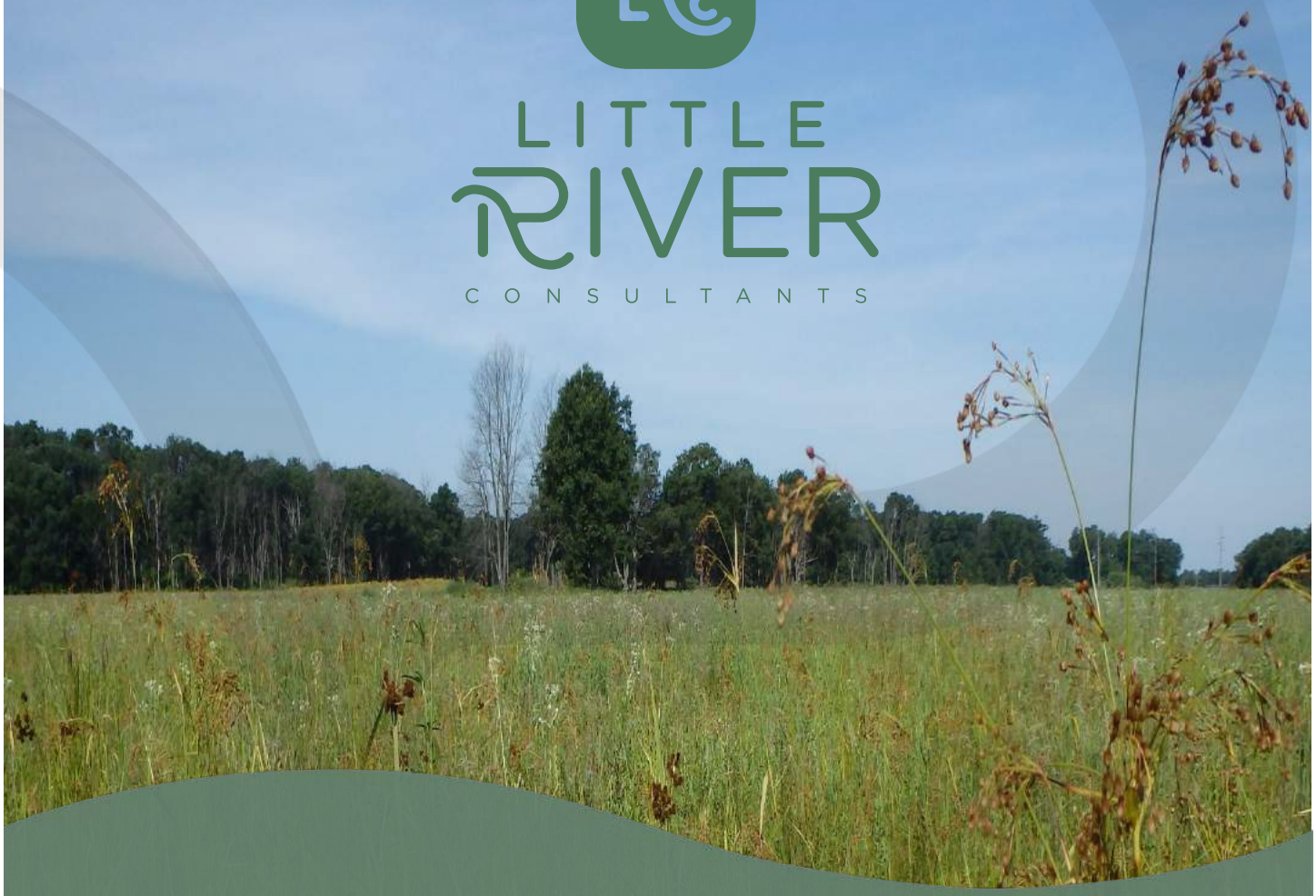
Appendix F: Water Resources

EXPERIENCED | RELIABLE | CREATIVE

- LITTLE RIVER CONSULTANTS -
PROJECT 19-019D R. Baker
493 WEST CR 600N, SEYMOUR, IN

Jacob Burskey
Approved 3/14/2023

LITTLE RIVER CONSULTANTS



WETLAND AND WATERBODY DELINEATION

SR 252 Slide Correction
0.9 mile east of US 52
near Brookville, Franklin County, Indiana

INDOT Des. No. 2000087

Field Work Completed: November 1, 2022

Report Date: February 28, 2023

PREPARED FOR PRIME CONSULTANT:

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

PREPARED BY:

Shannon Bonifacio
shannon@littleriverconsultants.com
Office Phone: 317-702-7291
Little River Consultants, LLC
493 West CR 600N
Seymour, IN 47274

1.0 INTRODUCTION

Dates of Field Reconnaissance: November 1, 2022

Project Location:
Section 28, Township 9 North, Range 2 West
Whitcomb USGS Quadrangle (1994)
near Brookville, Franklin County, Indiana
39.416758, -84.995685

State Road (SR) 252 Slide Correction

1.1 Project Description

The investigated area is located on SR 252, 0.9 mile east of US 52, and was chosen based on the area needed to mitigate the sliding earth in several locations on the south side of SR 252. Proposed project activities include the excavation of the slope south of SR 252 and the installation of a structural drilled shaft retaining wall with reinforced concrete plugshafts to stabilize the land slide. Guardrail will be placed along the eastbound lane. The ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to the existing 12-inch (CLV 17195) and 30-inch (CLV 1782) stormwater pipes within the project area. Both structures will be extended beyond the proposed retaining wall. Existing overhead electric utility poles along the north edge of roadway will need to be relocated for ditch regrading. Curb and gutter will be installed along the southern edge of the roadway to prevent water from overtopping the proposed retaining wall. The roadway within the project area will be milled and overlaid. Two-foot paved shoulders with an aggregate safety edge will be added along the north edge of the roadway. Tree clearing and right-of-way (ROW) acquisition will likely be required for this project.

In preparation, a wetland and waterway delineation was conducted for the investigated area. The general project vicinity is shown on Exhibit 1, and approximate boundaries and surrounding features of the investigated area are shown on Exhibits 2-6.

Land use within the investigated area is paved roadway, embankment, stream, mowed yard, and forested area. Beyond the investigated area, land use is low density residential with agriculture and forest in all quadrants. The Town of Brookville is located approximately 0.4 mile west of the investigated area. Aerial photographs showing land use in the immediate vicinity of the investigated area can be found on Exhibit 5.

2.0 DESKTOP RECONNAISSANCE

Prior to conducting field work, Little River staff reviewed the U.S. Geological Survey (USGS) topographic mapping (Exhibit 2), U.S. Fish & Wildlife Service (USFWS) National Wetlands Inventory (NWI) Map (Exhibit 3), USGS National Hydrography Dataset (NHD) (Exhibit 3), Indiana Department of Natural Resources (IDNR) Best Available Flood Hazard Map (Exhibit 3), U.S. Department of Agriculture (USDA) Web Soil Survey (Exhibit 4), and current aerial photography (Exhibit 5). These resources were used to identify potential wetlands and waterways within the investigated area and establish historic conditions.

2.1 Soils

According to the Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Franklin County, Indiana, three soil types are present within the investigated area (Exhibit 4). Drainage class, flood and ponding frequency, depth to water table, and hydric rating for onsite soils are summarized in Table 1 below.

Table 1: Soil Survey Data Regarding Hydrology and Hydric Soil

Soil Name	Soil Symbol	Drainage Class	Flooding Frequency	Ponding Frequency	Depth to Water Table (in)	Hydric Rating	Hydric Soil Category
Eden flaggy silty clay, 15 – 25% slopes, eroded	EbE2	Well Drained	None	None	>78.7	0	Nonhydric
Eden flaggy silty clay, 25 – 50% slopes	EdG	Well Drained	None	None	>78.7	0	Nonhydric
Miami silt loam, 6 – 12% slopes, eroded	MmC2	Moderately Well Drained	None	None	29.9	5	Predominantly Nonhydric

2.2 National Wetland Inventory (NWI) Information

The NWI map (Exhibit 3) shows no NWI wetlands mapped within or adjacent to the investigated area (Exhibit 3). The nearest NWI wetland is a palustrine unconsolidated bottom intermittently exposed (PUBG) located approximately 500 feet north of the investigated area.

2.3 12-Digit Hydrologic Unit Code (HUC)

The investigated area is located entirely within the limits of the Brookville Lake-East Fork Whitewater River 12-Digit HUC (050800030717).

2.4 Additional Information

A review of the USGS topographic map (Exhibit 2) shows one intermittent stream (dashed blue line) within the investigated area which corresponds to an unnamed tributary 1 (UNT1) to East Fork (EF) Whitewater River. The NHD map (Exhibit 3) shows one classified flowline (stream) that corresponds to UNT1 to EF Whitewater River and one unclassifed flowline that was not seen in the field, likely due to drainage rerouting north of SR 252 (Photo 44), and the slide conditions south of SR 252. The IDNR Best Available Flood Hazard map (Exhibit 3) shows that the investigated area does not fall within a floodplain. UNT1 to EF Whitewater River flows southwest through the investigated area and is visible on aerial photography (Exhibit 5).

2.5 Attached Documents

Maps reviewed and completed as part of the desktop and field reconnaissance are attached to this report as follows:

Exhibit 1 – Project Location Map
Exhibit 2 – USGS Quadrangle Map
Exhibit 3 – Wetland, Floodplain and Flowline Map
Exhibit 4 – Franklin County Soil Survey Map
Exhibit 5 – 2017 Aerial Photography Map
Exhibit 6 – Feature and Photo Location Map
Exhibit 7 – Streamstats Report

Some attachments were removed to avoid duplication. Attachments can be found in Appendix B of this CE document.

Photographs of the project can be found in Appendix A. Wetland Data Sheets are included in Appendix B. The Pre-JD form is in Appendix C. The locations of all photo points, data points, and mapped features are shown on Exhibit 6.

3.0 FIELD RECONNAISSANCE

Onsite data collection was conducted on November 1, 2022, by Shannon Bonifacio and Rachele Baker. Local precipitation data was reviewed to provide context for observations of hydrology. Precipitation data on the Community Collaborative Rain, Hail, and Snow Network website (Cocorahs.org) showed the area received approximately 0.77 inch of cumulative precipitation in the 2 weeks preceding the November 1, 2022 site visit. No significant rain events occurred during this time period. Field data collection was based on the technical criteria presented in the 1987 U.S. Army Corps of Engineers (USACE) Wetlands Delineation Manual (1987 Corps Manual) and 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest 2.0 (Regional Supplement). Field methods did not deviate from standard methods found in the 1987 Corps Manual or the Regional Supplement. The locations of identified streams, wetlands, and data points were mapped using sub-meter accurate GPS.

Stream conditions such as morphology, substrate, and riparian habitat were recorded, along with measurements of width and depth at the ordinary high-water mark (OHWM). Jurisdictional wetland and stream determinations were based on definitions of Waters of the U.S. included in the Clean Water Act (CWA), as clarified by Supreme Court rulings in the Solid Waste Association of Northern Cook County (SWANCC), Rapanos and Carabell cases, and in conformance with USACE regulatory guidance. State jurisdictional determinations were based on revisions to the State Regulated Wetlands Rule, effective July 1, 2021.

3.1 Waterways

All runoff from the investigated area drains into UNT1 to EF Whitewater River. Four tributaries (UNT2 to EF Whitewater River – UNT5 to EF Whitewater River) flow into UNT1 to EF Whitewater River along the length of the investigated area. The OHWM was taken at stream assessment points (SAP) along each waterway. Table 2 is a summary of SAP data taken within the investigated area. UNT1 to EF Whitewater River drains into East Fork Whitewater River approximately 0.4 mile west of the investigated area. East Fork Whitewater River is a traditional navigable water (TNW). Drainage is conveyed towards UNT1 to EF Whitewater River via roadside ditches (RSDs) and an erosional feature. All waterways identified onsite are shown on Exhibit 6 and photos are included in Appendix A.

Table 2: SAP Summary

Stream Assessment Point	Latitude Longitude	Waterway	OHWM
SAP1	39.416723, -84.994760	UNT1 to EF Whitewater River	2’10” wide x 8” deep
SAP2	39.416636, -84.995447	UNT1 to EF Whitewater River	10’10” wide x 1’ 9” deep
SAP3	39.416544, -84.995892	UNT2 to EF Whitewater River	4’ 4” wide x 8” deep
SAP4	39.416675, -84.996322	UNT1 to EF Whitewater River	7’ 8” wide x 1’ 1” deep
SAP5	39.416626, -84.996258	UNT3 to EF Whitewater River	3’ 2” wide x 1’ 1” deep
SAP6	39.416886, -84.997583	UNT4 to EF Whitewater River	6’ 9” wide x 1’ 2” deep
SAP7	39.416829, -84.997763	UNT5 to EF Whitewater River	3’ wide x 6” deep
SAP8	39.416881, -84.997954	UNT1 to EF Whitewater River	8’ 5” wide x 1’ 2” deep

3.1.1 UNT1 to EF Whitewater River

UNT1 to EF Whitewater River flows south under SR 252 and then west through the investigated area for approximately 1100 feet. UNT1 to EF Whitewater River is illustrated as intermittent (dashed blue line) on the USGS 1994 Whitcomb Quadrangle Map (Exhibit 2). Based on field observations, UNT1 to EF Whitewater River appears to be intermittent as it did not have flowing water during the site visit. StreamStats reports the upstream drainage area of UNT1 to EF Whitewater River as 0.097 square miles. UNT1 to EF Whitewater River drains into EF Whitewater River, a TNW. It is anticipated that UNT1 to EF Whitewater River would be considered a Water of the U.S.

UNT1 to EF Whitewater River has cobble-gravel substrate and heavy riparian cover within this reach. UNT1 to EF Whitewater River is moderately sinuous with well-developed riffle/pool complexes within the investigated area. The OHWM of UNT1 to EF Whitewater River was taken at four SAP's and are summarized in Table 2. The maximum OHWM width and depth of UNT1 to EF Whitewater River is 10' 10" wide x 1' 9" deep. The Cowardin classification is R4SB3 (riverine, intermittent, streambed, cobble-gravel). The quality of this reach of UNT1 to EF Whitewater River is average due to the thick woody riparian zone, sinuosity, and developed riffle/pool complexes.

3.1.2 UNT2 to EF Whitewater River

UNT2 to EF Whitewater River flows north into UNT1 to EF Whitewater River within the investigated area for approximately 70 feet. UNT2 to EF Whitewater River is not shown on the USGS 1994 Whitcomb Quadrangle Map (Exhibit 2). Based on field observations, UNT2 to EF Whitewater River appears to be ephemeral. UNT2 to EF Whitewater River is not shown in StreamStats. UNT2 to EF Whitewater River drains into UNT1 to EF Whitewater River, which drains into East Fork White River, a TNW. It is anticipated that UNT2 to EF Whitewater River would be considered a Water of the U.S.

UNT2 to EF Whitewater River has cobble-gravel substrate and heavy riparian cover. UNT2 to EF Whitewater River lacks sinuosity and riffle/pool complexes within the investigated area. The OHWM of UNT2 to EF Whitewater River was taken at SAP3 and is 4' 4" wide x 8" deep and is shown in Table 2. The quality of this reach of UNT2 to EF Whitewater River is poor due to lack of sinuosity and developed riffle-pool complexes.

3.1.3 UNT3 to EF Whitewater River

UNT3 to EF Whitewater River flows north into UNT1 to EF Whitewater River within the investigated area for approximately 115 feet. UNT3 to EF Whitewater River is not shown on the USGS 1994 Whitcomb Quadrangle Map (Exhibit 2). Based on field observations, UNT3 to EF Whitewater River appears to be ephemeral. UNT3 to EF Whitewater River is not shown in StreamStats. UNT3 to EF Whitewater River drains into UNT1 to EF Whitewater River, which drains into East Fork White River, a TNW. It is anticipated that UNT3 to EF Whitewater River would be considered a Water of the U.S.

UNT3 to EF Whitewater River has cobble-gravel substrate and heavy riparian cover. UNT3 to EF Whitewater River lacks sinuosity and riffle/pool complexes within the investigated area. The OHWM of UNT3 to EF Whitewater River was taken at SAP5 and is 3' 2" wide x 1' 1" deep and is shown in Table 2. The quality of this reach of UNT3 to EF Whitewater is poor due to lack of sinuosity and developed riffle-pool complexes.

3.1.4 UNT4 to EF Whitewater River

UNT4 to EF Whitewater River flows south from SR 252 into UNT1 to EF Whitewater River for approximately 75 feet. UNT4 to EF Whitewater River is not shown on the USGS 1994 Whitcomb Quadrangle Map (Exhibit 2). Based on field observations, UNT4 to EF Whitewater River appears to be ephemeral. UNT4 to EF Whitewater River is not shown in StreamStats. UNT4 to EF Whitewater River drains into UNT1 to EF Whitewater River, which drains into East Fork White River, a TNW. It is anticipated that UNT4 to EF Whitewater River would be considered a Water of the U.S.

UNT4 to EF Whitewater River has cobble-gravel/riprap substrate and moderate riparian cover. UNT4 to EF Whitewater River lacks sinuosity and riffle/pool complexes within the investigated area. The OHWM of

UNT4 to EF Whitewater River was taken at SAP6 and is 6' 9" wide x 1' 2" deep and is shown in Table 2. The quality of this reach of UNT4 to EF Whitewater River is poor due to lack of cover and proximity to SR 252.

3.1.5 UNT5 to EF Whitewater River

UNT5 to EF Whitewater River flows northwest into UNT1 to EF Whitewater River within the investigated area for approximately 150 feet. UNT5 to EF Whitewater River is not shown on the USGS 1994 Whitcomb Quadrangle Map (Exhibit 2). Based on field observations, UNT5 to EF Whitewater River appears to be ephemeral. UNT5 to EF Whitewater River is not shown in StreamStats. UNT5 to EF Whitewater River drains into UNT1 to EF Whitewater River, which drains into East Fork White River, a TNW. It is anticipated that UNT5 to EF Whitewater River would be considered a Water of the U.S.

UNT5 to EF Whitewater River has cobble-gravel substrate and heavy riparian cover. UNT5 to EF Whitewater River lacks sinuosity and riffle/pool complexes within the investigated area. The OHWM of UNT5 to EF Whitewater River was taken at SAP8 and is 3' wide x 6" deep and is shown in Table 2. The quality of this reach of UNT5 to EF Whitewater River is poor due to lack of sinuosity and developed riffle-pool complexes.

3.1.6 Roadside Ditches and Erosional Features

The investigated area was surveyed for drainage features. Three RSDs were identified in the investigated area during the site visit. RSD1 flows west, south of SR 252, from the eastern boundary of the investigated area into UNT1 to EF Whitewater River. RSD2 is located north of SR 252 and flows southeast along SR 252. It is carried by an underground culvert that may have originally directed flow to an old pipe running under SR 252 (Photo 44). The lack of flow from the original culvert, along with the slide conditions, would explain why the NHD flowline was not seen in the field. RSD3 flows west, north of SR 252, from the eastern boundary of the investigated area into UNT to EF Whitewater River. All three RSDs are manmade, have no defined bed and banks, and do not carry relatively permanent or seasonal flow.

Additionally, one erosional feature was found within the investigated area. The erosional feature (Photo 14) flows north into UNT1 to EF Whitewater River, and is not shown on the USGS 1994 Whitcomb Quadrangle Map (Exhibit 2). It has no defined bed and banks and does not carry relatively permanent or seasonal flow. The erosional feature, is therefore excluded from the definition of Waters of the U.S. as outlined in the CWA following the *Rapanos v. United States* Supreme Court Decision (1986). As such, it is our opinion that it would not be considered at Water of the U.S.

The RSDs and erosional feature are shown on Exhibit 6, and photos are included in Appendix A.

3.1.7 Waterways Summary

Table 3 is a summary of potentially jurisdictional waterways identified within the investigated area.

Table 3: Summary of Jurisdictional Waterways

Feature	Photos	Lat/Long	OHWM	USGS Blue-Line	Substrate	Riffles/ Pools	Quality	Stream Type	Likely Jurisdictional Water of the U.S.?
UNT1 to EF Whitewater River	4-7,9,11, 13,16,18, 19,21,24, 26,29,31, 33,35,50, 53,55	39.416636, -84.995447	10'10" x 1' 9"	Yes	cobble-grave	Yes	Average	R2SB3	Yes

Feature	Photos	Lat/Long	OHWM	USGS Blue-Line	Substrate	Riffles/ Pools	Quality	Stream Type	Likely Jurisdictional Water of the U.S.?
UNT2 to EF Whitewater River	15	39.416544, -84.995892	4' 4" x 8"	No	cobble-grave	No	Poor	N/A	Yes
UNT3 to EF Whitewater River	22	39.416626, -84.996258	3' 2" x 1' 1"	No	cobble-grave	No	Poor	N/A	Yes
UNT4 to EF Whitewater River	30, 39	39.416886, -84.997583	6' 9" x 1' 2"	No	cobble-grave/ riprap	No	Poor	N/A	Yes
UNT5 to EF Whitewater River	36	39.416829, -84.997763	3' x 6"	No	cobble-grave	No	Poor	N/A	Yes

3.2 Wetlands

One potential wetland area was investigated during the site visit. DP1 was taken north of SR 252 adjacent to UNT1 to EF Whitewater River. Dominant vegetation at DP1 was rice cutgrass (*Leersia oryzoides* – OBL) and pale smartweed *(Persicaria lapathifolia* – FACW). This plant community passes the rapid and dominance test for hydrophytic vegetation, therefore, the hydrophytic vegetation criterion is met. Indicators of wetland hydrology include saturation at surface (A3), geomorphic position (D2), and FAC-Neutral test (D5). The soil pit was only dug to 4" due to the presence of riprap, however, the soil did not meet any hydric soil indicators. DP1 does not meet all three wetland criteria, and is not located within a wetland.

Vegetation throughout the remainder of the project area was not hydrophytic and soils and hydrology were not investigated further. The location of the data points can be seen on Exhibit 6. The data sheet is included in Appendix B. Photographs are included in Appendix A.

3.2.1 Wetland Summary

Table 4 is a summary of the data points collected within the investigated area.

Table 4: Data Point Summary

Data Point	Latitude Longitude	Hydrophytic Vegetation	Hydric Soils	Wetland Hydrology	Wetland
DP1	39.416901, -84.994699	Yes	No	Yes	No

3.3 Open Water

There are no open water features located in the investigated area.

3.4 Wildlife Evidence and Concerns

CLV 17195 and CLV 1782 were investigated for potential use as wildlife crossings. Both could offer potential passage under the road for smaller wildlife. No evidence of birds or bats were found using any structures within the investigated area.

4.0 CONCLUSION

A meander survey of the investigated area found five streams, one erosional feature, and three roadside ditches.

UNT1 to EF Whitewater River is an intermittent stream, which drains into East Fork Whitewater River a TNW. UNT2 to EF Whitewater River, UNT3 to EF Whitewater River, UNT4 to EF Whitewater River, and UNT 5 to EF Whitewater River flow into UNT1 to EF Whitewater River along the length of the investigated area. It is anticipated that UNT1 to EF Whitewater River, UNT2 to EF Whitewater River, UNT3 to EF Whitewater River, UNT4 to EF Whitewater River, and UNT5 to EF Whitewater River would be considered Waters of the U.S.

All three RSDs are manmade, have no defined bed and banks, and do not carry relatively permanent or seasonal flow. Therefore, all roadside ditches are excluded from the definition of Waters of the U.S. as outlined in the CWA following the *Rapanos v. United States* Supreme Court Decision (1986). As such, it is our opinion that the roadside ditches are not jurisdictional.

Additionally, one erosional feature was found within the investigated area. The erosional feature has no defined bed and banks and does not carry relatively permanent or seasonal flow, and is therefore excluded from the definition of Waters of the U.S. as outlined in the CWA following the *Rapanos v. United States* Supreme Court Decision (1986). As such, it is our opinion that the erosional feature would not be considered a Water of the U.S.

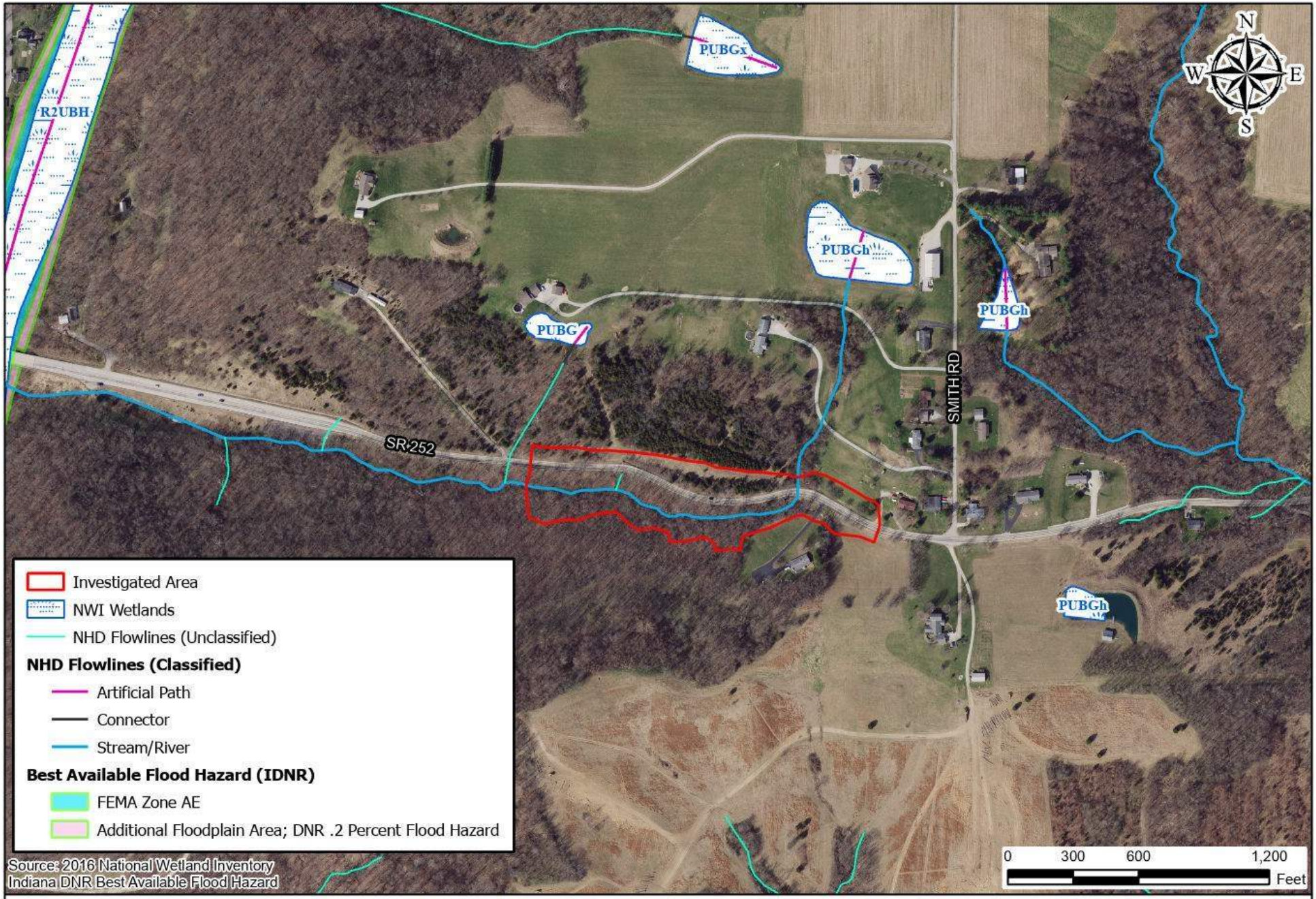
UNT1 to EF Whitewater River, UNT2 to EF Whitewater River, UNT3 to EF Whitewater River, UNT4 to EF Whitewater River, and UNT5 to EF Whitewater River should be presumed to be under the jurisdiction of both USACE and Indiana Department of Environmental Management (IDEM). Every effort should be taken to avoid and minimize impacts to the streams. Waterway permitting will be required if impacts will occur. If stream impacts exceed 300 linear feet, stream mitigation will be required. The Indiana Department of Transportation (INDOT) Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the USACE. This report is our best judgment based on the guidelines set forth by the USACE.

5.0 ACKNOWLEDGEMENT

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

Printed Name: Shannon Bonifacio

Signature, Title: S. Bonifacio Project Scientist III
Little River Consultants



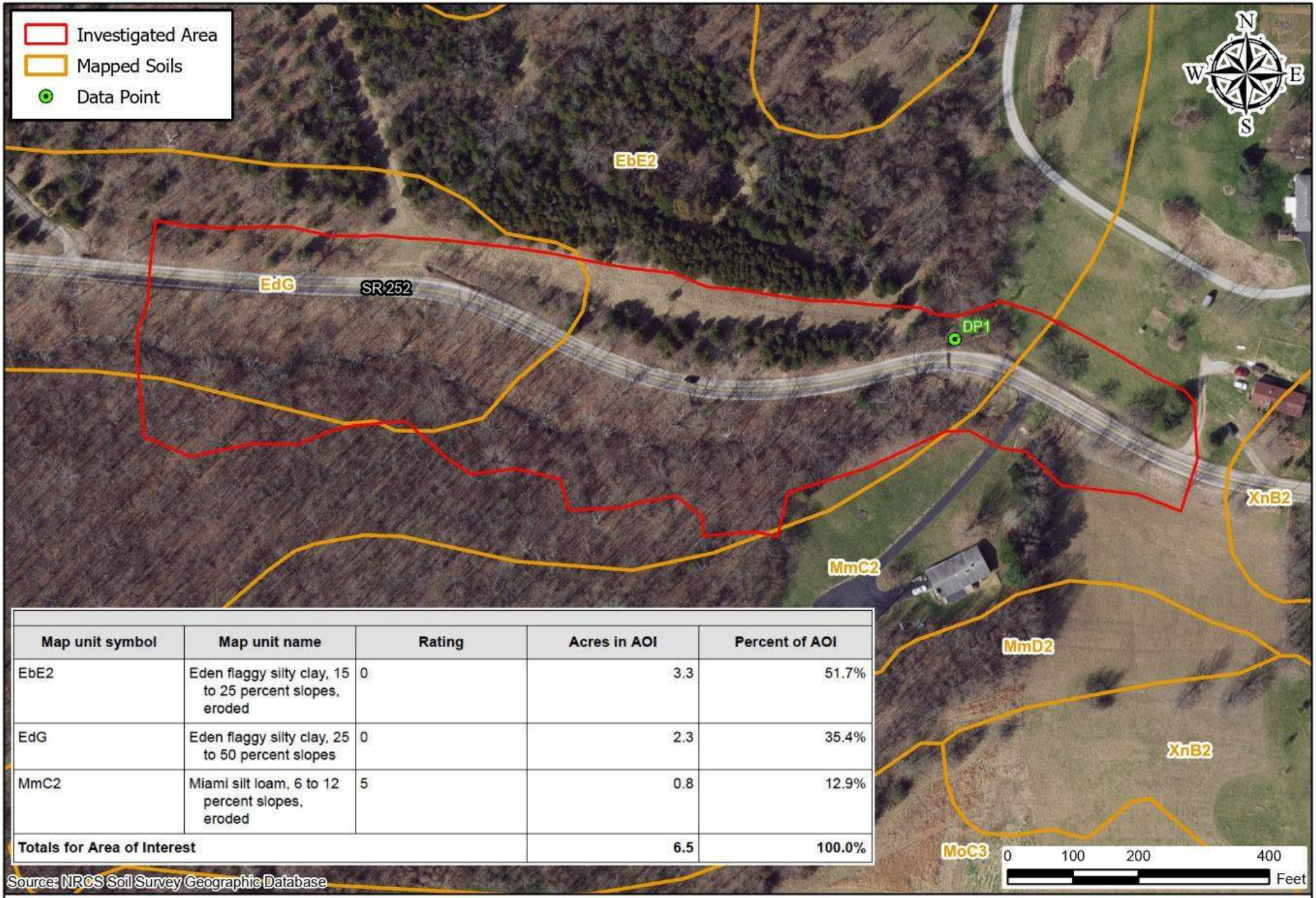
Wetland, Floodplain, and Flowline Map

LITTLE RIVER CONSULTANTS

SR 252 Slide Correction
Des No: 2000087
Location: near Brookville, Franklin County, Indiana

EX3

Created: December 20, 2022
Project No: 19-019D



Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
EbE2	Eden flaggy silty clay, 15 to 25 percent slopes, eroded	0	3.3	51.7%
EdG	Eden flaggy silty clay, 25 to 50 percent slopes	0	2.3	35.4%
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	5	0.8	12.9%
Totals for Area of Interest			**6.5**	**100.0%**

Source: NRCS Soil Survey Geographic Database

Franklin County Soil Survey

LITTLE RIVER CONSULTANTS

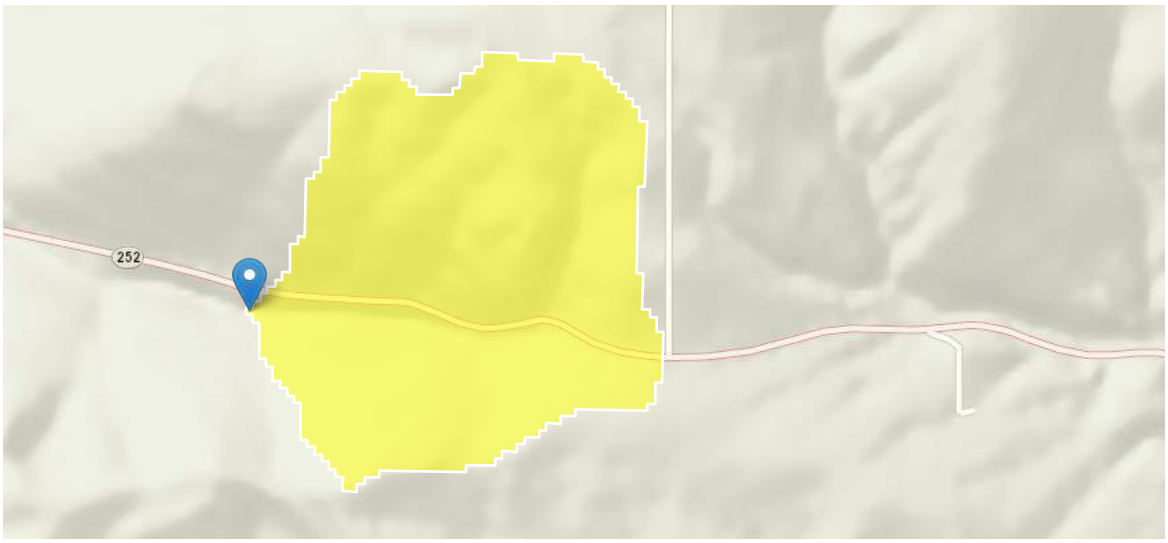
SR 252 Slide Correction
Des No: 2000087
Location: near Brookville, Franklin County, Indiana

EX4

Created: December 20, 2022
Project No: 19-019D

UNT1 to EF Whitewater River StreamStats Report

Workspace ID: IN20230103213303586000
Region ID: IN
Clicked Point (Latitude, Longitude): 39.41693, -84.99953
Time: 2023-01-03 16:33:29 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.097	square miles

Application Version: 4.11.1
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

WETLAND DETERMINATION DATA FORM – Midwest Region

Project/Site: Des. No. 2000087 - SR 252 Slide Correction City/County: Franklin County Sampling Date: 2023-01-27

Applicant/Owner: INDOT State: Indiana Sampling Point: DP1

Investigator(s): Rachele Baker, Shannon Bonifacio Section, Township, Range: S28 T9N R2W

Landform (hillslope, terrace, etc.): Stream Channel Local relief (concave, convex, none): Concave

Slope (%): 5 Lat: 39.416901 Long: -84.994699 Datum: WGS 84

Soil Map Unit Name: EbE2 - Eden flaggy silty clay, 15 to 25 percent slopes, eroded NWI classification: R4SBC

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

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

Hydrophytic Vegetation Present?	Yes ✔ No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____ No ✔	
Wetland Hydrology Present?	Yes ✔ No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1.			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Leersia oryzoides	80	✔	OBL
2. Persicaria lapathifolia	20	✔	FACW
3. Elymus riparius	15		FACW
4. Impatiens pallida	5		FACW
5.			
6.			
7.			
8.			
9.			
10.			
	120% = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1.			
2.			
	_____ = Total Cover		

Dominance Test worksheet:

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

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	80	x 1 =	80
FACW species	20	x 2 =	40
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	100 (A)		120 (B)

Prevalence Index = B/A = 1.20

Hydrophytic Vegetation Indicators:

✔ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

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

Hydrophytic Vegetation Present? Yes ✔ No _____

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

SOIL

Sampling Point: DP1

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

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 4	10YR 3/2	100					Sandy Clay Loam	Riprap at 4
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

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

Indicators for Problematic Hydric Soils[3]:

- ___ Coast Prairie Redox (A16)
- ___ Dark Surface (S7)
- ___ Iron-Manganese Masses (F12)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✔

Remarks:

Riprap at 4"

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ True Aquatic Plants (B14)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Gauge or Well Data (D9)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ✔ Geomorphic Position (D2)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No X Depth (inches): _____

Water Table Present? Yes _____ No X Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes ✔ No _____ Depth (inches): 0

Wetland Hydrology Present? Yes ✔ No _____

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

Remarks:

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: February 28, 2023

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Shannon Bonifacio, 493 West CR 600N, Seymour, IN 47274

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

Des. No. 2000087: The investigated area is located on SR 252, 0.9 mile east of US 52. Proposed project activities include the excavation of the slope south of SR 252 and the installation of a structurarilled shaft retaining wall with timber lagging to stabilize the land slide. The ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to the existing 12-inch and 30-inch stormwater pipes within the project area. Existing overhead electric utility poles along the north edge of roadway will need to be relocated for ditch regrading. Curb and gutter will be installed along the southern edge of the roadway to prevent water from overtopping the proposed retaining wall. The roadway within the project area will be milled and overlaid. Tree clearing and right-of-way (ROW) acquisition will likely be required for this project.

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

State: IN County/parish/borough: Franklin City: Brookville

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

Lat.: 39.416758 Long.: -84.995685

Universal Transverse Mercator:

Name of nearest waterbody: East Fork Whitewater River

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

☐ Office (Desk) Determination. Date:

■ Field Determination. Date(s): November 1, 2022

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)
UNT1 to EF Whitewater River	39.416636	-84.995447	1100 lf	non-wetland	Section 404
UNT2 to EF Whitewater R	39.416544	-84.995892	70 lf	non-wetland	Section 404
UNT3 to EF Whitewater R	39.416626	-84.996258	115 lf	non-wetland	Section 404
UNT4 to EF Whitewater R	39.416886	-84.997583	75 lf	non-wetland	Section 404
UNT5 to EF Whitewater R	39.416829	-84.997763	150 lf	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:

- [x] Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
  Map: IndianaMap.
- [x] Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - [ ] Office concurs with data sheets/delineation report.
  - [ ] Office does not concur with data sheets/delineation report. Rationale: _____.
- [ ] Data sheets prepared by the Corps: _____.
- [ ] Corps navigable waters' study: _____.
- [x] U.S. Geological Survey Hydrologic Atlas: EX3 in Waters Report.
  - [x] USGS NHD data.
  - [ ] USGS 8 and 12 digit HUC maps.
- [x] U.S. Geological Survey map(s). Cite scale & quad name: 1:24000 Brookville Quadrangle.
- [x] Natural Resources Conservation Service Soil Survey. Citation: Franklin County Soil Survey.
- [x] National wetlands inventory map(s). Cite name: NWI Wetlands (USFWS).
- [ ] State/local wetland inventory map(s): _____.
- [x] FEMA/FIRM maps: Indiana DNR Best Available Flood Hazard.
- [ ] 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- [x] Photographs: [x] Aerial (Name & Date): IndianaMap Aerial Photography 1994.
  or [ ] Other (Name & Date): _____.
- [ ] Previous determination(s). File no. and date of response letter: _____.
- [x] Other information (please specify): EX6 shows mapped features, Appendix A shows photos.

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.

_____	Shannon Bonifacio Digitally signed by Shannon Bonifacio Date: 2023.02.27 16:11:21 -05'00'
Signature and date of Regulatory staff member completing PJD	Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

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

Appendix G: Public Involvement

HNTB Corporation
The HNTB Companies
Infrastructure Solutions

111 Monument Circle
Suite 1200
Indianapolis, IN 46204

Telephone (317) 636-4682
Facsimile (317) 917-5211
www.hntb.com

August 11, 2022

NOTICE FOR SURVEY OR INVESTIGATION

Dear Property Owner or Resident:

HNTB, on behalf of the Indiana Department of Transportation (INDOT), will perform a survey for proposed improvements on SR 252 in Franklin County, Indiana, Des No. 2000087. Our information indicates that you own property near this proposed transportation project. It may be necessary for HNTB, or their subcontractors, to enter your property to complete this work. This is permitted under Indiana Code § 8-23-7-26. Anyone performing this type of work has been instructed to identify him or herself to you, if you are available, before they enter your property. If you no longer own this property or it is currently occupied by someone else, please let us know the name of the new owner or occupant so that we can contact them about the survey.

Please read the attached notice to inform you of what the "Notice of Entry for Survey or Investigation" means. The survey work may include the identification and mapping of wetlands, archaeological investigations (which may involve the survey, testing, or excavation of identified archaeological sites), and various other environmental studies. The information we obtain from such studies is necessary for the proper planning and design of this highway project.

If any problems do occur, please contact: Kia Gillette; 111 Monument Circle, Suite 1200, Indianapolis, IN 46204; (317) 917-5240; or kgillette@hntb.com.

Please be aware that you have the right to request any or all artifacts collected from your property. If you do not ask that artifacts be returned to you, all recovered archaeological material will be curated at a state-approved Qualified Curation Facility. If you wish to have artifacts returned to you, please call or email Matt Coon at 317-697-9752 or mcoon@indot.in.gov.

It our sincere desire to cause as little inconvenience as possible during this survey, and we thank you in advance for your cooperation.

Sincerely,
HNTB Corporation

Kia M. Gillette
Environmental Project Manager

HNTB Corporation
The HNTB Companies
Infrastructure Solutions

111 Monument Circle
Suite 1200
Indianapolis, IN 46204

Telephone (317) 636-4682
Facsimile (317) 917-5211
www.hntb.com

September 21, 2021

Sample Notice of Survey Letter

NOTICE OF SURVEY

Dear Property Owner:

HNTB, on behalf of The Indiana Department of Transportation (INDOT), will perform a survey for the geologic slide occurring at RP 38+0.123 along SR 252, 0.9 miles east of the intersection with US 52 in Franklin County, Seymour District, Indiana, Des No. 2000087. 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 September 21, 2020.

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:

William M. Jones
111 Monument Circle, Suite 1200
Indianapolis, IN 46204
(317) 917-5248

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 Indiana Department of Transportation Central Office; contact information is below. The Indiana Department of Transportation Central Office can provide you with a form to request compensation for damages. Once you fill out this form, you can return it to the Indiana Department of Transportation Central Office 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 Indiana Department of Transportation Central Office. This contact information is as follows:

> 1-855-INDOT4U (463-6848)
> www.INDOT4U.com

Thank you in advance for your cooperation in this matter.
Sincerely,
HNTB Corporation

William M. Jones
Supervisory Survey Technician / Survey Field Staff Coordinator

Appendix H: Air Quality

Indiana Department of Transportation (INDOT)

State Preservation and Local Initiated Projects FY 2024 - 2028

SPONSOR	CONTRACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Indiana Department of Transportation	42630 / 1900192	Init.	US 52	HMA Overlay Minor Structural	Seymour	8.64	STBG	$6,979,000.00	Road Construction	CN	$5,036,000.00	$1,259,000.00	$0.00		$6,295,000.00		
Performance Measure Impacted: Pavement Condition																	
Location: SR 244 to SR 229																	
Comments:Include DES 1900192																	
Batesville	42801 / 1902774	Init.	ST 2867	Bike/Pedestrian Facilities	Seymour	1.09	STBG	$2,525,000.00	Local Funds	CN	$0.00	$403,000.00		$403,000.00			
									Local Transportation Alternatives	CN	$1,612,000.00	$0.00		$1,612,000.00			
Performance Measure Impacted: Reliability and Freight Reliability																	
Location: Along SR 229 from Franklin Street to Six Pine Ranch Road																	
Comments:Include DES 1902774																	
Indiana Department of Transportation	43365 / 2000087	Init.	SR 252	Slide Correction	Seymour	0	STBG	$4,437,000.00	Road Construction	CN	$3,376,000.00	$844,000.00		$4,220,000.00			
									Road ROW	RW	$24,000.00	$6,000.00	$30,000.00				
Performance Measure Impacted: Safety																	
Location: 0.9 miles East of the intersection with US 52																	
Comments:Include DES 2000087																	
Indiana Department of Transportation	43366 / 2000092	Init.	US 52	Slide Correction	Seymour	.36	STBG	$4,075,000.00	Road ROW	RW	$8,000.00	$2,000.00	$10,000.00				
									Road Construction	CN	$3,116,000.00	$779,000.00		$3,895,000.00			
Performance Measure Impacted: Safety																	
Location: 2.32 miles South of SR 252																	
Comments:Include DES 2000092																	
Indiana Department of Transportation	43367 / 2000097	Init.	SR 1	Slide Correction	Seymour	0	STBG	$1,604,000.00	Road Construction	CN	$1,127,200.00	$281,800.00		$1,409,000.00			
									Road ROW	RW	$24,000.00	$6,000.00	$30,000.00				
									Bridge Construction	CN	$0.00	$0.00		$0.00			
Performance Measure Impacted: Safety																	
Location: 0.3 miles North of SR 101																	
Comments:Include DES 2000097, 2002542																	
Indiana Department of Transportation	43595 / 1900003	Init.	US 52	Intersect. Improv. W/ Added Turn Lanes	Seymour	.26	STBG	$1,976,000.00	District Other Construction	CN	$1,200,000.00	$300,000.00					$1,500,000.00

Report Created:12/22/2023 11:21:16AM

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

Appendix I: Additional Studies

Land and Water Conservation Fund (LWCF) County Property List for Indiana (Last Updated March 2022)

ProjectNumber	SubProjectCode	County	Property
1800031	1800031	Franklin	Franklin County Park
1800176	1800176	Franklin	Whitewater Canal State Historic Site
1800225	1800225	Franklin	Fairfield Marina, Brookville Lake
1800324	1800324	Franklin	Mounds State Recreation Area
1800331	1800331	Franklin	Batesville Community Park
1800363	1800363B	Franklin	Brookville Reservoir

*Park names may have changed. If acquisition of publically owned land or impacts to publically owned land is anticipated, coordination with IDNR, Division of Outdoor Recreation, should occur.

4.3 Laboratory Testing

Following retrieval, S&ME preserved the recovered soil samples in sealable glass jars, and the Shelby Tube samples were sealed with plastic caps and wax. The recovered samples were returned to our laboratory where applicable laboratory tests were performed. These tests are used to assess the engineering properties of the soil. The soil samples were visually classified by a geotechnical engineer according to INDOT requirements using the AASHTO Soil Classification System. Our recovered samples were subjected to the following laboratory tests:

- Natural moisture contents (AASHTO T265)
- Loss on Ignition Testing (AASHTO T267)
- Potassium and Phosphorus Topsoil Testing (NCRRP 221, Chapter 6 and 7)
- Atterberg limits tests (AASHTO T89 and T90)
- Grain Size Analyses (AASHTO T88)
- Standard Proctor tests (AASHTO T99)
- Specific Gravity (AASHTO T100)
- pH testing (AASHTO T200)
- Unconfined Compressive Strength of Soil (AASHTO T208)
- Uniaxial Compressive Strength of Rock (ASTM D7012 Method C)
- Triaxial Compression tests (AASHTO T296 and T297)

A summary of laboratory tests performed, and the individual test results are provided in Appendix III.

5.0 Site and Subsurface Conditions

5.1 Existing Pavement Conditions

During our exploration, there was visual evidence of distress within the pavement section via cracking within the eastbound lane. The typical roadway condition shows the eastbound lane moving downhill. Figure 5.1 depicts the typical pavement thickness and movement encountered throughout the project corridor. However, we understand that the pavement was recently resurfaced as part of an HMA preventive maintenance project from RP 36+00 to RP 47+83 (Des. No. 1801067 and 1801069). S&ME additionally provided geotechnical services for this project (S&ME Report No. 1136-18-024, dated February 28, 2019).

As discussed in the following sections, our borings encountered pavement sections ranging from 12 to 24 inches in the four (4) borings performed in the roadway. Based on previous experience along this corridor, this section has been resurfaced multiple times to address pavement distress due to slope movement.

Figure 5.1 – Existing Pavement Condition

Date: 12/4/2020

Photographer: N. Jones

Location / Orientation	Looking West (Approximate Sta. 82+10)
Remarks	Roadway showed evidence of downhill slope movement.

5.2 Subsurface Conditions

Four (4) of our borings, B-101, B-109, B-112 and B-113 were performed in the roadway and encountered a pavement section consisting of 12 to 24 inches of asphalt pavement overlying 4 to 12 inches of aggregate subbase to a maximum depth of 2.7 feet. The remaining borings were performed within the southern slope and encountered between 2 and 6 inches of topsoil. A total of ten (10) borings were drilled and were terminated at depths between 20.5 to 28.0 feet, with 10 feet of rock core performed in each boring. The encountered in-situ soils were laboratory classified as Clays (A-6 and A-7-6), Clay Loams (A-4 and A-6), Silty Clays (A-6), and Sandy Loams (A-6 and A-7-5), with the predominant soil types being Clays (A-6). Laboratory classifications and index testing were performed on three (3) Shelby Tube samples, twelve (12) SPT samples, and one (1) topsoil sample.

Six (6) borings (B-101, B-102, B-107, B-109, B-111, and B-113) encountered 4.0 to 8.0 feet of existing embankment fill consisting of medium stiff to very stiff light brown, brown, and brown mottled with gray Clay Loam (A-4 and A-6), medium stiff brown Sandy Loam (A-6), and medium stiff to stiff black to brown Clay (A-7-6). N-values for the existing fill material ranged from 6 to 23.

Abbreviated Engineer's Assessment

SR 252 Slide Correction

INDOT Geotechnical Services Division
Franklin County, Brookville IN
DES No: 2000087

February 15th, 2023

Prepared For
INDOT Geotechnical Services Division
Contact: Joey Franzino

Prepared By
HNTB Corporation
111 Monument Circle, Suite 1200
Indianapolis, IN 46204
Phone (317) 636-4682
Contact: Doug Garvin, PE

Approved: _____ Date: 2/15/2023
Doug Garvin, P.E.
HNTB, Project Manager

Approved: Nicole Carter _____ Date: 3/6/2023
Nicole Carter
INDOT, Project Manager

Approved: Robert F. Tally Jr. _____ Date: 2/28/2023
Robert F. Tally Jr., P.E.
INDOT, System Asset Manager

CONTENTS

Attachments

Attachments are omitted from this appendix as some of the material is presented elsewhere in this report.

1. PURPOSE OF REPORT

The purpose of this report is to document the engineering assessment phase of the project development for Des 2000087, including all coordination that has been completed in preparation for this project. This document outlines the proposal and is intended to serve as a guide for subsequent survey, design, environmental, right of way, and other project activities leading to construction. The preferred alternative identified in this document is considered preliminary, pending the outcome of environmental studies.

2. PROJECT LOCATION

This project is located on SR 252 between RP 38+12 and RP 44+12, approximately 0.9 miles East of US 52 in Franklin County, Indiana. The project is in the INDOT Seymour District. The area is rural consisting primarily of farm fields and isolated pockets of woodlands. Please see Appendix A for the map location.

3. PROJECT PURPOSE AND NEED

The purpose of the project is to mitigate a sliding earth mass on the South side of SR 252 at periodic locations from Sta. 81+75 to Sta. 88+75. Several potential conditions present beneath and adjacent to SR 252 have destabilized the slope causing the soil beneath the roadway to erode. The need for this project is to protect the adjacent roadway from being damaged by continued bank erosion, and to protect the traveling public.

4. EXISTING FACILITY

The existing roadway facility is classified as a minor arterial state road and is not part of the US National Highway System (NHS). The roadway is not on the National Truck Network. The posted speed limit at the project location is 55 mph. The existing roadway is approximately 22’ wide through the project limits with a 1’ aggregate safety edge, and no guardrail along the south roadway edge. Existing horizontal alignment does not meet minimum INDOT Design Manual horizontal alignment design criteria. Existing horizontal curves have inconsistent super-elevations with inadequate curve lengths. Due to inadequate curve lengths, the horizontal sight distance criteria is not met. The table below describes the existing geometric conditions.

Geometric Design Criteria			
Proposed Design Speed	55 MPH Existing 55 MPH Proposed	Functional Class	Minor Arterial
Proposed Design Criteria	IDM Figure 55-3B	Rural/Urban	Rural
Terrain	Rolling	Access Control	None
Cross Section Elements			
	Existing	Minimum	Desirable
Lane Width	11'	11'	12'
Shoulder Width Paved	0'	2'	4'
Shoulder Width Usable	1'	3'	8'

Advisory speed limit sign of 25 mph is posted prior to project limits; however due to the posted speed limit on SR 252 of 55 mph, the following design exceptions will be pursued.

Level one design exceptions will be pursued for the following:

1. Minimum Horizontal Curve Radius not meeting IDM Fig. 43-2A
2. Horizontal Stopping Sight Distance not meeting IDM Fig. 55-3B
3. Vertical Stopping Sight Distance not meeting IDM Fig. 55-3B
4. Maximum Grade not meeting IDM Fig. 55-3B

A level two design exception will be pursued for Superelvation Transition Length not meeting requirements per IDM 55-4.03(2).

5. TRAFFIC DATA

The INDOT traffic count for SR 252 in the vicinity of the Slide indicates a count in 2021 of 1213 AADT. Traffic counts have fluctuated since remaining relatively consistent up to 2016. In 2017 there was a drastic drop in traffic volume likely due to construction and again in 2020 likely due to the recent epidemic. The forecasted AADT for the anticipated construction year of 2025, beginning in 2021, is 1262. This suggests a 1% increase year over year; however, final traffic analysis and data will be provided in a future submittal.

6. STRUCTURES

There is an existing 30” corrugated metal pipe culvert crossing under SR 252 near station 111+37, which has been identified by INDOT as CLV-1782 and is in good condition. There is an existing 18” corrugated metal pipe culvert crossing under SR 252 near station 104+96, which has been identified as CLV-17195. The existing 18” CMP culvert is prior to the recommended remediation limits and was recently replaced under a previous slide correction project adjacent to the west property limits. The proposed retaining wall and outside shoulder widening with curb and gutter will result in an extension being required for

the 30" CMP culvert. All proposed alternatives will be evaluated for conflict with the existing structures and designed accordingly.

7. DRAINAGE

Drainage on the north side of the road is conveyed through side ditches to both culverts within the project vicinity. Water falling within the roadway sheet flows to the south and into the ravine along the base of the roadway downslope.

8. CRASH DATA AND ANALYSIS

Crash data from January 1, 2010 to March 31, 2022 was received from INDOT and analyzed for the specific location of the project. Seven crashes were reported within the project limits within the 12-year time span of the data provided. Crash details were reviewed to determine the potential need for safety improvements on the roadway. The crash frequency was determined to not be a concern at this time. See Appendix C for more details.

9. SLIDE CORRECTION ALTERNATIVES

Geotechnical analysis produced two recommended alternatives, along with other mitigation options that will be discussed at the end of this section. Additionally, slope repair and installation of riprap shall occur at the curb and gutter turnouts along the south edge of the roadway. Superelevation transition is substandard because of the roadway slide, subsequent asphalt additions and short horizontal curve lengths; however, does not warrant fixing. Any cross slopes greater than 8% throughout the project limits will be evaluated for correction to meet minimum design standards. There is no change to roadway alignment or profile in any of the alternatives.

Alternative 1: Per geotechnical recommendations, excavation, and the installation of a structural drilled shaft retaining wall with unreinforced concrete plug shafts is proposed. The drilled shafts will be reinforced with HP12x53 steel I-Beams, spaced 5 ft on center, and installed a minimum of 10ft below bedrock. The unreinforced concrete plug shafts will sit on the bedrock and bridge the gap between drilled shafts. The existing ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to the existing culverts. Existing overhead electric utility poles along the north edge of roadway will need to be relocated for ditch regrading. The roadway will be restored with a 1.5" mill and overlay. The shoulder along the north edge of roadway will be improved to 2ft paved shoulder, with 1ft unpaved shoulder, meeting design standards through project limits. The shoulder along the south edge of roadway will be improved to a 2ft paved shoulder, with the gutter flag increasing the total usable shoulder width to 3ft, meeting design standards through project limits. Curb and gutter is required for drainage and will be installed along the south edge of roadway to prevent water from overtopping the proposed retaining wall. The ditch along the southern slope of roadway will

require regrading and riprap placed to mitigate erosion due to the reach of proposed downslope. See plans and details in Appendix D.

Alternative 2: This alternative requires the excavation of the south slope adjacent to SR 252 and the installation of a structural drilled shaft retaining wall with concrete lagging. The drilled shafts will be reinforced with HP12x53 steel I-Beams, spaced 6 ft on center, and installed a minimum of 10ft below bedrock. This design results in a vertical drop of 3ft beyond the retaining wall edge, which requires the implementation of MGS guardrail. The existing ditches along the north edge of roadway will be regraded to improve drainage conditions and facilitate water flow to the existing culverts. Existing overhead electric utility poles along the north edge of roadway will need to be relocated for ditch regrading. The roadway will be restored with a 1.5" mill and overlay. The shoulder along the north edge of roadway will be improved to 2ft paved, with 1ft unpaved, meeting design standards through project limits. The shoulder along the south edge of roadway will be improved to 2ft paved, with the gutter flag increasing the total usable shoulder to 3ft, meeting design standards through project limits. Curb and gutter is required for drainage and will be installed along the south edge of roadway to prevent water from overtopping the proposed retaining wall. See plans and details in Appendix D.

Alternative 3: No slide correction solution would be implemented in this alternative. This is not recommended, because the roadway will continue to slide and deteriorate.

Other mitigation options produced from the geotechnical analysis include the following:

- A soil nail wall was discussed within the geotechnical report; however, not recommended over the drilled shaft retaining wall options based on the level of confidence in the proposed solutions for a similar overall project cost. No soil nail wall plans or details were produced for this report.

10. MAINTENANCE OF TRAFFIC DURING CONSTRUCTION

Alternative 1 and alternative 2 will both require a full closure of SR 252 with a detour. Single lane closures with a temporary traffic signal were evaluated, but the narrow roadway and lack of shoulders do not allow for a sufficient travel lane to be maintained during construction. Installation of the drilled shafts used in both alternatives requires heavy machinery that requires a larger work zone than the roadway allows with only a single lane closure.

Alternative 1 & 2: Traffic will be affected by placing machinery on the roadway, requiring a full closure and detour. Stability of SR 252 will likely be compromised during slope excavation and installation of drilled shafts.

11. COST ESTIMATE

The table below summarizes the expected costs of the two alternatives. Cost breakdowns are explained in Appendix E and consist of the major pay items required for each alternative. Other pay items have been accounted for in the 20% contingency. Cost of right of way is assumed to be $5,000 per acre and

Utility costs are estimated based on type of work required. Right-of-way and utility costs are similar for both alternatives.

A soil nail wall was discussed within the geotechnical report; however, it is not recommended over the drilled shaft retaining wall options based on the level of confidence in the proposed solutions. A soil nail wall is not being proposed as an alternative, and no plans or details were produced for this report. However, a cost estimate was prepared for reference.

	Alternative 1	Alternative 2	Soil Nail Wall
Construction Cost (CN)	$ 2,230,193	$ 1,848,162	$ 2,102,259
Right-of-Way (RW)	$ 6,000	$ 5,000	$ 5,000
Utility (UT)	$ 100,000.00	$ 100,000.00	$ 100,000.00
Total Project Cost	$ 2,336,193	$ 1,953,162	$ 2,207,259

12. ENVIRONMENTAL ISSUES

A Section 106 Minor Projects Programmatic Agreement (MPPA) document or full Section 106 documentation, Red Flag Investigation, Waters of the U.S. Report, and Categorical Exclusion (CE) National Environmental Policy Act (NEPA) document will be prepared. Slide correction work will require coordination with the Indiana Department of Natural Resources (IDNR), U.S. Army Corps of Engineers (USACE), U.S. Fish and Wildlife Service (USFWS) and the Indiana Department of Environmental Management (IDEM). A permit determination has not been completed yet; however, is it possible that a Construction Stormwater General Permit (CSGP), and Section 404/401 Permits will be required.

Red Flag Investigation

A preliminary Red Flag Investigation was prepared for the project and the following water resource concern has been identified:

One river and stream segment, an Unnamed Tributary (UNT) to East Fork Whitewater River, is located within the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

There are no hazardous material, mining and mineral resource exploration, or infrastructure concerns within or near the project area.

Early coordination will be initiated with the USFWS and IDNR requesting comments on potential ecological impacts. Any comments received will be incorporated into the environmental document.

This project will likely qualify for the Indiana Bat and Northern Long eared Bat Range-Wide Programmatic Informal Consultation and this process will be followed.

Coordination with INDOT ES Cultural Resources Office will occur regarding Section 106 consultation.

13. RIGHT-OF-WAY IMPACT

Right of way impacts are varied for each of the two alternatives. This being a rural farmland area there are only 9 property owners to consider through the limits of the project. Impacts per alternative are explained below.

Alternative 1: Impacts 9 right-of-way parcels of an area of 1.02 acres.

Alternative 2: Impact 9 right-of-way parcels of an area of 0.85 acres.

14. RAILROAD IMPACT

No railroad within vicinity of the project area.

15. UTILITY IMPACTS

There are overhead electric lines that run the length of the project along the north edge of roadway. The electrical lines are supported by a series of wooden poles, which due to the nature of this project will need to be relocated. Impacts to the power poles and wires are anticipated in both alternatives.

16. DETAILS OF PREFERRED ALTERNATIVE

The structural drilled shaft retaining wall with concrete plug shafts proposed in Alternative 1 is preferred. The plug shafts will require less maintenance than the pile wall and will provide a higher degree of confidence in correcting the slide, justifying their higher cost. Additionally, this alternative eliminates the hazardous 3’ vertical drop created by the wall in Alternative 2. For these reasons, Alternative 1 is the preferred alternative.

Christina Lindstrom

From: Caroline Tegeler
Sent: Wednesday, October 11, 2023 7:21 AM
To: Kia Gillette; Douglas Garvin
Subject: FW: Des. 2000087, SR 252 Slide Correction Project in Franklin County - EJ Analysis
Attachments: EJ Analysis_Des No 2000087_Revised V2.pdf

Please note that we now have concurrence from INDOT that the subject project will not have a disproportionally high and adverse effect on EJ populations.

Caroline Tegeler
Environmental Planner III
Tel (317)917-5352 **Cell** (765)212-4983 **Email** ctegeler@hntb.com

HNTB CORPORATION
111 Monument Circle, Suite 1200 | Indianapolis, IN 46204 | hntb.com

100+ YEARS OF INFRASTRUCTURE SOLUTIONS

From: Fair, Terri <TFair@indot.IN.gov>
Sent: Tuesday, October 10, 2023 1:47 PM
To: Caroline Tegeler <ctegeler@HNTB.com>
Cc: Passmore, Andrew D <APassmore@indot.IN.gov>
Subject: Des. 2000087, SR 252 Slide Correction Project in Franklin County - EJ Analysis

INDOT-Environmental Services Division (ESD) has reviewed the project information along with the Environmental Justice (EJ) Analysis for the above referenced project. With the information provided, the project may require minimal right-of-way, require no relocations, and would not disrupt community cohesion or create a physical barrier. With the information provided, INDOT-ESD would not consider the impacts associated with this project as causing a disproportionately high and adverse effect on minority and/or low-income populations of EJ concern relative to non-EJ populations in accordance with the provisions of Executive Order 12898 and FHWA Order 6640.23a. No further EJ Analysis is required.

Draft EJ Analysis

Project Location: This project is located on SR 252, approximately 0.9 mile east of US 52, in a rural portion of Franklin County, Indiana. More specifically, the project is located in Section 28, Township 9 North, Range 2 West in Brookville Township.

Des. No. 2000087 involves a slide correction to stabilize the land slide along the south side of SR 252. Additional project activities include milling and overlaying the existing roadway, installing Midwest Guardrail System rail along the south side of the roadway, regrading the ditches on the north side of the roadway, and placing riprap on the slope south of the roadway at the east end of the project area. The 1-foot aggregate shoulder along the north edge of the roadway will be replaced with a 2-foot paved shoulder and a 1-foot aggregate safety edge. The 1-foot aggregate shoulder along the south edge of the roadway will be replaced with a 2-foot paved shoulder.

Under FHWA Order 6640.23A, FHWA and INDOT, as 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 Preparation Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent ROW. This project will require approximately 1.22 acres of new permanent ROW. Therefore, an EJ analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exist and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city, or town and is called the community of comparison (COC). In this project, the COC is Franklin County. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 9697. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the American Community Survey five-year estimates data (2017-2021) was obtained from the U.S. Census Bureau website (https://data.census.gov/) on June 14, 2023. The data collected for minority and low-income populations within the AC are summarized in the table below.

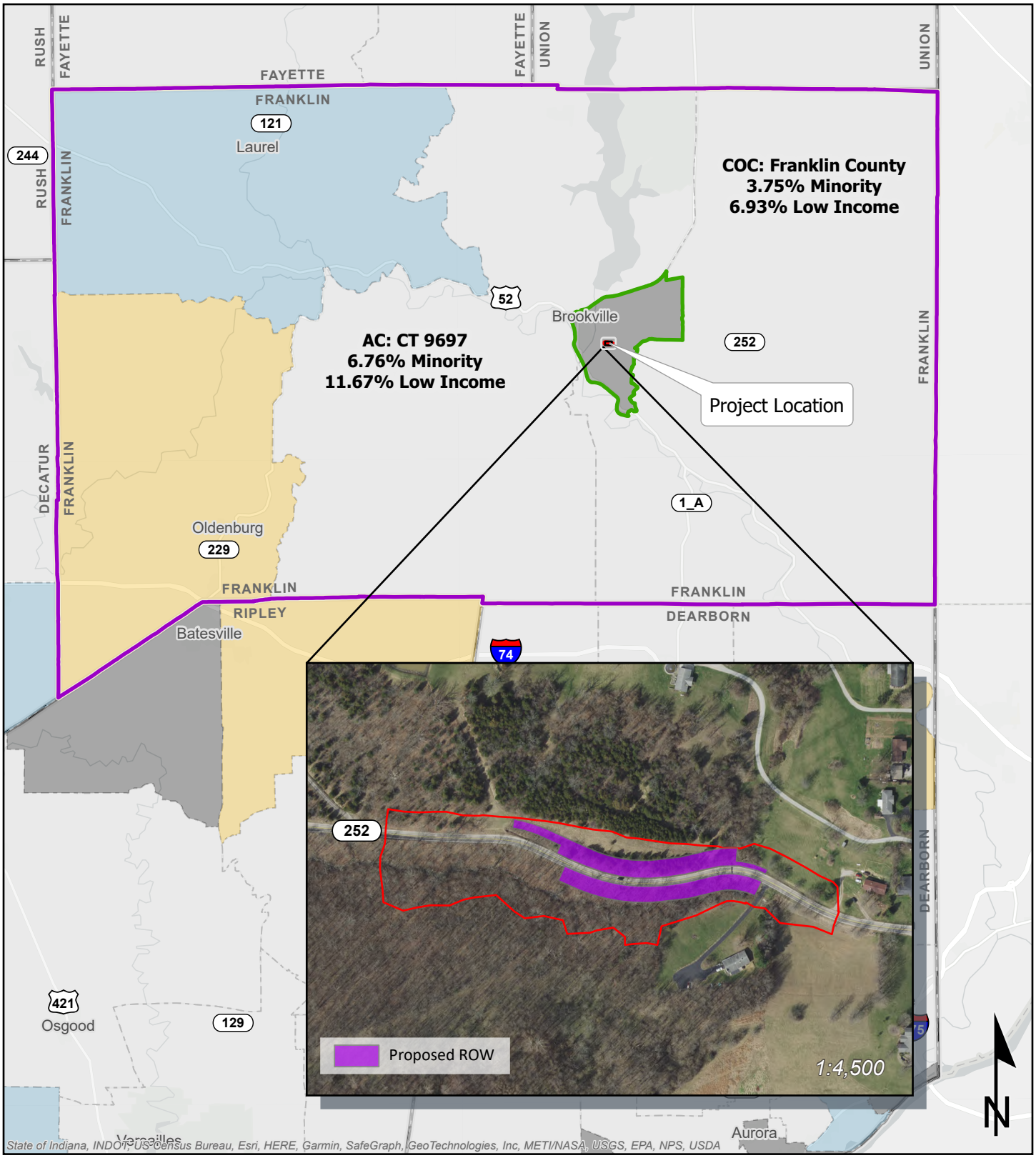
	COC – Franklin County, Indiana	**AC – Census Tract 9697, Franklin County, Indiana**
MINORITY POPULATION		
Percent minority	3.75%	6.76%
125 Percent of COC	4.69%	
AC Percent Minority Greater Than 125 Percent of COC?		Yes
AC Percent Minority Greater Than 50 Percent?		No
Population of EJ Concern?		Yes
LOW- INCOME POPULATION		
Percent Low-Income	6.93%	11.67%
125 Percent of COC	8.67%	
AC Percent Low-Income Greater Than 125 Percent of COC?		Yes
AC Percent Low-Income Greater Than 50 Percent?		No
Population of EJ Concern?		Yes

The AC, Census Tract 9697 has a percent minority population of 6.76%, which is below 50% but is above the 125% COC threshold. Therefore, the AC Census Tract has a minority population of EJ concern.

The AC, Census Tract 9697 has a percent low-income of 11.67%, which is below 50% but is above the 125% COC threshold. Therefore, the AC Census Tract has a low-income population of EJ concern.

The project will require the acquisition of approximately 0.67 acre of permanent ROW (strip ROW) north of SR 252 and 0.56 acre permanent ROW (strip ROW) south of SR 252. Land use within the proposed permanent ROW consists of forested areas with scattered open grassy areas. Overall, the negative impacts to property owners within the project

area will be minimal and consist primarily of short-term construction impacts and the loss of strip ROW. No relocations will be required. The ROW to be acquired will not substantially diminish the existing land use of the affected property owners. The maintenance of traffic during construction will utilize a 48-mile official detour route along US 52, SR 1, I-74, SR 128, and SR 126. The detour may pose delays and temporary inconveniences to traveling motorists in both the EJ and non-EJ populations; however, local access will be maintained, and the detour will be temporary. Property owners will be provided access throughout the duration of the project to minimize impacts to the maximum extent feasible. No permanent impacts to community cohesion are anticipated. Long-term impacts from the project to any EJ community in this area will be beneficial due to improved safety of travel along this section of SR 252. It is expected that the project will not have a disproportionately high and adverse environmental impact to low-income or minority populations of EJ concern when compared to non-EJ populations.



Project Area
COC: County
AC: Census Tract
Counties
Census Tracts

EJ Population
None
Low Income
Minority
Minority & Low Income

0 2 4 Miles

Data Source: 2017-2021 American Community Survey 5 Year Estimates

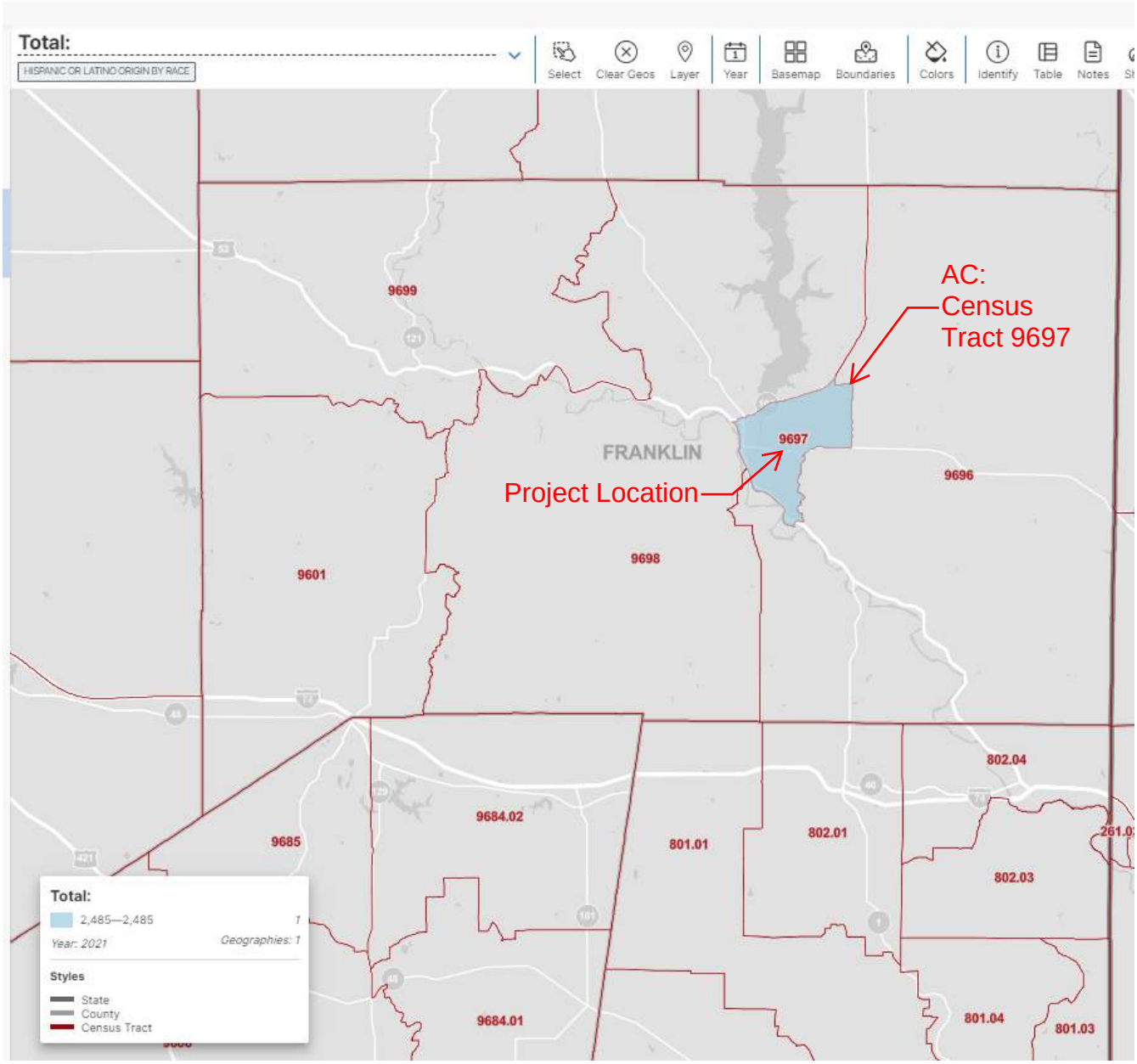
Environmental Justice Map

SR 252, 0.9 Mile East of US 52
Slide Correction
Franklin County, Indiana

Des. No. 2000087

1 inch = 4 miles

HNTB
Graphics created by HNTB Corporation (2023)



Source: data.census.gov

	Franklin County, Indiana		Census Tract 9697, Franklin County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	22,769	*****	2,485	±126
Not Hispanic or Latino:	22,487	*****	2,401	±146
White alone	21,915	±121	2,317	±146
Black or African American alone	11	±14	0	±12
American Indian and Alaska Native alone	0	±23	0	±12
Asian alone	128	±92	30	±43
Native Hawaiian and Other Pacific Islander alone	0	±23	0	±12
Some other race alone	76	±99	5	±7
Two or more races:	357	±103	49	±54
Two races including Some other race	60	±70	0	±12
Two races excluding Some other race, and three or more races	297	±95	49	±54
Hispanic or Latino:	282	*****	84	±68
White alone	109	±56	49	±58
Black or African American alone	0	±23	0	±12
American Indian and Alaska Native alone	0	±23	0	±12
Asian alone	0	±23	0	±12
Native Hawaiian and Other Pacific Islander alone	0	±23	0	±12
Some other race alone	60	±60	35	±43
Two or more races:	113	±52	0	±12
Two races including Some other race	45	±63	0	±12
Two races excluding Some other race, and three or more races	68	±84	0	±12

Table: ACSDT5Y2021.B17020

	Franklin County, Indiana		Census Tract 9697, Franklin County, Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	22,613	±102	2,477	±127
Income in the past 12 months below poverty level:	1,568	±405	289	±124
Under 6 years	138	±69	19	±18
6 to 11 years	158	±103	18	±17
12 to 17 years	140	±79	39	±44
18 to 59 years	693	±203	127	±68
60 to 74 years	181	±84	55	±32
75 to 84 years	182	±160	8	±10
85 years and over	76	±87	23	±23
Income in the past 12 months at or above poverty level:	21,045	±409	2,188	±137
Under 6 years	1,514	±151	170	±67
6 to 11 years	1,355	±239	77	±45
12 to 17 years	1,908	±297	148	±74
18 to 59 years	10,727	±322	1,060	±105
60 to 74 years	4,161	±256	396	±89
75 to 84 years	965	±199	173	±67
85 years and over	415	±143	164	±96