FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	Witt Road/ Boone County
Designation Number(s):	2101721
Project Description/Termini:	Witt Road Improvement/ From Lafayette Avenue to approximately 175 feet north of Austin Drive

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

N/A

INDOT DE Initials and Date

ADWP March 18, 2025

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: Briana M. Hope (lead) and Preeti Samra, American Structurepoint, Inc.

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 near the project area on August 23, 2023, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Entry letter is included in Appendix G, G-1.

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: City of Lebanon INDOT District: Crawfordsville

Local Name of the Facility: Witt Road

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

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

PURPOSE AND NEED:

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

Need: The need for the project is evidenced by the lack of pedestrian facilities along Witt Road, from Lafayette Avenue to Austin Drive, as well as the deteriorated condition of the pavement surface throughout the corridor. Additionally, the existing curve radius of Witt Road from Lafayette Avenue to Rovine Drive is too narrow for the current design speed, and therefore does not meet current INDOT design standards (Appendix I, I-3).

The existing pedestrian facilities consist of intermittent 5-foot wide sidewalks on the west and east sides of Witt Road and the northeast and southwest sides of Lafayette Avenue and do not include American with Disabilities (ADA) compliant curb ramps. The lack of sidewalks within the project area, as well as the lack of connectivity between existing sidewalks, prevents pedestrians from moving safely along the corridor to access residences and businesses, resulting in pedestrians utilizing the roadway or an area immediately

adjacent to the roadway. Therefore, there is an increased potential for vehicle and pedestrian conflict.

According to the Abbreviated Engineer's Assessment, dated July 2023, the pavement along this stretch of Witt Road is experiencing fatigue, cracking, and rutting in the wheel paths (Appendix I, I-2).

Purpose: The purpose of the project is to improve pedestrian mobility and update curb ramps to meet ADA standards along Witt Road, from Lafayette Avenue to Austin Drive, improve the existing curve radius of Witt Road to meet current INDOT design standards, as well as preserve and extend the service life of the existing pavement condition throughout the corridor.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Boone Municipality: City of Lebanon

Limits of Proposed Work: The project is located on Witt Road, from approximately 140 feet southwest of Lafayette Avenue to 175 feet north of Austin Drive. The project also extends along Lafayette Avenue, from approximately 335 feet southeast to 280 feet northwest of the existing intersection.

Total Work Length: 0.53 Mile(s) Total Work Area: 8.03 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.

The City of Lebanon, with funding from the Federal Highway Administration (FHWA) and administrative oversight from INDOT, intends to proceed with the Witt Road Improvement Project.

Location: The project is located along Witt Road, from Lafayette Avenue to Austin Drive, in Lebanon, Boone County, Indiana. The project area begins approximately 140 feet southwest from the center of the existing intersection with Lafayette Avenue and generally extends approximately 0.56 mile north along Witt Road, terminating approximately 175 feet north of the existing intersection with Austin Drive. The project area also extends along Lafayette Avenue, approximately 335 feet southeast and 280 feet northwest of the existing intersection with Witt Road.

More specifically, the project is located within Center Township on the Lebanon, Indiana 7.5 Minute United States Geological Survey (USGS) topographic quadrangle, in Sections 23, 24, 25, and 26, Township 19 North, Range 1 West. The State Location Map, USGS Topographic Map, 2023 Aerial Photography Map, and project area photographs can be referenced in Appendix B, B-1 to B-5.

Existing Conditions: This section of Witt Road is functionally classified as a *Local Agency Collector* and has a posted speed limit of 30 miles per hour (mph). The existing typical roadway section of Witt Road consists of two 10.5-foot wide travel lanes (one northbound and one southbound) intermittently bordered by 5-foot wide sidewalks on both the west and east sides of the roadway. According to the Abbreviated Engineer's Assessment, dated July 2023, the pavement along this stretch of Witt Road is experiencing fatigue, cracking, and rutting in the wheel paths (Appendix I, I-1 to I-4). This section of Lafayette Avenue is functionally classified as a *Local Minor Arterial* and has a posted speed limit of 30 mph. The existing typical roadway section of Lafayette Avenue consists of two 10.5-foot wide travel lanes (one northwest bound and one southeast bound) intermittently bordered by 5-foot wide sidewalks along the northeast and southwest side of the roadway. The existing Witt Road and Lafayette Avenue intersection is two-way-stop-controlled, where traffic along Lafayette Avenue is continuous flow through the intersection, while traffic along Witt Road is controlled by stop signs at both north and south approaches. The existing curve radius along the southern portion of Witt Road approaching Lafayette Avenue is too narrow for the existing design speed, and therefore does not meet current INDOT design standards (Appendix I, I-3). Drainage is conveyed throughout the project area by roadside ditches and storm sewers along both sides of the roadway which drain

to Small Reynolds Ditch (also known as New Reynolds Ditch). Witt Road bridge over Small Reynolds Ditch is a 22-foot long concrete arch bridge located within the project area.

The project area is primarily comprised of residential land as well as maintained right-of-way (ROW). The existing apparent ROW varies from approximately 11 feet to 30 feet west and 11 feet to 33 feet east from the centerline of the existing roadway (Appendix B, B-8 to B-9).

Preferred Alternative: The project will consist of widening Witt Road with full depth pavement reconstruction, realigning the substandard curve, and the connection of pedestrian facilities. The typical roadway section along Witt Road will include two 11-foot wide travel lanes (one northbound and one southbound), a 10-foot wide asphalt multi-use path along the west side of the roadway, and a 6-foot wide concrete sidewalk on the east side of the roadway. A 5-foot wide utility buffer will be established between the roadway and the pedestrian facilities along both sides of Witt Road. The existing sidewalk along the west side of Witt Road will be removed and replaced by the multi-use path. Additionally, a 6-foot wide sidewalk will be constructed along the northeast side of Lafayette Avenue, beginning at Witt Road and extending southwest to Mar Lee Lane. The project will also include the installation of ADA compliant curb ramps at the intersection of Witt Road with Lafayette Avenue, Rovine Drive, Elizabeth Drive, Victoria Drive, Ashley Drive, Thomas Drive, and Austin Drive. The existing horizontal alignment of Witt Road will be altered by increasing the radius of the curve between Lafayette Ave and Rovine Drive in order to meet current INDOT design standards. The existing storm sewer network will be reconfigured to accommodate the revised geometry and will direct drainage to Small Reynolds Ditch. A new storm sewer trunkline will be installed under the roadway along the entire length of the project area. New drainage inlets/castings will be installed along Witt Road and connect to the new storm sewer trunkline. Existing private driveways along the project corridor will be reconstructed to tie into the new roadway and driveway pipes replaced as needed. Permanent lighting will be installed along the west side of Witt Road. No structure work will occur to the existing Witt Road bridge over Small Reynolds Ditch; however, pavement associated with the existing bridge will be milled and resurfaced with a hot mixed asphalt (HMA) overlay with patching as needed. Project plans can be seen in Appendix B, B-6 to B-33.

The project will require the acquisition of approximately 0.93 acre of permanent and 0.41 acre of temporary ROW. No relocations are anticipated as a result of the project. Please refer to the *Right-of-Way* section of this document and Appendix B, B-8 to B-9 for additional details.

Approximately 1.344 acres of total terrestrial disturbance, which includes approximately 0.003 acre of tree clearing, will occur in order to facilitate the road improvements. Avoidance and minimization of environmental impacts have been incorporated into the design to the maximum extent practical. However, total avoidance of impacts to terrestrial habitat are not possible while still meeting the project's purpose and need. For more information about the project's anticipated impacts along with avoidance and minimization measures, please see the *Identification and Evaluation of Impacts* section of this document.

Maintenance of Traffic (MOT): The MOT for the project will consist of phased construction with detours (Appendix B, B-10). Access to all properties will be maintained during construction. Refer to the *Maintenance of Traffic During Construction* section of this document and Appendix B, B-10 for additional details.

Logical Termini/Independent Utility: The preferred alternative's termini represent the minimum limits needed to tie in the project with the existing intersections of Witt Road with Lafayette Avenue and Austin Drive while meeting the purpose and need of the project. Therefore, the termini are logical. The preferred alternative has independent utility as it does not create the need for additional work and does not rely on any other project to meet the purpose and need. Therefore, it is a single and complete project.

Purpose and Need Fulfillment: The preferred alternative as described above meets the purpose and need of the project because it will improve pedestrian mobility and update curb ramps to meet ADA standards along Witt Road, from Lafayette Avenue to Austin Drive, improve the existing curve radius of Witt Road to meet current INDOT design standards, as well as preserve and extend the service life of the existing pavement condition throughout the corridor.

OTHER ALTERNATIVES CONSIDERED:

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

No Build Alternative:

This alternative leaves the existing roadways and curb ramps in their current condition. While this alternative would eliminate cost and any environmental impacts, it would not improve pedestrian mobility along Witt Road. The curb ramps would remain out of compliance with ADA standards, the existing curve radius would remain out of compliance with current INDOT design standards, and the existing pavement would continue to deteriorate. Therefore, it would not meet the purpose and need for the project because it would not

improve pedestrian mobility, update curb ramps to meet ADA standards, improve the existing curve radius of Witt Road to meet current INDOT design standards, nor would it preserve and extend the service life of the existing pavement condition throughout the corridor. Therefore, this alternative was dismissed from further consideration.

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

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

ROADWAY CHARACTER: Witt Road

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

Name of Roadway: Witt Road
Functional Classification: Local Agency Collector
Current ADT: 3,700 VPD (2027) Design Year ADT: 5,200 VPD (2047)
Design Hour Volume (DHV): 520 Truck Percentage (%): 3
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	Travel		Travel	
Pavement Width:	21	ft.	22	ft.
Shoulder Width:	0	ft.	0	ft.
Median Width:	0	ft.	0	ft.
Sidewalk Width:	5	ft.	6	ft.

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

ROADWAY CHARACTER: Lafayette Avenue

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

Name of Roadway: Lafayette Avenue
Functional Classification: Local Minor Arterial
Current ADT: 3,144 VPD (2025) Design Year ADT: 3,773 VPD (2045)
Design Hour Volume (DHV): 307 Truck Percentage (%): 14.4
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	Travel		Travel	
Pavement Width:	21	ft.	21	ft.
Shoulder Width:	0	ft.	0	ft.
Median Width:	0	ft.	0	ft.
Sidewalk Width:	5	ft.	6	ft.

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

BRIDGES AND/OR SMALL STRUCTURE(S): N/A

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): National Bridge Inventory (NBI) No. 0600230 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	Concrete Arch		Concrete Arch	
Number of Spans:	1		1	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	25	ft.	25	ft.
Outside to Outside Width:	52	ft.	52	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.

The existing Witt Road bridge over Small Reynolds Ditch (NBI No. 0600230) is located within the project area. The existing structure is a 22-foot long concrete arch bridge with an out-to-out width of 52 feet. The bridge was originally built in 2022 making it less than 50 years of age; therefore, it is not eligible for listing in the National Register of Historic Places (NRHP). No structure work will occur to the existing Witt Road bridge over Small Reynolds Ditch; however, pavement associated with the existing bridge will be milled and resurfaced with an HMA overlay with patching as needed.

Several small structures associated with inlets, sewer manholes, an enclosed sewer system, and an underground public water utility line are located within the project area. The existing horizontal alignment of Witt Road will be altered by increasing the radius of the curve at the south end of the project area in order to meet current INDOT design standards. The existing storm sewer network will be reconfigured to accommodate the revised geometry. New drainage inlets/castings will be installed along Witt Road and connect to the new storm sewer trunkline. Two unnumbered storm sewer outlets will be installed above the ordinary high-water mark (OHWM) of Small Reynolds Ditch. Existing driveway culverts will be replaced in kind as needed due to the widening of Witt Road. Several unnumbered existing culverts will be replaced and realigned to provide connectivity to the new storm sewer. For additional information, see Appendix B, B-31 to B-33.

All existing culvert structures lack assigned asset identification numbers and are not eligible for listing in the NRHP.

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

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).	X	

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

The MOT for the project will require phased construction with detours. Phase I of the MOT will begin at the north end of the project area to just north of Ashley Drive, leaving the intersection of Witt Road and Ashley Drive open. Phase II of the MOT will span from the intersection of Witt Road and Ashley Drive to just north of the intersection of Witt Road and Rovine Drive. Phase III of the MOT will span along Witt Road from Rovine Drive to Lafayette Ave. Witt Road will be closed to thru traffic and local access will be provided. The detour route will follow Lafayette Road, West Main Street, SR 39 and West County Road 250 North, and will be approximately 4 miles in length. Access to all properties, both residential and commercial, will be maintained during construction (Appendix B, B-10). Walkability throughout the project area will be maintained with ADA-compliant pedestrian detour routes installed prior to any sidewalk or curb ramp removal. All pedestrian detour routes will be marked as needed. The MOT is scheduled to be in place for approximately five months.

According to a review of the website, https://www.fairsandfestivals.net/, an online resource for local fairs and festivals on September 12, 2024, no scheduled festivals or other public events take place in the Boone County area. Therefore, no provisions will be made to accommodate any local special events or festivals.

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: $ 478,500* (2023) Right-of-Way: $ 250,000 (2025) Construction: $ 3,589,000 (2027)

Anticipated Start Date of Construction: Fall 2026

*Preliminary Engineering (PE) funding was included in the Fiscal Year (FY) 2022-2026 Statewide Transportation Improvement Program (STIP) and was expended in 2023. Therefore, the PE funding is not reflected in the current 2024-2028 STIP.

RIGHT OF WAY:

	Amount (acres)	
Land Use Impacts	Permanent	Temporary
Residential	0.93	0.41
Commercial	N/A	N/A
Agricultural	N/A	N/A
Forest	N/A	N/A
Wetlands	N/A	N/A
TOTAL	0.93	0.41

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

The existing apparent ROW along Witt Road extends approximately 11 feet west and 28 feet east from Lafayette Avenue to Elizabeth Drive, 27 feet west and 11 feet east from Elizabeth Drive to Small Reynolds Ditch, and 30 feet west and 33 feet east from Small Reynolds Ditch to Austin Drive from the centerline of the existing roadway (Appendix B, B-8 to B-9). The existing apparent ROW along Lafayette Avenue extends approximately 12 feet northeast and 40 feet southwest from Mar Lee Lane to Witt Road from the centerline of the existing roadway. The surrounding land use in the vicinity of the project is residential.

The project requires approximately 0.93 acres of permanent ROW from residential properties for the addition of curb and gutter and multi-use path. The project also requires approximately 0.41 acre of temporary ROW from residential properties, which includes 0.38 acre for grading as well as 0.03 acre for driveway reconstruction. No relocations are anticipated as a result of the project. The limits of the existing ROW and permanent ROW can be seen in Appendix B, B-8 to B-9.

If the scope of work or permanent or temporary ROW amounts change, the INDOT Environmental Services Division (ESD) and the INDOT Crawfordsville 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 January 10, 2024, and January 7, 2025 (Appendix C, C-1 to C-3).

Agency	Date Sent	Date Response Received	Appendix
Boone County Commissioners	January 10, 2024	No Response Received	N/A
Boone County Emergency Management Agency	January 10, 2024	No Response Received	N/A
Boone County Health Department	January 10, 2024	No Response Received	N/A
Boone County Highway Department	January 10, 2024	No Response Received	N/A
Boone County Sheriff's Department	January 10, 2024	No Response Received	N/A
Boone County Surveyor's Office (Drainage Board)	January 10, 2024	January 17, 2024	C-4
Boone County Area Plan Commission	January 10, 2024	No Response Received	N/A
City of Lebanon, Floodplain Administrator	January 10, 2024	No Response Received	N/A
City of Lebanon, Municipal Separate Storm Sewer System (MS4) Coordinator	January 10, 2024	January 17, 2024	C-5
FHWA	January 10, 2024	No Response Received	N/A
Indiana Department of Natural Resources, Division of Fish and Wildlife (IDNR-DFW)	January 10, 2024	February 6, 2024	C-6 to C-8
Indiana Geological and Water Survey (IGWS) (Electronic Coordination)	January 10, 2024	January 10, 2024	C-9 to C-10
INDOT Environmental Policy Office	January 10, 2024	No Response Received	N/A
INDOT Office of Aviation	January 10, 2024	January 11, 2024	C-11
INDOT Crawfordsville District	January 10, 2024	No Response Received	N/A
Lebanon Community School Corporation	January 10, 2024	No Response Received	N/A
City of Lebanon, Mayor	January 10, 2024	No Response Received	N/A
National Parks Service – Midwest Regional Office	January 10, 2024	No Response Received	N/A
US Department of Housing & Urban Development	January 10, 2024	No Response Received	N/A
Natural Resources Conservation Service (NRCS)	January 10, 2024	January 22, 2024	C-12 to C-13
US Army Corps of Engineers (USACE), Louisville District	January 10, 2024	No Response Received	N/A
The Church of Jesus Christ of Latter-day Saints	January 7, 2025	No Response Received	N/A

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

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: 187 Linear feet Total impacted stream(s): 0 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 U.S., appendix reference)
Small Reynolds Ditch	Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated (R4SBCx)	187	0	Small Reynolds Ditch enters the project area approximately 215 feet north of the Witt Road and Victoria Drive intersection. The stream flows east to west through the project area and is conveyed beneath the existing Witt Road bridge over Small Reynolds Ditch. It is likely to be considered a jurisdictional waters of the US (Appendix F, F-1 to F-31).

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 (Appendix B, B-3), and the Red Flag Investigation (RFI) report (Appendix E, E-1 to E-9), there are 34 streams, rivers, watercourses, or other jurisdictional features within the 0.5-mile search radius. There are two streams within or adjacent to the project area, both field verified as Small Reynolds Ditch, which was confirmed by the site visit on September 18, 2023, by American Structurepoint, Inc.

A *Wetland Delineation and Waters Report* was completed for the project on February 8, 2024. Please refer to Appendix F, F-1 to F-31, for the *Wetland Delineation and Waters Report*. It was determined that one stream, Small Reynolds Ditch, is located within the project area. Small Reynolds Ditch is anticipated to be considered a jurisdictional waters of the US. The USACE makes all final determinations regarding jurisdiction.

The Federal Wild and Scenic Rivers listing; State Natural, Scenic and Recreational Rivers listing; Outstanding Rivers List; Navigable Waterways List; and National Rivers Inventory list was researched by American Structurepoint, Inc. on September 18, 2023, to determine the possible presence of protected waterways in the project area. No listed waters were identified within or adjacent to the project area.

Small Reynolds Ditch is an intermittent stream that enters the project area approximately 215 feet north of the Witt Road and Victoria Drive intersection. The stream flows east to west for approximately 187 linear feet through the project area and is conveyed beneath the existing Witt Road bridge over Small Reynolds Ditch. The OHWM of Small Reynolds Ditch is 13.4 feet wide by 0.8 feet deep. Small Reynolds Ditch would be considered a poor stream due to proximity to urban development and runoff received from surrounding roadways.

No structure work will occur to the existing Witt Road over Small Reynolds Ditch bridge, and work within the vicinity of Small Reynolds Ditch will remain above the OHWM. Therefore, no stream impacts are expected.

The IDNR-DFW responded on February 6, 2024, with recommendations regarding pavement rehabilitation runoff and erosion/sediment control measures as well as drainage and stormwater management (Appendix C, C-6 to C-8).

The Boone County Surveyor's Office (Drainage Board) responded on January 17, 2024, stating they do not have any environmental concerns to report on the project (Appendix C, C-4). Although not mapped on the Boone County Geographic Information System (GIS) website (https://boonein.maps.arcgis.com/), the Boone County Surveyor indicated that Small Reynolds Ditch is a county legal drain. To meet the Boone County Drainage Ordinance and Standards, they requested that the final construction plans be submitted to the Boone County Surveyor's Office for review and approval of any connection to Small Reynolds Legal Drain. This has been added as a firm commitment in the *Environmental Commitments* section of this CE document.

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

Open Water Feature(s)	**Presence**	**Impacts** Yes	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 (Appendix B, B-3), and the RFI report (Appendix E, E-1 to E-9), there are 11 open water features 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 September 18, 2023, by American Structurepoint, Inc. Therefore, no impacts are expected.

A *Wetland Delineation and Waters Report* was completed for the project on February 8, 2024. Please refer to Appendix F, F-1 to F-31 for the *Wetland Delineation and Waters Report*. It was determined that no open water features are present within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

Wetlands	**Presence**	**Impacts** Yes	No

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

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

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

Wetlands (*Mark all that apply*)	**Documentation**	**ESD Approval Dates**
Wetland Determination		
Wetland Delineation	X	N/A
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 (Appendix B, B-3), and the RFI report (Appendix E, E-1 to E-9), there are 21 wetlands 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 September 18, 2023, by American Structurepoint, Inc. Therefore, no impacts are expected.

A *Wetland Delineation and Waters Report* was completed for the project on February 8, 2024. Please refer to Appendix F, F-1 to F-31

for the *Wetland Delineation and Waters Report*. It was determined that no wetlands are present within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

	Presence	Impacts	
		Yes	No
Terrestrial Habitat	X	X	

Total terrestrial habitat in project area: 1.344 Acre(s) Total tree clearing: 0.003 Acre(s)

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

Based on a desktop review, a site visit on September 18, 2023, by American Structurepoint, Inc., and the aerial map of the project area (Appendix B, B-3), there is maintained ROW within the project area. Dominant herbaceous species within the project area includes Kentucky blue grass (*Poa pratensis*) and tall fescue (*Festuca arundinacea*). Ground-level photographs can be referenced in Appendix B, B-4 to B-5.

Approximately 1.344 acres of total terrestrial disturbance, which includes approximately 0.003 acre of tree clearing and 1.341 acres of maintained lawn, will occur in order to facilitate the proposed road improvements. Tree species to be removed include Norway spruce (*Picea abies*), northern red oak (*Quercus rubra*), sugar maple (*Acer saccharum*), eastern white pine (*Pinus strobus*), eastern red cedar (*Juniperus virginiana*), silver maple (*Acer sarccharinum*), and callery pear (*Pyrus calleryana*) within 100 feet of the existing roadway. Tree removal will occur during the bat inactive season (between October 1st and March 31st).

Impacts to terrestrial habitat, including tree removal, cannot be avoided due to their location adjacent to roadways and on residential properties. Therefore, there are no practical alternatives which avoid impacts to terrestrial habitat while meeting the purpose and need for the project. Implementation of standard INDOT specifications for re-vegetation of disturbed areas will promote re-establishment of similar ground cover in areas temporarily impacted by site access. Additional mitigation, if required, for impacts to terrestrial habitat will be determined during the permitting process.

The IDNR-DFW responded on February 6, 2024 with recommendations to avoid or minimize impacts to terrestrial habitat. These recommendations included developing a mitigation plan for any unavoidable habitat impacts as well as recommendations for installing bank stabilization measures, revegetating all bare and disturbed areas, and installing appropriate erosion and sediment control measures (Appendix C, C-6 to C-8).

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, E-1 to E-9), completed by American Structurepoint, Inc. on April 23, 2024, the IDNR Boone County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated February 6, 2024 (Appendix C, C-6 to C-8), the Natural Heritage Program's Database has been checked and, to date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity. An INDOT 0.5-mile bat review occurred on March 7, 2023. The results indicated no presence of bats in, or within 0.5 mile of the project area.

Project information was submitted through the US Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) portal, and an official species list was generated on December 23, 2024, (Appendix C, C-14 to C-27. The project is within range of the federally endangered Indiana bat (*Myotis sodalis*). Other species were generated in the IPaC species list along with the Indiana bat. Refer to paragraph below.

The project qualifies for the *Range-wide Programmatic Informal Consultation* for the Indiana bat and northern long-eared bat (NLEB, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. A bridge inspection occurred on September 18, 2023, by American Structurepoint, Inc., and the results indicated no signs of bats or birds were present (Appendix C, C-42).

An effect determination key was completed on March 21, 2024, by American Structurepoint, Inc. and based on the responses provided, the project was found to "*may affect, but not likely to adversely affect*" the Indiana bat and/or the NLEB (Appendix C, C-28 to C-41). INDOT reviewed and verified the effect finding on March 21, 2024, 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. Six Avoidance and Minimization Measures (AMMs) for general operation, lighting, and tree removal were included with the effect determination. All AMMs are included as firm commitments in the *Environmental Commitments* section of this document.

The project is within range of the whooping crane (*Grus americana*), which is listed as an experimental population, non-essential species; the salamander mussel (*Simpsonaias ambigua*), which is listed as a proposed endangered species; and the monarch butterfly (*Danaus plexippus*), which is listed as a proposed threatened species. The project qualifies for the most current INDOT/USFWS agreement. Further coordination with USFWS is not required for non-essential experimental population, federally proposed, or candidate species and no impacts to the whooping crane, salamander mussel, or the monarch butterfly are expected.

USFWS Bridge/Structure Assessments are only valid for two years. If construction will begin after September 18, 2025, an inspection of the structure by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT Crawfordsville District Environmental Manager must be contacted immediately.

The bridge and the project's surrounding habitat are conducive for use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the *Potential Migratory Bird on Structure* Recurring Special Provisions (RSP).

This precludes the need for further consultation on the project 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, the 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 EWPSO (if applicable): N/A

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

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 topographic map of the project area (Appendix B, B-2), and the RFI report (Appendix E, E-1 to E-9), there are no karst features identified within or adjacent to the project area.

In the early coordination response dated January 10, 2024, the IGWS did not indicate that karst features exist in the project area (Appendix C, C-9 to C-10). Their response stated the project is located within an area of moderate liquefaction potential, floodway, moderate bedrock resource potential, and low sand and gravel resource potential. Their response also indicated that active and/or abandoned mineral resource extraction sites (i.e., petroleum exploration wells, underground coal mines, and surface coal mines) have not been documented in the area. The features will not be affected because the depth of excavation (10 feet below the ground surface [10 ft-bgs]) will not be deep enough to encounter these resources. The response from IGWS has been communicated with the designer on January 10, 2024. No impacts are expected.

SECTION C – OTHER RESOURCES

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

	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.

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

Wellhead Protection Area and Source Water:
The IDEM Wellhead Proximity Determinator website (http://www.in.gov/idem/cleanwater/pages/wellhead/) was accessed on January 10, 2024, by American Structurepoint, Inc. This project is not located within a Wellhead Protection Area or Source Water Area. No impact is expected.

Water Wells:
The IDNR Water Well Record Database website (https://www.in.gov/dnr/water/3595.htm) was accessed on January 10, 2024, by American Structurepoint, Inc. No wells are located near this project. Therefore, no impacts are expected.

Urban Area Boundary:
Based on a desktop review of IDEM's MS4 Boundaries Map for Indiana website (https://www.in.gov/idem/cleanwater/ms4s-boundaries-map-for-indiana/) by American Structurepoint, Inc. on January 10, 2024, this project is located in an Urban Area Boundary (UAB). The MS4 Coordinator for the City of Lebanon responded to early coordination on January 17, 2024, stating they do not have any additional comments regarding environmental impacts beyond what was covered in the letter at this time and any additional issues should be mitigated by the Stormwater Pollution Prevention Plan (SWPPP) for the project (Appendix C, C-5). In accordance with

IDEM's MS4 General Permit (MS4GP), projects located within a UAB that are currently permitted under the MS4GP (City of Lebanon, Permit No. INR040113) are required to have a Storm Water Quality Management Plan (SWQMP). The SWQMP requires erosion and sediment control measures and material handling procedures to be submitted as part of the construction plans and specifications; and, to consider appropriate post construction storm water quality best management practices (BMPs). These BMPs should take into consideration the available space, pollutants of concern and receiving waters. Avoidance alternatives are not practical as impacts are necessary to meet the purpose and need of the project, however, impacts will be reduced to the greatest extent practicable to complete the project. This project will comply with the SWQMP by implementing and adhering to BMPs.

Public Water System:
Based on a desktop review, a site visit on September 18, 2023 by American Structurepoint, Inc., the aerial map of the project area (Appendix B, B-3), and IDEM's Public Water Supply System website (https://myweb.in.gov/IDEM/DWW/) accessed on January 10, 2024 by American Structurepoint, Inc., this project is located where there is a public water system. One water utility company, Lebanon Utilities (City of Lebanon), services the overall project area. Utility coordination to date has confirmed location of utilities within project limits, and Lebanon Utilities has provided locations of facilities within the project area. Lebanon Utilities does not anticipate the need to relocate the existing facilities; therefore, no impact is expected.

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

If applicable, indicate the Floodplain Level?

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

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

Based on a desktop review of the IDNR Indiana Floodway Information Portal website (https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e) by American Structurepoint, Inc. on September 18, 2023, and the RFI report (Appendix E, E-1 to E-9), this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F, F-17). An early coordination letter was sent on January 10, 2024, to the local Floodplain Administrator. The floodplain administrator did not respond within the 30-day time frame. In the early coordination response dated February 6, 2024, the IDNR-DFW stated that they will require the formal approval for Construction in a Floodway (CIF) permit under the Flood Control Act, IC 14- 28-1 for work in the floodway of Small Reynolds Ditch (also identified as Unnamed Tributary Prairie Creek) (Appendix C, C-6 to C-8). This project qualifies as a Category 3 per the current INDOT CE Manual, which states that the modifications to drainage structures included in this project will result in an insubstantial change in their capacity to carry flood water. This change could cause a minimal increase in flood heights and flood limits. These minimal increases will not result in any substantial adverse impacts on the natural and beneficial floodplain values; they will not result in substantial change in flood risks or damage; and they do not have substantial potential for interruption or termination of emergency service or emergency routes; therefore, it has been determined that this encroachment is not substantial.

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

Total Points (from Section VII of CPA-106/AD-1006*) **116**
**If 160 or greater, see CE Manual for guidance.*

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

Based on a desktop review, a site visit on September 18, 2023, by American Structurepoint, Inc., the aerial map of the project area (Appendix B, B-3), the project will convert 0.93 acre of farmland as defined by the Farmland Protection Policy Act. An early coordination

letter was sent on January 10, 2024, to NRCS. Coordination with NRCS resulted in a score of 116 on the AD 1006 Form (Appendix C, C-12 to C-13). NRCS's threshold score for significant impacts to farmland that result in the consideration of alternatives is 160. Since this project score is less than the threshold, no significant loss of prime, unique, statewide, or local important farmland will result from this project. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

SECTION D – CULTURAL RESOURCES

	Category and Type	INDOT Approval Date	N/A
Minor Projects PA	Category B; Types 1, 2, 3, and 8	September 5, 2024	

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			
Archaeological Phase Ia Survey Report	X	September 5, 2024	N/A
Archaeological Phase Ic Survey Report			

		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 September 5, 2024, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Types 1, 2, 3, and 8 under the Minor Projects Programmatic Agreement (MPPA) (Appendix D, D-1 to D-8).

Category B, Type 1 covers *Replacement, repair, or installation of curbs, curb ramps, or sidewalks, including when such projects are associated with roadway work such as surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking* that meets the listed conditions.

Category B, Type 2 covers *Installation of new lighting, signals, signage and other traffic control devices* that meets the listed conditions.

Category B, Type 3 covers *Construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration and deceleration lanes) and shoulder widening* that meets the listed conditions.

Category B, Type 8 covers *Construction of pedestrian facilities including trails, multi-use paths, greenways, and associated minor activities defined below,* that meets the listed conditions.

Work will occur in undisturbed soils; therefore, an archaeological survey was required for the project. An *Archaeological Phase 1a Reconnaissance* report was completed for the project area by Weintraut & Associates, Inc. (Appendix D, D-7). Shovel probes were excavated, and visual walkovers were performed throughout the project area. Two archaeological sites, 12BO712 and 12BO713, were recorded within the survey area. The sites were determined to not be eligible for listing in the Indiana Register of Historic Sites and

Structures (IRHSS) or the NRHP; therefore, no further work is recommended.

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 US 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 significantly 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, B-3), and the RFI report (Appendix E, E-1 to E-9), 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 September 28, 2023, by American Structurepoint, Inc., there are no Section 4(f) resources located 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 US Land and Water Conservation Fund Act of 1965 established the Land and Water Conservation Fund (LWCF), which was created to preserve, develop, and assure accessibility to outdoor recreation resources. Section 6(f) of this Act prohibits conversion of lands purchased with LWCF monies to a non-recreation use.

A review of Section 6(f) properties on the INDOT ESD website revealed a total of five properties in Boone County (Appendix I, I-12). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to Section 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?		X
Is the project exempt from conformity?		X
If No, then:		
Is the project in the Transportation Plan (TP)?	X	
Is a hot spot analysis required (CO/PM)?		X

Location in STIP: FY 2024-2028 STIP

Name of MPO (if applicable): N/A

Location in TIP (if applicable): N/A

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 FY 2024-2028 STIP (Appendix H, H-3).

This project is located in Boone County, which is currently a maintenance area for Ozone according to the EPA Green Book website (https://www.epa.gov/green-book) under the 1997 Ozone 8-hour standard, which was revoked in 2015 but is being evaluated for conformity due to the February 16, 2018, South Coast Air Quality Management District V. EPA, Et. Al. Decision. The portion of Boone County where the project is located is outside of the Indianapolis Metropolitan Planning Organization (MPO) planning area; therefore, the project is not included in the Indianapolis MPO Transportation Improvement Program (TIP). The project's design concept and scope are accurately reflected in both the STIP and the INDOT 2045 Long Range Transportation Plan (TP). Therefore, the conformity requirements of 40 CFR 93 have been met.

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 (MSAT) 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: N/A

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 *INDOT 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.

This project will have temporary negative socioeconomic impacts on the community, including temporary inconveniences commonly associated with construction such as noise, fugitive dust, increased travel delay, and utility disruptions. However, these impacts are temporary and will cease upon completion of the project.

The project is not anticipated to negatively affect community cohesion. Though this project may cause minor delays to the motoring public during construction, the work will not result in permanent socioeconomic impacts to the surrounding area. It is anticipated that MOT will involve a road closure; however, access to all properties will be maintained during construction. Minimal impacts are anticipated to the local tax base, property value, and community events. Overall, the project is expected to positively impact the community. According to a review of the website, https://www.fairsandfestivals.net/, an online resource for local fairs and festivals on September 12, 2024, no scheduled festivals or other public events take place in the Boone County area. Therefore, no impacts are expected.

In order for a municipality to be eligible to receive federal funds they must have in place, or at least under development, an ADA Transition Plan. The Transition Plan inventories the municipality's infrastructure identifying those areas with features (i.e. sidewalks, crosswalks, curb ramps, building access, etc.) that are not in compliance with the ADA and establishes a plan to program funding for improvement intended to bring the facilities into compliance.

The project will comply with the October 12, 2022 Boone County Transition Plan by constructing all sidewalks and curb ramps in accordance with the plan (https://boonecounty.in.gov/wp-content/uploads/2022/10/Boone-County-ADA-Transition-Plan.pdf).

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 the desktop review, the aerial map of the project area (Appendix B, B-3), and the RFI report (Appendix E, E-1 to E-9), there are two religious facilities, two schools, two recreational facilities, three pipelines, and one railroad located within the 0.5-mile search radius. One public facility, The Church of Jesus Christ of Latter-day Saints, is located approximately 0.06 mile northeast from the project area. That number was confirmed by the site visit on September 18, 2023, by American Structurepoint, Inc. Coordination with The Church of Jesus Christ of Latter-day Saints occurred on January 7, 2025. No response was received within the 30-day time frame. Access to all properties, both residential and commercial, will be maintained during construction (Appendix B, B-10). Therefore, no impacts are expected.

Utility coordination to date has confirmed the location of seven utilities within project limits. Currently, two communication companies (AT&T Indiana and Windstream Communications, Inc.), one cable company (Comcast [Indianapolis]), one electric (Boone County Rural Electric Membership Cooperative [REMC]), one fiber optic (Metro Fibernet, LLC), one gas (Vectren Energy), and one electric/sewer/storm/water (City of Lebanon) provide services to residents and businesses within the project area. Coordination with utility companies to identify potential conflicts and relocation of the appropriate facilities, if needed, has been initiated. The coordination will continue through the duration of the engineering phase of the project.

In their early coordination response dated January 11, 2024, the INDOT Office of Aviation stated that no tall structure permit is required if all equipment being used for the project stays below 200 feet in height (Appendix C, C-11). According to the project designer, the project will not require any equipment taller than 200 feet. Therefore, a tall structure permit will not be required for the project.

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.

This analysis was performed for this project prior to the issuance of recent federal Executive Orders (EO) from January 2025, including EO 14154, EO 14148, and EO 14173. As such, this analysis is included for transparency but is no longer applicable to the impacts analysis for federal projects and this impact was not considered in the federal decision.

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT CE Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent ROW. The project will require the acquisition of greater than 0.5 acre of ROW, and no relocations. 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 Boone County, Indiana. The community that overlaps the project area is called the affected community (AC). In this project area, there are two AC's: AC 1 is Census Tract 8103 and AC 2 is Census Tract 8104. 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 was obtained from the US Census Bureau Website (https://data.census.gov) on September 12, 2024, by American Structurepoint, Inc. The data collected for minority and low-income populations within the AC's are summarized in the below table.

	COC Boone County	**AC 1** Census Tract 8103	**AC 2** Census Tract 8104
MINORITY POPULATION			
Total Population	71,235	5,906	6,074
Not Hispanic or Latino: White Alone	62,878	5,426	5,253
Minority Population	2,488	309	677
Percent Minority	11.73%	8.13%	13.52%
125 Percent of COC	14.66%		
AC Percent Minority Greater Than 125 Percent of COC?		No	No
AC Percent Minority Greater Than 50 Percent?		No	No
Population of EJ Concern?		No	No
LOW-INCOME POPULATION			
Total Population for Whom Poverty Status is Determined	70,260	5,595	5,817
Total Population Below Poverty Level	4,050	365	492
Percent Low-Income	5.76%	6.52%	8.46%
125 Percent of COC	7.21%		
AC Percent Low-Income Greater Than 125 Percent of COC?		No	Yes
AC Percent Low-Income Greater Than 50 Percent?		No	No
Population of EJ Concern?		No	Yes

Data from the US Census Bureau, *2022 American Community Survey 5-Year Estimates* (2018-2022)

% Minority = (Total population - Not Hispanic or Latino: White Alone)/Total Population

% Low Income = (Total population Below Poverty Level/Total Population for Whom Poverty Status is Determined)
125 Percent of COC = Percent Minority (or Percent Low-Income) * 1.25

The AC 1, Census Tract 8103, has a percent minority of 8.13% which is below 50% and is below the 125% COC threshold. The AC 2, Census Tract 8104, has a percent minority of 13.52% which is below 50% and is below the 125% COC threshold. Therefore, both AC's do not contain minority populations of EJ concern.

The AC 1, Census Tract 8103, has a percent low-income of 6.52% which is below 50% and is below the 125% COC threshold. The AC 2, Census Tract 8104, has a percent low-income of 8.46% which is below 50%, but is above the 125% COC threshold. Therefore, AC 2 does contain a low-income population of EJ concern.

The project will require ROW from residential properties consisting of maintained lawn for the addition of curb and gutter, sidewalks, and multi-use path. No relocations are anticipated as a result of the project.

The MOT for the project will consist of phased construction with an official detour length of approximately four miles. The MOT may pose a temporary inconvenience to EJ populations; including school buses and emergency services; however, no significant delays are anticipated, and all inconveniences and delays will cease upon project completion. No public bus stops are located within the project area. Access to all properties, both residential and commercial, will be maintained during construction.

This project will improve pedestrian mobility and update curb ramps to meet ADA standards along Witt Road, from Lafayette Avenue to Austin Drive, improve the existing curve radius of Witt Road to meet current INDOT design standards, as well as preserve and extend the service life of the existing pavement condition throughout the corridor. Although there are existing sidewalks within the project area, the existing sidewalks lack connectivity. By constructing additional sidewalks, a multi-use path, pedestrian crosswalks, and ADA compliant curb ramps, the project will improve pedestrian facilities in the project area, improving community cohesion and connectivity. Additionally, by improving the pedestrian mobility along Witt Road, the project will improve the existing transportation facilities in the project area for the local bus routes and vehicular traffic. Based on the project improving pedestrian and transportation connectivity, it is concluded this project will not have disproportionately high or any adverse effects to EJ populations throughout the project area.

INDOT ESD approved the EJ analysis on October 7, 2024. 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.

The EJ Analysis, including the census data sheets, map, and calculations can be found in Appendix I, I-5 to I-11.

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 places 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): April 23, 2024

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 April 23, 2024, by American Structurepoint, Inc. and INDOT Site Assessment & Management (SAM) provided their concurrence on April 23, 2024 (Appendix E, E-1 to E-9). Three Underground Storage Tank (UST) sites, one brownfield site, and three National Pollutant Discharge Elimination System (NPDES) facilities are located within 0.5 mile of the project area.

None of the hazardous material concerns (hazmat sites) identified will impact the project. Further investigation for hazmat sites 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)	
Individual Permit (IP)	
Other	
IN Department of Environmental Management (401/Rule 5)	
Nationwide Permit (NWP)	
Regional General Permit (RGP)	
Individual Permit (IP)	
Isolated Wetlands	
Construction Stormwater General Permit (CSGP)	X
Other	
IN Department of Natural Resources	
Construction in a Floodway	X
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."

It is anticipated that a Construction Stormwater General Permit (CSGP) will be required for greater than one acre of soil disturbance.

Additionally, a CIF permit pursuant to the Flood Control Act (IC-14-28-1) will likely be required due to floodway impacts.

Applicable recommendations provided by the 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 ROW amounts change, the INDOT ESD and the INDOT Crawfordsville District Environmental Section will be contacted immediately. (INDOT ESD and INDOT Crawfordsville 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. Walkability throughout the project area will be maintained with ADA-compliant pedestrian detour routes installed prior to any sidewalk or curb ramp removal. All pedestrian detour routes will be marked as needed. (INDOT ESD)
4. To meet the Boone County Drainage Ordinance and Standards, the Boone County Surveyor's Office requested that the final construction plans be submitted to the Boone County Surveyor's Office for review and approval of any connection to Small Reynolds Legal Drain. (Boone County Surveyor's Office)
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. (USFWS)
7. Lighting AMM 2: When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. (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 and 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. USFWS Bridge/Structure Assessments are only valid for two years. If construction will begin after September 18, 2025, an inspection of the structure by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT Crawfordsville District Environmental Manager must be contacted immediately. (USFWS)
12. The bridge and the project's surrounding habitat are conducive for use (i.e. nests) by a bird species protected under the MBTA. Prior to the start of nesting season (May 1) the structure must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the *Potential Migratory Bird on Structure* 107-C-273 RSP. (USFWS)
13. If any equipment used will be over 200 feet in height, further coordination with the INDOT Office of Aviation will occur. (INDOT Office of Aviation)

For Further Consideration:

14. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR-DFW)
15. A more sustainable approach should aim to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, raingardens, etc.) and recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement, etc.). The following links give a good overview of traditional and sustainable stormwater management systems and their pros and cons for consideration during the design of the proposed project: https://www.epa.gov/greeningepa/epa-facility-stormwater-management; https://www.epa.gov/greeningepa/stormwater-management-practices-epa-facilities. (IDNR-DFW)
16. Employ storage techniques (retention basins, constructed wetlands, raingardens) & infiltration techniques (infiltration basins or trenches, pervious pavement). (IDNR-DFW)

17. Wildlife Passage: No site-level photos of wildlife passage conditions under the bridge were submitted. Wildlife passage was a requirement of permit FW-30807 approved in June of 2021 for the replacement of the Witt Road bridge over New Reynolds/Small Reynolds Ditch. The approved permit required the construction of a wildlife passage shelf along the south bank above the ordinary high-water mark (OHWM) constructed from compacted #53 aggregate over riprap scour protection. The Division of Fish and Wildlife recommends submitting photos taken below the completed bridge replacement that clearly depict the required wildlife passage shelf. (IDNR-DFW)
18. The use of sealants that are free of petroleum and coal tar-based products is encouraged whenever possible. Where possible, road runoff should be directed to riprap turnouts and sediment filtration prior to entering a stream to reduce impacts to aquatic species. Use pollutant trapping technology such as storm drain inserts to reduce the runoff of roadside pollutants where appropriate. (IDNR DFW)
19. Follow International Dark-Sky Association recommendations for LED lighting systems. These suggestions will aid in the selection of lighting that is energy and cost efficient, yet ensures safety and security, protects wildlife, and promotes the goal of reducing light pollution. (IDNR-DFW)
20. Avoid all work within the inundated part of the stream channel during the fish spawning season (April 1 through June 30); except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season. No equipment shall be operated below Ordinary High Water Mark during this time unless the machinery is within the caissons or on the cofferdams. (USFWS)
21. Evaluate wildlife crossings under bridge/culverts projects in appropriate situations. Suitable crossings include flat areas below bridge abutments with suitable ground cover, high water shelves in culverts, amphibian tunnels, and diversion fencing. (USFWS)
22. Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat. (USFWS)
23. Restrict below low-water work in streams to placement of culverts, piers, pilings, and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. (USFWS)

Table of Contents for Appendix Items

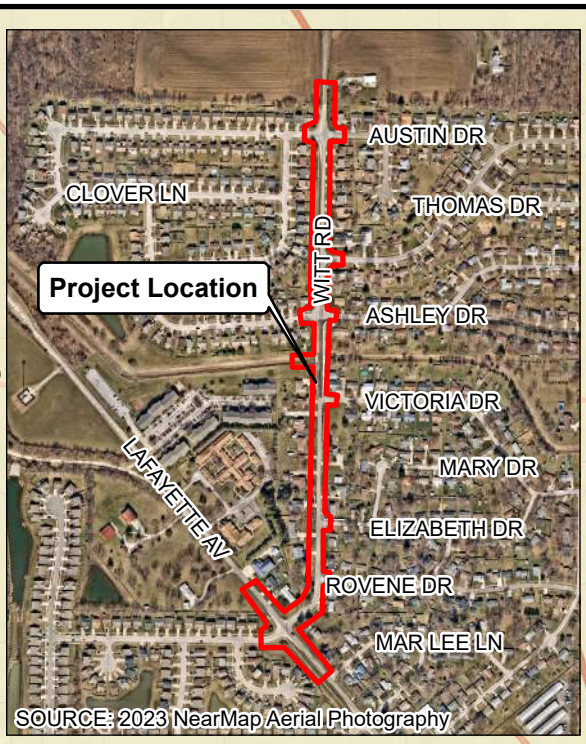
Appendix A: INDOT Supporting Documents

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 Location

Lebanon

Source: ESRI Street Map North America

Esri, HERE, Garmin, INCREM

Not to Scale

AMERICAN STRUCTUREPOINT INC.

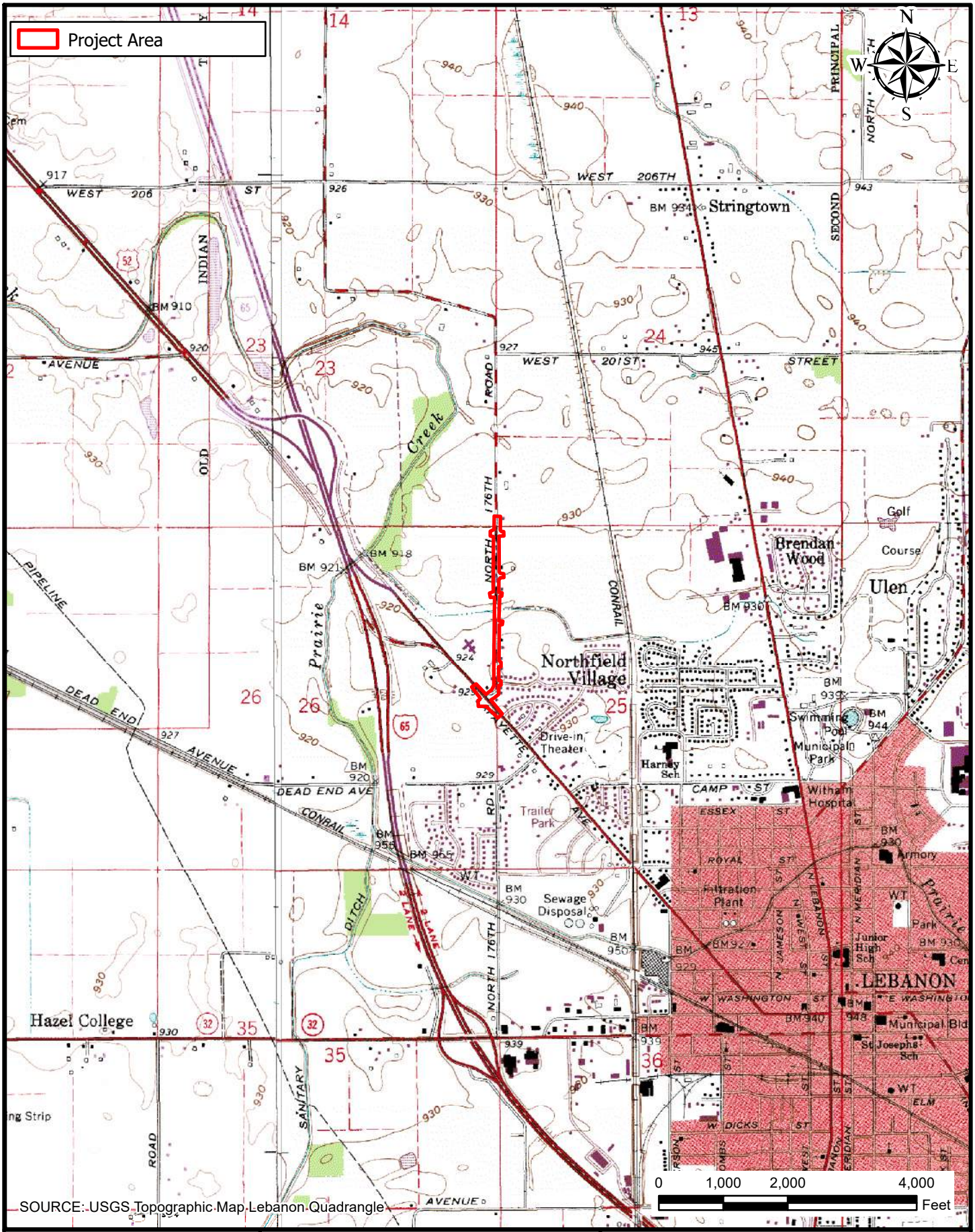
State Location Map

City of Lebanon
401 South Meridian Street
Lebanon, IN 46052

Witt Road Improvement Project
Des. No. 2101721

Location: Lebanon
Township: Center
County: Boone
State: Indiana

Date: 01/09/2024



SOURCE: USGS Topographic Map Lebanon Quadrangle

AMERICAN STRUCTUREPOINT INC.

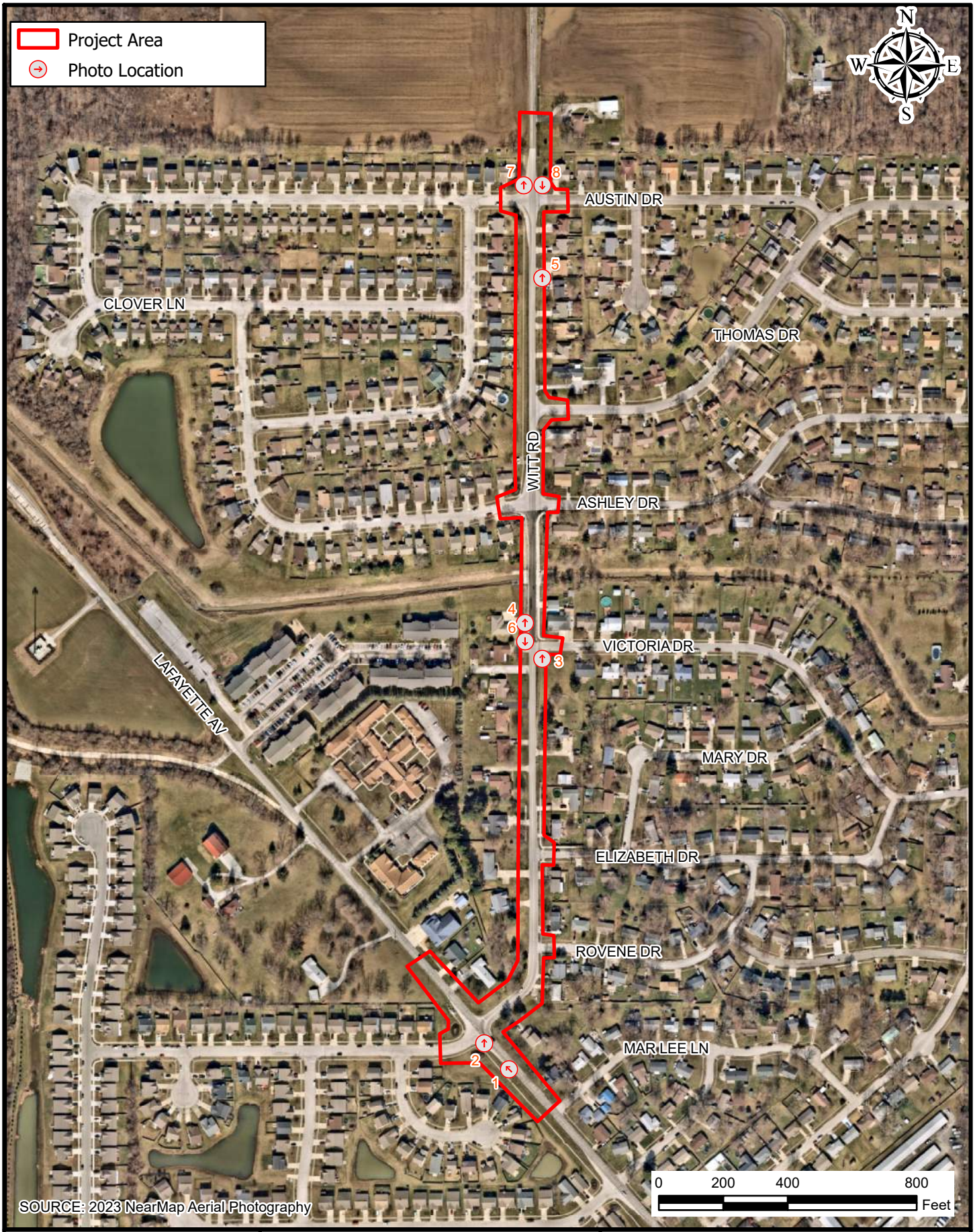
USGS Topographic Map

City of Lebanon
401 South Meridian Street
Lebanon, IN 46052

Witt Road Improvement Project
Des. No. 2101721

Location: Lebanon
Township: Center
County: Boone
State: Indiana

Date: 01/09/2024



AMERICAN STRUCTUREPOINT INC.

2023 Aerial Photography and Photo Location Map

City of Lebanon
401 South Meridian Street
Lebanon, IN 46052

Witt Road Improvement Project
Des. No. 2101721

Location: Lebanon
Township: Center
County: Boone
State: Indiana

Date: 01/09/2024

Photo 1. On Lafayette Avenue facing northwest towards the intersection with Witt Road.

Photo 2. Facing north towards the intersection of Lafayette Avenue and Witt Road.

Photo 3. Standing along the northbound lane of Witt facing the existing bridge.

Photo 4. Facing north towards the existing bridge carrying Witt Road over an unnammed tributary to Small Reynolds Ditch.

Photo 5. Facing north showing lack of pedestrian connectivity along the northbound lane of Witt Road.

Photo 6. Facing south standing along the southbound lane of Witt Road showing lack of pedestrian facility connectivity.

Photo 7. At the northern limits of the project area facing north.

Photo 8. At the northern limits of the project area facing south towards the intersection with Austin Drive.

PROJECT	DESIGNATION
2101721	2101721
CONTRACT	BRIDGE FILE
R-44251	N/A

INDIANA DEPARTMENT OF TRANSPORTATION

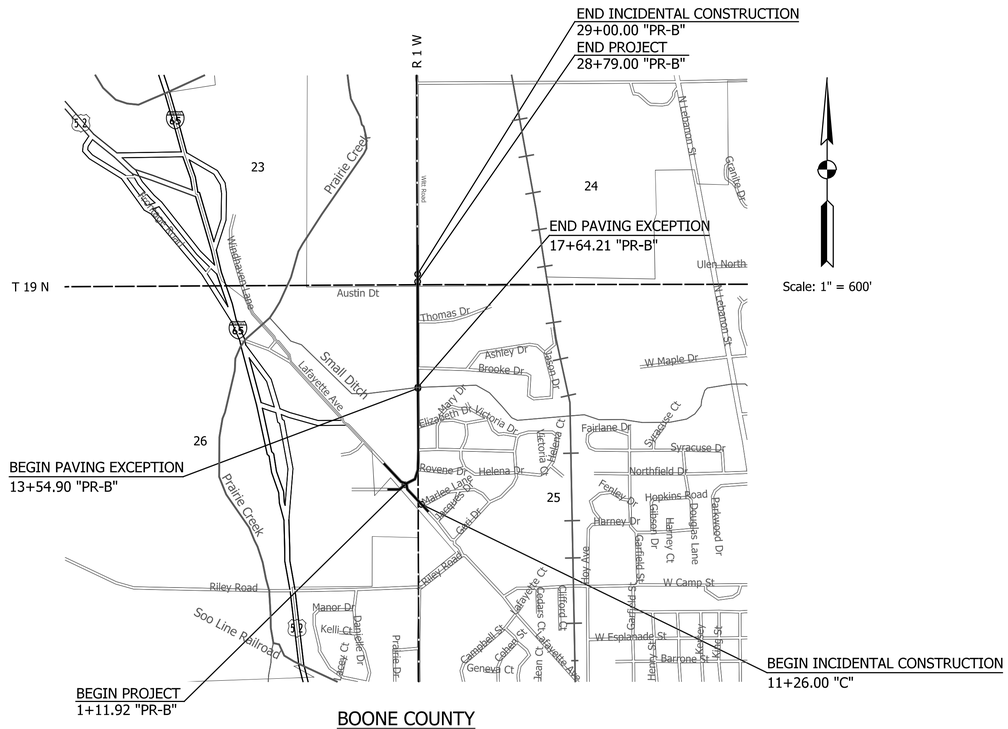
NOTE TO REVIEWER:
City Signature Block will be added in a future submittal.

ROAD PLANS

ROUTE: WITT RD. FROM: LAFAYETTE AVE. TO: AUSTIN DR.

PROJECT NO. 2101721 P.E.
2101721 R/W
2101721 CONST.

Project Description: Roadway Reconstruction Located on Witt Road from Lafayette Avenue to approximately 175 ft. North of Austin Drive In Sections 23-26, Township 19 North, Range 1 West, Center Township, Boone County, Indiana.



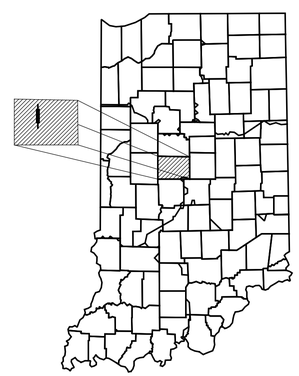
BOONE COUNTY

TRAFFIC DATA

A.A.D.T.	(2027)	3700 V.P.D.
A.A.D.T.	(2047)	5200 V.P.D.
D.H.V	(2047)	520 V.P.H.
DIRECTIONAL DISTRIBUTION		51/49 %
TRUCKS		3 % A.A.D.T.

DESIGN DATA

DESIGN SPEED	30 M.P.H.
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	LOCAL AGENCY COLLECTOR
RURAL/URBAN	URBAN (SUBURBAN)
TERRAIN	LEVEL
ACCESS CONTROL	NONE



PROJECT LOCATION SHOWN BY

BOONE COUNTY

LATITUDE: 40° 03' 47" N LONGITUDE: 86° 29' 15" W

Gross Length: 0.53 MI.
Net Length: 0.45 MI.
Maximum Grade: 2.3 %

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

AMERICAN STRUCTUREPOINT INC.
9025 RIVER ROAD, SUITE 200
INDIANAPOLIS, IN 46240
TEL 317.547.5580 FAX 317.543.0270
www.structurepoint.com

PLANS PREPARED BY: American Structurepoint, Inc. (317) 547-5580 PHONE NUMBER

CERTIFIED BY: DATE

BRIDGE FILE
N/A
DESIGNATION
2101721

SURVEY BOOK	SHEETS		
N/A	1	of	62
CONTRACT	PROJECT		
R-44251	2101721		

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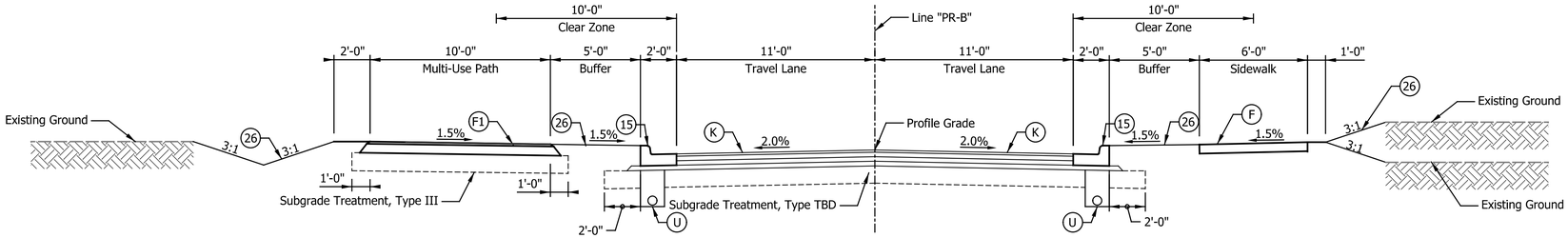
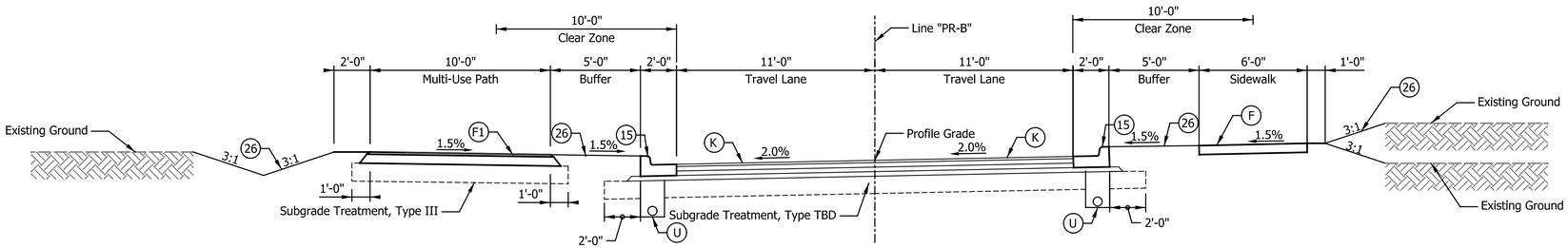


Witt Road

1+11.92 "PR-B" to 1+28.01 "PR-B"
4+90.87 "PR-B" to 13+54.90 "PR-B
17+64.21 "PR-B" to 28+79.00 "PR-B"

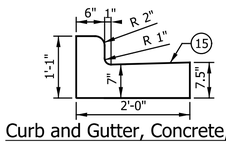
Paving Exception

13+54.90 "PR-B" to 17+64.21 "PR-B"



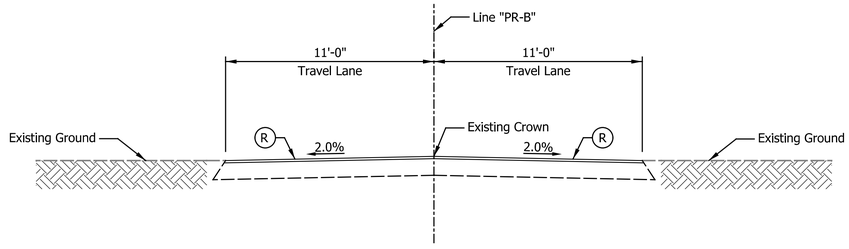
Witt Road (Superelevation)

1+28.01 "PR-B" to 4+90.87 "PR-B"



Curb and Gutter, Concrete, Modified

Not to Scale



Witt Road

28+79.00 "PR-B" to 29+00.00 "PR-B"

NOTE TO REVIEWER:
Pavement Design to be completed at a later stage.

LEGEND

- (K) xxx #/Syd. QC/QA-HMA, x, xx, Surface, xx, on xxx #/Syd. QC/QA-HMA, x, xx, Intermediate, xx, on xxx #/Syd. QC/QA-HMA, x, xx, Base, xx
- (F) Concrete Sidewalk, 4 in.
- (F1) Multi-Use Path xxx #/Syd. HMA Surface, Type "x", on 6 in. Compacted Aggregate, No. xx, Base
- (R) Milling, Asphalt, xx in. followed by xxx #/Syd. QC/QA-HMA, x, xx, Surface, xx
- (U) Underdrain, 6 in.
- (25) Seeding
- (26) Sodding, Nursery

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS
LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1/4" = 1'-0"	N/A
VERTICAL SCALE	DESIGNATION
1/4" = 1'-0"	2101721
SURVEY BOOK	SHEETS
N/A	3 of 62
CONTRACT	PROJECT
R-44251	2101721

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5

10

SEC. 26, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

20'-0" Utility, Drainage & Storm Sewer Esmt.

10'-0" Utility Drainage & Sewer Esmt.

10'-0" Utility Drainage & Sewer Esmt.

20'-0" Utility, Drainage & Storm Sewer Esmt.

5'-0" Utility, Drainage & Sewer Esmt.

15'-0" Utility, Drainage & Sewer Esmt.

LOWELL E. & SUSAN M. ENDICOTT

20'-0" Utility & Drainage Esmt.

App. Exist. R/W

Line "C"

App. Exist. R/W

JESSICA M. WALKER
LOT 1

RUBEN III & CRYSTAL G. DELAROSA
LOT 37

LOT 35

Witt Rd.

Line "A"

CLEAR VISTA HOMEOWNERS ASSOCIATION, INC.
COMMON AREA 1

DEREK J. & CRYSTAL L. DIMICELI

App. P.L.

App. P.L.

20'-0" Utility & Drainage Esmt.

25'-0" Utility & Drainage Esmt.

30'-0" Utility & Drainage Esmt.

MICHAEL & MEGAN NANCE

App. P.L.

App. P.L.

App. P.L.

App. P.L.

App. P.L.

10'-0" Drainage Esmt.

BEGIN PROJECT
1+11.92 "PR-B"

COMMON AREA 2

LOT 32

CLEAR VISTA HOMEOWNERS ASSOCIATION, INC.

20'-0" Signage Esmt.

20'-0" Signage Esmt.

RICHARD & CONNIE LENOX

NADINE L. MOORE

GAROLD J. & LISA D. CHRISTY

JEFFREY A. & KIMBERLY S. RODGERS

MICHAEL J. MCFERON
LOT 1

RONALD E. & BRENDA A. MCDONALD
LOT 2

RONALD MILLER JR.
LOT 3

HEATHER S. & SHAWN M. JONES
LOT 4

DOUGLAS M. PODGERS
LOT 5

15'-0" Utility & Drainage Esmt.

15'-0" Utility & Drainage Esmt.

App. P.L.

12'-6" Utility & Drainage Esmt.

12'-6" Utility & Drainage Esmt.

25'-0" Utility Esmt.

App. P.L.

App. P.L.

App. P.L.

App. P.L.

15'-0" Storm Drain Esmt.

40' R/W

45' Temp. R/W for Grading

35' Temp. R/W for Grading

30' R/W

35' R/W

App. Exist. R/W

40' Temp. R/W for Drive Const.

30' R/W

35' Temp. R/W for Grading

App. Exist. R/W

45' Temp. R/W for Drive Const.

45' Temp. R/W for Drive Const.

Lafayette Ave.

App. Exist. R/W

App. Exist. R/W

Witt Rd.

40' Temp. R/W for Grading

Temp. R/W

R/W

App. Section Line

Line "B"

Line "PR-B"

App. Exist. R/W

BEGIN PAVING EXCEPTION
13+54.90 "PR-B"

T. BRENT DAVIS, BRENDA DAVIS & J. BRENNAE (DAVIS) DALE

App. Exist. R/W

App. P.L.

LOT 67

LOT 68

DEBORAH K. SPURLOCK

BRANDON K. & JORDIN N. DAVIS

Rovene Dr.

LOT 114

MARKITA L. BUSTAMANTE

App. Exist. R/W

App. P.L.

DENNIS L. ROSE JR.

LOT 115

10'-0" Utility & Drainage Esmt.

10'-0" Utility & Drainage Esmt.

App. P.L.

App. Exist. R/W

Elizabeth Dr.

LOT 226

JAMES A. KOONTZ & BRITTANY J. FLOYD

7'-6" Utility & Drainage Esmt.

JAMES A. KOONTZ & BRITTANY J. FLOYD

App. P.L.

25' R/W

30' Temp. R/W for Grading

40' Temp. R/W for Drive Const.

ERICA L. BABB

ERICA L. BABB

App. P.L.

App. P.L.

Victoria Dr.

App. Exist. R/W

App. Exist. R/W

15'-0" Elec. Line Esmt.

App. Exist. R/W

App. P.L.

App. P.L.

App. Exist. R/W

10'-0" Utility & Drainage Esmt.

10'-0" Utility & Drainage Esmt.

App. Exist. R/W

App. P.L.

App. P.L.

App. Exist. R/W

10'-0" Utility & Drainage Esmt.

26 | 26
25 | 25

App. Section Line

App. ¼ Section Line

App. ¼ Section Line

SEC. 25, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

DATE	REVISION

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAT NO. 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	4 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-ePdf.dfcfg
Indiana_Shade.tbl

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15 20 25

SEC. 26, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

Hickory Meadows

15'-0" Utility & Drainage Esmt.
Reynolds Legal Drain Esmt.
20'-0" Drainage Esmt.
Reynolds Legal Drain Esmt.
App. P.L.
HICKORY MEADOWS SECTION 1 HOMEOWNERS ASSOC., INC.
COMMON AREA 1
LOT 6
R/W Acquired by Others
App. Exist. R/W
R/W
App. P.L.
25'-0" Utility, Drainage, & Sewer Esmt.
LOT 2
ROBERTA J. JANISSE
App. P.L.
LOT 1
DANIEL C. HORN
45' R/W
20'-0" Utility, Drainage & Storm Sewer Esmt.
20'-0" Utility & Drainage Esmt.
App. P.L.
App. Exist. R/W
Ashley Drive
App. Exist. R/W
10'-0" Utility, Drainage, & Sewer Esmt.
App. P.L.
LOT 26
CHRISTIE L. KINCAID
App. P.L.
20'-0" Signage Esmt.
LOT 25
KERRY A. & KENNETH M. LUCHETTA
7'-6" Utility, Drainage, & Sewer Esmt.
7'-6" Utility, Drainage, & Sewer Esmt.
App. P.L.
MATTHEW A. & MICHELLE E. MCKAIG
LOT 154
10'-0" Utility, Drainage, & Sewer Esmt.
App. P.L.
20'-0" Utility, Drainage, & Storm Sewer Esmt.
JESSE E. & AMY B. LANGE
LOT 153
25'-0" Utility, Drainage, & Sewer Esmt.
App. P.L.
RYAN & SHERI L. HUFFINE
LOT 152
App. P.L.
RUSSELL E. VANFLEEREN
LOT 151
40' Temp. R/W for Grading
App. Exist. R/W
App. P.L.
SUSAN R. MARTINEZ
LOT 150
App. P.L.
LOT 149
AMANDA & TODD FIELDS
App. P.L.
LOT 148
GLEN O. & TRACY MCPHERSON
App. P.L.
LOT 147
ASHLEY M. & ERIC P. BOYER
App. P.L.
LOT 146
KOBI ELMORE
App. P.L.
25'-0" Utility, Drainage, & Sewer Esmt.
LOT 145
SHERRY D. VANLANDINGHAM
App. P.L.
LOT 144
AMY M. MITCHELL
App. P.L.
CHRISTOPHER JENSEN
LOT 143
20'-0" Signage Esmt.
R/W
App. Exist. R/W
20'-0" Utility, Drainage, & Sewer Esmt.
10'-0" Utility, Drainage, & Storm Sewer Esmt.
App. Section Line
App. P.L.
20'-0" Signage Esmt.
LOT 142
MARY R. THEADEMAN
25'-0" Utility & Drainage Esmt.
20'-0" Drainage Esmt.
Temp. R/W for Grading
R/W
App. Exist. R/W
App. Exist. R/W
Witt Road
Line "PR-B"
App. Section Line
CITY OF LEBANON, INDIANA
App. P.L.
App. P.L.
App. Exist. R/W
END PAVING EXCEPTION
17+64.21 "PR-B"
Reynolds Legal Drain Esmt.
75'-0" Reynolds Legal Drain Esmt.
LOT 1
App. P.L.
BRENT & COLETTE PETERS
App. P.L.
App. Exist. R/W
Ashley Drive
KURT KELLER & SIDNEY WEAVER
LOT 51
15'-0" Utility & Drainage Esmt.
App. P.L.
App. Exist. R/W
App. P.L.
LOT 52
EDWARD C. ALM
App. P.L.
LOT 53
DANIEL & TIA BOICE
App. Exist. R/W
6'-6" Utility & Drainage Esmt.
8'-6" Utility & Drainage Esmt.
App. Exist. R/W
Thomas Drive
App. Exist. R/W
App. P.L.
25' R/W
40' Temp. R/W for Drive Const.
35' Temp. R/W for Grading
STEVEN R. & RHODA J. VANAUSDALL
App. P.L.
LOT 129
JULIE A. YOUNG
15'-0" Utility & Drainage Esmt.
App. P.L.
LOT 130
KAREN CLINE
App. P.L.
10'-0" Utility & Drainage Esmt.
45' Temp. R/W for Drive Const.
App. Exist. R/W
App. P.L.
LOT 131
DAVID & AMY MCCAULEY
App. P.L.
LOT 132
JEREMY D. & RACHEL E. HODGES
App. P.L.
LOT 133
SHARINA K. SHELLEY
App. P.L.
LOT 134
NATHAN A. HOLLINGER
App. P.L.
JAY K. & NANCY J. GYER
LOT 135
15'-0" Utility & Drainage Esmt.
App. P.L.
App. Exist. R/W
Austin Drive
App. Exist. R/W
LOT 111
JENNIFER L. DAVIS
7'-6" Utility & Drainage Esmt.
15'-0" Utility & Drainage Esmt.
15'-0" Utility & Drainage Esmt.
10'-0" Utility & Drainage Esmt.
App. P.L.
App. Section Line
26 23
25 24
App. Section Line

Rolling Meadows

SEC. 25, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

DATE	REVISION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP
CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAT NO. 1

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	5 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Pdf.plt.cfg
Indiana_Shade.tbl

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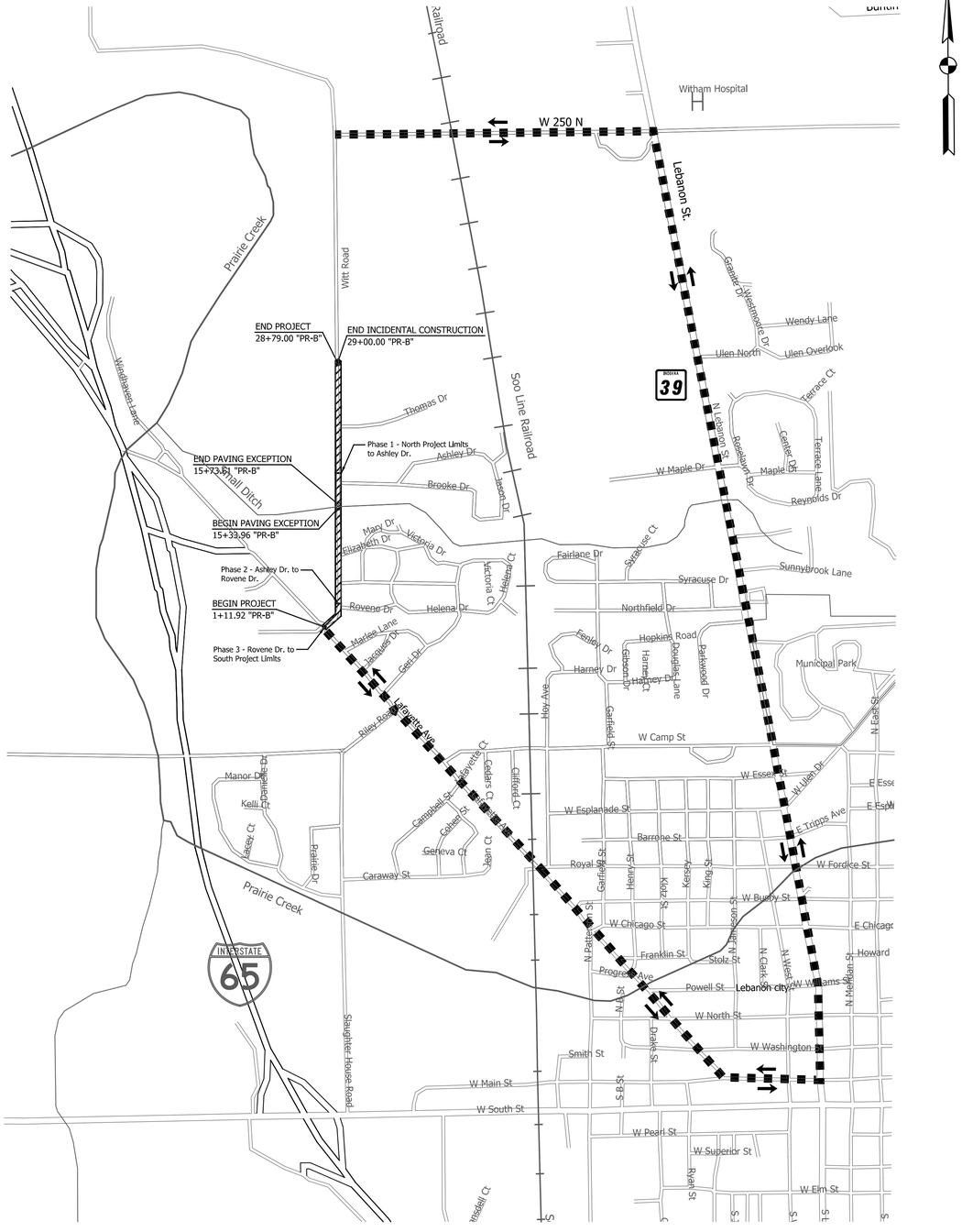

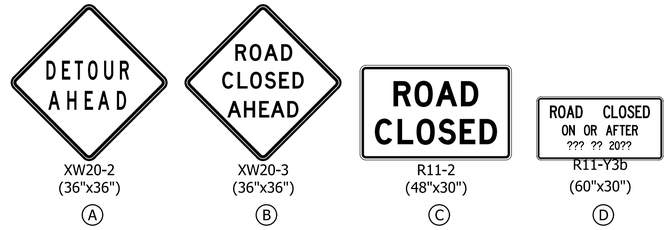

Note To Reviewer: Signage Will Be Updated In A Future Submittal.
Pedestrian MOT to be provided in A Future Submittal.

DATE	REVISION

LEGEND

- Barricade
- Construction Sign
- Direction of Traffic
- Road Closure Assembly
- Detour Route
- Work Area

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
DETOUR PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 750'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721

SURVEY BOOK	SHEETS
N/A	9 of 62
CONTRACT	PROJECT
R-44251	2101721

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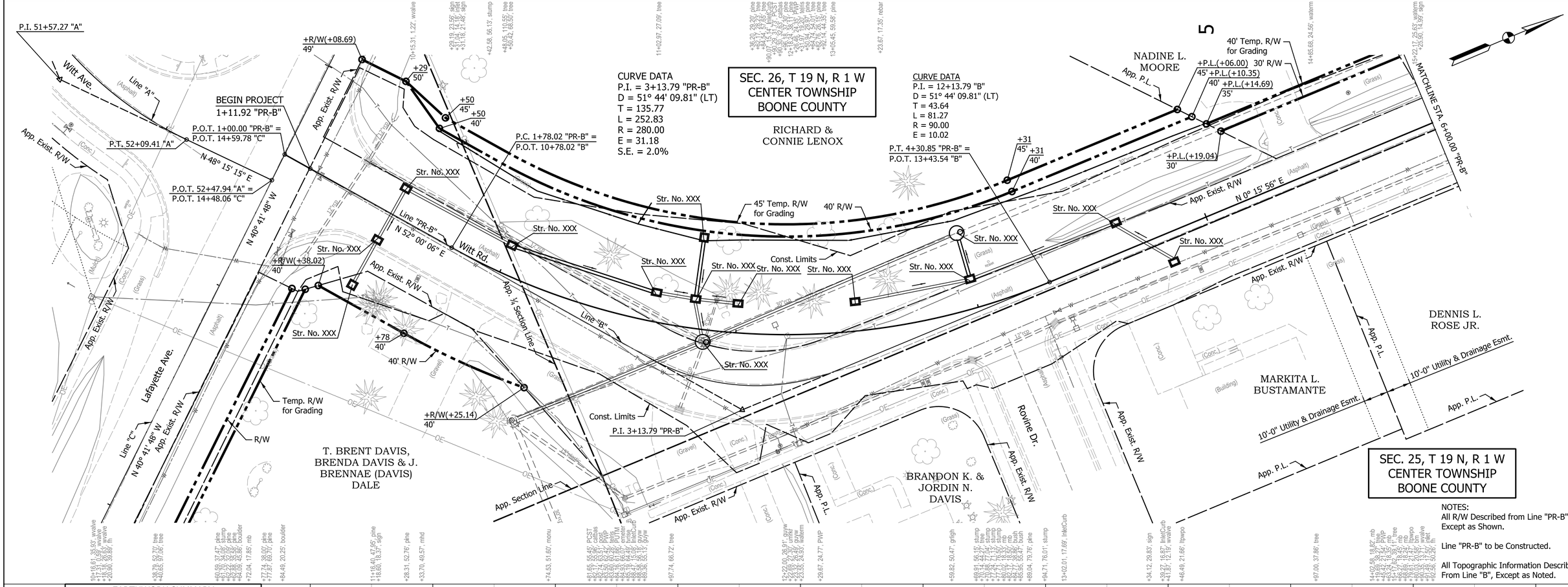


NOTES:
All R/W Described from Line "PR-B" Except as Shown.

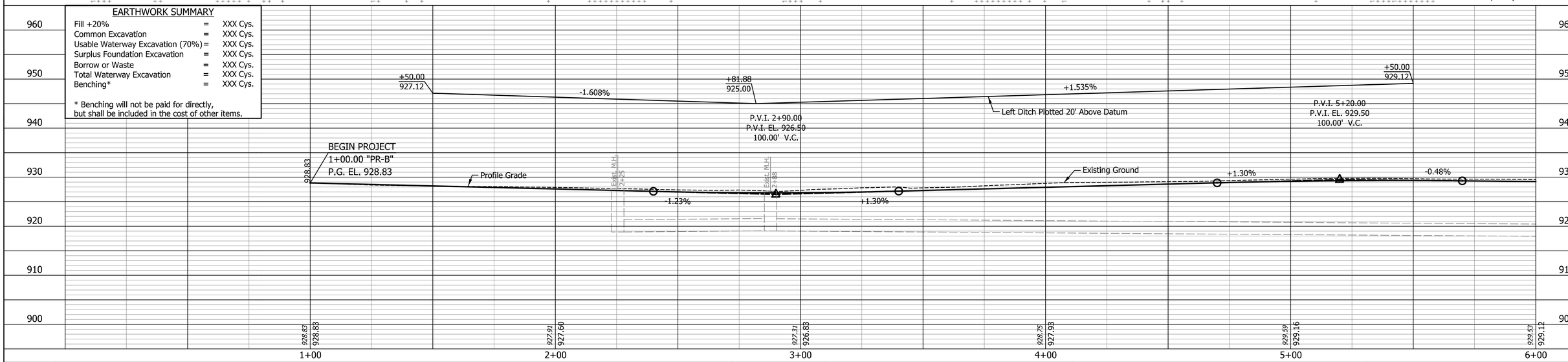
Line "PR-B" to be Constructed.

All Topographic Information Described From Line "B", Except as Noted.

EARTHWORK SUMMARY

Fill +20%	=	XXX Cys.
Common Excavation	=	XXX Cys.
Usable Waterway Excavation (70%)	=	XXX Cys.
Surplus Foundation Excavation	=	XXX Cys.
Borrow or Waste	=	XXX Cys.
Total Waterway Excavation	=	XXX Cys.
Benching*	=	XXX Cys.

* Benching will not be paid for directly, but shall be included in the cost of other items.



DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	2101721
SURVEY BOOK	SHEETS
N/A	10 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Rdf.dgn
Indiana_Shade.tbl

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SEC. 26, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

GAROLD J. & LISA D. CHRISTY

JEFFREY A. & KIMBERLY S. RODGERS

MICHAEL J. MCFERON

RONALD E. & BRENDA A. MCDONALD

RONALD MILLER JR.

DENNIS L. ROSE JR.

JAMES A. KOONTZ & BRITTANY J. FLOYD

JAMES A. KOONTZ & BRITTANY J. FLOYD

ERICA L. BABB

SEC. 25, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

MATCHLINE STA. 6+00.00 "PR-B"

MATCHLINE STA. 12+00.00 "PR-B"

Line "PR-B"

Witt Rd.

N 0° 15' 56" E

Elizabeth Dr.

App. P.L.

App. Exist. R/W

App. Section Line

25'-0" Utility Esmt.

7'-6" Utility & Drainage Esmt.

15'-0" Storm Drain Esmt.

Const. Limits

40' Temp. R/W for Drive Const.

30' Temp. R/W for Grading

35' Temp. R/W for Grading

30' R/W

25' R/W

+P.L.(+38.57) 35'

+P.L.(+51.73) 35'

+P.L.(+51.73) 40'

+P.L.(+51.73) 30'

+P.L.(+71.73) 40'

+P.L.(+71.73) 35'

+P.L.(+71.73) 30'

+P.L.(+21.95) 25'

+P.L.(+21.95) 30'

+P.L.(+06.95) 25'

+P.L.(+06.95) 30'

+00 30'

+00 40'

+25 30'

+25 40'

Str. No. XXX

15+22.17, 25.63', waterm
+25.90, 14.89', sign

16+31.74, 20.49', rebar

+41.14, 37.89', tree

+80.77, 37.82', tree

17+54.24, 49.70', pine
+57.23, 28.85', pine
+59.66, 26.54', waterm
+60.59, 27.87', wvalve
+64.51, 24.21', PWP
+69.37, 15.45', gv/w
+70.23, 30.75', gv/w
+70.80, 40.70', gv/w

+97.94, 42.50', tree

18+46.92, 41.05', grligh

19+61.45, 15.43', sign

20+54.76, 20.09', boulder

+85.29, 28.98', waterm
+89.35, 18.34', rebar

15+17.62, 39.11', tree

+66.27, 18.45', mb
+68.69, 18.24', mb

+79.61, 21.47', ltpwpo
+80.03, 20.58', bm

+90.35, 13.71', wvalve
+91.39, 17.50', inlet
+92.06, 30.26', lm

16+13.35, 36.40', mhs

+26.71, 25.36', sign
+27.23, 16.99', inlet

16+15.65, 64.64', bush

15+89, 34.64', tree

+45.89

+84.26, 17.75', mb

17+28.45, 18.35', mb
+31.72, 20.97', PWP

+74.88, 33.50', tree

+85.75, 9.01', wvalve

18+00.35, 33.40', tree

+26.92, 19.20', wall

+91.59, 12.56', mb
+94.25, 18.54', mb
+94.93, 18.13', ltpwpo

19+13.02, 18.48', boulder

+37.73, 21.98', bush

+42.07, 18.62', boulder
+42.79, 18.10', bush

+65.81, 16.52', mb

20+02.72, 20.99', boulder

+07.84, 17.40', umhfr

+15.72, 21.25', boulder

+52.78, 12.70', mb
+84.17, 18.58', gv/w

All R/W Described from Line "PR-B" Except as Shown.

Line "PR-B" to be Constructed.

All Topographic Information Described From Line "B", Except as Noted.

TBM #201 - Magnail set West Face of Power Pole of the Southeast Intersection of Witt Rd and Elizabeth Dr - Elev. 929.84

P.V.I. 8+10.00
P.V.I. EL. 928.11
100.00' V.C.

P.V.I. 10+25.00
P.V.I. EL. 929.19
109.76' V.C.

M.H. 9+25
Str. No. XXX

M.H. 11+00
Str. No. XXX

M.H. 12+00
Str. No. XXX

Profile Grade

Existing Ground

-0.48%

+0.50%

+0.50%

-2.30%

-2.30%

960
950
940
930
920
910
900

929.53
929.12
929.03
928.64
928.89
928.24
928.92
928.56
929.39
928.95
928.28
927.46
925.52
925.18

5+00
7+00
8+00
9+00
10+00
11+00
12+00

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	2101721
SURVEY BOOK	SHEETS
N/A	11 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Rdf.dfcfg
Indiana_Shade.tbl

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SEC. 26, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

15

Note to Reviewer:
Separate improvements to Witt Rd over Small Reynolds Ditch have been completed by others.

12'-6" Utility & Drainage Esmt.

12'-6" Utility & Drainage Esmt.

HEATHER S. & SHAWN M. JONES

DOUGLAS M. PODGERS

MATTEW & ANGELA SUMMERS

LEBANON PLACE APARTMENTS II, LLC

HICKORY MEADOWS SECTION 1 HOMEOWNERS ASSOC., INC.

DANIEL C. HORN

45' Temp. R/W for Drive Const.

35' Temp. R/W for Grading

45' Temp. R/W for Drive Const.

15'-0" Storm Drain Esmt.

75'-0" Reynolds Legal Drain Esmt.

20'-0" Drainage Esmt.

20'-0" Utility, Drainage & Storm Sewer Esmt.

25'-0" Utility, Drainage, & Sewer Esmt.

20'-0" Signage Esmt.

Small Reynolds Ditch (Do Not Disturb)

Reynolds Legal Drain Esmt.

Ashley Dr.

+P.L.(+71.73) 42'

+P.L.(+71.73) 35'

+P.L.(+71.73) 30'

R/W Aquired by Others +95 42'

+P.L.(+36.31) 65'

+P.L.(+37.58) 45'

+P.L.(+37.77) 42'

+R/W(+35.05) 45'

45' R/W

30' R/W

Const. Limits

App. Exist. R/W

Str. No. XXX

Witt Rd.

Line "PR-B" N 0° 15' 56" E

P.I. 15+73.61 "PR-B" = 00°00'00" LT. (No Curve Run)

App. Section Line

END PAVING EXCEPTION 17+64.21 "PR-B"

MATCHLINE STA. 12+00.00 "PR-B"

MATCHLINE STA. 18+00.00 "PR-B"

+P.L.(+01.95) 25'

+P.L.(+01.95) 30'

+P.L.(+16.77) 25'

+P.L.(+16.72) 30'

ERICA L. BABB

Victoria Dr.

BEGIN PAVING EXCEPTION 13+54.90 "PR-B"

MICHAEL R. & CONNIE S. THATCHER, TRUSTEES

CITY OF LEBANON, INDIANA

DEED GAP

BRENT & COLETTE PETERS

15'-0" Elec. Line Esmt.

75'-0" Reynolds Legal Drain Esmt.

Reynolds Legal Drain Esmt.

SEC. 25, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

NOTES:
All R/W Described from Line "PR-B", Except as Shown.

Line "PR-B" to be Constructed.

All Topographic Information Described From Line "B", Except as Noted.

TBM #202 - Cut "X" Northwest Corner of Fire Hydrant at the Southest Corner of Witt Rd and Ashley Dr - Elev. 926.69

P.V.I. 12+25.00
P.V.I. El. 924.59
100.00' V.C.

BEGIN PAVING EXCEPTION
13+54.90 "PR-B"
P.G. EL. 922.24

P.V.I. 17+75.00
P.V.I. El. 924.50
100.00' V.C.

END PAVING EX
17+64.21 "PR-
P.G. EL. 924.83

M.H. 12+00 Str. No. XXX

M.H. 13+00 Str. No. XXX

M.H. 14+30 Str. No. XXX

Exist. M.H. 15+80

M.H. 17+00 Str. No. XXX

-1.80%

+0.45%

Existing Ground

95.33 ft. of 15" Pipe at 0.40 %

125.33 ft. of 18" Pipe at 0.40 %

117.30 ft. of 18" Pipe at 0.50 %

918.72 925.18 925.52

918.34 923.24 923.08

918.09

917.59 921.86

917.59

917.00 921.69

922.16

923.33

925.74 925.04

950 940 930 920 910 900

12+00 13+00 14+00 15+00 16+00 17+00 18+00

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	2101721
SURVEY BOOK	SHEETS
N/A	12 of 67
CONTRACT	PROJECT
R-44251	2101721

Indy-Pelf.pltCfg
Indiana_Shade.tbl

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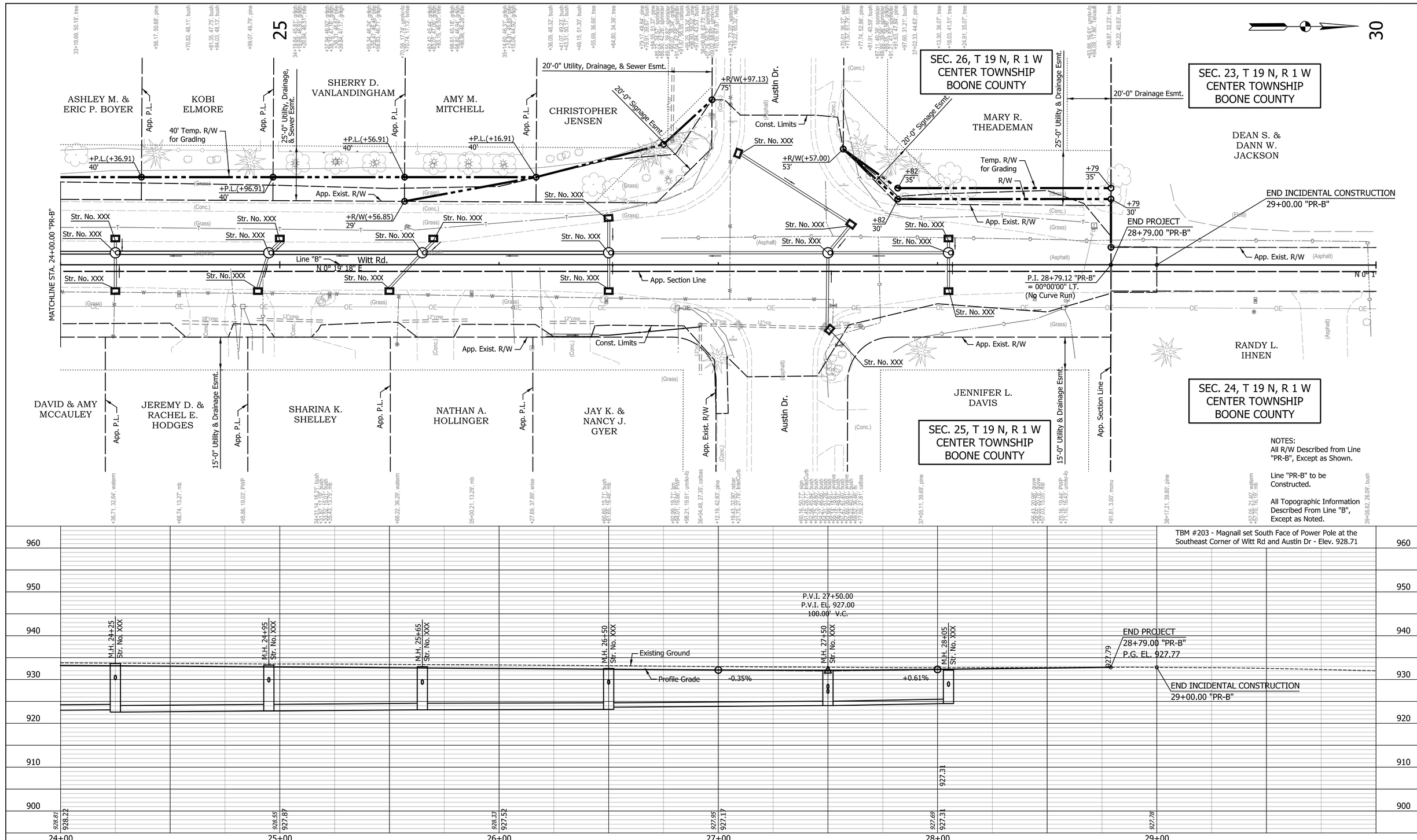

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 10'	2101721
SURVEY BOOK	SHEETS
N/A	14 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Ref.dfcfg
Indiana_Shade.tbl

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10

15

SEC. 26, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

KRISTOFER M. & ALYS PERRY

COREY A. HERRON

PAUL A. & MELISSA STRODE

MICHELLE D. & LESLEE BOWMAN

CLEAR VISTA HOMEOWNERS ASSOCIATION, INC.

CLEAR VISTA HOMEOWNERS ASSOCIATION, INC.

SHAWN CHAPMAN

SARA K. STRANGE

T. BRENT DAVIS, BRENDA DAVIS & J. BRENNAE (DAVIS) DALE

RICHARD & CONNIE LENOX

Mar Lee Ln.

Witt Rd.

Witt Ave.

Lafayette Ave.

App. P.L.

App. Exist. R/W

App. Sec. Line

App. ¼ Sec. Line

15' D.E.

10' D.E.

20' D.&U.E.

20' S.L.E.

25' D.&U.E.&L.M.A.E.

P.I. 51+57.27 "A"

Line "A"

N 48° 15' 15" E

P.O.T. 14+48.06 "C" =
P.O.T. 52+47.94 "A"

BEGIN PROJECT
1+11.92 "PR-B"

P.O.T. 10+00.00 "C"

BEGIN INCIDENTAL CONSTRUCTION
11+26.00 "C"

Line "C"

N 41° 21' 48" W

P.I. 12+00.00 "C"

N 40° 41' 48" W

+00.11
18.74' RT.

+25.99
25.21' RT.

+25.96
31.41' RT.

+00.14
24.74' RT.

+11.62
18.74' RT.

+11.61
24.74' RT.

+33.50
47.77' RT.

+39.49
48.06' RT.

Const. Limits

R/W
Temp. R/W
for Grading

22' R

Line "PR-B"

(Asphalt)

(Concrete)

(Grass)

(Gravel)

(Building)

(Multi)

(Vinyl)

(Industry)

12"RCP

STM

OE

W

F

X1

X2

F1

LEGEND

- (C) PCCP For Approaches, 6 in., on Dense Graded Subbase, on Subgrade Treatment, Type II
- (D) HMA For Approaches, Type TBD
- (F) Concrete Sidewalk, 4 in.
- (F1) Multi-Use Path (See Typical Sections)
- (K) Full Depth QC/QA-HMA Pavement (See Typical Sections)
- (P) HMA Patching, Full depth, Type B
- (O) Compacted Aggregate No. 53, 6 in.
- (R) Milling, Asphalt, 1.5in. and Resurface (See Typical Sections)
- (15) Combined Concrete Curb and Gutter, Type II
- (X) Curb Ramp, Concrete

NOTES:
All R/W Described from Line "C"
Except as Shown.

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "C"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	16 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Prof.dfcfg
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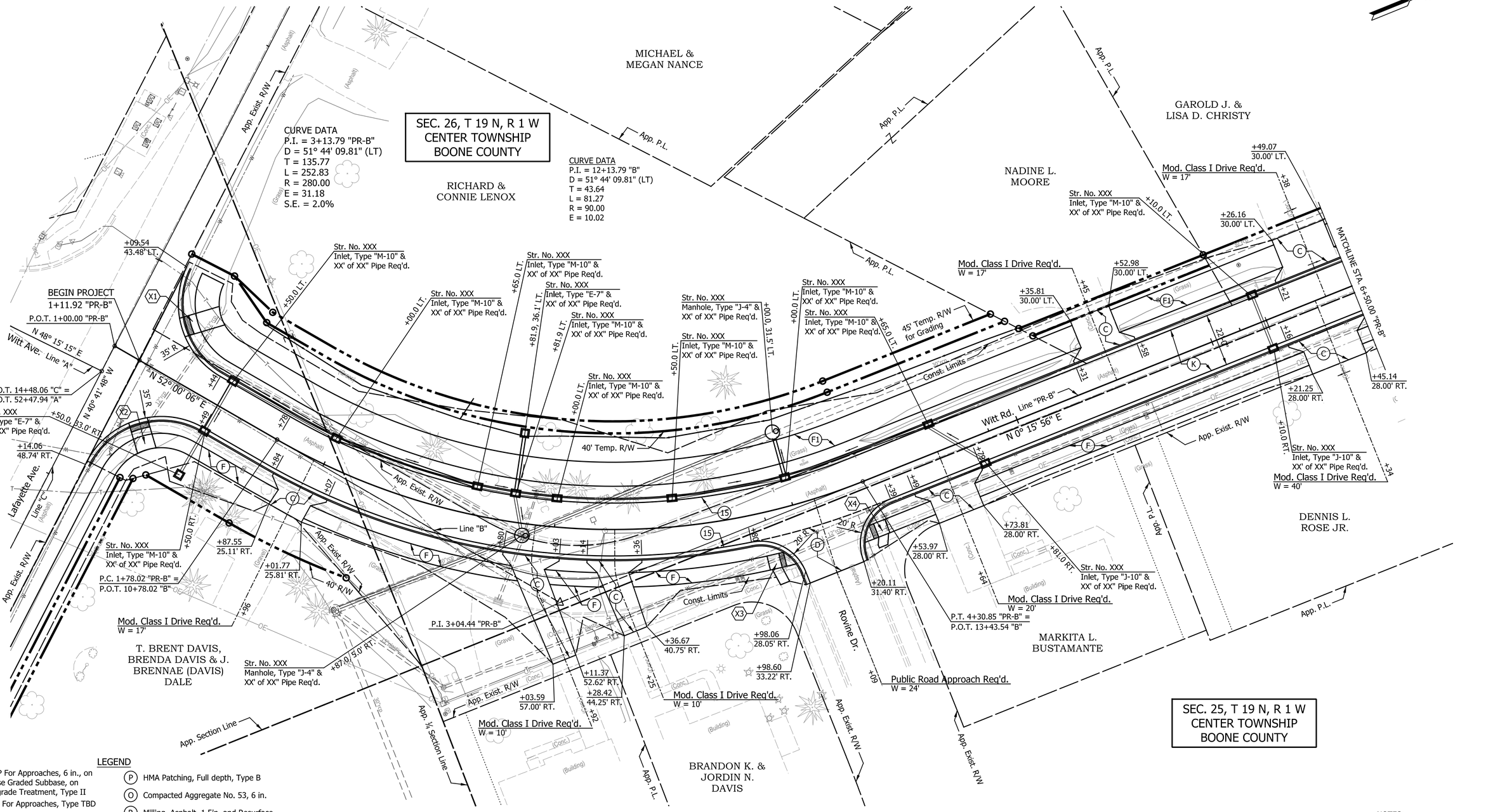

LEGEND

- (C) PCCP For Approaches, 6 in., on Dense Graded Subbase, on Subgrade Treatment, Type II
- (D) HMA For Approaches, Type TBD
- (F) Concrete Sidewalk, 4 in.
- (F1) Multi-Use Path (See Typical Sections)
- (K) Full Depth QC/QA-HMA Pavement (See Typical Sections)
- (P) HMA Patching, Full depth, Type B
- (O) Compacted Aggregate No. 53, 6 in.
- (R) Milling, Asphalt, 1.5in. and Resurface (See Typical Sections)
- (15) Combined Concrete Curb and Gutter, Type II
- (X) Curb Ramp, Concrete

SEC. 25, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

NOTES:
All R/W Described from Line "PR-B" Except as Shown.

Line "PR-B" to be Constructed.

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	17 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Prof.dtcfg
Indiana_Shade.tbl

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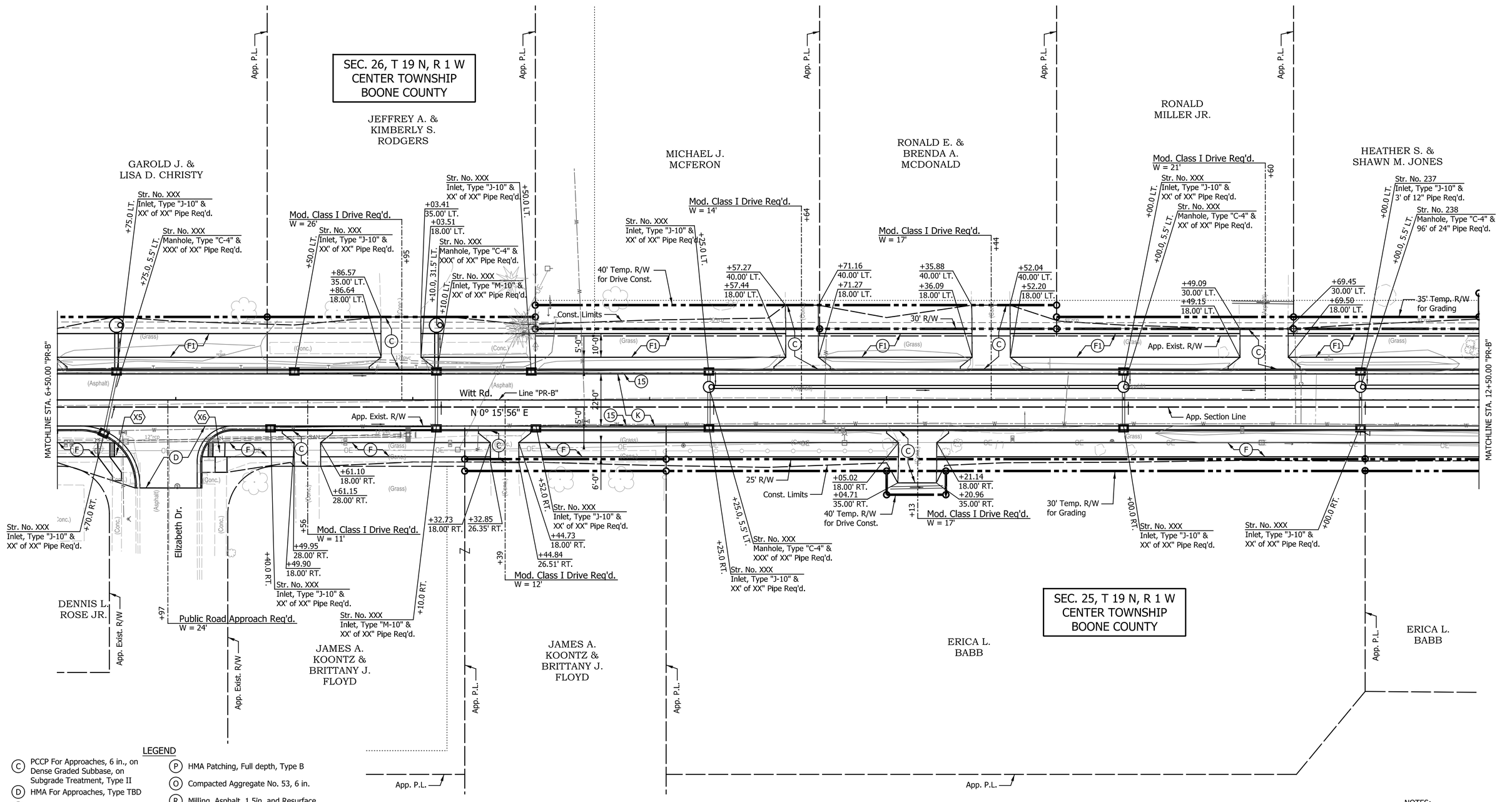

LEGEND

- (C) PCCP For Approaches, 6 in., on Dense Graded Subbase, on Subgrade Treatment, Type II
- (D) HMA For Approaches, Type TBD
- (F) Concrete Sidewalk, 4 in.
- (F1) Multi-Use Path (See Typical Sections)
- (K) Full Depth QC/QA-HMA Pavement (See Typical Sections)
- (P) HMA Patching, Full depth, Type B
- (O) Compacted Aggregate No. 53, 6 in.
- (R) Milling, Asphalt, 1.5in. and Resurface (See Typical Sections)
- (15) Combined Concrete Curb and Gutter, Type II
- (X) Curb Ramp, Concrete

NOTES:
All R/W Described from Line "PR-B" Except as Shown.

Line "PR-B" to be Constructed.

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	18 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Prof.dftcfg
Indiana_Shade.tbl
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SEC. 26, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

DOUGLAS M. PODGERS

MATTEW & ANGELA SUMMERS

HICKORY MEADOWS SECTION 1 HOMEOWNERS ASSOC., INC.

ROBERTA J. JANISSE

DANIEL C. HORN

CHRISTIE L. KINCAID

KERRY A. & KENNETH M. LUCHETTA

ERICA L. BABB

MICHAEL R. & CONNIE S. THATCHER, TRUSTEES

CITY OF LEBANON, INDIANA

BRENT & COLETTE PETERS

KURT KELLER & SIDNEY WEAVER

SEC. 25, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

Witt Rd. Line "PR-B"

N 0° 15' 56" E

App. Section Line

MATCHLINE STA. 12+50.00 "PR-B"

MATCHLINE STA. 18+50.00 "PR-B"

Str. No. XXX
Inlet, Type "J-10" & XX' of XX" Pipe Req'd.
+00.0 LT.

Str. No. XXX
Manhole, Type "C-4" & XXX' of XX" Pipe Req'd.
+00.0, 5.5' LT.

45' Temp. R/W for Drive Const.

Mod. Class I Drive Req'd.
W = 26'
+56.79
40.00' LT.

+56.86
18.00' LT.

+82.16
40.00' LT.

+82.24
18.00' LT.

+23.89
40.00' LT.

Mod. Class I Drive Req'd.
W = 18'

45' Temp. R/W for Drive Const.

+41.57
40.00' LT.

30' R/W

35' Temp. R/W for Grading

R/W Acquired by Others

Const. Limits

Str. No. XXX
Manhole, Type "C-4" & XX' of XX" Pipe & 1 P.E.S. Req'd.

Small Reynolds Ditch (Do Not Disturb)

Floodway

+41.67
18.00' LT.

+24.19
18.00' LT.

+03.26
16.38' LT.

+41.00
16.49' LT.

+77.61
16.48' LT.

App. Exist. R/W

Const. Limits

45' R/W

+61.78
64.57' LT.

+94.65
48.58' LT.

+91.19
69.25' LT.

Str. No. XXX
Manhole, Type "C-4" & XXX' of XX" Pipe Req'd.
+70.0, 38.0' LT.

Public Road Approach Req'd.
W = 30'

Ashley Dr.

Str. No. XXX
Inlet, Type "J-10" & XX' of XX" Pipe Req'd.
+00.0 LT.

Str. No. XXX
Manhole, Type "C-4" & XXX' of XX" Pipe Req'd.
+85.0, 5.5' LT.

+28.31
18.32' LT.

+63.47
19.65' LT.

END PAVING EXCEPTION
17+64.21 "PR-B"

+25.70
11.25' RT.

+64.63
11.00' RT.

Const. Limits
30' R/W

Str. No. XXX
Inlet, Type "J-10" & XX' of XX" Pipe Req'd.
+00.0 RT.
6'-0"

+30.51
31.00' RT.

+30.51
34.44' RT.

+54.90
34.44' RT.

BEGIN PAVING EXCEPTION
13+54.90 "PR-B"

Public Road Approach Req'd.
W = 25'

Victoria Dr.

Str. No. XXX
Inlet, Type "A-2" & XX' of XX" Pipe Req'd.

+94.61
56.09' RT.

+94.62
62.24' RT.

+66.29
62.37' RT.

Public Road Approach Req'd.
W = 28'

Str. No. XXX
Inlet, Type "A-2" & XX' of XX" Pipe Req'd.

+30.0, 33.0' RT.

+05.0' RT.

Str. No. XXX
Mod. Manhole, Type "J-10" & XX' of XX" Pipe Req'd.

DEED GAP

App. Exist. R/W

App. P.L.

LEGEND

- (C) PCCP For Approaches, 6 in., on Dense Graded Subbase, on Subgrade Treatment, Type II
- (D) HMA For Approaches, Type TBD
- (F) Concrete Sidewalk, 4 in.
- (F1) Multi-Use Path (See Typical Sections)
- (K) Full Depth QC/QA-HMA Pavement (See Typical Sections)
- (P) HMA Patching, Full depth, Type B
- (O) Compacted Aggregate No. 53, 6 in.
- (R) Milling, Asphalt, 1.5in. and Resurface (See Typical Sections)
- (15) Combined Concrete Curb and Gutter, Type II
- (X) Curb Ramp, Concrete

NOTES:
All R/W Described from Line "PR-B" Except as Shown.

Line "PR-B" to be Constructed.

DATE	REVISION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP
CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721

SURVEY BOOK	SHEETS
N/A	19 of 67
CONTRACT	PROJECT
R-44251	2101721

Indy-ehf.dftcfg
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CHRISTIE L. KINCAID

MATTHEW A. & MICHELLE E. MCKAIG

KERRY A. & KENNETH M. LUCHETTA

JESSE E. & AMY B. LANGE

RYAN & SHERI L. HUFFINE

RUSSELL E. VANFLEEREN

SUSAN R. MARTINEZ

AMANDA & TODD FIELDS

GLEN O. & TRACY MCPHERSON

ASHLEY M. & ERIC P. BOYER

SEC. 26, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

SEC. 25, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

KURT KELLER & SIDNEY WEAVER

EDWARD C. ALM

DANIEL & TIA BOICE

STEVEN R. & RHODA J. VANAUSDALL

JULIE A. YOUNG

KAREN CLINE

DAVID & AMY MCCAULEY

JEREMY D. & RACHEL E. HODGES

Witt Rd. Line "PR-B"
N 0° 15' 56" E

Thomas Dr.

MATCHLINE STA. 18+50.00 "PR-B"

MATCHLINE STA. 24+50.00 "PR-B"

LEGEND

- (C) PCCP For Approaches, 6 in., on Dense Graded Subbase, on Subgrade Treatment, Type II
- (D) HMA For Approaches, Type TBD
- (F) Concrete Sidewalk, 4 in.
- (F1) Multi-Use Path (See Typical Sections)
- (K) Full Depth QC/QA-HMA Pavement (See Typical Sections)
- (P) HMA Patching, Full depth, Type B
- (O) Compacted Aggregate No. 53, 6 in.
- (R) Milling, Asphalt, 1.5in. and Resurface (See Typical Sections)
- (15) Combined Concrete Curb and Gutter, Type II
- (X) Curb Ramp, Concrete

NOTES:
All R/W Described from Line "PR-B" Except as Shown.

Line "PR-B" to be Constructed.

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721

SURVEY BOOK	SHEETS
N/A	20 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Prof.dtcfg
Indiana_Shade.tbl

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25

30

SEC. 26, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

SEC. 23, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

SEC. 25, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

SEC. 24, T 19 N, R 1 W
CENTER TOWNSHIP
BOONE COUNTY

KOBI ELMORE

SHERRY D. VANLANDINGHAM

AMY M. MITCHELL

CHRISTOPHER JENSEN

MARY R. THEADEMAN

DEAN S. & DANN W. JACKSON

JEREMY D. & RACHEL E. HODGES

SHARINA K. SHELLEY

NATHAN A. HOLLINGER

JAY K. & NANCY J. GYER

JENNIFER L. DAVIS

RANDY L. IHNEN

Austin Drive

Witt Rd.

Line "PR-B"

N 0° 19' 18" E

MATCHLINE STA. 24+50.00 "PR-B"

App. P.L.

App. Exist. R/W

App. Section Line

40' Temp. R/W for Grading

Const. Limits

Temp. R/W for Grading R/W

Const. Limits

Public Road Approach Req'd.
W = 30'

Public Road Approach Req'd.
W = 28'

Mod. Class I Drive Req'd.
W = 37'

Mod. Class I Drive Req'd.
W = 17'

Mod. Class I Drive Req'd.
W = 17'

Mod. Class I Drive Req'd.
W = 20'

Str. No. XXX
Manhole, Type "C-4" & XX' of XX" Pipe Req'd.

Str. No. XXX
Inlet, Type "J-10" & XX' of XX" Pipe Req'd.

Str. No. XXX
Inlet, Type "J-10" & XX' of XXX" Pipe Req'd.

Str. No. XXX
Inlet, Type "M-10" & XX' of XX" Pipe Req'd.

+95.0, 5.5' LT.
+00.0 LT.
+65.0, 5.5' LT.
+70.0 LT.
+50.0 LT.
+10.0 LT.
+50.0, 5.5' LT.
+60.0 LT.
+05.0 LT.
+05.0, 5.5' LT.
+50.0 RT.
+90.0 RT.
+50.0 RT.
+50.0, 5.5' LT.
+05.0 RT.
+50.0 RT.

+72.00
11.00' LT.
+76.86
23.58' LT.
+12.09
68.32' LT.
+42.26
68.32' LT.
+12.09
63.30' LT.
+42.20
56.22' LT.
45° R.
40' R.
28' R.

+74.96
18.00' RT.
+62.51
18.00' RT.
+41.70
18.00' RT.
+65.00
18.00' RT.
+58.92
18.00' RT.
+57.15
33.00' RT.
+58.96
31.58' RT.
+76.53
33.00' RT.
+75.02
29.87' RT.
+14.47
18.00' RT.
+14.41
33.00' RT.
+97.27
18.00' RT.
+97.49
33.00' RT.
+62.61
33.00' RT.
+79.60
18.00' RT.
+79.40
33.00' RT.
+24.92
18.00' RT.
+25.26
33.00' RT.
+41.62
33.00' RT.
+15.22
51.13' RT.
+43.06
47.35' RT.
+43.09
50.75' RT.

END PROJECT
28+79.00 "PR-B"

END INCIDENTAL CONSTRUCTION
29+00.00 "PR-B"

LEGEND

- (C) PCCP For Approaches, 6 in., on Dense Graded Subbase, on Subgrade Treatment, Type II
- (D) HMA For Approaches, Type TBD
- (F) Concrete Sidewalk, 4 in.
- (F1) Multi-Use Path (See Typical Sections)
- (K) Full Depth QC/QA-HMA Pavement (See Typical Sections)
- (P) HMA Patching, Full depth, Type B
- (O) Compacted Aggregate No. 53, 6 in.
- (R) Milling, Asphalt, 1.5in. and Resurface (See Typical Sections)
- (15) Combined Concrete Curb and Gutter, Type II
- (X) Curb Ramp, Concrete

NOTES:
All R/W Described from Line "PR-B" Except as Shown.

Line "PR-B" to be Constructed.

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "PR-B"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	21 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Prof.dfnCfg
Indiana_Shade.tbl

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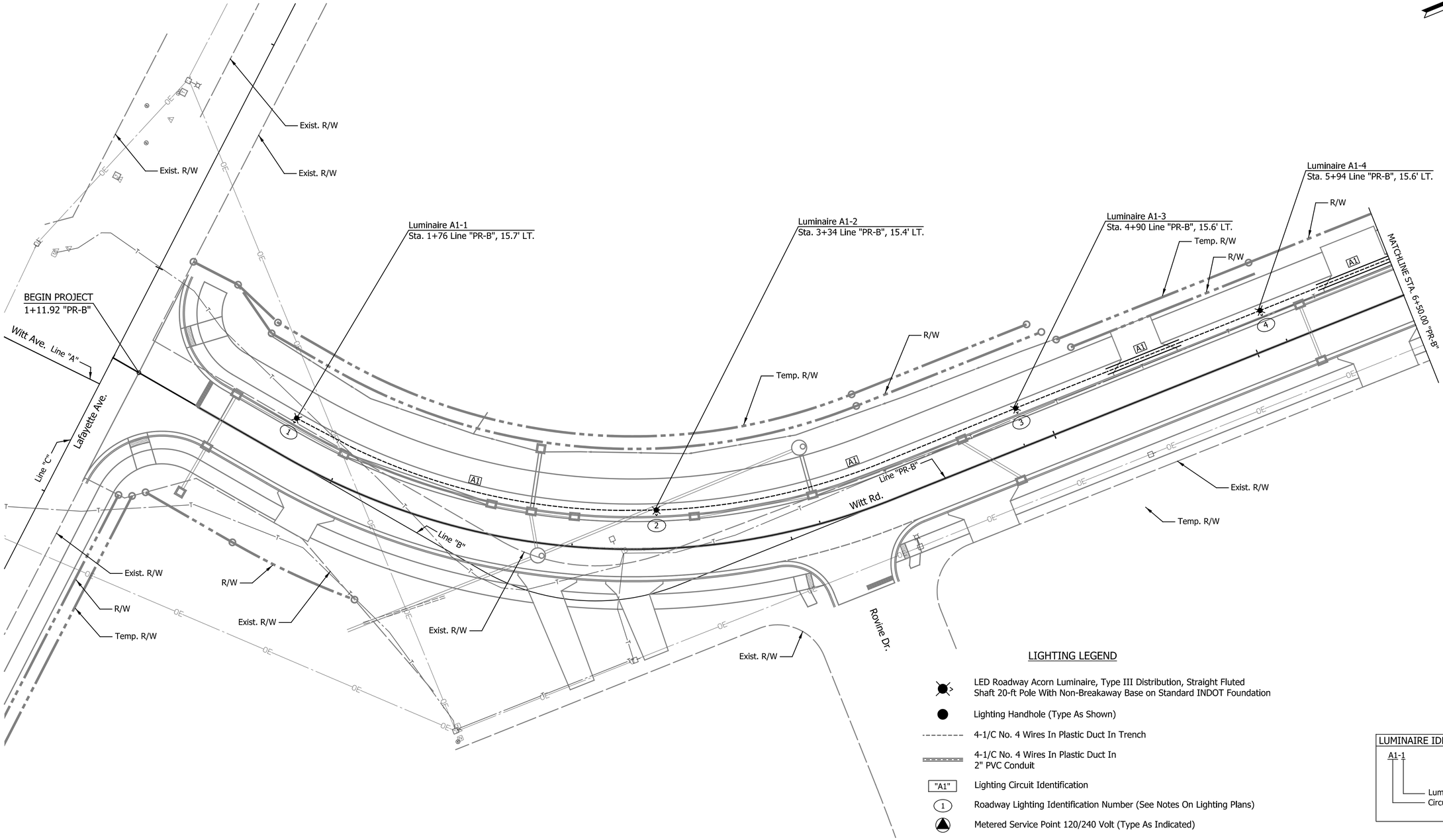

LIGHTING LEGEND

- LED Roadway Acorn Luminaire, Type III Distribution, Straight Fluted Shaft 20-ft Pole With Non-Breakaway Base on Standard INDOT Foundation
- Lighting Handhole (Type As Shown)
- 4-1/C No. 4 Wires In Plastic Duct In Trench
- 4-1/C No. 4 Wires In Plastic Duct In 2" PVC Conduit
- "A1" — Lighting Circuit Identification
- 1 — Roadway Lighting Identification Number (See Notes On Lighting Plans)
- Metered Service Point 120/240 Volt (Type As Indicated)

LUMINAIRE IDENTIFICATION

A1-1
- Luminaire Number
- Circuit Number

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SMS DRAWN: SMS

CHECKED: GMG CHECKED: GMG

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	22 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-ehf.dfcfg
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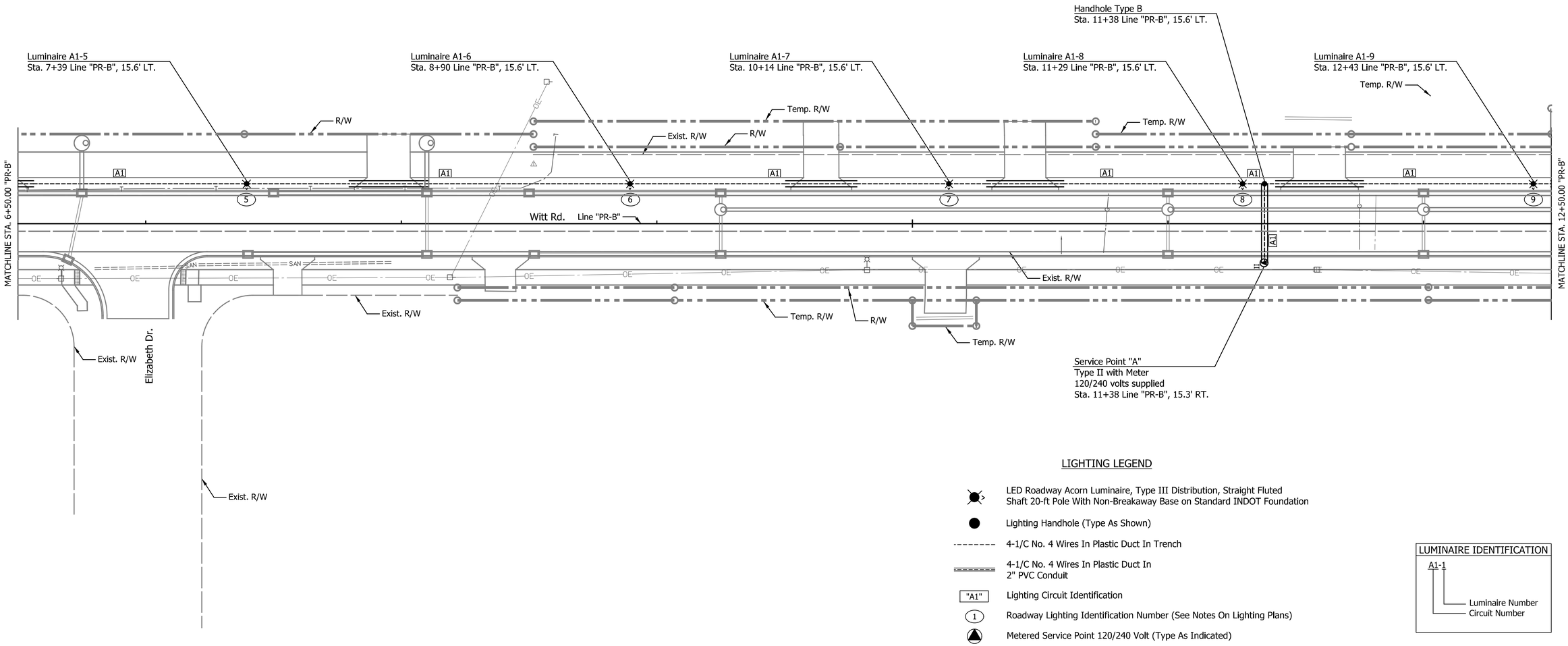

LIGHTING LEGEND

- LED Roadway Acorn Luminaire, Type III Distribution, Straight Fluted Shaft 20-ft Pole With Non-Breakaway Base on Standard INDOT Foundation
- Lighting Handhole (Type As Shown)
- 4-1/C No. 4 Wires In Plastic Duct In Trench
- 4-1/C No. 4 Wires In Plastic Duct In 2" PVC Conduit
- "A1" — Lighting Circuit Identification
- 1 — Roadway Lighting Identification Number (See Notes On Lighting Plans)
- Metered Service Point 120/240 Volt (Type As Indicated)

LUMINAIRE IDENTIFICATION

A1-1
- Luminaire Number
- Circuit Number

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SMS DRAWN: SMS

CHECKED: GMG CHECKED: GMG

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	23 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Pdf.plt.cfg
Indiana_Shade.tbl

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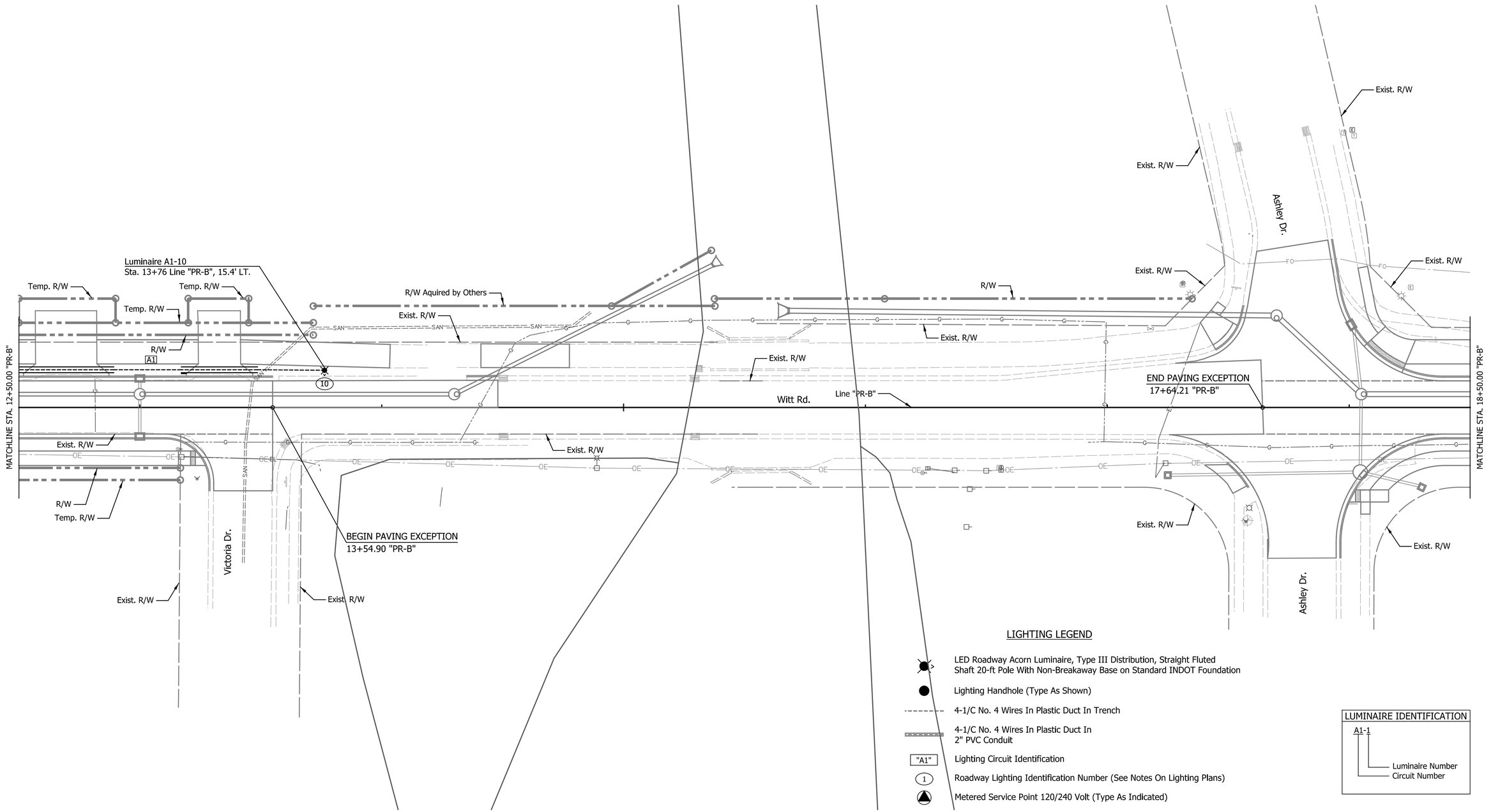

LIGHTING LEGEND

- LED Roadway Acorn Luminaire, Type III Distribution, Straight Fluted Shaft 20-ft Pole With Non-Breakaway Base on Standard INDOT Foundation
- Lighting Handhole (Type As Shown)
- 4-1/C No. 4 Wires In Plastic Duct In Trench
- 4-1/C No. 4 Wires In Plastic Duct In 2" PVC Conduit
- "A1" — Lighting Circuit Identification
- 1 — Roadway Lighting Identification Number (See Notes On Lighting Plans)
- Metered Service Point 120/240 Volt (Type As Indicated)

LUMINAIRE IDENTIFICATION

A1-1

- Luminaire Number
- Circuit Number

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SMS DRAWN: SMS

CHECKED: GMG CHECKED: GMG

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	24 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Pref.dfcfg
Indiana_Shade.tbl

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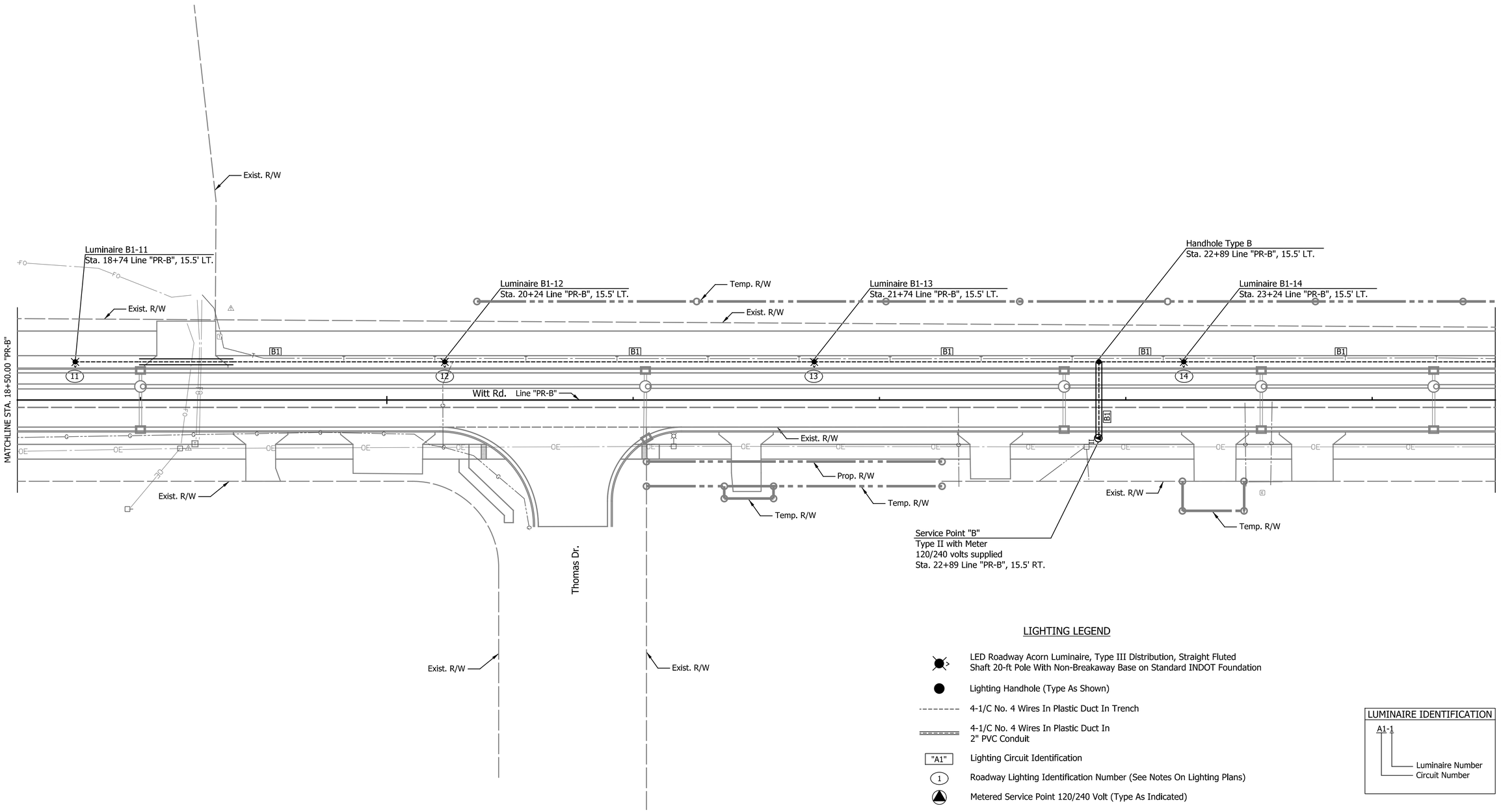

LIGHTING LEGEND

- LED Roadway Acorn Luminaire, Type III Distribution, Straight Fluted Shaft 20-ft Pole With Non-Breakaway Base on Standard INDOT Foundation
- Lighting Handhole (Type As Shown)
- 4-1/C No. 4 Wires In Plastic Duct In Trench
- 4-1/C No. 4 Wires In Plastic Duct In 2" PVC Conduit
- "A1" — Lighting Circuit Identification
- 1 — Roadway Lighting Identification Number (See Notes On Lighting Plans)
- Metered Service Point 120/240 Volt (Type As Indicated)

LUMINAIRE IDENTIFICATION

A1-1
- Luminaire Number
- Circuit Number

DATE	REVISION

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CHECKED: GMG CHECKED: GMG

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	25 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-ePdf.dfcfg
Indiana_Shade.tbl

mcoates 3/19/2024 6:15:46 AM P:\2019\01590\D. Drawings\201901590.0001.RD.LT.04.dgn

25

30

MATCHLINE STA. 24+50.00 "PR-B"

Exist. R/W

Handhole Type A
Sta. 26+80 Line "PR-B", 28.8' LT.

Luminaire B1-16
Sta. 26+23 Line "PR-B", 21.7' LT.

R/W

Luminaire B1-15
Sta. 24+74 Line "PR-B", 15.5' LT.

Temp. R/W

Exist. R/W

Austin Dr.

Exist. R/W

Handhole Type A
Sta. 27+60 Line "PR-B", 23.6' LT.

Luminaire B1-17
Sta. 27+71 Line "PR-B", 17.4' LT.

R/W

Temp. R/W

Exist. R/W

END PROJECT
28+79.00 "PR-B"

END INCIDENTAL CONSTRUCTION
29+00.00 "PR-B"

Exist. R/W

B1

15

16

17

Witt Rd. Line "PR-B"

OE

Exist. R/W

Exist. R/W

Austin Dr.

Exist. R/W

LIGHTING LEGEND

- LED Roadway Acorn Luminaire, Type III Distribution, Straight Fluted Shaft 20-ft Pole With Non-Breakaway Base on Standard INDOT Foundation
- Lighting Handhole (Type As Shown)
- 4-1/C No. 4 Wires In Plastic Duct In Trench
- 4-1/C No. 4 Wires In Plastic Duct In 2" PVC Conduit
- "A1" — Lighting Circuit Identification
- 1 — Roadway Lighting Identification Number (See Notes On Lighting Plans)
- Metered Service Point 120/240 Volt (Type As Indicated)

LUMINAIRE IDENTIFICATION

A1-1

Luminaire Number
Circuit Number

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: SMS DRAWN: SMS

CHECKED: GMG CHECKED: GMG

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING PLANS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721

SURVEY BOOK	SHEETS
N/A	26 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Prof.dfcfg
Indiana_Shade.tbl

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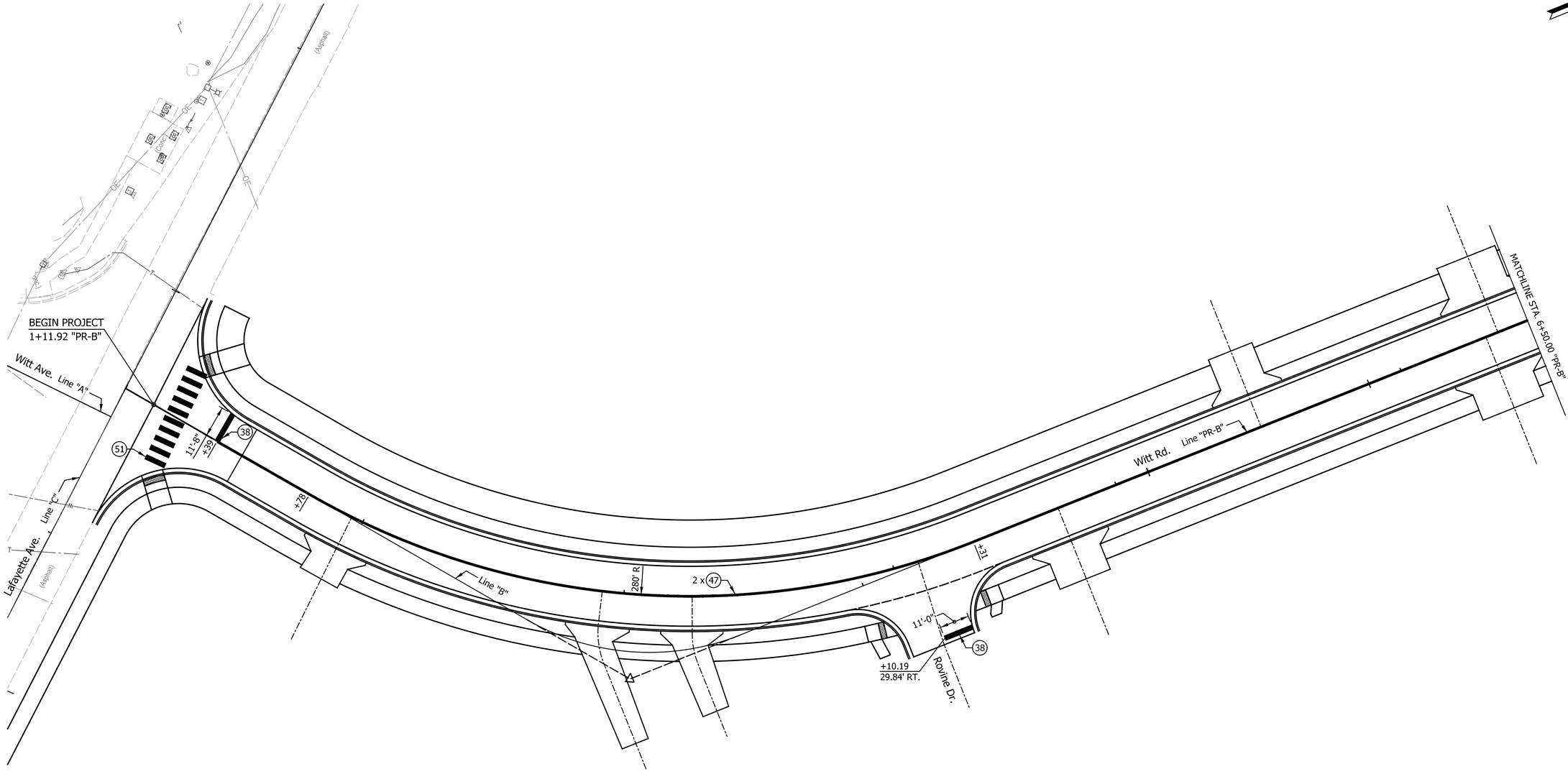


DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

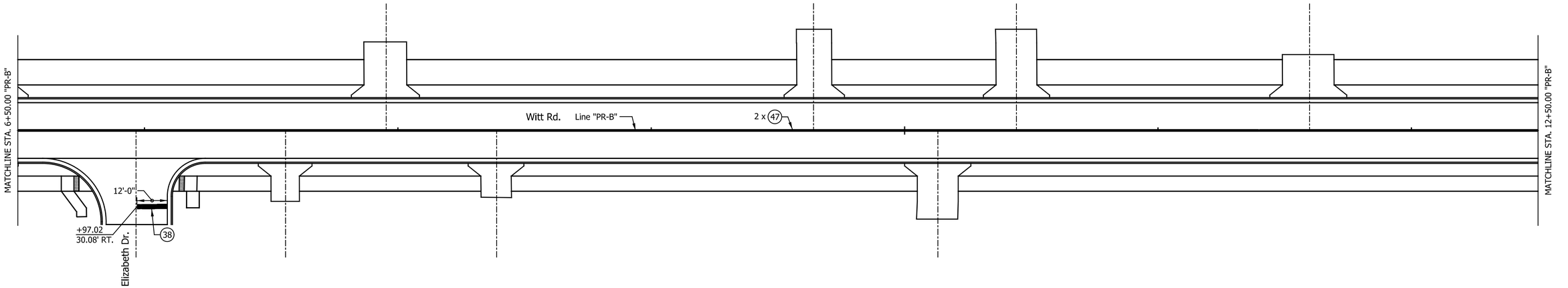
INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	27 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Pref.dfcfg
Indiana_Shade.tbl

mcoates 3/19/2024 6:15:48 AM P:\2019\01590\D. Drawings\201901590.0001.RD.PM.01.dgn



DATE	REVISION

LEGEND

(38) Transverse Markings, Thermoplastic, Stop Line, White, 24 in.

(47) Line, Thermoplastic, Solid, Yellow, 4 in.

(51) Transverse Markings, Thermoplastic, Crosswalk Line, White, 8 in.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

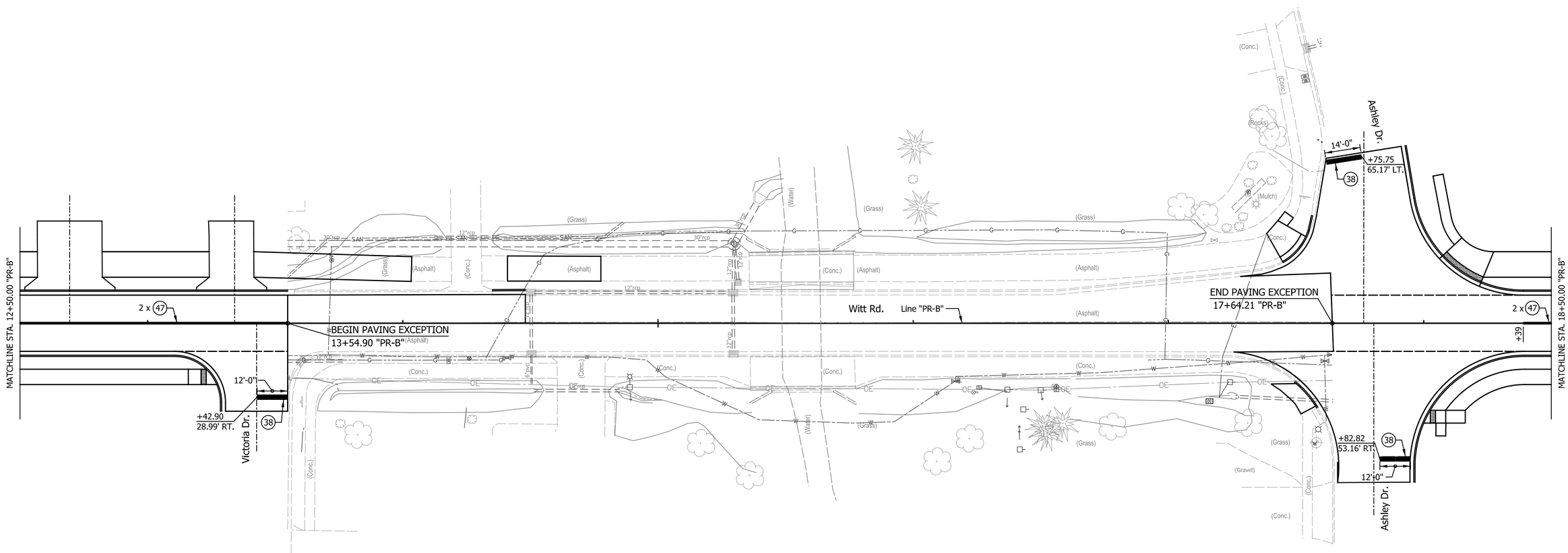
PAVEMENT MARKING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721

SURVEY BOOK	SHEETS
N/A	28 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Prof.dfcfg
Indiana_Shade.tbl

mcoates 3/19/2024 6:15:48 AM P:\2019\01590\D. Drawings\201901590.0001.RD.PM.02.dgn



DATE	REVISION

LEGEND

(38) Transverse Markings, Thermoplastic, Stop Line, White, 24 in.

(47) Line, Thermoplastic, Solid, Yellow, 4 in.

(51) Transverse Markings, Thermoplastic, Crosswalk Line, White, 8 in.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: MRO DRAWN: BLP

CHECKED: DSS CHECKED: DSS

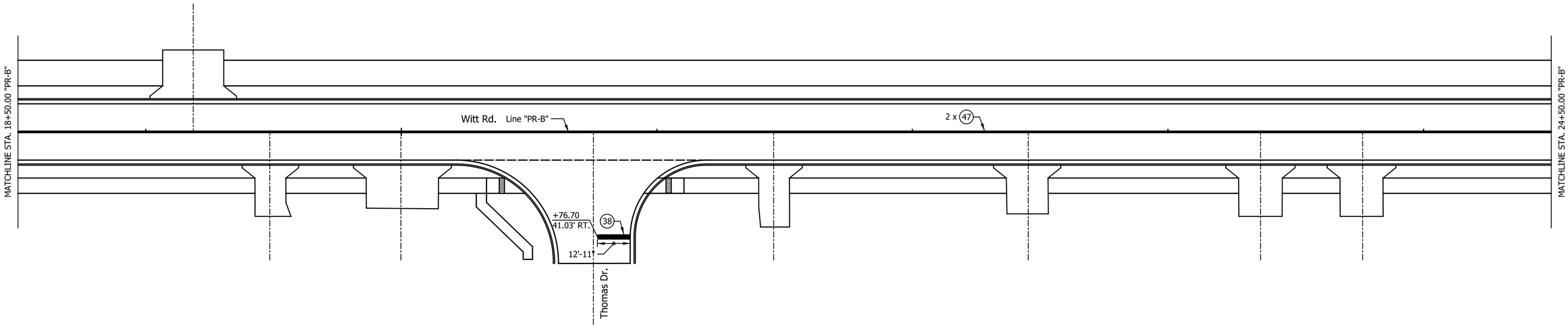
INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	29 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-ePdf.dfcfg
Indiana_Shade.tbl

mcoates 3/19/2024 6:15:49 AM P:\2019\01590\D. Drawings\201901590.0001.RD.PM.03.dgn



DATE	REVISION

LEGEND

38 Transverse Markings, Thermoplastic, Stop Line, White, 24 in.

47 Line, Thermoplastic, Solid, Yellow, 4 in.

51 Transverse Markings, Thermoplastic, Crosswalk Line, White, 8 in.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

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INDIANA
DEPARTMENT OF TRANSPORTATION

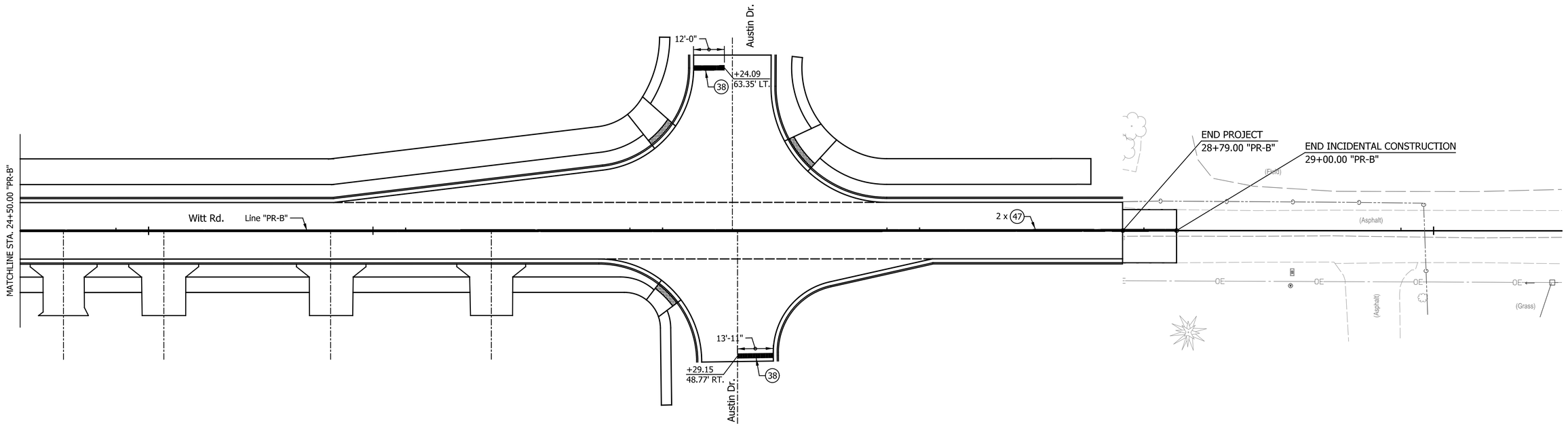
PAVEMENT MARKING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721

SURVEY BOOK	SHEETS
N/A	30 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Pref.dfcfg
Indiana_Shade.tbl

mcoates 3/19/2024 6:15:49 AM P:\2019\01590\D. Drawings\201901590.0001.RD.PM.04.dgn



DATE	REVISION

LEGEND

38 Transverse Markings, Thermoplastic, Stop Line, White, 24 in.

47 Line, Thermoplastic, Solid, Yellow, 4 in.

51 Transverse Markings, Thermoplastic, Crosswalk Line, White, 8 in.

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

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INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721

SURVEY BOOK	SHEETS
N/A	31 of 62
CONTRACT	PROJECT
R-44251	2101721

Indy-Pref.dfcfg
Indiana_Shade.tbl

mcoates 3/19/2024 6:15:50 AM P:\2019\01590\D. Drawings\201901590.0001.RD.PM.05.dgn

STRUCTURE DATA

STRUCTURE NUMBER	LOCATION					SIZE	DESCRIPTION		LENGTH	SKEW	FLOW LINE			SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL	TYPE	FLOWABLE BACKFILL	TYPE	GEOTEXTILES	REVETMENT RIPRAP	SCOUR PROTECTION				CONCRETE, CLASS A, FOR STRUCTURES	VIDEO INSPECTION	PIPE END SECTION	GRATED BOX END SECTION			SAFETY METAL END SECTION			CONNECT TO STR. NO.	CULVERT ASSET ID	REMARKS
	STATION	LEFT	RIGHT	CROSS	OFFSET		PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE			COVER	UP STREAM	DOWN STREAM											SUMP DEPTH	GEOTEXTILE	RIPRAP													
					FT	IN			LFT		FT	ELEV.	ELEV.	YR.					CYS		CYS	SYS	TON	IN	SYS	TYPE	TONS	CYS	LFT	EA	TYPE	SLOPE	EA	TYPE	SLOPE	EA			
Line "PR-B"																																							
201	1+15.0	x				12	2	Manhole J-10	61		0.1	-1.00	-1.00	75	N/A	7.0	1	7.0																				203		
202	1+19.0		x			12	2	Inlet J-10	61		0.5	-1.00	-1.00	75	N/A	7.0	1	10.6																				201		
203	1+75.0	x				12	2	Inlet M-10	21		1.5	924.25	923.80	75	N/A	7.0	1	5.4																				206		
204	1+75.0		x			12	2	Inlet J-10	21		1.2	924.50	924.39	75	N/A	7.0	1	4.4																				203		
205	1+75.0		x			12	2	Inlet E-7	18		0.7	925.10	925.00	75	N/A	7.0	1	3.1																				204		
206	2+00.0	x				15	2	Inlet M-10	59		2.2	923.04	922.75	75	N/A	7.0	1	21.9																				208		
207	2+24.8		x			30	2	Existing Manhole	79		4.9	919.27	919.03	75	N/A	7.0	1	90.1																				211		
208	2+65.0	x				15	2	Inlet M-10	13		2.2	922.75	922.69	75	N/A	7.0	1	4.7																				210		
209	2+81.9	x				15	2	Inlet E-7	23		1.3	922.92	922.75	75	N/A	7.0	1	6.9																				210		
210	2+81.9	x				15	2	Inlet M-10	14		3.2	921.75	921.61	75	N/A	7.0	1	7.1																				211		
211	2+87.0		x		5.0	30	2	Manhole J-4	107		4.9	919.03	918.65	75	N/A	7.0	1	133.0																				214		
212	3+00.0	x				12	2	Inlet M-10	14		1.5	923.75	923.68	75	N/A	7.0	1	3.2																				210		
213	3+50.0	x				12	2	Inlet J-10	44		1.0	924.72	924.50	75	N/A	7.0	1	9.7																				215		
214	4+00.0	x			31.5	30	2	Manhole J-4	266		6.1	918.65	917.64	75	N/A	7.0	1	394.2																				221		
215	4+00.0	x				15	2	Inlet M-10	15		1.8	924.25	924.17	75	N/A	7.0	1	4.7																				214		
216	4+65.0	x				12	2	Inlet M-10	60		1.8	924.80	924.50	75	N/A	7.0	1	18.0																				215		
217	4+81.0		x			12	2	Inlet J-10	27		1.3	926.00	925.87	75	N/A	7.0	1	5.8																				216		
218	6+10.0	x				12	2	Inlet M-10	61		2.6	924.81	924.50	75	N/A	7.0	1	22.0																				222		
219	6+10.0		x			12	2	Inlet J-10	21		1.9	925.50	925.39	75	N/A	7.0	1	6.1																				218		
220	6+70.0		x			12	2	Inlet J-10	24		2.6	924.50	924.38	75	N/A	7.0	1	8.9																				222		
221	6+75.0	x			31.5	30	2	Manhole J-4	129		7.2	917.64	917.19	75	N/A	7.0	1	216.9																				225		
222	6+75.0	x				18	2	Inlet M-10	15		2.0	924.00	923.85	75	N/A	7.0	1	6.4																				221		
223	7+40.0		x			18	2	Inlet J-10	66		1.4	924.90	924.64	75	N/A	7.0	1	20.0																				227		
224	7+50.0	x				18	2	Inlet J-10	56		1.5	924.75	924.53	75	N/A	7.0	1	17.7																				226		
225	8+10.0	x			31.5	30	2	Manhole J-4	715		3.6	917.19	914.69	75	N/A	7.0	1	932.0																				#N/A		
226	8+10.0	x				18	2	Inlet M-10	15		1.6	924.50	924.42	75	N/A	7.0	1	5.1																				225		
227	8+10.0		x			12	2	Inlet M-10	21		1.6	925.00	924.89	75	N/A	7.0	1	5.2																				226		
228	8+50.0	x				18	2	Inlet J-10	71		1.3	924.35	924.00	75	N/A	7.0	1	23.8																				230		

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: HH DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

STRUCTURE DATA TABLE

HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	34 of 67
CONTRACT	PROJECT
R-44251	2101721

Indy-Pref .dftcfg
Indiana_Shade.tbl

hhassan 1/2/2025 11:20:16 AM P:\2019\01590\D. Drawings\201901590.0001.RD.SD.01.dgn

STRUCTURE DATA

STRUCTURE NUMBER	LOCATION					SIZE	DESCRIPTION		LENGTH	SKEW	FLOW LINE			SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL	TYPE	FLOWABLE BACKFILL	TYPE	GEOTEXTILES	REVETMENT RIPRAP	SCOUR PROTECTION				CONCRETE, CLASS A, FOR STRUCTURES	VIDEO INSPECTION	PIPE END SECTION	GRATED BOX END SECTION			SAFETY METAL END SECTION			CONNECT TO STR. NO.	CULVERT ASSET ID	REMARKS
	STATION	LEFT	RIGHT	CROSS	OFFSET		PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE			COVER	UP STREAM	DOWN STREAM											SUMP DEPTH	GEOTEXTILE	RIPRAP													
					FT	IN			LFT		FT	ELEV.	ELEV.	YR.				CYS		CYS		SYS	TON	IN	SYS	TYPE	TONS	CYS	LFT	EA	TYPE	SLOPE	EA	TYPE	SLOPE	EA			
Line "PR-B"																																							
228	8+50.0	x				18	2	Inlet J-10	71		1.3	924.35	924.00	75	N/A	7.0	1	23.8																				230		
229	8+52.0		x			18	2	Inlet J-10	69		0.8	924.90	924.55	75	N/A	7.0	1	18.1																				232		
230	9+25.0	x				12	2	Inlet J-10	3		2.0	924.50	924.49	75	N/A	7.0	1	0.9																				231		
231	9+25.0	x			5.5	15	2	Manhole C-4	171		6.0	919.78	919.10	75	N/A	7.0	1	158.0																				234		
232	9+25.0		x			12	2	Inlet J-10	14		2.0	924.50	924.43	75	N/A	7.0	1	4.2																				231		
233	11+00.0	x				12	2	Inlet J-10	3		1.8	923.50	923.47	75	N/A	7.0	1	0.9																				234		
234	11+00.0	x			5.5	15	2	Manhole C-4	96		4.1	919.10	918.72	75	N/A	7.0	1	71.3																				237		
235	11+00.0		x			12	2	Inlet J-10	14		1.3	924.00	923.93	75	N/A	7.0	1	3.1																				234		
236	12+00.0	x				12	2	Inlet J-10	3		1.0	922.00	921.99	75	N/A	7.0	1	0.6																				237		
237	12+00.0	x			5.5	15	2	Manhole C-4	96		2.5	918.72	918.34	75	N/A	7.0	1	48.1																				240		
238	12+00.0		x			12	2	Inlet J-10	14		1.5	921.50	921.43	75	N/A	7.0	1	3.4																				237		
239	13+00.0	x				12	2	Inlet J-10	3		1.7	919.50	919.47	75	N/A	7.0	1	0.8																				240		
240	13+00.0	x			5.5	18	2	Manhole C-4	126		1.4	918.09	917.59	75	N/A	7.0	1	47.6																				242		
241	13+00.0		x			12	2	Inlet J-10	14		1.6	919.50	919.43	75	N/A	7.0	1	3.5																				240		
242	14+30.0	x			5.5	18	2	Manhole C-4	118		1.0	917.59	917.00	75	N/A	7.0	1	32.4													1									
243	17+25.0		x			12	2	Inlet A-2	76		0.8	918.75	919.38	75	N/A	7.0	1	25.4																				247		
244	17+70.0	x			38.0	24	2	Manhole C-4	200		4.2	915.15	914.50	75	N/A	7.0	1	205.8													1									
245	18+00.0	x				12	2	Inlet J-10	25		1.0	921.50	921.38	75	N/A	7.0	1	5.5																				246		
246	18+50.0	x			5.5	24	2	Manhole C-4	44		5.8	915.57	915.15	75	N/A	7.0	1	51.7																				244		
247	18+50.0		x			12	2	Manhole J-10	27		1.0	921.50	921.35	75	N/A	7.0	1	6.1																				246		
248	18+30.0		x			12	2	Inlet A-2	22		1.1	920.00	919.78	75	N/A	7.0	1	7.2																				247		
249	19+00.0	x				12	2	Inlet J-10	3		1.8	923.50	923.49	75	N/A	7.0	1	0.8																				250		
250	19+00.0	x			5.5	24	2	Manhole C-4	91		5.8	915.93	915.57	75	N/A	7.0	1	123.0																				246		
251	19+00.0		x			12	2	Inlet J-10	14		1.8	923.50	923.43	75	N/A	7.0	1	3.8																				250		
252	21+50.0	x				12	2	Inlet J-10	3		2.0	925.50	925.49	75	N/A	7.0	1	0.9																				253		
253	21+50.0	x			5.5	18	2	Manhole C-4	201		8.4	917.23	916.43	75	N/A	7.0	1	302.1																				250		
254	21+50.0		x			12	2	Inlet J-10	18		2.0	925.50	925.41	75	N/A	7.0	1	5.3																				253		
255	22+75.0	x				12	2	Inlet J-10	3		1.8	925.50	925.49	75	N/A	7.0	1	0.9																				256		

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: HH DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

STRUCTURE DATA TABLE

HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	35 of 67
CONTRACT	PROJECT
R-44251	2101721

Indy-Pref .dftcfg
Indiana_Shade.tbl

hhassan 1/2/2025 11:20:16 AM P:\2019\01590\D. Drawings\201901590.0001.RD.SD.02.dgn

STRUCTURE DATA

STRUCTURE NUMBER	LOCATION					SIZE	DESCRIPTION		LENGTH	SKEW	FLOW LINE			SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL	TYPE	FLOWABLE BACKFILL	TYPE	GEOTEXTILES	REVETMENT RIPRAP	SCOUR PROTECTION				CONCRETE, CLASS A, FOR STRUCTURES	VIDEO INSPECTION	PIPE END SECTION	GRATED BOX END SECTION			SAFETY METAL END SECTION			CONNECT TO STR. NO.	CULVERT ASSET ID	REMARKS
	STATION	LEFT	RIGHT	CROSS	OFFSET		PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE AND TYPE			COVER	UP STREAM	DOWN STREAM											SUMP DEPTH	GEOTEXTILE	RIPRAP													
					FT	IN			LFT		FT	ELEV.	ELEV.	YR.				CYS		CYS		SYS	TON	IN	SYS	TYPE	TONS	CYS	LFT	EA	TYPE	SLOPE	EA	TYPE	SLOPE	EA			
Line "PR-B"																																							
256	22+75.0	x			5.5	18	2	Manhole C-4	166		9.0	917.89	917.23	75	N/A	7.0	1	258.7																			253		
257	22+75.0		x			12	2	Inlet J-10	14		1.8	925.50	925.43	75	N/A	7.0	1	3.9																			256		
258	23+55.0	x				12	2	Inlet J-10	3		1.4	925.50	925.49	75	N/A	7.0	1	0.7																			259		
259	23+55.0	x			5.5	15	2	Manhole C-4	76		8.5	918.14	917.82	75	N/A	7.0	1	102.2																			256		
260	23+55.0		x			12	2	Inlet J-10	14		1.4	925.50	925.43	75	N/A	7.0	1	3.2																			259		
261	24+25.0	x				12	2	Inlet J-10	3		1.6	925.00	924.99	75	N/A	7.0	1	0.8																			262		
262	24+25.0	x			5.5	15	2	Manhole C-4	66		8.3	918.08	917.82	75	N/A	7.0	1	84.9																			259		
263	24+25.0		x			12	2	Inlet J-10	14		1.6	925.00	924.93	75	N/A	7.0	1	3.5																			262		
264	24+90.0		x			12	2	Inlet J-10	15		1.8	924.50	924.43	75	N/A	7.0	1	4.0																			265		
265	24+95.0	x			5.5	18	2	Manhole C-4	66		8.0	917.83	917.57	75	N/A	7.0	1	89.6																			262		
266	2+50.0	x				12	2	Inlet J-10	5		1.7	924.50	924.48	75	N/A	7.0	1	1.3																			265		
267	25+50.0		x			12	2	Inlet J-10	20		2.0	924.00	923.90	75	N/A	7.0	1	5.8																			268		
268	25+65.0	x			5.5	18	2	Manhole C-4	66		7.4	918.09	917.83	75	N/A	7.0	1	82.6																			265		
269	25+70.0	x				12	2	Inlet J-10	5		1.9	924.00	923.98	75	N/A	7.0	1	1.4																			268		
270	26+50.0	x				12	2	Inlet J-10	13		1.5	924.00	923.94	75	N/A	7.0	1	3.1																			271		
271	26+50.0	x			5.5	18	2	Manhole C-4	81		6.8	918.18	918.09	75	N/A	7.0	1	93.7																			268		
272	26+50.0		x			12	2	Inlet J-10	14		1.5	924.00	923.93	75	N/A	7.0	1	3.3																			271		
273	27+10.0	x				12	2	Inlet J-10	58		1.7	923.46	923.00	75	N/A	7.0	1	16.0																			276		
274	27+50.0	x			5.5	12	2	Manhole C-4	96		6.1	919.06	918.68	75	N/A	7.0	1	82.5																			271		
275	27+50.0		x			12	2	Inlet J-10	32		3.1	922.00	921.84	75	N/A	7.0	1	13.7																			274		
276	27+60.0	x				12	2	Inlet M-10	13		2.1	923.00	922.94	75	N/A	7.0	1	4.0																			274		
277	28+50.0	x				12	2	Inlet J-10	3		1.7	923.50	923.49	75	N/A	7.0	1	0.8																			278		
278	28+50.0	x			5.5	12	2	Manhole C-4	51		5.6	919.51	919.06	75	N/A	7.0	1	39.6																			274		
279	28+50.0		x			12	2	Inlet J-10	14		1.7	923.50	923.43	75	N/A	7.0	1	3.6																			278		

DATE	REVISION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: HH DRAWN: BLP

CHECKED: DSS CHECKED: DSS

INDIANA
DEPARTMENT OF TRANSPORTATION

STRUCTURE DATA TABLE

HORIZONTAL SCALE	BRIDGE FILE
N/A	N/A
VERTICAL SCALE	DESIGNATION
N/A	2101721
SURVEY BOOK	SHEETS
N/A	36 of 67
CONTRACT	PROJECT
R-44251	2101721

Indy-Def.dfcfg
Indiana_Shade.tbl

hhassan 1/2/2025 11:20:17 AM P:\2019\01590\D. Drawings\201901590.0001.RD.SD.03.dgn

Appendix C: Early Coordination

AMERICAN STRUCTUREPOINT INC.

9025 RIVER ROAD, SUITE 200
INDIANAPOLIS, INDIANA 46240
TEL 317.547.5580
FAX 317.543.0270

Initial Early Coordination Letters Were Sent January 10, 2024

Sample Early Coordination Letter

Re: Des. No. 2101721
Witt Road Improvement Project
Lafayette Avenue to Austin Drive
Lebanon, Boone County, Indiana

Dear Sir or Madam:

The City of Lebanon, with funding from the Federal Highway Administration (FHWA) and administrative oversight from the Indiana Department of Transportation (INDOT), intends to proceed with the roadway improvement project (Des. No. 2101721) located in Lebanon, Boone County, Indiana. This letter is part of the early coordination phase of the environmental review process. American Structurepoint on behalf of the City of Lebanon, is requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above designation number and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts.

The proposed project area is located along Witt Road in the City of Lebanon, Boone County, Indiana. The proposed project begins approximately 130 feet west of the intersection of Lafayette Avenue and extends 0.5 mile north, terminating 250 feet north of the intersection of Witt Road with Austin Drive. The proposed limits also extend along Lafayette Avenue approximately 335 feet southeast to 280 feet northwest of the intersection of Witt Road and Lafayette Avenue.

This section of Witt Road is functionally classified as a *Local Agency Collector* and has a posted speed limit of 30 miles per hour (mph). The existing typical roadway section of Witt Road consists of two 10.5-foot-wide travel lanes (one northbound and one southbound) intermittently bordered by 5-foot-wide sidewalks on both the west and east sides of the roadway. This section of Lafayette Avenue is functionally classified as a *Local Minor Arterial* and has a posted speed limit of 30 mph. The existing typical roadway section of Lafayette Avenue consists of two 10.5-foot-wide travel lanes (one northwest bound and one southeast bound) bordered by intermittent 5-foot-wide sidewalks along the northwest side of the roadway.

Pavement along this stretch of Witt Road is experiencing some fatigue cracking and rutting in the wheel paths and the existing sidewalks do not include Americans with Disabilities (ADA) compliant curb ramps within the project area. The lack of sidewalks within the project area, as well as the lack of connectivity between existing sidewalks, prevent pedestrians from moving safely along the corridor to access residences and businesses.

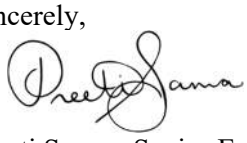
The current proposed project would consist of widening Witt Road to accommodate one 11-foot-wide travel lane in each direction (one northbound and one southbound) and full depth pavement reconstruction. The proposed roadway section would include two 11-foot-wide travel lanes (one northbound and one southbound), a 10-foot-wide multi-use path on the west side of the roadway, a 6-foot-wide sidewalk on the east side of the roadway, and a 5-foot-wide utility buffer between the roadway and the pedestrian facilities on each side of Witt Road. A 6-foot-wide sidewalk would be constructed along the southeast side of Lafayette Avenue, extending southwest to the intersection of Mar Lee Lane. The proposed project would also include the installation of permanent lighting along the corridor as well as a storm sewer system with curb and gutter and ADA compliant curb ramps. No structure work would occur to the existing Witt Road over Small Reynolds Ditch bridge; however, pavement associated with the existing bridge would receive the proposed roadway treatment.

It is anticipated that the project would require tree clearing less than 0.5 acre, and construction is anticipated to begin Fall 2026. It is anticipated that the proposed project would require the acquisition of less than 0.5 acre of additional permanent and temporary right-of-way. No relocations are anticipated as a result of the proposed project. Maintenance of traffic for the project would include phased closures with detours. Access to all properties would be maintained during construction.

Land use in the vicinity of the project is primarily residential. A wetland delineation and waters investigation will be performed to identify ecological resources that may be present. Coordination for the Indiana bat and northern long-eared bat will be completed using the US Fish and Wildlife Service (USFWS) Information for Planning and Consulting (IPaC) system, and the results of the IPaC determination will be reviewed by the USFWS. The project area will be evaluated in regard to archaeological and historic resources for Section 106 compliance. The result of any cultural resource evaluations/investigations will be forwarded to the State Historic Preservation Officer for review and concurrence as required.

American Structurepoint, on behalf of the City of Lebanon, is requesting comments regarding any possible environmental effects associated with this project. Please provide your responses **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 Preeti Samra, American Structurepoint by phone at (317) 547-5580 or e-mail at psamra@structurepoint.com, or Kevin Krulik, City of Lebanon, City Engineer at (765) 482-8845 or e-mail at kkrulik@lebanon.in.gov. Thank you in advance for your input.

Sincerely,



Preeti Samra, Senior Environmental Specialist, American Structurepoint, Inc.
Consultant soliciting comments on behalf of the City of Lebanon

PS:mgn **Attachments have been removed to avoid duplication**

Enclosures
- State Location Map
- USGS Topographic Map – Lebanon Quadrangle
- 2023 Aerial Photography and Photo Location Map
- General Project Photos

Distribution List

- Boone County Commissioners
- Boone County EMA
- Boone County Health Department
- Boone County Highway Department
- Boone County Sheriff
- Boone County Surveyor (Drainage Board)
- Boone County Area Plan Commission
- City of Lebanon Floodplain Administrator
- City of Lebanon MS4
- Federal Highway Administration
- IDNR, Division of Fish and Wildlife
- Indiana Geological and Water Survey
- INDOT Environmental Policy Office
- INDOT Office of Aviation
- INDOT, Crawfordsville District
- Lebanon Community School Corporation
- Mayor of City of Lebanon
- National Parks Service – Midwest Regional Office
- U.S. Department of Housing and Urban Development
- U.S. Natural Resources Conservation Service
- USACE – Louisville District

An Early Coordination Letter was sent on January 7, 2025 to The Church of Jesus Christ of Latter-day Saints per the RFI Recommendation

116 W. Washington Street
Room 102
Lebanon, Indiana 46052
765-483-4444
FAX: 765-482-4430

Boone County Surveyor

January 17, 2024

Preeti Samra
American Structurepoint
9025 Riveer Road, Suite 200
Indianapolis, IN 46240

Re: Des. No. 2101721
Witt Road Improvements
Lafayette Ave to Austin Dr
Lebanon, Indiana

The Boone County Surveyor's Office does not have any environmental concerns to report on this project.

Please note when construction plans are developed for this project they will need to be submitted to the Boone County Surveyor's Office for review. Approval of connection to Small Reynolds legal drain will be required to meet the Boone County Drainage Ordinance and Standards.

If you should have any questions please feel free to contact the Boone County Surveyor's Office.

Thank you
Carol Cunningham, CISEC
Boone County Surveyor

From: Scott Calvert
To: Samra, Preeti
Cc: Hope, Briana
Subject: RE: Witt Road Improvement Project Early Coordination Letter
Date: Wednesday, January 17, 2024 2:49:16 PM
Attachments: image003.png
image004.jpg
image005.jpg
image006.jpg
image007.jpg
image008.jpg
image009.png
image010.jpg

Hello Preeti,

Thank you for the early coordination letter regarding DES. No 2101721. At this time, I do not have any additional comments regarding environmental impacts beyond what was covered in the letter. Any additional issues not covered should be mitigated by the SWPPP for the project.
Thank you,

photo

Scott Calvert
CESSWI, QSM
MS4, Inspections Superintendent
P 765.482.8845 | C 317.296.0586 |
scalvert@lebanon.in.gov | Lebanon.IN.gov |
324 N Mount Zion Road | Lebanon, Indiana 46052

ONLY RAIN IN THE DRAIN

From: Samra, Preeti <psamra@structurepoint.com>
Sent: Wednesday, January 10, 2024 3:03 PM
To: Scott Calvert <scalvert@lebanon.in.gov>
Cc: Hope, Briana <bhope@structurepoint.com>
Subject: Witt Road Improvement Project Early Coordination Letter

Good Afternoon,

Please find attached the early coordination letter for the Witt Road Improvement Project in Boone County, Indiana.

Please respond with any comments regarding the project.

THIS IS NOT A PERMIT

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

DNR#: ER-26202

Request Received: January 10, 2024

Requestor:
Preeti Samra
American Structurepoint, Inc.
9025 River Road, Suite 200
Indianapolis, IN 46240

Project:
Witt Road roadway improvements from Lafayette Avenue to Austin Drive, including road widening and construction of pedestrian paths on both sides of the roadway, with no structure work anticipated on the bridge over Small Reynolds Ditch / UNT Prairie Creek, City of Lebanon; Des #2101721

County/Site Info: Boone County

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

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

Regulatory Assessment:
This proposal will require the formal approval for construction in a floodway under the Flood Control Act, IC 14-28-1 for work proposed in the floodway of the Unnamed Tributary Prairie Creek. Please submit a copy of this letter with the permit application.

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) Wetlands
Due to the presence or potential presence of wetland habitat on site, we recommend contacting and coordinating with the Indiana Department of Environmental Management (IDEM) 401 program and the US Army Corps of Engineers (USACE) 404 program.

B) Wildlife Passage
No site-level photos of wildlife passage conditions under the bridge were submitted. Wildlife passage was a requirement of permit FW-30807 approved in June of 2021 for the replacement of the Witt Road bridge over New Reynolds/Small Reynolds Ditch. The approved permit required the construction of a wildlife passage shelf along the south bank above the ordinary high-water mark (OHWM) constructed from compacted #53

aggregate over riprap scour protection. The Division of Fish and Wildlife recommends submitting photos taken below the completed bridge replacement that clearly depict the required wildlife passage shelf. If the wildlife passage shelf was not completed as approved, a Notice of Violation may be sent to the applicant and corrective action may be required.

C) Pavement Rehabilitation

Pavement rehabilitation projects typically do not have a significant impact on fish, wildlife, and botanical resources if best management practices (BMPs) are in place to limit the migration of polycyclic aromatic hydrocarbons (PAHs) into local waterways. PAHs are a byproduct of asphalt and coal tar-based sealants and negatively impact aquatic systems. The use of sealants that are free of petroleum and coal tar-based products is encouraged whenever possible. Contaminated road runoff can significantly impact the aquatic environment through increased turbidity and release of sediment into the stream which can be harmful to fish and other aquatic organisms, their eggs, and their food supply. Where possible, road runoff should be directed to riprap turnouts and sediment filtration prior to entering a stream to reduce impacts to aquatic species. We recommend the use of pollutant trapping technology such as storm drain inserts to reduce the runoff of roadside pollutants where appropriate.

D) Lighting

Lighting should only be used when necessary. Lighting in forested areas and along waterways should be the lowest intensity feasible and shielded to cast light downwards onto the road and not up- or outwards into the surroundings to avoid disturbing wildlife circadian rhythms and disorienting night-migrating birds. Certain types of LED lighting can have negative impacts on both human and wildlife health and safety. The International Dark-Sky Association has developed a set of recommendations for those choosing LED lighting systems. These suggestions will aid in the selection of lighting that is energy and cost efficient, yet ensures safety and security, protects wildlife, and promotes the goal of reducing light pollution:

- Always choose fully shielded fixtures that emit no light upward.
- Use “warm-white” or filtered LEDs (CCT < 3,000 K; S/P ratio < 1.2) to minimize harmful blue light emission.
- Look for products with adaptive controls like dimmers, timers, and motion sensors.
- Consider dimming or turning off lights during non-peak overnight hours.
- Avoid the temptation to over-light because of the higher luminous efficiency of LEDs.
- Only light the exact space and in the amount required for particular tasks.

The Division of Fish and Wildlife strongly encourages visiting the following link to learn more about the potential negative impacts of improperly selected LED lighting systems: http://darksky.org/light-pollution/light-pollution-solutions/.

E) Drainage and Stormwater Management

The Division of Fish and Wildlife recommends considering a more sustainable approach to stormwater management. The traditional model of stormwater management aims to drain runoff as quickly as possible with the help of channels and pipes, which increases peak flows and costs of stormwater management. This type of solution only transfers drainage problems from one section of a basin to another. A more sustainable approach should aim to rebuild the natural water cycle by using storage techniques (retention basins, constructed wetlands, raingardens, etc.) and recharging groundwater using infiltration techniques (infiltration basins or trenches, pervious pavement, etc.). The following links give a good overview of traditional and sustainable stormwater management systems and their pros and cons for consideration during the design of the proposed project: https://www.epa.gov/greeningepa/epa-facility-stormwater-management; https://www.epa.gov/greeningepa/stormwater-management-practices-epa-facilities.

F) Expanding Existing Roadways

When designing a roadway expansion or upgrade, the goal should be to disturb as narrow an area as possible to help minimize negative impacts. Where significant impacts to fish, wildlife or botanical resources are likely due to the roadway's width, the width should be reduced to help avoid or reduce those impacts whenever possible. For example, the width of a median or stream crossing structure could be reduced to decrease the overall width and impact of the proposed transportation corridor on adjacent resources.

Wildlife movement across the landscape should be a consideration for all transportation corridor projects. The Bipartisan Infrastructure Law has several funding programs in place (https://highways.dot.gov/federal-lands/programs/wildlife-crossings) to help transportation corridor planners increase the permeability of roadways for wildlife movement across the landscape. Maintaining wildlife habitat along transportation corridors is a major directive of the current Division of Fish and Wildlife Strategic Plan. Additionally, any proposed landscaping along the corridor should consider the use of native trees, shrubs, grasses, and wildflowers to offset impacts to these resources as a result of the proposed project.

It is also important to note that there are many studies which indicate that building new roadways or widening existing roadways creates or induces more traffic and congestion. It is understood that the proposed project is also intended to improve motorist safety in addition to adding capacity. The Division of Fish and Wildlife recommends at a minimum considering the potential negative impacts of increasing capacity into the planning process. Including pedestrian facilities and public transportation opportunities into the design of a transportation corridor is recommended to help offset some of the negative impacts of induced demand/traffic. The following is a link to a Federal Highway Administration Office of Planning webpage that discusses the basics of induced travel: https://www.fhwa.dot.gov/planning/itfaq.cfm.

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 are not currently 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 currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
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 (3 inches or greater diameter-at-breast height, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
6. 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.
7. 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.
8. Plant five trees, 1 inch to 2 inches in diameter-at-breast height, for each tree which is removed that is 10 inches or greater in diameter-at-breast height.

Contact Staff:
Our agency appreciates this opportunity to be of service. Please contact me at RVanVoorhis@dnr.IN.gov or (317) 232-8163 if we can be of further assistance.

Rachel Van Voorhis **Date:** February 6, 2024
Rachel Van Voorhis
Environmental Coordinator
Division of Fish and Wildlife

INDIANA GEOLOGICAL & WATER SURVEY
INDIANA UNIVERSITY

Organization and Project Information

Project ID:
Des. ID: Des. No. 2101721
Project Title: Witt Road Improvement Project
Name of Organization: American Structurepoint Inc.
Requested by: Preeti Samra

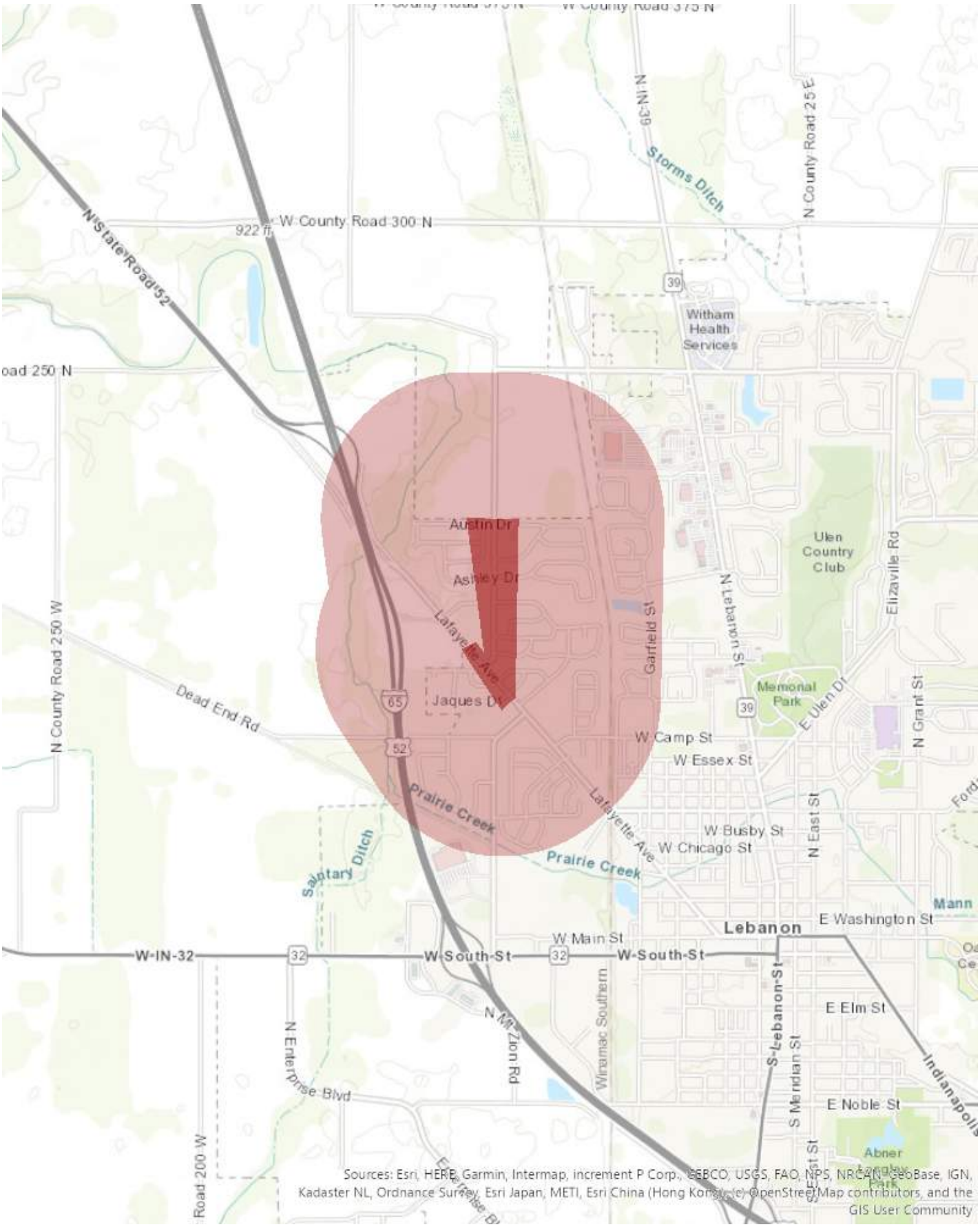
Environmental Assessment Report

1. Geological Hazards:
   - Moderate liquefaction potential
   - Floodway
2. Mineral Resources:
   - Bedrock Resource: Moderate Potential
   - Sand and Gravel Resource: Low Potential
3. Active or abandoned mineral resources extraction sites:
   - None documented in the area

*Map layers from the Indiana Geological and Water Survey and Indiana Map

This information was furnished by Indiana Geological Survey
Address: 420 N. Walnut St., Bloomington, IN 47404
Email: IGSEnvir@indiana.edu
Phone: 812 855-7428

Date: January 10, 2024



From: Lewandowski, Tyler
To: Samra, Preeti
Cc: Hope, Briana
Subject: RE: Witt Road Improvement Project Early Coordination Letter
Date: Thursday, January 11, 2024 8:55:26 AM
Attachments: image003.png
image004.png
image005.jpg

Good morning,

After review, no tall structure permit is required for the project if all equipment being used is under 200 feet in height. Please let our office know if you have any further questions.

Thank you,

Tyler Lewandowski
Project Manager
INDOT Office of Aviation
(317) 495-4875
tlewandowski@indot.in.gov
www.aviation.indot.in.gov

From: Samra, Preeti <psamra@structurepoint.com>
Sent: Wednesday, January 10, 2024 2:22 PM
To: Lewandowski, Tyler <TLewandowski@indot.IN.gov>
Cc: Hope, Briana <bhope@structurepoint.com>
Subject: Witt Road Improvement Project Early Coordination Letter

Good Afternoon,

Please find attached the early coordination letter for the Witt Road Improvement Project in Boone County, Indiana.

Please respond with any comments regarding the project.

Best,

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

January 22, 2024

Preeti Samra
American Structurepoint
9025 River Road, Suite 200
Indianapolis, Indiana 46240

Dear Preeti Samra:

The proposed Witt Road Improvement project in Boone County, Indiana (Des. No. 2101721), as referred to in your letter received on January 10, 2024, will cause a conversion of prime farmland.

The attached packet of information is for your use competing Parts VI and VII of the AD-1006. After completion, the federal funding agency needs to forward one copy to NRCS for our records.

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

Sincerely,

JOHN ALLEN

Digitally signed by JOHN ALLEN
Date: 2024.01.22 15:13:38 -05'00'

JOHN ALLEN
State Soil Scientist

Enclosers

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*		Date Of Land Evaluation Request	
Name of Project DES2101721 Witt Rd Improvement		Federal Agency Involved	
Proposed Land Use		County and State Boone County, Indiana	
PART II *(To be completed by NRCS)*		Date Request Received By NRCS	Person Completing Form: JRA
Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☑ NO ☐	Acres Irrigated	Average Farm Size 367 ac
Major Crop(s) Corn	Farmable Land In Govt. Jurisdiction Acres: 253707 % 94	Amount of Farmland As Defined in FPPA Acres: 24728 % 91	
Name of Land Evaluation System Used LESA	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS 1/22/2024	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	0.93			
B. Total Acres To Be Converted Indirectly				
C. Total Acres In Site	0.93			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	0.02			
B. Total Acres Statewide Important or Local Important Farmland	0.00			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<0.001			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	81			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	82			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	7			
2. Perimeter In Non-urban Use	(10)	5			
3. Percent Of Site Being Farmed	(20)	0			
4. Protection Provided By State and Local Government	(20)	0			
5. Distance From Urban Built-up Area	(15)	5			
6. Distance To Urban Support Services	(15)	0			
7. Size Of Present Farm Unit Compared To Average	(10)	2			
8. Creation Of Non-farmable Farmland	(10)	0			
9. Availability Of Farm Support Services	(5)	5			
10. On-Farm Investments	(20)	10			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	0			
TOTAL SITE ASSESSMENT POINTS	160	34	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	82	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	34	0	0	0
TOTAL POINTS ***(Total of above 2 lines)***	260	116	0	0	0

Site Selected: 3/27/2024	Date Of Selection 3/27/2024	Was A Local Site Assessment Used? YES ☐ NO ☑

Reason For Selection:

Road Improvement Project

Name of Federal agency representative completing this form: Preeti Samra	Date: 03/27/2024

(See Instructions on reverse side) **Form AD-1006 (03-02)**

United States Department of the Interior

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

In Reply Refer To: 12/23/2024 20:20:29 UTC
Project Code: 2024-0064291
Project Name: Des 2101721, Road Improvement Project on Witt Road in Boone County, Indiana

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: 2024-0064291

Project Name: Des 2101721, Road Improvement Project on Witt Road in Boone County, Indiana

Project Type: Road/Hwy - Maintenance/Modification

Project Description: The project is located along Witt Road, from Lafayette Avenue to Austin Drive, in the City of Lebanon, Boone County, Indiana. The proposed project begins approximately 130-feet west of the intersection of Lafayette Avenue and extends 0.5-mile north, terminating 250-feet north of the intersection of Witt Road with Austin Drive. The proposed limits also extend along Lafayette Avenue approximately 335-feet southeast to 280-feet northwest of the intersection of Witt Road and Lafayette Avenue. More specifically, the project is located in Sections 23, 24, 25, & 26 of Township 19 North, and Range 1 West, as shown on the United States Geological Survey (USGS) 7.5' Lebanon, Indiana topographic quadrangle.

The existing typical roadway section of Witt Road consists of two10.5-foot-wide travel lanes (one northbound and one southbound) intermittently bordered by 5-foot-wide sidewalks on both the west and east sides of the roadway. The existing typical roadway section of Lafayette Avenue consists of two 10.5-foot-wide travel lanes (one northwest bound and one southeast bound) bordered by intermittent 5-foot-wide sidewalks along the northwest side of the roadway. The existing Witt Road and Lafayette Avenue intersection is two-way-stop-controlled. Lafayette Avenue traffic is continuous flow through the intersection while Witt Road traffic is controlled by stop signs at both north and south approaches.

Pavement along this stretch of Witt Road is experiencing some fatigue cracking and rutting in the wheel paths and the existing sidewalks do not include Americans with Disabilities (ADA) compliant curb ramps within the project area. The lack of sidewalks within the project area, as well as the lack of connectivity between existing sidewalks, prevent pedestrians from moving safely along the corridor to access residences and businesses.

The current proposed project would consist of widening Witt Road to accommodate one 11-foot-wide travel lane in each direction (one northbound and one southbound) and full depth pavement reconstruction. The proposed roadway section would include two 11-foot-wide travel lanes (one northbound and one southbound), a 10-foot-wide multi-use path on the west side of the roadway, a 6-foot-wide sidewalk on the east side of the roadway, and a 5-foot-wide utility buffer between the roadway

and the pedestrian facilities on each side of Witt Road. A 6-foot-wide sidewalk would be constructed along the southeast side of Lafayette Avenue, extending southwest to the intersection of Mar Lee Lane. The proposed project would also include the installation of permanent lighting along the corridor as well as a storm sewer system with curb and gutter and ADA compliant curb ramps. No structure work would occur to the existing Witt Road over Small Reynolds Ditch bridge; however, pavement associated with the existing bridge would receive the proposed roadway treatment. It is anticipated that the proposed project would require the acquisition of approximately 0.93 acre of permanent and 0.38 acre of temporary right-of-way. No relocations are anticipated as a result of the proposed project.

There is suitable summer habitat located within the project area; however, a review of the USFWS database that was conducted by INDOT, Crawfordsville district staff on March 7, 2023, did not indicate the presence of endangered bat species within 0.5-mile of the project area. It is anticipated that approximately 0.003 acre of tree clearing would be required for the project. Construction is anticipated to begin in Fall of 2026.

The maintenance of traffic (MOT) plan for the project would include phased closures with detours. Access to all properties would be maintained during construction. Temporary lighting may be used during construction. The MOT would be implemented per the INDOT Indiana Design Manual guidelines.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.0646452,-86.4875778882078,14z

Counties: Boone County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 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.

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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

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

CLAMS

NAME	STATUS
Salamander Mussel *Simpsonaias ambigua* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/6208	Proposed Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

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 likely bald eagles present in your project area. For additional information on bald eagles, refer to Bald Eagle Nesting and Sensitivity to Human Activity

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 Oct 15 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 (■)

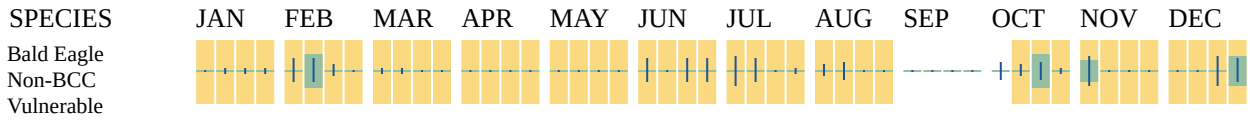
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

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.

■ probability of presence ■ breeding season | survey effort – no data



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".

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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 Oct 15 to Aug 31

NAME	BREEDING SEASON
Black-billed Cuckoo *Coccyzus erythropthalmus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Bobolink *Dolichonyx oryzivorus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Cerulean Warbler *Setophaga 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 21 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
Grasshopper Sparrow *Ammodramus savannarum perpallidus* 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/8329	Breeds Jun 1 to Aug 20
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Pectoral Sandpiper *Calidris melanotos* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9561	Breeds elsewhere
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 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
Ruddy Turnstone *Arenaria interpres morinella* 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/10633	Breeds elsewhere

NAME	BREEDING SEASON
Rusty Blackbird *Euphagus carolinus* 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/9478	Breeds elsewhere
Semipalmated Sandpiper *Calidris 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/9603	Breeds elsewhere
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
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.

■ probability of presence ■ breeding season | survey effort – no data


SPECIES
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Bald Eagle
Non-BCC
Vulnerable
Black-billed
Cuckoo
BCC Rangewide
(CON)
Bobolink
BCC Rangewide
(CON)
Cerulean Warbler
BCC Rangewide
(CON)
Chimney Swift
BCC Rangewide
(CON)
Grasshopper
Sparrow
BCC - BCR
Lesser Yellowlegs
BCC Rangewide
(CON)
Pectoral Sandpiper
BCC Rangewide
(CON)
Prothonotary
Warbler
BCC Rangewide
(CON)
Red-headed
Woodpecker
BCC Rangewide
(CON)
Ruddy Turnstone
BCC - BCR
Rusty Blackbird
BCC - BCR
SPECIES
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
Semipalmated
Sandpiper
BCC - BCR
Short-billed
Dowitcher
BCC Rangewide
(CON)

Wood Thrush
BCC Rangewide
(CON)

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:	Department of Transportation
Name:	Preeti Samra
Address:	9025 River Road
Address Line 2:	Suite 200
City:	Indianapolis
State:	IN
Zip:	46240
Email	psamra@structurepoint.com
Phone:	3179469709

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: 03/21/2024 14:58:01 UTC
Project code: 2024-0064291
Project Name: Des 2101721, Road Improvement Project on Witt Road in Boone County, Indiana

Subject: Concurrence verification letter for the 'Des 2101721, Road Improvement Project on Witt Road in Boone County, Indiana' project under the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (NLEB).

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated March 21, 2024 to verify that the **Des 2101721, Road Improvement Project on Witt Road in Boone County, Indiana** (Proposed Action) may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat.884, as amended; 16 U.S.C. 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures. **At least one of the qualification interview questions indicated an activity or portion of your project is consistent with a not likely to adversely affect determination therefore, the overall determination for your project is, may affect, and is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the endangered northern long-eared bat (*Myotis septentrionalis*)**. Consultation with the Service pursuant to section 7(a)(2) of ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq*.) is required.

The Service has 14 calendar days to notify the lead Federal action agency or designated non-federal representative if we determine that the Proposed Action does not meet the criteria for a NLAA determination under the PBO. If we do not notify the lead Federal action agency or designated non-federal representative within that timeframe, you may proceed with the Proposed Action under the terms of the NLAA concurrence provided in the PBO. This verification period

allows Service Field Offices to apply local knowledge to implementation of the PBO, as we may identify a small subset of actions having impacts that were unanticipated. In such instances, Service Field Offices may request additional information that is necessary to verify inclusion of the proposed action under the PBO.

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

If the Proposed Action is modified, or new information reveals that it may affect the Indiana bat and/or northern long-eared bat in a manner or to an extent not considered in the PBO, further review to conclude the requirements of ESA Section 7(a)(2) may be required.

For Proposed Actions that include bridge/culvert or structure removal, replacement, and/or maintenance activities:
If your initial bridge/culvert or structure assessments failed to detect Indiana bats and/or NLEB use or occupancy, yet bats are later detected prior to, or during construction, please submit the Post Assessment Discovery of Bats at Bridge/Culvert or Structure Form (User Guide Appendix E) to this Service Office within 2 working days of the incident. In these instances, potential incidental take of Indiana bats and/or NLEBs may be exempted provided that the take is reported to the Service.

If the Proposed Action may affect any other federally-listed or proposed species, and/or any designated critical habitat, additional consultation between the lead Federal action agency and this Service Office is required. If the proposed action has the potential to take bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act may also be required. In either of these circumstances, please contact this Service Office.

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

- Monarch Butterfly *Danaus plexippus* Candidate
- Salamander Mussel *Simpsonaias ambigua* Proposed Endangered
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

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

NAME

Des 2101721, Road Improvement Project on Witt Road in Boone County, Indiana

DESCRIPTION

The project is located along Witt Road, from Lafayette Avenue to Austin Drive, in the City of Lebanon, Boone County, Indiana. The proposed project begins approximately 130-feet west of the intersection of Lafayette Avenue and extends 0.5-mile north, terminating 250-feet north of the intersection of Witt Road with Austin Drive. The proposed limits also extend along Lafayette Avenue approximately 335-feet southeast to 280-feet northwest of the intersection of Witt Road and Lafayette Avenue. More specifically, the project is located in Sections 23, 24, 25, & 26 of Township 19 North, and Range 1 West, as shown on the United States Geological Survey (USGS) 7.5' Lebanon, Indiana topographic quadrangle.

The existing typical roadway section of Witt Road consists of two10.5-foot-wide travel lanes (one northbound and one southbound) intermittently bordered by 5-foot-wide sidewalks on both the west and east sides of the roadway. The existing typical roadway section of Lafayette Avenue consists of two 10.5-foot-wide travel lanes (one northwest bound and one southeast bound) bordered by intermittent 5-foot-wide sidewalks along the northwest side of the roadway. The existing Witt Road and Lafayette Avenue intersection is two-way-stop-controlled. Lafayette Avenue traffic is continuous flow through the intersection while Witt Road traffic is controlled by stop signs at both north and south approaches.

Pavement along this stretch of Witt Road is experiencing some fatigue cracking and rutting in the wheel paths and the existing sidewalks do not include Americans with Disabilities (ADA) compliant curb ramps within the project area. The lack of sidewalks within the project area, as well as the lack of connectivity between existing sidewalks, prevent pedestrians from moving safely along the corridor to access residences and businesses.

The current proposed project would consist of widening Witt Road to accommodate one 11-foot-wide travel lane in each direction (one northbound and one southbound) and full depth pavement reconstruction. The proposed roadway section would include two 11-foot-wide travel lanes (one northbound and one southbound), a 10-foot-wide multi-use path on the west side of the roadway, a 6-foot-wide sidewalk on the east side of the roadway, and a 5-foot-wide utility buffer between the roadway and the pedestrian facilities on each side of Witt Road. A 6-foot-wide sidewalk would be constructed along the southeast side of Lafayette Avenue, extending southwest to the intersection of Mar Lee Lane. The proposed project would also include the installation of permanent lighting along the corridor as well as a storm sewer system with curb and gutter and ADA compliant curb ramps. No structure work would occur to the existing Witt Road over Small Reynolds Ditch bridge; however, pavement associated with the existing bridge would receive the proposed roadway treatment. It is

anticipated that the proposed project would require the acquisition of approximately 0.93 acre of permanent and 0.38 acre of temporary right-of-way. No relocations are anticipated as a result of the proposed project.

There is suitable summer habitat located within the project area; however, a review of the USFWS database that was conducted by INDOT, Crawfordsville district staff on March 7, 2023, did not indicate the presence of endangered bat species within 0.5-mile of the project area. It is anticipated that approximately 0.003 acre of tree clearing would be required for the project. Construction is anticipated to begin in Fall of 2026.

The maintenance of traffic (MOT) plan for the project would include phased closures with detours. Access to all properties would be maintained during construction. Temporary lighting may be used during construction. The MOT would be implemented per the INDOT Indiana Design Manual guidelines.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.0646452,-86.4875778882078,14z

DETERMINATION KEY RESULT

Based on your answers provided, this project(s) may affect, but is not likely to adversely affect the endangered Indiana bat and/or the endangered northern long-eared bat, therefore, consultation with the U.S. Fish and Wildlife Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 *et seq.*) is required. However, also based on your answers provided, this project may rely on the concurrence provided in the amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

QUALIFICATION INTERVIEW

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

    Yes

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)?

    No

25. 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

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

    Yes

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

    Yes

28. Will the project install *any* new or replace any existing **permanent** lighting in addition to the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities?

    No

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

    No

30. 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

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

    No

32. Are the project activities that are not associated with habitat removal, tree removal/ trimming, bridge and/or structure activities, temporary or permanent lighting, or use of percussives consistent with a No Effect determination in this key?

    Automatically answered

    Yes, other project activities are limited to actions that DO NOT cause any additional stressors to the bat species as described in the BA/BO

33. 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.

34. 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.

35. **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

36. **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.

    No

37. **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

38. **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

39. **Lighting AMM 2**
Does the lead agency use the BUG (Backlight, Uplight, and Glare) system developed by the Illuminating Engineering Society[1] to rate the amount of light emitted in unwanted directions?

[1] Refer to The BUG System—A New Way To Control Stray Light

Yes

40. **Lighting AMM 2**
Will the **permanent** lighting used during removal of suitable habitat and/or the removal/ trimming of trees within suitable habitat be designed to be as close to 0 for all three BUG ratings as possible, with a priority of "uplight" of 0 and "backlight" as low as practicable?

Yes

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

Yes

PROJECT QUESTIONNAIRE

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

   N/A

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

   N/A

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

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

   0.003

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

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.

LIGHTING AMM 2

When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all three ratings with a priority of "uplight" of 0 and "backlight" as low as practicable.

TREE REMOVAL AMM 3

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

TREE REMOVAL AMM 4

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

GENERAL AMM 1

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

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

This key was last updated in IPaC on October 30, 2023. Keys are subject to periodic revision.

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

This decision key should only be used to verify project applicability with the Service's amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion (dated March 23, 2023) 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: Benjamin Neild
Address: 41 W. 300 N.
City: Crawfordsville
State: IN
Zip: 47933
Email bneild@indot.in.gov
Phone: 7653615259

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
9/18/2023, 1:00 pm	2101721	Witt Road	Boone
Federal Structure ID CN/A	**Structure Coordinates** (latitude and longitude) 41.471216/-87.313139	**Structure Height** (approximate) N/A	**Structure Length** 22 feet

Structure Type (check one)

Bridge Construction Style

○ Cast-in-place		○ Pre-stressed Girder	
○ Flat Slab/Box		○ Steel I-beam	
○ Truss		○ Covered	
○ Parallel Box Beam		○ Other: Arch	

Culvert Type

○ Box	
○ Pipe/Round	○
○ Other:	

Other Structure

Structure Material (check all that apply)

Deck Material	*Beam Material*	*End/Back Wall Material*
☐ Metal	☐ None	☒ Concrete
☒ Concrete	☒ Concrete	☐ Timber
☐ Timber	☐ Steel	☐ Stone/Masonry
☐ Open grid	☐ Timber	☐ Other:
☐ Other:	☐ Other:	

Creosote Evidence

○ Yes ○ No ⊙ Unknown

Culvert Material

☐ Metal
☐ Concrete
☐ Plastic
☐ Stone/Masonry
☐ Other: N/A

Notes:

Crossings Traversed (check all that apply)

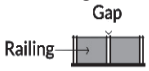
☐ Bare ground	☐ Open vegetation
☒ Rip-rap	☐ Closed vegetation
☒ Flowing water	☐ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

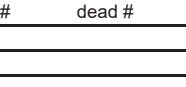
☐ Agricultural	☐ Grassland
☐ Commercial	☐ Ranching
☒ Residential-urban	☐ Riparian/wetland
☐ Residential-rural	☐ Mixed use
☐ Woodland/forested	☐ Other:

Areas Assessed (check all that apply)

Check all areas that apply. If an area is not present in the structure, check the "not present" box.
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.

Area (check if assessed)	Assessment Notes	Evidence of Bats (include photos if present)
☒ All crevices and cracks: **Bridges/culverts:** rough surfaces or imperfections in concrete **Other structures:** soffits, rafters, attic areas	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Concrete surfaces (open roosting on concrete)	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Spaces between concrete end walls and the bridge deck	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Crack between concrete railings on top of the bridge deck 	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ Vertical surfaces on concrete I-beams	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Spaces between walls, ceiling joists	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ Weep holes, scupper drains, and inlets/pipes	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☒ All guiderails	☐ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species
☐ All expansion joints	☒ Not present	☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species

Name: Preeti Samra

Signature: 

Appendix D: Section 106 of 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-CRO staff will be responsible for completion of Part II.*

Original Submission Date: **Amended Submission Date*:**

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

Submitted By (Provide Name and Firm/Organization):

Linda Weintraut, Ph.D.
Weintraut & Associates, Inc.
PO Box 5034
Zionsville, IN 46077
Linda@weintrautinc.com
317-733-9770

Project Designation Number: 2101721

Route Number: Witt Road

Feature crossed (if applicable):

City/Township: City of Lebanon/Center Township **County:** Boone County

Project Description: Boone County, with funding from the Federal Highway Administration (FHWA) and administrative oversight from the Indiana Department of Transportation (INDOT), intends to proceed with the Witt Road Improvement Project (Des. No. 2101721) located in Boone County, Indiana.

The project is located at the intersection of Witt Road and Austin Drive, extending approximately 150 ft to the north limits of the project, and 2650 ft to the south limits of the project at the intersection of Witt Road and Lafayette Avenue. The project is located in Sections 23-26, Township 19 N, Range 1 W, Center Township, Boone County, Lebanon, Indiana. The need for this project is to improve the pavement structure and enhance pedestrian accessibility.

This project would include pavement reconstruction, the addition of lighting on the west side of the road spaced 150-feet apart, ADA compliant curb ramps, trail (10-feet-wide) construction on the west side of the road, and sidewalk (6-feet-wide) construction on the east side of the road. Right-of-way impacts are anticipated throughout the project limits due to the proposed widening of the roadway and the inclusion of a utility buffer and pedestrian facilities throughout the limits of the project. In particular, there would be significant impacts to the parcel at the north corner of Lafayette Avenue and Witt Rd, due to horizontal radius correction on Witt Road.

Tree Clearing Impacts: Approximately 1.344 acres of total terrestrial disturbance, which includes approximately 0.003 acre of tree clearing, 1.341 acres of maintained lawn, will occur in order to facilitate the proposed road improvements.

If the project includes any curb, curb ramp, or sidewalk work, please specify the location(s) of such work: This project would include ADA compliant curb ramps, trail construction, and sidewalk construction (see attached plans).

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type: N/A - Witt Road over Small Reynolds Ditch Bridge (Str No. 0600230) would not be impacted by this project. (See attached plan with marked paving exception.)

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: The project requires approximately 0.93 acres of permanent ROW from residential properties for the addition curb and gutter and asphalt multi-use path. The project also requires approximately 0.38 acre of temporary ROW for grading as well as 0.03 acres for driveway reconstruction, which will all be from residential properties.

Is there *any* potential for additional temporary right-of-way to be needed later for purposes such as access, staging, etc.?

☐ **Yes** ☒ **No**

Archaeology (check one):

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

☒ **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) (INDOT will highlight applicable conditions in yellow**):**

B-1. Replacement, repair, or installation of curbs, curb ramps, or sidewalks, including when such projects are associated with roadway work such as surface replacement, reconstruct ion, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking, 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 satisfied *(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 Division of Historic Preservation and Archaeology (DHPA) and any archaeological site form information will be entered directly into the State Historic Architectural and Archaeological Database (SHAARD) by the applicant. The archaeological reports will also be available for viewing (by Tribes only) on INSCOPE.

Condition B (Above-Ground Resources)

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

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

ii. Work occurs adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource under one of the two additional conditions listed below *(EITHER Condition a OR Condition b must be met and field work and documentation must be completed as described below)*:

   a. No unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and historic brick or stone retaining walls are present in the project area adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; *OR*

   b. Unusual features, including but not limited to historic brick or stone sidewalks curbs or curb ramps, stepped or elevated sidewalks and historic brick or stone retaining walls are present in the project area adjacent to or within a National Register-listed or National Register-eligible individual above-ground resource or district and ANY ONE of the conditions *(1, 2, or 3)* listed below must be fulfilled:

      1. Unusual features described above will not be impacted by the project. Firm commitments regarding the avoidance of these features must be listed in the MPPA determination form and the NEPA document and must be entered into the INDOT Project Commitments Database. These projects will also be flagged for quality assurance reviews by INDOT Cultural Resources Office during/after project construction.
      2. Unusual features described above have been determined not to contribute to the significance of the historic resource by INDOT Cultural Resources Office in consultation with the SHPO based on an analysis and justification prepared by their staff or review of such information from other qualified professional historians.
      3. Impacts to unusual features described above have been determined by INDOT Cultural Resources Office to be so minimal that they do not diminish any of the characteristics that contribute to the significance of the historic resource, based on an analysis and justification prepared by their staff or review of such information from other qualified professional historians.

B-2. Installation of new lighting, signals, signage and other traffic control devices 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-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-8. Construction of pedestrian facilities including trails, multi-use paths, greenways, and associated minor activities defined below, 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 within areas previously disturbed by vertical and horizontal construction activities, including existing roadway, sidewalk, or rail bed, and is not on, within or adjacent to a National Register listed or eligible site; *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.

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

Information reviewed (please check all that apply):

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

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

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

Bridge inspection information/iTAMS ☐ Historic Bridge Inventory Database ☐

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

Other (please specify):

Natali, Bethany. *Historic Property Short Report, I-65 and US 52 Interchange Improvement Project in Center Township, Boone County, Indiana, INDOT Des. No. 2200176.* Indianapolis, IN: Weintraut & Associates, 2023.

Arnold, Craig
2024 Archaeological Phase Ia Reconnaissance: New Witt Road Construction from Lafayette Avenue to Austin Drive in Center Township, Boone County, Indiana (INDOT Des No. 2100721). 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:

<u>Above-ground Resources</u>

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 Boone County. No listed resources are present within 500 feet of the project area, a distance that serves as an adequate area of potential effects given the project scope and terrain.

The National Register & Indiana Historic Sites and Structures Inventory (IHSSI) information for Boone 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 *Boone County Interim Report* (1982; Center Township) of the IHSSI was 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 resources are located within 500 feet 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.

Because the location of this project is not adjacent to a National Register-listed or eligible resource, a field visit by a Qualified Professional historian is not required to review the ADA compliant curb ramp construction along the project area. Therefore, Category B-1, Condition B-i is applicable for the proposed work.

It should be noted that the project area for this project is partially within the Area of Potential Effects of the I-65 and US 52 Interchange Improvement Project (Des. No. 2200176). The Historic Property Short Report (HPSR) for that project (Natali 2023) was consulted to assist with this review.

The INDOT-CRO historian reviewed structures adjacent to the project area utilizing online aerial, street-view photography, and the Boone County GIS website. It should be noted that while new lighting is being installed, only properties within 250 feet of the project area are being reviewed. Intervening structures and trees as well as current lighting within the project area will limit impacts from light intrusion. The project area is within a suburban setting with immediately adjacent building stock consisting of late twentieth century residential subdivisions. The HPR for Des. 2200176 did not identify any eligible districts or individual resources within the APE where that project overlapped the project area for Des. 2101721.

The portions of the project area that were not within the APE for Des. 2200176 consist of late twentieth century residential subdivisions. These neighborhoods do not appear to possess the age or significance and/or integrity necessary to be considered National Register-eligible.

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

Archaeological Resources

An INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the archaeology report submitted by CONSULTANT on behalf of ENGINEERING FIRM (Arnold 2024).

A 14.65-acre survey area was examined through a combination of systematic shovel probing in 15 m intervals and visual inspection of disturbed areas. The area encompassing Witt Road has been previously disturbed from the construction of the roadway, existing culvert with associated drainage, embankments, residential and commercial infrastructure, existing sidewalks, and buried utilities. Two archaeological sites, 12BO712 and 12BO713, were documented as a result of the survey. Site 12BO712 consists of a historic artifact scatter that is unlikely to produce information beyond that which has already been gathered. Therefore, it is not eligible for listing in the NRHP and no further work is recommended. Site 12BO713 is a multicomponent site that consists of a historic scatter and precontact lithic scatter. This site is also unlikely to produce information beyond that which has already been gathered. Therefore, it is not eligible for listing in the NRHP and no further work is recommended (Arnold 2024).

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): Taylor Payne and KayLee Blum

INDOT Approval Date: 9/5/2024

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.*

Appendix E: Red Flag and Hazardous Materials

AMERICAN STRUCTUREPOINT INC.

9025 River Road, Suite 200, Indianapolis, Indiana 46240
TEL 317.547.5580 FAX 317.543.0270

www.structurepoint.com

RED FLAG INVESTIGATION

Date: April 23, 2024

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: Preeti Samra
American Structurepoint, Inc.
9025 River Road, Suite 200
Indianapolis, Indiana 46240
psamra@structurepoint.com

Re: RED FLAG INVESTIGATION
DES #2101721, Local Project
Road Improvement
Witt Road, Lafayette Avenue to Austin Drive
Boone County, Indiana

PROJECT DESCRIPTION

The proposed project is located along Witt Road in the City of Lebanon, Boone County, Indiana. The proposed project begins approximately 130-feet west of the intersection of Lafayette Avenue and extends 0.5-mile north, terminating 250-feet north of the intersection of Witt Road with Austin Drive. The proposed limits also extend along Lafayette Avenue approximately 335-feet southeast to 280-feet northwest of the intersection of Witt Road and Lafayette Avenue. The current proposed project would consist of widening Witt Road to accommodate one 11-foot wide travel lane in each direction (one northbound and one southbound) and full depth pavement reconstruction. The proposed roadway section would also include a 10-foot-wide multi-use path on the west side of the roadway, a 6-foot-wide sidewalk on the east side of the roadway, and a 5-foot-wide utility buffer between the roadway and the pedestrian facilities on each side of Witt Road. A 6-foot-wide sidewalk would be constructed along the southeast side of Lafayette Avenue, extending southwest to the intersection of Mar Lee Lane. The proposed project would also include the installation of permanent lighting along the corridor as well as a storm sewer system with curb and gutter, and Americans with Disabilities (ADA) compliant curb ramps. No structure work would occur to the existing Witt Road over Small Reynolds Ditch bridge; however, pavement associated with the existing bridge would receive the proposed roadway treatment.

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) _____

Proposed right of way: Temporary ☒ # Acres __<0.5_, Permanent ☒ # Acres _<0.5_, Not Applicable ☐

Type and proposed depth of excavation: It is anticipated the proposed project would require excavation to a maximum depth of 10 feet below ground surface (ft-bgs) associated with the storm water infrastructure work.

Maintenance of traffic (MOT): MOT is anticipated to require full closure with detour. Access to all properties, both residential and commercial, would be maintained during construction. The roads to be utilized for the detour have not yet been determined.

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	**2***	Recreational Facilities	**2**
Airports[1]	**N/A**	Pipelines	**3**
Cemeteries	**N/A**	Railroads	**1**
Hospitals	**N/A**	Trails	**N/A**
Schools	**2***	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 the icons are not mapped on the GIS layer, two (2) religious facilities are located within the 0.5-mile search radius. The nearest facility, The Church of Jesus Christ of Latter-day Saints, is located approximately 0.06-mile northeast from the project area. Coordination with The Church of Jesus Christ of Latter-day Saints will occur.

Schools*: Although the icons are not mapped on the GIS layer, two (2) schools are located within the 0.5-mile search radius. The nearest school, Boone County Head Start, is located approximately 0.09-mile south from the project area. No impact is expected.

Recreational Facilities: Two (2) recreational facilities are located within the 0.5-mile search radius. The nearest facility, Rolling Meadow Park, is located approximately 0.13-mile east from the northern terminus of the project area. No impact is expected.

Pipelines: Three (3) pipeline segments are located within the 0.5-mile search radius. The nearest pipeline segment, associated with Indiana Gas Co. Inc., is located approximately 0.09-mile southeast of the project area. No impact is expected.

Railroads: One (1) railroad segment is located within the 0.5-mile search radius. The railroad segment, CSX Railroad, is located approximately 0.32-mile east 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	**21**
Canal Structures – Historic	**N/A**	Lakes	**11**
NPS NRI Listed	**N/A**	Floodplain - DFIRM	**28**
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	**34**	Sinking-Stream Basins	**N/A**

Explanation:

Rivers and Streams: Thirty-four (34) stream segments are located within the 0.5-mile search radius. Two (2) stream segments, associated with Small Reynolds Ditch, are located within the project area. A Waters of the U.S. Report is recommended based on mapped features, and coordination with the appropriate agency, if applicable, will occur.

NWI-Wetlands: Twenty-one (21) wetlands are located within the 0.5-mile search radius. The nearest wetland is located approximately 0.02-mile south from the southern terminus of the project area. No impact is expected.

Lakes: Eleven (11) lakes are located within the 0.5-mile search radius. The nearest lake is located approximately 0.08-mile east from the northern terminus of the project area. No impact is expected.

Floodplains: Twenty-eight (28) floodplain polygons are located within the 0.5-mile search radius. The project area is located within three (3) of the floodplain polygons. Coordination with the appropriate agency, if applicable, will occur.

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 resources 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	**3**	Confined Feeding Operations (CFO)	**N/A**
Voluntary Remediation Program	**N/A**	Brownfields	**1**
Construction Demolition Waste	**N/A**	Institutional Controls	**N/A**
Solid Waste Landfill	**N/A**	NPDES Facilities	**3**
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:

UST Sites: Three (3) UST sites are located within the 0.5-mile radius. The nearest site, Lebanon Street Department, 1301 Lafayette Avenue, AI ID #5400, is mapped adjacent to the project area, but is located approximately 0.20-mile southeast from the southern terminus of the project area. The USTs on site were removed in 1990. No impact is expected.

Brownfields: One (1) Brownfield site is located within the 0.5-mile search radius. The site, County Rock Pile 4070450, Indianapolis Avenue & I-65, AI ID #7821, is located approximately 0.41-mile southwest from the southern terminus of the project area. No impact is expected.

NPDES Facilities: Three (3) NPDES facilities are located within the 0.5 mile search radius. The nearest facility, Riley Ridge Subdivision, 1706 Lafayette Road, Permit ID INRA01767, is located adjacent to the southern terminus of the project area. The Construction Stormwater Permit was for discharge associated with construction activities and was effective until July 10, 2023. No impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Boone 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_boone.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 U.S. Fish and Wildlife (USFWS) and the Indiana Department of Natural Resources (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 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 Information for Planning and Consultation (IPaC) 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:

Religious Facilities: The Church of Jesus Christ of Latter-day Saints is located approximately 0.06-mile northeast from the project area. Coordination with The Church of Jesus Christ of Latter-day Saints will occur.

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

- Two (2) stream segments, associated with Small Reynolds Ditch, are located within the project area.
- The project area is located within three (3) floodplain polygons (coordination only).

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

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

INDOT ESD concurrence: Tracy Barnes Digitally signed by Tracy Barnes Date: 2024.04.23 13:50:15 -04'00' (Signature)

Prepared by:
Preeti Samra
Senior Environmental Specialist
American Structurepoint, Inc.

Graphics:

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

SITE LOCATION: YES

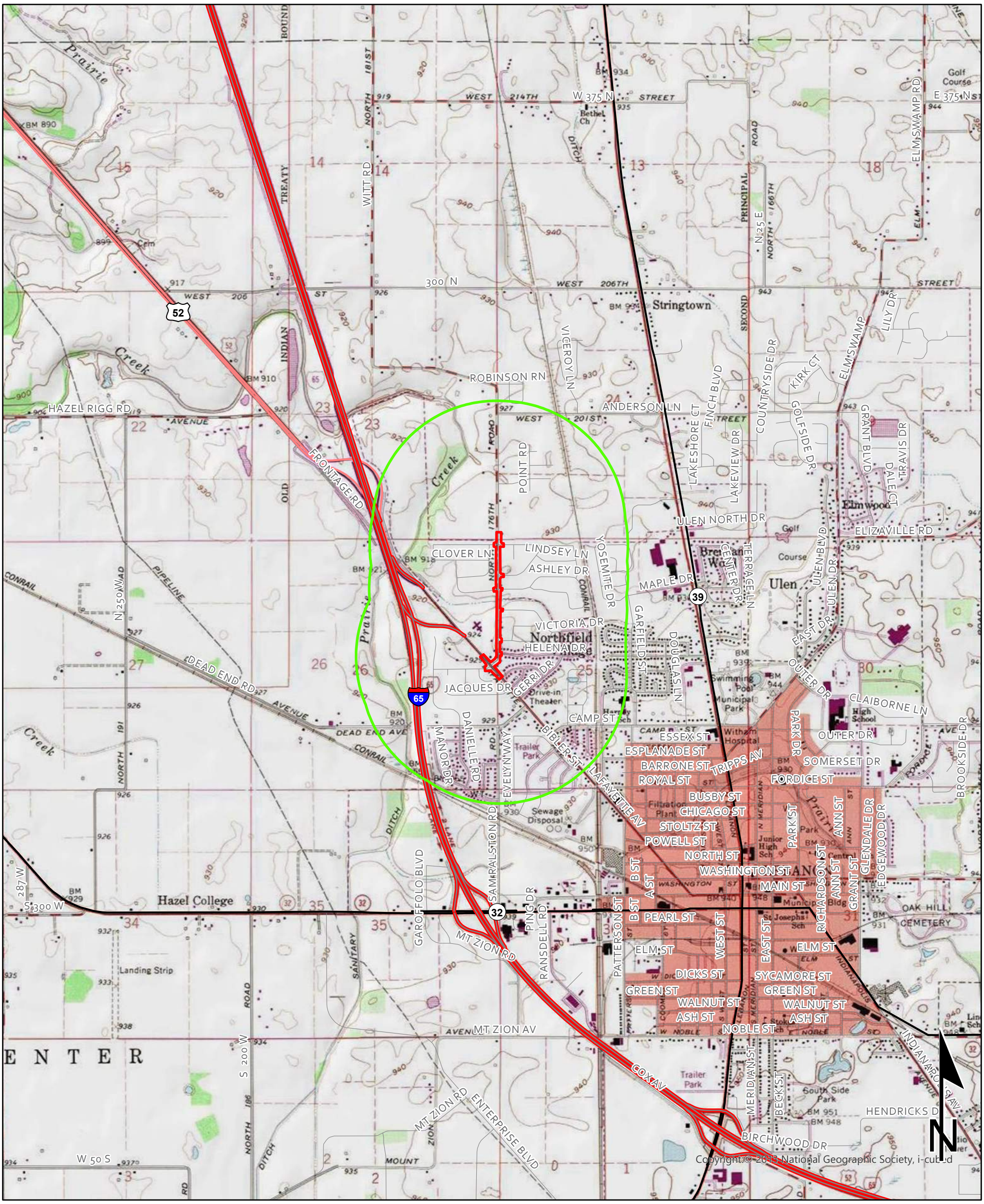
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Site Location
Witt Road, Lafayette Avenue to Austin Drive
Des. No. 2101721, Road Improvement
Boone County, Indiana



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

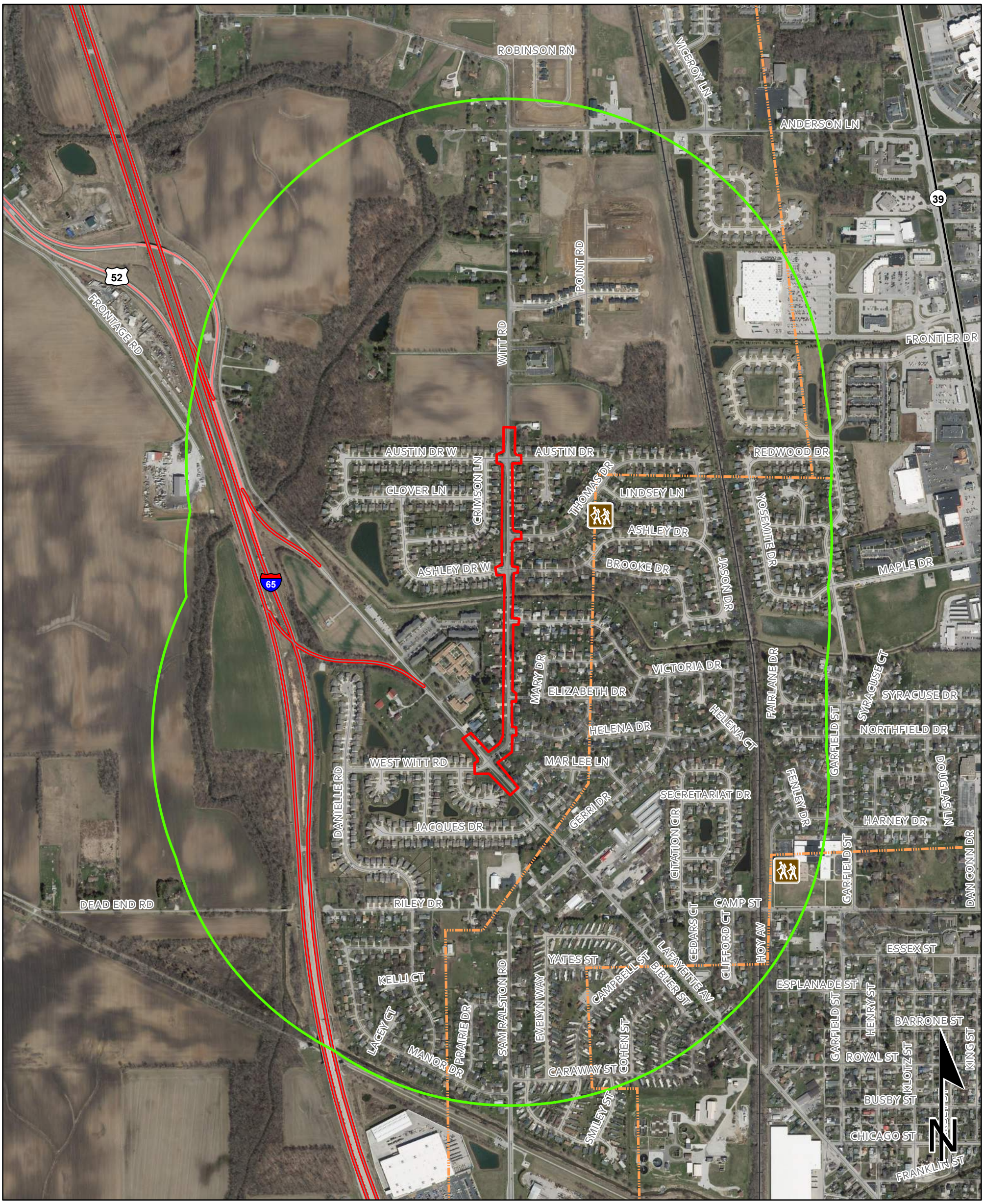
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

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.

LEBANON QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Red Flag Investigation - Infrastructure
Witt Road, Lafayette Avenue to Austin Drive
Des. No. 2101721, Road Improvement
Boone County, Indiana



Sources:

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

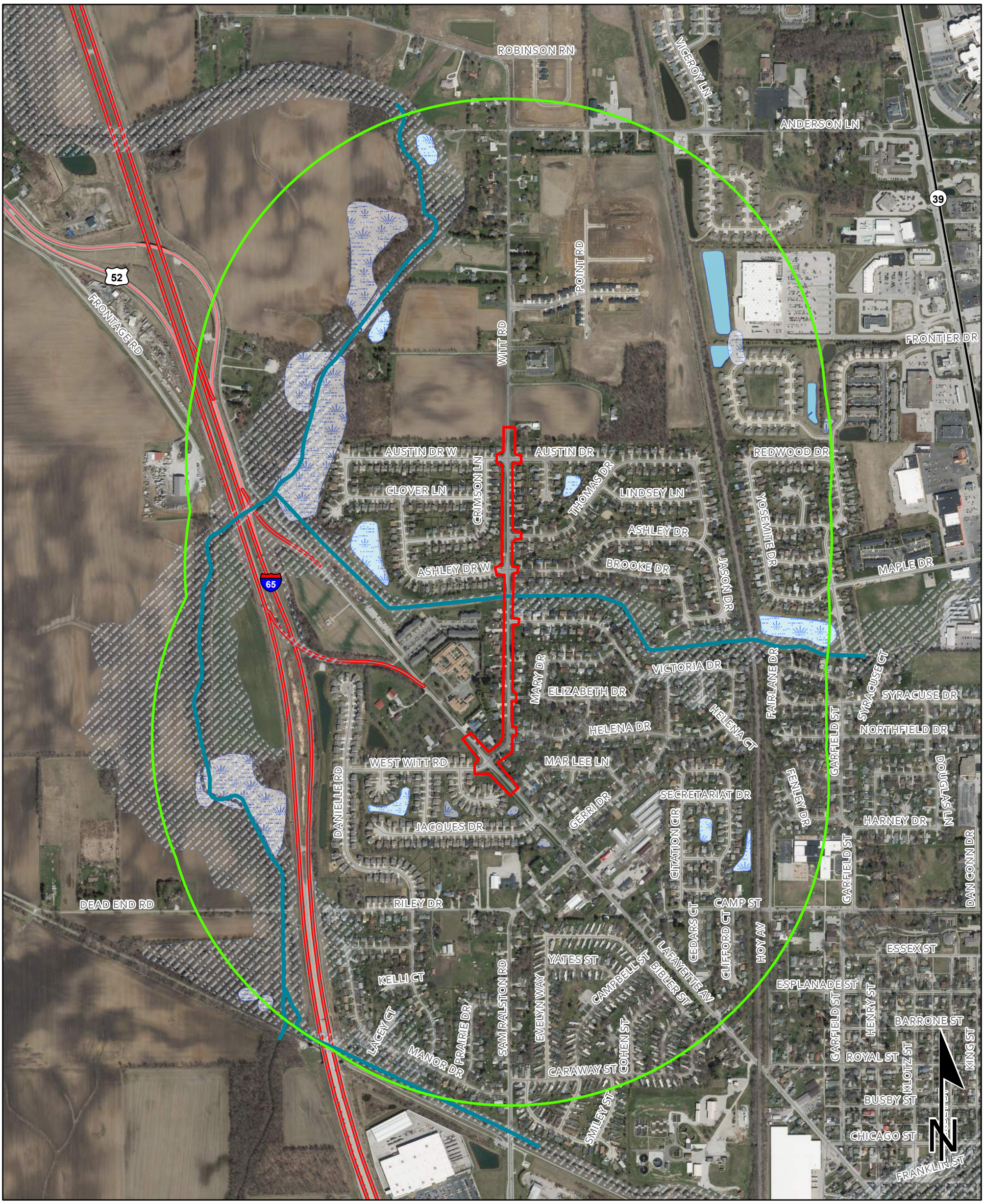
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)

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
Witt Road, Lafayette Avenue to Austin Drive
Des. No. 2101721, Road Improvement
Boone County, Indiana



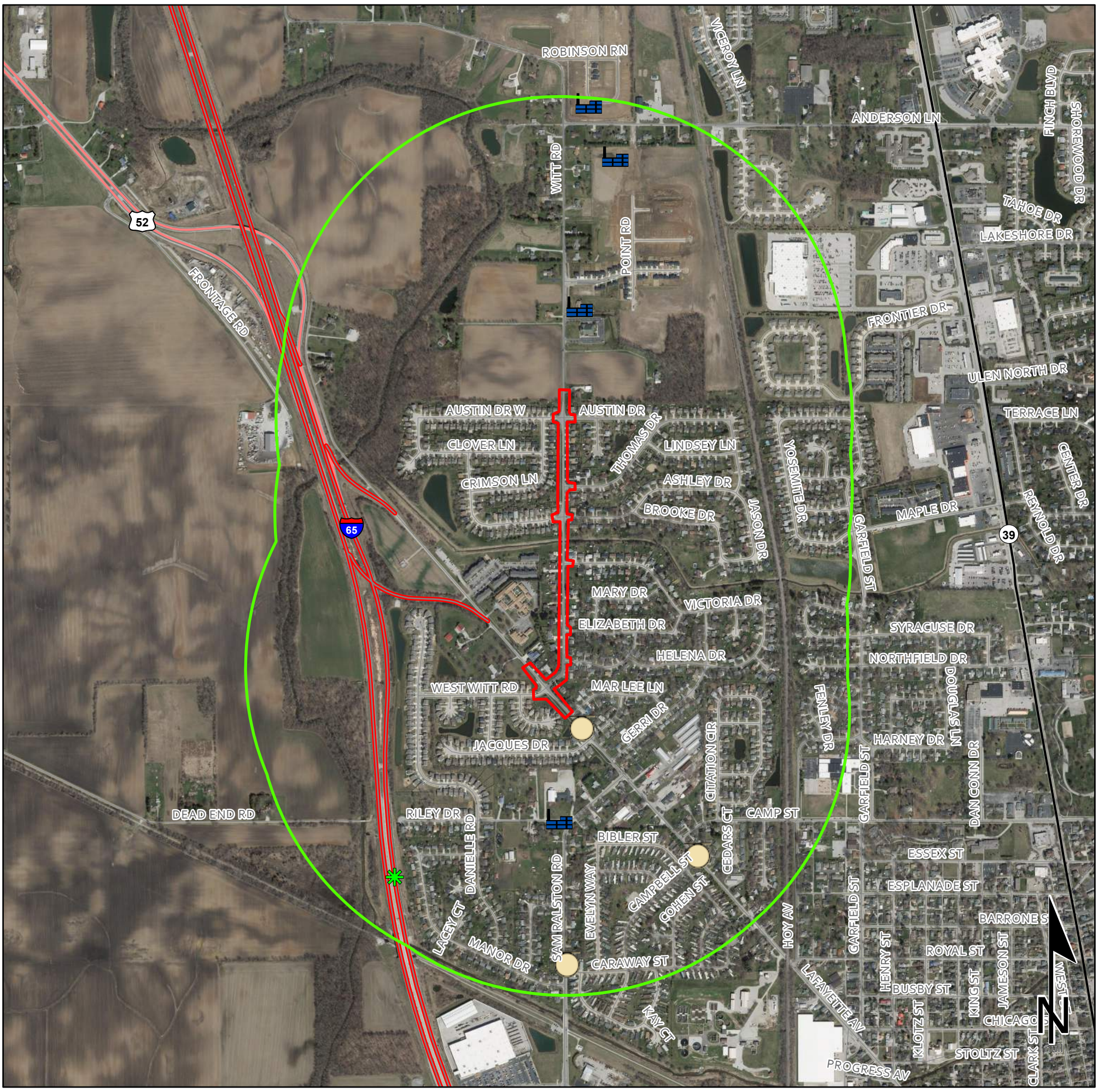
0 0.1 0.2 0.4 Miles

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

Red Flag Investigation - Hazardous Material Concerns
Witt Road, Lafayette Avenue to Austin Drive
Des. No. 2101721, Road Improvement
Boone County, Indiana



- Brownfield
- RCRA Corrective Action Sites
- Confined Feeding Operation
- Notice_Of_Contamination
- Construction/Demolition Site
- Infectious/Medical Waste Site
- Leaking Underground Storage Tank
- Manufactured Gas Plant
- NPDES Facilites
- NPDES Pipe Locations
- Open Dump Waste Site
- RCRA Generator/TSD
- Restricted Waste Site
- Septage Waste Site
- Solid Waste Landfill
- State Cleanup Site
- Superfund
- Tire Waste Site
- Underground Storage Tank
- Voluntary Remediation Program
- Waste Transfer Station
- Institutional Controls
- County Boundary
- Project Area
- Half Mile Radius
- Toll
- Interstate
- State Route
- US Route
- Local Road

0 0.13 0.25 0.5 Miles

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

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

Appendix F: Water Resources and Ecological Information

Duplicate mapping and routine wetland delineation data have been removed to reduce file size.

WETLAND DELINEATION AND WATERS REPORT

WITT ROAD IMPROVEMENT PROJECT
DES. NO. 2101721
CITY OF LEBANON, BOONE COUNTY, INDIANA
40.064078, -86.487723

Prepared for:

CITY OF LEBANON
401 SOUTH MERIDIAN STREET
LEBANON, IN 46052

Prepared by:

AMERICAN STRUCTUREPOINT, INC.
9025 RIVER ROAD
INDIANAPOLIS, INDIANA 46240
(317) 547-5580

February 8, 2024

TABLE OF CONTENTS

1.0 Introduction

American Structurepoint, Inc. was contracted by the City of Lebanon to perform a wetland delineation and waters investigation on the Witt Road Improvement project in Boone County, Indiana.

Date of Field Reconnaissance: September 18, 2023

Project Location:

Latitude/Longitude	40.064078, -86.487723	
Lebanon, Indiana 7.5 Minute Quadrangle		
Section(s)	**Township**	**Range**
23, 24, 25, & 26	19N	1W

Project Description: The proposed project is located along Witt Road in the City of Lebanon, Boone County, Indiana. The proposed project would consist of widening travel lanes from 10.5-foot-wide to 11-foot-wide in each direction (one northbound and one southbound) as well as the addition of a 6-foot-wide sidewalk on the east side of Witt Road, a 10-foot-wide multi-use path on the west side of Witt Road, enclosed storm sewer with curb and gutter, and Americans with Disabilities Act (ADA) compliant curb ramps. No work would occur to the existing Witt Road over Small Reynolds Ditch Bridge within the project area located over Small Reynolds Ditch; however, pavement associated with the existing bridge would receive full depth pavement reconstruction.

The investigated area begins at the Witt Road intersection of Lafayette Avenue and extends approximately 0.5-mile north, terminating approximately 250-feet north of the intersection of Austin Drive. The investigated limits also extend along Lafayette Avenue approximately 335-feet southeast to approximately 280-feet northwest of the intersection of Witt Road. The investigated area for the undertaking was set based on preliminary coordination with the project designers, the City of Lebanon, and the project scope as understood prior field investigation and set to encompass all proposed work and areas needed for access. The location and approximate boundaries of the investigated area can be seen in the attached maps and aerial photographs (Appendix C).

The proposed project is located in Land Resource Region (LRR) M, as recognized by the US Department of Agriculture. As such, this wetland delineation was conducted in accordance with the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (U.S. Army Corps of Engineers, 2010).

No wetlands and one stream (Small Reynolds Ditch) totaling 187 linear feet (0.06 acre), was identified within the investigated area. Small Reynolds Ditch appears to have jurisdictional connection to Sugar Creek, which drains to the Wabash River, a Traditionally Navigable Waterway (TNW). Therefore, this feature is anticipated to be a jurisdictional waters of the U.S.

2.0 Definitions

2.1 "Waters of the US"

"Waters of the US" are within the jurisdiction of the US Department of the Army Corps of Engineers (USACE) under the Clean Water Act of 1972, Section 404. "Waters of the US" is a broad term that describes all interstate waters and any water that affects interstate traffic or commerce. Included are wetlands and tributaries adjacent to navigable "waters of the US" and other waters where degradation or destruction could affect interstate or foreign commerce. This includes rivers, streams, wetlands, and many ditches where permits are required for the discharge of dredged or fill material pursuant to Section 404 of the Clean Water Act.

2.2 "Waters of the State" and Isolated Wetlands

"Waters of the State" include all intrastate waters and wetlands that are not hydrologically connected or adjacent to interstate waters. "Waters of the State" include isolated wetlands determined not to be "waters of the US" or jurisdictional wetlands under the January 9, 2001, US Supreme Court ruling [see Solid Waste Agency of Northern Cook County (SWANCC) v. US Army Corps of Engineers]. Isolated wetlands refer to those non-tidal "waters of the US" that are not part of a surface tributary in interstate/navigable waters and are not adjacent to such tributary water bodies.

2.3 Wetlands

Wetlands are "waters of the US" or "waters of the State". Section 404 of the Clean Water Act defines wetlands as those areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support and under normal conditions do support a prevalence of vegetation typically adapted for life in saturated soil conditions.

2.4 Regulatory Authority and Requirements

The USACE regulates the nation's waters for navigation and the full public interest for both the protection and utilization of water resources. The regulatory authorities and responsibilities of the USACE are based on the following laws:

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the obstruction or alteration of navigable waters of the United States without a permit from the USACE.
- Section 404 of the Clean Water Act (33 U.S.C. 1344). Section 301 of this Act prohibits the discharge of dredged or fill material into "waters of the US" without a permit from the USACE.
- Section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972, as amended (33 U.S.C. 1413) authorizes the USACE to issue permits for the transportation of dredged material for the purpose of dumping it into ocean waters.

If filling or dredging operations are proposed to occur with the boundary of a "waters of the US" a Section 404 permit must be obtained from USACE before those activities are conducted. Three types of permits are issued by USACE within the State of Indiana: nationwide permits, the Regional General Permit for Indiana, and Individual Permits. Nationwide permits have been developed for projects meeting specific criteria and have a minimal impact to the regulated resources. Minimal impacts are generally classified as less than 0.5 acre of permanent impacts or temporary impacts depending on the activity to be undertaken. The Regional General Permit (RGP) for Indiana has been developed for projects meeting specific criteria and has

a minimal impact to the regulated resources within the State of Indiana. The RGP authorizes activities associated with any construction activities impacting less than one acre of wetlands or less than 1,500 linear feet of regulated waterway. Individual Section 404 Permits (site specific permits) are required for any construction activities impacting greater than one acre of regulated resources.

All activities that require a Section 404 Permit from USACE will also require a Section 401 Water Quality Certification (or a waiver) from the Indiana Department of Environmental Management (IDEM). On December 12, 2014 IDEM issued a Water Quality Certification for projects meeting specific criteria and conditions for the Indiana RGP and on March 15, 2017 IDEM issued a Water Quality Certification for projects meeting specific criteria and conditions for multiple Nationwide Permits. The specific conditions limit these Water Quality Certifications to projects with less than 0.1 acre and 300 linear feet of impacts to wetlands and waterways. An Individual Section 401 Water Quality Certification is required for projects impacting greater than 0.1 acre or 300 linear feet of wetlands or waterways.

Under the 2001 US Supreme Court Ruling (SWANCC), filling or dredging of isolated wetlands does not require notification of USACE. However, it is necessary to notify the IDEM for such projects and obtain a permit from the agency under State Wetland Law. All activities affecting "waters of the State" that are not considered to be "waters of the US" will require a State Wetland Permit under IC 13-18.

3.0 Methodology

The study area was analyzed using methods outlined in the Routine Determination, On-site Inspection Necessary procedure in the *Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region* (U.S. Army Corps of Engineers, 2010). The 1987 USACE Manual and the Regional Supplemental Documents require wetland boundaries to be delineated using a 3-parameter approach: hydrophytic vegetation, hydric soils, and wetland hydrology.

3.1 Hydrophytic Vegetation

Hydrophytic vegetation criteria are met by the rapid test for hydrophytic vegetation, the dominance test, the prevalence index, or morphological adoptions.

The rapid test for hydrophytic vegetation is met if all dominated species across all strata are rated as obligate (OBL), or facultative wetland (FACW), or a combination based on a visual assessment.

The indicator status of plant species is based on the estimated probabilities of that species occurring in wetland conditions. The indicator status categories are defined as follows.

PLANT INDICATOR STATUS CATEGORIES
(Environmental Laboratory, 1987)

INDICATOR CATEGORY	INDICATOR SYMBOL	DEFINITION
Obligate Wetland Plants	OBL	Plants that occur almost always (probability >99 percent) in wetland under natural conditions. Species rarely occur in non-wetland (probability <1 percent).
Facultative Wetlands Plants	FACW	Plants that usually occur in wetland (probability 67 to 99 percent) may also occur in non-wetland (probability 1 to 33 percent).
Facultative Plants	FAC	Plants that are equally likely to occur in wetland or non-wetland (probability 33 to 67 percent).
Facultative Upland Plants	FACU	Plants that sometimes occur in wetland (probability 1 to 33 percent) but occur more often in non-wetland (probability 67 to 99 percent).
Upland Plants	UPL	Plants that occur almost always (probability >99 percent) in non-wetland under natural conditions. Species rarely occur in wetland (probability <1 percent).

The dominance test for hydrophytic vegetation is met if more than 50 percent of the dominant plants species across all strata are rated OBL, FACW, or FAC.

If a community fails the Rapid Test and the Dominance Test, and both hydric soils and hydrology are present, then two additional wetland vegetation indicators should be assessed. These are the prevalence index and morphological adaptations. If either a prevalence of species noted in the sampling plot are hydrophytic or if morphological indicators are present, then the area is considered to have hydrophytic vegetation.

3.2 Hydric Soils

Hydric soils criteria are met with the presence of soils flooded for a long duration or very long duration during the growing season. Hydric soil indicators are formed predominately by the accumulation or loss of iron, manganese, sulfur, or carbon compounds in saturated and anaerobic conditions. Anaerobic conditions created by repeated or prolonged saturation or flooding result in permanent changes in soil color and chemistry, which are used to determine the presence of hydric soils.

Soils on a particular site are analyzed to determine whether they meet the hydric criteria. In the absence of groundwater, this analysis is performed by looking for acceptable indicators that suggest the soil is saturated, flooded, or ponded for a duration long enough to support anaerobic conditions near the surface. Field indicators of hydric soils, such as gleyed matrix, depleted matrix, redox dark surface or depressions, or depleted dark surface, are common hydric soil indicators in Indiana.

3.3 Wetland Hydrology

Wetland hydrology criteria is met or assumed by the presence of soils inundated or saturated under normal circumstances for periods long enough to support a prevalence of wetland vegetation. Hydrology is

controlled by such factors as rainfall patterns, local geology and topography, soil type, local water table, and drainage. Primary indicators of wetland hydrology include inundation, soil saturation, watermarks, sediment deposits, sparse vegetation, and inundation visible on the aerial photography. Secondary indicators include cracked soils, drainage patterns, and FAC-neutral vegetation. A single primary indicator or two secondary indicators are necessary to determine the presence of wetland hydrology.

All three parameters must be present for a site to be considered "waters of the State" or "waters of the US."

3.4 Stream Habitat

The Qualitative Habitat Evaluation Index (QHEI) is used to determine existing stream impairments and aid in mitigating future impacts. The QHEI is composed of six metrics; substrate, in-stream cover, channel morphology, riparian zone and bank erosion, pool/glide and riffle run quality, and map gradient. Each metric is scored individually and then summed, resulting in a total QHEI score for the targeted reach of stream.

The primary Headwater Habitat Evaluation Index (HHEI) is used to determine existing impairments and aid in mitigating future impacts to primary headwater habitat streams. A primary headwater habitat stream is described as a jurisdictional surface water that has a defined bed and bank, with either continuous or periodical flowing water, with a watershed area less than or equal to one square mile, and maximum depth of water pools equal to or less than 40 cm. The HHEI is composed of three metrics: substrate, maximum pool depth, and bank full width. Each metric is scored individually, and then summed, resulting in a total HHEI score for the targeted reach of headwater stream.

Methodology described in the *Methods for Assessing Habitat in Flowing Waters: Using the Qualitative Habitat Evaluation Index* (QHEI) manual (OhioEPA, Division of Surface Water, 2006)) was used for assessing streams. Additional methodology described in the *Field Evaluation Manual for Ohio's Primary Headwater Habitat Streams* (Ohio EPA, Division of Surface Water, 2012) was used in assessing primary headwaters.

4.0 Site Characterization – Records Review

4.1 USGS Topographic Mapping

The investigated area is located on the Lebanon USGS 7.5 Minute Quadrangle Map in Sections 23, 24, 25, & 26, Township 19N, and Range 1W. The topographic map depicts the area as primarily cleared, residential land. The topography is sloped towards Small Reynolds Ditch. An unnamed intermittent stream, locally known as Small Reynolds Ditch, is shown as flowing east to west through the center of the investigated area and was verified during the September 18, 2023, field investigation.

4.2 County Soil Survey

The *NRCS Soil Survey Geographic Database (SSURGO)* was reviewed to determine soil classification within the investigated area. Soil types mapped within the investigated area include:

Soil Map Unit Summary		
Map Unit Name	**Map Unit Symbol**	**SSURGO Hydric Rating by Map Unit**
Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	CudA	2
Fincastle silt loam-Urban land complex, 0 to 2 percent slopes	YfsA	10
Fincastle-Urban land complex, 0 to 2 percent slopes	YfuA	5
Miami silt loam-Urban land complex, 2 to 6 percent slopes, eroded	YmsB2	5
Treaty-Urban land complex, 0 to 1 percent slopes	YmyA	49
Ockley-Urban land complex, 0 to 2 percent slopes YocA	YocA	1
Ockley-Urban land complex, 2 to 6 percent slopes	YocB	2
Ockley silt loam-Urban land complex, 0 to 2 percent slopes	YoxA	0
Ockley silt loam-Urban land complex, 2 to 6 percent slopes, eroded	YoxB2	5

Soil Map Unit Summary		
Map Unit Name	**Map Unit Symbol**	**SSURGO Hydric Rating by Map Unit**
Treaty silty clay loam-Urban land complex, 0 to 1 percent slopes	YtrA	67

4.3 National Wetlands Inventory (NWI) Mapping

The NWI Mapping was reviewed for the investigated area. There were no NWI wetlands mapped within the investigated area. The nearest NWI wetland is mapped approximately 0.30 mile northwest from the investigated area and is categorized as a Palustrine, Forested, Broad-Leaved Deciduous, Temporarily Flooded (PFO1A) under the Cowardin Classification System.

4.4 National Hydrography Dataset Flow Lines

Three USGS National Hydrography Dataset (NHD) flow lines are present in the investigated area. The first NHD flowline, a pipeline flow line, is located approximately 75 feet east of the Witt Road and Ashley Drive intersection and was field verified as an existing stormwater drain (Photo 21). The remaining two stream/river flow lines, both field verified as Small Reynolds Ditch, flow through the center of the investigated area approximately 224 feet south of the Witt Road and Ashley Drive intersection (Photos 18-19 and 32-33).

4.5 Floodways and Floodplains

The Indiana Department of Natural Resources (IDNR) Floodplain Analysis and Regulatory Assessment (FARA) mapping was reviewed for the investigated area. One floodway, associated with Small Reynolds Ditch (also known as New Reynolds Ditch), crosses the project area. The floodway is associated with the IDNR Best Available Flood Hazard Zone FEMA Zone AE Floodway and extends north and south from Small Reynolds Ditch within the investigated area. The floodway is primarily maintained grassy lawn.

4.6 Legal Drain

The Boone County Surveyors Office Geographic Information System (https://boonein.maps.arcgis.com/) was accessed on December 5, 2023, by American Structurepoint, Inc. staff. The results indicated Small Reynolds Ditch is not mapped as a Boone County legal drain within the investigated area.

4.7 12-Digit Hydrologic Unit Code

The investigated area is located entirely within the limits of the Deer Creek-Prairie Creek 12-Digit HUC (051201100402).

4.8 Aerial Photography

The 2023 NearMap Aerial Photography was reviewed for the proposed project corridor. The aerial photography depicts the area as mostly residential land use within the vicinity of the investigated area. An agricultural field can be seen north of the investigated area. Small Reynolds Ditch can be seen in the center of the investigated area.

According to the ECL response from the Boone County Surveyor's Office, Small Reynold's Ditch is a legal drain. See Appendix C for additional information.

5.0 Field Reconnaissance

The Witt Road Improvement project was examined for the presence of wetlands and waters of the U.S. on the site on September 18, 2023. Data points were strategically placed to identify appropriate boundaries of delineated wetlands and to determine the presence or absence of jurisdictional wetlands and waters of the U.S. One stream, Small Reynolds Dirch, was delineated within the investigated area. Data sheets and a map indicating the location of data points documenting the field investigation are included in the appendix.

5.1 Wetlands

No wetlands were delineated within the investigated area. The investigated area was thoroughly reviewed for areas of hydrophytic vegetation and wetland hydrology. No evidence of wetland hydrology were documented. Additionally, dominant vegetation within the investigated area includes Kentucky blue grass (*Poa pratensis*, FAC), and tall fescue *(Festuca arundinacea,* FACU).

Stormwater is conveyed through vegetated roadside ditches throughout the investigated area along both sides of the roadway that discourage wetland development. In addition, no wetlands were mapped within the investigated area on the USGS topographic map or the NWI map. The topography is sloped towards Small Reynolds Ditch north and south of the stream and is not conductive for wetland development.

5.2 Drainage Features, Streams, and Other Potential "Waters of the U.S."

5.2.1 Small Reynolds Ditch

Small Reynolds Ditch enters the eastern boundary of the investigated area approximately 215 feet north of the Witt Road and Victoria Drive intersection. The stream flows west for approximately 187 linear feet under the existing Bridge, Witt Road over Small Reynolds Ditch, before exiting the investigated area. The stream is depicted on the USGS topographic map as an intermittent stream. StreamStats (https://water.usgs.gov/osw/streamstats/) reports the upstream drainage area of Small Reynolds Ditch is approximately 3.31 square miles. The stream is not a County Legal Drain. Small Reynolds Ditch was flowing during field investigation on September 18, 2023, and stream flow appears to be intermittent as indicated by USGS topographic map. Small Reynolds Ditch drains to Prairie Creek, which drains to Sugar Creek, which eventually drains to the Wabash River, a TNW. Therefore, it is anticipated Small Reynolds Ditch would be considered a jurisdictional waters of the U.S.

Small Reynolds Ditch is conveyed beneath the existing Witt Road over Small Reynolds Ditch Bridge. The stream was noted to have poor channel development with extensive embeddedness. In-stream cover was nearly absent. The stream was 10% riffle, 5% run, 80% glide, and 5% pool. The substrate was 60% silt and 40% sand. The ordinary high water mark (OHWM) of Small Reynolds Ditch at the assessment location was 13.4 feet wide by 0.8 feet deep. Small Reynolds Ditch would be classified as a Riverine, Intermittent, Streambed, Seasonally Flooded, Excavated (R4SBCx) according to the Cowardin Classification.

A Qualitative Habitat Evaluation was conducted for Small Reynolds Ditch at Stream Assessment (SA) 1 at coordinates 40.064744, -86.488033. The overall QHEI score for the 187-foot sampled stream segment was 27. This is a very poor narrative rating in the manual. Small Reynolds Ditch scored highest for Gradient (6/10) and Channel Morphology (6/20). However, the poor Instream Cover (1/20) may be a limiting factor to the macrohabitat of the stream.

6.0 Conclusions

No wetlands and one stream, Small Reynolds Ditch, totaling 187 linear feet (0.06 acre), was identified within the investigated area. Small Reynolds Ditch appears to have jurisdictional connection to Sugar Creek, which drains to the Wabash River, a TNW. Therefore, this feature is anticipated to be a jurisdictional waters of the U.S.

All jurisdictional waters of the U.S. are under the regulatory authority of the USACE under Section 404 of the Clean Water Act. Every effort should be taken to avoid and minimize impacts to the waterway and wetlands. If impacts are necessary, then mitigation may be required. 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.

7.0 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.

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02/08/2024

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Table 2 – Aquatic Resources Summary

Aquatic Resources Summary: Streams											
Delineated Resource	**Photos**	**Lat/ Long**	**USGS Blue Line & Type**	**OHWM Width**	**OHWM Depth**	**Quality**	**Riffle/Run Presence**	**Substrate**	**Jurisdiction**	**Total Linear Feet**	**Total Acres**
Small Reynolds Ditch	18-19, 32-33	40.064744, -86.488033	Yes, INT	13.4	0.8	Very Poor	Yes/Yes	Sand, Silt	Water of the U.S.	187	0.06
Total										**187**	**0.06**

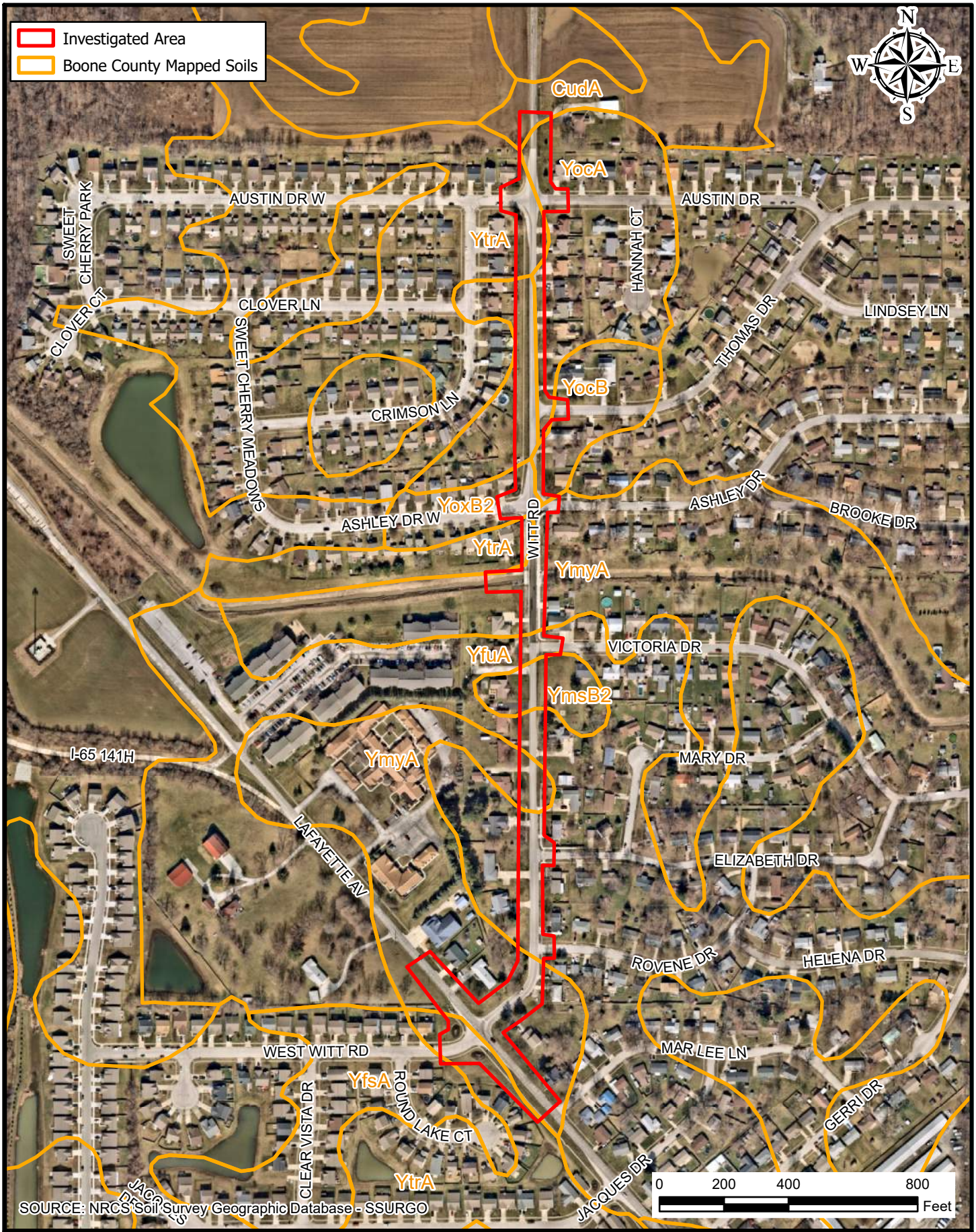

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Figure 3: Boone County Mapped Soils - SSURGO

City of Lebanon
401 South Meridian Street
Lebanon, IN 46052

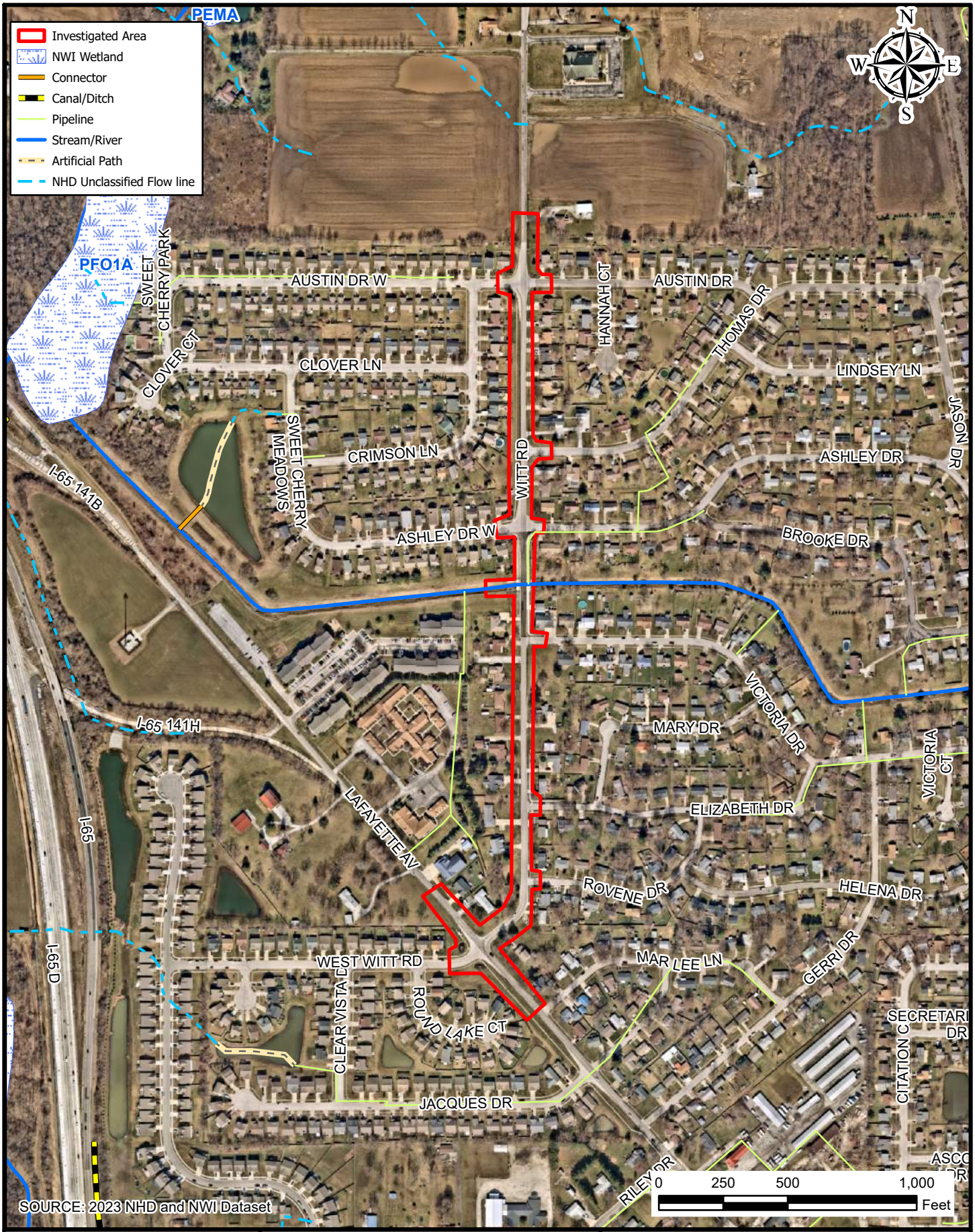
Witt Road Improvement Project
Des. No. 2101721

Location: Lebanon
Township: Center
County: Boone
State: Indiana

Date: 12/05/2023

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
CudA	Crosby silt loam, fine-loamy subsoil, 0 to 2 percent slopes	2	0.1	1.4%
YfsA	Fincastle silt loam-Urban land complex, 0 to 2 percent slopes	10	0.0	0.1%
YfuA	Fincastle-Urban land complex, 0 to 2 percent slopes	5	1.4	17.5%
YmsB2	Miami silt loam-Urban land complex, 2 to 6 percent slopes, eroded	5	0.3	3.5%
YmyA	Treaty-Urban land complex, 0 to 1 percent slopes	49	2.6	32.9%
YocA	Ockley-Urban land complex, 0 to 2 percent slopes	1	0.9	11.3%
YocB	Ockley-Urban land complex, 2 to 6 percent slopes	2	0.2	2.5%
YoxA	Ockley silt loam-Urban land complex, 0 to 2 percent slopes	0	0.8	10.4%
YoxB2	Ockley silt loam-Urban land complex, 2 to 6 percent slopes, eroded	5	0.3	4.2%
YtrA	Treaty silty clay loam-Urban land complex, 0 to 1 percent slopes	67	1.3	16.2%
Totals for Area of Interest			**8.0**	**100.0%**



AMERICAN STRUCTUREPOINT INC.

Figure 4: NWI and NHD Map

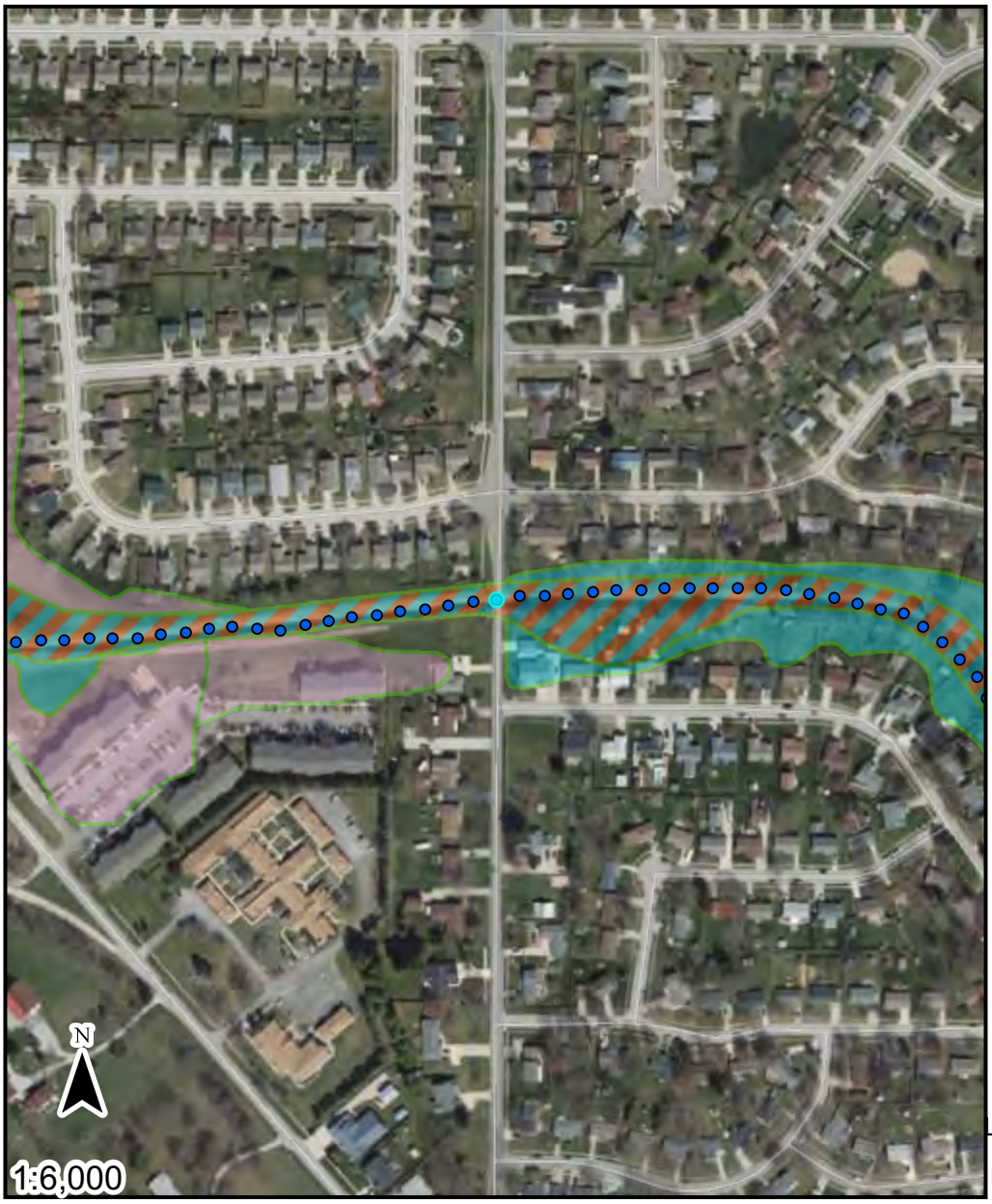
City of Lebanon
401 South Meridian Street
Lebanon, IN 46052

Witt Road Improvement Project
Des. No. 2101721

Location: Lebanon
Township: Center
County: Boone
State: Indiana

Date: 08/21/2023

Figure 5: Floodplain Analysis & Regulatory Assessment (FARA)



Point of Interest

Base Flood Elevation Point

VERSION

1.0

FLD_ZONE, SOURCE_DNR, ZONE_SUBTY

FEMA Zone AE Floodway; FEMA Administrative Floodway

FEMA Zone AE

Additional Floodplain Area; DNR .2 Percent Flood Hazard

Not Mapped

Long: **-86.48760098119209**

Lat: **40.064788025161945**

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

County: **Boone**

Stream Name:
New Reynolds Ditch

Approximate Ground Elevation: **921.8 feet (NAVD88)**

Base Flood Elevation: **919.5 Feet (NAVD88)**

Drainage Area: **Not Available**

Best Available Flood Hazard Zone: **FEMA Zone AE Floodway**

National Flood Hazard Zone: **FEMA Zone AE Floodway**

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

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

Floodplain Administrator: **Derek Warren, Building Commissioner**

Community Jurisdiction: **City Of Lebanon, City proper**

Phone: **(765) 482-8844**

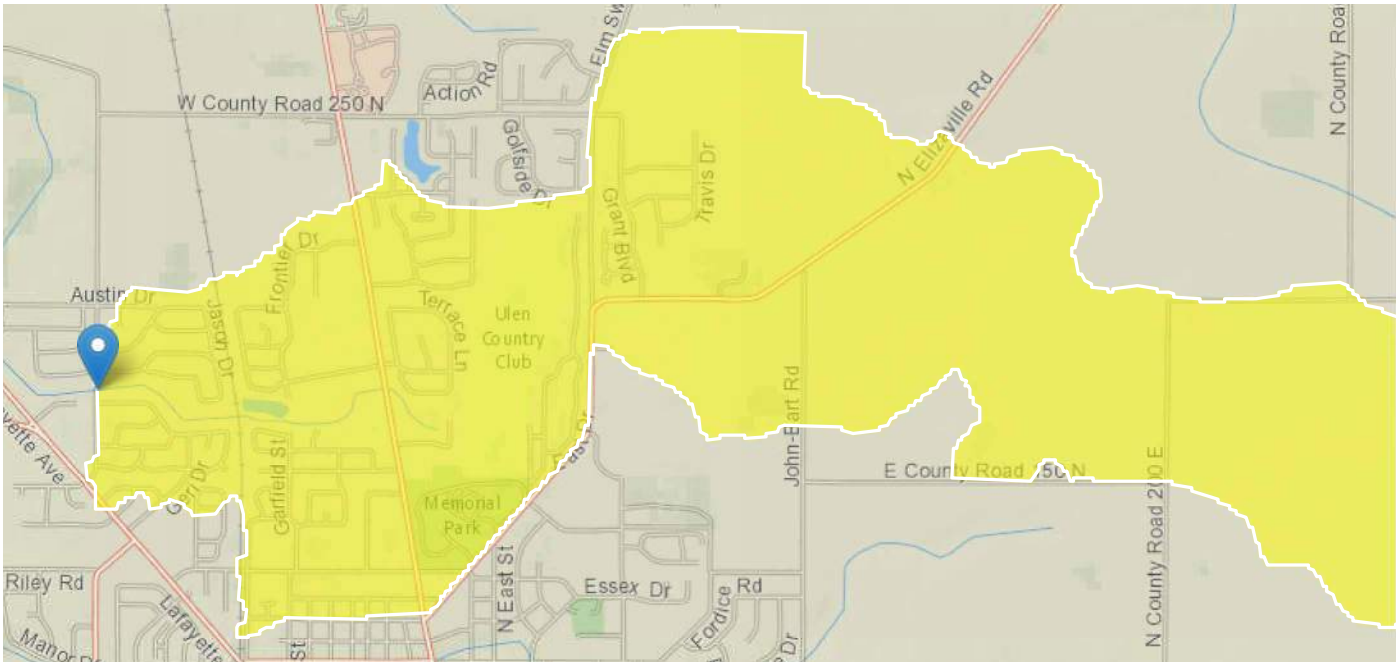
Email: **dwarren@lebanon.IN.gov**

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

Date Generated: 12/5/2023

Figure 6: StreamStats Report for Des. No. 2101721

Region ID: IN
Workspace ID: IN20231204172445089000
Clicked Point (Latitude, Longitude): 40.06464, -86.48753
Time: 2023-12-04 12:25:07 -0500



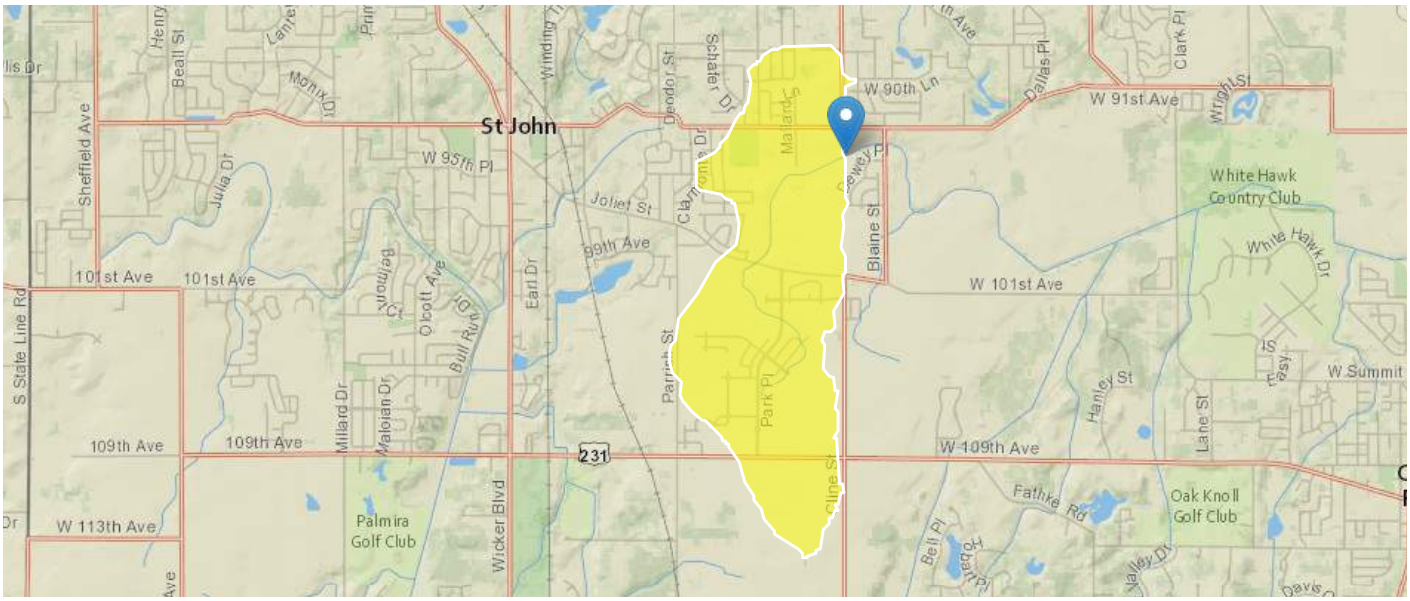
Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	3.31	square miles
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	10	ft per day
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	0.5	percent
LOWREG	Low Flow Region Number	1729	dimensionless
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	271.56	dimensionless
T2INDNR	Average transmissivity (ft2/d) for the full depth of unconsolidated deposits from InDNR well database.	1211	square feet per day

Figure 6: StreamStats Report for Des. No. 2101150

Region ID: IN
Workspace ID: IN20240119204425726000
Clicked Point (Latitude, Longitude): 41.44717, -87.43113
Time: 2024-01-19 15:44:50 -0500



Collapse All

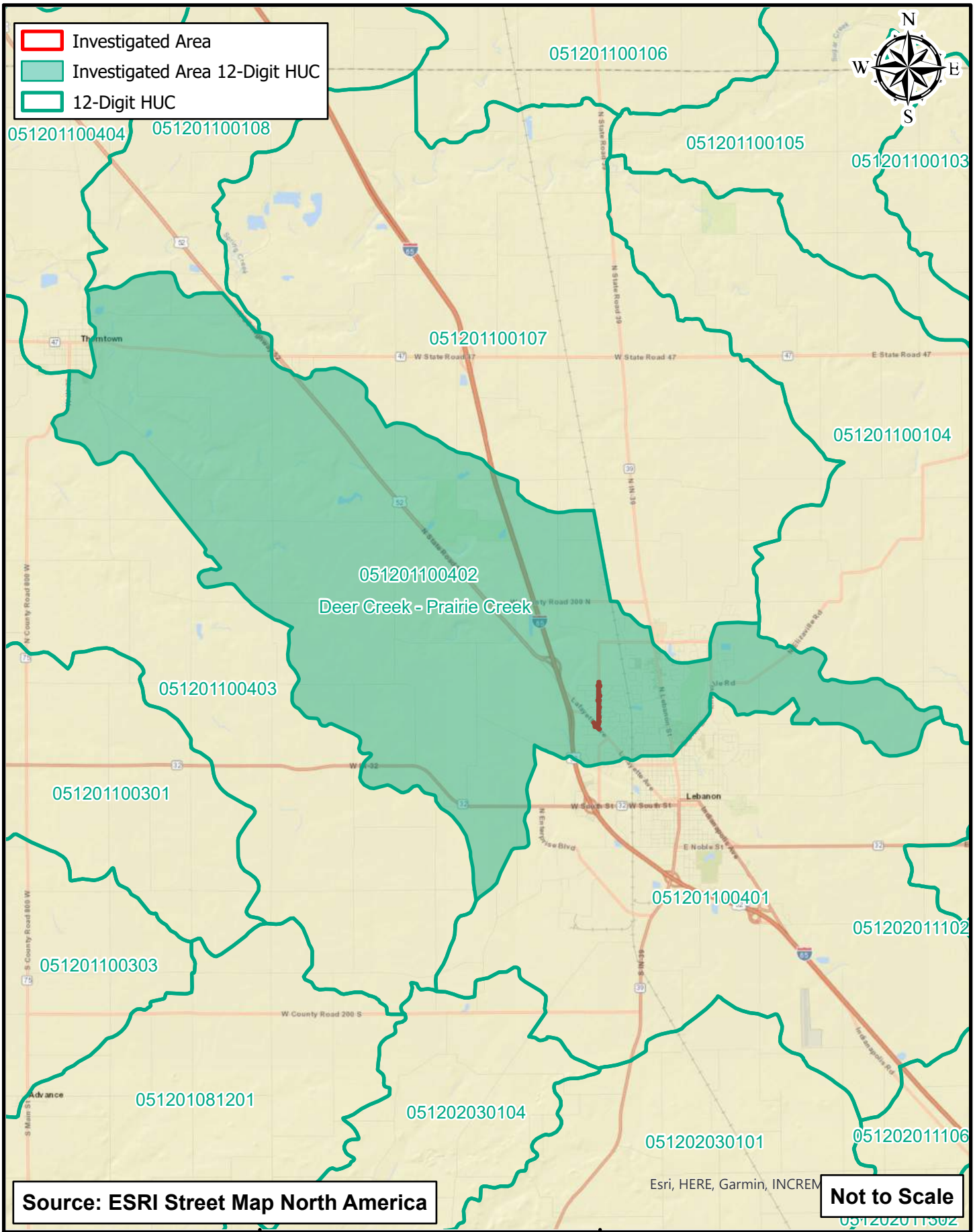
Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	15.2	feet per mi
DRNAREA	Area that drains to a point on a stream	2.138	square miles
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	48	ft per day
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	0.2	percent
LOWREG	Low Flow Region Number	1728	dimensionless
QSSPERMTHK	Index of the permeability of surficial Quaternary sediments computed as in SIR 2014-5177	150	dimensionless
T2INDNR	Average transmissivity (ft2/d) for the full depth of unconsolidated deposits from InDNR well database.	3598	square feet per day

General Flow Statistics

General Flow Statistics Parameters [Harmonic Mean Northern Region 2016 5102]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.138	square miles	6.33	856



AMERICAN STRUCTUREPOINT INC.

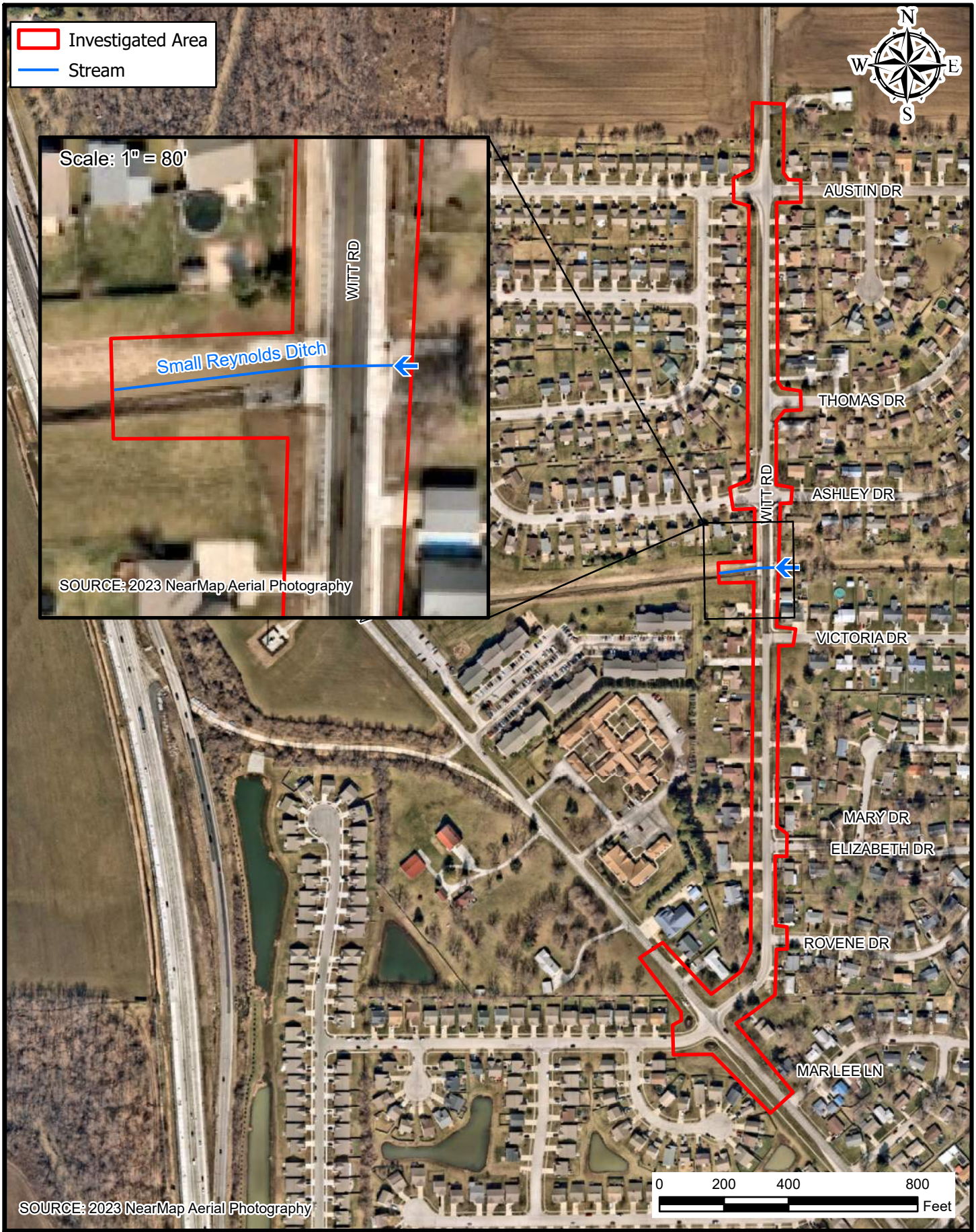
Figure 7: 12-Digit HUC Map

City of Lebanon
401 South Meridian Street
Lebanon, IN 46052

Witt Road Improvement Project
Des. No. 2101721

Location: Lebanon
Township: Center
County: Boone
State: Indiana

Date: 12/05/2023



AMERICAN STRUCTUREPOINT INC.

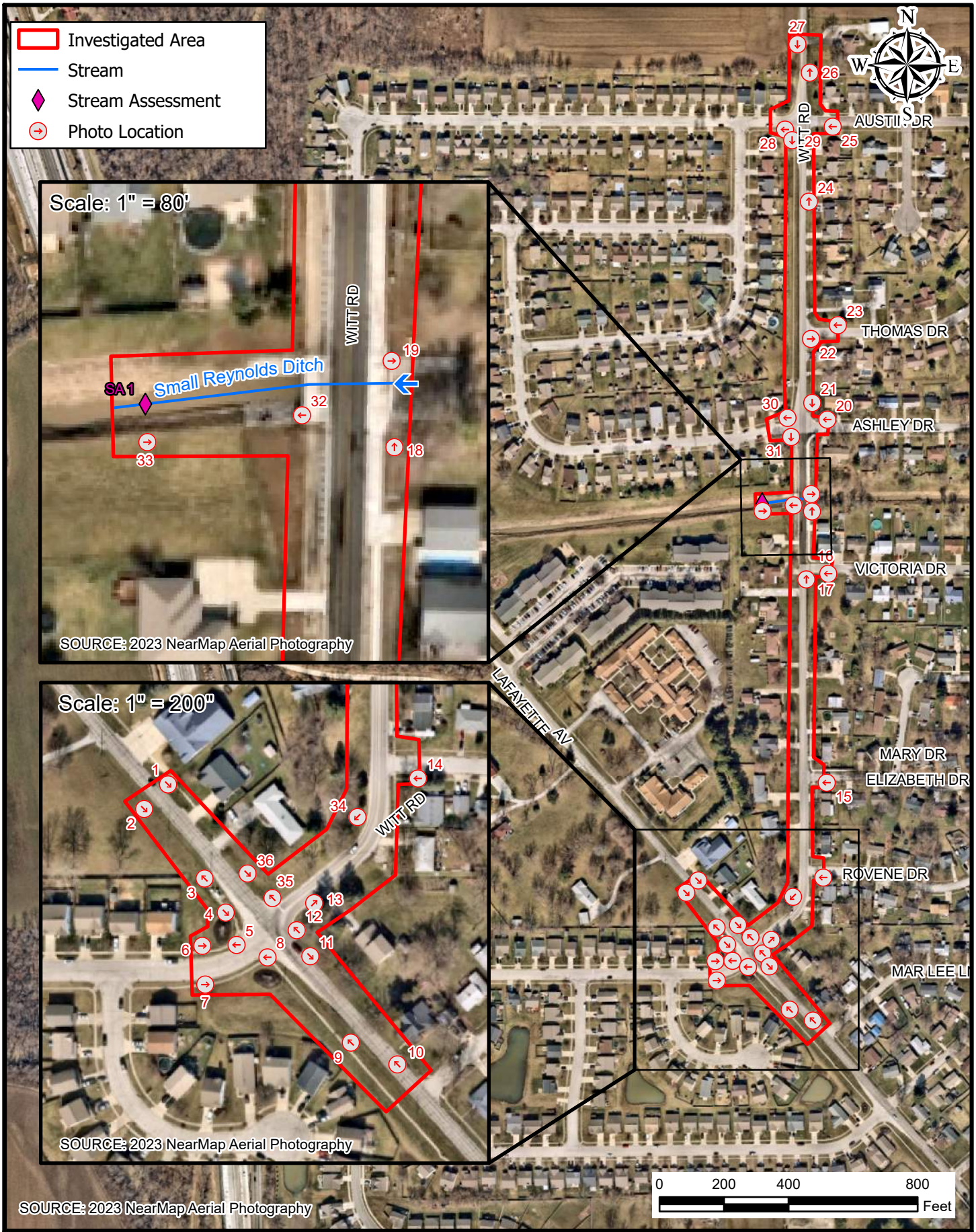
Figure 8: Water Resources Map

City of Lebanon
401 South Meridian Street
Lebanon, IN 46052

Witt Road Improvement Project
Des. No. 2101721

Location: Lebanon
Township: Center
County: Boone
State: Indiana

Date: 12/05/2023



AMERICAN STRUCTUREPOINT INC.	Figure 9: Field Investigation and Photo Location Map	Witt Road Improvement Project Des. No. 2101721
	City of Lebanon 401 South Meridian Street Lebanon, IN 46052	Location: Lebanon Township: Center County: Boone State: Indiana Date: 12/05/2023

Photo 1. Investigated Area - Looking southeast along Lafayette Avenue at the intersection with Witt Road.

Photo 2. Investigated Area - Looking southeast along Lafayette Avenue south of the roadway.

Photo 3. Investigated Area - Looking northwest along Lafayette Avenue at the northwest quadrant of the intersection with Witt Road.

Photo 4. Investigated Area - Looking southeast along Lafayette Avenue at the intersection with Witt Road.

Photo 5. Investigated Area - Looking west along Witt Road at the northwest quadrant of the intersection with Lafayette Avenue.

Photo 6. Investigated Area - Looking east along Lafayette Avenue at the intersection with Lafayette Avenue north of the roadway.

Photo 7. Investigated Area - Looking east along Lafayette Avenue at the intersection with Lafayette Avenue south of the roadway.

Photo 8. Investigated Area - Looking west along Witt Road at the southwest quadrant of the intersection with Lafayette Avenue.

Photo 9. Investigated Area - On Lafayette Avenue facing northwest towards the intersection with Witt Road.

Photo 10. Investigated Area - Looking northwest Along Lafayette Avenue at the northeast quadrant of the intersection with Mar Lee Lane.

Photo 11. Investigated Area - Looking southeast Along Lafayette Avenue at the northeast quadrant of the intersection with Witt Road.

Photo 12. Investigated Area - Looking northwest at an unnumbered drain pipe at the northeast quadrant of the intersection of Witt Road and Lafayette Avenue.

Photo 13. Investigated Area - Looking northeast along Witt Road at the southeast quadrant of the intersection with Lafayette Avenue.

Photo 14. Investigated Area - Looking west along Rovene Drive at the intersection with Witt Road.

Photo 15. Investigated Area - Looking west along Elizabeth Drive at the intersection with Witt Road.

Photo 16. Investigated Area - Looking west along Victoria Drive at the intersection with Witt Road.

Photo 17. Investigated Area - Looking north along Witt Road at an unnumbered drain pipe at the intersection with Victoria Drive.

Photo 18. Witt Road over Small Reynolds Ditch - Looking north along Witt Road at the existing Witt Road over Small Reynolds Ditch Bridge, east of the roadway.

Photo 19. Witt Road over Small Reynolds Ditch - Looking east upstream along Small Reynolds Ditch from Witt Road.

Photo 20. Investigated Area - Looking west along Ashley Drive at the intersection with Witt Road north of the roadway.

Photo 21. Investigated Area - Looking south along Witt Road at an unnumbered drain pipe at the intersection with Ashley Drive.

Photo 22. Investigated Area - Looking east along Thomas Drive from the intersection with Witt Road.

Photo 23. Investigated Area - Looking west along Thomas Drive at the intersection with Witt Road.

Photo 24. Investigated Area - Looking north along the northbound lane of Witt Road at several unnumbered driveway drain pipes.

Photo 25. Investigated Area - Looking west along Austin Drive at the intersection with Witt Road.

Photo 26. Investigated Area - Looking north along Witt Road at the north limits of the investigated Area.

Photo 27. Investigated Area - Looking south along Witt Road at the north limits of the investigated Area.

Photo 28. Investigated Area - Looking west along Austin Drive at the intersection with Witt Road.

Photo 29. Investigated Area - Looking south along Witt Road at the southbound lane west of the roadway.

Photo 30. Investigated Area - Looking west along Ashley Drive at the intersection with Witt Road.

Photo 31. Investigated Area - Looking south along Witt Road at the existing sidewalk and guardrail adjacent to the downstream end of Small Reynolds Ditch.

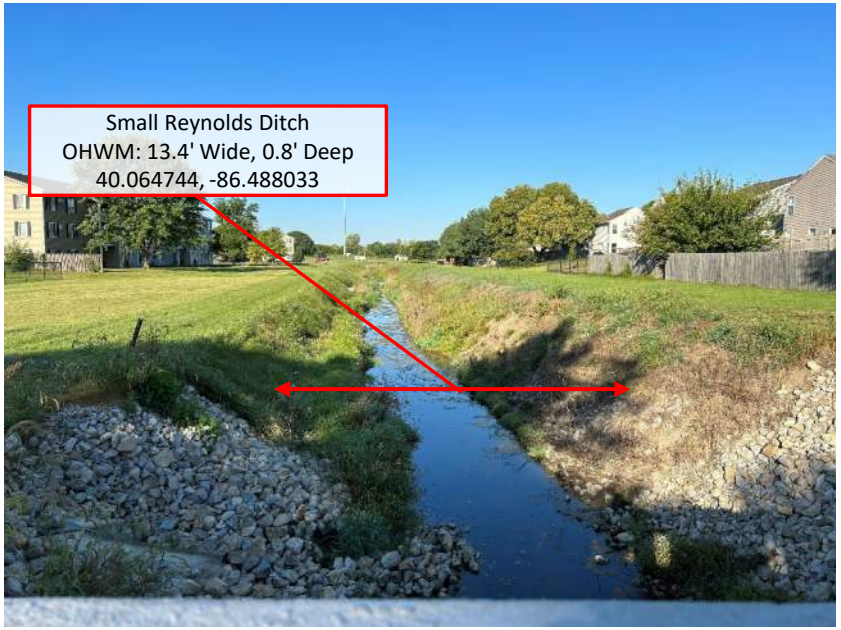


Photo 32. Witt Road over Small Reynolds Ditch - Looking west, downstream, along the stream towards SA 1.

Photo 33. Witt Road over Small Reynolds Ditch - Looking east, upstream, along the stream from SA 1.

Photo 34. Investigated Area - Looking southwest along Witt Road towards the intersection with Lafayette Avenue.

Photo 35. Looking west along Lafayette Avenue at the intersection with Witt Road.

Photo 36. Investigated Area - Looking southeast at an unnumbered drain pipe at the northeast quadrant of the intersection with Lafayette Avenue and Witt Road.

Appendix G: Public Involvement

AMERICAN STRUCTUREPOINT INC.

9025 RIVER ROAD, SUITE 200
INDIANAPOLIS, INDIANA 46240
TEL 317.547.5580
FAX 317.543.0270

August 23, 2023

Sample Notice of Entry Letter

Re: Witt Road Reconstruction, Lafayette Ave to Austin Drive,
Des. No. 2101721 in Lebanon, Boone County

Notice of Entry for Survey or Investigation

Dear Property Owner:

Our information indicates that you own property near the above-proposed transportation project. This project's scope of work is to reconstruct Witt Road between Lafayette Avenue and Austin Drive to include new pavement, storm sewer system, roadway lighting, sidewalk, and a shared use path. This project is using a combination of federal and local funding and construction is expected to begin in 2026. Representatives of the City of Lebanon will be conducting environmental surveys of the project area in the near future and may continue for several months. It may be necessary for them to enter onto your property (exterior only) to complete this work. This is permitted under Indiana Code § 32-24-1-3. 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.

The work may include but is not limited to shovel probes for identification of drainage features including streams, ponds, and wetlands; archaeological investigations (which may involve the survey, testing, or excavation of identified archaeological sites); topographic survey; photographing; geotechnical surveys; and various other environmental studies. The information we obtain from the aforementioned studies is necessary for the proper planning and design of this transportation project.

It is our sincere desire to cause as little inconvenience as possible during this survey, and we thank you in advance for your cooperation. If you have any questions or concerns, please contact me at (317) 547-5580.

Sincerely,
American Structurepoint, Inc.

Daniel S. Sherman, PE
Project Manager

PS/DSS:mgn

Appendix H: Air Quality

Federal Transit Administration
Region V
200 West Adams St., Suite 320
Chicago, IL 60606-5253

U.S. Department of Transportation

Federal Highway Administration
Indiana Division
575 N. Pennsylvania St., Rm 254
Indianapolis, IN 46204-1576

September 1, 2023

Mr. Michael Smith
Commissioner
Indiana Department of Transportation
100 N Senate Ave. N955
Indianapolis, IN 46204

SUBJECT: Indiana FY2024-2028 STIP Approval and Associated Federal Planning Finding

Dear Mr. Smith:

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) have completed our review of the FY2024-2028 Indiana Statewide Transportation Improvement Program (INSTIP), which was submitted by the Indiana Department of Transportation (INDOT) request letter dated August 23, 2023.

Based on our review of the information provided, certifications of the Statewide and Metropolitan transportation planning processes for and within the state of Indiana, and our participation in those transportation planning processes (including planning certification reviews conducted in Transportation Management Areas), FHWA and FTA are jointly approving the FY2024-2028 STIP, including the Metropolitan Planning Organization (MPO) Transportation Improvement Programs (TIPs) incorporated into the STIP by reference, subject to the corrective actions identified in the attached Federal Planning Finding (FPF) report. FHWA and FTA consider the projects in the 5th year for informational purposes only, and our approval does not exceed four years per 23 CFR 450.220(c).

FHWA and FTA are required under 23 CFR 450.220(b) to document and issue an FPF in conjunction with the approval of the FY2024-2028 STIP. At a minimum, the FPF verifies that the development of the STIP is consistent with the provisions of both the Statewide and Metropolitan transportation planning requirements. FHWA and FTA find that the Indiana FY2024-2028 STIP substantially meets the transportation planning requirements and are approving the STIP subject to the corrective actions outlined in the FPF. This approval is effective September 1, 2023 and is given with the understanding that an eligibility determination of individual projects for funding must be met, and INDOT must ensure the satisfaction of all administrative and statutory requirements, as well as address the corrective actions outlined in the attached report.

If you have questions or need additional information concerning our approval and the FPF, please contact Ms. Erica Tait of the FHWA Indiana Division at (317) 226-7481, or by email at erica.tait@dot.gov, or Mr. Tony Greep of the FTA Region 5 Office at (312) 353-1646, or by email at anthony.greep@dot.gov.

Sincerely,

KELLEY BROOKINS
Digitally signed by KELLEY BROOKINS
Date: 2023.08.31 17:33:15 -05'00'

Kelley Brookins
Regional Administrator
FTA Region V

Sincerely,

JERMAINE R HANNON
Digitally signed by JERMAINE R HANNON
Date: 2023.09.01 11:46:31 -04'00'

Jermaine R. Hannon
Division Administrator
FHWA Indiana Division

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
Performance Measure Impacted: Safety																	
Location: Various locations throughout Boone County on roads that are in Boone County's jurisdiction.																	
Comments:Increase funds in SFY 25 in CN from $140,051 to $173,008 Increase funds in SFY 25 in CN from $1,260,455 to $1,557,075 Total project cost increased from $1,790,703 to $2,120,280 (18.4%) IMPO Mod 24-07.3 AQC Exempt																	
Boone County	44244 / 2101727	M 30	IR 8663	Bridge Replacement	Crawfordsville	.23	STBG	$2,488,200.00	Local Funds	CN	$0.00	$196,000.00				$196,000.00	
									Local Bridge Program	CN	$786,000.00	$0.00				$786,000.00	
Performance Measure Impacted: Bridge Condition																	
Location: Bridge 61 On CR N 1000 E in Boone County approximately .5 miles north of SR 32																	
Comments:Increase funds in SFY 27 in CN from $349,800 to $546,200 Increase funds in SFY 27 in CN from $1,399,200 to $2,184,800 Total project cost increased from $2,488,200 to $3,470,200 (39.5%) IMPO Mod 24-07.3 AQC Exempt																	
Lebanon	44250 / 2101720	A 01	ST 3039	New Road Construction	Crawfordsville	.41	STBG	$4,590,000.00	Local Funds	CN	$0.00	$730,560.00			$730,560.00		
									Local Funds	RW	$0.00	$65,478.00	$65,478.00				
									Group III Program	CN	$2,922,240.00	$0.00			$2,922,240.00		
									Group III Program	RW	$261,912.00	$0.00	$261,912.00				
Performance Measure Impacted: Pavement Condition																	
Location: Grant Street (phase 2) from Indianapolis Avenue (SR 32) to Washington Street																	
Comments:Add RW to FY 24 and CN to FY 24. AQC Exempt 9/29/23.																	
Lebanon	44251 / 2101721	Init.	ST 8824	New Road Construction	Crawfordsville	.53	STBG	$4,556,000.00	Group III Program	RW	$200,000.00	$0.00		$200,000.00			
									Group III Program	CN	$2,871,000.00	$0.00				$2,871,000.00	
									Local Funds	RW	$0.00	$50,000.00		$50,000.00			
									Local Funds	CN	$0.00	$718,000.00				$718,000.00	
Performance Measure Impacted: Pavement Condition																	
Location: Witt Road from Lafayette Avenue to Austin Drive																	
Comments:Include DES 2101721																	
Boone County	44855 / 2201606	Init.	IR 1812	Bridge Replacement	Crawfordsville	.094	STBG	$808,000.00	Local Funds	CN	$0.00	$162,000.00		$162,000.00			

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

Appendix I: Additional Information

AMERICAN STRUCTUREPOINT INC.

9025 RIVER ROAD, SUITE 200
INDIANAPOLIS, INDIANA 46240
TEL 317.547.5580
FAX 317.543.0270

ABBREVIATED ENGINEER'S ASSESSMENT

WITT ROAD RECONSTRUCTION PHASE 1
ROADWAY IMPROVEMENT PROJECT
Lebanon, Indiana

For Submittal to
City of Lebanon

July 2023

Des No.: 2101721

Abbreviated Engineer's Assessment

Type of Work: Reconstruction (Non-Freeway)
Route: Witt Road
Functional Classification: Local Agency Collector
City/County: Lebanon
Posted Speed Limit: Witt Road – 30 mph

Project Location

The project is located at the intersection of Witt Road and Austin Drive, extending approximately 150 ft to the north limits of the project, and 2650 ft to the south limits of the project at the intersection of Witt Road and Lafayette Avenue. The project is located in Sections 23-26, Township 19 N, Range 1 W, Center Township, Boone County, Lebanon, Indiana. See Appendix A for location map.

Project Need and Purpose

The need for this project is to improve the pavement structure and enhance pedestrian accessibility. This project includes pavement reconstruction, the addition of lighting, ADA compliant curb ramps, trail construction, and sidewalk construction.

Existing Facility

Witt Road is classified as an Urban Major Collector with a posted speed limit of 30 mph from Austin Drive to Lafayette Avenue. The existing roadway is comprised of 21 ft of pavement delineated with a double yellow pavement marking. The pavement is all HMA, and in fair condition with some fatigue cracking and rutting in the wheel paths. A 5 ft sidewalk is intermittently present on both the east and west side of the roadway, and does not include ADA compliant curb ramps at public road crossings.

The existing terrain is level along the corridor and the stormwater runoff is collected in roadside ditches. Existing storm sewer is present along with an existing water main and other utilities along the corridor. Some lighting is present along the corridor, though additional road lighting is anticipated to be necessary to meet minimum illumination and light distribution requirements.

Traffic Data

Street Name	Witt Road
AADT 2027	3700
AADT 2047	5200
DHV 2047	520
Truck %	3%

Design Data

Street Name	Witt Road
Posted Speed/Design Speed	30 mph
Project Design Criteria	Reconstruction (Non-Freeway)
Functional Classification	Local Agency Collector
Rural/Urban - Terrain	Urban (Suburban) – Level
Access Control	None

Identification of Proposal

The existing horizontal alignment will be altered by increasing the radius of the curve at the south end of the project to be compliant with INDOT standards. The remainder of the alignment will not be altered. The width of the roadway will be widened to 12 ft throughout the project, except for a short transition to 11 ft to match the bridge cross section approximately halfway through the alignment. The proposed vertical profile will be designed to offer adequate drainage of stormwater conveyance, minimize the need for right-of-way acquisition, and minimize the need for utility relocations. All pedestrian facilities will be in accordance with ADA Standards and curb ramps will be added at all public road approaches. The approximate length of construction along Witt Road up to the intersection of Lafayette Avenue is 2800 ft.

The proposed lane configuration consists of one 12 ft travel lane in each direction. The proposed cross section will include a 5 ft wide sidewalk on the east side of Witt Road, a 10 ft trail on the west side of Witt Road, and a 5 ft utility strip/buffer between the roadway and pedestrian facilities on each side. Finally, the corridor will include street lighting. See Appendix B for roadway typical sections. All signage and pavement markings will be updated and in accordance with the latest version of the IMUTCD.

No Level One design exceptions are anticipated for this project.

Estimated Costs:

The preliminary construction cost estimate for the project is $3,649,233.97 with a contingency percentage of 20%,

	(2023)
Total Cost	**= $4,379,080.76**

Right-of-Way Impact

Right-of-way impacts are anticipated throughout the project limits due to the widening of the roadway and inclusion of a utility buffer and pedestrian facilities throughout the limits of the project. In particular, there will be significant impacts to the parcel at the north corner of Lafayette Ave and Witt Rd, due to horizontal radius correction on Witt Road.

Utility Impact

Existing utilities throughout the project limits are comprised of overhead electric, overhead telephone, underground telephone, water, sanitary sewer, storm sewer, fiber optic, and natural gas pipeline. No disturbance to the storm sewer is anticipated; however, disruptions to other utilities are anticipated. Utility coordination will be conducted throughout the design of the project to determine and assess appropriate dispositions of impacted utilities.

Traffic Maintenance

Traffic will be maintained by closing Witt Road in phases, and a detour. The detour will utilize W 250 N, Lebanon St, Camp St, and Lafayette Avenue. MOT phase 1 is anticipated to start at the north end of the project, south to Ashley Drive, leaving the intersection of Witt Road and Ashley Drive open. MOT phase 2 will span from the intersection of Witt Road and Ashley Drive to just north of the intersection of Witt Road and Rovene Drive. MOT phase 3 will span along Witt Road from Rovene Drive to Lafayette Ave.

This Abbreviated Engineer's Assessment has been prepared by:

Dan Sherman, PE

July 20, 2023

American Structurepoint, Inc.
9025 River Road
Indianapolis, Indiana 46240

Concur:

Kevin Krulik,

City Engineer, City of Lebanon _____ Date _____

This analysis was performed for this project prior to the issuance of recent federal Executive Orders (EO) from January 2025, including EO 14154, EO 14148, and EO 14173. As such, this analysis is included for transparency but is no longer applicable to the impacts analysis for federal projects and this impact was not considered in the federal decision.

Table 1. Hispanic or Latino Origin by Race

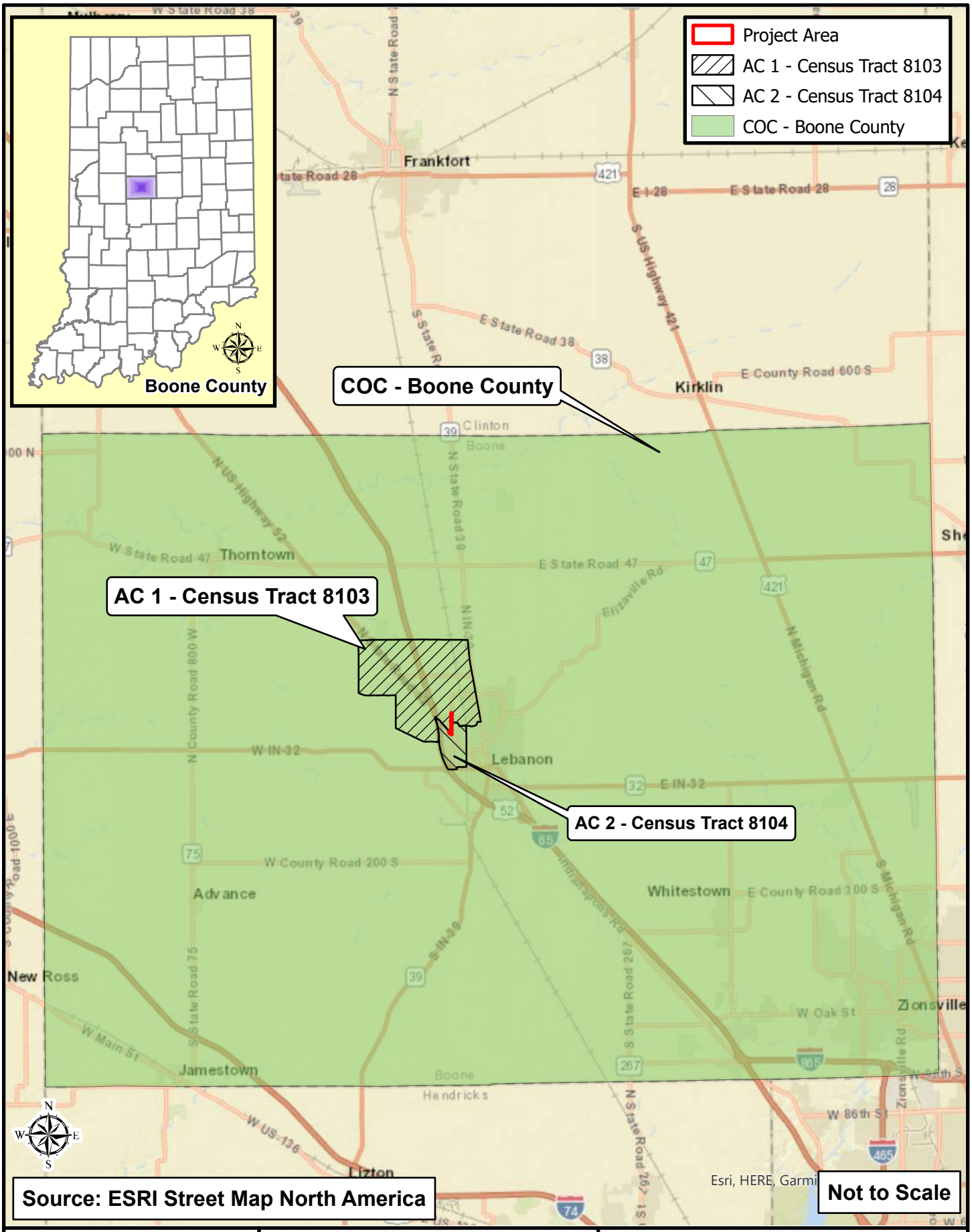
	Boone County, Indiana		Census Tract 8103; Boone County; Indiana		Census Tract 8104; Boone County; Indiana	
Label	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**	**Estimate**	**Margin of Error**
Total:	71,235	*****	5,906	±549	6,074	±661
Not Hispanic or Latino:	68,747	*****	5,597	±566	5,397	±653
White alone	62,878	±249	5,426	±579	5,253	±653
Black or African American alone	1,536	±164	44	±28	17	±15
American Indian and Alaska Native alone	37	±35	5	±8	8	±17
Asian alone	2,208	±231	0	±18	9	±15
Native Hawaiian and Other Pacific Islander alone	0	±30	0	±18	0	±18
Some other race alone	122	±154	0	±18	0	±18
Two or more races:	1,966	±339	122	±77	110	±73
Two races including Some other race	274	±196	6	±11	33	±37
Two races excluding Some other race, and three or more races	1,692	±272	116	±78	77	±68
Hispanic or Latino:	2,488	*****	309	±230	677	±198
White alone	1,004	±296	292	±229	163	±131
Black or African American alone	0	±30	0	±18	0	±18
American Indian and Alaska Native alone	0	±30	0	±18	0	±18
Asian alone	19	±48	0	±18	0	±18
Native Hawaiian and Other Pacific Islander alone	27	±45	0	±18	0	±18
Some other race alone	440	±274	10	±31	67	±64
Two or more races:	998	±290	7	±13	447	±214
Two races including Some other race	894	±295	7	±13	445	±218
Two races excluding Some other race, and three or more races	104	±99	0	±18	2	±9

Data from the US Census Bureau, *2022 American Community Survey 5-Year Estimates* (2018-2022)

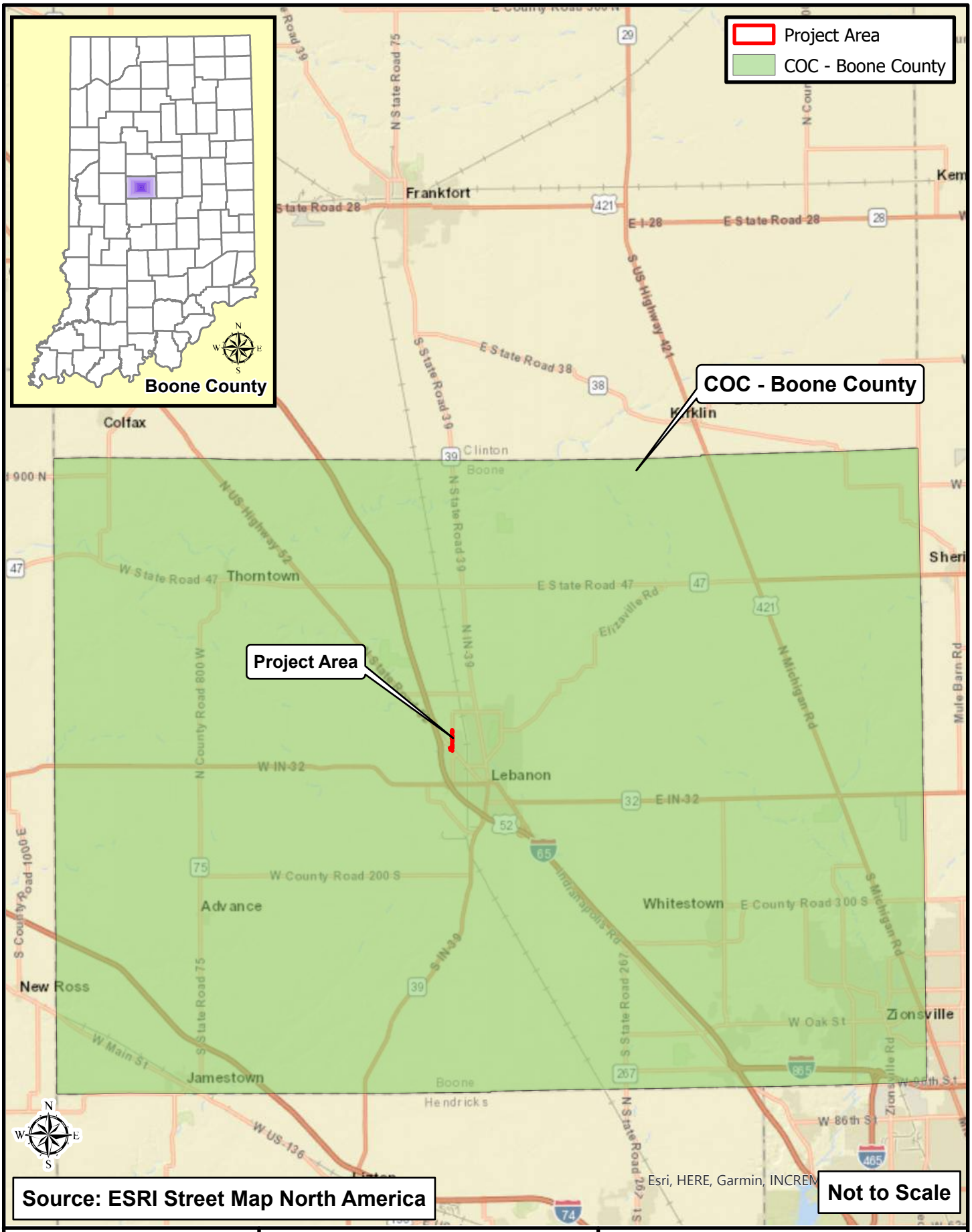
Table 2. Poverty Status in the Past 12 Months by Sex by Age

	Boone County, Indiana		Census Tract 8103; Boone County; Indiana		Census Tract 8104; Boone County; Indiana	
Label	Estimate	Margin of Error	Estimate	Margin of Error	Estimate	Margin of Error
Total:	70,260	±214	5,595	±549	5,817	±641
Income in the past 12 months below poverty level:	4,050	±796	365	±251	492	±294
Male:	1,775	±425	192	±176	215	±133
Under 5 years	76	±63	0	±18	0	±18
5 years	0	±30	0	±18	0	±18
6 to 11 years	190	±127	18	±29	24	±41
12 to 14 years	89	±81	18	±29	0	±18
15 years	69	±72	28	±45	25	±47
16 and 17 years	26	±23	0	±18	0	±18
18 to 24 years	377	±231	40	±70	12	±19
25 to 34 years	201	±109	10	±16	80	±74
35 to 44 years	255	±130	21	±35	49	±51
45 to 54 years	85	±59	10	±31	12	±19
55 to 64 years	93	±62	0	±18	13	±20
65 to 74 years	203	±141	38	±35	0	±18
75 years and over	111	±66	9	±16	0	±18
Female:	2,275	±489	173	±133	277	±181
Under 5 years	98	±92	0	±18	45	±64
5 years	45	±68	0	±18	45	±68
6 to 11 years	77	±73	0	±18	9	±16
12 to 14 years	74	±79	0	±18	17	±32
15 years	59	±67	20	±35	16	±42
16 and 17 years	39	±38	0	±18	0	±18
18 to 24 years	218	±162	0	±18	0	±18
25 to 34 years	218	±116	0	±18	0	±18
35 to 44 years	328	±160	20	±34	45	±45
45 to 54 years	292	±141	58	±86	35	±55
55 to 64 years	275	±136	9	±14	20	±32
65 to 74 years	226	±143	26	±28	33	±38
75 years and over	326	±175	40	±60	12	±19
Income in the past 12 months at or above poverty level:	66,210	±831	5,230	±577	5,325	±664
Male:	33,355	±413	2,283	±315	2,701	±416
Under 5 years	2,283	±81	88	±75	152	±92
5 years	533	±170	0	±18	52	±49
6 to 11 years	3,290	±320	140	±96	165	±89
12 to 14 years	1,231	±244	82	±67	122	±67
15 years	699	±203	57	±70	127	±138
16 and 17 years	803	±186	31	±45	47	±60
18 to 24 years	2,535	±281	231	±149	373	±189
25 to 34 years	3,917	±203	237	±103	418	±170
35 to 44 years	4,895	±211	270	±97	480	±175
45 to 54 years	4,785	±147	341	±137	197	±108
55 to 64 years	4,346	±98	524	±158	239	±98
65 to 74 years	2,607	±153	173	±78	233	±85
75 years and over	1,431	±68	109	±55	96	±51
Female:	32,855	±564	2,947	±444	2,624	±350
Under 5 years	1,887	±165	108	±68	204	±120
5 years	565	±206	34	±42	10	±17
6 to 11 years	3,001	±271	294	±152	166	±99
12 to 14 years	1,220	±262	90	±73	141	±115
15 years	483	±156	26	±42	45	±51
16 and 17 years	1,005	±163	84	±79	42	±42
18 to 24 years	2,373	±179	338	±143	369	±199
25 to 34 years	4,011	±169	219	±88	526	±156
35 to 44 years	4,587	±171	409	±176	385	±123
45 to 54 years	4,667	±178	259	±115	184	±119
55 to 64 years	4,269	±136	545	±142	243	±83
65 to 74 years	2,801	±141	324	±86	167	±66
75 years and over	1,986	±206	217	±89	142	±67

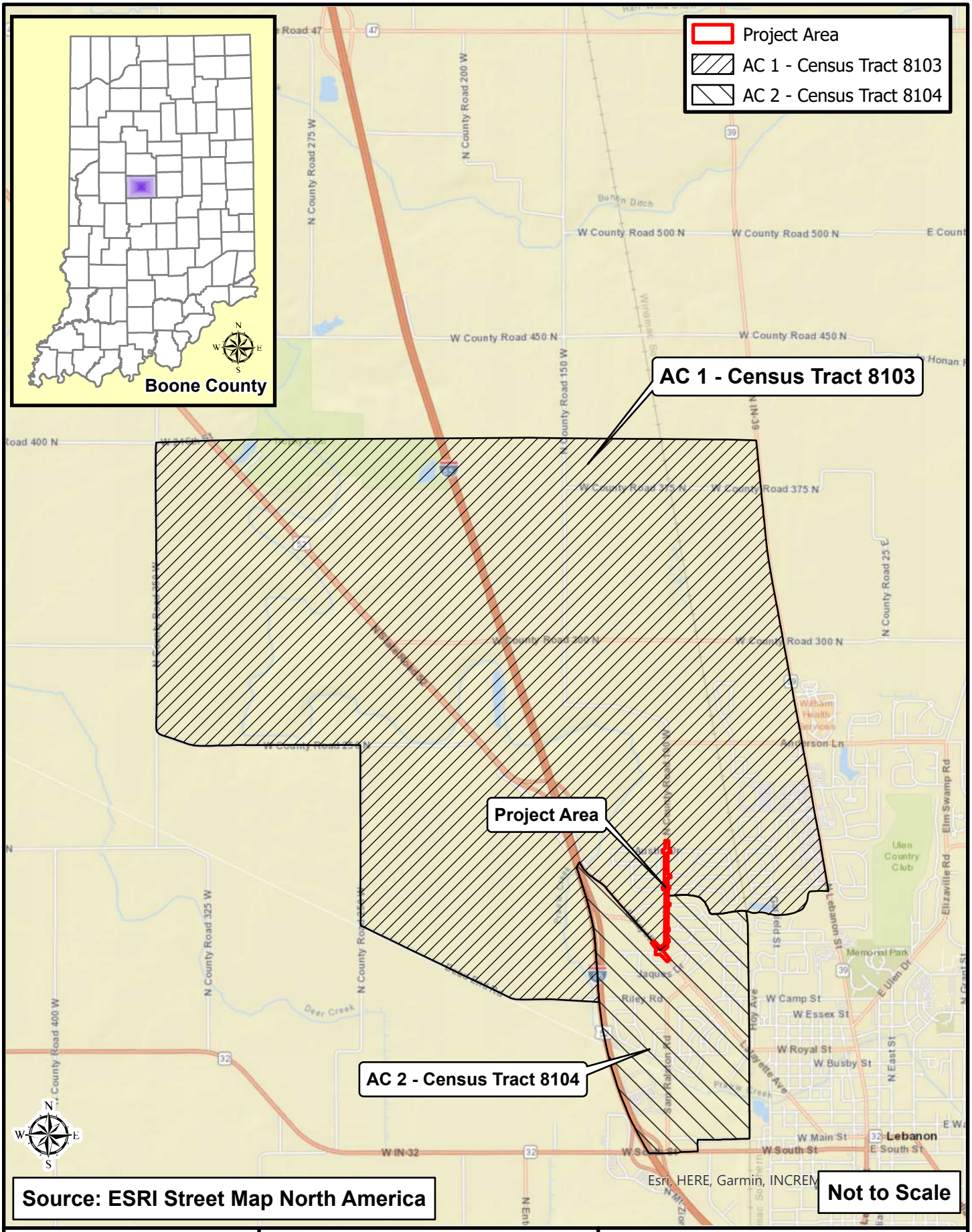
Data from the US Census Bureau, *2022 American Community Survey 5-Year Estimates* (2018-2022)



AMERICAN STRUCTUREPOINT INC.	EJ Analysis Map City of Lebanon 401 South Meridian Street Lebanon, IN 46052	Witt Road Improvement Project Des. No. 2101721 Location: Lebanon Township: Center County: Boone State: Indiana Date: 09/13/2024



AMERICAN STRUCTUREPOINT INC.	Community of Comparison City of Lebanon 401 South Meridian Street Lebanon, IN 46052	Witt Road Improvement Project Des. No. 2101721 Location: Lebanon Township: Center County: Boone State: Indiana Date: 09/13/2024



AMERICAN STRUCTUREPOINT INC.

Affected Communities

City of Lebanon
401 South Meridian Street
Lebanon, IN 46052

Witt Road Improvement Project
Des. No. 2101721
Location: Lebanon
Township: Center
County: Boone
State: Indiana

Date: 09/13/2024

EJ Analysis Summary Table

	COC Boone County	AC 1 Census Tract 8103	AC 2 Census Tract 8104
MINORITY POPULATION			
Total Population	71,235	5,906	6,074
Not Hispanic or Latino: White Alone	62,878	5,426	5,253
Minority Population	2,488	309	677
Percent Minority	11.73%	8.13%	13.52%
125 Percent of COC	14.66%		
AC Percent Minority Greater Than 125 Percent of COC?		No	No
AC Percent Minority Greater Than 50 Percent?		No	No
Population of EJ Concern?		No	No
LOW-INCOME POPULATION			
Total Population for Whom Poverty Status is Determined	70,260	5,595	5,817
Total Population Below Poverty Level	4,050	365	492
Percent Low-Income	5.76%	6.52%	8.46%
125 Percent of COC	7.21%		
AC Percent Low-Income Greater Than 125 Percent of COC?		No	Yes
AC Percent Low-Income Greater Than 50 Percent?		No	No
Population of EJ Concern?		No	Yes

Data from the US Census Bureau, *2022 American Community Survey 5-Year Estimates* (2018-2022)

% Minority = (Total population - Not Hispanic or Latino: White Alone)/Total Population

% Low Income = (Total population Below Poverty Level/Total Population for Whom Poverty Status is Determined)

125 Percent of COC = Percent Minority (or Percent Low-Income) * 1.25

From: Fair, Terri
To: Samra, Preeti
Subject: EJ Analysis Review, Des. No. 2101721, City of Lebanon, Witt Road Improvement
Date: Monday, October 7, 2024 3:09:43 PM
Attachments: WittRoad_RoadwayImprovement_Des2101721_Draft_EJAnalysis_2024-10-07.pdf

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 right-of-way, requires 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.

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

ProjectNumber	SubProjectCode	County	Property
1800485	1800485	Boone	Nancy Burton Park
1800520	1800520	Boone	Zion Park
1800573	1800573	Boone	Heritage Trail Park
1800604	1800604	Boone	Overly-Worman Park
1800607	1800607	Boone	Anson Park

*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.