Indiana Department of Transportation

County Elkhart Route US 20 Des. No. 1900095

FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	United States Highway 20 (US 20) / Elkhart County
Designation Number(s):	Lead Des (1900095), Pumpkinvine Trail Structure (Des. 2000038)
Project Description/Termini:	US 20 Improvement Project – County Road 35 (CR 35) to State Road 13 (SR 13)/approximately 565 feet east of the intersection of US 20 and CR 35 to approximately 315 feet west of the intersection of US 20 and SR 13.

	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
X	**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 February 27, 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: Eric Jagger, HNTB

Project History

The Indiana Department of Transportation (INDOT) Fort Wayne District initiated the National Environmental Policy Act (NEPA) environmental review process for the portion of US 20 corridor from SR 15 to CR 35 (Des. No. 1600517; hereon referred to as Section 1). This environmental process concluded with the approval of a Categorical Exclusion Level 4 (CE-4) by the Federal Highway Administration (FHWA) on October 10, 2019 (Appendix J, page 1 to 53).

During the environmental studies associated with US 20 Section 1 (SR 15 to CR 35), INDOT and project stakeholders identified additional concerns associated with the adjacent portion of US 20 from CR 35 to SR 13. In recognition of these additional concerns, INDOT began additional preliminary engineering studies to independently evaluate these concerns. The additional studies completed by INDOT resulted in the identification of additional transportation needs, which are detailed below in the purpose and need section of this document. Although these needs were valid, no foreseeable funding was available to complete additional studies or implement any potential recommendations. Therefore, INDOT made the decision to continue forward with the implementation of US 20 Section 1 (SR 15 to CR 35) since it would be a useful and reasonable expenditure even if no other transportation improvements were made.

After the CE-4 for US 20 Section 1 was approved, additional funding was provided to the INDOT Fort Wayne District via proceeds from the amendments to the Indiana Toll Road Lease. Based on the needs of the corridor, the INDOT Fort Wayne District decided to initiate the environmental review for US 20 from SR 35 to SR 13 (Lead Des. No. 1900095; hereon referred to as Section 2) as a continuation of the US 20 Section 1 project.

An Additional Information (AI) document (AI No. 1) was prepared to analyze and document the anticipated changes in environmental effects associated with implementation of US 20 Section 2. The revised impacts to resources resulting from the addition of US 20 Section 2 to the overall US 20 improvements project are described in the initial AI approved by FHWA on February 1, 2022 (Appendix J, pages 54 to 95).

After the conclusion of the NEPA process for US 20 Section 2, the alignment of the preferred alternative shifted south to accommodate revised utility clearance requirements.

This AI document (AI No. 2) is being prepared to document the revised environmental impacts realized by the alignment shift of the preferred alternative. Unless specifically addressed in this AI No. 2 document, all project impacts, and conditions as described in the preceding approved environmental documents remain the same.

Resource impacts discussed in the remainder of this AI will focus on the revised impacts realized during the development of the shifted US 20 Section 2 alignment. Impacts associated with the initial US 20 Section 2 alignment are documented in the approved AI No. 1 document found in Appendix J, pages 54 to 95. The Impact Summary Table (Appendix I, page 1) summarizes the overall total increase or decrease in impacts to specific resources.

Public Involvement

Various public involvement activities were conducted during the development of AI No. 1, which included notice of entry letters, kitchen table meetings, targeted stakeholder meetings, outreach with the local Amish communities, Section 4(f) coordination, and a public hearing.

Because of the revisions to the alignment and the changes in right-of-way, additional public involvement was initiated for this AI No. 2 document, as detailed below.

Notice of Survey

Notice of Entry letters were mailed to the property owners potentially affected by the revised alignment of the US 20 Section 2 project on September 26, 2019, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area.

Kitchen Table Meetings
Due to the revisions in right-of-way needs, additional Kitchen Table Meetings (KTMs) were held with affected property owners. Sixteen additional KTMs were held on September 25 and 27, as well as October 2, 2023, with affected property owners to discuss the changes in the alignment shift and the need for revised right-of-way acquisition (Appendix G, pages 1 to 3). Additional KTMs were held on May 8 and 13, 2024 with affected business owners along the south side of US 20 (Appendix G, page 4). The surveys from these meetings are included in Appendix G, pages 5 to 50.

Section 4(f) Public Notice
Because of the changes to the design of the Pumpkinvine Nature Trail, its associated structure along US 20, and the Ridge Run Trail, additional Section 4(f) coordination was conducted with Elkhart County and the Town of Middlebury, which is detailed further below in the Section 4(f) Resources section of this AI document.

A Section 4(f) *de minimis* use determination for the Pumpkinvine Nature Trail was established in AI No. 1. After conducting additional coordination for this AI No. 2 document, it has been confirmed that the de minimis use finding remains valid despite the shift in alignment. A *de minimis* impact determination requires public involvement and concurrence from the official with jurisdiction. In accordance with 23 CFR 774.5(b)(2), a public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the Section 4(f) property will be provided in conjunction with the public review and comment period of this document.

In accordance with the requirements of Section 4(f), the public was offered an opportunity to review and comment on the effects of the proposed project on the Pumkinvine Nature Trail and Ridge Run trail via a legal advertisement placed in *The Elkhart Truth* on September 12, 2024. The affidavit for this legal notice is included in Appendix G, page 51. The 30-day review period ended on October 12, 2024, and no comments were received.

Public Hearing
The project will meet the minimum requirements described in the current *Indiana Department of Transportation (INDOT) Public Involvement Manual* which requires the project sponsor to offer the public an opportunity to submit comment and/or request a public hearing. Due to public interest in this project and the revision of the US 20 alignment, a second public hearing will be held to provide information to the public and gather further public input. Therefore, a legal notice will appear in a local publication contingent upon the release of this document for public involvement.

This AI No. 2 document will be revised after the public involvement requirements are fulfilled.

Purpose and Need

The purpose and need, as defined in AI No. 1, centered on improving safety, reducing traffic congestion, geometric and drainage deficiencies, and local community needs and interests (Appendix J, pages 55 to 57). The project alignment shift resulted from a utility conflict and did not change the project's purpose and need. Therefore, the purpose and need remain unchanged from AI No. 1. Below is a detailed discussion of the transportation needs and project purpose specific to Section 2.

Need: Improve Safety

INDOT generated crash data for this corridor which has been used in this evaluation. This data is documented in the project's Engineer's Report dated March 24, 2020, and Draft Traffic & Safety Analysis Revision. These reports examined US 20 from the intersection of US 20 and CR 35 to the intersection of US 20 and SR 13 over a three-year period from January 1, 2016, to December 31, 2018. During this period, there were 96 crashes within this study area, half of which were rear end crashes. In general, rear end collisions are indicative of elevated levels of traffic congestion, lack of turn lanes, and/or closely spaced driveways. RoadHAT analysis shows a higher than expected crash frequency from CR 35 to CR 16 (Wayne Street) and from CR 22 (Orpha Drive) to SR 13. The conditions along this segment of US 20

have not changed since the publication of the aforementioned reports; therefore, the safety conditions are still applicable today.

Need: Reduce Traffic Congestion

The primary measure of traffic congestion is Level of Service (LOS), which the Highway Capacity Manual (2000) defines as a quality measure describing operational conditions within a traffic stream. LOS A represents near ideal traffic flow, while LOS F represents a breakdown of the traffic flow. Currently, the arterial roadway portion of US 20 between from CR 35 to SR 13 operates at LOS B in the worst-case condition; however, over time, traffic operations are anticipated to deteriorate due to the projected travel demand. More specifically, the Michiana Area Council of Governments (MACOG), which acts as the Municipal Planning Organization (MPO) for Elkhart County, *Michiana on the Move 2045 Transportation Plan* (LRTP) (http://www.macog.com/docs/transportation/tp/2045_TransportationPlan_ApG.pdf, page 185 to 186) indicates that US 20 immediately west of the Wayne Street (CR 16) intersection will operate at LOS F in 2045. The MACOG LRTP also indicates that US 20 immediately west of SR 13 will operate at LOS D in 2045. Trucks account for approximately 27% of all traffic on US 20, further reducing capacity.

Need: Geometric and Drainage Deficiencies

Two existing geometric deficiencies, where the roadway does not meet critical safety design requirements, have been identified within the project area.

The horizontal alignment of US 20 has one existing curve located near Wayne Street (CR 16) that lacks adequate banking and visibility. This inadequate banking has necessitated posting an advisory speed limit of 40 MPH, while the rest of the corridor is signed as 45 MPH. The existing sight distance at this curve is 305 feet, which does not meet safe design requirements and could lead to rear end crashes.

This segment of US 20 also has multiple areas where the vertical alignment does not meet the minimum grade requirement of 0.5%, increasing the likelihood of stormwater ponding in the travel lanes during rain events.

Need: Local Community Needs and Interests

Pedestrians traveling to and from Northridge High School are currently crossing US 20 west of Spring Valley Drive where a designated crossing does not exist. Safety concerns have been expressed about students crossing in this location.

Horse drawn buggies are the primary mode of transportation for the local Amish community. This section of US 20 is regularly utilized by horse drawn buggies and bicyclists. These buggies primarily use the existing shoulders. Currently, US 20 through the project area has shoulders with varying widths, some of which do not provide adequate separation between motorized vehicles and drawn buggies and increase the potential of crashes.

The area between Wayne Street (CR 16) and Orpha Drive (CR 22) south of US 20 is primarily industrial and the existing US 20 traffic lanes are near the commercial truck loading docks for the industrial buildings. The near continuous driveway for several of these facilities creates the potential for conflict between the commercial vehicles and live traffic on US 20.

Project Purpose

The refined purpose of the US 20 project between SR 15 and SR 13 (Sections 1 and 2) is to improve safety, reduce traffic congestion, correct geometric and drainage deficiencies, and address local community needs and interests. Alternatives considered as part of the US 20 improvement project between CR 35 and SR 13 (Section 2) must:

- Improve safety
  - Reduce the number of rear end crashes on the facility.
- Reduce traffic congestion
  - Reduce traffic congestion and improve arterial level of service to LOS C or better in the design year of 2044.
- Correct geometric and drainage deficiencies
  - Correct the undesirable horizontal geometry to increase the sight distance at the curve near Wayne Street (CR16) to meet INDOT design criteria for a 50 mph design speed
  - Correct the undesirable vertical geometry to meet or exceed current INDOT standards for minimum grades to improve roadway drainage through reduced likelihood of stormwater ponding in the travel lanes.
- Address local community needs and interests
  - Provide adequate separation between pedestrians, vehicles, and provide appropriate pedestrian crossings based on known origins and destinations.
  - Provide adequate separation between buggies and vehicles.
  - Improve ingress/egress routes for trucks accessing industrial businesses adjacent to US 20.

Proposed Modification

After the approval of AI No. 1, the alignment of the preferred alternative was shifted to the south to avoid the unnecessary cost associated with relocating a high-pressure gas main north of US 20. In order to relocate the gas main, current federal safety guidelines would require that the line have its own easement outside of the existing right-of-way. Acquiring the right-of-way needed for this easement would effectively double the overall cost of the project; therefore, the design was revised to shift the alignment to avoid these impacts.

The shift in alignment will be approximately 12 feet to the south between Westlake Drive and Wayne Street (also known as County Road [CR] 16) and varies between approximately 12 and 46 feet to the south from Wayne Street to SR 13. Despite the shift in the proposed US 20 roadway alignment, the majority of the preferred alternative as described in AI No.1 remains the same, with a few minor exceptions.

In addition to the alignment shift, the length of the US 20 curve at Wayne Street was shortened to minimize right-of-way impacts. The roadway typical section was changed from an open shoulder to curb and gutter to minimize right-of-way impacts; therefore, storm sewer systems are proposed. AI No. 1 discussed adding sidewalks to the south side of US 20 between Westlake Drive and Spring Valley Road; however, considerations from the revised design have resulted in removing this sidewalk from the preferred alternative. No other changes to the preferred alternative detailed in AI No. 1 are proposed.

Because of the shift in alignment, minor revisions to stormwater detention basins were necessary. At the Wayne Street and US 20 intersection, the previously proposed stormwater detention basin at the southeast quadrant has been removed from the scope of work, and as a result, the northwest detention basin has been increased in size. Additionally, the proposed stormwater detention pond south of US 20, north of Bill's Collision Center will be increased in size to accommodate new stormwater drainage needs. The changes in size have been accounted for in the revised impacts, as shown in Appendix I, page 1.

Right-of-Way

The maximum existing right-of-way width is approximately 105 feet north and 110 feet south of the US 20 centerline, while the average width of the existing right-of-way is approximately 55 feet north and 45 feet south of the current US 20 centerline. The maximum proposed right-of-way is approximately 68 feet north and 62 feet south of the proposed US 20 centerline. The existing right-of-way is comprised of various land uses, including residential, commercial, and industrial, as well as resources such as forest, terrestrial habitat, and open water features.

According to the approved AI No. 1, the previous alignment required 12.3 acres of permanent and 7.3 acres of temporary right-of-way. Due to the alignment shift, the need for right-of-way has increased overall, and the amounts of right-of-way by current land use have changed. The current right-of-way acquisition needs based on the scope changes documented in this AI No. 2 include approximately 20.7 acres of permanent and 9.4 acres of temporary right-of-way.

The proposed right-of-way acquisition totals for US 20 Section 1 and Section 2, as well as the revisions in acquisition totals between AI No. 1 and AI No. 2, are summarized in the Impact Summary Table in Appendix I, page 1.

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

Maintenance of Traffic:

According to the approved AI No. 1, the proposed MOT will consist of maintaining two lanes of traffic, one in each direction, during construction. The MOT plan will be implemented in three phases. In Phase 1, MOT will be accomplished by shifting traffic to the current eastbound shoulders and constructing temporary pavement on the northern portion of US 20. In Phase 2, after completion of temporary pavement on the northern portion of the project, traffic will be switched over to the temporary pavement while the southern half of the project is constructed. In Phase 3, traffic will be shifted to the newly constructed road on the southern portion of the project area while the construction of the northern portion of the roadway is finalized. During construction, a suitable detour for use by bicyclists and pedestrians that wish to use the Pumpkinvine Nature Trail will be provided.

No revisions to the maintenance of traffic have occurred following the shift in the US 20 alignment.

Early Coordination:

Early coordination for US 20 Section 2 was initiated on November 20, 2019, with federal, state, and local agencies. Early coordination letters describing the revisions to the US 20 Section 2 (CR 35 to SR 13) improvements were sent to resource agencies, local officials, and other stakeholders on September 20, 2022, and August 9, 2024 (Appendix C, pages 1 and 2). Responses received from these agencies have been included in the appropriate sections of this AI No. 2 document.

Agency	Response Received	Appendix Location
Elkhart County Surveyor	No response received	N/A
Elkhart County Sheriff	No response received	N/A
Elkhart County Highway Department	No response received	N/A
Elkhart County Commissioners	No response received	N/A
Northridge High School	No response received	N/A
Middlebury Community Schools	No response received	N/A
Elkhart County Emergency Management	No response received	N/A
Middlebury Town Manager	No response received	N/A
Middlebury Town Council	No response received	N/A

Agency	Response Received	Appendix Location
Middlebury Water Department	No response received	N/A
Middlebury Parks and Recreation Department	No response received	N/A
Business Manager, Das Dutchman Essenhaus	No response received	N/A
Elkhart LaGrange Settlement Representative, Amish Steering Committee	No response received	N/A
Elkhart County MS4 Stormwater Coordinator	No response received	N/A
Elkhart County Soil and Water Conservation District	No response received	N/A
Elkhart County Planning and Development	No response received	N/A
Indiana Department of Natural Resources (IDNR), Outdoor Recreation Streams and Trails Section	No response received	N/A
Pathway Assembly of God	No response received	N/A
INDOT, Manager of Public Hearings	No response received	N/A
MACOG	No response received	N/A
Natural Resource Conservation Service (NRCS), State Conservationist	No response received	N/A
INDOT, Utilities and Railroad	No response received	N/A
INDOT, Environmental Services Division	No response received	N/A
INDOT Transportation, Fort Wayne District	No response received	N/A
US Army Corps of Engineers (USACE), Detroit District	No response received	N/A
Regional Environmental Coordinator, National Parks Service (NPS)	No response received	N/A
US Department of Housing & Development (USHUD)	No response received	N/A
Indiana Geological & Water Survey (IGWS) (Automated coordination)	August 9, 2024	Appendix C, pages 6 and 7
Indiana Department of Natural Resources, Division of Fish and Wildlife (IDNR DFW)	September 23, 2022	Appendix C, page 3
FHWA	No response received	N/A
US Fish and Wildlife Service (USFWS)	September 20, 2022	Appendix C, page 4
US Environmental Protection Agency (USEPA), Region 5 Groundwater and Drinking Water Branch	October 17, 2022	Appendix C, page 5
INDOT, Project Manager	No response received	N/A

Other Surface Waters

Based on a desktop review, a site visit October 14, 2020, by HNTB, the USGS topographic map, the aerial map of the project area, and the water resources map in the RFI report, the AI No. 1 documented 24 lakes located within the 0.5-mile search radius, and one pond adjacent to the US 20 Section 2 project area.

A Waters of the U.S. Determination / Wetland Delineation Report was approved by INDOT Ecology and Waterway Permitting, and Stormwater Office (EWPSO) on March 26, 2020. This waters report was completed on the initial study area documented in AI No. 1. It was determined that one pond, Pond A, is located within the proposed right-of-way. Pond A was determined to be approximately 0.57 acre in size, and the entire pond would be permanently impacted by the initial alignment. It was also determined that mitigation for pond impacts would be anticipated and would be determined during permitting.

Although not documented in the approved AI No. 1, there are two existing detention basins located within the US 20 Section 2 project area. One is located at the southwest quadrant of the US 20 and SR 16 intersection, and the other is located south of US 20 north of the private drive to the Inteplast Group (IP) Middlebury facility.

During the permitting phase of the project this waters report was submitted to the USACE for an Approved Jurisdictional Determination (AJD). The USACE issued the AJD on May 18, 2021 (Appendix F, pages 28 to 35). This AJD determined that the feature documented in the waters report as "Pond A" is a non-jurisdictional feature and should be reclassified as "Stormwater Control Feature B".

The alignment shift required an expansion of the investigated area and the completion of additional fieldwork which was conducted on October 22, 2022. An additional Waters of the US Determination / Wetland Delineation Report was completed to update the findings of the initial report and document water features in the revised investigated area. This Waters of the US Determination / Wetland Delineation Report was approved by INDOT EWPSO on June 21, 2023 (Appendix F, pages 1 to 27). This report identified the same two stormwater management facilities, Stormwater Feature 1 (Stormwater Feature A) and Stormwater Feature 2 (Stormwater Feature B) from the AJD.

The impacts to Stormwater Feature 1 (previously Pond A) and Stormwater Feature 2 (previously Wetland A) have not changed; however, they have been reclassified as stormwater management facility impacts, resulting in total impacts of 0.62 acre to stormwater management facilities. Additional permanent impacts totaling 0.52 acre will occur to the two detention basins that were not documented in AI No. 1 (Appendix I, page 1). These impacts will result from the reuse and reconfiguration of these detention basins to support the detention requirements of the project.

Wetlands

Based on a review of the National Wetlands Inventory (NWI) online mapper (https://www.fws.gov/wetlands/data/Mapper.html), a site visit on October 14, 2019, by HNTB, the USGS topographic map (Appendix B page 2), and the RFI report the AI No. 1 documented forty-seven wetlands located within the 0.5 mile search radius, and four wetlands present adjacent to the project area.

A Waters of the U.S. Determination / Wetland Delineation Report was approved by EWPSO on March 26, 2020. At the time, it was determined that one wetland, Wetland A, is located within the proposed right-of-way. Wetland A was determined to be approximately 0.05 acre in size, and the entire wetland would be permanently impacted by the initial alignment.

During the permitting phase of the project this waters report was submitted to the USACE for an Approved Jurisdictional Determination (AJD). The USACE issued the AJD on May 18, 2021 (Appendix F, pages 28 to 35). This AJD determined that the features documented in the waters report as "Wetland A" and "Pond A" were non-jurisdictional features and should be reclassified as "Stormwater Control Feature A" and "Stormwater Control Feature B" respectively.

Due to the shift in alignment, additional fieldwork was conducted on October 22, 2022, and a Waters of the US Determination / Wetland Delineation Report was completed to update the findings of the initial report and documenting water features in the revised investigated area. This Waters of the US Determination / Wetland Delineation Report was approved by INDOT EWPSO on June 21, 2023 (Appendix F, pages 1 to 27). It was determined that there are no wetlands within the project area.

The impacts to the feature documented as Wetland A in AI No. 1 have not changed but have been reclassified from wetland impacts to stormwater management facility impacts (Appendix I, page 1).

Additional early coordination was conducted with IDNR DFW and USFWS on September 20, 2022. IDNR DFW responded on September 23, 2022, stating that the recommendations in their previous December 19, 2019, response still applied (Appendix C, page 3). USFWS responded on September 20, 2022, stating that the agency does not have any concerns regarding the change in project plans (Appendix C, page 4).

Terrestrial Habitat

According to AI No. 1, proposed permanent and temporary impacts for terrestrial habitat include approximately 1.40 acres of tree clearing, 2.70 acres of agricultural land, 0.05 acre of wetland, and 14.80 acres of mowed and maintained right-of-way. Due to the revisions of the US 20 alignment, the impacts to terrestrial impacts have changed.

An additional 0.61 acre of tree clearing and 7.94 acres of mowed and maintained right-of-way impacts will be incurred by the alignment shift, for a total of 2.01 acres and 22.74 acres, respectively. Impacts to agricultural land has been decreased by 1.43 acres, for a total of 1.27 acres of impacts.

Tree clearing will be limited to areas within 100 feet of the proposed edge of pavement of US 20 and connecting local and county roads. The remainder of the project area is largely existing pavement (Appendix B, pages 3 and 43 to 48). No core forest will be impacted by the project. Animal movement should not be permanently restricted or impacted due to the proposed project. All areas will be restored per the current INDOT Standard Specifications.

Impacts to terrestrial habitat for US 20 Section 1 and Section 2 are summarized in the Impact Summary Table in Appendix I, page 1.

Additional early coordination was conducted with IDNR DFW and USFWS on September 20, 2022. IDNR DFW responded on September 23, 2022, stating that the recommendations in their previous December 19, 2019, response still applied (Appendix C, page 3). USFWS responded on September 20, 2022, stating that the agency does not have any concerns regarding the change in project plans (Appendix C, page 4).

Karst

Based on a desktop review and the Indiana Karst Region Map, the project is located outside the designated karst region of Indiana as outlined in the most current *Protection of Karst Features during Project Development and Construction*. According to the topo map of the project area (Appendix B, page 2), and the site visit October 22, 2022, there are no karst features identified within or adjacent to the project area.

According to AI No. 1, in the auto response generated on November 9, 2020, the IGWS did not indicate that karst features exist in the project area. IGWS indicated this project is located in an area with moderate liquefaction potential, low potential for bedrock resources, high potential of sand and gravel resources, and the presence of abandoned industrial mineral sand gravel pits (Appendix J, page 73).

Additional coordination was completed with IGWS on August 9, 2024. The automated response generated the same findings as the previous November 9, 2020, response, with the exception of the potential for sand and gravel resources, of which, the project area now has a low potential for these resources (Appendix C, pages 6 and 7). Response from IGWS was communicated with the designer on August 9, 2024. No impacts are expected.

Drinking Water Resources

According to AI No. 1, early coordination occurred with the USEPA Groundwater and Drinking Water Branch on November 20, 2019, and the agency responded stating that the project is not within a designated Sole Source Aquifer review area, so an EPA Sole Source Aquifer project review of this project is not required (Appendix J, page 75). Additional coordination was conducted with the agency on September 20, 2022, and they responded stating that the project is outside of any Sole Source Aquifer boundary and therefore no review is required under the Safe Drinking Water Act (SDWA) Section 1424(e) (Appendix C, page 5).

Threatened and Endangered Species

Due to the changes to the alignment, additional tree clearing is required, as described in the Terrestrial Habitat section; therefore, additional coordination was conducted for the potential of threatened and endangered species, as detailed below.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, pages 8 to 21). The project is within range of the federally endangered Indiana bat (*Myotis sodalist*) and the northern long-eared bat (NLEB) (*Myotis septentrionalis*). Other species were generated in the IPaC species list along with the Indiana bat and NLEB. Refer to the paragraph below.

The official species list generated from IPaC indicated two other listed species present within the project area: the whooping crane (*Grus americana*) and the monarch butterfly (*Danaus plexippus*). The whooping crane is listed as endangered wherever found, except where listed as an experimental population, according to the Environmental Conservation Online System (https://ecos.fws.gov/ecp/species/758). The whooping crane is listed as an experimental population in this location. At the time the species list was generated, the monarch butterfly was identified as a candidate species and not yet listed or proposed for listing. In December of 2024, the USFWS announced a proposal to list the species as threatened. Until the species has been listed, the federal protections under the Endangered Species Act do not apply. Therefore, these species were not considered as part of this project, and the USFWS Interim Policy is not applicable because there are no other federally protected species identified within the project area. No further coordination is needed with USFWS.

The project qualifies for the Range-wide Programmatic Informal Consultation for the Indiana bat and NLEB dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. Structure inspections occurred on July 21, 2024, and no birds or bats or signs of birds or bats was observed using the structures. An effect determination key was completed on July 26, 2024, and based on the responses provided, the project was found to "may affect – not likely to adversely affect" the Indiana bat and/or the NLEB. INDOT reviewed and verified the effect finding on July 26, 2024, and requested USFWS's review of the finding (Appendix C, pages 22 to 36). No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Mitigation Measures (AMMs) are included as firm commitments in the Environmental Commitments section of this document.

One residential outbuilding will be removed as a result of the project. Further details on the removal of this building are included in the Relocation of People, Businesses, or Farms section of this AI No. 2 document. Prior to any demolition, the structure will be inspected for bats or evidence of bats. If bats, or evidence of bats, are found coordination will occur with INDOT ESD and USFWS before demolition may occur. If further coordination is needed no demolition shall occur until coordination is concluded with INDOT ESD and USFWS. This firm commitment is included in the Environmental Commitments of this document.

Structure inspections occurred on July 21, 2024, and no birds or bats or signs of birds or bats was observed using the structures. USFWS Bridge/Structure Assessment are only valid for two years. If construction will begin after July 21, 2026, 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 District Environmental Manager must be contacted immediately. This firm commitment is included in the Environmental Commitments of this document.

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

Cultural Resources

According to the approved AI No. 1, on February 20, 2020, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 3 under the Minor Projects Programmatic Agreement. MPPA Category B, Type 3 projects include construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration and deceleration lanes) and shoulder widening under certain conditions (Appendix J, pages 76 and 77).

Between January 6 and 8, 2020, Cultural Resource Analysts, Inc., personnel conducted a phase 1a archaeological reconnaissance for the project. The background research found that no archaeological sites were recorded and that historic maps did not indicate a structure had been present within the proposed project area. Two archaeological reconnaissance studies have been conducted at the western edge of the project, one reconnaissance was completed recently utilizing current methods and so that area was not resurveyed (Arnold 2018). One historic archaeological site was located during the reconnaissance. The site was found to lack integrity and is ineligible to the state and national registers. This report did recommend archaeological clearance for the project and was approved by INDOT CRO on February 20, 2020 (Appendix J, page 77).

Because of the alignment shift, the MPPA Submittal and Assessment Form was amended and approved by INDOT CRO on September 5, 2024 (Appendix D, pages 1 to 6), which determined that the project falls within the guidelines of Category B, Type 6 under the MPPA, which includes other minor actions if deemed appropriate for coverage under this MPPA, by consultation and mutual agreement between INDOT, FHWA, and the State Historic Preservation Office (SHPO). The Tribes shall be provided information all projects proposed to be cleared under this category for review prior to an agreement being signed between the agencies. FHWA and SHPO provided concurrence on September 25, 2024 (Appendix D, page 6).

Between October 23 and 26, 2023, Cultural Resource Analysts, Inc., personnel conducted additional field reconnaissance for areas not previously surveyed prior to the shift in alignment and prepared an addendum to the initial archaeological report discussed above. The phase 1a reconnaissance located no additional archaeological resources (Appendix D, pages 7 to 12). INDOT concurred with the recommendations of the addendum on September 5, 2024, which recommend that the project be allowed to proceed as planned because the phase 1a archaeological reconnaissance has located no archaeological sites within the project area and/or previously recorded sites that were investigated warrant no additional investigation.

A SHPO concurrence letter was received in regard to the project on September 25, 2024. Therefore, it is recommended that the project be allowed to proceed as planned without additional archaeological investigation.

Section 4(f) Resources

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

Based on a desktop review, site visits on October 14, 2019, and November 4, 2020, by HNTB, the aerial map of the project area, a November 4, 2020, on-site meeting with the Middlebury Parks and Recreation Department, and the RFI report, there are five potential Section 4(f) resources located within the 0.5-mile search radius. According to additional research and by the site visits on October 14, 2019, November 4, 2020, and October 22, 2022, there are two Section 4(f) resources located within or adjacent to the project area. These resources are the Pumpkinvine Nature Trail and the Ridge Run Trail.

According to the AI No. 1, the preferred alternative with the original alignment would result in a Section 4(f) *de minimis* use of the Pumpkinvine Nature Trail and the work proposed to the Ridge Run Trail qualified as a Section 4(f) enhancement (Appendix J, pages 78 to 80). Due to the change in design, additional coordination occurred with local

officials and the owners and operators of the recreational facilities, which resulted in the same Section 4(f) findings, as detailed below.

Pumpkinvine Nature Trail (Section 4(f) De minimis Use)

Based on the trail maps available, the Pumpkinvine Nature Trail, a recreational multi-use trail, is within the project area. The Pumpkinvine Nature Trail crosses under US 20 approximately 500 feet west of CR 22, between CR 37 and Orpha Drive (Appendix B, page 47).

The Pumpkinvine Nature Trail is a former railroad that has been converted to a multi-use trail. This trail connects Goshen, Middlebury and Shipshewana. Within the project area, the trail is owned by the Town of Middlebury (north of US 20) and the Elkhart County Parks and Recreation Board (south of US 20). The trail is publicly-owned, open to the public year-round, and is primarily used for recreation and travel to and from work particularly by the local Amish Community. As a result, it is eligible for protection under Section 4(f). The trail is managed by the Middlebury Department of Parks and Recreation and Elkhart County Parks. Therefore, in accordance with 23 CFR 774.17, the Middlebury Department of Parks and Recreation and the Elkhart County Parks and Recreation Board are considered the Officials with Jurisdiction (OWJs) for the Section 4(f) resource.

The Pumpkinvine Nature Trail is currently carried under US 20 by a concrete box culvert approximately 65 feet in length. The widened roadway will require the box culvert to be extended approximately 43 feet to the south. The widened roadway will require the replacement of a 60-inch corrugated metal pipe (CMP) that runs parallel to the box culvert with a longer 72-inch CMP in the same location. This 72-in CMP will require a slight shift of the proposed trail alignment to the south of US 20 (Appendix B, page 109).

This extended culvert and new trail pavement will be designed and constructed to meet the same INDOT standards as the existing culvert and trail. The joints connecting the existing culvert to the proposed extension will follow INDOT Standard Drawings and will be covered with a waterproof membrane to keep moisture and soil out. Additional lighting will be included within the culvert to meet the illumination requirements for pedestrian tunnels. INDOT will fund the realignment and resurfacing of the Pumpkinvine Nature Trail within the limits of the US 20 Improvement Project.

This culvert extension, and pipe replacement will require the purchase of approximately 0.047 acre of permanent right-of-way and 0.075 acre of temporary right-of-way from the Town of Middlebury. Approximately 0.067 acre of permanent right-of-way and 0.17 acre of temporary right-of-way will be required from the Elkhart County Parks and Recreation Board. This right-of-way acquisition will be considered a use under Section 4(f). INDOT intends to perpetuate the use of the trail through an easement allowing the trail to use the County right-of-way. Construction will also require the temporary closure of the trail and implementation of a detour during construction for trail traffic. The temporary closure of the Pumpkinvine Natural Trail is anticipated to last no longer than nine months while the construction of US 20 is anticipated to last 24 months.

Prior to the change in the alignment, as documented in AI No. 1, the proposed detour started at the trailhead near the intersection of CR 22 and CR 37, south of US 20, routed east utilizing the westbound shoulder of CR 22, and continued east through the intersection of US 20 and CR 22. Just past the intersection, the detour turned north up the residential driveway of the residence at 130 1/2 Orpha Drive and connected back to the Pumpkinvine Nature Trail.

Following the shift in alignment, a revised detour route was developed in coordination with Elkhart County, the Town of Middlebury, and other stakeholders. This detour, which will meet the design criteria for a multi-use path, will begin at the trailhead near the intersection of CR 22 and CR 37, south of US 20. The trail closure will begin just north of CR 22 and extend north along the trail to a point just south of the Ridge Run Trail's intersection with the Pumpkinvine Nature Trail (Appendix B, page 59).

Prior to the closure of the trail the following actions will be taken; the northbound travel lane of CR 37 will be separated with pylons and lane markings to provide safe separation between pedestrian and vehicular traffic, the intersection of US 20 and CR 37 will be closed to all vehicular traffic, and a temporary traffic light at the intersection of SR 13 and CR

20 will be in place to accommodate the potential additional truck traffic rerouted by the closure of the US 20 and CR 37 intersection.

From the southern closure point, the detour will be routed west along a new trail section before intersecting with CR 37 and turning north to utilize the existing northbound travel lane of CR 37. The US 20 and CR 37 intersection will be closed to vehicular traffic prior to utilizing CR 37 as a detour route for the Pumpkinvine Nature Trail. The existing southbound travel lanes on CR 37 will remain open to service business and residences along CR 37. The detour will continue north and will cross US 20 via a temporary traffic signal. Once across US 20 this detour will connect to the Ridge Run trail via a temporary path (Appendix B, page 59).

The temporary detour using the northbound travel lanes of CR 37 will maintain the existing asphalt surface, be a minimum of 10 feet wide, and will be separated from the southbound travel lanes on CR 37 by delineators. The temporary traffic signal across US 20 will utilize pedestrian push buttons and will be optimized to match the signal at US 20 and CR 22. The Pumpkinvine Nature Trail will not be closed until the detour route is constructed and the traffic signal modified to allow for safe passage of bicyclists and pedestrians on the trail.

Informational signage and advance warning of the upcoming detour will be installed. This signage will be placed on the trail north and south of the of the detour to inform users of the reason for the re-route and warn them as to what is ahead. The detour will include painting CR 37 as a trail.

The construction on the trail connection between the existing trail and CR 37 is anticipated to require the acquisition of right-of-way. This trail connection will require the purchase of approximately 0.123 acre of temporary right-of-way from an adjacent business. This right-of-way acquisition is necessary to accommodate the revised detour route and was not required by the detour route proposed in AI No. 1. INDOT will be responsible for costs associated with the acquisition of temporary right-of-way for the Pumpkinvine Nature Trail Detour.

Under Section 4(f) of the U.S. Department of Transportation Act of 1966 (23 CFR 774), this trail is considered a Section 4(f) resource as it is publicly-owned land that permits public access for primarily recreational purposes. A *de minimis* impact is one that, after considering any measure to minimize harm (such as avoidance, minimization, mitigation, or enhancement measures), the project will not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f). A *de minimis* impact determination requires public involvement and concurrence from the official with jurisdiction. In accordance with 23 CFR 774.5(b)(2), a public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the Section 4(f) property will be provided in conjunction with the public review and comment period of this AI document. Public comments received that pertain to the Section 4(f) impact determination will be relayed to the OWJs.

Due to revisions made to the structure carrying the Pumpkinvine Nature Trail under US 20, and its effect on the trail, Section 4(f) coordination was reinitiated with Elkhart County and the Town of Middlebury. A Notification of Intent to Pursue Section 4(f) *De Minimis* Finding was sent to these entities on July 1, 2024. The OWJ for the Town of Middlebury agreed with this assessment and signed the letter on July 19, 2024 (Appendix I, pages 3 to 5), and the OWJ for Elkhart County agreed with this assessment and signed the letter on August 12, 2024 (Appendix I, pages 6 to 8). As previously stated in AI No. 1, a Section 4(f) *de minimis* use of the Pumpkinvine Nature Trail was determined. After additional coordination for this AI No. 2 document, it has been confirmed that the *de minimis* use finding remains applicable following the alignment shift.

In accordance with the requirements of Section 4(f), the public was offered an opportunity to review and comment on the effects of the proposed project on the Pumkinvine Nature Trail and Ridge Run trail via a legal advertisement place in *The Elkhart Truth* on September 12, 2024. The affidavit for this legal notice is included in Appendix G, page 51. The 30-day review period ended on October 12, 2024, and no comments were received.

Ridge Run Trail (Section 4(f) Enhancement)

As detailed in AI No. 1, a letter was sent to the Town of Middlebury on November 11, 2021, requesting concurrence

that the use of the property is solely for the purpose of preserving or enhancing an activity, feature, or attribute that qualifies the property for Section 4(f) protection. The Town of Middlebury agreed with this assessment and have signed the letter on November 16, 2021 (Appendix J, pages 79 and 80). The work to this trail still qualifies as a *Section 4(f) Enhancement*, which has been coordinated with the OWJs through ongoing coordination.

Section 6(f) Resources

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

At the time of approval for AI No. 1, a review of 6(f) properties on the INDOT ESD website revealed a total of 20 properties in Elkhart County (Appendix J, pages 81 and 82); however, a more recent review of 6(f) properties on the INDOT ESD website revealed a total of 13 individual properties in Elkhart County (Appendix I, page 2) having received these funds. None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

Air Quality

At the time of approval for AI No. 1, the project was included in the Fiscal Year (FY) 2020-2024 MACOG MPO Transportation Improvement Program (TIP) and the 2020-2024 Statewide Transportation Improvement Program (STIP) (Appendix J, page 81).

Currently, the project is included in the FY 2024-2028 MACOG MPO TIP, which has been directly incorporated into the FY 2024-2028 STIP (Appendix H, page 1 to 5). An administrative modification to the FY 2024-2028 MACOG TIP has occurred since the design change covered by this AI No. 2 document, which included shifting funding from Des. No. 1900095 (US 20 Section 2) to Des. No. 2400128 (US 20 Section 1) (Appendix H, pages 5 to 9). These Des. Nos. are listed separately in the MACOG MPO TIP (Appendix H, page 5); however, the FY 2024-2028 STIP is listed based on Lead Des. No. in the contract. The Lead Des. No. for this contract is Des. No. 1900095. The FY 2024-2028 STIP includes Des. Nos. 2400128 and 2000038 by reference with the contract number R-42379 (Appendix H, page 9).

The MACOG MPO's *Conformity Determination Report* (https://www.macog.com/docs/transportation/tp/ConformityAnalysis2050.pdf) was completed in October 2023 for the update to the Michiana on the Move: 2050 Transportation Plan and the FY 2024-2028 MACOG MPO TIP, which included the US 20 Improvement Project. Coordination occurred with the MACOG MPO on January 28, 2025, and it was determined that the shift in alignment does not warrant further air quality conformity analysis (Appendix H, page 10).

No other changes to air quality, including Attainment Status and Mobile Source Air Toxics, occurred since the approval of AI No. 1.

Environmental Justice (EJ)

This analysis was completed as part of AI #1 and CE-4 for this project prior to the issuance of recent 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.

An EJ analysis was conducted for AI No. 1, which determined that no minority or low-income populations of concern were present within the project area; however, there is a known local Amish community that is considered to be a population of concern. Amish populations were identified in the 2019 MACOG Environmental Justice report (http://www.macog.com/docs/about/ej/2019_EJ-report_v.pdf) that utilized a method for identifying EJ communities based on "Indicators of Potential Disadvantage" (IPD). In addition to minority and low-income populations, the report considered carless households and limited English proficiency as two of several IPDs for EJ analysis. The Amish

population generally falls into those two IPDs and thus was identified as a population of potential EJ concern for the US 20 Section 2 project. Although the Amish population generally falls into two IPDs, the specific location of this project was not identified in the MACOG Environmental Justice report as being above average in potential disadvantage.

Targeted outreach occurred with the local Amish population during the project development process, consisting of conversations with the local Amish Safety Committee. The Amish Safety Committee provided recommendations on how roadways can best accommodate horse drawn buggy traffic, including the use of sinuous rumple strips that are easier for buggies to cross and providing shoulders that can withstand horse drawn buggy use without forming ruts. As detailed in the CE-4 for US 20 Section 1 and the AI No. 1 for US 20 Section 2, the preferred alternative for this project includes wider shoulders and sinuous rumple strips to accommodate this buggy traffic and was included as a firm commitment (Appendix J, page 45 and 92). These design elements will improve safety for all roadway uses, as well as provide additional mobility benefits for Amish communities.

With the shift in alignment and the proposed public involvement activities covered by this AI No. 2 document, additional engagement with the local Amish community will be conducted. Therefore, consistent with AI No. 1, the US 20 project will not result in disproportionately high and adverse impacts to Amish populations. No further EJ analysis is warranted.

Relocation of People, Businesses, or Farms

Under the previous alignment of US 20 Section 2, as discussed in AI No. 1, the proposed project anticipated requiring one residential relocation of the property located at 218 US 20, which included a residential home and an outbuilding. Because of the shift in the alignment, the relocation of the residence is no longer necessary; however, the outbuilding at this property will still be removed. For the sake of transportation projects, a relocation is the act of displacing residents, community facilities, or businesses from structures or land, whereas, removal is the purchase and demolition of an unoccupied building whether residential, commercial, or institutional. Therefore, no relocations will occur along US 20 Section 2.

Hazardous Materials and Regulated Substances

According to the AI No. 1, based on a review of GIS and available public records, a RFI was completed on March 31, 2020, by HNTB. Three RCRA Generator/TSD sites, two Underground Storage Tank (UST) sites, one Voluntary Remediation Program site, one Solid Waste Landfill, one Leaking Underground Storage Tank (LUST) site, one Institutional Controls site, and seven National Pollutant Discharge Elimination System (NPDES) facilities are located within 0.5 mile of the project area. One LUST site and one NPDES facility are located in the project area and could potentially impact this project (Appendix J, pages 90 and 91).

An RFI Addendum was completed after the design change and approved by INDOT Site Assessment and Management (SAM) on October 3, 2022. One Voluntary Remediation Program (VRP) site is located within the revised alignment; however, no impact to the site is expected (Appendix E, pages 1 to 4).

A subsequent check of the hazardous materials data was conducted on November 26, 2024, by HNTB. According to recent documentation in the IDEM VFC, the LUST site documented in the original RFI document has had recent incidents resulting in ongoing monitoring. The resulting commitment that was included in AI No. 1 will be applied to this AI No. 2.

Permits

As previously mentioned, Pond A and Wetland A were reclassified to stormwater features. Because of this change, and because no other wetlands, streams, rivers, or ponds are present within the project area, no impacts will occur to such features. Therefore, a USACE Regional General Permit (RGP) and IDEM Individual Water Quality Certification

(WQC), which were previously anticipated in AI No. 1, are no longer likely to be required (Appendix J, page 91).

The project will still require more than one acre of soil disturbance and will therefore still require a Construction Stormwater General Permit (CSGP).

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

Environmental Commitments

The commitments provided in the US 20 Section 1 CE-4 (Appendix J, pages 49 to 52) remain valid. Firm Commitment No. 7, which pertained to structure inspections, in the US 20 Section 2 AI No. 1 (Appendix J, pages 54 to 95) requires modification due to more recent inspections occurring on the structures in the project area. Additionally, the removal of the residential outbuilding resulted in an additional commitment, provided below.

Structure inspections occurred on July 21, 2024, and no birds or bats or signs of birds or bats was observed using the structures. USFWS Bridge/Structure Assessment are only valid for two years. If construction will begin after July 21, 2026, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately (USFWS).

One residential outbuilding will be removed as a result of the project. Prior to any demolition, the structure will be inspected for bats or evidence of bats. If bats, or evidence of bats, are found coordination will occur with INDOT ESD and USFWS before demolition may occur. If further coordination is needed no demolition shall occur until coordination is concluded with INDOT ESD and USFWS. (USFWS)

An updated list of commitments for this AI No. 2 document is provided in Appendix I, pages 11 and 12.

Conclusion

This AI No. 2 was prepared to analyze and document the potential impacts associated with the revised alignment of the preferred alternative for the US 20 Section 2 Project (Des. No. 1900095). The impacts documented in this AI No. 2 are revised from the impacts documented in the approved CE-4 prepared for the US 20 Section 1 Project (Des. No. 1600517) and the AI No 1 prepared for the US 20 Section 2 Project (Des. No. 1900095). In total, US 20 Section 1 and Section 2 will improve US 20 from SR 15 to approximately 315 feet west of SR 13.

Revised impacts include increases to right-of way acquisition, open water resource impacts, and terrestrial habitat impacts. There are no additional adverse impacts to environmental features or communities of concern other than those outlined in this document. Unless specifically discussed and addressed in this AI, all information provided, and statements made in the approved CE-4 for US 20 Section 1 and AI No. 1 for US 20 Section 2 remain valid. Additionally, the environmental commitments in the CE-4 approved for the US 20 Section 1 project document still apply to the US 20 Section 1 Project (Des. No. 1600517), the US 20 Section 1 building demolition contract (Des. No. 1802043), and the US 20 Section 1 tree clearing contract (Des. No. 1802045). The environmental commitments in the AI No. 1 for US 20 Section 2 are still applicable to Des. No. 1900095 (Lead Des. No.) and Des. No. 2000038 (Pumpkinvine Nature Trail).

This AI document will be revised after the public involvement requirements outlined are fulfilled.

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APPENDIX A: INDOT SUPPORTING DOCUMENTATION

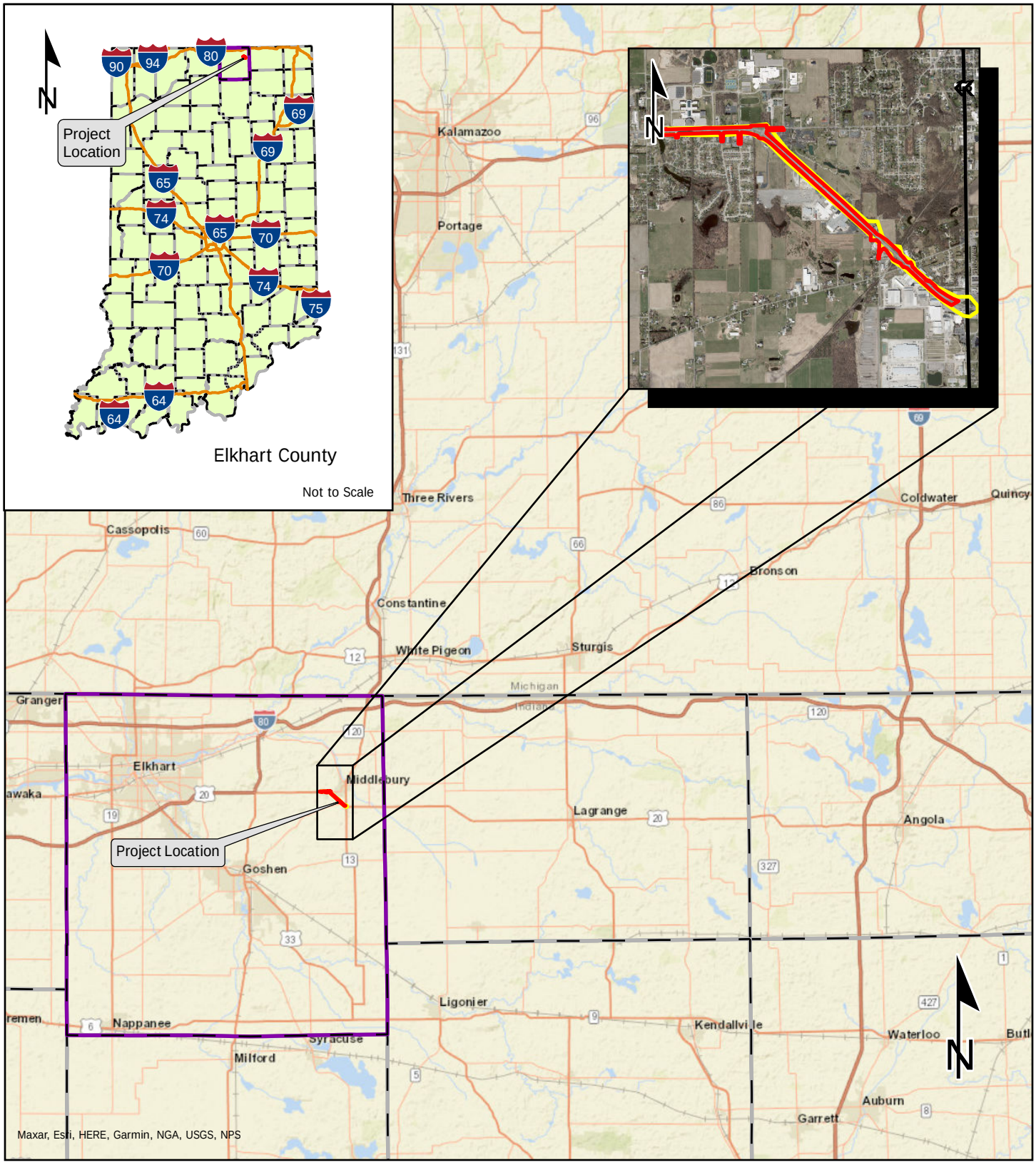
Categorical Exclusion Level Thresholds

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

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

This CE threshold table includes all impacts from US 20 Section 1 and US 20 Section 2.

APPENDIX B: GRAPHICS



Updated Project Area

Original Project Area

Elkhart County County

Boundary

0 4.5 9 Miles

Project Location Map

US 20, From SR 13 to CR 35

Added Travel Lanes

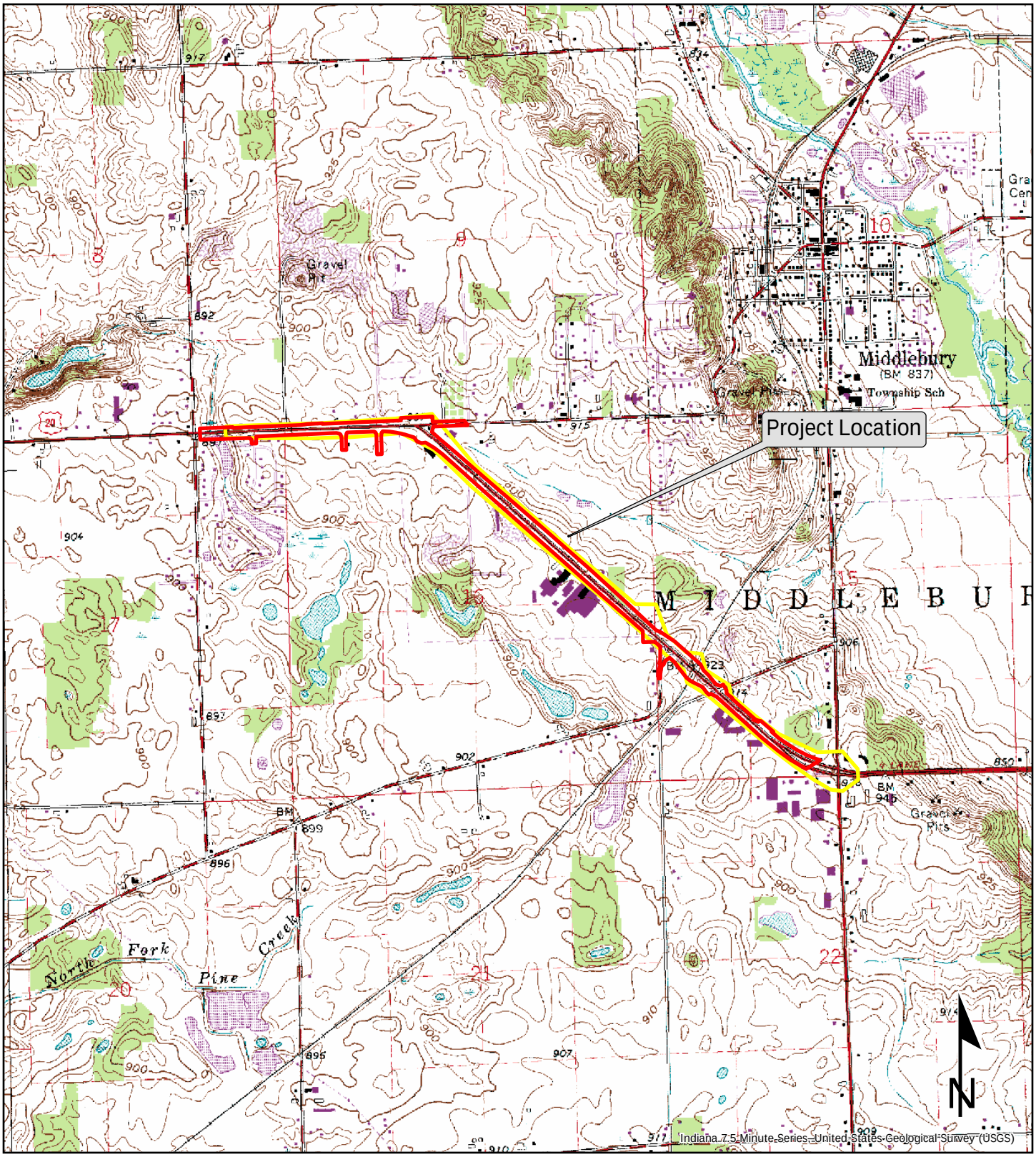
Elkhart County, Indiana

Des. No. 1900095

1 inch = 9 miles

HNTB

Graphics created by HNTB Corporation (2022)



Updated Project Area

Original Project Area

0 1,000 2,000 Feet

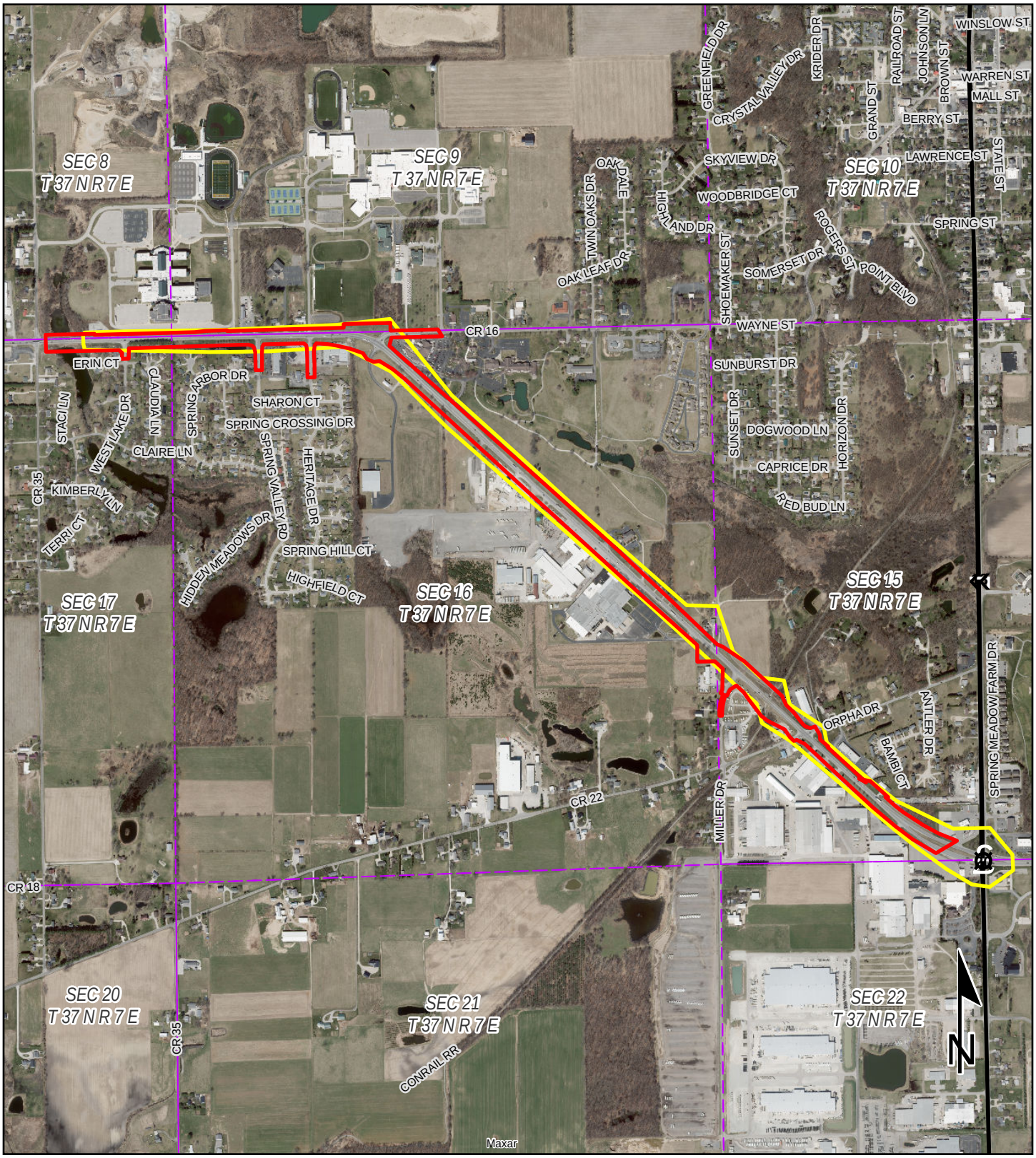
USGS (1:24,000 scale) Topographic Map

US 20, From SR 13 to CR 35

Added Travel Lanes

Elkhart County, Indiana

Des. No. 1900095	HNTB
1 inch = 2,000 ft	Graphics created by HNTB Corporation (2022)



Updated Project Area

Original Project Area

PLSS Section Boundary

0 675 1,350 Feet

Project Aerial Map

US 20, From SR 13 to CR 35
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 1,350 ft

HNTB

Graphics created by HNTB Corporation (2022)



Investigated Area

Stormwater Feature

Photo Location

0 125 250 Feet

Photo Location Map

U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area
Stormwater Feature
Data Points
Photo Location

0 125 250 Feet

Photo Location Map
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

Photo Location

0 125 250 Feet

Photo Location Map

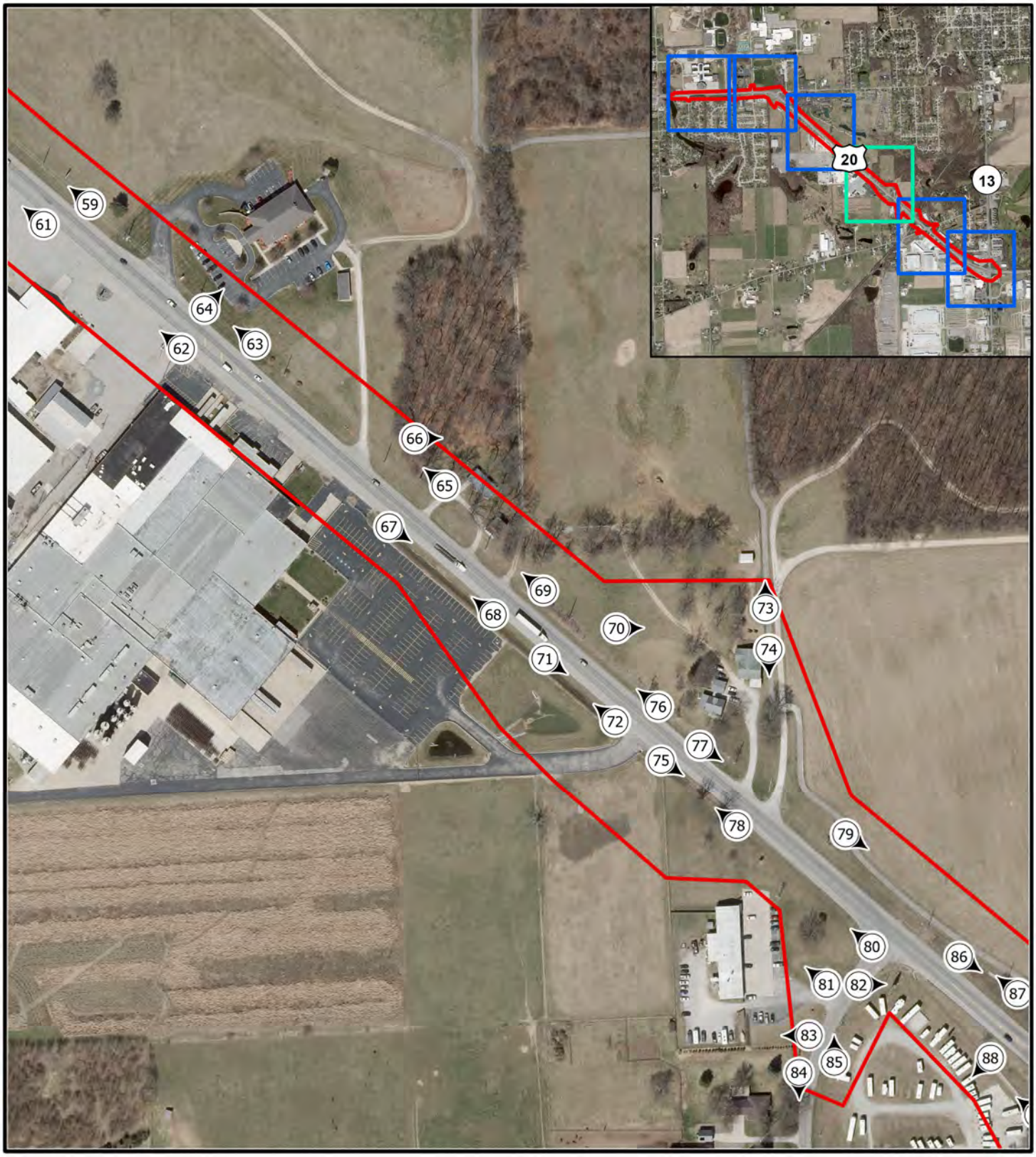
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

Photo Location

0 125 250 Feet

Photo Location Map

U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

Photo Location

Data Points

0 125 250 Feet

Photo Location Map

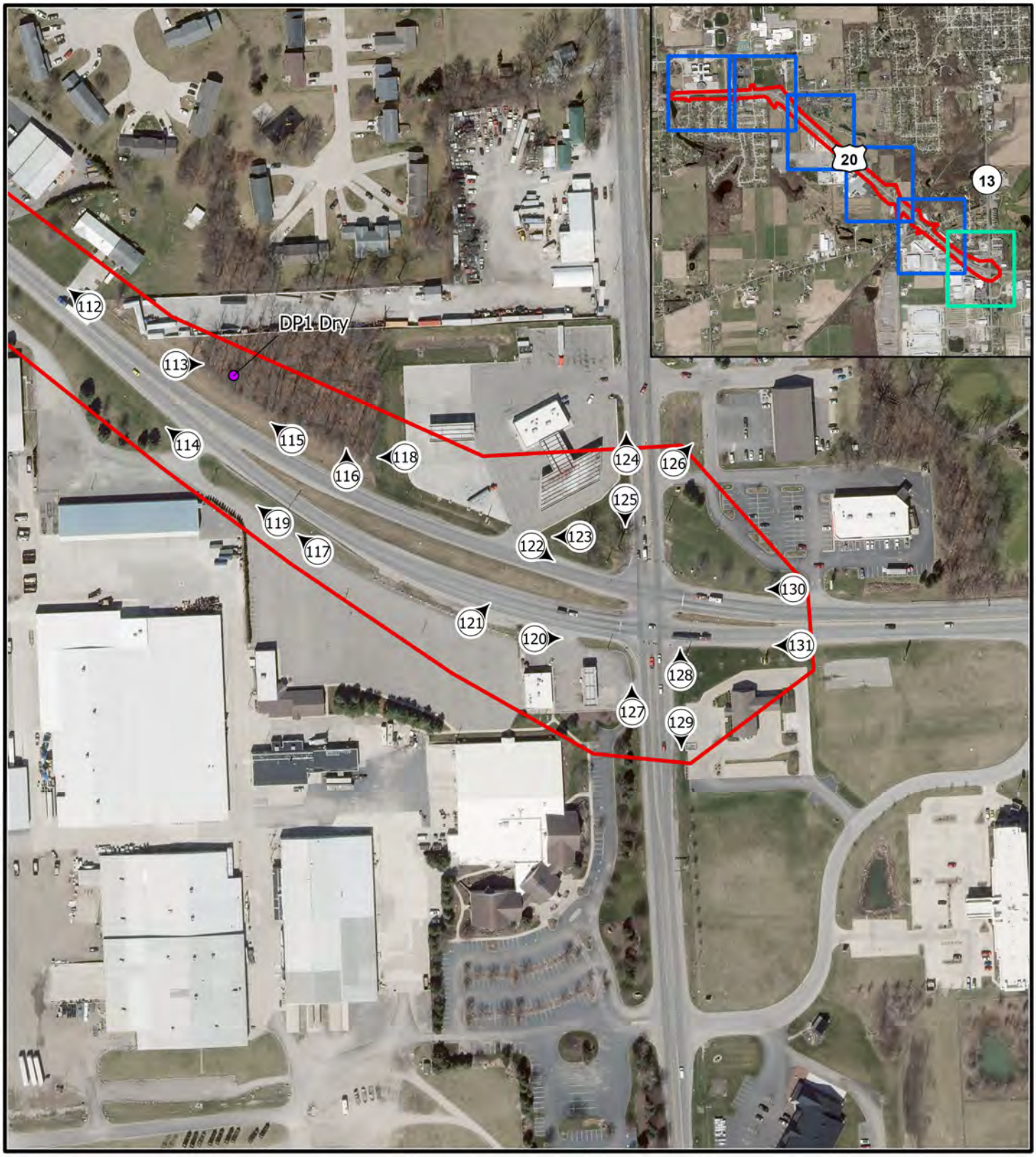
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

Data Points

Photo Location

0 125 250 Feet

Photo Location Map

U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



1. Looking south at the pond along the south side of US 20



2. Looking west at the pond along the south side of US 20



3. Looking west along the south side of US 20



4. Looking west along the north side of US 20



5. Looking east along the north side of US 20



6. Looking west along the south side of US 20



7. Looking southwest along the south side of US 20



8. Looking west along the north side of US 20



9. Looking east along the north side of US 20



10. Looking east along the south side of US 20



11. Looking west along the south side of US 20



12. Looking east along the north side of US 20



13. Looking east along the north side of US 20



14. Looking west along the north side of US 20



15. Looking southwest at stormwater feature 1 along the south side of US 20



16. Looking southeast at the stormwater feature 1 along the south side of US 20



17. Looking west along the north side of US 20



18. Looking west along the south side of US 20



19. Looking east along north side of US 20



20. Looking west along the north side of US 20



21. Looking south at residential area south of US 20



22. Looking northeast at stormwater feature 2 along the south side of US 20



23. Looking east along the south side of US 20, note stormwater feature 2



24. Looking west at stormwater feature 2 along the south side of US 20



25. Looking west along the north side of US 20



26. Looking west along the north side of US 20



27. Looking west along the south side of US 20



28. Looking southeast along the north side of US 20



29. Looking west along the south side of US 20



30. Looking southwest along the north side of US 20



31. Looking west along the north side of US 20



32. Looking south towards US 20 along the west side of CR 16



33. Looking southeast along the west side of CR 16



34. Looking south along the west side of CR 16



35. Looking west at upland retention area south of US 20



36. Looking west from drive on the south side of US 20



37. Looking east at area south of US 20



38. Looking northeast towards US 20, south of US 20



39. Looking south at upland area south of US 20



40. Looking northwest along the south side of US 20



41. Looking southeast along the south side of US 20



42. Looking southeast along the north side of US 20



43. Looking northwest along the north side of US 20



44. Looking east at upland area north of US 20



45. Looking northwest along the south side of US 20



46. Looking southeast at upland wooded area south of US 20



47. Looking north at upland wooded area south of US 20



48. Looking northwest along the north side of US 20



49. Looking east at upland area north of US 20



50. Looking west along the south of US 20



51. Looking northwest along the south side of US 20



52. Looking northwest along the south side of US 20



53. Looking northeast along the north side of US 20



54. Looking east at upland area north of US 20



55. Looking northwest along the north side of US 20



56. Looking east at upland area north of US 20



57. Looking northwest along the south side of US 20



58. Looking southeast along the south side of US 20



59. Looking northwest along the north side of US 20



60. Looking east at upland area along the south side of US 20



61. Looking northwest along the south side of US 20



62. Looking northwest along the south side of US 20



63. Looking northwest along the north side of US 20



64. Looking northeast at commercial property along the north side of US 20



65. Looking northwest from upland wooded area along the north side of US 20



66. Looking east from upland wooded area along the north side of US 20



67. Looking southeast along the south side of US 20



68. Looking northwest along the south side of US 20



69. Looking northwest along the north side of US 20



70. Looking east at upland area north of US 20



71. Looking southeast along the south side of US 20



72. Looking northwest along the south side of US 20



73. Looking north along pumpkin vine path north of US 20



74. Looking south along pumpkin vine path north of US 20



75. Looking southeast along the north side of US 20



76. Looking northwest along the north side of US 20



77. Looking southeast along the north side of US 20



78. Looking northwest along the south side of US 20



79. Looking southeast along a public trail along the north of US 20



80. Looking northwest along the south side of US 20



81. Looking northwest along the south side of US 20



82. Looking east at trailer storage area south of US 20



83. Looking west at commercial property south of US 20



84. Looking south along the south side of US 20



85. Looking north along commercial area south of US 20



86. Looking southeast down concrete channel along the south of US 20



87. Looking northwest of concrete channel along the north side of US 20



88. Looking southwest along the south side of US 20



89. Looking east into upland wooded area north of US 20



90. Looking southwest at Pumpkinvine Trail under the north side of US 20



91. Looking northeast at Pumpkinvine Trail north of US 20



92. Looking southwest along the north side of US 20



93. Looking southeast along the north side of US 20



94. Looking northwest along the north side of US 20



95. Looking northwest at culvert outlet on the north side of US 20



96. Looking east along the north side of US 20



97. Looking northwest along the south side of US 20



98. Looking northwest at culvert outlet under pedestrian trail along the south side of US 20



99. Looking southeast at concrete channel along the south side of US 20



100. Looking northwest along the north side of US 20



101. Looking northeast within upland wooded area south of US 20



102. Looking northeast at Pumpkinvine Trail under the south side of US 20



103. Looking northwest at concrete channel along the south side of US 20



104. Looking northeast within the west quadrant of US 20 and CR 22 intersection



105. Looking northeast along the south side of CR 22



106. Looking northwest along the north side of US 20



107. Looking northwest within the east quadrant of US 20 and CR 22 intersection



108. Looking northwest along the south side of US 20



109. Looking northwest along the south side of US 20



110. Looking northwest along the north side of US 20



111. Looking northwest along the south side of US 20



112. Looking northwest along the north side of US 20



113. Looking east at upland wooded area north of US 20



114. Looking northwest along the south side of US 20



115. Looking northwest along the north side of US 20



116. Looking north at upland wooded area north of US 20



117. Looking northwest along the south side of US 20



118. Looking west at upland wooded area north of US 20



119. Looking northwest at commercial area south of US 20



120. Looking east along the south side of US 20



121. Looking northeast along the south side of US 20



122. Looking southeast within the northwest quadrant of US 20 and SR 13 intersection



123. Looking west within the northwest quadrant of US 20 and SR 13 intersection



124. Looking north along the west side of SR 13



125. Looking south along the west side of SR 13



126. Looking northeast at upland retention area east of SR 13



127. Looking north within the southwest quadrant of US 20 and SR 13 intersection



128. Looking north within the southeast quadrant of US 20 and SR 13 intersection



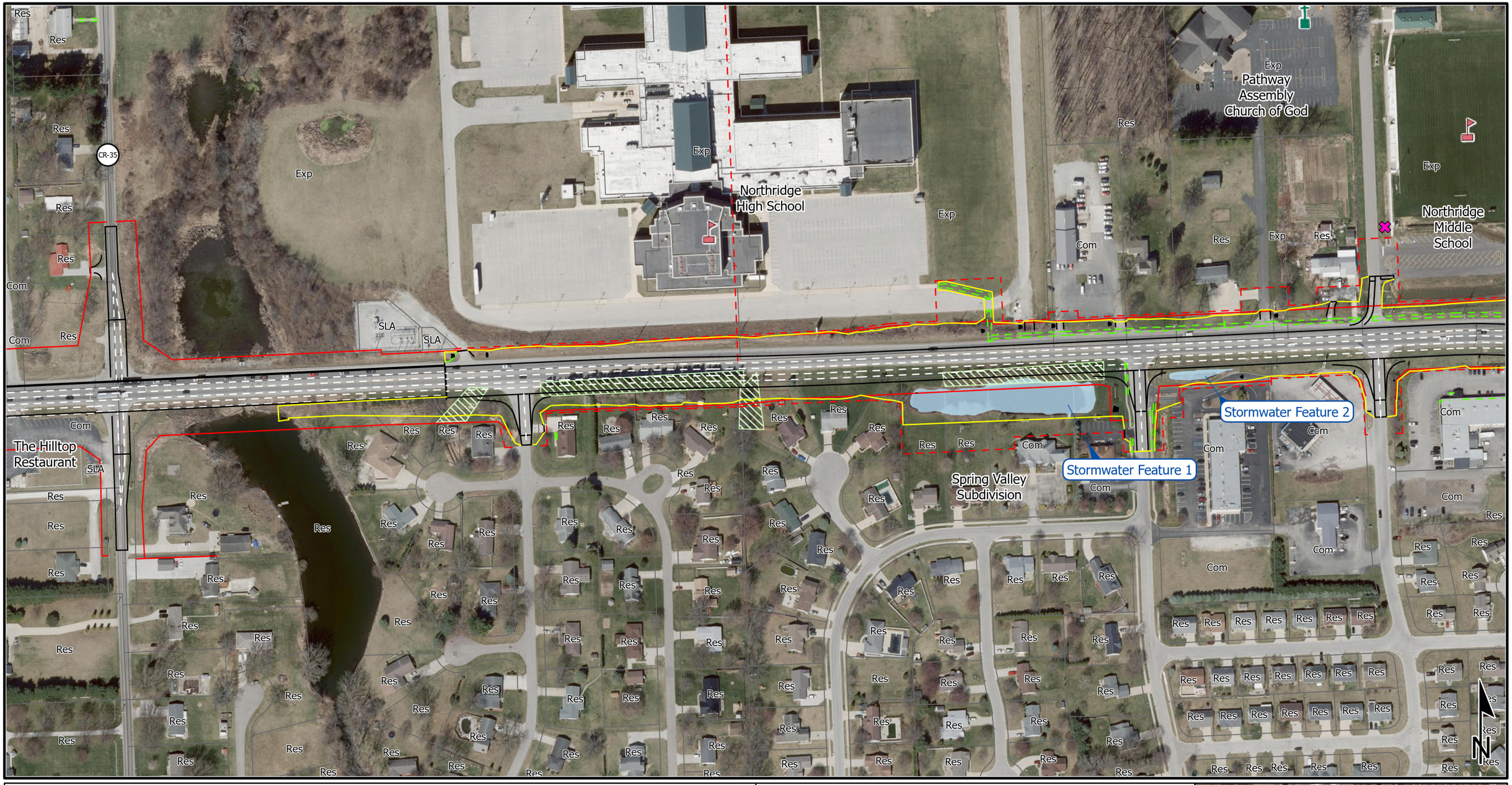
129. Looking south along the east side of SR 13



130. Looking west along the north side of US 20



131. Looking west along the south side of US 20



Design Features
- Proposed ROW
- Temporary ROW
- Construction Limits
- Sidewalk
- Edge of Pavement
- Lane Line
- Noise Measurements
- Tree clearing area
- Potential Residential Relocation

Local Resources
- Parcel Boundary
- Pipeline
- Trails
- Managed Lands
- School
- Religious Facility
- Recreation Facility

Hazardous Material Concerns
- Landfill Boundaries
- NPDES Facilities
- NPDES Pipe Locations
- RCRA Generator/TSD
- Voluntary Remediation Program
- Underground Storage Tank
- Leaking Underground Storage Tank
- Brownfield

Water Resources
- Stormwater Feature

Land Use Class Codes

Agr	Agricultural
Res	Residential
Com	Commercial
Exp	Exempt
Ind	Industrial
Min	Mineral
SLA	State/Local Assessed

Figure 3: Environmental Features Map

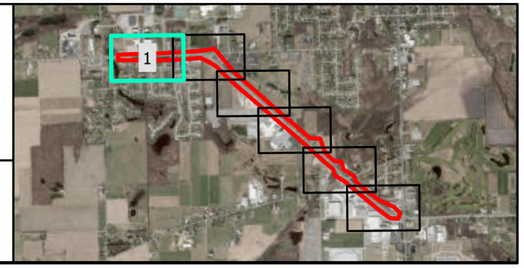
US 20 Improvement Project - Section 2
CR 35 to SR 13 Added Travel Lanes
Elkhart County, Indiana

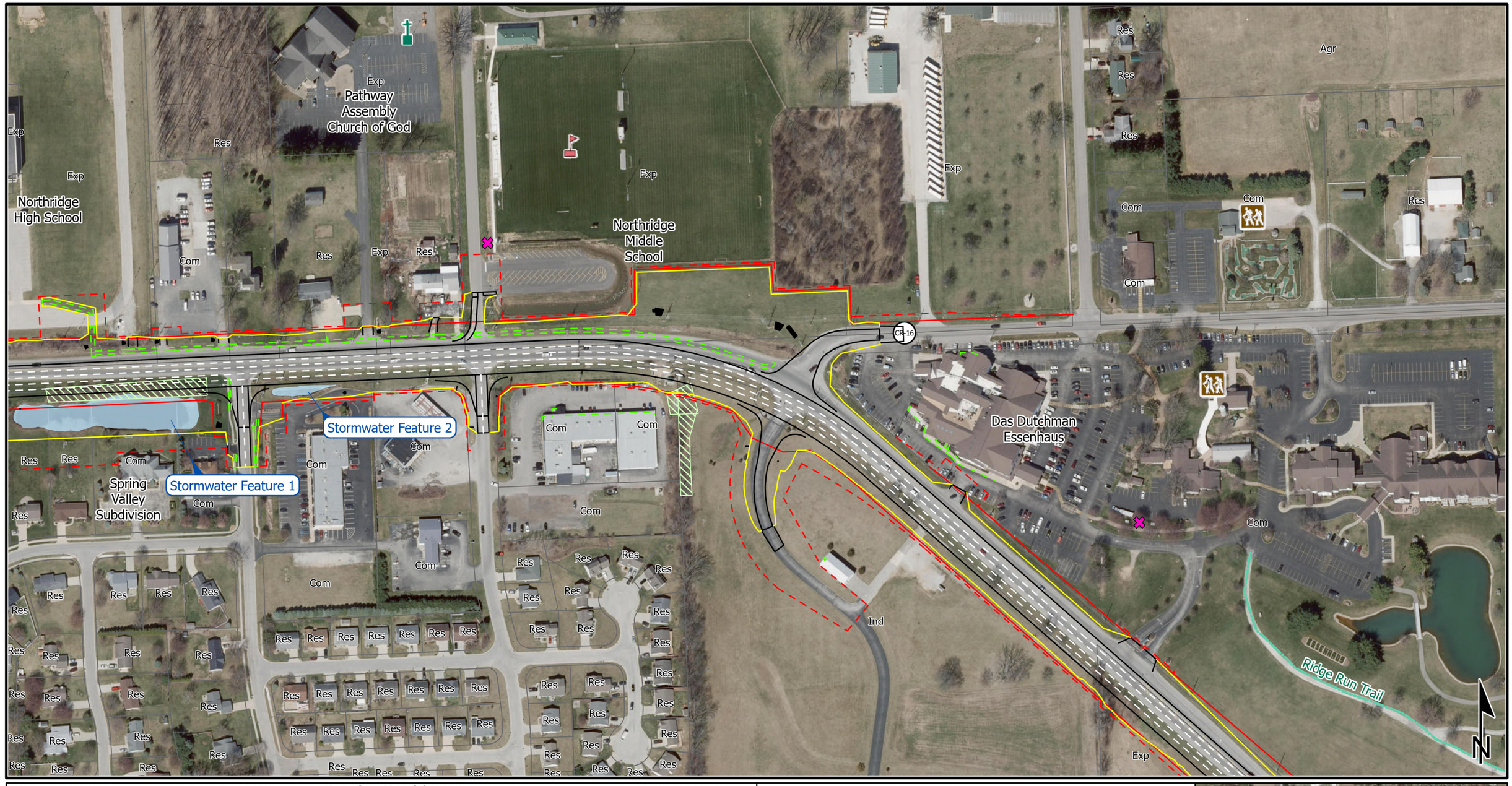
Des. No. 1900095 | 1 inch = 200 ft

0 100 200 Feet

HNTB

Graphics created by HNTB Corporation (2024)





Design Features
- Proposed ROW
- Temporary ROW
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- Noise Measurements
- Tree clearing area
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- Brownfield

Water Resources
- Stormwater Feature

Land Use Class Codes

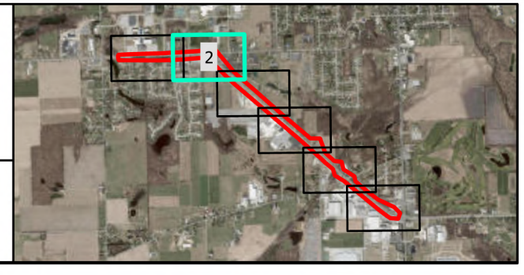
Agr	Agricultural
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Exp	Exempt
Ind	Industrial
Min	Mineral
SLA	State/Local Assessed

Figure 3: Environmental Features Map
US 20 Improvement Project - Section 2
CR 35 to SR 13 Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095 | 1 inch = 200 ft

0 100 200 Feet

HNTB
Graphics created by HNTB Corporation (2024)





Design Features
- Proposed ROW
- Temporary ROW
- Construction Limits
- Sidewalk
- Edge of Pavement
- Lane Line
- Noise Measurements
- Tree clearing area
- Potential Residential Relocation

Local Resources
- Parcel Boundary
- Pipeline
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- Religious Facility
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Hazardous Material Concerns
- Landfill Boundaries
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- Underground Storage Tank
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Water Resources
- Stormwater Feature

Land Use Class Codes

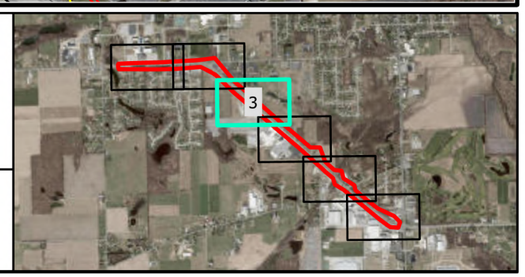
Agr	Agricultural
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Figure 3: Environmental Features Map
US 20 Improvement Project - Section 2
CR 35 to SR 13 Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095	1 inch = 200 ft

0 100 200 Feet

HNTB
Graphics created by HNTB Corporation (2024)




Exp
Ind
Res
Com
Com
Exp
Ind
Ind
Goshen
Physicians
Exp
Res
Res
Res
Res
Res
Res
Ridge Run Trail
MDK
Enterprises
Ind
Ind
Agr
Ind
Inteplast
Group
Ind
Ind
Ind
Agr
Ind
Ind
Com
Com
Ind
Res
Com
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Noise Measurements
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Potential Residential Relocation
Local Resources
Parcel Boundary
Pipeline
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CR 35 to SR 13 Added Travel Lanes
Elkhart County, Indiana
Des. No. 1900095
1 inch = 200 ft
0 100 200
Feet
HNTB
Graphics created by HNTB Corporation (2024)
4


Ind
Ind
Ind
Ind
Res
Ridge Run Trail
Com
Exp
Res
Res
Res
Res
Res
Monteith's Best-One Tire & Service
Com
Com
Res
Res
Res
Res
Res



Design Features
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Min	Mineral
SLA	State/Local Assessed

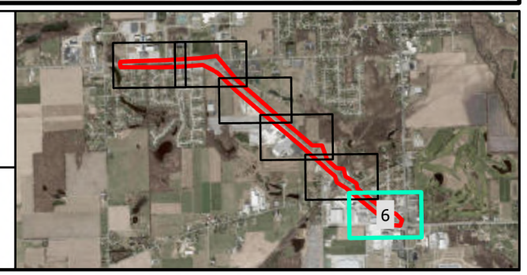
Figure 3: Environmental Features Map
US 20 Improvement Project - Section 2
CR 35 to SR 13 Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095 | 1 inch = 200 ft

0 100 200 Feet

HNTB

Graphics created by HNTB Corporation (2024)



PROJECT	DESIGNATION
1900095	1900095
CONTRACT	
R-42379	

INDIANA DEPARTMENT OF TRANSPORTATION

ROAD PLANS

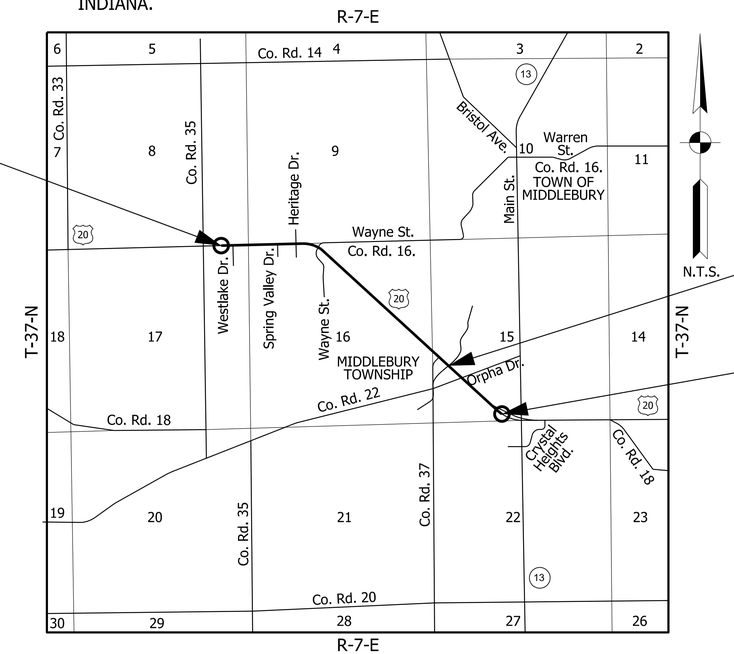
ROUTE: U.S. 20 FROM: RP 103+11 TO: RP 105+64

PROJECT NO. 1900095 P.E.
1900095 R/W
1900095 CONST.

PROJECT DESCRIPTION

ROAD CONSTRUCTION BEGINNING APPROXIMATELY 565' EAST OF THE INTERSECTION OF U.S. 20 AND C.R. 35, AND PROCEEDING EAST ON U.S. 20 TO THE INTERSECTION OF U.S. 20 AND S.R. 13 IN SECTIONS 9, 15, 16 AND 22, TOWNSHIP 37 NORTH, RANGE 7 EAST, MIDDLEBURY TOWNSHIP, ELKHART COUNTY, FORTWAYNE DISTRICT, INDIANA.

BEGIN PROJECT
PROJECT NO. 1900095
STA. 570+50.00
LINE "PR-A3"



N.T.S.

LOCATION MAP
MIDDLEBURY TOWNSHIP,
ELKHART COUNTY

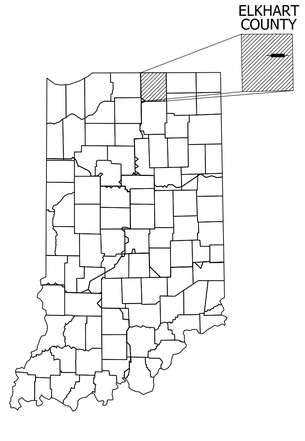
STR. NO. 101
Pumpkinvine Trail Tunnel
Extension, Des. No. 2000038
Sta. 648+80.24 Line "PR-A3"

END PROJECT
PROJECT NO. 1900095
STA. 672+00.00
LINE "PR-A-WB2"

NOTE TO REVIEWER
PLEASE SEE CORRESPONDENCE FILE FOR DOCUMENTATION OF DESIGN DECISIONS

TRAFFIC DATA U.S. 20		
A.A.D.T.	(2024)	17,300 VPD
A.A.D.T.	(2044)	21,300 VPD
D.H.V	(2044)	1,800 VPH
DIRECTIONAL DISTRIBUTION		48/52 EB/WB
TRUCKS		25% OF DHV
		27% OF AADT

DESIGN DATA U.S. 20	
DESIGN SPEED	50 MPH
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN (SUBURBAN)
TERRAIN	LEVEL
ACCESS CONTROL	NONE



PROJECT LOCATION SHOWN BY

FORT WAYNE DISTRICT

LATITUDE: 41°39'50.20" LONGITUDE: 85°43'17.01"

GROSS LENGTH:	1.92	MI.
NET LENGTH:	1.92	MI.
MAX. GRADE:		2.35%

HYDROLOGIC UNIT CODE: 0405000112

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

HNTB CORPORATION
THE HNTB COMPANIES
INFRASTRUCTURE SOLUTIONS

111 MONUMENT CIRCLE
SUITE 1200
INDIANAPOLIS, IN 46204

DRAFT
NOT FOR CONSTRUCTION

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

CERTIFIED BY: _____ DATE

APPROVED FOR LETTING: _____ INDIANA DEPARTMENT OF TRANSPORTATION DATE

	DESIGNATION
SURVEY BOOK	SHEETS
	of 271
CONTRACT	PROJECT

UTILITIES

TELEPHONE/COMMUNICATIONS
AT&T LONG DISTANCE
DEAN NORWICH
574-842-8830
deannorwich@jmceainc.com
110 NORTH MAIN STREET
CULVER, IN 46511

TELEPHONE/COMMUNICATIONS
COMCAST
JAY CASTELLO
847-789-1039
jay_castello@comcast.com
1920 E MISHAWAKA AVE.
MISHAWAKA, IN 46545

TELEPHONE/COMMUNICATIONS
CENTURYLINK
DEAN NORWICH
574-842-8830
deannorwich@jmceainc.com
110 NORTH MAIN STREET
CULVER, IN 46511

TELEPHONE/COMMUNICATIONS
CENTURYLINK - LOCAL
JOHN UNVENFERTH
419-226-6342
john.c.unvenferth@centurylink.com
994 SOUTH CENTRAL AVENUE
LIMA, OH 45804

TELEPHONE/COMMUNICATIONS
RVP FIBER CO. (US SIGNAL)
RYAN MIEDEMA
616-223-7144
rjmiedema@ussignal.com
201 IONIA AVENUE SOUTHWEST
GRAND RAPIDS, MI 49503

TELEPHONE/COMMUNICATIONS
FRONTIER COMMUNICATIONS OF INDIANA
ROBIN BRANSON
574-875-3789
robin.n.branson@ftr.com
8001 WEST JEFFERSON BLVD
FORT WAYNE, IN 46804

GAS / ELECTRIC
NIPSCO
DAVE SCHAAFSMA
866-732-6243
dschaafsma@nisource.com
DEAN GARRETT
219-647-6260
dagarrett@nisource.com
300 EAST KERCHER ROAD
GOSHEN, IN 46526

TELEPHONE/COMMUNICATIONS
COMMUNITY FIBER NETWORK
RANDY REESE
574-831-2176
rreese@nptel.com
19066 COUNTY ROAD 46
NEW PARIS, IN 46553

TELEPHONE/COMMUNICATIONS
NEW PARIS TELEPHONE
COLLIN KOOGLER
574-831-7110
ckoogler@nptel.com
19066 COUNTY ROAD 46
NEW PARIS, IN 46553

COMMUNICATIONS
MIDDLEBURY SCHOOL CORP
JEREMY MILLER
574-825-9425
millerj@mcsin-k12.org
57853 NORTHRIDGE DRIVE
MIDDLEBURY, IN 46540

WATER/SEWER
MIDDLEBURY PUBLIC WORKS
TIM ODELL
574-825-1493
publicworks@middleburyin.com
418 NORTH MAIN STREET
MIDDLEBURY, IN 46540

GENERAL NOTES

	The final cross sections of the grading contract will be the original cross sections of the paving contract. However, partial or complete cross sections shall be taken if necessary to determine the actual excavation quantities.
	The paper relocation lines will be cross sectioned by the engineer before construction.
	Existing asphalt pavement located outside the constuction limits shall be removed as directed.
	Existing pccp sidewalks and curbs shall be removed from project right of way limits unless otherwise noted and shall be paid for under clearing right of way.
✳✳	All earth shoulders, median areas, cut and fill slopes shall be plain or mulched seeded except where sodding is specified.
✳✳	All existing storm drainage pipes, inlets, and manholes shall remain unless otherwise noted.
	All limited access right of way is to be fenced with black vinyl coated chain link type fence (b.v.c.l.t.f.) unless otherwise noted.
	All existing right of way fence shall be removed unless otherwise noted.
✳✳	All disturbed areas shall be seeded with seed mixture "U" unless otherwise noted.
✳✳	All slopes are to be repaired with a minimum amount of grading so as not to disturb existing vegetation more than necessary.
	All pipes that are to be removed which connect to existing sewers that are to remain in operation shall be sealed water tight.

✳✳ Denotes General Notes Required.

SHEET INDEX

SHEET NO.	DWG NO.	DESIGNATION
1	TI-01	TITLE SHEET
2	IN-01	INDEX AND GENERAL NOTES
3-10	TS-01 - TS-08	TYPICAL CROSS SECTIONS
11-12	PLT-01 - PLT-02	PLAT NO. 1
13-20	LC-01 - LC-08	LOCATION CONTROL ROUTE SURVEY
21-25	GEO-01 - GEO-05	GEOMETRIC LAYOUT
26-54	MOT-01 - MOT-29	MAINTENANCE OF TRAFFIC
55-78	PLN-01 - PP-08	PLAN AND PROFILE
79-80	DET-01 - DET-02	SUPERELEVATION DIAGRAM
81-107	CD-01 - CD-27	CONSTRUCTION DETAILS
108-111	CR-01 - CR-04	CURB RAMP DETAILS
112-135	DR-01 - DR-24	DRAINAGE DETAILS
136-138	DR-25 - DR-27	SMALL STRUCTURE DETAILS
139-164	EC-01 - EC-26	EROSION CONTROL DETAILS
165-166	GP-01 - GP-02	PUMPKINVINE TRAIL STRUCTURE EXTENSION
167-172	PM-01 - PM-06	PAVEMENT MARKINGS AND SIGNING DETAILS
173-175	TR-01 - TR-03	TRAFFIC SIGNALS
176-177	SUM-01 - SUM-02	PAVEMENT AND APPROACH TABLES
178	SUM-03	PUMPKINVINE TRAIL APPROACH AND STRUCTURE TABLES
179-190	SUM-04 - SUM-15	STRUCTURE DATA TABLES
191	SUM-16	DITCH MATERIAL TABLES
192-194	SUM-17 - SUM-19	PAVEMENT MARKINGS TABLES
195-198	SUM-20 - SUM-23	SHEET SIGN TABLES
199-283	XS-01 - XS-85	CROSS SECTIONS

REVISIONS

SHEET NO.	DATE	REVISED

TRAFFIC DATA WESTLAKE DR. "S-8-A"

A.A.D.T.	(2024)	303 VPD
A.A.D.T.	(2044)	358 VPD
D.H.V	(2044)	33 VPH
DIRECTIONAL DISTRIBUTION		72% NB
TRUCKS		0% OF DHV
		0% OF AADT

DESIGN DATA WESTLAKE DR.

DESIGN SPEED	30 MPH
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	LOCAL STREET
RURAL/URBAN	URBAN (SUBURBAN)
TERRAIN	LEVEL
ACCESS CONTROL	NONE

TRAFFIC DATA SPRING VALLEY DR. "S-1-A"

A.A.D.T.	(2024)	1585 VPD
A.A.D.T.	(2044)	1868 VPD
D.H.V	(2044)	185 VPH
DIRECTIONAL DISTRIBUTION		67% NB
TRUCKS		0% OF DHV
		0% OF AADT

DESIGN DATA SPRING VALLEY DR.

DESIGN SPEED	30 MPH
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	LOCAL STREET
RURAL/URBAN	URBAN (SUBURBAN)
TERRAIN	LEVEL
ACCESS CONTROL	NONE

TRAFFIC DATA HERITAGE DR. "S-2-A"

		NORTH APPROACH	SOUTH APPROACH
A.A.D.T.	(2024)	1519 VPD	2955 VPD
A.A.D.T.	(2044)	1785 VPD	3484 VPD
D.H.V	(2044)	339 VPH	332 VPH
DIRECTIONAL DISTRIBUTION		63% NB	63% NB
TRUCKS		0% OF DHV	1% OF DHV
		7% OF AADT	3% OF AADT

DESIGN DATA HERITAGE DR.

DESIGN SPEED	30 MPH
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	LOCAL STREET
RURAL/URBAN	URBAN (SUBURBAN)
TERRAIN	LEVEL
ACCESS CONTROL	NONE

TRAFFIC DATA CR 16/WAYNE ST. 'PR-S-3-A"

		NORTH APPROACH	SOUTH APPROACH
A.A.D.T.	(2024)	7745 VPD	119 VPD
A.A.D.T.	(2044)	9918 VPD	137 VPD
D.H.V	(2044)	888 VPH	4 VPH
DIRECTIONAL DISTRIBUTION		57% NB	57% NB
TRUCKS		2% OF DHV	0% OF DHV
		12% OF AADT	18% OF AADT

DESIGN DATA CR 16/WAYNE ST.

DESIGN SPEED	30 MPH	
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)	
FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR	LOCAL STREET
RURAL/URBAN	URBAN (SUBURBAN)	
TERRAIN	LEVEL	
ACCESS CONTROL	NONE	

TRAFFIC DATA CR 37 "S-4-A"

A.A.D.T.	(2024)	878 VPD
A.A.D.T.	(2044)	1050 VPD
D.H.V	(2044)	121 VPH
DIRECTIONAL DISTRIBUTION		63% NB
TRUCKS		8% OF DHV
		8% OF AADT

DESIGN DATA CR 37

DESIGN SPEED	30 MPH
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	MINOR COLLECTOR
RURAL/URBAN	URBAN (SUBURBAN)
TERRAIN	LEVEL
ACCESS CONTROL	NONE

TRAFFIC DATA CR 22/ORHA DR. "S-5-A" AND "S-6-A"

		NORTH APPROACH	SOUTH APPROACH
A.A.D.T.	(2024)	3896 VPD	4227 VPD
A.A.D.T.	(2044)	4416 VPD	4798 VPD
D.H.V	(2044)	441 VPH	539 VPH
DIRECTIONAL DISTRIBUTION		55% NB	55% NB
TRUCKS		0% OF DHV	5% OF DHV
		2% OF AADT	9% OF AADT

DESIGN DATA CR 22/ORHA DR.

DESIGN SPEED	30 MPH	
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)	
FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR	
RURAL/URBAN	URBAN (SUBURBAN)	
TERRAIN	LEVEL	
ACCESS CONTROL	NONE	

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

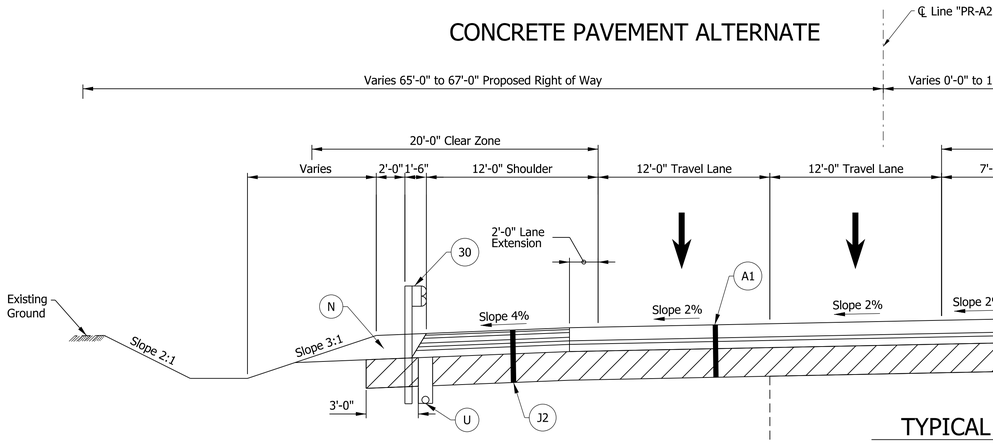
INDIANA
DEPARTMENT OF TRANSPORTATION

INDEX AND GENERAL NOTES

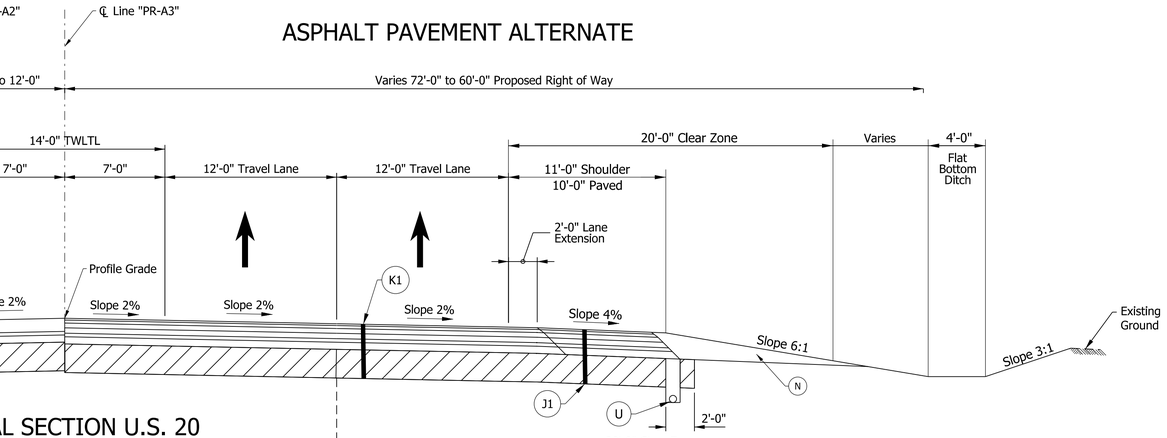
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VERTICAL SCALE	DESIGNATION
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	2 of 283
CONTRACT	PROJECT
	1900095

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CONCRETE PAVEMENT ALTERNATE

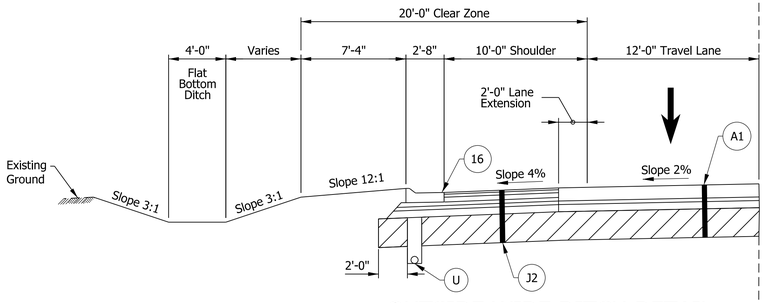


ASPHALT PAVEMENT ALTERNATE



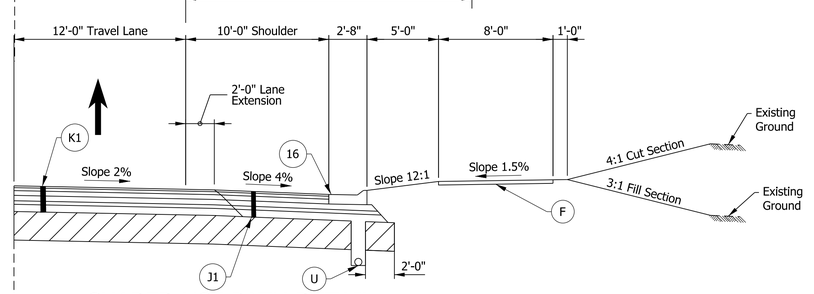
TYPICAL SECTION U.S. 20

STA. 570+50.00 LINE "PR-A3" TO STA. 588+50.00 LINE "PR-A3"
STA. 1588+50.00 LINE "PR-B" TO STA. 1588+52.00 LINE "PR-B"



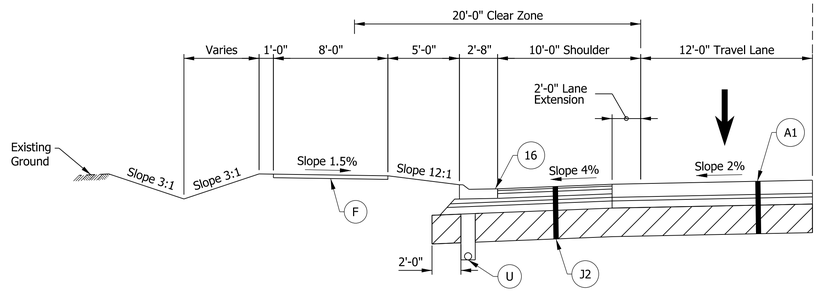
OUTSIDE WIDE DITCH DETAIL

STA. 570+75.24 LINE "PR-A3" TO STA. 582+07.56 LINE "PR-A3"



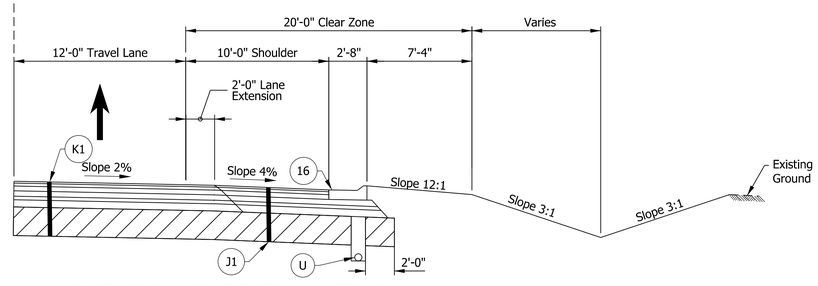
SHARED USE PATH DETAIL

STA. 572+76.20 LINE "PR-A3" TO STA. 580+18.84 LINE "PR-A3" [A]



SHARED USE PATH AND OUTSIDE DITCH DETAIL

STA. 582+07.56 LINE "PR-A3" TO STA. 588+50.00 LINE "PR-A3"
STA. 1588+50.00 LINE "PR-B" TO STA. 1589+71.94 LINE "PR-B"



OUTSIDE WIDE DITCH DETAIL

STA. 585+86.59 LINE "PR-A3" TO STA. 589+36.31 LINE "PR-A3"

[A] See next page for typical section STA. 580+18.84 "PR-A3" to STA. 584+26.63 "PR-A3"

LEGEND

- (A1) QC/QA-PCCP, 11 In., on 300#/Syd. QC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on, 6 In. of Compacted Aggregate, No. 53, on, Geotextile for Pavement Type 2A, on Subgrade Treatment, Type IBC. 15 ft Transverse Joint spacing with 1.25-In. Diameter Dowels and no. 6 Tie Bars for Longitudinal Joints and 14 ft Widened Slab for Outside Travel Lanes
- (J1) 165#/Syd. QC/QA-HMA, 3, 70, Surface 9.5 mm on, 275#/Syd. QC/QA-HMA, 3, 70 Intermediate, 19.0 mm on, 440#/Syd. QC/QA-HMA, 2, 64, Base, 25.0 mm on, 495#/Syd. QC/QA-HMA, 2, 64 Base, 25.0 mm on, 300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on 6 In. of Compacted Aggregate, No. 53 (Consisting of Crushed Limestone), Base on, Geotextile for Pavement, Type 2A, on Subgrade Treatment, Type IBC
- (J2) 165#/Syd. QC/QA-HMA, 3, 70, Surface 9.5 mm on, 275#/Syd. QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on, 440#/Syd. QC/QA-HMA, 2, 64, Base, 19.0 mm on, 330#/Syd. QC/QA-HMA, 2, 64 Base, 19.0 mm on, 300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on 6 In. of Compacted Aggregate, No. 53, on, Geotextile for Pavement, Type 2A, on Subgrade Treatment, Type IBC
- (K1) 165#/Syd. QC/QA-HMA, 4, 76, Surface 9.5 mm SMA on, 275#/Syd. QC/QA-HMA, 4, 76 Intermediate, 19.0 mm on, 440#/Syd. QC/QA-HMA, 4, 64, Base, 25.0 mm on, 495#/Syd. QC/QA-HMA, 4, 64 Base, 25.0 mm on, 300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on 6 In. of Compacted Aggregate, No. 53 (Consisting of Crushed Limestone), Base on, Geotextile for Pavement, Type 2A, on Subgrade Treatment, Type IBC
- (F) Sidewalk Concrete
- (U) Underdrain, 6-Inch
- (16) Combined Concrete Curb and Gutter, Type B (Sloping) (See Std. Dwg. No. E-605-CCCG-01)
- (N) Compacted Aggregate, No. 53
- (30) Guardrail MGS W-Beam

Note: See TS-02 for safety edge details.

DRAFT NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

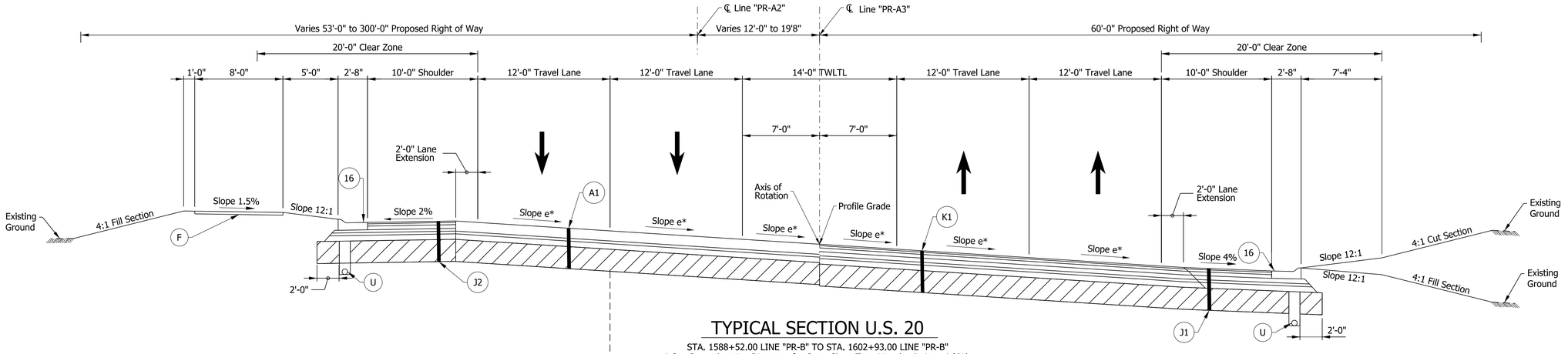
INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

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1"=5'	
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS TS-01
	3 of 283
CONTRACT	PROJECT
	1900095

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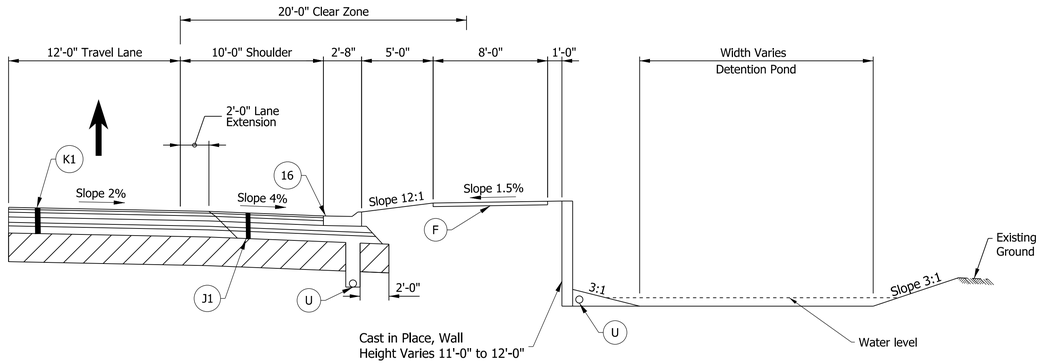
CONCRETE PAVEMENT ALTERNATE



TYPICAL SECTION U.S. 20

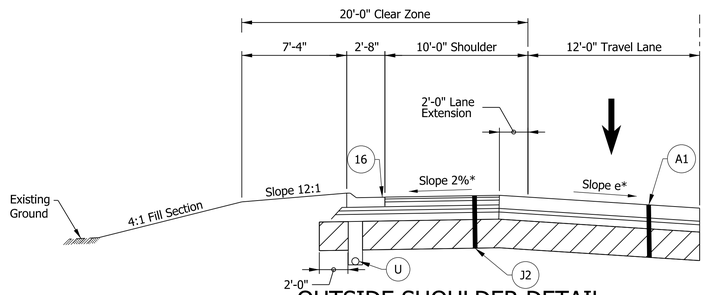
STA. 1588+52.00 LINE "PR-B" TO STA. 1602+93.00 LINE "PR-B"
* See Superelevation Diagrams for Cross Slope Transition (e_design=4.0%).

ASPHALT PAVEMENT ALTERNATE



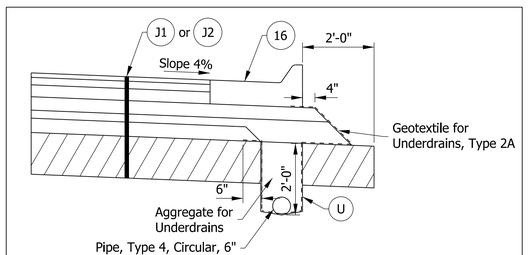
OUTSIDE CAST IN PLACE WALL

STA. 580+18.84 LINE "PR-A3" TO STA. 584+26.63 LINE "PR-A3"



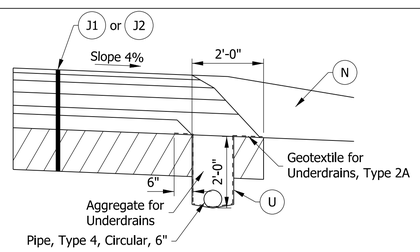
OUTSIDE SHOULDER DETAIL

STA. 1598+01.64 LINE "PR-B" TO STA. 1602+93.00 LINE "PR-B"



UNDERDRAIN WITH CURB & GUTTER

N.T.S.



UNDERDRAIN WITH OPEN SHOULDER

N.T.S.

LEGEND

A1 QC/QA-PCCP, 11 In., on
300#/Syd. QC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on,
6 In. of Compacted Aggregate, No. 53, on,
Geotextile for Pavement Type 2A, on
Subgrade Treatment, Type IBC
15 ft Transverse Joint spacing with 1.25-In. Diameter Dowels and no. 6 Tie Bars for Longitudinal Joints and 14 ft Widened Slab for Outside Travel Lanes

J1 165#/Syd. QC/QA-HMA, 3, 70, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 3, 70 Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 2, 64, Base, 25.0 mm on,
495#/Syd. QC/QA-HMA, 2, 64 Base, 25.0 mm on,
300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on
6 In. of Compacted Aggregate, No. 53 (Consisting of Crushed Limestone), Base on,
Geotextile for Pavement, Type 2A, on
Subgrade Treatment, Type IBC

J2 165#/Syd. QC/QA-HMA, 3, 70, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 2, 64, Base, 19.0 mm on,
330#/Syd. QC/QA-HMA, 2, 64 Base, 19.0 mm on,
300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on
6 In. of Compacted Aggregate, No. 53, on,
Geotextile for Pavement, Type 2A, on
Subgrade Treatment, Type IBC

K1 165#/Syd. QC/QA-HMA, 4, 76, Surface 9.5 mm SMA on,
275#/Syd. QC/QA-HMA, 4, 76 Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 4, 64, Base, 25.0 mm on,
495#/Syd. QC/QA-HMA, 4, 64 Base, 25.0 mm on,
300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on
6 In. of Compacted Aggregate, No. 53 (Consisting of Crushed Limestone), Base on,
Geotextile for Pavement, Type 2A, on
Subgrade Treatment, Type IBC

F Sidewalk Concrete

U Underdrain, 6-Inch

16 Combined Concrete Curb and Gutter, Type B (Sloping)
(See Std. Dwg. No. E-605-CCCG-01)

N Compacted Aggregate, No. 53

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

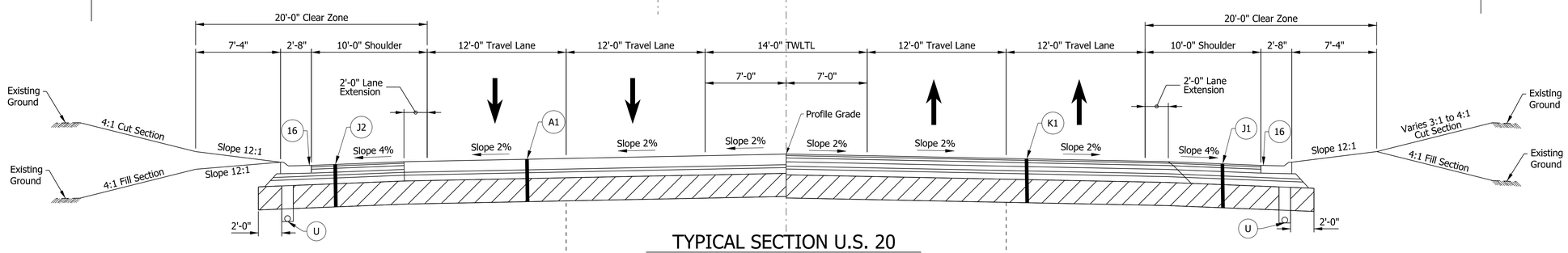
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CONTRACT	PROJECT
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CONCRETE PAVEMENT ALTERNATE

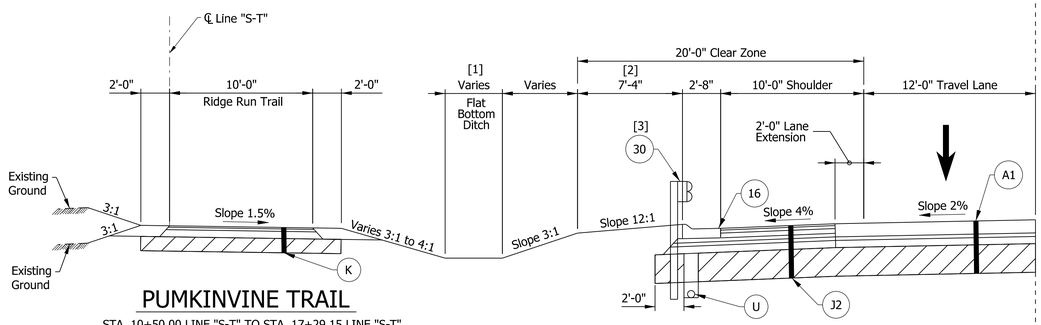
℄ Line "PR-A2" ℄ Line "PR-A3"

ASPHALT PAVEMENT ALTERNATE



TYPICAL SECTION U.S. 20

STA. 1602+93.00 LINE "PR-B" TO STA. 1603+19.19 LINE "PR-B"
STA. 603+00.00 LINE "PR-A3" TO STA. 662+00.00 LINE "PR-A3"

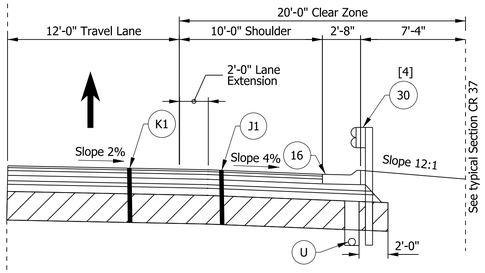


PUMKINVINE TRAIL

STA. 10+50.00 LINE "S-T" TO STA. 17+29.15 LINE "S-T"

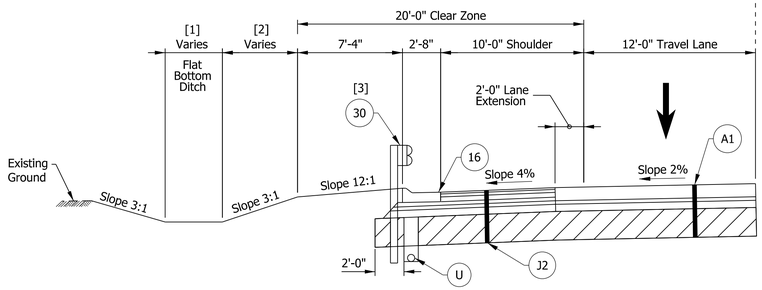
OUTSIDE GUARDRAIL AND DITCH DETAIL

STA. 642+00.00 LINE "PR-A3" TO STA. 648+64.42 LINE "PR-A3"



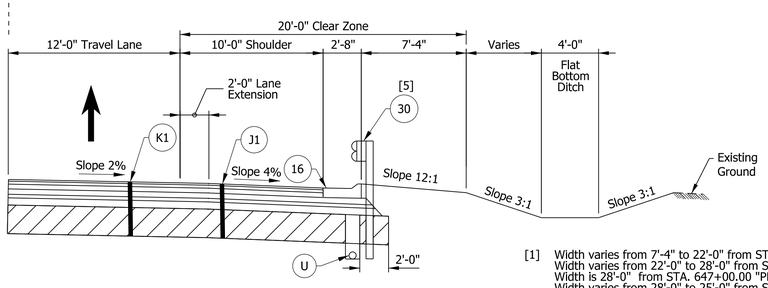
OUTSIDE GUARDRAIL AND DITCH DETAIL

STA. 643+10.78 LINE "PR-A3" TO STA. 645+29.18 LINE "PR-A3"



OUTSIDE GUARDRAIL AND DITCH DETAIL

STA. 649+50.00 LINE "PR-A3" TO STA. 653+28.92 LINE "PR-A3"
STA. 654+87.97 LINE "PR-A3" TO STA. 662+00.00 LINE "PR-A3"



OUTSIDE GUARDRAIL AND DITCH DETAIL

STA. 645+29.18 LINE "PR-A3" TO STA. 652+29.08 LINE "PR-A3"
STA. 653+87.82 LINE "PR-A3" TO STA. 662+00.00 LINE "PR-A3"

[1] Width varies from 7'-4" to 22'-0" from STA. 641+88.00 "PR-A3" to STA. 646+00.00 "PR-A3"
Width varies from 22'-0" to 28'-0" from STA. 646+00.00 "PR-A3" to STA. 647+00.00 "PR-A3"
Width is 28'-0" from STA. 647+00.00 "PR-A3" to STA. 649+42.00 "PR-A3"
Width varies from 28'-0" to 25'-0" from STA. 649+42.00 "PR-A3" to STA. 649+80.00 "PR-A3"
Width varies from 25'-0" to 7'-4" from STA. 649+80.00 "PR-A3" to STA. 650+75.00 "PR-A3"

[2] Width is 14'-0" from STA. 641+88.00 "PR-A3" to STA. 648+50.00 "PR-A3"
Width varies from 14'-0" to 4'-0" from STA. 648+50.00 "PR-A3" to STA. 649+00.00 "PR-A3"

[3] Guardrail at STA. 648+22.65 "PR-A3" to STA. 649+91.40 "PR-A3"

[4] Guardrail at STA. 643+10.78 "PR-A3" to STA. 645+29.18 "PR-A3"

[5] Guardrail at STA. 647+66.16 "PR-A3" to STA. 649+91+47.34 "PR-A3"

LEGEND

A1 QC/QA-PCCP, 11 In., on
300#/Syd. QC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on,
6 In. of Compacted Aggregate, No. 53, on,
Geotextile for Pavement Type 2A, on
Subgrade Treatment, Type IBC
15 ft Transverse Joint spacing with 1.25-In. Diameter Dowels and no. 6 Tie Bars for Longitudinal Joints and 14 ft Widened Slab for Outside Travel Lanes

J1 165#/Syd. QC/QA-HMA, 3, 70, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 3, 70 Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 2, 64, Base, 25.0 mm on,
495#/Syd. QC/QA-HMA, 2, 64 Base, 25.0 mm on,
300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on
6 In. of Compacted Aggregate, No. 53 (Consisting of Crushed Limestone), Base on,
Geotextile for Pavement, Type 2A, on
Subgrade Treatment, Type IBC

J2 165#/Syd. QC/QA-HMA, 3, 70, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 2, 64, Base, 19.0 mm on,
330#/Syd. QC/QA-HMA, 2, 64 Base, 19.0 mm on,
300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on
6 In. of Compacted Aggregate, No. 53, on,
Geotextile for Pavement, Type 2A, on
Subgrade Treatment, Type IBC

K HMA for Sidewalk
140#/Syd. HMA Surface, Type B, on,
220#/Syd. HMA Intermediate, Type B, on,
6 In. of Compacted Aggregate, No. 53, Base on,
Subgrade Treatment, Type III

K1 165#/Syd. QC/QA-HMA, 4, 76, Surface 9.5 mm SMA on,
275#/Syd. QC/QA-HMA, 4, 76 Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 4, 64, Base, 25.0 mm on,
495#/Syd. QC/QA-HMA, 4, 64 Base, 25.0 mm on,
300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on
6 In. of Compacted Aggregate, No. 53 (Consisting of Crushed Limestone), Base on,
Geotextile for Pavement, Type 2A, on
Subgrade Treatment, Type IBC

30 Guardrail MGS W-Beam

U Underdrain, 6-Inch

16 Combined Concrete Curb and Gutter, Type B (Sloping)
(See Std. Dwg. No. E-605-CCCG-01)

N Compacted Aggregate, No. 53

Note: See TS-02 for safety edge details.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

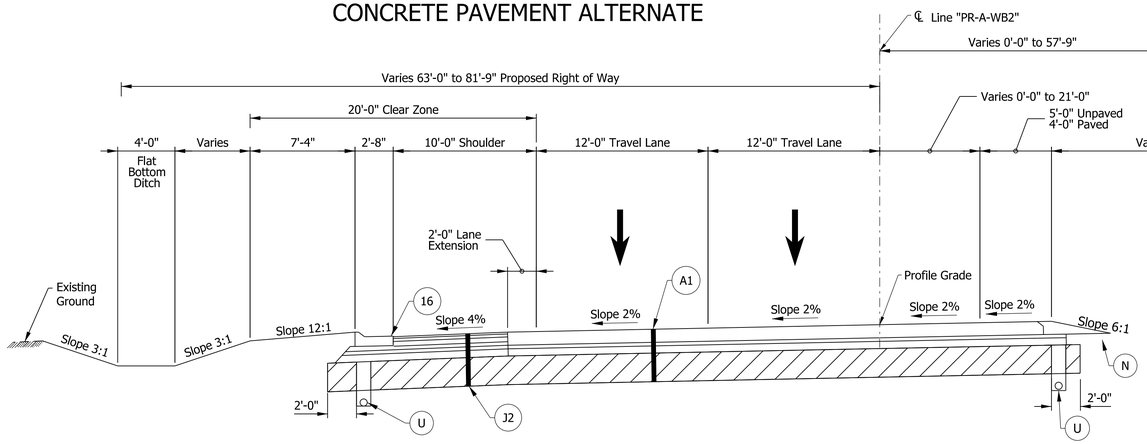
INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

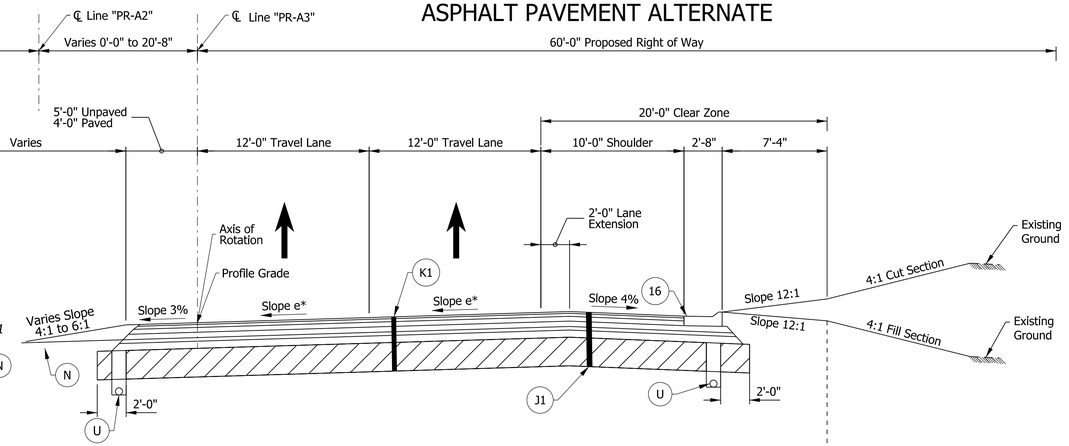
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1"=5'	
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS TS-03
	5 of 283
CONTRACT	PROJECT
	1900095

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CONCRETE PAVEMENT ALTERNATE

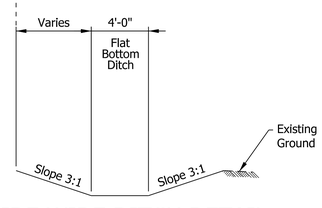


ASPHALT PAVEMENT ALTERNATE



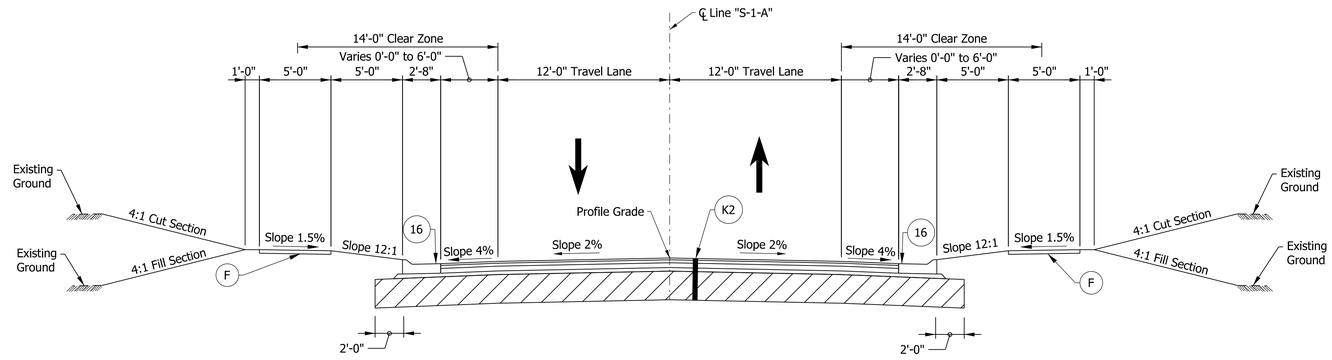
TYPICAL SECTION U.S. 20

STA. 662+00.00 LINE "PR-A3" TO STA. 670+50.00 LINE "PR-A3"
STA. 662+00.00 LINE "PR-A-WB2" TO STA. 672+00.00 LINE "PR-A-WB2"
* See Superelevation Diagrams for Cross Slope Transition (e_design=3.0%)



OUTSIDE WIDE DITCH DETAIL

STA. 662+00.00 LINE "PR-A3" TO STA. 670+40.00 LINE "PR-A3"



TYPICAL SECTION SPRING VALLEY DRIVE

STA. 47+73.00 LINE "S-1-A" TO STA. 49+37.74 LINE "S-1-A"

LEGEND

A1 QC/QA-PCCP, 11 In., on
300#/Syd. QC/QA-HMA, 4, 76, Intermediate, OG, 19.0 mm on,
6 In. of Compacted Aggregate, No. 53, on,
Geotextile for Pavement Type 2A, on
Subgrade Treatment, Type IBC
15 ft Transverse Joint spacing with 1.25-In. Diameter Dowels and no. 6 Tie Bars for Longitudinal Joints and 14 ft Widened Slab for Outside Travel Lanes

J1 165#/Syd. QC/QA-HMA, 3, 70, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 3, 70 Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 2, 64, Base, 25.0 mm on,
495#/Syd. QC/QA-HMA, 2, 64 Base, 25.0 mm on,
300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on
6 In. of Compacted Aggregate, No. 53 (Consisting of Crushed Limestone), Base on,
Geotextile for Pavement, Type 2A, on
Subgrade Treatment, Type IBC

J2 165#/Syd. QC/QA-HMA, 3, 70, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 2, 64, Base, 19.0 mm on,
330#/Syd. QC/QA-HMA, 2, 64 Base, 19.0 mm on,
300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on
6 In. of Compacted Aggregate, No. 53, on,
Geotextile for Pavement, Type 2A, on
Subgrade Treatment, Type IBC

K1 165#/Syd. QC/QA-HMA, 4, 76, Surface 9.5 mm SMA on,
275#/Syd. QC/QA-HMA, 4, 76 Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 4, 64, Base, 25.0 mm on,
495#/Syd. QC/QA-HMA, 4, 64 Base, 25.0 mm on,
300#/Syd. QC/QA-HMA, 4, 76 Intermediate, OG, 19.0 mm on
6 In. of Compacted Aggregate, No. 53 (Consisting of Crushed Limestone), Base on,
Geotextile for Pavement, Type 2A, on
Subgrade Treatment, Type IBC

K2 165#/Syd. QC/QA-HMA, 2, 64, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 2, 64 Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 2, 64, Base, 25.0 mm on,
3 In. of Compacted Aggregate, No. 53, on,
Subgrade Treatment, Type IBC

F Sidewalk Concrete

U Underdrain, 6-Inch

16 Combined Concrete Curb and Gutter, Type B (Sloping) (See Std. Dwg. No. E-605-CCCG-01)

N Compacted Aggregate, No. 53

Note: See TS-02 for safety edge details.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

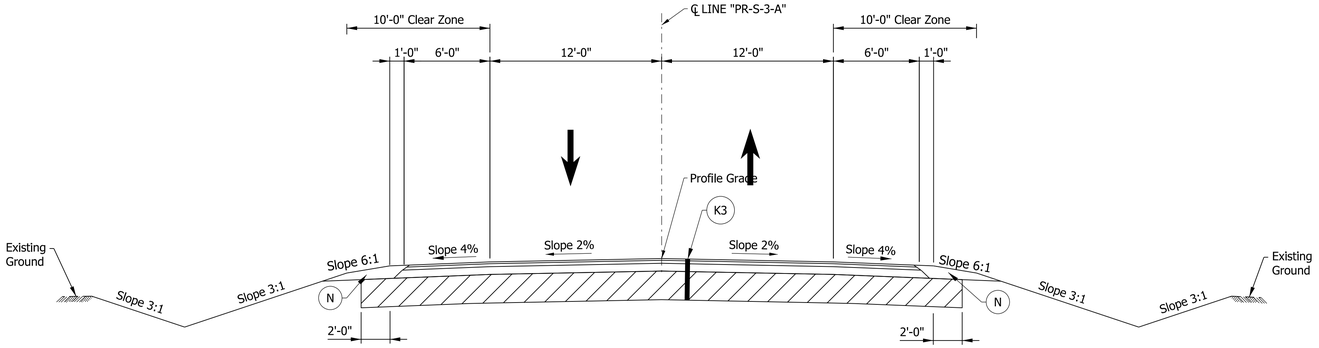
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INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

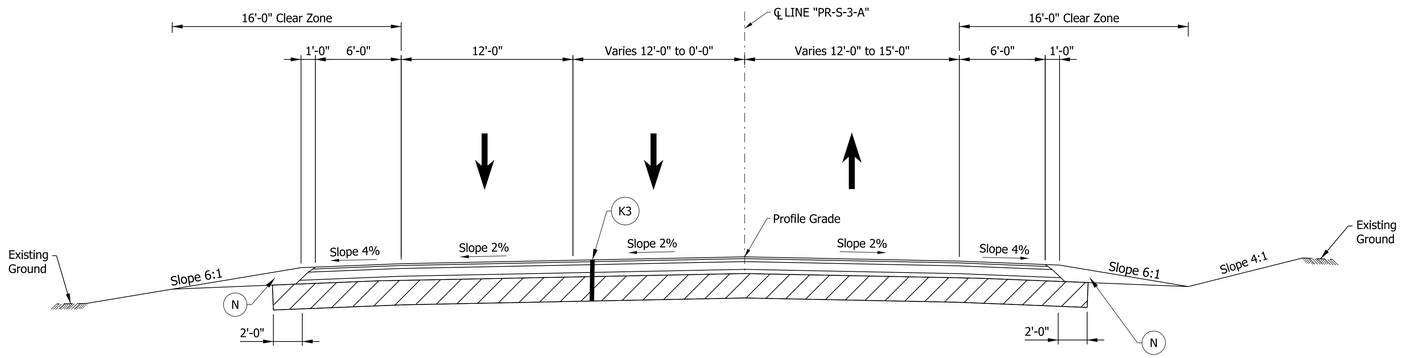
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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS TS-04
	6 of 283
CONTRACT	PROJECT
	1900095

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TYPICAL SECTION CR 16/WAYNE STREET

STA. 46+75.00 LINE "PR-S-3-A" TO STA. 48+76.08 LINE "PR-S-3-A"



TYPICAL SECTION CR 16/WAYNE STREET

STA. 49+64.00 LINE "PR-S-3-A" TO STA. 52+25.00 LINE "PR-S-3-A"

LEGEND

(K3) 165#/Syd. QC/QA-HMA, 3, 70, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 3, 70, Intermediate, 19.0 mm on,
715#/Syd. QC/QA-HMA, 3, 64, Base, 19.0 mm on,
Subgrade Treatment, Type IBC

(N) Compacted Aggregate, No. 53

Note: See TS-02 for safety edge details.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____
DESIGN ENGINEER DATE

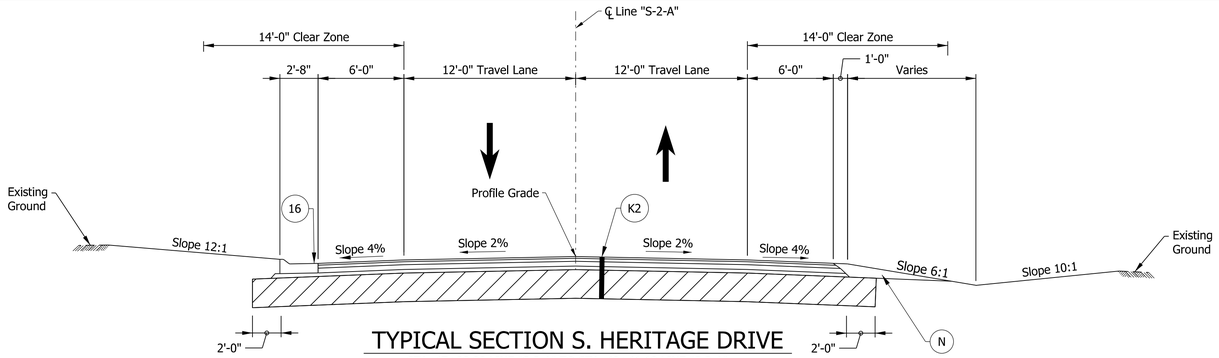
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DRAWN: LMC
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INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

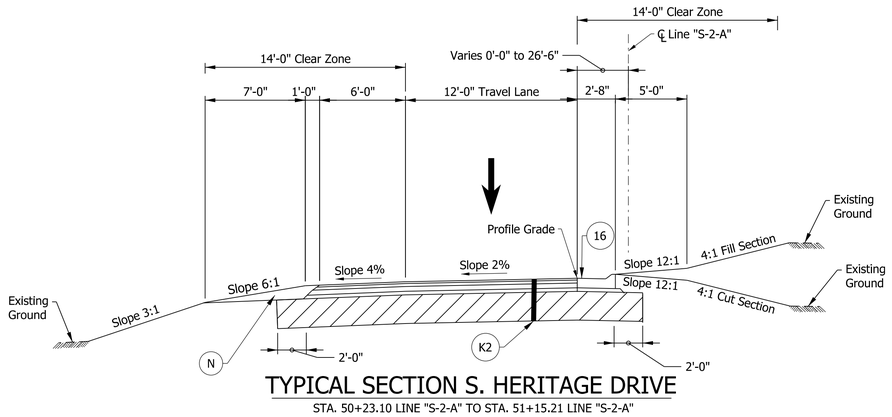
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VERTICAL SCALE	DESIGNATION
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	7 of 283
CONTRACT	PROJECT
	1900095

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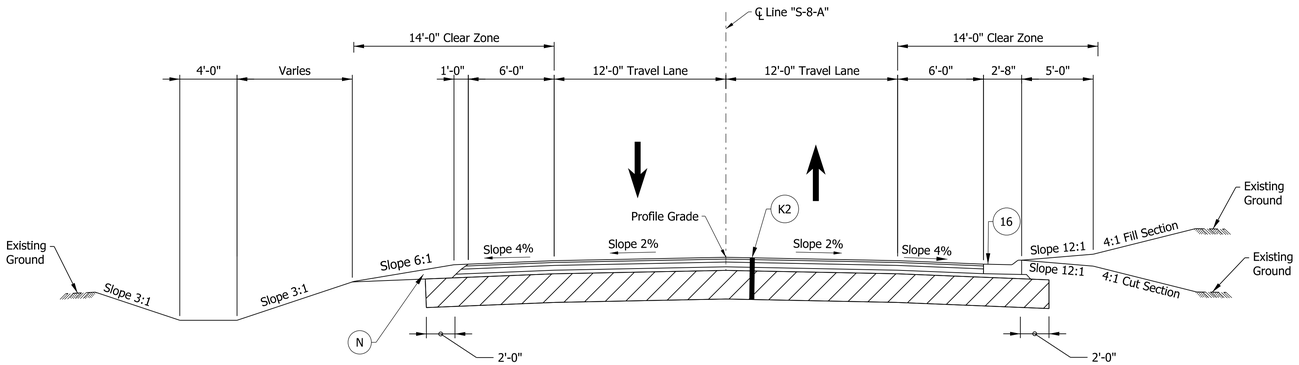
TYPICAL SECTION S. HERITAGE DRIVE

STA. 47+88.00 LINE "S-2-A" TO STA. 49+41.10 LINE "S-2-A"



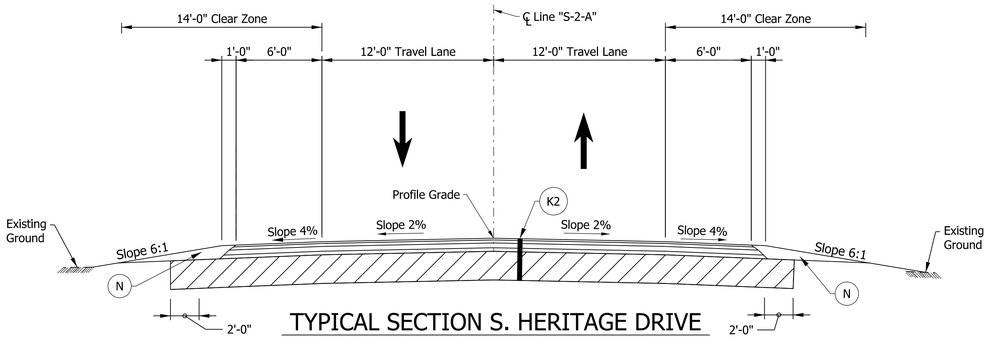
TYPICAL SECTION S. HERITAGE DRIVE

STA. 50+23.10 LINE "S-2-A" TO STA. 51+15.21 LINE "S-2-A"



TYPICAL SECTION WESTLAKE DRIVE

STA. 68+43.00 LINE "S-8-A" TO STA. 69+43.55 LINE "S-8-A"



TYPICAL SECTION S. HERITAGE DRIVE

STA. 51+15.21 LINE "S-2-A" TO STA. 52+00.00 LINE "S-2-A"

LEGEND

- (K2) 165#/Syd. QC/QA-HMA, 2, 64, Surface 9.5 mm on, 275#/Syd. QC/QA-HMA, 2, 64 Intermediate, 19.0 mm on, 440#/Syd. QC/QA-HMA, 2, 64, Base, 25.0 mm on, 3 In. of Compacted Aggregate, No. 53, on, Subgrade Treatment, Type IBC
- (16) Combined Concrete Curb and Gutter, Type B (Sloping) (See Std. Dwg. No. E-605-CCCG-01)
- (N) Compacted Aggregate, No. 53

Note: See TS-02 for safety edge details.

DRAFT NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC DRAWN: LMC

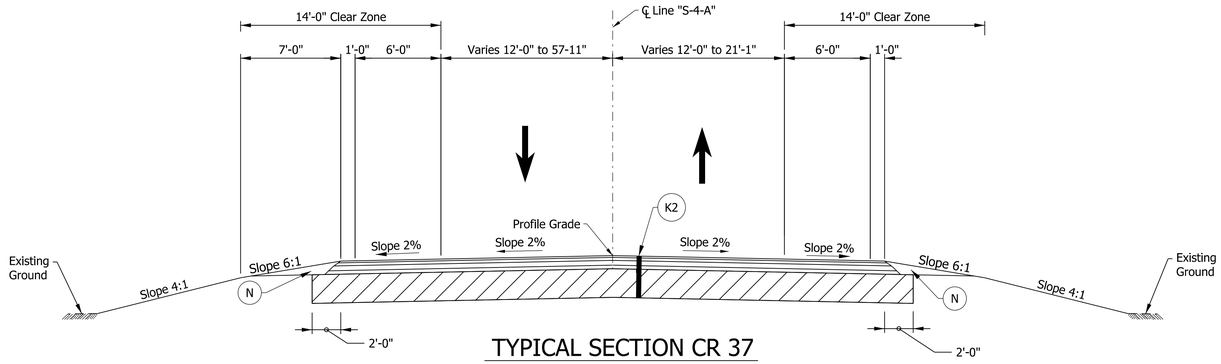
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INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

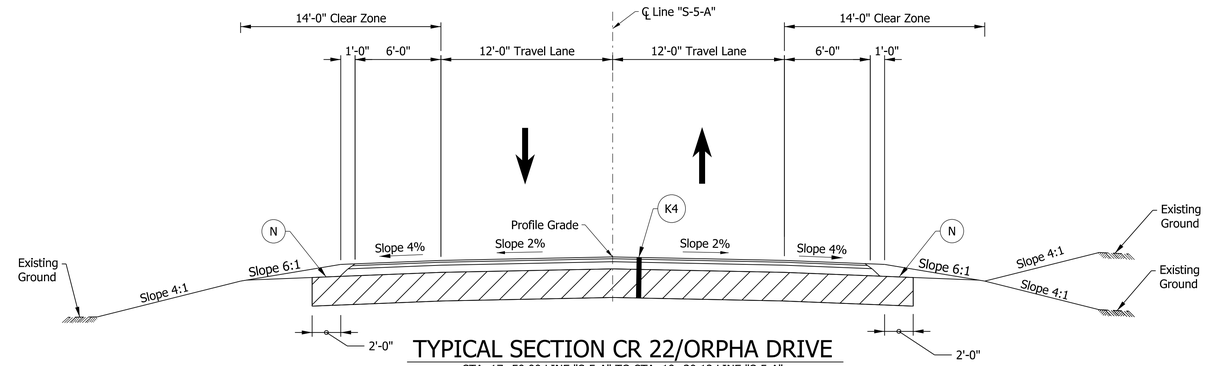
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CONTRACT	PROJECT
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TYPICAL SECTION CR 37

STA. 47+50.00 LINE "S-4-A" TO STA. 49+21.98 LINE "S-4-A"



TYPICAL SECTION CR 22/ORPHA DRIVE

STA. 17+50.00 LINE "S-5-A" TO STA. 19+30.12 LINE "S-5-A"
STA. 20+21.94 LINE "S-5-A" TO STA. 22+60.00 LINE "S-5-A"

LEGEND

(K2) 165#/Syd. QC/QA-HMA, 2, 64, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 2, 64 Intermediate, 19.0 mm on,
440#/Syd. QC/QA-HMA, 2, 64, Base, 25.0 mm on,
3 In. of Compacted Aggregate, No. 53, on,
Subgrade Treatment, Type IBC

(K4) 165#/Syd. QC/QA-HMA, 2, 64, Surface 9.5 mm on,
275#/Syd. QC/QA-HMA, 2, 64, Intermediate, 19.0 mm on,
660#/Syd. QC/QA-HMA, 2, 64, Base, 25.0 mm on,
Subgrade Treatment, Type IBC

(N) Compacted Aggregate, No. 53

Note: See TS-02 for safety edge details.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

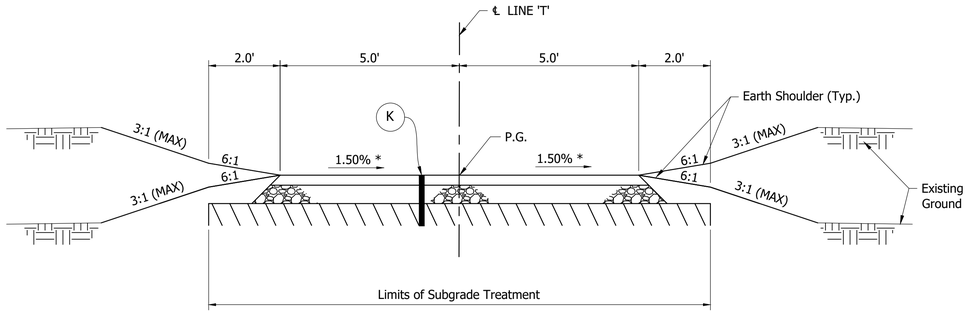
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INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

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VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS TS-07
	9 of 283
CONTRACT	PROJECT
	1900095

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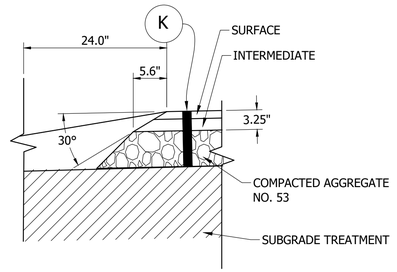


* VARIES FROM LEFT 1.50% TO RIGHT 1.50%, SEE CROSS SECTIONS

PUMPKINVINE TRAIL - LINE 'T'

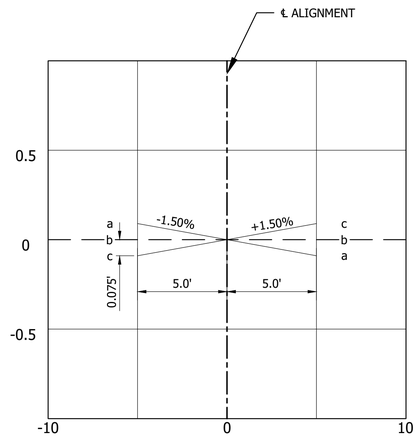
Scale: 1" = 2'-0"

Line 'T' Sta. 94+44.39 to Sta. 96+87.77



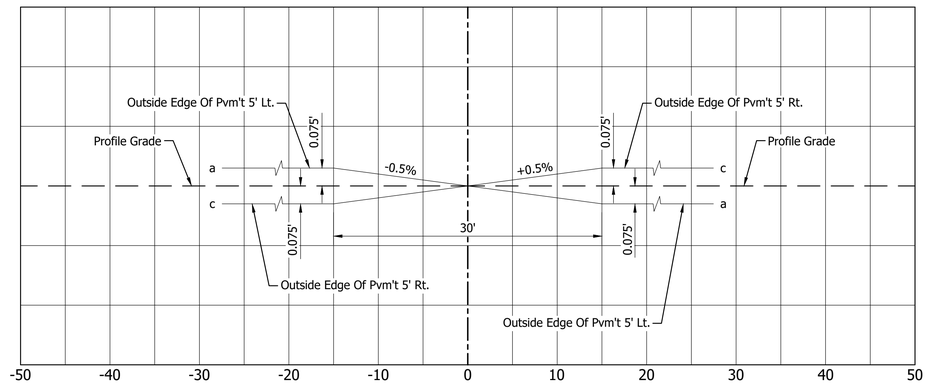
SAFETY EDGE DETAIL

Scale: 1" = 1'-0"



LATERAL TRANSITION DIAGRAM

Scale: NTS



LONGITUDINAL TRANSITION DIAGRAM

Scale: NTS

LEGEND

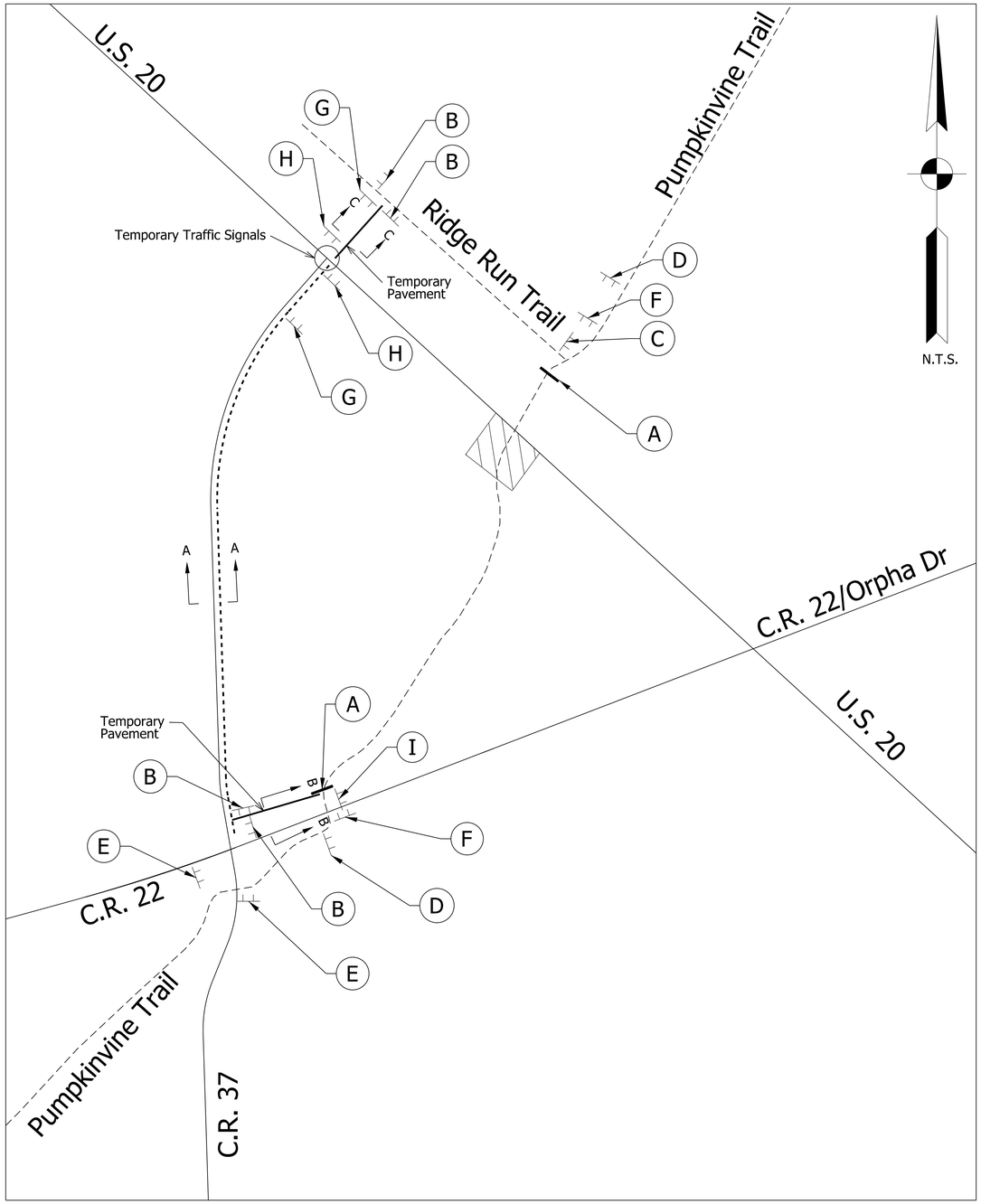
(K) HMA for Sidewalk
140 lb/yd^2 HMA Surface, Type B, on
220 lb/yd^2 HMA Intermediate, Type B, on
6" Compacted Aggregate No. 53, Base, on
Subgrade Treatment Type III

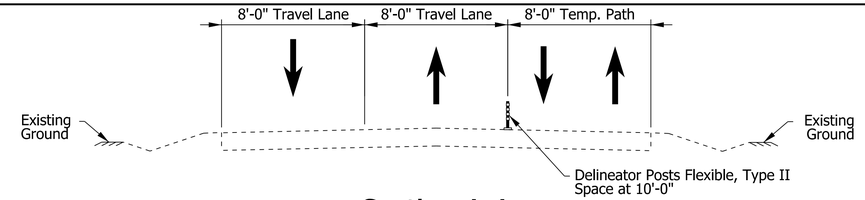
DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE		INDIANA DEPARTMENT OF TRANSPORTATION
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CHECKED: MAH	CHECKED: JAD	

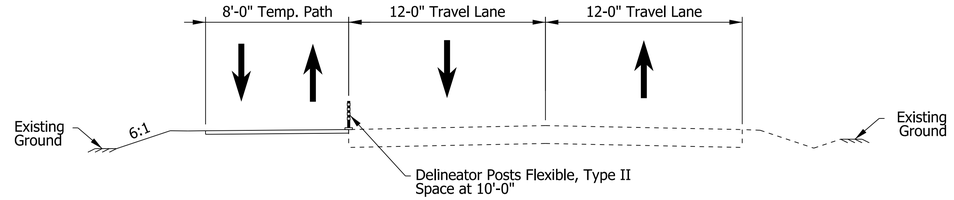
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VERTICAL SCALE	N/A	DESIGNATION	2000038
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CONTRACT	R-42379	PROJECT	2000038

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DATE.....Nov 10,2022 - 3:21pm

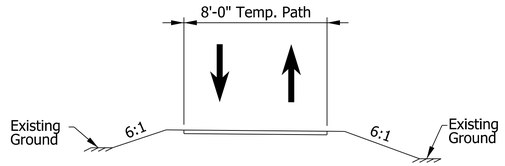




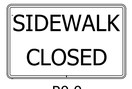
Section A-A



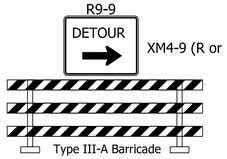
Section B-B



Section C-C



R9-9



XM4-9 (R or L)

A



M4-9a (R or L)

B



XM4-8A
24" X 18"

C



R9-11

D



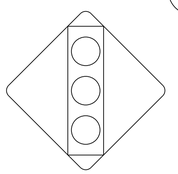
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48" x 48"

E

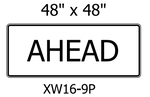


XW20-2
48" x 48"

F

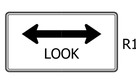


XW3-3
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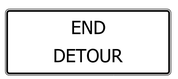
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G

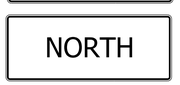


R15-8

H



XM 4-8a



M3-1 to M3-4



M1-4 or M1-6

I

LEGEND

- Path Detour
- Construction Area
- Typical Sign Standard
- Type III-A Barricade
- Temporary Pavement
  165#/Syd. HMA Surface, Type D, on
  275 #/Syd. HMA Intermediate, Type D, on
  660 #/Syd. HMA Base, Type D, on
  Subgrade Treatment, Type II

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

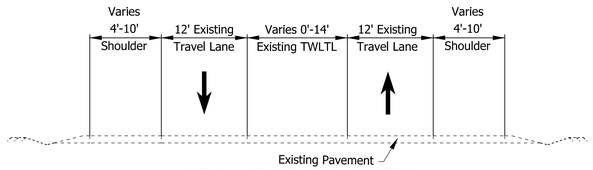
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
CR 37 AND PEDESTRIAN DETOUR

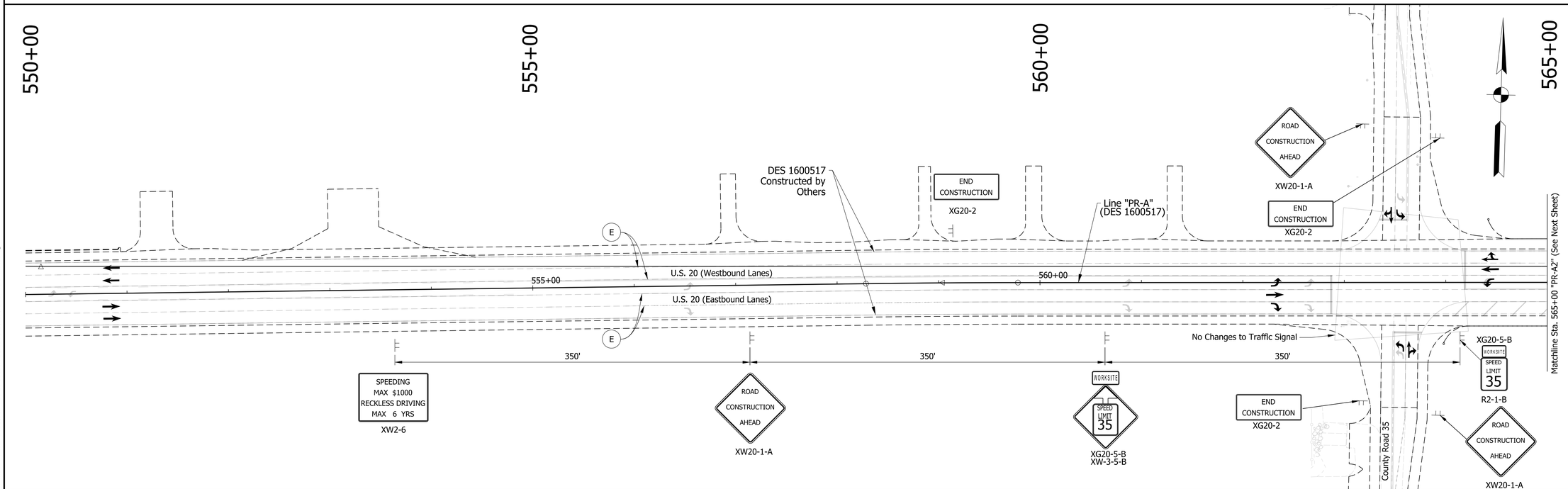
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CONTRACT	PROJECT
	1900095

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Maintenance Of Traffic Summary - Phase 1			
1.	Temporary Pavement Marking, Removable, 5 In (White)	1,033	LFT
2.	Temporary Pavement Marking, Removable, 5 In (Yellow)	1,730	LFT
3.	Construction Sign, A	39	EACH
4.	Barricade, III-A	24	LFT
5.	Temporary Worksite Speed Limit Sign Assembly	4	EACH
6.	Temporary Road Closure Sign Assembly	1	EACH
7.	Barricade, III-B	12	LFT
8.	Temporary Message Marking, Lane Indication Arrow	8	EACH
9.	Temporary Traffic Barrier, Type 2	1,488	LFT



MOT PHASE 1 TYPICAL SECTION
Traffic Maintained on Existing Travel Lanes



Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

Construction Design Speed: 35 MPH
Construction Clear Zone: 13'-0"

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

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1"=50'	N/A
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS MOT-04
ELECTRONIC	29 of 283
CONTRACT	PROJECT
R-42379	1900095

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565+00
570+00
575+00
580+00
Matchline Sta. 565+00 "PR-A2" (See Previous Sheet)
E
U.S. 20 (Westbound Lanes)
U.S. 20 (Eastbound Lane)
N88°22'24"E
570+00
570+00
570+00
BEGIN PROJECT
PROJECT NO. 1900095
P.O.T. STA. 570+50.00
LINE "PR-A3"
N: 338611.64
E: 108841.87
Line "S-8-A"
70+00
Westlake Drive
END
CONSTRUCTION
XG20-2
ROAD
CONSTRUCTION
AHEAD
XW20-1-A
575+00
575+00
575+00
E
U.S. 20 (Westbound Lane)
U.S. 20 (Eastbound Lane)
N88°22'24"E
Line "PR-A3"
Matchline Sta. 580+00 "PR-A3" (See Below)

580+00
585+00
590+00
595+00
Line "PR-A3"
Work Zone
9.25'
Varies
2'
Shoulder
11' MOT
Travel Lane
11' MOT TWLTL
11' MOT
Travel Lane
4' Shoulder
Traffic Drums
Existing Pavement
Section A-A
END
CONSTRUCTION
XG20-2
ROAD
CONSTRUCTION
AHEAD
XW20-1-A
Matchline Sta. 580+00 "PR-A3" (See Above)
+25 "PR-A3"
37' Lt.
+40 "PR-A3"
41' Lt.
+25 "PR-A3"
25' Lt.
+25 "PR-A3"
13' Lt.
580+00
+25
300'
Lane Shift Taper
+25
A
A
U.S. 20 (Westbound Lane)
U.S. 20 (Eastbound Lane)
585+00
585+00
50+00
Line "PR-A3"
Spring Valley Drive
ROAD
CONSTRUCTION
AHEAD
XW20-1-A
END
CONSTRUCTION
XG20-2
Line "S-1-A"
590+00
590+00
1590+00
590+00
50+00
South Heritage Drive
END
CONSTRUCTION
XG20-2
Line "S-2-A"
ROAD
CONSTRUCTION
AHEAD
XW20-1-A
+37 "PR-B"
8' Lt.
+99 "PR-B"
20' Lt.
R 941'
15
Matchline Sta. 595+00 "PR-A3" (See Next Sheet)

Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

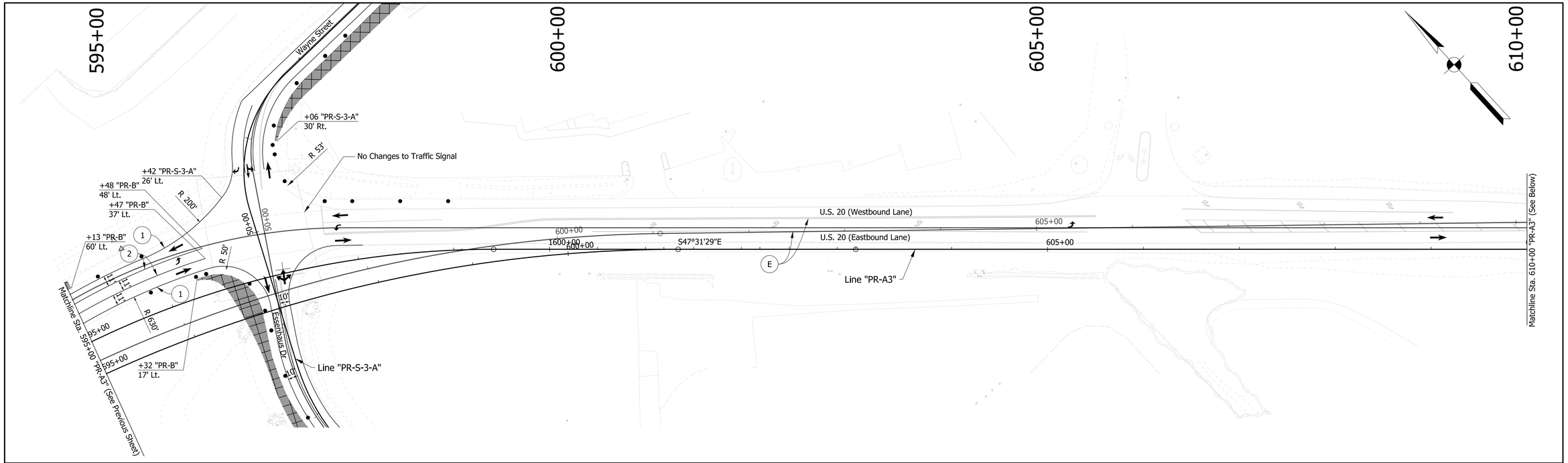
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DEPARTMENT OF TRANSPORTATION

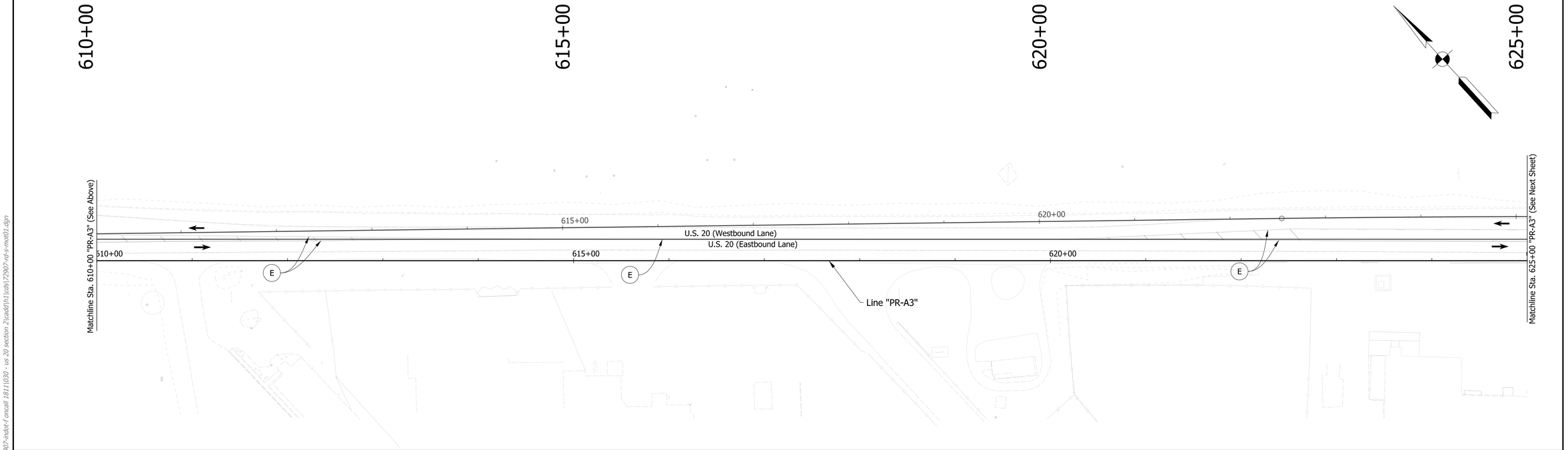
MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095

SURVEY BOOK	SHEETS MOT-05
ELECTRONIC	30 of 283
CONTRACT	PROJECT
R-42379	1900095

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model: Sheet2
file: \\indot\2209projects\72907-indot-f.ewall 18111020 - us 20 section 2\cadd\fih1\cds\72907-rd-s-mot01.dgn





Notes:
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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

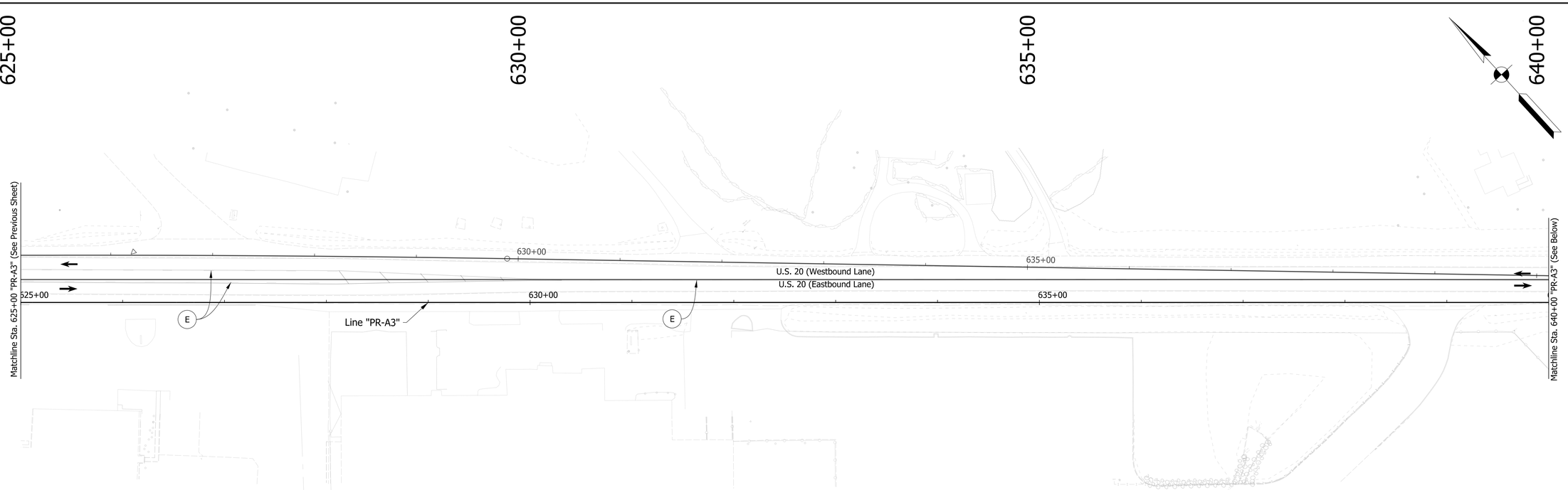
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CHECKED: NSX | CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

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VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-06
ELECTRONIC	31 of 283
CONTRACT	PROJECT
R-42379	1900095

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Notes:
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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

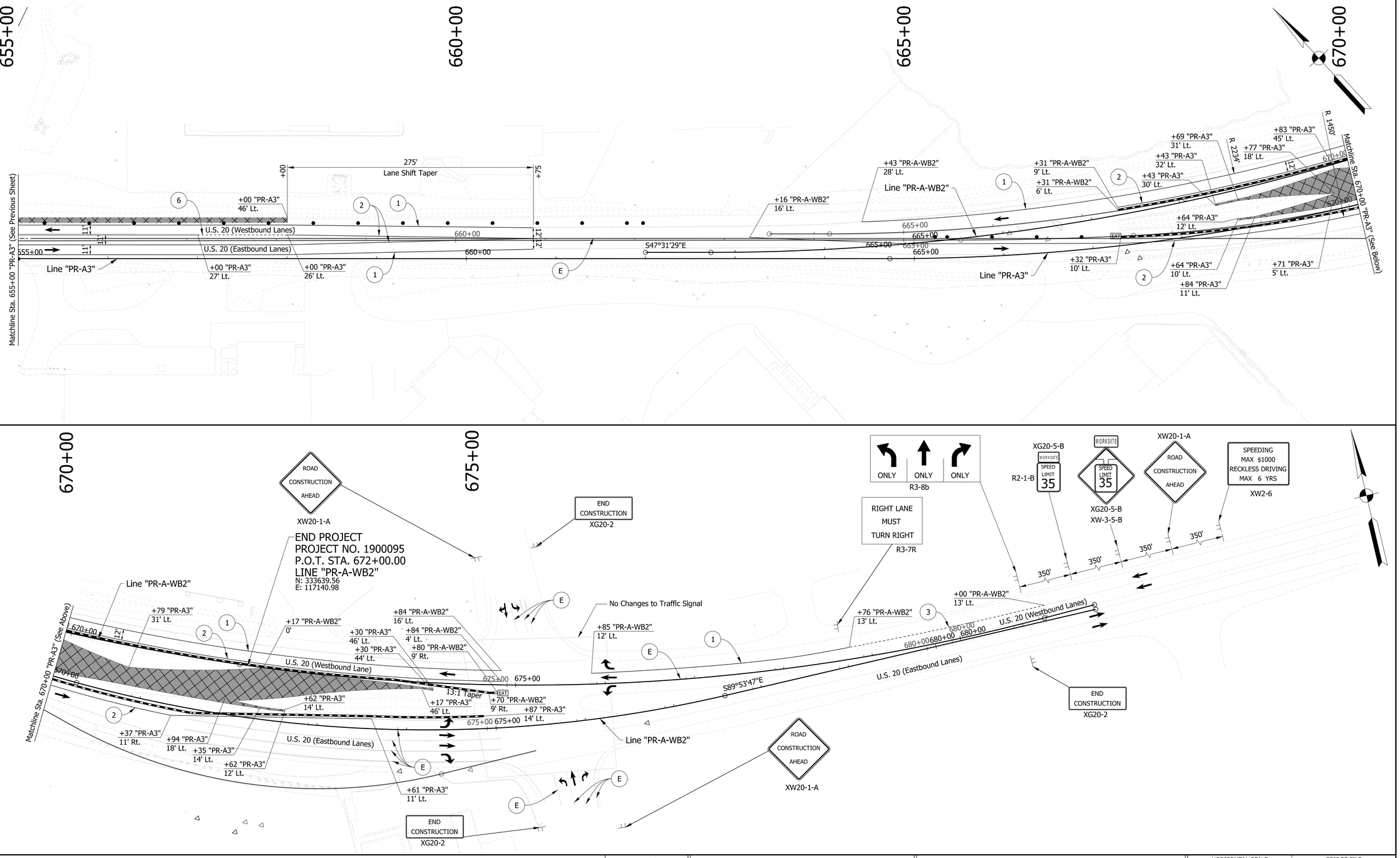
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DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

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VERTICAL SCALE	DESIGNATION
N/A	1900095

SURVEY BOOK	SHEETS MOT-07
ELECTRONIC	32 of 283
CONTRACT	PROJECT
R-42379	1900095

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Notes:
1. All sign spacing shall be 350' unless otherwise directed.
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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

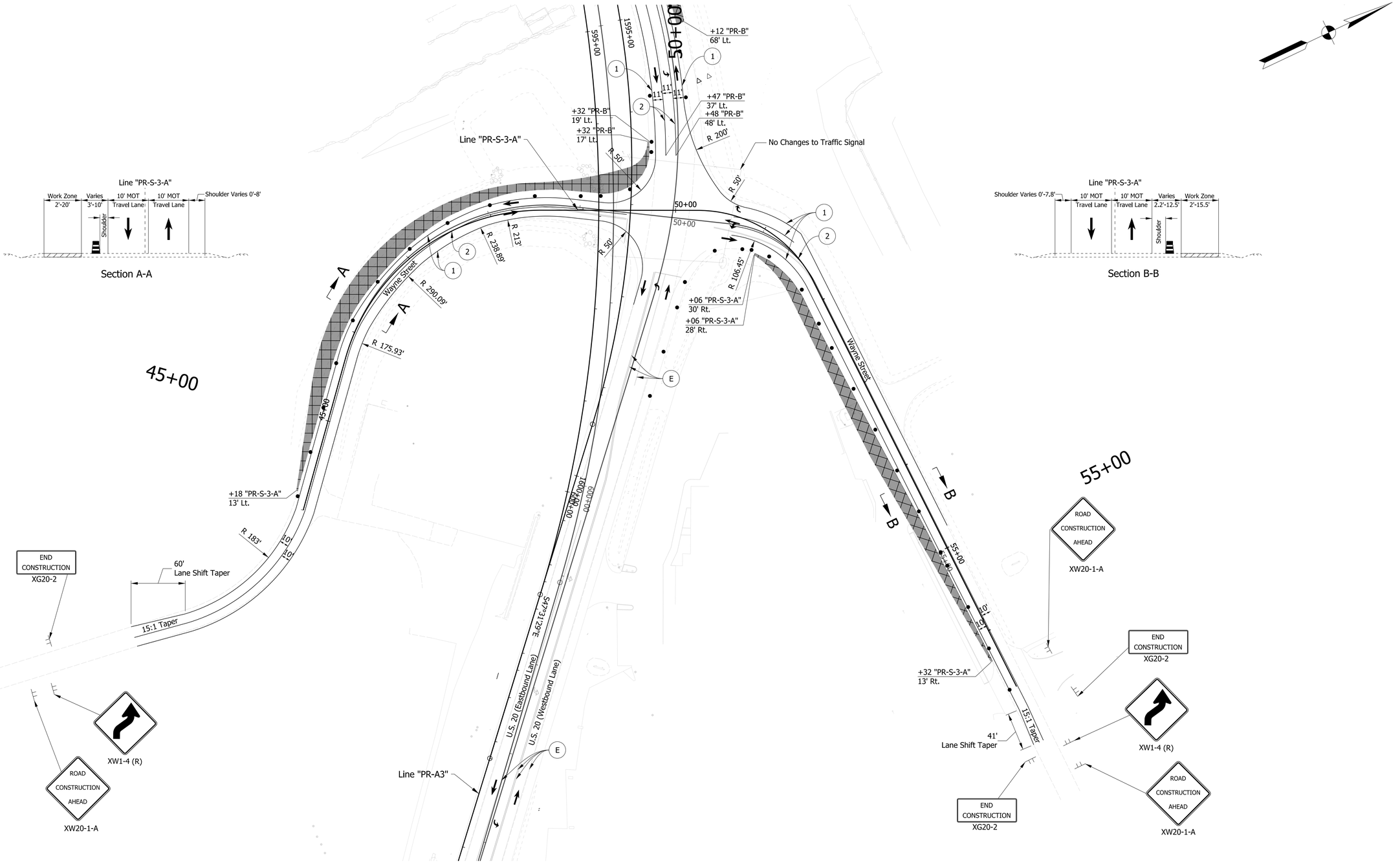
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CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-08
ELECTRONIC	33 of 283
CONTRACT	PROJECT
R-42379	1900095

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Notes:
1. All sign spacing shall be 350' unless otherwise directed.
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4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC | DRAWN: LMC

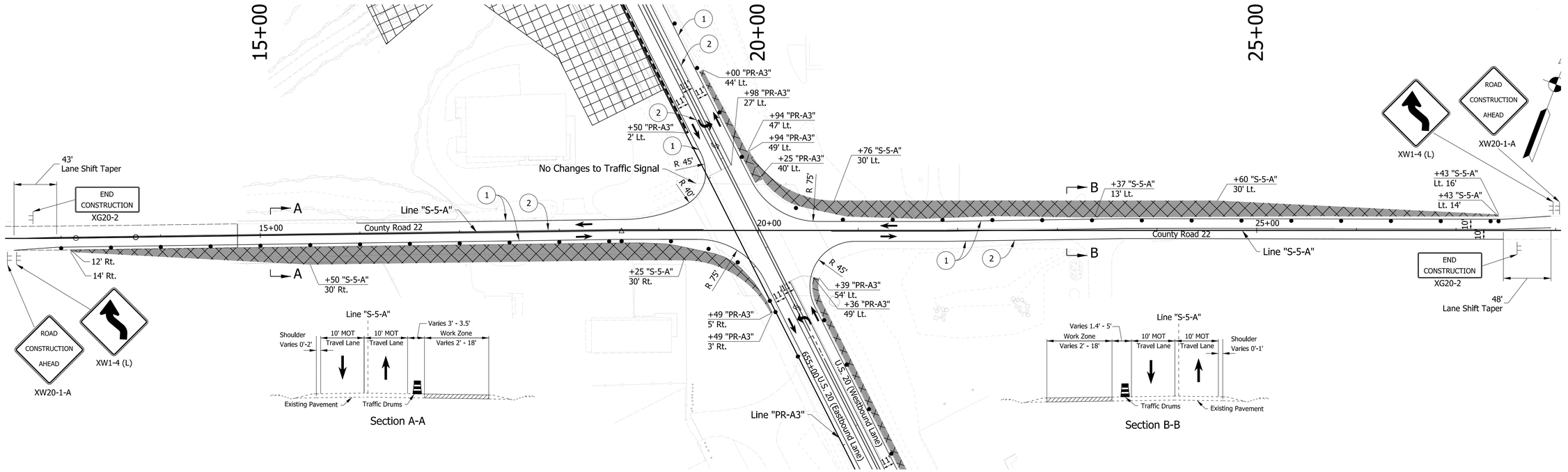
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INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1 LINE "PR-S-3-A"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-09
	34 of 283
CONTRACT	PROJECT
	1900095

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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC | DRAWN: LMC

CHECKED: NSX | CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 1 LINE "S-5-A"

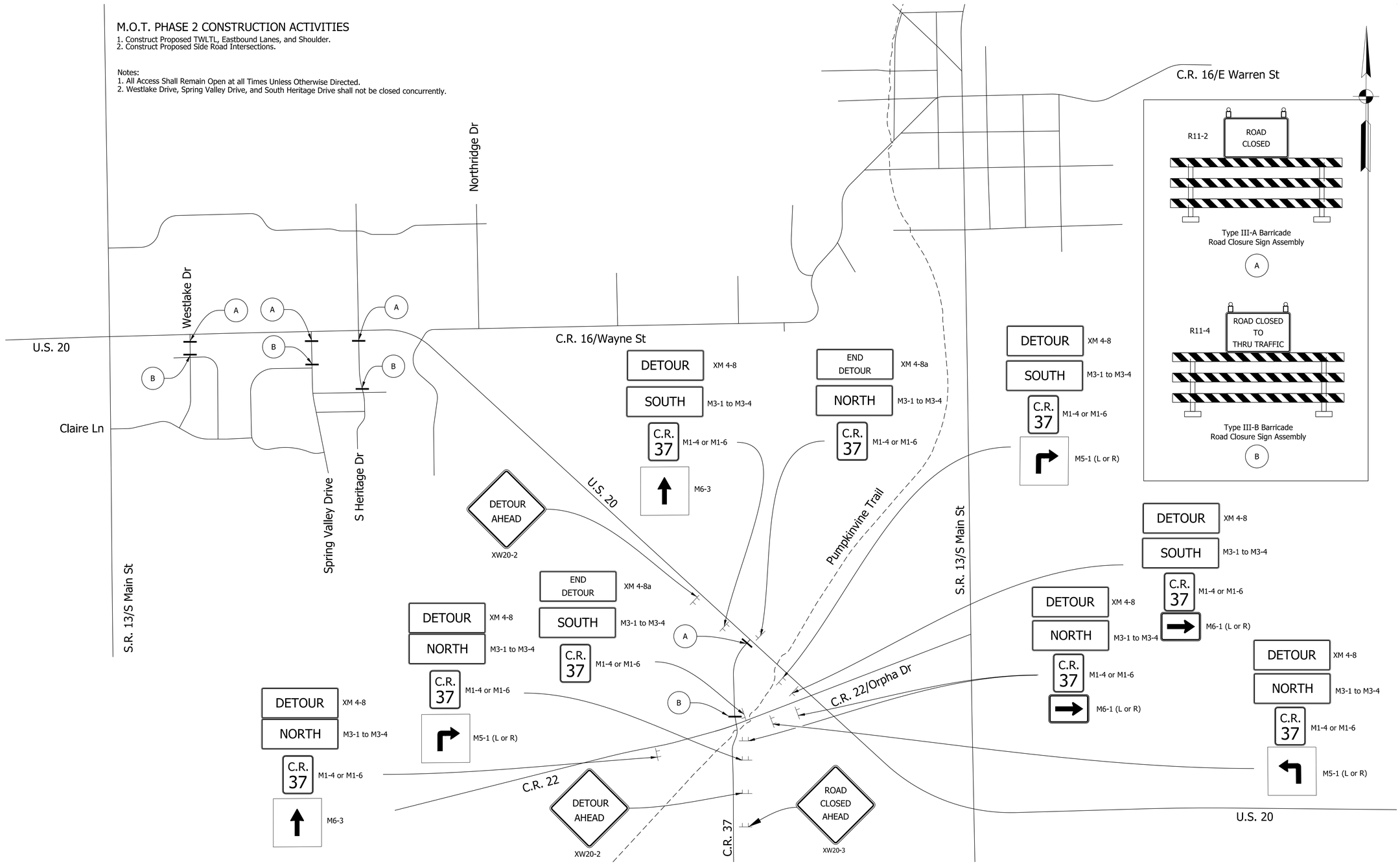
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1"=50'	
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS MOT-10
	35 of 283
CONTRACT	PROJECT
	1900095

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M.O.T. PHASE 2 CONSTRUCTION ACTIVITIES

1. Construct Proposed TWLTL, Eastbound Lanes, and Shoulder.
2. Construct Proposed Side Road Intersections.

Notes:
1. All Access Shall Remain Open at all Times Unless Otherwise Directed.
2. Westlake Drive, Spring Valley Drive, and South Heritage Drive shall not be closed concurrently.



Legend

- Typical Sign Standard
- Type IIIA or IIIB Barricade As Specified

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

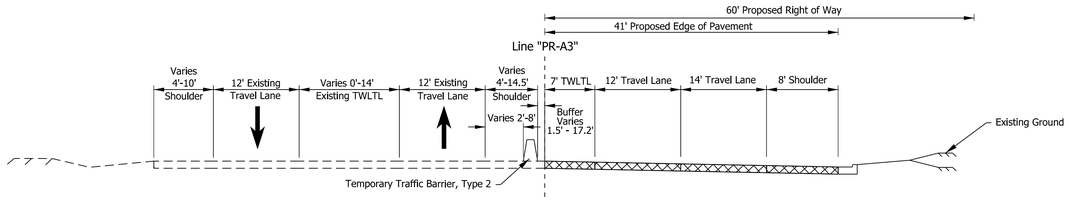
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INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2 DETOUR

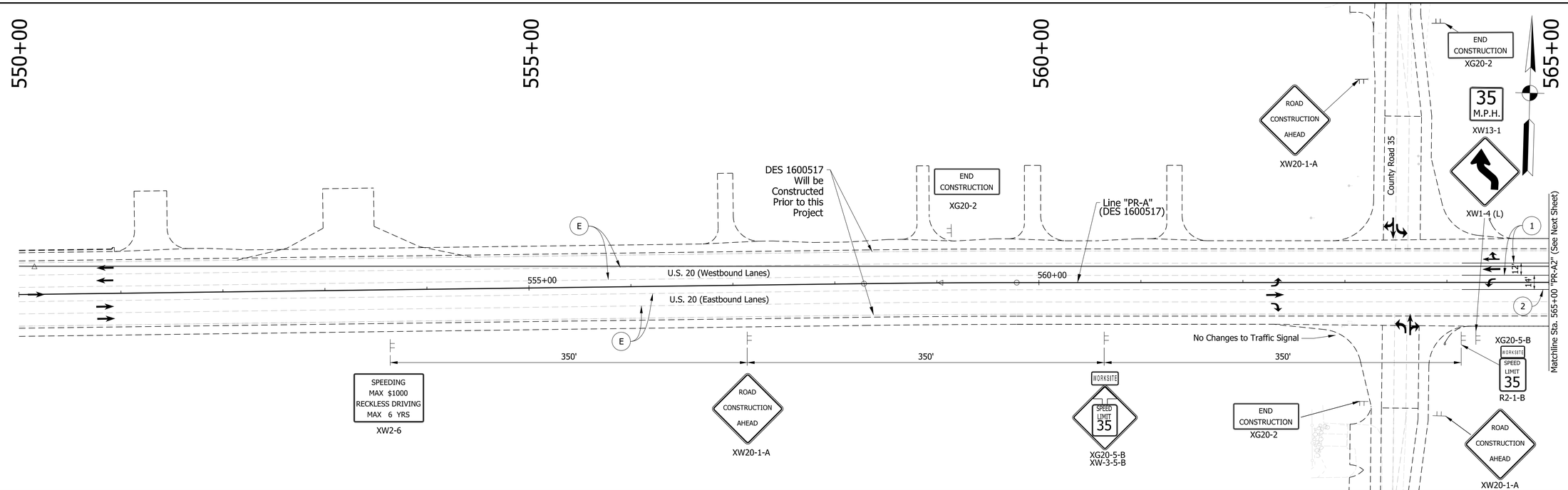
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N/A	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-11
	36 of 283
CONTRACT	PROJECT
	1900095

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MOT PHASE 2 TYPICAL SECTION
MAINTAIN TRAFFIC ON EXISTING PAVEMENT

Maintenance Of Traffic Summary - Phase 2			
1.	Temporary Pavement Marking, Removable, 5 In (White)	6,925	LFT
2.	Temporary Pavement Marking, Removable, 5 In (Yellow)	5,610	LFT
3.	Construction Sign, A	47	EACH
4.	Barricade, III-A	48	LFT
5.	Temporary Worksite Speed Limit Sign Assembly	4	EACH
6.	Flashing Arrow Sign	0	DAY
7.	Temporary Road Closure Sign Assembly	8	EACH
8.	Barricade, III-B	48	LFT
9.	Temporary Message Marking, Lane Indication Arrow	3	EACH
10.	Temporary Traffic Barrier, Type 2	10,541	LFT



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Construction Design Speed: 35 MPH
Construction Clear Zone: 13'-0"

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

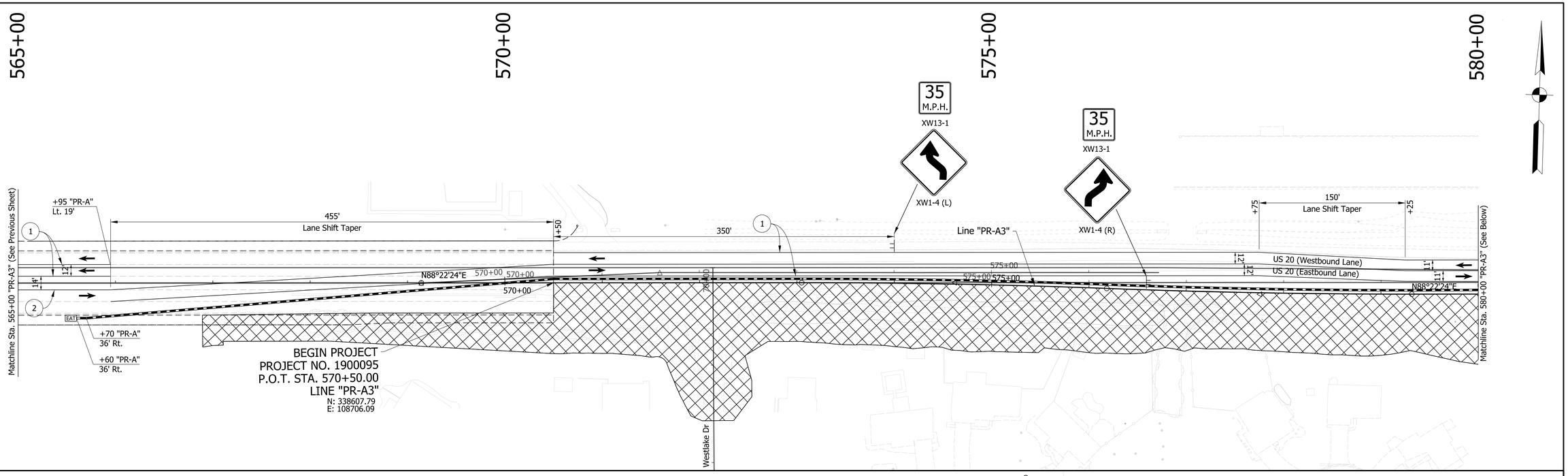
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

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VERTICAL SCALE	DESIGNATION
N/A	1900095

SURVEY BOOK	SHEETS	MOT-12
ELECTRONIC	37 of	283
CONTRACT	PROJECT	
R-42379	1900095	

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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

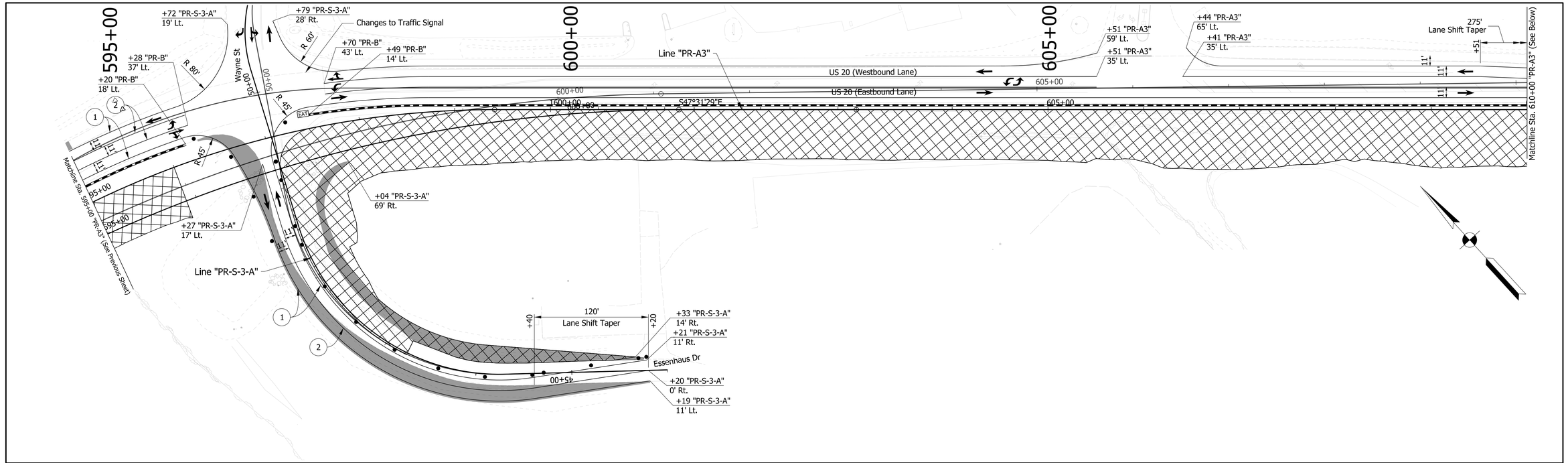
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INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

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VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-13
ELECTRONIC	38 of 283
CONTRACT	PROJECT
R-42379	1900095

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Notes:
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DRAFT
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RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

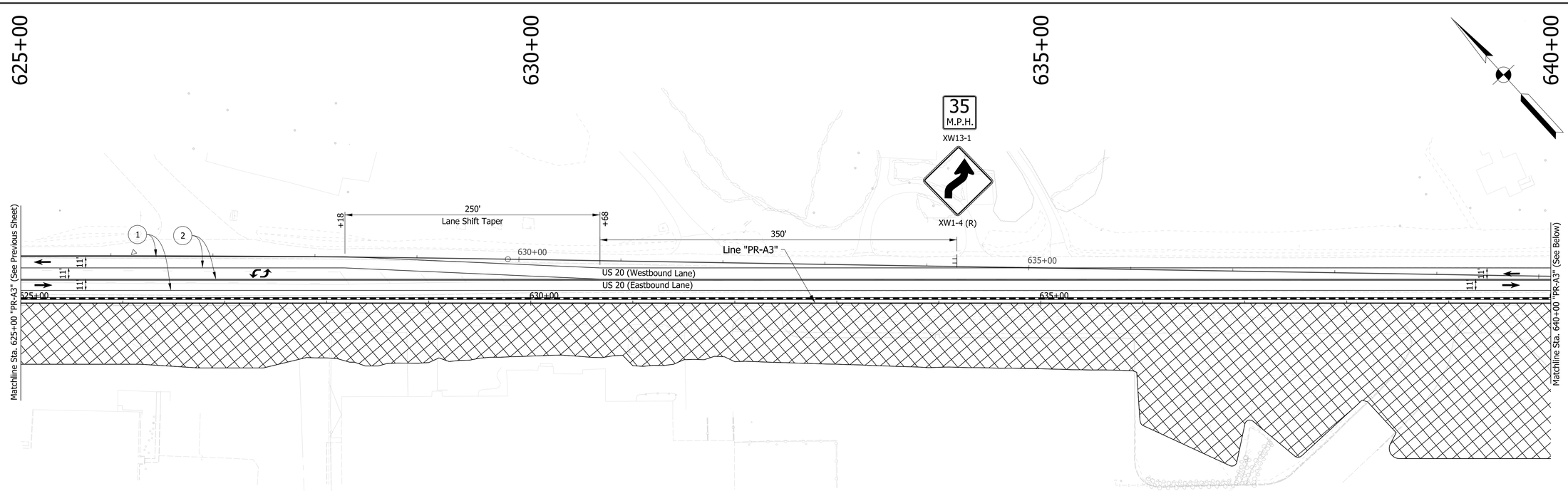
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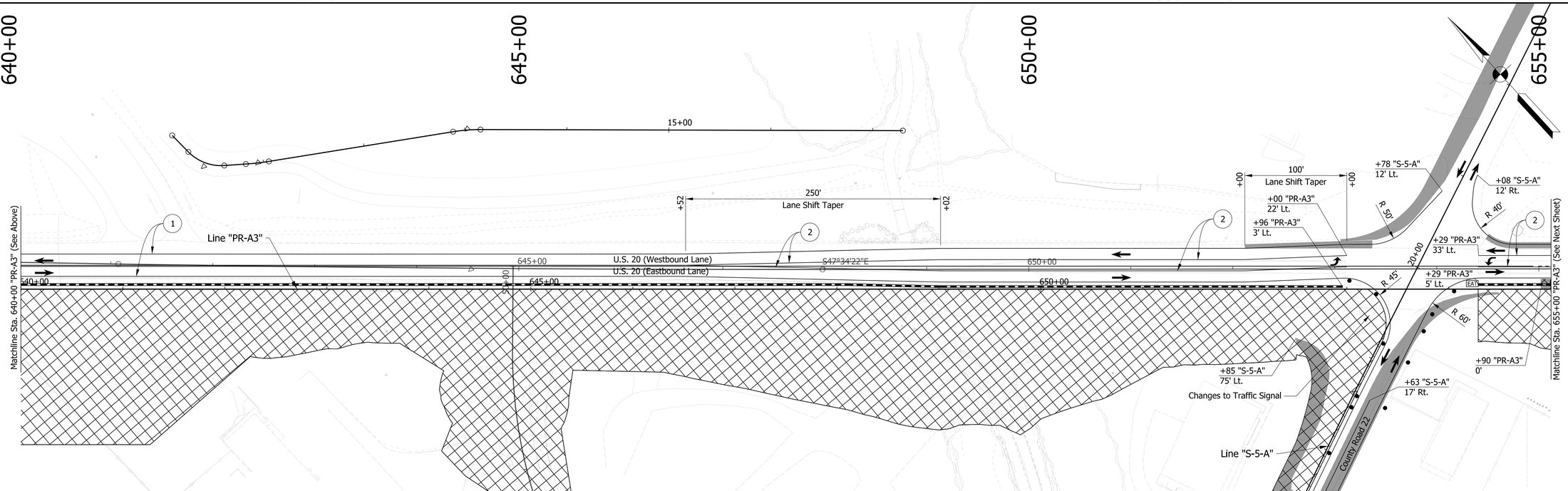
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-14
ELECTRONIC	39 of 283
CONTRACT	PROJECT
R-42379	1900095

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Notes:
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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

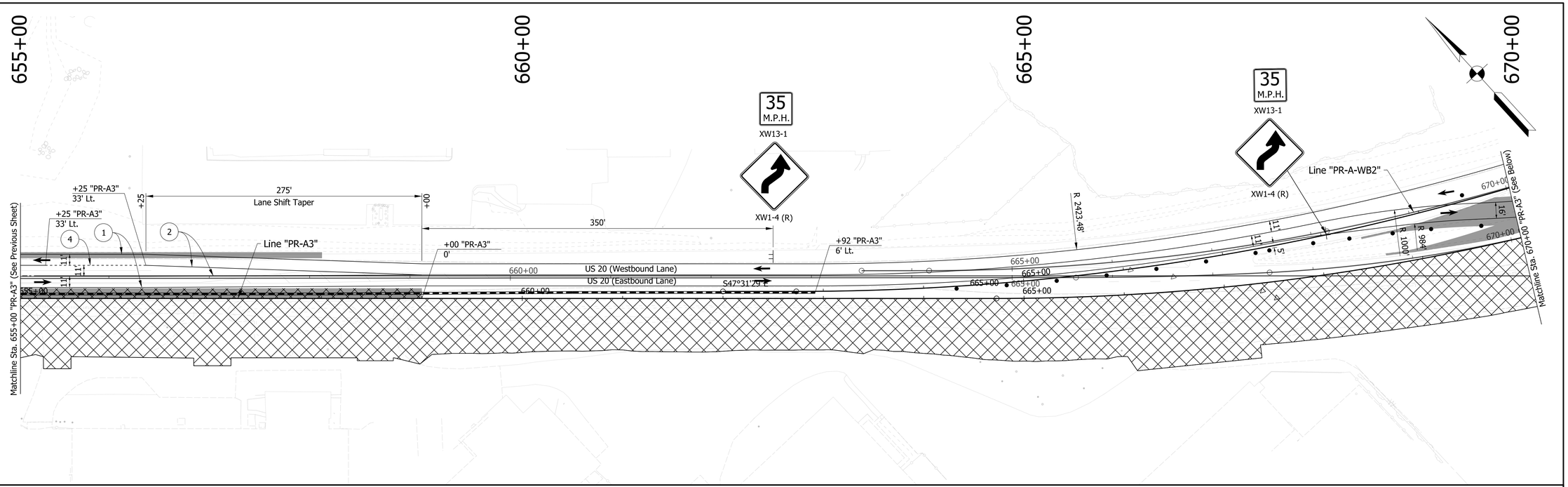
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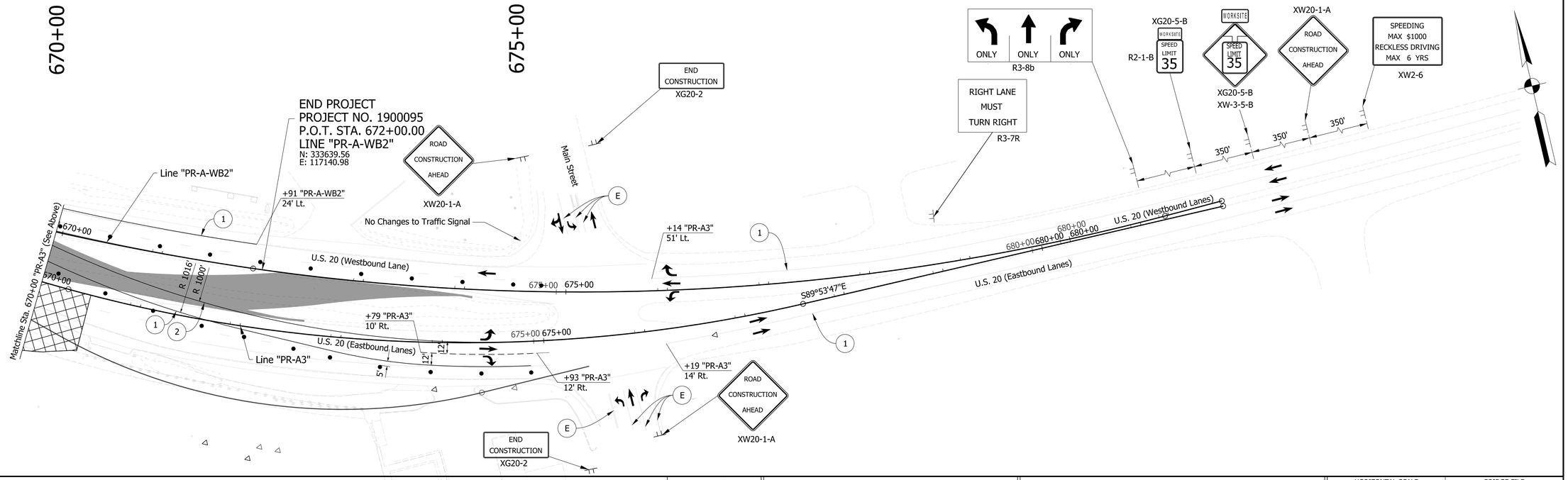
MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095

SURVEY BOOK	SHEETS MOT-15
ELECTRONIC	40 of 283
CONTRACT	PROJECT
R-42379	1900095

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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC | DRAWN: LMC
CHECKED: NSX | CHECKED: NSX

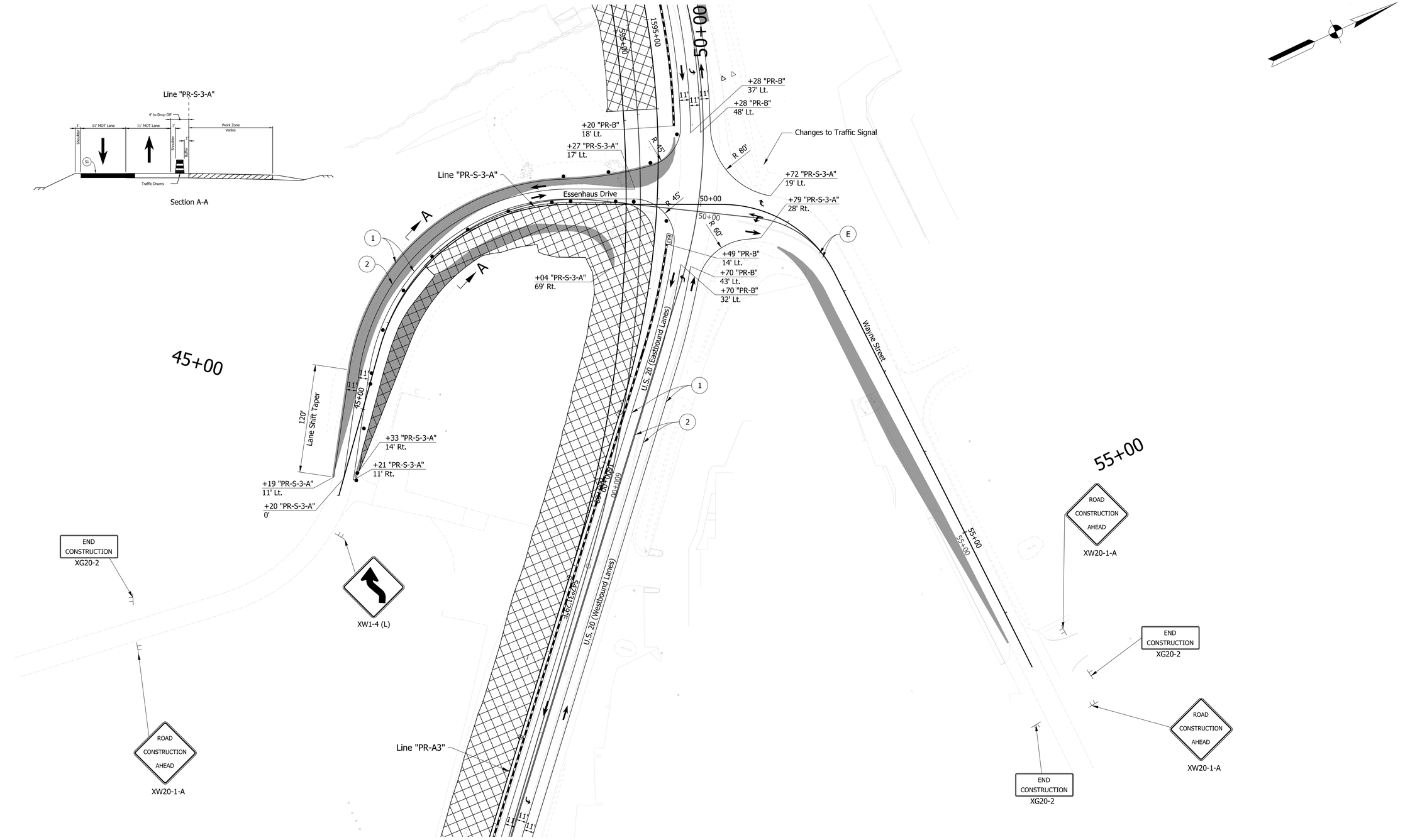
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-16
ELECTRONIC	41 of 283
CONTRACT	PROJECT
R-42379	1900095

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Section A-A



Notes:
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DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC | DRAWN: LMC

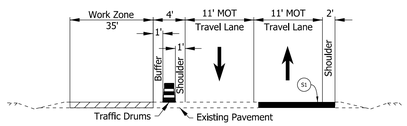
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INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2A LINE "PR-S-3-A"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-17
	42 of 283
CONTRACT	PROJECT
	1900095

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Section A-A

45+00

50+00

55+00

Line "PR-S-3-A"

R 45'

+54 "PR-B"
0' Rt.

+68 "PR-B"
17' Lt.

Changes to traffic signal

R 80'

+72 "PR-S-3-A"
19' Lt.

+79 "PR-S-3-A"
28' Rt.

50+00

50+00

+36 "PR-S-3-A"
17' Rt.

R 60'

+00 "PR-B"
0' Rt.

+04 "PR-B"
11' Lt.

R 60'

Essenhaus Dr

Wayne Street

U.S. 20 (Eastbound Lane)

U.S. 20 (Westbound Line)

Line "PR-A3"

1

2

11'

END
CONSTRUCTION
XG20-2

XW1-4 (R)

ROAD
CONSTRUCTION
AHEAD
XW20-1-A

ROAD
CONSTRUCTION
AHEAD
XW20-1-A

END
CONSTRUCTION
XG20-2

END
CONSTRUCTION
XG20-2

Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

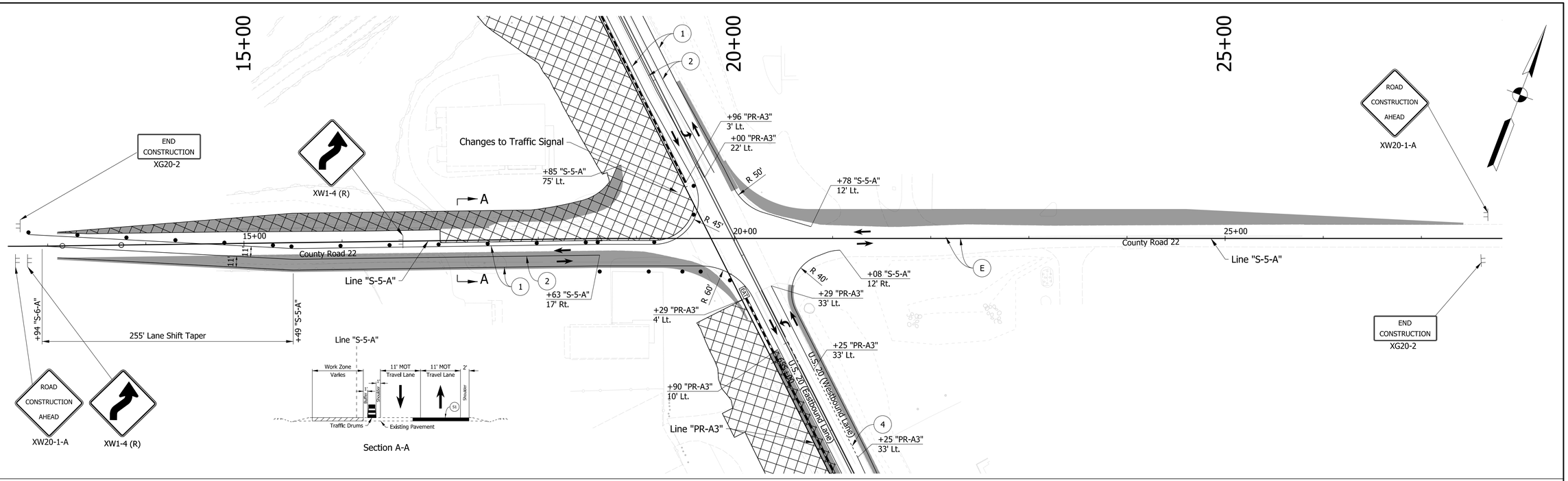
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INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2B LINE "PR-S-3-A"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-18
	43 of 283
CONTRACT	PROJECT
	1900095

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model:Sheet7b
file:\\indot\i39projects\173907\i-indot-f.oncall 18111030 - us 20 section 2\cadd\1s1cds\173907-rd-s-mot02.dgn



Maintenance Of Traffic Legend

- Construction Area
- Standard Drum
- Direction Of Traffic
- Barricade, III-A (12 Lft.)
- Construction Sign, A

Temporary Pavement Marking Legend

1. Temporary Pavement Marking, Removable, 5 In. (White)
2. Temporary Pavement Marking, Removable, 5 In. (Yellow)
3. Temporary Pavement Marking, Removable, 5 In. (Dotted White 3' Line 9' Gap)

E Existing Pavement Marking To Remain

EAT Energy Absorbing Terminal CZ, Type 2

Temporary Pavement

Temporary Traffic Barrier, Type 2

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: LMC
DRAWN: LMC
CHECKED: NSX
CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 2A & 2B LINE "S-5-A"

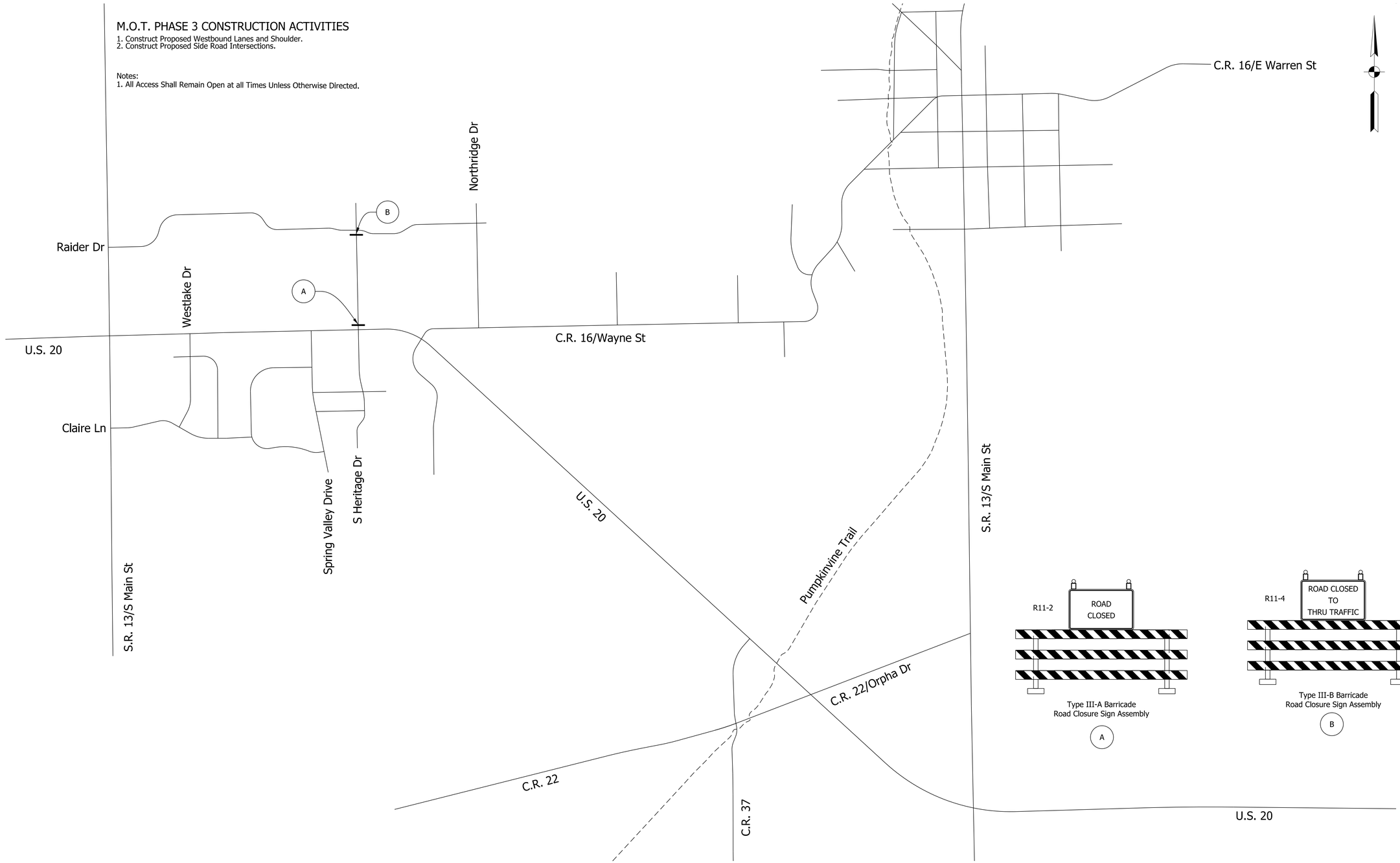
HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEETS MOT-19
	44 of 283
CONTRACT	PROJECT
	1900095

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M.O.T. PHASE 3 CONSTRUCTION ACTIVITIES

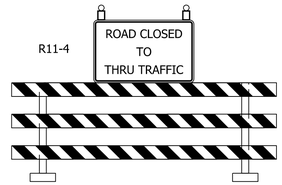
1. Construct Proposed Westbound Lanes and Shoulder.
2. Construct Proposed Side Road Intersections.

Notes:
1. All Access Shall Remain Open at all Times Unless Otherwise Directed.



Type III-A Barricade
Road Closure Sign Assembly

A



Type III-B Barricade
Road Closure Sign Assembly

B

Legend

Typical Sign Standard

Type IIIA or IIIB Barricade As Specified

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC | DRAWN: LMC

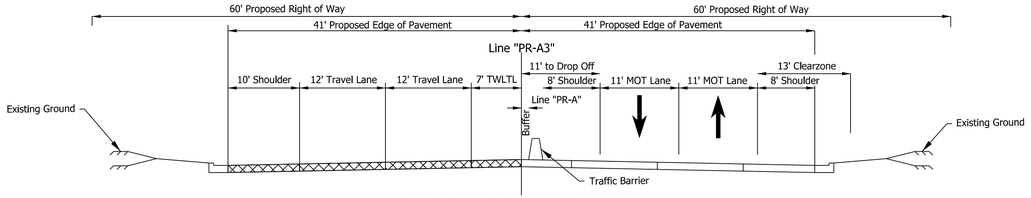
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INDIANA
DEPARTMENT OF TRANSPORTATION

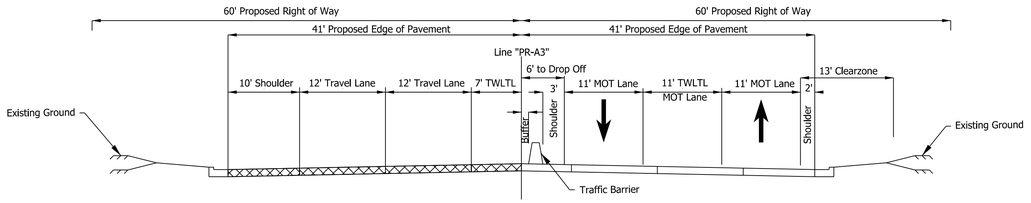
MAINTENANCE OF TRAFFIC
PHASE 3 DETOUR

HORIZONTAL SCALE	BRIDGE FILE
N/A	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-20
	45 of 283
CONTRACT	PROJECT
	1900095

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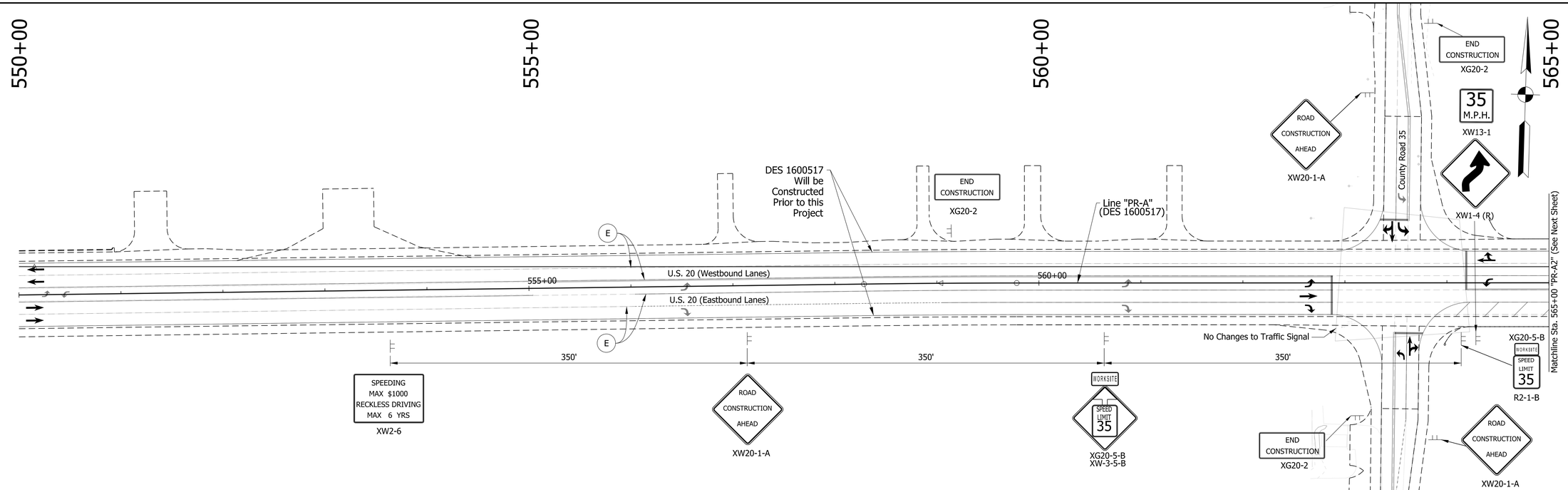
MOT PHASE 3 TYPICAL SECTION
NO TWLTL



MOT PHASE 3 TYPICAL SECTION
TWLTL

Construction Zone (Proposed Lanes)

Maintenance Of Traffic Summary - Phase 3			
1.	Temporary Pavement Marking, Removable, 5 In (White)	23,627	LFT
2.	Temporary Pavement Marking, Removable, 5 In (Yellow)	14,391	LFT
3.	Construction Sign, A	51	EACH
4.	Barricade, III-A	12	LFT
5.	Temporary Worksite Speed Limit Sign Assembly	4	EACH
6.	Temporary Road Closure Sign Assembly	2	EACH
7.	Barricade, III-B	12	LFT
8.	Temporary Message Marking, Lane Indication Arrow	8	EACH
9.	Temporary Traffic Barrier, Type 2	10,322	LFT



Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

Construction Design Speed: 35 MPH
Construction Clear Zone: 13'-0"

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

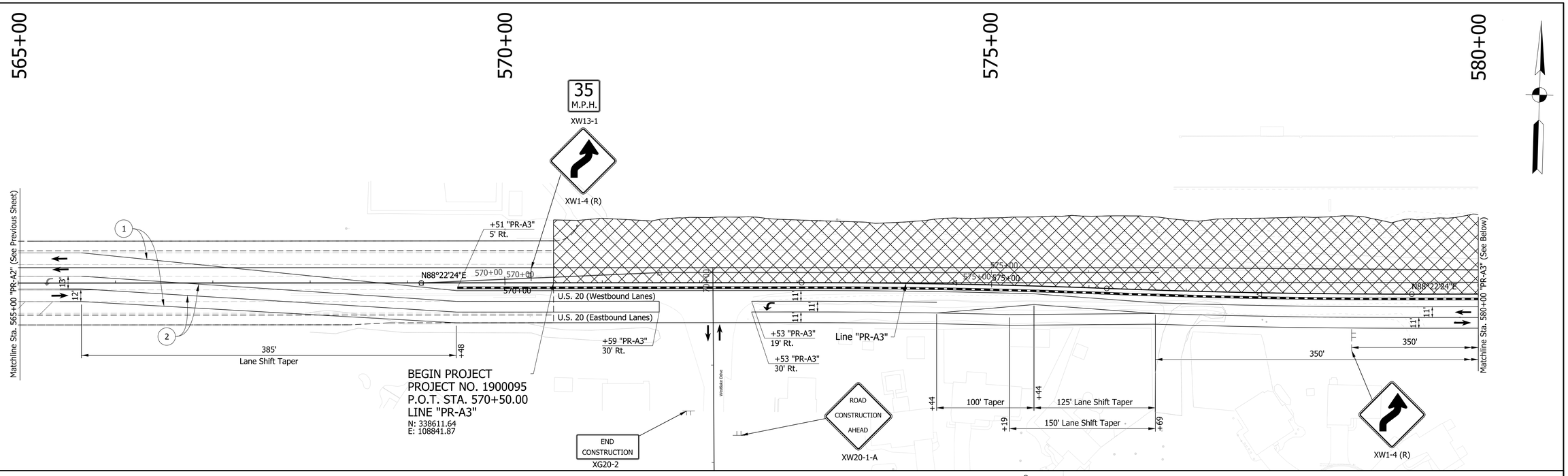
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095

SURVEY BOOK	SHEETS MOT-21
ELECTRONIC	46 of 283
CONTRACT	PROJECT
R-42379	1900095

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file: \\indot\ti\369projects\72907-rdoh-f-oneall 18111030 - ea 29 section 2\ce\dl\h1\cds\72907-rd-s-mot03.dgn



Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

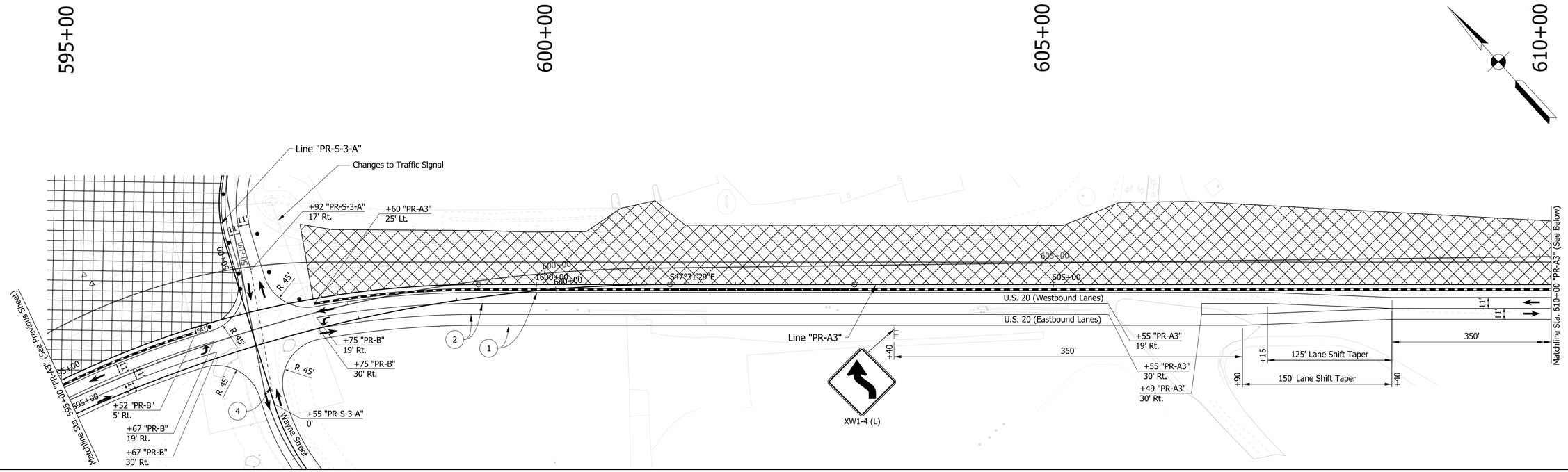
DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-22
ELECTRONIC	47 of 283
CONTRACT	PROJECT
R-42379	1900095

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Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC | DRAWN: LMC

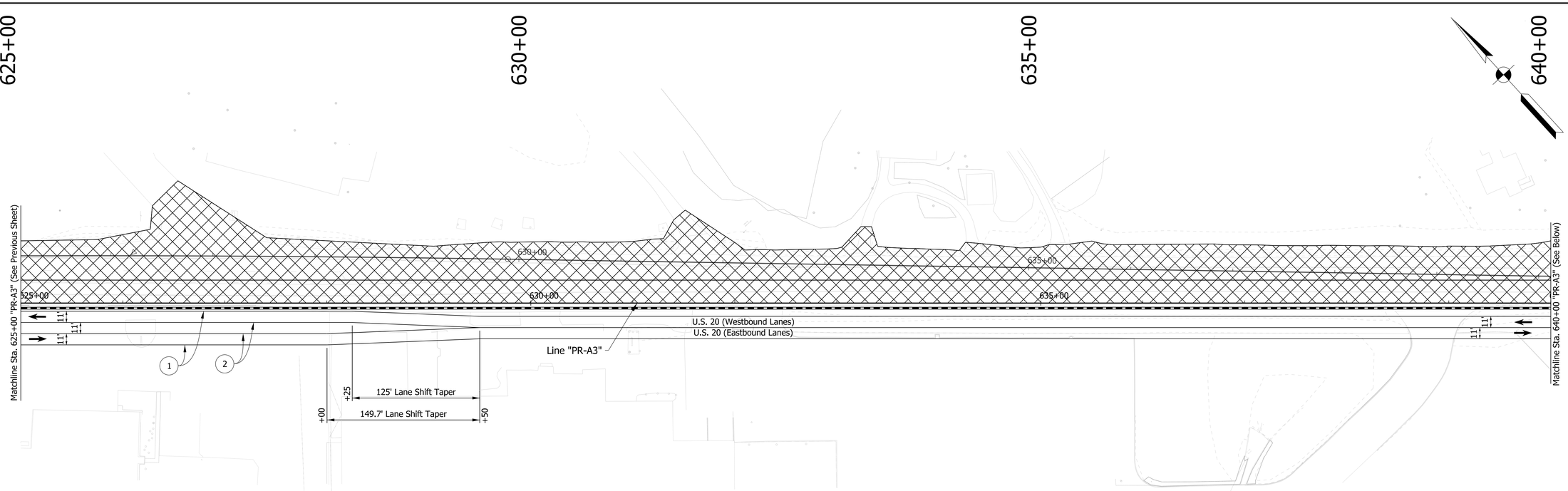
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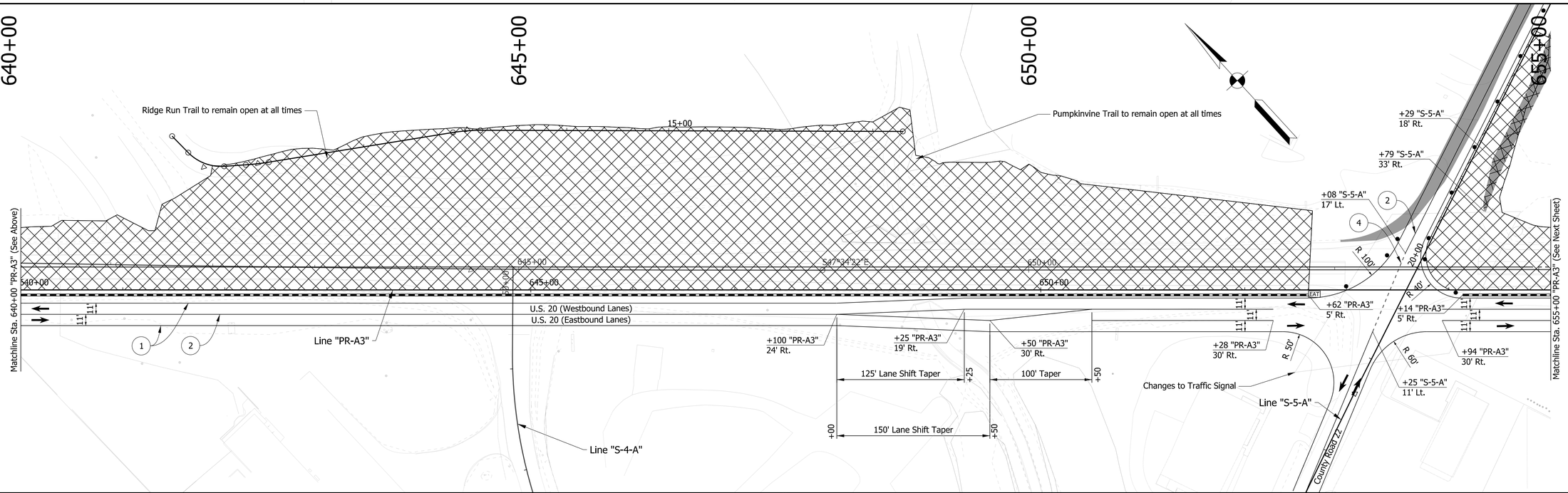
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-23
ELECTRONIC	48 of 283
CONTRACT	PROJECT
R-42379	1900095

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Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: LMC | DRAWN: LMC

CHECKED: NSX | CHECKED: NSX

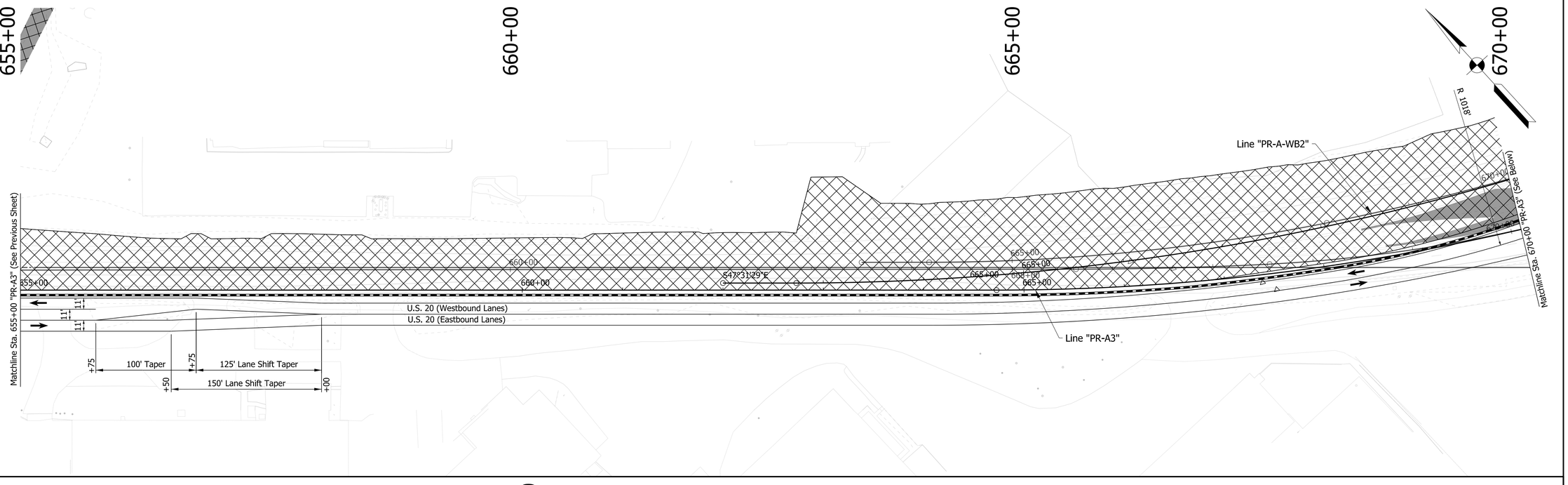
INDIANA
DEPARTMENT OF TRANSPORTATION

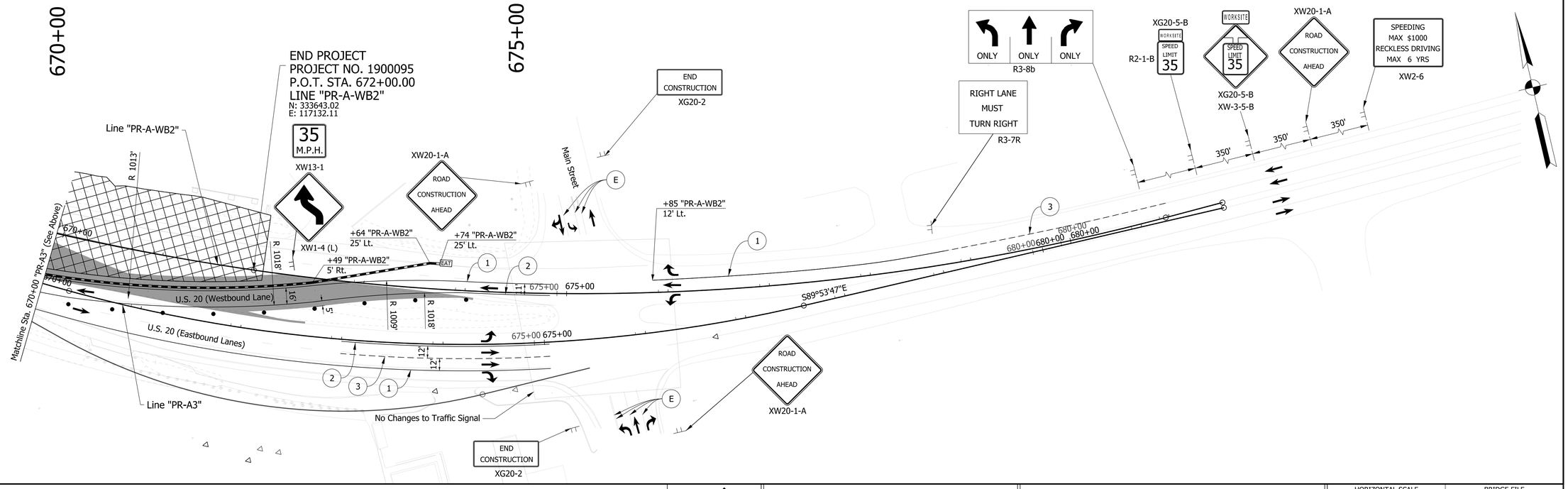
MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095

SURVEY BOOK	SHEETS MOT-24
ELECTRONIC	49 of 283
CONTRACT	PROJECT
R-42379	1900095

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model:Sheet4
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Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

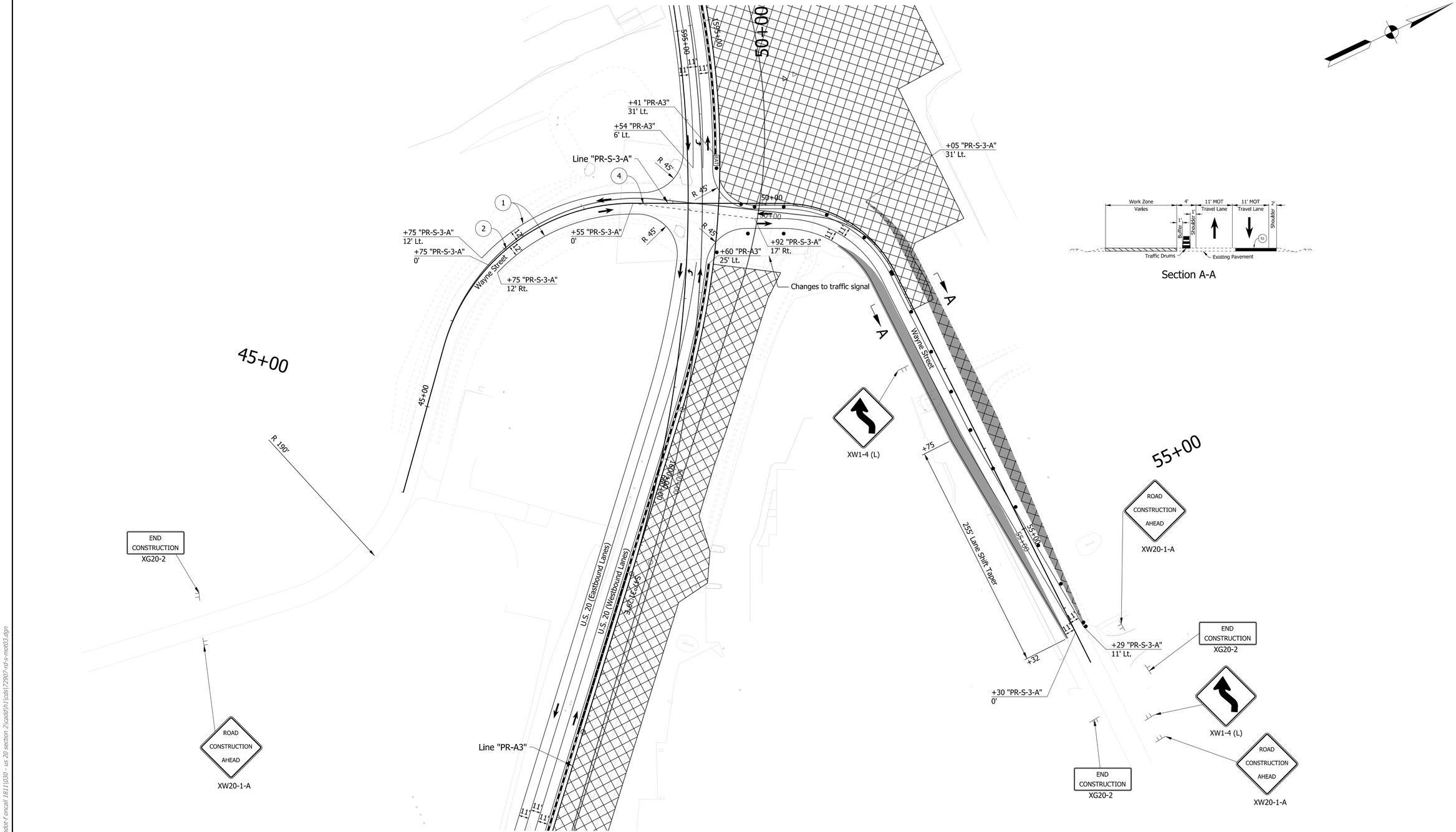
INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095

SURVEY BOOK	SHEETS	MOT-25
ELECTRONIC	50 of	283
CONTRACT	PROJECT	
R-42379	1900095	

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Section A-A

Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

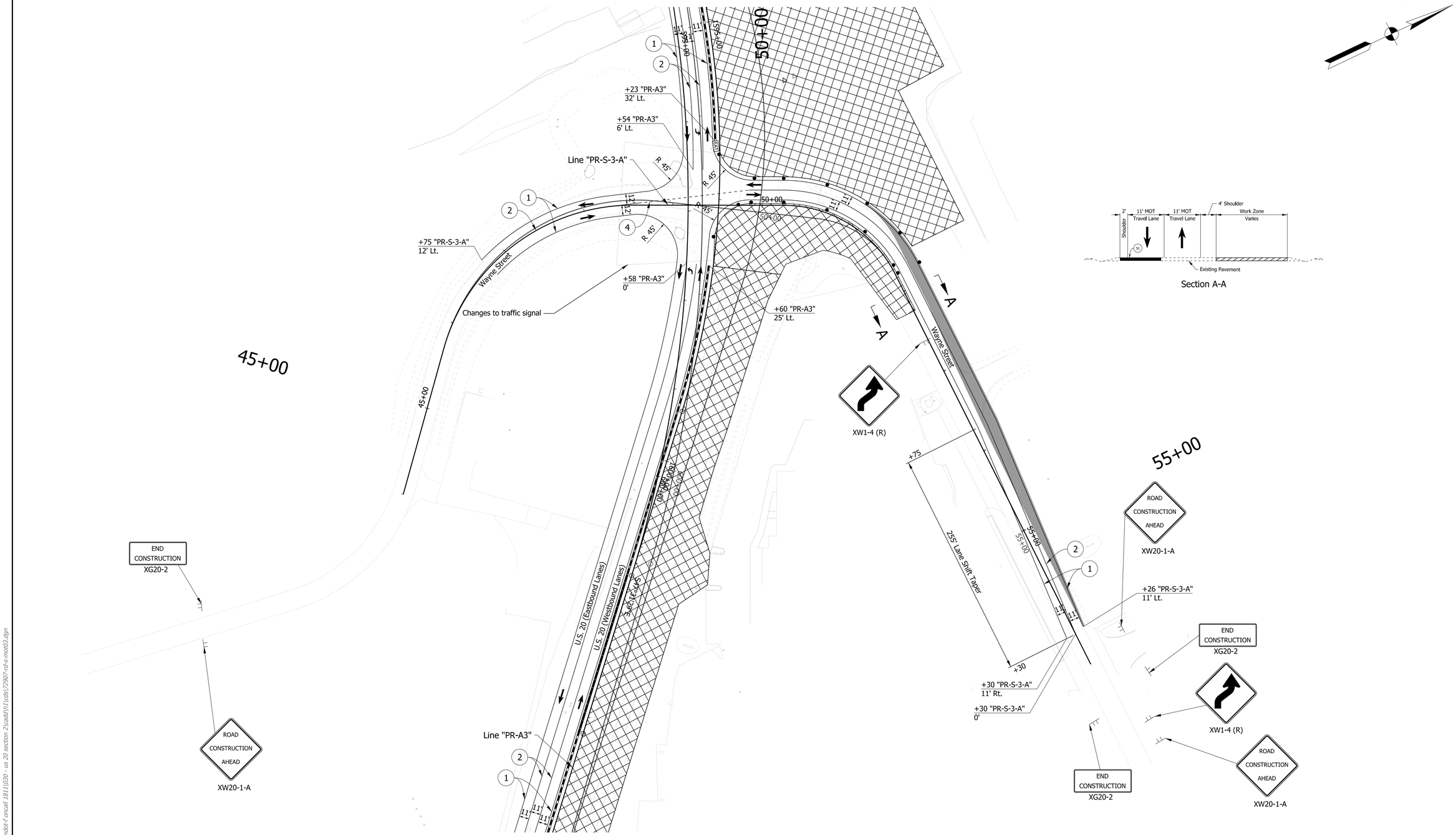
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INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3A LINE "PR-S-3-A"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-26
	51 of 283
CONTRACT	PROJECT
	1900095

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Notes:
1. All sign spacing shall be 350' unless otherwise directed.
2. Contractor shall maintain 2' minimum shoulders at all times.
3. Drum spacing on tapers shall be 25' unless otherwise noted.
4. Drum spacing on tangents shall be 50'.
5. All stations referenced from Line "PR-A3" unless otherwise noted.
6. Existing transverse rumble strips to remain in place.
7. Access to private entrances shall remain open at all times unless otherwise directed.
8. Existing speed limit signs that conflict with work zone speed limits shall be covered.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC | DRAWN: LMC

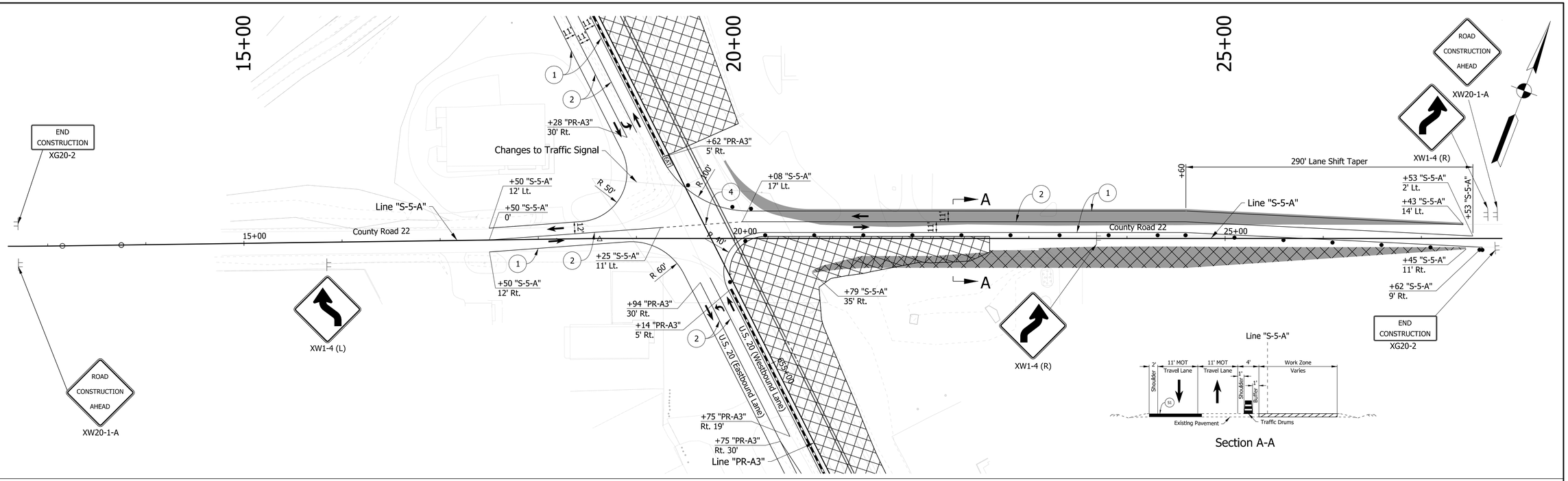
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INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE 3B LINE "PR-S-3-A"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-27
	52 of 283
CONTRACT	PROJECT
	1900095

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Maintenance Of Traffic Legend

- Construction Area
- Standard Drum
- Direction Of Traffic
- Barricade, III-A (12 Lft.)
- Construction Sign, A

Temporary Pavement Marking Legend

1. Temporary Pavement Marking, Removable, 5 In. (White)
2. Temporary Pavement Marking, Removable, 5 In. (Yellow)
3. Temporary Pavement Marking, Removable, 5 In. (Dotted White 3' Line 9' Gap)

E Existing Pavement Marking To Remain

EAT Energy Absorbing Terminal CZ, Type 2

Temporary Pavement

Temporary Traffic Barrier, Type 2

DRAFT NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

INDIANA DEPARTMENT OF TRANSPORTATION

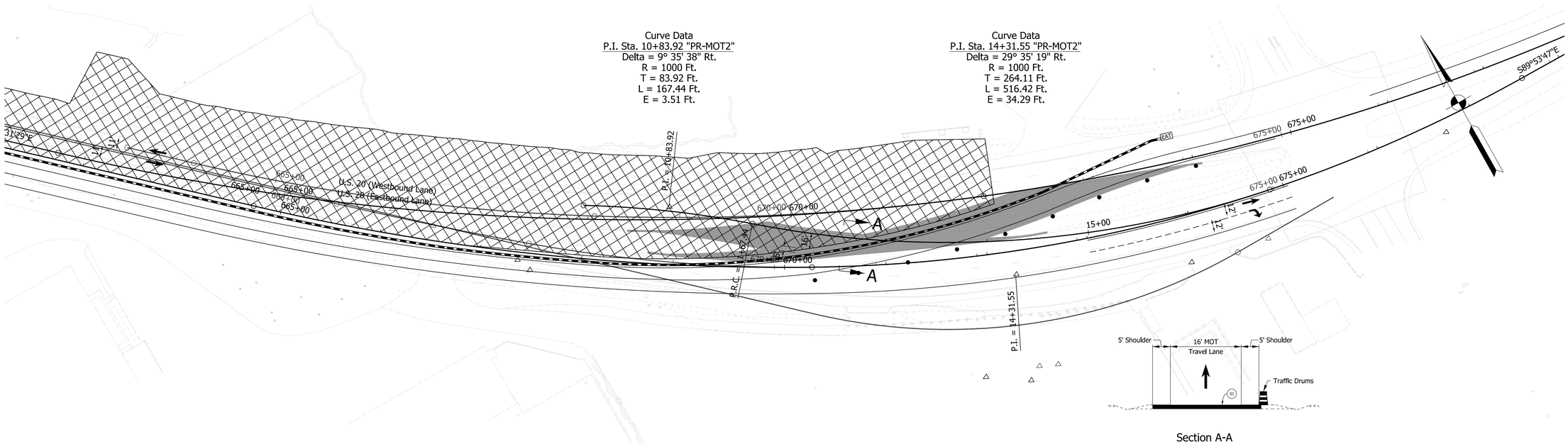
MAINTENANCE OF TRAFFIC PHASE 3A & 3B LINE "S-5-A"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-28
	53 of 283
CONTRACT	PROJECT
	1900095

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Curve Data
P.I. Sta. 10+83.92 "PR-MOT2"
Delta = 9° 35' 38" Rt.
R = 1000 Ft.
T = 83.92 Ft.
L = 167.44 Ft.
E = 3.51 Ft.

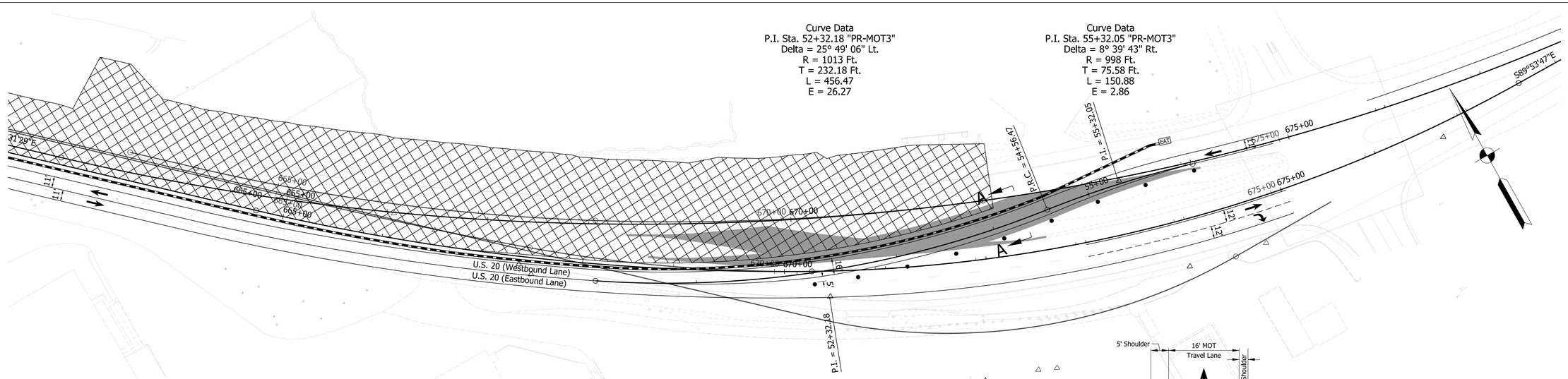
Curve Data
P.I. Sta. 14+31.55 "PR-MOT2"
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R = 1000 Ft.
T = 264.11 Ft.
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E = 34.29 Ft.

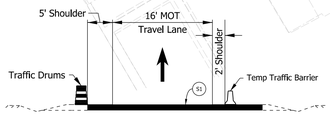


Section A-A

Curve Data
P.I. Sta. 52+32.18 "PR-MOT3"
Delta = 25° 49' 06" Lt.
R = 1013 Ft.
T = 232.18 Ft.
L = 456.47
E = 26.27

Curve Data
P.I. Sta. 55+32.05 "PR-MOT3"
Delta = 8° 39' 43" Rt.
R = 998 Ft.
T = 75.58 Ft.
L = 150.88
E = 2.86





Section A-A

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC CROSSOVER
PHASE 3A & 3B

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS MOT-29
	54 of 283
CONTRACT	PROJECT
	1900095

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565+00 | 570+00 | 575+00 | 580+00

3 JAMES E. & PEGGY S. MOWAT
5 MAYNARD J. & LAURA HOCHSTETLER
6 SNIDER, BRETT
7 LARRY LEHMAN
8 CURTIS FREED & ALICIA SMITH

MIDDLEBURY COMMUNITY SCHOOLS

BEGIN PROJECT
PROJECT NO. 1900095
P.O.T. STA. 570+50.00
LINE "PR-A3"
N: 338611.64
E: 108841.87

+℄ (+71.12 "PR-A2")
70'

N.I.P.S.C.O.

+14.17 "PR-A2"
75'

+14.17 "PR-A2
65.59'

Eliminated 11/01/2021

Electric Sub-station

(C.L. Fence)

(Bldg.)

(Riprap)

(Gravel)

(Riprap)

Str. No. 012

P.O.T. Sta. = 572+13.72 "PR-A3"
= P.O.T. Sta. = 69+84.55 "S-8-A"
N: 338616.29
E: 109005.52

MIDDLEBURY COMMUNITY SCHOOLS

Sec. 8, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

MIDDLEBURY SCHOOLS BUILDING CORPORATION

Sec. 9, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

Section Line

Ingress & Egress Ease. in favor of Middlebury Schools Building Corporation

+Sec. Line (+72.57 "PR-A2")
65'

Temp. R/W for Grading
+00 "PR-A2"
70'

+00 "PR-A2"
65'

+00 "PR-A2"
79'

+00 "PR-A2"
74'

(Pond)

R/W
(DES 1600517)
Acquired by others

R/W
(DES 1600517)

Constr. Limits

Temp. R/W for Grading

65' Temp. R/W

(Sdwk.)

(Conc. Curb)

(Asph.)

(Grass)

(Sign)

Exist. R/W

Line "A"
N 88°23'58" E

Section Line

Line "PR-A"
(DES 1600517)
N 88°22'24" E

DES 1600517

U.S. 20

N88°22'24"E

Line "PR-A"

Str. No. 003
N 88°23'50" E

Str. No. 001

Section Line

U.S. 20
N 88°46'31" E

Line "PR-A3"
N88°22'24"E

Line "PR-A2"

Str. No. 009
Str. No. 008

Str. No. 010B

Str. No. 010

Exist. R/W
(Trees and Brush)

Constr. Limits

15' Drainage and Util. Ease.

Lot 68

Lot 67

(Grass)

Westlake Drive

+℄ (+71.73)
72'

+℄ (+04.91)
72'

Str. No. 004
(Trees and Brush)

+℄ (+06.50)
60'

+℄ (+02.50)
Ex.R/W (72.25')

Exist. L.A. R/W
30' Drainage & Utility Esm't

+℄ (+31.47)
60'

Str. No. 002
60' L.A. R/W & A.C.L.

Matchline Sta. 580+00 "PR-A3" (See Next Sheet)

(Shed)

(Wd. Fence)

Str. No. 005B

Str. No. 005

15' Drainage and Util. Ease.

Exist. R/W

L.A. R/W

(Trees and Brush)

JEREMY S. & JENNIFER A. GREGORY

+℄ (+10.13)
70'

Temp. R/W for Grading

+℄ (+60.27)
60'

+℄ (+53.72)
70'

JOHN A. & MARY ANN LECHLITNER

JOHN L. & CYNTHIA S. PICCO

Lot 7

Lot 6

Lot 5

SPRING VALLEY A P.U.D.

7.5' Drainage & Util. Ease.

+℄ (+31.74)
70'

BERTHA BONTRAGER & LAURA M. BONTRAGER

+16
85'

+95.18 "S-8-A"
EX. R/W (57.20')

MOWAT, JAMES E. ET UX.

Temp R/W for Grading

Do Not Disturb Tree

+66.19 "S-8-A"
30.21'

Exist. R/W

Line "S-8-A"
N 1°57'55" W

Exist. R/W

+59
77'

+℄ (+50.50)
77'

+P.C. (+04.91)
77'

+℄ (+50.58)
72'

+℄ (+69.32)
77'

+℄ (+51.45)
72'

+℄ (+51.43)
77'

+P.R.C. (+18.32)
71'

+P.R.C. (+18.32)
76'

Lot 65

Lot 64

Lot 63

HOCHSTETLER, MAYNARD J. ET UX.

LEHMAN, LARRY

SNIDER, BRETT

FREED, CURTIS ET AL.

+EX. R/W (+45.32)
72'

WESTLAKE ESTATES EIGHTH SUBDIVISION

WESTLAKE ESTATES SECOND SUBDIVISION

Temp. R/W for Driveway Constr.
+39 "S-8-A"
44'

CONSOLIDATED LEISURE INDUSTRIES, LLC

Eliminated 11/01/2021

WESTLAKE ESTATES NINTH SUBDIVISION

P.O.T. Sta. = 569+14.25 "PR-A3"
= P.O.T. Sta. = 569+12.21 "A" 15.59' RT
= P.O.T. Sta. = 569+14.17 "PR-A"
N: 338607.79
E: 108706.09

+39 "S-8-A"
46'

BEGIN INCIDENTAL CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 567+00.00
LINE "PR-A"
N: 338603.15
E: 108542.68

+EX. R/W (+39 "S-8-A")
30.93'

Str. No. 007F2

Str. No. 007

+EX. R/W (+39 "S-8-A")
29.23'

Str. No. 007F1

Sec. 17, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

+℄ (+72.46)
70'

+℄ (+72.52)
75'

15' Drainage & Util. Ease.

App. Section Line

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

25' Drainage & Util. Ease.

Note:
Line "PR-A3" and "PR-B" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
LINE "PR-A3"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PLN-01
	55 of 283
CONTRACT	PROJECT
	1900095

lucarlson
7/12/2024 9:58:48 am
model: Sheet 1
file: I:\Work\02\89\projects\72907-fw\dot-f-one\all 18111039 - us 20 section 2\cad\ds1\cds172907-rd-s-plh01_original.dgn

EARTHWORK TABLE	
Common Excavation	75,367 Cys.
Fill Required	24,713 Cys.
Additional Fill for Shrinkage (25%)	6,178 Cys.
Waste	50,654 Cys.

P.V.I. Sta. = 566+07.00
Elev. = 894.53
V.C. = 275.00'

P.V.I. Sta. = 573+10.00
Elev. = 909.39
V.C. = 760.00'

TBM #321 Cut "X" in North Anchor Bolt of Traffic Strain Pole, Sta. 562+94.98 "A", 59.32' Rt., Elev. 898.76

Des. No. 1600517

BEGIN PROJECT
PROJECT NO. 1900095
P.O.T. STA. 570+50.00
LINE "PR-A3"
ELEV. 903.52

Str. No. 010B

Str. No. 010

+2.11%

888.50

889.30

889.40

196 Lft. of 18" Pipe @ +0.41% Rt.
(Plotted at Datum)

Str. No. 012

899.89

900.11

40 Lft. of 15" Pipe @ +0.55% Lt.
(Plotted 20' Above Datum)

+2.61%

+50.00
899.74

+35.00
902.01

+62.00
901.62

+50.00
900.00

Grade of Spl. 4' Bottom Ditch Req'd. Rt.
(Plotted at Datum)

351 Lft. of 18" Pipe @ +0.36% Rt.
(Plotted at Datum)

25' -0" of MGS W-Beam Guardrail @
6'-3" Spacing Req'd Lt.

Sodding Req'd. Lt.

Sodding Req'd. Rt.

+0.56%

+00.00
903.50

Str. No. 009

Profile Grade Along Line "PR-A3"

Existing Ground Along Line "PR-A3"

890.65

890.85

291 Lft. of 18" Pipe @ 0.42%
(Plotted at Datum)

Grade of Spl. 4' Bottom Ditch Req'd. Lt.
(Plotted 10' Above Datum)

-1.70%

Str. No. 005B

892.06

892.45

95 Lft. of 18" Pipe @ 0.37%
(Plotted at Datum)

Str. No. 004

+00.00
898.40

893.15

892.80

198 Lft. of 15" Pipe @ +0.30% Rt.
(Plotted at Datum)

-2.20%

-1.79%

Str. No. 002

+00.00
894.00

893.75

-3.73%

Riprap, Revetment and
Geotextiles, Type 1A Req'd. Lt.

Riprap, Revetment and
Geotextiles, Type 1A Req'd. Rt.

Grade of Spl. V-Bottom Ditch Req'd. Rt.
(Plotted 30' Below Datum)

+00.00
904.65

-1.19%

+4.33%

+50.00
900.50

+80.00
901.80

895.28	895.09	895.02	895.26	895.97	896.73	897.82	899.02	899.84	900.8	901.6	902.4	903.2	903.7	904.1	904.5	904.6	904.8	904.6	904.6	904.3	903.9	902.5	902.6	901.7	900.8	899.4	898.1	896.9	896.0	895.3
896.00	895.70	895.69	896.00	896.62	897.35	898.61	899.63	900.75	901.77	902.71	903.52	904.21	904.76	905.19	905.49	905.66	905.70	905.61	905.40	905.06	904.58	903.98	903.25	902.40	901.50	900.61	899.71	898.81	897.92	897.02

565+00 566+00 567+00 568+00 569+00 570+00 571+00 572+00 573+00 574+00 575+00 576+00 577+00 578+00 579+00 580+00

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

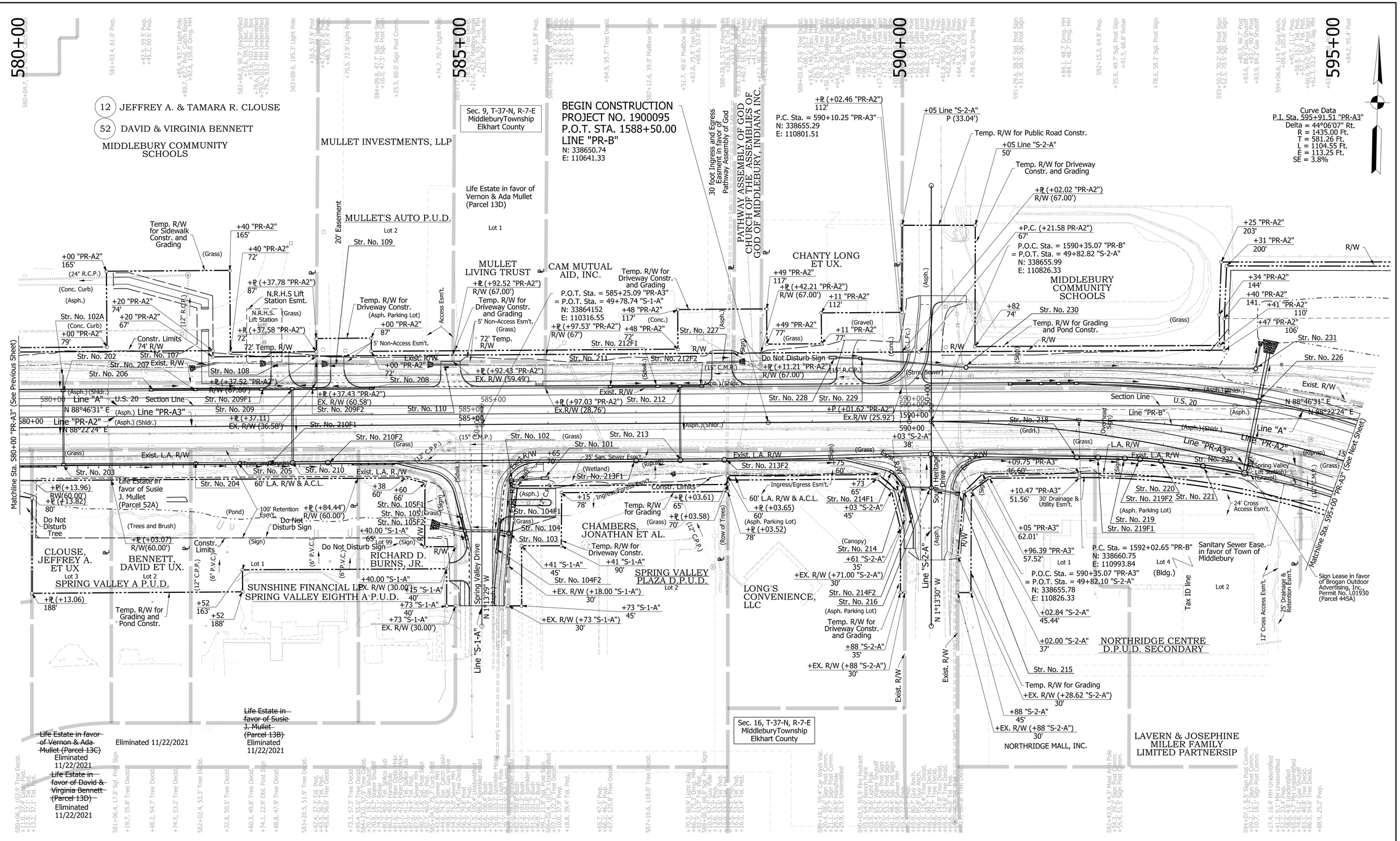
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PROFILE
LINE "PR-A3"

SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
1"=10'	1900095
SURVEY BOOK	SHEETS PRF-01
	56 of 283
CONTRACT	PROJECT
R-42379	1900095

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model:Sheet 1
file:\\indot\i2\89projects\72907-indot-f oncall 1811\030 - us 20 section 2\cadd\ls1\cds\72907-rd-s-prf01.dgn



Note:
Line "PR-A3" and "PR-B" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
LINE "PR-A3"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PLN-02
	57 of 283
CONTRACT	PROJECT
	1900095

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9/12/2024 11:32:51 am
model:Sheet2
file:\\indot\dot28projects\72907-roadway-f-oncall 18111039 - us 20 section 2\cadd\ls1\cds\72907-rd-s-plh01_original.dgn

P.V.I. Sta. = 581+99.00
Elev. = 893.46
V.C. = 400.00'

P.V.I. Sta. = 585+29.00
Elev. = 895.11
V.C. = 160.00'

P.V.I. Sta. = 587+49.00
Elev. = 894.00
V.C. = 160.00'

P.V.I. Sta. = 1589+50.00
Elev. = 895.00
V.C. = 160.00'

P.V.I. Sta. = 1592+50.00
Elev. = 893.40
V.C. = 200.00'

TBM #452 Cut "X" in North Lug Nut of Fire Hydrant,
Sta. 589+79.01 "A", 70.83' Rt., Elev. 874.71

Str. No. 206
Str. No. 207
Str. No. 209
Str. No. 209F1
Str. No. 209F2
Str. No. 208
890.01
889.78
889.68
889.36
889.26
889.13
889.33
889.23
889.11
889.67
47 Lft. of 12" Pipe @ 0.50% (Plotted 55' Above Datum)
72 Lft. of 12" Pipe @ 0.45%
32 Lft. of 12" Pipe @ 0.42% (Plotted 55' Above Datum)
22 Lft. of 12" Pipe @ 0.57% (Plotted 55' Above Datum)
62 Lft. of 12" Pipe @ 0.56% (Plotted 55' Above Datum)

Str. No. 211
Str. No. 212
Str. No. 212F1
Str. No. 212F2
889.31
889.04
888.94
888.93
888.83
888.83
51 Lft. of 12" Pipe @ 0.54% (Plotted 55' Above Datum)
22 Lft. of 12" Pipe @ 0.47%
22 Lft. of 12" Pipe @ 0.52% (Plotted 55' Above Datum)

Str. No. 223F1
Str. No. 223
Str. No. 223F2
Str. No. 224
Str. No. 225
Str. No. 226
890.20
890.07
889.97
889.86
889.76
889.47
889.65
888.90
888.80
888.43
32 Lft. of 12" Pipe @ 0.42% (Plotted 55' Above Datum)
17 Lft. of 12" Pipe @ 0.68% (Plotted 55' Above Datum)
17 Lft. of 12" Pipe @ 0.68% (Plotted 55' Above Datum)
127 Lft. of 12" Pipe @ 0.45% (Plotted 55' Above Datum)
74 Lft. of 12" Pipe @ 0.50% (Plotted 55' Above Datum)

Riprap, Revetment and Geotextiles, Type 1A Req'd. Lt.
+75.00

Str. No. 107
27 Lft. of 15" Pipe @ +0.50% Lt. (Plotted 15' Above Datum)
+50.00
888.40
+3.73%
Grade of Spl. 4' Bottom Ditch Req'd. Lt. (Plotted 15' Above Datum)
+0.44%
889.06
Str. No. 108
889.19
889.42
+00.00
889.50
33 Lft. of 15" Pipe @ +0.45% Lt. (Plotted 15' Above Datum)
889.75
+0.50%
889.57
Str. No. 109
889.94
+55.00
889.77
Grade of Spl. V-Ditch Req'd. Lt. (Plotted 15' Above Datum)
+0.83%
890.79
Str. No. 110
41 Lft. of 15" Pipe @ +0.92% Lt. (Plotted 15' Above Datum)
891.16
+50.00
891.40
25 Lft. of 15" Pipe @ +0.77% Lt. (Plotted 15' Above Datum)
1.79%
Profile Grade Along Line "PR-A3"
+0.50%
-0.50%

Str. No. 227
890.26
+0.50%
890.06
38 Lft. of 15" Pipe @ -0.53% Lt. (Plotted 15' Above Datum)
Str. No. 228
Str. No. 229
889.18
888.57
888.67
27 Lft. of 12" Pipe @ 1.94% (Plotted 25' Above Datum)
+1.81%
+20.00
889.55
Existing Ground Along Line "PR-A3"
+0.50%+0.50%
+00.00
891.00
Str. No. 230
887.95
888.05
118 Lft. of 12" Pipe @ 0.44% (Plotted 25' Above Datum)
Profile Grade Along Line "PR-B"
-0.53%
+0.50%
Str. No. 231
886.60
325 Lft. of 12" Pipe @ 0.42% (Plotted 25' Above Datum)
+50.00
893.16
-0.55%
Grade of Spl. Ditch Req'd. Lt. (Plotted 35' Above Datum)
+50.00
891.50

BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 1588+50.00
LINE "PR-B"
ELEV. 894.50
+0.50%
+00.00
891.47
+00.00
889.98
+75.00
891.04
+20.00
891.76
Grade of Spl. Ditch Req'd. Rt. (Plotted 20' Below Datum)

Str. No. 102
Str. No. 101
888.85
888.99
32.08 Lft. of 18.00" Pipe @ 0.44% (Plotted 30' Below Datum)
Str. No. 203
Str. No. 204
Str. No. 205
Str. No. 210F1
Str. No. 210
Str. No. 210F2
Str. No. 213F1
Str. No. 213
Str. No. 213F2
Str. No. 217
Str. No. 218
Str. No. 219
Str. No. 219F1
Str. No. 219F2
Str. No. 220
Str. No. 221
Str. No. 222
890.00
889.40
889.00
888.84
888.79
888.71
888.66
887.61
888.61
887.52
887.57
887.14
887.09
887.04
886.99
886.94
886.44
886.22
886.19
886.03
886.00
885.98
885.97
885.94
885.89
885.67
885.72
885.74
885.79
885.83
885.85
885.88
147 Lft. of 15" Pipe @ 0.41% (Plotted 40' Below Datum)
46 Lft. of 18 " Pipe @ 0.35% (Plotted 40' Below Datum)
31 Lft. of 18" Pipe @ 0.26% (Plotted 40' Below Datum)
21 Lft. of 18" Pipe @ 0.24% (Plotted 40' Below Datum)
35 Lft. of 30" Pipe @ 0.11% (Plotted 40' Below Datum)
345 Lft. of 30" Pipe @ 0.11% (Plotted 40' Below Datum)
45 Lft. of 30" Pipe @ 0.11% (Plotted 40' Below Datum)
45 Lft. of 30" Pipe @ 0.11% (Plotted 40' Below Datum)
230 Lft. of 36" Pipe @ 0.10% (Plotted 40' Below Datum)
161 Lft. of 36" Pipe @ 0.10% (Plotted 40' Below Datum)
20 Lft. of 36" Pipe @ 0.11% (Plotted 40' Below Datum)
26 Lft. of 36" Pipe @ 0.12% (Plotted 40' Below Datum)
19 Lft. of 36" Pipe @ 0.11% (Plotted 40' Below Datum)
13 Lft. of 36" Pipe @ 0.11% (Plotted 40' Below Datum)
43 Lft. of 36" Pipe @ 0.11% (Plotted 40' Below Datum)
43Lft. of 36" Pipe @ 0.11% (Plotted 40' Below Datum)

| 895.6 | 897.47 | 895.3 | 897.02 | 894.8 | 896.20 | 894.4 | 895.52 | 894.0 | 894.99 | 893.6 | 894.60 | 893.3 | 894.35 | 893.3 | 894.24 | 893.3 | 894.28 | 893.4 | 894.46 | 893.4 | 894.71 | 893.2 | 894.88 | 892.7 | 894.89 | 893.4 | 894.75 | 893.4 | 894.50 | 893.4 | 894.27 | 893.4 | 894.20 | 893.4 | 894.28 | 893.5 | 894.50 | 893.5 | 894.72 | 893.6 | 894.79 | 894.70 | 894.47 | 894.2 | 894.20 | 894.5 | 893.93 | 894.9 | 893.73 | 895.2 | 893.66 | 895.5 | 893.71 | 895.5 | 893.90 | 895.0 | 894.15 | 895.2 | 894.40 | 895.7 | 894.65 |
|---|---|---

595+00 600+00 605+00 610+00

Sec. 9, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

MIDDLEBURY COMMUNITY SCHOOLS

+74.34 "S-3-A"
40'
Temp. R/W for Grading

+75.58 "S-3-A"
40'
+66.65 "S-3-A"
40'
+℄ (+15.46) "PR-A2"
300'
+℄ (+13.34) "PR-A2"
305'
+66.35 "S-3-A"
25.12'
+75.58 "S-3-A"
25'
+71 "PR-A2"
284'
+74 "PR-A2"
291'
+93.86 "PR-A2"
238'
+91 "PR-A2"
231'

TEMP R/W FOR GRADING
EX. R/W
R/W
Exist. R/W
Wayne Street (Asph.)
Section Line
Line "S-3-A"

Curve Data
P.I. Sta. = 1595+91.51 "PR-B"
Delta = 44°06'07" Rt.
R = 960.00 Ft.
T = 388.86 Ft.
L = 738.93 Ft.
E = 75.77 Ft.

Curve Data
P.I. Sta. 51+10.50 "PR-S-3-A"
Delta = 63°18'52" Rt.
R = 140.00 Ft.
T = 86.32 Ft.
L = 154.71 Ft.
E = 24.47 Ft.
SE = N/A

Curve Data
P.I. Sta. = 595+91.51 "PR-A3"
Delta = 44°06'07" Rt.
R = 1435.00 Ft.
T = 581.26 Ft.
L = 1104.55 Ft.
E = 113.25 Ft.

DUTCHMAN HOSPITALITY GROUP, INC.

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

1/4 Section Line

16' San. Sewer Esm't.

REPLAT OF THE DUTCH CORP. D.P.U.D.

DUTCHMAN HOSPITALITY GROUP, INC.

+P.T. (+07.51 "PR-A2")
95'
+P.T. (+07.51 "PR-A2")
60'
+50 "PR-A2"
95'
+34 "PR-A2"
60'
+50 "PR-A2"
R/W (60')

Temp. R/W for Driveway Constr. and Grading
+EX. R/W (+29.48 "PR-A2")
70'
Do Not Disturb Light Post
(Sdwk.)
(Bldg.)
+36 "PR-A2"
95'
+64 "PR-A2"
+36 "PR-A2"
70'
60'

Do Not Disturb Tree
Temp. R/W For Driveway Constr.
(Grass)
+68 "PR-A2"
60'
+P.T. (+68 "PR-A2")
60'
+57 "PR-A2"
65'
+57 "PR-A2"
R/W (60')
+48 "PR-A2"
60'
+97 "PR-A2"
65'
+97 "PR-A2"
R/W (60')
(Grass)

(Asph.)
(Sign)

Str. No. 338
Str. No. 337
Str. No. 320
Str. No. 326
Str. No. 322
Str. No. 327
Str. No. 313
Str. No. 315
Str. No. 317
Str. No. 323
Str. No. 324
Str. No. 330
Str. No. 330F1
Str. No. 330F2
Str. No. 331
Str. No. 329
Str. No. 332
Str. No. 333
Str. No. 335
Str. No. 334
Str. No. 336
Str. No. 328
Str. No. 325
Str. No. 318
Str. No. 319
Str. No. 316
Str. No. 314

(Asph. Parking Lot)
(Asph.) (Shldr.)
(Gravel)
(Grass)
(Field)
(Trees and Brush)

Exist. L.A. R/W (12" C.M.P.)
L.A. R/W
Exist. L.A. R/W
Constr. Limits
L.A. R/W
Exist. L.A. R/W
EX. R/W
60' R/W
20' Sewer Esm't.
60' L.A. R/W & A.C.L.
L.A. R/W (Grass)

+00.98
95.06'
+EX. R/W (+19.72)
60'
+15.29
46.60'
+79.55
31.68'
+45.85 "S-3-A"
84.69'
+57.66 "S-3-A"
38.44'
+34.38 "S-3-A"
52.17'
+89.70
27.66'
+93.48
22.70'
+58.42 "S-3-A"
60'
+59.48 "S-3-A"
32.38'
+05.12
60'
+℄ (+09.42)
65'
+℄ (+14.12)
70'
+℄ (+14.80)
65'
+P.T. (+48)
60'

N 88°46'31" E
S 47°31'29" E
S 48°16'06" E
N 88°22'24" E
Line "A"
Line "PR-A2"
Line "PR-A3"
Line "PR-B"
Line "S-3-A"
Line "PR-A2"
S 48°16'06" E
Line "A"
S 47°31'29" E
S47°31'29"E
U.S. 20
(Asph.) (Shldr.)
(Asph.)

Matchline Sta. 595+00 "PR-A3" (See Previous Sheet)
Matchline Sta. 610+00 "PR-A3" (See Next Sheet)

P.O.T. Sta. = 596+93.43 "PR-A3"
= P.O.T. Sta. = 49+20.57 "S-3-A"
N: 338514.44
E: 111463.44

P.T. Sta. = 1592+02.65 "PR-B"
N: 338660.75
E: 110993.84

P.T. Sta. = 601+14.80 "PR-A3"
N: 338279.28
E: 111811.26

DUTCHMAN HOSPITALITY GROUP, INC.
HERITAGE POINTE D.P.U.D./G.P.U.D.

END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 1601+33.99
LINE "PR-B"
N: 338279.28
E: 111811.26

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

MISSIONARY CHURCH NORTH CENTRAL DISTRICT INCORPORATED
D/B/A CRYSTAL VALLEY MISSIONARY CHURCH

1/4 Section Line & P

Utility Esm't.

+30 "S-3-A"
35'
+00 "S-3-A"
35'
+71.30 "S-3-A"
60'
+00 "S-3-A"
35'
Temp. R/W for Public Road Constr. and Grading
15' Drainage Esm't.

Curve Data
P.I. Sta. 47+36.60 "PR-S-3-A"
Delta = 74°30'48" Rt.
R = 220.00 Ft.
T = 167.33 Ft.
L = 286.11 Ft.
E = 56.41 Ft.
SE = N/A

Note:
Line "PR-A3" and "PR-B" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

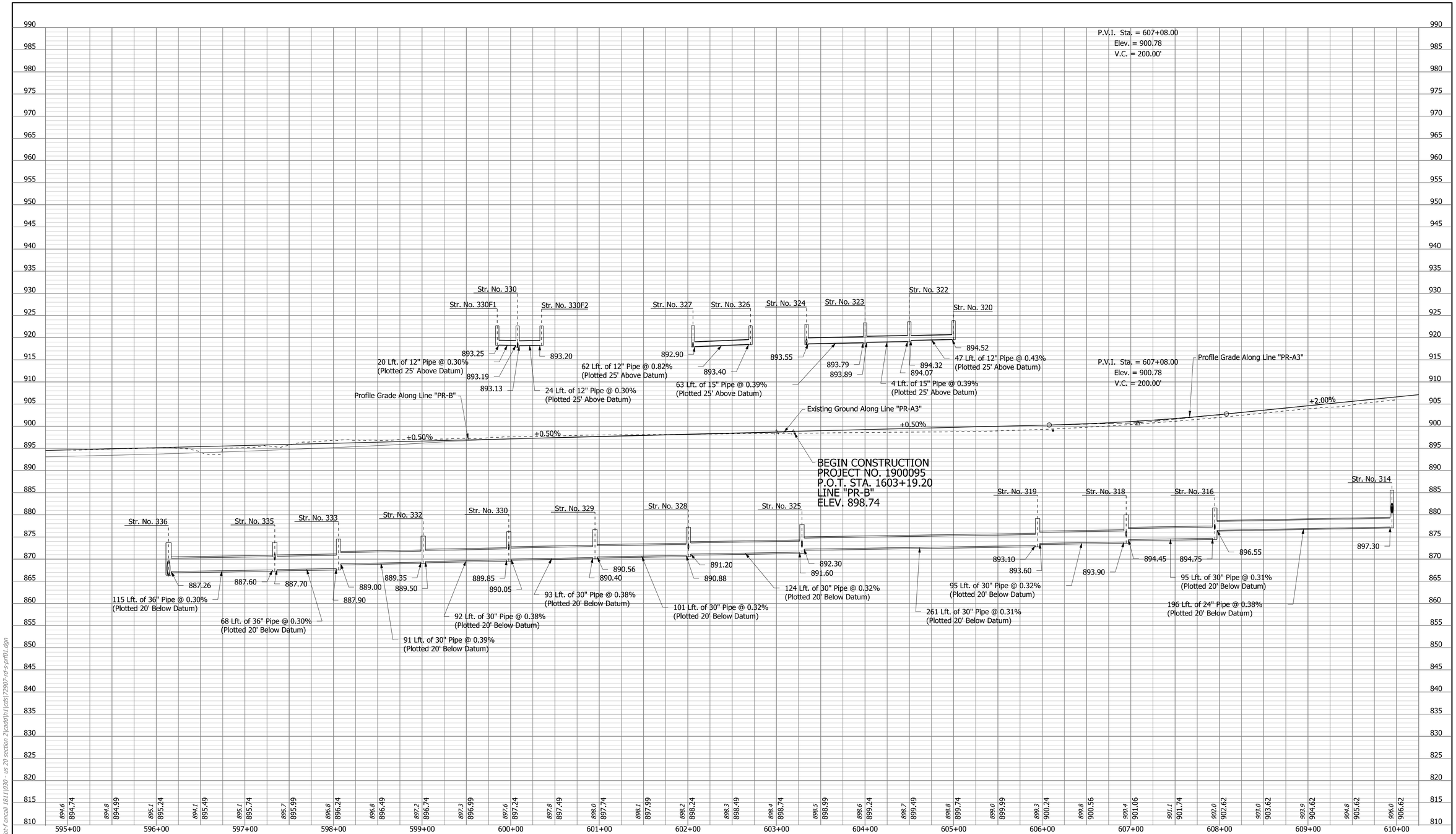
DESIGNED: LMC
DRAWN: LMC
CHECKED: NSX
CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
LINE "PR-A3"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PLN-03
	59 of 283
CONTRACT	PROJECT
	1900095

kleisure
9/12/2024 11:32:51 am
model:Sheet3
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RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

INDIANA
DEPARTMENT OF TRANSPORTATION

SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
1"=10'	1900095

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

ROADWAY PROFILE
LINE "PR-A3"

SURVEY BOOK	SHEETS PRF-03
	60 of 283
CONTRACT	PROJECT
R-42379	1900095

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9/12/2024 12:06:17 pm
model: Sheet3
file: \\indot\1289projects\72907-indot-f on call\ 18111030 - us 20 section 2\cadd\h1\cds\72907-rd-s-prf01.dgn

610+00
615+00
620+00
625+00

611+72.6, 40.2' Tel. Splice Tub
612+37.2, 41.6' Fiber Optic Mrkr.
+39.7, 41.3' Fiber Optic Mrkr.
+51.6, 41.4' Pvp.
614+31.7, 70.8' Tree Decid.
+92.1, 60.1' Tree Decid.
+25.9, 53.4' Tree Decid.
+40.1, 36.0' Sgl. Post Sign
+54.5, 54.0' Tree Decid.
616+40.9, 115.5' Tree Decid.
+52.7, 69.0' Tree Conif.
+73.3, 145.3' Tree Conif.
+81.1, 68.9' Tree Decid.
617+00.8, 142.0' Tree Conif.
+35.9, 35.0' Pvp.
618+84.8, 12.0' Sgl. Post Sign
619+63.1, 31.8' Pvp.
+67.5, 42.0' Sgl. Post Sign
+68.2, 40.4' Fiber Optic Mrkr.
+68.4, 57.5' Sgl. Post Sign
+69.1, 34.6' Elec. Meter
620+87.9, 56.4' Tree Decid.
621+79.6, 30.0' Pvp.
+87.3, 28.1' Tel. Ped.
623+89.8, 25.2' Fiber Optic Mrkr.
+90.8, 25.6' Fiber Optic Mrkr.
+95.3' Pvp.
624+38.6, 46.1' Sgl. Post Sign

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

REPLAT OF THE DUTCH CORP. D.P.U.D.

DUTCHMAN HOSPITALITY GROUP, INC.

DUTCHMAN HOSPITALITY GROUP, INC.
Lot 1 "A"

+P.C. (+54.26 "PR-A2")
80'
+P.C. (+54.26 "PR-A2")
60'
+00 "PR-A2"
80'
+00 "PR-A2"
R/W (60.00')
+28 "PR-A2"
65'
+28 "PR-A2"
R/W (60.00)
+33 "PR-A2"
60'
+87 "PR-A2"
65'
+87 "PR-A2"
R/W (60.00')
+03 "PR-A2"
60'
Temp. R/W for Grading
Temp. R/W for Grading
L.A. R/W
L.A. R/W
EX. L.A. R/W
EX. L.A. R/W
EX. L.A. R/W
Constr. Limits
Str. No. 313
Str. No. 311
(Grass)
Str. No. 307
Str. No. 305
(Grass)
Str. No. 303
(Sign)
Str. No. 301
Line "PR-A2"
S 48°16'06" E
(Shldr.)
U.S. 20
Line "A"
S 47°31'29" E
(Asph.) (Shldr.)
Line "PR-A3"
(15" C.P.P.)
EX. R/W
(Asph.)
(Grass)
(Wd. Fence)
(Sign)
60' R/W
Str. No. 314
Str. No. 312
Str. No. 309
Str. No. 310
Str. No. 308
(Conc.)
Constr. Limits
Temp. R/W For Grading
Str. No. 306
+23
70'
+P.C. (+11.85)
110'
+P.C. (+79.58)
110'
Str. No. 304
(Gravel)
Str. No. 302
+94
70'
+28
70'
+28
95'
+88
70'
+88
95'
(Bldg.)
Temp. R/W for Driveway Constr. and Grading
Temp. R/W for Driveway Constr. and Grading
Matchline Sta. 610+00 "PR-A3" (See Previous Sheet)
Matchline Sta. 625+00 "PR-A3" (See Next Sheet)

MISSIONARY CHURCH NORTH CENTRAL DISTRICT INCORPORATED
D/B/A CRYSTAL VALLEY MISSIONARY CHURCH

OZINGA READY MIX CONCRETE, INC.

MDK ENTERPRISES, LLC

IRMA PLANK

TOWN OF MIDDLEBURY

Sec. 16, T-37-N, R-7-E
Middlebury Township
Elkhart County

610+42.9, 51.7' Sgl. Post Sign
+43.6, 63.6' Sgl. Post Sign
+63.4, 75.0' Tree Decid.
+77.6, 154.1' Tree Decid.
611+51.8, 63.6' Sgl. Post Sign
+52.2, 74.2' Sgl. Post Sign
+57.0, 144.7' Bush
+60.1, 125.4' Bush
+63.0, 63.8' Sgl. Post Sign
+63.2, 63.8' Sgl. Post Sign
+72.3, 101.1' Tree Decid.
+75.1, 91.8' Bush
+76.4, 94.1' Bush
+78.4, 94.1' Bush
+80.1, 94.5' Bush
+80.2, 49.7' Sewer MH
+85.1, 127.1' Bush
+86.0, 153.9' Bush
+89.2, 120.7' Bush
+90.0, 129.9' Tree Decid.
+99.2, 129.9' Bush
+108.6, 131.7' Bush
+50.4, 60.8' Pvp.
+52.9, 60.0' Tel. Ped.
614+97.5, 65.3' Pvp.
+97.7, 61.3' Tel. Ped.
+98.6, 50.5' Sewer MH
615+41.9, 32.7' Water Shutoff
617+20.9, 53.1' Sewer MH
618+51.6, 69.5' Sgl. Post Sign
+52.7, 79.5' Sgl. Post Sign
+54.5, 63.8' Pvp.
+56.9, 70.5' Guy Pole
+90.5, 135.4' Unidentified
+94.2, 67.5' Pvp.
+98.4, 134.8' Unidentified
619+17.9, 139.3' Light Pole
620+02.3, 40.6' Water Shutoff
+10.0, 57.2' Pvp.
+12.5, 42.0' Tel. Ped.
+19.5, 42.6' Water Shutoff
+19.7, 58.4' Fire Hydrant
+24.1, 55.4' Pvp.
+86.4, 59.1' Sewer MH
621+31.0, 50.6' Sgl. Post Sign
+54.4, 60.6' Tel. Ped.
622+91.8, 60.5' Sewer MH
623+58.5, 62.4' Water Shutoff
+63.5, 64.2' Fire Hydrant

Note:
Line "PR-A3" and "PR-B" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
LINE "PR-A3"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PLN-04
	61 of 283
CONTRACT	PROJECT
	1900095

lucarlson
7/12/2024 9:58:48 am
model:Sheet4
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P.V.I. Sta. = 614+50.00
Elev. = 915.61
V.C. = 200.00'

Str. No. 314
Str. No. 312
Str. No. 310
Str. No. 309
Str. No. 308
Str. No. 306
Str. No. 304
Str. No. 302
+2.00%
+0.50%
Existing Ground Along Line "PR-A3"

900.55
901.00
903.05
903.32
904.50
904.67
905.50
906.05
908.45
909.55
910.70
911.45
911.75
912.60

121 Lft. of 24" Pipe @ 0.37%
(Plotted at Datum)

71 Lft. of 24" Pipe @ 0.38%
(Plotted at Datum)

46 Lft. of 24" Pipe @ 0.37%
(Plotted at Datum)

146 Lft. of 24" Pipe @ 0.38%
(Plotted at Datum)

296 Lft. of 24" Pipe @ 0.37%
(Plotted at Datum)

196 Lft. of 18" Pipe @ 0.38%
(Plotted at Datum)

197 Lft. of 15" Pipe @ 0.43%
(Plotted at Datum)

610+00	611+00	612+00	613+00	614+00	615+00	616+00	617+00	618+00	619+00	620+00	621+00	622+00	623+00	624+00	625+00
906.0 906.62	*906.9* 907.61	*907.9* 908.61	*908.8* 909.61	*909.7* 910.61	*910.7* 911.61	*911.7* 912.61	*912.7* 913.61	*913.4* 914.52	*914.2* 915.24	*914.7* 915.77	*915.1* 916.11	*915.6* 916.36	*916.0* 916.61	*916.2* 916.86	*916.5* 917.11	*916.7* 917.36	*916.9* 917.61	*917.2* 917.86	*917.5* 918.11	*917.9* 918.36	*918.2* 918.61	*918.3* 918.86	*918.4* 919.11	*918.5* 919.36	*918.5* 919.57	*918.5* 919.71	*918.5* 919.79	*918.6* 919.80	*918.7* 919.74	*918.8* 919.62

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PROFILE
LINE "PR-A3"

SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
1"=10'	1900095
SURVEY BOOK	SHEETS PRF-04
	62 of 283
CONTRACT	PROJECT
R-42379	1900095

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625+00 | 630+00 | 635+00 | 640+00

DUTCHMAN HOSPITALITY GROUP, INC.
23

GOSHEN HEALTH SYSTEMS, P.U.D.

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

REPLAT OF THE DUTCH CORP. D.P.U.D.

GOSHEN HOSPITAL ASSOCIATION

DUTCHMAN HOSPITALITY GROUP, INC.

DUTCHMAN HOSPITALITY GROUP, INC.

25' Common Access Esm't.

50' Common Access & Utilities Esm't.

Lot 1

Lot 2

1/4 Section Line

Ingress Egress Expanded Easement in favor of Essenhaus, Inc.

Temp. R/W for Driveway Constr.

Temp. R/W for Grading

Temp. R/W for Grading & Drive Constr.

Temp. R/W for Driveway and Pond Constr.

Constr. Limits

Top of Pond

Bottom of Pond (Basin)

Tax Parcel Line

Eliminated 04/05/2023

IP MOULDING, INC.

MDK ENTERPRISES, LLC

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

NOTE TO REVIEWER

JP Moulding, INC. driveways are under coordination

Note:
Line "PR-A3" and "PR-B" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
LINE "PR-A3"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PLN-05
	63 of 283
CONTRACT	PROJECT
	1900095

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P.V.I. Sta. = 625+44.00
Elev. = 921.08
V.C. = 700.00'

-1.35%

Str. No. 401
913.08
197 Lft. of 12" Pipe @ 0.50%
(Plotted 20' Below Datum)

Str. No. 405
912.10
909.85
197 Lft. of 18" Pipe @ 0.47%
(Plotted 20' Below Datum)

Str. No. 404
912.86

Str. No. 403
913.08
41 Lft. of 12" Pipe @ 0.53%
(Plotted 50' Below Datum)

Str. No. 407
908.93
907.25
146 Lft. of 24" Pipe @ 0.38%
(Plotted 20' Below Datum)

Str. No. 408
906.70
905.86
96 Lft. of 24" Pipe @ 0.37%
(Plotted 20' Below Datum)

Str. No. 410
905.50
904.55
96 Lft. of 24" Pipe @ 0.40%
(Plotted 20' Below Datum)

Str. No. 411
904.17
902.68
60 Lft. of 24" Pipe @ 0.40%
(Plotted 20' Below Datum)

Str. No. 413
901.30
902.45
132 Lft. of 30" Pipe @ 0.30%
(Plotted 20' Below Datum)

Str. No. 414
898.50
900.90
95 Lft. of 30" Pipe @ 0.31%
(Plotted 20' Below Datum)

Str. No. 417
897.25
898.20
1367 Lft. of 30" Pipe @ 0.37%
(Plotted 20' Below Datum)

Str. No. 418
896.75
896.48
164 Lft. of 30" Pipe @ 0.31%
(Plotted 20' Below Datum)

Str. No. 419
895.98

Str. No. 416
899.89
47 Lft. of 12" Pipe @ 0.52%
(Plotted 40' Above Datum)

Str. No. 415
900.13

97 Lft. of 12" Pipe @ 0.52%
(Plotted 40' Above Datum)

Str. No. 420
898.40

Str. No. 421
897.90

Str. No. 422
897.80
47 Lft. of 12" Pipe @ 0.37%
(Plotted 40' Above Datum)

Str. No. 423
Str. No. 423F1
897.63
897.27
22 Lft. of 12" Pipe @ 0.52%
(Plotted 40' Above Datum)
897.16
897.06
12 Lft. of 12" Pipe @ 0.54%
(Plotted 40' Above Datum)
897.00
896.50

| | | |

23 DUTCHMAN HOSPITALITY GROUP, INC.

35 R & S JENKINS PROPERTIES, LLC

640+00 645+00 650+00 655+00

Sec. 15, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

TOWN OF MIDDLEBURY

Abandoned Pumpkinvine Railroad (f.k.a. Penn Central Railroad)

P.O.C. Sta. = 644+82.43 "PR-A3"
= P.O.T. Sta. = 49+77.50 "S-4-A"
N: 335329.95
E: 115032.69

PERPETUAL TRAIL EASEMENT

Constr. Limits

Ridge Run Trail

Str. No. 450

Str. No. 424

Str. No. 423F2

Str. No. 426

Str. No. 425

Str. No. 429

Str. No. 427

Str. No. 430

Str. No. 431

Str. No. 467

Str. No. 532

Str. No. 531

Str. No. 530

Str. No. 530F2

Str. No. 530F1

Str. No. 528

Str. No. 529

Str. No. 542

Str. No. 527

Str. No. 521

Str. No. 101
Pumpkinvine Trail Tunnel
Extension, Des. 2000038
Sta. 648+80.24 Line "PR-A3"

Str. No. CV 020-020-104.92

Line "PR-A3"

Line "PR-A2"

Line "A"

Line "S-5-A"

Line "S-4-A"

Matchline Sta. 640+00 "PR-A3" (See Previous Sheet)

Matchline Sta. 655+00 "PR-A3" (See Next Sheet)

LAVERN R. & VICKI L. WINGARD

IP MOULDING, INC.

MMPC LAND HOLDING LLC

THE ELKHART COUNTY PARK & RECREATION BOARD OF ELKHART COUNTY, INDIANA

MONTEITH TIRE/ JENKINS NAPA A D.P.U.D.

BEST ONE GOSHEN REALITY, LLC.
Lot 1B
Lot 1A

LARRY J. & DIANE M. BRUMBAUGH

TRAGER7 PROPERTIES, LLC

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

Sec. 15, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

Temp. R/W for Grading and Pond Constr.

Temp. R/W for Driveway Constr. and Gradlng

Temp. R/W for Trail Constr. and Grading

Temp. R/W for Driveway Constr. and Grading

Temp. R/W for Grading

Temp. R/W for Driveway Constr. & Grading

Temp. R/W for Driveway Constr. and Grading

5' No Access Easement

Sanitary Sewer Easements in favor of Town of Middlebury

Sign Lease in Favor of Lutes Signs, Inc. Permit No. L00198 (Parcel 36SA)

24' Cross Access Ease.

Orpha Drive

County Road 32

Note:
Line "PR-A3" and "PR-B" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
LINE "PR-A3"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PLN-06
	65 of 283
CONTRACT	PROJECT
	1900095

lucarlson
7/12/2024 9:58:48 am
model:Sheet0
file: \\work\0\389projects\72907-mdot-f oncall 18\1\020 - ue 20 section 2\cadd\h1\cds\72907-rd-s-ph01_original.dgn

P.V.I. Sta. = 640+46.00
Elev. = 900.81
V.C. = 400.00'

Str. No. 423F2

Str. No. 424

897.57
896.41

898.00

99 Lft. of 12" Pipe @ 0.44%
(Plotted 60' Above Datum)

32 Lft. of 18" Pipe @ 0.30%
(Plotted 60' Above Datum)

P.V.I. Sta. = 649+04.00
Elev. = 920.97
V.C. = 940.00'

Str. No. 532

Str. No. 531

Str. No. 530F1

Str. No. 521

902.26

902.42

902.37

903.60

907.35

907.80

907.35

35 Lft. of 12" Pipe @ 0.32%
(Plotted 60' Above Datum)

238 Lft. of 12" Pipe @ 0.50%
(Plotted 60' Above Datum)

84 Lft. of 12" Pipe @ 0.54%
(Plotted 60' Above Datum)

+10.65

218'-9" of Guardrail, MGS W-Beam,
Double Faced @ 6'-3" Spacing Req'd Rt.

+29.40

+50.00
911.25

Grade of Spl. 4' Bottom Ditch Req'd. Rt.
(Plotted 30' Above Datum)

-4.70%

Grade of Spl. 14' Bottom Ditch Req'd. Lt.
(Plotted At Datum)

-0.50%

+88.00
898.20

+56.00

Riprap, Revetment and
Geotextiles, Type 1A Req'd. Lt.

+00.00
902.58

+50.00
904.43

+25.00
909.00

+50.00

+50.00
910.41

+50.00
909.75

+0.60%

+2.99%

+3.71%

+9.53%

+6.17%

-1.00%

Grade of Spl. 4' Bottom Ditch Req'd. Lt.
(Plotted At Datum)

+75.00
895.98

893.95

Str. No. 450

+74.00

893.91 894.80

15 Lft. of 42" Pipe @ 0.27%
(Plotted 30' Above Datum)

+78.00
894.95

Profile Grade Along Line "PR-A3"

+2.35%

Existing Ground Along Line "PR-A3"

+22.65

168'-9" of Guardrail, MGS W-Beam @ 6'-3"
Spacing Req'd Lt.

+91.40

-1.50%

+66.09

+47.34

181'-3" of Guardrail, MGS W-Beam @ 6'-3" Spacing Req'd Rt.

+25.00

Riprap, Revetment and
Geotextiles, Type 1A Req'd. Rt.

+00.00

+20.00

+33.00

+53.00

Riprap, Revetment and
Geotextiles, Type 1A Req'd. Rt.

+50.00

Sodding Req'd. Rt.

Str. No. 431

Str. No. 430

Str. No. 529

Str. No. 528

Str. No. 527

Str. No. 429

895.87

345 Lft. of 36" Pipe @ 0.10%

895.53

895.48

270 Lft. of 36" Pipe @ 0.10%

895.21

898.16

898.50

898.92

900.27

95 Lft. of 36" Pipe @ 0.36%
(Plotted 35' Above Datum)

396 Lft. of 36" Pipe @ 0.34%
(Plotted 35' Above Datum)

Str. No. 426

Str. No. 425

Str. No. 427

901.82

902.25

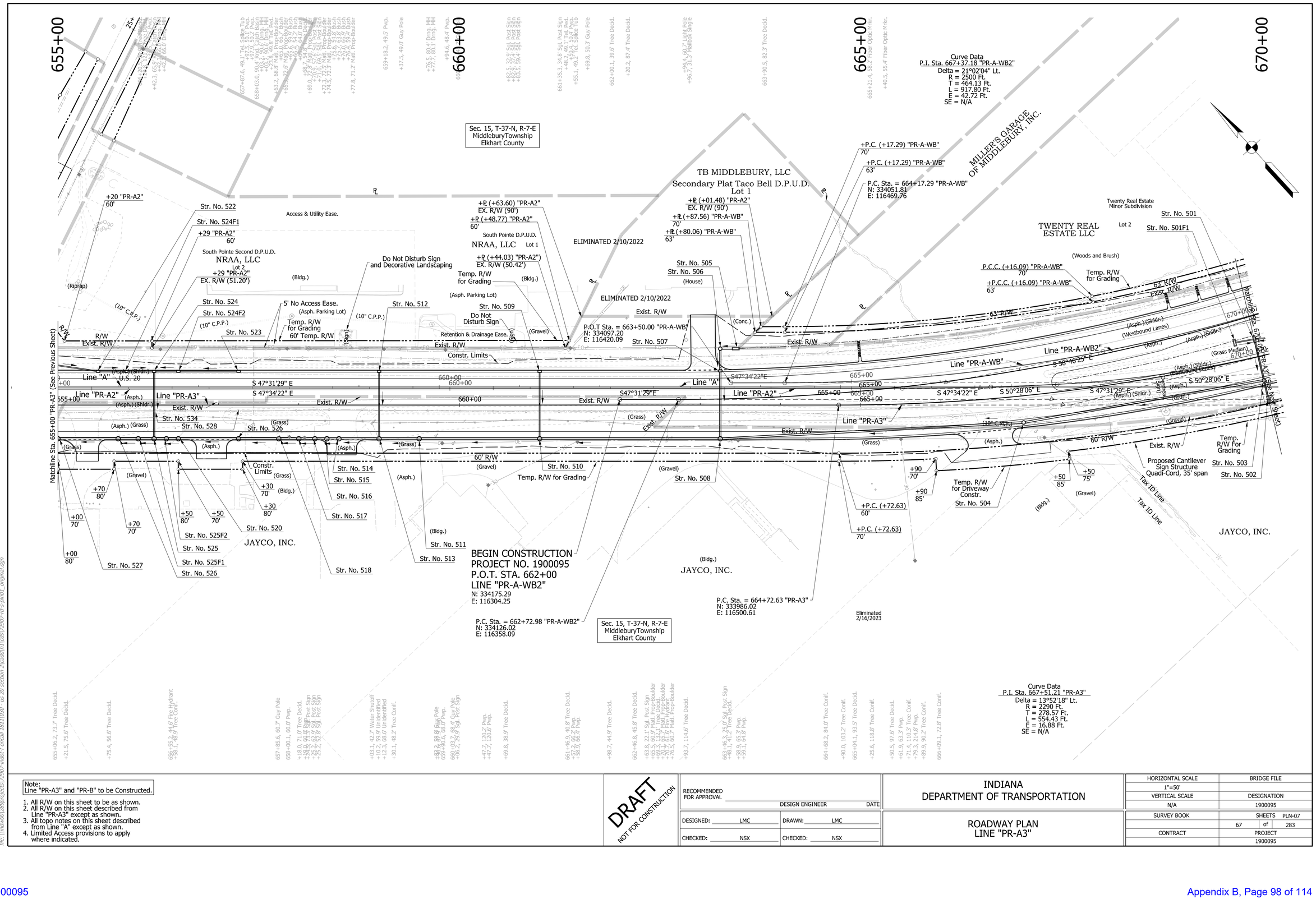
899.32

899.70

97 Lft. of 12" Pipe @ 0.45%

97 Lft. of 15" Pipe @ 0.40%

| | | |



Note:
Line "PR-A3" and "PR-B" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
LINE "PR-A3"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PLN-07
	67 of 283
CONTRACT	PROJECT
	1900095

lucarlson
7/12/2024 9:58:48 am
model: Sheet7
file: \\indot\d0180\projects\172907\ndot-f.oncall \8111030 - us 20 section 2\cadd\ls1\cds\172907-rd-s-pln01_original.dgn

P.V.I. Sta. = 656+24.00
Elev. = 910.16
V.C. = 300.00'

P.V.I. Sta. = 660+76.00
Elev. = 917.42
V.C. = 200.00'

P.V.I. Sta. = 667+00.00
Elev. = 920.40
V.C. = 150.00'

P.V.I. Sta. = 667+68.00
Elev. = 920.88
V.C. = 160.00'

P.V.I. Sta. = 669+94.81
Elev. = 918.93
V.C. = 150.00'

Str. No. 522
Str. No. 524F1
Str. No. 524
Str. No. 524F2
Str. No. 523
906.40
906.10
906.00
905.90
905.80
905.94
906.04
906.18
906.95
72 Lft. of 12" Pipe @ 0.42%
(Plotted 40' Above Datum)
27 Lft. of 12" Pipe @ 0.38%
(Plotted 40' Above Datum)
31 Lft. of 12" Pipe @ 0.45%
(Plotted 40' Above Datum)
32 Lft. of 12" Pipe @ 0.45%
(Plotted 40' Above Datum)
67 Lft. of 12" Pipe @ 0.60%
(Plotted 40' Above Datum)

Str. No. 506
Str. No. 505
911.55
911.49
14 Lft. of 18" Pipe @ 0.44%
(Plotted 40' Above Datum)

+25.00
+00.00
Sodding Req'd. Median
+75.00
Riprap, Revetment and
Geotextiles, Type 1A Req'd. Rt.

Profile Grade Along Line "PR-A3"
Existing Ground Along Line "PR-A3"
+1.61%
+0.50%
-0.50%

BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 662+00.00
LINE "PR-A-WB2"
ELEV. 917.90
+50.00
912.50
+0.50%
-0.50%
Profile Grade Along Line "PR-A-WB2"
(Plotted 20' Below Datum)
Existing Ground Along Line "PR-A-WB2"
(Plotted 20' Below Datum)
-0.45%
-0.55%
-1.00%
-1.71%
-1.53%
+50.00
918.77
+00.00
918.55
+50.00
918.27
+00.00
917.77
+50.00
916.92
+00.00
916.15
-0.67%
+00.00
917.50
+00.00
915.50
+00.00
915.94
+0.53%
Grade of Spl. Ditch Req'd. Median
(Plotted 25' Below Datum)
Grade of Spl. Ditch Req'd. Rt.
(Plotted 30' Below Datum)
Grade of Spl. Ditch Req'd. Lt.
(Plotted 34' Below Datum)

15 Lft. of 36" Pipe @ 0.34%
(Plotted 50' Below Datum)
Str. No. 525
11 Lft. of 36" Pipe @ 0.30%
(Plotted 50' Below Datum)
Str. No. 525F2
10 Lft. of 36" Pipe @ 0.30%
(Plotted 50' Below Datum)
Str. No. 525F1
Str. No. 526
Str. No. 527
Str. No. 520
Str. No. 519
Str. No. 518
Str. No. 517
Str. No. 516
Str. No. 515
Str. No. 514
Str. No. 513
Str. No. 511
Str. No. 510
Str. No. 508
Str. No. 504
900.37
900.61
901.63
901.73
901.42
902.03
903.33
903.81
903.71
903.57
903.47
901.32
901.29
901.19
901.16
900.93
900.88
900.78
900.71
901.87
901.97
902.85
902.88
902.71
902.20
902.15
912.34
905.01
904.35
904.25
913.55
913.45
70 Lft. of 36" Pipe @ 0.30%
(Plotted 50' Below Datum)
45 Lft. of 30" Pipe @ 0.31%
(Plotted 50' Below Datum)
45 Lft. of 36" Pipe @ 0.31%
(Plotted 50' Below Datum)
20 Lft. of 36" Pipe @ 0.35%
(Plotted 50' Below Datum)
70 Lft. of 36" Pipe @ 0.34%
(Plotted 50' Below Datum)
20 Lft. of 36" Pipe @ 0.30%
(Plotted 50' Below Datum)
10 Lft. of 30" Pipe @ 0.30%
(Plotted 50' Below Datum)
10 Lft. of 30" Pipe @ 0.40%
(Plotted 50' Below Datum)
15 Lft. of 36" Pipe @ 0.33%
(Plotted 50' Below Datum)
145 Lft. of 30" Pipe @ 0.30%
(Plotted 50' Below Datum)
220 Lft. of 30" Pipe @ 0.30%
(Plotted 50' Below Datum)
374 Lft. of 24" Pipe @ 0.30%
(Plotted 50' Below Datum)
300 Lft. of 24" Pipe @ 0.30%
(Plotted 50' Below Datum)

911.1 912.05 | 910.7 911.57 | 910.5 911.34 | 910.5 911.37 | 910.8 911.66 | 911.4 912.21 | 912.1 912.99 | 913.0 913.79 | 913.8 914.59 | 914.6 915.40 | 915.5 916.19 | 916.2 916.85 | 916.8 917.38 | 917.1 917.77 | 917.5 918.04 | 917.5 918.29 | 917.7 918.54 | 917.9 918.79 | 918.0 919.04 | 918.1 919.29 | 918.4 919.54 | 918.6 919.79 | 919.0 920.04 | 919.4 920.29 | 919.7 920.54 | 919.8 920.67 | 919.7 920.65 | 919.6 920.47 | 919.5 920.22 | 919.5 919.97 | 919.5 919.72

655+00 656+00 657+00 658+00 659+00 660+00 661+00 662+00 663+00 664+00 665+00 666+00 667+00 668+00 669+00 670+00

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

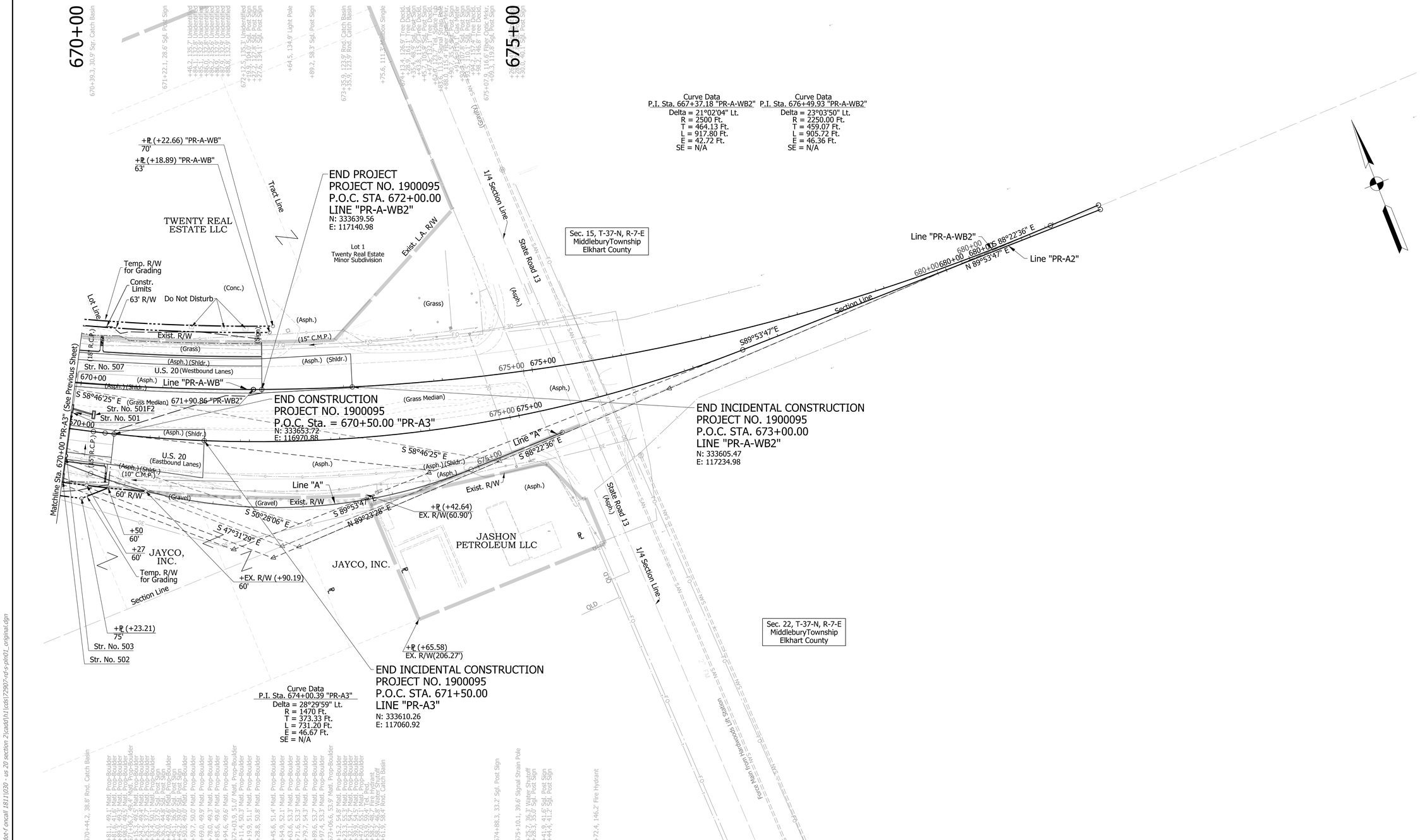
DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PROFILE
LINE "PR-A3"

SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
1"=10'	1900095
SURVEY BOOK	SHEETS PRF-07
	68 of 283
CONTRACT	PROJECT
R-42379	1900095

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Note:
Line "PR-A3" and "PR-B" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
LINE "PR-A3"

HORIZONTAL SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PLN-08
	69 of 283
CONTRACT	PROJECT
	1900095

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P.V.I. Sta. = 669+95.00
Elev. = 918.93
V.C. = 150.00'

END CONSTRUCTION
PROJECT NO. 1900095
P.O.C. STA. 670+50.00
LINE "PR-A3"
ELEV. 919.54

+75.00

Riprap, Revetment and
Geotextiles, Type 1A Req'd. Rt.

Str. No. 501
Str. No. 501F2

Existing Ground Along Line "PR-A3"

-0.50%

Profile Grade Along Line "PR-A3"

915.98
23.04 Lft. of 12.00" Pipe @ 1.04%
(Plotted at Datum)
915.74

Profile Grade Along Line "PR-A-WB2"

+0.81%

Existing Ground Along Line "PR-A-WB2"
(Plotted 20' Below Datum)

END PROJECT
PROJECT NO. 1900095
P.O.C. STA. 672+00.00
LINE "PR-A-WB2"
ELEV. 920.59

Grade of Spl. Ditch Req'd. Rt.
(Plotted 30' Below Datum)
+50.00
917.03

+3.00%
+00.00
915.50

+0.53%

+00.00
917.00

+00.00
915.94

Grade of Spl. Ditch Req'd. Lt.
(Plotted 34' Below Datum)

919.5 919.72 919.5 919.6 919.7 919.8 920.2 920.7 921.3 922.0 922.8 924.0 925.4 926.5

670+00 671+00 672+00 673+00 674+00 675+00 676+00 677+00 678+00 679+00 680+00 681+00

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PROFILE
LINE "PR-A3"

SCALE	BRIDGE FILE
1"=50'	
VERTICAL SCALE	DESIGNATION
1"=10'	1900095
SURVEY BOOK	SHEETS PRF-08
	70 of 283
CONTRACT	PROJECT
R-42379	1900095

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45+00

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

50+00

Sec. 9, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

SUNSHINE FINANCIAL LP
Lot 1

SPRING VALLEY EIGHTH A.P.U.D.

RICHARD D. BURNS, JR.

SPRING VALLEY PLAZA D.P.U.D.

CHAMBERS, JONATHAN ET AL.

MULLET INVESTMENTS, LLP

MULLET LIVING TRUST

CONSERVATIVE AND AMISH MENNONITE MUTUAL AID ASSOCIATION

Str. No. 210F1
Str. No. 210
Str. No. 210F2
Str. No. 209
Str. No. 108
Str. No. 209F2
Str. No. 109
Str. No. 208
Str. No. 105
Str. No. 105F2
Str. No. 105F1
Str. No. 110
Str. No. 102
Str. No. 104F2
Str. No. 104F1
Str. No. 104
Str. No. 103
Str. No. 101
Str. No. 213F1
Str. No. 213
Str. No. 211
Str. No. 212F1
Str. No. 212
Str. No. 212F2

Temp. R/W for Pond Constr. and Grading
Temp. R/W for Driveway Constr.
Temp. R/W for Grading
Temp. R/W For Driveway Constr.
Temp. R/W for Driveway Constr.
Temp. R/W for Grading
Temp. R/W for Grading

Exist. R/W
Exist. L.A. R/W
L.A. R/W & A.C.L.
60' L.A. R/W & A.C.L. 25' San. Sewer Esm't.
Ingress/Egress Esm't.
100' Retention Esm't.
Access Esm't.
Life Estate in favor of Vernon & Ada Mullet (Parcel 13D)

Line "PR-A2"
N 88°22'24" E
Line "A"
N 88°46'31" E
Line "PR-A3"
Line "S-1-A"
N 1°13'29" W
Section Line
U.S. 20
NYS
Spring Valley Drive
12" Iron

P.O.T. Sta. = 47+50.00 "S-1-A"
N: 338412.83
E: 110321.44

BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 47+73.00 "S-1-A"
N: 338435.82
E: 110320.95

P.O.T. Sta. = 49+78.74 "S-1-A"
= P.O.T. Sta. = 585+25.09 "PR-A3"
N: 338641.52
E: 110316.55

END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 49+45.74 "S-1-A"
N: 338608.52
E: 110317.26

+38 "PR-A3" 60' (Grass)
+60 "PR-A3" 66' R/W
+40 65'
+65 "PR-A3" 70'
+15 "PR-A3" 78'
+00 "PR-A2" 72'
+48 "PR-A2" 72'
+℄ (+37.43 "PR-A2")
+℄ (+37.58 "PR-A2") (Grass)
+℄ (+37.78 "PR-A2") 87'
+℄ (+37.51 "PR-A2") 67'
+00 "PR-A2" 87'
+℄ (+92.52 "PR-A2") 67'
+℄ (+92.43 "PR-A2")
+℄ (+97.53 "PR-A2") (67')
+℄ (+97.42 "PR-A2")
+48 "PR-A2" 117'
+73 40'
+15 40'
+EX. R/W (+40.00) 30'
+EX. R/W (+73) 30'
+73 45'
+EX. R/W (+18) 30'
+41 45'
+41 90'
EX. R/W (60.58')
EX. R/W (59.49')
EX. R/W (58.75')
EX. R/W (30.00')
R/W (Conc.)
(Asphalt)
(Concrete)
(Sidwk.)
(Ditch)
(Top of Slope)
(Grass)
(Asphalt) (Slope)
(Slope) (Top of Slope)
(Asphalt) (Top of Slope)
(Slope) (Top of Slope)
(Asphalt) (Slope)
(Slope) (Top of Slope)
(Asphalt) (Slope)
(Slope) (Top of Slope)
(Asphalt) (

45+00

50+00

55+00

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

Sec. 9, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

LONG'S CONVENIENCE, LLC

CHANTY LONG
ET UX.

NORTHRIDGE
MALL, INC.
Lot 1
Lot 4

NORTHRIDGE CENTRE
D.P.U.D. SECONDARY

MIDDLEBURY COMMUNITY
SCHOOLS

Str. No. 213F2
℄ +℄ (+03.52 "PR-A3")
78'
+℄ (+03.65 "PR-A3")
60'
(Asph. Parking Lot)
L.A. R/W
+75 "PR-A3"
60'
(Asph. Parking Lot)
+73 "PR-A3"
65'
(Canopy)
Str. No. 214F1
+03
38'
Str. No. 214
+R/W (+71.00)
30'
Str. No. 214F2
+61
35'
+88
35'
+R/W (+88)
30'
Exist. R/W
P.O.T. Sta. = 47+50.00 "S-2-A"
N: 338423.73
E: 110831.29
South Heritage
Drive
N 1°13'30" W
Line "S-2-A"
Str. No. 216
(Asph.) Str. No. 217
Exist. R/W
BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 48+25.00 "S-2-A"
N: 338498.71
E: 110829.69
+R/W (+88)
30'
Str. No. 215
+88
45'
+03
37'
+02.84
45.44'
+R/W (+28.62)
30'
Temp. R/W
for Grading
+96.39 "PR-A3"
57.52'
+05 "PR-A3"
62'
Str. No. 218
Str. No. 219F1
Str. No. 219
Str. No. 219F2
Exist. L.A. R/W
Line "PR-A2"
N 88°22'24" E
(Asph.) (Shldr.)
U.S. 20
Line "A"
Exist. R/W
(Asph.)
(Sign)
(Grass)
(Bldg.)
(Sdwk.)
(Grdrl.)
Section Line
Str. No. 227
Temp. R/W for Driveway Constr.
R/W
+49 "PR-A2"
117'
+49 "PR-A2"
77'
(Grass)
Temp. R/W for Grading
Str. No. 228
+11 "PR-A2"
112'
+11 "PR-A2"
77'
Str. No. 229
Temp. R/W For
Driveway Constr.
(Gravel)
(Conc.)
+℄ (+02.46 Line "PR-A2")
112'
+05 "S-2-A"
℄(33.04')
Exist. R/W
END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 51+25.00 "S-2-A"
N: 338798.65
E: 110823.28
P.O.T. Sta. = 52+50.00 "S-2-A"
N: 338923.62
E: 110820.60
Str. No. 230
Temp. R/W for Public Road Constr.
+05 "S-2-A"
50'
+82"PR-A2"
74'
Temp. R/W for Driveway Constr. and Grading
Str. No. 223F1
Line "PR-A3"
P.O.T. Sta. = 49+82.10 "S-2-A"
= P.O.C. Sta. = 590+35.07 "PR-A3"
N: 338655.78
E: 110826.33
(Field Verify Connection to Existing Parking Lot)
Str. No. 223
Str. No. 223F2
Str. No. 224
Temp. R/W for Grading
R/W

930 930
925 925
920 920
915 915
910 910
905 905
900 900
895 895
890 890
885 885
880 880
875 875
870 870
865 865
860 860
855 855
850 850

P.V.I. Sta. = 49+00.00
Elev. = 892.90
V.C. = 90.00'
Str. No. 217
30 Lft. of 12" Pipe @ 0.34% Lt.
(Plotted 20' Above Datum)
19 Lft. of 12" Pipe @ 0.41% Lt.
(Plotted 20' Above Datum)
Str. No. 217F2
Str. No. 217F1
Paving Exception
See "PR-A3" Plan Profile Sheets
+23.32
891.00
+25.00
893.50
888.68
888.66
888.58
888.58
+2.46%
Grade of Spl. Ditch Req'd. Lt.
(Plotted 15' Above Datum)
Existing Ground Along Line "S-2-A"
Profile Grade Along Line "S-2-A"
-1.03%
+2.00%
+0.40%
-0.56%
BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 48+25.00
LINE "S-2-A"
ELEV. 893.67
34 Lft. of 18" Pipe @ 0.30% Rt.
(Plotted at Datum)
Str. No. 218
Str. No. 219
887.86
887.76
+25.00
892.10
+00.00
890.74
+40.00
891.04
-1.81%
+0.75%
Grade of Spl. Ditch Req'd. Rt.
(Plotted 20' Below Datum)
END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 51+25.00
LINE "S-2-A"
ELEV. 894.06
+88.00
+00.00
Sodding Req'd. Rt.

893.9 893.8 893.4 893.41 892.7 893.24 892.8 893.90 894.62 893.2 894.48 894.0 894.20 894.1 894.1

47+00 48+00 49+00 50+00 51+00 52+00

Note:
Line "S-2-A" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
LINE "S-2-A"

SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PP-02
ELECTRONIC	72 of 283
CONTRACT	PROJECT
R-42379	1900095

lucarlson
7/12/2024 9:58:48 am
model:Sheet3
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Sec. 9, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

Curve Data
P.I. Sta. 47+36.60 "PR-S-3-A"
Delta = 74°30'48" Rt.
R = 220.00 Ft.
T = 167.33 Ft.
L = 286.11 Ft.
E = 56.41 Ft.
SE = N/A

Curve Data
P.I. Sta. 595+92.03 "PR-A2"
Delta = 43°21'30" Rt.
R = 1435.00 Ft.
T = 570.45 Ft.
L = 1085.93 Ft.
E = 109.23 Ft.
SE = N/A

45+00

50+00

55+00

P.O.T. Sta. = 596+93.43 "PR-A3"
= P.O.T. Sta. = 49+17.08 "PR-S-3-A"
N: 338514.44
E: 111463.44

P.T. Sta. = 48+55.38 "PR-S-3-A"
N: 338458.74
E: 111436.92

P.I. Sta. = 47+36.60 "PR-S-3-A"
N: 338307.66
E: 111364.98

BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 46+75.00 "PR-S-3-A"
N: 338283.47
E: 111430.88

BEGIN INCIDENTAL CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 46+25.00 "PR-S-3-A"
N: 338239.43
E: 111454.33

P.C. Sta. = 45+69.27 "PR-S-3-A"
N: 338198.00
E: 111491.37

P.C. Sta. = 50+24.18 PR-S-3-A"
N: 338611.14
E: 111509.48

P.I. Sta. = 51+10.50 "PR-S-3-A"
N: 338689.08
E: 111546.59

P.T. Sta. = 51+78.88 "PR-S-3-A"
N: 338690.92
E: 111632.89

END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 52+25.00 "PR-S-3-A"
N: 338691.91
E: 111678.99

END INCIDENTAL CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 52+75.00 "PR-S-3-A"
N: 338692.98
E: 111728.98

Str. No. 336
Str. No. 334
Str. No. 335
Str. No. 338
Str. No. 337
Str. No. 333
Str. No. 332
Str. No. 331
Str. No. 330F1
Str. No. 345F1
Str. No. 345
Str. No. 344F1
Str. No. 344
Str. No. 344F2

DUTCHMAN HOSPITALITY GROUP, INC.

MIDDLEBURY COMMUNITY SCHOOLS

MIDDLEBURY SCHOOLS BUILDING CORPORATION
Leasehold Interest in favor of Middlebury Community Schools (Parcel 49A)

Temp. R/W for Public Road Constr. and Grading

Temp. R/W for Pond Constr. and Grading

Temp. R/W for Grading

Temp. R/W for Public Road Constr. and Grading

Wayne Street (Asph.)

Frontier Aerial

Do Not Disturb Building

(Asph. Parking Lot)

Exist. L.A. R/W

Exist. R/W

Exist. Section Line

Line "PR-A2"

Line "PR-S-3-A"

Line "PR-A3"

Line "S-3-A"

Line "A"

Matchline Sta. 53+75 "PR-S-3-A"

P.V.I. Sta. = 47+30.00
Elev. = 895.75
V.C. = 100.00'

P.V.I. Sta. = 48+44.00
Elev. = 893.00
V.C. = 125.00'

P.V.I. Sta. = 49+10.24
Elev. = 894.05

P.V.I. Sta. = 49+70.32
Elev. = 896.43

P.V.I. Sta. = 50+59.00
Elev. = 898.50
V.C. = 100.00'

P.V.I. Sta. = 51+60.00
Elev. = 897.45
V.C. = 100.00'

P.V.I. Sta. = 52+25.00
Elev. = 897.74

Sodding Req'd. Lt.
Sodding Req'd. Rt.

12 Lft. of 12" Pipe @ 0.84% Lt.
(Plotted 20' Above Datum)

15 Lft. of 12" Pipe @ 0.42% Rt.
(Plotted at Datum)

17 Lft. of 12" Pipe @ 0.43% Rt.
(Plotted at Datum)

Paving Exception
See "PR-A3" Plan Profile Sheets

Grade of Spl. Ditch Req'd. Lt.
(Plotted 20' Above Datum)

Grade of Spl. Ditch Req'd. Rt.
(Plotted 20' Below Datum)

Grade of Spl. Ditch Req'd. Rt.
(Plotted at Datum)

Existing Ground Along Line "PR-S-3-A"

Profile Grade Along Line "PR-S-3-A"

BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 46+75.00
LINE "PR-S-3-A"
ELEV. 896.35

END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 52+25.00
LINE "PR-S-3-A"
ELEV. 897.74

Note:
Line "PR-S-3-A" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
LINE "PR-S-3-A"

SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PP-03
ELECTRONIC	73 of 283
CONTRACT	PROJECT
R-42379	1900095

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7/12/2024 9:58:48 am
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Sec. 16, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

45+00

50+00

Str. No. 427

Str. No. 429

+25 "PR-A3"
60'

+50 "PR-A3"
68'

(Conc. Parking Lot)

LAVERN R. & VICKI L. WINGARD

Str. No. 426

+40 "PR-A3"
60'

R/W

+R/W (+47.04 "PR-A3")
68'

+40
95'

P.I. Sta. = 48+34.45 "S-4-A"
N: 335223.74
E: 114934.22

+50
R/W (78.49')
(Grass)

R/W

Str. No. 425

Temp. R/W for Driveway Constr. & Grading

Curve Data
P.I. Sta. 48+34.45 "S-4-A"
Delta = 20°22'28" Rt.
R = 470.00 Ft.
T = 84.46 Ft.
L = 167.13 Ft.
E = 7.53 Ft.
SE = N/A

+75
32'

+40
32'

R/W

+R/W (+40)
EX. R/W(6.97')

P.C. Sta. = 47+50.00 "S-4-A"
N: 335145.69
E: 114901.96

N 22°27'43" E

Line "S-4-A"

N 42°50'11" E

+10
32'

Str. No. 430

(Sign)

R/W

+07
42'

R/W

(Grass)

BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.C. Sta. = 47+50.00 "S-4-A"
N: 335145.69
E: 114901.96

County Road 37
(Asph.)

Section Line

Exist. R/W

Exist. R/W

+R/W (+40)
15'

+40
32'

+40
42'

P.T. Sta. = 49+17.13 "S-4-A"
N: 335285.68
E: 114991.65

+46 "PR-A3"
92'

+40 "PR-A3"
82'

+35 "PR-A3"
92'

+35 "PR-A3"
82'

(Gravel)

(Block Wall)

(Gravel)

(Block Wall)

R/W

R/W

(Sign)

Temp. R/W for Grading

MMPC LAND HOLDING LLC

EXIST. R/W

EXIST. R/W

EXIST. R/W

(Grdnl.)

Line "PR-A2"
S 46°35'02" E

S 47°31'29" E
Line "A"

(Asph.)(Shldr.)

Line "A"
S 47°31'29" E

(Shldr.) (Asph.)

Line "PR-A2"
S 46°35'02" E

(Asph.) S 46°35'02" E

(Asph.) (Shldr.)

U.S. 20

EXIST. R/W

(Grass)

Perpetual Highway Easement

R/W

P.O.T. Sta. = 49+77.50 "S-4-A"
= P.O.T. Sta. = 644+82.43 "PR-A3"
N: 335329.95
E: 115032.69

+50 "PR-A2"
120'

DUTCHMAN HOSPITALITY GROUP, INC.

(Cultivated Field)

+80 "PR-A2"
155'

Perpetual Highway Easement

(Asph. Pedestrian Path)

EXIST. R/W

R/W

END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 49+20.08 "S-4-A"
N: 335287.84
E: 114993.65

Sec. 15, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

P.V.I. Sta. = 48+59.54
Elev. = 912.30
V.C. = 80.00'

BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.C. STA. 47+50.00
LINE "S-4-A"
ELEV. 912.91

-0.56%

-1.19%

END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 49+20.08
LINE "S-4-A"
ELEV. 911.58

Existing Ground Along Line "S-4-A"

Profile Grade Along Line "S-4-A"

912.9 912.91
912.6 912.63
912.3 912.32
911.8 911.82
910.9
910.8

950 945 940 935 930 925 920 915 910 905 900 895 890 885 880 875 870

47+00 48+00 49+00 50+00 51+00

Note:
Line "S-4-A" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

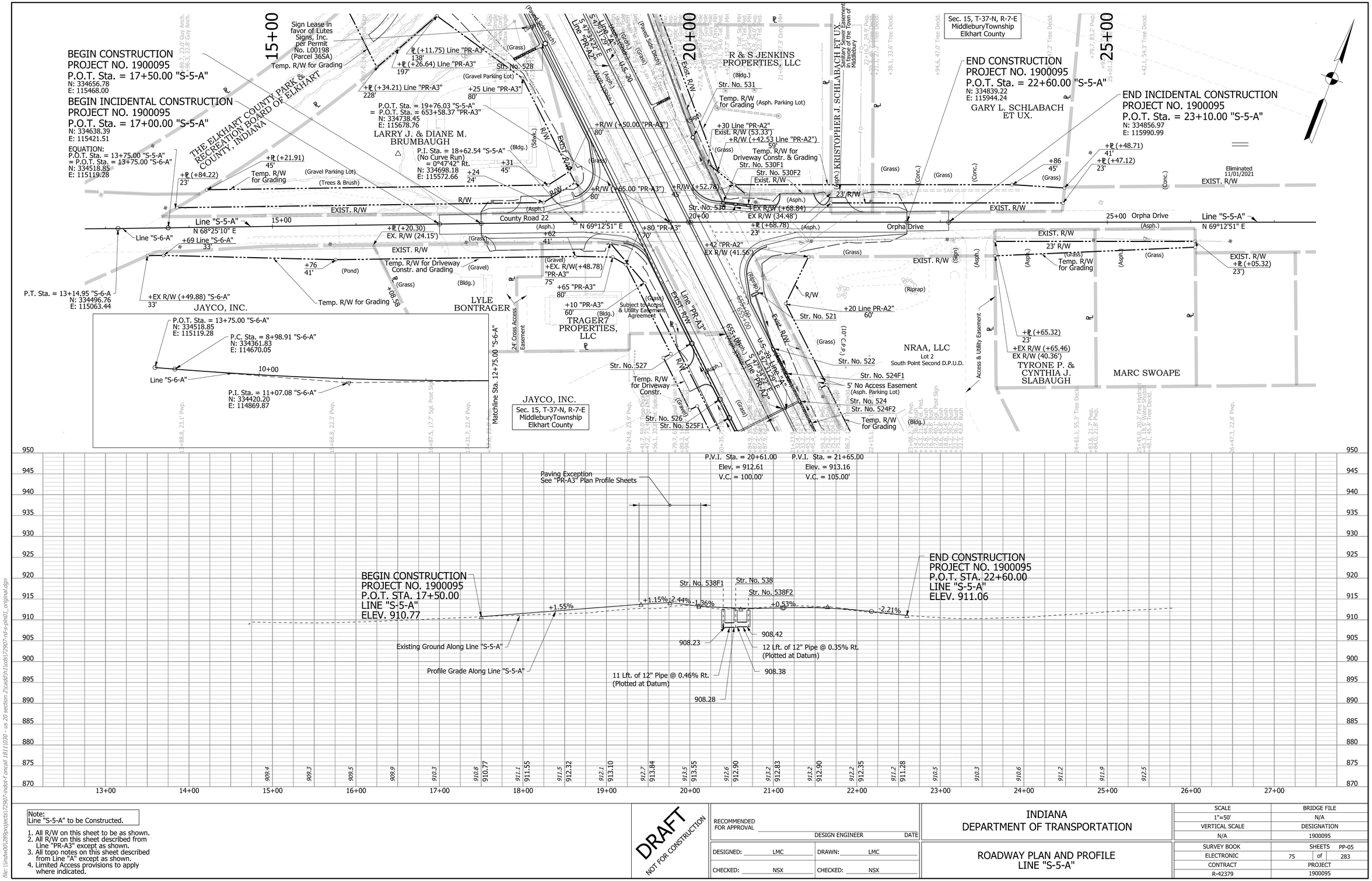
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
LINE "S-4-A"

SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PP-04
ELECTRONIC	74 of 283
CONTRACT	PROJECT
R-42379	1900095

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Note:
Line "S-5-A" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
LINE "S-5-A"

SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PP-05
ELECTRONIC	75 of 283
CONTRACT	PROJECT
R-42379	1900095

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65+00

70+00

Sec. 17, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

Sec. 8, T-37-N, R-7-E
MiddleburyTownship
Elkhart County

Line "PR-A3"

JAMES E. &
PEGGY S.
MOWAT
Lot 68

Lot 67

ERIN CT.

Exist. R/W

+EX. R/W (+95.18)
EX. R/W (57.20')

+Ex. R/W (+66.19)
Ex. R/W (30.21')

Temp. R/W
for Grading

+39
46'

+EX. R/W (+39.00)
31'

Westlake Drive
Line "S-8-A"
N 1°57'55" W

P.O.T. Sta. = 67+50.00 "S-8-A"
N: 338381.88
E: 109013.57

BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 68+43.00 "S-8-A"
N: 338474.83
E: 109010.38

Str. No. 007F2
Str. No. 007
Str. No. 007F1

+EX. R/W (+39.00)
EX. R/W(29.23')

+39
44'

Temp. R/W for
Driveway Constr.

+EX. R/W (+45.32 "PR-A3")
72'

+59 "PR-A3"
77'

CLAUDIA LN.

MAYNARD J. & LAURA
HOCHSTETLER

ERIC W.
KAUFFMAN

R/W

Line "PR-A2" N 88°22'24" E

U.S. 20

(Asph.)

(Grass)

(Conc.)

(Shldr.)

(Top of Slope)

(Trees and Brush)

570+00

572+00

R/W
(DES 1600517)

+P (+71.12 "PR-A2")
70'

Str. No. 012

END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. Sta. = 69+51.55 "S-8-A"
N: 338583.31
E: 109006.65

P.O.T. Sta. = 69+84.55 "S-8-A"
= P.O.T. Sta. = 572+13.72 "PR-A3"
N: 338616.29
E: 109005.52

P.O.T. Sta. = 70+00.00 "S-8-A"
N: 338631.73
E: 109004.99

Str. No. 009

Str. No. 008

Temp. R/W for Grading

R/W
(DES 1600517)

NORTHRIDGE HIGH SCHOOL

P.V.I. Sta. = 69+00.00
Elev. = 903.59
V.C. = 104.00'

+00.00

+27.00

Sodding Req'd. Lt.

9 Lft. of 12" Pipe @ 0.45% Rt. (Plotted 25' Above Datum)

899.70

35 Lft. of 12" Pipe @ 0.52% Rt. (Plotted 25' Above Datum)

899.52

899.42

899.38

898.99

42 Lft. of 12" Pipe @ 0.46% Rt. (Plotted 25' Above Datum)

899.18

Profile Grade Along Line "S-8-A"

Existing Ground Along Line "S-8-A"

-1.28%

-1.64%

2.00%

BEGIN CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 68+43.00
LINE "S-8-A"
ELEV. 904.32

+48.00
903.00

END CONSTRUCTION
PROJECT NO. 1900095
P.O.T. STA. 69+51.55
LINE "S-8-A"
ELEV. 904.63

+27.00
901.62

Grade of 4' Flat Bottom Spl. Ditch Req'd. Lt.
(Plotted at Datum)

904.8 904.3 904.24 904.0 904.02 903.8 904.59

950 940 930 920 910 900 890 880 870

67+00 68+00 69+00 70+00 71+00

Note:
Line "S-8-A" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED
FOR APPROVAL
DESIGN ENGINEER DATE

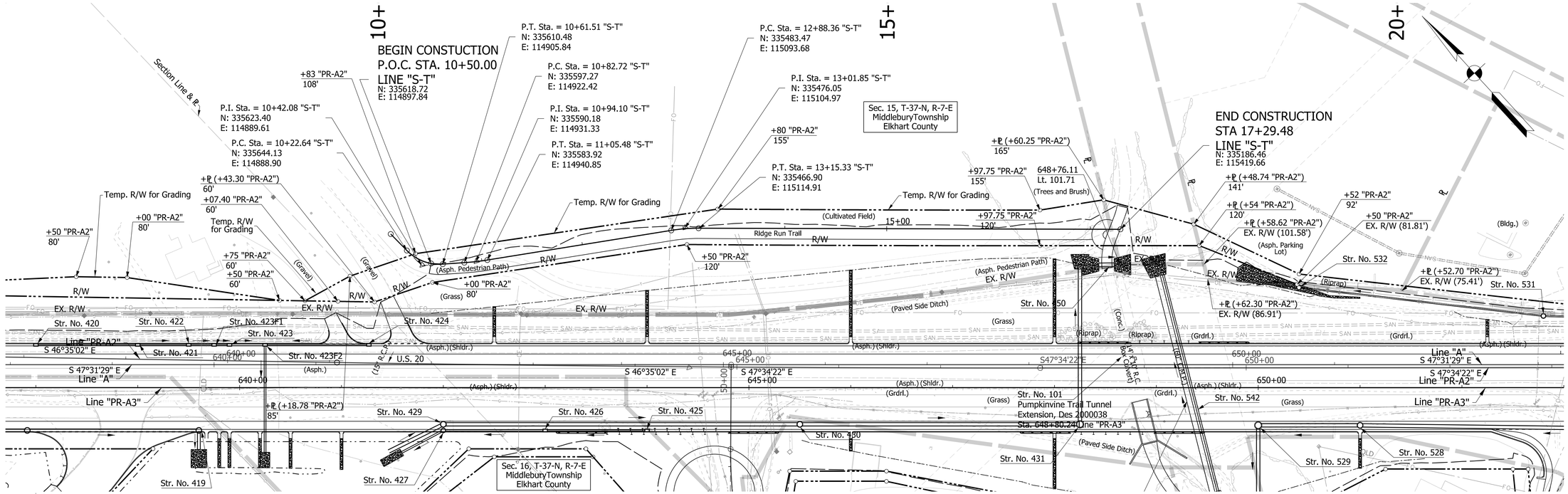
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CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
LINE "S-8-A"

SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PP-06
ELECTRONIC	76 of 283
CONTRACT	PROJECT
R-42379	1900095

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Note:
Line "S-T" to be Constructed.

1. All R/W on this sheet to be as shown.
2. All R/W on this sheet described from Line "PR-A3" except as shown.
3. All topo notes on this sheet described from Line "A" except as shown.
4. Limited Access provisions to apply where indicated.

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

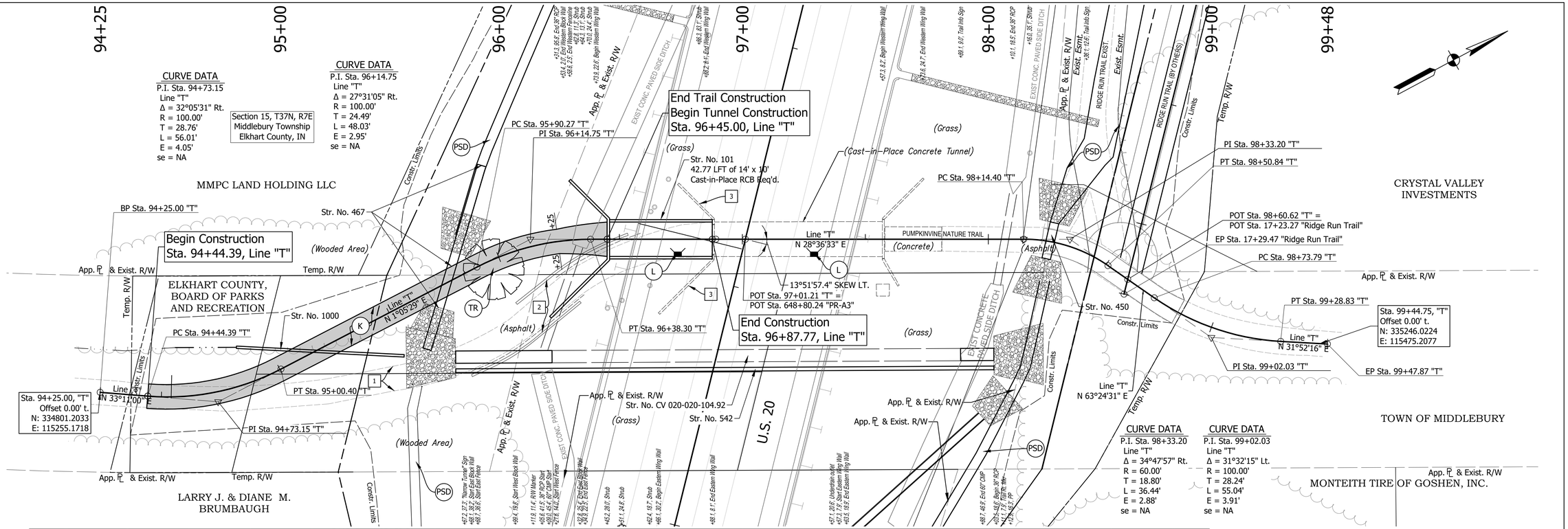
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CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
LINE "S-T"

SCALE	BRIDGE FILE
1"=50'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS PP-07
ELECTRONIC	77 of 283
CONTRACT	PROJECT
R-42379	1900095

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NOTE:
See U.S. 20 Road Widening Plans for Drainage Structure Info.

EARTHWORK SUMMARY

CUT (COMMON EXCAVATION)			
Line "T"			6 CYS
FILL			
Line "T"			488 CYS
Recommended shrinkage factor (Fig. 17-2C)			25%
FILL +	25%		610 CYS
USEABLE CUT			
50% of Excavated Material Line "T"			
Common Excavation			6 CYS
Unsuitable =		-	3 CYS
		=	3 CYS
BORROW			
610	- 3	= 607 =>	610 CYS

HMA FOR SIDEWALK
(K) 140 lb/yd² HMA Surface, Type B, on 220 lb/yd² HMA Intermediate, Type B, on 6" Compacted Aggregate No. 53, Base on Subgrade Treatment Type III
(PSD) Proposed Concrete Paved Side Ditch (See Road Plans)

(L) Vandal-Proof Light
(TR) Tree Removal

NOTE TO REVIEWER:
LIGHT FIXTURE AND ELECTRICAL TO BE PROVIDED AT NEXT SUBMITTAL.

CONSTRUCTION NOTES:
1 Sawcut & Remove Existing Asphalt Trail
2 Remove Existing Railings & Modular Block Walls
3 Sawcut & Remove Existing Wingwalls

DRAFT NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: JAD DRAWN: ABM
CHECKED: MAH CHECKED: JAD

INDIANA DEPARTMENT OF TRANSPORTATION

PUMPKINVINE TRAIL
PLAN & PROFILE LINE "T"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2000038
SURVEY BOOK	SHEETS PP-16
ELECTRONIC	67 of 271
CONTRACT	PROJECT
R-42379	2000038

DIRECTORY.....F:\2019\19-4220.US 20 Widening\30 SheetDrawings\
FILE NAME.....PUMPKINVINE PP&P.dwg
DIMSCALE..1 LTSCALE...1
PLOTTED BY...amahney
DATE.....Nov 10,2022 - 6:00pm

Temp R/W for Sidewalk Construction

Sta. 582+15.56 "PR-A3"
Lt. 144.60
Elev. 892.19

Return Curb

Sta. 582+15.56 "PR-A3"
Lt. 138.55
Elev. 892.10

Sta. 582+15.56 "PR-A3"
Lt. 133.30
Elev. 892.05 EX.
T.C. and B.C.

Sta. 582+15.56 "PR-A3"
Lt. 110.13
Elev. 891.88 EX.
T.C. and B.C.

Return Curb

Sta. 582+15.56 "PR-A3"
Lt. 99.95
Elev. 892.14
T.C.

Sta. 582+15.56 "PR-A3"
Lt. 91.95
Elev. 892.26

Sta. 582+15.56 "PR-A3"
Lt. 78.66
Elev. 892.68

MATCH LINE (see next sheet)

Sta. 582+15.56 "PR-A3"
Lt. 70.66
Elev. 892.72

6.05' 5.25' 10' 8' 13.29' 8'

1.49% 0.96% 2.60% 1.50% 3.16% 0.50%

0.33% 0.37% R 1.25% EX. 0.37% EX. 1.00% 1.00% F 1.00% 0.00%

6.05' 8' 0.90% 0.90% 8'

Northridge Highschool Access

Sta. 582+09.73 "PR-A3"
Lt. 146.25
Elev. 892.17

1.25% 0.96% 2.80% 1.50% 3.16% 1.50%

5' 1.00% F 1.50% 0.60% 8'

Sta. 582+04.92 "PR-A3"
Lt. 147.61
Elev. 892.22

Sta. 582+07.56 "PR-A3"
Lt. 133.35
Elev. 892.02 EX.
T.C. and B.C.

Sta. 582+07.56 "PR-A3"
Lt. 109.96
Elev. 891.78 EX.
T.C. and B.C.

Return Curb

Sta. 582+07.56 "PR-A3"
Lt. 99.95
Elev. 892.06
T.C.

Sta. 582+07.56 "PR-A3"
Lt. 78.66
Elev. 892.60

Sta. 582+07.56 "PR-A3"
Lt. 70.66
Elev. 892.72

MATCH LINE (see next sheet)

Return Curb

Sta. 582+07.56 "PR-A3"
Lt. 138.55
Elev. 892.07

Sta. 582+07.56 "PR-A3"
Lt. 91.95
Elev. 892.18

Sta. 582+02.74 "PR-A3"
Lt. 139.91
Elev. 892.10

To US 20

Constr. Limit

Constr. Limit

Prop R/W

QUANTITIES

Curb Ramp, Concrete - 37.4 SYS
Sidewalk, Concrete - 8.0 SYS
Detectable Warning Surface - 3.6 SYS

Legend:

- Turning Space
- Clear Space
- Detectable Warning Surface
- (F) Sidewalk Concrete
- [R] Curb Ramp
- [FS] Flare Side
- [SB] Setback
- T.C. - Top of Curb
- B.C. - Bottom of Curb

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

CURB RAMP DETAILS
NORTHRIDGE HIGH SCHOOL ACCESS
NORTH -SOUTH CROSSING

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS CR-02
	109 of 283
CONTRACT	PROJECT
	1900095

kleisure
7/15/2024 12:46:57 pm
model:Sheet2
file: \\nwk001\389projects\72907-ndot-f oncall 18111020 - us 20 section 2\cadd\h1\cds\72907-rd-s-idth01.dgn

Line "PR-A3"

Prop. R/W

MATCH LINE (see previous sheet)

Sta. 582+25.56 "PR-A3"
Lt. 56.67
Elev. 894.21

Sta. 582+15.56 "PR-A3"
Lt. 56.67
Elev. 893.65

Sta. 582+15.56 "PR-A3"
Lt. 70.67
Elev. 892.72

Sta. 582+25.56 "PR-A3"
Lt. 48.67
Elev. 894.09

Sta. 582+15.56 "PR-A3"
Lt. 48.67
Elev. 893.53

Sta. 582+15.57 "PR-A3"
Lt. 43.00
Elev. 893.41
T.C. and B.C.

Sta 582+15.57 "PR-A3"
Lt. 35.00
Elev. 893.76

Sta. 582+07.56 "PR-A3"
Lt. 70.67
Elev. 892.72

Sta. 582+07.56 "PR-A3"
Lt. 56.67
Elev. 893.70

Sta 582+07.57 "PR-A3"
Lt. 35.00
Elev. 893.81

Sta. 582+07.57 "PR-A3"
Lt. 43.00
Elev. 893.46
T.C. and B.C.

Sta. 582+07.56 "PR-A3"
Lt. 48.67
Elev. 893.58

To Northridge Highschool

MATCH LINE (see previous sheet)

U.S. 20

Sta. 582+23.56 "PR-A3"
Rt. 48.67
Elev. 894.10

Sta. 582+15.56 "PR-A3"
Rt. 48.67
Elev. 893.76

Sta. 582+15.55 "PR-A3"
Rt. 43.00
Elev. 893.41
T.C. and B.C.

Sta 582+15.53 "PR-A3"
Rt. 33.00
Elev. 893.84

Sta 582+07.53 "PR-A3"
Rt. 33.00
Elev. 893.89

Sta. 582+07.55 "PR-A3"
Rt. 43.00
Elev. 893.45
T.C. and B.C.

Sta. 582+07.56 "PR-A3"
Rt. 48.67
Elev. 893.80

Sta. 581+99.56 "PR-A3"
Rt. 48.67
Elev. 894.24

Sta. 582+23.56 "PR-A3"
Rt. 56.67
Elev. 894.22

Sta. 582+15.56 "PR-A3"
Rt. 56.67
Elev. 893.88

Sta. 582+07.56 "PR-A3"
Rt. 56.67
Elev. 893.92

Sta. 581+99.56 "PR-A3"
Rt. 56.67
Elev. 894.36

QUANTITIES
Curb Ramp, Concrete - 58.7 SYS
Detectable Warning Surface - 3.6 SYS

Note:
See Typical Sections for Cross Slopes in Clear Space.

Legend:
- Turning Space
- Clear Space
- Detectable Warning Surface
- (F) Sidewalk Concrete
- [R] Curb Ramp
- [FS] Flare Side
- [SB] Setback
- T.C. - Top of Curb
- B.C. - Bottom of Curb

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

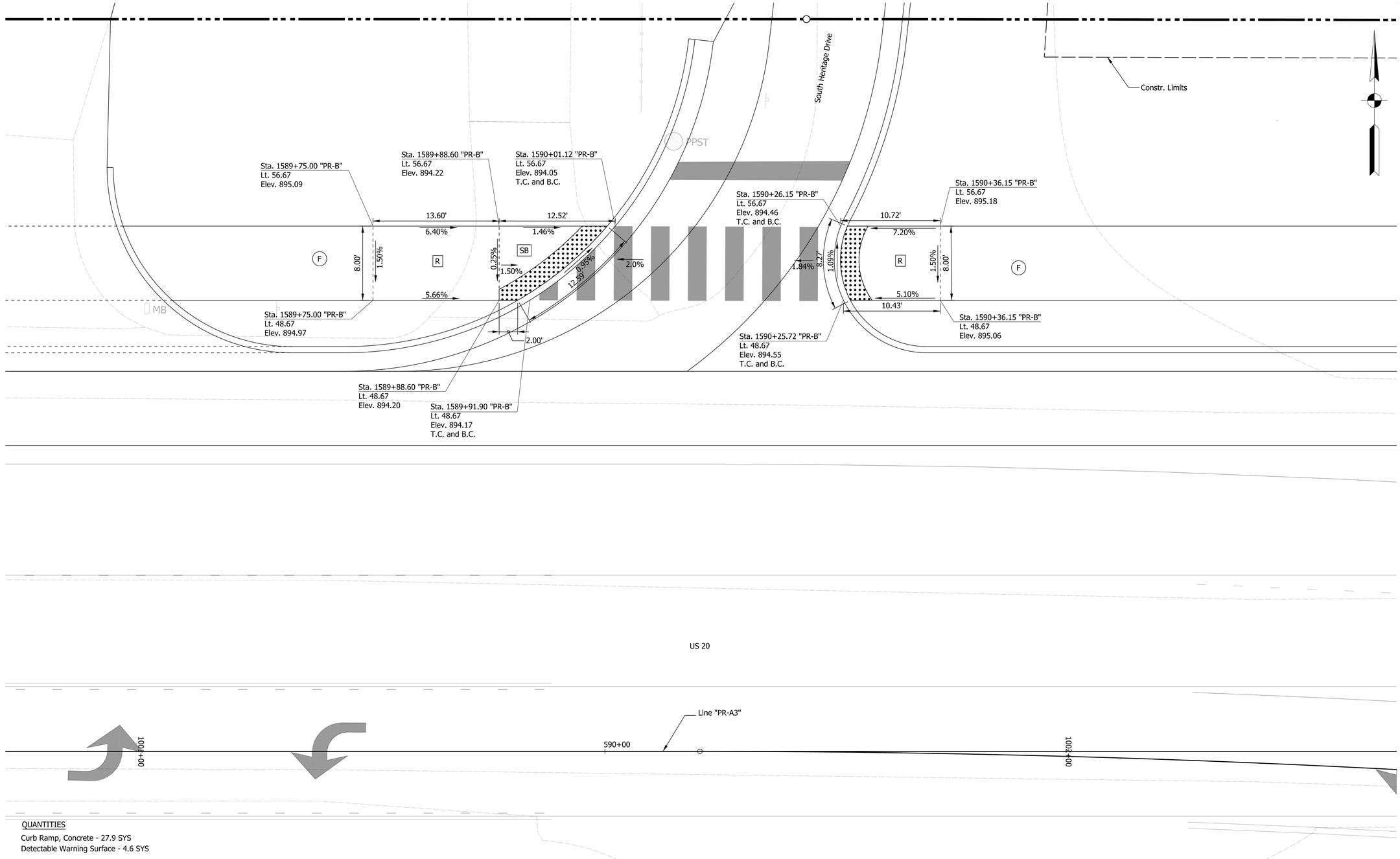
DESIGNED: LMC | DRAWN: LMC
CHECKED: NSX | CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

CURB RAMP DETAILS
US 20 MID-BLOCK (STA 582+00)
NORTH - SOUTH CROSSING

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS CR-03
	110 of 283
CONTRACT	PROJECT
	1900095

kleisure
7/15/2024 12:46:58 pm
model:Sheet3
file: \\indot\i3$\projects\172907-indot-f oncall\ 1811030 - us 20 section 2\cad\fs1\cds\172907-rd-s-idfs01.dgn



QUANTITIES

Curb Ramp, Concrete - 27.9 SYS

Detectable Warning Surface - 4.6 SYS

Note:
See Typical Sections for Cross Slopes in Clear Space.

Legend:

- Turning Space
- Clear Space
- Detectable Warning Surface
- (F) Sidewalk Concrete
- [R] Curb Ramp
- [FS] Flare Side
- [SB] Setback
- T.C. - Top of Curb
- B.C. - Bottom of Curb

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: LMC DRAWN: LMC

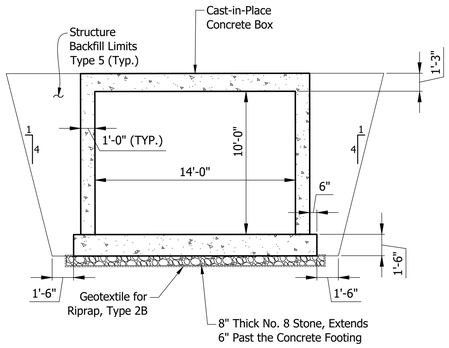
CHECKED: NSX CHECKED: NSX

INDIANA
DEPARTMENT OF TRANSPORTATION

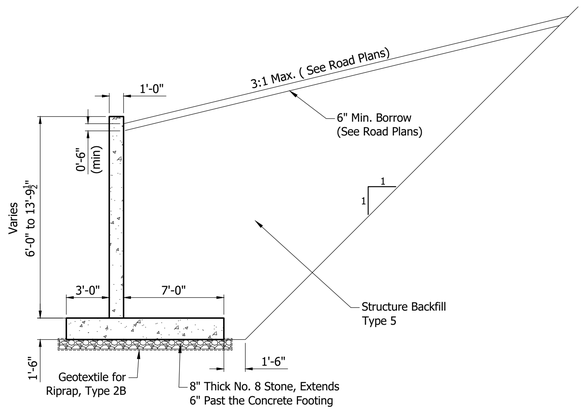
CURB RAMP DETAILS
US 20 AT S. HERITAGE DRIVE
NE AND NW QUADRANTS

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS CR-04
	111 of 283
CONTRACT	PROJECT
	1900095

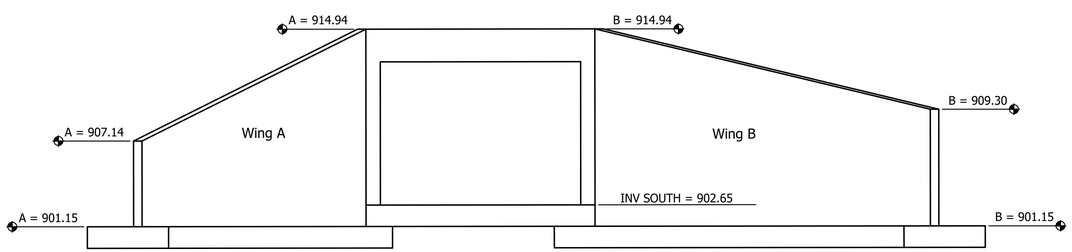
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7/15/2024 12:46:59 pm
model:Sheets
file:\\indot\d0286projects\72907\indot-f oncall II\811030 - us 20 section 2\cadd\ln1\cds\72907-rd-s-idhd01.dgn



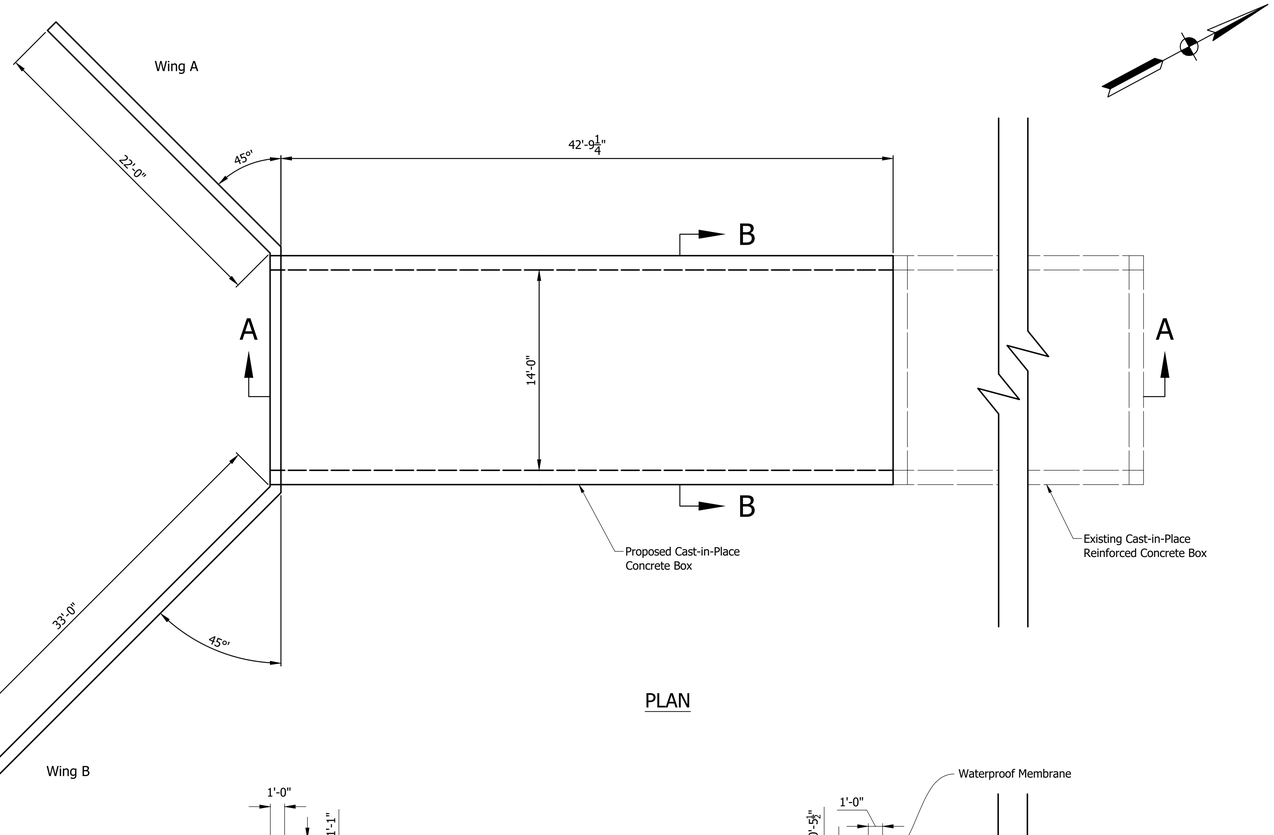
SECTION B-B



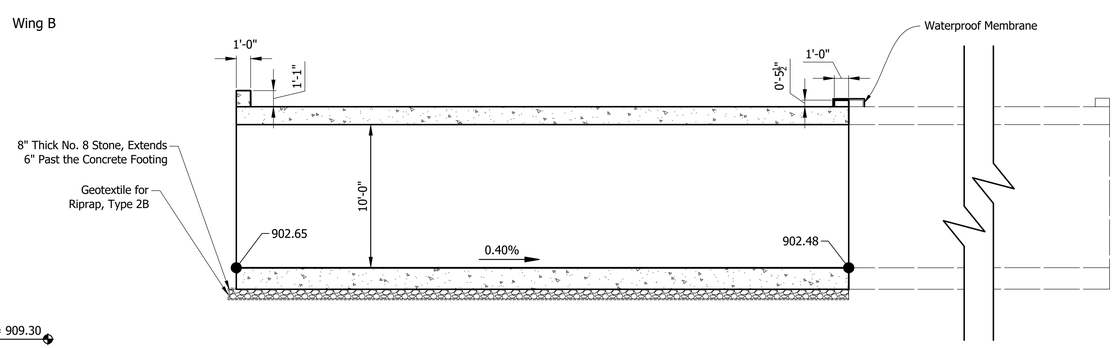
TYPICAL WINGWALL SECTION



ELEVATION



PLAN



SECTION A-A

NOTE:
PROPOSED STRUCTURE WILL BE DOWELED INTO THE EXIST. STRUCTURE WITH FIELD DRILLED HOLES AND CHEMICAL ANCHORS.

US 20 OVER PUMPKINVINE TRAIL
CAST-IN-PLACE REINFORCED CONCRETE STRUCTURE
14'-0" SPAN x 10'-0" RISE
SKEW: 13°51'57.4" LEFT
STA. 648+80.24 "PR-A3"
ELKHART COUNTY

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

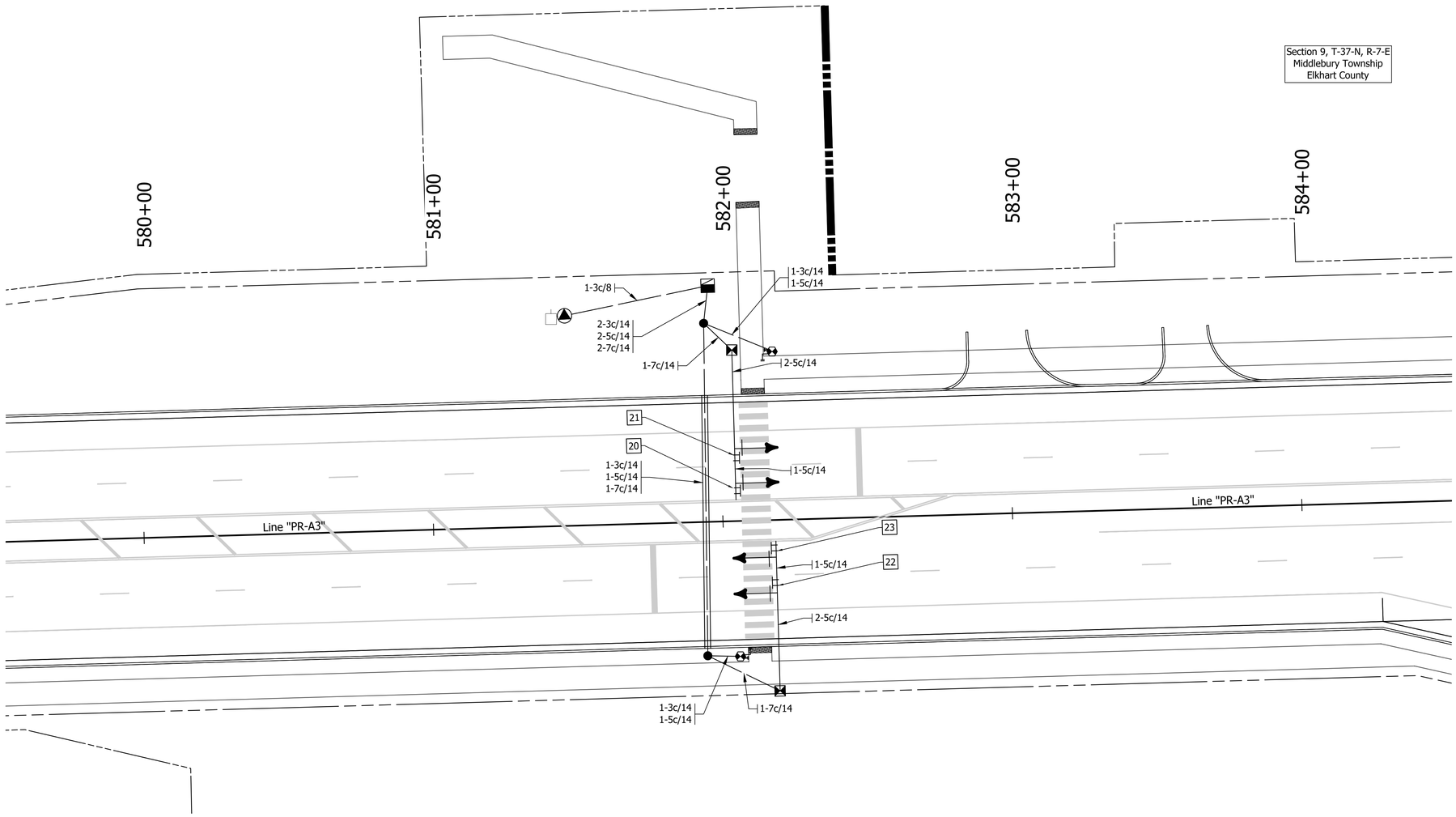
DESIGNED: JAD DRAWN: ABM
CHECKED: MAH CHECKED: JAD

INDIANA
DEPARTMENT OF TRANSPORTATION

PUMPKINVINE TRAIL
STRUCTURE EXTENSION

HORIZONTAL SCALE	BRIDGE FILE
1" = 5'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	2000038
SURVEY BOOK	SHEETS GP-01
ELECTRONIC	155 of 271
CONTRACT	PROJECT
R-42379	2000038

DIRECTORY...F:\2019\19-4220 US 20 Widening\00 SheetDrawings\
FILE.....Concrete Wingwall.dwg
DIVISCALE..5 LTSCALE...1
PLOTTED BY..amabney
DATE.....Nov 10,2022 - 3:34pm



LEGEND

- Proposed service point
- Proposed controller/cabinet, Type M
- Proposed 55-feet cantilever structure and foundation
- Proposed signal pedestal on Type "A" foundation
- Proposed pedestrian indication
- Proposed push button
- Proposed traffic handhole
- Proposed 2" PVC conduit schedule 40
- Proposed 2" HDPE conduit schedule 80
- Proposed 1 way, 3 section (12" red, 12" red, 12" amber) pedestrian hybrid beacon with back plate

Location Table Line "PR-A3"

DESCRIPTION	STATION	OFFSET
Service Point	581+47	72.5' Lt.
Handhole	581+93	46.2' Rt.
Handhole	581+95	68.6' Lt.
Controller	581+97	81.5' Lt.
Cantilever Structure	582+05	59.1' Lt.
Signal Pedestal	582+05	46.7' Rt.
Signal Pedestal	582+19	58.2' Lt.
Cantilever Structure	582+18	59.0' Rt.



21 22



20 23

DIRECTORY.....F:\2019\19-4220 us 20 widening\30 sheetdrawings\
FILENAME.....TR01_AE-C-SIG1.dwg
DESIGN.....JAD
PLOTTED BY..CCorsbie
DATE.....Nov 10,2022 - 3:10pm

DRAFT
NOT FOR CONSTRUCTION

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: JAD DRAWN: ABM

CHECKED: MAH CHECKED: JAD

INDIANA
DEPARTMENT OF TRANSPORTATION

PEDESTRIAN HYBRID BEACON
US 20 NEAR NORTHRIDGE HIGH SCHOOL
ELKHART COUNTY, FORT WAYNE DISTRICT

COMM. NO.

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1900095
SURVEY BOOK	SHEETS TR-01
ELECTRONIC	163 of 271
CONTRACT	PROJECT
R-42379	1900095

APPENDIX C: EARLY COORDINATION

INDIANA DEPARTMENT OF TRANSPORTATION

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

PHONE: (317)233-0800

Eric J. Holcomb, Governor
Joe McGuinness, Commissioner

September 20, 2022

Example Early Coordination Letter

Via Mail to Early Coordination List:

Re: Re-Coordination Letter, Des. No.: 1900095, US 20 Added Travel Lanes, From State Road (SR) 13 to County Road (CR) 35, Elkhart County, Indiana

To Whom it May Concern:

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with an added travel lanes project along US 20 in Elkhart County, Indiana. An early coordination letter describing the project was previously sent to your agency on November 20, 2019.

The purpose of this letter is to provide updates the project area included in the original early coordination letter. Since the original early coordination letter, it was determined that the project area would need to shift slightly south due to utility conflicts on the north side of US 20. No other project updates have occurred.

Comments Request: You are asked to review this information and provide comments you may have relative to the anticipated effects of the project on areas which you have jurisdiction or special expertise. Please send your comments to Caroline Tegeler, of HNTB Corporation, at ctegeler@hntb.com or 317-917-5352. Please provide your response within thirty (30) calendar days from the date of this letter. However, should you find that an extension to the response time is necessary, a reasonable amount may be granted upon request.

If you have any questions regarding this matter, please feel free to contact Caroline Tegeler, of HNTB Corporation at ctegeler@hntb.com or 317-917-5352; or Alex Zembala, INDOT Project Manager, at azembala@indot.in.gov or 260-969-8293. Thank you in advance for your input.

Sincerely,

Caroline Tegeler

Caroline Tegeler
HNTB CORPORATION

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

Graphics intentionally omitted to avoid duplication. Refer to Appendix B for project graphics.

Cc: Phillip Barker, Elkhart County Surveyor
Jeff Siegel, Elkhart County Sheriff
Elkhart County Highway Department
Brad Rogers, Elkhart County Commissioners
Andrew Wood, Northridge High School
Jane Allen, Middlebury Community Schools
Jennifer Tobey, Elkhart County Emergency Management
Mary Cripe, Middlebury Town Manager
Miranda Cripe, Middlebury Town Council
John Strycker, Middlebury Water Department
Tom Enright, Middlebury Parks and Recreation Department
Business Manager, Das Dutchman Essenhaus
David Yoder, Elkhart LaGrange Settlement Representative, Amish Steering Committee
John Heiliger, Elkhart County MS4 Stormwater Coordinator
Jim Hess, Elkhart County Soil and Water Conservation District
Chris Godlewski, Elkhart County Planning and Development
Dale Brier, IDNR Outdoor Recreation Streams and Trails Section
Scott Miller, Pathway Assembly of God
Rickie Clark, Indiana Department of Transportation, Manager of Public Hearings
James Turnwald, Michiana Area Council of Governments (MACOG)
Rick Neilson, NRCS State Conservationist
Michael Jett, Indiana Department of Transportation, Utilities and Railroad
Ron Bales, Indiana Department of Transportation, Environmental Services Division
Arianna Gills, Indiana Department of Transportation, Fort Wayne District
Paul Allerding, US Army Corps of Engineers, Detroit District
Regional Environmental Coordinator, National Parks Service
Paul J. Lehmann, US Department of Housing & Development
Indiana Geological Survey
Christie Stanifer, Indiana Department of Natural Resources
Joyce Newland, Federal Highway Administration
Elizabeth McCloskey, US Fish and Wildlife Service
William Spaulding, USEPA Region 5 Groundwater and Drinking Water Branch
Alex Zembala, INDOT Project Manager
Chris Schultz, HNTB Corporation

Caroline Tegeler

From: DNR Environmental Review <environmentalreview@dnr.IN.gov>
Sent: Friday, September 23, 2022 3:34 PM
To: Caroline Tegeler
Cc: Richard Connolly
Subject: RE: Re-Coordination Letter - US 20 Added Travel Lanes Project - Des. No. 1900095; ER-22021
Attachments: ER-22021letter.pdf

Dear Ms. Tegeler:
Dec
I have looked at the new information submitted and saved it in our file (ER-22021). Despite the slight change in this project, the recommendations in our previous letter dated December 19, 2019 (copy attached), still apply. However, the DNRs new Habitat Mitigation Guidelines are now found here: http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf.

Sincerely,

Christie L. Stanifer
Environmental Coordinator
Indiana Department of Natural Resources
Division of Fish & Wildlife
402 West Washington St, Room W273
Indianapolis, IN 46204
cstanifer@dnr.in.gov
Direct: (317) 232-8163
www.dnr.IN.gov

**** Please let us know about the quality of our service by taking this brief*** customer survey.

From: Caroline Tegeler <ctegeler@HNTB.com>
Sent: Tuesday, September 20, 2022 10:25 AM
Cc: Richard Connolly <rconnolly@HNTB.com>
Subject: Re-Coordination Letter - US 20 Added Travel Lanes Project - Des. No. 1900095

**** This is an EXTERNAL email. Exercise caution. DO NOT open attachments or click links from unknown senders or unexpected email. ****

To Whom it May Concern,

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving US 20 in Elkhart County, Indiana. An early coordination letter describing the project was previously sent to your agency on November 19, 2019. The purpose of this re-coordination letter is to provide recent project updates. We request comments from you within your area of expertise regarding any potential environmental or community effects associated with the project updates mentioned in the re-coordination letter. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental effects.

Thank you,

Caroline Tegeler

From: McCloskey, Elizabeth <elizabeth_mccloskey@fws.gov>
Sent: Tuesday, September 20, 2022 11:51 AM
To: Caroline Tegeler
Cc: Richard Connolly
Subject: Re: [EXTERNAL] Re-Coordination Letter - US 20 Added Travel Lanes Project - Des. No. 1900095

Good morning, the USFWS does not have any concerns about this change in the project plans.

Elizabeth McCloskey
U.S. Fish and Wildlife Service
Northern Indiana Suboffice
Ecological Services
Chesterton, Indiana

From: Caroline Tegeler <ctegeler@HNTB.com>
Sent: Tuesday, September 20, 2022 9:24 AM
Cc: Richard Connolly <rconnolly@HNTB.com>
Subject: [EXTERNAL] Re-Coordination Letter - US 20 Added Travel Lanes Project - Des. No. 1900095

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

To Whom it May Concern,

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving US 20 in Elkhart County, Indiana. An early coordination letter describing the project was previously sent to your agency on November 19, 2019. The purpose of this re-coordination letter is to provide recent project updates. We request comments from you within your area of expertise regarding any potential environmental or community effects associated with the project updates mentioned in the re-coordination letter. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental effects.

Thank you,

Caroline Tegeler
Environmental Planner II
Tel (317)917-5352 **Cell** (765)212-4983 **Email** ctegeler@hntb.com

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

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Caroline Tegeler

From: Heath, Victoria <Heath.Victoria@epa.gov>
Sent: Monday, October 17, 2022 1:17 PM
To: Caroline Tegeler
Cc: Richard Connolly; Bosscher, Valerie; Blazey, Samuel
Subject: RE: Re-Coordination Letter - US 20 Added Travel Lanes Project - Des. No. 1900095

Good Afternoon Ms. Tegeler,

This message is in regards to your email sent on September 20, 2022 (below). The project appears to be outside of any SSA boundary and therefore no review is required under SDWA Section 1424(e). Please let me know if you have any additional questions.

Victoria Heath
Environmental Engineer | Wisconsin State Program Manager
US EPA | R5 | WD | Ground Water & Drinking Water Branch
77 West Jackson Boulevard, 15-076 , Chicago, IL 60604
Heath.Victoria@epa.gov
(312) 886-0703

From: Caroline Tegeler <ctegeler@HNTB.com>
Sent: Tuesday, September 20, 2022 9:25 AM
Cc: Richard Connolly <rconnolly@HNTB.com>
Subject: Re-Coordination Letter - US 20 Added Travel Lanes Project - Des. No. 1900095

To Whom it May Concern,

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with a project involving US 20 in Elkhart County, Indiana. An early coordination letter describing the project was previously sent to your agency on November 19, 2019. The purpose of this re-coordination letter is to provide recent project updates. We request comments from you within your area of expertise regarding any potential environmental or community effects associated with the project updates mentioned in the re-coordination letter. Please use the above designation number and description in your reply. We will incorporate your comments into a study of the project's environmental effects.

Thank you,

Caroline Tegeler
Environmental Planner II
Tel (317)917-5352 **Cell** (765)212-4983 **Email** ctegeler@hntb.com

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

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Organization and Project Information

Organization Name: HNTB

First Name: Eric

Last Name: Jagger

Phone: (574) 376-9083

Email: e.jagger04@gmail.com

Address Line 1: 111 Monument Circle

City: Indianapolis

State: IN

Zip: 46204

Project Title: US 20 Section 2

Destination ID: 1900095

Project Description:

Environmental Assessment Report

Geological Hazards:

1. Moderate liquefaction potential

Mineral Resources:

1. Sand and Gravel Resource: Low Potential

Disclaimer:

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This information was furnished by Indiana Geological Survey

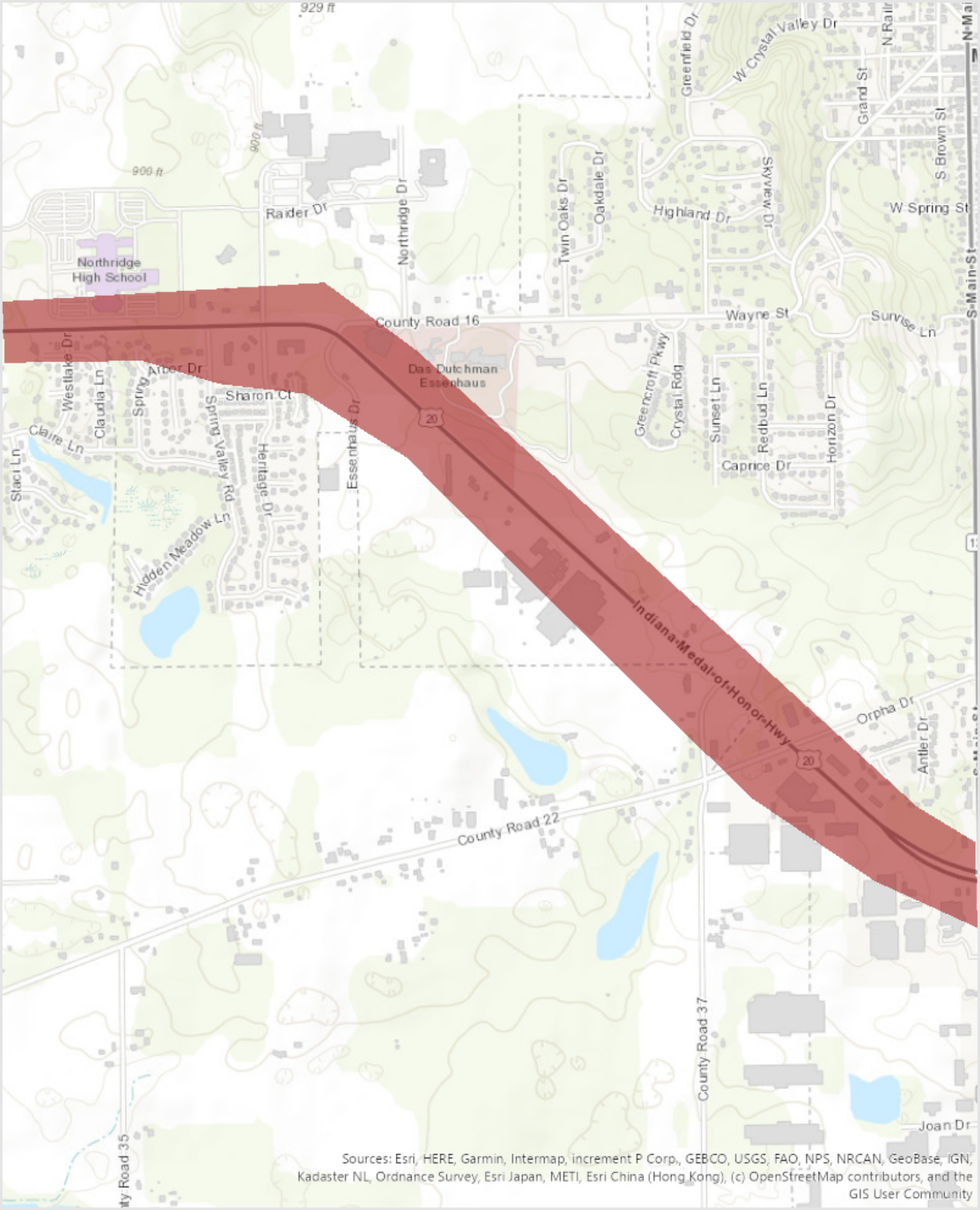
Address: 1001 E. 10th St., Bloomington, IN 47405

Email: IGSEnvir@indiana.edu

Phone: (812) 855-7428

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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: 07/26/2024 15:17:17 UTC
Project Code: 2024-0110637
Project Name: Des. Nos. 1900095 & 2000038, US 20 Section 2 (CR 35 to SR 13) AI No. 2

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: 2024-0110637
Project Name: Des. Nos. 1900095 & 2000038, US 20 Section 2 (CR 35 to SR 13) AI No. 2
Project Type: Road/Hwy - Maintenance/Modification
Project Description: The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) propose a roadway and intersection improvement project along United States Highway 20 (US 20) between County Road 35 (CR 35) and State Road 13 (SR 13) (referred to as US 20 Section 2) in Elkhart County, Indiana. More specifically, the US 20 Section 2 improvements will extend from approximately 565 feet east of the intersection of US 20 and CR 35 to approximately 315 feet west of the intersection of US 20 and SR 13. The project is located within Middlebury Township; Middlebury US Geological Survey (USGS) Quadrangle, Sections 9, 15, 16, and 22 of Township 37 North, Range 7 East.

The preferred alternative includes reconstruction of existing 2-lane US 20 to a 5-lane cross-section including a 14-foot two way left turn lane, two 12-foot travel lanes in each direction, and two 10-foot paved shoulders. The project also proposes reconstructing the intersections within the project area, as well as pedestrian facility and stormwater system improvements (Des. No. 1900095). There are culverts within the project area, as well as a residential outbuilding that will be demolished, as part of this project. See the Structure Inspection Table for structure numbers (as applicable) and details, as well as proposed scopes of work. The structure carrying US 20 over Pumpkinvine Nature Trail (CV 020−020−104.91) will be extended at each end to accommodate the new roadway alignment, which will be completed under Des. No. 2000038.

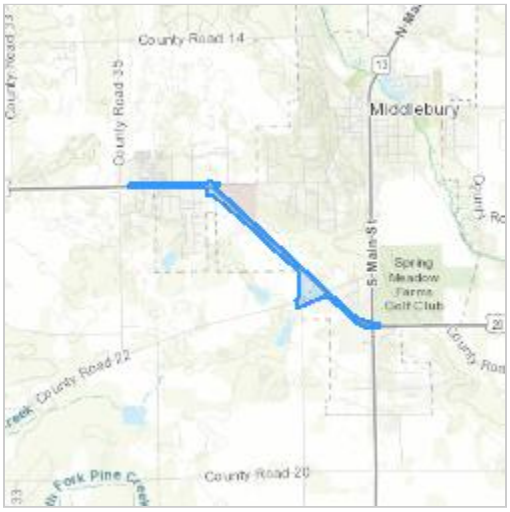
There is potentially suitable summer bat habitat located within and adjacent to the project area, primarily near the CR 35 intersection and along the Pumpkinvine Nature Trail, as well as northwest of the trail. Tree clearing will be required (2.010 acres) for this project during the inactive season before construction begins. All tree clearing will occur within 100 feet from the edge of pavement. Dominant tree species in the area are Quercus macrocarpa (Bur oak) and Fraxinus pennsylvanica (Green ash). There is existing permanent lighting within the project area; however, the scope of work will not involve permanent lighting alterations. Additionally, temporary lighting will be used during construction.

A search of the USFWS database by INDOT Fort Wayne District on December 12, 2023, did not identify any documented bat habitat sites within a half mile of the project area. No bats or evidence of bats were

observed in or on the culverts or the outbuilding structure during the HNTB inspections on July 21, 2024. No INDOT inspections have been conducted in the last 24 months. Construction is anticipated to begin in Spring 2026.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.6608898,-85.71699938600577,14z



Counties: Elkhart 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. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[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
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: ▪ This species only needs to be considered if the project includes wind turbine operations. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

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

INSECTS

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

CRITICAL HABITATS

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

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

BALD & GOLDEN EAGLES

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

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

1. The Bald and Golden Eagle Protection Act of 1940.

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

There are 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 Dec 1 to Aug 31
Golden Eagle *Aquila chrysaetos* 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/1680	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

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

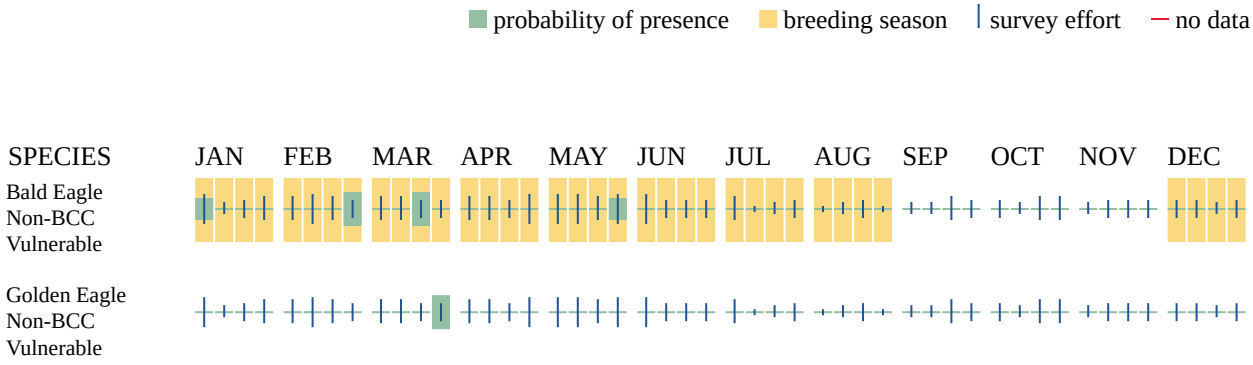
Probability of Presence (■)

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

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

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

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



Additional information can be found using the following links:

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

MIGRATORY BIRDS

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

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

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

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

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Dec 1 to Aug 31
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
Canada Warbler *Cardellina canadensis* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9643	Breeds May 20 to Aug 10
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 22 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
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Golden Eagle *Aquila chrysaetos* 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/1680	Breeds elsewhere
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
Henslow's Sparrow *Centronyx henslowii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Kirtland's Warbler *Setophaga kirtlandii* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8078	Breeds May 25 to Jul 31

NAME	BREEDING SEASON
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
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
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



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.

FRESHWATER POND

- PUBGx

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation
Name: Eric Jagger
Address: 111 Monument Circle
Address Line 2: Suite 1200
City: Indianapolis
State: IN
Zip: 46204
Email ejagger@hntb.com
Phone: 3179175206

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

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: 07/26/2024 19:22:44 UTC
Project code: 2024-0110637
Project Name: Des. Nos. 1900095 & 2000038, US 20 Section 2 (CR 35 to SR 13) AI No. 2

Subject: Concurrence verification letter for the 'Des. Nos. 1900095 & 2000038, US 20 Section 2 (CR 35 to SR 13) AI No. 2' 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 July 26, 2024 to verify that the **Des. Nos. 1900095 & 2000038, US 20 Section 2 (CR 35 to SR 13) AI No. 2** (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
- 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. Nos. 1900095 & 2000038, US 20 Section 2 (CR 35 to SR 13) AI No. 2

DESCRIPTION

The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) propose a roadway and intersection improvement project along United States Highway 20 (US 20) between County Road 35 (CR 35) and State Road 13 (SR 13) (referred to as US 20 Section 2) in Elkhart County, Indiana. More specifically, the US 20 Section 2 improvements will extend from approximately 565 feet east of the intersection of US 20 and CR 35 to approximately 315 feet west of the intersection of US 20 and SR 13. The project is located within Middlebury Township; Middlebury US Geological Survey (USGS) Quadrangle, Sections 9, 15, 16, and 22 of Township 37 North, Range 7 East.

The preferred alternative includes reconstruction of existing 2-lane US 20 to a 5-lane cross-section including a 14-foot two way left turn lane, two 12-foot travel lanes in each direction, and two 10-foot paved shoulders. The project also proposes reconstructing the intersections within the project area, as well as pedestrian facility and stormwater system improvements (Des. No. 1900095). There are culverts within the project area, as well as a residential outbuilding that will be demolished, as part of this project. See the Structure Inspection Table for structure numbers (as applicable) and details, as well as proposed scopes of work. The structure carrying US 20 over Pumpkinvine Nature Trail (CV 020−020−104.91) will be extended at each end to accommodate the new roadway alignment, which will be completed under Des. No. 2000038.

There is potentially suitable summer bat habitat located within and adjacent to the project area, primarily near the CR 35 intersection and along the Pumpkinvine Nature Trail, as well as northwest of the trail. Tree clearing will be required (2.010 acres) for this project during the inactive season before construction begins. All tree clearing will occur within 100 feet from the edge of pavement. Dominant tree species in the area are Quercus macrocarpa (Bur oak) and Fraxinus pennsylvanica (Green ash). There is existing permanent lighting within the project area; however, the scope of work will not involve permanent lighting alterations. Additionally, temporary lighting will be used during construction.

A search of the USFWS database by INDOT Fort Wayne District on December 12, 2023, did not identify any documented bat habitat sites within a half mile of the project area. No bats or evidence of bats were observed in or on the culverts or the outbuilding structure during the HNTB inspections on July 21, 2024. No INDOT inspections have been conducted in the last 24 months. Construction is anticipated to begin in Spring 2026.

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@41.6608898,-85.71699938600577,14z



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?

    No

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

    No

23. Does the project include slash pile burning?

    No

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

    Yes

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

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

    Yes

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

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

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

    Yes

    SUBMITTED DOCUMENTS

    - *Des. Nos. 1900095 2000038 Structure Inspection Table Figure.pdf https://ipac.ecosphere.fws.gov/project/SVZ2F5HBCJDIJOG7C7VSC6FY5Y/projectDocuments/146809501*

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

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

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

    No

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

    No

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

    Yes

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

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

    Yes

31. Has a structure assessment[1] been conducted **within** the last 24 months[2] to determine if bats are using the structure(s)?

    [1] Structure assessment for occupied buildings means a cursory inspection for bat use. For abandoned buildings a more thorough evaluation is required (See User Guide Appendix D for bridge/abandoned structure assessment guidance).

    [2] Assessments must be completed no more than 2 years prior to conducting any work on the structures, regardless of whether assessments have been conducted in the past. Due to the transitory nature of bat use, a negative result in one year does not guarantee that bats will not use that structure in subsequent years.

    Yes

    SUBMITTED DOCUMENTS

    - *Des. Nos. 1900095 2000038 Structure Inspection Table Figure.pdf https://ipac.ecosphere.fws.gov/project/SVZ2F5HBCJDIJOG7C7VSC6FY5Y/projectDocuments/146809501*

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

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

    No

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

    No

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

    Yes

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

    Yes

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

    No

37. 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

38. 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

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

    No

40. 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

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

    Automatically answered
    Yes, because the tree removal/trimming that occurs outside of the 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.

42. 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.

43. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

44. Is the structure removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the structure has been assessed using the criteria documented in the BA and no signs of bats were detected

45. **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

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

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

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

    Yes

47. **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

48. **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

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

    Yes

PROJECT QUESTIONNAIRE

1. Please describe the proposed bridge work:

   See the Structure Inspection Table for the individual scopes of work.
2. Please state the timing of all proposed bridge work:

   Spring 2026
3. Please describe the proposed structure work:

   The residential outbuilding structure at 218 US 20 will be demolished.
4. Please state the timing of all proposed structure work:

   Spring 2026
5. Please enter the date of the bridge assessment:

   July 21, 2024
6. Have you made a No Effect determination for *all* other species indicated on the FWS IPaC generated species list?

   N/A
7. Please enter the date of the structure assessment:

   July 21, 2024

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

   N/A

9. 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.

   2.01

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

TREE REMOVAL AMM 1

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

LIGHTING AMM 1

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

TREE REMOVAL AMM 2

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

TREE REMOVAL AMM 3

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

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: Sarah Hall
Address: 5333 Hatfield Road
City: Fort Wayne
State: IN
Zip: 46808
Email sarhall@indot.in.gov
Phone: 2609698302

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

You have indicated that your project falls under or receives funding through the following special project authorities:

- BIPARTISAN INFRASTRUCTURE LAW (BIL) (OTHER)

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: 1/16/24 **Amended Submission Date*:** 6/19/24

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):

Alyssa Reynolds
CRA, Inc.
201 NW 4th Street
Evansville, IN 47708
adreynolds@crai-ky.com

Project Designation Number: 1900095

Route Number: United States Highway (US) 20

Feature crossed (if applicable):

City/Township: Town of Middlebury/Middlebury Township **County:** Elkhart County

Project Description: The proposed US 20 Travel Lane Addition Project, in Elkhart County, begins at the intersection of US 20 and CR 35 and continues southeast along US 20 where it ends at its intersection with SR 13. In total, the project area is 71.3 acres and is located in developed, urban areas and agricultural fields. A two-way left-turn lane will be added along the current route of US 20. Since the original MPPA was approved, it was determined that the project area would need to shift slightly south due to utility conflicts on the north side of US 20. The project was converted to a curb and gutter section to reduce right-of-way (ROW) impacts. With the current design, there is no anticipation of a total take of a property. The only demolition will be of an outbuilding on a property located at 217 US 20, across from IP Middlebury. The outbuilding is not impacted from the roadway improvements, but the property owner requested its removal.

No other project updates have occurred. A detention pond will be added southeast of the current US 20 footprint.

As the project has progressed, the right-of-way (ROW) amounts have changed from the original 19.6 acres of ROW acquisition that was approved in the NEPA document. There will be approximately 23 acres of permanent right-of-way (ROW) acquisition and an additional 10 acres of temporary ROW acquisition for the proposed project. The total amount of ROW acquisition will be 33 acres.

f the project includes any curb, curb ramp, or sidewalk work, please specify the location(s) of such work:

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type:

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: Approximately 10 acres of temporary right-of-way (ROW) will be acquired, along with 23 acres of permanent ROW for the detention pond.

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 with the submission. ***
**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-6. Other minor actions if deemed appropriate for coverage under this MPPA, by consultation and mutual agreement between INDOT, FHWA, and the SHPO. The Tribes shall be provided information on all projects proposed to be cleared under this category for review prior to an agreement being signed between the agencies.

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): Indiana State Historic Architectural and Archaeological Research Database (SHAARD); Indiana Buildings, Bridges, and Cemeteries Map website; *Elkhart County Interim Report*; Arc Map GIS; online street-view imagery; MPPA application (including maps and photographs) sent by HNTB Corporation, dated December 17th, 2019, and on file at INDOT-CRO.

Arnold, Craig
2018 Archaeological Records Check and Phase Ia Reconnaissance US 20 Two-way Left Turn Lane Project from Indiana State Road 15 to Elkhart County Road 35 in Jefferson Township, Elkhart County, Indiana. Weintraut and Associates. Submitted to HNTB Corporation. Report on file at IDNR, DHPA.

Harth, Aaron
2020 An Archaeological Reconnaissance for a Proposed Road Widening Project on US 20, from County Road 35 to State Road 13, in Elkhart County, Indiana (INDOT Des. No. 1900095). Cultural Resource Analysts, Inc. Submitted to HNTB Corporation. Report on file at IDNR, DHPA.

Lawhorn, Ashely and Lisa Kelley
2024 An Addendum to a Phase Ia Archaeological Reconnaissance for a Proposed Road Widening Project on US 20, from County Road 35 to State Road 13, in Elkhart County, Indiana (INDOT Des. No. 1900095). Report on file, Indiana Department of Transportation, Cultural Resources Office, Indianapolis, IN.

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

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

Additional Comments:

Above-ground Resources

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

The Indiana Historic Sites and Structures Inventory (IHSSI) and National Register information for Elkhart County are available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBCM). The *Elkhart County Interim Report* (2005; Middlebury Township) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. An INDOT-CRO historian reviewed the SHAARD online map and checked it against the Interim Report hard-copy maps. No resources rated higher than "contributing" are located within 0.25 mile of the project area.

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

The INDOT-CRO historian reviewed structures adjacent to the project area utilizing online aerial and street-view photography. The project area is located in an exurban setting along US 20 with adjacent above-ground resources consisting of mid-twentieth to early twenty-first century residential and commercial buildings. None of the visible resources appear to possess the significance or integrity required to be considered NRHP-eligible.

June 2024 Update

In June, the project consultant notified INDOT-CRO of changes to the project scope of work that were not originally assessed in the January 2020 MPPA Determination. This work includes the shifting south of the original project location due to utility conflicts on US 20, the addition of a detention pond, and the removal of an outbuilding at the request of the property owner. Right-of-way acquisition is now anticipated to consist of 33-acres.

To account for the project location shift and addition of the detention pond, a review buffer of 0.25-mile from the project area was utilized. No National Register-listed or IHSSI documented resources were noted within that 0.25-mile buffer. The building stock within the 0.25-mile buffer consists primarily of mid-twentieth to early twenty-first century residential and commercial buildings. None of these structures appear to possess either age or integrity and/or significance necessary to be considered National Register-eligible.

There is one (1) demolition proposed at 218 US 20. Several structures are located on the parcel. These structures include:

1. House, traditional ranch, c. 1966
2. House, vernacular Tudor revival, c. 1948
3. Outbuilding, lean-to, c. 1960
4. Outbuilding, Type 3 barn, c. 1950
5. Outbuilding, Type 3 barn, c. 1960
6. Outbuilding, utility shed, c. 1960
7. Outbuilding, Type 3 barn, c. 1975

This demolition involves a garage outbuilding, and the removal is due to the request of the property owner and the close proximity of ROW acquisition to the structure. The garage was built in 1975 according to the County Assessor property card and was examined via online street-view photography. The barn has a metal siding exterior and metal roof. There is one metal garage door on the southwest elevation and one exterior door on the northwest elevation. Although the barn will be 50 years of age at the time of letting, it lacks unusual features and a context that would suggest that it might have historical or architectural significance. Additionally, none of the remaining structures located on the property appear to possess the integrity and/or significance necessary to be considered National Register-eligible.

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

Archaeological Resources

With regard to archaeological resources, an INDOT Cultural Resources archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the report of investigation for the project and concurred with the results and recommendations (Harth 2020). The background research found that no archaeological sites were recorded and that historic maps did not indicate a structure had been present within the proposed project area. Two archaeological reconnaissance had been conducted at the western edge of the project, one reconnaissance was recent utilizing current methods and so that area was not resurveyed (Arnold 2018). One historic archaeological site was located during the reconnaissance. The site was found to lack integrity and is ineligible to the state and national registers. No additional archaeological investigation was recommended.

June 2024 Update

An INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the addendum Phase Ia archaeological reconnaissance submitted by Cultural Resources Analysts, Inc. on behalf of HNTB Corporation (Lawhorn and Kelley 2024).

The addendum survey investigated an additional 4.6 acres via visual inspection and systematic shovel test probing (n=50) in 15 m intervals along US 20. Previous disturbances in the newly investigated areas include the existing roadway, CR 16 and CR 22 intersections, existing sidewalks, residential and commercial infrastructure, and buried utilities. The addendum survey documented no new archaeological sites (Lawhorn and Kelley 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.

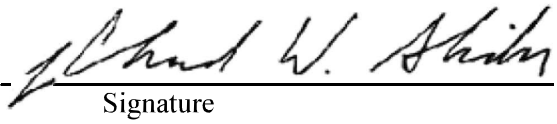
INDOT-CRO staff reviewer(s): Clint Kelly and David Moffatt (2020)
Taylor Payne, Clint Kelly and KayLee Blum (2024)

INDOT Approval Date:

Amendment Approval Date (if applicable):

Signatures for concurrence that the project falls under B-6 of the Minor Projects PA:

SHPO:

Chad W. Slider		09/25/2024
Printed Name	Signature	Date

FHWA:

PATRICK ALLEN CARPENTER Digitally signed by PATRICK ALLEN CARPENTER Date: 2024.09.25 11:21:04 -04'00'

Printed Name	Signature	Date

INDOT:

Matthew S. Coon		9/5/2024
Printed Name	Signature	Date

****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.*

Excerpt

INDIANA ARCHAEOLOGICAL SHORT REPORT

State Form 54566 (R3 / 3-22)

INDIANA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF HISTORIC PRESERVATION AND ARCHAEOLOGY
402 West Washington Street, Room W274
Indianapolis, Indiana 46204-2739
Telephone Number: (317) 232-1646
Fax Number: (317) 232-0693
E-mail: dhpa@dnr.IN.gov

Where applicable, the use of this form is recommended but not required by the Division of Historic Preservation and Archaeology (DHPA).

Name(s) of author(s)	Date *(month, day, year)*
Ashley Lawhorn, MA, and Lisa Kelley, RPA 4535	March 22, 2024

Title of project
An Addendum to a Phase Ia Archaeological Reconnaissance for a Proposed Road Widening Project on US 20, from County Road 35 to State Road 13, in Elkhart County, Indiana (INDOT Des. No. 1900095)

This document is being used to report on the results of:
☐ Records check only ☐ Records check and Phase 1a archaeological reconnaissance
☒ An addendum to a previous archaeological report. *For an addendum, provide the following information.*

Name(s) of author(s) of previous report
Aaron L. Harth

Title of previous report
A Phase Ia Archaeological Reconnaissance for a Proposed Road Widening Project on US 20, from County Road 35 to State Road 13, in Elkhart County, Indiana (INDOT Des. No. 1900095)

Date of previous report *(month, day, year)*	DHPA number
January 27, 2020	N/A

PROJECT OVERVIEW

Description of project
The purpose of the proposed project is to modify approximately 3.2 km (2.0 mi) of US 20 between County Road (CR) 35 and State Road (SR) 13, in Elkhart County (Figures 1 and 2). The proposed roadway modification will add a two-way left-turn lane to improve the safety of US 20. The project also will include improvements at the intersections of CR 16 (Wayne Street) and CR 22 (Orpha Drive). The project will start just east of the intersection at CR 35 and US 20, and conclude just west of the intersection at SR 13 (South Main Street) and US 20 (Figure 3). The previous survey for this project encompassed approximately 27 ha (67 acres) (Harth 2020).The current addendum survey area for this project consists of small locations that total 1.9 ha (4.6 acres) (Figures 4–8). Since the original early coordination letter, it was determined that the project area would need to shift slightly south due to utility conflicts on the north side of US 20. In total, 9.2 ha (23.0 acres) of permanent right-of-way (ROW) and 4.0 ha (10.0 acres) of temporary ROW will be required for the project.

INDOT designation number(s)	Project number	DHPA number	DHPA plan number
1900095	CRA Project No. I230473 CRA Publication Series No. 23-511	N/A	N/A

Prepared for: *(Company / Institution / Agency)*
HNTB Corporation

Name of contact
Richard Connolly

Address *(number and street, city, state, and ZIP code)*
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Name of principal investigator
Lisa Kelley

Name of company / institution
Cultural Resource Analysts, Inc.

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201 NW Fourth Street, Suite 204, Evansville, Indiana 47708

Telephone number	E-mail address
(812) 253-3009	ljkelley@crai-ky.com

Signature of principal investigator *(Required)*	Date *(month, day, year)*
Lisa Kelley	March 22, 2024

PROJECT LOCATION

County	USGS 7.5' series topographic quadrangle	Civil township
Elkhart	Middlebury	Middlebury

Legal Location

Grid alignment
NE

1/4	1/4	1/4	1/4	Section	Township	Range

Comments
See Table 1.

Property ownership *(Check all that apply)*
☒ Private ☐ Local Government ☒ State Government ☐ Federal Government ☐ Other

Name of owner
Private property owners are listed on Elevate (2023); Indiana Department of Transportation (INDOT) ROW

Address of owner *(number and street, city, state, and ZIP code)*
(see Elevate 2023)

PROJECT AREA DETAILS

See Short Report instructions for required references to be consulted.

Size of project area *(hectares)*	Size of project area *(acres)*
28.9	71.6
Natural region Northern Lakes	Topography Upland flats
Soil(s) information Bristol loamy sand, excessively drained, 2 to 5 percent slopes (BtxB); Bristol loamy sand, excessively drained, 5 to 10 percent slopes (BtxC); Bronson sandy loam, moderately well drained, 0 to 1 percent slopes (BufA); Coloma sand, 0 to 2 percent slopes (CnbC); Urban land-Bristol complex, 0 to 1 percent slopes (UdpA); and Urban land-Bristol complex, 1 to 5 percent slopes (UdpB) (Soil Survey Staff 2023).	Watershed St. Joseph

Current land usage
Agricultural fields, business, industrial, residential lawns, sidewalks, wooded areas, and grassy ROW

Comments
Six soil map units are mapped within the survey area (Soil Survey Staff 2023). The soil series within the soil map units are classified by the amount of time it has taken them to form and the landscape position on which they are found (Birkeland 1984; Soil Survey Staff 1999). This information can provide a relative age of the soils and can express the potential for buried archaeological deposits within them (Stafford 2004). The soil order and group classifications for each soil series are used to assist with determining this potential.

The Bristol soil series (Psammentic Hapludalfs) is classified as an excessively drained Alfisol that formed in sandy outwash on outwash plains, outwash terraces, or kames (Soil Survey Staff 2012). The Bronson soil series (Aquic Hapludalfs) is classified as a moderately well-drained Alfisol that formed in loamy and sandy materials on outwash plains, valley trains, and moraines (Soil Survey Staff 2014). These Alfisols are found on landforms that formed during the late Pleistocene time period (Soil Survey Staff 1999:163–165, 208–217). Archaeological deposits would only be found on, or very near, the ground surface on landforms mapped with the Alfisols within the survey area because of the time period and erosional landform position in which these soils formed. Including the urban land complexes, Alfisols account for the majority of the soils mapped within the survey area. The urban land complexes are characterized as areas that were originally located on Bristol soils, but have been significantly disturbed by urban development. The urban land units are located along the large industries in the central-western portion of the survey area, and around the intersection of US 20 and SR 13 at the eastern extent of the survey area.

The Coloma soil series (Lamellic Udipsamments) is classified as a somewhat excessively drained Entisol that formed in sandy drift on moraines and outwash plains (Soil Survey Staff 2015). The Coloma soils within the survey area are considered to have no potential for containing deeply buried archaeological deposits because they were formed in glacial deposits that are too old to be associated with human occupation in this region. The Coloma soils are located in the southern portion of the survey area between CR 22 and CR 13.

RECORDS CHECK

☐ Records check only; no field investigation conducted.	Date of records check *(month, day, year)* October 20, 2023

Records consulted *(Check all that apply)*

☒ Archaeological site forms, reports in SHAARD, and SHAARD Archaeology and Structures Map Web Application
☐ Cultural Resource Management reports, other research reports, etc., on file in locations other than SHAARD
☒ Historical documents and maps from other institutions / resources
☒ IHSSI / NRHP structures records in SHAARD
☒ Cemetery records in SHAARD

Within the Project Area

Previously recorded archaeological sites *(Include citations)*

There are no previously recorded archaeological sites within or directly adjacent to the current survey area (DHPA 2023a).

Previous archaeological studies within the project area *(Include citations)*

Two previous studies have been conducted within or near the current survey area (Arnold 2018; Cantin 1995). Additionally, the original survey for this project (Harth 2020) does not overlap with this addendum survey area (see Figure 3).

Name(s) of previously recorded cemetery(ies)

No cemeteries are located within or near the current survey area.

Cemetery registry number(s)

N/A

Outside the Project Area

Distance from boundary *(Check one)*

☐ Area researched was a half (½) mile radius from the boundary of the project area.
☒ Area researched was a one (1) mile radius from the boundary of the project area.
☐ Area researched was a two (2) mile radius from the boundary of the project area.

Previously recorded archaeological sites *(Include citations)*

The records review showed that four previously recorded archaeological sites are located within 1.6 km of the survey area (12E420, 12E421, 12E493, and 12E494) (Table 1) (Harth 2020; King and Zoll 2005; Settle et al. 2020). Sites 12E420 and 12E421 were recorded as the result of a phase Ia survey in 2005 (King and Zoll 2005). Neither site was recommended for further work. Site 12E493 was recorded in 2019 as part of a phase Ia survey and no further work was recommended (Settle et al. 2020). Site 12E494 was recorded in 2019 as a result of the previous investigation associated with the current project area (Harth 2020). Site 12E494 is a historic scatter that was not recommended for further work.

Previous archaeological studies *(Include citations)*

The DHPA records revealed that 11 previous archaeological studies have been conducted within a 1.6 km radius of the survey area (Table 2) (Arnold 2018; Branster 2019; Cantin 1995; Harth 2020; King and Zoll 2005, 2009; McCullough 2013; Settle et al. 2020; Snell and Copenhaver 2021; Stillwell 2003; Zink et al. 2023). The current survey area is outside of all of the areas investigated for the project previously (Harth 2020). However, a portion of two investigations (Arnold 2018; Cantin 1995) overlap with the current survey area on the extreme western end of the survey near a pond. Any overlapping areas were resurveyed during the current investigation. None of the previous surveys overlapped with the current survey area.

Name(s) of previously recorded cemetery(ies)

No cemeteries are located within 1.6 km of the survey area.

Cemetery registry number(s)

N/A

FIELD INVESTIGATION

Date(s) of field investigation *(month, day, year)*	Name of field supervisor
October 23 to 26, 2023	Ashley Lawhorn

Names of field crew

N/A

Field Conditions

Surface visibility	Factors affecting visibility
0–10 percent in the grassy and wooded areas; 10–25 percent in the agricultural fields	Brush, leaf litter, grass, paved roadways, and weeds
Slope	**Environmental (weather) conditions during the survey**
0–10 percent throughout the entire survey area	Sunny and 70 degrees

Methods

Surface survey *(Check all that apply)*

☒ Visual walkover — Interval: ☐ Thirty (30) meters ☒ Other *(Describe below.)*
☐ Pedestrian survey — Interval: ☐ Five (5) meters ☐ Ten (10) meters ☐ Other *(Describe below.)*

Describe methods.

Areas of obvious disturbance were visually inspected at 10 m intervals to confirm the conditions. Obvious disturbances within the survey area included the paved roadways and sidewalks, roadside ditches, embankments, overhead powerlines, and underground utilities (see Figures 6–8).

Shovel probes *(Check all that apply)*

☒ Shovel probes — Interval: ☐ Five (5) meters ☐ Ten (10) meters ☒ Fifteen (15) meters ☐ Other *(Describe below)*

The standard is screened shovel probes using ¼" size mesh. If shovel probes were not screened, or a different size mesh was utilized, an explanation must be provided in the methods below.

Describe methods.

Shovel tests were placed at 15 m intervals, paralleling US 20. All shovel tests measured no less than 30.0 cm in diameter and went into culturally sterile subsoil. All soil was removed and screened through a 0.25-inch mesh. The sidewalls and bottoms were examined for cultural materials and features. General soil characteristics (e.g., texture and Munsell hues and chromas) were recorded for the shovel test probes.

Cores / auger probes *(Check all that apply)*

☐ Cores / auger probes Interval: ☐ Five (5) meters ☐ Ten (10) meters ☐ Fifteen (15) meters ☐ Other *(Describe below)*

The standard is screened cores / auger probes using ¼" size mesh. If cores / auger probes were not screened, or a different size mesh was utilized, an explanation must be provided in the methods below.

Describe methods.

Due to the survey area containing soils that would have archaeological materials at or near the ground surface, no auger probes were conducted for this survey.

Additional field investigation comments

The survey area was investigated in accordance with Indiana Department of Natural Resources, DHPA Guidebook (DHPA 2023b) and INDOT's Cultural Resources Manual (INDOT 2023).

RESULTS

Summary of relevant regional culture background

Previous research has demonstrated that archaeological sites in this region of Indiana may include components from the entire timeline of North American occupation. Precontact periods represented in the Indiana archaeological record include Paleoindian (10,000–7500 BC), Early Archaic (8000–6000 BC), Middle Archaic (6000–3500 BC), Late Archaic (4000–1500 BC), Terminal Late Archaic (1500–700 BC), Early Woodland (1000–200 BC), Middle Woodland (200 BC–AD 600), Late Woodland (AD 500–1200), and Mississippian (AD 1000–1650) (Jones and Johnson 2016). The contact period in Indiana (AD 1400–1850) is considered a transitional period where European settlers began to arrive and have direct and indirect contact with the Native Americans (Jones and Johnson 2016). Well-known groups of Native Americans that were present in the state from the late 1600s to mid-nineteenth century include the Miamis, Weas, Piankashaws, Potawatomis, Kickapoos, Mascoutens, Delawares, and Shawnees (Jones and Johnson 2016:16).

In 1812, General Anthony Wayne sent Colonel John Jackson to Elkhart County with troops to drive out remaining members of the Potawatomi and Miami Tribes (Historic Landmarks Foundation of Indiana [HLFI] 2005). By 1840, the Potawatomi and Miami tribes had been dispossessed of their ancestral homelands and the land was ceded to the United States government (HLFI 2005).

Organized in 1830, Elkhart County is geographically located along Indiana's northern border. The county is made up of 468 sq mi of mostly rural farmland and diffuse hills. The earliest recorded permanent Euro-American settlement in the county was around 1815, when French traders settled in the area, though at the time of the county's formation, 935 residents were recorded (United States Bureau of the Census [USBC] 1830, Washington, DC).

The Elkhart and St. Joseph Rivers have been crucial geographic features in the development of the county. The confluence of these two rivers is located in the town of Elkhart. Steamboats arrived to the town by 1844, bringing with them docks and wharves to assist in the waterborne trade opportunities.

Elkhart County's first courthouse was built in 1833 in the town of Goshen. Records indicate that this was the first courthouse built in northern Indiana (Chapman 1881). The Logansport and White Pigeon Road was the first road established by state legislation. This road is now SR 15 (HLFI 2005). By 1849, Goshen had developed into a prosperous town.
In 1852, railways began to emerge in Elkhart County. The Warsaw, Goshen, and White Pigeon Railroad was established in 1870 (HLFI 2005). This railroad is first shown on an 1874 map as the Cincinnati, Wabash, and Michigan Railway (Higgins, Belden & Company 1874). In 1868, a dam was constructed in Goshen that diverted a small portion of the Elkhart River to create the Millrace Canal that allowed boats access to the town. Several mills began to take advantage of the canal's resources, including a linseed oil mill, a woolen mill, a saw and planning mill, and a flour and grist mill (HLFI 2005).
The economic prosperity that followed on the heels of the encroaching rail lines led to population growth throughout the county and its principal cities and towns. Into the twentieth century, the county has seen an increase in tourism, in part due to the Amish, Mennonite, and Anabaptist communities that all maintain a significant presence.

In addition to the file search, a review of available historic maps was initiated to help identify potential properties (structures) or historic archaeological site locations within the survey area. Maps from these references were reviewed:

1863 Map of Elkhart County (Nash)
1874 Illustrated Historical Atlas of the State of Indiana, Elkhart County (Higgins, Belden & Company)
1876 Illustrated Historical Atlas of the State of Indiana, Elkhart County (Baskin Forster & Company)
1892 Plat Book of Elkhart County, Indiana (Ogle)
1909 Map of Elkhart County, Indiana Showing Rural Delivery Service (United States Post Office Department [USPOD])
1915 Standard Atlas of Elkhart County, Indiana (Ogle)
1920 Atlas of Indiana, Elkhart County (W.W.Hixson and Company)
1929 Atlas and Plat Book of Elkhart County, Indiana (The Goshen Daily Democrat)
1936 Map of Elkhart County, Cultural (Indiana Highway Survey Commission [IHSC])
1961 Middlebury, Indiana 7.5-minute series topographic quadrangle (United States Geological Survey [USGS])
1981 Middlebury, Indiana 7.5-minute series topographic quadrangle (USGS)

Overall, the historic maps show that the survey area remained largely rural until the second half of the twentieth century. The survey area was located beyond the southwestern extent of the city of Middlebury throughout the late nineteenth and the majority of the twentieth centuries. The late nineteenth- and early twentieth-century maps of this area show five residential structures along present-day US 20. All five residential structures are located within close proximity to the northern extent of the survey area (Figure 9). These are the only structures shown near the survey area at this time (Baskin, Forster & Company 1876; Higgins, Belden & Company 1874; Ogle 1915; USPOD 1909). The areas near these mapped structures have undergone significant development in recent years. This includes the ongoing construction of a school, residential properties, businesses, and numerous belowground utilities. Due to the rapid urbanization of this area, it is possible that historic archaeological resources could be disturbed or destroyed. Additionally, the map search revealed that present-day US 20 has been in its current configuration since at least 1920 (Ogle 1915; W.W. Hixson and Company 1920).

Records check *(Check all that apply)*

- ☐ The project area does not have the potential to contain archaeological resources. *Provide explanation / justification.*
- ☐ There are previously recorded archaeological resources within the project area, but those resources do not warrant additional archaeological investigation. *Provide explanation / justification.*
- ☒ The project area contains previously recorded archaeological resources that warrant additional investigation and/or the project area has the potential to contain archaeological resources. *Provide explanation / justification.*
  - ☒ Based upon the records check results, a reconnaissance has been conducted.
- ☐ A cemetery is located within or adjacent to the project area.

Explanation / justification

There appear to be undisturbed landforms in the survey area that have not been subjected to an archaeological investigation.

Phase 1a archaeological reconnaissance *(Check all that apply)*

- ☐ No Phase 1a reconnaissance was conducted.
- ☒ Phase 1a reconnaissance located no archaeological resources.
- ☐ Previously recorded sites were in the project area.
  - ☐ Artifacts and/or features at a previously recorded site(s) within the project area were not discovered. *List the site(s) below.*
- ☐ Phase 1a reconnaissance has identified landforms conducive to buried archaeological deposits. *Describe below.*

List sites.

N/A

Describe landforms.

N/A

Number of shovel probes excavated	Number of cores / auger probes
50	0

Describe disturbances. Attach photographs documenting disturbances.

Disturbances included paved driveways, parking lots, and roadways, drainage ditches, aboveground power lines, a retaining pond, roadside embankments, and sidewalks (see Figures 6–8). Marked, buried utilities were also located throughout the survey area. These included a sewer line that ran north–south in the northwest portion of the survey area, a gas pipeline and telecommunication line that ran north–south in the northeast portion of the survey area, and a gas pipeline and telecommunication line that ran roughly north–south through the southern portion of the survey area near CR 37.

Actual area surveyed *(hectares)*	Actual area surveyed *(acres)*
1.9	4.6

Explain results of fieldwork.

A total of 0.9 ha of the survey area was visually inspected, including areas of disturbance. The remaining 1 ha of the survey area was subjected to shovel testing.

Shovel tests across the survey area conformed to one general soil profile. Shovel tests generally consisted of a Zone I that was brown (10YR 4/3) loamy sand and included some small and medium sized natural gravel from the ground surface to 25 cm below ground surface (bgs). This was followed by a Zone II of dark yellowish brown (10YR 4/4) loamy sand that had

more common small- and medium-sized natural gravel that extended from 25 to 50 cm bgs. Zone III was brown (7.5YR 4/4) loamy coarse sand that included common small- and medium-sized natural gravel that extended from 50 to at least 62 cm bgs. This soil profile is consistent with the Bristol soil series that is mapped throughout the majority of the survey area (Soil Survey Staff 2012).

RECOMMENDATIONS

Records check *(Check all that apply)*

- ☐ No archaeological investigation is recommended before the project is allowed to proceed because the records check has determined that the project area does not have the potential to contain archaeological resources.
- ☐ A Phase 1a archaeological reconnaissance is recommended.
- ☒ Based upon the records check results, a Phase 1a archaeological reconnaissance was recommended and has been conducted.
- ☐ A cemetery development plan may be required under Indiana Code 14-21-1-26.5 because project ground disturbance will be within 100 feet of a cemetery.

Phase 1a archaeological reconnaissance *(Check all that apply)*

- ☒ It is recommended that the project be allowed to proceed as planned because the Phase 1a archaeological reconnaissance has located no archaeological sites within the project area and/or previously recorded sites that were investigated warrant no additional investigation.
- ☐ It is recommended that Phase 1c archaeological subsurface reconnaissance be conducted before the project is allowed to proceed. The Phase 1a archaeological reconnaissance has determined that the project area includes landforms which have the potential to contain buried archaeological deposits.

Other recommendations / commitments

There is no further archaeological work recommended for the project.

Pursuant to IC-14-21-1, if any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646.

REQUIRED ATTACHMENTS

- ☒ Figure showing project location within Indiana
- ☒ USGS topographic map showing the project area *(1:24,000 scale)*
- ☒ Aerial photograph showing the project area, land use and survey methods
- ☒ Photographs of the project area, including, if applicable, photographs documenting disturbances
- ☐ Project plans *(if available)*

Other attachments

References Cited; Figures 1–9, Tables 1–3

References cited *(See short report instructions for required references to be consulted)*

See attachements.

Comments

No additional comments.

CURATION

Location of project documentation

Project notes and photographs will be maintained at the Cultural Resource Analysts, Inc., office in Evansville, Indiana.

APPENDIX E: RED FLAG AND HAZARDOUS MATERIALS

INDIANA DEPARTMENT OF TRANSPORTATION

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

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

Eric Holcomb, Governor
Michael Smith, Commissioner

Date: September 15, 2022

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: Richard Connolly
HNTB Corporation
111 Monument Circle, Suite 1200
Indianapolis, IN 46204
rconnolly@hntb.com

Re: RED FLAG INVESTIGATION – ADDENDUM
Des. No. 1900095, State Project
Added Travel Lanes
US 20 – Section 2 (CR 35 to SR 13)
Elkhart County, Indiana

A review of the original RFI signed on March 31, 2021, for the above DES # indicated substantive changes have occurred within the 0.5-mile radius and/or project area limits that will have an impact to the project. Following the approval of the original RFI, it was determined that the project area would need to be revised due to utility conflicts. The project will include the widening of United States Highway 20 (US 20) from a 2-lane/3-lane typical section to a 5-lane typical section including a two way left turn lane between County Road 35 (CR 35) and State Road 13 (SR 13) in Elkhart County, Indiana. An RFI addendum is being completed due to the project area shifting south due to utility conflicts on the north side of US 20. Additionally, the updated project area accounts for several minor updates based on the current proposed construction limits.

The following features and/or items were not detailed in the original RFI document dated December 3, 2019 but have since been identified as having an impact on the project area and requiring additional coordination/recommendations:

1. Hazardous Material Concerns

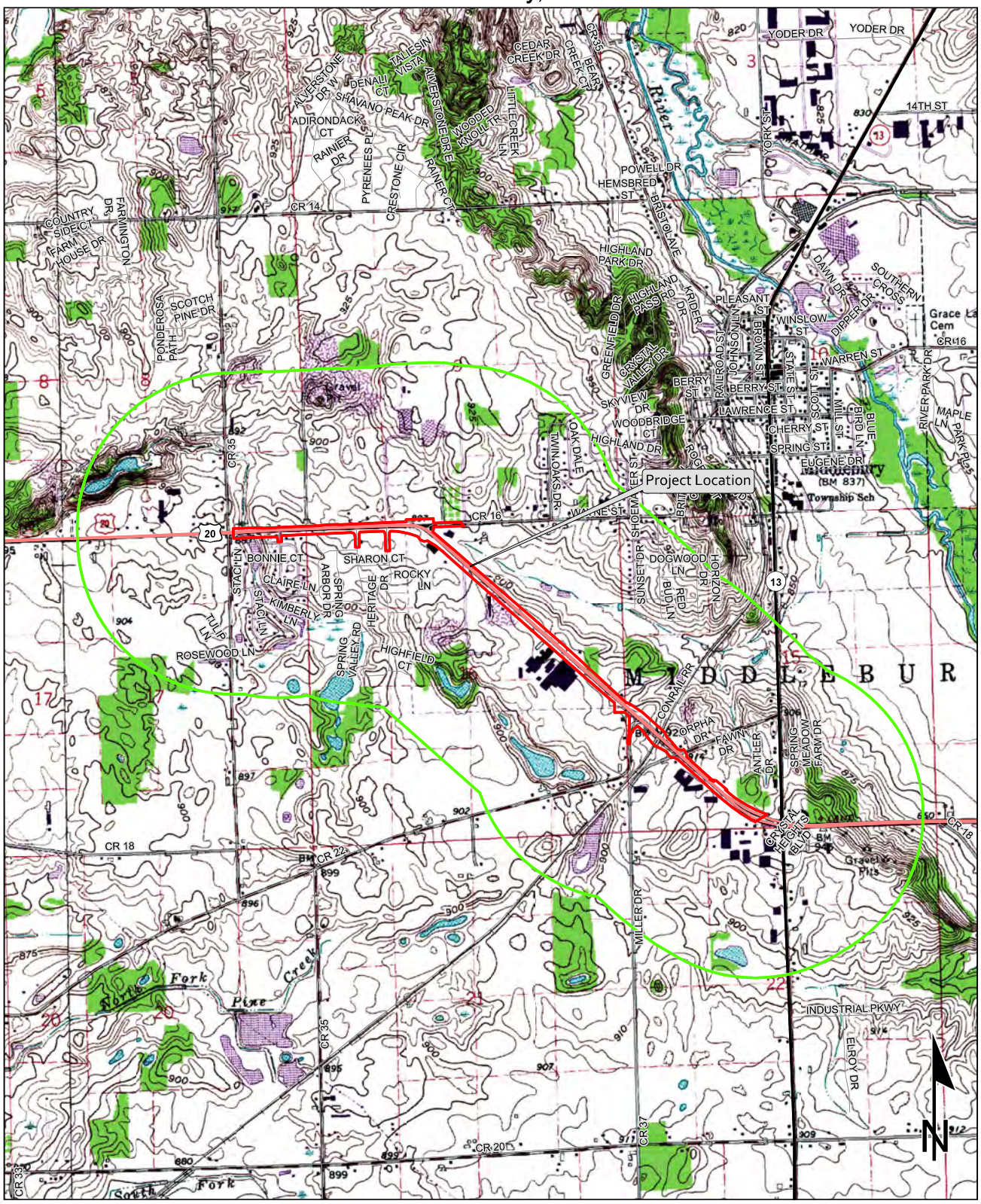
   Voluntary Remediation Program: As indicated above, the project extents have shifted south due to utility conflicts on the north side of US 20. As such, Louisiana Pacific Corporation, 219 US 20, Middlebury, IN 46540, AI ID # 12005, now lies within the central portion project area. According to a Remediation Completion Report, the site was formerly used for manufacturing extruded polyvinyl chloride (PVC) and cellular polystyrene moldings. It was determined that solvents were disposed of in a trench located in the northeast portion of the project area and a stockpile in the southwest portion of the project area. Remedial activities were completed on the site in November 1996. IDEM issued a Site Closure document on April 16, 1997, in response to the Remediation Completion Report. The site is now operated under the RCRA Generator/ TSD program. IDEM

conducted an inspection of the facility on February 6, 2018 and was found to be in compliance. No impact is expected.

INDOT ESD concurrence: Nicole Fohey-Breting Digitally signed by Nicole Fohey-Breting Date: 2022.10.03 03:00:01 -04'00' (Signature)

Prepared by:
Richard Connolly
Science Project Manager
HNTB Corporation

Red Flag Investigation - Site Location
US 20, From SR 13 to CR 35
Des. No. 1900095, Added Travel Lanes
Elkhart County, Indiana



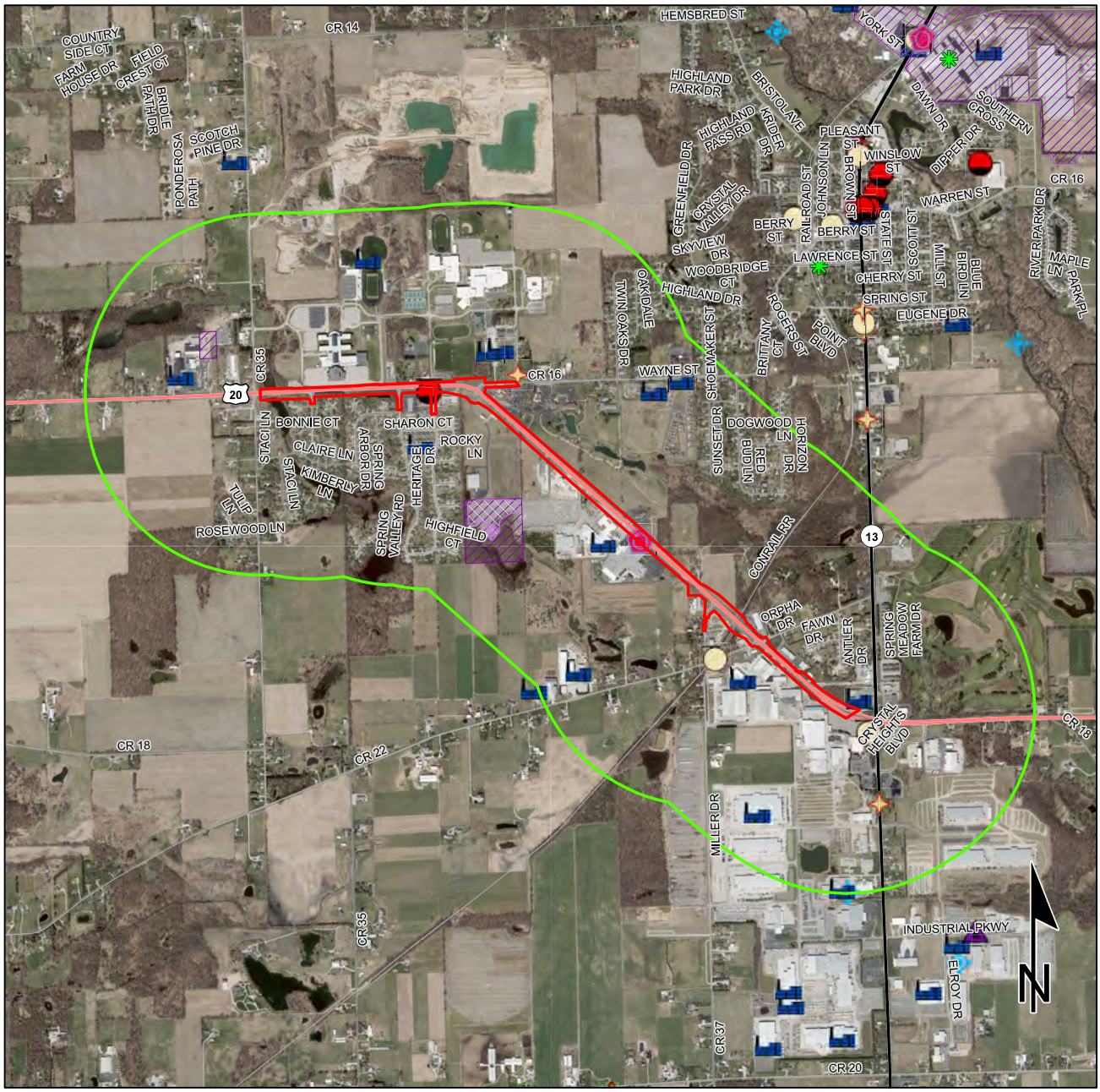
0 0.13 0.25 0.5 Miles

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: State Plane Indiana West (FIPS 1301 Ft US)
Map Datum: NAD83

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

MIDDLEBURY QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Red Flag Investigation - Hazardous Material Concerns
US 20, From SR 13 to CR 35
Des. No. 1900095, Added Travel Lanes
Elkhart 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 Facilities
- 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 0.5 1 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

Waters of the U.S Report



U.S. 20 Section 2 (CR 35 to SR 13) – Added Travel Lanes
Des. No. 1900142
Allen County, Indiana
February 6, 2023

1. PROJECT INFORMATION

Date(s) of Field Reconnaissance: June 11, 2019, October 14, 2019, & October 22, 2022

Location

The project is located on U.S. 20 between CR 35 to SR 13 in Elkhart County, Indiana.

- Section 9, 16, 15, 22, Township 37 N, Range 7 E
- Middlebury Quadrangle, Indiana
- 41.66338 N, -85.72056 W (NAD83)

Project Description

The Federal Highway Administration (FHWA) and Indiana Department of Transportation (INDOT), Fort Wayne District are planning to proceed with an addition of a two-way left turn lane and additional travel lanes along United States Highway 20 (US 20) between County Road 35 (CR 35) and State Road 13 (SR 13) in Elkhart County, Indiana. This report updates the findings of the initial report to document water features in the revised investigated area. This revised investigated area includes an area needed for design changes made after the approval of the initial waters report completed in October 2019. These design changes included shifting the roadway alignment further to the south to accommodate revised utility clearance requirements.

2. DESKTOP RECONNAISSANCE

2.1 SOIL ASSOCIATIONS AND SERIES TYPES

According to the Soil Survey Geographic (SSURGO) Database for Elkhart County, Indiana, the soil series summarized in Table 1 are found within the US 20 Section 2 (CR 35 to SR 13) project area (Attachment Pages 12-17).

TABLE 1: SOIL CLASSIFICATIONS

Soil Name	Symbol	Description	Hydric Soil Category	Hydric Rating
Bristol Loamy Sand	BtxA	Very deep, excessively drained soils formed in sandy outwash on outwash plains, outwash terraces, or kames. Slope ranges from 0 to 2 percent.	Non-hydric	0%
Bristol Loamy Sand	BtxB	Very deep, excessively drained soils formed in sandy outwash on outwash plains, outwash terraces, or kames. Slope ranges from 2 to 5 percent.	Non-hydric	0%
Bristol Loamy Sand	BtxC	Very deep, excessively drained soils formed in sandy outwash on outwash plains, outwash terraces, or kames. Slope ranges from 5 to 10 percent.	Non-hydric	0%
Bronson Sandy Loam	BufA	Very deep, moderately well-drained soils formed in loamy and sandy materials overlying loamy sand or gravelly sand deposits on outwash plains, valley trains, and low-lying moraines. Slope ranges from 0 to 1 percent.	Predominantly Non-hydric	6%
Coloma Sand	CnbA	Very deep, excessively drained, or excessively drained soils formed in sandy drift. These soils are moraines, outwash plains, deltas, and stream terraces. Slope ranges from 0 to 2 percent.	Non-hydric	0%
Gilford Sandy Loam	GczA	Very deep, poorly drained, or very poorly drained soils formed in loamy over sandy sediments on outwash plains, glacial drainage channels, near-shore zones, and floodplain steps. Slope ranges from 0 to 2 percent.	Predominantly hydric	95%
Histosols	HhaAP	Very deep, poorly drained soils formed in depressions on till plains, depressions on outwash plains, and depressions on lake plains. Slope ranges from 0 to 1 percent.	Predominantly hydric	75%
Urban Land-Bristol Complex	UdpA	Very deep, excessively drained soils formed in outwash plains, outwash terraces, and kames. Slope ranges from 0 to 1 percent.	Non-hydric	0%
Urban Land-Bristol Complex	UdpB	Very deep, excessively drained soils formed in outwash plains, outwash terraces, and kames. Slope ranges from 1 to 5 percent.	Non-hydric	0%

2.2 NATIONAL WETLANDS INVENTORY

Based on the U.S. Fish and Wildlife National Wetland Inventory (NWI) data (www.fws.gov/wetlands/Data/State-Downloads.html) there is 1 wetland within the project area (Attachment Page 5). Below is the NWI area mapped within the investigated area.

- One wetland within the investigated area is mapped as palustrine, unconsolidated bottom, intermittently exposed, and excavated (PUBGx).

2.3 HYDROLOGY

According to the Indiana Floodplain Information Portal, the project is not within a 100-year floodplain or regulatory floodway (http://dnrmaps.dnr.in.gov/appsphp/fdms/) (Attachment Page 4).

3. Field Reconnaissance

HNTB Indiana staff performed a field review of the investigated area on June 11, 2019, October 14, 2019, and October 22, 2022. The purpose was to determine the presence of waters of the U.S. within the investigated area and determine the presence or absence of jurisdictional waters. The field investigation area encompassed the area required for construction access and completion of the added travel lanes work. HNTB staff photographed select features and areas of interest throughout the investigated area. A photo location map and selected photographs are included as Attachment Pages 18-56.

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

4. Waters

The June 11, 2019, October 14, 2019, and October 22, 2022, field reconnaissance for the US 20 added travel lanes project identified two Stormwater Control Features (Stormwater Control Feature 1, Stormwater Control Feature 2).

4.1 Stormwater Control Features

Stormwater Control Feature 1

Stormwater Control Feature 1 formed as an acting retention area for water in the surrounding area. Hydrology is sourced from stormwater runoff from US 20 and surrounding parking lots. Stormwater Control Feature 1, approximately 0.05 acre in size, exists as a manmade drainage feature. Stormwater Control Feature 1 is a poor-quality resource based on the poor species richness and position with the ditch line of US 20. Stormwater Control Feature 1 is likely a non-jurisdictional feature as it is an acting retention area for water in the surrounding area.

Stormwater Control Feature 2

Stormwater Control Feature 2 was constructed as a retention area for water in the surrounding area. Hydrology is sourced from stormwater runoff from US 20 and the surrounding residential and commercial properties. Stormwater Control Feature 2 is considered poor based on the lack of a buffer, lack of shading, proximity to commercial property, and lack of aquatic habitat. Stormwater Control Feature 2, approximately 0.57 acre in size, exists as a manmade drainage feature. Stormwater Control Feature 2 was constructed on a commercial property adjacent to US 20. Stormwater Control Feature 2 is a stormwater retention basin and is a section 402 feature. This is not jurisdictional.

TABLE 2: STORMWATER CONTROL FEATURES SUMMARY TABLE

Stormwater Control Features	Photo	Lat/Long	Areas (Acre)	Quality	Water of the U.S?
1	90, 91, 92	41.66801 N -85.73107 W	0.05	Poor	No
2	94, 95	41.66777 N -85.73299 W	0.57	Poor	No

DATA POINT 1 (DP1 DRY)

This data point was taken from an upland forest area north of US 20. Dominant vegetation consisted of green ash (*Fraxinus pennsylvanica,* FACW), bur oak (*Quercus macrocarpa,* FAC), honeysuckle (*Lonicera maackii,* UPL), sassafras (*Sassafras albidum,* FACU). This data point passed the dominance test for hydrophytic vegetation since greater than 50% of the dominant species were FAC or wetter. Hydrophytic vegetation was observed. Soils within the pit were excavated to a depth of 20 inches. From 0-8 inches soils were 10YR 3/3 silt loam with no redox features. From 8-20 inches, soils were 10YR 5/6 silt loam with no redox features. Soil characteristics do not support hydric soil status. No wetland hydrology indicators were observed. This point is not within a wetland due to the observation of no hydric soil and no wetland hydrology. The data form for this point is included as Attachment Pages 57-59.

DATA POINT 2 (DP2 DRY)

This data point was taken in the investigated area within the right of way south of US 20. This data point is the upland point of Stormwater Control Feature 1. Dominant vegetation consisted of tall fescue (*Festuca arundinacea,* FACU), common dandelion (*Taraxacum officinale,* UPL), white clover (*Trifolium repens,* UPL). This data point did not pass the dominance test for hydrophytic vegetation or have a prevalence index of less than 3; therefore, the hydrophytic vegetation criteria are not met. Soils within the pit were excavated to a depth of 20 inches. From 0-6 inches, soils were 10YR 3/3 silt loam with no redox features. From 6-20 inches, soils were 10YR 4/6 silt loam with no redox features. Soil characteristics do not support hydric soil status. No wetland hydrology indicators were observed. This point is not within a wetland due to the observation of non-hydrophytic vegetation, no hydric soil, and no wetland hydrology. The data form for this point is included as Attachment Pages 60-62.

DATA POINT 3 (DP3 WET)

This data point was taken in the investigated area within the right of way south of US 20. This data point represents the entirety of Stormwater Control Feature 1. Dominant vegetation consisted of tall fescue (*Festuca arundinacea,* FACU), common rush (*Juncus effuses,* OBL), spikerush (*Eleocharis nodosus,* OBL), narrowleaf cattail (*Typha angustifolia,* OBL). This data point passed the dominance test for hydrophytic vegetation since greater than 50% of the dominant species were FAC or wetter. The entire vegetative composition has a prevalence index of less than three. Hydrophytic vegetation was observed. Soils within the pit were excavated to a depth of 20 inches. From 0-7 inches soils were 10YR 3/1 mucky loam/clay. From 7-20 inches soils are 10YR 4/2 mucky loam/clay with 15% redox concentrations of 10YR 4/6. The soil profile is representative of hydric soil indicator loamy mucky mineral (F1) and depleted matrix (F3). Wetland hydrology indicators observed were surface water (A1) and high-

water table (A2). This point meets the three wetland criteria due to the observation of hydrophytic vegetation, hydric soil, and wetland hydrology. The data form for this point is included as Attachment Pages 63-65.

TABLE 3: DATA POINT SUMMARY TABLE

Data Point-ID	Vegetation	Soils	Hydrology	Meets Wetland Criteria?
DP1 Dry	Yes	No	No	No
DP2 Dry	No	No	No	No
DP3 Wet	Yes	Yes	Yes	Yes

4.2 WETLANDS

Site investigations did not identify any wetland features within the investigated area.

4.3 STREAMS

Site investigations did not identify any stream features within the investigated area. An equalizer pipe is located underneath US 20, east of Pumpkinvine Nature Trail causing a pronounced scour feature in this section of the investigated area.

4.4 ROADSIDE DRAINAGE FEATURES

HNTB staff did not identify any roadside drainage features with bed, bank, and OHWM characteristics within the investigated area.

4.5 OPEN WATERS

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

4.6 WILDLIFE EVIDENCE AND CONCERNS

There are no structures that exhibited a wildlife crossing within the US 20 Section 2 (CR 35 to SR 13) added travel lanes investigated area.

5. CONCLUSION

The June 11, 2019, October 14, 2019, & October 22, 2022, field reviews for the US 20 added travel lanes project did not identify any jurisdictional features within the identified investigated area. The United States Army Corps of Engineers (USACE) will make the final determination.

Disturbance of a wetland or stream could result in a mitigation requirement to secure the required permits for the added travel lanes project. If construction exceeds the limits of the survey review area illustrated in this document, further field investigation will be needed. This report is this office's best judgment of water resources that are likely to be under federal jurisdiction, based on the guidelines set forth by the U.S. Army corps of Engineers

(USACE). The final determination of jurisdictional waters is the responsibility of the USACE. The INDOT Office of Environmental Services should be contacted immediately if impacts occur.

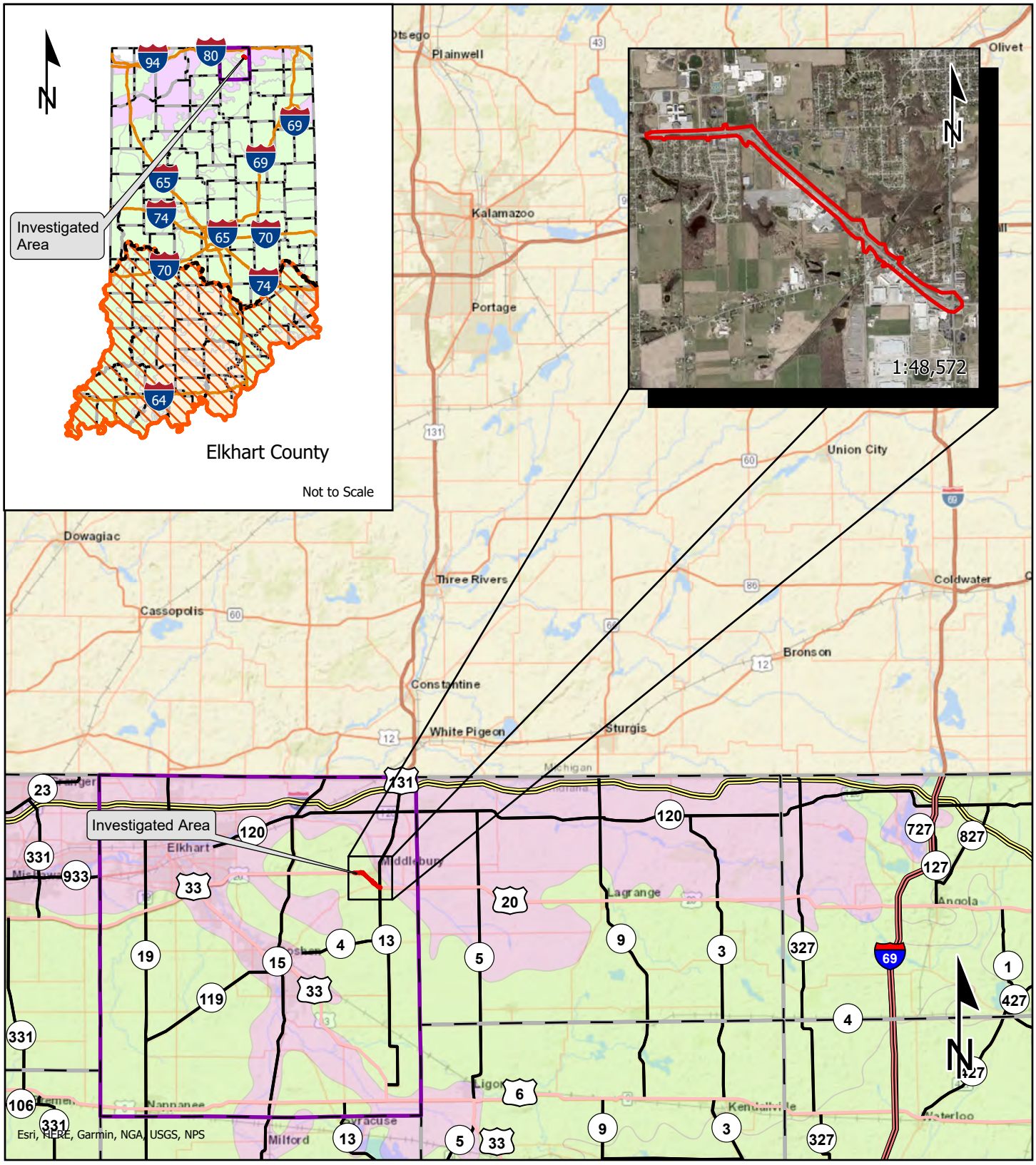
This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience, and professional judgment in conformance with the 1987 Corps of Engineers Wetlands Delineation Manual, the appropriate regional supplement, the USACE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



Landon Little, Scientist

PREPARERS:

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



Investigated Area
Elkhart County
County Boundaries
Indiana Karst Region

NRCS Land Resource Regions
Northeast and Northcentral
Midwest
Eastern Mountains and Piedmont

0 4.5 9 Miles

Project Location Map

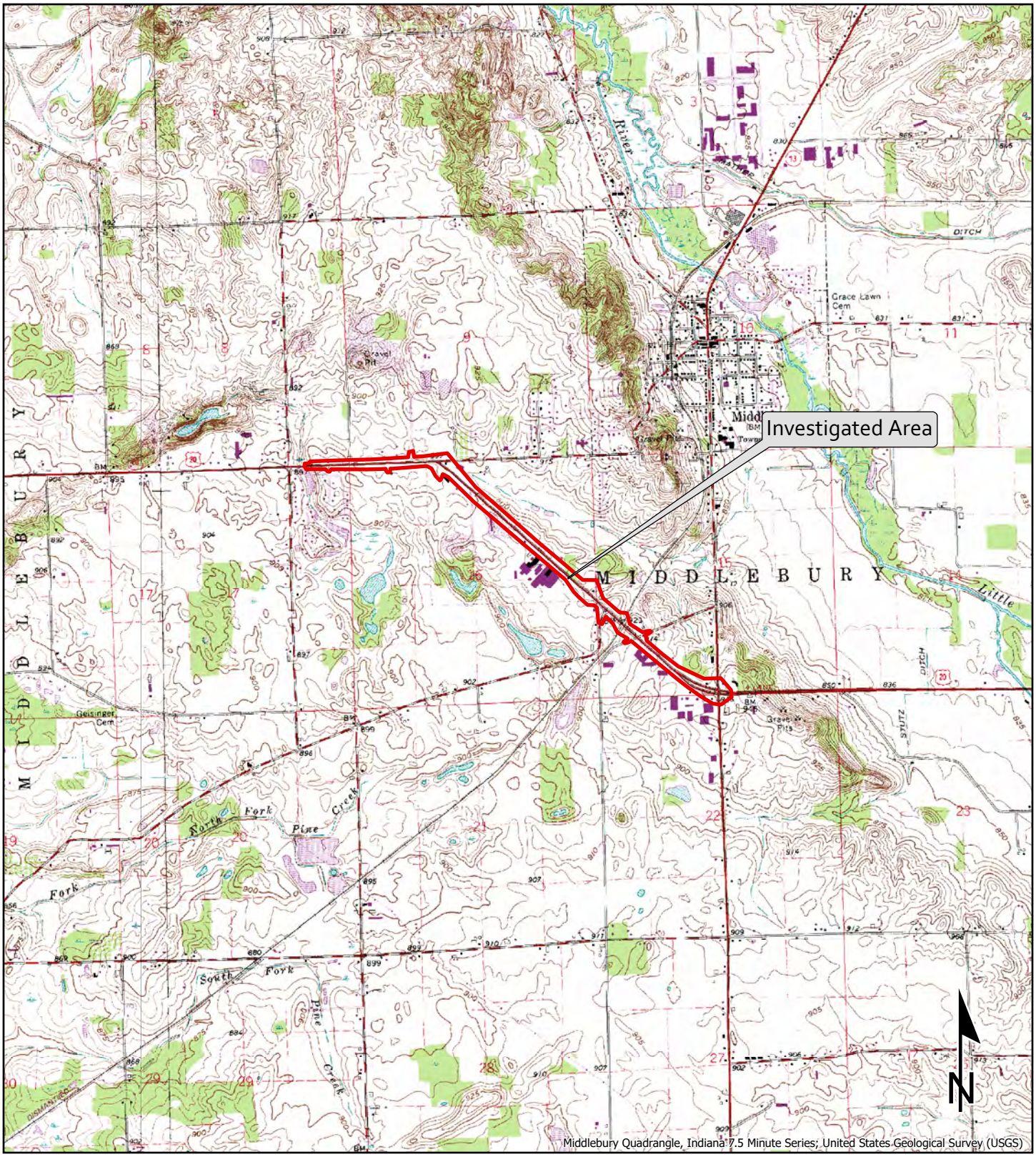
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 9 miles

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

0 3,000 Feet

USGS (1:36,000 scale) Topographic Map

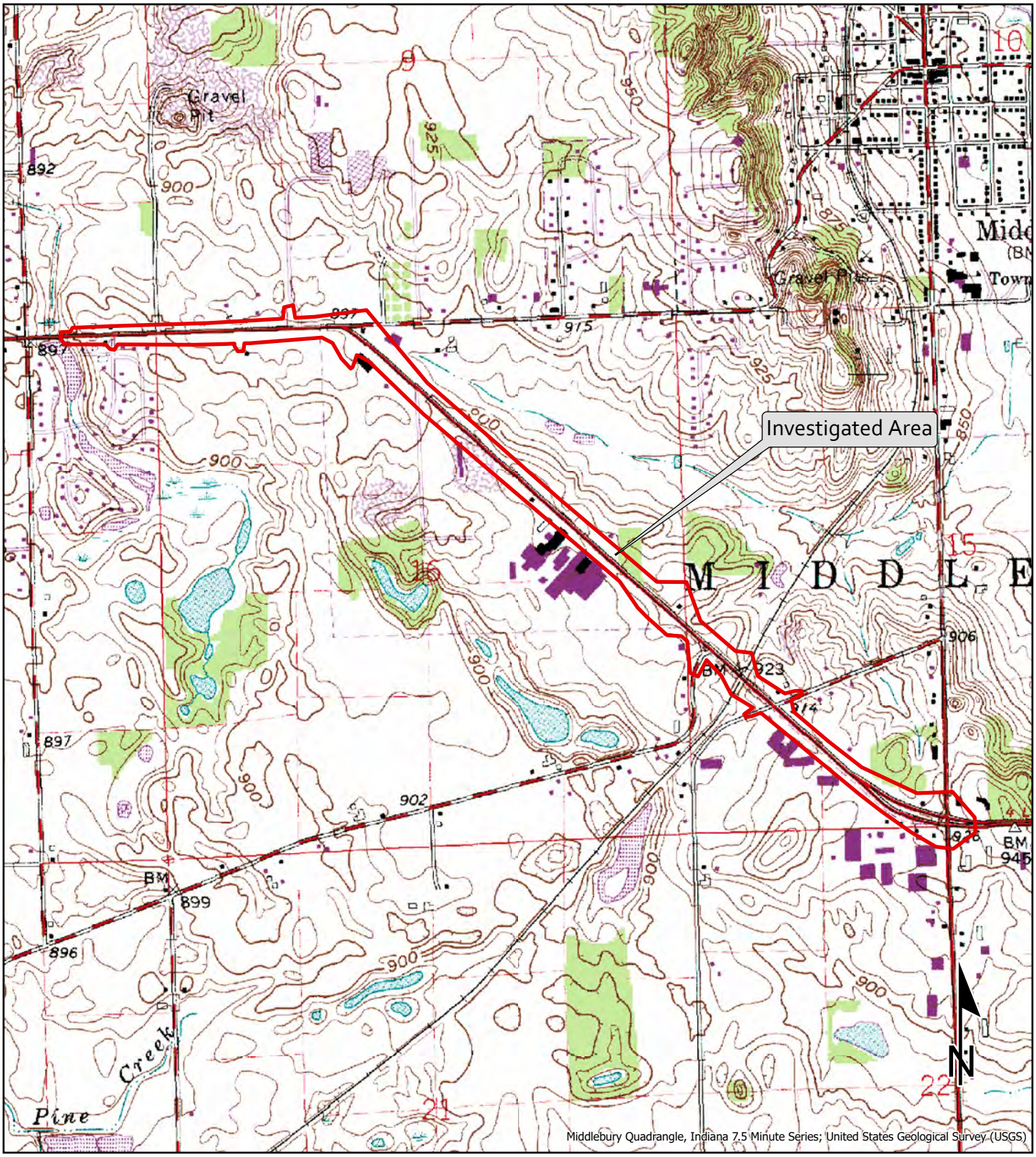
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 3,000 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

0 1,400 Feet

USGS (1:16,800 scale) Topographic Map

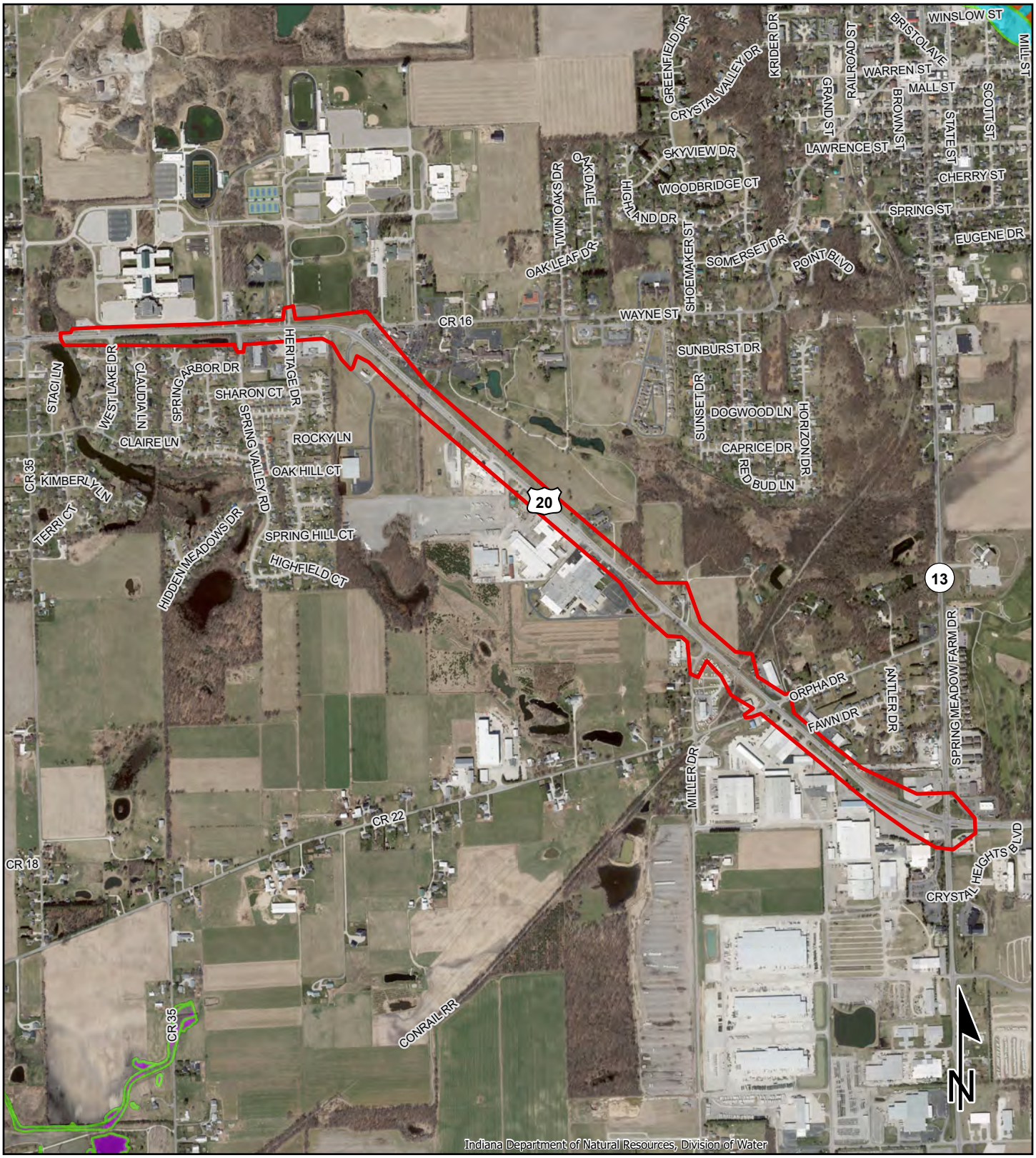
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 1,400 ft

HNTB

Graphics created by HNTB Corporation (2023)



- FEMA Zone AE Floodway
- DNR Detailed Floodway
- DNR Approximate Floodway
- FEMA Zone A
- FEMA Zone AE
- DNR Detailed Fringe
- DNR Approximate Fringe
- Additional Floodplain Area
- FEMA Protected by Levee
- FEMA Floodplain - Ponding (Depth)
- FEMA Floodplain - Sheet Flow (Depth)
- Investigated Area

0 700 1,400 Feet

IDNR Floodplain Map

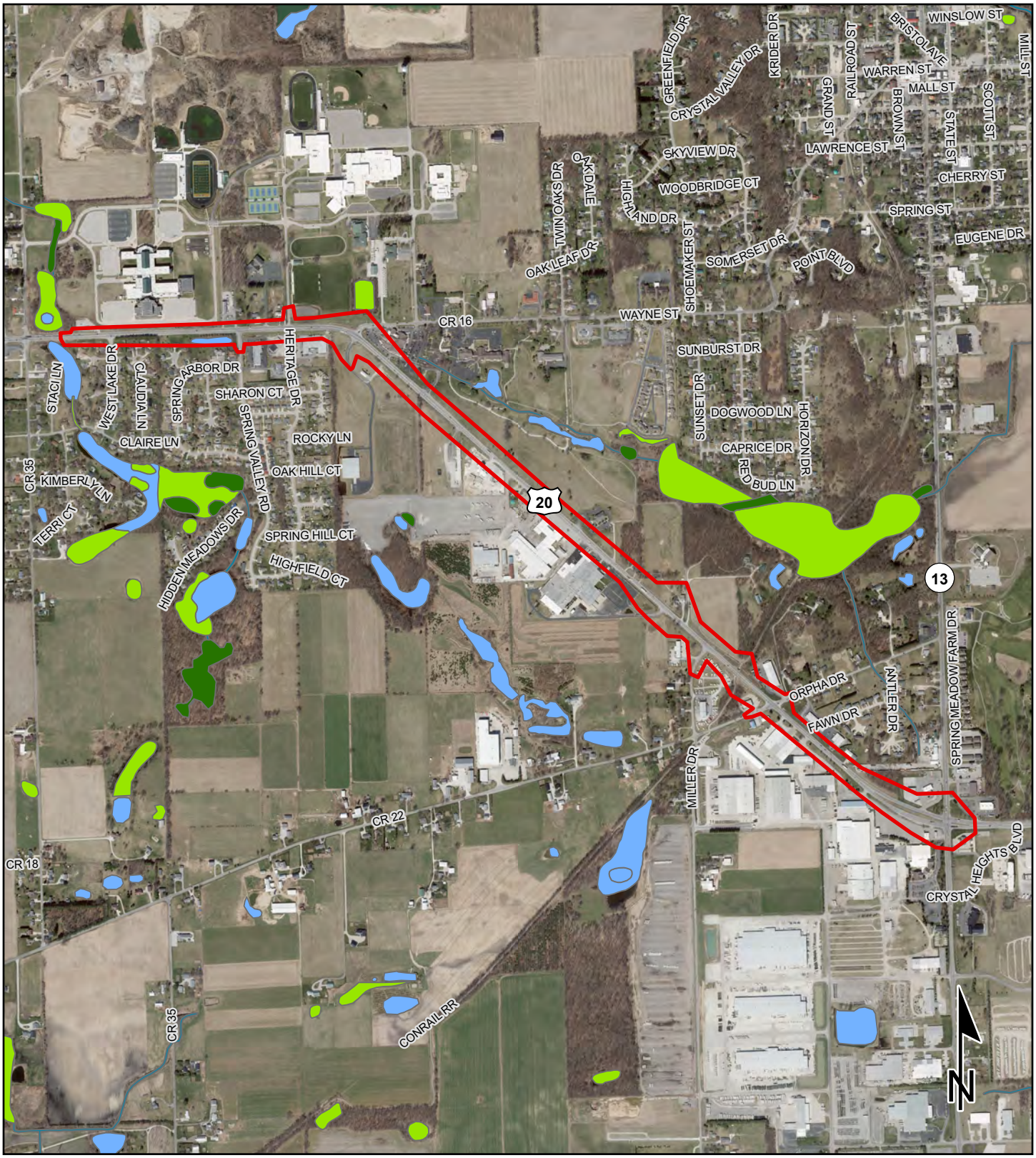
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

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

Investigated Area

0 700 1,400 Feet

National Wetlands Inventory Map

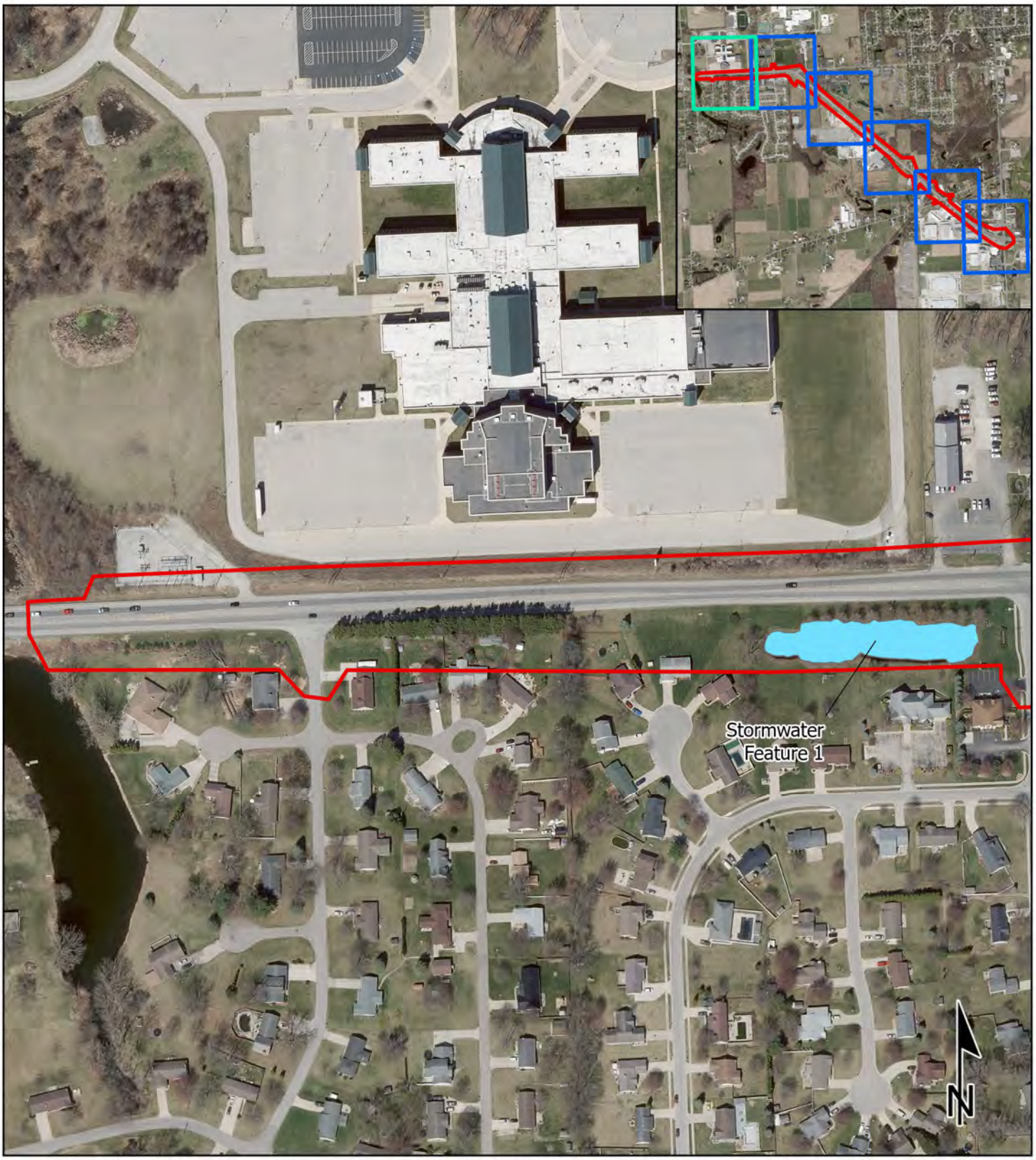
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 1,400 ft

HNTB

Graphics created by HNTB Corporation (2022)



Investigated Area

Stormwater Feature

0 125 250 Feet

Delineated Features Map

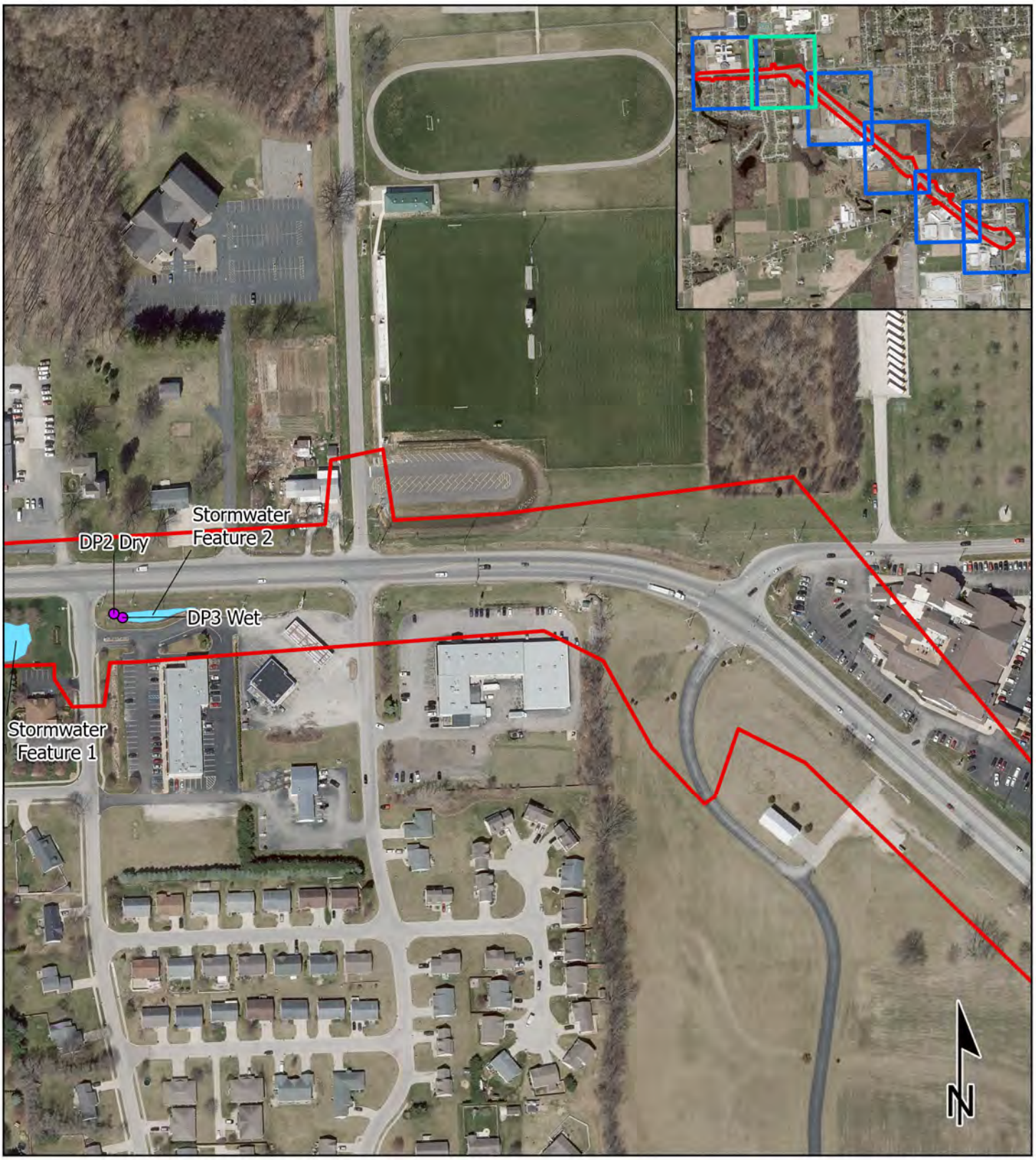
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

Stormwater Feature

Data Points

Data Points

0 125 250 Feet

Delineated Features Map

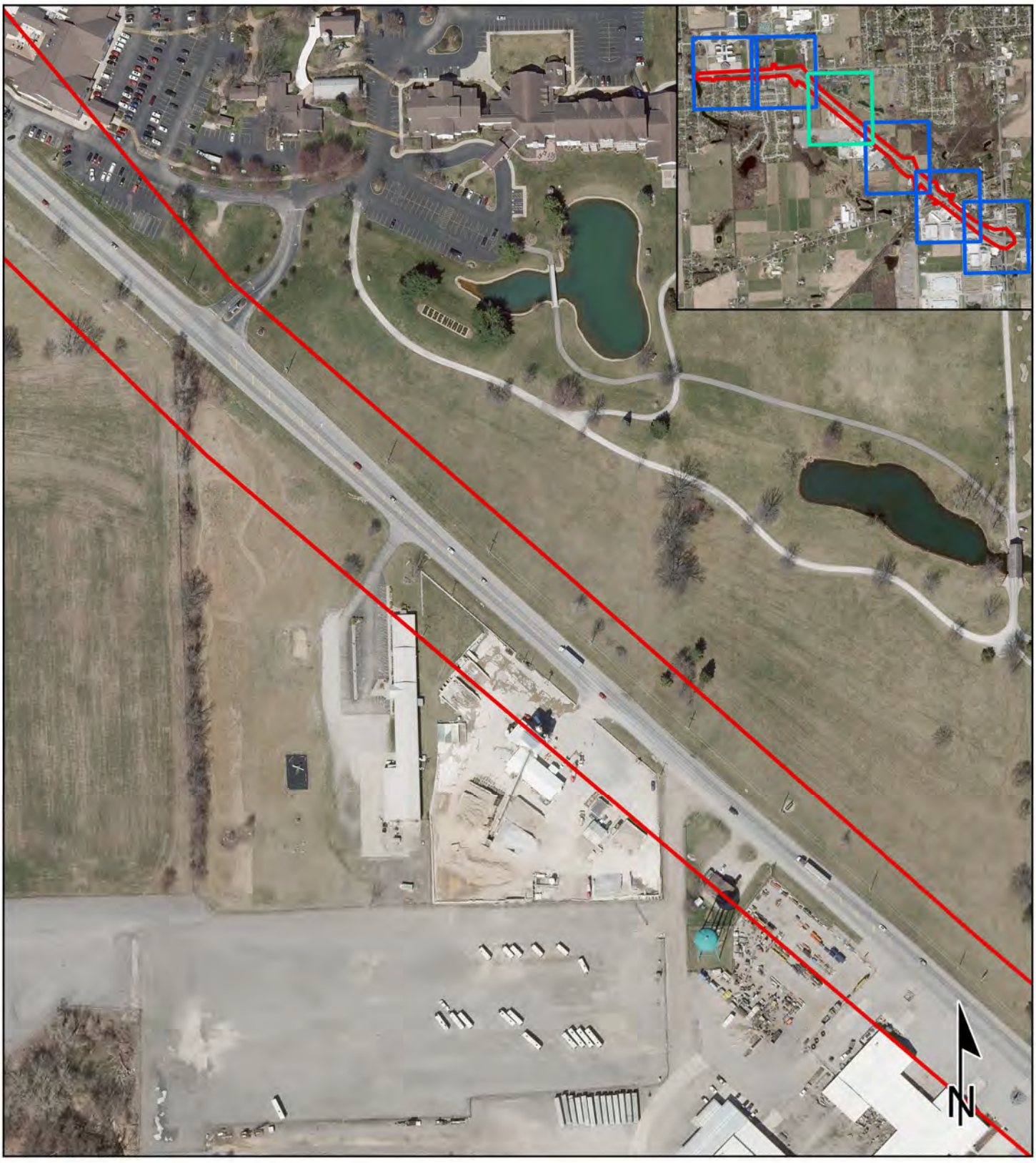
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

0 125 250 Feet

Delineated Features Map

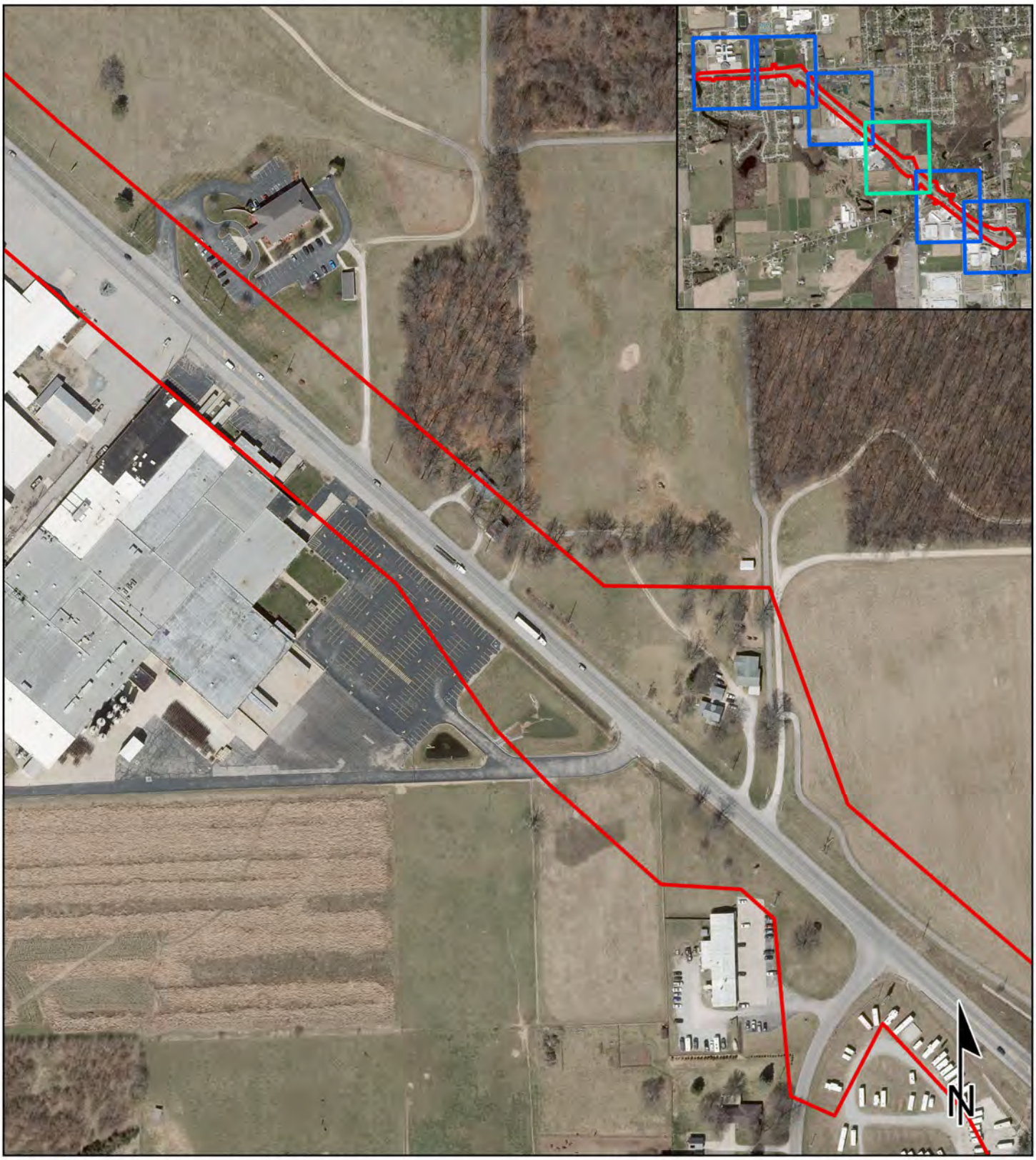
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

0 125 250 Feet

Delineated Features Map

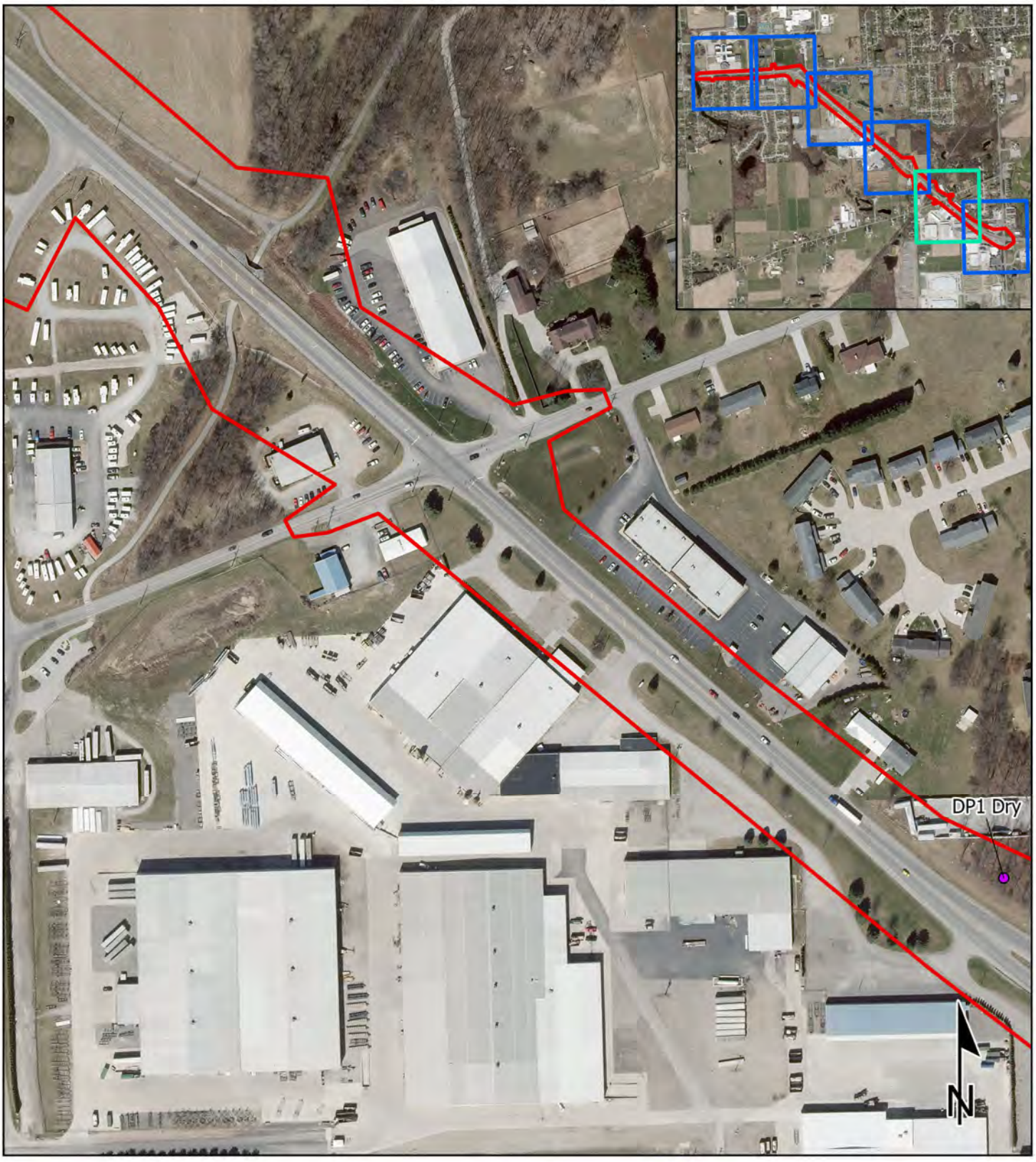
U.S. 20 - CR 35 to SR 13, Section 2
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Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

Data Points

0 125 250 Feet

Delineated Features Map

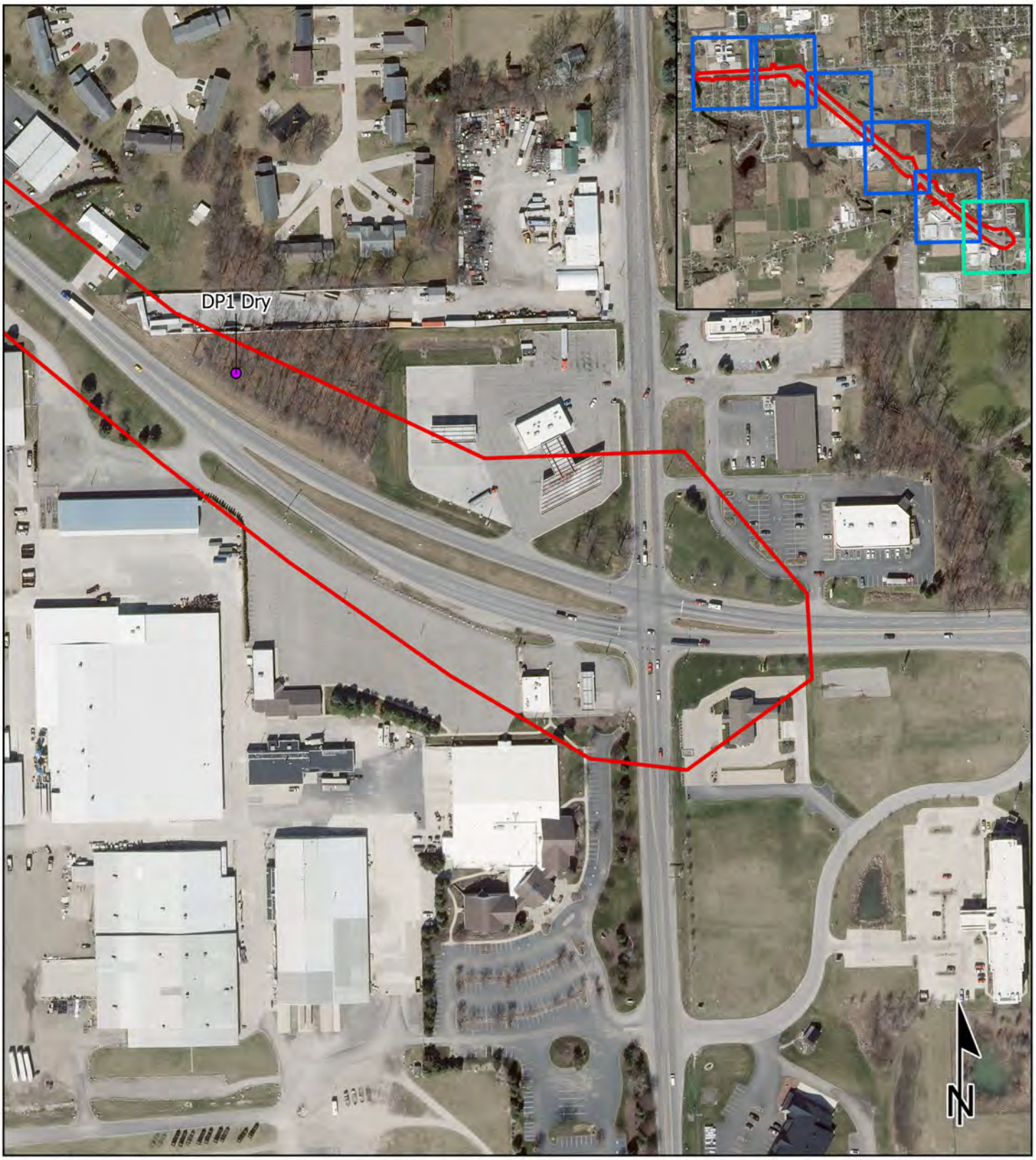
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Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Investigated Area

Data Points

0 125 250 Feet

Delineated Features Map

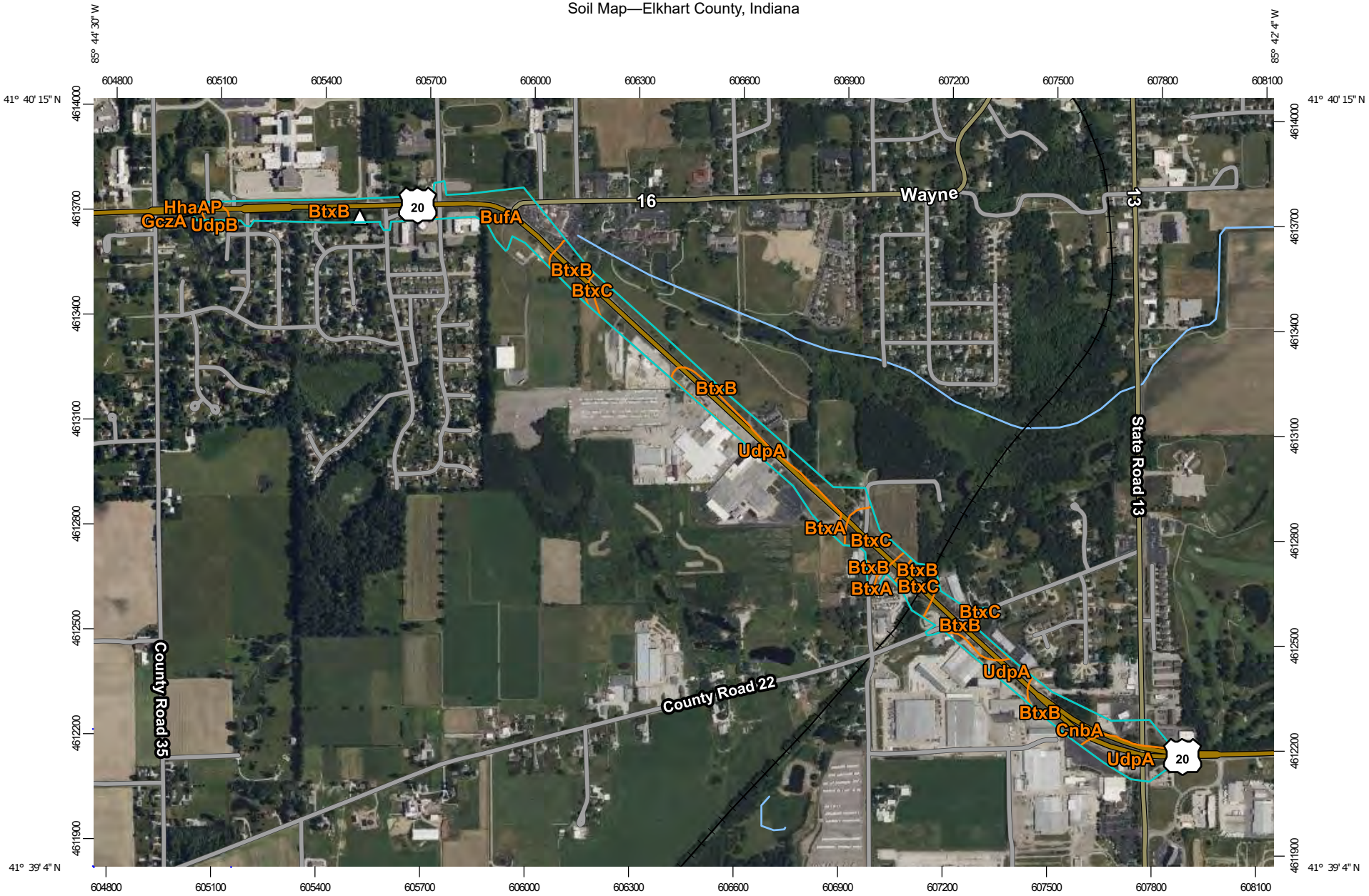
U.S. 20 - CR 35 to SR 13, Section 2
Added Travel Lanes
Elkhart County, Indiana

Des. No. 1900095

1 inch = 250 ft

HNTB

Graphics created by HNTB Corporation (2023)



Map Scale: 1:15,500 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 200 400 800 1200

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BtxA	Bristol loamy sand, 0 to 2 percent slopes	0.3	0.4%
BtxB	Bristol loamy sand, 2 to 5 percent slopes	30.4	41.5%
BtxC	Bristol loamy sand, 5 to 10 percent slopes	8.1	11.1%
BufA	Bronson sandy loam, 0 to 1 percent slopes	10.3	14.1%
CnbA	Coloma sand, 0 to 2 percent slopes	7.4	10.1%
GczA	Gilford sandy loam, 0 to 2 percent slopes, gravelly subsoil	0.2	0.3%
HhaAP	Histosols, 0 to 1 percent slopes, ponded	0.0	0.0%
UdpA	Urban land-Bristol complex, 0 to 1 percent slopes	15.7	21.4%
UdpB	Urban land-Bristol complex, 1 to 5 percent slopes	0.8	1.1%
Totals for Area of Interest		**73.3**	**100.0%**

Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
BtxA	Bristol loamy sand, 0 to 2 percent slopes	0	0.3	0.4%
BtxB	Bristol loamy sand, 2 to 5 percent slopes	0	30.4	41.5%
BtxC	Bristol loamy sand, 5 to 10 percent slopes	0	8.1	11.1%
BufA	Bronson sandy loam, 0 to 1 percent slopes	6	10.3	14.1%
CnbA	Coloma sand, 0 to 2 percent slopes	0	7.4	10.1%
GczA	Gilford sandy loam, 0 to 2 percent slopes, gravelly subsoil	95	0.2	0.3%
HhaAP	Histosols, 0 to 1 percent slopes, ponded	75	0.0	0.0%
UdpA	Urban land-Bristol complex, 0 to 1 percent slopes	0	15.7	21.4%
UdpB	Urban land-Bristol complex, 1 to 5 percent slopes	0	0.8	1.1%
Totals for Area of Interest			**73.3**	**100.0%**

Report—Hydric Soil List - All Components

Hydric Soil List - All Components–IN039-Elkhart County, Indiana					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
BtxA: Bristol loamy sand, 0 to 2 percent slopes	Bristol	85	Outwash terraces,outwash plains	No	—
	Osolo	5	Outwash plains,outwash terraces	No	—
	Tyner	5	Outwash plains	No	—
	Vistula	5	Outwash plains	No	—
BtxB: Bristol loamy sand, 2 to 5 percent slopes	Bristol	80	Outwash plains,kames,outwash terraces	No	—
	Vistula	8	Outwash plains	No	—
	Bronson	4	Outwash plains,moraines	No	—
	Osolo	4	Outwash plains,outwash terraces	No	—
	Tyner	4	Outwash plains	No	—
BtxC: Bristol loamy sand, 5 to 10 percent slopes	Bristol	83	Outwash terraces,outwash plains,kames	No	—
	Ormas	8	Till plains	No	—
	Tyner	7	Outwash plains	No	—
	Riddles	2	Moraines,till plains	No	—
BufA: Bronson sandy loam, 0 to 1 percent slopes	Bronson	85	Outwash plains,moraines	No	—
	Brady	6	Outwash plains,outwash terraces	No	—
	Gilford	6	Flats on outwash plains,drainageways on outwash plains,depressions on outwash plains	Yes	2
	Bristol	3	Outwash terraces,outwash plains	No	—
CnbA: Coloma sand, 0 to 2 percent slopes	Coloma	85-100	Moraines,outwash plains	No	—
	Bristol	0-10	Outwash plains	No	—
	Osolo	0-10	Outwash plains	No	—
	Tyner	0-10	Outwash plains	No	—

Hydric Soil List - All Components–IN039-Elkhart County, Indiana					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
GczA: Gilford sandy loam, 0 to 2 percent slopes, gravelly subsoil	Gilford-Gravelly subsoil	85-100	Glacial drainage channels,glacial drainage channels	Yes	2,3
	Brady	0-10	Glacial drainage channels,glacial drainage channels	No	—
	Sebewa	0-10	Glacial drainage channels,glacial drainage channels	Yes	2,3
	Adrian	0-5	Depressions on glacial drainage channels,depressions on glacial drainage channels	Yes	1,3
	Granby	0-5	Glacial drainage channels,glacial drainage channels	Yes	2
HhaAP: Histosols, 0 to 1 percent slopes, ponded	Histosols-Undrained	50	Depressions on till plains,depressions on outwash plains,depressions on lake plains	Yes	1,2,3
	Water	25	—	No	—
	Adrian-Undrained	5	Depressions on till plains,depressions on outwash plains,depressions on lake plains	Yes	1,2,3
	Edwards-Undrained	5	Depressions on till plains,depressions on outwash plains,depressions on lake plains	Yes	1,2,3
	Houghton-Undrained	5	Depressions on till plains,depressions on outwash plains,depressions on lake plains	Yes	1,2,3
	Muskego-Undrained	5	Depressions on lake plains,depressions on till plains,depressions on outwash plains	Yes	1,2,3
	Palms-Undrained	5	Depressions on till plains,depressions on outwash plains	Yes	1,2,3
UdpA: Urban land-Bristol complex, 0 to 1 percent slopes	Urban land	50	Outwash plains	Unranked	—
	Bristol	40	Outwash terraces,outwash plains	No	—

Hydric Soil List - All Components–IN039-Elkhart County, Indiana					
Map symbol and map unit name	**Component/Local Phase**	**Comp. pct.**	**Landform**	**Hydric status**	**Hydric criteria met (code)**
	Osolo	4	Outwash plains,outwash terraces	No	—
	Vistula	4	Outwash plains	No	—
	Tyner	2	Outwash plains	No	—
UdpB: Urban land-Bristol complex, 1 to 5 percent slopes	Urban land	50	Outwash plains	Unranked	—
	Bristol	40	Outwash plains,kames,outwash terraces	No	—
	Vistula	4	Outwash plains	No	—
	Bronson	2	Outwash plains,moraines	No	—
	Osolo	2	Outwash plains,outwash terraces	No	—
	Tyner	2	Outwash plains	No	—

Data Source Information

Soil Survey Area: Elkhart County, Indiana
Survey Area Data: Version 25, Sep 3, 2022

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM

BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR PJD: February 6, 2023

B. NAME AND ADDRESS OF PERSON REQUESTING PJD: Landon Little, 111 Monument Circle Suite 1200, Indianapolis, IN, 46204

C. DISTRICT OFFICE, FILE NAME, AND NUMBER:

D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:

This project is located on US 20 between CR 35 and SR 13, near the town of Middlebury in Elkhart County, Des. No. 1900095. Proposed work is a added two-way left turn lane and additional travel lane along US 20. Work that may affect water resources in the area include added travel lanes.

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

State: IN County/parish/borough: Elkhart City: Middlebury

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

Lat.: 41.66338 N Long.: -85.72056 W

Universal Transverse Mercator: Northing: 4613085 Easting: 606640 Zone: 16S

Name of nearest waterbody: Little Elkhart River

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

☐ Office (Desk) Determination. Date:

☐ Field Determination. Date(s):

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

Site number	Latitude (decimal degrees)	Longitude (decimal degrees)	Estimated amount of aquatic resource in review area (acreage and linear feet, if applicable)	Type of aquatic resource (i.e., wetland vs. non-wetland waters)	Geographic authority to which the aquatic resource "may be" subject (i.e., Section 404 or Section 10/404)
Stormwater Feature 1	41.66801 N	-85.73107 W	0.05 acre	wetland	Section 404
Stormwater Feature 2	41.66777 N	-85.73299 W	0.57 acre	wetland	Section 404

1) The Corps of Engineers believes that there may be jurisdictional aquatic resources in the review area, and the requestor of this PJD is hereby advised of his or her option to request and obtain an approved JD (AJD) for that review area based on an informed decision after having discussed the various types of JDs and their characteristics and circumstances when they may be appropriate.

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

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

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

- [x] Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
  Map: HNTB Indiana.
- [ ] Data sheets prepared/submitted by or on behalf of the PJD requestor.
  - [ ] Office concurs with data sheets/delineation report.
  - [ ] Office does not concur with data sheets/delineation report. Rationale: _____.
- [ ] Data sheets prepared by the Corps: _____.
- [ ] Corps navigable waters' study: _____.
- [ ] U.S. Geological Survey Hydrologic Atlas: _____.
  - [ ] USGS NHD data.
  - [ ] USGS 8 and 12 digit HUC maps.
- [x] U.S. Geological Survey map(s). Cite scale & quad name: 1:24,000 scale Middlebury Quadrangle.
- [x] Natural Resources Conservation Service Soil Survey. Citation: https://websoilsurvey.sc.egov.usda.gov.
- [x] National wetlands inventory map(s). Cite name: https://www.fws.gov/wetlands/data/mapper/html.
- [ ] State/local wetland inventory map(s): _____.
- [x] FEMA/FIRM maps: IDNR Floodplain Database.
- [ ] 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- [x] Photographs: [x] Aerial (Name & Date): 2016 USDA/NRCS Ortho.
  or [x] Other (Name & Date): June 11, 2019, October 14, 2019, & October 22, 2022.
- [ ] Previous determination(s). File no. and date of response letter: _____.
- [ ] Other information (please specify): _____.

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

_____	 2-6-2023
Signature and date of Regulatory staff member completing PJD	Signature and date of person requesting PJD (REQUIRED, unless obtaining the signature is impracticable)[1]

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

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, DETROIT DISTRICT
MICHIANA BRANCH
2422 VIRIDIAN DRIVE SUITE # 200
SOUTH BEND, IN 46628-3489

May 18, 2021

Regulatory Office
File No. LRE-2010-00799-120-J21

Kristi Todd
Indiana Dept. of Transportation
100 N. Senate Ave. Rm 642
Indianapolis, Indiana 46204

Dear Ms. Todd:

This letter is in response to your request for a Corps of Engineers' (Corps) Jurisdictional Determination dated April 13, 2021 concerning US 20 Section 2 (CR 35 to SR 13) near Middlebury, Indiana (Latitude 41.66338 N. and Longitude -85.72056 W., Elkhart County). The request included a delineation report provided by HNTB on behalf of INDOT. Based upon review of the report, we have determined that Stormwater Control Features A and B as depicted on the enclosed figure fall into a category of excluded features that are not within the regulatory authority of the Corps of Engineers.

We still exercise regulatory authority over the discharge of dredged and/or fill material into all other waters of the United States. We will continue to make jurisdiction determinations on all waters of the United States, including wetlands, on a case-by-case basis. Although a Department of the Army permit may not be required in this instance, this determination does not relieve you of the responsibility to comply with applicable state law. We urge you to contact the Indiana Department of Environmental Management (IDEM) at (317) 233-8488 to determine the applicability of state law to your project. A copy of this letter is being forwarded on to the IDEM for its files.

Attached to this determination is an approved jurisdictional determination (AJD). If you are not in agreement with the AJD, you can make an administrative appeal under 33 CFR 331. We have enclosed a Notification of Administrative Appeals Options and Process and Request for Appeal form describing all of your appeals options regarding this AJD. If you accept the AJD, you do not need to sign and submit the appeals form. If you elect to return the appeals document, your response is required within 60 days from the date of this letter. Please contact us if you have questions on our appeals process.

This jurisdiction determination is valid for a period of five years from the date of this letter unless new information warrants revision of the delineation before the expiration date. Should you have any questions, please contact me at the above address, by E-Mail at Ryan.D.Cassidy@usace.army.mil, or by telephone at (574) 232-1952 ext. 21964. In all communications, please refer to File Number LRE-2010-00799-120-J21.

We are interested in your thoughts and opinions concerning your experience with the Detroit District, Corps of Engineers Regulatory Program. If you are interested in letting us know how we are doing, you can complete an electronic Customer Service Survey from our web site at: http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey. Alternatively, you may contact us and request a paper copy of the survey that you may complete and return to us by mail or fax. Thank you for taking the time to complete the survey, we appreciate your feedback.

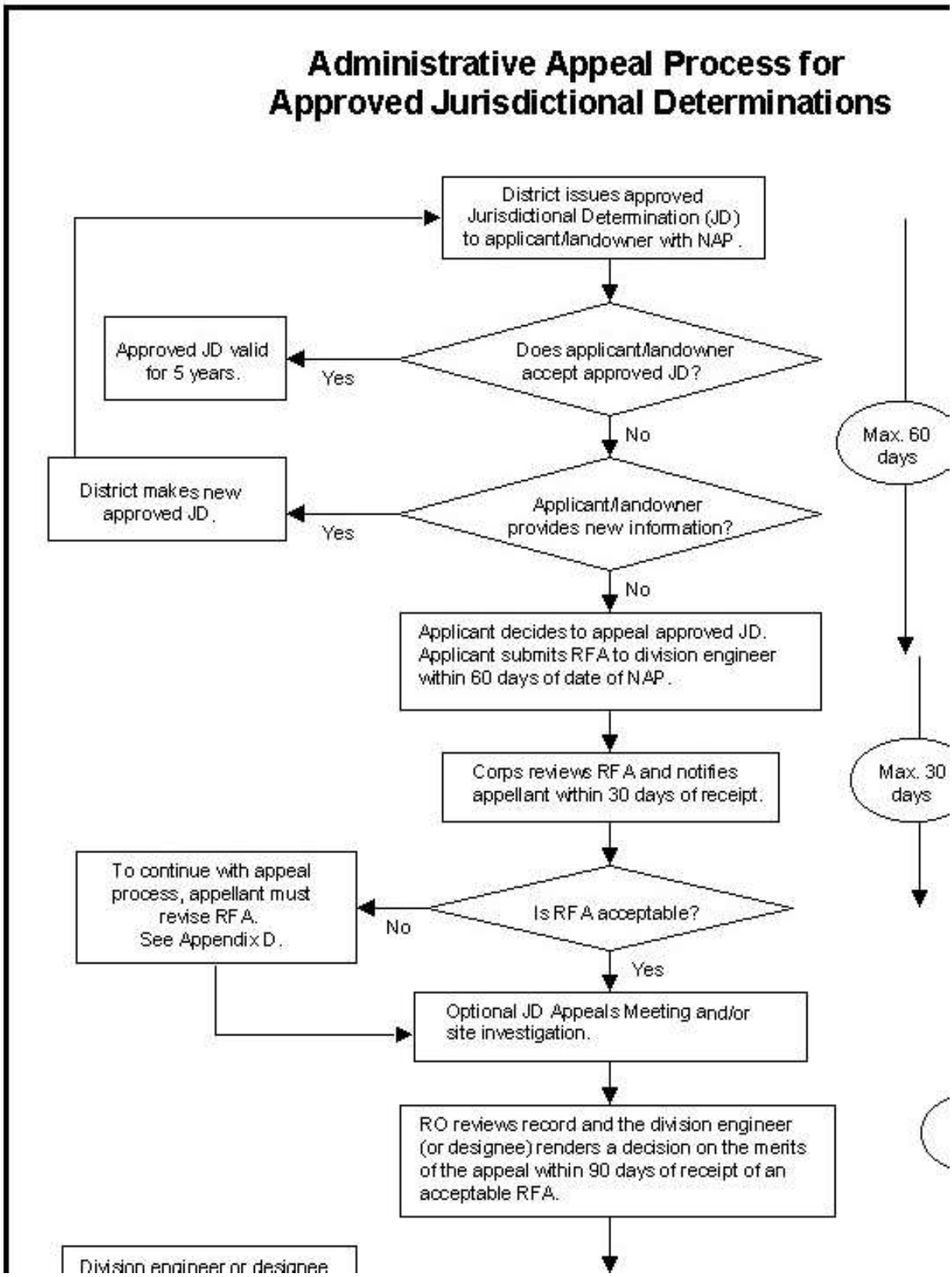
Sincerely,



Ryan D. Cassidy
Regulatory Project Manager
Michiana Branch

Copy Furnished

IDEM, Turner
IDNR, Smithers
HNTB, Connolly


Administrative Appeal Process for Approved Jurisdictional Determinations
District issues approved Jurisdictional Determination (JD) to applicant/landowner with NAP.
Does applicant/landowner accept approved JD?
Yes
Approved JD valid for 5 years.
No
Applicant/landowner provides new information?
Yes
District makes new approved JD.
No
Applicant decides to appeal approved JD. Applicant submits RFA to division engineer within 60 days of date of NAP.
Corps reviews RFA and notifies appellant within 30 days of receipt.
Is RFA acceptable?
No
To continue with appeal process, appellant must revise RFA. See Appendix D.
Yes
Optional JD Appeals Meeting and/or site investigation.
RO reviews record and the division engineer (or designee) renders a decision on the merits of the appeal within 90 days of receipt of an acceptable RFA.
Division engineer or designee
Max. 60 days
Max. 30 days

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Crystal Rehder, INDOT	File Number: LRE-2010-00799-120-J21	Date: May 18, 2021

Attached is:		See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A
	PROFFERED PERMIT (Standard Permit or Letter of permission)	B
	PERMIT DENIAL	C
X	APPROVED JURISDICTIONAL DETERMINATION	D
	PRELIMINARY JURISDICTIONAL DETERMINATION	E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/cecw/pages/reg materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:	If you only have questions regarding the appeal process you may also contact:
Ryan Cassidy U.S. Army Corps of Engineers Michiana Branch 2422 Viridian Drive Suite # 200 South Bend, IN 46628-3489 (574) 232-1952 ext. 21964	Jacob Siegrist Regulatory Appeals Review Officer US Army Corps of Engineers Great Lakes & Ohio River Division 550 Main Street, Room 10-714 Cincinnati, Ohio 45202-3222 Tel. (513) 684-2699 Fax (513) 684-2460

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

	Date:	Telephone number:
_____ Signature of appellant or agent.		

U.S. ARMY CORPS OF ENGINEERS
REGULATORY PROGRAM
APPROVED JURISDICTIONAL DETERMINATION FORM (INTERIM)
NAVIGABLE WATERS PROTECTION RULE

I. ADMINISTRATIVE INFORMATION

Completion Date of Approved Jurisdictional Determination (AJD): 5/18/2021
ORM Number: LRE-2010-00799-120-J21
Associated JDs: LRE-2010-00799-120-J19
Review Area Location[1]: State/Territory: Indiana City: Middlebury County/Parish/Borough: Elkhart County
Center Coordinates of Review Area: Latitude 41.6681 Longitude -85.7318

II. FINDINGS

A. Summary: Check all that apply. At least one box from the following list MUST be selected. Complete the corresponding sections/tables and summarize data sources.

- ☐ The review area is comprised entirely of dry land (i.e., there are no waters or water features, including wetlands, of any kind in the entire review area). Rationale: N/A or describe rationale.
- ☐ There are "navigable waters of the United States" within Rivers and Harbors Act jurisdiction within the review area (complete table in Section II.B).
- ☐ There are "waters of the United States" within Clean Water Act jurisdiction within the review area (complete appropriate tables in Section II.C).
- ☒ There are waters or water features excluded from Clean Water Act jurisdiction within the review area (complete table in Section II.D).

B. Rivers and Harbors Act of 1899 Section 10 (§ 10)[2]

§ 10 Name	§ 10 Size		§ 10 Criteria	Rationale for § 10 Determination
N/A.	N/A.	N/A	N/A.	N/A.

C. Clean Water Act Section 404

Territorial Seas and Traditional Navigable Waters ((a)(1) waters):[3]				
(a)(1) Name	(a)(1) Size		(a)(1) Criteria	Rationale for (a)(1) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Tributaries ((a)(2) waters):				
(a)(2) Name	(a)(2) Size		(a)(2) Criteria	Rationale for (a)(2) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Lakes and ponds, and impoundments of jurisdictional waters ((a)(3) waters):				
(a)(3) Name	(a)(3) Size		(a)(3) Criteria	Rationale for (a)(3) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

Adjacent wetlands ((a)(4) waters):				
(a)(4) Name	(a)(4) Size		(a)(4) Criteria	Rationale for (a)(4) Determination
N/A.	N/A.	N/A.	N/A.	N/A.

[1] Map(s)/figure(s) are attached to the AJD provided to the requestor.
[2] If the navigable water is not subject to the ebb and flow of the tide or included on the District's list of Rivers and Harbors Act Section 10 navigable waters list, do NOT use this document to make the determination. The District must continue to follow the procedure outlined in 33 CFR part 329.14 to make a Rivers and Harbors Act Section 10 navigability determination.
[3] A stand-alone TNW determination is completed independently of a request for an AJD. A stand-alone TNW determination is conducted for a specific segment of river or stream or other type of waterbody, such as a lake, where upstream or downstream limits or lake borders are established. A stand-alone TNW determination should be completed following applicable guidance and should NOT be documented on the AJD Form.

D. Excluded Waters or Features

Excluded waters ((b)(1) – (b)(12)):[4]				
Exclusion Name	Exclusion Size		Exclusion[5]	Rationale for Exclusion Determination
Feature A, (b)(10)	0.05	acre(s)	(b)(10) Stormwater control feature constructed or excavated in upland or in a non-jurisdictional water to convey, treat, infiltrate, or store stormwater runoff.	Active storm water control feature (detention/ retention area)
Feature B, (b)(10)	0.57	acre(s)	(b)(10) Stormwater control feature constructed or excavated in upland or in a non-jurisdictional water to convey, treat, infiltrate, or store stormwater runoff.	Active storm water control feature (detention/ retention area)

III. SUPPORTING INFORMATION

A. Select/enter all resources that were used to aid in this determination and attach data/maps to this document and/or references/citations in the administrative record, as appropriate.

☒ Information submitted by, or on behalf of, the applicant/consultant: Delineation report provided by HNTB on behaf of INDOT by HNTB dated April 13, 2021

This information is sufficient for purposes of this AJD.

Rationale: NA

☐ Data sheets prepared by the Corps: Title(s) and/or date(s).

☒ Photographs: Aerial: Inidana Map, https://indianamap.org dates: 1998, 2003, 2005

☒ Corps site visit(s) conducted on: April 16, 2021

☒ Previous Jurisdictional Determinations (AJDs or PJDs): 2010-00799-120-J18

☐ Antecedent Precipitation Tool: *provide detailed discussion in Section III.B*.

☒ USDA NRCS Soil Survey: NRCS web soil survey

☒ USFWS NWI maps: USFWS online wetland mapper

☒ USGS topographic maps: 1:24K Bristol Indiana Quad

[4] Some excluded waters, such as (b)(2) and (b)(4), may not be specifically identified on the AJD form unless a requestor specifically asks a Corps district to do so. Corps districts may, in case-by-case instances, choose to identify some or all of these waters within the review area.
[5] Because of the broad nature of the (b)(1) exclusion and in an effort to collect data on specific types of waters that would be covered by the (b)(1) exclusion, four sub-categories of (b)(1) exclusions were administratively created for the purposes of the AJD Form. These four sub-categories are not new exclusions, but are simply administrative distinctions and remain (b)(1) exclusions as defined by the NWPR.

Other data sources used to aid in this determination:

Data Source (select)	Name and/or date and other relevant information
USGS Sources	N/A.
USDA Sources	Web Soil Survey
NOAA Sources	N/A.
USACE Sources	Detroit Dist. Regulatory Viewers
State/Local/Tribal Sources	N/A.
Other Sources	INDOT Waters Report submitted by HNTB, Indiana Map aerial imagery 1998, 2003 and 2005

B. Typical year assessment(s): NA

C. Additional comments to support AJD: Based upon review of the delineation report provided by HNTB and a site visit completed on April 16, 2021 the subject features were determined to be storm water facilities (active storm water detention/ retention basins). Indiana Map aerial imagery from 1998 and 2005 indicated that Features A and B did not exisit prior to the construction of the current subdivision and commercial retail outlets. These residential and commercial develpments were present after 1998 but before 2003. Feature A does not appear until 2005 based upon review of aerial imagery. Further, the subject features were not constructed out of hydric soil units based upon the USDA web soil survery and information detailed in the report (BtxB-Bristol loamy sand). Features A and B also appeared to be the subject of active maintenance with apparent riprap stabilization of pipe and curbside inlets to facilitate storm water flow into the basins.

APPENDIX G: PUBLIC INVOLVEMENT

SignUpGenius

US 20.2 (1:1 Property Owner Conversations) Kitchen Table Meeting Sign-Ups

US 20.2 Corridor Improvement Project

Location: Middlebury Public Library

Created By: Dan Syrus

Personal information has been intentionally redacted for stakeholder privacy.

Dates are in mm/dd/yyyy. Times are shown in EDT.

~~**09/25/2023 (Mon. 9:30AM - 10:30AM)**~~ Moved to Oct. 2 at 9:30am - 10:30am

Property Owner (1)	Name: **Jacob Hildenbrand** [redacted]			
	[redacted]			
	City: Middlebury	State/Prov.: IN	Postal Code: 46540	Country: United States

~~**09/25/2023 (Mon. 10:30AM - 11:30AM)**~~ Moved to Sept. 27 at 11:30am - 12:30pm

Property Owner (1)	Name: **Tim Miller** [redacted]			
	[redacted]			
	City: Goshen	State/Prov.: IN	Postal Code: 46527	Country: United States
	- 851 us 20			

09/25/2023 (Mon. 11:30AM - 12:30PM)

Property Owner (1)	Name: **John Lechlitner** [redacted]			
	[redacted]			
	City: MIDDLEBURY, IN	State/Prov.: IN	Postal Code: 46540	Country: United States

09/25/2023 (Mon. 1:30PM - 2:30PM)

Property Owner (1)	Name: **Jim Mowat**	Email:		Phone:
	[redacted]			
	City: Middlebury	State/Prov.: IN	Postal Code:	Country: United States
	- Jim Signed up over the phone on 9/12/23			

09/25/2023 (Mon. 2:30PM - 3:30PM)

09/25/2023 (Mon. 3:30PM - 4:30PM)

Property Owner (1)	Name: **Alicia Smith** [redacted]			
	[redacted]			
	City: Middlebury	State/Prov.: IN	Postal Code: 46540	Country: United States

09/25/2023 (Mon. 4:30PM - 5:30PM)

Property Owner (1) Name: **Brett Snider** [redacted]

Address: 504 Claudia Lane

City: Middlebury State/Prov.: IN Postal Code: 46540 Country: United States

09/25/2023 (Mon. 5:30PM - 6:30PM)

Property Owner (1) Name: **Dave & Gini Bennett** [redacted] Phone:

[redacted]

City: Middlebury State/Prov.: IN Postal Code: Country: United States

- Signed up with Dave, per phone call on 9/12/23

09/27/2023 (Wed. 9:30AM - 10:30AM)

Property Owner (1) Name: **Salvatore Rulli** [redacted]

[redacted]

City: Middlebury State/Prov.: IN Postal Code: 46540 Country: United States

09/27/2023 (Wed. 10:30AM - 11:30AM)

Property Owner (1) Name: **Cynthia Picco** [redacted]

[redacted]

City: Middlebury State/Prov.: IN Postal Code: 46540 Country: United States

- Dan, looking forward to meeting you!!!! NEWS:)

09/27/2023 (Wed. 11:30AM - 12:30PM)

Property Owner (1) Name: **Tim Miller** Email: Phone:

[redacted]

City: State/Prov.: Postal Code: Country: United States

09/27/2023 (Wed. 2:00PM - 3:00PM)

Property Owner (1) Name: **Laura Hochstetler** Email: Phone:

[redacted]

City: Middlebury State/Prov.: IN Postal Code: Country: United States

- Called on 9/12/23 and set up meeting over the phone.

09/27/2023 (Wed. 3:30PM - 4:30PM)

Property Owner (1)	Name: **Larry Lehman**	[redacted]		
	[redacted]			
	City: Middlebury	State/Prov.: IN	Postal Code: 46540	Country: United States

10/02/2023 (Mon. 9:30AM - 10:30AM)

Property Owner (1)	Name: **Jacob Hildenbrand**	Email:		Phone:
	[redacted]			
	City:	State/Prov.:	Postal Code:	Country: United States

10/02/2023 (Mon. 10:30AM - 11:30AM)

Property Owner (1)	Name: **David Regan**	[redacted]		
	[redacted]			
	City: MIDDLEBURY	State/Prov.: IN	Postal Code: 46540	Country: United States

10/02/2023 (Mon. 11:30AM - 12:30PM)

10/02/2023 (Mon. 1:30PM - 2:30PM)

10/02/2023 (Mon. 2:30PM - 3:30PM)

10/02/2023 (Mon. 3:30PM - 4:30PM)

Property Owner (1)	Name: **Jennifer Gregory**	[redacted]		
	[redacted]			
	City: Middlebury	State/Prov.: IN	Postal Code: 46540	Country: United States

10/02/2023 (Mon. 4:30PM - 5:30PM)

Property Owner (1)	Name: **Jeff Clouse**	[redacted]		
	[redacted]			
	City: Middlebury	State/Prov.: IN	Postal Code: 46540	Country: United States

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HNTB Corporation
The HNTB Companies
Infrastructure Solutions

111 Monument Circle
Suite 1200
Indianapolis, IN 46204

Telephone (317) 636-4682
hntb.com

Example KTM Invite Letter

May 1, 2024

Dear Josh Hendricks,

We are working with INDOT on the US 20 corridor project, which starts at CR 35 and ends at SR 13 in Middlebury, IN.

Project development continues, and the design is currently at the stage where we have project updates to share with each property owner adjacent to the US 20 corridor. **We are reaching out, individually, to hopefully get a time scheduled with you so we can share these important updates.**

DATES: Here are the days we plan to be in Middlebury:

- **Wednesday, May 8, 2024** (10:00 a.m. to 4:45 p.m.)
- **Monday, May 13, 2024** (10:00 a.m. to 4:45 p.m.)

LOCATION: Meeting location will be on-site at your property address listed above. However, if an alternative location is needed, please reach out to the number or email below so we can determine a location that's best for you.

SIGN-UP: Please sign-up for (1) one available time slot using the online tool by scanning the QR code.

We look forward to meeting with you soon!

Best regards,

Dan Syrus
Public Involvement Specialist
Cell: (317) 864-3095
Email: dsyrus@hntb.com

Contact List

Josh Hendricks	Jonathan Chambers, et al.
Chanty Long and Sao Man M. Long	Long's Convenience Store, LLC
Barry Voorn	Ozinga Ready Mix Concrete, Inc
Crystal Valley Missionary Church	Missionary Church of North Central District Incorporated
Irma Plank	227 US Highway 20
Wingard Lavern R & Vicki L Wingard	13024 US Highway 20
Lyle Bontrager	Tire Star of Middlebury, LLC
Lyle Bontrager	Trager7 Properties
MMPC Land Holdings, LLC	12974 US Highway 20
Bill Davis / Janet Bontrager	Elkhart County Park & Rec Board
Mary Cripe, Town Council President	The Town of Middlebury

Personal information has been intentionally redacted for stakeholder privacy.

Randy Yoder - facilitys.
Lance Miller - owner

Parcel Number: _____

Date: _____

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information	Secondary Contact?
Name: Eisenhaus.	Name:
Address:	Address:
Home Phone:	Home Phone:
Cell Phone:	Cell Phone:
Email address:	Email address:
Preferred Method:	Preferred Method:

1. What time of day do you prefer we contact you? Or not contact you?

   normal business hours.

2. How do you access your property?

   normal access.

3. How would you prefer the project team access your property?

   normal publize access area?.

4. Is your property fenced? Locked gates?

   none. horse fancing-

5. Are there animals on your property that we should be aware of?

   horses on east end near bed + breakfast, barn.

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   n/a

Parcel Number: _____

Date: 12/20/23

8. Does the aerial exhibit look correct?

yes.

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes. Town. US 20 and Wayne.

10. Do you have a septic system, springs, and/or water wells? If so, where?

yes. Well heads at West point of property

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

yes. grease in line w/ sewer.

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

east side.

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced?
    c. Does someone else farm the ground? If so, who?

some farming - east side --

Name: _____

Address: _____ Rondi

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Parcel Number: _____

Date: _____

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

sign for retirement Dutchmen Hospitality dba "Essenhouse"

16. Are other persons included on the title to the property?

contact from Randi

17. Do you rent the property? If so, to who?

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

NO

19. Is there any additional information you wish to share about your property?

prefer water service come from Wayne St. during construction. USP consideration..

- detention / retention around the intersection. north side preference
- EL burry?
- noise concerns.

Parcel Number: 26

Date: 12/20/23

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information

Name: MDK Enterprises

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Preferred Method: _____

Secondary Contact?

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   morning

2. How do you access your property?

   multiple access from US 20 for various tenants.

3. How would you prefer the project team access your property?

   from US 20

4. Is your property fenced? Locked gates?

   yes

5. Are there animals on your property that we should be aware of?

   no

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   do not block entry ways to tenants

Parcel Number: _____

Date: _____

8. Does the aerial exhibit look correct?

yes

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes, unsure on how it is fed: fiber from US 20 power to sign. gas service and electric lines through the lot

10. Do you have a septic system, springs, and/or water wells? If so, where?

no

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

dry well from storm wells, none we know of.

12. Are there any dump sites on the property? If so, where?

permitted land fill on back side of property

13. Are there wooded areas on the property? If so, where?

yes back side of the property

14. (as appropriate) Do you own farm ground w/in the project area? If so,

a. Is a field tile map available? no
b. Do you have livestock or other animals that are fenced? no
c. Does someone else farm the ground? If so, who? no

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Parcel Number: _____

Date: _____

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

16. Are other persons included on the title to the property?

17. Do you rent the property? If so, to who?

(3) major tenants (2) small tenants

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

no special instructions.

some retail and daily shipping / deliveries.

Dave - Missonary Church North Central

being approached by multiple people

KTM

Dave 260 413 5951

1.) primary drive ↑
2.) phone ↓ business hours.
3.) primary drive
4.) no fencing
5.) no
6.)
7.) if you have to be in drive, contact, don't do it wed. pm. or sunday anytime.
8.) exhibit correct (looking to expand, but south

* pass along question about lanes for accell/decell

9.) yes, unsure where they come from
10.) may have old system.
11.) no
12.) no
13.) sparce trees only
14.)
15.) NO
16.) title held by district of the church
17.) no
18.) no

Parcel Number: 7

Date: 9/27/23

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information

Name: Larry Lehman

Address: [redacted]

Home Phone: _____

Cell Phone: [redacted]

Email address: _____

Preferred Method: phone call

Secondary Contact?

Name: _____

Address: _____

Home Phone: _____

Cell Phone: _____

Email address: _____

Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   monday, wednesday, friday.

2. How do you access your property?

   drive way

3. How would you prefer the project team access your property?

   driveway.

4. Is your property fenced? Locked gates?

   yes w/ lock gate. (

5. Are there animals on your property that we should be aware of?

   dogs in fenced in yard.

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   always close the fence back, has dogs

Parcel Number: 7

Date: _____

8. Does the aerial exhibit look correct?

yes

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes, recently connected

10. Do you have a septic system, springs, and/or water wells? If so, where?

smashed and filled in

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

tree line on north side w/ other trees.

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced? no
    c. Does someone else farm the ground? If so, who?

    Name: _____

    Address: _____

    _____

    Home Phone: _____

    Cell Phone: _____

    Email address: _____

Parcel Number: _____

Date: _____

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

no

16. Are other persons included on the title to the property?

no

17. Do you rent the property? If so, to who?

Name: _____ no

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

no

Parcel Number: 5

Date: _____

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information

Name: Laura Hochstetler

Address: 510 Westlake

_____

Home Phone: _____

Cell Phone: [redacted]

Email address: _____

Preferred Method: US Mail + call

Secondary Contact?

Name: Sharon Yoder

Address: _____

_____

Home Phone: _____

Cell Phone: [redacted]

Email address: _____

Preferred Method: call Sharon and send mail

1. What time of day do you prefer we contact you? Or not contact you?

   normal business hours (Wed best)

2. How do you access your property?

3. How would you prefer the project team access your property?

4. Is your property fenced? Locked gates?

   NO

5. Are there animals on your property that we should be aware of?

   NO

6. Is there hunting on your property? (allowed, observed)

   NO

7. Any special instructions for field employees?

   NO notify owners ahead of time. don't block driveway

Parcel Number: _____

Date: _____

8. Does the aerial exhibit look correct?

yes

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

no well southside, septic on eastside.

10. Do you have a septic system, springs, and/or water wells? If so, where?

yes behind house

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

north + east edge

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced?
    c. Does someone else farm the ground? If so, who?

wo

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Parcel Number: _____

Date: _____

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

no

16. Are other persons included on the title to the property?

no

17. Do you rent the property? If so, to who?

Name: _____ no

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

drainage must be tied in

no bump on driveway.

Parcel Number: # 44

Date: _____

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information	Secondary Contact?
Name: Tim Miller	Name: _____
Address: _____	Address: _____
_____	_____
Home Phone: _____	Home Phone: _____
Cell Phone: _____	Cell Phone: _____
Email address: _____	Email address: _____
Preferred Method: email	Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   normal business hours

2. How do you access your property?

   drive

3. How would you prefer the project team access your property?

   drive

4. Is your property fenced? Locked gates?

   no , no

5. Are there animals on your property that we should be aware of?

   no

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   park in gravel lot on side of the project.

Parcel Number: _____

Date: _____

8. Does the aerial exhibit look correct?

yes.

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes, water on south- also sewer.

10. Do you have a septic system, springs, and/or water wells? If so, where?

no

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

along east side.

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced? no
    c. Does someone else farm the ground? If so, who?

    Name: _____

    Address: _____

    _____

    Home Phone: _____

    Cell Phone: _____

    Email address: _____

Parcel Number: _____

Date: _____

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

yes to bill boards. leased + business signs.

16. Are other persons included on the title to the property?

truss, maybe partner.

17. Do you rent the property? If so, to who?

Name: Brad Beer

Address: 951 US 20 Middlebury IN

Home Phone: 5745960376

Cell Phone: 5742384196

Email address: Bbbhomes@hotmail.com

Lease dates (end of term?): ≈ Feb. 26

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

Parcel Number: # 11

Date: _____

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information	Secondary Contact?
Name: Cindy Picco	Name: _____
Address: 502 Arbor Ct.	Address: _____
_____	_____
Home Phone: _____	Home Phone: _____
Cell Phone: _____	Cell Phone: _____
Email address: _____	Email address: _____
Preferred Method: email / call	Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   normal business hours.

2. How do you access your property?

   drive way

3. How would you prefer the project team access your property?

   drive way.

4. Is your property fenced? Locked gates?

   no

5. Are there animals on your property that we should be aware of?

   no

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   notify owners if on the property

Parcel Number: _____

Date: _____

8. Does the aerial exhibit look correct?

yes

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes, front yard.

10. Do you have a septic system, springs, and/or water wells? If so, where?

no

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

yes, trees on east side.

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced? No
    c. Does someone else farm the ground? If so, who?

    Name: _____

    Address: _____

    _____

    Home Phone: _____

    Cell Phone: _____

    Email address: _____

Parcel Number: _____

Date: _____

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

no

16. Are other persons included on the title to the property?

~~husband~~

17. Do you rent the property? If so, to who?

Name: _____ no

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

Ryan Buckley

River birch wants to remain w/n the property
> protect roots in place.

Parcel Number: _____

Date: _____

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information

Name: Sam Bulli

Address: 851 US 20
Suite 2

Home Phone: _____

Cell Phone: [redacted]

Email address: _____

Preferred Method: cell phone.

Secondary Contact?

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   morning business hours. (Bulli's italian restaurant and land owner.

2. How do you access your property?

   driveway.

3. How would you prefer the project team access your property?

   driveway

4. Is your property fenced? Locked gates?

   no. privacy fence on back of property.

5. Are there animals on your property that we should be aware of?

   no

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   no, park further away from restaurant

Parcel Number: _____

Date: _____

8. Does the aerial exhibit look correct?

yes.

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes. everything comes in the back sewer across south side of building.

10. Do you have a septic system, springs, and/or water wells? If so, where?

no

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

grease trap behind building on South east.

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

west and east side of the property.

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced?
    c. Does someone else farm the ground? If so, who?

no.

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Parcel Number: _____

Date: _____

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

no,

16. Are other persons included on the title to the property?

no

17. Do you rent the property? If so, to who?

North Ridge Mall / Rallis \ CK Dance storage unit

Name: CK Dance

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

NO

19. Is there any additional information you wish to share about your property?

no. delivery trucks all five days, take care to avoid being in the way of delivery.

Parcel Number: 10

Date: 9/25/23

KTM Interviewers: Doug Gavin, Damien Perry, Kenny Stephenson

Customer Survey

Property Owner Information/Tenant Information	Secondary Contact?
Name: John Lechlitner	Name:
Address: 500 Arbor Ct.	Address:
Home Phone: [redacted]	Home Phone:
Cell Phone:	Cell Phone:
Email address: [redacted]	Email address:
Preferred Method:	Preferred Method:

1. What time of day do you prefer we contact you? Or not contact you?

   normal business hours

2. How do you access your property?

   Arbor Ct.

3. How would you prefer the project team access your property?

   Arbor Ct.

4. Is your property fenced? Locked gates?

   No

5. Are there animals on your property that we should be aware of?

   NO

6. Is there hunting on your property? (allowed, observed)

   No

7. Any special instructions for field employees?

   NO

Parcel Number: 10

Date: 9/25/23

8. Does the aerial exhibit look correct?

yes

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes both through driveway.

10. Do you have a septic system, springs, and/or water wells? If so, where?

NO well, used for irrigation ~10' North of house

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

NO

12. Are there any dump sites on the property? If so, where?

NO

13. Are there wooded areas on the property? If so, where?

NO

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced?
    c. Does someone else farm the ground? If so, who?

    Name: _____

    Address: _____

    _____

    Home Phone: _____

    Cell Phone: _____

    Email address: _____

Parcel Number: 10

Date: 9/25/23

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

NO

16. Are other persons included on the title to the property?

NO

17. Do you rent the property? If so, to who? NO

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

NO

19. Is there any additional information you wish to share about your property?

NO, new tile and vinyl floors

Do not disturb (2) trees in back yard.

Parcel Number: 52

Date: 9/25/23

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information	Secondary Contact?
Name: Dave & Gini Bennett	Name: _____
Address: 1008 Spring Arbor	Address: _____
_____	_____
Home Phone: _____	Home Phone: _____
Cell Phone: [redacted]	Cell Phone: _____
Email address: [redacted]	Email address: _____
Preferred Method: phone call	Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   normal business hours.

2. How do you access your property?

   drive way

3. How would you prefer the project team access your property?

4. Is your property fenced? Locked gates?

   no

5. Are there animals on your property that we should be aware of?

   no

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   No, notify when coming notify when there.

Parcel Number: 52

Date: 9/25/23

8. Does the aerial exhibit look correct?

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes

10. Do you have a septic system, springs, and/or water wells? If so, where?

no

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

yes

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced?
    c. Does someone else farm the ground? If so, who? no

    Name: _____

    Address: _____

    _____

    Home Phone: _____

    Cell Phone: _____

    Email address: _____

Parcel Number: 52

Date: 9/25/23

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

no

16. Are other persons included on the title to the property?

no

17. Do you rent the property? If so, to who?

no

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

timing and would like to know when, where shed.

Parcel Number: 6

Date: 9/25/23

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information	Secondary Contact?
Name: Brett Snider	Name: _____
Address: 504 Claudia Ln.	Address: _____
_____	_____
Home Phone: [redacted]	Home Phone: _____
Cell Phone: _____	Cell Phone: _____
Email address: [redacted]	Email address: _____
Preferred Method: phone call / text	Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   after 3:30 pm

2. How do you access your property?

   drive way

3. How would you prefer the project team access your property?

   drive way

4. Is your property fenced? Locked gates?

   yes fenced on back no locked gates.

5. Are there animals on your property that we should be aware of?

   no

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   no

Parcel Number: 6

Date: 9/25/23

8. Does the aerial exhibit look correct?

yes

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

on water not on sewer.

10. Do you have a septic system, springs, and/or water wells? If so, where?

underneath deck septic tank

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

yes, north side

14. (as appropriate) Do you own farm ground w/in the project area? If so,

a. Is a field tile map available? no
b. Do you have livestock or other animals that are fenced?
c. Does someone else farm the ground? If so, who?

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Parcel Number: 6

Date: 9/25/23

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

no

16. Are other persons included on the title to the property?

no

17. Do you rent the property? If so, to who?

Name: _____ no

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

utilities will need to be remarked.

Parcel Number: 8

Date: 9/25/23

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information

Name: Alicia Smith

Address: 508 Claudia Ln.

_____

Home Phone: [redacted]

Cell Phone: _____

Email address: [redacted]

Preferred Method: phone call

Secondary Contact?

Name: Curtis Freed

Address: _____

_____

Home Phone: _____

Cell Phone: [redacted]

Email address: [redacted]

Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   normal business

2. How do you access your property?

   drive way

3. How would you prefer the project team access your property?

   drive way or side gate.

4. Is your property fenced? Locked gates?

   yes fence, no locks.

5. Are there animals on your property that we should be aware of?

   no

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   let us know when you are coming and when you arrive.

Parcel Number: 8

Date: 9/25/23

8. Does the aerial exhibit look correct?

yes, no pool, there is a new shed

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes, unsure on location.

10. Do you have a septic system, springs, and/or water wells? If so, where?

septic likely still in back yard, well line still coming through the west side.

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

yes on east west

14. (as appropriate) Do you own farm ground w/in the project area? If so,

a. Is a field tile map available?
b. Do you have livestock or other animals that are fenced? NO
c. Does someone else farm the ground? If so, who?

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Parcel Number: 8

Date: 9/25/23

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

NO

16. Are other persons included on the title to the property?

Curtis F.

17. Do you rent the property? If so, to who?

Name: _____ NO

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

NO

19. Is there any additional information you wish to share about your property?

No.

Parcel Number: 3

Date: 9/25/23

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information	Secondary Contact?
Name: Jim Mowat	Name: _____
Address: 509 Westlake Dr.	Address: _____
_____	_____
Home Phone: _____	Home Phone: _____
Cell Phone: [redacted]	Cell Phone: _____
Email address: _____	Email address: _____
Preferred Method: _____	Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   call cell, normal business hours.

2. How do you access your property?

   drive way

3. How would you prefer the project team access your property?

   R/W | drive way

4. Is your property fenced? Locked gates?

   partial

5. Are there animals on your property that we should be aware of?

   dog

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   no

Parcel Number: 3

Date: 9/25/23

8. Does the aerial exhibit look correct?

yes

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes

10. Do you have a septic system, springs, and/or water wells? If so, where?

no septic, well in basement.

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

NO

12. Are there any dump sites on the property? If so, where?

NO

13. Are there wooded areas on the property? If so, where?

yes, need to remain

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced?
    c. Does someone else farm the ground? If so, who?

    Name: _____

    Address: _____

    _____

    Home Phone: _____

    Cell Phone: _____

    Email address: _____

Parcel Number: 3

Date: 9/25/23

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

NO

16. Are other persons included on the title to the property?

No

17. Do you rent the property? If so, to who?

Name: _____

Address: _____ NO

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

NO

19. Is there any additional information you wish to share about your property?

NO

Parcel Number: 54

Date: 10/2

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information

Name: Jennifer Gregory

Address: 501 Arbor Ct.

_____

Home Phone: _____

Cell Phone: [redacted]

Email address: [redacted]

Preferred Method: phone

Secondary Contact?

Name: Jeremy Gregory

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   after noon

2. How do you access your property?

   through sub division, driveway

3. How would you prefer the project team access your property?

   through cul de sac.

4. Is your property fenced? Locked gates?

   yes, no locked gates.

5. Are there animals on your property that we should be aware of?

   no

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   notify prior to coming onto property.

Parcel Number: 54

Date: 10/2.

8. Does the aerial exhibit look correct?

yes

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes, unknown.

10. Do you have a septic system, springs, and/or water wells? If so, where?

perhaps well was in yard. unknown

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

some trees for shade, west side of property

14. (as appropriate) Do you own farm ground w/in the project area? If so,

a. Is a field tile map available? no
b. Do you have livestock or other animals that are fenced?
c. Does someone else farm the ground? If so, who?

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Parcel Number: 54

Date: 10/2.

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

NO

16. Are other persons included on the title to the property?

NO

17. Do you rent the property? If so, to who?

Name: _____ NO

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

previous sellers may not have disclosed project temp fencing and privacy vs. chain link

Parcel Number: 14

Date: 10/2

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information

Name: David Regan

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: reganight@aol.com

Preferred Method: email

Secondary Contact?

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   anytime, phone after hours only

2. How do you access your property?

   driveway spring arbor drive

3. How would you prefer the project team access your property?

   through Dr. Burns

4. Is your property fenced? Locked gates?

   no, there is an invisible fence.

5. Are there animals on your property that we should be aware of?

   dog

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   notify owner before any one is on site.

Parcel Number: 14

Date: 10/2

8. Does the aerial exhibit look correct?

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes, from spring Arbor

10. Do you have a septic system, springs, and/or water wells? If so, where?

no

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

no

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced? no
    c. Does someone else farm the ground? If so, who?

    Name: _____

    Address: _____

    _____

    Home Phone: _____

    Cell Phone: _____

    Email address: _____

Parcel Number: 14

Date: 10/2

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

no

16. Are other persons included on the title to the property?

no

17. Do you rent the property? If so, to who?

Name: _____ no

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

- flooding at basement happened before.
noise concerns.
- need to verify the pond is similar or better than before.

Parcel Number: 12

Date: 10/2

KTM Interviewers: _____

Customer Survey

Property Owner Information/Tenant Information

Name: Jeff Clouse

Address: 1010 Spring Arbor Dr.

~~508 Westlake~~

Home Phone: _____

Cell Phone: _____

Email address: [redacted]

Preferred Method: email

Secondary Contact?

Name: _____

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Preferred Method: _____

1. What time of day do you prefer we contact you? Or not contact you?

   any.

2. How do you access your property?

   spring arbor drive.

3. How would you prefer the project team access your property?

   spring arbor drive

4. Is your property fenced? Locked gates?

   no

5. Are there animals on your property that we should be aware of?

   no

6. Is there hunting on your property? (allowed, observed)

   no

7. Any special instructions for field employees?

   notify when coming / arrive wear hi viz vest.

Parcel Number: _____

Date: _____

8. Does the aerial exhibit look correct?

yes.

9. Are you on city water/sewer? Do you know where the lines run? Additional utilities? (plot on parcel map if known)

yes from spring arbor drive

10. Do you have a septic system, springs, and/or water wells? If so, where?

no

11. Are you aware of any underground storage tanks on the property? Any tanks within the buildings?

no

12. Are there any dump sites on the property? If so, where?

no

13. Are there wooded areas on the property? If so, where?

no

14. (as appropriate) Do you own farm ground w/in the project area? If so,

    a. Is a field tile map available?
    b. Do you have livestock or other animals that are fenced? no
    c. Does someone else farm the ground? If so, who?

    Name: _____

    Address: _____

    _____

    Home Phone: _____

    Cell Phone: _____

    Email address: _____

Parcel Number: _____

Date: _____

15. Other than farming, does the property have revenue generating activities? i.e.: billboards, business, utility leases, mineral rights, etc.?

no

16. Are other persons included on the title to the property?

no

17. Do you rent the property? If so, to who?

Name: _____ no

Address: _____

_____

Home Phone: _____

Cell Phone: _____

Email address: _____

Lease dates (end of term?): _____

18. Is any of the property under a preservation agreement, such as classified forest, other NRCS program, etc.?

no

19. Is there any additional information you wish to share about your property?

no pond info, when they pumped even tually stabilized

AFFP
The Indiana Dept of Transport

Affidavit of Publication

STATE OF IN }
COUNTY OF ELKHART } SS

Julia Duschek, being duly sworn, says:

That she is Accounting Clerk of the Elkhart Truth, a daily newspaper of general circulation, printed and published in Elkhart, Elkhart County, IN; that the publication, a copy of which is attached hereto, was published in the said newspaper on the following dates:

September 13, 2024

Publication Fees: $ 518.25

That said newspaper was regularly issued and circulated on those dates.
SIGNED:

Subscribed to and sworn to me this 13th day of September 2024.

Heather Purk, Notary Public 11/22/2030

HEATHER PURK
NOTARY PUBLIC - STATE OF MICHIGAN
COUNTY OF VAN BUREN
My Commission Expires November 22, 2030
Acting in the County of Berrien

70125876 71051208

Richard Connolly
HNTB CORPORATION
111 Monument Circle Suite 1200
Indianapolis, IN 46204

The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) propose the addition of a two-way left turn lane (TWLTL) and travel lanes along United States Highway 20 (US 20) between County Road 35 (CR 35) and State Road 13 (SR 13) (Des. No. 1900095) in Elkhart County, Indiana. The project includes reconstruction of existing 2-lane US 20 to a 5-lane cross-section including a 14-foot TWLTL, two 12-foot travel lanes in each direction, and two 10-foot paved shoulders.

As part of the environmental evaluation of the community and natural resource impacts of the proposed project, any potential recreation areas must be identified and evaluated for protection under Section 4(f) of the Department of Transportation Act of 1966, 49 USC 303(c). Two recreational resources, the Pumpkinvine Nature Trail which is operated by the Town of Middlebury and Elkhart County Parks and Recreation Board, and the Ridge Run Trail operated by the Town of Middlebury were identified as Section 4(f) resources.

The proposed project will require the purchase of approximately 0.047 acre of permanent right-of-way and 0.075 acre of temporary right-of-way from the Town of Middlebury. Approximately 0.067 acre of permanent right-of-way and 0.17 acre of temporary right-of-way will be required from the Elkhart County Parks and Recreation Board. This right-of-way is required in order to extend the box culvert carrying the Pumpkinvine Trail under US 20 in order to accommodate the widened roadway. A de minimis determination has been made for this Section 4(f) use. A de minimis impact is one that, after taking into account any measure to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), will not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f). A de minimis impact determination requires public involvement and concurrence from the official with jurisdiction. In this case, the officials with jurisdiction are the President of the Elkhart County Parks Board and the President of the Town of Middlebury Council.

Additionally, due to the roadway widening, a portion of the Ridge Run Trial will be relocated to north of the existing location. The trail, within the project area, is leased by the Town of Middlebury from a local property owner and is maintained by the Town of Middlebury. Relocation and reconstruction of the Ridge Run Trail has been determined to be a Section 4(f) Enhancement. INDOT intends to perpetuate the use of the Ridge Run Trail through an easement allowing the trail to remain operational within the INDOT right-of-way.

Construction will also require the temporary closure of the Pumpkinvine Nature Trail and implementation of a detour during construction for trail traffic. The temporary closure of the Pumpkinvine Natural Trail is anticipated to last no longer than nine months while the construction of US 20 Section 2 is anticipated to last 24 months.

The designed action will not adversely impact the activities, features, and attributes that qualify the property for protection under Section 4(f) of the Department of Transportation Act of 1966 and in accordance with SAFETEA-LU Section 6009 (a). As such, it is the intent of INDOT, along with the Federal Highway Administration to issue a finding of de minimis. In accordance with SAFETEA-LU Section 6009 (a), the views of the public are being sought regarding the effect of the proposed project on the public recreational area.

Project information, including the environmental document, may be mailed to interested persons upon request. Please contact Richard Connolly, HNTB, 111 Monument Circle, Suite 1200, Indianapolis, IN 46204 or rconnolly@HNTB.com or (317 636-4682).

INDOT respectfully requests comments be submitted on or before 30 days from the publication of this notice. Comments will become part of the official record and will be considered when making future project related decisions.

Please respond with any comments to the contact information below.
Richard Connolly-Project Manager
HNTB
111 Monument Circle Suite 1200
Indianapolis, IN 46204

HSPAXLP

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

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-Executive Office
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Eric Holcomb, Governor
Michael Smith, Commissioner

August 28, 2023

Mr. Jermaine R. Hannon, Division Administrator
FHWA Indiana Division
575 North Pennsylvania St., Room 254
Indianapolis, IN 46204

Ms. Kelley Brookins, Regional Administrator
FTA Region 5
200 West Adams St.
Suite 320
Chicago, IL 60606-5253

Dear Mr. Hannon /Ms. Brookins:

The Indiana Department of Transportation is pleased to submit its FY 2024-2028 Statewide Transportation Improvement Program (STIP) for review and approval by your offices.

Included in the final submitted document is a listing of the state's expansion/preservation and local small urban and rural and rural transit projects. The following Metropolitan Planning Organization TIPs will be included in the FY 2024-2028 STIP by reference.

Area Plan Commission of Tippecanoe County (APCTC) FY 2024-2028
- https://www.tippecanoe.in.gov/DocumentCenter/View/40728/FY-2024-2028-TIP-including-0-amendments

Bloomington-Monroe County Metropolitan Planning Organization (BMCMPO) FY 2024-2028
- https://bloomington.in.gov/sites/default/files/2023-08/BMCMPO%20FY%202024%20-%202028%20TIP%20-%2006-30-23%20-%20ADOPTED%20FINAL.pdf

Columbus Area Metropolitan Planning Organization (CAMPO) FY 2024-2028
- https://www.columbus.in.gov/planning/tip/

Delaware-Muncie Metropolitan Plan Commission (DMMPC) FY 2022-2025
- *Including Amendments/modifications through 2/14/23*
- https://www.co.delaware.in.us/egov/documents/1692987897_47263.pdf

Evansville Metropolitan Planning Organization (EMPO) FY 2024-2028
- http://www.evansvillempo.com/Docs/TIP/TIP_2024-2028/TIP_2024-2028.pdf

Kokomo-Howard County Governmental Coordinating Council (KHCGCC) FY 2022-2026
- *Including Amendments/modification through 7/28/23*
- https://www.kokomompo.com/project/tip-2020-2024/

NextLevel INDIANA

Kentuckiana Regional Planning and Development Agency (KIPDA) FY 2023-2026
- https://www.kipda.org/wp-content/uploads/2023/05/FY2023-TIP-FINAL-5-25.pdf

Indianapolis Metropolitan Planning Organization (IMPO) FY 2024-2027
- https://www.indympo.org/whats-underway/irtip

Michiana Area Council of Governments (MACOG) FY 2024-2028
- http://www.macog.com/docs/transportation/tip/approved/fy2028tip_projects.pdf

Madison County Council of Governments (MCCOG) FY 2022-2026
- *Including Amendments/modifications through 7/28/23*
- https://irp.cdn-website.com/65a760a0/files/uploaded/TIP%202022-2026%20-%20updated%205-1-23.pdf

Northeastern Indiana Regional Coordinating Council (NIRCC) FY 2024-2028
- https://www.nircc.com/uploads/1/2/9/8/129837621/final_2024-2028_tip_5-25-23.pdf

Northwestern Indiana Regional Planning Commission (NIRPC) FY 2022-2026
- *Including Amendments/modifications through 7/25/23*
- https://nirpc.org/2040-plan/mobility/transportation-improvement-program/

Ohio-Kentucky-Indiana Regional Council of Governments (OKI) FY 2024-2027
- https://www.oki.org/transportation-planning/transportation-improvement-program-tip/

Terre Haute Area Metropolitan Planning Organization (THAMPO) FY 2024-2028
- https://www.terrehautempo.com/images/THAMPO_2024_2028_AdoptionTIP.pdf

In addition, INDOT has expanded our public involvement process by taking advantage of virtual meeting techniques and allowing accessibility to online documents, materials, virtual meeting registration, recorded virtual meetings, and comment forms. INDOT also leveraged our planning partner contacts (MPOs, RPOs, LTAP), social media, and notifications sent to local libraries, housing authorities, senior aging centers, and local newspapers across the state.

We greatly appreciate FHWA/FTA support in the development of the STIP 2024-2028 and look forward to working together to achieve our mutual goals. Should you have any questions pertaining to this amendment, please contact April Leckie, STIP Administration at 317-232-5466 or at aleckie@indot.in.gov.

Sincerely,

Michael Smith, Commissioner
Indiana Department of Transportation

cc: (w/enclosure): Angelica Salgado, FTA
Cecilia Crenshaw, FTA
Erica Tait, FHWA
Lyndsay Quist, INDOT
Kristin Brier, INDOT
Kathy Eaton-McKalip, INDOT
Louis Feagans, INDOT
April Leckie, INDOT
Roy Nunnally, INDOT
Larry Buckel, INDOT
Jay Mitchell, INDOT
Jason Casteel, INDOT
Michael McNeil, INDOT

Excerpt Source: https://www.macog.com/docs/transportation/tip/updates/Elkhart_County.pdf

Goshen	2100020	R-43582			Blackport Dr from Monroe St to Lincoln Ave	Road Reconstruction (3R/4R Standards)	STBG	RW	$200,000	$50,000				$250,000		$6,200,000	8/9/2028
Goshen	2201240	R-44768	M24-24, Res.01-25		EV Charging Infrastructure in Downtown Goshen	EV Infrastructure	CRP	PE	$10,000	$2,500		$12,500				$260,700	8/6/2025
Goshen	2201240	R-44768	Res.01-25		EV Charging Infrastructure in Downtown Goshen	EV Infrastructure	CRP	CN	$198,560	$49,640				$248,200		$260,700	8/6/2025
Middlebury	2101771	R-44338	M79-24		Bristol Avenue from Brown Street to Powell Drive	Pavement Replacement	ST STBG	RW	$877,692	$219,423		$1,097,115				$9,175,480	10/7/2026
Middlebury	2101771	R-44338			Bristol Avenue from Brown Street to Powell Drive	Pavement Replacement	ST STBG	CN	$5,204,420	$1,301,105				$6,505,525		$9,175,480	10/7/2026
Middlebury	2101771	R-44338	Res. 28-24		Bristol Avenue from Brown Street to Powell Drive	Pavement Replacement	ST STBG	PE	$419,748	$104,937	$250,000	$274,685				$9,175,480	10/7/2026
MACOG Transit	MAC-24-003		Res 24-23		Capital Cost of Third Party Contracting	Transit Operating	5307		$1,280,000	$320,000	$1,600,000					$1,600,000	2024
MACOG Transit	MAC-24-004		Res 24-23		Operating Assistance	Transit Operating	5307		$1,182,843	$1,182,843	$2,365,686					$2,365,686	2024
MACOG Transit	MAC-24-005		Res 24-23		Non Fixed Route ADA Paratransit Service	Transit Operating	5307		$273,649	$68,412	$342,061					$342,061	2024
MACOG Transit	MAC-25-003				Capital Cost of Third Party Contracting	Transit Operating	5307		$1,280,000	$320,000		$1,600,000				$1,600,000	2025
MACOG Transit	MAC-25-004				Operating Assistance	Transit Operating	5307		$1,200,000	$1,200,000		$2,400,000				$2,400,000	2025
MACOG Transit	MAC-25-005		M87-35		Operating ADA Paratransit	Transit Operating	5307		$281,235	$70,308		$351,543				$337,500	2025
MACOG Transit	MAC-24-102		Res. 11-24		Operating Assistance for Yellow Line Connector and Goshen Transit Routes	Transit Operating	CMAQ		$ 650,000	$ 162,500	$ 812,500					$812,500	2024
MACOG Transit	MAC-24-103		Res. 14-24		Buy Replacement Capital Buses	Transit Operating	5307		$ 1,405,739	$ 351,435	$ 1,757,173					$ 1,757,173	2024
MACOG Transit	TBD		Res. 30-24		Buy four Replacement Vans Transit Purchase Vehicles	Transit Operating	5307		$ 224,000	$ 56,000		$280,000				$ 280,000	
MACOG Transit	TBD		Res. 30-24		Acquire - Mobile Surv/Security Equipment Transit Misc Equipment	Transit Operating	5307		$ 112,352	$ 28,088		$140,440				$ 140,440	
MACOG Transit	TBD		Res. 30-24		Acquire - ADP Software	Transit Operating	5307		$ 54,400	$ 13,600		$68,000				$ 68,000	
MACOG Transit	TBD		Res. 30-24		Acquire - ADP Hardware	Transit Operating	5307		$ 12,000	$ 3,000		$15,000				$ 15,000	
MACOG Transit	TBD		Res. 30-24		Fare Collection Equipment (Mobile)	Transit Operating	5307		$ 60,000	$ 15,000		$75,000				$ 75,000	
MACOG	2101676		Res. 18-23, M46-23		Vanpool	UPWP	CMAQ	PL	$660,000	$0	$660,000					$660,000	2024
INDOT	1800039	R-41560	M30-23	SR 15	SR 15, 1.03 Miles S. of US 20 (at CR 18)	Intersection Improvement with Added Turn Lanes	ST STBG	RW	$94,960	$23,740	$ 118,700					$ 1,924,034.00	09/13/23
INDOT	1800039	R-41560	M05-24	SR 15	SR 15, 1.03 Miles S. of US 20 (at CR 18)	Intersection Improvement with Added Turn Lanes	ST STBG	CN	$1,195,968	$298,992		$1,494,960				$ 1,989,961.00	01/15/25
INDOT	1800045	R-43314	M62-24	SR 119	SR 119, 1.35 miles East of SR 19 (CR7)	Intersection Improvement	ST STBG	RW	$80,000	$20,000		$100,000				$3,595,641	1/15/2025
INDOT	1800045	R-43314		SR 119	SR 119, 1.35 miles East of SR 19 (CR 7)	Intersection Improvement	ST STBG	CN	$1,912,642	$478,161		$2,390,803				$3,331,886	1/15/2025
INDOT	2001821	R-43314		SR 120	SR 120, from 0.41 mi E of SR 15 E Jct. (R/R Tracks) to SR 13	HMA Overlay, Preventative Maintenance	ST STBG	RW	$80,000	$20,000	$100,000					$8,329,000	8/14/2024
INDOT	2001821	R-43314		SR 120	SR 120, from 0.41 mi E of SR 15 E Jct. (R/R Tracks) to SR 13	HMA Overlay, Preventative Maintenance	ST STBG	CN	$5,559,200	$1,389,800		$6,949,000				$8,329,200	8/14/2024
INDOT	2000024	R-43820	Res. 03-24	SR 15	SR 15, 3.06 miles N of US 6 (SR 15 at CR 146)	Intersection Improvement with Added Turn Lanes	ST STBG	RW	$12,000	$3,000	$15,000					$2,497,049	12/10/2025
INDOT	2000024	R-43820	M02-24	SR 15	SR 15, 3.06 miles N of US 6 (SR 15 at CR 146)	Intersection Improvement with Added Turn Lanes	ST STBG	CN	$1,552,359	$388,090		$105,000	$1,835,449			$2,497,049	12/10/2025
INDOT	1900095	R-42379	M47-24	US 20	US 20, 2.13 miles E of SR 13 (CR 35) to SR 13	Added Travel Lanes	NHPP	CN	$17,621,442	$4,405,360			$22,026,802			$53,074,407	12/13/2025
INDOT	2400128	R-42379	Res. 13-24	US 20	US 20 from 2.13 miles W of SR 13 (CR 35) to SR 13	ADA Sidewalk Ramp Construction	Safety	CN	$632,958	$158,240			$791,198			$791,198	12/13/2025
INDOT	1902645	R-42585	Res. 34-23	SR 120	SR 120 from 0.86 Miles West of SR 15 (W Junct) to 0.41 Miles East of SR 15 (E Junct)	Pavement Replacement	ST STBG	RW	$388,000	$97,000	$485,000					$12,750,745	10/9/2024
INDOT	1902645	R-42585	M42-24	SR 120	SR 120, 0.86 Miles West of SR 15 (W Junct) to 0.41 Miles East of SR 15 (E Junct)	Pavement Replacement	ST STBG	CN	$8,725,442	$2,181,361		$10,906,803				$12,750,745	10/9/2024

Des. No. 1900095

M54-24	INDOT	2100938	Small Structure Maint and Repair	SR 23 0.10 S JCT US 31/20	St. Joseph	NHPP	CN	$ 52,000	$ 13,000		$ 65,000				Add FY25 CN funds
M53-24	INDOT	2002290	Small Structure Pipe Lining	SR 23 over ditch, 1.05 N Jct US 31/20	St. Joseph	NHPP	CN	$ 434,280	$ 108,570		$ 542,850				Increase CN funds from $295,405 to $542,850
M52-24	INDOT	2002301	Small Structure Pipe Lining	US 30 over UNT Lemer-Berger Ditch, 0.47 W SR 331	Marshall	NHPP	CN	$ 220,800	$ 55,200		$ 276,000				Increase CN funds from $240,230 to $276,000
M51-24	Warsaw	1702849	Added Travel Lanes	Anchorage Rd (CR 200 N) from SR 15 to Biomet Dr	Kosciusko	STBG	CN	$ 2,683,763	$ 2,542,810		$ 5,226,573				Moving Letting Date from FY 25 to FY 26
M50-24	Elkhart Co.	2201238	Bridge Replacement	Bridge #385 Carrying Hively Ave/CR 18 over the Yellow Creek	Elkhart	ST Bridge	RW	$ 304,000	$ 76,000			$ 380,000			Moving FY 25 RW funds to FY 26
M49-24	INDOT	2000615	HMA Overlay, Preventive Maintenance	SR 17 E. Jct. to SR 117	Marshall	NHPP	CN	$ 850,080	$ 212,520		$ 1,062,600				Increasing Federal Funding by $85,256 - (Increase CN from $956,030 to $1,062,600)
M48-24	Elkhart Co.	1900465	Bridge Replacement	Bridge #312 on CR 142 over Turkey Creek	Elkhart	ST Bridge	CN	$ 1,795,592	$ 626,468		$ 2,422,060				Increasing Local funding by $177,569.90
M47-24	INDOT	1900095	Added Travel Lanes	US 20 from 2.13 miles W of SR 13 (CR 35) to SR 13	Elkhart	NHS	CN	$ 17,621,442	$ 4,405,360			$ 22,026,802			Decreasing CN funding by $791,198 and moving funding to DES 2400128 within contract R-43279 for ADA sidewalks
M46-24	Marshall Co.	2101698	Bridge Replacement	Bridge #231 Carrying Center St over Armey Ditch in Bremen	Marshall	ST Bridge	RW	$ 220,000	$ 55,000			$ 275,000			Move RW funds from FY 24 to FY 26
M45-24	INDOT	2002014	Bridge Deck Overlay	US 33 WB Bridge over NS RR (MARION), 00.12 E SR 15	Kosciusko	NHS	CN	$ 890,058	$ 222,514		$ 1,112,572				Increasing Federal Funding for CN by $75,964
M44-24	INDOT	2002011	Bridge Deck Overlay	US 30 EB Bridge over NS RR (MARION), 00.12 E SR 15	Kosciusko	NHS	CN	$ 1,058,579	$ 264,645		$ 1,323,224				Increase Federal Funding for CN by $244,485

Printed 7/25/2024

Excerpt

Source: https://firebasestorage.googleapis.com/v0/b/edge-cms.appspot.com/o/macog%2Ftip%2F-NxOQ3YNuTitiFp4kv4a?alt=media&token=ecafa9d4-6281-4a9a-bea5-4f0fa5a0055e

May 8, 2024

April Leckie
INDOT Central Office
100 N. Senate Ave. N758-PL
Indianapolis, Indiana 46204

Dear April:

Please amend the Fiscal Year (FY) 2024-2028 Transportation Improvement Program (TIP) and FY 2024-2028 Indiana Statewide Transportation Improvement Program (STIP) to include the following items from MACOG Resolution 13-24 (attached) in the Fort Wayne and La Porte Districts.

Transportation Resolution 13-24

INDOT Initiated

A. INDOT Amendment Exempt Project in Elkhart County
Resolution 13-24 Add DES Number to TIP
Des#: 2400128 **US 20 from 2.13 miles W of SR 13 (CR 35) to SR 13**
ADA Sidewalk Ramp Construction
Phase: CN Total: $791,198 Federal: $632,958 (NHS) State: $158,240 SFY 2026
Estimated Cost to Complete = $791,198

B. INDOT Amendment Exempt Project in St. Joseph County
Resolution 13-24 Add Project to TIP
Des#: 2101267 **Old SR 123 (Mayflower Rd) from 0.31m S of US 20 to 0.34m N of US 20 (Dogwood Drive)**
HMA Overlay Minor Structural
Phase: CN Total: $ 2,304,000 Federal: $ 1,843,200 (ST STBG) State: $460,800 SFY 2025
Estimated Cost to Complete = $2,304,000

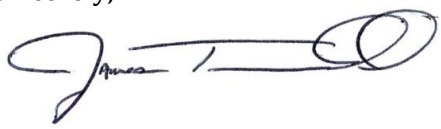
C. INDOT Amendment Exempt Project in St. Joseph County
Resolution 13-24 Increase Federal Funding by $3,072,170
Des#: 1900063 **SR 23 from 0.46mi N of SR 4 (Potato Creek Bridge) to 0.94mi N of US 20 (Olive St)**
HMA Overlay Minor Structural
Phase: CN Total: $ 8,905,000 Federal: $ 7,124,000 (ST STBG) State: $ 1,781,000 SFY 2025
Estimated Cost to Complete = $ 10,464,515

The Michiana Area Council of Governments, as the designated Metropolitan Planning Organization for the South Bend and Elkhart/Goshen, Indiana Urbanized Areas, is hereby submitting an amendment to the FY 2024-2028 TIP, as well as, the FY 2024-2028 STIP for Intergovernmental Review under the provisions of Executive Order 1271. The document has been reviewed and endorsed by the MACOG Policy Board on May 8, 2024.

We are therefore offering our assurance that the document has been developed with and reviewed by the appropriate jurisdictions and governmental agencies within the South Bend and Elkhart/Goshen Urbanized Areas. This includes the Indiana Department of Transportation and member jurisdictions and governmental agencies of the MACOG Policy Board.

Thank you for your time and attention to this matter. Please contact this agency if you need further information.

Sincerely,



James Turnwald
Executive Director

Cc: Jenny Bass, Stephanie Belch, Marcia Blansett, Breanna Freese, Donya LaRue, Michael McNeil, Jay Mitchell, Ryan Pennington, Julie Ritzler, Miguel Tucker, STIP@indot.in.gov, INDOT and Paige Story, Erica Tait, FHWA

Excerpt

Source: https://www.in.gov/indot/files/STIP_M24-48.pdf

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
Elkhart County																	
Elkhart County	41953 / 1900465	M 48	IR 4761	Bridge Replacement	Fort Wayne	.095	STBG	$3,105,519.90	Local Funds	CN	$0.00	$481,000.00		$481,000.00			
Performance Measure Impacted: Bridge Condition																	
Location: Bridge No 312: on CR 142 over Turkey Creek																	
Comments:Increasing Local funding by $481,269.90 in FY 25 MACOG MPO Involved																	
Indiana Department of Transportation	42379 / 1900095	M 48	US 20	Added Travel Lanes	Fort Wayne	2.53	NHPP	$54,271,666.00	Safety Construction	CN	-$632,958.40	-$158,239.60			($791,198.00)		
Performance Measure Impacted: Pavement Condition																	
Location: US 20 from 2.13 miles W of SR 13 (CR 35) to SR 13 (1900095), US 20 0.43 Miles West of SR 13. (Pumpkinvine Trail structure) (2000038)																	
Comments:Decreasing CN funding by $791,198 and moving funding to DES 2400128 within contract R-43279 for ADA sidewalks Includes des 2400128 and 2000038 MACOG MPO Involved																	
Elkhart County	44742 / 2201238	M 48	IR 1030	Bridge Replacement	Fort Wayne	.05	STBG	$3,346,515.20	Local Funds	RW	$0.00	$0.00		($76,000.00)	$76,000.00		
									Elkhart-Goshen MPO	RW	$0.00	$0.00		($304,000.00)	$304,000.00		
Performance Measure Impacted: Bridge Condition																	
Location: Bridge 385: On Hively Ave/CR 18 over Yellow Creek																	
Comments:Moving FY 25 RW funds to FY 26 MACOG MPO Involved																	

Elkhart County Total

Federal: -$632,958.40 Match :$322,760.40 2024: 2025: $101,000.00 2026: -$411,198.00 2027: 2028:

*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.

Eric Jagger

From: Caitlin Stevens <cstevens@macog.com>
Sent: Tuesday, January 28, 2025 11:55 AM
To: Eric Jagger
Cc: jturnwald@macog.com; Richard Connolly; Douglas Garvin; Perry, Damien N (INDOT)
Subject: Re: Des. No. 1900095 - US 20 Improvement Project; Air Quality Conformity Inquiry

External Email: Use caution when clicking on links, replying, or opening attachments.

Good Morning Eric,

The alignment shift mentioned would not have an impact on capacity and how the project is modeled, so further conformity analysis would not be required.

If you need anything additional, please let me know.

Thanks,

Caitlin Stevens (she/her)
Director of Transportation

Michiana Area Council of Governments
227 W. Jefferson Boulevard
11th Floor County-City Building
South Bend, IN 46601

www.macog.com
P: 574.287.1829 ext. 501
F: 574.239.4072
cstevens@macog.com
Follow MACOG on Facebook

On Tue, Jan 28, 2025 at 11:16 AM Eric Jagger <ejagger@hntb.com> wrote:

> Good morning James,
>
> Thank you for taking my call this morning. As mentioned, in the last year or so this project went through a design change that shifted the alignment by about 50 feet to the south due to a utility conflict on the north side of the roadway. There is no additional mileage caused by this shift in alignment. We received a FHWA comment asking us to confirm that a reevaluation to the air quality conformity determination was not warranted by this alignment shift. I know the TIP underwent an administrative modification but based on the documentation I have from your MPO and the ICG, this type of modification does not warrant conformity reevaluation. Can you please confirm that further conformity analysis is not required for this alignment shift?

APPENDIX I: ADDITIONAL INFORMATION

US 20 Section 1 & Section 2 – Impact Summary Table

	US 20 Section 1		US 20 Section 2						Revised Total	
	Approved CE-4		AI No. 1		AI No. 2		AI No. 1 vs AI No. 2 Difference (+/-)		CE-4 & AI No. 2 Combined	
	Right of Way Impacts*									
Land use impacts	Perm. Acres	Temp. Acres	Perm. Acres	Temp. Acres	Perm. Acres	Temp. Acres	Perm. Acres	Temp. Acres	Perm. Acres	Temp. Acres
Residential	39.4	3.5	2.5	1.6	1.7	1.1	-0.8	-0.5	41.1	4.6
Commercial	7.5	0.2	3.8	2.1	8.3	4.7	+4.5	+2.6	15.8	4.9
Agricultural	29.9	0.1	0.9	1.8	1.3	0.0	+0.4	-1.8	31.2	0.1
Forest	5.5	0.0	0.9	0.5	0.0	0.0	-0.9	-0.5	5.5	0.0
Wetlands*	5.1	<0.1	0.1	0.0	0.0	0.0	-0.1	0.0	5.1	<0.1
Other: Industrial	0.0	0.0	1.3	0.5	5.6	2.0	+4.3	+1.5	5.6	2.0
Other: Educational and Religious	1.8	0.2	2.2	0.8	3.6	1.1	+1.4	+0.3	5.4	1.3
Other: Utility	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
Other: Open Water	0.0	0.0	0.6	0.0	0.0	0.0	-0.6	0.0	0.0	0.0
Total:	**90.8**	**4.0**	**12.3**	**7.3**	**20.7**	**9.4**	**+8.4**	**+2.1**	**111.5**	**13.4**
Other Surface Waters (Acres)										
Reservoirs	0.00		0.00		0.00		0.00		0.00	
Lakes	0.20		0.00		0.00		0.00		0.20	
Farm Ponds	0.28		0.00		0.00		0.00		0.28	
Detention Basins	0.00		0.00		0.52		+0.52		0.52	
Storm Water Management Facilities	0.00		0.00		0.62		+0.62		0.62	
Other: Pond	0.00		0.57		0.00		-0.57		0.00	
Total:	**0.48**		**0.57**		**1.14**		**+0.57**		**1.62**	
Wetland Impacts (Acres)*										
Total:	**5.065**		**0.050**		**0.000**		**-0.050**		**5.015**	
Terrestrial Habitat Impact (Acres)										
Tree Clearing	5.50		1.40		2.01		+0.61		7.51	
Agricultural Land	30.00		2.70		1.27		-1.43		31.27	
Wetland*	5.10		0.050		0.000		-0.050		5.10	
Mowed and Maintained	42.90		14.80		22.74		+7.94		65.64	
Total:	**83.50**		**18.95**		**26.02**		**+7.07**		**109.52**	
Relocation Impacts										
Residential	19		1		0		-1		19	
Business	2		0		0		0		2	
Farms	4		0		0		0		4	
Other	0		0		0		0		0	
Total:	**25**		**1**		**0**		**-1**		**25**	

***Discrepancies in significant digits are a result of varying calculations done for previous reports/documents and updated calculations done for this AI document.**

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

ProjectNumber	SubProjectCode	County	Property
1800054	1800054	Elkhart	Oxbow County Park
1800064	1800064	Elkhart	Stauffer Park, Derksen Park & McCormicks Creek G.C.
1800074	1800074	Elkhart	Oxbow County Park
1800099	1800099	Elkhart	Stauffer Park, Derksen Park & McCormicks Creek G.C.
1800257	1800257A	Elkhart	Elliott Park
1800257	1800257B	Elkhart	Lundquist Bicentennial Park
1800257	1800257C	Elkhart	Pinewood Park
1800283	1800283	Elkhart	High Dive Park
1800310	1800310	Elkhart	McNaughton Park
1800337	1800337	Elkhart	Stauffer Park, Derksen Park & McCormicks Creek G.C.
1800339	1800339	Elkhart	Shoup-Parsons Woods Park
1800340	1800340	Elkhart	Reith Park
1800354	1800354	Elkhart	Pierre Moran Park
1800441	1800441	Elkhart	High Dive Park
1800450	1800450	Elkhart	Stauffer Park, Derksen Park & McCormicks Creek G.C.
1800470	1800470	Elkhart	Studebaker Park
1800554	1800554	Elkhart	Cobus Creek County Park
1800628	1800628	Elkhart	Corson Riverwoods County Park
1800631	1800631	Elkhart	South 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.

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204

Eric Holcomb, Governor
Joe McGuinness, Commissioner

July 1, 2024

Mary Cripe
Town Manager
418 N. Main Street
Middlebury, Indiana 46540

INDOT District: Fort Wayne
County: Elkhart
Des. No.: 1900095
Highway: US 20
Pumpkinvine Nature Trail

SUBJECT: NOTIFICATION OF INTENT TO PURSUE SECTION 4(F) *DE MINIMIS* FINDING

Dear Ms. Cripe:

The Indiana Department of Transportation (INDOT), in cooperation with the Federal Highway Administration (FHWA), proposes to widen US Highway 20 (US 20) to a 5-lane facility with two lanes in each direction and Two Way Left Turn Lane (TWLTL) in the center. This project will require the acquisition of additional right-of-way north and south of the roadway (see attached Project Plans).

As part of the environmental evaluation of the community and natural resource impacts of the proposed project, any potential recreation areas must be identified and evaluated for protection under Section 4(f) of the Department of Transportation Act of 1966, 49 USC 303(c). Section 4(f) protects publicly-owned parks, recreational areas (including trails), wildlife and waterfowl refuges, and public and private historic sites against direct or constructive use impacts from transportation projects. Section 4(f) requires coordination with the officials with jurisdiction over these historic and recreational resources regarding applicability of Section 4(f) and the impacts of the project on Section 4(f) resources. In the case of recreational properties, the officials with jurisdiction are the officials of the agency or agencies that own or administer the property in question and who are empowered to represent the agency on matters related to the property.

In accordance with 23 CRF 774.3(b), INDOT and FHWA are seeking concurrence from the officials with jurisdiction regarding the determination of significance and effect of the proposed project on the Pumpkinvine Nature Trail. INDOT and FHWA intend to pursue a Section 4(f) *de minimis* finding for the Pumpkinvine Nature Trail.

Pumpkinvine Nature Trail (Section 4(f) *De Minimis* Use)

Based on the trail maps available, the Pumpkinvine Nature Trail, a recreational multi-use trail, is within the project area. The Pumpkinvine Nature Trail crosses under US 20 approximately 500 feet west of CR 22, between CR 37 and Orpha Drive (see attached Proposed Detour Route).

The Pumpkinvine Nature Trail is a former railroad that has been converted to a multi-use trail. This trail connects Goshen, Middlebury and Shipshewana. Within the project area, the trail is owned by the Town of Middlebury (north of US 20) and the Elkhart County Parks and Recreation Board (south of US 20). The trail is publicly-owned, open to the public year-round, and is primarily used for recreation and travel to and from work particularly by our Amish Community. As a result, it is eligible for protection under Section 4(f). The trail is managed by the Middlebury Department of Parks and Recreation and Elkhart County Parks. Therefore, in accordance with 23 CFR 774.17, the Middlebury Department of Parks and Recreation and the Elkhart County Parks and Recreation Board are considered the Officials with Jurisdiction (OWJs) for the Section 4(f) resource. The other agency will also be receiving notification.

Description of Proposed Work and Anticipated Impacts

The Pumpkinvine Nature Trail is currently carried under US 20 by a concrete box culvert approximately 65 feet in length. The widened roadway will require the box culvert to be extended approximately 43 feet to the south. The widened roadway will require the replacement of a 60-inch corrugated metal pipe (CMP) that runs parallel to the box culvert with a longer 72-inch CMP in the lame location. This 72-in CMP will require a slight shift of the proposed trail alignment to the south of US 20 (see attached Project Plans).

This extended culvert and new trail pavement will be designed and constructed to meet the same INDOT standards as the existing culvert and trail. The joints connecting the existing culvert to the proposed extension will follow INDOT Standard Drawings and will be covered with a waterproof membrane to keep moisture and soil out. Additional lighting will be included within the culvert to meet the illumination requirements for pedestrian tunnels. INDOT will fund the realignment and resurfacing of the Pumpkinvine Nature Trail within the limits of the US 20 Improvement Project and necessary detour.

This culvert extension, and pipe replacement will require the purchase of approximately 0.047 acre of permanent right-of-way and 0.075 acre of temporary right-of-way from the Town of Middlebury. Approximately 0.067 acre of permanent right-of-way and 0.17 acre of temporary right-of-way will be required from the Elkhart County Parks and Recreation Board. This right-of-way acquisition will be considered a use under Section 4(f). INDOT intends to perpetuate the use of the trail through an easement allowing the trail to use the County right-of-way. Construction will also require the temporary closure of the trail and implementation of a detour during construction for trail traffic. The temporary closure of the Pumpkinvine Natural Trail is anticipated to last no longer than nine months while the construction of US 20 is anticipated to last 24 months.

Proposed Detour

A detour route was developed in coordination with Elkhart County, the Town of Middlebury and other stakeholders. This detour, which will meet the design criteria for a multi-use path, will begin at the trailhead near the intersection of CR 22 and CR 37, south of US 20. The trail closure will begin just north of CR 22 and extend north along the trail to a point just south of the Ridge Run Trail's intersection with the Pumpkinvine Nature Trail (see attached Proposed Detour Route).

Prior to the closure of the trail the following actions will be taken; the northbound travel lane of CR 37 will be separated with pylons and lane markings to provide safe separation between pedestrian and vehicular traffic, the intersection of US 20 and CR 37 will be closed to all vehicular traffic, and a temporary traffic light at the intersection of SR 13 and CR 20 will be in place to accommodate the potential additional truck traffic rerouted by the closure of the US 20 and CR 37 intersection.

From the southern closure point, the detour will be routed west along a new trail section before intersecting with CR 37 and turning north to utilize the existing northbound travel lane of CR 37. The US 20 and CR 37 intersection will be closed to vehicular traffic prior to utilizing CR 37 as a detour route for the Pumkinvine Nature Trail. The existing southbound travel lanes on CR 37 will remain open to service business and residences along CR 37. The detour will continue north and will cross US 20 via a temporary traffic signal. Once across US 20 this detour will connect to the Ridge Run trail via a temporary path (see attached Proposed Detour Route).

The temporary detour using the northbound travel lanes of CR 37 will maintain the existing asphalt surface, be a minimum of 10 feet wide, and will be separated from the southbound travel lanes on CR 37 by delineators. The temporary traffic signal across US 20 will utilize pedestrian push buttons and will be optimized to match the signal at US 20 and CR 22. The Pumpkinvine Nature Trail will not be closed until the detour route is constructed and the traffic signal modified to allow for safe passage of bicyclists and pedestrians on the trail.

Informational signage and advance warning of the upcoming detour will be installed. This signage will be placed on the trail north and south of the of the detour to inform users of the reason for the re-route and warn them as to what is ahead. The detour will include painting CR 37 as a trail.

Further details associated with the conceptual detour route including, but not limited to, signage and anticipated closure dates will be coordinated with the OWJ during the final engineering design and land acquisition phases of the project.

Costs associated with the US 20 Section 2 Project, Contract R-42379, which includes the design and construction of the Pumkinvine Nature Trail Detour, will be paid by INDOT.

The construction on the trail connection between the existing trail and CR 37 is anticipated to require the acquisition of right-of-way. This trail connection will require the purchase of approximately 0.123 acre of temporary right-of-way from an adjacent business. INDOT will be responsible for costs associated with the acquisition of temporary right-of-way for the Pumkinvine Nature Trail Detour.

Determination and Concurrence of Section 4(f) *De Minimis*

Under Section 4(f) of the U.S. Department of Transportation Act of 1966 (23 CFR 774), this trail is considered a Section 4(f) resource as it is publicly-owned land that permits public access for primarily recreational purposes. A *de minimis* impact is one that, after taking into account any measure to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), the project will not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f). A *de minimis* impact determination requires public involvement and concurrence from the official with jurisdiction. In accordance with 23 CFR 774.5(b)(2), a public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the Section 4(f) property will be provided in conjunction with the public review and comment period of the NEPA document. You will be informed of all public comments received that pertain to the Section 4(f) impact determination, and if warranted, your concurrence can be reevaluated.

Additional information about Section 4(f) requirements can be found at the following web address or you may request additional information from INDOT:

http://environment.fhwa.dot.gov/(S(1vyep545s3wmhuubnvexkmm2))/4f/index.asp

As the official with jurisdiction over the Pumpkinvine Nature Trail, your documented agreement that this project will not adversely affect the activities, features, or attributes qualifying the trail for protection under Section 4(f) is required in order for the trail closure and detour to be considered a *de minimis* impact under Section 4(f).

A response from you is requested within 30 days to determine the following:

If you agree with the statements below, please sign this letter and return it for inclusion in the environmental document for this project.

As the Official with Jurisdiction over the Pumpkinvine Nature Trail, I agree that the proposed project will not adversely affect the activities, features, or attributes qualifying the trail for protection under Section 4(f).

SIGNATURE: Mary M Cripe DATE: July 19, 2024

PRINTED NAME AND TITLE: Mary M. Cripe, Town Manager

Thank you for your assistance with the federal review process. If you need further information, please call me at 317-917-5333. Thank you for your assistance in the development of this project.

Sincerely,

Richard J. Connolly
Science Project Manager
HNTB Corporation

Attachments –
Project Plans
Proposed Detour Route

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N642
Indianapolis, Indiana 46204

Eric Holcomb, Governor
Joe McGuinness, Commissioner

July 1, 2024

Larry Andrews
President Elkhart County Parks Board
211 W. Lincoln Avenue
Goshen, IN 46526

INDOT District: Fort Wayne
County: Elkhart
Des. No.: 1900095
Highway: US 20
Pumpkinvine Nature Trail

SUBJECT: NOTIFICATION OF INTENT TO PURSUE SECTION 4(F) *DE MINIMIS* FINDING

Dear Mr. Andrews:

The Indiana Department of Transportation (INDOT), in cooperation with the Federal Highway Administration (FHWA), proposes to widen US Highway 20 (US 20) to a 5-lane facility with two lanes in each direction and Two Way Left Turn Lane (TWLTL) in the center. This project will require the acquisition of additional right-of-way north and south of the roadway (see attached Project Plans).

As part of the environmental evaluation of the community and natural resource impacts of the proposed project, any potential recreation areas must be identified and evaluated for protection under Section 4(f) of the Department of Transportation Act of 1966, 49 USC 303(c). Section 4(f) protects publicly-owned parks, recreational areas (including trails), wildlife and waterfowl refuges, and public and private historic sites against direct or constructive use impacts from transportation projects. Section 4(f) requires coordination with the officials with jurisdiction over these historic and recreational resources regarding applicability of Section 4(f) and the impacts of the project on Section 4(f) resources. In the case of recreational properties, the officials with jurisdiction are the officials of the agency or agencies that own or administer the property in question and who are empowered to represent the agency on matters related to the property.

In accordance with 23 CRF 774.3(b), INDOT and FHWA are seeking concurrence from the officials with jurisdiction regarding the determination of significance and effect of the proposed project on the Pumpkinvine Nature Trail. INDOT and FHWA intend to pursue a Section 4(f) *de minimis* finding for the Pumpkinvine Nature Trail.

Pumpkinvine Nature Trail (Section 4(f) *De Minimis* Use)

Based on the trail maps available, the Pumpkinvine Nature Trail, a recreational multi-use trail, is within the project area. The Pumpkinvine Nature Trail crosses under US 20 approximately 500 feet west of CR 22, between CR 37 and Orpha Drive (see attached Proposed Detour Route).

The Pumpkinvine Nature Trail is a former railroad that has been converted to a multi-use trail. This trail connects Goshen, Middlebury and Shipshewana. Within the project area, the trail is owned by the Town of Middlebury (north of US 20) and the Elkhart County Parks and Recreation Board (south of US 20). The trail is publicly-owned, open to the public year-round, and is primarily used for recreation and travel to and from work particularly by our Amish Community. As a result, it is eligible for protection under Section 4(f). The trail is managed by the Middlebury Department of Parks and Recreation and Elkhart County Parks. Therefore, in accordance with 23 CFR 774.17, the Middlebury Department of Parks and Recreation and the Elkhart County Parks and Recreation Board are considered the Officials with Jurisdiction (OWJs) for the Section 4(f) resource. The other agency will also be receiving notification.

Description of Proposed Work and Anticipated Impacts

The Pumpkinvine Nature Trail is currently carried under US 20 by a concrete box culvert approximately 65 feet in length. The widened roadway will require the box culvert to be extended approximately 43 feet to the south. The widened roadway will require the replacement of a 60-inch corrugated metal pipe (CMP) that runs parallel to the box culvert with a longer 72-inch CMP in the lame location. This 72-in CMP will require a slight shift of the proposed trail alignment to the south of US 20 (see attached Project Plans).

This extended culvert and new trail pavement will be designed and constructed to meet the same INDOT standards as the existing culvert and trail. The joints connecting the existing culvert to the proposed extension will follow INDOT Standard Drawings and will be covered with a waterproof membrane to keep moisture and soil out. Additional lighting will be included within the culvert to meet the illumination requirements for pedestrian tunnels. INDOT will fund the realignment and resurfacing of the Pumpkinvine Nature Trail within the limits of the US 20 Improvement Project and necessary detour.

This culvert extension, and pipe replacement will require the purchase of approximately 0.047 acre of permanent right-of-way and 0.075 acre of temporary right-of-way from the Town of Middlebury. Approximately 0.067 acre of permanent right-of-way and 0.17 acre of temporary right-of-way will be required from the Elkhart County Parks and Recreation Board. This right-of-way acquisition will be considered a use under Section 4(f). INDOT intends to perpetuate the use of the trail through an easement allowing the trail to use the County right-of-way. Construction will also require the temporary closure of the trail and implementation of a detour during construction for trail traffic. The temporary closure of the Pumpkinvine Natural Trail is anticipated to last no longer than nine months while the construction of US 20 is anticipated to last 24 months.

Proposed Detour

A detour route was developed in coordination with Elkhart County, the Town of Middlebury and other stakeholders. This detour, which will meet the design criteria for a multi-use path, will begin at the trailhead near the intersection of CR 22 and CR 37, south of US 20. The trail closure will begin just north of CR 22 and extend north along the trail to a point just south of the Ridge Run Trail's intersection with the Pumpkinvine Nature Trail (see attached Proposed Detour Route).

Prior to the closure of the trail the following actions will be taken; the northbound travel lane of CR 37 will be separated with pylons and lane markings to provide safe separation between pedestrian and vehicular traffic, the intersection of US 20 and CR 37 will be closed to all vehicular traffic, and a temporary traffic light at the intersection of SR 13 and CR 20 will be in place to accommodate the potential additional truck traffic rerouted by the closure of the US 20 and CR 37 intersection.

From the southern closure point, the detour will be routed west along a new trail section before intersecting with CR 37 and turning north to utilize the existing northbound travel lane of CR 37. The US 20 and CR 37 intersection will be closed to vehicular traffic prior to utilizing CR 37 as a detour route for the Pumkinvine Nature Trail. The existing southbound travel lanes on CR 37 will remain open to service business and residences along CR 37. The detour will continue north and will cross US 20 via a temporary traffic signal. Once across US 20 this detour will connect to the Ridge Run trail via a temporary path (see attached Proposed Detour Route).

The temporary detour using the northbound travel lanes of CR 37 will maintain the existing asphalt surface, be a minimum of 10 feet wide, and will be separated from the southbound travel lanes on CR 37 by delineators. The temporary traffic signal across US 20 will utilize pedestrian push buttons and will be optimized to match the signal at US 20 and CR 22. The Pumpkinvine Nature Trail will not be closed until the detour route is constructed and the traffic signal modified to allow for safe passage of bicyclists and pedestrians on the trail.

Informational signage and advance warning of the upcoming detour will be installed. This signage will be placed on the trail north and south of the of the detour to inform users of the reason for the re-route and warn them as to what is ahead. The detour will include painting CR 37 as a trail.

Further details associated with the conceptual detour route including, but not limited to, signage and anticipated closure dates will be coordinated with the OWJ during the final engineering design and land acquisition phases of the project.

Costs associated with the US 20 Section 2 Project, Contract R-42379, which includes the design and construction of the Pumkinvine Nature Trail Detour, will be paid by INDOT.

The construction on the trail connection between the existing trail and CR 37 is anticipated to require the acquisition of right-of-way. This trail connection will require the purchase of approximately 0.123 acre of temporary right-of-way from an adjacent business. INDOT will be responsible for costs associated with the acquisition of temporary right-of-way for the Pumkinvine Nature Trail Detour.

Determination and Concurrence of Section 4(f) *De Minimis*

Under Section 4(f) of the U.S. Department of Transportation Act of 1966 (23 CFR 774), this trail is considered a Section

4(f) resource as it is publicly-owned land that permits public access for primarily recreational purposes. A *de minimis* impact is one that, after taking into account any measure to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), the project will not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f). A *de minimis* impact determination requires public involvement and concurrence from the official with jurisdiction. In accordance with 23 CFR 774.5(b)(2), a public notice and an opportunity for public review and comment concerning the effects on the protected activities, features, or attributes of the Section 4(f) property will be provided in conjunction with the public review and comment period of the NEPA document. You will be informed of all public comments received that pertain to the Section 4(f) impact determination, and if warranted, your concurrence can be reevaluated.

Additional information about Section 4(f) requirements can be found at the following web address or you may request additional information from INDOT:

http://environment.fhwa.dot.gov/(S(1vyep545s3wmhuubnvexkmm2))/4f/index.asp

As the official with jurisdiction over the Pumpkinvine Nature Trail, your documented agreement that this project will not adversely affect the activities, features, or attributes qualifying the trail for protection under Section 4(f) is required in order for the trail closure and detour to be considered a *de minimis* impact under Section 4(f).

A response from you is requested within 30 days to determine the following:

If you agree with the statements below, please sign this letter and return it for inclusion in the environmental document for this project.

As the Official with Jurisdiction over the Pumpkinvine Nature Trail, I agree that the proposed project will not adversely affect the activities, features, or attributes qualifying the trail for protection under Section 4(f).

SIGNATURE: Klaus D. Mueller DATE: 8/12/2024

PRINTED NAME AND TITLE: Klaus D. Mueller, President Elkhart County Park Board

Thank you for your assistance with the federal review process. If you need further information, please call me at 317-917-5333. Thank you for your assistance in the development of this project.

Sincerely,

Richard J. Connolly
Science Project Manager
HNTB Corporation

Attachments –
Project Plans
Proposed Detour Route

RESOLUTION 2024-01

A RESOLUTION OF THE ELKHART COUNTY PARK AND RECREATION BOARD REGARDING SECTION 4(F) DE MINIMIS FINDING FOR THE TEMPORARY REROUTING OF THE PUMPKINVINE NATURE TRAIL

Whereas, the Elkhart County Park and Recreation Board ("Board") governs real estate and facilities designated for park purposes within the unincorporated areas of Elkhart County, Indiana, per I.C. § 36-10-3-1 *et seq.*;

Whereas, the Board recognizes the importance of the Pumpkinvine Nature Trail (the "Trail") as a valuable recreational resource for the community;

Whereas, the Indiana Department of Transportation (INDOT) is planning a project to expand U.S. Highway 20, which will necessitate the temporary rerouting of a portion of the Trail that currently passes under said highway;

Whereas, INDOT, in coordination with Elkhart County Parks, Town of Middlebury, and other stakeholders, has developed a proposed detour route for the Trail to ensure continued access and use during the construction period, said rerouting attached to and made part of this Resolution as Attachment A;

Whereas, INDOT has committed to funding the realignment and resurfacing of the Trail within the limits of the construction project and the detour;

Whereas, the Board has reviewed the details of the proposed detour and the potential impacts on the Trail and its users, and has determined that the temporary rerouting of the Trail will have a de minimis impact on the activities, features, and attributes that qualify the trail for protection under Section 4(f) of the U.S. Department of Transportation Act of 1966;

Now, Therefore, Be It Resolved by the Elkhart County Park and Recreation Board that:

Section 1: The Board hereby agrees that the temporary rerouting of the Trail due to the expansion of U.S. Highway 20 will not adversely affect the activities, features, or attributes that qualify the Trail for protection under Section 4(f).

Section 2: The Board acknowledges INDOT's commitment to fund the realignment and resurfacing of the Trail within the limits of the construction project and detour.

Section 3: The Board authorizes the appropriate offices to take any and all necessary action to implement this resolution and to ensure compliance with the Section 4(f) requirements.

PASSED and ADOPTED by the Elkhart County Park and Recreation Board this August 12, 2024.

Klaus Mueller, President
Elkhart County Park and Recreation Board

ATTEST:

Karen Mackowiak, Secretary

AI No. 2 Commitments

Firm:

1. If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT)
2. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction activity that would block or limit access. (INDOT)
3. To minimize impacts to the Blanding's Turtle, an entrenched silt fence should be placed between the road and the adjacent wetlands near Spring Valley Road and should remain in place through the duration of the project. If these wetlands are to be filled in their entirety, then they should be live-trapped for turtles prior to filling, and any turtles captured should be relocated to nearby areas of suitable habitat. Removal of any state endangered species and eastern box turtles would require a permit issued by the Division of Fish and Wildlife. (IDNR – DFW)
4. Coordination with BP Gas Station and Convenience Store, located at 995 US 20, Middlebury, IN 46540, will occur prior to the projects Ready for Contracts (RFC) date. (INDOT SAM)
5. The project will be designed with wider shoulders and sinuous rumble strips to accommodate buggy traffic. (INDOT)
6. It is recommended that during construction appropriate safeguards are in place to ensure that ground water is not endangered. Such safeguards would include securing adequate precautions for fueling/servicing large equipment, using “green infrastructure” practices where possible, and developing contingency plans to handle the release of any hazardous materials. (US EPA)
7. In the event the proposed detour route for the Pumpkinvine Natural Trail becomes infeasible during final design, the coordination with the OWJs will be re-initiated and a suitable alternative detour route will be developed for OWJ concurrence. (INDOT ESD)
8. USFWS Bridge/Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after July 21, 2026, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD)
9. One residential outbuilding will be removed as a result of the project. Prior to any demolition, the structure will be inspected for bats or evidence of bats. If bats, or evidence of bats, are found coordination will occur with INDOT ESD and USFWS before demolition may occur. If further coordination is needed no demolition shall occur until coordination is concluded with INDOT ESD and USFWS. (USFWS)
10. 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 Avoidance and Minimization Measures. (USFWS)
11. Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)

12. Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. Tree removal may not occur during the active season for bats, which extends from April 1st through September 30th. (USFWS)
13. 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)
14. 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)
15. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
16. 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)

For Further Consideration:

17. Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" diameter at breast height (dbh) or greater (5:1 mitigation based on the number of large trees). (IDNR – DFW)
18. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches dbh, living or dead) from April 1 through September 30. (IDNR-DFW)
19. Evaluate the feasibility of removing the utility poles and installing underground conduit to house the utilities. This would decrease the frequency of power outages, provide for safer travel of vehicles, and improve the aesthetics of our community. (Essenhaus Inc.)
20. The inclusion of additional infrastructure to completely connect Spring Valley Neighborhood with the Ridge Run Trail will be considered during the final design of the project. (Town of Middlebury)
21. A school zone speed limit is being considered to reduce the enforceable speed limit during school days. (Middlebury School District)

APPENDIX J: PREVIOUS ENVIRONMENTAL DOCUMENTS

Indiana Department of Transportation

County Elkhart Route US 20 Des. No. 1600517

FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	**US Highway 20 (US 20)/Elkhart County**
Designation Number:	**1600517 lead des, 1802043 building demolition, 1802045 tree clearing**
Project Description/Termini:	**US 20 Improvement Project – State Road 15 (SR 15) to County Road 35 (CR 35)**

After completing this form, I conclude that this project qualifies for the following type of Categorical Exclusion (FHWA must review/approve if Level 4 CE):

	Categorical Exclusion, Level 2 – The proposed action meets the criteria for Categorical Exclusion Manual Level 2 - table 1, CE Level Thresholds. Required Signatories: ESM (Environmental Scoping Manager)
	Categorical Exclusion, Level 3 – The proposed action meets the criteria for Categorical Exclusion Manual Level 3 - table 1, CE Level Thresholds. Required Signatories: ESM, ES (Environmental Services Division)
X	**Categorical Exclusion, Level 4** – The proposed action meets the criteria for Categorical Exclusion Manual Level 4 - table 1, CE Level Thresholds. Required Signatories: ESM, ES, FHWA
	Environmental Assessment (EA) – EAs require a separate FONSI. Additional research and documentation is necessary to determine the effects on the environment. Required Signatories: ES, FHWA

Note: For documents prepared by or for Environmental Services Division, it is not necessary for the ESM of the district in which the project is located to release for public involvement or sign for approval.

Approval N/A _____ Ronald E. Blue 10-7-19

ESM Signature Date ES Signature Date

Joyce E. Newland Digitally signed by Joyce E. Newland Date: 2019.10.10 20:55:03 -04'00'

FHWA Signature Date

Release for Public Involvement

N/A _____ REB 5/31/19

ESM Initials Date ES Initials Date

Certification of Public Involvement Mary Wright 8/16/19

Office of Public Involvement Date

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

INDOT ES/District Env. Reviewer Signature: _____ Date: 10/7/19

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

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.

Remarks:

Notice of Entry for Survey or Investigation Letters

Notice of Entry for Survey or Investigation letters were mailed to potentially affected property owners on February 23, 2017 (Appendix G, pages 9 to 13).

Stakeholder Working Group (SWG) Meeting

A SWG meeting was held to gather feedback and concerns from local officials. Invitation letters were mailed out to SWG invitees on February 13, 2018 (Appendix G, page 14). The SWG invitee list included local, state and federal officials, emergency response facilities, and local education facilities. The SWG meeting was held on March 15, 2018 at 1 p.m. at Middlebury Town Hall. The project scope was discussed and an update on the current status of the project was provided. Questions and concerns included the consideration of through traffic through Middlebury and the impacts of additional water flow into legal drains. Meeting participants were then provided the opportunity to review Stage 1 design plans. Additional discussion between attendees and the project team continued after completion of the meeting (Appendix G, pages 15 and 16).

Public Information Meeting

A public information meeting was held for the general public. Invitation postcards were sent to adjacent property owners and SWG meeting invitees. This invitation was also posted on several media outlets, the local newspaper, *The Elkhart Truth*, and the local Amish newspaper, *Die Blatt.* This meeting consisted of an open house session where members of the project team could answer questions, and a formal presentation was offered, and concluded with another open house session. This meeting was held on June 21, 2018 at Northridge High School from 5:30 to 7 p.m. Questions and concerns from attendees generally pertained to right-of-way acquisition, the US 20/County Road (CR) 35 intersection, existing safety concerns, schedule, and emergency services (Appendix G, pages 20 to 62).

Section 106 Public Notice

To meet the public involvement requirements of Section 106, the Federal Highway Administration's (FHWA's) finding of "Adverse Effect" was advertised in *The Goshen News,* a widely circulated newspaper throughout the Town of Middlebury and northern Elkhart County, on November 1, 2018 offering the public an opportunity to submit comment pursuant to 36 CFR 800.2(d), 800.3(e), and 800.6(a)(4). The public comment period closed 30 days later on December 3, 2018. The text of the public notice and the affidavit of publication appear in Appendix D, page 64 No comments were received on the Section 106 public notice.

Public Hearing

The project will meet the minimum requirements described in the current INDOT Public Involvement Manual which requires the project sponsor to offer the public an opportunity to submit comment and/or request a public hearing. INDOT decided to forgo offering the public an

opportunity to request a hearing and held a public hearing to provide information to the public and gather public input.

A public hearing was held on July 18, 2019 at Northridge High School. A legal notice of public hearing was published in *The Goshen News* on July 3, 3019 and July 10, 2019 (Appendix G, page 84). The purpose of this hearing was to present the studied alternatives to community members and other interested stakeholders, as well as offer and in-person opportunity for them to discuss their opinions or concerns with project officials. The presentation is included in Appendix G, page 39. Approximately 150 members of the public and elected officials were in attendance (Appendix G, page 55).

A total of approximately 40 comments were received, including verbal, written, and e-mail comments. The public commented on a wide range of topics including but not limited to, broad support for the project, schedule, safety, logical termini, road design, and maintenance of traffic (MOT) concerns. All comments received during this period have been listed and individually addressed in the disposition of comments (Appendix G, pages 147-178).

Public Controversy on Environmental Grounds	**Yes**	**No**
Will the project involve substantial controversy concerning community and/or natural resource impacts?		X

Remarks:

At this time, there is no known public controversy over community and/or natural resource impacts regarding the project.

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

Sponsor of the Project: Indiana Department of Transportation INDOT District: Fort Wayne
Local Name of the Facility: US 20

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

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

PURPOSE AND NEED:

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

Need: Improve Safety

INDOT generated accident data for this corridor which has been used in this evaluation. It examined a three-year period from October 4, 2013 to September 25, 2016. During this period, there were 200 accidents within the project area with a majority being rear end crashes. The severity level of each accident is defined as property damage only, personal injury, or fatality. Within the project area, 11% of the accidents resulted in personal injury with one accident resulting in a fatality. RoadHAT analysis shows the index of accident frequency is well above the expectations of the facility type and within the top 0.2% of highways in the state in terms of accident frequency.

US 20 Accident Quantity and Severity

	Property Damage Only	Personal Injuries	Fatalities	Total in the Project Area
US 20	143	18	1	162

Need: Reduce Congestion

The primary measure of congestion is level of service (LOS), which the Highway Capacity Manual (2000) defines as a quality measure describing operational conditions within a traffic stream. LOS range from A (best) to F (worst). LOS of E and F are deemed unacceptable and in need of improvement.

Base year (2016), opening year (2021), and horizon year (2041) traffic projections were developed by INDOT and are summarized in the Average Annual Daily Traffic (AADT) and Design Hourly Volume (DHV) Table below. A 1.9 % per year growth rate was used in the development of this forecast.

The existing LOS for US 20 within the project area was analyzed and determined to be at LOS E which results in congestion and traffic delays. The horizon year 2041 would experience a LOS F. The desirable LOS for this improvement is B.

AADT DHV Table

Year	Growth Rate percent	AADT	DHV	LOS
2016	1.9	17,390	4,695	E
2021	1.9	19,040	5,141	E
2041	1.9	25,650	6,926	F

Need: Geometric Deficiencies

Three existing level one geometric deficiencies, where the roadway does not meet critical safety design requirements, have been identified within the project area.

- A vertical alignment deficiency exists 1,900 feet east of the US 20/CR 15 intersection. Sight distance at this existing crest curve does not meet safe design requirements and could lead to rear end accidents.
- A vertical curve in US 20 that does not provide adequate visibility is located between CR 27 South of US 20 and CR 27 north of US 20. In this area, the leg of CR 27 south of US 20 is separated from the

leg on CR 27 north of US 20 by approximately 0.5 mile (Appendix B, pages 7 and 8).

- A curve in US 20 without banking is located just west of CR 31. However, with a design speed of 55 miles per hour (MPH) a banking rate of 2.6 percent is required to meet safe design requirements.

Need: Local Community Needs and Interests

Horse drawn buggies are the primary mode of transportation for the local Amish community. This section of US 20 is regularly utilized by horse drawn buggies. Currently, US 20 through the project area has approximately 6-foot shoulders, which do not provide adequate separation between motorized vehicles and horse drawn buggies increasing the potential of accidents between motorists and buggies.

Project Purpose

Alternative must:

- Improve the traffic conditions to a LOS of B in the horizon year 2041.
- Correct the undesirable vertical geometry and provide adequate sight distance throughout the corridor.
- Provide adequate separation between buggies and vehicles.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Elkhart Municipality: Town of Middlebury

Limits of Proposed Work: Beginning approximately 803 feet east of the intersection of SR 15 and US 20 and proceeding east on US 20 to approximately 1,051 feet east of the intersection of US 20 and CR 35.

Total Work Length: 4.4 Mile(s) Total Work Area: 130 Acre(s)

Is an Interchange Modification Study / Interchange Justification Study (IMS/IJS) required? If yes, when did the FHWA grant a conditional approval for this project?	Yes[1]	No
		X
	Date:	

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

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

INDOT and FHWA propose to proceed with the US 20 Improvement Project (Des. Nos. 1600517) located west of the town of Middlebury in Elkhart County, Indiana from approximately 1,000 feet east of SR 15 to approximately 800 feet east of CR 35. More specifically the project is located within Jefferson and Middlebury Townships; Bristol and Middlebury US Geological Survey (USGS) Quadrangles, Sections 10, 11, 12, 13, 14, 15 of Township 37 North, Range 6 East and Sections 7, 8, 17, 18 of Township 37 North, Range 7 East (Appendix B, page 1 and 38).

Existing Conditions

US 20 is classified as a 2-lane rural minor arterial throughout the project area. This segment has a posted speed of 40 MPH starting at the US 20 and SR 15 intersection transitioning up to 55 MPH through the rural section of the project then transitioning down to 45 MPH before the intersection of US 20 and CR 35. A majority of the existing typical section of US 20 consists of two 12-foot travel lanes with 6-foot paved and 4-foot unpaved shoulders with a ditch of variable width. The apparent average right-of-way width through the corridor is 48 feet.

There are two signalized intersections along this segment of US 20, one at the west end of the project at US

20 and SR 15 and one at the east end of the project at US 20 and CR 35. The US 20 and SR 15 intersection consists of two through lanes in all directions with a single left turn lane for all approaches. One through lane ends approximately 0.5 mile east of the intersection. The US 20 and CR 35 intersection consists of a through lane in each direction, and a single left turn lane for the east and west approaches. All other intersections along the corridor are stop controlled on the minor approach. The horizontal alignment along US 20 runs from west to east and contains curves without adequate banking.

US 20 frequently experiences elevated levels of congestion causing frequent delays resulting in unsafe driving conditions. Traffic through the corridor is projected to increase over the next 20 years resulting in worsened congestion levels. Within the project area, 11% of the accidents resulted in personal injury with one accident resulting in a fatality. This roadway is currently ranks in the top 0.2% of highways in the state for most accidents. These congestion and safety issues are exacerbated by the frequent use of the roadway, and roadway shoulders, by non-motorized vehicles including Amish buggies.

The project area includes several convenience store/gas stations, two religious facilities, a concrete plant, and several commercial properties at the east and west ends of the project area. Northridge High School is also located at the east end of the project. Land use within the remainder of the project area includes small to large family farms and agricultural land, residential properties and wetlands or natural areas. Local utilities including electric transmission lines, telephone, cable, and gas transmission lines are located on the north side of the roadway within the apparent existing right-of-way. One snow mobile trail also crosses US 20 approximately at mid-point of the project and extends along the north side of US 20 for approximately 0.75 mile.

Preferred Alternative (Alternative 3B-TWLTL)

The preferred alternative includes reconstruction of existing 2-lane US 20 to a 5-lane section including a 14-foot two way left turn lane, two 12-foot travel lanes in each direction, and two 10-foot paved shoulders. These 10-foot paved shoulders are wide enough to safely accommodate horse drawn buggy traffic and will be specifically designed to support long term buggy traffic without forming ruts. The widening will occur primarily to the south of the existing alignment. The preferred alternative will eliminate the vertical alignment deficiencies that exist 1,900 feet east of the US 20/CR 15 and between CR 27 south of US 20 and CR 27 north of US 20 by flattening the road grade through these areas. The preferred alternative also corrects the curve without banking on US 20 just west of CR 31 by increasing the horizontal curve radius to eliminate the need for super elevation.

The preferred alternative includes both in-ditch detention and retention basins. Efforts have been made to minimize impacts to wetlands where possible. Where necessary, ditch detention areas have been made wider to minimize impacts to other more sensitive areas. The preferred alternative includes only open channel drainage, no storm sewer lines are proposed. There are ten culverts to be modified across US 20 and the adjacent county roads (Appendix B, pages 51 through 60).

County road intersections with US 20 will be improved from the existing condition as necessary. The preferred alternative includes design exceptions for vertical sight distance requirements on CR 29 and CR 35. These design exemptions will avoid at least two residential relocations and minimize the overall project footprint. The preferred alternative also includes dedicated left turn lanes from CR 35 to US 20 in both directions and improved traffic signal timing.

Description of improvements to county roads at each intersection are described below:

US 20 and CR 27 - Roadway lanes will be widened from 10.5 feet to 12 feet in both directions along CR 27. Additionally, useable shoulder width will be widened from 1 foot (0 feet paved) to 8 feet (2 feet paved) in both directions. Approximately 290 linear feet and 630 linear feet of roadway and shoulder widening will occur along CR 27 north and south of US 20, respectively.

US 20 and CR 29 - Roadway lanes will be widened from 9 feet to 12 feet in both directions along CR 29. Additionally, useable shoulder width will be widened from 4 feet (0 feet paved) to 10 feet (2 feet paved) in both directions. Approximately 240 linear feet of roadway and shoulder widening will occur along CR 29 north and south of US 20.

US 20 and CR 31 - Roadway lanes will be widened from 10 feet to 12 feet in both directions along CR 31. Additionally, useable shoulder width will be widened from 0 feet to 10 feet (2 feet paved) in both directions. Approximately 190 linear feet and 230 linear feet of roadway and shoulder widening will occur along CR 31 north and south of US 20, respectively.

US 20 and CR 33 - Roadway lanes will be widened from 10.5 feet to 12 feet in both directions along CR 33. Additionally, useable shoulder width will be widened from 2.5 feet (0 feet paved) to 8 feet (2 feet paved) in both directions. Approximately 240 linear feet and 220 linear feet of roadway and shoulder widening will occur along CR 33 north and south of US 20, respectively.

US 20 and CR 35 - Roadway lanes will not be widened along CR 35. However, useable shoulder width will be widened from 10 feet (6 feet paved) to 11 feet (10 feet paved) in both directions. Approximately 320 linear feet and 285 linear feet of shoulder widening will occur along CR 35 north and south of US 20, respectively.

The proposed project will require approximately 90.8 acres of permanent right-of-way and 4.0 acre of temporary right-of way. A total of 19 residential relocations, and two business relocations will be required. The proposed project will result in acquisition of 5.1 acres of wetland, 30.0 acres of agricultural land, 5.5 acres of forest, and 7.7 acres of commercial property. A total of 1,665 linear feet of UNT North Fork Pine Creek and Indian Creek will be impacted by structure lengthening, riprap placement, and channel clearing. Cofferdams and temporary pumparounds are anticipated to be necessary to complete the project resulting in temporary stream impacts. The Elkhart County Snowmobile Trail is present within the project area; however, the project is not anticipated to result in a Section 4(f) use of this trail.

Logical Termini and Fulfillment of Purpose and Need

The project has independent utility and will provide a fully functional road segment without any additional transportation improvements beyond the project limits. The project's logical termini along US 20 extend from SR 15 on to CR 35. Logical termini for improvements to the local road system are approximately 200 feet north and south of US 20 (Appendix B, page 1). These termini were established to encompass an area of elevated accidents, geometric deficiencies, and congestion.

The proposed project fulfills the purpose and need of the project by improving the LOS from E under the no-build alternative to LOS B in the horizon year, reducing congestion, improving functional safety, providing a safer facility for horse drawn buggies and eliminating the geometric deficiencies within the corridor.

Maintenance of Traffic (MOT)

MOT for the preferred alternative will be accomplished by constructing the entire southern portion of US 20 in Phase 1, while maintaining current traffic patterns on US 20. After completion of the southern portion of the project, traffic will be switched over to the newly constructed half, while the northern half of the project can be constructed. Note this method provides access to buggy traffic while not closing more than one consecutive county road. Additionally, this method increases worker safety by separating construction activities from travel lanes (Appendix B, pages 29-66).

Cost Estimate

The total estimated construction and engineering costs for the US 20 Improvement Project are $17,453,050 and $2,195,100 respectively. Construction is anticipated to start in 2022. The Michiana Area Council of Governments (MACOG), which functions as the Metropolitan Planning Organization (MPO) for Elkhart County initially included the project in the Fiscal Year (FY) 2018-2021 Transportation Improvement Program (TIP). This project is also included in the INDOT FY 2018-2021 Statewide Transportation Improvement Program (STIP) (Appendix H, pages 1 and 2). This project has been carried forward into the MACOG FY 2020-2024 TIP and INDOT 2020-2024 STIP.

OTHER ALTERNATIVES CONSIDERED:

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

Alternative 1 – 2-lane with Two Way Left Turn Lane (TWLTL)

Alternative 1 was considered to minimize impacts to the human and natural environments. This alternative would widen US 20 to allow for the addition of a center TWLTL. This alternative would improve the safety of the roadway by removing left turning vehicles from the travel lane and address the horizontal and vertical geometric issues. However, this alternative would only improve operation of the facility to a LOS E in the design year thus not sufficiently reducing congestion. Alternative 1 would not meet the purpose and need and was eliminated from consideration.

Alternative 2 – 2-lane with TWLTL and Grading for Future 5 Lane Section:

Alternative 2 was considered to reduce the overall cost of the project. This alternative would construct a 3-lane facility and grade the corridor outside of the constructed road to accommodate a future 5-lane facility. This alternative would improve the safety of the roadway by removing left turning vehicles from the travel lane and address the horizontal and vertical geometric issues. However, this alternative would only improve operation of the facility to a LOS E in the design year thus not sufficiently reduce congestion. Alternative 2 would not meet the purpose and need and was eliminated from consideration.

Alternative 3A – 4-lane with TWLTL (Center):

Similar to the preferred alternative, this alternative would reconstruct US 20 to a 5-lane section carrying two lanes of traffic in each direction with a TWLTL in the center. Alternative 3A was developed to widen the road while splitting the additional environmental impacts evenly between the north and south sides of US 20. As both Alternative 3A and Alternative 3B (preferred alternative) meet the purpose and need of the project, an evaluation of impacts was conducted to quantify the impacts to assist in determining which alternative had the lowest overall environmental impacts. The results of this analysis are summarized in the Alternatives Comparison Table (Appendix I, page 1).

While Alternative 3A has fewer impacts to some resources, Alternative 3B had fewer overall impacts, thus Alternative 3A was eliminated from consideration.

Alternative 4 – 4-lane section with no TWLTL:

Upgrading the facility to a 4-lane section, two lanes in each direction without a TWLTL was considered and eliminated early in the alternative selection process. This alternative was dismissed since TWLTLs are the most effective way to remove left turning movements from through traffic. The 4-lane section with no TWLTL alternative does not address the congestion and safety concerns discussed in the Purpose and Need section above. If this alternative were selected, congestion would continue to increase throughout the corridor. This alternative does not meet the purpose and need of the project and was therefore dismissed from further consideration.

Alternative 5 – No Build Alternative:

This alternative would not involve roadway work along US 20. The No Build Alternative does not address the congestion and safety concerns discussed in the Purpose and Need section above. If this alternative were selected, congestion would continue to increase throughout the corridor. This alternative does not meet the purpose and need of the project and was therefore dismissed from further consideration.

The Do Nothing Alternative is not feasible, prudent or practicable because (*Mark all that apply*):

It would not correct existing capacity deficiencies;	X
It would not correct existing safety hazards;	X

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

ROADWAY CHARACTER:

Functional Classification: US 20-Rural Minor Arterial
Current ADT: 19,040 VPD (2021) Design Year ADT: 25,650 VPD (2041)
Design Hour Volume (DHV): 8.15 Truck Percentage (%) 26.91
Designed Speed (mph): 40/55 Legal Speed (mph): 55

	Existing		Proposed	
Number of Lanes:	2		5	
Type of Lanes:	12 ft. through lanes		12 ft. through lanes with a 14 ft. two-way left turn lane	
Pavement Width:	36	ft.	82	ft.
Shoulder Width:	10 (6 ft. paved)	ft.	11 (10 ft. paved)	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

Functional Classification: CR 27 - Local
Current ADT: N/A VPD (2021) Design Year ADT: N/A VPD (2041)
Design Hour Volume (DHV): N/A Truck Percentage (%) N/A
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	10.5 ft. through lanes		12 ft. through lanes	
Pavement Width:	21	ft.	28	ft.
Shoulder Width:	1 (0 ft. paved)	ft.	8 (2 ft. paved)	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

Functional Classification: CR 29- Local
Current ADT: N/A VPD (2021) Design Year ADT: N/A VPD (2041)
Design Hour Volume (DHV): N/A Truck Percentage (%) N/A
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	9 ft. through lanes		12 ft. through lanes	
Pavement Width:	18	ft.	28	ft.
Shoulder Width:	4 (0 ft. paved)	ft.	10 (2 ft. paved)	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

Functional Classification: CR 31 - Local
Current ADT: N/A VPD (2021) Design Year ADT: N/A VPD (2041)
Design Hour Volume (DHV): N/A Truck Percentage (%) N/A
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	10 ft. through lanes		12 ft. through lanes	
Pavement Width:	20	ft.	28	ft.
Shoulder Width:	0	ft.	12 (2 ft. paved)	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

Functional Classification: CR 33 - Local
Current ADT: N/A VPD (2021) Design Year ADT: N/A VPD (2041)
Design Hour Volume (DHV): N/A Truck Percentage (%) N/A
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	10.5 ft. through lanes		12 ft. through lanes	
Pavement Width:	21	ft.	28	ft.
Shoulder Width:	2.5 (0 ft. paved)	ft.	8 (2 ft. paved)	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

Functional Classification: CR 35 – Rural Local Arterial
Current ADT: 5,190 VPD (2021) Design Year ADT: 6,933 VPD (2041)
Design Hour Volume (DHV): 403 Truck Percentage (%) 7.65
Designed Speed (mph): 45 Legal Speed (mph): 45

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	12 ft. through lanes		12 ft. through lanes	
Pavement Width:	36	ft.	44	ft.
Shoulder Width:	10 (6 ft. paved)	ft.	11 (10 ft. paved)	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

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

DESIGN CRITERIA FOR BRIDGES:

Structure/NBI Number(s): CV 020-020-099.20 Sufficiency Rating: 6, Large Culvert Inspection Report, 7/31/2018
(Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	12 ft. x 8 ft. Metal Arch		12 ft. x 8 ft. Metal 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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	131	ft.	131	ft.
Shoulder Width:	16	ft.	16	ft.
Length of Channel Work:			1,530	ft.

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

Remarks:

Large culvert CV 020-020-099.20, carrying eastbound and westbound lanes of US 20 over Indian Creek is located approximately 960 feet east of the US 20 and SR 15 intersection. Per the May 21, 2013 INDOT Large Culvert Inspection Report, the existing structure was constructed in 1991 and was replaced in 2009 which included a 20-foot extension on the south end. No replacement or rehabilitation activities to this structure are anticipated as part of this project; however, approximately 1,530 linear feet of Indian Creek occurs within the proposed permanent right-of-way. Therefore, approximately 1,530 feet of impacts to Indian Creek are anticipated (Appendix B, page 27).

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

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

Structure/NBI Number(s): Small Structure 17 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	1.5 ft. Reinforced Concrete Pipe		3 ft. Reinforced Concrete Pipe	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	138	ft.	138	ft.
Shoulder Width:	10	ft.	11	ft.
Length of Channel Work:			0	ft.

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

Remarks:

The existing small structure identified as Structure Number 17 on the plan sheet conveys roadside drainage beneath eastbound and westbound lanes of US 20 from the south to the north where it outlets into Indian Creek approximately 49 feet north of the existing US 20 edge of pavement. The existing small structure is located approximately 1,340 feet west of the US 20 and CR 27 South intersection. Due to a pipe diameter of less than 48 inches, the existing structure does not have an assigned INDOT Structure Number or Structure Inspection Report. The existing 1.25-foot reinforced concrete pipe (RCP) will be replaced with a 3-foot RCP as part of this project. This small structure carries roadside drainage, thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 51).

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

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

Structure/NBI Number(s): Small Structure 19 Sufficiency Rating: N/A (Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	2 ft. Reinforced Concrete Pipe		3 ft. Reinforced Concrete Pipe	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	82	ft.	130	ft.
Shoulder Width:	16	ft.	21	ft.
Length of Channel Work:			0	ft.

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

Remarks:

The existing small structure identified as Structure Number 19 on the plan sheet conveys roadside drainage beneath eastbound and westbound lanes of US 20 from the south to the north where it outlets into Indian Creek approximately 46 feet north of the existing US 20 edge of pavement. The existing small structure is located approximately 958 feet west of the US 20 and CR 27 South intersection. Due to a pipe diameter of less than 48 inches, the existing structure does not have an assigned INDOT Structure Number or Structure Inspection Report. The existing 2-foot RCP will be replaced with a 3-foot RCP as part of this project. This small structure carries roadside drainage, thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 52).

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

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

Structure/NBI Number(s): Small Structure 47 Sufficiency Rating: N/A (Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	1.5 ft. Reinforced Concrete Pipe		3 ft. Reinforced Concrete Pipe	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	89	ft.	135	ft.
Shoulder Width:	10	ft.	11	ft.
Length of Channel Work:			0	ft.

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

Remarks:

The existing small structure identified as Structure Number 47 on the plan sheet conveys roadside drainage beneath eastbound and westbound lanes of US 20 from the south to the north where it outlets into Wetland 1 approximately 28 feet north of the existing US 20 edge of pavement. The existing small structure is located approximately 384 feet east of the US 20 and CR 29 intersection. Due to a pipe diameter of less than 48 inches, the existing structure does not have an assigned INDOT Structure Number or Structure Inspection Report. The existing 1.5-foot RCP will be replaced with a 3-foot RCP as part of this project. This small structure carries roadside drainage, thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 53).

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

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

Structure/NBI Number(s): Small Structure 55 Sufficiency Rating: N/A (Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	2 ft. Reinforced Concrete Pipe		11 ft. x 4 ft. Reinforced Concrete Box	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	82	ft.	144	ft.
Shoulder Width:	10	ft.	11	ft.
Length of Channel Work:			135	ft.

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

Remarks:

The existing small structure identified as Structure Number 55 on the plan sheet conveys unnamed tributary (UNT) 1 beneath eastbound and westbound lanes of US 20 from the north to the south where it outlets into a UNT approximately 760 feet south of the existing US 20 edge of pavement. The existing small structure is located approximately 1,797 feet east of the US 20 and CR 29 intersection. Due to a pipe diameter of less than 48 inches, the existing structure does not have an assigned INDOT Structure Number or Structure Inspection Report. The existing 2-foot RCP will be replaced with an 11-foot by 4-foot reinforced concrete box (RCB) as part of this project. This small structure carries roadside drainage, thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 54).

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

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

Structure/NBI Number(s): Small Structure 22 Sufficiency Rating: N/A (Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	N/A		3 ft. Reinforced Concrete Pipe	
Number of Spans:	N/A		1	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	100	ft.
Shoulder Width:	1	ft.	8	ft.
Length of Channel Work:			0	ft.

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

Remarks:

The proposed small structure identified as Structure Number 22 on the plan sheet conveys roadside drainage beneath northbound and southbound lanes of CR 27 South. Structure Number 22 carries roadside drainage west from a proposed detention pond east of CR 29 South to a proposed detention pond west of CR 29 South. An existing structure is not currently present at this location. The proposed small structure will be located approximately 49 feet south of the US 20 and CR 27 South intersection. The proposed structure will a 3-foot RCP. This small structure will carry roadside drainage, thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 56).

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

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

Structure/NBI Number(s): Small Structure 41 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	N/A		3 ft. Reinforced Concrete Pipe	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	113	ft.
Shoulder Width:	4	ft.	10	ft.
Length of Channel Work:			0	ft.

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

Remarks:

The proposed small structure identified as Structure Number 41 on the plan sheet conveys roadside drainage beneath northbound and southbound lanes of CR 29 north of US 20. Structure Number 41 carries roadside drainage east from Wetland 2 to a proposed detention pond east of CR 29. An existing structure is not currently present at this location. The proposed small structure will be located approximately 32 feet north of the US 20 and CR 29 intersection. The proposed structure will a 3-foot RCP. This small structure will carry roadside drainage, thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 57).

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

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

Structure/NBI Number(s): Small Structure 59 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	N/A		3 ft. Reinforced Concrete Pipe	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	118	ft.
Shoulder Width:	0	ft.	12	ft.
Length of Channel Work:			0	ft.

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

Remarks:

The proposed small structure identified as Structure Number 59 on the plan sheet conveys

roadside drainage beneath northbound and southbound lanes of CR 31 south of US 20. Structure Number 58 carries roadside drainage west from a proposed detention pond east of CR 31 to Wetland 15. An existing structure is not currently present at this location. The proposed small structure will be located approximately 31 feet south of the US 20 and CR 31 intersection. The proposed structure will a 3-foot RCP. This small structure will carry roadside drainage, thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 58).

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

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

Structure/NBI Number(s): Small Structure 60 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	N/A		3 ft. Reinforced Concrete Pipe	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	118	ft.
Shoulder Width:	0	ft.	12	ft.
Length of Channel Work:			0	ft.

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

Remarks:

The proposed small structure identified as Structure Number 60 on the plan sheet conveys roadside drainage beneath northbound and southbound lanes of CR 31 north of US 20. Structure Number 60 carries roadside drainage west from a proposed detention pond east of CR 31 to a proposed detention pond west of CR 31. An existing structure is not currently present at this location. The proposed small structure will be located approximately 25 feet north of the US 20 and CR 31 intersection. The proposed structure will a 3-foot RCP. This small structure will carry roadside drainage, thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 59).

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

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

Structure/NBI Number(s): Small Structure 76 Sufficiency Rating: N/A
(Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	N/A		3 ft. Reinforced Concrete Pipe	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	94	ft.
Shoulder Width:	0	ft.	8	ft.
Length of Channel Work:			0	ft.

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

Remarks:

The proposed small structure identified as Structure Number 76 on the plan sheet conveys roadside drainage beneath northbound and southbound lanes of CR 33 North. Structure Number 76 carries roadside drainage west from a proposed detention pond east of CR 33 North to a proposed detention pond west of CR 33 North. An existing structure is not

currently present at this location. The proposed small structure will be located approximately 25 feet north of the US 20 and CR 33 North intersection. The proposed structure will a 3-foot RCP. This small structure will carry roadside drainage, thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 60).

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

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

Structure/NBI Number(s): CV 020-020-103.34 (Str. No. 105)

Sufficiency Rating: 8, Large Culvert Inspection Report, 8/3/2018 (Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	Twin 5 ft. Corrugated Metal Pipes		9 ft. x 5 ft. Reinforced Concrete Box	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	90	ft.	128	ft.
Shoulder Width:	10	ft.	11	ft.
Length of Channel Work:			38	ft.

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

Remarks:

Large culvert CV 020-020-103.34, Structure Number 105, serves as an equalization culvert for Pond 2 and Pond 3 beneath eastbound and westbound lanes of US 20 and is located approximately 270 feet east of the US 20 and CR 35 intersection. Pond 2 is located in the southeast quadrant of the US 20 and CR 35 intersection, approximately 145 feet east of CR 35 (Appendix B, page 41). Pond 3 is located in the northeast quadrant of the US 20 and CR 35 intersection, approximately 145 feet east of CR 35 (Appendix B, page 41). Per the May 21, 2013 INDOT Large Culvert Inspection Report, the existing structure was constructed in 1999. No records of rehabilitation activities to this structure were listed in the INDOT Large Culvert Inspection Report. The existing twin 5-foot corrugated metal pipe will be replaced with a 9-foot by 5-foot reinforced concrete box (RCB) as part of this project. Approximately 0.16 acre of Pond 2 and 0.04 acre of Pond 3 are within the proposed permanent right-of-way. Therefore, impacts to Pond 2 and Pond 3 are anticipated (Appendix B, page 55).

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

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

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

	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 in remarks)		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

Remarks:

Two lanes of traffic, one in each direction, will be maintained during construction. MOT will be accomplished by constructing the entire southern portion of US 20 in Phase 1, while maintaining current traffic patterns on US 20. After completion of the southern portion of the project, traffic will be switched over to the newly constructed half, while the northern half of the project can be constructed. Note this method provides access for buggy traffic while not closing more than one consecutive county road. A separate travel lane will be maintained for buggies and other non-motorized traffic. Although intersecting county roads may be closed for a brief period, detours will be clearly marked and should not substantially impair travel routes. During construction, a suitable path for use by the Elkhart County Snowmobile Trail will be provided. Additionally, this method increases worker safety by separating construction activities from travel lanes.

Early coordination letters were sent to the Elkhart County Surveyor, Elkhart County Sheriff, the Middlebury Town Manager, the Elkhart County Commissioners, Elkhart County Highway Department, Elkhart County Emergency Management, Northridge High School, Middlebury Town Council Members, and Middlebury Community Schools on February 1, 2018 and March 6, 2018 (Appendix C, pages 1 to 9). No responses pertaining to MOT were received from local officials.

The MOT will pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no significant delays are anticipated and all inconveniences will cease upon project completion. Construction is anticipated to span two construction seasons. Potential temporary community and economic impacts during construction of the proposed project include increased travel time, increased emergency response time, and increased fuel consumption by commercial and individual motorists due to any temporary lane closures that may be required. The project sponsor will be responsible for contacting school districts, churches and emergency services at least two weeks prior to construction activity that would block or limit access. Delays may occur during construction but would cease with project completion.

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: $ 2,195,100 (2018) Right-of-Way: $ 2,100,000 (2020-21) Construction: $ 15,353,050 (2020-21)*

Anticipated Start Date of Construction: Spring 2021

Date project incorporated into STIP July 2, 2019 (FY 20-24) (Appendix H, page 4)

Is the project in an MPO Area?	Yes	No
	X	

If yes,

Name of MPO MACOG

Location of Project in TIP MACOG TIP FY 20-24 (Appendix H, page 3)

Date of incorporation by reference into the STIP July 2, 2019 (FY 20-24)

RIGHT OF WAY:

	Amount (acres)	
Land Use Impacts	Permanent	Temporary
Residential	39.4	3.5
Commercial	7.5	0.2
Agricultural	29.9	0.1
Forest	5.5	N/A
Wetlands	5.1	<0.1
Other: Religious Facility	1.8	0.2
Other:	N/A	N/A
Other: Utility	1.6	N/A
TOTAL	90.8	4.0

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

Remarks:

INDOT does not have right-of-way outside of the edge of the existing pavement. Any work outside of the traveled way will necessitate re-acquiring the existing right-of-way. The width of the reacquired right-of-way will be approximately 22 feet north and south of the current US 20 centerline. New, permanent right-of way widths range from 190 feet to 295 feet from the center line along US 20 and 90 feet to 142 feet from the center line along CR 27, CR 29, CR 31, CR 33, and CR 35.

The proposed project will require the reacquisition of 18.8 acre of right-of-way and acquisition of 90.8 acre of new, permanent right-of-way will be necessary. An additional 4.0 acres of temporary right-of-way will be necessary for construction access, staging activities, and temporary grading.

The current use of all reacquired right-of-way is existing pavement for US 20. The current use of the new, permanent right-of-way includes approximately 39.4 acre of residential property, 7.5 acre of commercial property, 29.9 acre of agricultural property, 5.1 acre of wetlands, 5.5 acres of forested property, 1.8 acre of religious facility property, and 1.6 acre of utility property. The current use of the temporary right-of-way includes approximately 3.5 acre of residential property, 0.2 acre of commercial property, 0.1 acre of agricultural property, <0.1 acre of wetlands, and 0.2 acre of religious facility property.

Farmland acquisition acreage provided by the US Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) was calculated based on a preliminary right-of-way footprint reflective of the worst-case scenario. As the project development process has progressed, the right-of-way acquisition footprint has been refined and reduced where possible. The refined right-of-way was used to calculate land use impacts in this section of the document. As such, acreage of agricultural areas noted in the table above are less than the acreage noted in the Farmland Farmland Protection Policy Act (FPPA) coordination included in Appendix C.

As a result of design changes, including a need for increased water detention areas onsite and a need for over excavation to remove unsuitable peat soils, the estimated right-of-way increased from the 48 acres stated in the March 6, 2018 agency-re-coordination letter to the 90.8 acres documented in this CE. During the Public Information Meeting, held on June 21, 2018 and the Resource Agency Meeting, on July 12, 2018, an estimated right-of-way acreage of 91 acres was presented to the public and resource agencies. No concerns regarding the overall right-of-way acreage have been received from the public or resource agencies.

The use of reacquired right-of-way will continue to be existing pavement. The use of new, permanent right-of-way will be converted from agricultural, residential, wetland, forest, religious

facility, and utility property into new pavement, maintained roadside, and storm water detention for the project. The use of temporary right-of-way will continue to be residential, commercial, agricultural, wetland, and religious facility property (Appendix B, pages 6 to 14).

INDOT has approved an early acquisition CE in accordance with the Moving Ahead for Progress in the 21st Century Act (MAP-21) on December 5, 2018 (Appendix I pages 62-77). The document covered parcels except for those that would be considered Section 4(f) properties. This document was prepared to afford affected property owners additional time to work through the relocation procedures and to begin the time-consuming process of right-of-way acquisition activities as soon as possible.

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

SECTION A – ECOLOGICAL RESOURCES

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

Remarks:

HNTB staff conducted a desktop review of the project area in October 2016 and October 2017, using current and historical aerial imagery, the 7.5 Minute USGS Topographic Quadrangle Map, and publicly available Geographic Information System (GIS) water resource layers. As part of the Red Flag Investigation (RFI), 26 river and stream segments were located within a 0.5-mile radius of the project area, three of which were within the project area (Appendix E, pages 3 and 10).

HNTB staff performed surveys of the investigated area on October 20 and 21, 2016 and October 17, 2017. A *Wetland and Waterways Delineation* report, dated October 18, 2018 was prepared for the project by HNTB Corporation to detail the water resources observed and potentially impacted within the project area. This report was approved by INDOT Environmental Services Division (ESD) on September 25, 2018 (Appendix F, page 45).

An initial version of the waters report, approved by INDOT ESD on March 27, 2017, was sent to the US Army Corps of Engineers (USACE) for a jurisdictional determination. After a field review by the USACE, coordination between USACE and HNTB, and the second field survey by HNTB Corporation on October 17, 2017 an amendment to the Waters Report was prepared. The findings of the amendment to the report have been incorporated into the project Waters report (Appendix F, pages 1 to 44). Two streams, Indian Creek and UNT North Fork Pine Creek were field verified within or adjacent to the project area. On April 3, 2018, the USACE signed the Preliminary Jurisdiction Determination (PJD) form (Appendix F, page 43). The streams and waterways reported below are considered jurisdictional waters of the US. These streams showed Ordinary High Water Mark (OHWM) characteristics and hydrologic connection to the Elkhart River.

The Indiana list of Outstanding Rivers and Streams, and State Natural, Scenic or Recreational lists was reviewed by HNTB staff. No streams within the project area are listed on the Indiana Register's list of Outstanding Rivers and Streams. None of the streams within the project area are listed as a Federal Wild and Scenic River; State Natural, Scenic or Recreational River.

The identified streams and estimated amount of resource within the proposed right-of-way are described in the table below:

Stream Name	Flow Regime	USGS Blue Line	Impact Description	Limits of Stream within Right of Way (ft.)	Limits of Stream within Right-of-way (ac.)
UNT North Fork Pine Creek (UNT 1)	Intermittent	N	Structure Lengthening, Riprap Placement Channel Clearing	135	<0.01
Indian Creek	Perennial	Y	Structure Lengthening, Riprap Placement Channel Clearing	1,530	0.35

The proposed project will result in approximately 1,665 linear feet (0.35 acre) of impacts to the two streams observed within the project area. Stream mitigation is anticipated since new impacts meet or exceed 300 linear feet and/or 0.1 acre below the OHWM.

Cofferdams and temporary pump-arounds are anticipated to be necessary to complete the project resulting in temporary stream impacts. Proper sediment and erosion control measures will be implemented for construction access areas and in-stream work. All disturbed areas will be restored per the current INDOT Standard Specifications.

Agency Coordination

Early coordination letters were sent to the US Fish and Wildlife Service (USFWS), the Indiana Department of Natural Resources Division of Fish and Wildlife (IDNR DFW), and the USACE on June 9, 2017 (Appendix C, pages 1 to 3).

In their early coordination response dated July 12, 2017 IDNR DFW provided comments to reduce potential effects to streams in the project area. (Appendix C, pages 12 to 13).

An automated response was obtained from the Indiana Department of Environmental Management (IDEM) on July 23, 2018 (Appendix C, pages 44 to 51). North Fork of Pine Creek and Indian Creek are IDEM 303D listed streams for *E. coli*. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. This has been added as a firm commitment.

In their early coordination response dated July 26, 2017, USACE recommended that INDOT and their consultants delineate wetlands (including streams) and that the resulting report be forwarded to them for their review (Appendix C, pages 22 to 25).

In their early coordination response dated July 7, 2017, USFWS noted the presence of several wetlands adjacent to US 20 in the western portion of the study area. The noted that mitigation for loss of wetlands will be required (Appendix C, pages 34 to 35).

Re-coordination letters were sent to the resource agencies on March 6, 2018 as an update to the project and a continuation of the coordination process (Appendix C, pages 7 to 9). This coordination letter documented the recommended preferred alternative would be a 5-lane facility with two travel lanes in each direction and a TWLTL in the center.

The IDNR DFW responded on April 4, 2018 indicating all the recommendations in their previous letter dated July 12, 2017 still apply (Appendix C, page 14). USFWS responded in an email dated March 20, 2018 stating that the original letter of July 7, 2017 continues to suffice and did not provide any additional comments regarding streams (Appendix C, page 36 to 37). No additional response was received from the USACE.

Representatives from the FHWA, USACE, IDEM, and IDNR DFW attended a resource agency meeting on July 12, 2018. The purpose of the meeting was to present the recommended preferred alternative to the resource agencies and identify any concerns they may have moving forward. Potential impacts to streams along with mitigation opportunities were discussed at the meeting (Appendix C, pages 52 to 72).

Recommendations provided by the agencies are included in Section J - Environmental Commitments section of this document.

Other Surface Waters	**Presence**	**Impacts**	
		Yes	**No**
Reservoirs			
Lakes	X	X	
Farm Ponds	X	X	
Detention Basins			
Storm Water Management Facilities			

Other: _____ ☐ ☐ ☐

Remarks:

HNTB staff conducted a desktop review of the project area in October 2016, using current and historical aerial imagery, the 7.5 Minute USGS Topographic Quadrangle Map, and publicly available GIS water resource layers. As part of the RFI, 63 lakes were located within a 0.5-acre radius of the project area, 10 of which were mapped within the project area (Appendix E, page 1-14). The field investigations on October 20 and 21, 2016 and October 17, 2017, identified three open waters including one farm pond, and two other ponds present within the investigated area (Appendix B, pages 8, and 13-14). Descriptions of each of these ponds, including anticipated impacts are included below.

Pond 1 is located approximately 50 feet south of US 20 just west of CR 27. Pond 1 is an excavated farm pond approximately 0.84 acre in size, 0.28 acre of which is within the investigated area (Appendix B, page 8). Approximately 0.28 acre of Pond 1 occurs within the proposed permanent right-of-way. Therefore, impacts to Pond 1 are anticipated.

Pond 2 is located approximately 37 feet south of US 20 in the southeast quadrant of the intersection of US 20 and CR 35 (Appendix B, page 14). This pond is associated with Wetland 18. Pond 2 is a natural feature approximately 2.02 acre in size, 0.31 acre of which is within the investigated area. Approximately 0.16 acre of Pond 2 occurs within the proposed permanent right-of-way. Therefore, impacts to Pond 2 are anticipated.

Pond 3 is located approximately 43 feet north of US 20 in the northeast quadrant of the intersection of US 20 and CR 35 (Appendix B, page 14). This pond is associated with Wetland 19. Pond 3 is a natural feature approximately 1.06 acre in size, 0.33 acre of which is within the investigated area. Approximately 0.04 acre of Pond 3 occurs within the proposed permanent right-of-way. Therefore, impacts to Pond 3 are anticipated.

The proposed project will result in 0.48 acre of impacts to the three ponds observed within the project area. Mitigation for open water impacts is anticipated.

Agency Coordination

In their early coordination responses dated July 12, 2017, and April 4, 2018, IDNR DFW did not provide comments regarding potential effects to ponds in the project area. (Appendix C, pages 12 to 13).

An automated response was obtained from IDEM on July 23, 2018 (Appendix C, pages 44 to 51).

In their early coordination response dated July 21, 2017 and July 26, 2017, USACE recommended that INDOT and their consultants delineate wetlands (including open waters) and that the resulting report be forwarded to them for their review (Appendix C, pages 22).

In their early coordination responses dated July 7, 2017, and March 20, 2018, USFWS did not provide comments relating to other surface waters (Appendix C, pages 34 to 35). Re-coordination letters were sent to the resource agencies on March 6, 2018 as an update to the project and a continuation of the coordination process (Appendix C, pages 7 to 9). This coordination letter documented the recommended preferred alternative would be a 5-lane facility with two travel lanes in each direction and a TWLTL in the center.

IDNR DFW responded on April 4, 2018 indicating all of the recommendations in their previous letter dated July 12, 2017 still apply (Appendix C, page 14). USFWS responded in an email dated March 20, 2018 stating that the original letter of July 7, 2017 continues to suffice and did not provide any additional comments regarding ponds or other surface waters (Appendix C, page 36 to 37). No additional response was received from the USACE.

Representatives from the FHWA, USACE, IDEM, and IDNR DFW attended a resource agency meeting on July 12, 2018. The purpose of the meeting was to present the recommended preferred alternative to the resource agencies and identify any concerns they may have moving forward.

During the meeting USACE mentioned that impacts to ponds two and three should be avoided or minimized as much as possible. Potential impacts to ponds along with mitigation opportunities were also discussed at the meeting (Appendix C, pages 52 to 72).

Coordination with USACE and IDEM will continue during the permitting process.

Recommendations provided by the agencies are included in Section J - Environmental Commitments of this document.

	Presence	Impacts	
		Yes	No
Wetlands	X	X	

Total wetland area: 10.822 acre(s) Total wetland area impacted: 5.065 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 (ROW)	Comments
Wetland 01	Palustrine Emergent (PEM1C)	0.342	0.026	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 1 is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 9).
Wetland 02A	Palustrine Emergent (PEM1C)	0.619	0.582	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 2A is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 and improve the intersection of US 20 and CR 27 (Appendix B, page 8).
Wetland-02B	Palustrine Forested (PFO1B)	0.187	0.052	Delineated wetland located within a larger wetland complex. A portion of Wetland 2B is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 8).
Wetland-02C	Palustrine Scrub Shrub (PSS1B)	1.754	0.088	Delineated wetland located within a larger wetland complex. A portion of Wetland 2C is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 8).
Wetland-02D	Palustrine Scrub Shrub (PSS1B)	0.95	0.062	Delineated wetland located within a larger wetland complex. A portion of Wetland 2D is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 8).
Wetland-02E	Palustrine Forested (PFO1B)	0.175	0.004	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 2E is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 8).
Wetland-03A	Palustrine Forested (PFO1B)	0.074	0.070	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 3A is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 and improve the intersection of US 20 and CR 27 (Appendix B, page 8).
Wetland-03B	Palustrine Emergent (PEM1C)	0.019	0.019	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 3B is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20 and improve the intersection of US 20 and CR 27 (Appendix B, page 8).
Wetland-04	Palustrine Emergent (PEM1B)	0.799	0.275	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 4 is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 7).
Wetland-05	Palustrine	1.317	0.474	Delineated wetland located immediately adjacent to the

	Emergent (PEM1C)			existing fill slope. Wetland 5 is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 7).
Wetland-06	Palustrine Emergent (PEM1C)	0.21	0.023	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 6 is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 6).
Wetland-07	Palustrine Emergent (PEM1B)	1.207	0.260	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 7 is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20. A portion of Wetland 7 is a current mitigation site. The current mitigation site will not be impacted by the project (Appendix B, page 6).
Wetland-08	Palustrine Emergent (PEM1A)	0.05	0.050	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 8 is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20. (Appendix B, page 6).
Wetland-9	Palustrine Emergent (PEM1A)	0.033	0.022	Delineated wetland located immediately adjacent to the existing fill slope and Indian Creek. Wetland 9 will be partially impacted by roadway fill required to widen US 20 and the extension of the culvert carrying US 20 over Indian Creek (Appendix B, page 6).
Wetland-10	Palustrine Emergent (PEM1C)	0.411	0.411	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 10 is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20 (Appendix B, page 7).
Wetland-11	Palustrine Emergent (PEM1B)	2.127	2.128	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 11 is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20 (Appendix B, page 7).
Wetland-12A	Palustrine Emergent (PEM1H)	0.063	0.063	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 12A is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20 (Appendix B, page 8).
Wetland-12B	Palustrine Scrub Shrub (PSS1B)	0.093	0.093	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 12B is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20 (Appendix B, page 8).
Wetland-12C	Palustrine Emergent (PEM1H)	0.133	0.133	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 12C is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20 (Appendix B, page 8).
Wetland-13	Palustrine Emergent (PEM1H)	0.009	0.009	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 13 is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20 (Appendix B, page 8).
Wetland-14	Palustrine Emergent (PEM1C)	0.124	0.124	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 14 is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20 (Appendix B, page 9).
Wetland-15	Palustrine Emergent (PEM1A)	0.067	0.059	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 15 is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 9).
Wetland-18	Palustrine Emergent (PEM1C)	0.034	0.034	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 18 is within the proposed right-of-way and will be entirely impacted by roadway fill required to widen US 20 (Appendix B, page 9).

Wetland - 19	Palustrine Emergent (PEM1C)	0.025	0.005	Delineated wetland located immediately adjacent to the existing fill slope. Wetland 19 is within the proposed right-of-way and will be partially impacted by roadway fill required to widen US 20 (Appendix B, page 9).

Wetlands (*Mark all that apply*)	**Documentation**	**ES Approval Dates**
Wetland Determination	X	March 27, 2017
Wetland Delineation	X	March 27, 2017
USACE Isolated Waters Determination	X	April 3, 2018
Mitigation Plan		To be submitted with permit applications.

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;	X
Unique engineering, traffic, maintenance, or safety problems;	
Substantial adverse social, economic, or environmental impacts, or	
The project not meeting the identified needs.	X

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

Remarks:

HNTB conducted a desktop review of the investigated area on October 2, 2016, using current and historical aerial imagery, the Bristol and Middlebury 7.5 Minute USGS Topographic Quadrangle Map, and the National Wetlands Inventory (NWI). 153 NWI mapped areas identified in the RFI included in Appendix E are classified as freshwater emergent wetlands (PEM1/UBF, PEM1B, PEM1C); freshwater forested/Shrub wetland (PFO1/SS1C, PFO1C, PSS1C); and freshwater pond (PBF and PUBGh). These areas are located north and south of US 20 along the length of the investigated area, as well as the extreme east end of the investigated area, just east of the intersection of US 20 and CR 35.

HNTB conducted a Waters of the United States determination on October 20 and 21, 2016 and October 17, 2017. Per the *Wetland and Waterways Delineation Report*, approved by INDOT ESD Ecology and Waterway Permitting (EWPO) on March 27, 2017, a total of seventeen wetlands totaling 10.822 acres were identified within the investigated area (Appendix F, pages 1 to 56). In order for an area to be considered a wetland the observed vegetation, soil properties and hydrologic regime must meet criteria set forth by the USACE. Of the wetlands delineated, fourteen were emergent (Wetlands 1, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 18, and 19), one was an emergent - scrub/shrub - forested complex (Wetland 02), one was an emergent-forested complex (Wetland 3), and one was an emergent - scrub/shrub complex (Wetland 12). Wetlands 2, 3 and 12 contained distinct areas that would receive different classifications under the Cowardin classification system. Therefore, letters were added to differentiate the separate wetland types found within each wetland. All seventeen of these wetlands are jurisdictional. All wetlands were delineated near the project limits in accordance with the USACE Wetland Delineation Manual (Midwest Regional Supplement, 2010). Two areas initially identified as wetlands, Wetlands 16 and 17 did not meet the vegetation, soils or hydrology criteria on a subsequent site visit and were determined to not be wetlands. On April 3, 2018, the USACE signed the Preliminary Jurisdiction Determination (PJD) form (Appendix F, page 45).

Impacts to wetlands are anticipated. Wetland impacts will be limited to the existing and proposed right-of-way limits of the project. Approximately 5.07 acre of wetland may be impacted by the US 20 Improvement Project.

Wetlands impacted by the project are located in low lying areas immediately adjacent to the base of the existing roadway embankment. Shifting US 20 to avoid wetlands was considered and found infeasible as any modification to the alignment would result in greater wetland impact and utility

impacts. For this reason, an alternative that avoids wetland impacts was eliminated from consideration. The No-Build alternative would avoid wetland impacts but is not practicable as the No-Build alternative would not meet the purpose and need of the project. Of the two alternatives that met the purpose and need of the project, the preferred alternative had the lowest wetland impacts (Appendix I, page 1). Efforts to minimize wetland impacts will continue in the design phase of the project.

There is no practicable alternative to the proposed new construction in wetlands and the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use. FHWA approval of this document will constitute approval of the adverse impacts to wetlands.

Indirect impacts to portions of wetland that are not impacted by the construction limits of the project will be prevented by posting do not disturb signs and utilizing proper erosion control measures. This is a firm commitment and is included in the *Environmental Commitments* section below in this document.

Wetland mitigation is anticipated and will be determined during permitting.

Agency Coordination

In their early coordination response dated July 12, 2017, IDNR DFW provided recommendations to coordinate with IDEM and USACE and that impacts to wetlands should be mitigated according to the 1991 INDOT/IDNR/USFWS Memorandum of Understanding. (Appendix C, pages 12 to 13).

In their early coordination response dated July 26, 2017, USACE recommend that INDOT and their consultants delineate wetlands and that the resulting report be forwarded to them for their review (Appendix C, pages 22 to 23).

An automated response was obtained from the Indiana Department of Environmental Management (IDEM) on August 8, 2018 (Appendix C, pages 44 to 51).

In their early coordination response dated July 7, 2017, USFWS noted the presence of several wetlands adjacent to US 20 in the western portion of the study area. The letter also noted that mitigation for loss of wetlands will be required (Appendix C, pages 34 to 35).

Re-coordination letters were sent to the resource agencies on March 6, 2018 as an update to the project and a continuation of the coordination process (Appendix C, pages 7 to 9). This coordination letter documented the recommended preferred alternative would be a 5-lane facility with two travel lanes in each direction and a TWLTL in the center.

The IDNR DFW responded on April 4, 2018 indicating all the recommendations in their previous letter dated July 12, 2017 still apply (Appendix C, page 14). USFWS responded in an email dated March 20, 2018 stating that the original letter of July 7, 2017 continues to suffice and did not provide any additional comments regarding wetlands (Appendix C, page 36 to 37). No additional response was received from the USACE.

Representatives from the FHWA, USACE, IDEM, and IDNR DFW attended a resource agency meeting on July 12, 2018. The purpose of the meeting was to present the recommended preferred alternative to the resource agencies and identify any concerns they may have moving forward. A Google Earth tour of the project corridor was also completed. Potential impacts to wetlands along with mitigation opportunities were discussed at the meeting (Appendix C, pages 52 to 72).

Recommendations provided by the agencies are included in Section J - Environmental Commitments of this document.

	Presence	Impacts	
		Yes	No
Terrestrial Habitat Unique or High Quality Habitat	X	X	

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

Remarks:

A review of the USGS topographic map, aerial photograph, and site visits conducted by HNTB on October 20 and 21, 2016 and October 17, 2017, revealed that terrestrial habitat within the project area consists primarily of agricultural, residential, and commercial land use. Dominant vegetation observed within the project area consists of tall fescue (*Schedonorus arundinaceus)*, Queen Anne's lace (*Daucus carota),* reed canary grass (*Phalaris arundinacea*), spicebush (*Lindera benzoin)*, multifora rose (*Rosa multiflora)*, ash-leaf maple (*Acer negundo)*, silver maple (*Acer saccharinum)*, American elm (*Ulmus americana*), and green ash (*Fraxinus pennsylvanica).* One wetland (Wetland 2) containing high-quality habitats were observed during the field investigation. Signs of wildlife such as deer rubs, deer beds, beaver cut trees and evidence of numerous other small mammals were observed during the field investigation. It can be assumed that small animals such as squirrels, raccoons, birds, etc. likely inhabit the surrounding area.

Proposed right-of-way impacts for the terrestrial habitat include approximately 5.5 acres of tree clearing, 30.0 acres of agricultural land, 5.1 acres of wetland, and 42.9 acres of residential property. Vegetation removal from on commercial, religious, and utility corridor land uses total 11.3 acres. Tree clearing will be limited to areas within 300 feet of the edge of pavement of US 20 and connecting county roads. The remainder of the project area is largely existing pavement or maintained grasses associated with commercial properties and existing transportation facilities (Appendix B, pages 6 to 14 and 25 to 51). No core forest will be impacted by the project. Animal movement should not be permanently restricted or impacted due to the proposed project. All areas will be restored per the current INDOT Standard Specifications.

Tree clearing for the project will be accomplished under a separate tree clearing contract. This work is anticipated to be performed one year prior to the main construction contract. The designation number for this work will be 1802045.

Agency Coordination

In their early coordination response letter on July 7, 2017, USFWS stated that mitigation for the loss of wetlands will be required. USFWS also stated their concern over the loss of deciduous and evergreen trees which provide habitat for migratory birds and other wildlife and indicated that these trees will need to be replaced as close to the project area as possible (Appendix C, pages 34 to 35).

In their early coordination response letter dated July 12, 2017, IDNR DFW made recommendations to minimize any potential effects to terrestrial habitat (Appendix C, pages 12 to 13).

Re-coordination letters were sent to the resource agencies on March 6, 2018 as an update to the project and a continuation of the coordination process. This coordination letter documented that recommended preferred alternative would be a 5-lane facility with two travel lanes in each direction and a TWLTL in the center.

The IDNR DFW responded on April 4, 2018 indicating all the recommendations in their previous letter dated July 12, 2017 still apply and did not make any additional recommendations concerning terrestrial habitat species (Appendix C, page 14).

The USFWS responded in an e-mail received March 20, 2018 USFWS indicating that they would like to see mitigation for the loss of trees for migratory birds and other wildlife, since a large number of trees will be taken (Appendix C, page 36).

Representatives from the FHWA, USACE, IDEM, and IDNR DFW attended a resource agency meeting on July 12, 2018. No concerns regarding impacts to terrestrial habitat were discussed at

the meeting (Appendix C, pages 52 to 72).

Recommendations provided by the agencies are included in Section J - Environmental Commitments of this document.

If there are high incidences of animal movements observed in the project area, or if bridges and other areas appear to be the sole corridor for animal movement, consideration of utilizing wildlife crossings should be taken.

Karst

	Yes	No
Is the proposed project located within or adjacent to the potential Karst Area of Indiana?		X
Are karst features located within or adjacent to the footprint of the proposed project?		X
If yes, will the project impact any of these karst features?		

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

Remarks:

The project is located in Elkhart County, which is outside the designated karst area of the state, as identified in the October 13, 1993 Memorandum of Understanding (MOU) between INDOT, IDNR, IDEM and USFWS. No karst features are known to exist within or adjacent to the proposed project area. The 1993 Karst MOU is not applicable to this project, and a karst assessment is not required. No karst features were noted in the RFI (Appendix E, pages 3 and 10). Impacts to karst features are not expected.

The Indiana Geological Survey (IGS) did not provide responses regarding karst features in their initial coordination response, dated July 6, 2017 or their auto response generated on March 14, 2018 (Appendix C, pages 26 and 27). In their early coordination response, IGS included this project is located in a moderate liquification area. It is also included in a moderate potential for bedrock resources and a low potential for sand and gravel resources. There are also active industrial mineral sites.

Threatened or Endangered Species

	Presence	Impacts Yes	Impacts No
Within the known range of any federal species	X	X	
Any critical habitat identified within project area			
Federal species found in project area (based upon informal consultation)			
State species found in project area (based upon consultation with IDNR)	X		X

	Yes	No
Is Section 7 formal consultation required for this action?		X

Remarks:

Based on a desktop review and the RFI (Appendix E, page 15), completed by HNTB on July 31,2018, the IDNR Elkhart County Endangered, Threatened and Rare (ETR) Species List has been checked and is included in (Appendix E, page 12). The highlighted species on the list reflect the federal and state identified ETR species located within the county. In their early coordination response letter on July 12, 2017, a IDNR DFW review of the Natural Heritage Database identified one state endangered species Blanding's turtle (*Emydoidea blaningii*) documented within a half mile southeast of the project area (Appendix C, page 12). IDNR DFW recommended that to minimize impacts to this species during the nesting period construction should not taking place from April 1 through July 1. This has been added as a "For Consideration" commitment.

Early coordination was undertaken with the USFWS on June 9, 2017 (Appendix C, page 1-3). USFWS responded in a letter dated July 7, 2017 requesting information on the current and proposed right-of-way widths, stating that mitigation will be required for any wetland impacts, and any trees lost during the project will need to be replaced as close to the project area as possible

(Appendix C, page 34). USFWS also provided comments regarding endangered species. They stated that impacts to the Indiana bat and northern long-eared bat (NLEB) will be evaluated utilizing the Range-wide Programmatic Consultation Process and that there is no known habitat for the eastern massasauga within the proposed project area. They concluded that the project is not likely to adversely affect the eastern massasauga and that this letter precludes the need for further consultation on the eastern massasauga as required under Section 7 of the Endangered Species Act (Appendix C, page 35).

A response was provided to USFWS on March 6, 2018 via email by HNTB providing information on the current and proposed right-of-way. This e-mail also solicited comments on the identification of the proposed five lane section as the recommended alternative. This e-mail also stated that approximately 5.5 acres of tree clearing may be needed, a portion of which may be 100-300 feet from the edge of the existing pavement (Appendix C, page 36).

USFWS responded to this additional coordination in an e-mail dated March 20, 2018. In this e-mail USFWS had questions regarding the proposed road alignment, potential residential relocations, and the existing and proposed right-of-way widths. This e-mail went on to say that the USFWS would still like to see mitigation for the loss of trees for migratory birds and other wildlife and that the overall habitat is suitable for bats. This e-mail asked for a copy of the wetlands delineation report and the USACE jurisdictional determination. HNTB provided responses to the USFWS questions along with a copy of the wetland delineation report in an e-mail on May 30, 2018. USFWS confirmed receipt of this information on June 11, 2018 and did not include any additional comments (Appendix C, page 37).

Elkhart County is within range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (NLEB) (*Myotis septentrionalis*). Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal and an official species list was generated (Appendix C, pages 78 to 84). The official species list generated from IPaC indicated one other species present within the project area, the federally threatened eastern massasauga (*Sistrurus catenatus*). This project does not qualify for the USFWS Interim Policy. Qualified staff identified suitable summer habitat for the Indiana bat and NLEB within the investigated area during the field survey.

The project does not qualify 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, Federal Transit Administration and USFWS. The *Limited Formal Programmatic Consultation* for the Indiana bat and northern long-eared bat (NLEB) was completed for this project.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal on August 6, 2018. The USFWS IPaC Official Species List and USFWS IPaC Concurrence Verification Letter have been completed (Appendix C, page 101). Based on the results of the IPaC consultation process, this project determination is likely to adversely affect the Indiana bat and/or NLEB (Appendix C, page 101). As part of this finding, four Avoidance and Minimization Measures (AMMs) are required. The following AMMs are firm project commitments:

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

Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal in excess of what is required to implement the project safely.

Tree Removal AMM 3: Ensure tree removal is limited to that specified in project plans. Install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits. Ensure that contractors understand clearing limits and how they are marked in the field.

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

Lighting AMM 2: Use downward-facing, full cut-off lens lights, and direct lighting away from suitable habitat when installing new or replacing existing permanent lights.

INDOT shall satisfy the compensatory mitigation requirements of the formal consultation with USFWS through one of the conservation options outlined on page 41 of the May 20, 2016 *Programmatic Biological Opinion for Transportation Projects in the Range of the Indiana bat and NLEB*. The amount to be paid to the Range-wide In-lieu Fee Program, to be administered by The Conservation Fund, shall be $12,996.03. This amount was determined by the Habitat Block Method. The area of suitable habitat to be cleared, multiplied by the mitigation ratio for inactive season tree clearing for Elkhart, and the compensatory price per acre; 1.225 acre X 1.75 X $10,609.

INDOT verified the effect finding and submitted to USFWS on August 6, 2018, (Appendix C, page 102). On August 16, 2018, USFWS concurred with the *"Likely to Adversely Effect"* finding (Appendix C, page 101). USFWS stated that this concurrence concludes the ESA Section 7 responsibilities relative to these species for this project. Additionally, a "Re-initiation Notice" is required if: more than 1.225 acre of suitable habitat is to be cleared; additional information about listed species is encountered; the project is modified in a manner that causes an effect to the listed species; or a new species or critical habitat is listed that the project may affect. These requirements, and the Avoidance and Minimizations Measures (AMMs) from the Project Submittal Form, are included as firm commitments for this project. Agency Coordination

Re-coordination letters were sent to the resource agencies on March 6, 2018 as an update to the project and a continuation of the coordination process (Appendix C, page 7 to 9). This coordination letter documented that recommended preferred alternative would be a 5-lane facility with two travel lanes in each direction and a TWLTL in the center.

The IDNR DFW responded on April 4, 2018 indicating all the recommendations in their previous letter dated July 12, 2017 still apply and did not make any additional recommendations concerning threatened or endangered species (Appendix C, page 14).

Recommendations provided by the agencies and AMMs are included in Section J - Environmental Commitments section of this document.

This precludes the need for further consultation on this project under Section 7 of the Endangered Species Act of 1973, as amended. Should additional information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinitiate consultation.

SECTION B – OTHER RESOURCES

Drinking Water Resources	Presence	Impacts Yes	Impacts No
Wellhead Protection Area			
Public Water System(s)			
Residential Well(s)	X	X	
Source Water Protection Area(s)			
Sole Source Aquifer (SSA)	X		X

If a SSA is present, answer the following:

	Yes	No
Is the Project in the St. Joseph Aquifer System?		X
Is the FHWA/EPA SSA MOU Applicable?		X
Initial Groundwater Assessment Required?		X
Detailed Groundwater Assessment Required?		X

Remarks:

The proposed project is located in Elkhart County, and a portion of the project area is within approximately 125 feet of the delineated boundary of the St. Joseph Sole Source Aquifer, the only legally designated sole source aquifer in the state of Indiana (Appendix B, page 6).

Agency Coordination

An early coordination letter was sent to the US Environmental Protection Agency (EPA) Groundwater and Drinking Water Branch on February 1, 2018 (Appendix C, page 4). EPA responded electronically on February 1, 2018, stating that the project is not within a designated Sole Source Aquifer review area, so an EPA Sole Source Aquifer project review of this project is not required (Appendix C, pages 29 to 31). After review of the project EPA suggested that during construction appropriate safeguards are in place to ensure that ground water is not endangered. Such safeguards would include securing adequate precautions for fueling/servicing large equipment, using "green infrastructure" practices where possible, and developing contingency plans to handle the release of any hazardous materials. This has been added as a "For Consideration" commitment.

Re-coordination letters were sent to the resource agencies on March 6, 2018, in order to document that the project team has determined that a five-lane section through the project area is warranted and solicit comments on the project. The EPA responded electronically on March 14, 2018, confirming that an EPA Sole Source Aquifer project review of this project is not required (Appendix C, page 31).

The IDEM Stormwater Permit Coordinator responded on April 4, 2018 indicating all the recommendations in their previous letter dated July 12, 2017 still apply and did not make any additional recommendations concerning threatened or endangered species (Appendix C, page 15).

Therefore, the FHWA/EPA Sole Source Aquifer Memorandum of Agreement (MOA) is not applicable to this project, and a detailed groundwater assessment is not required.

IDEM's Wellhead Proximity Determinator website (https://www.in.gov/idem/cleanwater/pages/wellhead/) was accessed on July 11, 2018, by HNTB. The required project location data was provided and it was determined that it is not located within a Wellhead Protection Area (WHPA).

A query of the IDNR Water Well Web Viewer (https://www.in.gov/dnr/water/3595.htm) conducted on July 11, 2018, by HNTB identified numerous private wells along the project corridor. There are three residential wells mapped within the right-of-way of the project and will likely be impacted. An additional eight residential wells are located adjacent to the right-of-way of the project. However, public water systems are not available to residences within the project area, and each residence and business located within the project area likely has its own water supply well. Therefore, there will likely be additional impacted private wells identified as the project advances to the right-of-way acquisition stage.

This project lies adjacent to the Elkhart, Goshen Urban Area Boundary (UAB). Post construction Storm Water Quality Best Management Practices (BMPs) will be considered during the final design of the project and incorporated into the project's Stormwater Pollution Prevention Plan (SWPPP).

The IDNR Division of Oil and Gas responded to early coordination on June 14, 2017 (Appendix C, pages 10 and 11). In their response, they indicated that some ground water withdrawal wells, owned by Elkhart County Gravel, Inc., are located at the east end of US 20. The identified ground water withdrawal well is 0.54 mile north of the right-of-way and will not be impacted by construction activities.

	Presence	Impacts	
Flood Plains		**Yes**	**No**

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

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

Remarks:

The project does not encroach upon a regulatory floodplain as determined from available Federal Emergency Management Agency (FEMA) floodplain maps (Appendix B, pages 2 and 3). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23, CFR 771, and 44 CFR. No impacts are expected.

In their early coordination response letters dated July 12, 2017 and March 6, 2018, IDNR DFW stated that the project will require a formal approval for construction in the Indian Creek floodway (Appendix C, page 12) unless the project qualifies for a bridge exemption or qualifies under the INDOT Maintenance Activity Exemption. It was determined by INDOT EWPO that a Construction in a Floodway (CIF) permit would not be needed for this project.

The Elkhart County Floodplain Administrator responded to coordination on March 19, 2019 (Appendix C, page 108). In their response, they requested to be provided the Waters Report. This was provided electronically on March 19, 2019. They had no other concerns with the project.

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* **157**

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

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

Remarks:

As required by the Farmland Protection Policy Act (FPPA), coordination with the USDA-NRCS has been completed.

An early coordination letter was sent to the USDA-NRCS on July 2, 2018.

In their response dated July 26, 2018, the USDA-NRCS stated that the acquisition of right-of-way will cause the conversion of prime farmland per the FPPA (Appendix C, page 32). A copy of the Farmland Conversion Impact Rating for Corridor Type Projects (NRCS-CPA-106) form was included in the response. The NRCS-CPA-106 form included prime farmland impact ratings for Alternative 3A (Corridor 1) and Alternative 3B (Corridor 2). Only alternatives that were determined to meet the purpose and need were evaluated for prime farmland impacts.

Alternative 3A and Alternative 3B will both require the acquisition of approximately 91 acres of new, permanent right-of-way. Farmland acreage provided by the NRCS were calculated based on a preliminary right-of-way footprint, a more refined right-of-way footprint was used in the right-of-way section of this document. Alternative 3A and Alternative 3B received NRCS-CPA-106 Form scores of 155 and 157, respectively (Appendix C, page 33).

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 C – CULTURAL RESOURCES

	Category	Type	INDOT Approval Dates	N/A
Minor Projects PA Clearance				X

Results of Research

	Eligible and/or Listed Resource Present
Archaeology	X
NRHP Buildings/Site(s)	
NRHP District(s)	
NRHP Bridge(s)	

Project Effect

No Historic Properties Affected [ ] No Adverse Effect [ ] Adverse Effect [X]

Documentation Prepared

Documentation (mark all that apply)		ES/FHWA Approval Date(s)	SHPO Approval Date(s)
Historic Properties Short Report			
Historic Property Report	X	September 15, 2017	October 24, 2017
Archaeological Records Check/ Review			
Archaeological Phase Ia Survey Report	X	June 29, 2018	August 8, 2018
Archaeological Phase Ic Survey Report			
Archaeological Phase II Investigation Report			
Archaeological Phase III Data Recovery			
APE, Eligibility and Effect Determination	X	October 22, 2018	November 27, 2018
800.11 Documentation	X	October 22, 2018	November 27, 2018

		MOA Signature Dates (List all signatories)
Memorandum of Agreement (MOA)	X	1/23/2019 FHWA 1/17/2019 IDNR DHPA-SHPO 12/13/2018 INDOT ES

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

Remarks:

Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their undertakings on historic properties. In accordance with 36 CFR 800.2(c), consulting parties were invited to participate in efforts to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.

Area of Potential Effect (APE):

The Area of Potential Effects (APE) is "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The area of potential effects is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking". [36 CFR § 800.16(d)]

The APE for this undertaking was drawn to extend 1,320 feet from the project termini and to encompass all properties lying adjacent to the undertaking (Appendix D, page 22). On October 24,

2017, the IDNR Division of Historic Preservation and Archaeology State Historic Preservation Officer (DHPA-SHPO) indicated the APE as proposed in the Historic Property Report (HPR) (Weintraut and Associates, May 2017) appears to be of appropriate size to encompass the geographic area of direct and indirect effects (Appendix D, page 34).

Coordination with Consulting Parties:

The following entities were invited to be consulting parties on September 21, 2017. INDOT, FHWA, and the DHPA-SHPO are automatically considered to be consulting parties. The potential consulting parties were asked to respond within 30 days. If no response was received, it was assumed the recipient did not wish to act as a consulting party. Those in bold type accepted the invitation to be a consulting party.

- Eastern Shawnee Tribe of Oklahoma
- Forest County Potawatomi Community
- Miami Tribe of Oklahoma
- Peoria tribe of Indians of Oklahoma
- Pokagon Band of Indians of Oklahoma
- Elkhart County Historian
- Elkhart County Genealogy Society
- Elkhart County Historical Museum
- Middlebury Community Historical Museum
- Goshen Historical Society and Museum
- Michiana Area Council of Governments
- Elkhart County Planning and Zoning
- Elkhart County Board of Commissioners
- Indiana Landmarks - Northern Regional Office
- State Historic Preservation Office.

Historic Properties:

An HPR was prepared by qualified professionals at Weintraut and Associates for the proposed action in May of 2017 (Appendix D, pages 9 to 10). Historians identified nine properties considered or rated Contributing, per the rating standards established for Indiana Historic Sites and Structures Inventory (IHSSI). Five properties within the project APE have been previously recorded in the IHSSI; only four remain extant. As part of the identification and evaluation efforts for the Section 106 study of this undertaking, historians are recommending no properties as eligible for listing in the NRHP. On October 24, 2017, DHPA-SHPO agreed none of the above-ground properties identified in the HPR appears to be eligible for inclusion in the NRHP (Appendix D, page 34).

Archaeology:

An archaeological records check and Phase Ia Field Reconnaissance Survey Report was prepared by qualified professionals at Weintraut and Associates for the proposed action in June of 2018 (Appendix D, pages 11-13). The report of these findings was approved by the INDOT Cultural Resources Office (CRO) on June 29, 2018. The archaeological records check was sent to the DHPA-SHPO on July 6, 2018 and provided to the Native American tribes for review via INDOT's IN SCOPE website on July 9, 2018 (Appendix D, page 40).

The DHPA-SHPO concurred with the findings of the report on August 8, 2018 (Appendix D, pages 41 to 42). In their letter, the DHPA-SHPO concurred that archaeological site 12-E-0487 appears potentially eligible for inclusion on the NRHP and must either be avoided or subjected to further archaeological investigations. The site must be clearly marked so that it is avoided by all project-related ground disturbing activities. If avoidance is not feasible, a plan for subsurface investigations must be submitted to the Division of Historic Preservation and Archaeology (DHPA)

for review and comment and such investigations must conform to the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation.

Additionally, DHPA-SHPO concurred with the opinion of the archaeologist, as expressed in the archaeological report, that the portions of sites 12-E-0482, 12-E-0483, 12-E-0484, 12-E-0486, 12-E-0489, 12-E-0490, and 12-E-0491 that lie within the proposed project area are unlikely to contain intact archaeological deposits; and that no further archaeological investigations of these portions of sites 12-E-0482, 12-E-0483, 12-E-0484, 12-E-0486, 12-E-0489, 12- E-0490, and 12-E-0491 appear necessary. The portions of sites 12-E-0482, 12-E-0483, 12-E-0484, 12-E-0486, 12-E-0489, 12-E-0490, and 12-E-0491 that lie outside the proposed project area should be clearly marked, and must be avoided by all ground-disturbing project activities. If avoidance is not feasible, then a plan for subsurface archaeological investigations must be submitted to the DHPA for review and comment. Any further archaeological investigations must be done in accordance with the "Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation" (48 F.R. 44716)". This is included in Section J- Environmental Commitments at the end of this document.

Documentation, Findings:

The Section 106 APE determination and "Adverse Effect" finding were approved by FHWA on October 22, 2018 (Appendix D, page 1). The Section 106 finding was submitted to the DHPA-SHPO and consulting parties for review on October 25, 2018. The DHPA-SHPO concurred with the finding on November 27, 2018 (Appendix D, page 43). No other comments were received.

Public Involvement:

In accordance with 36 CFR 800.4(a)(1), 800.4(c)(2), and 800.6(a)(4), a 30-day public notice and opportunity for the public to comment on the "Adverse Effect" finding was published on November 1, 2018 in the *Goshen News* (Appendix D, page 64). The 30-day comment period concluded on December 3, 2018. No comments were received.

Memorandum of Agreement (MOA):

Due to the potential for adverse effects to archaeological site 12-E-0487 that would occur under the Preferred Alternative, FHWA has determined that a finding of Adverse Effect under Section 106 is appropriate for this undertaking.

Commitments to mitigate adverse impacts to archaeological resources that are determined eligible for the NRHP as a result of the US 20 Improvement project have been developed through a MOA between INDOT, FHWA, DHPA-SHPO, and consulting parties.

The draft MOA includes stipulations in which the agency agrees to fund and conduct a Phase II investigation of the site to determine its data potential and eligibility for listing in the NRHP. The Effect Finding and draft MOA were submitted to DHPA-SHPO and other consulting parties on October 25, 2018 for their review and concurrence on the proposed measures to resolve or mitigate adverse effects. Comments were received from DHPA-SHPO on November 27, 2018. INDOT, the project applicant, signed the MOA as an invited signatory on December 13, 2018. The DHPA-SHPO signed the MOA on January 17, 2019. FHWA signed the MOA on January 23, 2019 (Appendix D, pages 58 to 60). All mitigation measures from the MOA have been incorporated into this document as firm commitments.

The Section 106 process has been completed and the responsibilities of the FHWA under Section 106 have been fulfilled.

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

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

	Presence	Use	
Parks & Other Recreational Land		Yes	No
Publicly owned park			
Publicly owned recreation area			
Other (school, state/national forest, bikeway, etc.)	X		X

	Evaluations Prepared	FHWA Approval date
Programmatic Section 4(f)*		
"De minimis" Impact*		
Individual Section 4(f)		

	Presence	Use	
Wildlife & Waterfowl Refuges		Yes	No
National Wildlife Refuge			
National Natural Landmark			
State Wildlife Area			
State Nature Preserve			

	Evaluations Prepared	FHWA Approval date
Programmatic Section 4(f)*		
"De minimis" Impact*		
Individual Section 4(f)		

	Presence	Use	
Historic Properties		Yes	No
Sites eligible and/or listed on the NRHP			

	Evaluations Prepared	FHWA Approval date
Programmatic Section 4(f)*		
"De minimis" Impact*		
Individual Section 4(f)		

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

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

Remarks:

Section 4 (f) of the Department of Transportation Act of 1966, 49 USC 303(c) was established to protect publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historic sites against direct or constructive use impacts from transportation projects.

The RFI, prepared by HNTB on January 23, 2017, identified one trail, the Miami Snowmobile Trail, within the project area (Appendix E, pages 2 and 9). The Miami Snowmobile Trail crosses US 20 between CR 31 and CR 35 (Appendix B, page 11).

This trail is considered a Section 4(f) resource, as it is located within an existing public easement

on private land that permits public access for recreational purposes. The easement is owned by IDNR Division of Outdoor Recreation and managed by the Elkhart County Snowmobile Club. The Elkhart County Snowmobile Club is the Official with Jurisdiction (OWJ) over the resource. The trail is maintained during the snowmobile season from December 1 to March 31, and the location of the trail is marked by placement of flags in the ground to designate the path. Although it is a formally-designated trail, it is used only in the winter months and does not have a permanent, surfaced path that is visible during non-winter months. During the rest of the year, the land is used for agricultural crops.

In their early coordination response letter dated February 13, 2018, IDNR Division of Outdoor Recreation stated that initial analysis of the roadway expansion will not be a problem for the trail (Appendix C, page 15). In an additional early coordination response letter dated March 14, 2018, IDNR Division of Outdoor Recreation stated that coordination with the Elkhart County Snowmobile Club indicated the club does not anticipate the project affecting the trail outside of the December 1 to March 31 snowmobile season. IDNR Division of Outdoor Recreation requested that INDOT replace the existing snowmobile crossing signs at the crossing locations once construction is complete (Appendix C, page 16). This is a firm commitment included in Section J- Environmental Commitments at the end of this document.

The Elkhart County Snowmobile Club did not respond to the initial early coordination correspondence; however, phone conversations with the club president and lease coordinator occurred on February 1, 2018, and July 23, 2018 regarding details of the trail and concerns with the project (Appendix I, page 2). The club representatives noted that the trail is leased by IDNR from a local property owner, and the trail is installed and maintained each year by the Elkhart County Snowmobile Club. The lease held by the IDNR is for the use of the entire field. The location of the trail crossing is shown on the projects construction plans. It was also noted that the current US 20 crossing was chosen due to the lack of line-of-sight issues that are associated with elevated topography to the west. The club's concerns with the project include any proposed fencing, the additional safety concern with crossing a 5-lane facility, and a change in location of the trail's crossing of US 20 that may worsen line-of-sight issues for trail users. Access to the trail will be maintained during construction when there is snow on the ground and the trail is available for use. The line-of-sight for snowmobiles will be improved as a result of this project. This has been added as a firm commitment.

The widening of the right-of-way associated with this project will require the trail to be moved further north on the property from what is shown on the IDNR trail map, but within the existing public easement. This will not require a revision to the lease held by the IDNR Division of Outdoor Recreation, as the lease agreement is for the entire property and not a specific path on the property. The trail will continue to be open and available for public use in a different location within the public easement during construction. The existing location where the trail crosses US 20 will continue to be signed and will be maintained during construction.

According to the FHWA Section 4(f) Policy Paper, dated July 20, 2012, a temporary occupancy will not constitute a Section 4(f) use when all the conditions listed in 23 CFR 774.13(d) are satisfied:

- Duration will be temporary, i.e., less than the time needed for construction of the project, and there should be no change in ownership of the land;
- Scope of the work must be minor, i.e., both the nature and the magnitude of the changes to the Section 4(f) property are minimal;
- There are no anticipated permanent adverse physical impacts, nor will there be interference with the protected activities, features, or attributes of the property, on either a temporary or permanent basis;
- The land being used must be fully restored, i.e., the property must be returned to a condition which is at least as good as that which existed prior to the project; and
- There must be documented agreement of the OWJ over the Section 4(f) resource regarding the above conditions.

The Elkhart County Snowmobile Club, the OWJ for the Miami Snowmobile Trail, was notified of INDOT's intent to apply the Section 4(f) temporary occupancy criteria to this project on July 24, 2018, and concurrence that the project meets the above conditions was received on July 25, 2018 (Appendix I, pages 3 and 4). Therefore, the impacts to this trail constitute a temporary occupancy and are therefore not considered a Section 4(f) use.

The RFI also identified Northridge High School within the project area. 1.4 acres of strip right-of-way from the school will be necessary for the project. Portions of public schools that are used for recreation purposes and are open for public use may be considered a Section 4(f) resource if the OWJ for the property considers the recreational activities to be significant. The right-of-way that will be acquired from Northridge High School does not include any recreational facilities (Appendix I, page 5). Therefore, there will be no Section 4(f) use of this property.

FHWA Section 4(f) regulations exempt archeological sites from Section 4(f) protection if the archaeological resource "is important chiefly because of what can be learned by data recovery and has minimal value for preservation in place" per 23 CFR §774.13(b)(1). This exception from Section 4(f) is only effective if the "officials(s) with jurisdiction over the Section 4(f) resource have been consulted and have not objected" per 23 CFR §774.13(b)(2). Most archaeological resources qualify for this exception.

Archaeological site 12-E-0487 appears potentially eligible for inclusion on the NRHP and must either be avoided or subjected to further archaeological investigations. If avoidance is not feasible, a plan for subsurface investigations must be implemented for data recovery. As site 12-E-0487 does not require preservation in place this is not a Section 4(f) Resource.

In the event that an archeological site which warrants preservation in place is discovered during construction, the Section 4(f) process may be expedited and any required evaluation of feasible and prudent avoidance alternatives will take into account the level of investment already made. The review process, including the consultation with other agencies, will be shortened as appropriate.

No other potential Section 4(f) resources were identified within or adjacent to the project. No further Section 4(f) evaluation is required.

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

Discuss proposed alternatives that satisfy the requirements of Section 6(f). Discuss any Section 6(f) involvement.

Remarks:

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

A review of the project's RFI, aerial mapping, the LWCF National Park Service website (https://www.nps.gov/subjects/lwcf/lwcf-in-your-neighborhood.htm/), and site visit determined that 16 Section 6(f) resources are within Elkhart County. None of the identified Section 6(f) resources are located within or near the project area (Appendix I, page 61). The proposed project will not impact Section 6(f) resources.

SECTION E – Air Quality

Air Quality

Conformity Status of the Project	Yes	No
Is the project in an air quality non-attainment or maintenance area?		X
If YES, then:		
Is the project in the most current MPO TIP?		
Is the project exempt from conformity?		
If the project is NOT exempt from conformity, then:		
Is the project in the Transportation Plan (TP)?		
Is a hot spot analysis required (CO/PM)?		

Level of MSAT Analysis required?

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

Remarks:

Per the IDEM Office of Air Quality, Elkhart County is in attainment for all National Ambient Air Quality Standards criteria pollutants. Therefore, a carbon monoxide (CO) or particulate matter (PM) 2.5 hot spot analysis is not required.

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

Elkhart County is within the boundaries of the MACOG MPO. This project was programmed into the MACOG TIP for Elkhart County per resolution 28-17 on July 1, 2017 (Appendix H, page 1). This project was initially programmed into the INDOT STIP for Fiscal Year (FY) 2018-2021 on July 3, 2017 (Appendix H, page 2).

This project was carried forward into the MACOG TIP for FY 2020-2024 for Elkhart County on June 27, 2019 (Appendix H, page 3) and the INDOT STIP for FY 2020-2024 on July 2, 2019 (Appendix H, page 4).

The purpose of this project is to decrease congestion and increase safety by constructing an additional travel lane in each direction as well as a two-way left turn lane along US 20. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxics (MSAT) concerns. This project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that will cause an increase in MSAT impacts from that of the No Build Alternative.

Moreover, Environmental Protection Agency (EPA) regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

SECTION F - NOISE

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

	No	Yes / Date
ES Review of Noise Analysis		November 30, 2018

Remarks:

The addition of an added travel lane classifies the proposed project as a Type I project. Per the FHWA noise regulations (23 CFR 772) and the 2017 INDOT *Traffic Noise Procedure*, a Traffic Noise Analysis Report has been completed and approved by INDOT on November 30, 2018 (Appendix I, page 60).

The latest version of the FHWA's Traffic Noise Model, TNM®2.5, was used to model existing (2016) and design year (2041) worst hourly traffic noise levels within the US 20 Improvement Project study area. Eighty-two (82) noise receivers representing the 100 receptors were modeled in the Existing and No Build conditions. Receivers were placed within and immediately adjacent to a 500-foot buffer surrounding US 20 in areas consisting of residences, religious facilities, and commercial facilities. Due to anticipated relocations of Receivers 20, 39, 46, 47, 48, 49, 53, and 60, 74 receivers (91 receptors) were modeled in the Build condition.

Existing peak hour (2016) noise levels range from 54.8 to 70.4 dBA L_{eq}(1h). Residential noise levels ranged from 58.4 to 68.4 dBA L_{eq}(1h).

Predicted future design year (2041) noise levels adjacent to the proposed project would approach or exceed the noise abatement criteria (NAC) at 24 noise sensitive receptors. The noise levels would range from 57.6 to 69.9 dBA L_{eq}(1h) within the project area.

Predicted future noise levels change over existing noise levels range from -1.0 to 4.5 dBA. Therefore, none of the predicted future noise levels would substantially exceed existing noise levels.

One noise barrier (Noise Barrier 1) was modeled in the study area. While Noise Barrier 1 would be considered a feasible abatement measure, even at the maximum allowable height of 30 feet, Noise Barrier 1 would not achieve INDOT's design goal of 7.0 dB(A) reduction for any of the benefitted first row receivers nor meet the cost effective criterion of $25,000 per benefitted receptor per the INDOT Traffic Noise Policy in accordance with 23 CFR 772. Noise Barrier 1 would be constrained by a pond to the west and Westlake Drive to the east, inhibiting its effectiveness. Noise Barrier 1 would be approximately 410 feet in length and would be 30 feet in height. The estimated cost of Noise Barrier 1 would be approximately $368,615, or approximately $184,308 per benefitted receptor.

Based on the studies thus far accomplished, the State of Indiana has not identified any locations where noise abatement is likely. Noise abatement at these locations is based upon preliminary design costs and design criteria. Noise abatement has been found to be feasible, but not reasonable as the barrier exceeded the cost effective criterion of $25,000 per benefitted receptor. This barrier did not meet the INDOT design goal as a 7 dB(a) reduction could not be reached at any of the benefitted receptors. A reevaluation of the noise analysis will occur during final design. If during final design it has been determined that conditions have changed such that noise abatement is feasible and reasonable, the abatement measures might be provided. The final decision on the installation of any abatement measure(s) will be made upon the completion of the project's final design and the public involvement processes.

SECTION G – 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 remarks box)	X	

Remarks:

The proposed project will improve traffic flow and safety along the project corridor. The project is not anticipated to result in substantial impacts to community cohesion, as it will not divide existing neighborhoods, or change community access. The project is not expected to have adverse impact to the local tax base or property values. The safety improvements provided by the project are anticipated to be a benefit to the community.

Potential temporary community and economic impacts during construction of the proposed project include increased travel time, increased emergency response time, and increased fuel consumption by commercial and individual motorists due to any temporary lane closures that may be required. Local access surrounding the construction limits will be maintained during construction.

In their coordination response dated February 16, 2018, the Town of Middlebury recommended that INDOT construct this roadway to resemble the section of US 20 between SR 15 and CR 17 except with a wider shoulder to accommodate all modes of transportation, including horse and buggy and bicycle traffic. Middlebury Town Council also recommended that the intersection of US 20 and CR 35 be improved to allow for protected left turns along with having a through lane and a dedicated right turn lane on the north and south approaches to the intersection (Appendix C, pages 39 to 40). These recommendations have been added as for consideration commitments.

According to the Fairs and Festivals website (www.fairsandfestivals.net) and (https://www.indianafestivals.org/) accessed on July 26, 2018, by HNTB, there are three annual fairs and festivals located within 10 miles of the project: Middlebury Summer Festival (August), Middlebury Fall Festival (September) and Hometown Holidays Annual Festival (November). The proposed project will maintain at least one lane of traffic in each direction during construction. Although intersecting roads may be closed for a brief period, detours will be clearly marked and should not substantially impair travel routes to these fairs and festivals.

According to the MACOG website, Elkhart County has a completed Americans with Disabilities Act (ADA) Transition Plan, dated 2012 (http://www.macog.com/docs/transportation_/active/ada/ElkhartCo.pdf). The project will comply with the ADA Transition Plan. There are no sidewalks within or adjacent to the construction limits. Therefore, there are no facilities in the construction limits that require ADA compliance.

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

Remarks:

Indirect impacts are caused by an action (project) and are later in time or farther removed in distance, but are still reasonably foreseeable. Cumulative impacts are impacts on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.

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

Public Facilities & Services

	Yes	No
Will the proposed action result in substantial impacts on health and educational facilities, public and private utilities, emergency services, religious institutions, airports, public transportation or pedestrian and bicycle facilities? *Discuss how the maintenance of traffic will affect public facilities and services.*		X

Remarks:

Educational facilities, religious institutions, a private airport, a snowmobile trail, and public utilities are located within or near the project area. The proposed project will not result in substantial impacts to these facilities. In addition, due to the presence of the Amish community in the area, this roadway is known to be heavily travelled by bicycles and horse-drawn buggies.

Educational Facilities - Northridge High School is located adjacent to the project in the northeast quadrant of the US 20 and CR 35 intersection (Appendix B, page 14). Approximately 1.4 acres of right-of-way will be acquired from the school. This right-of-way will be acquired from the portion of the property immediately adjacent to US 20. This portion of the property is currently a mowed lawn. Early coordination letters were sent to Northridge High School and Middlebury Community Schools. No response was received. Additional coordination will occur prior to construction to notify them of the MOT plan and the potential impacts on bus routes in the area. Access to the schools will be maintained during construction.

Religious Facilities – The RFI identified Waypoint Community Church and Wat Lao Dharmajaro Buddhist Temple religious facilities adjacent to the project (Appendix E, pages 2 and 9). Although right-of-way will be acquired from both properties, the required right-of-way will be a narrow strip near the roadway and will not have a permanent negative impact on the use of the facilities. Early coordination letters were sent to both religious facilities. Waypoint Community Church responded to early coordination on February 14, 2018 (Appendix C, page 38). Although the church anticipates temporary congestion during construction, they support the project and stated that it will have long-term positive effects on safety in the area. They also noted concerns from people who use their facility regarding lack of safety of current conditions, the wetlands located on the church property, and the increase in Amish “carts” in the last year. Additional coordination with these facilities will occur prior to construction to notify them of the MOT plan and the potential impacts to access of these facilities.

Snowmobile Trail – As discussed in the Section 4(f) section of this document, there is one snowmobile trail located within the project area. The project is not anticipated to negatively impact the trail, as the trail can be easily moved within the existing easement. Access to the trail will be maintained during construction when there is snow on the ground and the trail is available for use.

Airport - The Hatfield Airport, a private airport, is located approximately 0.49 mile west of the project area. An early coordination letter was sent to the airport, but no response was received. No impact to this airport is anticipated. Early coordination was sent to INDOT Office of Aviation. Their response dated June 21, 2017, indicated that no public use airports are located within five nautical miles of the project (Appendix C, page 18).

Early coordination was sent to the INDOT Office of Aviation on June 9, 2017 (Appendix C,

pages 1-3). An updated early coordination letter was sent to the INDOT Office of Aviation on March 6, 2018 (Appendix C, pages 7 to 9). In their early coordination response letter dated June 21, 2017, the INDOT Office of Aviation stated that a tall structure permit would not be required unless the project involves the construction of a temporary or permanent structure that exceeds a height of 200 feet above ground level (Appendix C, page 18). No tall structure permit is anticipated for this project.

Utilities - Water, sanitary sewer, gas, electric, cable, fiber optic, and telephone utility lines are present throughout the project area. Utility coordination has been initiated for the project and several utilities attended a preliminary field check meeting on March 27, 2018 (Appendix C, page 105 to 107).

Bicycles and horse-drawn buggies – Due to the prevalence of Amish residences and businesses within the project area and in the region, there are a large number of bicycles and horse-drawn buggies utilizing this highway for transportation. Accommodating the non-motorized traffic was taken into consideration when choosing an alternative and designing the proposed roadway. The preferred alternative includes 10-foot paved shoulders to accommodate the non-motorized traffic. Access for bicycles and horse-drawn buggies during construction was also considered when selecting the preferred alternative. The MOT plan for the preferred alternative will be accomplished by constructing the entire southern portion of US 20 in Phase 1, while maintaining current traffic patterns on US 20. After completion of the southern portion of the project, traffic will be switched over to the newly constructed half, while the northern half of the project can be constructed. This method allows the project to provide access to buggy traffic while not closing more than one consecutive county road. Additionally, this method increases worker safety by separating construction activities from travel lanes.

Property Maintenance- A comment was received from a member of the public concerning the current unsafe conditions experienced during mowing the roadside ditches in front of his property. The maximum grade of the proposed side ditches is 3:1. A 3:1 side slope can safely be mowed.

The MOT plan for the project may pose delays and temporary inconveniences to traveling motorists (including school buses and emergency services); however, all inconveniences will cease upon project completion. School districts, emergency services and churches will be notified at least two weeks prior to construction activity that would block or limit access. The MOT is not expected to substantially impact public facilities or services.

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 or disproportionate impacts to EJ populations?		X

Remarks:

Under FHWA Order 6640.23A, FHWA and INDOT, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations.

Per the Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent right-of-way. This project will require 90.8 acres of right-of-way. Approximately 19 residential relocations and two business relocations are anticipated. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exists and whether there could be disproportionately high and adverse impacts to them. Data from the 2010 Census (2012-2016 American Community Survey (ACS) 5-year Estimates) was obtained from the US Census Bureau Website on July 27, 2018, by HNTB. The data collected for minority and low-income populations

within the Affected Communities (ACs) was then utilized to determine their percentages relative to the Community of Comparison (COC). For this project, the COC is Elkhart County.

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. The AC contains two census tracks for low-income populations. AC1, Census Tract 6 has a percent low-income of 7.5%, which is below 50% and is below the 125% COC threshold of 18.6%. AC2, Census Tract 8.02 has a percent low-income of 7.2%, which is below 50% and is below the 125% COC threshold of 18.6%. Therefore, the AC does not contain low-income populations of EJ concern.

The AC contains two census tracks for minority population. AC1, Census Tract 6 has a percent minority of 6.2%, which is below 50% and is below the 125% COC threshold of 30.2%. AC2, Census Tract 8.02 has a percent minority of 8.3%, which is below 50% and is below the 125% COC threshold of 30.2%. Therefore, the AC does not contain minority populations of EJ concern.

Census Data

US 20 - SR 15 to CR 35 (Des. No. 1600517)	COC Elkhart County, Indiana	AC-1 Census Tract 6, Elkhart County	AC-2 Census Tract 8.02, Elkhart County
LOW-INCOME			
Total Population	197,671	9,946	9,161
Total Population Below Poverty Level	29,381	744	663
Percent Low-Income	14.9%	7.5%	7.2%
125 percent of COC	18.6%	AC < 125% COC	AC < 125% COC
EJ Population of Concern		No	No
MINORITY			
Total Population	201,640	9,946	9,175
Not Hispanic or Latino; White Alone	152,871	9,329	8,413
Percent Non-White (Minority)	24.2%	6.2%	8.3%
125 percent of COC	30.2%	AC < 125% COC	AC < 125% COC
EJ Population of Concern		No	No

Although the EJ analysis that was performed using US Census data did not identify any low income or minority EJ populations within the project area, there is a known local Amish community that is considered to be an EJ population of concern. Amish populations were identified in the 2014 MACOG Environmental Justice report (http://www.macog.com/environmental_justice.html) that utilized a method for identifying EJ communities based on "Indicators of Potential Disadvantage" (IPD). In addition to minority and low-income populations, the report considered carless households and limited English proficiency as two of several IPDs for EJ analysis. The Amish population generally falls into those two IPDs and thus was identified as a population of EJ concern.

The Amish community was taken into consideration during project development and public involvement activities. For public involvement activities, project information was distributed to residences via US mail to ensure that families that do not access the internet would be aware of the project and would be aware of the public information meeting that was held. Additionally, a

public notice of the public information meeting was included in the *Die Blatt*, an Amish newsletter for northern Indiana. The public information meeting was held on June 21, 2018, at Northridge High School (Appendix G, page 20 to 62). It was well attended by the Amish community.

Additional correspondence with the Amish community has consisted of regular phone conversions between the project team and representatives of the Amish Safety Steering Committee (Safety Committee). The Safety Committee serves to provide best practice guidance to the Amish community on the safe navigation of roadways and any upcoming road closures and detour routes. The Safety Committee also provides suggestions to INDOT and local road departments on how roadways can best accommodate horse drawn buggy traffic. For this project, the Safety Committee recommended the use of sinuous rumble strips that are easier for buggies to cross and providing shoulders that can withstand horse drawn buggy use without forming ruts. The project will be designed with wider shoulders and sinuous rumble strips to accommodate buggy traffic, and the project alternative was also selected based on how the MOT would impact the EJ community (see Public Facilities and Services section above). These conversations, along with a face to face meeting at the public information meeting helped to ensure that sufficient outreach was conducted with the Amish community.

Conclusion

The census data comparisons detailed in the table above indicate that the AC does not contain a higher concentration of low-income or minority populations when compared to the COC. However, because the Amish community has been identified as an EJ community of concern, additional analysis was performed to determine if there will be a disproportionately high and adverse effect on the Amish community. Although the project requires a relatively large amount of right-of-way and relocations, the right-of-way acquisition and relocations of Amish properties are not disproportionately high and adverse, when compared to non-Amish properties. The potential burden to the Amish community of having to cross US 20 after being widened as part of this project was discussed with the Safety Committee. The Safety Committee already encourages buggy traffic to avoid crossing US 20 or to cross at a traffic signal because of safety concerns. The proposed widened conditions on US 20 will not significantly change the recommendations that are already in place regarding US 20.

The project will not disrupt community cohesion or create a physical barrier within the community. In addition, the project will equally benefit both the Amish and non-Amish communities by providing a safer roadway with wider shoulders to accommodate non-motorized traffic. The project is not expected to have a disproportionately high and adverse environmental or health impact to low-income or minority populations of EJ concern when compared to non-EJ populations.

No further EJ analysis is required for this project. Should the scope of work change or the amount of right-of-way or relocations change, INDOT-ESD will be contacted to determine if the EJ analysis should be reinitiated.

Relocation of People, Businesses or Farms

	Yes	No
Will the proposed action result in the relocation of people, businesses or farms?	X	
Is a Business Information Survey (BIS) required?		X
Is a Conceptual Stage Relocation Study (CSRS) required?		X
Has utility relocation coordination been initiated for this project?	X	

Number of relocations: Residences: 19 Businesses: 2 Farms: 4 Other: _____

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

Remarks:

According to the INDOT CE Manual, a Conceptual Stage Relocation Study (CSRS) may be required if there are more than 10 relocations required for a project. There are 19 anticipated residential relocations associated with this project, four farm relocations and two business relocations. Therefore, INDOT was consulted on February 23, 2018, to determine if a CSRS would

be required. INDOT Real Estate Division determined that a CSRS would not be required for this project (Appendix C, page 20).

According to the INDOT CE Manual, a Business Information Survey (BIS) may be required if there are 10 or more business relocations associated with a project. Alternatively, if a community has fewer than 40 businesses, then a BIS may be required if 25% or more of the businesses will be relocated. Middlebury supports greater than 40 business. This project will require two business relocations, and therefore a BIS is not required. Anticipated relocations are shown in Appendix B, pages 6 to 14.

The two business relocations include the Middlebury Tool Repair and the Hilltop Restaurant. Several written public comments were received during the Public Information Meeting concerning the relocation of the Hilltop Restaurant.

Of the two alternatives that were considered to meet purpose and need, the preferred alternative had fewer relocations (see the alternatives analysis table in the "Other Alternatives Considered" section of this document).

The acquisition and relocation program will be conducted in accordance with 49 CFR 24 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended. Relocation resources are available to all residential and business relocatees without discrimination. No person displaced by the project will be required to move from a displaced dwelling unless comparable replacement housing is available to that person.

The Town of Middlebury is considering the possibilities of extending sanitary sewer and water to the west to allow for future growth of the town. Town officials will be included in utility relocation discussion as design progresses.

Water, sanitary sewer, gas, electric, cable, fiber optic, and telephone utility lines are present throughout the project area. Utility coordination has been initiated for the project and several utilities attended a preliminary field check meeting on March 27, 2018 (Appendix C, pages 105 to 107).

SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

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

	No	**Yes / Date**
ES Review of Investigations		Yes/May 31, 2017

Include a summary of findings for each investigation.

Remarks:

The RFI, prepared by HNTB on January 23, 2017, identified five hazardous material items of concern within or adjacent to the project area (Appendix E, pages 1 to 11). A representative of the INDOT ESD Site Assessment and Management (SAM) Section concurred with the results of the RFI on May 31, 2017.

An addendum to the RFI was prepared on July 31, 2018 because the initial RFI was approved more than one year from incorporation into the CE document. The addendum was approved by a representative of INDOT ESD SAM on August 1, 2018 (Appendix E, pages 15 to 16).

The RFI and RFI addendum identified the following sites within or adjacent to the project area:

Leaking Underground Storage Tank (LUST): One LUST site, with records of 15 underground storage tanks (USTs), is located in the northwest quadrant of US 20 and CR 15 at the site of Speedway #6662 (18541 US 20 Middlebury, IN 46540; FID No. 16008) (Appendix B, page 6). Records show this has been an active gas/service station since 1940 with 15 underground storage tanks at this site. Of the 15 USTs at this site, seven have been removed, seven are active, and the status of one is unknown. This site has four spill incidents of which three have been issued No Further Action (NFA) Closure determinations and one of which has been discontinued. According to the NFA Determination Pursuant to Risk Integrated System of Closure (RISC) issued by IDEM on June 6, 2016, contamination remains in the area surrounding the site and exists in the right-of-way. The nearest proposed excavation for this project will by approximately 920 feet east of the boundary of this site. Due to the distance between the between the boundary of the site and proposed excavation for this project, impact is expected.

Institutional Control Site: One Institutional Control site is within the project area. This site Speedway No. 6662, was issued a NFA Approval Determination Pursuant to IDEM Risk Integrated System of Closure (RISC) Guidance for Incident No. 200404502 on July 3, 2008 by IDEM (Appendix B, page 6). This is the same site as the LUST site described above. An additional NFA Approval Determination Pursuant to IDEM RISC Guidance for Incidents No. 199008603 and No. 200908504 were issued on June 6, 2016. Low levels of soil and ground water contamination remain on the site. An Environmental Restrictive Covenant (ERC) was placed on the property and recorded by the Elkhart County Office of the Recorder on February 5, 2016 pertaining to Incident No. 200404502. A Recorded Modification of ERC was added to the property on May 18, 2016 to include Incident No. 199008603 and Incident No. 200908504. The ERC imposes specific usage requirements on the site designed to limit or eliminate exposure to contamination remaining in soil and groundwater. In total, approximately 5,670.87 tons of soil; 24,734 gallons of groundwater, and seven USTs have been removed from this site. The nearest proposed excavation for this project will by approximately 920 feet east of the boundary of this site. No impact is expected.

Underground Storage Tank: One UST site is within the project area; however, this site is not mapped within the INDOT RFI Database. IDEM conducted an Underground Storage Tank Inspection of this site, American Petroleum Inc. (18423 US 20 Goshen, IN 46528; FID No. 25362), on September 19, 2017, and the facility was found to be out of compliance with equipment, operating or maintenance requirements set forth in Indiana's UST Rule 329 IAC 9; however, documentation reviewed does not indicate that a release occurred. No impact is expected.

NPDES Facilities: Two (2) mapped NPDES facilities, Kuert Concrete Incorporated and Lippert Components Plant 67 Access Road, are mapped adjacent to the project area; however, further analysis of the most recent aerial imagery identifies both sites within the project area (Appendix B, pages 15 to 16). As recommended in the RFI, coordination with the IDEM Municipal Permitting Section was sent on July 18, 2018 (Appendix C, pages 4 to 6). No response was received. Additionally, coordination with the IDEM Storm Water Permitting Section was sent on July 18, 2018 (Appendix C, page 42). In their response, the IDEM Storm Water Permitting Coordinator responded stating that their only concern would be the construction limit overlap with the entrance to the NPDES Facilities affecting access (Appendix C, page 42). Per the INDOT Standard Specification 107.08, local access surrounding the construction limits will be maintained during construction. No impacts to NPDES Facility structures or outfalls were identified in the response.

Early coordination was sent to IDNR Division of Oil and Gas on June 9, 2017 (Appendix C, pages 1 to 3). An updated early coordination letter was sent to the IDNR Division of Oil and Gas on March 6, 2018 (Appendix C, pages 10 to 11). IDNR Division of Oil and Gas stated that their records indicate no oil or gas wells were drilled in the area of the project (Appendix C, page 11).

If a spill occurs or contaminated soils or water are encountered during construction, appropriate personal protective equipment (PPE) should be utilized. Contaminated materials will need to be properly handled by trained personnel and disposed in accordance with current regulations. IDEM should be notified through the spill line at (888) 233-7745 within 24 hours of discovery of a release from a UST system and within two hours of discovery of a spill. This is also listed in the

Environmental Commitments section at the end of this document.

North Fork of Pine Creek and Indian Creek lie within the project area and are impaired for *E. coli*. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure (Appendix E, page 3).

SECTION I – PERMITS CHECKLIST

Permits (mark all that apply)	**Likely Required**
Army Corps of Engineers (404/Section10 Permit)	
Individual Permit (IP)	X
Nationwide Permit (NWP)	
Regional General Permit (RGP)	
Pre-Construction Notification (PCN)	
Other	
Wetland Mitigation required	X
Stream Mitigation required	X
IDEM	
Section 401 WQC	X
Isolated Wetlands determination	
Rule 5	X
Other	
Wetland Mitigation required	X
Stream Mitigation required	X
IDNR	
Construction in a Floodway	
Navigable Waterway Permit	
Lake Preservation Permit	
Other	
Mitigation Required	
US Coast Guard Section 9 Bridge Permit	
Others (Please discuss in the remarks box below)	X

Remarks:

Based on the preliminary permit determination from INDOT EWPO, received on March 5, 2018, a USACE 404/IDEM 401 Individual Permit (IP), Elkhart County Legal Drain Permit, and Rule 5 Permit will be necessary for the project (Appendix F, page 46).

Early coordination was sent to the INDOT Office of Aviation on June 9, 2017 (Appendix C, pages 1-3). An updated early coordination letter was sent to the INDOT Office of Aviation on March 6, 2018 (Appendix C, pages 7 to 9). In their early coordination response letter dated June 21, 2017, the INDOT Office of Aviation stated that a tall structure permit would not be required unless the project involves the construction of a temporary or permanent structure that exceeds a height of 200 feet above ground level (Appendix C, page 18). No tall structure permit is anticipated for this project.

In their early coordination response letters dated July 12, 2017 and March 6, 2018, IDNR DFW stated that the project will require a formal approval for construction in the Indian Creek floodway (Appendix C, page 12) unless the project qualifies for a bridge exemption or qualifies under the INDOT Maintenance Activity Exemption. It was determined by INDOT EWPO that a CIF permit would not be needed for this project.

It will be the responsibility of the designer to submit plans to ES to process permits.

SECTION J- ENVIRONMENTAL COMMITMENTS

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

Remarks:

Firm:

1. If the scope of work or permanent or temporary right-of-way amounts change, INDOT Environmental services will be contacted immediately (INDOT).
2. If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, federal law and regulations (16 USC 470, et esq.: 36 CFR 800.11 et. a1.) and State Law (IC 14-21) require that work must stop immediately and that the discovery must be reported to the Division of Historic Preservation and Archeology in the Indiana Department of Natural Resources within 2 business days. (IDNR, SHPO)
3. If a spill occurs or contaminated soils or water are encountered during construction, appropriate personal protective equipment (PPE) should be used. Contaminated materials will need to be properly handled by trained personnel and disposed in accordance with current regulations. IDEM should be notified through the spill line at (888) 233-7745 within 24 hours of discovery of a release from a UST system and within 2 (two) hours of discovery of a spill. (IDEM)
4. It is the responsibility of the project sponsor to notify school corporations, emergency services, and religious institutions at least two weeks prior to any construction that would block or limit access. (INDOT)
5. As local- or State- designated floodplains may be present in the project site, we recommend that you coordinate with local officials and with the Indiana Department of Natural Resources regarding the applicability of a floodplain permit prior to construction. (USACE)
6. Wastes and unused building materials shall be managed and disposed of in accordance with all applicable statutes and regulations. (IDEM)
7. Do not install right-of-way fencing at the US 20 and Miami Snowmobile Trail crossing.
8. Replace snowmobile crossing signage at the US 20 and Miami Snowmobile Trail crossing once construction is complete. (IDNR Division of Outdoor Recreation)
9. Access to the trail will be maintained during construction when there is snow on the ground and the trail is available for use (Elkhart County Snowmobile Club)
10. North Fork of Pine Creek and Indian Creek lie within the project area and are impaired for *E. coli*. Workers who are working in or near water with *E. coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. (INDOT)
11. Indirect impacts to portions of wetland that are outside of the projects construction limits will be prevented by labeling the wetlands as “Do Not Disturb” on the plans, field delineating the wetland with “Do Not Disturb” signs and utilizing proper erosion control measures. (INDOT)
12. The proposed shoulder in the US 20 project between SR 15 and CR 35 needs to be constructed extra wide to allow for all modes of transportation, including the horse and buggy traffic and bicycle traffic. (Middlebury Town Council)
13. The intersection of US 20 and CR 35 needs to be improved to allow for protected left turns along with having a through lane and a dedicated right turn lane on the north and south approaches to the intersection. (Middlebury Town Council)
14. The Town of Middlebury is considering the possibilities of extending sanitary sewer and water to the west to allow for future growth of the town. Town officials will be included in utility relocation discussion as design progresses. (Middlebury Town Council)
15. 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)
16. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
17. 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 and "backlight" as low as practicable. (USFWS)

18. Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to the extent practicable to avoid tree removal in excess of what is required to implement the project safely. (USFWS)
19. 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)
20. Contractors must take care when handling dead or injured bats (regardless of species), and any other federally listed species that are found at the Project site in order to preserve biological material and protect the handler from exposure to diseases, such as rabies. Project personnel are responsible for ensuring that any evidence about determining the cause of death or injury is not unnecessarily removed. Reporting the discovery of dead or injured listed species is required in all cases. Parties finding a dead, injured, or sick specimen of any bat (regardless of species), or other endangered or threatened species, must promptly notify the USFWS Bloomington Field Office, call (812) 334-4261. (USFWS)
21. A "Reinitiation Notice" is required if: more than (amount) acre of trees are to be cleared; the amount or extent of incidental take of Indiana bat is exceeded; new information about listed species is encountered; new species is listed or critical habitat designated that the project may affect; the project is modified in a manner that causes an effect to the listed species; or, new information reveals that the project may affect listed species or critical habitat in a manner not considered in the BO or the project information. (USFWS)
22. The INDOT Project Manager will assure that (amount) of Preliminary Engineering funds will be allocated to the Range-wide In-Lieu Fee Program, administered by The Conservation Fund, to resolve formal consultation under the Rangewide Programmatic ((amount) acre X (mitigation ratio) x $10,609 = (amount)). Payment Shall be made at Ready for Contracts (RFC) date. (INDOT-ESD, USFWS)
23. USFWS would still like to see mitigation for the loss of trees for migratory birds and other wildlife, since a large number of trees will be taken. (USFWS)
24. The Phase Ia archaeological reconnaissance identified one site, 12E0487, recommended potentially eligible for inclusion in the NRHP. Before commencing construction activities within a segment of this undertaking that could affect site 12E0487, FHWA or its representatives shall submit a work plan authorization request for Phase II archaeological investigations for review and approval by the DHPA approval under IC-14-21-1-25 prior to the commencement of Phase II investigations. (DHPA)
25. After the approval of the Phase II work plan authorization request, FHWA or its representatives shall conduct Phase II testing to determine the eligibility of site 12E0487 for listing in the NRHP. (DHPA)
26. A report of Phase II archaeological investigations shall be provided to the DHPA prior to any proposal of Phase III investigations. (DHPA)
27. If site 12E0487 is determined eligible for inclusion in the NRHP, FHWA or its representatives shall submit a work plan authorization request for Phase III archaeological investigations for review and approval by the DHPA approval under IC- 14-21-1-25 prior to the commencement of Phase III investigations. (DHPA)
28. After the approval of the Phase III work plan authorization request, FHWA or its representatives shall conduct Phase III data recovery of site 12E0487 to mitigate for impacts to the site from this undertaking. (DHPA)
29. A report of all archaeological investigations shall be provided to the DHPA within one (1) year of the conclusion of fieldwork. (DHPA)
30. No less than 10 percent of the site within the project limits shall be tested during a Phase II investigation; Phase III data recovery, if required, shall excavate an additional 25 percent of

the site area within the project limits as mitigation. (DHPA)

31. FHWA or its representatives shall clearly mark and avoid all ground disturbing project activities within the portions of the archaeological sites 12E0482, 12E0483, 12E0484, 12E0486, 12E0489, 12E0490, and 12E0491 that lie outside the project area depicted in "Attachment A" and "Attachment B (1 and 2)"; or, if avoidance is not feasible, FHWA will submit a plan for subsurface archaeological investigations to determine eligibility for listing in the NRHP to the Indiana Division of Historic Preservation and Archaeology ("DHPA") for review and comment. (DHPA)

For Further Consideration:

32. We suggest that during construction appropriate safeguards are in place to ensure that ground water is not endangered. Such safeguards would include securing adequate precautions for fueling/servicing large equipment, using "green infrastructure" practices where possible, and developing contingency plans to handle the release of any hazardous materials. (USEPA)
33. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife. (IDNR DFW)
34. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized. (IDNR DFW)
35. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion. (IDNR DFW)
36. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30. (IDNR DFW)
37. Seed and protect disturbed stream banks that are 3:1 or steeper with heavy-duty net-free biodegradable erosion control blankets to minimize the entrapment and snaring of small wildlife such as snakes and turtles (follow manufacturer's recommendation for installation); seed and apply mulch on all other disturbed areas. (IDNR DFW)
38. To minimize impacts to the Blanding's turtle during the nesting period, we recommend that construction not take place from April 1 through July 1. (IDNR DFW)
39. Due to the expansion of the road, it is likely the new roadside ditches will need to be relocated to allow for drainage along the sides of the roads. The newly constructed ditches should be constructed at a stable slope of at least 2:1, preferably 3:1. The sideslopes should be seeded with a native seed mixture that includes wildflowers to provide important pollinator habitat along the sides of the roads. (IDNR DFW)
40. The Environmental Unit recommends bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with shorter through lengths are better than culverts with longer through lengths. If box or pipe culverts are used, the bottoms should be buried a minimum of 6" (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2') below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossings should: span the entire channel width (a minimum of 1.2 times the bankful width); maintain the natural stream substrate within the structure; have a minimum openness ratio (height x width/ length) of 0.25; and have stream depth and water velocities during /low-flow conditions that are approximate to those in the natural stream channel. The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. (IDNR DFW)
41. Due to the presence or potential presence of wetlands on site, we recommend contacting and coordinating with the Indiana Department of Environmental Management (IDEM) 401 program and also the US Army Corps of Engineers (USAGE) 404 program. Impacts to wetland habitat should be mitigated at the appropriate ratio according to the 1991 INDOT/IDNR/USFWS Memorandum of Understanding. (IDNR DFW)

42. We recommend a mitigation plan be developed (and submitted with the permit application, if required) if riparian habitat impacts will occur. (IDNR DFW)
43. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" dbh or greater (5:1 mitigation based on the number of large trees). (IDNR DFW)
44. IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff. (IDEM)
45. Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. Dirt tracked onto paved roads from unpaved areas should be minimized. (IDEM)
46. Stabilize all disturbed areas upon completion of land disturbing activities. (IDEM)
47. Sediment-laden water which otherwise would flow from the project site shall be treated by erosion and sediment control measures appropriate to minimize sedimentation. (IDEM)
48. A stable construction site access shall be provided at all points of construction traffic ingress and egress to the project site. (IDEM)
49. Public or private roadways shall be kept cleared of accumulated sediment that is a result of run-off or tracking. (IDEM)
50. Install silt fence or other erosion control measures around the perimeter of any wetlands and/or other waterbodies to remain undisturbed at the project site. (IDEM)
51. The use of cutback asphalt, or asphalt emulsion containing more than seven percent oil distillate, is prohibited during the months of April through October. (IDEM)
52. In all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to demolition. (IDEM)

SECTION K- EARLY COORDINATION

Please list the date coordination was sent and all agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received. INDOT and FHWA are automatically considered early coordination participants and should only be listed if a response is received.

Remarks:

Early coordination was initiated on June 9, 2017 with federal, state, and local agencies (Appendix C, pages 1-3). Subsequent letters were also sent to additional agencies, members of the stakeholder working group and local agencies on January 26 and February 1, 2018.

Re-coordination letters were sent to the resource agencies on March 6, 2018 as an update to the project and a continuation of the coordination process (Appendix C, page 7). This coordination letter documented that recommended preferred alternative would be a 5-lane facility with two travel lanes in each direction and a TWLTL in the center. The resource agencies and dates of their responses are listed below.

Agency	Response Received	Appendix Location
IDNR– Division of Oil and Gas	June 14, 2017 and February 13, 2018	Appendix C, pages 10 to 11
IDNR – Division of Fish and Wildlife	July 12, 2017 and April 4, 2018	Appendix C, pages 12 to 14
IDNR – Division of Outdoor Recreation	February 13, 2018 and March 14, 2018	Appendix C, pages 15 to 16
Elkhart County Snow mobile Club via the IDNR – Division of Outdoor Recreation	February 13, 2018 and March 14, 2018	Appendix C, page 16
INDOT, Public Involvement Office	June 15, 2017	Appendix C, page 17
INDOT, Aviation Section	June 21, 2017	Appendix C, page 18
INDOT – Ft. Wayne District	February 6, 2018	Appendix C, page 19

USACE, Environmental Analysis Branch	July 21, 2017	Appendix C, pages 22 to 23
USACE, Engineering and Technical Services Branch	July 26, 2017	Appendix C, pages 24 to 25
Indiana Geological Survey (IGS)	July 6, 2017 and March 14, 2018	Appendix C, pages 26 to 28
USEPA, Ground Water and Drinking Water Branch	February 1, 2018 and March 14, 2018	Appendix C, pages 29 to 31
USDA-NRCS	July 26 2018	Appendix C, page 32 to 33
USFWS, Bloomington Field Office	July 7, 2017 and March 20, 2018	Appendix C, pages 34 to 37
Waypoint Community Church	February 14, 2018	Appendix C, page 38
Middlebury Town Council,	February 16, 2018	Appendix C, page 39 to 40
Middlebury Town Manager via the Middle Town Council Response	February 16, 2018	Appendix C, page 39 to 40
IDEM - Groundwater Section	March 12, 2018	Appendix C, page 41
IDEM Office of Water Quality Storm Water Permitting Coordinator	July 19, and July 24, 2018	Appendix C, pages 42
IDEM Auto Response	August 8, 2018	Appendix C, pages 44 to 49
Elkhart County Surveyor	No response received	N/A
Elkhart County Sheriff	No response received	N/A
Elkhart County Highway Department	No response received	N/A
Elkhart County Board of Commissioners	No response received	N/A
Middlebury Community Schools	No response received	N/A
Elkhart County Emergency Management	No response received	N/A
National Parks Service	No response received	N/A
US Coast Guard	No response received	N/A
Elkhart County Soil and Water Conservation District	No response received	N/A
Greater Elkhart County Storm Water Partnership	No response received	N/A
Michiana Area Council of Governments (MACOG)	No response received	N/A
Northridge High School	No response received	N/A
Wat Lao Dharmajaro Buddhist Temple	No response received	N/A
Hatfield Airport	No response received	N/A

Representatives from the FHWA, USACE, IDEM, and IDNR DFW attended a resource agency meeting on July 12, 2018. The purpose of the meeting was to present the recommended preferred alternative to the resource agencies and identify any concerns they may have moving forward. Resource agency comments pertained to environmental impacts and mitigation requirements. (Appendix C, pages 52 to 72).

FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	**US Highway 20 (US 20) / Elkhart County**
Designation Number:	**Lead Des (1900095), Pumpkinvine Trail Structure (Des. 2000038), Tree Clearing (Des. TBD)**
Project Description/Termini:	**US 20 Improvement Project – County Road 35 (CR 35) to State Road 13 (SR 13)/approximately 565 feet east of the intersection of US 20 and CR 35 to approximately 315 feet west of the intersection of US 20 and SR 13.**

After completing this form, I conclude that this project qualifies for the following type of Categorical Exclusion (FHWA must review/approve if Level 4 CE):

	Categorical Exclusion, Level 2 – The proposed action meets the criteria for Categorical Exclusion Manual Level 2 - table 1, CE Level Thresholds. Required Signatories: ESM (Environmental Scoping Manager)
	Categorical Exclusion, Level 3 – The proposed action meets the criteria for Categorical Exclusion Manual Level 3 - table 1, CE Level Thresholds. Required Signatories: ESM, ES (Environmental Services Division)
	Categorical Exclusion, Level 4 – The proposed action meets the criteria for Categorical Exclusion Manual Level 4 - table 1, CE Level Thresholds. Required Signatories: ESM, ES, FHWA
	Environmental Assessment (EA) – EAs require a separate FONSI. Additional research and documentation is necessary to determine the effects on the environment. Required Signatories: ES, FHWA
X	**Additional Information Addendum (AI)** – This is an additional information document to the CE-4 document for Des. No 1600517 approved on October 11, 2019. Required Signatories: ESM, ES, FHWA

Note: For documents prepared by or for Environmental Services Division, it is not necessary for the ESM of the district in which the project is located to release for public involvement or sign for approval.

Approval N/A (ESM Signature) _____ (Date) Ronald E. Bales (ES Signature) 1-28-2022 (Date)

KARSTIN MARIE CARMANY-GEORGE Digitally signed by KARSTIN MARIE CARMANY-GEORGE Date: 2022.02.01 14:15:28 -05'00' (FHWA Signature) 2/1/22 (Date)

Release for Public Involvement

N/A (ESM Initials) _____ (Date) BDM for REB (ES Initials) 3/24/2021 (Date)

Certification of Public Involvement Steve Seculoff (Office of Public Involvement) 10/13/2021 (Date)

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

INDOT ES/District Env. Reviewer Signature: Ronald E. Bales Date: 1-28-2022

Primary reviewer was Meghan Hinkle

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

Introduction

The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) propose the addition of a two-way left turn lane and additional travel lanes along United States Highway 20 (US 20) between County Road 35 (CR 35) and State Road 13 (SR 13) (Des. No. 1900095; referred to as Section 2) in Elkhart County, Indiana.

The INDOT Fort Wayne District initiated the National Environmental Policy Act (NEPA) environmental review process for the portion of US 20 corridor from SR 15 to CR 35 (Des. No. 1600517; referred to as Section 1). This environmental process concluded with the approval of a Categorical Exclusion Level 4 (CE-4) by FHWA on October 10, 2019 (Appendix J, page 1).

During the environmental studies associated with US 20 Section 1 (SR 15 to CR 35), INDOT and project stakeholders identified additional concerns associated with the portion of US 20 from CR 35 to SR 13. In recognition of these additional concerns, INDOT began additional preliminary engineering studies to independently evaluate these concerns. The additional studies completed by INDOT resulted in the identification of additional transportation needs, which are detailed below in the purpose and need section of this document. Although these needs were valid, no foreseeable funding was available to complete additional studies or implement any potential recommendations. Therefore, INDOT made the decision to continue forward with the implementation of US 20 Section 1 (SR 15 to CR 35) since it would be a useful and reasonable expenditure even if no other transportation improvements were made.

After the CE-4 for US 20 Section 1 was approved, additional funding was provided to the INDOT Fort Wayne District via proceeds from the amendment(s) to the Indiana Toll Road Lease. Based on the needs of the corridor, the INDOT Fort Wayne District decided to initiate the environmental review for US 20 Section 2 (CR 35 to SR 13) as a continuation of the US 20 Section 1 project.

This Additional Information (AI) document is being prepared to analyze and document the anticipated changes in environmental effects associated with implementation of US 20 Section 2 (CR 35 to SR 13). The revised impacts to resources resulting from the addition of US 20 Section 2 to the overall US 20 improvements project are described below in detail. The preceding information provides an overview of modifications to the approved environmental document. Unless specifically addressed in this AI document, all project impacts and conditions as described in the approved environmental document remain the same.

Early coordination letters describing the US 20 Section 2 (CR 35 to SR 13) improvements were sent to resource agencies, local officials, and other stakeholders on November 20, 2019 (Appendix C, pages 1 to 3). Responses received from these agencies have been included in the appropriate sections.

Purpose and Need:

As part of the analysis completed for this AI document, the purpose and need of the US 20 project was reexamined to confirm that it comprehensively considered the transportation needs between SR 15 and SR 13 (Sections 1 and 2). Refinements to the purpose and need included location-specific factors associated with Section 2 (CR 35 to SR 13), as well as adding drainage to the geometric deficiencies need. Additionally, public and stakeholder involvement during the environmental review process also identified specific need elements for consideration under local community needs and interests.

The refined purpose of the US 20 project between SR 15 and SR 13 (Sections 1 and 2) is to improve safety, reduce traffic congestion, correct geometric and drainage deficiencies, and address local community needs and interests.

The refined purpose and need statement is not substantially different than that considered in the US 20 Section 1 Categorical Exclusion Level 4 (CE-4) document, which was approved by the Federal Highway Administration (FHWA) on October 10, 2019 (Appendix J, pages 4 to 5). The only change was the addition of drainage deficiencies, which were not identified in Section 1. Therefore, the alternatives developed and analyzed for the Section 1 project (SR 15 to CR 35) remain unchanged (Appendix J, pages 5 to 8). As a result, the decisions made and documented in the approved CE-4 remain unchanged and are still valid (Appendix J, pages 6 to 7).

Following is a detailed discussion of the transportation needs specific to Section 2 (CR 35 to SR 13).

Need: Improve Safety

INDOT generated crash data for this corridor which has been used in this evaluation. This data is documented in the project's Engineer's Report dated March 24, 2020 (Appendix I, page 2) and Draft Traffic & Safety Analysis Revision (Appendix I, page 26). These reports examined US 20 from the intersection of US 20 and CR 35 to the intersection of US 20 and SR 13 over a three-year period from January 1, 2016 to December 31, 2018. During this period, there were 96 crashes within this study area, half of which were rear end crashes. In general, rear end collisions are indicative of elevated levels of traffic congestion, lack of turn lanes, and/or closely spaced driveways. RoadHAT analysis shows a higher than expected crash frequency from CR 35 to CR 16 (Wayne Street) and from CR 22 (Orpha) to SR 13 (Appendix I, page 29).

Need: Reduce Traffic Congestion

The primary measure of traffic congestion is Level of Service (LOS), which the Highway Capacity Manual (2000) defines as a quality measure describing operational conditions within a traffic stream. LOS A represents near ideal traffic flow, while LOS F represents a breakdown of the traffic flow. LOS relates to operations, not the physical condition of the roadway. Currently, the arterial roadway portion of US 20 between from CR 35 to SR 13 operates at LOS B in the worst-case condition (Appendix I, page 16); however, over time, traffic operations are anticipated to deteriorate due to the projected travel demand. More specifically, the Michiana Area Council of Governments (MACOG), which acts as the Municipal Planning Organization (MPO) for Elkhart County, *Michiana on the Move 2045 Transportation Plan* (LRTP) (http://www.macog.com/docs/transportation/tp/2045_TransportationPlan_ApG.pdf, page 185 to 186) indicates that US 20 immediately west of the Wayne Street (CR 16) intersection will operate at LOS F in 2045. The MACOG LRTP also indicates that US 20 immediately west of SR 13 will operate at LOS D in 2045. Trucks account for approximately 27% of all traffic on US 20, further reducing capacity.

Need: Geometric and Drainage Deficiencies

Two existing geometric deficiencies, where the roadway does not meet critical safety design requirements, have been identified within the project area.

The horizontal alignment of US 20 has one existing curve located near Wayne Street (CR 16) that lacks adequate banking and visibility. This inadequate banking has necessitated posting an advisory speed limit of 40 MPH, while the rest of the corridor is signed as 45 MPH. The existing sight distance at this curve is 305 feet, which does not meet safe design requirements and could lead to rear end crashes.

This segment of US 20 also has multiple areas where the vertical alignment does not meet the minimum grade requirement of 0.5%, increasing the likelihood of stormwater ponding in the travel lanes during rain events.

Need: Local Community Needs and Interests

Pedestrians traveling to and from Northridge High School are currently crossing US 20 west of Spring Valley Drive where a designated crossing does not exist. Safety concerns have been expressed about students crossing in this location.

Horse drawn buggies are the primary mode of transportation for the local Amish community. This section of US 20 is regularly utilized by horse drawn buggies and bicyclists. These buggies primarily use the existing shoulders. Currently, US 20 through the project area has shoulders with varying widths, some of which do not provide adequate separation between motorized vehicles and drawn buggies and increase the potential of crashes.

The area between Wayne Street (CR 16) and Orpha Drive (CR 22) south of US 20 is primarily industrial and the existing US 20 traffic lanes are near the commercial truck loading docks for the industrial buildings. The near continuous driveway for several of these facilities creates the potential for conflict between the commercial vehicles and live traffic on US 20.

Project Purpose

The refined purpose of the US 20 project between SR 15 and SR 13 (Sections 1 and 2) is to improve safety, reduce traffic congestion, correct geometric and drainage deficiencies, and address local community needs and interests. Alternatives considered as part of the US 20 improvement project between CR 35 and SR 13 (Section 2) must:

- Improve safety
    - Reduce the number of rear end crashes on the facility.
- Reduce traffic congestion
    - Reduce traffic congestion and improve arterial level of service to LOS C or better in the design year of 2044.
- Correct geometric and drainage deficiencies
    - Correct the undesirable horizontal geometry to increase the sight distance at the curve near Wayne Street (CR16) to meet INDOT design criteria for a 50 mph design speed
    - Correct the undesirable vertical geometry to meet or exceed current INDOT standards for minimum grades to improve roadway drainage through reduced likelihood of stormwater ponding in the travel lanes.
- Address local community needs and interests
    - Provide adequate separation between pedestrians, vehicles, and provide appropriate pedestrian crossings based on known origins and destinations.
    - Provide adequate separation between buggies and vehicles.
    - Improve ingress/egress routes for trucks accessing industrial businesses adjacent to US 20.

Resource impacts discussed in the remainder of this AI will focus on the additional impacts realized during the development of Section 2 (CR 35 to SR 13). Impacts associated with US 20 Section 1 (SR 15 to CR 35) are documented in the approved CE-4 document found in Appendix J (Appendix J, pages 1 to 53). The Impact Summary Table (Appendix I, page 1) summarizes the overall total increase in impacts to specific resources.

Public Involvement:

INDOT has developed a project-specific Public Involvement and Stakeholder Engagement Plan for the US 20 Section 2 project (Appendix G, pages 5 to 15). This plan provides a framework for the public outreach anticipated during the project development process. This outreach includes a project website, kitchen table meetings, stakeholder meetings, a public hearing, and a direct line of communication with the Amish community via the Amish Safety Committee.

Notice of Entry

Notice of Entry letters were mailed to the property owners potentially affected by the US 20 Section 2 project on September 26, 2019 notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Survey letter is included in Appendix G, pages 1 to 2.

Project Website/Email Address

The website for the US 20 Section 2 project is https://us20section2elkhartcounty.com/. The website includes project updates, frequently asked questions, and project documents. Interested parties can also send questions to the project email address (admin@us20section2elkhartcounty.com) and a project team member provides a response.

Kitchen Table Meetings

Kitchen Table Meetings (KTMs) are one-on-one meetings with property owners and project representatives to review parcel specific information and concerns. Over the course of the project development, eight KTMs were held. Feedback received during these meetings were generally positive.

Targeted Stakeholder Meetings

A wide range of stakeholders have provided input during the US 20 Section 2 project development process. These stakeholders include local government agencies, representatives from the Amish community, school representatives, and major employers. These stakeholders will continue in their role during project implementation to assist with minimizing community impacts, maintaining regional mobility, and communicating with their constituents.

Amish Community Outreach

The local Amish community was taken into consideration during the project development and public involvement activities. Additional correspondence with the Amish community has consisted of phone conversions between the project team and representatives of the Amish Safety Steering Committee (Safety Committee). The Safety Committee serves to provide best practice guidance to the Amish community on the safe navigation of roadways and any upcoming road closures and detour routes. The Safety Committee also provides suggestions to INDOT and local road departments on how roadways can best accommodate horse drawn buggy traffic. For this project, the Safety Committee recommended the use of sinuous rumble strips that are easier for buggies to cross and providing shoulders that can withstand horse drawn buggy use without forming ruts. The project will be designed with wider shoulders and sinuous rumble strips to accommodate buggy traffic and this is a firm project commitment. These conversations, along with a face-to-face discussion at the preliminary field check meeting ensured that sufficient outreach was conducted with the Amish community.

Section 4(f) Public Notice

In accordance with the requirements of Section 4(f), the public was afforded an opportunity to review and comment on the effects of the proposed project to the Pumpkinvine Nature Trail and Ridge Run Trail via a

legal advertisement placed in a *The Elkhart Truth* on November 23, 2021(Appendix I, page 99). The 30-day review period closed on December 24, 2021. No comments were received.

Public Hearing

The project met 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 comment and/or request a public hearing. Due to public interest in this project, a public hearing was held to provide information to the public and gather public input.

Public hearing invitation postcards were sent to adjacent property owners and project stakeholders. A legal advertisement was placed in *The Elkhart Truth* on April 2, and April 10, 2021, notifying the public of the hearing date and the AI's availability for review and comment for a period of 30 days (Appendix G, page 85).

The hearing was held on April 21, 2021 at Northridge High School from 6:00 to 8 p.m. The purpose of the hearing was to present the project to community members and other interested stakeholders, as well as offer an in-person opportunity for them to discuss their opinions or concerns with project officials. The hearing consisted of an open house session where members of the project team could answer questions, a formal presentation, then another open house session. The presentation and public comment session were live streamed via the Fort Wayne District Facebook page. The presentation is included in Appendix G, pages 27 to 57. Approximately 60 members of the public and elected officials attended the public hearing, and the presentation received 1,100 views online, as of December 29, 2021. Comments were accepted for a period of 15 days following the hearing.

Questions and concerns from attendees generally pertained to traffic and pedestrian safety, drainage and flooding concerns, and right-of-way acquisition (Appendix G, pages 66 to 102). All comments received during this period have been listed and individually addressed in the disposition of comments (Appendix G, page 103).

Several of these comments, raised both by local officials during initial coordination and members of the public during the public hearing and comment period, are addressed by the proposed design. Design elements included due to local official and public feedback are listed below.

- The installation of a High-Intensity Activated Crosswalk Beacon (HAWK Beacon).
- Revised detention basins near the intersection of Wayne Street.
- Revising detention pond configuration in southeast quadrant of US 20 and Spring Valley Road.
- Revising the intersection of US 20 and Heritage Drive to be a right-out only movement.
- Additional signage for the detour of the Pumpkinvine Nature Trail.

Project Description (Preferred Alternative):

County: Elkhart Municipality: Middlebury

Limits of Proposed Work: Beginning approximately 565 feet east of the intersection of US 20 and CR 35 and proceeding east on US 20 to approximately 315 feet west of the intersection of US 20 and SR 13.

Total Work Length: 1.95 Mile(s) Total Work Area: 35.2 Acre(s)

	Yes[1]	No
Is an Interchange Modification Study / Interchange Justification Study (IMS/IJS) required?		X
If yes, when did the FHWA grant a conditional approval for this project?	Date:	

Location

INDOT and FHWA propose to proceed with additional improvements as part of the US 20 Improvement Project. These additional improvements, which are referred to as US 20 Section 2 (Des. No. 1900095), are located west of the town of Middlebury in Elkhart County, Indiana. More specifically, the US 20 Section 2 improvements will extend from approximately 565 feet east of the intersection of US 20 and CR 35 to approximately 315 feet west of the intersection of US 20 and SR 13. The project is located within Middlebury Township; Middlebury US Geological Survey (USGS) Quadrangle, Sections 9, 15, 16, and 22 of Township 37 North, Range 7 East (Appendix B, page 1 and 2).

Existing Conditions

US 20 is classified as a 2-lane rural minor arterial and has a posted speed of 45 miles per hour (MPH) throughout the project area. Most of the existing typical section of US 20 consists of two 12-foot travel lanes (one in each direction), a variable width shoulder ranging from approximately 4-feet to 10-feet wide, and a ditch of variable width. The existing cross-section widens at the signalized intersections where left turn lanes are provided. There are no existing sidewalks along US 20. The apparent average existing right-of-way width throughout the corridor is 100 feet.

There are two signalized intersections along this segment of US 20, one at the intersection of US 20 and Wayne Street (CR 16), and one at the intersection of US 20 and Orpha Drive (CR 22).

The US 20 and Wayne Street (CR 16) intersection consists of one through lane in all directions with a single left turn lane on the US 20 EB and WB approaches. The US 20 and Orpha Drive (CR 22) intersection consists of one through lane in each direction, and a single left turn lane for the east and west approaches. All other intersections along the corridor are stop controlled on the minor approach.

The horizontal alignment US 20 has one existing curve located near Wayne Street (CR 16) that lacks adequate banking and stopping sight distance. This inadequate banking has necessitated posting an advisory speed limit of 40 MPH, while the rest of the corridor is signed as 45 MPH. This portion of US 20 also has multiple areas where the vertical alignment does not meet the minimum grade requirement of 0.5%.

US 20 from CR 35 to SR 13 had a high rate of rear end collisions, approximately 50%, during the time period between January 2016 to December 2018. The rear end collisions are often related to multiple factors, including congested conditions, lack of turn lanes, and/or closely spaced driveways along the corridor (Appendix I, pages 28 to 30).

Traffic through the corridor is projected to increase over the next 20 years, which will result in worsened traffic congestion levels. The traffic congestion and safety issues are exacerbated by the frequent use of the roadway and roadway shoulders by non-motorized vehicles, including Amish buggies.

Land use within the project area can generally be divided between the east and west halves. The western half of the project area consists of residential subdivisions, schools, religious facilities, a hotel, restaurant, and retail stores. The eastern half of the project area consists of individual residential, commercial, and industrial buildings. Two multi-use paths, the Pumpkinvine Nature Trail and the Ridge Run Trail, are located between Wayne Street (CR 16) and Orpha Drive (CR 22). Local utilities, including electric transmission lines, telephone, cable, and gas transmission lines, are located on the north and south sides of the roadway within the apparent existing right-of-way.

Preferred Alternative: Alternative 2 – 4-lane with Two-way Left Turn Lane (TWLTL) (Urban)

The preferred alternative includes reconstruction of existing 2-lane US 20 to a 5-lane cross-section including a 14-foot TWLTL, two 12-foot travel lanes in each direction, and two 10-foot paved shoulders. The addition of a TWLTL will remove left turning vehicles from live traffic, which is anticipated to provide an approximate 39% reduction in rear end crashes between major intersections (Appendix I, page 29). The

additional through lane, in conjunction with the TWLTL, contribute to the preferred alternative achieving a LOS of B or better in the design year (Appendix I, page 16). Sidewalks will be added on the north side of US 20 from Northridge High School to Wayne Street (CR 16) and to the south side of US 20 between Westlake Drive and Spring Valley Road. The proposed sidewalks will provide separation between vehicular and pedestrian traffic. A HAWK Beacon will be installed in the vicinity of the Northridge Middle School and Northridge High School to provide a pedestrian crossing and increase pedestrian safety. The addition of a through lane in each direction will increase the capacity of the roadway, while also facilitating ingress/egress movements for trucks accessing the industrial businesses between Wayne Street (CR 16) and Orpha Drive (CR 22). The 10-foot paved shoulders are wide enough to safely accommodate horse drawn buggy traffic and will be specifically designed to support long term buggy traffic without forming ruts. The preferred alternative will eliminate the horizontal alignment deficiencies that exist near the intersection of US 20 and Wayne Street (CR 16) by smoothing out the curve in the road through this area. The preferred alternative also meets the minimum vertical grade requirement of 0.5% through the project area.

The preferred alternative will be a "closed system" with all roadway drainage being conveyed via curb and gutters, as well as storm sewers that will discharge into proposed detention ponds. This "closed system" will minimize the overall footprint of the project and will reduce impacts to the natural and human environment. From the western end of the project to Wayne Street (CR 16), the storm sewer system will discharge to the proposed detention pond located in the northwest quadrant of the US 20/Wayne Street (CR 16) intersection (Appendix B, page 97 and 98). From Wayne Street to a high point approximately 0.5 mile east of US 20 and Wayne street (CR 16), near the Goshen Physicians Family Medicine office, the storm sewer system will discharge to the proposed detention pond located in the southeast quadrant of US 20/Wayne Street (CR 16) (Appendix B, page 98). From this high point to another high point near the Pumpkinvine Nature Trail, the storm sewer system will discharge to the proposed detention basin located near the property of Bill's Collision Service; however, the stormwater runoff will ultimately be discharged to the existing ditch along the Pumpkinvine Nature Trail (Appendix B, page 101). From the high point near the Pumpkinvine Nature Trail to eastern end of the project, the storm sewer system will be discharged to the ditch along the Pumpkinvine Nature Trail (Appendix B, page 101).

There are three culverts across US 20 and the adjacent county roads that will be constructed, replaced, or rehabilitated (Appendix B, pages 95 to 110).

Local road intersections with US 20 will be improved from the existing condition as necessary. The preferred alternative does not require design exceptions.

The preferred alternative will include the relocation of the connection between the Ridge Run Trail and the Pumpkinvine Nature Trail. This relocation will be constructed prior to the closure and demolition of the current Ridge Run Trail alignment to allow for continued use of the trail during construction.

Description of improvements to local and county roads at each intersection are described below:

US 20 and West Lake Drive – Roadway lanes will be widened from 10 feet to 12 feet in both directions along West Lake Drive. Useable shoulder width will remain the same at 1 foot in both directions. Approximately 125 feet of roadway and shoulder widening will occur along West Lake Drive south of US 20.

US 20 and Spring Valley Drive – Roadway lanes will remain the same width as existing at 12 feet in both directions along Spring Valley Drive. Useable shoulder width will also remain the same at 6 feet in both directions. Approximately 180 linear feet of roadway and shoulder reconstruction will occur along Spring Valley Drive south of US 20.

US 20 and Heritage Drive – Roadway lanes will remain the same width as existing at 12 feet in both directions along Heritage Drive. Useable shoulder width will be widened from 5 feet to 6 feet in both directions. Approximately 175 feet of roadway and shoulder widening will occur along Heritage Drive

south of US 20. The north leg of the Heritage Drive intersection with US 20 will be revised to only allow for a right-out movement. Heritage Drive will connect traffic coming from the school to the parking lot south of the athletic fields.

US 20 and Wayne Street (CR 16) – Roadway through lanes will remain the same as existing at 12 feet while the right turn lanes will be widened from approximately 12 feet to 15 feet. Useable shoulder width will remain the same at approximately 6 feet in both directions. Approximately 260 feet and 205 feet of roadway and shoulder widening will occur along Wayne Street (CR 16) north and south of US 20, respectively.

US 20 and CR 37 – CR 37 will no longer have access to US 20 and a cul-de-sac will be constructed.

US 20 and Orpha Drive (CR 22) – Roadway lanes will not be widened along Orpha Drive (CR 22). However, useable shoulder width will be widened from approximately 5 feet to 6 feet in both directions. Approximately 240 linear feet and 220 linear feet of shoulder widening will occur along Orpha Drive (CR 22) north and south of US 20, respectively.

Logical Termini and Fulfillment of Purpose and Need

The US 20 Improvement Project (Sections 1 and 2) has independent utility and will provide a fully functional road segment without any additional transportation improvements beyond the project limits. The western terminus of SR 15 remains unchanged. In recognition of the needs detailed above, the eastern logical terminus of the project was extended east from CR 35 to approximately 300 feet west of SR 13. Logical termini for improvements to the local road system are approximately 200 feet north and south of US 20 (Appendix B, page 1). These termini were established to encompass an area of elevated accidents, geometric and drainage deficiencies, and traffic congestion.

The proposed project fulfills the purpose and need of the project by improving safety, reducing traffic congestion, correcting geometric and drainage deficiencies, and addressing local community needs and interests.

Maintenance of Traffic (MOT)

Two lanes of traffic, one in each direction, will be maintained during construction. The MOT plan will be implemented in three phases. In Phase 1, MOT will be accomplished by shifting traffic to the current eastbound shoulders and constructing temporary pavement on the northern portion of US 20. In Phase 2, after completion of temporary pavement on the northern portion of the project, traffic will be switched over to the temporary pavement while the southern half of the project is constructed. In Phase 3, traffic will be shifted to the newly constructed road on the southern portion of the project area while the construction of the northern portion of the roadway is finalized. During construction, a suitable path for use by bicyclists and pedestrians that wish to use the Pumpkinvine Nature Trail will be provided. Additional detail can be found in the MOT section of this document. MOT plan sheets are included in (Appendix B, pages 75 to 95).

Cost Estimate

The total estimated construction, right-of-way, and engineering costs for the US 20 Section 2 project are $27,567,402, $2,000,000, and $4,000,000, respectively. Construction is anticipated to start in 2024. MACOG has included the project in the Fiscal Year (FY) 2020-2024 Transportation Improvement Program (TIP). This project is also included in the INDOT FY 2020-2024 Statewide Transportation Improvement Program (STIP) (Appendix H, pages 1 to 2).

Other Alternatives Considered:

A range of alternatives were evaluated to meet the transportation needs identified for the portion of US 20 between CR 35 to SR 13 (US 20 Section 2). Each of these alternatives would tie into the eastern terminus of the US 20 Section 1 project and extend to approximately 315 west of SR 15. Ultimately these alternatives were not selected.

Alternative 1 – 2-lane with TWLTL

Alternative 1 was considered to minimize impacts to the human and natural environments. This alternative would widen US 20 to allow for the addition of a center TWLTL. This alternative would improve the safety of the roadway by removing left turning vehicles from the travel lane and address the horizontal and vertical geometric issues. However, this alternative would not maintain lane continuity from US 20 Section 1, would not address projected traffic demand, and would not perform as well at improving access to the businesses between Wayne Street (CR 16) and Orpha Drive (CR22). Therefore, Alternative 1 would not meet the purpose and need and was eliminated from consideration.

Alternative 2 – 4-lane with TWLTL (Rural):

Similar to the preferred alternative, this alternative would reconstruct US 20 to a 5-lane section carrying two lanes of traffic in each direction with a TWLTL in the center. Alternative 2 was developed to widen the road to a 5-lane cross section with roadway drainage being accommodated by shoulders and open ditches. As both Alternative 2 and Alternative 3 (preferred alternative) meet the purpose and need of the project, a cursory evaluation of impacts was conducted to quantify the potential impacts associated with Alternative 2 and Alternative 3. The results of this analysis are summarized in the Alternatives Comparison Table (Appendix I, page 32). When compared against Alternative 3, Alternative 2 was found to have greater overall impacts; therefore, it was eliminated from consideration.

Alternative 4 – No Build Alternative:

This alternative would not involve roadway work along US 20. The No Build Alternative does not address the safety concerns, reduce traffic congestion, address geometric deficiencies, and would not address the local community needs and interests discussed above in the Purpose and Need section. If this alternative were selected, traffic congestion would continue to increase throughout the corridor. This alternative does not meet the purpose and need of the project and was therefore dismissed from further consideration.

The Do Nothing Alternative is not feasible, prudent or practicable because (*Mark all that apply*):

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

Roadway Character:

Functional Classification:	US 20 Rural Minor Arterial				
Current ADT:	17,300	VPD (2024)	Design Year ADT:	21,300	VPD (2044)
Design Hour Volume (DHV):	1,800	Truck Percentage (%)	25% of DHV		
Designed Speed (mph):	50	Legal Speed (mph):	45		

Indiana Department of Transportation

County Elkhart Route US 20 Des. No. 1900095

	Existing		Proposed	
Number of Lanes:	2		5	
Type of Lanes:	12 ft. through lanes		12 ft through lanes with a 14 ft. two-way left turn -lane	
Pavement Width:	Avg. 60	ft.	82	ft.
Shoulder Width:	Avg. 10	ft.	10	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	8	ft.

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

Functional Classification: West Lake Drive - Local
Current ADT: 303 VPD (2024) Design Year ADT: 358 VPD (2044)
Design Hour Volume (DHV): 33 Truck Percentage (%) 0
Designed Speed (mph): 30 Legal Speed (mph): 25

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	10 ft through lanes		12 ft through lanes	
Pavement Width:	20	ft.	24	ft.
Shoulder Width:	1	ft.	1	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

Functional Classification: Spring Valley Drive - Local
Current ADT: 1,585 VPD (2024) Design Year ADT: 1,868 VPD (2044)
Design Hour Volume (DHV): 185 Truck Percentage (%) 0
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	12 ft through lanes		12 ft through lanes	
Pavement Width:	36	ft.	36	ft.
Shoulder Width:	6	ft.	6	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	5	ft.	5	ft.

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

Functional Classification: Heritage Drive - Local
Current ADT: 1,519 N 2,955 S VPD (2024) Design Year ADT: 1,785 N 3,484 S VPD (2044)
Design Hour Volume (DHV): 339 N 332 S Truck Percentage (%) 0 N 1 S
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing	Proposed*
Number of Lanes:	2	2

Indiana Department of Transportation

County Elkhart Route US 20 Des. No. 1900095

Type of Lanes:	12 ft through lanes		12 ft through lanes 12 ft right in right out.	
Pavement Width:	34	ft.	36	ft.
Shoulder Width:	5	ft.	6	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

Setting: [ ] Urban [X] Suburban [ ] Rural
Topography: [X] Level [ ] Rolling [ ] Hilly
*Heritage Drive will be revised to only provide the right-out movement onto US 20.

Functional Classification: Wayne Street (CR 16) - Local
Current ADT: 7,745 N 119S VPD (2024) Design Year ADT: 9,918 N 137 S VPD (2044)
Design Hour Volume (DHV): 888N, 4S Truck Percentage (%) 2N, 0S
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed	
Number of Lanes:	3		3	
Type of Lanes:	12 ft through lane 12 ft right turn		12 ft right turn, 12 and 15ft through lanes	
Pavement Width:	48	ft.	51	ft.
Shoulder Width:	6	ft.	6	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

Functional Classification: CR 37 - Local
Current ADT: 878 VPD (2024) Design Year ADT: 1,050 VPD (2044)
Design Hour Volume (DHV): 121 Truck Percentage (%) 8
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed*	
Number of Lanes:	2		N/A	
Type of Lanes:	12 ft right turn 12 ft left turn		N/A	
Pavement Width:	34	ft.	N/A	ft.
Shoulder Width:	5	ft.	N/A	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

Setting: [ ] Urban [X] Suburban [ ] Rural
Topography: [X] Level [ ] Rolling [ ] Hilly
* CR 37 will not have access to US 20 in the build condition.

Functional Classification: Orpha Drive (CR 22) - Local
Current ADT: 3,896 N, 4,227 S VPD (2024) Design Year ADT: 4,416 N 4,798S VPD (2044)
Design Hour Volume (DHV): 441 N, 539 S Truck Percentage (%) 0 N, 5S
Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing	Proposed
Number of Lanes:	2	2

County Elkhart Route US 20 Des. No. 1900095

Type of Lanes:	12 ft through lanes		12 ft through lanes	
Pavement Width:	34	ft.	36	ft.
Shoulder Width:	5	ft.	6	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

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

Design Criteria for Bridges:

Structure/NBI Number(s): Small Structure No. 205 Sufficiency Rating: N/A

(Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	N/A		2 ft. Corrugated Metal Pipe	
Number of Spans:	N/A		1	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	N/A	ft.	99	ft.
Shoulder Width:	2	ft.	6	ft.
Length of Channel Work:			0	ft.

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

Remarks: The proposed small structure, identified as Structure Number 205 on the plan sheet, conveys roadside drainage beneath Wayne Street (CR 22) north of US 20. Structure Number 205 carries roadside drainage west from a roadside ditch east of Wayne Street (CR 22) to another roadside ditch west of Wayne Street (CR 22). An existing structure is not currently present at this location. The proposed small structure will be located approximately 90 feet north of the US 20 and Wayne Street (CR 22) intersection. The proposed structure will be a 2-foot Reinforced Concrete Pipe (RCP). This small structure will carry roadside drainage; thus, no impacts to a jurisdictional waterway will occur due to the placement of this new structure (Appendix B, page 98).

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

Structure/NBI Number(s): CV020-020-104.91 Structure No. 101 Sufficiency Rating: 8, Culvert Inspection Report 10/28/2020

(Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	66’ X 14’ X 10” Reinforced Concrete Box Culvert.		112’ X 14’ X 10’ Reinforced Concrete Box Culvert	
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:	46	ft.	82	ft.
Outside to Outside Width:	64	ft.	112	ft.
Shoulder Width:	8	ft.	10	ft.
Length of Channel Work:			N/A	ft.

Indiana Department of Transportation

County Elkhart Route US 20 Des. No. 1900095

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

Remarks: The existing small structure, identified as Structure Number 101 on the plan sheet, carries US 20 over the Pumpkinvine Nature Trail. The existing small structure is located approximately 500 feet west of the US 20 and Orpha Drive (CR 22) intersection. The existing Reinforced Concrete Box Culvert will be lengthened 21 feet to the north and 25 feet to the south. This structure carries the Pumpkinvine Nature Trail; thus, no impacts to a jurisdictional waterway will occur due to the structure replacement (Appendix B, page 101).

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

Structure/NBI Number(s): CV 020-020-104.92 Structure No. 202 Sufficiency Rating: 7, Culvert Inspection Report 7/31/2018 (Rating, Source of Information)

	Existing		Proposed	
Bridge Type:	60 in CMP		72 in RCP	
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:	N/A	ft.	N/A	ft.
Outside to Outside Width:	166	ft.	228	ft.
Shoulder Width:	8	ft.	10	ft.
Length of Channel Work:				ft.

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

Remarks: The proposed small structure, identified as Structure Number 202 on the plan sheet, conveys roadside drainage beneath US 20 just east of the Pumpkinvine Nature Trail. Structure Number 202 carries roadside drainage south from a roadside ditch north of US 20 to a roadside ditch south of US 20. The existing structure is approximately 40 feet east of the Pumpkinvine Nature Trail. The proposed structure will be approximately 10 feet east of the existing structure. The proposed structure will a 72-inch Corrugated Metal Pipe (CMP). This small structure will carry roadside drainage; thus, no impacts to a jurisdictional waterway will occur due to the placement of this new structure (Appendix B, page 101).

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

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

Maintenance of Traffic (MOT)During Construction:

	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 in remarks)		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

Two lanes of traffic, one in each direction, will be maintained during construction. The MOT plan will be implemented in three phases. In Phase 1, the MOT will be accomplished by shifting traffic to the current eastbound shoulders and constructing temporary pavement on the northern portion of US 20. In Phase 2, after completion of temporary pavement on the northern portion of the project, traffic will be switched over to the temporary pavement while the southern half of the project is constructed. In Phase 3, traffic will be shifted to the newly constructed road on the southern portion of the project area while the construction of the northern portion of the roadway is finalized. To maintain access for the residential subdivision at the eastern end of the project, Westlake Drive and Heritage Drive will not be closed concurrently with Spring Valley Drive. Temporary lane closures may be required near the SR 13 intersection to tie back into the existing four lane section. The project's MOT plan is included in Appendix B, pages 74 to 95.

During construction, buggies and other non-motorized traffic will use a combination of the shoulder and travel lanes as necessary. Although intersecting county roads may be closed for a brief period, detours will be clearly marked and should not substantially impair travel routes. During construction, a suitable path for use by the pedestrians along the Pumpkinvine Nature Trail will be provided. Further details associated with the detour route including, but not limited to, signage and anticipated closure dates will be coordinated with the Officials with Jurisdiction (OWJs) and residential landowner during the final engineering design and land acquisition phases of the project. In the event the proposed detour route becomes infeasible during final design, the coordination with the OWJs will be re-initiated and a suitable alternative detour route will be developed for OWJ concurrence.

Early coordination letters were sent to the Elkhart County Surveyor, Elkhart County Sheriff, Middlebury Town Manager, Elkhart County Commissioners, Elkhart County Highway Department, Elkhart County Emergency Management, Northridge High School, Middlebury Town Council Members, Middlebury Parks and Recreation, Das Dutchman Essenhaus, and Middlebury Community Schools on November 20, 2019 (Appendix C, pages 1 to 3). In their early coordination response dated December 16, 2019 Middlebury Community Schools stated that the entrance/exit to and from the transportation maintenance garage is near the intersection of US 20 and Wayne Street (CR 16) and they will require access to that area during construction (Appendix C, pages 9 to 10). In their early coordination response dated December 16, 2019, the Middlebury Town Council stated that it will be important to provide a safe detour route for the trail users during the construction of the tunnel extension (Appendix C, pages 14 to 15). These have been added as firm project commitments in the Environmental Commitments section of this CE document.

The MOT will pose a temporary inconvenience to traveling motorists (including school buses and emergency services); however, no significant delays are anticipated, and all inconveniences will cease upon project completion. Delays would occur during construction but would cease with project completion. Construction is anticipated to span two construction seasons.

Estimated Project Cost and Schedule:

Engineering: $ 4,000,000 (2020) Right-of-Way: $ 2,000,000 (2022) Construction: $ 27,567,402 (2023-24)

Anticipated Start Date of Construction: Spring 2024

Date project incorporated into STIP: March 26, 2020 (FY 20-24) (Appendix H, page 3)

County Elkhart Route US 20 Des. No. 1900095

Is the project in an MPO Area?	Yes	No
	X	

If yes,

Name of MPO MACOG

Location of Project in TIP: MACOG TIP FY 20-24 per Resolutions 33-19 and 02-20 (Appendix H, page 2)

Date of incorporation by reference into the STIP: March 26, 2020 (FY 20-24)

Right-of-Way Impacts:

The US 20 Section 2 project will require approximately 12.3 acres of permanent right-of-way. The project also requires 7.3 acres of temporary right-of-way. No right-of-way re-acquisition will be required for this project.

The current land uses of the new, permanent right-of-way includes approximately 2.5 acres of residential property, 3.8 acres of commercial property, 0.9 acre of agricultural property, 0.9 acre of forested property, 0.1 acre of wetlands, 1.3 acres of industrial property, 2.2 acres of educational and religious property, and 0.6 acre of open water. The current land uses of the temporary right-of-way includes approximately 1.6 acres of residential property, 2.1 acres of commercial property, 1.8 acre of agricultural property, 0.5 acre of forest, 0.5 acre of industrial property, and 0.8 acre of educational and religious property.

The proposed right-of-way acquisition for US 20 Section 1 and Section 2 are summarized in the Impact Summary Table in Appendix I, page 1. The maximum existing right-of-way width is approximately 105 feet north and 110 feet south of the US 20 centerline. The average width of the existing right-of-way is approximately 55 feet north and 45 feet south of the current US 20 centerline.

The maximum proposed right-of-way width is approximately 124 feet north and 135 feet south of the US 20 centerline. The average width of the proposed right-of-way is approximately 68 feet north and 62 feet south of the proposed US 20 centerline.

The use of new, permanent right-of-way will be converted from residential, commercial, agricultural, forest, wetlands, industrial and religious facility property into new pavement, maintained roadside, and storm water detention for the project. The use of temporary right-of-way will continue to be residential, commercial, agricultural, wetland, industrial and religious facility property (Appendix B, pages 3 to 8). Tree clearing is anticipated to be completed within the entire proposed permanent and temporary right-of-way.

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

Streams, Rivers, Watercourses & Jurisdictional Ditches:

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

Based on a desktop review, a site visit on October 14, 2019 by HNTB, the aerial map of the project area (Appendix B, pages 3 to 8), the USGS topographic map (Appendix B, page 2), and the water resource map in the Red Flag Investigation (RFI) report (Appendix E, page 10) there are 19 streams, rivers, watercourse or jurisdictional ditches within the 0.5 mile search radius. No streams, rivers, watercourses, or jurisdictional ditches are present within the project area; therefore, the US 20 Section 2 project will result in no additional impacts.

A Waters of the U.S. Determination / Wetland Delineation Report was approved by INDOT Ecology and Waterway Permitting Office on March 26, 2020 (Appendix F, pages 1 to 10). It was determined that no jurisdictional streams or ditches are located within the proposed right-of-way. The USACE makes all final determinations regarding jurisdiction.

Early coordination letters were sent to the U.S. Fish and Wildlife Service (USFWS), the Indiana Department of Natural Resources Division of Fish and Wildlife (IDNR-DFW), and the U.S. Army Corps of Engineers (USACE) on November 20, 2019 (Appendix C, pages 1 to 3). USACE did not respond to the early coordination letter. In their early coordination response letter dated November 21, 2019, USFWS stated that because the proposed project would have minor impacts on natural resources, and no Federally endangered species are known to be present, the USFWS would not be providing a comment letter (Appendix C, page 7). In their early coordination response letter date December 19, 2019, IDNR-DFW provided standard recommendations but did not provide any recommendations specific to streams, rivers, watercourses or jurisdictional ditches (Appendix C, pages 19 to 20).

An automated letter was generated from IDEM's website on November 9, 2020. The letter contained recommendations pertaining to coordination with USACE and IDEM for permitting of stream impacts.

Other Surface Waters:

Other Surface Waters	Presence	Impacts Yes	Impacts No
Reservoirs			
Lakes			
Farm Ponds			
Detention Basins			
Storm Water Management Facilities			
Other: Pond	X	X	

Based on a desktop review, a site visit October 14, 2020 by HNTB, the USGS topographic map (Appendix B, page 2), the aerial map of the project area (Appendix B, pages 3 to 8), and the water resources map in the RFI report (Appendix E, page 10), there are 24 lakes located within the 0.5 mile search radius. One pond is adjacent to the US 20 Section 2 project area.

A Waters of the U.S. Determination / Wetland Delineation Report was approved by INDOT Ecology and Waterway Permitting Office on March 26, 2020 (Appendix F, pages 1 to 10). It was determined that one pond is located within the proposed right-of-way. Pond A is classified as a palustrine, unconsolidated bottom, intermittently exposed, excavated wetland (PUBGx) according to the classification defined by Cowardin et al. (1979). Pond A is approximately 0.57 acre and the entire pond will be permanently impacted by the project. The USACE makes all final determinations regarding jurisdiction. Mitigation for pond impacts is anticipated and will be determined during permitting.

Impacts to other surface waters for US 20 Section 1 and Section 2 are summarized in the Impact Summary Table in Appendix I, page 1. Early coordination letters were sent to the USFWS, IDNR-DFW, and the USACE on November 20, 2019 (Appendix C, pages 1 to 3). USACE did not respond to the early coordination letter. In their early coordination response letter date December 19, 2019, IDNR-DFW provided standard recommendations but did not provide any recommendations specific to surface waters (Appendix C, pages 19 to 20).

An automated letter was generated from IDEM's website on November 9, 2020. The letter contained recommendations pertaining to coordination with USACE and IDEM for permitting of stream impacts (Appendix C, pages 23 to 29).

Wetlands:

	Presence	Impacts	
		Yes	No
Wetlands	X	X	

Total wetland area: 0.05 acre(s) Total wetland area impacted: 0.05 acre(s)

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

US 20 Section 2 Wetland Impacts

Wetland No.	Classification	Total Size (Acres)	Impacted Acres	Comments
Wetland A	Palustrine Emergent (PEM1A)	0.05	0.05	Delineated wetland located immediately adjacent to the existing fill slope. Wetland A is within the proposed right-of-way and will be permanently impacted by roadway fill required to widen US 20 (Appendix B, page 4).

Wetlands (*Mark all that apply*)	Documentation	ES Approval Dates
Wetland Determination	X	March 26, 2020
Wetland Delineation	X	March 26, 2020
USACE Isolated Waters Determination		
Mitigation Plan		

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;	X
Unique engineering, traffic, maintenance, or safety problems;	X
Substantial adverse social, economic, or environmental impacts, or	
The project not meeting the identified needs.	X

Based on a review of the National Wetlands Inventory (NWI) online mapper (https://www.fws.gov/wetlands/data/Mapper.html), a site visit on October 14, 2019 by HNTB, the USGS topographic map (Appendix B page 2), and the RFI report (Appendix E, page 10) there are forty-seven wetlands located within the 0.5 mile search radius. There are four wetlands present adjacent to the project area.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office on March 26, 2020 (Appendix F, pages 1 to 10). It was determined that one wetland is located within the proposed right-of-way. Wetland A is classified as a palustrine, emergent, persistent, temporary flooded wetland (PEM1A) according to the classification defined by Cowardin et al. (1979). Wetland A is approximately 0.05 acre and the entire wetland will be permanently impacted by the project. The USACE makes all final determinations regarding jurisdiction.

Avoidance and minimization of impacts to Wetland A was considered. Avoidance and minimization measures included a combination of shifting the roadway alignment to the north and constructing a retaining wall. Avoidance and minimization measures would result in additional construction and long-term maintenance costs, as well as increase impacts to residential or commercial properties on the north side of

US 20. Therefore, these measures were dismissed. Wetland mitigation is anticipated and will be determined during permitting.

The total wetland impacts for US 20 Section 1 and US 20 Section 2 are summarized in the Impact Summary Table in Appendix I, page 1.

Early coordination letters were sent to the USFWS, IDNR-DFW, and the USACE on November 20, 2019 (Appendix C, pages 1 to 3). USACE did not respond to the early coordination letter. In their early coordination response letter date December 19, 2019, IDNR-DFW stated that the presence or potential presence of wetland habitat on site would require contacting and coordinating with IDEM and USACE for permitting of wetland impacts (Appendix C, pages 19 to 20).

An automated letter was generated from IDEM's website on November 9, 2020. The letter contained recommendations pertaining to coordination with USACE and IDEM for permitting of wetland impacts (Appendix C, page 23 to 29).

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

Terrestrial Habitat:

	Presence	Impacts	
		Yes	No
Terrestrial Habitat	X	X	
Unique or High Quality Habitat			

Based on a desktop review, a site visit on October 14, 2019 by HNTB, the aerial map of the project area (Appendix B, pages 3 to 8), and the USGS topographic map, the terrestrial habitat in the project area consists primarily of residential, commercial, and industrial land use. Dominant vegetation within the project area consists of green ash (*Fraxinus pennsylvanica*), bur oak (*Quercus macrocarpa*), honeysuckle (*Lonicera maackii*), sassafras (*Sassafras albidum*), tall fescue (*Festuca arundinacea)*, common dandelion (*Taraxacum officinale*), white clover (*Trifolium repens),* common rush (*Juncus effuses*), spikerush (*Eleocharis nodosus*), and narrowleaf cattail (*Typha angustifolia*). It can be assumed that small animals such as squirrels, raccoons, birds, etc. likely inhabit the surrounding area.

Proposed permanent and temporary impacts for terrestrial habitat include approximately 1.4 acres of tree clearing, 2.7 acres of agricultural land, 0.6 acre of open water, 0.1 acre of wetland, and 14.8 acres of mowed and maintained right-of-way. The tree clearing acreage quantified during the initial design stages, 2.15 acres, was minimized during project development. Tree clearing will be limited to areas within 100 feet of the edge of pavement of US 20 and connecting local and county roads. The remainder of the project area is largely existing pavement (Appendix B, pages 3 to 8). No core forest will be impacted by the project. Animal movement should not be permanently restricted or impacted due to the proposed project. All areas will be restored per the current INDOT Standard Specifications.

Impacts to terrestrial habitat for US 20 Section 1 and Section 2 are summarized in the Impact Summary Table in Appendix I, page 1.

A separate tree clearing contract will be required to fell trees outside of the active season for the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (NLEB) (*Myotis septentrionalis*). This work is anticipated to be performed one year prior to the main construction contract. The designation number for this work will be determined during project development.

Early coordination letters were sent to the USFWS, IDNR-DFW, and the USACE on November 20, 2019 (Appendix C, pages 1 to 3). USACE did not respond to the early coordination letter. In their early coordination response letter dated November 21, 2019, USFWS stated that because the proposed project

would have minor impacts on natural resources, and no Federally endangered species are known to be present, the USFWS would not be providing a comment letter (Appendix C, page 7). In their early coordination response letter dated December 19, 2019, IDNR-DFW made recommendations to minimize any effects to terrestrial habitat, revegetate disturbed areas, restrict tree clearing to the inactive season, and implement appropriate erosion and sediment control measures (Appendix C, pages 19 to 20).

An automated letter was generated from IDEM's website on November 9, 2020. The letter contained recommendations minimizing effects to terrestrial habitat (Appendix C, pages 23 to 29).

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

Karst:

Karst	Yes	No
Is the proposed project located within or adjacent to the potential Karst Area of Indiana?		X
Are karst features located within or adjacent to the footprint of the proposed project?		X
If yes, will the project impact any of these karst features?		

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

Based on a desktop review, the project is located outside the designated karst region of Indiana as outlined in the October 13, 1993 Memorandum of Understanding (MOU). According to the topo map of the project area (Appendix B, page 2), and the RFI report (Appendix E, page 10) there are no karst features identified within or adjacent to the project area.

In the auto response generated on November 9, 2020, the Indiana Geological Survey (IGS) did not indicate that karst features exist in the project area (Appendix C, pages 30 to 32). IGS indicated this project is located in an area with moderate liquefaction potential, low potential for bedrock resources, high potential of sand and gravel resources, and the presence of abandoned industrial mineral sand gravel pits. Response from IGS has been communicated with the designer November 9, 2020. No impacts are expected.

Threatened and Endangered Species:

	Presence	Impacts	
Threatened or Endangered Species		Yes	No
Within the known range of any federal species	X	X	
Any critical habitat identified within project area			
Federal species found in project area (based upon informal consultation)			
State species found in project area (based upon consultation with IDNR)			

	Yes	No
Is Section 7 formal consultation required for this action?		X

Based on a desktop review and the RFI report (Appendix E, pages 1 to 13), completed by HNTB on December 3, 2019, the IDNR Elkhart County Endangered, Threatened and Rare (ETR) Species List has been checked and is included in (Appendix E, pages 12 to 14). The highlighted species on the list reflect the federal and state identified ETR species located within the county. According to the IDNR-DFW early coordination response letter dated December 19, 2019 (Appendix C, pages 19 to 20), the Natural Heritage Program's Database has been checked and the blanding's turtle (*Emydoidea blandingii*) has been documented within 0.5 mile of the project area. IDNR-DFW requested an entrenched silt fence should be placed between the road and the adjacent wetlands near Spring Valley Road and should remain in place through the duration of the project. If the wetlands near Spring Valley Road are to be filled in their entirety, then they should be live-trapped for turtles prior to filling, and any turtles captured should be relocated to

nearby areas of suitable habitat. Removal of any state endangered species and eastern box turtles would require a permit issued by the Division of Fish and Wildlife. Recommendations provided by the IDNR-DFW requiring threatened and endangered species are included as firm commitments in the Environmental Commitments section of this document.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C, pages 42 to 47). The project is within range of the Indiana bat and the NLEB. No additional species were found within or adjacent to the project area other than the Indiana bat and northern long-eared bat.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. An effect determination key was completed on February 11, 2021, and based on the responses provided, the project was found to "may affect – not likely to adversely affect" the Indiana bat and/or the NLEB. INDOT reviewed and verified the effect finding on February 11, 2021 and requested USFWS's review of the finding (Appendix C, page 62). No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Mitigation Measures (AMMs) are included as firm commitments in the Environmental Commitments section of this document.

USFWS Bridge/Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. Since construction will begin after October 14, 2021, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. This has been added as a firm project commitment in the Environmental Commitments section of this document.

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

Drinking Water Resources:

	Presence	Impacts	
		Yes	No
Wellhead Protection Area			
Public Water System(s)	X	X	
Residential Well(s)			
Source Water Protection Area(s)			
Sole Source Aquifer (SSA)			

If a SSA is present, answer the following:

	Yes	No
Is the Project in the St. Joseph Aquifer System?		
Is the FHWA/EPA SSA MOU Applicable?		
Initial Groundwater Assessment Required?		
Detailed Groundwater Assessment Required?		

The project is located in Elkhart County, but located outside the area of the St. Joseph Sole Source Aquifer, the only legally designated sole source aquifer in the state of Indiana (Appendix B, page 2). Therefore, the FHWA/EPA Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project. Therefore, a detailed groundwater assessment is not needed, and no impacts are expected.

An early coordination letter was sent to the US Environmental Protection Agency (EPA) Groundwater and Drinking Water Branch on November 20, 2019 (Appendix C, pages 1 to 3). EPA responded on December 10, 2019, stating that the project is not within a designated Sole Source Aquifer review area, so an EPA Sole Source Aquifer project review of this project is not required (Appendix C, page 8). The EPA suggested that during construction appropriate safeguards are in place to ensure that ground water is not endangered. Such safeguards would include securing adequate precautions for fueling/servicing large equipment, using "green infrastructure" practices where possible, and developing contingency plans to handle the release of any hazardous materials. Recommendations provided by the EPA are included as firm commitments in the Environmental Commitments section of this document.

The Indiana Department of Environmental Management's Wellhead Proximity Determinator website (http://www.in.gov/idem/cleanwater/pages/wellhead/) was accessed on November 9, 2020 by HNTB. This project is not located within a Wellhead Protection Area or Source Water Area. No impacts are expected.

The Indiana Department of Natural Resources Water Well Record Database website (https://www.in.gov/dnr/water/3595.htm) was accessed on November 9, 2020 by HNTB. The nearest water well is shown close to the intersection of County Road 22 and US 20; however, the well appears to be mapped incorrectly. One additional well is located adjacent to the project area. The features will not be affected because they appear to be located outside of the proposed right-of-way. Therefore, no impacts are expected. Should it be determined during the right-of-way phase that these wells are affected, a cost to cure will likely be included in the appraisal to restore the wells.

Based on a desktop review of the INDOT MS4 website (https://entapps.indot.in.gov/MS4/) by HNTB on November 9, 2020, and the RFI report; this project is not located in an Urban Area Boundary location. No impacts are expected.

Based on a desktop review, a site visit on October 14, 2020 by HNTB, the aerial map of the project area (Appendix B, pages 3 to 8), and coordination with the Middlebury Department of Public Works, this project is located where there is a public water system. The public water system will be affected because there are water mains and multiple lateral crossings within the project area. Early coordination letters were sent on December 16, 2019 to the Middlebury Department of Public Works. No response to this early coordination was received; however, multiple water utilities were identified during the survey for the project and confirmed during the Preliminary Field Check meeting on November 4, 2020 (Appendix I, pages 33 to 45). Due to the proximity of the lines to the project area, as well as their shallow depth, impacts to this utility are unavoidable. Coordination with the Middlebury Department of Public Works will continue through design to relocate these utilities.

Floodplains:

Flood Plains	Presence	Impacts Yes	Impacts No
Longitudinal Encroachment			
Transverse Encroachment			
Project located within a regulated floodplain			
Homes located in floodplain within 1000' up/downstream from project			

The Indiana Department of Natural Resources Indiana Floodway Information Portal website (http://dnrmaps.dnr.in.gov/appsphp/fdms/) was accessed on November 9, 2020 by HNTB. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix B, page 2). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

Farmland:

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

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

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

Based on a desktop review, a site visit on October 14, 2020 by HNTB, a review of the aerial map of the project area (Appendix B, pages 3 to 8), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The requirements of the FPPA do not apply to this project; therefore, no impacts are expected. An early coordination letter was sent on November 20, 2019 to Natural Resources Conservation Services (NRCS). In their early coordination response letter dated November 21, 2019, NRCS stated that the proposed project will not cause a conversion of prime farmland.

Cultural Resources:

	Category	Type	INDOT Approval Dates	N/A
Minor Projects PA Clearance	B	3	February 20, 2020	

Results of Research	Eligible and/or Listed Resource Present
Archaeology	
NRHP Buildings/Site(s)	
NRHP District(s)	
NRHP Bridge(s)	

Project Effect

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

Documentation (mark all that apply)	Documentation Prepared	ES/FHWA Approval Date(s)	SHPO Approval Date(s)
Historic Properties Short Report			
Historic Property Report			
Archaeological Records Check/ Review			
Archaeological Phase Ia Survey Report	X	February 20, 2020	
Archaeological Phase Ic Survey Report			
Archaeological Phase II Investigation Report			
Archaeological Phase III Data Recovery			
APE, Eligibility and Effect Determination			
800.11 Documentation			

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

On February 20, 2020 the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 3 under the Minor Projects Programmatic Agreement, (Appendix D,

page 7). MPPA Category B, Type 3 projects include construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration and deceleration lanes) and shoulder widening under certain conditions.

Between January 6 and 8, 2020, Cultural Resource Analysts, Inc., personnel conducted a phase Ia archaeological reconnaissance for the project. The background research found that no archaeological sites were recorded and that historic maps did not indicate a structure had been present within the proposed project area. Two archaeological reconnaissance studies have been conducted at the western edge of the project, one reconnaissance was completed recently utilizing current methods and so that area was not resurveyed (Arnold 2018). One historic archaeological site was located during the reconnaissance. The site was found to lack integrity and is ineligible to the state and national registers. This report did recommend archaeological clearance for the project and was approved by INDOT CRO on February 20, 2020.

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

Section 4(f) Resources:

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

	Presence	Use	
Parks & Other Recreational Land		Yes	No
Publicly owned park			
Publicly owned recreation area			
Other (school, state/national forest, bikeway, etc.)	X	X	

	Evaluations Prepared	FHWA Approval date
Programmatic Section 4(f)*		
"De minimis" Impact*	X	
Individual Section 4(f)		

	Presence	Use	
Wildlife & Waterfowl Refuges		Yes	No
National Wildlife Refuge			
National Natural Landmark			
State Wildlife Area			
State Nature Preserve			

	Evaluations Prepared	FHWA Approval date
Programmatic Section 4(f)*		
"De minimis" Impact*		
Individual Section 4(f)		

	Presence	Use	
Historic Properties		Yes	No
Sites eligible and/or listed on the NRHP			

	Evaluations Prepared	FHWA Approval date
Programmatic Section 4(f)*		
"De minimis" Impact*		
Individual Section 4(f)		

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

Based on a desktop review, site visits on October 14, 2019 and November 4, 2020 by HNTB, the aerial map of the project area (Appendix B, pages 3 to 8), a November 4, 2020 on-site meeting with the Middlebury Parks and Recreation Department and HNTB, and the RFI report (Appendix E, pages 1 to 14), there are two Section 4(f) resources located within the 0.5 mile search radius. There are two Section 4(f) resources located within or adjacent to the project area. These resources are the Pumpkinvine Nature Trail and the Ridge Run Trail.

Pumpkinvine Nature Trail (Section 4(f) De minimis Use)

Based on the trail maps available, the Pumpkinvine Nature Trail, a recreational multi-use trail, is within the project area. The Pumpkinvine Nature Trail crosses under US 20 approximately 500 feet west of CR 22, between CR 22 and Orpha Drive (see Appendix B, page 7).

The Pumpkinvine Nature Trail is a former railroad that has been converted to a multi-use trail. This trail connects Goshen, Middlebury and Shipshewana. Within the project area, the trail is owned by the Town of Middlebury (north of US 20) and the Elkhart County Parks and Recreation Board (south of US 20). The trail is publicly-owned, open to the public year-round, and is primarily used for recreation. As a result, it is eligible for protection under Section 4(f). The trail is managed by the Middlebury Department of Parks and Recreation and Elkhart County Parks. Therefore, in accordance with 23 CFR 774.17, the Middlebury Department of Parks and Recreation and the Elkhart County Parks and Recreation Board are considered the OWJs for the Section 4(f) resource.

The Pumpkinvine Nature Trail is currently carried under US 20 by a concrete box culvert approximately 65 feet in length. The widened roadway will require the box culvert to be extended approximately 20 feet to the north and 20 feet to the south for a total of approximately 40 feet in additional length. The widened roadway will also require the replacement of a 60-inch corrugated metal pipe (CMP) that runs parallel to the box culvert with a longer 72-inch CMP in the same location. This 72-in CMP will require a slight shift in the trail alignment to the south of US 20 (see Appendix I, page 51).

The proposed culvert extension and pipe replacement will require the purchase of approximately 0.047 acre of permanent right-of-way and 0.075 acre of temporary right-of-way from the Town of Middlebury. Approximately 0.071 acre of permanent right-of-way will be required from the Elkhart County Parks and Recreation Board. This right-of-way acquisition will be considered a use under Section 4(f). INDOT intends to perpetuate the use of the trail through an easement allowing the trail to remain operational within the INDOT right-of-way. Construction will also require the temporary closure of the trail and implementation of a detour during construction for trail traffic. The temporary closure of the Pumpkinvine Natural Trail is anticipated to last no longer than nine months while the construction of US 20 Section 2 is anticipated to last 24 months.

During the environmental review process, a detour route was developed in coordination with the OWJs and other stakeholders. This detour, which will meet the design criteria for a multi-use path, will begin at the trailhead near the intersection of CR 22 and CR 37, south of US 20. From this trailhead, the detour will be routed east utilizing the westbound shoulder of CR 22. The westbound shoulder of CR 22 will be widened to provide safe separation between pedestrian and vehicular traffic. The detour will continue east through the intersection of US 20 and CR 22 before turning north up the residential driveway of the residence at 130 1/2 Orpha Drive and connecting back to the Pumpkinvine Nature Trail. Coordination with the residential landowner on Orpha Drive has occurred. The landowner has agreed in principle to the viability of the detour route (see Appendix I, page 52). In the event the proposed detour route becomes infeasible

during final design, the concurrence with the OWJs will be re-initiated and a suitable alternative detour route will be developed for OWJ concurrence.

Further details associated with the detour route including, but not limited to, signage and anticipated closure dates will be coordinated with the OWJs and residential landowner during the final engineering design and land acquisition phases of the project.

Under Section 4(f) of the U.S. Department of Transportation Act of 1966 (23 CFR 774.3(b)), this trail is considered a Section 4(f) resource as it is publicly-owned land that permits public access for primarily recreational purposes. A *de minimis* impact is one that, after taking into account any measure to minimize harm (such as avoidance, minimization, mitigation or enhancement measures), the project will not adversely affect the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f). A *de minimis* impact determination requires public involvement and concurrence from the OWJs that the proposed impacts will not affect the resource's features, attributes, and activities that qualify it for protection under Section 4(f). Letters were sent to the Town of Middlebury and the Elkhart County Parks and Recreation Department on November 11, 2021 requesting concurrence that the proposed project will not adversely affect the activities or attributes but will enhance the features. The Town of Middlebury and Elkhart County Parks agreed with this assessment and signed the letter on November 15, and November 18, 2021 respectively (Appendix I pages 50 and 56).

The public was afforded an opportunity to review and comment on the effects of the proposed project to the Pumpkinvine Nature Trail via a legal advertisement that was placed in a local publication. The legal notice, which occurred separately from the legal notice for this AI, notified the public of the Section 4(f) *de minimis* finding and provided a 30-day review period. This notice pas published in *The Elkhart Truth* on November 23, 2021. The 30-day review period for the Section 4(f) *de minimis* finding ended on December 24, 2021 (Appendix G, page 121). No comments were received during the public comment period.

Ridge Run Trail (Section 4(f) Enhancement)

The Ridge Run Trail is a multi-use trail that connects the grounds of the Essenhaus facility to the Pumpkinvine Nature Trail. The Ridge Run Trail runs parallel to the north side of US 20 for approximately 660 feet between the Pumpkinvine Nature Trail and an existing driveway to the west (see Appendix I, page 52).

The trail, within the project area, is leased by the Town of Middlebury from a local property owner and is maintained by the Town of Middlebury. The trail is publicly-owned, open to the public year-round, and is primarily used for recreation. As a result, it is eligible for protection under Section 4(f). The trail is managed by the Middlebury Department of Parks and Recreation. Therefore, in accordance with 23 CFR 774.17, the Middlebury Department of Parks and Recreation is considered the OWJ for the Section 4(f) resource.

Due to the widening of the roadway, the Ridge Run Trail will need to be reconstructed and realigned as part of the project. This realignment will require the acquisition of right-of-way from the local property owner with whom the Town of Middlebury has an easement to operate and maintain the trail. Therefore, a use of the property will occur as part of US 20 Section 2 which is not considered temporary; however, the use will preserve the recreational attributes of the trail by realigning to avoid permanent impacts. The proposed use will also enhance the trail's physical condition through reconstruction of the pavement structure.

According to 23 CFR 774.13(g), transportation enhancement projects that meet the following stipulations are excepted from the requirement for Section 4(f) approval:

- The use of the Section 4(f) property is solely for the purpose of preserving or enhancing an activity, feature, or attribute that qualifies the property for Section 4(f) protection; and
- The OWJ over the Section 4(f) resource agrees in writing to paragraph (g)(1) of this section.

Given the anticipated scope of work associated with the Ridge Run Trail, INDOT and FHWA believe it qualifies for an enhancement exception to Section 4(f) under the conditions found at 23 CFR 774.13(g). In accordance with the requirements of 23 CFR 774.13(f), concurrence from the OWJ that this project's effects on the Ridge Run Trail will not constitute a use of the Section 4(f) resource was obtained.

A letter was sent to the Town of Middlebury on November 11, 2021 requesting concurrence that the use of the property is solely for the purpose of preserving or enhancing an activity, feature, or attribute that qualifies the property for Section 4(f) protection. The Town of Middlebury agreed with this assessment and signed the letter on November 15, 2021 (Appendix I page 50)

Further details associated with the acquisition of the right-of-way and perpetuating the easement from the local landowner will be coordinated with the OWJ and landowner during the final engineering design and land acquisition phases of the project.

In addition to the Section 4(f) resources listed above, three other resources were identified as having the potential to receive protection under Section 4(f). These resources include Das Dutchman Essenhaus, Northridge High School, and Northridge Middle School. A discussion of why these resources do not meet the criteria for protection under Section 4(f) is included below.

Das Dutchman Essenhaus

The RFI identified Das Dutchman Essenhaus as a recreational facility adjacent to the project area. Das Dutchman Essenhaus is a hotel, restaurant, and conference center. It is not publicly owned and therefore Section 4(f) does not apply to this property.

Northridge High School

The RFI identified Northridge High School as a school within the project area (Appendix E, page 9). The project will require the acquisition of approximately 1 acre of permanent right-of-way from Northridge High School. Portions of public schools that are used for recreation purposes and are open for public use may be considered a Section 4(f) resource if the OWJ for the property considers the recreational activities to be significant. The right-of-way that will be acquired from Northridge High School does not include any recreational facilities (Appendix I, page 59). Therefore, there will be no Section 4(f) use of this property.

Northridge Middle School

The RFI identified Northridge Middle School as a school within the project area (Appendix E. page 9). The project will require the acquisition of approximately 1 acre of permanent right-of-way from Northridge Middle School. The athletic fields on the grounds of the middle school are fenced, not open to the public during normal hours of operation, and therefore are not subject to Section 4(f) requirements. The right-of-way that will be acquired from Northridge Middle School does not include any recreational facilities open to the public. Therefore, there will be no Section 4(f) use of this property.

Section 6(f) Property:

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

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

A review of 6(f) properties on the Land and Water Conservation Fund (LWCF) website at https://www.in.gov/indot/2523.htm revealed a total of 20 properties in Elkhart County (Appendix I, page

60). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources as a result of this project.

Air Quality:

Air Quality

Conformity Status of the Project	**Yes**	**No**
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 the project is NOT exempt from conformity, then:		
Is the project in the Transportation Plan (TP)?	X	
Is a hot spot analysis required (CO/PM)?		X

Level of MSAT Analysis required?

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

STIP/TIP

This project is included in the Fiscal Year (FY) 2020-2024 Michiana Council of Governments (MACOG) Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP) (Appendix H, page 2) and the 2020-2024 Statewide Transportation Improvement Program (STIP) (Appendix H, page 3).

Attainment Status

This project is located in Elkhart County which is currently in attainment for $PM_{2.5}$ and CO, and a maintenance area for Ozone (O3) according to the IDEM County List: All Regulated Pollutants (https://www.in.gov/idem/airquality/files/nonattainment_county_list.pdf).

Ozone: This project is located in Elkhart County, which is current a maintenance area for Ozone, 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. Environmental Protection Agency Et. Al. Decision. The project's design concept and scope are accurately reflected in both the MACOG *Michiana On the Move: 2045 Transportation Plan* (Appendix H, page 1) and the TIP and both conform to the State Implementation Plan (SIP). Therefore, the conformity requirements of 40 CFR 93 have been met.

Mobile Source Air Toxics

The purpose of this project is to decrease traffic congestion and increase safety by constructing an additional travel lane in each direction, as well as a two-way left turn lane along US 20. This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxics (MSAT) concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that will cause an increase in MSAT impacts of the project from that of the No Build Alternative.

Moreover, Environmental Protection Agency (EPA) regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES2014 model forecasts a combined reduction of over 90 percent in the total annual emissions rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 45 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

Noise:

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

	No	Yes/ Date
ES Review of Noise Analysis		Yes, February 5, 2021

The addition of an added travel lane classifies the proposed project as a Type I project. Therefore, in accordance with the FHWA noise regulations (23 CFR 772) and the *INDOT Traffic Noise Procedure (2017)*, this action requires a traffic noise analysis.

INDOT approved a Traffic Noise Analysis report on February 5, 2021 (Appendix I, page 61). The latest version of the FHWA Traffic Noise Model, TNM® 2.5 (TNM), was used to model existing (2024) and design year (2044) worse (i.e., noisiest) hourly traffic noise levels within the US 20 study area.

Ninety-eight (98) noise receivers representing the 168 receptors were modeled in the existing and proposed conditions. The study area includes receivers located within 500 feet from the roadway.

Existing exterior noise levels range from 53.5 to 69.4 dB(A) Leq(1h). Predicted future exterior design year (2044) noise levels adjacent to the proposed project would approach or exceed the Noise Abatement Criteria (NAC) at 18 noise sensitive receptors. Predicted future exterior design year noise levels would range from 55.3 to 70.6 dB(A) Leq(1h). Predicted future exterior noise levels change over existing noise levels range from -0.7 to 4.0 dB(A). Therefore, none of the predicted future noise levels would substantially exceed existing noise levels. A reduction in predicted noise levels is shown at some receptor locations. This reduction is a result of splitting traffic volumes across multiple lanes within the model under the build alternative.

To address the predicted noise impacts, three noise barriers (Noise Barriers 1, 2 and 3) were modeled in the study area.

1. Noise Barrier 1 (NB-1) was evaluated in the vicinity of Westlake Drive to provide attenuation at nine impacted receivers (R5, R6, R11- R14, and R30 - R32). Noise Barrier 1 would be considered a feasible abatement measure and Noise Barrier 1 would achieve INDOT's design goal of 7.0 dB(A) reduction for a majority of the benefited first row receivers. Noise Barrier 1 would be approximately 1,317 feet in length and would average 18 feet in height. The estimated cost of Noise Barrier 1 would be approximately $710,940 or approximately $39,497 per benefited receptor. Because the cost per benefited receptor exceeded the maximum allowable cost of $25,000, Noise Barrier 1 was found to not be reasonable. Two variations of NB1 were modeled to evaluate separate noise walls east and west of Westlake Drive. Both iterations of NB1 were found to be not reasonable.
2. Noise Barrier 2 (NB-2) was evaluated north of US 20 at the intersection of US 20 and the Pumpkinvine Nature Trail. Noise Barrier 2 would provide abatement for one impacted receiver (R68). Noise Barrier 2 would be considered a feasible abatement measure and Noise Barrier 2 would achieve INDOT's design goal of 7.0 dB(A) reduction for the benefited first row receivers. Noise Barrier 2 would be approximately 904 feet in length and would average 16 feet in height. The estimated cost of Noise Barrier 2 would be approximately $434,070 or approximately $217,035 per benefited receptor. Because cost per benefited receptor exceeded the maximum allowable cost of $25,000, Noise Barrier 2 was found to not be reasonable.
3. Noise Barrier 3 (NB-3) was evaluated south of US 20 at the intersection of US 20 and the Pumpkinvine Nature Trail. Noise Barrier 3 would provide abatement for impacted receiver (R67). While Noise Barrier 3 would be considered a feasible abatement measure and Noise Barrier 3 would achieve INDOT's design goal of 7.0 dB(A) reduction for the benefited first row receivers.

Noise Barrier 3 would be approximately 903 feet in length and would average 16 feet in height. The estimated cost of Noise Barrier 3 would be approximately $433,320 or approximately $216,660 per benefited receptor. Because cost per benefited receptor exceeded the maximum allowable cost of $25,000, Noise Barrier 3 was found to not be reasonable.

Based on the studies thus far accomplished, the State of Indiana has not identified any locations for the US 20 Section 2 project where noise abatement is likely. Noise abatement has been found to be feasible, but not reasonable as the cost per benefited receptor exceeded the maximum allowable cost of $25,000. A reevaluation of the noise analysis will occur during final design. If during final design it has been determined that conditions have changed such that noise abatement is feasible and reasonable, the abatement measures might be provided. The final decision on the installation of any abatement measure(s) will be made upon the completion of the project's final design and the public involvement processes.

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 remarks box)	X	

The project is located in the Town of Middlebury, which is an urban portion of Elkhart County. The proposed project will require acquisition of approximately 12.3 acres of new permanent right-of-way. The right-of-way acquisition is not anticipated to have a substantial impact on the tax base or property values. The project will not result in substantial impacts to community cohesion as it will require only a single residential relocation and will not divide existing neighborhoods or change community access. There may be temporary inconveniences associated with construction, such as increased travel times, construction, noise, and fugitive dust. However, these will cease upon completion of construction activities.

According to the Fairs and Festivals website (www.fairsandfestivals.net), the Indiana Festivals website (https://www.indianafestivals.org/), and the Town of Middlebury website (http://www.middleburyin.com/attractions/festivals.php), accessed on November 4, 2020 by HNTB, there are three regularly scheduled festivals and events located within 10 miles of the project: Middlebury Summer Festival (August), Middlebury Fall Festival (September), and Hometown Holidays Annual Festival (November). The project includes a phased maintenance of traffic plan that allows for vehicular and bicycle traffic to be maintained for the duration of construction. Intersecting roads may be closed for a brief period; however, detours will be clearly marked and should not substantially impair travel routes to these fairs and festivals. Access to individual properties will be maintained, but typical delays in construction zones with reduced speeds and potential restrictions can be expected during construction of the project.

The Town of Middlebury's most recent Americans with Disabilities (ADA) transition/accessibility implementation plan was adopted in 2013 (http://www.middleburyin.com/community_information/americans_with_disabilities_act_information/index.php). The project will be designed in accordance with the plan and all applicable ADA requirements.

There is a known local Amish community that was identified as a key stakeholder and a community of concern during the environmental study process. The project will be designed with wider shoulders and sinuous rumble strips to accommodate buggy traffic and will equally benefit both the Amish and non-Amish

communities. Incorporation of these design elements into the preferred alternative were the result of coordination with the Amish Safety Committee (see the Environmental Justice section for additional detail).

Indirect and Cumulative Impacts:

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

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

The project will not affect traffic patterns after construction, provide new access to undeveloped lands, or result in changes in land use patterns. The project will not cause changes in neighborhoods or contribute to an increase in industrial, commercial, or residential development in the project area. Therefore, no substantial indirect or cumulative impacts are anticipated with this project.

Public Facilities & Services:

Public Facilities & Services	Yes	No
Will the proposed action result in substantial impacts on health and educational facilities, public and private utilities, emergency services, religious institutions, airports, public transportation or pedestrian and bicycle facilities? *Discuss how the maintenance of traffic will affect public facilities and services.*		X

Based on a desktop review, a site visit on October 14, 2019 by HNTB, the aerial maps of the project area (Appendix B, pages 3 to 8), and the RFI report (Appendix E, page 9), there are four religious facilities, four schools, four recreational facilities, one pipeline, one trail, one managed land, and one unmapped health facility located within the 0.5 mile search radius,. The following properties or resources are adjacent to or near the project area:

Health Facilities

One health facility, Goshen Physicians Family Medicine (Appendix B, page 6) is located adjacent to the project. Although right-of-way acquisition will be required from this property, the required right-of-way will be narrow strips of land near the existing US 20 roadway. Access to this facility will be maintained throughout construction. Therefore, no permanent negative effects to the use of this facility are anticipated.

Religious Facilities

Two religious facilities, Pathway Assembly of God Church and Crystal Valley Missionary Church (Appendix B, page 4 and 5), are located adjacent to the project. Although right-of-way acquisition will be required from both properties, the required right-of-way will be narrow strips of land near the existing US 20 roadway. Therefore, no permanent negative effects to the use of the facilities are anticipated. An early coordination letter was sent on November 20, 2019 to Pathway Assembly of God Church and on December 16, 2019 to Crystal Valley Missionary Church. The early coordination letter for Crystal Valley Missionary Church was re-sent via e-mail on November 13, 2020. No responses were received. Access to all religious facilities will be maintained during construction.

Schools

Northridge High School is located adjacent to the project area (Appendix B, page 3). An early coordination letter was sent on November 20, 2019 to Middlebury Community Schools. Middlebury Community Schools responded in a letter dated December 16, 2019 with several recommendations focusing on student safety. Despite the concerns and suggestions identified in the early coordination letter response, the Middlebury Community Schools also expressed general support for the project. Responses to the Middlebury Community School's comments were provided to the school on December 27, 2019 (Appendix C, pages 11 to 13). Recommendations from the school, and the INDOT response to these recommendations are summarized below.

Recommendations from the school are summarized below:

- The lack of barrier/fencing along the north side of US 20 and student crossings of a widened US 20 create concerns for student safety.
- A median cross walk with a median island should be considered between CR 35 and the traffic signal at Wayne Street (CR 16).
- A traffic signal installation at US 20 and Wayne Street (CR 16) would be beneficial for safety.
- The speed limit on US 20 should be adjusted in consideration of pedestrian crossings near the high school and Heritage Drive.
- The additional turn lane will help despite increasing the distance of roadway width to travel.
- Access to the school's transportation maintenance garage near US 20 and Wayne Street (CR 16) both during and after construction will be required.
- Any potential impacts to Heritage Drive and the soccer fields and parking areas north of US 20 would be of particular concern.

Responses from INDOT are summarized below:

- Construction of barrier fencing along the north side of US 20 is beyond the scope of this project and has not been incorporated into the project.
- A sidewalk and pedestrian crossing of US 20 between CR 35 and Wayne Street (CR 16), along with modifying the Heritage Drive intersection to only allow or the right-out movement to US 20 will be included in the design of the project (Appendix B, pages 3 and 4).
- The proposed project will straighten the curve in the road in the vicinity of US 20 and Wayne Street (CR 16). The intersection of US 20 and Wayne Street (CR16) will continue to be signalized after the project is complete.
- This project is being designed for 50 MPH with a posted speed limit of 45 MPH. A school zone speed limit is being considered to reduce the enforceable speed limit during school days.
- With the increase of traffic along US 20, a 2nd travel lane in each direction is needed. A center two-way left turn lane will be installed for vehicles to safely turn left at driveways and side roads. The traffic signal at CR 35 can also be used to access the subdivision to the south.
- Temporary access will be maintained during construction, and all existing access points along US 20 will be preserved with the project.
- Straightening the curve at US 20 and Wayne Street (CR 16) will move the road further south than the existing location. Impacts to the north side of the road will be minimal and there will be no impact to the parking lot or athletic fields.

The proposed project will acquire right-of-way from the Middlebury Community Schools and, at the request of the Middlebury Community Schools, the US 20/Heritage Drive will be revised to only allow for the right-out movement to US 20. The acquisition will be narrow strips of land that are currently as mowed lawn near the existing US 20 roadway. Heritage Drive will continue to provide access from the school to the parking lot and athletic fields during construction. Therefore, no permanent negative effects to the use of the school facilities are anticipated. Access to all schools and appurtenant facilities will be maintained for the duration of construction. All applicable Middlebury Community Schools recommendations are included in the Environmental Commitments section of this CE document.

Recreational Facilities

Das Dutchman Essenhaus is a restaurant, hotel, and conference center located adjacent to the project area (Appendix B, page 4). An early coordination letter was sent on November 20, 2019 to Das Dutchman Essenhaus. Das Dutchman Essenhaus responded in a letter dated January 2, 2020 that consideration should be given to removing the utility poles and replacing them via installation of underground conduit to accommodate utilities. The proposed project will acquire right-of-way from Das Dutchman Essenhaus. The acquisition will be narrow strips of land near the existing US 20 roadway. Therefore, no permanent negative effects to the use of the facility are anticipated. Access to the property will be maintained during construction. The feasibility of relocating the utilities underground will be evaluated during final engineering design development. This has been added as a "for further consideration" commitment in the Environmental Commitments section of this CE. All applicable Das Dutchman Essenhaus recommendations are included in the Environmental Commitments section of this CE document.

Pipelines

One pipeline, owned by Northern Indiana Public Indiana Gas Company, crosses the project 0.18 mile south of the US 20 and CR 16 intersection (Appendix B, page 4). Utility coordination has been initiated by HNTB and is ongoing.

Trails / Managed Lands

Two trails/managed lands, the Pumpkinvine Nature Trail and Ridge Run Trail, are located both within and adjacent to the project area. The Pumpkinvine Nature Trail crosses under US 20 approximately 500 feet west of CR 22, between CR 22 and Orpha Drive The Ridge Run Trail runs parallel to the north side of US 20 for approximately 660 feet between the Pumpkinvine Nature Trail and an existing driveway to the west (Appendix B, page 7).

An early coordination letter was sent on November 20, 2019 to Middlebury Parks and Recreation Department and Middlebury Town Council. No response was received from the Parks and Recreation Department. The Middlebury Town Council responded in a letter dated December 16, 2019 with three comments concerning the Pumpkinvine Nature Trail, the Ridge Run Trail, and a potential future multi-use trail connecting the Spring Valley Neighborhood to the Pumpkinvine Nature Trail. These three comments are summarized below:

- The letter stated that the Pumpkinvine Nature Trail is used extensively throughout the year for recreational and commuting purposes; that a safe detour during construction will be important to accommodate these trail users; and that the addition of lighting should be considered due to the lengthening of the tunnel under US 20. Access to this resource will be maintained during construction through implementation of a detour. Cyclists and pedestrians using the trail during construction will be accommodated via a temporary detour. During the environmental review process, a detour route was developed in coordination with the OWJ and other stakeholders. This detour, which will meet the design criteria for a multi-use path, will begin at the trailhead near the intersection of CR 22 and CR 37, south of US 20. From this trailhead, the detour will be routed east utilizing the westbound shoulder of CR 22. The westbound shoulder of CR 22 will be widened to

provide safe separation between pedestrian and vehicular traffic. The detour will continue east through the intersection of US 20 and CR 22 before turning north up the residential driveway of the residence at 130 1/2 Orpha Drive and connecting back to the Pumpkinvine Nature Trail (see Appendix I, page 52).

Further details associated with the detour route including, but not limited to, signage and anticipated closure dates will be coordinated with the OWJ and residential landowner during the final engineering design and land acquisition phases of the project.

- The letter stated a concern among residents regarding how the project will affect the Ridge Run Trail. Access to this resource will be maintained during construction. The trail will continue to be open and available for public use during construction by constructing the new trail and new connection to the Pumpkinvine Trail prior to closure and demolition of the existing Ridge Run Trail.
- The letter stated that a multi-use trail may need to be constructed connecting the Spring Valley Neighborhood to the Pumpkinvine Nature Trail. The proposed design will provide a pedestrian connection between the Spring Valley neighborhood and Wayne Street (CR 16) via a combination of proposed sidewalks on the south side of US 20, a designated pedestrian crossing with a HAWK signal just west of Spring Valley Drive, and proposed sidewalks on the north side of US 20. The inclusion of additional infrastructure to completely connect Spring Valley Neighborhood with the Ridge Run Trail, which connects to the Pumpkinvine Nature Trail, will be considered during the final design of the project. This has been added as a "for consideration" commitment in the Environmental Commitments section of this CE document.

Emergency Services

Emergency services within the project area are provided by the Middlebury Township Fire and Emergency Management Services (EMS). An early coordination letter was sent on November 20, 2019 to Middlebury Township EMS. No response was received.

Utilities

Water, sewer, gas, electric, cable, fiber optic, and telephone utility lines are present throughout the project area. Utility coordination has been initiated for the project and several utilities attended a preliminary field check meeting on November 4, 2020 (Appendix I, pages 33 to 45). Utility coordination will continue through the final design of the project.

There are no airports, public transportation facilities, or pedestrian and bicycle facilities, other than those discussed above, within the project area.

The MOT plan for the project may pose delays and temporary inconveniences to traveling motorists (including school buses and emergency services); however, all inconveniences will cease upon project completion. The MOT is not expected to substantially impact public facilities or services.

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.

Amish Mobility

To support the needs of the local Amish community the project includes wider shoulders and sinuous rumble strips to accommodate buggy traffic. Incorporation of these design elements into the preferred alternative were the result of coordination with the Amish Safety Committee (see the Community Impacts section for additional detail).

Environmental Justice (EJ):

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 or disproportionate impacts to EJ populations?		X

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent right-of-way. The project will require 19.6 acres of permanent and temporary right-of-way and one residential relocation. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exists and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Elkhart County. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 8.02. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the 2018 American Community Survey 5-Year Estimates was obtained from the US Census Bureau Website https://data.census.gov/cedsci/ on November 13, 2020 by HNTB. The data collected for minority and low-income populations within the AC are summarized in the below table.

Summary of Minority and Low-income Populations

	COC - Elkhart County, Indiana	AC - Census Tract 8.02, Elkhart County, Indiana
Percent Minority	24.9%	7.1%
125% of COC	31.2%	AC < 125% COC
EJ Population of Concern		No
Percent Low-Income	13.3%	2.5%
125% of COC	16.7%	AC < 125% COC
EJ Population of Concern		No

The AC, Census Tract 8.02, has a percent minority of 7.13% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain minority populations of EJ concern.

The AC, Census Tract 8.02, has a percent low-income of 2.51% which is below 50% and is below the 125% COC threshold. Therefore, the AC does not contain low-income populations of EJ concern.

Although the EJ analysis that was performed using US Census data did not identify any low-income or minority EJ populations within the project area, there is a known local Amish community that is considered to be a population of concern. Amish populations were identified in the 2019 MACOG Environmental Justice report (http://www.macog.com/docs/about/ej/2019_EJ-report_v.pdf) that utilized a method for identifying EJ communities based on "Indicators of Potential Disadvantage" (IPD). In addition to minority and low-income populations, the report considered carless households and limited English proficiency as two of several IPDs for EJ analysis. The Amish population generally falls into those two IPDs and thus was identified as a population of potential EJ concern for the US 20 Section 2 project.

Although the Amish population generally falls into two IPDs, the specific location of this project was not identified in the MACOG Environmental Justice report as being above average in potential disadvantage.

INDOT has developed a project-specific Public Involvement and Stakeholder Engagement Plan for the US 20 Section 2 project (Appendix G, page 5). This plan details the public outreach that will be conducted during the project development process. This outreach includes a direct line of communication with the Amish community via the Amish Safety Committee.

In general, outreach to the Amish community has consisted of regular phone conversions between the project team and representatives of the Amish Safety Committee. The Safety Committee serves to provide best practice guidance to the Amish community on the safe navigation of roadways and any upcoming road closures and detour routes. The Safety Committee also provides suggestions to INDOT and local road departments on how roadways can best accommodate horse drawn buggy traffic. For this project, the Safety Committee recommended the use of sinuous rumble strips that are easier for buggies to cross and providing shoulders that can withstand horse drawn buggy use without forming ruts. These design elements have been incorporated into the preferred alternative.

Conclusion

The US 20 Section 2 project will require right-of-way acquisition and a single residential relocation. The project will not disrupt community cohesion, nor will it create a physical barrier within the community. These adverse impacts, when considered in the context of the total US 20 improvement project from SR 15 to approximately 315 feet west of SR 13, are not anticipated to disproportionately affect Amish populations in the project area. Furthermore, the design of the preferred alternative for both Section 1 and Section 2 includes wider shoulders and sinuous rumble strips to accommodate buggy traffic. These design elements will improve safety for all roadway users, as well as provide additional mobility benefits for Amish communities. As a result of these considerations, the US 20 project will not result in disproportionately high and adverse impacts to Amish populations.

The census data sheets, map, and calculations can be found in Appendix I, pages 92 to 98. No further environmental justice analysis is warranted.

Relocation of People, Businesses or Farms:

	Yes	No
Will the proposed action result in the relocation of people, businesses or farms?	X	
Is a Business Information Survey (BIS) required?		X
Is a Conceptual Stage Relocation Study (CSRS) required?		X
Has utility relocation coordination been initiated for this project?	X	

Number of relocations: Residences: 1 Businesses: 0 Farms: 0 Other: 0

The proposed project is anticipated to require one residential relocation (Appendix B, page 6). Avoidance and minimization measures will be further explored as design progresses. The acquisition and relocation program will be conducted in accordance with 49 CFR 24 of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended. Relocation resources are available to all residential and business relocatees without discrimination. No person displaced by this project will be required to move from a displaced dwelling unless comparable replacement housing is available to that person.

Utility coordination has been initiated and is ongoing. Based on a review of the RFI approved on March 31, 2020, there are two pipelines in the 0.5-mile search radius. One pipeline, owned by Northern Indiana Public Service Co. (NIPSCO), crosses the project 0.18 mile south of the US 20 and CR 16 intersection (see Appendix E, page 9). Additional utilities adjacent to and within the project area include: municipal sewer and water (Town of Middlebury), fiber optic lines (AT&T, CenturyLink, Community Fiber Network, RVP

Fiber Company, and possibly Elkhart Fiber), and electric poles and transmission lines (NIPSO). Utility relocation work plans are in preparation and will be executed. All utility relocations will be completed prior to construction.

Impacts to residential units, businesses, farms, and other properties for US 20 Section 1 and Section 2 are summarized in the Impact Summary Table in Appendix I, page 1.

Hazardous Materials and Regulated Substances:

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

	No	**Yes/ Date**
ES Review of Investigations		RFI - Yes/March 31, 2020 Phase II ESA – 1/12/2021

Based on a review of GIS and available public records, a RFI was completed on March 31, 2020 by HNTB (Appendix E, pages 1 to 14). Three RCRA Generator/TSD sites, two Underground Storage Tank (UST) sites, one Voluntary Remediation Program site, one Solid Waste Landfill, one Leaking Underground Storage Tank (LUST) site, one Institutional Controls site, and seven National Pollutant Discharge Elimination System (NPDES) facilities are located within 0.5 mile of the project area. One LUST site and one NPDES facility are located in the project area and could potentially impact this project.

- Leaking Underground Storage (LUST) Sites: One (1) LUST is located within the 0.5 mile search radius. Long Convenience, 995 US Highway 20, AI # 33707, is the site of a gas station. According to the IDEM Virtual File Cabinet (VFC), IDEM issued a No Further Action Approval Determination Pursuant on November 15, 2007. Low levels of soil contamination may still remain on the site in the south west portion of the canopy. If excavation occurs in this area, that petroleum contamination may be encountered. Proper handling, removal, and disposal of soil and/or groundwater may be necessary.
- NPDES Facilities: BP Gas Station and Convenience Store is adjacent to the southern portion of the project area. BP Gas Station and Convenience Store's permit is effective until October 28, 201. Coordination with BP Gas Station and Convenience Store will occur during final design.

During geotechnical investigations by Earth Exploration, Inc. (EEI), field staff collected soil samples in the range of 7 to 11.5 feet below existing grade at one of the borings in the area of the intersection of US 20 and Wayne Street (CR16) Street that exhibited a suspected petroleum odor. Review of available IDEM VFC and UST database records and available aerial photographs from the area completed by EEI indicated that a large apparent commercial building south of US 20 and east of US 16 existed in 1998 and was removed by 2003. INDOT Site Assessment & Management (SAM) was notified of these findings and conducted research in the area. INDOT SAM found that the removed building was a Recreational Vehicle (RV) frame manufacturer and that several gas stations were located on the east side of US 20 in this area as late as the early 1970s. INDOT SAM requested soil and groundwater investigation for both petroleum and chlorinated solvents related compounds to a maximum depth of 10 feet below the existing ground surface.

A Phase II Environmental Site Assessment (ESA) was completed by Terracon Consultants, Inc. and approved by INDOT SAM on January 12, 2021 (Appendix E, pages 16 to 32). The Phase II ESA concluded that soil and groundwater associated with the site are not thought to pose a risk to worker health during

construction activities. If dewatering is required during construction activities, water may be able to be discharged to sanitary sewers pending agreement from the appropriate regulatory body in the area. Additionally, excess soil and groundwater produced as investigation derived waste or during the construction of the proposed road improvements can be classified as nonhazardous waste and disposed of accordingly.

Permits:

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

Based on the preliminary permit determination from INDOT EWPO, received on November 18, 2020 (Appendix F, page 11 to 12), a USACE Regional General Permit (RGP) and IDEM Individual Water Quality Certification (WQC) will likely be required due to impacts to Wetland A and Pond A. An IDEM Rule 5 permit will also be required. As noted above, the permitting process for US 20 Section 1 is underway. As a result, coordination with USACE and IDEM will continue through project development to determine the appropriate permitting process of US 20 Section 2.

Applicable recommendations provided by resource agencies are included in the Environmental Commitments section of this document. If permits are found to be necessary, the conditions of the permits 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.

Commitments:

The environmental commitments in the CE-4 approved for the US 20 Section 1 project document still apply to the US 20 Section 1 Project (Des. No. 1600517), the US 20 Section 1 building demolition contract (Des. No. 1802043), and the US 20 Section 1 tree clearing contract (Des. No. 1802045). The following environmental commitments identified during the development of US 20 Section 2 are applicable to Des. No. 1900095 (Lead Des. No.), Des. No. 2000038 (Pumpkinvine Nature Trail), and the Des. No. for the tree clearing contract (To Be Determined).

Firm:

1. If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division (ESD) and the INDOT District Environmental Section will be contacted immediately. (INDOT)
2. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction activity that would block or limit access. (INDOT)
3. To minimize impacts to the Blanding's Turtle, an entrenched silt fence should be placed between the road and the adjacent wetlands near Spring Valley Road and should remain in place through the duration of the project. If these wetlands are to be filled in their entirety, then they should be live-trapped for turtles prior to filling, and any turtles captured should be relocated to nearby areas of suitable habitat. Removal of any state endangered species and eastern box turtles would require a permit issued by the Division of Fish and Wildlife. (IDNR – DFW)
4. Coordination with BP Gas Station and Convenience Store, located at 995 US 20, Middlebury, IN 46540, will occur prior to the projects Ready for Contracts (RFC) date. (INDOT SAM)
5. The project will be designed with wider shoulders and sinuous rumble strips to accommodate buggy traffic. (INDOT)
6. It is recommended that during construction appropriate safeguards are in place to ensure that ground water is not endangered. Such safeguards would include securing adequate precautions for fueling/servicing large equipment, using "green infrastructure" practices where possible, and developing contingency plans to handle the release of any hazardous materials. (US EPA)
7. In the event the proposed detour route for the Pumpkinvine Natural Trail becomes infeasible during final design, the coordination with the OWJs will be re-initiated and a suitable alternative detour route will be developed for OWJ concurrence. (INDOT ESD)
8. USFWS Bridge/Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after October 14, 2021, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD)
9. 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 Avoidance and Minimization Measures. (USFWS)
10. Tree Removal AMM 1: Modify all phases/aspects of the project (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
11. Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. Tree removal may not occur during the active season for bats, which extends from April 1st through September 30th. (USFWS)
12. 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)

13. 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)
14. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
15. Lighting AMM2: 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)

For Further Consideration:

16. Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10" diameter at breast height (dbh) or greater (5:1 mitigation based on the number of large trees). (IDNR – DFW)
17. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 3 inches dbh, living or dead) from April 1 through September 30. (IDNR-DFW)
18. Evaluate the feasibility of removing the utility poles and installing underground conduit to house the utilities. This would decrease the frequency of power outages, provide for safer travel of vehicles, and improve the aesthetics of our community. (Essenhaus Inc.)
19. The inclusion of additional infrastructure to completely connect Spring Valley Neighborhood with the Ridge Run Trail will be considered during the final design of the project. (Town of Middlebury)
20. A school zone speed limit is being considered to reduce the enforceable speed limit during school days. (Middlebury School District)

Early Coordination:

Early coordination for US 20 Section 2 was initiated on November 20, 2019 with federal, state, and local agencies (Appendix C, pages 1 to 3).

Agency	Response Received	Appendix Location
IDNR – Division of Fish and Wildlife	December 19, 2019	Appendix C, pages 19 to 20
IDNR – Division of Outdoor Recreation	No response received	N/A
INDOT– Public Involvement Office	No response received	N/A
INDOT – Ft. Wayne District	December 9, 2019	Appendix C, page 5
INDOT – Central Office	November 22, 2019	Appendix C, page 4
INDOT – Utilities and Railroad	No response received	N/A

USACE – Detroit District	No response received	N/A
Indiana Geological Survey (IGS)	November 9, 2019	Appendix C, pages 30 to 32
USEPA, Ground Water and Drinking Water Branch	December 10, 2019	Appendix C, page 8
USDA-NRCS	November 27, 2019	Appendix C, page 6
USFWS, Chesterton Field Office	November 27, 2019	Appendix C, page 7
Middlebury Town Manager via the Middlebury Town Council Response	December 16, 2019	Appendix C, page 14 to 15
IDEM Auto Response	November 9, 2020	Appendix C, pages 23 to 29
Elkhart County Surveyor	No response received	N/A
Elkhart County Sheriff	No response received	N/A
Elkhart County Highway Department	No response received	N/A
Middlebury Community Schools	December 16, 2019	Appendix C, pages 9 to 10
Essenhaus, Inc.	January 2, 2020	Appendix C, page 21
US Department of Housing and Urban Development	No response received	N/A
Elkhart County Soil and Water Conservation District	No response received	N/A
Greater Elkhart County Storm Water Partnership	No response received	N/A
Elkhart County Planning and Development	No response received	N/A
Middlebury Parks and Recreation Department	No response received	N/A
Amish Safety Committee	No response received	N/A
Middlebury Water Department	No response received	N/A
Elkhart County Emergency Management	No response received	N/A
Pathway Assembly of God	No response received	N/A
Crystal Valley Missionary Church	No response received	N/A

Michiana Area Council of Governments (MACOG)	No response received	N/A
Northridge High School	No response received	N/A

Conclusion:

This AI document was prepared to analyze and document the potential impacts associated with the additional roadway improvements proposed on US 20 from approximately 565 feet east of CR 35 to approximately 315 west of SR 13 (Des. No. 1900095; referred to as Section 2). The impacts documented in this AI are considered additive to those contained the approved CE-4 prepared for the US 20 Section 1 Project (Des. No. 1600517). In total, US 20 Section 1 and Section 2 will improve US 20 from SR 15 to approximately 315 feet west of SR 13.

The additional roadway improvements in US 20 Section 2 will result in increases to right-of way acquisition, open water impacts, wetland impacts, terrestrial habitat impacts, Section 4(f) impacts, and an additional residential relocation. There are no additional adverse impacts to environmental features or communities of concern other than those outlined in this document. Unless specifically discussed and addressed in this AI, all information provided, and statements made in the approved CE-4 for US 20 Section 1 remain valid. Additionally, all environmental commitments identified in the approved CE-4 for US 20 Section 1 remain valid for US 20 Section 1 Project (Des. No. 1600517), the US 20 Section 1 building demolition contract (Des. No. 1802043), and the US 20 Section 1 tree clearing contract (Des. No. 1802045). The environmental commitments identified in this AI are applicable to No. 1900095 (Lead Des. No.), Des. No. 2000038 (Pumpkinvine Nature Trail), and the Des. No. for the tree clearing contract (To Be Determined).