

CATEGORICAL EXCLUSION LEVEL 1 FORM

GENERAL PROJECT INFORMATION

Road No./County:

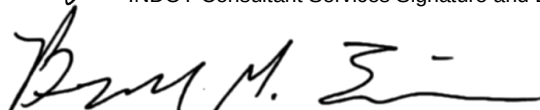
United States Route (US) 41 and Indiana State Route (SR) 18, Benton

Designation Number(s):

2100059

Project**Description/Termini:**

Intersection improvement project at US 41 and SR 18. The project will extend from 0.16 mile south of SR 18 to 0.17 mile north of SR 18.

☒**CE Level 1 documentation for
exempted projects****Additional Information
to CE Level 1****Approval:**
7/17/2025
INDOT DE/ESD Signature and Date**Release for Public Involvement:**
9/23/2024
INDOT DE/ESD Initials and Date**Certification of Public involvement:**
6/26/2025
INDOT Consultant Services Signature and Date**INDOT DE/ESD Reviewer:**
7/17/2025
Signature and Date**CE Preparer:**Chad Kelly, Kaskaskia Engineering Group, LLC
Name and Organization

Indiana Department of Transportation

County Benton Route US 41 Des. No. 2100059

GENERAL PROJECT INFORMATION, DESCRIPTION, AND DESIGN INFORMATION	
Purpose and Need:	<p>The need for this project is due to high crash rates at the subject intersection. Per the October 2021, Abbreviated Engineering Assessment Report, this intersection was identified as a concern due to one fatal accident, three incapacitating injury accidents, and four property damage occurrences over a three-year span. The three-year data collection resulted in an Index of Crash Cost (ICC) of 1.66 out of 3.00 and an Index of Crash Frequency (ICF) of 1.60 out of 3.00, which is considered high compared to similar intersections (Appendix I, page 16). ICF and ICC data is measured in standard deviations. ICF is a measurement of differences between the number of expected and reported crashes at this type of intersection. ICC is a measurement of the difference in expected costs and reported costs and is an indication of crash severity. A value of zero indicates that accidents at the intersection are typical and generally expected.</p> <p>The purpose of this project is to reduce the number of traffic collisions, improving the ICF and ICC to 1.00 or below, and provide a long-term solution to ensure safe and sufficient operation of the intersection.</p>
Project Description (Preferred Alternative):	<p>The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) intend to proceed with an intersection improvement project, which includes the construction of a reduced conflict intersection (RCI) along with drainage and lighting improvements.</p> <p>The project is located 0.16 mile south of SR 18 and 0.17 mile north of SR 18 in Sections 12 and 13 of Township 25 North, Range 9 West, in Parish Grove Civil Township, and Section 7 and 18 of Township 25 North, Range 8 West, in Center Civil Township, Benton County, Indiana, illustrated in the USGS 7.5-Minute Boswell Quadrangle Map (Appendix B, page 3)</p> <p>The project is located in a rural area consisting predominantly of agricultural land, with farmsteads to the north and a utility substation to the southeast. This section of US 41 is a four-lane rural principal arterial road, and SR 18 is a two-lane rural state collector road. The existing US 41 cross section consists of four 12-foot lanes, divided by a vegetated median with a four-foot inside paved shoulder, a 10-foot outside paved shoulder, and left and right turning lanes in the northbound and southbound directions. The existing SR 18 cross section consists of two 12-foot lanes with eight-foot gravel shoulders. US 41 is free-flow traffic northbound and southbound, while SR 18 is stop controlled eastbound and westbound via stop signs.</p> <p>Per the October 2021, Abbreviated Engineering Assessment Report, the intersection experiences elevated crash rates with a pattern of right-angle crashes. Crash data from 2018 to 2020 was analyzed at this intersection. During this time period, one crash resulted in a fatality, three of these crashes resulted in incapacitating injuries, and four crashes resulted in property damage only. This resulted in the RoadHAT analysis and the aforementioned ICF value of 1.60 and ICC value of 1.66, as outlined in the purpose and need section.</p>

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	<p>The preferred alternative for this project will convert the existing intersection into an RCI intersection. This intersection design prohibits direct through movements of traffic of SR 18, and will require drivers to turn right from SR 18 onto US 41, and then conduct a U-turn maneuver at a one-way median opening at least 400 feet after the intersection.</p> <p>Raised medians will be installed at the intersection of US 41 and SR 18. The medians will restrict the left turn and through movements along SR 18. The only allowable movement from SR 18 will be a right turn onto US 41. Traffic that previously indicated a left turn onto US 41 and straight-through traffic on SR 18 will now proceed to the proposed median turns to make a U-turn movement. Traffic will continue to free flow on US 41 and left turns onto SR 18 will still be allowed. SR 18 will remain stop controlled with the use of stop signs, but only right turns will be permitted. Raised islands will be installed on SR 18 to ensure traffic is right turn only.</p> <p>Median turns will be added to the north and south of the intersection to allow motorists on SR 18 to be able to perform a U-turn movement. The median turns will be regraded and paved with asphalt and concrete. Curb and gutter will be used to propagate drainage. Loons will be added along the outside shoulder to provide enough pavement width for trucks to maneuver the turnaround movement. The existing side slopes where the loons will be located will be widened, regraded, and reseeded.</p> <p>Drainage improvements will include new 48-inch culverts that will be installed under either approach to SR 18. Inlets will be installed in the existing grassy median and connected to 15-inch to 24-inch pipes to convey drainage beneath US 41 to the roadside ditches. Some ditch grading will be required at the proposed loon locations.</p> <p>Utility relocations for utility poles may be required at the corners of the existing intersection. Intersection improvements will also include new lighting, pavement markings, signage, and landscaping to better delineate the revised approaches at the intersection. Proposed lighting will include 16 new LED light poles along the outside of US 41 between the median turn locations. Light poles will be 40 feet high with an eight-foot mast arm. Preliminary project plans are included in Appendix B, pages 29 to 58.</p> <p>The proposed maintenance of traffic (MOT) will include a single lane closure in each direction along US 41 with a complete closure of SR 18, utilizing a detour using SR 352, SR 71, and US 52 (Appendix B, pages 34 to 43). The MOT for the project is discussed in further detail in the MOT During Construction section of this document.</p> <p>The project will not require the acquisition of permanent or temporary right of way. Since the project will disturb at least one acre of soil, a Construction Stormwater General Permit (CSGP) will be required. Every effort to avoid, minimize, and/or mitigate project impacts will be made.</p>
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	<p>The project is anticipated to reduce crash potential, improve the ICF and ICC to below 1.00, and provide a long-term solution to ensure safe and efficient operation of the intersection. This would improve overall safety in the area and meets the purpose and need.</p> <p>The project construction limits extend from 0.16 mile south of US 41 to 0.17 mile north of US 41, and 0.03 mile east and west of SR 18, which are the logical termini for the project since these are the rational end points of the transportation improvement and subsequent review of its environmental impacts.</p> <p>The project has independent utility because the outcome of this project is not associated with the outcomes of other projects. It has a functional purpose and is a reasonable expenditure, regardless of any other current or planned transportation improvements.</p>
Other Alternatives Considered:	<p>No Build: The no build alternative would not improve the vehicular accident occurrences at the intersection. The no build alternative does not address vehicular safety and will not meet the purpose and need. Therefore, this alternative was discarded.</p> <p>Traffic Signal: The traffic signal alternative would be expected to cause excessive delays at the intersection, higher crash rates compared to the preferred alternative, and may result in disobedience of the signal in a rural area. The traffic volumes at the intersection do not likely warrant a signalized intersection. This alternative does not address vehicular safety and will not meet the purpose and need. Therefore, this alternative was discarded.</p> <p>Median U-Turn (MUT) Intersection: The MUT intersection alternative refers to any intersection replacing direct left turns at an intersection with indirect left turns using a U-turn movement in a wide median (Appendix I, page 8). This alternative would eliminate left turns from SR 18 onto US 41 and vice versa, reducing the number of conflict points at the main crossing intersection. This alternative would require drivers on SR 18 to turn right onto the main road and then proceed to make a U-turn maneuver at a one-way median opening, at least 400 feet after the intersection. This alternative will experience a reduction in accidents; however, the MUT alternative has no physical restriction to stop traffic from turning left at the intersection so the presence of law enforcement may be encouraged for a longer duration upon opening the new intersection. The MUT alternative meets the purpose and need but does not close off the US 41 median to through traffic on SR 18, which will do little in reducing vehicular collisions. Therefore, this alternative was discarded.</p> <p>Multi-Lane Roundabout: The Multi-Lane Roundabout alternative would widen two entry lanes on SR 18 to allow more vehicles to enter the roundabout. This alternative is not well suited for high truck volumes combined with higher speeds on US 41</p>

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	compared to the low volumes of traffic on SR 18. Trucks traversing US 41 would be forced to slow down and navigate a roundabout with little traffic on side roads. This alternative is also anticipated to receive political opposition from local stakeholders, the general public, and from truck drivers who regularly use this route. Maintenance of traffic will require greater detail and will likely require right-of-way acquisition. Therefore, this alternative was discarded.		
Funding Source(s):	☒ Federal	☒ State	☐ Local ☐ Other
Project Sponsor:	Indiana Department of Transportation		
Estimated Cost:	\$2,950,000.00	Project Length:	0.33 mile
Public Involvement:	No:		Yes: X
<p>Notice of Survey letters were mailed to potentially affected property owners near the project area on September 21, 2022, 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, page 1.</p> <p>The project meets the minimum requirement described in the current <i>Indiana Department of Transportation (INDOT) Project Development Public Involvement Procedures Manual</i>, which required the project sponsor to offer the public an opportunity to submit comments and/or request a public hearing. INDOT decided to hold a public hearing for this project; therefore, a hearing for the project occurred, and a legal notice appeared in the local publication after the release of this document for public involvement. The hearing was advertised in the <i>Benton Review</i> on April 2, 2025, and April 16, 2025 (Appendix G, pages 4 to 6). The hearing notice was also distributed via mail to early coordination recipients, consulting parties, project stakeholders, local public library, and adjacent property owners (Appendix G, pages 10 to 11). Additionally, project information was published on INDOT's webpage on April 5, 2025, along with the released environmental document and preliminary design plans.</p> <p>An in-person public hearing was held on Wednesday, April 23, 2025, at the Benton Central Jr./Sr. High School auditorium located at 4241 E. 300 S. in Oxford, Indiana. Six people signed up to speak at the public hearing (Appendix G, page 49). The public hearing featured an information open house session where the public could review pertinent project materials such as project plans and a project fact sheet (Appendix G, page 47), provide written comments via a comment form, and speak with the project team. The open house was immediately followed by a formal presentation (Appendix G, pages 12 to 46), and a subsequent public comment session. Comments were accepted until May 7, 2025. Twenty-six comments were received regarding this project during the public hearing comment period, via in person at the hearing, mail, or email, prior to the May 7, 2025, comment period deadline. The comments were concerned about the selection process of the preferred alternative, alternative roadway recommendations, project dimensions not accommodative to larger vehicles, concerns of vehicles traversing in the wrong direction on US 41, navigation difficulties in adverse weather conditions, concerns the project will result in more vehicular crashes, and project cost. INDOT and designer responses to public comments are included in Appendix G, pages 50 to 64. After the public comment period ended on May 7, 2025, a request for certification was sent to the INDOT Crawfordsville District Consultant Services Manager on June 26, 2025.</p> <p>The public involvement process for this project has been completed. A Notice of Approved Environmental Document (Notice of Project Advancement) is required after approval of this CE. Notification will be made</p>			

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through the same means as the Notice of Public Hearing, including publishing in the Benton Review newspaper, mailing and emailing notices to early coordination recipients, consulting parties, stakeholders, and property owners, and updating the project website to include this notice and the approved CE.

Right-of-Way:	No: X	Yes:
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The existing right-of-way (ROW) on SR 18 is approximately 40 feet from each side of the centerline throughout the project. The existing ROW on US 41 north leg and south leg is 100 feet from each side of the centerline throughout the project. The existing ROW consists of scrub shrub, mature trees, and forested acreage, typical of what is adjacent to a rural state highway.

This project will occur within existing ROW. No permanent or temporary ROW will be required for this project.

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 (MOT) During Construction:	No:	Yes: X
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The MOT for the project will consist of phased single lane closures in each direction along US 41 with a complete closure for SR 18, utilizing SR 352, SR 71, and US52 (Appendix B, page 34 to 43). The detour for traffic using SR 18 will add approximately 27 miles and approximately 34 minutes to commuter travel. Construction is anticipated to last for a duration of six months.

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

Bridge(s) and/or Small Structure(s) (include structure number(s)):	No:	Yes: X
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Two concrete cast-in-place continuous bridges (Str. 041-04-05991 CNBL, NBI 015380; Str. 041-04-05991 JCSB, NBI 015385) built in 1971 and 1976, respectively, are present within the project area. Str. 041-04-05991 CNBL is 90 feet in length with an out-to-out width of 46.5 feet. Str. 041-04-05991 JCSB is 92 feet in length with an out-to-out width of 64.5 feet. There is no proposed work planned for these structures, and they will not be impacted by the project.

Four small structure culverts are present within the project area (CLV-33896, CLV-33884, CLV-16825, and CLV-16821). No features of these structures qualify for historical eligibility. Culverts present within the project area with a poor condition rating, which include CLV-16821 and CLV-16825, will be replaced as part of this project. CLV-16821 is 36 inches in diameter, while CLV-16825 is 30 inches in diameter. Both culverts are corrugated metal pipe (CMP) culverts and will be replaced with 48-inch diameter Type 1 pipes.

No other structures are involved with this project.

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IDENTIFICATION AND EVALUATION OF IMPACTS			
Early Coordination:			
Early coordination letters were sent on January 26, 2023 (Appendix C, pages 1 to 2).			
<u>Agency</u>	<u>Date Sent</u>	<u>Date Response Received</u>	<u>Appendix</u>
Federal Highway Administration (FHWA)	January 26, 2023	No response received	N/A
United States Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS)	January 26, 2023	January 31, 2023	Appendix C, pages 3 to 5
Indiana Department of Natural Resources – Division of Fish and Wildlife (IDNR-DFW)	January 26, 2023	February 24, 2023	Appendix C, pages 6 to 9
Indiana Department of Transportation (INDOT) – Crawfordsville District Senior Environmental Manager Supervisor	January 26, 2023	No response received	N/A
US Forest Service – Hoosier National Forest	January 26, 2023	No response received	N/A
National Park Service	January 26, 2023	No response received	N/A
U.S. Department of Housing & Urban Development	January 26, 2023	No response received	N/A
U.S. Army Corps of Engineers (USACE) – Louisville District	January 26, 2023	No response received	N/A
Indiana Geological and Water Survey (IGWS)	January 26, 2023	February 2, 2023	Appendix C, pages 10 to 11
Indiana Department of Environmental Management (IDEM) - Groundwater Section	January 26, 2023	February 1, 2023	Appendix C, pages 12 to 13
IDEM – Wetlands and Stormwater Programs	January 26, 2023	No response received	N/A
INDOT - Project Manager	January 26, 2023	No response received	N/A
Benton County Highway Department – Superintendent	January 26, 2023	No response received	N/A
Benton County Council - President	January 26, 2023	No response received	N/A
Benton County Commissioners - President	January 26, 2023	No response received	N/A
Benton County 911 Dispatch - Director	January 26, 2023	No response received	N/A
Benton Community Schools – Superintendent	January 26, 2023	January 26, 2023	Appendix C, page 14
Benton Community Schools – Transportation Director	January 26, 2023	January 31, 2023	Appendix C, page 14

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Benton County Sheriff's Department	January 26, 2023	No response received	N/A
Benton County Emergency Plan	January 26, 2023	No response received	N/A
Sacred Heart Catholic Elementary School - Principal	January 26, 2023	No response received	N/A
Town of Fowler – Fire Department	January 26, 2023	No response received	N/A
Town of Fowler – Police Department	January 26, 2023	No response received	N/A
Town of Fowler Council - President	January 26, 2023	No response received	N/A
Town of Boswell – Street Department Superintendent	January 26, 2023	No response received	N/A
Town of Boswell Council - President	January 26, 2023	No response received	N/A
Boswell-Grant Township Fire Department	January 26, 2023	No response received	N/A
Earl Park Town Council	January 26, 2023	No response received	N/A
Richland Township Fire Department	January 26, 2023	No response received	N/A

All applicable recommendations are included in the Environmental Commitments section of this Categorical Exclusion (CE) document.

Streams, Rivers, and Other Jurisdictional Features Impacted:	No: X	Yes:
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Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E), there are six streams, rivers, watercourses, or other jurisdictional features within the 0.5-mile search radius. There is one stream, Mud Creek, within the project area, which was confirmed by the site visit on May 9, 2023, by Kaskaskia Engineering Group, LLC (KEG).

No Federal, Wild and Scenic Rivers; State Natural, Scenic, and Recreational Rivers; Outstanding Rivers for Indiana; navigable waterways or National Rivers Inventory waterways are present in or adjacent to the project area.

A *Waters of the U.S. Determination Report* was approved by INDOT Ecology, Waterway, Permitting, & Stormwater Office (EWPSO) on July 27, 2023. Please refer to Appendix F for the *Waters of the U.S. Determination Report*. It was determined that one likely jurisdictional stream, Mud Creek, has the potential to be impacted by the project. USACE makes all final determinations regarding jurisdiction.

Mud Creek is a perennial stream that flows from the east to west under US 41. It is likely classified as perennial due to semi-permanent base flow and is associated with a NHD flowline. The upstream drainage area consists of agricultural fields, rural residences, and a commercial wind farm. Based on a qualitative assessment, this resource is of poor quality within this reach due to lack of overhead vegetation coverage and lack of habitat potential due to substrate type. A defined ordinary high water mark (OHWM) was observed to be approximately 13 feet wide and approximately five feet deep.

Approximately 329 linear feet (LF) of the resource is within the investigated area. There are no permanent or temporary impacts to Mud Creek as a result of this project.

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IDNR-DFW responded on February 24, 2023, with standard recommendations of erosion and sediment control, waterway work avoidance, and in channel disturbances (Appendix C, pages 6 to 9). All applicable recommendations are included in the Environmental Commitments section of this CE document.

Open Water Feature(s):	No: X	Yes:
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Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E), there are two mapped open water features within the 0.5-mile search radius. There are no open water features within or adjacent to the project area, which was confirmed by the site visit on May 9, 2023, by KEG. During INDOT District review, an open water feature was identified to abut the project in the southwest quadrant of US 41 and SR 18, which was identified as a mapped feature within the RFI Lake polygon layer. This mapped feature is present outside of the existing ROW and project limits. The area was reviewed in Google Earth Street View photos dated from October of 2023, and no changes in site conditions from the May 9, 2023, site visit were identified. Per INDOT's internal coordination with INDOT SAM and EWPSO, no further field investigation or coordination is necessary. No changes to the RFI or *Waters of the U.S. Determination Report* are required at this time.

A *Waters of the U.S. Determination Report* was approved by INDOT EWPSO on July 27, 2023. Please refer to Appendix F for the *Waters of the U.S. Determination Report*. It was determined that no open water features were identified. USACE makes all final determinations regarding jurisdiction. Due to no open water features being observed within or near the investigated area, no impacts are expected.

Wetlands:	No: X	Yes:
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Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E), there are four wetlands located within the 0.5-mile search radius. There are no wetlands within or adjacent to the project area. That number was confirmed by the site visit on May 9, 2023, by KEG.

A *Waters of the U.S. Determination Report* was approved by INDOT EWPSO on July 27, 2023. Please refer to Appendix F for the *Waters of the U.S. Determination Report*. It was determined that no wetland features were identified. USACE makes all final determinations regarding jurisdiction.

Due to no wetlands being observed within or near the investigated area, no impacts are expected.

Terrestrial Habitat:	No:	Yes: X
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Based on a desktop review, a site visit on May 9, 2023, by KEG, and the aerial map of the project area (Appendix B, page 2), there are vegetated roadside and agricultural acreage located adjacent to the project area. Habitat within this adjacent area is predominantly row crops and roadside grasses. Dominant roadside species included Reed Canary Grass (*Phalaris arundinacea*), mullein (*Verbascum thapsus*), and crownvetch (*Securigera varia*). No trees within the project area will be trimmed or removed. Approximately 1.02 acres of maintained grassy roadside vegetation will be impacted by the project. Avoidance alternatives are not practical as project limits have been constrained to the smallest area possible to complete the project. Mitigation is not anticipated to be required. Disturbed areas will be re-seeded post-construction to return the site to as close as possible to pre-construction conditions.

The IDNR-DFW responded on February 24, 2023, with standard recommendations for revegetation, seeding, and erosion and sediment control (Appendix C, pages 6 to 9). All applicable recommendations are included in the Environmental Commitments section of this CE document.

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Protected Species:	No:	Yes: X
<p>Based on a desktop review and the RFI report (Appendix E), completed by KEG on March 2, 2023, and approved by INDOT SAM on March 9, 2023, the IDNR Benton County Endangered, Threatened, and Rate (ETR) Species list has been checked. According to the IDNR-DFW early coordination response letter dated February 24, 2023 (Appendix C, pages 6 to 9), the Natural Heritage Program's Database has been checked and three species of special concern have been documented within 0.5 mile of the project area: American badger (<i>Taxidea taxus</i>), silver-haired bat (<i>Lasionycteris noctivagans</i>), and eastern red bat (<i>Lasiurus borealis</i>). Impacts to the American badger or its preferred habitat are unlikely as a result of this project. To minimize impacts to the silver haired bat, IDNR-DFW recommends to not cut any trees suitable for roosting (greater than five inches diameter at-breast-height (dbh), living or dead, with loose hanging bark, or with cracks crevices, or cavities) from April through September 30. Additionally, to minimize impacts to foliage roosting species such as the Eastern red bat, avoid the cutting of deciduous canopy trees from April 1 through September 30. Foliage roosting species show no strong preference to certain tree species. Species-specific IDNR recommendations are included as firm commitments in the <i>Environmental Commitments</i> section of this document.</p> <p>An INDOT 0.5-mile bat review occurred on November 2, 2022, and did not indicate the presence of endangered bat species within 0.5-mile of the project area. 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 15 to 22). The project is within range of the federally endangered Indiana bat (<i>Myotis sodalis</i>) and proposed endangered tricolored bat (<i>Perimyotis subflavus</i>). The USFWS official species list also identified three additional species as potentially occurring in the project area (Appendix C, page 20). The project is in the range of the monarch butterfly (<i>Danaus plexippus</i>), which is a proposed threatened species, but it is not considered a protected species. INDOT, on behalf of FHWA, has determined that the project will not jeopardize the continued existence of the proposed threatened monarch butterfly or its proposed critical habitat. The project area does not overlap critical habitat for this species. The monarch butterfly inhabits wetlands and grasslands in this region, particularly milkweed (<i>Asclepias</i> sp.), which are not present in the project area. Additionally, the project is in the range of the tricolored bat (<i>Perimyotis subflavus</i>), which is proposed endangered species. This project will not jeopardize the continued existence of the tricolored bat. No protected critical habitat has been proposed for the tricolored bat; therefore, no further action is required. The project is in the range of a "non-essential experimental population" of the whooping crane (<i>Grus americana</i>), but this population is not covered by protections provided for the natural endangered population of whooping crane. At this time, all candidate and experimental population species do not require additional coordination with USFWS.</p> <p>The project qualifies for the <i>Range-wide Programmatic Biological Opinion for Transportation Project within the Range of the Indiana Bat, Northern Long-eared Bat, and Tricolored Bat.</i>, dated December 13, 2024, between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. An effect determination key was completed on February 8, 2024, and based on responses provided, the project was found to "may affect, not likely to adversely affect" the Indiana bat, NLEB, and/or the tricolored bat (Appendix C, pages 24 to 36). INDOT reviewed and concurred within the effect finding on February 12, 2024, and requested the USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Minimization Measures (AMMs) for lighting and general construction were applicable to this project, including General AMM 1 and Lighting AMMs 1 and 2. AMMs and/or commitments are included as firm commitments in the <i>Environmental Commitments</i> section of this document.</p>		

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Culvert inspections were conducted on May 9, 2023, by KEG, and no evidence of bats was seen or heard in the structures (Appendix C, pages 22 to 23). A subsequent inspection was conducted by INDOT on July 17, 2024, with no evidence of bats seen or heard in the structures (Appendix C, pages 37 to 44). USFWS Bridge/Structure Assessments are only valid for two years. If construction will begin after July 17, 2026, an inspection of the structures by a qualified individual, must be performed. Inspection of the structures should check for presence of bats/bat indicators. The results of the inspection must indicate no signs of bats. If signs of bats are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. This firm commitment is included in the *Environmental Commitments* of this document.

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

Geological and Mineral Resources:

No: X

Yes:

Based on a desktop review and the Indiana Karst Region map, the project is not located in the designated Indiana Karst Region as outlined in INDOT's most current *Protection of Karst Features During Project Development and Construction*. According to the topo map of the project area (Appendix B, page 3), and the RFI report (Appendix E), there is one mineral resource facility located within 0.5 mile of the project area. In the early coordination response dated February 2, 2023, the IGWS did not indicate the potential for karst features to exist in the project area (Appendix C, pages 10 to 11). The IGWS report indicated: moderate liquefaction potential, moderate potential bedrock resource, high potential sand and gravel resource, and documented abandoned industrial minerals sand and gravel pits. Response from IGWS has been communicated with the designer on March 12, 2024. No impacts are expected.

Drinking Water Resources:

No: X

Yes:

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

An early coordination response letter dated February 1, 2023, IDEM stated the project is not located within a Wellhead Protection Area nor in a Source Water Area (Appendix C, pages 12 to 13). Therefore, 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 February 7, 2024, by KEG. One unconsolidated 'other' well was identified approximately 500 feet east of the project area. The feature will not be affected due to the scope of work being limited to the roadway and adjacent land. Therefore, no impacts are expected.

Based on a desktop review of the INDOT Municipal Separate Storm Sewer Systems (MS4) website (<https://entapps.indot.in.gov/MS4/>) by KEG on February 7, 2024, this project is not located in an Urban Area Boundary (UAB). No impacts are expected.

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<p>Based on a desktop review, a site visit on May 9, 2023, by KEG, the aerial map of the project area (Appendix B, page 2), and a review of the EPA's Search for Public Water Systems (https://www.epa.gov/enviro/sdwis-search), no public water systems were identified. Therefore, no impacts are expected.</p>		
Floodplains:	No:	Yes: X
<p>Based on a desktop review of The Indiana Department of Natural Resources Indiana Floodway Information Portal website (http://dnrmaps.dnr.in.gov/appsphp/fdms/) by KEG on February 7, 2024 and the RFI report, this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps. Base floodplain elevation for the project is 775.9 feet (Appendix F, page 12). All proposed work will occur above this elevation. There is no floodplain administrator for this project. This project qualifies as a Category 1 per the current INDOT CE Manual. This project involves work within the horizontal limits of the 100-year floodplain, no work is being performed below the 100-year flood elevation and as a result this project does not encroach upon the base floodplain.</p>		
Farmland:	No: X	Yes:
<p>Based on a desktop review, a site visit on May 9, 2023, by KEG, and the aerial map of the project area (Appendix B, page 2), there is farmland as defined by the Farmland Protection Policy Act adjacent to the project. No new permanent ROW is needed; therefore, the project will not convert any farmland to a transportation use. An early coordination letter was sent on January 26, 2023, to the Natural Resources Conservation Service (NRCS) that indicated the need for right-of-way and conversion of farmland. KEG sent follow-up letter to the NRCS on February 9, 2023, indicating ROW is no longer needed for the project. NRCS confirmed that the AD-1006 form is no longer applicable (Appendix C, page 5). No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.</p>		
Cultural Resources:	No: X	Yes:
<p>On July 10, 2023, INDOT Cultural Resources Office (CRO) determined that this project falls within the guidelines of Category A, Type 2, as well as Category B, Type 3 and Type 9 under the Minor Projects Programmatic Agreement (MPPA). <i>Category A, Type 2</i> covers all work within interchanges and within medians of divided highways in previously disturbed soils. <i>Category B, Type 3</i> covers construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration, and deceleration lanes) and shoulder widening. <i>Category B, Type 9</i> covers installation, replacement, repair, lining, or extension of culverts and other drainage structures. An amendment to the original INDOT CRO MPPA was approved August 15, 2024, which included additional project work scope, along with guidelines of Category B, Type 2. <i>Category B, Type 2</i> covers installation of new lighting, signals, signage and other traffic control devices. INDOT CRO conducted a desktop review of above-ground resources and archaeological resources near the project area. No listed Indiana Register of Historic Sites and Structures (State Register) or National Register of Historic Places (National Register) resources were identified within 0.15 mile of the project area. Additionally, since all work will be limited to previously disturbed soils, there are no archaeological concerns. No further consultation is required. This completes the Section 106 process and the responsibilities of the FHWA under Section 106 have been fulfilled.</p>		

Indiana Department of Transportation

County Benton Route US 41 Des. No. 2100059

Section 4(f) and Section 6(f) Resources:	No: X	Yes:
<p>Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of certain public and historic lands for federally funded transportation facilities unless there is no feasible and prudent alternative. The law applies to significant publicly owned parks, recreation areas, wildlife/waterfowl refuges, and NRHP eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.</p> <p>Based on a desktop review, the aerial map of the project area (Appendix B, page 2), and the RFI report (Appendix E), there are no potential 4(f) resources located within the 0.5-mile search radius. According to additional research, and by the site visit on May 9, 2023, by KEG, there are no Section 4(f) resources within or adjacent to the project area. Therefore, no use is expected.</p> <p>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.</p> <p>A review of 6(f) properties on the INDOT ESD website (https://www.in.gov/indot2523.htm) revealed a total of one property in Benton County (Appendix I, page 18). None of these properties are located within or adjacent to the project area. Therefore, there will be no impact to Section 6(f) resources.</p>		
Air Quality:	No: X	Yes:
<p>This project is included in the Fiscal Year (FY) 2024-2028 Statewide Transportation Improvement Program (STIP) (Appendix H, page 3).</p> <p>This project is located in Benton County, which is currently in attainment for all criteria pollutants according to the US EPA Green Book (https://www3.epa.gov/airquality/greenbook/anayo_in.html) accessed by KEG on February 8, 2024. Therefore, the conformity procedures of 40 CFR Part 93 do not apply.</p> <p>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.</p>		
Community Impacts:	No: X	Yes:
<p>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. This project will have no relocations and will not require additional permanent right of way; therefore, an EJ analysis is not required per the current INDOT Categorical Exclusion Manual.</p> <p>On February 8, 2024, KEG reviewed www.indianafestivals.org for any special events or festivals in Benton County throughout the year and found one event listed: Dan Patch Days Community Festival (September 6-8, 2024). If proposed construction activities occur during any events, the commute times to the events may be impacted causing a short-term impact. Access to all destinations and events will be maintained through the detour, and impacts will cease upon project completion.</p>		

Indiana Department of Transportation

County Benton Route US 41 Des. No. 2100059

Public Facilities and Services (e.g. schools, emergency services):	No: X	Yes:
<p>Based on a desktop review, an aerial map of the project area (Appendix B, page 2), and the RFI report (Appendix E), there are no public facilities within the 0.5-mile search radius. There are no public facilities within or adjacent to the project area. This number was confirmed by the site visit on May 9, 2023, by KEG. Therefore, no impacts are expected. Access to all properties will be maintained during construction.</p> <p>GIS data was checked, and the project is not within 20,000 feet (3.8 miles) of a public airport. Coordination with the designer confirmed that no work or equipment will exceed 200 feet above the ground surface elevation. Therefore, no coordination or permits are needed for impacts to aviation airspace.</p> <p>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.</p>		
Hazardous Materials and Regulated Substances:	No: X	Yes:
<p>Based on a review of Geographic Information Systems (GIS) and available public records, the RFI was approved by INDOT SAM, which provided their concurrence on March 9, 2023 (Appendix E). One National Pollutant Discharge Elimination System (NPDES) facility is located within 0.5 mile of the project area. None of the hazmat sites identified will impact the project. Further investigation of hazardous material concerns or regulated substances is not required at this time.</p>		
Permits:	No: X	Yes:
<p>On October 24, 2023, INDOT EWPSO replied to the permit determination request submitted by KEG on September 18, 2023 (Appendix F, page 19), indicating that the following permits will be required for this project: Stormwater (CSGP). There will be no mitigation required for this permit.</p> <p>Applicable recommendations provided by resource agencies are included in the Environmental Commitments section of this document. If permits are found to be necessary, the conditions of the permit will be requirements of the project and will supersede these recommendations.</p> <p>It is the responsibility of the project sponsor to identify and obtain all required permits.</p>		

Indiana Department of Transportation

County Benton Route US 41 Des. No. 2100059

ENVIRONMENTAL 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 ESD and INDOT Crawfordsville District)
2. It is the responsibility of the project sponsor to notify school corporations and emergency services at least two weeks prior to any construction that would block or limit access. (INDOT ESD)
3. Any work in a wetland area within right-of-way or in borrow/waste areas is prohibited unless specifically allowed in the U.S. Army Corps of Engineers permit. (INDOT EWPSO)
4. General AMM 1: Ensure all operators, employees, and contractors working in areas of known or presumed bat habitat are aware of all FHWA/FRA/FTA (Transportation Agencies) environmental commitments, including all applicable AMMs. (USFWS)
5. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
6. 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 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)
7. 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 17, 2026, an inspection of the impacted culverts, CLV-16821 and CLV-16825, by a qualified individual must be performed. Inspection of the structure should check for presence of bats/bat indicators. The results of the inspection must indicate no signs of bats. If signs of bats are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD)
8. To minimize impacts to the silver-haired bat (and the Indiana bat and northern long-eared bat, which may also be present), do not cut any trees suitable for roosting (greater than five inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30. (IDNR-DFW)
9. To minimize impacts to foliage roosting species such as the eastern red bat, avoid the cutting of deciduous canopy trees as well from April 1 through September 30. Foliage roosting species show no strong preferences to certain tree species. (IDNR-DFW)
10. A Notice of Approved Environmental Document (Notice of Project Advancement) is required after approval of this CE. Notification will be made through the same means as the Notice of Public Hearing, including publishing in the Benton Review newspaper, mailing and emailing notices to early coordination recipients, consulting parties, stakeholders, and property owners, and updating the project website to include this notice and the approved CE. (INDOT Crawfordsville District)

For Consideration:

11. The replacement/rehabilitated culvert structure, and any bank stabilization under or around the structure, must not create conditions that are less favorable for wildlife passage when compared to existing conditions. (IDNR-DFW)
12. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds. (IDNR-DFW)
13. Use minimum average 6-inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR-DFW)

Categorical Exclusion Level 1
US 41 at SR 18
DES 2100059, Intersection Improvement
Benton County, Indiana

APPENDICES

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APPENDIX A

INDOT Supporting Documents

Categorical Exclusion Level Thresholds

	PCE	Level 1	Level 2	Level 3	Level 4 ¹
Section 106	Falls within guidelines of Minor Projects PA	“No Historic Properties Affected”	“No Adverse Effect”	-	“Adverse Effect” Or Historic Bridge involvement ²
Stream Impacts³	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 Impacts³	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
Right-of-way⁵	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
Relocations	None	-	-	< 5	≥ 5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat)*	“No Effect”, “Not likely to Adversely Affect” (With select AMMs ⁶)	“Not likely to Adversely Affect” (With any AMMs or commitments)	-	“Likely to Adversely Affect”	Project does not fall under Species Specific Programmatic ⁷
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 ⁸
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Section 4(f) Impacts	None	-	-	-	Any ⁹
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes ¹⁰
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 Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

⁷ 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.

⁸ Potential for causing a disproportionately high and adverse impact.

⁹ 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.

¹⁰ 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.

Note: the type of intersection work for Des. No. 2100059 is not included in the allowed types under the Programmatic CE, and public involvement is required due to the change in facilities per INDOT's Project Development Public Involvement Procedures manual. Therefore, a CE-1 is required.

Chad Kelly

From: Kurtz, Randy <RKurtz@indot.IN.gov>
Sent: Thursday, February 15, 2024 11:44 AM
To: Arnold, Karen; Effinger, Melissa
Cc: Mcdaniel, Kaitlyn; Chad Kelly
Subject: RE: DES 2100059: US 41 at SR 18 Intersection Improvement, Potential PCE

Hello

Well, that is more information and thank you. So now we are calling it a RCUT, that's cool. I didn't relate that to being an RCI. This has been discussed at length within our central office. They determined by/when applying the public involvement criteria #b the word "substantially" was what was up for debate. The RCI/RCUT/JTurn does not substantially change the layout or function, they can still go all directions as intended, but nothing official has been sent out because they can all be constructed differently and there hasn't been enough constructed, to date. Even though the threshold falls under the PCE, they need to have a place for public involvement initials and sign offs. In the future maybe these will be as easy as an PCE, but now they are allowing for public involvement if warranted and that may be up to the location and/or districts discretion. It sounds like we will do some public involvement on this one, so yes, a CE-1 would be needed. All we have are some email correspondences explaining this topic, so I do not have any official guidance to provide at this time.

Sorry Chad, for misleading you before. Cheers

Randy "Zane" Kurtz
Environmental Section Manager
Capital Program Management Division
Indiana Department of Transportation
Crawfordsville District
Office: (765)-361-5232
Cell: 432-788-8741
Email: rkurtz@indot.in.gov
[Find us on social media!](#)



From: Arnold, Karen <KArnold2@indot.IN.gov>
Sent: Thursday, February 15, 2024 10:20 AM
To: Effinger, Melissa <melissa.effinger@mbakerintl.com>; Kurtz, Randy <RKurtz@indot.IN.gov>
Cc: Mcdaniel, Kaitlyn <KaMcdaniel@indot.IN.gov>; Chad Kelly <ckelly@kaskaskiaeng.com>; Jack, Laura <laura.jack@mbakerintl.com>; Matrisciano, Mary <Mary.Matrisciano@mbakerintl.com>; Waite, Lauren <Lauren.Waite@mbakerintl.com>
Subject: RE: DES 2100059: US 41 at SR 18 Intersection Improvement, Potential PCE

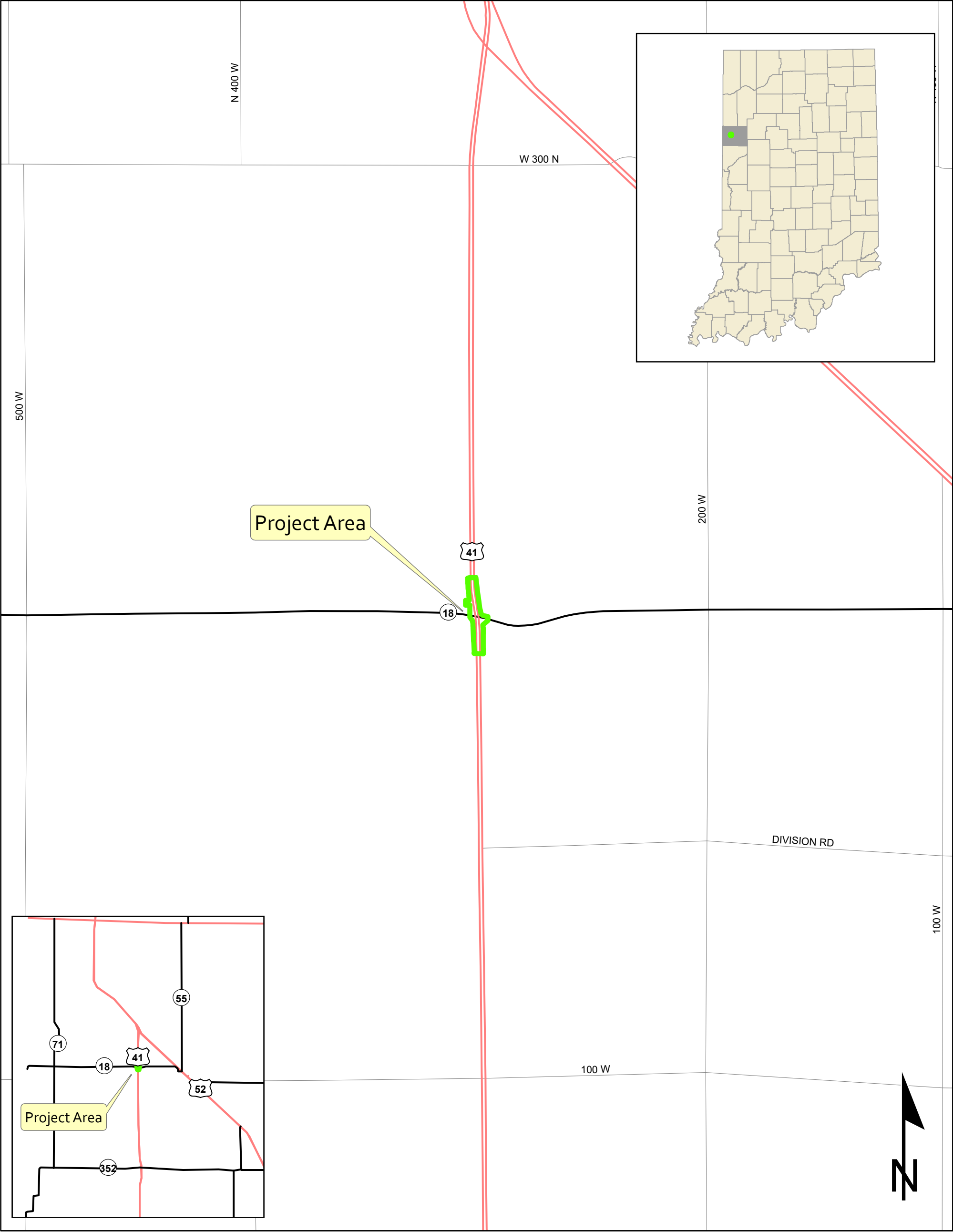
Zane,

For my other project that stemmed the CE-1 versus CE-4 conversation, it was determined that a CE-1 with public involvement was needed based on letter 'b' of the attached public involvement criteria list.

APPENDIX B

Graphics

Site Location Map
US 41 and SR 18 Intersection
Des No. 2100059, Intersection Improvement Project
Benton County, Indiana

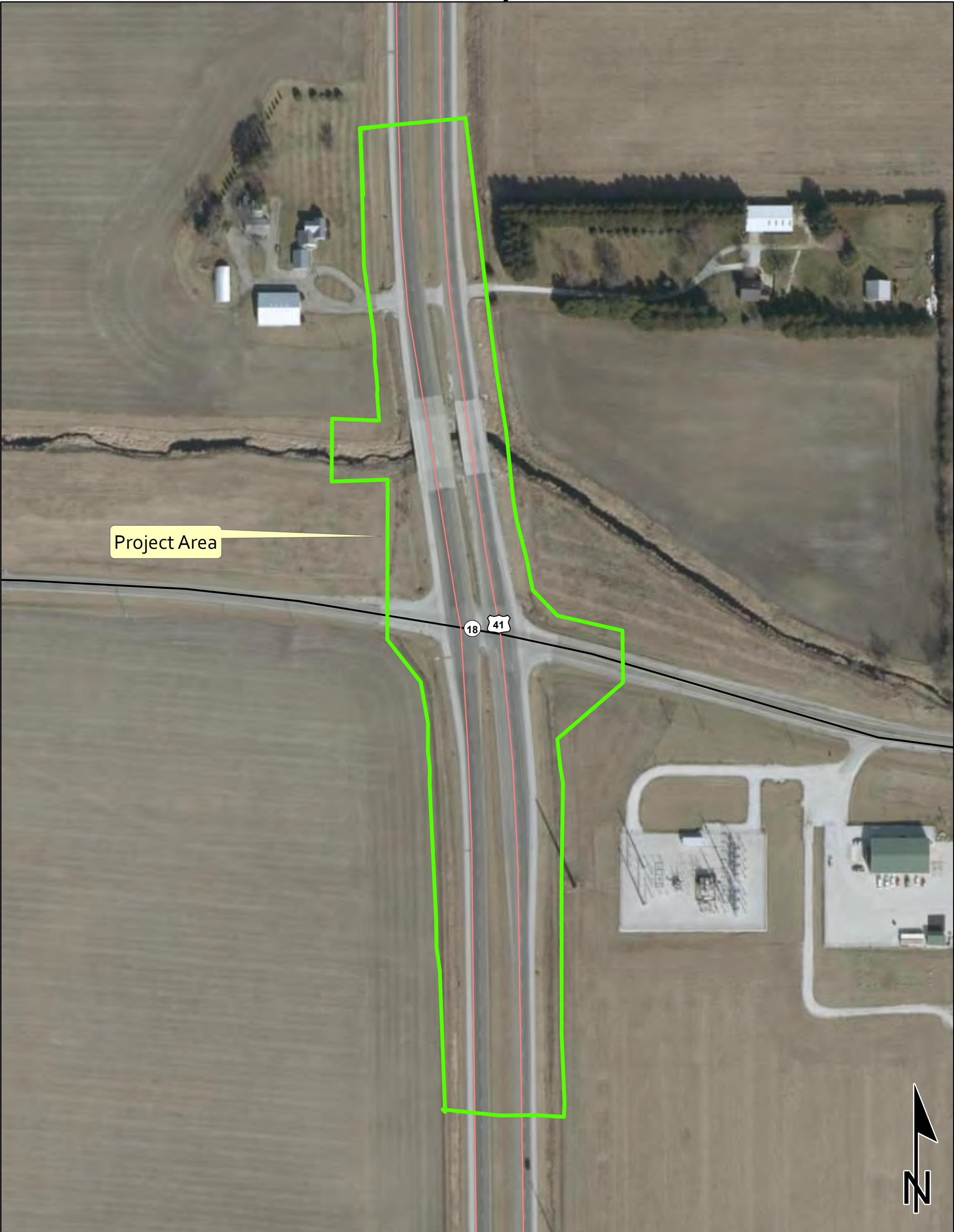


Sources:
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Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

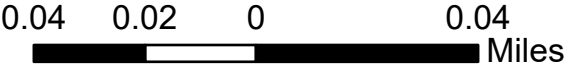


This map is intended to serve as an aid in graphic representation only. This information is not warranted for accuracy or other purposes.

Aerial Map
US 41 and SR 18 Intersection
Des No. 2100059, Intersection Improvement Project
Benton County, Indiana

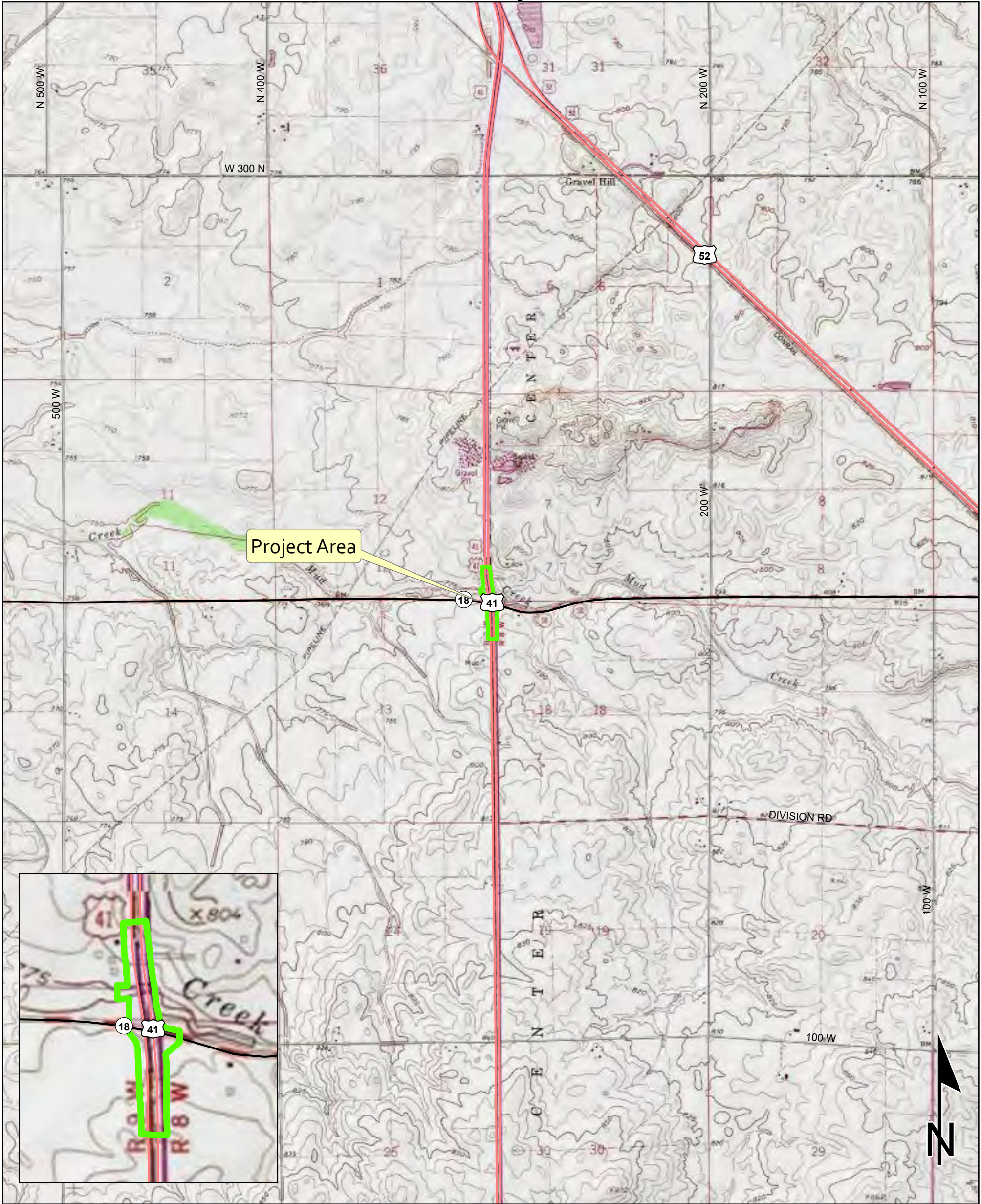


Sources:
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83



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

Topographic Map
US 41 and SR 18 Intersection
Des No. 2100059, Intersection Improvement Project
Benton County, Indiana



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

BOSWELL AND EARL PARK
QUADRANGLES
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

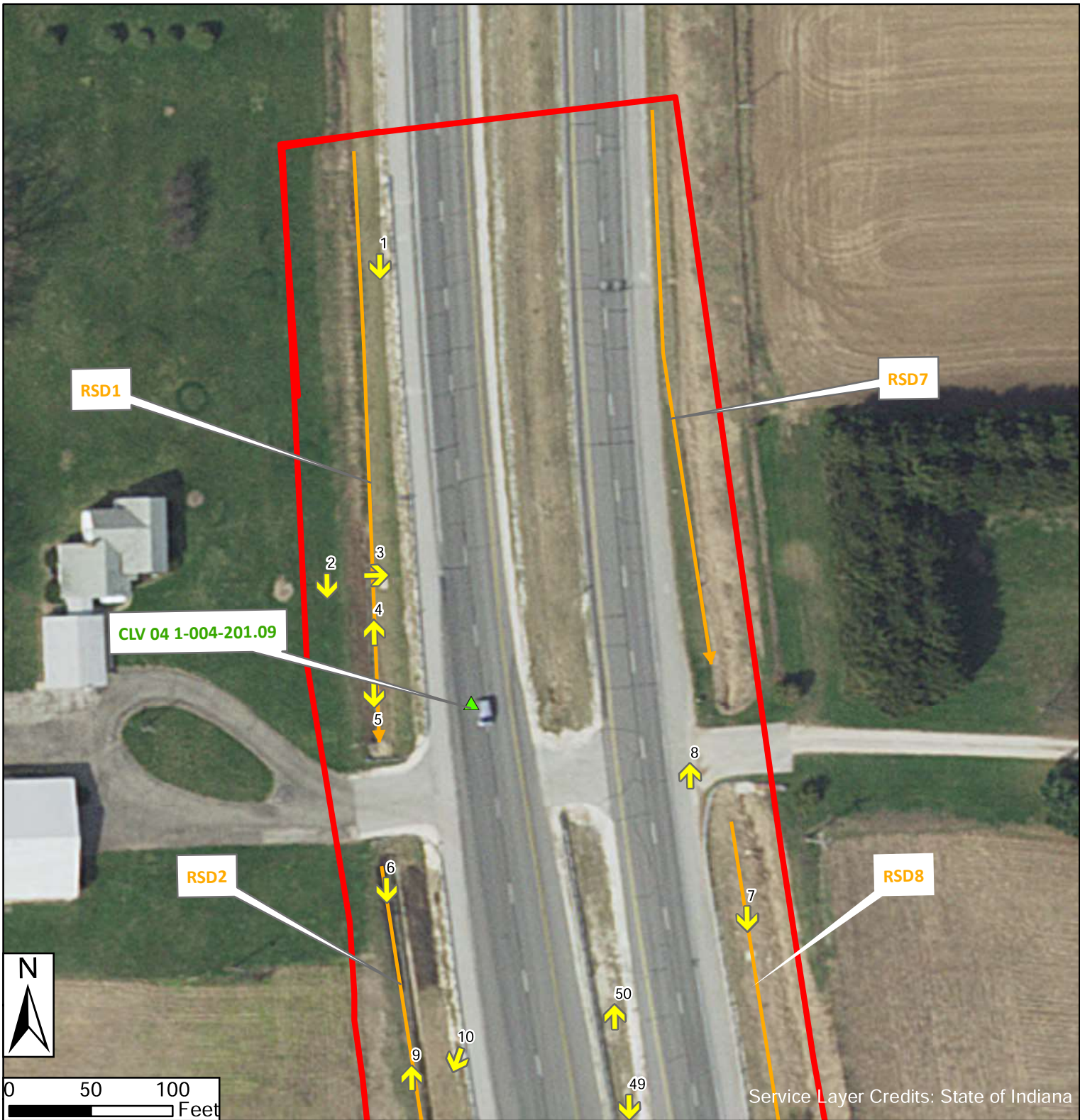


Figure 10.1
Photo Direction Map
US 41 at SR 18
Intersection Improvement
with Added Turn Lanes
Benton County, Indiana
Des. No. 2100059

-  Investigated Area
-  Ordinary High Water Mark
-  Structure
-  Stream
-  Roadside Ditch (RSD)
-  Photo Direction



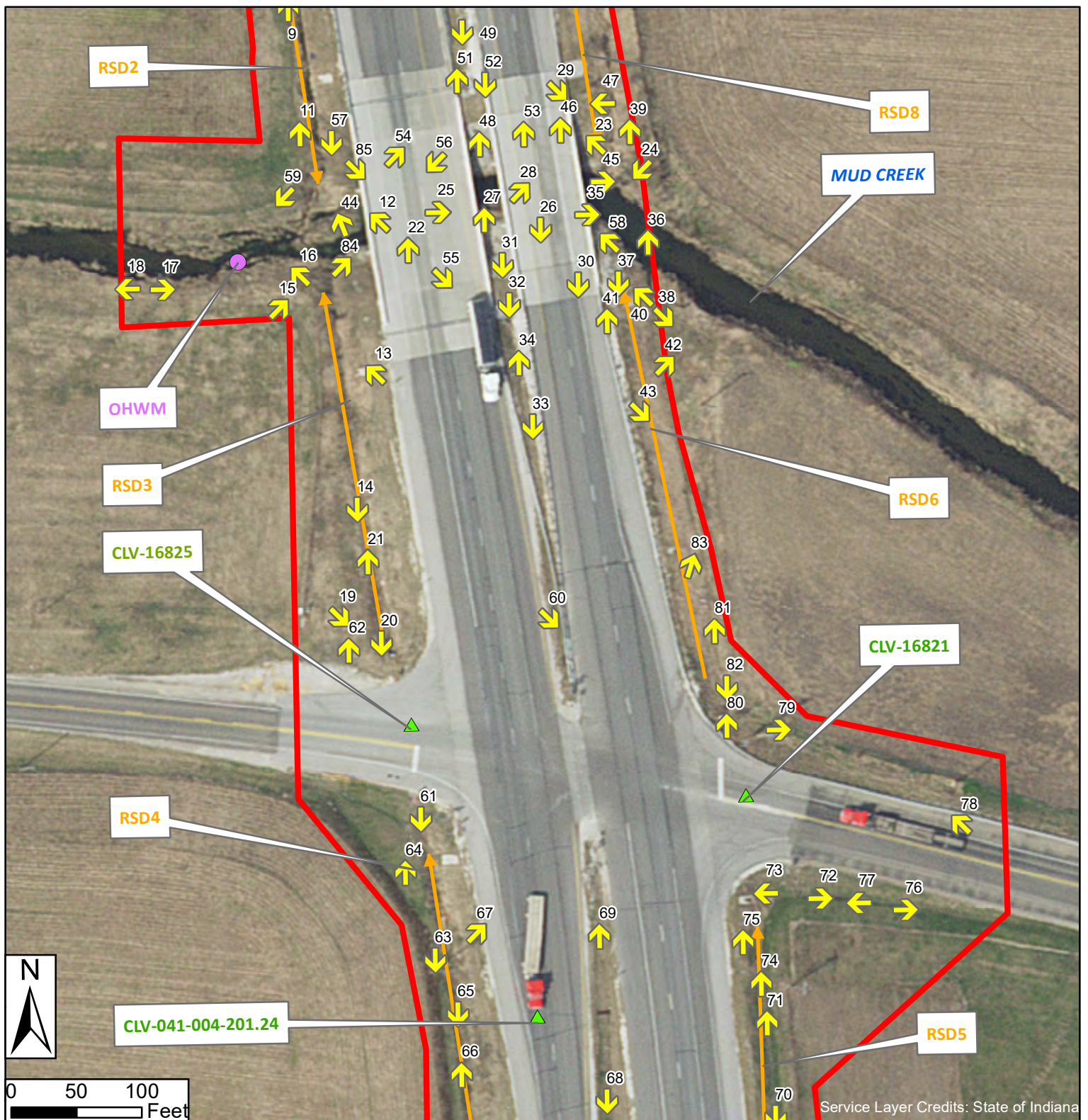


Figure 10.2
Photo Direction Map
US 41 at SR 18
Intersection Improvement
with Added Turn Lanes
Benton County, Indiana
Des. No. 2100059

- Investigated Area
- Ordinary High Water Mark
- ▲ Structure
- Stream
- Roadside Ditch (RSD)
- ↑ Photo Direction



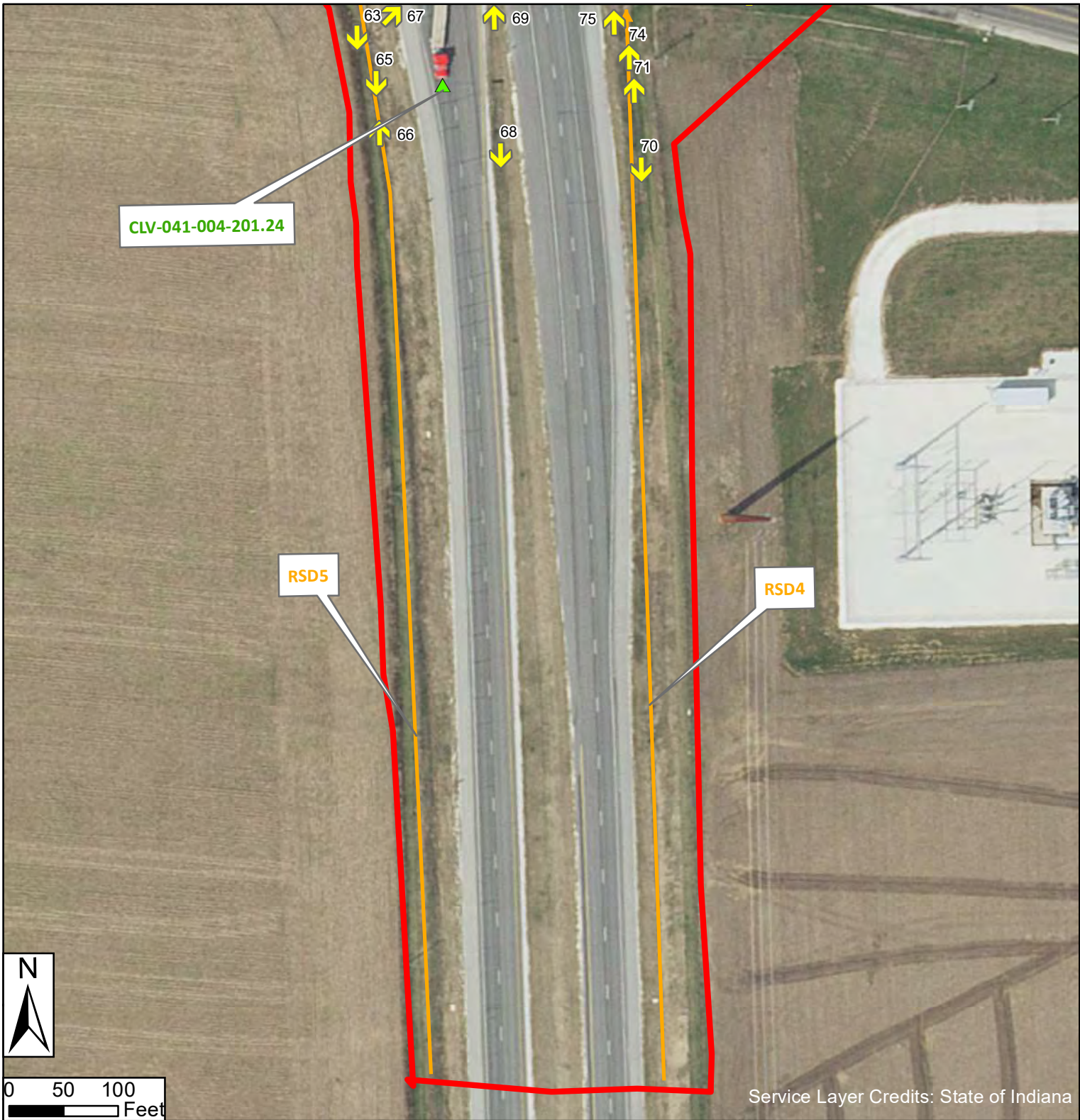


Figure 10.3
Photo Direction Map
US 41 at SR 18
Intersection Improvement
with Added Turn Lanes
Benton County, Indiana
Des. No. 2100059

-  Investigated Area
-  Ordinary High Water Mark
-  Structure
-  Stream
-  Roadside Ditch (RSD)
-  Photo Direction



Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



1. Looking south along RSD 1, on the west side of US 41 SB, toward the SR 18 intersection.



2. Looking south along RSD 1 on the west side of US 41 southbound (SB).



3. Looking east, at the underdrain outlet near RSD 1 on the west side of US 41 SB.



4. Looking north along RSD 1 on the west side of US 41 SB.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



5. Looking south at the inlet of CLV 041-004-201.09, on the west side of US 41 SB.



6. Looking south along RSD 2, toward Mud Creek, on the west side of US 41 SB.



7. Looking south along RSD 7, on the east side of US 41 northbound (NB).



8. Looking north along RSD 8, on the east side of US 41 NB.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



9. Looking north towards RSD 2, on the west side of US 41 SB.



10. Looking S/SW towards RSD 2, on the west side of US 41 SB.



11. Looking north along RSD 2, on the west side of US 41 SB.



12. Looking northwest at Mud Creek from US 41 SB.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



13. Looking northwest towards RSD 3 and Mud Creek from the west side of the US 41 southbound (SB) bridge (Structure #041-04-05991 JCSB/ NBI# 015385).

14. Looking south towards the outlet of CLV 16825 in RSD 3, on the west side of US 41 SB, towards the intersection of US 41 and SR 18.



15. Looking northeast towards Mud Creek and the west side of the SB US 41 bridge.

16. Looking northwest along Mud Creek from the southwest bank near the US 41 SB bridge.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



OHW
Lat: 40.622704, Lon: -87.381665



17. The OHWM was measured approximately 160 feet downstream (west) of the US 41 SB bridge. The OHWM of Mud Creek was 13 feet wide 5 feet deep.

18. Looking west along Mud Creek from the OHWM.



19. Looking southeast towards the outlet of CLV 16825 in RSD 3, on the west side of US 41 SB bridge, at the SR 18 intersection.



20. Looking south through the outlet of CLV 16825 in RSD 3, on the west side of US 41 SB bridge, at the SR 18 intersection. There were no signs of bats or birds.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



21. Looking north along RSD 3, on the west side of the US 41 SB bridge.



22. Looking north towards the north concrete pylon of the US 41 SB bridge.



23. Looking northwest at the north concrete wall under the US 41 NB. There were no signs of bats or birds.



24. Looking southwest at the north concrete pylon under the US 41 NB bridge from the northeast bank of Mud Creek. There were no signs of bats or birds.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



25. Looking east along Mud Creek from the west opening of the US 41 SB bridge through both bridges. There are no signs of bats or birds under the center of the US 41 SB bridge.



26. Raccoon tracks visible under the south end of the US 41 NB bridge.



27. Looking north, at the north bank of Mud Creek, from the center of the south bank between both US 41 bridges.



28. Looking northeast towards the east side of the north concrete pylon of the US 41 NB bridge. There were no signs of bats or birds.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



29. Looking southeast towards the north central concrete pylon of the NB US 41 bridge. There were no signs of birds or bats.



30. Looking south towards the south wall of the US 41 NB bridge. There were no signs of birds or bats.



31. Looking south towards pipe on south bank slope between both bridges.



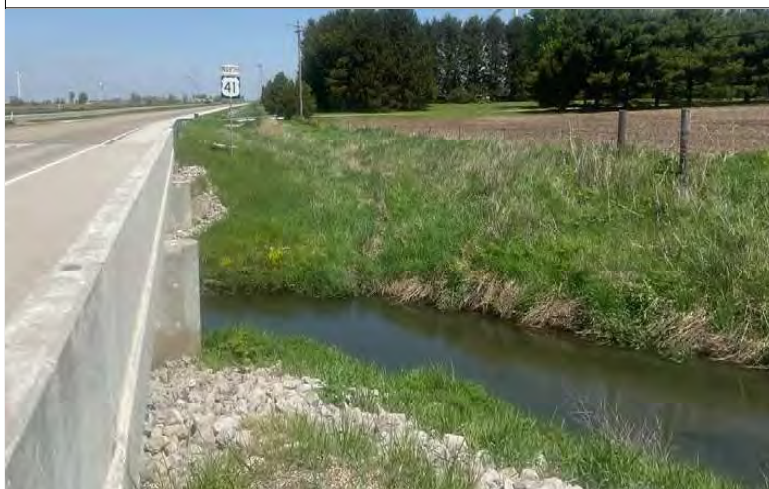
32. Looking south at the drain and grassy swale in the median between the guardrails of the bridges on US 41.

<p>Photo Log Des No. 2100059</p>	<p>US 41 and SR 18 Intersection Improvement with Added Turn Lanes Taken: 5/9/2023</p>
	
<p>33. Looking south along the mown US 41 median and at the intersection of US 41 and SR 18.</p>	<p>34. Looking north across the Mud Creek crossing between both US 41 bridges. There is spotty riprap on both slopes that is overgrown with mowed vegetation.</p>
	
<p>35. Looking east along Mud Creek from the US 41 NB bridge.</p>	<p>36. Looking north towards north bank of Mud Creek east of the US 41 NB bridge.</p>

<p>Photo Log Des No. 2100059</p>	<p>US 41 and SR 18 Intersection Improvement with Added Turn Lanes Taken: 5/9/2023</p>
	
<p>37. Looking south towards the south bank of Mud Creek, east of the US 41 NB. The riprap extended approximately 15-feet from the opening of the bridge.</p>	<p>38. Looking northwest towards the north bank of the US 41 NB bridge from the south bank of Mud Creek</p>
	
<p>39. Looking north towards north bank of Mud Creek east the NB bridge of US 41 and RSD 8 from the north bank of Mud Creek.</p>	<p>40. Looking southeast towards US 41 NB and RSD 6 from the southeast side of the NB bridge of US 41.</p>

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



41. Looking north across Mud Creek from the east side of the NB US 41 bridge.



42. Looking northeast towards Mud Creek along RSD 6.



43. Looking southeast along RSD 6, east of US 41 NB bridge.



44. Looking northwest towards the US 41 NB bridge north bank of Mud Creek.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



45. Looking east along Mud Creek from the east side of the US 41 NB bridge.



46. Looking north along RSD 7 from the northeast corner of the US 41 NB bridge.



47. Looking west at the north concrete pylon of the US NB bridge. There were no signs of birds or bats. There was riprap on this side of the pylon up the slope under the bridge.



48. Looking north at the north wall of the US 41 NB bridge from the center of the bridges. There were no signs of birds or bats.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



49. Looking south across the US 41 Mud Creek crossing of both bridges from the north Mud Creek bank



50. Looking north along the mowed median between both lanes of US 41 from the north bank of Mud Creek.



51. Looking north towards pipe on north bank slope between both bridges.



52. Looking south across Mud Creek towards south bank between both bridges.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



53. Looking north towards north wall of the US NB bridge from the slope between the north pylon and the north wall of the bridge. There were no signs of birds or bats.



54. Looking northeast towards north wall of the US 41 SB bridge from the slope between the north pylon and the north wall of the bridge. There were no signs of birds or bats.



55. Looking southeast towards the south wall of structure of the US 41 SB bridge from the slope between the south pylon and the south wall of the bridge. There were no signs of birds or bats.



56. Looking southwest towards the inner north pylon of the US 41 SB bridge from the slope between the north pylon and the north wall of the bridge. There were no signs of birds or bats.

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



57. Looking south from the northwest bank of Mud Creek, at the outlet of RSD 2 into Mud Creek.



58. Looking northwest, from the northeast side of the US 41 NB bridge, along Mud Creek under the US 41 NB bridge.



59. Looking southwest along Mud Creek, from the northwest bank of Mud Creek



60. Looking SE, at the SR 18 and US 41 SB intersection, from the median

<p>Photo Log Des No. 2100059</p>	<p>US 41 and SR 18 Intersection Improvement with Added Turn Lanes Taken: 5/9/2023</p>
	
<p>61. Looking south along RSD 4 from the southwest side of the intersection of US 41 and SR 18.</p>	<p>62. Looking north along RSD 3, from the northwest side of the intersection of US 41 and SR 18.</p>
	
<p>63. Looking south along RSD 4, from the southwest side of the intersection of US 41 and SR 18. There was standing water observed at the time of the field check.</p>	<p>64. Looking north at the inlet of CLV 16825 (under SR 18 west of US 41) in RSD 4, at the intersection of SR 18 and US 41 SB.</p>

<p>Photo Log Des No. 2100059</p>	<p>US 41 and SR 18 Intersection Improvement with Added Turn Lanes Taken: 5/9/2023</p>
	
<p>65. Closer look (looking S) at the water ponding in RSD 4, on the west side of US 41 SB, south of the intersection of US 41 and SR 18.</p>	<p>66. Looking north at the standing water in RSD 4 on the west side of US 41 SB, south of the intersection of US 41 and SR 18.</p>
	
<p>67. Looking northeast towards the SR 18 and US 41 median intersection from southwest of the SR 18 and US 41 intersection.</p>	<p>68. Looking south along the US 41 vegetated median, from south of the SR 18 and US 41 intersection.</p>

<p>Photo Log Des No. 2100059</p>	<p>US 41 and SR 18 Intersection Improvement with Added Turn Lanes Taken: 5/9/2023</p>
	
<p>69. Looking north along the US 41 vegetated median, from south of the SR 18 and US 41 intersection.</p>	<p>70. Looking south along RSD 5, from the southeast side of the SR 18 and US 41 intersection.</p>
	
<p>71. Looking north towards the inlet of CLV-16821 (under SR 18 east of US 41) and RSD 5 at the intersection of SR 18 and US 41.</p>	<p>72. Looking east along the grassy swale on the southeast side of SR 18 from the southeast of the SR 18 and US 41 intersection.</p>

<p>Photo Log Des No. 2100059</p>	<p>US 41 and SR 18 Intersection Improvement with Added Turn Lanes Taken: 5/9/2023</p>
	
<p>73. Looking west towards drain in the southeast quadrant of the US 41 and SR 18 intersection.</p>	<p>74. Looking north at the inlet of CLV-16821 in the southeast quadrant of the US 41 and SR 18 intersection.</p>
	
<p>75. Looking north through CLV-16821 in the southeast quadrant of the US 41 and SR 18 intersection. There were no signs of birds or bats.</p>	<p>76. Looking east along the grassy swale on the south side of SR 18 from the southeast quadrant of the intersection.</p>

<p>Photo Log Des No. 2100059</p>	<p>US 41 and SR 18 Intersection Improvement with Added Turn Lanes Taken: 5/9/2023</p>
	
<p>77. Looking west towards a drain in the southeast quadrant along the grassy swale on the south side of SR 18 from the southeast quadrant of the intersection</p>	<p>78. Looking northwest along the north side of SR 18 in the of the northeast quadrant of US 41 and SR 18 intersection.</p>
	
<p>79. Looking east along the unmaintained farm ground on the north side of SR 18 from the northeast quadrant of the intersection.</p>	<p>80. Looking north along the unmaintained farm ground, and RSD 6, on the north side of SR 18 from the northeast quadrant of SR 18 and US 41 intersection.</p>

<p>Photo Log Des No. 2100059</p>	<p>US 41 and SR 18 Intersection Improvement with Added Turn Lanes Taken: 5/9/2023</p>
	
<p>81. Looking north along RSD 6, on the north side of SR 18 from the northeast quadrant of SR 18 and US 41 intersection.</p>	<p>82. Looking south towards outlet of CLV-16821 in the northeast quadrant of the SR 18 and US 41 intersection.</p>
	
<p>83. Looking south along RSD 6, in the northeast quadrant of SR 18 and US 41 intersection.</p>	<p>84. Looking northeast at the north concrete pylon under the US 41 SB bridge from the southwest bank of Mud Creek. There were no signs of bats or birds.</p>

Photo Log
Des No. 2100059

US 41 and SR 18 Intersection Improvement with Added Turn Lanes
Taken: 5/9/2023



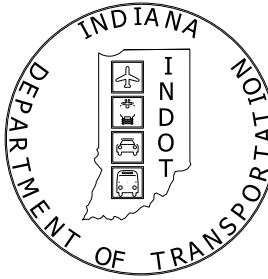
85. Looking southeast at the north pylon of the US 41 SB bridge from the northwest bank of Mud Creek.

PROJECT	DESIGNATION
2100187	2100059
CONTRACT	BRIDGE FILE
R-43688	.

KIN DESIGNATION NUMBERS	
DES. NO.	DESCRIPTION
2100059	US 41 & SR 18 INTERSECTION IMPROVEMENT
2100187	SR 55 HMA MINOR STRUCTURAL OVERLAY (LEAD)

CULVERT ASSETS		
DES. NO.	CULVERT ASSET ID	WORK TYPE
2100059	CLV-16825	REPLACEMENT
2100059	CLV-16821	REPLACEMENT

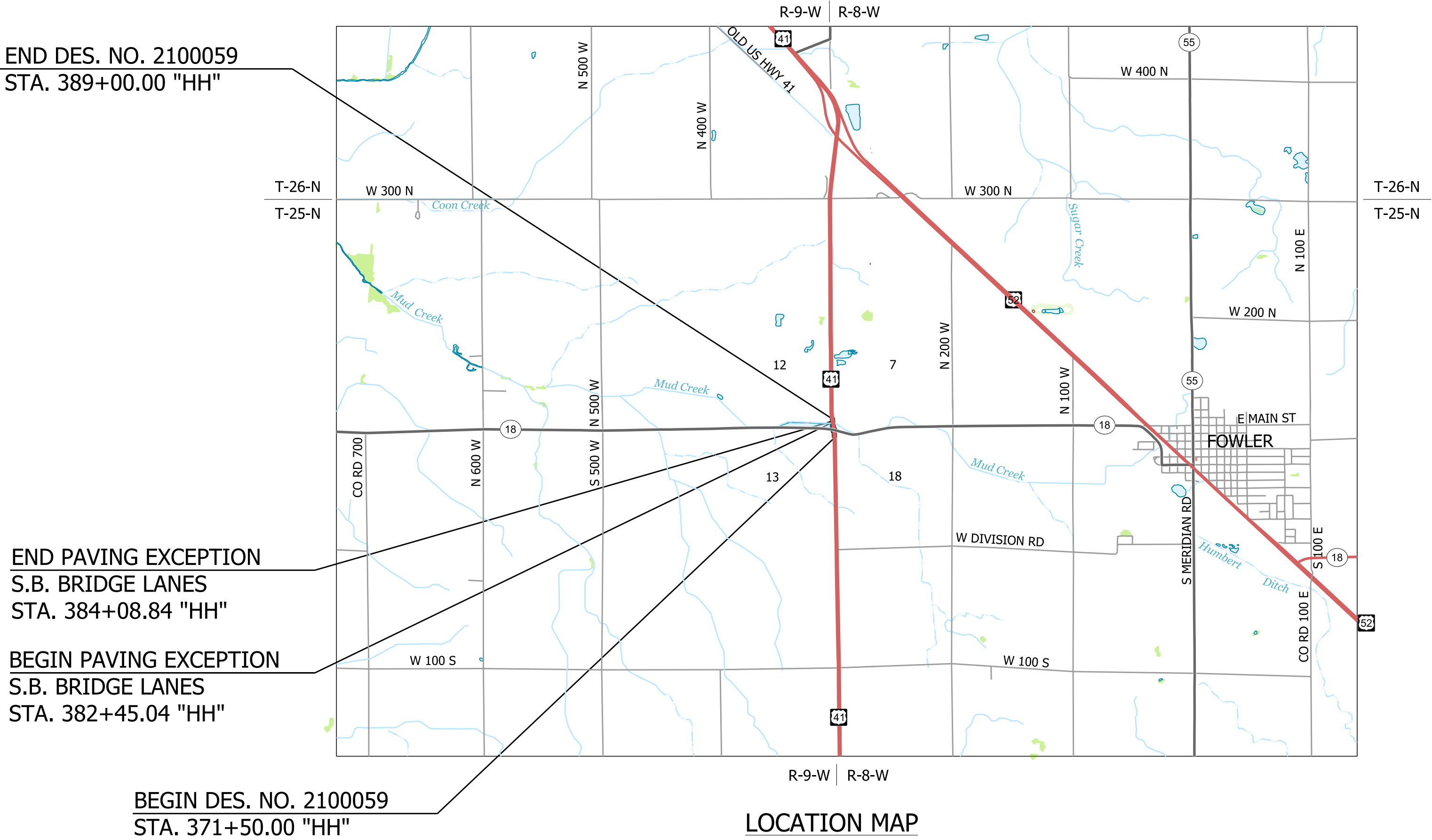
INDIANA DEPARTMENT OF TRANSPORTATION



ROAD PLANS

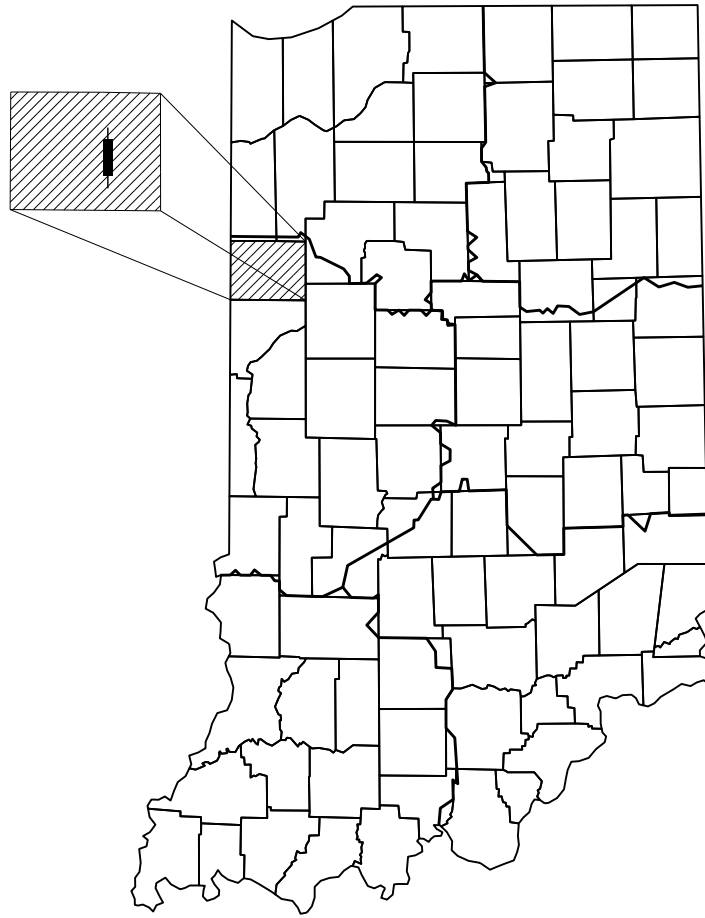
ROUTE: US 41 FROM: RP 200+97 201+37
PROJECT NO. 2100187 P.E.
2100187 R/W
2100187 CONST.

INTERSECTION IMPROVEMENT AT US 41 AND SR 18 LOCATED 0.16 MILES SOUTH OF SR 18 & 0.17 MILES NORTH OF SR 18.
IN SECTIONS 12 & 13, T-25-N, R-9-W, PARISH GROVE TWP. AND SECTIONS 7 & 18, T-25-N, R-8-W, IN CENTER TWP., BENTON COUNTY, INDIANA.



LOCATION MAP
BENTON CO.

TRAFFIC DATA	SR 18	US 41
A.A.D.T. (2026)	1,073 V.P.D.	3,617 V.P.D.
A.A.D.T. (2046)	1,206 V.P.D.	4,195 V.P.D.
D.H.V (2046)	90 V.P.H.	370 V.P.H.
DIRECTIONAL DISTRIBUTION	50.0 %	50.3 %
TRUCKS	37.9% A.A.D.T. 57.9% D.H.V.	48.2% A.A.D.T. 57.9% D.H.V.
DESIGN DATA		
DESIGN SPEED	55 M.P.H.	60 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	STATE COLLECTOR	PRINCIPAL ARTERIAL
RURAL/URBAN	RURAL	RURAL
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	PARTIAL	PARTIAL



PROJECT LOCATION SHOWN BY
BENTON COUNTY

LATITUDE: 40° 37' 19" N LONGITUDE: -87° 22' 51" W

BRIDGE LENGTH: 0.03 MI.
ROADWAY LENGTH: 0.30 MI.
TOTAL LENGTH: 0.33 MI.
MAX. GRADE: (EXIST.) 1.40 %

HUC: # 07120002070030

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

Michael Baker
INTERNATIONAL

Michael Baker International, Inc.
3815 River Crossing Parkway, Suite 20
Indianapolis, IN 46240
Tel: 317-663-8430 Fax: 317-663-8410
www.mbakertntl.com

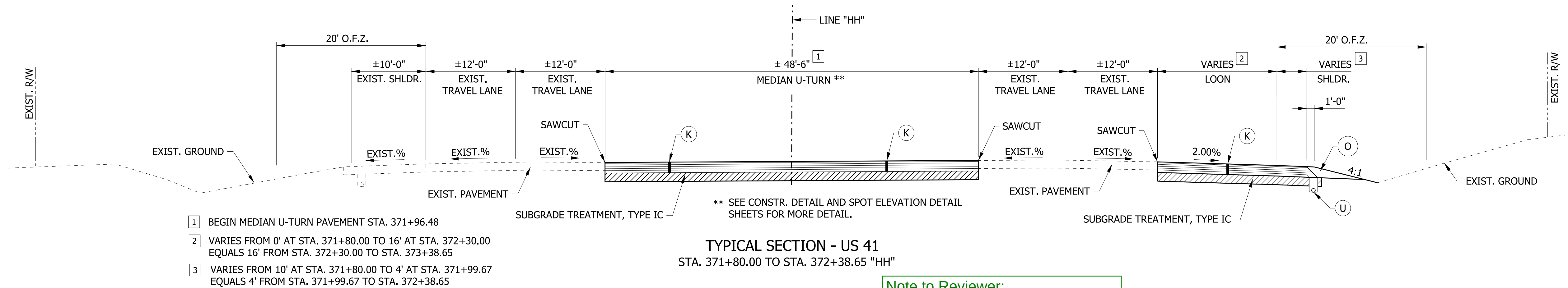
STAGE 2 SUBMITTAL
SEPTEMBER 14, 2023

PLANS PREPARED BY:	Michael Baker International, Inc.	317-663-8430 PHONE NUMBER
CERTIFIED BY:		DATE
RECOMMENDED FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTATION	DATE

	BRIDGE FILE		
	DESIGNATION 2100059		
SURVEY BOOK	SHEETS		
	1	of	47
CONTRACT	PROJECT		
R-43688	2100187		

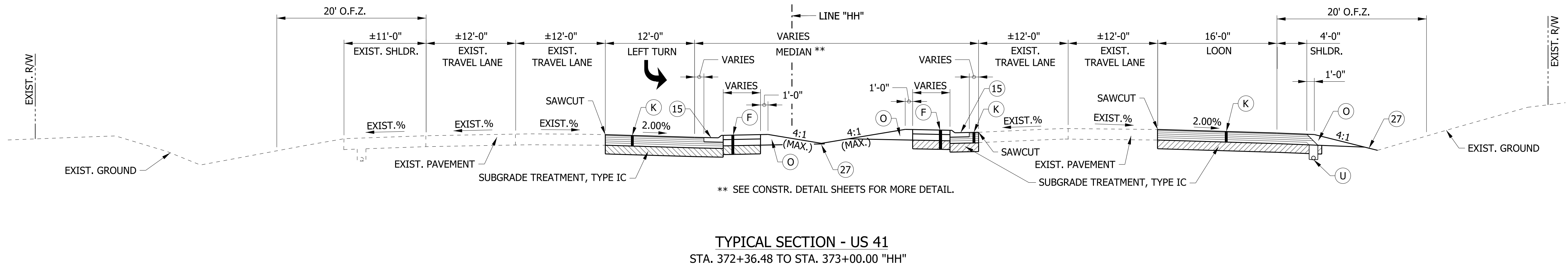
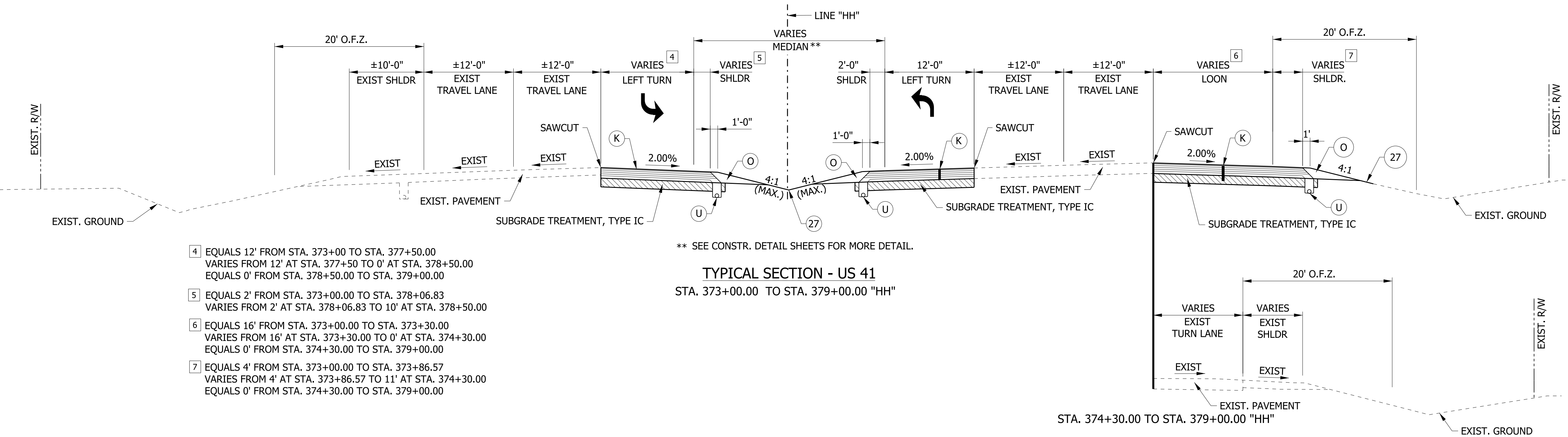
9/14/2023

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LEGEND

- F PCCP, 7 IN. WITH D-1 JOINTS SPACE AT 15 FT. WITH 1 IN. DIA. BARS SPACED AT 12 IN. ON 10 IN. COMPACTED AGGREGATE NO. 53, ON SUBGRADE TREATMENT, TYPE IC
- K HMA, FULL DEPTH RECONSTRUCTION: 165 LB/SYD QC/QA HMA, 3, 70 SURFACE, 9.5 MM, ON 275 LB/SYD QC/QA HMA, 3, 70 INTERMEDIATE, 19 MM, ON 1100 LB/SYD QC/QA HMA, 3, 64 BASE, 19 MM (2 LIFTS), ON 300 LB/SYD QC/QA HMA, 4, 76, INTERMEDIATE, OG, 19 MM
- O COMPACTED AGGREGATE NO. 53
- U UNDERDRAIN, TYPE 4, 6"
- 15 MOD. COMBINED CONC. CURB & GUTTER, TYPE B
- 27 MULCHED SEEDING R

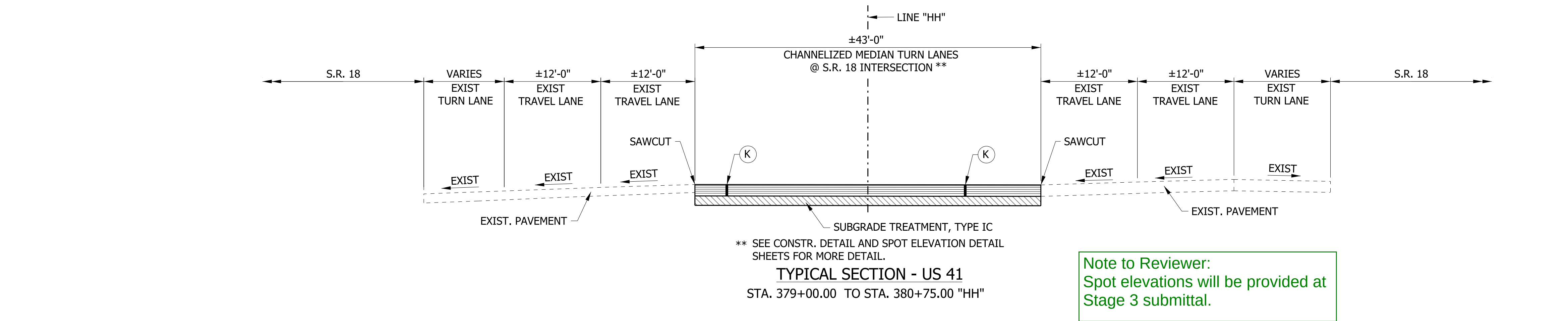
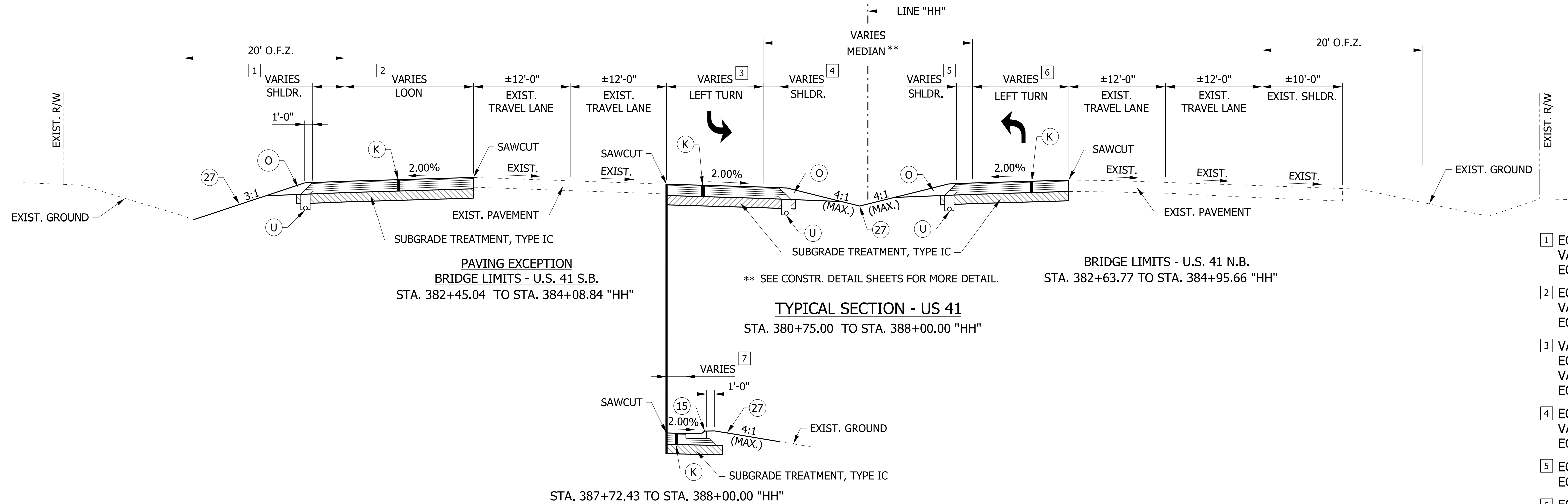
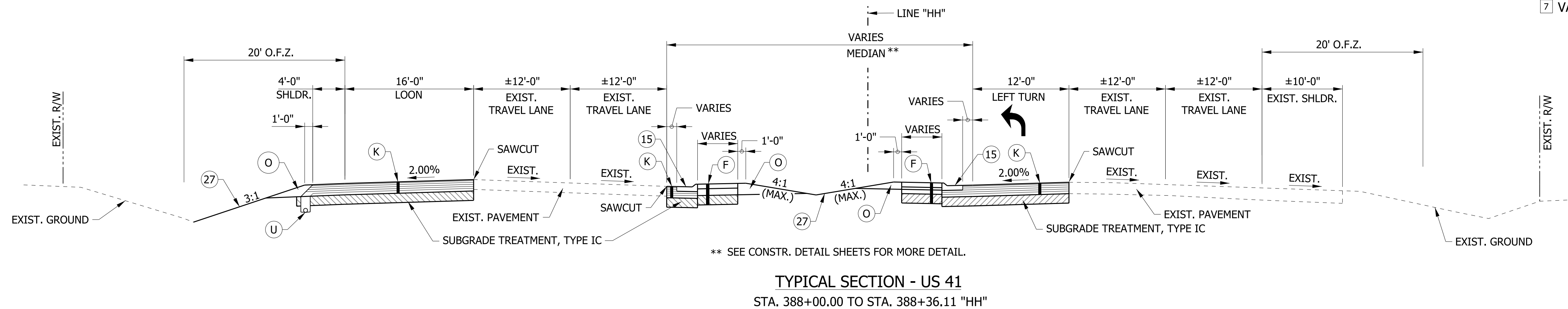


RECOMMENDED FOR APPROVAL	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: JWM

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1/8"=1'-0"	
VERTICAL SCALE	DESIGNATION
1/8"=1'-0"	2100059
SURVEY BOOK	SHEETS
	3 of 47
CONTRACT	PROJECT
R-43688	2100187



LEGEND

- (F) PCCP, 7 IN. WITH D-1 JOINTS SPACE AT 15 FT. WITH 1 IN. DIA. BARS SPACED AT 12 IN. ON 10 IN. COMPACTED AGGREGATE NO. 53, ON SUBGRADE TREATMENT, TYPE IC
- (K) HMA, FULL DEPTH RECONSTRUCTION: 165 LB/SYD QC/QA HMA, 3, 70 SURFACE, 9.5 MM, ON 275 LB/SYD QC/QA HMA, 3, 70 INTERMEDIATE, 19 MM, ON 1100 LB/SYD QC/QA HMA, 3, 64 BASE, 19 MM (2 LIFTS), ON 300 LB/SYD QC/QA HMA, 4, 76, INTERMEDIATE, OG, 19 MM
- (O) COMPACTED AGGREGATE NO. 53
- (U) UNDERDRAIN, TYPE 4, 6"
- (15) MOD. COMBINED CONC. CURB & GUTTER, TYPE B
- (27) MULCHED SEEDING R

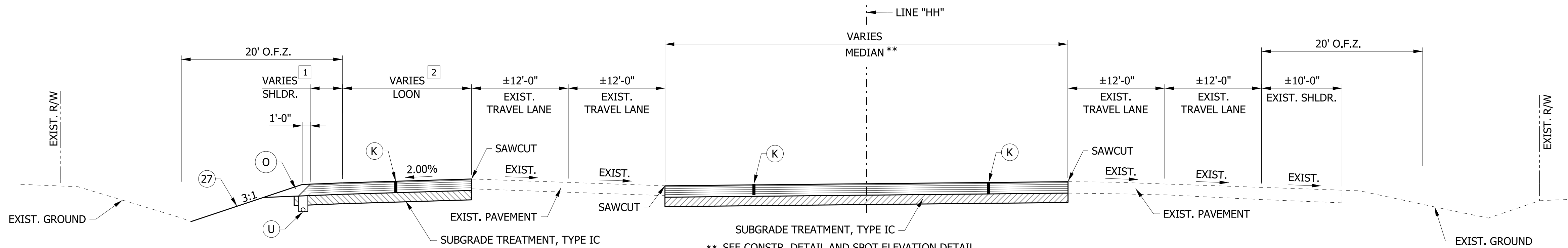
- 1 EQUALS 0' FROM STA. 380+75.00 TO STA. 386+51.71 VARIES FROM 11.69' AT STA. 386+51.71 TO 4' AT STA. 387+51.71 EQUALS 4' FROM STA. 387+51.71 TO STA. 388+00.00
- 2 EQUALS 0' FROM STA. 380+75.00 TO STA. 386+51.71 VARIES FROM 0' AT STA. 386+51.71 TO 16' AT STA. 387+51.71 EQUALS 16' FROM STA. 387+51.71 TO STA. 388+00.00
- 3 VARIES FROM 18.42' AT STA. 380+75.00 TO 12' AT STA. 381+59.60 EQUALS 12' FROM STA. 381+59.60 TO STA. 385+95.00 VARIES FROM 12' AT STA. 385+95.00 TO 0' AT STA. 386+95.00 EQUALS 0' FROM STA. 386+95.00 TO STA. 387+72.43
- 4 EQUALS 2' FROM STA. 380+75.00 TO STA. 386+83.45 VARIES FROM 2' AT STA. 386+83.45 TO 3.61' AT STA. 386+95.00 EQUALS 0' FROM STA. 386+95.00 TO STA. 387+72.43
- 5 EQUALS 0' FROM STA. 380+75.00 TO STA. 383+95.64 EQUALS 2' FROM STA. 383+95.64 TO STA. 388+00.00
- 6 EQUALS 0' FROM STA. 380+75.00 TO STA. 383+95.64 VARIES FROM 7.73' AT STA. 383+95.64 TO 12' AT STA. 384+88.60 EQUALS 12' FROM STA. 384+88.60 TO STA. 388+00.00
- 7 VARIES FROM 0' AT STA. 387+72.43 TO 2.38' AT STA. 388+00.00

RECOMMENDED FOR APPROVAL	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: JWM

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	
VERTICAL SCALE	DESIGNATION
1/8" = 1'-0"	2100059
SURVEY BOOK	SHEETS
	4 of 47
CONTRACT	PROJECT
R-43688	2100187



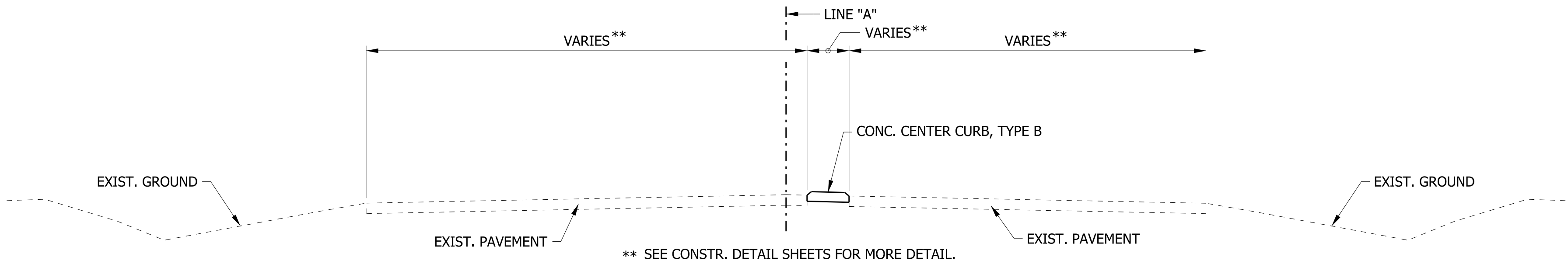
- 1 EQUALS 4' FROM STA. 380+75.00 TO STA. 388+80.12
VARIES FROM 4' AT STA. 388+80.12 TO 10.79' AT STA. 389+00.00
- 2 EQUALS 16' FROM STA. 388+36.11 TO STA. 388+50.00
VARIES FROM 16' AT STA. 388+50.00 TO 0' AT STA. 389+00.00

TYPICAL SECTION - US 41
STA. 388+36.11 TO STA. 389+00.00 "HH"

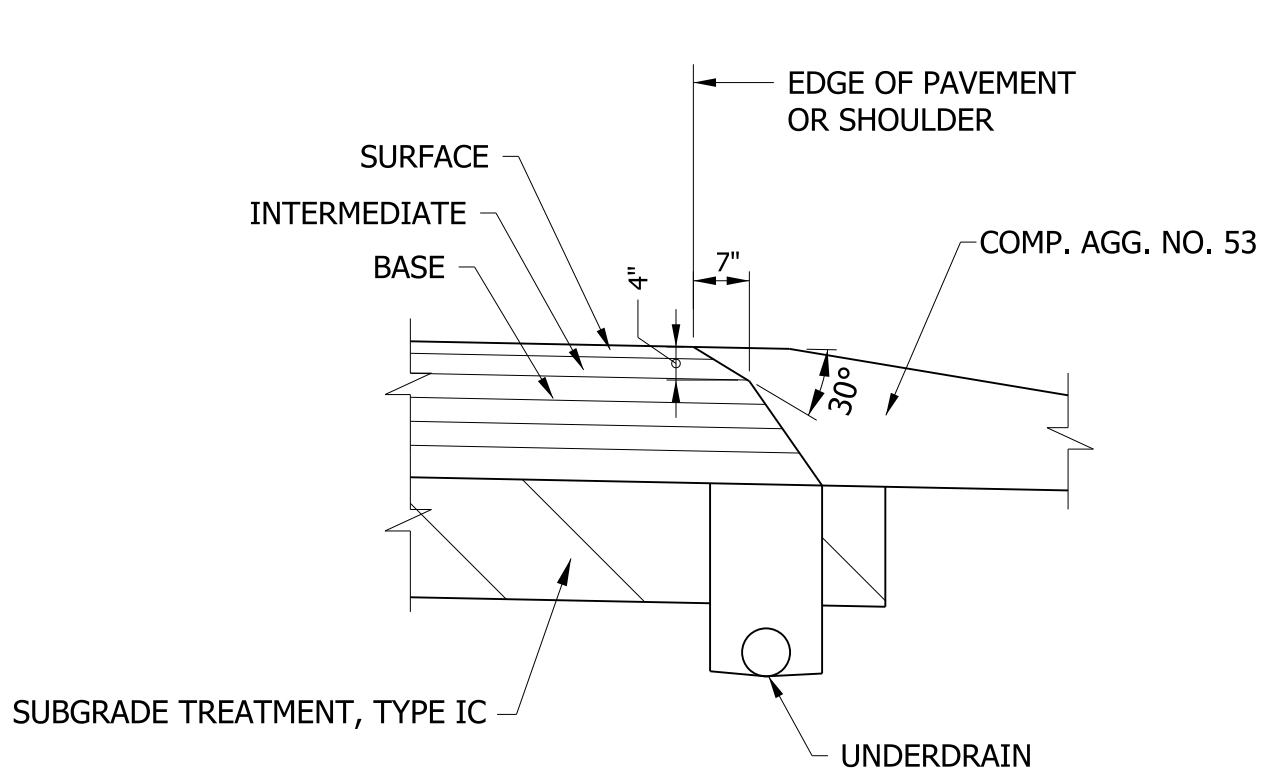
Note to Reviewer:
Spot elevations will be provided at
Stage 3 submittal.

LEGEND

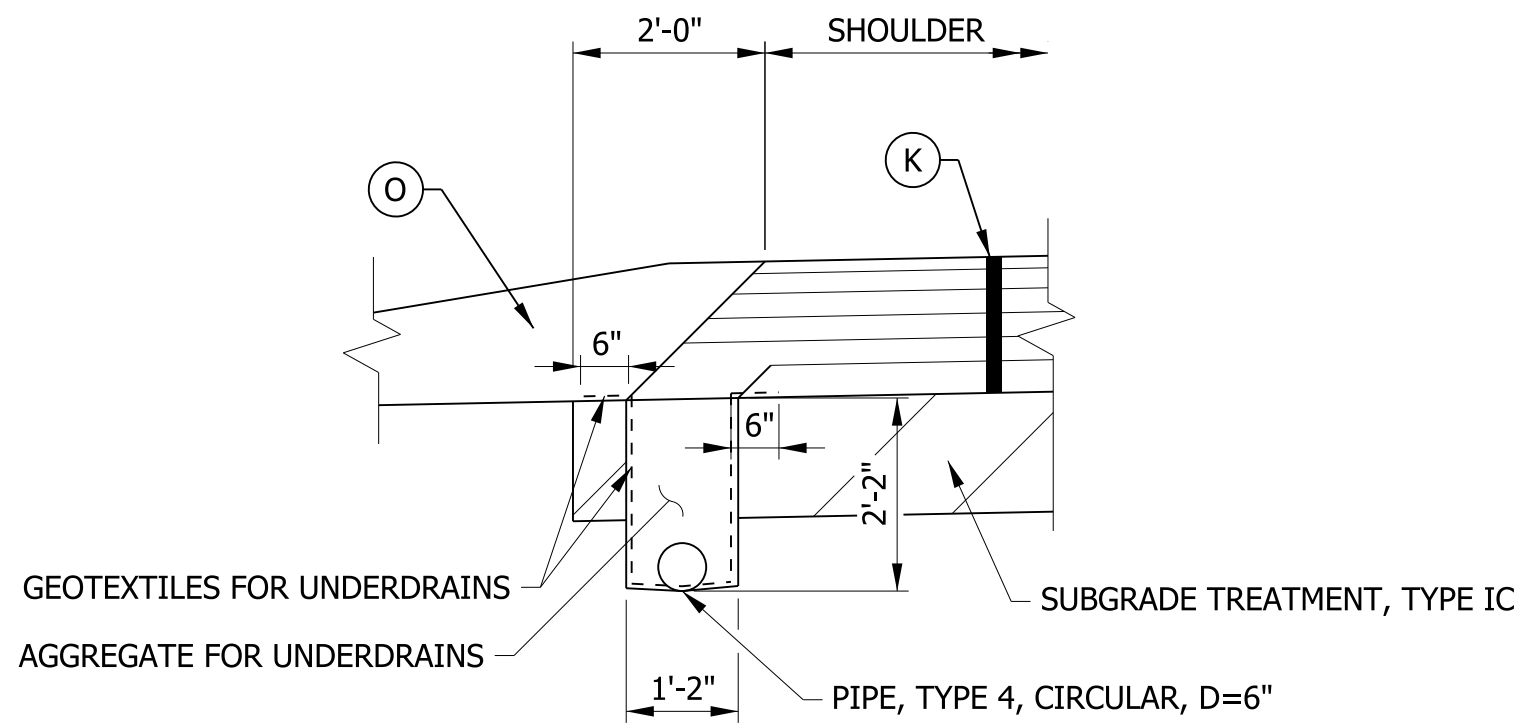
- F PCCP, 7 IN. WITH
D-1 JOINTS SPACE AT 15 FT. WITH
1 IN. DIA. BARS SPACED AT 12 IN. ON
10 IN. COMPACTED AGGREGATE NO. 53, ON
SUBGRADE TREATMENT, TYPE IC
- K HMA, FULL DEPTH RECONSTRUCTION:
165 LB/SYD QC/QA HMA, 3, 70 SURFACE, 9.5 MM, ON
275 LB/SYD QC/QA HMA, 3, 70 INTERMEDIATE, 19 MM, ON
1100 LB/SYD QC/QA HMA, 3, 64 BASE, 19 MM (2 LIFTS), ON
300 LB/SYD QC/QA HMA, 4, 76, INTERMEDIATE, OG, 19 MM
- O COMPACTED AGGREGATE NO. 53
- U UNDERDRAIN, TYPE 4, 6"
- 15 MOD. COMBINED CONC. CURB & GUTTER, TYPE B
- 27 MULCHED SEEDING R



TYPICAL SECTION - SR 18 APPROACHES
STA. 407+45.06 TO STA. 407+81.77 "A"
STA. 409+12.47 TO STA. 408+50.07 "A"



SAFETY EDGE - HMA PAVEMENT
SCALE: N.T.S.



UNDERDRAIN DETAIL FULL DEPTH HMA SHOULDER
SCALE: N.T.S.

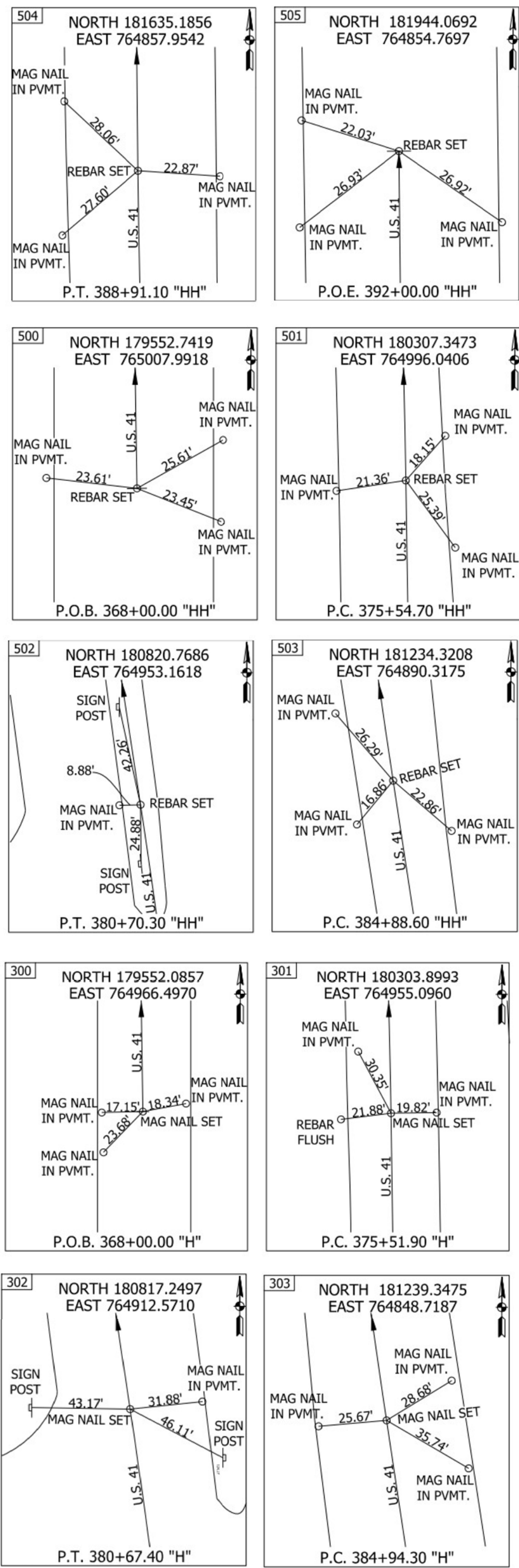
RECOMMENDED FOR APPROVAL	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	
VERTICAL SCALE	DESIGNATION
1/8" = 1'-0"	2100059
SURVEY BOOK	SHEETS
5	of 47
CONTRACT	PROJECT
R-43688	2100187

REFERENCE TIES



CURVE DATA
P.I. 386+95.88 "H"
Δ = 8°03'00" RT
R = 2864.79'
T = 201.58'
L = 402.50'
E = 7.08'

CURVE DATA
P.I. = 386+90.18 "HH"
Δ = 8°03'00" RT
R = 2864.79'
T = 201.58'
L = 402.50'
E = 7.08'

CURVE DATA
P.I. 417+54.10 "A"
Δ = 27°29'00" LT
R = 572.89'
T = 140.10'
L = 274.80'
E = 16.88'

CURVE DATA
P.I. 419+02.03 "PR-A"
Δ = 31°09'00" LT
R = 1640.42'
T = 457.24'
L = 891.85'
E = 62.53'

CURVE DATA
P.I. 378+10.04 "H"
Δ = 7°44'00" LT
R = 3819.31'
T = 258.14'
L = 515.50'
E = 8.71'

CURVE DATA
P.I. 378+12.89 "HH"
Δ = 7°44'00" LT
R = 3820.05'
T = 258.19'
L = 515.60'
E = 8.72'

CURVE DATA
P.I. 406+68.12 "A"
Δ = 13°07'00" RT
R = 3819.52'
T = 439.12'
L = 874.40'
E = 25.16'

BENCHMARK TABLE						
BENCHMARK NO.	NORTHING	EASTING	ELEVATION (NAVD88)	STATION	OFFSET	DESCRIPTION
TBM 1	181801.1593	764913.9101	786.526	390+56.49	57.66' RT.	MAG NAIL SET 2' WEST OF EAST EDGE OF PAVEMENT OF NORTHBOUND LANES.
TBM 2	181315.0117	764878.4377	780.818	385+70.15	0.78' LT.	MAG NAILSET 1' NORTH OF SOUTH EDGE OF PAVEMENT OF TURNAROUND.
TBM 3	180301.4579	764938.6051	785.149	375+49.72	57.52' LT.	MAG NAIL SET 1' EAST OF EDGE OF PAVEMENT OF SOUTHBOUND LANES.

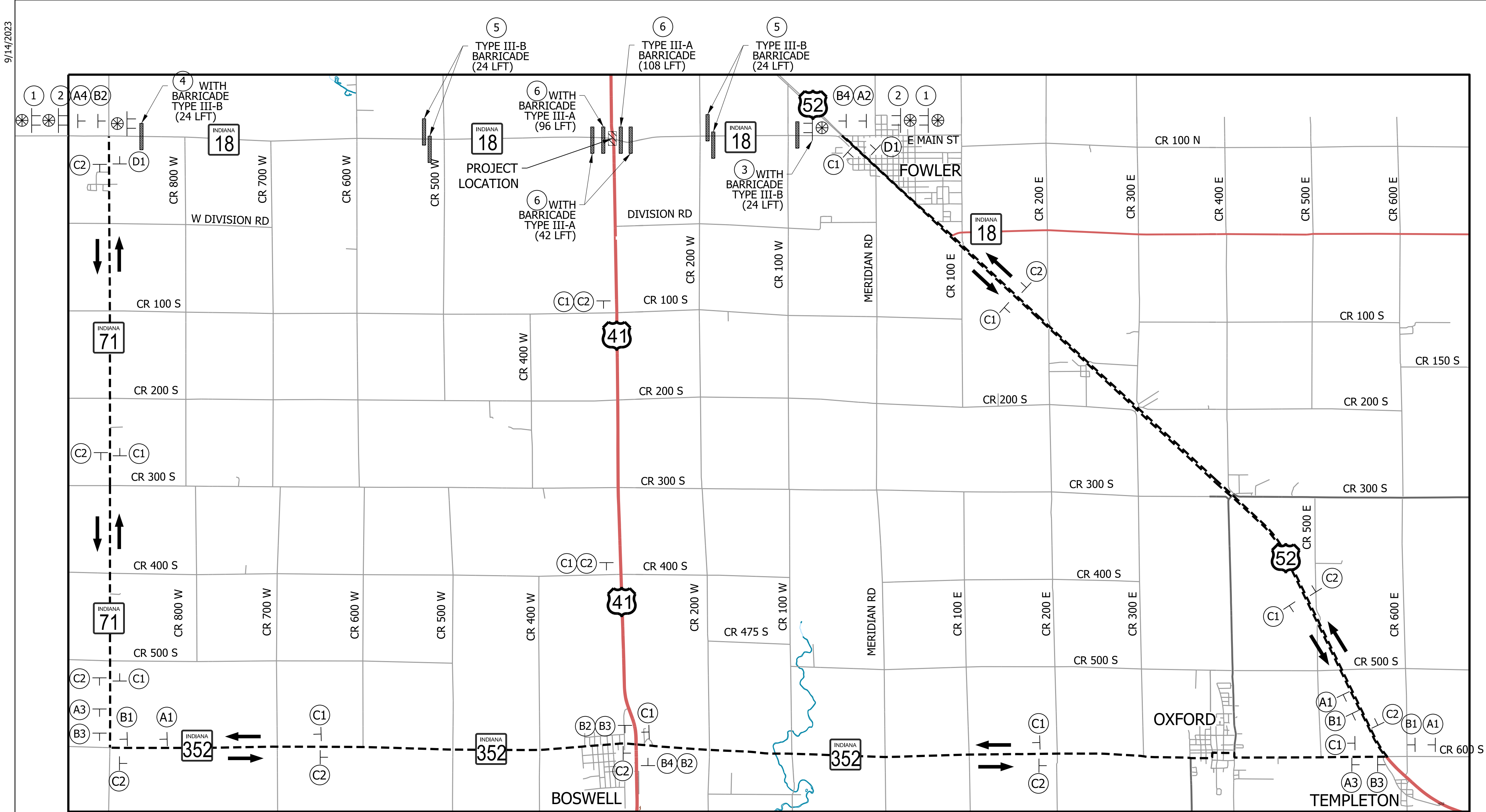
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: LDW	DRAWN: JEC	
CHECKED: MAE	CHECKED: JWM	

INDIANA
DEPARTMENT OF TRANSPORTATION

SURVEY CONTROL

HORIZONTAL SCALE	BRIDGE FILE
1"=100'	
VERTICAL SCALE	DESIGNATION
N/A	2100059
SURVEY BOOK	SHEETS
	6 of 47
CONTRACT	PROJECT
R-43688	2100187

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DETOUR PLAN
NOT TO SCALE

MAINTENANCE OF TRAFFIC QUANTITIES					
	UNIT	PHASE I	PHASE II	DETOUR	TOTAL
CONSTRUCTION SIGN, A	EA	22	22	4	26
CONSTRUCTION SIGN, B	EA			4	4
TYPE III-A BARRICADE	LFT		288		288
TYPE III-B BARRICADE	LFT			144	144
ROAD CLOSURE SIGN ASSEMBLY	EA			8	8
DETOUR ROUTE MARKER ASSEMBLY	EA			43	43
FLASHING ARROW SIGN	DAY	60	60		120
ENERGY ABSORBING TERMINAL CZ TL-3	EA	3	2		3
TEMPORARY TRAFFIC BARRIER TYPE 2	LFT	708	6,510		6,510
TEMPORARY PAVEMENT MARKING, REMOVABLE, 4 IN., WHITE	LFT	200	4,150		4,350
TEMPORARY PAVEMENT MARKING, REMOVABLE, 8 IN., BLACK	LFT		2,025		2,025

LEGEND

- DETOUR ROUTE MARKER ASSEMBLY
- CONSTRUCTION SIGN, TYPE A
- TYPE "A" CONSTRUCTION WARNING LIGHT
- TYPE "B" CONSTRUCTION WARNING LIGHT
- STANDARD BARRICADE, TYPE III-B
- DETOUR ROUTE
- CONSTRUCTION AREA
- DIRECTION OF DETOUR TRAFFIC FLOW

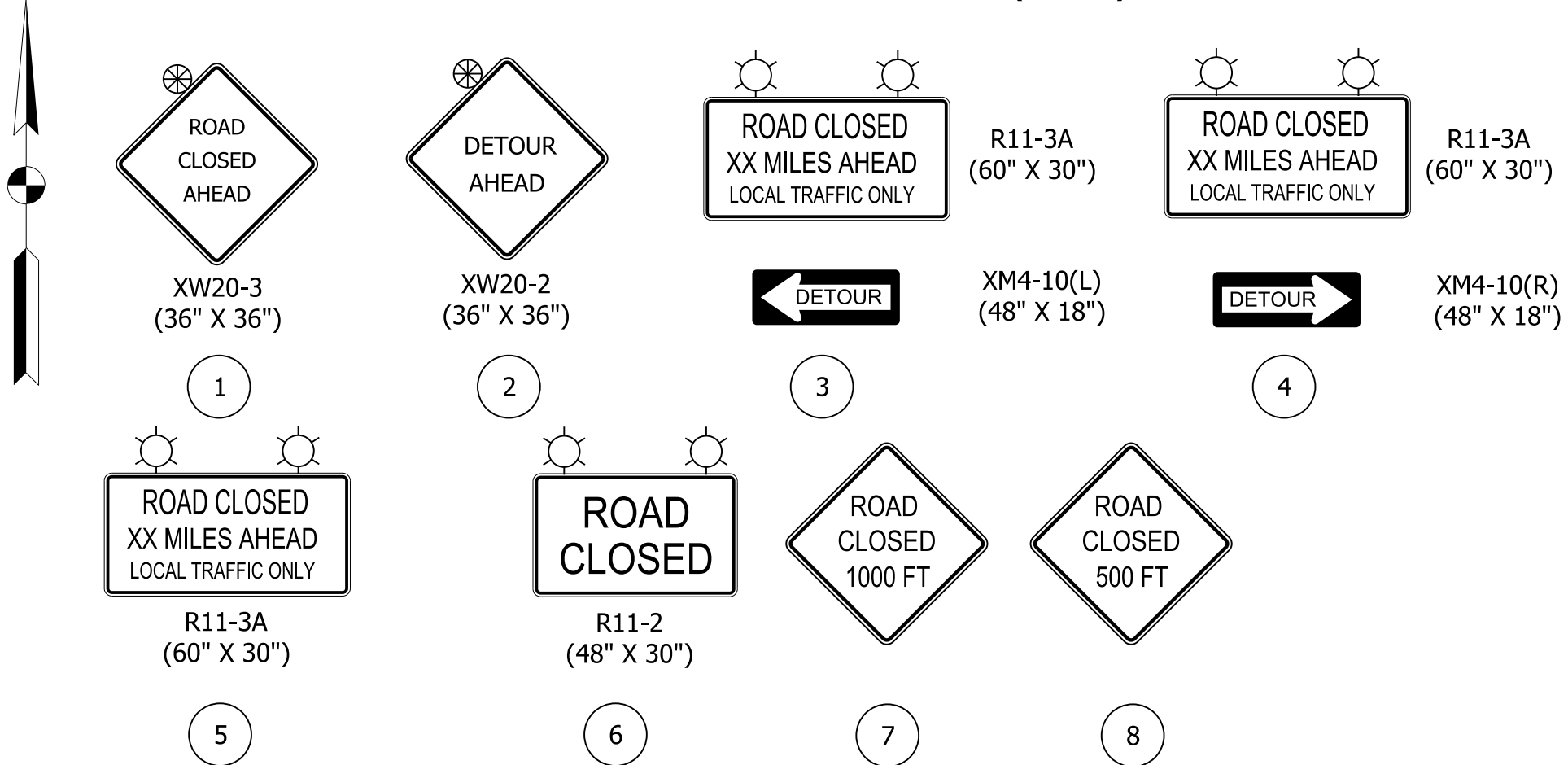
RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: SWB
CHECKED: MAE	CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

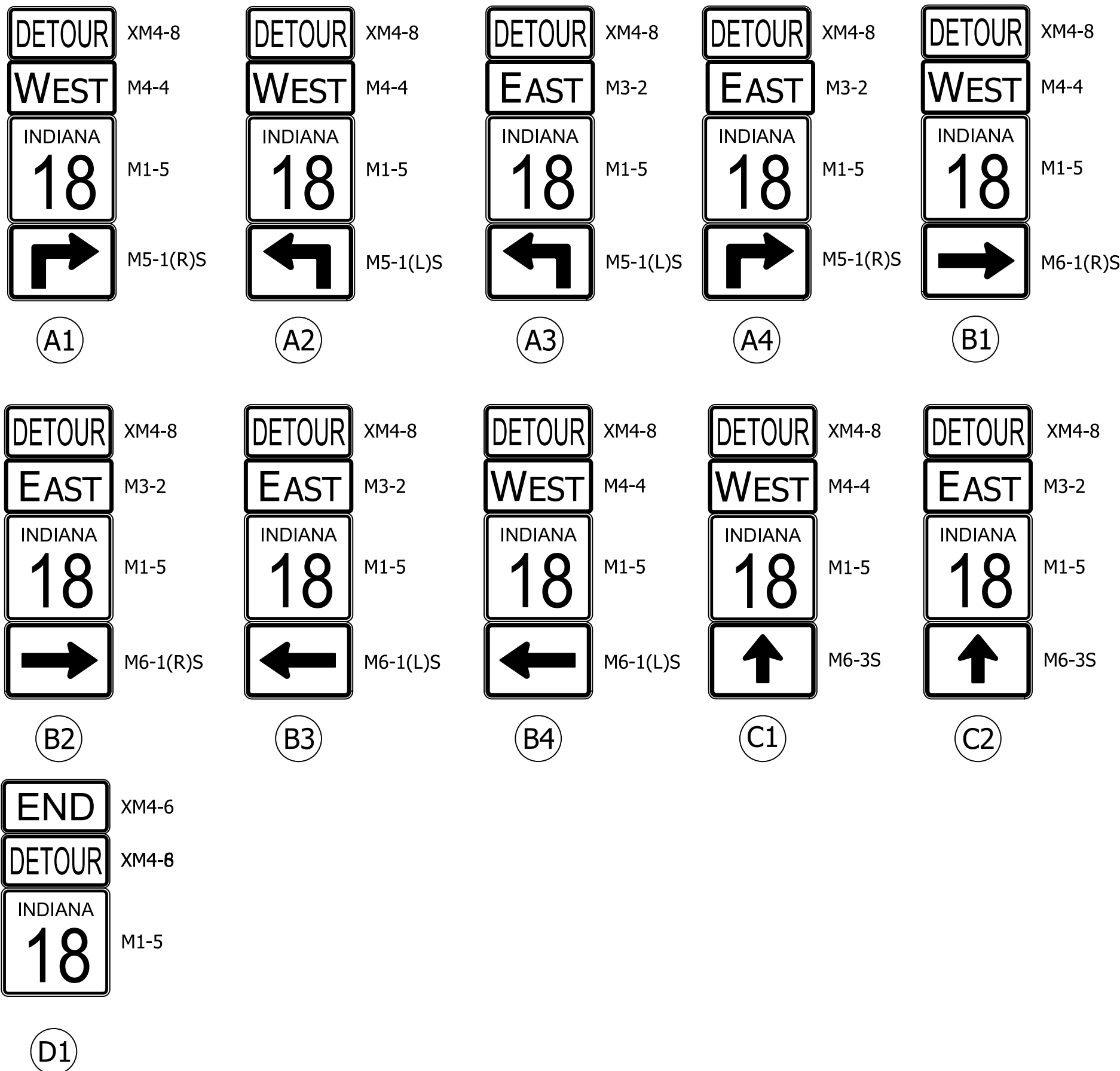
MAINTENANCE OF TRAFFIC
DETOUR ROUTE - US41 & SR 18

HORIZONTAL SCALE AS NOTED	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION 2100059
SURVEY BOOK	SHEETS
CONTRACT R-43688	7 of 47 PROJECT 2100187

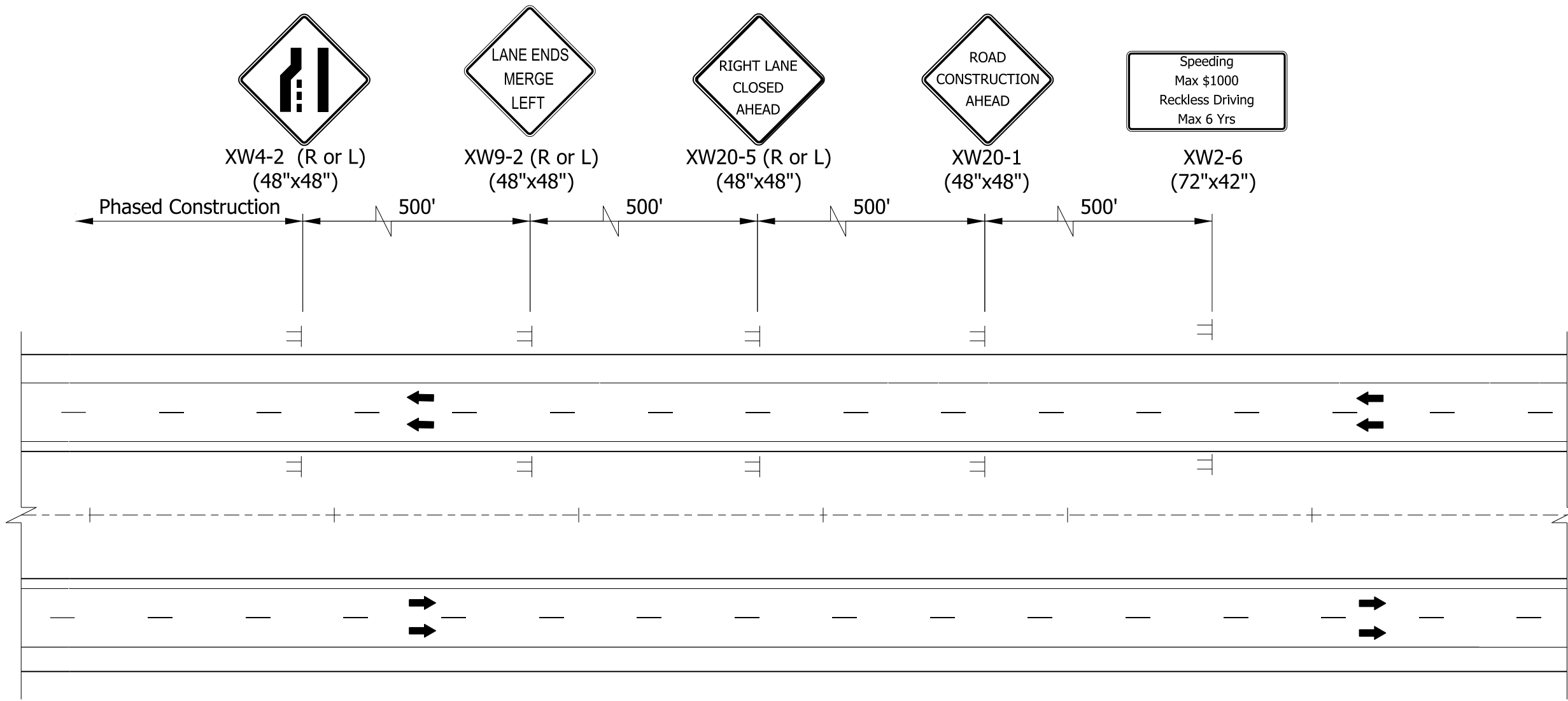
ROAD CLOSURE SIGN ASSEMBLY (RCSA)



DETOUR ROUTE MARKER ASSEMBLIES



- NOTES:
- POSTED SPEED LIMIT ON SR 18 IS 55 MPH.
 - ADJACENT DRIVEWAY ACCESS TO REMAIN OPEN AT ALL TIMES.
 - REFER TO INDOT STANDARD DRAWINGS E801-TCDD, E 801-TCDDV, E801-TCLG AND E 801-TCSN FOR FURTHER DETAILS OF TRAFFIC CONTROL SIGNS AND PLACEMENT.
 - CONTRACTOR SHALL PROVIDE CONSTRUCTION SCHEDULE TO EMERGENCY SERVICES, RESIDENTS ALONG PROJECT LIMITS AND NEARBY SCHOOLS WITH BUSING ROUTES THROUGH THE PROJECT LIMITS.
 - CONSTRUCTION SIGN PLACEMENT SHALL BE PER THE INDIANA MUTCD.

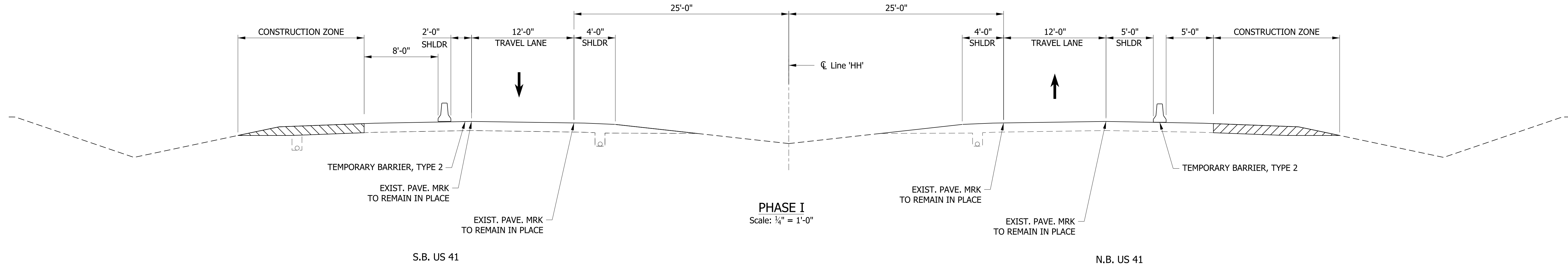


ADVANCED SIGNING PLAN

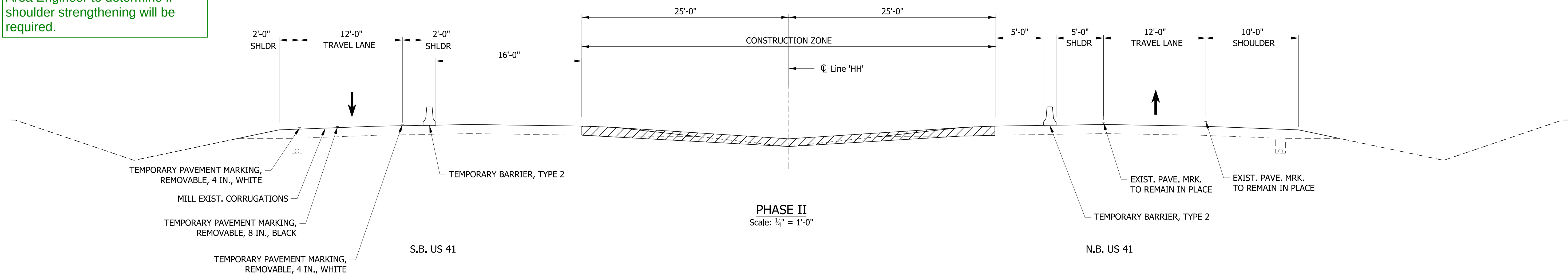
RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: SWB
CHECKED: MAE	CHECKED: LDW

INDIANA DEPARTMENT OF TRANSPORTATION	
ADVANCED SIGNING PLAN	

HORIZONTAL SCALE	BRIDGE FILE	
N/A	.	
VERTICAL SCALE	DESIGNATION	
N/A	2100059	
SURVEY BOOK	SHEETS	
.	8	of 47
CONTRACT	PROJECT	
R-43688	2100187	



Note to Reviewer:
Coordination is on-going with the
Area Engineer to determine if
shoulder strengthening will be
required.



PHASE I SUMMARY DESCRIPTION

- US 41 IS REDUCED TO A SINGLE LANE IN EACH DIRECTION
- US 41 TRAFFIC IS PUSHED TO THE OUTSIDE LANE TO ALLOW FOR THE CONSTRUCTION OF THE LOONS
- PORTIONS OF PROPOSED DRAINAGE STRUCTURE ARE INSTALLED UNDER SB US 41

PHASE II SUMMARY DESCRIPTION

- US 41 IS REDUCED TO A SINGLE LANE IN EACH DIRECTION
- US 41 TRAFFIC IS PUSHED TO THE OUTSIDE LANE TO ALLOW FOR THE CONSTRUCTION OF THE MEDIAN DIRECT LEFTS
- SR 18 IS CLOSED FOR THE CONSTRUCTION OF THE RAISED CENTER CURB AND CULVERT REPLACEMENTS
- THE REMAINING DRAINAGE STRUCTURES ARE INSTALLED

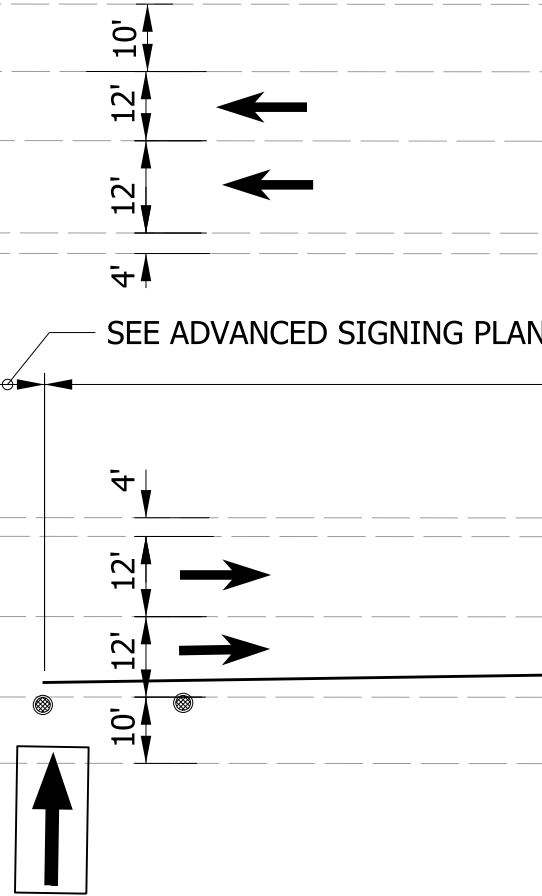
- NOTES
1. CONSTRUCTION ZONE DESIGN SPEED: 60 MPH
 2. EXISTING PAVEMENT MARKINGS TO BE LEFT IN PLACE.

RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: JWM

INDIANA DEPARTMENT OF TRANSPORTATION	
MAINTENANCE OF TRAFFIC TYPICAL SECTIONS	

HORIZONTAL SCALE	BRIDGE FILE	
AS NOTED	.	
VERTICAL SCALE	DESIGNATION	
AS NOTED	2100059	
SURVEY BOOK	SHEETS	
.	9	of 47
CONTRACT	PROJECT	
R-43688	2100187	

SEE ADVANCED SIGNING DETAILS



359+00

360+00

361+00

362+00

363+00

364+00

365+00

366+00

367+00

US 41 S.B.

US 41 N.B.

→

←

←

720' TAPER

570' BUFFER

TR

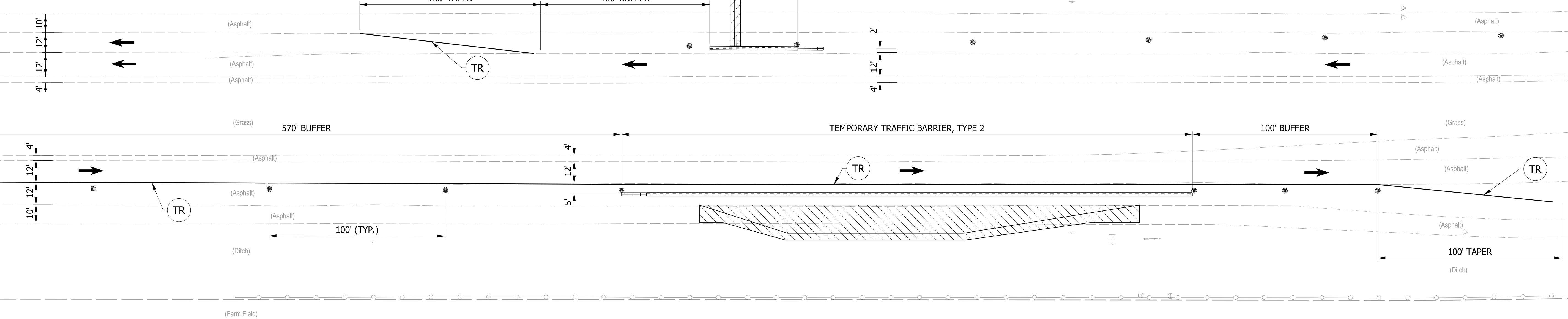
50' (TYP.)

TR

MATCHLINE STA. 367+50

MOT PLAN - PHASE 1

MATCHLINE STA. 367+50



368+00

369+00

370+00

371+00

372+00

373+00

374+00

375+00

376+00

(Asphalt)

(Asphalt)

(Asphalt)

(Grass)

(Asphalt)

(Asphalt)

(Ditch)

(Farm Field)

(Asphalt)

(Asphalt)

(Asphalt)

(Grass)

(Asphalt)

(Asphalt)

(Asphalt)

(Ditch)

50' TEMP. TRAFFIC BARRIER, TYPE 2

TEMPORARY TRAFFIC BARRIER, TYPE 2

100' TAPER

100' BUFFER

100' BUFFER

100' TAPER

TR

TR

TR

MATCHLINE STA. 376+50

MOT PLAN - PHASE 1

NOTES:

SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA & INFORMATION.

LEGEND

- Flashing Arrow Sign
- Standard Drum (Spa. @ 100', 50' on Tapers)
- Existing Pavement Marking Removal
- Construction Sign
- Indicates Area to be Constructed this Phase
- Temporary Pavement Marking, Removable, 4 IN., White
- Energy Absorbing Impact Attenuator
- Temporary Pavement Marking, Removable, 8 IN., Black

RECOMMENDED FOR APPROVAL

DESIGN ENGINEER DATE

DESIGNED: LDW

DRAWN: SWB

CHECKED: MAE

CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE I

HORIZONTAL SCALE

1" = 30'

VERTICAL SCALE

NA

SURVEY BOOK

CONTRACT

R-43688

BRIDGE FILE

DESIGNATION

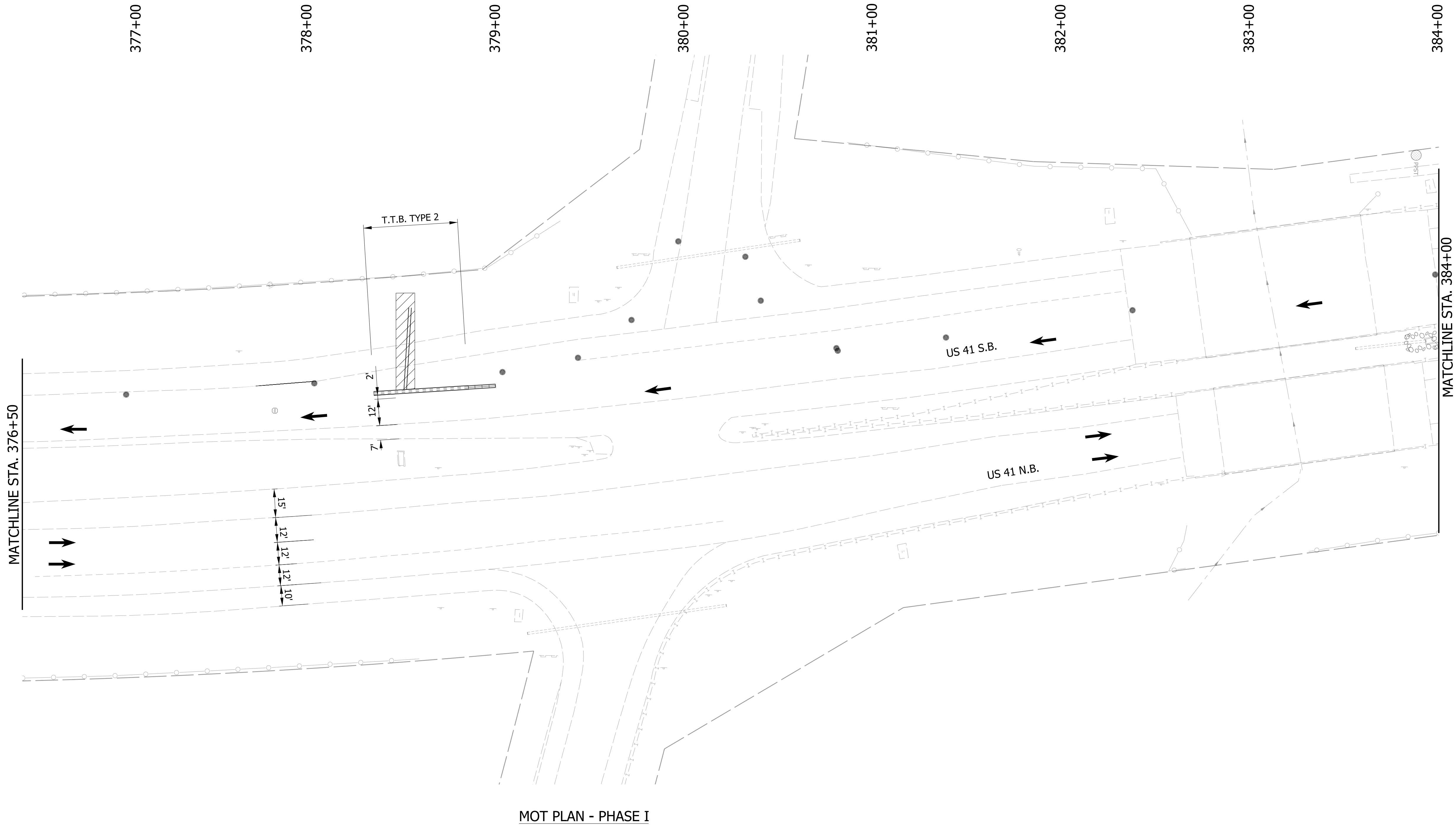
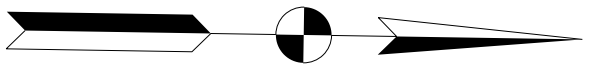
2100059

SHEETS

10 of 47

PROJECT

2100187



MOT PLAN - PHASE I

SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA & INFORMATION.

LEGEND

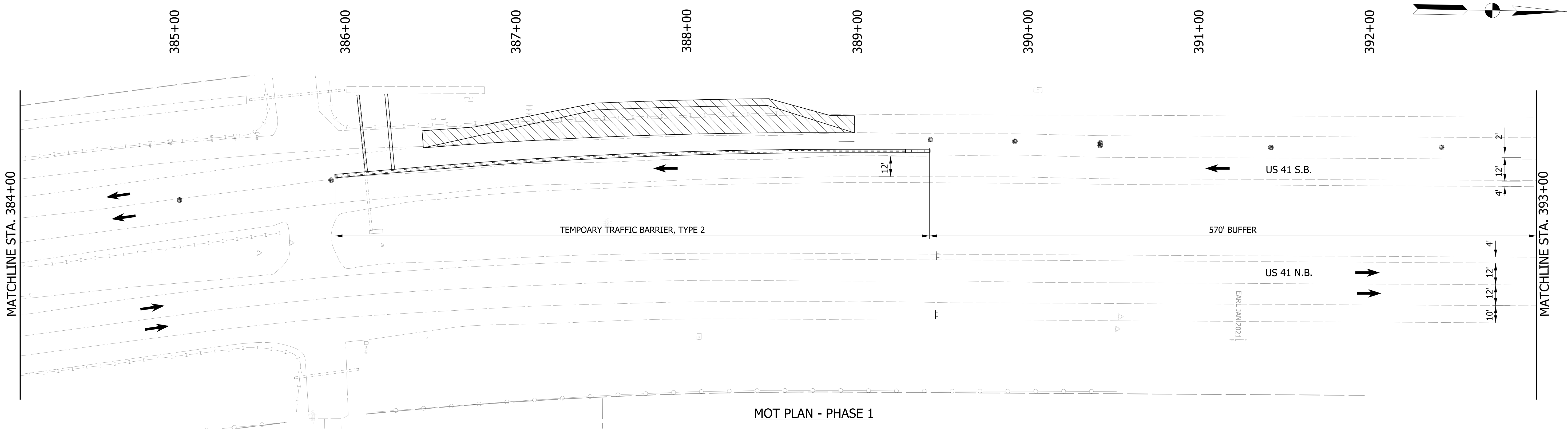
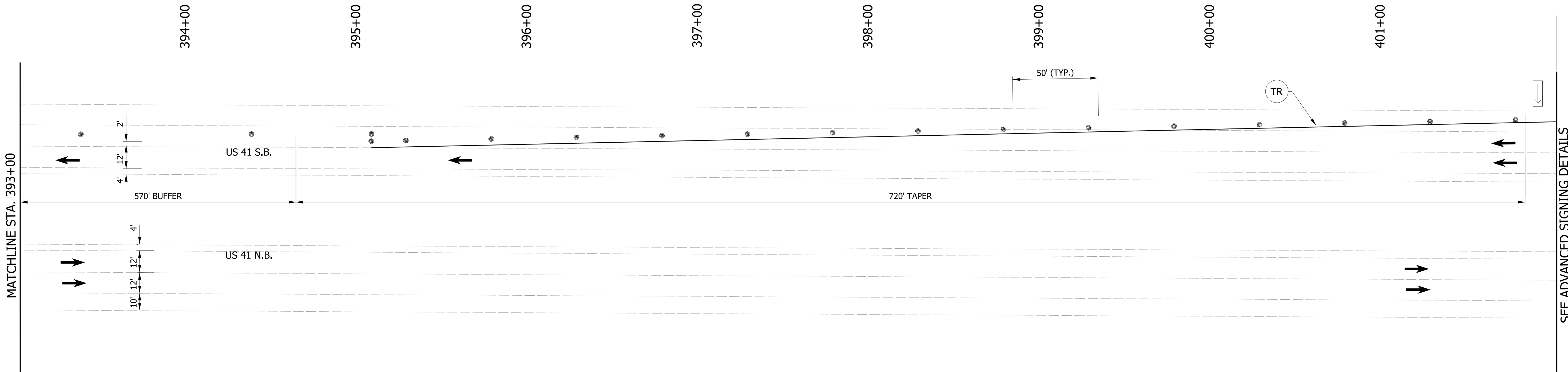
- Flashing Arrow Sign
- Standard Drum (Spa. @ 100', 50' on Tapers)
- Existing Pavement Marking Removal
- Construction Sign
- Indicates Area to be Constructed this Phase
- Temporary Pavement Marking, Removable, 4 IN., White
- Energy Absorbing Impact Attenuator
- Temporary Pavement Marking, Removable, 8 IN., Black

RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER	DATE
DESIGNED: LDW	DRAWN: SWB
CHECKED: MAE	CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE I

HORIZONTAL SCALE 1" = 30'		BRIDGE FILE	
VERTICAL SCALE NA		DESIGNATION 2100059	
SURVEY BOOK		SHEETS	
CONTRACT R-43688		11 of 47	PROJECT 2100187



NOTES:
SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA & INFORMATION.

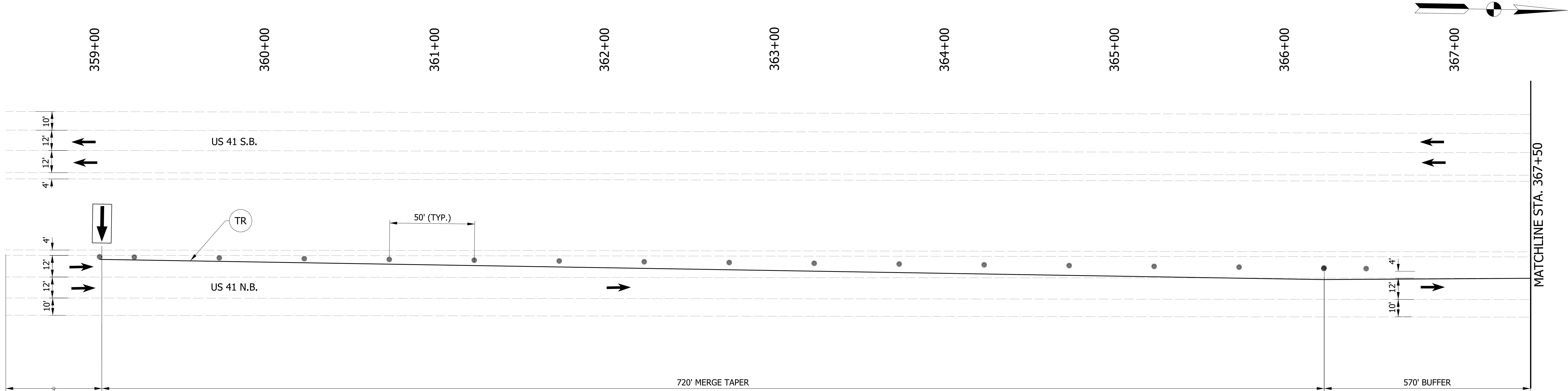
LEGEND

- Flashing Arrow Sign
- Standard Drum (Spa. @ 90, 45' on Tapers)
- Existing Pavement Marking Removal
- Construction Sign
- Indicates Area to be Constructed this Phase
- Temporary Pavement Marking, Removable, 4 IN., White
- Energy Absorbing Impact Attenuator
- Temporary Pavement Marking, Removable, 8 IN., Black

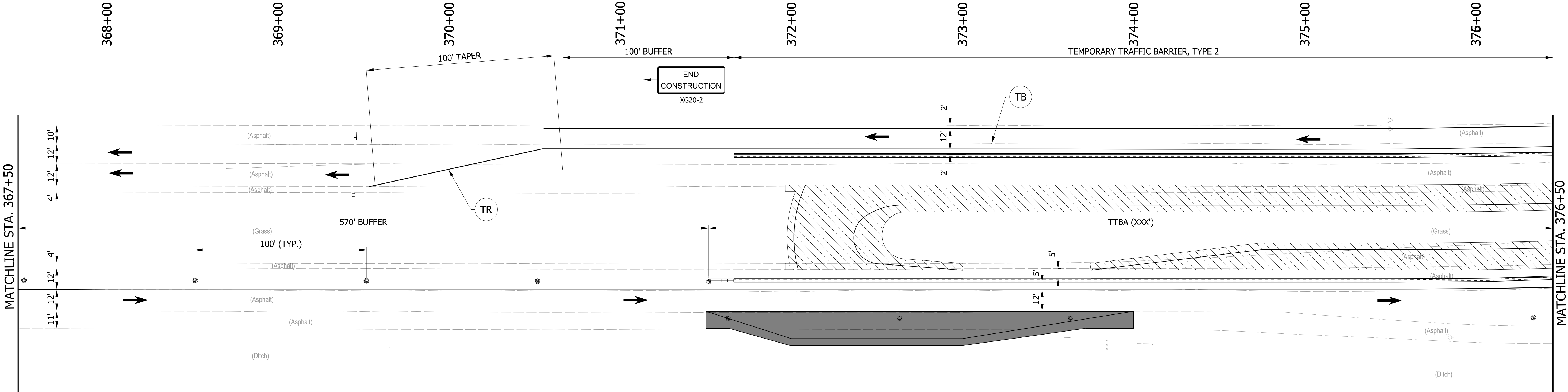
RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: SWB
CHECKED: MAE	CHECKED: LDW

INDIANA DEPARTMENT OF TRANSPORTATION	
MAINTENANCE OF TRAFFIC PHASE I	

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE	
VERTICAL SCALE NA	DESIGNATION 2100059	
SURVEY BOOK	SHEETS	
CONTRACT R-43688	12 of 47	PROJECT 2100187



MOT PLAN - PHASE II



MOT PLAN - PHASE II

NOTES:
SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA & INFORMATION.

LEGEND

- Flashing Arrow Sign
- Standard Drum (Spa. @ 100', 50' on Tapers)
- ✕

 Existing Pavement Marking Removal
- ⏏

 Construction Sign
- ▨

 Indicates Area to be Constructed this Phase
- TR

 Temporary Pavement Marking, Removable, 4 IN., White
- ≡

 Energy Absorbing Impact Attenuator
- TB

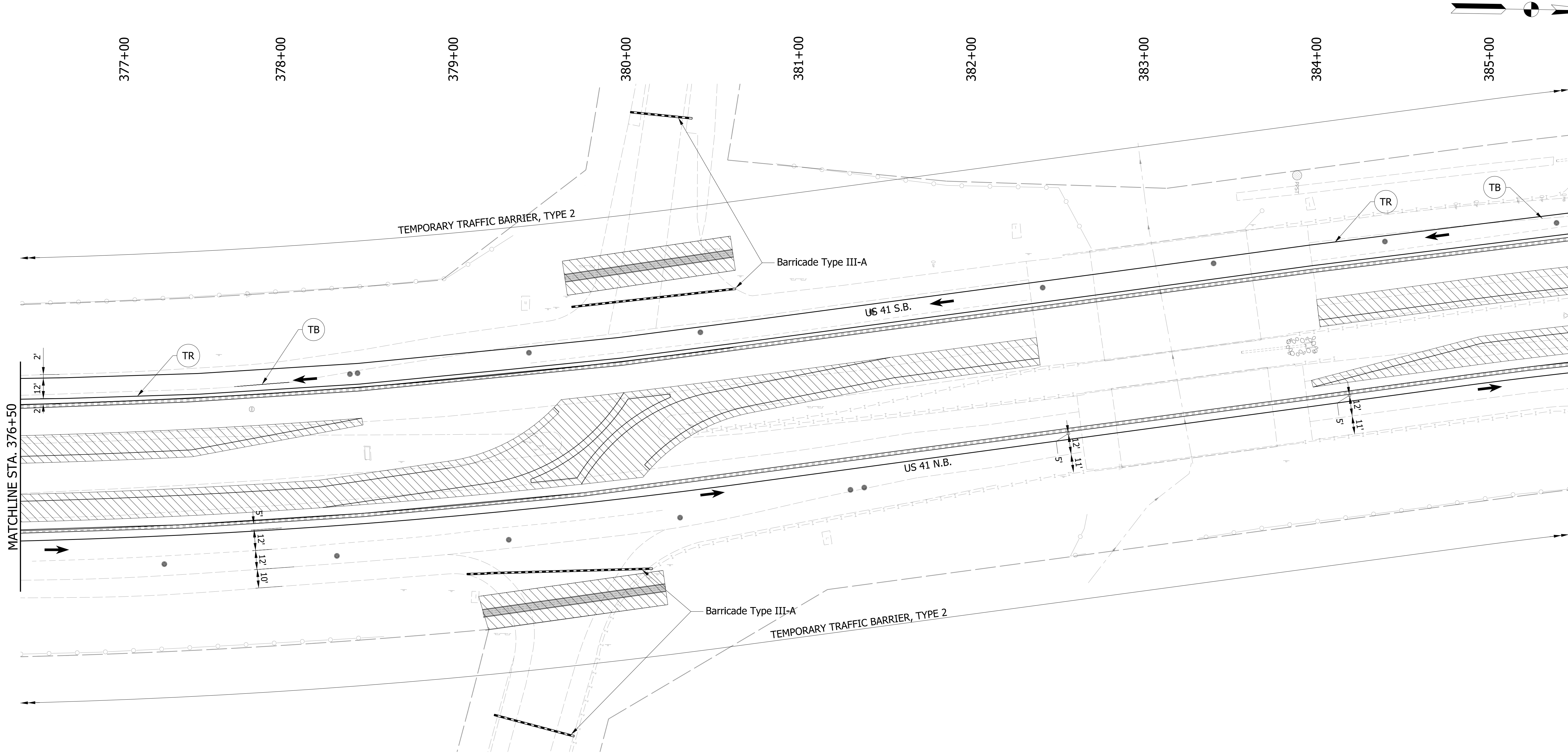
 Temporary Pavement Marking, Removable, 8 IN., Black

RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: SWB
CHECKED: MAE	CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE II

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE	
VERTICAL SCALE NA	DESIGNATION 2100059	
SURVEY BOOK	13	of 47
CONTRACT R-43688	PROJECT 2100187	



MOT PLAN - PHASE II

SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA & INFORMATION.

LEGEND

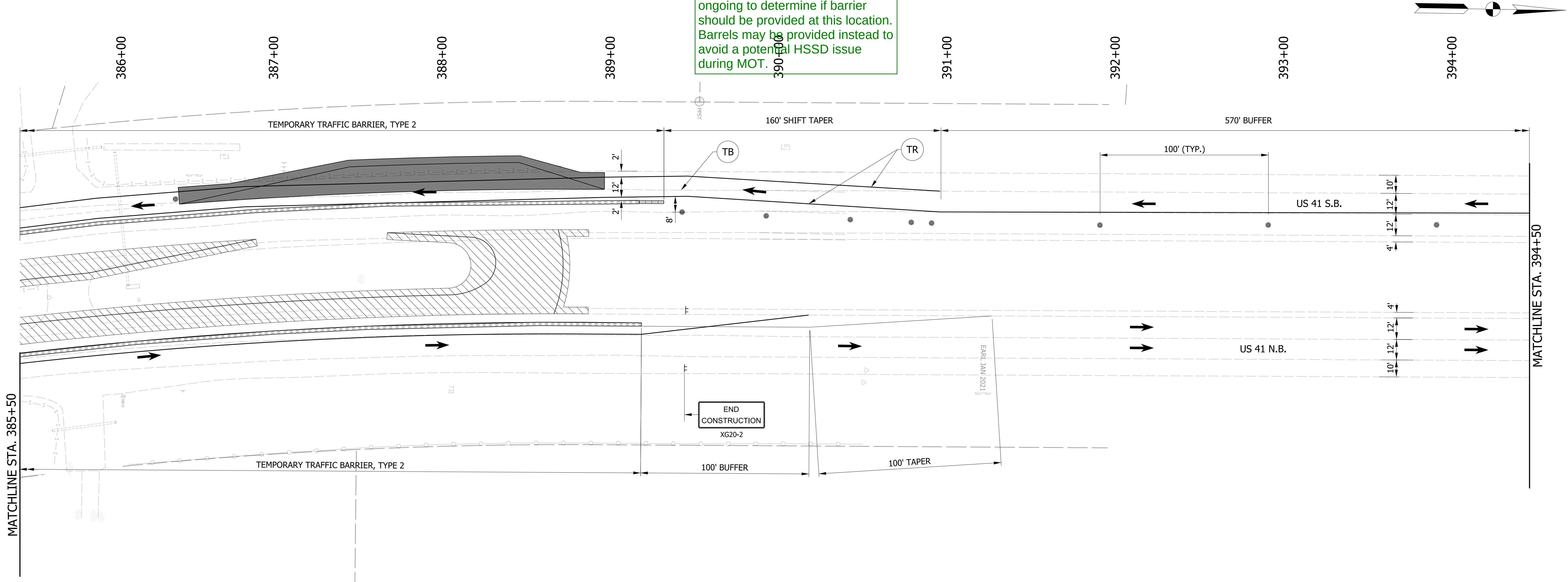
- Flashing Arrow Sign
- Standard Drum (Spa. @ 100', 50' on Tapers)
- Existing Pavement Marking Removal
- Construction Sign
- Indicates Area to be Constructed this Phase
- Temporary Pavement Marking, Removable, 4 IN., White
- Energy Absorbing Impact Attenuator
- Temporary Pavement Marking, Removable, 8 IN., Black

RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: SWB
CHECKED: MAE	CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE II

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE	
VERTICAL SCALE NA	DESIGNATION 2100059	
SURVEY BOOK	SHEETS	
CONTRACT R-43688	14 of 47	PROJECT 2100187



MOT PLAN - PHASE II

SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA & INFORMATION.

LEGEND

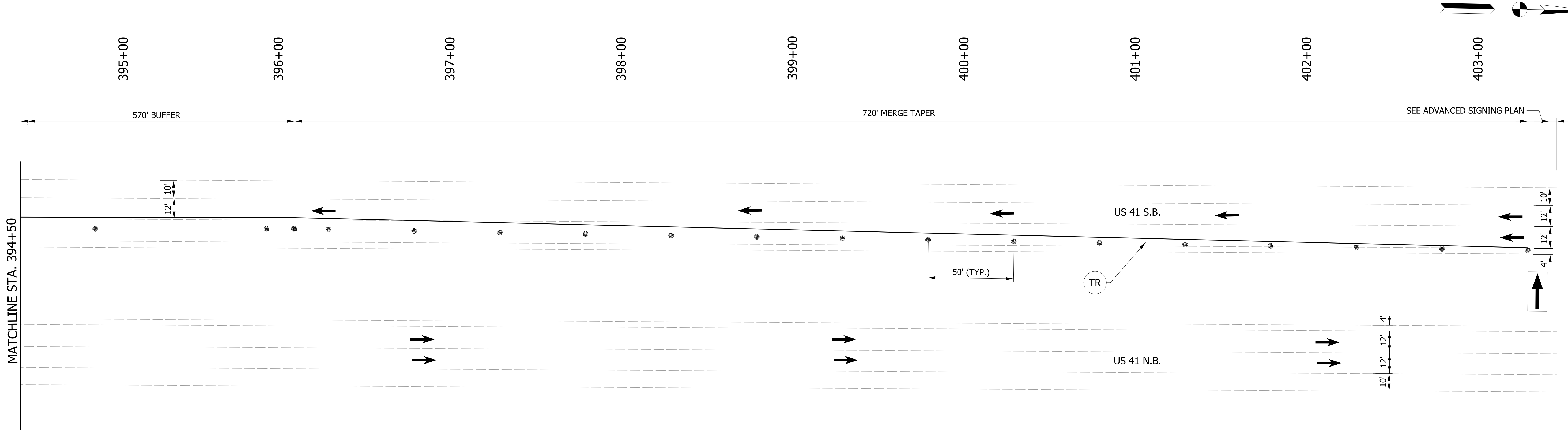
- Flashing Arrow Sign
- Standard Drum (Spa. @ 100', 50' on Tapers)
- Existing Pavement Marking Removal
- Construction Sign
- Indicates Area to be Constructed this Phase
- Temporary Pavement Marking, Removable, 4 IN., White
- Energy Absorbing Impact Attenuator
- Temporary Pavement Marking, Removable, 8 IN., Black

RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER	DATE
DESIGNED: LDW	DRAWN: SWB
CHECKED: MAE	CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
PHASE II

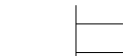
HORIZONTAL SCALE 1" = 30'		BRIDGE FILE	
VERTICAL SCALE NA		DESIGNATION 2100059	
SURVEY BOOK		SHEETS	
CONTRACT R-43688		15 of 47	PROJECT 2100187



MOT PLAN - PHASE II

SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA & INFORMATION.

LEGEND

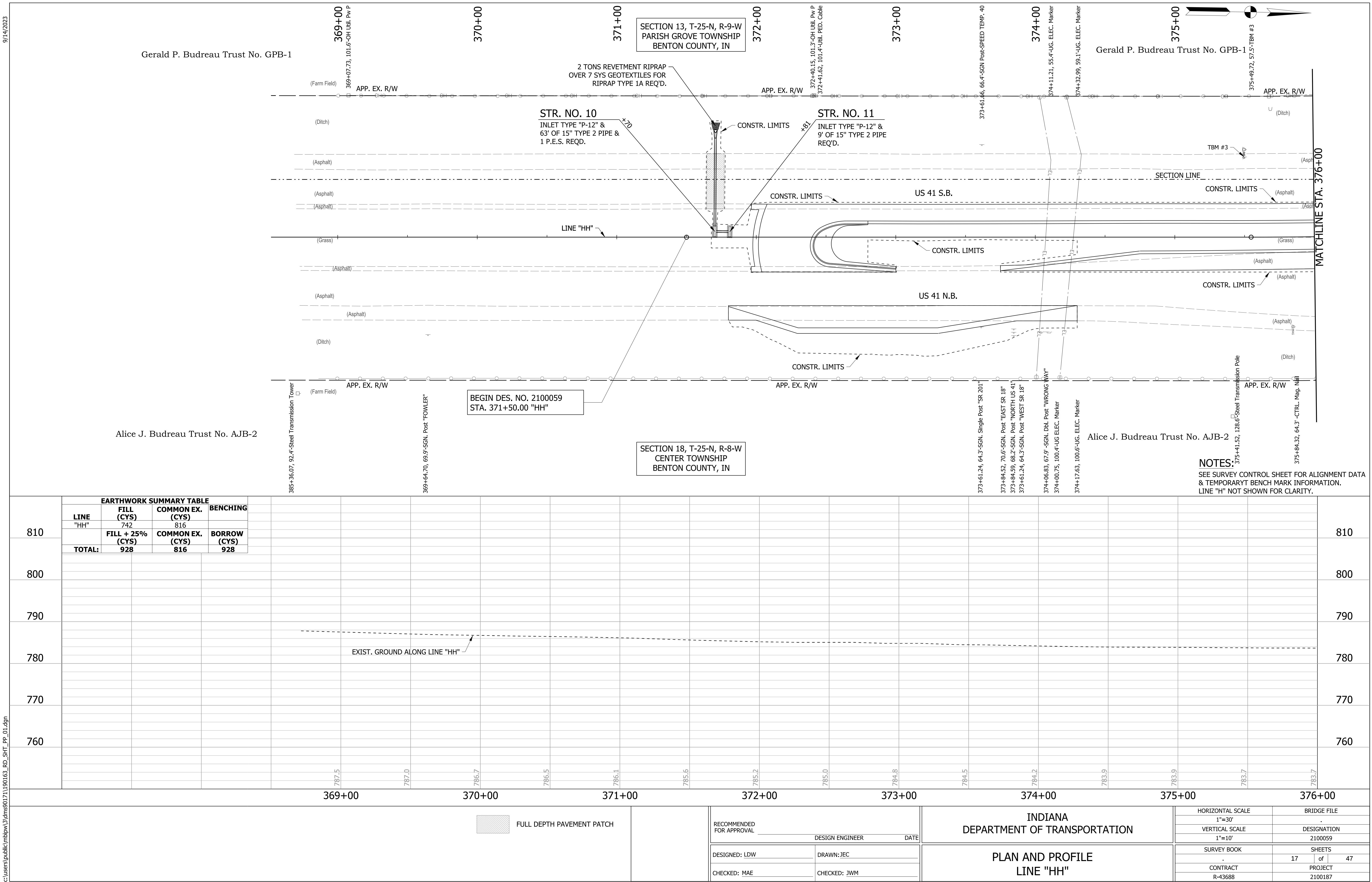
-  Flashing Arrow Sign
-  Standard Drum (Spa. @ 100', 50' on Tapers)
-  Existing Pavement Marking Removal
-  Construction Sign
-  Indicates Area to be Constructed this Phase
-  Temporary Pavement Marking, Removable, 4 IN., White
-  Energy Absorbing Impact Attenuator
-  Temporary Pavement Marking, Removable, 8 IN., Black

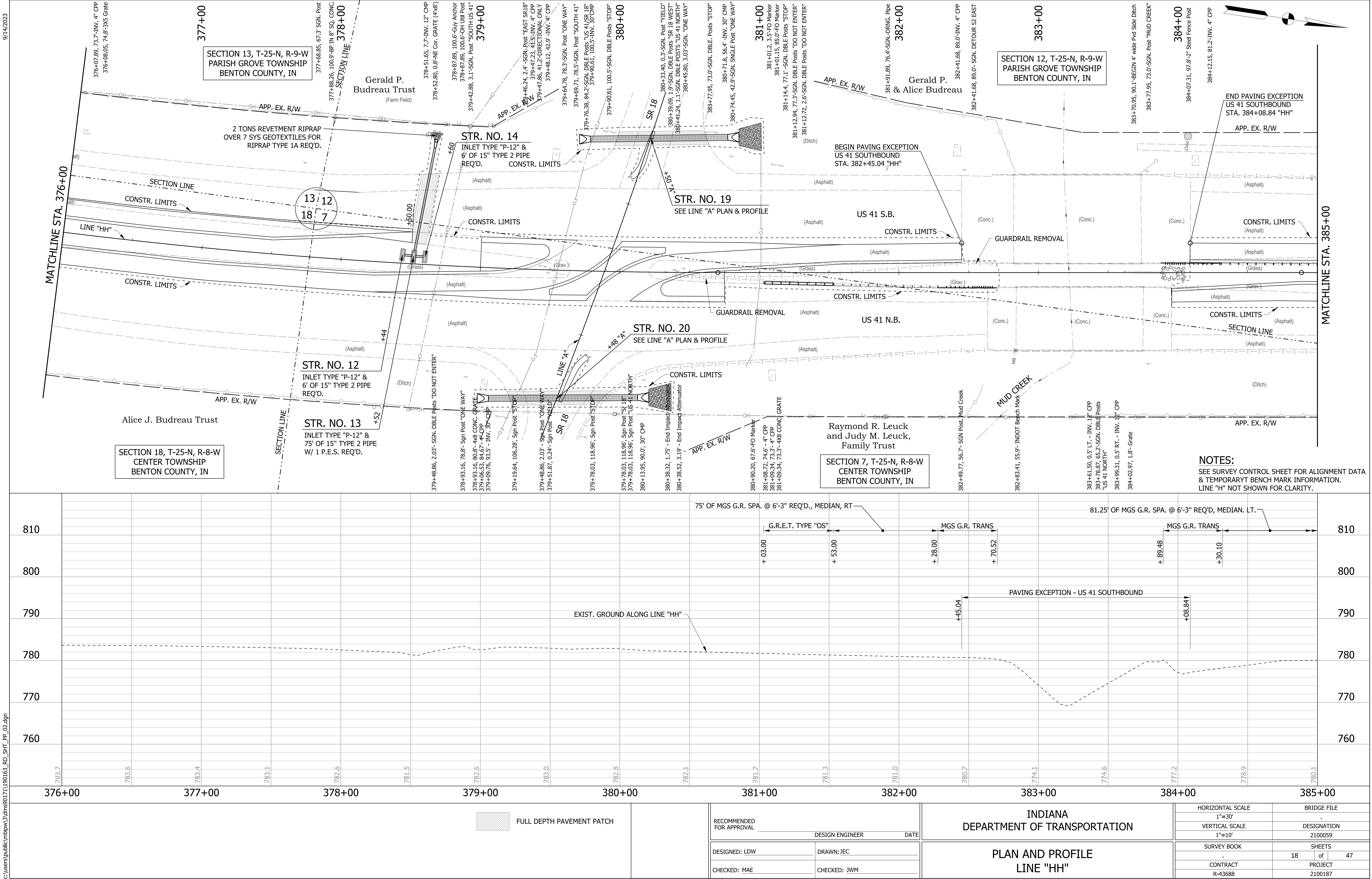
RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER	DATE
DESIGNED: LDW	DRAWN: SWB
CHECKED: MAE	CHECKED: LDW

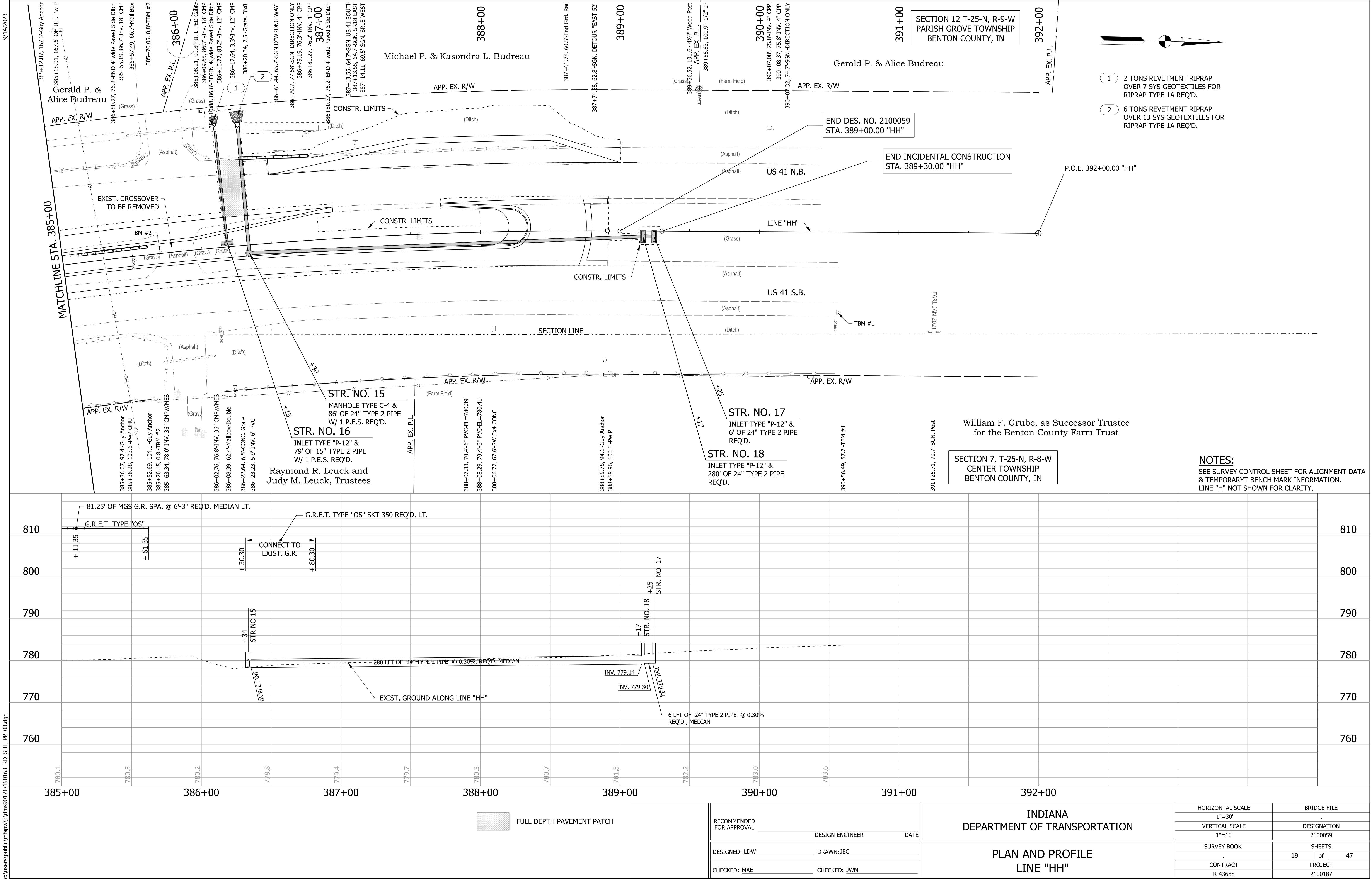
INDIANA
DEPARTMENT OF TRANSPORTATION

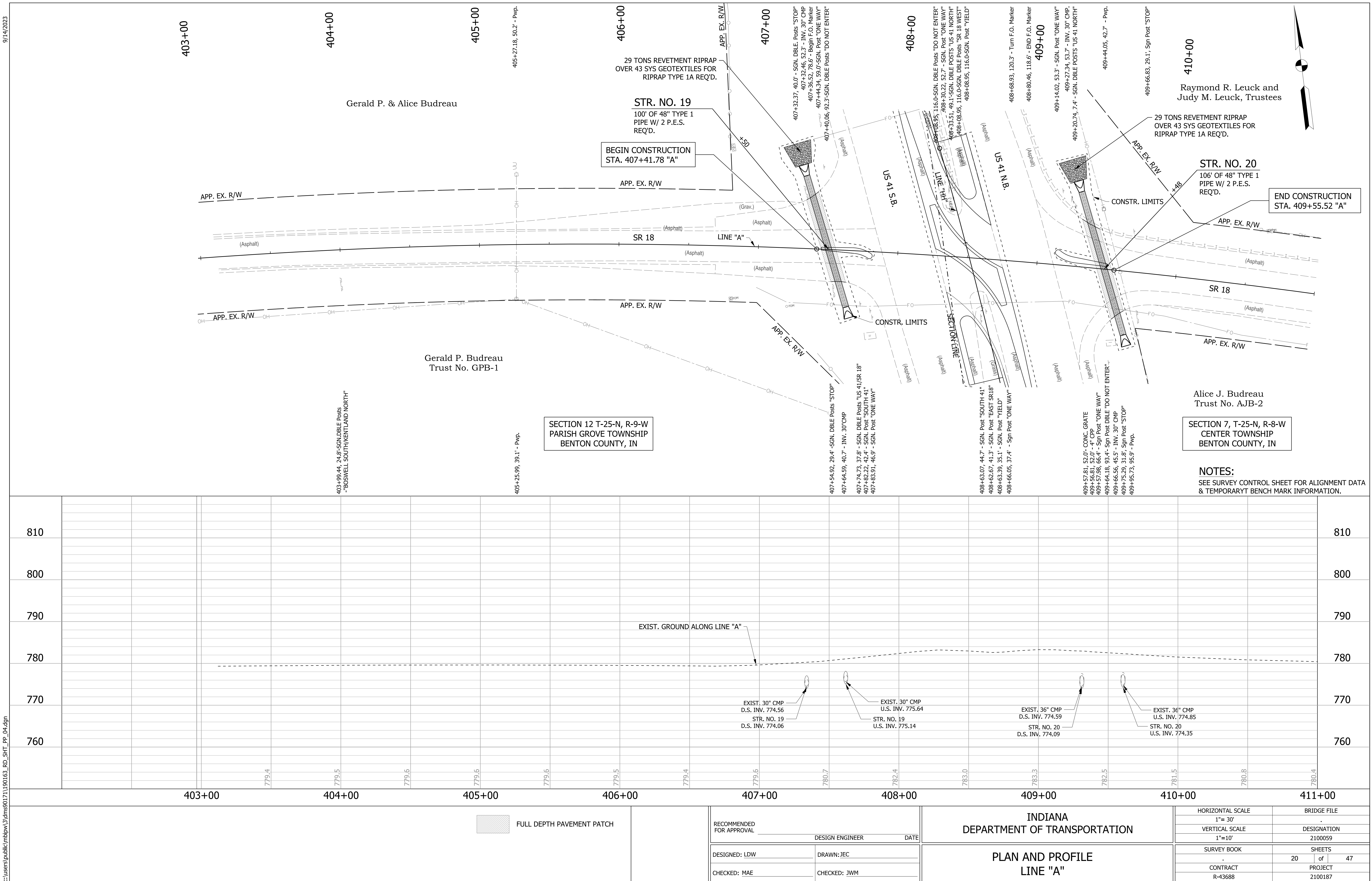
MAINTENANCE OF TRAFFIC
PHASE II

HORIZONTAL SCALE		BRIDGE FILE	
1" = 30'			
VERTICAL SCALE		DESIGNATION	
NA		2100059	
SURVEY BOOK		SHEETS	
		16	of 47
CONTRACT		PROJECT	
R-43688		2100187	









370+00

371+00

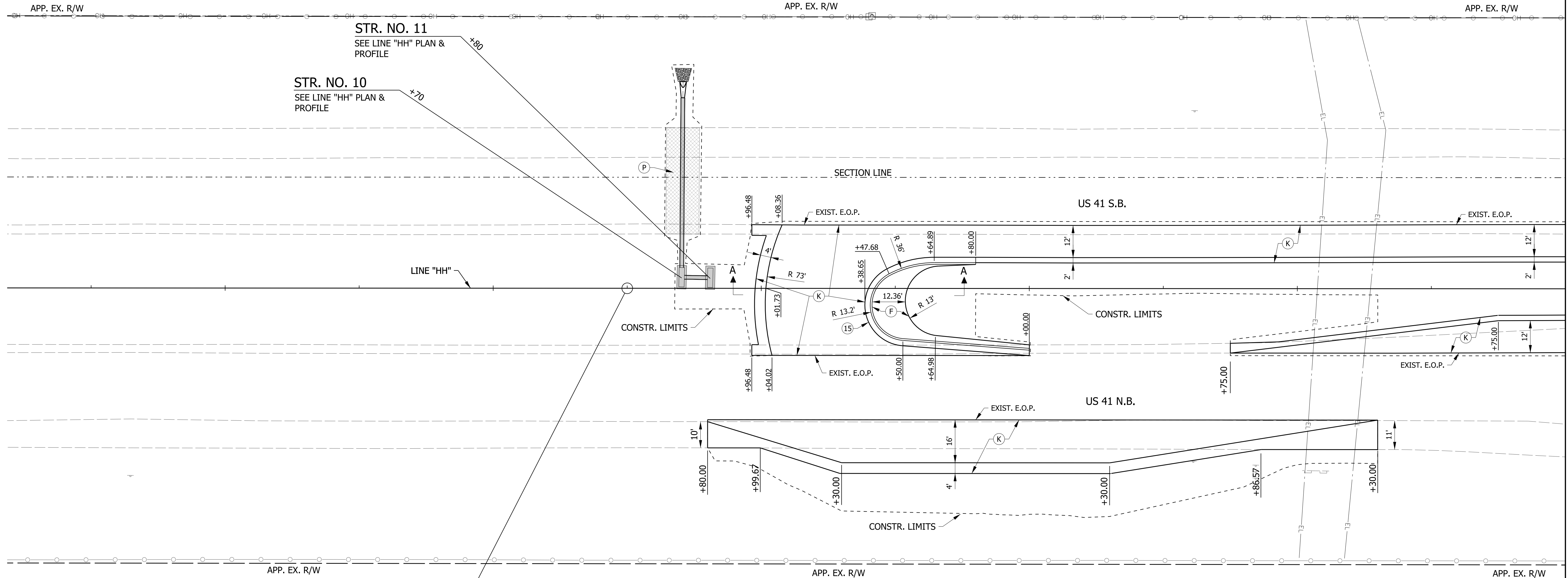
372+00

373+00

374+00

SECTION 13, T-25-N, R-9-W
PARISH GROVE TOWNSHIP
BENTON COUNTY, IN

Gerald P. Budreau Trust No. GPB-1



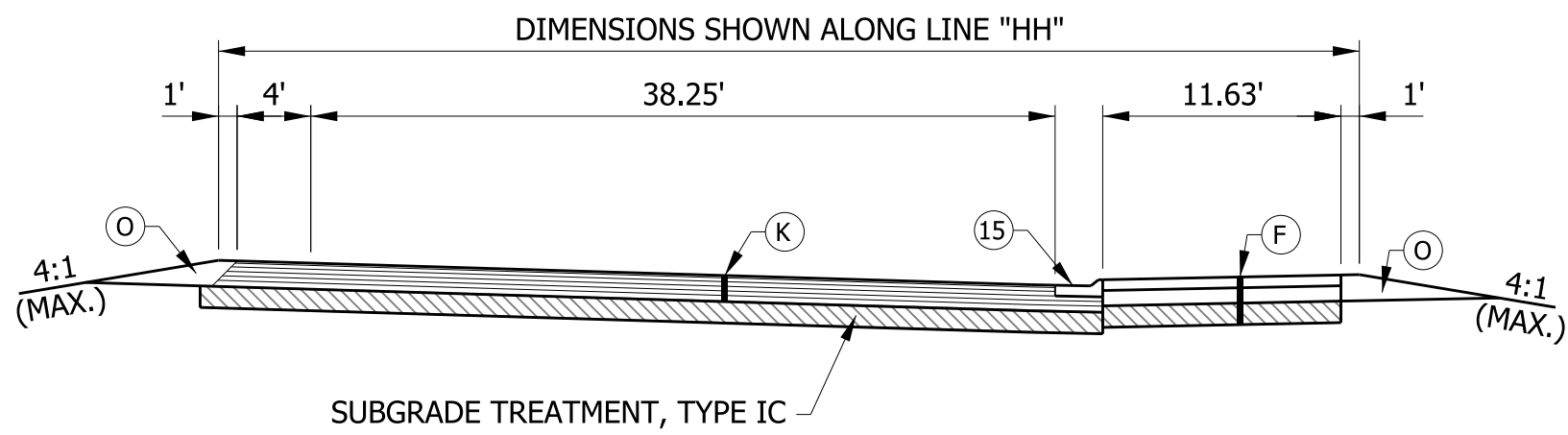
LEGEND

- (K) HMA, FULL DEPTH RECONSTRUCTION:
165 LB/SYD QC/QA HMA, 3, 70 SURFACE, 9.5 MM, ON
275 LB/SYD QC/QA HMA, 3, 70 INTERMEDIATE, 19 MM, ON
770 LB/SYD QC/QA HMA, 3, 64 BASE, 19 MM, ON (TWO LIFTS)
250 LB/SYD QC/QA HMA, 4, 76, INTERMEDIATE, OG, 19 MM, ON
4 IN. COMPACTED AGGREGATE, NO. 53, ON
GEOTEXTILE FOR PAVEMENT, TYPE 2A
- (F) PCCP, 7 IN. WITH
D-1 JOINTS SPACE AT 15 FT. WITH
1 IN. DIA. BARS SPACED AT 12 IN. ON
10 IN. COMPACTED AGGREGATE NO. 53, ON
SUBGRADE TREATMENT, TYPE IC
- (O) COMPACTED AGGREGATE NO. 53 (AS DIRECTED)
- (15) MOD. COMBINED CONCRETE CURB & GUTTER
- (P) FULL DEPTH PAVEMENT PATCH: TBD

BEGIN DES. NO. 2100059
STA. 371+50.00 "HH"

Alice J. Budreau Trust No. AJB-2

SECTION 18, T-25-N, R-8-W
CENTER TOWNSHIP
BENTON COUNTY, IN

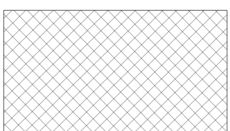


SECTION A-A

Note to Reviewer:
Spot elevations will be provided at
Stage 3 submittal.

NOTES:

SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA
& TEMPORARY BENCH MARK INFORMATION.
LINE "H" NOT SHOWN FOR CLARITY.



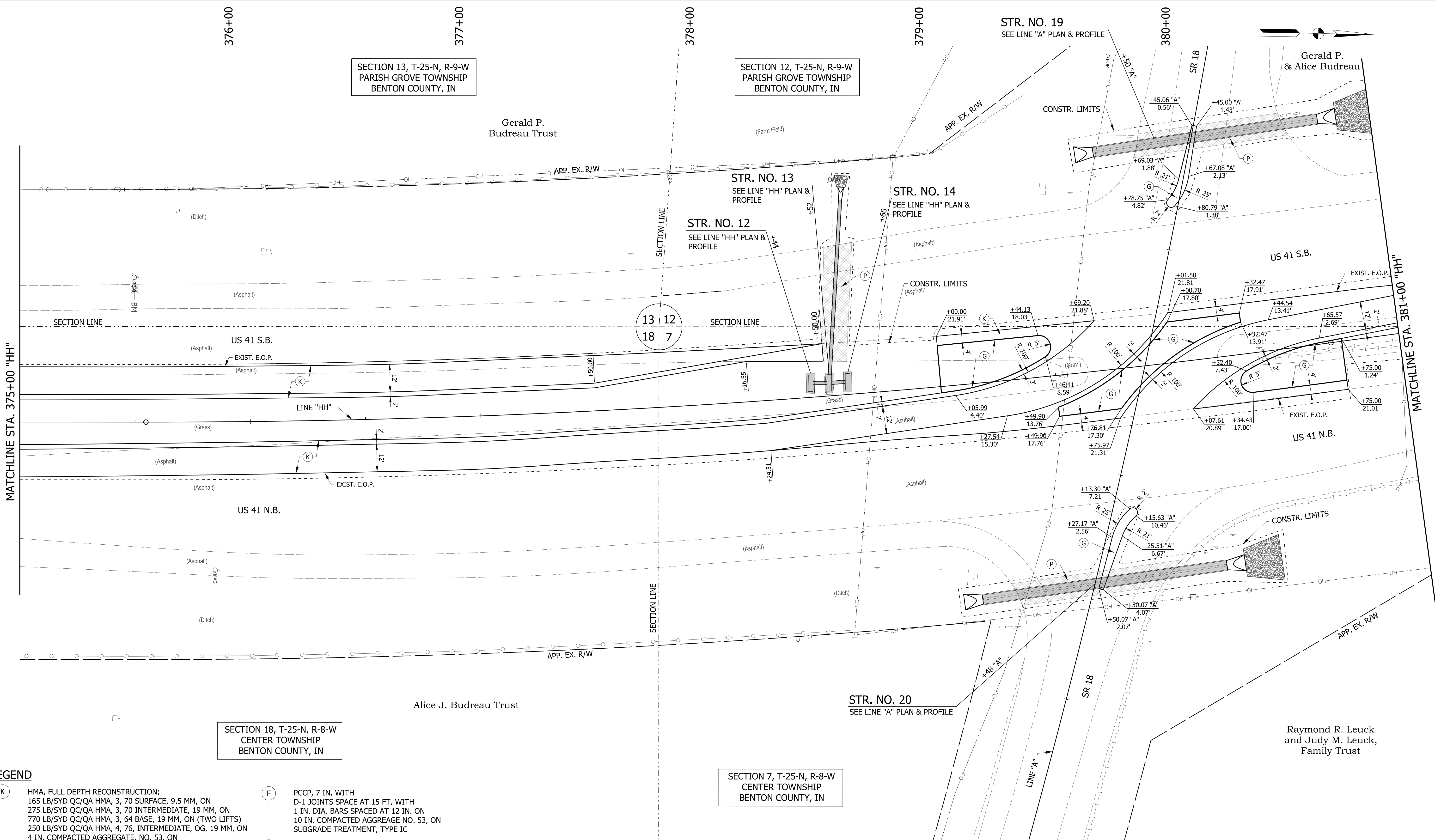
FULL DEPTH PAVEMENT PATCH

RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: JWM

INDIANA
DEPARTMENT OF TRANSPORTATION

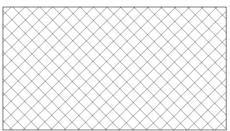
CONSTRUCTION DETAILS
LINE "HH"

HORIZONTAL SCALE 1"=20'	BRIDGE FILE	
VERTICAL SCALE N/A	DESIGNATION 2100059	
SURVEY BOOK	SHEETS	
CONTRACT R-43688	21	of 47
	PROJECT 2100187	



LEGEND

- | | | | |
|-----|---|------|--|
| (K) | HMA, FULL DEPTH RECONSTRUCTION:
165 LB/SYD QC/QA HMA, 3, 70 SURFACE, 9.5 MM, ON
275 LB/SYD QC/QA HMA, 3, 70 INTERMEDIATE, 19 MM, ON
770 LB/SYD QC/QA HMA, 3, 64 BASE, 19 MM, ON (TWO LIFTS)
250 LB/SYD QC/QA HMA, 4, 76, INTERMEDIATE, OG, 19 MM, ON
4 IN. COMPACTED AGGREGATE, NO. 53, ON
GEOTEXTILE FOR PAVEMENT, TYPE 2A | (F) | PCCP, 7 IN. WITH
D-1 JOINTS SPACE AT 15 FT. WITH
1 IN. DIA. BARS SPACED AT 12 IN. ON
10 IN. COMPACTED AGGREGATE NO. 53, ON
SUBGRADE TREATMENT, TYPE IC |
| (P) | FULL DEPTH PAVEMENT PATCH: TBD | (O) | COMPACTED AGGREGATE NO. 53 (AS DIRECTED) |
| | | (15) | MOD. COMBINED CONCRETE CURB & GUTTER |

 FULL DEPTH PAVEMENT PATCH

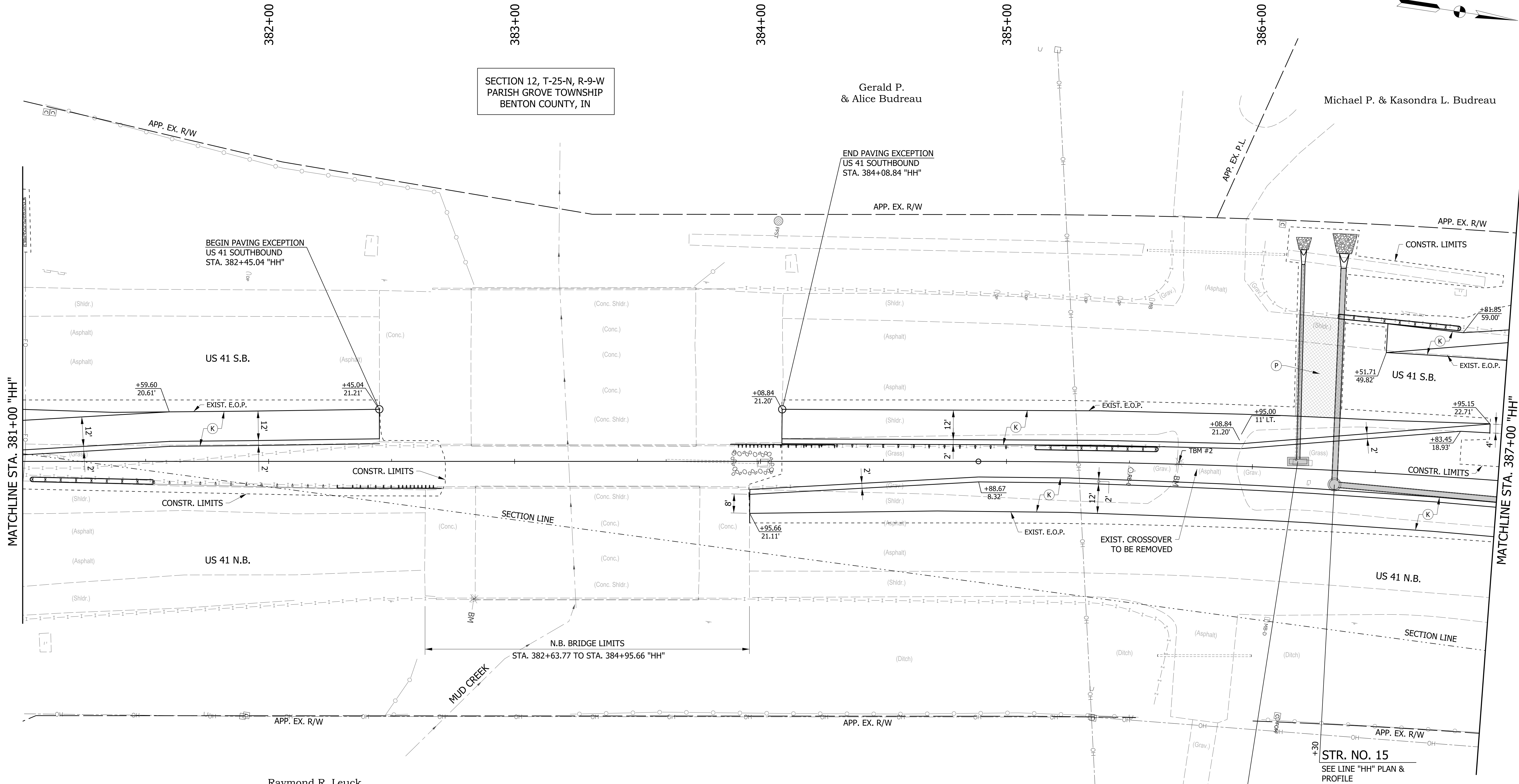
NOTES:
SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA
& TEMPORARY BENCH MARK INFORMATION.
LINE "H" NOT SHOWN FOR CLARITY.

RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: JWM

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "HH"

HORIZONTAL SCALE 1"=20'	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION 2100059
SURVEY BOOK	SHEETS
CONTRACT R-43688	22 of 47 PROJECT 2100187



LEGEND

- (K) HMA, FULL DEPTH RECONSTRUCTION:
165 LB/SYD QC/QA HMA, 3, 70 SURFACE, 9.5 MM, ON
275 LB/SYD QC/QA HMA, 3, 70 INTERMEDIATE, 19 MM, ON
770 LB/SYD QC/QA HMA, 3, 64 BASE, 19 MM, ON (TWO LIFTS)
250 LB/SYD QC/QA HMA, 4, 76, INTERMEDIATE, OG, 19 MM, ON
4 IN. COMPACTED AGGREGATE, NO. 53, ON
GEOTEXTILE FOR PAVEMENT, TYPE 2A

(P) FULL DEPTH PAVEMENT PATCH: TBD
- (F) PCCP, 7 IN. WITH
D-1 JOINTS SPACE AT 15 FT. WITH
1 IN. DIA. BARS SPACED AT 12 IN. ON
10 IN. COMPACTED AGGREGATE NO. 53, ON
SUBGRADE TREATMENT, TYPE IC

(O) COMPACTED AGGREGATE NO. 53 (AS DIRECTED)

(15) MOD. COMBINED CONCRETE CURB & GUTTER

 FULL DEPTH PAVEMENT PATCH

RECOMMENDED FOR APPROVAL _____	
DESIGNED: _____	DRAWN: _____
CHECKED: _____	CHECKED: _____

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "HH"

HORIZONTAL SCALE 1"=20'	BRIDGE FILE
VERTICAL SCALE N/A	DESIGNATION 2100059
SURVEY BOOK	SHEETS
CONTRACT R-43688	23 of 47 PROJECT 2100187

NOTES:
SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA
& TEMPORARY BENCH MARK INFORMATION.
LINE "H" NOT SHOWN FOR CLARITY.

Raymond R. Leuck
and Judy M. Leuck,
Family Trust

SECTION 7, T-25-N, R-8-W
CENTER TOWNSHIP
BENTON COUNTY, IN

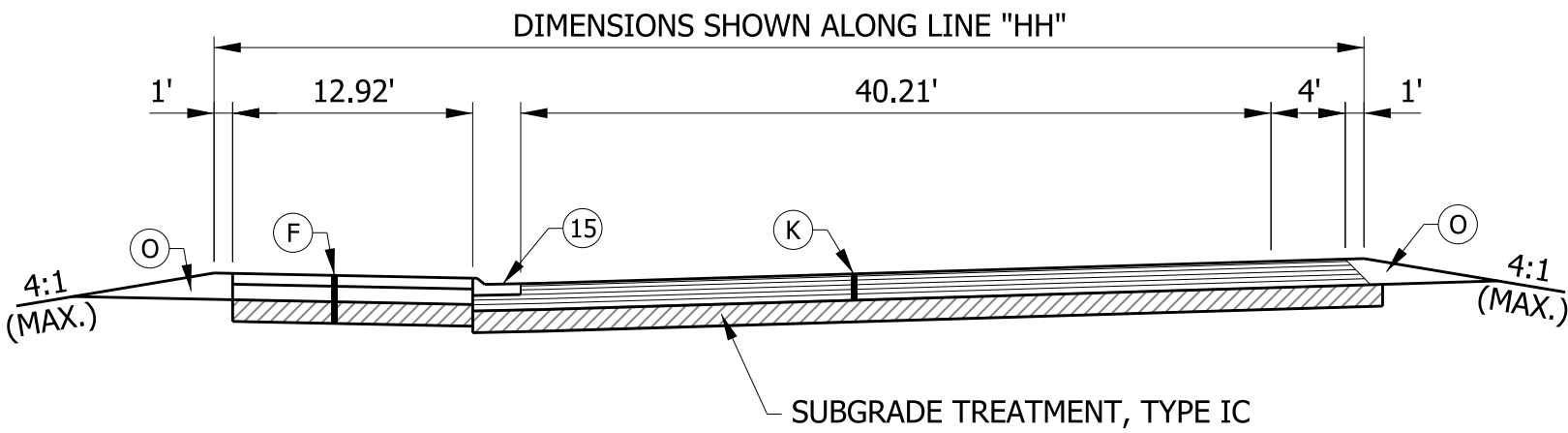
STR. NO. 16
SEE LINE "HH" PLAN &
PROFILE

STR. NO. 15
SEE LINE "HH" PLAN &
PROFILE

Raymond R. Leuck and
Judy M. Leuck, Trustees

LEGEND

- (K) HMA, FULL DEPTH RECONSTRUCTION:
165 LB/SYD QC/QA HMA, 3, 70 SURFACE, 9.5 MM, ON
275 LB/SYD QC/QA HMA, 3, 70 INTERMEDIATE, 19 MM, ON
770 LB/SYD QC/QA HMA, 3, 64 BASE, 19 MM, ON (TWO LIFTS)
250 LB/SYD QC/QA HMA, 4, 76, INTERMEDIATE, OG, 19 MM, ON
4 IN. COMPACTED AGGREGATE, NO. 53, ON
GEOTEXTILE FOR PAVEMENT, TYPE 2A
- (P) FULL DEPTH PAVEMENT PATCH: TBD
- (F) PCCP, 7 IN. WITH
D-1 JOINTS SPACE AT 15 FT. WITH
1 IN. DIA. BARS SPACED AT 12 IN. ON
10 IN. COMPACTED AGGREAGE NO. 53, ON
SUBGRADE TREATMENT, TYPE IC
- (O) COMPACTED AGGREGATE NO. 53 (AS DIRECTED)
- (15) MOD. COMBINED CONCRETE CURB & GUTTER



SECTION A-A

Note to Reviewer:
Spot elevations will be provided at
Stage 3 submittal.

NOTES:
SEE SURVEY CONTROL SHEET FOR ALIGNMENT DATA
& TEMPORARYT BENCH MARK INFORMATION.
LINE "H" NOT SHOWN FOR CLARITY.

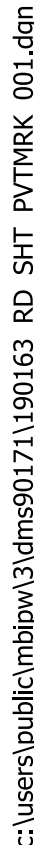
FULL DEPTH PAVEMENT PATCH

RECOMMENDED FOR APPROVAL		DESIGN ENGINEER	DATE
DESIGNED: LDW		DRAWN: JEC	
CHECKED: MAE		CHECKED: JWM	

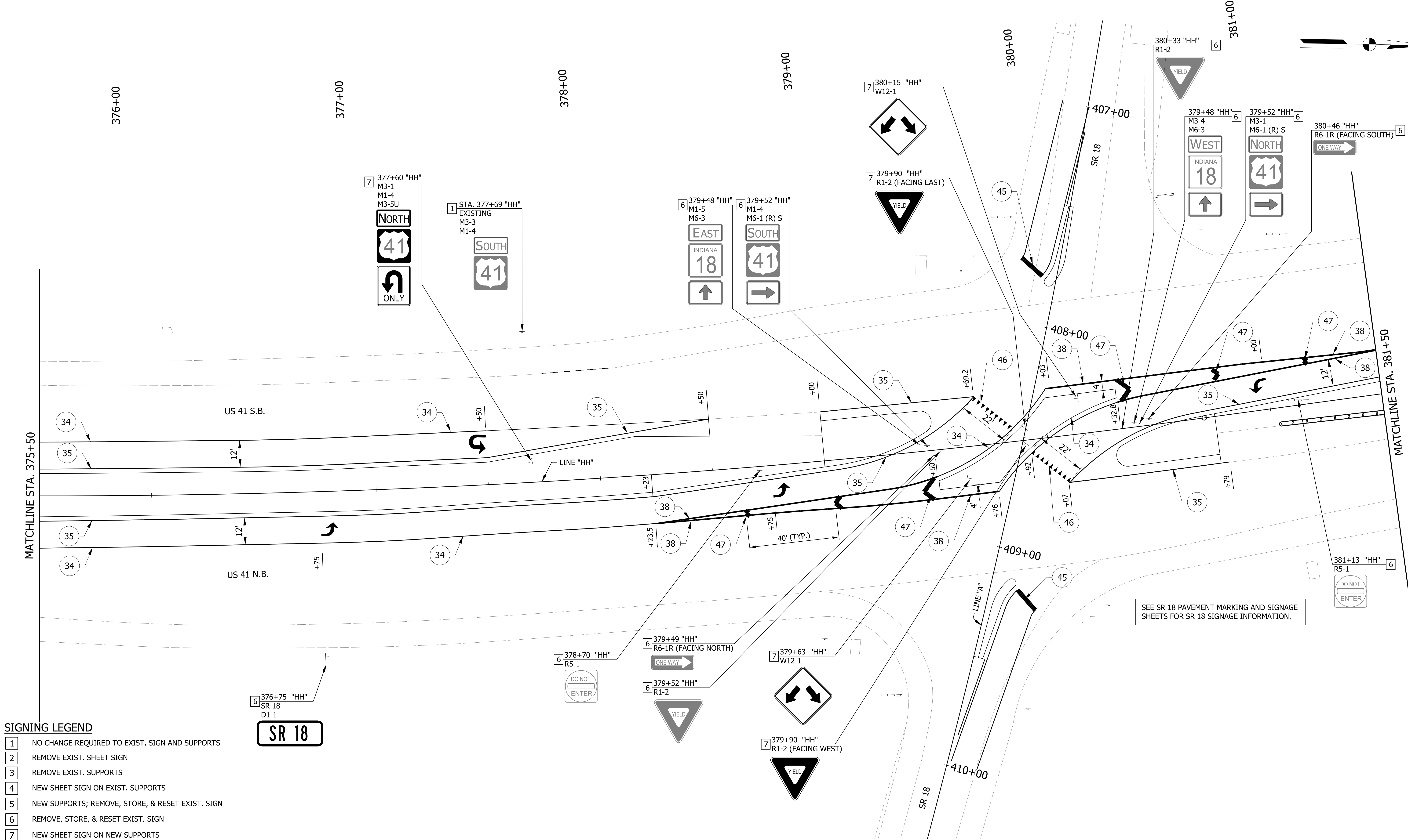
INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
LINE "HH"

HORIZONTAL SCALE	BRIDGE FILE		
1"=20'			
VERTICAL SCALE	DESIGNATION		
N/A	2100059		
SURVEY BOOK	SHEETS		
	24	of	47
CONTRACT	PROJECT		
R-43688	2100187		



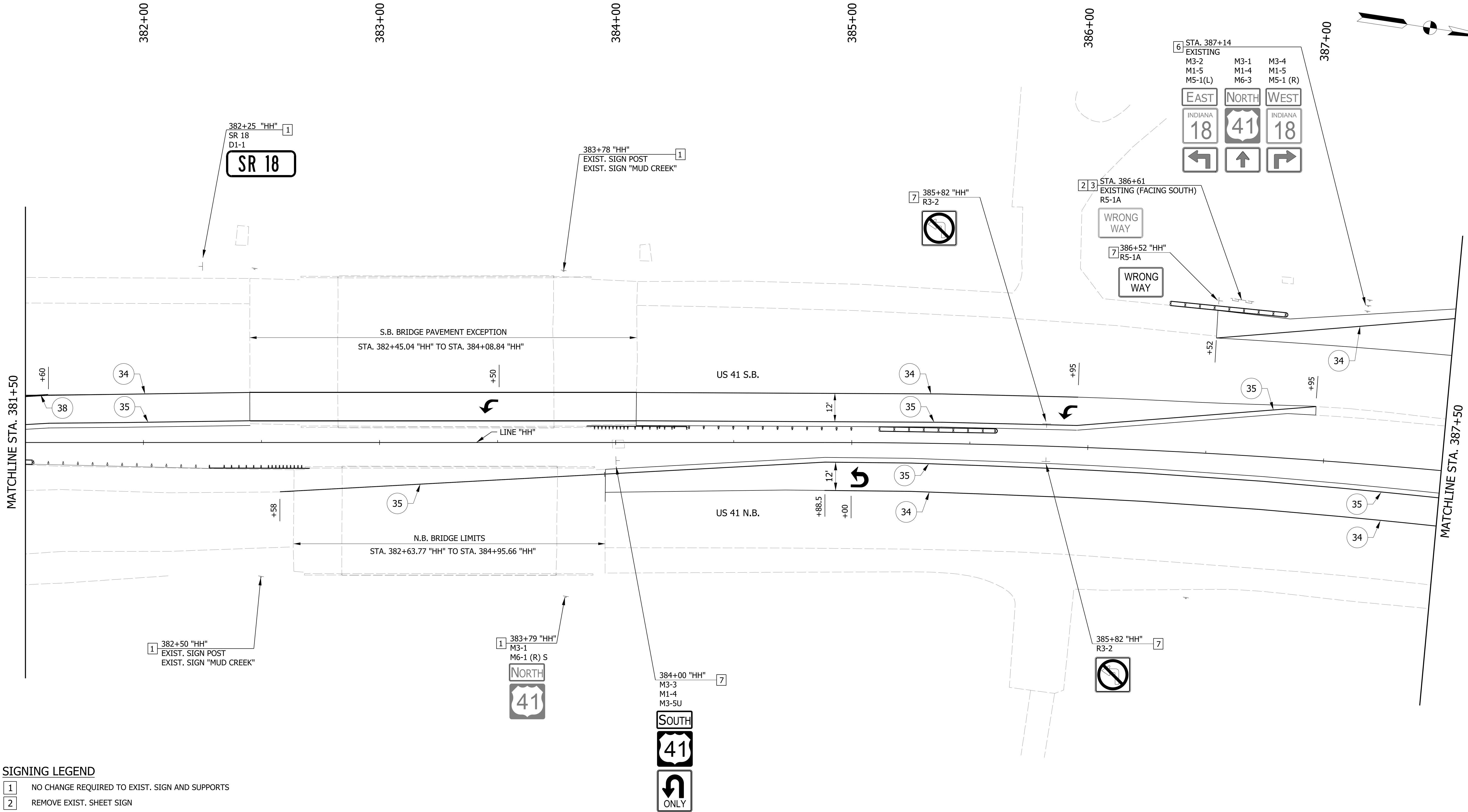
C:\users\public\mjb\pww\3\dm90171\90163_RD_SHT_PVTMRK_002.dgn



SIGNING LEGEND

1	NO CHANGE REQUIRED TO EXIST. SIGN AND SUPPORTS	45	TRANSVERSE MARKING, THERMOPLASTIC, STOP LINE, WHITE, 24 IN.
2	REMOVE EXIST. SHEET SIGN	46	TRANSVERSE MARKING, THERMOPLASTIC, YIELD LINE, WHITE, 27 IN.
3	REMOVE EXIST. SUPPORTS	47	TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, WHITE, 24 IN.
4	NEW SHEET SIGN ON EXIST. SUPPORTS		
5	NEW SUPPORTS; REMOVE, STORE, & RESET EXIST. SIGN		
6	REMOVE, STORE, & RESET EXIST. SIGN		
7	NEW SHEET SIGN ON NEW SUPPORTS		
34	LINE, THERMOPLASTIC, SOLID, WHITE, 6 IN.		
35	LINE, THERMOPLASTIC, SOLID, YELLOW, 6 IN.		
38	LINE, THERMOPLASTIC, SOLID, WHITE, 8 IN.		
	PAVEMENT MESSAGE MARKING, THERMOPLASTIC, WHITE LANE INDICATION ARROW		PAVEMENT MESSAGE MARKING, THERMOPLASTIC, WHITE LANE TURNAROUND ARROW

RECOMMENDED FOR APPROVAL			INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE		BRIDGE FILE	
				1" = 20'		.	
				VERTICAL SCALE		DESIGNATION	
				N/A		2100059	
DESIGNED: LDW	DRAWN: JEC		PAVEMENT MARKINGS AND SIGNS US 41	SURVEY BOOK		SHEETS	
				26 of 47			
CHECKED: MAE	CHECKED: LDW			CONTRACT		PROJECT	
		R-43688		2100187			



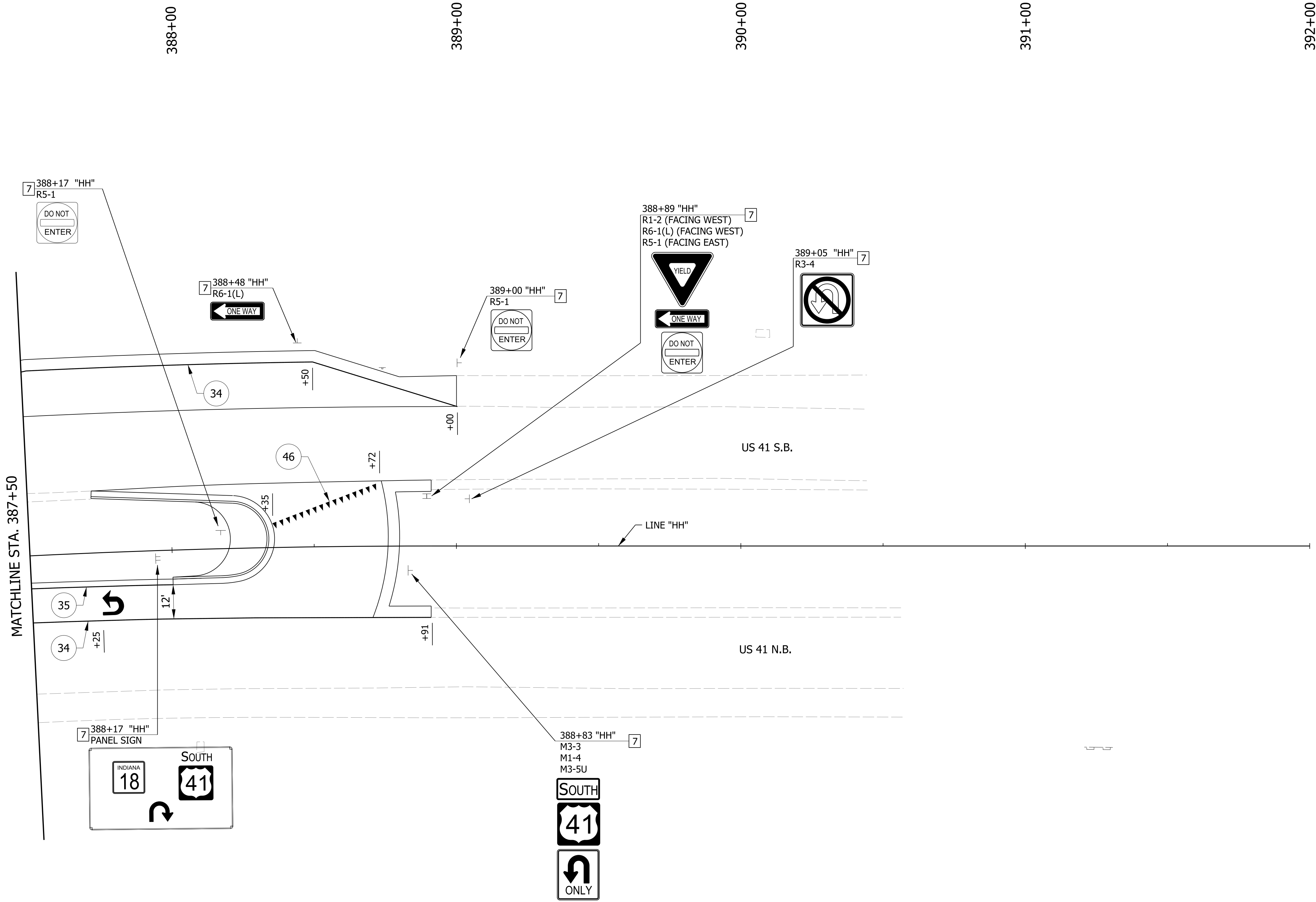
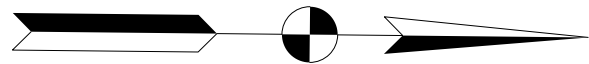
SIGNING LEGEND

- | | |
|---|--|
| 1 | NO CHANGE REQUIRED TO EXIST. SIGN AND SUPPORTS |
| 2 | REMOVE EXIST. SHEET SIGN |
| 3 | REMOVE EXIST. SUPPORTS |
| 4 | NEW SHEET SIGN ON EXIST. SUPPORTS |
| 5 | NEW SUPPORTS; REMOVE, STORE, & RESET EXIST. SIGN |
| 6 | REMOVE, STORE, & RESET EXIST. SIGN |
| 7 | NEW SHEET SIGN ON NEW SUPPORTS |
-
- | | |
|----|---|
| 34 | LINE, THERMOPLASTIC, SOLID, WHITE, 6 IN. |
| 35 | LINE, THERMOPLASTIC, SOLID, YELLOW, 6 IN. |
| 38 | LINE, THERMOPLASTIC, SOLID, WHITE, 8 IN. |
| 45 | TRANSVERSE MARKING, THERMOPLASTIC, STOP LINE, WHITE, 24 IN. |
| 46 | TRANSVERSE MARKING, THERMOPLASTIC, YIELD LINE, WHITE, 27 IN. |
| 47 | TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, WHITE, 24 IN. |
-
- | |
|--|
| PAVEMENT MESSAGE MARKING, THERMOPLASTIC, WHITE LANE INDICATION ARROW |
| PAVEMENT MESSAGE MARKING, THERMOPLASTIC, WHITE LANE TURNAROUND ARROW |

RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: LDW

INDIANA DEPARTMENT OF TRANSPORTATION	
PAVEMENT MARKINGS AND SIGNS US 41	

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE	
VERTICAL SCALE N/A	DESIGNATION 2100059	
SURVEY BOOK	SHEETS	
CONTRACT R-43688	27 of 47	PROJECT 2100187



SIGNING LEGEND

- | | | | |
|----|--|----|--|
| 1 | NO CHANGE REQUIRED TO EXIST. SIGN AND SUPPORTS | 45 | TRANSVERSE MARKING, THERMOPLASTIC, STOP LINE, WHITE, 24 IN. |
| 2 | REMOVE EXIST. SHEET SIGN | 46 | TRANSVERSE MARKING, THERMOPLASTIC, YIELD LINE, WHITE, 27 IN. |
| 3 | REMOVE EXIST. SUPPORTS | 47 | TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, WHITE, 24 IN. |
| 4 | NEW SHEET SIGN ON EXIST. SUPPORTS | | |
| 5 | NEW SUPPORTS; REMOVE, STORE, & RESET EXIST. SIGN | | |
| 6 | REMOVE, STORE, & RESET EXIST. SIGN | | |
| 7 | NEW SHEET SIGN ON NEW SUPPORTS | | |
| 34 | LINE, THERMOPLASTIC, SOLID, WHITE, 6 IN. | | |
| 35 | LINE, THERMOPLASTIC, SOLID, YELLOW, 6 IN. | | |
| 38 | LINE, THERMOPLASTIC, SOLID, WHITE, 8 IN. | | |
| | PAVEMENT MESSAGE MARKING, THERMOPLASTIC, WHITE LANE INDICATION ARROW | | PAVEMENT MESSAGE MARKING, THERMOPLASTIC, WHITE LANE TURNAROUND ARROW |

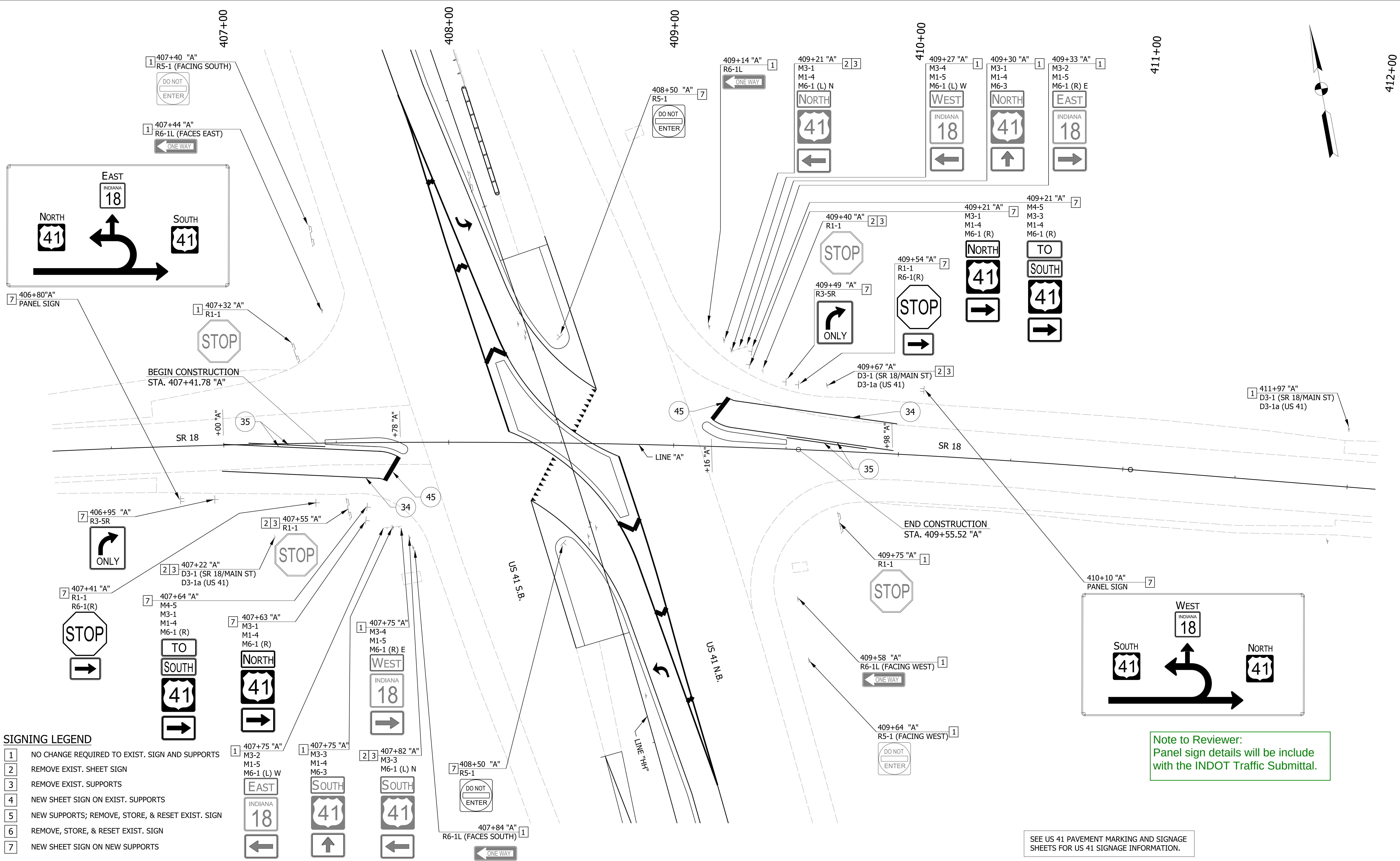
RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS AND SIGNS
US 41

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE	
VERTICAL SCALE N/A	DESIGNATION 2100059	
SURVEY BOOK	SHEETS	
CONTRACT R-43688	28 of 47	PROJECT 2100187

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SIGNING LEGEND

- 1

NO CHANGE REQUIRED TO EXIST. SIGN AND SUPPORTS
- 2

REMOVE EXIST. SHEET SIGN
- 3

REMOVE EXIST. SUPPORTS
- 4

NEW SHEET SIGN ON EXIST. SUPPORTS
- 5

NEW SUPPORTS; REMOVE, STORE, & RESET EXIST. SIGN
- 6

REMOVE, STORE, & RESET EXIST. SIGN
- 7

NEW SHEET SIGN ON NEW SUPPORTS
- 34

LINE, THERMOPLASTIC, SOLID, WHITE, 6 IN.
- 35

LINE, THERMOPLASTIC, SOLID, YELLOW, 6 IN.
- 38

LINE, THERMOPLASTIC, SOLID, WHITE, 8 IN.
- PAVEMENT MESSAGE MARKING, THERMOPLASTIC, WHITE LANE INDICATION ARROW
- 45

TRANSVERSE MARKING, THERMOPLASTIC, STOP LINE, WHITE, 24 IN.
- 46

TRANSVERSE MARKING, THERMOPLASTIC, YIELD LINE, WHITE, 27 IN.
- 47

TRANSVERSE MARKING, THERMOPLASTIC, CROSSHATCH LINE, WHITE, 24 IN.
- PAVEMENT MESSAGE MARKING, THERMOPLASTIC, WHITE LANE TURNAROUND ARROW

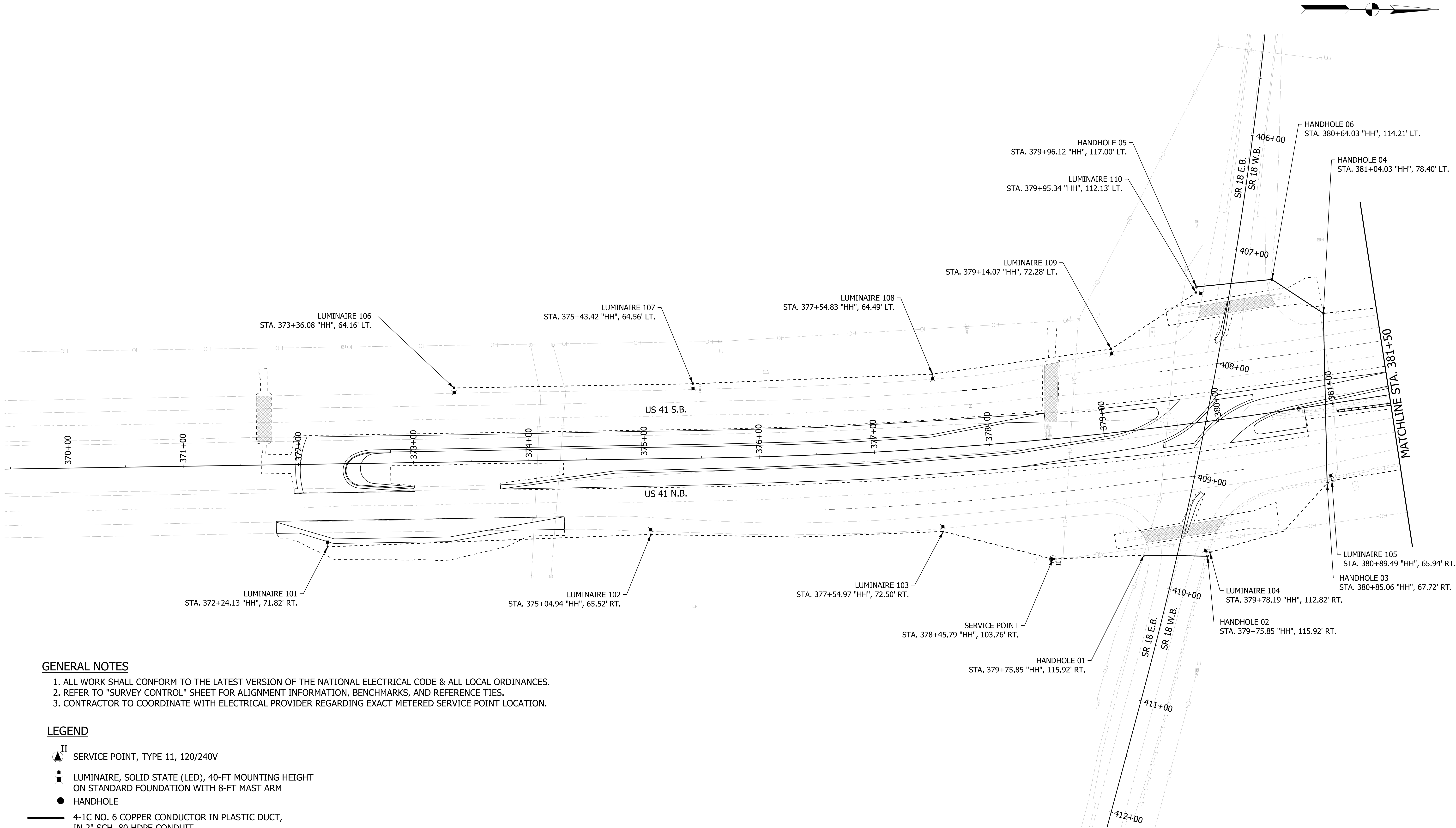
Note to Reviewer:
Panel sign details will be include
with the INDOT Traffic Submittal.

SEE US 41 PAVEMENT MARKING AND SIGNAGE
SHEETS FOR US 41 SIGNAGE INFORMATION.

RECOMMENDED FOR APPROVAL _____	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: LDW

INDIANA DEPARTMENT OF TRANSPORTATION	
PAVEMENT MARKINGS AND SIGNS SR 18	

HORIZONTAL SCALE 1" = 20'	BRIDGE FILE	
VERTICAL SCALE N/A	DESIGNATION 2100059	
SURVEY BOOK	SHEETS	
CONTRACT R-43688	29	of 47
	PROJECT 2100187	



GENERAL NOTES

- 1. ALL WORK SHALL CONFORM TO THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE & ALL LOCAL ORDINANCES.
- 2. REFER TO "SURVEY CONTROL" SHEET FOR ALIGNMENT INFORMATION, BENCHMARKS, AND REFERENCE TIES.
- 3. CONTRACTOR TO COORDINATE WITH ELECTRICAL PROVIDER REGARDING EXACT METERED SERVICE POINT LOCATION.

LEGEND

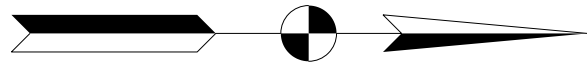
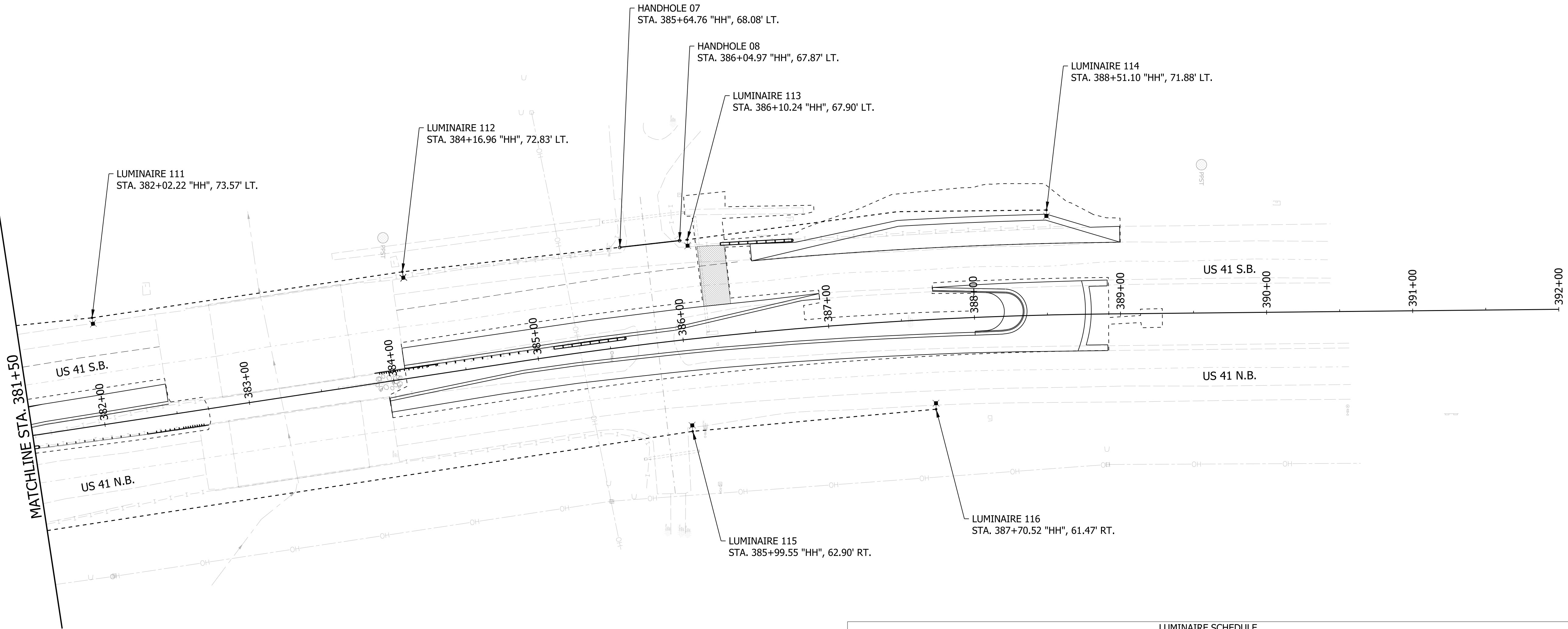
- SERVICE POINT, TYPE 11, 120/240V
- LUMINAIRE, SOLID STATE (LED), 40-FT MOUNTING HEIGHT ON STANDARD FOUNDATION WITH 8-FT MAST ARM
- HANDHOLE
- 4-1C NO. 6 COPPER CONDUCTOR IN PLASTIC DUCT, IN 2" SCH. 80 HDPE CONDUIT
- 4-1C NO. 6 COPPER CONDUCTOR IN PLASTIC DUCT, IN TRENCH

RECOMMENDED FOR APPROVAL	
DESIGN ENGINEER	DATE
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS

HORIZONTAL SCALE	BRIDGE FILE		
1"=40'			
VERTICAL SCALE	DESIGNATION		
N/A	2100059		
SURVEY BOOK	SHEETS		
	30	of	47
CONTRACT	PROJECT		
R-43688	2100187		



GENERAL NOTES

- 1. ALL WORK SHALL CONFORM TO THE LATEST VERSION OF THE NATIONAL ELECTRICAL CODE & ALL LOCAL ORDINANCES.
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- 3. CONTRACTOR TO COORDINATE WITH ELECTRICAL PROVIDER REGARDING EXACT METERED SERVICE POINT LOCATION.

LEGEND

- SERVICE POINT, TYPE 11, 120/240V
- LUMINAIRE, SOLID STATE (LED), 40-FT MOUNTING HEIGHT ON STANDARD FOUNDATION WITH 8-FT MAST ARM
- HANDHOLE
- 4-1C NO. 6 COPPER CONDUCTOR IN PLASTIC DUCT, IN 2" SCH. 80 HDPE CONDUIT
- 4-1C NO. 6 COPPER CONDUCTOR IN PLASTIC DUCT, IN TRENCH

LUMINAIRE SCHEDULE																
LUMINAIRE NO.	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116
CONNECTION TYPE	1	2	2	2	2	1	2	2	2	2	2	2	2	1	2	1
POLE HEIGHT	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft	40-ft
MAST ARM LENGTH	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft	8-ft

LUMINARE SHALL PROVIDE A LIGHT DISTRIBUTION EQUIVALENT TO IES DISTRIBUTION TYPE: ATBL_E_XXXX_R3.IES

HANDHOLE SCHEDULE								
HANDHOLE NO.	H01	H02	H03	H04	H05	H06	H07	H08
CONNECTION TYPE	A	A	A	B	A	A	A	A

SERVICE POINT & CONTROLLER CABINET				
No.	Main Breaker	Branch Circuit	Computed Branch Circuit Average	Branch Circuit Breaker Rating
1	200 Amps	Red	17.847 Amps	30 Amps
	200 Amps	Black	13.881 Amps	30 Amps

RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER _____ DATE _____	
DESIGNED: LDW	DRAWN: JEC
CHECKED: MAE	CHECKED: LDW

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS

HORIZONTAL SCALE	BRIDGE FILE	
1"=40'		
VERTICAL SCALE	DESIGNATION	
N/A	2100059	
SURVEY BOOK	SHEETS	
	31	of 47
CONTRACT	PROJECT	
R-43688	2100187	

APPENDIX C

Early Coordination



INDIANA DEPARTMENT OF TRANSPORTATION

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

PHONE: (317) 694-8283

Eric Holcomb, Governor
Michael Smith, Commissioner

January 26, 2023

Sample Early
Coordination Letter

Re: Early Coordination Letter, Des. No.: 2100059, Intersection Improvement with Added Turn Lanes Project, US 41 at SR 18, Benton County, Indiana
KEG No. 22-1012.01

Dear Interested Party,

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

The project is located at the intersection of US 41 and SR 18 approximately 2.6 miles west of the Town of Fowler in Benton County. This section of US 41 is a four-lane *Rural Principal Arterial*. The existing US 41 cross section consists of four 12-foot lanes, divided by a vegetated median with a 4-foot inside paved shoulder, a 12-foot outside paved shoulder, and left and right turning lanes in both the northbound and southbound directions. The existing SR 18 cross section consists of two 12-foot lanes with 8-foot gravel shoulders. The draft need is due to the high frequency of right-angle crashes resulting from multiple vehicle crossings and left turns from SR 18 to US 41. The draft purpose of the project is to improve the safety of the intersection by reducing the number of traffic crashes. The approximate existing right-of-way (ROW) on SR 18 is 40 feet each side of the centerline. The approximate existing ROW on US 41 north leg is 100 feet each side of the centerline. The approximate existing ROW on US 41 south leg is 100 feet each side of the centerline.

The proposed project is to construct a Reduced Conflict Intersection (RCI) which will improve safety by restricting the thru and left turn movement from SR 18 onto US 41. Drainage improvements will also be made to existing cross culverts under SR 18 that have a "poor" condition rating. Additionally, existing median drainage culverts within the project limits with a "poor" condition rating will be replaced. Further improvements include utility relocations and lighting installation. The project requires the acquisition of 0.07 acre of permanent ROW. Proposed ROW widths along US 41 are 115 feet each side of the centerline. The project will be approximately 0.33 mile in length. The proposed method of traffic maintenance is anticipated to be a one lane closure in each direction along US 41 with a complete closure and detour for SR 18. No trees will be cleared as part of this project. The project is anticipated to begin construction in Spring of 2026.

Land use in the vicinity of the project is primarily rural with agricultural land, intermittent farmsteads, and one adjacent utility station. Kaskaskia Engineering Group, LLC will perform waters and wetlands determinations to identify water resources that may be present. The project is anticipated to qualify for the Rangewide Programmatic Agreement for the Indiana bat and northern long-eared bat by completing the Information for Planning and Consultation (IPaC).

Coordination will occur with INDOT Cultural Resources Office (CRO) to evaluate the project area for archaeological and historic resources and for Section 106 compliance. The results of this investigation will be forwarded to the State Historic Preservation Officer (SHPO) for review and concurrence as appropriate.

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 me Brigitte Moneyemaker, at 618-233-5877 or bmoneyemaker@kaskaskiaeng.com, or Karen Arnold, INDOT Project Manager at 765-361-5241 karnold2@indot.in.gov. Thank you in advance for your input.

Sincerely,

Brigitte Moneyemaker
Environmental Scientist
Kaskaskia Engineering Group, LLC

Attachment -

- Early Coordination Letter Recipient List
- Maps (Location, Aerial, Topographic)
- Photo Log

Attachments omitted to
avoid duplication.

cc: Melissa Effinger, MBI
Laura Jack, MBI



United States
Department of
Agriculture

Farm
Production
and
Conservation

Natural
Resources
Conservation
Service

Indiana State Office
6013 Lakeside Boulevard
Indianapolis, Indiana 46278
317-295-5800

January 31, 2023

Brigitte Moneymaker
Environmental Scientist
208 E Main Street #100
Belleville, Illinois 62220

Dear Ms. Moneymaker:

The proposed intersection improvement project, US 41 at SR 18 in Benton County, Indiana (Des. No. 2100059), as referred to in your letter received January 26, 2023, will cause a conversion of prime farmland.

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

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

Sincerely,

JOHN ALLEN



Digitally signed by JOHN ALLEN
Date: 2023.01.31 13:57:23 -05'00'

JOHN ALLEN
State Soil Scientist

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request				
Name of Project DES2100059 InterSec Improv US41 SF		Federal Agency Involved				
Proposed Land Use		County and State Benton County, Indiana				
PART II (To be completed by NRCS)		Date Request Received By NRCS		Person Completing Form: JRA		
Does the site contain Prime, Unique, Statewide or Local Important Farmland? (If no, the FPPA does not apply - do not complete additional parts of this form)		YES ☒	NO ☐	Acres Irrigated	Average Farm Size 701 ac	
Major Crop(s) Corn	Farmable Land In Govt. Jurisdiction Acres: 256012 % 98	Amount of Farmland As Defined in FPPA Acres: 252327 % 97				
Name of Land Evaluation System Used LESA	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS				
PART III (To be completed by Federal Agency)		Alternative Site Rating				
		Site A	Site B	Site C	Site D	
A. Total Acres To Be Converted Directly		0				
B. Total Acres To Be Converted Indirectly		0				
C. Total Acres In Site		0				
PART IV (To be completed by NRCS) Land Evaluation Information						
A. Total Acres Prime And Unique Farmland		0.05				
B. Total Acres Statewide Important or Local Important Farmland		0.00				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted		<0.001				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value		71				
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)		81				
PART VI (To be completed by Federal Agency) Site Assessment Criteria (Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)		Maximum Points	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	12				
2. Perimeter In Non-urban Use	(10)	6				
3. Percent Of Site Being Farmed	(20)	12				
4. Protection Provided By State and Local Government	(20)	10				
5. Distance From Urban Built-up Area	(15)	15				
6. Distance To Urban Support Services	(15)	10				
7. Size Of Present Farm Unit Compared To Average	(10)	3				
8. Creation Of Non-farmable Farmland	(10)	0				
9. Availability Of Farm Support Services	(5)	3				
10. On-Farm Investments	(20)	8				
11. Effects Of Conversion On Farm Support Services	(10)	0				
12. Compatibility With Existing Agricultural Use	(10)	0				
TOTAL SITE ASSESSMENT POINTS		160	79	0	0	0
PART VII (To be completed by Federal Agency)						
Relative Value Of Farmland (From Part V)		100	81	0	0	0
Total Site Assessment (From Part VI above or local site assessment)		160	79	0	0	0
TOTAL POINTS (Total of above 2 lines)		260	160	0	0	0
Site Selected:	Date Of Selection	Was A Local Site Assessment Used? YES ☐ NO ☒				
Reason For Selection:						
Name of Federal agency representative completing this form: Brigitte Moneymaker						
Date: 02/08/2023						

(See Instructions on reverse side)

Form AD-1006 (03-02)

Chad Kelly

From: Allen, John - NRCS, Indianapolis, IN <john.allen@usda.gov>
Sent: Thursday, February 9, 2023 11:11 AM
To: Brigitte Moneymaker; Phillips, Daniel - NRCS, Indianapolis, IN
Subject: Re: INDOT, Des. No. 210059, US 41 and SR 18, Intersection Improvement with Added Turn Lanes Project (Benton. IN)

Confirmed, thank you.

State Soil Scientist
 USDA-Natural Resources Conservation Service
 6013 Lakeside Boulevard
 Indianapolis, IN 46278

317-295-5859
 317-670-1924 (cell)

www.soils.usda.gov

[Soil Explorer](#)

[SoilWeb: An Online Soil Survey Browser | California Soil Resource Lab \(ucdavis.edu\)](#)

From: Brigitte Moneymaker <BMoneymaker@kaskaskiaeng.com>
Sent: Thursday, February 9, 2023 11:38 AM
To: Allen, John - NRCS, Indianapolis, IN <john.allen@usda.gov>; Phillips, Daniel - NRCS, Indianapolis, IN <daniel.phillips@usda.gov>
Subject: Re: INDOT, Des. No. 210059, US 41 and SR 18, Intersection Improvement with Added Turn Lanes Project (Benton. IN)

Good Morning,

After further consultation, the need for right-of-way on this project has been eliminated, we want to confirm that AD-1006 is no longer applicable.

Thank you,
 Brigitte

THIS IS NOT A PERMIT

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

DNR #: ER-25304**Request Received:** January 26, 2023

Requestor: Kaskaskia Engineering Group, LLC
 Brigitte Moneymaker
 208 East Main Street, Suite 100
 Belleville, IL 62220

Project: US 41 and SR 18 intersection improvement with added turn lanes and culvert improvements/replacements, 2.6 miles west of the Town of Fowler; KEG #22-1012.01, Des #2100059

County/Site info: Benton

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

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

Regulatory Assessment: This proposal may require the formal approval of our agency pursuant to the Flood Control Act (IC 14-28-1) for any proposal to construct, excavate, or fill in or on the floodway of Mud Creek, unless it qualifies for a bridge exemption (see enclosure) or qualifies under the INDOT and IDNR Memorandum of Understanding for Maintenance Activity Exemption, dated March 1997. Please include a copy of this letter with the permit application, if required.

Natural Heritage Database: The Natural Heritage Program's data have been checked. The mammal species below, all state species of special concern, have been documented within 1/2 mile of the project area.

1. American Badger (*Taxidea taxus*)
2. Silver-haired bat (*Lasionycteris noctivagans*)
3. Eastern red bat (*Lasiurus borealis*)

Fish & Wildlife Comments: Badgers are a wide ranging species that prefer an open, prairie-type habitat, with Indiana being at the eastern edge of their natural range. The range of the badger continues to expand as a result of land-use changes from forest to farmland and open pastureland. Impacts to the American badger or its preferred habitat are unlikely as a result of this project.

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

1) Bats:

To minimize impacts to the Silver-haired bat (and the Indiana bat and Northern Long-eared bat, which may also be present), do not cut any trees suitable for roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.

To minimize impacts to foliage roosting species such as the Eastern red bat, avoid the cutting of deciduous canopy trees as well from April 1 through September 30. Foliage roosting species show no strong preference to certain tree species.

Attachments: A - Bridge Exemption Criteria

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

2) Drainage & Stormwater Management:

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

<https://www.epa.gov/greeningepa/epa-facility-stormwater-management>;

<https://www.epa.gov/greeningepa/stormwater-management-practices-epa-facilities>

3) Culvert Repair/Replacement:

The replacement/rehabilitated culvert structures, and any bank stabilization under or around the structures, must not create conditions that are less favorable for wildlife passage when compared to existing conditions. Upgrading wildlife passage for replacement/rehabilitated structures is recommended whenever possible to improve wildlife/vehicle safety. Bank lines must be maintained or restored within structures to allow for wildlife passage above the ordinary high water mark. All wildlife passage designs must include a smooth level pathway a minimum of 1-3 feet in width composed of natural substrate (soil, sand, gravel, etc.) or compacted aggregate fill over riprap (#2, #53, #73, etc.) tied into existing elevations both upstream and downstream. The width and location of the wildlife pathway is dependent on the wildlife species using the area.

There are a number of techniques and materials for incorporating wildlife passage into the design of a crossing structure if maintaining or restoring banklines is not possible. Coordination with a Regional Environmental Biologist to address wildlife passage issues before submitting a permit application (if required) is encouraged to avoid delays in the permitting process. The following links are good resources to consider in the design of stream crossing structures to maintain fish and wildlife passage:

<https://www.fs.usda.gov/wildlifecrossings/library/index.php>,

https://www.fhwa.dot.gov/clas/ctip/wildlife_crossing_structures/,

<https://www.fhwa.dot.gov/engineering/hydraulics/pubs/11008/hif11008.pdf>,

<https://www.fs.usda.gov/ccrc/tool/fishxing-fish-passage-learning-systems>.

4) Pavement Rehabilitation:

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

5) Lighting:

Most transportation corridor designers and municipalities are trending toward LED lighting. Certain types of LED lighting can have negative impacts on both human and wildlife health and safety. Scientific evidence suggests that artificial light at night has

THIS IS NOT A PERMIT

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

negative and deadly effects on many organisms including amphibians, birds, mammals, insects and plants (<https://www.darksky.org/light-pollution/wildlife/>). A June 2016 American Medical Association (AMA) report, "Human and Environmental Effects of Light Emitting Diode Community Lighting," concluded that "white LED street lighting patterns may contribute to the risk of chronic disease in the populations of cities in which they have been installed."

The International Dark-Sky Association has developed recommendations for communities choosing LED lighting systems that will aid in the selection of lighting that is energy and cost efficient, yet ensures safety and security, protects wildlife, and promotes the goal of reducing light pollution. We strongly encourage visiting this website at <https://www.darksky.org/our-work/lighting/lighting-for-citizens/led-guide/>.

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

1. Revegetate all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Central Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.
4. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
5. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
6. Do not use broken concrete as riprap.
7. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.
8. Minimize the movement of resuspended bottom sediment from the immediate project area.
9. Do not deposit or allow construction/demolition materials or debris to fall or otherwise enter the waterway. Any incidental fallen material or debris in the waterway must be removed within 24 hours using best management practices, particularly lifting material out of the waterway and not dragging it across the streambed whenever possible.
10. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
11. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

THIS IS NOT A PERMIT

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

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

Christie L. Stanifer

Date: February 24, 2023

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



INDIANA
GEOLOGICAL SURVEY

Organization and Project Information

Project ID: 22-1012.01
Des. ID: 2100059
Project Title: Intersection Improvement with Added Turn Lanes on US 41 and SR
Name of Organization: Kaskaskia Engineering Group, LLC
Requested by: Brigitte Moneymaker

Environmental Assessment Report

1. Geological Hazards:

- Moderate liquefaction potential

2. Mineral Resources:

- Bedrock Resource: Moderate Potential
- Sand and Gravel Resource: High Potential

3. Active or abandoned mineral resources extraction sites:

- Abandoned Industrial Minerals Sand Gravel Pits

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

DISCLAIMER:

This document was compiled by Indiana University, Indiana Geological Survey, using data believed to be accurate; however, a degree of error is inherent in all data. This product is distributed "AS-IS" without warranties of any kind, either expressed or implied, including but not limited to warranties of suitability to a particular purpose or use. No attempt has been made in either the design or production of these data and document to define the limits or jurisdiction of any federal, state, or local government. The data used to assemble this document are intended for use only at the published scale of the source data or smaller (see the metadata links below) and are for reference purposes only. They are not to be construed as a legal document or survey instrument. A detailed on-the-ground survey and historical analysis of a single site may differ from these data and this document.

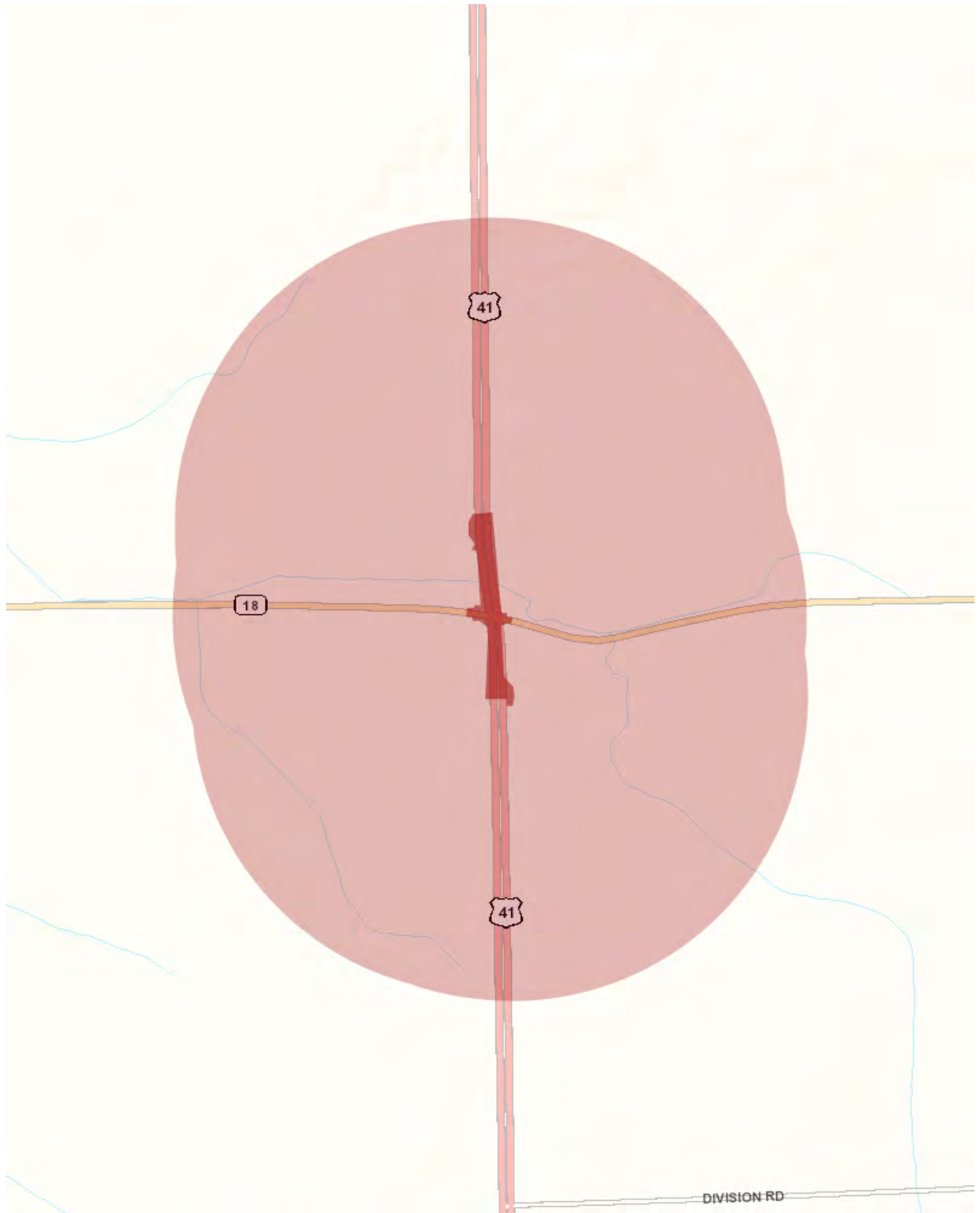
This information was furnished by Indiana Geological Survey

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

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: February 02, 2023



February 1, 2023

Kaskaskia Engineering Group, LLC
Attention: Brigitte Moneymaker
323 Main Street, Suite E
Evansville, Indiana 47708

Dear Brigitte Moneymaker:

Re: Wellhead Protection Area
Proximity Determination
Des No 2100059
Intersection Improvement with
Added Turn Lanes Project, US 41 at SR 18,
Benton County, Indiana

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

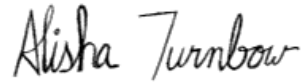
The project area **is not located within** a Source Water Assessment Area for a PWSS's surface water intake. The Source Water Assessment Area relates to the surface water drainage area that water could potentially flow and influence water quality for a PWSS's source of drinking water.

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

Brigitte Moneymaker
Page 2

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

Sincerely,

A handwritten signature in black ink that reads "Alisha Turnbow". The script is cursive and fluid, with the first name "Alisha" and last name "Turnbow" clearly distinguishable.

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

Chad Kelly

From: Jennifer Wright <jwright@benton.k12.in.us>
Sent: Tuesday, January 31, 2023 9:06 AM
To: Brigitte Moneymaker
Subject: Fwd: Early Coordination: INDOT, Des. No. 210009, US 41 and SR 18, Intersection Improvement with Added Turn Lanes Project (Benton. IN)

Hi Brigitte,

I am not sure what I need to do with this - but if you are looking for an approval from the School Corporation - WE APPROVE. This will be a great improvement. I have a few drivers that talk to me at least once a week about this intersection. If there is something else you need - "more professional" from me please let me know.

Have a great day,

Jennifer

----- Forwarded message -----

From: Scott Van Der Aa <svanderaa@benton.k12.in.us>
Date: Thu, Jan 26, 2023 at 10:09 AM
Subject: Re: Early Coordination: INDOT, Des. No. 210009, US 41 and SR 18, Intersection Improvement with Added Turn Lanes Project (Benton. IN)
To: Brigitte Moneymaker <BMoneymaker@kaskaskiaeng.com>, Jennifer Wright <jwright@benton.k12.in.us>
Cc: Molly Barletta <MBarletta@kaskaskiaeng.com>, Effinger, Melissa <Melissa.Effinger@mbakerintl.com>, Jack, Laura <Laura.Jack@mbakerintl.com>, karnold2@indot.in.gov <karnold2@indot.in.gov>

Brigitte,

Jennifer Wright will respond on our behalf. She is our transportation director.

Sincerely,
 Scott Van Der A, PhD

On Thu, Jan 26, 2023 at 9:43 AM Brigitte Moneymaker <BMoneymaker@kaskaskiaeng.com> wrote:

Dear Interested Party:

Please find attached an early coordination letter and supporting exhibits for the above referenced project.

Thank you,

Brigitte



Brigitte Moneymaker (she/her)



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:

07/01/2025 16:35:10 UTC

Project Code: 2024-0046987

Project Name: US 41 at SR 18, Intersection Improvement Project, DES 2100059

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:

To Whom It May Concern:

The purpose of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.), 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.

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 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 Act.

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 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. You can complete this verification formally or informally or request an updated list by visiting the IPaC website at regular intervals during project planning and implementation.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at [Midwest Section 7 Technical Assistance | U.S. Fish & Wildlife Service](#). This website contains step-by-step instructions to help you determine if your project will have an adverse effect on listed species and to lead you through the Section 7 process.

We appreciate your concern for threatened and endangered species. Federal agencies should 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.**

Other Trust Resources and Activities

Bald and Golden Eagles - Although the bald eagle has been removed from the endangered species list, this species and the golden eagle are protected by the Bald and Golden Eagle Act and the Migratory Bird Treaty Act. It is the responsibility of the project proponent to survey the area for any migratory bird nests. If there is an eagle nest on-site while work is on-going, eagles may be disturbed. We recommend avoiding and minimizing disturbance to eagles whenever practicable. If you cannot avoid eagle disturbance, you may seek a [permit](#). A [nest take permit](#) is always required for removal, relocation, or obstruction of an eagle nest. For communication and wind energy projects, please refer to additional guidelines below.

Migratory Birds - The Migratory Bird Treaty Act (MBTA) prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Service. The Service has the responsibility under the MBTA to proactively prevent the mortality of migratory birds whenever possible and we encourage implementation of [recommendations that minimize potential impacts to migratory birds](#). Such measures include clearing forested habitat outside the nesting season (generally March 1 to August 31) or conducting nest surveys prior to clearing to avoid injury to eggs or nestlings.

Communication Towers - Construction of new communications towers (including radio, television, cellular, and microwave) creates a potentially significant impact on migratory birds, especially some 350 species of night-migrating birds. However, the Service has developed [voluntary guidelines for minimizing impacts](#).

Transmission Lines - Migratory birds, especially large species with long wingspans, heavy bodies, and poor maneuverability can also collide with power lines. In addition, mortality can occur when birds, particularly hawks, eagles, kites, falcons, and owls, attempt to perch on uninsulated or unguarded power poles. To minimize these risks, please refer to [guidelines](#) developed by the Avian Power Line Interaction Committee and the Service. Implementation of these measures is especially important along sections of lines adjacent to wetlands or other areas that support large numbers of raptors and migratory birds.

Wind Energy - To minimize impacts to migratory birds and bats, wind energy projects should follow the Service's [Wind Energy Guidelines](#). In addition, please refer to the Service's [Eagle Conservation Plan Guidance](#), which provides guidance for conserving bald and golden eagles in the course of siting, constructing, and operating wind energy facilities.

Attachment(s):

- Official Species List

OFFICIAL SPECIES LIST

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

This species list is provided by:

Indiana Ecological Services Field Office

620 South Walker Street

Bloomington, IN 47403-2121

(812) 334-4261

PROJECT SUMMARY

Project Code: 2024-0046987
Project Name: US 41 at SR 18, Intersection Improvement Project, DES 2100059
Project Type: Road/Hwy - Maintenance/Modification
Project Description: This project is located at the intersection of US 41 and SR 18, 0.16 mile south of SR 18 and 0.17 mile north of SR 18, Benton County, Indiana. The proposed project is anticipated to convert the existing intersection into a Restricted Crossing U-Turn (RCUT) intersection. Additionally, drainage improvements will be made to existing cross culverts under SR 18. Also, existing median drainage culverts within the project limits with a “poor” condition will be replaced, along with utility relocations and lighting installation. There is suitable summer habitat within the project area. No trees will be cleared as part of this project. On November 2, 2022, INDOT Crawfordsville District Environmental personnel stated, “A review of the USFWS GIS database for Indiana bat and Northern long-eared bat roosting, hibernacula and capture sites was conducted for Des No. 2100059 on 11/2/2022. There are no documented sites within a half mile of the project area.” Per the bat inspection by Kaskaskia Engineering Group (KEG) of small structures (Str # CLV-16821 and CLV-16825) on May 9, 2023, no evidence of bats was seen or heard in or near the structures. Construction is anticipated to begin in Spring 2026. Permanent lighting changes are anticipated due to the installation of new street lighting. Temporary lighting changes are assumed due to the potential for nighttime construction.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.6219661,-87.3809477,14z>



Counties: Benton County, Indiana

ENDANGERED SPECIES ACT SPECIES

There is a total of 4 threatened, endangered, or candidate species on this species list.

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

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

MAMMALS

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

BIRDS

NAME	STATUS
Whooping Crane <i>Grus americana</i> 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 <i>Danaus plexippus</i> There is proposed critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

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

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

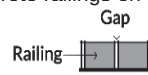
IPAC USER CONTACT INFORMATION

Agency: Kaskaskia Engineering Group, LLC
Name: Chad Kelly
Address: 477 South Third Street
Address Line 2: Suite 280
City: Geneva
State: IL
Zip: 60134
Email: ckelly@kaskaskiaeng.com
Phone: 6303329157

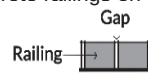
LEAD AGENCY CONTACT INFORMATION

Lead Agency: Federal Highway Administration

Bridge/Structure Bat Assessment Form

Date & Time of Assessment 5-9-23 1:17 est		DOT Project Number 2100059		Route/Facility Carried SR 18 E side		County Benton	
Federal Structure ID CLV-16821		Structure Coordinates (latitude and longitude) 40.621999, -87.380536		Structure Height (approximate) 36 inches		Structure Length	
Structure Type (check one)				Structure Material (check all that apply)			
Bridge Construction Style				Deck Material		Beam Material	
☐ Cast-in-place  ☐ Pre-stressed Girder 				☐ Metal ☐ Concrete ☐ Timber ☐ Open grid ☐ Other:		☐ None ☐ Concrete ☐ Steel ☐ Timber ☐ Other:	
☐ Flat Slab/Box  ☐ Steel I-beam 						☐ Concrete ☐ Timber ☐ Stone/Masonry ☐ Other:	
☐ Truss  ☐ Covered 						Creosote Evidence ☐ Yes ☒ No	
☐ Parallel Box Beam  ☐ Other:				Culvert Material ☒ Metal ☐ Concrete ☐ Plastic ☐ Stone/Masonry ☐ Other: Corrugated metal		☐ Unknown	
Culvert Type		Other Structure				Notes:	
☐ Box ☒ Pipe/Round ☐ Other:		☐					
Crossings Traversed (check all that apply)				Surrounding Habitat (check all that apply)			
☐ Bare ground ☐ Rip-rap ☐ Flowing water ☐ Standing water ☒ Seasonal water				☐ Open vegetation ☐ Closed vegetation ☐ Railroad ☐ Road/trail - Type: ☐ Other:			
				☒ Agricultural ☒ Commercial ☐ Residential-urban ☒ Residential-rural ☐ Woodland/forested			
				☒ Grassland ☐ Ranching ☐ Riparian/wetland ☐ Mixed use ☒ Other: Wind farm			
Areas Assessed (check all that apply)							
Check all areas that apply. If an area is not present in the structure, check the "not present" box.							
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.							
Area (check if assessed)		Assessment Notes		Evidence of Bats (include photos if present)			
☐ All crevices and cracks: Bridges/culverts: rough surfaces or imperfections in concrete Other structures: soffits, rafters, attic areas		☐ Not present No birds no bats present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Concrete surfaces (open roosting on concrete)		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Spaces between concrete end walls and the bridge deck		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Crack between concrete railings on top of the bridge deck 		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Vertical surfaces on concrete I-beams		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Spaces between walls, ceiling joists		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Weep holes, scupper drains, and inlets/pipes		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ All guiderails		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ All expansion joints		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
Name: Brigitte Moneymaker				Signature: 			

Bridge/Structure Bat Assessment Form

Date & Time 05/09/22 12:27 est of Assessment		DOT Project 2100059 Number		Route/Facility SR 18 Carried		County Benton	
Federal Structure ID CLV-16825		Structure Coordinates 40.622079, - (latitude and longitude) 87.381222		Structure Height 30 in (approximate)		Structure Length	
Structure Type (check one)				Structure Material (check all that apply)			
Bridge Construction Style				Deck Material		Beam Material	
☐ Cast-in-place  ☐ Pre-stressed Girder 				☐ Metal ☐ Concrete ☐ Timber ☐ Open grid ☐ Other:		☐ None ☐ Concrete ☐ Steel ☐ Timber ☐ Other:	
☐ Flat Slab/Box  ☐ Steel I-beam 						☐ Concrete ☐ Timber ☐ Stone/Masonry ☐ Other:	
☐ Truss  ☐ Covered 						Creosote Evidence ☐ Yes ☒ No	
☐ Parallel Box Beam  ☐ Other:				Culvert Material ☒ Metal ☐ Concrete ☐ Plastic ☐ Stone/Masonry ☐ Other:		☐ Unknown	
Culvert Type		Other Structure				Notes:	
☐ Box ☒ Pipe/Round ☐ Other: Corrugated metal		☐					
Crossings Traversed (check all that apply)				Surrounding Habitat (check all that apply)			
☐ Bare ground ☐ Rip-rap ☐ Flowing water ☐ Standing water ☒ Seasonal water				☐ Open vegetation ☐ Closed vegetation ☐ Railroad ☐ Road/trail - Type: ☐ Other:			
				☒ Agricultural ☒ Commercial ☐ Residential-urban ☒ Residential-rural ☐ Woodland/forested			
				☐ Grassland ☐ Ranching ☐ Riparian/wetland ☐ Mixed use ☐ Other: Wind farm			
Areas Assessed (check all that apply)							
Check all areas that apply. If an area is not present in the structure, check the "not present" box.							
Document all bat indicators observed during the assessment. Include the species present, if known, and provide photo documentation as indicated.							
Area (check if assessed)		Assessment Notes		Evidence of Bats (include photos if present)			
☐ All crevices and cracks: Bridges/culverts: rough surfaces or imperfections in concrete Other structures: soffits, rafters, attic areas		☐ Not present No birds no bats present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Concrete surfaces (open roosting on concrete)		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Spaces between concrete end walls and the bridge deck		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Crack between concrete railings on top of the bridge deck 		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Vertical surfaces on concrete I-beams		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Spaces between walls, ceiling joists		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ Weep holes, scupper drains, and inlets/pipes		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ All guiderails		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
☐ All expansion joints		☒ Not present		☐ Visual - live # dead # ☐ Guano ☐ Staining ☐ Audible ☐ Odor ☐ Photos ☐ Species			
Name: Brigitte Moneymaker				Signature: 			



United States Department of the Interior

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



In Reply Refer To:

February 12, 2024

Project code: 2024-0046987

Project Name: US 41 at SR 18, Intersection Improvement Project, DES 2100059

Subject: Concurrence verification letter for the 'US 41 at SR 18, Intersection Improvement Project, DES 2100059' 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 February 12, 2024 to verify that the **US 41 at SR 18, Intersection Improvement Project, DES 2100059** (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
- Tricolored Bat *Perimyotis subflavus* Proposed Endangered
- Whooping Crane *Grus americana* Experimental Population, Non-Essential

PROJECT DESCRIPTION

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

NAME

US 41 at SR 18, Intersection Improvement Project, DES 2100059

DESCRIPTION

This project is located at the intersection of US 41 and SR 18, 0.16 mile south of SR 18 and 0.17 mile north of SR 18, Benton County, Indiana. The proposed project is anticipated to convert the existing intersection into a Restricted Crossing U-Turn (RCUT) intersection. Additionally, drainage improvements will be made to existing cross culverts under SR 18. Also, existing median drainage culverts within the project limits with a “poor” condition will be replaced, along with utility relocations and lighting installation. There is suitable summer habitat within the project area. No trees will be cleared as part of this project. On November 2, 2022, INDOT Crawfordsville District Environmental personnel stated, “A review of the USFWS GIS database for Indiana bat and Northern long-eared bat roosting, hibernacula and capture sites was conducted for Des No. 2100059 on 11/2/2022. There are no documented sites within a half mile of the project area.” Per the bat inspection by Kaskaskia Engineering Group (KEG) of small structures (Str # CLV-16821 and CLV-16825) on May 9, 2023, no evidence of bats was seen or heard in or near the structures. Construction is anticipated to begin in Spring 2026. Permanent lighting changes are anticipated due to the installation of new street lighting. Temporary lighting changes are assumed due to the potential for nighttime construction.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.621957699999996,-87.38094733154924,14z>



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.

No

10. 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

11. 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

12. 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

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

No

14. Does the project include slash pile burning?

No

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

Yes

16. 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

17. 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

- 22-1012.01_BBA_CLV-16821.pdf <https://ipac.ecosphere.fws.gov/project/GVJRDVCB6VFXVC7RRYLXOAW7IY/projectDocuments/138350403>
- 22-1012.01_BBA_CLV-16825.pdf <https://ipac.ecosphere.fws.gov/project/GVJRDVCB6VFXVC7RRYLXOAW7IY/projectDocuments/138350406>

18. 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

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

Yes

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

No

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

Yes

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

Yes

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

Yes

24. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **permanent** lighting (other than the lighting already indicated for habitat removal (including the removal or trimming of trees) or bridge/structure removal, replacement or maintenance activities) will be installed or replaced?

Yes

25. 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

26. 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

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

No

28. 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

29. 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

30. **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

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

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

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

This decision key should only be used to verify project applicability with the Service's [amended February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion \(dated March 23, 2023\) for Transportation Projects](#). The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: Indiana Department of Transportation

Name: Benjamin Neild

Address: 41 W. 300 N.

City: Crawfordsville

State: IN

Zip: 47933

Email: bneild@indot.in.gov

Phone: 7653615259

INDOT Bridge/Small Structure Bat Inspection Data Sheet (Rev by Cvile Dist 5/23/2022)

General Information		
Date of Inspection: 7/17/2024	Initial Inspection ☐	Temp: 73F
Time of Inspection: 9:45 am	Follow-up Inspection ☒	Wind: ~3 mph
County: Benton	Construction ☐	Precip: None - scattered clouds
Inspected by: Brock Ervin, Robabeh Asadpour (Crawfordsville DE)		Sunrise: 6:33 am Sunset: 9:16 pm
GPS Latitude: 40.621999	Des. Number: 2100059	Anticipated Start Date for Construction:
Longitude: -87.380536	Contract Number: R-43688	Spring 2026
UTM Zone: 16		

Bridge or Culvert	Bridge or Culvert
Stream or Road Crossed: US 41 at Mud Creek	Station:
Bridge/Culvert number: Various	Number of Spans: Various
Type of Structure: ☐ Concrete box beam ☐ Steel beam ☐ Concrete I-beam ☐ Steel girder ☐ Concrete bulb tee beam ☐ Steel pony truss ☐ Concrete arch ☐ Welded steel thru girder ☐ Concrete girder ☐ Concrete box culvert ☒ Concrete slab ☐ Concrete pipe ☐ Multi-plate arch ☒ Corrugated steel pipe ☐ Other (list):	Material: ☒ Concrete ☒ Steel ☐ Other (describe): Shape: ☐ Box Culvert ☒ Pipe ☐ Arch ☒ Slab ☐ Other (describe)
Searched entire structure? If not, why not? Yes	Location of bats or signs of use (w/drawing and photos):
Bats Present? ☐ Seen? ☐ Heard?	N/A
No bats observed	
In Clusters? Number of clusters: N/A	Note: The twin bridges over Mud Creek are an exemption from the project area and will not be impacted. Numerous other small culverts were in the proeject area (small pipes) and were inspected. Only two of which, the SR 18 approach road pipes, are currently proposed for replacement.
Number of bats in largest cluster: N/A	
Approximate total number of bats found: N/A	
Signs of previous bat use? ☐ Guano ☐ Staining None	

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















APPENDIX D

Section 106 of the NHPA

Minor Projects PA Project Submittal and Assessment Form

SECTION 1

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

Part 1: Project Information-Completed by Applicant (Consultant/PM/Project Sponsor/INDOT District Staff)*

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

Original Submission Date: July 10, 2023 **Amended Submission Date*:** August 15, 2024

**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): Katherine J. Molnar

Timothy G. Zinn
Michael Baker International, Inc.
100 Airside Drive
Moon Township, PA 15108

Project Designation Number: 2100059

Route Number: SR 18 – US 41

Feature crossed (if applicable): N/A

City/Township: Fowler, Parish Grove and Center Townships **County:** Benton

Project Description:*

**Provide a full project description—include the same level of specificity and detail as expected in the NEPA document—in order to ensure a timely review by INDOT-CRO staff. For bridge and culvert projects, include specific details on the rehab or replacement including potential changes to width, height and materials. Be sure to include the specific elements listed below as applicable.*

The Indiana Department of Transportation (INDOT) and Federal Highway Administration (FHWA) intend to proceed with an intersection improvement roadway project on State Road (SR) 18 and US 41 in Benton County, Indiana. The project is located at the intersection of US 41 and SR 18, approximately 2.6 miles west of the Town of Fowler, Benton County, Indiana. The project includes portions of Sections 7, 12, 13, and 18, Township 25 North, Ranges 8 and 9 West in Parish Grove Township on the *Boswell, Indiana* topographic quadrangle map (USGS).

Purpose and Need: The purpose of the project is to mitigate the right-angle crashes along US 41 at its intersection with SR 18. US 41 is a rural four-lane divided highway with a free flow movement while SR 18 is stop controlled. This intersection has experienced multiple crossing and left-turn crashes. The need for the project is to improve safety concerns related to the turning movements at this intersection.

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Existing Conditions: The intersection is currently a two-way stop, controlled, with US 41 crossing northbound/southbound (NB/SB) and SR 18 crossing eastbound/westbound (EB/WB). US 41 is a four-lane, rural **Principal Arterial** divided highway and SR 18 is a two-lane, rural **State Collector** roadway. US 41 has 10-foot paved outside shoulders and 4-foot paved inside shoulders. SR 18 has 1-foot paved shoulders. No curbs or sidewalks are present. The southwest quadrant includes an agricultural field leading to an electrical substation. The northwest, northeast, and southeast quadrants are agricultural land.

Preferred Alternative: The proposed project is a Reduced Conflict Intersection (RCI) that includes the construction of two restricted crossing U-turns (**RCUTs**), one approximately ~~0.15~~ **0.17** mile north of the intersection, and the other ~~0.15~~ **0.16** mile south of the intersection. Construction will occur primarily within the median. However, at the location of the northern U-turn, the outside shoulder of the SB lane will be widened slightly to accommodate the turning radius of large trucks. Similarly, at the southern U-turn, the outside shoulder of the NB lanes will be widened in a similar fashion. The widened pavement areas, “loons,” will be constrained ~~primarily~~ within the limits of the existing right-of-way, ~~though some permanent right-of-way will be required.~~ At the intersection of SR 18 and US 41, two new turn lanes will be added between the NB and the SB traffic lanes to create safer turning for vehicles traveling NB and turning left (west) onto SR 18; and for vehicles traveling SB and turning left (east) onto SR 18. A new culvert will be added under each new turn lane. This work will occur entirely within the existing median.

The alternative includes several improvements to provide additional safety awareness for motorists along US 41 and SR 18, such as intersection lighting and advance guide signs. **The lighting at the intersection includes 16 luminaires, evenly spaced along the west and east sides of US 41. The luminaires will be 40-feet tall on standard foundations with 8-foot mast arms. The light will be solid state (LED).**

Additionally, ~~it is recommended that~~ the existing drainage structures (currently listed in poor condition) **will** be upgraded as part of this project. The proposed maintenance of traffic (**MOT**) will require various lane and roadway closures that will allow the drainage work to be completed.

The proposed RCI meets the purpose and need of this project by mitigating right angle crashes and therefore improving safety. It will reduce interruptions to current traffic patterns on US 41; provide the least amount of traffic delays; provide reduced environmental impacts by providing median turns along one roadway (instead of both); and reduces the overall amount of right-of-way needed.

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

This project does not include any curb, curb ramp, or sidewalk work.

For bridge or small structure projects, please list feature crossed, structure number, NBI number, and structure type:

This project involves work to **new and** existing drainage structures **as follows:**

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Structure #	Type	Length (ft)	Asset ID	Proposed Work
10	INLET, P-12	63		New median drain
11	INLET, P-12	9		
12	INLET, P-12	6	CLV-041-004-201.24	Replace existing median drain
13	INLET, P-12	75		
14	INLET, P-12	6		
15	MANHOLE, C-4	86		New manhole
16	INLET, P-12	79	CLV 041-004-201.09	Replace existing median drain
17	INLET, P-12	6		New median drain
18	INLET, P-12	280		
19	PIPE	100	CLV-16825	Repair existing culvert
20	PIPE	106	CLV-16821	Repair existing culvert

Structure #(s) CLV-16825 and CLV-16821, ~~CLV 041-004-201.24, and CLV 041-004-201.09.~~ The culverts are comprised of corrugated metal pipes (CMP), ~~will be repaired in kind.~~ Two additional structures, CLV-041-004-201.24 and CLV 041-004-201.09, CMP median drains, will be replaced during this project. Finally, two new median drains will be installed at the north and south ends of the project (See Figure 1).

There is no anticipated work on the two bridges carrying NB and SB US 41 over Mud Creek. ~~The culvert locations are depicted in the following graphic (please note that No work is anticipated on culverts CLV-33884 or CLV-33896, located in the median between the NB and SB bridges.); and illustrated in Photo 1, attached below.~~

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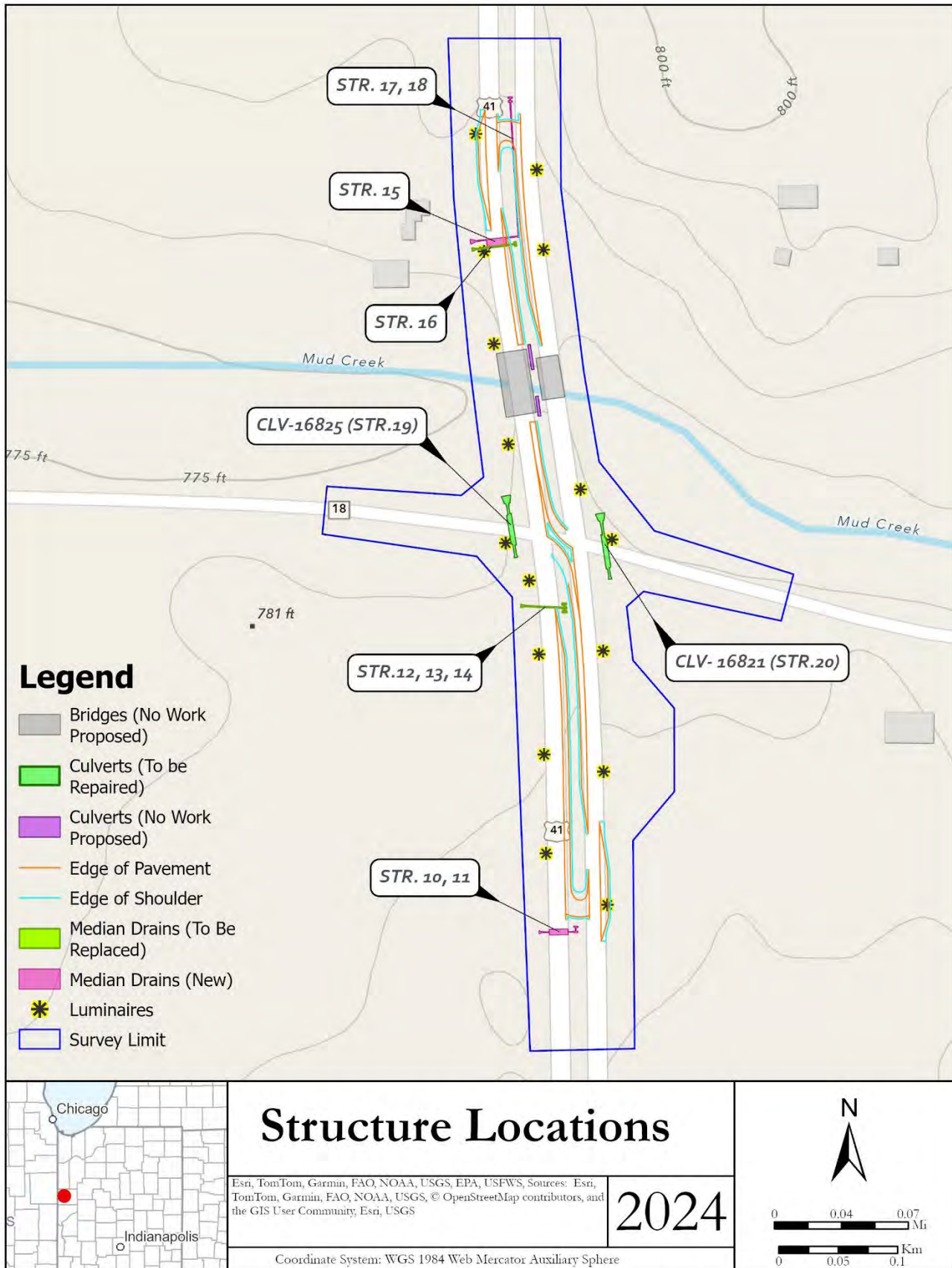


Figure 1. Locations and types of drainage structures within the project survey limits.

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For bridge projects, is the bridge included in INDOT's Historic Bridge Inventory (<https://www.in.gov/indot/2531.htm>)? N/A – this is not a bridge project.

☐ 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: 0.00 acre

☐ Temporary:

☐ Reacquisition

If applicable, identify right-of-way acquisition locations in text below and in attached mapping. Please specify how much (both temporary and permanent) and indicate what activities are included in the proposed right-of-way:

~~The proposed project will require 0.07 acre of new right of way from parcels 04-07-12-400-007.001-012 and 04-08-18-200-004.000-003 (See Figure 5 for locations). The areas will be used to create "loose" locations for increased turning radii for the median turns.~~

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

☐ Yes

☒ No

Archaeology (check one):

☐ All proposed activities are presumed to occur in previously disturbed soils*

**INDOT-CRO will notify you if project area includes undisturbed soils and requires an archaeological reconnaissance.*

☒ Project takes place in undisturbed soils and the archaeology report is included in submission or will be forthcoming*

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

A Phase IA archaeological reconnaissance was completed on October 20, 2022, and an Archaeological Short Form ~~will be submitted to INDOT-CRO~~ was posted to INSCOPE on August 1, 2023. The reconnaissance included background research, pedestrian reconnaissance, and subsurface sampling through the excavations of shovel test probes (STPs). STPs were placed at 15-meter intervals along a single transect in the northeast quadrant of the SR 18/US 41 intersection. No archaeological resources were identified within the APE as a result of the reconnaissance.

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Please specify all applicable categories and condition(s) (highlight applicable conditions in yellow)*:

B-2: Installation of new lighting, signals, signage and other traffic control devices under the following conditions *[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]*:

Condition A (Archaeological Resources)

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

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

Condition B (Above-Ground Resources)

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

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

Condition A (Archaeological Resources)

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

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

Condition B (Above-Ground Resources)

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

B-9: Installation, replacement, repair, lining, or extension of culverts and other drainage structures under the conditions listed below *[BOTH Condition A, which pertains to Archaeological Resources, and Condition B, which pertains to Above-Ground Resources, must be satisfied]*:

Minor Projects PA Project Submittal and Assessment Form

Condition A (Archaeological Resources):

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

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

Condition B (Above-Ground Resources):

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

- i. Work does not involve installation of a new culvert and other drainage structure, and there are no impacts to unusual features, including but not limited to historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under one of the following conditions (Condition a, Condition b, or Condition c must be satisfied):
 - a. The structure exhibits no wood, stone, or brick structures or parts therein; OR
 - b. The structure exhibits only modern wood, stone, or brick structures or parts therein; OR
 - c. The structure exhibits non-modern wood, stone, or brick structures or parts therein and the following conditions are met (BOTH Condition 1 AND Condition 2 must be met):
 - 1. Work does not occur adjacent to or within a National Register-listed or National Register eligible district or individual above-ground resource; AND
 - 2. The structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.
- ii. Work involves the installation of a new culvert and other drainage structures AND/OR there may be impacts to unusual features, including historic brick or stone sidewalks, curbs or curb ramps, stepped or elevated sidewalks and retaining walls, under the following conditions (BOTH Condition a and Condition b must be satisfied):
 - a. Work does not occur adjacent to or within a National Register-listed or National Register-eligible district or individual above-ground resource; AND
 - b. The subject structure exhibits one of the characteristics described below (Condition 1, Condition 2 or Condition 3 must be satisfied).
 - 1. The structure exhibits no wood, stone, or brick structures or parts therein; OR
 - 2. The structure exhibits only modern wood, stone, or brick structures or parts therein; OR
 - 3. The structure exhibits non-modern wood, stone, or brick structures or parts therein but lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. Under this condition, a qualified professional (meeting the Secretary of Interior's Professional Qualification

Minor Projects PA Project Submittal and Assessment Form

standards [48 Federal Register (FR) 44716]) must prepare an analysis and justification that the structure lacks sufficient integrity and/or a context that suggests it might have engineering or historical significance. This documentation must be reviewed and approved by INDOT Cultural Resources Office.

**Include full category text, including any conditions. INDOT-CRO will finalize categories upon their review.*

Check ☐ if SECTION 2: Minor Projects PA Category B-1, Condition B-ii Submission is included
Check ☐ if SECTION 3: Minor Projects PA Category B-9, Condition B-i-c-2 or B-ii-b-3 Submission is included

Part II: Completed by INDOT-CRO

Amendments will be shown in red font.

Information reviewed (please check all that apply):

General project location map ☐ USGS map ☐ Aerial photograph ☒ Soil survey data ☒
 General project area photos ☐ Archaeology Reports ☒ Historic Property Reports ☐
 Indiana Historic Buildings, Bridges, and Cemeteries Map/Interim Report ☒
 Bridge inspection information/BIAS ☒ Historic Bridge Inventory Database ☒
 SHAARD ☒ SHAARD GIS ☒ Streetview Imagery ☒ County GIS Data/Property Cards ☒

Other (please specify):- INDOT Bridge and Drainage Assets Viewer database;

Nones, Dean, Ryan Robinson, and Bryan Cuning

2023 A Phase I Archaeological Reconnaissance for the US 41 and SR 18 Intersection Improvement Project in Parish Grove and Center Townships, Benton County, Indiana, Des. No. 2100059. Michael Baker International, Moon Township, Pennsylvania.

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

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

Additional Comments:

Above-ground Resources

An INDOT-Cultural Resources Office (CRO) historian who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 first performed a desktop review, checking the Indiana Register of Historic Sites and Structures (State Register) and National Register of Historic Places (National Register) lists for

Minor Projects PA Project Submittal and Assessment Form

Benton County. No listed resources are present within 0.15 mile of the project area, a distance that would serve as an adequate area of potential effects (APE) given the scope of the project and the surrounding terrain.

The *Benton County Interim Report* (2009) of the Indiana Historic Sites and Structures Inventory (IHSSI) was also consulted. The National Register & IHSSI information is available in the Indiana State Historic Architectural and Archaeological Research Database (SHAARD) and the Indiana Historic Buildings, Bridges, and Cemeteries Map (IHBBM). The SHAARD information was checked against the interim report hard-copy maps. No IHSSI-surveyed resources are recorded within 0.15 mile of the project.

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

Land surrounding the project area is rural with agricultural fields, wind turbines, scattered residential and farm buildings, and an electrical substation present. Within 0.15 mile of the project area, there are two (2) above-ground resources; of these, only one is—or will be—50 years of age by the project's proposed 2025 letting. That resource, a highly altered c.-1900 central passage house, lacks the material integrity and historic significance to be considered eligible for listing in the National Register. No other above-ground resources within 0.15 mile of the project are or will be 50 years of age by the proposed 2024 letting.

According to the INDOT Bridge and Drainage Assets Viewer database, the structures to be repaired (CLV-16825, CLV-16821, CLV 041-004-201.24, and CLV 041-004-201.09) as part of this project are all corrugated metal pipes. None of the structures are included in the BIAS database due to their small diameters (less than 4 feet). No dates of installation for the structures could be located. Examination of available structure photos included in the Bridge and Drainage Assets Viewer showed no wood, stone or brick structures or parts therein. In addition, there is no evidence that the structures possess historic or engineering significance.

Based on the available information, as summarized above, no above-ground concerns exist as long as the project scope does not change.

August 2024 Project Update: No changes to the July 2023 above-ground analysis are necessary.

Archaeological Resources

An INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the Phase Ia field reconnaissance survey report completed for the project by Cultural Resource Analysts (Nones et al. 2023). No archaeological sites were previously recorded within or adjacent to the project area.

A 14.2-acre survey area was investigated via a combination of systematic shovel probing (n=2), pedestrian survey in an agricultural field, and visual inspection of obviously disturbed areas. No archaeological resources were documented as a result of the survey and no additional investigation is recommended (Nones et al. 2023).

August 2024 Update: All work remains within the Phase Ia survey area.

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

Minor Projects PA Project Submittal and Assessment Form

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): Susan Branigin and Matt Coon

INDOT Approval Date: July 10, 2023

Amendment Approval Date (if applicable):

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

Please attach the following to this form:

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

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

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

Minor Projects PA Project Submittal and Assessment Form

Attachments

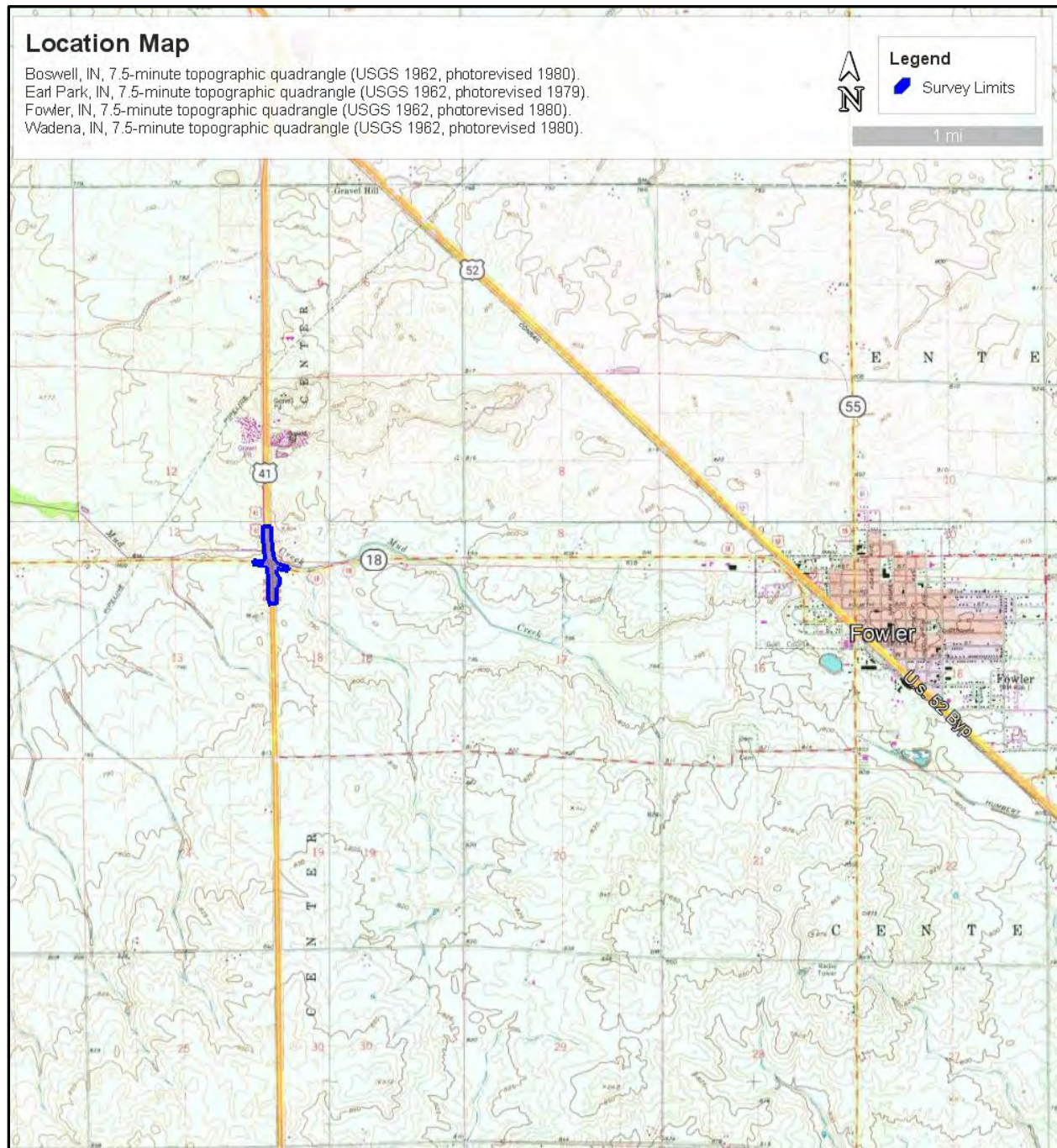


Figure 2. Location map showing the project area in Benton County, Indiana.

Minor Projects PA Project Submittal and Assessment Form

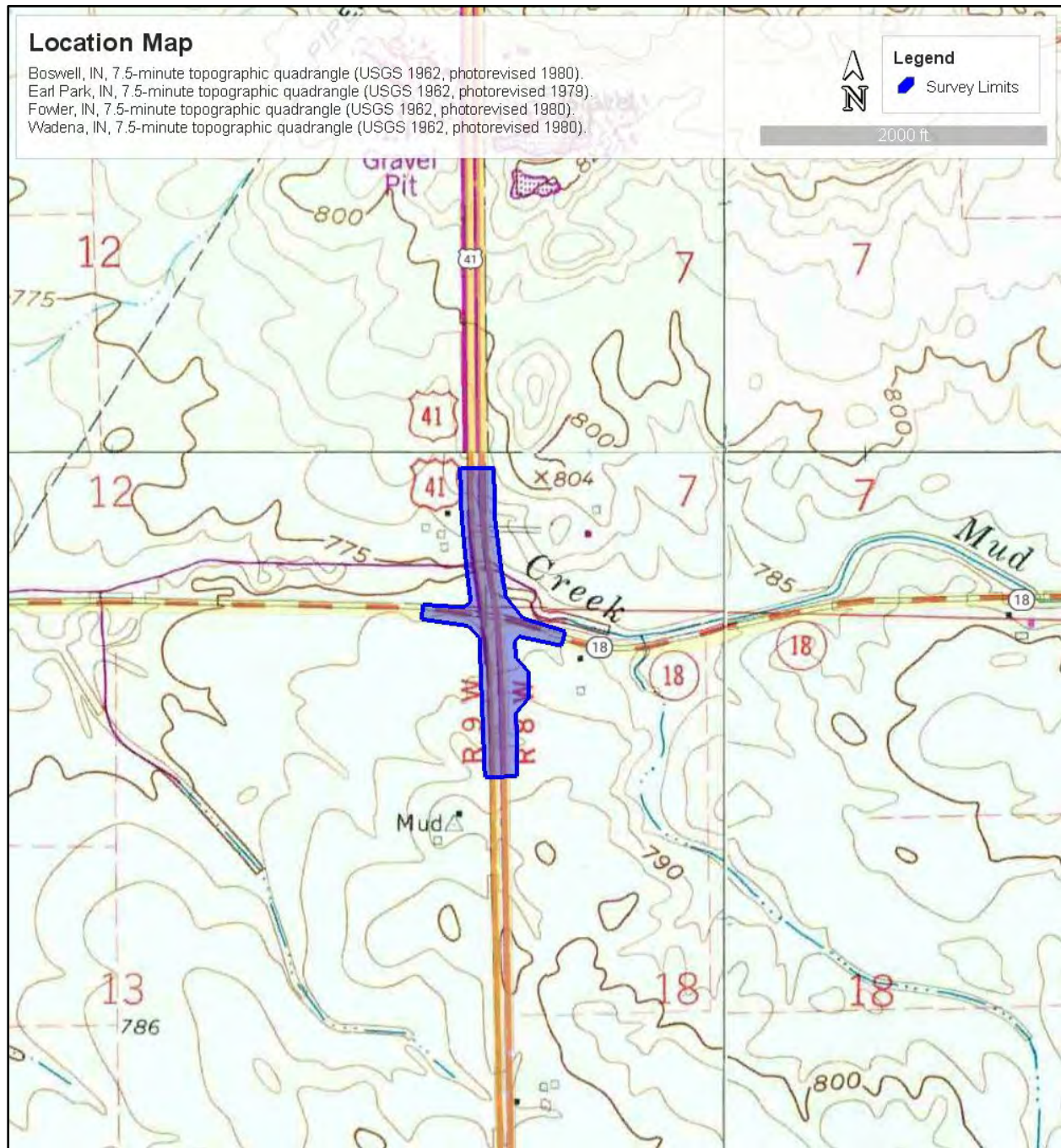


Figure 3. Location map showing the limits of disturbance on a USGS topographic map.

Minor Projects PA Project Submittal and Assessment Form

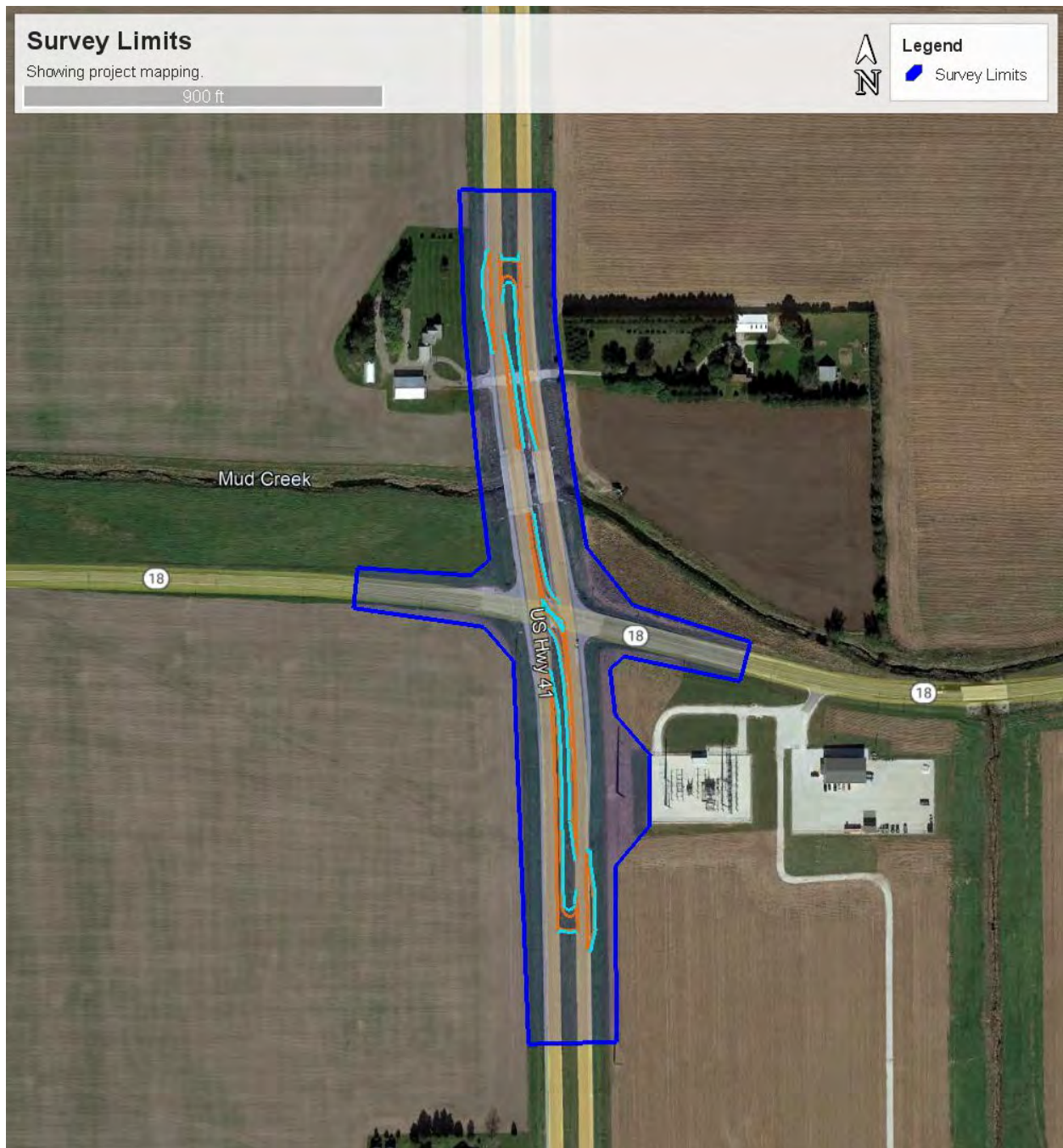


Figure 4. Aerial photograph showing the project survey limits.

Minor Projects PA Project Submittal and Assessment Form

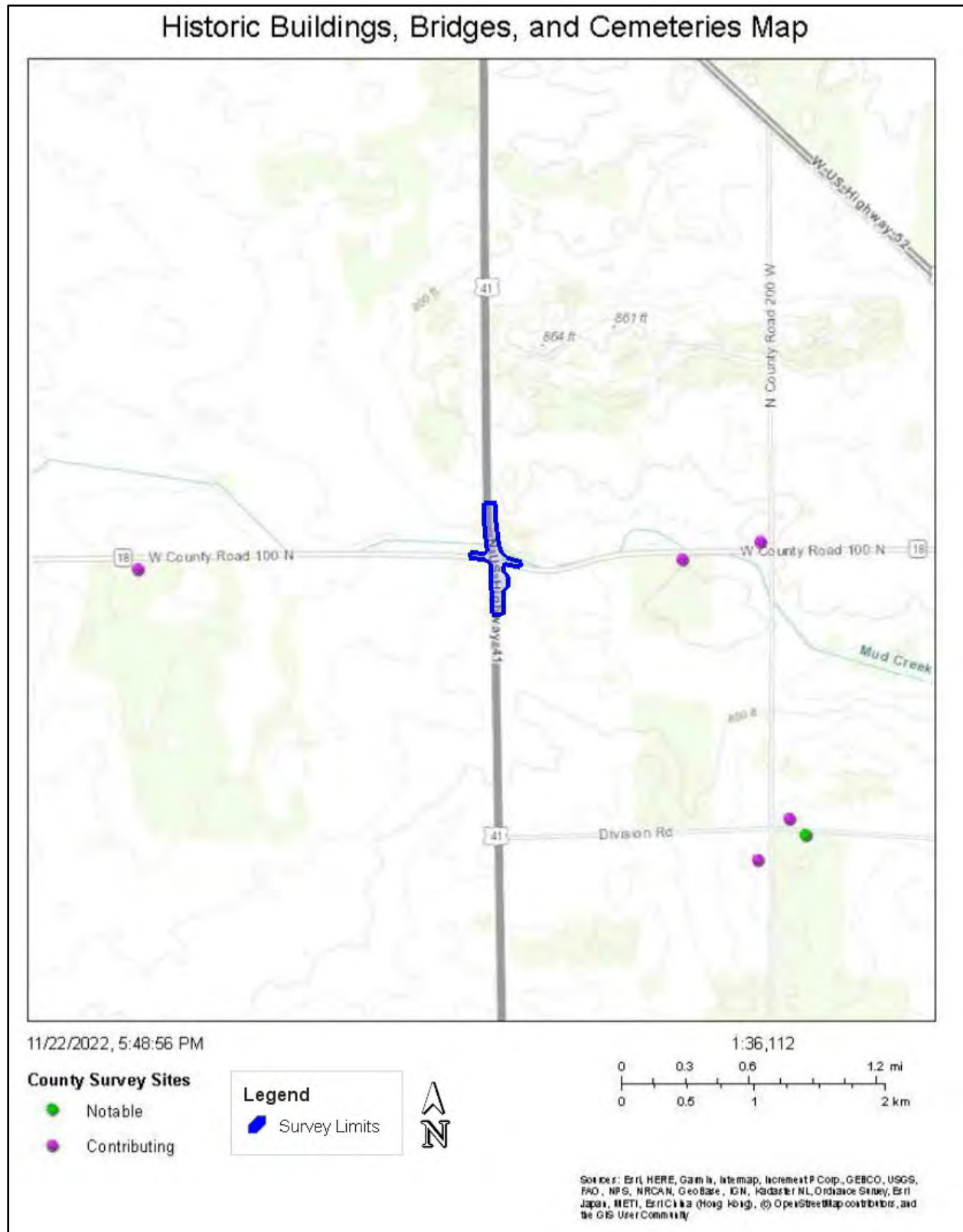


Figure 5. Printout from the Indiana Buildings, Bridges, and Cemeteries Map showing previously surveyed historic properties in the project vicinity. Note that there are none in the survey area.

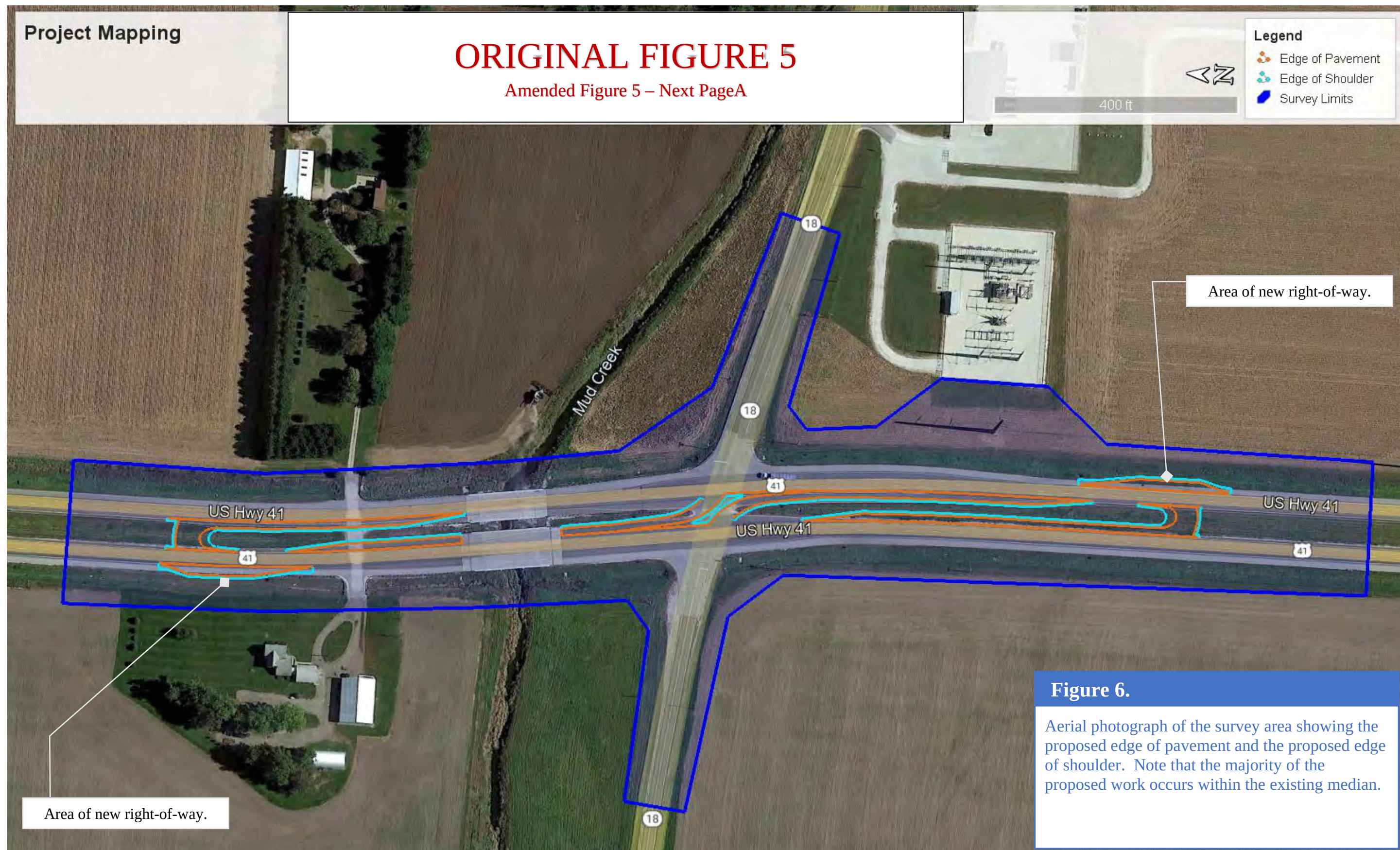
Minor Projects PA Project Submittal and Assessment Form



Photo 1. Culvert CLV-16825, a corrugated metal pipe, which is typical of all the culverts in this undertaking

Minor Projects PA Project Submittal and Assessment Form

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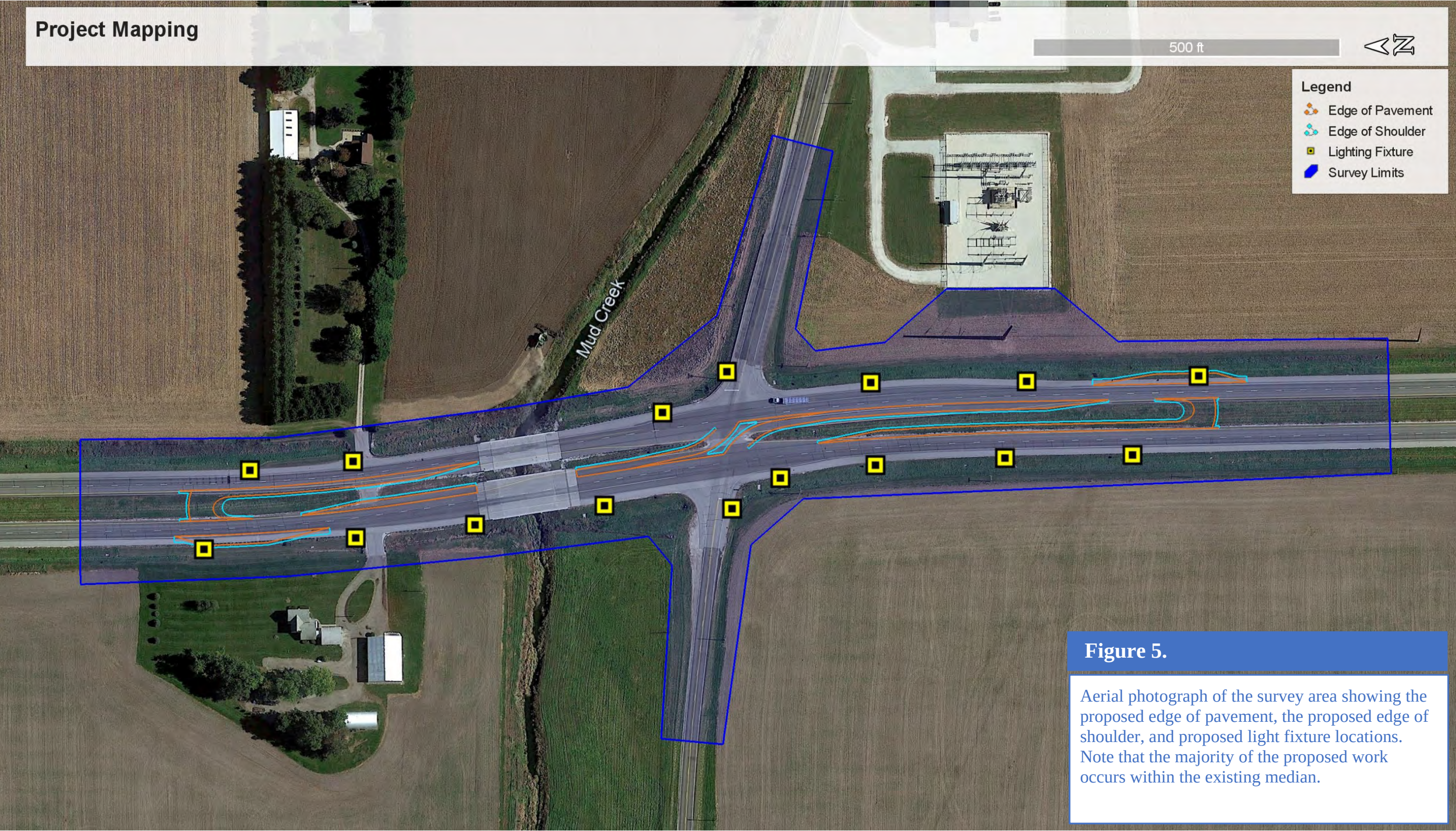


Figure 5.

Aerial photograph of the survey area showing the proposed edge of pavement, the proposed edge of shoulder, and proposed light fixture locations. Note that the majority of the proposed work occurs within the existing median.

APPENDIX E

Red Flag Investigation 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: March 2, 2023

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

From: Brigitte Money maker
Kaskaskia Engineering Group, LLC
323 Main St, Suite E
Evansville, IN 47708
Bmoney maker@kaskaskiaeng.com

Re: RED FLAG INVESTIGATION
DES 2100059, State Project
Intersection Improvement with Added Turn Lanes
US 41 and SR 18 Intersection
Benton County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: The Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) intend to proceed with an intersection improvement roadway project in Benton County, Indiana. The project is located at the intersection of US 41 and SR 18, approximately 2.6 miles west of the Town of Fowler, Benton County, Indiana. The project includes Sections 7, 12, 13, and 18, Township 25 North, Ranges 8 and 9 West in Parish Grove Township in the Boswell quadrangle. The intersection is a two-way stop controlled with US 41 crossing northbound/southbound (NB/SB) and SR 18 crossing eastbound/westbound (EB/WB). US 41 is a four-lane divided highway and SR 18 is a two-lane roadway. INDOT proposes a Reduced Conflict Intersection (RCI) which will restrict the thru and left-turn movement from SR 18 onto US 41. Additional associated improvement include drainage improvements to the existing cross culverts under SR 18, utility relocations, and installation of lighting.

Bridge Work Included in Project: Yes ☐ No ☒ Structure #(s) _____

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

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

Culvert Work Included in Project: Yes ☒ No ☐ Structure #(s) CLV-16825, CLV-16821, CLV 041-004-201.21, CLV 041-004-201.09

Proposed right of way: Temporary ☐ # Acres _____ Permanent ☒ # Acres 0.07, Not Applicable ☐

Type and proposed depth of excavation: Excavation may be required in order to install the median crossover as well as the new culverts and riprap. Excavation depths are not anticipated to exceed three (3) feet below ground surface.

Maintenance of traffic (MOT): Maintenance of traffic will include a one lane closure in each direction along US 41 and a complete closure with detour for SR 18.

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

State Project: ☒ LPA: ☐

Any other factors influencing recommendations: N/A

INFRASTRUCTURE TABLE AND SUMMARY

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

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

Explanation:

Pipelines: One (1) pipeline segment is located within the 0.5 mile search radius. The pipeline segment, Trunkline Gas Company, is located approximately 0.40 mile northwest of the project area. No impact is expected.

WATER RESOURCES TABLE AND SUMMARY

Water Resources Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
NWI - Points	N/A	Canal Routes - Historic	N/A
Karst Springs	N/A	NWI - Wetlands	4
Canal Structures – Historic	N/A	Lakes	2
NPS NRI Listed	N/A	Floodplain - DFIRM	N/A
NWI-Lines	2	Cave Entrance Density	N/A
IDEM 303d Listed Streams and Lakes (Impaired)	5	Sinkhole Areas	N/A
Rivers and Streams	6	Sinking-Stream Basins	N/A

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

Explanation:

NWI-Lines: Two (2) NWI- Lines are located within the 0.5 mile search radius. One (1) NWI-Line is located within the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

IDEM 303d Listed Streams and Lakes (Impaired): Five (5) IDEM 303d Listed Stream segments are located within the 0.5 miles search radius but are actually not impaired according to the IDEM 303d Listed Streams and Lakes website.

Rivers and Streams: Six (6) river and stream segments are located within the 0.5 mile search radius. One (1) segment, Mud Creek, is located within the project area. A Waters of the US Report is recommended based on mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur.

NWI-Wetlands: Four (4) NWI-Wetlands are located within the 0.5 search radius. The nearest NWI-Wetland is located approximately 0.39 mile northeast of the project area. No impact is expected.

Lakes: Two (2) lakes are located within the 0.5 search radius. The nearest lake is located approximately 0.39 mile northeast of the project area. No impact is expected.

MINING AND MINERAL EXPLORATION TABLE AND SUMMARY

Mining/Mineral Exploration Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Petroleum Wells	N/A	Mineral Resources	1
Mines – Surface	N/A	Mines – Underground	N/A

Explanation:

Mineral Resources: One (1) mineral resource facility is located with the 0.5 mile search radius. The facility, identified as Benton County Gravel, is located 0.36 mile northwest of the project area. No Impact is expected.

HAZARDOUS MATERIAL CONCERNS TABLE AND SUMMARY

Hazardous Material Concerns Indicate the number of items of concern found within the 0.5 mile search radius. If there are no items, please indicate N/A:			
Superfund	N/A	Manufactured Gas Plant Sites	N/A
RCRA Generator/ TSD	N/A	Open Dump Waste Sites	N/A
RCRA Corrective Action Sites	N/A	Restricted Waste Sites	N/A
State Cleanup Sites	N/A	Waste Transfer Stations	N/A
Septage Waste Sites	N/A	Tire Waste Sites	N/A
Underground Storage Tank (UST) Sites	N/A	Confined Feeding Operations (CFO)	N/A
Voluntary Remediation Program	N/A	Brownfields	N/A
Construction Demolition Waste	N/A	Institutional Controls	N/A
Solid Waste Landfill	N/A	NPDES Facilities	1
Infectious/Medical Waste Sites	N/A	NPDES Pipe Locations	N/A
Leaking Underground Storage (LUST) Sites	N/A	Notice of Contamination Sites	N/A

Unless otherwise noted, site specific details presented in this section were obtained from documents reviewed on the

Indiana Department of Environmental Management (IDEM) Virtual File Cabinet (VFC).

Explanation:

NPDES Facilities: One (1) NPDES Facility is located within the 0.5 mile search radius. The facility, Gick Property Temporary Soil Stockpile Area (Gravel Hill), is located approximately 0.38 mile northwest of the project area. Permit INR10H203 expired pm September 6, 2018. No Impact is expected.

ECOLOGICAL INFORMATION SUMMARY

The Benton County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities is provided at https://www.in.gov/dnr/nature-preserves/files/np_benton.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did indicate the presence of ETR species within the 0.5 mile search radius. Coordination with IDNR will occur. Due to the nature of project activities, this project may fall under the guidelines set forth under USFWS Interim Policy for the Review of Highway Transportation Projects in Indiana dated May 29, 2013. Since a Waters of the US Report is being prepared, results of the report may indicate the need to coordinate with USFWS.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. The project area is located in an area surrounded by agricultural fields, mowed vegetation, and utility uses. No information on the presence or absence of bats is available for the small structures. Additional investigation to confirm the presence or absence of bats in the small structures will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

RECOMMENDATIONS SECTION

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

INFRASTRUCTURE: N/A

WATER RESOURCES:

A Waters of the US Report is recommended based on the presence of mapped features, and coordination with INDOT ESD Ecology and Waterway Permitting will occur for the following features:

- One (1) NWI Line is located within the project area.
- One (1) stream segment, Mud Creek, flows through the project area.

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

ECOLOGICAL INFORMATION: Coordination with IDNR will occur. Since a Waters of the US Report is being prepared, results of the report may indicate the need to coordinate with USFWS. Additional investigation to confirm the presence or absence of bats in the small structures will be necessary. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's IPaC System for Listed Bat Consultation for INDOT Projects".

Nicole Fohey Breting
Digitally signed by
Nicole Fohey-Breting
Date: 2023.03.09
03:43:32 -05'00'

INDOT ESD concurrence: _____

Prepared by:



Brigitte Money maker
Environmental Scientist
Kaskaskia Engineering Group, LLC

Graphics:

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

SITE LOCATION: YES

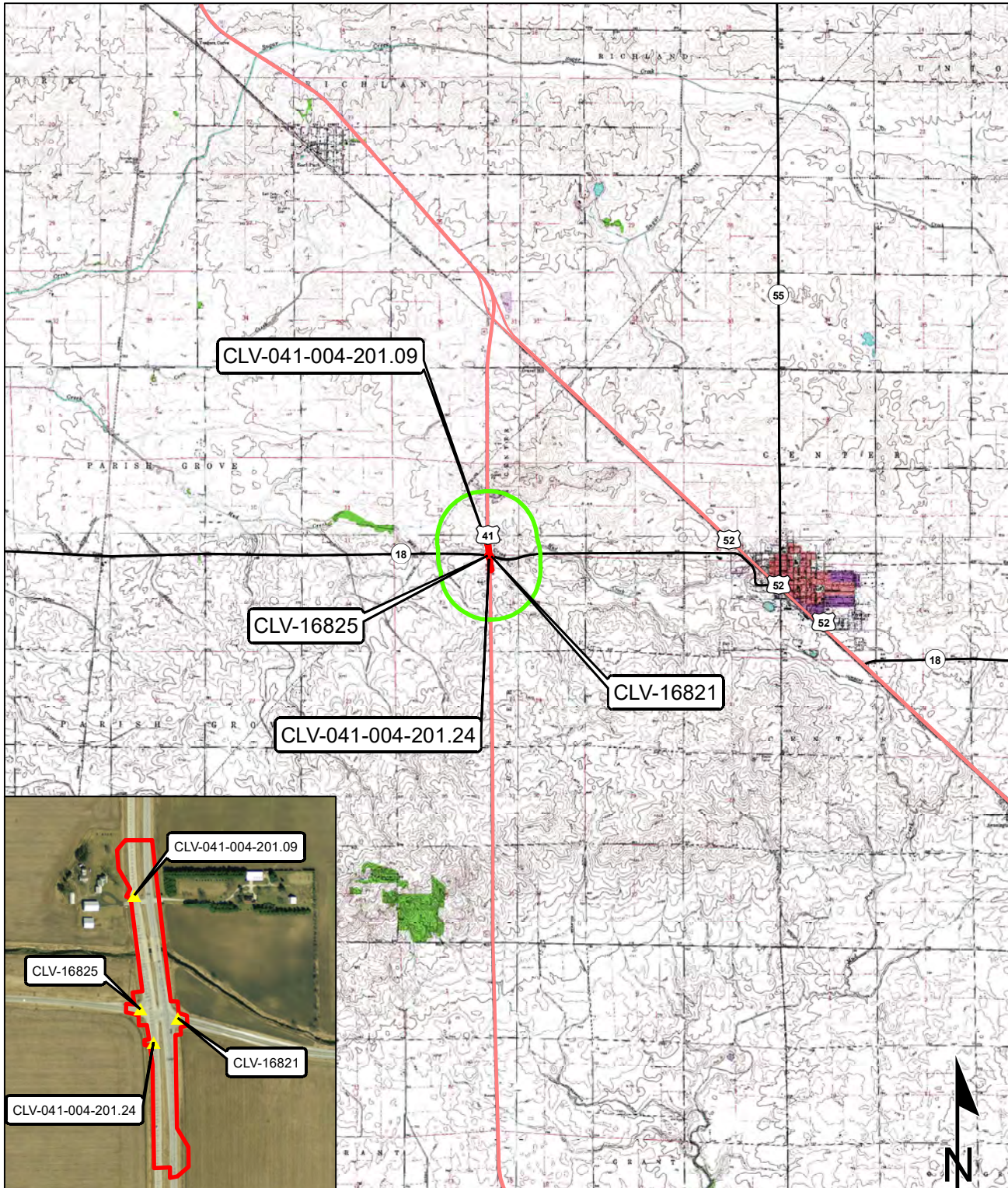
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: YES

Red Flag Investigation - Site Location
US 41 and SR 18 Intersection
Des No. 2100059, Intersection Improvement with Added Turn Lanes
Benton County, Indiana



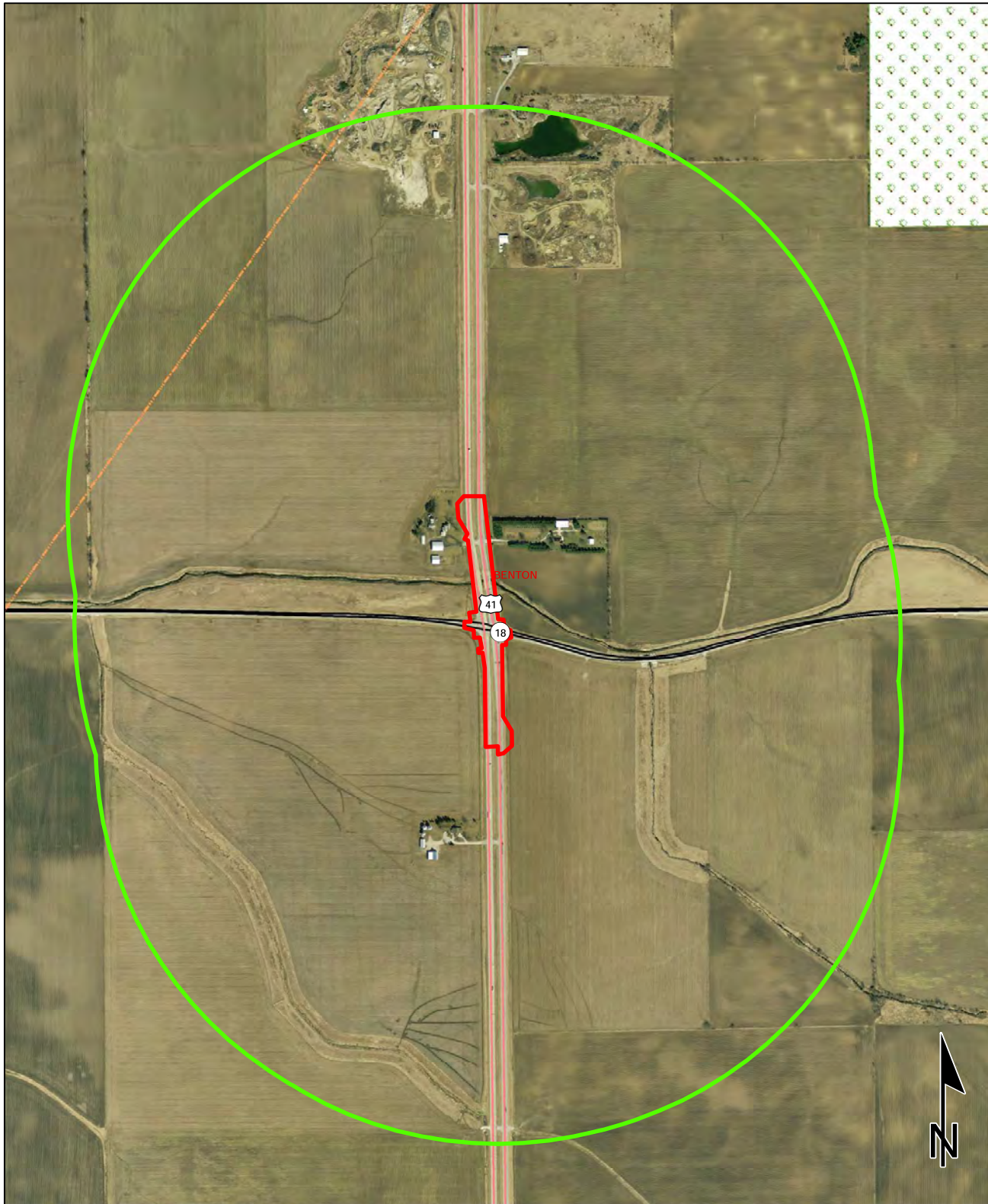
Legend

▲ Culvert Locations

**BOSWELL AND EARL PARK
 QUADRANGLES INDIANA
 7.5 MINUTE SERIES
 (TOPOGRAPHIC)**

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

Red Flag Investigation - Infrastructure
US 41 and SR 18 Intersection
Des No. 2100059, Intersection Improvement with Added Turn Lanes
Benton County, Indiana

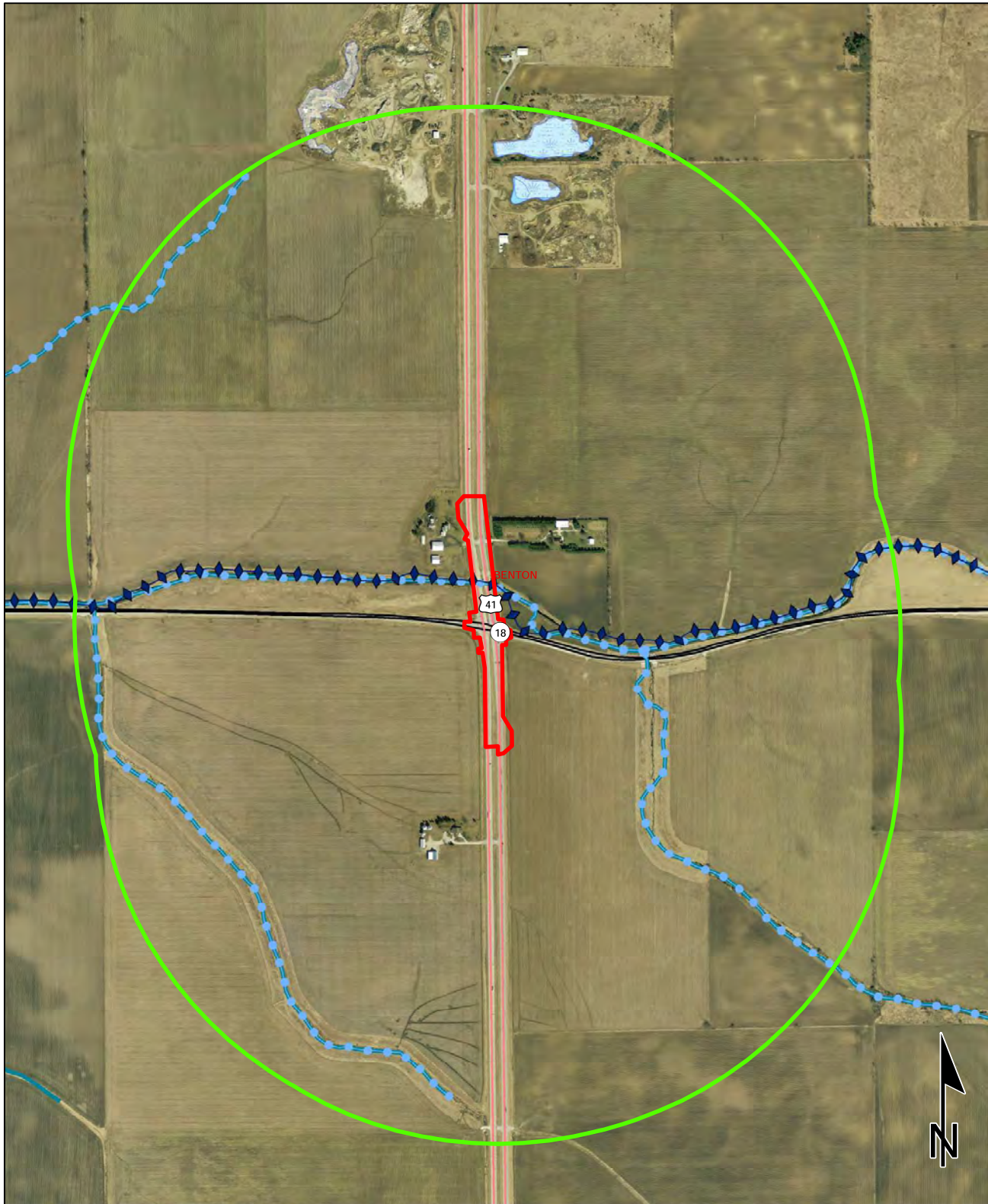


Sources: 0.15 0.075 0 0.15 Miles
Non Orthophotography
Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N Map Datum: NAD83

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

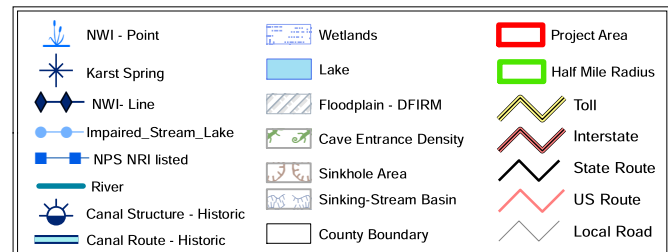
	Religious Facility		Recreation Facility		Project Area
	Airport		Pipeline		Half Mile Radius
	Cemeteries		Railroad		Toll
	Hospital		Trails		Interstate
	School		Managed Lands		State Route
			County Boundary		US Route
					Local Road

Red Flag Investigation - Water Resources
US 41 and SR 18 Intersection
Des No. 2100059, Intersection Improvement with Added Turn Lanes
Benton County, Indiana

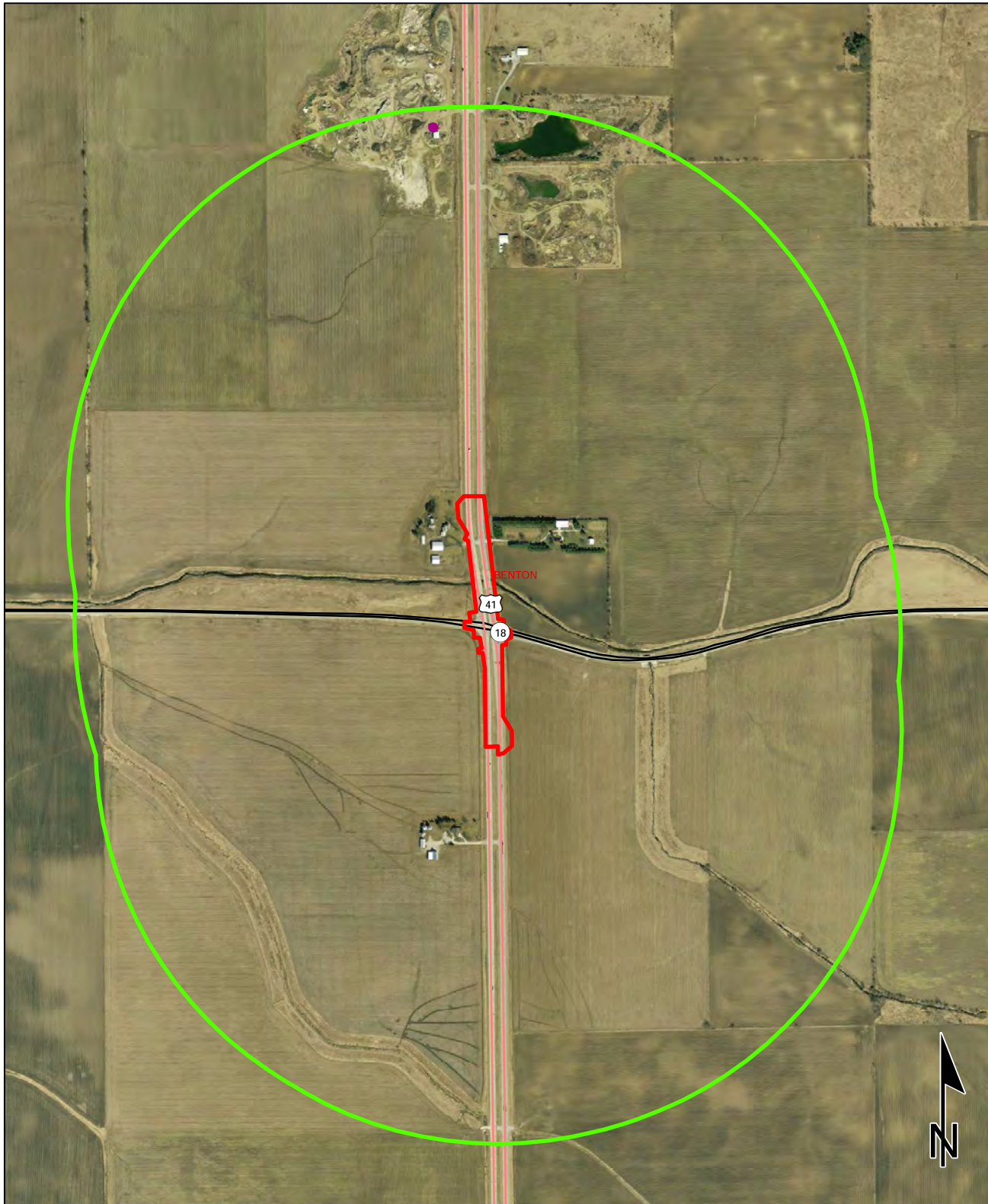


Sources:
Non Orthophotography
 Data - Obtained from the State of Indiana Geographical
 Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data
 (www.indianamap.org)
 Map Projection: UTM Zone 16 N Map Datum: NAD83

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

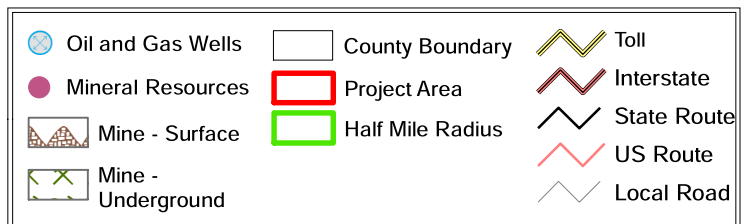


Red Flag Investigation - Mining/Mineral Exploration
US 41 and SR 18 Intersection
Des No. 2100059, Intersection Improvement with Added Turn Lanes
Benton County, Indiana



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

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



Red Flag Investigation - Hazardous Material Concerns
US 41 and SR 18 Intersection
Des No. 2100059, Intersection Improvement with Added Turn Lanes
Benton County, Indiana



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

0.2 0.1 0 0.2
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

Justus McGill 7/27/23

**WATERS OF THE U.S. DETERMINATION REPORT
US 41 and SR 18 Intersection Improvement Project
Benton County, IN**

INDOT DES. NO. 2100059

**Asset ID #: 041-04-05991 CNBL/NBI# 015380
& 041-04-05991 JCSB/ NBI# 015385**

Prepared by: Brigitte Moneymaker

Contact Information: bmoneymaker@kaskaskiaeng.com, 618-233-5877

Kaskaskia Engineering Group, LLC

Completed Date: July 13, 2023

1.0 PROJECT INFORMATION

Date of Field Reconnaissance:

May 9, 2023

Photo Directional Maps
and Photo Log omitted
to avoid duplication.

Project Location:

Boswell, Indiana Quadrangle

Sections: 12 & 13 Township 25 N, Range 9 W

Sections: 7 & 18 Township 25 N, Range 8 W

Latitude: 40.621858 N, Longitude: -87.380438 W

Benton County, Indiana

Project Description:

The proposed project (Des No. 2100059) is located at the intersection of US 41 and SR 18, approximately 2.6 miles west of the Town of Fowler, in Benton County Indiana, in the Indiana Department of Transportation (INDOT) Crawfordsville District. The intersection includes sections 12, 7, 18, 13, Township 25 North, Ranges 8 West and 9 West in the Boswell quadrangle. (Figure 1). The proposed project is to construct a Reduced Conflict Intersection (RCI) which will improve safety by restricting the thru and left turn movement from SR 18 onto US 41. The following culverts are located within the projects area. Culverts in poor condition will likely be replaced.

Table 1 – Structure Summary Table

Asset ID	Latitude	Longitude	Location	Type	Condition	Crossing Roadway	Size (width)
CLV-041-004-201.09	40.623573	-87.381291	Boswell S 12, T 25N, R 9W	Corrugated Metal Pipe	Poor	US 41 SB	12 in
CLV-16825	40.621955	-87.38117	Boswell S 13, T 25N, R 9W	Corrugated Metal Pipe	Poor	SR 18	30 in
CLV-041-004.201.24	40.621487	-87.380916	Boswell S 13, T 25N, R 9W	Corrugated Metal Pipe	Poor	SR 18	36 in
CLV-16821	40.621833	-87.380471	Boswell S 18, T 25N, R 8W	Corrugated Metal Pipe	Fair/ Poor	US 4 1 SB	15 in
041-04-05991CNBL NBI# 015380	40.622852	-87.380893	Boswell S 18, T 25N, R 8W	Concrete Slab	Good	US 41	90 ft
041-04-05991 JCSB NBI# 015385	40.622783	-87.381154	Boswell, S 18 & 13, T 25N, R 8W & 9W	Concrete Slab	Good	US 41	95 ft

2.0 OFFICE EVALUATION

Results:

USGS Mapping

The USGS Boswell, Indiana 7.5-minute topographic quadrangle map indicates a perennial stream associated with Mud Creek within the investigated area. (Figures 2 and 3).

NWI Mapping

The NWI map was reviewed for the presence of potential wetlands in, or adjacent to, the investigated area (Figure 4). One NWI feature is mapped within the investigated area, which is listed below in Table 2. The riverine NWI wetland is associated with Mud Creek. There are no other mapped NWI features within the investigated area.

Table 2 - NWI Wetlands Within/Adjacent the Investigated Area

Wetland Type	Cowardin Classification Code	Location
Riverine, lower perennial, unconsolidated bottom, semi permanently flooded, excavated	R2UBFx	Mud Creek flows under US 41, just north of the project intersection

Source: USFWS NWI, 2023

Mapped Soil Units

According to the Web Soil Survey (WSS) geographic database for Benton County, Indiana (USDA-NRCS Web Soil Survey, 2023), the investigated area contains four map units (Figure 5, Table 3)

Table 3 - Soil Units within the Investigated Area

Soil Unit Symbol	Soil Unit Name	Hydric Rating	Hydric Status
BaB2	Barce loam, 2 to 6 percent slopes, eroded	6%	Predominantly Not Hydric
Ck	Comfrey silty clay loam, sandy substratum, occasionally flooded	100%	Hydric
Cu	Crane loam, till substratum	9%	Predominantly Not Hydric
WhB2	Wea silt loam, 2 to 6 percent slopes, eroded	6%	Predominantly Not Hydric

Source: NRCS Web Soil Survey, 2023

Hydrology

According to the USGS NHD map, there are four flowlines located within the investigated area (Figure 6). One stream/river flowline north of SR 18 that flows east to west under US 41 is associated with Mud Creek. One canal/ditch flowline flows from the SE quadrant of the SR 18 and US 41 intersection, under SR 18, then flows south to north along US 41 northbound and into Mud Creek, is associated with roadside ditch (RSD) 1. A second canal/ditch flowline that flows south to north along US 41 southbound, flows

under SR 18, and then into Mud Creek is associated with RSD 2. A third canal/ditch flowline, RSD 3, that flows from north to south along US 41 northbound into Mud Creek is not associated with any water resources found during the site investigation.

According to the IDNR Best Available Floodplain Layer, the investigated area is located within the floodplain associated with Mud Creek (Figure 7).

This project does not lie within the karst region of Indiana.

Table 4 - Stream Summary Table

ID	Latitude	Longitude	USGS Blue-Line (Y/N)	Stream Type	Riffles/ Pools (Y/N)	Substrate	OHWL Width (ft)	OHWL Depth (ft)	Stream Relative Quality	Estimated Amount of Aquatic Resources in the Investigated Area (acres / linear feet)	Photo #s	Likely Water of the U.S.?
Mud Creek	40.622736	-87.380997	Yes	Perennial	No	Sand and Muck	13	5	Average	0.25 ac./ 329 lf	12, 13, 15, 16, 17, 18, 27, 35, 36, 41, 45, 49, 52, 57, 59	Yes

3.0 Field Reconnaissance

Results:

Bats and Birds:

The bridge and two culvert structures were investigated for the presence of migratory bird nests and/or evidence of bats during the site visit. There were no bird nests and/or evidence of bats was found during the visit.

Wildlife Evidence and Concerns:

There was evidence of the stream being used by racoons (Photo 26). Prints were found in the mud behind the pylons on the southwest corner of the northbound bridge. There was no evidence of the RSDs being used by terrestrial vertebrates.

Streams:

One stream, Mud Creek, was identified within the investigated area.

Mud Creek

Mud Creek would likely be classified as a perennial stream because it has a semi-permanent base flow and is associated with a NHD flowline. Hydrologic conditions were normal based on the previous three months of rainfall data (USACE APT v 1.0.20). The channel flows from east to west under US 41. According to USGS StreamStats, Mud Creek has an upstream drainage of 7.526 square miles. It is within USGS 12-digit Hydrological Unit Code (HUC) 071200020702 (Coon Creek-Mud Creek Watershed). The upstream drainage consists of agricultural fields, rural residences, rural residences, and a commercial wind farm.

The observed ordinary high water mark (OHWM) (Lat: 40.622704, Lon: -87.381665) was 13-feet wide and approximately 5-feet deep. The OHWM was measured 160 feet downstream, outside the influence of the bridge, and was characterized by the presence of litter/debris, and matted vegetation. The water was flowing west during the site visit. Mud Creek flows 13.21 miles northwest into Sugar Creek, which qualifies for classification as an Indiana Natural and Scenic River Segment. Sugar Creek then flows into the Iroquois River northwest of the investigated area, which is a Section 10 Navigable River. Mud Creek is to be likely to be considered a Waters of the US.

The substrate within the channel was sand and muck. Riprap was found on the slope behind the pilons of the bridge and extending approximately 15-feet from edges of the openings but was not found within the channel or on the bank where the OHWM was measured. There were no riffles or pools, and in-stream cover from overhanging vegetation was 0 percent. Mud creek has a defined bed and bank. Both banks were approximately 6-feet high.

The dominant plant species within the stream was reed canary grass (*Phalaris arundinacea*, FACW). Dominant plant species along the stream bank were common mullien (*Verbascum Thapsus*, FACU), reed canary grass (FACW), and yellow rocket (*Barbarea vulgaris*, FACW). Based on a qualitative assessment, this resource is of poor quality within this reach due to lack of overhead coverage and lack of habitat potential due to substrate type.

Wetlands:

No wetlands were found within the investigated area. Wetland vegetation was found within the stream, and along the stream banks, but did not occur in sufficient quantities above the OHWM within the investigated area to meet the wetland indicator status for hydrophytic vegetation. The land within and surrounding the investigated area includes active row crop fields in all four quadrants, with two rural residences in the northwest and northeast ends of the investigated with well-maintained vegetated lawns. In addition to a commercial lot, with an electric utility building on a well-maintained grass lot. This is not conducive to the development of wetlands.

Roadside Ditches:

There were eight roadside ditches (RSD) located within the investigated area, summarized in Table 5. The RSDs did not have a defined OHWM, they were determined to be excavated wholly in and draining only uplands and did not carry a relatively permanent flow of water. RSDs 1 -8 are likely not jurisdictional. The location of the RSDs is shown in Figure 8.

Table 5 – Roadside Ditch Summary Table

ID	Latitude	Longitude	Location	Flow Direction	Description	Length in investigated area (ft)	Photo #s
RSD 1	40.623687	-87.381407	NW Quadrant	S	Vegetated Swale	362.03	1,2,4,87
RSD 2	40.623225	-87.381382	NW Quadrant	S	Vegetated Swale	266.38	6, 9, 10, 11, 57
RSD 3	40.622407	-87.381296	NW Quadrant	N	Vegetated Swale - concrete	272.31	13, 14, 19, 21, 21,14

ID	Latitude	Longitude	Location	Flow Direction	Description	Length in investigated area (ft)	Photo #s
RSD4	40.62160	-87.381034	SW Quadrant	N	Vegetated Swale	1036.08	61, 63, 64, 65, 66,
RSD 5	40.621527	-87.380469	SE Quadrant	N	Vegetated Swale	983.40	70, 71, 88
RSD 6	40.622465	-87.380661	NE Quadrant	N	Vegetated Swale	303.31	40, 42, 43, 80, 81, 83
RSD 7	40.623123	-87.380823	NE Quadrant	S	Vegetated Swale	341.69	7, 46
RSD 8	40.623785	-87.380962	NE Quadrant	S	Vegetated Swale	263.79	8, 39

4.0 CONCLUSIONS

Field observations revealed one likely perennial jurisdictional stream (Mud Creek) that has the potential to be impacted by the proposed project. Every effort should be taken to avoid and minimize impacts to Mud Creek. If impacts are necessary, then mitigation may be required. The INDOT Environmental Services Division should be contacted immediately if impacts will occur. The final determination of jurisdictional waters is ultimately made by the USACE. This report is our best judgment based on the guidelines set forth by the USACE.

5.0 ACKNOWLEDGEMENT

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

Respectfully,

Kaskaskia Engineering Group, LLC



Brigitte Moneymaker

Date: 7/13/2023

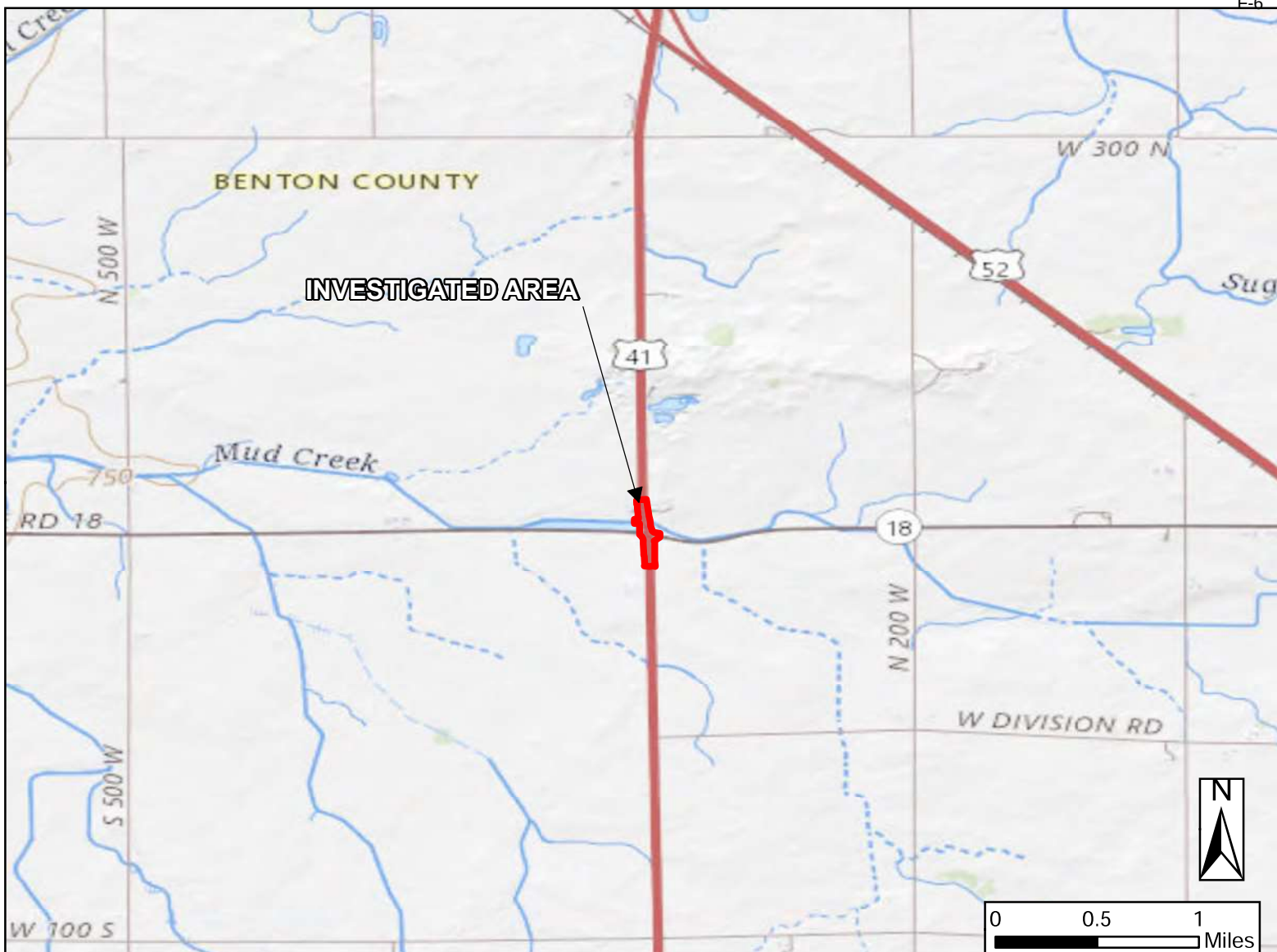
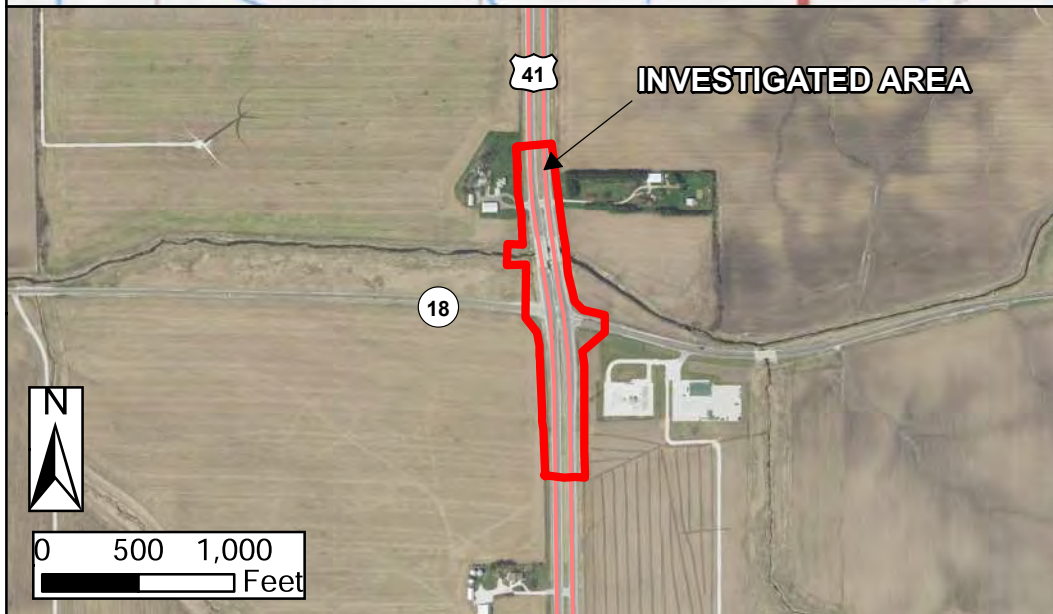
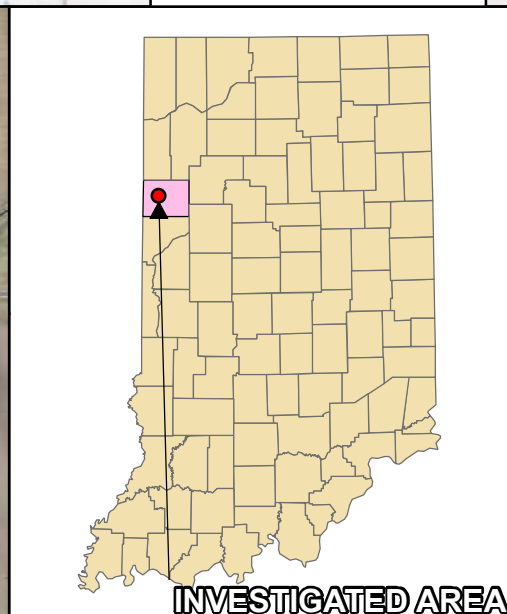


Figure 1
Site Location Map
US 41 at SR 18
Intersection Improvement
with Added Turn Lanes
Benton County, Indiana
Des. No. 2100059

Investigated Area

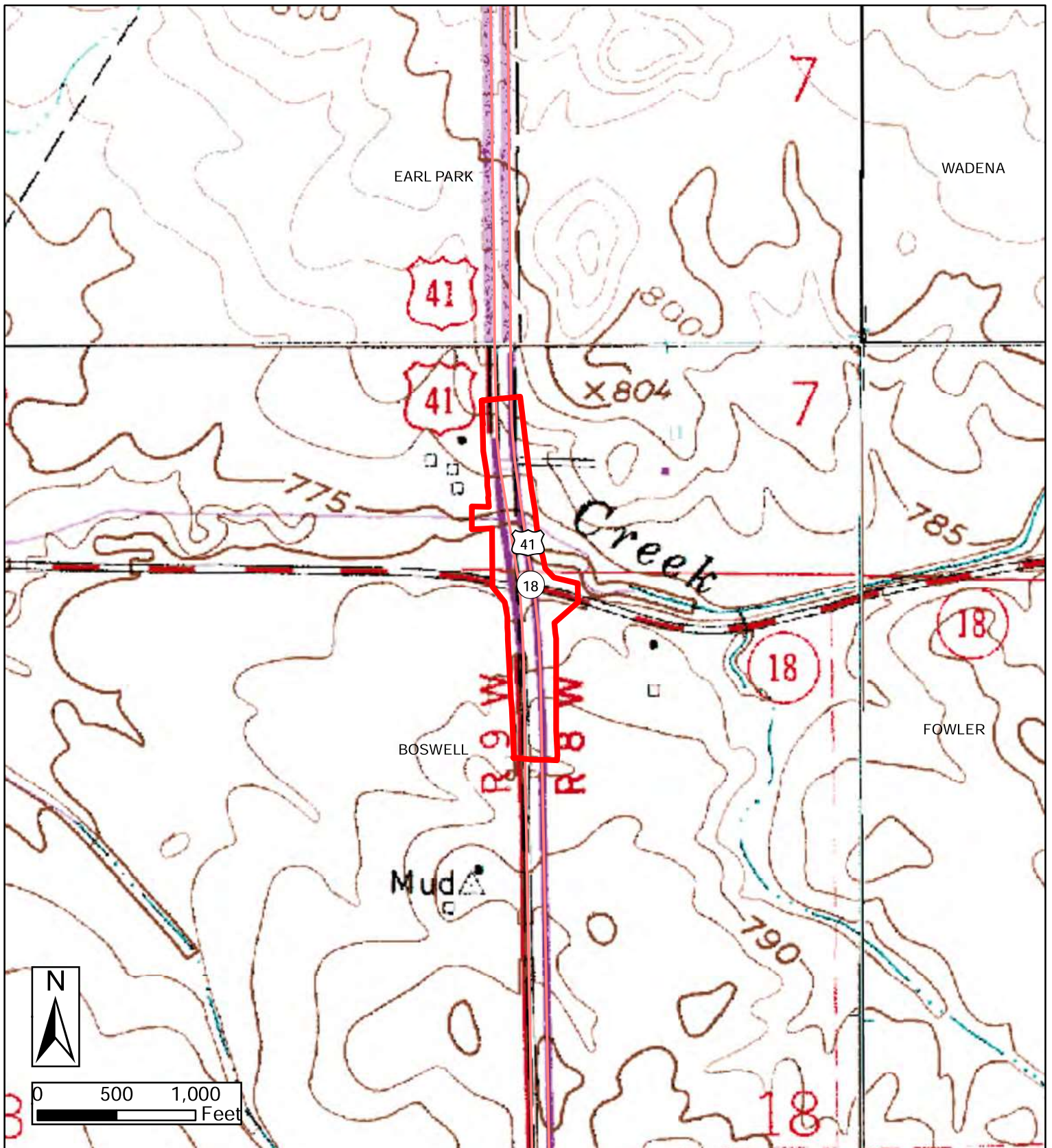


Figure 2
 USGS Topographic Boswell Quadrangle
 Large Scale Map (1:10,000)
 US 41 at SR 18
 Intersection Improvement
 with Added Turn Lanes
 Benton County, Indiana
 Des. No. 2100059

Investigated Area



Created: 7/12/2023

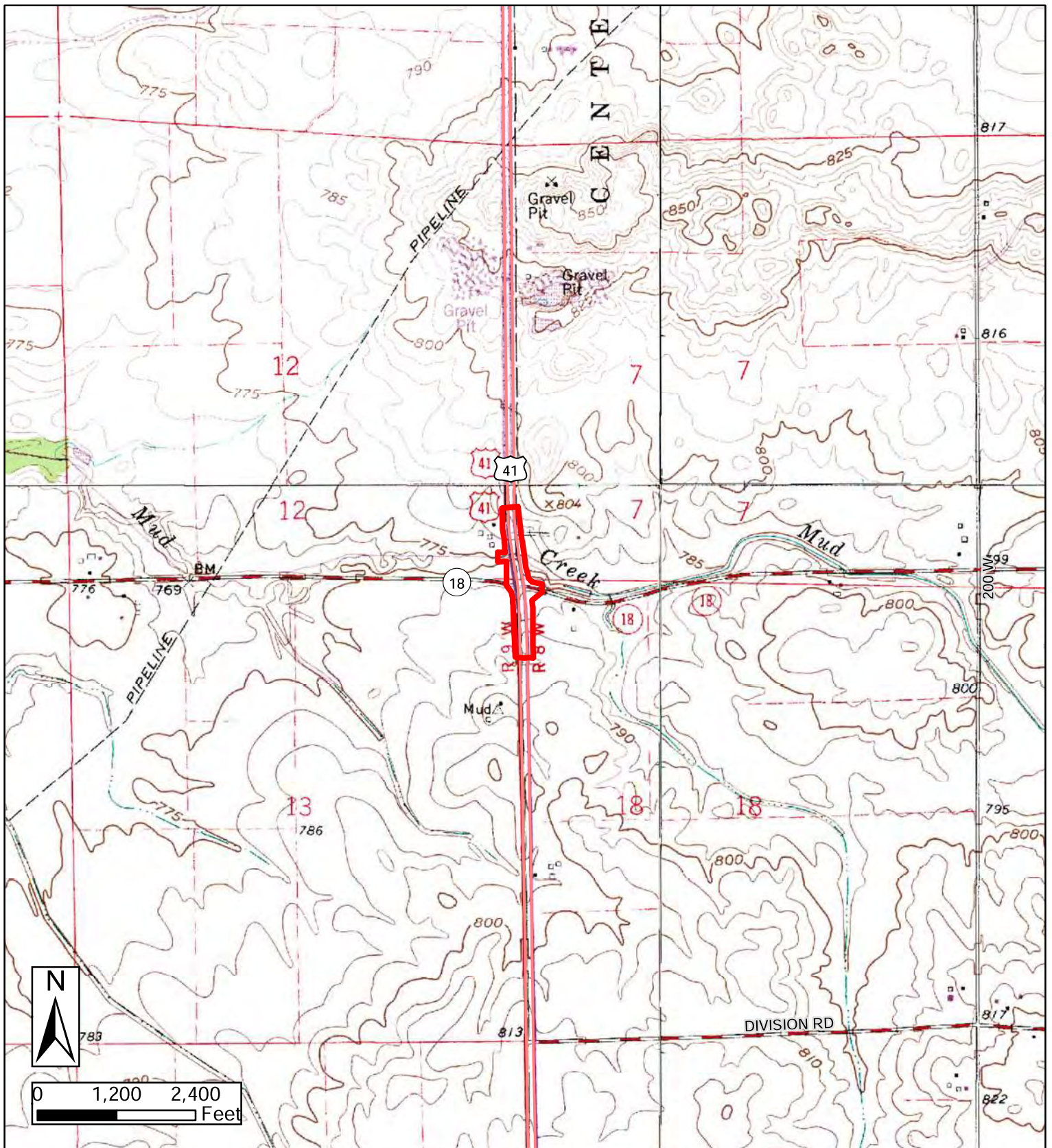


Figure 3
 USGS Topographic Boswell Quadrangle
 Large Scale Map (1:24,000)
 US 41 at SR 18
 Intersection Improvement
 with Added Turn Lanes
 Benton County, Indiana
 Des. No. 2100059

Investigated Area



Created: 7/12/2023

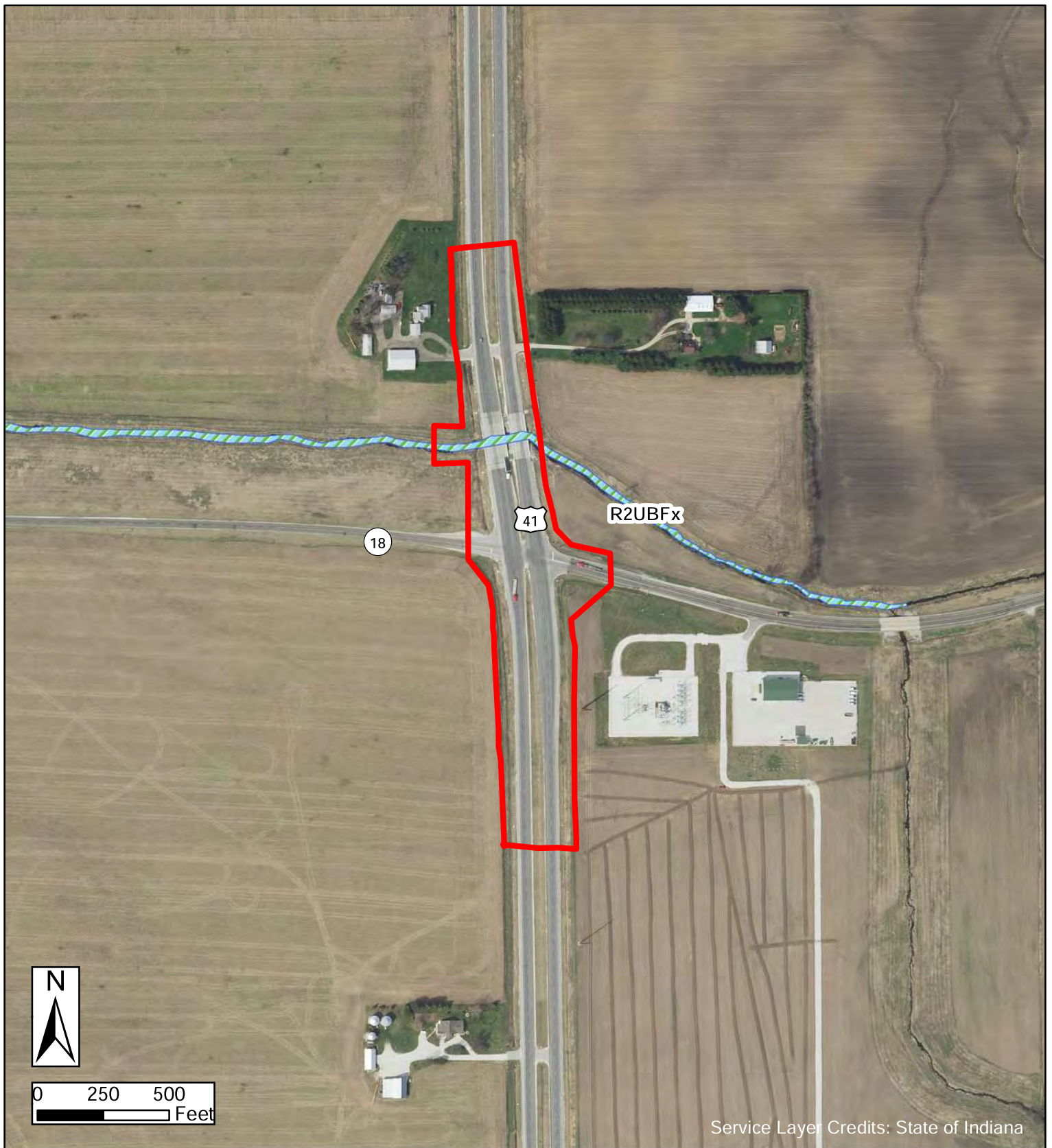


Figure 4
 USFWS National Wetland Inventory Map
 US 41 at SR 18
 Intersection Improvement
 with Added Turn Lanes
 Benton County, Indiana
 Des. No. 2100059

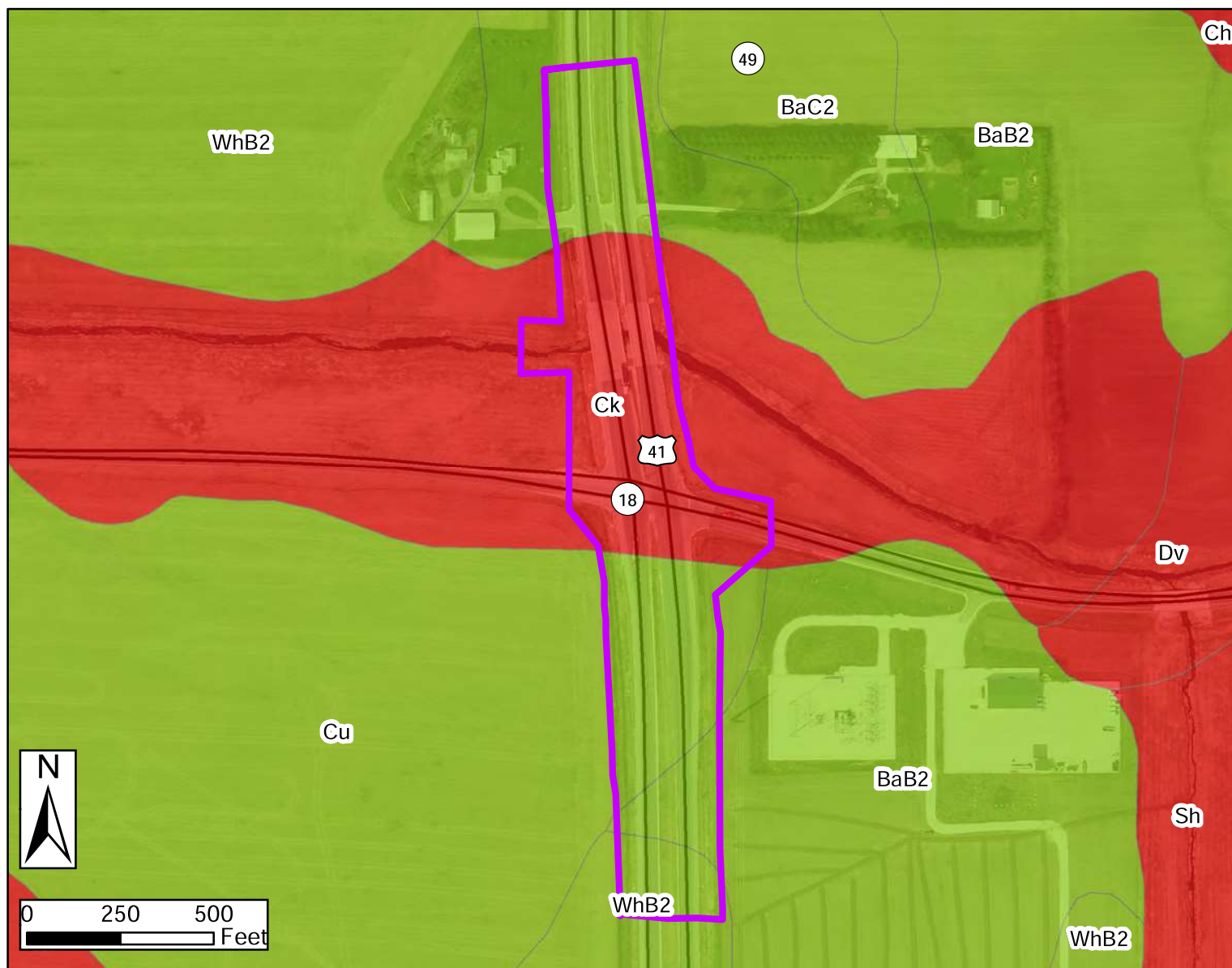
— Investigated Area

 Riverine Wetland

Source: USFWS NWI Wetlands 2023



Created: 7/12/2023



Soil Unit Symbol	Soil Unit Name	Hydric Rating	Hydric Status
BaB2	Barce loam, 2 to 6 percent slopes, eroded	6%	Predominantly Not Hydric
Ck	Comfrey silty clay loam, sandy substratum, occasionally flooded	100%	Hydric
Cu	Crane loam, till substratum	9%	Predominantly Not Hydric
WhB2	Wea silt loam, 2 to 6 percent slopes, eroded	6%	Predominantly Not Hydric

Figure 5
USDA NRCS Soil Map
US 41 at SR 18
Intersection Improvement
with Added Turn Lanes
Benton County, In
Des No 2100059

- Investigated Area
- 0% Non-Hydric
- 1% - 32% Predominantly Non-Hydric
- 33% - 65% Partially Hydric
- 66% - 99% Predominantly Hydric
- 100% Hydric



Source: USDA NRCS 2023

Created: 7/12/2023

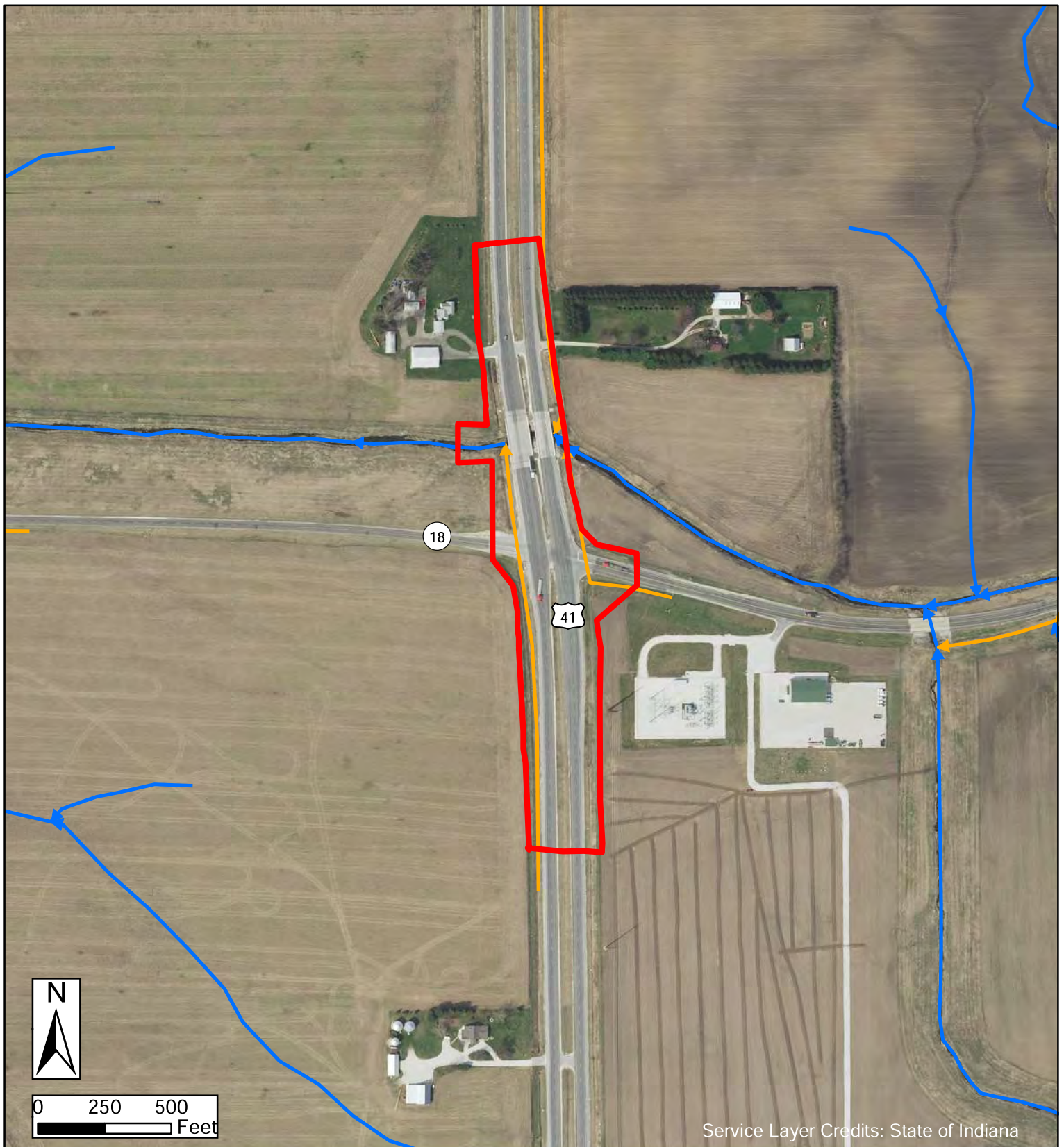


Figure 6
 USGS National Hydrography Data Map
 US 41 at SR 18
 Intersection Improvement
 with Added Turn Lanes
 Benton County, Indiana
 Des No 2100059

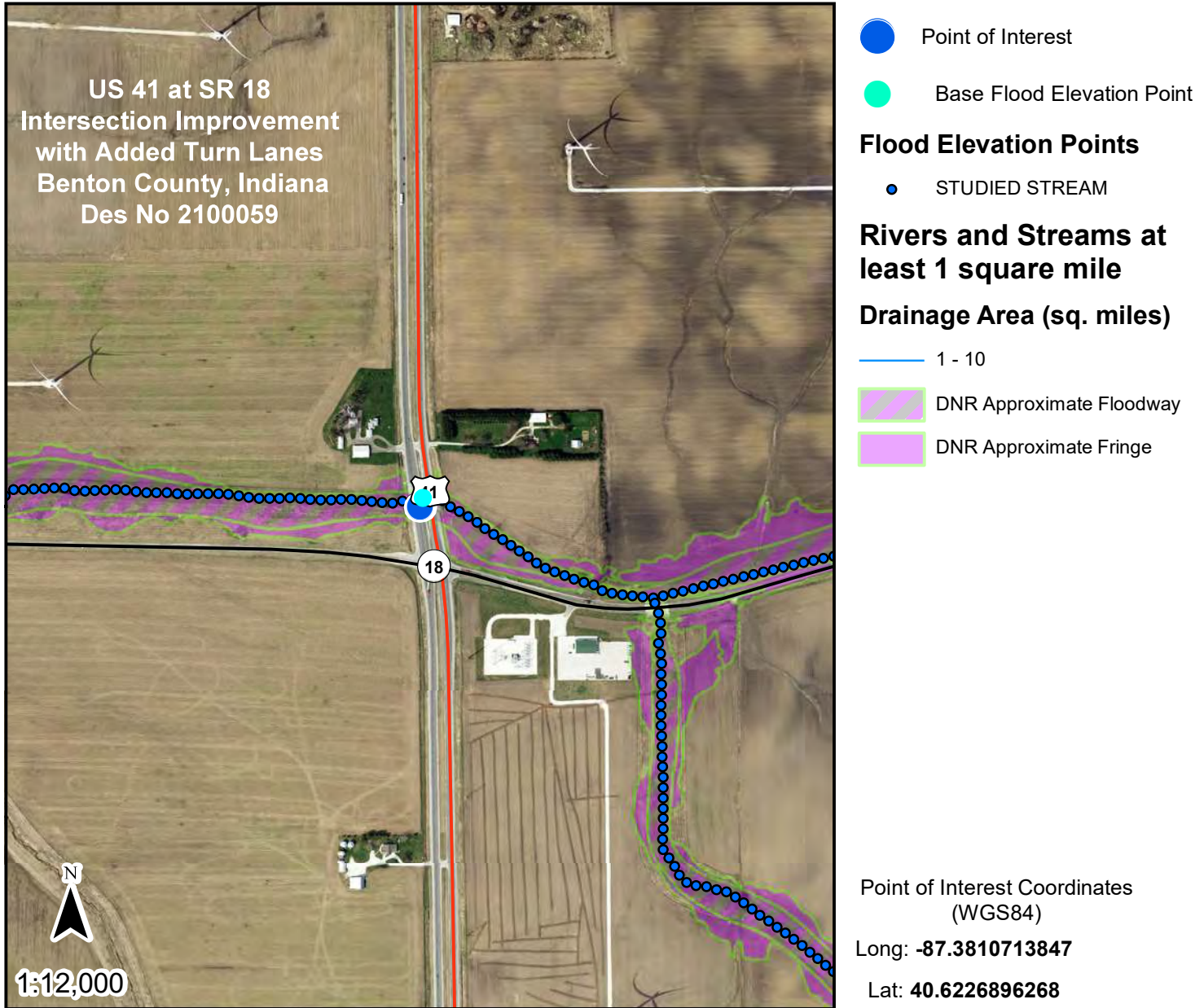
- Investigated Area
- Canal Ditch
- Stream River

Source: USGS NHD 2023



Created: 7/12/2023

Figure 7. Floodplain Analysis & Regulatory Assessment (FARA)



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

County: Benton	Approximate Ground Elevation: 778.0 feet (NAVD88)
Stream Name: Mud Creek	Base Flood Elevation: 775.9 feet (NAVD88)
	Drainage Area: Not available

Best Available Flood Hazard Zone: **DNR Approximate Floodway**

National Flood Hazard Zone: **Not Mapped**

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

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

Floodplain Administrator: **No Floodplain Administrator Name Available**

Community Jurisdiction: **Benton County, County proper**

Phone: **No Phone Number Available**

Email: **No Email Address Available**

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

Date Generated: 6/8/2023

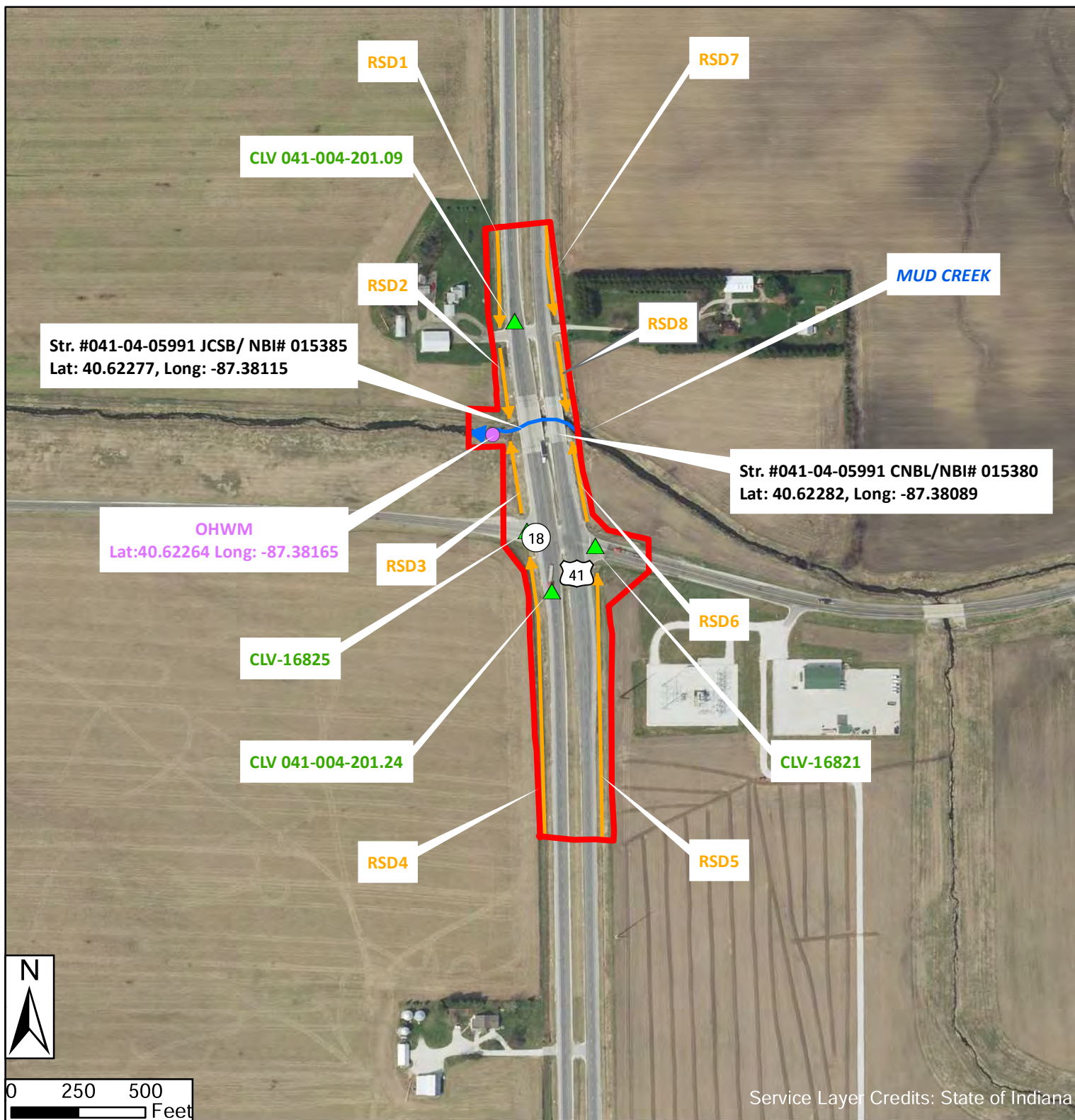


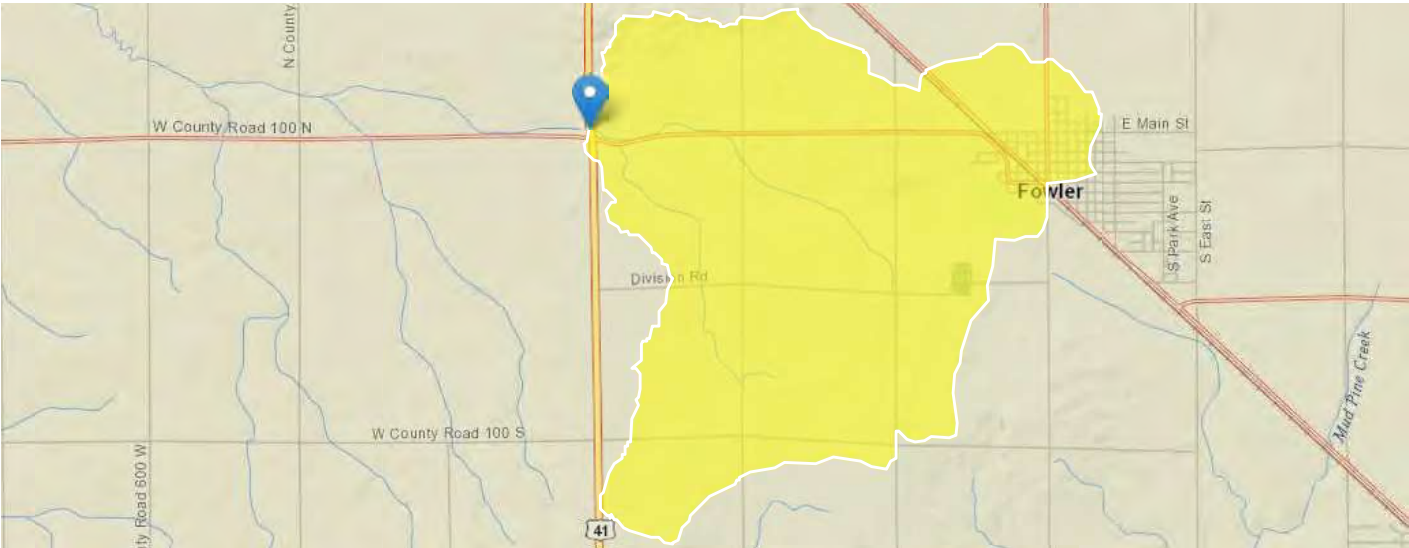
Figure 8
Water Resources Map
US 41 at SR 18
Intersection Improvement
with Added Turn Lanes
Benton County, Indiana
Des. No. 2100059

- Investigated Area
- Ordinary High Water Mark
- ▲ Culvert
- Stream
- Roadside Ditch



Figure 9.
StreamStats Report Mud Creek

Region ID: IN
Workspace ID: IN20230512150508287000
Clicked Point (Latitude, Longitude): 40.62276, -87.38105
Time: 2023-05-12 10:05:36 -0500



+ Collapse All

> Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BFREGNO	BFREGNO	1566	dimensionless
BSLDEM10M	Mean basin slope computed from 10 m DEM	1.8	percent
CONTDA	Area that contributes flow to a point on a stream	7.526	square miles
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	6.36	feet per mi
DRNAREA	Area that drains to a point on a stream	7.526	square miles
DURREG	Flow-Duration Hydrologic Region code	1667	dimensionless
HIGHREG	HIGHREG	1009	dimensionless
INSINKHOLE	Percent Sinkhole drainage area per basin from Indiana Geological Survey.	0	percent
INSINKING	Percent Sinking stream drainage area from Indiana Geological Survey.	0	percent
K1INDNR	Average hydraulic conductivity (ft/d) for the top 70 ft of unconsolidated deposits from InDNR well database.	6	ft per day
K2INDNR	Average hydraulic conductivity (ft/d) for the full depth of unconsolidated deposits from InDNR well database.	14	ft per day
LAT_CENT	Latitude of Basin Centroid	40.612178	decimal degrees
LAT_OUT	Latitude of Basin Outlet	40.622796	degrees
LC01FOREST	Percentage of forest from NLCD 2001 classes 41-43	0.3	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	10.9	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	2.97	percent
LOWREG	Low Flow Region Number	1729	dimensionless
PERMBXTHK	An index of the permeability of surficial Quaternary sediments (including fraction exposed bedrock) multiplied by their thickness. See SIR 2014-5177 page 3 for details.	661.2	dimensionless

Appendix 2 - PRELIMINARY JURISDICTIONAL DETERMINATION (PJD) FORM**BACKGROUND INFORMATION****A. REPORT COMPLETION DATE FOR PJD:** 07/13/2023**B. NAME AND ADDRESS OF PERSON REQUESTING PJD:** Brigitte Moneymaker, 323 Main Street Suite E, Evansville IN 47708**C. DISTRICT OFFICE, FILE NAME, AND NUMBER:****D. PROJECT LOCATION(S) AND BACKGROUND INFORMATION:**

The proposed project (Des No. 2100059) is located at the intersection of US 41 and SR 18, approximately 2.6 miles west of the Town of Fowler, in Benton County Indiana, in the Indiana Department of Transportation (INDOT) Crawfordsville District. The intersection includes sections 12, 7, 18, 13, Township 25 North, Ranges 8 West and 9 West in the Boswell quadrangle. The proposed project is to construct a Reduced Conflict Intersection (RCI) which will improve safety by restricting the thru and left turn movement from SR 18 onto US 41.

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

State: IN County/parish/borough: Benton County City:

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

Lat.: 40.621858 Long.: -87.380438

Universal Transverse Mercator: 16

Name of nearest waterbody: UNT South Fork Blue River

E. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):☒ Office (Desk) Determination. Date: 07/13/2023☒ Field Determination. Date(s): 5/9/2023

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)
Mud Creek	40.622736	-87.380997	0.25 ac./ 329 lf	Non-Wetland	404

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

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

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

- ☒ Maps, plans, plots or plat submitted by or on behalf of the PJD requestor:
Map: Figures 1-10 by PJD requester.
- ☒ 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: NHD Figure 6.
☒ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
- ☒ U.S. Geological Survey map(s). Cite scale & quad name: Goshen IN QUAD 10,000 and 24,000 (Figures 1, 2).
- ☒ Natural Resources Conservation Service Soil Survey. Citation: NRCS Web Soil Survey 2023 (Figure 5).
- ☒ National wetlands inventory map(s). Cite name: USFWS NW(Mapper 2023 (Figure 4).
- ☐ State/local wetland inventory map(s): _____.
- ☒ FEMA/FIRM maps: IDNR Best Available 2023 (Figure 7).
- ☐ 100-year Floodplain Elevation is: _____.(National Geodetic Vertical Datum of 1929)
- ☒ Photographs: ☒ Aerial (Name & Date): Indiana, Best Available 2023.
or ☒ Other (Name & Date): Ground Level May 9, 2023.
- ☐ Previous determination(s). File no. and date of response letter: _____.
- ☐ Other information (please specify): _____.

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

Signature and date of
Regulatory staff member
completing PJD

Brigitte Moneymaker Digitally signed by Brigitte Moneymaker
Date: 2023.07.13 09:16:59 -05'00'

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.

Permit Determination Checklist **2023**

INDOT Ecology and Waterway Permitting Office
(EWPO) Revised 2/3/2023

1. PROJECT SPECIFIC INFORMATION		Date: 10/23/23	
Project Route/Type	US 41 and SR 18 Intersection Improvement with added turn lanes		
INDOT Des. Number	2100059	Contract # - R-43688	
County	Benton		
RFC Date	08/20/25	Letting Date - 11/13/25	Stage 3 Due Date - 3/21/25
INDOT PM	Kaitlyn McDaniel		
2. Preparer Contact Information	Brigitte Moneymaker, bmoneymaker@kaskaskiaeng.com, 812-314-704		
3. Detailed Activity Description including Impacts to Regulated Resources (refer to permit checklists for required information)	<p>The proposed project (Des No. 2100059) is located at the intersection of US 41 and SR 18, approximately 2.6 miles west of the Town of Fowler, in Benton County Indiana. There will be no temporary or permanent impacts to Mud Creek due to the construction of a Reduced Conflict Intersection (RCI) which will improve safety by restricting the thru and left turn movement from SR 18 onto US 41. The project requires the acquisition of 0.07 acre of permanent Right-Of-Way.</p>		
4. Materials Used	☒ Waters Report ☐ NEPA Documents ☒ Scope of Work	☒ Regulatory Guidance ☒ Project Plans ☒ IndianaMAP	☐ Waterway Permit Manual ☒ USGS IN StreamStats ☐ _____
Timeline 1. The target permit approval/on-hand date is two (2) weeks prior to Stage 3 submittal. 2. To calculate the first draft permit application submittal to EWPO, use the following formula. Please note, EWPO review time is based on the complexity of the permit application or the project: Stage 3 Date - (Agency Review Time + EWPO Review Time) = Submittal Date to EWPO Agency Review Timeframes: 4 months – 404/401 NWP or RGP, County Regulated Drain 5 months – CSGP, USACE Section 5 6-9 months – 401 IP 7 months – Section 10 9-12 months – CIF 20 months – 404 IP			

5. 401 WQC (IDEM)/ 404 (USACE)

- a. Are there jurisdictional streams, wetlands and/or open water within the project area?
☒ Yes – Type: ☒ Stream(s) ☐ Wetland(s) ☐ Open Water ☐ No [NPR]
- b. If yes, what are the total impacts to the resources (reference the waters report)?

	PERMANENT IMPACTS	TEMPORARY IMPACTS
Wetlands	0	0
Total Acres	0	0
Streams	0	0
LF Below OHWM	0	0
Acres Below OHWM	0	0
LF Stream Relocation	0	0
Net Gain/Loss	0	
Open Water	0	0
Total Acres	0	0
Floodway	0	0
Acreage Below BFE		

6. IDNR Construction in a Floodway (CIF)

- a. Is there any work being conducted below BFE (Including changes in elevation)? ☒ Yes ☐ No [NPR]
b. Is any stream's individual drainage area ≥ 1 mile²? ☒ Yes ☐ No [NPR]

Each crossing that will impact a DNR jurisdictional floodway will require a permit.

- c. Upstream Drainage Area 7.53 sq mi
d. Rural Bridge Exemption ☐ Yes [NPR] ☒ No

Project must meet the following five requirements:

- ☒ Construction/reconstruction project of a state highway bridge funded by INDOT.
- ☒ Upstream drainage area of the waterway is less than or equal to 50 square miles (does not exceed 50 square miles).
- ☒ Project is in a rural area (if within two miles of an urban planning zone, include coordination with the local entity with jurisdiction).
- ☐ Project is limited to a bridge or culvert (bank stabilization, roadway repair, and stream relocation are not exempt activities).
- ☒ Each building impacted by the project is higher than the regulatory flood elevation (lowest elevation in the structure including the basement).

- e. Logjam and Sandbar Removal General License ☐ Yes [NPR] ☒ No
f. Qualified Outfall Projects General License ☐ Yes [NPR] ☒ No
g. Mitigation ☐ Yes ☒ No

7. Construction Stormwater General Permit

Will one (1) acre or more of soil be disturbed? ☒ Yes ☐ No [NPR]
(Such as tree clearing, full-depth replacement, shoulder work, construction access, etc.) 2.10 ac
[Coordination with INDOT-ES Storm Water Team is required.]

8. County Regulated Drains

- Is the project located in a regulated drain? ☐ Yes ☒ No [NPR]
Is the project in a county that requires notification? ☐ Yes ☒ No [NPR]

Allen, Elkhart, Hamilton, Hendricks, Lake, LaPorte.

Designation as a regulated drain may prevent construction of on-site mitigation. Include coordination with the entity with jurisdiction.

9. Section 9 (USCG) and Section 10 (USACE)

Does the project impact a navigable waterway?

☐ Yes ☒ No [NPR]

10. Levee

Does the project impact a levee?

☐ Yes ☒ No [NPR]

11. Additional Considerations

- ☐ Fish Spawning (restriction of instream work between April 1 – June 30)
- ☐ Tree Clearing (restriction of clearing between April 1 – September 30)
- ☒ Wildlife Concerns (e.g. wildlife crossing, etc.)
- ☒ Adjacent project(s) - may be looked at cumulatively for impacts and mitigation
- ☐ Endangered, Threatened or Rare Species (see DNR Early Coordination letter, USFWS species list)
- ☐ Migratory Birds (see DNR Early Coordination letter, USFWS species list, visual evidence such as nests)
- ☐ Bats (see USFWS species list, visual evidence such as guano, staining, etc.)
- ☐ Other Protected Species (see DNR Early Coordination letter, USFWS species list)
- ☐ Indiana designated waters - salmonid or outstanding state resource waters, critical wetland and aquatic sites
- ☐ US EPA Class V Injection Well
- ☐ St. Joseph Aquifer System
- ☒ Waters Report <5 years from date of first field visit
- ☒ USFWS and IDNR Early Coordination requirements
- ☐ Section 106 consultation

If there are any special concerns, notify designer that the project should take these into consideration when completing the design and permit applications. Some special concerns may require extra coordination with agencies and possibly permits. If marked, notify the project manager in your permit determination response of these conflicts.

12. EWPO Preliminary Permit Determination Concurrence ***For EWPO Use Only***

This is a **preliminary** permit determination based on the information presented at the time of the request. **If scope and plans change the designer should contact us for a revised determination.** A final permit determination will be done at the time of permit application submittal and/or any changes to the scope of the project.

Permit Determination:

- ▶ **No Permits Required**
 - ☐ Project does not impact jurisdictional aquatic resources and has less than one acre of soil disturbance.
- ▶ **State Form 51937**
 - ☐ Cumulative impacts are < ☐500' <0.25 ac ☐ <150' encapsulation ☐ < 1 cy/ft discharge under OHWM.
 - ☐ There **is no** stream relocation associated with a structure or it meets 401 NWP 14 Condition 6.
- ▶ **State Form 51821**
 - ☐ Cumulative impacts are > ☐500' >0.25 ac ☐ >150' encapsulation ☐ >1 cy/ft discharge under OHWM.
 - ☐ There **is** stream relocation which doesn't meet 401 NWP 14 Condition 6, or the relocation is not associated with a structure.
 - ☐ NWP and/or RGP conditions are not met.
- ▶ **USACE Form 4345**
 - ☐ 404 IP – a single wetland or stream is impacted that is >1.0 acre or > 1,500'.
- ▶ **Mitigation**
 - ☐ If there is a loss of > 0.1 ac wetland or 0.03 ac of streambed (explain in Detailed Activity Description, item 3 above).
 - ☐ Cumulative impacts > 300' stream and/or 0.1 ac wetland/stream.

Permit Type

- ☐ 404 NWP
 ☐ 3a ☐ 3b ☐ 3c ☐ 13 ☐ 14 ☐ 33 ☐ PCN ☐ no PCN (pre-construction notification)
- ☐ 404 RGP
☐ 404 IP
☐ 401 WQC
 ☐ NWP ☐ 3a ☐ 3b ☐ 3c ☐ 13 ☐ 14 ☐ 33 ☐ PCN ☐ no PCN
 ☐ RGP
 ☐ IP
☐ CIF (State Form 42946)
☐ County Drain
☒ Stormwater (CSGP)
☐ USACE Section 408
☐ USACE Section 10
☐ USCG Section 9
☐ Mitigation

Project Notes: (include special considerations such as wildlife crossings or protected species)

Proposed activities will not have any proposed fill or excavation below OHWM or Q100 of Mud Creek. As a result, no 401/404 or CIF is required for the project.

EWPO Reviewer Signature: Justus McGill

Date: 10/24/23

For EWPO Use Only:

Email to: ☒ PM
 ☒ PD Preparer
 ☒ Storm Water Specialist
 ☒ Team Lead
 ☐ Other _____

Date sent: 10/24/23

Update: ☒ Milestones ☒ EWPS ☒ ProjectWise (file PD email)

APPENDIX G

Public Involvement



INDIANA DEPARTMENT OF TRANSPORTATION

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

Eric Holcomb, Governor
Joe McGuinness, Commissioner

Re: Designation Number: 2100059, Intersection Improvement on US 41 and SR 18, Fowler, Benton County, Indiana

SAMPLE

Notice of Entry for Survey or Investigation

September 21, 2022

Dear Property Owner,

Our information indicates that you own/or reside at a property near a proposed transportation project located at the US 41 and State Route (SR) 18 within Fowler, in Benton County, Indiana. The Indiana Department of Transportation (INDOT) has a proposed intersection improvement project to address existing conditions. As part of the early stages of development representatives of INDOT will be conducting environmental surveys of the project area in the near future. These studies will evaluate the roadway as well as the surrounding area near the intersection. It may be necessary for them to enter onto your property to complete this work. This is permitted under Indiana Code § 8-23-7-26. Anyone performing this type of work has been instructed to identify him or herself to you, if you are available, before they enter your property. If you no longer own this property or it is currently occupied by someone else, please let us know the name of the new owner or occupant so that we can contact them about the survey.

Please read the attached notice to inform you of what the “Notice of Entry for Survey or Investigation” means. The survey work may include the identification and mapping of wetlands, measuring and identification of trees and/or vegetation, archaeological investigations (which may involve the survey, testing, or excavation of identified archaeological sites), and various other environmental studies. Any excavation work conducted as part of this project will involve hand tools only. Excavations will be backfilled upon completion. The information we obtain from such studies is necessary for the proper planning and design of this highway project.

Staff performing this work will retain a copy of this letter and will attempt to identify themselves to the occupant before they enter the property. We anticipate that field investigations will occur starting October 2022 (weather dependent).

If any problems do occur, please communicate with the field crew or INDOT Project Manager, Karen Arnold at 765-361-5241, email: karnold2@indot.in.gov or Consultant Project Manager, Melissa Effinger at 317-467-3438, email: melissa.effinger@mbakerintl.com.

Please be aware that you have the right to request any or all archaeological artifacts collected from your property. If you do not ask that artifacts be returned to you, all recovered archaeological material will be curated at a state-approved Qualified Curation Facility. If you wish to have artifacts returned to you, please call or email Matt Coon at mcoon@indot.in.gov or 317-697-6752.

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

Sincerely,
Melissa Effinger
Highway Department Manager Michael
Baker International Inc.



INDIANA DEPARTMENT OF TRANSPORTATION

DES. # 2100059

LEGAL NOTICE OF PUBLIC HEARING

Proposed Improvements of Intersection at US 41 and SR 18 in Benton County

The Indiana Department of Transportation (INDOT) will host a public hearing on April 23, 2025, at Benton Central Jr./Sr. High School auditorium located at 4241 E. 300 S. in Oxford, Indiana 47971. The hearing will begin at 5:30 PM EST. The purpose of the public hearing is to offer all interested persons an opportunity to comment on current preliminary design plans for the proposed intersection improvements at United State Route (US) 41 and State Route (SR) 18, from approximately 0.16 mile south of SR 18 to approximately 0.17 mile north of SR 18, located in Benton County, Indiana.

The purpose of this improvement project is to lessen the number or severity of potential vehicle to vehicle conflicts and improve traffic movements and safety at the intersection. The need for the project is due to the increased level of fatal and incapacitating injury accidents occurring at the intersection.

The project proposes to convert the existing intersection into a Reduced Conflict Intersection (RCI) at the intersection location of US 41 and SR 18. This RCI design prohibits direct through movement of traffic of SR 18, and will require drivers to turn right from SR 18 onto US 41, then conduct a U-turn maneuver at a one-way median opening at least 400 feet after the intersection. Median turns will be added to the north and south of the intersection to allow motorists on SR 18 the ability to perform a U-turn movement. The median turns will be regraded and paved with asphalt and concrete. Curb and gutter methods will be used to propagate drainage. Loops will be added along the outside shoulder to provide enough pavement width for trucks and other larger vehicles to maneuver the turnaround movement. Additionally, there will be improvements to drainage structures including new 48-inch culverts that will be installed under both approaches to SR 18. Drainage inlets will be installed in the existing grassy median and connected to 15-inch to 24-inch pipes to convey drainage beneath US 41 to the roadside ditches. Lastly, utility relocations of some existing underground fiber may be required. There will also be upgrades to lighting, pavement markings, and signage to better delineate the revised approaches at the intersection. Proposed lighting will include 16 new LEG light poles along the outside of US 41 between the median turn locations. Light poles will be 40 feet in height with an eight-foot mast arm.

The maintenance of traffic (MOT) plan proposes phased single-lane closures in each direction of US 41, with a complete closure for SR 18 and associated detour. The SR 18 closure will utilize SR 352, SR 71, and US 52 as a detour route. Local roads may be used by local traffic. Access to all properties will be maintained throughout construction. School corporations and emergency services will be notified of closures prior to construction. The proposed construction will not require the acquisition of any permanent or temporary right-of-way (ROW) and will be constructed within existing INDOT-owned ROW. The proposed start of construction is Spring of 2026.

Federal and state funds are proposed to be used for construction of this project. IDOT and the Federal Highway Administration (FHWA) have agreed that this project poses minim impact to natural environments. The FHWA and INDOT have agreed this project falls within the guidelines of a Categorical

Exclusion (CE) Level 1 environmental document. Preliminary design plans along with the CE-1 are available for review at the following locations:

1. Benton County Public Library, 102 North Van Buren Avenue in Fowler, IN 47944;
2. INDOT Crawfordsville District Office, 41 West 300 North in Crawfordsville, IN 47933;
3. Project webpage: <https://www.in.gov/indot/about-indot/central-office/welcome-to-the-crawfordsville-district/us-41-at-sr-18-reduced-conflict-intersection/>

Emergency Situation Guidance: During emergency situations, public viewing locations may be limited or prohibited as part of the Notice of Planned Improvement. Project documents may only be available on-line during emergency situations. The notice must offer the public the opportunity to request project documents be mailed. INDOT and/or the project sponsor will mail project documents upon request.

A project webpage will be created prior to the public hearing to ensure project information is available on-line via the INDOT Crawfordsville District page at on.in.gov/US41-at-SR18-RCI.

Public statements for the record will be taken as part of the public hearing procedure. All verbal statements recorded during the public hearing and all written comments submitted prior to, during and for a period of two (2) weeks following the hearing date, will be evaluated, considered and addressed in subsequent environmental documentation. Written comments may be submitted prior to the public hearing and within the comment period to Kaskaskia Engineering Group, LLC, 477 South 3rd Street, Suite 280, Geneva, IL 60134. E-Mail: ckelly@kaskaskiaeng.com. **INDOT respectfully requests comments be submitted by May 7, 2025.**

With advance notice, INDOT will provide accommodations for persons with disabilities with regards to participation and access to project information as part of the hearings process including arranging auxiliary aids, interpretation services for the hearing impaired, services for the sight impaired and other services as needed. In addition, INDOT will provide accommodations for persons of Limited English Proficiency (LEP) requiring auxiliary aids including language interpretation services and document conversion. Should accommodation be required, please contact Kaitlyn Taylor, INDOT (765-376-4754 and kattaylor@indot.in.gov).

This notice is published in compliance with Code of Federal Regulations, Title 23, Section 771 (CFR 771.111(h)(1) states: “Each State must have procedures approved by the FHWA to carry out a public involvement/public hearing program.” 23 CFR 450.212(a)(7) states: “Public involvement procedures shall provide for periodic review of the effectiveness of the public involvement process to ensure that the process provides full and open access to all and revision of the process as necessary.” approved by the Federal Highway Administration, U.S. Department of Transportation on July 7, 2021.



Benton Review | News & Review
 Francesville Tribune | Lowell Tribune
 Wolcott Enterprise

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Finance Fee of 1.5% will be
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INVOICE

Hoosier Media Group, LLC		Michael Baker International		Invoice No. 326922		3/28/2025	
Date	Order	Description	Ad Size	SubTotal	Sales Tax	Amount	
4/2/2025	103759 BR	Legal Ads: Legals: PUBLIC HEARING PROPOSED IMPROVE INTERSECTION US 41 AND SR 18	4 Lines			\$79.22	
4/16/2025	103759 BR	PUBLIC HEARING PROPOSED IMPROVE INTERSECTION US 41 AND SR 18 Legal Ads: Legals: PUBLIC HEARING PROPOSED IMPROVE INTERSECTION US 41 AND SR 18	4 Lines			\$79.22	
				Sub Total:		\$158.44	
				Total Transactions: 2		Total: \$158.44	

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 Please provide your advertiser number on remittance for accurate credit.
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**PROOF OF PUBLICATION
BENTON REVIEW
Federal ID.: 45-2211406**

Michael Baker International

PUBLIC HEARING PROPOSED IMPROVE INTERSECTION US 41 AND SR 18

COMPUTATION OF CHARGE

199 lines, 1 columns wide equals *199 equivalent lines at \$.7961_ cents per line \$158.44
Additional charge for notices containing rule or tabular work
(50 percent of above amount) \$
Charge for extra proofs of publication (\$1.00 for each proof
in excess of two) \$

TOTAL AMOUNT OF CLAIM \$158.44

DATA FOR COMPUTING COST

Width of single column: 10.-6 picas

Size of type: 8 point

Pursuant to the provisions and penalties of Chapter 155, Acts 1953,

I hereby certify that the foregoing account is just and correct, that the amount claimed is
legally due, after allowing all just credits, and that no part of the same has been paid.

PUBLISHER'S AFFIDAVIT

Personally appeared before me, a notary public in and for said county and state, the undersigned
Don Hurd who, being duly sworn, says that he is publisher of the **The Benton Review** newspaper of gen-
eral circulation printed and published in the English language in the town of **Fowler** in state and county
aforesaid, and that the printed matter attached hereto is a true copy, which was duly published in said
paper for

_____ 2 time(s)_____, the date of publication being as follows:

Benton Review: 4/2/2025, 4/16/2025

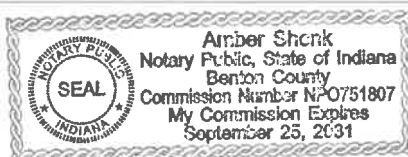
Date: 4/16/2025

Signed: _____

Publisher

Subscribed and sworn to before me 4/16/2025

Notary Public



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HICKORY GROVE TOWNSHIP, BENTON COUNTY, INDIANA 2014					
Curb & Investments Combined Statement					
LOCAL FUND NUMBER	LOCAL FUND NAME	By Cash & Inv Bal January 1, 2024	Receipts	Disbursements	End Cash & Inv Bal December 31, 2024
Governmental Activities					
1	Cumulative Fire Fund	\$ 56,772.79	\$ 12,934.26	\$ 2,573.27	\$ 67,131.78
2	Pipe Fighting Fund	\$ 11,181.45	\$ 43,099.22	\$ 24,544.76	\$ 33,736.91
3	Township Fund	\$ 9,363.26	\$ 9,363.26	\$ 9,363.26	\$ 9,363.26
4	Lowship Assistance Fund	\$ 13,222.80	\$ 10,709.67	\$ 2,263.72	\$ 14,671.75
5	Wild Farm Fund	\$ 878.93	\$ 0.00	\$ 0.00	\$ 878.93
TOTAL ALL FUNDS		\$303,387.50	\$ 131,018.51	\$ 67,943.45	\$ 356,462.56

Certification
State of Indiana
SS.

Benton County
I, Louis Kalle Batts, Treasurer of Hickory Grove Township, Benton County, Indiana, do solemnly affirm under the penalty of perjury that the preceding report contains the information required by Indiana Code 36-6-4-13 and is true and correct; that the amounts with which I am charged in this report are all of the amounts received by me; and that the various items of expenditures credited have been fully paid in the same status; that such payments were made without express or implied agreement that any portion thereof shall be retained by, or repaid to me or to any other person. A complete abstract that contains the statements required under Indiana Code 36-6-4-13(a)(5) and (a)(6) is available for inspection in the county auditor's office.
I further affirm that a complete and detailed annual report, together with all accompanying vouchers showing the names of persons having been paid money by the township, have been filed as required by law in the office of the County Auditor, and that copies of such annual report are in custody of the Township Board and the State Board of Accounts. Said report is subject to inspection by any taxpayer of the township.

s Louis Kalle Batts
Hickory Grove Township Treasurer
Telephone: 765-869-3311
Subscribed and sworn (or affirmed) to before me, the Chairman of the Township Board of Hickory Grove Township at its annual meeting, this 1st day of March, 2025.
s Kevin McNeil
Hickory Grove Township Board Chairman
This report was received, accepted, and approved by the Township Board at its annual meeting, this 1st day of March, 2025.
4.2.2025
batts

LEGAL Advertising

LEGAL NOTICE OF PUBLIC HEARING
Proposed Improvements of Intersection at US 41 and SR 18 in Benton County
The Indiana Department of Transportation (INDOT) will hold a public hearing on April 23, 2025, at Benton Central High School auditorium located at 4241 E. 300 S. in Oxford, Indiana 47921. The hearing will begin at 10:00 PM EST. The purpose of the public hearing is to offer all interested persons an opportunity to comment on current preliminary design plans for the proposed intersection improvements at United States Route (US) 41 and State Route (SR) 18, from approximately 0.16 mile south of SR 18 to approximately 0.17 mile north of SR 18, located in Benton County, Indiana.
The purpose of this improvement project is to lessen the number or severity of potential vehicle to vehicle conflicts and improve traffic movements and safety at the intersection. The need for the project is due to the increased level of fatal and incapacitating injury accidents occurring at the intersection. The project proposes to convert the existing intersection into a Reduced Conflict Intersection (RCI) at the intersection location of US 41 and SR 18. This RCI design prohibits direct through movement of traffic of SR 18, and will require drivers to turn right from SR 18 onto US 41, then conduct a U-turn maneuver at a city-way median opening at least 400 feet after the intersection. Median turns will be added to the north and south of the intersection to allow motorists on SR 18 the ability to perform a U-turn movement. The median turns will be expanded and paved with asphalt and concrete.

Curb and gutter methods will be used to propagate drainage. Cows will be added along the outside shoulder to provide enough pavement width for trucks and other larger vehicles to maneuver the around movement. Additionally, there will be improvements to drainage structures including new 48-inch culverts that will be installed under both approaches to SR 18. Drainage inlets will be installed in the existing grassy median and connected to 15-inch or 24-inch pipes to convey drainage beneath US 41 to the roadside ditch. Lastly, utility relocations of any existing underground fiber may be required. There will also be upgrades to lighting, pavement markings, and signage to better delineate the revised approaches at the intersection. Proposed lighting will include 16 new LED light poles along the outside of US 41 between the median turn locations. Light poles will be 40 feet in height with an eight-foot mast arm. The maintenance of traffic (MOT) on-line during emergency situations. During emergency situations, public viewing locations may be limited or prohibited as part of the Notice of Planned Improvement. Project documents may only be available on-line during emergency situations. The notice must offer the public the opportunity to request project documents be mailed. INDOT and the project sponsor will email project documents upon request. A project webpage will be created prior to the public hearing to ensure project information is available online via the INDOT Crawfordville District page at on.in.gov/US41-SR18-RCI. Public assessments for the project will be taken as part of the public hearing procedure. All verbal statements recorded during the public hearing and all written comments submitted prior to, during and for a period of two (2) weeks following the hearing date, will be evaluated, considered and addressed in subsequent environmental documentation. Written comments may be submitted prior to the public hearing and within the comment period to Kaskaskia Engineering Group, LLC, 477 South 3rd Street, Suite 200, Geneva, IL 60134. E-Mail: ckelly@kaskaskieng.com. INDOT respectfully requests comments to be submitted by May 7, 2025. With advance notice, INDOT will provide accommodations for persons with disabilities with regards to participation and access to project information as part of the hearings process including arranging auxiliary aids, interpretation services for the hearing required, services for the sight impaired and other services as needed. In addition, INDOT will provide accommodations for persons of Limited English Proficiency (LEP) requiring auxiliary aids including language interpretation services and document conversion. Should accommodations be required, please contact Kelly N. Taylor, INDOT (765) 376-4754 and kaytaylor@indot.in.gov. This notice is published in compliance with Code of Indian Regulations, Title 22, Section 771 (CFR 77.111(h)(1)) states: "Each State must have procedures approved by the FHWA to carry out a public involvement program." 23 CFR 450.212(a)(7) states: "Public involvement procedures shall provide for periodic review of the effectiveness of the public involvement process to ensure that the process provides full and open access to all and revision of the process as necessary." approved by the Federal Highway Administration, U.S. Department of Transportation on July 7, 2021. 4.2 & 4.16.2025
batts

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APPENDIX F
NOTICE OF ADOPTION
The taxpayers of Benton County, Indiana.
You are hereby notified that on March 30, 2025, the County Council, Benton County, Indiana, pursuant to notice heretofore given, and under and by virtue of IC 36-9-15, duly adopted a plan whereby a Cumulative Jail Fund was established to provide for the following:
For all cases set out in IC 36-9-15. The fund will be provided for by a property tax rate of \$0.0004 per one hundred dollars (\$0.0004 of taxable real and personal property within the taxing unit beginning in 2025 payable 2026 and thereafter, continuing until reduced or rescinded. "0" or more taxpayers in the taxing unit who will be affected by the tax rate and corresponding levy may file a petition with the Benton County Auditor not later than 30 days after the publication of this Notice setting forth their objections to the proposed cumulative fund. Upon the filing of the petition, the County Auditor shall immediately certify the same to the Department of Local Government Finance, at which point the Department will fix a date for and conduct a public hearing on the proposed cumulative fund before issuing its approval, disapproval, or modification thereof. Dated this 23rd day of March, 2025.
Benton County Council
3.26 & 4.2.2025
batts

LEGAL Advertising

Notice
The Benton County Advisory Plan Commission and the Benton County Board of Zoning Appeals will have a hearing on April 11, 2025, at 8:30am. At the Benton County Courthouse in the Commissioners room. Margaret McCabe & Salyem Estate is requesting a Special Exception, Setback Variance, and height
Reasoning on Parcel 69-4-1-29-450-010-004-01. Located US HWY 52 & Kurbstein IN 47970. P1 N1/2 SW 1/4 S4E1 - PT S1/2 NW 1/4 S4E1 4.29-24-06, 2.156A. Any questions or concerns please contact Samantha Smith at the Benton County Surveyors office. 765-884-0095
4.2 & 4.9.2025
batts

LEGAL Advertising

Notice
The Benton County Advisory Plan Commission and the Benton County Board of Zoning Appeals will have a hearing on April 11, 2025, at 8:30am. At the Benton County Courthouse in the Commissioners room. Margaret McCabe & Salyem Estate is requesting a Special Exception, Setback Variance, and height
Reasoning on Parcel 69-4-1-29-450-010-004-01. Located US HWY 52 & Kurbstein IN 47970. P1 N1/2 SW 1/4 S4E1 - PT S1/2 NW 1/4 S4E1 4.29-24-06, 2.156A. Any questions or concerns please contact Samantha Smith at the Benton County Surveyors office. 765-884-0095
4.2 & 4.9.2025
batts

LEGAL Advertising

Notice
The Benton County Advisory Plan Commission and the Benton County Board of Zoning Appeals will have a hearing on April 11, 2025, at 8:30am. At the Benton County Courthouse in the Commissioners room. Kevin Pritchett is requesting a Special Exception on Parcel #04-4192 E. 200 N. Fowler IN 47944. PT W 1/2 NW 1/4. 06-24-07, 2.35A. Any questions or concerns please contact Samantha Smith at the Benton County Surveyors office. 765-884-0095
3.26 & 4.2.2025
batts

LEGAL Advertising

STATE OF INDIANA
COURT OF BENTON
IN THE BENTON COUNTY
COURT
CASE NO.:
04CB1-2501-M-00058
IN RE: NAME CHANGE
OF MINOR:
JANSEN DRAPER
NAME OF MINOR:
KAMEY KOZLOSKI
PETITIONER:
NOTICE OF PETITION FOR
CHANGE OF NAME.
Notice is hereby given that Petitioner, Kamey Kozloski, as a self-represented litigant, filed a Verified
Petition for Change of Name to change the name of Jansen Draper to Jansen Draper Kozloski. The Petition is scheduled for hearing in the Benton Circuit Court on May 15, 2025 at 1:30 pm, which is more than thirty (30) days after the third notice of publication. Any person has the right to appear at the hearing and in file written objections on or before the hearing date. Date: February 27, 2025
A. Jennifer Greenburg Clerk
3.19, 3.26 & 4.2.2025
batts

LEGAL Advertising

REQUEST FOR PROPOSAL
Benton County, INDIANA
In order to assure compliance with the Indiana Office of Community and Rural Affairs (OCRA) and related requirements regarding competitive negotiation of grant administration services, Benton County is seeking Proposals for the provision of the services described below relating to the administration of a grant funding project with federal assistance from the CHRG Bright Cleanse Program. Description of Services Needed: Benton County has been awarded grant funds through the Indiana Office of Community and Rural Affairs Bright Cleanse Program, grant administration, environmental review, and labor standard services are needed to administer the grant. Type of Contract: Benton County will execute a firm, fixed-price type of contract for these services that is contingent on the final commitment of grant funding. All services will be delivered for the agreed upon price. Federal Requirements: Prospective offerors should note the successful proposer must meet the following terms and conditions:
1. 24 CFR Part 85.36.
2. Title VI of the Civil Rights Act of 1964.
3. Conflict of Interest (24 CFR Part 570).
4. Access to records.
5. Executive Order 11245 - Equal Employment Opportunity.
6. Executive Order 12138 - Women Business Enterprise Policy.
7. Architectural Barriers Act of 1968.
8. Age Discrimination Act of 1975.
9. Section 3 (Contract - Housing and Urban Development Act of 1968, 10. Section 504 - Rehabilitation Act of 1973.
11. Federal and Categorical Requirements (24 CFR Part 85.42).
12. Executive Order 11063.
13. Affirmative Action Program Plan.
14. Davis Bacon and Related Acts. Proposal Content: The proposal should include the following:
1. A description of experience, personnel, and resources directly relevant and available for the proposed project.
2. A list of similar projects previously completed.
3. A list of references.
4. Resumes of professional staff members who will work on this project.
5. Name of person to be in charge of the project.
6. Description of scope of services to be provided.
7. "Description of Services Needed" and proposed price per "Type of Contract".
8. A project timeline.
9. Proposed fee for providing services.
The proposal shall also provide the following information: name, title, address, and telephone number of individuals with authority to negotiate and bind the proposer contractually, and who may be contacted during the period of proposal evaluation.
Award of Contract: Proposal Evaluation criteria shall include:
1. Firm's history and resource capabilities to perform required services. (10 Points)
2. Evaluation of assigned personnel. (10 Points)
3. Related Experience. (10 Points)
4. Financial Management and Cost Allocation experience and results. (10 Points)
5. Familiarity with local experience and results. (10 Points)
6. Ability to relate to the project. (10 Points)
7. Analysis of narrative statement. (10 Points)
8. Reference check. (10 Points)
9. Price comparison. (10 Points)
If you are interested in providing the required services, please note that there is (1) copies of the Proposal of each prospective organization must be received by Benton County, 706 E. 3rd Street, Suite 17, Fowler, IN 47944 no later than Noon local time on April 18, 2025. Each Proposal will be reviewed for completeness and clarity according to the above criteria. Interviews are expected to be held by Wednesday, April 23, 2025.
The County may or may not negotiate the fee for schedule with one or more offers. The County reserves the right to reject any and all proposals. The Town is an Equal Opportunity Employer. The contract is tentatively scheduled to be awarded by the County on April 29, 2025. Offerors may desire additional information or clarification regarding the Proposal. If so, please contact the Benton County Auditor, Beth Budreau, between 9:00 a.m. and 3:00 p.m. local time at (765) 864-0760
4.2.2025
batts

BENTON COUNTY SCHOOL LUNCH MENUS • APRIL 2 - APRIL 10, 2025			
Elementary Breakfast Menu	Elementary Lunch Menu	Benton Central Breakfast Menu	Benton Central Lunch Menu
WEDNESDAY 4-2 Cereal / Granohms Or Waffle / Syrup	WEDNESDAY 4-2 Chicken Fajita Burrito Or Pizza Burger / Bun Mixed Vegetables	WEDNESDAY 4-2 Cereal / Granohms Or French Toast Bites & Sausage pty	WEDNESDAY 4-2 Cheeseburgers / W/B Bun Or Hot Dog / Bun French Fries Fruit Cup
THURSDAY 4-3 Cereal / Granohms Or Sausage Pizza	THURSDAY 4-3 Sausage Steak / Dinner Roll Or Del. Frito / Bun Mixed Potatoes	THURSDAY 4-3 Cereal / Granohms Or Fruit Smoothie / Granohms	THURSDAY 4-3 Chicken Drumstick Corn Muffin Or Macaroni & Cheese Bites Baked Beans
FRIDAY 4-4 Cereal / Granohms Or Cinn Mini	FRIDAY 4-4 Toasted Cheese Or Macaroni & Cheese Tomato Soup	FRIDAY 4-4 Cereal / Granohms Or Donut Holes	FRIDAY 4-4 4 meal Pizza Or Mozzarella Sticks / Montezuma Cantaloupe
MONDAY 4-7 2 HOUR DELAY	MONDAY 4-7 Pizza slices / Montezuma Or Chicken Nuggets Mixed Vegetables	MONDAY 4-7 Cereal / Granohms Or Sausage Pizza	MONDAY 4-7 Breaded chicken / Bun Or Smoked Sausage / HD Bun Mixed Vegetables
TUESDAY 4-8 Cereal / Granohms Or Bacon & Egg Pizza	TUESDAY 4-8 Texas Brown Rat Or BBQ Chicken / Bun Sweet Potatoes Sheet Cake or Brownies	TUESDAY 4-8 Cereal / Granohms Or Yogurt / Granohms	TUESDAY 4-8 Nacho Supreme Or Chicken Salad / Bun Baked Beans Chocolate Chip Bar Cookie
WEDNESDAY 4-9 Cereal / Granohms Or Strawberry Cream Cheese Mini Bagels	WEDNESDAY 4-9 Cheeseburgers / W/B Bun Or Hot Dog / Bun French Fries	WEDNESDAY 4-9 Cereal / Granohms Or Pancake & Bacon / Syrup	WEDNESDAY 4-9 Spicy Chicken Pasty / Bun Or Beef Stew & Cheese Slice Baked Potatoes
THURSDAY 4-10 Cereal / Granohms Or Yogurt / Granohms	THURSDAY 4-10 Alfredo / Breadstick Or Shrimp / Bun Almondini Breadstick	THURSDAY 4-10 Cereal / Granohms Or Cinnamon Roll	THURSDAY 4-10 Alfredo / Breadstick Or Breaded Tenderloin / Bun Baked Potatoes

"WE ARE DOING OUR BEST TO FOLLOW THESE MENUS BUT THEY ARE SUBJECT TO CHANGE BECAUSE OF SUPPLY AND DEMAND."

BOSWELL CHASE GRAIN
110 N Clinton St. • Boswell, IN 47921
(765) 869-5527
HOURS: Monday - Friday 8am - 4pm.
www.boswellchasegrain.com

To view this email as a web page, click [here](#).



FOR IMMEDIATE RELEASE

April 10, 2025

INDOT to host public hearing for proposed intersection improvement project in Benton County

BENTON COUNTY, Ind. - The Indiana Department of Transportation will host a public hearing on Wednesday, April 23, to inform residents and solicit feedback about a proposed intersection improvement project at the intersection of U.S. 41 and State Road 18.

The hearing will take place at Benton Central Jr./Sr. High School (4241 E. 300 S., Oxford, IN, 47971). Doors will open at 5 p.m., with a project presentation to begin at 5:30 p.m., followed by an in-person comment session. The purpose of the project is to lessen the number or severity of potential vehicle to vehicle conflicts and improve traffic movements and safety at this intersection.

Project documents are currently available online at <https://bit.ly/US41atSR18RCI>. Meeting materials will be available on the same web page following the hearing. Printed copies of project documents are available at the following locations:

- Benton County Public Library, 102 North Van Buren Avenue, Fowler, IN, 47944
- INDOT Crawfordsville District Office, 41 W. 300 N., Crawfordsville, IN, 47933

Comments may be submitted in-person at the hearing or in writing. To submit via mail, send to Kaskaskia Engineering Group, Attn: Chad Kelly, 477 S. 3rd Street, Suite 280, Geneva, IL, 60134.

Comments may also be submitted by email to ckelly@kaskaskiaeng.com, or to INDOT's customer service center at INDOT4u.com or by calling 1-855-INDOT4U (1-855-463-6848).

INDOT respectfully requests comments to be submitted and/or postmarked by Wednesday, May 7, 2025.

U.S. 41 AT S.R. 18 INTERSECTION IMPROVEMENT PROJECT: BENTON COUNTY (DES # 2100059)

PUBLIC HEARING

WEDNESDAY,
APRIL 23, 2025

Benton Central Jr./Sr. High
School Auditorium 4241 E.
300 S., Oxford, IN, 47971)

Doors open at 5 p.m.
Presentation at 5:30 p.m.
Public comment period to
follow

Proposed location:

- U.S. 41 & State Road 18
intersection

Learn more:

<https://bit.ly/US41atSR18RCI>



Stay Informed

Motorists in West Central Indiana can monitor road closures, road conditions, and traffic alerts any time via:

- Facebook: [facebook.com/INDOTWestCentral](https://www.facebook.com/INDOTWestCentral)
- X (formerly Twitter): [@INDOT_WCentral](https://twitter.com/INDOT_WCentral)
- TrafficWise: [511in.org](https://www.511in.org)
- Mobile App: [iTunes App Store](https://itunes.apple.com/us/app/indot/id1234567890) and the [Google Play store for Android](https://play.google.com/store/apps/details?id=com.indot)

About the Indiana Department of Transportation

INDOT is responsible for planning, constructing, maintaining, and operating the State of Indiana's more than 29,000 highway lane miles and 5,700 bridges, and providing support for 4,500 rail miles and 127 aviation facilities throughout the Hoosier State. With six district offices and over 3,500 employees, INDOT works to ensure safe, efficient, and reliable transportation infrastructure while supporting the state's economic vitality. The department is committed to fostering innovation, sustainability, and safety in transportation planning and development, in addition to collaborating with local governments and private sector partners to meet the state's transportation needs. For the eighth consecutive year, Indiana has placed in the top ten in the nation for infrastructure in CNBC's "America's Top States for Business" rankings. Learn more at in.gov/indot.

About Buckle Up Phone Down

Buckle Up Phone Down is a safety initiative adopted by the Indiana Department of

Transportation in late 2023. Unrestrained motorists and passengers, as well as distracted driving continue to be contributing factors in fatal and serious injury crashes on Indiana roadways. Buckle Up Phone Down is one of many efforts to change driver behavior and improve roadway safety across Indiana.

The actions are simple: when you get into a vehicle, buckle up. If you are the driver, put the phone down. Every trip. Every time. Learn more and accept the challenge at BUPDIN.com.

Customer Service

1-855-463-6848

www.indot4u.com

Media Contact

Blake Dollier

765-365-4347

bdollier@indot.in.gov

This email was sent by: Indiana Department of Transportation
100 N. Senate Ave., Indianapolis, IN, 46204 US

Privacy Notice

Manage Preferences Unsubscribe

Adjoining Property Recipients

NAME	ADDRESS1	ADDRESS2	OwnerCity	OwnerState	OwnerZip
Budreau Alice J Trust	2870 W ST R 18	726 N US Highway 41	Fowler	IN	47944
Leuck Raymond R & Judy M Trustees - Cbc Family Trust	1153 N US Highway 41		Fowler	IN	47944
Grube F William Successor Trustee - Benton County Farm Trust	18 & US Hwy 41, Fowler, IN 47944	6497 Deerfield Dr, Greenwood, IN 46143	Greenwood	IN	46143
Gerald P Budreau Trustee 1/2 int & Alice J Budreau Trestee 1/2 int	US Hwy 41	726 N US Highway 41	Fowler	IN	47944
Budreau michael P & Kasondra L H/W	1092 N US Hwy 41		Fowler	IN	47944
Budreau Gerald P Trust	726 N US Hwy 41		Fowler	IN	47944
Budreau Alice J Trust	18 & US Hwy 41, Fowler, IN 47944	726 N US Highway 41	Fowler	IN	47944
State of Indiana	ST Rd 18, Fowler, IN 47944		Crawfordsville	IN	47933

ECL Recipients

NAME	ADDRESS1	ADDRESS2	OwnerCity	OwnerState	OwnerZip
Environmental Specialist, Federal Highway Administration	575 North Pennsylvania Street, Room 254		Indianapolis	IN	46204
Chief Indiana Department of Environmental Management, Groundwater Section	100 N. Senate Avenue		Indianapolis	IN	46204
Regional Environmental Coordinator Midwest Regional Office, National Park Service	601 Riverfront Drive		Omaha	NE	68102
Indiana Geological and Water Survey	611 North Walnut Grove		Bloomington	IN	47405
Environmental Coordinator, Indiana Department of natural Resources, Division of Fish and Wildlife	402 West Washington Street, Room W273		Indianapolis	IN	46204
Field Environmental Officer, Chicago Regional Office, U.S. Dept. of Housing & Urban Development, Metcalfe Federal Building	77 West Jackson Boulevard, Room 2401		Chicago	IL	60604
Environmental Section Manager, Indiana Department of Transportation, Crawfordsville District	41 W. 300N		Crawfordsville	IN	47933
Section Chief, Indiana Department of Environmental Management, Wetlands and Stormwater Programs	100 N. Senate Avenue		Indianapolis	IN	46204
Section Chief, Indiana Department of Environmental Management, Wetlands and Stormwater Programs	101 N. Senate Avenue		Indianapolis	IN	46204
State Conservationist, Natural Resources, Conservation Service	6013 Lakeside Boulevard		Indianapolis	IN	46278
US Army Corps of Engineers, Louisville District, Indianapolis Regulatory Office			Indianapolis	IN	46216
Highway Superintendent, Highway Department, Benton County	1101 E. Lingle Avenue		Fowler	IN	47944
Surveyor, Benton County	706 E. 5th Street, Suite 17		Fowler	IN	47944
President, Benton County Council	706 E. 5th Street		Fowler	IN	47944
President, Benton County Commissioners	706 E. 5th Street		Fowler	IN	47944
Sheriff, Sheriff Department, Benton County	105 S. Lincoln Avenue		Fowler	IN	47944
Director, 911 Dispatch, Benton County	604 E. 2nd Street		Fowler	IN	47944
Superintendent, Benton Community Schools	405 S. Grant Street, P.O. Box 512		Fowler	IN	47944
Principal, Sacred Heart Catholic Elementary School	607 N. Washington Avenue		Fowler	IN	47944
Fire Chief, Fire Department, Richland Township 104	W. 5th Street		Earl Park	IN	47942
Fire Department, Boswell-Grant Township	307 W North Street		Boswell	IN	47921
Chief, Police Department, Town of Fowler	311 E. 5th Street		Fowler	IN	47944
Emergency Plan Benton County	604 E. 2nd Street B		Fowler	IN	47944
President, Fowler Town Council	307 East 5th Street		Fowler	IN	47944
Fire Chief, Fire Department, Town of Fowler	107 N Washington Avenue		Fowler	IN	47944
Superintendent, Street Department, Town of Fowler	307 East 5th Street		Fowler	IN	47944
Superintendent, Street Department, Town of Boswell	108A East Main Street		Boswell	IN	47921
President, Boswell Town Council	108A East Main Street		Boswell	IN	47921
Marshal, Town of Boswell	108A East Main Street		Boswell	IN	47921
Earl Park Town Council	123 West 5th Street		Earl Park	IN	47942
Project Manager, Indiana Department of Transportation	41 W. 300N		Crawfordsville	IN	47933
Transportation Director, Benton Community Schohols	405 S. Grant Street, P.O. Box 512		Fowler	IN	47944

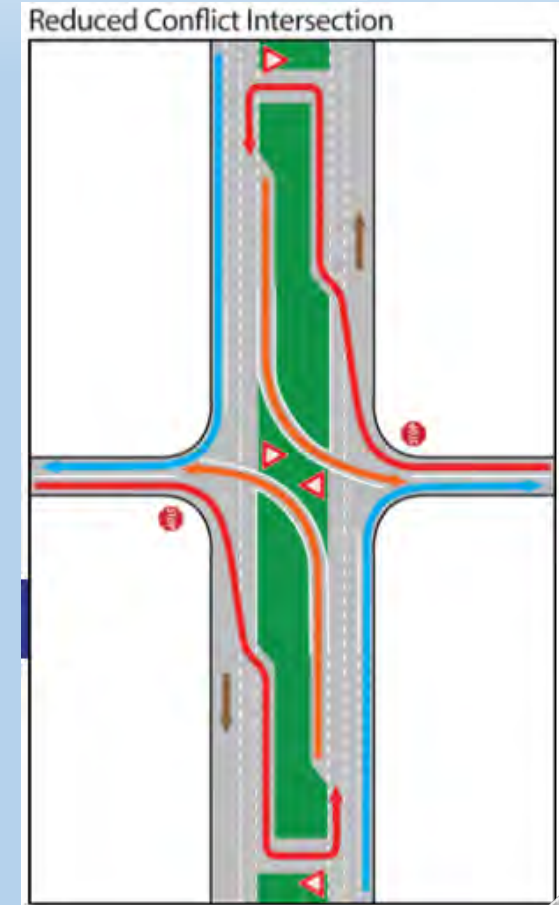
Reduced Conflict Intersection (RCI)

Intersection of US 41 and SR 18

DES. No. 2100059

Benton County

Indiana Department of Transportation



Welcome

- Purpose and Need Overview
- Proposed Project Improvements
- Environmental Process
- Anticipated Project Schedule
- Submit Written Public Comments
- View Handout and Display Materials at www.westcentral.indot.in.gov
- A public hearing notice was mailed to known property owners in the project area.
- An announcement of this hearing was posted to INDOT's website.
- Legal notice published



Submit Public Comments

Ways to comment:

Public Comment Form mailed to: Chad Kelly, Kaskaskia Engineering Group, LLC
477 South 3rd St., Suite 280
Geneva, IL 60134

Via e-mail: ckelly@kaskaskiaeng.com

All comments submitted will become part of the public record, and they will be entered into a transcript, reviewed, evaluated, and given full consideration during the decision-making process.

The comment period deadline to have your comment included in the project record is:

May 7, 2025



Project Stakeholders

- Indiana Department of Transportation
- Indiana Division Federal Highway Administration
- Benton County
- Elected and local officials
- Residents and citizens
- Commuters
- Businesses
- Emergency services
- Schools
- Churches
- Community organizations



Project Development



National Environmental Policy Act

Impact

Requires that federal agencies consider the effects of their actions on surrounding natural, cultural and social environments

Involvement

Requires the public be provided the opportunity to be involved and comment

Information

Requires that impacts be described in an environmental document



Environmental Document

- **Environmental Process**

- Establish purpose and need
- Develop possible alternatives
 - The “Do Nothing” alternative is a baseline for comparison
- Evaluate and screen alternatives
- Identify a preferred alternative
- Solicit public comment on environmental document and preliminary design plan
- Address and consider public comment as part of decision-making process
- Finalize and approve environmental document



Project Need

The need for this project is due to the above average crash severity at the existing intersection



Project Purpose

Reduce the number of traffic collisions and provide a long-term solution to ensure safe and sufficient operation of the intersection.



Alternatives Analysis



Impacts
People and
natural
environment



Costs
Construction,
right-of-way,
utility
relocations



Benefits
Improved
safety and
travel time
savings



Detailed Alternative Analysis

- Reduced Conflict Intersection (RCI) (discussed last)
- Traffic Signal
- Multi-Lane Roundabout
- Median U-Turn (MUT) Intersection
- No Build

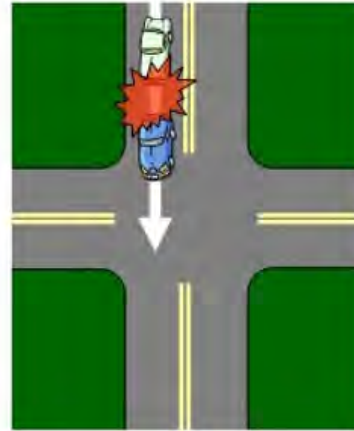


Detailed Alternative Analysis

Traffic Signal



Right angle



Rear end



Left turn



Detailed Alternative Analysis

Multi-Lane Roundabout



Detailed Alternative Analysis

Median U-Turn (MUT)



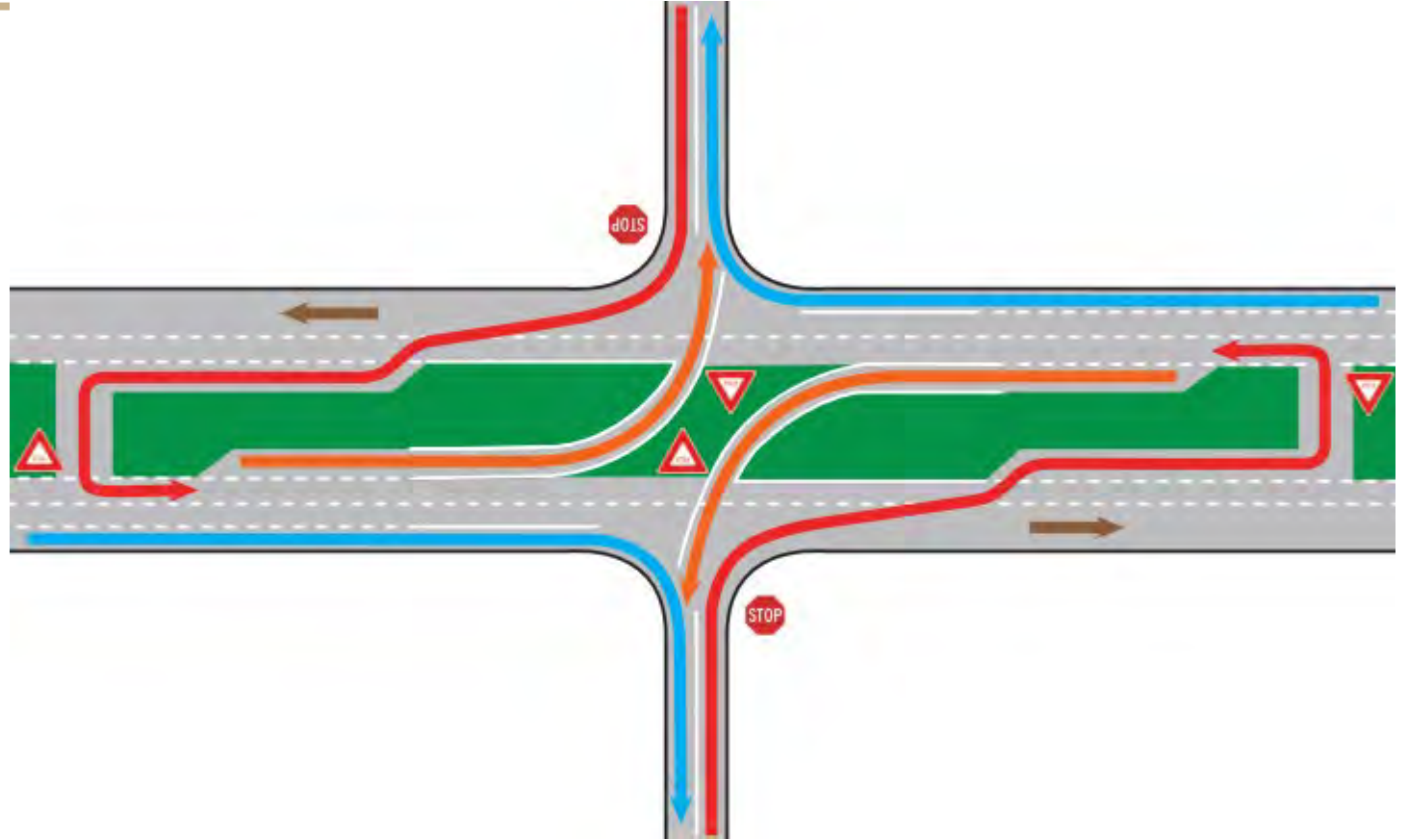
Detailed Alternative Analysis

No Build (or do nothing)



Detailed Alternatives Analysis

Reduced
Conflict
intersection or
(RCI)



What is an RCI



Safety Benefits of RCIs

2024 Statistics for RCIs Installed in Indiana (11 Locations)

- 80% Reduction in Injury and Fatal Crashes
- 30% Reduction in Property Damage Crashes
- 53% Reduction in All Crashes



Safety Benefits of RCIs



Examples of Items Evaluated

- Right-of-way
- Streams, wetlands, and other waters
- Floodplains
- Endangered species
- Farmland
- Cultural resources (historic/archaeological)
- Parks and recreational lands (trails)
- Air quality
- Noise
- Community impacts
- Environmental justice
- Hazardous materials
- Permits
- Mitigation
- Public involvement
- Commercial development



Alternatives Analysis



Impacts
People and
natural
environment



Costs
Construction,
right-of-way,
utility
relocations



Benefits
Improved
safety and
travel time
savings



Project Impacts

Type	Amount
Construction Cost	Approximately \$ 3,200,000
Relocations	None
Temporary Right-Of-Way	0
Permanent Right-Of-Way	0
Tree Removal	0 acres
Threatened or Endangered Species	None Present
Water/Wetlands	No Impacts



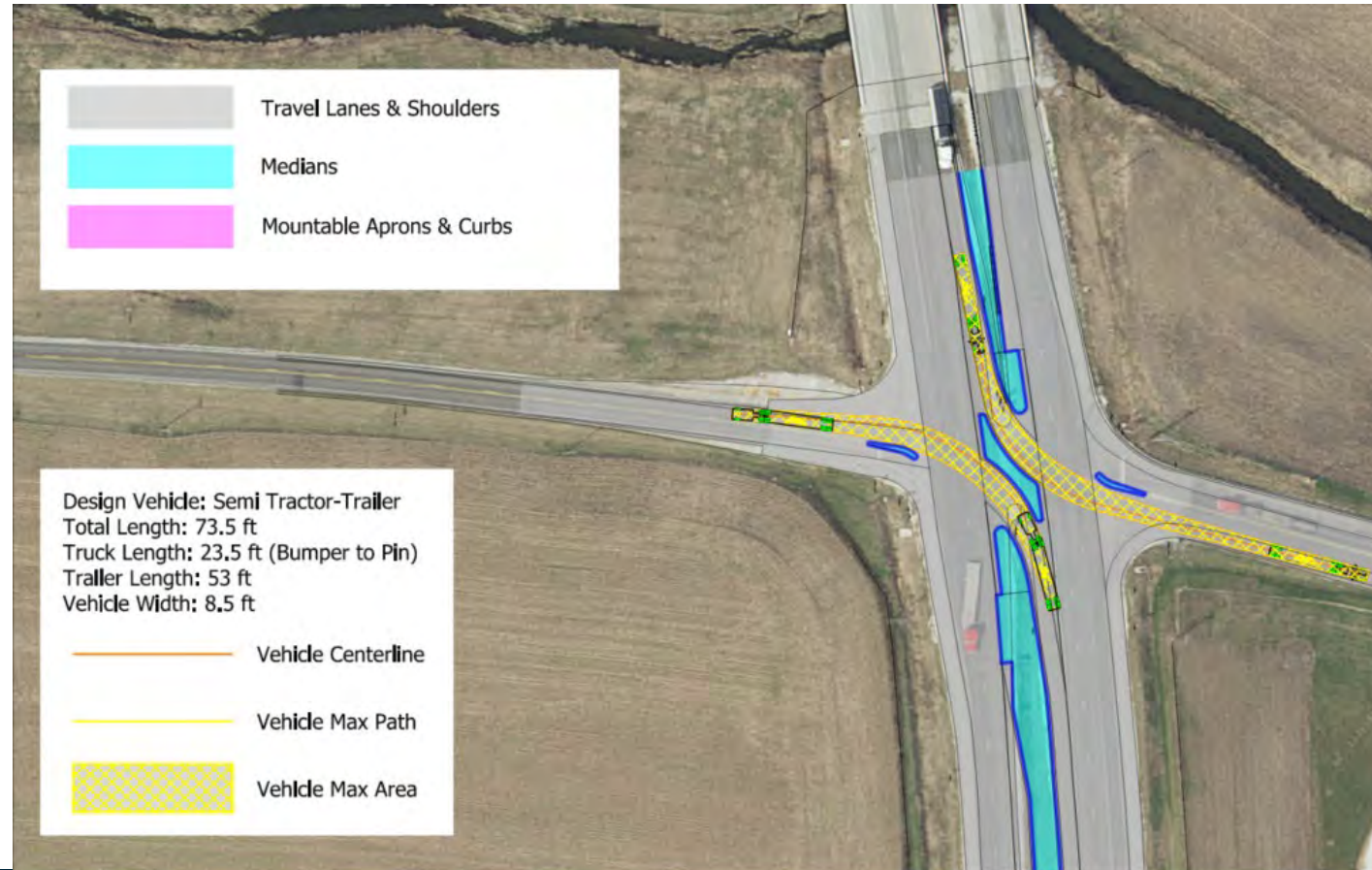
Preferred Alternative



Semi Tractor-Trailer Turning Path



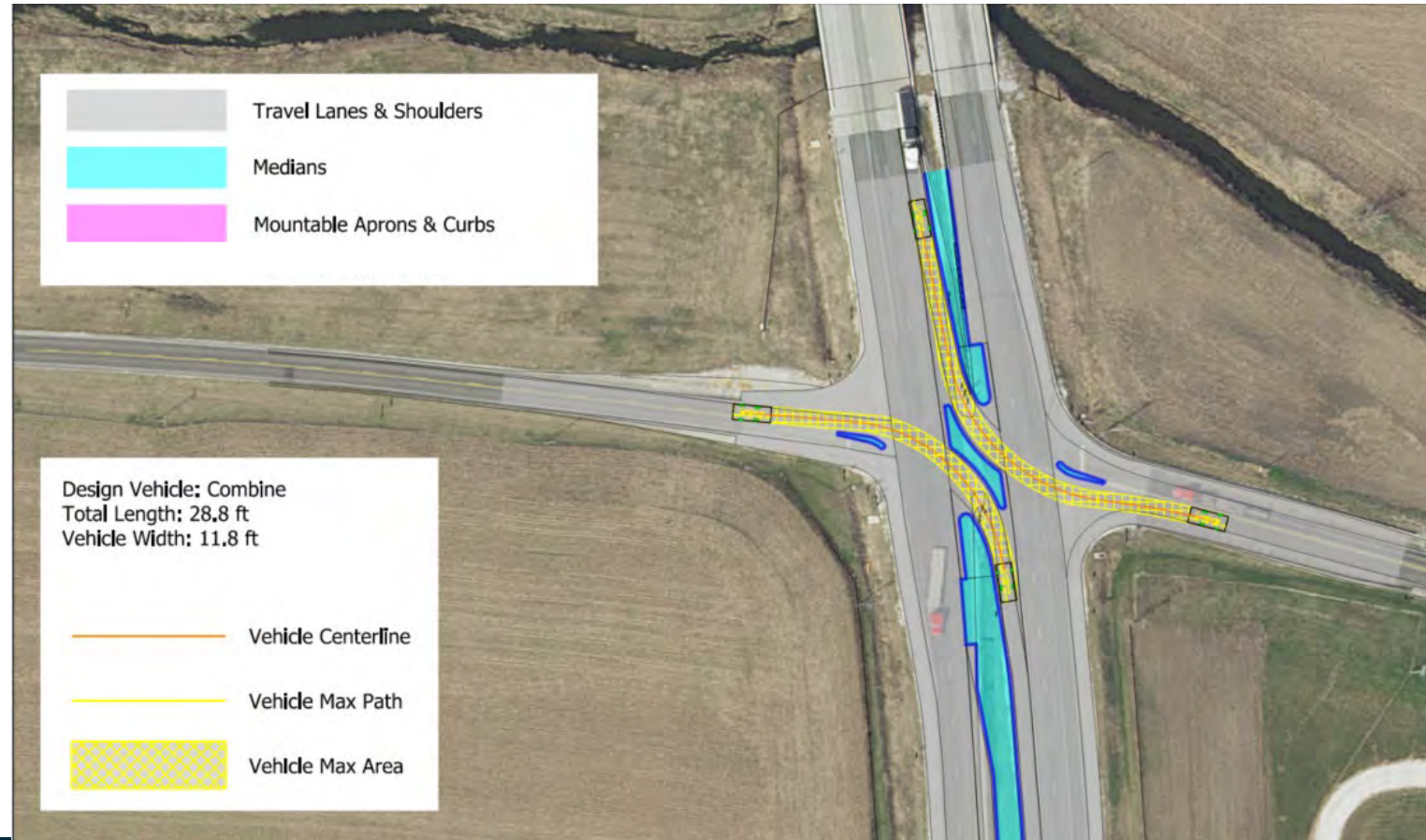
Semi Tractor-Trailer Turning Path



Combine Turning Path



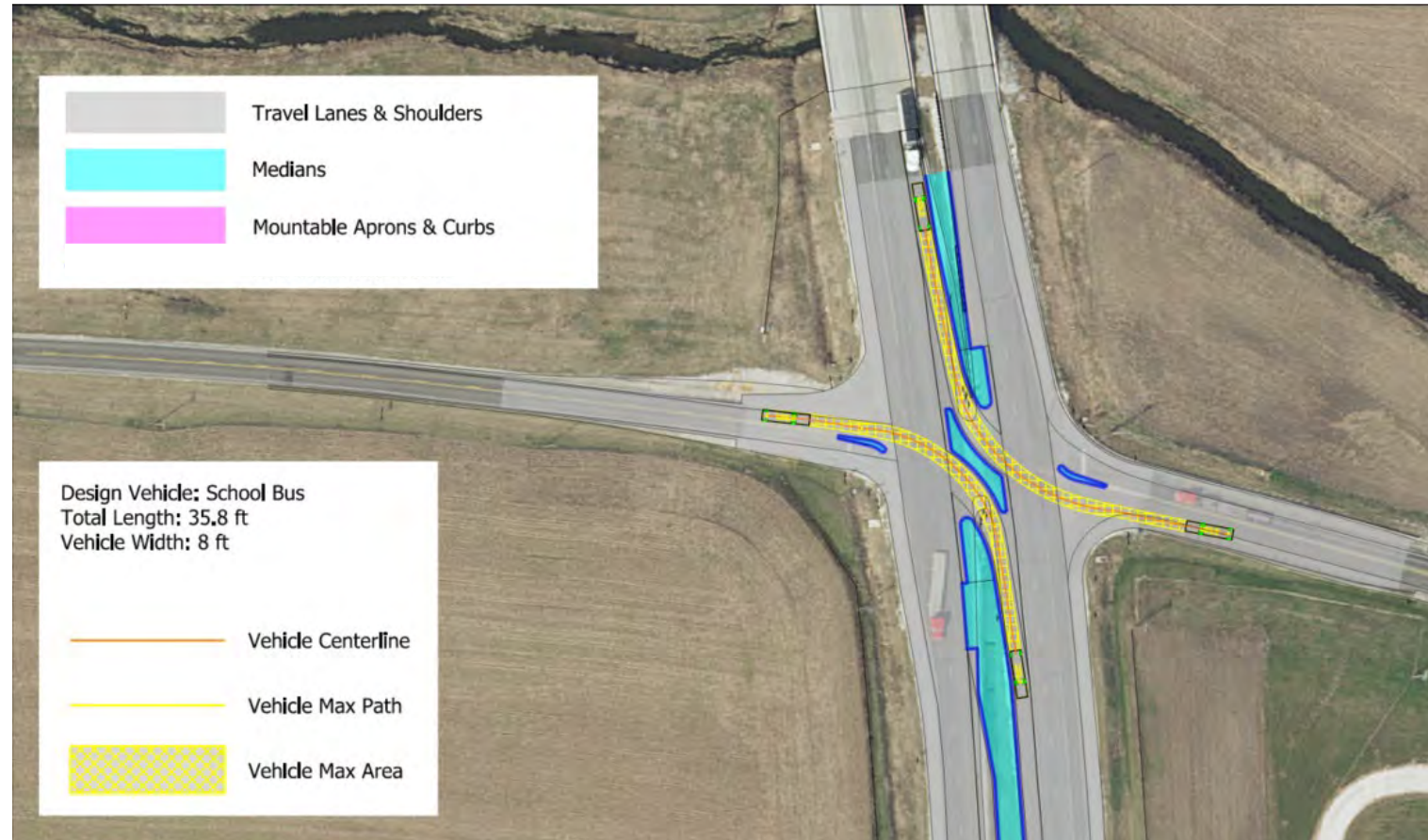
Combine Turning Path



School Bus Turning Path



School Bus Turning Path



Next Steps

- **Public and project stakeholder input**
 - Submit comments via postal mail, e-mail, or phone message.
- **INDOT review and evaluation**
 - All comments are given full consideration during the decision-making process.
 - Address comments, finalize and approve the environmental document, and complete the project design.
- **Communicate a decision**
 - INDOT will notify project stakeholders of the decision.
 - Work through local media, social media outlets; paid legal notice.
 - Make project documents accessible via repositories.
- **Questions? Contact the Public Involvement Team.**



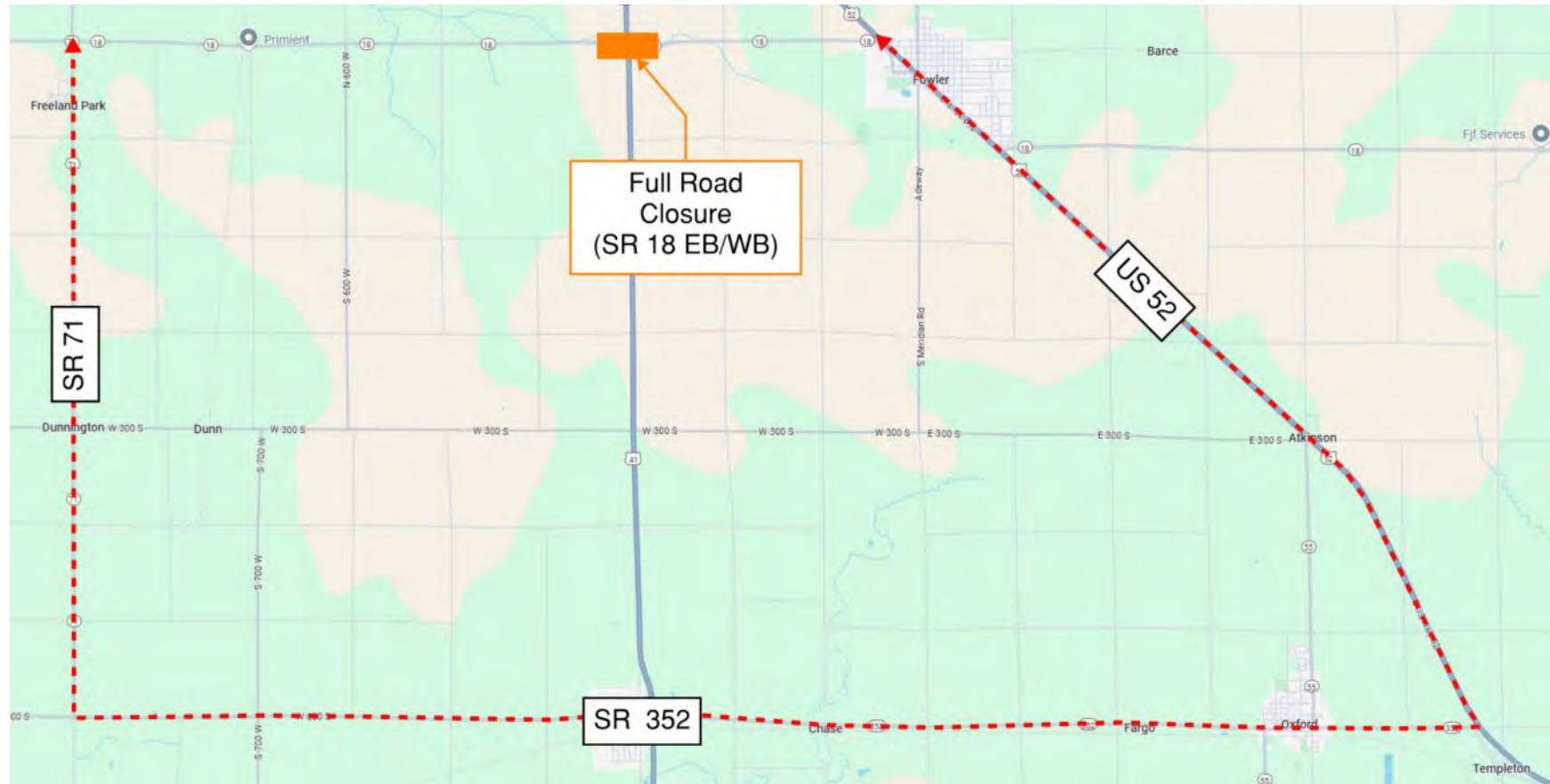
Project Schedule

LETTING
DECEMBER 2025

CONSTRUCTION
SUMMER 2026



Maintenance of Traffic



Project Resource Locations

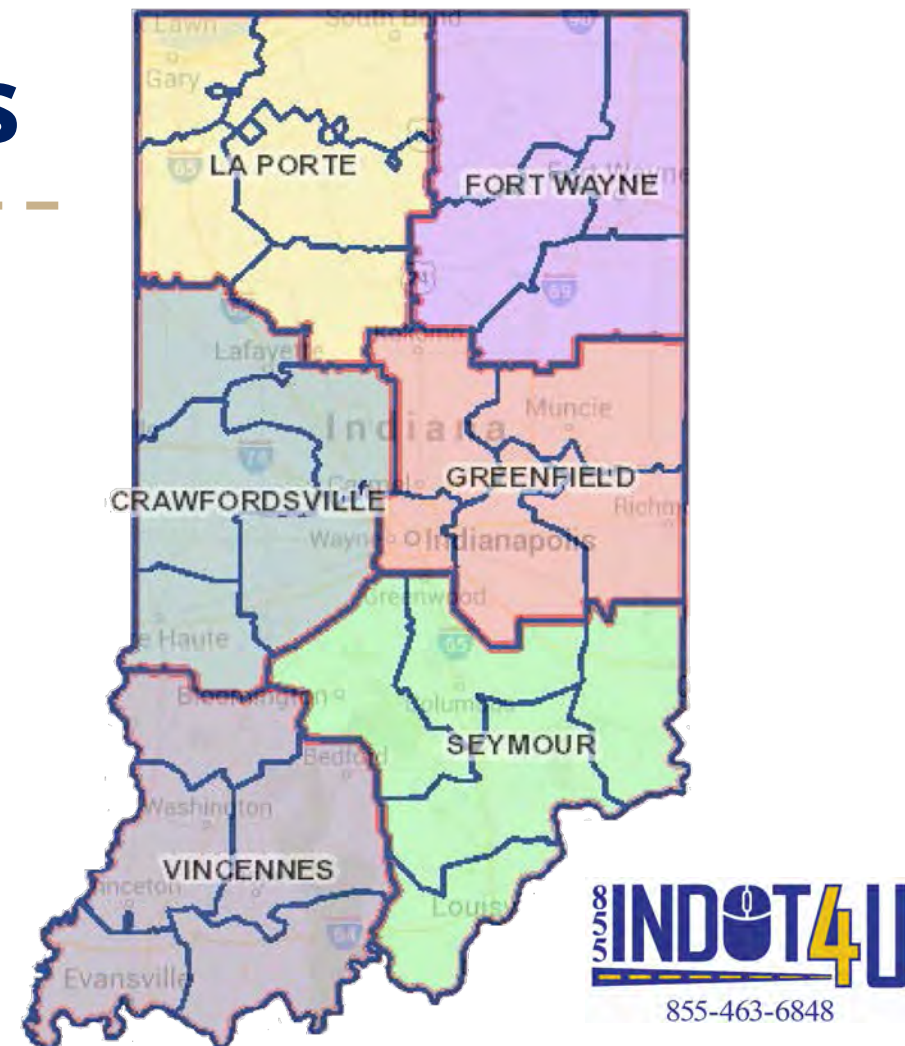
INDOT Crawfordsville District website –
westcentral.indot.in.gov

Benton County Library
 102 N. Van Buren Ave., Fowler, IN

Transportation Services Call Center

Provides citizens and business customers with a single point of contact to request transportation services, obtain information, or provide feedback through multiple channels of communication.

855-463-6848 • INDOT4U.com • INDOT@indot.in.gov



Ways To Make a Formal Comment

Written Comments



By Email

ckelly@kaskaskiaeng.com

By Mail

Chad Kelly

Kaskaskia Engineering Group, LLC,
477 South 3rd St.,
Geneva, IL, 60134



Website

westcentral.indot.in.gov

Voice Recorded Message

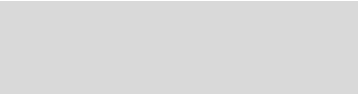
INDOT Customer Service (855) 463-6848

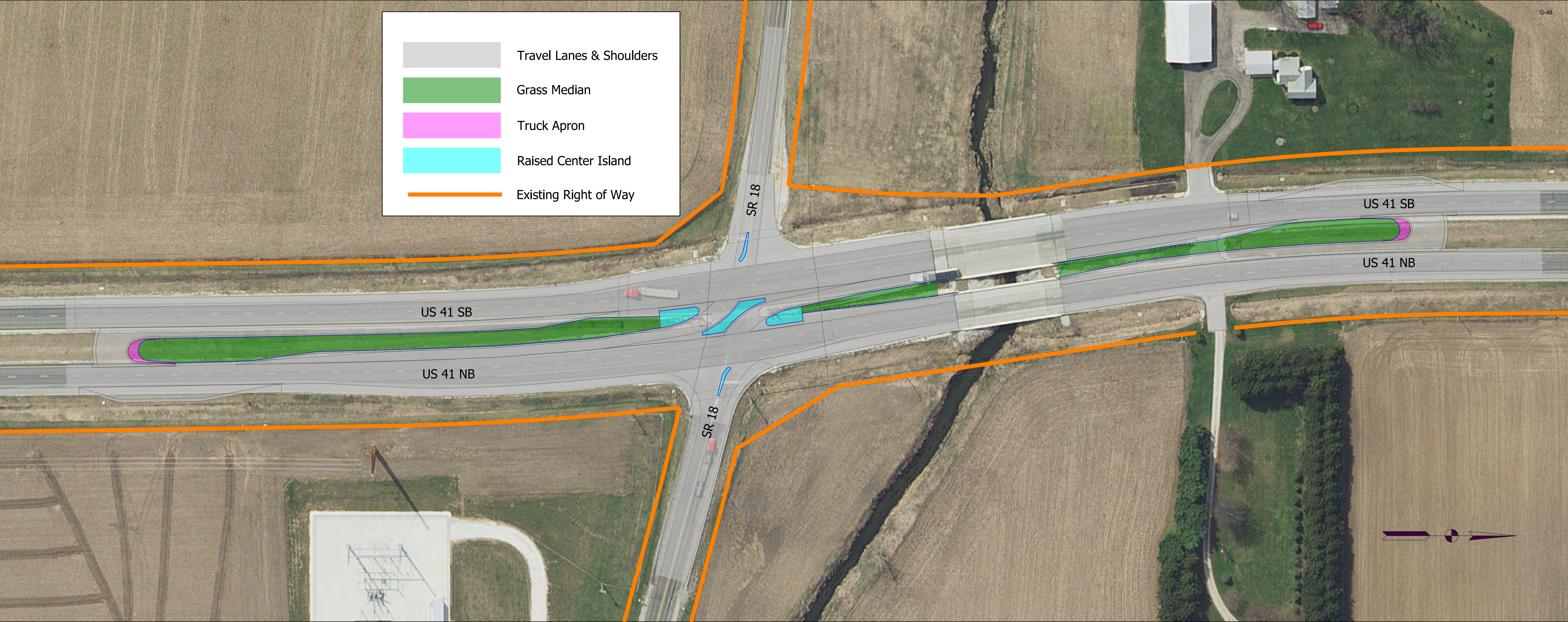


Thank You For Watching





	Travel Lanes & Shoulders
	Grass Median
	Truck Apron
	Raised Center Island
	Existing Right of Way



Sign-in Sheet – Public Hearing
April 23, 2025 – Benton Co. Jr./Sr. High School

[illegible]

US 41 at SR 18 Reduced Conflict Intersection (RCI)

Comment Form – Public Hearing
April 23, 2025 – Benton Co. Jr./Sr. High School

NAME: Dale J. Budreau

FULL ADDRESS:

EMAIL:

PUBLIC HEARING COMMENT

Please provide your feedback on the recommended preferred alternative for the project. Comments will be included in the project record and responded to in the environmental document.

Traffic coming from North semi's coming down hill coming fast, and we are making a U-turn in front of them.

Put Flashing light on 41, yellow and Red Flash lights on Hwy 18 + Flashing stop signs. Put Rumble strips on Hwy 18.

Cost of "T" turn ~~reverse~~ other ideas

* You say not much traffic on 18 so don't do anything

How much room or distance between roads.

90 ft equipment length, have enough space to wait on traffic to clear to be able to pull out.

- Drop your comment in the comment box
- Mail to: Chad Kelly, Kaskaskia Engineering Group, LLC, 477 South 3rd St., Suite 280 Geneva, IL 60134
- Scan & email to ckelly@kaskaskiaeng.com
- Please return before the end of the comment period on May 7, 2025

US 41 at SR 18 Reduced Conflict Intersection (RCI)

Comment Form – Public Hearing
April 23, 2025 – Benton Co. Jr./Sr. High School

NAME: Hori Cyr

FULL ADDRESS: _____

EMAIL: _____

PUBLIC HEARING COMMENT

Please provide your feedback on the recommended preferred alternative for the project. Comments will be included in the project record and responded to in the environmental document.

Did you consider the increased volume of truck traffic on 18 in the fall with the tobacco life grain elevator?

What is the distance from the intersection (right turn) to the point that the left hand turn needs to be made?

Have you considered the elevation of the road in the south bound 41 lanes? When trying to make the turn cars would be coming at a high rate of speed and because it is a hill and traffic will not be visible.

Have you considered fog? Is there enough room in low visibility conditions

- Drop your comment in the comment box
- Mail to: Chad Kelly, Kaskaskia Engineering Group, LLC, 477 South 3rd St., Suite 280 Geneva, IL 60134
- Scan & email to ckelly@kaskaskiaeng.com
- Please return before the end of the comment period on May 7, 2025

US 41 at SR 18 Reduced Conflict Intersection (RCI)

Comment Form - Public Hearing
April 23, 2025 - Benton Co. Jr./Sr. High School

NAME: _____

FULL ADDRESS: _____

EMAIL: _____

PUBLIC HEARING COMMENT

Please provide your feedback on the recommended preferred alternative for the project. Comments will be included in the project record and responded to in the environmental document.

#1 COULD NOT HEAR SPEAKER !!
2. TIME OF MEETING IS TOO LATE OF DAY
LIGHTS TOO BRIGHT FOR VISUAL OF SCREEN

- Drop your comment in the comment box
- Mail to: Chad Kelly, Kaskaskia Engineering Group, LLC, 477 South 3rd St., Suite 280 Geneva, IL 60134
- Scan & email to ckelly@kaskaskiaeng.com
- Please return before the end of the comment period on May 7, 2025

1. why did you show the BUS' Length when ~~just~~ Semi TRAILERS could be AS LONG AS 54' with out TRACTOR Length included
2. There ARE WARNING LIGHTS AT ST Rd 16/55 14/55
why where Lights NOT PUT here 50 YRS AGO?
3. who is going To TAKE Responsibility For FUTURE ACCIDENTS For LAWYERS?
4. AT OAK TOWN There one of These " INTERSECTION IMPROVEMENTS -
Those who Live There SAID THAT ITS A PAIN IN THE A... TRAFIC FROM
COAL TRUCKS, LUMBER TRUCK AND AG EQUIP STARTED USING COUNTY ROADS
5. How old is EACH one of The STATE Reps AND why SO MANY of Them?
6. MANY LOCAL USERS ARE 70-80 + LOCAL FARMERS - CONSTRUCTION People
7. When There ARE Foggy CONDITIONS - Snow White OUTS This "IMPROVEMENT"
IS AS JUST AS DANGEROUS IF NOT MORE
8. Only Those That signed up were Allowed To speak
9. who ever set This MEETING UP Should be Reassigned ~~_____~~

NAME: Richard Ziebart

FULL ADDRESS: [REDACTED]

EMAIL: [REDACTED]

PUBLIC HEARING COMMENT

Please provide your feedback on the recommended preferred alternative for the project. Comments will be included in the project record and responded to in the environmental document.

In my opinion this plan will not work for several reasons

- The number of people who do not stop at intersections. It is still possible with this plan to go straight across 41

- the number of people driving in this area who do not speak or read english and who do not have a drivers license

- the increased amount of Truck traffic through this intersection from grain elevators to the west hauling grain to Lafayette also

from trucks hauling to and from the dairy farms to the west. Some of these trucks may have drivers who do not speak or read english especially during harvest.

- with the proposed plan drivers who are less than alert or in inclement weather would have a greater chance of going the wrong way

the curved island in the middle could steer them the wrong way

- In my opinion an overpass is the only solution to control traffic and eliminate serious accidents

- Drop your comment in the comment box
- Mail to: Chad Kelly, Kaskaskia Engineering Group, LLC, 477 South 3rd St., Suite 280 Geneva, IL 60134
- Scan & email to ckelly@kaskaskiaeng.com
- Please return before the end of the comment period on May 7, 2025

From: Scott Durflinger [REDACTED]
Sent: Thursday, April 24, 2025 7:38 AM
To: ckelly@kaskaskiaeng.com
Subject: US 41 at SR 18 Reduced Conflict Intersection

US 41 at SR 18 Reduced Conflict Intersection

Comment Form - Public Hearing
April 23, 2025 - Benton Co. Jr./Sr. High School

Scott Durflinger
[REDACTED]

PUBLIC HEARING COMMENT

The current studies seemed to indicate the most viable solution for safety issues at US 41 at SR 18 is a reduced conflict intersection. I believe some additional changes can be implemented to significantly improve the safety and usability of this intersection. It would require increasing the footprint of the intersection. Due to Seasonal traffic increases during the fall harvest, heavy semi's travel SR18 frequently. Therefore, an on ramp style merge Lane from SR18 to US41 would reduce potential rearend accidents by not allowing slow traffic to merge directly in to the high speed vehicle flow. The other critical point in the current proposal is the U-turn for direction reversal. These portions need to be widened to allow a semi to make the U-turn, into a merging lane, while not impeding the US 41 two lane traffic flow. Consideration also needs to be made for large agricultural equipment (16' wide by 70+' long) crossing through this intersection. Since the new intersection is not a norm for this area of the state, high visibility signage will need to be added to SR 18 to inform drivers of the intersection traffic flow patterns. I estimate these recommended improvements will reduce the current fatality accident rate at this intersection by more than 95%.

Sent from my iPad

From: Fausset, Jesse [REDACTED]
Sent: Tuesday, April 22, 2025 7:36 AM
To: Chad Kelly
Subject: Benton County Intersection comments

Good morning, Chad,

I am commenting in response to the proposed improvements for SR 18/US 41 and US 41/352.

First, I completely understand the why-there have been many wrecks and fatalities over the years at these intersections, however I do not believe the j-turns are the answer. We have one of those in Morocco to the north, and I can't begin to tell you how many times I have witnessed myself and heard on my FD radio of wrong way drivers as a result of the j-turn. I personally believe that the problem is distracted driving and/or complacency. While I am all about doing what is best to save lives, I have a concern over the proposal, from our company stand point that I think could lead to increased accidents.

I am the operations manager for Barnhart Crane and Rigging in Boswell, IN. We regularly travel our cranes and semi's through both of these intersections on an almost daily basis. Our cranes range from 3 axle truck cranes to 7 and 8 axle all terrain cranes, that are quite large-125,000#-180,000# in weight and 45-80' in length. In the design of these j-turns, when a driver has to make the u-turn from the turn off lane to switch direction, we do not have enough room without taking up both lanes and the shoulder of the lane we are turning into. Even at that, we are going to be off of the designated pavement and risking ripping tires off of trailers. I have watched many semi's in Morocco to see how it is for them to navigate. Our only option is going to be to start our turn from the right lane of travel, in to the u-turn. I have a concern that this has the potential to create even more of a hazard with other traffic trying to pass on our left as we turn.

I do not see any other way around this for us, as 41 and 18 are our only way to get to our destination all over the area. This is why our company located this Branch where we did-ease of access.

I hope the State will re-consider putting these in, and hopefully find an alternative method to decrease the chances of injury and fatalities.

Thank you.

Jesse Fausset
Operations Manager
Fowler Branch



Comment Numbers	General Comment(s)	Response
PC-2	What was the selection process for the proposed project at US 41 and SR 18?	<p>The need for this project is due to high crash rates at the subject intersection. Per the October 2021, Abbreviated Engineering Assessment Report, this intersection was identified as a concern due to one fatal accident, three incapacitating injury accidents, and four property damage occurrences over a three-year span. RoadHAT software was used to analyze the existing crash history at the intersection. Crash data was obtained from the Automated Reporting Information Exchange System (ARIES) that contains information from the original crash reports. RoadHAT generates an index of crash frequency (Icf) and index of crash cost (Icc). The three-year data collection resulted in an Index of Crash Cost (ICC) of 1.66 out of 3.00 and an Index of Crash Frequency (ICF) of 1.60 out of 3.00, which is considered high compared to similar intersections. ICF and ICC data are measured in standard deviations. ICF is a measurement of differences between the number of expected and reported crashes at this type of intersection. ICC is a measurement of the difference in expected costs and reported costs and is an indication of crash severity. A value of zero indicates that accidents at the intersection are typical and generally expected. The purpose of this project is to reduce the number of traffic collisions, improving the ICF and ICC to 1.00 or below, and provide a long-term solution to ensure safe and sufficient operation of the intersection.</p>
PC-5	A stop light would be a better solution.	<p>A traffic signal alternative was considered for this location; however, the traffic volumes at the intersection do not warrant a signal. The traffic signal would be expected to cause excessive delays; higher crash rates</p>

		compared to the preferred alternative and may result in disobedience of the signal in this rural area. This alternative does not address vehicular safety and will not meet the purpose and need. Therefore, this alternative was discarded.
PC-6, CF-1	Flashing lights and advanced signs should be installed at the intersection to slow traffic. Add flashing yellow light on US 41 with a flashing red light and ruble strips on SR 18.	Amber/red overhead flashers can cause confusion for motorists. Drivers often perceive the overhead flasher as an implication of an all-way stop. Existing flashers at intersections throughout the state are currently being removed by INDOT, as this misperception can result in right-angle crashes because of failing to yield to traffic on the free flow approaches. Installing red/amber flashing lights does not address safety at this intersection and will not meet the purpose and need of this project.
PC-3, EL-1	A better solution would be to construct an interchange.	Four alternatives for construction at this intersection were considered. In addition to the RCI, a traffic signal, a multi-lane roundabout, and a median U-turn (MUT) intersection were all considered. RCIs have proven safety benefits reducing crashes. An interchange at this location would be out of balance with the need and scale of the problem.
EL-2	A right turn merge lane should be constructed for the heavy truck traffic (especially during harvest season) turning onto US 41 to allow trucks to get up to speed before merging into the travel lane.	The existing volume of traffic on US 41 provides sufficient gaps and sight distance for turning traffic to make the turns on US 41 safely. INDOT will continue to investigate further needs.
EL-2	The U-turn areas on the shoulder side should be widened and lengthened to allow a semi to make a U-turn into a merging lane while not impeding traffic on US 41.	The existing volume of traffic on US 41 provides sufficient gaps and sight distance for turning traffic to make the U-turn maneuver, get up to speed, and merge into traffic on US 41. Also, the right turn lane will be of sufficient length for vehicles to turn and avoid through traffic.

EL-2	High visibility signage should be installed.	Large, high-visibility signs and enhanced pavement markings will be installed as part of the project.
PC-2, EL-3	The RCI in Morocco at US 41 and SR 114 requires additional time to drive through it, people in that area do not care for it, and drivers have gone the wrong way.	The additional distance driven to make the U-turn movement is offset by the time saved to cross two lanes of traffic as opposed to four lanes of traffic at the current intersection. The geometric footprint of the proposed RCI at US 41 and SR 18 is larger than the one in Morocco at US 41 and SR 114. The distance between the intersection and the median turnarounds at US 41 and SR 18 will be more than twice as far as those distances at the RCI in Morocco. In addition, the loon area where vehicles make the U-turn will be much wider at the RCI at US 41 and SR 18. In Morocco, there is about 10-12 ft of area for the U-turn on the shoulder side of the roadway. At US 41 and SR 18, there will be a 16 ft wide loon with a 2 ft wide paved shoulder to allow a 73.5 ft semi tractor-trailer to make the U-turn on the pavement. In addition, additional signs and pavement markings will better guide motorists through the intersection.
PC-2	A T-bone crash can still occur.	<p>In 2024, Indiana's RCIs were studied to obtain updated crash statistics. Crashes at 11 different locations were analyzed in the years before and after an RCI was constructed. Study periods for each location included the same number of years before and after the installation of the RCI. In total, 94 site-years were analyzed (47 before and 47 after).</p> <p>Overall, these locations experienced:</p> <ul style="list-style-type: none"> • 78% reduction in injury and fatal crashes • 30% reduction in property damage crashes • 53% reduction in crashes of all severities

		<p>Additionally, of these 11 sites,</p> <ul style="list-style-type: none"> • Eight experienced a 50% or greater reduction in injury and fatal crashes. • Five experienced an 80% or greater reduction in injury and fatal crashes.
PC-3	There is not sufficient room for a truck to stop in the median and drivers will still have to cross two lanes of traffic.	By directing vehicles to the median turn-around location, only two lanes must be crossed at a time, rather than four lanes at the existing intersection. The median turn-around is designed to accommodate the turning movement for a 73.5 ft long semi tractor-trailer and the dedicated auxiliary lane prior to the median turn-around will provide storage for seven 73.5 ft long semi-trucks.
PC-3, EL-1	Cars will drive straight through the intersection on SR 18.	Raised medians will be installed at the intersection of US 41 and SR 18. The medians will restrict the left turn and through movements along SR 18. The only allowable movement from SR 18 will be a right turn onto US 41. Traffic that previously indicated a left turn onto US 41 and straight-through traffic on SR 18 will now proceed to the proposed median turnarounds to make a U-turn movement. Traffic will continue to free flow on US 41 and left turns onto SR 18 will still be allowed. SR 18 will remain stop controlled with the use of stop signs, but only right turns will be permitted. Raised islands will be installed on SR 18 to ensure traffic is right turn only. In addition, signage and pavement markings will help provide guidance for motorists to navigate the intersection safely.
PC-3, EL-1, EL-3	Vehicles traveling through the intersection may go the wrong way on US 41.	Raised medians will be installed at the intersection of US 41 and SR 18. The medians will restrict the left turn and through movements along SR 18. The only allowable movement from SR 18 will be a right turn onto US 41.

		<p>Traffic that previously indicated a left turn onto US 41 and straight-through traffic on SR 18 will now proceed to the proposed median turns to make a U-turn movement. Traffic will continue to free flow on US 41 and left turns onto SR 18 will still be allowed. SR 18 will remain stop controlled with the use of stop signs, but only right turns will be permitted. Raised islands will be installed on SR 18 to ensure traffic is right turn only. In addition, signage and pavement markings will help provide guidance for motorists to navigate the intersection safely.</p>
PC-3, PC-7, EL-1, CF-2	The RCI will be difficult to navigate during foggy or snowy conditions.	<p>Raised medians will be installed at the intersection of US 41 and SR 18. The medians will restrict the left turn and through movements along SR 18. The only allowable movement from SR 18 will be a right turn onto US 41. Traffic that previously indicated a left turn onto US 41 and straight-through traffic on SR 18 will now proceed to the proposed median turns to make a U-turn movement. Traffic will continue to free flow on US 41 and left turns onto SR 18 will still be allowed. SR 18 will remain stop controlled with the use of stop signs, but only right turns will be permitted. Raised islands will be installed on SR 18 to ensure traffic is right turn only. In addition, signage and pavement markings will help provide guidance for motorists to navigate the intersection safely.</p>
PC-4, PC-6, CF-1, CF-2	The proposed design will increase crashes due to reduced visibility and high vehicles speeds for traffic on US 41 south because of the hill to the north.	<p>The preferred alternative simplifies the decisions needed to be made by drivers and reduces the risk of collisions. Intersection sight distance (ISD) is the distance required for a driver to perceive potential conflicts and perform the actions needed to negotiate an intersection safely based on a specific design speed. Intersection sight distance considers vehicle speed, roadway grade, and vehicle type.</p>

		<p>For example, large trucks require additional time to accelerate to match the speed of vehicles on US 41. Intersection sight distance was analyzed at the northern and southern median turnarounds for trucks and passenger cars. The analysis found that both median turnarounds locations meet the requirements for a stopped truck or passenger car to make the U-turn maneuver with traffic on US 41 traveling at a speed of 60 mph. An analysis of the sight distance for the northern median turn-around found that a vehicle stopped in the median at the median turn-around has an unobstructed visual line of sight of approaching traffic over 3200 ft away. For comparison, the required sight distance for a combination truck with speeds on US 41 traveling at 70 mph is 1,440 ft. The sight distance available is more than double what is needed for a truck to make the U-turn movement with traffic approaching at 70 mph. In addition, the existing intersection sight distance for a truck stopped at the eastern SR 18 approach and attempting to cross all four lanes is currently much less due to the horizontal curve in the alignment at the SR 18 intersection and the grove of trees just to the north of the intersection that block the view of the crest of the hill.</p>
PC-6	A semi-trailer turning movement display was not provided at the public hearing.	<p>A turning movement template for a 73.5 ft long semi-tractor truck was on display at the public hearing in the area to the right of the podium. The turning movement graphics are included on the INDOT website, and the template was included in the video presentation at the public hearing.</p>
EL-1	People driving through the intersection who do not speak or read English will have trouble.	<p>Raised islands on SR 18 will channelize traffic to encourage the right turn movement. The median</p>

		turnarounds will also have channelization and signage for the motorists to make the U-turn movement. The signage includes both words and graphical indications for the U-turn movement to help.
EL-2	There is a significant amount of truck traffic that travels through the intersection.	The RCI was designed to accommodate truck traffic including a 73.5 ft long semi tractor-trailer.
EL-3	Crane type vehicles will not be able to traverse through the intersection. The vehicles include three axle truck cranes and up to seven and eight axle all terrain cranes that weight up to 80,000 lbs and are up to 80 ft in length. There is not enough room to make the U-turn without taking up both lanes and the shoulder. The crane vehicle will be off of the pavement and risk ripping tires off of trailers. Crane vehicles will have to start the U-turn from the right lane creating a hazard with other traffic trying to pass on the left. Consideration should be made for large industrial equipment (16 ft wide and 70 ft long).	The RCI was designed to accommodate truck traffic including a 73.5 ft long semi tractor-trailer without getting off of the proposed pavement. In addition, the median turn around area has a wide area with a two-inch-tall mountable curb to accommodate wider vehicles. The dedicated auxiliary lane allows truck to be out of the through lanes prior to making the U-turn movement. Coordination is ongoing with the crane company due to the non-typical types of vehicles they will be moving through the intersection. Appropriate revisions will be made based on the outcome of that coordination.
CF-1	The cost of the RCI is too high.	The cost of the proposed RCI is supported by the anticipated reduction in crashes at this location.
CF-1	Since there is not much traffic on SR 18, don't do anything.	The need for this project is due to high crash rates at the subject intersection. Per the October 2021, Abbreviated Engineering Assessment Report, this intersection was identified as a concern due to one fatal accident, three incapacitating injury accidents, and four property damage occurrences over a three-year span.
CF-1, CF-2	The proposed geometric design is not sufficient. The RCI U-turns are not far enough	The distance between the location of SR 18 and the median turn-around to the south is about 800 ft. The

	<p>apart, and the loons are not wide enough. What is the distance between the intersection and the location where the left turn will be made? With 90 ft of equipment length, is there enough room for traffic to clear to be able to pull out.</p>	<p>distance between SR 18 and the median turn-around to the north is about 850 ft. The left turn lane lengths prior to the median turnarounds are 350 ft for the median turnaround north of the intersection and 600 ft for the median turnaround south of the intersection. The left turn lanes are sufficient length to store seven semi-trucks prior to making the U-turn movement. The width of the loons were designed based on the turning path of a 73.5 ft long semi tractor-trailer truck and also will accommodate specialized crane vehicles.</p>
CF-2	<p>Was increased truck traffic on SR 18 in the fall considered due to the nearby grain elevator?</p>	<p>The RCI was designed to accommodate truck traffic including a 73.5 ft long semi tractor-trailer. The left turn lanes are sufficient length to store seven 73.5-foot-long semi-trucks prior to the U-turn movement.</p>
PC-6, CF-3	<p>The acoustics of the room where the public hearing was held were poor.</p>	<p>The public hearing was to be held in the auditorium, but the presenters were alerted to an issue with the sound system a few hours before the hearing and the hearing had to be moved to the cafeteria.</p>
CF-3	<p>The lights in the room were too bright to see the video presentation.</p>	<p>The public hearing was to be held in the auditorium, but the presenters were alerted to an issue with the sound system a few hours before the hearing and the hearing had to be moved to the cafeteria.</p>
CF-3	<p>The time of the meeting was too late in the day.</p>	<p>The hearing time was scheduled at 5:30 pm EST to allow interested parties to attend after work hours.</p>
CF-3	<p>Why are only the people who signed up allowed to speak.</p>	<p>All people are allowed to speak at INDOT public hearings. The sign-in sheet format is a standard policy for determining the order of speakers. .</p>

<p style="text-align: right;">1</p> <p style="text-align: center;">INDOT PROPOSED IMPROVEMENTS OF INTERSECTION AT US 41 AND SR 18 IN BENTON COUNTY</p> <p style="text-align: center;">PUBLIC MEETING</p> <p>TRANSCRIPT of the public comments made during the Public Meeting held on the 23rd day of April, 2025, at the Benton Central Jr./Sr. High School Auditorium, 4241 East 300 South, Oxford, Indiana, 47971, before Heather S. Orbaugh, Notary Public in and for the County of Boone, State of Indiana, CCR: LA.</p> <p style="text-align: center;">ALLIANCE COURT REPORTING PO BOX 78261 INDIANAPOLIS, INDIANA 46278-0261 (317) 875-3914 www.alliancecourtreporting.com</p>	<p style="text-align: right;">3</p> <p>1 5:30 PM 2 APRIL 23, 2025 3 4 PUBLIC COMMENTS 5 6 MS. EFFINGER: All right. That 7 concludes the presentation part of this evening. 8 At this point, we will open up the opportunity 9 for anyone who would like to come up and make a 10 public comment. I will check the sign-in sheet. 11 We currently have two people signed up. Is there 12 anyone else who wants to sign up? The first 13 person is Brian. State your name first. 14 BRIAN: Hi, I'm Brian. I am all 15 for these if they are done correctly. And from 16 what I have seen so far, they are not far enough 17 apart and they are not wide enough. And I 18 know, I drive a truck and I see this all the time 19 and the ones I like the most are up in Michigan. 20 They have a wide turn because they pull double 21 trailers, they are super long. 22 We need to have that here instead of 23 driving out in the grass and out into the 24 shoulder, past the shoulder to get it turned 25 around. Other than that, I have no problem with</p>
<p style="text-align: right;">2</p> <p>1 A P P E A R A N C E S 2 3 Ms. Melissa Effinger MICHAEL BAKER INTERNATIONAL 4 3815 River Crossing Parkway Suite 300 5 Indianapolis, Indiana 46240 574.607.7786 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>	<p style="text-align: right;">4</p> <p>1 it, like I said, as long as they are done right. 2 MS. EFFINGER: Thank you, sir. 3 UNIDENTIFIED SPEAKER: On your J 4 turns, when your semis are making them turns, do 5 you notice how many lanes they were taking? 6 MS. EFFINGER: Would you like to 7 sign up, sir? 8 UNIDENTIFIED SPEAKER: I don't 9 want to sign up. 10 MR. FRIEND: Most of you know me, 11 other than engineers, people with INDOT. I am 12 Mike Friend, former County Commissioner. I used 13 to drive for UPS and they put this in up there at 14 US 41 and State Road 114 in Morocco, and 15 everybody up there that lived in that area did 16 not care for it. As a UPS driver, I didn't care 17 for it. You know, it took me more time if you 18 are traveling east and west. 19 Now, if you are coming from the south and 20 you want to go west, you know, you have still got 21 the potential of being T-boned -- I mean 22 southbound traffic, and the same way if you are 23 coming from the north and wanting to go east into 24 Fowler potentially. So you are not eliminating 25 all opportunities for getting T-boned. So that</p>

PC-1

PC-2

PC-3

5

1 argument I don't think flies with me.
 2 And I don't know, it seems to me like
 3 there is a better way to do this. I don't know
 4 what it is, but that's where your engineering
 5 company should come up with something. But I
 6 don't know, I just think it is waste of money.
 7 And how -- what was the selection process for
 8 this particular intersection? Of all the
 9 intersections in the state of Indiana, why was
 10 this one chosen? Why Benton County out of the 92
 11 counties that are in the state of Indiana, why is
 12 Benton County being selected for this? Thank
 13 you.

14 MS. EFFINGER: Thank you, sir.
 15 Our next person is Richard Ziebart.

16 MR. ZIEBART: I am Richard
 17 Ziebart. Not many of you know me, but I am a
 18 farmer and we haul grain through this
 19 intersection and the first problem is, like he
 20 said, it is not wide enough in the median. There
 21 is not room for a truck -- if you misjudge the
 22 truck coming from -- if you are going east and
 23 you misjudge the speed of the truck coming from
 24 the south, there is not room to stop in the
 25 middle and you have done nothing to address it;

6

1 and in fact, you have choked that down by putting
 2 more turn lanes. So you are still going to have
 3 to cross two lanes of traffic. That's number
 4 one.

5 Number two, I realize this is not to
 6 scale, but you are not going to stop cars from
 7 going straight across. And people that don't
 8 stop, I was T-boned by a guy at a four-way stop
 9 going 80 miles an hour. I was almost T-boned at
 10 Boswell. People that go through intersections
 11 aren't going to stop, whether they can't speak
 12 English, can't read, can't see.

13 And also as far as like he mentioned, the
 14 intersection at Morocco, the law enforcement
 15 people I talked to in Benton County say that's
 16 where they get people going the wrong way. I
 17 mean this is part of a non-limited access
 18 highway, four-lane highway, and you can go the
 19 wrong way. And it looks to me like if you come
 20 up here and it is foggy and you don't see that,
 21 you are going to go right around that and go
 22 north on the southbound lane.

23 And I say the only way to fix this
 24 intersection is to put in an overpass because
 25 then people aren't going to stop. They are going

7

1 to go up and over and they are not going to have
 2 to. And I know it is going to cost a whole lot
 3 more, but I don't see that the State is worried
 4 about spending money anywhere else.

5 And with trucks, they are still going to
 6 have to cross two lanes of traffic. And like I
 7 said, there is not room if you misjudge the speed
 8 of that truck going -- coming at you -- coming
 9 toward you, you are still not going to have room
 10 to get out of the way. Thank you.

11 MS. EFFINGER: Thank you, sir.

12 The next person I have on here is Cody Muller.

13 MR. MULLER: My name is Cody
 14 Muller. I live a half mile north of where this
 15 turnaround would be, north of 18, and I am pretty
 16 sure most of you know where it is. It is one of
 17 the highest hills in the county and I guarantee
 18 you there will be just as many wrecks. There are
 19 doublewides southbound through there all the
 20 time, right? All the time, running 75 miles an
 21 hour. It is more dangerous to pull out of my
 22 damn driveway than that intersection because you
 23 can't see to the north. I didn't design it, but
 24 whatever.

25 But, again, too, I agree with Brian that

PC-4

8

1 it is not long enough. When them cats are up
 2 there, they are turning left and making that
 3 U-turn, how hard is it to see that guy coming
 4 over. Southbound -- over that hill southbound,
 5 and we know who is driving nowadays, nobody pays
 6 attention.

7 Now, every Friday afternoon or all day
 8 Friday all spring and all summer and all fall, it
 9 is a parade going north -- or going southbound
 10 from Chicago to the Badlands, right? They are
 11 four or five wide, two wide, six deep, nothing
 12 but cars, right? And the same thing coming back
 13 on Sunday going northbound, right?

14 Now, for me looking at that, where I live
 15 it wouldn't affect me. I turn right, I come
 16 down, turn to get on 18, no big deal. But I
 17 don't think the numbers jive with the accidents
 18 that's going -- you think you are going to
 19 prevent. It is going to cause more because you
 20 are moving that thing up the hill where you have
 21 less visibility of people coming over that hill,
 22 and I know that for a fact by living here. So
 23 coming out of my driveway scares me more than my
 24 mom that's retired turning onto 18. That's my
 25 opinion.

PC-5

9

1 MS. EFFINGER: Thank you, sir.
 2 Pat Harvey?
 3 MS. HARVEY: I am Pat Harvey and I
 4 am not a farmer, I am a grandma. I am not here
 5 about that one, but I -- all your concerns make
 6 sense. My daughter works for Martin Mauer
 7 (phonetic) and she has to go to Michigan at least
 8 three or four times a year for her position,
 9 otherwise she works at home. And she has had to
 10 deal with these J-turns and she said they are
 11 ridiculous.
 12 I did email in February. You said we had
 13 to email by February 14, I emailed Fishback and
 14 Katelyn Taylor, Rod Iverson. I did get an email
 15 back from Katelyn saying I needed to email or
 16 call INDOT4u.com, so I called and gave my
 17 opinion. My concern is for out here at Benton
 18 Central, and I never heard anything back about
 19 that yet.
 20 But I went to school here, my kids went
 21 to school here, my grandkids go here, I have kids
 22 that teach over there and they are crossing and I
 23 hope they don't put a J-turn in out here. We
 24 have been trying to get a stoplight for years
 25 because there has been many accidents out there

10

1 and I think a J-turn will be ridiculous during
 2 sporting events, kids getting out of school.
 3 I mean I just want to put in my opinion
 4 about that because I hope they don't put it in.
 5 I hope we end up getting a light which to me
 6 would make a lot more sense and be a lot cheaper
 7 and safer.
 8 MS. EFFINGER: Ray Leach?
 9 MR. LEACH: I won't need this
 10 thing. How many of you people are from the
 11 State? Raise your hands. Raise your hands and
 12 keep them up so we can see who you are. Really
 13 proud of that, aren't you? Let me tell you
 14 something, out here on the board you have a
 15 length of a bus, but you didn't put down the
 16 length of a semi trailer or tractor.
 17 Now, if I am not mistaken, the longest
 18 semi trailer we have got is 54 feet. Some of our
 19 farm equipment is even longer than that. Farm
 20 equipment has been going across that road for
 21 many, many years. Now, when I say many years, I
 22 have lived on that road for over a hundred years.
 23 Not a hundred years, 81 years. A lot of these
 24 people here have been there longer than that, but
 25 we're still using it.

PC-6

11

1 At Route 16 and 55 the State put up a
 2 flashing sign. At State Road, I believe they
 3 told me, 14 and 55, they put up a flashing sign.
 4 But they never put up a flashing sign at 41 and
 5 18. At 24 and 52 and 41, they got flashing
 6 signs, stop signs, but they never put any on 18.
 7 Now, taking a look at the age of you
 8 people from the State, you haven't used an
 9 intersection like that in your life. We have.
 10 The semi drivers have, tanker trucks have, milk
 11 trucks have, farm equipments have, our local
 12 people have. We know what's going on there.
 13 It is not that it's dangerous, it is
 14 because the State didn't put up any freakin'
 15 lights years and years ago. They didn't put up
 16 signs like we have got down in Indianapolis to
 17 slow traffic or cross traffic. It is just
 18 sitting out there in the middle of the county.
 19 So when you guys don't have anything to
 20 do you said, there is an outfit we can work with.
 21 I would imagine the contractors like all of you.
 22 Now, here is the thing, when we have bad weather
 23 conditions, and I live at the junction of 41 and
 24 18, I have seen it so damn foggy you could not
 25 see 30 or 40 feet away. I have seen snow storms,

12

1 white-outs that you can't see.
 2 If you take a look at that intersection,
 3 the road coming from the north and the road
 4 coming from the south comes right down 41 and 18.
 5 The traffic coming down those hills gains speed
 6 whether it is cars, trucks, whatever. The same
 7 way from the south. But there is no flashing
 8 light. It is just wide open prairie.
 9 The design of that road when you put 41
 10 in, and I still can't believe what they done. On
 11 41 and 18, you put a curve at the junction of 18
 12 and 41. That was really smart. You have got a
 13 bridge out there right now that's starting to
 14 sink because somebody cut all the pilings out of
 15 the old bridge. Really smart.
 16 What worries me is now you have got
 17 another smart idea with this outfit, what you
 18 guys call intersection improvements. Well, the
 19 local people could have more improvement than
 20 what the hell you have put up. It is really sad.
 21 Really, really sad. You can't afford a little
 22 bit of electricity, yet you want to put up poles
 23 with a lot of electricity around that.
 24 This is road improvement. I would
 25 imagine there is not one of you that want to take

<p style="text-align: right;">13</p> <p>1 responsibility for any deaths created by this 2 road improvement. And as I look at you, none of 3 you are very damn old. I hauled grain on that 4 road when I was 12 years old. No problem. Single 5 lane, 65 miles an hour. Now we have got a dual 6 lane and we can only go 60. Something wrong with 7 that. Really, really bad wrong. You get on 65, 8 there is no speed limit. Get on there one time 9 and travel 60 miles an hour. 10 As far as I am concerned, you are just 11 putting my family in harm's way. I would like to 12 thank you if you didn't, but I can't do it. I 13 have got a little bit more common sense and I 14 know what the traffic is like. I have lived here 15 all my life. Not in this location, just down the 16 road, that's where my father farmed. And it is 17 sad, really sad, that you guys come up with an 18 idea and rubber stamp it, have a meeting like 19 this. 20 And I will tell you what, I worked for a 21 company years ago. If they had a meeting like 22 this they would fire the person that started the 23 meeting for the very simple reason because the 24 harmonics in the building, the cement floor. 25 Whenever we had a meeting, it was a meeting where</p>	<p style="text-align: right;">15</p> <p>1 getting out, I just can't imagine a J-turn and 2 trying to finagle a J-turn with all that traffic. 3 So that's all I am going to say. 4 MS. EFFINGER: Thank you. All 5 right. Anyone else? Okay. Well, that will 6 conclude our formal portion of the presentation 7 this evening. 8 (End of public comments.) 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p>
<p style="text-align: right;">14</p> <p>1 everybody could hear. You didn't need a 2 microphone. 3 I don't think I should say anything more 4 because I have got nothing but disgust with what 5 the State has been doing. It is very, very, very 6 bad. I hope you guys all enjoy your pay. 7 (Applause.) 8 MS. EFFINGER: That was the last 9 person that we had signed up to speak. Is there 10 anyone else who would like to have an opportunity 11 to speak now? 12 MS. EFFINGER: Go ahead and state 13 your name. 14 MS. HARVEY: Pat Harvey again. I 15 didn't bring up the weather and the grain trucks 16 because out here there are a lot of semis that go 17 by and I can't imagine trying to turn a semi in a 18 J-turn when there is all kinds of traffic. I 19 seriously can't. And then, you know, make sure 20 your load doesn't spill over. 21 I used to work for a grain elevator and I 22 worked for ADM for five years in the 80s, so I am 23 old, too. But I was just thinking the weather 24 out there when it is snowing and icy sand slick 25 in Benton County in the winter and games are</p>	<p style="text-align: right;">16</p> <p>1 CERTIFICATE 2 STATE OF INDIANA) 3) Ss: 4 COUNTY OF BOONE) 5 6 I, Heather S. Orbaugh, the undersigned Court 7 Reporter and Notary Public residing and 8 maintaining offices in the City of Zionsville, 9 Boone County, Indiana, do hereby certify: 10 11 That I reported to the best of my ability in 12 machine shorthand all of the words spoken by all 13 parties in attendance during the course of the 14 ensuing proceedings, including objections, if 15 any, made by all counsel present; 16 17 That I later reduced my shorthand notes into 18 the foregoing typewritten transcript form, which 19 typewritten transcript is a true record to the 20 best of my ability of the testimony given by the 21 witness as stated above; 22 23 24 25</p>

PC-7

<p>A</p> <p>ability 16:7,12 access 6:17 accidents 8:17 9:25 address 5:25 ADM 14:22 affect 8:15 afford 12:21 afternoon 8:7 age 11:7 ago 11:15 13:21 agree 7:25 ahead 14:12 ALLIANCE 1:23 apart 3:17 Applause 14:7 April 1:13 3:2 area 4:15 argument 5:1 attendance 16:8 attention 8:6 Auditorium 1:14</p>	<p>bring 14:15 building 13:24 bus 10:15</p> <p>C</p> <p>C 2:1 call 9:16 12:18 called 9:16 care 4:16,16 cars 6:6 8:12 12:6 cats 8:1 cause 8:19 CCR 1:17 cement 13:24 Central 1:13 9:18 CERTIFICA... 16:1 certify 16:6 cheaper 10:6 check 3:10 Chicago 8:10 choked 6:1 chosen 5:10 City 16:6 Cody 7:12,13 come 3:9 5:5 6:19 8:15 13:17 comes 12:4 coming 4:19,23 5:22,23 7:8,8 8:3,12,21,23 12:3,4,5 comment 3:10 comments 1:11 3:4 15:8 Commissioner 4:12 common 13:13 company 5:5 13:21 concern 9:17 concerned 13:10 concerns 9:5 conclude 15:6 concludes 3:7 conditions 11:23 contractors</p>	<p>11:21 correctly 3:15 cost 7:2 counsel 16:9 counties 5:11 county 1:2,16 4:12 5:10,12 6:15 7:17 11:18 14:25 16:3,6 course 16:8 Court 1:23 16:5 created 13:1 cross 6:3 7:6 11:17 crossing 2:4 9:22 currently 3:11 curve 12:11 cut 12:14</p> <p>D</p> <p>damn 7:22 11:24 13:3 dangerous 7:21 11:13 daughter 9:6 day 1:12 8:7 deal 8:16 9:10 deaths 13:1 deep 8:11 design 7:23 12:9 disgust 14:4 doing 14:5 double 3:20 doublewides 7:19 drive 3:18 4:13 driver 4:16 drivers 11:10 driveway 7:22 8:23 driving 3:23 8:5 dual 13:5</p> <p>E</p> <p>E 2:1,1 east 1:14 4:18 4:23 5:22 Effinger 2:3 3:6</p>	<p>4:2,6 5:14 7:11 9:1 10:8 14:8 14:12 15:4 electricity 12:22 12:23 elevator 14:21 eliminating 4:24 email 9:12,13,14 9:15 emailed 9:13 enforcement 6:14 engineering 5:4 engineers 4:11 English 6:12 enjoy 14:6 ensuing 16:9 equipment 10:19,20 equipments 11:11 evening 3:7 15:7 events 10:2 everybody 4:15 14:1</p> <p>F</p> <p>fact 6:1 8:22 fall 8:8 family 13:11 far 3:16,16 6:13 13:10 farm 10:19,19 11:11 farmed 13:16 farmer 5:18 9:4 father 13:16 February 9:12 9:13 feet 10:18 11:25 finagle 15:2 fire 13:22 first 3:12,13 5:19 Fishback 9:13 five 8:11 14:22 fix 6:23 flashing 11:2,3,4 11:5 12:7 flies 5:1</p>	<p>floor 13:24 foggy 6:20 11:24 foregoing 16:11 form 16:11 formal 15:6 former 4:12 four 8:11 9:8 four-lane 6:18 four-way 6:8 Fowler 4:24 freakin' 11:14 Friday 8:7,8 Friend 4:10,12</p> <p>G</p> <p>gains 12:5 games 14:25 getting 4:25 10:2,5 15:1 given 16:12 go 4:20,23 6:10 6:18,21,21 7:1 9:7,21 13:6 14:12,16 going 5:22 6:2,6 6:7,9,11,16,21 6:25,25 7:1,2,5 7:8,9 8:9,9,13 8:18,18,19 10:20 11:12 15:3 grain 5:18 13:3 14:15,21 grandkids 9:21 grandma 9:4 grass 3:23 guarantee 7:17 guy 6:8 8:3 guys 11:19 12:18 13:17 14:6</p>
<p>B</p> <p>back 8:12 9:15 9:18 bad 11:22 13:7 14:6 Badlands 8:10 BAKER 2:3 believe 11:2 12:10 Benton 1:2,13 5:10,12 6:15 9:17 14:25 best 16:7,12 better 5:3 big 8:16 bit 12:22 13:13 board 10:14 Boone 1:16 16:3 16:6 Boswell 6:10 BOX 1:23 Brian 3:13,14 3:14 7:25 bridge 12:13,15</p>				<p>half 7:14 hands 10:11,11 hard 8:3 harm's 13:11 harmonics 13:24 Harvey 9:2,3,3</p>

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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 (INDOT)

State Preservation and Local Initiated Projects FY 2024 - 2028

SPONSOR	CONTR ACT # / LEAD DES	STIP NAME	ROUTE	WORK TYPE	DISTRICT	MILES	FEDERAL CATEGORY	Total Cost of Project*	PROGRAM	PHASE	FEDERAL	MATCH	2024	2025	2026	2027	2028
Indiana Department of Transportation	42944 / 2000884	Init.	SR 71	HMA Overlay, Preventive Maintenance	Crawfordsville	7.03	STBG	\$7,903,272.00	Road Consulting	PE	\$800,000.00	\$200,000.00	\$1,000,000.00				
Performance Measure Impacted: Pavement Condition																	
Location: From SR 352 to SR 18 and bridges SR 18 1.13 mi W of SR 43, over Moots Creek, SR 18 0.79 mi W of US 231, over Vanatta Ditch, Bridge Deck Overlay																	
Comments: Include DES 2000389, 2000439, 2000533, 2000538, 2000884																	
Indiana Department of Transportation	43424 / 2001830	Init.	SR 71	HMA Overlay, Preventive Maintenance	Crawfordsville	10.537	STBG	\$5,842,000.00	Road Consulting	PE	\$720,000.00	\$180,000.00	\$900,000.00				
									Road Construction	CN	\$3,073,600.00	\$768,400.00	\$400,000.00	\$0.00	\$3,442,000.00		
									Road ROW	RW	\$160,000.00	\$40,000.00	\$200,000.00				
Performance Measure Impacted: Pavement Condition																	
Location: From SR 18 to US 24																	
Comments: Include DES 2001830																	
Indiana Department of Transportation	43453 / 2002000	Init.	SR 18	Bridge Replacement	Crawfordsville	0	STBG	\$2,159,000.00	Bridge Construction	CN	\$1,695,200.00	\$423,800.00	\$80,000.00	\$2,039,000.00			
Performance Measure Impacted: Bridge Condition																	
Location: 6.84 mi E of US 52, over Greenwood Ditch																	
Comments: Include DES 2002000																	
Indiana Department of Transportation	43688 / 2100059	A 19	US 41	Intersect. Improv. W/ Added Turn Lanes	Crawfordsville	.2	NHPP	\$1,399,418.00	Safety Construction	CN	\$727,200.00	\$181,800.00			\$909,000.00		
Performance Measure Impacted: Safety																	
Location: Intersect. Improv. W/ Added Turn Lanes, US 41 & SR 18																	
Comments: New Phase. Add CN \$909,000 FY2026																	
Indiana Department of Transportation	43688 / 2100059	A 20	US 41	Intersect. Improv. W/ Added Turn Lanes	Crawfordsville	.2	NHPP	\$1,402,018.00	Safety Consulting	PE	\$17,600.00	\$4,400.00		\$22,000.00			
Performance Measure Impacted: Safety																	
Location: Intersect. Improv. W/ Added Turn Lanes, US 41 & SR 18																	
Comments: Add FY25 PE \$22,000																	
Indiana Department of Transportation	43688 / 2100187	Init.	SR 55	HMA Overlay Minor Structural	Crawfordsville	1.38	STBG	\$4,805,000.00	Safety Construction	CN	\$727,200.00	\$181,800.00	\$73,000.00		\$836,000.00		
									Road Construction	CN	\$2,748,000.00	\$687,000.00		\$500,000.00	\$2,935,000.00		
									Safety ROW	RW	\$40,000.00	\$10,000.00		\$50,000.00			
									Road ROW	RW	\$320,000.00	\$80,000.00	\$200,000.00	\$200,000.00			

APPENDIX I

Additional Information

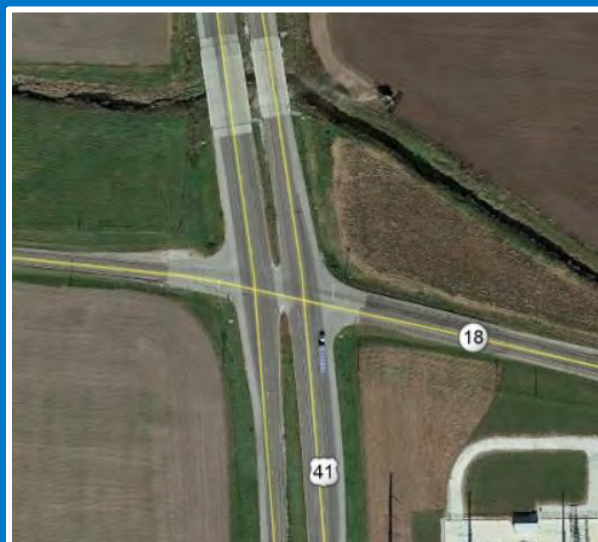
PARSONS

Abbreviated Engineering Assessment

US 41 and SR 18 Intersection

Crawfordsville District

Indiana Department of Transportation



Prepared for INDOT Crawfordsville District

October 2021



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LIST OF ABBREVIATIONS

- AADT – Average Annual Daily Traffic
- ADA – Americans with Disabilities Act
- CE – Categorical Exclusion
- EA – Environmental Assessment
- EB – Eastbound
- HCS – Highway Capacity Software
- HSM – Highway Safety Manual
- ICC – Index of Crash Cost
- ICF – Index Crash Frequency
- IDEM – Indiana Department of Environmental Management
- IDM – Indiana Design Manual
- IDNR – Indiana Department of Natural Resources
- INDOT – Indiana Department of Transportation
- HMA – Hot Mix Asphalt
- LOS – Level of Service
- MPH – Miles Per Hour
- MPPA – Minor Projects Programmatic Agreement
- MOT – Maintenance of Traffic
- MUTCD – Manual of Uniform Traffic Control Devices
- NCHRP – National Cooperative Highway Research Program
- NEPA – National Environmental Policy Act
- NB – Northbound
- RFI – Red Flag Investigation
- RoadHAT – Road Hazard Analysis Tool
- SB - Southbound
- SR – State Road
- SUE – Subsurface Utility Exploration
- USACE – United States Army Corps of Engineers
- WB – Westbound
- WQC – Water Quality Certification

SECTION 1: PROJECT OVERVIEW

1.1 PROJECT LOCATION

The US 41 and SR 18 Intersection Project is located approximately 7.0 miles north of SR 352 and 2.5 miles south of US 52 in township 25N, Range 8 W, Sections 7 and 18, and Range 9 W, Sections 12 and 13, in Parish Grove and Center Townships in Benton County, Indiana. The approximate location of the project has a latitude of 40°37'19" and a longitude of 87°22'51" within the subdistrict of West Lafayette of the INDOT Crawfordville District. The project limits are shown in Figure 1 below.

1.2 PURPOSE AND NEED STATEMENT

Within the project limits, the US 41 and SR 18 intersection is experiencing an above normal number of crashes and crash severity for an Unsignalized Rural State Intersection.

The purpose of this project is to increase public safety by reducing the number of crashes at this intersection and to reduce right angle crashes.



Figure 1: Project Area

SECTION 2: EXISTING CONDITIONS

2.1 HISTORY AND GEOMETRY

US 41 is a rural principal arterial and SR 18 is a major collector. US 41 is on the National Highway System and on the National Truck Network and serves heavy commercial traffic over long distances. SR 18 serves more localized, shorter distance trips. The US 41 and SR 18 intersection is classified as an Unsignalized Rural State Intersection. US 41 is a four-lane divided highway and is constructed with two 12-foot travel lanes with two 10-foot shoulders on the outside and four-foot median shoulders in each direction. SR 18 is a two-lane un-divided highway and is constructed with two 12-foot lanes with two 10-foot shoulders that narrow down to two feet within the project limits. The posted speed limit is 60 mph along US 41 and 55 mph along SR 18.

US 41 within the project limits was constructed in 1925 with concrete pavement and then later reconstructed and widened in 1969. In 2013, US 41 was overlaid with asphalt pavement. There are left and right turn lanes from US 41 onto SR 18. The intersection is also in the middle of two reverse curves on both US 41 and SR 18. The bridge over Mud Creek is approximately 250 feet north of the intersection. There is guardrail in the median leading up to the bridges in both directions and guardrail in the northeast corner of the intersection. There is also guardrail leading up to the bridges in the southbound direction on the outside shoulders and also northbound trailing guardrail that ends at the driveway. At the driveway north of the bridge, there is an existing median crossover.

2.2 EXISTING UTILITIES

Aerial electric and communication lines are present in the project area on both sides of US 41 and SR 18. A call ticket was created and is attached in Appendix 5.

2.2 EXISTING DRAINAGE

There are two culverts in the project limits; one is located under SR 18 east of US 41 and the second one is located under SR 18 west of US 41. Multiple median inlets are located in the US 41 grass median within the project limits. The medians inlets are draining east and west into the existing roadside ditches along US 41.

SECTION 3: TRAFFIC AND CRASH DATA

3.1 TRAFFIC DATA

The AADT per INDOT's Traffic Count Database System (TCDS) from 2020 is 3604 vehicles per day on US 41 and 915 vehicles per day on SR 18. The truck percentages are 48% for US 41 and 20% for SR 18.

3.2 CRASH DATA

There were 9 crashes at this intersection between 2018 and 2020 including one fatal crash. From the available information in the narratives of the crashes, 3 accidents involved incapacitating injuries (when either the driver or the passenger was transported to the hospital) and 4 crashes had property damage only.

The roadway performance was analyzed using RoadHAT. This Segment has an Index of Crash Frequency (ICF) of 1.60 and an Index of Crash Costs (ICC) of 1.66. The RoadHAT report and crash data are attached to Appendix 1.

The primary crash factors for all the recorded incidents are listed in Table 1 which shows the majority of crashes are more likely attributable to driver failure to yield right of way than road features.

Table 1: Primary cause of accidents

PRIMARY FACTOR	% OF ACCIDENTS CAUSED
SAME DIRECTION/SIDESWIPE	11%
RIGHT ANGLE	89%

SECTION 4: ALTERNATIVE ANALYSIS

The project team analyzed different alternatives in order to determine the optimized solution. Several alternatives were considered using a WB-67 as the design vehicle. A brief description of each alternative is below.

4.1 NO BUILD ALTERNATIVE

No-Build Alternative: Matches the Existing conditions with No Improvements

The no-build alternative would include no changes to either the existing geometry or the roadside features. This alternative will not reduce the number of crashes and will not meet the Project Purpose and Need.

4.2 LOW-COST ALTERNATIVE

Low-Cost Alternative: Install a Traffic Signal

Traffic signal warrants have not been checked by District Traffic. However, traffic counts are lower than the US 41 and SR 352 intersection where a traffic warrant analysis had been conducted and that intersection does not meet the criteria. Installing an unwarranted signal will cause excessive delay, higher crash rates and may result in disobedience of the traffic signal in this rural area. This alternative will not meet the Project Purpose and Need and therefore is discarded from consideration.

4.3 RECONSTRUCTION ALTERNATIVE

Reconstruction Alternative 1: Median U-Turn Intersection

The Median U-Turn (MUT) Intersection is also known as the Median U-Turn Crossover and sometimes referred to as a Michigan Left Turn. The MUT refers to any intersection replacing direct left turns at an intersection with indirect left turns using a U-turn movement in a wide median. The MUT intersection requires drivers on SR 18 to turn right onto the main road and then make a U-turn maneuver at a one-way median opening at least 400 feet after the intersection. The MUT intersection eliminates left turns from SR 18 onto US 41 and vice versa and thus reduces the number of conflict points at the main crossing intersection, resulting in improved safety at the intersection. Right turn lanes were incorporated in the design, but they are not required; these would separate the through vehicles from the turning vehicles. The addition of the right turning lanes are included in the cost estimate. This alternative would be un-signalized. The median U-turn was located 400 feet north of the existing bridge to avoid the guardrail leading up to the bridges in the southbound direction and also to avoid any potential widening on the bridges. The existing median crossover at the driveways will be closed off. US 41 and SR 18 will be milled and resurfaced after the completion of adding the median U-turns.

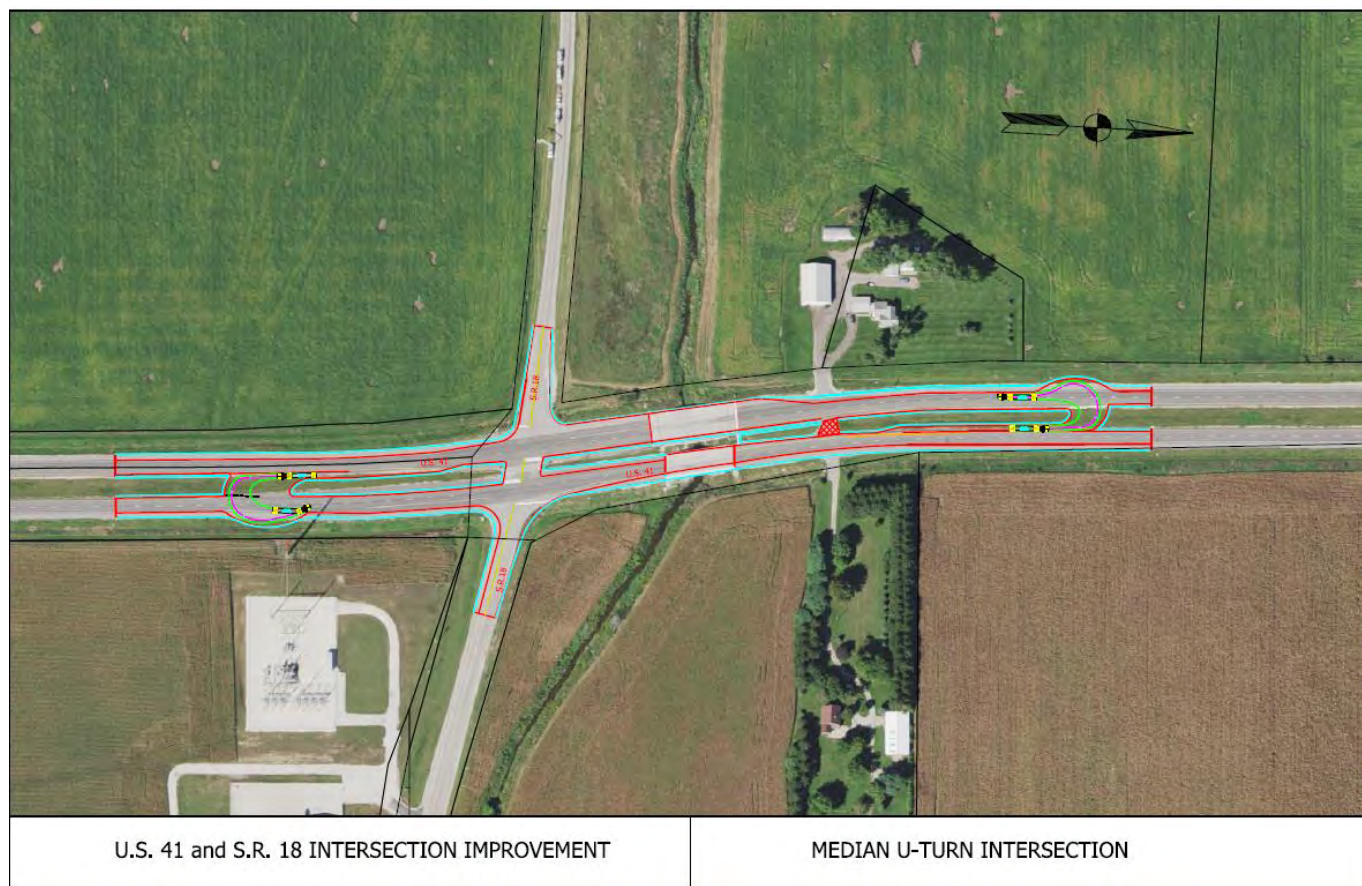


Figure 2: Median U-Turn Intersection

Reconstruction Alternative 2: Restricted Crossing U-Turn Intersection

The Restricted Crossing U-Turn (RCUT) Intersection is also known as a superstreet intersection, a J-turn intersection, and synchronized street intersection. The RCUT intersection differs from a conventional intersection because direct through movements from cross street approaches are not allowed. To accommodate through movements on SR 18, the RCUT intersection requires drivers to turn right from SR 18 onto US 41 and then make a U-turn maneuver at a one-way median opening at least 400 feet after the intersection. US 41 left turns onto SR 18 will still be allowed in the existing intersection area, separated by islands.

RCUT intersections can have either three or four legs. In the case of a four-legged RCUT intersection, there are two U-turn crossovers, and minor street left-turn and through movements are not allowed to be made directly at the main intersection. A stop-controlled RCUT intersection is used as a safety treatment at an isolated intersection on a four-lane divided arterial in a rural area. This alternative would be un-signalized and the turns (both the right and U-turns) would be stop controlled. The median U-turn was located 400 feet north of the existing bridge to avoid the guardrail leading up to the bridges in the southbound direction and also to avoid any potential widening on the bridges. The existing median crossover at the driveways will be closed off. US 41 and SR 18 will be milled and resurfaced after the completion of adding the median U-turns and center medians.

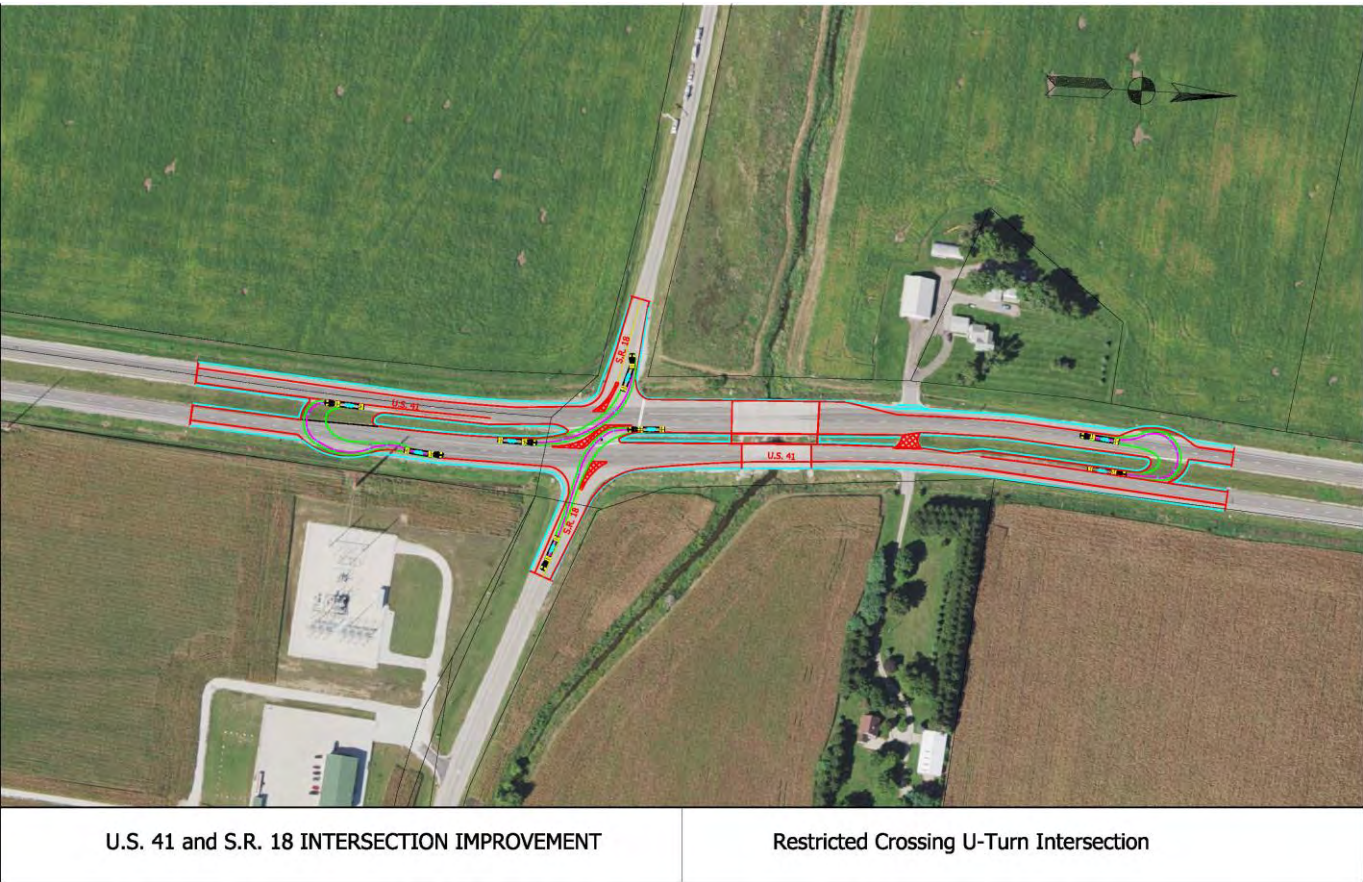


Figure 3: Restricted Crossing U-Turn Intersection

Reconstruction Alternative 3: Multi-Lane Roundabout

This alternative will consist of a multi-lane roundabout that will follow the design standards per NCHRP 672 and the IDM. Multi-lane roundabouts have at least one entry with two or more lanes. SR 18 will be widened to two entry lanes to allow more vehicles to enter the roundabout. The geometric design will include raised spitter islands, a truck apron, a non-traversable central island, and appropriate entry path deflection. Since US 41 and the east leg of SR 18 are high speed roadways, a series of curves will be designed leading up to the roundabout to reduce the speed of vehicles. However, in the southbound direction north of the roundabout, the deflection will need to avoid any impacts to the bridges.

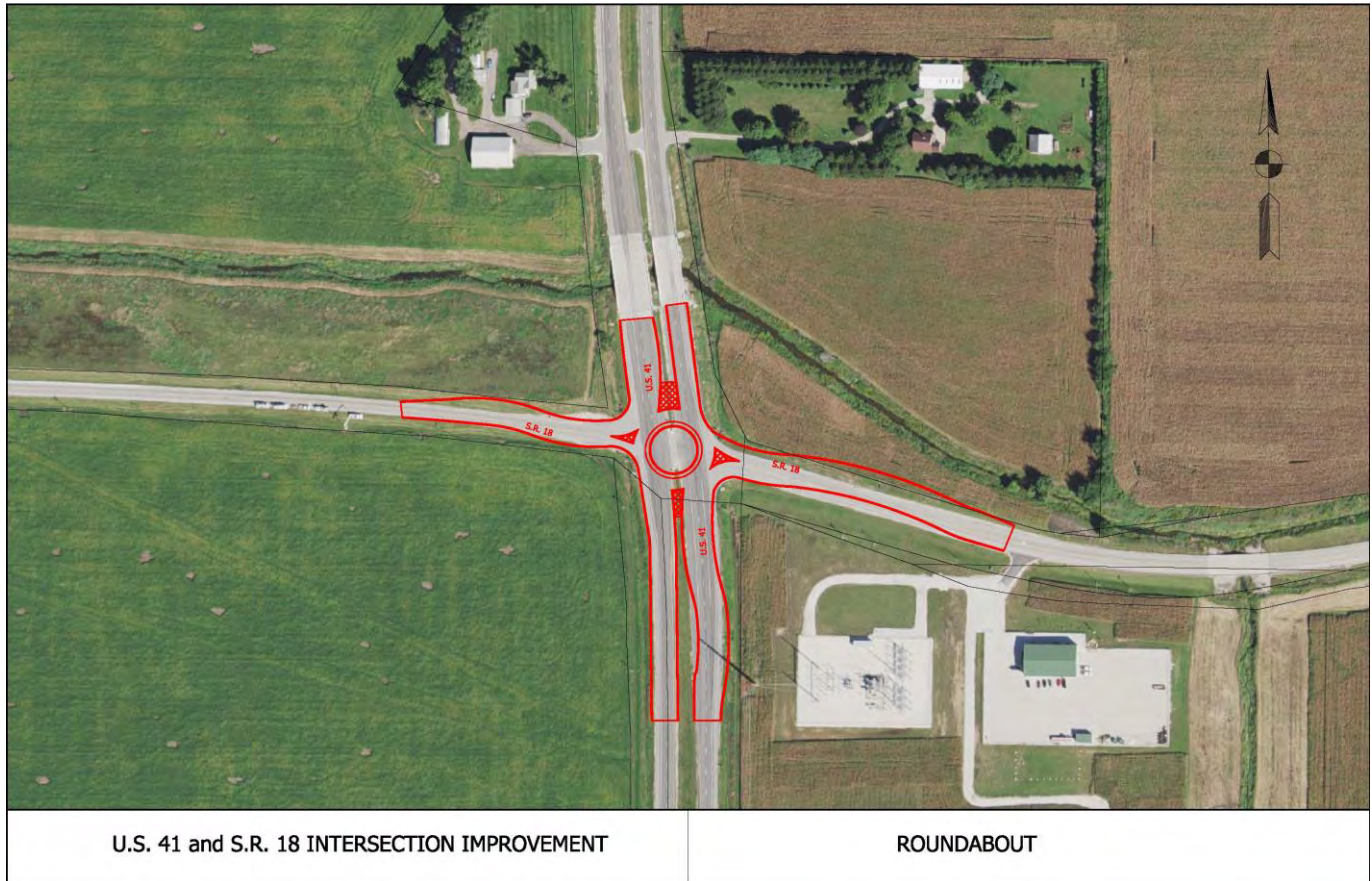


Figure 4: Multi-Lane Roundabout

4.4 MAINTENANCE OF TRAFFIC

The maintenance of traffic (MOT) for all reconstruction alternatives is to close one lane in each direction on US 41 while still maintaining one lane in each direction. For the median U-turn and restricted U-turn alternatives, the inside travel lanes will be closed in both directions in order to build the U-turns. For the restricted U-turns alternative, U-turns would be built first and then the main intersection will be closed in order to construct the new islands while the through movement on SR 18 can now use the U-turns. US 41 left turns can also use the U-turns during construction of the central islands. For the roundabout alternative, construction would require 2 phases. Traffic would be shifted onto one side by using median crossovers and half of the roundabout would be built and then switched to the other side to build the other half. This may require temporary widening and shoulder strengthening on one side of US 41 and assumes that permanent shoulders would be wider than the existing shoulders to help maintain traffic through the zone.

4.5 ENVIRONMENTAL

Impacts

A preliminary Red Flag Investigation was performed for the project area. Per the current scope of work, this project will likely fall under the Minor Projects Programmatic Agreement (MPPA). Mud Creek flows through the project area. Any areas that will be disturbed outside of pavement for drainage improvements will need to be investigated for water resources. No other resources are anticipated to be impacted by the proposed project.

The CE level will be dependent on the Section 106 investigations and final right-of-way impacts.

Permits Required

It is anticipated that there will be >1 acre of disturbance. Therefore, a Rule 5 permit is anticipated. If water resources are identified within any of the disturbed areas outside of pavement, a USACE Section 404 permit and IDEM Section 401 WQC will be required. Per the current scope of work, an IDNR Construction in a Floodway permit is not anticipated to be required.

4.6 UTILITY COORDINATION

Utility impacts are expected for the existing utilities within the project limits. Culverts under SR 18 would need to be extended due to the lane addition. Existing guardrail will need to be removed to allow for an auxiliary lane. Utility poles will need to be relocated due to pavement widening.

4.7 RIGHT OF WAY

Permanent right of way is required for the roundabout alternative. Right of Way Engineering and Title Research is required for any affected parcels.

4.8 COST ANALYSIS

The estimated total project costs for all reconstruction alternatives including preliminary engineering, survey, right of way, utility coordination, construction and construction services are shown in Table 2.

Table 2: Project Cost

TASK #	TASK	COST FOR RECONSTRUCTION ALTERNATIVES		
		ALTERNATIVE 1	ALTERNATIVE 2	ALTERNATIVE 3
1	Preliminary Engineering	\$53,000	\$59,000	\$120,000
2	Survey	\$40,000	\$44,000	\$90,000
3	Right of Way	\$0	\$0	\$30,000
4	Utility Coordination	\$65,500	\$73,180	\$147,200
5	Construction (20% Contingency)	\$872,125	\$946,400	\$2,607,610
6	Construction Support Services	\$53,000	\$59,000	\$120,000
TOTAL		\$1,083,625	\$1,181,580	\$3,114,810

The quantities and assumptions for each pay item is included with Appendix 2.

SECTION 5: CONCLUSION

5.1 ANALYSIS

Each reconstruction alternative was analyzed to determine how effectively it met the Project Purpose and Need.

The Multi-Lane Roundabout is not well suited to very high truck volumes combined with higher speeds on US 41 compared to the low volumes of traffic on SR 18. The trucks traveling on US 41 would be forced to slow down and navigate a roundabout on a rural US highway with very little traffic on the side roads. It is anticipated that this alternative will receive political opposition from local stakeholders, the public and also truck drivers who drive this road regularly. Maintenance of traffic is more difficult for the roundabout and right of way is required. Since the roundabout has a larger footprint at the intersection, more drainage analysis is required and more grading is expected. The roundabout has significantly higher construction costs compared to the other reconstruction alternatives. For these reasons, the Multi-Lane Roundabout is discounted from further consideration.

The RCUT intersection meets the purpose and need and is a little safer than the MUT intersection. One major disadvantage of the RCUT intersection is that it prevents traffic on SR 18 from traveling straight through the intersection at US 41. RCUT intersection have 14 conflict points compared to 32 at a conventional intersection. Eliminating every through movement on SR 18 at US 41 does add an extra level of safety. It is anticipated that the local stakeholders and traveling public will be opposed to the RCUT intersection since through movements are not allowed.

The MUT meets the purpose and need but does not close off the US 41 median to through traffic on SR 18 which will do little to reduce the number of crashes because of non-compliance and/or confusion. MUT intersection have 16 conflict points compared to 32 at conventional intersection without including the non-compliance left turn movements. This intersection will experience a reduction in crashes by using signs to require SR 18 traffic turning left onto US 41 to turn right and then make a U-turn. However, an MUT intersection has no physical restriction to stop traffic from turning left at the intersection so the presence of law enforcement may be encouraged for a longer duration upon opening the new intersection.

Per FHWA, enforcement needs at RCUT intersections may be higher in the short term but those needs are anticipated to drop in the long term. Upon opening a new MUT intersection in Michigan, MDOT typically allocates extra enforcement resources during the first few weeks of operation. Such an enforcement program is also desirable for RCUT intersections to help confused motorists avoid wrong-way movements through crossovers. Enforcement during the periods after the RCUT intersections are initially opened to traffic help drivers become familiar and help reduce unintentional illegal maneuvers. After drivers form new habits, the need for extra enforcement is likely to subside, and normal vigilance in enforcing traffic laws at RCUT intersections should suffice.

Although the MUT and RCUT have similar, smaller footprints than the roundabout which minimizes impacts to existing drainage patterns and even though MOT is similar for both, Reconstruction alternative 1 is less expensive than alternative 2. The major difference between the MUT and the RCUT intersections in this scenario is that in the RCUT, there is an inability for SR 18 to make an illegal through or left turn movement. Once the central island is built in the RCUT, through and left turning traffic on SR 18 will no longer be able to go through the intersection, which can reduce the amount and severity of the crashes. The traffic in the RCUT will be forced to make the right turn onto US 41 and then a U-turn, which allows for that traffic to only have to cross one direction of traffic at a time.

5.2 RECOMMENDED ALTERNATIVE

After considering the reconstruction alternatives, even though the cost of the MUT intersection is smaller, it has been determined that the Restricted Crossing U-Turn Intersection (Reconstruction Alternative 2) is the recommended alternative for how effectively it meets the Project Purpose and Need and not that much more in cost.



This document was prepared by:


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 APPROVE / DISAPPROVE

PARSONS

Appendix 1 – RoadHAT Report

Appendices 2-5 omitted to avoid duplication.

Appendix 2 – Cost Estimate

Appendix 3 – Draft Mini-Scopes

Appendix 4 – Red Flag Investigation

Appendix 5 – 811 Utility Ticket

Appendix 1: RoadHat Report

Abbreviated Engineering Assessment

Settings: Indiana state settings

Version: Version 4.1

Location

US 41 and SR 18

GIS

Post

Analyst

Almani

Date

12/15/2021

INPUT

Road Facility Type

Unsignalized Rural State Intersection

Busiest Road AADT (veh/day)

3075

Crossing Road AADT (veh/day)

663

T Intersection Indicator (1 if present, 0 otherwise)

0

First Year with Crash Data (yyyy)

2018

Last Year with Crash Data (yyyy)

2020

Number of Crashes (crash/period)

Fatal and Incapacitating Injury Crashes

4

Non-Incapacitating and Possible Injury Crashes

1

Property Damage Only Crashes

4

Route or Road Type

Unsignalized Rural State Intersection

Average Crash Costs (\$)

Fatal and Incapacitating Injury Crashes

2335800

Non-Incapacitating and Possible Injury Crashes

389500

Property Damage Only Crashes

32200

Crash Cost Year (yyyy)

2017

OUTPUT

Expected Crash Frequency (crash/year)

Fatal and Incapacitating Injury Crashes

0.165

Non-Incapacitating and Possible Injury Crashes

0.07

Property Damage Only Crashes

0.72

All Crashes

0.96

Index of Crash Frequency

1.60

Index of Crash Cost

1.66

Settings: Indiana state settings

Version: Version 4.1

Location

US 41 and SR 18

GIS

Post

Analyst

Almani

Date

12/15/2021

Comments:

MASTER RECORD	COLLISION DATE	COLLISION DAY	COLLISION TIME	LIGHTNING	SURFACE	WEATHER	UPDATED NARRATIVE	MANNER OF COLLISION	PRIMARY FACTOR	V1	V2	INCAPACITATING	NON- INCAPACITATING	PROPERTY DAMAGE ONLY	TOTAL INJURED	FATALITY
903085777	01/19/2018	FRIDAY	01:42	Daylight	Dry	Clear	V1 was headed west on SR 18 and when crossing the intersection at US 41, V1 failed to yield when crossing. V1 was struck on the passenger side by V2	RIGHT ANGLE	FAILURE TO YIELD RIGHT OF WAY	West	South				1	1
903212718	09/01/2018	SATURDAY	01:17	Daylight	Dry	Clear	V1 was heading west on SR 18. V1 attempted to cross US 41. V1 proceeded through the intersection and hit V2	RIGHT ANGLE	FAILURE TO YIELD RIGHT OF WAY	West	South	1			1	
903221325	09/16/2018	SUNDAY	05:44	Daylight	Dry	Clear	V1 was heading south US 41 when V2 pulled front of V1. V1 tried to avoid the collision but it was too late	RIGHT ANGLE	FAILURE TO YIELD RIGHT OF WAY	West	South			1		
903280971	12/14/2018	FRIDAY	11:07	Dark (Not Lighted)	Wet	Fog/Smoke/Smog	V1 was heading north on US 41 when V2 pulled front of V1. V2 was crossing US 41 thinking that V1 is far enough to cross	RIGHT ANGLE	FAILURE TO YIELD RIGHT OF WAY	North	West	1			1	
903311863	01/31/2019	THURSDAY	08:46	Dark (Not Lighted)	Snow/Slush	Blowing Sand/Soil/Snow	V1 was heading north on US 41 and tried to pass V2. As V1 was trying to pass, V1 sideswiped V2 then crashed through the guardrail onto a field	Same Direction Sideswipe	SPEED TOO FAST FOR WEATHER CONDITION	North	North			1		
903345138	03/30/2019	SATURDAY	01:25	Daylight	Wet	Rain	V1 was heading westbound on Dr 18 when he failed to stop at the stop sign at US 41. V1 travelled across US 41 and into the southbound lane striking V2	RIGHT ANGLE	DISREGARD SIGNAL/REG SIGN	West	South			1		
903397264	06/24/2019	MONDAY	03:08	Daylight	Dry	Cloudy	V1 was traveling westbound on SR 18 and failed to yield to V2 that was traveling southbound on US 41	RIGHT ANGLE	FAILURE TO YIELD RIGHT OF WAY	West	South			1		
903484424	11/11/2019	MONDAY	04:22	Daylight	Snow/Slush	Blowing Sand/Soil/Snow	V1 was facing east on SR 18 and at a complete stop. V1 tried to cross but couldn't make it before crashing with V2	RIGHT ANGLE	FAILURE TO YIELD RIGHT OF WAY	East	South		1		1	
903487246	11/12/2019	TUESDAY	04:25	Daylight	Dry	Clear	V1 was heading west on Sr 18 when it crossed US 41 and collided into V2. V1 did not see V2	RIGHT ANGLE	FAILURE TO YIELD RIGHT OF WAY	West	South	1			1	

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

ProjectNumber	SubProjectCode	County	Property
1800027	1800027	Benton	Fowler Park and Community Swimming Pool
1800535	1800535	Benton	Fowler Park and Community Swimming Pool
1800569	1800569	Benton	Fowler Park and Community Swimming Pool

*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.