FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION LEVEL 1 FORM

GENERAL PROJECT INFORMATION

Road No./County:	SR 9 and CR 600 N Intersection, Madison County
Designation Number(s):	1900152
Project Description/Termini:	SR 9 and CR 600 N Intersection Improvements with Added Turn Lane

[X] **CE Level 1 documentation for exempted projects**

[ ] **Additional Information to CE Level 1**

Approval:

INDOT DE/ESD Signature and Date

Release for Public Involvement: REB 6-26-2023

INDOT DE/ESD Initials and Date

Certification of Public involvement:

INDOT Consultant Services Signature and Date

INDOT DE/ESD Reviewer:

Signature and Date

CE Preparer: Wes Butch, Fishbeck

Name and Organization

GENERAL PROJECT INFORMATION, DESCRIPTION, AND DESIGN INFORMATION	
Purpose and Need:	**Need**: The need for this project stems from the elevated number of angle crashes and high-speed rear end crashes occurring at the intersection. These crashes indicate the existing traffic signal is not safely controlling traffic at this intersection. A total of 24 crashes occurred at the intersection during the six-year study period (2017-2022), the majority being rear-end or right-angle crashes. According to the Abbreviated Engineering Assessment report (Appendix J-8), the RoadHAT crash analysis resulted in an Index of Crash Frequency of 1.20 and an Index of Crash Cost of 1.49. These values indicate the number and severity of crashes are higher than expected for this type of intersection. The Index of Crash Frequency measures the difference between expected and reported number of crashes, and a value higher than 1.0 indicates a higher than expected frequency of crashes at that location. The Index of Crash Cost measures the difference between expected and reported crash costs, and a value higher than 1.0 indicates a higher than expected severity of crashes at this location. Therefore, there is a need to improve safety at this intersection. **Purpose**: The purpose of this project is to improve the safety of the State Route (SR) 9 and Country Road (CR) 600 N intersection and reduce the number of crashes at this intersection by at least 30% with a safe and efficiently operated long-term solution.
Project Description (Preferred Alternative):	The INDOT and the Federal Highway Administration (FHWA) intend to proceed with the intersection improvement project at the intersection of SR 9 and CR 600 N, in Richland Township, Madison County, Indiana (Appendix B-2 and B-3). The project is located in the United States Geological Survey (USGS) North Anderson Topographic Quadrangle Map, in Section 18 of Richland Township 20 North, Range 8 East. This section of SR 9 is classified as a rural, Other Principal Arterial. SR 9 has four 11 to 12-foot lanes divided by a variable width grass median, with 4-foot inside shoulder width and 9-foot outside shoulders. CR 600 N is a rural local road which crosses SR 9. CR 600 N has two 12-foot lanes, with one lane in each direction, and no shoulders. The project area is rural and surrounded by a mix of commercial and residential properties. Southeast of the intersection is Funk Cemetery (also known as Smith Cemetery), located approximately 250 feet from the intersection along Alexandria Pike. The existing intersection is signalized operating as a two-phase signal. SR 9 has two through lanes in each direction and dedicated right and left turn lanes in each direction. CR 600 N has one shared left/through/right turn lane for each approach. Each leg of CR 600 N has a single approach with varying shoulder widths near the intersection. Both legs along CR 600 N flair out to an approximate width of 30 feet at the intersection, which is sufficient for right-turning traffic to use as a by-pass. Two existing median crossovers are located along SR 9, one approximately 1,000 feet south of the intersection and one approximately 1,025 feet north of the intersection. These crossovers are stop-controlled. The northbound crossover has a dedicated left turn lane with approximately 190 feet of storage and a taper length of approximately 100 feet. The southbound crossover does not have a dedicated turning lane. It should be noted that a conference center (6061 IN-9, Alexandria, IN 46001) is situated along the western side of SR 9 and has a driveway which aligns with the northern crossover. There is an elevated number of angle crashes and high-speed rear end crashes occurring at the intersection. A total of 24 crashes occurred at the intersection during the six-year study period (2017-2022), the majority being rear-end or right-angle

	crashes. No pedestrian or non-motorized facilities are provided at the intersection or within the surrounding area. A local road, Alexandria Pike, T-intersects along the southern edge of the eastern leg of CR 600 N approximately 90 feet east of the SR 9 intersection. Alexandria Pike is stop controlled with a single lane in each direction and generally parallels SR 9 south of the intersection. The Preferred Alternative will modify the existing intersection by providing enhanced signal visibility and modernized configuration. Lighting will be installed for enhanced nighttime visibility at each corner. A 'Prepare to Stop When Flashing' Flasher system is expected to be installed for enhanced warning to drivers approaching along SR 9. Geometric improvements include creating positive offset left turn lanes for enhanced sight distance of conflicting traffic. The modernization will replace all signal heads, poles, and wires at intersection, bringing it up to modern standards. The positive offset lanes will be constructed starting approximately 540 ft north and south of the intersection. Fiber cable will extend approximately 850 feet north and south of the intersection for the advance warning signals. Additionally, culvert extensions will be required at the intersection and modified turn lanes, and ditch grading will be required to ensure proper drainage. The proposed project will occur entirely within existing, previously disturbed right-of-way (ROW), no permanent or temporary ROW will be required for this project. Drainage work and structure improvements will be limited to the minimum area needed to accommodate the project and will not include improvements outside the project area. During construction, one lane in each direction on SR 9 will be closed while still maintaining one lane in each direction. Refer to the maintenance of traffic (MOT) section for more details. This project will not impact historic properties nor affect cultural resources. The project will impact roadside grass habitat with work in the median and also terrestrial habitat around the structures that are being replaced or rehabilitated. Further, due to the structure work and temporary and permanent light work it is possible (though unlikely) the project could impact protected bat species (the project has an effect finding of "Not Likely to Adversely Affect" for these species). However, disturbed areas will be reseeded, and avoidance and minimization measures will be implemented during construction for protected bat species. No significant impacts are expected. The project will permanently alter traffic patterns at this intersection. The Preferred Alternative will meet the purpose and need of the project by improving the overall safety of the intersection and reducing the number of crashes. This alternative may reduce severe crashes by 35% and more broadly reduce overall crash occurrence. This alternative will address the purpose and need by reducing left turn/right angle and rear end crashes at the intersection for SR 9 drivers. According to FHWA's "Safety Evaluation of Offset Improvements for Left-Turn Lanes," an intersection with left turn positive offset has a Crash Modification Factor (CMF) of 0.644 and a Crash Reduction Factor of 35.6. This indicates an approximate 35% decrease in overall crash occurrences at positive offset intersections as compared to traditional intersections. Providing additional warning signals and lighting is anticipated to further reduce crash potential at the intersection. The SR 9 and CR 600 N Intersection project termini, described above under Limits of Proposed Work, include the intersection, adjacent roadways, and culvert locations

	where work is proposed. These termini are logical because they accomplish the project purpose (improving intersection safety) and transition back into the existing roads consistent with relevant design standards. This project is a reasonable improvement even if no additional transportation improvements in the area are made, and it should not restrict consideration of alternatives for other reasonably foreseeable transportation improvements. Therefore, this project meets FHWA criteria for independent utility and logical termini (www.environment.fhwa.dot.gov/legislation/nepa/ guidance_project_termini.aspx). Initially the project was proposed as an RCI intersection, and environmental reports contained in the appendices may reference the RCI. However due to discussion during public outreach and addressing stakeholder's concerns, the project is now an intersection modernization project as discussed above in this section.
Other Alternatives Considered:	The *Abbreviated Engineering Assessment* (Appendix J-9 to J-15) contains information about the Reduced Conflict Intersection and No Build alternatives. A roundabout option was also considered. **Alternative 1: No Build** This alternative would leave the existing traffic signal and intersection in their current condition. This alternative would not change traffic patterns, it would incur no costs (other than normal operation and maintenance costs), and it would not result in negative impacts to the surrounding resources. However, the safety of motorists would not be addressed, and the intersection would continue to have an elevated number of high-speed rear end crashes and angle crashes. Since this alternative does not meet the purpose and need of the project, it was dismissed from further consideration. **Alternative 2: Roundabout Intersection** This alternative would convert the existing intersection into a roundabout. The roundabout would have two lanes on the SR 9 approaches and one lane on the CR 600 N approaches. The unbalanced volumes between SR 9 and CR 600 N make this location not ideal for a roundabout intersection. Typically, a roundabout would have more balanced volumes on all approaches. SR 9 has significantly more traffic than CR 600 N. Another consideration that makes this location not ideal is that a roundabout here would have a circle diameter of approximately 180-190 ft. However, right-of-way (ROW) at this location typically averages only 65-85 ft wide from the SR 9 centerline, which would require ROW purchase, for these reasons, this alternative was dismissed from further consideration. **Alternative 3: Reduced Conflict Intersection** This alternative would remove the existing signal in favor of the Reduced Conflict Intersection (RCI). This intersection greatly improves intersection safety by removing the traffic signal and reducing conflict points. The current traffic signal is not warranted when considering traffic volumes, congestion, and location of the intersection. This alternative addresses the purpose and need of the project and would reduce severe crashes by at least 54%. Public outreach found that local businesses and Madison County officials would prefer another alternative to allow for more direct turn movements for trucks. Due to the local preferences, this option was not chosen.
Funding Source(s):	[X] Federal [X] State [ ] Local [ ] Other

Project Sponsor:	INDOT		
Estimated Cost:	$1,282,410	**Project Length:**	0.50 miles

Public Involvement:	**No:**	**Yes: X**

Notice of Entry letters were mailed to potentially affected property owners near the project area on April 8, 2021 notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Entry letter is included in (Appendix G-2).

A Public Involvement Plan (PIP) was prepared for the project and is included in (Appendix G-3).

A Transportation Management Plan (TMP) Meeting was held March 10th, 2023 (Appendix G-6). The meeting was attended by representatives from INDOT, INDOT's design consultant, Madison County, local businesses, the Anderson MPO, and emergency service providers. The East-West thru movement of large grain trucks used by the local businesses and the preferences of county officials were discussed. Attendees voiced opposition to the proposed RCI alternative. Concerns about the safety at the nearby CR 500 intersection were discussed, and how if an RCI intersection were constructed at CR 600, local businesses and agencies would direct their crews away from the intersection which could increase number and severity of crashes at other nearby intersections. Low-cost alternatives were also discussed. Based on this information, INDOT decided that the RCI intersection would not be the preferred alternative. No other substantial controversy has been identified.

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

Right-of-Way:	**No: X**	**Yes:**

The existing ROW consists of the existing roadway limits, grassy median, and roadside ditches. The existing ROW averages 65-85 ft wide from the SR 9 centerline.

The project area is entirely located in existing ROW. No additional permanent or temporary right of way acquisition is anticipated

If the scope of work or permanent or temporary ROW amounts change, INDOT ESD and the INDOT District Environmental Section will be contacted immediately.

Maintenance of Traffic (MOT) During Construction:	**No: X**	**Yes:**

The maintenance of traffic (MOT) will consist of closing one lane in each direction along SR 9 while still maintaining one lane in each direction. The turn lanes will be constructed first. Shoulder closures will be utilized to install the additional lighting at the intersection and advance warning signals.

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: X**	**Yes:**

To ensure proper drainage in the project area, one existing culvert will have maintenance or replacement work performed on it, summarized in the table below. The locations of this culvert and nearby culverts can be found in Figures 3-1 and 3-2 of the Waters of the US Determination Report (Appendix F-21 to F-25).

A Waters of the US Determination Report was prepared by Hanson and concurred with by INDOT ESD February 25, 2022 (Appendix F-10). The study found no jurisdictional features within the study area. No impacts to water are expected.

Culvert ID	Description	Length	Proposed Work
Str. 001	15-inch (in.) reinforced concrete pipe (RCP)	35 ft	No work required.
CV 009-048-77.96	42-in. RCP	140 ft	No work required.
CV 009-048-78.01	12-in. RCP	70 ft	No work required.
CV 009-048-78.07	12-in. RCP	70 ft	Restore inlet in median
CV 009-048-78.19	36-in. RCP	65 ft	No work required.
CV 009-048-78.20	15-in. RCP	125 ft	No work required.
CV 009-048-78.26	6-in. PVP Pipe	60 ft	No work required.
Str. 002	15-in. RCP	60 ft	No work required.
CV 009-048-78.31	15-in. RCP	60 ft	No work required.

IDENTIFICATION AND EVALUATION OF IMPACTS

Early Coordination:

Agency	Dates Sent	Date Response Received	Appendix
FHWA	Feb 9, 2022	No response received	N/A
National Park Service	Feb 9, 2022	No response received	N/A
US Housing and Urban Development	Feb 9, 2022	No response received	N/A
Indiana Geological and Water Survey*	July 6, 2022	July 6, 2022	C-40 to C-42
IDNR Division of Fish and Wildlife	Feb 9, 2022	March 10, 2022	C-39
IDEM*	July 7, 2022	July 7, 2022	C-32 to C-38
IDEM Groundwater Section	Feb 9, 2022	N/A	N/A
INDOT Greenfield District	Feb 9, 2022	No response received	N/A
INDOT Office of Aviation	Nov 18, 2022	Nov 21, 2022	C-45
US Army Corps of Engineers	Feb 9, 2022	No response received	N/A
Madison County Council of Governments (MCCOG)	Feb 9, 2022	No response received	N/A

Madison County Engineer	Feb 9, 2022	March 3, 2022	C-43 to C-44
Madison County Emergency Management and Office of Homeland Security	Feb 9, 2022	No response received	N/A
Madison County Administrator	Feb 9, 2022	No response received	N/A
INDOT Utilities and Railroad Director	Feb 9, 2022	No response received	N/A

*Electronic coordination

A sample Early Coordination Letter is included in Appendix C-2.

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

Streams, Rivers, and Other Jurisdictional Features Impacted:	**No: X**	**Yes:**

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E-3 to E-4), there are two streams, rivers, watercourses, or other jurisdictional features within the 0.5 mile search radius. That number was confirmed by the site visit on November 16, 2021 by Fishbeck. A Waters of the US Determination Report was prepared by Hanson, and concurred with by INDOT ESD February 25, 2022 (Appendix F-10). The study found that no stream features exhibiting an ordinary high-water mark (OHWM), or a defined bed and bank were observed within the study area. No streams, rivers, watercourses, or other jurisdictional features are present within or adjacent to the project area. Therefore, no impacts are expected.

IDNR-DFW responded to early coordination on February 9, 2022 with standard recommendations to protect water resources, such as erosion control and revegetating disturbed areas (Appendix C-39). All applicable recommendations are included in the Environmental Commitments section of this CE document.

Open Water Feature(s):	**No: X**	**Yes:**

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E-3 to E-4), there is one lake within the 0.5 mile search radius. This lake is located 0.45 mile west of the project area, and no impact is expected. That number was confirmed by the site visit on November 16, 2021 by Fishbeck. A Waters of the US Determination Report was prepared by Hanson and concurred with by INDOT ESD February 25, 2022 (Appendix F-10). The study found no open water features within the study area. Storm water management facilities are subgrade and do not include open water features such as detention ponds. There are no open water features present within or adjacent to the project area. Therefore, no impacts are expected. Responses to early coordination did not contain recommendations applicable to open water features.

Wetlands:	**No: X**	**Yes:**

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E-3 to E-4), there are four wetlands within the 0.5 mile search radius. That number was confirmed by the site visit on November 16, 2021 by Fishbeck. No wetlands are present within or adjacent to the project area. Therefore, no impacts are expected. A Waters of the US Determination Report was prepared by Hanson and concurred with by INDOT ESD February 25, 2022 (Appendix F-10). The study found that no wetlands were identified within the study area. Responses to early coordination did not contain recommendations applicable to wetlands.

Terrestrial Habitat:	**No:**	**Yes: X**

Based on a desktop review, a site visit on November 16, 2021 by Fishbeck, and the aerial map of the project area (Appendix B-3), habitats within the project area consist of maintained grassy roadside. Dominant species include common species of grasses (Festuca arundinacea and Setaria pumila), clover (Trifolium repens), and broadleaf plantain (Plantago major). Most of the project area is paved.

0.05 acres of terrestrial habitat will be disturbed by this project. This area consists of grass shoulders and grass medians along SR near the intersection. There are no trees within the project area; therefore, no tree trimming or clearing will occur. Mitigation is not anticipated. Responses to early coordination did not contain applicable recommendations regarding terrestrial habitat, except standard recommendations to revegetate disturbed areas.

Protected Species:	**No:**	**Yes: X**

Based on a desktop review and the RFI report (Appendix E-5) approved by INDOT on June 14, 2022, the IDNR Madison County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated March 10, 2020 (Appendix C-39), the Natural Heritage Program's Database has been checked, and no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity. An INDOT 0.5-mile bat review occurred on August 17, 2021; there are no documented sites within a half 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-16 to C-29). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally endangered northern long-eared bat (NLEB) (*Myotis septentrionalis*). This project is within range of the candidate species the monarch butterfly (*Danaus plexippus*); however no impact is expected. No additional species were generated in the IPaC species list.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, the Federal Railroad Administration (FRA), the Federal Transit Administration (FTA), and USFWS.

Culvert/Structure inspections occurred on November 16, 2021, by Fishbeck, and no evidence for the presence of bats was reported. An effect determination key was completed on April 13, 2023, and based on the responses provided, the project is "Not Likely to Adversely Affect" the Indiana bat and/or the NLEB (Appendix C-5 to C-14). INDOT reviewed and verified the effect finding on May 17, 2023, and requested USFWS's review of the finding. No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. The Avoidance and Minimization Measures (AMMs) for this project are General AMM 1, Lighting AMM 1 and Lighting AMM 2. These AMMs are included as firm commitments in the *Environmental Commitments* section of this document.

Migratory birds have not been observed in the in the project area. Structures or trees that would provide adequate nesting areas for migratory birds are not present in the project area. Therefore, no impacts to migratory birds are expected.

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, the project is located outside the designated karst region of Indiana as outlined in the *Protection of Karst Features during Project Development and Construction.* According to the topographic map of the project area (Appendix B-3) and the RFI report (Appendix E-3 to E-4), there are no karst features identified within or adjacent to the project area. In their early coordination response dated July 6, 2022, the IGWS did not indicate that karst features exist in the project area (Appendix C-40 to C-42). Response from IGWS has been communicated with the designer on July 6, 2022. The coordination indicated there are petroleum exploration wells

within 0.5 miles of the project area. No impacts are expected.

According to the RFI report (Appendix E-4), one petroleum well was identified within a 0.5 mile search radius of the project area. This well is located 0.35 mile northeast of the project area. No impact is expected.

Drinking Water Resources:	**No: X**	**Yes:**

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

IDEM's Wellhead Proximity Determinator website (https://www.in.gov/idem/cleanwater/information-about/groundwater-monitoring-and-source-water-protection/wellhead-protection-program/source-water-proximity-determination-tool/) was accessed on June 28, 2022 by Fishbeck. This project is not located within a Wellhead Protection Area or Source Water Area.

The IDNR Water Well Record Database website (https://www.in.gov/dnr/water/3595.htm) was accessed on June 28, 2022 by Fishbeck. A Significant Withdraw Well is adjacent to the project area, located 0.08 miles from the intersection. This significant withdraw well is owned by Anderson Water Department, registration number 00863. This project is not anticipated to significantly affect drainage in the area; therefore, no impacts are expected. Should it be determined during the right-of-way phase that these wells will be affected, a cost to cure will likely be included in the appraisal to restore the wells.

Based on the RFI report approved by INDOT on June 14, 2022, this project is not located in an Urban Area Boundary (Appendix E-2). Therefore, no impacts are expected.

Based on a desktop review, the November 16, 2021 site visit by Fishbeck, the aerial map of the project area (Appendix B-3), and utility coordination, this project is not located where there is a public water system. Therefore, no impacts are expected.

Floodplains:	**No: X**	**Yes:**

The Indiana Department of Natural Resources Indiana Floodway Information Portal website (https://indnr.maps.arcgis.com/apps/webappviewer/index.html?id=05026dabc2e8461983e196d56a213c1e) was accessed on July 6, 2022 by Fishbeck. This project is located adjacent to a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F-2). However, the project area itself is not within the regulated floodplain. Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

The IDNR-DOW Floodplain dataset was reviewed for the study area during the preparation of the Waters of the US Determination Report (Appendix F-10). The study area is located in an area of minimal flood hazard. Based on StreamStats V 4.6.2 (2022) there is an upstream drainage area of 0.266 square mile at culvert CV 009-048-77.96. No encroachment on the floodplain is expected as part of this project.

Farmland:	**No: X**	**Yes:**

Based on a desktop review, a site visit on November 16, 2021 by Fishbeck, and the aerial map of the project area (Appendix B-3), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The requirements of the FPPA do not apply to this project; therefore, no impacts are expected.

Cultural Resources:	**No: X**	**Yes:**

Minor Projects PA Category A Projects
This project falls within the guidelines of Category A, Type 2, 3, 4, and 5 under the Minor Projects Programmatic Agreement (MPPA), (Appendix D-2 to D-3).

- A category A, Type 2 project includes: all work within interchanges and within medians of divided highways in previously disturbed soils.
- A category A, Type 3 project includes: replacement, repair, lining or extension of culverts and other drainage structures that do not exhibit wood, stone or brick structures or parts therein and are in previously disturbed soils.
- A category A, Type 4 project includes: roadway work associated with surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking within previously disturbed soils where replacement, repair, or installation of curbs, curb ramps or sidewalks will not be required.
- A category A, Type 5 project includes: repair, in-kind replacement of existing lighting, signals, signage, and other traffic control devices in previously disturbed soils.

The project is occurring in previously disturbed soils, so an archaeological survey is not required. No further consultation is required. This completes the Section 106 process, and the responsibilities of the FHWA under Section 106 have been fulfilled.

Section 4(f) and Section 6(f) Resources:	**No: X**	**Yes:**

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 National Register of Historic Places (NRHP) eligible or listed historic properties regardless of ownership. Lands subject to this law are considered Section 4(f) resources.

Based on a desktop review, the aerial map of the project area (Appendix B-3), a review of the NRHP database, and the RFI report (Appendix E), there are no potential Section 4(f) resources located within the 0.5 mile search radius. Therefore, no Section 4(f) impacts are anticipated.

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

A review of Section 6(f) properties on the INDOT ESD website revealed a total of 25 properties in Madison County (Appendix J-2). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

Air Quality:	**No: X**	**Yes:**

This project is part of the Madison County Council of Governments (FY) 2022-2026 TIP which has been directly incorporated into the FY 2022-2026 STIP (Appendix H-2).

This project is located in Madison County, which is currently a maintenance area for Ozone, under the 1997 Ozone 8-hour standard which was revoked in 2015 but is being evaluated for conformity due to the February 16, 2018, South Coast Air Quality Management District V. Environmental Protection Agency, Et. Al. Decision. The project's design concept and scope are accurately reflected in both the Madison County Council of Governments Transportation Plan (TP) and the Transportation Improvement Program (TIP) and both conform to the State Implementation Plan (SIP). Therefore, the conformity requirements of 40 CFR 93 have been met.

This project is of a type qualifying as a categorical exclusion (Group 1) under 23 CFR 771.117(c), or exempt under

the Clean Air Act conformity rule under 40 CFR 93.126, and as such, a Mobile Source Air Toxics analysis is not required.

Community Impacts:	**No: X**	**Yes:**

The project is consistent with local and regional land use.

Coordination with the Madison County Commissioners and County Engineer has been ongoing during preliminary planning and selection of the preferred alternative.

Regarding community events, no comments concerning potential impacts to fair, festivals, etc., have been received. The contractor will be required to coordinate with Richland Township local stakeholders regarding the MOT, which is included in the Environmental Commitments section. Therefore, impacts to community events are not expected.

This project does not affect properties/facilities listed in Madison County's 2020 Transition Plan Self-Assessment Update (https://mcapi.signaturewebcreations.com/wp-content/uploads/2021/08/madison-county-ada-transition-plan-update-2020.pdf). Therefore, the project complies with this transition plan.

Public Facilities and Services (e.g. schools, emergency services):	**No: X**	**Yes:**

Based on a desktop review, the aerial map of the project area (Appendix B-3), and the RFI report (Appendix E), there is one cemetery and three pipelines located within 0.5 mile of the project. One public use airport is located 2.9 miles northeast of the project area. Those numbers were confirmed by the site visit on November 16, 2021 by Fishbeck.

Funk Cemetery (also known as Smith Cemetery) is located approximately 150 ft southeast of the intersection of SR 9 and CR 600 N, along the local road Alexandria Pike. The cemetery is located greater than 100 ft from proposed work, therefore a Cemetery Development Plan is not required. There will be no change in access to this property, and access will be maintained during construction. Therefore, no impacts are expected. However, if the project extents should change, re-coordination with SAM and CRO may be needed.

No utilities are expected to be impacted by this project. From the RFI (Appendix E-3), two pipelines are in or near the project area. However, they are not expected to be affected by the project activities. There will be no disruption in services. Therefore, no impacts are expected.

There are no pedestrian and bicycle facilities located within 0.5 miles of the project area.

The proposed project should not impact property values or the local tax base. There should be no impacts to community cohesion, and the proposed construction should not impact community events. Therefore, no significant economic or community impacts are expected to develop as a result of the project.

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

Hazardous Materials and Regulated Substances:	**No: X**	**Yes:**

Based on a review of GIS and available public records, an RFI was concurred by INDOT Site Assessment and Management on June 14, 2022 (Appendix E-2 to E-10). No hazardous material site locations were found within 0.5 mile of the project area. No impacts are expected. Further investigation for hazardous material concerns or regulated substances is not required at this time.

Permits:	**No:**	**Yes: X**

Less than one acre of land will be disturbed; therefore, an IDEM Construction Stormwater General Permit (CSGP) is not anticipated. IDEM's electronic coordination discussed this permit requirement (Appendix C-32 to C-38).

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

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

ENVIRONMENTAL COMMITMENTS:

Firm:

1. Lighting AMM 1
Direct temporary lighting away from suitable habitat during the active season. (USFWS)

2. Lighting AMM 2
When installing new or replacing existing permanent lighting, use downward-facing, full cut-off lens lights (with same intensity or less for replacement lighting); or for those transportation agencies using the BUG system developed by the Illuminating Engineering Society, be as close to 0 for all tree ratings with a priority of "uplight" of 0 and "backlight" as low as practicable. (USFWS)

3. 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)

4. 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 ESD)

5. 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 Greenfield District)

6. 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)

7. Funk Cemetery (also known as Smith Cemetery) is located on Alexandria Pike approximately 150 ft southeast of the intersection of SR 9 and CR 600 N. No impact is expected; however, if the project extents should change, re-coordination with SAM and CRO may be needed. (INDOT SAM)

Table of Contents

Appendix A: INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

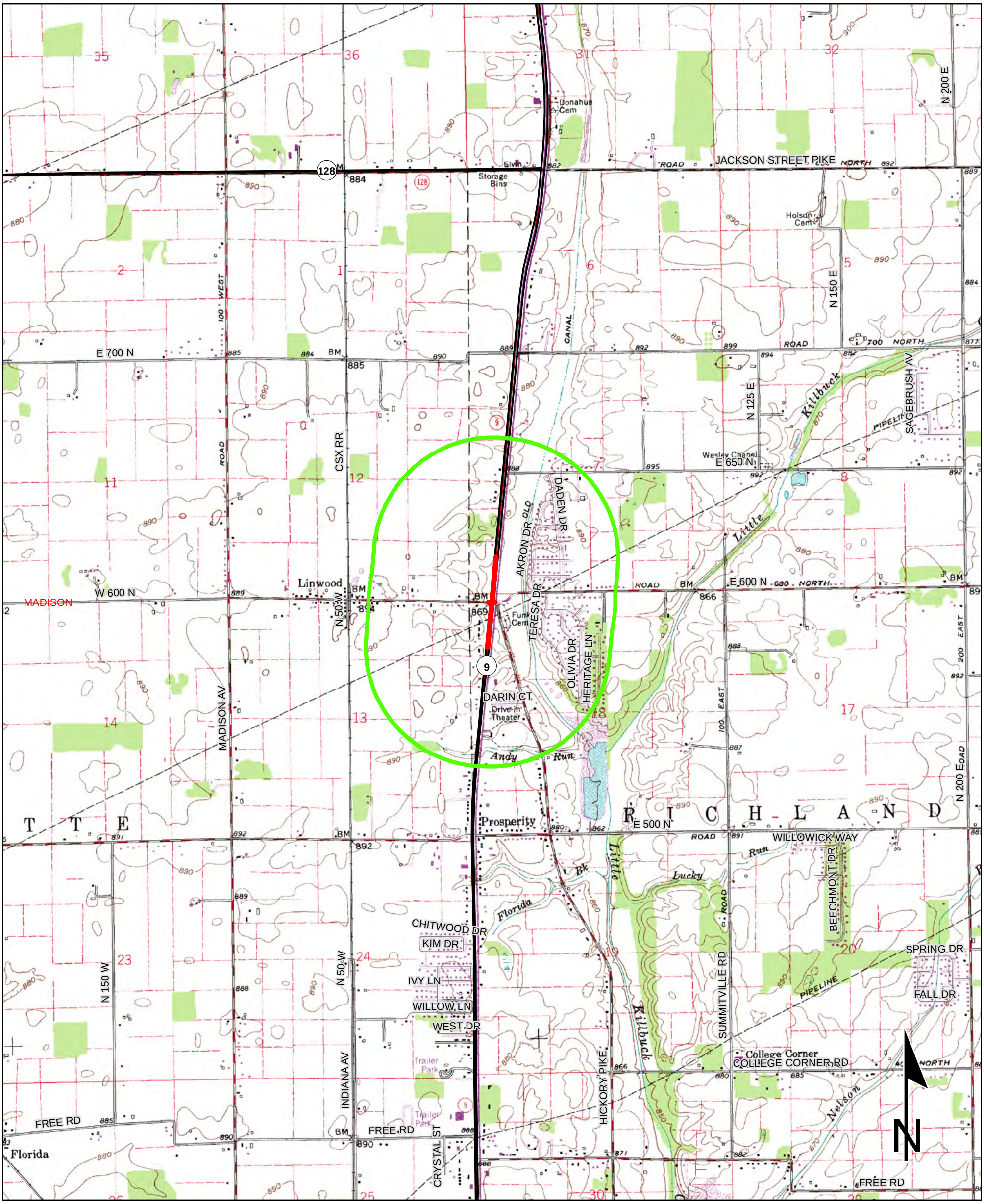
	PCE	Level 1	Level 2	Level 3	Level 4[1]
Section 106	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"	-	"Adverse Effect" Or Historic Bridge involvement[2]
Stream Impacts[3]	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	USACE Individual 404 Permit[4]
Wetland Impacts[3]	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
Right-of-way[5]	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
Relocations	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.

The CE is being processed as a Level 1 since the project requires public involvement per the *INDOT Project Development Public Involvement Procedures Manual.*

Appendix B: Graphics

Site Location
SR 9 at CR 600 N Rd Intersection
Des. No.1900152, Intersection Improvement with Added Turn Lanes
Madison County, Indiana



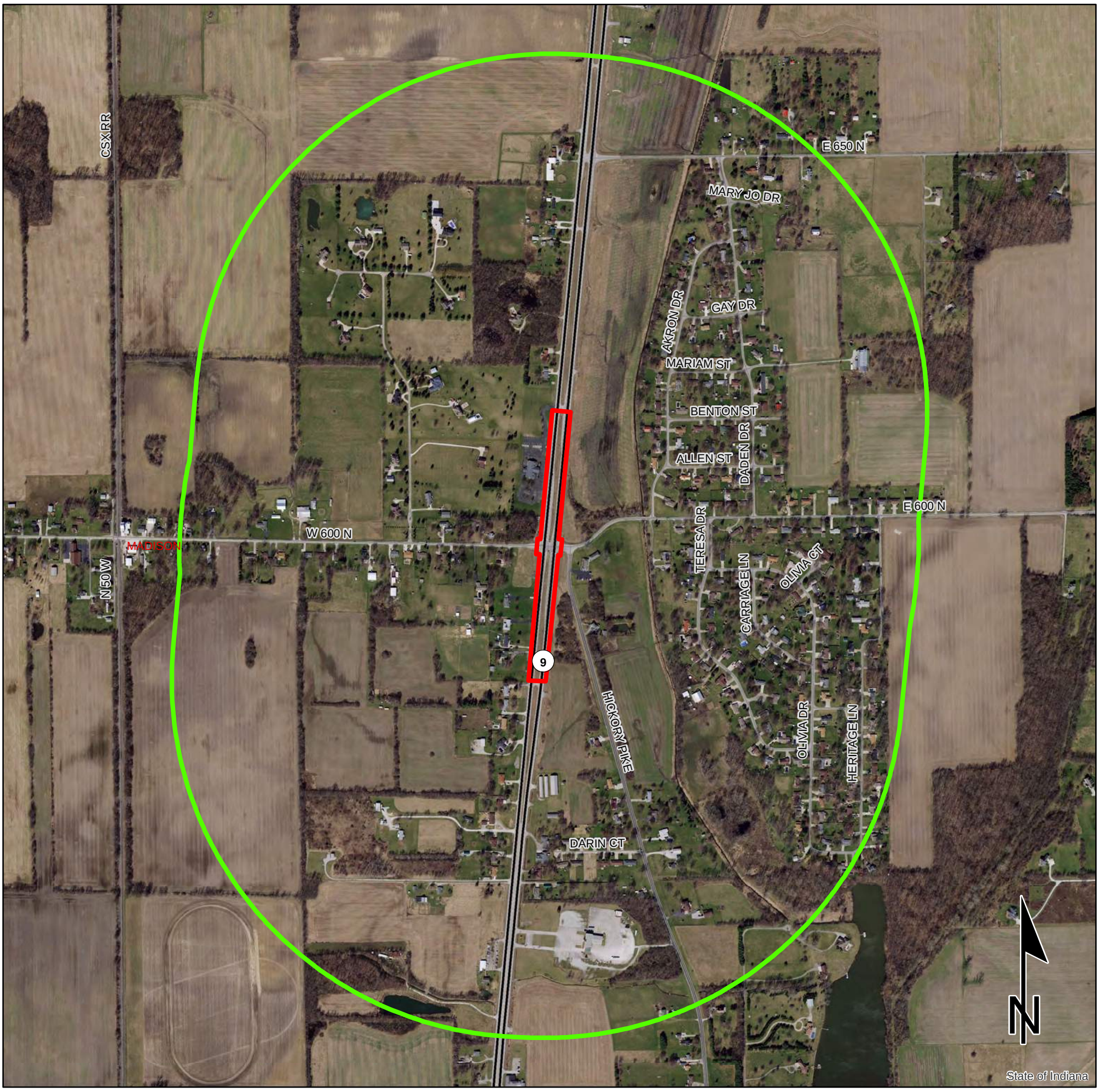
Sources:
Non Orthophotography Data - Obtained from the State of Indiana Geographical Information Office Library
Orthophotography - Obtained from Indiana Map Framework Data (www.indianamap.org)
Map Projection: UTM Zone 16 N **Map Datum:** NAD83

0.5 0.25 0 0.5 Miles

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

ANDERSON NORTH QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Aerial Map
SR 9 at CR 600 N Rd Intersection
Des. No.1900152, Intersection Improvement with Added Turn Lanes
Madison County, Indiana



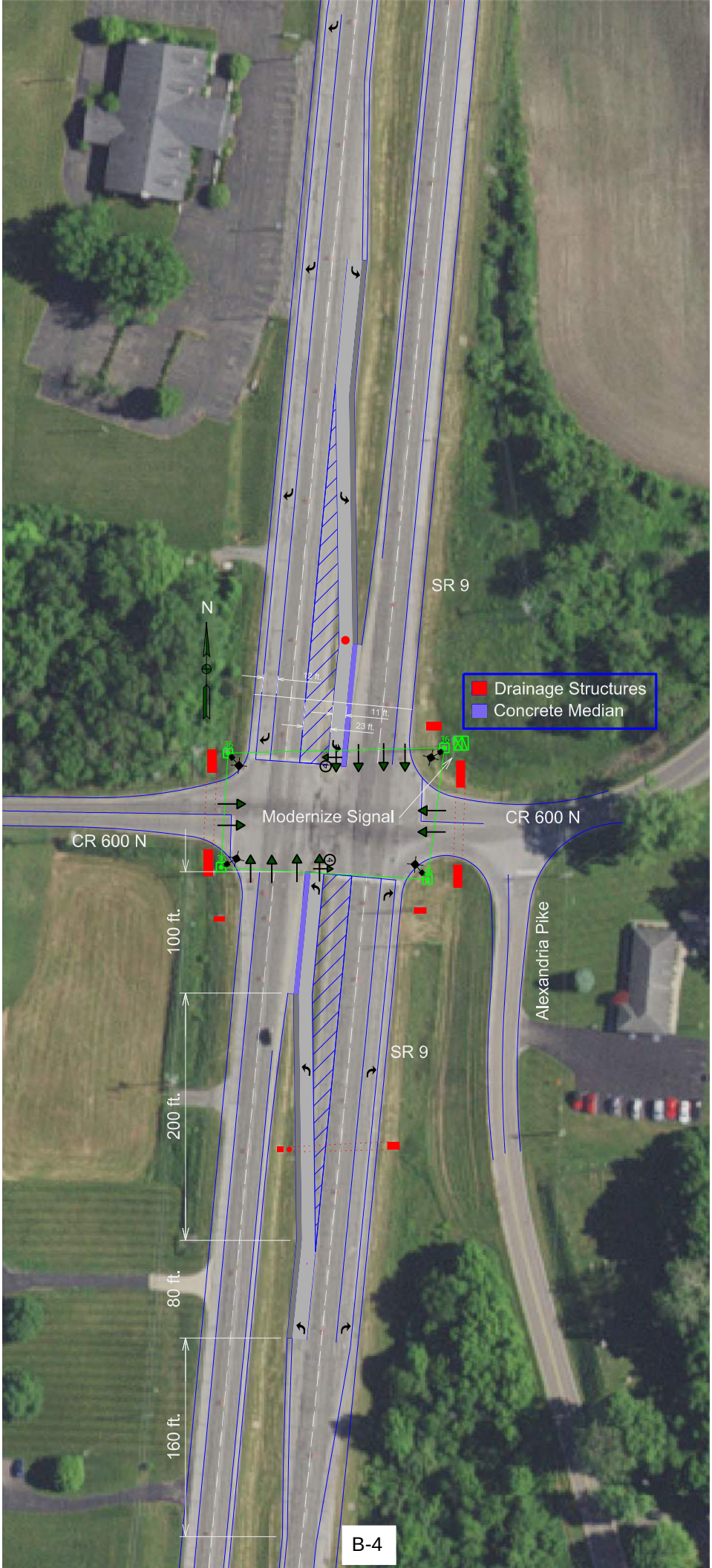
Project Area

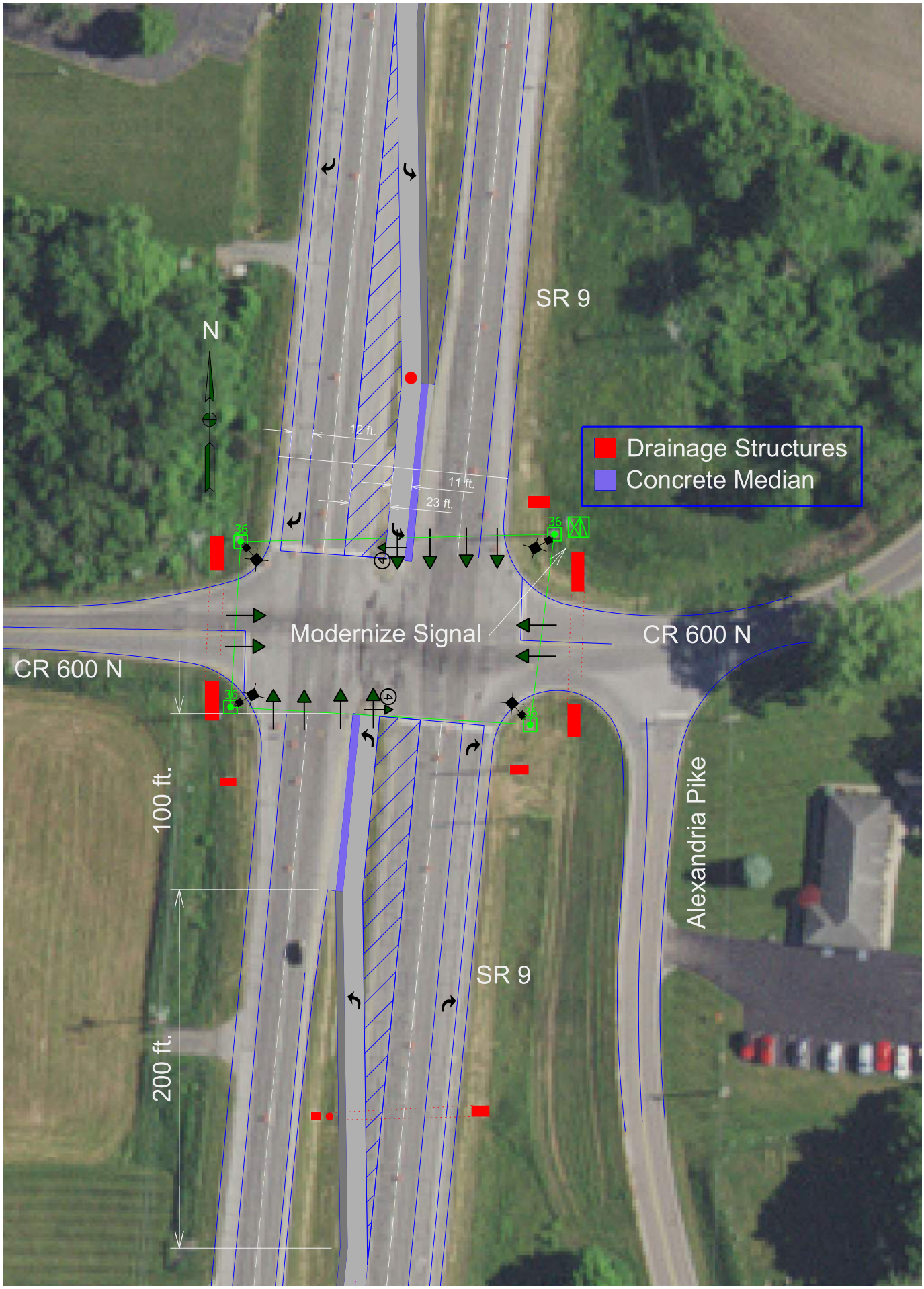
Half Mile Radius

0.15 0.075 0 0.15
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


SR 9
N
12 ft.
11 ft.
23 ft.
Drainage Structures
Concrete Median
Modernize Signal
CR 600 N
CR 600 N
100 ft.
Alexandria Pike
SR 9
200 ft.
80 ft.
160 ft.


SR 9
N
12 ft.
11 ft.
23 ft.
Drainage Structures
Concrete Median
Modernize Signal
CR 600 N
CR 600 N
100 ft.
200 ft.
Alexandria Pike
SR 9

PROJECT	BRIDGE FILE
1900152	N/A
CONTRACT	ROAD DESIGNATION
R-42410	1900152

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION

INDIANA DEPARTMENT OF TRANSPORTATION

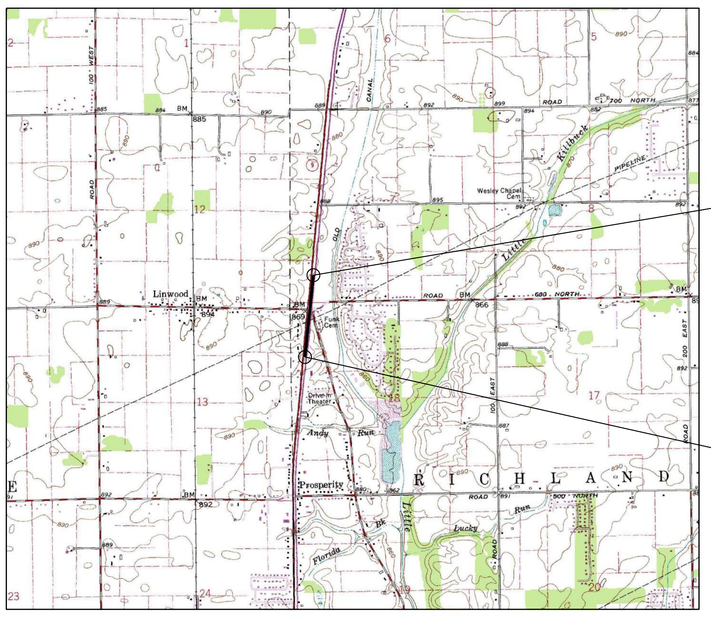
ROAD PLANS

ROUTE: SR 9 FROM: RP 78+13 TO: RP 78+13

PROJECT NO. 1900152 P.E.
1900152 CONST.

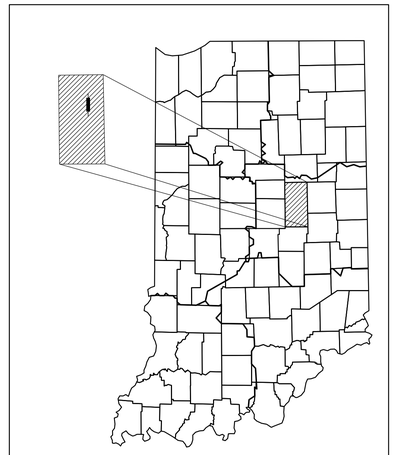
NO ADDITIONAL RIGHT OF WAY REQUIRED FOR THIS PROJECT

Intersection Improvements with Added Turn Lanes on SR9
Located at County Road 600 N/Linwood Road,
In Sections 7, 18, T20N, R8E, Lafayette Township, Madison County, Indiana



TRAFFIC DATA		
A.A.D.T.	(2024)	12550 V.P.D.
A.A.D.T.	(2044)	13162 V.P.D.
D.H.V.	(2044)	1198 V.P.D.
DIRECTIONAL DISTRIBUTION		49.08%
TRUCKS		14.52% A.A.D.T.
		12.38% D.H.V.

DESIGN DATA	
DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R
FUNCTIONAL CLASSIFICATION	OTHER PRINCIPAL ARTERIAL
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	NONE



PROJECT LOCATION SHOWN BY
MADISON COUNTY

LATITUDE: 40°11'36" N LONGITUDE: 85°40'11" W

BRIDGE LENGTH: N/A MI.
ROADWAY LENGTH: 0.400 MI.
TOTAL LENGTH: 0.400 MI.
MAX. GRADE: 1.00% %

HUC 051202010304

INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2022 TO BE USED WITH THESE PLANS.

PLANS PREPARED BY: HANSON (317)293-9024 PHONE NUMBER

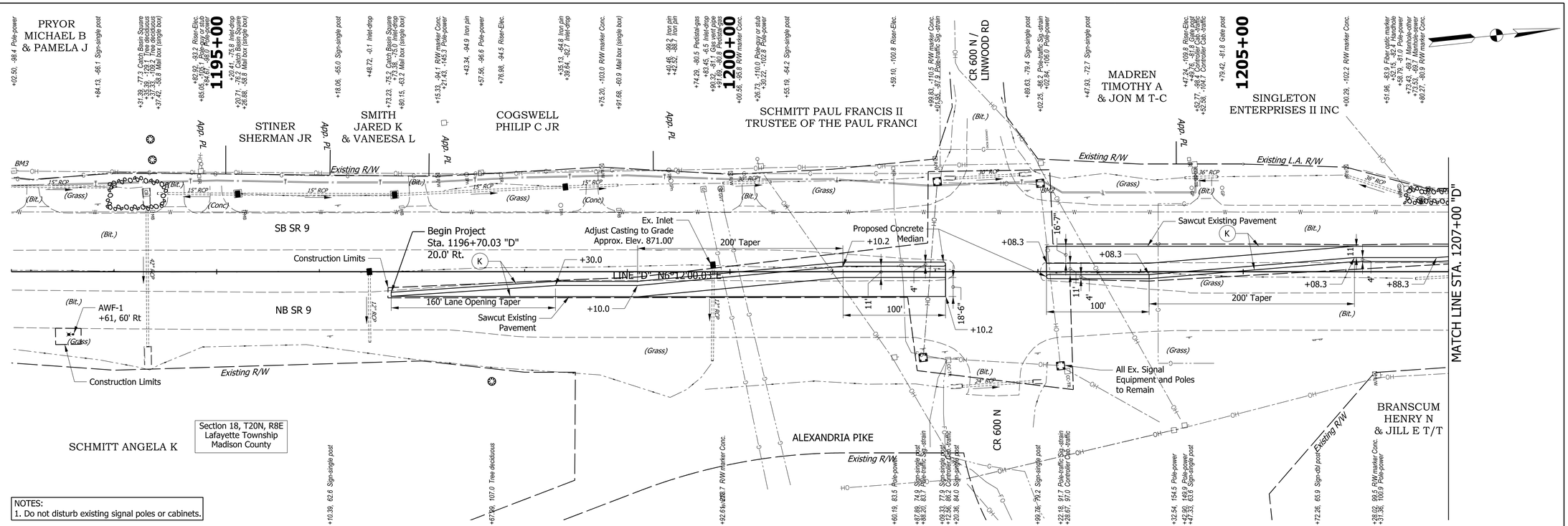
CERTIFIED BY: 1/26/2022 DATE

APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
N/A	
DESIGNATION	
1900152	

SURVEY BOOK	SHEETS		
	1	of	30
CONTRACT	PROJECT		
R-42410	1900152		

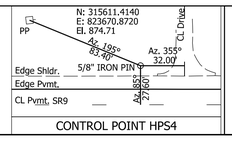
I:\20jobs\20H0010A\CAD\Road\Sheet\Sht Title.dgn



BENCHMARK DATA:
BM2: TOP EAST BOLT OF TRAFFIC SIGNAL FOUNDATION AT THE NORTHWEST CORNER OF SR 9 AND CR 600 N
STA. 1203+02.25, 85.24' LT
El. 868.59

BM3: COTTON SPINDLE IN EAST FACE OF POWER POLE ON THE WEST SIDE OF SR 9 ABOUT 0.20 MILES SOUTH OF CR 600 N ALSO BEING THE FIRST POWER POLE NORTH OF HOUSE #5827
STA. 1193+03.09, 97.40' LT
El. 880.81

(K) 165 LBS/SYS QC/QA HMA, 3, 70, Surface 9.5mm, on
275 LBS/SYS QC/QA HMA, 3, 64, Intermediate, 19.0mm, on
880 LBS/SYS QC/QA HMA, 3, 64, Base, 25.0mm, on
Subgrade Treatment Type IC, on
Geogrid Type IB



STAGE 2
5/19/2023

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER — $DATE1$ DATE

DESIGNED: NK — DRAWN: NK
CHECKED: JH — CHECKED: NK

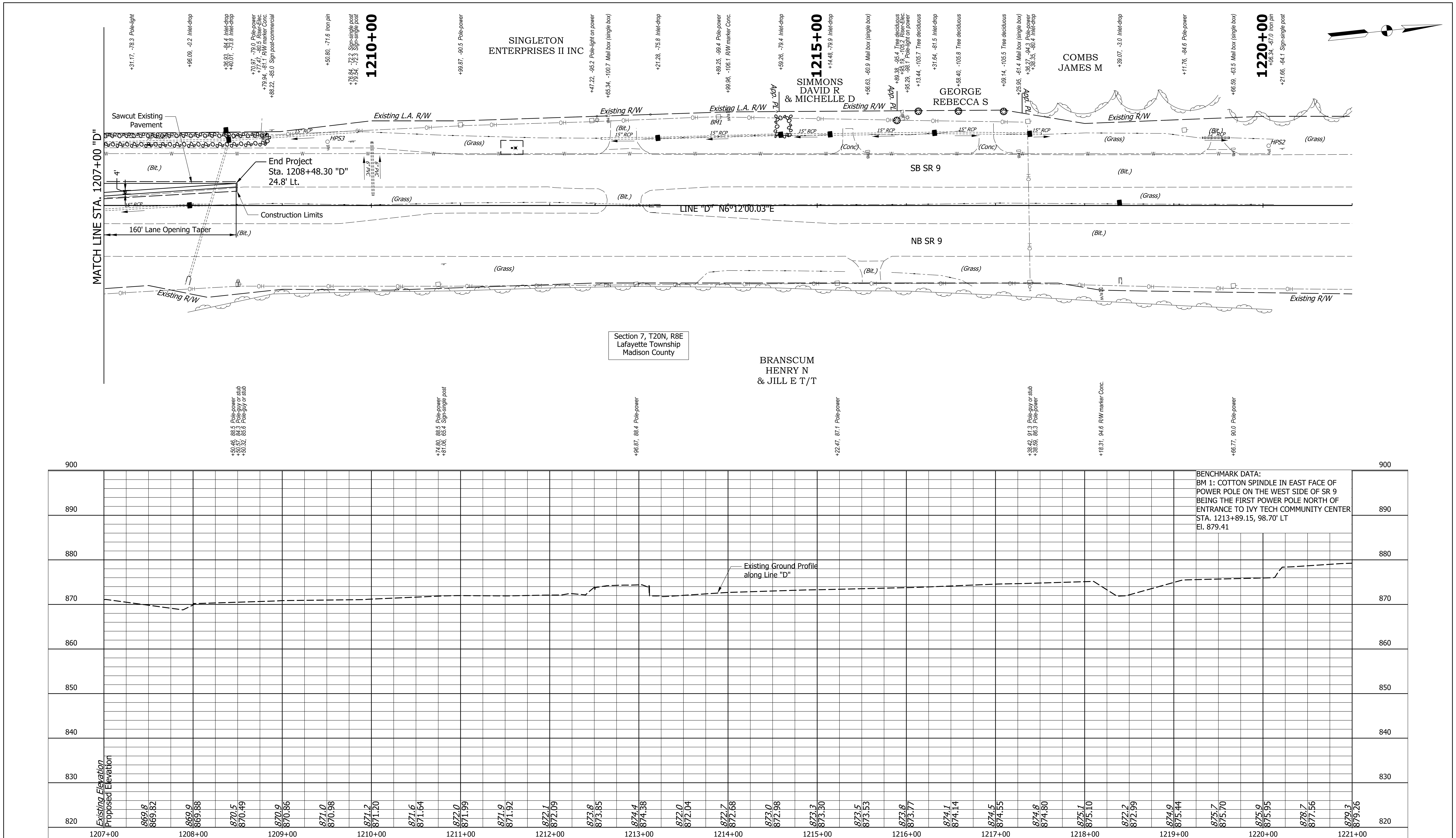
INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
SR 9

SCALE	DESIGNATION
1" : 50'	1900152
	SHEETS
	18 of 39
CONTRACT	PROJECT
R-42410	1900152

DESIGNED	$SCALE1$	$SIGDATE6$
DRAWN	$SIGNAME$	$SIGDATE5$
REVIEWED	jm	$SIGDATE4$

Sht PlanProfile3.dgn



CONTROL POINT HPS3	N: 316721.2840 E: 823784.6450 El. 871.76	
CONTROL POINT HPS2	CL Pvmt. SR9 N: 317770.1600 E: 823903.1320 El. 876.38	

STAGE 2

5/19/2023

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE

DESIGNED: NK — DRAWN: NK

CHECKED: JH — CHECKED: NK

INDIANA DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
SR 9

SCALE	DESIGNATION
1" : 50'	1900152
SHEETS	19 of 39
CONTRACT	PROJECT
R-42410	1900152

Sht PlanProfile4.dgn

Appendix C: Early Coordination

INDIANA DEPARTMENT OF TRANSPORTATION

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

Eric Holcomb, Governor
Joe McGuinness,
Commissioner

Sample Early Coordination Letter

February 9th, 2022

Re: Des No.: 1900152, SR 9 Intersection Improvement Project with Added Turn Lanes, Madison County

To Whom It May Concern,

The Indiana Department of Transportation (INDOT), with federal funding, intends to proceed with a project involving the aforementioned intersection improvements in Madison County. This letter is part of an 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 numbers and description in your reply.** We will incorporate your comments into a study of the project's environmental impacts.

This project is located on SR 9 at the intersection with County Road (CR) 600 N, in Madison County. This section of SR 9 is designated as a Rural- Other Principal Arterial. SR 9 is a divided four-lane road running north-south, and CR 600 N is a two-lane local road running east-west. This is currently a signal-controlled intersection, but existing traffic counts no longer warrant a traffic signal. The existing traffic control is contributing to crashes by unnecessarily stopping high speed SR 9 traffic in a rural location. There are an elevated number of angle crashes and high-speed rear end crashes at this intersection. A change in traffic control will improve the safety and mobility of this intersection.

The proposed project will include removing the existing traffic signal and converting the intersection into a Restricted Crossing U-Turn (R-CUT) intersection. Median U-turn intersections will be installed approximately 1000 feet (ft) north and 800 ft south of the intersection. Widened pavement (i.e., "loons") will be installed opposite the median crossover locations to accommodate U-turns by larger vehicles. Culvert extensions will be constructed at loon locations. Raised concrete medians will be installed to channelize the left turn movements from SR 9 as well as the right turn movements from both approaches of CR 600 N. Ditch grading will be performed for proper drainage. Traffic will be maintained by single lane closures; at least one lane will be open to traffic in each direction at all times. No trees will be cleared as part of this project. The project is anticipated to begin construction in Spring 2024.

Land use in the vicinity of the project is primarily rural residential with surrounding woodlands and farmland farther away from the roadway. This project qualifies for the application of the USFWS range-wide programmatic informal consultation for the Indiana bat and the Northern long-eared bat, and project information has been submitted through USFWS's Information for Planning and Consultation (IPaC) separately. The INDOT Cultural Resources Office (CRO) will review the archaeological and historic resources investigations completed by Hanson Professional Services, Inc. for section 106 compliance. The results of these investigations will be forwarded to the State Historic Preservation Officer (SHPO) for review and concurrence.

Should we not receive your response within thirty (30) calendar days from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should 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 Wes Butch, Consultant Team Environmental

Coordinator, at wbutch@fishbeck.com and 517-887-4007, or Donald McGhghy, INDOT Project Manager, at dmcghghy@indot.in.gov and 317-467-3920. Thank you in advance for your input.

Sincerely,

Wes Butch
Consultant Team Environmental Coordinator
Fishbeck

Initially the project was proposed as an RCI intersection but due to concerns from local businesses and the county, the project is an intersection modernization project. Refer to Project Description section within this CE document.

cc: Donald McGhghy, INDOT
Taylor Darrah, INDOT
Jason Rowley, Hanson Professional Services, Inc.
Tamra Reece, Hanson Professional Services, Inc.

Attachments:
Maps (Project Location and Aerial)

INDIANA DEPARTMENT OF TRANSPORTATION

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

Eric Holcomb, Governor
Joe McGuinness,
Commissioner

The following agencies received Early Coordination Letters:

Federal Highway Administration
Room 254, Federal Office Building,
575 North Pennsylvania Street
Indianapolis, Indiana 46204

Regional Environmental Coordinator
Midwest Regional Office National Park Service
601 Riverfront Drive Omaha, Nebraska 68102

Field Environmental Officer
Chicago Regional Office US Department of Housing & Urban Development
Room 2401, Metcalf Fed. Bldg.
77 W. Jackson Blvd.
Chicago, IL 60604

Indiana Geological and Water Survey
611 North Walnut Grove
Bloomington, IN 47405
(Electronic Coordination)

Environmental Coordinator
Indiana Department of Natural Resources
Division of Fish and Wildlife
402 West Washington Street, Rm W273
Indianapolis, IN 46204

Section Chief, Groundwater Section
Indiana Department of Environmental Management
100 N. Senate Avenue
Indianapolis, IN 46204
(electronic Coordination)

Indiana Department of Environmental Management
(Electronic Coordination)

INDOT Greenfield District
Environmental Section Manager
32 South Broadway
Greenfield, IN 46140

US Army Corps of Engineers,
Louisville District, Indianapolis Regulatory Office,
Indianapolis, IN 46216

Madison County Council of Governments (MCCOG)
739 Main Street Anderson, IN 46016

Madison County Engineer
16 East 9th St, Anderson, IN 46016

Madison County Emergency Management and Office of Homeland Security
16 East 9th St, Anderson, IN 46016

Madison County Administrator
16 East 9th St, Anderson, IN 46016

Utilities and Railroad Director
100 N. Senate Ave. IGCN 758 - UT/RR
Indianapolis, IN 46204

Site Location Map and Aerial Map were included with the letter. The duplicated figures were removed here. Please see Appendix B-2 and B-3 for the figures.

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: May 17, 2023
Project code: 2022-0031739
Project Name: SR 9 Intersection Improvement with added Turn Lanes (DES 1900152)

Subject: Concurrence verification letter for the 'SR 9 Intersection Improvement with added Turn Lanes (DES 1900152)' 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 May 17, 2023 to verify that the **SR 9 Intersection Improvement with added Turn Lanes (DES 1900152)** (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, and may affect, but 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

SR 9 Intersection Improvement with added Turn Lanes (DES 1900152)

DESCRIPTION

This project consists of intersection improvements at SR 9 and CR 600 N. This project is located in Richland Township, Madison County, Indiana. This project will include modernizing the existing traffic signal and adding lighting for enhanced nighttime visibility. A 'Prepare to Stop When Flashing' Flasher active system will be installed for enhanced warning to drivers approaching along SR 9. Fiber will likely need to be installed to the sign locations, approximately 1000 ft north and south of the intersection along SR 9. Geometric improvements include creating positive offset left turn lanes for enhanced sight distance of conflicting traffic. This modernization will replace all signal heads, poles, and wires at the intersection, bringing it up to modern standards. Ditch grading will be performed for proper drainage. No tree removal is anticipated. A review of the USFWS database on 8/17/21 did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. Bat assessments were performed on 11/16/21 for culverts in the project area, and no evidence of bats were found. Temporary lighting may be required during construction. Permanent lighting will be added, and the existing traffic signal will be removed. Work will be performed in the spring, summer and fall months.

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)?

    No

16. 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

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

    Yes

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

    Yes

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

    Yes

20. Is there *any* suitable habitat **within** 1,000 feet of the location(s) where **permanent** lighting will be installed or replaced?

    Yes

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

    Yes

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

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

    Yes

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

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

    Yes

24. 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

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

    No

26. Are the project activities that use percussives (not including tree removal/trimming or bridge/structure work) consistent with a Not Likely to Adversely Affect determination in this key?

    Automatically answered
    Yes, because the activities are within 300 feet of the existing road/rail surface, greater than 0.5 miles from a hibernacula, and conducted during the active season within undocumented habitat.

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

    Automatically answered

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

28. **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

29. **Lighting AMM 1**

    Will *all* **temporary** lighting be directed away from suitable habitat during the active season?

    Yes

30. **Lighting AMM 2**

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

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

    Yes

31. **Lighting AMM 2**

    Will the **permanent** lighting be designed to be as close to 0 for all three BUG ratings as possible, with a priority of "uplight" of 0 and "backlight" as low as practicable?

    Yes

PROJECT QUESTIONNAIRE

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

   N/A

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

   N/A

AVOIDANCE AND MINIMIZATION MEASURES (AMMS)

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

LIGHTING AMM 2

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

GENERAL AMM 1

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

LIGHTING AMM 1

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

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

This key was last updated in IPaC on April 13, 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 February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects. The programmatic biological opinion covers limited transportation activities that may affect either bat species, and addresses situations that are both likely and not likely to adversely affect either bat species. This decision key will assist in identifying the effect of a specific project/activity and applicability of the programmatic consultation. The programmatic biological opinion is not intended to cover all types of transportation actions. Activities outside the scope of the programmatic biological opinion, or that may affect ESA-listed species other than the Indiana bat or NLEB, or any designated critical habitat, may require additional ESA Section 7 consultation.

IPAC USER CONTACT INFORMATION

Agency: Department of Transportation
Name: Ron Bales
Address: 32 South Broadway Street
City: Greenfield
State: IN
Zip: 46140
Email rbales@indot.in.gov
Phone: 3175157908

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Transportation

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: May 24, 2023
Project Code: 2022-0031739
Project Name: SR 9 Intersection Improvement with added Turn Lanes (DES 1900152)

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

To Whom It May Concern:

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

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

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

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

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

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

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

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

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

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

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

Executive Order 13186, please visit https://www.fws.gov/birds/policies-and-regulations/executive-orders/e0-13186.php.

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

Attachment(s):

- Official Species List
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

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

This species list is provided by:

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

PROJECT SUMMARY

Project Code: 2022-0031739
Project Name: SR 9 Intersection Improvement with added Turn Lanes (DES 1900152)
Project Type: Road/Hwy - Maintenance/Modification
Project Description: This project consists of intersection improvements at SR 9 and CR 600 N. This project is located in Richland Township, Madison County, Indiana. This project will include modernizing the existing traffic signal and adding lighting for enhanced nighttime visibility. A 'Prepare to Stop When Flashing' Flasher active system will be installed for enhanced warning to drivers approaching along SR 9. Fiber will likely need to be installed to the sign locations, approximately 1000 ft north and south of the intersection along SR 9. Geometric improvements include creating positive offset left turn lanes for enhanced sight distance of conflicting traffic. This modernization will replace all signal heads, poles, and wires at the intersection, bringing it up to modern standards. Ditch grading will be performed for proper drainage. No tree removal is anticipated. A review of the USFWS database on 8/17/21 did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. Bat assessments were performed on 11/16/21 for culverts in the project area, and no evidence of bats were found. Temporary lighting may be required during construction. Permanent lighting will be added, and the existing traffic signal will be removed. Work will be performed in the spring, summer and fall months.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@40.1931974,-85.66977969288519,14z

Counties: Madison County, Indiana

ENDANGERED SPECIES ACT SPECIES

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

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

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

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

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

MAMMALS

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

BIRDS

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

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus*	Candidate

No critical habitat has been designated for this species.
Species profile: https://ecos.fws.gov/ecp/species/9743

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.

MIGRATORY BIRDS

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

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

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

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

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

NAME	BREEDING SEASON
American Golden-plover *Pluvialis dominica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Oct 15 to Aug 31

NAME	BREEDING SEASON
Black-billed Cuckoo *Coccyzus erythropthalmus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
Kentucky Warbler *Oporornis formosus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 20 to Aug 20
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Short-billed Dowitcher *Limnodromus griseus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

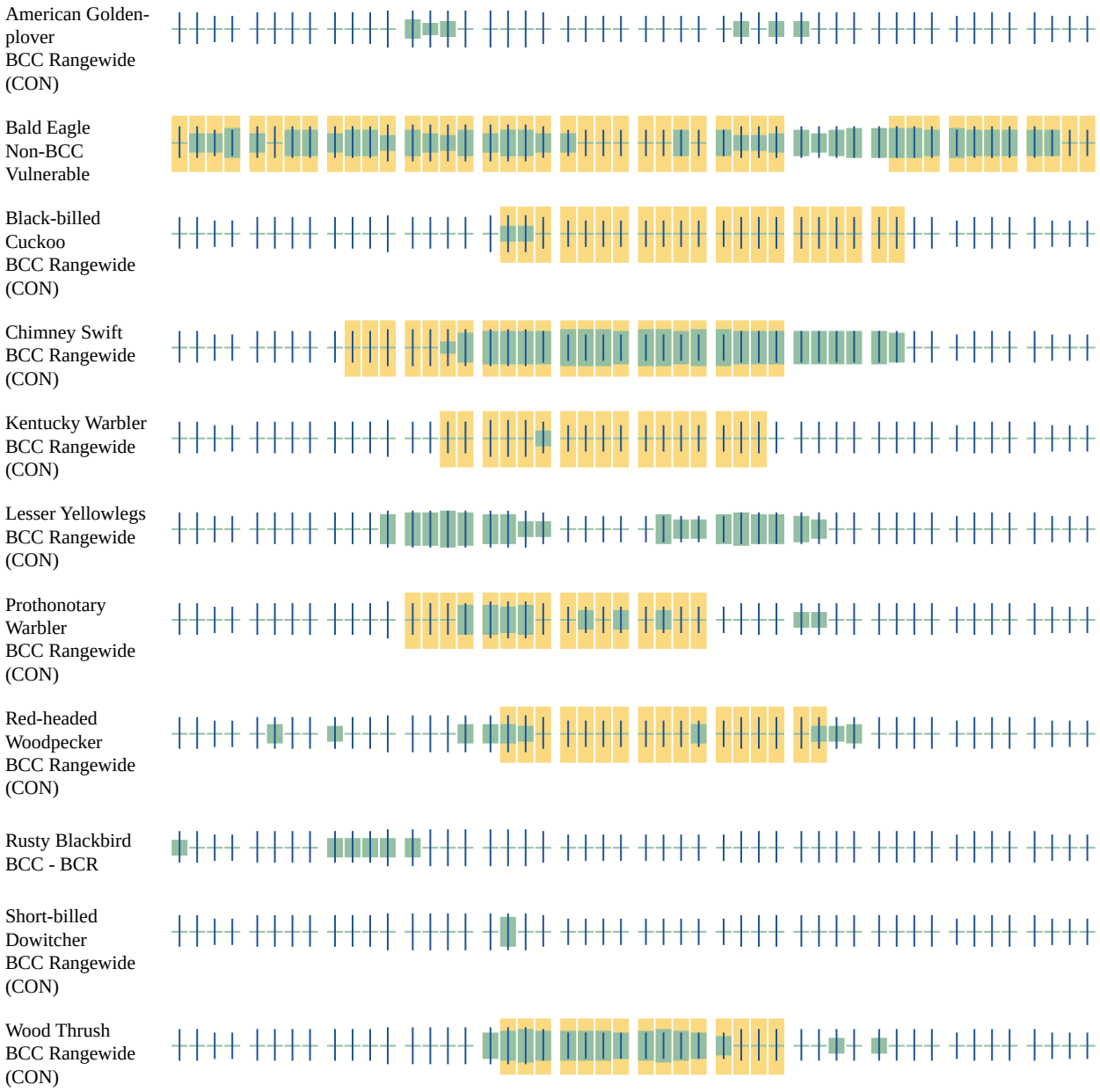
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

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

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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

SPECIES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC



Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

MIGRATORY BIRDS FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point

within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?
Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects
For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?
If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no

data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

WETLANDS

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

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

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: Fishbeck
Name: Catherine McNutt
Address: 8520 Allisonville Pointe Blvd, Suite 100
City: Indianapolis
State: IN
Zip: 46250
Email cmcnutt@fishbeck.com
Phone: 3179396633

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Department of Transportation

Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 North Senate Avenue - Indianapolis, IN 46204
(800) 451-6027 - (317) 232-8603 - www.idem.IN.gov

INDOT
Donald McGhghy
32 S Broadway St
Greenfield , IN 46140

Fishbeck
Wes Butch
8520 Allison Pointe Blvd
Suite 100
Indianapolis , IN 46250

Date

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: This project (DES 1900152) is located at the intersection of SR 9 and CR 600 N in Madison County. This project will replace the existing traffic signal with a Restricted Crossing U-Turn (RCUT) Intersection. Channelized left turns will be provided for SR 9. Median U-turn intersections will be installed approximately 1,250 feet (ft.) north and 1,000 ft. south of the intersection of SR 9 and CR 600 North. Loons will be installed opposite the median crossover locations. Culvert extensions will be constructed at the loon locations, and ditch grading will occur for proper drainage. Raised concrete medians will be installed to channelize the turns. No trees will be cleared as part of this project. The project is anticipated to begin construction in spring of 2024.

This letter from the Indiana Department of Environmental Management (IDEM) serves as a standardized response to enquiries inviting IDEM comments on roadway construction, reconstruction, or other improvement projects within existing roadway corridors when the proposed scope of the project is beneath the threshold requiring a formal National Environmental Policy Act-mandated Environmental Assessment or Environmental Impact Statement. As the letter attempts to address all roadway-related environmental topics of potential concern, it is possible that not every topic addressed in the letter will be applicable to your particular roadway project.

For additional information on specific roadway-related topics of interest, please visit the appropriate Web pages cited below, many of which provide contact information for persons within the various program areas who can answer questions not fully addressed in this letter. Also please be mindful that some environmental requirements may be subject to change and so each person intending to include a copy of this letter in their project documentation packet is advised to download the most recently revised version of the letter; found at: http://www.in.gov/idem/5283.htm (http://www.in.gov/idem/5283.htm).

To ensure that all environmentally-related issues are adequately addressed, IDEM recommends that you read this letter in its entirety, and consider each of the following issues as you move forward with the planning of your proposed roadway construction, reconstruction, or improvement project:

WATER AND BIOTIC QUALITY

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or

other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.

USACE recommends that you have a consultant check to determine whether your project will abut, or lie within, a wetland area. To view a list of consultants that have requested to be included on a list posted by the USACE on their Web site, see USACE Permits and Public Notices (http://www.lrl.usace.army.mil/orf/default.asp) (http://www.lrl.usace.army.mil/orf /default.asp (http://www.lrl.usace.army.mil/orf/default.asp)) and then click on "Information" from the menu on the right-hand side of that page. Their "Consultant List" is the fourth entry down on the "Information" page. Please note that the USACE posts all consultants that request to appear on the list, and that inclusion of any particular consultant on the list does not represent an endorsement of that consultant by the USACE, or by IDEM.

Much of northern Indiana (Newton, Lake, Porter, LaPorte, St. Joseph, Elkhart, LaGrange, Steuben, and Dekalb counties; large portions of Jasper, Starke, Marshall, Noble, Allen, and Adams counties; and lesser portions of Benton, White, Pulaski, Kosciusko, and Wells counties) is served by the USACE District Office in Detroit (313-226-6812). The central and southern portions of the state (large portions of Benton, White, Pulaski, Kosciosko, and Wells counties; smaller portions of Jasper, Starke, Marshall , Noble, Allen, and Adams counties; and all other Indiana counties located in north-central, central, and southern Indiana) are served by the USACE Louisville District Office (502-315-6733).

Additional information on contacting these U.S. Army Corps of Engineers (USACE) District Offices, government agencies with jurisdiction over wetlands, and other water quality issues, can be found at http://www.in.gov/idem/4396.htm (http://www.in.gov/idem/4396.htm). IDEM recommends that impacts to wetlands and other water resources be avoided to the fullest extent.

2. In the event a Section 404 wetlands permit is required from the USACE, you also must obtain a Section 401 Water Quality Certification from the IDEM Office of Water Quality Wetlands Program. To learn more about the Wetlands Program, visit: http://www.in.gov/idem/4384.htm (http://www.in.gov/idem/4384.htm).

3. If the USACE determines that a wetland or other water body is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana . A State Isolated Wetland permit from IDEM's Office of Water Quality (OWQ) is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the OWQ Wetlands Program at 317-233-8488.

4. If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: http://www.in.gov/idem/4384.htm (http://www.in.gov/idem/4384.htm) for the appropriate staff contact to further discuss your project.

5. Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the follow statutes:
    - IC 14-26-2 Lakes Preservation Act 312 IAC 11
    - IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
    - IC 14-28-1 Flood Control Act 310 IAC 6-1

- IC 14-29-1 Navigable Waterways Act 312 IAC 6
- IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
- IC 14-29-4 Construction of Channels Act No related code

For information on these Indiana (statutory) Code and Indiana Administrative Code citations, see the DNR Web site at: http://www.in.gov/dnr/water/9451.htm (http://www.in.gov/dnr/water/9451.htm) . Contact the DNR Division of Water at 317-232-4160 for further information.

The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project. The shade provided by the large overhanging trees helps maintain proper stream temperatures and dissolved oxygen for aquatic life.

6. For projects involving construction activity (which includes clearing, grading, excavation and other land disturbing activities) that result in the disturbance of one (1), or more, acres of total land area, contact the Office of Water Quality – Watershed Planning Branch (317/233-1864) regarding the need for of a Rule 5 Storm Water Runoff Permit. Visit the following Web page
   - http://www.in.gov/idem/4902.htm (http://www.in.gov/idem/4902.htm)

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

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

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

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

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

construction activities are available from the Soil and Water Conservation District (SWCD) offices in each county or from IDEM.

7. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317/232-4080) for addition project input.

8. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.

9. For projects involving effluent discharges to waters of the State of Indiana , contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.

10. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

AIR QUALITY

The above-noted project should be designed to minimize any impact on ambient air quality in, or near, the project area. The project must comply with all federal and state air pollution regulations. Consideration should be given to the following:

1. Regarding open burning, and disposing of organic debris generated by land clearing activities; some types of open burning are allowed (http://www.in.gov/idem/4148.htm (http://www.in.gov/idem/4148.htm)) under specific conditions. You also can seek an open burning variance from IDEM.

   However, IDEM generally recommends that you take vegetative wastes to a registered yard waste composting facility or that the waste be chipped or shredded with composting on site (you must register with IDEM if more than 2,000 pounds is to be composted; contact 317/232-0066). The finished compost can then be used as a mulch or soil amendment. You also may bury any vegetative wastes (such as leaves, twigs, branches, limbs, tree trunks and stumps) onsite, although burying large quantities of such material can lead to subsidence problems, later on.

   Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. For example, wetting the area with water, constructing wind barriers, or treating dusty areas with chemical stabilizers (such as calcium chloride or several other commercial products). Dirt tracked onto paved roads from unpaved areas should be minimized.

   Additionally, if construction or demolition is conducted in a wooded area where blackbirds have roosted or abandoned buildings or building sections in which pigeons or bats have roosted for 3-5 years precautionary measures should be taken to avoid an outbreak of histoplasmosis. This disease is caused by the fungus Histoplasma capsulatum, which stems from bird or bat droppings that have accumulated in one area for 3-5 years. The spores from this fungus become airborne when the area is disturbed and can cause infections over an entire community downwind of the site. The area should be wetted down prior to cleanup or demolition of the project site. For more detailed information on histoplasmosis prevention and control, please contact the Acute Disease Control Division of the Indiana State Department of Health at (317) 233-7272.

2. The U.S. EPA and the Surgeon General recommend that people not have long-term exposure to radon at levels above 4 pCi/L. (For a county-by-county map of predicted radon levels in Indiana, visit: http://www.in.gov/idem/4145.htm (http://www.in.gov/idem/4145.htm).)

The U.S. EPA further recommends that all homes (and apartments within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L, or higher, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, EPA recommends the installation of radon-reduction measures. (For a list of qualified radon testers and radon mitigation (or reduction) specialists visit: http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf (http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf).) It also is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure visit: http://www.in.gov/isdh/regsvcs/radhealth/radon.htm (http://www.in.gov/isdh/regsvcs/radhealth/radon.htm), http://www.in.gov/idem/4145.htm (http://www.in.gov/idem/4145.htm), or http://www.epa.gov/radon/index.html (http://www.epa.gov/radon/index.html).

3. With respect to asbestos removal: all facilities slated for renovation or demolition (except residential buildings that have (4) four or fewer dwelling units and which will not be used for commercial purposes) must be inspected by an Indiana-licensed asbestos inspector prior to the commencement of any renovation or demolition activities. If regulated asbestos-containing material (RACM) that may become airborne is found, any subsequent demolition, renovation, or asbestos removal activities must be performed in accordance with the proper notification and emission control requirements.

   If no asbestos is found where a renovation activity will occur, or if the renovation involves removal of less than 260 linear feet of RACM off of pipes, less than 160 square feet of RACM off of other facility components, or less than 35 cubic feet of RACM off of all facility components, the owner or operator of the project does not need to notify IDEM before beginning the renovation activity.

   For questions on asbestos demolition and renovation activities, you can also call IDEM's Lead/Asbestos section at 1-888-574-8150.

   However, in all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition, using the form found at http://www.in.gov/icpr/webfile/formsdiv/44593.pdf (http://www.in.gov/icpr/webfile/formsdiv/44593.pdf).

   Anyone submitting a renovation/demolition notification form will be billed a notification fee based upon the amount of friable asbestos containing material to be removed or demolished. Projects that involve the removal of more than 2,600 linear feet of friable asbestos containing materials on pipes, or 1,600 square feet or 400 cubic feet of friable asbestos containing material on other facility components, will be billed a fee of $150 per project; projects below these amounts will be billed a fee of $50 per project. All notification remitters will be billed on a quarterly basis.

   For more information about IDEM policy regarding asbestos removal and disposal, visit: http://www.in.gov/idem/4983.htm (http://www.in.gov/idem/4983.htm).

4. With respect to lead-based paint removal: IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978 , or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal visit: http://www.in.gov/isdh/19131.htm (http://www.in.gov/isdh/19131.htm).

5. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited during the months April through October. See 326 IAC 8-5-2 , Asphalt Paving Rule (http://www.ai.org/legislative/iac/T03260/A00080.PDF (http://www.ai.org/legislative/iac/T03260/A00080.PDF)).

6. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (View at: www.ai.org/legislative/iac/t03260/a00020.pdf (http://www.ai.org/legislative/iac/t03260/a00020.pdf).) New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.

7. For more information on air permits visit: http://www.in.gov/idem/4223.htm (http://www.in.gov/idem/4223.htm), or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or OAMPROD atdem.state.in.us.

LAND QUALITY

In order to maintain compliance with all applicable laws regarding contamination and/or proper waste disposal, IDEM recommends that:

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ)at 317-308-3103.

2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit http://www.in.gov/idem/4998.htm (http://www.in.gov/idem/4998.htm).

3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.

4. If PCBs are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.

5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes (Asbestos removal is addressed above, under Air Quality).

6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317/308-3039. See: http://www.in.gov/idem/4999.htm (http://www.in.gov/idem/4999.htm).

FINAL REMARKS

Should you need to obtain any environmental permits in association with this proposed project, please be mindful that IC 13-15-8 requires that you notify all adjoining property owners and/or occupants within ten days your submittal of each permit application. However, if you are seeking multiple permits, you can still meet the notification requirement with a single notice if all required permit applications are submitted with the same ten day period.

Should the scope of the proposed project be expanded to the extent that a National Environmental Policy Act Environmental Assessment (EA) or Environmental Impact Statement (EIS) is required, IDEM will actively participate in any early interagency coordination review of the project.

Meanwhile, please note that this letter does not constitute a permit, license, endorsement or any other form of approval on the part of the Indiana Department of Environmental Management regarding any project for which a copy of this letter is used. Also note that is it the responsibility of the project engineer or consultant using this letter to ensure that the most current draft of this document, which is located at http://www.in.gov/idem/5284.htm (http://www.in.gov/idem/5284.htm), is used.

Signature(s) of the Applicant

I acknowledge that the following proposed roadway project will be financed in part, or in whole, by public monies.

Project Description

This project (DES 1900152) is located at the intersection of SR 9 and CR 600 N in Madison County. This project will replace the existing traffic signal with a Restricted Crossing U-Turn (RCUT) Intersection. Channelized left turns will be provided for SR 9. Median U-turn intersections will be installed approximately 1,250 feet (ft.) north and 1,000 ft. south of the intersection of SR 9 and CR 600 North. Loons will be installed opposite the median crossover locations. Culvert extensions will be constructed at the loon locations, and ditch grading will occur for proper drainage. Raised concrete medians will be installed to channelize the turns. No trees will be cleared as part of this project. The project is anticipated to begin construction in spring of 2024.

With my signature, I do hereby affirm that I have read the letter from the Indiana Department of Environment that appears directly above. In addition, I understand that in order to complete that project in which I am interested, with a minimum of impact to the environment, I must consider all the issues addressed in the aforementioned letter, and further, that I must obtain any required permits.

Date: _____

Signature of the INDOT
Project Engineer or Other Responsible Agent Kim Szewczak

Kimberly Szewczak

Date: 2022.08.18

Signature of the
For Hire Consultant Butch, Wes Digitally signed by Butch, Wes
DN: CN="Butch, Wes", OU=Transportation, OU=All Staff, DC=corp, DC=ftch, DC=com
Date: 2022.07.15 11:00:54-04'00'

Wes Butch

THIS IS NOT A PERMIT

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

DNR #: ER-24476 **Request Received:** February 9, 2022

Requestor: Fishbeck, Inc
Wes Butch
5913 Executive Drive, Suite 100
Lansing, MI 48911

Project: SR 9 and CR 600 North intersection improvement with added turn lanes; Des #1900152

County/Site info: Madison

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

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

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

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

Fish & Wildlife Comments: The measures below should be implemented to avoid, minimize, or compensate for impacts to fish, wildlife, and botanical resources:
1. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue) and legumes as soon as possible upon completion; low endophyte tall fescue may be used in the ditch bottom and side slopes only.
2. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.

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:** March 10, 2022

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

Organization and Project Information

Project ID:	210858
Des. ID:	1900152
Project Title:	SR 9 and CR 600 N Intersection Improvements with Added Turn Lane
Name of Organization:	Fishbeck
Requested by:	Catherine McNutt

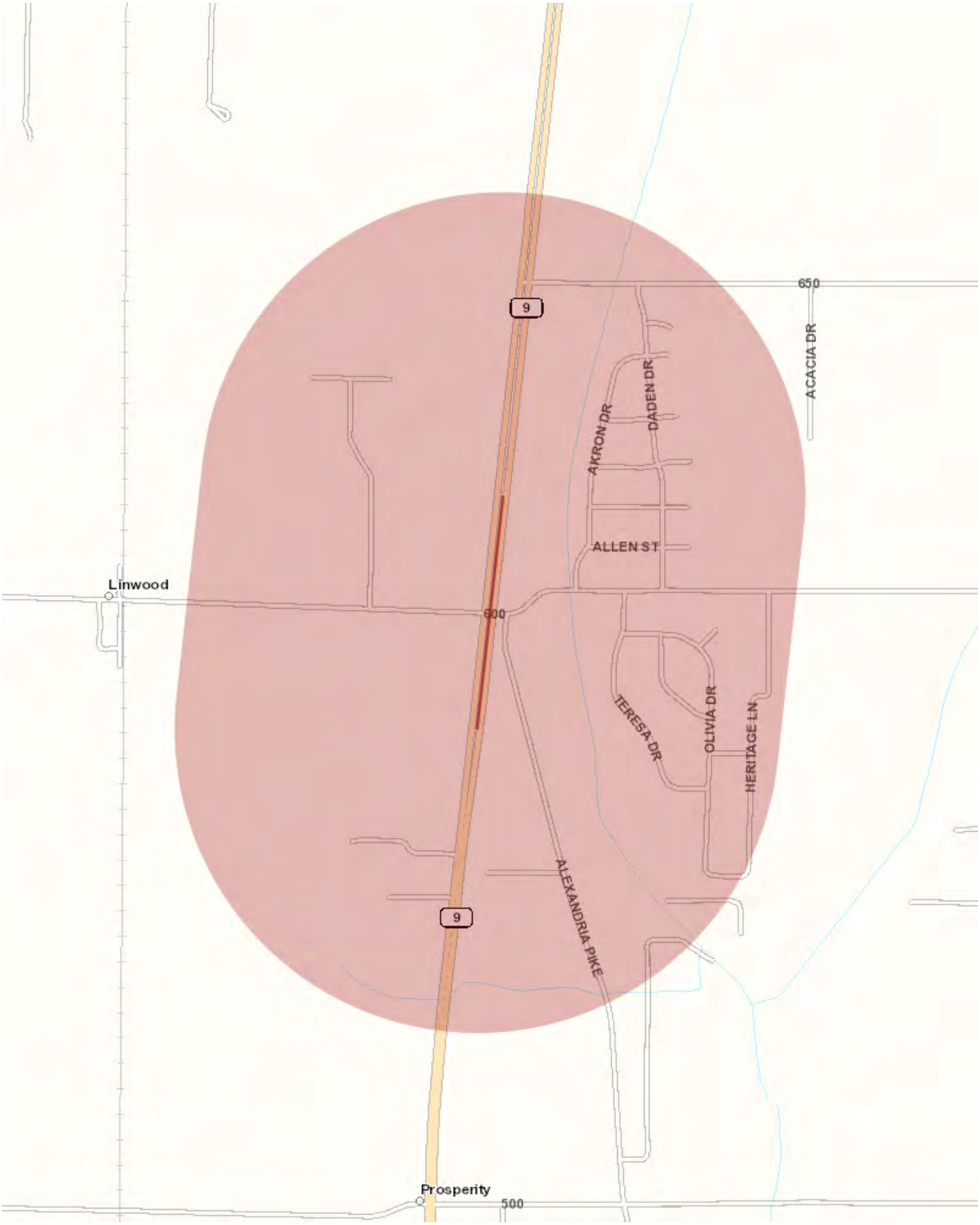
Environmental Assessment Report

1. Geological Hazards:
    - Moderate liquefaction potential
    - 1% Annual Chance Flood Hazard
2. Mineral Resources:
    - Bedrock Resource: High Potential
    - Sand and Gravel Resource: Low Potential
3. Active or abandoned mineral resources extraction sites:
    - Petroleum Exploration Wells

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

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

Date: July 06, 2022



Metadata:

- https://maps.indiana.edu/metadata/Geology/Petroleum_Wells.html
- https://maps.indiana.edu/metadata/Geology/Seismic_Earthquake_Liquefaction_Potential.html
- https://maps.indiana.edu/metadata/Geology/Industrial_Minerals_Sand_Gravel_Resources.html
- https://maps.indiana.edu/metadata/Hydrology/Floodplains_FIRM.html
- https://maps.indiana.edu/metadata/Geology/Bedrock_Geology.html

McNutt, Catherine

From: Butch, Wes
Sent: Friday, March 4, 2022 9:42 AM
To: Jessica Bastin
Cc: Mcghghy, Donald; Jason Rowley; Marie Jett; KFilson@indot.in.gov; Tamra Reece; Darrah, Taylor N
Subject: RE: [EXTERNAL] INDOT Des. 1900152 - SR 9 Intersection Improvements Project - Early Coordination Letter

Good Morning Ms. Bastin,

Thank you for the email. INDOT and the consultant design team (led by Hanson Professional Services) are still developing and evaluating the proposed options, and more details should be available in a few months. When this information is ready, drawings of the proposed intersection design can be provided for the County's review. We have made note of your request and are planning to follow up.

We also wanted to let you know there is a new INDOT project manager for this project. Contact info is:

Kim Filson
INDOT – Greenfield District
Cell: (317) 289-3193
Email: kfilson@indot.in.gov

Transportation Management Plan (TMP) Meeting was held March 10th, 2023 with representatives from INDOT, INDOT's design consultant, Madison County, local businesses, the Anderson MPO, and emergency service providers.

Regards,

Wes

Wes Butch | Sr Project Manager
Fishbeck | w: 517.887.4007 | c: 517.930.8024 | Fishbeck.com | wbutch@Fishbeck.com |
https://www.linkedin.com/in/wabutch/

From: Jessica Bastin <jbastin@madisoncounty.in.gov>
Sent: Thursday, March 3, 2022 1:47 PM
To: Butch, Wes <wbutch@fishbeck.com>
Cc: Mcghghy, Donald <DMcghghy@indot.IN.gov>
Subject: RE: [EXTERNAL] INDOT Des. 1900152 - SR 9 Intersection Improvements Project - Early Coordination Letter
Importance: High

EXTERNAL EMAIL

Mr. Butch,
Do you have a sketch of the proposed intersection improvements that you can share with us to review with our County leadership?
Thank you,
Jessica

Jessica S. Bastin, P.E.
Madison County Engineer

2830 West Eighth Street
Anderson, IN 46011
(765) 646-9240
(765) 646-9245 direct
(765) 646-9257 fax
jbastin@madisoncounty.in.gov

From: Butch, Wes <wbutch@fishbeck.com>
Sent: Wednesday, February 9, 2022 10:23 AM
To: Jerry Bridges <jerry@heartlandmpo.org>; Jessica Bastin <jbastin@madisoncounty.in.gov>; Tom Ecker <tom.ecker@MadisonCounty.IN.Gov>; Tom Ecker <tom.ecker@MadisonCounty.IN.Gov>; saanderson2@indot.in.gov; k.carmanygeorge@dot.gov; Mwro_Compliance@nps.gov; environmentalreview@dnr.in.gov; erik.r.sandsted@hud.gov; RegulatoryApplicationsLRL@usace.army.mil
Cc: dcmcghghy@indot.in.gov; Darrah, Taylor N <TDarrah@indot.IN.gov>; Tamra Reece <TReece@hanson-inc.com>; Jason Rowley <JRowley@hanson-inc.com>; Marie Jett <EJett@hanson-inc.com>; McNutt, Catherine <cmcnutt@fishbeck.com>; Prasad, Dandi <dvprasad@fishbeck.com>
Subject: [EXTERNAL] INDOT Des. 1900152 - SR 9 Intersection Improvements Project - Early Coordination Letter

Good Morning,

Attached you will find an early coordination letter for the above referenced project. If your agency intends to submit a response letter, we kindly request the response be provided within 30 days. If you have any questions, feel free to contact me (contact info is below) or the INDOT Project Manager, Donald McGhghy (dmcghghy@indot.in.gov , 317-467-3920). We appreciate your consideration.

Regards,

Wes Butch | Sr Project Manager
Fishbeck | w: 517.887.4007 | c: 517.930.8024 | Fishbeck.com |wbutch@Fishbeck.com |
https://www.linkedin.com/in/wabutch/

McNutt, Catherine

From: Lewandowski, Tyler <TLewandowski@indot.IN.gov>
Sent: Monday, November 21, 2022 8:10 AM
To: McNutt, Catherine
Cc: Blake, Martin
Subject: RE: INDOT Des. 1900152 - SR 9 Intersection Improvements Project - Early Coordination Letter

EXTERNAL EMAIL

Good morning,

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

Thank you,

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

From: Blake, Martin <MaBlake@indot.IN.gov>
Sent: Friday, November 18, 2022 2:38 PM
To: Lewandowski, Tyler <TLewandowski@indot.IN.gov>
Subject: FW: INDOT Des. 1900152 - SR 9 Intersection Improvements Project - Early Coordination Letter

Marty Blake
Manager – INDOT Office of Aviation
(317) 407-7451
www.aviation.indot.in.gov

From: McNutt, Catherine <cmcnutt@fishbeck.com>
Sent: Friday, November 18, 2022 1:56 PM
To: Blake, Martin <MaBlake@indot.IN.gov>; JCourtade@indot.in.gov
Subject: INDOT Des. 1900152 - SR 9 Intersection Improvements Project - Early Coordination Letter

Division of Nature Preserves
402 W. Washington St., Rm W267
Indianapolis, IN 46204-2739

August 17, 2021

Catherine McNutt
Fishbeck
8520 Allison Pointe Blvd., Suite 100
Indianapolis, IN 46250

Dear Catherine McNutt:

I am responding to your request for information on the threatened or endangered (T&E) species, high quality natural communities, and natural areas for the SR 9 and CR 600 N Intersection Improvements Project located in Madison County, Indiana. The Indiana Natural Heritage Data Center has been checked and there are no T&E species or significant areas documented within 0.5 mile of the project area.

If you need a general environmental review of the project from DNR, you can submit the project information to Christie Stanifer, DNR Environmental Coordinator, at environmentalreview@dnr.in.gov (preferred) or send to the street address below. For more help or guidance contact Christie Stanifer at cstanifer@dnr.in.gov.

Department of Natural Resources
Environmental Review
Division of Fish and Wildlife
402 W. Washington Street, Room W273
Indianapolis, IN 46204

The information I am providing does not preclude the requirement for further consultation with the U.S. Fish and Wildlife Service as required under Section 7 of the Endangered Species Act of 1973. If you have concerns about potential Endangered Species Act issues you should contact the Service at their Bloomington, Indiana office.

U.S. Fish and Wildlife Service
620 South Walker St.
Bloomington, Indiana 47403-2121
(812)334-4261

Please note that the Indiana Natural Heritage Data Center relies on the observations of many individuals for our data. In most cases, the information is not the result of comprehensive field surveys conducted at particular sites. Therefore, our statement that there are no documented significant natural features at a site should not be interpreted to mean that the site does not support special plants or animals.

Due to the dynamic nature and sensitivity of the data, this information should not be used for any project other than that for which it was originally intended. It may be necessary for you to request updated material from us in order to base your planning decisions on the most current information.

Thank you for contacting the Indiana Natural Heritage Data Center. You may reach me at (317)233-2558 you have any questions or need additional information.

Sincerely,

Taylor Davis
Indiana Natural Heritage Data Center

Appendix D: Section 106 of the NHPA

Category A consists of projects that, by their nature, have no effect on properties listed in or eligible for inclusion in the National Register of Historic Places (hereinafter referred to as the "National Register") and do not require review by INDOT Cultural Resources Office. All of the work under this Category must occur in previously disturbed soils, which are defined as soils that have been completely altered or displaced by earthmoving or other modern manipulation.

1. Any work on bridges limited to substructure or superstructure elements without replacing, widening, or elevating the superstructure under the conditions listed below ***(BOTH Conditions A and B must be met).*** This category **does not** include bridge replacement projects (when both superstructure and substructure are removed):

   A. The project takes place in previously disturbed soils; *AND*
   B. With regard to the bridges, at least one of the conditions (i, ii or iii) listed below must be satisfied:
      i. The latest Historic Bridge Inventory identified the bridge as non-historic (see http://www.in.gov/indot/2531.htm);
      ii. The bridge was built after 1945, and is a common type as defined in Section V. of the *Program Comment Issued for Streamlining Section 106 Review for Actions Affecting Post-1945 Concrete and Steel Bridges* issued by the Advisory Council on Historic Preservation on November 2, 2012 for so long as that Program Comment remains in effect AND the considerations listed in Section IV of the Program Comment do not apply;
      iii. The bridge is part of the Interstate system and was determined not eligible for the National Register under the Section 106 Exemption Regarding Effects to the Interstate Highway System adopted by the Advisory Council on Historic Preservation on March 10, 2005, for so long as that Exemption remains in effect.

2. All work within interchanges and within medians of divided highways in previously disturbed soils.

3. Replacement, repair, lining, or extension of culverts and other drainage structures that do not exhibit wood, stone or brick structures or parts therein and are in previously disturbed soils.

4. Roadway work associated with surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking within previously disturbed soils where replacement, repair, or installation of curbs, curb ramps or sidewalks will not be required.

5. Repair, in-kind replacement or upgrade of existing lighting, signals, signage, and other traffic control devices in previously disturbed soils.

6. Repair, replacement, or upgrade of existing safety appurtenances such as guardrails, barriers, glare screens, and crash attenuators in previously disturbed soils.

7. Repair or in-kind replacement of fencing and hardscape landscaping elements and/or replacement of existing plant materials in previously disturbed soils and installation of new fencing and hardscape landscaping elements and plant materials limited to locations within interstate right-of way within previously disturbed soils.

8. Installation of new or modification of existing traffic control devices and systems, including signs, signals, markings, illumination, other warning devices and their supports, to improve safety at railway crossings in previously disturbed soils.

9. Installation, repair, or replacement of erosion control measures along roadways, waterways and bridge piers within previously disturbed soils.

10. Routine roadside maintenance activities necessary to preserve existing infrastructure or maintain roadway safety in previously disturbed soils.

11. Rehabilitation of existing rest areas and truck weigh stations within previously disturbed soils.

12. Removal and disposal of hazardous waste.

13. Work on concrete and asphalt decks of bridges identified in the Historic Bridge Inventory as National Register-listed or National Register-eligible (see http://www.in.gov/indot/2531.htm), which is limited to pavement resurfacing, overlay, pavement repair, pavement grinding, pavement marking, seal coating, joint repair, and in-kind replacement or repair of existing concrete curbs, curb ramps or sidewalks in previously disturbed soils, provided none of these actions impact structural members of the bridge.

14. Repair and/or replace existing MSE walls, retaining walls and noise walls in previously disturbed soils, using similar design, dimensions and materials.

Appendix E: Red Flag Investigation

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room 758-ES
Indianapolis, Indiana 46204

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

Eric Holcomb, Governor
Michael Smith, Commissioner

Date: June 13, 2022

To: Site Assessment & Management (SAM)
Environmental Policy Office - Environmental Services Division (ESD)
Indiana Department of Transportation
100 N Senate Avenue, Room 758-ES
Indianapolis, IN 46204

From: Wes Butch
Fishbeck
8520 Allison Pointe Blvd., Suite 100
Indianapolis, IN 46250
wbutch@fishbeck.com

Initially the project was proposed as an RCI intersection but due to concerns from local businesses and the county, the project is an intersection modernization project. Refer to Project Description section within this CE document.

Re: RED FLAG INVESTIGATION
DES #1900152, State Project
Intersection Improvements
SR 9 and CR 600 N Intersection Improvements with Added Turn Lanes
Madison County, Indiana

PROJECT DESCRIPTION

Brief Description of Project: This project consists of intersection improvements at SR 9 and CR 600 N. This project is located in the Richland Township, Madison County, Indiana. This project will include removing the existing traffic signal and converting the intersection into a Restricted Crossing U-Turn (R-CUT) intersection. Channelized left turns will be provided for SR 9. Median U-turn intersections will be installed approximately 1000 feet (ft.) north and 800 ft south of the intersection. Loons will be installed opposite the median crossover locations to allow for larger vehicles to make the U-turn on the divided highway. Culvert extensions will be constructed at loon locations. Raised concrete medians will be installed to channelize the left turn movements from SR 9 as well as the right turn movements from both minor approaches of CR 600 N. The driveway for the Anderson North Campus Conference Center will be incorporated into the northern loon. Ditch grading will be performed for proper drainage.

Bridge and/or Culvert Project: Yes ☐ No ☒ Structure # _____
If this is a bridge project, is the bridge Historical? Yes ☐ No ☐ , Select ☐ Non-Select ☐
(Note: If the project involves a historical bridge, please include the bridge information in the Recommendations Section of the report).
Proposed right of way: Temporary ☐ # Acres ___ Permanent ☐ # Acres ___, Not Applicable ☒

Type and proposed depth of excavation: The median will be excavated to construct the new turn lanes. Excavation for the loon construction north and south of the intersection will occur. Excavation of the pavement where raised concrete medians will be placed will occur on either side of the intersection. The anticipated excavation depth will be 2 to 3 feet

on average. Where drainage improvements will be made, excavation depths could increase to 3 to 4 feet at these locations.

Maintenance of traffic: Traffic will be maintained with phased single lane closures. AT least one lane will be open to traffic in each direction at all times.
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]	**1**	Pipelines	**3**
Cemeteries	**1**	Railroads	**N/A**
Hospitals	**N/A**	Trails	**N/A**
Schools	**N/A**	Managed Lands	**N/A**

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

Explanation:

Airports: One (1) public use airport, Alexandria Airport, is 2.90 miles northeast of the project area. Coordination with INDOT Aviation will occur.

Pipelines: Three (3) pipeline segments are located within the 0.5-mile search radius. Two (2) pipelines are in or near the project area. The nearest pipeline segment, a 3-inch natural gas pipeline owned by Indiana Gas Co. Inc., crosses SR 9 in the project area. Shell Oil Co. pipeline is 0.03 mile southeast of the project area. Coordination with INDOT Utilities and Railroads should occur.

Cemeteries: One (1) cemetery is located within the 0.5-mile search radius. Funk Cemetery is located on Alexandria Pike approximately 150 ft southeast of the intersection of SR 9 and CR 600 N. The grave site portion of the cemetery is located approximately 185 ft east of project area at its closest location. The driveway entrance is located approximately 150 ft south of the project area on the east side of the intersection. No impact is expected; however, if the project extents should change, re-coordination with SAM and CRO may be needed.

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	**1**
NPS NRI Listed	**N/A**	Floodplain - DFIRM	**1**

NWI-Lines	**1**	Cave Entrance Density	**N/A**
IDEM 303d Listed Streams and Lakes (Impaired)	**2**	Sinkhole Areas	**N/A**
Rivers and Streams	**2**	Sinking-Stream Basins	**N/A**

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

NWI – Lines: One (1) NWI – Line segment is located within the 0.5-mile search radius. The NWI – Line segment is located approximately 0.13 mile east of the project area. No impact is expected.

IDEM 303d Listed Streams and Lakes (Impaired): Two (2) 303d listed streams are located within the 0.5-mile search radius. The nearest stream, the Little Killbuck Creek, is located approximately 0.13 mile east of the project area. No impact is expected.

Rivers and Streams: Two (2) rivers and streams segments are located within the 0.5-mile search radius. The nearest segment, Little Killbuck Creek, is located approximately 0.13 mile east of the project area. No impact is expected.

NWI – Wetlands: Four (4) NWI – Wetland polygons are located within the 0.5-mile radius. The nearest wetland polygon is located approximately 0.15 mile northwest of the project area. No impact is expected.

Lakes: One (1) lake is located within the 0.5-mile radius. The lake is located 0.45 mile west of the project area. No impact is expected.

Floodplain – DFIRM: One (1) floodplain polygon is located within the 0.5-mile radius. The floodplain polygon is located approximately 0.10 mile east 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	**1**	Mineral Resources	**N/A**
Mines – Surface	**N/A**	Mines – Underground	**N/A**

Explanation:

Petroleum Wells: One (1) petroleum well is located within the 0.5 mile search radius. The petroleum well is located 0.35 mile northeast 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	**N/A**
Infectious/Medical Waste Sites	**N/A**	NPDES Pipe Locations	**N/A**
Leaking Underground Storage (LUST) Sites	**N/A**	Notice of Contamination Sites	**N/A**

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

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

ECOLOGICAL INFORMATION SUMMARY

The Madison County listing of the Indiana Natural Heritage Data Center information on endangered, threatened, or rare (ETR) species and high quality natural communities provided at https://www.in.gov/dnr/nature-preserves/files/np_madison.pdf. A preliminary review of the Indiana Natural Heritage Database by INDOT ESD did not indicate the presence of ETR species within the 0.5 mile search radius. Due to the nature of project activities, this project will fall under the guidelines set forth under USFWS Interim Policy for the Review of Highway Transportation Projects in Indiana dated May 29, 2013. No further coordination is necessary.

A review of the USFWS database did not indicate the presence of endangered bat species in or within 0.5-mile of the project area. The range-wide programmatic consultation for the Indiana Bat and Northern Long-eared Bat will be completed according to the most recent "Using the USFWS's 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:

- Airports: One (1) public use airport, Alexandria Airport, is 2.90 miles northeast of the project area. Coordination with INDOT Aviation will occur.
- Pipelines: Three (3) pipeline segments are located within the 0.5-mile search radius. Two (2) pipelines are in or near the project area. The nearest pipeline segment, a 3-inch natural gas pipeline owned by Indiana Gas Co. Inc.,

crosses SR 9 in the project area. Shell Oil Co. pipeline is 0.03 mile southeast of the project area. Coordination with INDOT Utilities and Railroads should occur.

- Cemeteries: One (1) cemetery is located within the 0.5-mile search radius. Funk Cemetery is located on Alexandria Pike approximately 150 ft southeast of the intersection of SR 9 and CR 600 N. The grave site portion of the cemetery is located approximately 185 ft east of project area at its closest location. The driveway entrance is located approximately 150 ft south of the project area on the east side of the intersection. No impact is expected; however, if the project extents should change, re-coordination with SAM and CRO may be needed.

WATER RESOURCES: N/A

MINING/MINERAL EXPLORATION: N/A

HAZARDOUS MATERIAL CONCERNS: N/A

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

INDOT ESD concurrence: Nicole Fohey-Breting Digitally signed by Nicole Fohey-Breting Date: 2022.06.14 04:32:23 -04'00' (Signature)

Prepared by:
Wes Butch
Sr. Project Manager
Fishbeck

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

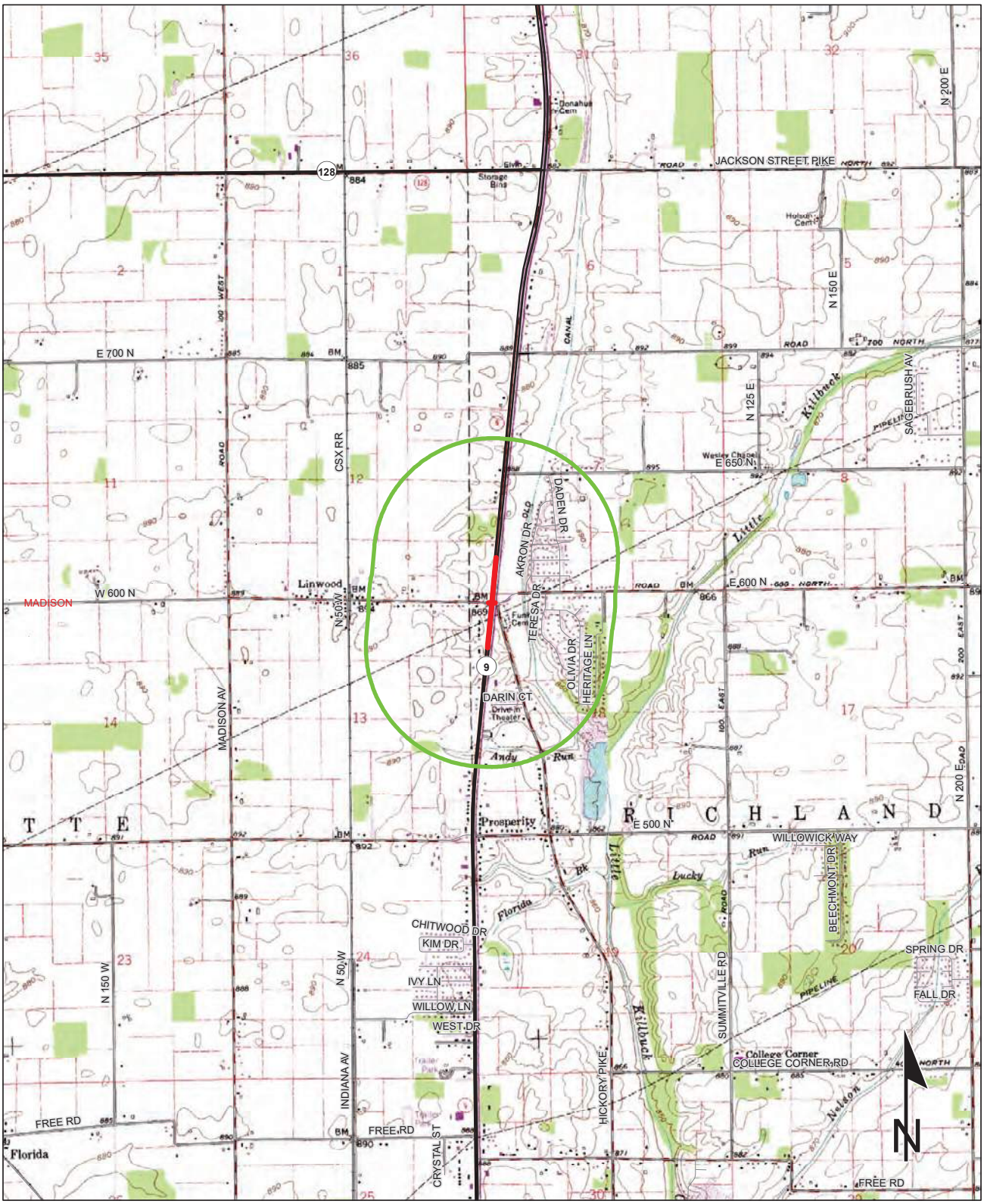
INFRASTRUCTURE: YES

WATER RESOURCES: YES

MINING/MINERAL EXPLORATION: YES

HAZARDOUS MATERIAL CONCERNS: N/A

Red Flag Investigation - Site Location
SR 9 at CR 600 N Rd Intersection
Des. No.1900152, Intersection Improvement with Added Turn Lane
Madison County, Indiana



0.5 0.25 0 0.5 Miles

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

ANDERSON NORTH QUADRANGLE
INDIANA
7.5 MINUTE SERIES
(TOPOGRAPHIC)

Red Flag Investigation - Infrastructure
SR 9 at CR 600 N Rd Intersection
Des. No.1900152, Intersection Improvement with Added Turn Lane
Madison County, Indiana

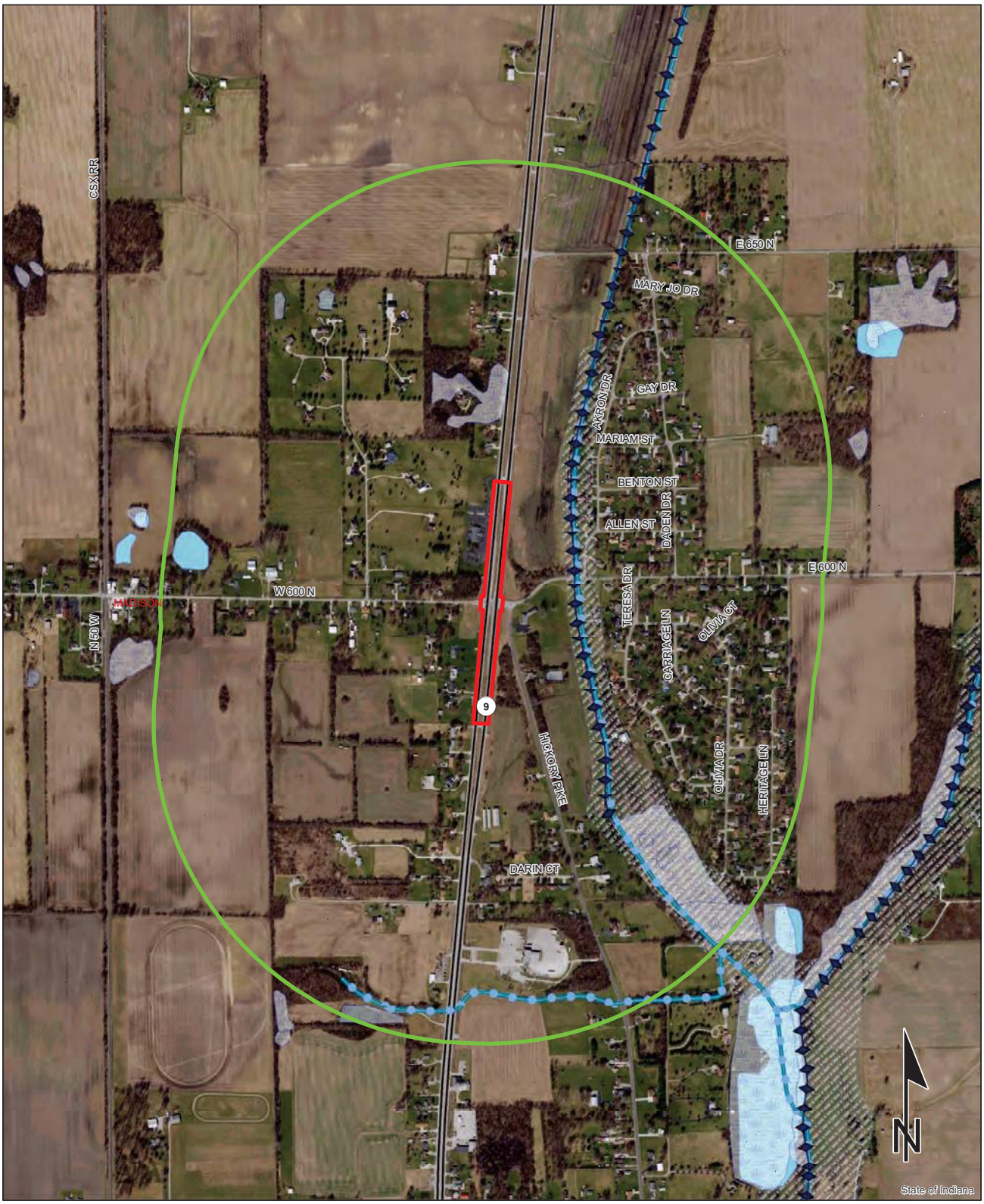
0.15 0.075 0 0.15 Miles

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

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

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

Red Flag Investigation - Water Resources
SR 9 at CR 600 N Rd Intersection
Des. No.1900152, Intersection Improvement with Added Turn Lane
Madison County, Indiana



0.15 0.075 0 0.15 Miles

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

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

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

Red Flag Investigation - Mining/Mineral Exploration
SR 9 at CR 600 N Rd Intersection
Des. No.1900152, Intersection Improvement with Added Turn Lane
Madison County, Indiana

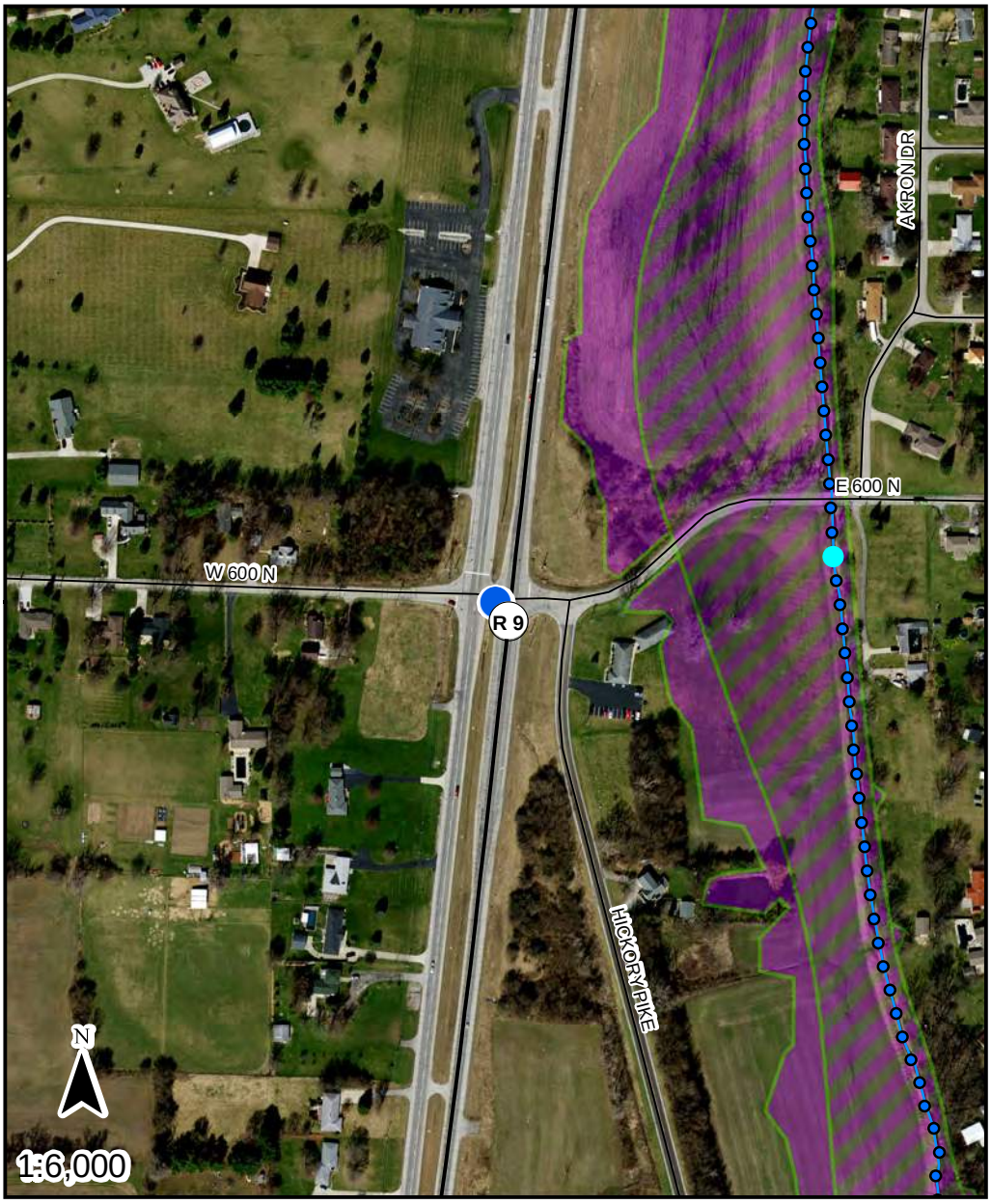
0.15 0.075 0 0.15 Miles

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

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

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

Appendix F: Water Resources



Point of Interest

Base Flood Elevation Point

Flood Elevation Points

STUDIED STREAM

Rivers and Streams at least 1 square mile

Drainage Area (sq. miles)

1 - 10

DNR Approximate Floodway

DNR Approximate Fringe

Point of Interest Coordinates (WGS84)

Long: **-85.6697711491**

Lat: **40.193176507**

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

County: **Madison**

Stream Name: **Old Canal**

Approximate Ground Elevation: **872.3 feet (NAVD88)**

Base Flood Elevation: **862.9 feet (NAVD88)**

Drainage Area: **Not available**

Best Available Flood Hazard Zone: **Not Mapped**

National Flood Hazard Zone: **Not Mapped**

Is a Flood Control Act permit from the DNR needed for this location? **See following pages**

Is a local floodplain permit needed for this location? **Contact your local Floodplain Administrator-**

Floodplain Administrator: **Brad Newman, Director Plan Commisssion**

Community Jurisdiction: **Madison County, County proper**

Phone: **(765) 641-9540**

Email: **bnewman@MadisonCounty.IN.Gov**

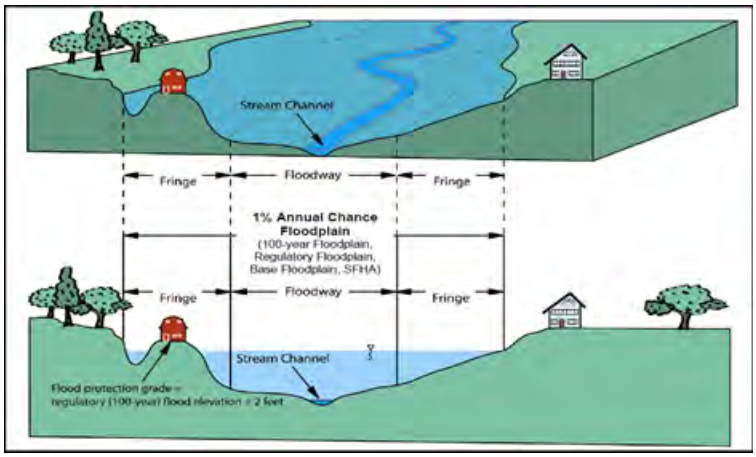
US Army Corps of Engineers District: **Louisville**

About the Floodplain Analysis and Regulatory Assessment (FARA):

All streams have a floodplain, whether mapped or not. This FARA, and the information provided herein, is designed for sites along streams with a mapped floodplain that delineates the floodway portion of the floodplain; see the image below for a visual guide to the floodplain, floodway, and flood fringe. The information in this document was determined using an automated mapping tool. The DNR has high confidence in the tool, but there are scenarios where the floodplain information provided requires additional review from the DNR.

All streams in DNR jurisdiction (streams that have a drainage area one square mile or greater) are shown by a blue line on the map on page 1. However, a floodplain/floodway may or may not be mapped for every stream. In any of the following scenarios, or if you have more detailed floodplain information, use the link at the bottom of this page to request a staff review of the site. Please note that staff review may take several weeks to complete.

Scenarios that require additional DNR review:
•The base flood elevation on page 1 is not available
•The tool selects the nearest flood elevation point for a stream outside the floodplain associated with the point of interest
•There is not a delineated floodway for the stream nearest your point of interest
•The point of interest is along a stream without a mapped floodplain
•The point of interest is in a mapped floodplain of another stream, but the stream nearest the point of interest does not have a mapped floodplain with a floodway of its own



If DNR review is required, do not use this FARA for your site's determination.
If you have questions about DNR permitting requirements, you can contact DNR, Division of Water toll-free at 1-877-928-3755 and select option 1 to speak to a Technical Services staff member. You can also write to the division at water_inquiry@dnr.IN.gov or use the Indiana Waterways Inquiry Request tool at waterways.IN.gov to submit a permitting determination request to both DNR and the Indiana Department of Environmental Management at once.

We recommend keeping a copy of this FARA for your records as the DNR will not have a copy on file.

LINK:

https://survey123.arcgis.com/share/3293526dfdca453e95c19b08fb7bdcfb?FIELD:LAT1=40.193176507&FIELD:LON1=-85.6697711491&FIELD:DNR_PERMIT=See%20following%20pages&FIELD:LOCAL_PERMIT=Contact%20your%20local%20Floodplain%20Administrator-&FIELD:STREAM=OLD%20CANAL&FIELD:INIT_DATE=07/06/2022&FIELD:BFE=862.9

If the link above does not work, send a copy of this FARA to infipinquiry@dnr.IN.gov and describe the reason you are requesting a staff review. Include your name and contact information so that staff can follow-up with you.

The loss of lives and property caused by floods and the damage resulting from floods is a matter of deep concern to Indiana affecting the life, health, and convenience of the people and the protection of property. The Indiana Floodplain Information Portal is designed to show flood risk associated with Indiana waterbodies and provide information specifically for local and state floodplain permitting. The information provided is based on the regulatory floodplain limits; floods exceeding the regulatory floodplain can and do occur. If you are seeking information regarding lake or dam permitting, see the corresponding section below, under the permitting information section.

Floodplain Information:

All streams have a floodplain, whether mapped or not. This FARA, and the information provided herein, is designed for sites along streams with a mapped floodplain. See page 2 for scenarios where this FARA should not be used and additional review from the DNR may be required.

The Best Available Floodplain Layer (BAFL) is the mapping developed by the DNR that provides the best flood risk information currently available. This information should be used for construction, planning, and flood risk assessment. The BAFL incorporates the National Flood Hazard Layer (NFHL) from FEMA's Flood Insurance Rate Maps (FIRMs) for AE zones. The layer has completed modeling and more detailed studies using more recent LiDAR data for areas designated as A zone on the FIRM or areas that were not identified on the FIRM. BAFL mapping exists for over 80% of streams in Indiana. BAFL mapping should not be used for insurance rating purposes or for mandatory flood insurance purchase requirements related to the National Flood Insurance Program. See the Flood Insurance Information section on the following pages for information on flood insurance requirements. Common flood hazard zones are described below; to find the flood hazard zones associated with your point of interest, see the legend on page 1.

- Floodway (FEMA Zone AE Floodway, DNR Detailed, DNR Approximate): The floodway includes the stream channel and the overbank area necessary to carry the 1% annual chance flood, also known as the base flood, which has a 1% chance of being equaled or exceeded in any given year. The water surface at this level is referred to as the Base Flood Elevation (BFE). Land in this area is considered to have a high flood risk. Construction in the floodway area requires a permit from the DNR, Division of Water. Local floodplain ordinances require local construction permits. Flood insurance is strongly recommended and may be required by FEMA. See the Permitting Information and Flood Insurance Information sections of this document for more information.

- Special Flood Hazard Area (FEMA Zone A, FEMA Zone AE without floodway, DNR Approximate without floodway): Any natural ground levels that have an elevation lower than the Base Flood Elevation are considered floodway area. The floodway includes the stream channel and the overbank area necessary to carry the 1% annual chance flood, also known as the base flood, which has a 1% chance of being equaled or exceeded in any given year. The water surface at this level is referred to as the Base Flood Elevation (BFE). Land in this area is considered to have a high flood risk. Construction in the floodway area requires a permit from the DNR, Division of Water. Local floodplain ordinances require local construction permits. Flood insurance is strongly recommended and may be required by FEMA. See the Permitting Information and Flood Insurance Information sections of this document for more information.

- Special Flood Hazard Area (FEMA Zone AH – Ponding, FEMA Zone AO – Sheet Flow): Land in this area is considered to have a high flood risk. These areas are subject to the 1% annual chance flood with average

depths of 1 to 3 feet. A Construction in the Floodway permit is not required from the DNR, Division of Water. Local floodplain ordinances require local construction permits. Do not use the BFE generated by this tool for zones AH and AO; please refer to the FEMA Flood Insurance Study or FIRM for the depth or flood elevation. Flood insurance is strongly recommended and may be required by FEMA. See the Permitting Information and Flood Insurance Information sections of this document for more information.

- Fringe (DNR Detailed, DNR Approximate, FEMA Zone AE): Area outside the floodway but still subject to flooding during the 1% annual chance flood. The 1% annual chance flood, also known as the base flood, has a 1% chance of being equaled or exceeded in any given year. Land in this area is considered to have a high flood risk. A Construction in the Floodway permit is not required from the DNR, Division of Water. Local floodplain ordinances require local construction permits. Flood insurance is strongly recommended and may be required by FEMA. See the Permitting Information and Flood Insurance Information sections of this document for more information.

- Additional Floodplain Area (0.2% Annual Chance Flood): Land in this area is considered to have a moderate risk of flooding. These areas are subject to the 0.2% annual chance (500-year) flood. A Construction in the Floodway permit is not required from the DNR, Division of Water. Local floodplain ordinances may require local construction permits; contact the local Floodplain Administrator for more information. Flood insurance is strongly recommended.

- Additional Floodplain Area (Zone X – Protected by Levee): This zone includes areas protected from the 1% annual chance flood by levee, dike, or other structure subject to failure during larger floods. A Construction in the Floodway permit is not required from the DNR, Division of Water. Local floodplain ordinances may require local construction permits; contact the local Floodplain Administrator for more information. Flood insurance is strongly recommended.

Permitting Information:

Flood Control Act (Construction in the Floodway):

- The Flood Control Act (IC 14-28-1) requires the prior approval of the DNR, Division of Water for any construction in the floodway area including an obstruction, fill, excavation, or the construction of a building.

  A permit application form and permit application assistance manual can be obtained from our website at: https://www.in.gov/dnr/water/regulatory-permit-programs/. You may choose to file an electronic application through our website at: https://www.in.gov/dnr/water/regulatory-permit-programs/file-a-permit-application-online/. Please be aware that in addition to the application fee, there is a $15.00 Enhanced Access Fee to submit an electronic application.

- Local Ordinances / Permitting: For proposed construction at the point of interest marked on the map, you may also be required to obtain permits from or coordinate with the local floodplain administrator, plan commission, zoning office, and county drainage board.

  Construction permitting by local government entities is independent of the State's permitting authority. Local floodplain ordinances require that the lowest floor of a new building or an addition to

an existing building proposed in the Special Flood Hazard Area (SFHA) be elevated at least 2 feet above the Base Flood Elevation (BFE). Some communities in the state regulate to the additional floodplain area also known as the 0.2% chance flood. If a basement is included, the basement floor shall be considered the lowest floor. Special Flood Hazard Area (SFHA) means the land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. The area may be designated as Zone A, AE, AH, AO, AR, A99 or VE on the Flood Insurance Rate Map (FIRM). The area may also be designated on the DNR best available floodplain layer or designated by the community as a flood prone area.

- Indiana Department of Environmental Management: You may also be required to obtain a construction stormwater general permit from the Indiana Department of Environmental Management (IDEM) if the proposed project will disturb one acre or more. Inquiries may be sent to Stormwat@idem.IN.gov. IDEM permits may also be required for impacts to wetlands and streams especially if any work is proposed below the ordinary high-water mark of a waterbody. Go to waterways.IN.gov to submit a permitting determination request, call (317) 233-8488 or (800) 451-6027, or visit the IDEM webpage at https://www.in.gov/idem/cleanwater/ for more information.

- Indiana Department of Health: The state rules which address on-site sewage systems in a floodplain are IDOH Rule 410 IAC 6-8.3-63(e), 70(c)(2), and 72(c)(2) for residential systems and 410 IAC 6-10.1-71(e), 77(c)(2), and 80(c)(2) for commercial systems. The Indiana Department of Health (IDOH) is responsible for administering 410 IAC 6-10.1 and County Health Departments are responsible for administering 410 IAC 6-8.3. The Department of Natural Resources requires that all septic systems in a floodway meet IDOH requirements. Both subsurface trench systems and mound systems are prohibited in all areas below the BFE; it is highly likely that either a connection to a public sewer system or an off-site cluster system will be required. It is recommended that you contact IDOH for compliance with commercial system requirements and your County Health department for compliance with residential system requirements. If you have questions regarding the state rules, you may wish to contact:

  Alice Quinn, Senior Environmental Manager
  Environmental Public Health Division
  Indiana Department of Health
  100 N. Senate Ave., N855
  Indianapolis, IN 46204
  Telephone: (317) 518-4388
  Email: alquinn@isdh.in.gov

- Indiana State Chemist: You may also be required to obtain permits from the Indiana State Chemist, especially if any work is proposed involving pesticide or fertilizer applications. To contact the Office of Indiana State Chemist call (765) 494-1492; or visit their webpage at https://www.oisc.purdue.edu/index.html for more information.

Lake Preservation Act:

- The Lake Preservation Act (IC 14-26-2) requires the approval of the DNR, Division of Water for any construction or project that is proposed below the legal or normal water level, and located over, along, or lakeward of the shoreline of a public freshwater lake, or within 10 feet landward of the shoreline for construction of a wall whose lowest point is below the legal lake level. A list of public freshwater lakes can be found in the "Public Freshwater Lake List" document at https://www.in.gov/nrc/nonrule-policy-documents-npd/. Contact the DNR, Division of Water for more information on permitting requirements if working near a public freshwater lake or near or on a lake not on the Public Freshwater Lake list.

Regulation of Dams:

- A permit under the Flood Control Act (IC 14-28-1) and Regulation of Dams (IC 14-27-7.5) is required for a proposed dam, or work to an existing dam, if any one of the following criteria is met:
    - the drainage area above the dam is greater than one square mile, or;
    - the height of the dam is more than 20 feet as measured from the lowest point in the natural streambed under the centerline of the dam to the crest of the dam, or;
    - the maximum volume of water impounded by the dam to the crest (high pool level during the design storm event) is more than 100 acre-feet, or;
    - upon receiving a petition from a downstream property owner or resident, the DNR, Division of Water deems the dam a high hazard dam

  If a permit is required for a proposed dam, or work to an existing dam, it will be necessary for you to obtain the services of a registered professional engineer experienced in dam design and construction to make a complete geotechnical and hydrologic/hydraulic engineering evaluation of the project, develop plans and specifications, and submit the technical documentation to the DNR, Division of Water with an application for review. Your engineer will need to work with other technical professionals (i.e. geotechnical, engineering geologists, structural engineers, etc.) to develop safe, adequate plans and specifications.

  In order to expedite the permitting process, the Project Engineer should meet with the DNR, Division of Water staff to discuss details of the project before work commences on the plans, specifications, and engineering report. It is important that all survey, hydrology/hydraulic, geotechnical, structural, and mechanical engineering evaluations are complete and accurate prior to submitting the application for a permit.

  If a dam does not require a permit, we would suggest the following action:
    - consult with a professional engineer experienced in dams design, maintenance, and repair to develop a design that will minimize the risk to the downstream properties; the DNR, Division of Water does not offer design services.
    - upon completion of the project, obtain a set of as-built plans signed and stamped by a Professional Engineer certifying that the dam was constructed in accordance with acceptable engineering standards.

  For information on erosion control, proper maintenance, regulation, etc., the applicant is encouraged to follow the Indiana Dam Safety Inspection Manual and General Guidelines for New Dams and Improvements to Existing Dams in Indiana found on the DNR, Division of Water Web page at https://www.in.gov/dnr/water/dams-and-levees/.

Residential Construction in a Floodway:

- New residential construction in the floodway area is prohibited under the Flood Control Act, except in the floodway of the Ohio River. New non-residential buildings proposed in the floodway area will be required to be constructed at least 2 feet above the Base Flood Elevation (BFE). If a basement is included, the basement floor shall be considered the lowest floor. New building construction, including residential and non-residential, proposed in the floodway area of the Ohio River will be required to have the lowest floor constructed at least 2 feet above the Base Flood Elevation (BFE). If a basement is included, the basement floor shall be considered the lowest floor.

- An addition to an existing lawful residence that's located in the floodway does not require a permit from the DNR, Division of Water if the structure was constructed prior to January 1, 1973, and the cost of the addition, in combination with all other additions to the residence since the residence was originally built, does not equal or exceed 50% of the market value of the original, pre-altered residence. The cost of repair should be based on a cost of material that is equal to average retail value and labor that is based on average contractor's fees. The market value of a residence does not include the value of the land on which the residence is built.

  If fill is proposed in the floodway to elevate an addition that meets the above criteria, prior approval from the DNR, Division of Water is required for the fill.

- The reconstruction of a residence in the floodway area is authorized by a general license if specific criteria of the Flood Control Act, IC 14-28-1-24(B)(2), is met. To ensure that the proposed reconstruction project fulfills these requirements, please contact the DNR, Division of Water for more details.

Flood Insurance Information:

- Under the federal regulations of FEMA, the National Flood Insurance Program (NFIP) requires the purchase of flood insurance on buildings in the FEMA mapped Special Flood Hazard Area (Zones A, AE, AH, AO, AR, A99, or VE) that have a federally backed mortgage. DNR-developed Best Available Floodplain Layer mapping should not be used for insurance rating purposes or for mandatory flood insurance purchase requirements related to the NFIP. The National Flood Hazard Zone associated with your point of interest is listed on page 1. Flooding is the most frequent and costly disaster in Indiana. The risk for flooding changes over time due to erosion, land use, weather events, and other factors. Flooding occurs not only in the high-risk Special Flood Hazard Areas, but also in low to moderate-risk areas. About 42% of flood insurance claims nationwide come from areas designated as having a low or moderate flood risk. Therefore, it is strongly recommended to obtain a flood insurance policy even if it is not federally required on your property.

- If the property owner wishes to have the federal requirement to purchase flood insurance waived, they must prove that 1) the structure or property is on natural ground levels with an elevation higher than the Base Flood Elevation (BFE); or that 2) the structure or property is located outside of a Special Flood Hazard Area (SFHA). If one of those conditions exists, the property owner can apply for a Letter of Map Amendment (LOMA) from the Federal Emergency Management Agency (FEMA). A LOMA is a letter which allows a mortgage lender to waive federal flood insurance requirements by stating that an existing structure, property, or portion of a property that has not been elevated by fill is not located in the SFHA. The final decision regarding flood insurance is left to the mortgage lending institution.

  If the structure or property is located inside of the SFHA, the property owner may apply for a LOMA if it can be demonstrated that it is located on natural ground levels with an elevation higher than the Base Flood Elevation (BFE). Specific elevation information must be submitted with the LOMA application, typically documented by a licensed surveyor or engineer.

  If the structure or property is located outside of the Special Flood Hazard Area (SFHA), the property owner may apply for a Letter of Map Amendment Out-As-Shown (LOMA-OAS). Elevation information is not required in this review process. If requesting a LOMA-OAS, please write "Out-As-Shown" at the top of the application form.

Visit https://www.fema.gov/flood-maps/change-your-flood-zone/paper-application-forms to submit a LOMA application online or to obtain the LOMA application forms and instructions. These can also be obtained by contacting FEMA toll-free at 1-877-336-2627. There is no fee for a LOMA application, although fees may be associated with hiring a surveyor to obtain the elevation information for the Elevation Certificate or LOMA application form.

If the LOMA is issued by FEMA and the mortgage lender accepts the LOMA determination, the property owner may be reimbursed up to one year of flood insurance payments. Be aware that regardless of if FEMA issues a LOMA, the mortgage lender has the final decision regarding flood insurance requirements. Finally, note that if a LOMA is issued by FEMA, flood insurance may still be purchased and is encouraged. The policy may have a lower premium and can provide coverage for events larger than the 1% annual chance flood.

Disclaimer:

This Floodplain Analysis and Regulatory Assessment (FARA) should not be construed as a local building permit, nor is it a waiver of the provisions of any local building or zoning ordinances. Additionally, this FARA does not relieve the permittee of the responsibility of obtaining permits, approvals, easements, etc. under other regulatory programs administered by, but not limited to, the U.S. Army Corps of Engineers, County Drainage Board, Indiana Department of Environmental Management, Indiana Department of Health, and local, city, or county floodplain management, planning or zoning commissions.

When using this FARA for a determination of permitting requirements, the user shall maintain a copy of the FARA for documentation purposes. The DNR, Division of Water will not have a record of this FARA.

The approximate ground elevation shown on page 1 of this FARA is based on the latest available ground elevations available to the state. This elevation is provided for your information but may not be detailed or accurate enough to be used for purposes of applying for a Letter of Map Amendment.

Waters of the U.S. Determination Report

Approved 2.25.22

SR 9, at CR 600 North/Linwood Road
Madison County, Indiana
Intersection Improvement
Des. No. 1900152

Prepared by: Payton Fischer, Faelan Hoese and Tamra Reece
Hanson Professional Services Inc.
6510 Telecom Dr., Suite 210
Indianapolis, IN 46278
Completed: February 17, 2022

Initially the project was proposed as an RCI intersection but due to concerns from local businesses and the county, the project is an intersection modernization project. Refer to Project Description section within this CE document.

1.0 Project Description

Date of Waters Field Investigation:
August 26, 2021

Project Location:
Anderson North, Indiana Quadrangle
Sections 7 and 18, Township 20 North, Range 8 East
Central GPS Point: 40.193166°, -85.669789°
Madison County, Indiana

Hanson Professional Services Inc. (Hanson) was contracted by the Indiana Department of Transportation (INDOT) Greenfield District to perform a wetland delineation and waters investigation for the proposed intersection improvement on State Road (SR) 9, at County Road (CR) 600 North/Linwood Road in Lafayette and Richland Townships, Madison County, Indiana (see Figure 1).

Proposed work includes removing the existing traffic signal and converting the intersection into a Restricted Crossing U-Turn (R-CUT) intersection. Channelized left turns will be provided for SR 9. Median U-turn intersections will be installed approximately 1,000 feet (ft.) north and 800 ft. south of the intersection of SR 9 and CR 600 North. Loons will be installed opposite the median crossover locations to allow for larger vehicles to make the U-turn on the divided highway. Culvert extensions will be constructed at the loon locations (see Table 1 for details). Raised concrete medians will be installed to channelize the left turn movements from SR 9 as well as the right turn movements from both minor approaches of CR 600 North. The driveway for the Anderson North Campus Conference Center will be incorporated into the northern loon. Ditch grading will be performed for proper drainage. The need for this project is due to the elevated number of angle crashes and high-speed rear end crashes that indicate the traffic signal is not sufficiently controlling traffic at the intersection. The purpose of this project is to improve safety at the intersection for motorists.

Table 1: Structure Summary

Culvert ID	Description	Proposed Work
Str. 001	15-inch (in.) reinforced concrete pipe (RCP)	Culvert to be filled/plugged
CV 009-048-77.96	42-in. RCP	New riprap at outlet
CLV-009-048-78.01	12-in. RCP	Restore inlet in median
CLV-009-048-78.07	12-in. RCP	Restore inlet in median
CLV-009-048-78.19	36-in. RCP	Ditch grading and riprap replacement
CLV-009-048-78.20	15-in. RCP	Remove pipe and replace with new 15-in. pipe and end section, restore inlet in median and connect with new pipe
CLV-009-048-78.26	6-in PVC Pipe	Restore inlet in median
Str. 002	15-in. RCP	Remove and replace with 21 in. pipe
CLV-009-048-78.31	15-in. RCP	Extend existing pipe and add end section

2.0 Desktop Reconnaissance

Data from the USGS 7.5-minute quadrangle maps (2019), the U.S. Department of Agriculture – Natural Resources Conservation Service (USDA-NRCS) *Web Soil Survey* (2019), the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) (USDOI - FWS, 2014), the Indiana Department of Natural Resources -Division of Water (IDNR-DOW) Best Available floodplain dataset (2018), StreamStats V 4.6.2 (2022), and the USGS National Geospatial Program (2020) National Hydrography Dataset (NHD) were used to provide an indication of areas where waters and wetlands potentially occur.

2.1 USGS Quadrangle Map

The study area is located on the Anderson North USGS 7.5-Minute Quadrangle Map in Sections 7 and 18, Township 20 North, Range 8 East. There are no resources within the study area on the topographic map (see Figure 2).

2.2 National Wetlands Inventory (NWI) Information

The NWI was reviewed for the study area. No NWI wetlands are located within the study area. The nearest wetland is approximately 0.08 mile north of the study area and is classified as Palustrine, Forested, Broad-Leafed Deciduous, Temporarily Flooded (PFO1C) under the Cowardin Classification System (Wetlands Subcommittee, 2013) (see Figure 3-1).

2.3 Soils

The USDA-NRCS *Web Soil Survey* (2019) is generated from USDA-NRCS certified data for Madison County, Indiana. Soil mapping units within the study area depicted in Figures 3-1 and 3-2 are presented in Table 2. According to the Soil Survey Geographic (SSURGO) Database for Madison County, Indiana, the study area contains soil areas with nationally listed hydric soils.

Table 2: Soils

Soil Type	Symbol	NRCS Flooding Frequency	NRCS Drainage Class	NRCS Hydric Soil Category	SSURGO Hydric Rating
Brookston silty clay loam, 0 to 2 percent slopes	Bs	None	Poorly Drained	Predominantly Hydric	95% Hydric
Crosby silt loam, 2 to 4 percent slopes, eroded	CrB2	None	Somewhat Poorly Drained	Predominantly Non-Hydric	7% Hydric
Fox soils, 6 to 12 percent slopes, severely eroded	FtC3	None	Well Drained	Non-Hydric	0% Hydric
Miami silt loam, 6 to 12 percent slopes, eroded	MnC2	None	Moderately Well Drained	Predominantly Non-Hydric	5% Hydric
Miami soils, 6 to 12 percent slopes, severely eroded	MpD3	None	Moderately Well Drained	Non-Hydric	0% Hydric

2.4 Floodways and Floodplains

The IDNR-DOW Floodplain dataset was reviewed for the study area. The study area is located in an area of minimal flood hazard (Zone X) (see Figure 4). Based on StreamStats V 4.6.2 (2022) there is an upstream drainage area of 0.266 square mile at culvert CV 009-048-77.96.

2.5 12-Digit Hydrologic Unit Code

The USGS 12-Digit Hydrologic Unit Code (HUC) (Indiana Geological Survey, 2011) mapping was reviewed for the study area. The study area is located entirely within the limits of the Little Killbuck Creek Subwatershed 12-Digit HUC (051202010304).

2.6 National Hydrography Dataset (NHD) Flowlines

Five NHD flowlines run through the study area. The northernmost flowline flowing west to east is classified as an underground conduit. The flowline north of the SR 9 and CR 600 North intersection is classified as a connector with no attributes. The flowline crossing CR West 600 North from south to north is classified as a canal/ditch with no attributes. The two flowlines south of the SR 9 and CR 600 North intersection are classified as a connector with no attributes and an unclassified flowline (see Figures 3-1 and 3-2).

3.0 Field Reconnaissance

A field reconnaissance was conducted on August 26, 2021, by Hanson personnel to determine and identify jurisdictional wetlands and Waters of the United States (WOTUS) or Waters of the State within the study area. The study area was determined by the construction limits. The study area is along the edge of pavement around the construction limits. The length of the study area was walked, and photos were taken of any suspected features. Collector for ArcGIS installed on an iPad equipped with a Bad Elf GPS receiver was used to collect data points and photographs throughout the study area. See Figures 5-1 through 6-3 for collected data and selected photo locations.

3.1 Stream Features

No stream features exhibiting an ordinary high-water mark (OHWM), or a defined bed and bank were observed within the study area.

3.2 Wetlands

No areas within the study area displaying potential wetland characteristics were identified during the field visit. Vegetation throughout the study area consisted of facultative upland (FACU) and upland (UPL) plant species. These species included smooth brome (*Bromus inermis*¸ FACU), Canadian thistle (*Cirsium arvense*, FACU), cutleaf teasel (*Dipsacus laciniatus*, UPL), common milkweed (*Asclepias syriaca*, FACU), Queen Anne's lace (*Daucus carota*, UPL), and Canadian goldenrod (*Solidago canadensis*, FACU). The land form of the roadside was convex and sloped toward the ditches outside the study area providing drainage. No wetlands were identified within the study area.

3.3 Ditch Features

Four roadside ditches (RSDs) were observed throughout the study area. RSD 1 is a vegetated ditch northeast of the intersection of SR 9 and CR 600 North. RSD 1 flows west to east. RSD 2 is a mowed vegetated ditch west of SR 9 at the northern portion of the study area. RSD 2 begins at the outlet of Str. 002 and flows north to south. RSD 3 is a mowed vegetated ditch west of SR 9. RSD 3 begins at CLV-009-048-78.19 and flows north to south. RSD 4 is a ditch that has no vegetation with exposed soil. RSD 4 begins at the outlet of CV 009-048-77.96 and flows west to east. At the time of the field visit, the ditch appeared to end at a large berm. A flowline classified as an unclassified flowline is depicted in Figure 3-2 at the location of RSD 4. There was prominent erosion of the surrounding upland area (see Photo 13).

No flow or standing water was observed in any of the RSDs. No RSDs were observed in the median of the divided highway. The vegetated median between the roads appeared to be roadside swales that drained to median inlets and not defined ditches (see Photos 10 and 11). The RSDs lacked an OHWM and did not have a defined bed and bank; therefore, they would likely be considered non-jurisdictional by the USACE. See Table 3 and Figures 5-1 and 5-2 for details and locations of the RSDs.

Table 3: Ditch Summary Table

Ditch Name	Photos	Description	Length	Flow Direction	Flow Observed
RSD 1	9	Vegetated	20 ft.	East	No
RSD 2	1-2	Mowed vegetation	155 ft.	South	No
RSD 3	5-6	Mowed vegetation	44 ft.	South	No
RSD 4	13-14	Exposed soil	10 ft.	East	No

3.4 Open Water Features

No open water features were observed within the study area at the time of the site visit.

4.0 Conclusions

No jurisdictional features were identified within the study area. The final determination of jurisdictional waters is ultimately made by the USACE. This report is our best judgement on the guidelines set forth by the USACE.

5.0 Acknowledgement

This waters determination has been prepared based on the best available information, interpreted in the light of the investigator's training, experience and professional judgement in conformance with the 1987 *Corps of Engineers Wetlands Determination Manual*, the appropriate regional supplement, the *USACE Jurisdictional Determination Form Instructional Guidebook* (2007), and other appropriate agency guidelines.

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6.0 Supporting Documentation

Maps:
- Figure 1 – Project Location Map
- Figure 2 – USGS Topographic Map
- Figure 3-1 to 3-2 – NHD, NWI, and Soil Survey Maps
- Figure 4 – IDNR Floodplain Map
- Figures 5-1 to 5-2 – Field Identified Resources Maps
- Figures 6-1 to 6-3 – Photo Location Maps

StreamStats Report
Photos 1-16

7.0 References

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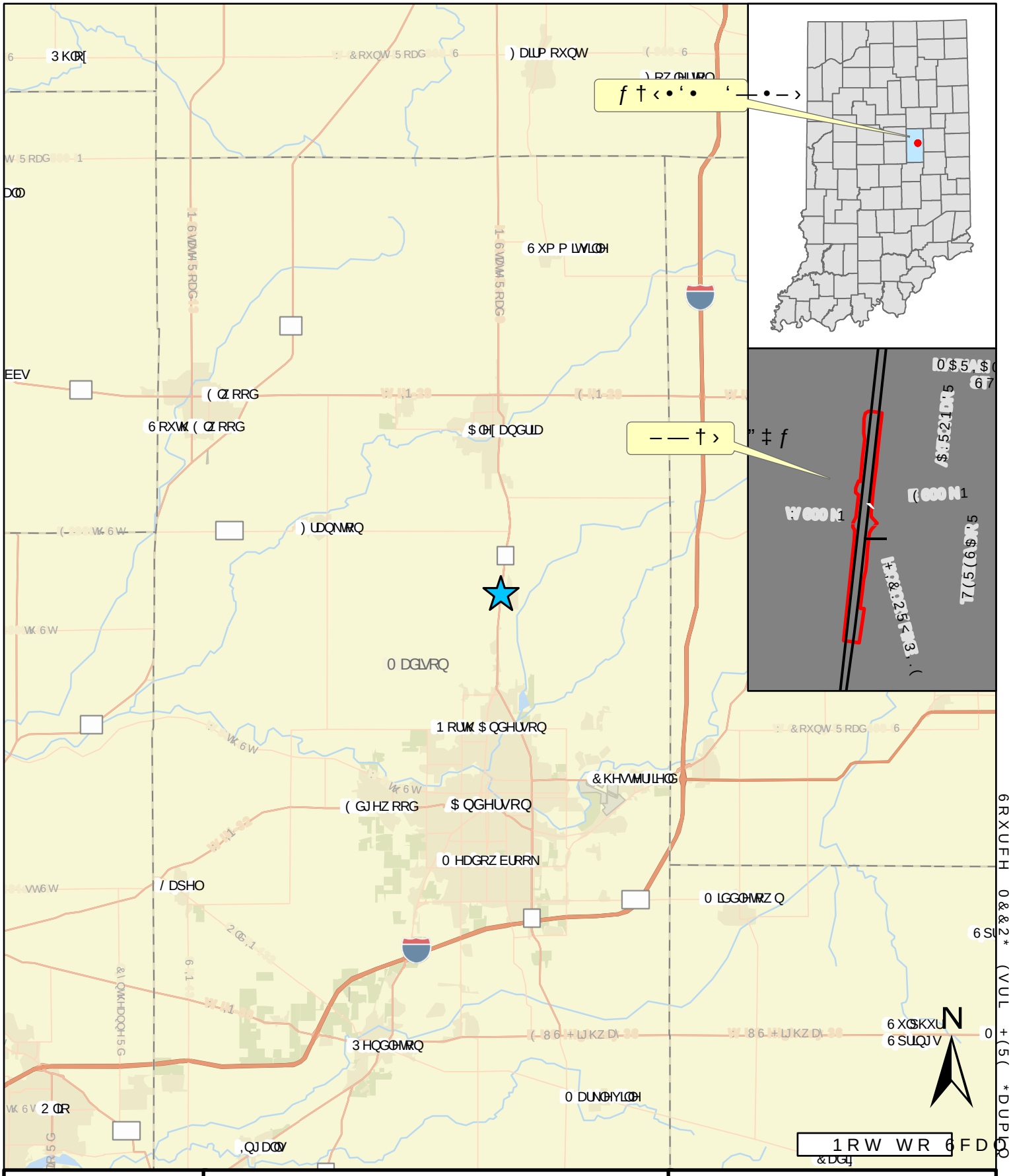
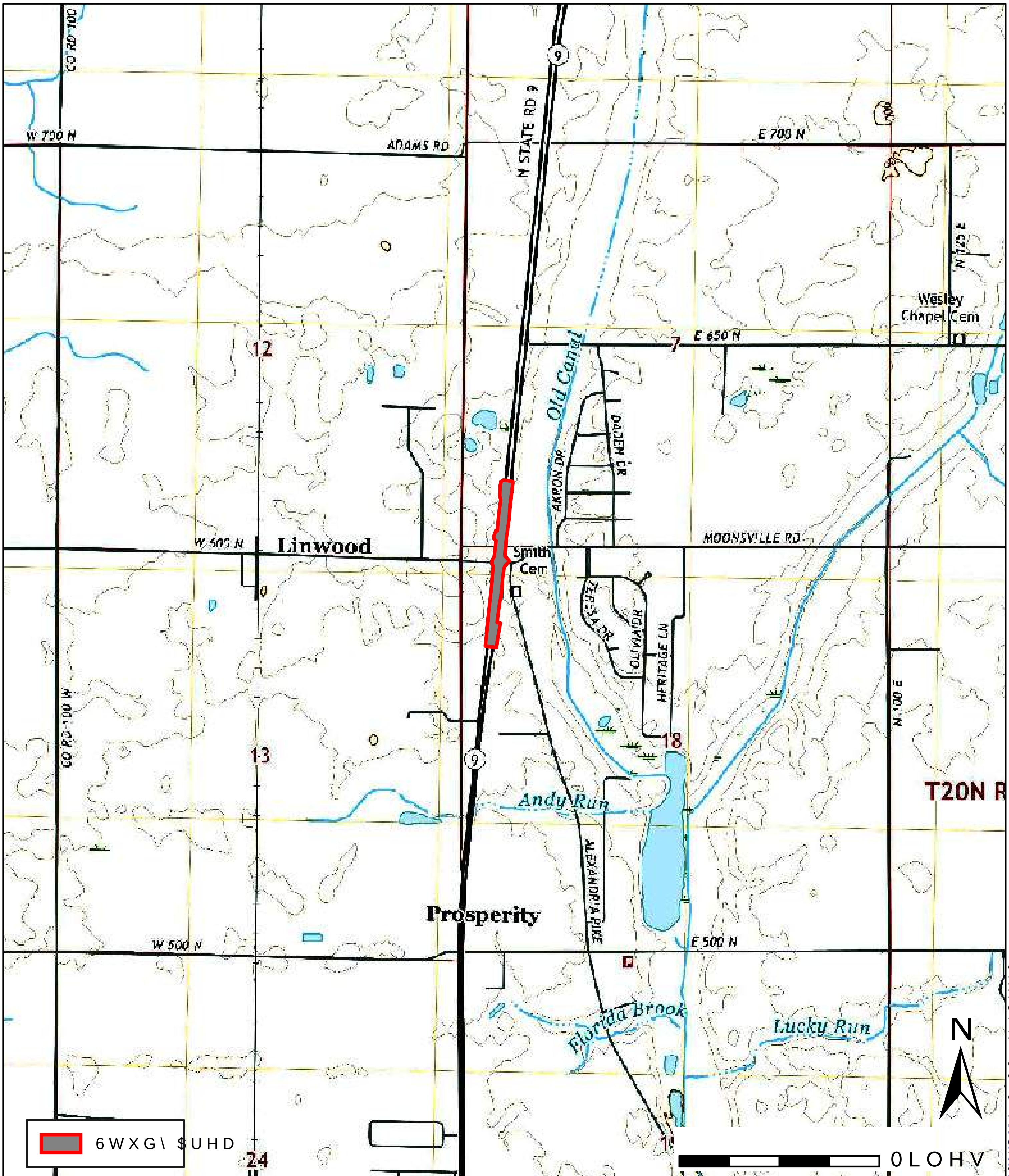
Wetlands Subcommittee. (2013). Classification of wetlands and deepwater habitats of the United States. FGDC-STD-004-2013. Federal Geographic Data Committee, Reston, VA.



HANSON. Hanson Professional Services Inc.	)LJXUH 3URMHFW /RFDWLRQ :DWHUV 5HSRUW 65 ,QWHUVHFWLRQ ,PSURYHPHQW 0DGLVRQ &RXQW\ ,QGLDQD
	'HV 1R &UHDWHG



)LJXUH 86*6 7RSRJUDSKLF 0DS

:DWHUV 5HSRUW

65 ,QWHUVHFWLRQ ,PSURYHPHQW

0DGLVRQ &RXQW\ ,QGLDQD

'HV 1R &UHDWHG

,QGLDQD 'HSDUWP

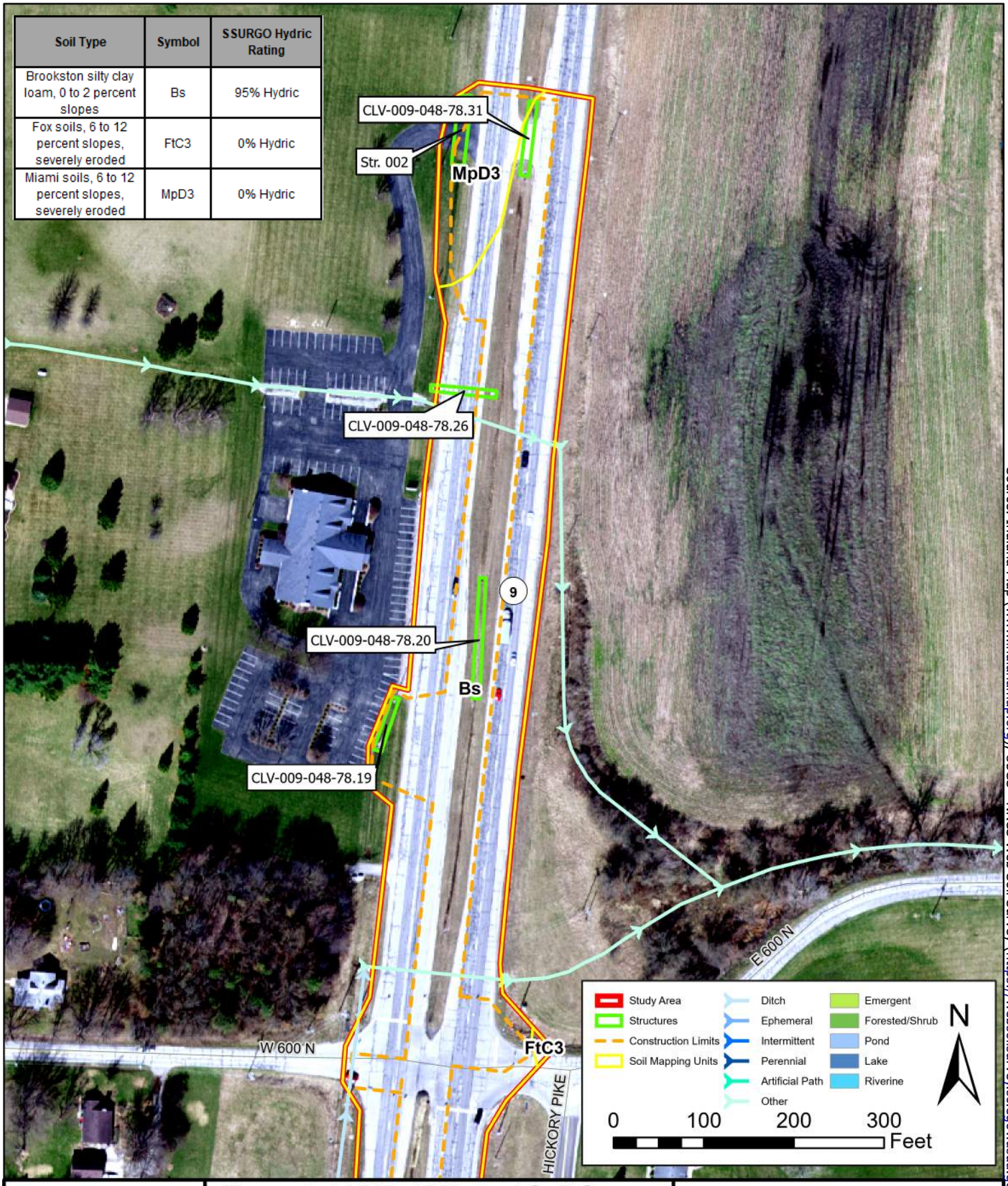
RI 7UDQVSRUWDW

1RUWK 6HQDWH

,QGLDQDSROLV ,1

6RXUFH 86*6 7RSR

Soil Type	Symbol	SSURGO Hydric Rating
Brookston silty clay loam, 0 to 2 percent slopes	Bs	95% Hydric
Fox soils, 6 to 12 percent slopes, severely eroded	FtC3	0% Hydric
Miami soils, 6 to 12 percent slopes, severely eroded	MpD3	0% Hydric



Source: Indiana Map (www.indianamap.org), USGS - NRCS Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm)

Figure 3-1 NHD, NWI, and Soil Survey

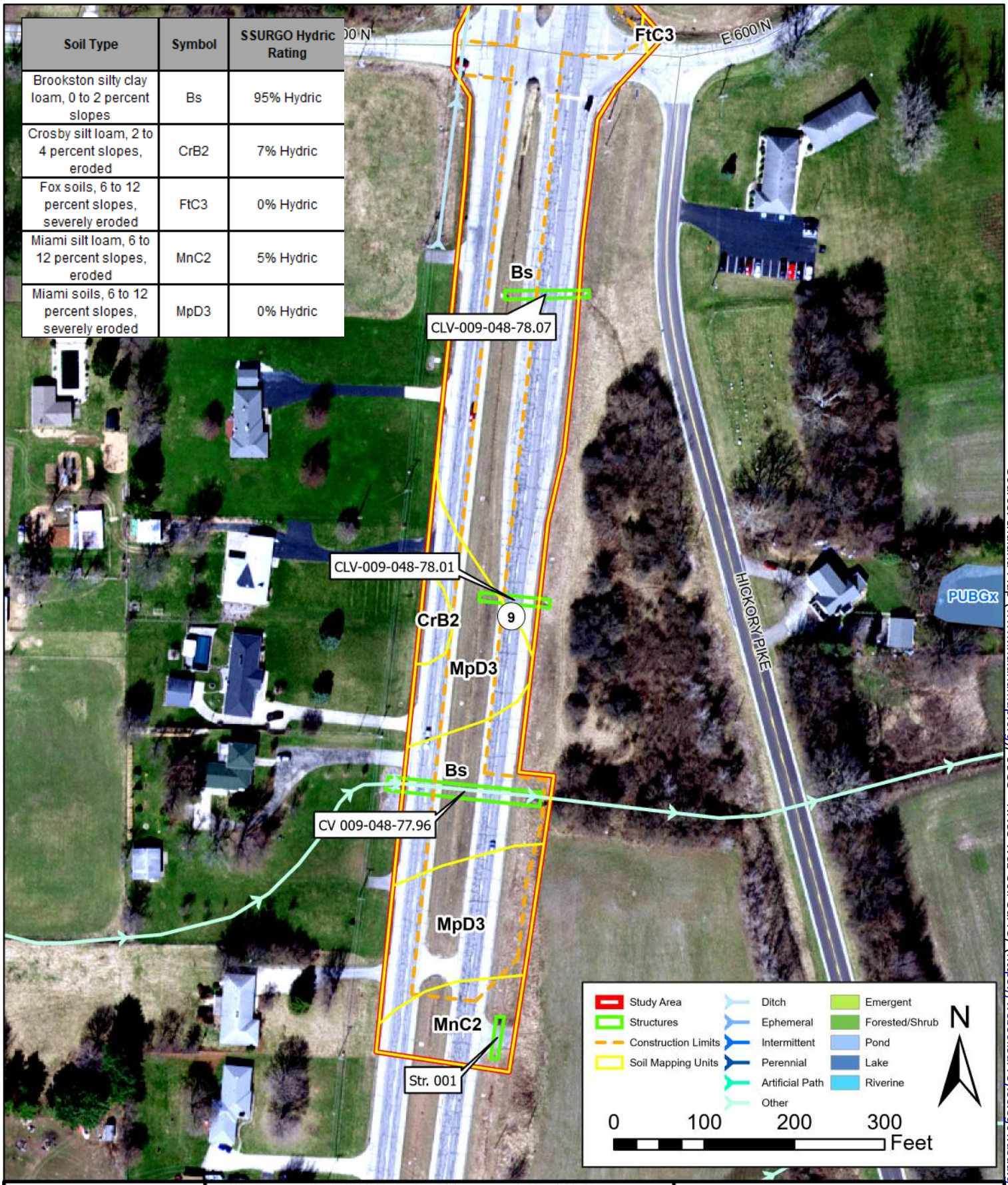
Waters Report
SR 9 Intersection Improvement
Madison County, Indiana

Des. No. 1900152 Created: 2/9/2022

HANSON
Hanson Professional Services Inc.

Indiana Department of Transportation
100 North Senate Avenue
Indianapolis, IN 46204

Soil Type	Symbol	SSURGO Hydric Rating
Brookston silty clay loam, 0 to 2 percent slopes	Bs	95% Hydric
Crosby silt loam, 2 to 4 percent slopes, eroded	CrB2	7% Hydric
Fox soils, 6 to 12 percent slopes, severely eroded	FtC3	0% Hydric
Miami silt loam, 6 to 12 percent slopes, eroded	MnC2	5% Hydric
Miami soils, 6 to 12 percent slopes, severely eroded	MpD3	0% Hydric



Source: Indiana Map (www.indianamap.org), USGS - NRCS Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm)

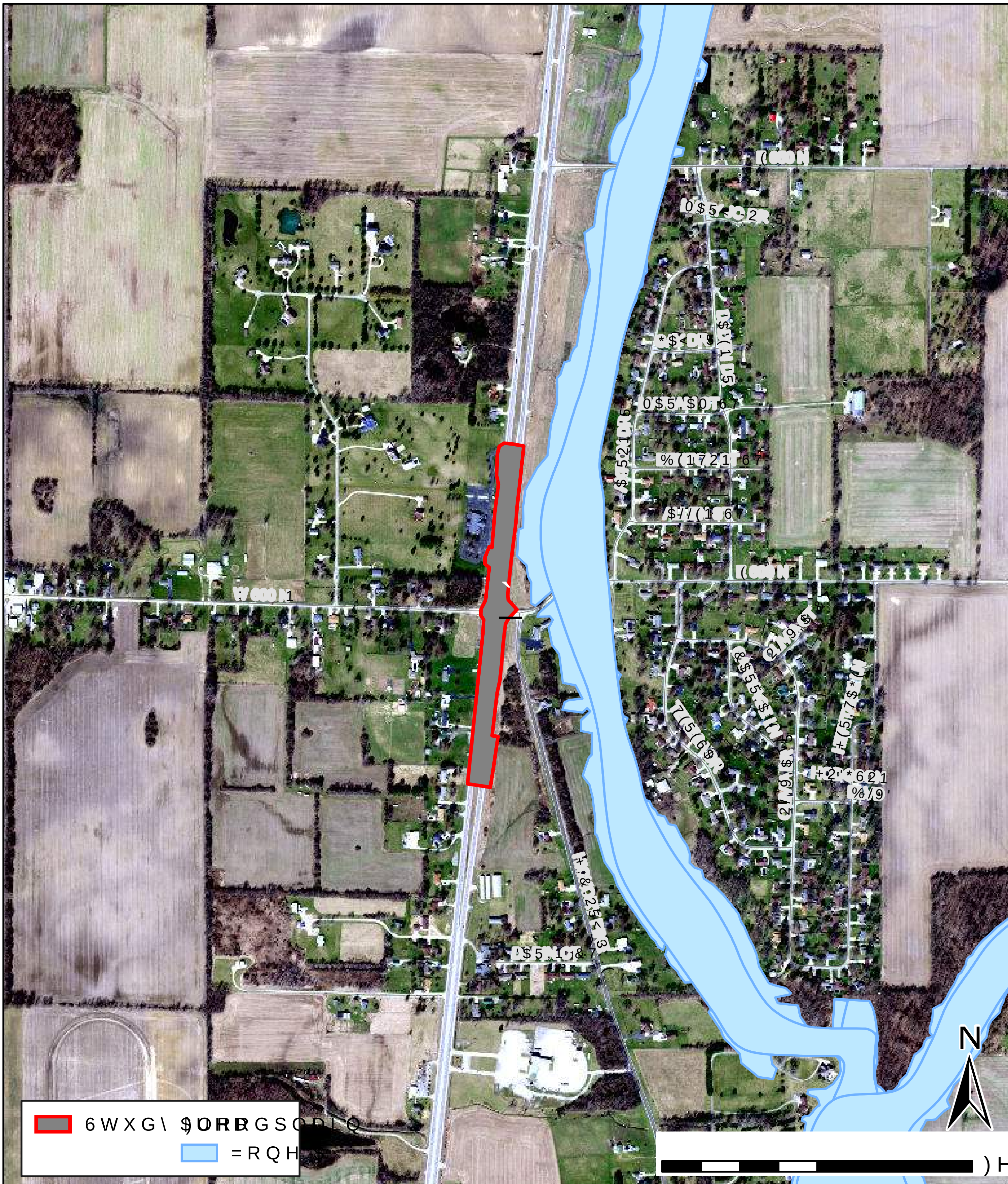
HANSON
Hanson Professional Services Inc.

Figure 3-2 NHD, NWI, and Soil Survey

Waters Report
SR 9 Intersection Improvement
Madison County, Indiana

Des. No. 1900152 Created: 2/9/2022

Indiana Department of Transportation
100 North Senate Avenue
Indianapolis, IN 46204



)LJXUH ,'15)ORRGSODLQ 0DS	
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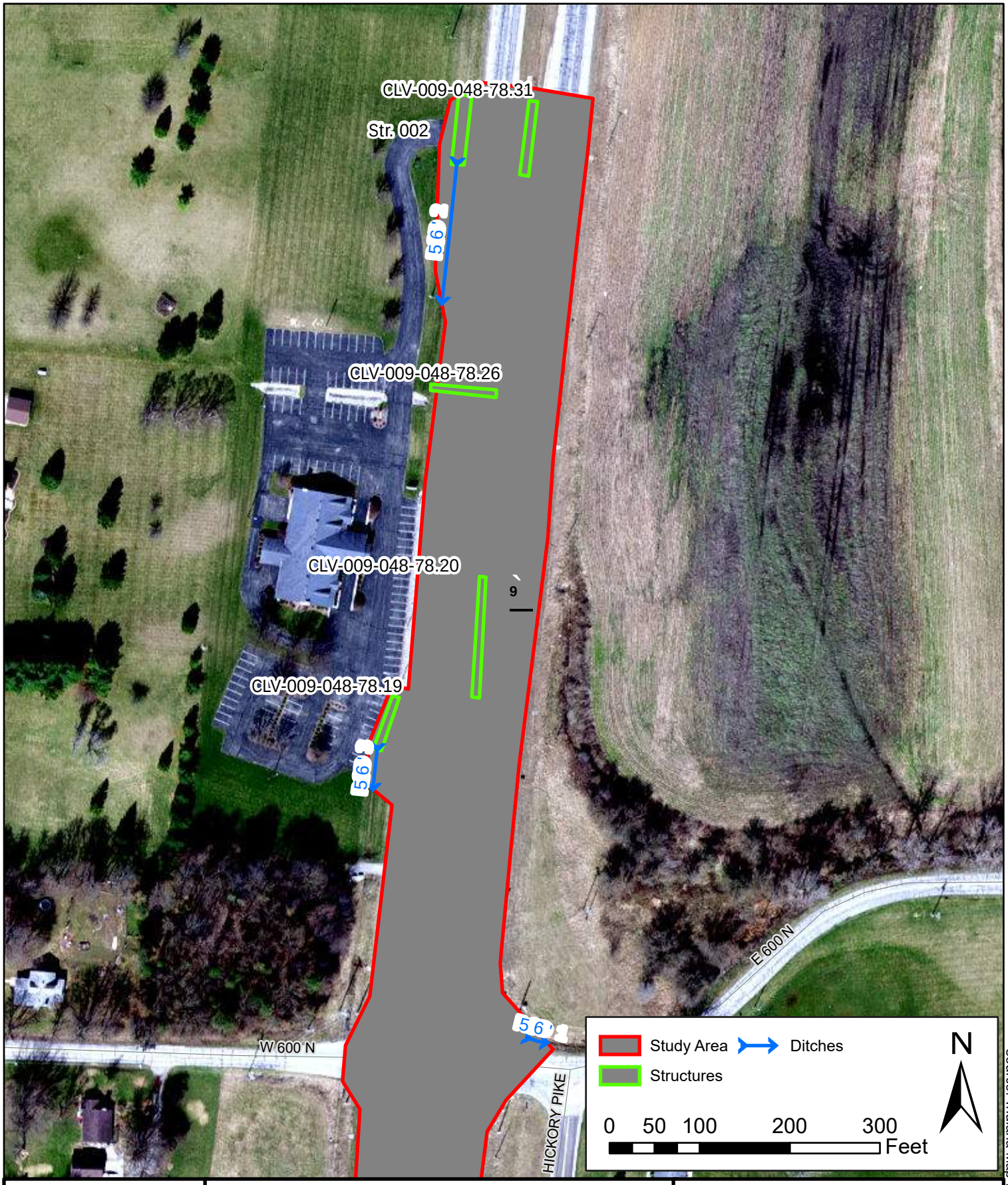
'HV 1R &UHDWHG	

6RXUFH ,'15 %HVW $YDLODEOH



Source: Indiana Map (www.indianamap.org)

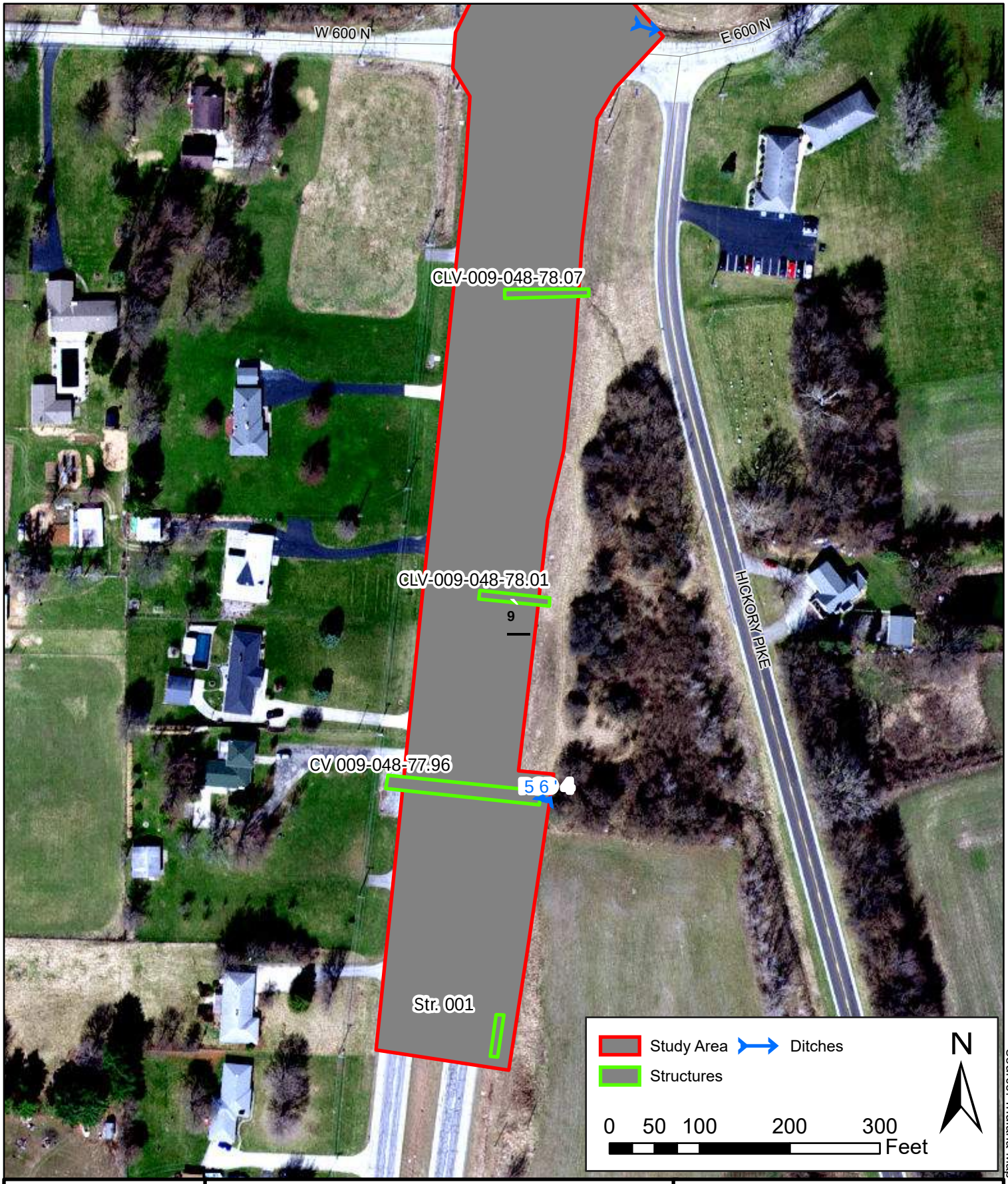
Figure 5-1 Field Identified Resources

Waters Report
SR 9 Intersection Improvement
Madison County, Indiana

Des. No. 1900152 Created: 2/9/2022

HANSON
Hanson Professional Services Inc.

Indiana Department of Transportation
100 North Senate Avenue
Indianapolis, IN 46204



Source: Indiana Map (www.indianamap.org)

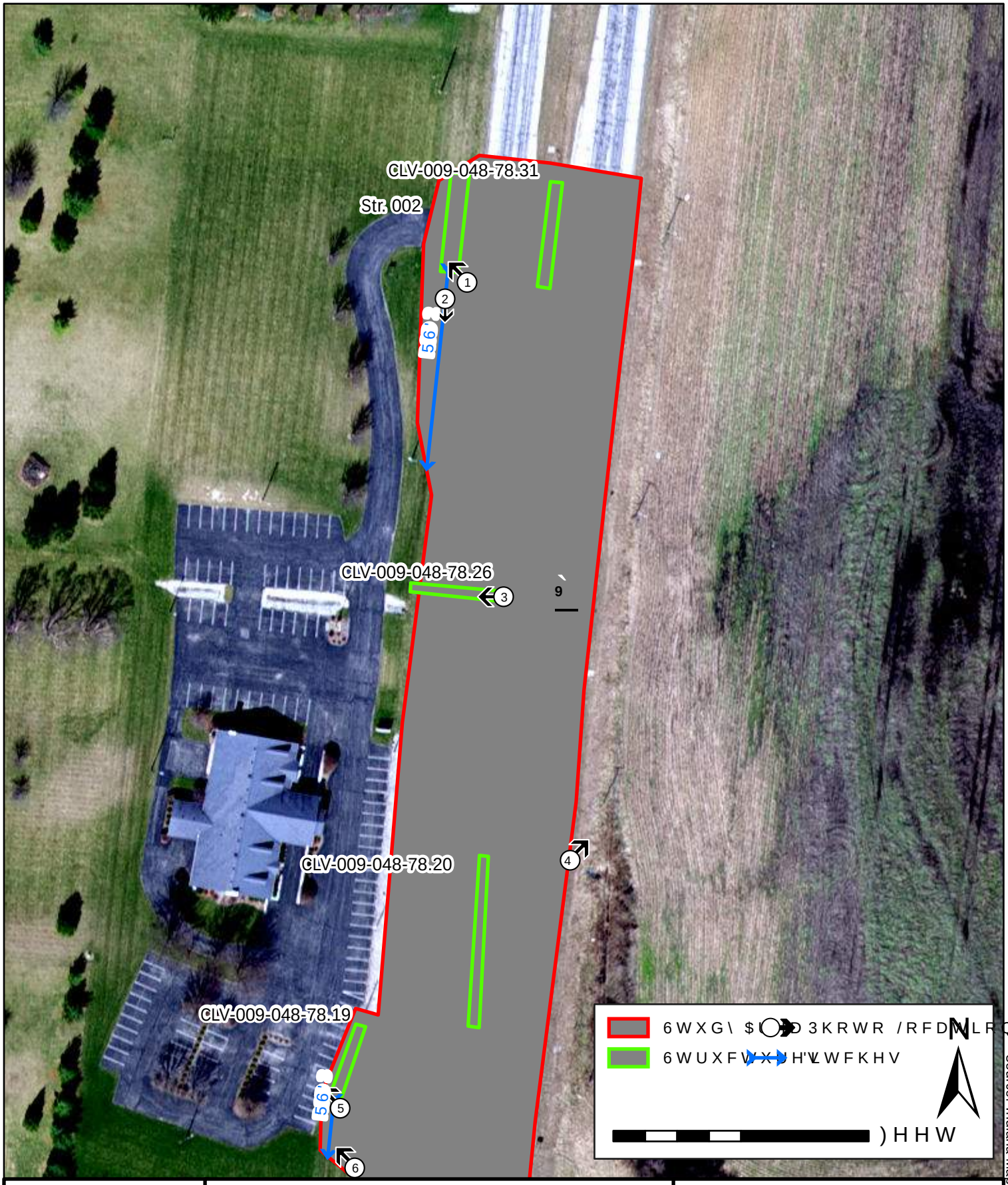
Figure 5-2 Field Identified Resources

Waters Report
SR 9 Intersection Improvement
Madison County, Indiana

Des. No. 1900152 Created: 2/9/2022

HANSON
Hanson Professional Services Inc.

Indiana Department of Transportation
100 North Senate Avenue
Indianapolis, IN 46204



Source: Indiana Map (www.indianamap.org)

HANSON. Hanson Professional Services Inc.	**Figure 6-1 Photo Locations** **Waters Report** 65 ,QWHUVHFWLRQ ,PSURYHPHQW 0DGLVRQ &RXQW\ ,QGLDQD	**Indiana Department of Transportation** 1RUWK 6HQDWH ,QGLDQDSROLV ,
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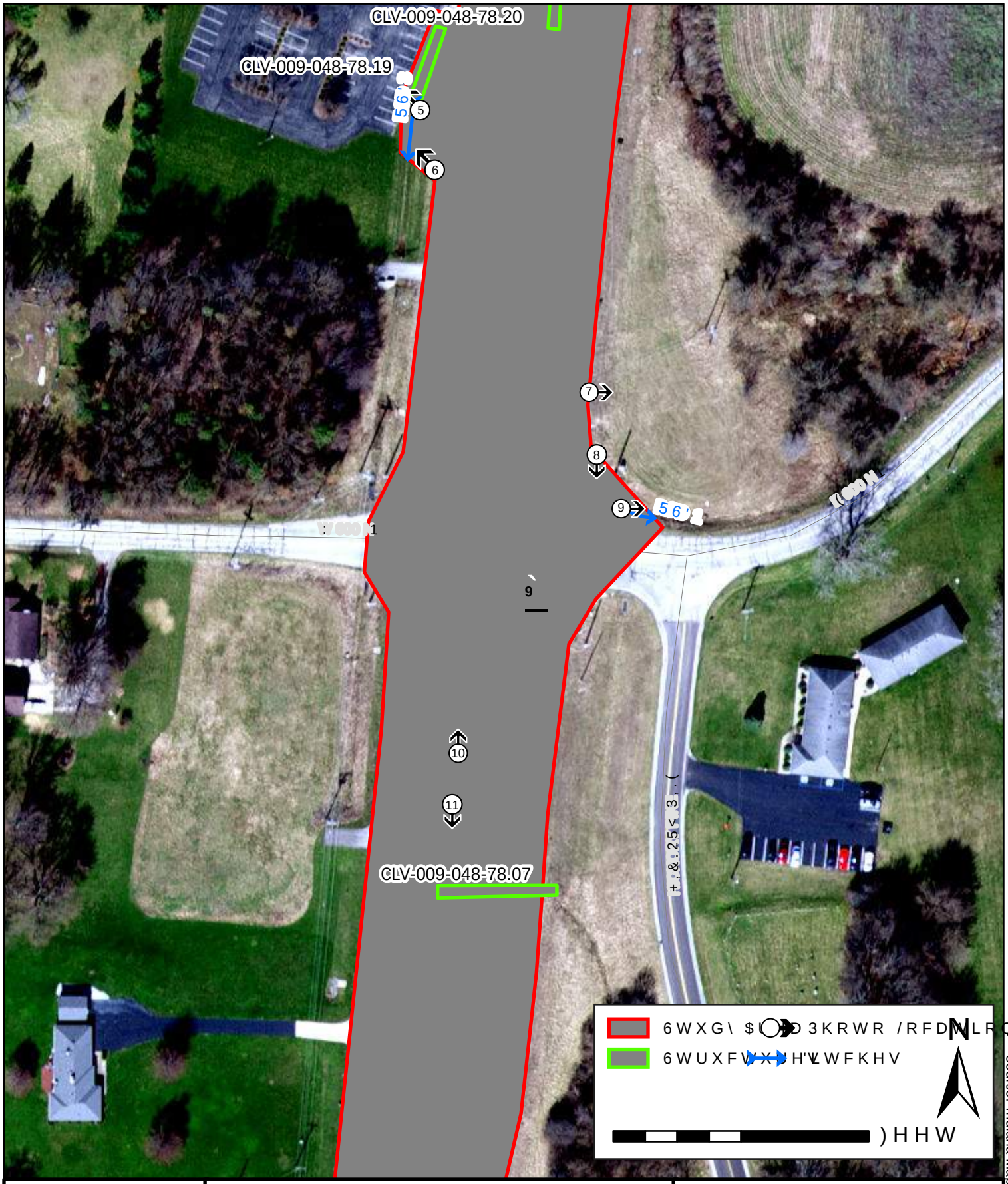
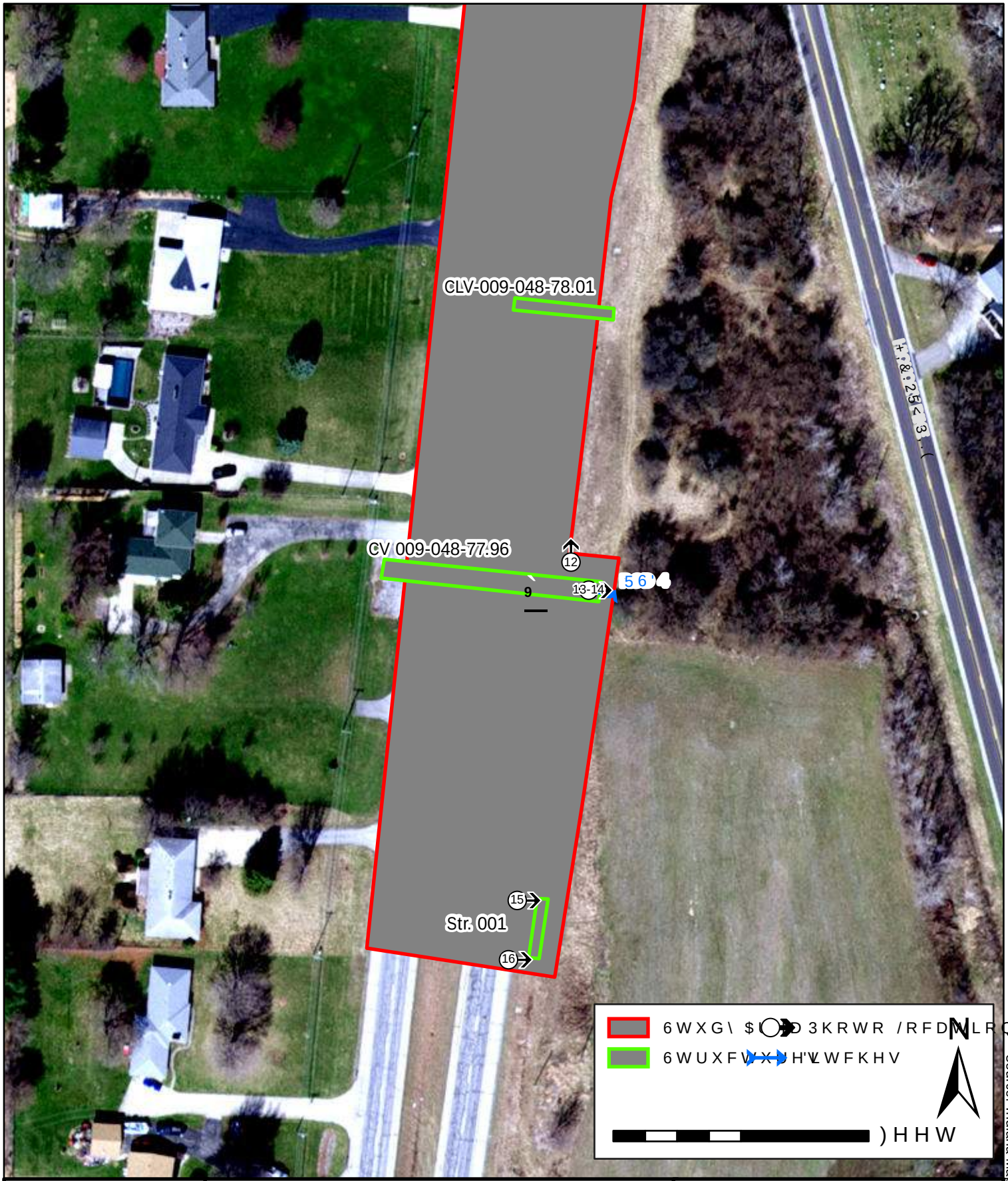


HANSON. Hanson Professional Services Inc.	**Figure 6-2 Photo Locations** **Waters Report** 65 ,QWHUVHFWLRQ ,PSURYHPHQW 0DGLVRQ &RXQW\ ,QGLDQD	**Indiana Department of Transportation** 1RUWK 6HQDWH ,QGLDQDSROLV ,
'HV 1R	&UHDWHG	

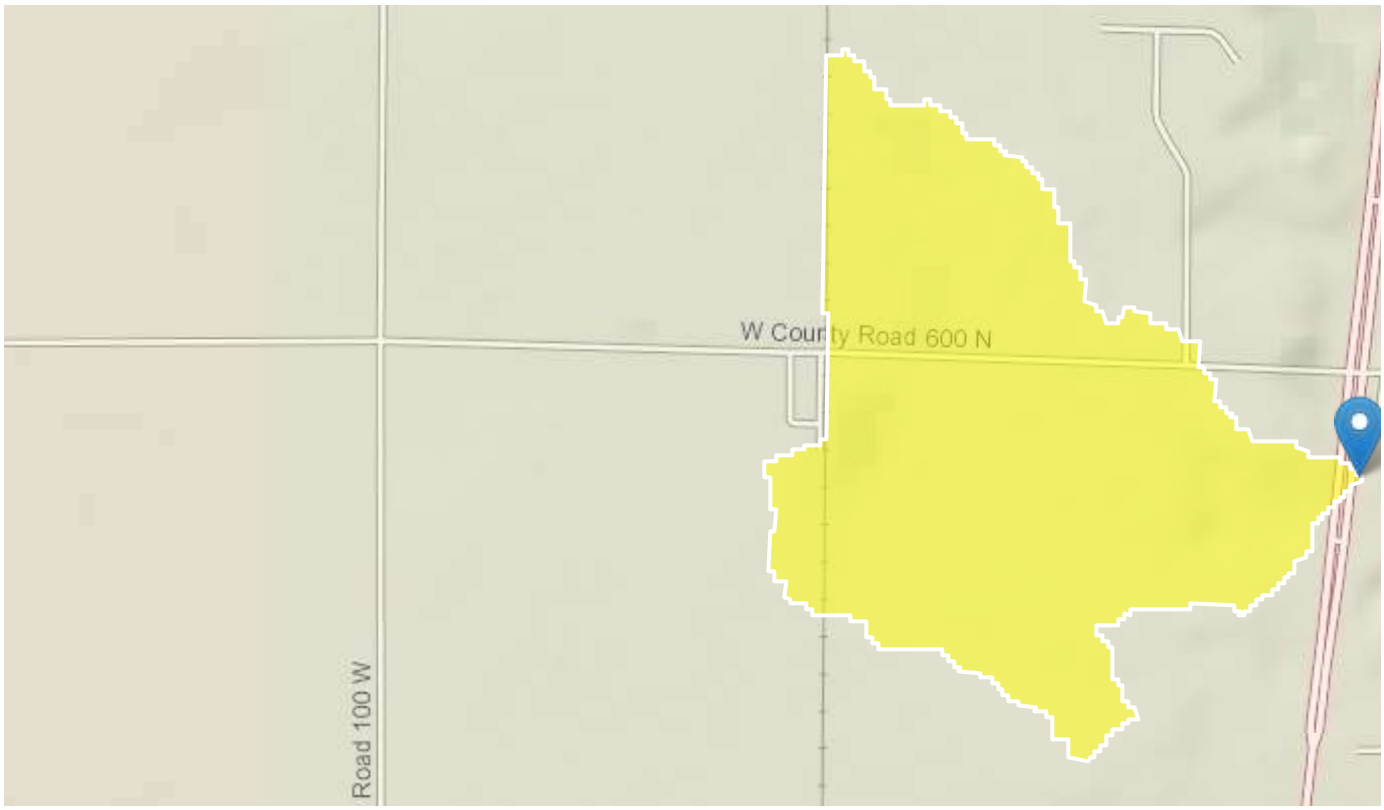
Source: Indiana Map (www.indianamap.org)



HANSON. Hanson Professional Services Inc.	**Figure 6-3 Photo Locations** **Waters Report** 65 ,QWHUVHFWLRQ ,PSURYHPHQW 0DGLVRQ &RXQW\ ,QGLDQD	**Indiana Department of Transportation** 1RUWK 6HQDWH ,QGLDQDSROLV ,
'HV 1R	&UHDWHG	

StreamStats Report Des. 1900152 Intersection Improvement

Region ID: IN
Workspace ID: IN20220111185447470000
Clicked Point (Latitude, Longitude): 40.19145, -85.66977
Time: 2022-01-11 13:55:06 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.266	square miles

Application Version: 4.6.2
StreamStats Services Version: 1.2.22
NSS Services Version: 2.1.2

Photo 1. RSD 2 at outlet of Str. 002, viewing northwest, 8/26/2021

Photo 2. RSD 2 west of SR 9 southbound, viewing south, 8/26/2021

Photo 3. Inlet of CLV 009-048-78.26 in median of SR 9, viewing west, 8/26/2021

Photo 4. Roadside east of SR 9, viewing northeast, 8/26/2021

Photo 5. Outlet of CLV-009-048-78.19 draining to RSD 3, viewing northwest, 8/26/2021

Photo 6. RSD 3 west of SR 9 southbound, viewing northwest, 8/26/2021

Photo 7. Upland area at northeast corner of intersection, viewing east, 8/26/2021

Photo 8. Northeast corner of intersection, viewing south, 8/26/2021

Photo 9. RSD 1 at intersection of SR 9 and CR 600 North, viewing east, 8/26/2021

Photo 10. Median south of intersection, viewing north, 8/26/2021

Photo 11. Median south of intersection, viewing south, 8/26/2021

Photo 12. Roadside north of CV 009-042-77.96 and RSD 4, viewing north, 8/26/2021

Photo 13. RSD 4 ending at berm, viewing east, 8/26/2021

Photo 14. Outlet of CV 009-048-77.96 and RSD 4, viewing east, 8/26/2021

Photo 15. Outlet of Str. 001 east of SR 9, viewing east, 8/26/2021

Photo 16. Inlet of Str. 001 east of SR 9, viewing east, 8/26/2021

Appendix G: Public Involvement

HANSON
ENGINEERING | PLANNING | ALLIED SERVICES

PH (317).293.9024
HANSON-INC.COM

6510 Telecom Drive, Suite 210
Indianapolis, IN 46278

April 8, 2021

NOTICE OF SURVEY

«OwnerName»
«Mailing_Address»
«Mailing_CityStateZip»

RE: **Des. No. 1900152 – SR 9 Intersection At County Road 600 N (Linwood Road) Improvements with Added Lanes, Madison County, Indiana**

Dear Property Owner:

Our information indicates that you own or occupy property near the subject proposed highway project. Our employees will be performing a survey of the project area in the near future. It may be necessary for them to come onto your property to complete this work. This is permitted by law per Indiana Code IC 8-23-7-26. They will show you their identification if you are available, before coming onto your property. If you have sold this property, or it is occupied by someone else, please let us know the name and address of the new owner or current occupant so we can contact them about the survey.

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

The survey work will include mapping the location of features such as trees, buildings, fences and drives as well as obtaining ground elevations. This survey is needed for the proper planning and design of this highway project. Please be assured of our sincere desire to cause you as little inconvenience as possible during this survey. If problems do occur, please contact our field crew or contact me at the telephone number or address shown above.

Sincerely,

HANSON PROFESSIONAL SERVICES INC.

Richard P. McPhail, PS
Senior Surveyor

Public Involvement Plan -- DES NO. 1900152
Proposed SR 9 Intersection Improvements with Added Turn Lanes in Madison County
June 17th, 2022

Introduction

The Indiana Department of Transportation (INDOT) recognizes the importance of involving the public in the exchange of information when providing transportation facilities and services to best meet the state's transportation challenges. INDOT promotes public involvement opportunities and public engagement activities in the planning, developing, designing, construction, operations and maintenance of transportation projects. INDOT strives to diligently provide opportunities for early and continuing involvement of the public in developing transportation plans, programs, projects, and provide complete public information, timely public notice and public access to key decisions.

Purpose

This public involvement plan is designed to provide for early and continuous engagement of project stakeholders beginning in the project development phase. Both the public and decision-makers need to fully understand the problems, opportunities, and the various options or alternatives that may lead toward finding an acceptable solution. Effective public participation increases understanding and improves decisions by bringing all issues, idea, opinions, and perspectives to the table. Sustainable decisions are those that are technically feasible, economically viable, environmentally compatible, and publicly acceptable.

The purpose of this public involvement plan is to:

- Clarify specific public involvement objectives for the project.
- Present a schedule for public involvement activities that is consistent with project schedule.
- Establish a process for communicating with the public as well as a process for solicitating input from the stakeholders who will be, or may be, impacted by the proposed transportation project.
- Clearly communicate the public involvement goals and tools that will be used to achieve these goals.

Throughout the project, techniques and the implementation of the plan will be evaluated, and changes may be made to adapt to stakeholders needs, new and changing issues, and/or changes in the project process and schedule.

Goals and objectives

The goal of this plan is to promote two-way communication aimed at providing information to the public and incorporating those views, input and feedback into the decision-making process. Therefore, the objectives of the plan are to:

- Provide early and continuous dissemination of information and obtain input from primary project stakeholders and the public at large.
- Identify key issues, problems, and concerns of the public, and proactively work to ensure that they are addressed during the development of the project.
- Develop and implement a process that maintains open and continuing two-way communication between the public and project team.

Approach

INDOT will proactively provide information regarding the project to the stakeholders, elected public officials, community leaders, residents within the project area, and the public in addition to solicitating information from this group regarding issues, problems and opportunities. The approach presented in this plan through the following series of tasks is adopted to reach various groups of stakeholders:

- Key local community leaders
- Elected public officials
- Local residents and businesses
- Commuters/traveling public
- Resource agencies (federal/state/local)
- Others

Tasks

To accomplish the goals noted above, the following actions will be undertaken:

Identify Stakeholders and Communicate. Stakeholders will be identified through coordination with the project team and other agencies. Property owner notification letters will be sent prior to survey or other field work activities taking place. Community outreach will be conducted by providing early coordination letters to relevant stakeholders and agencies. These activities will be undertaken during winter and spring of 2022.

Information Sharing will occur at appropriate milestones in the planning and design process. Shared information could include traffic analysis, an Engineering Assessment, design options, or other information that has been reviewed and approved by the project team. If stakeholders or members of the public request information, it will be shared after it has been reviewed and approved for release. Information sharing will occur throughout the duration of the project, as applicable.

Public Notices will be published in local newspapers within the project area and on INDOT's district website. Notices will provide information about the available NEPA document and offer the opportunity to request a Public Hearing. Copies of public notices will also be mailed to project mailing lists. These public notices will inform the public of where they can access the NEPA document and provide information on how they can submit comments or requests for a public hearing. It is anticipated that public notices will be posted in the fall of 2022.

A **Public Hearing** may be held after the public review period for the NEPA document. If a public hearing has been requested by the public, and their comments cannot be otherwise addressed directly by the project team, a public hearing will be held. Meeting logistics (facilities and arrangements), advertising, notification, and development of project-display materials will all be discussed during a pre-meeting with the project team to assign duties and maximize effort. If a Public Hearing is required, it is anticipated this would occur in the fall of 2022.

Additional information or inquiries about this plan can be directed to the INDOT Project Manager:

Kim Filson
INDOT – Greenfield District
32 S. Broadway Street
Greenfield, IN 46140
Phone: (317) 289-3193
Email: kfilson@indot.in.gov

INDIANA DEPARTMENT OF TRANSPORTATION

Greenfield District
32 S Broadway St
Greenfield, IN 46140

PHONE: (855) 463-6848

Eric Holcomb, Governor
Michael Smith, Commissioner

Meeting Minutes

Date: March 10th, 2023 at 10AM

Location: Anderson Public Library

Re: Transportation Management Plan (TMP) for Des 1900152, SR 9 & CR 600 N

Attachments: Meeting Invite, Sign-in Sheet, Meeting Agenda, Exhibits

---

- Introductions – The following Stakeholders were represented; INDOT, Kokomo Grain, Conrad Farms, East Madison Fire, Co-Alliance, Local Farmers, and Madison County (Highway Department, Engineer and Commissioner).

- Existing Conditions / Background on Project Development

    - INDOT reviewed the crash data that indicated there was a need to improve the safety at this intersection. (see exhibits).

- Proposed Scope

    - INDOT presented the proposed project, provided exhibits and discussed the design (see exhibits).

- Pause for Discussion

    - Kokomo Grain
        - Concerns with large semi's crossing two lanes of traffic, also a possible sight distance issue with a hill near the approach.
        - Suggested lighting could be added to improve safety.

    - East Madison Fire
        - Explained how the Fire Department responds in this area.
        - Suggested that while there were more crashes at CR 600, they were less severe than the crashes at CR 500.
        - Expressed significant concern with the potential for increasing severity of crashes at CR 500 with this Reduced Conflict Intersection being installed at CR 600.

- Madison County
  - Highway Department advised they would not direct their crews to drive through the Reduced Conflict Intersection.
  - Requested examples of where this type of intersection existed in Indiana near a grain business.
  - County advised that they currently encourage farmers and trucks to use CR 600 as a means to cross SR 9.
  - County does not believe that this is the appropriate location for the RCI and that low-cost improvements could serve the same need.

- MPO
  - Encouraged looking at low-cost improvements to reduce safety risks at the intersection.

- General Comments
  - All parties concurred that their businesses and agencies would direct drivers away from the intersection of CR 600 and SR 9 if INDOT were to build a Reduced Conflict Intersection at this location.
  - There was an overall feeling that the proposed design, while it may reduce quantity of crashes at SR 9 & CR 600, may increase severity of crashes and increase crashes at adjacent intersections.

- Next Steps

  - INDOT stopped the meeting after the feedback was provided as it warranted an in-depth review before moving forward with the project. The proposed schedule of construction taking place in 2024 is on hold.

  - Action Items for INDOT –
    - Review other RCI's across the State to see if any have more similar characteristics and adjacent businesses like this location.
    - Review crash data and analysis at SR 9 & CR 600 and SR 9 & CR 500 to better review safety from a more wholistic perspective.
    - Investigate if there are other low-cost improvements that may still meet the purpose and need of the project.
    - Regroup with project stakeholders once all comments are thoughtfully reviewed and considered.

Beck, Jennifer

From: Hiller, Jerod <jahiller@fishbeck.com>
Sent: Friday, February 24, 2023 4:35 PM
To: Beck, Jennifer; Szewczak, Kimberly; Laracuente, Luis A; jbastin@madisoncounty.in.gov; jmoore@eastmadisonfire.com; pio@lafayettetownshipfire.org; pio@eastmadisonfire.com; bmeadows@acsc.net; jwillis@flcs.k12.in.us; Keegan, Scott P.; dgrice@kokomograin.com; sheriff_operations@madisoncounty.in.gov; dave@heartlandmpo.org
Cc: Jason Rowley; Dennis Koscielski; Butch, Wes; Reidsma, Kyle
Subject: INDOT Des. 1900152 / R-43388 Intersection Improvement Project TMP Meeting - SR 9 @ CR 600 N in Madison County

All,
On behalf of INDOT Greenfield District and the consultant design team of Hanson/Fishbeck, you are cordially invited to attend a TMP meeting for INDOT **Des. 1900152**, contract **R-43388.** This project is an intersection improvement on **SR 9 at CR 600 N (Linwood Road)** in Madison County, Indiana.

The TMP meeting will be held on **March 10, 2023 at 10:00 am** at the **Anderson Public Library** (111 East 12th Street, Anderson, IN 46016-2701) in the Chief Anderson meeting room.

The purpose of this TMP meeting will be to go over the existing conditions of the intersection, project development background, proposed scope of improvements, maintenance of traffic during construction, and project schedule.

Our team looks forward to the opportunity to meeting and discussing the project with each of you.

Thanks,

Jerod A. Hiller, PE | Senior Transportation Engineer/Project Manager
Fishbeck | w: 614.363.1010 | c: 740.513.8510 | Fishbeck.com

Attendance Sheet

fishbeck

MEETING: TMP Meeting

DATE: March 10, 2023 TIME: 10:00 AM

PROJECT NAME: Intersection Improvement (RCI)
SR 9 at CR 600 N in Madison County

LOCATION: Anderson Public Library, Chief Anderson Room

PROJECT NO.: Des. 1900152, Contract R-42410

NAME	REPRESENTING	PHONE NO.	EMAIL
Jess Basham	Madison Co	765-696-9247	JBasham@madisonco.in.gov
John Richwine	"	765-641-9471	JRichwine@ "
Luke S	INDOT		
Josh Hendrick	East Madison Fire	765-639-2840	Jhendrick@eastmadisonfire.com
JASON ROWLEY	Hanson Professional Services	317.600.7860	jrowley@hanson-inc.com
Scott Hardess	Madison County Highway	765 646-9240	Shardess@madisoncounty.in.gov
Deandre Coleman	Madison County Highway	765-646-9240	DColeman@
Gerald Imel	madison County Highway	765-646-9240	
Myron Witthamper	Co-Alliance		Myron.Witthamper@co-alliance.com
Dustin Simpson	Farmer	765-623-7145	Dustin.simpson79@gmail.com
Troy ONeill	Co Alliance	765.617.2830	Troy.Oneill@co-alliance.com
Aaron Mayle	Kokomo Grain Co	765-438-1775	amayle@kokomograin.com
John Westerfield	Kokomo Grain	765-661-7342	JWesterfield@kokomograin.com
DALLAS Conrad	CONRAD FARMS	765-623-4362	dallasconrad@COMCAST.NET
Mark Myers	INDOT	317-926-9854	MMyers@indot.in.gov
BRAD ORTMAN	KOKOMO GRAIN CO.	765-860-5107	BORTMAN@KOKOMOGRAIN.COM
DAN GRICE	KOKOMO GRAIN Co	765-623-1168	DGRICE@KOKOMOGRAIN.COM

Attendance Sheet

fishbeck

MEETING: TMP Meeting

DATE: March 10, 2023 TIME: 10:00 AM

PROJECT NAME: Intersection Improvement (RCI)
SR 9 at CR 600 N in Madison County

LOCATION: Anderson Public Library, Chief Anderson Room

PROJECT NO.: Des. 1900152, Contract R-42410

NAME	REPRESENTING	PHONE NO.	EMAIL
David Benefiel	Anderson MPO	765 640-4201	dave@heartlandmpo.org
JERRY BRIDGES	ANDERSON MPO	765-606-7564	jerry@heartlandmpo.org

fishbeck
Engineers | Architects | Scientists | Constructors

8520 Allison Pointe Boulevard, Suite 100
Indianapolis, Indiana 46250

317.577.9050 | fishbeck.com

Agenda

PROJECT:	Intersection Improvement (RCI) SR 9 and CR 600 N in Madison County	**PROJECT NO.**	Des 1900152 R-42410
SUBJECT:	TMP Meeting	**MEETING DATE:**	March 10, 2023 10:00 AM

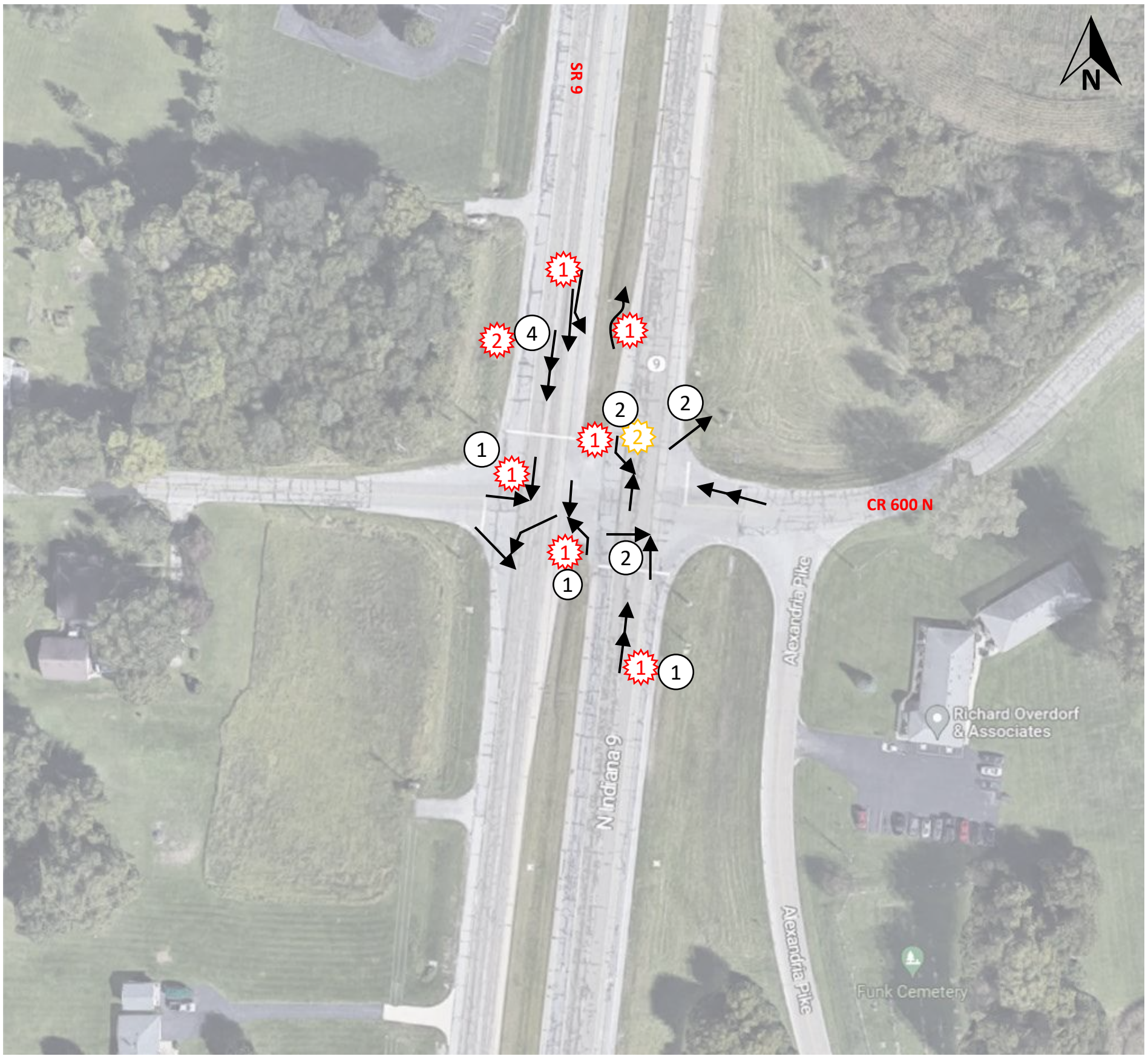
1. Introductions
    a. INDOT
    b. Design Team
    c. Attendees
2. Existing Conditions / Background on Project Development
    a. Purpose and Need
    b. Crash History
3. Proposed Scope
    a. Proposed Improvements
4. Maintenance of Traffic Discussion
    a. Construction Phasing / Staging
    b. SR 9 / CR 600 N Access During Construction
5. Schedule Discussion
    a. Upcoming Meetings
    b. Design Schedule
    c. Construction Schedule
6. Open Discussion

SR 9 & CR 600 N

COLLISION DIAGRAM

Study Period: 2017-2022 (6 years)
District: Greenfield County: Madison
Analyst: Bill Tanner Date: 2/27/2023

Location: 40.193201/-85.669735
City/Town: Anderson/Alexandria
DES: 1900152 Letting Year: 2024



** Diagram not to scale*

Aerial imagery from Google Maps

Year	Inc	Non-Inc	PDO	Total
2017	5	0	1	6
2018	0	0	3	3
2019	1	0	1	2
2020	0	0	2	2
2021	0	0	6	6
2022	1	2	2	5
Total	**7**	**2**	**15**	**24**

Additional Comments

- 9 of 24 Right Angle (37%)
- 9 of 24 Rear End (37%)

Object Symbols

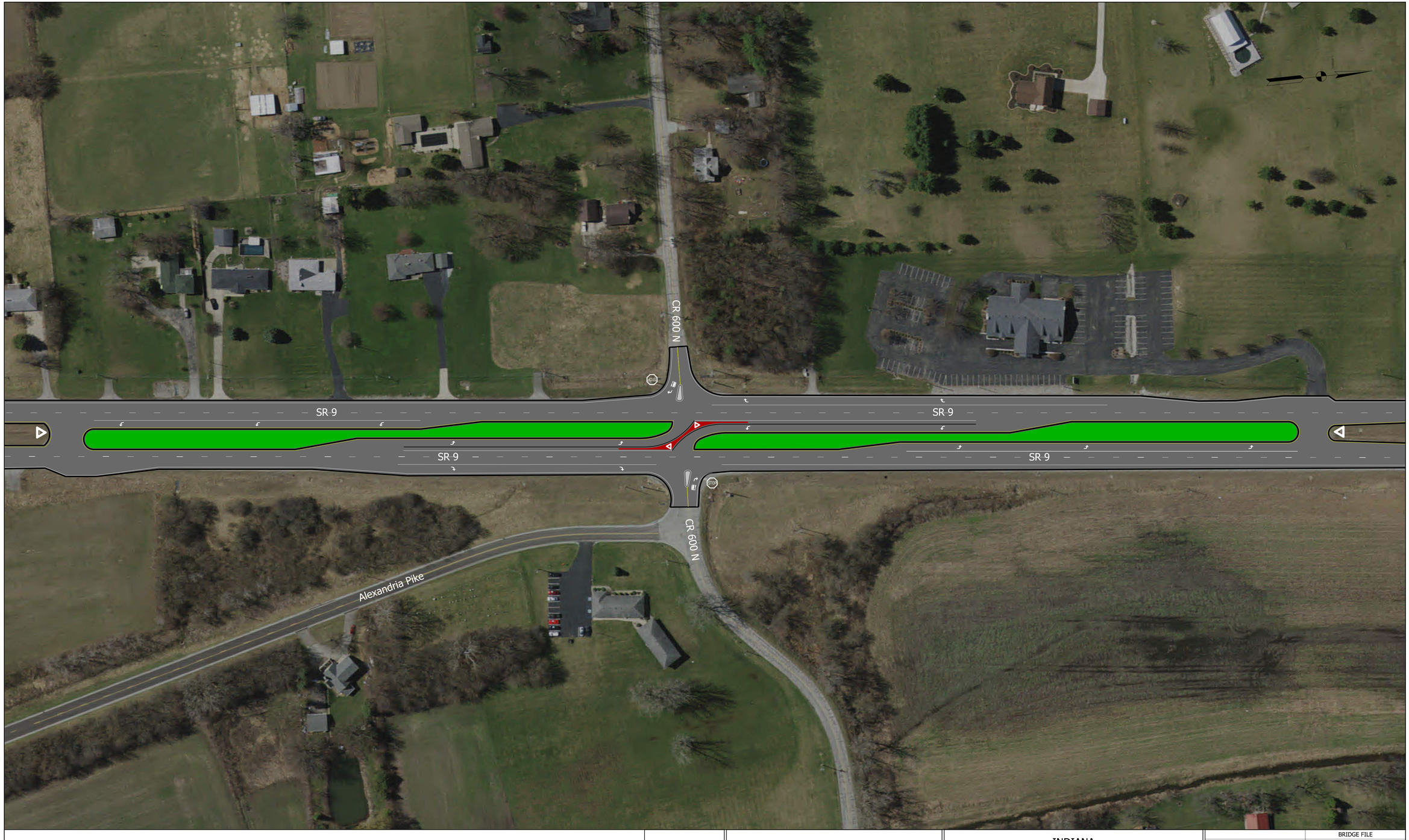
- Moving Vehicle
- Turning Vehicle
- Backing Vehicle
- Sliding Vehicle
- Parked Vehicle
- Pedestrian
- Bicycle
- A – Animal
- D – Debris in Roadway
- # – Fixed Object (see table for #)
- # – Incapacitating/Fatal
- # – Non-Incapacitating
- # – PDO (If > 1)
- Signalized Intersection
- STOP – Stop Sign

Collision Symbols

- Rear End
- Head On
- Sideswipe - Same
- Sideswipe - Opposite
- Right Angle
- Right Turn
- Left Turn

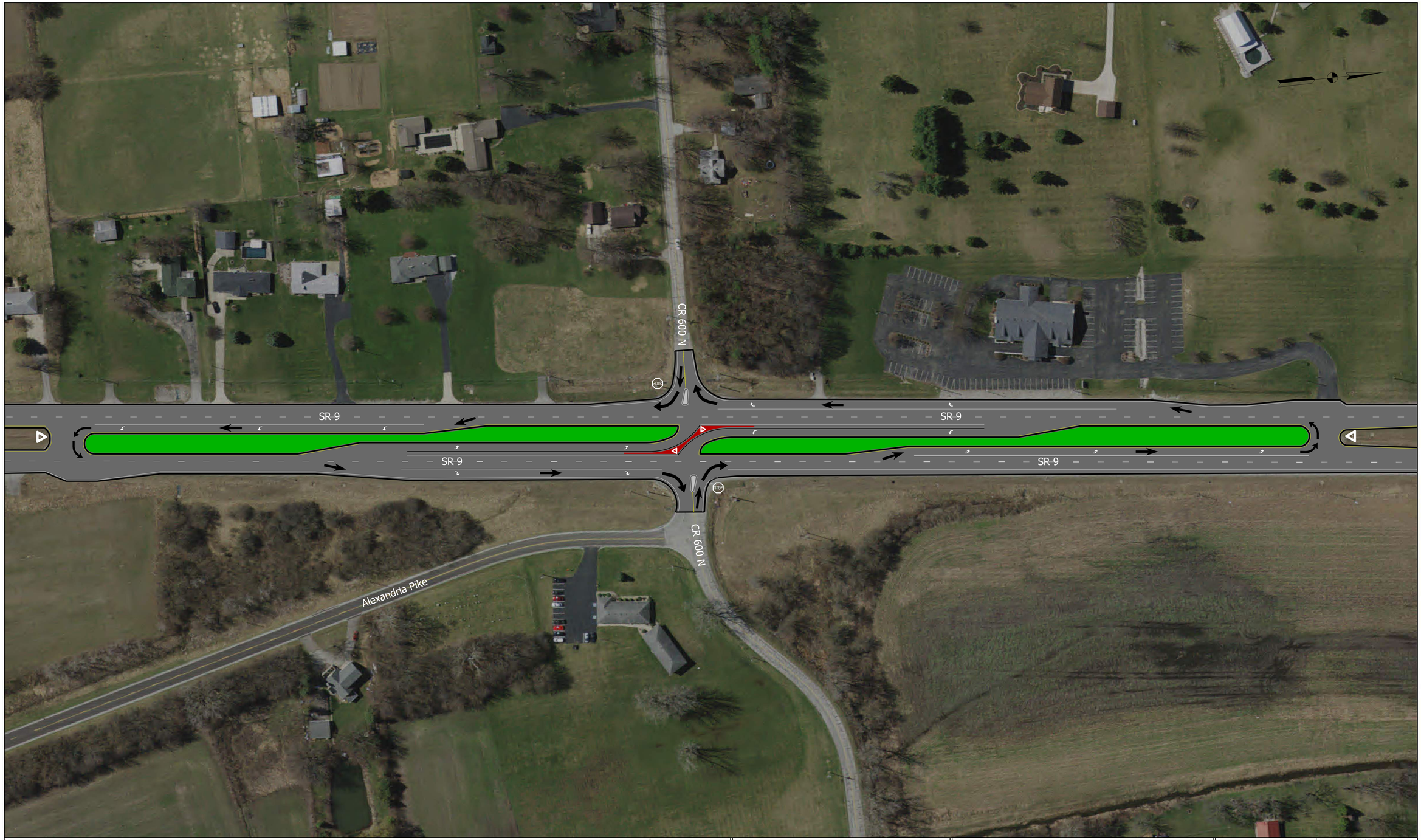
Fixed Object Codes

01 – Bridge or Overpass
02 – Building
03 – Culvert or ditch
04 – Curb
05 – Guardrail or Barrier
06 – Embankment
07 – Fence
08 – Traffic Pole
09 – Utility Pole
10 – Sign
11 – Tree / Shrub
12 – Construction Barrier
13 – Crash Attenuator
88 – Other
99 – Unknown



			BRIDGE FILE
			N/A
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION	SCALE	DESIGNATION
		1" = 70'	1900152
DESIGNED: _____ DRAWN: _____	SR 9 PROPOSED RCI	SURVEY BOOK	SHEETS
		ELECTRONIC	of
CHECKED: _____ CHECKED: _____		CONTRACT	PROJECT
		R-42410	1900152

$FILE$



		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE	INDIANA DEPARTMENT OF TRANSPORTATION		BRIDGE FILE
					N/A
				SCALE	DESIGNATION
				1" = 70'	1900152
		DESIGNED: _____ DRAWN: _____	SR 9 THRU MOVEMENT	SURVEY BOOK	SHEETS
				ELECTRONIC	of
		CHECKED: _____ CHECKED: _____		CONTRACT	PROJECT
				R-42410	1900152

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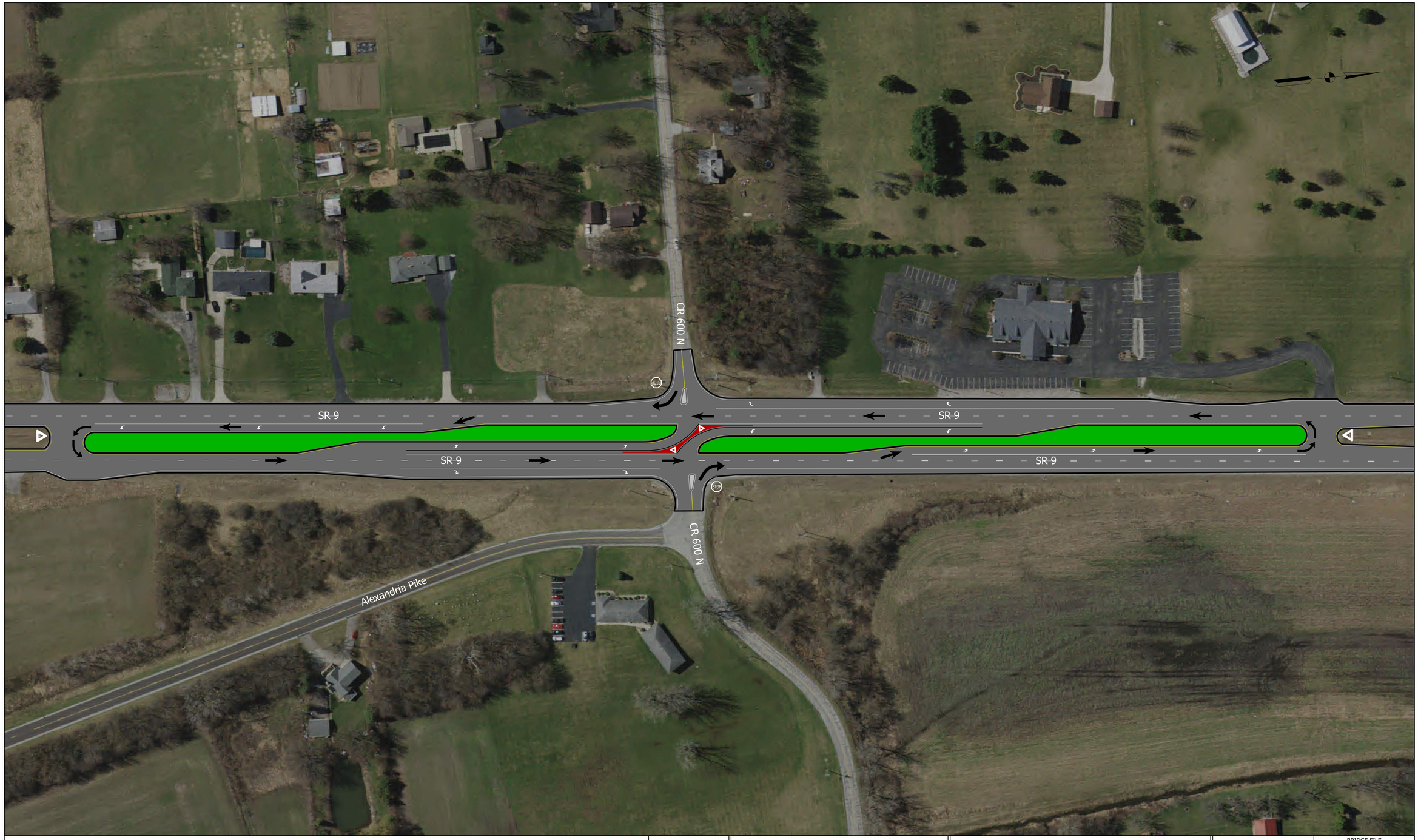

		RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION
		DESIGNED: _____ DRAWN: _____ CHECKED: _____ CHECKED: _____	SR 9 LEFT TURN MOVEMENT

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SURVEY BOOK	SHEETS
ELECTRONIC	of
CONTRACT	PROJECT
R-42410	1900152

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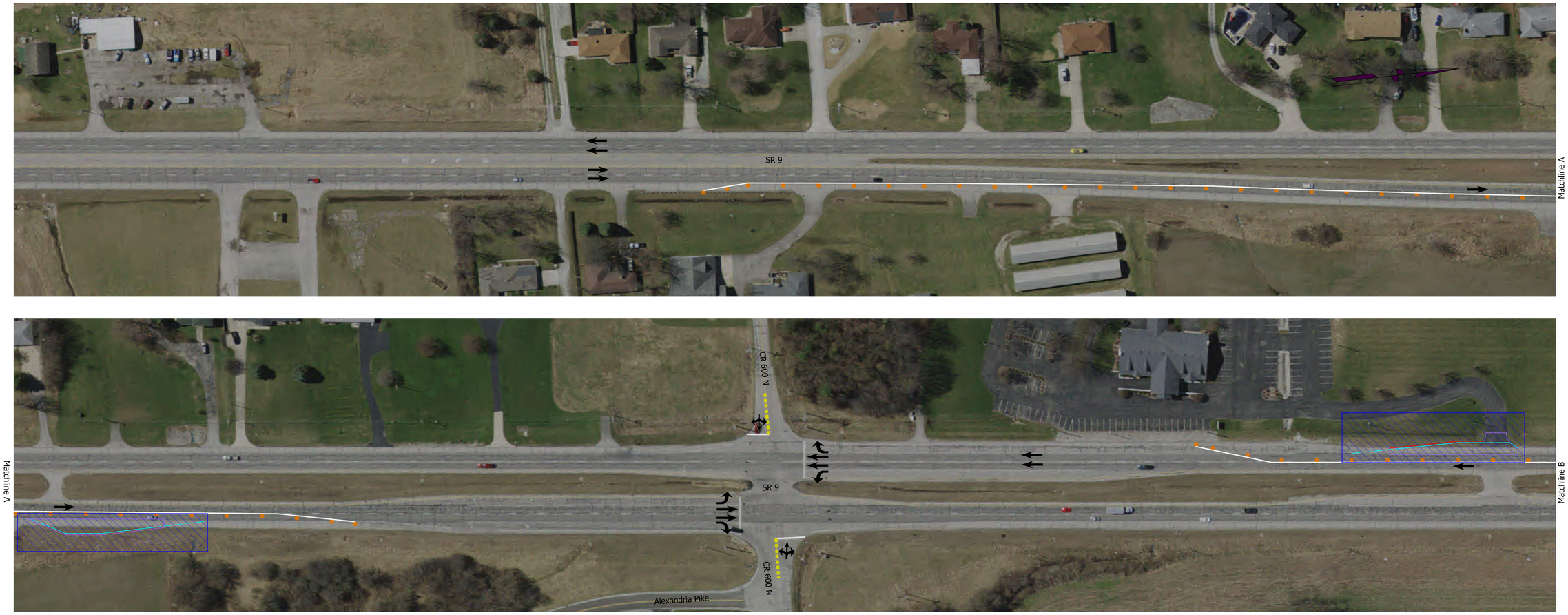

RECOMMENDED FOR APPROVAL _____
DESIGN ENGINEER DATE

DESIGNED: _____ DRAWN: _____

CHECKED: _____ CHECKED: _____

INDIANA
DEPARTMENT OF TRANSPORTATION

SR 9
PROPOSED RCI - MOT PHASE 1

	BRIDGE FILE
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SCALE	DESIGNATION
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SURVEY BOOK	SHEETS
ELECTRONIC	of
CONTRACT	PROJECT
R-42410	1900152

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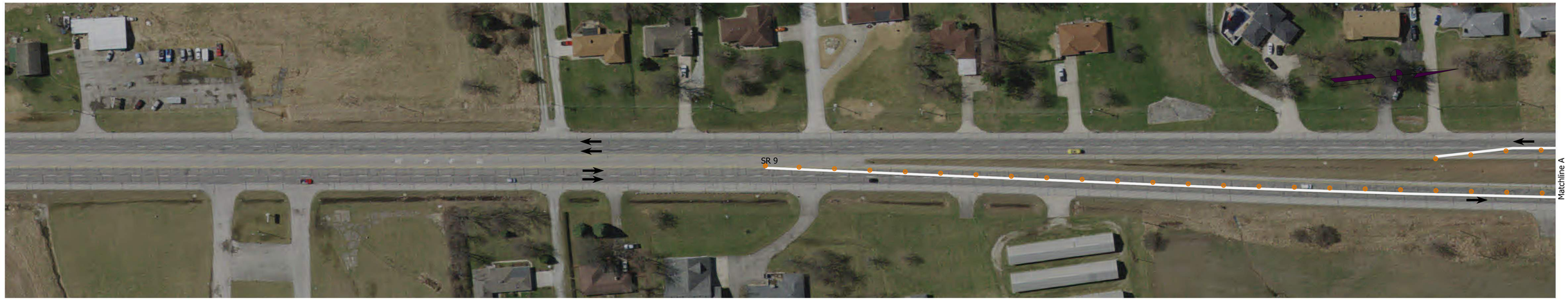

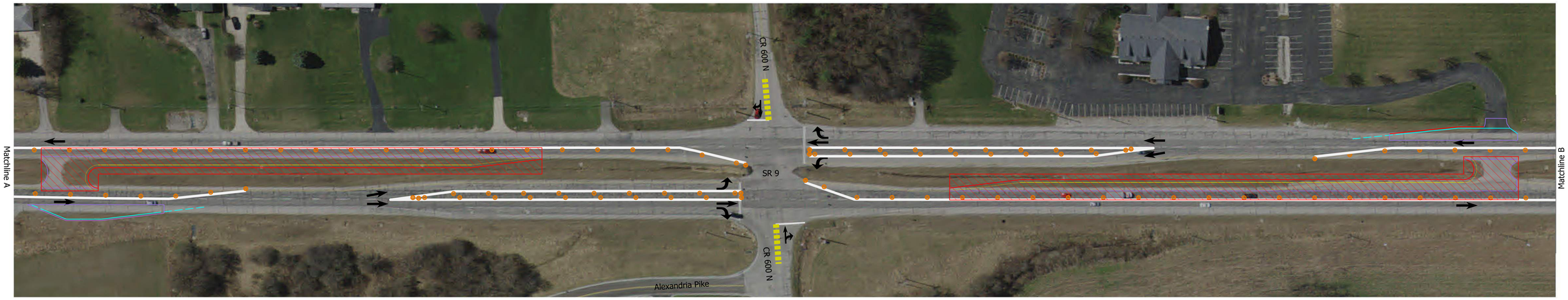

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DESIGNED: _____ DRAWN: _____	SR 9 PROPOSED RCI - MOT PHASE 2	SURVEY BOOK	SHEETS
		ELECTRONIC	of
CHECKED: _____ CHECKED: _____		CONTRACT	PROJECT
		R-42410	1900152

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RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION		BRIDGE FILE
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DESIGNED: _____ DRAWN: _____	SR 9 PROPOSED RCI - MOT PHASE 3	SURVEY BOOK	SHEETS
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CHECKED: _____ CHECKED: _____		CONTRACT	PROJECT
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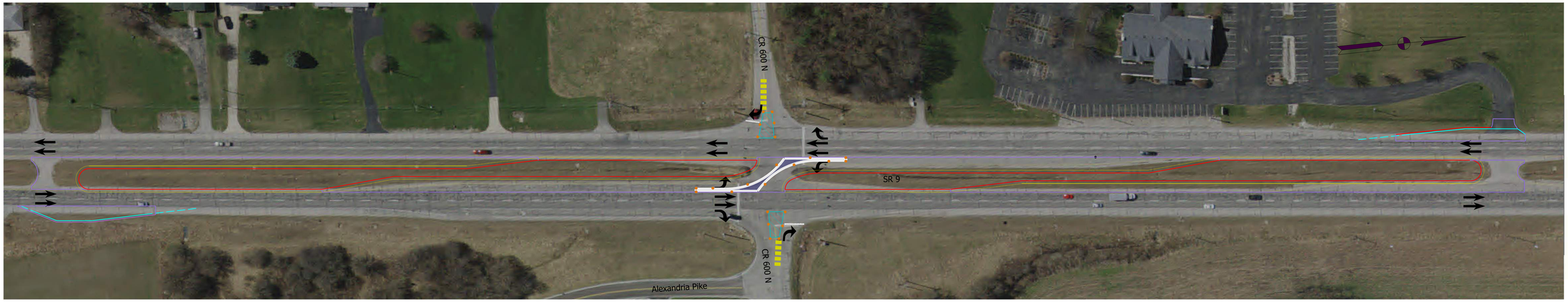

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: _____ DRAWN: _____

CHECKED: _____ CHECKED: _____

INDIANA
DEPARTMENT OF TRANSPORTATION

SR 9
PROPOSED RCI - MOT PHASE 4

	BRIDGE FILE
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SCALE	DESIGNATION
1" = 70'	1900152
SURVEY BOOK	SHEETS
ELECTRONIC	of
CONTRACT	PROJECT
R-42410	1900152

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Appendix H: Air Quality

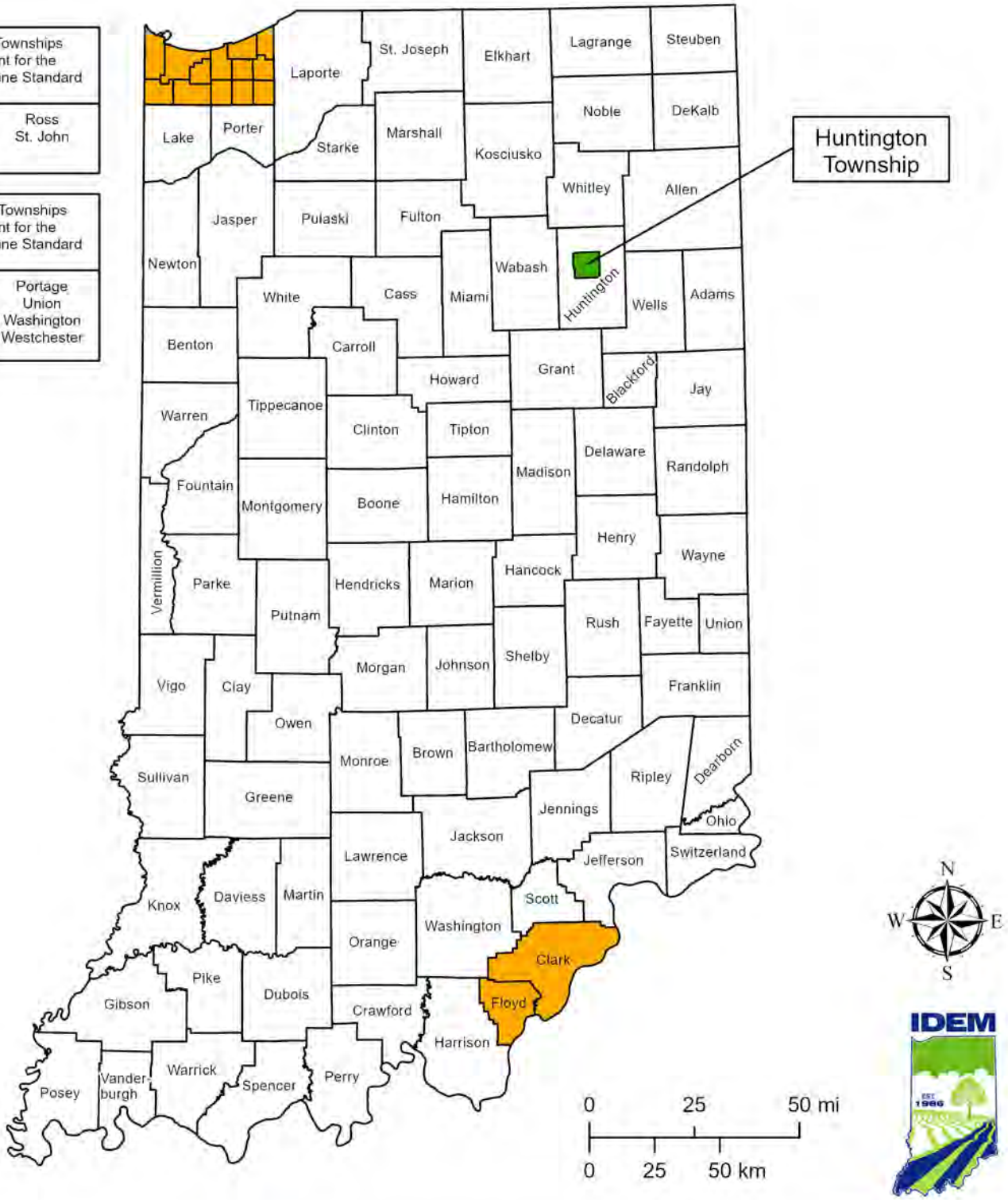
Madison County Council of Governments (Anderson MPO)
FY 2022-2026 Transportation Improvement Program (TIP)
All Projects: Current Through 4-13-21

REF	PROJECT DETAILS					PROJECT FUNDING									PERFORMANCE MEASURES							MTP PLANNING		AIR QUALITY CONFORMITY			REFERENCE DOCUMENTS
	DES	Sponsor Name	Work Category (Work Type)	Location & Description	County	Funding Obligation Year (State Fiscal)	Project Phase	Federal Funds by Phase	Required Local/State Matching Funds	Total Funds by Phase	Federal Funding Program	Letting Date (2-3 weeks prior to Obligation Date of CN Phase)	Contract Number (CN Phase)	Estimated Total Project Cost Extending Beyond SFY2026	Complete Streets [MPO]	Safety [MPO/INDOT]	Pavement Condition [MPO/INDOT]	Bridge Condition [MPO/INDOT]	Reliability & Freight Reliability [MPO/INDOT]	Congestion Mitigation & Air Quality (CMAQ) [MPO/INDOT]	Transit [MPO/INDOT]	MTP Project Category	Analysis Period	AQ Conformity Analysis	Exempt Project Type (AQ)	Reference (AQ)	
Section 1: MPO-Funded Projects - Non-Exempt from Air Quality Conformity Analysis																											
1	**NONE**																										
Section 2: Non-MPO-Funded Projects - Non-Exempt from Air Quality Conformity Analysis																											
2	**1592299**	Anderson	New Road Construction	**67th Street Extension Project:** Layton Road (CR 400 W) to SR 38 (PE Phase) **& 67th Street Extension Project: Phase 1,** Layton Road (CR 400 W) to .13 miles west of Foster Branch Ditch (RW & CN Phases)	48	2025	RW	$ -	$ 70,000	$ 70,000	N/A	1/15/2025	R-38985	$ -	Scope Provided by MPO		X					MOVE	2020-2025	AQC Non-Exempt per 2020-2023 TIP Document Amendment & MTP 2024 Amendment USDOT Conformity Letter 9-28-20	N/A	N/A	Res. 10-1-15, Res. 2-5-16, Res. 1-16-17, Res. 3-10-17, Res. 4-6-17, 4-5-18, Res. 4-4-19, Res. 9-17-19, Adopted with 2022-2026 TIP (Courtesy TIP Amendment - Res. 2-15-21)
3	**1592299**	Anderson	New Road Construction	**67th Street Extension Project:** Layton Road (CR 400 W) to SR 38 (PE Phase) **& 67th Street Extension Project: Phase 1,** Layton Road (CR 400 W) to .13 miles west of Foster Branch Ditch (RW & CN Phases)	48	2026	CN	$ -	$ 6,698,750	$ 6,698,750	N/A	1/15/2025	R-38985	$ -	Scope Provided by MPO		X					MOVE	2020-2025	AQC Non-Exempt per 2020-2023 TIP Document Amendment & MTP 2024 Amendment USDOT Conformity Letter 9-28-20	N/A	N/A	Res. 10-1-15, Res. 2-5-16, Res. 1-16-17, Res. 3-10-17, Res. 4-6-17, 4-5-18, Res. 4-4-19, Res. 9-17-19, Adopted with 2022-2026 TIP (Courtesy TIP Amendment - Non-Exempt)
4	**1702936**	INDOT	Added Travel Lanes	**US 36 (SR 9/SR 67),** .28 miles S. of SR 38 to N. Junction of SR 9/SR 67 [Pendleton]	48	2022	RW	$ 240,000	$ 60,000	$ 300,000	STBG	11/16/2022	R-41837	$ -	Technical Memo Provided by MPO		X					N/A	2020-2025	AQC Non-Exempt per 2020-2023 TIP Document Amendment & MTP 2024 Amendment USDOT Conformity Letter 9-28-20	N/A	N/A	Res. 12-13-18, Res. 2-14-19, Adopted with 2020-2023 TIP, USDOT Conformity Finding Letter 8-21-19, Res. 1-8-21
5	**1702936**	INDOT	Added Travel Lanes	**US 36 (SR 9/SR 67),** .28 miles S. of SR 38 to N. Junction of SR 9/SR 67 [Pendleton]	48	2022	CN	$ 80,000	$ 20,000	$ 100,000	STBG	11/16/2022	R-41837	$ -	Technical Memo Provided by MPO		X					N/A	2020-2025	AQC Non-Exempt per 2020-2023 TIP Document Amendment & MTP 2024 Amendment USDOT Conformity Letter 9-28-20	N/A	N/A	Res. 12-13-18, Res. 2-14-19, Adopted with 2020-2023 TIP, USDOT Conformity Finding Letter 8-21-19, Res. 1-8-21
6	**1702936**	INDOT	Added Travel Lanes	**US 36 (SR 9/SR 67),** .28 miles S. of SR 38 to N. Junction of SR 9/SR 67 [Pendleton]	48	2023	CN	$ 2,616,294	$ 654,074	$ 3,270,368	STBG	11/16/2022	R-41837	$ -	Technical Memo Provided by MPO		X					N/A	2020-2025	AQC Non-Exempt per 2020-2023 TIP Document Amendment & MTP 2024 Amendment USDOT Conformity Letter 9-28-20	N/A	N/A	Res. 12-13-18, Res. 2-14-19, Adopted with 2020-2023 TIP, USDOT Conformity Finding Letter 8-21-19, Res. 1-8-21
7	**1900152**	INDOT	Intersect. Improv. W/ Added Turn Lanes	**SR 9 @ CR 600 N (Linberg Road)** [Anderson]	48	2022	RW	$ 20,000	$ 5,000	$ 25,000	STBG	7/12/2023	R-42410	$ -	Exempt	X						N/A	2020-2025	AQC Exempt - 8-5-20 - Redesignated as AQC Non-Exempt per 2020-2023 TIP Document Amendment & MTP 2024 Amendment USDOT Conformity Letter 9-28-20	N/A	N/A	Res. 8-1-19, Res. 8-6-20, Adopted with 2022-2026 TIP (Courtesy TIP Amendment - Non-Exempt)
8	**1900152**	INDOT	Intersect. Improv. W/ Added Turn Lanes	**SR 9 @ CR 600 N (Linberg Road)** [Anderson]	48	2024	CN	$ 905,928	$ 226,482	$ 1,132,410	STBG	7/12/2023	R-42410	$ -	Exempt	X						N/A	2020-2025	AQC Exempt - 8-5-20 - Redesignated as AQC Non-Exempt per 2020-2023 TIP Document Amendment & MTP 2024 Amendment USDOT Conformity Letter 9-28-20	N/A	N/A	Res. 8-1-19, Res. 8-6-20, Adopted with 2022-2026 TIP (Courtesy TIP Amendment - Non-Exempt)
9	**1900171**	INDOT	New Signal Installation	**SR 13 @ CR 800 S** [Ingalls]	48	2024	CN	$ 697,642	$ 174,411	$ 872,053	STBG	7/12/2023	T-42708	$ -	Exempt	X						N/A	2020-2025	AQC Exempt - 2-13-20 - Redesignated as AQC Non-Exempt per 2020-2023 TIP Document Amendment & MTP 2024 Amendment USDOT Conformity Letter 9-28-20	N/A	N/A	Res. 2-20-20, Adopted with 2022-2026 TIP (Courtesy TIP Amendment - Non-Exempt)
Section 3: MPO-Funded Projects - Exempt from Air Quality Conformity Analysis																											
10	**1900390**	Anderson	Traffic Signals Modernization	**Anderson Traffic Signalization System Modernization Project,** various locations throughout the City of Anderson (Pre-PE All Phases & PE,RW,CN -Phase 1/Group 1)	30	2022	CN	$ 819,494	$ 204,874	$ 1,024,368	STBG	1/12/2022	T-41881	UNKNOWN	Scope Provided by MPO	X						MOVE	2020-2025	AQC Exempt - 3-3-20	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 1-28-19, Res. 2-14-19), Adopted with 2020-2023 TIP, Res. 3-6-20, Res. 6-4-20, Mod. 8-3-20, Res. 10-1-20
11	**1900390**	Anderson	Traffic Signals Modernization	**Anderson Traffic Signalization System Modernization Project,** various locations throughout the City of Anderson (Pre-PE All Phases & PE,RW,CN -Phase 1/Group 1)	30	2022	CN	$ 343,632	$ -	$ 343,632	HSIP	1/12/2022	T-41881	UNKNOWN	Scope Provided by MPO	X						MOVE	2020-2025	AQC Exempt - 3-3-20	Safety: Projects that Correct, Improve, or Eliminate a Hazardous Location or Feature (2)	40 CFR 93.126.2	Res. 1-28-19, Res. 2-14-19), Adopted with 2020-2023 TIP, Res. 3-6-20, Res. 6-4-20, Mod. 8-3-20, Res. 10-1-20
12	**1592449**	Fortville	Bike/Pedestrian Facilities	**CR 200 W Pedestrian Safety Project**, .5 miles S. of CR 900 N to South Entrance to Mt. Vernon High School	30	2022	CN	$ 106,599	$ 61,232	$ 167,831	STBG	10/14/2021	R-39074	$ -	Scope Provided by MPO			X				PROTECT	2020-2025	AQC Exempt - 11-15-19	Air Quality: Bicycle and Pedestrian Facilities (33)	40 CFR 93.126.33	CMAQ Eligibility Finding 8-14-12, CMAQ Eligibility Finding 8-26-15, Project Eligibility Review Project Submission (2014), Res. 11-16-15, Res. 4-7-16, Adopted with 2020-2023 TIP, Res. 11-15-19, Res. 2-20-20, Res. 10-1-20
13	**1592449**	Fortville	Bike/Pedestrian Facilities	**CR 200 W Pedestrian Safety Project**, .5 miles S. of CR 900 N to South Entrance to Mt. Vernon High School	30	2022	CN	$ 743,697	$ 185,925	$ 929,622	CMAQ	10/14/2021	R-39074	$ -	Scope Provided by MPO			X				PROTECT	2020-2025	AQC Exempt - 11-15-19	Air Quality: Bicycle and Pedestrian Facilities (33)	40 CFR 93.126.33	CMAQ Eligibility Finding 8-14-12, CMAQ Eligibility Finding 8-26-15, Project Eligibility Review Project Submission (2014), Res. 11-16-15, Res. 4-7-16, Adopted with 2020-2023 TIP, Res. 11-15-19, Res. 2-20-20, Res. 10-1-20
14	**1592447**	Fortville	Bike/Pedestrian Facilities	**Mt. Vernon Trail: Phase 1,** Maple Street/Fortville Pike from Garden Street to North CR 200 W	30	2023	CN	$ 141,034	$ 35,259	$ 176,293	STBG	7/13/2022	R-39072	$ -	Scope Provided by MPO			X				PROTECT	2020-2025	AQC Exempt - 11-15-19 & 8-5-20	Air Quality: Bicycle and Pedestrian Facilities (33)	40 CFR 93.126.33	CMAQ Eligibility Finding 8-14-12, Project Eligibility Review Project Submission (2014), Res. 11-16-15, Res. 4-7-16, Res. 3-2-17, Adopted with 2020-2023 TIP, Res. 11-15-19, Res. 2-20-20, Res. 8-6-20, Res. 10-1-20

Current Nonattainment Areas

Lake County Townships Nonattainment for the 2015 8-Hour Ozone Standard	
Calumet Hobart North	Ross St. John

Porter County Townships Nonattainment for the 2015 8-Hour Ozone Standard	
Center Jackson Liberty Pine	Portage Union Washington Westchester



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

"Marginal" Nonattainment for the 2015 8-Hour Ozone Standard (0.070 ppm)

Nonattainment for the 2010 1-Hour SO_2 Standard

Date: 05/24/2022 **Mapped By:** C. Mitchell, OAQ **Source:** Office of Air Quality **Map Projection:** UTM Zone 16 N **Map Datum:** NAD83

INDIANA DEPARTMENT OF TRANSPORTATION

100 North Senate Avenue
Room N758-Executive Office
Indianapolis, Indiana 46204

PHONE: (855) 463-6848

Eric Holcomb, Governor
Michael Smith, Commissioner

April 26, 2022

Mr. Jermaine R. Hannon, Division Administrator
FHWA Indiana Division
575 North Pennsylvania St., Room 254
Indianapolis, IN 46204

Ms. Kelley Brookins, Regional Administrator
FTA Region 5
200 West Adams St.
Suite 320
Chicago, IL 60606-5253

Dear Mr. Hannon /Ms. Brookins:

The Indiana Department of Transportation is pleased to submit its Draft FY 2022-2026 Statewide Transportation Improvement Program (STIP) for review and comment by your offices.

Included in the final submitted document is a listing of the state's expansion/preservation and local small urban and rural and rural transit projects. The following Metropolitan Planning Organization TIP's will be included in the FY 2022-2026 STIP by reference, pending FHWA approval in May 2022.

Area Plan Commission of Tippecanoe County (APCTC)	FY 2022-2026
• *Version 3/10/2022*	
Bloomington-Monroe County Metropolitan Planning Organization (BMCMPO)	FY 2022-2026
• *Version 3/11/2022*	
Columbus Area Metropolitan Planning Organization (CAMPO)	FY 2022-2026
• *Version 3/22/2021*	
Delaware-Muncie Metropolitan Plan Commission (DMMPC)	FY 2022-2025
• *Version 12/15/2021*	
Evansville Metropolitan Planning Organization (EMPO)	FY 2022-2026
• *Version 3/10/2022*	
Kokomo-Howard County Governmental Coordinating Council (KHCGCC)	FY 2022-2026
• *Version 3/10/2022*	
Kentuckiana Regional Planning and Development Agency (KIPDA)	FY 2020-2025
• *Version 3/29/2022*	
Indianapolis Metropolitan Planning Organization (IMPO)	FY 2022-2025
• *Version 8/18/2021*	
Michiana Area Council of Governments (MACOG)	FY 2022-2026
• *Version 3/09/2022*	

Madison County Council of Governments (MCCOG)	FY 2022-2026
• *Version 7/13/2021*	
Northeastern Indiana Regional Coordinating Council (NIRCC)	FY 2022-2026
• *Version 3/28/2022*	
Northwestern Indiana Regional Planning Commission (NIRPC)	FY 2022-2026
• *Version 3/17/2022*	
Ohio-Kentucky-Indiana Regional Council of Governments (OKI)	FY 2020-2023
• *Version 03/10/2022*	
Terre Haute Area Metropolitan Planning Organization (THAMPO)	FY 2020-2024
• *Version 08/26/2021*	

In addition, INDOT has expanded our public involvement process by taking advantage of virtual meeting techniques and allowing accessibility to online documents, materials, virtual meeting registration, recorded virtual meetings, and comment forms. INDOT also leveraged our planning partner contacts (MPOs, RPOs, LTAP), social media, and notifications sent to local libraries, housing authorities, senior aging centers, and local newspapers across the state.

We greatly appreciate FHWA/FTA support in the development of the STIP 2022-2026 and look forward to working together to achieve our mutual goals. Should you have any questions pertaining to this amendment, please contact Michael McNeil, STIP Specialist at 317-232-0223 or at mmcneil@indot.in.gov.

Sincerely,

Michael Smith, Commissioner
Indiana Department of Transportation

cc: (w/enclosure): FTA
Michelle Allen, FHWA
Jeffrey Brooks, INDOT
Kristin Brier, INDOT
Kathy Eaton-McKalip, INDOT
Louis Feagans, INDOT
Roy Nunnally, INDOT
Larry Buckel, INDOT
Jay Mitchell, INDOT
Jason Casteel, INDOT
Michael McNeil, INDOT

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

June 17, 2022

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

SUBJECT: Indiana FY2022-2026 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 FY2022-2026 Indiana Statewide Transportation Improvement Program (INSTIP), which was submitted by the INDOT request letter dated April 27, 2022.

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 FY2022-2026 STIP, including the Metropolitan Planning Organization (MPO) Transportation Improvement Programs (TIPs) directly incorporated into the STIP, 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 FY2022-2026 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 FY2022-2026 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 June 17, 2022, 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. FHWA and FTA will continue to partner with INDOT to ensure the previously developed action plan (attached) is implemented to address the corrective actions. If progress is not made in addressing the corrective actions, future amendments to the FY2022-2026 STIP, or adoption of the FY2024-2028 STIP, may not be approved by USDOT.

If you have questions or need additional information concerning our approval and the FPF, please contact Ms. Michelle Allen of the FHWA Indiana Division at (317) 226-7344, or by email at michelle.allen@dot.gov, or Mr. Jason Ciavarella of the FTA Region 5 Office at (312) 353-1653, or by email at jason.ciavarella@dot.gov.

Sincerely,

KELLEY BROOKINS
Digitally signed by KELLEY BROOKINS
Date: 2022.06.13 10:08:34 -05'00'

Kelley Brookins
Regional Administrator
FTA Region V

Sincerely,

JERMAINE R HANNON
Digitally signed by JERMAINE R HANNON
Date: 2022.06.13 15:57:46 -04'00'

Jermaine R. Hannon
Division Administrator
FHWA Indiana Division

cc: (transmitted by e-mail)
Louis Feagans, INDOT
Roy Nunnally, INDOT
Karen Hicks, INDOT

Appendix J: Additional Studies/Reports

Land and Water Conservation Fund (LWCF) County Property List for Indiana

1800433	1800433	Lawrence	Spring Mill State Park & Donaldson's Cave Nature Preserve
1800612	1800612	Lawrence	Spring Mill State Park
1800136	1800136	Madison	Funk Historic (8th St.) Park
1800139	1800139	Madison	General Pulaski ParkE. 38th St. Park
1800143	1800143	Madison	Streaty Park
1800145	1800145	Madison	Southside Sports Complex
1800169	1800169	Madison	Shadyside Recreation Complex (Aqua Gardens)
1800169.6	1800169.6	Madison	Crawford Field
1800171	1800171H	Madison	Mounds State Park
1800204	1800204	Madison	Beulah Park
1800238	1800238	Madison	Beulah Park
1800254	1800254	Madison	Falls Park
1800255	1800255	Madison	Alvin D. Brown Memorial Pool
1800258	1800258	Madison	Athletic Park
1800287	1800287	Madison	Shepherd Park
1800292	1800292	Madison	Elwood Municipal Swimming Pool
1800299	1800299	Madison	Alvin D. Brown Memorial Pool
1800305	1800305G	Madison	Mounds State Park
1800312	1800312I	Madison	Mounds State Park
1800370	1800370	Madison	Maple Meadows Park/Frankton Community Park
1800382	1800382	Madison	Mounds State Park
1800413	1800413O	Madison	Mounds State Park
1800442	1800442	Madison	Walbridge Acres Park
1800466	1800466	Madison	Grand Avenue Wetlands & Killbuck Walkway
1800477	1800477a	Madison	Anderson Riverwalk
1800534	1800534	Madison	General Pulaski Park
1800587	1800587	Madison	Bodenhorn Park
1800048	1800048	Marion	Eagle Creek Park, Nature Preserve, and Peace Learning Center
1800072	1800072	Marion	Martin Luther King Park
1800088	1800088	Marion	Eagle Creek Park, Nature Preserve, and Peace Learning Center
1800114	1800114	Marion	Eagle Creek Golf Course
1800167	1800167	Marion	Eagle Creek Park, Nature Preserve, and Peace Learning Center
1800185	1800185	Marion	German Church & 30th St Park

Abbreviated
Engineering Assessment Report

SR 9 & CR 600 N – Intersection Improvement
DES No. 1900152, Contract R-42410

Safety Project
Fiscal Year: 2024
Score: N/A

Greenfield District
Albany Sub-District
Madison County, Indiana
3/23/2023

Prepared by:
Mark Muenz
Greenfield District Traffic Planning Engineer

Approved by:
Luis Laracuente, P.E.
District Traffic Engineer

Indiana Department of Transportation
Traffic Engineering
Greenfield District
32 South Broadway Greenfield IN 46140

Table of Contents

9. Cost Estimate
10. RoW Information
11. Utilities and Railroad Information
12. Environmental Information
13. Project Support Letters
14. OTHERS

Executive Summary

The purpose of this report is to document the engineering assessment phase of project development, including all coordination that has been completed in preparation for this project. This document outlines the proposal and is intended to serve as a guide for subsequent survey, design, environmental, right of way and other project activities leading to construction. The preferred alternative identified in this document is considered predecisional, pending the outcome of environmental studies. An alternative other than the preferred alternative may not be selected without consultation with the preparer of this report.

SR 9 and CR 600 N is located north of Anderson in Madison County. This intersection is currently a signal controlled intersection, with SR 9 running north south and CR 600 N running east-west. The intersection has been experiencing a high rate of rear end and right angle crashes due to the high speed nature of SR 9 and the downhill geometry for SB traffic. The negative offset with the wide median along SR 9 may be contributing to the left turn crash pattern at this signalized rural intersection located in a 4-lane divided high speed state highway.

This project is to improve the safety of the location through improvements to left turn offset for enhanced visibility of conflicting traffic, modernization of the traffic signal with lighting for enhanced visibility of the intersection and signalized condition. Lastly, the project will attempt to include an active system with 'Prepare to Stop when Flashing' beacons in advance of the signal along SR 9 or signal ahead flashing signs if the active system is not feasible as an enhancement with the goal of reducing rear end crashes and red light running.

This location has been studied as a possible candidate for project funding under the federal Highway Safety Improvement Program (HSIP) and therefore 23 U.S.C Section 409 applies.

Project Location

Table 1: Project Location Information

Location Description			
Route	SR 9	Latitude	40.193221
City	Anderson	Longitude	-85.669811
County	Madison	Nearest Cross Street	CR 650 N
District	Greenfield	Distance From	2,900 ft.
Sub District	Albany	RP From	78 + 13
MPO	Madison (MCCOG)	RP To	78 + _13
NHS Route?	No	Length	
Functional Class	Other Principal Arterial	Work Type	Traffic Signals, New Or Modernized
Rural or Urban	Rural	Work Category	Intersection Improvement Project
Other Location Info:			

See Attachment 1 for a map showing the project location and for other pictures of the site.

Purpose and Need

The purpose of this project is to improve traffic safety at this location, in particular the reduction of left-turn/right angle, and rear end crashes at this signalized intersection.

This project is needed due to the elevated risk of these types of crashes at the intersection.

Project History

This project is currently in on-going design. The two main alternatives of this report will reflect this, as public feedback has been accounted into alterations of the preferred alternative.

Existing Conditions

Notes from Field Check

There is drainage in the median of the roadway which will have to be addressed with the proposed alternatives.

Structure Information

There are several small culverts in the area, along with several drainage pipes. Crossing CR 600 N are small culverts CLV-76082 and CLV-7608. There are also several culverts along SR 9 within the project area. Including but not limited to CLV-009-048-78.23, CLV-009-048-78.2, CLV-009-048-78.19, CLV-009-048-78.07, and CLV-009-048-78.01. A large culvert, CV 009-048-77.96, NBI 93003454 is located further south and will likely not be impacted by this project.

Roadway Geometrics and Pavement Information

Table 2: Roadway Geometrics and Pavement Information

Lane Width	12 ft.
Curbed	No
Shoulder Width	6 ft.
Number of lanes in each direction	2
Intersection Traffic Control	Traffic Signal
Speed Limit	55 mph
Pavement Type	Asphalt
Median Type	Depressed

Traffic Data and Capacity Analysis

A Traffic analysis was performed previously for this intersection, please see attachments for original analysis

Crash Information

Table 6: Crash History

ICC	1.49	Number of Crashes	24
ICF	1.20	Number of Fatal and Incapacitating Crashes	8
First Year of Crash Data	2017	Number of Non-Incapacitation Crashes	2
Last Year of Crash Data	2022	Number of Property Damage Only Crashes	14

The RoadHAT output, crash statistics summary and a crash diagram have been included in Attachment 4 of this report.

This intersection had a reinvestigation of the previous 5 years of crash data. Over the past 6 years there were 9 rear end, 7 right angle, 2 left turn, 3 ran off road, 2 other, and 1 same direction sideswipe crash. Using the RoadHAT 4D.1 tool, the intersection received an Index of Crash Cost (ICC) of 1.49. This indicates a significantly above average crash severity issue at this location. It also received an Index of Crash Frequency (ICF) of 1.20, which indicates an elevated frequency of crashes at this location as compared to a location of similar volume.

Design Considerations

Table 7: Other Design Considerations

Land Survey Location	NW ¼ of SEC. 18, T 20 N, RNG 8 E
Civil Township	Richland
Federal Aid System	Yes, Urban On
National Truck Network	Yes
Urban Area Boundary	No
Adjacent Land Use	Residential

Community/External Stakeholder Context

This project has been altered due to public feedback to include the preferred alternative of a signal modernization.

Adjacent INDOT Projects

There are no adjacent INDOT projects in the nearby area.

Other Miscellaneous Information

None

Analysis and Alternatives

Description of Alternatives

Alternative 1 – Traffic Signal Modernization & Geometric Improvements – The traffic signal will be modernized for enhanced signal visibility and configuration; lighting will be installed for enhanced nighttime intersection condition at each corner. A 'Prepare to Stop When Flashing' Flasher active system is expected to be installed for enhanced warning to drivers approaching along SR 9. The geometric improvement includes creating positive offset left turn lanes for enhanced sight distance of conflicting traffic. This modernization will replace all signal heads, poles, and wires at the intersection, bringing it up to modern standards. This alternative addresses the purpose and need and may reduce severe crashes by 35% and more broadly reduced overall crash occurrence.

Alternative 2 – Reduced Conflict Intersection – This alternative removes the existing signal in favor of the Reduced Conflict Intersection (RCI). This intersection greatly improves intersection safety by removing the traffic signal and reducing conflict points. The current traffic signal is not warranted when considering traffic volumes, congestion, and location of the intersection. This alternative addresses the purpose and need of the project and is expected to reduce severe crashes by at least 54%.

Alternative 3 – No Build. The No build option was considered for this project. However, this alternative would not address the safety issues at this location. This option is not beneficial to the motoring public.

Cost Estimates

This project had a HSIP budget of $1,132,410. The preferred alternative is expected to not exceed the current budget.

Preliminary Maintenance of Traffic Plan (MOT)

Depending on chosen alternative, closures will vary. A lane closure along SR 9 is likely, and potential full closure of CR 600 N is also possible.

The above information is preliminary and conceptual in nature. The designer of record for this project shall be responsible for the determination of MOT scheme and the full design of that scheme. The above information can be used to inform the decision making of the designer but it does not absolve him of the responsibility of the design.

The provisions of the Indiana Manual on Uniform Traffic Control Devices, the Indiana Design Manual and the INDOT Standard Drawings concerning the design of an MOT zone shall be adhered to. A detailed design showing the MOT layout should be included in the final set of plans. The provisions of the Interstate Highway Congestion Policy shall be followed.

Pavement and Roadway Design

Standard pavement design for this classification of roadway is assumed.

With the preferred alternative, creating a positive off-set left is part of the signal modernization. This involves creating a taper and appropriate storage lengths for the turn lane. See Attachment 8 for a sketch.

Right-of-Way and Survey

Right-of-way acquisition is not anticipated to be required with the preferred alternative.

Utilities and Railroads

Utility coordination has started as part of Stage 2 of the contract.

Hydraulic Recommendations

See Structure information for small culverts. Drainage considerations will be considerable for this location.

Environmental and Historic Considerations

Public involvement has begun regarding this intersection.

Design Criteria

The design of this project shall adhere to Partial 3R Project standards per the Indiana Design Manual.

Recommended Alternative

The preferred alternative is Alternative 1 – Traffic Signal Modernization & Geoemtric Improvement. By modernizing the signal, adding lighting, creating positive off-set left turn lanes, adding LED Signal ahead signs, and utilizing 'Prepare to Stop When Flashing' flashers will improve intersection safety. This alternative will address the purpose and need by targeting the reduction of left turn/right angle and rear end crashes at the intersection for SR 9 drivers.

Changes to Proposal

Contact the Greenfield District Traffic Engineer if deviation from this document is determined to be necessary during a later phase of project development, including but not limited to scope of work or letting changes. Any desired changes should include justification for the change and the estimated cost.

Concurrence and Approval

This document was prepared by:

NAME Mark Muenz
TITLE Traffic Planning Engineer
DATE 3/24/2023

This document was reviewed by:

NAME Mark Muenz
TITLE Traffic Planning Engineer
DATE 3/24/2023

This document was approved by:

NAME Luis Laracuente
TITLE District Traffic Engineer
DATE 3/24/2023

ATTACHMENT 1

Location Map

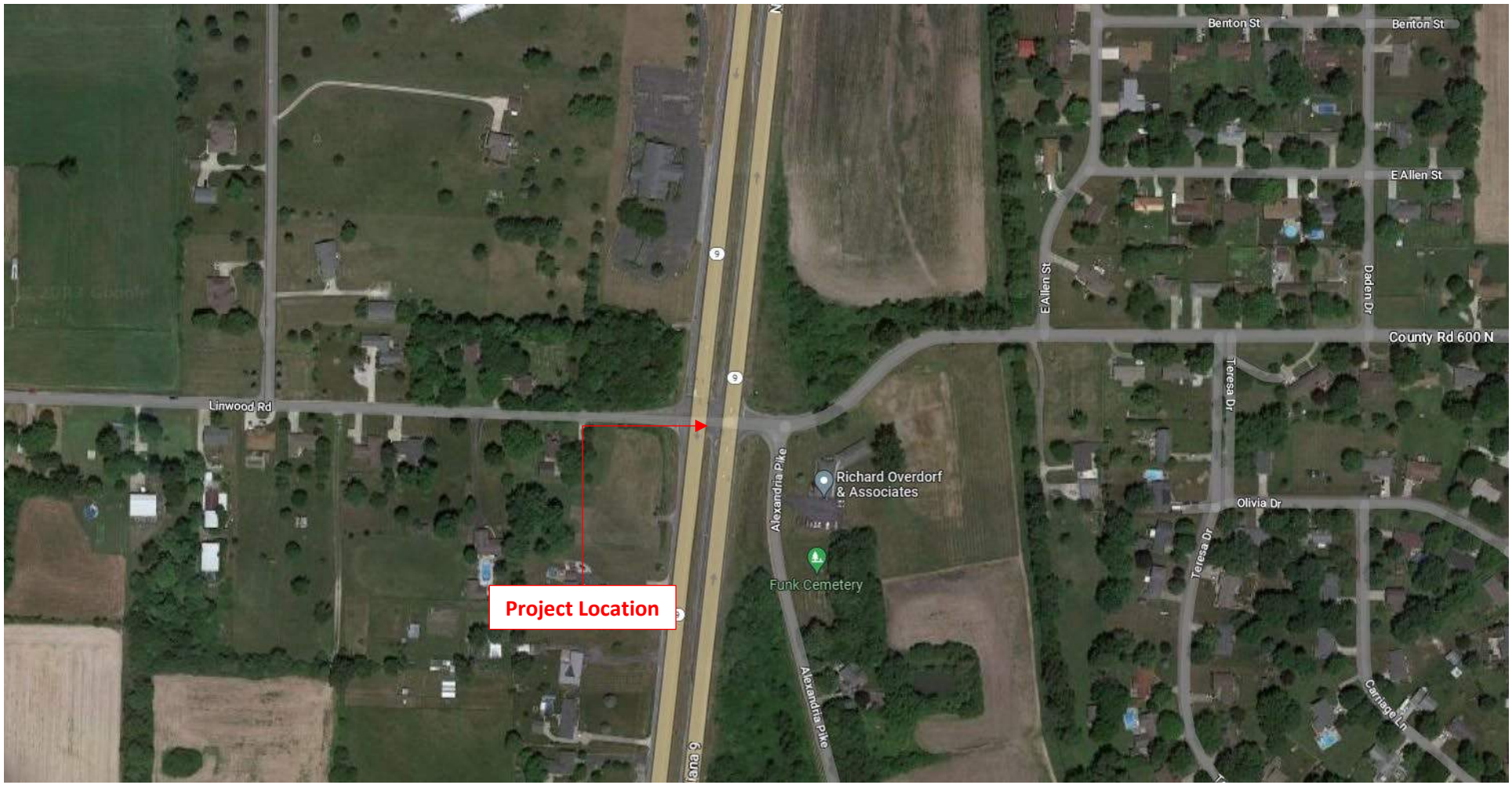
Attachment 1
Location Maps

SR 9 @ CR 600 N

Anderson, Madison County

Intersection Improvement

DES 1900152, Contract R-



ATTACHMENT 2

Traffic Forecast and Volumes

Study Name	GF_SR9_@_600N_(48)
Start Date	Wednesday, March 28, 2018 12:00 AM
End Date	Thursday, March 29, 2018 12:00 AM
Site Code	

Report Summary

		Southbound						Westbound						Northbound						Eastbound						
Time Period	**Class.**	**R**	**T**	**L**	**U**	**I**	**O**	**R**	**T**	**L**	**U**	**I**	**O**	**R**	**T**	**L**	**U**	**I**	**O**	**R**	**T**	**L**	**U**	**I**	**O**	**Total**
Peak 1	Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Specified Period	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12:00 AM - 12:00 PM	Cars	5	419	6	0	430	238	29	5	40	0	74	20	10	207	8	0	225	472	13	4	2	0	19	18	748
One Hour Peak	%	83%	84%	67%	0%	84%	77%	85%	56%	83%	0%	81%	65%	63%	76%	73%	0%	75%	84%	72%	67%	100%	0%	73%	69%	81%
7:15 AM - 8:15 AM	ıt Goods Vehi	1	58	3	0	62	55	5	4	8	0	17	10	5	50	3	0	58	69	3	2	0	0	5	8	142
	%	17%	12%	33%	0%	12%	18%	15%	44%	17%	0%	19%	32%	31%	18%	27%	0%	19%	12%	17%	33%	0%	0%	19%	31%	15%
	Buses	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	1	0	3
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	6%	0%	0%	0%	4%	0%	0%
	ıgle-Unit Truc	0	6	0	0	6	9	0	0	0	0	0	1	1	9	0	0	10	7	1	0	0	0	1	0	17
	%	0%	1%	0%	0%	1%	3%	0%	0%	0%	0%	0%	3%	6%	3%	0%	0%	3%	1%	6%	0%	0%	0%	4%	0%	2%
	ticulated Truc	0	12	0	0	12	6	0	0	0	0	0	0	0	6	0	0	6	12	0	0	0	0	0	0	18
	%	0%	2%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	2%	2%	0%	0%	0%	0%	0%	0%	2%
	Total	**6**	**497**	**9**	**0**	**512**	**308**	**34**	**9**	**48**	**0**	**91**	**31**	**16**	**272**	**11**	**0**	**299**	**563**	**18**	**6**	**2**	**0**	**26**	**26**	**928**
	PHF	0.5	0.75	0.45	0	0.76	0.86	0.71	0.75	0.92	0	0.81	0.48	0.4	0.88	0.55	0	0.86	0.76	0.75	0.5	0.5	0	0.72	0.65	0.89
	Approach %					55%	33%					10%	3%					32%	61%					3%	3%	
Peak 2	Motorcycles	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	2
Specified Period	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
12:00 PM - 12:00 AM	Cars	5	415	18	0	438	531	18	11	23	0	52	71	46	505	18	2	571	451	11	7	8	0	26	34	1087
One Hour Peak	%	83%	87%	69%	0%	86%	82%	69%	85%	79%	0%	76%	76%	87%	82%	72%	67%	82%	86%	58%	47%	89%	0%	60%	77%	83%
4:30 PM - 5:30 PM	ıt Goods Vehi	1	48	7	0	56	107	8	2	5	0	15	21	7	98	7	1	113	62	8	7	1	0	16	10	200
	%	17%	10%	27%	0%	11%	17%	31%	15%	17%	0%	22%	22%	13%	16%	28%	33%	16%	12%	42%	47%	11%	0%	37%	23%	15%
	Buses	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
	ıgle-Unit Truc	0	7	1	0	8	6	0	0	1	0	1	2	0	6	0	0	6	8	0	1	0	0	1	0	16
	%	0%	1%	4%	0%	2%	1%	0%	0%	3%	0%	1%	2%	0%	1%	0%	0%	1%	2%	0%	7%	0%	0%	2%	0%	1%
	ticulated Truc	0	4	0	0	4	3	0	0	0	0	0	0	0	3	0	0	3	4	0	0	0	0	0	0	7
	%	0%	1%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%
	Total	**6**	**476**	**26**	**0**	**508**	**648**	**26**	**13**	**29**	**0**	**68**	**94**	**53**	**613**	**25**	**3**	**694**	**527**	**19**	**15**	**9**	**0**	**43**	**44**	**1313**
	PHF	0.38	0.87	0.93	0	0.89	0.92	0.72	0.54	0.91	0	0.89	0.87	0.83	0.92	0.78	0.75	0.93	0.88	0.59	0.75	0.56	0	0.83	0.79	0.92
	Approach %					39%	49%					5%	7%					53%	40%					3%	3%	

ATTACHMENT 3

Capacity Analysis

LEVEL OF SERVICE & DELAY

SR 9 @ CR 600 N/ Linwood Dr

Study Period: 2018 **Location:** 40.193188 -85.669863
District: Greenfield **County:** Madison **City/Town:** Linwood
Analyst: Nathan Sturdevant **Date:** 9/12/18 **DES:** _____ **Letting Year:** 2024

ROAD	EB		WB		NB		SB	
	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Existing	B	14	B	16.5	A	2.9	A	2.9
Design Year Base	B	13.7	B	17.3	A	3.8	A	3.7
Design Year Proposed	B	12.5	B	11	A	0.5	A	0.3

ATTACHMENT 4

Crash Information and Diagrams

INDOT - GREENFIELD TRAFFIC CRASH SUMMARY AND DIAGRAM

Location	SR 9 & CR 600 N Anderson/Alexandria Madison Co		
District	630	Period	2017-2022
Total Crashes	24	Fatal Crashes	0
PDO Crashes	14	"Possible" Crashes	1
Non Incapacitating Crashes	2	Total injuries	15
Incapacitating Crashes	7	Total Fatalities	0
Dry	21	Snow/Slush	0
Wet	3	Ice	0
Muddy	0	Water(Standing or Moving)	0
Loose Material On Road	0	Other/Unknown	0
Daylight	20	Dark (Not Lighted)	0
Dawn/Dusk	0	Unknown	0
Dark (Lighted)	0		
Rear End	9	Left Turns	2
Head On	0	Right Turns	0
Same Dir Sideswipe	1	Ran Off Road	3
Opposite Dir Sideswipe	0	Other	2
Right Angle	7	Unknown	0

Crash Details

1	Left/Right Turn	5/26/2017		State Road	Dry	Incapacitating	1	F	0
2	Left Turn	8/31/2017		State Road	Dry	Incapacitating	3	F	0
3	Right Angle	9/21/2017		State Road	Dry	Incapacitating	2	F	0
4	Rear End	12/13/2017		State Road	Wet	Incapacitating	2	F	0
5	Rear End	12/15/2017		State Road	Dry	PDO	0	F	0
6	Ran off Road	12/18/2017		State Road	Dry	Incapacitating	1	F	0
7	Ran off Road	4/4/2018		State Road	Dry	PDO	0	F	0
8	Rear End	5/3/2018		State Road	Dry	PDO	0	F	0
9	Ran off Road	11/20/2018		State Road	Dry	PDO	0	F	0
10	Right Angle	1/7/2019		State Road	Wet	PDO	0	F	0
11	Rear End	2/15/2019		State Road	Dry	Incapacitating	1	F	0
12	Rear End	5/2/2020		County Road	Dry	PDO	0	F	0
13	Rear End	9/10/2020		State Road	Dry	PDO	0	F	0
14	Right Angle	5/7/2021		State Road	Dry	PDO	0	F	0
15	Left Turn	7/14/2021		State Road	Dry	PDO	0	F	0
16	Rear End	8/30/2021		State Road	Dry	PDO	0	F	0
17	Right Angle	9/9/2021		State Road	Dry	PDO	0	F	0
18	Right Angle	10/29/2021		State Road	Wet	PDO	0	F	0
19	Left/Right Turn	11/4/2021		State Road	Dry	PDO	0	F	0
20	Same Direction Sideswipe	9/6/2022	3:00 PM	State Road	DRY	Incapacitating	1	F	0
21	Right Angle	10/12/2022	1:00 PM	State Road	DRY	Non-incapacitating	1	F	0
22	Right Angle	10/29/2022	5:00 PM	State Road	DRY	Possible	1	F	0
23	Rear End	11/3/2022	3:00 PM	State Road	DRY	PDO	0	F	0
24	Rear End	12/8/2022	2:00 PM	State Road	DRY	Non-incapacitating	2	F	0

ATTACHMENT 5

RoadHAT Crash Report

Index of Crash Frequency and Cost - Form F1

Settings: Indiana state settings	Version: Version 4.1	
Location	SR 9 & CR 600 N	
Anderson/Alexandria, Madison		
GIS	40.193201	-85.669735
Post		
Analyst	Bill Tanner	
Date	2/7/2023	

INPUT	
Road Facility Type	Signalized Rural State Intersection
Busiest Road AADT (veh/day)	10467
Crossing Road AADT (veh/day)	774
T Intersection Indicator (1 if present, 0 otherwise)	0
First Year with Crash Data (yyyy)	2017
Last Year with Crash Data (yyyy)	2022
Number of Crashes (crash/period)	
Fatal and Incapacitating Injury Crashes	8
Non-Incapacitating and Possible Injury Crashes	2
Property Damage Only Crashes	14
Route or Road Type	Signalized Rural State Intersection
Average Crash Costs ($)	
Fatal and Incapacitating Injury Crashes	2203700
Non-Incapacitating and Possible Injury Crashes	428200
Property Damage Only Crashes	40300
Crash Cost Year (yyyy)	2017
OUTPUT	
Expected Crash Frequency (crash/year)	
Fatal and Incapacitating Injury Crashes	0.411
Non-Incapacitating and Possible Injury Crashes	0.20
Property Damage Only Crashes	1.43
All Crashes	2.04
Index of Crash Frequency	**1.20**
Index of Crash Cost	**1.49**

ATTACHMENT 7

CMF Information

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 5555

Install J-Turn intersection

Description: Install J-Turn intersection

Prior Condition: Two way stop controlled intersection

Category: Intersection geometry

Study: ***Evaluation of J-turn Intersection Design Performance in Missouri*, Edara et al., 2013**

Star Quality Rating:	[View score details]

Crash Modification Factor (CMF)

Value:	0.652
Adjusted Standard Error:	

Unadjusted Standard Error:	

Crash Reduction Factor (CRF)

Value:	34.8 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	
Unadjusted Standard Error:	

Applicability

Crash Type:	All
Crash Severity:	All
Roadway Types:	Principal Arterial Other Freeways and Expressways
Number of Lanes:	
Road Division Type:	Divided by Median
Speed Limit:	65-70
Area Type:	Rural
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	Roadway/roadway (not interchange related)
Intersection Geometry:	3-leg,4-leg
Traffic Control:	Other
Major Road Traffic Volume:	Minimum of 10326 to Maximum of 26470 Annual Average Daily Traffic (AADT)
Minor Road Traffic Volume:	Minimum of 434 to Maximum of 1389 Annual Average Daily Traffic (AADT)

Development Details

Date Range of Data Used:	2004 to 2013
Municipality:	
State:	MO
Country:	USA
Type of Methodology Used:	Before/after using empirical Bayes or full Bayes
Sample Size (crashes):	86 crashes before, 27 crashes after
Sample Size (sites):	5 sites before, 5 sites after
Sample Size (site-years):	15 site-years before, 11 site-years after

Other Details

Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Aug-12-2014

Comments:

[View the Full Study Details]

Export Detail Page As A PDF

This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

For more information, contact Karen Scurry at karen.scurry@dot.gov

CRASH MODIFICATION FACTORS CLEARINGHOUSE

CMF / CRF Details

CMF ID: 6096

CMF Name: Improve left-turn lane offset to create positive offset

Description: Improve left-turn lane offset to make the left-turn lanes with positive offset

Prior Condition: Left-turn lanes with negative offset

Category: Intersection geometry

Study: *Safety Evaluation of Offset Improvements for Left-Turn Lanes*, Persaud et al., 2009

Star Quality Rating:	★★★☆☆ [View score details]

Crash Modification Factor (CMF)	
Value:	0.644
Adjusted Standard Error:	
Unadjusted Standard Error:	0.09

Crash Reduction Factor (CRF)	
Value:	35.6 *(This value indicates a **decrease** in crashes)*
Adjusted Standard Error:	

Unadjusted Standard Error:	9

Applicability

Crash Type:	All
Crash Severity:	K (fatal),A (serious injury),B (minor injury),C (possible injury)
Roadway Types:	Not specified
Number of Lanes:	
Road Division Type:	
Speed Limit:	
Area Type:	Not specified
Traffic Volume:	
Time of Day:	All

If countermeasure is intersection-based

Intersection Type:	
Intersection Geometry:	4-leg
Traffic Control:	
Major Road Traffic Volume:	7,150 to 29,200 Annual Average Daily Traffic (AADT)
Minor Road Traffic Volume:	2,200 to 13,350 Annual Average Daily Traffic (AADT)

Development Details

Date Range of Data Used:	1983 to 2005
Municipality:	
State:	WI

Country:	
Type of Methodology Used:	2
Sample Size Used:	

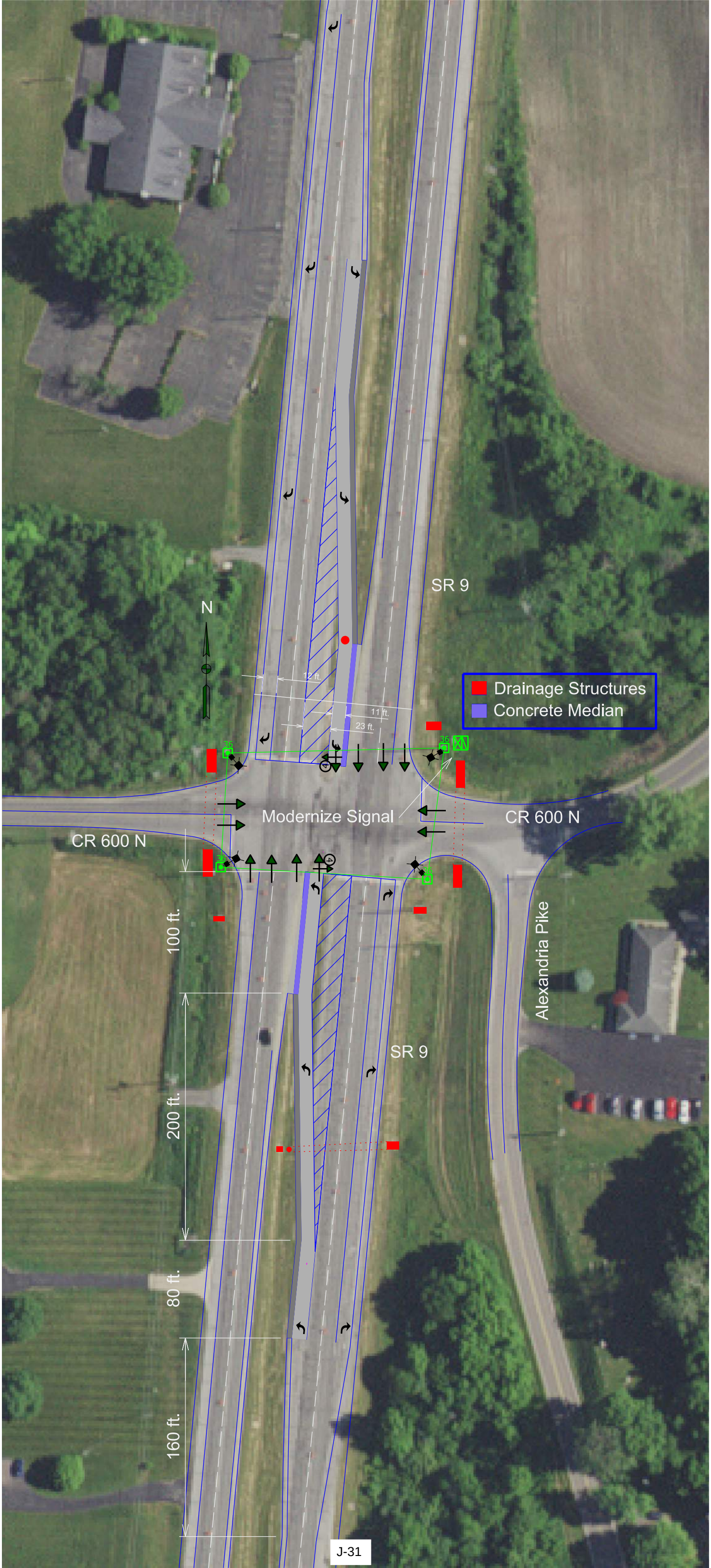
Other Details	
Included in Highway Safety Manual?	No
Date Added to Clearinghouse:	Dec-08-2014
Comments:	CMF of shifting the left-turn lane further away from the adjacent through lane and result in a less negative offset or no offset.

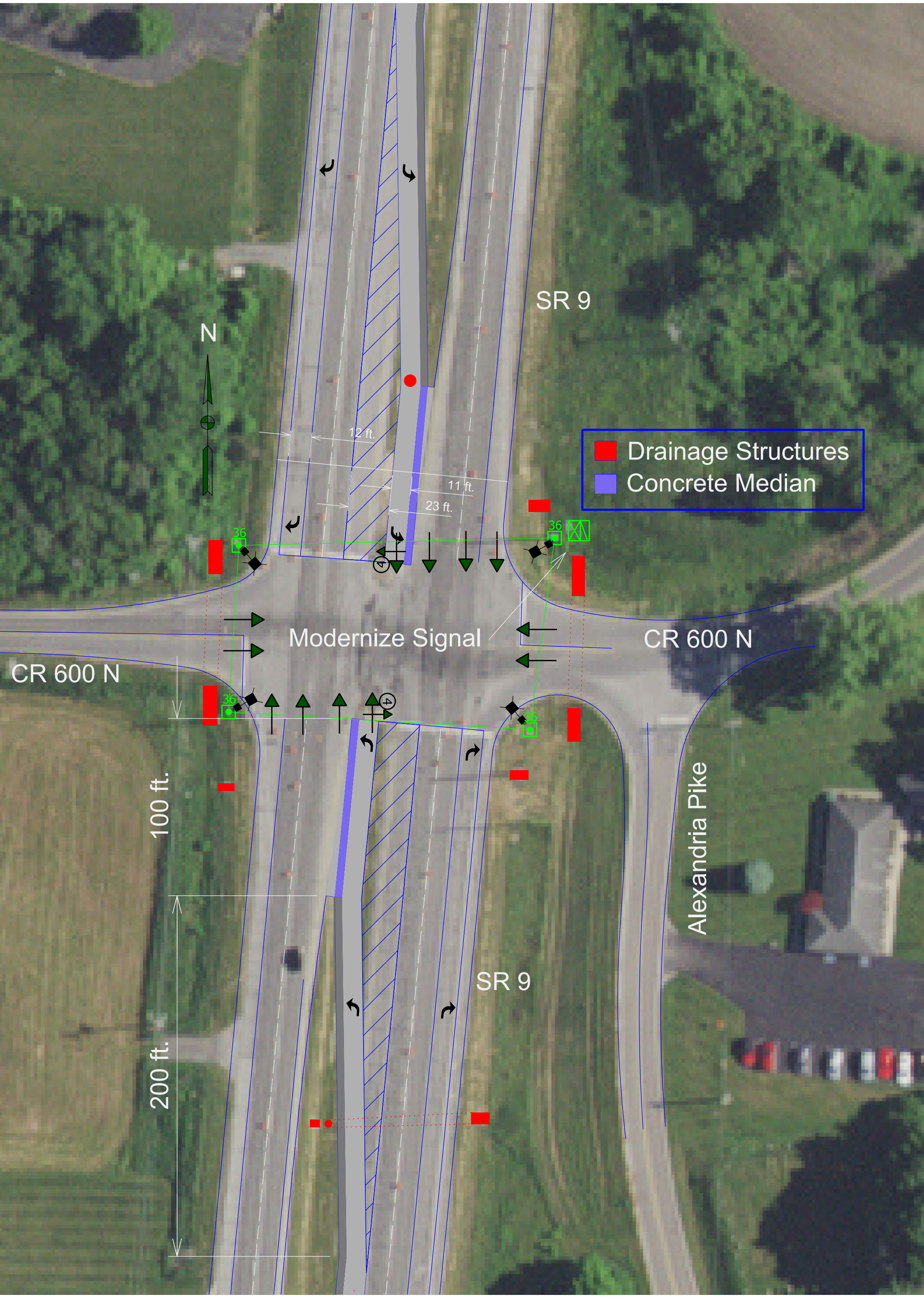
This site is funded by the U.S. Department of Transportation Federal Highway Administration and maintained by the University of North Carolina Highway Safety Research Center

ATTACHMENT

8

Alternative Sketch


SR 9
N
12 ft.
11 ft.
23 ft.
Drainage Structures
Concrete Median
Modernize Signal
CR 600 N
CR 600 N
100 ft.
Alexandria Pike
SR 9
200 ft.
80 ft.
160 ft.
J-31


SR 9
N
12 ft.
11 ft.
23 ft.
Drainage Structures
Concrete Median
36
36
36
35
4
4
Modernize Signal
CR 600 N
CR 600 N
100 ft.
Alexandria Pike
SR 9
200 ft.

SR 9 @ CR 600 N/ Linwood Rd

Proposed Layout

Study Period: 2018 Location: 40.193188 -85.669863
District: Greenfield County: Madison City/Town: Linwood
Analyst: Nathan Sturdevant Date: 9/7/18 DES:
Letting Year: 2024

PART 4. HIGHWAY TRAFFIC SIGNALS

Chapter 4O. Advance Warning Flashers

4O.1 Description

SUPPORT:

The Advanced Warning Flasher (AWF) is a device which, at certain high speed locations, has been found to provide additional information to the motorist describing the operation of the highway traffic signal. It has been found that an Advance Warning Flasher can assist the driver in making safer and more efficient driving decisions. The additional information includes a visual indication to get the driver's attention and a specific notice that the driver must prepare to stop.

The Minnesota Advance Warning Flasher system consists of a flasher and a sign located on main street approaches to a high speed signalized intersection. The AWF is connected to the highway traffic signal in such a way that when the main street green is about to change to yellow, the flasher is turned on to warn the approaching drivers of the impending change. Basically, the purpose of an optimally designed combination of highway traffic signal and Advance Warning Flasher system is twofold: 1) to inform the driver in advance of a required drive decision (prepare to stop) and 2) to minimize the number of drivers that will be required to make that decision. The amount of time, prior to the signal turning yellow, that the Advance Warning Flasher flashes is known as Leading Flash Period.

OPTION:

Advance Warning Flashers may be used at traffic signals.

4O.2 General Design and Operation

STANDARD:

If used, the Advance Warning Flasher assembly shall be as shown in Figure 4O-1. The flasher shall flash yellow in a alternating manner prior to the termination of the green, and during the yellow and red periods of the signal. The flasher shall also flash if the signal goes into flashing mode.

Posted Speeds (mph)	AWF Placement (feet)	Leading Flash (seconds)
40	560	8.0
45	560	7.0
50	700	8.0
55	700	7.0
60	850	8.0
65	850	7.5

Table 4O-1. Advance Warning Sign Placement

GUIDANCE:

If used, then the following should apply:

Advance Warning Flasher - The Advance Warning Flasher power should be supplied from the signal control cabinet.

Advance Warning Flasher Sign Placement - The Advance Warning Flasher should be set back from the intersection in accordance with Table 4O-1. Where this is not possible, the leading flash should be adjusted for the actual distance by using the formula below. At locations on four-lane divided roadways, it should be placed on both sides of the approach.

Leading Flash Period - The Advance Warning Flasher should flash prior to the termination of the green for the Leading Flash Period shown in Table 4O-1. For existing systems where the placement is other than what is listed in Table 4O-1, the Leading Flash Period should be computed by the following formula:

$$\text{English:} \quad F = \frac{0.68D}{v} - 1.5$$

Where:
F = Leading Flash Time (seconds)
D = AWF Placement (feet)
v = Posted Speeds (mph)

Detector Placement - The detection of the intersection should be determined without regard to the Advance Warning Flasher.

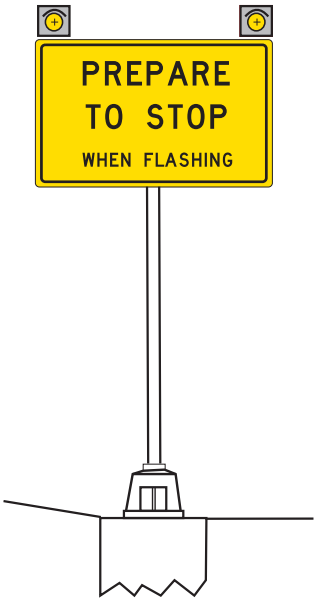


Figure 4O-1. Advance Warning Assembly

ATTACHMENT 9

Cost Estimate

JOB NUMBER: 1900152
DESCRIPTION: INTERSECT. IMPROV. W/ ADDED TURN LANES ON SR9 AT CR 600 N_LINWOOD RD
HIGHWAY TYPE: Other Principal Arterial
DATE UPDATED: 09/27/2022
CONTRACT NO: R -42410
LATITUDE: 401135
LONGITUDE: 854010

ESTIMATOR:
COUNTY: C048
SEASON: SPRING
GREENFIELD DISTRICT
LETTING DATE: 01/18/2024
CHECKED BY:
PROJECT LENGTH: 0.0000
LANE MILES/KM: 0.0

SPEC YEAR: 10
WORK TYPE: P000
UNIT SYSTEM: E
CONTINGENCY: 15.0%
READY FOR CONTRACT DATE: 11/08/2023
DATE CHECKED: 01/24/2022
PAVEMENT WIDTH:
PAVEMENT DEPTH:

LINE	CAT	ITEM	DESCRIPTION	QTY	UNIT		PRICE		AMOUNT	OBS	REC/STD/UNIQUE
0001		105-06845	CONSTRUCTION ENGINEERING	1.0000	LS	@	$ 17,097.63	=	$ 17,097.63	N	S
0002		110-01001	MOBILIZATION AND DEMOBILIZATION	1.0000	LS	@	$ 42,744.07	=	$ 42,744.07	N	S
0003		201-52370	CLEARING RIGHT OF WAY	1.0000	LS	@	$ 17,097.63	=	$ 17,097.63	N	S 201-C-052
0004		202-02240	PAVEMENT REMOVAL	2,038.0000	SYS	@	$ 8.50	=	$ 17,340.14	N	S
0005		202-93995	SIGNAL POLE FOUNDATION REMOVE	4.0000	EACH	@	$ 705.80	=	$ 2,823.24	N	S
0006		202-93999	SIGNAL POLE REMOVE	4.0000	EACH	@	$ 883.90	=	$ 3,535.62	N	S
0007		202-91385	INLET REMOVE	2.0000	EACH	@	$ 935.10	=	$ 1,870.21	N	S
0008		202-96133	PIPE REMOVE	201.0000	LFT	@	$ 21.85	=	$ 4,391.85	N	S
0009		202-97909	TRAFFIC SIGNAL INTERCONNECT REMOVE	1.0000	LS	@	$ 9,280.00	=	$ 9,280.00	N	S
0010		203-02000	EXCAVATION COMMON	1,843.0000	CYS	@	$ 53.74	=	$ 99,057.86	N	S
0011		203-02070	BORROW	948.0000	CYS	@	$ 15.00	=	$ 14,220.00	N	S 200-R-401, 203-B-025-MARION COUNTY
0012		205-12108	STORMWATER MANAGEMENT BUDGET	10,000.0000	DOL	@	$ 1.00	=	$ 10,000.00	N	S
0013		205-12616	STORMWATER MANAGEMENT IMPLEMENTATION	1.0000	LS	@	$ 23,100.00	=	$ 23,100.00	N	S
0014		205-12618	SWQCP PREPARATION	1.0000	LS	@	$ 20,000.00	=	$ 20,000.00	N	S
0015		207-12151	SUBGRADE TREATMENT TYPE IVA	6,642.0000	SYS	@	$ 44.45	=	$ 295,294.62	N	S
0016		211-09265	STRUCTURE BACKFILL TYPE 2	126.0000	CYS	@	$ 61.14	=	$ 7,703.96	N	S
0017		401-07322	QC/QA-HMA 3 64 SURFACE 9.5 mm	552.0000	TON	@	$ 80.00	=	$ 44,160.00	N	S
0018		401-07357		917.0000	TON	@	$ 75.00	=	$ 68,775.00	N	S

REVIEWED
By Lauren.Waite at 10:30 am, Oct 06, 2022

JOB NUMBER: 1900152 ESTIMATOR: SPEC YEAR: 10
DESCRIPTION: INTERSECT. IMPROV. W/ ADDED TURN LANES COUNTY: C048 WORK TYPE: P000
ON SR9 AT CR 600 N_LINWOOD RD SEASON: SPRING UNIT SYSTEM: E
HIGHWAY TYPE: Other Principal Arterial GREENFIELD DISTRICT CONTINGENCY: 15.0%
DATE UPDATED: 09/27/2022 LETTING DATE: 01/18/2024 READY FOR CONTRACT DATE: 11/08/2023
CONTRACT NO: R -42410 CHECKED BY: DATE CHECKED: 01/24/2022
LATITUDE: 401135 PROJECT LENGTH: 0.0000 PAVEMENT WIDTH:
LONGITUDE: 854010 LANE MILES/KM: 0.0 PAVEMENT DEPTH:

LINE	CAT	ITEM	DESCRIPTION	QTY	UNIT		PRICE		AMOUNT	OBS	REC/STD/UNIQUE
			QC/QA-HMA 3 64 INTERMEDIATE 9.5 mm								
0019		401-07424		2,192.0000	TON	@ $	45.00	= $	98,640.00	N	S
			QC/QA-HMA 3 64 BASE 19.0 mm								
0020		401-10258		3,350.0000	LFT	@ $	1.00	= $	3,350.00	N	S MAY REQUIRE 401-11785 LIQUID ASPHALT SEALANT, SEE 401.15
			JOINT ADHESIVE SURFACE								
0021		401-10259		3,350.0000	LFT	@ $	1.00	= $	3,350.00	N	S
			JOINT ADHESIVE INTERMEDIATE								
0022		401-11785		3,350.0000	LFT	@ $	9.36	= $	31,365.72	N	S Refer to Design Memo 22-14 before use.
			LIQUID ASPHALT SEALANT								
0023		406-05520		5.0000	TON	@ $	1,040.34	= $	5,201.70	N	S
			ASPHALT FOR TACK COAT								
0024		605-02493		124.0000	SYS	@ $	95.03	= $	11,783.78	N	S
			CURB ISLAND CONCRETE								
0025		616-06405		20.0000	TON	@ $	19.69	= $	393.95	N	S
			RIPRAP REVETMENT								
0026		616-12246		26.0000	SYS	@ $	5.00	= $	130.00	N	S
			GEOTEXTILE FOR RIPRAP TYPE 1A								
0027		628-11976		1.0000	EACH	@ $	998.95	= $	998.96	N	S
			COMPUTER SYSTEM EQUIPMENT								
0028		628-11977		1.0000	EACH	@ $	1,513.09	= $	1,513.09	N	S
			COMPUTER SYSTEM								
0029		628-12683		12.0000	MOS	@ $	2,530.09	= $	30,361.17	N	S
			FIELD OFFICE D								
0030		715-05151		234.0000	LFT	@ $	29.44	= $	6,889.71	N	S
			PIPE TYPE 2 CIRCULAR 15 IN								
0031		715-05153		160.0000	LFT	@ $	57.28	= $	9,164.80	N	S
			PIPE TYPE 2 CIRCULAR 21 IN								
0032		715-46005		1.0000	EACH	@ $	569.42	= $	569.42	N	S
			PIPE END SECTION DIAMETER 15 IN								
0033		715-46015		1.0000	EACH	@ $	759.84	= $	759.84	N	S

JOB NUMBER: 1900152 ESTIMATOR: SPEC YEAR: 10
DESCRIPTION: INTERSECT. IMPROV. W/ ADDED TURN LANES COUNTY: C048 WORK TYPE: P000
ON SR9 AT CR 600 N_LINWOOD RD SEASON: SPRING UNIT SYSTEM: E
HIGHWAY TYPE: Other Principal Arterial GREENFIELD DISTRICT CONTINGENCY: 15.0%
DATE UPDATED: 09/27/2022 LETTING DATE: 01/18/2024 READY FOR CONTRACT DATE: 11/08/2023
CONTRACT NO: R -42410 CHECKED BY: DATE CHECKED: 01/24/2022
LATITUDE: 401135 PROJECT LENGTH: 0.0000 PAVEMENT WIDTH:
LONGITUDE: 854010 LANE MILES/KM: 0.0 PAVEMENT DEPTH:

LINE	CAT	ITEM	DESCRIPTION	QTY	UNIT		PRICE		AMOUNT	OBS	REC/STD/UNIQUE
			PIPE END SECTION DIAMETER 21 IN								
0034		720-12797		1.0000	EACH	@	$ 705.68	=	$ 705.69	N	S
			CASTING INLET ADJUST TO GRADE								
0035		720-45035		1.0000	EACH	@	$ 2,481.71	=	$ 2,481.71	N	S
			INLET F7								
0036		720-45065		1.0000	EACH	@	$ 5,532.24	=	$ 5,532.24	N	S
			INLET N12								
0037		801-06775		1.0000	LS	@	$ 100,000.00	=	$ 100,000.00	N	S 801-C-157
			MAINTAINING TRAFFIC								
0038		802-05701		373.0000	LFT	@	$ 26.13	=	$ 9,749.53	N	S
			SIGN POST SQ 1 REINFORCED ANCHOR BASE								
0039		802-05702		114.0000	LFT	@	$ 1.52	=	$ 174.22	N	S
			SIGN POST SQ 2 REINFORCED ANCHOR BASE								
0040		802-07057		534.0000	SFT	@	$ 35.14	=	$ 18,765.50	N	S
			SIGN PANEL WITH LEGEND								
0041		802-07060		2.0000	EACH	@	$ 76.90	=	$ 153.82	N	S
			SIGN SHEET RELOCATE								
0042		802-09838		105.0000	SFT	@	$ 23.09	=	$ 2,425.16	N	S
			SIGN SHEET WITH LEGEND 0.080 IN								
0043		802-09840		211.0000	SFT	@	$ 4.73	=	$ 999.53	N	S
			SIGN SHEET WITH LEGEND 0.100 IN								
0044		802-12223		8.0000	EACH	@	$ 2,525.56	=	$ 20,204.55	N	S
			WIDE FLANGE SIGN POST SUPPORT FNDN B								
0045		802-76095		2,988.0000	LBS	@	$ 10.76	=	$ 32,166.33	N	S
			STRUCTURAL STEEL BREAKAWAY								
0046		805-11815		441.0000	LFT	@	$ 27.32	=	$ 12,052.30	N	S
			CONDUIT HDPE 2 IN SCHEDULE 80								
0047		807-02191		6.0000	EACH	@	$ 1,385.84	=	$ 8,315.07	N	S
			HANDHOLE LIGHTING								
0048		807-07580		3,345.0000	LFT	@	$ 19.82	=	$ 66,315.13	N	S
			WIRE NO 4 CU IN DUCT IN TRENCH 4 1/C								
0049		807-12199		10.0000	EACH	@	$ 829.21	=	$ 8,292.14	N	S
			LUMINAIRE HIGH LUMEN ROADWAY								
0050		807-86810		1.0000	EACH	@	$ 7,154.22	=	$ 7,154.22	N	S
			SERVICE POINT II								
0051		808-11698		95.0000	LFT	@	$ 12.84	=	$ 1,220.21	N	S
			TRANSVERSE MRKG THERMO YIELD WHITE 27								

JOB NUMBER: 1900152 ESTIMATOR: SPEC YEAR: 10
DESCRIPTION: INTERSECT. IMPROV. W/ ADDED TURN LANES COUNTY: C048 WORK TYPE: P000
ON SR9 AT CR 600 N_LINWOOD RD SEASON: SPRING UNIT SYSTEM: E
HIGHWAY TYPE: Other Principal Arterial GREENFIELD DISTRICT CONTINGENCY: 15.0%
DATE UPDATED: 09/27/2022 LETTING DATE: 01/18/2024 READY FOR CONTRACT DATE: 11/08/2023
CONTRACT NO: R -42410 CHECKED BY: DATE CHECKED: 01/24/2022
LATITUDE: 401135 PROJECT LENGTH: 0.0000 PAVEMENT WIDTH:
LONGITUDE: 854010 LANE MILES/KM: 0.0 PAVEMENT DEPTH:

LINE	CAT	ITEM	DESCRIPTION	QTY	UNIT		PRICE		AMOUNT	OBS	REC/STD/UNIQUE
			IN								
0052		808-75043		4,079.0000	LFT	@	$ 1.00	=	$ 4,079.00	N	S
			LINE THERMOPLASTIC SOLID WHITE 6 IN								
0053		808-75247		4,816.0000	LFT	@	$ 1.06	=	$ 5,131.16	N	S
			LINE THERMOPLASTIC SOLID YELLOW 6 IN								
0054		808-75272		332.0000	LFT	@	$ 9.50	=	$ 3,156.26	N	S
			TRANSVERSE MKG THERMO X-HATCH WHITE 24								
0055		808-75290		217.0000	LFT	@	$ 8.92	=	$ 1,935.89	N	S
			TRANSVERSE MKG THERMO XHATCH YELLOW 24								
0056		808-75297		55.0000	LFT	@	$ 9.33	=	$ 513.68	N	S
			TRANSVERSE MKG THERMO STOP WHITE 24 IN								
0057		808-75320		16.0000	EACH	@	$ 172.06	=	$ 2,753.04	N	S
			PAVEMENT MSG MKG THERMO LANE IND ARROW								
0058		808-75325		2.0000	EACH	@	$ 189.87	=	$ 379.74	N	S
			PAVEMENT MSG MARKING THERMO ONLY								

ESTIMATE ITEM TOTAL = $ 1,217,620.09
INFLATED ESTIMATE TOTAL = $ 1,217,936.68
CONTINGENCY (15.0%) = $ 182,690.50
TOTAL ESTIMATE = $ 1,400,627.18

NOTE: The estimate item total includes all alternate items. The other estimate totals include only low cost alternate items.

ATTACHMENT

14

Others