FHWA-Indiana Environmental Document

CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM

GENERAL PROJECT INFORMATION

Road No./County:	Clinton Street / Vigo County
Designation Number(s):	1901781
Project Description/Termini:	Road rehabilitation project on Clinton Street, from Park Avenue to Imperial Avenue, in Otter Creek Township.

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

Approval

INDOT DE Signature and Date

INDOT ESD Signature and Date

FHWA Signature and Date

Release for Public Involvement

N/A
INDOT DE Initials and Date

ADWP June 11, 2025
INDOT ESD Initials and Date

Certification of Public Involvement

INDOT Consultant Services Signature and Date

INDOT DE/ESD Reviewer Signature and Date:

Name and Organization of CE/EA Preparer: Nora McDonald, Metric Environmental LLC

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

Part I – Public Involvement

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

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

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

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

Notice of Entry letters were mailed to potentially affected property owners near the project area on November 17, 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: G-1.

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

Public Controversy on Environmental Grounds

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

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

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

Sponsor of the Project: Vigo County INDOT District: Crawfordsville

Local Name of the Facility: Clinton Street

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

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

PURPOSE AND NEED:

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

The primary need for this project is the current state of Clinton Street. The existing roadway surface is cracking, potholes are forming, and some sections of the roadway pavement are starting to sink into ruts. No sidewalks are present along Clinton Street causing pedestrians and pedestrians with disabilities to walk along the shoulders of the roadway. Clinton Street is a two-lane roadway with free-flowing traffic and no dedicated turning lanes, except for the signalized intersection at Park Avenue which is the southern terminus of the project area. The intersections between Park Avenue to Imperial Avenue are all stop controlled and lack dedicated turning lanes. The lack of dedicated turning lanes causes long queues in traffic during peak traffic hours. Since the side streets leading to Clinton Street are stop-controlled, it is up to drivers to decide when to turn into traffic on Clinton Street.

Crash data was analyzed for Clinton Street from Park Avenue to Hasselburger Avenue. Crash data was sourced from the county-wide crash analysis from the Local Technical Assistance Program (LTAP) 2014 – 2018 data and from Indiana's Automated Reporting Information Exchange System (ARIES) database maintained by the Indiana State Police. From this data, it was determined that the Clinton Street corridor had a total of 66 recorded crashes near intersections, with 12 accidents causing injuries or fatalities. Intersections along Clinton Street were found to have a higher rates of rear end crashes and off-road crashes. To further analyze incidences at intersections along the Clinton Street corridor, a RoadHAT analysis was performed following INDOT design guidance. RoadHAT evaluates the Index of crash frequency (ICF) on a scale of 0, meaning that the roadway is performing as expected, up to a 2, meaning that the roadway is performing worse than expected. For the Index of crash cost (ICC), the values are the same but 0 represents whether the crash severity was close to expected and 2 is if the crash was more severe than normal. The RoadHAT analysis for the study corridor resulted in an average ICF of 0.44 and an average index of crash cost (ICC) of 1.19. This indicates that though the crashes are not as frequent, the severity of the crash is more than what is expected for the small crash frequency. The results of this study found that the intersections along Clinton Street are performing worse than expected compared to similar intersection across the state of Indiana. Additional statistics and information about the crash studies can be found in Appendix I: I-1 to I-10.

The intersection of Hasselburger Avenue and Clinton Street is a stop-controlled intersection, with traffic stopping on Hasselburger Avenue. According to the RoadHAT analysis of Hasselburger Avenue, the intersection had an ICF of 2.07 and an ICC of 1.58. These values indicate that this intersection is experiencing more crashes that are more severe than the average for the study corridor. The RoadHAT analysis revealed that collisions at this intersection were predominantly left turn, right turn, or angled collisions. This analysis was verified by a twelve-hour turn movement study conducted by USI Consulting (USI) for the intersection during peak traffic hours. This analysis showed that there were a moderate number of turning movements from Hasselburger Avenue onto Clinton Street, which had a significantly higher amount of through traffic. Using this data USI determined that if the intersection was left as it is, Hasselburger Avenue would continue to have a higher frequency of crashes that are severe (Appendix I: I-7 to I-10).

An additional need for this project is due to the deteriorating condition of the bridge located just north of the Park Avenue intersection. The need for this project is due to the deteriorating condition of Bridge No. 84-00242 (Vigo County Bridge No. 242, National Bridge Index (NBI) No. 8400169). The bridge was assessed based on the bridge condition rating system. The bridge condition rating is a scaled system that rates the condition of bridges based on a 0-9 scale, with the lowest rating, 0, being a failed bridge and the highest rating, 9, being a bridge in excellent condition.

Bridge No. 84-00242 (Vigo County Bridge No. 242, NBI No. 8400169), which carries North Clinton Street over Otter Creek, is a three-span continuous concrete box beam bridge. The bridge, originally constructed in 1993, has not been rehabilitated since its construction. According to the June 12, 2024, excerpt *Bridge Inspection Report* and excerpt *Engineering Assessment Report*, the bridge assets had various condition ratings ranging from 4 (poor condition) to 7 (good condition) out of a possible 9 (excellent condition). The bridge deck and wearing surface were given a condition rating of 7 out of 9, with problems such as scattered hairline cracks and popouts throughout the concrete deck and wearing surface. It was also noted that there were cracks and spalling in both of the approach slabs of the bridge. The

bridge expansion joints had spalls and cracks in several locations. The superstructure and substructure were given a condition rating of 5 (fair condition) out of 9. The inspection report noted that there are shear cracks that measure up to 0.030 inches in length present near various beam ends bear the bridge piers. There is cracking on the beam surfaces and sides. The box beams of the bridge have 7 ft. spacing in-between. It was also noted that the beams of the bridge had weep holes drilled into them. These holes would have been needed to alleviate pressure from water build-up within the beams. The substructure of the bridge has scattered hairline cracks along the pier caps. The channel/channel protection of the stream banks was given a condition rating of a 6 (Satisfactory condition) out of a possible 9. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement, debris restricting the channel, and the stream banks are beginning to slump. The scour of the bridge was given a 4 (poor condition) out of 9. Piers 2 and 3 have scour on the piers, especially on the upstream portion of Pier 3. Pier 3 has 1.4 ft. of footing exposed (Appendix I: I-10 to I-12 and I-24 to I-27).

The purpose of the project is to improve the condition of the roadway, to improve pedestrian connectivity, to provide ADA compliant pedestrian infrastructure, to reduce long queues in traffic, to implement changes to reduce the ICF and ICC to 1 or better, and to provide a structurally adequate crossing for vehicular and pedestrian traffic over Otter Creek, with a condition rating of at least a 7 (good condition) out of 9 (excellent condition).

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Vigo Municipality: Terre Haute

Limits of Proposed Work: Along Clinton Street from the Park Avenue to Imperial Avenue in Terre Haute.

Total Work Length: 1.12 Mile(s) Total Work Area: 5.82 Acre(s)

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

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

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

The City of Terre Haute with funding from the Federal Highway Administration (FHWA) and administrative oversight from the Indiana Department of Transportation (INDOT), intends to proceed with a sidewalk construction and roadway rehabilitation project along Clinton Street, in the City of Terre Haute, Vigo County, Indiana.

Location

This project is located on Clinton Street, from Park Avenue to Imperial Avenue in the City of Terre Haute, Otter Creek Township, Vigo County, Indiana (Sections 25, 26, 35, and 36, Township 13 North, Range 9 West) (Appendix B: B-1 to B-2). Land use in the vicinity of the project is suburban, with a mix of commercial and residential properties as well as intermittent farmland (Appendix B: B-3 to B-18). This section of Clinton Street is a two-lane urban–principal arterial roadway that consists of two 12-foot (ft) travel lanes bordered by variable 2 to 10 ft. paved and gravel shoulders. Other than the intersection at the southern terminus, there are no two ways left turning lanes (TWLTL) on Clinton Street. The speed limit on Clinton Street is 40 miles per hour. No curb and gutter or sidewalks are present on Clinton Street.

Existing Conditions

This project will focus on Clinton Street from Park Avenue to Imperial Avenue in the City of Terre Haute. This portion of Clinton Street provides access to businesses and residences located north of the City of Terre Haute. The existing roadway is exhibiting signs of pavement distress. Clinton Street is a two-lane roadway with free-flowing traffic. There are no dedicated turning lanes throughout the project area north of the Park Avenue intersection. Side streets intersecting with this stretch of Clinton Street are stop sign controlled and lack dedicated turning lanes. Due to this, drivers must determine when to turn onto Clinton Street. The crash data analyzed for the Clinton Street corridor showed that crashes are predominantly rear-end crashes, showing that the conditions for turning traffic are an issue along Clinton Street (Appendix I: I-1 to I-9). Additionally, there are no sidewalks are present adjacent to Clinton Street, causing pedestrians to walk along the shoulders of the roadway. The lack of sidewalks also makes Clinton Street inaccessible for pedestrians with disabilities (Appendix B: B-7 to B-18).

Bridge No. 84-00242 (Vigo County Bridge No. 242, National Bridge Index (NBI) No. 8400169), which carries North Clinton Street over Otter Creek, will also be rehabilitated as part of the project. Vigo County Bridge No. 242 is located near the southern terminus of the project area, approximately 0.10 miles north of Park Avenue. The bridge is a three-span continuous concrete box beam bridge. The bridge length is 156 ft. long, with a curb-to-curb width of 45.5 ft., out-to-out deck width of 48.3 ft. and is set at a skew of 18 degrees. The bridge, originally constructed in 1993, has not been rehabilitated since its construction. According to the June 12, 2024, excerpt *Bridge Inspection Report* and excerpt *Engineering Assessment Report*, the bridge assets had various condition ratings ranging from 4 (poor condition) to 7 (good condition) out of a possible 9 (excellent condition). The bridge deck and wearing surface were given a condition rating of 7 out of 9, with problems such as scattered hairline cracks and popouts throughout the concrete deck and wearing surface. It was also noted that there were cracks and spalling in both of the approach slabs of the bridge. The bridge expansion joints had spalls and cracks in several locations. The superstructure and substructure were given a condition rating of 5 (fair condition) out of 9. The inspection report noted that there are shear cracks that measure up to 0.030 inches in length present near various beam ends bear the bridge piers. There is cracking on the beam surfaces and sides. The box beams of the bridge have 7 ft. spacing in-between. It was also noted that the beams of the bridge had weep holes drilled into them. These holes would have been needed to alleviate pressure from water build-up within the beams. The substructure of the bridge has scattered hairline cracks along the pier caps. The channel/channel protection of the stream banks was given a condition rating of a 6 (Satisfactory condition) out of a possible 9. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement, debris restricting the channel, and the stream banks are beginning to slump. The scour of the bridge was given a 4 (poor condition) out of 9. Piers 2 and 3 have scour on the piers, especially on the upstream portion of Pier 3. Pier 3 has 1.4 ft. of footing exposed (Appendix I: I-10 to I-12 and I-24 to I-27).

Preferred Alternative

The preferred alternative will include milling, widening, and resurfacing Clinton Street and the construction of a sidewalk with curb ramps to meet current ADA standards throughout the project area. The corridor between the north end of the bridge to Imperial Avenue will be widened and repaved to include two 12-foot travel lanes, a dedicated 12 ft. TWLTL, and variable width paved shoulders with 4-foot paved mailbox approaches. A traffic signal will be installed at the intersection of Hasselburger Avenue and Clinton Street, along with Americans with Disabilities Act (ADA) compliant curb ramps, and pedestrian push button pedestals. An 8 ft. wide asphalt pedestrian trail will be constructed along the east side of Clinton Street. The pedestrian trail will be separated from the roadway by a 10-foot grass buffer for the entire project length (Appendix B: B-19 to B-22).

The Vigo County Bridge No. 242 (Structure No. 84-00242, NBI No. 8400169) will be rehabilitated by reconstructing the deck, bridge exterior, reinforced concrete approaches, bridge railing, bridge rail transitions, and 7’-8” of deck copings. The exterior beams under the deck copings will be replaced. A new concrete sidewalk will be constructed on the east side of the bridge. New deck drains will be installed. The bridge railing and sidewalk will be surface sealed. Class 2 riprap will be installed around Pier 3 (Appendix B: B-46 to B-50).

Potential Impacts
The proposed construction of this project requires the acquisition of approximately 2.872 acres of permanent, 0.439 acres of temporary right-of-way, and 1.299 acres of reacquisition. The project will require a Construction Stormwater General Permit (CSGP) due to the estimated 5.82 acres of soil disturbance. To aid in reducing and mitigating project impacts to the environment, the project limits have been reduced to what is necessary to repave the roadway, add the additional turning lanes, construct the pedestrian trail, rehabilitate the bridge, and install traffic signals at the Hasselburger Avenue and Clinton Street intersection. Approximately 64 linear feet (lft.) of permanent impacts will occur to Otter Creek due to the placement of Class 2 riprap and approximately 107 lft. of temporary impacts will occur due to construction access below the bridge. This project will require an IDNR construction in a floodplain (CIF) permit, Section 401 Water Quality Certificate (WQC), and a Section 404 Regional General Permit (RGP) due to the impacts to Otter Creek.

Logical Termini/Independent Utility
The project termini are approximately 1.21 miles of Clinton Street, from Park Avenue to Imperial Avenue in the City of Terre Haute. The termini are logical, as they provide beginning and end points for the proposed project. The beginning and end points of the TWLTL from the north end of the bridge to Imperial Avenue will allow dedicated space for turning vehicles to move out of the way of through traffic where the intersecting side roads begin and end within the project corridor. This project has independent utility because it will not rely on the completion of another project to be considered completed.

The maintenance of traffic (MOT) for this project will be accomplished with phased construction and alternating lane closures. Additional details about the MOT can be found below in the MOT During Construction section of this CE.

OTHER ALTERNATIVES CONSIDERED:

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

Various alternatives were discussed for this project in the Engineering Assessment report (Appendix I: I-16 to I-23). The following alternatives were considered for this project:

No Build
The No Build alternative would not address the deterioration of the existing structure. This alternative would require no expenditure of funds and there would be no impacts to the surrounding environment. Although this is a feasible option, it would not address the purpose and need of the project to rehabilitate the existing roadway and bridge, nor would it have improved pedestrian connectivity. Nor would it be prudent to allow the Clinton Street corridor and Vigo County Bridge No. 242 to further deteriorate and become unusable to the traveling public. For these reasons, this alternative was dismissed from further consideration (Appendix I: I-17).

Roadway Expansion with a 16 ft. wide TWLTL and 10 ft. Shoulder (No sidewalk or Trail)
This alternative would have widened Clinton Street to allow for the addition of a continuous 16 ft. wide TWLTL in the center median, and 10 ft. wide paved shoulders from Park Avenue to Budd Road. A widening exception would have been made from Park Avenue to County Bridge No. 242 and work would have been limited to roadway resurfacing. Work proposed to County Bridge No. 242 would have included a full superstructure replacement to address the deterioration and cracking near the concrete beams of the bridge. A traffic signal would have been installed at the intersection of Clinton Street and Hasselburger Avenue.

This alternative would have provided a TWLTL, allowing traffic enough room to decelerate and wait to turn left through traffic. This alternative would have also increased the shoulder limits from 3 to 10 ft. wide, that would have allowed

room for cars to pull off of the road and avoid rear end collisions or other roadway hazards. The extended shoulders would have also provided pedestrians with room to walk or bike away from the travel lanes. Although this is a feasible option, it would not address the purpose and need of the project to construct ADA compliant infrastructure, provide pedestrian crossing over the bridge, or address scour at the base of the bridge. It would not be prudent to allow the bridge scour to further deteriorate, neglect to provide adequate pedestrian crossing over the bridge, or fail to provide a dedicated pedestrian trail with ADA compliance. For these reasons, this alternative was dismissed from further consideration (Appendix I: I-17 to I-20).

Roadway Expansion with a 14 ft. wide TWLTL, 6 ft. wide sidewalk, and Storm Sewer
This alternative would have widened Clinton Street to allow for the addition of a continuous 14 ft. wide TWLTL in the center median with 2 ft. wide curb and gutter section. Additionally, a new storm sewer system would have been built from Park Avenue to Budd Road to convey runoff into ditches. A traffic signal would have been installed at the intersection of Clinton Street and Hasselburger Avenue. This alternative would have also provided a 6 ft. wide sidewalk along both sides of the project corridor. Work proposed to County Bridge No. 242 would have included a full replacement of the structure to address the deterioration and cracking near the concrete beams of the bridge. The full replacement would have also allowed for the incorporation of sidewalks on both sides of the bridge.

This alternative would have provided a TWLTL, allowing traffic enough room to decelerate and wait to turn left through traffic. This would have reduced the probability of rear end crashes occurring. The storm sewer drainage along the project corridor would have been upgraded with new inlets, curbs, and gutters. This alternative would have also provided pedestrian connectivity and ADA access to both sides of Clinton Street. The bridge would have also been restored to a condition rating of 8 (very good condition) or higher. Although this is a feasible option, it would have increased environmental impacts to the surrounding area and caused a prolonged closure of the bridge. For these reasons, this alternative was dismissed from further consideration (Appendix I: I-20).

No other alternatives were considered.

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

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

ROADWAY CHARACTER: Clinton Street

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

Name of Roadway	Clinton Street				
Functional Classification:	Urban-Principal Arterial				
Current ADT:	11,115	VPD (2020)	Design Year ADT:	12,644	VPD (2044)
Design Hour Volume (DHV):	N/A	Truck Percentage (%)	4.3		
Designed Speed (mph):	40	Legal Speed (mph):	40		

County Vigo Route Clinton Street Des. No. 1901781

	Existing		Proposed	
Number of Lanes:	2		3	
Type of Lanes:	through lanes		2 through lanes, 1 TWLTL	
Pavement Width:	19 to 41	ft.	19 to 41	ft.
Shoulder Width:	0 to 10	ft.	0 to 10	ft.
Median Width:	N/A	ft.	12	ft.
Sidewalk Width:	N/A	ft.	8	ft.

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

BRIDGES AND/OR SMALL STRUCTURE(S):

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

Structure/NBI Number(s): 84-00242/ 8400169 Sufficiency Rating: 84.8, Bridge Inspection Report (6/12/2024)
(Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	concrete box beam		concrete box beam	
Number of Spans:	3		3	
Weight Restrictions:	20	ton	20	ton
Height Restrictions:	100	ft.	100	ft.
Curb to Curb Width:	45.5	ft.	30.4	ft.
Outside to Outside Width:	48.3	ft.	42.6	ft.
Shoulder Width:	9 to 12	ft.	9 to 12	ft.

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

Vigo County Bridge No. 242 (Structure No. 84-00242 or NBI No. 8400169) is a non-historic, three-span continuous concrete box beam bridge. The structure length is 156 ft. long, with a curb-to-curb width of 45.5 ft., out-to-out deck width of 48.3 ft. and set at a skew of 18 degrees. The bridge, originally constructed in 1993, has not been rehabilitated since its construction.

The Vigo County Bridge No. 242 will be rehabilitated by having the deck replaced as well as the exterior 7'-8" of deck copings along with the exterior beam lines. Bent reconstruction will be required at bents 1 and 4 for replacement of the exterior beams. The reinforced concrete approaches, bridge rail transitions, and bridge railing will also be replaced. A new concrete sidewalk will be installed along the east bridge rail on top of the bridge. The bridge work is anticipated to require a maximum excavation of approximately 3 feet within the limits of the bridge end bents. Work under the OHWM will be required for the installation of Class 2 riprap around Pier 3 (Appendix B: B-46 to B-50).

No other bridges or small structures will be impacted by this project.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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

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

The proposed maintenance of traffic plan includes three phases in which traffic will be maintained on Clinton Street using 10 ft. lanes. The maintenance of traffic can be found in Appendix B (Appendix B: B-23 to B-24). The MOT will last for approximately 10-12 months.

Phase 1a includes shifting traffic to the west side of Clinton Street and closing off the east side of the roadway to allow for the construction of the trail and pavement widening. This phase also includes full-depth construction at Shabur Avenue, Grant Avenue, and Crystle Avenue. Flaggers, temporary pavement paint, channelizing devices, signs, and barricades will be utilized to assist traffic through the construction corridor.

Phase 2 will consist of shifting traffic to the east side of the roadway, while pavement widening occurs along the west side of Clinton Street. Flaggers, temporary pavement paint, channelizing devices, signs, and barricades will be utilized to assist traffic through the construction corridor.

Phase 3 of the project will divert traffic to the newly constructed shoulders to allow for the milling, overlay, and repainting of the existing Clinton Street pavement. Flaggers, temporary pavement paint, channelizing devices, signs, and barricades will be utilized to assist traffic through the construction corridor.

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

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: $ 962,000.00 (Local) (2026) Right-of-Way: $ N/A (Local) (2025) Construction: $ 4,632,000.00 (2026)

Anticipated Start Date of Construction: Fall 2026

RIGHT OF WAY:

Land Use Impacts	Amount (acres) Permanent	Temporary
Residential	2.013	0.253
Commercial	0.286	0.057
Agricultural	0.589	0.204
Forest	0.012	0.000
Wetlands	0.000	0.000
Other: Reacquired	1.299	0.000
Other: Municipal	0.151	0.023
TOTAL	2.872 (-1.299)	0.439

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

The existing right-of-way limits along Clinton Street vary between 30 ft. and 45 ft. from the centerline of the roadway. This project requires the acquisition of approximately 2.872 acres of permanent, 0.439 acres of temporary right-of-way, and 1.299 acres of reacquisition to allow for the construction of sidewalks, ADA curb ramps, and widening of the roadway throughout the project corridor. Both permanent and temporary right-of-way consists of residential, commercial, and agricultural property along the project corridor.

The proposed maximum permanent right-of-way limits will vary between 30 to 45 ft. to the east and west sides of the centerline of Clinton Street. Temporary right-of-way will be used for construction access to allow for the removal of trees, the removal and construction of drainage, the construction of sidewalks with ADA curbs, and access to the bridge. Additional plan details can be found in Appendix B (Appendix B: B-25 to B-46).

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

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

SECTION A - EARLY COORDINATION:

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

Early coordination letters were sent out on May 1, 2023 (Appendix C: C-1 to C-4).

Agency	Date Sent	Response Received	Appendix C
Federal Highway Administration (FHWA)	May 1, 2023	No Response	N/A
Indiana Geological and Water Survey (IGWS)	May 1, 2023 (electronic)	May 1, 2023 (Automated)	C-5 to C-6
Indiana Department of Environmental Management (IDEM) Wellhead Proximity Determinator	May 1, 2023 (electronic)	May 1, 2023 (Automated)	N/A
Indiana Department of Natural Resources – Division of Fish and Wildlife (IDNR-DFW)	May 1, 2023	May 31, 2023	C-10 to C12
US Department of Housing & Urban Development	May 1, 2023	No Response	N/A
INDOT Crawfordsville District	May 1, 2023	No Response	N/A

INDOT PM	May 1, 2023	No Response	N/A
INDOT- Aviation	May 1, 2023	May 3, 2023	C-7
United States Army Corp of Engineers (USACE) – Louisville District	May 1, 2023	No Response	N/A
Natural Resources Conservation Service (NRCS)	December 18, 2023	January 1, 2024	C-48 to C-49
Eighth Coast Guard District	May 1, 2023	No Response	N/A
Terre Haute Area Metropolitan Planning Organization (THAMPO)	May 1, 2023	No Response	N/A
Terre Haute Fire Department	May 1, 2023	No Response	N/A
Terre Haute Police Department	May 1, 2023	No Response	N/A
Terre Haute City Mayor	May 1, 2023	No Response	N/A
Terre Haute Street Department	May 1, 2023	No Response	N/A
Vido County Surveyor	May 1, 2023	May 11, 2023	C-9
Vigo County Highway Department	May 1, 2023	No Response	N/A
Vigo County Commissioner	May 1, 2023	No Response	N/A
Vigo County Environmental Health Department	May 1, 2023	May 3, 2023	C-8
Vigo County Area Planning Department	May 1, 2023	No Response	N/A
Vigo County Emergency Management Agency	May 1, 2023	No Response	N/A
Vigo County School Corporation	May 1, 2023	No Response	N/A
North Terre Haute Christian Church	May 1, 2023	No Response	N/A
IDEM – Office of Water Quality	March 6, 2024	March 6, 2024	C-50
Leisure Acres Mobile Home Park	March 7, 2024	No Response	N/A
Morris Mobile Home Estates	March 7, 2024	No Response	N/A
J & T Water Company	March 7, 2024	No Response	N/A
Vigo County Soil and Water Conservation District	March 12, 2024	No Response	N/A
City of Terre Haute Wastewater Utility	March 12, 2024	No Response	N/A
Vigo County Floodplain Administration	March 12, 2024	No Response	N/A

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

SECTION B – ECOLOGICAL RESOURCES:

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

Total stream(s) in project area: 227 Linear feet Total impacted stream(s): 65 Linear feet

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)
Otter Creek	R2UB	227	65	Southern terminus of project area, flows southwest, Likely a water of the US, Appendix F

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

Based on the desktop review, the aerial map of the project area (Appendix B: B-3), and the Red Flag Investigation (RFI) report (Appendix E: E-1 to E-12) there is one stream, river, watercourse, or other jurisdictional feature within the 0.5-mile search radius. There is one stream, Otter Creek, located adjacent to the southern terminus of the project area. That number was confirmed by the site visit on May 8, 2022, by Metric Environmental, LLC (Metric).

A *Waters of the U.S. Determination / Wetland Delineation Report* was prepared by Metric on January 25, 2023. Please refer to Appendix F for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that one likely jurisdictional stream, Otter Creek, is present within the project area. The USACE makes all final determinations regarding jurisdiction.

Otter Creek is listed as impaired for *E. Coli* and potential for hydrogen (pH). Workers who are working in or near water with *E. Coli* should take care to wear appropriate personal protective equipment (PPE), observe proper hygiene procedures, including regular hand washing, and limit personal exposure. Concerning pH, Best Management Practices (BMPs) will be used to avoid further degradation to the stream.

Otter Creek
Approximately 227 lft. of Otter Creek is within the project area. The ordinary high-water mark (OHWM) of the stream was 53 ft. wide and 1.7 ft. deep at the time of the site visit. Otter Creek is associated with a solid blue line on the USGS topographic map, indicating it is likely perennial. Otter Creek was associated with a mapped Riverine, Lower Perennial, Unconsolidated Bottom (R2UB) NWI polygon. According to USGS *Indiana StreamStats*, the drainage area upstream of Otter Creek at the project area is 116.49 square miles. Otter Creek flows southwest into the Wabash River, a Section 10 traditional navigable water (TNW). Therefore, Otter Creek should be considered a jurisdictional Water of the U.S.

During the May 8, 2022, site visit by Metric, it was observed that the dominant stream substrate was silt. Functional riffles and pools were observed within the stream. Sparse amounts of instream cover were also observed within the stream. The instream cover included overhanging vegetation and woody debris. The stream exhibited no sinuosity and had a slow current velocity. Vegetation observed along the streambanks included Japanese-knotweed (*Reynoutria japonica*), Japanese honeysuckle (*Lonicera japonica*), and black locust (*Robinia pseudoacacia*). The qualities of the stream listed above contribute to Otter Creek being classified as a moderate-quality stream.

Approximately 64 linear lft. of permanent impacts will occur to Otter Creek due to the placement of Class 2 riprap and approximately 107 lft. of temporary impacts will occur due to construction access below the bridge. This project will require an IDNR construction in a floodplain permit due to the impacts to Otter Creek.

The IDNR-DFW responded on May 31, 2023, with recommendations to use 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 (Appendix C: C-10 to C-12).

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

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

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

Based on the desktop review, the aerial map of the project area (Appendix B: B-3), and the RFI report (Appendix E: E-1 to E-12) there are no open water features within the 0.5-mile search radius. There are no open water feature(s) within or adjacent to the project area, which was confirmed by the site visit on May 8, 2022, by Metric. Therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was prepared by Metric on January 25, 2023. Please refer to Appendix F for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that one likely jurisdictional stream, Otter Creek, is present within the project area. The USACE makes all final determinations regarding jurisdiction.

	Presence	Impacts	
		Yes	No
Wetlands			

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

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

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

Wetlands (*Mark all that apply*)	Documentation	ESD Approval Dates
Wetland Determination		
Wetland Delineation	X	LPA N/A
USACE Isolated Waters Determination		

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

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

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

Based on the desktop review, the aerial map of the project area (Appendix B: B-3), and the RFI report (Appendix E: E-1 to E-14) there are nine wetlands within the 0.5-mile search radius. There are no wetlands within or adjacent to the project area, which was confirmed by the site visit on May 8, 2022, by Metric.

A *Waters of the U.S. Determination / Wetland Delineation Report* was prepared by Metric on January 25, 2023. Please refer to Appendix F for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that no wetlands are within or adjacent to the project area. The USACE makes all final determinations regarding jurisdiction.

	Presence	Impacts	
		Yes	NO
Terrestrial Habitat	X	X	

Total terrestrial habitat in project area: 5.82 Acre(s) Total tree clearing: 0.12 Acre(s)

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

Based on a desktop review, a site visit on May 8, 2022, by Metric, and the aerial photograph of the project area (Appendix B: B-3), the project area primarily consists of maintained grassy lawns, concrete sidewalks, drives, and streetside trees.

Approximately 0.12 acres of tree removal is anticipated at this time. The project will require an estimated 5.82 acres of soil disturbance. Dominant tree species within the project area are boxelder (*Acer negundo*), sugar maple (*Acer saccharum*), and tulip poplar (*Liriodendron tulipifera*). Disturbed areas will be stabilized, graded, and re-vegetated per INDOT standard specifications. All efforts to minimize terrestrial impacts were considered during the design phase of the project. The construction limits have been reduced to the extent that is practical for the project to be constructed, while implementing the required design standards and limiting terrestrial disturbance.

The IDNR-DFW responded on May 31, 2023, with recommendations to 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 (Appendix C: C-10 to C-12).

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

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

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

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

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

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

Based on a desktop review and the RFI report (Appendix E: E-1 to E-12), completed by Metric on July 18, 2023, the IDNR Vigo County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated May 31, 2023 (Appendix C: C-10 to C-12) the Natural Heritage Program's Database has been checked and, to date, no plant or animal species listed as state or federally threatened, endangered or rare have been reported to occur in the project vicinity.

An INDOT 0.5-mile bat review occurred on October 6, 2022. 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. A bridge inspection by Metric occurred on October 11, 2022, and found bat guano beneath the bridge. A sample of the guano was taken and submitted for testing. In the December 2022 Species Identification Report, the guano was successfully identified as Big Brown Bat (*Eptesicus Fuscus*), which is not an endangered or threatened species of bat (Appendix C: C-15 to C-18). A follow-up bridge inspection report by Metric occurred on January 22, 2025, and bat guano was again recovered from under the bridge (Appendix C: C-14). In the April 2025 Species Identification Report the guano was successfully identified again as Big Brown Bat (*Eptesicus Fuscus*), which is not an endangered or threatened species of bat (Appendix C: C-19 to C-23).

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C: C-24 to C-35). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*) and the endangered northern long-eared bat (NLEB) (*Myotis septentrionalis*). Two additional species were also generated in the IPaC species list along with the Indiana bat and northern long-eared bat. Refer to the paragraph below.

The official species list generated from IPaC indicated two other species present within the project area. The Whooping Crane (*Grus americana*) and the Monarch Butterfly (*Danaus plexippus*) were found to potentially be within the project area. These species have not officially been incorporated onto the federal or state ETR species list. No critical habitat has been identified for the above species. Therefore, no further coordination with USFWS is required.

The official species list generated from IPaC indicated one other species present within the project area. The endangered Gray bat (*Myotis grisescens*) may be present within the project area. Additional coordination for the Gray bat occurred with USFWS on May 14, 2025. USFWS reviewed the project information and determined that this project is not likely to adversely affect the Gray bat. Therefore, no further coordination with USFWS is required (Appendix C: C-51 to C-52).

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long-eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. An effect determination key was completed on February 10, 2023, and based on the responses provided, the project was found to "may affect but is not likely to adversely affect" the Indiana bat and the NLEB (Appendix C: C-36 to C-47). INDOT reviewed and verified the effect finding on February 10, 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 the USFWS concurs with the finding. Avoidance and Minimization Measures (AMMs) include the following: general crew knowledge requirements, lighting avoidance measure, light installation measures, and karst hibernaculum practices. The AMMs are included as firm commitments in the *Environmental Commitments* section of this CE document.

It was determined that the project's surrounding habitat near Vigo County Bridge No. 242 (Structure No. 84-00242, NBI No. 8400169), may be conducive for use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA) (Appendix C: C-29 to C-36). Prior to the start of nesting season (May 1) the structure and impacted surroundings must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests

without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the "Potential Migratory Bird on Structure" USP.

A bridge inspection occurred on January 22, 2025, and found evidence of bats using the bridge (Appendix C: C-14). USFWS Bridge/Structure Assessment are only valid for two years. If construction will begin after January 22, 2027, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. This firm commitment is included in the Environmental Commitments of this document.

Vigo County Bridge No. 242 (Structure No. 84-00242, NBI No. 8400169) has shown evidence of use (i.e. guano and/or live bats) by a non-listed bat species during the January 22, 2025, inspection. To minimize bat disturbance, if construction will occur during active bat season on any area of the bridge/structure the bats are using, the area shall temporarily be filled with an expandable material prior to active bat season. The structure shall also be inspected for bats prior to demolition, exclusion, or any construction activities. If signs of bats are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. Details of the required procedures are outlined in the "Bat Inspection and Coordination USP".

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

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

Date Karst Evaluation reviewed by INDOT EWPO (if applicable): N/A

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

Based on a desktop review and the Indiana Karst Region map, the project is located within the designated Indiana Karst Region as outlined in the most current Protection of Karst Features during Project Development and Construction. According to the topo map of the project area (Appendix B: B-2), the RFI report (Appendix E: E-1 to E-12), there are no karst features identified within or adjacent to the project area.

In the early coordination response dated May 1, 2023, the IGWS did not indicate that any karst features were within the project area. IGWS did indicate that there is a potential for liquefaction and floodways to exist within or adjacent to the project area as geological hazards (Appendix C: C-5 to C-6). The IGWS also identified a high potential for bedrock resources and sand and gravel resources. There are no documented active or abandoned mineral resources extraction sites within the area. The features will not be affected because scope of work will not involve deep excavation (i.e., greater than 5 feet below ground surface). Response from IGWS has been communicated to the designer on March 3, 2022. No impacts are expected.

SECTION C – OTHER RESOURCES

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

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

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

The project is located in Vigo 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/EPA Sole Source Aquifer Memorandum of Understanding (MOU) is not applicable to this project. A detailed groundwater assessment is not needed, and no impacts are expected.

The Indiana Department of Environmental Management's Wellhead Proximity Determinator website (http://www.in.gov/idem/cleanwater/pages/wellhead/) was accessed on March 6, 2024, by Metric. This project is located adjacent to a Wellhead Protection Area. In an early coordination letter dated March 6, 2024, IDEM-Office of Water Quality stated the project is located within 900 ft. of three Wellhead Protection Areas (Appendix C: C-50). Additional coordination was recommended for the following agencies:

- Leisure Acres Mobile Home Park
- Morris Mobile Home Estates
- J&T Water Company

Additional coordination was sent out to the above agencies on March 7, 2024. No responses were received. The features will not be affected because none of the Wellhead Protection Areas are located within the project area. Therefore, no impacts are expected.

The Indiana Department of Natural Resources Water Well Record Database website (https://www.in.gov/dnr/water/3595.htm) was accessed on March 6, 2024, by Metric. There are no wells located within or adjacent to the project area. No impacts are expected.

Based on a desktop review of the INDOT MS4 website (https://entapps.indot.in.gov/MS4/) by Metric on March 6, 2024, this project is partially located in the Urban Area Boundary (UAB) for the city of Terre Haute. An early coordination letter was sent on March 12, 2024, to the Vigo Couty and City of Terre Haute MS4 coordinators. The MS4 coordinators did not respond within the 30-day time frame. This project aims to improve existing stormwater drainage grates along Clinton Street. No other impacts are anticipated as a result of this project. Therefore, no impacts are expected.

Based on a desktop review, a site visit on May 8, 2022, by Metric, and the aerial map of the project area (Appendix B: B-3), this project is located where there is a public water system. The public water system and amenities such as valves, hydrants, and service lines may be relocated where improvements at intersections or trail segments overlap. HWC Engineering (HWC), has been in contact with Indiana American Water and City of Terre Haute Utilities and will

maintain open coordination throughout the project development process.

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

If applicable, indicate the Floodplain Level?

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

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

The Indiana Department of Natural Resources Indiana Floodway Information Portal website (http :// dnr maps. dnr .in.gov /apps php /fdms/) was accessed by Metric on May 1, 2023, and the RFI report, this project is located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F: F-15). An early coordination letter was sent on March 12, 2024, to the local Floodplain Administrator. The floodplain administrator did not respond within the 30-day time frame. This project will cause approximately 65 lft. of transverse impacts to the floodplain. This project qualifies as Category 3 per the current INDOT CE Manual, which states:

This project qualifies as a Category 3 project: The modifications to drainage structures included in this project will result in an insubstantial change in their capacity to carry flood water. This change could cause a minimal increase in flood heights and flood limits. These minimal increases will not result in any substantial adverse impacts on the natural and beneficial floodplain values; they will not result in substantial change in flood risks or damage; and they do not have substantial potential for interruption or termination of emergency services or emergency routes; therefore, it has been determined that this encroachment is not substantial.

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

Total Points (from Section VII of CPA-106/AD-1006*) 101

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

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

Based on a desktop review, a site visit on May 8, 2022, by Metric, and the aerial map of the project area (Appendix B: B-3 to B-6), the project will directly convert approximately 0.589 acres and indirectly convert 0.08 acres of farmland as defined by the Farmland Protection Policy Act. An early coordination letter was sent on May 1, 2023, and again on December 18, 2023, to NRCS. Coordination with NRCS resulted in a score of 101 on the NRCS AD 1006 Form (Appendix C: C-48 to C-49). NRCS's threshold score for significant impacts to farmland that result in the consideration of alternatives is 160. Since this project score is less than the threshold, no significant loss of prime, unique, statewide,

or local important farmland will result from this project. No alternatives other than those previously discussed in this document will be investigated without reevaluating impacts to prime farmland.

SECTION D – CULTURAL RESOURCES

	Category(ies) and Type(s)	INDOT Approval Date(s)	N/A
Minor Projects PA	Category B, Types B-1, B-2, B-3, B-8, and B-12	July 11, 2022	

Full 106 Effect Finding

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

Eligible and/or Listed Resources Present

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

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

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

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

On July 11, 2022, and amended on February 21, 2024, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 1, Type 2, Type 3, Type 8, and Type 12 under the Minor Projects Programmatic Agreement, (Appendix D: D-1 to D-10).

Category B, Type 1 under the MPPA includes the replacement, repair, or installation of curbs, curb ramps, or sidewalks, including when such projects are associated with roadway work such as surface replacement, reconstruction, rehabilitation, or resurfacing projects, including overlays, shoulder treatments, pavement repair, seal coating, pavement grinding, and pavement marking.

Category B, Type 2 includes the installation of new lighting, signals, signage and other traffic control devices.

Category B, Type 3 includes the construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration and deceleration lanes) and shoulder widening.

Category B, Type 8 includes the construction of pedestrian facilities including trails, multi-use paths, greenways, and associated minor activities.

Category B, Type 12 includes the replacement, widening, or raising the elevation of the superstructure on existing bridges, and bridge replacement projects.

These determinations were reached due to the work occurring within previously disturbed soils, the work does not occur adjacent to or within a national register-listed or National Register-eligible district or individual above-ground resource, and the work does not impact a bridge that was built after 1945 and is a common type of bridge.

Regarding archaeological resources, an INDOT-CRO archaeologist who meets the Secretary of the Interior's Professional Qualification Standards as per 36 CFR Part 61 reviewed the archaeological report prepared by Metric (Copenhaver et al. 2024) and approved of its results and recommendations. No archaeological sites were previously recorded within or adjacent to the project area (Appendix D: D-11 to D-20).

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

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

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

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

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

Section 4(f) of the U.S. Department of Transportation Act of 1966 prohibits the use of certain public and historic lands

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

Based on a desktop review, the aerial map of the project area (Appendix B: B-3), and the RFI report (Appendix E: E-1 to E-12), there is one school, two recreational facilities, and one trail within the 0.5-mile search radius. According to a desktop review, additional research on the City of Terre Haute Neighborhood Parks & Trails webpage and recreational trail map (https://www.terrehaute.in.gov/departments/parks/parks-information/neighborhood-parks-trails.html), and a site visit on May 8,2022, by Metric, it was determined that Otter Creek Middle School is 0.19 mile south of the southern terminus of the project area. The school has recreational facilities; however, the facilities are fenced in and locked when not in use by the school. Therefore, the school is not a Section 4(f) property. Big G's Drive-In Golf Center was located 0.08 mile south of the southern terminus of the project area; however, the facility appears to no longer be in operation. Therefore, Big G's is not a Section 4(f) facility. Since neither of these properties are within the project area, nor are they Section 4(f) properties, there are no potential 4(f) resources located within or adjacent to the project area.

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

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

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

A review of 6(f) properties on the INDOT ESD website revealed a total of seven properties in Vigo County (Appendix I: I-28). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

SECTION F – Air Quality

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

Location in STIP: By reference to TIP

Name of MPO (if applicable): Terre Haute Area MPO

Location in TIP (if applicable): Page 51 in the SFY 2024-2028 THAMPO report

Level of MSAT Analysis required?

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

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

This project is included in the Shorten Fiscal Year (SFY) 2024-2028 Tere Haute Area Metropolitan Organization (MPO) Transportation Improvement Plan (TIP) which has been directly incorporated into the 2024-2028 Statewide Transportation Improvement Program (STIP) (Appendix H: H-1 to H-4).

This project is located in Vigo County, which is currently in attainment for all criteria pollutants according to the Environmental Protection Agency's (EPA) Greenbook data-set for Indiana Counties (https://www3.epa.gov/airquality/greenbook/anayo_in.html).

Vigo County was historically in nonattainment for the following pollutants and has recently become attainment areas (with maintenance plans):

- 8-Hour Ozone (Attainment with Maintenance 2006) - Reversing U.S. EPA policy, on February 16, 2018, the D.C. Circuit Court found that U.S. EPA cannot waive the requirement for an update to the maintenance plan even though the 1997 8-hour ozone standard has been revoked. Limited maintenance plan update approved on December 27, 2019.
- 24-Hour SO_2 (Attainment with Maintenance 1997) – Maintenance plan established in 2005. Vigo County listed as in attainment for 24-hour SO_2 on IDEM's Nonattainment list notes section.

This project has been identified as being exempt from air quality analysis in accordance with 40 CFR Part 93.126 and this project is not a project of air quality concern (40 CFR Part 93.123). Therefore, the project will have no significant impact on air quality.

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

SECTION G - NOISE

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

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

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

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

SECTION H – COMMUNITY IMPACTS

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

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

On May 1, 2023, Metric conducted an on-line review of the Indiana Festivals website (Indiana festivals). There are no events identified within or near the project area that would be potentially impacted during construction of the project. No impact is expected.

The Americans with Disabilities Act (ADA) requires a transition plan by local and state governments. Such a plan includes how the government will remove barriers to accessibility over time for persons with disabilities, such as installing curb ramps at intersections, making a web site accessible for persons with low vision, ensuring public meetings are fully accessible to persons with disabilities and other related issues. Vigo County has an approved ADA transition plan which will comply with the goals of the proposed project. This project will not change the general development patterns, population density, or residential or commercial growth rate of the project area. Furthermore, there will be no permanent impacts to community cohesion, local mobility, access, pedestrian or motorist safety or emergency services as a result of the project. The project will not have any adverse impacts on the local tax base or property values.

Public Facilities and Services

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

Based on a desktop review, the aerial map of the project area (Appendix B: B-3), and the RFI report (Appendix E: E-1 to E-12) there are four religious facilities, one airport, two cemeteries, one school, two recreational facilities, four pipelines, one railroad, and one trail located within the 0.5 mile of the project area. There is one church, North Terre Haute Christian Church, and one gas line, a segment of Terre Haute Gas Corp, within or adjacent to the project area. That number was confirmed by the site visit on May 8, 2022, by Metric.

An early coordination letter was sent to the Vigo County Surveyor's office on May 1, 2023 (Appendix C: C-9). The Vigo County Surveyor responded stating that there are three existing survey markers located within the proposed construction area. They went on to say that if any survey markers are disturbed or destroyed that it be reset with a Harrison Survey Marker, supplied by the Vigo County Surveyor's office. Additionally, paperwork should be filed with the Vigo County Surveyor's office showing tie-in information before the markers are disturbed and showing the coordinates of the reset markers. This coordination was sent along to the designer on May 11, 2023. If impacts are anticipated, HWC Engineering will prepare the appropriate paperwork and coordinate with the Vigo County Surveyor's office.

An early coordination letter was sent to North Terre Haute Christian Church on May 1, 2023 (Appendix C: C-1 to C-4).

No response was received. The church is located approximately 0.3 miles east of the southern terminus of the project area. No impacts are anticipated to North Terre Haute Christian Church.

HWC has been coordinating with Terre Haute Gas Corp (managed by CenterPoint Energy) and ongoing coordination will be maintained until the completion of the project. If any valves or regulatory stations are within the project area, relocation may be required and additional coordination between HWC and CenterPoint Energy will occur (Appendix I: I-13 to I-16).

INDOT Aviation responded to early coordination on May 3, 2023, stating that no tall structure permit is required for the project if all equipment being used is under 25 ft. in height (Appendix C: C-7). Therefore, no impact to public facilities or services are expected. Access to all properties will be maintained during construction.

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

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

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

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

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

Under FHWA Order 6640.23A, FHWA and the project sponsor, as a recipient of funding from FHWA, are responsible to ensure that their programs, policies, and activities do not have a disproportionately high and adverse effect on minority or low-income populations. Per the current INDOT Categorical Exclusion Manual, an Environmental Justice (EJ) Analysis is required for any project that has two or more relocations or 0.5 acre of additional permanent right-of-way. The project will require approximately 2.872 acres of permanent, 0.439 acres of temporary right-of-way, and 1.299 acres of reacquired ROW. Therefore, an EJ Analysis is required.

Potential EJ impacts are detected by locating minority and low-income populations relative to a reference population to determine if populations of EJ concern exist and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Vigo County, Indiana. The community that overlaps the project area is called the affected community (AC). In this project, there are two ACs: AC 1 is Census Tract 102.01 and AC 2 is Census Tract 102.02. An

AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% or more of the COC. Data from the U.S. Census Bureau, 2022 American Community Summary 5-year Estimates was obtained from the US Census Bureau Website (https://data.census.gov/cedsci/) on July 15, 2024, by Metric. The data collected for minority and low-income populations within the AC are summarized in the table below:

Table: Minority and Low-Income Data (U.S. Census Bureau, 2022 American Community Summary 5-year Estimates)

	COC - (Vigo County, IN)	AC 1– (Census Tract 102.01, Vigo County, IN)	AC 2– (Census Tract 102.02, Vigo County, IN)
Low-income	19.95%	10.99%	19.90%
125% of COC	24.94%	AC < 125% COC	AC < 125% COC
EJ Population of Concern		No	No
Percent Minority	15.18%	4.09%	8.97%
125% of COC	18.98%	AC < 125% COC	AC < 125% COC
EJ Population of Concern		No	No

AC 1 – Census Tract 102.01 has a percent low-income of 10.99 which is below 50% and is below the 125% COC threshold (24.94%). Therefore, AC 1 does not have a low-income population of EJ concern.

AC 1 – Census Tract 102.01 has a percent minority of 4.09 which is below 50% and is below the 125% COC threshold (18.98%). Therefore, AC 1 does not have a minority population of EJ concern.

AC 2 – Census Tract 102.02 has a percent low-income of 19.90 which is below 50% and is below the 125% COC threshold (24.94%). Therefore, AC 2 does not have a low-income population of EJ concern.

AC 2 – Census Tract 102.02 has a percent minority of 8.97 which is below 50% and is below the 125% COC threshold (18.98%). Therefore, AC 2 does not have a low-income population of EJ concern.

The census data sheets, EJ maps, and calculations can be found in Appendix I: I-29 to I-39. No further environmental justice analysis is warranted.

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

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

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

No relocations of people, businesses or farms will be necessary to complete the proposed project.

SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

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

Date RFI concurrence by INDOT SAM (if applicable): July 17, 2023

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

Based on a review of GIS and available public records, the RFI was completed on July 18, 2023, by Metric, and INDOT SAM provided their concurrence on August 4, 2023 (Appendix E: E-1 to E-12). There is one unmapped underground storage tank (UST) site, three leaking underground storage (LUST) sites, and three National Pollutant Discharge Elimination System (NPDES) facilities located within 0.5 mile of the project area.

There are two LUST sites and one unmapped UST site located within the project area:

UST site:
There are no UST sites mapped within the 0.5 mile search radius: however, a review of street-level photography indicated the presence of a building in the northwest quadrant of the intersection of Park Avenue and Clinton Street at the southern project terminus that is visually consistent with a former filling station. The property (currently occupied by Parting Hair Salong, 5120 N Clinton St.) does not appear in the UT or LUST databases, which could indicate it might have ceased operations as a filling station prior to 1986, when UST registration became a requirement. Due to the lack of available data regarding subsurface conditions at the property, it is possible that petroleum related contamination could be present: additionally, due to the age of suspect filling station operations and the historic use of leaded gasoline, lead contamination would likely be present concurrent with any petroleum release. If excavation occurs in this area, it is possible that petroleum contamination may be encountered. Proper handling, removal, and disposal of soil and /or groundwater may be necessary. Before proper removal and disposal of soil and /or groundwater, analysis for lead will be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination.

LUST sites

- Pit Stop Marathon, 6321 N. Clinton St, Agency Interest (AI) ID #54557, is near the northern project terminus on the northeast corner of Clinton Street and Crystle/E. Hasselburger Avenue. The facility is in the early stage of addressing a release that was discovered in November 2021. Free product has been observed in onsite wells, and a petroleum constituent plume in the groundwater has been identified extending westward (following the groundwater flow direction) across Clinton Street to impact a residential well opposite the gas station. Corrective actions are still under evaluation. Groundwater at the location is fairly deep, with depth-to-water measurements in the monitoring wells ranging from 27-60 feet below grade. Although it is unlikely that project activities would encounter the impacted groundwater, there may be soil impacts extending to shallower depths. If groundwater monitoring wells are encountered in the project area, they should be maintained in-place. If they cannot be maintained, then the contractor must contact the INDOT Project Manager who will notify the INDOT Permits Group. The INDOT Permits Group will notify the permit holder that the well must be removed prior to construction. The permit holder is responsible for coordination with IDEM and the INDOT Permits Group for replacement or relocation of the well. If a property owner cannot be found in connection with the monitoring well, then well abandonment will be included in the project contract. All well abandonment activities must be

completed by an Indiana Licensed Well Driller in accordance with 312 IAC 13-10. Regardless of whether the well is abandoned by the contractor or the property owner, a record of well abandonment, including the well driller's license number, must be provided to the INDOT Project Manager once the well has been abandoned. If excavation occurs in this area, it is possible petroleum contamination may be encountered. Proper handling, removal, and disposal of soil and/or groundwater may be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination. Because this is an active site, coordination with the IDEM Project Manager, Doug Bartz (dbartz@idem.IN.gov) will occur before RFC.

- Jiffy Mini-Mart #518 (aka Phillips 66), 5083 N. Lafayette St., AI ID #54884, is adjacent to the southern project terminus on the southeast corner of Park Avenue and Lafayette Street (which becomes Clinton Street north of Park Avenue). The facility notified IDEM in September 1992 that it intended to remove all five (5) existing USTs as a part of installing new tanks. Upon removal of the tanks, impacted soil was discovered in the excavation. The facility notified IDEM of a release and indicated that corrective action would be determined. No other documents related to the release were found in the VFC file, so it is unknown whether or not any corrective action or additional investigation was implemented during reconstruction of the site. Due to the lack of available information, petroleum-related contamination could still be present. If excavation occurs in this area, it is possible that petroleum contamination will be encountered. Proper handling, removal, and disposal of soil and/or groundwater may be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination.

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.

Part IV – Permits and Commitments

PERMITS CHECKLIST

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

Permits (mark all that apply)	**Likely Required**
Others (Please discuss in the discussion below)	☐

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

The project will require a Construction Stormwater General Permit (CSGP), formerly a Rule 5 permit, due to the estimated 4.857 acres of soil disturbance. This project will require an IDNR CIF permit, Section 401 WQC, and a Section 404 RGP due to the placement of Class 2 riprap and temporary construction access below the bridge.

If any object exceeds 25 ft. in height regardless of location, coordination with INDOT Aviation will occur.

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

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

ENVIRONMENTAL COMMITMENTS

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

Firm:

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

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

3) Any work in a wetland area within right-of-way or in borrow/waste areas is prohibited unless specifically allowed in the U.S. Army Corps of Engineers permit. (INDOT ESD)

4) If any object exceeds 25 ft. in height regardless of location, coordination with INDOT Aviation will occur. (INDOT Aviation)

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

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

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

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

9) TREE REMOVAL AMM 3: Ensure tree removal is limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits). (USFWS)

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

11) It was determined that the project's surrounding habitat near Structure No. 84-00242, may be conducive for use (i.e. nests) by a bird species protected under the Migratory Bird Treaty Act (MBTA). Prior to the start of nesting season (May 1) the structure and impacted surroundings must be inspected for birds or signs of birds. If birds or signs of birds are found during the inspection avoidance and minimization measures must be implemented prior to the start of and during the nesting season. Nests without eggs or young should be removed prior to construction during the non-nesting season (September 8 – April 30) and during the nesting season if no eggs or young are present. Nests with eggs or young cannot be removed or disturbed during the nesting season (May 1 – September 7). Nests with eggs or young should be screened or buffered from active construction. Details of the required procedures are outlined in the "Potential Migratory Bird on Structure" USP. (INDOT ESD)

12) A bridge inspection occurred on January 22, 2025, and found evidence of bats using the bridge. USFWS Bridge/Structure Assessment are only valid for two years. If construction will begin after January 22, 2027, an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. This firm commitment is included in the Environmental Commitments of this document. (USFWS)

13) Otter Creek is listed as impaired for *E. Coli* and pH. Workers who are working in or near water with *E. Coli* should take care to wear appropriate PPE, observe proper hygiene procedures, including regular hand washing, and limit personal exposure. Concerning pH, BMPs will be used to avoid further degradation to the stream. (INDOT SAM)

14) There are no UST sites mapped within the 0.5 mile search radius: however, a review of street-level photography indicated the presence of a building in the northwest quadrant of the intersection of Park Avenue and Clinton Street at the southern project terminus that is visually consistent with a former filling station. The property (currently occupied by Parting Hair Salong, 5120 N Clinton St.) does not appear in the UT or LUST databases, which could indicate it might have ceased operations as a filling station prior to 1986, when UST registration became a requirement. Due to the lack of available data regarding subsurface conditions at the property, it is possible that petroleum0related contamination could be present: additionally, due to the age of suspect filling station operations and the historic use of leaded gasoline, lead contamination would likely be present concurrent with any petroleum release. If excavation occurs in this area, it is possible that petroleum contamination may be encountered. Proper handling, removal, and disposal of soil and /or groundwater may be necessary. Before proper removal and disposal of soil and /or groundwater, analysis for lead will be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination. (INDOT SAM)

15) Pit Stop Marathon, 6321 N. Clinton St, Agency Interest (AI) ID #54557, is near the northern project terminus on the northeast corner of Clinton Street and Crystle/E. Hasselburger Avenue. The facility is in the early stage of addressing a release that was discovered in November 2021. Free product has been observed in onsite wells, and a petroleum constituent plume in the groundwater has been identified extending westward (following the groundwater flow direction) across Clinton Street to impact a residential well opposite the gas station. Corrective actions are still under evaluation. Groundwater at the location is fairly deep, with depth-to-water measurements in the monitoring wells ranging from 27-60 feet below grade. Although it is unlikely that project activities would encounter the impacted groundwater, there may be soil impacts extending to shallower depths. If groundwater

monitoring wells are encountered in the project area, they should be maintained in-place. If they cannot be maintained, then the contractor must contact the INDOT Project Manager who will notify the INDOT Permits Group. The INDOT Permits Group will notify the permit holder that the well must be removed prior to construction. The permit holder is responsible for coordination with IDEM and the INDOT Permits Group for replacement or relocation of the well. If a property owner cannot be found in connection with the monitoring well, then well abandonment will be included in the project contract. All well abandonment activities must be completed by an Indiana Licensed Well Driller in accordance with 312 IAC 13-10. Regardless of whether the well is abandoned by the contractor or the property owner, a record of well abandonment, including the well driller's license number, must be provided to the INDOT Project Manager once the well has been abandoned. If excavation occurs in this area, it is possible petroleum contamination may be encountered. Proper handling, removal, and disposal of soil and/or groundwater may be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination. Because this is an active site, coordination with the IDEM Project Manager, Doug Bartz (dbartz@idem.IN.gov) will occur before RFC. (INDOT SAM)

16) Jiffy Mini-Mart #518 (aka Phillips 66), 5083 N. Lafayette St., AI ID #54884, is adjacent to the southern project terminus on the southeast corner of Park Avenue and Lafayette Street (which becomes Clinton Street north of Park Avenue). The facility notified IDEM in September 1992 that it intended to remove all five existing underground storage tanks as a part of installing new tanks. Upon removal of the tanks, impacted soil was discovered in the excavation. The facility notified IDEM of a release and indicated that corrective action would be determined. No other documents related to the release were found in the VFC file, so it is unknown whether or not any corrective action or additional investigation was implemented during reconstruction of the site. Due to the lack of available information, petroleum-related contamination could still be present. If excavation occurs in this area, it is possible that petroleum contamination will be encountered. Proper handling, removal, and disposal of soil and/or groundwater may be necessary. Refer to Appendix G of the SAM Manual for the recommended procedure to manage and report contamination. (INDOT SAM)

17) If a survey marker is disturbed or destroyed, it should be reset with a Harrison Survey Marker supplied by the Vigo County Surveyor's office. An incident report should also be filed with the Vigo County Surveyor's office showing tie-in information before the survey marker is disturbed and coordinates at the time of resetting of the marker. (Vigo County Surveyor)

For Further Consideration:

1) Vigo County Bridge No. 242 (Structure No. 84-00242, NBI No. 8400169) has shown evidence of use (i.e. guano and/or live bats) by a non-listed bat species during the January 22, 2025, inspection. To minimize bat disturbance, if construction will occur during active bat season on any area of the bridge/structure the bats are using, the area shall temporarily be filled with an expandable material prior to active bat season. The structure shall also be inspected for bats prior to demolition, exclusion, or any construction activities. If signs of bats are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. Details of the required procedures are outlined in the "Bat Inspection and Coordination USP". (INDOT ESD, USFWS)

2) Impacts to non-wetland forest of one (1) acre or more should be mitigated at a minimum 2:1 ratio. If less than one acre of non-wetland forest is removed in a rural setting, replacement should be at a 1:1 ratio based on area. Impacts to non-wetland forest under one (1) acre in an urban setting should be mitigated by planting five trees, at least 2 inches in diameter-at-breast height (dbh), for each tree which is removed that is 10 inches dbh or greater (5:1 mitigation based on the number of large trees). (IDNR-DFW)

3) The new, replacement, or rehabbed structure should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. (IDNR-DFW)

4) Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure. (IDNR-DFW)

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

6) Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids. (IDNR-DFW)

TABLE OF CONTENTS

APPENDIX I: Additional Studies

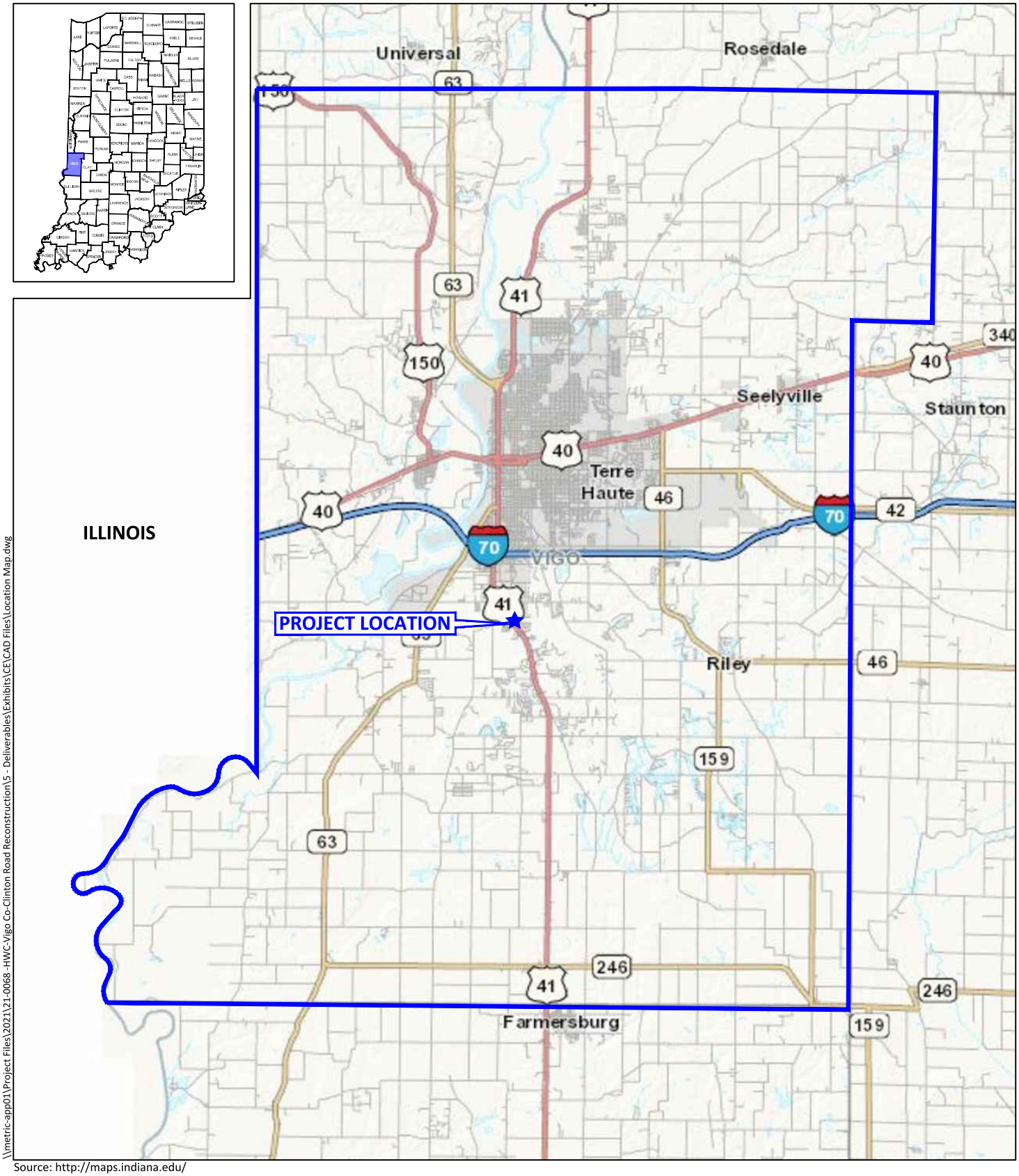
APPENDIX A:
INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

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

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

APPENDIX B:
Graphics



\\metric-app01\Project Files\2021\21-0068 -HWC-Vigo Co-Clinton Road Reconstruction\5 - Deliverables\Exhibits\CE\CAD Files\Location Map.dwg

Source: http://maps.indiana.edu/

Location Map
Road Improvements and Bridge Rehabilitation (#242)
N. Clinton Street from Park Avenue to
Imperial Avenue, Otter Creek Township, North Terre Haute, Vigo County, Indiana
Des. No 1901781
Metric Project #21-0068

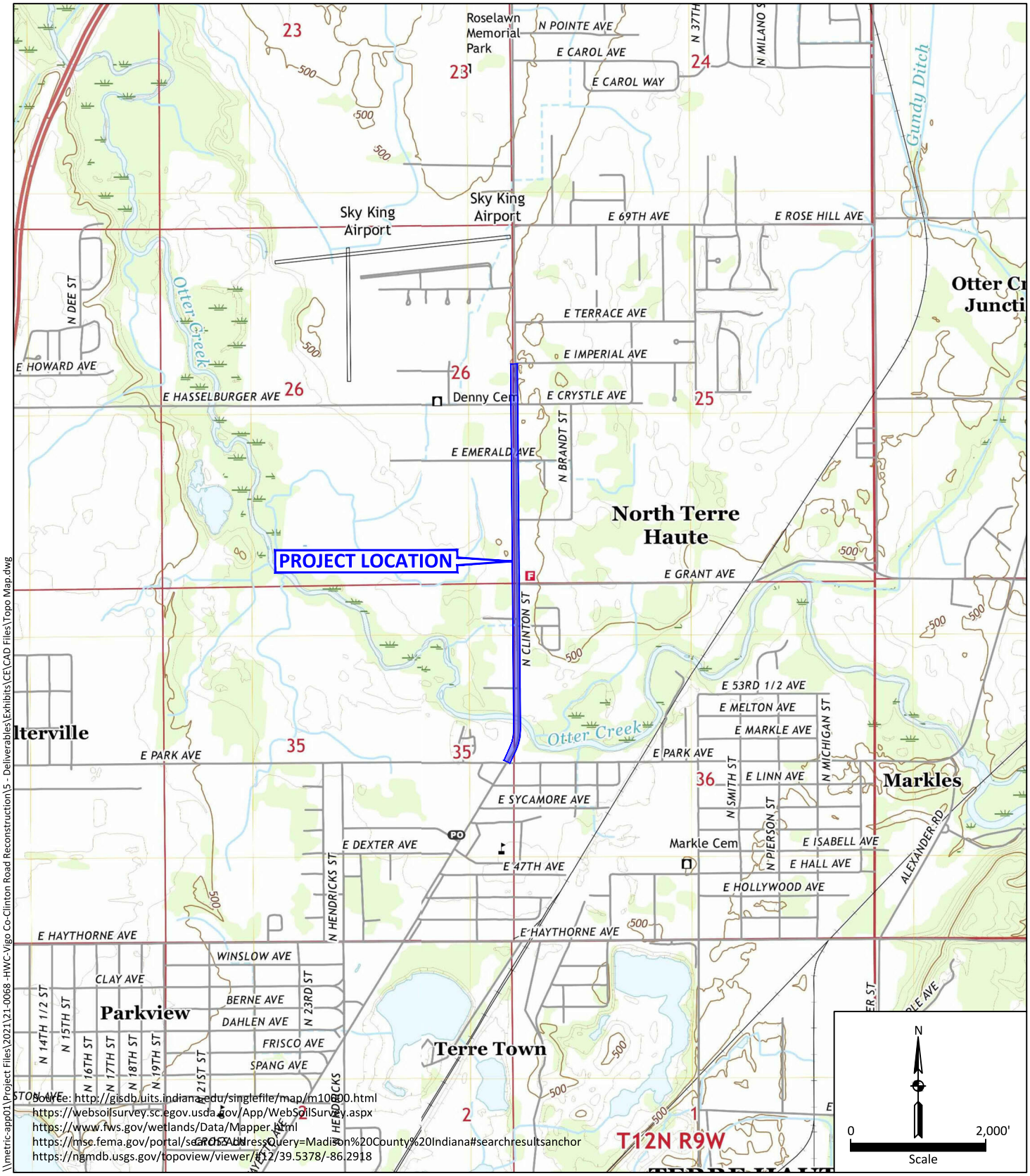
All locations approximate

N

Not to Scale

METRIC ENVIRONMENTAL

Drawn by: ILJ
Checked by: NH
Approved by: SC
Date: July, 2022



Source: http://gisdb.uits.indiana.edu/singlefile/map/m10800.html
https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx
https://www.fws.gov/wetlands/Data/Mapper.html
https://msc.fema.gov/portal/search?AddressQuery=Madison%20County%20Indiana#searchresultsanchor
https://ngmdb.usgs.gov/topoview/viewer/#12/39.5378/-86.2918

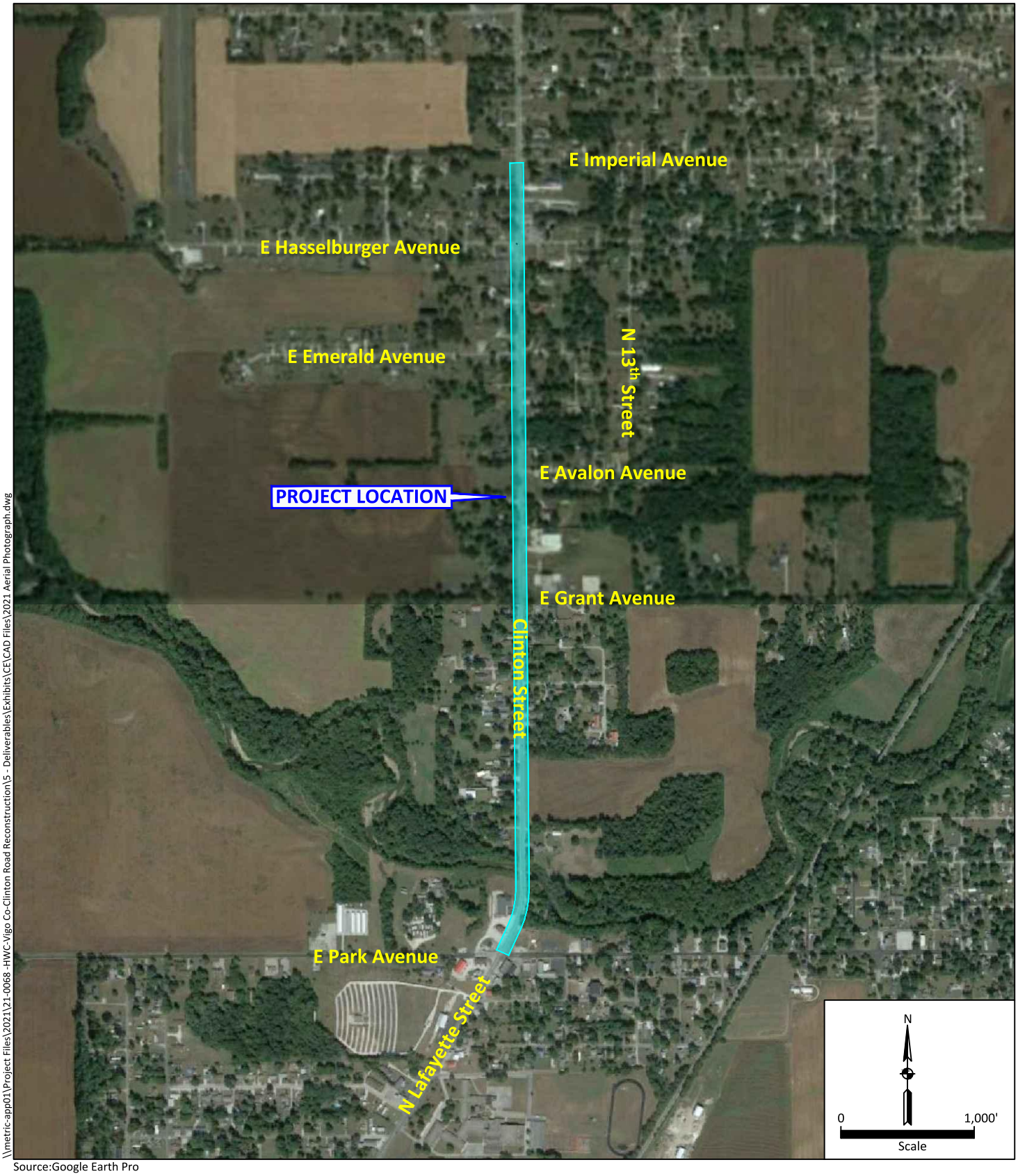
\\metric-app01\Project Files\2021\21-0068 -HWC-Vigo Co-Clinton Road Reconstruction\5 - Deliverables\Exhibits\CE\CAD Files\Topo Map.dwg

USGS Topographic Map
Road Improvements and Bridge Rehabilitation (#242)
N. Clinton Street from Park Avenue to Imperial Avenue, Otter Creek Township, North Terre Haute, Vigo County, Indiana
Des. No 1901781
Metric Project #21-0068

All locations approximate
Base map:
2019 Rosedale, IN
7.5 Minute Quadrangle

METRIC ENVIRONMENTAL

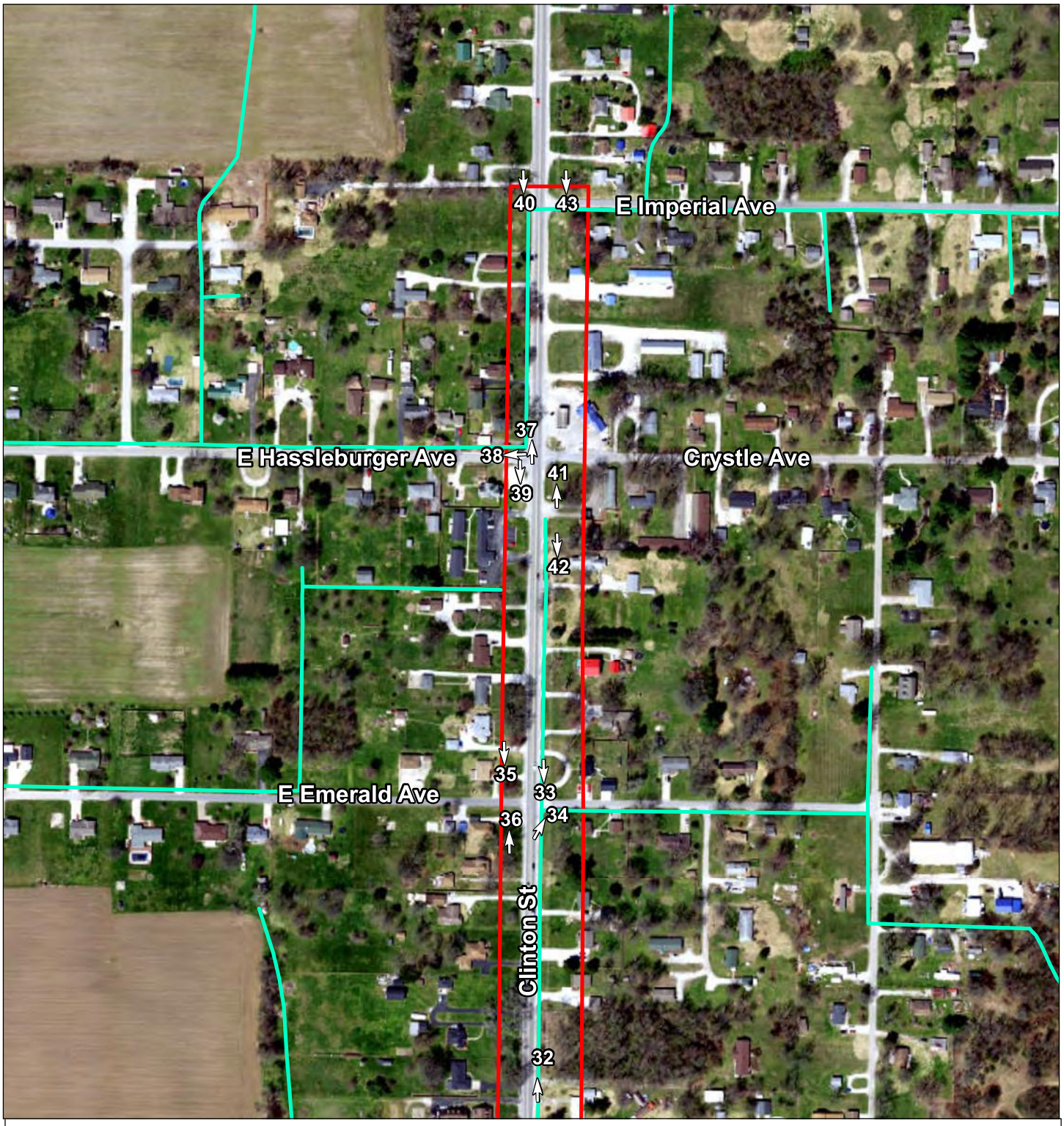
Drawn by:	ILJ
Checked by:	NH
Approved by:	SC
Date:	July, 2022



\\metric-app01\Project Files\2021\21-0068 -HWC-Vigo Co-Clinton Road Reconstruction\5 - Deliverables\Exhibits\CE\CAD Files\2021 Aerial Photograph.dwg

Source:Google Earth Pro

2020 Aerial Photograph Road Improvements and Bridge Rehabilitation (#242) N. Clinton Street from Park Avenue to Imperial Avenue, Otter Creek Township, North Terre Haute, Vigo County, Indiana Des. No 1901781 Metric Project #21-0068	All locations approximate	METRIC ENVIRONMENTAL Drawn by: ILJ Checked by: NH Approved by: SC Date: July, 2022



OHWM
Sampling Point
NHD Flowline
Storm Drain (SD)
Otter Creek
Investigated Area

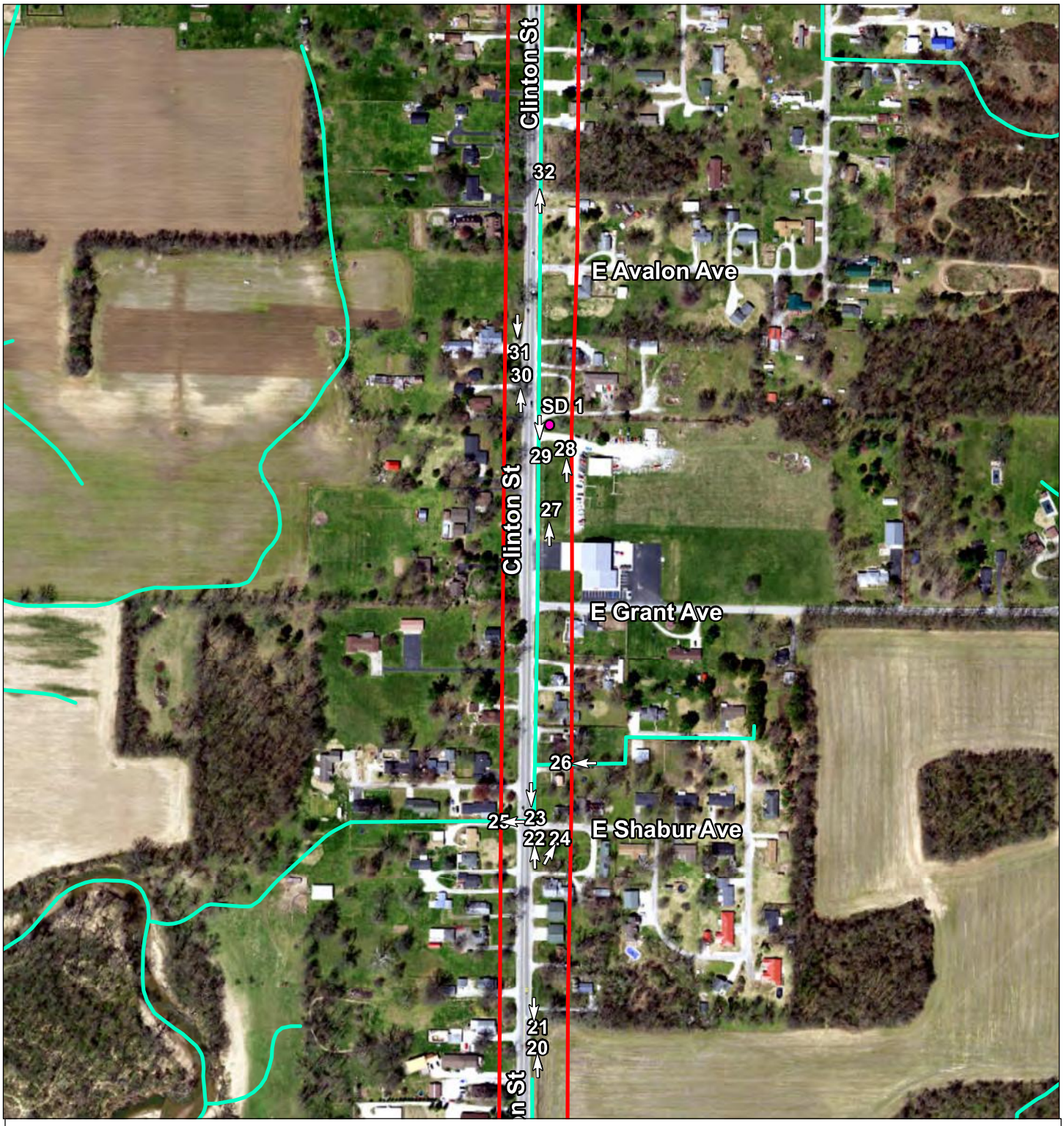
Waters Delineation & Photograph Location Map N Clinton St, from Park Ave to Imperial Ave
Road Improvements & Bridge Rehabilitation
Vigo County, IN
Des. No. 1901781
Metric Project No. 21-0068
Map Date: 10/13/21
Map Author: Kristina Zuniga

All locations approximate
Source: Indiana Spatial Data Portal (2016)

N

0 140 280 560
Feet

METRIC ENVIRONMENTAL



OHWM
Sampling Point
NHD Flowline
Storm Drain (SD)
Otter Creek
Investigated Area

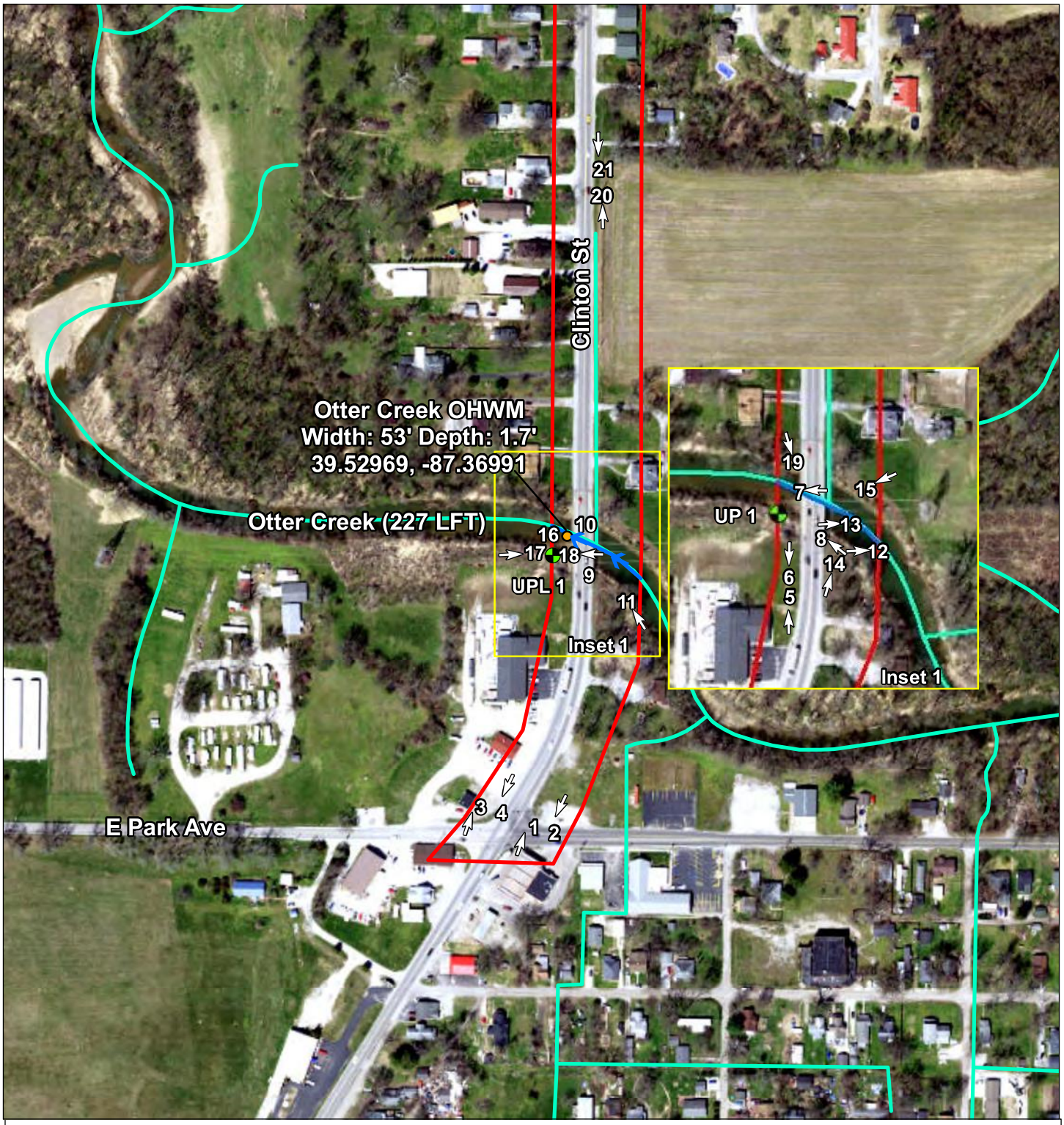
Waters Delineation & Photograph Location Map N Clinton St, from Park Ave to Imperial Ave
Road Improvements & Bridge Rehabilitation
Vigo County, IN
Des. No. 1901781
Metric Project No. 21-0068
Map Date: 10/13/21
Map Author: Kristina Zuniga

All locations approximate
Source: Indiana Spatial Data Portal (2016)

N

0 165 330 660
Feet

METRIC ENVIRONMENTAL



OHWM | Sampling Point | NHD Flowline

Storm Drain (SD) | Otter Creek | Investigated Area

Waters Delineation & Photograph Location Map N Clinton St, from Park Ave to Imperial Ave
Road Improvements & Bridge Rehabilitation
Vigo County, IN
Des. No. 1901781
Metric Project No. 21-0068
Map Date: 10/13/21
Map Author: Kristina Zuniga

All locations approximate
Source: Indiana Spatial Data Portal (2016)

N

0 125 250 500
Feet

METRIC ENVIRONMENTAL

Exh. 4 p. 1 of 3

1. View of Clinton St. roadside area from E Park Ave. intersection, looking northeast.

2. View of E Park Ave and Clinton St. intersection, looking south-west.

3. View of Clinton St. roadside area from E Park Ave., looking northeast.

4. View of E Park Ave. and Clinton St. intersection, looking south-west.

SITE PHOTOGRAPHS—5/10/2022
N Clinton St from Park Ave to Imperial Ave
Road Improvements & Bridge Rehabilitation
Vigo County, Indiana
Des. No. 1901781

METRIC ENVIRONMENTAL

5. View of Clinton St. roadside area, looking north.

6. View of Clinton St. roadside area, looking south.

7. Panoramic view of Otter Creek from Clinton St. bridge, looking west (downstream).

SITE PHOTOGRAPHS—5/10/2022
N Clinton St from Park Ave to Imperial Ave
Road Improvements & Bridge Rehabilitation
Vigo County, Indiana
Des. No. 1901781

METRIC ENVIRONMENTAL

8. View of Otter creek from under Clinton St. overpass, looking northwest.

9. Profile view of animal tracks under Clinton St. overpass.

10. Profile view of swallow nests along Clinton St. bridge.

11. View of Clinton St. bridge over Otter Creek, looking northwest (downstream).

SITE PHOTOGRAPHS—5/10/2022
N Clinton St from Park Ave to Imperial Ave
Road Improvements & Bridge Rehabilitation
Vigo County, Indiana
Des. No. 1901781

METRIC ENVIRONMENTAL

12. View of Otter Creek from investigated area (IA) limits, looking northeast (upstream).

13. Panoramic view of Otter Creek from atop of Clinton St. overpass, looking east. (upstream).

14. View of Otter Creek and upland vegetation along stream-banks, looking northeast.

15. View of upland area, looking southwest.

16. View of UP1, Upland Sampling Point 1, soil profile.

17. View UP1, looking east.

18. View of UP1, looking west.

19. View of Otter Creek and upland vegetation, looking southeast.

20. View of Clinton St. roadside area, looking north.

21. View of Clinton St. roadside area, looking south.

SITE PHOTOGRAPHS—5/10/2022
N Clinton St from Park Ave to Imperial Ave
Road Improvements & Bridge Rehabilitation
Vigo County, Indiana
Des. No. 1901781

METRIC ENVIRONMENTAL

22. View of E Shabur Ave and Clinton St. intersection, looking north

23. View of Clinton St. roadside area from E Shabur intersection, looking south.

24. View of E Shabur right-of-way, looking northeast.

25. View of unobserved NHD flowline, looking west.

SITE PHOTOGRAPHS—5/10/2022
N Clinton St from Park Ave to Imperial Ave
Road Improvements & Bridge Rehabilitation
Vigo County, Indiana
Des. No. 1901781

METRIC ENVIRONMENTAL

26. View of unobserved NHD flowline, looking west.

27. View of Clinton St. roadside area, looking north.

28. View of storm drain, looking north.

29. View of Clinton St. roadside area, looking south.

30. View of Clinton St. roadside area, looking north.

31. View of Clinton St., looking south.

32. View of Clinton St roadside area from E Emerald Ave, looking north (NHD flowline unobserved).

33. View of Clinton St. roadside area from E Emerald Ave, looking south (NHD flowline unobserved).

34. View of E Emerald Ave ROW, looking northeast (NHD flowline unobserved).

35. View of E Emerald Ave and Clinton St. intersection, looking south.

36. View of Clinton St. roadside area from E Emerald Ave., looking north.

37. View of unobserved NHD flowline at E Hasselburger Ave, looking north.

SITE PHOTOGRAPHS—5/10/2022
N Clinton St from Park Ave to Imperial Ave
Road Improvements & Bridge Rehabilitation
Vigo County, Indiana
Des. No. 1901781

METRIC ENVIRONMENTAL

38. View of E Hasselburger Ave and unobserved NHD flowline, looking west.

39. View of Clinton St. roadside area from E Hasselburger Ave, looking south.

40. View of Clinton St. roadside area from E Imperial Ave, looking south.

41. View of Clinton St. and Crystle Ave., looking north.

42. View of Clinton St. roadside area, looking south.

43. View of Clinton St. roadside area from Imperial Ave, looking south.

PROJECT	DESIGNATION
???	???
CONTRACT	
???	

INDIANA DEPARTMENT OF TRANSPORTATION

ROAD PLANS

ROUTE: CLINTON ROAD - PARK AVENUE TO IMPERIAL AVENUE

PROJECT NO. 1901781 P.E.

PROJECT DESCRIPTION
PAVEMENT MILLING, RESURFACING, AND ROADWAY WIDENING AND RECONSTRUCTION OF CLINTON ROAD FROM THE INTERSECTION OF PARK AVENUE NORTH TO THE INTERSECTION OF IMPERIAL AVENUE IN THE NE QUARTER OF SECTION 35, THE NW QUARTER OF SECTION 36, THE SE QUARTER OF SECTION 26, AND THE SW QUARTER OF SECTION 25, T-13-N, R-9-W, OTTER CREEK TOWNSHIP, VIGO COUNTY, INDIANA

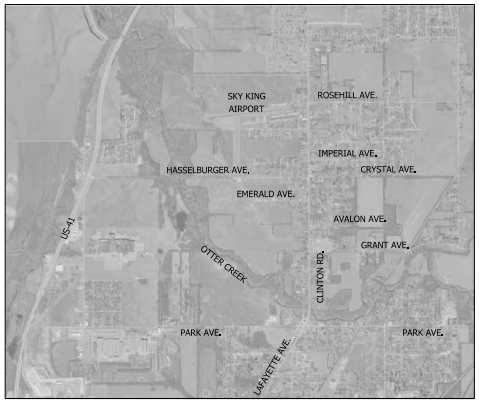
VIGO COUNTY, INDIANA

LARRY ROBBINS, P.E., VIGO COUNTY ENGINEER, ERC

BRENDAN KEARNS -VIGO COUNTY COMMISSIONER

MIKE MORRIS - VIGO COUNTY COMMISSIONER

CHRIS SWITZER - VIGO COUNTY COMMISSIONER



1" = 1000'

TRAFFIC DATA: CLINTON ROAD	
A.A.D.T. (2024)	11,145 V.P.D.
A.A.D.T. (2044)	12,644 V.P.D.
D.H.V	??? V.P.D.
DIRECTIONAL DISTRIBUTION	50%
TRUCKS	4.3% A.A.D.T.
	?? D.H.V.
DESIGN DATA	
DESIGN SPEED	40 m/hr
PROJECT DESIGN CRITERIA	3R NON-FREEWAY
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN
TERRAIN	LEVEL
ACCESS CONTROL	N/A

PROJECT LOCATION SHOWN BY

VIGO COUNTY

LATITUDE: 39°32'07" N LONGITUDE: 87°22'12" W

GROSS LENGTH: 1.12 MI.
NET LENGTH: 1.12 MI.
MAX. GRADE: 3.7% EXISTING

NOTE:
INLET LOCATIONS AND DITCH GRADES ARE PRELIMINARY AND SUBJECT TO CHANGE ONCE FINAL GRADING IS COMPLETE.

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

HWC ENGINEERING
INDIANAPOLIS - TERRE HAUTE
LAFAYETTE - NEW ALBANY - MUNCIE
www.hwcengineering.com

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

PLANS PREPARED BY: HWC ENGINEERING 812-675-4458 PHONE NUMBER

CERTIFIED BY: DATE

APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

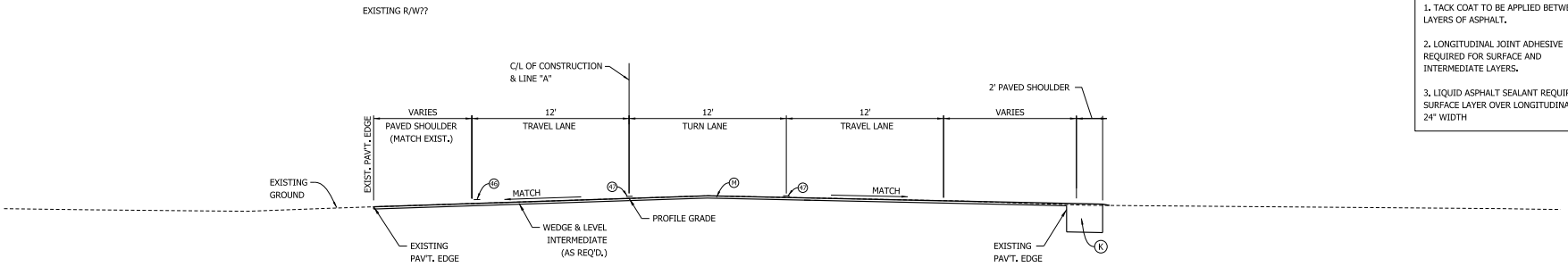
BRIDGE FILE
N/A
DESIGNATION
???
SHEETS
1 of 125
CONTRACT / PROJECT
??? / ???

NOTES:

1. TACK COAT TO BE APPLIED BETWEEN LAYERS OF ASPHALT.

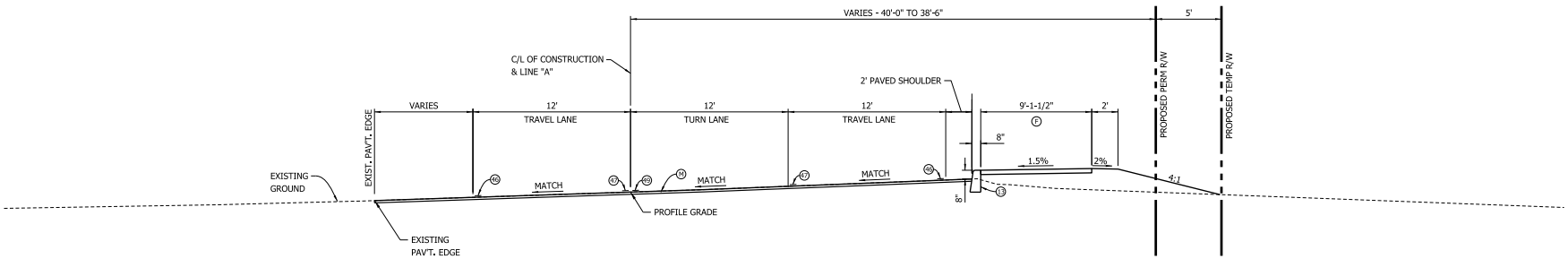
2. LONGITUDINAL JOINT ADHESIVE REQUIRED FOR SURFACE AND INTERMEDIATE LAYERS.

3. LIQUID ASPHALT SEALANT REQUIRED ON SURFACE LAYER OVER LONGITUDINAL JOINT 24" WIDTH



CLINTON ROAD TYPICAL SECTION

STA.11+29.93 TO STA. 12+23.54 "A"



CLINTON ROAD TYPICAL SECTION

STA.12+23.54 TO STA. 13+81.81 LINE "A"

(K) FULL DEPTH HMA PAVEMENT
220#/SYD HMA SURFACE, TYPE B ON
275#/SYD HMA INTERMEDIATE, TYPE B ON
440#/SYD HMA BASE, TYPE B ON
SUBGRADE TREATMENT TYPE IC

(M) MILL AND OVERLAY
220#/SYD HMA SURFACE, TYPE B, ON
PROFILE MILLING

(W) WIDENING WITH HMA
220#/SYD HMA SURFACE, TYPE B, ON
275#/SYD HMA INTERMEDIATE, TYPE B, ON
ON WIDENING WITH HMA, TYPE B CONSISTING OF
440#/SYD HMA BASE, TYPE B, ON
SUBGRADE TREATMENT TYPE IC

(P) HMA PATCHING, TYPE C
HMA FOR PATCHING CONSISTING OF
660#/SYD HMA BASE, TYPE C ON
SUBGRADE TREATMENT TYPE IC

(T) FULL DEPTH HMA TRAIL
165#/SYD HMA SURFACE TYPE B, ON
220#/SYD HMA INTERMEDIATE, TYPE B, ON
6" COMPACTED AGGREGATE, NO. 53, ON
SUBGRADE TREATMENT, TYPE III

(F) SIDEWALK, CONCRETE 4 IN.

(L3) CONCRETE CURB (VERTICAL)

(4R) LINE, THERMOPLASTIC, SOLID, WHITE, 4 IN.

(4Y) LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN.

(6D) LINE, THERMOPLASTIC, BROKEN, YELLOW, 4 IN.

(U) MULCHED SEEDING, TYPE U

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	3 of 125
CONTRACT	PROJECT
R-42521	2021-081-S

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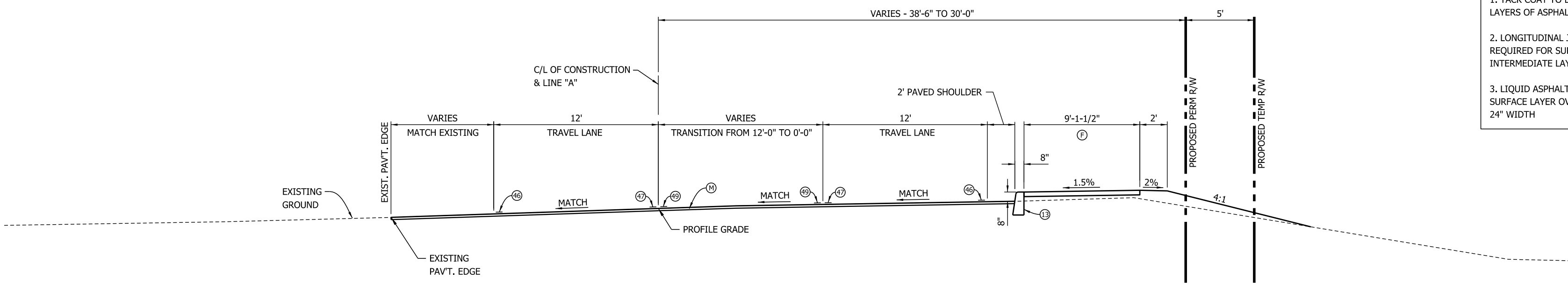
NOTES:

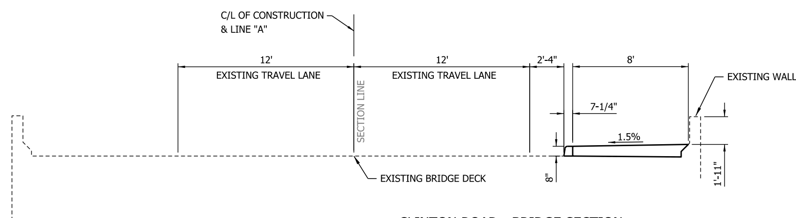
1. TACK COAT TO BE APPLIED BETWEEN LAYERS OF ASPHALT.

2. LONGITUDINAL JOINT ADHESIVE REQUIRED FOR SURFACE AND INTERMEDIATE LAYERS.

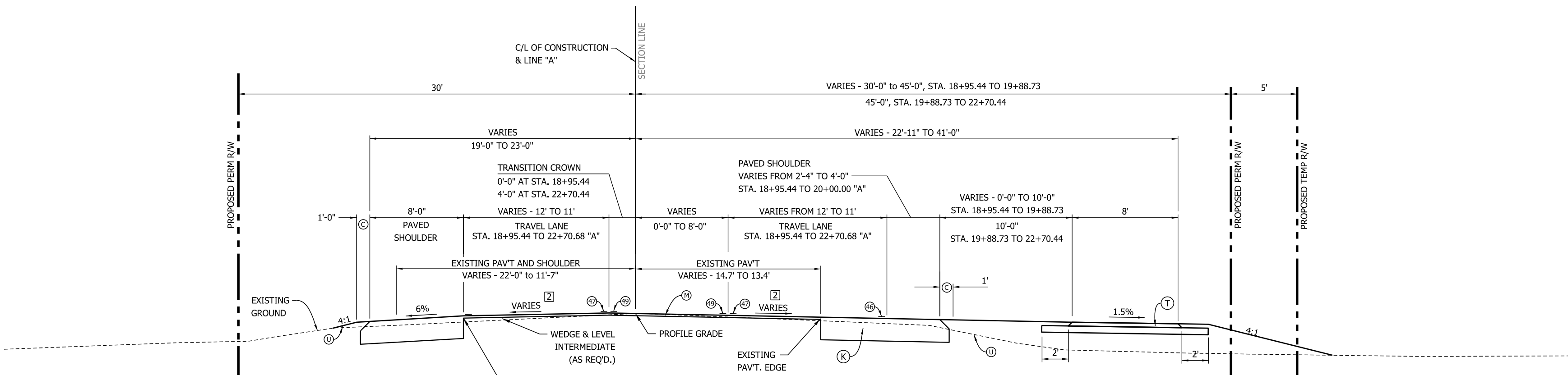
3. LIQUID ASPHALT SEALANT REQUIRED ON SURFACE LAYER OVER LONGITUDINAL JOINT 24" WIDTH



CLINTON ROAD TYPICAL SECTION
STA. 13+81.81 TO STA. 16+84.26 LINE "A"



CLINTON ROAD - BRIDGE SECTION
STA.16.84.26 TO STA. 18+95.44 "A"



2 SLOPE VARIES - TRANSITION FROM "MATCH EXISTING" AT STA. 18+95.44 (BRIDGE DECK) TO TO 2% AT STA. 19+50.00

CLINTON ROAD TYPICAL SECTION
STA. 18+95.44 TO STA. 22+70.68 "A"

(K) FULL DEPTH HMA PAVEMENT
220#/SYD HMA SURFACE, TYPE B ON
275#/SYD HMA INTERMEDIATE, TYPE B ON
440#/SYD HMA BASE, TYPE B ON
SUBGRADE TREATMENT TYPE IC

(M) MILL AND OVERLAY
220#/SYD HMA SURFACE, TYPE B, ON
PROFILE MILLING

(W) WIDENING WITH HMA
220#/SYD HMA SURFACE, TYPE B, ON
275#/SYD HMA INTERMEDIATE, TYPE B, ON
ON WIDENING WITH HMA, TYPE B CONSISTING OF
440#/SYD HMA BASE, TYPE B, ON
SUBGRADE TREATMENT TYPE IC

(P) HMA PATCHING, TYPE C
HMA FOR PATCHING CONSISTING OF
660#/SYD HMA BASE, TYPE C ON
SUBGRADE TREATMENT TYPE IC

(T) FULL DEPTH HMA TRAIL
165#/SYD HMA SURFACE TYPE B, ON
220#/SYD HMA INTERMEDIATE, TYPE B, ON
6" COMPACTED AGGREGATE, NO. 53, ON
SUBGRADE TREATMENT, TYPE III

(F) SIDEWALK, CONCRETE 4 IN.
(13) CONCRETE CURB (VERTICAL)
(46) LINE, THERMOPLASTIC, SOLID, WHITE, 4 IN.
(47) LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN.
(49) LINE, THERMOPLASTIC, BROKEN, YELLOW, 4 IN.
(U) MULCHED SEEDING, TYPE U

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER ______ DATE

DESIGNED:	DWN	DRAWN:	DWN
CHECKED:	LRA	CHECKED:	DPL

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	4 of 125
CONTRACT	PROJECT
R-42521	2021-081-S

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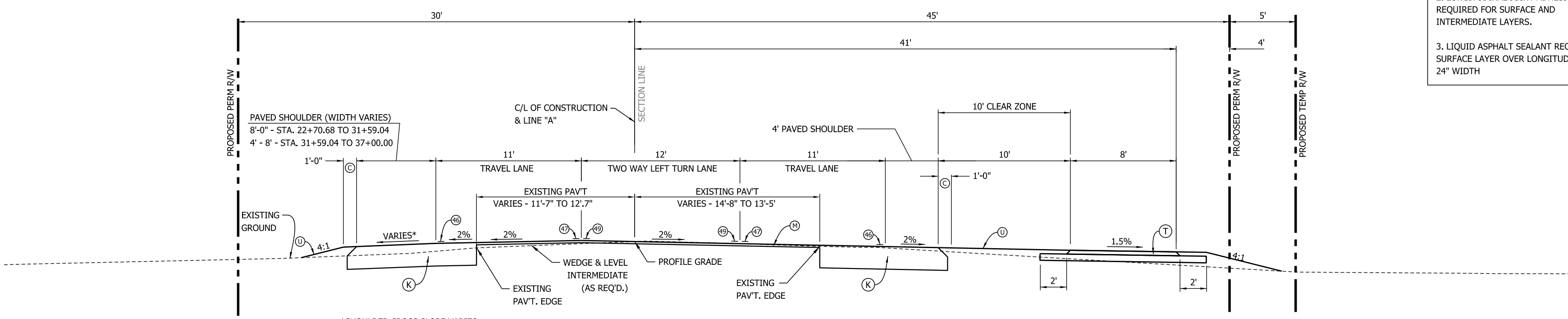
NOTES:

1. TACK COAT TO BE APPLIED BETWEEN LAYERS OF ASPHALT.

2. LONGITUDINAL JOINT ADHESIVE REQUIRED FOR SURFACE AND INTERMEDIATE LAYERS.

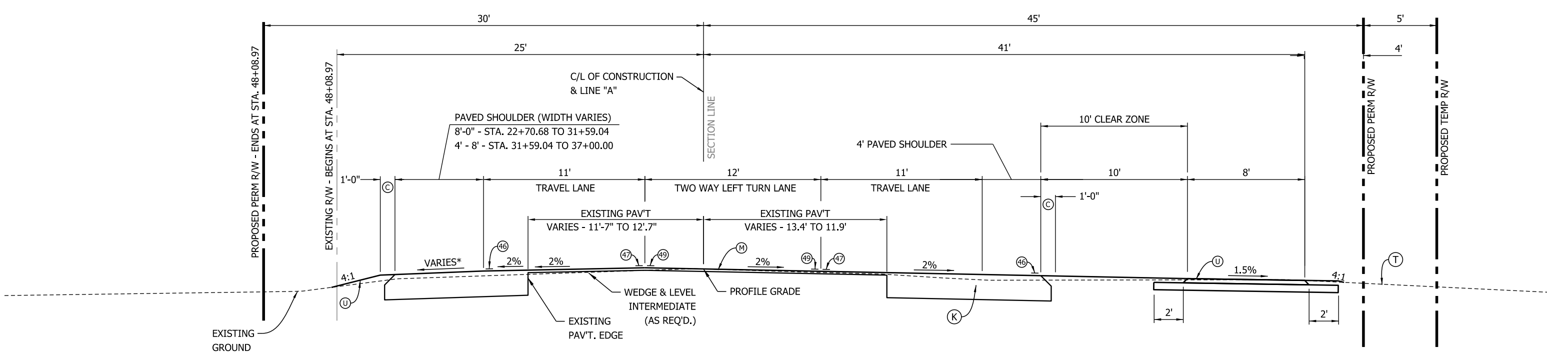
3. LIQUID ASPHALT SEALANT REQUIRED ON SURFACE LAYER OVER LONGITUDINAL JOINT 24" WIDTH



*SHOULDER CROSS SLOPE VARIES
BETWEEN 2.0% TO 6.0%
(SEE CROSS SECTIONS)

CLINTON ROAD TYPICAL SECTION

STA. 22+70.68 TO STA. 37+00.00 "A"



CLINTON ROAD TYPICAL SECTION

STA. 37+00.00 TO STA. 70+15.22 "A"

*SHOULDER CROSS SLOPE VARIES
BETWEEN 2.0% TO 6.0%
(SEE CROSS SECTIONS)

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REVISION 3.0
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INDOT.tbl
6/22/2023
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1:4

(K) FULL DEPTH HMA PAVEMENT
220#/SYD HMA SURFACE, TYPE B ON
275#/SYD HMA INTERMEDIATE, TYPE B ON
440#/SYD HMA BASE, TYPE B ON
SUBGRADE TREATMENT TYPE IC

(M) VARIABLE DEPTH MILLING (2" MAX) W/
220#/SYD HMA SURFACE, TYPE B, ON
EXISTING SURFACE / WEDGE & LEVEL

(W) WIDENING WITH HMA
220#/SYD HMA SURFACE, TYPE B, ON
275#/SYD HMA INTERMEDIATE, TYPE B, ON
ON WIDENING WITH HMA, TYPE B CONSISTING OF
440#/SYD HMA BASE, TYPE B, ON
SUBGRADE TREATMENT TYPE IC

(C) 6" COMPACTED AGGREGATE, No. 53 (SHOULDER)

(P) HMA PATCHING, TYPE C
HMA FOR PATCHING CONSISTING OF
660#/SYD HMA BASE, TYPE C ON
SUBGRADE TREATMENT TYPE IC

(T) FULL DEPTH HMA TRAIL
165#/SYD HMA SURFACE TYPE B, ON
220#/SYD HMA INTERMEDIATE, TYPE B, ON
6" COMPACTED AGGREGATE, NO. 53, ON
SUBGRADE TREATMENT, TYPE III

(F) SIDEWALK, CONCRETE 4 IN.

(13) CONCRETE CURB (VERTICAL)

(46) LINE, THERMOPLASTIC, SOLID, WHITE, 4 IN.

(47) LINE, THERMOPLASTIC, SOLID, YELLOW, 4 IN.

(49) LINE, THERMOPLASTIC, BROKEN, YELLOW, 4 IN.

(U) MULCHED SEEDING, TYPE U

PRELIMINARY
NOT FOR
CONSTRUCTION
6/16/23

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER ______ DATE

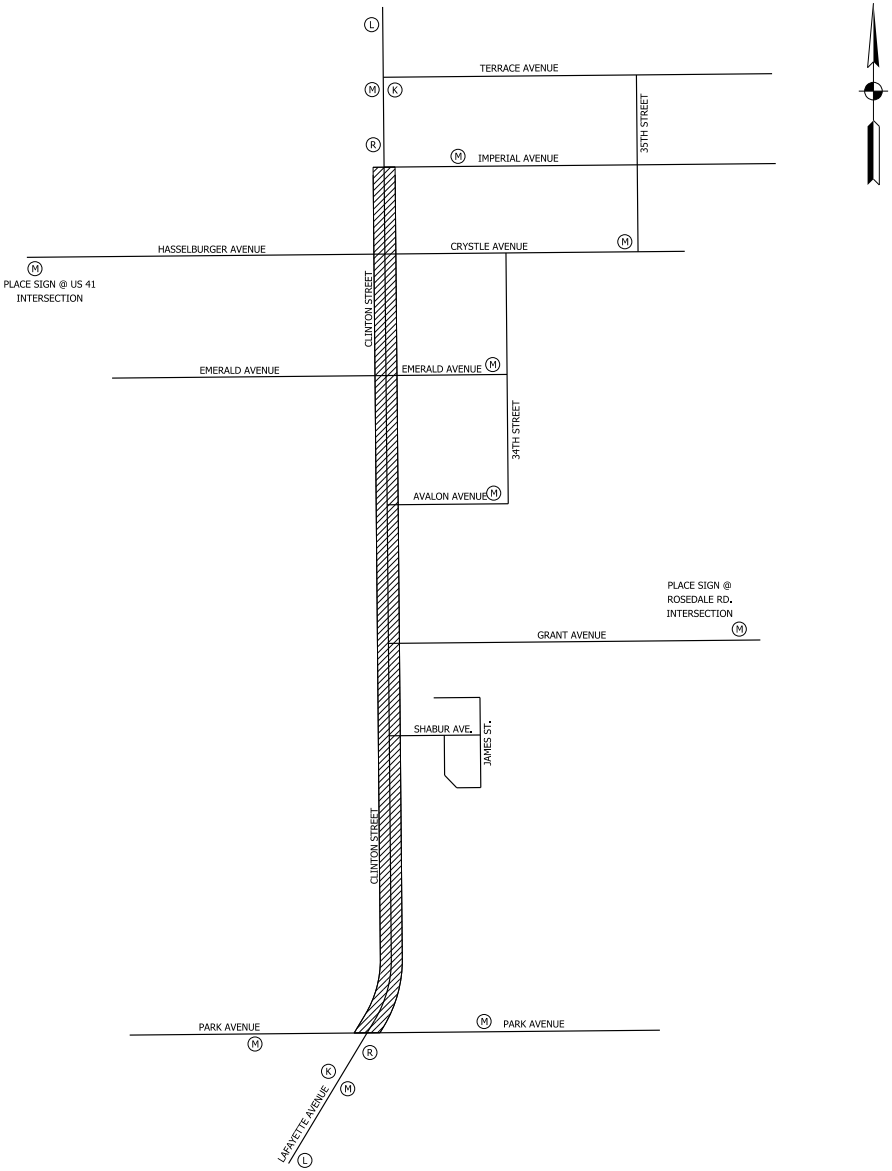
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1" = 4'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	5 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



GENERAL NOTES

CONSTRUCTION ZONE SPEED ON CLINTON STREET IS 30 MPH

THE CONTRACTOR SHALL PLACE TEMPORARY PAVEMENT MARKINGS ALONG THE CONSTRUCTION AREA PRIOR TO EACH PHASE, AND FINAL MARKINGS AFTER CONSTRUCTION IS COMPLETE.

THE CONTRACTOR IS RESPONSIBLE FOR RESETTING AND MAINTAINING TRAFFIC CONTROL DEVICES FOR EACH PHASE OF THE PROJECT. TEMPORARY CONSTRUCTION SIGNS AND CHANNELIZING DEVICES SHALL BE PROVIDED PER INDOT AND MUTCD STANDARDS.

THE CONTRACTOR IS TO NOTIFY LOCAL AUTHORITIES/RESIDENTS/BUSINESSES/FIRE DEPARTMENT/POLICE DEPARTMENT/POST OFFICE/SANITATION DEPARTMENT OF WORK SCHEDULES.

THE CONSTRUCTION SITE SHOULD PROVIDE ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES.

THE CONTRACTOR IS TO BE AWARE OF THE AERIAL AND/OR UNDERGROUND UTILITIES IN THE VICINITY THAT MAY INTERFERE WITH THE CONSTRUCTION PHASING AND MODIFY ACCORDINGLY TO NOT DISRUPT THE UTILITY SERVICE.

PHASING NOTES:

PHASE 1
MAINTAIN TRAFFIC ON EXISTING CLINTON STREET USING 10' LANES, SEE MAINTENANCE OF TRAFFIC TYPICAL SECTIONS. THIS PHASE INCLUDES TRAIL CONSTRUCTION AND PAVEMENT WIDENING ALONG THE EAST SIDE OF CLINTON STREET UP THROUGH (INCLUDING) THE INTERMEDIATE COURSE. FULL DEPTH CONSTRUCTION AT SHABUR AVENUE, GRANT AVENUE, AND CRYSTLE AVENUE TO BE COMPLETED IN THIS PHASE UTILITIZING FLAGGERS.

PHASE 2
SHIFT TRAFFIC TO NEW CONSTRUCTION COMPLETED IN PHASE 1 USING 10' LANES, SEE MAINTENACE OF TRAFFIC TYPICAL SECTIONS. THIS PHASE INCLUDES PAVEMENT WIDENING ALONG THE WEST SIDE OF CLINTON STREET UP THROUGH (INCLUDING) THE INTERMEDIATE COURSE.

PHASE 3
MILLING OF EXISTING CLINTON STREET PAVEMENT AND THE FINAL ASPHALT COURSE WILL BE PLACED, FINAL PAVEMENT MARKINGS AND PERMANENT SIGNS WILL BE COMPLETED UNDER TRAFFIC.

(K)	(M)	(R)		(L)
END CONSTRUCTION XG20-2	ROAD CONSTRUCTION AHEAD XW20-1	XG20-5P WORKSITE SPEED LIMIT 30 R2-1(30)		Speeding Max $1000 Reckless Driving Max 8 Yrs XW2-6
2 REQUIRED	10 REQUIRED	2 REQUIRED		2 REQUIRED

WORK ZONE

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

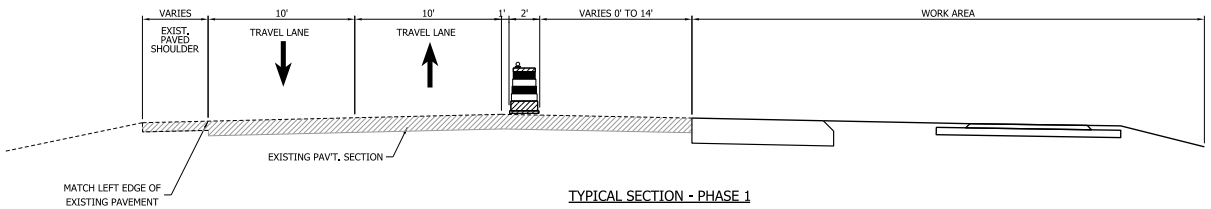
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC SIGNS & PHASING

HORIZONTAL SCALE	BRIDGE FILE
1"=400'	N/A
VERTICAL SCALE	DESIGNATION
	1901781
SURVEY BOOK	SHEETS
	6 of 125
CONTRACT	PROJECT
R-42521	2021-081-S

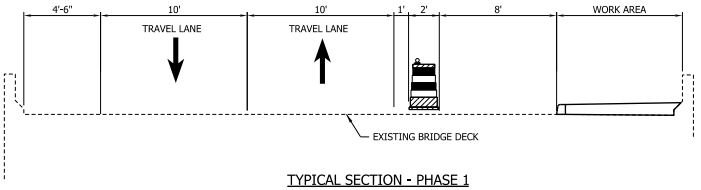


TYPICAL SECTION - PHASE 1

CLINTON STREET

STA. 13+81.81 TO STA. 16+84.26 "A"

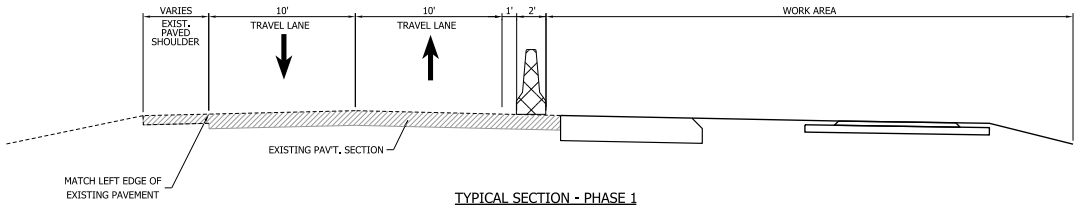
STA. 18+95.44 TO STA. 22+37.00 "A"



TYPICAL SECTION - PHASE 1

CLINTON STREET

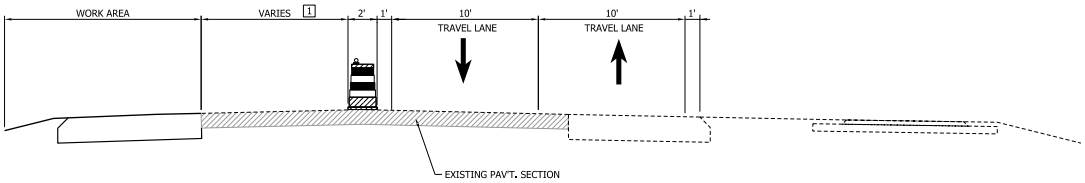
STA.16+84.26 TO STA. 18+95.44 "A"



TYPICAL SECTION - PHASE 1

CLINTON STREET

STA. 22+37.00 TO STA. 70+15.22 "A"



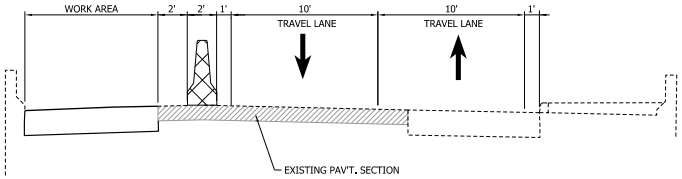
TYPICAL SECTION - PHASE 2

CLINTON STREET

STA. 13+81.81 TO STA. 16+84.26 "A"

STA. 18+95.44 TO STA. 70+15.22 "A"

[1] VARIES FROM 26' TO 11' FROM STA. 13+81.81 TO STA. 16+84.26
VARIES FROM 11' TO 9' FROM STA. 18+95.44 TO STA. 70+15.22



TYPICAL SECTION - PHASE 2

CLINTON STREET

STA.16+84.26 TO STA. 18+95.44 "A"

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

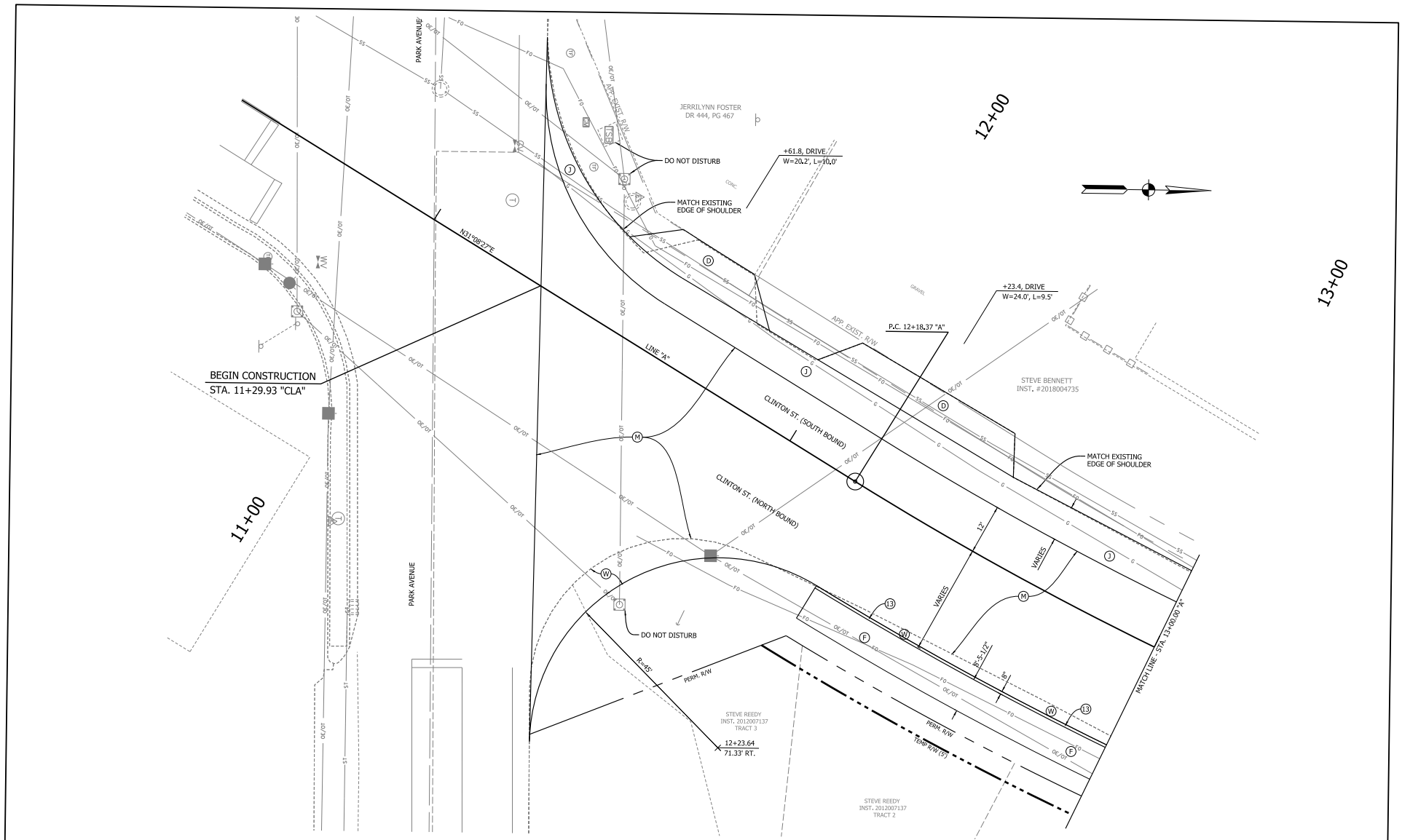
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS - PHASE 1 & 2

HORIZONTAL SCALE	BRIDGE FILE
1"=4'	N/A
VERTICAL SCALE	DESIGNATION
	1901781
SURVEY BOOK	SHEETS
	7 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



- (K) FULL DEPTH HMA PAVEMENT
- (M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
- (W) WIDENING WITH HMA
- FULL DEPTH PAV'T REMOVAL
- (C) PCCP FOR DRIVEWAYS
- (D) HMA FOR APPROACHES, TYPE C
- (F) SIDEWALK, CONCRETE, 4 IN.
- (U) MULCHED SEEDING, TYPE U
- (J) HMA SHOULDER
- (R) CURB RAMP, CONCRETE
- (S) SAW CUT REQ'D.
- (T) HMA TRAIL
- (13) CURB, CONCRETE

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

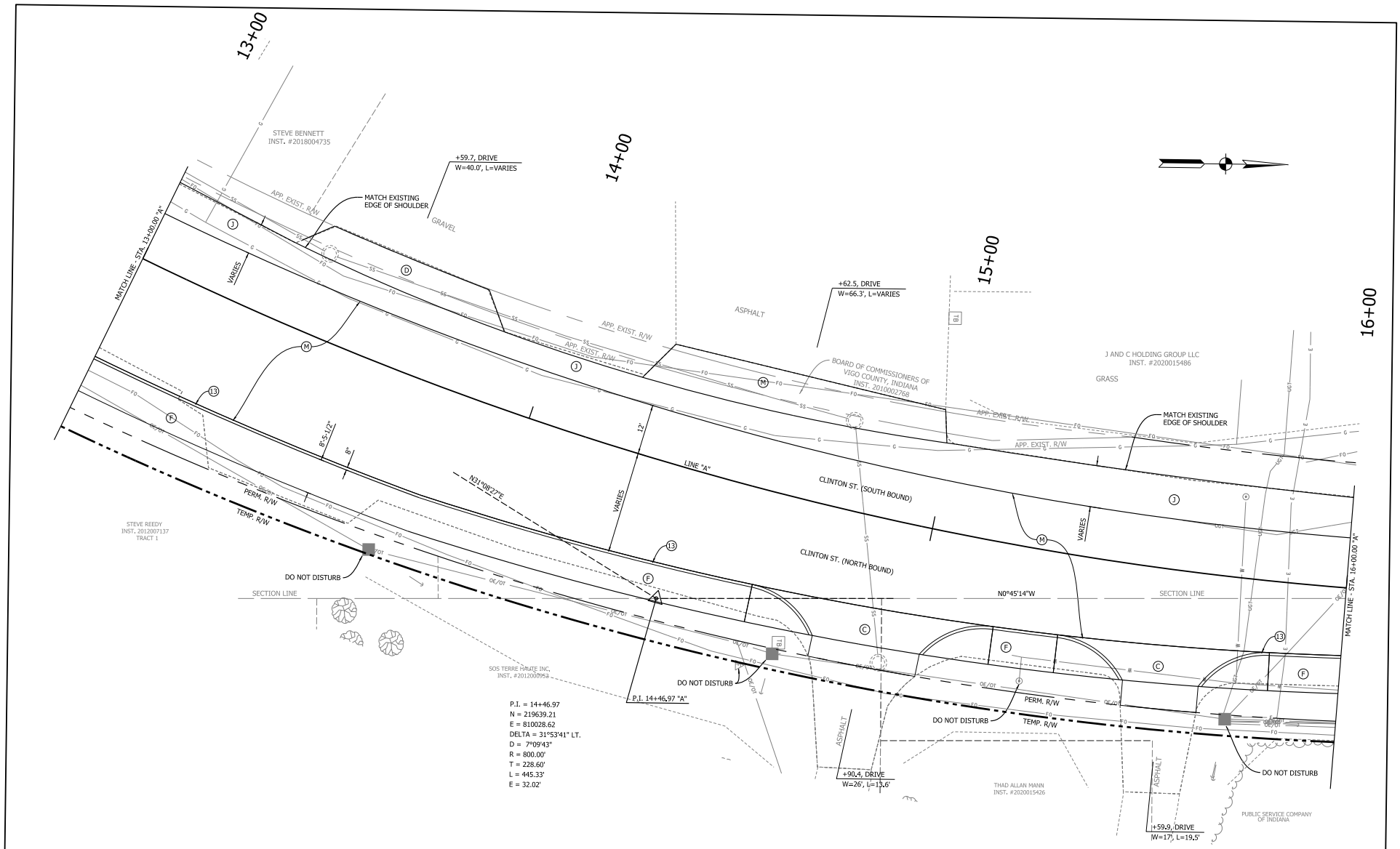
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 11+29.93 TO 13+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	30 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER	
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE	
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.	
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL	
		(13) CURB, CONCRETE	

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

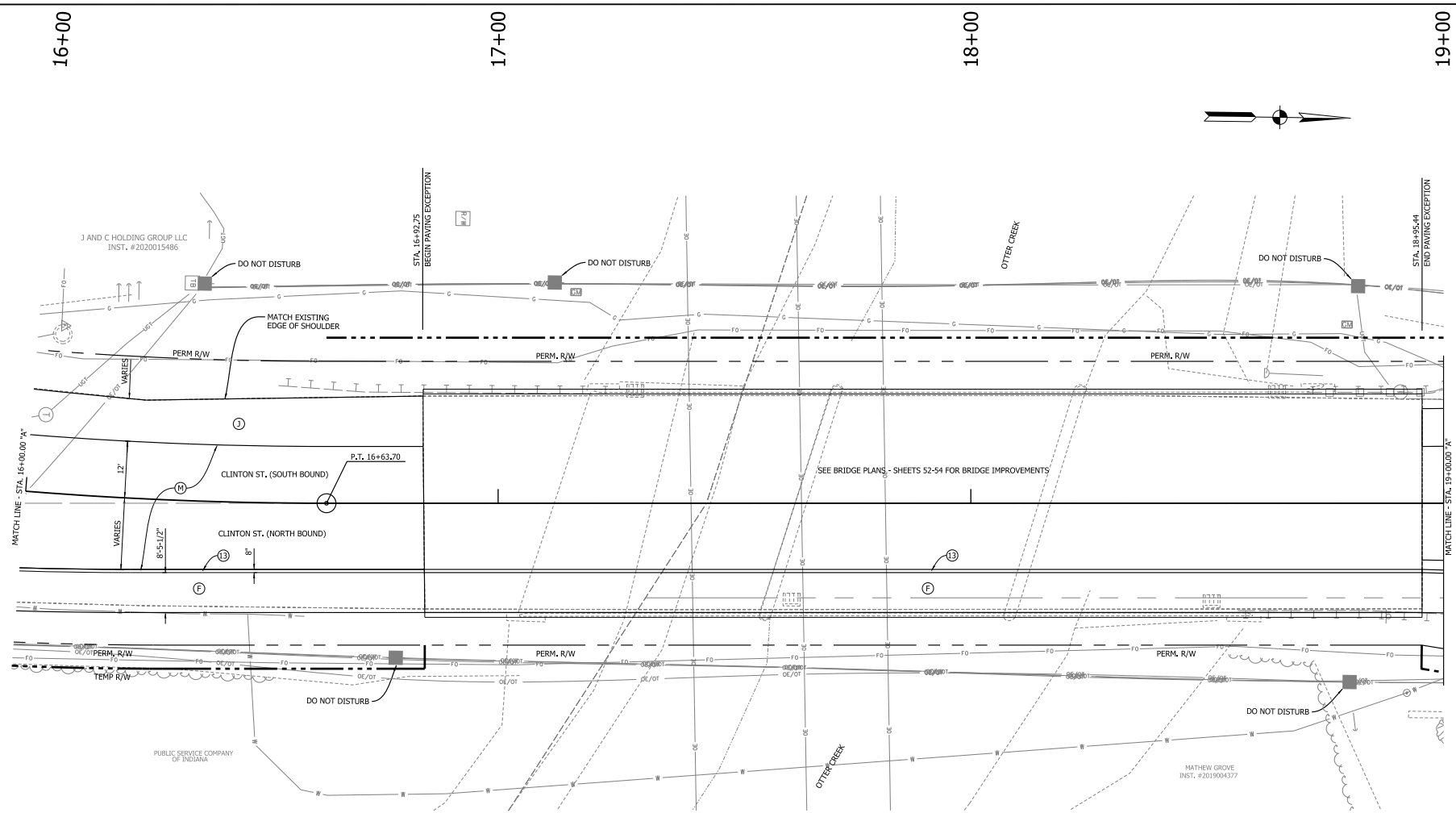
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 13+00.00 TO 16+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	31 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER	
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE	
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.	
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL	
		(13) CURB, CONCRETE	

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

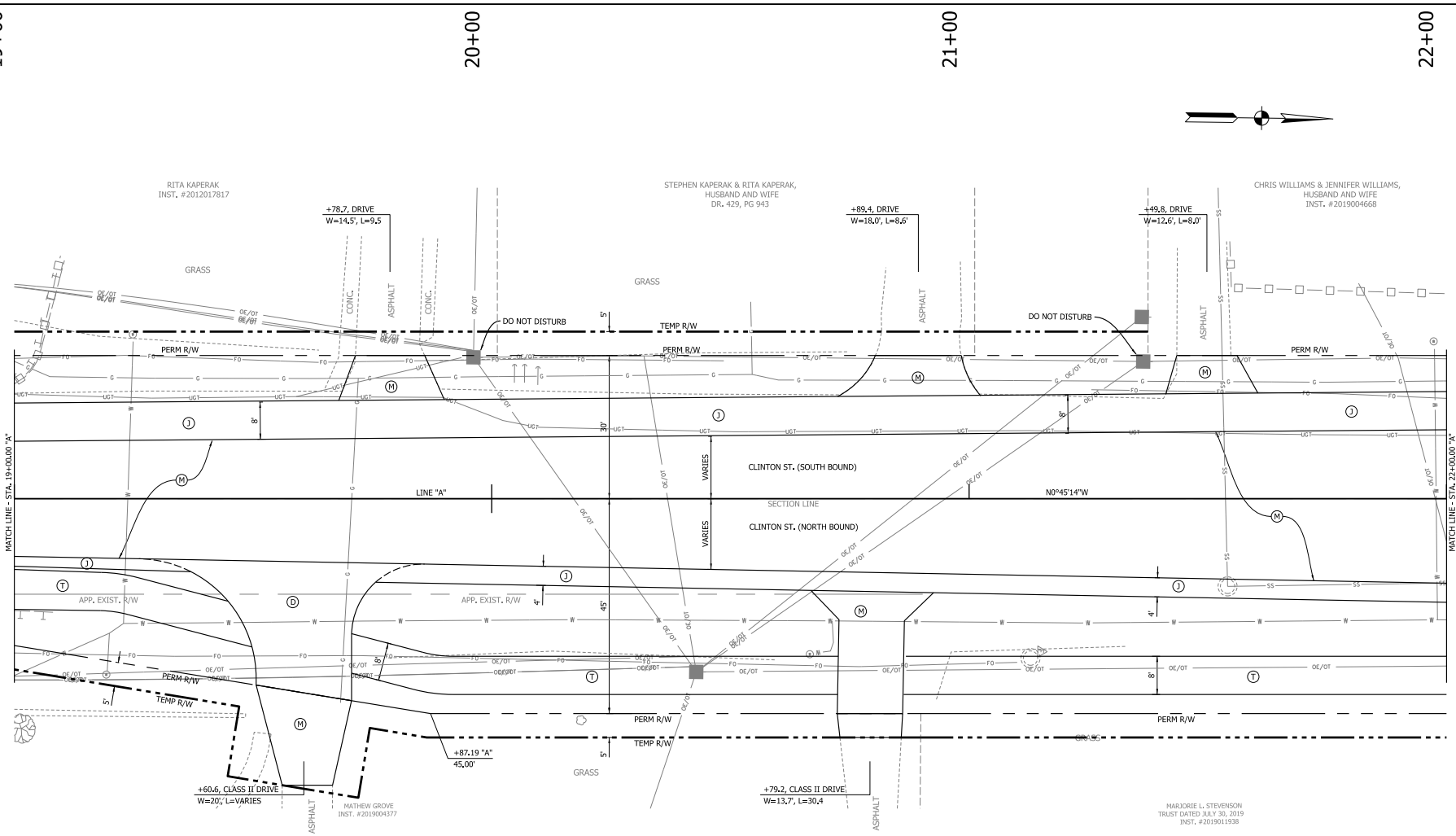
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 16+00.00 TO 19+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	32 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



- (K) FULL DEPTH HMA PAVEMENT
- (M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
- (W) WIDENING WITH HMA
- FULL DEPTH PAV'T REMOVAL
- (C) PCCP FOR DRIVEWAYS
- (D) HMA FOR APPROACHES, TYPE C
- (F) SIDEWALK, CONCRETE, 4 IN.
- (U) MULCHED SEEDING, TYPE U
- (J) HMA SHOULDER
- (R) CURB RAMP, CONCRETE
- (S) SAW CUT REQ'D.
- (T) HMA TRAIL
- (13) CURB, CONCRETE

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

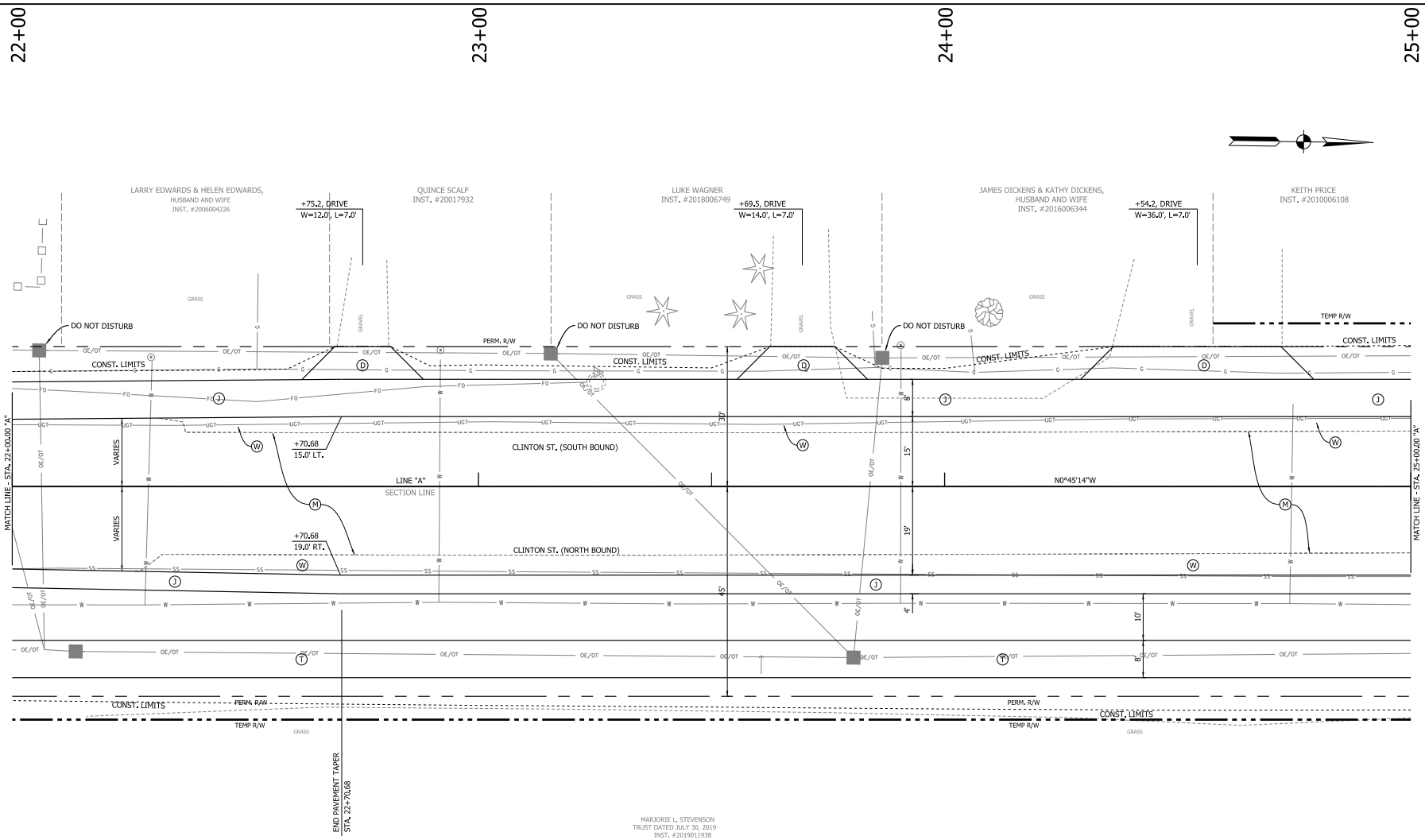
DESIGNED: DWN | DRAWN: DWN

CHECKED: LRA | CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 19+00.00 TO 22+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	33 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER	
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE	
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.	
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL	
		(13) CURB, CONCRETE	

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

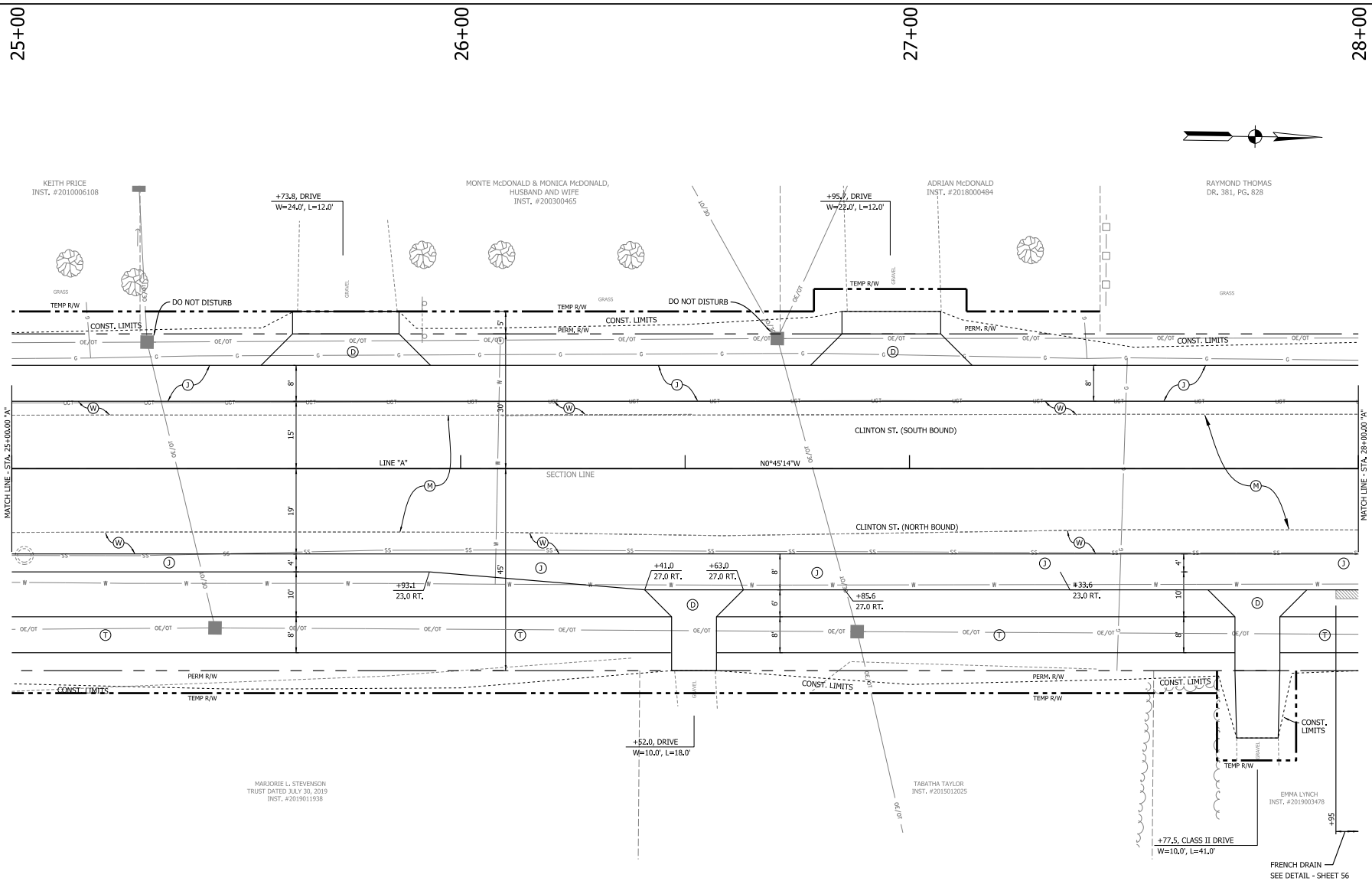
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS STA. 22+00.00 TO 25+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	34 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



- (K) FULL DEPTH HMA PAVEMENT
- (M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
- (W) WIDENING WITH HMA
- FULL DEPTH PAV'T REMOVAL
- (C) PCCP FOR DRIVEWAYS
- (D) HMA FOR APPROACHES, TYPE C
- (F) SIDEWALK, CONCRETE, 4 IN.
- (U) MULCHED SEEDING, TYPE U
- (J) HMA SHOULDER
- (R) CURB RAMP, CONCRETE
- (S) SAW CUT REQ'D.
- (T) HMA TRAIL
- (13) CURB, CONCRETE

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

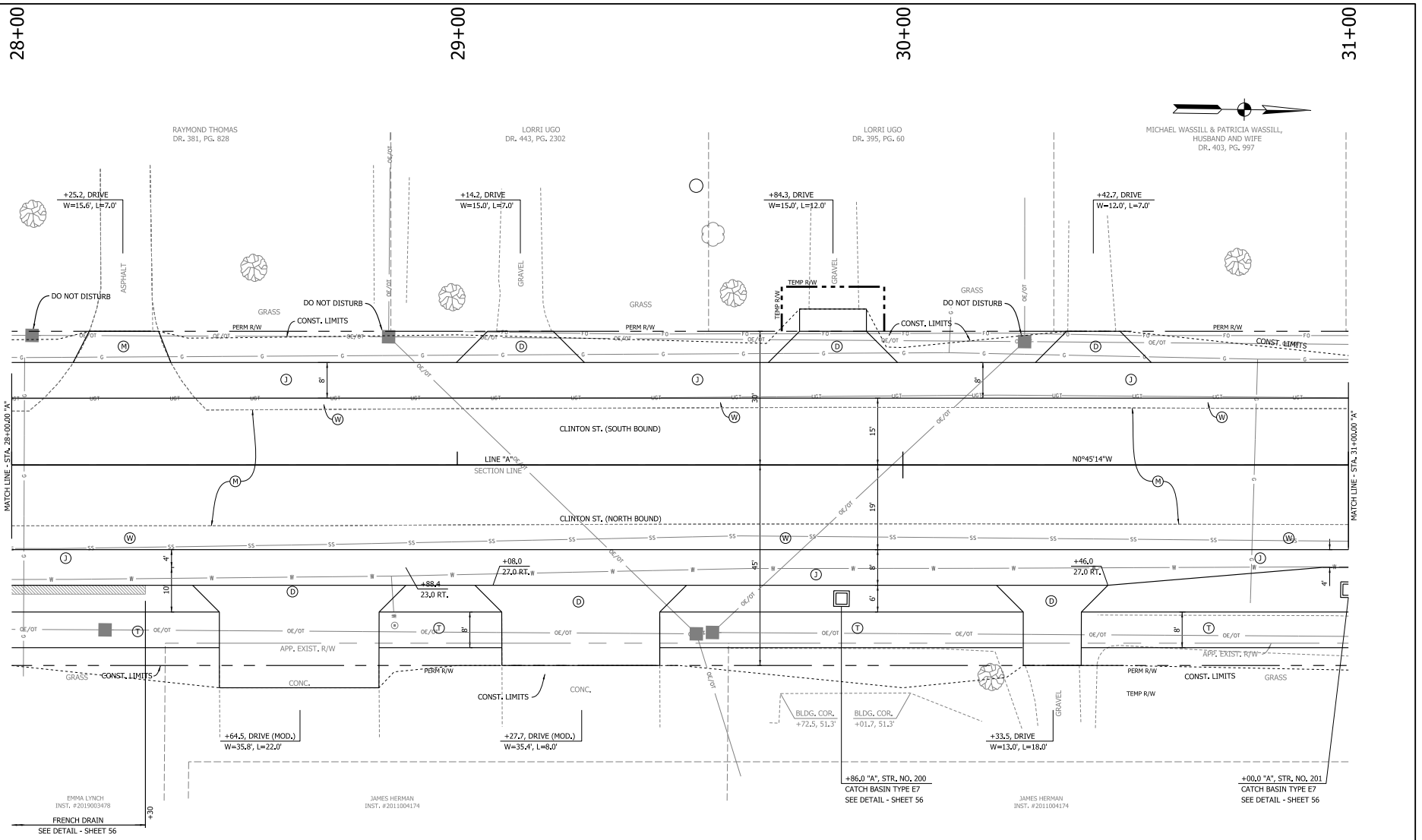
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: DWN DRAWN: DWN
CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 25+00.00 TO 28+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	35 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
(W) WIDENING WITH HMA
FULL DEPTH PAV'T REMOVAL

(C) PCCP FOR DRIVEWAYS
(D) HMA FOR APPROACHES, TYPE C
(F) SIDEWALK, CONCRETE, 4 IN.
(U) MULCHED SEEDING, TYPE U

(J) HMA SHOULDER
(R) CURB RAMP, CONCRETE
(S) SAW CUT REQ'D.
(T) HMA TRAIL
(13) CURB, CONCRETE

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

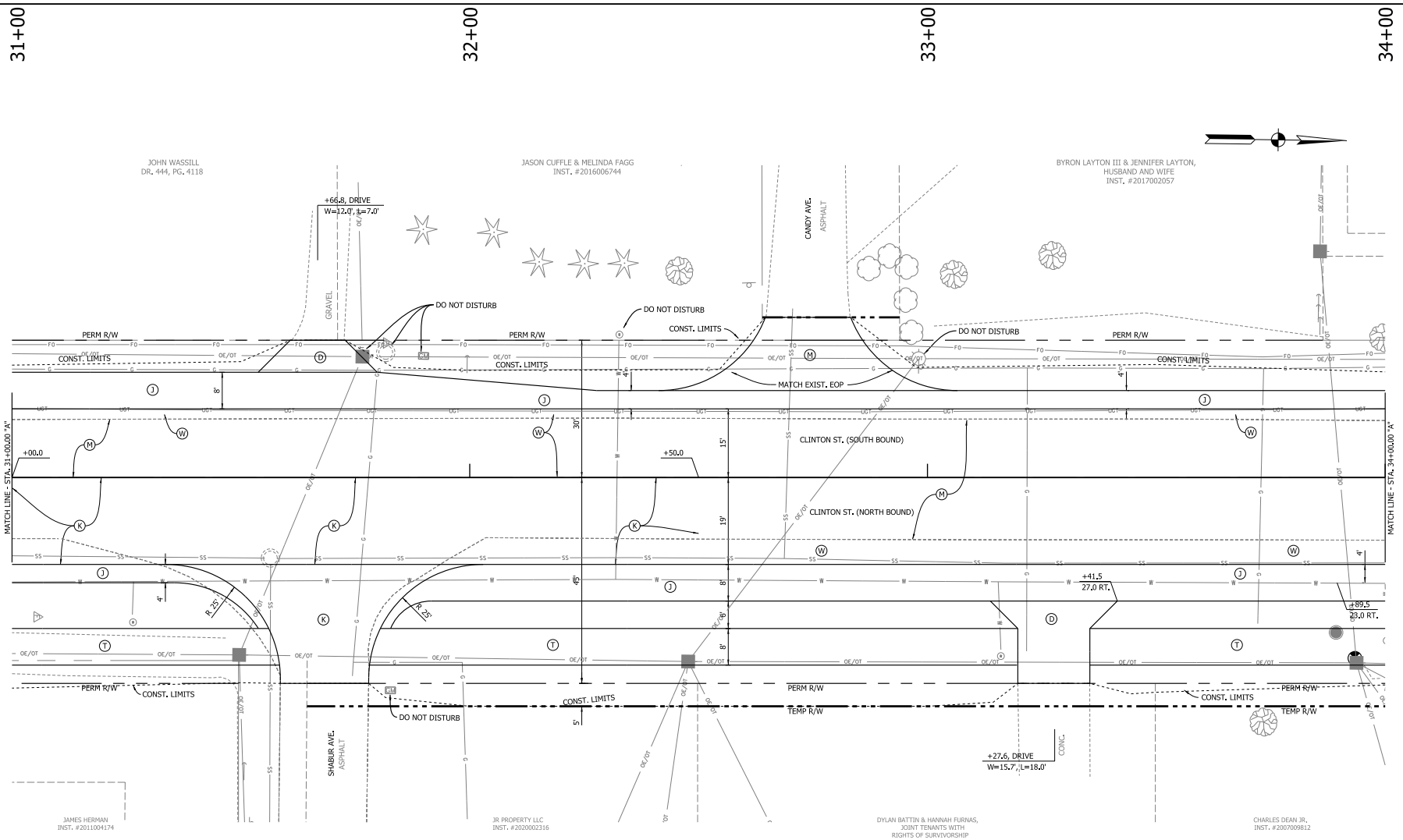
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: DWN
DRAWN: DWN
CHECKED: LRA
CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 28+00.00 TO 31+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	36 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER	
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE	
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.	
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL	
		(13) CURB, CONCRETE	

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

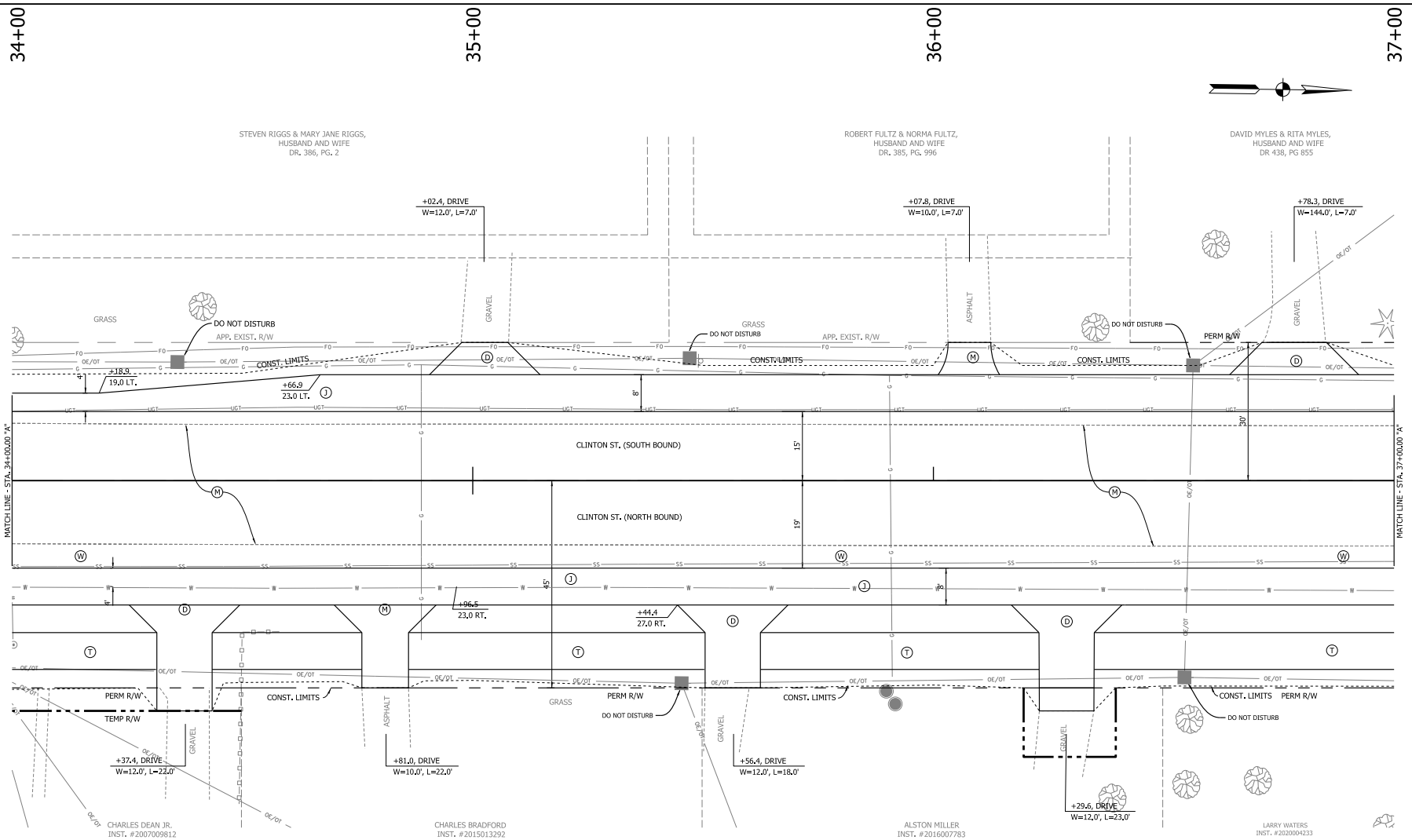
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS STA. 31+00.00 TO 34+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	37 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER	
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE	
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.	
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL	
		(13) CURB, CONCRETE	

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

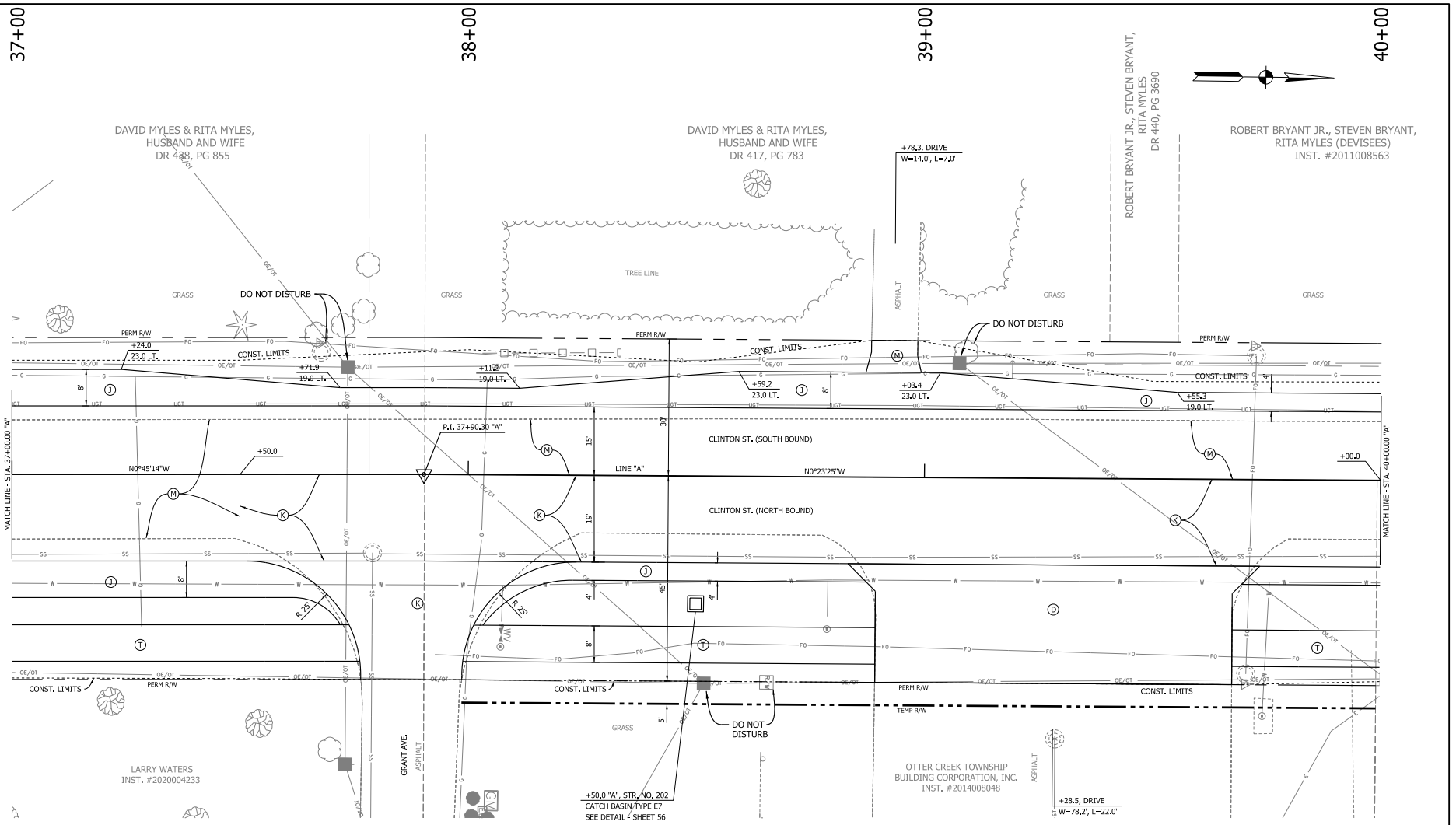
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 34+00.00 TO 37+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	38 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



P.I. = 37+90.30
N = 221994.21
E = 809997.64
DELTA = 0°21'49" RT.

(K) FULL DEPTH HMA PAVEMENT
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
(W) WIDENING WITH HMA
FULL DEPTH PAV'T REMOVAL
(C) PCCP FOR DRIVEWAYS
(D) HMA FOR APPROACHES, TYPE C
(F) SIDEWALK, CONCRETE, 4 IN.
(U) MULCHED SEEDING, TYPE U
(J) HMA SHOULDER
(R) CURB RAMP, CONCRETE
(S) SAW CUT REQ'D.
(T) HMA TRAIL
(13) CURB, CONCRETE

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

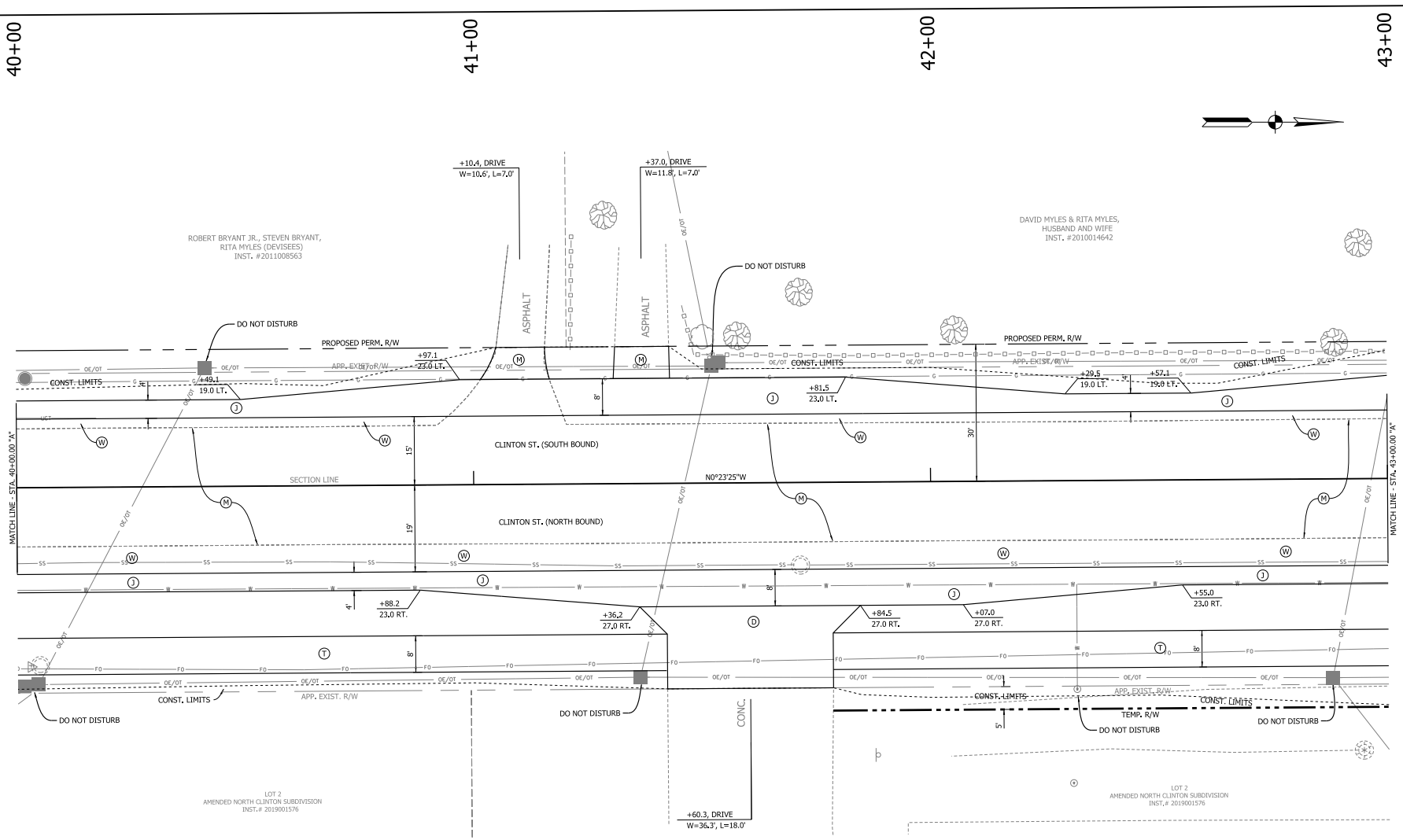
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: DWN DRAWN: DWN
CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 37+00.00 TO 40+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	39 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER	
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE	
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.	
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL	
		(13) CURB, CONCRETE	

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

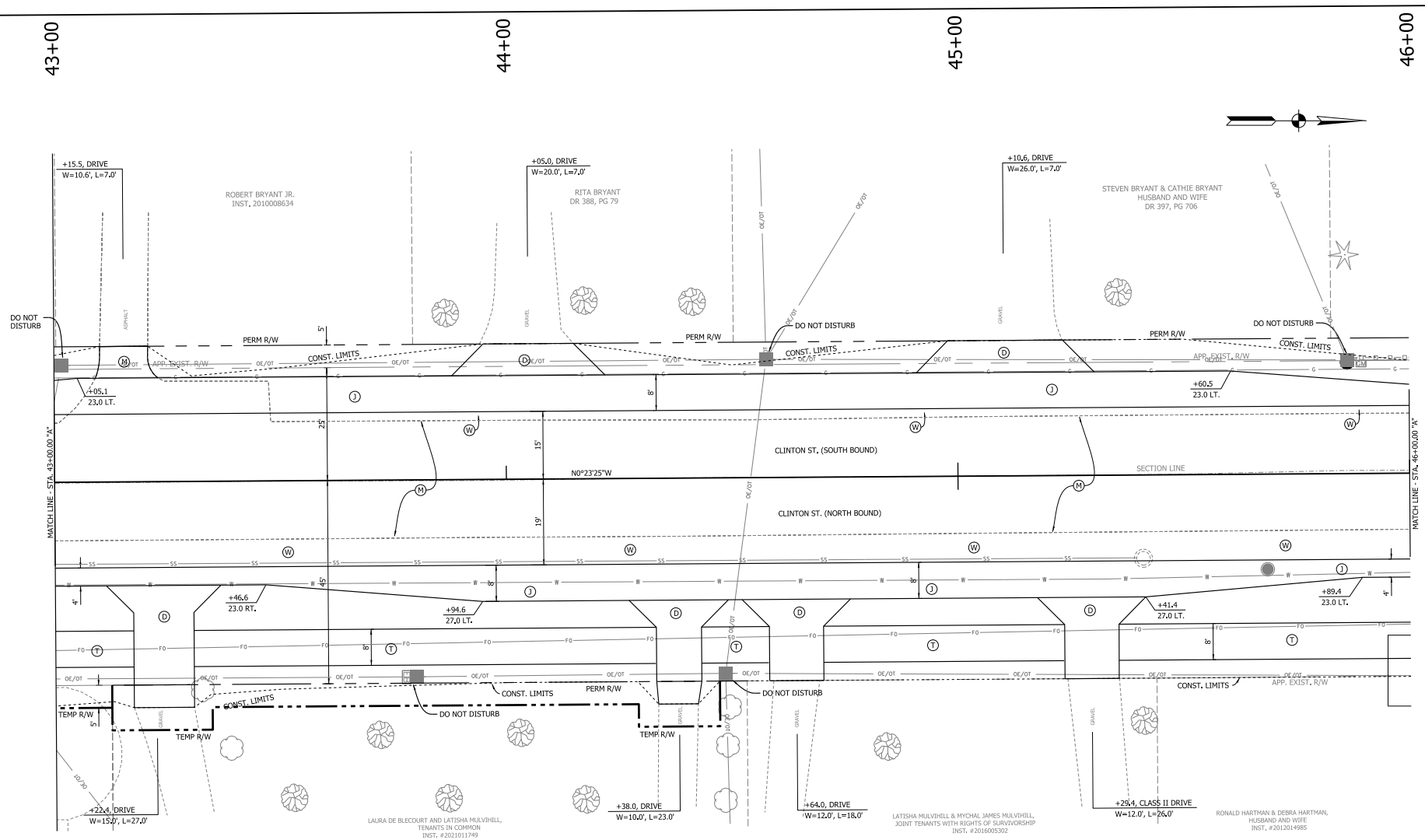
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 40+00.00 TO 43+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	40 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
(W) WIDENING WITH HMA
FULL DEPTH PAV'T REMOVAL

(C) PCCP FOR DRIVEWAYS
(D) HMA FOR APPROACHES, TYPE C
(F) SIDEWALK, CONCRETE, 4 IN.
(U) MULCHED SEEDING, TYPE U

(J) HMA SHOULDER
(R) CURB RAMP, CONCRETE
(S) SAW CUT REQ'D.
(T) HMA TRAIL
(13) CURB, CONCRETE

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

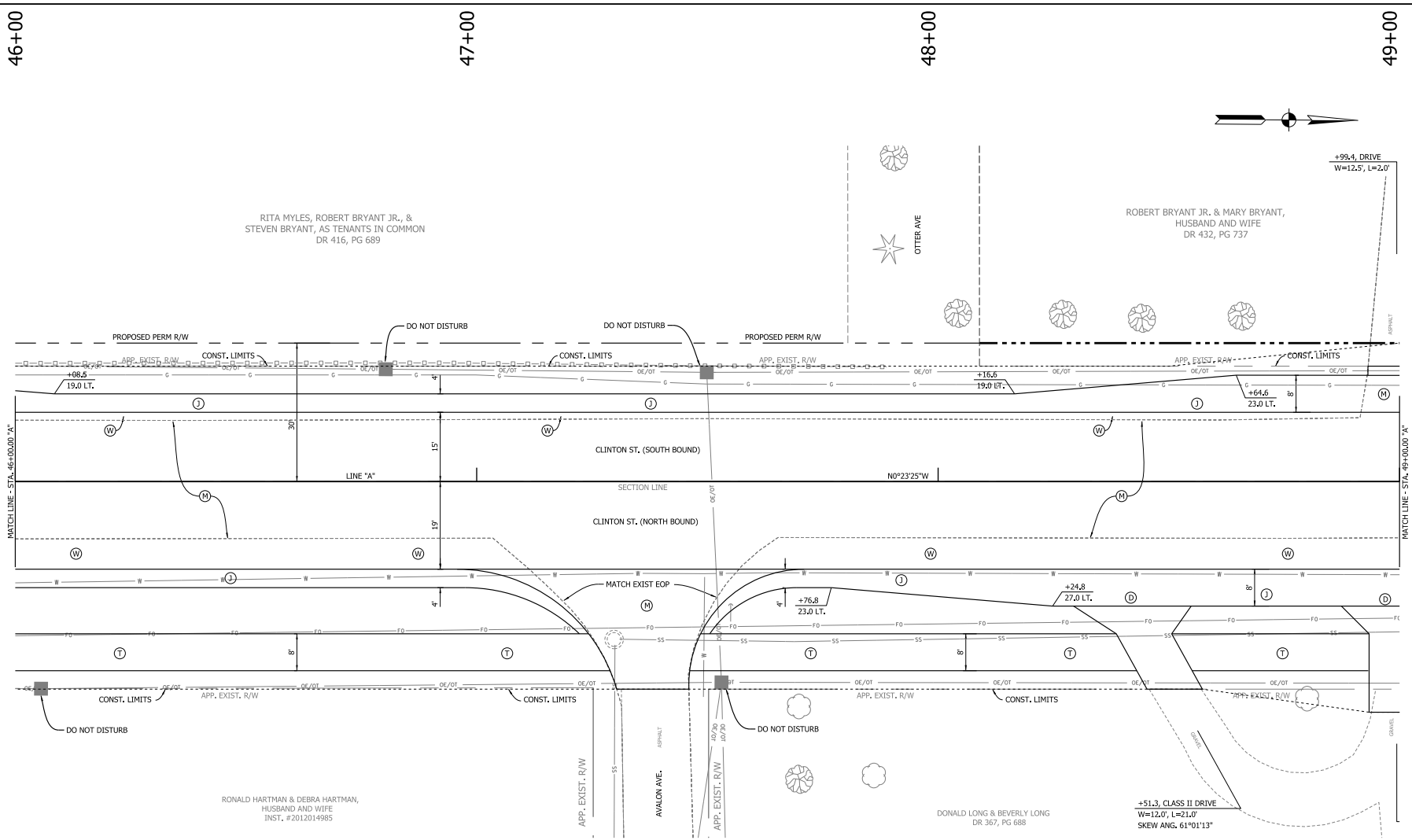
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: DWN DRAWN: DWN
CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 43+00.00 TO 46+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	41 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



- (K) FULL DEPTH HMA PAVEMENT
- (M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
- (W) WIDENING WITH HMA
- FULL DEPTH PAV'T REMOVAL
- (C) PCCP FOR DRIVEWAYS
- (D) HMA FOR APPROACHES, TYPE C
- (F) SIDEWALK, CONCRETE, 4 IN.
- (U) MULCHED SEEDING, TYPE U
- (J) HMA SHOULDER
- (R) CURB RAMP, CONCRETE
- (S) SAW CUT REQ'D.
- (T) HMA TRAIL
- (13) CURB, CONCRETE

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

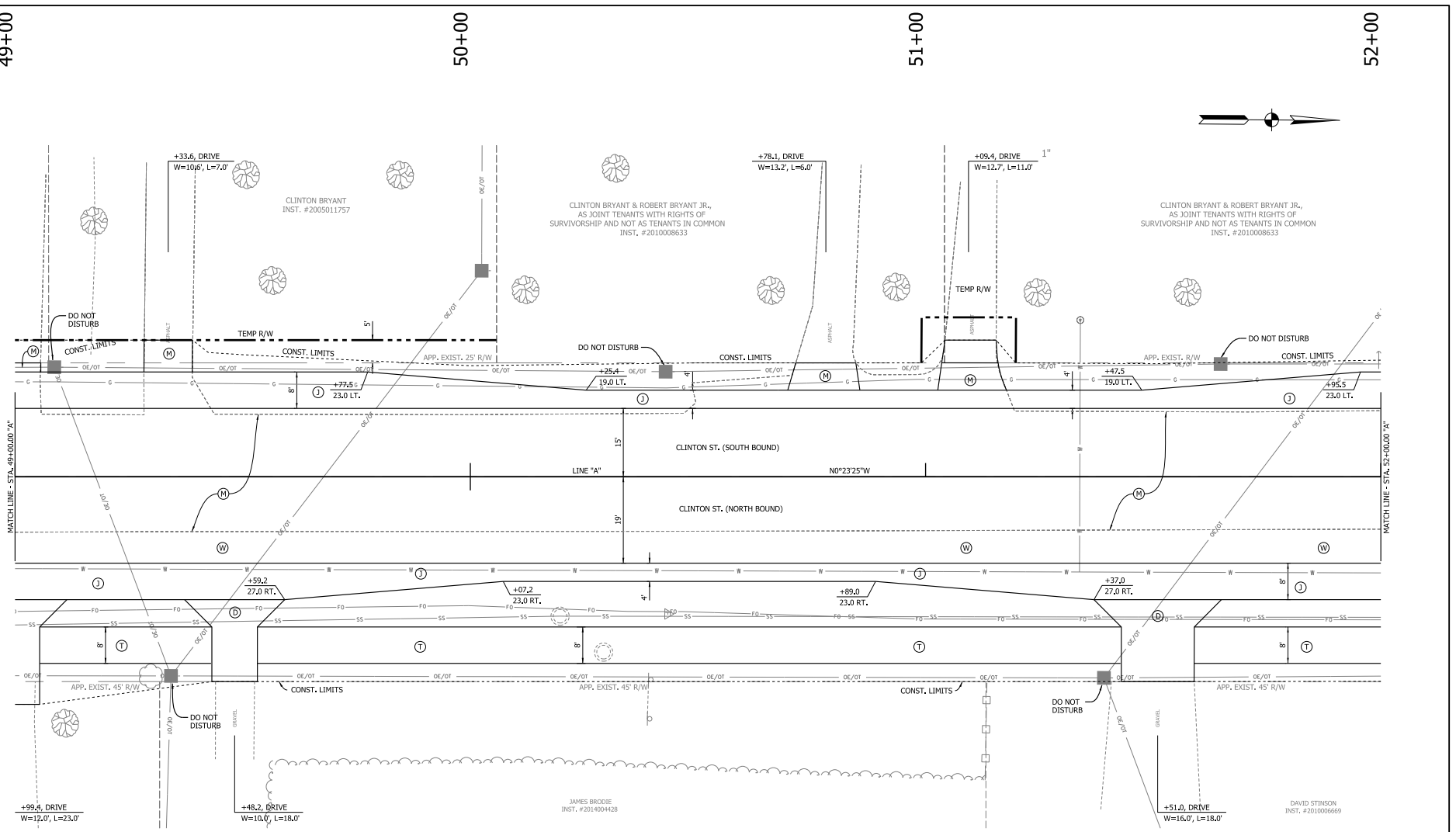
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: DWN | DRAWN: DWN
CHECKED: LRA | CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 46+00.00 TO 49+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	42 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER	
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE	
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.	
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL	
		(13) CURB, CONCRETE	

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

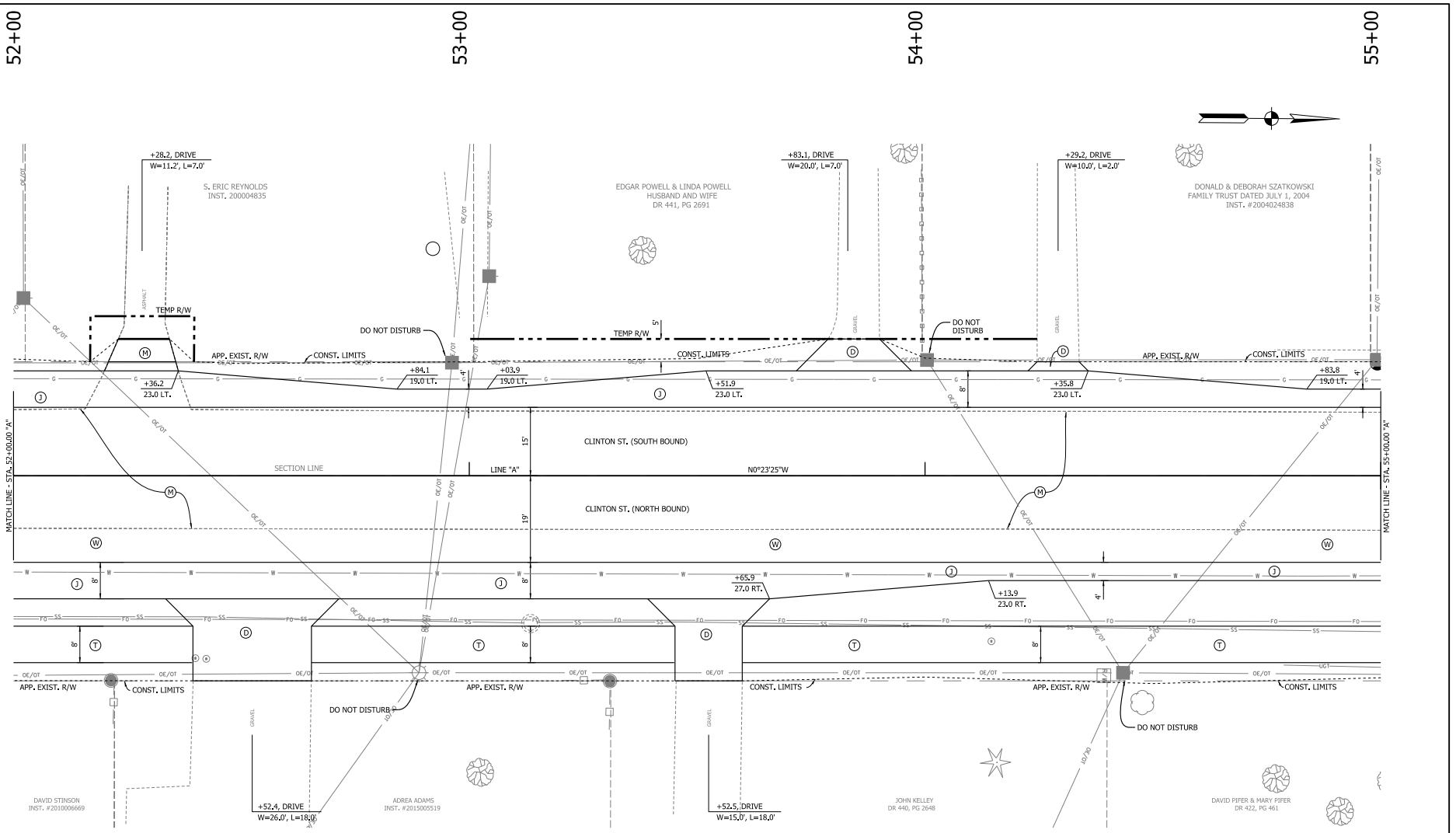
DESIGNED: DWN | DRAWN: DWN

CHECKED: LRA | CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS STA. 49+00.00 TO 52+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	43 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K)	FULL DEPTH HMA PAVEMENT
(M)	VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
(W)	WIDENING WITH HMA
	FULL DEPTH PAV'T REMOVAL
(C)	PCCP FOR DRIVEWAYS
(D)	HMA FOR APPROACHES, TYPE C
(F)	SIDEWALK, CONCRETE, 4 IN.
(U)	MULCHED SEEDING, TYPE U
(J)	HMA SHOULDER
(R)	CURB RAMP, CONCRETE
(S)	SAW CUT REQ'D.
(T)	HMA TRAIL
(13)	CURB, CONCRETE

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

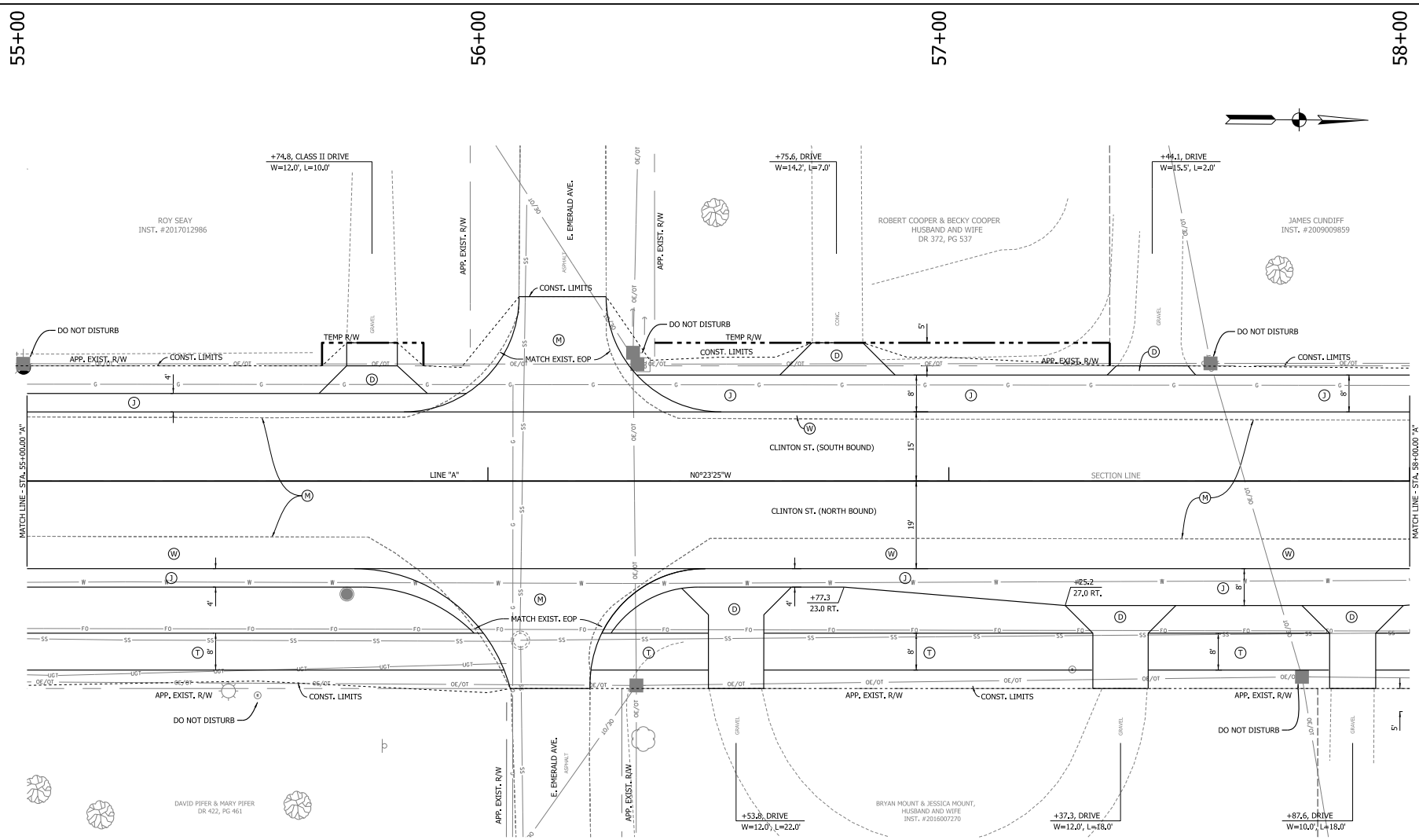
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 52+00.00 TO 55+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	44 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER	
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE	
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.	
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL	
		(13) CURB, CONCRETE	

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

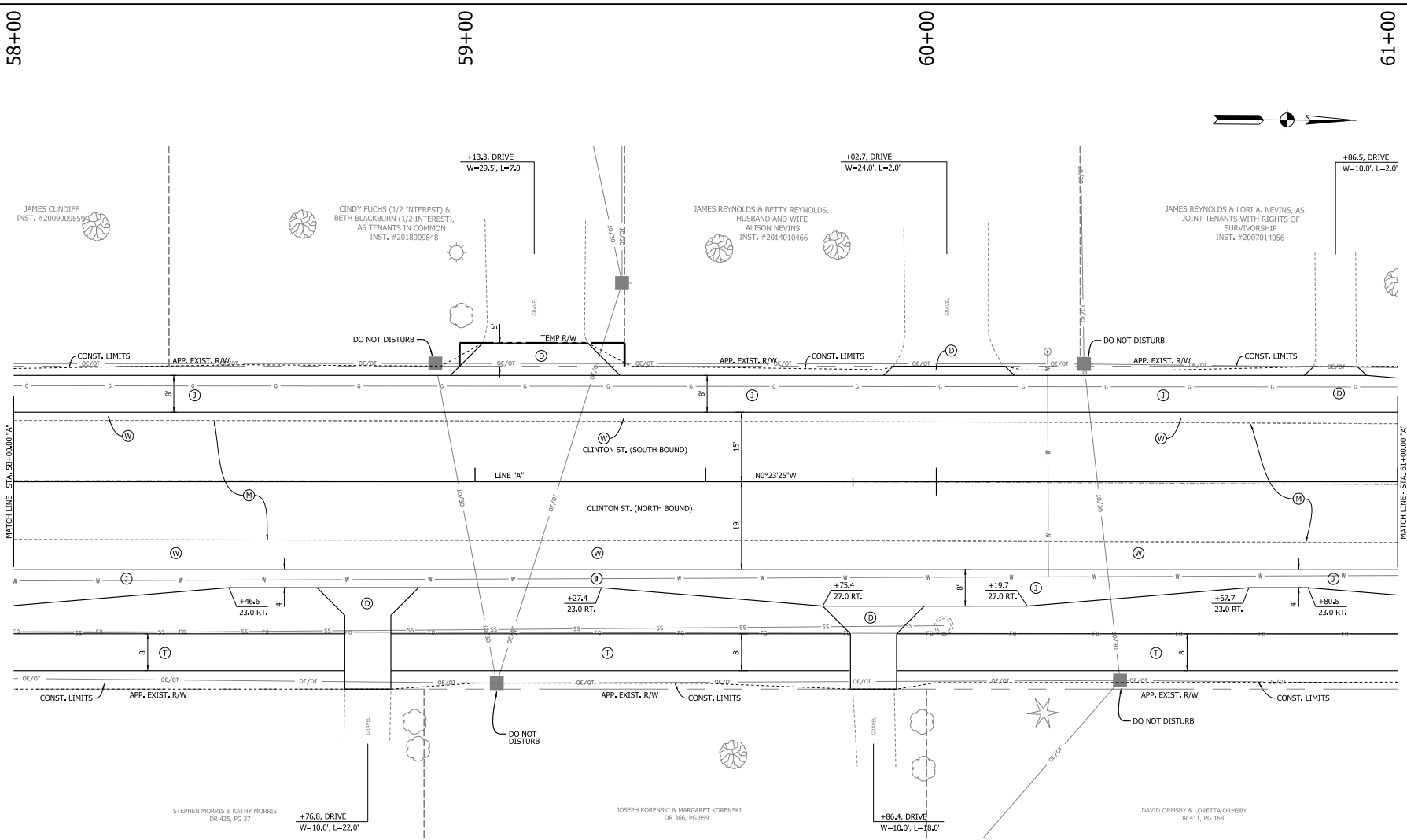
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

DESIGNED: DWN | DRAWN: DWN
CHECKED: LRA | CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 55+00.00 TO 58+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	45 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



- (K) FULL DEPTH HMA PAVEMENT
- (M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
- (W) WIDENING WITH HMA
- FULL DEPTH PAV'T REMOVAL
- (C) PCCP FOR DRIVEWAYS
- (D) HMA FOR APPROACHES, TYPE C
- (F) SIDEWALK, CONCRETE, 4 IN.
- (U) MULCHED SEEDING, TYPE U
- (J) HMA SHOULDER
- (R) CURB RAMP, CONCRETE
- (S) SAW CUT REQ'D.
- (T) HMA TRAIL
- (13) CURB, CONCRETE

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

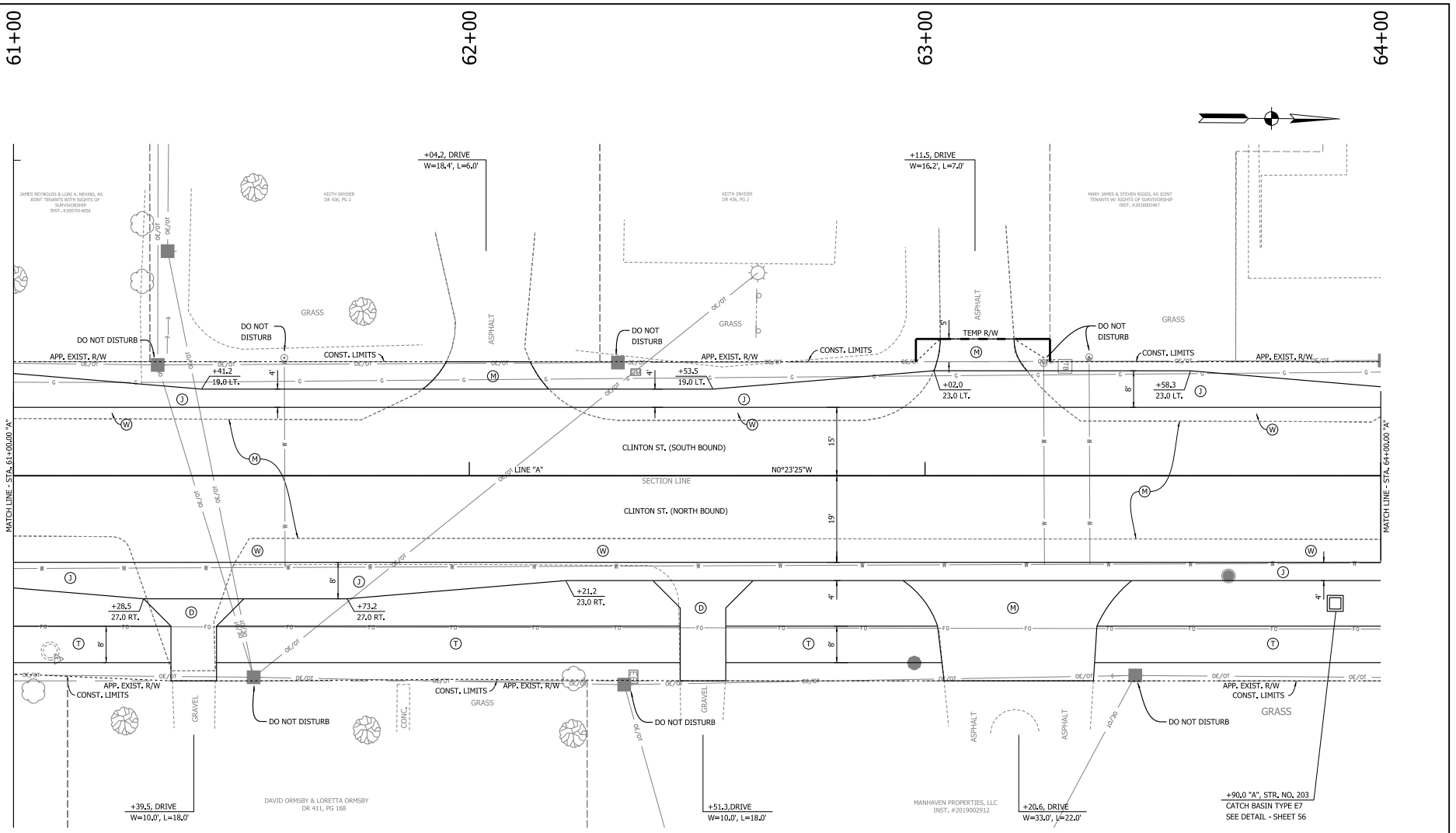
DESIGNED: DWN | DRAWN: DWN

CHECKED: LRA | CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 58+00.00 TO 61+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	46 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL
		(13) CURB, CONCRETE

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

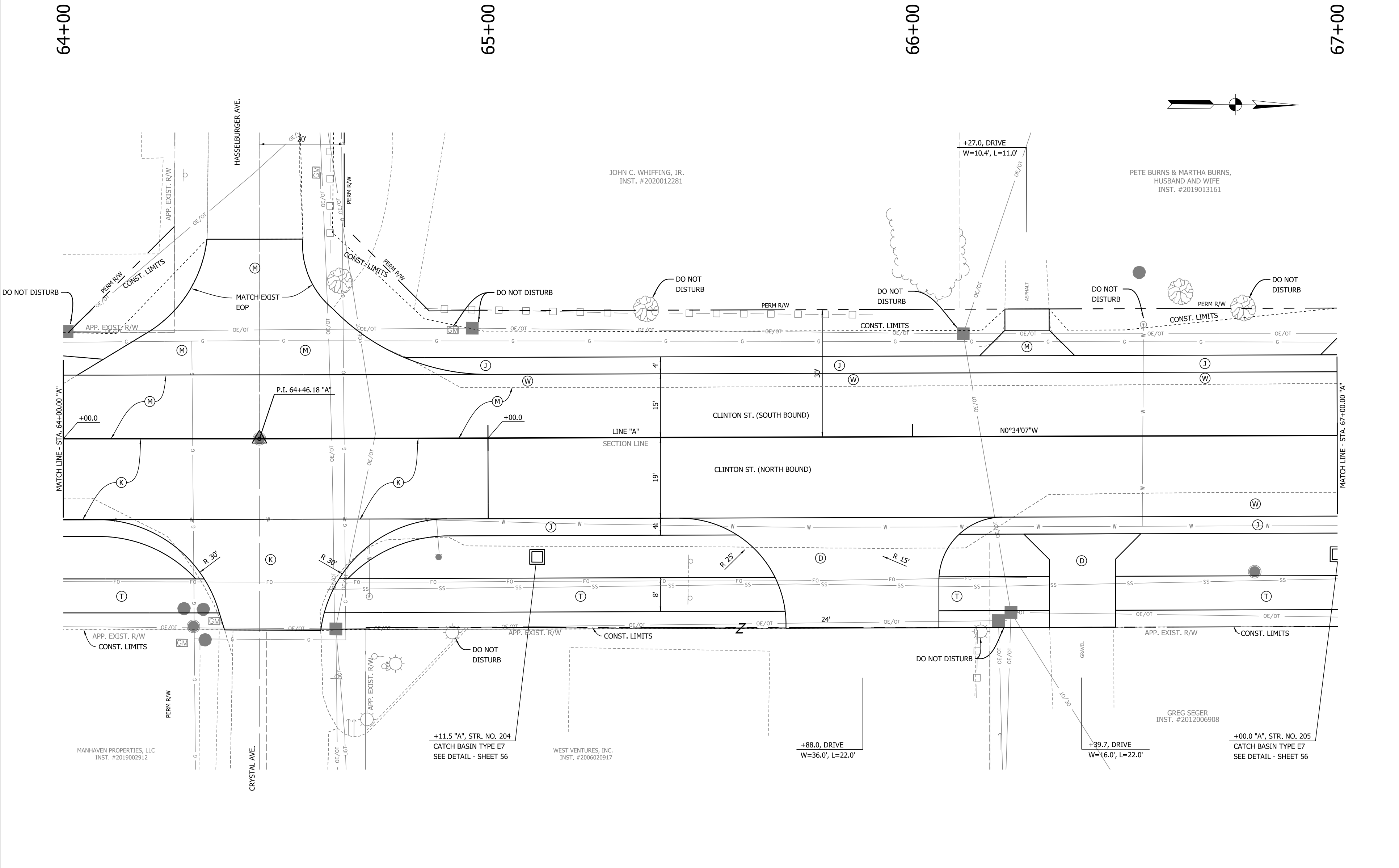
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 61+00.00 TO 64+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	47 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K)	FULL DEPTH HMA PAVEMENT
(M)	VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY
(W)	WIDENING WITH HMA
(hatched)	FULL DEPTH PAV'T REMOVAL
(C)	PCCP FOR DRIVEWAYS
(D)	HMA FOR APPROACHES, TYPE C
(F)	SIDEWALK, CONCRETE, 4 IN.
(U)	MULCHED SEEDING, TYPE U
(J)	HMA SHOULDER
(R)	CURB RAMP, CONCRETE
(S)	SAW CUT REQ'D.
(T)	HMA TRAIL
(13)	CURB, CONCRETE

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

RECOMMENDED FOR APPROVAL ______ DESIGN ENGINEER ______ DATE

DESIGNED: DWN DRAWN: DWN
CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 64+00.00 TO 67+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS 48 of 125
CONTRACT	PROJECT
R-42521	2021-081-S

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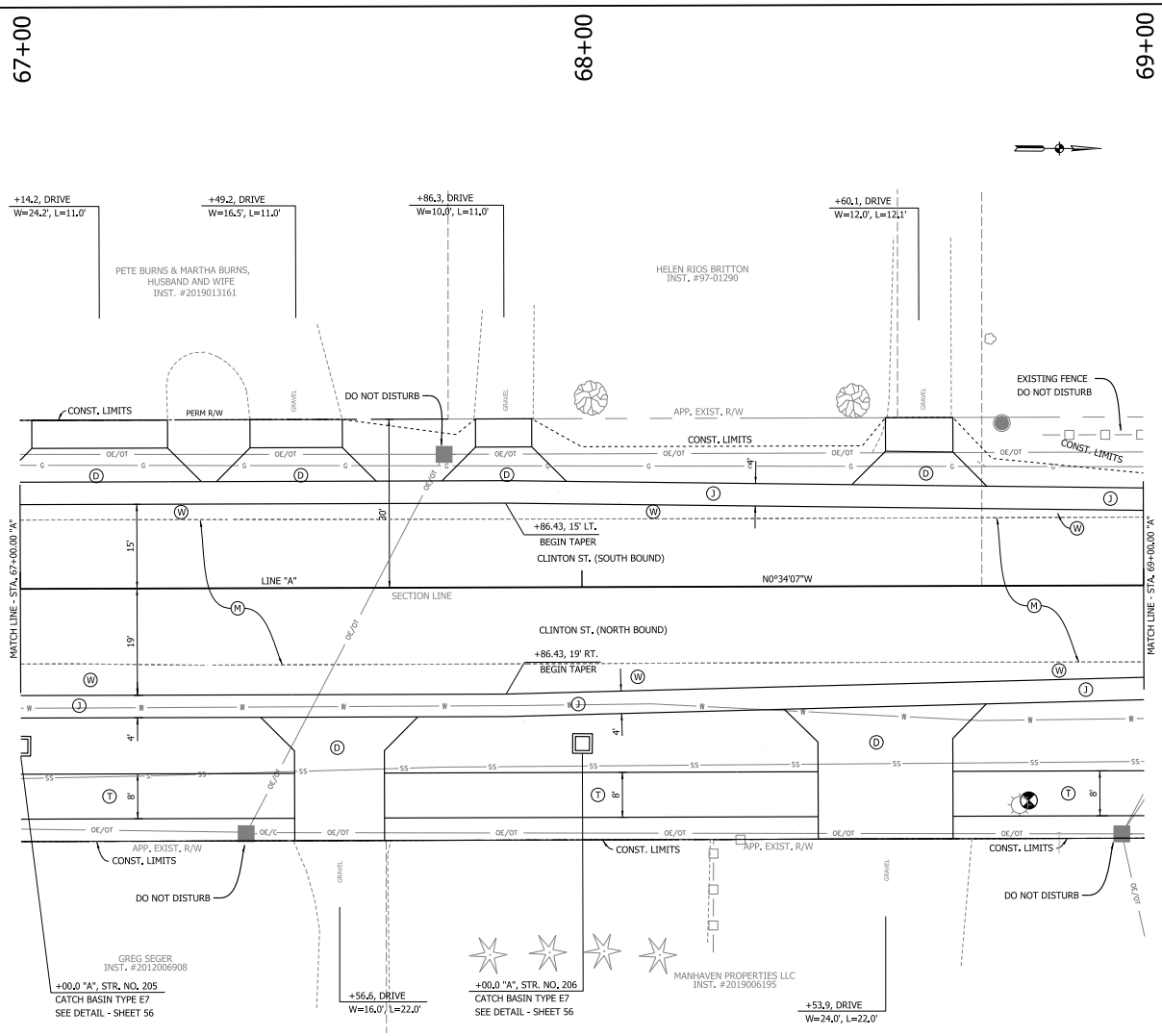
6/22/2023



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER	
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE	
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.	
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL	
		(13) CURB, CONCRETE	

PRELIMINARY
NOT FOR CONSTRUCTION
6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

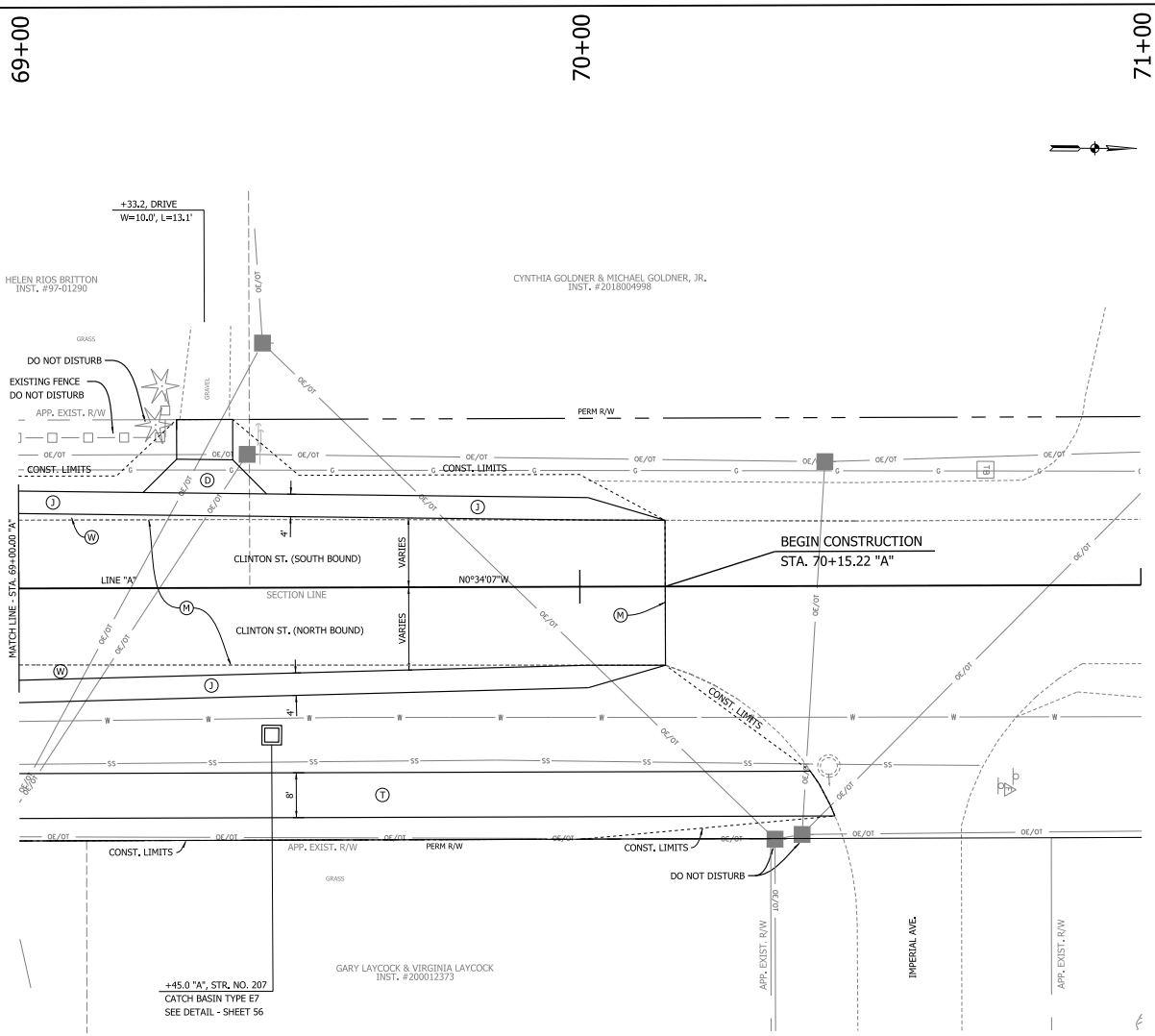
DESIGNED: DWN DRAWN: DWN

CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS STA. 67+00.00 TO 69+00.00 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	49 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



(K) FULL DEPTH HMA PAVEMENT	(C) PCCP FOR DRIVEWAYS	(J) HMA SHOULDER
(M) VARIABLE DEPTH MILLING W/ HMA PAV'T OVERLAY	(D) HMA FOR APPROACHES, TYPE C	(R) CURB RAMP, CONCRETE
(W) WIDENING WITH HMA	(F) SIDEWALK, CONCRETE, 4 IN.	(S) SAW CUT REQ'D.
FULL DEPTH PAV'T REMOVAL	(U) MULCHED SEEDING, TYPE U	(T) HMA TRAIL
		(13) CURB, CONCRETE

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

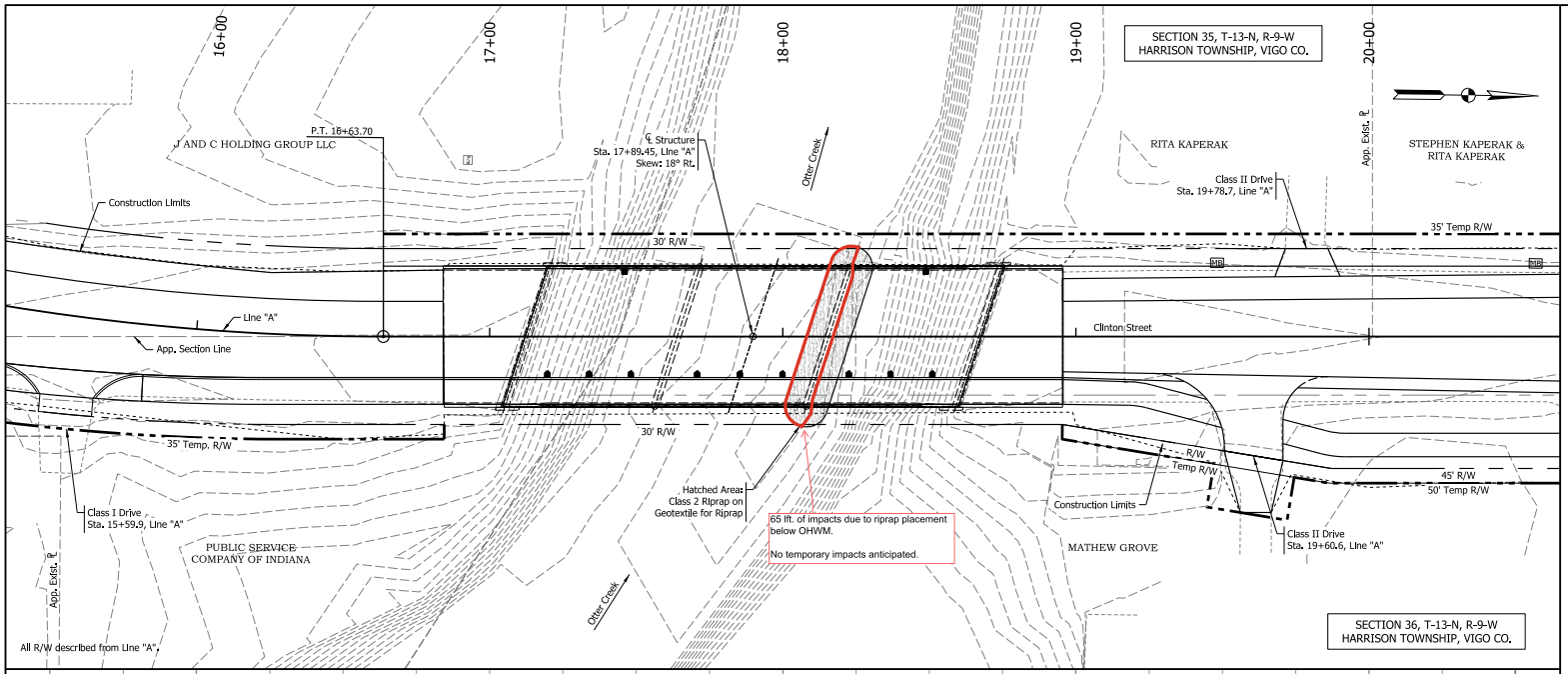
DESIGNED: DWN DRAWN: DWN

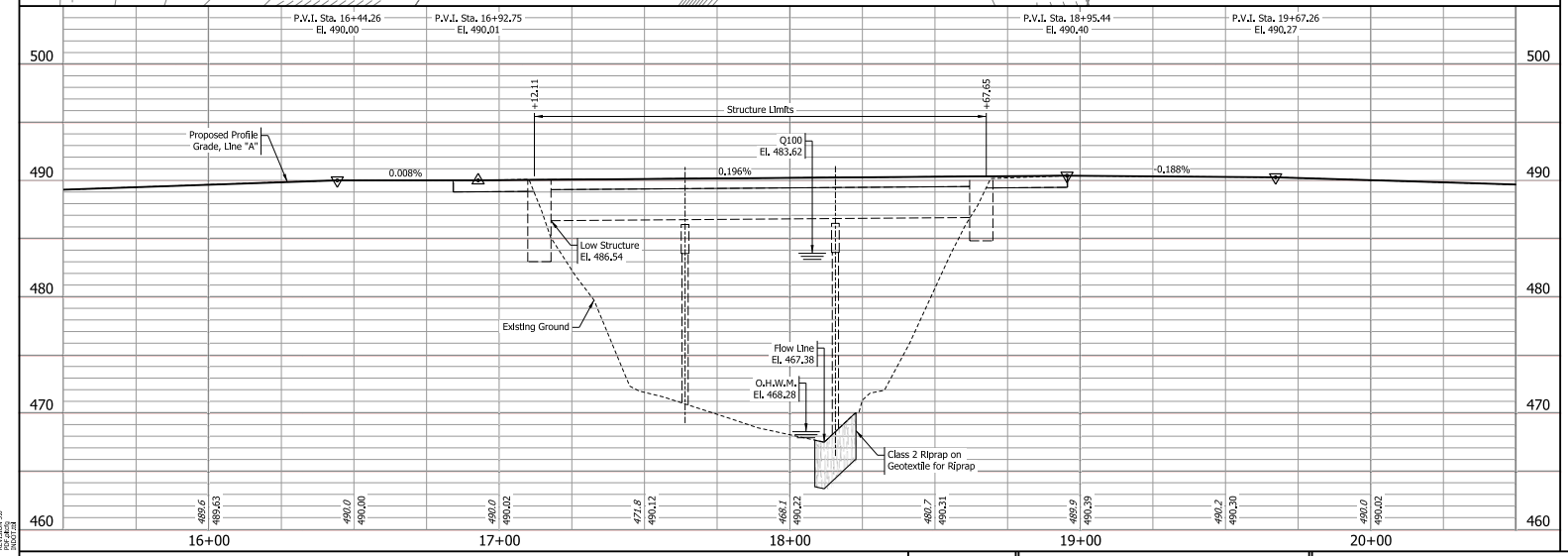
CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 67+00.00 TO 70+15.22 "A"

HORIZONTAL SCALE	BRIDGE FILE
1" = 10'	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	50 of 125
CONTRACT	PROJECT
R-42521	2021-081-S





EXISTING STRUCTURE

Existing Structure originally built in 1993 is a 155.5 ft. 3-span prestressed concrete box beam Bridge. Existing Structure to be Rehabilitated.

HYDRAULIC DATA

Dralnage Area Upstream	116.5	sq ml
Q100 Discharge Upstream	12400	cfs
Q500 Discharge Upstream	16740	cfs
Existlng Q100 Headwater Elevatlon	484.55	ft
Existing Q100 Elevatlon	483.62	ft
Existlng Q100 Backwater	0.47	ft
Existing Gross Waterway Area Opening Below Q100	1330.62	sq ft
Existlng Q100 Average Velocity	9.92	ft/sec
Existlng Q100 Road Overflow Area	0.00	sft
Existing Low Structure Elevation	486.54	ft
Existlng Skew to Flowlne of Waterway	18	deg

HYDRAULIC SCOUR DATA

	Q100		Q500	
Discharge	12400	cfs	16740	cfs
Contraction Scour Depth	2.93	ft	4.57	ft
Pier Scour Depth	3.60	ft	3.60	ft
Total Scour Depth	6.53	ft	8.17	ft
Flow Line Elevation	467.38	ft	467.38	ft
Low Scour Elevation	460.85	ft	459.21	ft
Maximum Velocity	12.22	ft/sec	15.2	ft/sec
D50 (Assumed)	0.01	mm	0.01	mm

EARTHWORK TABULATION

Fill +20%	XXX	Cys
Common Excavation	XXX	Cys
Usable Waterway Excavation (70%)	XXX	Cys
Surplus/Waste	XXX	Cys
Wet Excavation	XXX	Cys
Waterway Excavation	XXX	Cys
Foundation Excavation Unclassified	XXX	Cys
Benching (Estimated)	XXX	Cys

PRESTRESSED CONCRETE BOX BEAM BRIDGE
3 SPANS; 51'-1¼", 51'-9", 51'-1¼"
45'-3" CLEAR ROADWAY; 18° SKEW, RT.
CLINTON STREET OVER OTTER CREEK
VIGO COUNTY, IN

PFC
12/21/2022

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE

DESIGNED: DWN DRAWN: DWN
CHECKED: LRA CHECKED: DPL

INDIANA DEPARTMENT OF TRANSPORTATION

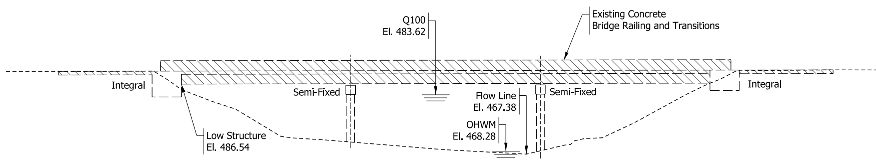
LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	N/A
VERTICAL SCALE	DESIGNATION
1" = 5'	1901781
SURVEY BOOK	SHEETS
	52 of 106
CONTRACT	PROJECT
R-42521	2021-081-S

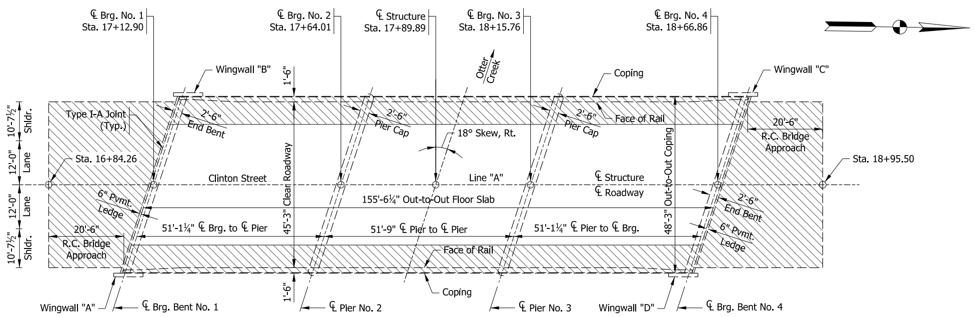
EXISTING STRUCTURE

Existing Structure originally built in 1993 is a 155.5 ft. 3-span prestressed concrete box beam Bridge. Existing Structure to be Rehabilitated. Existing Plans are not available for this structure.

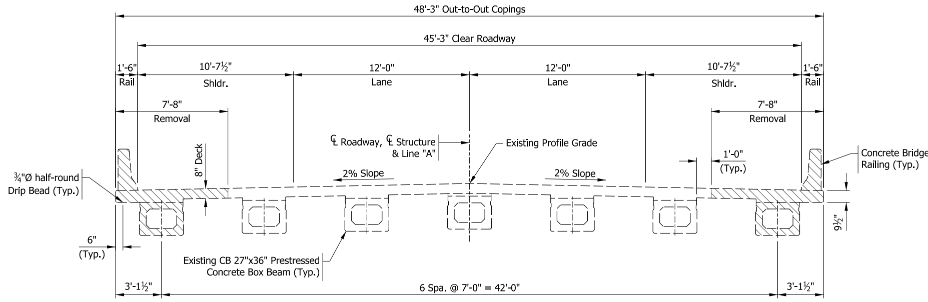
STRUCTURE BUILT TO AN APPROXIMATE 0.196% GRADE



ELEVATION
Scale: 1/16" = 1'-0"



PLAN
Scale: 1/16" = 1'-0"



TYPICAL SECTION
Scale: ¼" = 1'-0"

Hatched Area: Limits of Removal

PRESTRESSED CONCRETE BOX BEAM BRIDGE
3 SPANS: 51'-1¼", 51'-9", 51'-1¼"
45'-3" CLEAR ROADWAY; 18° SKEW, RT.
CLINTON STREET OVER OTTER CREEK
VIGO COUNTY, IN

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12/5/2022
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PFC
12/21/2022

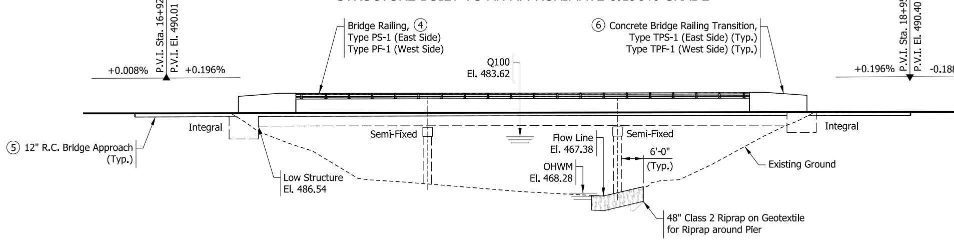
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE
DESIGNED: DWN	DRAWN: DWN		
CHECKED: LRA	CHECKED: DPL		

INDIANA DEPARTMENT OF TRANSPORTATION

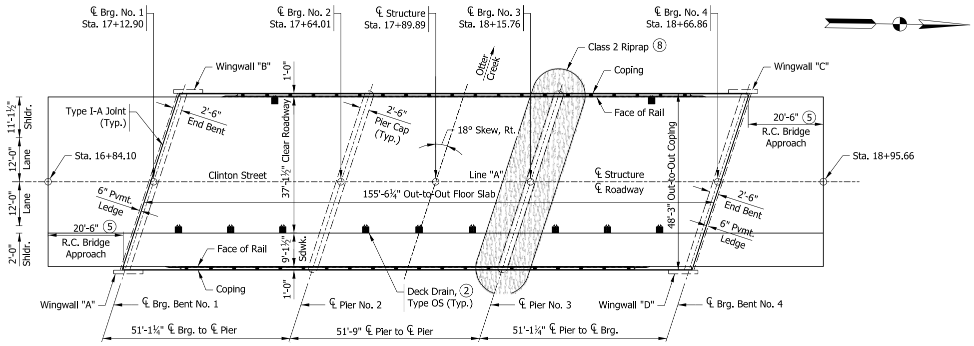
EXISTING GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	53 of 106
CONTRACT	PROJECT
R-42521	2021-081-S

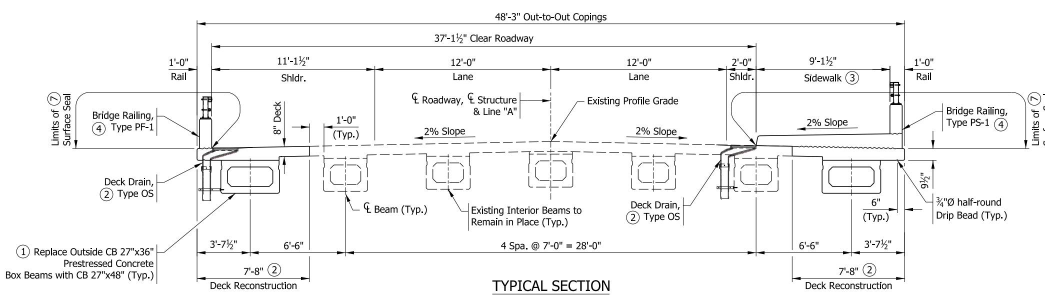
STRUCTURE BUILT TO AN APPROXIMATE 0.196% GRADE



ELEVATION
Scale: 1/16" = 1'-0"



PLAN
Scale: 1/16" = 1'-0"



TYPICAL SECTION
Scale: ¼" = 1'-0"

GENERAL NOTES

Reinforcing steel cover shall be 2½" in top and 1" minimum in bottom of floor slab, and 2" in all other parts unless noted otherwise.

Chamfered edges shall be 1" unless noted otherwise.

Clean and Surface Seal all proposed concrete areas from top of Deck copings to front face of Bridge Rails, and including exposed vertical portions of End Bents. Surface Seal on vertical surfaces to be in accordance with Article 709.05. Concrete Bridge Deck and Approach Slabs do not require Surface Seal per INDOT Design Memo 21-12 and INDOT Standard Specification 702-R-691. (Estimated Surface Seal = XXX Sft.)

All reinforcing steel to be Epoxy Coated.

Where proposed construction is to be fitted with existing structure, the Contractor shall field-check structure dimensions and conditions for accuracy. Any discrepancies shall be reported to Engineer and assume responsibility for correctness and the fit of proposed construction to existing.

DESIGN DATA

LIVE LOAD
Bridge originally designed for HS 20-44, in accordance with 1993 AASHTO Specifications.

Superstructure designed for HS-20 loading in accordance with AASHTO Standard Specifications, 17th Edition and interims.

DEAD LOAD
Actual weight plus 35 psf for future wearing surface.

FLOOR SLAB
Designed with 7 1/2" minimal structural depth plus 1/2" sacrificial wearing surface.

CONCRETE
Class A f'c = 3,500 psi
Class B f'c = 3,000 psi
Class C f'c = 4,000 psi

REINFORCING STEEL
Grade 60 fy = 60,000 psi

SCOPE OF WORK LEGEND

1. Replace Exterior Box Beams
2. Replace Reinforced Concrete Deck and Install Bridge Deck Drains, OS
3. Construct Concrete Curb and Sidewalk
4. Replace Concrete Bridge Railing, Type PS-1 and PF-1 (E 706-BRPP)
5. Replace Reinforced Concrete Bridge Approach (E 609-RCBA)
6. Replace Concrete Bridge Railing Transition, Type TPF-1 (E 706-TTPP)
7. Surface Seal Bridge Railing and Sidewalk
8. Install Class 2 Riprap at Pier 3

PRESTRESSED CONCRETE BOX BEAM BRIDGE
3 SPANS: 51'-1¼", 51'-9", 51'-1¼"
37'-1½" CLEAR ROADWAY; 18° SKEW, RT.
CLINTON STREET OVER OTTER CREEK
VIGO COUNTY, IN

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12/5/2022
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PFC 12/21/2022

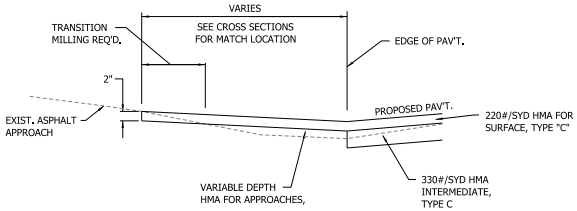
RECOMMENDED FOR APPROVAL ____ DESIGN ENGINEER ____ DATE

DESIGNED: DWN DRAWN: DWN
CHECKED: LRA CHECKED: DPL

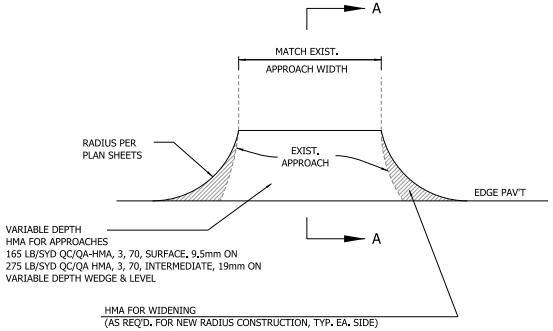
INDIANA DEPARTMENT OF TRANSPORTATION

PROPOSED GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	N/A
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	54 of 106
CONTRACT	PROJECT
R-42521	2021-081-S

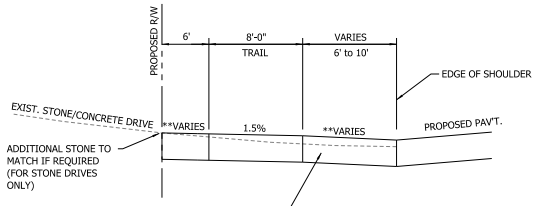


SECTION A-A



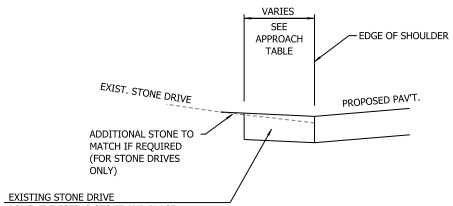
APPROACH DETAIL (ASPHALT)

NOT TO SCALE



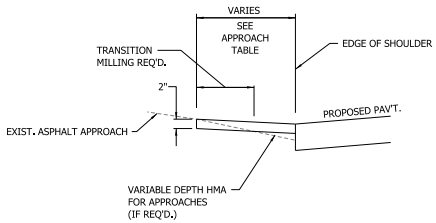
SECTION A-A

EXISTING CONCRETE DRIVE
REMOVE EXISTING CONCRETE AND PLACE
(660#/SYD) HMA FOR APPROACHES ON
EXISTING SUBGRADE

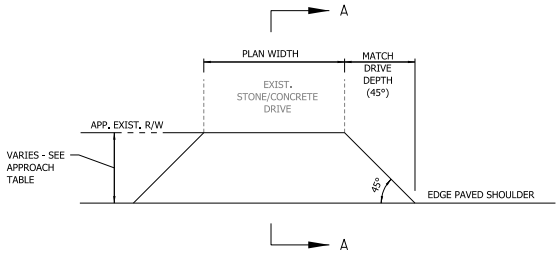


SECTION A-A

EXISTING CONCRETE DRIVE
REMOVE EXISTING CONCRETE AND PLACE
(660#/SYD) HMA FOR APPROACHES, TYPE C ON
EXISTING SUBGRADE

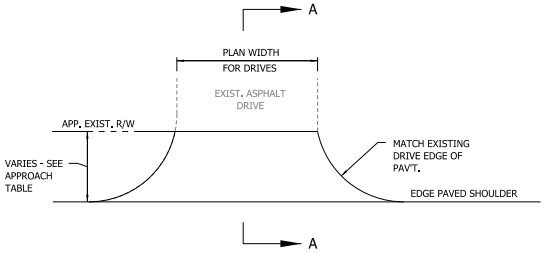


SECTION A-A



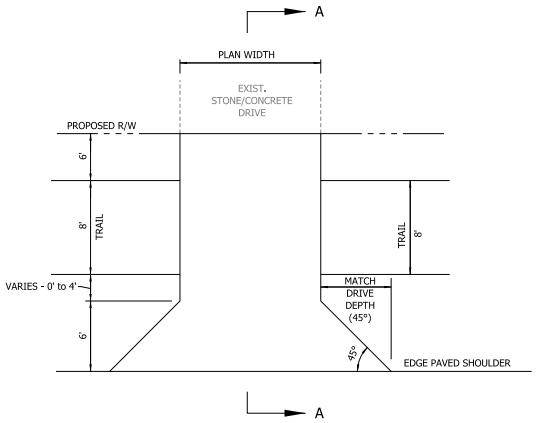
DRIVE DETAIL (EXISTING STONE & CONCRETE) LT. - NO TRAIL

NOT TO SCALE



DRIVE DETAIL (EXSITING ASPHALT) LT.

NOT TO SCALE



DRIVE DETAIL (EXISTING STONE, CONCRETE, & ASPHALT) RT. - WITH TRAIL

NOT TO SCALE

PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE

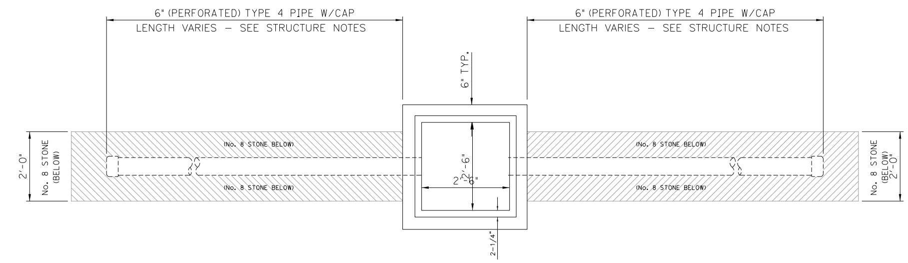
DESIGNED: DWN | DRAWN: DWN

CHECKED: LRA | CHECKED: DPL

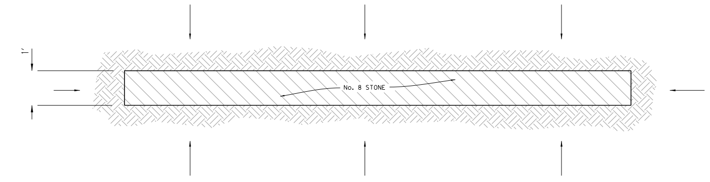
INDIANA DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

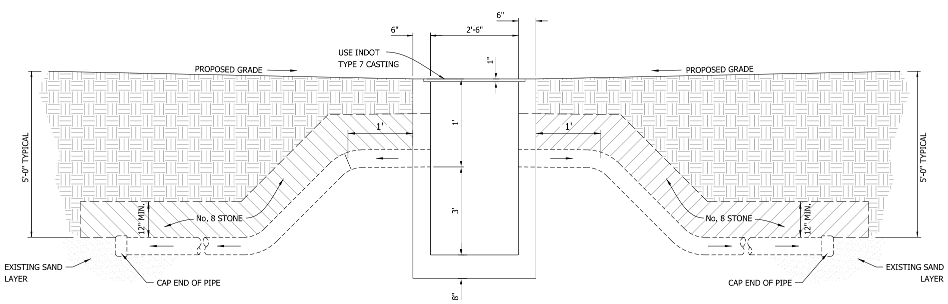
HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	N/A
VERTICAL SCALE	DESIGNATION
	1901781
SURVEY BOOK	SHEETS
	55 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



*No. 8 STONE TO BE WRAPPED AND ENCASED IN GEOTEXTILE



PLAN

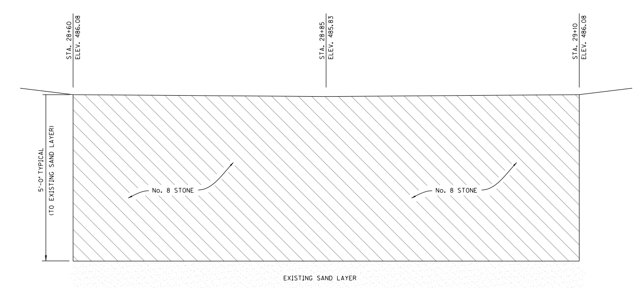


SECTION

*No. 8 STONE TO BE WRAPPED AND ENCASED IN GEOTEXTILE

TYPICAL CATCH BASIN (INDOT TYPE E) STR. 200 & 202

NTS



SECTION

FRENCH DRAIN DETAIL - STA. 28+60 TO 29+10 LT.

NTS

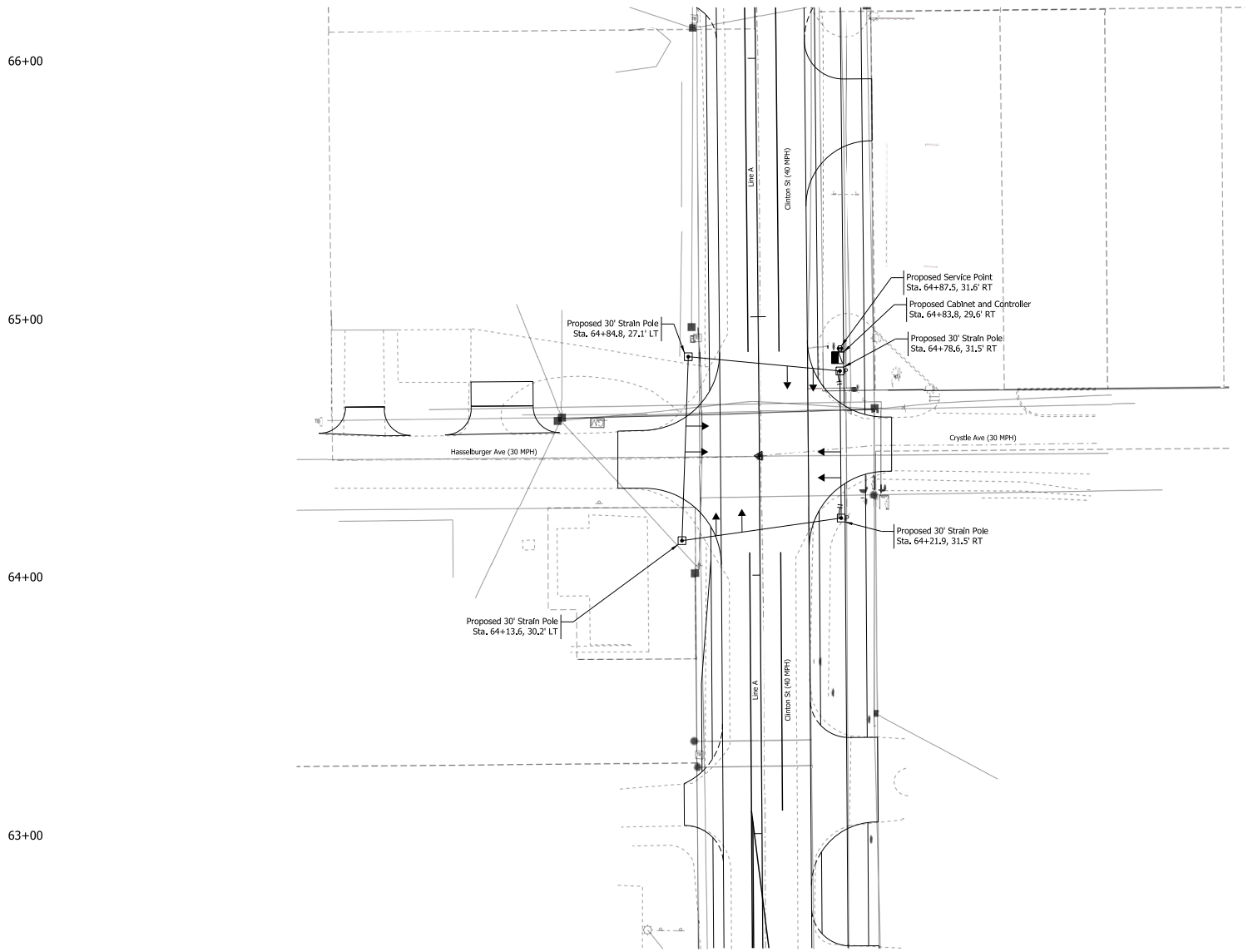
PRELIMINARY NOT FOR CONSTRUCTION 6/16/23

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	
DESIGNED: DWN	DRAWN: DWN		
CHECKED: LRA	CHECKED: DPL		

INDIANA DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	N/A
VERTICAL SCALE	DESIGNATION
	1901781
SURVEY BOOK	SHEETS
	56 of 125
CONTRACT	PROJECT
R-42521	2021-081-S



LEGEND

- 30' Steel Strain Pole & Foundation
- TS2 Controller and "P-1" Cabinet Min. 8 Phase on "P-1" Foundation
- Signal Handhole, Type 1
- Traffic Signal Head, 3 Face, 12": Red, Yellow, Green
- Disconnect Hanger
- Pedestrian Countdown Signal Head, International Symbols, 18"
- Signal Service Pedestal on "A" Foundation
- Detector Housing
- Conduit, HDPE, Schedule 80, 2 in.
- P Pedestrian Push Button

RECOMMENDED FOR APPROVAL
DESIGN ENGINEER DATE

DESIGNED: MJM
DRAWN: MJM
CHECKED: RLH
CHECKED: RLH

INDIANA
DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION
CLINTON ST & HASSELBURGER/CRYSTLE AVE

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	
VERTICAL SCALE	DESIGNATION
N/A	1901781
SURVEY BOOK	SHEETS
	57 of 106
CONTRACT	PROJECT
	1901781

Plot: 10/20/2022 2:11 PM
\\wsppw14ics01\jCS_pdf_work_dir\69141\447833_1\Sht TR Signal 20_01.dgn

APPENDIX C:
Early Coordination

Sample

May 1, 2023

{See Attached List}

Re: Early Coordination
Designation Number (Des. No.) 1901781
Road Revitalization and Bridge Rehabilitation, from Park Avenue (Ave.) to Imperial Ave.,
including Structure No. 84-00242/Vigo Co. Bridge No. 242: Clinton Street (St.) over Otter Creek,
0.10 Mile North of Park Ave., Otter Creek Township, Vigo County, Indiana

Dear Agency:

Vigo County intends to proceed with a proposed road revitalization and bridge rehabilitation project in the city of Terre Haute. This letter is part of the early coordination phase of the environmental review process. We are requesting comments from your area of expertise regarding any possible environmental effects associated with this project. **Please use the above designation number and description in your reply**. We will incorporate your comments into a study of the project's environmental impacts.

The project is located along Clinton St., from Park Avenue to Imperial Avenue and includes the rehabilitation of Structure No. 84-00242 over Otter Creek; located approximately 0.10 mile north of Park Ave. in Vigo County, Indiana. Specifically, the project is located in Sections 35, 36, 25, 26, Township 12 North, Range 9 West of the Rosedale, Indiana 7.5-minute United States Geological Survey (USGS) topographic quadrangle. Clinton Street is classified as a Non-Freeway, Urban-Principal Arterial roadway that consists of two 12 foot (ft.) wide through-lanes bordered by 2 to 4 ft. wide variable paved shoulders. No sidewalks are present along Clinton Street. The legal speed limit along Clinton Street is 40 miles per hour (mph). Land use in the vicinity of the project is primarily agricultural and residential.

At this time, the preferred alternative includes construction of a continuous three-lane roadway section in place of the existing two-lane section. The three-lane section will consist of two full travel lanes with a continuous center two-way left-turn lane (TWLTL). The addition of the continuous center TWLTL will allow left turn movements to take place along the corridor without stopping the free flow of traffic in the two travel lanes, thereby significantly reducing congestion and the adverse issues associated with congestion along the corridor, namely, accidents, travel delays and air pollution. The reconstruction project will utilize the existing pavement, widening along the east side of Clinton Street, with hot mix asphalt (HMA) overlays on the existing pavement. Options of sidewalks, a multi-use trail, shoulders or curbs and drainage related issues will be evaluated for inclusion into the project. The cconstruction of a traffic signal at the intersection of Clinton Street and Hasselburger Avenue is planned. Americans with Disabilities Act (ADA) compliant curb ramps and pedestrian push buttons and heads will be installed at this intersection. Structure No. 84-00242/ Vigo Co. Bridge No. 242 over Otter Creek will be rehabilitated (i.e., remove the superstructure, repair foundations as necessary, widen piers and abutments, widen and replace the superstructure, and install riprap at the piers). Acquisition of more than 0.5 acre of permanent right-of-way will likely be required for this project. Maintenance of traffic will likely include temporary lane restrictions where required; however, traffic on Clinton St. will be maintained for the duration of the project. The project is scheduled to begin in the Fall of 2026 and is anticipated to last until Winter of 2027.

The existing structure (Structure No. 84-00242/Vigo Co. Bridge No. 242) is a prestressed concrete continuous bridge constructed in 1993. The structure length is 156 ft., with a curb-to-curb width of 45.5 ft., out-to-out deck width of 48.3 ft., and a skew of 18 degrees. In the most recent *Bridge Inspection Report*, dated July 19, 2021, the bridge deck and wearing surface were given a condition rating of 7 (Good condition) out of 9 (Excellent condition), indicating an overall good condition with minor problems. The bridge superstructure and substructure were given a condition rating of 5 (Fair condition) out of 9 (Excellent condition), indicating minor section loss. The deck has scattered hairline cracks and pop-outs throughout the concrete, multiple defects in the approach slabs, and the expansion joint is cracked in several locations. There are wide cracks on the superstructure at Pier 2 of Span A and scattered hairline cracks along pier caps, as well as

one and half feet of footing exposed at the south end of the north pier. An aluminum and concrete railing system is provided in both directions across the bridge.

One mapped stream, Otter Creek, is located within the project area. Metric Environmental will perform Waters of the US determination and coordinate with INDOT Ecology and Waterways Permitting Office (EWPO) to prepare a Waters Determination Report and submit the appropriate Clean Water Act permit applications.

This project appears to qualify for the application of the USFWS range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat and project information will be submitted through USFW's Information for Planning and Consultation (IPaC) separately.

This project appears to fall under Category B of the Minor Projects Programmatic Agreement (MPPA) among the FHWA, INDOT, the Advisory Council on Historic Preservation, and the Indiana State Historic Preservation Office Regarding the Implementation of the Federal Aid Highway Program in the State of Indiana (2006, Rev. 2018). Metric will coordinate with the INDOT Cultural Resources Office for verification.

Should we not receive your response within thirty (30) calendar days from the date of this letter, it will be assumed that your agency believes 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 Nora Hillard, NEPA Staff Scientist, at Metric Environmental, 6958 Hillsdale Court, Indianapolis, Indiana 46250, by telephone at 317.245.6128, or norah@metricenv.com, or Larry Robins, Vigo County Engineer, 3250 East Haythorne Avenue Terre Haute, Indiana 47805, or larry.robbins@vigocounty.in.gov, by telephone at 812.466-9635. Thank you in advance for your input.

Sincerely,

Nora Hillard

Nora Hillard
NEPA Staff Scientist
Metric Environmental, LLC

cc: File No. 21-0068

Paul Lincks, HWC PM, plincks@hwcengineering.com
Larry Robbins, Vigo County Engineer, larry.Robbins@VigoCounty.IN.Gov
Chaila Jordan, INDOT PM, Crawfordsville District, cjordan2@indot.in.gov

Attachments: Recipient List, Location Map, USGS Topographic Map, 2020 Aerial Photograph

Map and Photographs have been
removed and can be found in Appendix B

Federal Highway Administration
Kari Carmany-George-Crawfordsville District
k.carmanygeorge@dot.gov

Indiana Geological and Water Survey
https://igws.indiana.edu/eAssessment

IDEM Wellhead Proximity Determinator
Electronic Review of Location
http://www.in.gov/idem/cleanwater/2456.htm

Environmental Coordinator
Indiana Department of Natural Resources
Division of Fish and Wildlife
environmentalreview@dnr.in.gov

US Department of Housing & Urban
Development Chicago Regional Office, Metcalf
Erik.r.sandstedt@hud.gov

Indiana Department of Transportation
Crawfordsville District
RKurtz@indot.in.gov
cjordan@indot.in.gov

Indiana Department of Transportation
Office of Aviation
TLewandowski@indot.IN.gov

Ms. Deborah Snyder
US Army Corps of Engineers
Louisville District
RegulatoryApplicationsLRL@usace.army.mil

State Conservationist
Natural Resources Conservation Service
john.allen@usda.gov

Eighth Coast Guard District
Eric Washburn
eric.washburn@uscg.mil

Terre Haute Area MPO
Jeremy Weir, Director
jweir@westcentralin.com

Terre Haute Fire Department
Bill Berry, Fire Chief
Chief@terrehaute.in.gov

Terre Haute Police Department
Marc Eldred, Asst. Chief
Marc.eldred@terrehaute.in.gov

Terre Haute City Mayor
Duke Bennett
Mayor@terrehaute.in.gov

Terre Haute Street Department
Streets@terrehaute.in.gov

Vigo County Surveyor
Bruce Allen
Bruce.Allen@VigoCounty.In.Gov

Vigo County Highway Department
Larry Robbins, County Engineer
larry.robins@vigocounty.in.gov

Vigo County Commissioner
Brendan Kearns
Brendan.kearns@vigocounty.in.gov

Vigo County Environmental Health Department
Amanda Bales, Supervisor/Administrator
Amanda.Bales@vigocounty.in.gov

Vigo County Area Planning Department
Jared Bayler
Jared.bayler@vigocounty.in.gov

Vigo County Emergency Management Agency
Dorene Hojnicki – Director
vcema@vidosheriff.in.gov

Vigo County School Corporation
Thomas Balitewicz
thomas.balitewicz@vigoschools.org

North Terre Haute Christian Church
info@nthcc.com

Additional coordination occurred on November 22, 2023:

State Conservationist
Natural Resources Conservation Service
john.allen@usda.gov

Additional coordination occurred on March 6, 2024:

Section Chief, Groundwater Section
Indiana Department of Environmental Management
Aturnbow@idem.IN.gov

Additional coordination occurred on March 7, 2024:

Leisure Acres Mobile Home Park WHPA
J. Agnew
fjagnew@gmail.com

Morris Mobile Home Estates is Rodney Mottesheard WHPA
Rodney Mottesheard
Tim0987as@gmail.com

J & T Water Company
Clint Kremer
765-592-4446

Additional coordination occurred on March 12, 2024:

Vigo County Soil and Water Conservation District
Brendan Kearns
Brendan.Kearns@VigoCounty.in.gov

City of Terre Haute Wastewater Utility
Ed Stewart
Wastewater@terrehaute.in.gov

Vigo County Floodplain Administration
Sydney Shahar
Sydney.shahar@vigocounty.in.gov

INDIANA
GEOLOGICAL SURVEY

Organization and Project Information

Project ID:	21-0068
Des. ID:	1901781
Project Title:	Clinton Road Reconstruction
Name of Organization:	Metric Environmental
Requested by:	Nora Hillard

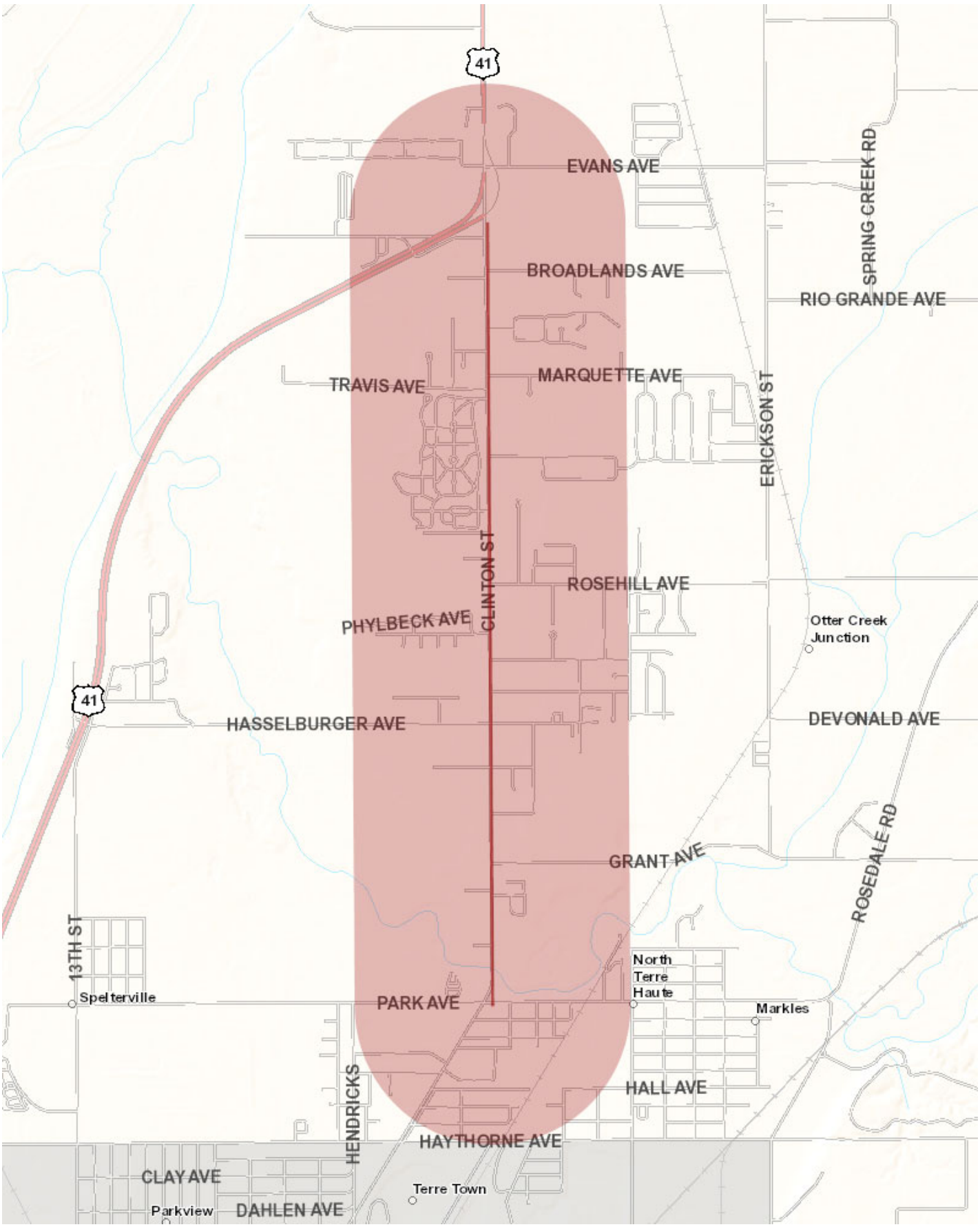
Environmental Assessment Report

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

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

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

Date: May 1, 2023



INDOT - Aviation

From: Lewandowski, Tyler
To: Nora Hillard
Subject: RE: Early coordination - Des. No. 1901781 - Road Revitalization and Bridge Rehabilitation, from Park Ave. to Imperial Ave., including Vigo Co. Bridge No. 242: Clinton St. over Otter Creek, 0.10 Mile North of Park Ave., Vigo County, IN
Date: Wednesday, May 3, 2023 8:16:35 AM
Attachments:

Good morning,

After review, no tall structure permit is required for the project if all equipment being used is under 25 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

Vigo County Health Department

From: Bales, Amanda
To: Nora Hillard
Subject: Re: Early coordination - Des. No. 1901781 - Road Revitalization and Bridge Rehabilitation, from Park Ave. to Imperial Ave., including Vigo Co. Bridge No. 242: Clinton St. over Otter Creek, 0.10 Mile North of Park Ave., Vigo County, IN
Date: Wednesday, May 3, 2023 9:07:51 AM
Attachments:

The Vigo County Health Department has no records on file for this location.

Early Coordination Designation Number (Des. No.) 1901781 Road Revitalization and Bridge Rehabilitation, from Park Avenue (Ave.) to Imperial Ave., including Structure No. 84-00242/Vigo Co. Bridge No. 242: Clinton Street (St.) over Otter Creek, 0.10 Mile North of Park Ave., Otter Creek Township, Vigo County, Indiana

In Health,

Amanda Bales
Vigo County Health Dept.
147 Oak St.
Terre Haute, IN. 47807
812-462-3281

Vigo County Surveyor's Office

Bruce Allen Jr.

Vigo County Surveyor

143 Oak Street • Terre Haute • Indiana • 47807 • Phone (812)462-3380 • Fax (812)234-1154 • Email: bruce.allen@vigocounty.in.gov

May 11, 2023

Re:
Des No: 1901781

Dear Sirs and Madam:

Our office has reviewed the information included in your letter regarding **Des No 1901781.** We have identified **Three (3)** existing survey markers located in the proposed construction area of **Des. No. 1901781 Road Revitalization & Bridge Rehabilitation, from Park Ave. to Imperial Ave. on Clinton Street, Otter Creek Twp. Vigo County, Indiana.** We have reason to believe that said survey markers may be disturbed or damaged due to the proposed construction.

We have included a Map of the subject area and info from our stone books for your review. Also we further require that if a Survey Marker is disturbed or destroyed that it be reset with a Harrison Survey Marker, supplied by this office. We also ask that paperwork be filed in our office showing tie-in information before the points are disturbed, and then paperwork showing coordinates at the time of resetting said monuments.

If you have any further questions or need additional information, please feel free to contact our office at: 812-462-3380.

Sincerely,

Bruce Allen Jr.
Vigo County Surveyor

THIS IS NOT A PERMIT

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

DNR#: ER-25589

Request Received: May 1, 2023

Requestor:
Nora Hillard
Metric Environmental
6958 Hillsdale Court
Indianapolis, IN 46250

Project:
Clinton Street road reconstruction and widening, from Park Avenue to Imperial Avenue, and bridge (#84-00242 / Vigo County #242) preventative maintenance over Otter Creek, 0.10 miles north of Park Avenue; Des #1901781

County/Site Info: Vigo County

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

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

Regulatory Assessment:
This proposal will require the formal approval of our agency for construction in a floodway pursuant to the Flood Control Act (IC 14-28-1), unless it qualifies for a bridge exemption (see enclosure). Please include a copy of this letter with the permit application if the project does not meet the bridge exemption criteria.

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

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

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

Impacts to non-wetland forest of one (1) acre or more in a rural or urban area should be mitigated at a minimum 2:1 ratio based on area of impact. Impacts to non-wetland forest under one (1) acre but at least 0.10 acre in a rural or urban area should be mitigated at a minimum 1:1 ratio based on area of impact. Impacts under 0.10 acre in an urban area should be mitigated by replacing trees that are 10” diameter-at-breast height (dbh) or greater by planting five trees, 1” to 2” in dbh, for each tree which is removed that is 10" dbh or greater.

Seeding and stabilizing disturbed areas is required regardless of the impact amount and location. If floodway impacts to forested wetland and non-wetland habitat areas combine to be 0.10 acres or more, mitigation should be done and coordinated with the biologist, as needed.

The mitigation site should be located in the floodway, downstream of the one (1) square mile drainage area of that stream (or another stream within the 8-digit HUC, preferably as close to the impact site as possible) and adjacent to existing forested riparian habitat.

B) Wildlife Passage:
Maintaining or improving fish and wildlife passage at existing and proposed crossings is a priority for the Division of Fish and Wildlife (DFW) to reduce wildlife mortality along roadways. The DFW has outlined different requirements for different types of crossing structure impacts. For brand new crossings in areas that currently do not have a crossing, the new structure must accommodate white-tailed deer passage where appropriate. Minimum structure dimensions for white-tailed deer passage are 20 feet of width clearance (overall size of the structure span) and 8 feet of height clearance measured from the OHWM to the low chord elevation and where deer passage is provided. For crossing replacements, the new structure must include wildlife passage appropriate for the type of replacement structure being proposed. If the existing structure is sized to accommodate white-tailed deer passage then it should be included in the design of the new structure. If white-tailed deer passage is not possible with the existing structure, deer passage still needs to be considered in the design and at minimum the bank lines must be restored within structures to allow for smaller wildlife passage above the ordinary high water mark. All wildlife passage designs must include a smooth level pathway preferably 3 feet wide but a minimum of 1-2 feet in width composed of natural substrate (soil, sand, gravel, etc.) or compacted aggregate fill over riprap (#2, #53, #73, etc.) tied into existing elevations both upstream and downstream. The addition of riprap around the bridge piers is likely to impair wildlife movement under the bridge. The stream crossing repairs or modifications, and any bank stabilization under or around the structure, must not create conditions that are less favorable for wildlife passage when compared to existing conditions. Upgrading wildlife passage for rehabilitated/modified structures is encouraged whenever possible to improve wildlife/vehicle safety.

Wildlife passage benefits, cost-savings (in terms of structure cost versus deer-vehicle collision costs), and safety of life and property issues can be reviewed at http://www.virginiadot.org/vtrc/main/online_reports/pdf/06-r2.pdf.

There are a number of techniques and materials for incorporating wildlife passage into the design of a crossing structure. Coordination with a Regional Environmental Biologist to address wildlife passage issues before submitting a permit application (if required) is encouraged to avoid delays in the permitting process. The following links are good resources to consider in the design of stream crossing structures to maintain fish and wildlife passage: https://www.fs.usda.gov/ccrc/tool/fishxing-fish-passage-learning-systems, https://www.fs.usda.gov/wildlifecrossings/library/index.php, https://www.fhwa.dot.gov/clas/ctip/wildlife_crossing_structures/, https://www.fhwa.dot.gov/engineering/hydraulics/pubs/11008/hif11008.pdf.

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

1. Revegetate all bare and disturbed areas that are not currently mowed and maintained with a mixture of grasses, sedges, and wildflowers, as well as hardwood trees and shrubs if any woody plants are disturbed during construction, native to Southern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in currently mowed areas only. A native herbaceous seed mixture must include at least 5 species of grasses and sedges and 5 species of wildflowers.
2. Minimize and contain within the project limits in-channel disturbance and the clearing of trees and brush.
3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.

4. Do not cut any trees suitable for Indiana Bat or Northern Long-eared Bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.
5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.
6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.
7. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.
8. Do not deposit or allow construction/demolition materials or debris to fall or otherwise enter the waterway. Any incidental fallen material or debris in the waterway must be removed within 24 hours using best management practices, particularly lifting material out of the waterway and not dragging it across the streambed whenever possible.
9. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the waterbody or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.
10. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

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

Matt Buffington

Date: May 31, 2023

Matt Buffington
Environmental Unit Supervisor
Division of Fish and Wildlife

USFWS Bat Check

From: Neild, Benjamin
To: Jason Damm
Cc: Susan Castle; Colin Keith; Nora Hillard; Kurtz, Randy
Subject: RE: Request USFWS confidential database check, Des. No. 1901781, N Clinton St from Park Ave to Hasselburger Ave, Vigo County, Indiana
Date: Thursday, October 6, 2022 10:16:10 AM
Attachments:

Good morning,
A review of the USFWS GIS database for Indiana bat and Northern long-eared bat roosting, hibernacula and capture sites was conducted for Des No. 1901781 on 10/6/2022. There are no documented sites within a half mile the project area. The USFWS Information for Planning and Conservation (IPaC) website must be consulted and a new project created to obtain an official species list and complete the questionnaire for the project to determine the applicability of the programmatic consultation. If needed, the IPaC generated documents must be forwarded to the USFWS for verification.

Benjamin Neild
Environmental Manager 2, Capital Program Management Division
41 West 300 North
Crawfordsville, IN 47933
Phone: (765) 361-5259
Email: bneild@indot.in.gov

Bridge/Structure Bat Assessment Form

Date & Time of Assessment	DOT Project Number	Route/Facility Carried	County
22 January 2025	1901781	Clinton Street	Vigo
Federal Structure ID	**Structure Coordinates (latitude and longitude)**	**Structure Height (approximate)**	**Structure Length**
84-001659	39.5297 -87.3698	45.5 feet	156.0 feet

Structure Type (check one)

Bridge Construction Style

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

Culvert Type

- ○ Box
- ○ Pipe/Round
- ○ Other:

Other Structure

- ○

Structure Material (check all that apply)

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

Creosote Evidence

- ◉ Yes ○ No
- ○ Unknown

Culvert Material

- ☐ Metal
- ☐ Concrete
- ☐ Plastic
- ☐ Stone/Masonry
- ☐ Other:

Notes:

Crossings Traversed (check all that apply)

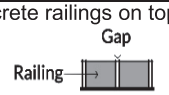
☒ Bare ground	☐ Open vegetation
☒ Rip-rap	☐ Closed vegetation
☒ Flowing water	☐ Railroad
☐ Standing water	☐ Road/trail - Type:
☐ Seasonal water	☐ Other:

Surrounding Habitat (check all that apply)

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

Areas Assessed (check all that apply)

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

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

Name: Jason Damm

Signature: Jason Damm

Species Identification Report

Jason Damm

Metric Environmental, LLC

Des#: 1901781, Report A

Email	jasond@metricenv.com
Invoice number	20221025_1
Project ID	JDamm
Sequencing date	December 2022
Report date	December 2022
Technician	Emma Froehlich
Bioinformatician	Daniel Sanchez

Sample processing:

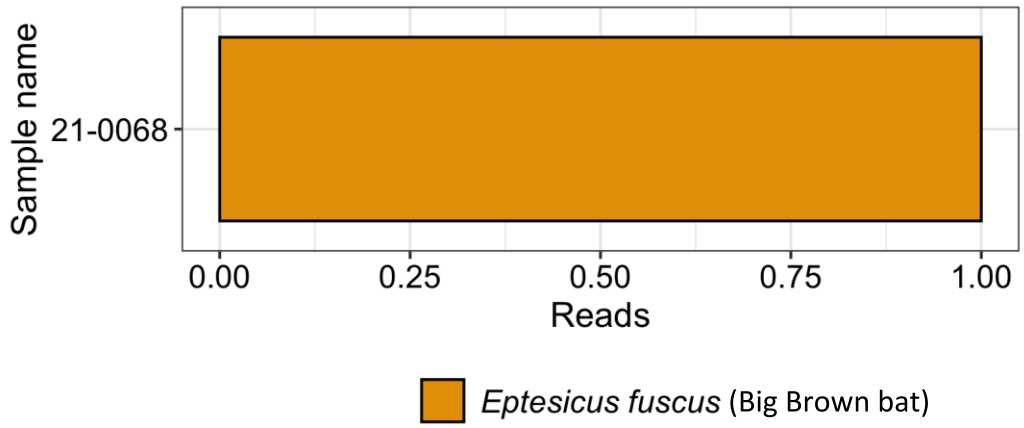
We received one 15 mL vial of bat guano. The goal was to identify one or more bat species in a mixture for each sample. We noted no issues with sample preservation and quality upon receipt of the vial. We decontaminated the vial with 10% bleach prior to handling and processing.

We successfully extracted genomic DNA and amplified a short-section of cytochrome oxidase subunit I (COI) from the sample using our standard methodology (Walker et al. 2016; Walker et al. 2019). Amplified product was sequenced on an Illumina MiSeq V2 micro 300 cycle kit to obtain DNA sequences (reads) of one or more taxa per sample. Sequencing reads were computationally processed to obtain read variants of the highest taxonomic quality in QIIME2 v2022.2 (Bolyen et al. 2018). Priming regions were removed using cutadapt v4.0 (Martin 2011) to isolate the 202 base pair fragment of interest. We removed low quality reads, and filtered out PCR artifacts (chimeric reads) using DADA2 (Callahan et al. 2016). Sequences were then classified using a naïve-Bayes machine learning classifier (Bokulich et al. 2018) that we trained against our custom reference database. We retained species classifications only if they were classified with at least 90% bootstrap support. Any read variants not classified using the machine learning algorithm to species were cross-referenced against the National Center for Biotechnology Information's (NCBI) GenBank database (Benson et al. 2009) using BLAST (Altschul et al. 1990) with taxa classified using Least Common Ancestor (LCA) analysis in MEGAN v6 (Huson et al. 2007). This cross-referencing step helps to alleviate any false negative bat classifications in the naïve-Baye's model or identify non-bat taxa.

Results:

Our positive control, containing a known mixture of nine bat species (of three families) amplified and sequenced all nine. None of the negative controls prepared with your samples amplified. **Your sample sequenced successfully and contains the DNA of *Eptesicus fuscus* (big brown bat).**

Accompanying files:



Along with a PDF of the detection barplots, we included an Excel (xlsx) spreadsheet that includes all figures, all taxonomic data, and sequencing pass and read summaries.

JDamm_20221025_1_Des_1901781_Report_A_BEGLresults.xlsx
Batdetection_plot.pdf

References:

Altschul SF, Gish W, Miller W, Myers EW, Lipman DJ. 1990. Basic Local Alignment Search Tool. J Mol Biol.:8.

Benson DA, Karsch-Mizrachi I, Lipman DJ, Ostell J, Sayers EW. 2009. GenBank. Nucleic Acids Res. 37(suppl_1):D26–D31. doi:10.1093/nar/gkn723.

Bokulich NA, Kaehler BD, Rideout JR, Dillon M, Bolyen E, Knight R, Huttley GA, Gregory Caporaso J. 2018. Optimizing taxonomic classification of marker-gene amplicon sequences with QIIME 2's q2-feature-classifier plugin. Microbiome. 6(1):90. doi:10.1186/s40168-018-0470-z.

Bolyen E, Rideout JR, Dillon MR, Bokulich NA, Abnet C, Al-Ghalith GA, Alexander H, Alm EJ, Arumugam M, Asnicar F, et al. 2018. QIIME 2: Reproducible, interactive, scalable, and extensible microbiome data science. PeerJ Inc. Report No.: e27295v2. [accessed 2019 Jul 3]. https://peerj.com/preprints/27295.

Callahan BJ, McMurdie PJ, Rosen MJ, Han AW, Johnson AJA, Holmes SP. 2016. DADA2: High-resolution sample inference from Illumina amplicon data. Nat Methods. 13(7):581–583. doi:10.1038/nmeth.3869.

Huson DH, Auch AF, Qi J, Schuster SC. 2007. MEGAN analysis of metagenomic data. Genome Res. 17(3):377–386. doi:10.1101/gr.5969107.

Martin M. 2011. Cutadapt removes adapter sequences from high-throughput sequencing reads. EMBnet.journal. 17(1):10–12. doi:10.14806/ej.17.1.200.

Walker FM, Tobin A, Simmons NB, Sobek CJ, Sanchez DE, Chambers CL, Fofanov VY. 2019. A fecal sequel: Testing the limits of a genetic assay for bat species identification. PLOS ONE. 14(11):e0224969. doi:10.1371/journal.pone.0224969.

Walker FM, Williamson CHD, Sanchez DE, Sobek CJ, Chambers CL. 2016. Species From Feces: Order-Wide Identification of Chiroptera From Guano and Other Non-Invasive Genetic Samples. Russo D, editor. PLOS ONE. 11(9):e0162342. doi:10.1371/journal.pone.0162342.

Species Identification Report

Jason Damm

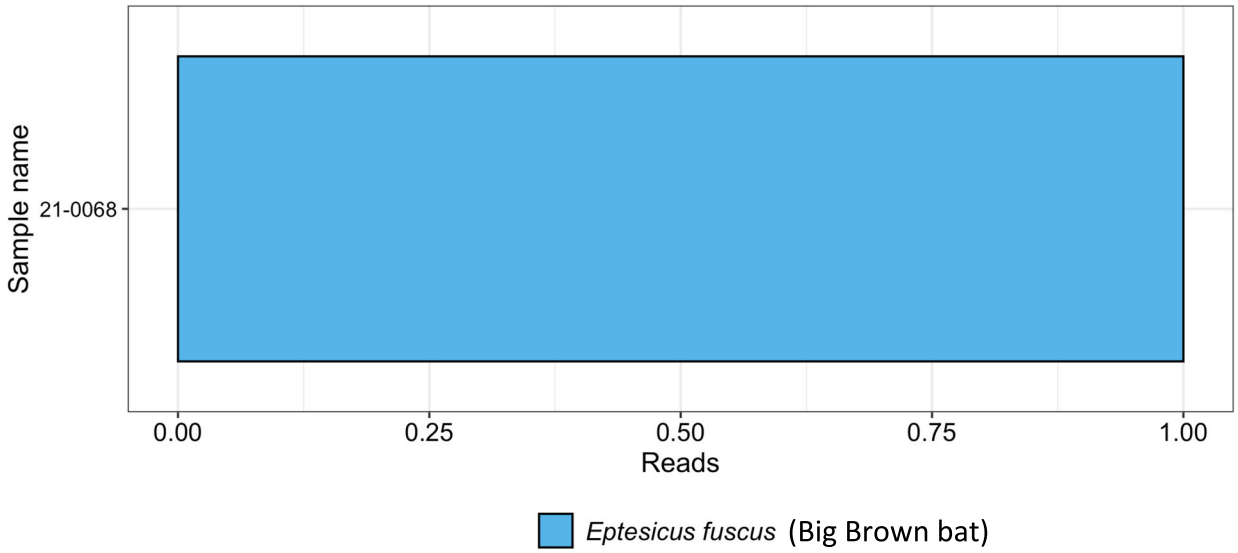
Metric Environmental, LLC

Invoice number	20250220_2
Project ID	JDamm
Email address	jasond@metricenv.com
Sequencing date	April 2025
Report date	April 2025
Technician	Savannah Marriott
Bioinformatician	Daniel Sanchez
Sequencing kit	Illumina: MiniSeq Mid Output (300 cycle)
QIIME version	QIIME2 v2024.10 (amplicon)

Results:

We processed 1 fecal sample with the goal of detecting one or more bat species. We successfully amplified the target region where we **detected *Eptesicus fuscus*.** More information can be found in the figure below and the associated results spreadsheet. See the key considerations section below for additional insight into interpreting these metabarcoding data.

None of the DNA extraction blanks nor PCR negative template controls prepared with your samples yielded taxonomic information. Our positive control consisting of eastern hemisphere bat species yielded 5/5 expected sequences and no unexpected sequences. If you suspect that a detection is surprising or could have significant management or conservation implications, we recommend re-amplification and re-sequencing to gather multiple lines of evidence. If this is the case, please feel free to contact us for further recommendations.



Accompanying files:

Along with a PDF of the detection barplots, we included an Excel (xlsx) spreadsheet that includes all figures, all taxonomic data, and sequencing pass and read summaries.

JDamm_20250220_2_JDamm_BEGLresults.xlsx
JDamm_detection_plot.pdf

Key considerations:

The taxonomic nomenclature used for classification is directly sourced from either the Barcode of Life Database or NCBI GenBank. It's important to note that nomenclature may differ among databases and could possibly contain outdated species names. Therefore, we advise considering updated or synonymous taxonomic nomenclature during your analysis of the samples. Additionally, it's common for us to recover DNA mini-barcodes from other non-bat species, and these can be found in the attached results spreadsheet (see accompanying filenames below). However, since our analysis focuses on bats, we recommend approaching non-bat classifications with caution. We cannot guarantee the accuracy of non-bat classifications, so we suggest cross-referencing them against relevant wildlife inventories. We are happy to take a second look at any non-bat taxa you may find interesting, however.

Please note that the barplots included in your results package only depict samples where bats were detected, unless only taxa other than bats were detected among all samples. Samples that failed or only amplified non-bat taxa are not shown in these plots but can be found in the associated results spreadsheet. In cases where certain bat taxa in a sample have low signal (i.e., few reads) compared to taxa with much higher read numbers, we apply a log transformation to enhance the visibility of these detections. It is important to disclose that **the number of sequencing reads for a species may not reflect the relative abundance of a species at a sampling location.**

Furthermore, it's important to acknowledge that we may not always have precise geographic information for bat species and largely rely on species range maps, state/provincial records, or the available literature for inspecting the taxa detected in your samples. If we detect a bat species outside of its known range, we always double-check the sequences against other databases. If the range boundaries are in close proximity to where the sample was collected, we consider it a plausible detection. However, if you suspect that a detection is erroneous (e.g., contamination) or could have significant management or conservation implications, we recommend re-amplification and re-sequencing to gather multiple lines of evidence. If this is the case, please feel free to contact us for further recommendations.

Methodology:

We extracted genomic DNA and amplified a short-section of cytochrome oxidase subunit I (COI) from the samples using our standard methodology (Walker et al. 2016; Walker et al. 2022). Amplified product was sequenced to obtain DNA sequences (reads) of one or more taxa per sample. Sequencing reads were computationally processed using QIIME2 (Bolyen et al. 2019). Priming regions were removed using cutadapt (Martin 2011) to isolate the 202 base pair fragment of interest. We removed low quality reads, and filtered out PCR artifacts (chimeric

reads) using DADA2 (Callahan et al. 2016). To avoid low abundance variants with sequencing errors, the unique sequences were post-clustered using LULU curation (Frøslev et al. 2017). Sequences were then classified using a naïve-Bayes machine learning classifier (Bokulich et al. 2018) that we trained against our custom reference database. References were derived from all available chiropteran COI references in the Barcode of Life Database (Ratnasingham and Hebert 2007). We retained species classifications only if they were classified with at least 90% bootstrap support. Any variants not classified using the machine learning algorithm to species were cross-referenced against the National Center for Biotechnology Information's (NCBI) GenBank database (Benson et al. 2009) using BLAST (Altschul et al. 1990). Taxa were classified using Least Common Ancestor (LCA) analysis in MEGAN v6 (Huson et al. 2007). This cross-referencing step helps to alleviate any false negative bat classifications in the naïve-Baye's model or identify non-bat taxa that may have co-amplified.

References:

Altschul SF, Gish W, Miller W, Myers EW, Lipman DJ. 1990. Basic local alignment search tool. J Mol Biol. 215(3):403–410.

Benson DA, Karsch-Mizrachi I, Lipman DJ, Ostell J, Sayers EW. 2009. GenBank. Nucleic Acids Res. 37(suppl_1):D26–D31. doi:10.1093/nar/gkn723.

Bokulich NA, Kaehler BD, Rideout JR, Dillon M, Bolyen E, Knight R, Huttley GA, Gregory Caporaso J. 2018. Optimizing taxonomic classification of marker-gene amplicon sequences with QIIME 2's q2-feature-classifier plugin. Microbiome. 6(1):1–17. doi:10.1186/s40168-018-0470-z.

Bolyen E, Rideout JR, Dillon MR, Bokulich NA, Abnet C, Al-Ghalith GA, Alexander H, Alm EJ, Arumugam M, Asnicar F, et al. 2019. Reproducible, interactive, scalable and extensible microbiome data science using QIIME 2. Nat Biotechnol. 37(8):852–857.

Callahan BJ, McMurdie PJ, Rosen MJ, Han AW, Johnson AJA, Holmes SP. 2016. DADA2: high-resolution sample inference from Illumina amplicon data. Nat Methods. 13(7):581–583. doi:10.1038/nmeth.3869.

Frøslev TG, Kjøller R, Bruun HH, Ejrnæs R, Brunbjerg AK, Pietroni C, Hansen AJ. 2017. Algorithm for post-clustering curation of DNA amplicon data yields reliable biodiversity estimates. Nat Commun. 8(1):1188. doi:10.1038/s41467-017-01312-x.

Huson DH, Auch AF, Qi J, Schuster SC. 2007. MEGAN analysis of metagenomic data. Genome Res. 17(3):377–386. doi:10.1101/gr.5969107.

Martin M. 2011. Cutadapt removes adapter sequences from high-throughput sequencing reads. EMBnet.journal. 17(1):10–12. doi:10.14806/ej.17.1.200.

Ratnasingham S, Hebert PDN. 2007. BOLD: The Barcode of Life Data System (http://www.barcodinglife.org). Mol Ecol Notes. 7(3):355–364. doi:10.1111/j.1471-8286.2007.01678.x.

Walker FM, Sanchez DE, Froehlich EM, Federman EL, Lyman JA, Owens M, Lear K. 2022. Endangered Nectar-Feeding Bat Detected by Environmental DNA on Flowers. Animals. 12(22):3075. doi:10.3390/ani12223075.

Walker FM, Williamson CHD, Sanchez DE, Sobek CJ, Chambers CL. 2016. Species From Feces: Order-Wide Identification of Chiroptera From Guano and Other Non-Invasive Genetic Samples. Russo D, editor. PLOS ONE. 11(9):e0162342. doi:10.1371/journal.pone.0162342.

United States Department of the Interior

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

In Reply Refer To: 03/09/2025 23:36:05 UTC
Project Code: 2023-0044047
Project Name: Des. 1901781, Road Improvement and Bridge Rehabilitation Project, Clinton Street, Vigo County, IN

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

To Whom It May Concern:

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

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

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

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/

s7process/index.html. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process. For all **wind energy projects** and **projects that include installing towers that use guy wires or are over 200 feet in height**, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

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

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

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

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

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

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

migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

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

Attachment(s):

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

OFFICIAL SPECIES LIST

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

This species list is provided by:

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

PROJECT SUMMARY

Project Code: 2023-0044047

Project Name: Des. 1901781, Road Improvement and Bridge Rehabilitation Project, Clinton Street, Vigo County, IN

Project Type: Road/Hwy - Maintenance/Modification

Project Description: Indiana Department of Transportation (INDOT) and Vigo County, with funding from Federal Highway Administration (FHWA), intends to proceed with a road improvement and bridge rehabilitation project along Clinton Street from Park Avenue to Imperial Avenue (Des. No. 1901781), Vigo County, Indiana. The bridge is at Clinton Street over Otter Creek, located 0.10 mile north of Park Avenue.

The project is located along Clinton Street, from Park Avenue to Imperial Avenue, and includes roadway improvements and the rehabilitation of an existing bridge (#84-00242) which carries Clinton Street over Otter Creek. The existing roadway structure which carries Clinton Street over Otter Creek is a 156.0-foot-long prestressed concrete continuous bridge constructed in 1993. The bridge deck has scattered hairline cracks and pop-outs throughout the concrete, multiple defects in the approach slabs, and the expansion joint is cracked in several locations. There are wide cracks on the superstructure at Pier 2 of Span A and scattered hairline cracks along pier caps, as well as one and half feet of footing exposed at the south end of the north pier. An aluminum and concrete railing system is provided in both directions across the bridge. Proposed project details are summarized in the project documents.

Based on consultation with INDOT Crawfordsville District, October 6, 2022, a review of the U.S. Fish and Wildlife Service (USFWS) database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. According to the Bridge Inspection Report, dated July 19, 2021, no evidence of bats was reported below the structure. A Metric Environmental biologist holding a Section 10 Recovery Permit for bats (Jason Damm; Permit Number TE-81936D-0) completed an inspection of the bridge on October 11, 2022. During the visit, no bats were seen using the structure; however, guano was present below near the central back wall of the south side of the structure. One pooled guano sample was collected and sent to Northern Arizona University (NAU) for analysis. Results of this sample indicated use of the structure by big brown bats (Eptesicus fuscus). Based on DNA analysis of all samples, no Indiana or northern long-eared bat presence was indicated. The DNA sequencing results from NAU are in the documents folder.

There is suitable summer habitat located within the project area. It is anticipated that approximately 0.012 acre of trees (3 trees) will be

removed from the project area during project construction. An aerial image highlighting tree impacts is attached with the project documents. The three trees that will be removed are a boxelder (Acer negundo), sugar maple (Acer saccharum), and tulip poplar (Liriodendron tulipifera). All three trees will be removed within 100 feet from the edge of the roadway during the inactive season 2026. No mitigation is anticipated.

The project is planned to begin in fall 2026 and be completed by winter 2027.

Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@39.53601835,-87.36984506475022,14z

Counties: Vigo County, Indiana

ENDANGERED SPECIES ACT SPECIES

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

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

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

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

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

MAMMALS

NAME	STATUS
Gray Bat *Myotis grisescens* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/6329	Endangered
Indiana Bat *Myotis sodalis* There is **final** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered

BIRDS

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

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/9743	Proposed Threatened

CRITICAL HABITATS

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

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

BALD & GOLDEN EAGLES

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

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

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/ activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project

activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

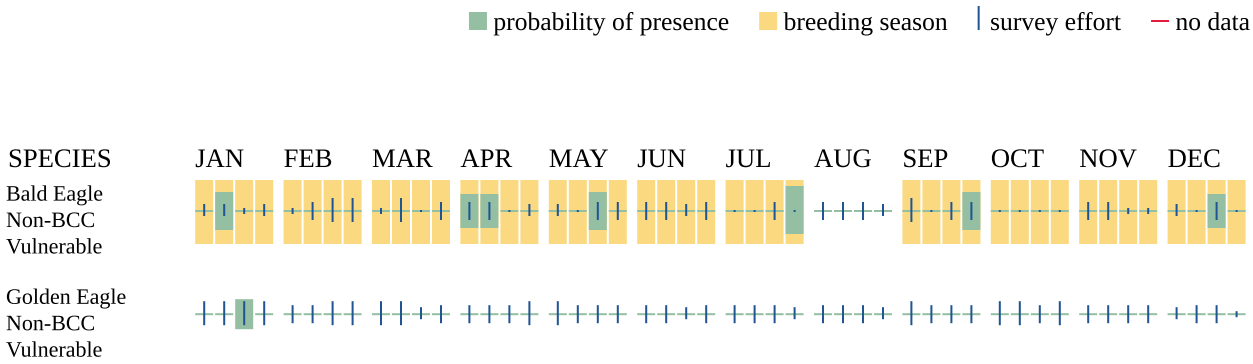
Probability of Presence (▪)

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

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

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

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



Additional information can be found using the following links:

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

MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service). The incidental take of migratory birds is the injury or death of birds that results from, but is not the purpose, of an activity. The Service interprets the MBTA to prohibit incidental take.

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

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Chimney Swift *Chaetura pelagica* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Eastern Whip-poor-will *Antrostomus vociferus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/10678	Breeds May 1 to Aug 20
Field Sparrow *Spizella pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9446	Breeds Mar 1 to Aug 15
Golden Eagle *Aquila chrysaetos* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds elsewhere

NAME	BREEDING SEASON
Kentucky Warbler *Geothlypis formosa* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	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
Prairie Warbler *Setophaga discolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9513	Breeds May 1 to Jul 31
Prothonotary Warbler *Protonotaria citrea* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9439	Breeds Apr 1 to Jul 31
Red-headed Woodpecker *Melanerpes erythrocephalus* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird *Euphagus carolinus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere
Semipalmated Sandpiper *Calidris pusilla* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9603	Breeds elsewhere
Wood Thrush *Hylocichla mustelina* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9431	Breeds May 10 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

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

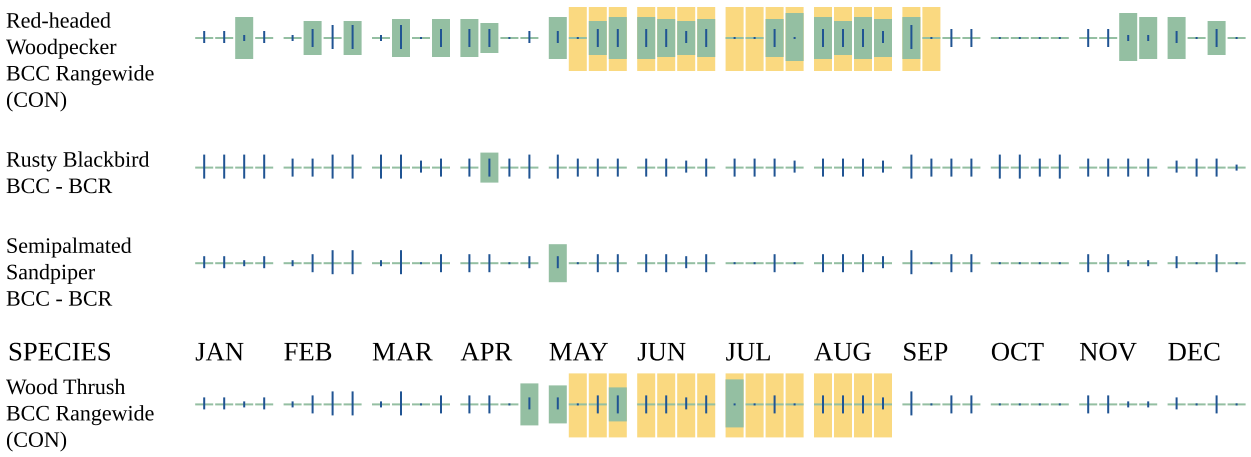
Probability of Presence (■)

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

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

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

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



Additional information can be found using the following links:

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

WETLANDS

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

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

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

RIVERINE

- R2UBH

IPAC USER CONTACT INFORMATION

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Name: Nora Hillard
Address: 6958 Hillsdale Court
City: Indianapolis
State: IN
Zip: 46250
Email norah@metricenv.com
Phone: 3174001633

United States Department of the Interior

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

In Reply Refer To: February 10, 2023
Project code: 2023-0044047
Project Name: Des. 1901781, Road Improvement and Bridge Rehabilitation Project, Clinton Street, Vigo County, IN

Subject: Concurrence verification letter for the 'Des. 1901781, Road Improvement and Bridge Rehabilitation Project, Clinton Street, Vigo County, IN' project under the revised February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat.

To whom it may concern:

The U.S. Fish and Wildlife Service (Service) has received your request dated February 10, 2023 to verify that the **Des. 1901781, Road Improvement and Bridge Rehabilitation Project, Clinton Street, Vigo County, IN** (Proposed Action) may rely on the concurrence provided in the February 5, 2018, FHWA, FRA, FTA Programmatic Biological Opinion for Transportation Projects within the Range of the Indiana Bat and Northern Long-eared Bat (PBO) to satisfy requirements under Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C 1531 *et seq.*).

Based on the information you provided (Project Description shown below), you have determined that the Proposed Action is within the scope and adheres to the criteria of the PBO, including the adoption of applicable avoidance and minimization measures, and may affect, but is not likely to adversely affect (NLAA) the endangered Indiana bat (*Myotis sodalis*) and/or the threatened Northern long-eared bat (*Myotis septentrionalis*). Consultation with the Service pursuant to Section 7(a)(2) of the Endangered Species Act of 1973 (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) is required.

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

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

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

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

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

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

- Monarch Butterfly *Danaus plexippus* Candidate

02/10/2023

Project Description

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

Name

Des. 1901781, Road Improvement and Bridge Rehabilitation Project, Clinton Street, Vigo County, IN

Description

Indiana Department of Transportation (INDOT) and Vigo County, with funding from Federal Highway Administration (FHWA), intends to proceed with a road improvement and bridge rehabilitation project along Clinton Street from Park Avenue to Imperial Avenue (Des. No. 1901781), Vigo County, Indiana. The bridge is at Clinton Street over Otter Creek, located 0.10 mile north of Park Avenue.

The project is located along Clinton Street, from Park Avenue to Imperial Avenue, and includes roadway improvements and the rehabilitation of an existing bridge (#84-00242) which carries Clinton Street over Otter Creek. The existing roadway structure which carries Clinton Street over Otter Creek is a 156.0-foot-long prestressed concrete continuous bridge constructed in 1993. The bridge deck has scattered hairline cracks and pop-outs throughout the concrete, multiple defects in the approach slabs, and the expansion joint is cracked in several locations. There are wide cracks on the superstructure at Pier 2 of Span A and scattered hairline cracks along pier caps, as well as one and half feet of footing exposed at the south end of the north pier. An aluminum and concrete railing system is provided in both directions across the bridge. Proposed project details are summarized in the project documents.

Based on consultation with INDOT Crawfordsville District, October 6, 2022, a review of the U.S. Fish and Wildlife Service (USFWS) database did not indicate the presence of endangered bat species in or within 0.5 mile of the project area. According to the Bridge Inspection Report, dated July 19, 2021, no evidence of bats was reported below the structure. A Metric Environmental biologist holding a Section 10 Recovery Permit for bats (Jason Damm; Permit Number TE-81936D-0) completed an inspection of the bridge on October 11, 2022. During the visit, no bats were seen using the structure; however, guano was present below near the central back wall of the south side of the structure. One pooled guano sample was collected and sent to Northern Arizona University (NAU) for analysis. Results of this sample indicated use of the structure by big brown bats (Eptesicus fuscus). Based on DNA analysis of all samples, no Indiana or northern long-eared bat presence was indicated. The DNA sequencing results from NAU are in the documents folder.

There is suitable summer habitat located within the project area. It is anticipated that approximately 0.012 acre of trees (3 trees) will be removed from the project area during project construction. An aerial image highlighting tree impacts is attached with the project documents. The three trees that will be removed are a boxelder (Acer negundo), sugar maple (Acer saccharum), and tulip poplar (Liriodendron tulipifera). All three trees will be removed within 100 feet from the edge of the roadway during the inactive season 2026. No mitigation is anticipated.

The project is planned to begin in fall 2026 and be completed by winter 2027.

Determination Key Result

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

Qualification Interview

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

   [1] See Indiana bat species profile

   Automatically answered
   Yes

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

   [1] See Northern long-eared bat species profile

   Automatically answered
   Yes

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

   A) Federal Highway Administration (FHWA)

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

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

   No

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

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

   No

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

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

   No

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

   No

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

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

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

   Yes

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

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

   Yes

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

    No

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

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

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

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

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

    No

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

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

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

    No

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

    Yes

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

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

    B) During the inactive season

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

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

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

    No

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

    Yes

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

    B) During the inactive season

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

    Yes

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

    No

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

    Yes

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

    No

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

    No

23. Does the project include slash pile burning?

    No

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

    Yes

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

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

    Yes

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

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

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

    Yes

    SUBMITTED DOCUMENTS

    - *21-0068_1901781_Metric Guano Collection Form_.pdf https://ipac.ecosphere.fws.gov/project/ZT6EOVVATNAKDJ5CHY5KNXF6QI/projectDocuments/122279675*
    - *21-0068_1901781_Metric Bat Insp_10112022.pdf https://ipac.ecosphere.fws.gov/project/ZT6EOVVATNAKDJ5CHY5KNXF6QI/projectDocuments/122279984*
    - *BEGL_results_Des_1901781_reportA.pdf https://ipac.ecosphere.fws.gov/project/ZT6EOVVATNAKDJ5CHY5KNXF6QI/projectDocuments/122279766*

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

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

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

    No

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

    No

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

    No

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

    Yes

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

    Yes

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

    No

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

    No

34. 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

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

    No

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

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

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

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

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

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

39. Is the bridge removal, replacement, or maintenance activities portion of this project consistent with a No Effect determination in this key?

    Automatically answered
    Yes, because the bridge has been assessed using the criteria documented in the BA and no signs of bats were detected

40. **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

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

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

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

    Yes

42. **Tree Removal AMM 3**
    Can tree removal be limited to that specified in project plans and ensure that contractors understand clearing limits and how they are marked in the field (e.g., install bright colored flagging/fencing prior to any tree clearing to ensure contractors stay within clearing limits)?

    Yes

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

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

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

    Yes

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

    Yes

Project Questionnaire

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

   N/A

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

   N/A

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

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

   0.27

4. Please describe the proposed bridge work:

   Scope of work at the existing bridge carrying Clinton Street over Otter Creek will include deck removal and replacement of the exterior 7.6 feet of deck copings along with replacement of the exterior beam lines. Bent reconstruction will be required at bents 1 and 4 for replacement of the exterior beams. The reinforced concrete approaches, bridge rail transitions, and bridge railing will also be replaced. A new concrete sidewalk will be installed along the east bridge rail on top of the bridge. The bridge work is anticipated to require a maximum excavation of approximately three feet within the limits of the bridge end bents. Work below the OHWM will be required beneath the bridge for the installation of riprap around Pier 3.

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

   The project is planned to begin in fall 2026 and be completed by winter 2027.

6. Please enter the date of the bridge assessment:

   October 11, 2022

Avoidance And Minimization Measures (AMMs)

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

TREE REMOVAL AMM 4

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

GENERAL AMM 1

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

TREE REMOVAL AMM 1

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

LIGHTING AMM 1

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

TREE REMOVAL AMM 2

Apply time of year restrictions for tree removal when bats are not likely to be present, or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/

rail surface and **outside of documented** roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed.

TREE REMOVAL AMM 3

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

Determination Key Description: FHWA, FRA, FTA Programmatic Consultation For Transportation Projects Affecting NLEB Or Indiana Bat

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

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

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

IPaC User Contact Information

Agency: Indiana Department of Transportation
Name: Benjamin Neild
Address: 41 W. 300 N.
City: Crawfordsville
State: IN
Zip: 47933
Email bneild@indot.in.gov
Phone: 7653615259

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

December 28, 2023

Nora Hillard
Metric Environmental
6958 Hillsdale Court
Indianapolis, Indiana 46250

Dear Ms. Hillard:

The proposed Road Revitalization and Bridge Rehabilitation, from Park Ave. to Imperial Ave., including Vigo Co. Bridge No. 242: Clinton St. over Otter Creek, 0.10 Mile North of Park Ave., Vigo County, Indiana (Des. No. 1901781), as referred to in your letter received on December 18, 2023, will cause a conversion of prime farmland.

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

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

Sincerely,

JOHN ALLEN Digitally signed by JOHN ALLEN
Date: 2024.01.04 08:56:41 -05'00'

JOHN ALLEN
State Soil Scientist

Enclosers

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*		Date Of Land Evaluation Request 11/22/2023	
Name of Project Des. No. 1901781, Road revitalization ar		Federal Agency Involved	
Proposed Land Use Roadway widening/sidewalk		County and State Vigo County, Indiana	
PART II *(To be completed by NRCS)*		Date Request Received By NRCS 11/22/2023	Person Completing Form: JRA
Does the site contain Prime, Unique, Statewide or Local Important Farmland? *(If no, the FPPA does not apply - do not complete additional parts of this form)*	YES ☑ NO ☐	Acres Irrigated	Average Farm Size 252 ac
Major Crop(s) Corn	Farmable Land In Govt. Jurisdiction Acres: 209398 % 81	Amount of Farmland As Defined in FPPA Acres: 19548 % 74	
Name of Land Evaluation System Used LESA	Name of State or Local Site Assessment System	Date Land Evaluation Returned by NRCS 12/28/2023	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating			
	Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	0.589			
B. Total Acres To Be Converted Indirectly	0.080			
C. Total Acres In Site	0.669			
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	0.59			
B. Total Acres Statewide Important or Local Important Farmland	0.00			
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted	<0.001			
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value	34			
PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value of Farmland To Be Converted (Scale of 0 to 100 Points)	82			

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(Criteria are explained in 7 CFR 658.5 b. For Corridor project use form NRCS-CPA-106)*	**Maximum Points**	Site A	Site B	Site C	Site D
1. Area In Non-urban Use	(15)	0			
2. Perimeter In Non-urban Use	(10)	3			
3. Percent Of Site Being Farmed	(20)	5			
4. Protection Provided By State and Local Government	(20)	5			
5. Distance From Urban Built-up Area	(15)	0			
6. Distance To Urban Support Services	(15)	0			
7. Size Of Present Farm Unit Compared To Average	(10)	4			
8. Creation Of Non-farmable Farmland	(10)	2			
9. Availability Of Farm Support Services	(5)	0			
10. On-Farm Investments	(20)	0			
11. Effects Of Conversion On Farm Support Services	(10)	0			
12. Compatibility With Existing Agricultural Use	(10)	0			
TOTAL SITE ASSESSMENT POINTS	160	19	0	0	0
PART VII ***(To be completed by Federal Agency)***					
Relative Value Of Farmland *(From Part V)*	100	82	0	0	0
Total Site Assessment *(From Part VI above or local site assessment)*	160	19	0	0	0
TOTAL POINTS ***(Total of above 2 lines)***	260	101	0	0	0

Site Selected: Site A	Date Of Selection 11/22/2023	Was A Local Site Assessment Used? YES ☐ NO ☑

Reason For Selection:

Meets purpose and need of project with minimal impact to farmland.

Name of Federal agency representative completing this form: Nora Hillard on behalf of INDOT | Date: 12/18/2023

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

From: Turnbow, Alisha
To: Nora Hillard
Subject: RE: Des. No. 1901781 - Road Revitalization and Bridge Rehabilitation, from Park Ave. to Imperial Ave., including Vigo Co. Bridge No. 242: Clinton St. over Otter Creek, 0.10 Mile North of Park Ave., Vigo County, IN
Date: Wednesday, March 6, 2024 4:45:40 PM
Attachments:

Hi Nora,

Des No 1901781 is not located in a Wellhead Protection Area (WHPA). However, it is located within 1,970 feet of Leisure Acres Mobile Home Park's WHPA, within 990 feet of Morris Mobile Home Estates' WHPA, within 900 feet of J & T Water Company's WHPA.

- The contact for Leisure Acres Mobile Home Park is Frankie J. Agnew and they can be reached at fjagnew@gmail.com and 812-535-3273.
- The contact for Morris Mobile Home Estates is Rodney Mottesheard and they can be reached at Tim0987as@gmail.com and 812-466-6887.
- The contact for J & T Water Company is Clint Kremer and they can be reached at 765-592-4446 and 4501 North Fruitridge Avenue, Terre Haute, IN 47805.

Let me know what questions you have.

Sincerely,

Alisha Turnbow
Environmental Manager
Office of Water Quality
Drinking Water Branch, Groundwater Section
(317) 233-9158 • aturnbow@idem.IN.gov

Indiana Department of Environmental Management

USFWS - Additional coordination for Gray Bat

From: McWilliams, Robin
To: Jason Damm
Cc: Nora Hillard; Linda Zug; Susan Castle; Ervin, Brock; RAsadpour@indot.IN.gov
Subject: Re: [EXTERNAL] Des 1901781, Standard Informal Consultation-Gray Bat, Clinton Street, Vigo County
Date: Wednesday, May 14, 2025 2:32:27 PM
Attachments:

Dear Jason,

This responds to your recent letter requesting our concurrence on a "not likely to adversely affect" determination for the gray bat (Myotis grisescens) on the aforementioned project. These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act (ESA) of 1973, as amended, and the U. S. Fish and Wildlife Service's Mitigation Policy.

The proposed project is within the range of the federally endangered Indiana bat (Myotis sodalis) and gray bat. There are records of both species in Vigo County. Consultation for the Indiana bat will be completed using the Federal Highway Administration, Federal Rail Administration, and Federal Transit Administration's Indiana bat, northern long-eared bat, and tricolored bat Rangewide Programmatic Consultation process. The gray bat is not covered under that consultation.

The preferred alternative includes roadway improvements and the rehabilitation of an existing bridge (#84-00242) which carries Clinton Street over Otter Creek. Approximately 0.012 acre of trees (3 trees) will be removed from the project area and temporary lighting may be used during construction. Tree removal will occur during the inactive season for bats and temporary lighting will be directed away from any potential bat habitat. There are no caves or voids for gray bat maternity or winter gray use at the project location.

The Service has reviewed the information you provided, including applicable avoidance and minimization measures and concurs your project is not likely to adversely affect the gray bat.

Wetland and stream impacts may require permits from the US Army Corps of Engineers, the Indiana Department of Environmental Management’s Water Quality Certification program, and the Indiana Department of Natural Resources. Wetland impacts should be avoided, and any unavoidable impacts should be compensated for in accordance with the Corps of Engineer's mitigation guidelines.

We appreciate the opportunity to comment at this early stage of project planning. If project plans change such that fish and wildlife habitat may be affected, please re-coordinate with our office as soon as possible. If you have any questions about our recommendations, please email or call (812) 902-1752.

Sincerely,

Robin

Robin McWilliams Munson
Fish and Wildlife Biologist/Transportation Liaison
U.S. Fish and Wildlife Service
Indiana Ecological Services Field Office
620 South Walker Street
Bloomington, IN 47403
Robin_McWilliams@fws.gov
***NEW* 812-902-1752**

Mon-Thurs 8:30-4:30p