

FHWA-Indiana Environmental Document
CATEGORICAL EXCLUSION / ENVIRONMENTAL ASSESSMENT FORM
GENERAL PROJECT INFORMATION

Road No./County:	State Road (SR) 15/Elkhart County
Designation Number(s):	1800039
Project Description/Termini:	SR 15 at County Road (CR) 18 Intersection Improvement, approximately 1.03 miles south of United States (US) 20; extending approximately 900 feet north, 850 feet south, 140 feet east, and 140 feet west of the existing intersection

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

	RF	8/26/2021
	_____	_____
	INDOT DE Initials and Date	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: Kevin McLane, SJCA Inc. (formerly Green 3, LLC)

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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.

Does the project have a historic bridge processed under the Historic Bridges PA*? If No, then: Opportunity for a Public Hearing Required? Yes No 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 June 24, 2020, 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-1. The project will meet minimum requirements described in the current Indiana Department of Transportation (INDOT) Public Involvement Manual which requires the project sponsor to offer the public an opportunity to submit comment and/or request a public hearing. 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 controversy concerning impacts to the community or to natural resources.

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

Sponsor of the Project: INDOT INDOT District: Fort Wayne

Local Name of the Facility: SR 15 and CR 18 intersection

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

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

PURPOSE AND NEED:

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

Need: The need for the project lies in improving the safety at the intersection of SR 15 at CR 18. Drivers in either direction of SR 15 must stop when vehicles are waiting to turn left on CR 18, which results in a high volume of rear-end collisions of vehicles waiting to make the left turn. Based on crash data for 2016 to 2018 in the September 2019 Engineering Assessment by Strand and Associates (Appendix I-2 to I-9), there were four (4) accidents resulting in a fatality or incapacity, and the highest crash type was rear-end accidents (11 total). A Road Hazard Analysis Tool (RoadHAT) analysis resulted in an Index of Crash Frequency (ICF) of 3.72 and an Index of Crash Cost (ICC) of 2.01. These values indicate that the intersection experiences an above-average crash frequency and safety improvements should be evaluated.

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Purpose:

The purpose of the project is to reduce the crash rate and improve intersection safety. The goal is to reduce the total number of crashes by at least 28%.

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Elkhart Municipality: Goshen

Limits of Proposed Work: Extending approximately 900 feet north, 850 feet south, 140 feet east, and 140 feet west of the existing intersection of SR 15 and CR 18

Total Work Length: 0.5 Mile(s) Total Work Area: 1.87 Acre(s)

Is an Interstate Access Document (IAD)1 required?
If yes, when did the FHWA provide a Determination of Engineering and Operational Acceptability?

Yes1 No
Date: X

1If 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.

Location:

The project is located in Elkhart County, Indiana, approximately 1.03 miles south of United States (US) 20 at the intersection of SR 15 and CR 18. Specifically, the project is located in Sections 15 and 22, Township 37N, Range 6E, in Jefferson Township. Project location maps can be found in Appendix B-1 to B-3.

Existing Conditions:

SR 15 is classified as an Urban Principal Arterial and consists of two (2) 12-foot-wide travel lanes, one in each direction, with 4-foot shoulders on each side. CR 18 intersects SR 15 and is classified as a Minor Collector to the west of SR 15 and a local road to the east of SR 15. CR 18 consists of 10-foot-wide lanes, one in each direction with no shoulders. Both SR 15 and CR 18 have a posted speed of 50 miles per hour. There is an existing corrugated metal pipe (CMP) 24 inches in diameter that runs under SR 15, south of the intersection, and a small concrete culvert that runs under CR 18, at the western approach of the intersection. The existing intersection is a controlled stop on CR 18. Drivers in either direction of SR 15 must stop when vehicles are waiting to turn left on CR 18, which has resulted in a high volume of rear-end collisions of vehicles waiting to make the left turn. A Road Hazard Analysis Tool (RoadHAT) resulted in an ICF of 3.72 and an ICC of 2.01. These values indicate that the intersection experiences an above-average crash frequency. Crash history data and the RoadHAT analysis are available in the September 24, 2019, Engineering Assessment by Strand and Associates (Appendix I-3).

The area surrounding the project location has flat and level terrain and consists primarily of residences and livestock pastures. There is existing livestock fencing within the project area along SR 15 and CR 18 in the northeast and northwest quadrants of the intersection. There is a religious facility in the southwest quadrant of the project area. Overhead power lines, gas lines, fiber optic lines, and telephone lines are located within and adjacent to the project area.

Preferred Alternative:

The preferred alternative will construct 12-foot-wide left turn lanes in each direction of travel on SR 15 that extend approximately 585 feet in length from the SR 15/CR 18 intersection. The SR 15 roadway will be widened to accommodate the new turn lanes, with shoulders varying between two (2) and four (4) feet in width being maintained throughout the project area. Refer to Appendix B-12 for cross sections of the roadway. The intersection at CR 18 will be widened in each quadrant to allow for larger turn radii. Driveways within the project area will be reconstructed. Shoulders and disturbed areas will be graded and reseeded upon completion. Livestock fencing within the project area will be removed to facilitate construction. Fencing is not anticipated to be replaced or reset; the replacement costs of the fencing will be included in ROW negotiations.

The existing 24-inch CMP that traverses under SR 15 approximately 615 feet south of the intersection will remain in place. The east

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end of the structure will be connected to the existing retention basin outfall pipe using a shallow manhole junction; two new structures will also be installed to carry stormwater runoff to the manhole. The west end of the structure will be extended with a CMP 24-inch safety metal end section. On CR 18 west of the approach to the intersection, the existing concrete culvert will be removed and replaced with 55 linear feet of a new 15-inch structure with new end sections; the type of structure will be determined at the time of construction. Two (2) structures under driveways will also be replaced. Refer to Appendix B-20 to B-21 for the locations of the structures and proposed improvements.

The project requires approximately 0.831 acre of new permanent right-of-way (ROW), the reacquisition of 1.116 acres of assumed (reacquired) ROW, and 0.046 acre of temporary ROW. Approximately 0.09 acre of trees will be removed, and both above and underground utilities will be relocated. Maintenance of traffic (MOT) is anticipated to involve widening SR 15 and shifting traffic while the other side is under construction. CR 18 will have a short- term closure for the structure replacement. A more detailed plan is discussed in the MOT section of this document. This alternative meets the purpose and need of the project by providing a solution to reduce crash rates and improve intersection safety. The addition of left turn lanes is known to reduce the total number of crashes between 28% and 48%, according to the Federal Highway Administration's (FHWA) "Proven Safety Countermeasures" (https://safety.fhwa.dot.gov/provencountermeasures/left_right_turn_lanes/), and will therefore meet the goal of the project.

Logical Termini/Independent Utility:

The project termini allow for construction equipment access to make the proposed improvements. The project does not rely on another project to meet its purpose and need. Therefore, the project has logical termini and independent utility.

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.

Do Nothing:

The no build alternative was considered but does not meet the purpose and need of the project because it does not address the crash rate and safety concerns at the intersection. Therefore, this alternative was discarded from further consideration.

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

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

X

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ROADWAY CHARACTER:

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

Name of Roadway SR 15 (Segment 1, north of intersection)
 Functional Classification: Urban Principal Arterial
 Current ADT: 14,667 VPD (2023) Design Year ADT: 17,797 VPD (2043)
 Design Hour Volume (DHV): 8.88% Truck Percentage (%) 7.94%
 Designed Speed (mph): 50 Legal Speed (mph): 50

Name of Roadway SR 15 (Segment 2, south of intersection)
 Functional Classification: Urban Principal Arterial
 Current ADT: 12,848 VPD (2023) Design Year ADT: 16,760 VPD (2043)
 Design Hour Volume (DHV): 9.01% Truck Percentage (%) 8.27%
 Designed Speed (mph): 50 Legal Speed (mph): 50

SR 15 (both segments)

	Existing		Proposed	
Number of Lanes:	2		3 (two through lanes, one middle left turn only lane)	
Type of Lanes:	Asphalt through lane		Asphalt through lane	
Pavement Width:	24	ft.	Varies; 24-44	ft.
Shoulder Width:	4	ft.	4	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

Name of Roadway CR 18 (both segments)
 Functional Classification: Minor Collector west of SR 15 and a Local Road east of SR 15
 Current ADT: 2,275 VPD (2018) Design Year ADT: 3,425 VPD (2043)
 Design Hour Volume (DHV): 309 Truck Percentage (%) 1.0%
 Designed Speed (mph): 30 Legal Speed (mph): 30

	Existing		Proposed	
Number of Lanes:	2		2	
Type of Lanes:	Asphalt on compacted stone base		Asphalt on compacted stone base	
Pavement Width:	20	ft.	Varies 20-40	ft.
Shoulder Width:	0	ft.	~2	ft.
Median Width:	N/A	ft.	N/A	ft.
Sidewalk Width:	N/A	ft.	N/A	ft.

Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

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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): N/A Sufficiency Rating: N/A
 (Rating, Source of Information)

	Existing		Proposed	
Bridge/Structure Type:	24-inch CMP		Safety metal end section and manhole junction installed to existing structure	
Number of Spans:	1		1	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	55	ft.	55	ft.
Shoulder Width:	N/A	ft.	N/A	ft.

	Existing		Proposed	
Bridge/Structure Type:	Small concrete culvert		15-inch pipe with 2 end sections. Type of material will be determined during construction	
Number of Spans:	N/A		N/A	
Weight Restrictions:	N/A	ton	N/A	ton
Height Restrictions:	N/A	ft.	N/A	ft.
Curb to Curb Width:	N/A	ft.	N/A	ft.
Outside to Outside Width:	31.4	ft.	55	ft.
Shoulder Width:	N/A	ft.	N/A	ft.

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

There is an existing 24-inch CMP under SR 15 approximately 615 linear feet south of the SR 15/CR 18 intersection that conveys stormwater under the roadway to an existing retention basin outfall pipe. This CMP will remain in place with no improvements and will be extended with a safety metal end section on the west side of SR 15 and connected to the existing retention basin outfall pipe using a new shallow manhole junction on the east side. Two (2) 12-inch diameter structures (8 linear feet and 5.5 linear feet in length) will be installed adjacent to the new manhole (refer to Appendix B-20). The existing concrete culvert under CR 18 west of the intersection will be removed and replaced with a 15-inch diameter structure (type undetermined) that will be 55 linear feet in length (refer to Appendix B-21). In addition, a new 15-inch diameter structure 20 linear feet in length will be installed under an agricultural field access driveway approximately 325 feet north of the SR 15/CR 18 intersection to convey stormwater runoff under the driveway (Appendix B-21).

No bridges or other small structures are located in the project area.

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MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

	Yes	No
Is a temporary bridge proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is a temporary roadway proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the project involve the use of a detour or require a ramp closure? (describe below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for access by local traffic and so posted.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for through-traffic dependent businesses.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Provisions will be made to accommodate any local special events or festivals.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there substantial controversy associated with the proposed method for MOT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discuss closures 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. Any local concerns about access and traffic flow should be detailed as well.

The MOT for the project will be conducted in phases, with widening of the SR 15 roadway to allow traffic to be shifted to one side while the other side is under construction. Traffic will be controlled using roadside signs and temporary pavement markers. CR 18 will require a short-term closure west of the intersection for the concrete culvert replacement; the estimated time of the closure is two (2) weeks. The closure of CR 18 will require the use of a detour. The detour will utilize CR 23 and CR 20 and add approximately 2.4 miles of additional travel. Barricades will be placed at the nearest intersection to warn drivers of the upcoming closure of CR 18. Access to Prince of Peace Lutheran Church and adjacent driveways to residences and the electrical substation on the east side of SR 15 north of the intersection will remain open throughout construction. Construction is anticipated to last nine months. See Appendix B-14 to B-19 for detailed MOT plans.

The closure/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: \$ 180,000 (2020) Right-of-Way: \$ 50,000 (2022) Construction: \$ 1,193,325 (2023)

Anticipated Start Date of Construction: April 2023

Note: the Indiana State Transportation Improvement Program (STIP) and Michiana Area Council of Governments (MACOG) Transportation Improvement Program (TIP) will be updated with current costs prior to construction.

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Residential	0.433	0.046
Commercial	0.333	0.0
Agricultural	0.0	0.0
Forest	0.0	0.0
Wetlands (Wetland 2)	0.065	0.0
Other:	0.0	0.0
Other:	0.0	0.0
TOTAL	0.831	0.046

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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.

Existing ROW limits on SR 15 are approximately 40 linear feet from the center line in each direction of travel to the south of CR 18 and approximately 35 linear feet from the centerline in each direction of travel to the north of CR 18. Existing ROW limits on CR 18 vary from 14 feet to 52 feet from the center line in each direction of travel.

Maximum proposed ROW width on SR 15 will vary from 40 linear feet to 50 linear feet from the center line south of the intersection of CR 18. Maximum proposed ROW width on SR 15 will vary from 40 linear feet to 45 linear feet from the center line north of the intersection of CR 18. The maximum proposed ROW width of CR 18 will be 88 linear feet from the centerline.

The project requires approximately 0.831 acre of new permanent ROW, 0.046 acre of temporary ROW, and the reacquisition of 1.116 acres of assumed ROW for improvements to the intersection and for construction equipment access. The temporary ROW acquisition will be required at the private drive entrances along the east side of SR 15. The permanent ROW acquisition and reacquisition of assumed ROW will be required from the residential, commercial, and agricultural properties surrounding the northeast, northwest, and southwest quadrants of the intersection. Approximately 0.065 acre of Wetland 2 will be permanently acquired, and approximately 0.035 acre of Wetland 2 will be reacquired and is included in the 1.116 total acres to be reacquired. The location of all ROW acquisition can be seen in Appendix B-20 to B-22. The early coordination letter, the USFWS concurrence letter and species list in Appendix C, and the Minor Projects Programmatic Agreement (MPPA) determination in Appendix D state that 0.25 acre of permanent and 1.2 acres of reacquired ROW will be required. The current ROW acquisition estimates were adjusted after the submission of these documents.

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 originally sent on June 30, 2020 by SJCA Inc. (formerly Green 3, LLC). There was an error in the subject line, therefore it was resent on July 10, 2020, with the correct subject line information (Appendix C-1 to C-2). The ROW estimates were updated after the initial early coordination letter was sent; therefore, updated ROW estimates were sent to the Indiana Department of Natural Resources (IDNR) Division of Fish and Wildlife (DFW) (Appendix C-20) and Natural Resources Conservation Service (NRCS) on July 3, 2021 (Appendix C-14).

Agency	Date Sent	Date Response Received	Appendix
Federal Highway Administration (FHWA)	6/30/2020; 7/10/2020	No Response Received	N/A
U.S. Department of Housing and Urban Development (HUD)	6/30/2020; 7/10/2020	No Response Received	N/A
Midwest Regional Office National Park Service (NPS)	6/30/2020; 7/10/2020	No Response Received	N/A
U.S. Fish and Wildlife (USFWS)	6/30/2020; 7/10/2020	7/14/2020	C-17
U.S. Army Corps of Engineers (USACE)	6/30/2020; 7/10/2020	No Response Received	N/A
NRCS	6/30/2020; 7/10/2020. 7/3/2021	7/29/2021	C-14 to C-15
Indiana Geological and Water Survey (IGWS)	7/9/2020	7/9/2020	C-3 to C-5
Indiana Department of Environmental Management (IDEM) Online Submission	7/10/2020	7/10/2020	C-6 to C-13
Elkhart Municipal Separate Storm Sewer Systems (MS4) Coordinator	6/30/2020; 7/10/2020	No Response Received	N/A

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MACOG Metropolitan Planning Organization (MPO)	6/30/2020; 7/10/2020	No Response Received	N/A
Elkhart County Commissioners	6/30/2020; 7/10/2020	No Response Received	N/A
INDOT Public Hearings	6/30/2020; 7/10/2020	No Response Received	N/A
INDOT Fort Wayne District	6/30/2020; 7/10/2020	No Response Received	N/A
Elkhart County Surveyor	6/30/2020; 7/10/2020	No Response Received	N/A
Elkhart County Highway Supervisor	6/30/2020; 7/10/2020	No Response Received	N/A
Elkhart County Council	6/30/2020; 7/10/2020	No Response Received	N/A
Middlebury Community Schools Transportation Director	6/30/2020; 7/10/2020	No Response Received	N/A
Middlebury Community Schools Superintendent	6/30/2020; 7/10/2020	No Response Received	N/A
Prince of Peace Lutheran Church	6/30/2020; 7/10/2020	No Response Received	N/A
INDOT Utilities and Railroad	6/30/2020; 7/10/2020	No Response Received	N/A
Sole Source Aquifer (SSA) Coordinator, U.S. Environmental Protection Agency (USEPA) Region 5	6/30/2020; 7/10/2020	7/14/2020	C-16
IDNR DFW	6/30/2020; 7/10/2020; 7/3/2021	8/7/2020; 7/6/2021	C-18 to C-20

The IDNR responded on July 6, 2021, stating that the recommendations in the August 7, 2020, response letter still apply and did not provide any additional recommendations or concerns (Appendix C-20). Resource specific recommendations are included in the applicable sections of this CE document, and all applicable recommendations are included in the *Environmental Commitments* section of this CE document.

SECTION B – ECOLOGICAL RESOURCES:

Streams, Rivers, Watercourses & Other Jurisdictional Features

- Federal Wild and Scenic Rivers
- State Natural, Scenic or Recreational Rivers
- Nationwide Rivers Inventory (NRI) listed
- Outstanding Rivers List for Indiana
- Navigable Waterways

Presence

Impacts

Yes No

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Total stream(s) in project area: 0.0 Linear feet Total impacted stream(s): 0.0 Linear feet

Stream Name	Classification	Total Size in Project Area (linear feet)	Impacted linear feet	Comments (i.e. location, flow direction, likely Water of the US, appendix reference)
N/A	N/A	N/A	N/A	N/A

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 subject to federal or state jurisdiction. Discuss measures to avoid, minimize, and mitigate if impacts will occur.

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Based on the desktop review, the aerial map of the project area (Appendix B-3), and the Red Flag Investigation (RFI) report (Appendix E-6), there are no streams, rivers, watercourses, or other jurisdictional features within the 0.5-mile search radius. That number was confirmed by the site visits on June 26, 2020, and August 14, 2020, by SJCA Inc. No streams, rivers, watercourses, or other jurisdictional features are present within or adjacent to the project area; therefore, no impacts are expected.

Open Water Feature(s)	Presence	Impacts	
		Yes	No
Reservoirs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Farm Ponds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Retention/Detention Basin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm Water Management Facilities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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 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-3), and the RFI report (Appendix E-6 to E-7) there are six (6) open water features within the 0.5-mile search radius. The RFI report states that the nearest lake is located 0.02 mile south of the project area; however, the lake is located 0.02 mile east of the project area. That number was updated to seven (7) open water features during the site visits on June 26, 2020, and August 14, 2020, by SJCA Inc. and includes one (1) unmapped pond located near the northeast quadrant of the SR 15/CR 18 intersection (refer to Appendix B-4 for the location of this pond). The two (2) ponds closest to the project area are outside of the construction limits; therefore, no impacts are expected.

A *Waters of the U.S. Determination / Wetland Delineation Report* was approved by INDOT Ecology and Waterway Permitting Office (EWPO) on November 17, 2020. Please refer to Appendix F for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that two (2) open water features, freshwater ponds, were located outside of and adjacent to the investigated area. No other open water or other water features were identified in the investigated area. The USACE makes all final determinations regarding jurisdiction.

Wetlands	Presence	Impacts	
		Yes	No
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Total wetland area: 0.30 Acre(s) Total wetland area impacted: 0.11 (0.04 temporary, 0.07 permanent) 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)
1	Emergent	0.24	0.06 (permanent); 0.04 (temporary)	Northeast quadrant of SR 15/CR 18 intersection. Wetland 1 is likely a Waters of the State* (Appendix F-4 to F-6).
2	Emergent/ shrub	0.06	0.01 (permanent)	Along the east side of SR 15, adjacent to the roadway. Wetland 2 is likely a Waters of the State* (Appendix F-5 to F-6).

*NOTE: INDOT acknowledges that the wetlands would likely not meet the definition of a Waters of the US; however, INDOT is requesting that the USACE take jurisdiction of the wetlands during permitting.

Wetlands (Mark all that apply)	Documentation	ESD Approval Dates
	Wetland Determination	<input checked="" type="checkbox"/>
Wetland Delineation	<input checked="" type="checkbox"/>	<u>11/17/2020</u>
USACE Isolated Waters Determination	<input type="checkbox"/>	

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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.

X
X

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 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-3), and the RFI report (Appendix E-1, E2, E-6, and E-7) there are 23 wetlands within the 0.5-mile search radius. The nearest wetland is located within the project area. That number was updated by the site visits on June 26, 2020, and August 14, 2020, by SJCA Inc. There are two (2) unmapped wetlands present within or adjacent to the project area (25 total wetlands within the 0.5-mile search radius).

The original RFI report was approved on March 31, 2020 and identified 20 wetlands within the 0.5 mile search radius (Appendix E-4). The project area was later extended and re-coordination with INDOT Site Assessment and Management (SAM) occurred (Appendix E-1 to E-3). Research of the amended 0.5-mile search radius found three (3) additional wetlands in addition to the 20 wetlands identified in the original RFI report (Appendix E-1 to E-2). Per email correspondence with Site Assessment Management office (SAM), an RFI addendum is not required as there are no impacts to additional findings within the 0.5-mile search radius (Appendix E-1 to E-3). Additional research of the project area was conducted on July 9, 2021, by SJCA Inc., and no additional wetlands were found.

Waters of the U.S. Determination / Wetland Delineation Report was approved by INDOT Ecology and Waterway Permitting Office on November 17, 2020. Please refer to Appendix F for the *Waters of the U.S. Determination / Wetland Delineation Report*. It was determined that two (2) wetlands are present in the project area, Wetland 1 and Wetland 2. The USACE makes all final determinations regarding jurisdiction.

Wetland 1: Wetland 1 is located in the northeast quadrant of the intersection of SR 15 and CR 18 in a low-lying pasture. The property is fenced and appears to have been used as a livestock pasture in the past. The pasture has been allowed to go fallow and is in a depression/concave relief. Based on the National Wetlands Inventory (NWI) map aerial imagery (from last 5 years) and the 2019 Google aerial imagery, the corner of this property is often saturated with water. Wetland 1 is approximately 0.24 acre within the investigated area; however, it appears to expand east outside of the investigated area. The western boundary of the wetland ends at the fence along SR 18 and the southern boundary extends past the fence and into the low area along the north side of CR 18. Wetland 1 is dominated by reed canary grass (*Phalaris arundinacea*) and is a poor-quality emergent wetland due to the lack of biodiversity and habitat for aquatic flora and fauna. Wetland 1 is likely not jurisdictional under the authority of the USACE because it lacks connectivity to any jurisdictional water features. It is likely that Wetland 1 is an isolated wetland and Waters of the State. INDOT acknowledges that the wetlands would likely not meet the definition of a Waters of the US; however, INDOT is requesting that the USACE take jurisdiction of the wetland during permitting. Approximately 0.06 acre of Wetland 1 will be permanently impacted by the widening of CR 18 in the northeast quadrant and approximately 0.04 acre will be temporarily impacted by equipment access during construction.

Wetland 2: Wetland 2 is located along the east side of SR 15, near the southern portion of the project area, and within a roadside ditch. The ditch is between the raised roadway of SR 15 to the west and a raised berm/terrace to the east. Wetland 2 is approximately 0.06 acre within the investigated area and is confined to the roadside ditch between SR 15 and the raised earthen-berm and raised terrace. The majority of this ditch wetland is dominated by reed canary grass (*Phalaris arundinacea*), but some sapling black willows (*Salix nigra*) are located further south within the wetland. The northern and southern boundaries of Wetland 2 are apparent by abrupt changes in dominant vegetation to upland vegetation and raised geomorphic position. Wetland 2 is a poor-quality emergent/shrub wetland due to the lack of biodiversity and habitat for aquatic flora and fauna. Wetland 2 is likely not jurisdictional under the authority of the USACE because it lacks connectivity to any jurisdictional water features. It is likely that Wetland 2 is an isolated wetland and Waters of the State. INDOT acknowledges that the wetland would likely not meet the definition of a Waters of the US; however, INDOT is requesting that the USACE take jurisdiction of the wetland during permitting. Approximately 0.01 acre of Wetland 2 will be permanently impacted by the installation of the proposed manhole and two (2) new pipes that will connect to the manhole and existing retention basin outfall pipe located within Wetland 2.

A USACE/IDEM 401/404 Regional General Permit (RGP) is anticipated. Wetland mitigation is not anticipated because permanent impacts to wetlands are under 0.1 acre. Complete avoidance of these impacts would not address the purpose and need of the

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project to improve safety at the SR 15/CR 18 intersection. Wetland boundaries will be marked as "Do Not Disturb" on the final plans and on the project site in accordance with the Environmental Commitments section of this CE document.

The IDEM automated early coordination response letter dated July 10, 2020, included recommendations for permits needed to work in wetlands but no comments specific to wetlands (Appendix C-6 to C-13). IDNR responded on August 7, 2020 and recommended not to excavate or place fill in any riparian wetland (Appendix C-18 to C-19). All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

	<u>Presence</u>	<u>Impacts</u>	
		Yes	No
Terrestrial Habitat	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Total terrestrial habitat in project area: 1.87 Acre(s) Total tree clearing: 0.09 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, site visits on June 26, 2020, and August 14, 2020, by SJCA Inc., and the aerial map of the project area (Appendix B-3), the terrestrial habitat within the project area consists primarily of Canadian thistle (*Cirsium arvense*), common milkweed (*Asclepias syriaca*), southwestern black willow (*Salix nigra*), wild grapevine (*Vitis riparia*), bottlebrush grass (*Hystrix patula*), Virginia creeper (*Parthenocissus quinquefolia*), poison ivy (*Toxicodendron Radicans*), common mullein, (*Verbascum Thapsus*), and spiderwort (*Tradescantia*).

This project will require approximately 1.87 acres of vegetation to be removed or disturbed along the roadsides to allow access to the roadway and pipe replacement. It is anticipated that three (3) trees will be removed (approximately 0.09 acre total); these trees will be demarcated on the final plans. Avoidance would not allow the project to occur and the purpose and need to be met; rear-end crashes resulting from stopped vehicles waiting to turn would continue. Mitigation is not anticipated.

IDNR responded on August 7, 2020, with recommendations to replace non-wetland trees removed; revegetate all bare and disturbed areas with a mixture of grasses and legumes upon project completion; minimize tree and brush clearing to within project limits; and to not cut trees suitable for the Indiana bat (*Myotis sodalis*) or northern long-eared bat (*Myotis septentrionalis*) from April 1 through September 30 (Appendix C-18 to C-19). All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

Protected Species

Federally Listed Bats

Information for Planning and Consultation (IPaC) determination key completed	Yes	No
Section 7 informal consultation completed (IPaC cannot be completed)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Section 7 formal consultation Biological Assessment (BA) required	<input type="checkbox"/>	<input type="checkbox"/>

Determination Received for Listed Bats from USFWS: NE NLAA LAA

Other Species not included in IPaC

Additional federal species found in project area (based on IPaC species list)	Yes	No
State species (not bird) found in project area (based upon consultation with IDNR)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Migratory Birds

Known usage or presence of birds (i.e. nests)	Yes	No
State bird species based upon coordination with IDNR	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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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-15 to E-18), completed by SJCA Inc. (formerly Green 3, LLC) on March 31, 2020, the IDNR Elkhart County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR DFW early coordination response letter dated August 7, 2020 (Appendix C-18), the Natural Heritage Program's Database has been checked no plant or animal species listed as state or federally threatened endangered, or rare have been reported to occur in the project vicinity.

Project information was submitted through the USFWS's Information for Planning and Consultation (IPaC) portal, and an official species list was generated (Appendix C-37 to C-42). The project is within range of the federally endangered Indiana bat (*Myotis sodalis*) and the federally threatened northern long-eared bat (NLEB) (*Myotis septentrionalis*). No additional species were generated in the IPaC species list other than the Indiana bat and northern long-eared bat.

The project qualifies for the *Range-wide Programmatic Informal Consultation for the Indiana bat and northern long eared bat (NLEB)*, dated May 2016 (revised February 2018), between FHWA, Federal Railroad Administration (FRA), Federal Transit Administration (FTA), and USFWS. A small structure inspection occurred on June 26, 2020, and no bats, signs of bats, or bat guano were present in or around the structure (Appendix C-36). An effect determination key was completed on August 25, 2020, and based on the responses provided, the project was found to "may affect-not likely to adversely affect" (NLAA) the Indiana bat and/or the NLEB (Appendix C-22 to C-35). INDOT reviewed and verified the effect finding on August 27, 2020 and requested USFWS's review of the finding (Appendix C-21). No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. Avoidance and Minimization Measures (AMMs) are included as firm commitments in the *Environmental Commitments* section of this document. These AMMs include restrictions on the use of temporary lighting and tree removal.

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

- Project located within the Potential Karst Features Area of Indiana
- Karst features identified within or adjacent to the project area
- Oil/gas or exploration/abandoned wells identified in the project area

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

Discuss if project is located in Potential Karst Features Area of Indiana 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. Describe if any impacts will occur to any karst features. Include discussion of karst study/report was completed and results. (Karst investigation must comply with the current Karst MOU and coordinated and reviewed by INDOT EWPO)

Based on a desktop review, this proposed project is located outside the designated karst area of Indiana as outlined in INDOT's July 15, 2021 *Protection of Karst Features during Project Development and Construction* procedure. According to the U.S. Geological Survey (USGS) topographic map of the project area (Appendix B-2) and the RFI report (Appendix E-6), there are no karst features identified within the project area. In the July 9, 2020, automated early coordination response, the IGWS did not indicate that karst features exist in the project area (Appendix C-3 to C-5). The IGWS also stated that there is a moderate liquefaction potential for geologic hazards, a moderate potential for bedrock resources, and a high potential for sand and gravel resources. These features will not be affected because the project falls along the same alignment with no extraction sites existing or planned within or adjacent to the project area. The IGWS did not indicate that any active or abandoned mineral resource extraction sites are in the vicinity of the project. Response from IGWS has been communicated with the designer on July 15, 2020. No impacts are expected.

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SECTION C – OTHER RESOURCES

Drinking Water Resources

- Wellhead Protection Area(s)
- Source Water Protection Area(s)
- Water Well(s)
- Urbanized Area Boundary
- Public Water System(s)

Presence

X
X
X

Impacts

Yes	No
	X
	X
	X

- Is the project located in the St. Joseph Sole Source Aquifer (SSA):
- If Yes, is the FHWA/EPA SSA MOU Applicable?
- If Yes, is a Groundwater Assessment Required?

Yes	No
X	
X	
	X

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.

Inside Sole Source Aquifer-SSA

The U.S. Environmental Protection Agency's (EPA) Sole Source Aquifer (SSA) website (<https://www.epa.gov/dwssa>) was accessed on June 23, 2020, by SJCA Inc. (formerly Green 3, LLC). The project is located in Elkhart County, of which portions are located within the area of the St. Joseph SSA, the only legally designated sole source aquifer in the state of Indiana. The FHWA/EPA Sole Source Aquifer Memorandum of Understanding (MOU) is applicable to this project. On July 14, 2020, the SSA Coordinator for Ground Water and Drinking Water Branch of the EPA responded to the early coordination letter, stating the project is not likely to contaminate the St. Joseph Sole Source Aquifer so as to create a significant hazard to public health, and no further review under the SSA Program should be necessary. It was recommended that prior to construction, the anticipated construction and staging areas need to be inspected to ensure there are no existing wells that could be disturbed or contaminated and if found, those areas need to be clearly flagged to avoid damage (Appendix C-16). The SSA Coordinator also recommended that during construction and maintenance, appropriate safeguards and best management practices are in place to ensure that local ground water supplies and neighboring drinking water wells are not endangered. Such precautions could include notifying general contractors that the site is sensitive, using certified clean fill materials where needed, using "green infrastructure" practices where possible to reduce potential impacts of stormwater run-off, securing adequate precautions for fueling/servicing large equipment, and developing contingency plans to handle the release of any hazardous materials. All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

Wellhead Protection Area and Source Water Area

The IDEM Source Water Proximity Determinator website (<http://www.in.gov/idem/cleanwater/pages/wellhead/>) was accessed on June 23, 2020, by SJCA Inc (formerly Green 3, LLC). This project is not located within a Wellhead Protection Area or Source Water area. No impacts are expected.

Water Wells

The IDNR Water Well Record Database website (<https://www.in.gov/dnr/water/3595.htm>) was accessed on June 23, 2020 by SJCA Inc (formerly Green 3, LLC). The nearest wells are located southeast and northwest of the construction site at residences near the intersection. The features will not be affected because construction is not in the area. Therefore, no impacts are expected. Should it be determined during the right-of-way phase that these wells are affected, a cost to cure will likely be included in the appraisal to restore the wells.

Urban Area Boundary

Based on a desktop review of the INDOT MS4 website (<https://entapps.indot.in.gov/MS4/>) by SJCA Inc. (formerly Green 3, LLC) on June 23, 2020 and the RFI report (Appendix E-7), this project is in an Urban Area Boundary (UAB) location. An early coordination letter was sent on July 10, 2020, to the MS4 Coordinator in Elkhart County. The MS4 Coordinator did not respond to early coordination. The MS4 ordinances in Goshen and Elkhart County have the same requirements for construction as the IDEM Rule 5 requirements. An IDEM Rule 5 permit is required for the project. Therefore, the project complies with the Elkhart County Soil & Water Conservation District's stormwater management plan.

Public Water System

Based on a desktop review, site visits on June 26, 2020, and August 14, 2020, by SJCA Inc., the aerial map of the project area (Appendix B-3), and the project plans (Appendix B-10 to B-29), this project is not located where there will be public water system impacts. Therefore, no impacts are expected.

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Floodplains	Presence	Impacts	
		Yes	No
Project located within a regulated floodplain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Longitudinal encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transverse encroachment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Homes located in floodplain within 1000' up/downstream from project	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If applicable, indicate the Floodplain Level?

Level 1 Level 2 Level 3 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 IDNR Indiana Floodway Information Portal website (<http://dnrmaps.dnr.in.gov/appsphp/fdms/>) was accessed on June 23, 2020. This project is not located in a regulatory floodplain as determined from approved IDNR floodplain maps (Appendix F-8). Therefore, it does not fall within the guidelines for the implementation of 23 Code of Federal Regulations (CFR) 650, 23 CFR 771, and 44 CFR. No impacts are expected.

Farmland	Presence	Impacts	
		Yes	No
Agricultural Lands	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Prime Farmland (per NRCS)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Total Points (from Section VII of CPA-106/AD-1006*) 108
 *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, site visits on June 26, 2020, and August 14, 2020, by SJCA Inc., and the aerial map of the project area (Appendix B-3), the project will convert prime farmland as defined by the farmland Protection Policy Act. An early coordination letter was sent on July 10, 2020, to the NRCS. Updated ROW information was sent to NRCS on July 3, 2021, and the agency responded on July 29, 2021. Coordination with NRCS resulted in a score of 108 on the AD-1006 Form (Appendix C-15). NRCS's threshold score for significant impact 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.

The ROW estimates in the early coordination letter to NRCS differ from the current estimates. Because the project area did not change significantly, additional coordination with NRCS was determined to not be warranted.

SECTION D – CULTURAL RESOURCES

Minor Projects PA	Category(ies) and Type(s)	INDOT Approval Date(s)	N/A
	Category B Type 3	September 11, 2020; updated April 16, 2021	<input type="checkbox"/>

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)

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Documentation Prepared (mark all that apply)

- 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:

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

ESD Approval Date(s)

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
September 11, 2020
<input type="checkbox"/>
<input type="checkbox"/>

SHPO Approval Date(s)

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
N/A
<input type="checkbox"/>
<input type="checkbox"/>

Memorandum of Agreement (MOA)

<input type="checkbox"/>

MOA Signature Dates (List all signatories)

N/A

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 April 16, 2021, the INDOT Cultural Resource Office (CRO) determined that this project falls within the guidelines of Category B, Type 3 under the Minor Projects Programmatic Agreement (Appendix D-2 to D-4). Category B-3 projects include construction of added travel, turning, or auxiliary lanes (e.g., bicycle, truck climbing, acceleration, and deceleration lanes) and shoulder widening in previously undisturbed soils when an archaeological investigation conducted by the applicant and reviewed by INDOT CRO determines that no sites listed or eligible for the National Register of Historic Places (NRHP) are present within the project area. Due to work in undisturbed soils, an archaeological investigation of the project area was conducted by SJCA Inc. (Jackson 2020). The report found one small historic site, but it was not considered eligible for listing in the NRHP. Therefore, there are no archaeological concerns.

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

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

Parks and Other Recreational Land

- Publicly owned park
- Publicly owned recreation area
- Other (school, state/national forest, bikeway, etc.)

<u>Presence</u>	<u>Use</u>	
	<u>Yes</u>	<u>No</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wildlife and Waterfowl Refuges

- National Wildlife Refuge
- National Natural Landmark
- State Wildlife Area
- State Nature Preserve

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Historic Properties

- Site eligible and/or listed on the NRHP

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Evaluations Prepared

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

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>

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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-3), and the RFI report (Appendix E-6) there are two (2) potential 4(f) resources located within the 0.5-mile search radius. One (1) trail segment is 0.49 mile from the project. One (1) school, Jefferson Elementary School, is identified in the RFI report as also being a recreational facility and is discussed in more detail in the Public Facilities section of this CE document below. The school/recreational facility is approximately 0.31 mile from the project. No impacts to the activities, features, and attributes that qualify the trail and school/recreational facility for protection under Section 4(f) are expected. Based on site visits on June 26, 2020, and August 14, 2020, by SJCA Inc., there are no 4(f) resources located within or adjacent to the project area. Therefore, no use is expected.

Section 6(f) Involvement

Presence

Use

Yes

No

Section 6(f) Property

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

The 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 Environmental Services Division (ESD) website revealed a total of 20 properties in Elkhart County (Appendix I-1). 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?

Is the project located in an MPO Area?

Is the project in an air quality non-attainment or maintenance area?

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)?

Is a hot spot analysis required (CO/PM)?

Location in STIP:

2020-2024 STIP (Appendix H-1)

Name of MPO (if applicable):

MACOG

Location in TIP (if applicable):

2020-2024 MACOG TIP (Appendix H-2)

Level of MSAT Analysis required?

Level 1a 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.

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This project is included in the Fiscal Year (FY) 2020-2024 Indiana STIP (approved July 2, 2019) and the FY 2020-2024 MPO MACOG TIP. Refer to Appendix H-1 and H-2.

This project is located in Elkhart County, which is currently a maintenance area for Ozone, under the 1979 1-hour standard and the 1997 Ozone 8-hour standard which was revoked in 2015 but is being evaluated for conformity due to the February 16, 2018, *South Coast Air Quality Management District V. Environmental Protection Agency*, Et. Al. Decision. The project's design concept and scope are accurately reflected in both the MACOG Transportation Plan (TP) and the TIP and both conform to the State Implementation Plan (SIP). Therefore, the conformity requirements of 40 CFR 93 have been met.

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

SECTION G - NOISE

Noise

Yes No

Is a noise analysis required in accordance with FHWA regulations and INDOT's traffic noise policy?

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

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

This project is a Type III project. In accordance with 23 CFR 772 and the current 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?

Will the proposed action result in substantial impacts to community cohesion?

Will the proposed action result in substantial impacts to local tax base or property values?

Will construction activities impact community events (festivals, fairs, etc.)?

Does the community have an approved transition plan?

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)

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.

The project will not have a substantial impact to community cohesion, or local tax bases and property values. This project will not result in changes in the pattern of land use, the population density, or the growth rate of the area.

The project will comply with the local and regional development plan for Elkhart County. Elkhart County has a 2006 Land Use Plan (<http://elkhartcountyplanninganddevelopment.com/Planning.html>) that promotes efficient transportation routes. The project is not located within the boundaries of any municipality; however, four (4) municipalities are located within seven (7) miles of the project area: the Towns of Middlebury to the east and Bristol to the north, and the Cities of Goshen to the south and Elkhart to the west. The 2030 Middlebury Comprehensive Plan promotes well maintained transportation routes as opportunities for economic growth. The Town of Bristol and MACOG are currently developing a 2030 Comprehensive Plan (refer to http://www.macog.com/community_development.html for both plans). Goals of the City of Goshen Comprehensive Plan and Community Vision 2025 (last updated October 2016, <https://goshenindiana.org/planning-zoning>) include identifying high risk intersections and developing strategies to improve safety and to optimize partnerships with regional, state, and federal transportation authorities to develop projects and policies to provide and improve multi-jurisdictional transportation. The City of Elkhart Comprehensive Plan (last updated in February 2015, <https://elkhartindiana.org/government/planning-zoning/>) promotes transportation systems that provide safe, convenient, and efficient movement of traffic as vital to a community's well-being. Elkhart County has an approved Americans with Disabilities Act (ADA) compliant transition plan (<http://www.elkcohy.org/resources/ada/ada-transition-plan/>). There are no pedestrian facilities in the project area and the project

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does not include sidewalks or curb improvements.

The website www.fairsandfestivals.net was reviewed to determine if the project would impact any community fairs or festivals in the vicinity of the project area. While there are fairs and festivals that are planned within a 10-mile radius of the project area during the construction period, this project will not restrict access to facilities that host these events. Travel to and from events in surrounding municipalities may be minimally impacted by the project. Since an official detour with clearly marked signage will be used during construction, impacts to community cohesion and local events will be minimized. This project will have a net positive effect on the community because it will provide an intersection with improved traffic flow and safety. It was concluded that the project will not substantially impact community cohesion or adversely impact local community events.

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-3), and the RFI report (Appendix E-6), there are five (5) public facilities within a 0.5-mile search radius. That number was confirmed during site visits on June 26, 2020, and August 14, 2020, by SJCA Inc.

One (1) trail, the Miami Snowmobile Trail, is located approximately 0.38 northeast to the project area. No impact is expected.

One (1) religious facility, the Prince of Peace Lutheran Church, is in the southwest quadrant of the SR 15/CR 18 intersection. The entrance to the facility is approximately 225 linear feet west of the intersection on CR 18 and outside of the project limits (refer to the plan sheet in Appendix B-21). The early coordination letter was sent to the religious facility, but no response was received. ROW is anticipated from Prince of Peace Lutheran Church and will comply with the FHWA's Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act). Access to all properties will be maintained throughout construction. Therefore, impacts to the religious facility will be minimized.

One (1) school, Jefferson Elementary School, is located approximately 0.31 mile southwest of the project area; the school is also identified as a recreational facility. The early coordination letter was sent to Middlebury Community Schools (the school corporation of which Jefferson Elementary School is a part) but no response was received.

Two (2) pipelines are located within the 0.5-mile search radius (Appendix E-6). One (1) pipeline (Northern Indiana Public Service Company) crosses the project area. The early coordination letter was sent to INDOT Utilities and Railroads on July 10, 2020, but no response was received. Based on a review of the plans in Appendix B-10 to B-29, there are overhead power lines, buried fiber optic lines, and gas lines. Impacts are expected. Coordination with utilities has been initiated and will be ongoing throughout the project.

The original RFI report was approved on March 31, 2020 and identified one (1) pipeline. The project area was later extended and re-coordination with INDOT SAM occurred (Appendix E-1 to E-3). Research of the amended 0.5-mile search radius on July 9, 2020 by SJCA Inc. (formerly Green 3, LLC) found one (1) additional pipeline in the 0.5-mile search radius; however, no additional impacts will occur. Per email correspondence with Site Assessment Management office (SAM), an RFI addendum is not required as there are no impacts to additional findings within the 0.5-mile search radius (Appendix E-1 to E-3). Additional research of the project area was conducted on July 9, 2021, by SJCA Inc., and no additional pipelines were found.

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.

Indiana Department of Transportation

County Elkhart Route SR 15 Des. No. 1800039

Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>

Does the project require an EJ analysis?

If YES, then:

Are any EJ populations located within the project area?

<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Will the project result in adversely high and disproportionate impacts to EJ populations?

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 and adverse effect on EJ populations and explain your reasoning. If yes, describe actions to avoid, minimize and mitigate these effects.

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 0.831 acre of permanent right-of-way. 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 Elkhart County. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 6. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from 2019 American Community Survey (5 year estimates) from the US Census Bureau Website (<https://data.census.gov/cedsci/>) on February 10, 2021 by SJCA Inc. The data collected for minority and low-income populations within the AC are summarized in the below table.

	COC - Elkhart County, Indiana	AC - Census Tract 6, Elkhart County, Indiana
Percent Minority	25.2%	16.4%
125% of COC	31.5 %	AC < 125% COC
EJ Population of Concern		No
Percent Low-Income	12.4%	3.0%
125% of COC	15.5 %	AC < 125% COC
EJ Population of Concern		No

The AC, Census Tract 6, has a percent minority of 16.4%, which is below 50% and is below the 125% COC threshold. The AC, Census Tract 6, has a percent low-income of 3.0%, which is below 50% and is below 125% of the COC threshold. Therefore, the AC does not contain minority or low-income populations of EJ concern.

The census data sheets, map, and calculations can be found in Appendix I-10 to I-20. The EJ analysis determined that this project will not have a disproportionately high and adverse effect on minority or low-income populations. No further environmental justice analysis is warranted.

Relocation of People, Businesses or Farms

Will the proposed action result in the relocation of people, businesses or farms?

Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

Is a BIS or CSRS required?

Number of relocations: Residences: 0 Businesses: 0 Farms: 0 Other: 0

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

No relocations of people, businesses, or farms will take place as a result of this project.

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SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Documentation

Hazardous Materials & Regulated Substances (Mark all that apply)

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): March 31, 2020 (amended project area reviewed on July 9, 2020, and July 9, 2021)

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 Geographic Information System (GIS) data and available public records, an RFI was concurred on March 31, 2020, by INDOT SAM (Appendix E). There are seven (7) hazmat sites located within 0.5 mile of the project area: four (4) Underground Storage Tanks (USTs); two (2) Leaking Underground Storage Tanks (LUSTs); and one (1) National Pollution, Discharge, and Elimination System (NPDES) Facility. None of the hazmat sites identified will impact the project. Further investigation for hazardous material concerns is not required at this time.

After approval of the RFI report, the project area was expanded (see Appendix E-4). Additional research of the project area on July 9, 2020, found one (1) additional UST and the NPDES facility that were not reported in the March 31, 2020, RFI report. These additional facilities are included in the total number of hazmat sites mentioned above. Correspondence with INDOT SAM discussing additional sites found during a desktop review of the current project area can be found in Appendix E-1 to E-3. INDOT SAM concluded on July 10, 2020, that an addendum to the RFI approved on March 31, 2020, was not necessary. Additional research of the project area was conducted on July 9, 2021, by SJCA Inc.; no additional hazmat sites were found beyond what has been discussed in this section.

PERMITS CHECKLIST

Permits (mark all that apply)

Likely Required

Army Corps of Engineers (404/Section10 Permit)	
Nationwide Permit (NWP)	
Regional General Permit (RGP)	X
Individual Permit (IP)	
Other	
IN Department of Environmental Management (401/Rule 5)	
Nationwide Permit (NWP)	
Regional General Permit (RGP)	X
Individual Permit (IP)	
Isolated Wetlands	
Rule 5	X
Other	
IN Department of Natural Resources	
Construction in a Floodway	
Navigable Waterway Permit	
Other	
Mitigation Required	
US Coast Guard Section 9 Bridge Permit	
Others (Please discuss in the discussion below)	

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Route SR 15

Des. No. 1800039

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

An IDEM Rule 5 Permit is anticipated due to the disturbance of more than one (1) acre of land. An USACE/IDEM 401/404 RGP is anticipated as a result of 0.07 acre of permanent wetland impacts.

Applicable recommendations 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 designer to identify and obtain all required permits.

ENVIRONMENTAL COMMITMENTS

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

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) will be contacted immediately. (INDOT ESD and INDOT Fort Wayne 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. USFWS Bridge/Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after (June 26, 2022), an inspection of the structure by a qualified individual, must be performed. Inspection of the structure should check for presence of bats/bat indicators and/or presence of birds. The results of the inspection must indicate no signs of bats or birds. If signs of bats or birds are documented during this inspection, the INDOT District Environmental Manager must be contacted immediately. (INDOT ESD)
5. Trees that will be removed will be demarcated on the final plans. (INDOT ESD)
6. 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)
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 (April 1 to September 30) 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)
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 tress within 0.25 mile of roosts or documented foraging habitat any time of year. (USFWS)
11. Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
12. If any wells are present in or directly adjacent to the construction or staging areas, the wells should be clearly flagged, and the area avoided to prevent damage or contamination of the wells. (U.S. EPA)
13. During construction and maintenance, appropriate safeguards and best management practices are in place to ensure that local ground water supplies and neighboring drinking water wells are not endangered. Such precautions could include notifying general contractors that the site is sensitive, using certified clean fill materials where needed, using "green infrastructure" practices where possible to reduce potential impacts of stormwater run-off, securing adequate precautions for fueling/servicing large equipment, and developing contingency plans to handle the release of any hazardous materials. (U.S. EPA)

For Further Consideration:

14. 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" dbh or greater (5:1 mitigation based on the number of large trees) or by using the 1:1 replacement ratio based on area depending on the type of habitat impacted. (IDNR)

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DES 1800039 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 Impacts³	No construction in waterways or water bodies	< 300 linear feet of stream impacts	≥ 300 linear feet of stream impacts	-	USACE Individual 404 Permit ⁴
Wetland Impacts³	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	≥ 1.0 acre
Right-of-way⁵	Property acquisition for preservation only or none	< 0.5 acre	≥ 0.5 acre	-	-
Relocations	None	-	-	< 5	≥ 5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat)*	“No Effect”, “Not likely to Adversely Affect” (With select AMMs ⁶)	“Not likely to Adversely Affect” (With any AMMs or commitments)	-	“Likely to Adversely Affect”	Project does not fall under Species Specific Programmatic ⁷
Threatened/Endangered Species (Any other species)*	Falls within guidelines of USFWS 2013 Interim Policy or “No Effect”	“Not likely to Adversely Affect”	-	-	“Likely to Adversely Affect”
Environmental Justice	No disproportionately high and adverse impacts	-	-	-	Potential ⁸
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Section 4(f) Impacts	None	-	-	-	Any ⁹
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes ¹⁰
Approval Level	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA

¹ Coordinate with INDOT Environmental Services Division. INDOT will then coordinate with the appropriate FHWA Environmental Specialist.

² Any involvement with a bridge processed under the Historic Bridge Programmatic Agreement.

³ Total permanent impacts to streams (linear feet) and wetlands (acres).

⁴ US Army Corps of Engineers Individual 404 Permit

⁵ Total permanent and temporary right-of-way. This does not include reacquisition of existing apparent right-of-way.

⁶ Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs.

⁷ Projects that do not fall under a Species Specific Programmatic and results in a “Likely to Adversely Affect”. Other findings can be processed as a lower level CE.

⁸ Potential for causing a disproportionately high and adverse impact.

⁹ Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.

¹⁰ Hot Spot Analysis and/or MSAT Quantitative Emission Analysis.

* Includes the threatened/endangered species critical habitat

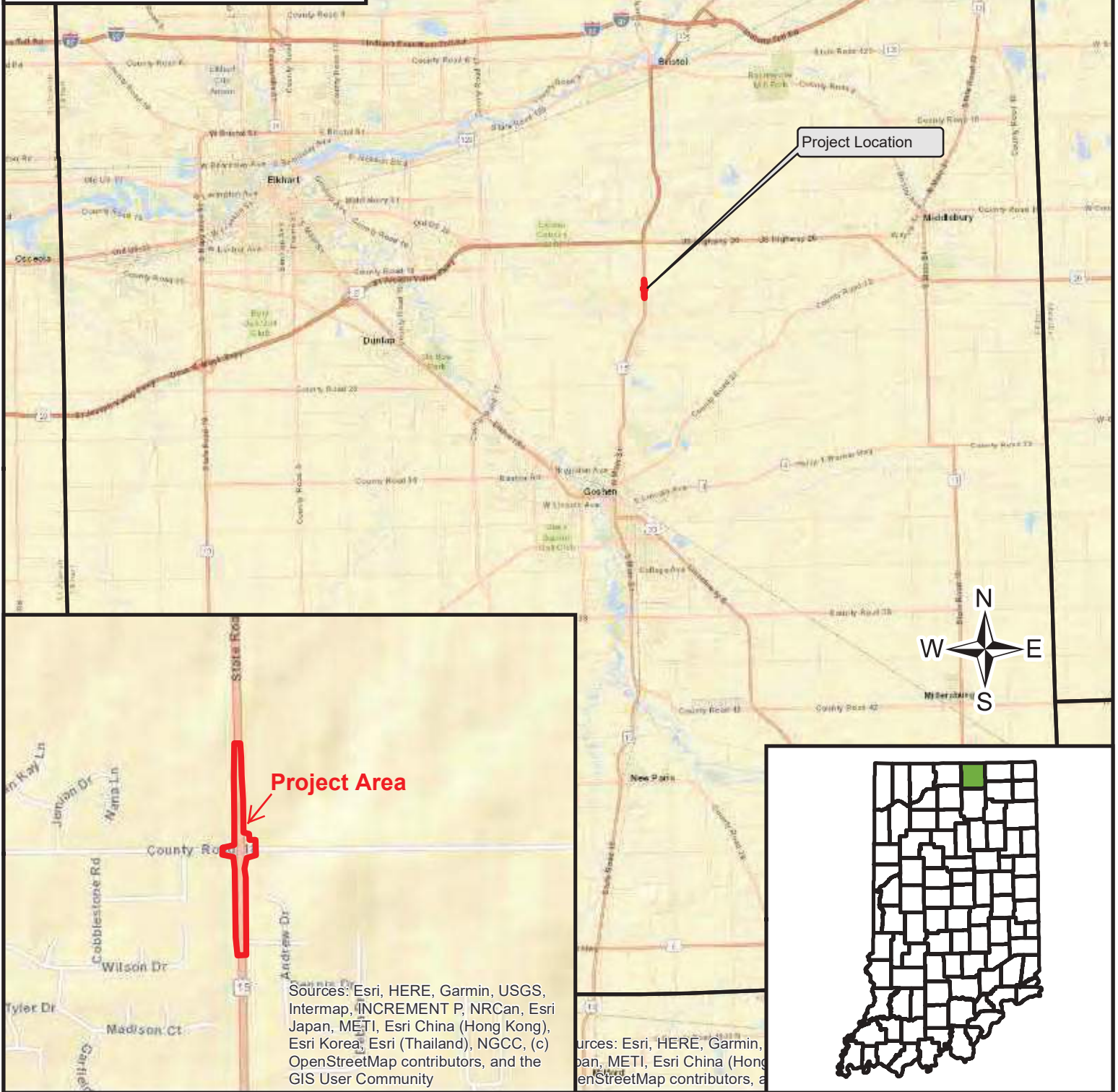
Note: Substantial public or agency controversy may require a higher-level NEPA document.

DES 1800039

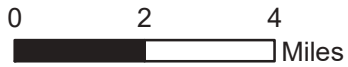
Appendix B



Graphics

Project Location Map (1:187,169)
 Intersection Improvement
 SR 15 at CR 18
 Des. No. 1800039
 Elkhart County, Indiana
 Source: Indiana Geological Survey



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

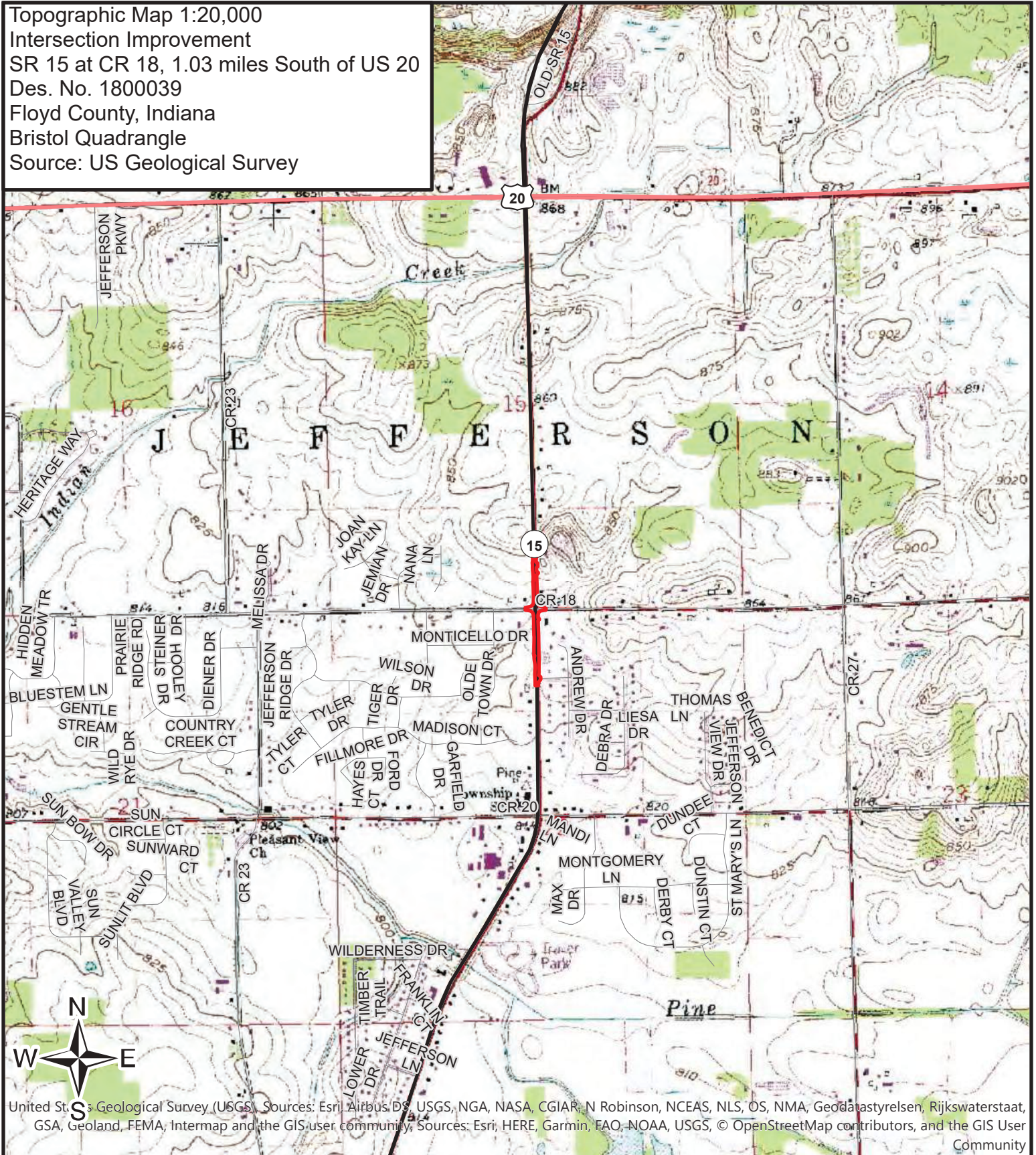


 County Boundary
 Project County



9/30/2020

Topographic Map 1:20,000
 Intersection Improvement
 SR 15 at CR 18, 1.03 miles South of US 20
 Des. No. 1800039
 Floyd County, Indiana
 Bristol Quadrangle
 Source: US Geological Survey



United States Geological Survey (USGS). Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

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 Miles

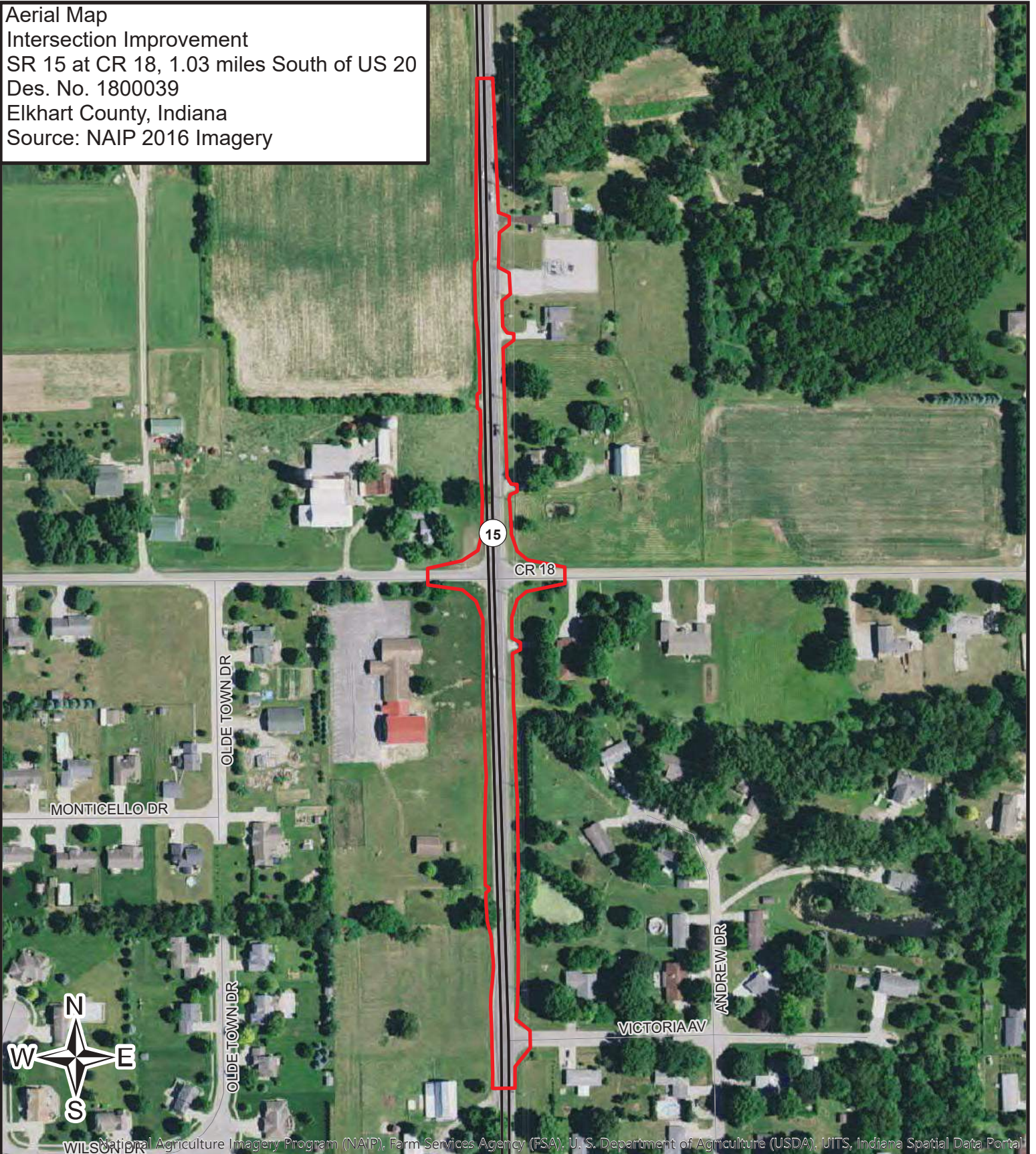
 Project Area

green • 3

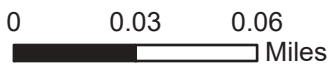


7/9/2020

Aerial Map
 Intersection Improvement
 SR 15 at CR 18, 1.03 miles South of US 20
 Des. No. 1800039
 Elkhart County, Indiana
 Source: NAIP 2016 Imagery



National Agriculture Imagery Program (NAIP), Farm Services Agency (FSA), U. S. Department of Agriculture (USDA), UITS, Indiana Spatial Data Portal

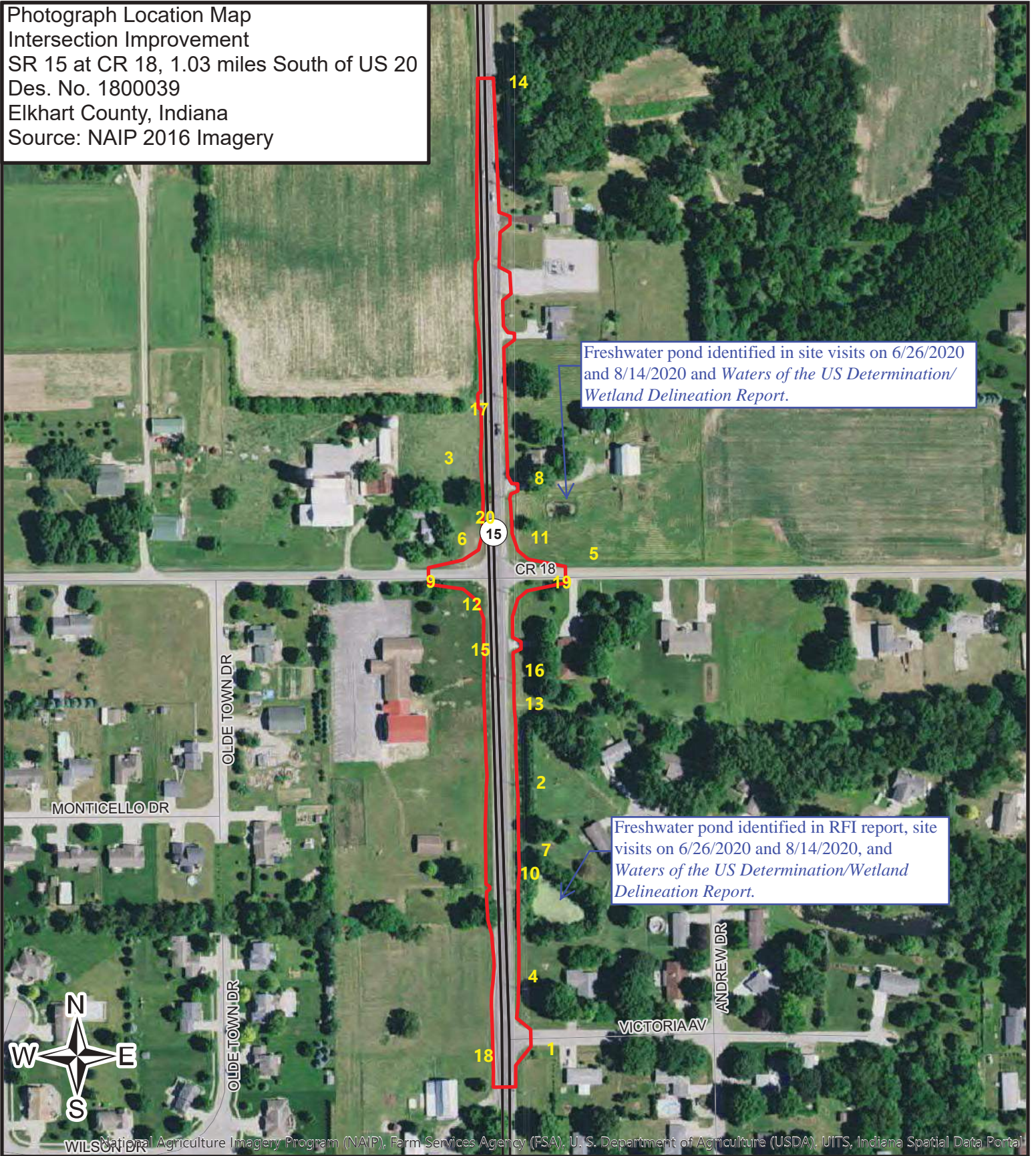


 Project Area



7/9/2020

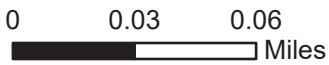
Photograph Location Map
 Intersection Improvement
 SR 15 at CR 18, 1.03 miles South of US 20
 Des. No. 1800039
 Elkhart County, Indiana
 Source: NAIP 2016 Imagery



Freshwater pond identified in site visits on 6/26/2020 and 8/14/2020 and Waters of the US Determination/Wetland Delineation Report.

Freshwater pond identified in RFI report, site visits on 6/26/2020 and 8/14/2020, and Waters of the US Determination/Wetland Delineation Report.

National Agriculture Imagery Program (NAIP), Farm Services Agency (FSA), U. S. Department of Agriculture (USDA), UITS, Indiana Spatial Data Portal



 Project Area



7/9/2020



1-Facing North at Victoria Drive



2- Facing South from Southeast Quadrant



3- Facing North from Northwest Quadrant



4- Facing South at Victoria Drive, failed pipe
Appendix B - 5



5- Facing West to Intersection from East Terminus, North side of CR 18



6- Facing West from Pipe under CR 18, Northwest Quadrant



7- Facing North, Suspected Wetland



8- Facing North from Northeast Quadrant



9- Facing East from West Terminus



10- Facing North, Potential Ditch Wetland



11- Facing South from Near Northeast Quadrant



12- Facing North from Southwest Quadrant, Failing Drain under CR 18



13-Facing South, Potential Ditch Wetland



14-Facing South from East Side of SR15 From North Terminus



15-Facing South from Southwest Quadrant



16-Facing East, Potential Wetland East Side



17- Facing North from West Side of SR 15



18-North Facing to Intersection from South Terminus



19- Eastern Cedar to be Removed, Southeast Quadrant



20-Facing South from Northwest Quadrant, Recent Utility Work

PROJECT	DESIGNATION
1800039	1800039
CONTRACT	BRIDGE FILE NO.
R-41560	N/A

INDIANA DEPARTMENT OF TRANSPORTATION



ROAD PLANS

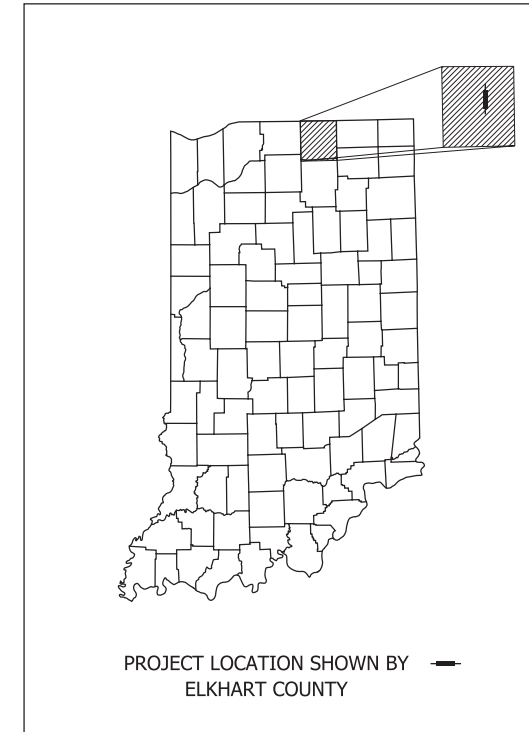
Note to Reader: some pages were removed from this plan set to reduce the overall size of this CE document and can be made available upon request.

ROUTE: SR 15 @ CR 18 FROM: RP 86+26 TO: RP 86+69
 PROJECT NO. 1800039 P.E. 1800039 R/W 1800039 CONST. 1800039

Intersection Improvement on SR 15 at CR 18
 Located 1.03 miles south of US 20
 Sections 15,22 T-37-N, R-6-E, Jefferson Township, Elkhart County

TRAFFIC DATA		
	SR 15 SEGMENT 1	SR 15 SEGMENT 2
A.A.D.T. (2023)	14,667 V.P.D.	12,848 V.P.D.
A.A.D.T. (2043)	17,797 V.P.D.	16,760 V.P.D.
D.H.V (2043)	8.88 %	9.01 %
DIRECTIONAL DISTRIBUTION	51.1 %	49.7 %
TRUCKS	7.94 % A.A.D.T.	8.27 % A.A.D.T.

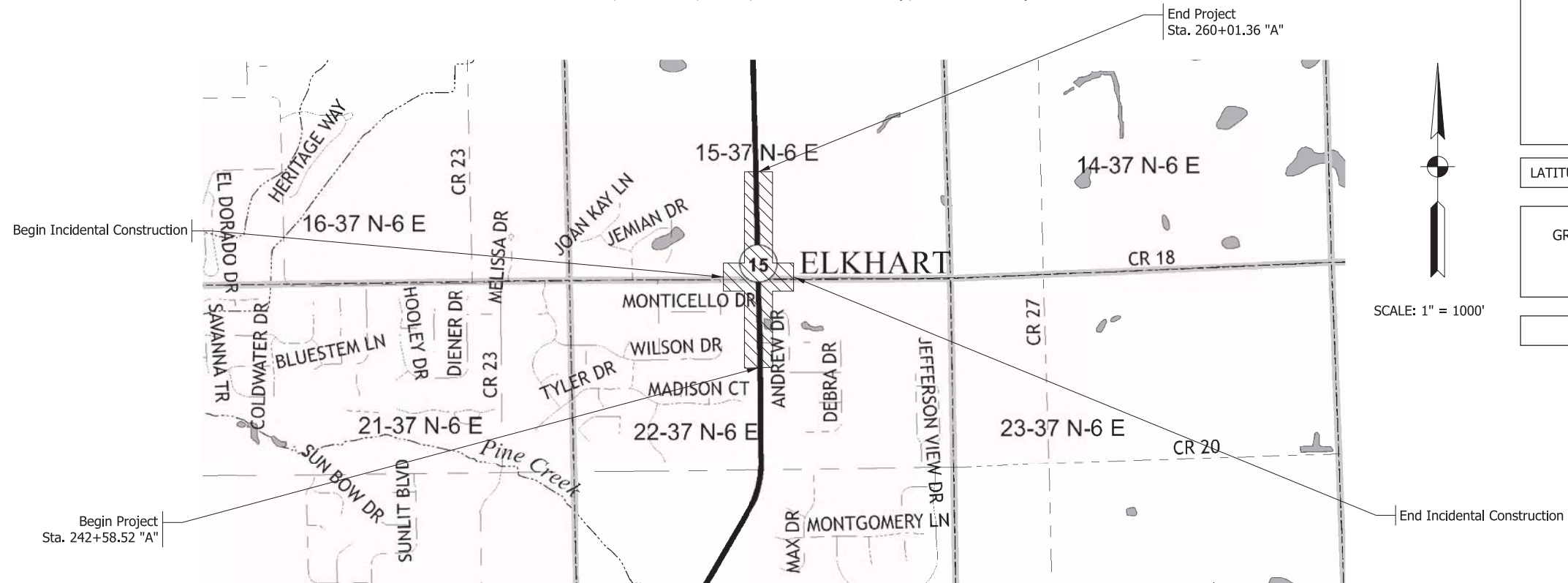
DESIGN DATA		
	50 M.P.H.	50 M.P.H.
DESIGN SPEED	50 M.P.H.	50 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL	PRINCIPAL ARTERIAL
RURAL/URBAN	URBAN (SUBURBAN)	URBAN (SUBURBAN)
TERRAIN	LEVEL	LEVEL
ACCESS CONTROL	NONE	NONE



LATITUDE: 41° 39' 10" N LONGITUDE: 85° 49' 16" W

GROSS LENGTH: 0.50 MI.
 NET LENGTH: 0.50 MI.
 MAX. GRADE: 2.42 %

HUC: 04050001150030



INDIANA DEPARTMENT OF TRANSPORTATION
 STANDARD SPECIFICATIONS DATED 2020
 TO BE USED WITH THESE PLANS

12/2/2020 4:52:46 PM MarCR S:\COL\4000-4099\4060\339\Drawings\CAO\MicroStation\Plan\Shr Title.dgn



PLANS PREPARED BY: STRAND ASSOCIATES, INC. (812)372-9911
 629 WASHINGTON ST., COLUMBUS, IN 47201 PHONE NUMBER

CERTIFIED BY: _____ DATE _____

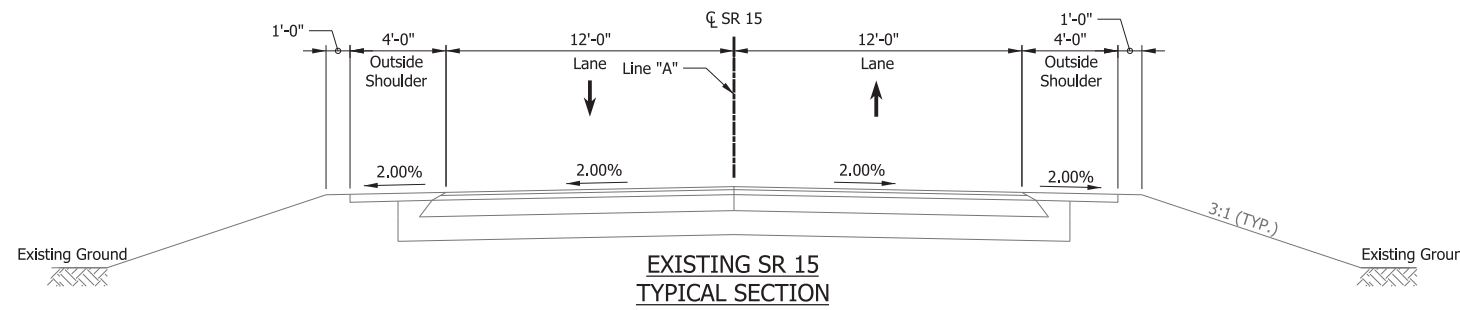
APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE _____

BRIDGE FILE NO.	
N/A	
DESIGNATION	
1800039	
SURVEY BOOK	SHEETS
N/A	1 of 35
CONTRACT	PROJECT
R-41560	1800039

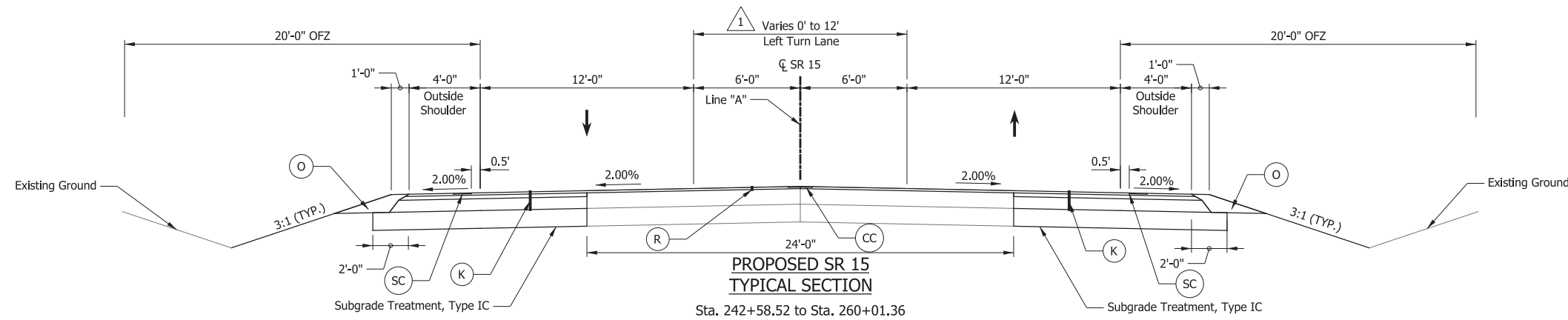
Note to Reviewer:
Pavement Structure will be finalized after
Pavement Design is completed.

LEGEND

- (R) HMA Overlay
165 lb/yd² QC/QA-HMA, 2, 64, Surface 9.5 mm on
Milling, Asphalt 1.5"
- (K) 165 lb/yd² QC/QA-HMA, 2, 64, Surface 9.5 mm on
275 lb/yd² QC/QA-HMA, 2, 64, Intermediate 19 mm on
660 lb/yd² QC/QA-HMA, 2, 64, Base 19 mm
- (O) Compacted Aggregate #53
- (SC) Shoulder Corrugation (Conventional)
- (CC) Centerline Corrugation (Sinusoidal)



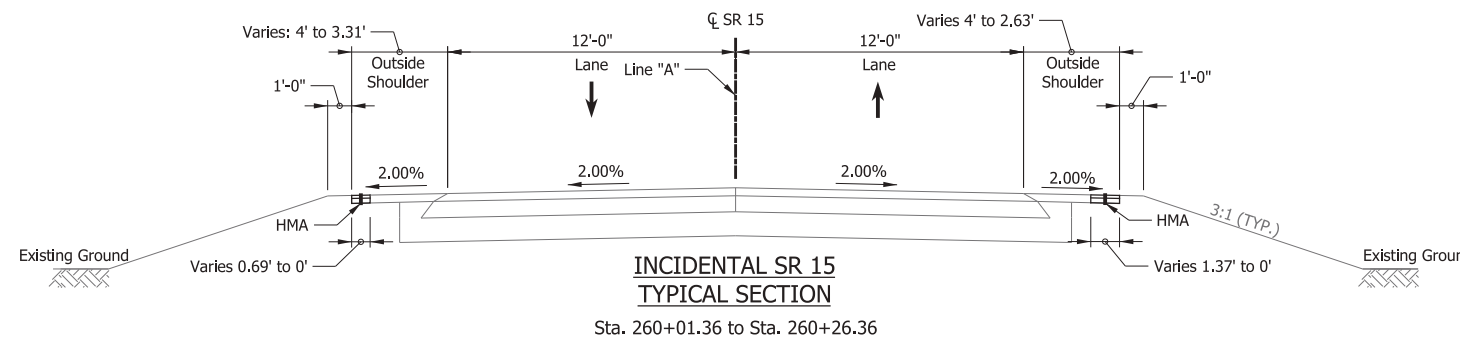
**EXISTING SR 15
TYPICAL SECTION**



**PROPOSED SR 15
TYPICAL SECTION**

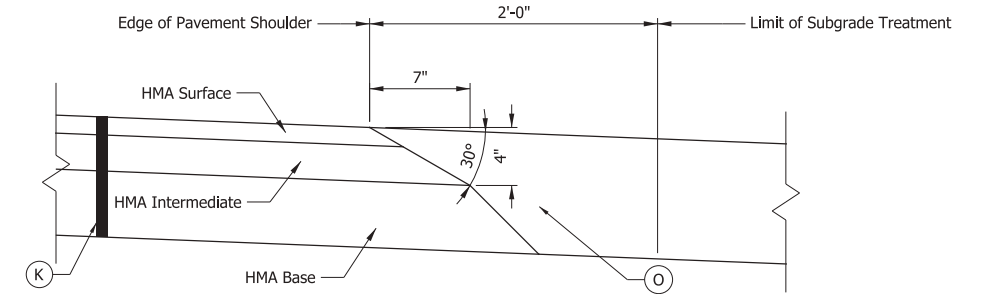
Sta. 242+58.52 to Sta. 260+01.36

△ Sta. 240+58.58 to Sta. 244+58.55 - 0' to 12'
Sta. 244+58.55 to Sta. 256+01.32 - 12'
Sta. 256+01.32 to Sta. 260+01.36 - 12' to 0'



**INCIDENTAL SR 15
TYPICAL SECTION**

Sta. 260+01.36 to Sta. 260+26.36



SAFETY EDGE DETAIL

No Scale

RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____	DATE _____
DESIGNED: BRW	DRAWN: BRW		
CHECKED: BBB	CHECKED: MAR		

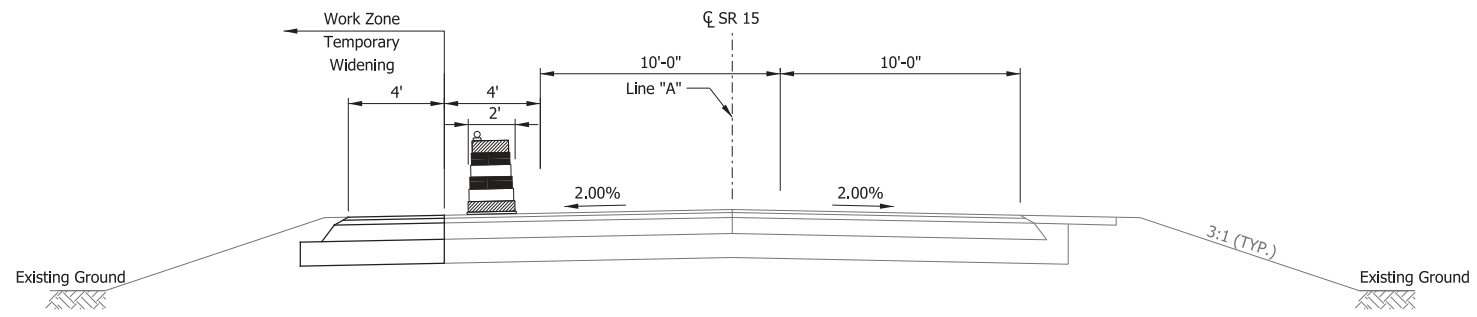
INDIANA
DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTION
SR 15/SR 18

HORIZONTAL SCALE	BRIDGE FILE NO.
1/4" = 1'-0"	NA
VERTICAL SCALE	DESIGNATION NO.
N/A	1800039
SURVEY BOOK NO.	SHEETS
N/A	4 of 35
CONTRACT NO.	PROJECT NO.
R-11560	1800039

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Note to Reviewer: Temporary full-depth pavement structure to be determined after pavement design is complete.

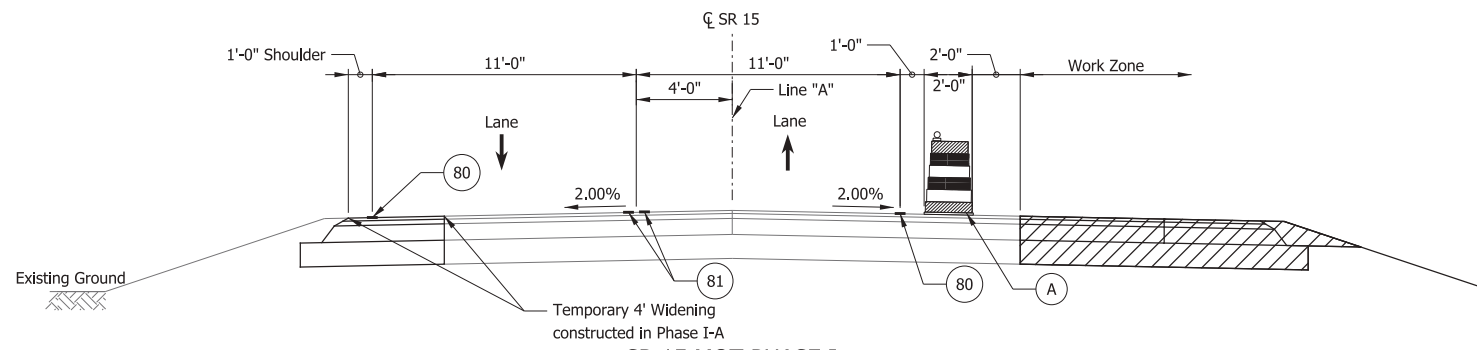
**SR 15 MOT PHASE I-A
TYPICAL SECTION**
Sta. 242+58.52 to Sta. 260+01.36

MAINTENANCE OF TRAFFIC OPERATIONS

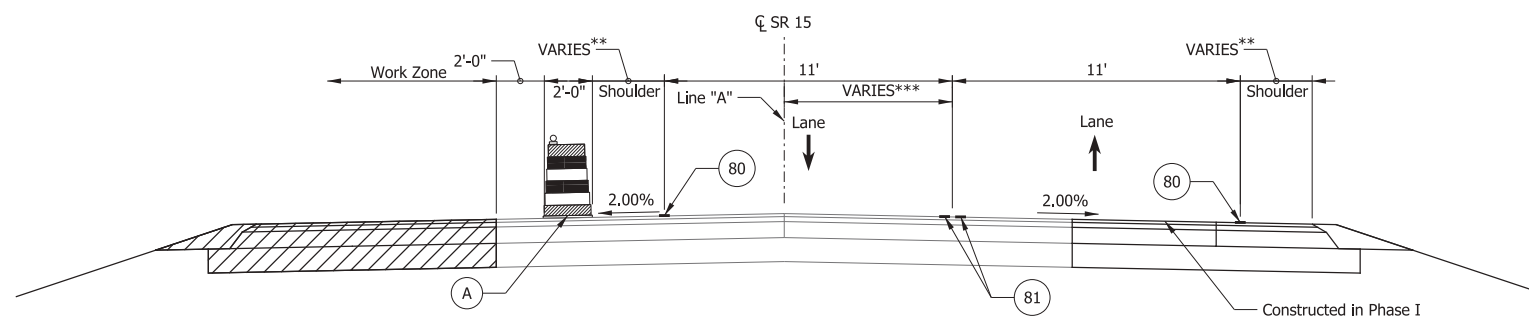
- Phase I-A: Construct Temporary Widening, LT
- Phase I: SR 15 Widening, RT
- Phase II: SR 15 Widening, LT

LEGEND

- (80) Temporary Pavement Marking, White, Solid, 4"
- (81) Temporary Pavement Marking, Yellow, Solid, 4"
- (A) Channelizing Device
- [Hatched Box] Construction Area



**SR 15 MOT PHASE I
TYPICAL SECTION**



**SR 15 MOT PHASE II
TYPICAL SECTION**

- ** 1' from Sta. 242+58 to Sta. 244+83 Line "A"
- ** 1' @ Sta. 244+83 Line "A" to 4' @ Sta. 245+58 Line "A"
- ** 4' from Sta. 245+58 to Sta. 256+01 Line "A"
- ** 4' @ Sta. 255+91 Line "A" to 1' @ Sta. 256+66 Line "A"
- ** 1' from Sta. 256+66 to Sta. 260+01 Line "A"
- *** 4' from Sta. 242+58 to Sta. 244+83 Line "A"
- *** 4' @ Sta. 244+83 Line "A" to 7' @ Sta. 245+58 Line "A"
- *** 7' from Sta. 245+58 to Sta. 256+01 Line "A"
- *** 7' @ Sta. 255+91 Line "A" to 4' @ Sta. 256+66 Line "A"
- *** 4' from Sta. 256+66 to Sta. 260+01 Line "A"

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: BRW	DRAWN: BRW	
CHECKED: BBB	CHECKED: MAR	

**INDIANA
DEPARTMENT OF TRANSPORTATION**

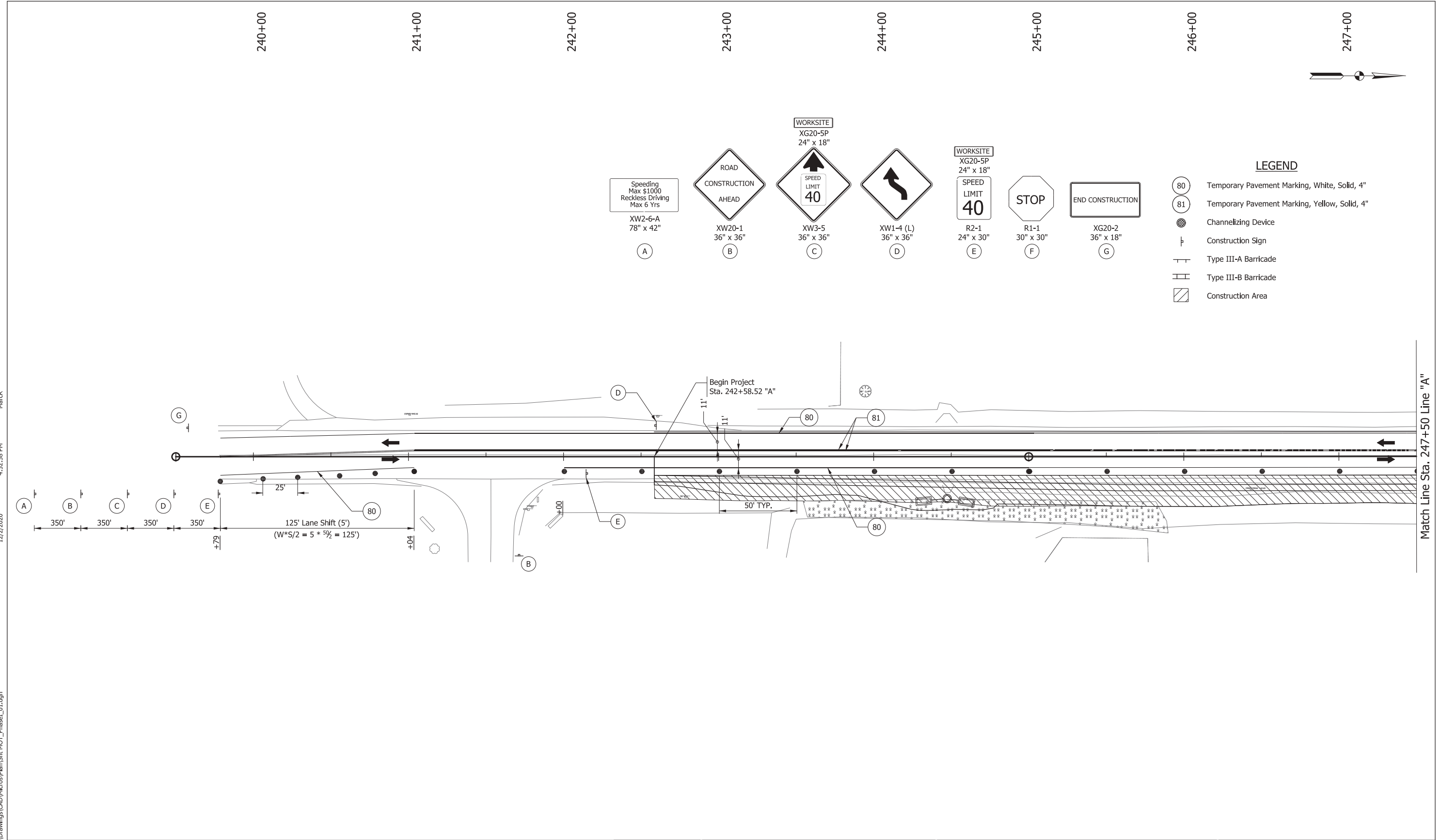
**TYPICAL CROSS SECTION
SR 15/SR 18**

HORIZONTAL SCALE	BRIDGE FILE NO.
1/4" = 1'-0"	NA
VERTICAL SCALE	DESIGNATION NO.
NA	1800039
SURVEY BOOK NO.	SHEETS
N/A	5 of 35
CONTRACT NO.	PROJECT NO.
R-11560	1800039

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12/2/2020 4:52:58 PM MarCR

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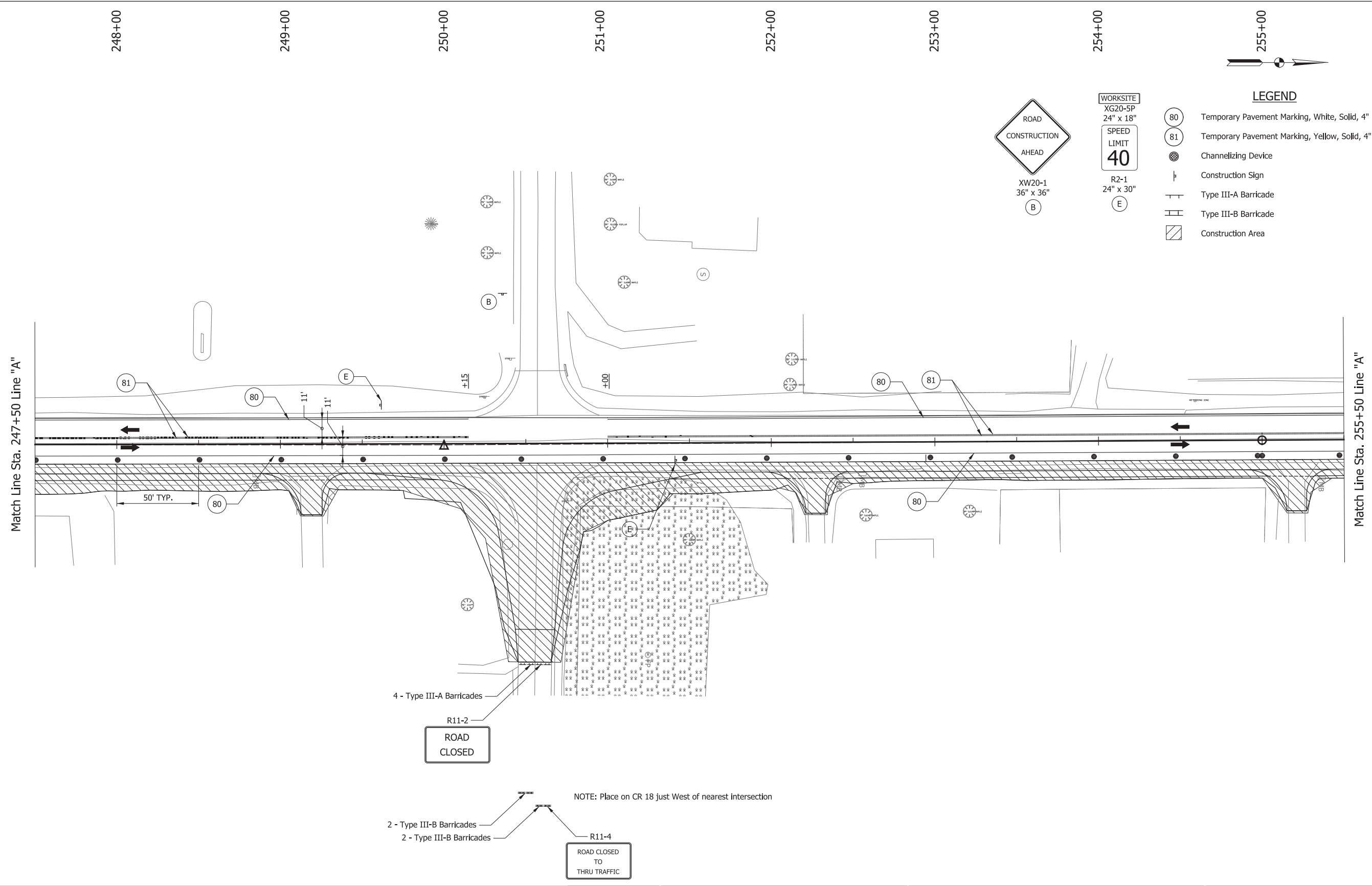
RECOMMENDED FOR APPROVAL	
DESIGNED: BRW	DRAWN: BRW
CHECKED: BBB	CHECKED: MAR

INDIANA DEPARTMENT OF TRANSPORTATION	
MOT PHASE I STA. 239+50 to STA. 247+50 LINE "A"	

HORIZONTAL SCALE	BRIDGE FILE NO.
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION NO.
N/A	1800039
SURVEY BOOK NO.	SHEETS
N/A	6 of 35
CONTRACT NO.	PROJECT NO.
R-41560	1800039

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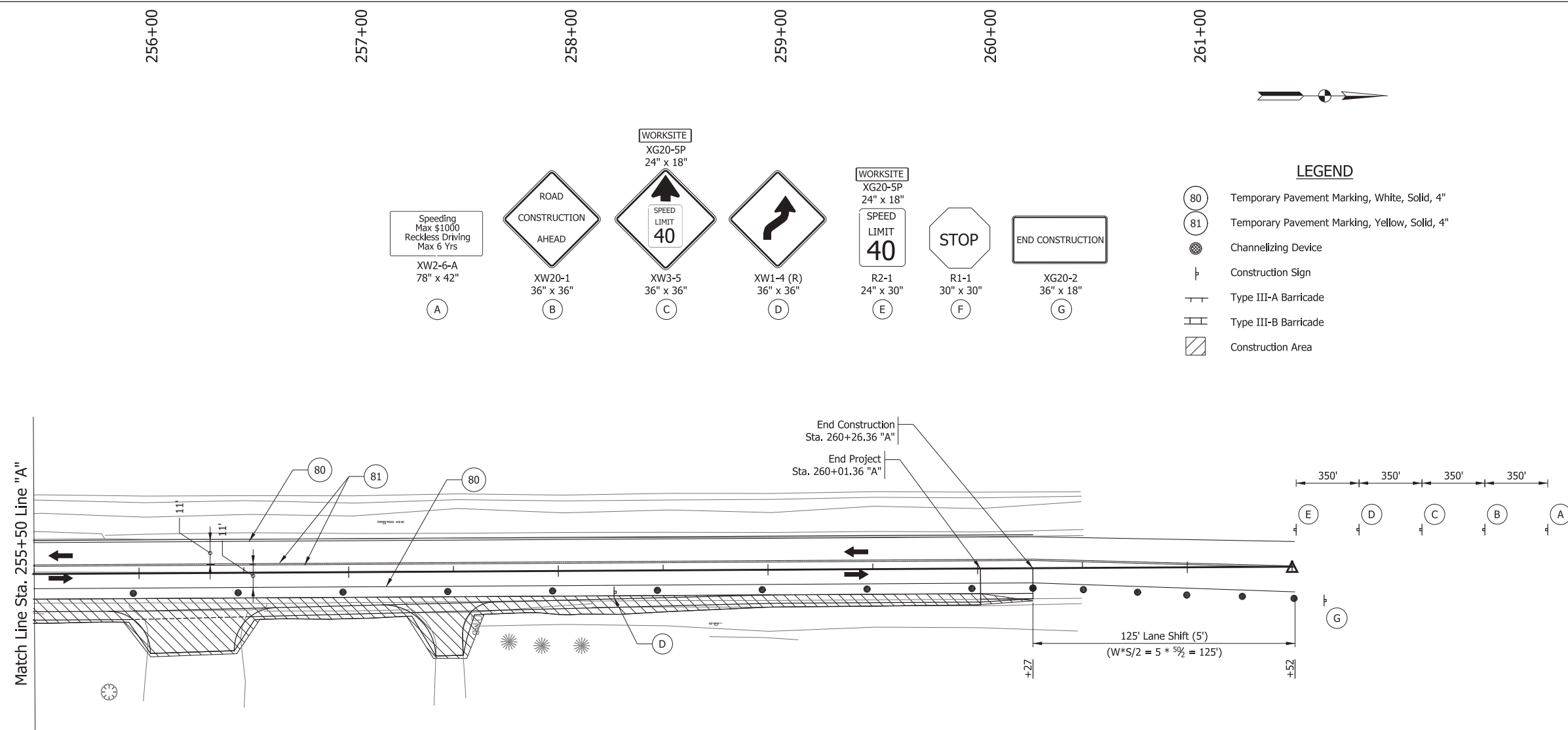


RECOMMENDED FOR APPROVAL	
DESIGNED: BRW	DRAWN: BRW
CHECKED: BBB	CHECKED: MAR

INDIANA DEPARTMENT OF TRANSPORTATION	
MOT PHASE I STA. 247+50 to STA. 255+50 LINE "A"	

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE NO. N/A
VERTICAL SCALE N/A	DESIGNATION NO. 1800039
SURVEY BOOK NO. N/A	SHEETS 7 of 35
CONTRACT NO. R-41560	PROJECT NO. 1800039

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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: BRW	DRAWN: BRW	
CHECKED: BBB	CHECKED: MAR	

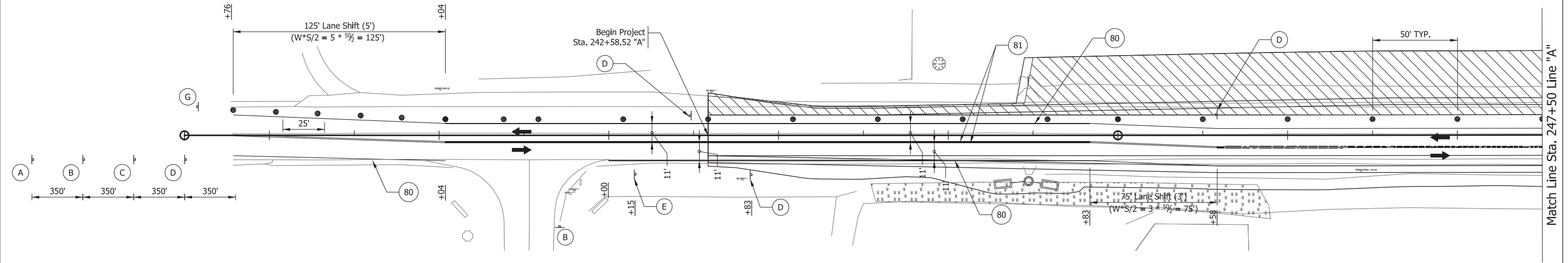
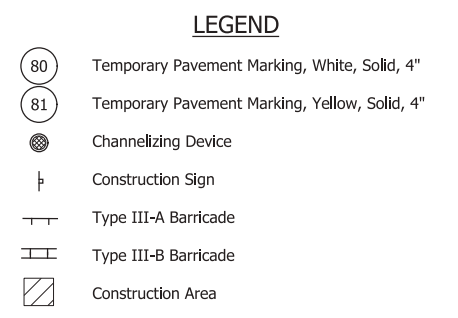
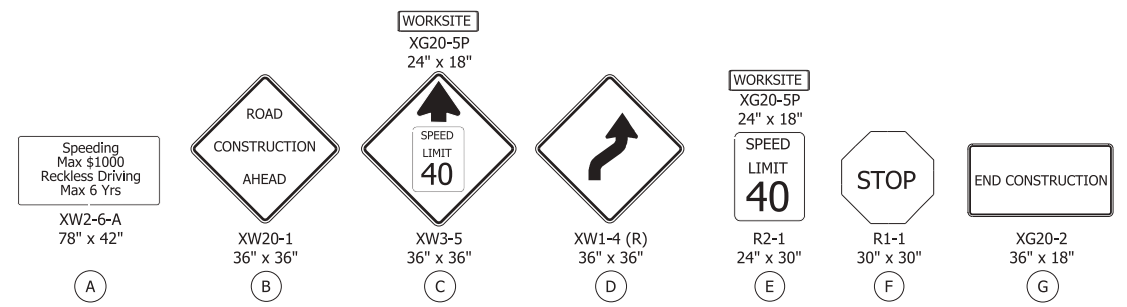
INDIANA DEPARTMENT OF TRANSPORTATION
MOT PHASE I
STA. 255+50 TO STA. 261+50 LINE "A"

HORIZONTAL SCALE	BRIDGE FILE NO.
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION NO.
N/A	1800039
SURVEY BOOK NO.	SHEETS
N/A	8 of 35
CONTRACT NO.	PROJECT NO.
R-41560	1800039

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240+00 241+00 242+00 243+00 244+00 245+00 246+00 247+00



RECOMMENDED FOR APPROVAL	
DESIGNED: BRW	DRAWN: BRW
CHECKED: BBB	CHECKED: MAR

INDIANA DEPARTMENT OF TRANSPORTATION

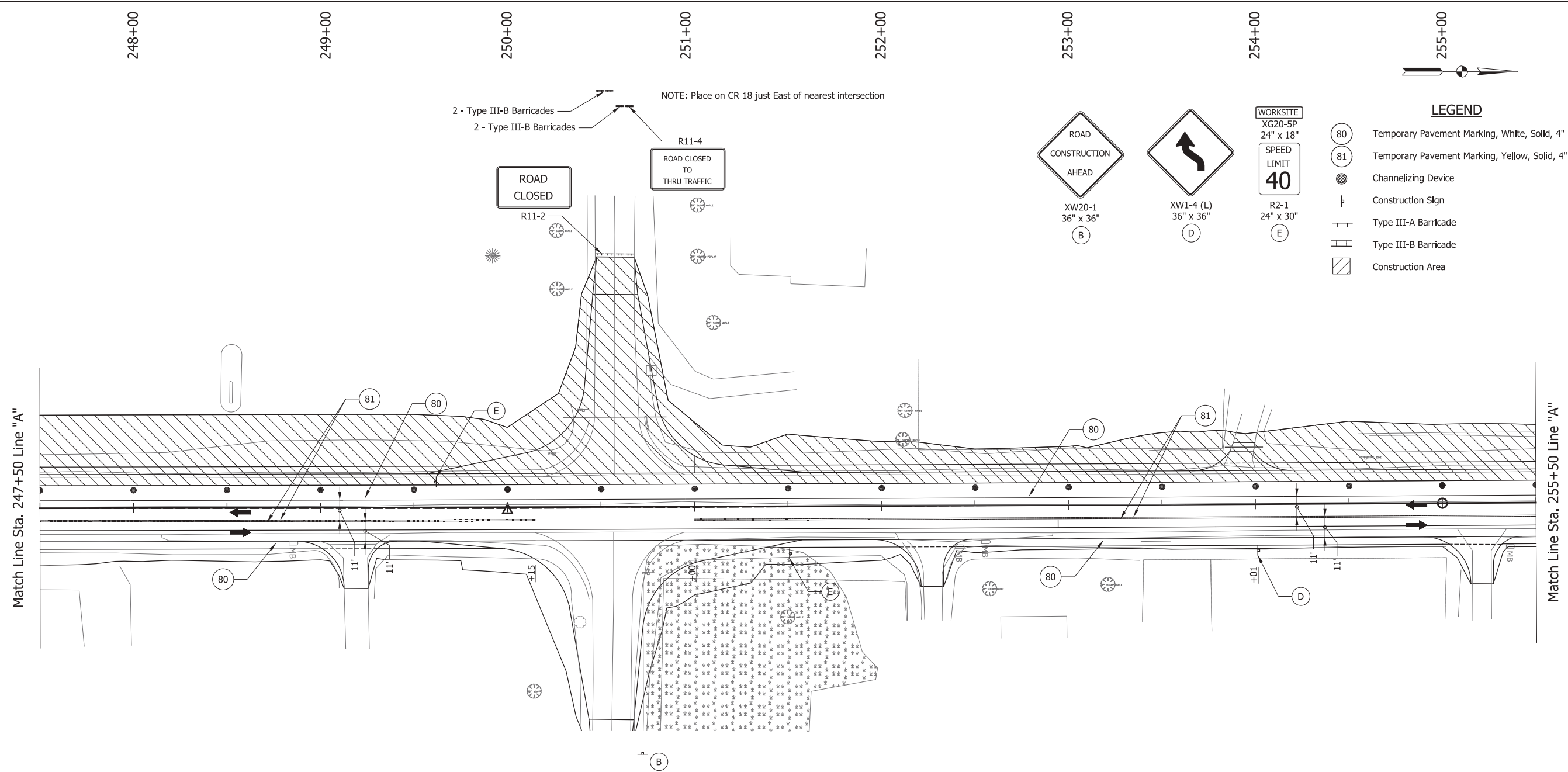
MOT PHASE II

STA. 239+50 to STA. 247+50 LINE "A"

HORIZONTAL SCALE	BRIDGE FILE NO.
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION NO.
N/A	1800039
SURVEY BOOK NO.	SHEETS
N/A	9 of 35
CONTRACT NO.	PROJECT NO.
R-41560	1800039

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RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____	DATE _____
DESIGNED: BRW	DRAWN: BRW		
CHECKED: BBB	CHECKED: MAR		

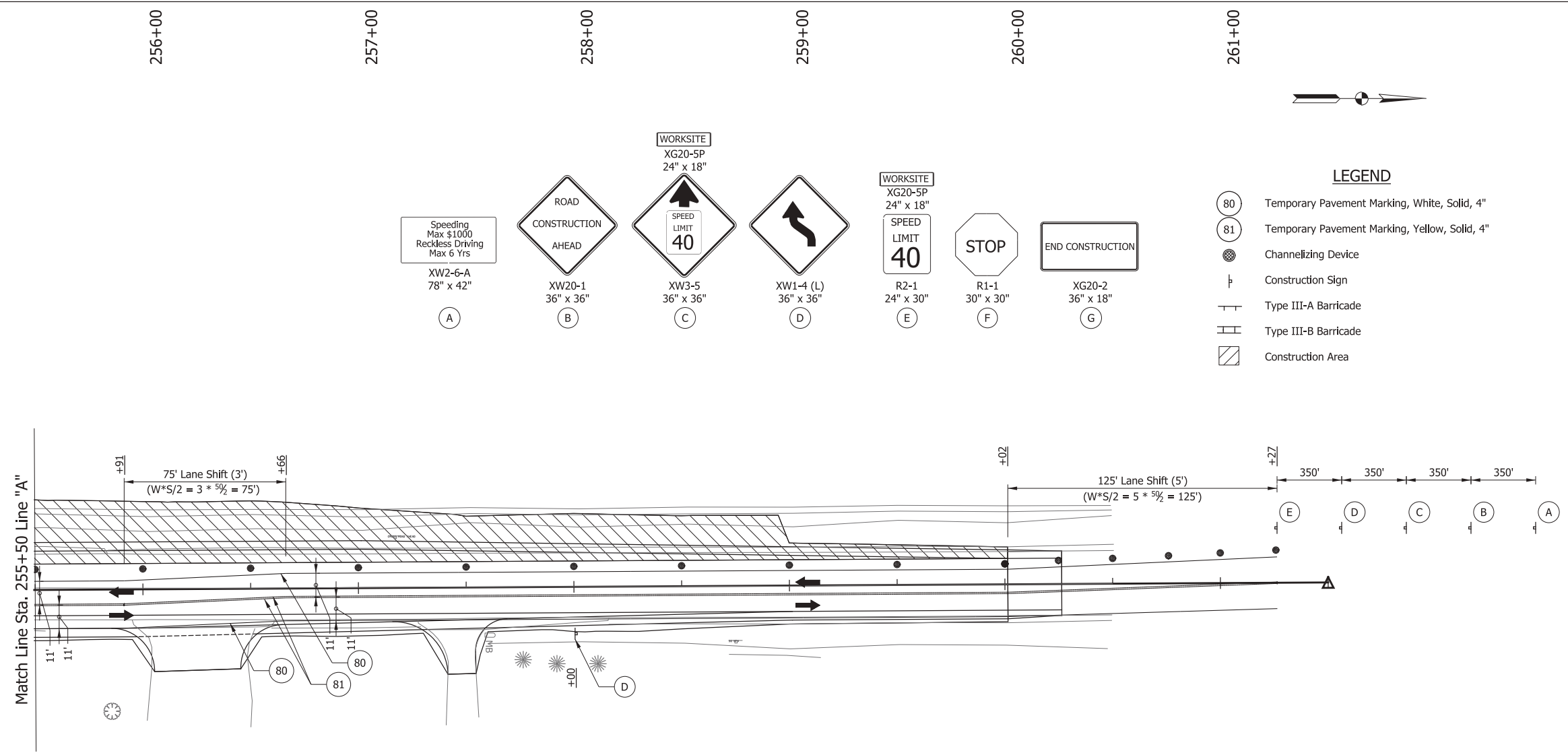
**INDIANA
DEPARTMENT OF TRANSPORTATION**

**MOT PHASE II
STA. 247+50 to STA. 255+50 LINE "A"**

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE NO. N/A
VERTICAL SCALE N/A	DESIGNATION NO. 1800039
SURVEY BOOK NO. N/A	SHEETS 10 of 35
CONTRACT NO. R-41560	PROJECT NO. 1800039

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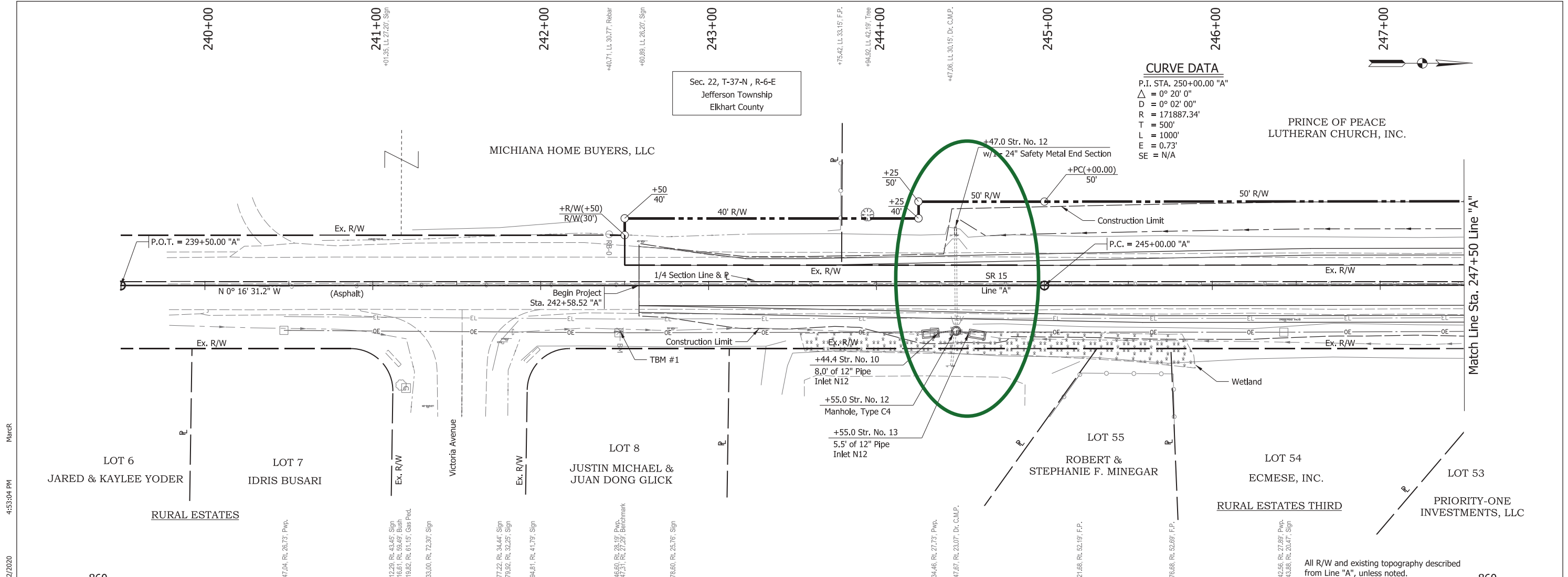
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RECOMMENDED FOR APPROVAL _____	
DESIGN ENGINEER DATE	
DESIGNED: BRW	DRAWN: BRW
CHECKED: BBB	CHECKED: MAR

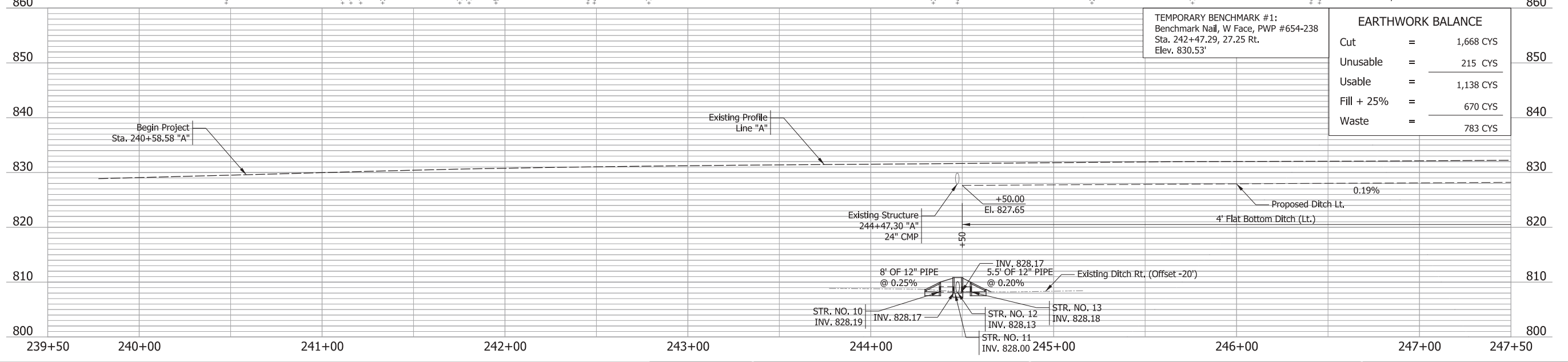
INDIANA DEPARTMENT OF TRANSPORTATION	
MOT PHASE II STA. 255+50 TO STA. 261+50 LINE "A"	

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE NO. N/A
VERTICAL SCALE N/A	DESIGNATION NO. 1800039
SURVEY BOOK NO. N/A	SHEETS 11 of 35
CONTRACT NO. R-41560	PROJECT NO. 1800039



CURVE DATA

P.I. STA. 250+00.00 "A"
 $\Delta = 0^\circ 20' 00''$
 $D = 0^\circ 02' 00''$
 $R = 171887.34'$
 $T = 500'$
 $L = 1000'$
 $E = 0.73'$
 $SE = N/A$



TEMPORARY BENCHMARK #1:
 Benchmark Nail, W Face, PWP #654-238
 Sta. 242+47.29, 27.25 Rt.
 Elev. 830.53'

EARTHWORK BALANCE	
Cut	= 1,668 CYS
Unusable	= 215 CYS
Usable	= 1,138 CYS
Fill + 25%	= 670 CYS
Waste	= 783 CYS

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: BRW	DRAWN: BRW	
CHECKED: BBB	CHECKED: MAR	

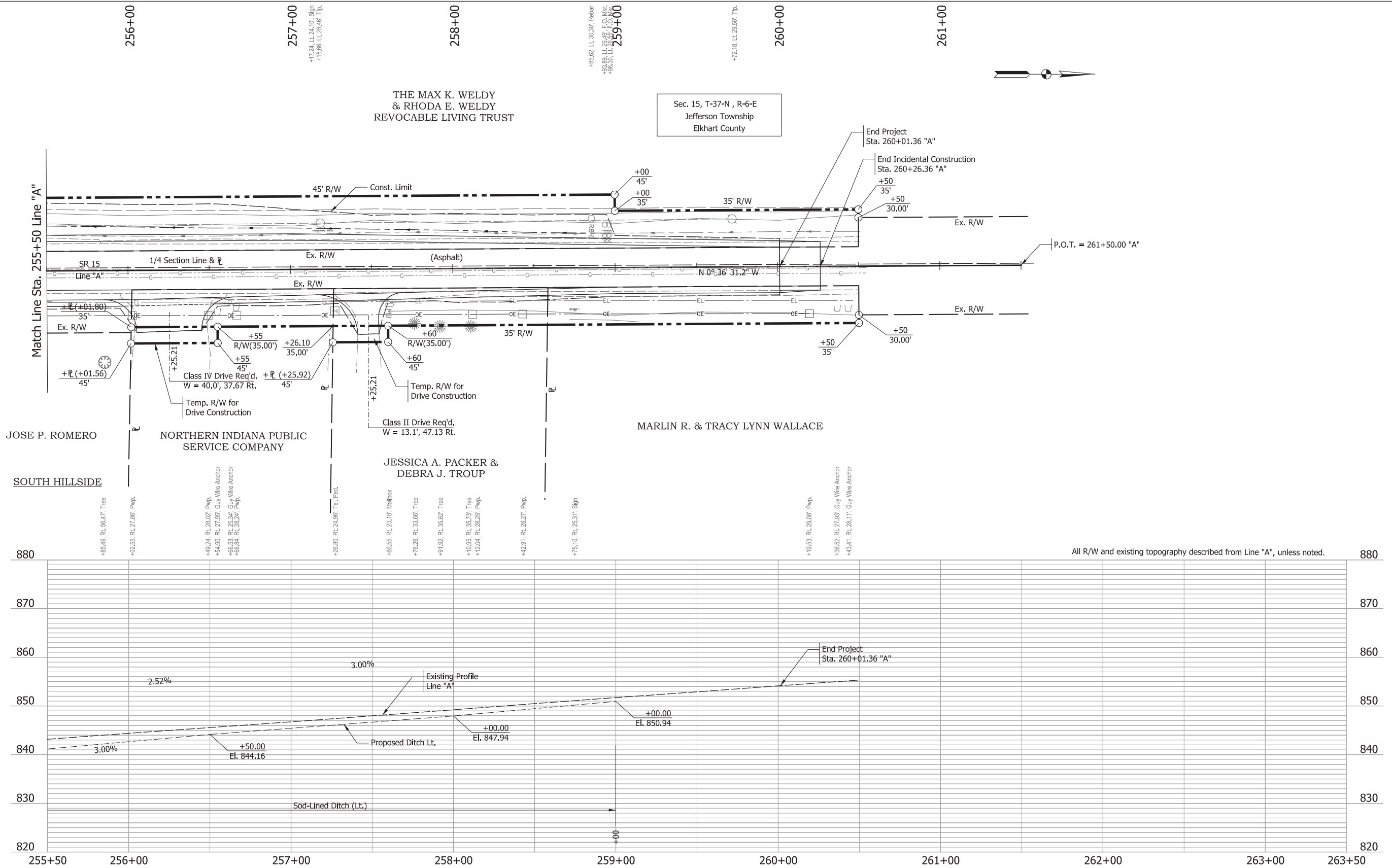
INDIANA DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE LINE "A"

HORIZONTAL SCALE	BRIDGE FILE NO.
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION NO.
1" = 10'	1800039
SURVEY BOOK NO.	SHEETS
N/A	12 of 35
CONTRACT NO.	PROJECT NO.
R-11560	1800039

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All R/W and existing topography described from Line "A", unless noted.

RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____	DATE _____
DESIGNED: BRW	DRAWN: BRW		
CHECKED: BBB	CHECKED: MAR		

INDIANA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
LINE "A"

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE NO. N/A
VERTICAL SCALE 1" = 10'	DESIGNATION NO. 1800039
SURVEY BOOK NO. N/A	SHEETS 14 of 35
CONTRACT NO. R-11560	PROJECT NO. 1800039

240+00 241+00 242+00 243+00 244+00 245+00 246+00 247+00



LEGEND	
(R)	HMA Overlay
(K)	HMA Full-Depth Pavement
(O)	Compacted Aggregate #53
(S)	Seeding

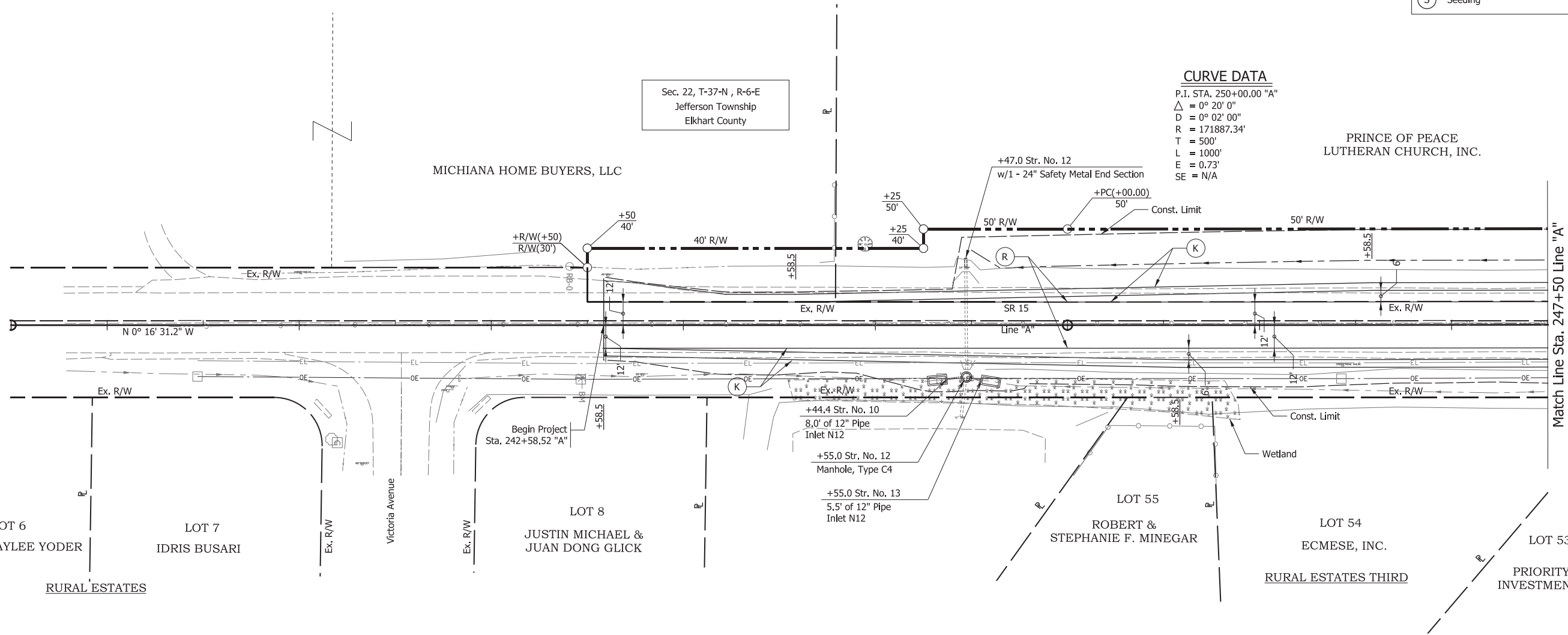
CURVE DATA

P.I. STA. 250+00.00 "A"
 $\Delta = 0^\circ 20' 00''$
 $D = 0^\circ 02' 00''$
 $R = 171887.34'$
 $T = 500'$
 $L = 1000'$
 $E = 0.73'$
 $SE = N/A$

Sec. 22, T-37-N, R-6-E
 Jefferson Township
 Elkhart County

MICHIANA HOME BUYERS, LLC

PRINCE OF PEACE
 LUTHERAN CHURCH, INC.



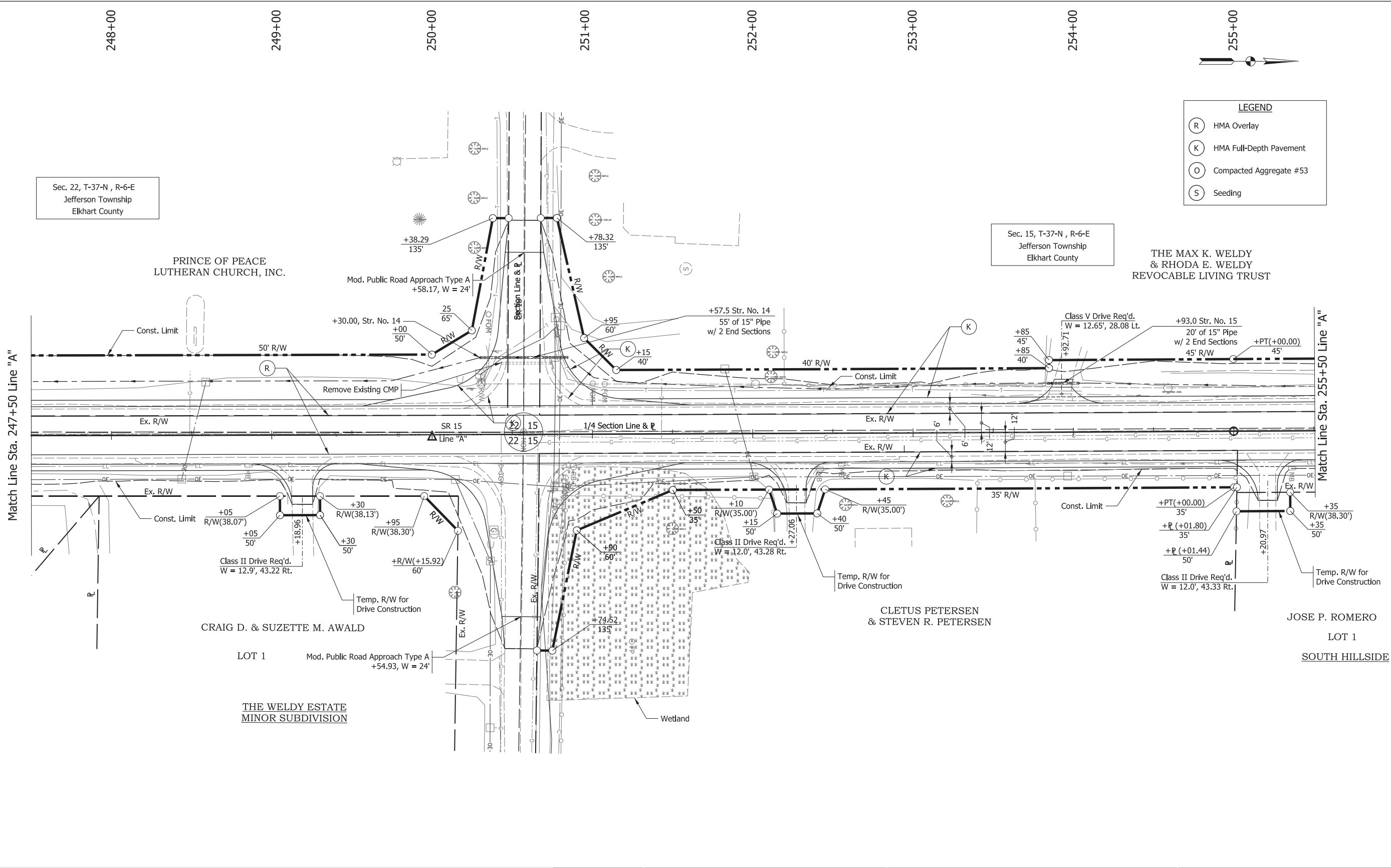
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RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: BRW	DRAWN: BRW	
CHECKED: BBB	CHECKED: MAR	

INDIANA
 DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
 STA. 239+50 to STA. 247+50 LINE "A"

HORIZONTAL SCALE	BRIDGE FILE NO.
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION NO.
N/A	1800039
SURVEY BOOK NO.	SHEETS
N/A	15 of 35
CONTRACT NO.	PROJECT NO.
R-11560	1800039



Sec. 22, T-37-N, R-6-E
Jefferson Township
Elkhart County

Sec. 15, T-37-N, R-6-E
Jefferson Township
Elkhart County

THE MAX K. WELDY
& RHODA E. WELDY
REVOCABLE LIVING TRUST

LEGEND	
(R)	HMA Overlay
(K)	HMA Full-Depth Pavement
(O)	Compacted Aggregate #53
(S)	Seeding

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RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: BRW	DRAWN: BRW	
CHECKED: BBB	CHECKED: MAR	

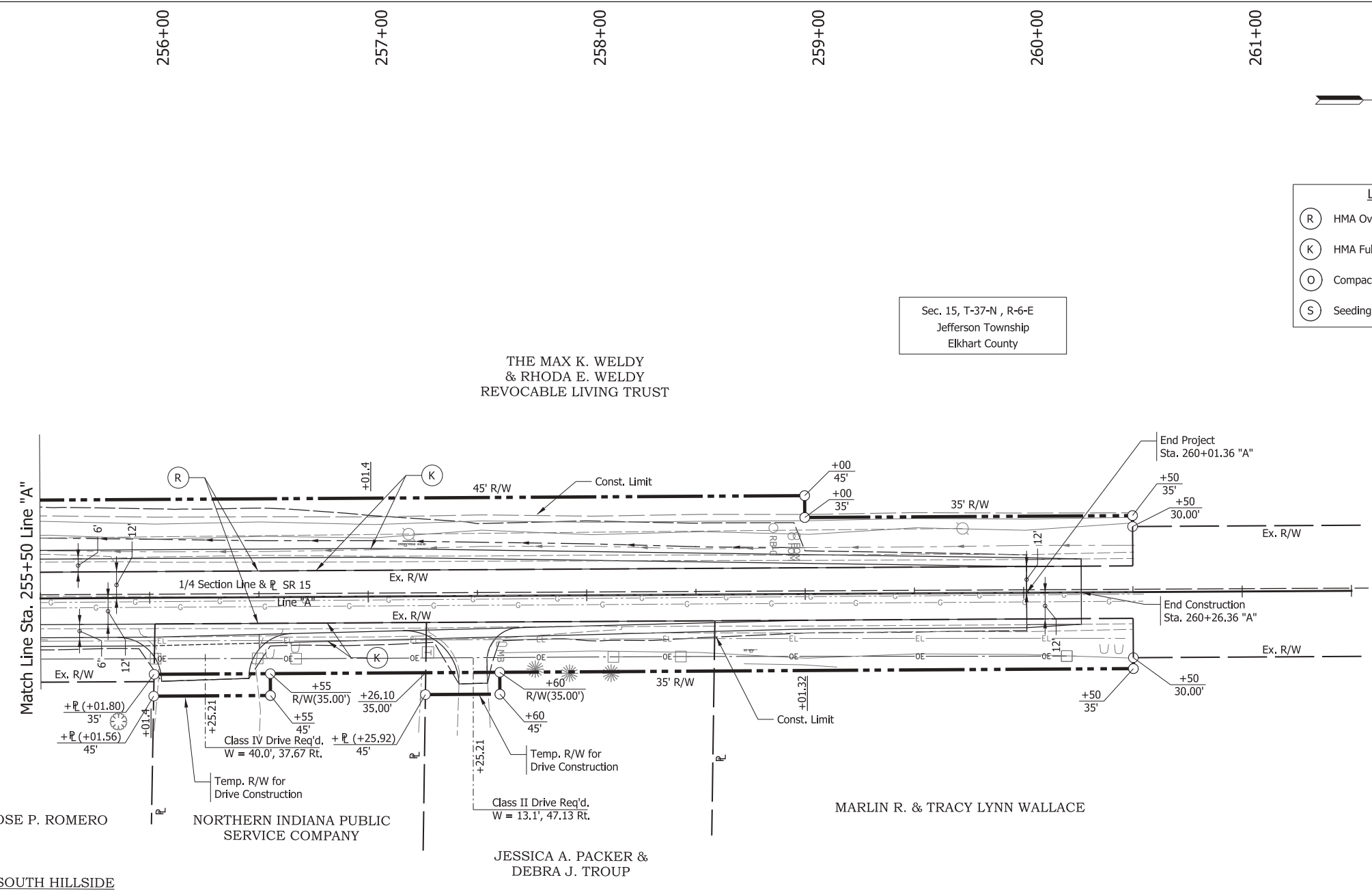
INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 247+50 to STA. 255+50 LINE "A"

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE NO. N/A
VERTICAL SCALE N/A	DESIGNATION NO. 180039
SURVEY BOOK NO. N/A	SHEETS 16 of 35
CONTRACT NO. R-41560	PROJECT NO. 180039

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LEGEND

(R)	HMA Overlay
(K)	HMA Full-Depth Pavement
(O)	Compacted Aggregate #53
(S)	Seeding



RECOMMENDED FOR APPROVAL _____		DESIGN ENGINEER _____	DATE _____
DESIGNED: BRW	DRAWN: BRW		
CHECKED: BBB	CHECKED: MAR		

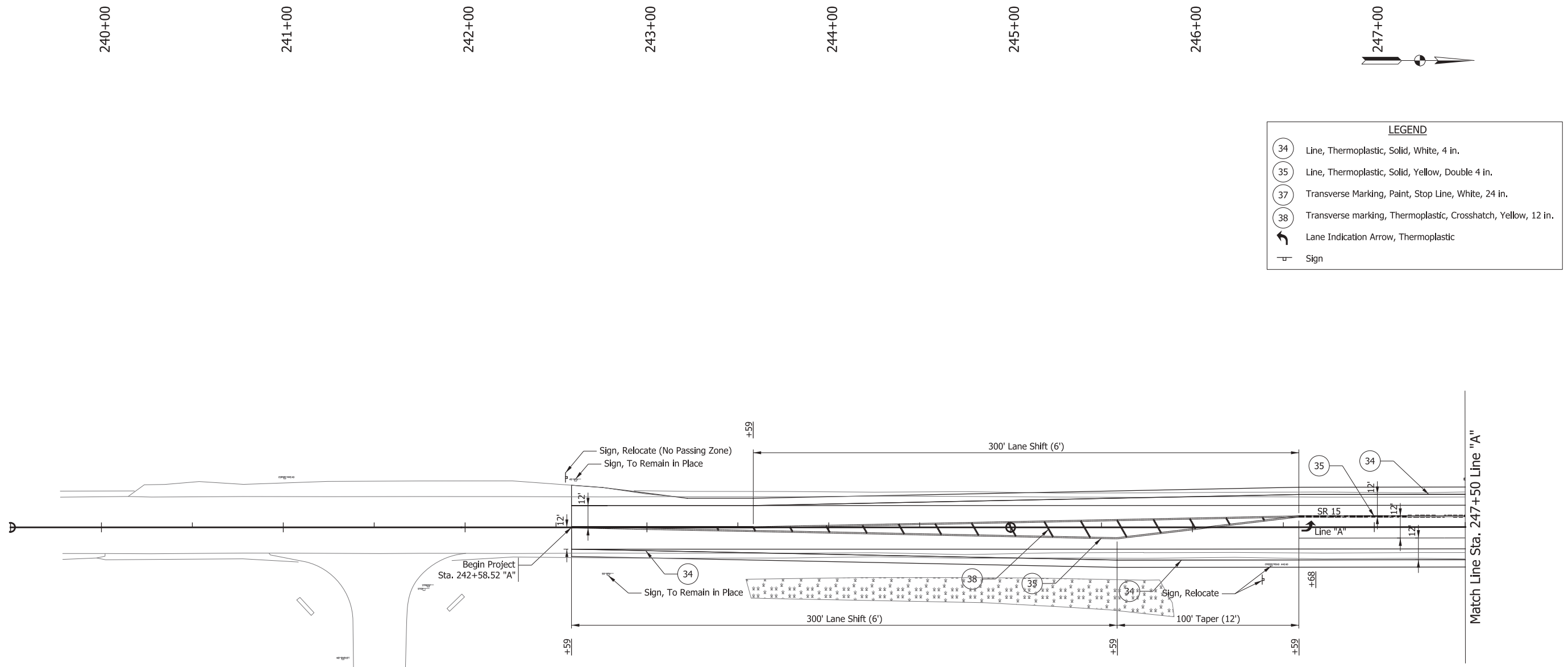
INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
STA. 255+50 TO STA. 261+50 LINE "A"

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE NO. N/A
VERTICAL SCALE N/A	DESIGNATION NO. 1800039
SURVEY BOOK NO. N/A	SHEETS 17 of 35
CONTRACT NO. R-41560	PROJECT NO. 1800039

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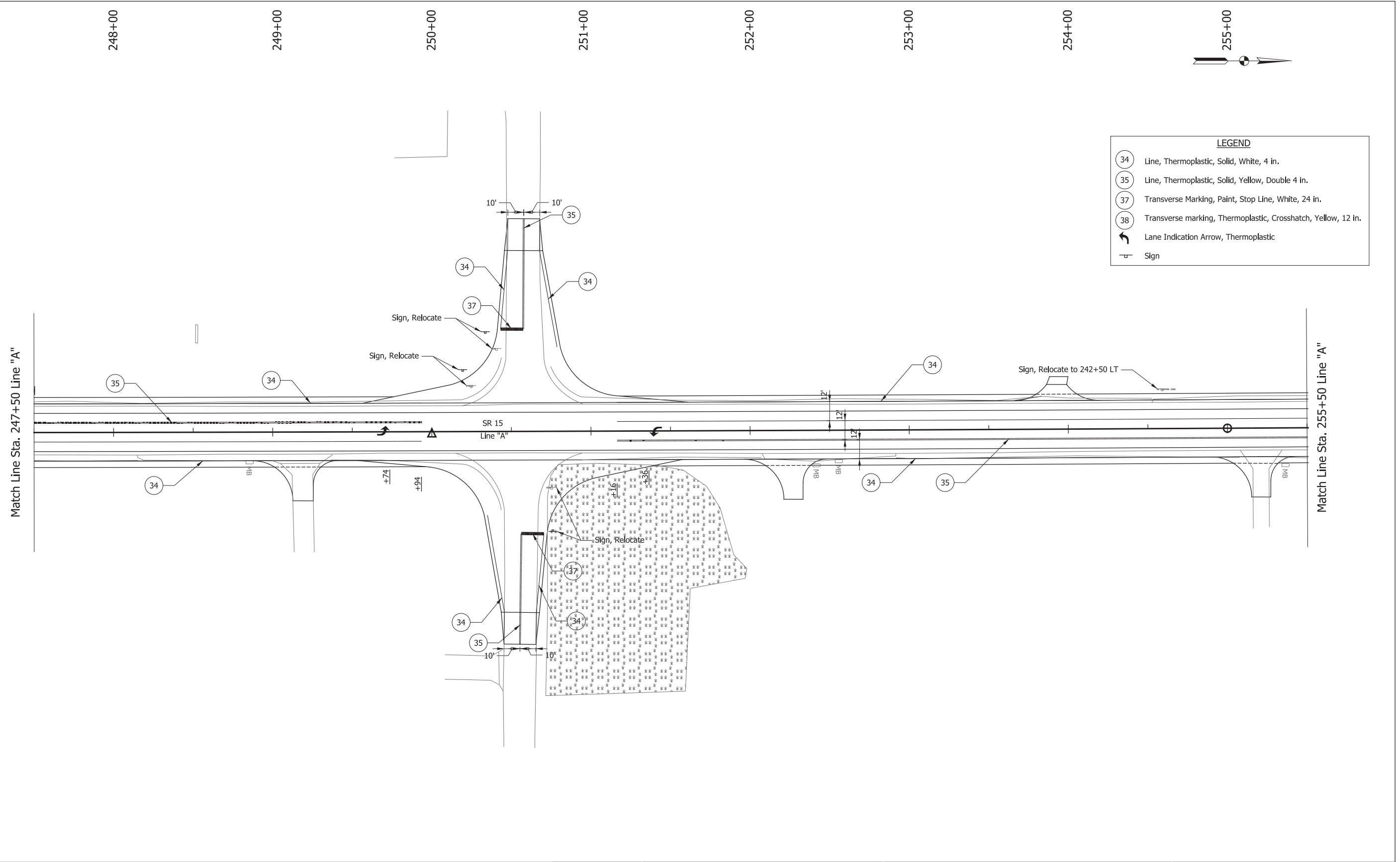


RECOMMENDED FOR APPROVAL	
DESIGNED: BRW	DRAWN: BRW
CHECKED: BBB	CHECKED: MAR

INDIANA DEPARTMENT OF TRANSPORTATION	
PAVEMENT MARKING/SIGNING	
STA. 239+50 to STA. 247+50 LINE "A"	

HORIZONTAL SCALE	BRIDGE FILE NO.
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION NO.
N/A	1800039
SURVEY BOOK NO.	SHEETS
N/A	19 of 35
CONTRACT NO.	PROJECT NO.
R-41560	1800039

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LEGEND	
(34)	Line, Thermoplastic, Solid, White, 4 in.
(35)	Line, Thermoplastic, Solid, Yellow, Double 4 in.
(37)	Transverse Marking, Paint, Stop Line, White, 24 in.
(38)	Transverse marking, Thermoplastic, Crosshatch, Yellow, 12 in.
↩	Lane Indication Arrow, Thermoplastic
□	Sign

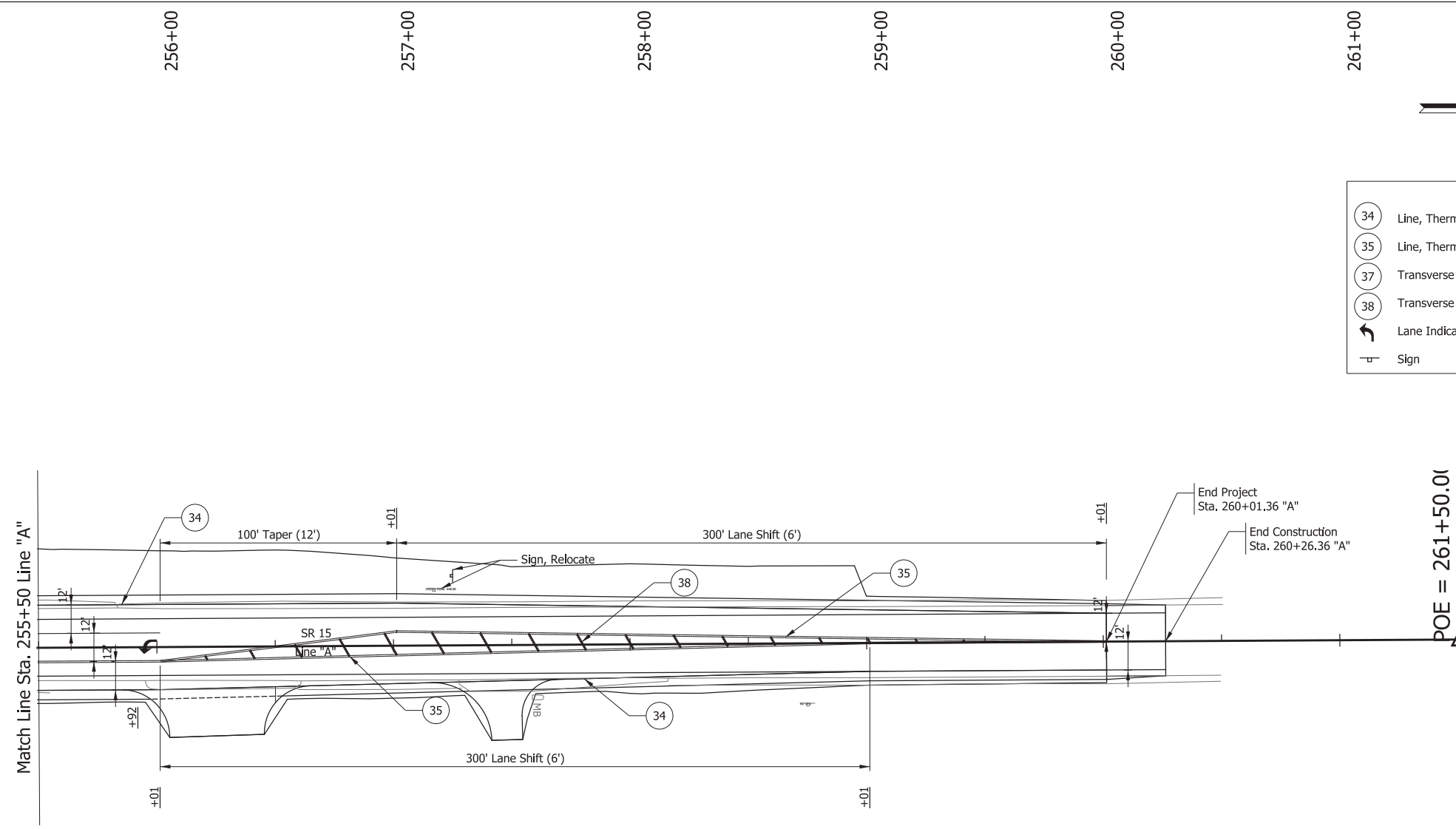
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: BRW	DRAWN: BRW	
CHECKED: BBB	CHECKED: MAR	

INDIANA DEPARTMENT OF TRANSPORTATION	
PAVEMENT MARKING/SIGNING STA. 247+50 to STA. 255+50 LINE "A"	

HORIZONTAL SCALE 1" = 30'	BRIDGE FILE NO. N/A
VERTICAL SCALE N/A	DESIGNATION NO. 1800039
SURVEY BOOK NO. N/A	SHEETS 20 of 35
CONTRACT NO. R-41560	PROJECT NO. 1800039

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LEGEND	
34	Line, Thermoplastic, Solid, White, 4 in.
35	Line, Thermoplastic, Solid, Yellow, Double 4 in.
37	Transverse Marking, Paint, Stop Line, White, 24 in.
38	Transverse marking, Thermoplastic, Crosshatch, Yellow, 12 in.
	Lane Indication Arrow, Thermoplastic
	Sign

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: BRW	DRAWN: BRW	
CHECKED: BBB	CHECKED: MAR	

INDIANA DEPARTMENT OF TRANSPORTATION	
PAVEMENT MARKING/SIGNING STA. 255+50 TO STA. 261+50 LINE "A"	

HORIZONTAL SCALE	BRIDGE FILE NO.
1" = 30'	N/A
VERTICAL SCALE	DESIGNATION NO.
N/A	1800039
SURVEY BOOK NO.	SHEETS
N/A	21 of 35
CONTRACT NO.	PROJECT NO.
R-41560	1800039