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

Road No./County:	State Road (SR) 7, Jefferson County
Designation Number(s):	1801684
Project Description/Termini:	Slide correction project along SR 7 from 0.51 mile to 0.77 mile north of SR 56 in the City of Madison.

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

Approval		
INDOT DE Signa	ture and Date INE	OOT ESD Signature and Date
FHWA Signatu	re and Date	
Release for Public Involvement	Diamond 2021.11.17 14:32:27 -05'00' 1000000000000000000000000000000000000	INDOT ESD Initials and Date
Certification of Public Involvement	INDOT Consultant Ser	vices Signature and Date
INDOT DE/ESD Reviewer Signature and Date	:	
Name and Organization of CE/EA Preparer:	Victoria Veach, SJCA Inc.	

County Jefferson

Route SR 7

Des. No. 1801684

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 $\mathsf{PA}^*\!?$ If No, then:

Opportunity for a Public Hearing Required?

 Yes
 No

 X
 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 Survey letters were mailed to potentially affected property owners near the project area on November 27, 2018, notifying them about the project and that individuals responsible for land surveying and field activities may be seen in the area. A sample copy of the Notice of Survey letter is included in Appendix F1-F2.

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

Public Controversy on Environmental Grounds

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

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

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

Sponsor of the Project:	INDOT	INDOT District: Seymour
Local Name of the Facility:	SR 7	
Funding Source (mark all that	apply): Federal x State x Local	Other*
*If other is selected, please inc	lentify 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 primary need for this project is due to the destabilization of the road embankments along the entire length of the project limits. This portion of SR 7 is built into the side of a hill and a sharp drop-off is present along the west side of SR 7 throughout this segment. Three (3) areas exhibiting destabilized and sliding land and associated roadway damage have been identified in this segment of SR 7. A secondary need of the project is due to a damaged headwall and wingwall at the outlet of the culvert located at the north terminus of the project (CV 007-039-00.80). The April 2, 2020, culvert inspection report noted extensive damage on the west side of the structure. The west headwall has been repaired by boards and wingwall in the southwest quadrant of the structure is separating from the slope. The April 2020 culvert inspection report rated the headwalls and wingwalls of this structure a 4 (poor condition).

This is page 2 of 24 Project name:

SR 7 Slide Correction

Date: October 14, 2021

Version: April 2021

County	Jefferson		Route SR	7	Des. No.	1801684	
Purpose: The purpo	se of this project is	to provide a stabl	e roadway that v	vill perpetuate safe vehicula	r traffic.		
PROJEC	T DESCRIPTION	(PREFERRED	ALTERNATIV	E):			
County:	Jefferson		Municipali	ty: Madison			
Limits of P	roposed Work:	From 0.51 mi to	0.77 mi north of S	SR 56			
Total Work	c Length:	0.26 Mile(5)	Total Work Area:	1.65	Acre(s)	
lf y	ceptability?	HWA provide a De	etermination of E	ingineering and Operational A document must be submitt		Date:	No X Juest for
Describe lo	cation of project inc	ludina townshin u	ange city count	tv roads etc. Existing cond	litions should	l include curren	t conditions

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:

This project is located along SR 7, between approximately 0.51 to 0.77 mile north of SR 56, in the City of Madison, Jefferson County, Indiana. Specifically, the project is located in Section 34, Township 4 North, Range 10 East and is shown on the Madison West Quadrangle Map (Appendix B3). Project location maps and photos can be seen in Appendix B1-B7.

Existing Conditions:

SR 7 is classified as Rural Principal Arterial and has a posted speed limit of 30 miles per hour within the project area. This section of SR 7 travels in a north-south direction and consists of one (1) 12-foot (ft) wide travel lane in each direction, each with a variable width shoulder ranging from zero (0) to two (2) feet (ft) wide. A guardrail is present along the west side of the roadway along the entire length of the project alignment. This section of SR 7 lies between the lower elevation of downtown Madison, Indiana and the higher elevation north of Madison with an average hill grade of 7.4%. The road is built into the side of a hill, with cut slopes present on the east side of the roadway and steep drop-offs along the west side of the roadway. The steepness of the hill in this location makes this area susceptible to erosion, and three (3) areas along this stretch of SR 7 have been identified as having sliding land and associated damage to the western edge of the roadway.

A concrete lined ditch is present along the east side of the roadway throughout the project alignment. Three (3) 24 inch (in) diameter reinforced concrete pipes (RCP) and two (2) 24 inch diameter corrugated metal pipes (CMP) are present in the project area. Drop inlets for these structures are present within the concrete lined ditch on the east side of the roadway and the outlets are on the west side of the roadway. These structures carry roadside drainage as well as drainage from the upslope area on the east side of the roadway under SR 7. One (1) 4 ft by 4 ft concrete box culvert is present at the north end of the project area. This structure carries an unnamed tributary (UNT) to Crooked Creek from the east side of SR 7 to a second UNT to Crooked Creek located at the bottom of the valley on the west side of the roadway. The April 2, 2020, Culvert Inspection Report rated the headwalls and wingwalls of this structure a 4 (poor condition). The wingwall in the southwest corner of the structure exhibits extensive damage including cracks, areas of missing and/or crumbling concrete, and separation from the roadway embankment due to erosion. Additionally, the portion of the headwall surrounding the culvert outlet has been repaired with boards and the guardrail over the structure is badly damaged and the anchors are detached from the base.

Rock outcrops are present on both sides of the roadway, and the area surrounding the project is forested and characterized by rolling hills. The northern terminus of a historic stone retaining wall which is listed as a Contributing Resource of the Madison Historic District (NR-2038) is located at the southern terminus of the project limits. This project is located within the limits of the City of Madison, and the primary land use transitions to commercial and residential development approximately 0.5 mile south of the southern terminus of this project. Overhead electric lines, one (1) utility pole, and three (3) street lights are present within the project area on both the east and west side of the roadway.

This is page 3 of 24 Project name:

County	Jefferson	Route	SR 7	Des. No.	1801684	

Preferred Alternative:

The proposed project will utilize soil nails to stabilize the downslope (west) side of the roadway embankment along the entire length of the project limits. A 1,400 ft long soil nail wall will be placed along the entire length of the project limits on the west side of SR 7 beginning at the historic stone retaining wall to the south and ending at the culvert located at the north terminus of the project. The soil nail wall will begin approximately 8 ft from the edge of the pavement and will extend downslope between approximately 10 ft and 27 ft. The existing wingwall located southwest of the culvert outlet will be removed and replaced with the soil nail wall. The damaged headwall at the culvert outlet will be reconstructed. This project will be constructed design-build, and details regarding the specifications of the soil nail wall and reconstructed headwall will be determined as the design phase progresses. The wingwall located north of the outlet will not be disturbed by this project. A concrete curb and gutter will be constructed at the top of the soil nail wall to help redirect water from draining behind the wall and to increase the stability of the wall. On the east side of SR 7, the existing full-depth hot mixed asphalt (HMA) patch will be placed around each structure. The existing drop inlets will be cleaned and reset, and new riprap lined ditches will be placed at the outlet of each structure. SR 7 will be milled and a new HMA overlay will be placed. Guardrail will also be replaced throughout the project alignment, and the existing shoulder will be removed and replaced with a ggregate. Tree clearing will be required in the downslope area of the roadway for construction access. At the bottom of the downslope, mulched seeding will be placed to the construction limits to help prevent erosion.

Traffic will be maintained by closing the section of SR 7 that includes the project area and creating a detour utilizing SR 56, US 421, and SR 62. Refer to the maintenance of traffic (MOT) section in this document for more detailed information. The total project length will be approximately 0.26 mi along SR 7 and will extend downslope from the west edge of the roadway between approximately 10 ft and 27 ft. The project limits include the area of sliding land adjacent to the west side of the roadway, the southwest wingwall and headwall of the culvert to be repaired, the roadway, and areas of incidental construction. These termini allow for construction of the proposed soil nail wall, repairs to the wingwall and headwall on the culvert at the north end of the project, replacement of five (5) drainage structures under SR 7, and adjacent incidental road construction. The project will not rely on any other project for completion. Therefore, the project has logical termini and independent utility. Project plans and the MOT plan can be seen in Appendix B8-B19.

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.

No Build / Do Nothing:

The No Build / Do Nothing alternative is a feasible alternative that would not require the utilization of any funds and would not impact the built, social, or physical environment. However, this alternative does not meet the purpose and need of the project as it does not address the structural issues of the culvert, CV 007-039-00.80, or improve the condition of the roadway; therefore, this alternative was discarded from further consideration.

Cantilever Pile Wall:

This alternative would involve coring 30 in diameter holes 15 ft deep into the rock, setting steel piles at approximately 8 ft spacing, and securing them in concrete. The piles would stick up above the bedrock approximately 10 ft and precast material will be placed between the piles to create a wall. The area behind the wall would be backfilled with riprap and a 2:1 slope would be established form the wall to the roadway. In order to keep the wall height to approximately 10 ft in height, the wall would be constructed approximately 45 ft from the centerline of the roadway. This alternative meets the purpose and need of the project, but the right-of-way (ROW) and construction area required for this alternative result in a higher construction cost and a greater ecological footprint. 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):



This is page 4 of 24 Project name:

County Jefferson		Route SR	7	_	Des. No.	1801684
ROADWAY CHARACTER:						
f the proposed action includes n	nultiple roadway	s, complete and	duplicate for ea	ch roadw	ay.	
Name of Roadway	SR 7					
Functional Classification:	Rural Principa	l Arterial				
Current ADT:	5,422	VPD (2023)	Design Year A	ADT:	5,422	VPD (2043)
			7.47%	AADT/		
Design Hour Volume (DHV):		uck Percentage		DHV		
Designed Speed (mph):	<u> </u>	gal Speed (mph)	: 30)		
	Existing		Propose	ed		
Number of Lanes:		2		2		
Type of Lanes:	Т	hrough Lane		Through	Lane	
Pavement Width:	12	ft.	12	ft.		
Shoulder Width:	0-2	ft.	0-2	ft.		
Median Width:	N/A	ft.	N/A	ft.		
Sidewalk Width:	N/A	ft.	N/A	ft.		
F						
Setting:	Urban		Suburban		X Rural	
Topography:	Level	Х	Rolling		Hilly	

BRIDGES AND/OR SMALL STRUCTURE(S):

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

Structure/NBI Number(s):	CV 007-039-00.80	Sufficiency Rating:	N/A
			(Rating, Source of Information)

	Existing		Proposed	d
Bridge/Structure Type:	Reinford	ced Concrete Box	Reinfo	rced Concrete Box
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:	4	ft.	4	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. The existing structure (CV 007-039-00.80) is a 4 ft by 4 ft reinforced concrete box with a length of 40 ft located approximately 0.77 mi north of SR 56, at the north end of the project alignment. The age of the structure is unknown. This project will make repairs to southwest wingwall and the headwall on the west side of the structure.

Three (3) 24 in diameter RCP and two (2) 24 in diameter CMP pipes will be replaced by the project. These structures are smaller than the 48 in threshold to receive a unique structure number. Please see Appendix C44 for the latitude and longitude coordinates for these structures.

This is page 5 of 24 Project name:

SR 7 Slide Correction

Date: October 14, 2021

County Jefferson

Route SR 7

Des. No. 1801684

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

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

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.

SR 7 will be closed for the duration of the construction and a detour utilizing SR 56, US 421, and SR 62 is planned. This detour route is 7.3 miles long and will add an additional 4.3 miles to the length of travel. The closure is estimated to last 120 days. Signage will be placed along SR 7, SR 56, and SR 62 notifying motorists of the construction area. No local residences or businesses are located in the project area. The MOT plan will not result in any additional impacts. Please see Appendix B10 for the details of the MOT.

The closures 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 completion.

ESTIMATED	ESTIMATED PROJECT COST AND SCHEDULE:							
Engineering:	\$_200,000	(2019)	Right-of-Way:	\$_150,000	(2021)	Construction:	\$ <u>2,717, 796</u>	(2023)
Anticipated Sta	art Date of Constru	uction:	2023					

RIGHT OF WAY:

	Amount (acres)						
Land Use Impacts	Permanent	Temporary					
Residential	0	0					
Commercial	0	0					
Agricultural	0	0					
Forest	0.96	0					
Wetlands	0	0					
Other:	0	0					
Other:	0	0					
TOTAL	0.96	0					

County	Jefferson	Route	SR 7	Des. No.	1801684

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

The existing apparent ROW on the west side of SR 7 ends at the edge of the roadway pavement. On the east side of SR 7, existing ROW extends approximately 40 ft from the center of the roadway. The existing ROW on the east side of SR 7 is forested.

The project requires 0.96 acre of permanent ROW and will be acquired from one forested parcel on the west side of SR 7. No temporary ROW will be required as part of the project. The proposed ROW will extend approximately 40 ft from the edge of the roadway on the west side of SR 7.

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.

Agency	Date Sent	Response Date	Appendix
Federal Highway Administration (FHWA)	March 5, 2021	No response	N/A
National Park Service	March 5, 2021	No response	N/A
US Dept. of Housing and Urban Development	March 5, 2021	No response	N/A
Natural Resources Conservation Service (NRCS)	March 5, 2021	March 24, 2021	C4
US Fish and Wildlife Service (USFWS)	March 5, 2021	March 9, 2021	C5-C6
Indiana Department of Natural Resources (IDNR), Division of Fish and Wildlife (DFW)	March 5, 2021	April 1, 2021	C7-C8
Indiana Department of Environmental Management (IDEM)	March 5, 2021	March 5, 2021	C9-C15
Indiana Geological & Water Survey (IGWS)	March 5, 2021	March 5, 2021	C16-C18
IDEM Groundwater Section	March 5, 2021	March 5, 2021	C19
INDOT Seymour District Environmental Services Division	March 5, 2021	No response	N/A
INDOT Project Manager	March 5, 2021	No response	N/A
INDOT Office of Aviation	April 5, 2021	April 6, 2021	
Kentuckiana Regional Planning & Development Agency (KIPDA)	March 5, 2021	March 5, 2021	C21
Jefferson County Commissioner's Office	March 5, 2021	No response	N/A
Jefferson County Council	March 5, 2021	No response	N/A
Jefferson County Highway Dept.	March 5, 2021	No response	N/A
Jefferson County Surveyor	March 5, 2021	No response	N/A
Madison Municipal Separate Storm Sewer Systems (MS4) Coordinator	March 5, 2021	No response	N/A
Madison Consolidated Schools	March 5, 2021	No response	N/A
Madison Water Department	March 9, 2021; April 6, 2021	No response	N/A
Madison State Hospital	March 9, 2021; April 6, 2021	April 7, 2021	C22

Early coordination letters were sent on March 5, 2021 (Appendix C, pages 1 to 3).

Resource specific recommendations are included in the applicable sections of the environmental document. All applicable recommendations are included in the *Environmental Commitments* section of this CE document.

This is page 7 of 24 Project name:

County	Jefferson	F	Route SR 7		Des. No.	1801684	4
SECTION	B – ECOLOGICAL	RESOURCES	:				
					Presence	<u>Impa</u> Yes	acts No
	eams, Rivers, Waterco		Jurisdictional	Features			
	Federal Wild and Sceni						
	State Natural, Scenic of						
	Nationwide Rivers Inve Outstanding Rivers List	• • •	u				
	Navigable Waterways						
Total strea	m(s) in project area:	None	Linear feet	Total impacted	stream(s):	None	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)

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.

Based on the desktop review, the aerial map of the project area, and the RFI report (Appendix E3, E8), there are five (5) streams, rivers, watercourses, or other jurisdictional features within the 0.5 mile search radius. One (1) ephemeral stream, an unnamed tributary (UNT) to Crooked Creek, was found in the project area during a site visit on May 7, 2020 (formerly Green 3, LLC). No work will occur below the ordinary high-water mark (OHWM) of this stream; therefore, no impacts are expected.

UNT to Crooked Creek flows east to west through the culvert located at the north terminus of the project area. UNT to Crooked Creek drains water from the uphill area on the east side of SR 7 and the portion of the stream in the vicinity of the roadway is characterized by limestone bedrock. No streambed is present on the west side of SR 7, and water exiting the structure drops straight down to the bottom of the valley where the stream continues to drain to Crooked Creek. While repairs will be made to the headwall and wingwall at the outlet of the structure carrying UNT to Crooked Creek under SR 7, no work below the OHWM will occur. Therefore, a *Waters of the U.S. / Wetland Delineation Report* was not prepared. Coordination with the INDOT Ecology and Waterway Permitting Office on August 6, 2021, stated that no waterway permits will be required for this project.

The IDEM automated response to early coordination dated March 5, 2021, had recommendations to acquire the proper permits for work in waterways (Appendix C9-C15). The IDNR responded to the early coordination letter on April 1, 2021, with recommendations to minimize and contain within the project limits any inchannel disturbance and to not excavate in the low flow area except for the placement of riprap (Appendix C7-C8). The USFWS responded to the early coordination letter on March 9, 2021, with recommendations regarding minimizing work within waterways, erosion control and bank stabilization, and timing of work within the waterway (Appendix C5-C6).

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

County	Jefferson	Route	SR 7	Des. No.	1801684
	•				

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

Describe all open water feature(s) identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are 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, and the RFI report (Appendix E3, E8), there are two (2) open water features within the 0.5 mile search radius. There are no open water features present within or adjacent to the project area. That number was confirmed by the site visit on May 7, 2020, by SJCA Inc. Therefore, no impacts are expected.

			Presence	Impa	<u>acts</u>
				Yes	No
Wetlands					
Total wetland area:	N/A	Acre(s)	Total wetland area impacted:	N/A	Acre(s)

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

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

Documentation

ESD Approval Dates

Wetlands (*Mark all that apply*) Wetland Determination

USACE Isolated Waters Determination

Wetland Delineation

N/A N/A N/A

-	

Improvements that will not result in any wetland impacts are not practicable because such avoidance	Э
would result in (Mark all that apply and explain):	
Substantial adverse impacts to adjacent homes, business or other improved properties;	
Substantially increased project costs;	
Unique engineering, traffic, maintenance, or safety problems:	

Substantial adverse social, economic, or environmental impacts, or

The project not meeting the identified needs.

Describe all wetlands identified adjacent or within the project area. Include whether or not impacts (both permanent and temporary) will occur to the features identified. Include if features are 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, and the RFI report (Appendix E3, E8), there is one (1) wetland within the 0.5 mile search radius. No wetlands are present within or adjacent to the project area. That number was confirmed by the site visit on May 7, 2020, by SJCA Inc. Therefore, no impacts are expected.

This is page 9 of 24 Project name:

County Jefferson	Route	SR 7	Des. No	o. <u>1801684</u>	
Terrestrial Habitat			Presence Im Yes X X	NO	
Total terrestrial habitat in project area:	0.82	Acre(s)	Total tree clearing:	0.82	Acre(s)

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

Based on a desktop review, a site visit on May 7, 2020, by SJCA Inc. and the aerial map of the project area (Appendix B2), the project is bordered by hardwood forests on both sides of the road. The dominant tree species present are sugar maple (Acer saccharum, FACU) and white ash (Fraxinus americana, FACU). This project will construct a 1,400 ft long soil nail wall on the west side of SR 7. The proposed wall will begin approximately eight (8) ft from the edge of the pavement and will extend downslope between approximately 10 ft and 27 ft. A total of 0.82 acre of trees will be cleared in order to place the soil nail wall. Avoidance of these impacts is only possible with the No Build alternative, which would not correct the slide areas or meet the purpose and need or the project. Mitigation for the tree clearing is not anticipated.

The IDEM automated early coordination response letter dated March 5, 2021, had recommendations to limit the disturbance of vegetation and implement erosion and sediment control measures (Appendix C9-C15). The IDNR responded to the early coordination letter on April 1, 2021, with recommendations to avoid and minimize impacts to botanical resources. Recommendations included limiting, minimizing, and mitigating tree removal, timing of tree removal, revegetating disturbed areas with native vegetation, and to prevent sediment and erosion from leaving the construction site (Appendix C7-C8). The USFWS responded to the early coordination letter on March 9, 2021, with recommendations regarding limiting and minimizing vegetation removal, erosion and sediment control methods, and revegetation (Appendix C5-C6).

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 Section 7 informal consultation completed (IPaC cannot be completed) Section 7 formal consultation Biological Assessment (BA) required	Yes	No X X
Determination Received for Listed Bats from USFWS: NE NLAA	X LA	A
Other Species not included in IPaC Additional federal species found in project area (based on IPaC species list) State species (not bird) found in project area (based upon consultation with IDNR)	Yes	No X X
Migratory Birds Known usage or presence of birds (i.e. nests) State bird species based upon coordination with IDNR	Yes	No X X

County	Jefferson	Route	SR 7	Des. No.	1801684

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 E1-E13), completed by SJCA Inc. on December 22, 2020, the IDNR Jefferson County Endangered, Threatened and Rare (ETR) Species List has been checked. According to the IDNR-DFW early coordination response letter dated April 1, 2021 (Appendix C7-C8), the Natural Heritage Program's Database has been checked, and no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur within 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 C36-C41). 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 culvert inspection occurred on May 7, 2020, and no bats or signs of bats were found (Appendix C43-C44). An effect determination key was completed on April 22, 2021, and based on the responses provided, the project was found "not likely to adversely affect" the Indiana bat and/or the NLEB (Appendix C23-C35). INDOT reviewed and verified the effect finding on April 22, 2021, and requested USFWS's review of the finding (Appendix C42). No response was received from USFWS within the 14-day review period; therefore, it was concluded they concur with the finding. The following Avoidance and Minimization Measures (AMMs) were provided: General AMM 1, Lighting AMM 1, and Tree Clearing AMMs 1-4. These AMMs are included as firm commitments in the *Environmental Commitments* section of this document.

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

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

/es	No
	Х
	Х
	Х

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

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, the project is located outside the designated karst region of Indiana as outlined in the October 13, 1993, Karst Memorandum of Understanding (MOU). According to the topographic map of the project area (Appendix B3) and the RFI report (Appendix E3, E8), there are no karst features identified within or adjacent to the project area. In the early coordination response from March 5, 2021, the IGWS did not indicate that karst features exist in the project area (Appendix C16-C18). The IGWS response stated there is a high liquefaction potential, a floodway, a high potential for impacts to bedrock resources, and a high potential for impacts to sand and gravel resources within 0.5 mile of the project area. The features will not be affected because the project is not within the vicinity of any bedrock resources and involves repairs to existing infrastructure. The response from IGWS has been communicated to the designer on July 7, 2021. No impacts are expected.

County	Jefferson	Route	SR 7		Des. No.	1801684
SECTION	I C – OTHER RESOURCES					
	inking Water Resources Wellhead Protection Area(s) Source Water Protection Area(s) Water Well(s) Urbanized Area Boundary Public Water System(s)			X X X X	Impa Yes	Cts No X X X X X X
	the project located in the St. Joseph S If Yes, is the FHWA/EPA SSA MOU If Yes, is a Groundwater Assessmen	Applicable	?		Yes	No 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.

Sole Source Aquifer

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

Wellhead Protection Area and Source Water

The IDEM Wellhead Proximity Determinator website (<u>http://www.in.gov/idem/cleanwater/pages/wellhead/</u>) was accessed on March 5, 2021, by SJCA Inc. This project is located within a Wellhead Protection Area. In an early coordination letter dated March 5, 2021, IDEM stated the project is located within Wellhead Protection Areas for the Madison Water Department and the Madison State Hospital (Appendix C19). Early coordination letters were sent to the Madison Water Department and the Madison State Hospital on March 9, 2021, and a follow-up email was sent on April 6, 2021. A representative of the Madison State Hospital responded to the early coordination letter on April 7, 2021, stating that they do not have any concerns about this project affecting their wellhead protection area. No response was received from the Madison Water Department. These features will not be affected because this project will take place on a hillslope where no water supply features are located. This project is not located in a Source Water Area.

Water Wells

The IDNR Water Well Record Database website (<u>https://www.in.gov/dnr/water/3595.htm</u>) was accessed on March 31, 2021, by SJCA Inc. No wells are located near this project. Therefore, no impacts are expected.

Urban Area Boundary

Based on a desktop review of the INDOT MS4 website (<u>http://entapps.indot.in.gov/MS4/</u>) by SJCA Inc. on March 5, 2021, this project is located in an Urban Area Boundary (UAB) location. An early coordination letter was sent on March 5, 2021, to the City of Madison MS4 Coordinator and the Kentuckiana Regional Planning & Development Agency (KIPDA). The City of Madison MS4 Coordinator didn't respond. A representative from the KIPDA responded on March 5, 2021, but did not provide any comments (Appendix C21).

Public Water System

Based on a desktop review, a site visit on May 7, 2020 by SJCA Inc. and the project plans (Appendix B11-B13), no public water systems were identified within or adjacent to the project area. Therefore, no impacts are expected.

County	Jefferson	Route	SR 7		ĺ	Des. No.	1801684	
Flo	oodplains				Presence	<u>l</u> Yes	<u>mpacts</u> s No	
	Project located within Longitudinal encroad Transverse encroad		vnstream fro	om project				
lf a	applicable, indicate th	e Floodplain Level?						
Le	vel 1	evel 2 Level 3	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 (<u>http://dnrmaps.dnr.in.gov/appsphp/fdms/</u>) was accessed on March 31, 2021, by SJCA Inc. This project is not located in a regulatory floodplain based on the IDNR Best Available Flood Hazard map layer and the IDNR floodplain layer in the RFI document (Appendix E3). Therefore, it does not fall within the guidelines for the implementation of 23 CFR 650, 23 CFR 771, and 44 CFR. No impacts are expected.

	Presence	Impacts
Farmland Agricultural Lands Prime Farmland (per NRCS)		Yes No
Total Points (from Section VII of CPA-106/AD-1006*) *If 160 or greater, see CE Manual for guidance.		

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

Based on a desktop review, a site visit on May 7, 2020, by SJCA Inc., the aerial map of the project area (Appendix B3), there is no land that meets the definition of farmland under the Farmland Protection Policy Act (FPPA) within or adjacent to the project area. The requirements of the FPPA do not apply to this project; therefore, no impacts are expected. An early coordination letter was sent on March 5, 2021, to NRCS. The NRCS responded on March 24, 2021, stating that the project will not cause a conversion of prime farmland (Appendix C4).

SECTION D - CULTURAL RESOURCES

Minor Projects PA	Category(ies) and	Type(s)		INDOT Approval D	ate(s) N/A X
Full 106 Effect Finding No Historic Properties	s Affected	No Adverse Effect	X	Adverse Effect	
Eligible and/or Listed R NRHP Building/Site/D		Archaeology		NRHP Bridge(s)	
This is page 13 of 24 Proj	ect name: <u>SR 7 S</u>	lide Correction		Date:	October 14, 2021

County	Jefferson	Route	SR 7	Des.	No. <u>1801684</u>
Do	ocumentation Prepared (mark all	that apply)		ESD Approval Date(s)	SHPO Approval Date(s)
	APE, Eligibility and Effect Determ	nination	X	5/13/2021	6/16/2021
	800.11 Documentation		Х	5/13/2021	6/16/2021
	Historic Properties Report or Sho	ort Report	X	11/17/2020	12/22/2020
	Archaeological Records Check a Archaeological Phase la Survey Archaeological Phase Ic Survey Other:	Report	nt X	11/17/2020	12/22/2020
	Memorandum of Agreement (MC	9A)		MOA Signature Dates (List all signatories)
f the projec	ct falls under the MPPA, describe	the category(ie	es) that the p	project falls under and any a	pproval dates. If the project re

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. Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires that federal agencies identify and assess the effects of federal projects, programs, and actions on historic resources. This includes projects that are supported by federal funds. The Section 106 process was managed by SJCA Inc. (formerly Green 3, LLC), who is listed on the IDNR Department of Historic Preservation and Archaeology's Roster of Qualified Professionals.

Area of Potential Effect (APE): According to 36 CFR 800.16(d), the APE is defined as "the geographic area or areas within which an undertaking may directly or indirectly cause alterations in character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking..."

The APE of the project includes all properties adjacent to the project and those with a proximate viewshed of the project. Land use within the APE consists primarily of residential properties. The APE is limited by a large line of trees, steep slopes of heavy vegetation to the west and east, a portion of a residential neighborhood, and the curvature and elevation changes of the roads. At its widest point, the APE measures 0.14 mile across; at its narrowest point, it measures 0.12 mile across. The APE is approximately 0.35 mile long. Please refer to Appendix D56 for an aerial map of the APE.

Consulting Party Response IDNR State Historic Preservation Officer (SHPO) May 4, 2020 Indiana Landmarks Southern Regional Office No Response Jefferson County Historian No Response Jefferson County Historical Society Museum No Response Cornerstone Society, Inc. No Response Historic Madison Foundation, Inc. No Response No Response Jefferson County Historic Preservation Council, Inc. City of Madison April 8, 2020; Accepted Invitation Madison Main Street No Response Jefferson County Highway Department April 8, 2020; Accepted Invitation Jefferson County Commissioner No Response Mayor of Madison No Response Madison City Council No Response Madison Street Department No Response Jan Vetrhus April 8, 2020; Accepted Invitation Camille Fife No Response Springhill Investments, Inc. No Response April 8, 2020; Accepted Invitation Delaware Tribe of Indians, Oklahoma Eastern Shawnee Tribe of Oklahoma No Response Miami Tribe of Oklahoma April 22, 2020; Accepted Invitation Peoria Tribe of Oklahoma No Response Pokagon Band of Potawatomi Indians April 8, 2020; Accepted Invitation

Coordination with Consulting Parties: On April 8, 2020, the following parties were sent early coordination letters and invitations to become consulting parties (Appendix D17-D25):

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Note: INDOT Cultural Resources Office (CRO) is acting on behalf of FHWA. FHWA is the lead agency. The IDNR SHPO is an automatic consulting party.

On April 8, 2020, Jan Vetrhus asked if a representative of the Springdale Cemetery (located southeast of the proposed project's location) will be contacted due to damage caused by a previous project and if this project was the same one discussed a couple of years ago. Green 3, LLC (now SJCA Inc.) responded that this was a new project located north of the cemetery and that the previous project was under Des. No. 1173314. Green 3 then asked Vetrhus if the cemetery should still be included as a consulting party. Vetrhus responded, stating that "if none of the run-off can impact the Cemetery, then probably not. Water & riprap flowing downhill into the cemetery was the problem before. As long as this project doesn't force more run-off onto the graves, it shouldn't be a concern." After discussions with the project designer, it was determined that no increase in run-off to the cemetery will occur because the proposed new inlets and reconstructed ditch on the east side of the roadway will be piped to the west side of the road (Appendix D34-D36).

On April 8, 2020, the City of Madison accepted consulting party status and commented that "if there is historic material such as a retaining wall, the City of Madison does not have room to store that material at any of our facilities" (Appendix D26).

On April 8, 2020, the Delaware Tribe of Indians, the Pokagon Band of Potawatomi Indians, and the Jefferson County Highway Department accepted consulting party status (Appendix D27-D29).

On April 22, 2020, the Miami Tribe of Oklahoma accepted consulting party status, offering no objection at this time (Appendix D31).

On May 4, 2020, SHPO staff responded that they were "not aware of any parties who should be invited to participate in the Section 106 consultation of this federal undertaking, beyond those whom INDOT already has invited." They requested that they be advised as to which of the invited parties have accepted the invitation. SHPO staff also asked for an explanation of "how this project differs in location or scope from an earlier project, Des. No. 1173314, SR 7 Slide Correction in the City of Madison, approximately 0.4 mile north of SR 56, for which FHWA made a Section 106 Adverse Effect finding on November 2, 2017, a Section 106 memorandum of agreement ('MOA') was executed on January 25, 2018, and the Indiana Historic Preservation Review Board granted a certificate of approval on January 17, 2018." SHPO staff also commented that the MOA that is posted in IN SCOPE did "not include Attachment A, which was to have included the area of potential effects map for Des. No. 1173314" (Appendix D32-D33). An explanation of how the two projects differed was provided in a letter dated November 20, 2020. The letter explained that the current project under Des. No. 1801684 takes place approximately 350 feet north of the northern limits of the previous project under Des. No. 1173314. The current scope under Des. No. 1801684 is similar to that of the scope under Des. No. 1173314 in which a soil nail wall will be constructed on the western slope of SR 7, roadway surface improvements and guardrail replacement. Additionally, under Des. No. 1801684, there will be drainage improvements. Approximately 3.2 feet of a stone retaining wall, a contributing resource to the Madison Historic District, NR-2038, of which 99 feet was removed from the 479 feet long wall under Des. No. 1173314, has been observed at the southern project limits under Des. No. 1801684. It is anticipated that there will be no removal or disturbance of this portion of the stone retaining wall within the project limits; the proposed construction of the new soil nail wall will abut the existing stone retaining wall without a gap. Future plan sheets will insert a "Do not disturb" notation for the stone retaining wall. Additionally, Attachment A of the MOA under Des. No. 1173314 was posted in IN SCOPE (Appendix D39-D43).

Archaeology: An Archaeological Records Check and Assessment was completed by an INDOT Qualified Professional Archaeologist and determined that the proposed project will not likely affect archaeological resources based on the project being located on a road that was mechanically cut into a hillslope that slopes steeply downhill to the west (Appendix D8, D39-D43).

Historic Properties: A Historic Property Short Report (HPSR) was completed for this project (Wood; October 2020). This HPSR was written as part of the Section 106 process and included the boundaries of the APE for this project. INDOT CRO approved the HPSR for distribution to SHPO and Consulting Parties for review on November 17, 2020 (Appendix D37-D43).

The HPSR found one (1) above-ground property in the APE, the Madison Historic District, NR-2038, that is listed in the National Register of Historic Places (NRHP). No contributing properties are located within the APE. A historic stone retaining wall is present adjacent to the southern limit of the proposed soil nail wall. No removal or disturbance of this wall is planned, but it is planned that the soil nail wall will abut this resource without a gap. Efforts will be made to avoid damaging the stone wall and a "Do Not Disturb" call out will be added to the project plans (Appendix D39-D43). The summary of the HPSR can be found in Appendix D54-D55.

The Madison Historic District was listed in the NRHP in 1973 and is a historic commercial district with significant properties built between 1806 and 1860. It includes 150 contributing resources that served as the commercial epicenter of the historic Madison township. According to the National Register Nomination Form, the Madison Historic District is significant for reasons of agriculture, architecture, commerce, and transportation. Many of the structures were built in the Greek Revival style by Madison-native architect

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Francis Costigan. The Madison Historic District is listed in the NRHP under Criterion C for its association with architecture. Although this project will acquire 0.96 ac of ROW from the Madison Historic District, the project will have "No Adverse Effect" on the resource. The project will not cause physical destruction or damage to the property, there will be no alterations to historic elements of the Madison Historic District, the historic district will not be removed from its historic location, the project will not change any features that contribute to its historic significance or change the property's use, the project will not diminish the integrity of the district's significant historic features, the project will not cause neglect of the historic district, and the ownership of the historic district will not change (Appendix D6-D11).

The Indiana SHPO concurred with the findings of the HPSR in their letter dated December 22, 2020, agreeing with SJCA Inc.'s conclusion that the NRHP listed Madison Historic District is located within the APE and that no other historic properties are located within the APE (Appendix D44-D45).

Documentation Findings: A finding of "No Adverse Effect" on the Madison Historic District was approved by INDOT CRO on May 12, 2021 (Appendix D5-D11) and distributed to Consulting Parties and SHPO on November 23, 2020, for a 30-day review period (Appendix D37-D38). The SHPO concurred with the "No Adverse Effect" finding in their letter dated June 16, 2021 (Appendix D2-D3). No other responses from consulting parties were received.

Public Involvement: To meet the public involvement requirements of Section 106, a legal notice of FHWA's finding of "No Adverse Effect" for the Madison Historic District was published in *The Madison Courier* on May 29, 2021, offering the public an opportunity to submit comments pursuant to 36 CFR 800.2(d), 800.3€, and 800.6(a)(4). The public comment period closed 30 days later on June 29, 2021. No comments were received during the public comment period. The text of the public notice and the affidavit of publication appear in Appendix D13-D15.

The Section 106 process has been completed 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.) Wildlife and Waterfowl Refuges National Wildlife Refuge National Natural Landmark State Wildlife Area State Nature Preserve Historic Properties Site eligible and/or listed on the NRHP	Presence	Yes No
Programmatic Section 4(f) "De minimis" Impact Individual Section 4(f) Any exception included in 23 CFR 774.13	Evaluations Prepared X	

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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 B2) and the RFI report (Appendix E2, E7), there are seven (7) potential 4(f) resources located within the 0.5 mile search radius. According to additional research and the site visit on May 7, 2020, by SJCA Inc., there is one (1) Section 4(f) resource within and adjacent to the project area. The project is located within the Madison Historic District (NR-2038), which is listed as a historic district on the NRHP. A historic stone retaining wall is present adjacent to the southern limit of the proposed soil nail wall. No removal or disturbance of this wall is planned, but it is planned that the soil nail wall will abut this resource without a gap. A "Do not disturb" notation referring to the historic stone retaining wall located at the southern terminus of the project will be included on all forthcoming plan sets. A HPSR and a full Section 106 review was completed for the project. A finding of "No Adverse Effect" on the Madison Historic District was approved by INDOT CRO on May 13, 2021 (Appendix D5-D11) and by the SHPO on June 16, 2021 (Appendix D2-D3).

The project will not cause physical destruction or damage to the property, there will be no alterations to historic elements of the Madison Historic District, the historic district will not be removed from its historic location, the project will not change any features that contribute to its historic significance or change the property's use, the project will not diminish the integrity of the district's significant historic features, the project will not cause neglect of the historic district, and the ownership of the historic district will not change (Appendix D6-D11). This project will stabilize the land on the downslope (west) side of the roadway to correct existing sliding land areas and to prevent future sliding land areas. Damaged elements of a non-historic concrete box culvert will be repaired on the west side of SR 7. This project will require 0.96 acre of new permanent ROW and approximately 0.82 acre of trees will be removed from the west side of SR 7 in order to facilitate placing the soil nail wall. As a result of the Section 106 "No Adverse Effect" finding issued on May 13, 2021, INDOT CRO, on behalf of FHWA, issued a "de minimis" finding for the Madison Historic District (Appendix D2-D3, D5-D11).

Section 6(f) Involvement	Presence	Us	<u>e</u>
Section 6(f) Property		Yes	No X

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 ten (10) properties in Jefferson County (Appendix H1). None of these properties are located within or adjacent to the project area. Therefore, there will be no impacts to 6(f) resources.

County Jefferson Route S	SR 7 Des. No. 1801684
SECTION F – Air Quality	
STIP/TIP and Conformity Status of the Project 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 main 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)?	tenance area?
Location in STIP: Name of MPO (if applicable): Location in TIP (if applicable):	Fiscal Year (FY) 2020-2024 Statewide Transportation Improvement Program (STIP) (Appendix G1-G2)
Level of MSAT Analysis required? Level 1a X Level 1b Level 2	Level 3 Level 4 Level 5
located. Indicate whether the project is exempt from a conform the TP and TIP. Describe if a hot spot analysis is required and	Describe the attainment status of the county(ies) where the project is nity determination. If the project is not exempt, include information about I the MSAT Level.
STIP/TIP This project is included in the FY 2020-2024 STIP (Appendix (Appendix G1). Attainment Status	G2). Engineering costs are in included in the FY 2018-2021 STIP

This project is located in Jefferson County which is currently a maintenance area for Particulate Matter (PM) 2.5 according to IDEM's Current and Historical List of Nonattainment Areas by County (<u>https://www.in.gov/idem/airquality/information-about/nonattainment-status-for-indiana-counties/</u>) as well as the United States Environmental Protection Agency (EPA) Nonattainment Areas for Criteria Pollutants Green Book (<u>https://www.epa.gov/green-book</u>). This project has been identified as being exempt from air quality analysis in accordance with 40 CFR Part 93.126 and this project is not a project of air quality concern (40 CFR 93.123) (Appendix G3). Therefore, the project will have no significant impact on air quality.

MSAT

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.

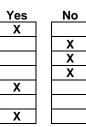
County	Jefferson	Route SR 7	Des. No18	801684
SECTI	ON G - NOISE			
	Noise			Yes No
	Is a noise analysis required in acco	ordance with FHWA regulations and	INDOT's traffic noise policy?	X
	Date Noise Analysis was approved	d/technically sufficient by INDOT ES	SD:	

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 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.

This project will not result in induced changes in the pattern of land use, the population density, or the growth rate of the area. It will not have a substantial impact on community cohesion, local tax bases, or property values. Minor decreases in property value may occur for properties that will require ROW acquisition. ROW acquisition will conform with Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act).

An Americans with Disabilities (ADA) Transition Plan for Jefferson County was adopted in January 2021. The plan ensures that all new construction, reconstruction, and road work construction or alterations are reviewed for compliance under current ADA standards. This project does not involve sidewalks or other public facilities that would need to comply with an ADA Transition Plan.

The Comprehensive Plan for Jefferson County includes goals of improving safety and prioritizing improvements of local roadways with poor conditions, to work with INDOT to enhance access and improve safety, and to review and administer roadway standards throughout Jefferson County. This project complies with the comprehensive plan by stabilizing the downslope side of SR 7 with soil nails in order to protect against landslides and erosion that result in damage to the roadway. The Jefferson County Comprehensive Plan can be accessed at https://jeffersoncounty.in.gov/DocumentCenter/View/1458/Jefferson-County-Comprehensive-Plan.

A search of local festivals, fairs, and events that could potentially be impacted by this project was conducted on July 7, 2021, by SJCA Inc. The following sources were evaluated: the City of Madison website (<u>https://visitmadison.org/events/</u>), the Jefferson County Government website (<u>https://jeffersoncounty.in.gov/</u>), and <u>www.fairsandfestivals.net</u>. Several annual and recurring events take place throughout the year in Madison. The construction and closure of SR 7 may pose an inconvenience to motorists traveling to these events, but the events will not be directly impacted by this project, and a detour route will be provided to allow for continued access to downtown Madison. The road closure and detour may temporarily impact motorists traveling to school or other community events in the surrounding area; however, no significant delays are expected, and all inconveniences to motorists will cease upon project completion.

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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 B2), and the RFI report (Appendix E2, E7), there is one (1) religious facility, one (1) recreational facility, seven (7) cemeteries, four (4) schools, two (2) railroads, and four (4) pipelines within the 0.5 mile search radius. The IDNR early coordination response letter stated that the Madison Historic Trail is located within 0.5 mile southwest of the project area (Appendix C7). A site visit on May 7, 2020, by SJCA Inc. and a review of the project plans identified one (1) utility in the project area (Appendix B11-B13). Overhead electric lines owned by Duke Energy are present within the project area. All utility poles present in the project area will be removed prior to construction and reset following construction. No impacts will occur to any other facilities or services. Access to all properties will be maintained during construction.

An early coordination letter was sent to Madison Consolidated Schools and to INDOT Office of Aviation on March 5, 2021. The school did not respond within the 30-day timeframe. The INDOT Office of Aviation responded to the early coordination letter on April 6, 2021, stating that there were no issues with any surrounding airspace or public-use airports, but that any object exceeding 200 ft in height regardless of location will need to be air spaced with the Federal Aviation Administration (FAA) 45 days prior to construction (Appendix C20). All applicable agency recommendations are included in the Environmental Commitments section of this CE document.

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

Environmental Justice (EJ) (Presidential EO 12898) During the development of the project were EJ issues identified? Does the project require an EJ analysis? If YES, then: Are any EJ populations located within the project area?

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 0.96 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 exists and whether there could be disproportionately high and adverse impacts to them. The reference population may be a county, city or town and is called the community of comparison (COC). In this project, the COC is Madison Township. The community that overlaps the project area is called the affected community (AC). In this project, the AC is Census Tract 9664. An AC has a population of concern for EJ if the population is more than 50% minority or low-income or if the low-income or minority population is 125% of the COC. Data from the 2019 American Community Survey 5-year Estimates was obtained from the US Census Bureau website http://data.census.gov on April 5, 2021, by SJCA Inc. The data collected for minority and low-income populations within the AC are summarized in the below table:

County	Jefferson	Route	SR 7	Des. No.	1801684	

	COC- Madison Township	AC-1 (Census Tract 9664, Jefferson County, IN)
Percent Minority	10.20%	12.66%*
125% of COC	12.74%*	AC < 125% COC
EJ Population of Concern		No
Percent Low-Income	18.36%	17.51%
125% of COC	22.95%	AC < 125% COC
EJ Population of Concern		No

Table: Minority and Low-Income Data (Source Data 2019)

*Typically, environmental justice analyses are conducted using percentages rounded to the tenth of a decimal. However, that format resulted in the percent minority in AC-1, Census Tract 9664, being equal to 125% of the COC threshold. To clarify this situation, the percentages were rounded to the hundredth decimal place, which is displayed in the table above.

AC-1, Census Tract 9664, has a percent minority of 12.66% and a percent low-income of 17.51%, which are below 50% and are below the 125% COC threshold. Therefore, AC-1 does not contain minority or low-income populations of EJ concern.

The census data sheets, map, and calculations can be found in Appendix H2-H10. No further environmental justice analysis is warranted.

Relocation of People, Businesses or Farms					No
Will the proposed action r Is a BIS or CSRS required		of people, businesses or f	arms?		X X
Number of relocations:	Residences:	Businesses:	Farms:	Other:	

Discuss any relocations that will occur due to the project. If a BIS or CSRS is required, discuss the results in the discussion below. No relocations of people, businesses, or farms will take place as a result of this project.

SECTION I – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

Date RFI concurrence by INDOT SAM (if applicable): April 21, 2021

Documentation

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This is page 21 of 24 Project name: SR 7 Slide Correction

County	Jefferson	Route	SR 7	Des. No.	1801684

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

Based on a review of GIS and available public records, a RFI was concurred by INDOT SAM on April 21, 2021 (Appendix E1-E13) and an addendum to the RFI was concurred by INDOT SAM on July 27, 2021 (Appendix E14-E19). There are four (4) underground storage tanks (UST) sites, one (1) leaking underground storage tank (LUST) site, three (3) National Pollutant Discharge Elimination System (NPDES) facilities, and one (1) NPDES pipe location located within 0.5 mile of the project area. None of the hazardous material sites identified will impact the project. Further investigation for hazardous material concerns or regulated substances is not required at this time.

Part IV – Permits and Commitments

PERMITS CHECKLIST Permits (mark all that apply) **Likely Required** Army Corps of Engineers (404/Section10 Permit) Nationwide Permit (NWP) Regional General Permit (RGP) Individual Permit (IP) Other **IN Department of Environmental Management** (401/Rule 5) Nationwide Permit (NWP) Regional General Permit (RGP) Individual Permit (IP) **Isolated Wetlands** Rule 5 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)

List the permits likely required for the project and summarize why the permits are needed, including permits designated as "Other." The total soil disturbance for this project will be 0.76 acre; therefore, an IDEM Rule 5 permit is not needed. IDNR-DFW responded on April 1, 2021, stating that formal approval by the IDNR under regulatory programs administered by the Division of Water is not required for the project (Appendix C7). While repairs will be made to the headwall and wingwall at the outlet of the structure carrying UNT to Crooked Creek under SR 7, no work below the OHWM will occur. Therefore, Section 401/404 permits were determined not likely to be required.

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

This is page 22 of 24 Project name:

SR 7 Slide Correction

Date: October 14, 2021

County	Jefferson	Route	SR 7	Des. No.	1801684
				_	

ENVIRONMENTAL COMMITMENTS

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

Firm:

- 1) If the scope of work or permanent or temporary right-of-way amounts change, the INDOT Environmental Services Division and the INDOT District Environmental Section will be contacted immediately. (INDOT ESD and INDT 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) Tree Removal AMM 1: Modify all phases/aspects of the project t (e.g., temporary work areas, alignments) to avoid tree removal. (USFWS)
- 4) Tree Removal AMM 2: Apply time of year restrictions for tree removal when bats are not likely to be present (only remove trees from October 1 through March 31), or limit tree removal to 10 or fewer trees per project at any time of year within 100 feet of existing road/rail surface and outside of documented roosting/foraging habitat or travel corridors; visual emergence survey must be conducted with no bats observed. (USFWS & IDNR-DFW)
- 5) Tree Removal AMM 3: Ensure tree removal is limited to that specified in project plans to 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)
- 6) Tree Removal AMM 4: Do not remove any documented Indiana Bat or NLEB roosts that are still suitable for roosting, or tree within 0.25 miles of roosts, or documented foraging habitat any time of year. (USFWS)
- 7) Lighting AMM 1: Direct temporary lighting away from suitable habitat during the active season. (USFWS)
- B) 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)
- 9) A "Do not disturb" notation referring to the historic stone retaining wall located at the southern terminus of the project will be included on all forthcoming plan sets. (INDOT CRO)
- 10) USFWS Structure Assessment shall take place no earlier than two (2) years prior to the start of construction. If construction will begin after May 7, 2022, an inspection of the structure, the culvert under SR 7 (CV 007-039-00.80), by a qualified representative of INDOT, 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)

For Further Consideration:

- 11) Restrict below low-water work in streams to placement of culverts, piers, pilings, and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap. (USFWS)
- 12) Culverts should span the active stream channel, should be either embedded or a 3-sided or open-arch culvert, and be installed where practicable on an essentially flat slope. When an open-bottom culvert or arch is used in a stream, which has a good natural bottom substrate, such as gravel, cobbles, and boulders, the existing substrate should be left undisturbed beneath the culvert to provide natural habitat for the aquatic community. (USFWS)

13) Minimize the extent of hard armor (riprap) in bank stabilization by using bioengineering techniques whenever possible. If

County	Jefferson	Route	SR 7		Des. No.	1801684
r	iprap is utilized for b	ank stabilization, extend i	t below low	-water elevation to	provide aquatic ha	bitat. (USFWS)
e 1	except for work within No equipment shall b		s caisson	s or cofferdams that	t were installed pric	(April 1 through June 30); or to the spawning season. achinery is within the
Ĺ		sings under bridge/culver h suitable ground cover, l				ings include flat areas below and diversion fencing.
r v r (non-wetland forest is wetland forest under diameter-at-breast ho number of large trees individual canopy tree ree canopy, woody to replacement of large	removed in a rural setting one (1) acre in an urban	g, replacen setting sho which is rep acement ra eetscape o us layer). I ly do not ro	nent should be at a uld be mitigated by moved that is 10 inc tio based on area c or park-like environr mpacts under 0.10 a equire any additiona	1:1 ratio based on planting five trees, ches dbh or greater depending on the ty ment versus remov acre in an urban ar al mitigation or add	at least 2 inches in (5:1 mitigation based on the pe of habitat impacted al of habitat supporting a ea may still involve the itional plantings beyond
17) D	o not excavate in th	e low flow area except for	the placer	∩ent of riprap. (IDN	R-DFW)	

18) Plant native hardwood trees within the right-of-way to replace the vegetation destroyed during construction. (IDNR-DFW)

DES NO 1801684 APPENDICES

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Des No. 1801684

Appendix A

INDOT Supporting Documentation

Categorical Exclusion Level Thresholds

	РСЕ	Level 1	Level 2	Level 3	Level 4 ¹
Section 106	Falls within guidelines of Minor Projects PA	"No Historic Properties Affected"	"No Adverse Effect"	-	"Adverse Effect"Or Historic Bridge involvement ²
Stream Impacts ³	No construction in waterways or water bodies	< 300 linear feet of stream impacts	\geq 300 linear feet of stream impacts	-	USACE Individual404 Permit ⁴
Wetland Impacts ³	No adverse impacts to wetlands	< 0.1 acre	-	< 1.0 acre	\geq 1.0 a cre
Right-of-way ⁵	Property acquisition for preservation only or none	< 0.5 acre	$\geq 0.5 \mathrm{a cre}$	-	-
Relocations	None	-	-	< 5	\geq 5
Threatened/Endangered Species (Species Specific Programmatic for Indiana bat & northern long eared bat)*	"No Effect", "Not likely to Adversely Affect" (With select AMMs ⁶)	"Not likely to Adversely Affect" (With any AMMs or commitments)	-	"Likely to Adversely Affect"	Project does not fall under Species Specific Programmatic ⁷
Threatened/Endangered Species (Any other species)*	Falls within guidelines of USFWS 2013 Interim Policy or "No Effect"	"Not likely to Adversely Affect"	-	-	"Likely to Adversely Affect"
Environmental Justice	No disproportionately high and adverse impacts	-	-	-	Potential ⁸
Sole Source Aquifer	No Detailed Groundwater Assessment	-	-	-	Detailed Groundwater Assessment
Floodplain	No Substantial Impacts	-	-	-	Substantial Impacts
Section 4(f) Impacts	None	-	-	-	Any ⁹
Section 6(f) Impacts	None	-	-	-	Any
Permanent Traffic Alteration	None	-	-	-	Any
Noise Analysis Required	No	-	-	-	Yes
Air Quality Analysis Required	No	-	-	-	Yes ¹⁰
 Approval Level District Env. (DE) Env. Serv. Div. (ESD) FHWA 	Concurrence by DE or ESD	DE or ESD	DE or ESD	DE and/or ESD	DE and/or ESD; and FHWA

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

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

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

⁴ US Army Corps of Engineers Individual 404 Permit

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

⁶ Avoidance and Mitigation Measures (AMMs) determined by the IPAC determination key to be required that are not tree AMMs, bridge AMMs, or structure AMMs. ⁷ Projects that do not fall under a Species Specific Programmatic and results in a "Likely to Adversely Affect". Other findings can be processed as a lower level CE. ⁸ Potential for causing a disproportionately high and adverse impact.

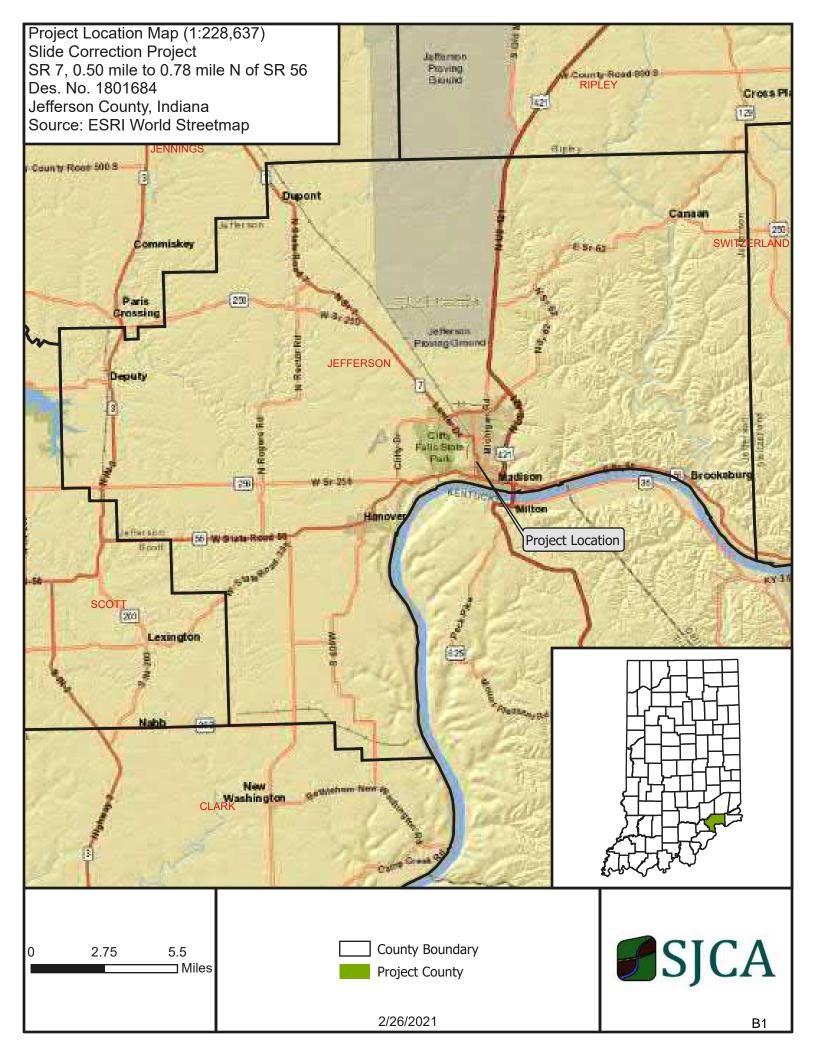
⁹ Section 4(f) use resulting in an Individual, Programmatic, or *de minimis* evaluation. The only exception is a *de minimis* evaluation for historic properties (Effective January 2, 2020). If a historic property *de minimis* and no other use, mark the *None* column.

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

* Includes the threatened/endangered species critical habitat

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

Des No. 1801684 Appendix B Graphics



Aerial Map (1:2,117) Slide Correction Project SR 7, 0.50 mile to 0.78 mil Des. No. 1801684 Jefferson County, Indiana Source: Indiana Ortho, 207		
		WESTWOOD LM
0 0.03 0.05	Project Area 2/26/2021	SJCA B2

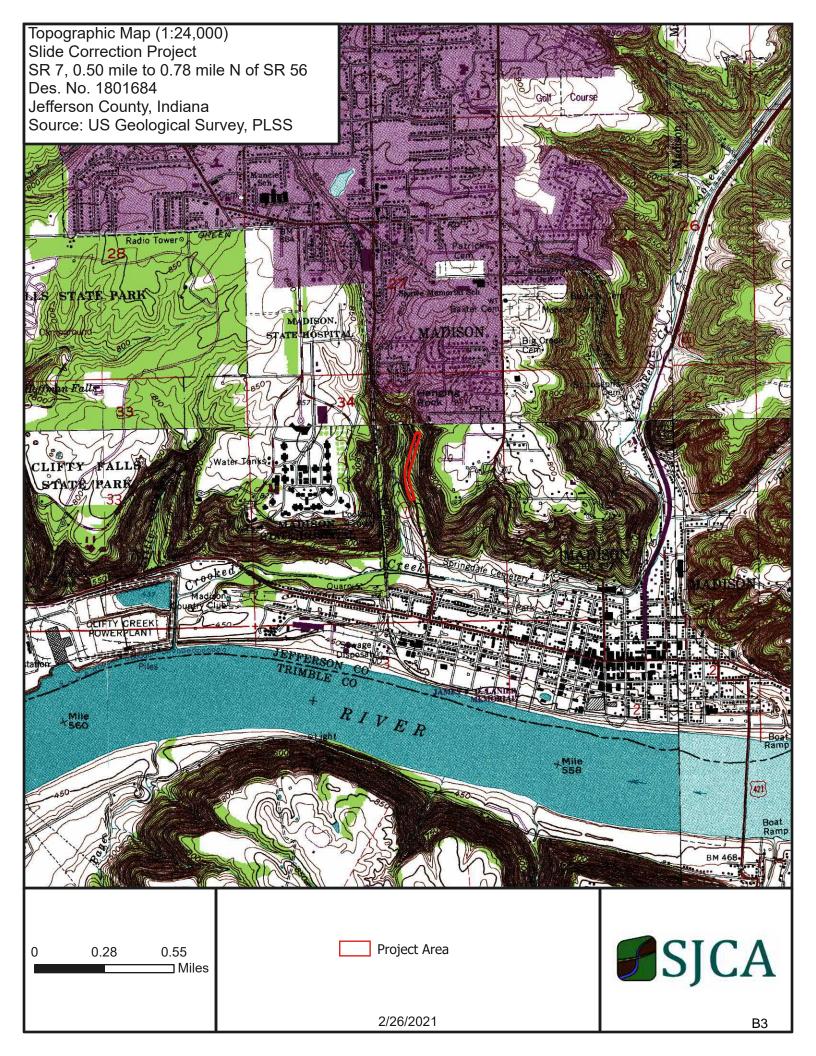


Photo Location and Orientation Map (1:2,117)

Slide Correction Project SR 7, 0.50 mile to 0.78 mi Des. No. 1801684 Jefferson County, Indiana Source: Indiana Ortho, 20		
	5	
	4	
0 0.03 0.05	Project Area A Photo Point 2/26/2021	B 4



Photo 1. Facing southeast along west side of SR 7 at outlet of drainage structure.



Photo 2. Facing east from structure drop inlet at upslope drainage pattern.



Photo 3. Facing north along west side of SR 7.



Photo 4. Facing southeast along west side of SR 7 at outlet of drainage structure.



Photo 5. Facing west at outlet of drainage structure.



Photo 6. Facing southwest along west side of SR 7.



Photo 7. Facing southwest along west side of SR 7.



Photo 8. Facing southwest at inlet of culvert planned to be repaired.



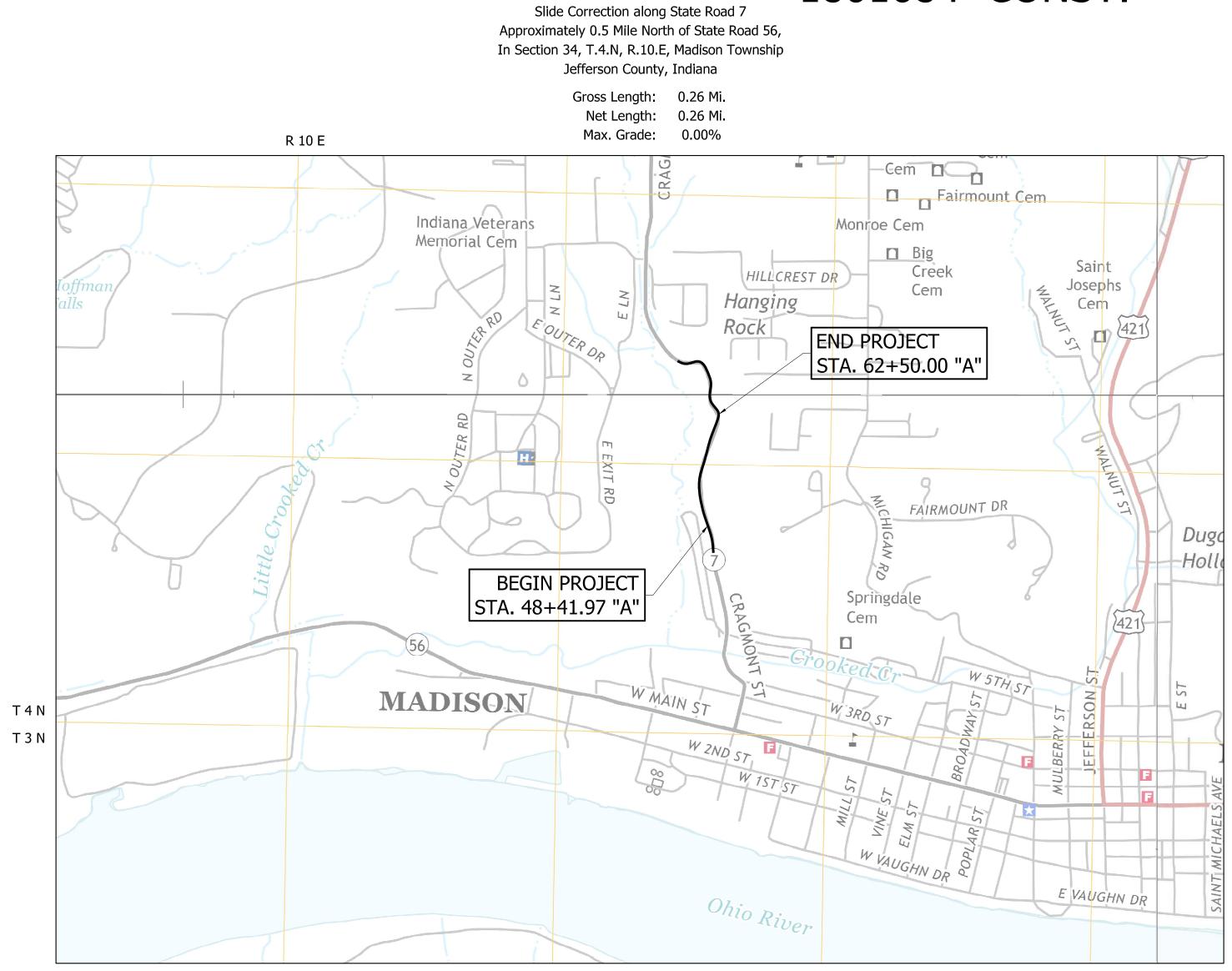
Photo 9. Facing north along east side of SR 7 from northern terminus of project.



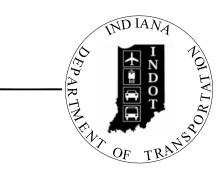
Photo 10. Facing southeast at outlet of culvert planned to be repaired.

PROJECT	DESIGNATION NO.
1801684	1801684
CONTRACT	
R-41534	

ROAD PLANS ROUTE: SR 7 FROM: RP 0+51 TO RP 0+78 PROJECT NO. 1801684 P.E. 1801684 R/W 1801684 CONST.



INDIANA **DEPARTMENT OF TRANSPORTATION**



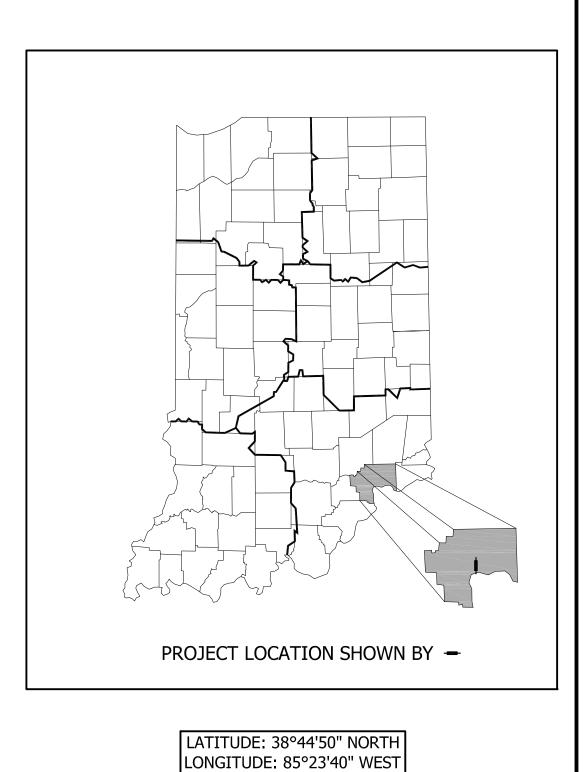
LOCATION MAP

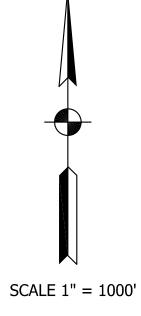


PLANS PREPARED BY:	USI Consultants, Inc.
CERTIFIED BY:	
APPROVED	
FOR LETTING:	INDIANA DEPARTMENT OF TRANSPORTA

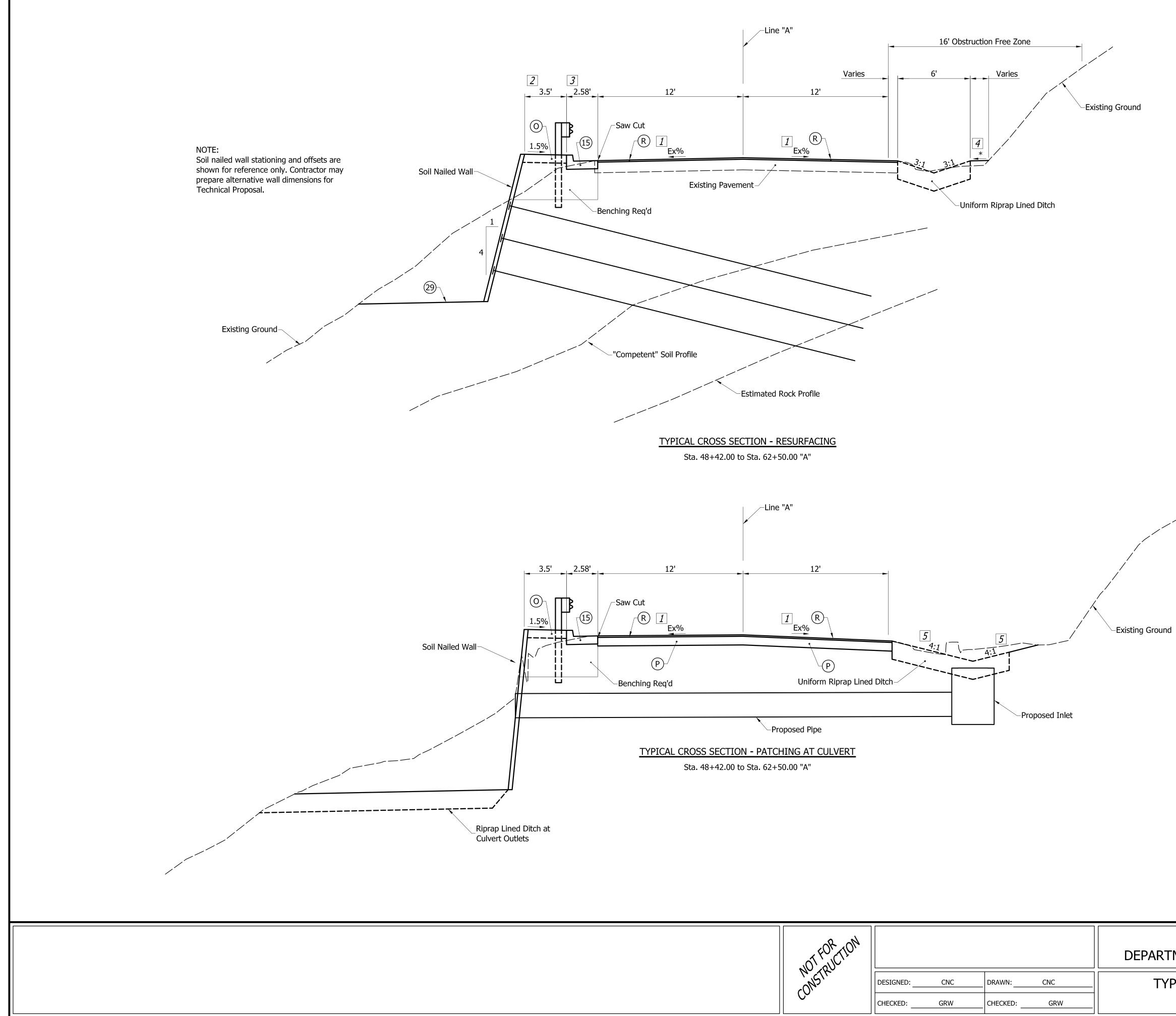
TION

TRAFFIC DATA	STATE ROAD 7
A.A.D.T. (2023)	5442 V.P.D.
A.A.D.T. (2043)	5442 V.P.D.
D.H.V. (2043)	571 V.P.H.
DIRECTIONAL DISTRIBUTION	48.8%
TRUCKS	10.46 % D.H.V.
TRUCKS	7.47% A.A.D.T.
DESIGN DATA	STATE ROAD 7
DESIGN SPEED	30 MPH
PROJECT DESIGN CRITERIA	Partial 3R
FUNCTIONAL CLASSIFICATION	Principal Arterial
RURAL/URBAN	Rural
TERRAIN	Rolling
ACCESS CONTROL	None





STAGE 2 PLANS - 8/1/2020 [INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2020 TO BE USED WITH THESE PLANS] 317-544-4996 DESIGNATION NO. PHONE NUMBER 1801684 SHEETS DATE 1 of 50 CONTRACT PROJECT NO. R-41534 1801684 DATE



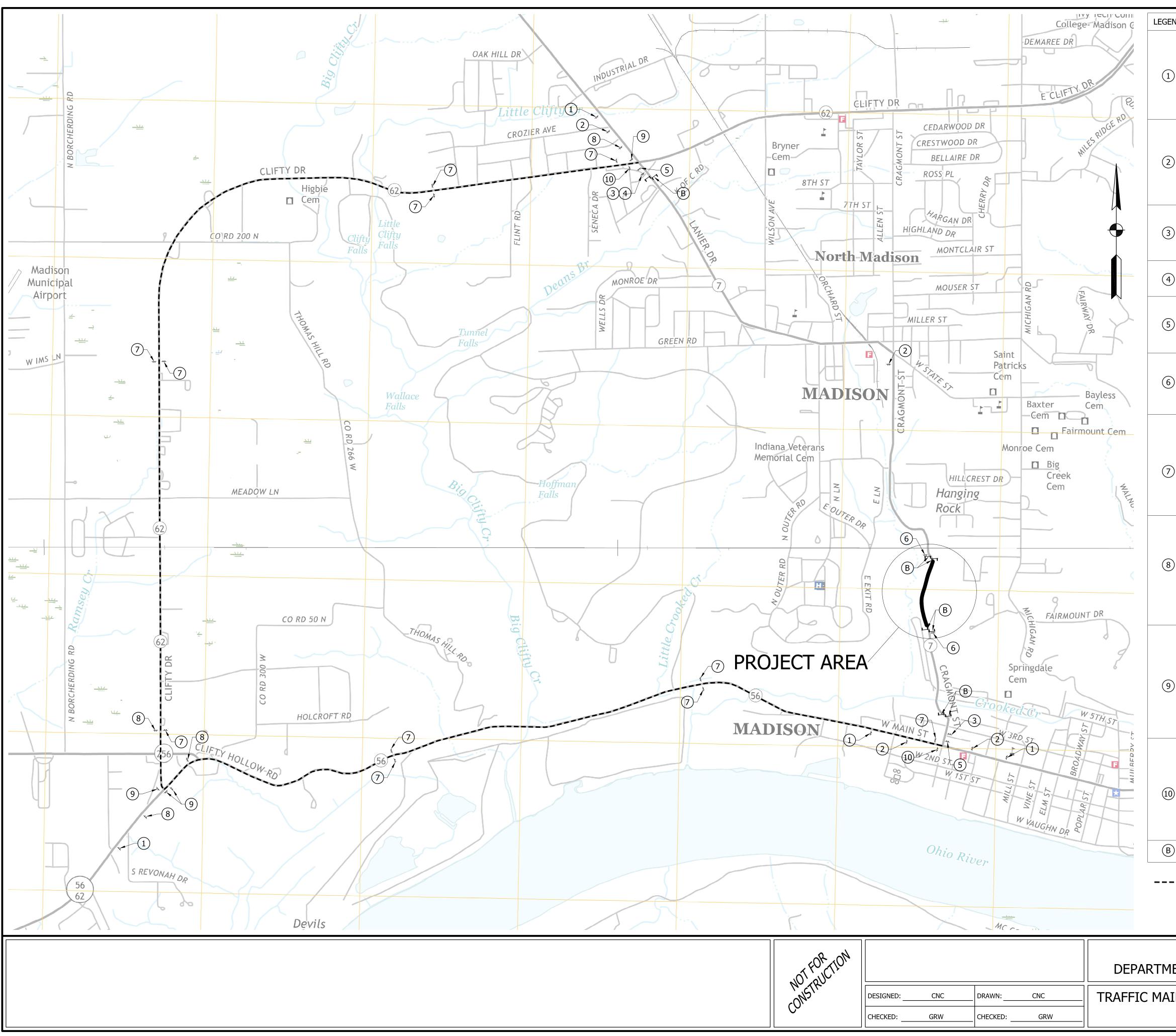
NOTFORTION					INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE 1" = 4' VERTICAL SCALE 1" = 4'		BRIDGE DESIGNA 18016	ATION
MSTR	DESIGNED:	CNC	DRAWN:	CNC	TYPICAL CROSS SECTIONS	SURVEY BOOK	3	SHEE of	TS 50
\mathcal{O}		GRW	CHECKED.	CDW	STATE ROAD 7	CONTRACT		PROJE	ECT
	CHECKED:	GKW	CHECKED:	GRW	STATE ROAD 7	R-41534		18016	584

LEGEND

- (R) HMA OVERLAY 165#/Syd. QC/QA-HMA, 2, 70, Surface 9.5 mm on Milling of Existing Pavement
- O Compacted Aggregate No. 53, Shoulder
- (P) HMA FOR PATCHING 935#/Syd.HMA Patching Type B
- (15) Combined Concrete Curb and Gutter
- (29) Mulched Seeding, R

NOTES:

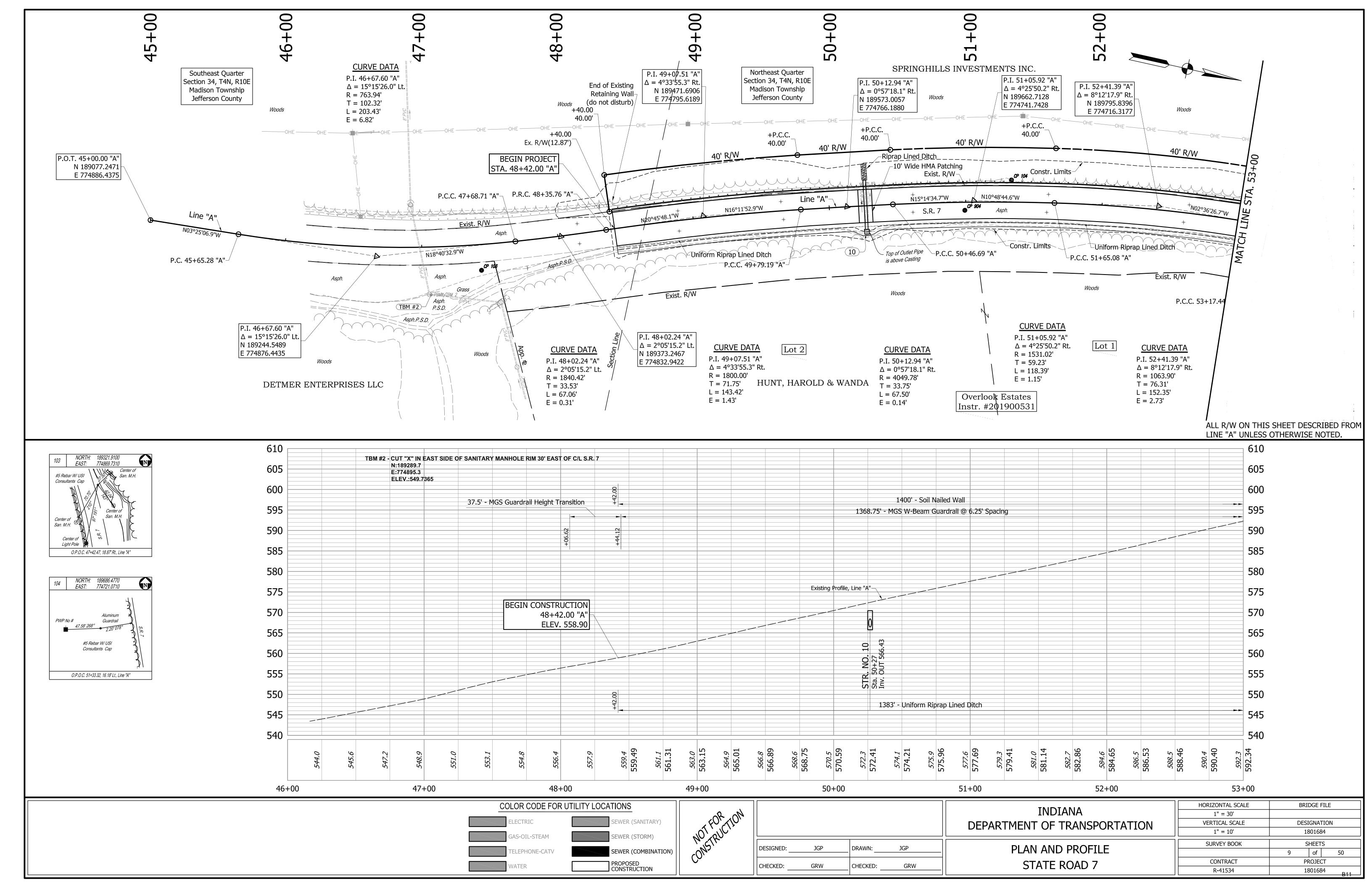
- 1 Match Existing Cross Slope
- 2 Varies from 3.5' @ Sta. 62+27 to 2.5' @ Sta. 67+42
- 3 Varies from 2.0' Gutter @ Sta. 62+27 to 1.5' Gutter @ Sta. 67+42
- 4 Slope Varies, See Cross Sections
- 5 Transition riprap slope from 3:1 to 4:1 @ Inlets

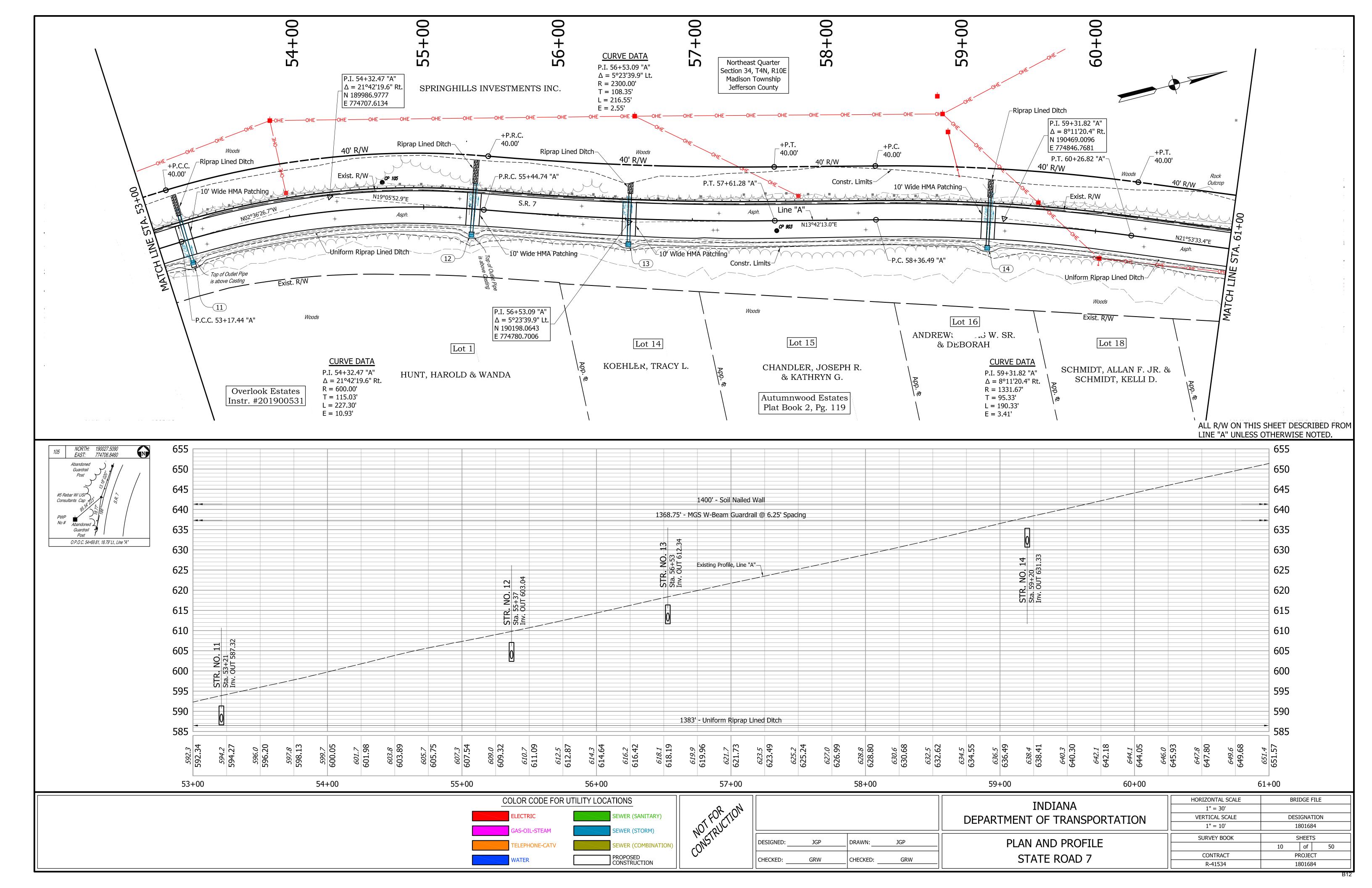


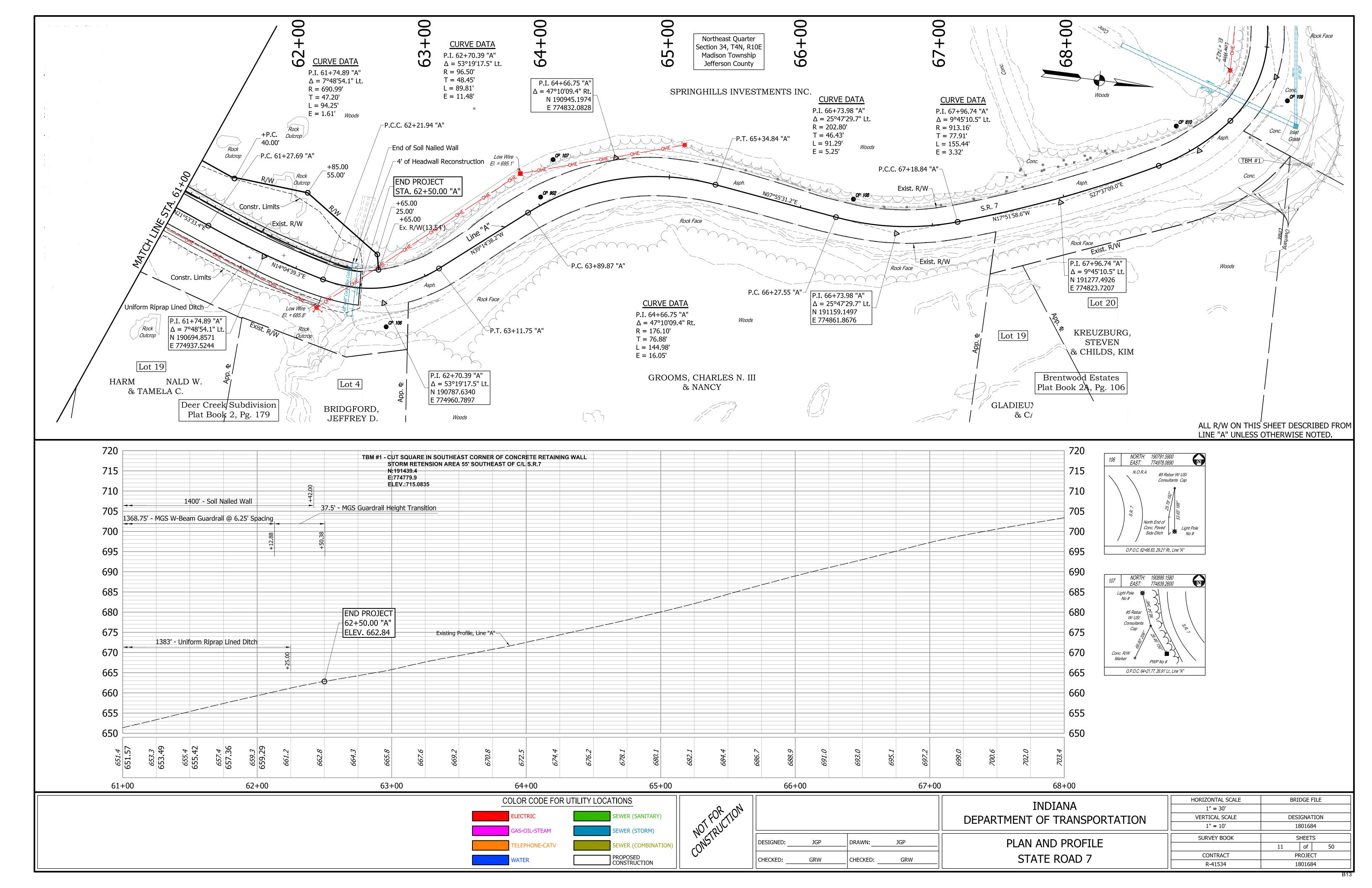
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IDETOUR XM4-8 30" X 15" Detour Route Assembly 2 IDETOUR M1-5 (120) 30" X 24" Detour Route Assembly 2 IDETOUR M5-1 (L or R) or M6-3 21" X 15" 2	9	INDIANA 7	M3-1 or M3-3 M6-1 (L or R)	30" X 15" 21" X 15"	Route	4
B TYPE III-B BARRICADE TI 12' 96 Lft.	10	DETOUR	XM4-8 M1-5 (120)	30" X 15" 30" X 24"	Route	2
	B	TYPE III-B BARRICADE		12'		96 Lft.

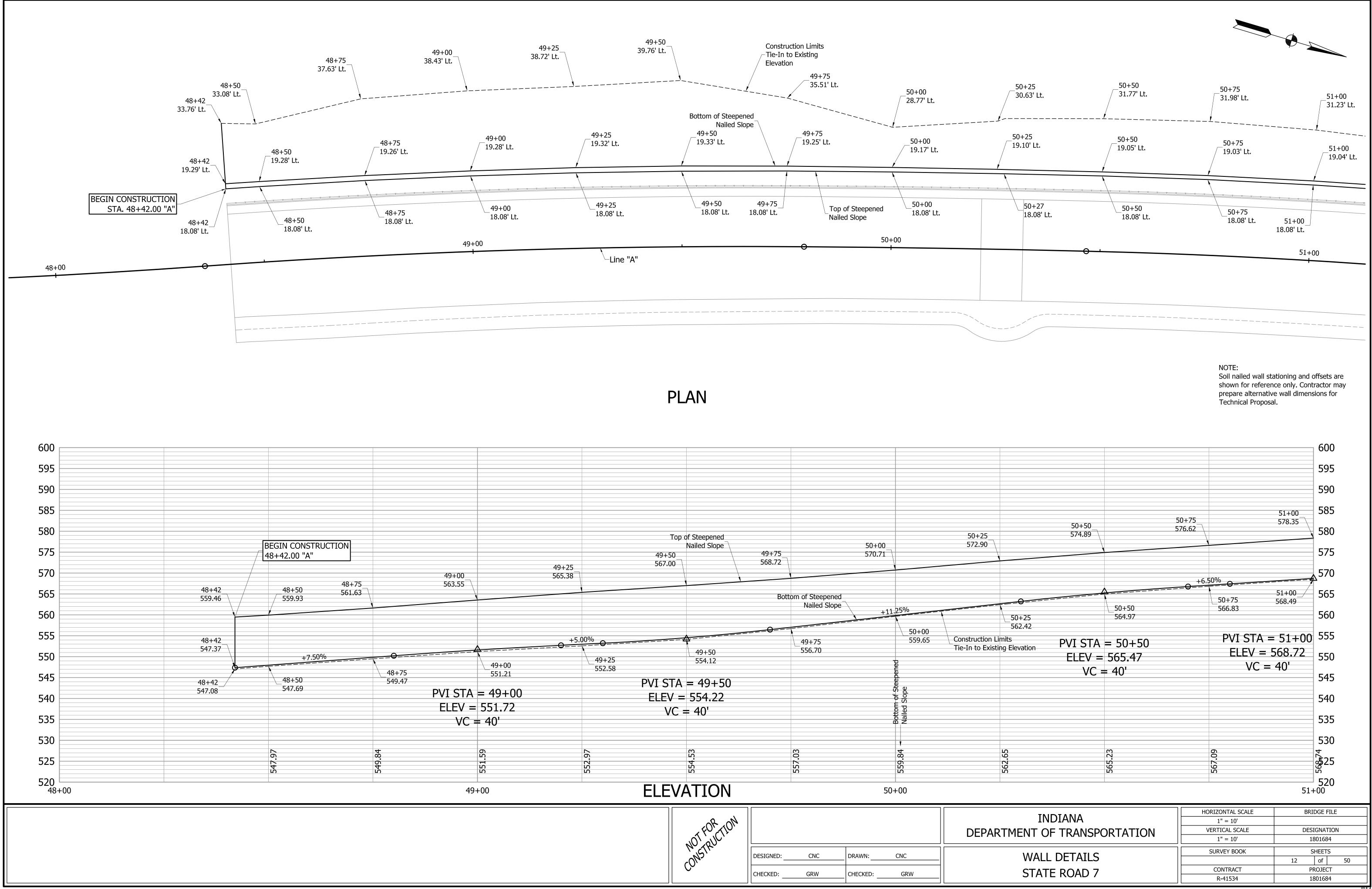
---- DETOUR ROUTE

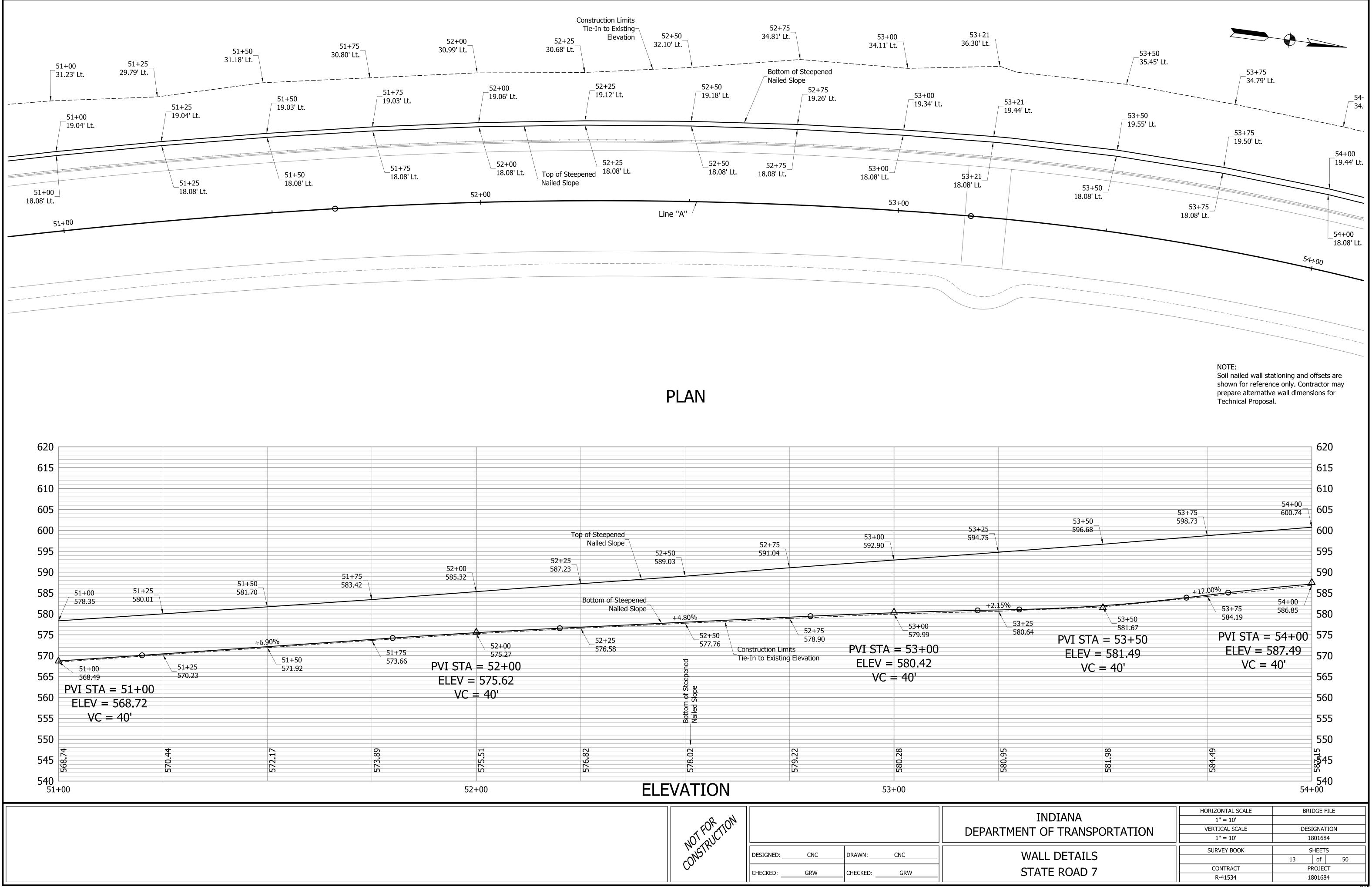
	HORIZONTAL SCALE	BR	IDGE FI	LE
INDIANA	1" = 1000'			
MENT OF TRANSPORTATION	VERTICAL SCALE	DES	SIGNATI	ON
	N/A	1801684		
	SURVEY BOOK	SHEETS		
AINTENANCE - DETOUR ROUTE		8	of	50
STATE ROAD 7			PROJECT	
STATE ROAD /	R-41534	1801684		

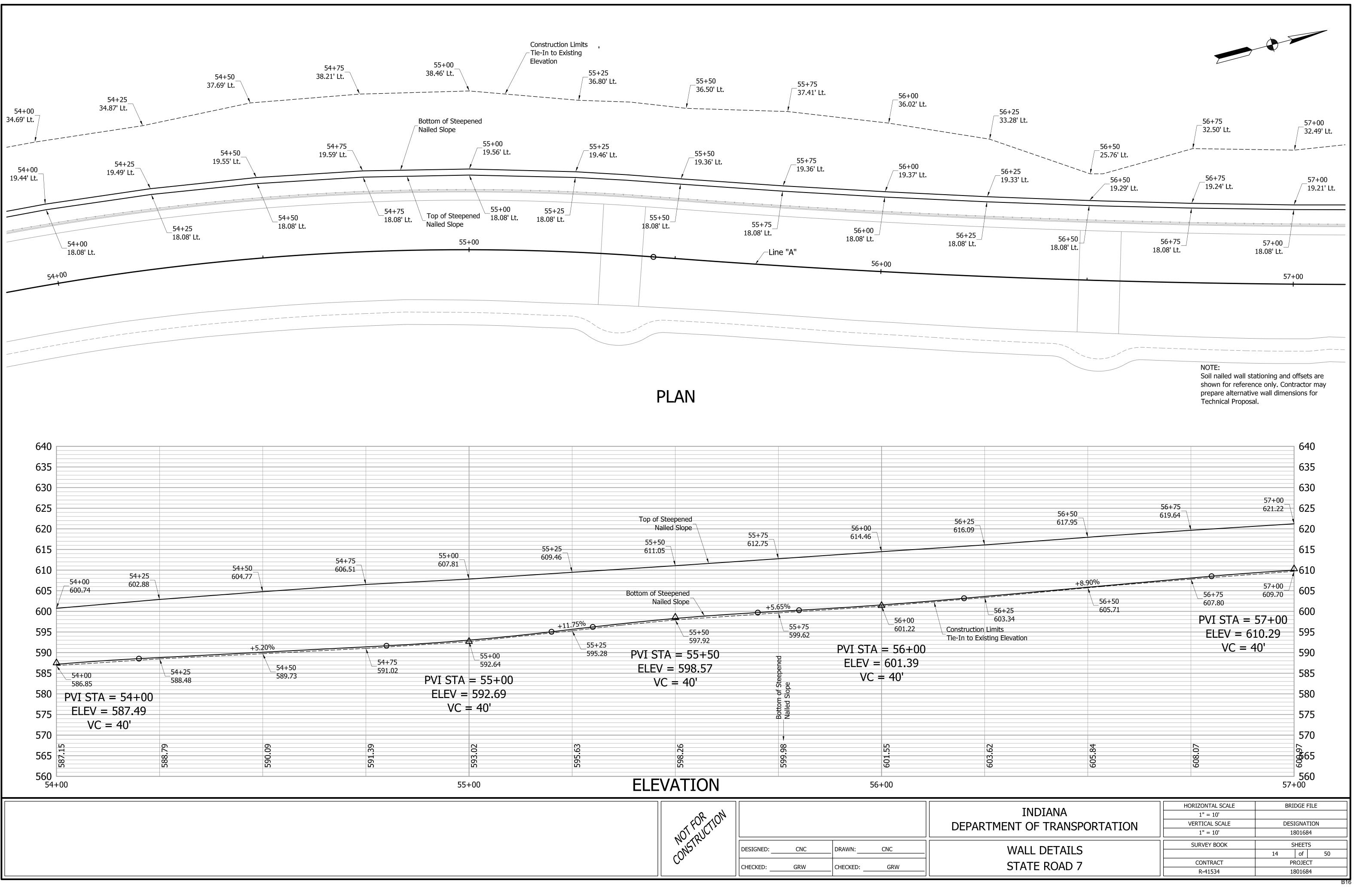


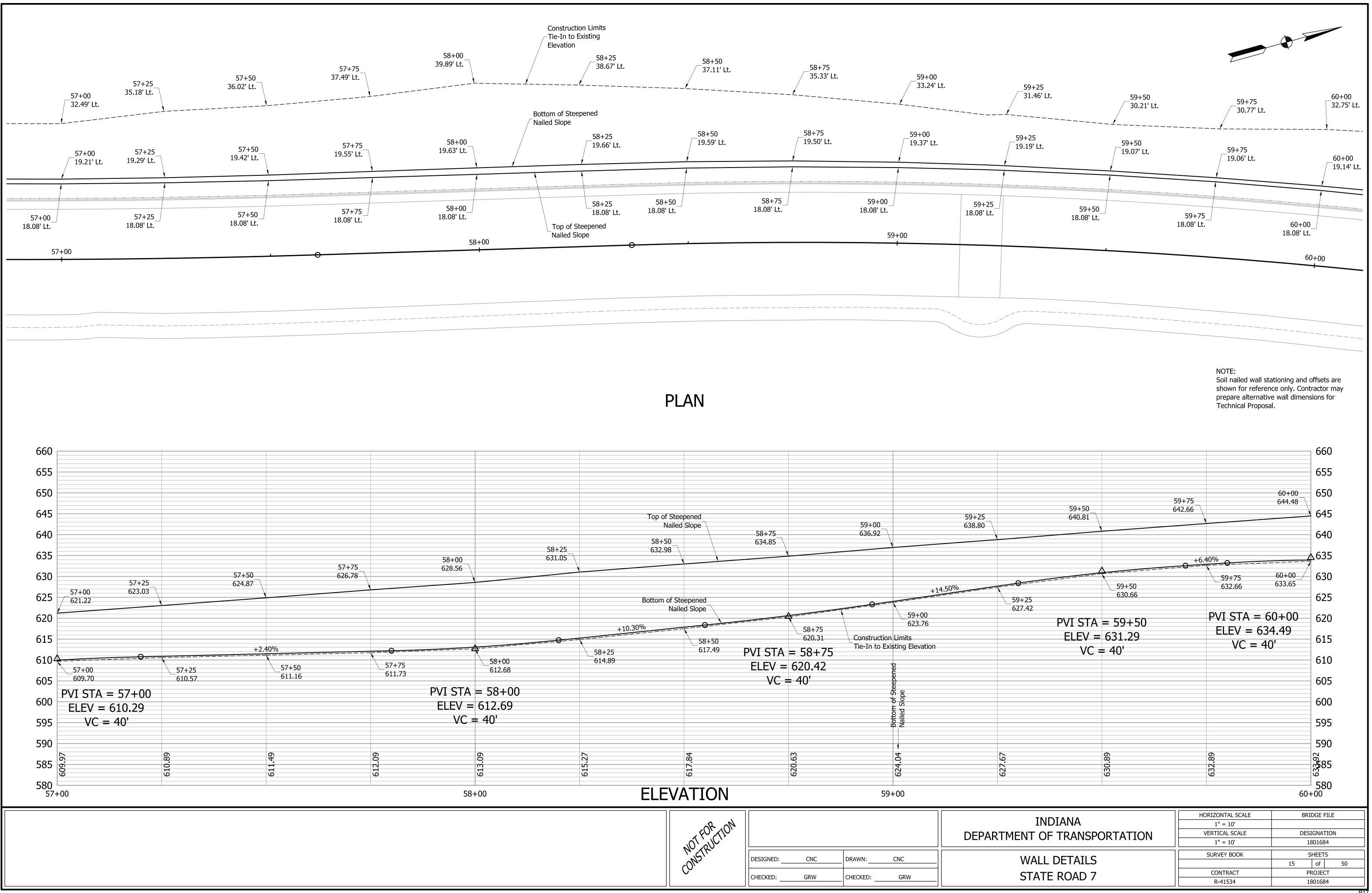


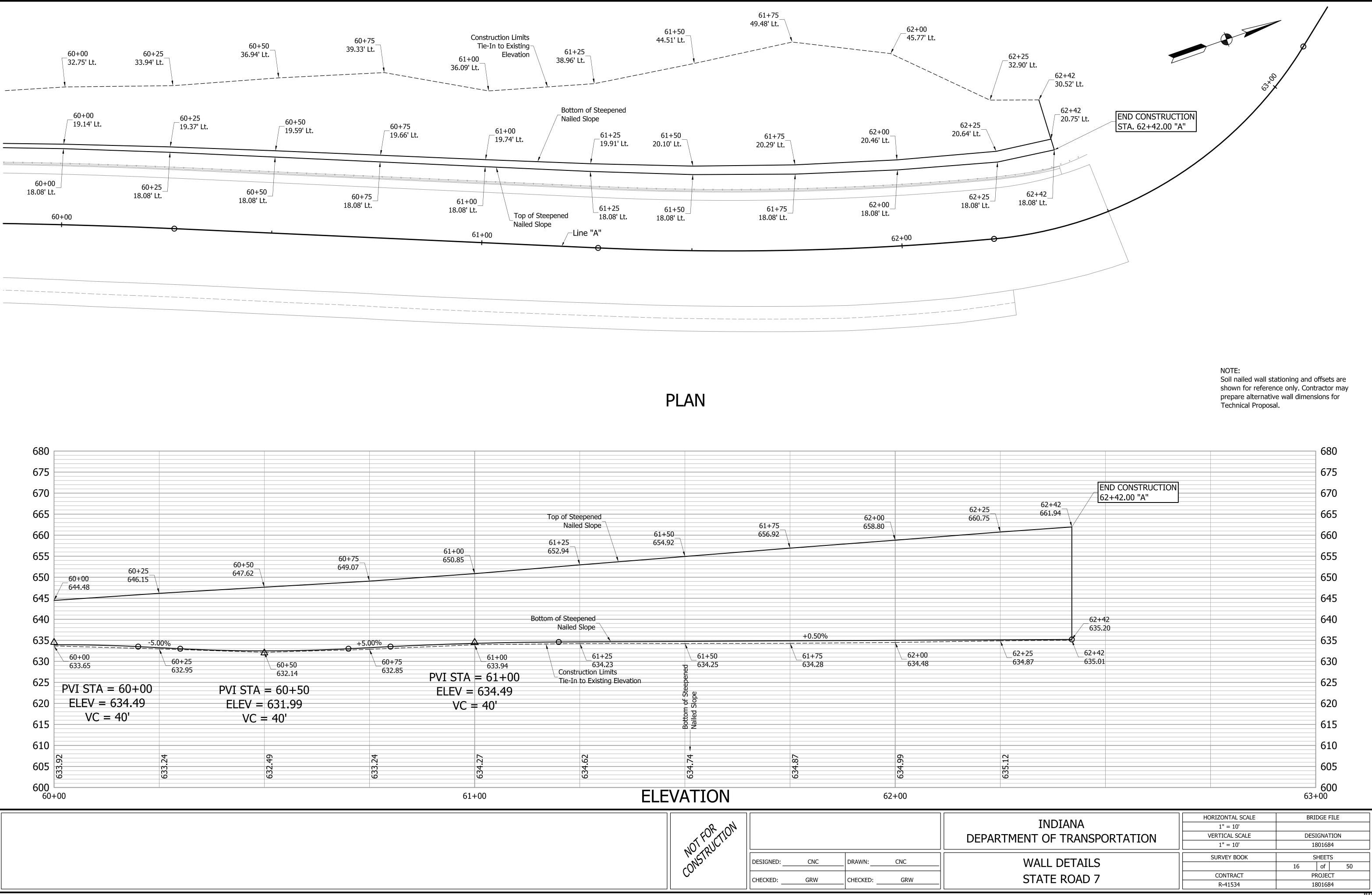












	HORIZONTAL SCALE	BR	IDGE FILI					
INDIANA	1" = 10'							
IENT OF TRANSPORTATION	VERTICAL SCALE	DES	DESIGNATION					
	1" = 10'	1801684						
	SURVEY BOOK	SHEETS						
WALL DETAILS		16	of	50				
STATE ROAD 7	CONTRACT	PROJECT 1801684						
STATE ROAD /	R-41534							

											S	TRUCT	URE	DATA		1										
	LOCATIO	N	_					7			FLOV	V LINE				u.	F	ទ	ζ¥ Si							
STRUCTURE NUMBER	STATION	LEFT, RIGHT OR CROSS OFFSET		SIZE	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE	LENGTH	RIM ELEVATION	SKEW	COVER	UP STREAM	DOWN STREAM	SERVICE	SITE DESIGNATION	BACKFILL	STRUCTURI BACKFILL TYPE 1	REVETMEN [.] RIPRAP	GEOTEXTILE	Concrete Class A, FC Structure	PIPE END SECTION	GRAT BOX E SECTI	ed Nd On	SAFETY METAL END SECTION	CONNECT TO STR. NO.	CULVERT ASSET ID	REMARKS
		FT		IN			LFT			LFT	ELEV	ELEV	YRS			CYS	TONS	SYS	CYS	EA	TYPE SLC)PE EA	SLOPE EA			
10	50+27 "A"	R 19.0		24	1	Type 1 Pipe	37	570.43			566.43	566.32	75	N	7											
11	53+21 "A"	R 19.0		24	1	Type 1 Pipe	37	591.32			587.32	587.21	75	N	7											
12	55+37 "A"	R 19.0		24	1	Type 1 Pipe	37	607.60			603.60	603.49	75	N	7											
13	56+53 "A"	R 19.0		24	1	Type 1 Pipe	37	616.86			612.86	611.54	75	N	7											
14	59+20 "A"	R 19.0		24	1	Type 1 Pipe	36	635.87			631.87	631.76	75	N	7											

DESIGNED: DRAWN: CNC MISC TABL	LES /
CHECKED: CHECKED: GRW	S

	HORIZONTAL SCALE	BRIDGE FILE				
INDIANA	N/A					
IENT OF TRANSPORTATION	VERTICAL SCALE	DESIGNATION				
	N/A	1801684				
	SURVEY BOOK	SHEETS				
S / SUMMARY OF QUANTITIES		17 of 50				
STATE ROAD 7	CONTRACT	PROJECT				
STATE RUAD /	R-41534	1801684				