

Photo Log



Photo 21: Looking southeast along the southern side of the legal drain at the adjacent farm field and riparian corridor associated with Rock Creek.



Photo 22: Looking east at the inlet of Pipe #3 extending under field entrance #3 along the southern side of the legal drain (UNT to Rock Creek).



Photo 23: Looking north at the inlet of Pipe #3 extending under field entrance #3 along the southern side of the legal drain (UNT to Rock Creek).



Photo 24: Looking east through Pipe #3 extending under field entrance #3 which connects the legal drain (UNT to Rock Creek) to Rock Creek.



Project Des Number: 1800156
 Project Description: SR 218 over Rock Creek, 2.16 miles west of SR 1
 Date Photos Taken: June 24, 2020
 Photographed By: Ashley Taylor

Photo Log



Photo 25: Looking west at the legal drain (UNT to Rock Creek) from field entrance #3 along the southern side of SR 218.



Photo 26: Looking northwest at Pipe #3 outlet extending under field entrance #3 which connects the legal drain (UNT to Rock Creek) to Rock Creek.



Photo 27: Looking west through Pipe #3 under field entrance #3 which connects the legal drain (UNT to Rock Creek) to Rock Creek.



Photo 28: Looking northeast at the southern side of the SR 218 bridge over Rock Creek (Structure No. (218)118-90-01488).



Project Des Number: 1800156
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Photo 29: Looking north at Pipe #3 outlet under field entrance #3 and the southern side of the SR 218 bridge over Rock Creek (Structure No. (218)118-90-01488).



Photo 30: Looking east at the SR 218 bridge over Rock Creek (Structure No. (218)118-90-01488) from the southwest quadrant.



Photo 31: Looking southeast at the riparian corridor along the southern side of Rock Creek where trees will likely be removed due to new right-of-way.



Photo 32: A closer look (southeast) at the riparian corridor located in the southern quadrants of Rock Creek where trees will likely be removed due to new right-of-way.



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<p>Photo 33: Looking southeast (upstream) from the middle of the SR 218 bridge at Rock Creek and the trees located in the southwest quadrant.</p>	<p>Photo 34: Looking northwest (downstream) from the middle of the SR 218 bridge at Rock Creek.</p>
	
<p>Photo 35: Looking east along the southern side of SR 218.</p>	<p>Photo 36: Looking southwest at the side slope located in the southeast quadrant of the project area.</p>
	<p>Project Des Number: 1800156 Project Description: SR 218 over Rock Creek, 2.16 miles west of SR 1 Date Photos Taken: June 24, 2020 Photographed By: Ashley Taylor</p>

Photo Log

	
<p>Photo 37: Looking south from the southeast quadrant at the unmowed grass, adjacent farm field, and Pipe #4 inlet for field entrance #4.</p>	<p>Photo 38: Looking west at the trees to be removed within the southwest quadrant.</p>
	
<p>Photo 39: Looking northwest at the southern side of the SR 218 bridge over Rock Creek (Structure No. (218)118-90-01488).</p>	<p>Photo 40: Looking west at Pipe #3 outlet extending under field entrance #3 from the southeast quadrant.</p>
	<p>Project Des Number: 1800156 Project Description: SR 218 over Rock Creek, 2.16 miles west of SR 1 Date Photos Taken: June 24, 2020 Photographed By: Ashley Taylor</p>

Photo Log



Photo 41: Looking east along the northern side of SR 218 within the northeast quadrant.



Photo 42: Looking west along the northern side of SR 218 within the northeast quadrant.



Photo 43: Looking northwest along the eastern side of Rock Creek from the northeast quadrant.



Photo 44: Looking southwest at the northern side of the SR 218 bridge over Rock Creek (Structure No. (218)118-90-01488).



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<p>Photo 45: Looking northwest along the eastern side of Rock Creek from the northeast quadrant.</p>	<p>Photo 46: Looking west at the SR 218 northwest wingwall and surrounding area from the northeast quadrant.</p>
	
<p>Photo 47: Looking south at the northern side of the SR 218 bridge over Rock Creek (Structure No. (218)118-90-01488).</p>	<p>Photo 48: Looking downstream (northwest) at Rock Creek from immediately adjacent to the SR 218 bridge.</p>
	<p>Project Des Number: 1800156 Project Description: SR 218 over Rock Creek, 2.16 miles west of SR 1 Date Photos Taken: June 24, 2020 Photographed By: Ashley Taylor</p>

Photo Log



Photo 49: Looking downstream (northwest) of Rock Creek from the northeast quadrant near the SR 218 bridge.



Photo 50: Looking upstream (southeast) of Rock Creek from the northern side of Rock Creek.



Photo 51: Looking east at the northern side of the SR 218 bridge (Structure No. (218)118-90-01488) and Rock Creek from the northwest quadrant.



Photo 52: Looking north along the western side of Rock Creek from the northwest quadrant.



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 Date Photos Taken: June 24, 2020
 Photographed By: Ashley Taylor

Photo Log



Photo 53: Looking northwest along the western side of Rock Creek from the northwest quadrant.



Photo 54: Looking west along the northern side of SR 218 at the mowed grass right-of-way.



Photo 55: Looking west along the northern side of SR 218 at the mowed grass right-of-way.



Photo 56: Looking east along the northern side of SR 218 at the mowed grass right-of-way.



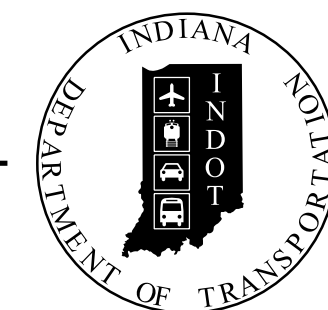
Project Des Number: 1800156
Project Description: SR 218 over Rock Creek, 2.16 miles west of SR 1
Date Photos Taken: June 24, 2020
Photographed By: Ashley Taylor

PROJECT	DESIGNATION
1800156	1800156
CONTRACT	BRIDGE FILE
B-41547	218-90-10417

STRUCTURE INFORMATION				
STRUCTURE	TYPE	SPAN AND SKEW	OVER	STATION
218-90-10417	Precast Reinforced Concrete 3-Sided Structure	Single Span: 36'-11 $\frac{3}{8}$ " Skew: 30° Lt.	Rock Creek	572+00 Line "S"

KIN PROJECT INFORMATION	
DESIGNATION	PROJECT DESCRIPTION
1600275	BRIDGE REPLACEMENT, SR 218 OVER WABASH RIVER OVERFLOW
1800156	BRIDGE REPLACEMENT, SR 218 OVER ROCK CREEK
1800209	BRIDGE REPLACEMENT, SR 218 OVER WABASH RIVER (LEAD PROJECT)

INDIANA DEPARTMENT OF TRANSPORTATION



BRIDGE PLANS

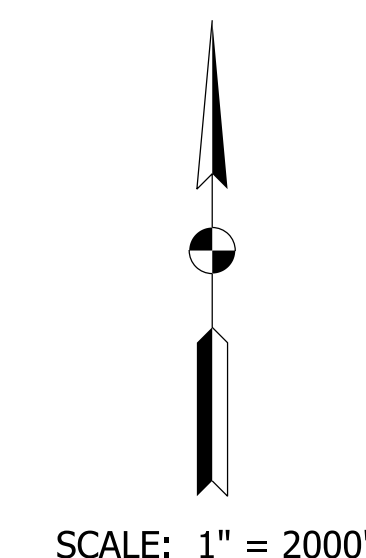
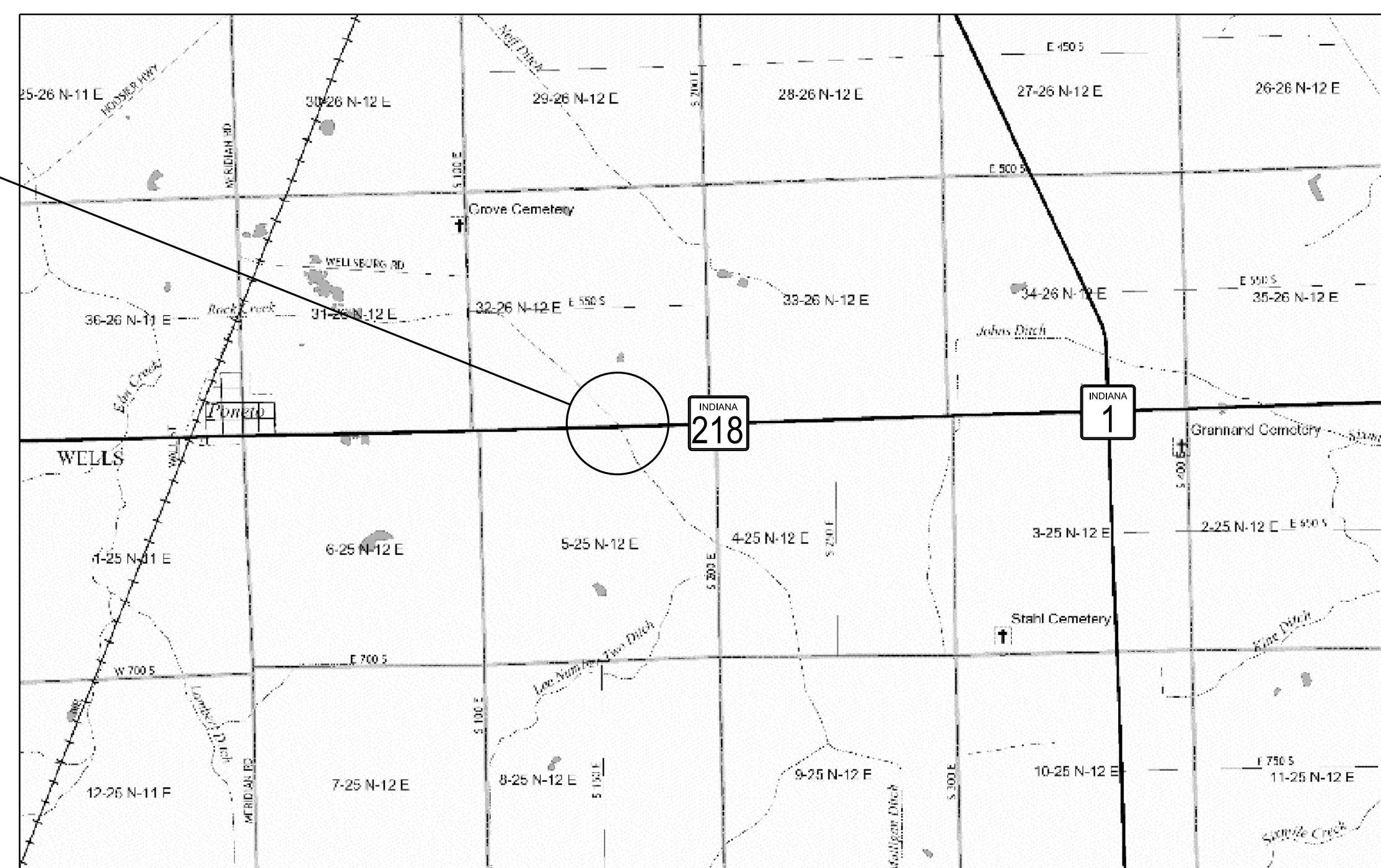
BRIDGE REPLACEMENT

ROUTE: SR 218 AT: RP 70+98

PROJECT NO. 1800156 P.E.
1800156 R/W
1800156 CONST.

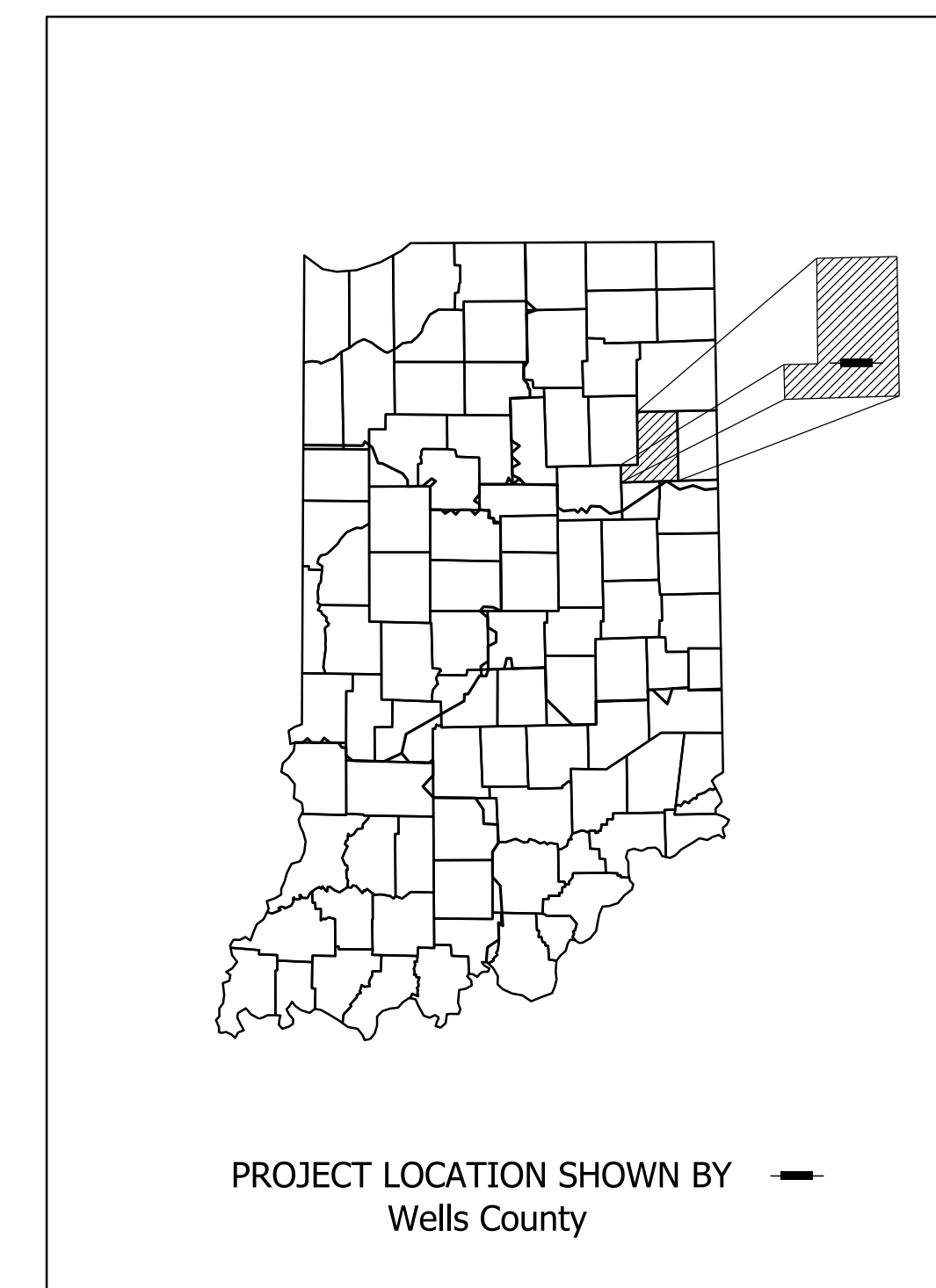
Bridge Replacement on SR 218 over Rock Creek
Located 2.16 Miles West of SR 1
Section 32, T-26-N, R-12-E, Nottingham Township and
Section 5, T-25-N, R-12-E, Harrison Township, Wells County, Indiana

Project Location
Str. 218-90-10417
Begin Project: Sta. 567+00.00 "S"
End Project: Sta. 575+00.00 "S"



TRAFFIC DATA		
A.A.D.T. (2022)		1,469 V.P.D.
A.A.D.T. (2042)		1,614 V.P.D.
D.H.V (2042)		136 V.P.H.
DIRECTIONAL DISTRIBUTION		49.5 %
TRUCKS		27 % A.A.D.T. 21 % D.H.V.

DESIGN DATA	
DESIGN SPEED	55 M.P.H.
PROJECT DESIGN CRITERIA	3R (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	MAJOR COLLECTOR
RURAL/URBAN	RURAL
TERRAIN	LEVEL
ACCESS CONTROL	NONE



LATITUDE: N 40°39'16" LONGITUDE: W 85°11'28"

BRIDGE LENGTH: 0.007 MI.
ROADWAY LENGTH: 0.145 MI.
TOTAL LENGTH: 0.152 MI.
MAX. GRADE: +0.30%

HUC: 05120101080010

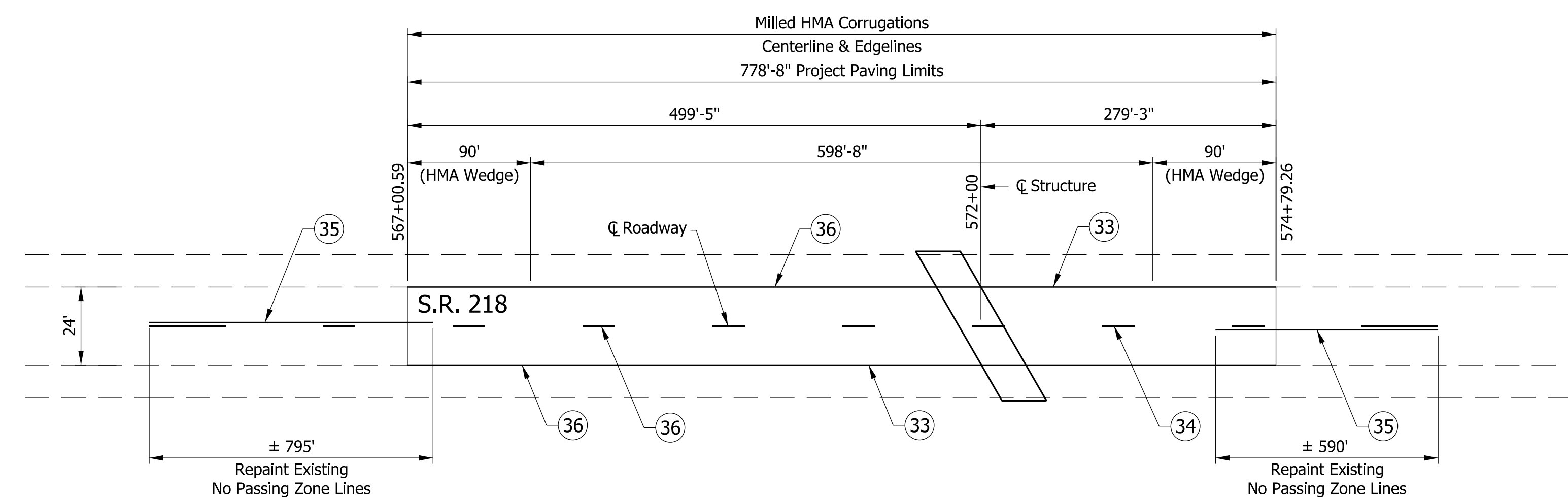
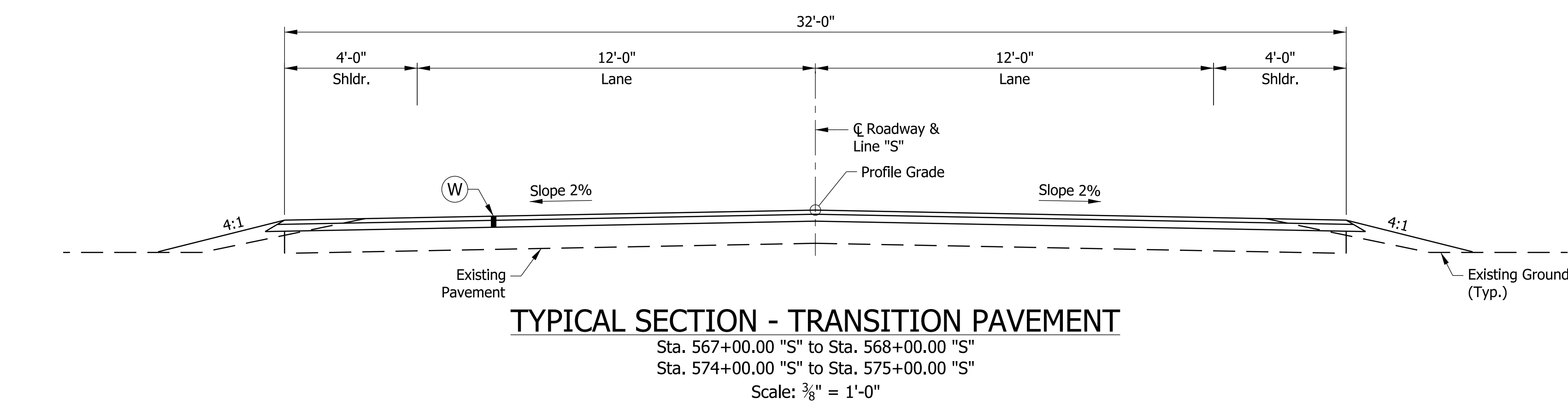
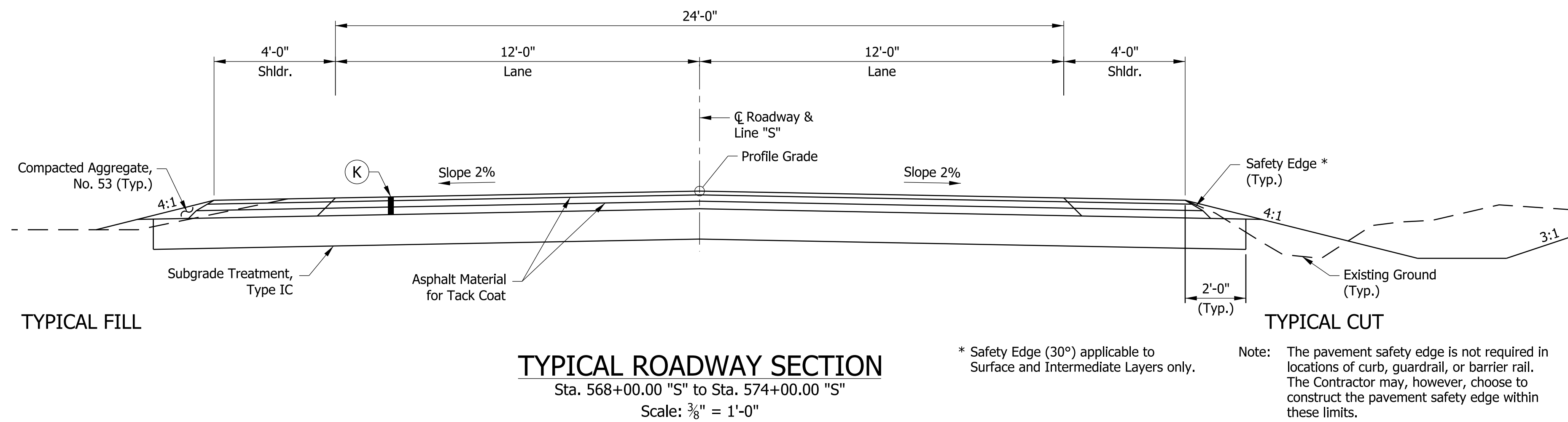
INDIANA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATIONS DATED 2020
TO BE USED WITH THESE PLANS.

PLANS PREPARED BY: Indiana Department of Transportation 317-232-5163
PHONE NUMBER
CERTIFIED BY: _____ DATE
RECOMMENDED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

BRIDGE FILE	
218-90-10417	
DESIGNATION	
1800156	
SHEETS	
1	of 15
CONTRACT	PROJECT
B-41547	1800156

Plot: 6/15/2020 1:15 PM

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Model:BR_Title Sheet



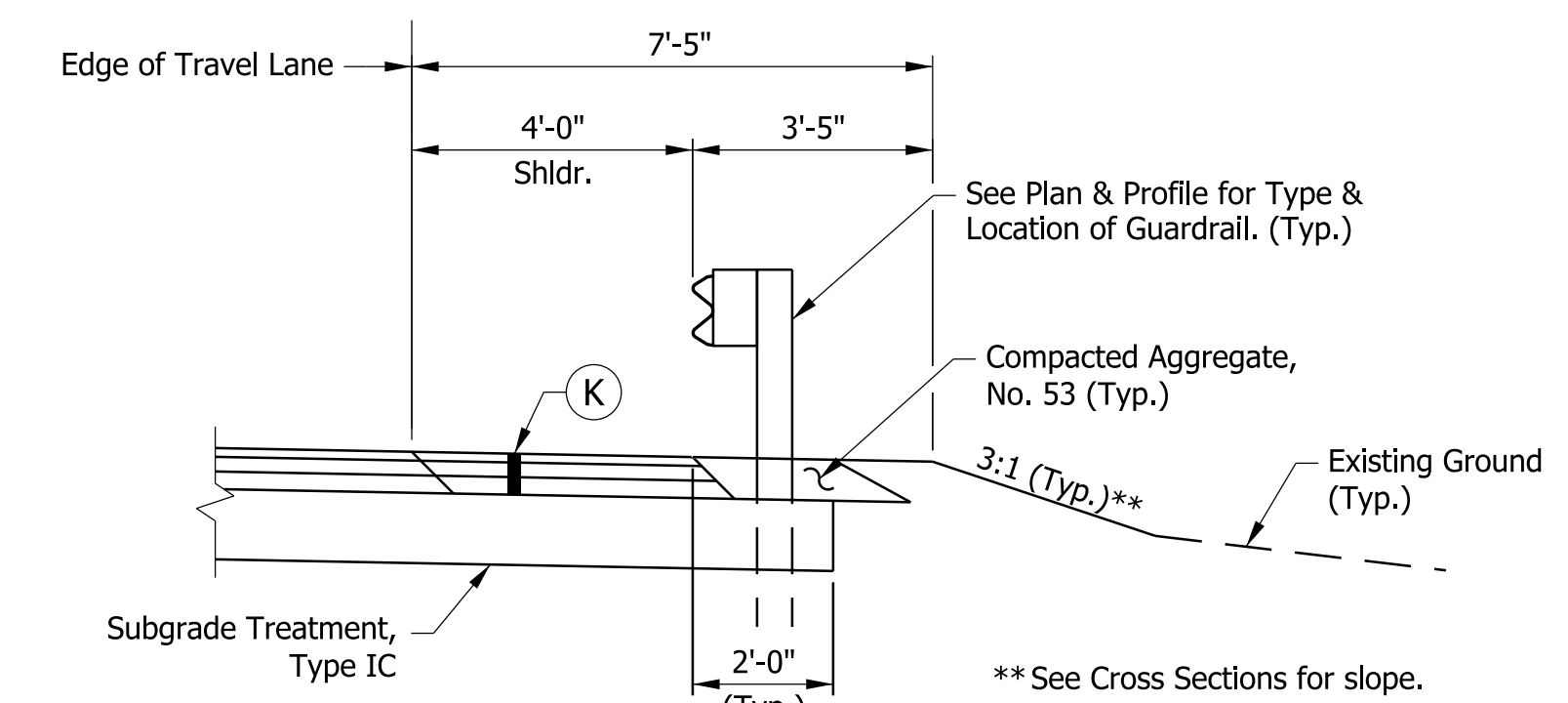
PAVEMENT MARKING LEGEND & QUANTITIES

33	Line, Paint, Solid, White, 4 inch	1560 Lft.
34	Line, Paint, Broken, Yellow, 4 inch	2084 Lft.
35	Line, Paint, Solid, Yellow, 4 inch	1385 Lft.
36	Milled HMA Corrugations	2340 Lft.
	Snowplowable Raised Pavement Marker, Remove	10 Ea.
	Snowplowable Raised Pavement Marker	10 Ea.

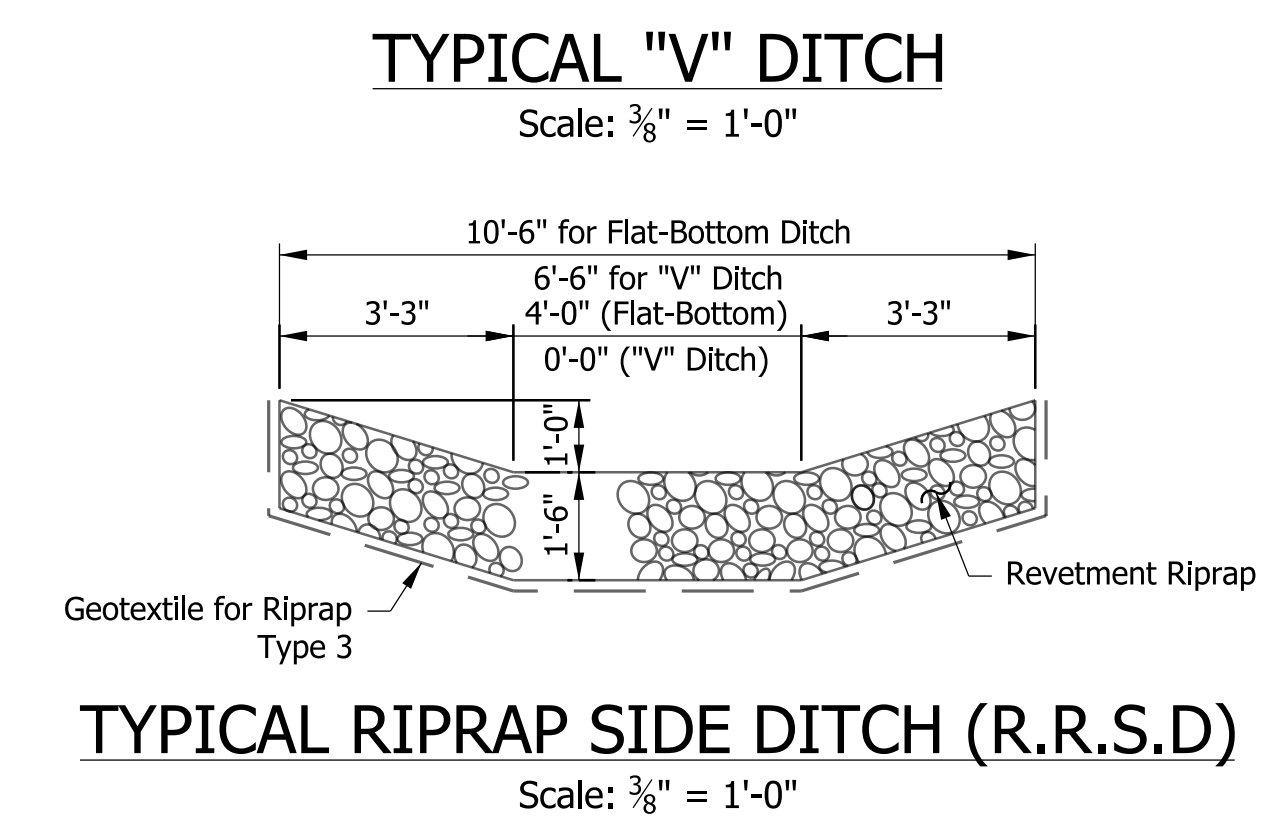
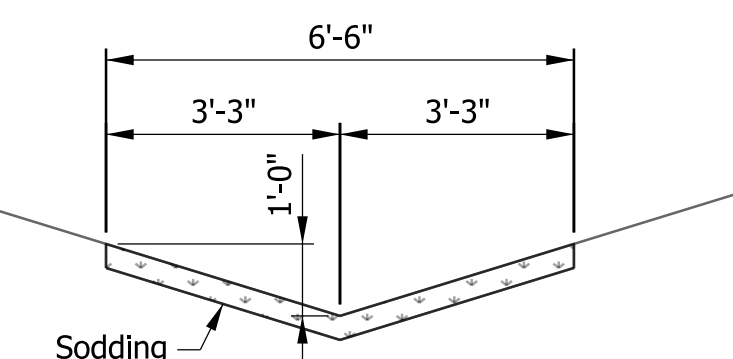
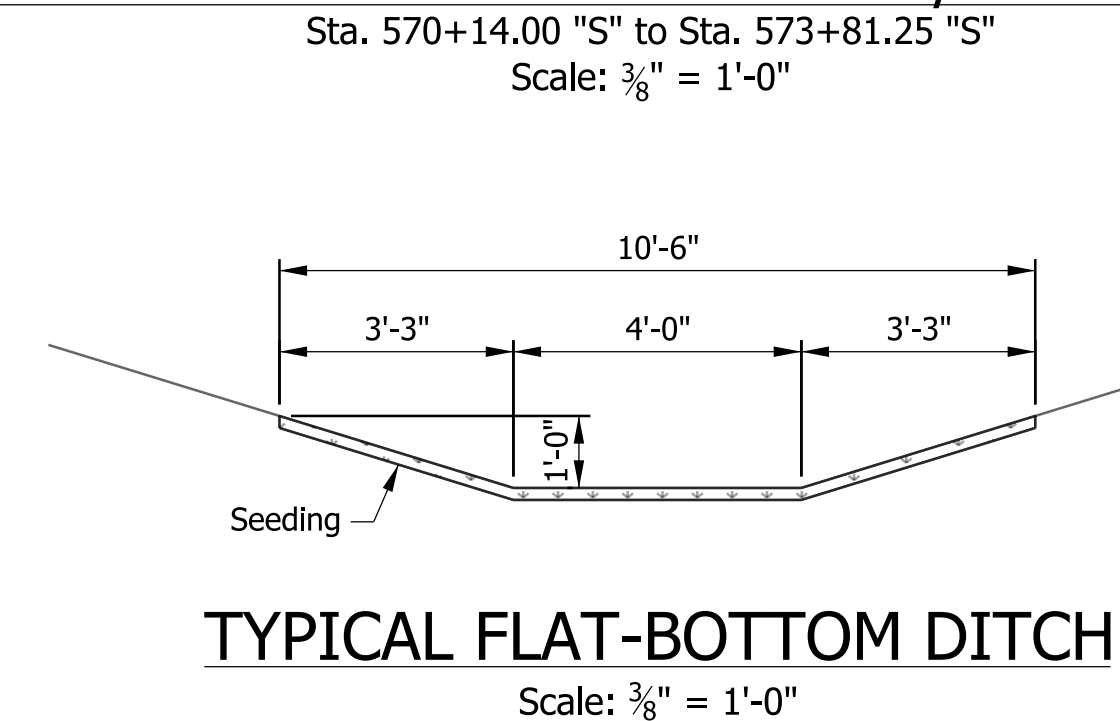
NOTE TO REVIEWER:
Final Pavement Design will be included in Stage 3 Submittal.

LEGEND

- (K) 165 lbs/yd² QC/QA-HMA, 3, 64, Surface, 9.5 mm on 275 lbs/yd² QC/QA-HMA, 3, 64, Intermediate, 12.5 mm, on 330 lbs/yd² QC/QA-HMA, 3, 64, Base, 12.5 mm, on Subgrade Treatment, Type IC (Tack Coat between HMA layers.)
- (W) 165 lbs/yd² QC/QA-HMA, 3, 64, Surface, 9.5 mm on 220 lbs/yd² QC/QA-HMA, 3, 64, Intermediate, 12.5 mm



TYPICAL FLAT-BOTTOM DITCH



Plot: 6/16/2020 3:19 PM

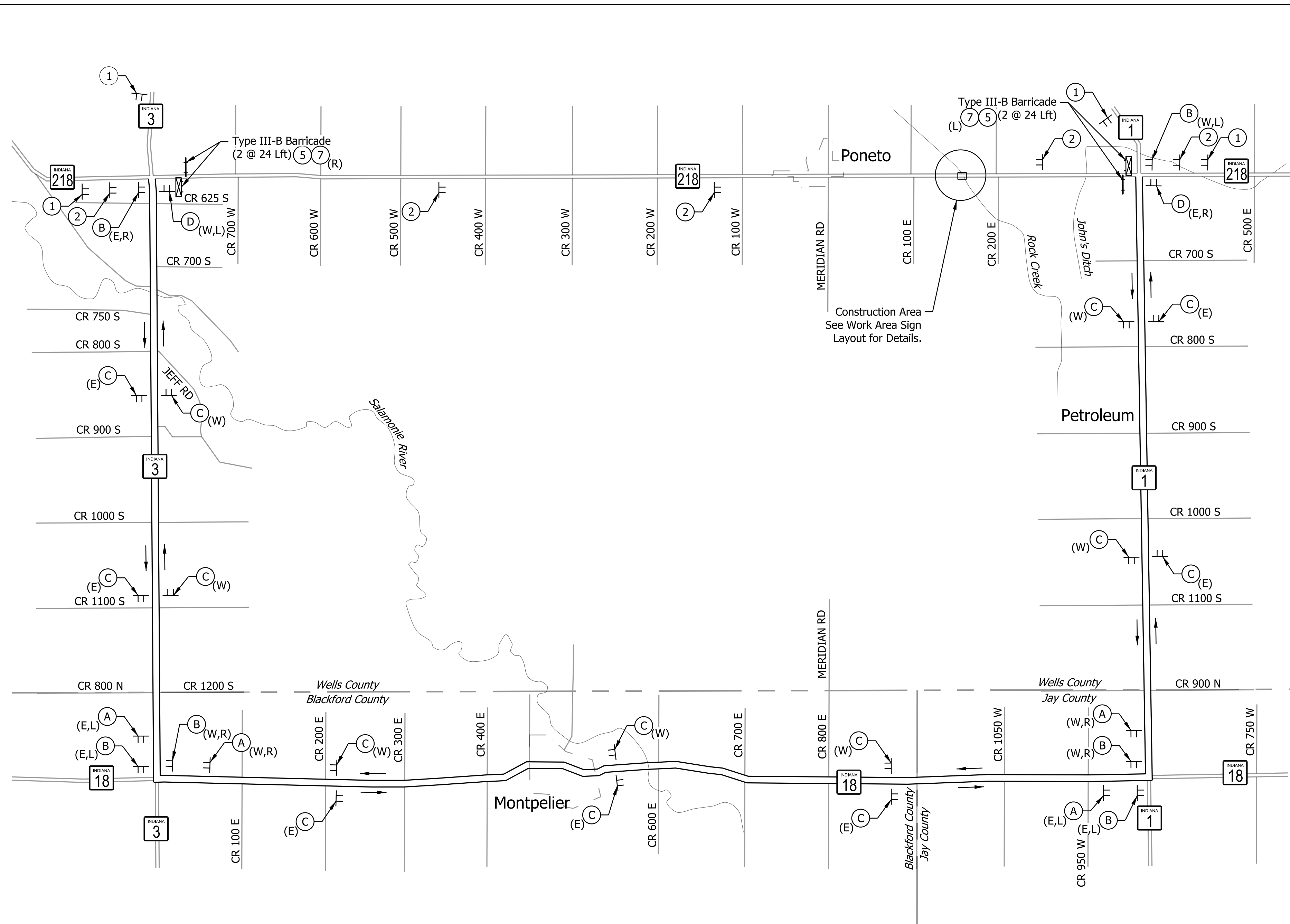
DATE	REVISION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MCB	05/2020	DRAWN: WLC
CHECKED: CRF	05/2020	CHECKED: MCB

INDIANA DEPARTMENT OF TRANSPORTATION	
ROADWAY DETAILS	

SCALE AS NOTED	BRIDGE FILE 218-90-10417
	DESIGNATION 1800156
	SHEETS 3 of 15
CONTRACT B-41547	PROJECT 1800156

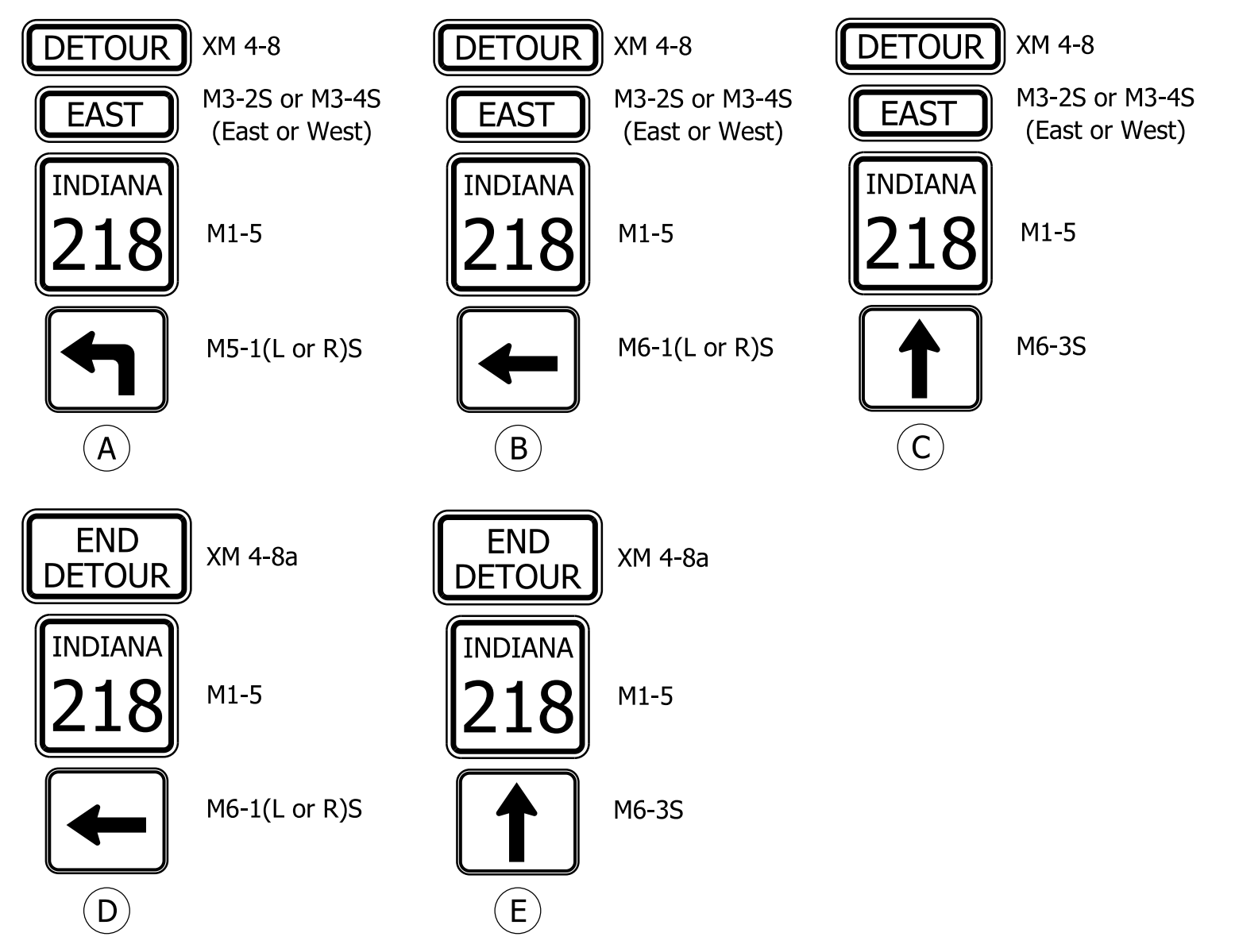
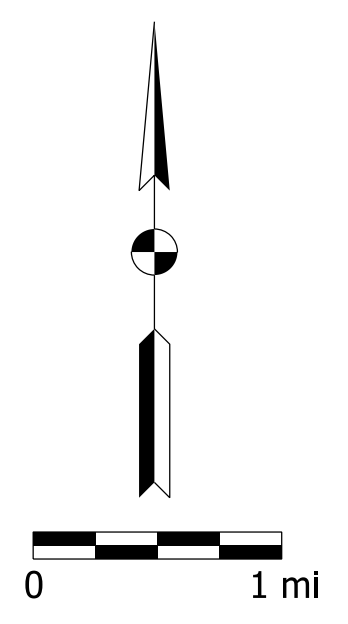
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Model: Roadway Details Sheet



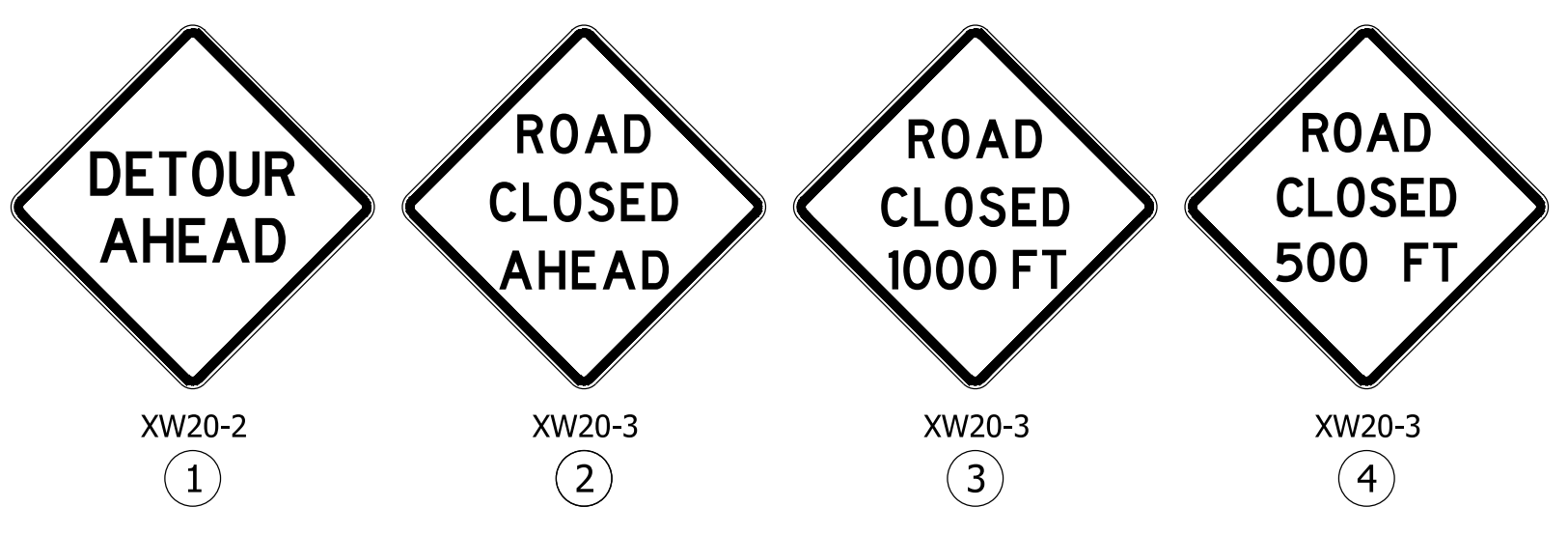
DETOUR MAP
Not to Scale

LEGEND

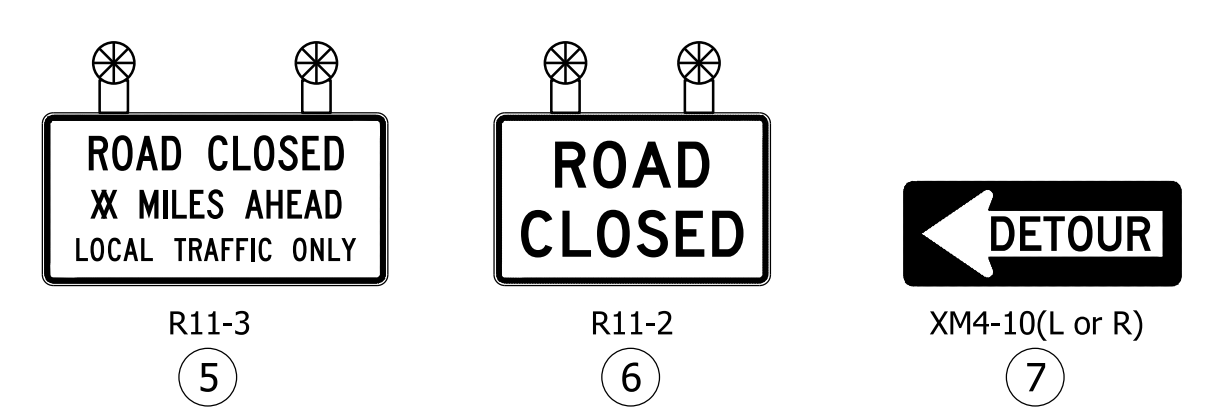
- Construction Sign
- Type III Barricade
- Type III Barricade & Road Closure Sign Assembly
- Type "A" Low Intensity Light
- E East
- W West
- L Left
- R Right
- Town Limits



DETOUR ROUTE MARKER ASSEMBLIES



CONSTRUCTION SIGNS



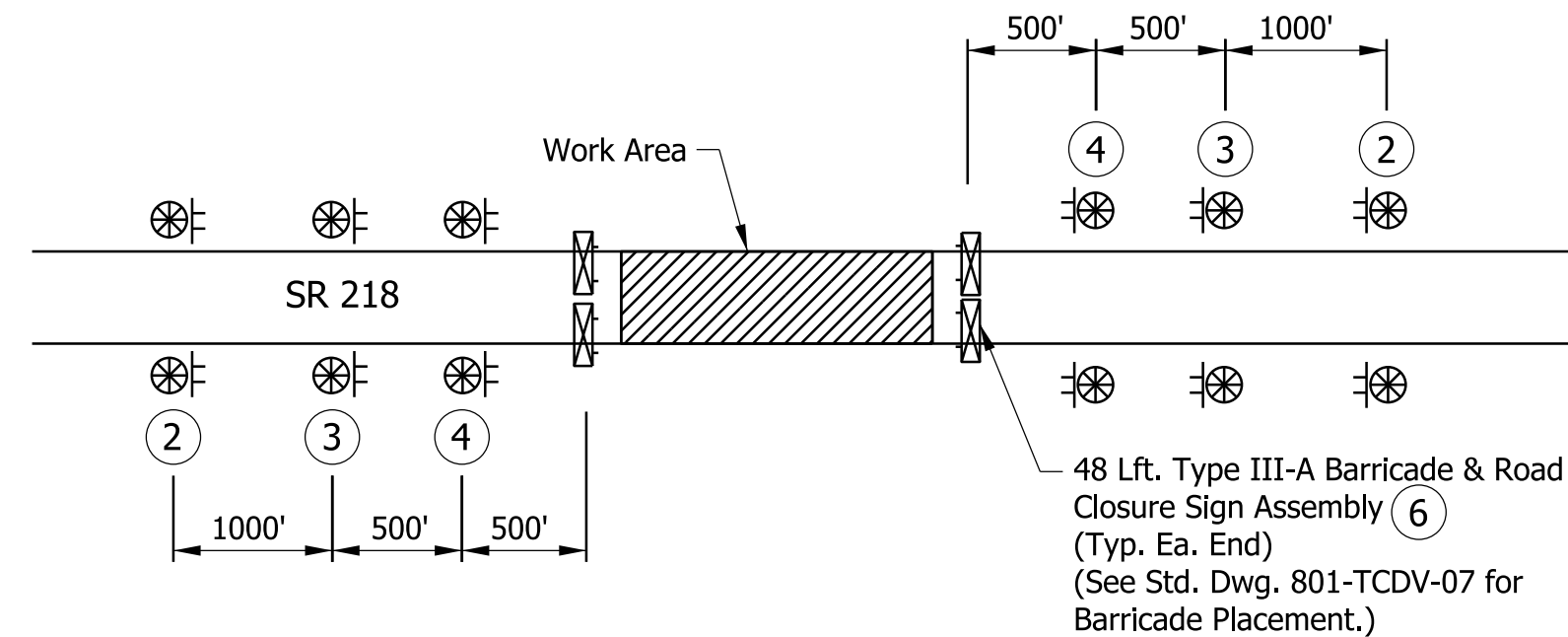
ROAD CLOSURE SIGN ASSEMBLIES

MAINTENANCE OF TRAFFIC QUANTITIES

Construction Sign, Type A	21 Ea.
Road Closure Sign Assembly	6 Ea.
Detour Route Marker Assembly	26 Ea.
Barricade, Type III-A	96 Lft.
Barricade, Type III-B	96 Lft.

NOTES

See Std. Dwg. 801-TCDT-01 for sign location details.
Estimated 30 ton quantity of HMA patching included for repairing detour route as directed by the Engineer.



WORK AREA SIGN LAYOUT
Not to Scale

Plot: 6/15/2020 1:16 PM

DATE	REVISION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: WLC	03/2020	DRAWN: WLC 03/2020
CHECKED: MCB	03/2020	CHECKED: MCB 03/2020

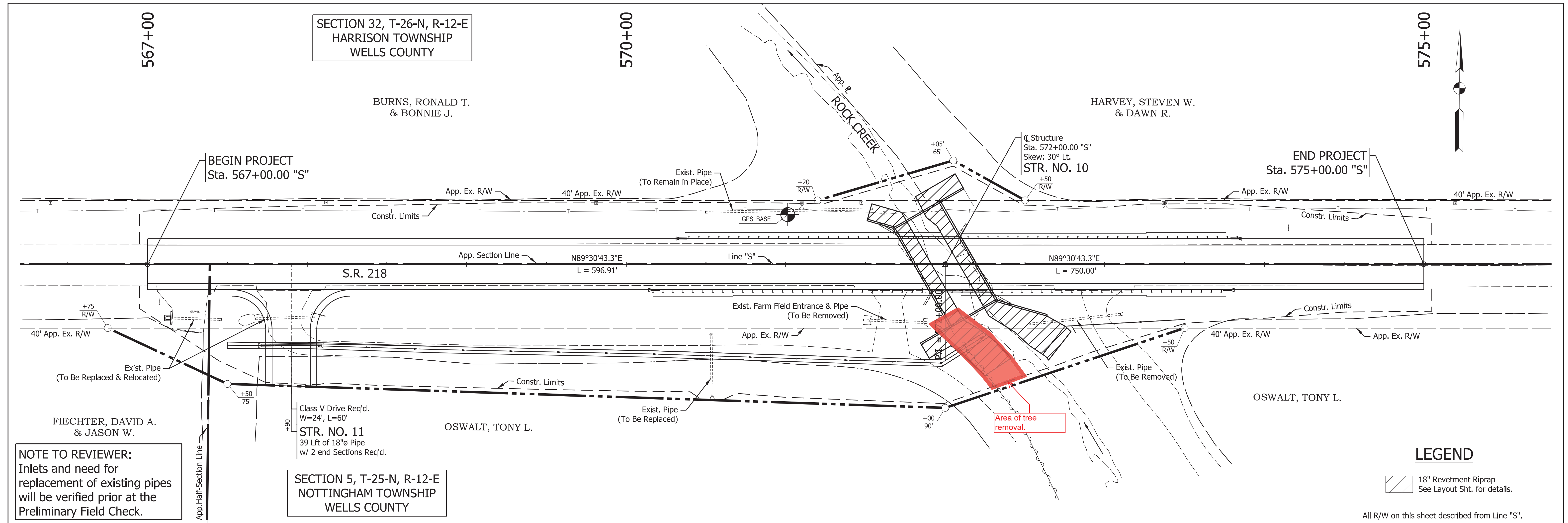
INDIANA
DEPARTMENT OF TRANSPORTATION

**MAINTENANCE OF TRAFFIC
DETOUR PLAN**

SCALE	BRIDGE FILE
AS NOTED	218-90-10417
	DESIGNATION
	1800156
	SHEETS
	4 of 15
CONTRACT	PROJECT
B-41547	1800156

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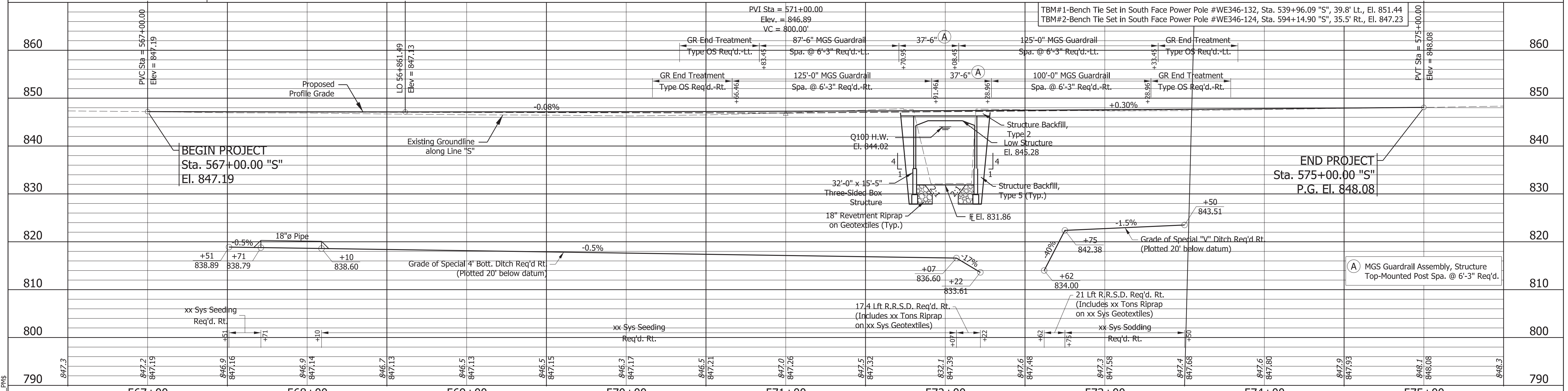
Updated Plan Sheet - 2/12/21



NOTE TO REVIEWER:
Inlets and need for replacement of existing pipes will be verified prior at the Preliminary Field Check.

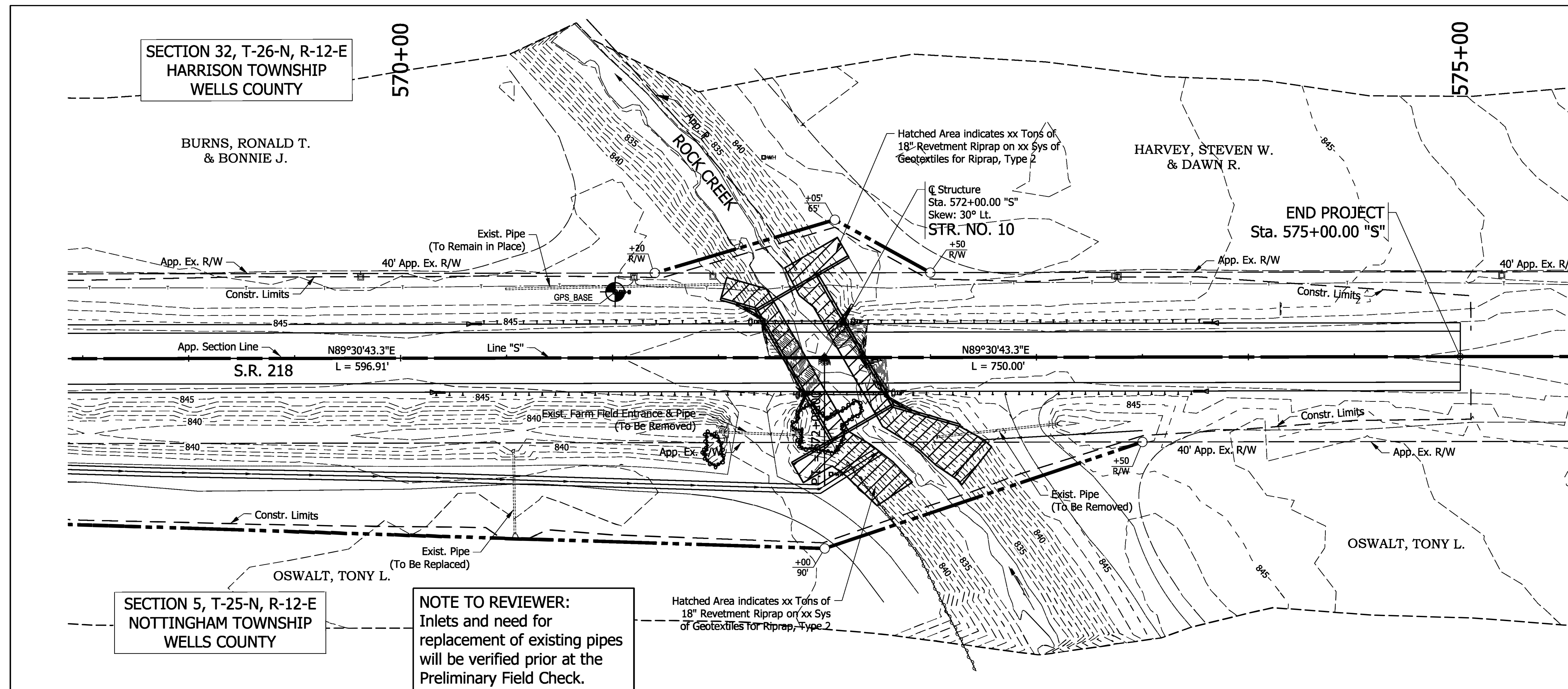
SECTION 5, T-25-N, R-12-E
NOTTINGHAM TOWNSHIP
WELLS COUNTY

LEGEND
18" Revetment Riprap
See Layout Sht. for details.



<p>RECOMMENDED FOR APPROVAL</p> <p>DESIGNED: MCB 06/2020 DRAWN: WLC 06/2020</p> <p>CHECKED: CRF 06/2020 CHECKED: MCB 06/2020</p>		<p>INDIANA DEPARTMENT OF TRANSPORTATION</p> <p>PLAN & PROFILE LINE "S"</p>		<p>HORIZONTAL SCALE 1" = 30'</p> <p>VERTICAL SCALE 1" = 10'</p> <p>SURVEY BOOK</p> <p>CONTRACT B-41547</p>		<p>BRIDGE FILE 218-90-10417</p> <p>DESIGNATION 1800156</p> <p>SHEETS \$PAGE_NUM\$ of \$TOTAL_PAGES\$</p> <p>PROJECT 1800156</p>	
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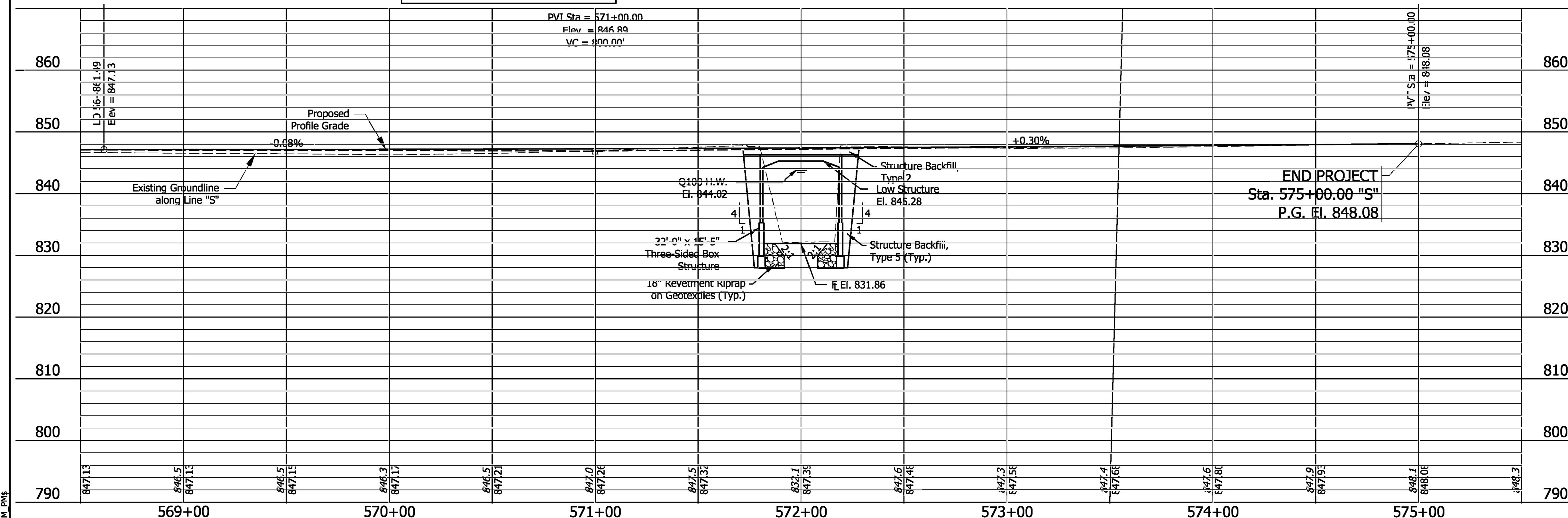
EXISTING STRUCTURE

Existing Structure is a Single-Span Reinforced Concrete Bridge (36'-0") with a 32'-0" Clear Roadway. (Entire structure to be removed.)

HYDRAULIC DATA

Drainage Area	8.96 sq. mi.
Q100 Discharge	1,450 cfs
Q100 Elevation	843.81 ft
Q100 Contraction Scour Depth	1.48 ft
Q100 Total Scour Depth	1.48 ft
Flowline Elevation (from HEC-RAS model)	831.86 ft
Q100 Low Scour Elevation	830.38 ft
Q100 Max. Velocity	5.48 ft/sec
Q100 Ave. Velocity	4.59 ft/sec

NOTE TO REVIEWER:
Inlets and need for replacement of existing pipes will be verified prior at the Preliminary Field Check.



LEGEND

18" Revetment Riprap

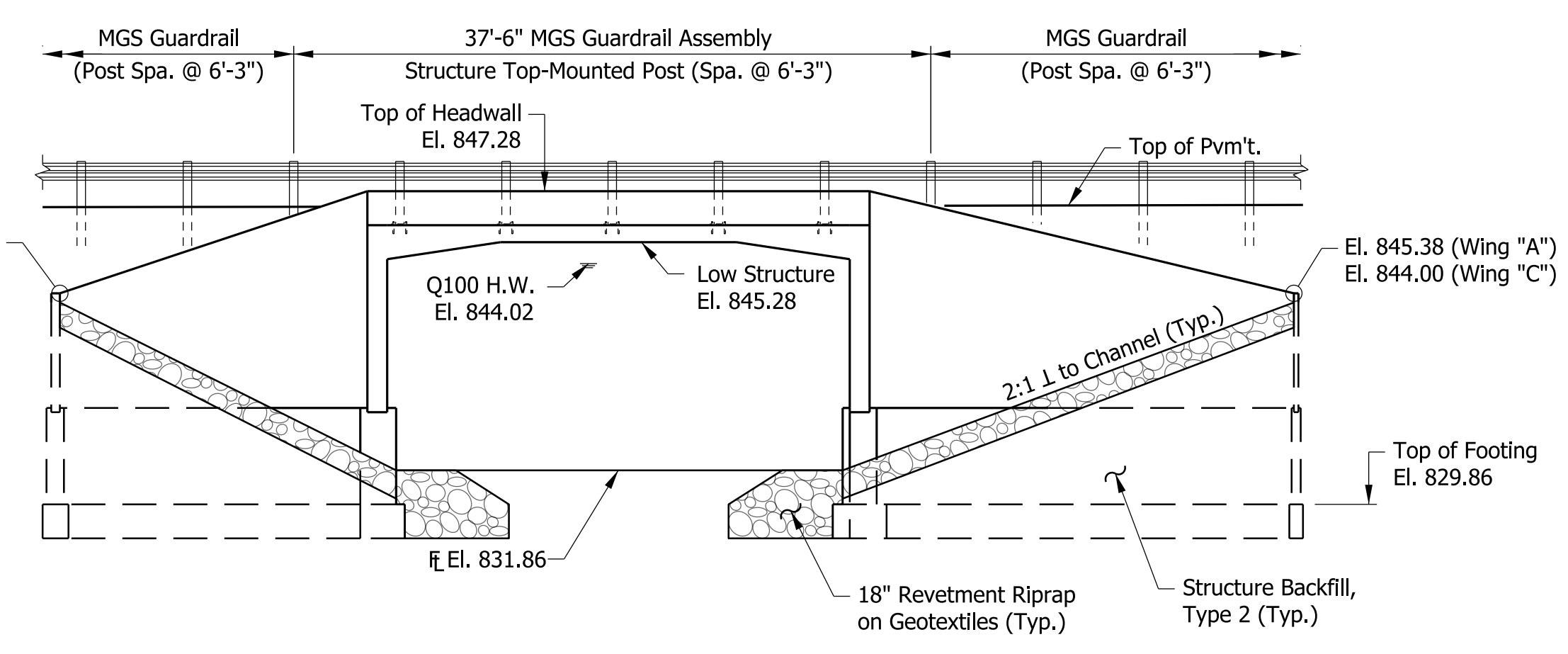
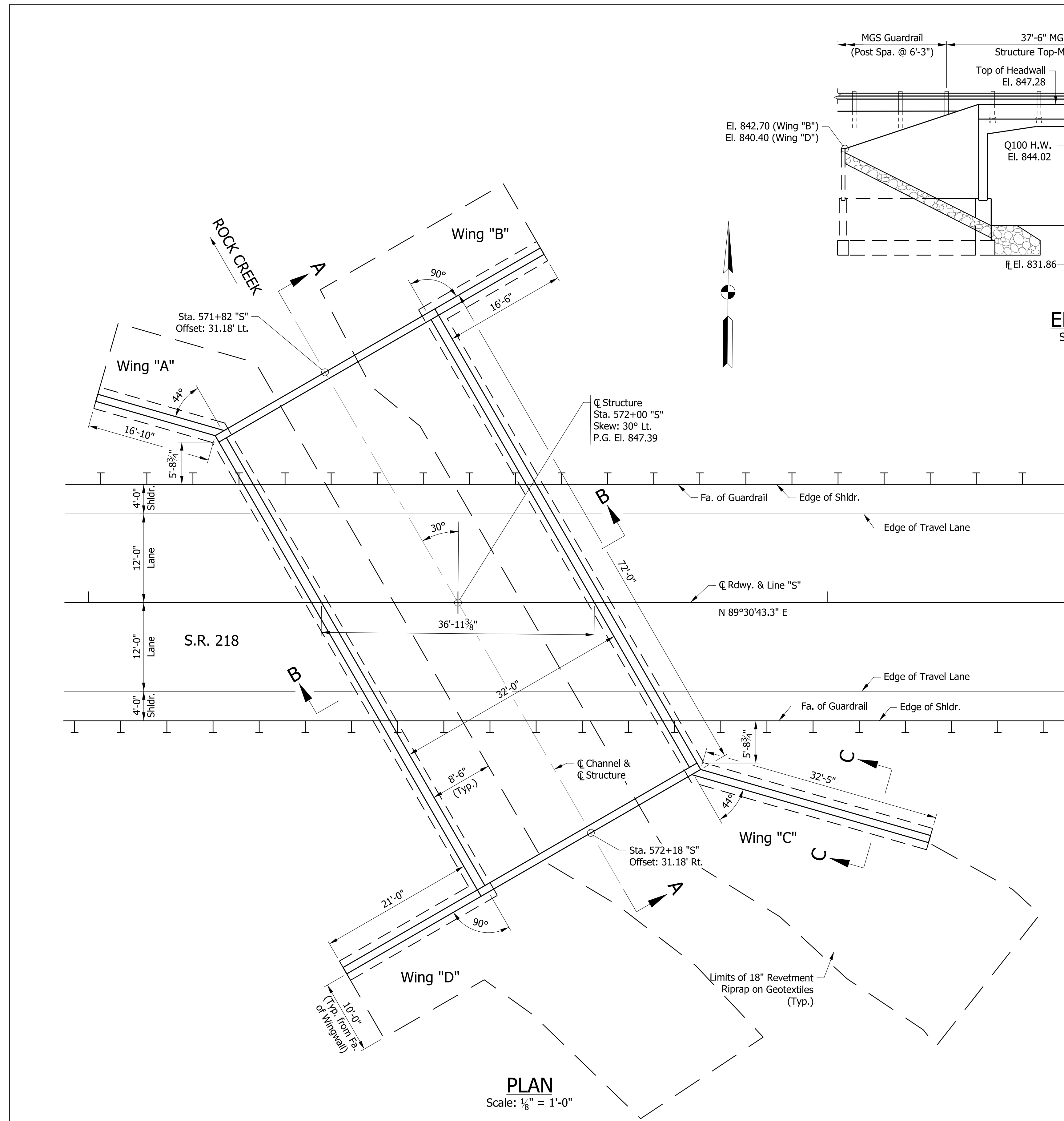
NOTES

All R/W on this sheet described from Line "S".
For General Notes, see Sht. xx.

**PRECAST REINFORCED CONCRETE FLAT TOP
3-SIDED STRUCTURE
32'-0" SPAN X 15'-5" RISE
32'-0" CLEAR ROADWAY SKEW: 30° LT.
S.R. 218 OVER ROCK CREEK
WELLS COUNTY**

DATE	REVISION	DESIGNED: MC_B	05/20	DRAWN: WLC	05/2020	INDIANA DEPARTMENT OF TRANSPORTATION LAYOUT LINE "S"	HORIZONTAL SCALE	BRIDGE FILE
		CHECKED: CRF	05/2020	CHECKED: MCB	05/2020		1" = 30'	218-90-10417
							1" = 10'	DESIGNATION 1800156
								SHEETS
								\$PAGE_NUM\$ of \$TOTAL_PAGES\$
								CONTRACT
								8-41547
								PROJECT
								1800156

File: pw:\dotwise\indot.in.gov\DOTwise\Documents\Fort Wayne\1800156\Design\MSConnect\Sht Layout.dgn
Model: \$MODEL_NAMES



ELEVATION
Scale: 1/8" = 1'-0"

PLAN
Scale: 1/8" = 1'-0"

GENERAL NOTES

Contractor shall verify the existing flowline elevation to set appropriate sump depth. (1'-0" Sump)
 Bottom of footing elevation for three-sided structure shall be at least 4 ft, or deeper, below flowline elevation.
 The exterior precast unit shall be mechanically fastened to the adjacent unit at both ends of the structure. Mechanical fastening detail shall be provided by Precast Manufacturer.
 Alternate cast-in-place wingwalls may be substituted for the precast windwall shown in Section C-C.
 A Three-Sided Arch Topped or True Arch Structure will not be permitted at this location.
 The following surfaces shall be Surface Sealed:
 The exposed faces of headwalls and wingwalls.
 (Estimated Quantity = x,xxx Sft)
 Riprap to be placed in accordance with Std. Dwg. 723-CCSP-04.

DESIGN DATA

Live Load: Designed for HL-93 Loading in accordance with the AASHTO LRFD Bridge Design Specifications, 8th Edition, 2017.
 Dead Load: Designed for actual dead load plus 35 lbs/sft future wearing surface.
REINFORCED CONCRETE (CAST-IN-PLACE)
 Unit Stresses:
 Concrete, Class A f_c = 3,500 psi
 Concrete, Class B f_c = 3,000 psi
 Reinforcing Steel (Grade 60) f_y = 60,000 psi

WINGWALL INFORMATION

	LENGTH	AREA
Wing "A"	16'-10"	278 Sft
Wing "B"	16'-6"	250 Sft
Wing "C"	32'-5"	512 Sft
Wing "D"	21'-0"	294 Sft

NOTE TO REVIEWER:
Soil Parameters Table will be provided on Stage 3 Submittal.

NOTES

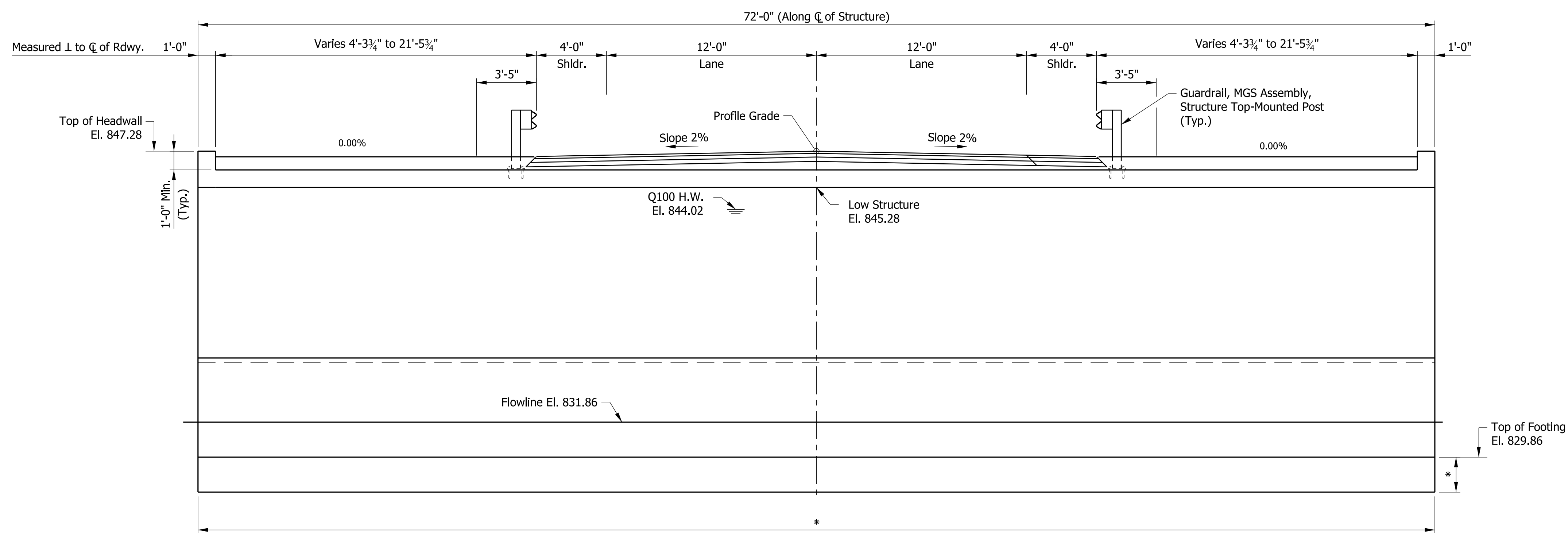
For Sections A-A, B-B, and C-C, see Sheet xx.
 For Layout, see Sheet xx.

**PRECAST REINFORCED CONCRETE FLAT TOP
 3-SIDED STRUCTURE
 32'-0" SPAN X 15'-5" RISE
 32'-0" CLEAR ROADWAY SKEW: 30° LT.
 S.R. 218 OVER ROCK CREEK
 WELLS COUNTY**

DATE	REVISION								SCALE AS NOTED	BRIDGE FILE 218-90-10417
										DESIGNATION 1800156
										SHEETS 7 of 15
										CONTRACT B-41547
										PROJECT 1800156

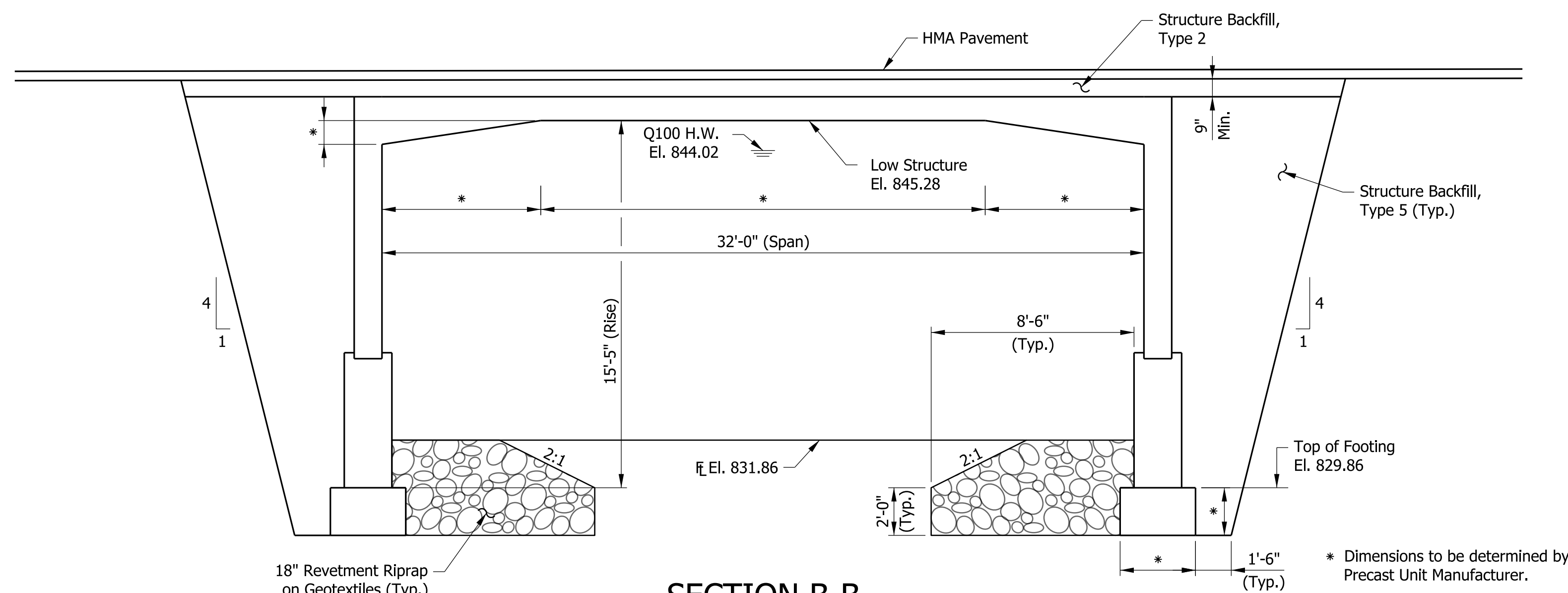
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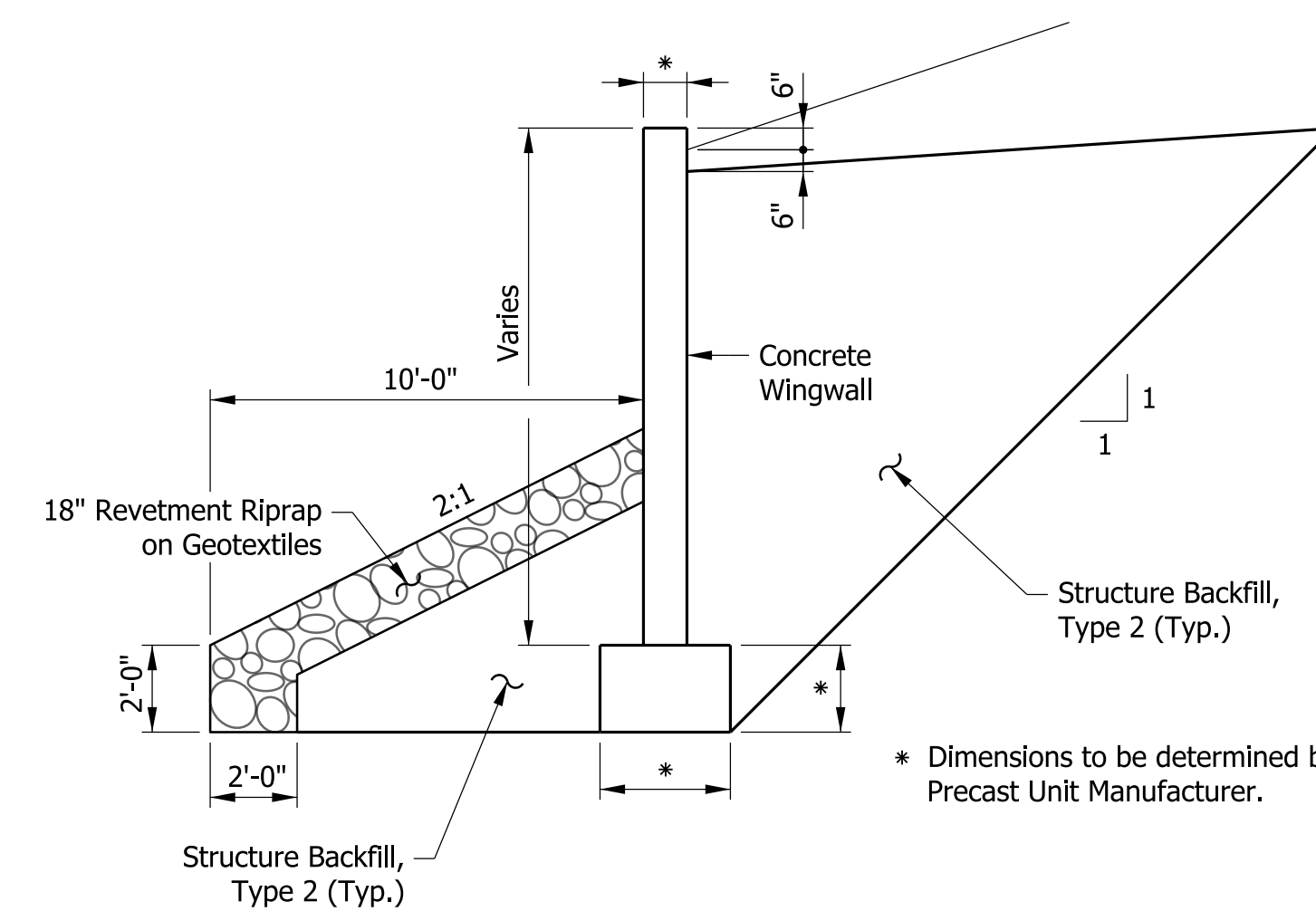
SECTION A-A
Scale: 1/4" = 1'-0"

* Dimensions to be determined by Precast Unit Manufacturer.



SECTION B-B
Scale: 1/4" = 1'-0"

* Dimensions to be determined by Precast Unit Manufacturer.



SECTION C-C
Scale: 1/4" = 1'-0"

* Dimensions to be determined by Precast Unit Manufacturer.

**PRECAST REINFORCED CONCRETE FLAT TOP
3-SIDED STRUCTURE
32'-0" SPAN X 15'-5" RISE
32'-0" CLEAR ROADWAY SKEW: 30° LT.
S.R. 218 OVER ROCK CREEK
WELLS COUNTY**

DATE	REVISION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: MCB	05/2020	DRAWN: WLC
CHECKED: CRF	05/2020	CHECKED: MCB

INDIANA
DEPARTMENT OF TRANSPORTATION

**GENERAL PLAN
SECTIONS**

SCALE	BRIDGE FILE
AS NOTED	218-90-10417
	DESIGNATION
	1800156
	SHEETS
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CONTRACT	PROJECT
B-41547	1800156

Plot: 6/15/2020 1:17 PM

File: pv:\dotwise\indot.in.gov\DOTWise\Documents\Fort Wayne\1800156\Design\MSCConnect\Sht General Plan.dgn
Model: Sections Sheet

Appendix C: Early Coordination



October 19, 2020

Ms. Kari Carmany-George
Federal Highway Administration
Federal Office Building, Room 254
575 North Pennsylvania Street
Indianapolis, IN 46204

Sample Early Coordination Letter

Re: Des. No.: 1800156, Bridge Project over Rock Creek on SR 218, 2.16 miles West of SR 1, Wells County, Indiana.

Dear Ms. Carmany-George:

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

This project is located on SR 218, 2.16 miles west of SR 1 in Wells County, Indiana. This section of SR 218 is a two lane Rural Major Collector. The existing SR 218 approach cross section consists of two 12' lanes bordered by 4' shoulders in each direction.

The existing bridge is a single-span, reinforced-concrete arch bridge built in 1933. The bridge superstructure is in poor condition with a rating of 4 (out of 9). The spandrels have moderate spalling/deterioration to the decorative caps on both walls and several vertical cracks with minor efflorescence. The arch ring has moderate deterioration in the outer sections as well as several areas of cracking along the construction joints. There was observed wetness and evidence of fill loss along the construction joints. The bridge substructure is in fair condition with a rating of 5 (out of 9). Honeycombing was noted on the thrust blocks and heavy scaling below the weep holes. Heavy deterioration was noted on the northeast corner. The wing walls have large areas of spalling to the decorative caps and moderate deterioration to the thrust block and wing wall northeast corner. There is a large deep spall with wetness on the southwest wingwall. The bridge railing is the original concrete railing from 1933 with no approach guardrail. The railing appears to be in fair to poor condition. There is an agricultural ditch with well vegetated banks located on the southwest bridge quadrant running along SR 218 for approximately 450 feet ending at Rock Creek. The agricultural ditch is a legal drain. No guardrail or other standard safety features exist at the structure. The existing 1933 plans indicate that the right-of-way extends 40 feet from the centerline of the roadway on both sides of SR 218 and the existing utility poles are located approximately 38 feet to the north of the roadway centerline.

The proposed project will replace the existing structure (Structure No. (218)118-90-01488) with a one span (32'-0") three sided box structure with a rise of 15'-5" and a skew of 30 degrees to orient the end bents with respect to the alignment of Rock Creek. The existing shoulder width of 3'-0" is being increased by 1'-0" on

each side of the roadway. Riprap will be placed on the east and west spill slopes. Guardrail will be installed in all four quadrants. Additionally, four (4) pipes under field entrances and one (1) pipe located approximately midway within the legal drain may be removed and/or replaced as indicated in the Stage 1 plans. These structures are all located on the south side of the roadway. The farm field entrance located immediately adjacent to the bridge on the southeast quadrant will need to be moved past the proposed guardrail. Additionally, the legal drain shall be regraded as necessary. Other riprap side ditches and V-ditches shall be graded/installed as indicated in the attached plan sheets. Approximately 0.03 acre of trees will be removed from the south side of the roadway adjacent to the bridge. The project will require approximately 0.58 acre of permanent right-of-way. The preferred method of traffic maintenance is a full road closure with an official state detour. The suggested detour route is SR 1, SR 18, and SR 3. Construction is anticipated to begin in Spring 2023.

The legal drain is being moved South, as indicated in the plan sheets.

Land use in the vicinity of the project is primarily agricultural. The INDOT-Fort Wayne District will perform waters and wetlands determinations and a biological assessment to identify any ecological resources that may be present. This project qualifies for the application of the USFWS range-wide programmatic informal consultation for the Indiana bat and northern long-eared bat and the project information will be submitted through USFWS's Information for Planning and Consultation (IPaC) separately. The INDOT Cultural Resources Office (CRO) will investigate the areas of additional right-of-way for archaeological and historic resources for compliance with Section 106 compliance. The results of this investigation will be forwarded to the State Historic Preservation Officer for review and concurrence.

Should we not receive your response **within thirty (30) calendar days** from the date of this letter, it will be assumed that your agency feels that there will be no adverse effects incurred as a result of the proposed project. However, should you find that an extension to the response time is necessary; a reasonable amount may be granted upon request. If you have any questions regarding this matter, please feel free to contact Ashley Taylor – INDOT Fort Wayne District Office, at (260) 969-8262 or ataylor@indot.in.gov. You may also contact the project manager for this project: Jesse Boley at (260) 399-7329 or jboley@indot.in.gov. Thank you in advance for your input.

Sincerely,



Ashley Taylor, Environmental Manager II
INDOT- Fort Wayne District

ADT

Attachments: Site Location Map, Aerial & Topographic Maps, Design Plan Sheets, Site Photographs

Email Cc: k.carmanygeorge@dot.gov, Federal Highway Administration
Indiana Geological and Water Survey Electronic Project Submission
environmentalreview@dnr.in.gov, IDNR Division of Fish and Wildlife
IDEM Electronic Project Submission
jboley@indot.in.gov, INDOT Project Manager
elizabeth_mccloskey@fws.gov, USFWS, Northern Field Office
rick.neilson@in.usda.gov, NRCS
dan.avery@co.allen.in.us, NIRCC

See Appendix B for the Maps and Plan Sheets. Site Photographs included with this ECL were from the BIAS 4/2/2020 Bridge Inspection Report and are not included in the NEPA document since the Waters Report photos were included.

regulatoryapplicationsrl@usace.army.mil, USACE Louisville District
eric.washburn@uscg.mil, Eighth Coast Guard District
broyer@dnr.in.gov, IDNR Oil and Gas Division
zero@adamswells.com, Wells County Board of Commissioners
highway@wellscounty.org, Wells County Highway Department
surveyor@wellscounty.org, Wells County Surveyor

Email CC on 12/28/20:

wcapc@wellscounty.org, Michael Lautzenheiser, Floodplain Administrator

Email CC on 01/11/21:

hpetroviak@indot.in.gov, Hunter Petroviak, INDOT Public Relations Director



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

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

Indiana Department of Transportation

Jesse Boley

5333 Hatfield Rd.

Fort Wayne , IN 46808

, IN

Date

To Engineers and Consultants Proposing Roadway Construction Projects:

RE: This project (Des. No. 1800156) is located on SR 218, 2.16 miles west of SR 1 in Wells County, Indiana. The existing bridge is a single-span, reinforced-concrete arch bridge built in 1933. The proposed project will replace the existing structure with a one span (32'-0") three sided box structure with a rise of 15'-5" and a skew of 30 degrees. The existing shoulder width of 3'-0" is being increased by 1'-0" on each side of the roadway. Riprap will be placed on the east and west spill slopes. Guardrail will be installed in all four quadrants. Additionally, four (4) pipes under field entrances and one (1) pipe located approximately midway within the legal drain may be removed and/or replaced. Additionally, the legal drain shall be regraded as necessary. Other riprap side ditches and V-ditches shall be graded/installed as well. Approximately 0.03 acre of trees will be removed from the south side of the roadway adjacent to the bridge. The project will require approximately 0.58 acre of permanent right-of-way. The preferred method of traffic maintenance is a full road closure with an official state detour. The suggested detour route is SR 1, SR 18, and SR 3. Construction is anticipated to begin in Spring 2023.

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

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

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

WATER AND BIOTIC QUALITY

1. Section 404 of the Clean Water Act requires that you obtain a permit from the U.S. Army Corps of Engineers (USACE) before discharging dredged or fill materials into any wetlands or other waters, such as rivers, lakes, streams, and ditches. Other activities regulated include the relocation, channelization, widening, or other such alteration of a stream, and the mechanical clearing (use of heavy construction equipment) of wetlands. Thus, as a project owner or sponsor, it is your responsibility to ensure that no wetlands are disturbed without the proper permit. Although you may initially refer to the U.S. Fish and Wildlife Service National Wetland Inventory maps as a means of identifying potential areas of concern, please be mindful that those maps do not depict jurisdictional wetlands regulated by the USACE or the Department of Environmental Management. A valid jurisdictional wetlands determination can only be made by the USACE, using the 1987 Wetland Delineation Manual.

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

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

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

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

3. If the USACE determines that a wetland or other water body is isolated and not subject to Clean Water Act regulation, it is still regulated by the state of Indiana . A State Isolated Wetland permit from IDEM's Office of Water Quality (OWQ) is required for any activity that results in the discharge of dredged or fill materials into isolated wetlands. To learn more about isolated wetlands, contact the OWQ Wetlands Program at 317-233-8488.
4. If your project will involve over a 0.5 acre of wetland impact, stream relocation, or other large-scale alterations to water bodies such as the creation of a dam or a water diversion, you should seek additional input from the OWQ Wetlands Program staff. Consult the Web at: <http://www.in.gov/idem/4384.htm> (<http://www.in.gov/idem/4384.htm>) for the appropriate staff contact to further discuss your project.
5. Work within the one-hundred year floodway of a given water body is regulated by the Department of Natural Resources, Division of Water. The Division issues permits for activities regulated under the follow statutes:
 - IC 14-26-2 Lakes Preservation Act 312 IAC 11
 - IC 14-26-5 Lowering of Ten Acre Lakes Act No related code
 - IC 14-28-1 Flood Control Act 310 IAC 6-1
 - IC 14-29-1 Navigable Waterways Act 312 IAC 6
 - IC 14-29-3 Sand and Gravel Permits Act 312 IAC 6
 - IC 14-29-4 Construction of Channels Act No related code

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

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

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

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

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

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

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

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

7. For projects involving impacts to fish and botanical resources, contact the Department of Natural Resources - Division of Fish and Wildlife (317/232-4080) for addition project input.
8. For projects involving water main construction, water main extensions, and new public water supplies, contact the Office of Water Quality - Drinking Water Branch (317-308-3299) regarding the need for permits.
9. For projects involving effluent discharges to waters of the State of Indiana , contact the Office of Water Quality - Permits Branch (317-233-0468) regarding the need for a National Pollutant Discharge Elimination System (NPDES) permit.
10. For projects involving the construction of wastewater facilities and sewer lines, contact the Office of Water Quality - Permits Branch (317-232-8675) regarding the need for permits.

AIR QUALITY

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

Consideration should be given to the following:

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

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

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

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

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

The U.S. EPA further recommends that all homes (and apartments within three stories of ground level) be tested for radon. If in-home radon levels are determined to be 4 pCi/L, or higher, EPA recommends a follow-up test. If the second test confirms that radon levels are 4 pCi/L, or higher, EPA recommends the installation of radon-reduction measures. (For a list of qualified radon testers and radon mitigation (or reduction) specialists visit:

http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf

(http://www.in.gov/isdh/regsvcs/radhealth/pdfs/radon_testers_mitigators_list.pdf.) It also is recommended that radon reduction measures be built into all new homes, particularly in areas like Indiana that have moderate to high predicted radon levels.

To learn more about radon, radon risks, and ways to reduce exposure visit:

<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>

(<http://www.in.gov/isdh/regsvcs/radhealth/radon.htm>), <http://www.in.gov/idem/4145.htm>

(<http://www.in.gov/idem/4145.htm>), or <http://www.epa.gov/radon/index.html>

(<http://www.epa.gov/radon/index.html>).

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

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

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

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

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

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

4. With respect to lead-based paint removal: IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust. IDEM is particularly concerned that young children exposed to lead can suffer from learning disabilities. Although lead-based paint abatement efforts are not mandatory, any abatement that is conducted within housing built before January 1, 1978 , or a child-occupied facility is required to comply with all lead-based paint work practice standards, licensing and notification requirements. For more information about lead-based paint removal visit: <http://www.in.gov/isdh/19131.htm> (<http://www.in.gov/isdh/19131.htm>).
5. Ensure that asphalt paving plants are permitted and operate properly. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7%) oil distillate, is prohibited

during the months April through October. See 326 IAC 8-5-2 , Asphalt Paving Rule (<http://www.ai.org/legislative/iac/T03260/A00080.PDF> (<http://www.ai.org/legislative/iac/T03260/A00080.PDF>)).

6. If your project involves the construction of a new source of air emissions or the modification of an existing source of air emissions or air pollution control equipment, it will need to be reviewed by the IDEM Office of Air Quality (OAQ). A registration or permit may be required under 326 IAC 2 (View at: www.ai.org/legislative/iac/t03260/a00020.pdf (<http://www.ai.org/legislative/iac/t03260/a00020.pdf>)). New sources that use or emit hazardous air pollutants may be subject to Section 112 of the Clean Air Act and corresponding state air regulations governing hazardous air pollutants.
7. For more information on air permits visit: <http://www.in.gov/idem/4223.htm> (<http://www.in.gov/idem/4223.htm>), or to initiate the IDEM air permitting process, please contact the Office of Air Quality Permit Reviewer of the Day at (317) 233-0178 or OAMPROD atdem.state.in.us.

LAND QUALITY

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

1. If the site is found to contain any areas used to dispose of solid or hazardous waste, you need to contact the Office of Land Quality (OLQ) at 317-308-3103.
2. All solid wastes generated by the project, or removed from the project site, need to be taken to a properly permitted solid waste processing or disposal facility. For more information, visit <http://www.in.gov/idem/4998.htm> (<http://www.in.gov/idem/4998.htm>).
3. If any contaminated soils are discovered during this project, they may be subject to disposal as hazardous waste. Please contact the OLQ at 317-308-3103 to obtain information on proper disposal procedures.
4. If PCBs are found at this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding management of any PCB wastes from this site.
5. If there are any asbestos disposal issues related to this site, please contact the Industrial Waste Section of OLQ at 317-308-3103 for information regarding the management of asbestos wastes (Asbestos removal is addressed above, under Air Quality).
6. If the project involves the installation or removal of an underground storage tank, or involves contamination from an underground storage tank, you must contact the IDEM Underground Storage Tank program at 317/308-3039. See: <http://www.in.gov/idem/4999.htm> (<http://www.in.gov/idem/4999.htm>).

FINAL REMARKS

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

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

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

Signature(s) of the Applicant

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

Project Description

This project (Des. No. 1800156) is located on SR 218, 2.16 miles west of SR 1 in Wells County, Indiana. The existing bridge is a single-span, reinforced-concrete arch bridge built in 1933. The proposed project will replace the existing structure with a one span (32'-0") three sided box structure with a rise of 15'-5" and a skew of 30 degrees. The existing shoulder width of 3'-0" is being increased by 1'-0" on each side of the roadway. Riprap will be placed on the east and west spill slopes. Guardrail will be installed in all four quadrants. Additionally, four (4) pipes under field entrances and one (1) pipe located approximately midway within the legal drain may be removed and/or replaced. Additionally, the legal drain shall be regraded as necessary. Other riprap side ditches and V-ditches shall be graded/installed as well. Approximately 0.03 acre of trees will be removed from the south side of the roadway adjacent to the bridge. The project will require approximately 0.58 acre of permanent right-of-way. The preferred method of traffic maintenance is a full road closure with an official state detour. The suggested detour route is SR 1, SR 18, and SR 3. Construction is anticipated to begin in Spring 2023.

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

Date: 12/23/2020

Signature of the INDOT
Project Engineer or Other Responsible Agent



Jesse Boley

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

DNR #: ER-23151

Request Received: October 19, 2020

Requestor: Indiana Department of Transportation, Fort Wayne District
Ashley Taylor
5333 Hatfield Road
Fort Wayne, IN 46808-1042

Project: SR 218 bridge ([218]118-90-01488) replacement over Rock Creek, 2.16 miles west of SR 1; Des #1800156

County/Site info: Wells

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

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

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

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

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

1) Crossing Structure:

For purposes of maintaining fish and wildlife passage through a crossing structure, the Environmental Unit recommends bridges rather than culverts and bottomless culverts rather than box or pipe culverts. Wide culverts are better than narrow culverts, and culverts with shorter through lengths are better than culverts with longer through lengths. If box or pipe culverts are used, the bottoms should be buried a minimum of 6" (or 20% of the culvert height/pipe diameter, whichever is greater up to a maximum of 2') below the stream bed elevation to allow a natural streambed to form within or under the crossing structure. Crossings should: span the entire channel width (a minimum of 1.2 times the OHWM width); maintain the natural stream substrate within the structure; have a minimum openness ratio (height x width / length) of 0.25; and have stream depth, channel width, and water velocities during low-flow conditions that are approximate to those in the natural stream channel. Banklines should be restored within box and pipe structures to allow for wildlife passage above the ordinary highwater mark.

The new, replacement, or rehabbed structure, and any bank stabilization under the structure, should not create conditions that are less favorable for wildlife passage under the structure compared to the current conditions. When determining an appropriate bridge or culvert size, consider whether or not wildlife/vehicle collisions are a concern at the crossing site. If feasible, a larger bridge or culvert opening can allow for the

Attachments: A - Bridge Exemption Criteria

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

movement of wildlife under the roadway in order to minimize wildlife/vehicle collisions.

2) Bank Stabilization:

Establishing vegetation along the banks is critical for stabilization and erosion control. In addition to vegetation, some other form of bank stabilization may be needed. While hard armoring alone (e.g. riprap or glacial stone) may be needed in certain instances, soft armoring and bioengineering techniques should be considered first. In many instances, one or more methods are necessary to increase the likelihood of vegetation establishment. Combining vegetation with most bank stabilization methods can provide additional bank protection and help reduce impacts upon fish and wildlife. Information about bioengineering techniques can be found at <http://www.in.gov/legislative/iac/20120404-IR-312120154NRA.xml.pdf>. Also, the following is a USDA/NRCS document that outlines many different bioengineering techniques for streambank stabilization: <http://directives.sc.egov.usda.gov/17553.wba>.

Riprap must not be placed in the active thalweg channel or placed in the streambed in a manner that precludes fish or aquatic organism passage (riprap must not be placed above the existing streambed elevation). Riprap may be used only at the toe of the sideslopes up to the ordinary high water mark (OHWM). The banks above the OHWM must be restored, stabilized, and revegetated using geotextiles and a mixture of grasses, sedges, wildflowers, shrubs, and trees native to Eastern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon completion.

3) Riparian Habitat:

We recommend a mitigation plan be developed (and submitted with the permit application, if required) for any unavoidable habitat impacts that will occur. The DNR's Habitat Mitigation guidelines (and plant lists) can be found online at: <http://iac.iga.in.gov/iac/20200527-IR-312200284NRA.xml.pdf>.

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 (individual canopy tree removal in an urban streetscape or park-like environment versus removal of habitat supporting a tree canopy, woody understory, and herbaceous layer). Impacts under 0.10 acre in an urban area may still involve the replacement of large diameter trees but typically do not require any additional mitigation or additional plantings beyond seeding and stabilizing disturbed areas. There are exceptions for high quality habitat sites however.

4) Stream/Wetland Habitat:

For any stream and/or wetland impacts, you may need to contact the Indiana Department of Environmental Management (IDEM) 401 program and the US Army Corps of Engineers (USACE) 404 program. Impacts to wetland habitat should be mitigated at the appropriate ratio according to the 1991 INDOT/IDNR/USFWS Memorandum of Understanding.

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

1. Revegetate all bare and disturbed areas that will not be mowed and maintained with a mixture of grasses, sedges, and wildflowers native to Northeastern Indiana and specifically for stream bank/floodway stabilization purposes as soon as possible upon

State of Indiana
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Division of Fish and Wildlife
Early Coordination/Environmental Assessment

completion; turf-type grasses (including low-endophyte, friendly endophyte, and endophyte free tall fescue but excluding all other varieties of tall fescue) may be used in regularly mowed areas only.

2. Minimize and contain within the project limits inchannel disturbance and the clearing of trees and brush.

3. Do not work in the waterway from April 1 through June 30 without the prior written approval of the Division of Fish and Wildlife.

4. Do not cut any trees suitable for Indiana bat or Northern Long-eared bat roosting (greater than 5 inches dbh, living or dead, with loose hanging bark, or with cracks, crevices, or cavities) from April 1 through September 30.

5. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.

6. Do not construct any temporary runarounds, access bridges, causeways, cofferdams, diversions, or pumparounds.

7. Operate equipment used to replace the bridge from the existing roadway.

8. Use minimum average 6 inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.

9. Do not use broken concrete as riprap.

10. Underlay the riprap with a bedding layer of well graded aggregate or a geotextile to prevent piping of soil underneath the riprap.

11. Minimize the movement of resuspended bottom sediment from the immediate project area.

12. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.

13. Seed and protect all disturbed streambanks and slopes not protected by other methods that are 3:1 or steeper with erosion control blankets that are heavy-duty, biodegradable, and net free or that use loose-woven / Leno-woven netting to minimize the entrapment and snaring of small-bodied wildlife such as snakes and turtles (follow manufacturer's recommendations for selection and installation); seed and apply mulch on all other disturbed areas.

14. Do not excavate or place fill in any riparian wetland.

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife

Our agency appreciates this opportunity to be of service. Please contact the above staff member at (317) 232-4080 if we can be of further assistance.

Christie L. Stanifer

Date: November 18, 2020

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

Taylor, Ashley

From: Taylor, Ashley
Sent: Monday, November 23, 2020 7:52 AM
To: Royer, Brian
Subject: RE: Des. No. 1800156 Early Coordination Letter

Thank you Brian! I will add this information into a commitment for the environmental document, so the contractor will be aware of these two old oil wells and that they should contact you if a steel casing or void hole is encountered on the south edge of the project.

Ashley Taylor

Environmental Manager II

5333 Hatfield Road
Fort Wayne, IN 46808
Office: (260) 969-8262
Email: ataylor@indot.in.gov



From: Royer, Brian <BRoyer@dnr.IN.gov>
Sent: Friday, November 20, 2020 9:09 AM
To: Taylor, Ashley <ATaylor@indot.IN.gov>
Subject: RE: Des. No. 1800156 Early Coordination Letter

There are 2 old oil wells that are located just south of this project area. There are not any plugging records on these wells that I could find but they are probably poorly plugged as they were drilled in 1903 and before. Locations for these were taken from old Ohio oil company plat maps that were sent to the IGS from Marathon oil company. As far as I can tell these should not be encountered but if a steel casing or void hole is encountered on the south edge of this project please contact me ASAP to determine the well status and what will need to be done.

Thanks,

Brian Royer

Orphan Well Manager
Indiana Department of Natural Resources
Division of Oil & Gas
Cell- 317-417-6556
www.dnr.IN.gov

** Please let us know about the quality of our service by taking this [brief customer survey](#).*

From: Taylor, Ashley <ATaylor@indot.IN.gov>
Sent: Monday, October 19, 2020 2:59 PM
To: Royer, Brian <BRoyer@dnr.IN.gov>
Subject: Des. No. 1800156 Early Coordination Letter

Organization and Project Information

Project ID:
Des. ID: 1800156
Project Title: SR 218 over Rock Creek
Name of Organization: Indiana Department of Transportation
Requested by: Ashley Taylor

Environmental Assessment Report

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

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

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This information was furnished by Indiana Geological Survey

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

Email: IGSEnvir@indiana.edu

Phone: 812 855-7428

Date: October 19, 2020

