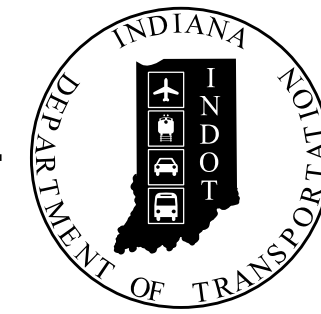


PROJECT	DESIGNATION
1702994	1702994
CONTRACT	BRIDGE FILE
R-43388	N/A

INDIANA DEPARTMENT OF TRANSPORTATION

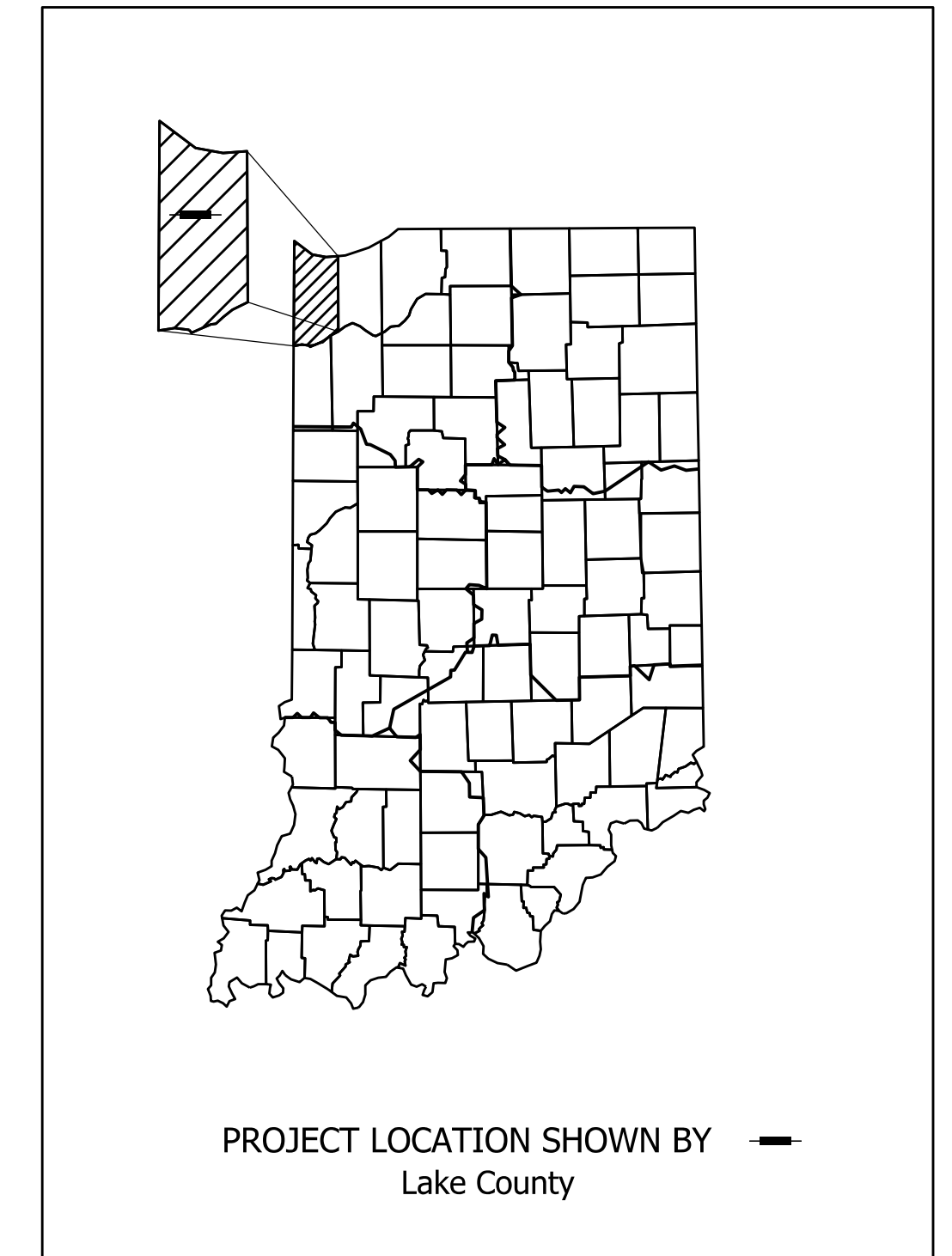


ROAD PLANS

LOCATION: US 231 and PARRISH AVE INTERSECTION IMPROVEMENT
 PROJECT NO. 1702994 P.E.
 1702994 R/W
 1702994 CONST.

Intersection Improvement to Roundabout at US 231 and Parrish Avenue
 Located 1.0 Mile East of US 41 in Sections
 3, 4, 9, 10, T-34-N, R-9-W,
 in St. John and Cedar Lake of
 Hanover Township, Lake County, Indiana

TRAFFIC DATA	U.S. 231	PARRISH AVE. NORTH	PARRISH AVE. SOUTH
A.A.D.T. (2022)	16,343 V.P.D.	(2018) 2,841 V.P.D.	(2018) 2,016 V.P.D.
A.A.D.T. (2045)	20,888 V.P.D.	(2045) 3,681 V.P.D.	(2045) 2,612 V.P.D.
D.H.V. (2045)	1876 V.P.H.	(2045) 402 V.P.H.	(2045) 345 V.P.H.
DIRECTIONAL DISTRIBUTION	48 %	35 %	41 %
TRUCKS	3 % A.A.D.T. 1 % D.H.V.	11 % A.A.D.T. 13 % D.H.V.	11 % A.A.D.T. 13 % D.H.V.
DESIGN DATA			
DESIGN SPEED	50 M.P.H.	40 M.P.H.	30 M.P.H.
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON-FREEWAY)	RECONSTRUCTION (NON-FREEWAY)	RECONSTRUCTION (NON-FREEWAY)
FUNCTIONAL CLASSIFICATION	PRINCIPAL ARTERIAL	LOCAL ROAD	MINOR ARTERIAL
RURAL/URBAN	URBAN (SUBURBAN)	URBAN (SUBURBAN)	URBAN (SUBURBAN)
TERRAIN	LEVEL	LEVEL	LEVEL
ACCESS CONTROL	NONE	NONE	NONE

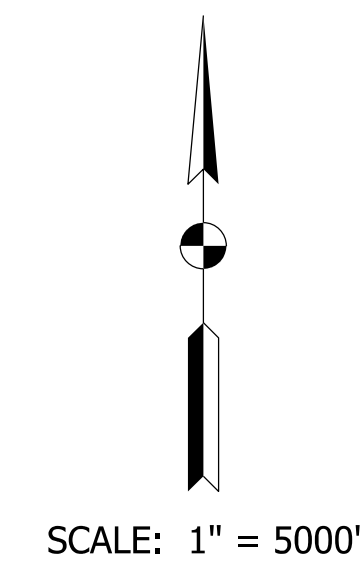
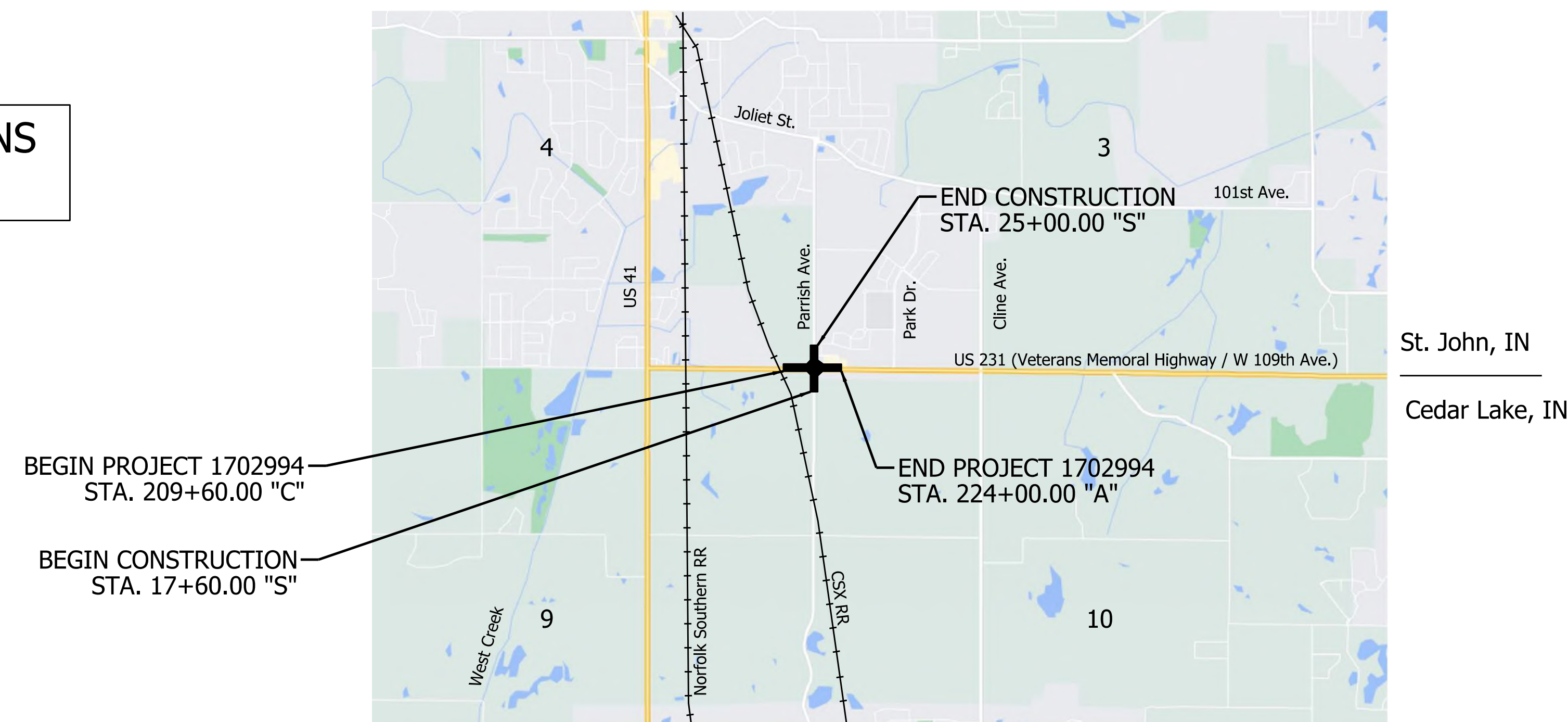


LATITUDE: 41° 25' 16" N LONGITUDE: 87° 27' 02" W

GROSS LENGTH: 0.273 MI.
 NET LENGTH: 0.273 MI.
 MAX. GRADE: 3.52 %

HUC: 07120001140010

PUBLIC HEARING PLANS
JULY 2024



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

Plans Prepared By:

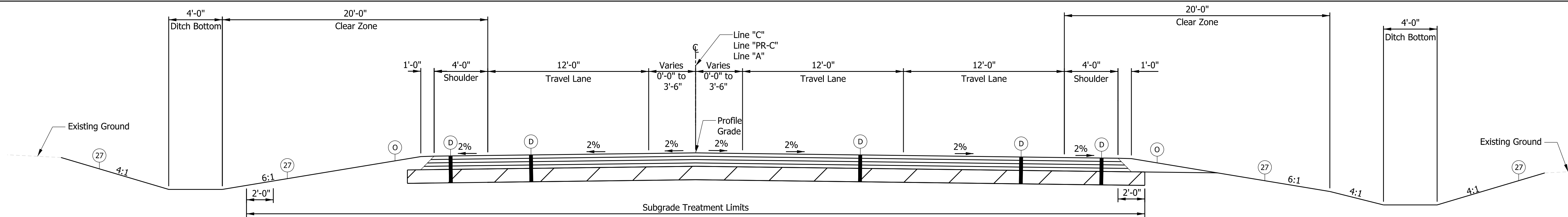


PLANS PREPARED BY: FISHBECK (317) 577-9050 PHONE NUMBER
 CERTIFIED BY: [Signature] DATE
 APPROVED FOR LETTING: INDIANA DEPARTMENT OF TRANSPORTATION DATE

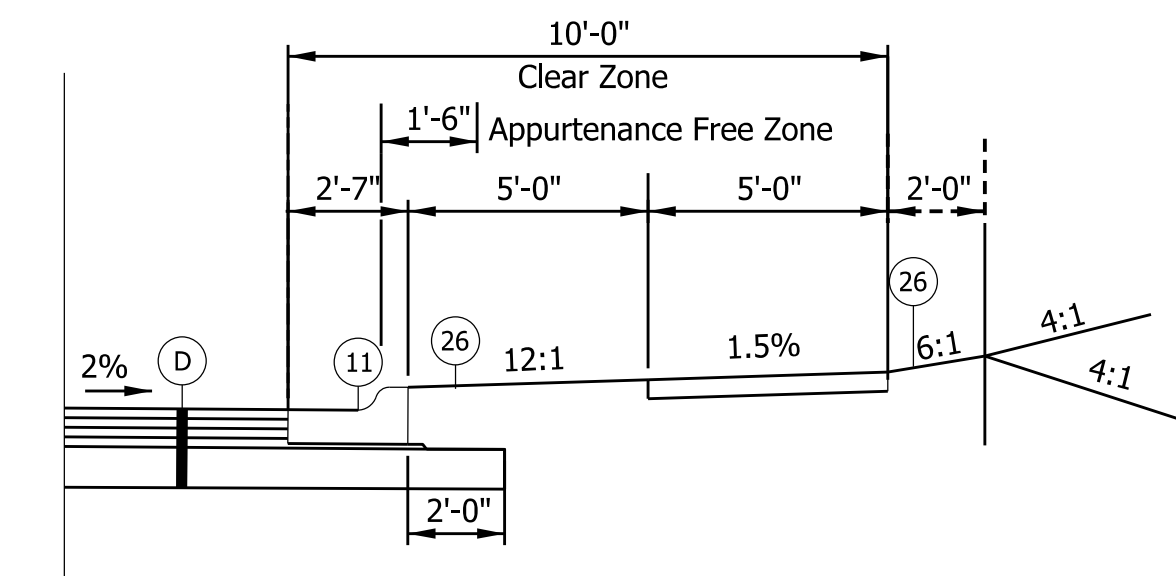
DESIGNATION	
1702994	
SHEETS	
1	of 55
CONTRACT	PROJECT
R-43388	1702994

Plot: 6/14/2024

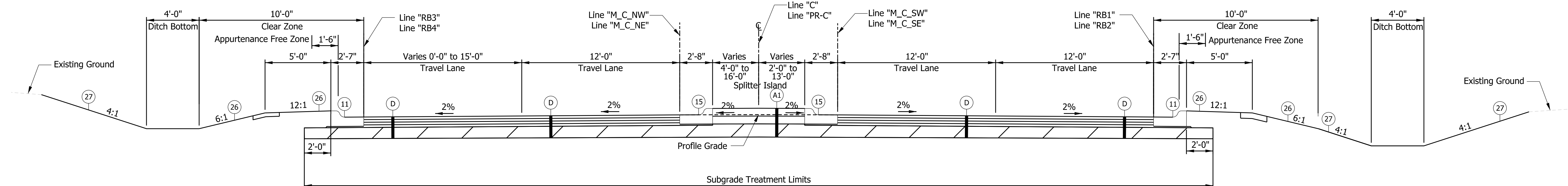
File: RD_Title Sheet.dgn
 Model: RD_Title Sheet



US 231
 Sta. 209+60 to 211+98.60 Line "C"
 Sta. 221+54.58 to 223+91.90 Line "PR-C"
 Sta. 223+85.18 to 224+00.00 Line "A"



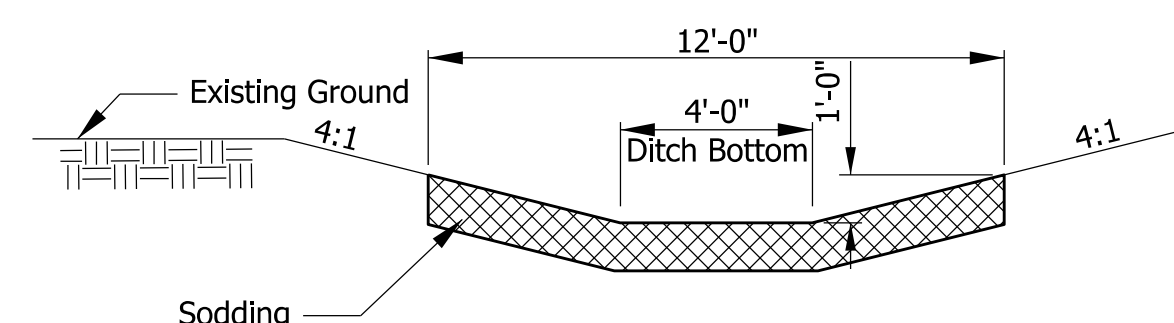
Sidewalk Detail
 Locations Shown on Construction Details
 Reverse for Lt Side



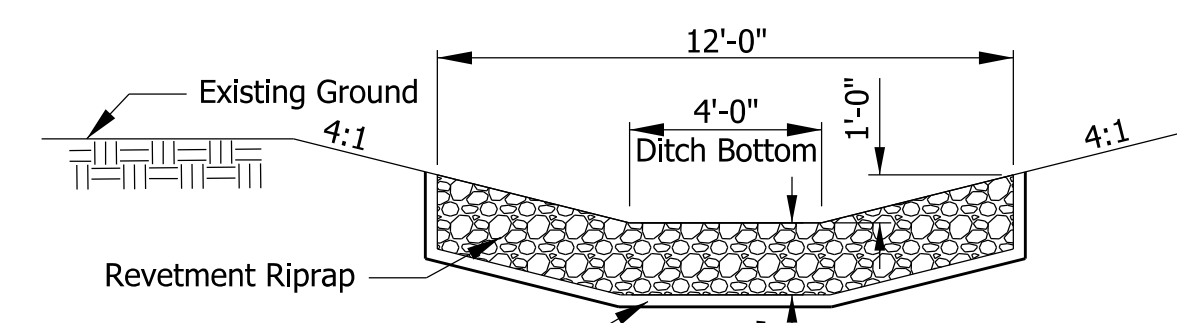
US 231
 Sta. 211+98.60 to 212+21.78 Line "C"
 Sta. 212+21.78 to 216+11.79 Line "PR-C"
 Sta. 217+81.86 to 221+54.58 Line "PR-C"

LEGEND

- (A) 8 in. PCCP (Colored), on 8 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IC
- (A1) 8 in. PCCP (Colored), on 9 in. Compacted Aggregate No. 53, on Subgrade Treatment, Type IC
- (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 385 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on 550 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on Subgrade Treatment, Type IC
- (O) Variable Depth Compacted Aggregate, No 73
- (11) Curb and Gutter, Concrete
- (12) Curb and Gutter, B, Concrete
- (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
- (14) Curb, Integral, Concrete
- (15) Curb and Gutter, B, Concrete, Modified (Inverted)
- (26) Sodding, Nursery
- (27) Mulched Seeding U



Typical Sodding 4' Flat Bottom Ditch Detail (4:1 Slopes)
 Not to Scale



Typical Riprap 4' Flat Bottom Ditch Detail (4:1 Slopes)
 Not to Scale

NOTE TO REVIEWERS:
 Pavement design to be determined after Stage 2 plan approval.

Plot: 6/14/2024

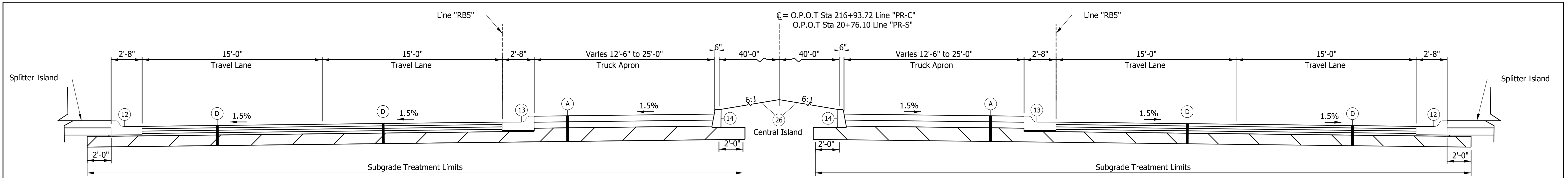
File: RD_Pr Typ Sections.dgn
 Model: Typical 1

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

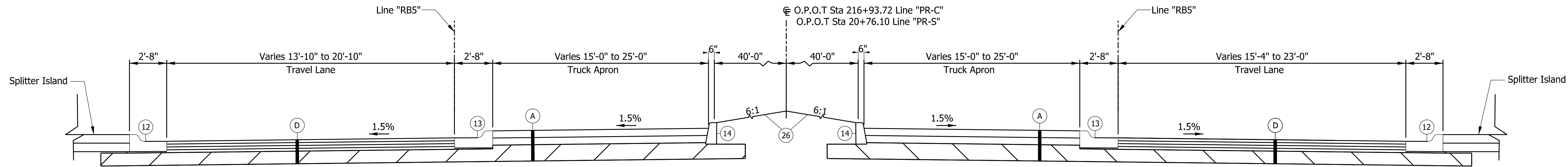
INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

SCALE	BRIDGE FILE
1/4" = 1'-0"	
	DESIGNATION
	1702994
	SHEETS
	3 of 55
CONTRACT	PROJECT
R-43388	1702994



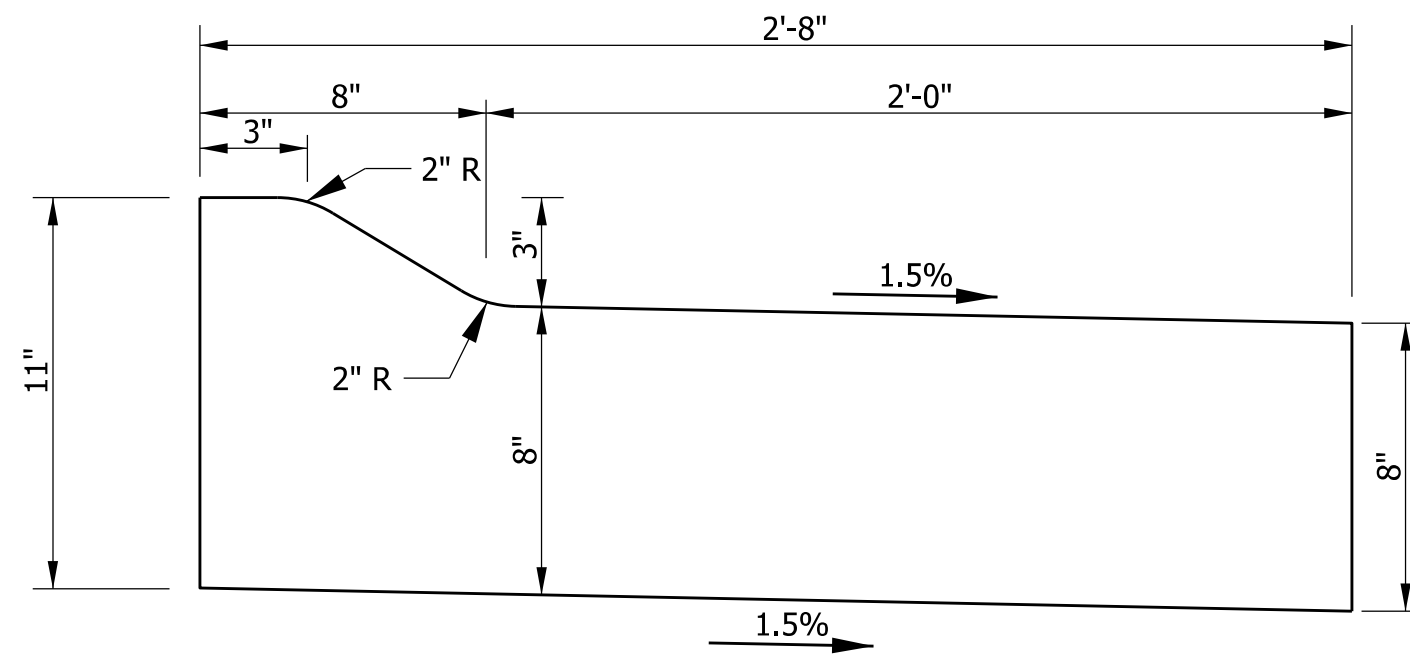
US 231 Roundabout Circulatory Roadway at Splitter Island



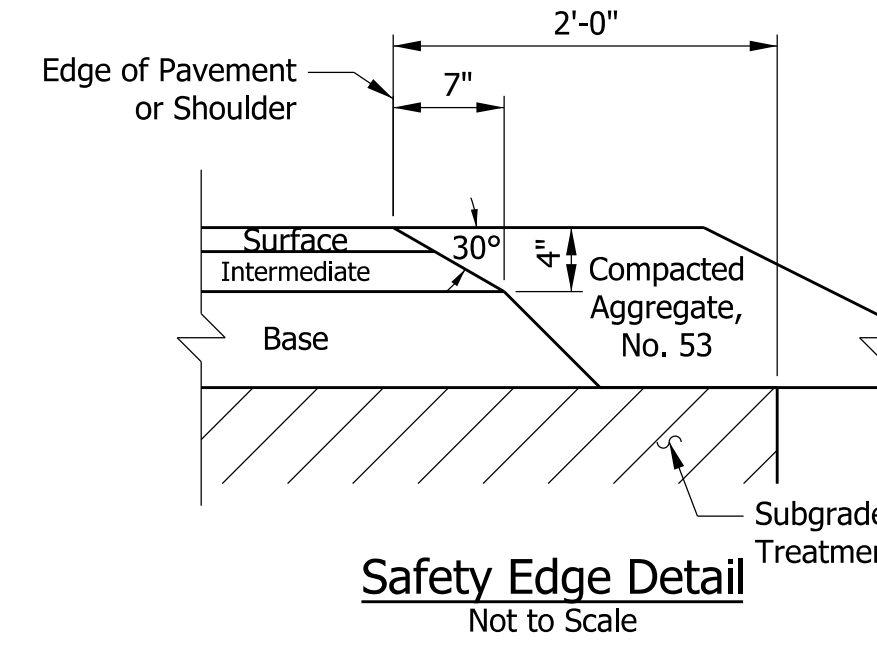
Parrish Roundabout Circulatory Roadway at Splitter Island

LEGEND

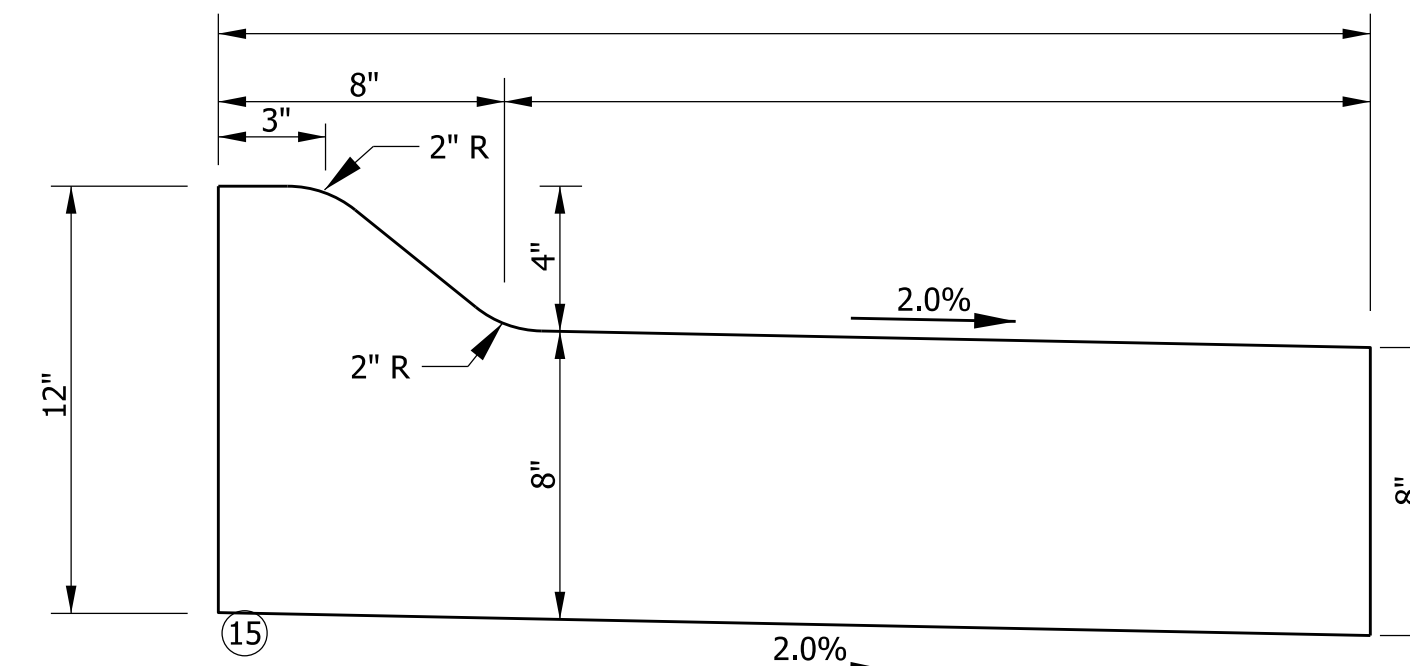
- (A) 8 in. PCCP (Colored), on 8 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IC
 - (A1) 8 in. PCCP (Colored), on 9 in. Compacted Aggregate No. 53, on Subgrade Treatment, Type IC
 - (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 385 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on 550 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on Subgrade Treatment, Type IC
 - (O) Variable Depth Compacted Aggregate, No 73
 - (11) Curb and Gutter, Concrete
 - (12) Curb and Gutter, B, Concrete
 - (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
 - (14) Curb, Integral, Concrete
 - (15) Curb and Gutter, B, Concrete, Modified (Inverted)
 - (26) Sodding, Nursery
 - (27) Mulched Seeding U
- Subgrade Treatment Type X



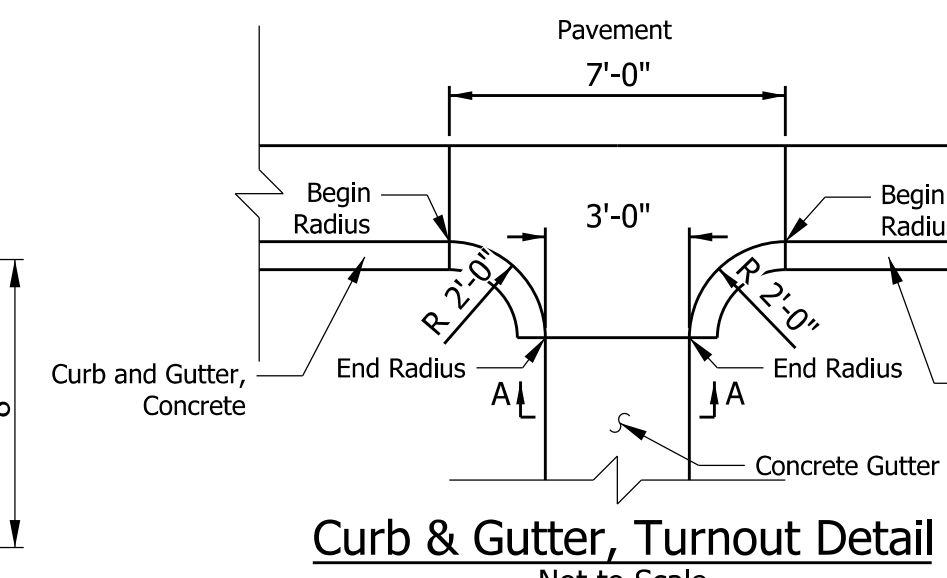
Curb & Gutter, B, Concrete, Modified (Inverted) (3" Reveal)
Scale: 1"=4"



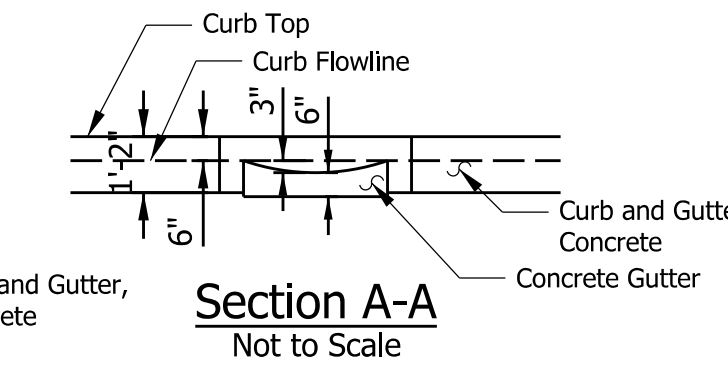
Safety Edge Detail
Not to Scale



Curb & Gutter, B, Concrete, Modified (Inverted)
Scale: 1"=4"



Curb & Gutter, Turnout Detail
Not to Scale



Section A-A
Not to Scale

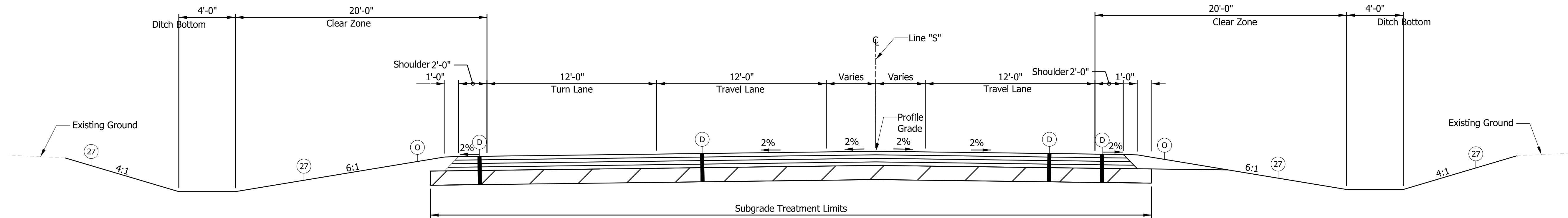
NOTE TO REVIEWERS:

Pavement design to be determined after Stage 2 plan approval.

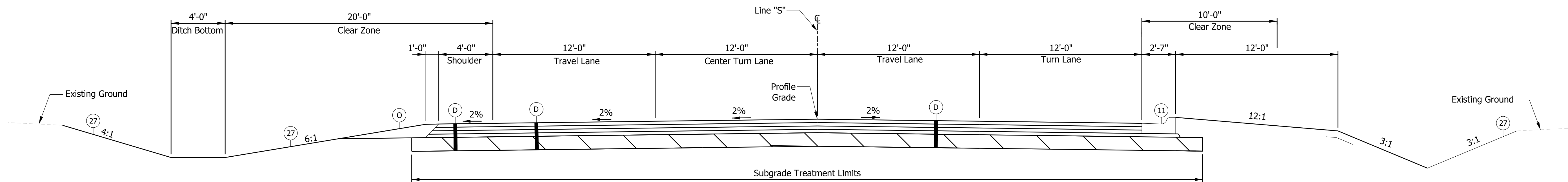
Plot: 6/14/2024

File: RD_Pr Typ Sections.dgn
Model: Typical 2

RECOMMENDED FOR APPROVAL _____ DESIGNED: NSK CHECKED: JH	DESIGN ENGINEER _____ DATE _____ DRAWN: NSK CHECKED: JH	INDIANA DEPARTMENT OF TRANSPORTATION		SCALE 1/4" = 1'-0"	BRIDGE FILE
		TYPICAL CROSS SECTIONS		DESIGNATION 1702994	SHEETS 4 of 55
				CONTRACT R-43388	PROJECT 1702994



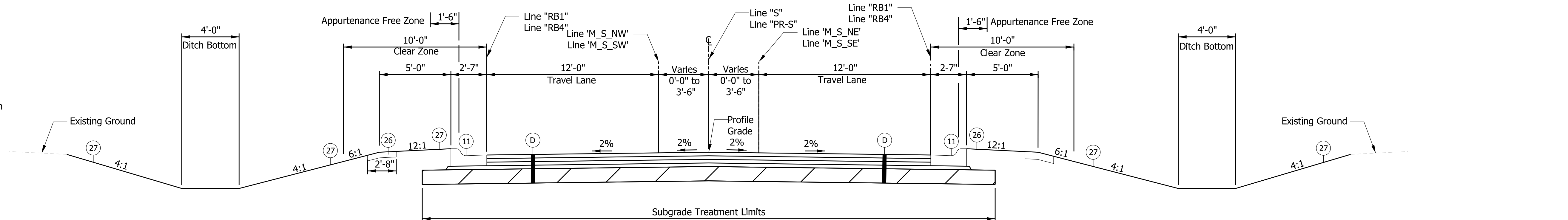
PARRISH AVE
Sta. 17+60.00 to 18+00.00 Line "S"



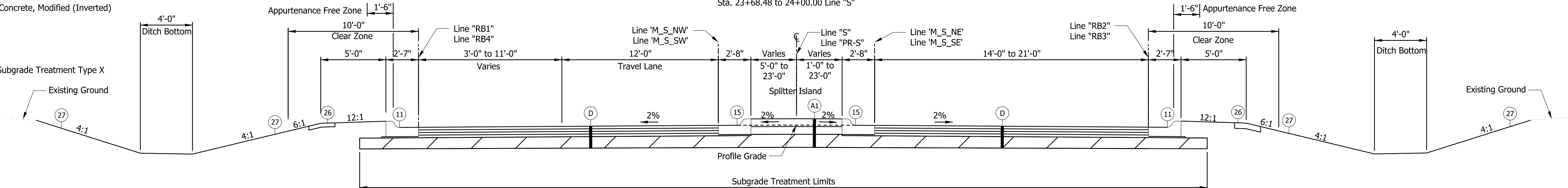
PARRISH AVE
Sta. 24+00.00 to 25+00.00 Line "S"

LEGEND

- (A) 8 in. PCCP (Colored), on 8 in. Compacted Aggregate No. 53 Subgrade Treatment, Type IC
- (A1) 8 in. PCCP (Colored), on 9 in. Compacted Aggregate No. 53, on Subgrade Treatment, Type IC
- (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 385 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on 550 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on Subgrade Treatment, Type IC
- (O) Variable Depth Compacted Aggregate, No 73
- (11) Curb and Gutter, Concrete
- (12) Curb and Gutter, B, Concrete
- (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
- (14) Curb, Integral, Concrete
- (15) Curb and Gutter, B, Concrete, Modified (Inverted)
- (26) Sodding, Nursery
- (27) Mulched Seeding U



PARRISH AVE
Sta. 18+00.00 to 19+05.04 Line "S"
Sta. 22+62.11 to 23+74.54 Line "PR-S"
Sta. 23+68.48 to 24+00.00 Line "S"



PARRISH AVE
Sta. 19+05.04 to 19+41.51 Line "S"
Sta. 19+41.51 to 19+92.27 Line "PR-S"
Sta. 21+62.17 to 22+62.11 Line "PR-S"

Plot: 6/14/2024

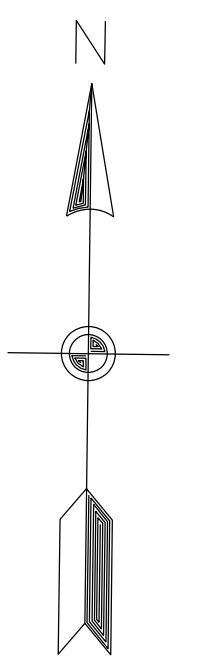
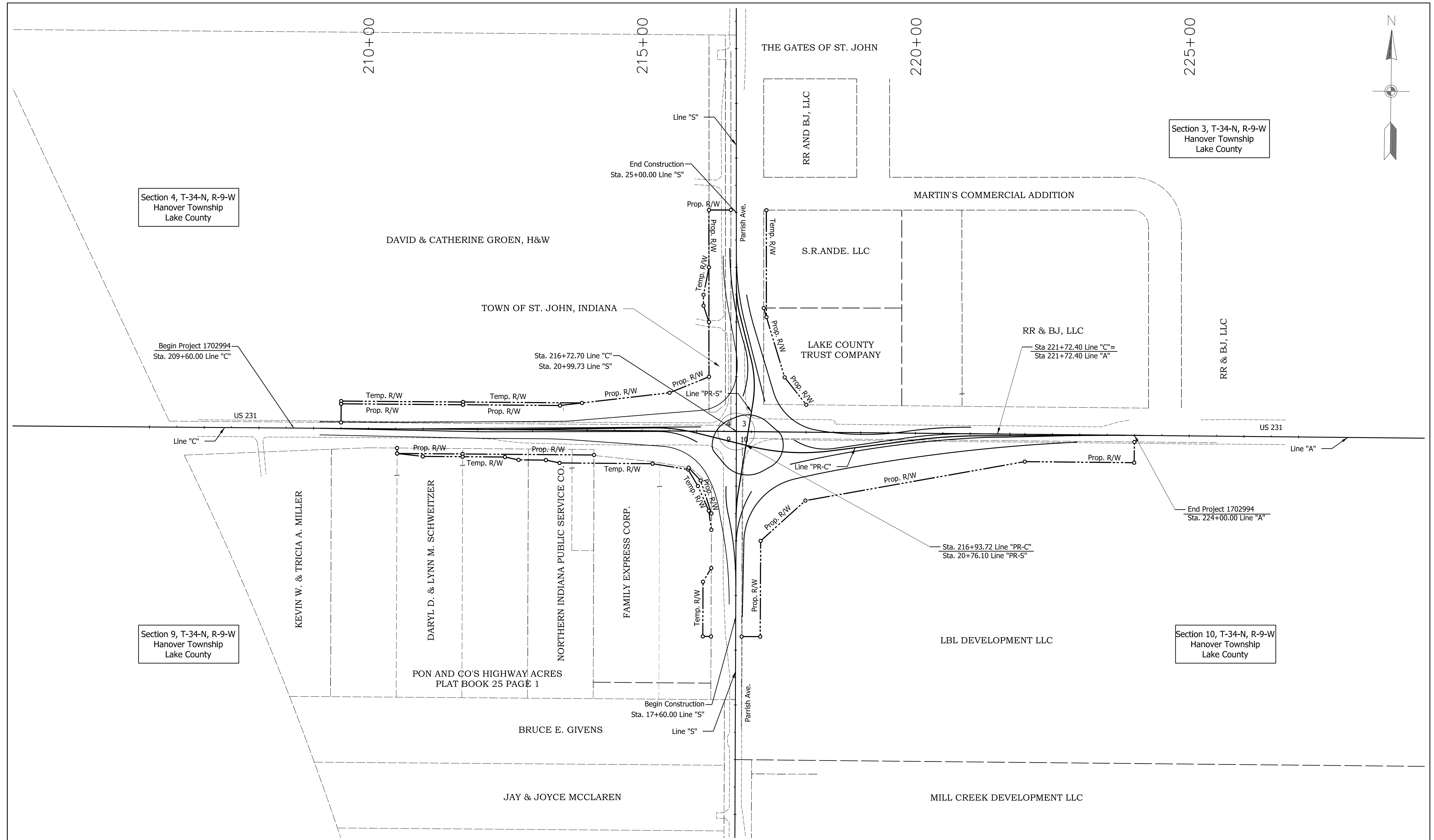
File: RD_Pr_Typ Sections.dgn
Model: Typical 3

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

SCALE 1/4" = 1'-0"	BRIDGE FILE
	DESIGNATION 1702994
	SHEETS 5 of 55
CONTRACT R-43388	PROJECT 1702994



Section 4, T-34-N, R-9-W
Hanover Township
Lake County

Section 3, T-34-N, R-9-W
Hanover Township
Lake County

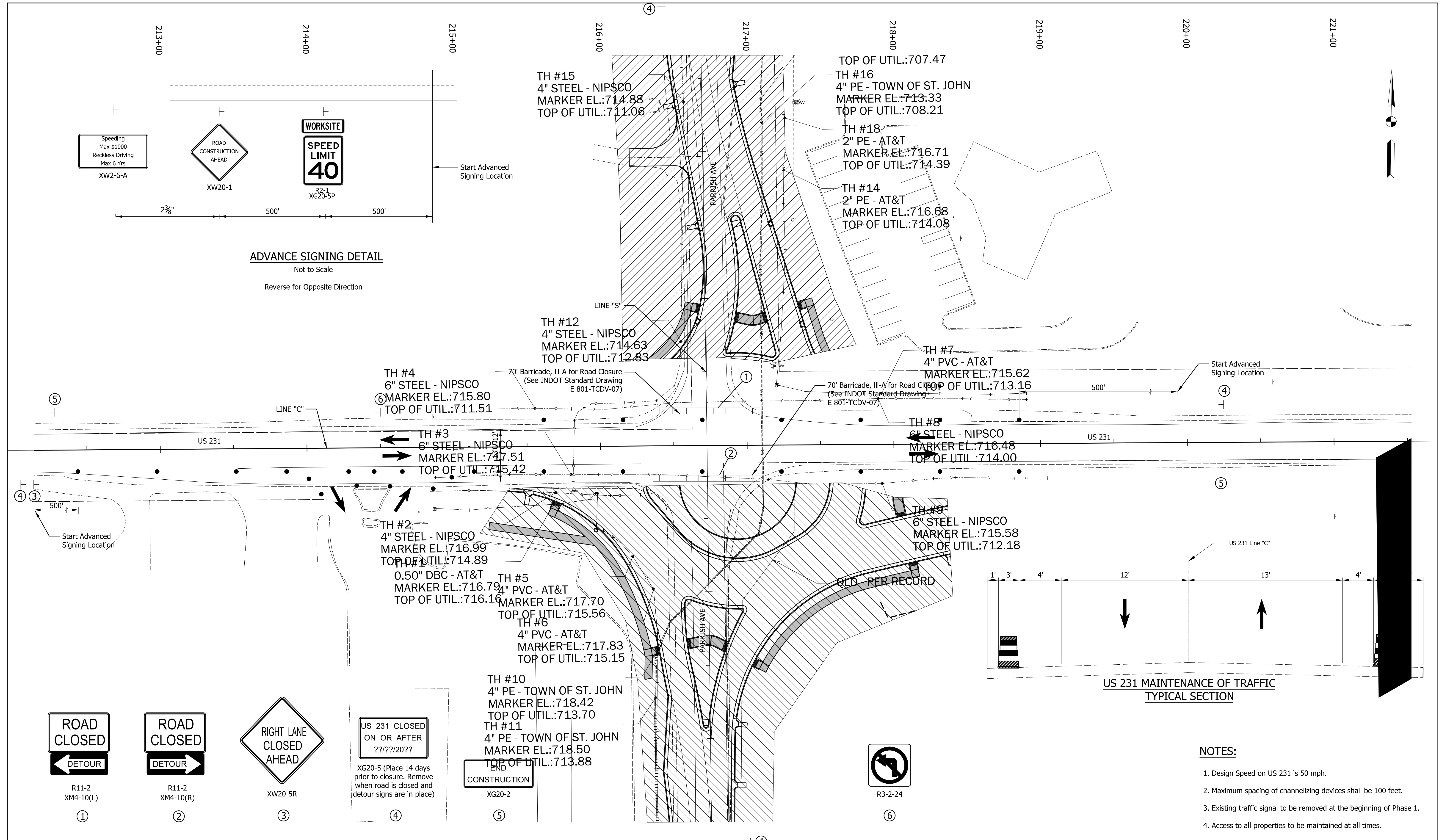
Section 9, T-34-N, R-9-W
Hanover Township
Lake County

Section 10, T-34-N, R-9-W
Hanover Township
Lake County

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: NSK DRAWN: NSK CHECKED: JAH CHECKED: JAH	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1"=80'	BRIDGE FILE NA
	PLAT NO. 1		SURVEY BOOK -	SHEETS 6 of 55
			CONTRACT R-43388	PROJECT 1702994

Plot: 6/14/2024

File: RD_Plat.dgn
Model: Geometric Layout



ADVANCE SIGNING DETAIL
Not to Scale
Reverse for Opposite Direction

**US 231 MAINTENANCE OF TRAFFIC
TYPICAL SECTION**

NOTES:

1. Design Speed on US 231 is 50 mph.
2. Maximum spacing of channelizing devices shall be 100 feet.
3. Existing traffic signal to be removed at the beginning of Phase 1.
4. Access to all properties to be maintained at all times.

LEGEND

- Traffic Flow
- Type III Barricade
- Channelizing Device
- Sign
- Construction Area

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

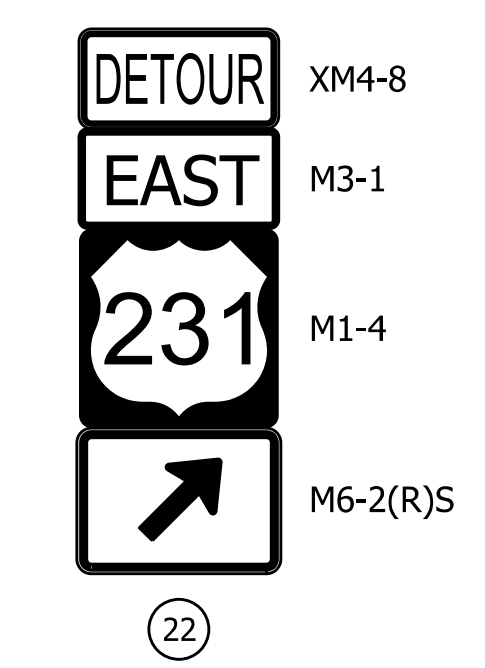
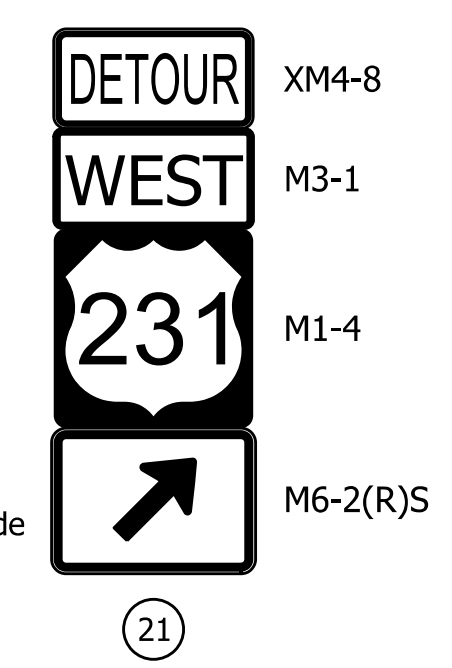
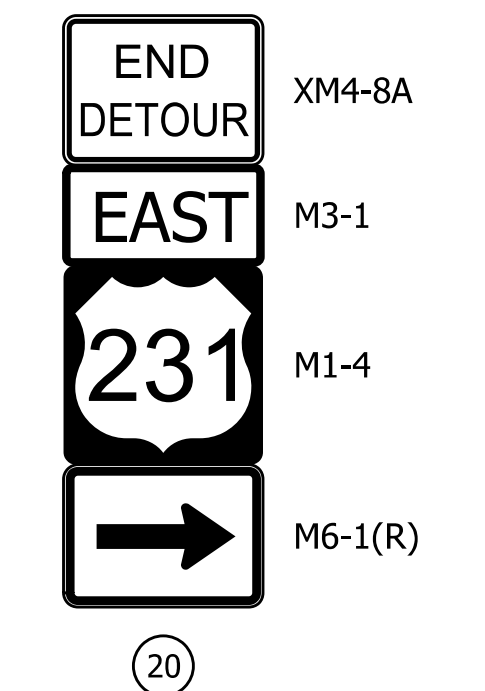
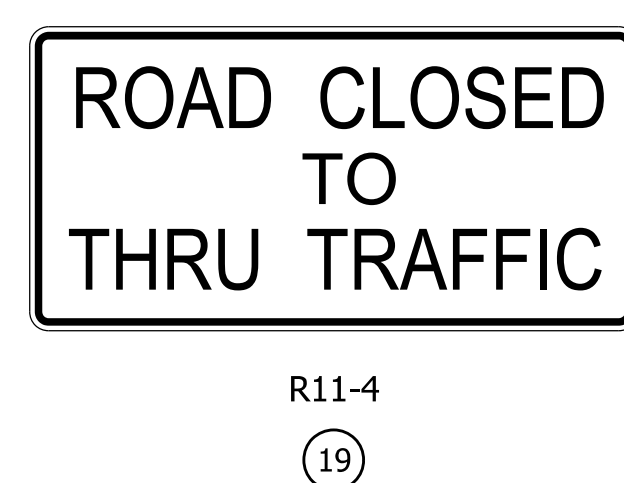
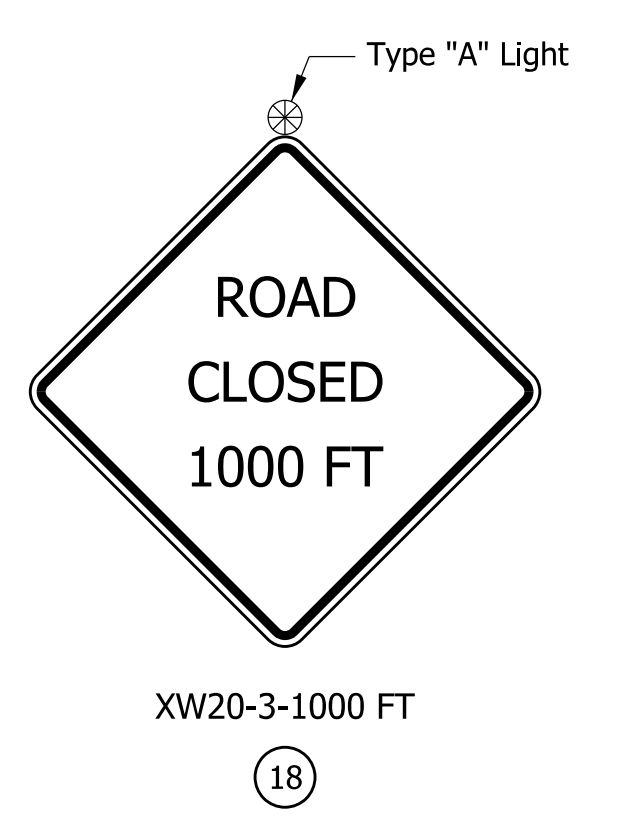
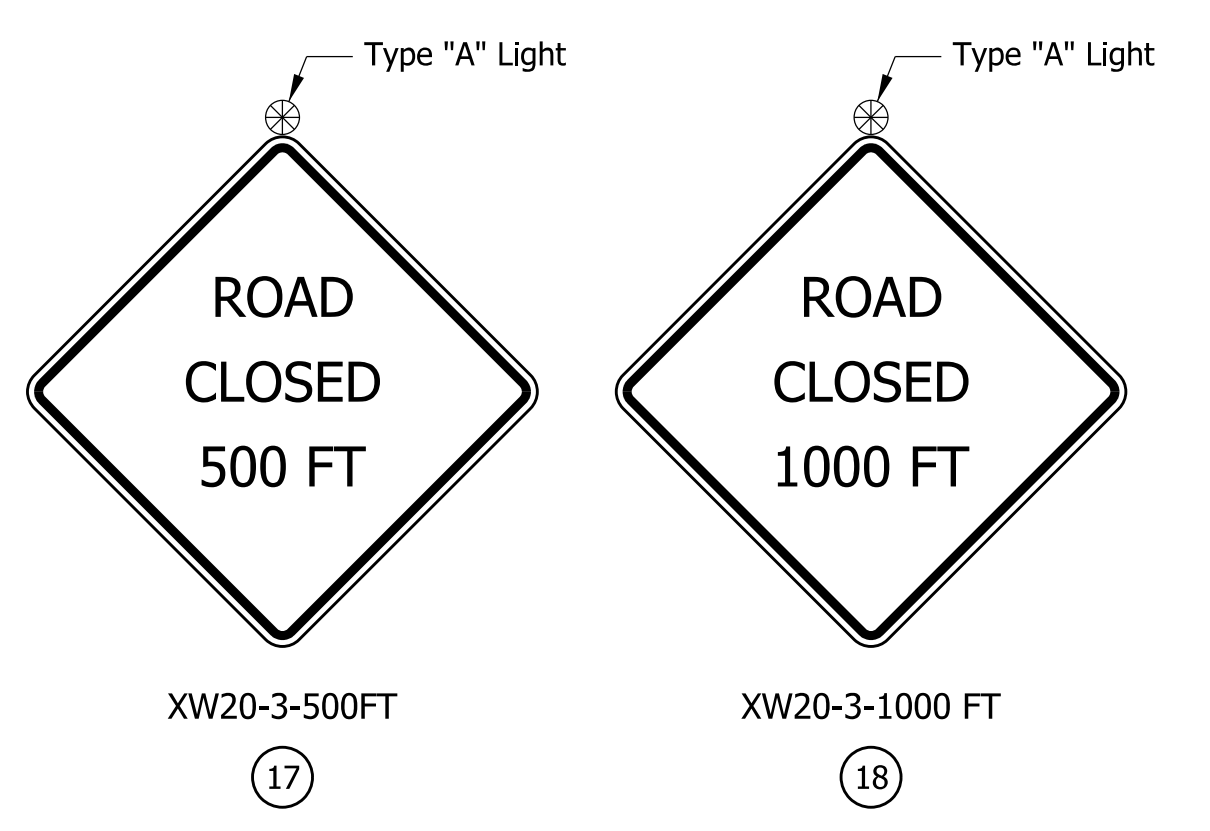
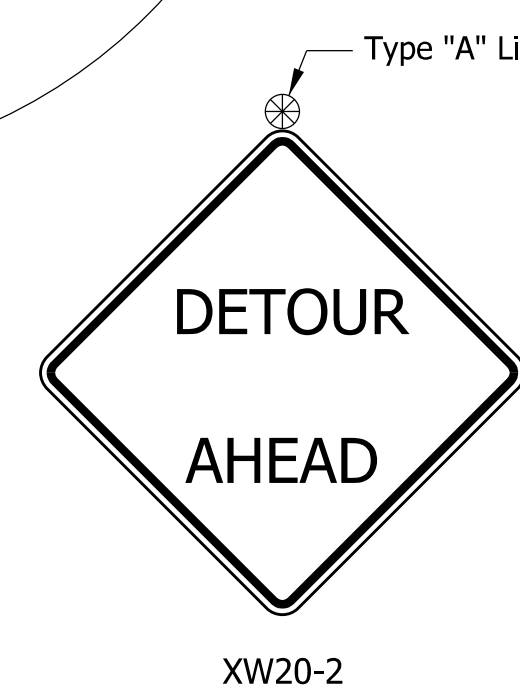
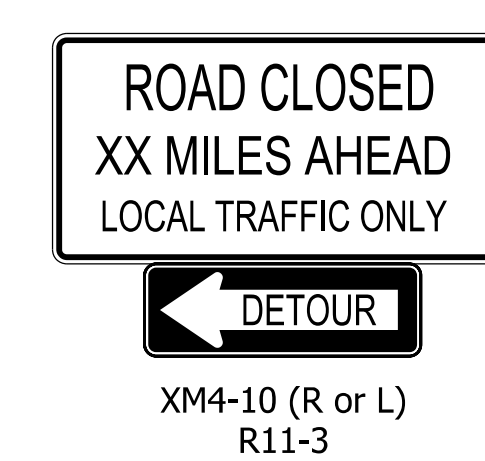
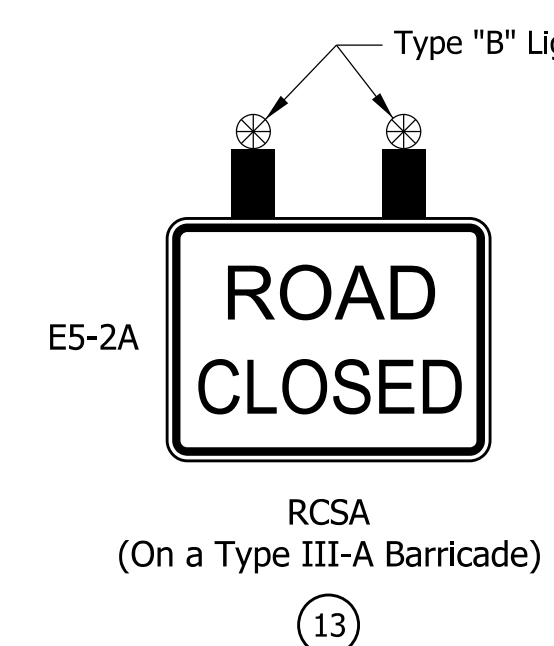
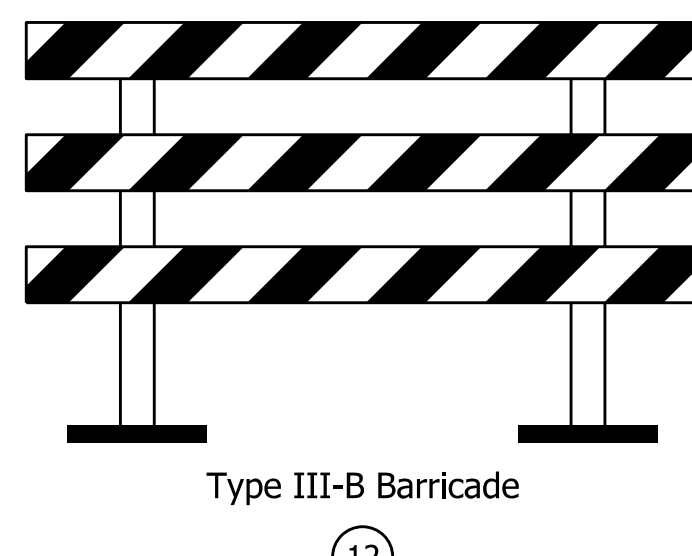
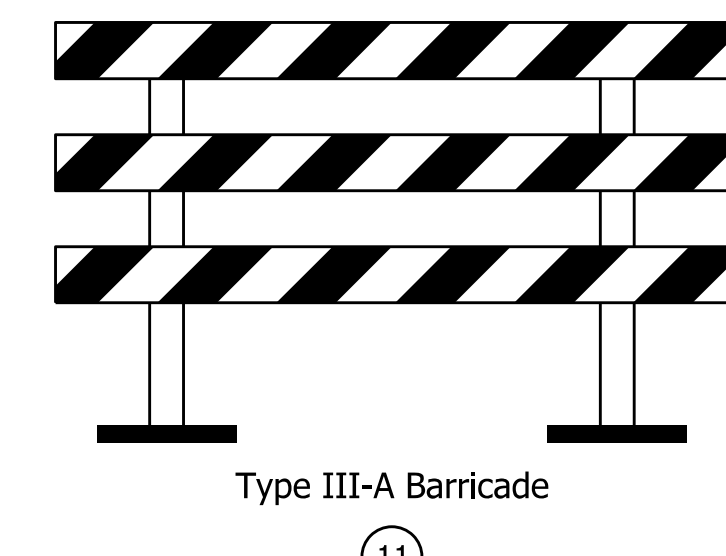
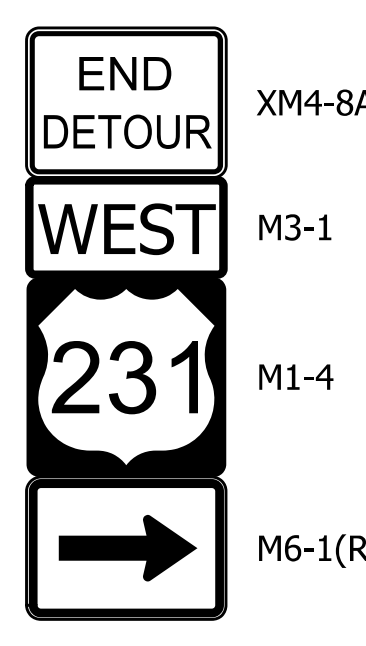
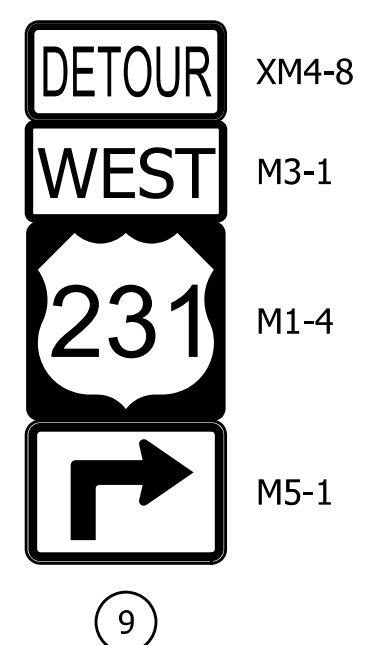
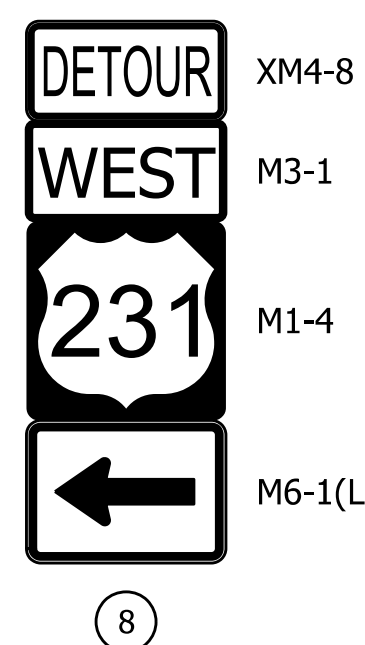
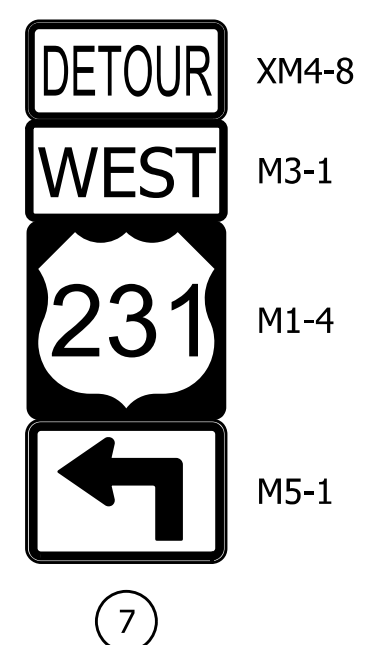
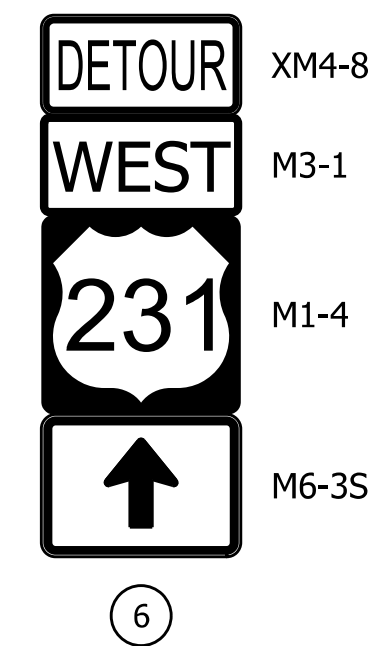
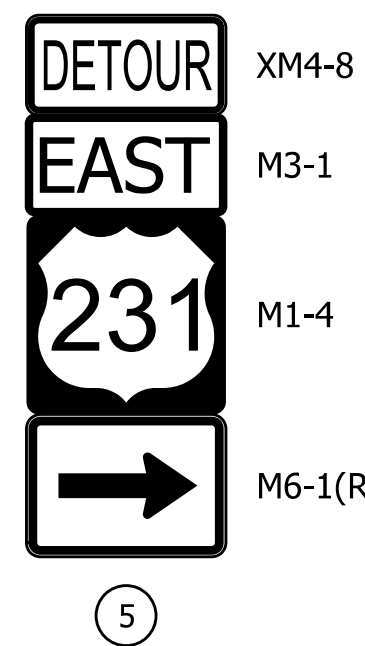
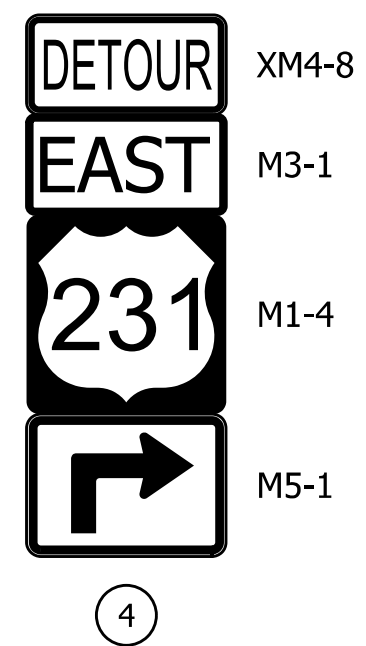
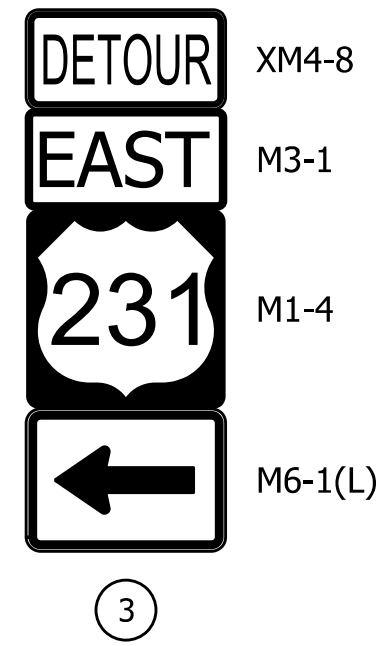
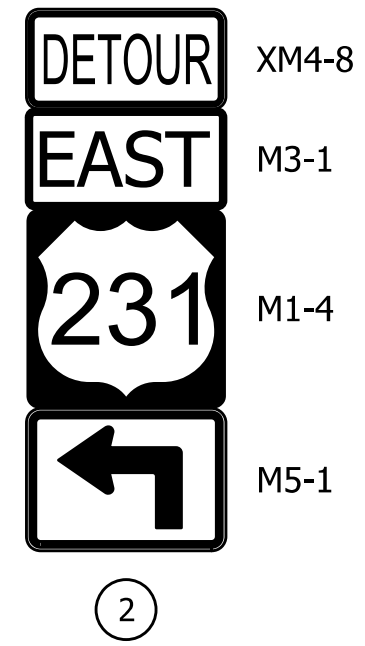
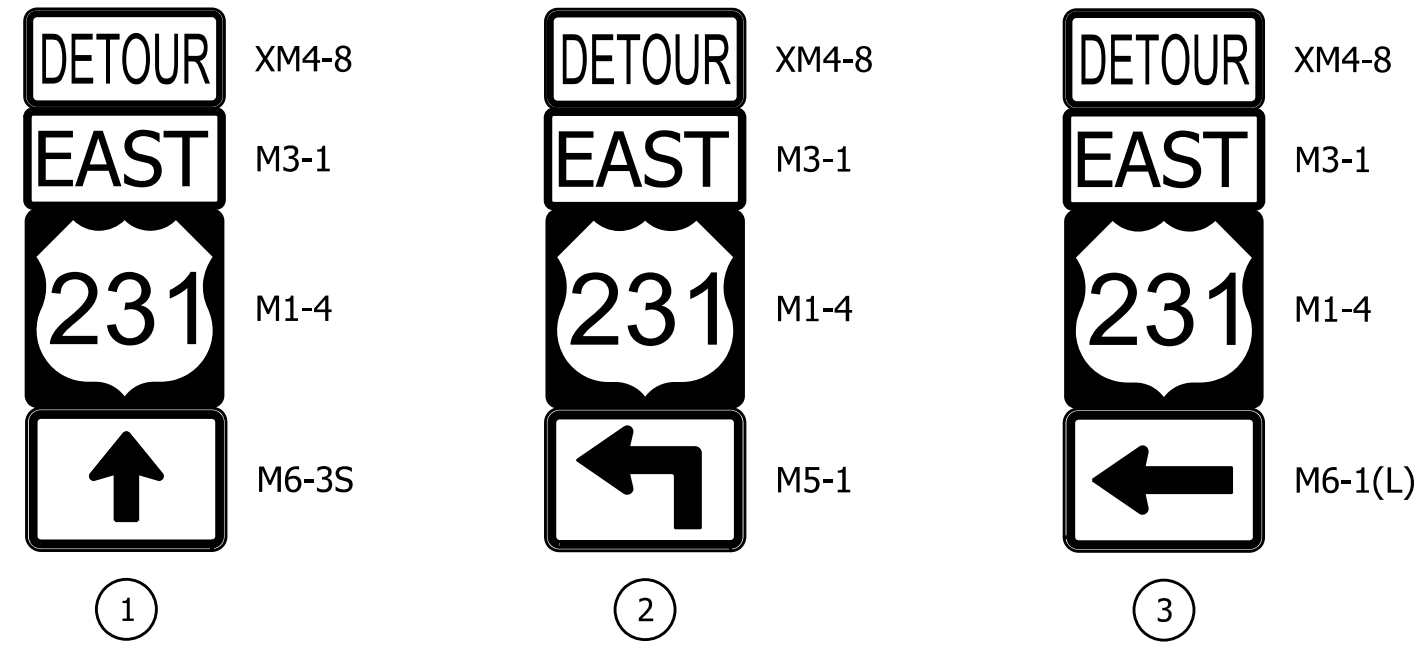
INDIANA
DEPARTMENT OF TRANSPORTATION

**MAINTENANCE OF TRAFFIC
US 231 - PHASE 1**

SCALE 1"=30'	BRIDGE FILE
	DESIGNATION 1702994
	SHEETS 7 of 55
CONTRACT R-43388	PROJECT 1702994

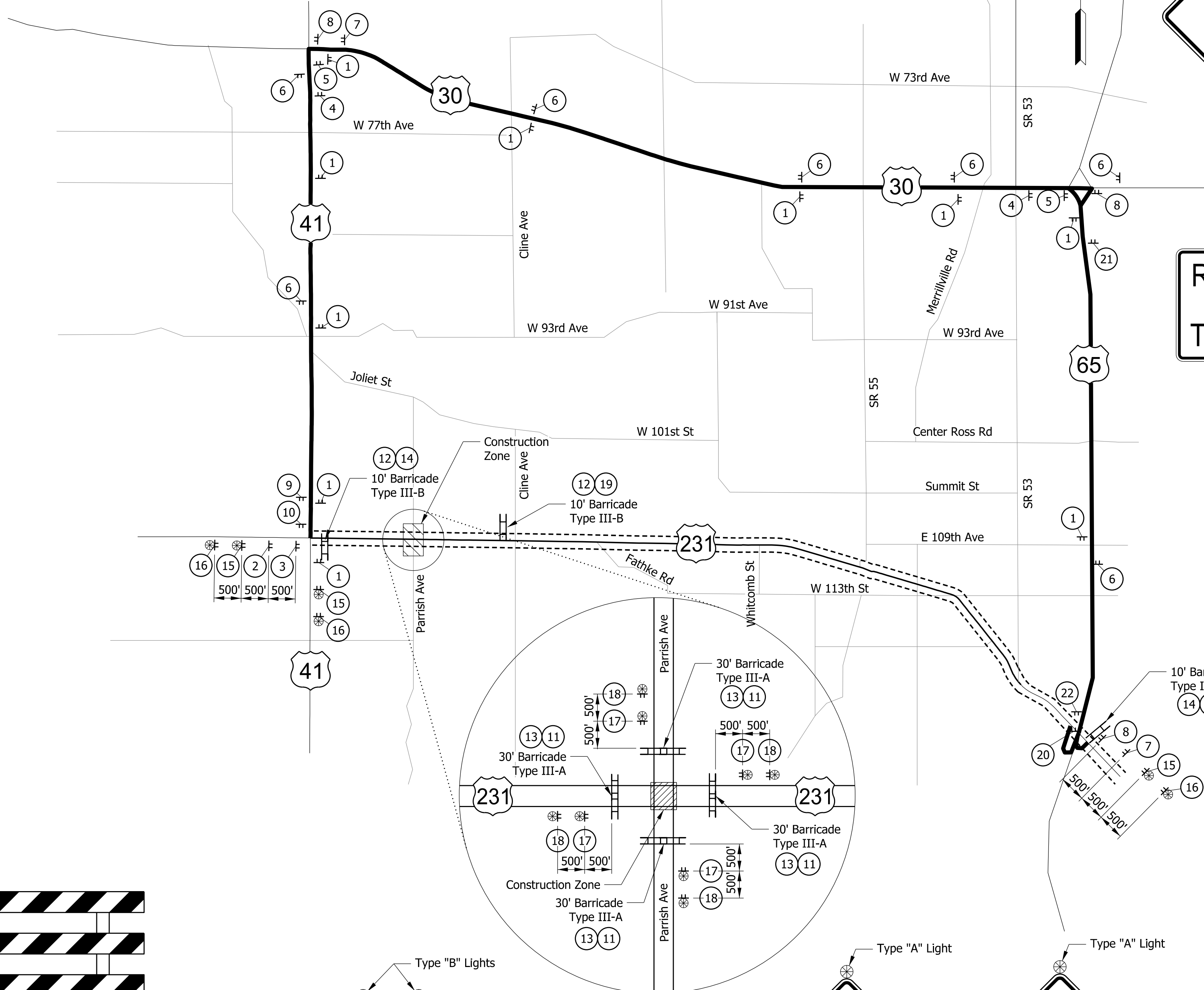
Plot: 6/14/2024

File: RD_MOT.dgn
Model: BR_Detail Sheet



MOT SUMMARY TABLE		
DESCRIPTION	UNIT	QUANTITY
DETOUR ROUTE MARKER ASSEMBLY	EACH	54
CONSTRUCTION SIGN, A	EACH	12
CONSTRUCTION SIGN, B	EACH	14
ROAD CLOSURE SIGN ASSEMBLY	EACH	7
BARRICADE, III-A	LFT	120
BARRICADE, III-B	LFT	30

THE ABOVE QUANTITIES ARE FOR THIS SHEET ONLY



LEGEND

- - Detoured Route
- ⊥ - Construction Sign
- ⊕ - Sign with Warning Light
- ▨ - Construction Area
- - Detour Route
- ▬ - Barricade Type III-A or III-B
- - Traffic Flow
- - Channelizing Device

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	12/2022	DRAWN: NSK
CHECKED: JH	12/2022	CHECKED: JH

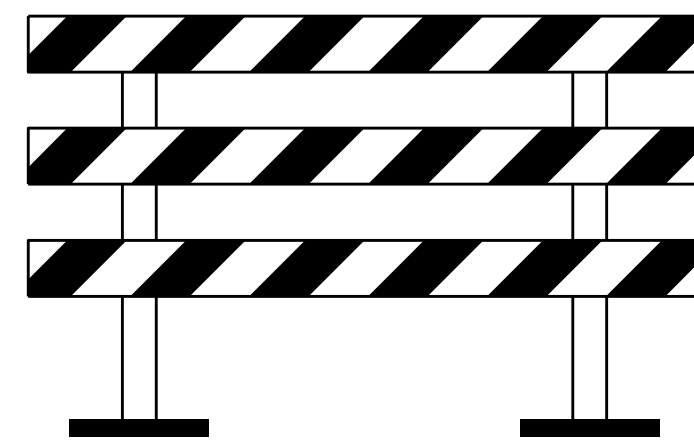
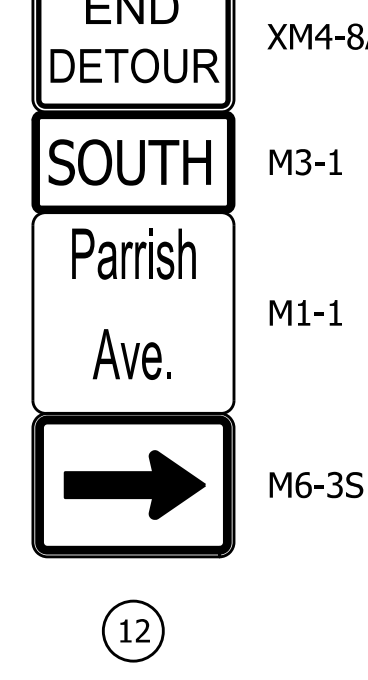
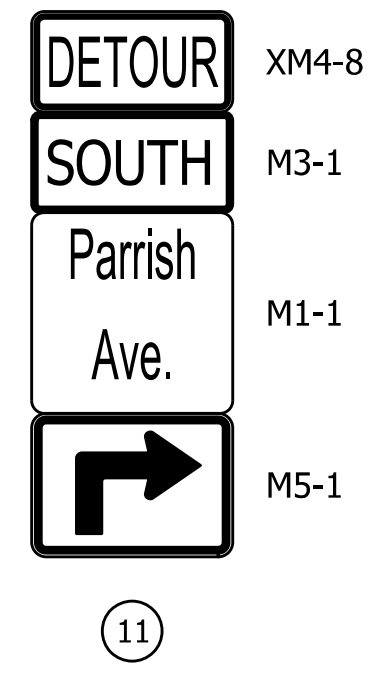
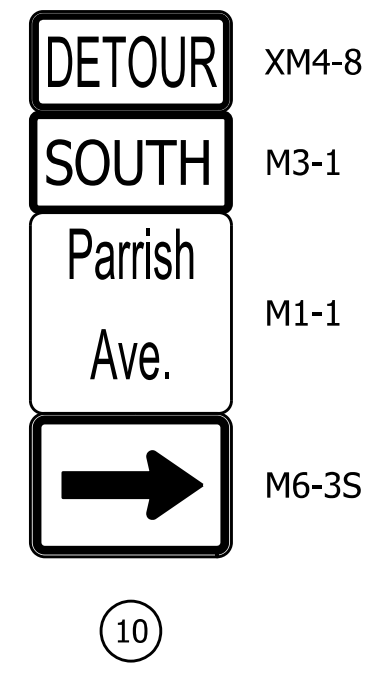
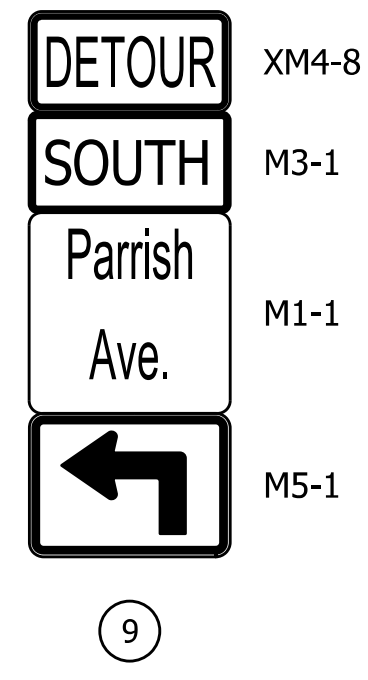
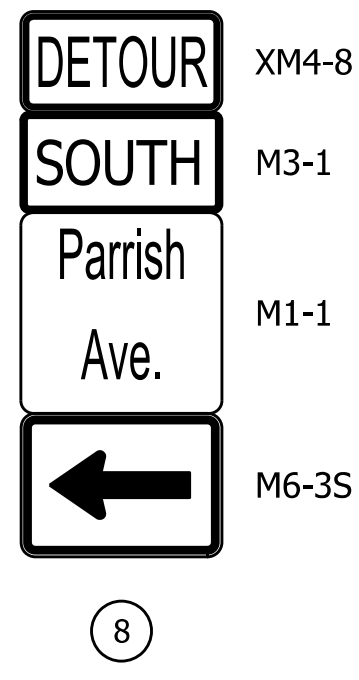
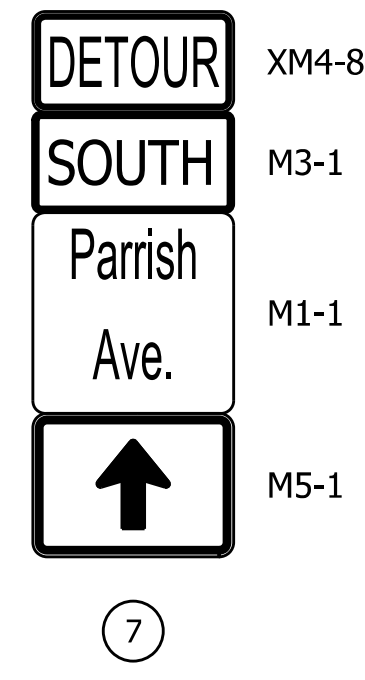
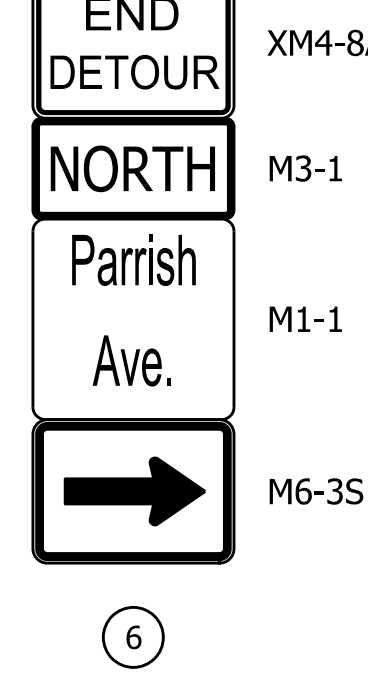
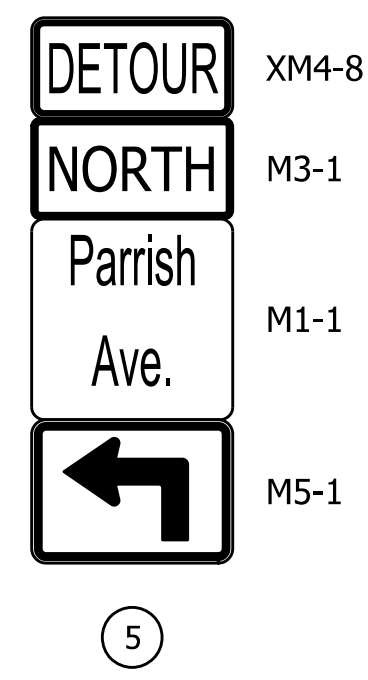
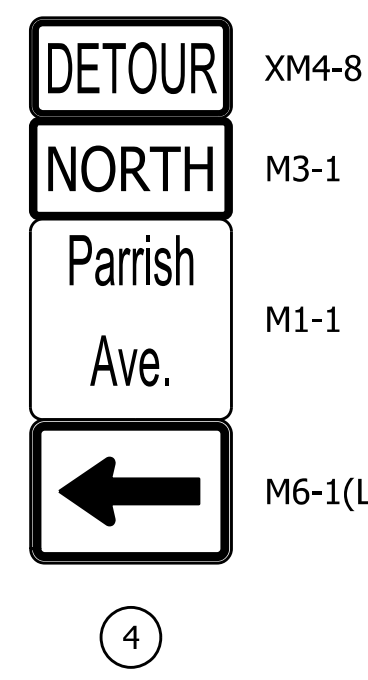
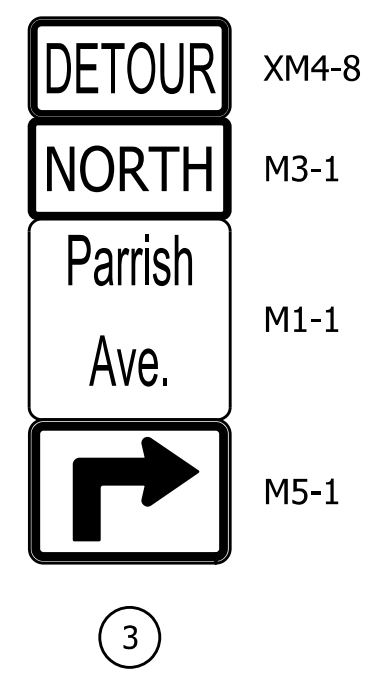
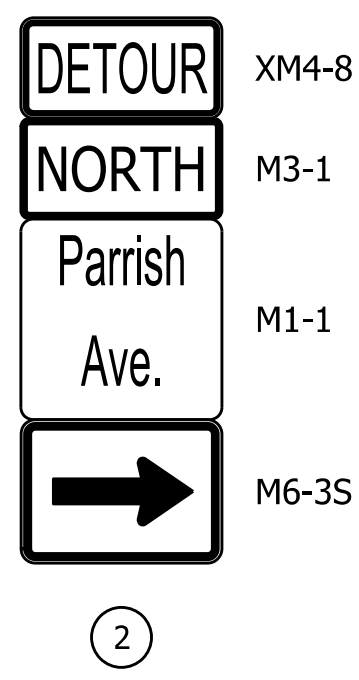
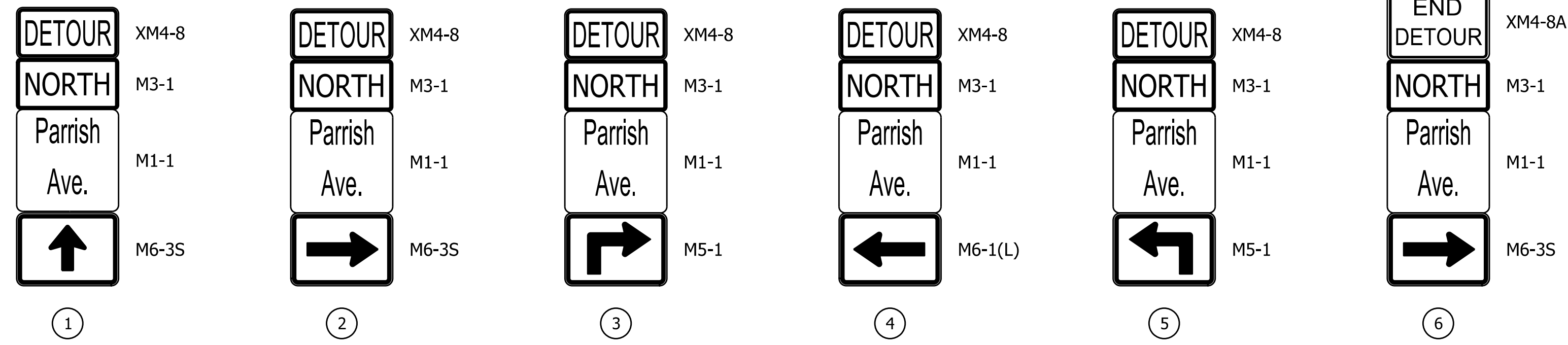
INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC US 231 DETOUR - PHASE 2

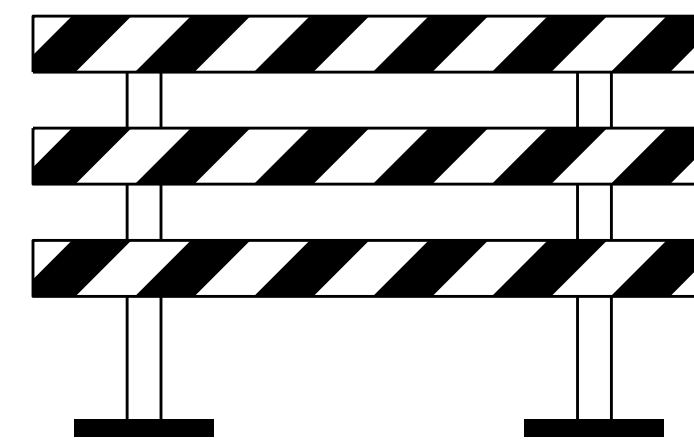
SCALE	BRIDGE FILE
1"=2000'	
	DESIGNATION
	1702994
	SHEETS
	8 of 55
CONTRACT	PROJECT
R-43388	1702994

Plot: 6/14/2024

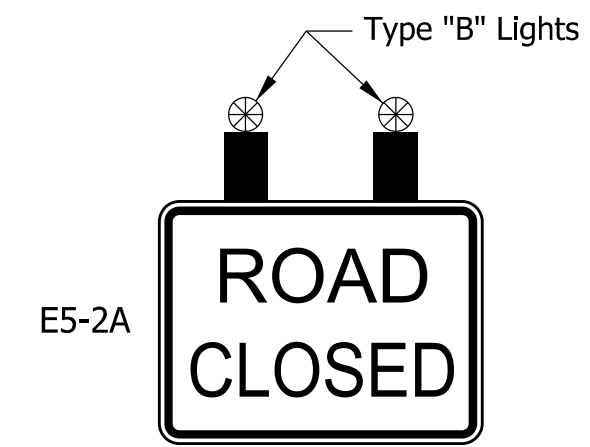
File: RD_Detour 231.dgn



Type III-A Barricade
13



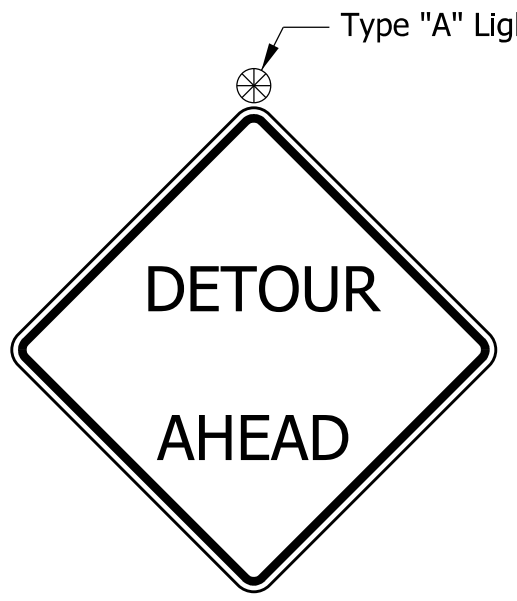
Type III-B Barricade
14



RCSA
(On a Type III-A Barricade)
15



ROAD CLOSED
XX MILES AHEAD
LOCAL TRAFFIC ONLY
XM4-10 (R or L)
R11-3
16



XW20-2
17



R11-73B
18



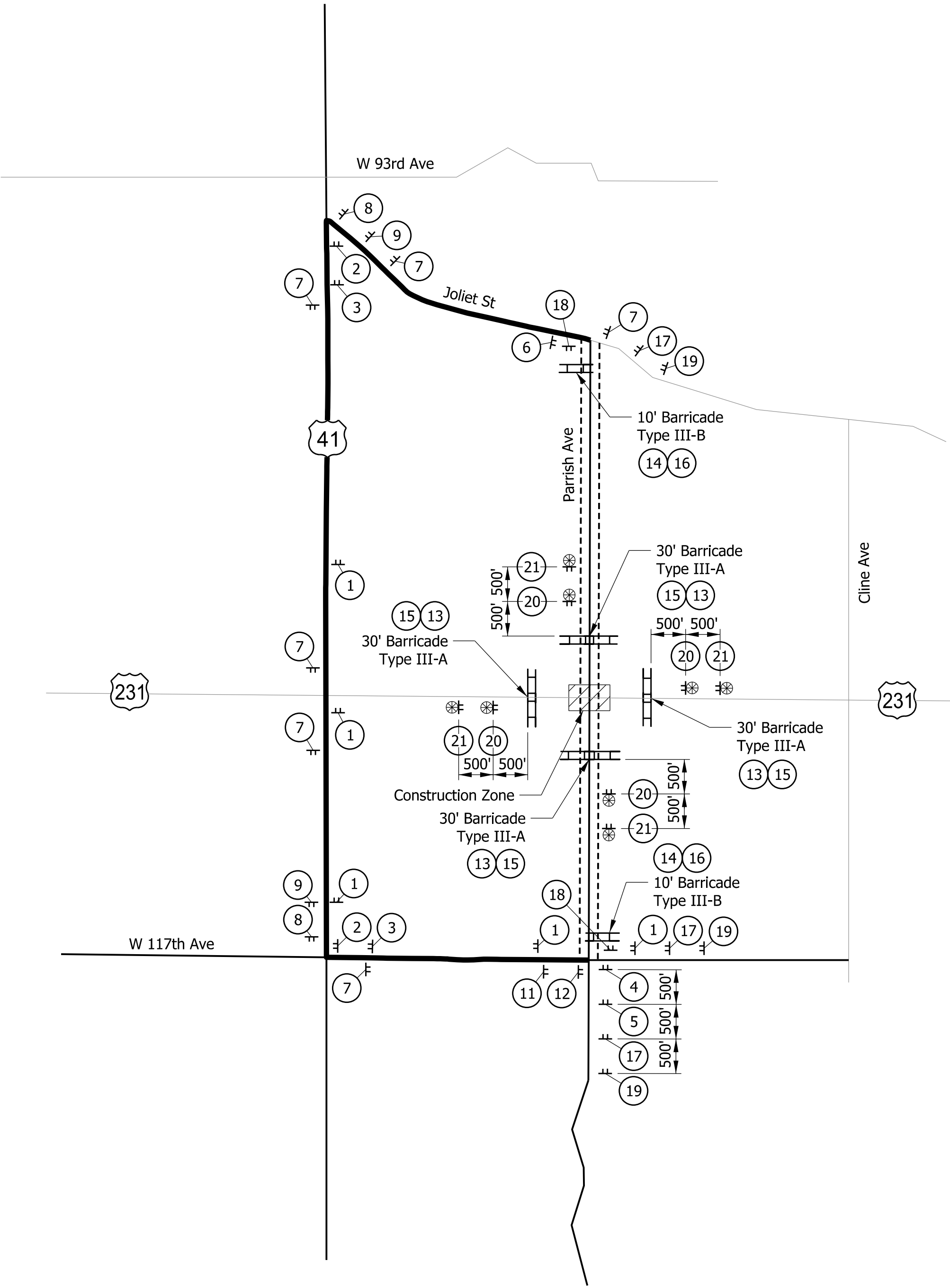
XW20-3
19



XW20-3-500FT
20



XW20-3-1000 FT
21



MOT SUMMARY TABLE		
DESCRIPTION	UNIT	QUANTITY
DETOUR ROUTE MARKER ASSEMBLY	EACH	24
CONSTRUCTION SIGN, A	EACH	2
CONSTRUCTION SIGN, B	EACH	14
ROAD CLOSURE SIGN ASSEMBLY	EACH	6
BARRICADE, III-A	LFT	120
BARRICADE, III-B	LFT	20

THE ABOVE QUANTITIES ARE FOR THIS SHEET ONLY

LEGEND

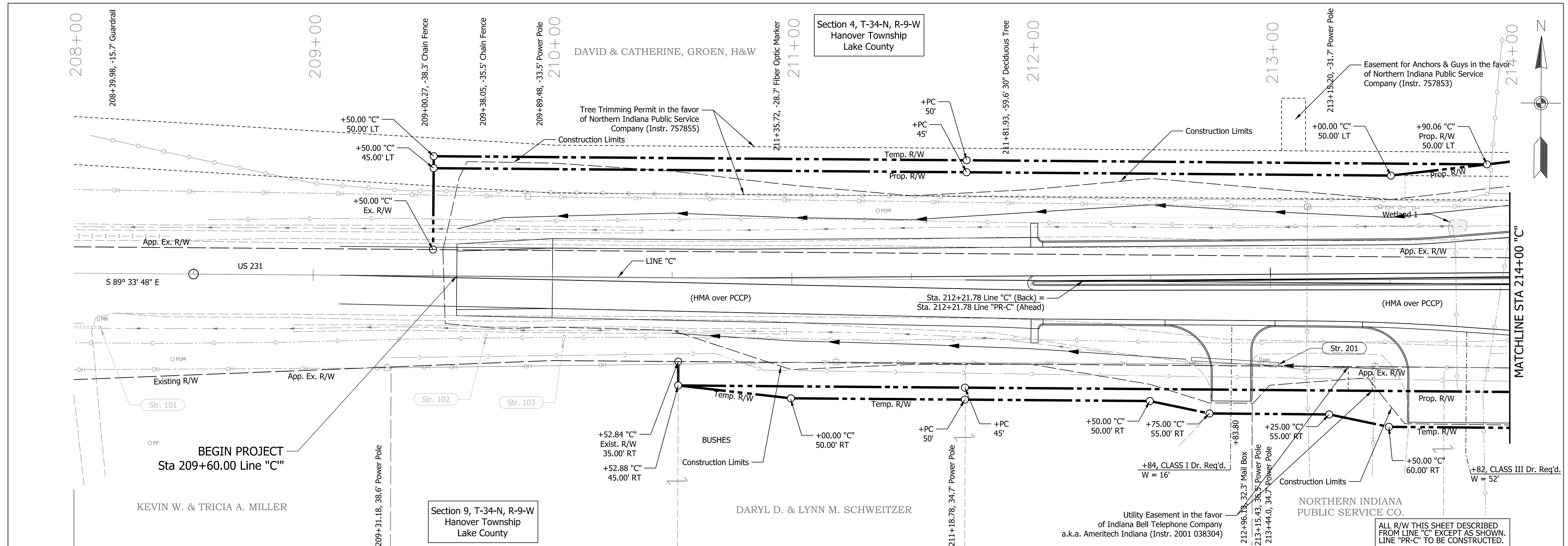
- - Detoured Route
- ▨ - Construction Area
- ⊥ - Sign
- ▬ - Detour Route
- ⊕ - Sign with Warning Light
- ▬▬ - Barricade Type III-A or III-B

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	12/2022	DRAWN: NSK 12/2022
CHECKED: JH	12/2022	CHECKED: JH 12/2022

INDIANA
DEPARTMENT OF TRANSPORTATION

**MAINTENANCE OF TRAFFIC
PARRISH AVE DETOUR PHASE 1 & 2**

SCALE 1"=2000'	BRIDGE FILE
	DESIGNATION 1702994
	SHEETS 9 of 55
CONTRACT R-43388	PROJECT 1702994

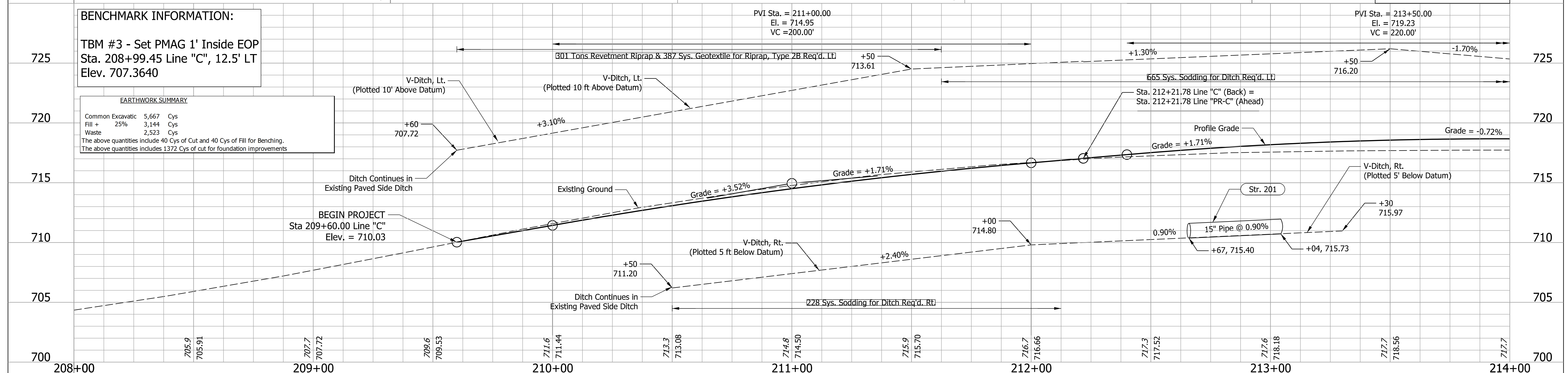


BENCHMARK INFORMATION:
 TBM #3 - Set PMAG 1' Inside EOP
 Sta. 208+99.45 Line "C", 12.5' LT
 Elev. 707.3640

EARTHWORK SUMMARY

Common Excavatic	5,667	Cys
Fill +	25%	3,144 Cys
Waste	2,523	Cys

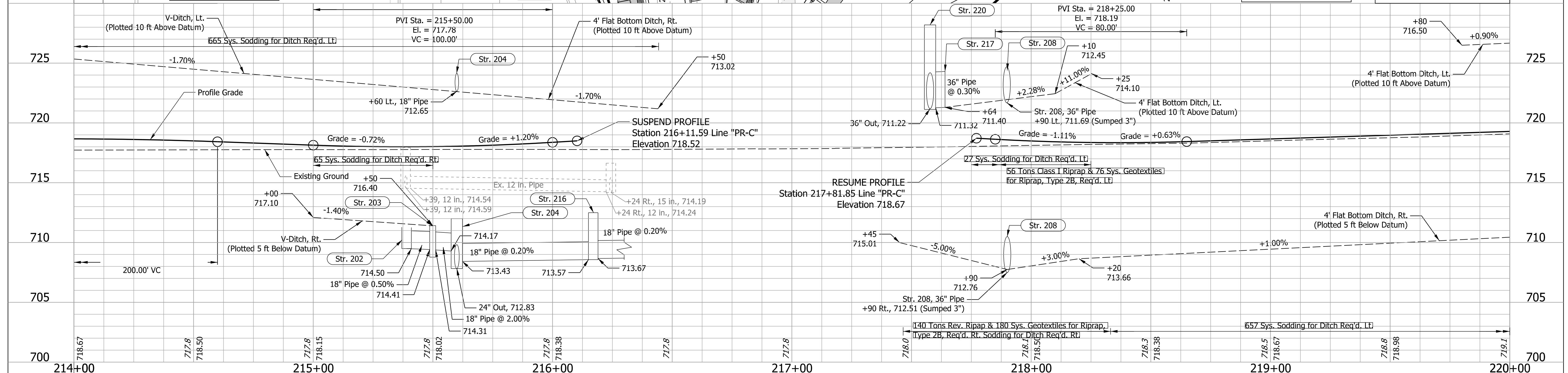
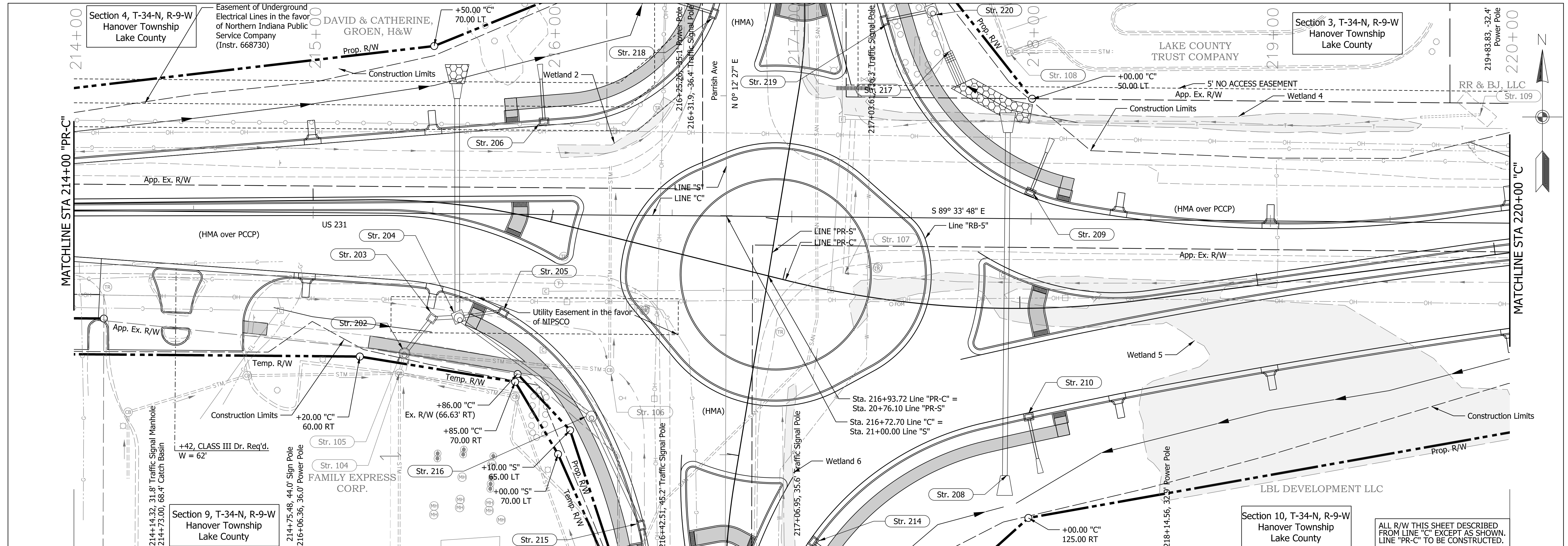
The above quantities include 40 Cys of Cut and 40 Cys of Fill for Benching.
 The above quantities includes 1372 Cys of cut for foundation improvements



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
DESIGNED: NSK	DRAWN: NSK			1"=20'	DESIGNATION
CHECKED: JAH	CHECKED: JAH			1"=4'	1702994
			PLAN & PROFILE US 231 - LINE "C"	SURVEY BOOK	SHEETS
				R-43388	10 of 55
				PROJECT	1702994

Plot: 6/14/2024

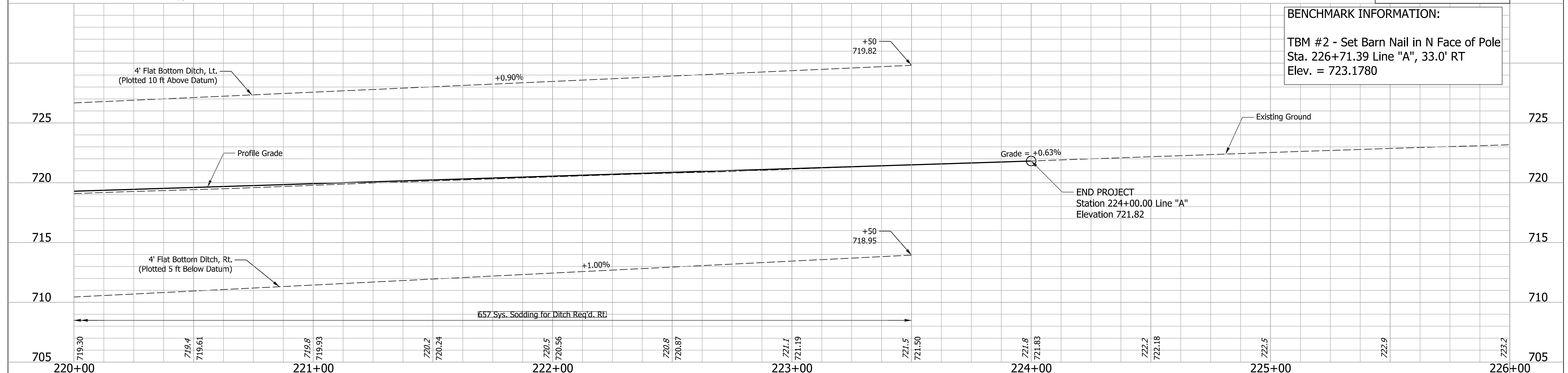
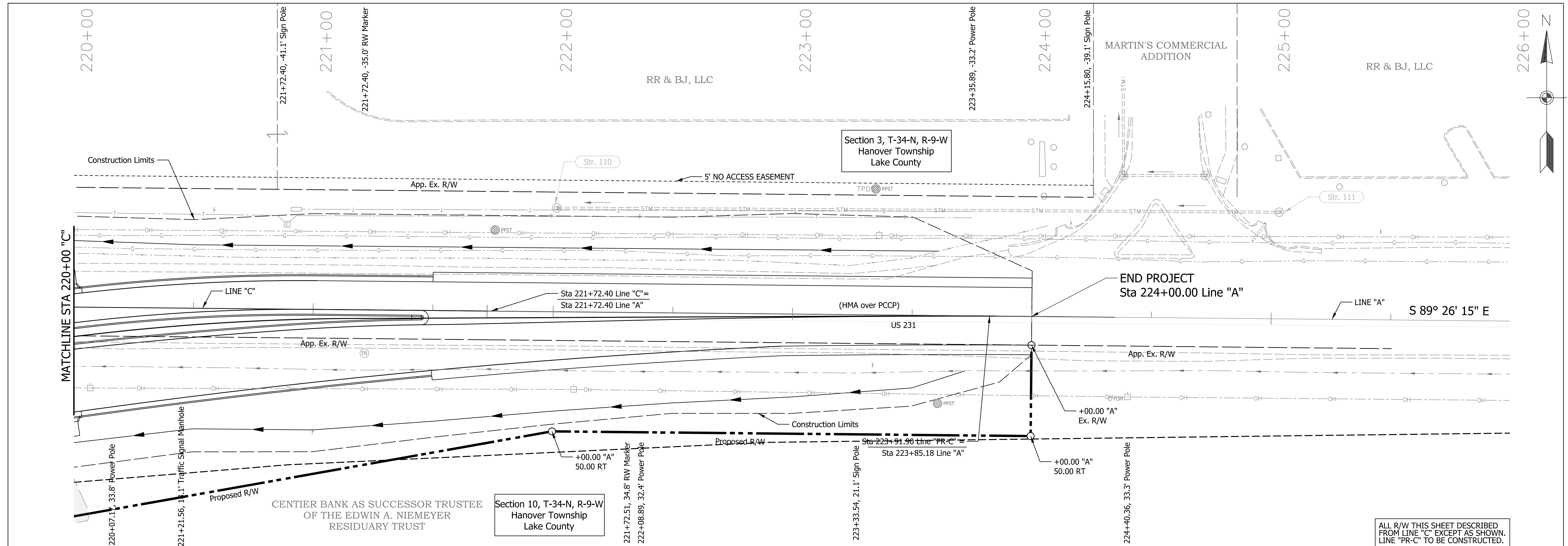
File: RD_Plan&Profile1.dgn
 Model: BR_Detail Sheet



RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____			HORIZONTAL SCALE 1"=20' BRIDGE FILE	
			VERTICAL SCALE 1"=4' DESIGNATION 1702994	
DESIGNED: NSK CHECKED: JAH			DRAWN: NSK CHECKED: JAH	
INDIANA DEPARTMENT OF TRANSPORTATION PLAN & PROFILE US 231 - LINE "C"			SURVEY BOOK 11 of 55 SHEETS	
			CONTRACT R-43388 PROJECT 1702994	

Plot: 6/14/2024

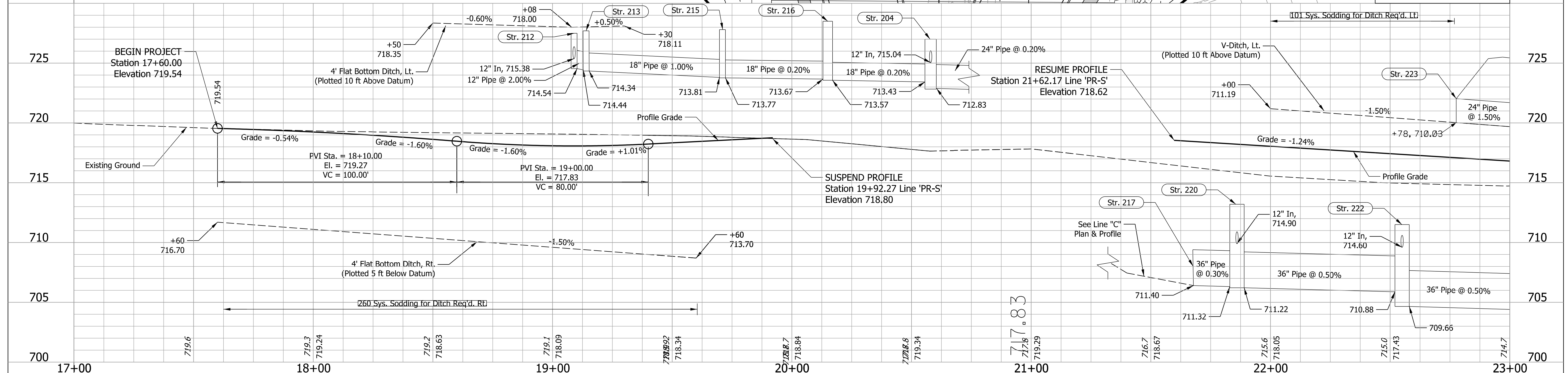
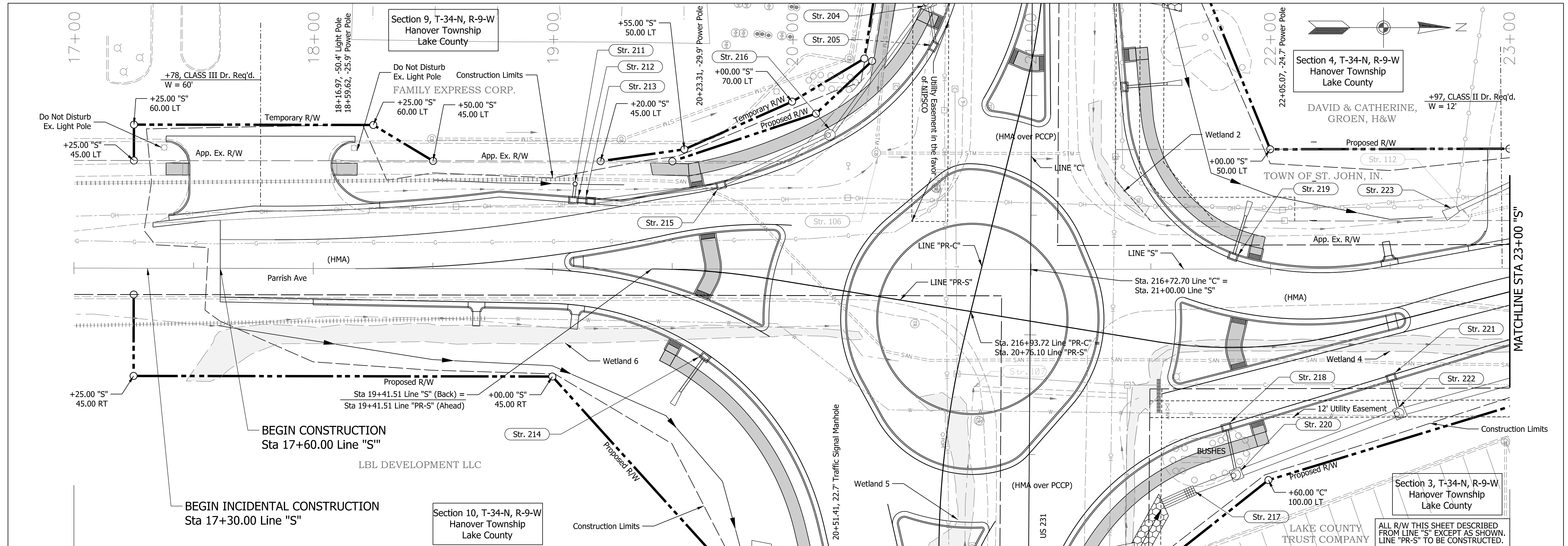
File: RD_Plan&Profile2.dgn
Model:BR_Detail Sheet



RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: NSK DRAWN: NSK CHECKED: JAH CHECKED: JAH	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE
	PLAN & PROFILE US 231 - LINE "C" & "A"		1"=20'	DESIGNATION
			1"=4'	1702994
			SURVEY BOOK	SHEETS
		R-43388	12 of 55	
		PROJECT	1702994	

Plot: 6/14/2024

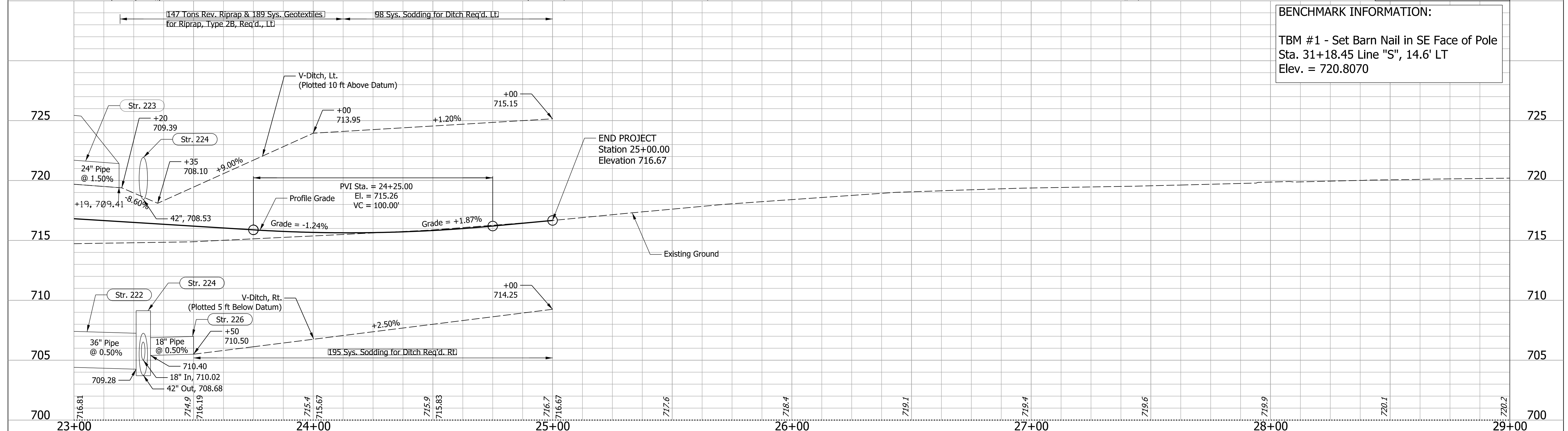
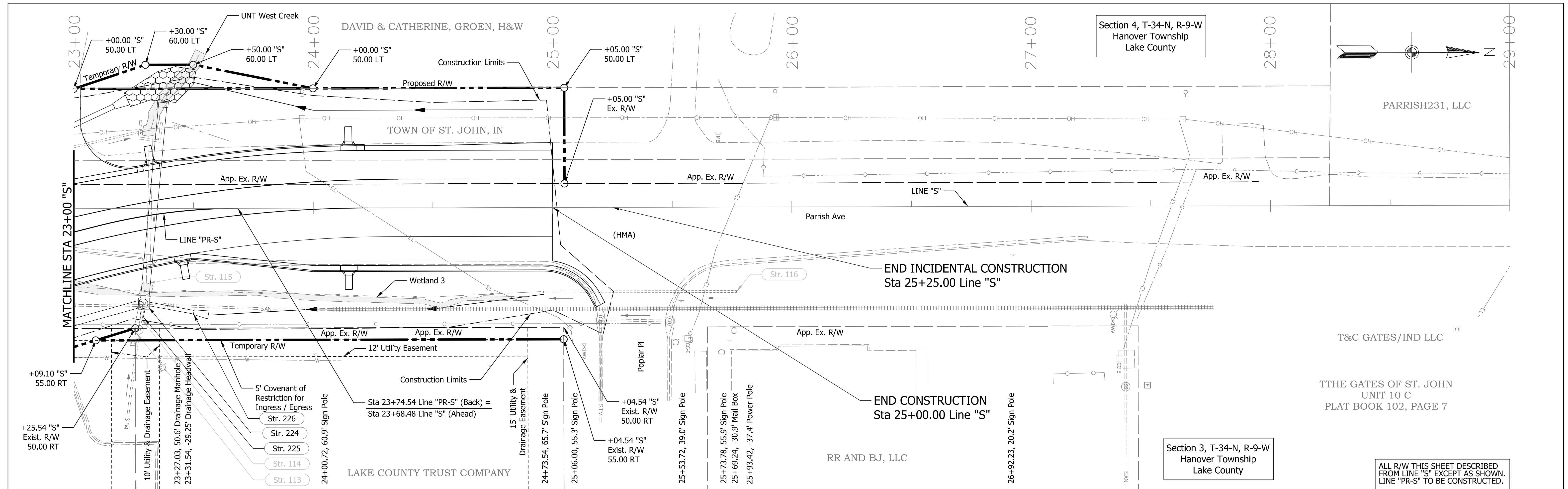
File: RD_Plan&Profile3.dgn
Model: BR_Detail Sheet



RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: NSK DRAWN: NSK CHECKED: JAH CHECKED: JAH	INDIANA DEPARTMENT OF TRANSPORTATION PLAN & PROFILE PARRISH AVE - LINE "S"		HORIZONTAL SCALE 1"=20' BRIDGE FILE
	VERTICAL SCALE 1"=4' DESIGNATION 1702994		SURVEY BOOK 13 of 55 SHEETS
	CONTRACT R-43388		PROJECT 1702994

Plot: 6/14/2024

File: RD_Plan&Profile4.dgn
Model:BR_Detail Sheet

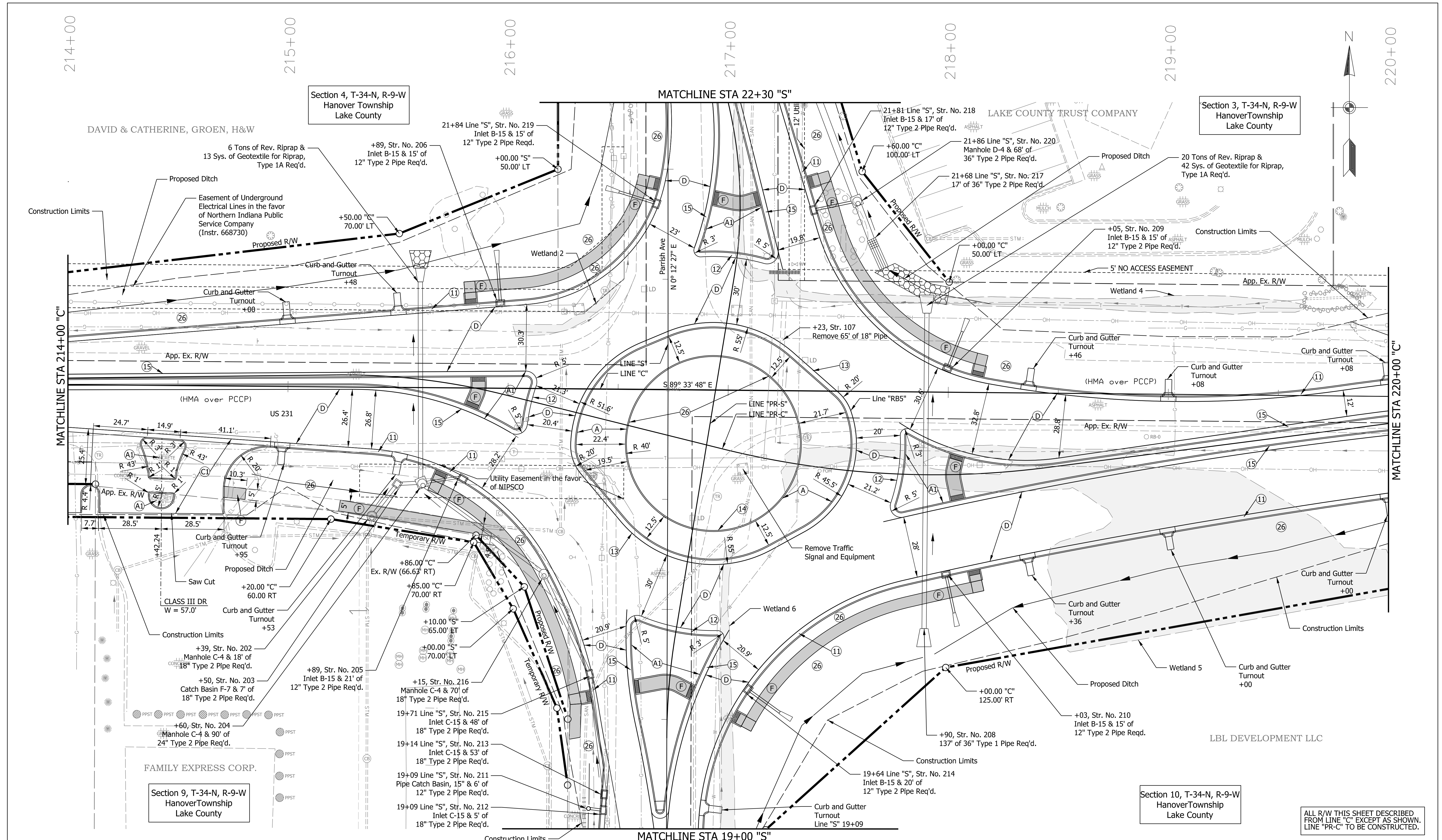


BENCHMARK INFORMATION:
 TBM #1 - Set Barn Nail in SE Face of Pole
 Sta. 31+18.45 Line "S", 14.6' LT
 Elev. = 720.8070

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION PLAN & PROFILE PARRISH AVE - LINE "S"		HORIZONTAL SCALE	BRIDGE FILE
			1"=20'	
DESIGNED: NSK CHECKED: JAH	DRAWN: NSK CHECKED: JAH	VERTICAL SCALE 1"=5'		DESIGNATION
				1702994
		SURVEY BOOK	SHEETS	
			14	of 55
		CONTRACT	PROJECT	
		R-43388	1702994	

Plot: 6/14/2024

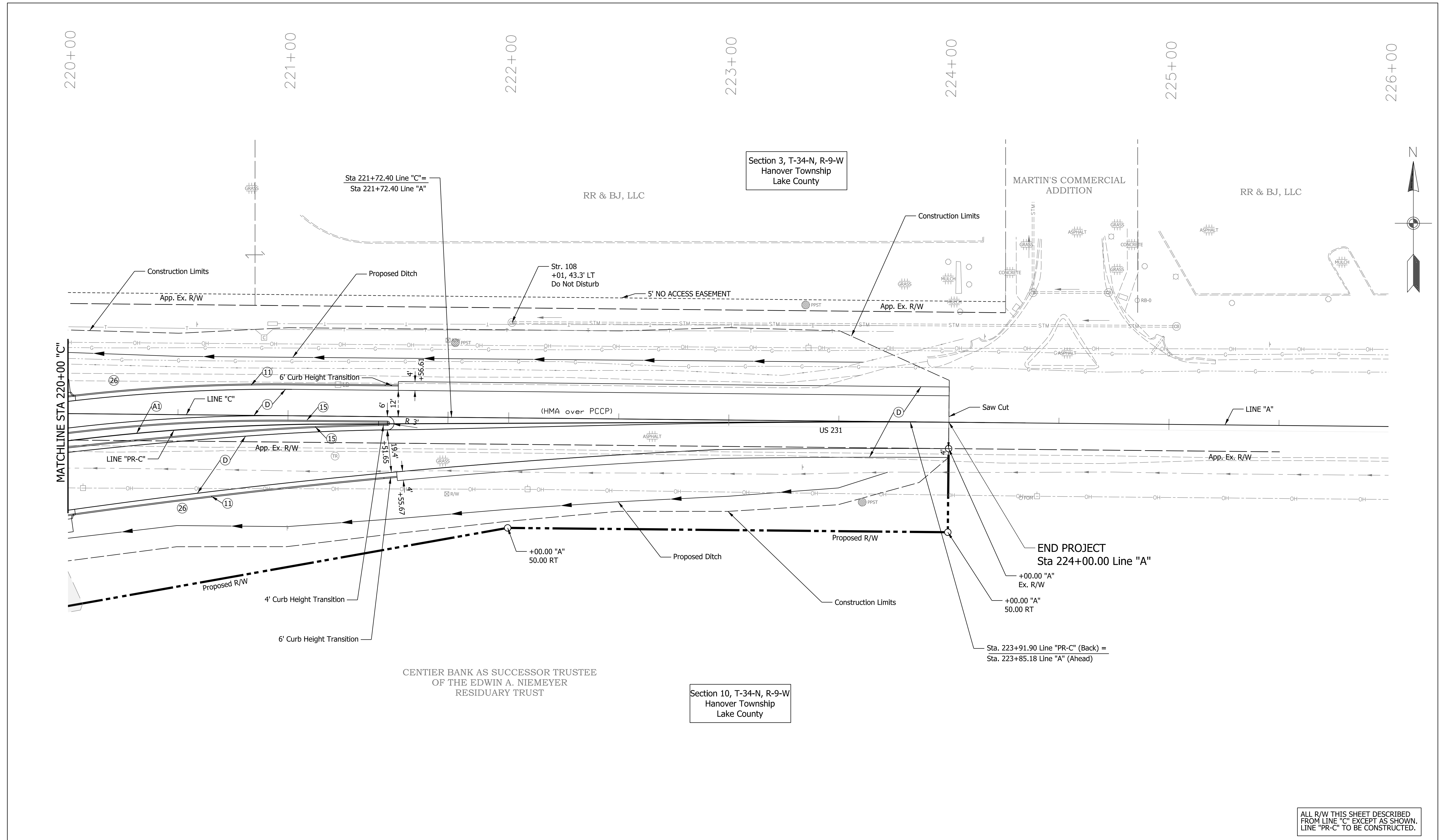
File: RD_Plan&Profile5.dgn
 Model:BR_Detail Sheet



LEGEND		INDIANA DEPARTMENT OF TRANSPORTATION		BRIDGE FILE	
(A) 8 in. PCCP (Colored), on 8 in. Compacted Aggregate No. 53, on Subgrade Treatment, Type IC	(C) PCCP for Approaches, 6in., on Subgrade Treatment Type II	(D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 385 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on 550 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on Subgrade Treatment, Type IC	RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
(A1) 8 in. PCCP (Colored), on 9 in. Compacted Aggregate No. 53, on Subgrade Treatment, Type IC	(C1) PCCP for Approaches, 9in., on Subgrade Treatment Type II	(F) 6" Concrete Sidewalk	DESIGNED: NSK	12/2022	12/2022
			CHECKED: JAH	12/2022	12/2022
			CONSTRUCTION DETAILS US 231 - LINE "C"		
			SHEETS 16 of 55		
			PROJECT 1702994		

File: RD_Detail 2.dgn
Model: BR_Detail Sheet

ALL R/W THIS SHEET DESCRIBED FROM LINE "C" EXCEPT AS SHOWN. LINE "PR-C" TO BE CONSTRUCTED.



Section 3, T-34-N, R-9-W
Hanover Township
Lake County

Section 10, T-34-N, R-9-W
Hanover Township
Lake County

ALL R/W THIS SHEET DESCRIBED FROM LINE "C" EXCEPT AS SHOWN. LINE "PR-C" TO BE CONSTRUCTED.

LEGEND

- (A) 8 in. PCCP (Colored), on 8 in. Compacted Aggregate No. 53, on Subgrade Treatment, Type IC
- (A1) 8 in. PCCP (Colored), on 9 in. Compacted Aggregate No. 53, on Subgrade Treatment, Type IC
- (C) PCCP for Approaches, 6in., on Subgrade Treatment Type II
- (C1) PCCP for Approaches, 9in., on Subgrade Treatment Type II
- (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 385 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on 550 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on Subgrade Treatment, Type IC
- (F) 6" Concrete Sidewalk
- (11) Curb and Gutter, Concrete
- (12) Curb and Gutter, B, Concrete
- (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3")
- (14) Curb, Integral, Concrete
- (15) Curb and Gutter, B, Concrete, Modified (Inverted)
- (26) Sodding on 4" of Topsoil
- (27) Mulched Seeding U

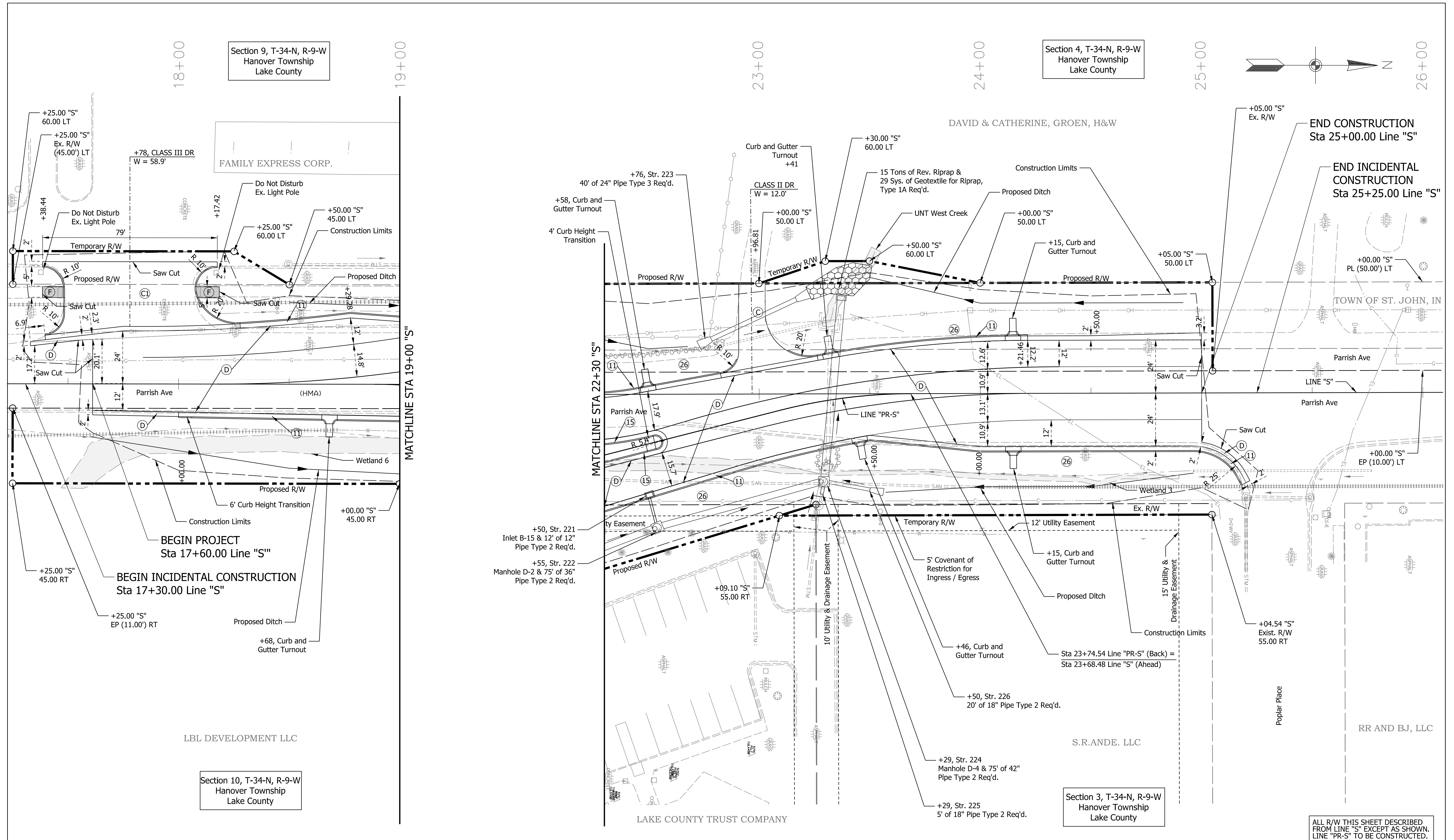
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	12/2022	DRAWN: NSK
CHECKED: JAH	12/2022	CHECKED: JAH

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS
US 231 - LINE "C" & LINE "A"

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	
VERTICAL SCALE	DESIGNATION
N/A	1702994
SURVEY BOOK	SHEETS
	of
CONTRACT	PROJECT
R-43388	1702994

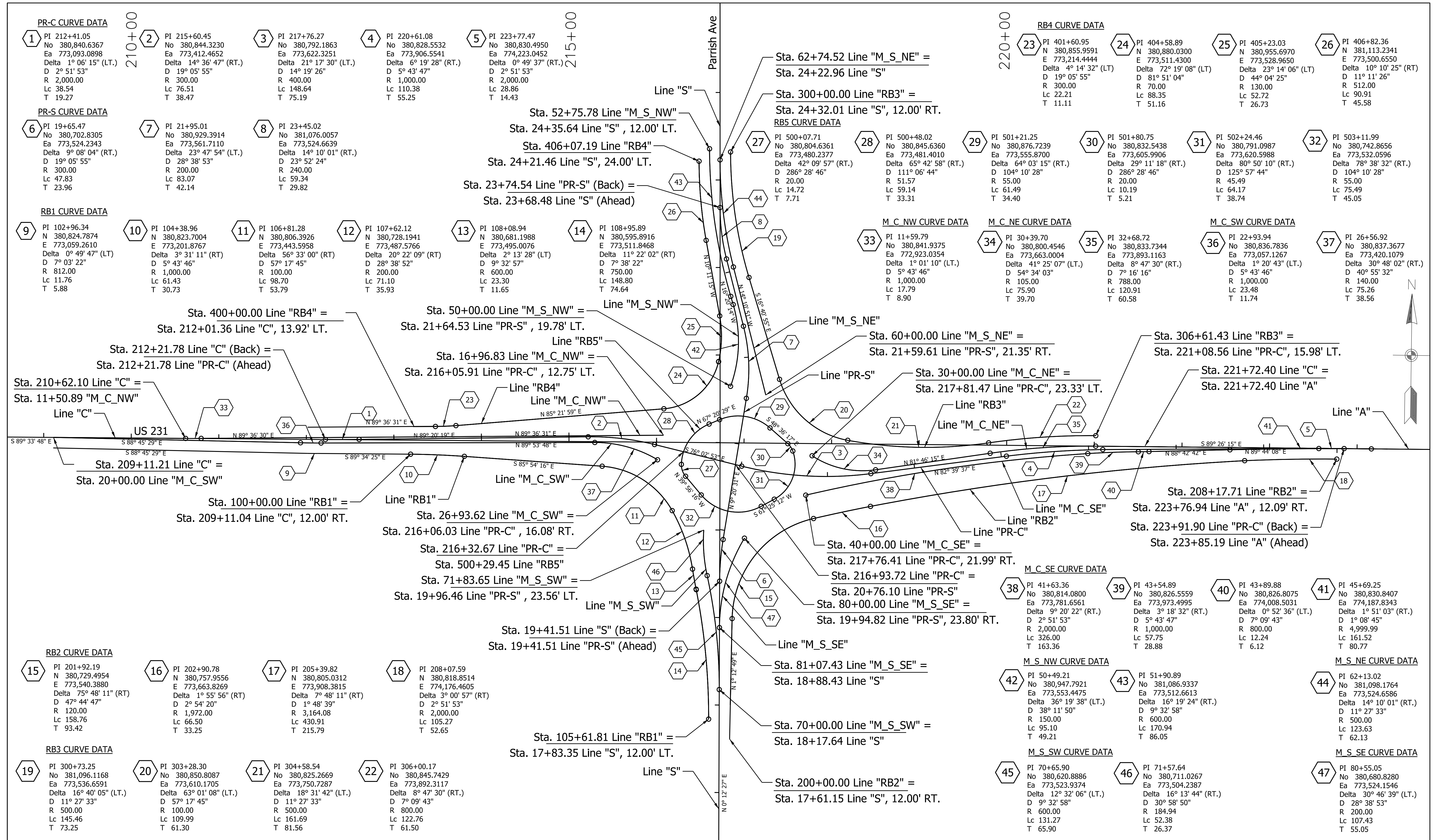
File: RD_Detail 3.dgn
Model:BR_Detail Sheet



LEGEND (A) 8 in. PCCP (Colored), on 8 in. Compacted Aggregate No. 53, on Subgrade Treatment, Type IC (A1) 8 in. PCCP (Colored), on 9 in. Compacted Aggregate No. 53, on Subgrade Treatment, Type IC (C) PCCP for Approaches, 6in., on Subgrade Treatment Type II (C1) PCCP for Approaches, 9in., on Subgrade Treatment Type II (D) 220 lb/syd QC/QA HMA, 3, 76, Surface, 9.5 mm, on 275 lb/syd QC/QA HMA, 3, 76, Intermediate, 19.0 mm, on 385 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on 550 lb/syd QC/QA HMA, 3, 64, Base, 19.0 mm, on Subgrade Treatment, Type IC (F) 6" Concrete Sidewalk (11) Curb and Gutter, Concrete (12) Curb and Gutter, B, Concrete (13) Curb and Gutter, B, Concrete, Modified (Inverted) (3") (14) Curb, Integral, Concrete (15) Curb and Gutter, B, Concrete, Modified (Inverted) (26) Sodding on 4" of Topsoil (27) Mulched Seeding U	RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____ DESIGNED: <u>NSK</u> 12/2022 DRAWN: <u>NSK</u> 12/2022 CHECKED: <u>JAH</u> 12/2022 CHECKED: <u>JAH</u> 12/2022	INDIANA DEPARTMENT OF TRANSPORTATION CONSTRUCTION DETAILS PARRISH AVE - LINE "S"	HORIZONTAL SCALE 1"=20' VERTICAL SCALE N/A SURVEY BOOK - CONTRACT R-43388	BRIDGE FILE DESIGNATION 1702994 SHEETS 18 of 55 PROJECT 1702994
--	---	--	--	---

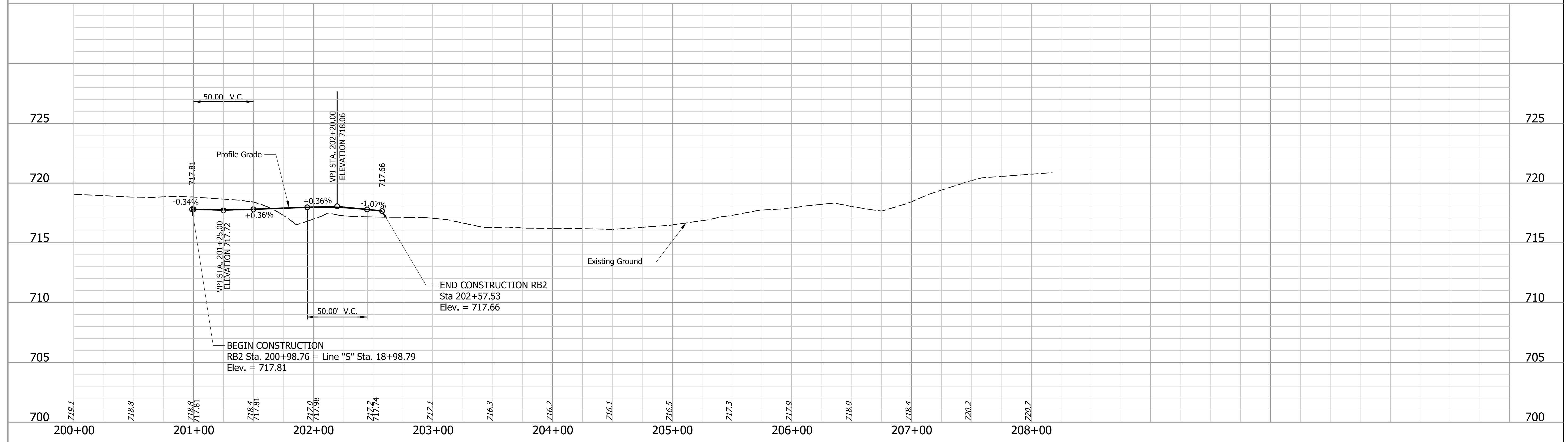
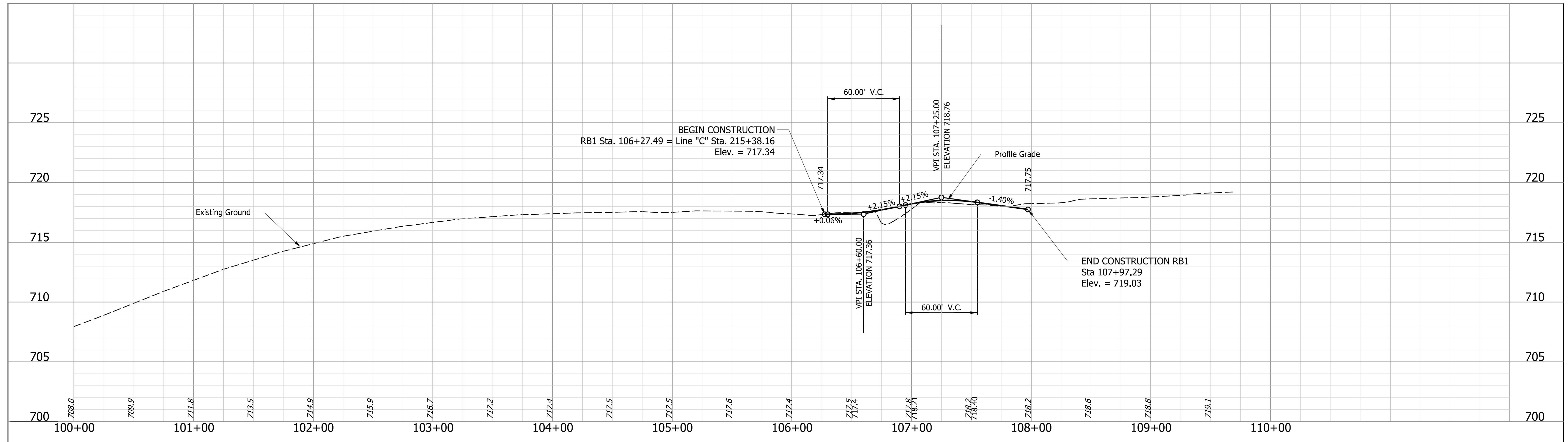
File: RD_Detail 4.dgn
Model:BR_Detail Sheet

Plot: 6/14/2024



RECOMMENDED FOR APPROVAL DESIGN ENGINEER _____ DATE _____ DESIGNED: NSK DRAWN: NSK CHECKED: JAH CHECKED: JAH	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1"=50'	BRIDGE FILE NA
	GEOMETRIC LAYOUT		SURVEY BOOK -	SHEETS 19 of 55
			CONTRACT R-43388	PROJECT 1702994

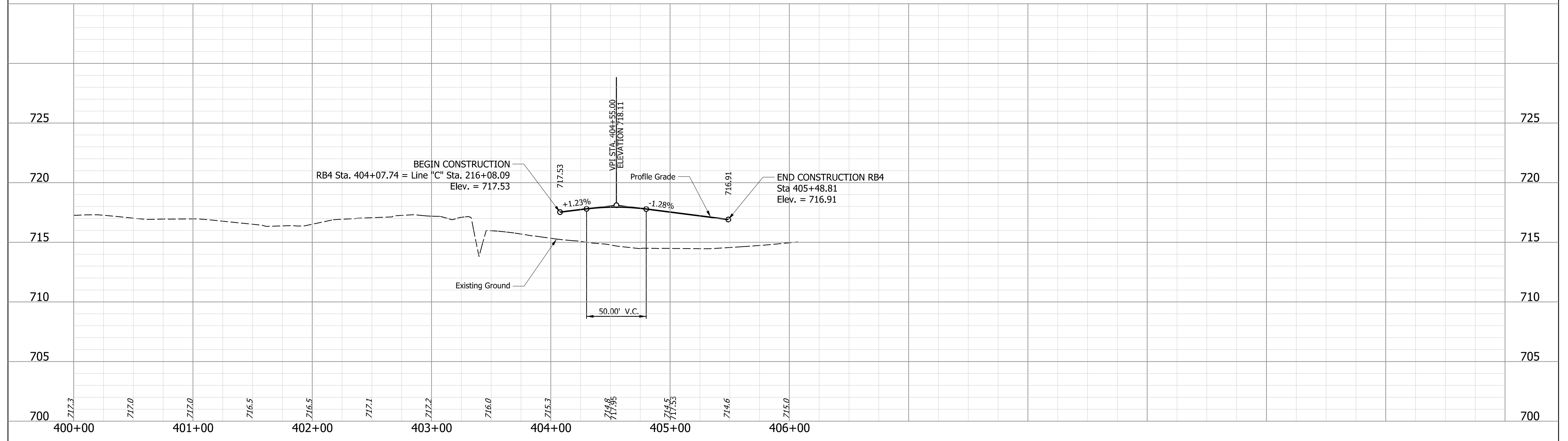
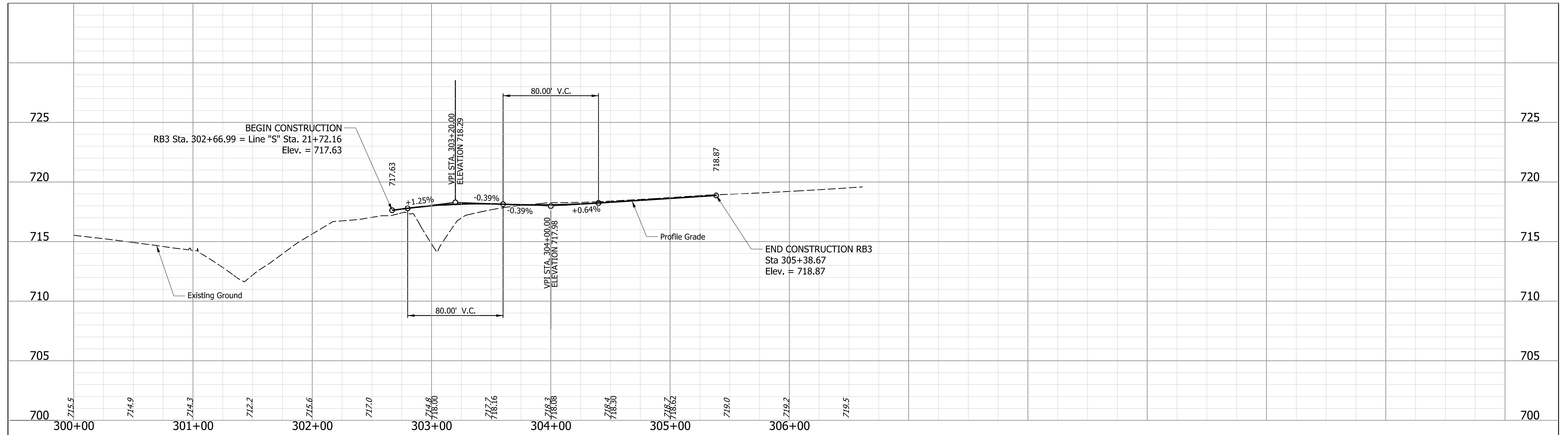
Plot: 6/14/2024
 File: RD_Alignments.dgn
 Model: Geometric Layout



RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION PROFILES RB1 AND RB2		HORIZONTAL SCALE	BRIDGE FILE
			1"=40'	
DESIGNED: NSK _____ DRAWN: NSK _____ CHECKED: JAH _____ CHECKED: JAH _____	PROFILES RB1 AND RB2		VERTICAL SCALE	DESIGNATION
			1"=5'	1702994
			SURVEY BOOK	SHEETS
			-	20 of 55
			CONTRACT	PROJECT
			R-43388	1702994

Plot: 6/14/2024

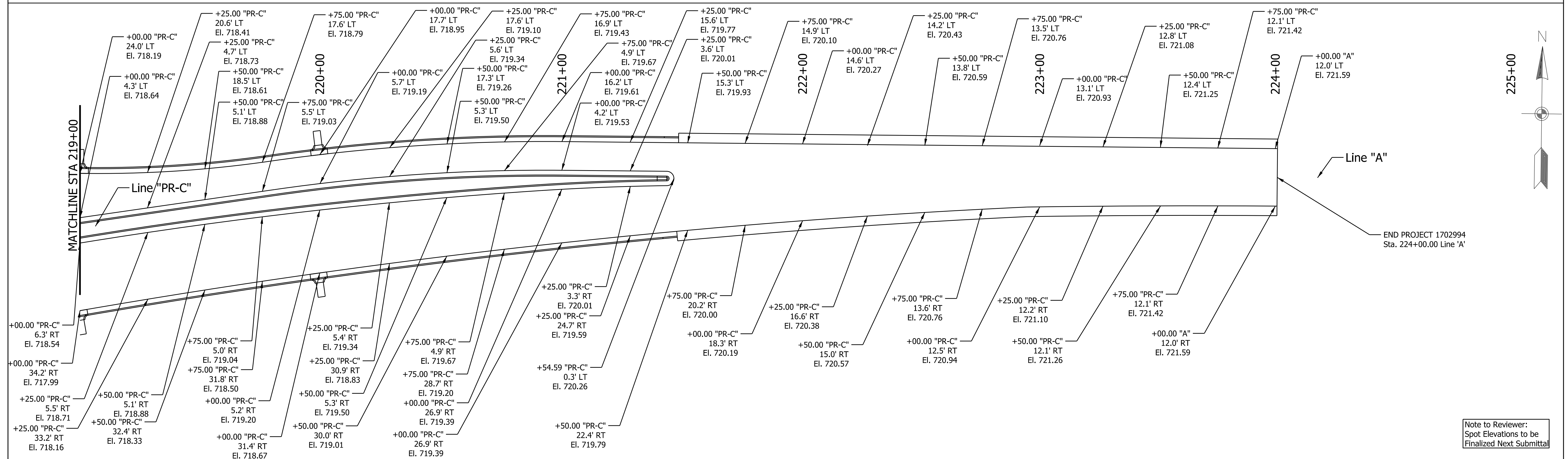
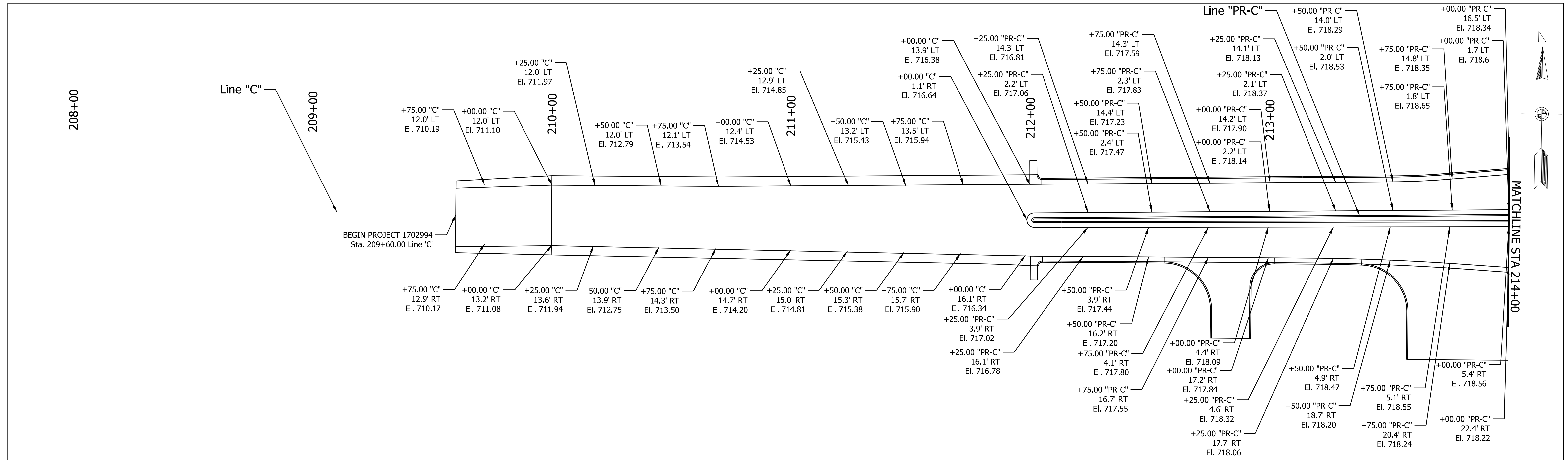
File: RD_RBProfiles.dgn
Model:RB1-2



RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION PROFILES RB3 AND RB4		HORIZONTAL SCALE	BRIDGE FILE
			1"=40'	
DESIGNED: NSK _____ DRAWN: NSK _____ CHECKED: JAH _____ CHECKED: JAH _____			VERTICAL SCALE	DESIGNATION
			1"=5'	1702994
			SURVEY BOOK	SHEETS
			-	21 of 55
			CONTRACT	PROJECT
			R-43388	1702994

Plot: 6/14/2024

File: RD_RBProfiles.dgn
Model:RB3-4

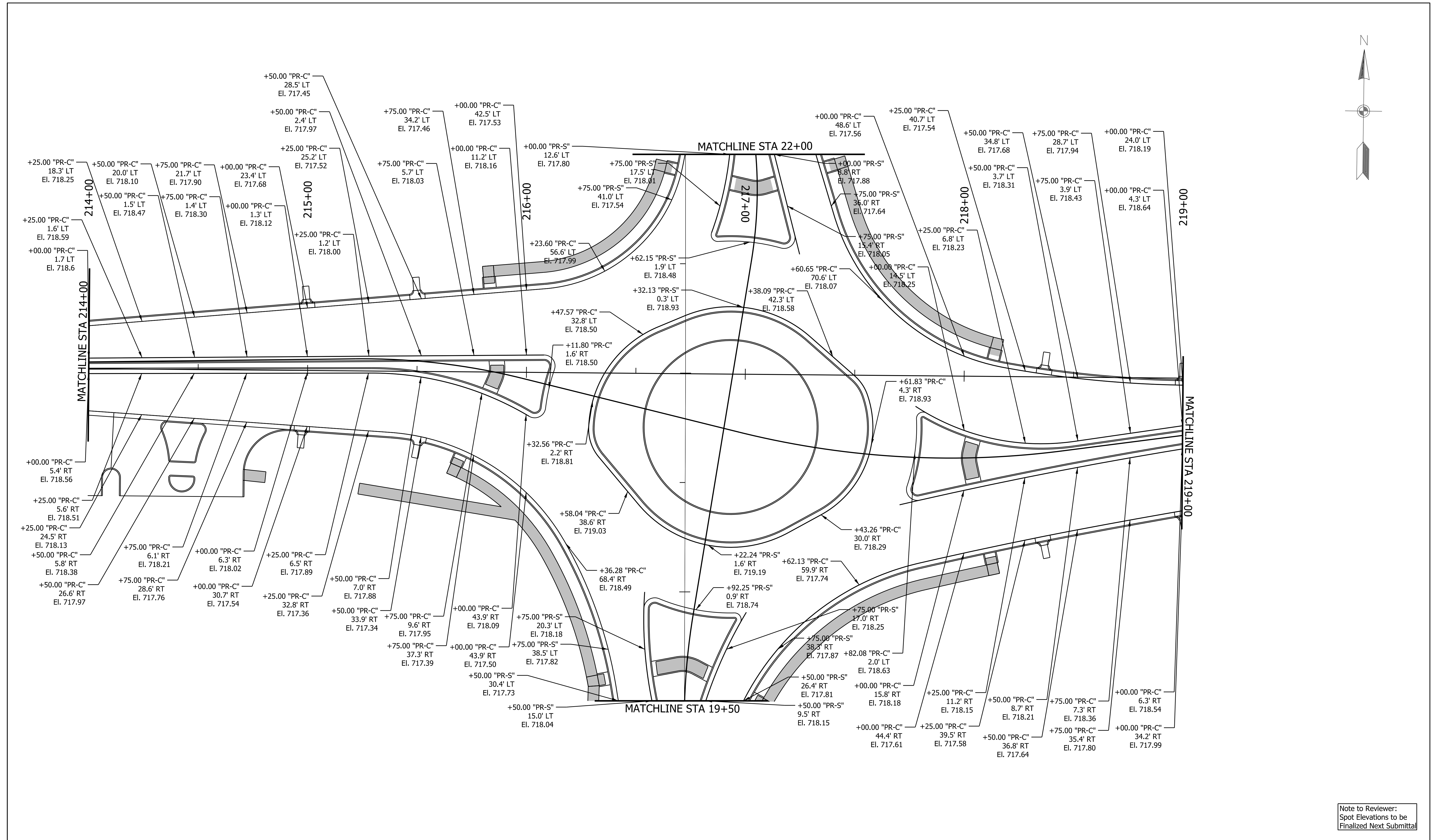
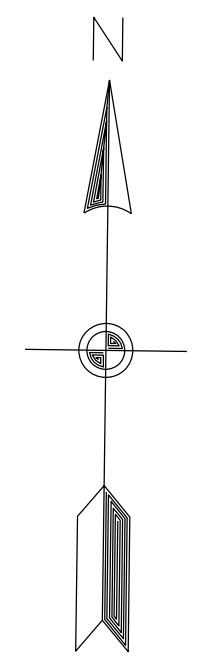


Note to Reviewer:
Spot Elevations to be
Finalized Next Submittal

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION SPOT ELEVATIONS		HORIZONTAL SCALE	BRIDGE FILE
			1"=20'	NA
				DESIGNATION
DESIGNED: NSK	DRAWN: NSK		SURVEY BOOK	SHEETS
CHECKED: JAH	CHECKED: JAH		-	22 of 55
			CONTRACT	PROJECT
			R-43388	1702994

Plot: 6/14/2024

File: RD_Spot Elevations.dgn
Model: US231

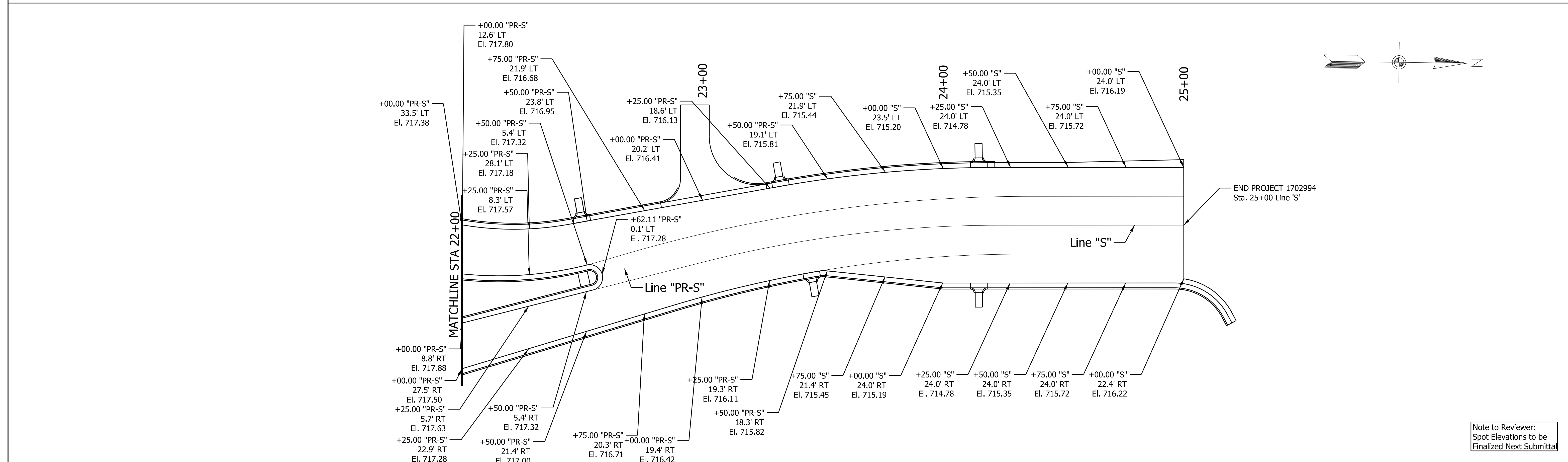
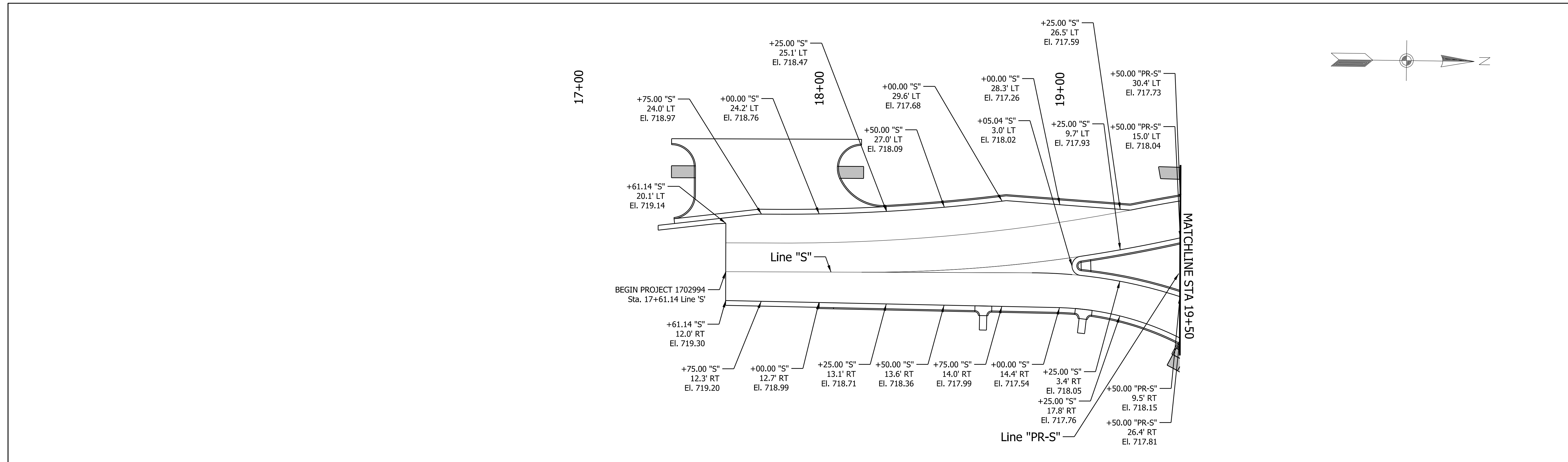


Note to Reviewer:
Spot Elevations to be
Finalized Next Submittal

Plot: 6/14/2024

File: RD_Spot Elevations.dgn
Model:RB

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER		DATE		INDIANA DEPARTMENT OF TRANSPORTATION	HORIZONTAL SCALE	BRIDGE FILE
						1"=20'	NA
DESIGNED: NSK	DRAWN: NSK				SPOT ELEVATIONS	SURVEY BOOK	SHEETS
CHECKED: JAH	CHECKED: JAH					-	23 of 55
					CONTRACT	PROJECT	
					R-43388	1702994	

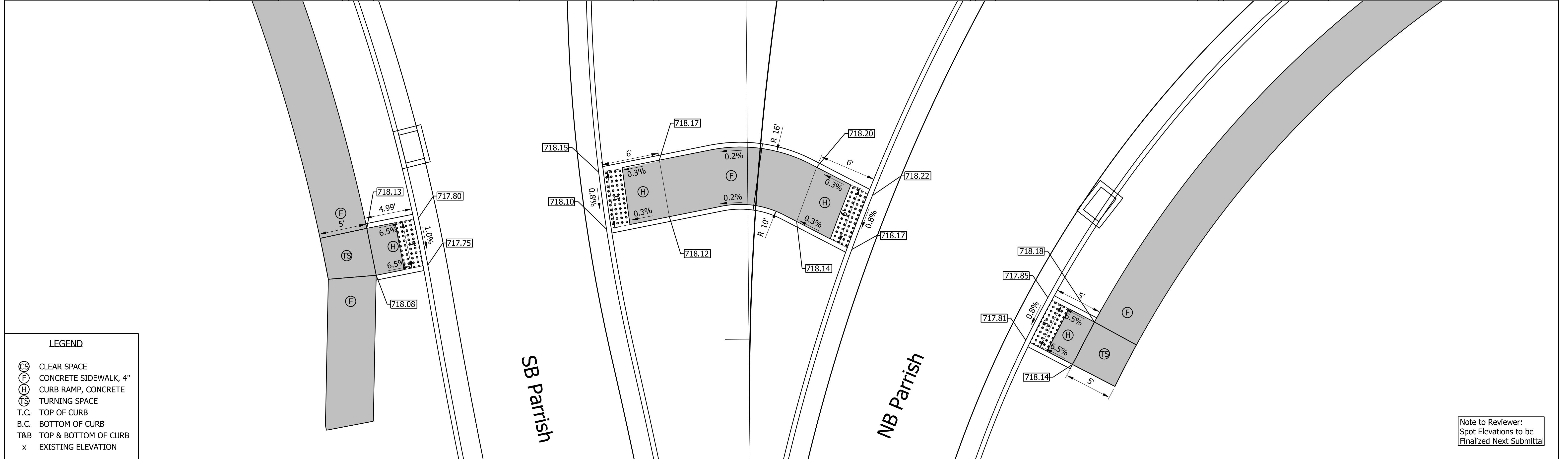
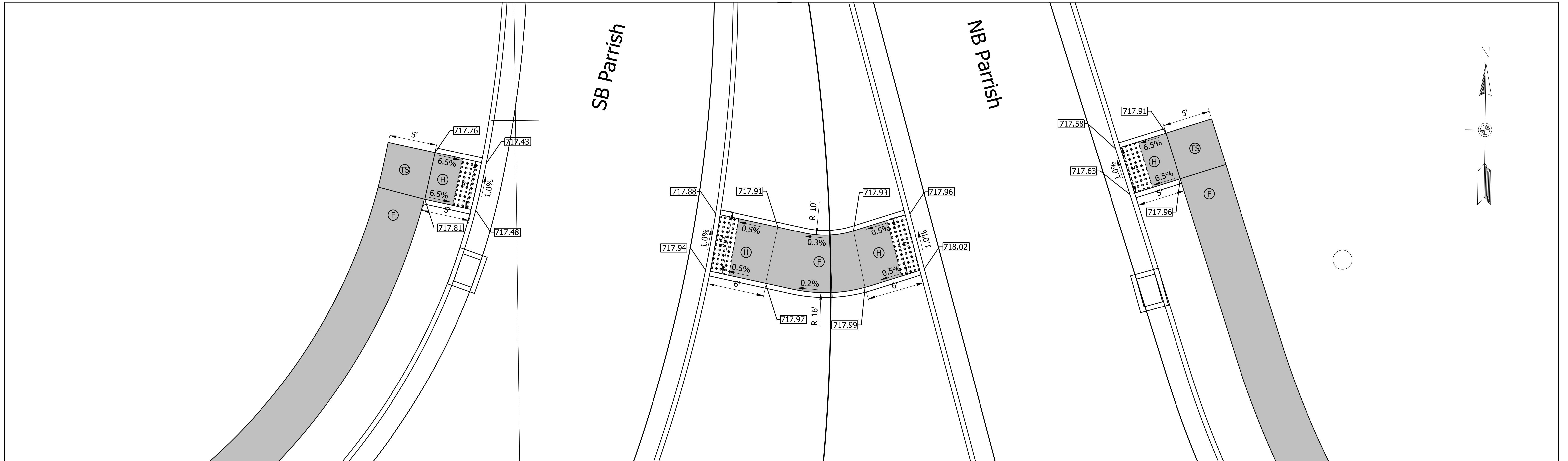
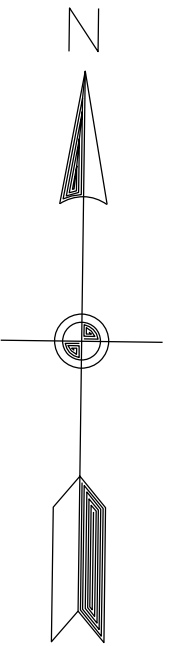


Note to Reviewer:
Spot Elevations to be
Finalized Next Submittal

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION SPOT ELEVATIONS		HORIZONTAL SCALE	BRIDGE FILE
			1"=20'	NA
				DESIGNATION
DESIGNED: NSK	DRAWN: NSK		SURVEY BOOK	SHEETS
CHECKED: JAH	CHECKED: JAH			24 of 55
			CONTRACT	PROJECT
			R-43388	1702994

Plot: 6/14/2024

File: RD_Spot Elevations.dgn
Model:Parrish



LEGEND

- (CS) CLEAR SPACE
- (F) CONCRETE SIDEWALK, 4"
- (H) CURB RAMP, CONCRETE
- (TS) TURNING SPACE
- T.C. TOP OF CURB
- B.C. BOTTOM OF CURB
- T&B TOP & BOTTOM OF CURB
- x EXISTING ELEVATION

Note to Reviewer:
Spot Elevations to be
Finalized Next Submittal

Plot: 6/14/2024

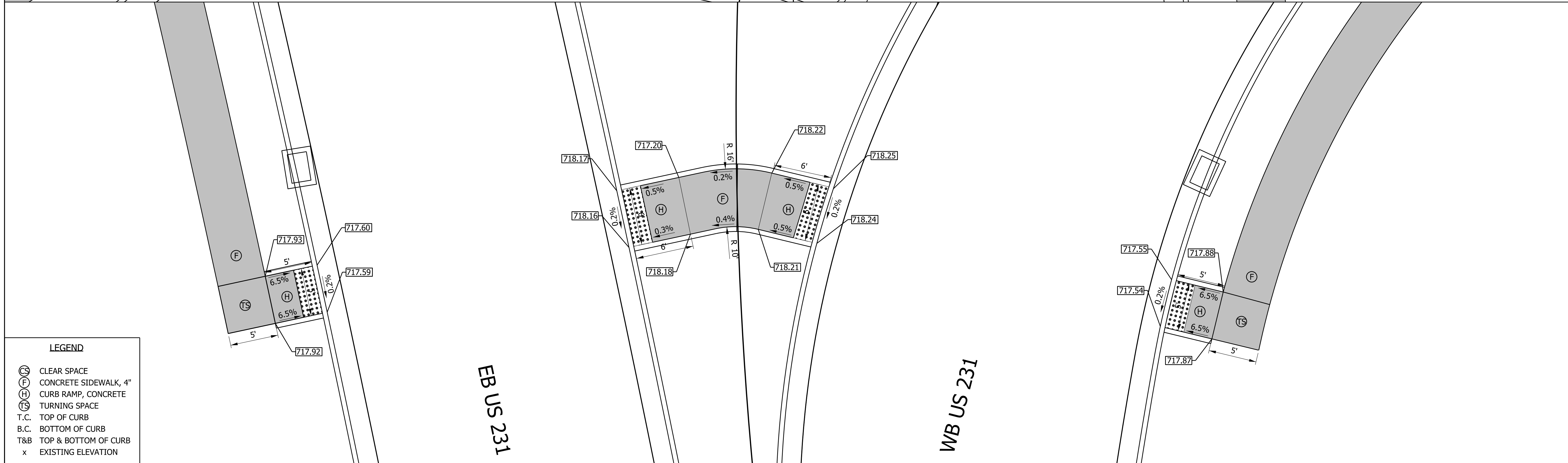
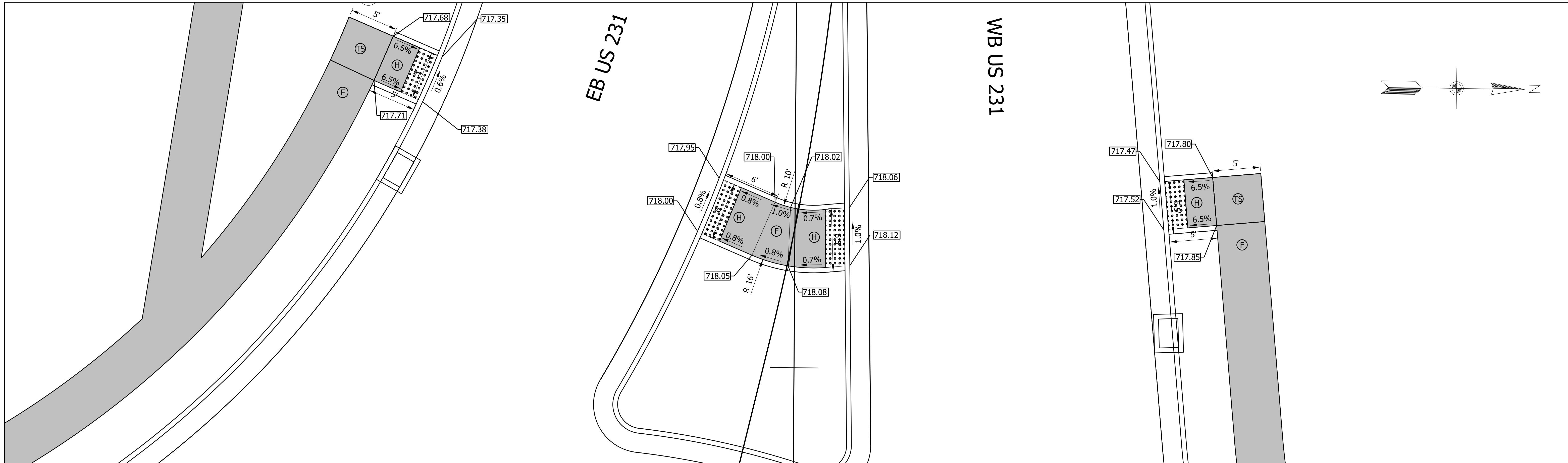
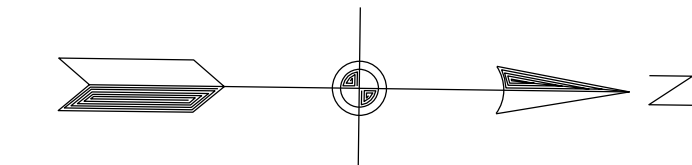
File: RD_Curb Ramps.dgn
Model: PARRISH CURB RAMP

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: RBI	CHECKED: RBI	

**INDIANA
DEPARTMENT OF TRANSPORTATION**

RAMP AND SIDEWALK DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	NA
	DESIGNATION
	1702994
SURVEY BOOK	SHEETS
	25 of 55
CONTRACT	PROJECT
R-43388	1702994



LEGEND

- ⊙ CLEAR SPACE
- ⊙ CONCRETE SIDEWALK, 4"
- ⊙ CURB RAMP, CONCRETE
- ⊙ TURNING SPACE
- T.C. TOP OF CURB
- B.C. BOTTOM OF CURB
- T&B TOP & BOTTOM OF CURB
- x EXISTING ELEVATION

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: RBI	CHECKED: RBI	

**INDIANA
DEPARTMENT OF TRANSPORTATION**

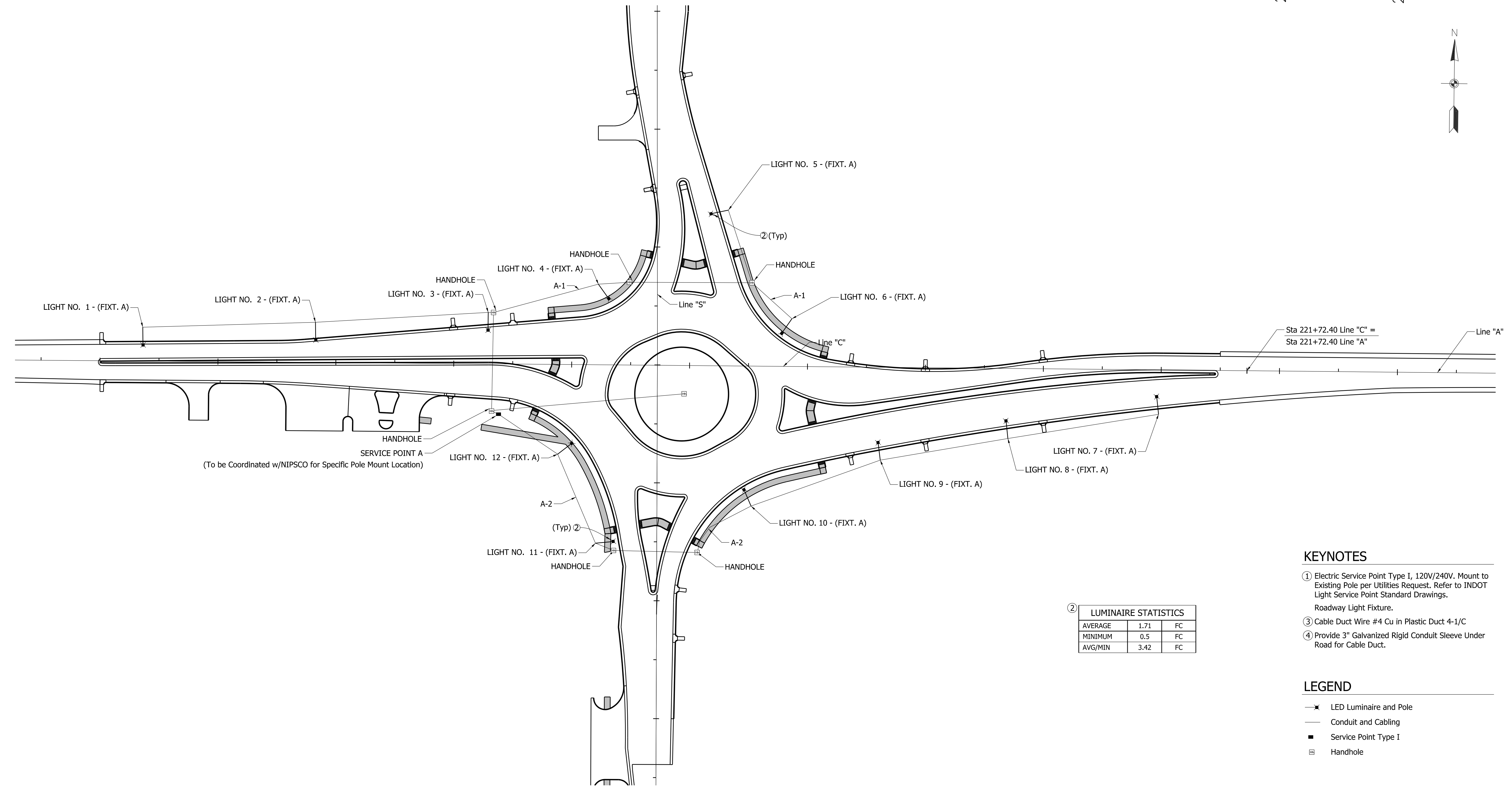
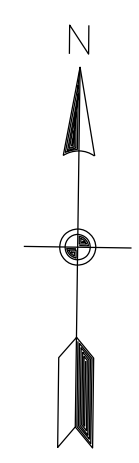
RAMP AND SIDEWALK DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	NA
	DESIGNATION
	1702994
SURVEY BOOK	SHEETS
	26 of 55
CONTRACT	PROJECT
R-43388	1702994

Plot: 6/14/2024

File: RD_Curb Ramps.dgn
Model: US 231 CURB RAMPS

212+00 213+00 214+00 215+00 216+00 217+00 218+00 219+00 220+00 221+00 222+00 223+00



SERVICE POINT A
(To be Coordinated w/NIPSCO for Specific Pole Mount Location)

② LUMINAIRE STATISTICS

AVERAGE	1.71	FC
MINIMUM	0.5	FC
AVG/MIN	3.42	FC

- KEYNOTES**
- ① Electric Service Point Type I, 120V/240V. Mount to Existing Pole per Utilities Request. Refer to INDOT Light Service Point Standard Drawings. Roadway Light Fixture.
 - ③ Cable Duct Wire #4 Cu in Plastic Duct 4-1/C
 - ④ Provide 3" Galvanized Rigid Conduit Sleeve Under Road for Cable Duct.

- LEGEND**
- x— LED Luminaire and Pole
 - Conduit and Cabling
 - Service Point Type I
 - Handhole

Plot: 6/14/2024

File: RD_Lighting Sheet.dgn
Model: Default

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: <u>NSK</u>	DRAWN: <u>NSK</u>	
CHECKED: <u>JAH</u>	CHECKED: <u>JAH</u>	


**INDIANA
DEPARTMENT OF TRANSPORTATION**

**US 231 - PARRISH AVENUE INTERSECTION
LIGHTING PLAN**

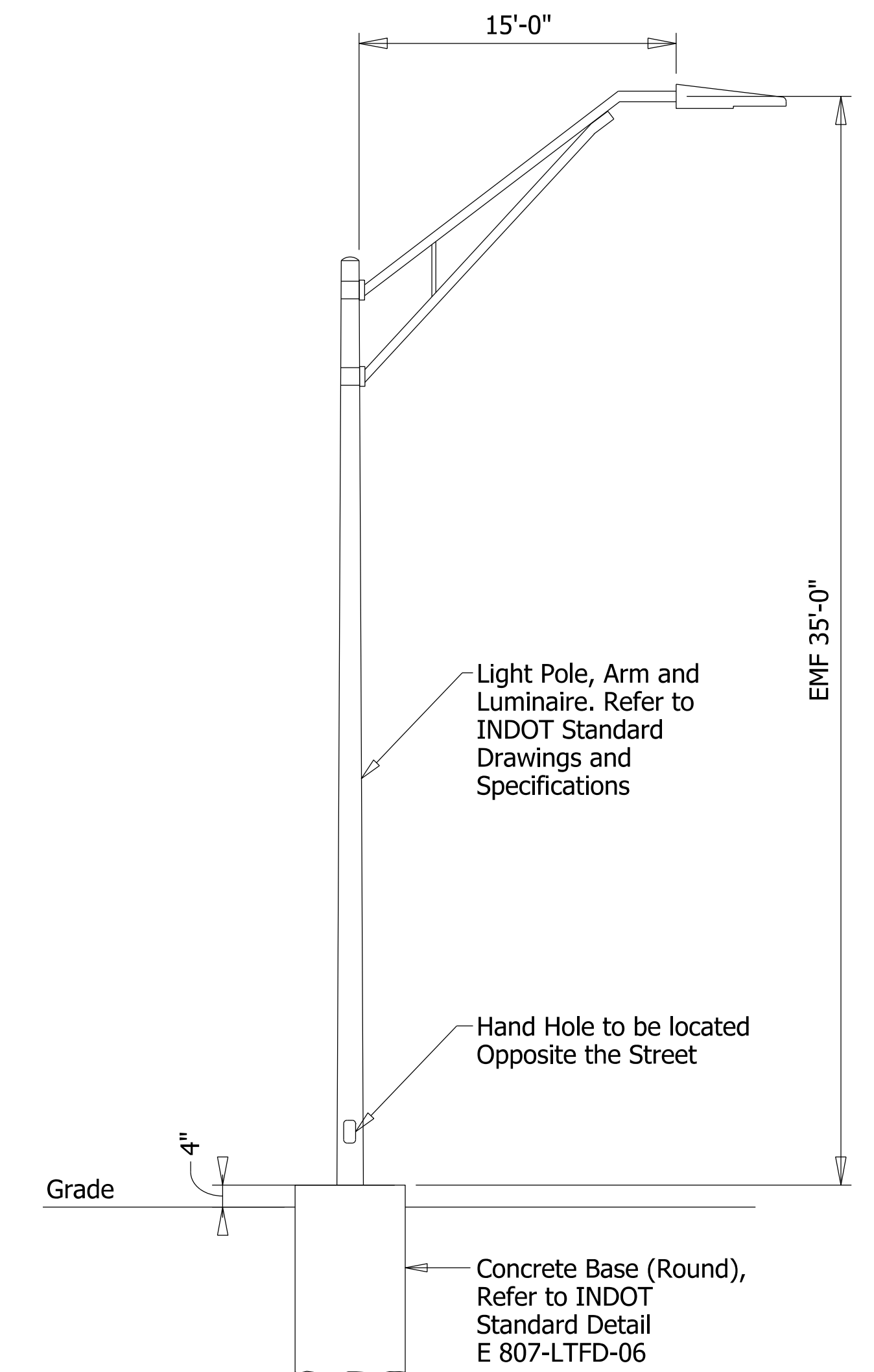
HORIZONTAL SCALE 1"=40'	BRIDGE FILE NA
	DESIGNATION 1702994
SURVEY BOOK -	SHEETS 27 of 55
CONTRACT R-43388	PROJECT 1702994

LUMINAIRE AND POLE INFORMATION SCHEDULE												
LUMINAIRE NO.	1	2	3	4	5	6	7	8	9	10	11	12
CIRCUIT NO.	A-1	A-1	A-1	A-1	A-1	A-1	A-2	A-2	A-2	A-2	A-2	A-2
CIRCUIT CONNECTION (R-RED, B-BLACK)	B	R	B	R	B	R	B	R	B	R	B	R
STATION	212+36 29' LT	213+83 34' LT	215+29 23' LT	216+17 65' LT	22+32 60' RT	217+80 65' LT	220+98 38' RT	219+70 59' RT	218+61 32' RT	20+06 68' RT	19+49 37' LT	20+21 82' LT

LIGHTING FIXTURE SCHEDULE						
SERVICE POINT	SERVICE TYPE	VOLTAGE	MAIN BREAKER	BRANCH CIRCUIT COLOR	BRANCH CIRCUIT DESIGN LOAD	BRANCH CIRCUIT BREAKER
A	--	120/240V	--	BLACK	--	--
				RED	--	--

LIGHTING FIXTURE SCHEDULE								
TYPE	SYMBOL	DESCRIPTION	MANUFACTURER	CATALOG NO.	LAMP	VOLTAGE	MOUNTING	REMARKS
A		INDOT STANDARD LED	AMERICAN ELECTRIC LIGHTING	ATB-P453-MVOLT-R3-4K	LED	120	ARM	--
A		INDOT STANDARD 15' ARM E-807-LTST	--	--	--	--	--	--
A		INDOT STANDARD 30' POLE E-807-LTST	--	--	--	--	--	--

LUMINAIRE DESIGN DATA TABLE	
LUMINAIRE STYLE	INDOT STANDARD
LAMP TYPE	159 W. LED, 1300 mA
DESIGN SAMPLE PHOTOMETRIC CURVE	ATBO SERIES 129W LED 1300mA TYPE 3 4000K CCT
NORMAL MOUNTING HEIGHT (MH)	35
LUMINAIRE CLASSIFICATION (IES)	ATBO SERIES 159W LED 1300mA TYPE 3 4000K CCT
VOLTAGE	120/240V
LUMINAIRE LOAD OPERATING AMPS (VARIES DEPENDING ON MANUFACTURER)	1.1A
INITIAL LAMP LUMENS (LL)	4000K
DESIGN SOFTWARE	AGI32
AVERAGE MAINTAINED ILLUMINATION (Eh)	2.88:1



LIGHT POLE DETAIL
SCALE: Not to Scale

NOTE TO REVIEWER:
Lighting Details to be Finalized for Stage 3 Plans Submittal.

Plot: 6/14/2024

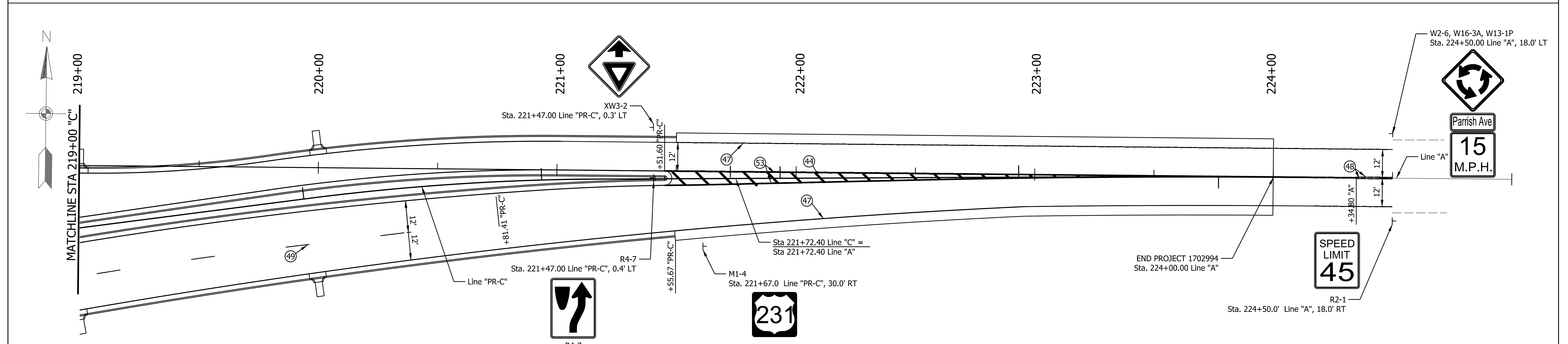
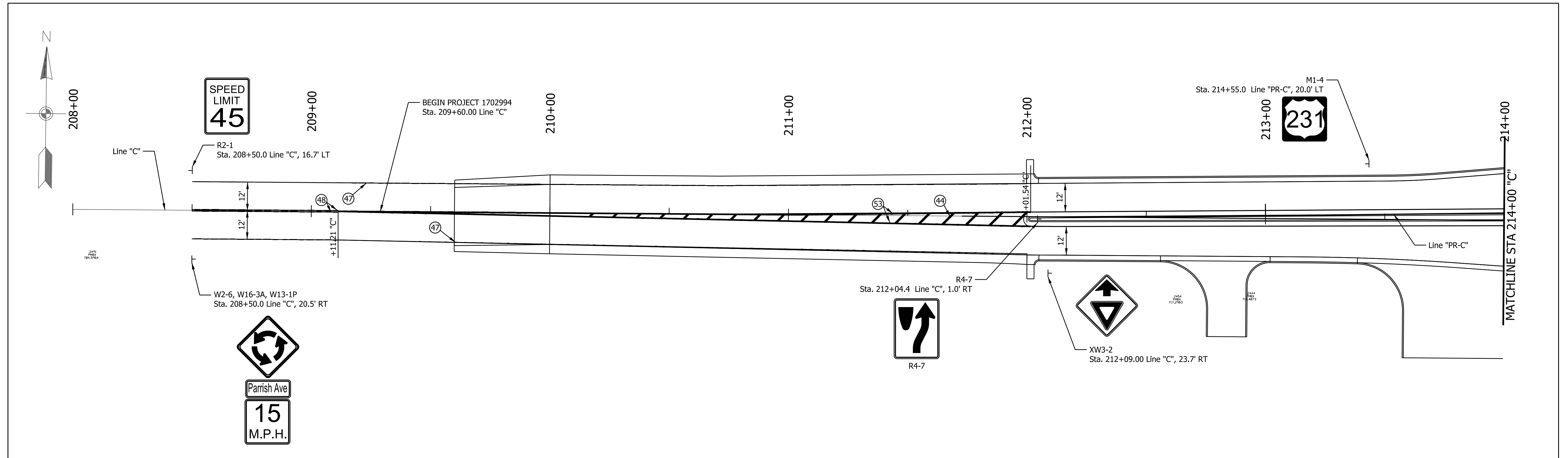
File:
Model:Default

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

INDIANA
DEPARTMENT OF TRANSPORTATION

LIGHTING DETAILS
AND SCHEDULES

SCALE	NTS
DESIGNATION	1702994
SHEETS	28 of 55
CONTRACT	R-43388
PROJECT	1702994



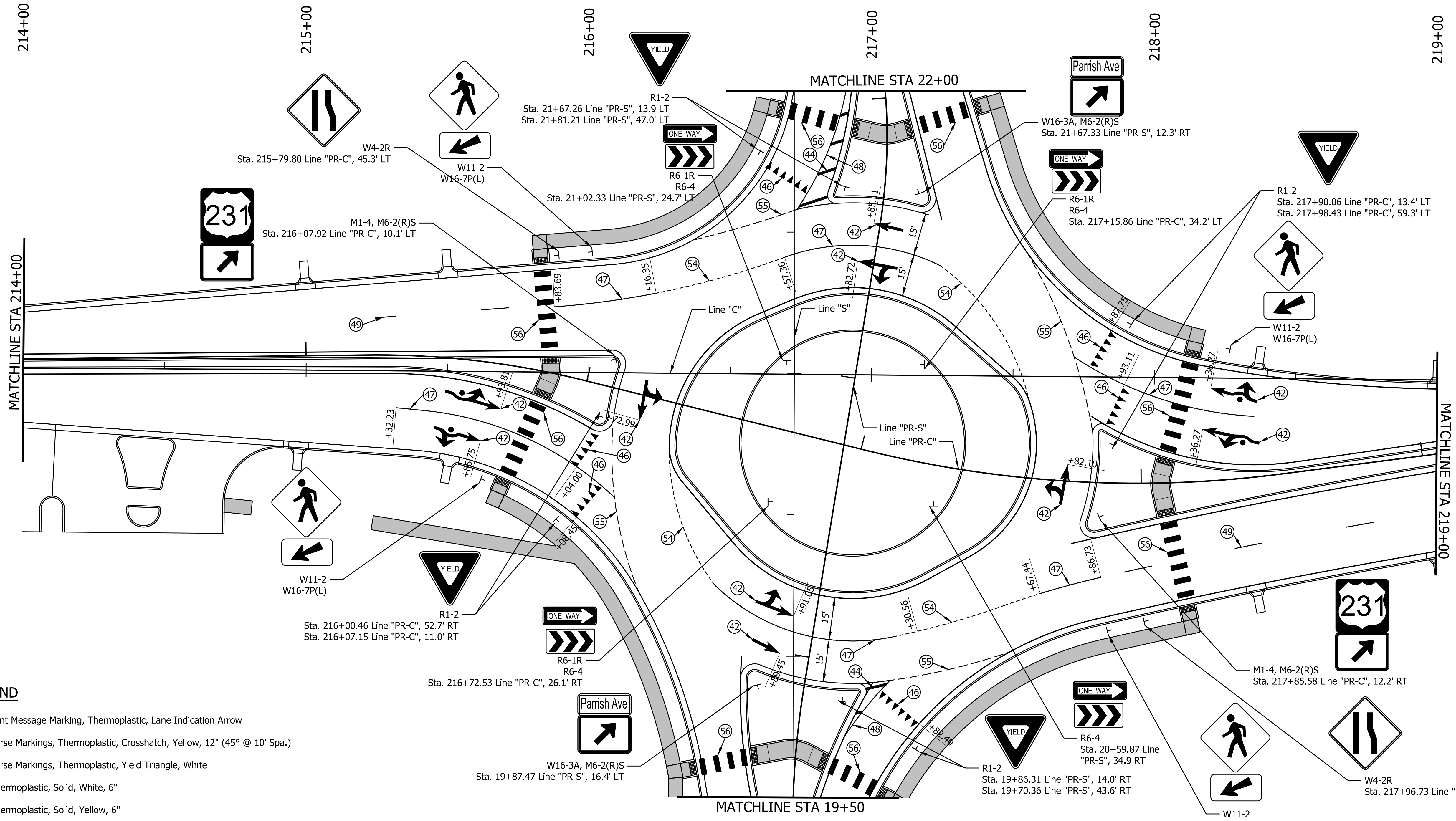
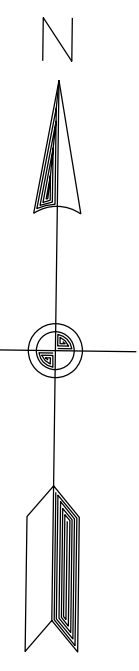
LEGEND

- (42) Pavement Message Marking, Thermoplastic, Lane Indication Arrow
- (44) Transverse Markings, Thermoplastic, Crosshatch, Yellow, 12" (45° @ 10' Spa.)
- (46) Transverse Markings, Thermoplastic, Yield Triangle, White
- (47) Line, Thermoplastic, Solid, White, 6"
- (48) Line, Thermoplastic, Solid, Yellow, 6"
- (49) Line, Thermoplastic, Broken, White, 6" (10' Line, 30' Gap)
- (52) Line, Thermoplastic, Solid, White, 8"
- (53) Line, Thermoplastic, Solid, Yellow, 8"
- (54) Line, Thermoplastic, Dotted, White, 6" (5' Line, 3' Gap)
- (55) Line, Thermoplastic, Dotted, White, 12" (3' Line, 2' Gap)

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING AND SIGNING	HORIZONTAL SCALE	BRIDGE FILE
		1"=20'	NA
		DESIGNATION	
DESIGNED: NSK	DRAWN: NSK	SURVEY BOOK	SHEETS
CHECKED: JAH	CHECKED: JAH	-	29 of 55
		CONTRACT	PROJECT
		R-43388	1702994

Plot: 6/14/2024

File: RD_PMK.dgn
Model: US231



LEGEND

- ④2 Pavement Message Marking, Thermoplastic, Lane Indication Arrow
- ④4 Transverse Markings, Thermoplastic, Crosshatch, Yellow, 12" (45° @ 10' Spa.)
- ④6 Transverse Markings, Thermoplastic, Yield Triangle, White
- ④7 Line, Thermoplastic, Solid, White, 6"
- ④8 Line, Thermoplastic, Solid, Yellow, 6"
- ④9 Line, Thermoplastic, Broken, White, 6" (10' Line, 30' Gap)
- ⑤2 Line, Thermoplastic, Solid, White, 8"
- ⑤3 Line, Thermoplastic, Solid, Yellow, 8"
- ⑤4 Line, Thermoplastic, Dotted, White, 6" (5' Line, 3' Gap)
- ⑤5 Line, Thermoplastic, Dotted, White, 12" (3' Line, 2' Gap)
- ⑤6 Transverse Marking, Thermoplastic, Crosswalk Line, White, 24" (6' Line, 3' Gap)

Plot: 6/14/2024

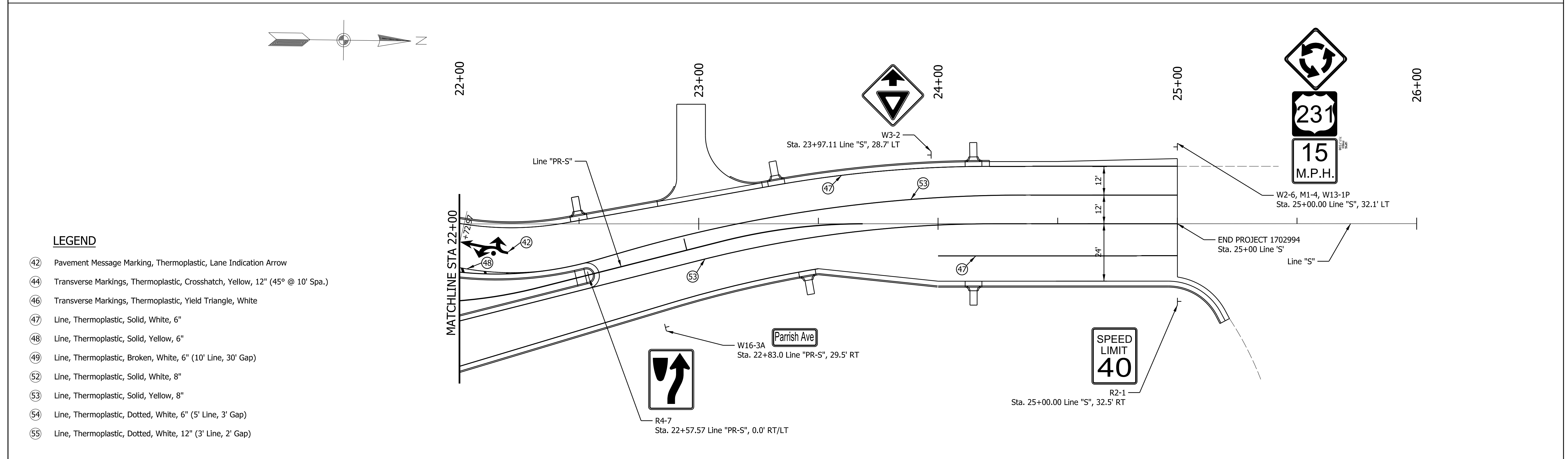
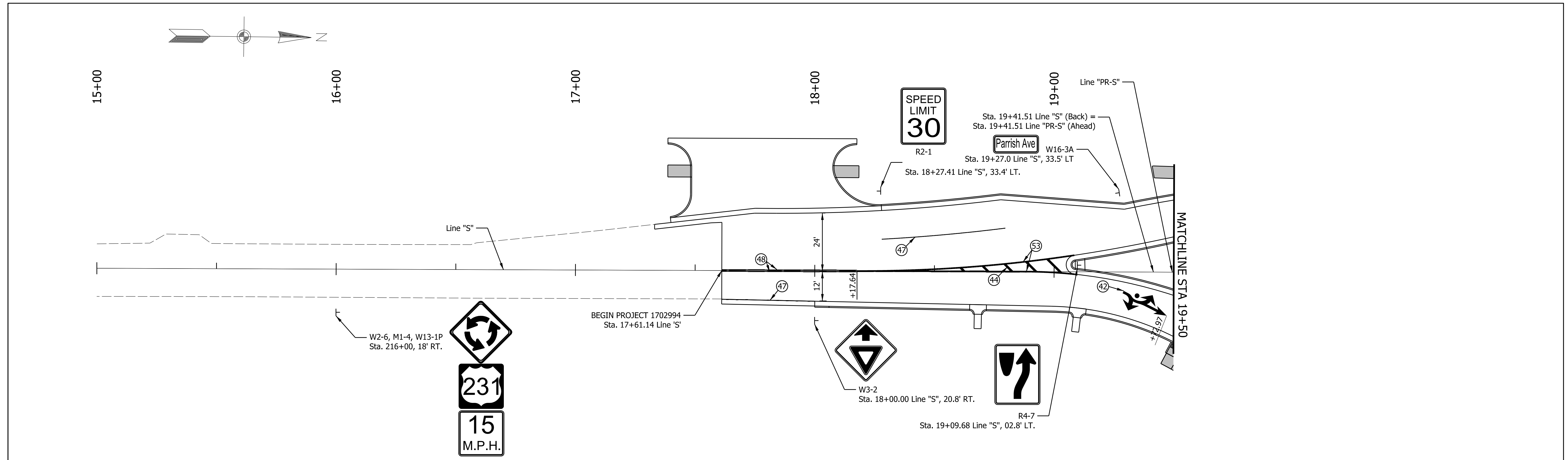
File: RD_PMK.dgn
Model:RB

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JAH	CHECKED: JAH	

INDIANA
DEPARTMENT OF TRANSPORTATION

**PAVEMENT MARKING
AND SIGNING**

HORIZONTAL SCALE 1"=20'	BRIDGE FILE NA
	DESIGNATION 1702994
SURVEY BOOK -	SHEETS 30 of 55
CONTRACT R-43388	PROJECT 1702994



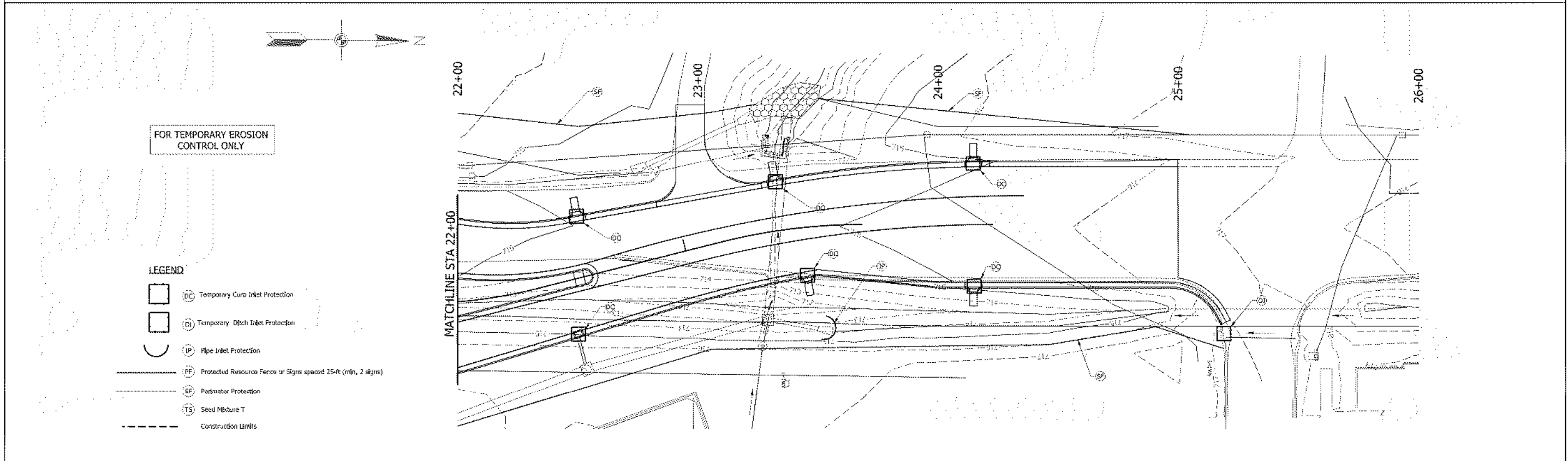
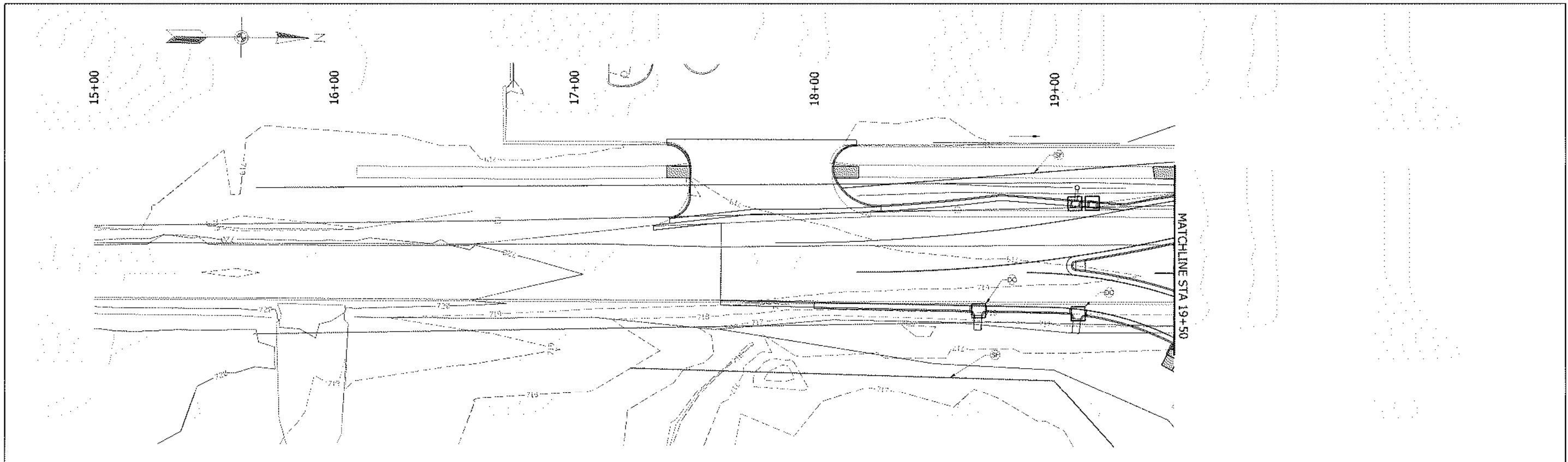
LEGEND

- (42) Pavement Message Marking, Thermoplastic, Lane Indication Arrow
- (44) Transverse Markings, Thermoplastic, Crosshatch, Yellow, 12" (45° @ 10' Spa.)
- (46) Transverse Markings, Thermoplastic, Yield Triangle, White
- (47) Line, Thermoplastic, Solid, White, 6"
- (48) Line, Thermoplastic, Solid, Yellow, 6"
- (49) Line, Thermoplastic, Broken, White, 6" (10' Line, 30' Gap)
- (52) Line, Thermoplastic, Solid, White, 8"
- (53) Line, Thermoplastic, Solid, Yellow, 8"
- (54) Line, Thermoplastic, Dotted, White, 6" (5' Line, 3' Gap)
- (55) Line, Thermoplastic, Dotted, White, 12" (3' Line, 2' Gap)

Plot: 6/14/2024

File: RD_PMK.dgn
Model:Parrish

RECOMMENDED FOR APPROVAL _____ DESIGNED: NSK CHECKED: JAH	DESIGN ENGINEER _____	DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE 1"=20'	BRIDGE FILE NA
	PAVEMENT MARKING AND SIGNING				SURVEY BOOK -	SHEETS 31 of 55
						CONTRACT R-43388



PWT: 6/21/2014

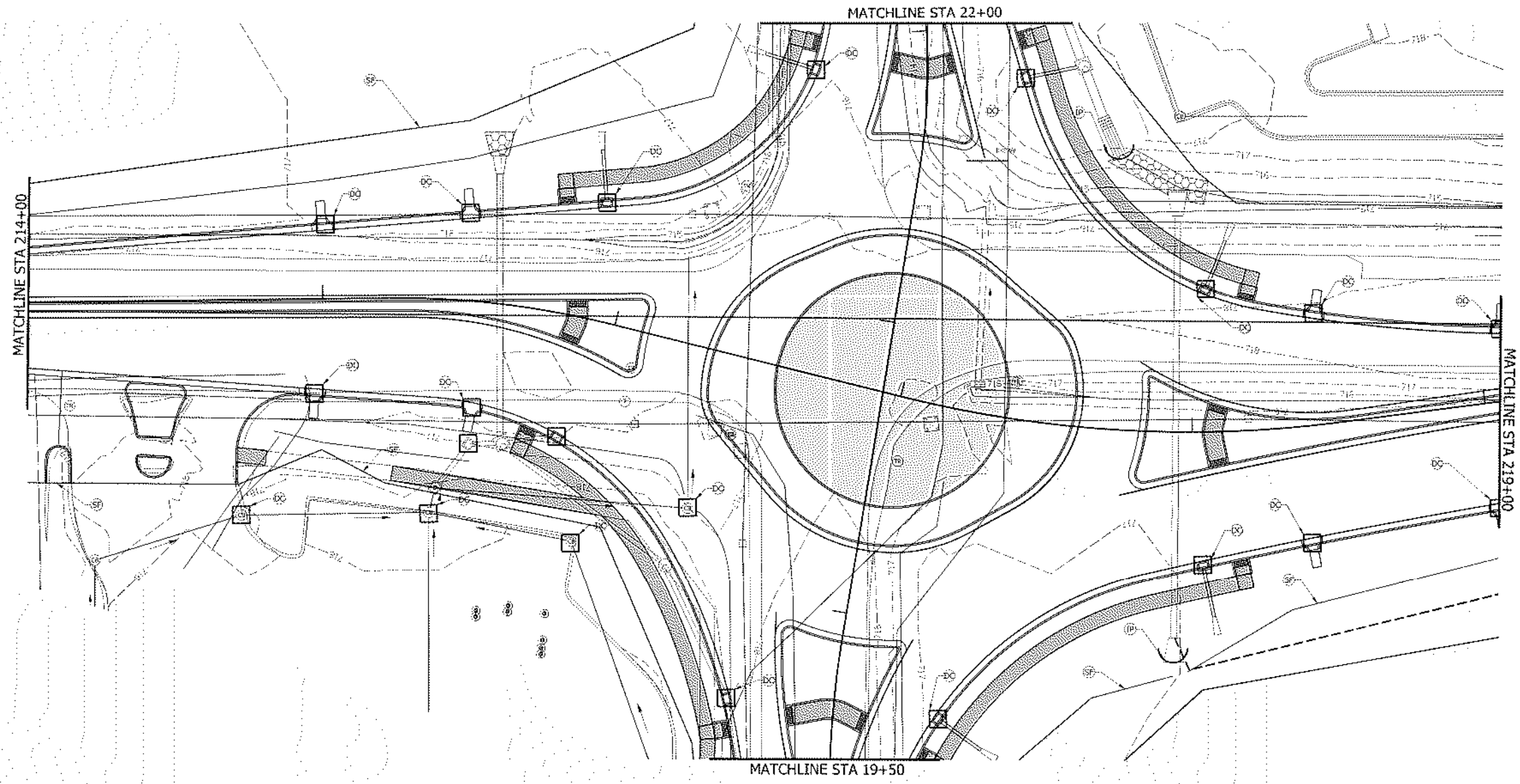
File: RD_Erosion_Control.dgn
Mod: Pantsh

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JAH	CHECKED: JAH	

**INDIANA
DEPARTMENT OF TRANSPORTATION**




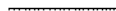



EROSION CONTROL

HORIZONTAL SCALE 1"=20'	BRIDGE FILE NA
SURVEY BOOK R-13288	DESIGNATION 1702954
	SHEETS 32 of 55
	PROJECT 1702954



FOR TEMPORARY EROSION CONTROL ONLY

LEGEND

-  DC Temporary Curb Inlet Protection
-  DI Temporary Ditch Inlet Protection
-  IP Pipe Inlet Protection
-  PF Protected Resource Fence or Signs spaced 25-ft (min, 2 signs)
-  SF Perimeter Protection
-  TS Seed Mixture T
-  Construction Limits

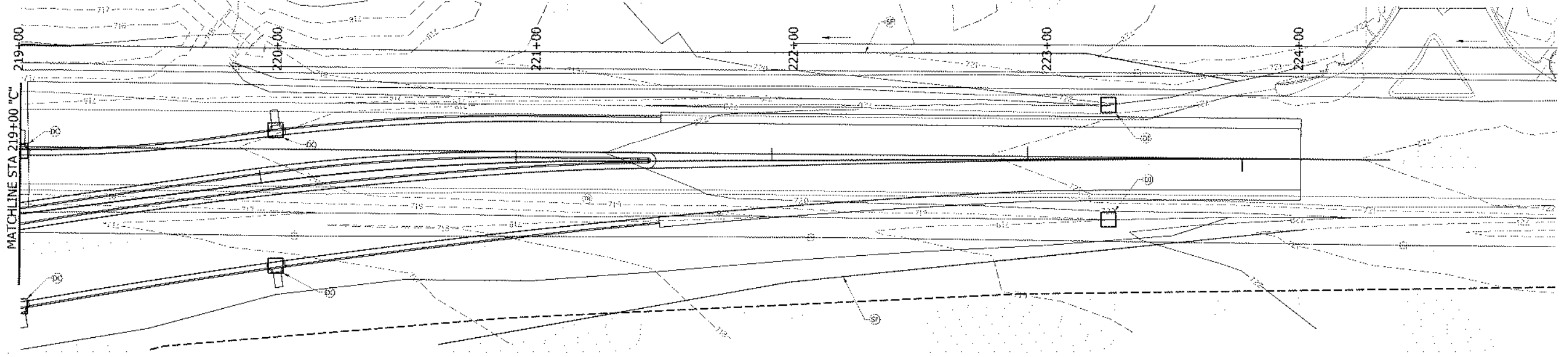
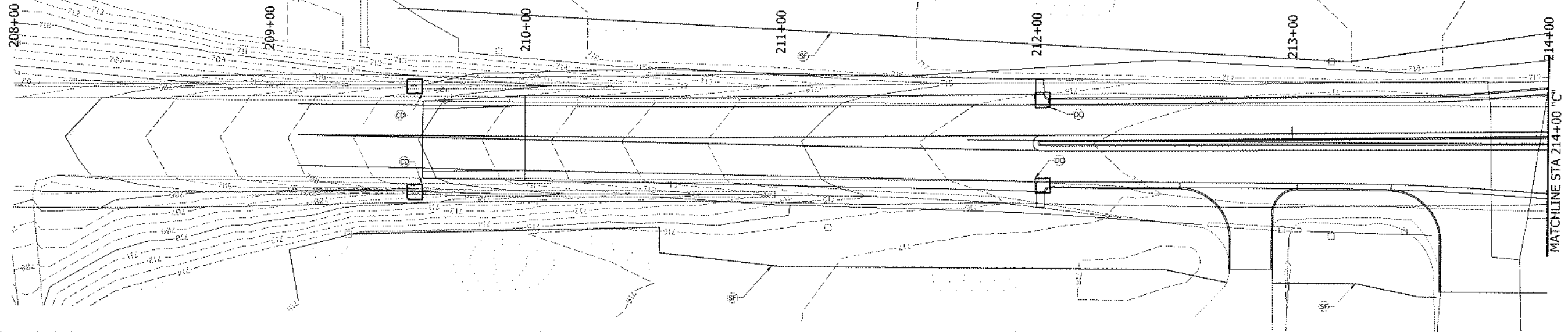
FILE: 6-21-17-2014
 File: RD_Erosion_Control.dgn
 Moor:RB

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JAH	CHECKED: JAH	

INDIANA
 DEPARTMENT OF TRANSPORTATION





EROSION CONTROL

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	NA
	DESIGNATION
	1702954
SURVEY BOOK	SHEETS
	33 of 55
CONTRACT	PROJECT
R-13288	1702954



FOR TEMPORARY EROSION CONTROL ONLY

LEGEND

-  Temporary Curb Inlet Protection
-  Temporary Ditch Inlet Protection
-  Pipe Inlet Protection
-  Protected Resource Fence or Signs spaced 25-ft (min. 2 signs)
-  Perimeter Protection
-  Seed Mixture T
-  Construction Limits
-  Check Dam

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JAH	CHECKED: JAH	

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL

HORIZONTAL SCALE 1"=20'	BRIDGE FILE NA
	DESIGNATION 1702954
SURVEY BOOK	SHEETS
	34 of 55
CONTRACT R-13288	PROJECT 1702954

FILE: 5/21/2004

File: RD_Erosion_Control.dgn
Mod: U5231

MONUMENTS						
Alignment	Sta.	Location	O/S	Section Corner	Type B	Type C
PR-C	212+21.78	PC	0		X	
PR-C	212+60.32	PT	0		X	
PR-C	212+41.05	PI			X	
PR-C	215+21.98	PC	0		X	
PR-C	215+98.50	PT	0		X	
PR-C	215+60.45	PI			X	
PR-C	217+01.08	PC	0			X
PR-C	218+49.72	PT	0		X	
PR-C	217+76.27	PI			X	
PR-C	220+05.83	PC	0		X	
PR-C	221+16.22	PT	0		X	
PR-C	220+61.08	PI			X	
PR-C	223+63.04	PC	0		X	
PR-C	223+91.90	PT	0		X	
PR-C	223+77.47	PI			X	
PR-S	19+41.51	PC	0		X	
PR-S	19+89.34	PT	0		X	
PR-S	19+65.47	PI			X	
PR-S	21+52.87	PC	0		X	
PR-S	22+35.94	PT	0		X	
PR-S	21+95.01	PI			X	
PR-S	23+15.20	PC	0		X	
PR-S	23+74.54	PT	0		X	
PR-S	23+45.02	PI			X	
PR-C	216+93.72	RAB middle	0			X
C	216+72.70	sec. corner	0	X		
TOTALS				1	23	2

PAVED SIDE DITCH, RIPRAP DITCH, AND SODDING SUMMARY TABLE																						
LOCATION			PAVED SIDE DITCH					RIPRAP DITCH				SODDING					REMARKS					
FROM STATION	TO STATION	LEFT	MEDIAN	RIGHT	ACTUAL LENGTH	TOTAL EQUIVALENT PAY LENGTHS					REVEMENT RIPRAP	CLASS I	GEOTEXTILES FOR RIPRAP, TYPE 2B	WATERPROOFING MEMBRANE	FOR PAVED SIDE DITCHES	FOR DITCHES		FOR MEDIAN	FOR SHOULDER BREAK	SODDING AT BRIDGE CONE	TOTAL SODDING	NURSERY SODDING FOR LAWNS
						TYPE																
						LFT	EACH	EACH	LFT	LFT												
Line "C" - US 231																						
209+60.00	211+75.00	X																				3,121
211+75.00	216+50.00	X																				
217+64.00	217+85.00	X																				
217+85.00	218+25.00	X																				
210+50.00	212+25.00		X								56	76										
215+00.00	215+50.00		X																			
217+45.00	218+45.00		X								140	180										
218+45.00	223+50.00		X																			
Line "S" - Parrish Ave.																						
22+00.00	22+78.00	X																				
23+20.00	24+25.00	X									147	189										
24+25.00	25+00.00	X																				
17+60.00	19+60.00		X																			
23+50.00	25+00.00		X																			
Totals											588	56	832	0		2,296						3,121

RIGHT-OF-WAY MARKERS			
Alignment	Sta.	O/S	LT/RT
C	209+50	45	LT
C	213+00	50.0	LT
C	213+90.06	50.0	LT
C	215+50	70.0	LT
S	22+00	50.0	LT
S	25+05	50.0	LT
C	210+52.88	45.0	RT
S	20+10	65.0	LT
S	23+09.10	55.0	RT
C	217+60	100.0	LT
C	218+00	50.0	LT
S	17+25	45.0	RT
S	19+00	45.0	RT
C	218+00	125.0	RT
A	222+00	50.0	RT
A	224+00	50.0	RT
TOTAL			16

FOUNDATION IMPROVEMENTS						
LOCATION	LENGTH	WIDTH	HEIGHT	PERIMETER	GEOTEXTILE FOR PAVEMENT TYPE 2B	COMPACTED AGGREGATE NO. 8 VOLUME
	FT	FT	FT	FT	SYS	CYS
NW						
209+60 to 216+30	670	5	2	14	1043	249
21+27 to 22+94	160	5	2	14		249
SW						
209+60 to 212+65	306	5	2	14	476	114
214+80 to 216+36	150	5	2	14	234	56
18+17 to 20+35	220	5	2	14	343	82
SE						
17+60 to 20+50	290	5	2	14	452	108
217+15 to 224+00	675	5	2	14	1050	250
NW						
217+15 to 219+75	260	10	2	14	694	193
219+95 to 224+00	405	5	2	14	630	150
21+55 to 23+30	175	5	2	14	273	65

CONCRETE CURB RAMP SUMMARY TABLE							
Alignment	Station	Rt./Lt.	Location	Quadrant	Curb Ramp Type (SYS)		Detectable Warning Surface (SYS)
					Perpendicular	Median Cut-Through	
S	21+95.22	Rt.	N Parrish Ave	NE	6.2		1.2
C	218+20.28	Lt.	E US 231	NE	6.1		1.2
C	218+09.02	Lt.	E US 231			6.9	1.4
C	218+08.73	Rt.	E US 231			9	1.4
C	218+14.61	Rt.	E US 231	SE	6.2		1.2
S	19+52.89	Rt.	S Parrish Ave	SE	6.1		1.2
S	19+63.22	Rt.	S Parrish Ave			9	1.4
S	19+63.54	Lt.	S Parrish Ave			12.5	1.4
S	19+58.54	Lt.	S Parrish Ave	SW	6.3		1.2
C	215+76.88	Rt.	W US 231	SW	6.1		1.2
C	215+85.15	Rt.	W US 231			7	1.4
C	215+85.83	Lt.	W US 231			4.2	1.4
C	215+76.95	Lt.	W US 231	NW	6.2		1.2
S	21+97.79	Lt.	N Parrish Ave	NW	6.1		1.2
S	21+89.80	Lt.	N Parrish Ave			9.6	1.4
S	21+89.21	Rt.	N Parrish Ave			6.9	1.4
TOTAL (SYS)					49.3	65.1	20.8
PAY ITEM QUANTITY (TOTAL)					50	66	21

MAILBOX APPROACHES				
LT./RT.	C/L BOX STATION	DESCRIPTION	WIDTH, W(FT)	ASSEMBLY REQ'D
				SINGLE DOUBLE
RT	212+64.55	appr. not required	0	X
RT	212+95.41	appr. not required	0	X
TOTAL				2

Plot: 6/14/2024

File: RD_MiscTables.dgn
Model:RD_Index Sheet

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	DESIGNATION 1702994
DESIGNED: NSK	DRAWN: NSK		SHEETS 35 of 55
CHECKED: JH	CHECKED: JH		CONTRACT R-43388

MISCELLANEOUS TABLES

PAVEMENT MARKINGS SUMMARY OF QUANTITIES										
LOCATION	LINE THERMOPLASTIC			LINE THERMOPLASTIC			TRANSVERSE MARKINGS THERMOPLASTIC YIELD LINE	TRANSVERSE MARKINGS CROSSHATCH LINE	TRANSVERSE MARKINGS CROSSWALK LINE	PAVEMENT MESSAGE THERMOPLASTIC LANE INDICATION ARROW
	SOLID WHITE	SOLID YELLOW	SOLID YELLOW	BROKEN WHITE	DOTTED WHITE	DOTTED WHITE	WHITE	SOLID YELLOW	SOLID WHITE	
	6 in	6 in	8 in	6 in	6 in	12 in	24 in	24 in	24 in	
	ft	ft	ft	ft	ft	ft	ft	ft	ft	
										EACH
North Leg	179	81	417		47	38	17	75	34	1
East Leg	658	30	542	280	58	68	28	290	59	2
South Leg	90	138	181		41	50	17	115	34	1
West Leg	814	122	560	48	53	60	27	290	54	2
Roundabout Circle	125									6
TOTALS	1,866	371	1,700	328	199	216	89	770	181	12

SHEET SIGN & POST SUMMARY TABLE												
PLAN SHEET NO. / LINE	SIGN LOCATION	SIGN CODE	SIGN SIZE (W x H)		SIGN, SHEET, WITH LEGEND (ft ²)				RELOCATE (EACH)	POST		
			(in x in)		THICKNESS (in)					2 1/4" x 2 1/4" - 12 Ga (Type 1) REINFORCED ANCHOR		
			Width	Height	0.080	.080 double-faced	0.100	0.100 double-faced		POST LENGTH (ft)		
										TYPE 1		
"C"	214+55	LT	M1-4	US 231	30	24	5.00				9.0	
"PR-C"	216+07.92	LT	M1-4	US 231	30	24	5.00				11.5	
"PR-C"	216+07.92	LT	M6-2(R)S	DIRECTIONAL ARROW	30	21	4.38					
"PR-C"	217+85.58	RT	M1-4	US 231	30	24	5.00				11.5	
"PR-C"	217+85.58	RT	M6-2(R)S	DIRECTIONAL ARROW	30	21	4.38					
"PR-C"	221+67	RT	M1-4	US 231	30	24	5.00				10.0	
"PR-C"	216+00.46	RT	R1-2	YIELD	36	36			4.50		8.5	
"PR-C"	216+07.15	RT	R1-2	YIELD	36	36			4.50		10.5	
"PR-C"	217+90.06	LT	R1-2	YIELD	36	36			4.50		8.5	
"PR-C"	217+98.43	LT	R1-2	YIELD	36	36			4.5		10.5	
"C"	208+50	LT	R2-1	SPEED LIMIT 45	24	30	5.00				10.5	
"A"	224+50	RT	R2-1	SPEED LIMIT 45	24	30	5.00				10.5	
"C"	212+04.4	RT	R4-7	KEEP RIGHT	24	30	5				10	
"PR-C"	221+47	LT	R4-7	KEEP RIGHT	24	30	5.00				10	
"PR-C"	221+47	LT	W3-2	YIELD AHEAD	30	30	6.25				10.5	
"PR-C"	216+72.53	RT	R6-1R	ONE WAY	36	12			3		8.5	
"PR-C"	216+72.53	RT	R6-4	ROUNDABOUT DIRECTIONAL	48	24			8			
"PR-C"	217+15.86	LT	R6-1R	ONE WAY	36	12			3		8.5	
"PR-C"	217+15.86	LT	R6-4	ROUNDABOUT DIRECTIONAL	48	24			8			
"C"	208+50	RT	W2-6	ROUNDABOUT	30	30	6.25				13	
	208+50	RT	W13-1P	15 MPH	18	18	2.25					
	208+50	RT	W16-3A	PARRISH AVE	30	12	2.5					
"A"	224+50	LT	W2-6	ROUNDABOUT	30	30	6.25				13	
	224+50	LT	W13-1P	15 MPH	18	18	2.25					
	224+50	LT	W16-3A	PARRISH AVE	30	12	2.5					
"PR-C"	215+79.80	LT	W4-2R	LANE ENDS	36	36			9		8.5	
"PR-C"	217+96.73	RT	W4-2R	LANE ENDS	36	36			9		8.5	
"C"	212+09	RT	W3-2	YIELD AHEAD	30	30	6.25				10.5	
"PR-C"	215+91.88	LT	W11-2	PEDESTRIAN CROSSING	36	36			9		10.5	
"PR-C"	215+67.75	RT	W16-7(P)L	DIAGONAL ARROW (L)	24	12	2					
"PR-C"	215+67.75	RT	W11-2	PEDESTRIAN CROSSING	36	36			9		10.5	
"PR-C"	218+35.83	LT	W16-7(P)L	DIAGONAL ARROW (L)	24	12	2					
"PR-C"	218+35.83	LT	W11-2	PEDESTRIAN CROSSING	36	36			9		10.5	
"PR-C"	217+89.26	RT	W16-7(P)L	DIAGONAL ARROW (L)	24	12	2					
"PR-C"	217+89.26	RT	W11-2	PEDESTRIAN CROSSING	36	36			9		10.5	
"S"	25+00	LT	M1-4	US 231	30	24	5				14	
"S"	25+00	LT	W2-6	ROUNDABOUT	30	30	6.25					
"S"	25+00	LT	W13-1P	15 MPH	18	18	2.25					
"S"	16+00	RT	M1-4	US 231	30	24	5				14	
"S"	16+00	RT	W2-6	ROUNDABOUT	30	30	6.25					
"S"	16+00	RT	W13-1P	15 MPH	18	18	2.25					
"PR-S"	21+67.33	RT	M6-2(R)S	DIRECTIONAL ARROW	30	21	4.375				10.5	
"PR-S"	21+67.33	RT	W16-3A	PARRISH AVE	30	12	2.5					
"PR-S"	19+87.47	LT	M6-2(R)S	DIRECTIONAL ARROW	30	21	4.375				10.5	
"PR-S"	19+87.47	LT	W16-3A	PARRISH AVE	30	12	2.5					
"PR-S"	21+67.26	LT	R1-2	YIELD	36	36			4.5		10.5	
"PR-S"	21+81.21	LT	R1-2	YIELD	36	36			4.5		8.5	
"PR-S"	19+86.31	RT	R1-2	YIELD	36	36			4.5		10.5	
"PR-S"	19+70.36	RT	R1-2	YIELD	36	36			4.5		10.5	
"S"	25+00	RT	R2-1	SPEED LIMIT 40	24	30	5				9.5	
"S"	18+27.41	LT	R2-1	SPEED LIMIT 30	24	30	5				10	
"PR-S"	22+57.57	0	R4-7	KEEP RIGHT	24	30	5				10	
"S"	19+09.58	LT	R4-7	KEEP RIGHT	24	30	5				10	
"PR-S"	21+02.33	LT	R6-1R	ONE WAY	36	12			3		8.5	
"PR-S"	21+02.33	LT	R6-4	ROUNDABOUT DIRECTIONAL	48	24			8			
"PR-S"	20+59.87	RT	R6-1R	ONE WAY	36	12			3		8.5	
"PR-S"	20+59.87	RT	R6-4	ROUNDABOUT DIRECTIONAL	48	24			8			
"S"	23+97.11	LT	W3-2	YIELD AHEAD	30	30	6.25				10.5	
"S"	18+00	RT	W3-2	YIELD AHEAD	30	30	6.25				10	
"PR-S"	22+83	RT	W16-3A	PARRISH AVE	30	12	2.5				9	
"S"	19+27	LT	W16-3A	PARRISH AVE	30	12	2.5				8.5	
TOTALS							169.50		134.00		427.0	

Plot: 6/14/2024

File: RD_TrafficSummaryTables.dgn
Model:RD_Index Sheet

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		DESIGNATION 1702994
DESIGNED: NSK	DRAWN: NSK		TRAFFIC SUMMARY TABLES		SHEETS 36 of 55
CHECKED: JH	CHECKED: JH		CONTRACT R-43388	PROJECT 1702994	

CURB TURNOUTS			
LOCATION			
STATION	LT	RT	
Line "S"			
22+58	x		
23+32	x		
24+14	x		
18+68		x	
18+75		x	
19+09		x	
23+50		x	
24+14		x	
Line "C"			
212+02	x		
215+00	x		
215+48	x		
218+46	x		
219+08	x		
220+08	x		
212+02		x	
214+95		x	
215+53		x	
218+36		x	
219+00		x	
220+00		x	
Subtotals	9	11	
Total		20	

PAVEMENT QUANTITIES AND APPROACH TABLE																															
LOCATION	DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	DISTANCE BEYOND R/W LINE	SURFACE BEYOND R/W LINE		SUBGRADE TREATMENT		PCCP, COLORED, (8")	SIDEWALK CONCRETE (6")	QC/QA-HMA MATERIALS				QC/QA-PCCP, (8")	HMA MATERIAL FOR:				COMPACTED AGGREGATE FOR BASE			PCCP FOR APPROACHES		CURB, INTEGRAL CONCRETE	CURB AND GUTTER, B, CONCRETE	CURB AND GUTTER, CONCRETE	MODIFIED SLOPE, CURB & GUTTER, B, CONCRETE	REMARKS	
						COMPACTED AGGREGATE BASE	CONCRETE	IC	TYPE II			SURFACE, 3, 76 9.5 mm	INTERMD., 3, 76 19.0 mm	BASE, 3, 64 19.0 mm	BASE, 3, 64 19.0 mm		ASPHALT FOR TACK COAT	LIQUID ASPHALT SEALANT	JOINT ADHESIVE, SURFACE	JOINT ADHESIVE, INTERMEDIATE	NO. 53	NO. 73	DEPTH		DEPTH						
																							LBS. PER SYD.	8"	9"						6"
						220	275	385	550			TONS	LFT	LFT	LFT		CYS	CYS	TON	SYS	SYS	LFT	LFT	LFT	LFT						
North Leg	"S" 22+30 to 25+00							1,619				184	230	322	460	222	1	580	580	580			2					30		204	
East Leg	"C" 220+00 to 224+00							1,694				318	397	556	794	517	1	815	815	815			9					32		749	
South Leg	"S" 19+00 to 17+60							1,034				114	143	199	285	243	1	391	391	391			1					37		181	
West Leg	"C" 214+00 to 209+60							1,627				290	363	508	725	397	1	881	881	881			15					19		826	
RAB Center								5,770			301	167	209	292	417		3	1,702	1,702	1,702										2,545	
North Splitter Island								222		156													35								
East Splitter Island								517		299													67								
South Splitter Island								244		182													41								
West Splitter Island								397		162													36								
Truck Apron								527		527						627							117				252				358
212+84 Line "PR-C"	Class I	12	32	20'/10'	4.8	9				71																					25
213+82 Line "PR-C"	Class III	52	38	20'	13		70			171																					86
214+45 Line "PR-C"	Class III	57	34	20'				34	209	37												10								81	
17+77 Line "PR-S"	Class III	59	31	20'/10'						236																					226
22+97 Line "PR-S"	Class II	12	30	20'/10'						77																					77
SUBTOTALS:					18	9	70	13,685	764	1,363	301	1,073	1,342	1,877	2,681	2,006	7	4,369	4,369	4,369	117	189	27	148	616	252	118	2,963	2,318		

Plot: 6/14/2024

File: RD_ApproachTable.dgn
Model:RD_Index Sheet

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	DESIGNATION 1702994
DESIGNED: NSK _____ DRAWN: NSK _____	APPROACH TABLE	SHEETS 37 of 55
CHECKED: JH _____ CHECKED: JH _____		CONTRACT R-43388 PROJECT 1702994

STRUCTURE NUMBER	LOCATION				SIZE	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE	LENGTH	SKEW	COVER	FLOWLINE		SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL	TYPE	REVETMENT RIPRAP	CLASS 2 RIPRAP	GEOTEXTILES, TYPE 2B	VIDEO INSPECTION FOR PIPES	PIPE END SECTION CONCRETE	PIPE ANCHOR	GRADED BOX END SECTION, TYPE 2		SAFETY METAL END SECTION		CONNECT TO STR. NO.	REMARKS													
	STATION	LEFT	RIGHT	CROSS							OFFSET	FT													IN	LFT	FT	UP			DOWN	YR.	CYS	TON	TON	SYS	LFT	EACH	EACH	SLOPE	EACH	SLOPE	EACH
																												ELEV.			ELEV.												
Existing Structures																																											
Line "C"																																											
101	208+11		X		22.5	12	3																																				
102	209+73		X		24.0	8	4																																				
103	210+05		X		24.3	8	4																																				
104	215+37		X		66.9	12	2																																				
105	215+39		X		58.5	18	2																																				
106	216+24		X		64.8	15	2																																				
107	217+23			X	23.6	18	1																																				
108	217+91	X			69.8	12	2																																				
109	219+87	X			43.9	15	3																																				
Line "A"																																											
110	222+01	X			43.3	15	2																																				
111	225+03	X			44.5	15	2																																				
Line "S"																																											
112	22+83	X			21.9	15	3																																				
113	23+27		X		50.6	18	2																																				
114	23+29		X		48.9	18	2																									Remove 6 ft of 12 ft pipe, replace with Str. 225.											
115	23+31			X	31.2	18	1																																				
116	25+77	X			35.2	15	1																																				
Proposed Structures																																											
Line "C"																																											
201	213+04		X		34.3	15	3			n/a	715.73	715.40	50	A	7.0	1	2																										
202	215+39		X		58.5	18	2			1.9	714.50	714.41	50	NA	7.0	1	2				18																						
203	215+50		X		43.8	18	2			0.6	714.31	714.17	50	NA	7.0	1	2				7	1																					
204	215+61		X		43.2	24	2			2.2	712.83	712.65	50	NA	7.0	1	2	6			13	90																					
205	215+80	X			EOP	12	2			1.2	715.34	715.04	50	NA	7.0	1	2																										
206	215+96		X		EOP	12	2			1.2	715.20	715.14	50	NA	7.0	1	2				21																						
207	Not Used																																										
208	217+90			X	104.7	36	1			n/a	712.51	711.69	50	A	7.0	1	2	20			42		2								Sump 3-in.												
209	218+05	X			EOP	12	2			1.2	715.54	715.24	50	NA	7.0	1	2																										
210	218+03		X		EOP	12	2			1.2	715.44	715.14	50	NA	7.0	1	2																										
Line "S"																																											
211	19+09	X			35.5	12	2			1.5	715.50	715.38	50	NA	7.0	1	5	2			6																						
212	19+09	X			EOP	18	2			1.2	714.54	714.44	50	NA	7.0	1	4	2			5																						
213	19+14	X			EOP	18	2			1.9	714.34	713.81	50	NA	7.0	1	43	2			53																						
214	19+64		X		EOP	12	2			1.2	715.65	715.45	50	NA	7.0	1	16	2			20																						
215	19+71	X			EOP	18	2			2.5	713.77	713.67	50	NA	7.0	1	39	2			48																						
216	20+15	X			55.0	18	2			3.4	713.57	713.43	50	NA	7.0	1	56	2			70																						
217	21+68		X		92.3	36	2			n/a	711.40	711.32	50	A	7.0	1	14	2			17				4:1	1																	
218	21+81		X		EOP	12	2			1.4	715.10	714.90	50	NA	7.0	1	14	2			17																						
219	21+84	X			EOP	12	2			1.2	715.24	714.94	50	NA	7.0	1	12	2			15																						
220	21+86		X		86.0	36	2			4.0	711.22	710.88	50	NA	7.0	1	55	2			68																						
221	22+50		X		EOP	12	2			1.2	714.84	714.60	50	NA	7.0	1	10	2			12																						
222	22+55		X		60.0	36	2			3.8	709.66	709.28	50	NA	7.0	1	60	2			75																						
223	22+76	X			24.2	24	3			n/a	710.03	709.41	50	A	7.0	1	33	2			2																						
224	23+29		X		39.5	42	2			0.8	708.68	708.53	50	NA	7.0	1	60	2	15		29	75		1																			
225	23+29		X		45.5	18	2			3.5	710.05	710.03	50	NA	7.0	1	3	2			3																						
226	23+50		X		43.4	18	2			n/a	710.50	710.40	50	A	7.0	1	16	2			20	1										Verify elevations in field.											

Plot: 6/14/2024

File: RD_Structure Data.dgn
Model:RD_Index Sheet

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION	DESIGNATION 1702994
DESIGNED: NSK DRAWN: NSK	STRUCTURE DATA TABLE	SHEETS 38 of 55
CHECKED: JH CHECKED: JH		CONTRACT R-43388 PROJECT 1702994

PIPE MATERIAL TABLE

PIPE TYPE / SHAPE	STRUCTURE NUMBER																					
	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222
SMOOTH PIPE SIZE	15 in.	18 in.	18 in.	24 in.	12 in.	12 in.	Not Used	36 in.	12 in.	12 in.	12 in.	18 in.	18 in.	12 in.	18 in.	18 in.	36 in.	12 in.	12 in.	36 in.	12 in.	36 in.
CORRUGATED PIPE SIZE	N/A	N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
RCP/RCHEP (S)	II	II	II	II	II	II		II	II	II	II	II	II	II	II	II	II	II	II	II	II	II
D _{0.01} RATING	1000	1000	1000	1000	1000	1000		1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)		OK		OK							OK		OK		OK	OK		OK		OK		OK
CORRUGATED PE PIPE, TYPE S (S)*				OK											OK	OK				OK		OK
PROFILE WALL (RIBBED) PE PIPE (S)*				OK											OK	OK				OK		OK
PROFILE WALL (CLOSED) PE PIPE (S)*				OK											OK	OK				OK		OK
SMOOTH WALL PE PIPE (S)* / MAXIMUM DR				OK / 26											OK / 26	OK / 26				OK / 26		OK / 26
CORRUGATED PP PIPE (S)				OK											OK	OK				OK		OK
PROFILE WALL PVC PIPE (S)				OK											OK	OK				OK		OK
SMOOTH WALL PVC PIPE (S)*				OK											OK	OK				OK		OK
VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)		OK		OK	OK	OK			OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK	OK
FULLY BIT. PAVED & LINED (S)																						
ZINC COATED (C)																						
ZINC COATED W/ BPI (C)																						
ALUM. COATED TYPE 2 (C)																						
POLYMER PRECOATED GALVANIZED (C)																						
POLYMER PRECOATED GALVANIZED CORRUGATED STEEL PIPE TYPE 1A (S)																						
ZINC COATED (SS)																						
ZINC COATED W/ BPI (SS)																						
ALUM. COATED TYPE 2 (SS)																						
POLYMER PRECOATED GALVANIZED (SS)																						
STR. PLATE ALUMINUM ALLOY PLATE (C)																						
STR. PLATE ALUMINUM ALLOY PLATE W/ CFP (C)																						
STR. PLATE STEEL (C)																						
STR. PLATE STEEL W/ CFP (C)																						

PIPE TYPE / SHAPE	STRUCTURE NUMBER			
	223	224	225	226
SMOOTH PIPE SIZE	24 in.	42 in.	18 in.	18 in.
CORRUGATED PIPE SIZE	N/A	N/A	N/A	N/A
RCP/RCHEP (S)	II	II	II	II
D _{0.01} RATING	1000	1000	1000	1000
NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)			OK	
CORRUGATED PE PIPE, TYPE S (S)*			OK	
PROFILE WALL (RIBBED) PE PIPE (S)*			OK	
PROFILE WALL (CLOSED) PE PIPE (S)*			OK	
SMOOTH WALL PE PIPE (S)* / MAXIMUM DR			OK / 26	
CORRUGATED PP PIPE (S)			OK	
PROFILE WALL PVC PIPE (S)			OK	
SMOOTH WALL PVC PIPE (S)*			OK	
VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)			OK	
FULLY BIT. PAVED & LINED (S)				
ZINC COATED (C)				
ZINC COATED W/ BPI (C)				
ALUM. COATED TYPE 2 (C)				
POLYMER PRECOATED GALVANIZED (C)				
POLYMER PRECOATED GALVANIZED CORRUGATED STEEL PIPE TYPE 1A (S)				
ZINC COATED (SS)				
ZINC COATED W/ BPI (SS)				
ALUM. COATED TYPE 2 (SS)				
POLYMER PRECOATED GALVANIZED (SS)				
STR. PLATE ALUMINUM ALLOY PLATE (C)				
STR. PLATE ALUMINUM ALLOY PLATE W/ CFP (C)				
STR. PLATE STEEL (C)				
STR. PLATE STEEL W/ CFP (C)				

LEGEND

RCP- Reinforced Concrete Pipe
 RCHEP- Reinforced Concrete Horizontal Elliptical Pipe
 PE- Polyethylene
 DR- Dimension Ratio
 PVC- Polyvinyl Chloride
 BIT- Bituminous
 CORR- Corrugation
 BPI- Bituminous Paved Invert
 ALUM- Aluminum
 STR- Structural
 CFP- Concrete Field Paving
 CIR- Circular Pipe
 DEF- Deformed Pipe
 (S)- Smooth Pipe Material
 (C)- Corrugated Pipe Material
 OK- Acceptable for Use
 (LS)- Lock Seam Pipe Required

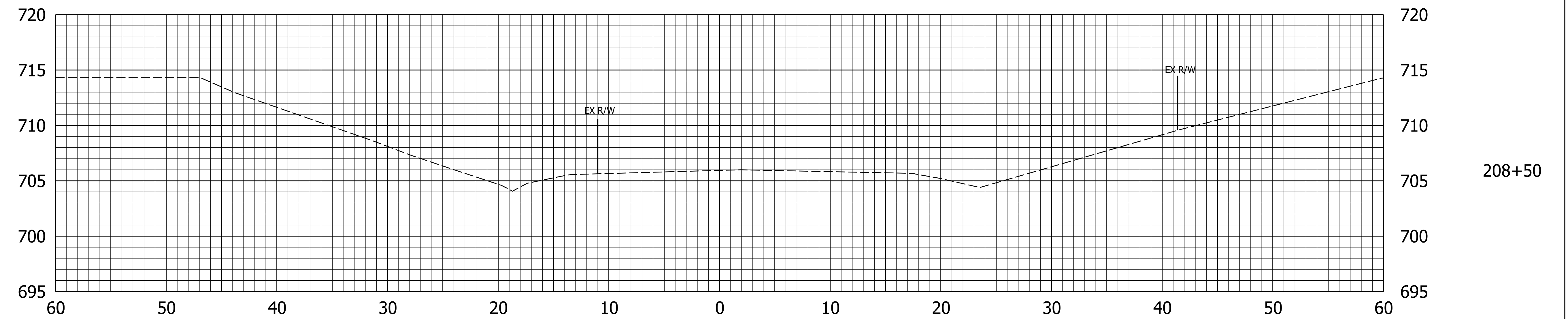
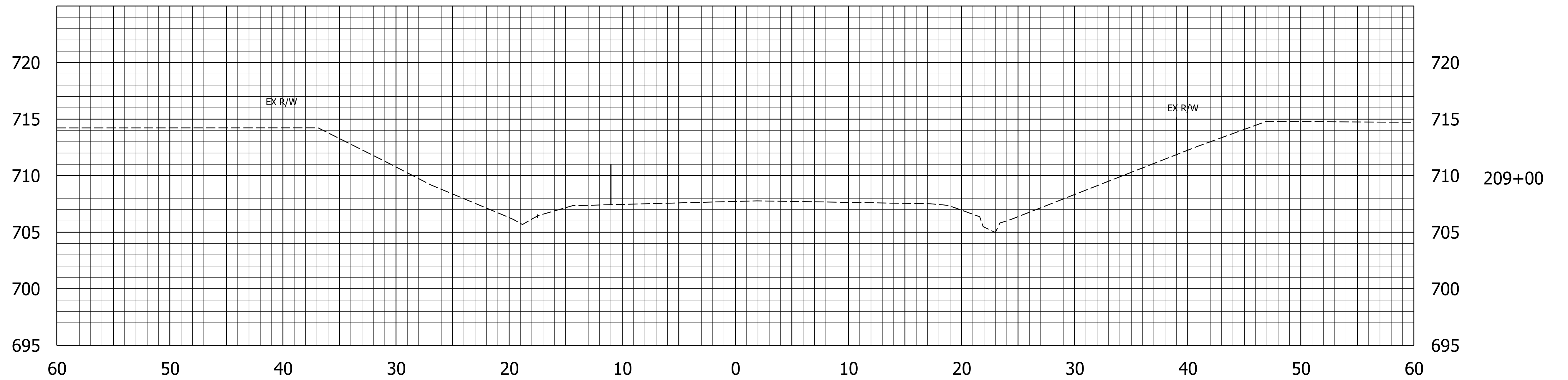
*- Refer to Standard Drawings 715-PHCL-18 and -19 for nominal diameter appropriate for pay item diameter.

** - Tabulated thickness refers to top and side plates. Bottom plates shall be of next greater available thickness.

Plot: 6/14/2024

File: RD_Pipe Material.dgn
 Model:RD_Index Sheet

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE	INDIANA DEPARTMENT OF TRANSPORTATION		DESIGNATION
DESIGNED: NSK	DRAWN: NSK		PIPE MATERIAL TABLE		1702994
CHECKED: JH	CHECKED: JH			SHEETS	39 of 55
				CONTRACT	PROJECT
				R-43388	1702994



Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
Model: 1

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: NSK _____	DRAWN: NSK _____	
CHECKED: JH _____	CHECKED: JH _____	

INDIANA
DEPARTMENT OF TRANSPORTATION

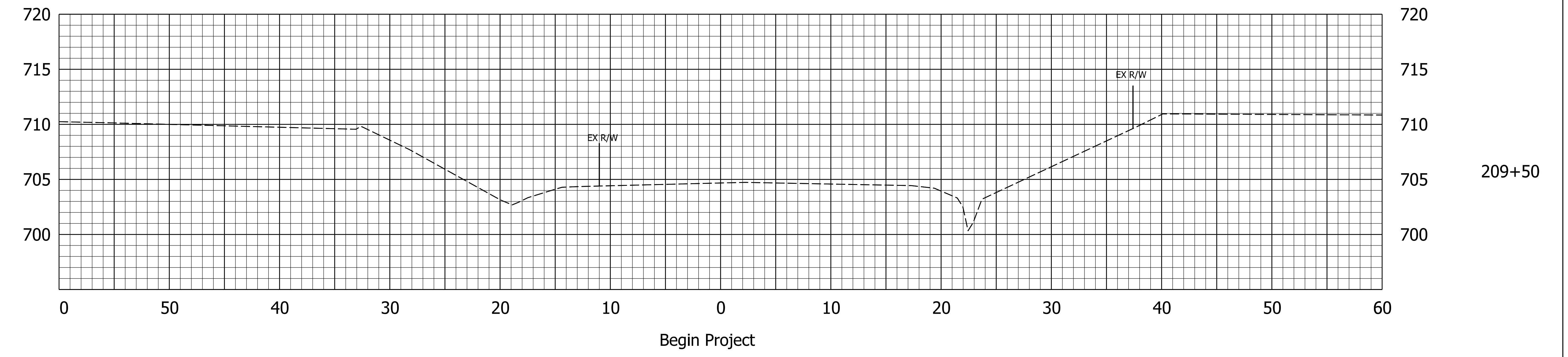
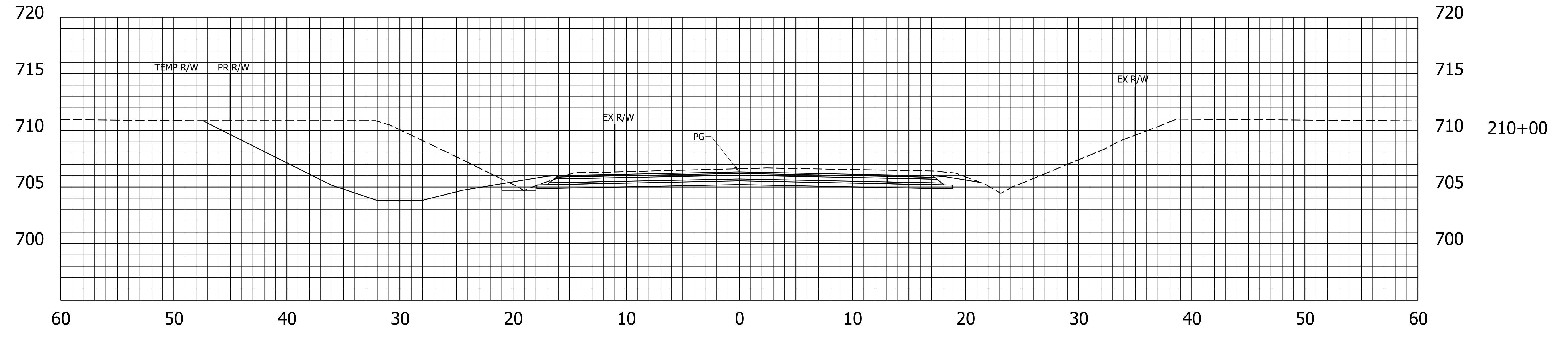
**CROSS SECTIONS
US 231 LINE "C"**

HORIZONTAL SCALE 1"=5'	BRIDGE FILE
VERTICAL SCALE 1"=5'	DESIGNATION 1702994
	SHEETS 40 of 55
CONTRACT R-43388	PROJECT 1702994

Existing: 711.58
Proposed: 711.34

Af: 2.3 SF Vf: 2 CY
Ac: 141.1 SF Vc: 131 CY

Ab: 1.1 SF Vb: 1 CY



Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
Model: 2

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

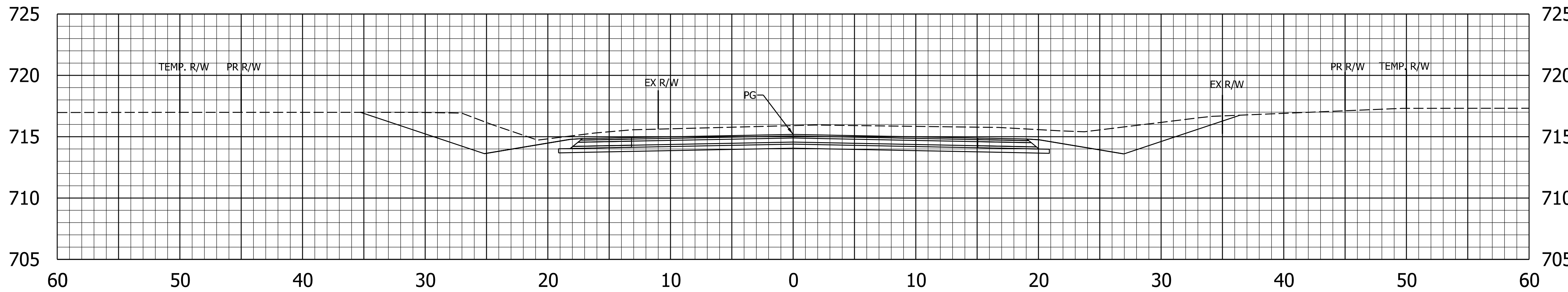
INDIANA
DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS
US 231 LINE "C"**

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
1"=5'	1702994
	SHEETS
	41 of 55
CONTRACT	PROJECT
R-43388	1702994

Existing: 715.90
Proposed: 715.69

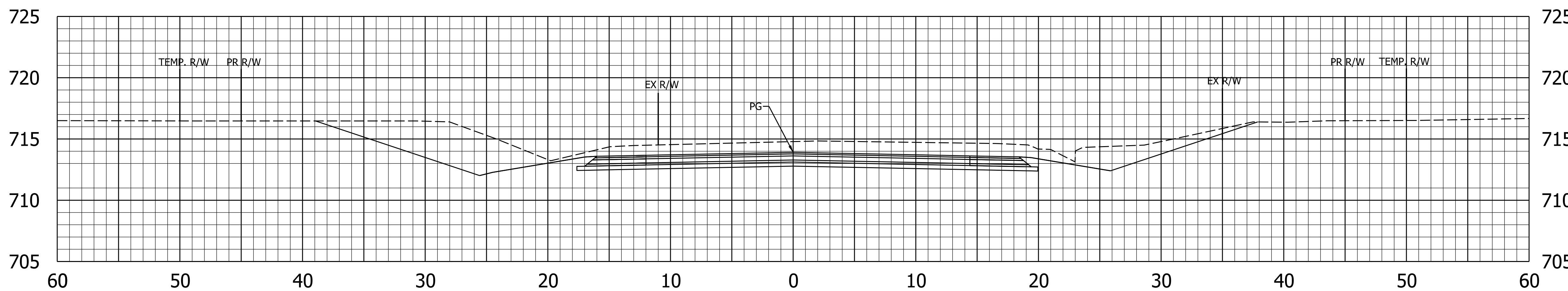
Af: 0 SF Vf: 0 CY
Ac: 98.2 SF Vc: 201 CY



211+50

Existing: 714.77
Proposed: 714.48

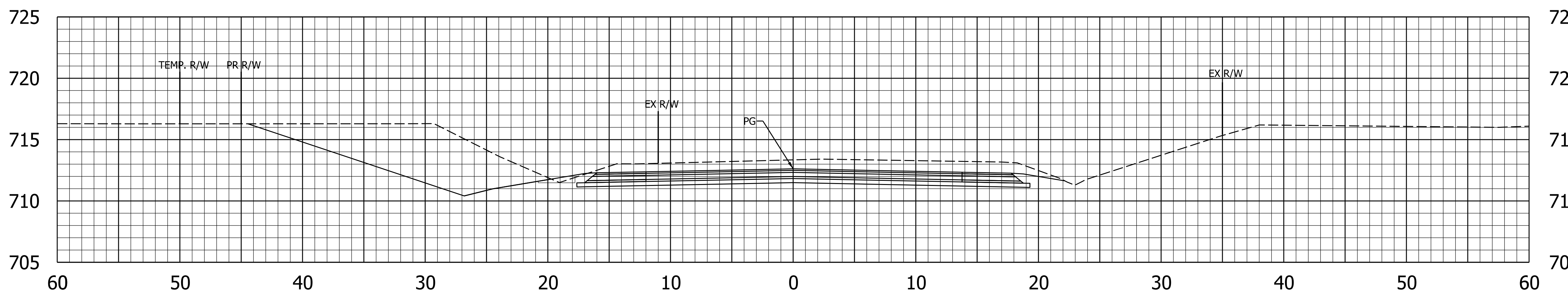
Af: 0 SF Vf: 1 CY
Ac: 118.4 SF Vc: 223 CY
Ab: 0 SF Vb: 1 CY



211+00

Existing: 713.33
Proposed: 713.03

Af: 0.6 SF Vf: 3 CY
Ac: 121.9 SF Vc: 244 CY
Ab: 0.6 SF Vb: 2 CY



210+50

Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
Model: 3

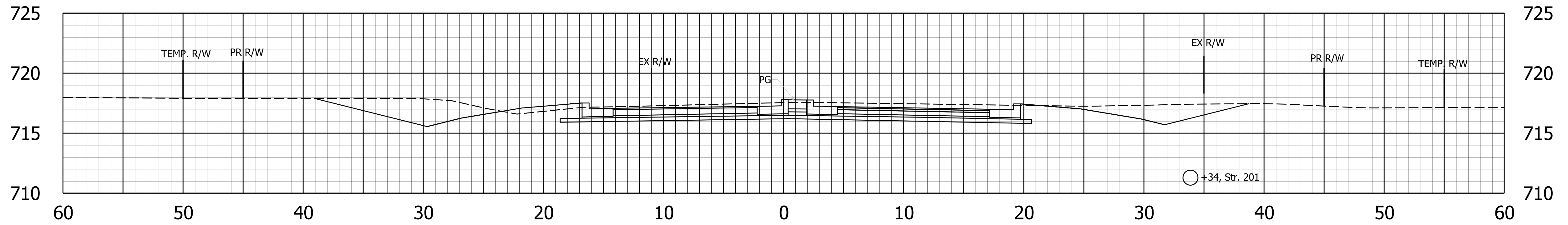
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

INDIANA
DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS
US 231 LINE "C"**

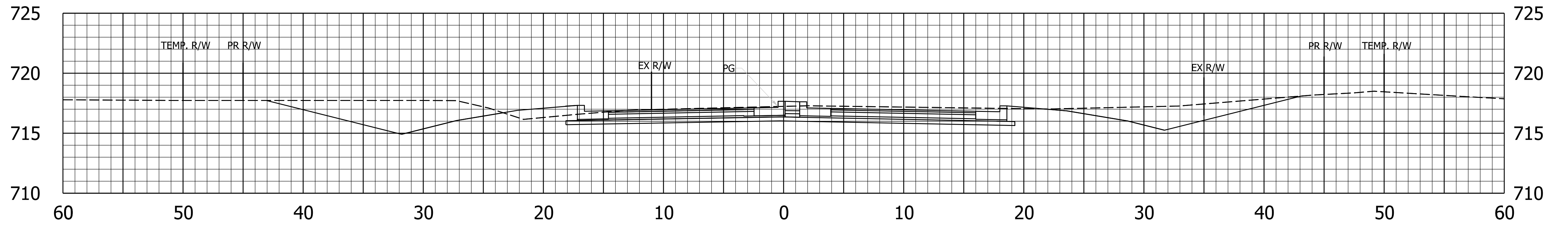
HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
1"=5'	1702994
	SHEETS
	42 of 55
CONTRACT	PROJECT
R-43388	1702994

Existing: 717.56
 Proposed: 718.18
 Af: 2.7 SF Vf: 7 CY
 Ac: 69.1 SF Vc: 139 CY



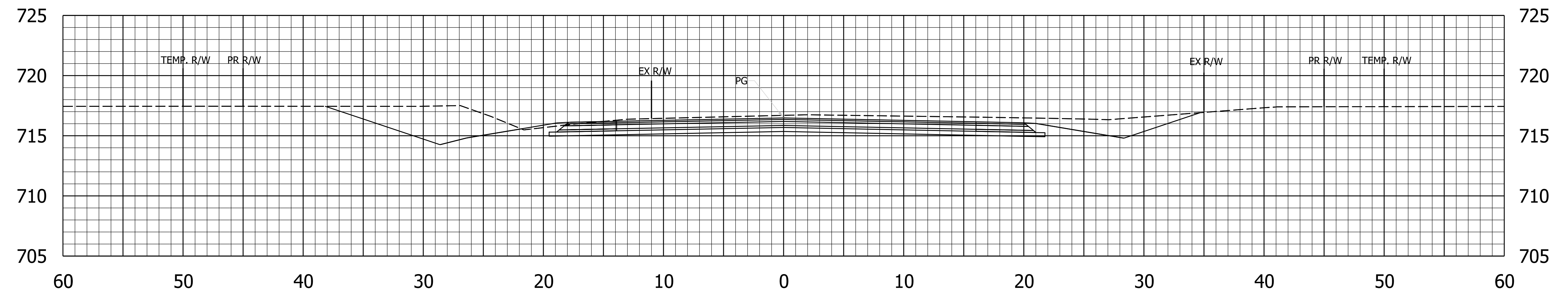
213+00

Existing: 717.25
 Proposed: 717.52
 Af: 4.5 SF Vf: 5 CY
 Ac: 81.1 SF Vc: 150 CY



212+50

Existing: 716.69
 Proposed: 716.66
 Af: 0.7 SF Vf: 1 CY
 Ac: 80.5 SF Vc: 165 CY



212+00

Plot: 6/14/2024

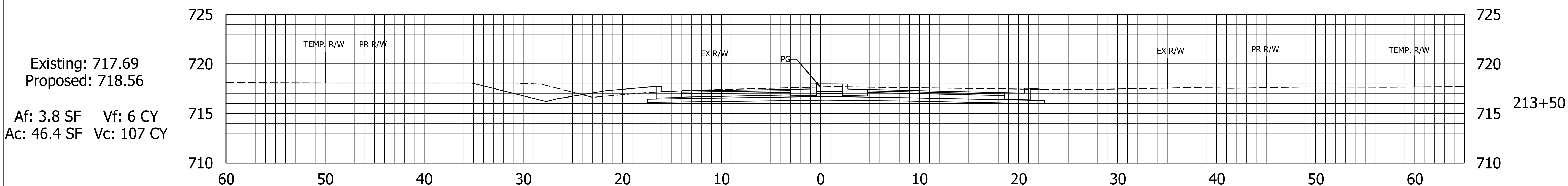
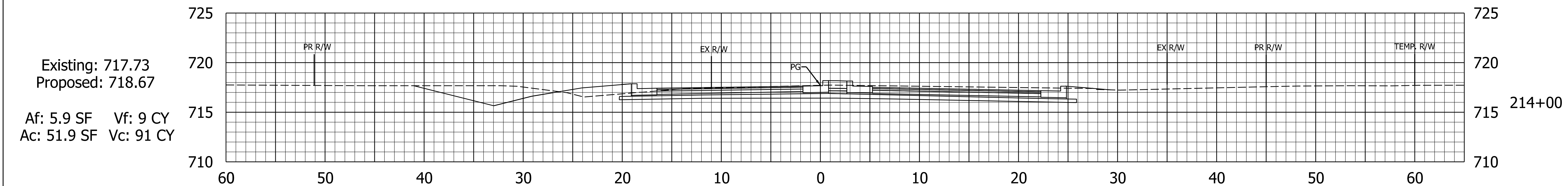
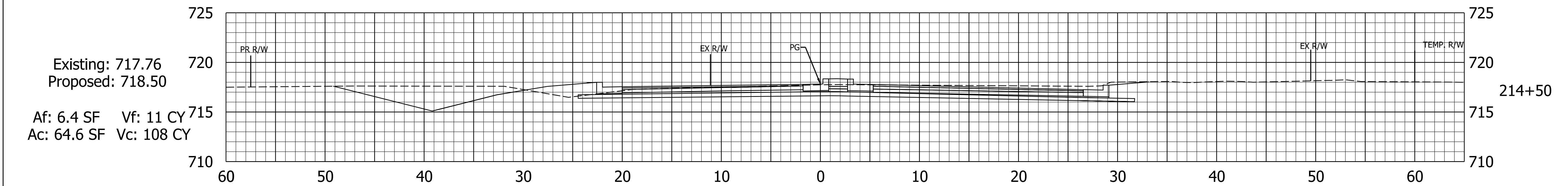
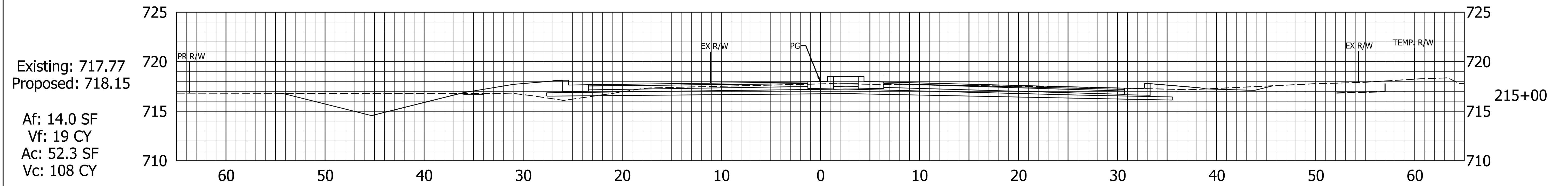
File: RD_Cross Sections 231.dgn
 Model:4

RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: NSK _____	DRAWN: NSK _____	
CHECKED: JH _____	CHECKED: JH _____	

INDIANA
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
 US 231 LINE "C"

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
1"=5'	1702994
	SHEETS
	43 of 55
CONTRACT	PROJECT
R-43388	1702994



Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
Model: 5

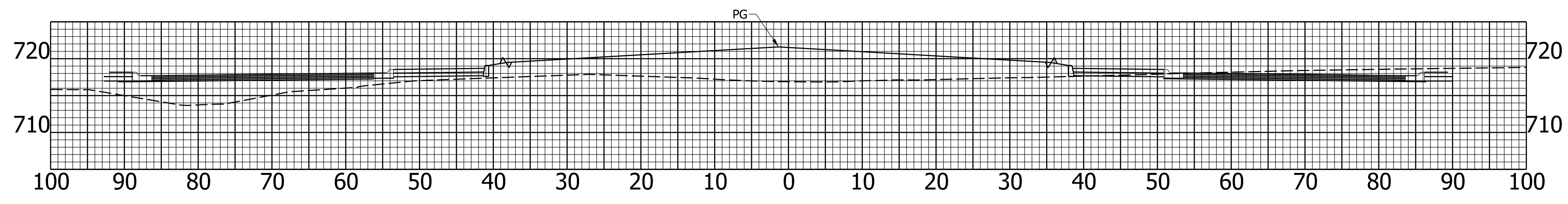
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

INDIANA
DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS
US 231 LINE "C"**

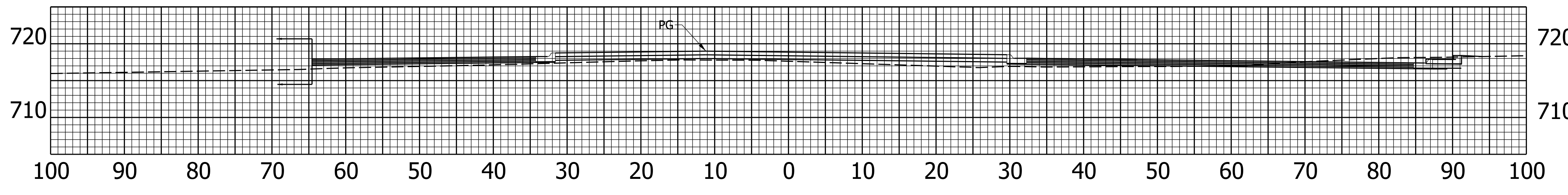
HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
1"=5'	1702994
	SHEETS
	44 of 55
CONTRACT	PROJECT
R-43388	1702994

Existing: 716.90
Proposed: 721.59
Af: 333.6 SF Vf: 346 CY
Ac: 52.8 SF Vc: 78 CY



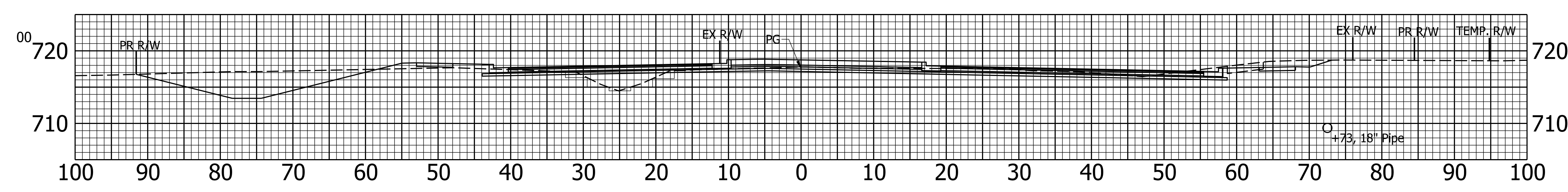
217+00

Existing: 717.79
Proposed: 719.00
Af: 39.7 SF Vf: 59 CY
Ac: 31.9 SF Vc: 131 CY



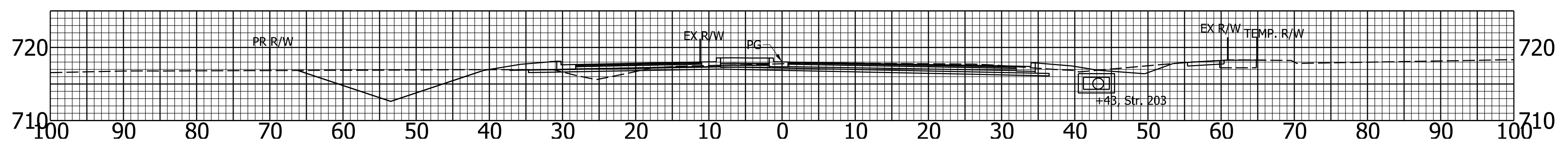
216+50

Existing: 717.78
Proposed: 718.38
Af: 24.6 SF Vf: 39 CY
Ac: 109.8 SF Vc: 210 CY



216+00

Existing: 717.78
Proposed: 718.02
Af: 17.2 SF Vf: 29 CY
Ac: 96.4 SF Vc: 138 CY



215+50

Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
Model:6

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

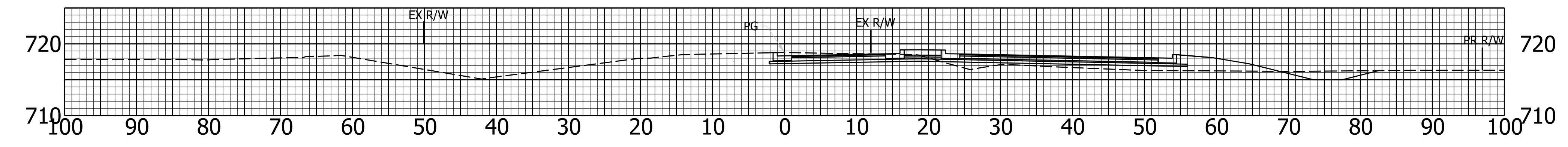
INDIANA
DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS
US 231 LINE "C"**

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	
VERTICAL SCALE	DESIGNATION
1"=10'	1702994
	SHEETS
	45 of 55
CONTRACT	PROJECT
R-43388	1702994

Existing: 718.77
Proposed: 718.98

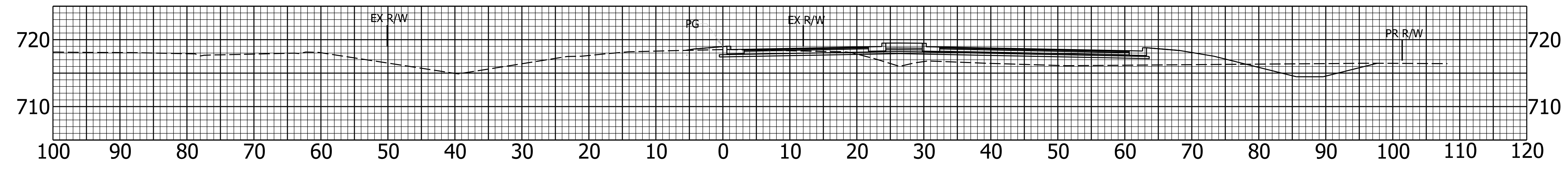
Af: 35.5 SF Vf: 102 CY
Ac: 30.0 SF Vc: 56 CY



219+50

Existing: 718.51
Proposed: 718.67

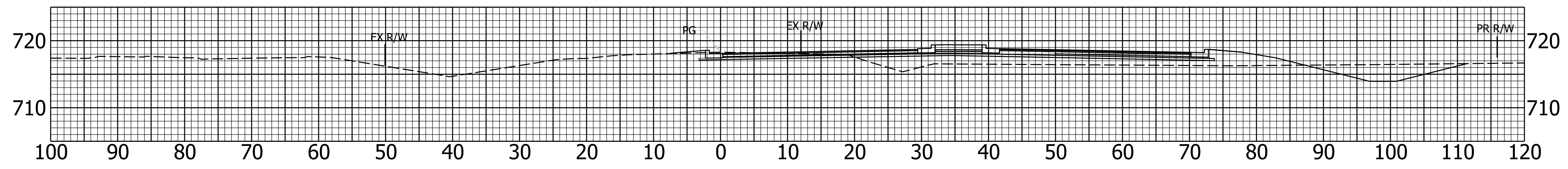
Af: 74.4 SF Vf: 143 CY
Ac: 30.6 SF Vc: 71 CY



219+00

Existing: 718.27
Proposed: 718.38

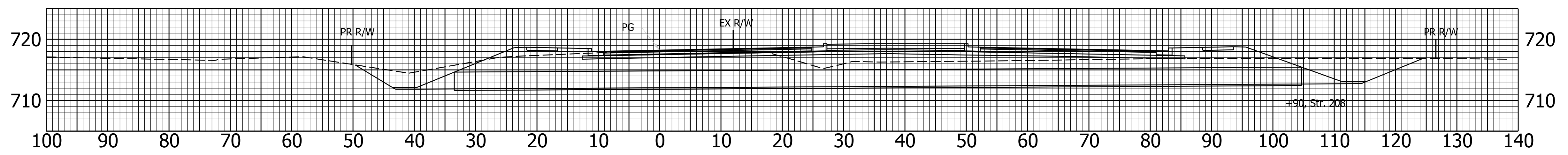
Af: 80.5 SF Vf: 119 CY
Ac: 45.6 SF Vc: 132 CY



218+50

Existing: 718.12
Proposed: 718.50

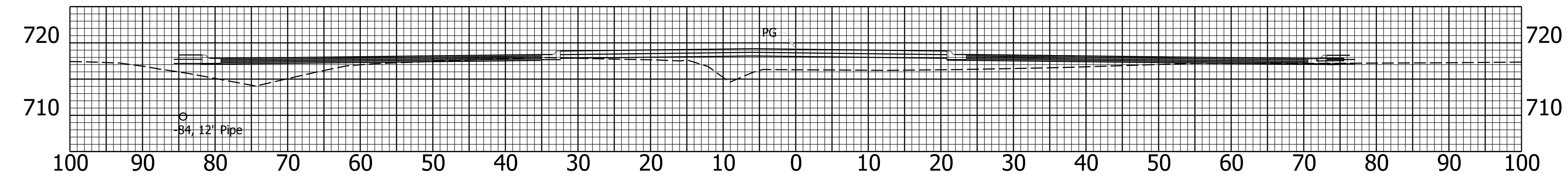
Af: 48.5 SF Vf: 39 CY
Ac: 96.7 SF Vc: 210 CY



218+00

Existing: 715.92
Proposed: 719.15

Af: 143.0 SF Vf: 441 CY
Ac: 5.5 SF Vc: 54 CY



217+50

Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
Model: 7

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

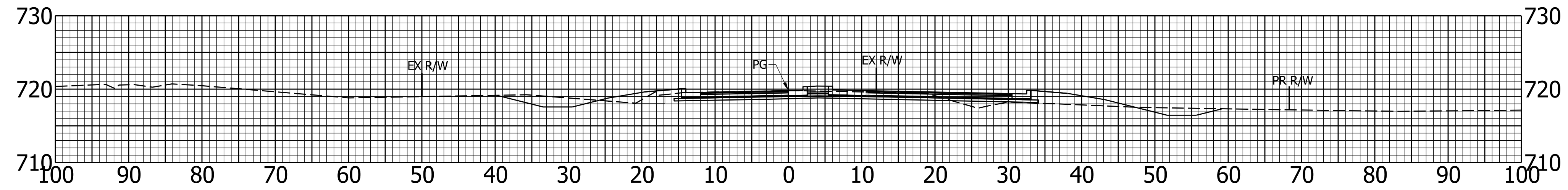
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US 231 LINE "C"

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	
VERTICAL SCALE	DESIGNATION
1"=10'	1702994
	SHEETS
	46 of 55
CONTRACT	PROJECT
R-43388	1702994

Existing: 719.79
Proposed: 719.93

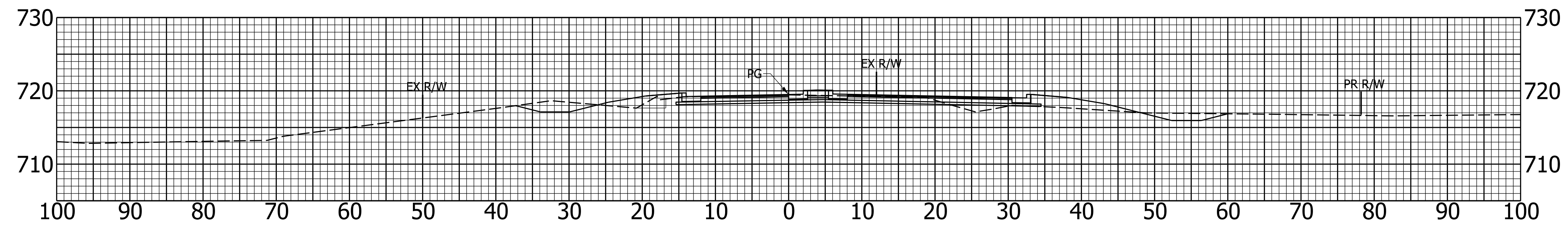
Af: 26.7 SF Vf: 56 CY
Ac: 44.9 SF Vc: 73 CY
Ab: 3.6 SF Vb: 7 CY



221+00

Existing: 719.43
Proposed: 719.61

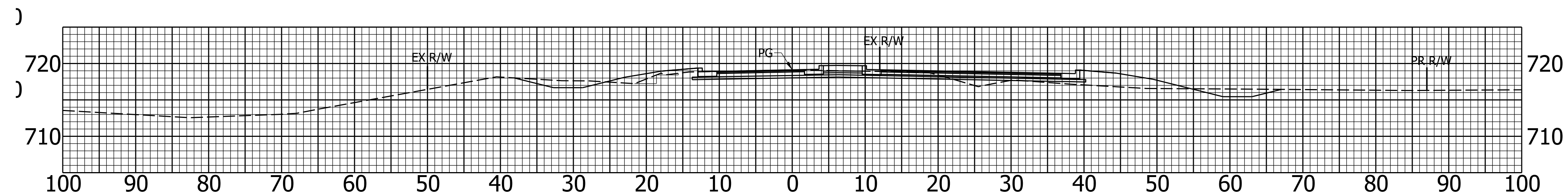
Af: 27.5 SF Vf: 56 CY
Ac: 40.4 SF Vc: 73 CY
Ab: 3.7 SF Vb: 5 CY



220+50

Existing: 719.09
Proposed: 719.30

Af: 33.2 SF Vf: 64 CY
Ac: 38.0 SF Vc: 63 CY
Ab: 2.1 SF Vb: 2 CY



220+00

Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
Model:8

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

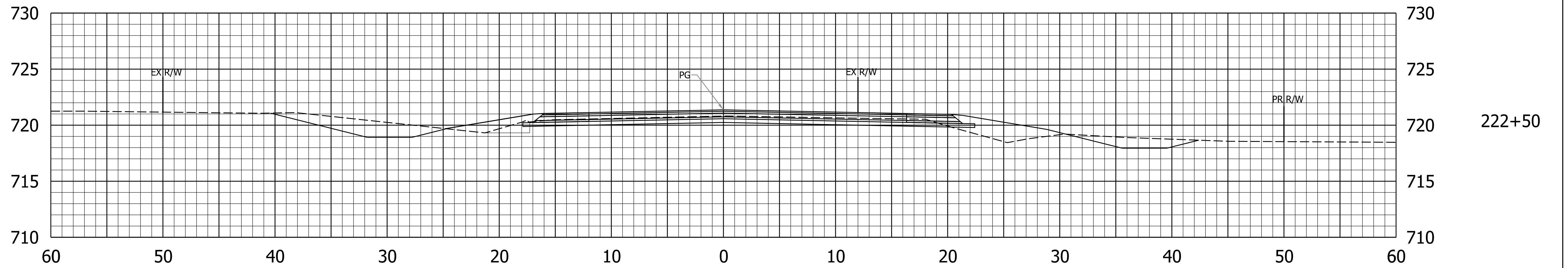
INDIANA
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
US 231 LINE "C"

HORIZONTAL SCALE	BRIDGE FILE
1"=10'	
VERTICAL SCALE	DESIGNATION
1"=10'	1702994
	SHEETS
	47 of 55
CONTRACT	PROJECT
R-43388	1702994

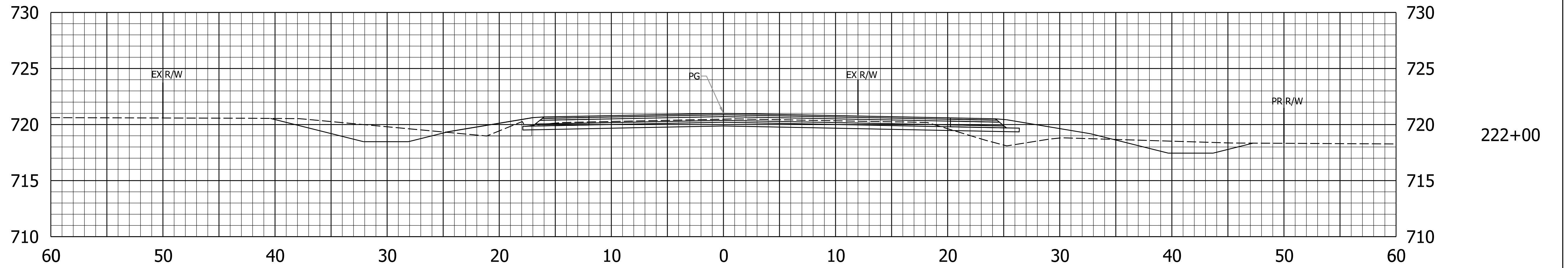
Existing: 720.81
Proposed: 720.87

Af: 16.1 SF Vf: 31 CY
Ac: 30.3 SF Vc: 59 CY
Ab: 2.3 SF Vb: 5 CY



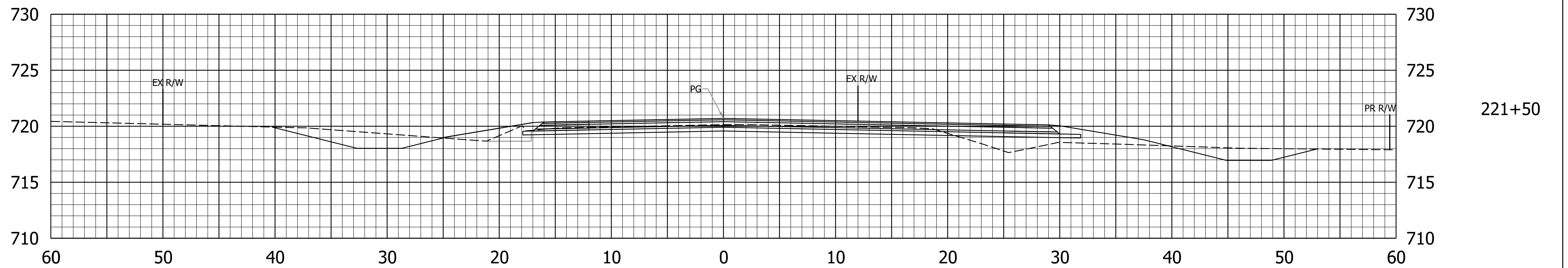
Existing: 720.49
Proposed: 720.56

Af: 17.3 SF Vf: 34 CY
Ac: 33.1 SF Vc: 60 CY
Ab: 2.8 SF Vb: 5 CY



Existing: 720.15
Proposed: 720.24

Af: 19.7 SF Vf: 43 CY
Ac: 32.1 SF Vc: 71 CY
Ab: 3.0 SF Vb: 6 CY



Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
Model:9

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

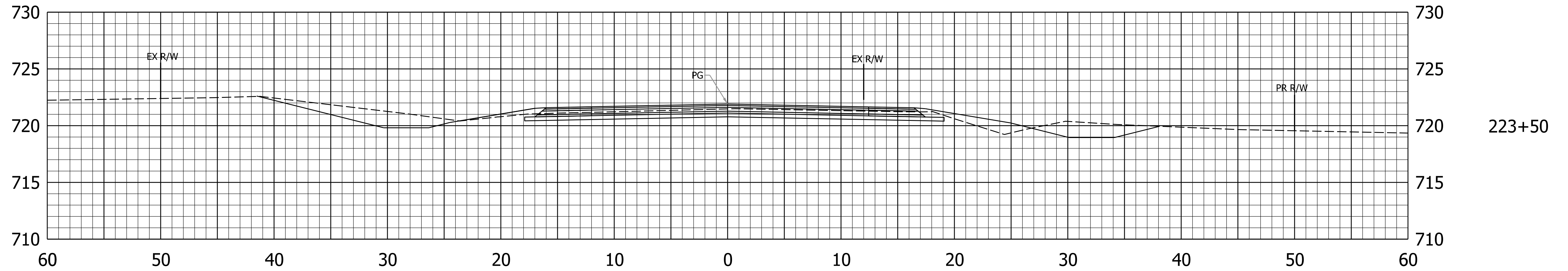
INDIANA
DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS
US 231 LINE "A"**

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
1"=5'	1702994
CONTRACT	SHEETS
R-43388	48 of 55
	PROJECT
	1702994

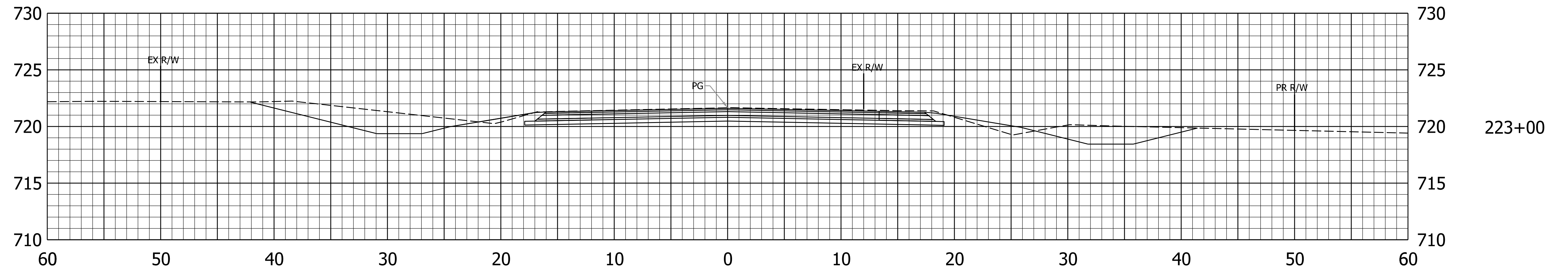
Existing: 721.49
Proposed: 721.50

Af: 7.5 SF Vf: 11 CY
Ac: 36.8 SF Vc: 98 CY



Existing: 721.14
Proposed: 721.19

Af: 4.1 SF Vf: 19 CY
Ac: 68.8 SF Vc: 92 CY
Ab: 0 SF Vb: 2 CY



Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
Model: 10

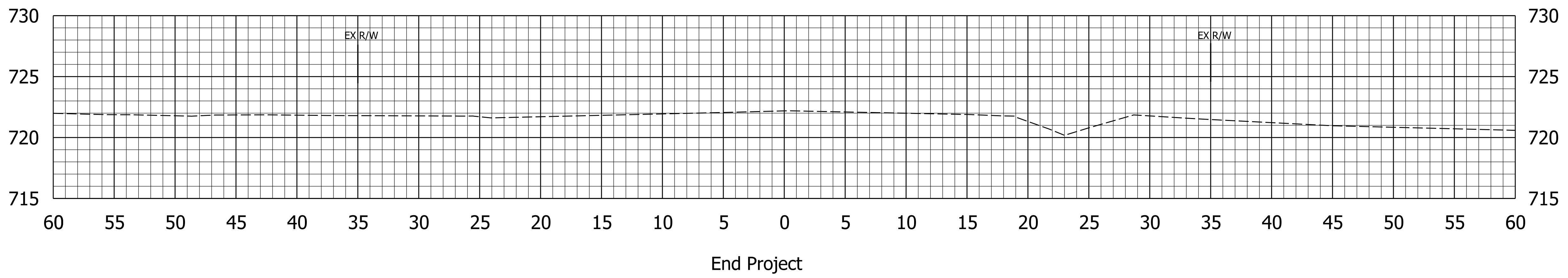
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER _____	DATE _____
DESIGNED: NSK _____	DRAWN: NSK _____	
CHECKED: JH _____	CHECKED: JH _____	

INDIANA
DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS
US 231 LINE "A"**

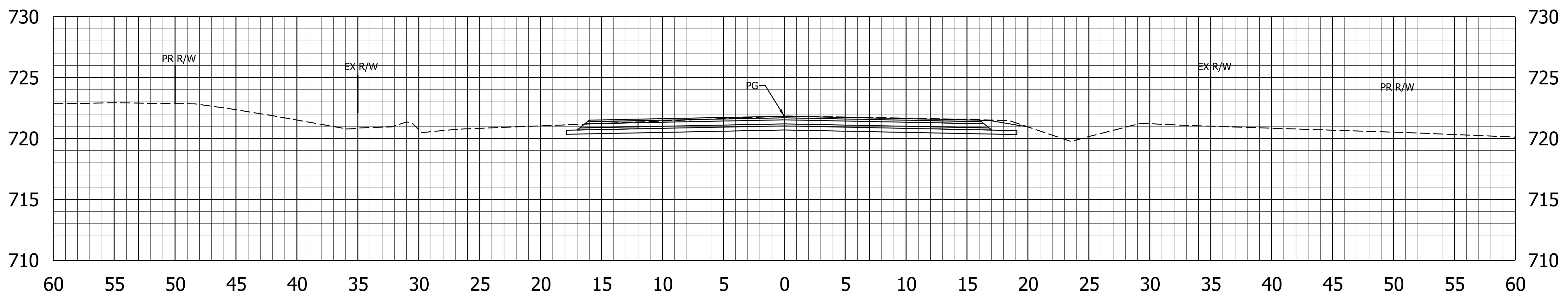
HORIZONTAL SCALE 1"=5'	BRIDGE FILE
VERTICAL SCALE 1"=5'	DESIGNATION 1702994
CONTRACT R-43388	SHEETS 49 of 55
	PROJECT 1702994

Af: 0 SF Vf: 0 CY
 Ac: 0 SF Vc: 23 CY



224+50

Existing: 721.82 Proposed: 721.83
 Af: 0 SF Vf: 7 CY
 Ac: 24.6 SF Vc: 57 CY



224+00

Plot: 6/14/2024

File: RD_Cross Sections 231.dgn
 Model: 11

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

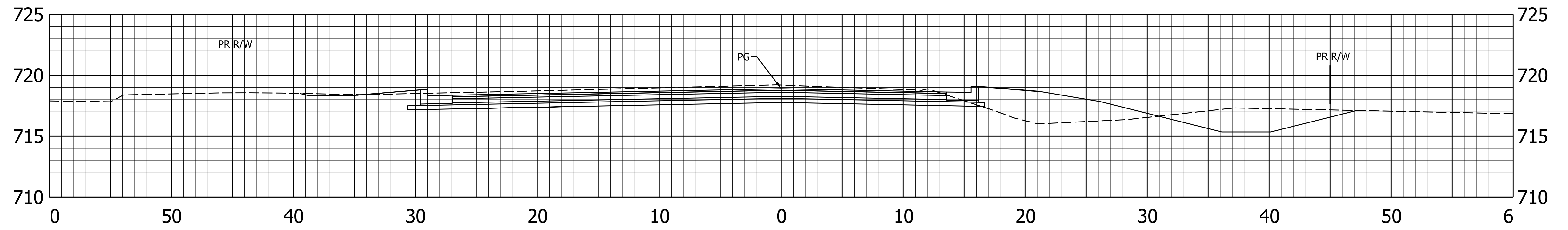
INDIANA
 DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS
 US 231 LINE "A"**

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
1"=5'	1702994
SHEETS	
50 of 55	
CONTRACT	PROJECT
R-43388	1702994

Existing: 719.19
Proposed: 718.63

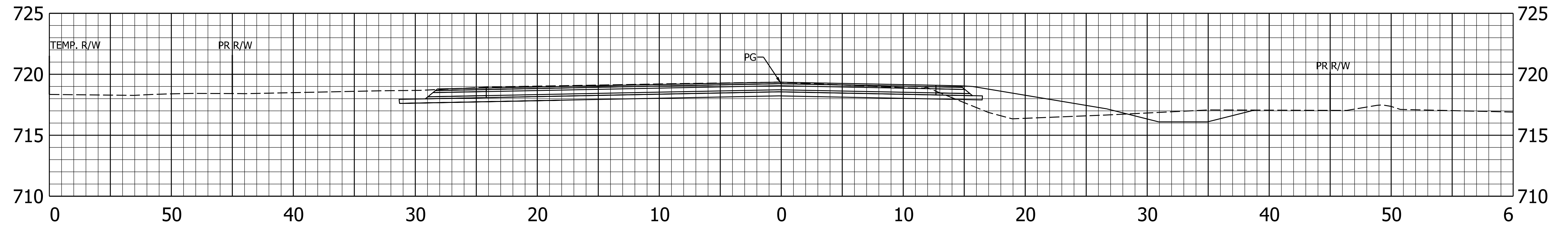
Af: 25.3 SF Vf: 39 CY
Ac: 64.3 SF Vf: 95 CY



18+50

Existing: 719.34
Proposed: 719.24

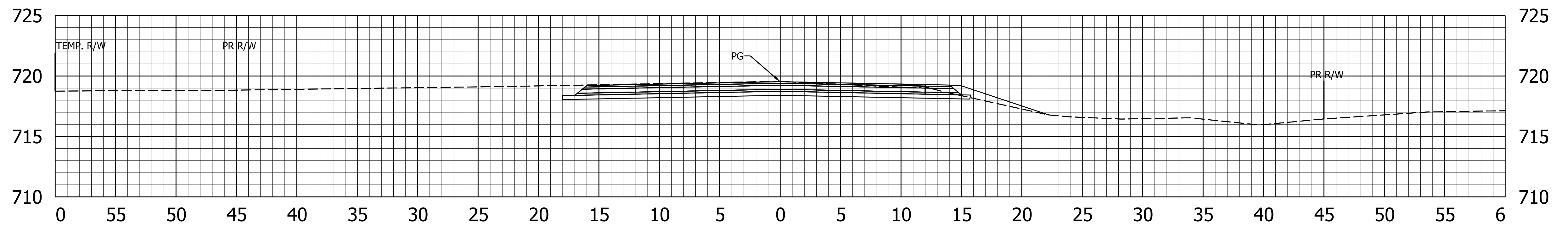
Af: 17.2 SF Vf: 15 CY
Ac: 38.4 SF Vf: 44 CY



18+00

Existing: 719.54
Proposed: 719.54

Af: 3.3 SF Vf: 0.0 CY
Ac: 22.3 SF Vf: 0.0 CY



17+61.14

Begin Construction

Plot: 6/14/2024

File: RD_Cross Sections Parrish.dgn
Model: 1

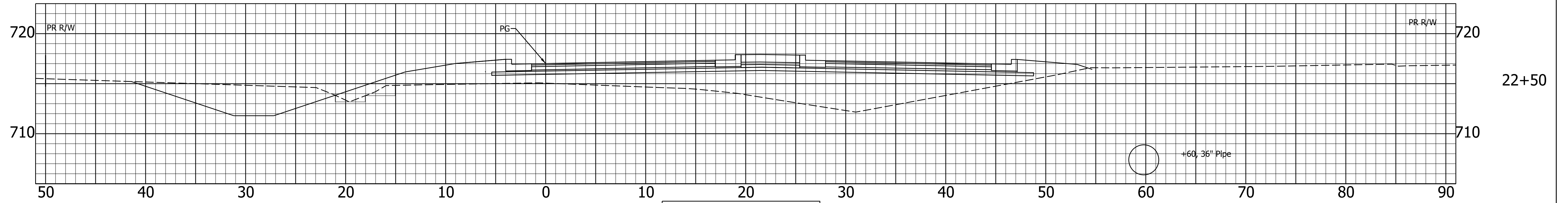
RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

INDIANA
DEPARTMENT OF TRANSPORTATION

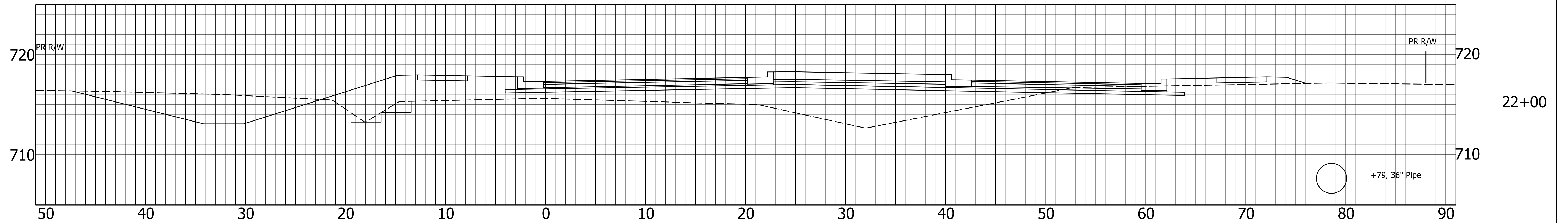
CROSS SECTIONS
PARRISH AVE LINE "S"

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
1"=5'	1702994
	SHEETS
	51 of 55
CONTRACT	PROJECT
R-43388	1702994

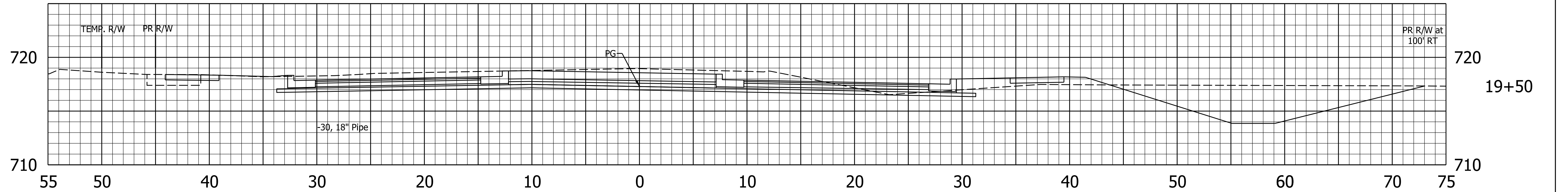
Existing: 714.97 Af: 140.2 SF Vf: 0 CY
 Proposed: 717.43 Ac: 8.4 SF Vc: 0 CY Ab: 2.9 SF Vb: 0 CY



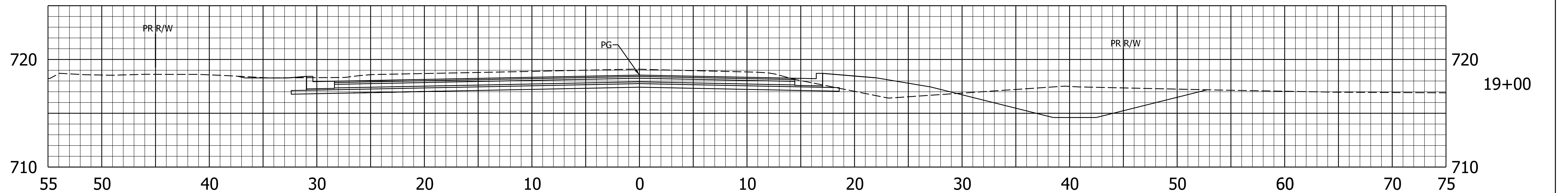
NOTE TO REVIEWER:
 Excavation between station 20+00 and 22+50 is covered in Line C cross sections.



Existing: 718.93
 Proposed: 718.34
 Af: 10.6 SF Vf: 23 CY
 Ac: 132.4 SF Vc: 225 CY



Existing: 719.08
 Proposed: 718.09
 Af: 14.6 SF Vf: 37 CY
 Ac: 110.7 SF Vc: 162 CY



RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

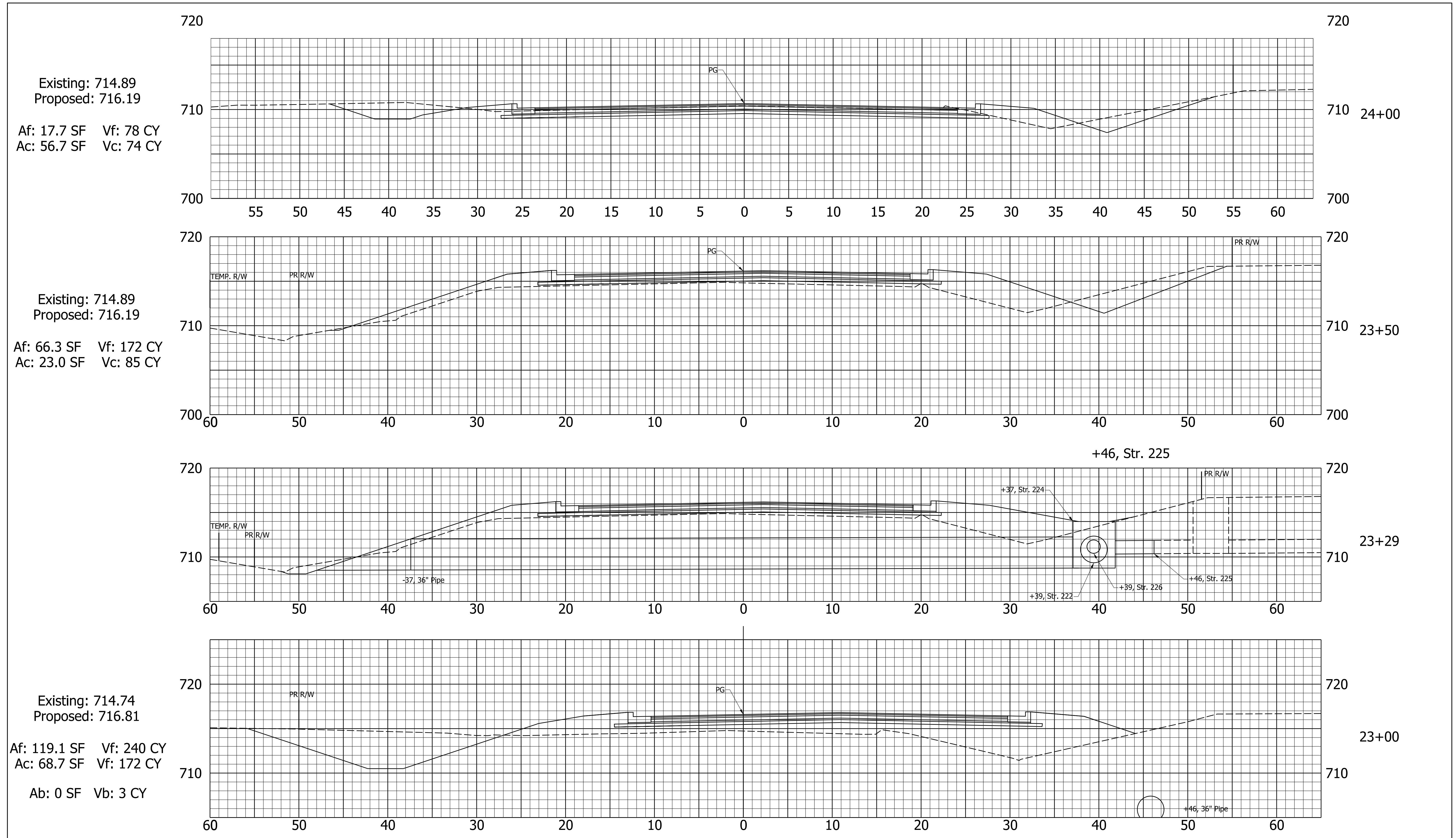
INDIANA
 DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
 PARRISH AVE LINE "S"

HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
1"=5'	1702994
	SHEETS
	52 of 55
CONTRACT	PROJECT
R-43388	1702994

Plot: 6/14/2024

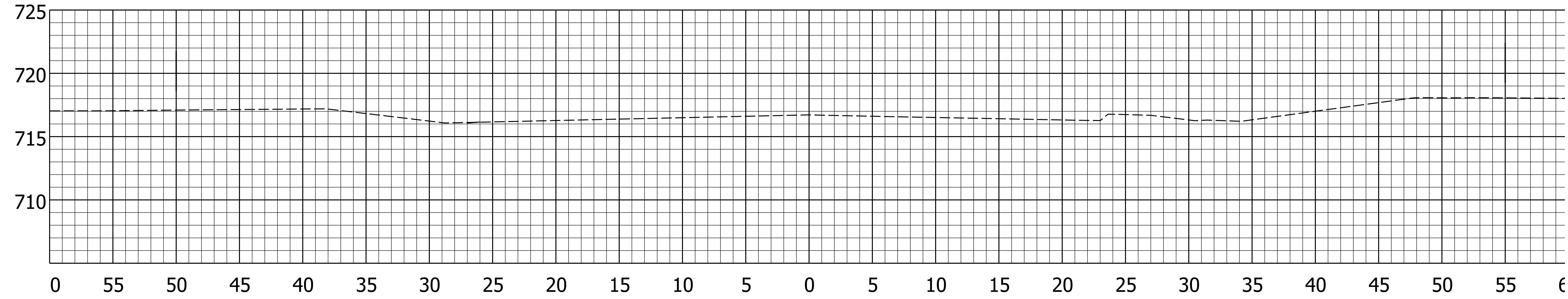
File: RD_Cross Sections Parrish.dgn
 Model: 2



RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER _____ DATE _____	INDIANA DEPARTMENT OF TRANSPORTATION		HORIZONTAL SCALE	BRIDGE FILE
			1"=5'	
	DESIGNED: NSK	DRAWN: NSK	VERTICAL SCALE	DESIGNATION
	CHECKED: JH	CHECKED: JH	1"=5'	1702994
CROSS SECTIONS PARRISH AVE LINE "S"			SHEETS	
			53	of 55
CONTRACT			PROJECT	
R-43388			1702994	

Plot: 6/14/2024
 File: RD_Cross Sections Parrish.dgn
 Model: 3

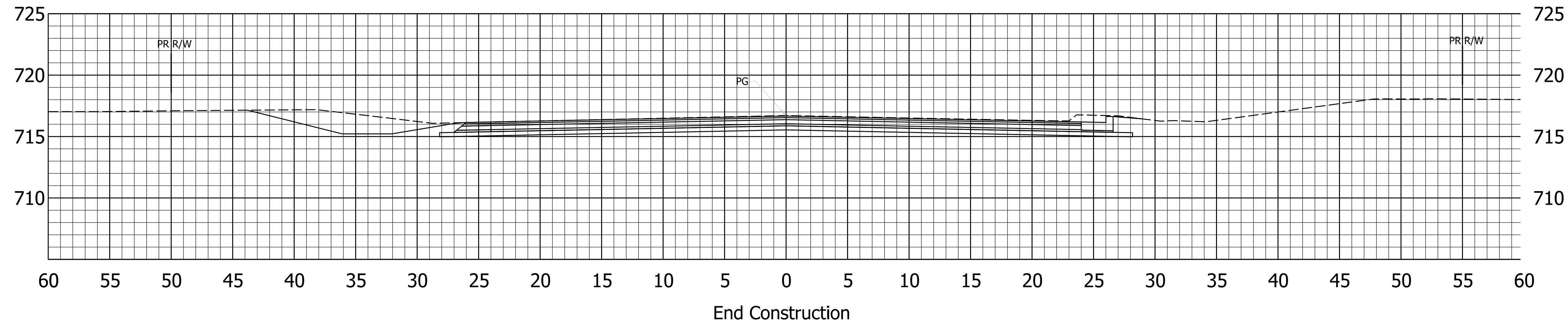
Af: 0 SF Vf: 0 CY
 Ac: 0 SF Vc: 57 CY



25+50

Existing: 716.67
 Proposed: 716.67

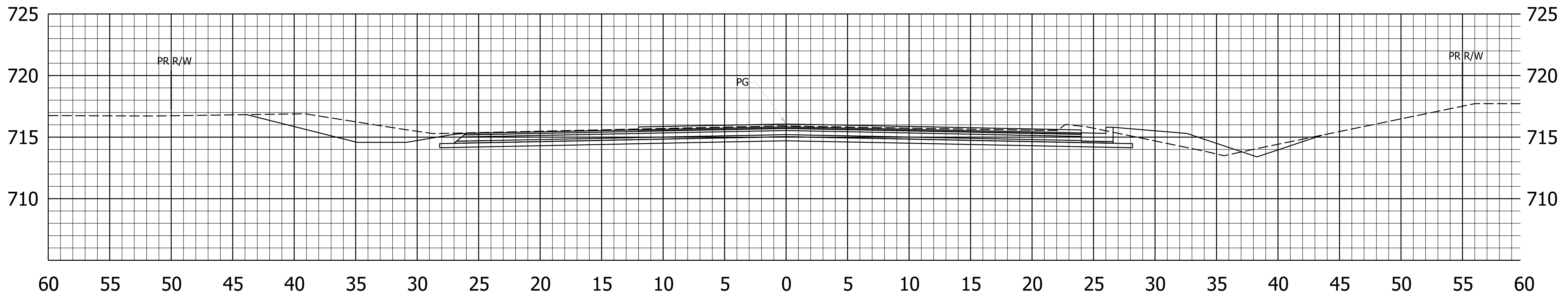
Af: 0 SF Vf: 8 CY
 Ac: 61.7 SF Vc: 119 CY



25+00

Existing: 715.88
 Proposed: 715.83

Af: 8.1 SF Vf: 24 CY
 Ac: 66.7 SF Vc: 114 CY



24+50

Plot: 6/14/2024

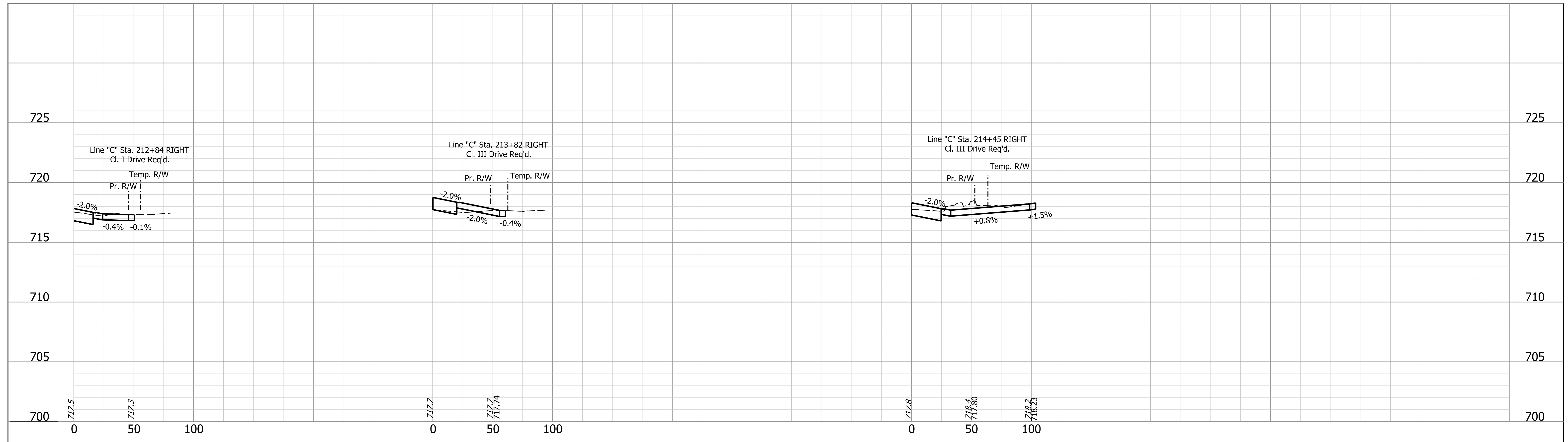
File: RD_Cross Sections Parrish.dgn
 Model:4

RECOMMENDED FOR APPROVAL	DESIGN ENGINEER	DATE
DESIGNED: NSK	DRAWN: NSK	
CHECKED: JH	CHECKED: JH	

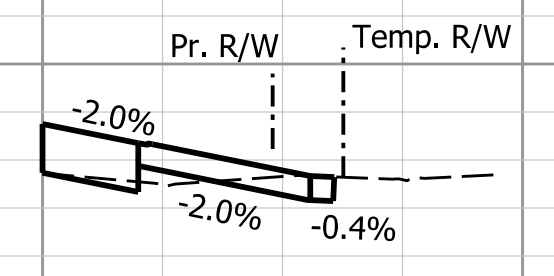
INDIANA
 DEPARTMENT OF TRANSPORTATION

**CROSS SECTIONS
 PARRISH AVE LINE "S"**

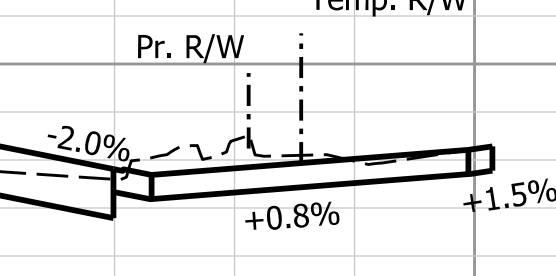
HORIZONTAL SCALE	BRIDGE FILE
1"=5'	
VERTICAL SCALE	DESIGNATION
1"=5'	1702994
	SHEETS
	54 of 55
CONTRACT	PROJECT
R-43388	1702994



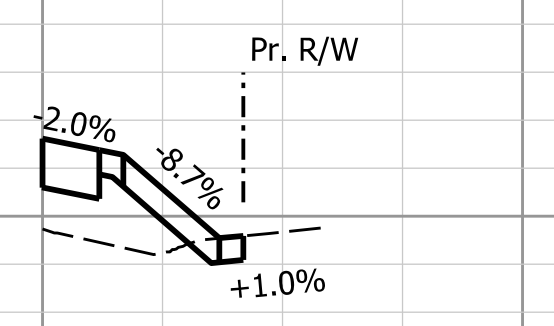
Line "C" Sta. 213+82 RIGHT
Cl. III Drive Req'd.



Line "C" Sta. 214+45 RIGHT
Cl. III Drive Req'd.



Line "S" Sta. 22+97 LEFT
Cl. II Drive Req'd.



RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER DATE	INDIANA DEPARTMENT OF TRANSPORTATION DRIVE PROFILES		HORIZONTAL SCALE	BRIDGE FILE
			1" = 40'	
			VERTICAL SCALE	DESIGNATION
			1" = 4'	1702994
DESIGNED: NSK	DRAWN: NSK	SURVEY BOOK		SHEETS
CHECKED: JAH	CHECKED: JAH	-	55 of 55	
		CONTRACT	PROJECT	
		R-43388	1702994	

Plot: 6/14/2024

File: RD_DrivewayProfiles.dgn
Model: Driveway 1