RHI

December 2024

PROJECT ID: 9303-03-71

WITH: N/A

COUNTY: IRON

ORDER OF SHEETS

Section No.	1	Title
Section No.	2	Typical Sections and Details
Section No.	3	Estimate of Quantities
Section No.	3	Miscellaneous Quantities
Section No.	4	Right of Way Plat
Section No.	5	Plan and Profile
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	9	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 206

N

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

UPSON - MONTREAL RIVER

STH 77 TO SOUTH JUNCTION CTH B

STH 122

IRON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9303-03-71	WISC 2025117	1

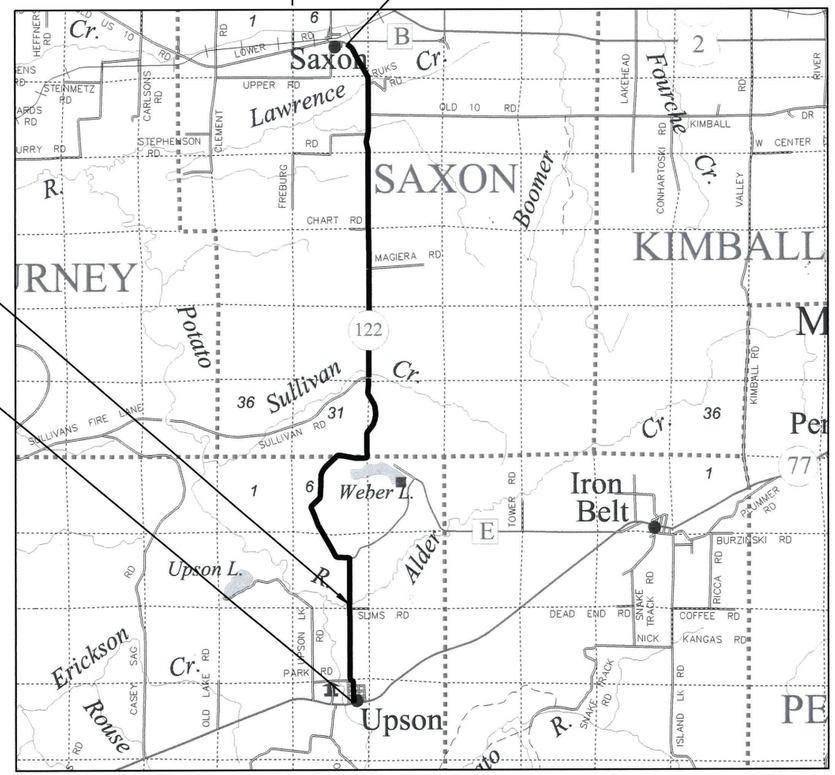
STATE PROJECT NUMBER

9303-03-71

END PROJECT
STA 539+76.87

STRUCTURE B-26-0045
STA 99+95 - STA 100+44

BEGIN PROJECT
STA 32+00.00
X: 686,604.69
Y: 340,556.31



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 9.617 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), IRON COUNTY NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

DESIGN DESIGNATION 9303-03-01

A.A.D.T.	2023	=	120
A.A.D.T.	2043	=	120
D.H.V.		=	31
D.D.		=	0.5
T.		=	13%
DESIGN SPEED		=	55
ESALS		=	14,600

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

ORIGINAL PLANS PREPARED BY

benesch

247 W Freshwater Way, Suite 650
Milwaukee, Wisconsin 53204
262-369-1010 Job No. 102600

WISCONSIN PROFESSIONAL ENGINEER
BENJAMIN J. WEIGAND
E-39495
RACINE, WI

DATE: 7/18/2024 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	BENESCH
Project Manager	MICHELLE GUOIN
Regional Examiner	FRED SCHUNKE
Regional Supervisor	DAN ERVA

APPROVED FOR THE DEPARTMENT

DATE: 7/18/2024 (Signature)

E

GENERAL NOTES

1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPOXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
2. ALL ELEVATIONS AND OFFSETS SHOWN IN THE PLAN SHALL BE VERIFIED IN THE FIELD.
3. NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
4. THE COST OF GRADING, CONSTRUCTING, MAINTAINING, AND REMOVING TEMPORARY ACCESS IS INCIDENTAL TO THE CONTRACT.
5. EXISTING RIGHT OF WAY SHOWN IN PLANS IS AN APPROXIMATION BASED ON AVAILABLE GIS INFORMATION.

PAVEMENT LOCATION	TOTAL PAVEMENT THICKNESS	TYPE
STH 122	2.5 INCHES	4 LT 58-34 S

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
STRUCTURE APPROACH DETAIL
EROSION CONTROL
CULVERT DETAILS
DETOUR PLANS
ALIGNMENT DETAIL

UTILITIES

ELECTRICITY

BAYFIELD ELECTRIC COOPERATIVE INC - ELECTRICITY
TROY SEEGER
P.O. BOX 68 HWY 2
IRON RIVER, WI 54847
OFFICE: 715-372-4287
CELL: 715-681-1012
TROYSEEGER41@GMAIL.COM

COMMUNICATIONS

BRIGHTSPEED OF NORTH CENTRAL WISCONSIN, LLC
COMMUNICATION LINE
TAYLOR AYLESWORTH
135 N 21ST STREET
SUPERIOR, WI 54880-5203
OFFICE: 980-376-1577
CELL: 980-376-1577
TAYLOR.AYLESWORTH@BRIGHTSPEED.COM

COMMUNICATIONS

MERIT NETWORK, INC. - COMMUNICATION LINE
DUSTIN LAPOINTE
880 E TECHNOLOGY DR SUITE 2
ANN ARBOR,MI 48108
734-476-6100
DLAPOINT@MERIT.EDU

ELECTRICITY

XCEL ENERGY - ELECTRICITY
SARAH MCDOWELL
2400 FARM RD
ASHLAND, WI 54806
715-292-8013
SARAH.L.CMDOWELL@XCELENERGY.COM

ELECTRICITY - TRANSMISSION

XCEL ENERGY - TRANSMISSION
MITCHELL DIENGER
414 NICOLLET MALL 5TH FLOOR
MINNEAPOLIS, MN 55401
612-321-3109
MITCHELL.A.DIENGER@XCELENERGY.COM

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANCE (PERCENT)			SLOPE RANCE (PERCENT)			SLOPE RANCE (PERCENT)			SLOPE RANCE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	0.08 0.22	0.16 0.30	0.22 0.38	0.12 0.26	0.20 0.34	0.27 0.44	0.15 0.30	0.24 0.37	0.33 0.50	0.19 0.34	0.28 0.41	0.38 0.56
MEDIAN STRIP TURF	0.19 0.24	0.20 0.26	0.24 0.30	0.19 0.25	0.22 0.28	0.26 0.33	0.20 0.26	0.23 0.30	0.30 0.37	0.20 0.27	0.25 0.32	0.30 0.40
SIDE SLOPE TURF	0.25 0.34	0.27 0.36	0.25 0.32	0.30		0.27 0.34			0.28 0.36			0.30 0.38
PAVEMENT:												
ASPHALT	0.70 - 0.95											
CONCRETE	0.80 - 0.95											
BRICK	0.70 -0.80											
DRIVES, WALKS	0.75 - 0.85											
ROOFS	0.75 - 0.95											
GRAVEL ROADS, SHOULDERS	0.40 - 0.60											

TOTAL PROJECT AREA = 33.59 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.96 ACRES

OTHER AGENCIES

WISDNR

NORTHERN REGION
JON SIMONSEN
107 SUTLIFF
RHINELANDER, WI 54501
715-367-1936
Jonathan.Simonsen@wisconsin.gov

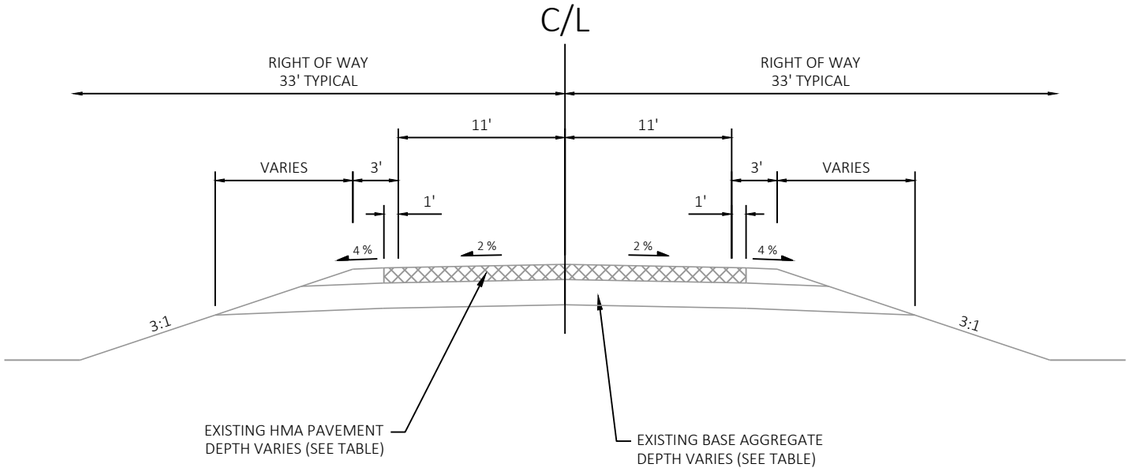
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

2

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 01

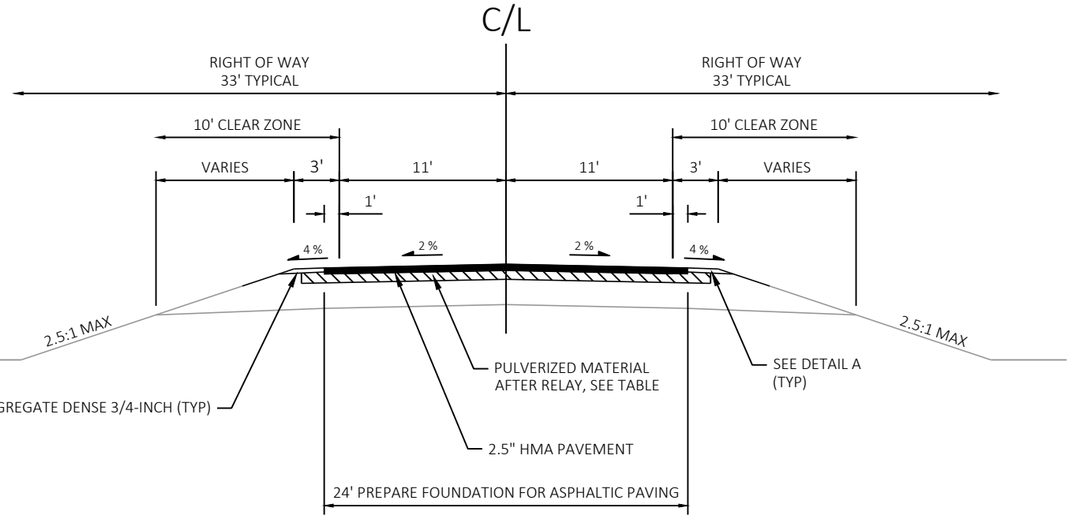
PLOT DATE : 6/5/2024 11:01 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:2000 FT



EXISTING TYPICAL SECTION

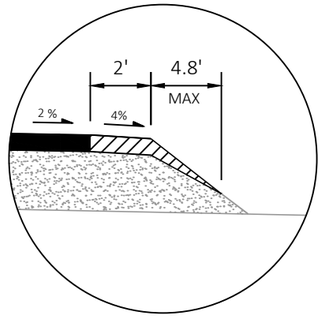
STA 32+00 - 539+77

CORE	STATION	OFFSET		HMA DEPTH (IN)	BASE DEPTH (IN)
1	52+83.26	16.47	LT	3.5	7.5
2	68+88.04	4.29	RT	7	5
3	82+77.40	19.71	RT	5.5	7.5
4	98+28.05	3.91	RT	4	5
5	113+38.16	2.29	LT	3.5	5.5
6	128+33.55	3.63	LT	2.75	22
7	143+55.95	2.56	RT	5	7
8	159+41.66	4.90	LT	3.5	11
9	173+46.70	16.86	RT	8	6
10	188+45.87	3.72	LT	7	10.75
11	203+08.29	9.46	RT	7.5	9
12	218+16.28	6.95	RT	2.75	7.5
13	233+14.66	14.22	RT	5	7.5
14	248+65.70	3.57	RT	3.5	13
15	262+19.51	12.30	RT	8.5	21.5
16	279+08.36	32.40	LT	7	6.5
17	292+75.59	14.58	RT	6	5.5
18	308+01.80	17.24	RT	2.25	7.75
19	323+70.06	0.93	RT	5.5	9.5
20	338+10.74	5.80	RT	9	9
21	352+93.80	5.84	RT	2	10.5
22	368+07.54	8.62	LT	2	13
23	383+03.08	10.94	RT	7.5	10
24	398+23.50	14.51	LT	2.75	21.25
25	413+97.82	5.14	RT	7.5	18.5
26	428+50.62	1.22	LT	7.5	6.5
27	443+52.11	5.33	RT	2.5	9.5
28	458+84.38	10.46	RT	8.75	3.25
29	473+35.51	15.03	RT	6	12
30	487+62.79	5.02	RT	7	16
31	502+94.88	11.56	RT	8	18
32	518+66.63	1.12	RT	6.5	16
33	533+25.90	4.76	RT	7	0



FINISHED TYPICAL SECTION

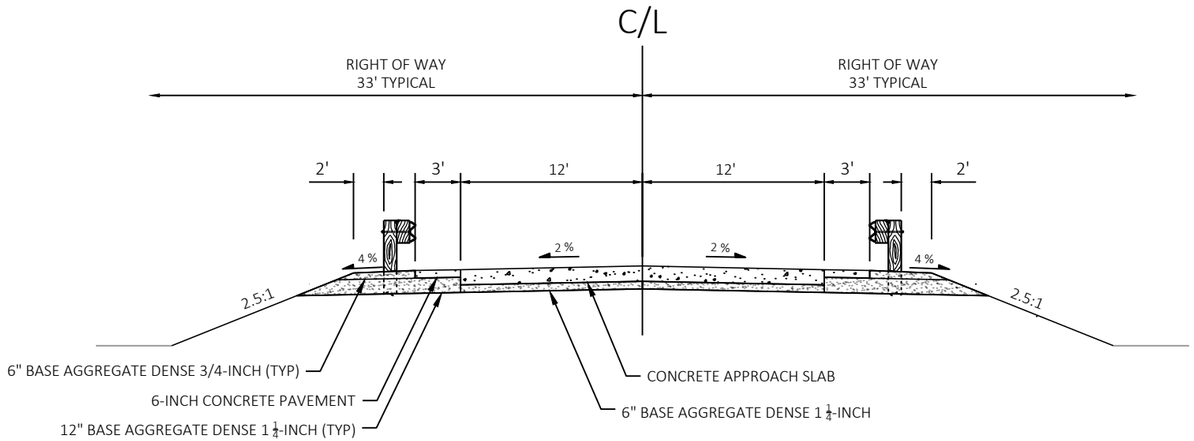
STA 32+00 - 97+75
STA 102+25 - 481+50
STA 491+00 - 539+77



DETAIL A

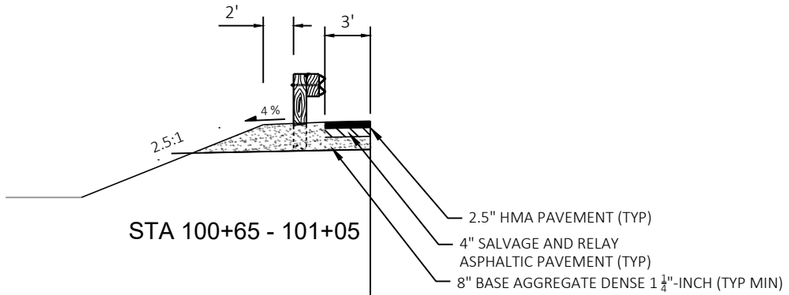
STATION	DEPTH PLACED (IN)	WIDTH REMOVED (FT)	% INCREASE IN PULVERIZED MATERIAL	WIDTH PLACED (FT)
32+00.00	5	24	12.5%	27
52+83.26	5	24	12.5%	27
68+88.04	8	24	12.5%	27
82+77.40	6.5	24	12.5%	27
98+28.05	5	24	12.5%	27
113+38.16	5	24	12.5%	27
128+33.55	5	24	12.5%	27
143+55.95	6	24	12.5%	27
159+41.66	5	24	12.5%	27
173+46.70	9	24	12.5%	27
188+45.87	8	24	12.5%	27
203+08.29	8.5	24	12.5%	27
218+16.28	5	24	12.5%	27
233+14.66	6	24	12.5%	27
248+65.70	5	24	12.5%	27
262+19.51	9.5	24	12.5%	27
279+08.36	8	24	12.5%	27
292+75.59	7	24	12.5%	27
308+01.80	5	24	12.5%	27
323+70.06	6.5	24	12.5%	27
338+10.74	10	24	12.5%	27
352+93.80	5	24	12.5%	27
368+07.54	5	24	12.5%	27
383+03.08	8.5	24	12.5%	27
398+23.50	5	24	12.5%	27
413+97.82	8.5	24	12.5%	27
428+50.62	8.5	24	12.5%	27
443+52.11	5	24	12.5%	27
458+84.38	9.75	24	12.5%	27
473+35.51	7	24	12.5%	27
487+62.79	8	24	12.5%	27
502+94.88	9	24	12.5%	27
518+66.63	7.5	24	12.5%	27
533+25.90	8	24	12.5%	27
539+77.00	5	24	12.5%	27

2

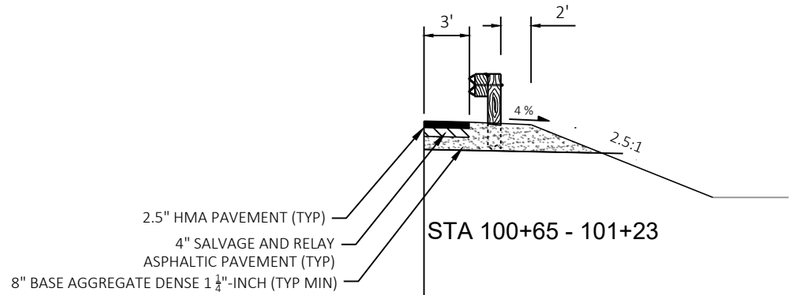


FINISHED TYPICAL SECTION

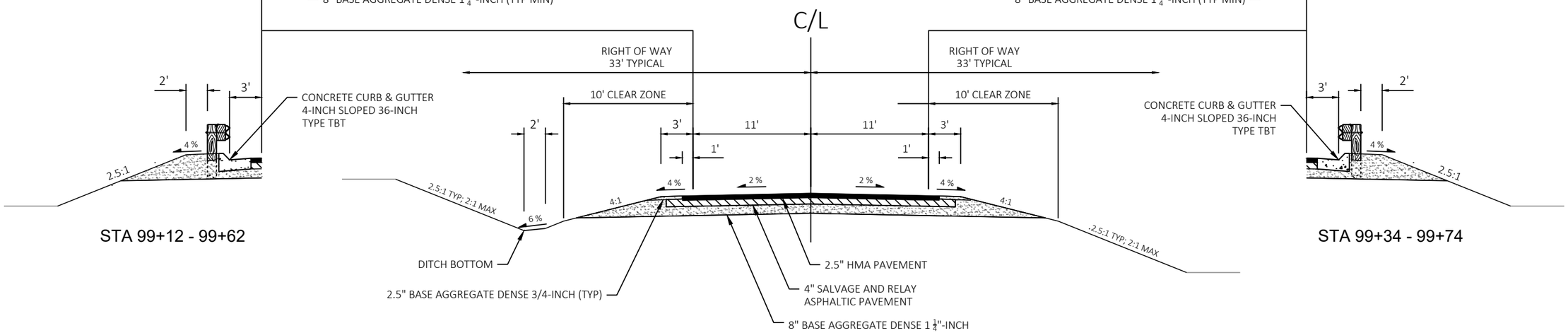
STA 99+74 - STA 99+95
STA 100+44 - STA 100+65



STA 100+65 - 101+05



STA 100+65 - 101+23



STA 99+12 - 99+62

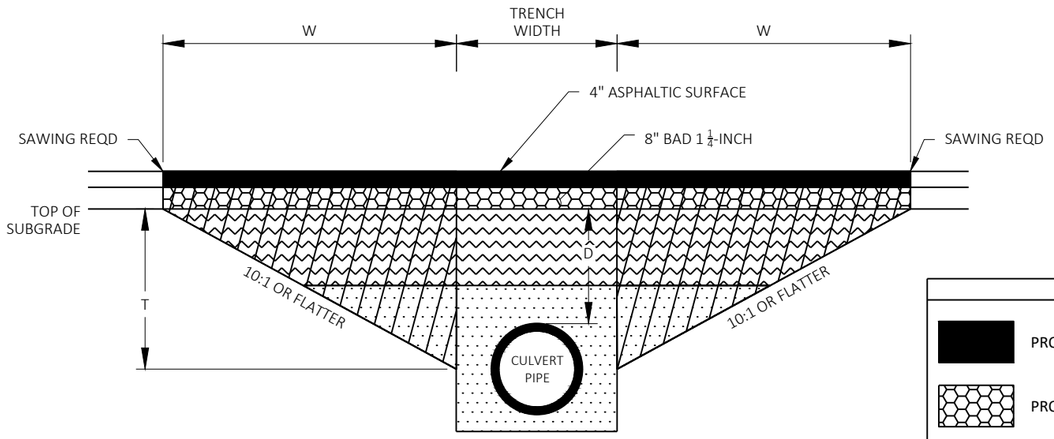
STA 99+34 - 99+74

FINISHED TYPICAL SECTION

STA 97+75 - 99+74
STA 100+65 - 102+25
STA 481+50 - 491+00

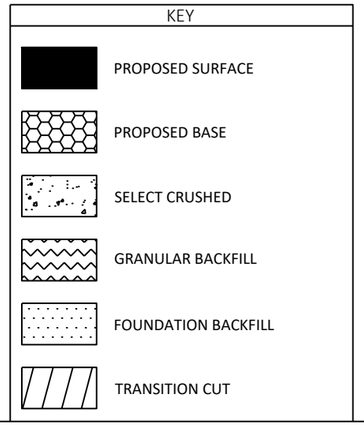
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	TYPICAL SECTIONS	SHEET 6	E

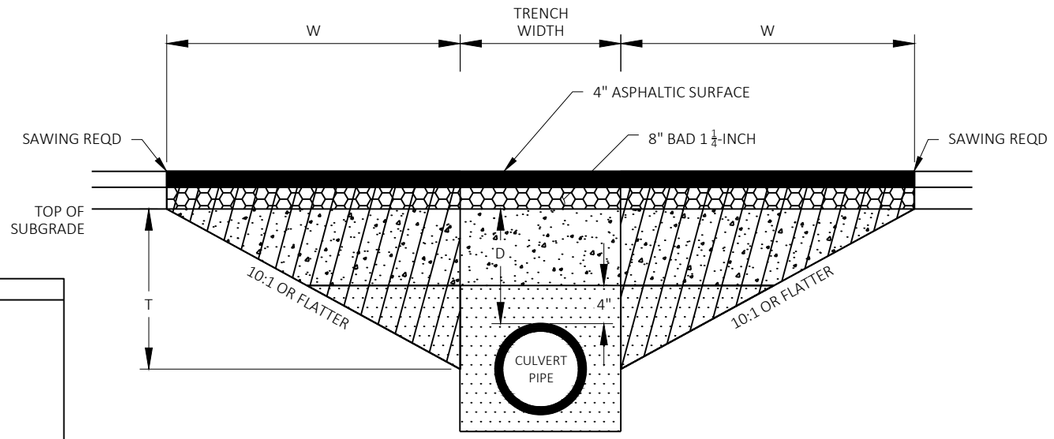
FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 03-10ft
PLOT DATE : 5/1/2024 3:36 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



DEPTH D < 1.3 FT

TRANSITION CUT DEPTH (T) = THE DEPTH TO CENTER OF PIPE.
DO NOT EXTEND TRANSITION CUT BELOW HORIZONTAL CENTER OF PIPE.





DEPTH D ≥ 1.3 FT

TRANSITION CUT DEPTH (T) = THE DEPTH TO CENTER OF PIPE.
DO NOT EXTEND TRANSITION CUT BELOW HORIZONTAL CENTER OF PIPE.

NOTES

TRANSITION CUT IS PAID AS EXCAVATION COMMON.

TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.

BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION BACKFILL AS SPECIFIED IN STANDARD SPEC 520.

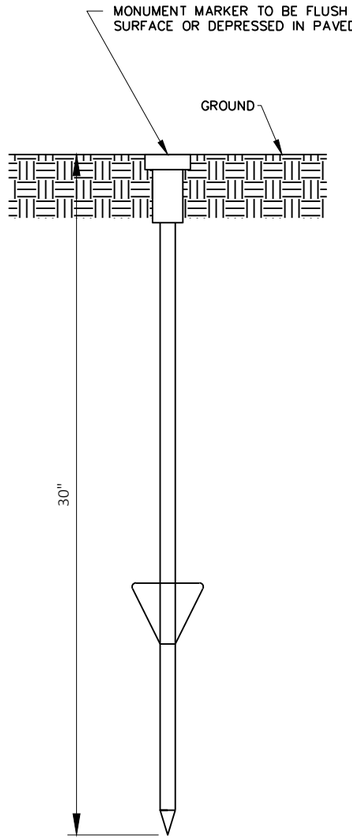
PERFORM CULVERT PIPE INSTALLATION BEFORE PULVERIZE AND OVERLAY.

CULVERT PIPE TRANSITION

ROUTE	STA (CL)	DEPTH D (FT)	W (FT)	PIPE DIA (IN)	REMARKS
STH 122	42+94	1.3	25	24	4TH STREET
STH 122	176+23	0.3	15	38x24	26122000839
STH 122	179+48	0.9	20	24	26122000840
STH 122	206+01	0.6	25	53x34	26122000842
STH 122	251+43	0.9	20	38x24	26122000847
STH 122	382+00	0.7	20	38x24	26122000858
STH 122	443+93	0.6	25	30x19	26122000862
STH 122	453+73	0.6	20	38x24	26122000863
STH 122	465+80	2.9	40	24	26122000864
STH 122	476+40/476+53	2.8/3.1	50	(2) 76x48	26122004622 & 26122000865 (MUD CREEK)
STH 122	484+04	0.7	20	38x24	26122000866
STH 122	486+43/486+62	1.4	25	(2) 38x24	26122000867 & 26122000868
STH 122	537+69	0.7	20	24	26122000871

WIS DOT MONUMENT CAP MARKER LOGO (SSDR130)

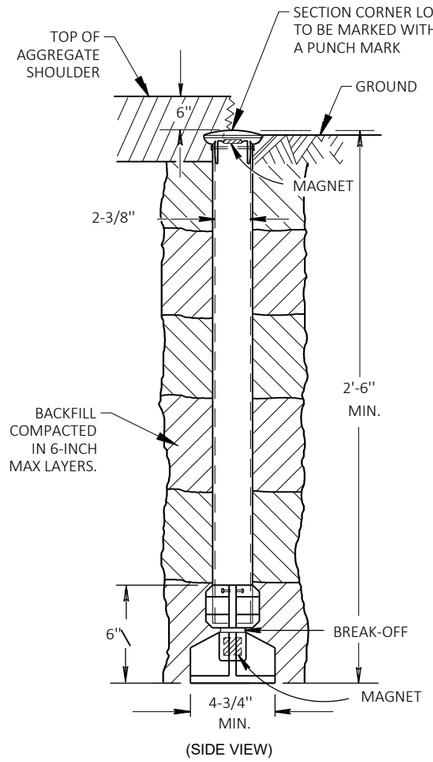
CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



(FRONT VIEW)

BERNSTEN DRIVABLE MONUMENT SSDR130

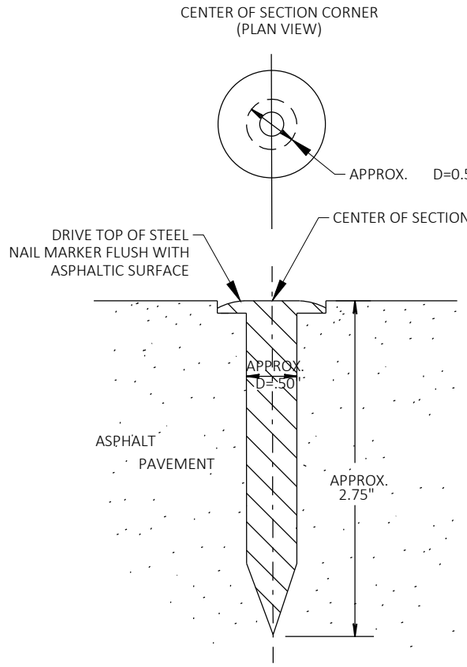
LANDMARK REFERENCE MONUMENT (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

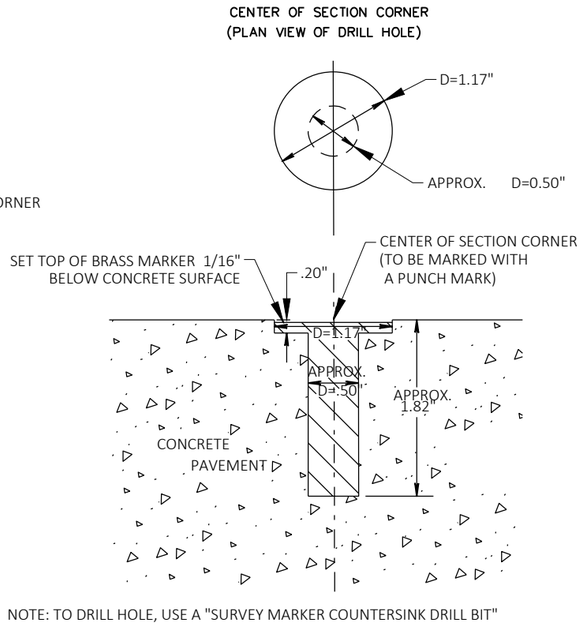
BERNTSEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

BERNTSEN SNM1 STEEL NAIL MARKER



NOTE: TO DRILL HOLE, USE A "SURVEY MARKER COUNTERSINK DRILL BIT" ITEM #BPMDRL, AVAILABLE FROM BERNTSEN INTERNATIONAL INC.

(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

BERNTSEN BP - 1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

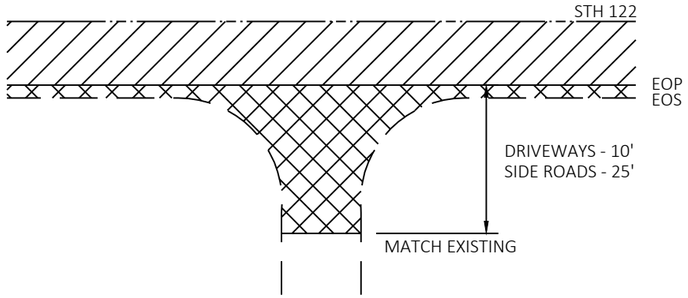
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

CONTRACTOR WILL SUPPLY ALL REQUIRED SURVEY MONUMENTS.

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL



PULVERIZE & OVERLAY

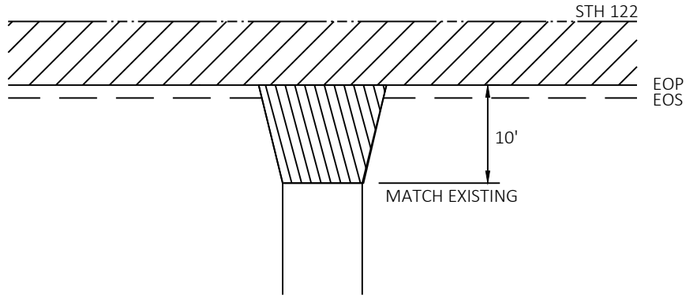
BASE AGGREGATE DENSE 3/4-INCH

SIDE ROADS & DRIVEWAYS

UNPAVED SIDE ROADS

SLIMS RD
RADAR HILL RD
SULLIVAN RD
MAGIERA RD
CHART RD
W FREBURG RD
OLD HIGHWAY 10
W RUKS RD

NOTE:
ALL EXISTING DRIVEWAYS ARE UNPAVED UNLESS OTHERWISE NOTED ON THE PLAN

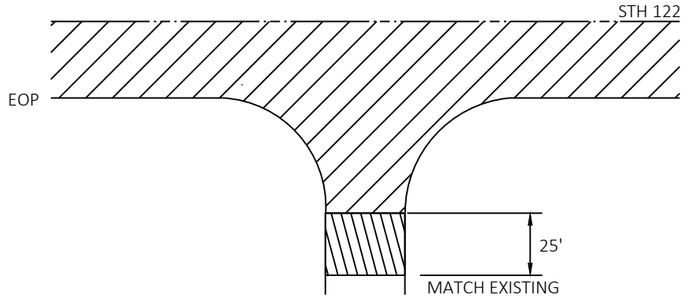


PULVERIZE & OVERLAY

REMOVING ASPHALTIC SURFACE DRIVEWAYS
2" ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

DRIVEWAYS

PAVED



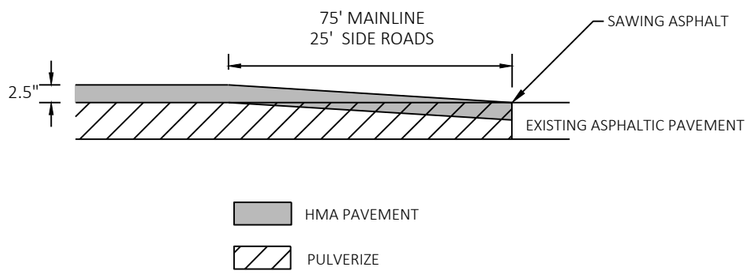
PULVERIZE & OVERLAY AT CTH B
PAVEMENT REPLACEMENT AT CTH A

PAVEMENT TRANSITION

SIDE ROADS

PAVED

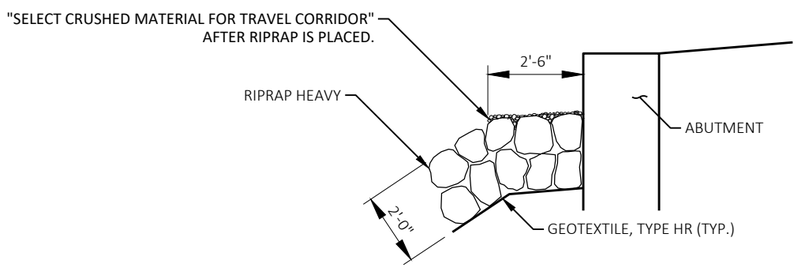
2ND ST
3RD ST
4TH ST
PARK RD
CTH E



PAVEMENT TRANSITION

MAINLINE, SIDE ROADS, AND DRIVEWAYS

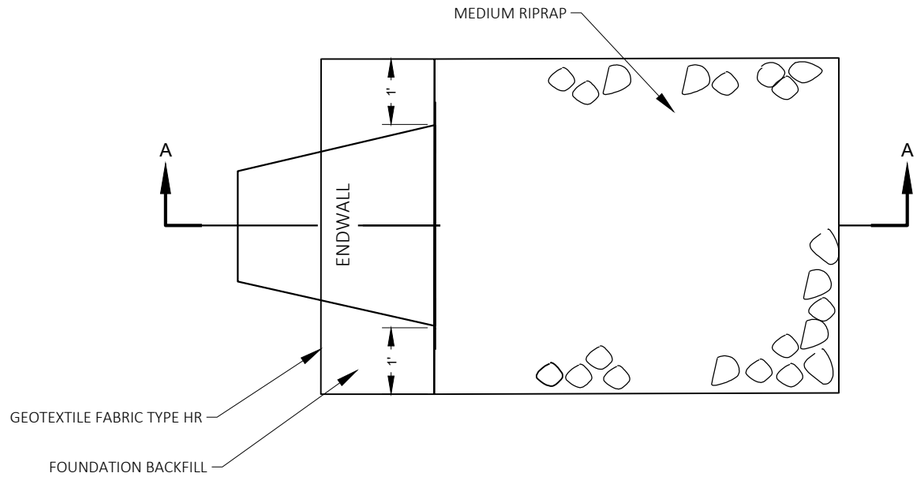
NOTE: PLACE HEAVY RIPRAP AS SHOWN IN WING ELEVATION DETAIL.

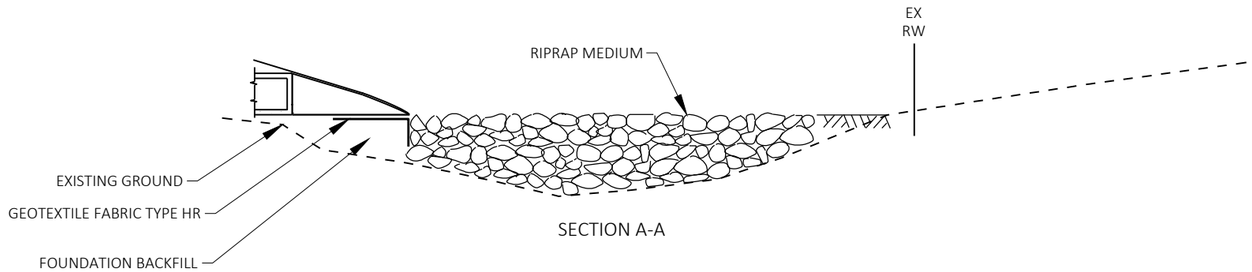


TRAVEL CORRIDOR

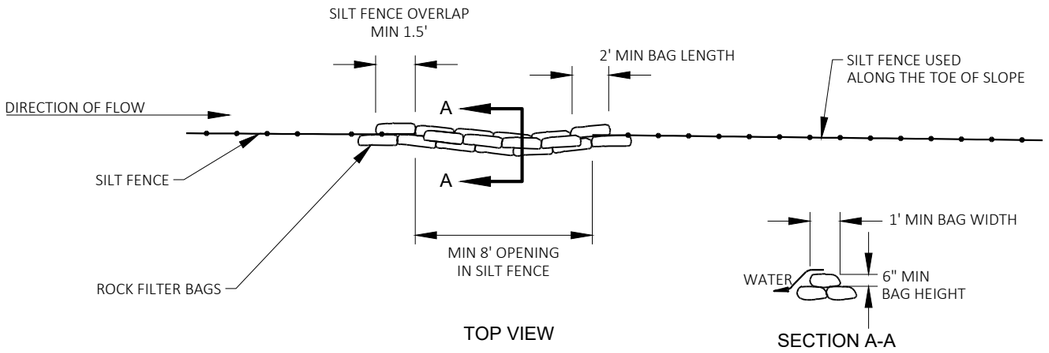
ALDER CREEK

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CONSTRUCTION DETAILS	SHEET 9	E

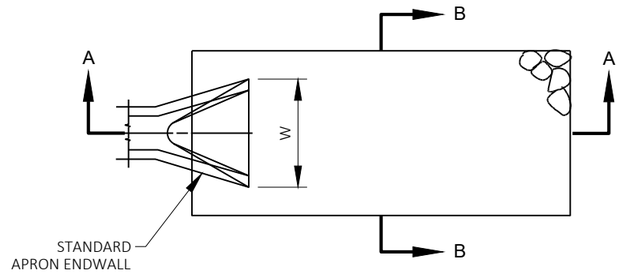


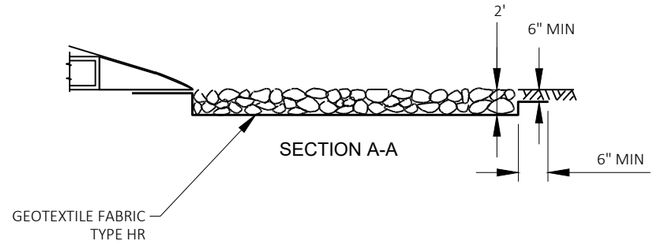


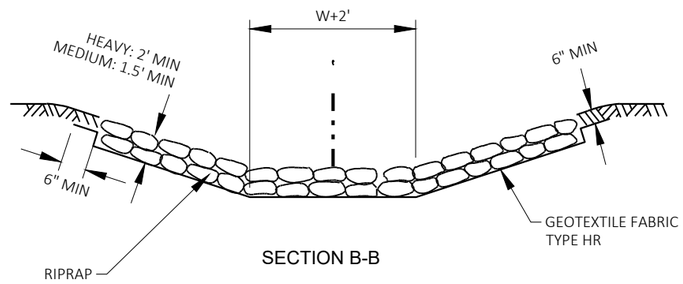
RIPRAP TREATMENT AT CULVERTS 26122000862



ROCK BAGS USED FOR SILT FENCE RELIEF







RIP RAP AND GEOTEXTILE
CULVERTS 26122000865 & 26122004622 (MUD CREEK)
CULVERTS 26122000867 & 26122000868

NOTE:
SEE EROSION CONTROL SHEETS FOR EROSION CONTROL WORK IN THIS AREA

0.019 ACRES TYPE RPF WETLAND IMPACT
TLE
HE
SURVEYED WATER EDGE
REMOVE EXISTING GUARDRAIL
EX R/W
RIPRAP HEAVY
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
CONCRETE SURFACE DRAINS
STA 99+61.44 -16' LT
POST 1 STA 98+58.43 -17' LT
POST 5 STA 98+84.29 -16' LT
POST 9 STA 99+11.50 -15' LT
STA 97+75.07 -12' LT
STA 98+06.04 -12' LT
STA 99+86.17 -15' LT
33'
17'
15'
STA 99+11.50 -13' LT
STA 99+61.43 -13' LT
MATCH STRUCTURE B-26-0045
C/L STH 122
98+00
99+00
100+00
PLACE MGS GUARDRAIL THRIE BEAM TRANSITION, 1 PANEL MGS GUARDRAIL & MGS GUARDRAIL TERMINAL EAT
STA 99+34.66 13' RT
STA 99+84.72 13' RT
STA 99+72.81 12' RT
STA 100+03.52 15' RT
STA 97+75 12' RT
STA 98+33.61 12' RT
POST 1 STA 98+81.43 17' RT
POST 5 STA 99+06.50 16' RT
POST 9 STA 99+34.66 15' RT
STA 99+72.80 13' RT
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT
CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT
STA 99+84.72 16' RT
CONCRETE SURFACE DRAINS
0.060 ACRES TYPE RPF WETLAND IMPACT
TLE
SI (TYP)
HE
REMOVE EXISTING GUARDRAIL
RIPRAP MEDIUM
EX R/W

LEGEND
- CONCRETE PAVEMENT APPROACH SLAB
- CONCRETE PAVEMENT 6-INCH
- 2 ½" HMA PAVEMENT OVER 4" SALVAGED ASPHALT PAVEMENT OVER 8" BASE AGGREGATE DENSE 1 1/4-INCH
- WETLAND IMPACT

TLE
HE
0.008 ACRES TYPE RPF WETLAND IMPACT
EX R/W
REMOVE EXISTING GUARDRAIL
STA 100+35.45 -15' LT
STA 100+54.20 -15' LT
STA 100+66.12 -15' LT
POST 9 STA 101+04.13 -15' LT
POST 5 STA 101+32.20 -16' LT
POST 1 STA 101+57.10 -17' LT
STA 102+09.49 -12' LT
STA 102+25.15 -12' LT
15'
17'
33'
PLACE MGS GUARDRAIL THRIE BEAM TRANSITION, 1 PANEL MGS GUARDRAIL & MGS GUARDRAIL TERMINAL EAT
C/L STH 122
101+00
102+00
103+00
STA 100+73.73 15' RT
STA 100+66.22 15' RT
STA 100+52.93 15' RT
POST 9 STA 101+22.43 15' RT
POST 5 STA 101+51.53 16' RT
POST 1 STA 101+76.50 17' RT
STA 102+25.17 12' RT
SI (TYP)
HE
0.030 ACRES TYPE RPF WETLAND IMPACT
EX R/W
RIPRAP HEAVY
REMOVE EXISTING GUARDRAIL
TLE

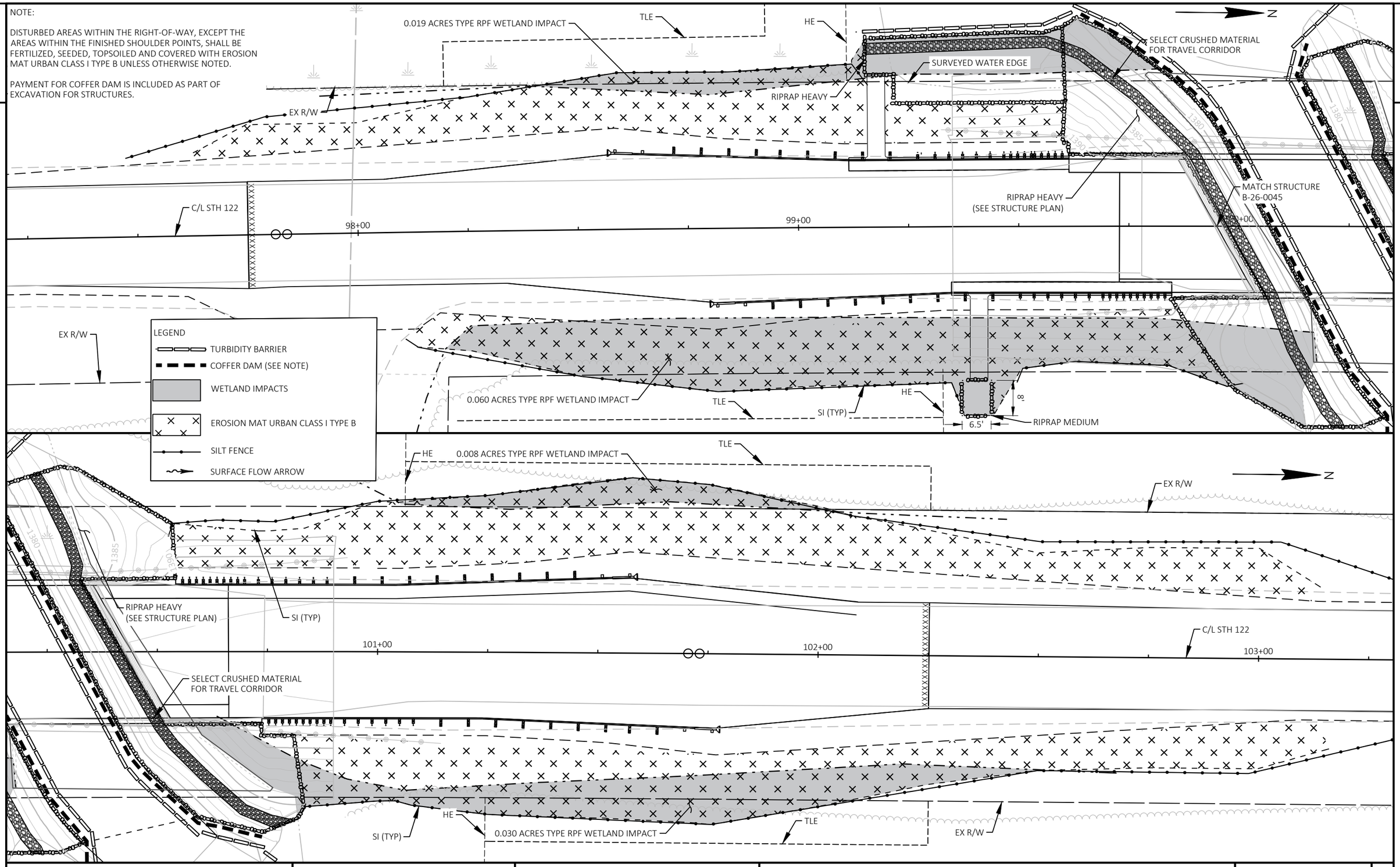
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	STRUCTURE APPROACH DETAIL	SHEET 11	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\021202-PD.DWG
LAYOUT NAME - 01
PLOT DATE : 6/5/2024 11:08 AM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 44

NOTE:

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

PAYMENT FOR COFFER DAM IS INCLUDED AS PART OF EXCAVATION FOR STRUCTURES.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	EROSION CONTROL - ALDER CREEK	SHEET 12	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - Alder

PLOT DATE : 8/15/2024 3:39 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 44

2

2

N

EX R/W

482+00

483+00

484+00

LEGEND

PIPE FLOW DIRECTION

WETLAND IMPACTS

EROSION MAT URBAN CLASS I TYPE B

SILT FENCE

SURFACE FLOW ARROW

NOTE:

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

EX R/W

TLE

RIPRAP MEDIUM

18'

17.5'

EX R/W

C/L STH 122

485+00

486+00

487+00

QTR SURVEY SPIKE
1126.168
10211

SI (TYP)

EX R/W

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	EROSION CONTROL - MUD CREEK	SHEET 13	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - Mud (2)

PLOT DATE : 6/5/2024 8:39 AM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

2

80'

C/L STH 122

HO

2+00

3+00

4+00

60'

N

402 STA 43 +01, 27.1' LT
APRON ENDWALLS FOR CPRC 24-INCH
INV 1490.20

43+00

STA 43+35
CULVERT 4TH STREET
REMOVE 1-12" CMP AND EX. INLET

INLET PROTECTION TYPE A

TLE

TLE

401 STA 42 +88, 23.3' RT
INLETS MEDIAN 2G-MS
RIM 1494.60
INV 1490.70

STA 42+94
CULVERT 4TH STREET
1-SSP CLASS III-B 24-INCH REQ'D
1-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
1-INLETS MEDIAN 2G-MS REQ'D
12° LHF
1-MARKERS FOR CULVERT END REQ'D

Tax ID: 002-0527-0500
PAUL S KAUL

Tax ID: 002-0526-0000
FRANCIS FIRKUS

SI

SI

EX R/W

80'

EX R/W

XCEL ENERGY

NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

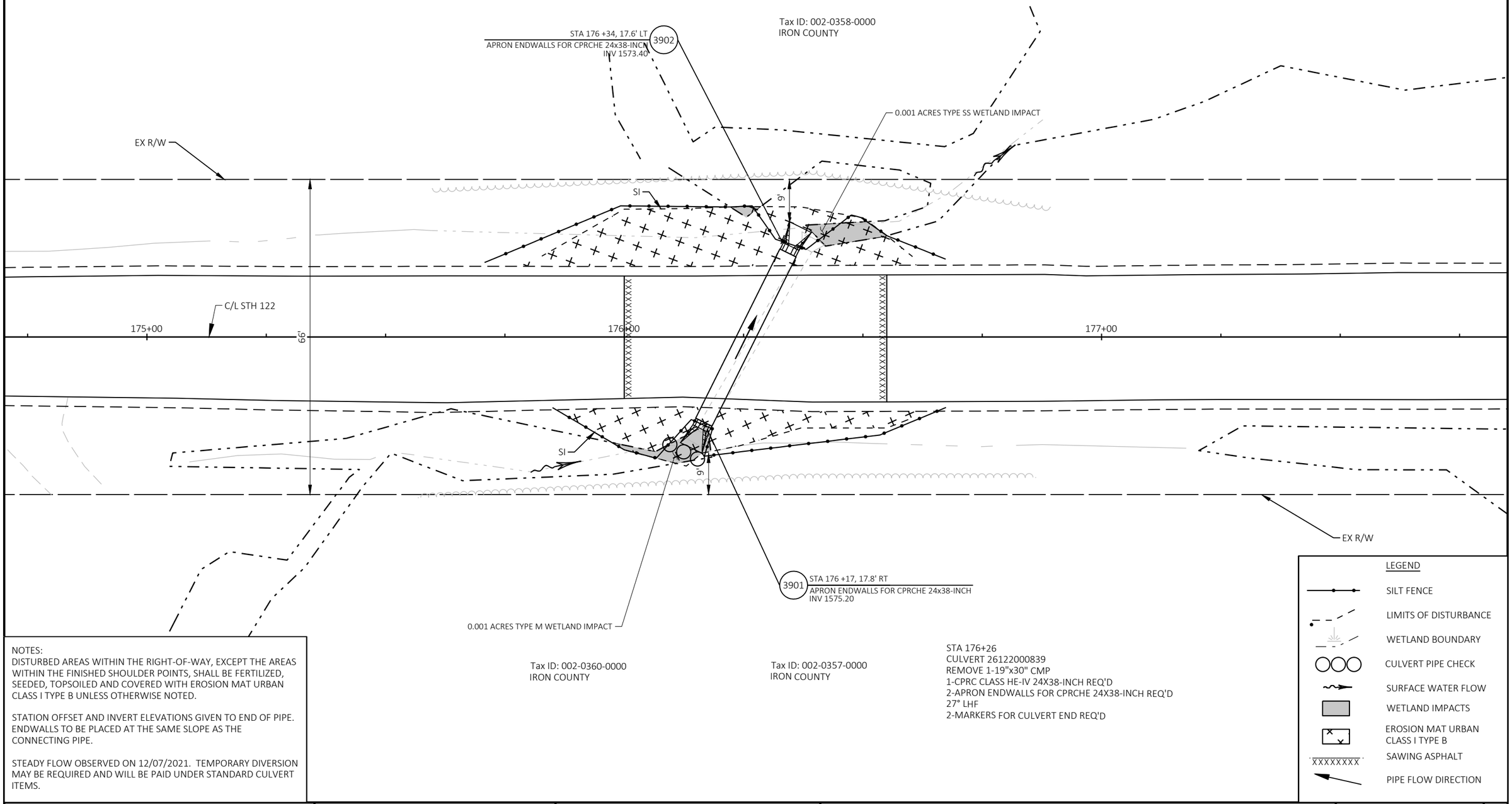
STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- SURFACE WATER FLOW
- SAWING ASPHALT
- PIPE FLOW DIRECTION
- EROSION MAT URBAN CLASS I TYPE A

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 14	E

2



NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER STANDARD CULVERT ITEMS.

2

Tax ID: 002-0359-0000
IRON COUNTY

4002 STA 179 +56, 17.8' LT
APRON ENDWALLS FOR CPRC 24-INCH
INV 1548.24

EX R/W

0.001 ACRES TYPE WS WETLAND IMPACT

9'

SI

C/L STH 122

178+00

179+00

180+00

66'

SI

9'

EX R/W

0.006 ACRES TYPE M WETLAND IMPACT

4001 STA 179 +42, 17.9' RT
APRON ENDWALLS FOR CPRC 24-INCH
INV 1549.38

Tax ID: 002-0359-0000
IRON COUNTY

STA 179+49
CULVERT **26122000840**
REMOVE 1-24" CMP
1-CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
22° LHF
2-MARKERS FOR CULVERT END REQ'D

NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

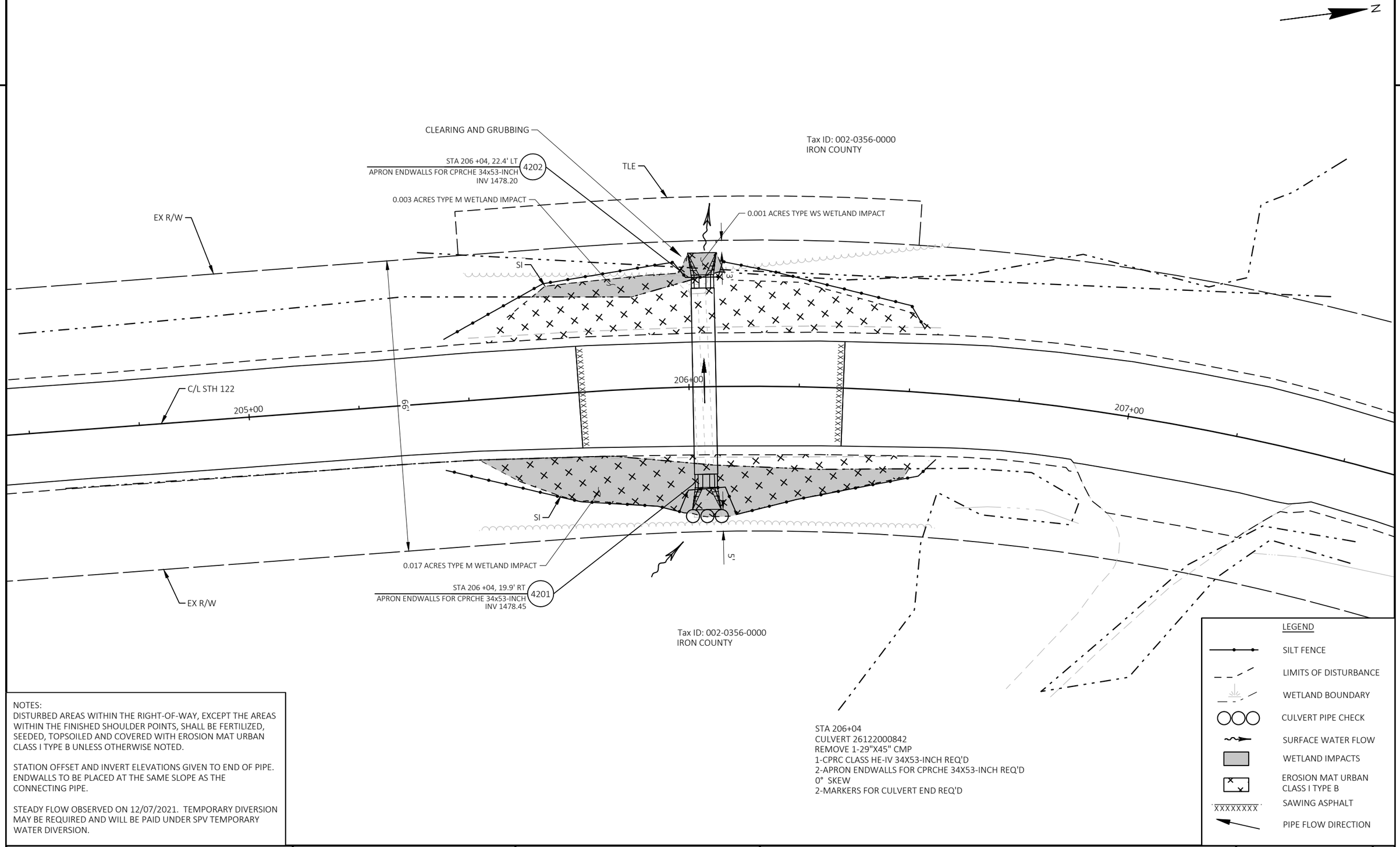
STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER SPV TEMPORARY WATER DIVERSION.

LEGEND
- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- WETLAND IMPACTS
- EROSION MAT URBAN CLASS I TYPE B
- XXXXXXXX SAWING ASPHALT
- PIPE FLOW DIRECTION

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 16	E

2



NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER SPV TEMPORARY WATER DIVERSION.

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 17	E

2

N

Tax ID: 018-0768-0000
IRON COUNTY

STA 251 +45, 22.6' LT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1477.72
4702

0.001 ACRES TYPE WS WETLAND IMPACT

EX R/W

4'

SI

C/L STH 122

250+00

251+00

252+00

253+

66'

9'

SI

0.003 ACRES TYPE M WETLAND IMPACT

0.001 ACRES TYPE SS WETLAND IMPACT

EX R/W

STA 251+45
CULVERT-26122000847
REMOVE 1-24" CMP
1-CPRC CLASS HE-IV 24X38-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 24X38-INCH REQ'D
0° SKEW
2-MARKERS FOR CULVERT END REQ'D

Tax ID: 018-0776-0100
ALLEN J DICKENSON

STA 251 +45, 17.8' RT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1478.45
4701

OH OH OH OH OH OH OH OH

LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- WETLAND IMPACTS
- EROSION MAT URBAN CLASS I TYPE B
- XXXXXXXX SAWING ASPHALT
- PIPE FLOW DIRECTION

NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER SPV TEMPORARY WATER DIVERSION.

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 18	E

2

N

Tax ID: 018-0768-0000
GREGORY L

STA 382 +01, 20.9' LT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1310.40
5801

BAYFIELD COOP

0.001 ACRES TYPE M(D) WETLAND IMPACT

OH OH OH

2

N

Tax ID: 018-0698-0000
WILLIAM D WEITZEL

STA 443 +93, 21.9' LT
APRON ENDWALLS FOR CPRCHE 19x30-INCH
INV 1191.34
6202

TLE

RIPRAP MEDIUM
0.001 ACRES TYPE M WETLAND IMPACT

EX R/W

BAYFIELD COOP

HO

SI

5'

C/L STH 122

443+00

444+00

445+00

99'

SI

0.001 ACRES TYPE WS WETLAND IMPACT

0.005 ACRES TYPE SS WETLAND IMPACT

EX R/W

BRIGHTSPEED

STA 443 +95, 19.8' RT
APRON ENDWALLS FOR CPRCHE 19x30-INCH
INV 1191.55
6201

STA 443+94
CULVERT 261122000862
REMOVE 1-24" CMP
1-CPRC CLASS HE-IV 19X30-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 19X30-INCH REQ'D
3° RHF
2-MARKERS FOR CULVERT END REQ'D

Tax ID: 018-0689-0000
MATS E PETERSSON

LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- WETLAND IMPACTS
- EROSION MAT URBAN CLASS I TYPE B
- XXXXXXXX SAWING ASPHALT
- PIPE FLOW DIRECTION

NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER STANDARD CULVERT ITEMS.

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 20	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 07
PLOT DATE : 6/4/2024 4:36 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

N

Tax ID: 018-0695-0000
WILLIAM D WEITZEL

BAYFIELD COOP

STA 453 +74, 22.0' LT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1185.32
6301

0.001 ACRES TYPE M WETLAND IMPACT

EX R/W

SI

C/L STH 122

453+00

454+00

455+00

99'

BRIGHTSPEED

0.003 ACRES TYPE M WETLAND IMPACT

EX R/W

STA 453 +74, 19.0' RT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1185.55
6302

Tax ID: 018-0688-0000
JONAH BERRES

STA 453+75
CULVERT 261122000863
REMOVE 1-24" CMP
1-CPRC CLASS HE-IV 24X38-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 24X38-INCH REQ'D
0° SKEW
2-MARKERS FOR CULVERT END REQ'D

LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- WETLAND IMPACTS
- EROSION MAT URBAN CLASS I TYPE B
- SAWING ASPHALT (XXXXXXXX)
- PIPE FLOW DIRECTION

NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER STANDARD CULVERT ITEMS.

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 21	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 08
PLOT DATE : 6/4/2024 4:36 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

2

N

STA 465 +86, 25.5' LT
APRON ENDWALLS FOR CPRC 24-INCH
INV 1180.50
6402

Tax ID: 018-0652-0000
BERNADETTE M KOKELY

0.003 ACRES TYPE M WETLAND IMPACT

BAYFIELD COOP

EX R/W

TLE

SI

C/L STH 122

465+00

466+00

467+00

99'

SI

EX R/W

BRIGHTSPEED

Tax ID: 018-0663-0000
RHONDA A WOELLNER

STA 465 +77, 21.8' RT
APRON ENDWALLS FOR CPRC 24-INCH
INV 1181.64
6401

STA 465+81
CULVERT 26112200864
REMOVE 1-15" CMP
1-CPRC CLASS III 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
11° LHF
2-MARKERS FOR CULVERT END REQ'D

LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- WETLAND IMPACTS
- EROSION MAT URBAN CLASS I TYPE B
- XXXXXXXX SAWING ASPHALT
- PIPE FLOW DIRECTION

NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 22	E

2

N

MUD CREEK

STA 476 +57, 26.0' LT
APRON ENDWALLS FOR CPRCHE 48x76-INCH
INV 1123.82
6502

STA 476 +48, 26.0' LT
APRON ENDWALLS FOR CPRCHE 48x76-INCH
INV 1124.81
2202

Tax ID: 018-0649-0100
LESLIE KOLESAR

HIGHWAY EASEMENT

RIPRAP HEAVY

0.028 ACRES TYPE RPE WETLAND IMPACT

TLE

EX R/W

BAYFIELD COOP

BRIGHTSPEED

SI

76'

21'

OH

T

C/L STH 122

475+00

476+00

477+00

478+00

99

SI

0.001 ACRES TYPE RPF WETLAND IMPACT

EX R/W

STA 476+48
CULVERT 26122004622(MUD CREEK)
REMOVE 1-48" CMP
1-CPRCHE CLASS HE-III 48X76-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 48X76-INCH REQ'D
3° RHF
2-MARKERS FOR CULVERT END REQ'D

TLE

6501 STA 476+57, 25.0' RT
APRON ENDWALLS FOR CPRCHE 48x76-INCH
INV 1125.00

0.009 ACRES TYPE RPE WETLAND IMPACT

HIGHWAY EASEMENT

STA 476 +48, 25.0' RT
APRON ENDWALLS FOR CPRCHE 48x76-INCH
INV 1125.48
2201

Tax ID: 018-0662-0000
DOWD KOELSCH

STA 476+57
CULVERT 26122000865(MUD CREEK)
REMOVE 1-48" CMP
1-CPRCHE CLASS HE-III 48X76-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 48X76-INCH REQ'D
5° LHF
2-MARKERS FOR CULVERT END REQ'D

MUD CREEK

LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- WETLAND IMPACTS
- EROSION MAT URBAN CLASS I TYPE B
- XXXXXXXX SAWING ASPHALT
- PIPE FLOW DIRECTION

NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER SPV TEMPORARY WATER DIVERSION.

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 23	E

2

N

Tax ID:018-0649-0000
KARL KRALL

BAYFIELD COOP

EX R/W

BRIGHTSPEED

STA 484 +04, 18.8' LT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1125.75
6602

0.005 ACRES TYPE M WETLAND IMPACT

SI

OH OH OH OH HO HO HO HO HO HO HO HO HO

T T T T FO FO FO FO T T T

C/L STH 122

483+00 484+00 485+00

99

4'

SI

EX R/W

0.001 ACRES TYPE M WETLAND IMPACT

STA 484 +03, 23.3' RT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1125.60
6601

TAX ID: 018-0662-0000
JAMES E KOELSCH

STA 484+04
CULVERT 26122000866
REMOVE 1-30" CMP
1-CPRC CLASS HE-IV 24X38-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 24X38-INCH REQ'D
2° LHF
2-MARKERS FOR CULVERT END REQ'D

LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- WETLAND IMPACTS
- EROSION MAT URBAN CLASS I TYPE B
- XXXXXXXX SAWING ASPHALT
- PIPE FLOW DIRECTION

NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER STANDARD CULVERT ITEMS.

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 24	E

2

N

STA 486 +63, 22.3' LT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1124.28
6802

Tax ID: 018-0649-0000
KARL KRALL

CENTURYLINK

BAYFIELD COOP

TLE

RIPRAP MEDIUM

STA 486 +52, 20.0' LT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1124.10
6702

EX R/W

0.005 ACRES TYPE M WETLAND IMPACT

0.001 ACRES TYPE M WETLAND IMPACT

SI

C/L STH 122

485+00

486+00

487+00

488+0

99'

66'

QTR SURVEY SPIKE
1126.168
10211

BRIGHTSPEED

SI

0.004 ACRES TYPE M WETLAND IMPACT

EX R/W

STA 486 +38, 19.6' RT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1124.40
6701

STA 486 +61, 21.1' RT
APRON ENDWALLS FOR CPRCHE 24x38-INCH
INV 1124.75
6801

STA 486+45
CULVERT 26122000867
REMOVE 1-19"X30" CMP
1-CPRCHE CLASS HE-IV 24X38-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 24X38-INCH REQ'D
19° LHF
2-MARKERS FOR CULVERT END REQ'D

TAX ID: 018-0662-0000
JAMES E KOELSCH

STA 486+62
CULVERT 26122000868
REMOVE 1-19"X30" CMP
1-CPRCHE CLASS HE-IV 24X38-INCH REQ'D
2-APRON ENDWALLS FOR CPRCHE 24X38-INCH REQ'D
4° LHF
2-MARKERS FOR CULVERT END REQ'D

66'

LEGEND

- SILT FENCE
- LIMITS OF DISTURBANCE
- WETLAND BOUNDARY
- CULVERT PIPE CHECK
- SURFACE WATER FLOW
- WETLAND IMPACTS
- EROSION MAT URBAN CLASS I TYPE B
- XXXXXXXX SAWING ASPHALT
- PIPE FLOW DIRECTION

NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

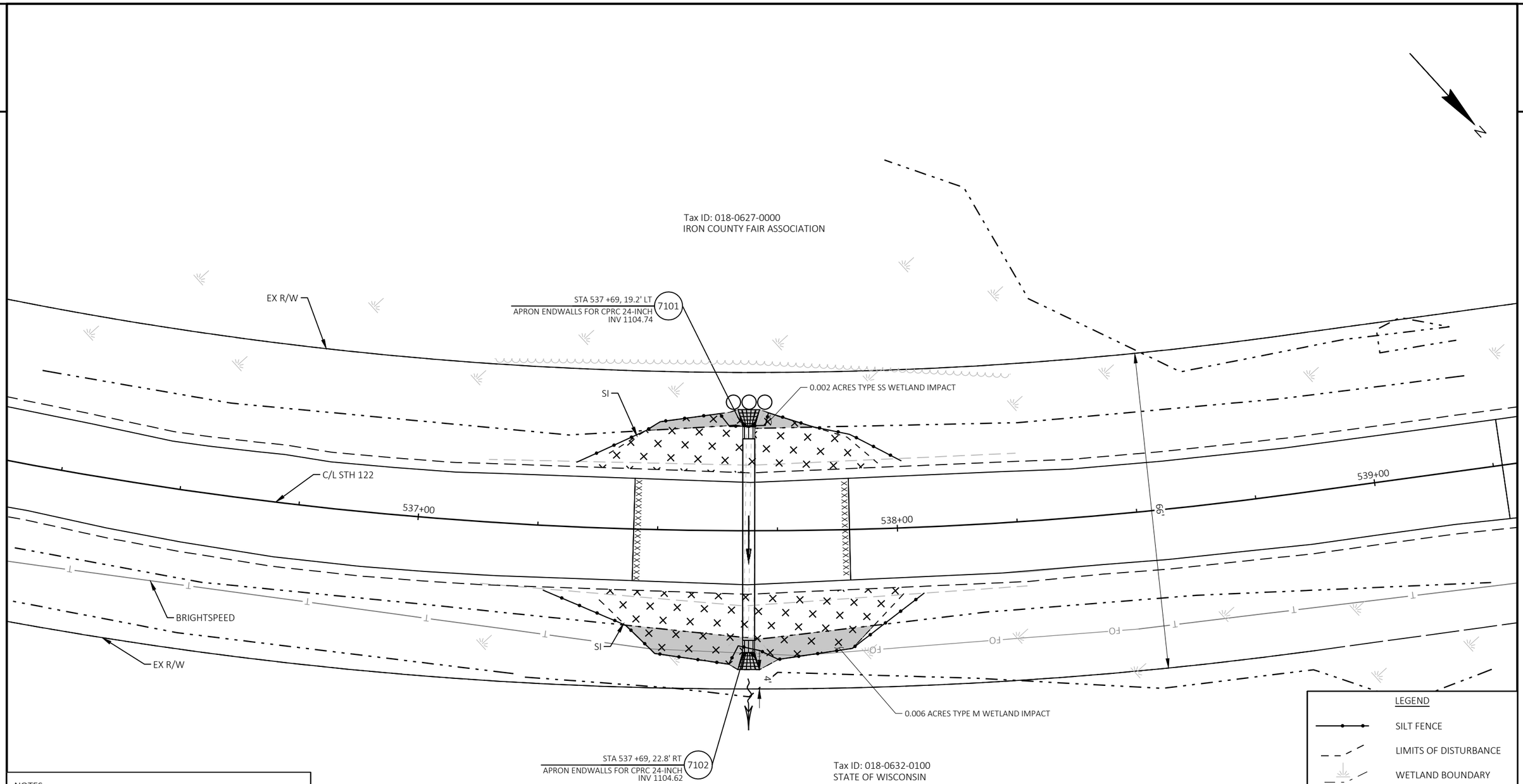
STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER STANDARD CULVERT ITEMS.

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 25	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 12
PLOT DATE : 6/4/2024 4:36 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2



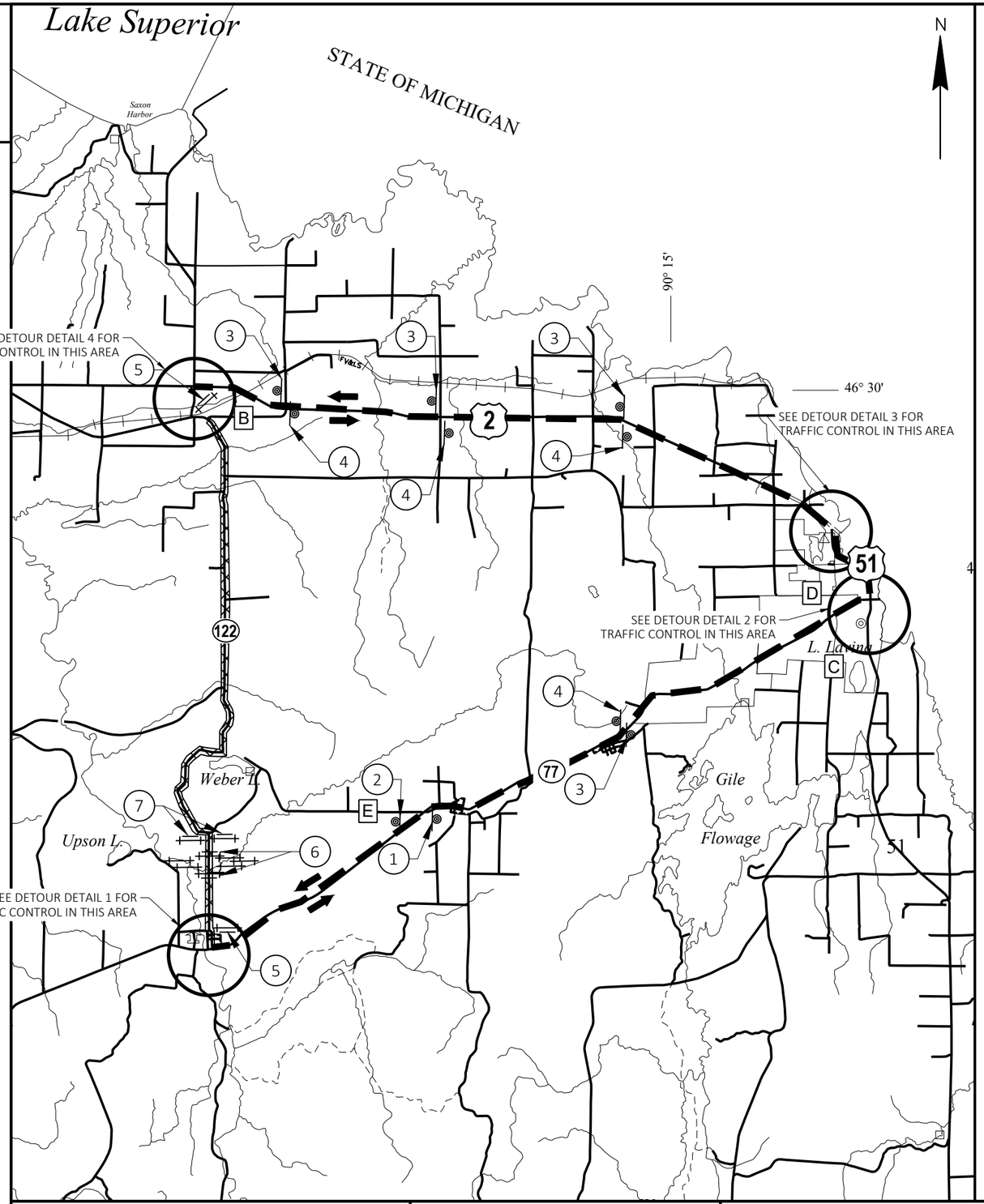
NOTES:
DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, SHALL BE FERTILIZED, SEEDED, TOPSOILED AND COVERED WITH EROSION MAT URBAN CLASS I TYPE B UNLESS OTHERWISE NOTED.

STATION OFFSET AND INVERT ELEVATIONS GIVEN TO END OF PIPE. ENDWALLS TO BE PLACED AT THE SAME SLOPE AS THE CONNECTING PIPE.

STEADY FLOW OBSERVED ON 12/07/2021. TEMPORARY DIVERSION MAY BE REQUIRED AND WILL BE PAID UNDER STANDARD CULVERT ITEMS.

STA 537+69
CULVERT 26122000871
REMOVE 1-24" CMP
1-CPRC CLASS IV 24-INCH REQ'D
2-APRON ENDWALLS FOR CPRC 24-INCH REQ'D
1° LHF
2-MARKERS FOR CULVERT END REQ'D

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CULVERT DETAILS	SHEET 26	E



LEGEND:

- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF DETOURED TRAFFIC
- DETOUR ROUTE
- EXISTING SIGN
- EXISTING SIGN TO BE COVERED
- WORK ZONE CLOSED TO TRAFFIC

NOTES:

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SEE STANDARD DETAIL DRAWING (SDD), "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND "DETOUR SIGNING FOR MAINLINE CLOSURES", FOR SIGN SPACING, BARRICADE LOCATIONS AND OTHER DETAILS.

ALL SIGNS 48" X 48" UNLESS OTHERWISE NOTED.

DO NOT PLACE ANY TRAFFIC CONTROL SIGNS WITHIN 50 FEET OF RAILROAD RIGHT OF WAY.

DETOUR M4-8 24"X12"
EAST NORTH M3-1 24"X12"
77 122 M1-6 24"X24"
1

DETOUR M4-8 24"X12"
WEST SOUTH M3-3 24"X12"
77 122 M1-6 24"X24"
2

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
122 M1-6 24"X24"
3

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
122 M1-6 24"X24"
4

HWY 122
ROAD CLOSED
BEGINS XXX-XX
G20-57C
96"X48"

FOLLOW DETOUR
USE ONLY ONCE WHEN ROAD IS CLOSED
5

PLACE SIGNS AT CLOSURE LIMITS 7 DAYS PRIOR TO CONSTRUCTION.

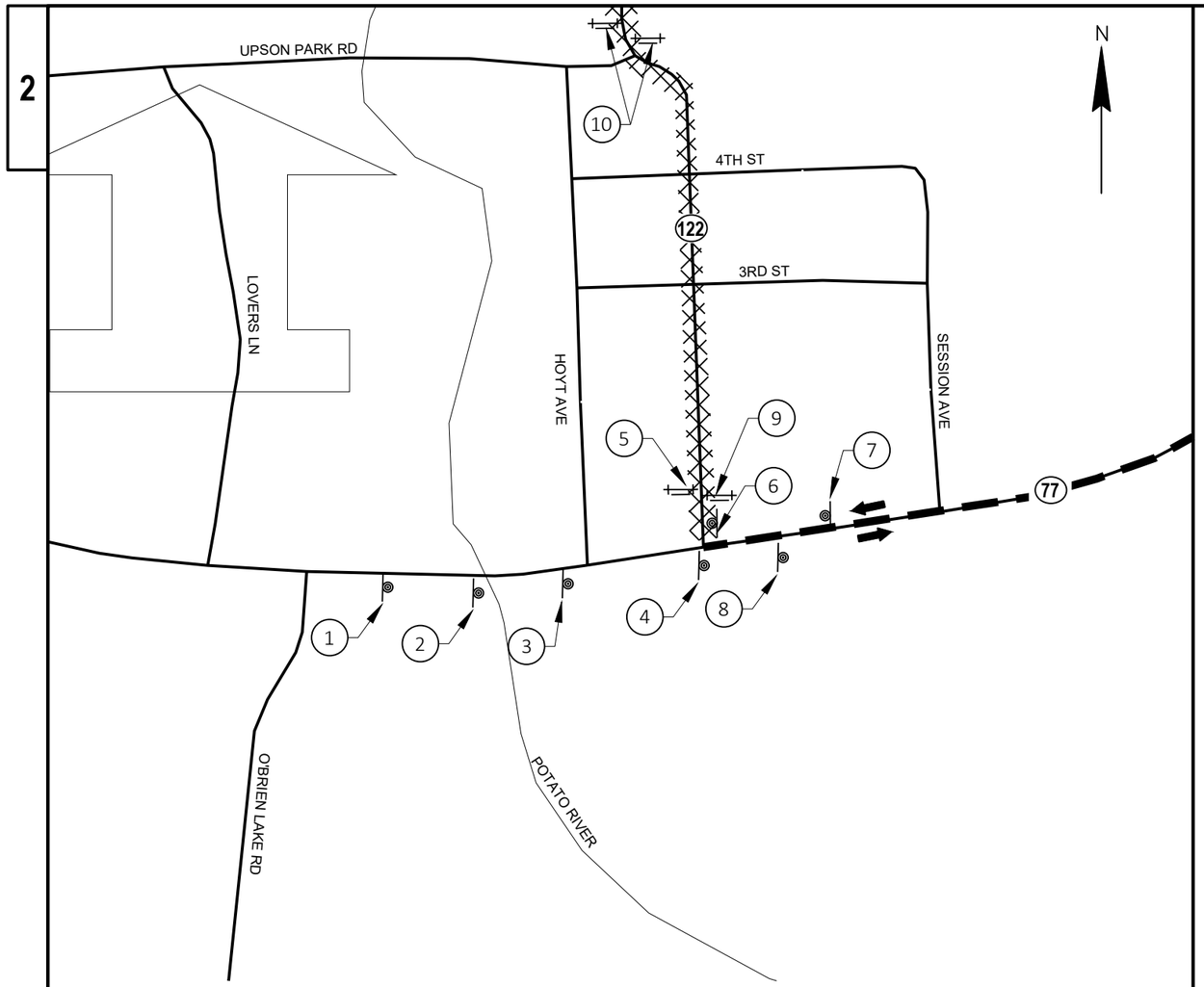
BRIDGE OUT
R11-2B
48"X30"
6

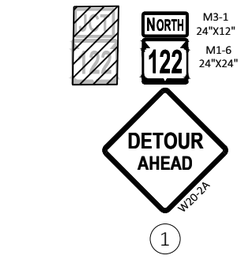
PLACE BARRICADES AND SIGNS IN ACCORDANCE WITH SDD BARRICADES AND SIGNS FOR VARIOUS CLOSURES, DETAIL D: ROAD CLOSURE BARRICADE DETAIL.

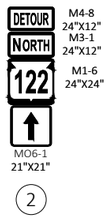
BRIDGE OUT
0.6 MILES AHEAD
LOCAL TRAFFIC ONLY
R11-3B
60"X30"
7

2

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	DETOUR PLAN	SHEET 27	E







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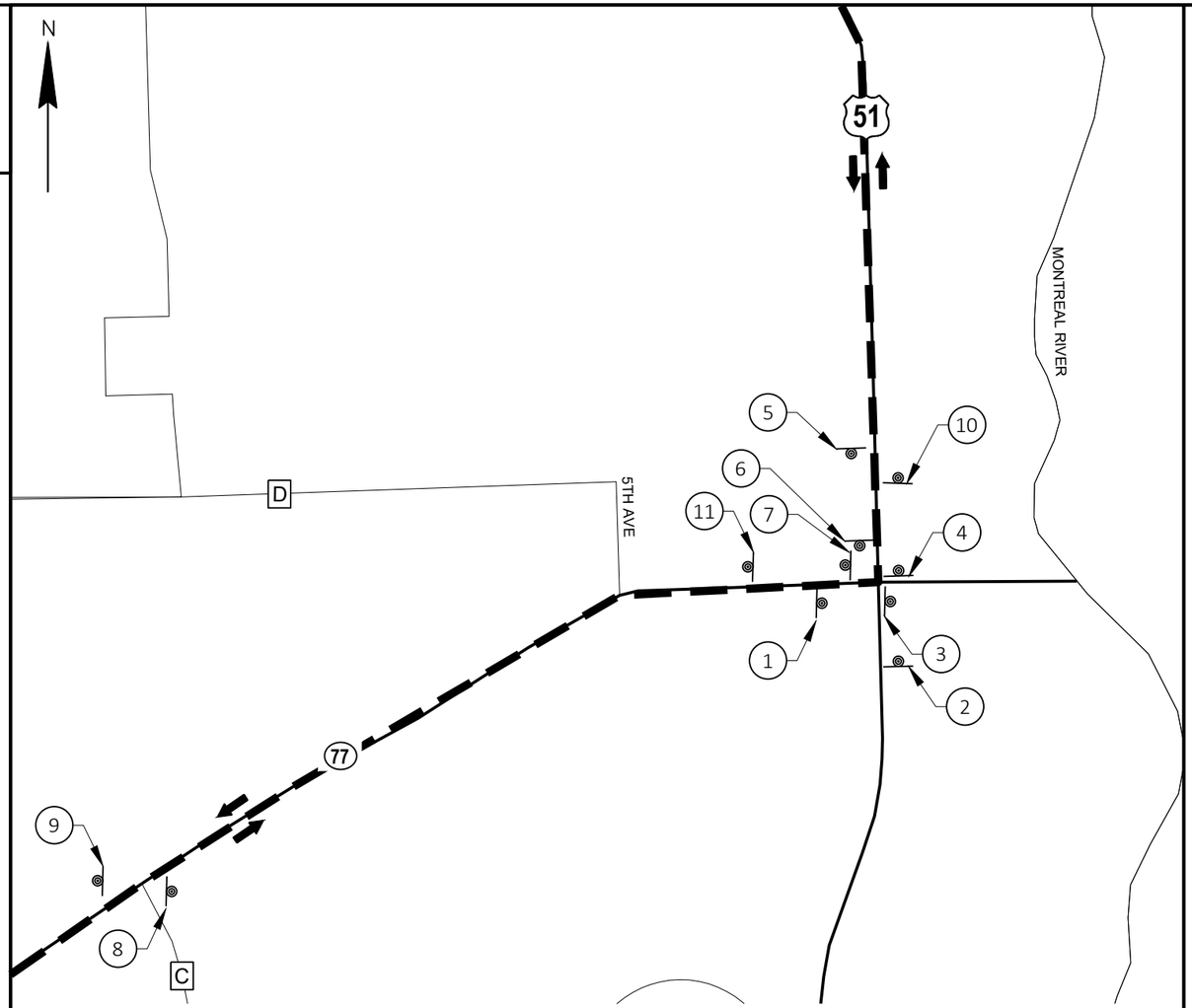
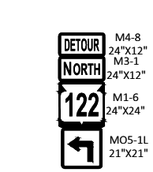
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	DETOUR PLAN - DETAIL 1	SHEET 28	E

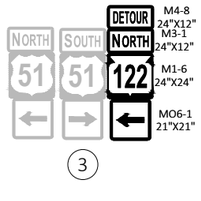
FILE NAME : Y:\MILWAUKEE\202005\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\027002_DT.DWG
LAYOUT NAME - Detail 1
PLOT DATE : 7/23/2024 10:44 AM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : Custom
WISDOT/CADDS SHEET 42





1

2



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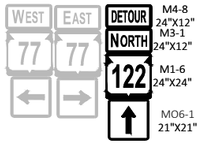
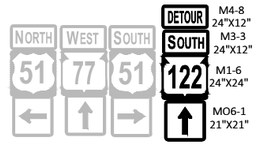


4

5

6



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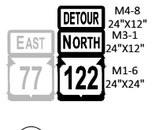

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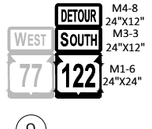


9

10

11

MONTREAL RIVER
N
1
3
5
7
6
2
4
2
51

M4-8
24"X12"
DETOUR
M3-1
24"X12"
NORTH
M1-6
24"X24"
122

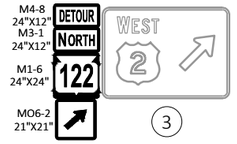
1

SOUTH
122
M3-3
24"X12"
M1-6
24"X24"
DETOUR
AHEAD
W20-2A

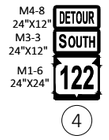
7

M4-8
24"X12"
DETOUR
M3-1
24"X12"
NORTH
M1-6
24"X24"
122
MO5-1L
21"X21"
WEST
2
EAST
2

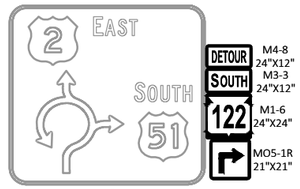
2


M4-8
24"X12"
DETOUR
M3-1
24"X12"
NORTH
M1-6
24"X24"
122
MO6-2
21"X21"
WEST
2

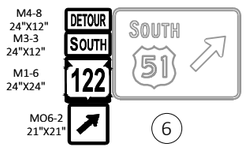
3


M4-8
24"X12"
DETOUR
M3-3
24"X12"
SOUTH
M1-6
24"X24"
122

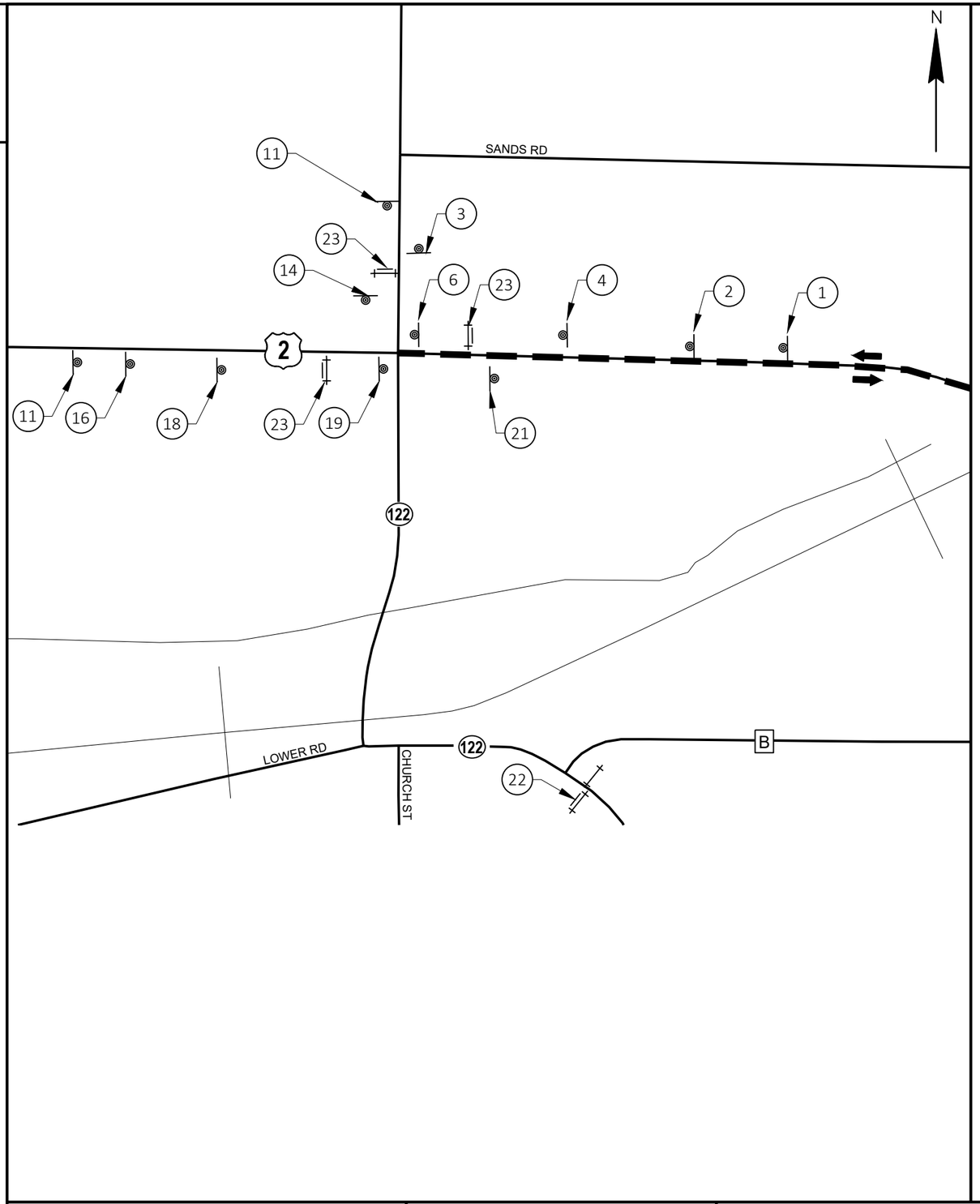
4


2
EAST
SOUTH
51
DETOUR
SOUTH
122
M4-8
24"X12"
M3-3
24"X12"
M1-6
24"X24"
MO5-1R
21"X21"

5


M4-8
24"X12"
DETOUR
M3-3
24"X12"
SOUTH
M1-6
24"X24"
122
MO6-2
21"X21"
SOUTH
51

6



COVER JCT NORTH M3-1 24"X12"
122
1

WEST NORTH
2
122
2

END DETOUR M4-8A 24"X18"
NORTH
122
3

ASHLAND
SAXON
4

NORTH
122
6

SOUTH M3-3 24"X12"
122 M1-6 24"X24"
DETOUR AHEAD W20-2A
11

M4-8 24"X12" DETOUR
EAST SOUTH WEST
2 122 2
COVER
MO6-1 21"X21"
14

DETOUR M4-8 24"X12"
NORTH WEST SOUTH
122 2 122
COVER
MO6-1 21"X21"
16

IRONWOOD
SAXON
18

DETOUR M4-8 24"X12"
NORTH SOUTH
122 122
COVER
MO6-1 21"X21"
19

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
122 M1-6 24"X24"
21

ROAD CLOSED TO THRU TRAFFIC
R11-4 60"X30"
22

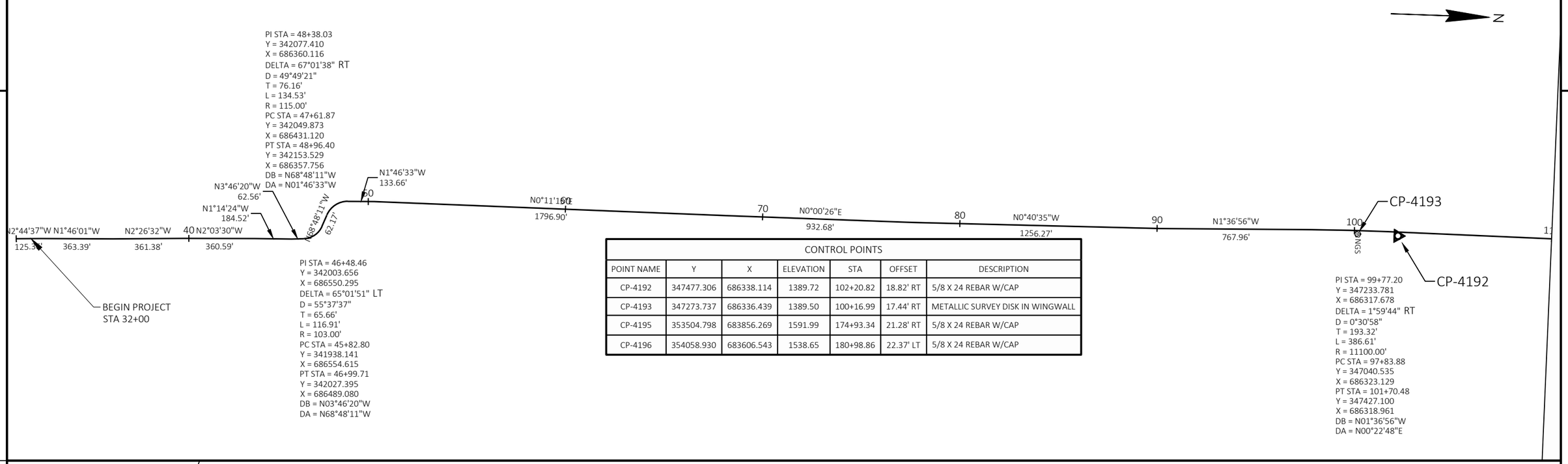
ROAD OPEN TO SAXON
R10-61 60"X30"
23

2

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	DETOUR PLAN - DETAIL 4	SHEET 31	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\027002_DT.DWG
LAYOUT NAME - Detail 4
PLOT DATE : 7/23/2024 10:44 AM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : Custom
WISDOT/CADDS SHEET 42

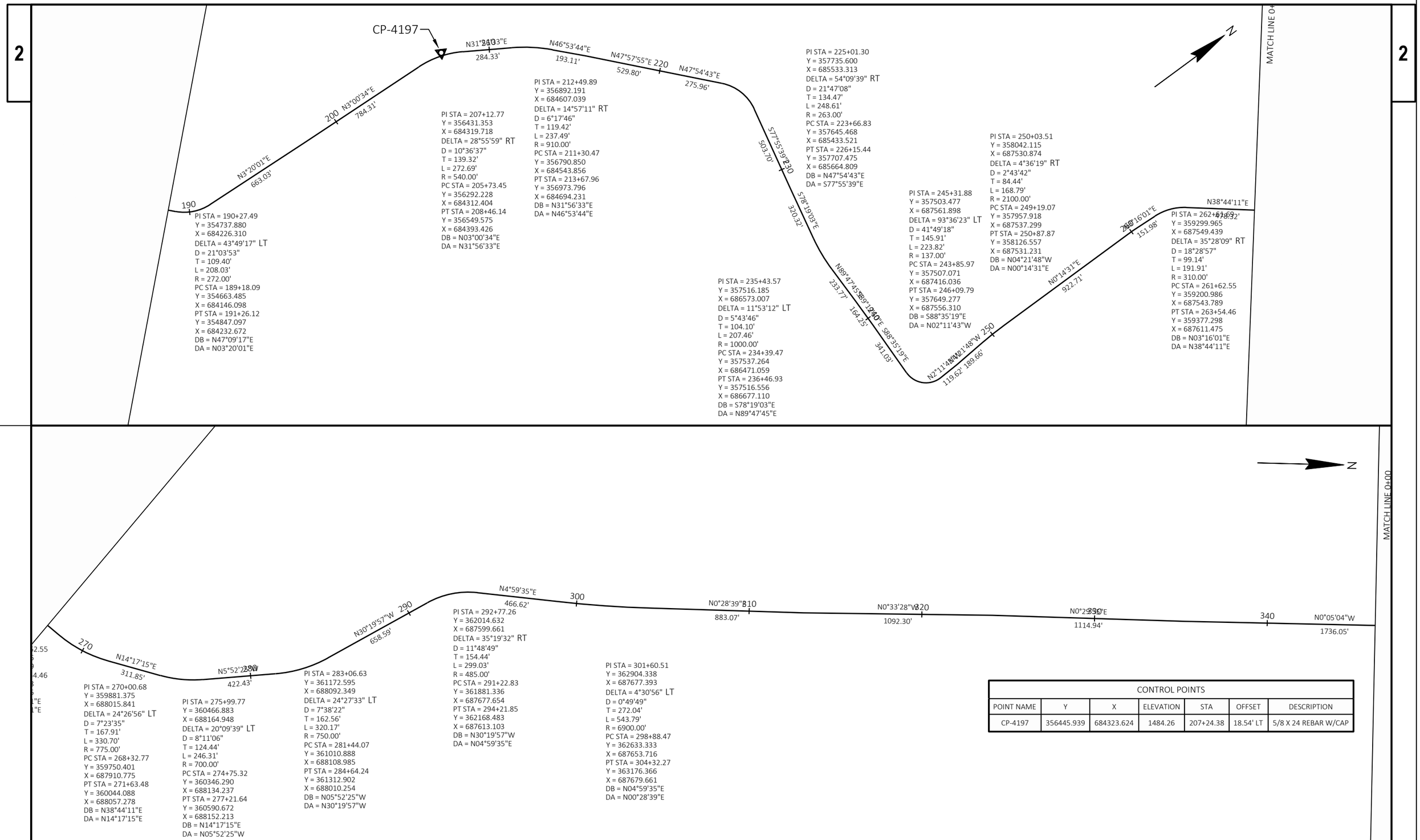
2



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	ALIGNMENT DETAILS	SHEET 32	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 10

PLOT DATE : 7/25/2024 3:56 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:500 FT



PI STA = 190+27.49
Y = 354737.880
X = 684226.310
DELTA = 43°49'17" LT
D = 21°03'53"
T = 109.40'
L = 208.03'
R = 272.00'
PC STA = 189+18.09
Y = 354663.485
X = 684146.098
PT STA = 191+26.12
Y = 354847.097
X = 684232.672
DB = N47°09'17"E
DA = N03°20'01"E

PI STA = 207+12.77
Y = 356431.353
X = 684319.718
DELTA = 28°55'59" RT
D = 10°36'37"
T = 139.32'
L = 272.69'
R = 540.00'
PC STA = 205+73.45
Y = 356292.228
X = 684312.404
PT STA = 208+46.14
Y = 356549.575
X = 684393.426
DB = N03°00'34"E
DA = N31°56'33"E

PI STA = 212+49.89
Y = 356892.191
X = 684607.039
DELTA = 14°57'11" RT
D = 6°17'46"
T = 119.42'
L = 237.49'
R = 910.00'
PC STA = 211+30.47
Y = 356790.850
X = 684543.856
PT STA = 213+67.96
Y = 356973.796
X = 684694.231
DB = N31°56'33"E
DA = N46°53'44"E

PI STA = 225+01.30
Y = 357735.600
X = 685533.313
DELTA = 54°09'39" RT
D = 21°47'08"
T = 134.47'
L = 248.61'
R = 263.00'
PC STA = 223+66.83
Y = 357645.468
X = 685433.521
PT STA = 226+15.44
Y = 357707.475
X = 685664.809
DB = N47°54'43"E
DA = S77°55'39"E

PI STA = 235+43.57
Y = 357516.185
X = 686573.007
DELTA = 11°53'12" LT
D = 5°43'46"
T = 104.10'
L = 207.46'
R = 1000.00'
PC STA = 234+39.47
Y = 357537.264
X = 686471.059
PT STA = 236+46.93
Y = 357516.556
X = 686677.110
DB = S78°19'03"E
DA = N89°47'45"E

PI STA = 245+31.88
Y = 357503.477
X = 687561.898
DELTA = 93°36'23" LT
D = 41°49'18"
T = 145.91'
L = 223.82'
R = 137.00'
PC STA = 243+85.97
Y = 357507.071
X = 687416.036
PT STA = 246+09.79
Y = 357649.277
X = 687556.310
DB = S88°35'19"E
DA = N02°11'43"W

PI STA = 250+03.51
Y = 358042.115
X = 687530.874
DELTA = 4°36'19" RT
D = 2°43'42"
T = 84.44'
L = 168.79'
R = 2100.00'
PC STA = 249+19.07
Y = 357957.918
X = 687537.299
PT STA = 250+87.87
Y = 358126.557
X = 687531.231
DB = N04°21'48"W
DA = N00°14'31"E

PI STA = 262+63.69
Y = 359299.965
X = 687549.439
DELTA = 35°28'09" RT
D = 18°28'57"
T = 99.14'
L = 191.91'
R = 310.00'
PC STA = 261+62.55
Y = 359200.986
X = 687543.789
PT STA = 263+54.46
Y = 359377.298
X = 687611.475
DB = N03°16'01"E
DA = N38°44'11"E

PI STA = 270+00.68
Y = 359881.375
X = 688015.841
DELTA = 24°26'56" LT
D = 7°23'35"
T = 167.91'
L = 330.70'
R = 775.00'
PC STA = 268+32.77
Y = 359750.401
X = 687910.775
PT STA = 271+63.48
Y = 360044.088
X = 688057.278
DB = N38°44'11"E
DA = N14°17'15"E

PI STA = 275+99.77
Y = 360466.883
X = 688164.948
DELTA = 20°09'39" LT
D = 8°11'06"
T = 124.44'
L = 246.31'
R = 700.00'
PC STA = 274+75.32
Y = 360346.290
X = 688134.237
PT STA = 277+21.64
Y = 360590.672
X = 688152.213
DB = N14°17'15"E
DA = N05°52'25"W

PI STA = 283+06.63
Y = 361172.595
X = 688092.349
DELTA = 24°27'33" LT
D = 7°38'22"
T = 162.56'
L = 320.17'
R = 750.00'
PC STA = 281+44.07
Y = 361010.888
X = 688108.985
PT STA = 284+64.24
Y = 361312.902
X = 688010.254
DB = N05°52'25"W
DA = N30°19'57"W

PI STA = 292+77.26
Y = 362014.632
X = 687599.661
DELTA = 35°19'32" RT
D = 11°48'49"
T = 154.44'
L = 299.03'
R = 485.00'
PC STA = 291+22.83
Y = 361881.336
X = 687677.654
PT STA = 294+21.85
Y = 362168.483
X = 687613.103
DB = N30°19'57"W
DA = N04°59'35"E

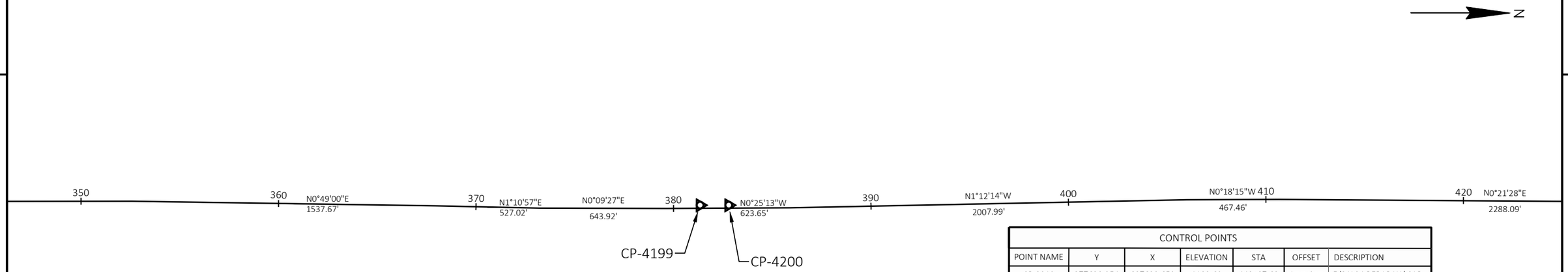
PI STA = 301+60.51
Y = 362904.338
X = 687677.393
DELTA = 4°30'56" LT
D = 0°49'49"
T = 272.04'
L = 543.79'
R = 6900.00'
PC STA = 298+88.47
Y = 362633.333
X = 687653.716
PT STA = 304+32.27
Y = 363176.366
X = 687679.661
DB = N04°59'35"E
DA = N00°28'39"E

CONTROL POINTS

POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-4197	356445.939	684323.624	1484.26	207+24.38	18.54' LT	5/8 X 24 REBAR W/CAP

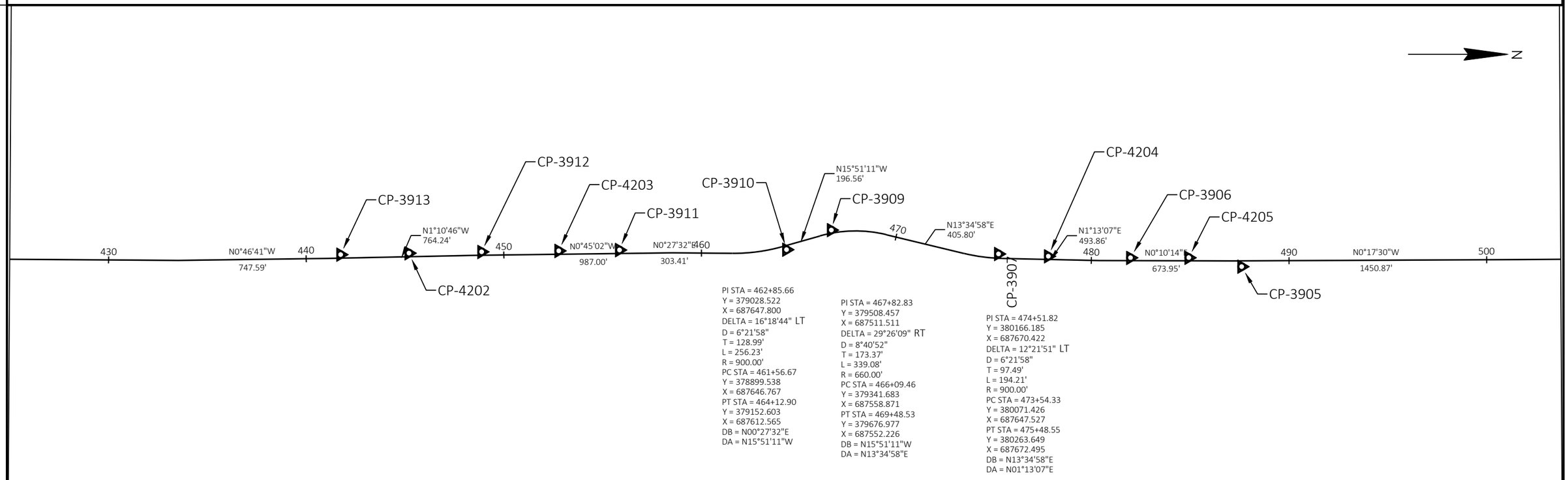
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	ALIGNMENT DETAILS	SHEET 33	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 11
PLOT DATE : 7/25/2024 4:01 PM
PLOT BY : WEIGAND, BEN
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 44



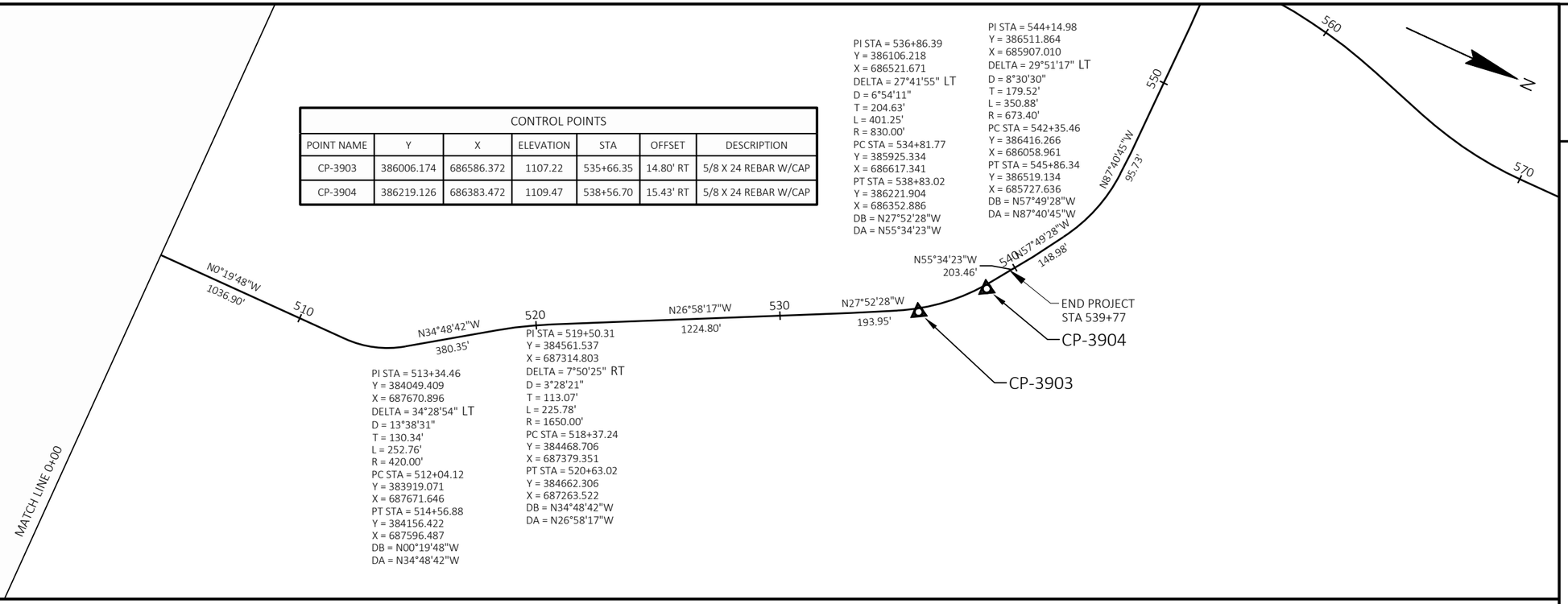
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-3905	381475.328	687713.445	1127.12	487+60.31	28.66' RT	5/8 X 24 REBAR W/ CAP
CP-3906	380912.986	687669.142	1129.11	481+98.06	14.32' LT	5/8 X 24 REBAR W/ CAP
CP-3907	380244.810	687649.766	1138.54	475+28.85	22.11' LT	5/8 X 24 REBAR W/ CAP
CP-3909	379398.991	687529.056	1187.09	466+71.43	15.99' LT	5/8 X 24 REBAR W/ CAP
CP-3910	379172.869	687628.287	1191.09	464+28.21	20.66' RT	5/8 X 24 REBAR W/ CAP
CP-3911	378327.368	687630.225	1190.20	455+84.81	17.63' LT	5/8 X 24 REBAR W/ CAP

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-3912	377630.254	687639.652	1193.62	448+87.63	17.34' LT	5/8 X 24 REBAR W/ CAP
CP-3913	376917.041	687653.706	1196.72	441+74.41	17.81' LT	5/8 X 24 REBAR W/ CAP
CP-4199	370877.856	687701.126	1313.92	381+34.38	15.75' LT	5/8 X 24 REBAR W/ CAP
CP-4200	371023.346	687700.901	1314.16	382+79.87	14.91' LT	5/8 X 24 REBAR W/ CAP
CP-4202	377262.407	687646.553	1194.07	445+19.85	17.85' LT	5/8 X 24 REBAR W/ CAP
CP-4203	378020.559	687634.437	1189.20	452+77.97	17.44' LT	5/8 X 24 REBAR W/ CAP
CP-4204	380497.054	687661.104	1131.40	477+81.77	16.35' LT	5/8 X 24 REBAR W/ CAP
CP-4205	381207.904	687668.398	1127.69	484+92.98	15.94' LT	5/8 X 24 REBAR W/ CAP



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	ALIGNMENT DETAILS	SHEET 34	E

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-3903	386006.174	686586.372	1107.22	535+66.35	14.80' RT	5/8 X 24 REBAR W/CAP
CP-3904	386219.126	686383.472	1109.47	538+56.70	15.43' RT	5/8 X 24 REBAR W/CAP



2

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	ALIGNMENT DETAILS	SHEET 35	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 13
PLOT DATE : 7/25/2024 4:01 PM
PLOT BY : WEIGAND, BEN
PLOT NAME :
PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 44

Estimate Of Quantities

9303-03-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0120	Clearing	ID	12.000	12.000
0004	201.0220	Grubbing	ID	12.000	12.000
0006	203.0100	Removing Small Pipe Culverts	EACH	15.000	15.000
0008	203.0211.S	Abatement of Asbestos Containing Material (structure) 01. B-26-0013	EACH	1.000	1.000
0010	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. B-26-0013	EACH	1.000	1.000
0012	204.0165	Removing Guardrail	LF	200.000	200.000
0014	204.0220	Removing Inlets	EACH	1.000	1.000
0016	205.0100	Excavation Common	CY	2,279.000	2,279.000
0018	206.1001	Excavation for Structures Bridges (structure) 01. B-26-0045	EACH	1.000	1.000
0020	208.0100	Borrow	CY	128.000	128.000
0022	209.2500	Backfill Granular Grade 2	TON	700.000	700.000
0024	210.1500	Backfill Structure Type A	TON	612.000	612.000
0026	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 9303-01-71	EACH	1.000	1.000
0028	213.0100	Finishing Roadway (project) 01. 9303-01-71	EACH	1.000	1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	10,000.000	10,000.000
0032	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	13,300.000	13,300.000
0034	312.0110	Select Crushed Material	TON	2,500.000	2,500.000
0036	325.0100	Pulverize and Relay	SY	132,550.000	132,550.000
0038	374.1020.S	QMP Pulverize and Relay Compaction	SY	136,240.000	136,240.000
0040	415.0060	Concrete Pavement 6-Inch	SY	31.000	31.000
0042	415.0410	Concrete Pavement Approach Slab	SY	118.000	118.000
0044	450.4000	HMA Cold Weather Paving	TON	5,050.000	5,050.000
0046	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0048	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0050	460.2005	Incentive Density PWL HMA Pavement	DOL	19,690.000	19,690.000
0052	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	10,140.000	10,140.000
0054	460.2010	Incentive Air Voids HMA Pavement	DOL	19,690.000	19,690.000
0056	460.5244	HMA Pavement 4 LT 58-34 S	TON	19,690.000	19,690.000
0058	465.0105	Asphaltic Surface	TON	480.000	480.000
0060	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	20.000	20.000
0062	502.0100	Concrete Masonry Bridges	CY	284.000	284.000
0064	502.3200	Protective Surface Treatment	SY	171.000	171.000
0066	502.3210	Pigmented Surface Sealer	SY	89.000	89.000
0068	505.0400	Bar Steel Reinforcement HS Structures	LB	6,664.000	6,664.000
0070	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	37,324.000	37,324.000
0072	516.0500	Rubberized Membrane Waterproofing	SY	22.000	22.000
0074	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	2.000	2.000
0076	520.3324	Culvert Pipe Class III-A 24-Inch	LF	48.000	48.000
0078	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	132.000	132.000
0080	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	5.000	5.000
0082	522.2348	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 48x76-Inch	LF	112.000	112.000
0084	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	40.000	40.000
0086	522.2424	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 24x38-Inch	LF	280.000	280.000
0088	522.2434	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 34x53-Inch	LF	40.000	40.000
0090	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000	2.000
0092	522.2624	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 24x38-Inch	EACH	14.000	14.000
0094	522.2634	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 34x53-Inch	EACH	2.000	2.000
0096	522.2648	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 48x76-Inch	EACH	4.000	4.000
0098	550.0500	Pile Points	EACH	16.000	16.000

9303-03-71

Line	Item	Item Description	Unit	Total	Qty
0100	550.1120	Piling Steel HP 12-Inch X 53 Lb	LF	248.000	248.000
0102	601.0588	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBT	LF	89.000	89.000
0104	601.0590	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type TBTT	LF	11.000	11.000
0106	602.3010	Concrete Surface Drains	CY	3.000	3.000
0108	606.0200	Riprap Medium	CY	10.000	10.000
0110	606.0300	Riprap Heavy	CY	346.000	346.000
0112	611.0642	Inlet Covers Type MS	EACH	2.000	2.000
0114	611.3902	Inlets Median 2 Grate	EACH	1.000	1.000
0116	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	188.000	188.000
0118	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	4.000	4.000
0120	614.2300	MGS Guardrail 3	LF	50.000	50.000
0122	614.2500	MGS Thrie Beam Transition	LF	150.000	150.000
0124	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0126	618.0100	Maintenance and Repair of Haul Roads (project) 01. 9303-01-71	EACH	1.000	1.000
0128	619.1000	Mobilization	EACH	1.000	1.000
0130	621.0100	Landmark Reference Monuments	EACH	36.000	36.000
0132	624.0100	Water	MGAL	466.000	466.000
0134	625.0100	Topsoil	SY	3,800.000	3,800.000
0136	628.1504	Silt Fence	LF	5,500.000	5,500.000
0138	628.1520	Silt Fence Maintenance	LF	5,500.000	5,500.000
0140	628.1905	Mobilizations Erosion Control	EACH	10.000	10.000
0142	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000	5.000
0144	628.2006	Erosion Mat Urban Class I Type A	SY	192.000	192.000
0146	628.2008	Erosion Mat Urban Class I Type B	SY	3,600.000	3,600.000
0148	628.6005	Turbidity Barriers	SY	180.000	180.000
0150	628.7005	Inlet Protection Type A	EACH	1.000	1.000
0152	628.7504	Temporary Ditch Checks	LF	20.000	20.000
0154	628.7555	Culvert Pipe Checks	EACH	120.000	120.000
0156	628.7570	Rock Bags	EACH	300.000	300.000
0158	629.0210	Fertilizer Type B	CWT	2.000	2.000
0160	630.0120	Seeding Mixture No. 20	LB	111.000	111.000
0162	630.0160	Seeding Mixture No. 60	LB	5.000	5.000
0164	630.0500	Seed Water	MGAL	78.000	78.000
0166	633.5200	Markers Culvert End	EACH	27.000	27.000
0168	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	14.000	14.000
0170	637.2230	Signs Type II Reflective F	SF	56.600	56.600
0172	638.2102	Moving Signs Type II	EACH	4.000	4.000
0174	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0176	643.0420	Traffic Control Barricades Type III	DAY	2,070.000	2,070.000
0178	643.0705	Traffic Control Warning Lights Type A	DAY	3,060.000	3,060.000
0180	643.0900	Traffic Control Signs	DAY	12,780.000	12,780.000
0182	643.0920	Traffic Control Covering Signs Type II	EACH	6.000	6.000
0184	643.5000	Traffic Control	EACH	1.000	1.000
0186	645.0111	Geotextile Type DF Schedule A	SY	107.000	107.000
0188	645.0120	Geotextile Type HR	SY	576.000	576.000
0190	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	189,200.000	189,200.000
0192	646.6120	Marking Stop Line Epoxy 18-Inch	LF	100.000	100.000
0194	650.4000	Construction Staking Storm Sewer	EACH	1.000	1.000
0196	650.4500	Construction Staking Subgrade	LF	2,562.000	2,562.000

Estimate Of Quantities

9303-03-71

Line	Item	Item Description	Unit	Total	Qty
0198	650.5000	Construction Staking Base	LF	2,562.000	2,562.000
0200	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	100.000	100.000
0202	650.6000	Construction Staking Pipe Culverts	EACH	15.000	15.000
0204	650.6501	Construction Staking Structure Layout (structure) 01. B-26-0045	EACH	1.000	1.000
0206	650.7000	Construction Staking Concrete Pavement	LF	62.000	62.000
0208	650.8000	Construction Staking Resurfacing Reference	LF	50,777.000	50,777.000
0210	650.9911	Construction Staking Supplemental Control (project) 01. 9303-01-71	EACH	1.000	1.000
0212	650.9920	Construction Staking Slope Stakes	LF	5,124.000	5,124.000
0214	690.0150	Sawing Asphalt	LF	704.000	704.000
0216	715.0502	Incentive Strength Concrete Structures	DOL	1,704.000	1,704.000
0218	740.0440	Incentive IRI Ride	DOL	38,399.000	38,399.000
0220	ASP.1.1PA	On-the-Job Training Pre-Apprentice at $5.00/HR	HRS	2,400.000	2,400.000
0222	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,980.000	1,980.000
0224	SPV.0060	Special 01. Reestablish Section Corner Monuments	EACH	9.000	9.000
0226	SPV.0060	Special 03. Temporary Water Diversion Station 179+48	EACH	1.000	1.000
0228	SPV.0060	Special 04. Temporary Water Diversion Station 206+00	EACH	1.000	1.000
0230	SPV.0060	Special 05. Temporary Water Diversion Station 251+43	EACH	1.000	1.000
0232	SPV.0060	Special 06. Temporary Water Diversion Station 382+00	EACH	1.000	1.000
0234	SPV.0060	Special 09. Temporary Water Diversion Station 476+50	EACH	1.000	1.000
0236	SPV.0180	Special 01. Salvage and Relay Asphaltic Pavement	SY	3,690.000	3,690.000
0238	SPV.0195	Special 01. Select Crushed Material for Travel Corridor	TON	24.000	24.000

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.20	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW
DIVISION 1											
Alder Creek	97+75.00/102+25.00		327	-	109	218	288	346	-128	-	128
Mud Creek	482+00.00/491+00.00		626	-	468	158	90	108	50	50	-
DIVISION 1 SUBTOTAL			953	-	577	376	378	454	-78	50	128
GRAND TOTAL			953	-	577	376	378	454	-78	50	128
TOTAL COMMON EXC			953								

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = 1.20
DEPENDING ON SELECTIONS: **EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) * FILL FACTOR**
OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED EBS) * FILL FACTOR
OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH) * FILL FACTOR
OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

REMOVAL

CATEGORY	STATION	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID	203.0100 REMOVING SMALL PIPE CULVERTS EACH	204.0220 REMOVING INLETS EACH
0010	42+95	4TH STREET	-	-	1	1
0010	176+23	26122000839	-	-	1	-
0010	179+48	26122000840	-	-	1	-
0010	206+00	26122000842	12	12	1	-
0010	251+43	26122000847	-	-	1	-
0010	382+00	26122000858	-	-	1	-
0010	443+93	26122000862	-	-	1	-
0010	453+73	26122000863	-	-	1	-
0010	465+81	26122000864	-	-	1	-
0010	476+48	26122004622	-	-	1	-
0010	476+57	26122000865	-	-	1	-
0010	484+04	26122000866	-	-	1	-
0010	486+45	26122000867	-	-	1	-
0010	486+62	26122000868	-	-	1	-
0010	537+69	26122000871	-	-	1	-
		TOTAL 0010	12	12	15	1

CULVERT PIPE TRANSITION

CATEGORY	STATION	LOCATION	LENGTH (FT)	"D" DEPTH (FT)	PIPE DIA (IN)	"T" DEPTH (FT)	SHOULDER POINT TO SHOULDER POINT (FT)	LENGTH OF CUT (FT)	CUT VOLUME W/O PAVEMENT (CF)	205.0100 * EXCAVATION COMMON CY
0010	42+95	4th STREET	52	1.3	24	2.3	36	76.25	2991.15	111
0010	176+23	26122000839	40	0.3	38 x 24	1.3	36	55.00	1193.40	45
0010	179+48	26122000840	38	0.9	24	1.9	36	60.00	1915.20	71
0010	206+00	26122000842	42	0.6	53 x 34	2.0	36	60.00	2002.55	75
0010	251+43	26122000847	40	0.9	38 x 24	1.9	36	45.00	1402.20	52
0010	382+00	26122000858	41	0.7	38 x 24	1.7	36	45.00	1254.60	47
0010	443+93	26122000862	42	0.6	30 x 19	1.4	36	60.00	1413.24	53
0010	453+73	26122000863	41	0.6	38 x 24	1.6	36	50.00	1324.80	50
0010	465+81	26122000864	48	2.9	24	3.9	36	95.00	6388.20	237
0010	476+50	26122004622 , 26122000865	51	3.1	(2) 76 x 48	5.1	36	127.00	11107.80	412
0010	484+04	26122000866	42	0.7	38 x 24	1.7	36	44.00	1224.00	46
0010	486+50	26122000867 , 26122000868	42	1.4	(2) 38 x 24	2.4	36	54.00	2160.00	80
0010	537+69	26122000871	42	0.7	24	1.7	36	45.00	1254.60	47
									TOTAL 0010	1326

PULVERIZE

CATEGORY	STATION	TO	STATION	LOCATION	325.0100 PULVERIZE AND RELAY SY	374.1020.S QMP PULVERIZE AND RELAY COMPACTION SY	624.0100 WATER MGAL	SPV.0180.01 SPECIAL (01. SALVAGE AND RELAY ASPHALTIC PAVEMENT) SY	REMARKS
0010	32+50	-	42+60		3,090	3,090	4.3	-	
0010	42+60	-	43+36	4th STREET	300	300	0.5	-	
0010	43+33	-	97+75		14,840	14,840	20.7	-	
0010	97+75	-	99+73	ALDER CREEK SOUTH	-	610	-	610	
0010	100+66	-	102+25	ALDER CREEK NORTH	-	540	-	540	
0010	102+25	-	176+00		19,820	19,820	27.6	-	
0010	176+00	-	176+55	26122000839	160	160	0.3	-	
0010	176+55	-	179+15		760	760	1.1	-	
0010	179+15	-	179+75	26122000840	170	170	0.3	-	
0010	179+75	-	205+75		6,940	6,940	9.7	-	
0010	205+75	-	206+35	26122000842	160	160	0.3	-	
0010	206+35	-	251+25		11,980	11,980	16.7	-	
0010	251+25	-	251+70	26122000847	120	120	0.2	-	
0010	251+70	-	381+80		34,700	34,700	48.2	-	
0010	381+80	-	382+25	26122000858	120	120	0.2	-	
0010	382+25	-	443+65		16,380	16,380	22.8	-	
0010	443+65	-	444+25	26122000862	160	160	0.3	-	
0010	444+25	-	453+50		2,470	2,470	3.5	-	
0010	453+50	-	454+00	26122000863	140	140	0.2	-	
0010	454+00	-	465+35		3,030	3,030	4.3	-	
0010	465+35	-	466+30	26122000864	260	260	0.4	-	
0010	466+30	-	475+87		2,560	2,560	3.6	-	
0010	475+87	-	477+14	26122004622 , 26122000865	340	340	0.5	-	
0010	477+14	-	481+50		1,170	1,170	1.7	-	
0010	481+50	-	491+00	MUD CREEK PROFILE ADJUST	-	2,540	-	2,540	
0010	491+00	-	537+45		12,390	12,390	17.3	-	
0010	537+45	-	537+90	26122000871	120	120	0.2	-	
0010	537+90	-	539+27		370	370	0.6	-	
0010				UNDISTRIBUTED	-	-	0.5	-	
				TOTAL 0010	132,550	136,240	186	3,690	

3

						BASE				
CATEGORY	STATION	TO	STATION	LOCATION	209.2500 BACKFILL GRANULAR GRADE 2 TON	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	* 624.0100 WATER MGAL	REMARKS
0010	32+50	-	42+60		-	193	-	-	1.5	
0010	42+60	-	43+36	4th STREET	-	7	171	170	2.7	
0010	43+33	-	97+75		-	1,038	-	-	7.8	
0010	97+75	-	99+73	ALDER CREEK SOUTH	-	125	529	-	8.9	
0010	100+66	-	102+25	ALDER CREEK NORTH	-	250	908	-	15.5	
0010	102+25	-	176+00		-	1,408	-	-	10.6	
0010	176+00	-	176+55	26122000839	40	5	98	-	1.6	
0010	176+55	-	179+15		-	50	-	-	0.4	
0010	179+15	-	179+75	26122000840	120	6	105	-	1.7	
0010	179+75	-	205+75		-	497	-	-	3.8	
0010	205+75	-	206+35	26122000842	80	6	101	-	1.6	
0010	206+35	-	251+25		-	857	-	-	6.5	
0010	251+25	-	251+70	26122000847	90	4	76	-	1.2	
0010	251+70	-	381+80		-	2,483	-	-	18.7	
0010	381+80	-	382+25	26122000858	70	4	76	-	1.2	
0010	382+25	-	443+65		-	1,172	-	-	8.8	
0010	443+65	-	444+25	26122000862	80	6	101	-	1.6	
0010	444+25	-	453+50		-	177	-	-	1.4	
0010	453+50	-	454+00	26122000863	70	5	84	-	1.3	
0010	454+00	-	465+35		-	217	-	-	1.7	
0010	465+35	-	466+30	26122000864	-	9	160	210	2.5	
0010	466+30	-	475+87		-	183	-	-	1.4	
0010	475+87	-	477+14	26122004622 , 26122000865	-	11	214	280	3.3	
0010	477+14	-	481+50		-	84	-	-	0.7	
0010	481+50	-	491+00	MUD CREEK PROFILE ADJUST	-	83	1,596	1,780	24.6	SELECT CRUSHED MATERIAL PLACEMENT AND USE AS DIRECTED BY THE ENGINEER
0010	491+00	-	537+45		-	887	-	-	6.7	
0010	537+45	-	537+90	26122000871	70	4	76	-	1.2	
0010	537+90	-	539+27		-	27	-	-	0.2	
0010				DRIVEWAYS	-	149	-	-	1.2	
0010	123+69	-	135+94	THIN PAVEMENT	-	-	363	-	5.5	ADD ON AVERAGE 2 INCHES BAD 1 1/4-INCH
0010	214+66	-	224+22	THIN PAVEMENT	-	-	284	-	4.3	ADD ON AVERAGE 2 INCHES BAD 1 1/4-INCH
0010	304+05	-	322+22	THIN PAVEMENT	-	-	539	-	8.1	ADD ON AVERAGE 2 INCHES BAD 1 1/4-INCH
0010	348+56	-	373+12	THIN PAVEMENT	-	-	728	-	11.0	ADD ON AVERAGE 2 INCHES BAD 1 1/4-INCH
0010	389+54	-	404+95	THIN PAVEMENT	-	-	457	-	6.9	ADD ON AVERAGE 2 INCHES BAD 1 1/4-INCH
0010	427+08	-	458+28	THIN PAVEMENT	-	-	925	-	13.9	ADD ON AVERAGE 2 INCHES BAD 1 1/4-INCH
0010				UNDISTRIBUTED	80	53	5,709	60	90.0	SUPERELEVATION CORRECTIONS & RUT FILLING
				TOTAL 0010	700	10,000	13,300	2,500	280	

3

CULVERTS

CATEGORY	STATION	LOCATION	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	520.3324 CULVERT PIPE CLASS III-A 24-INCH LF	522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.2348 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 48X76-INCH LF	522.2419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH LF	522.2424 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 24X38-INCH LF	522.2434 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 34X53-INCH LF	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH EACH	522.2624 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 24X38-INCH EACH	522.2634 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 34X53-INCH EACH	522.2648 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 48X76-INCH EACH	611.0642 INLET COVERS TYPE MS EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	633.5200 MARKERS CULVERT END EACH	INLET** ELEVATION	OUTLET** ELEVATION
0010	42+95	4TH STREET	-	-	52	1	-	-	-	-	-	-	-	-	2	1	1	1490.70	1490.20
0010	176+23	26122000839	-	-	-	-	-	-	40	-	-	2	-	-	-	-	2	1575.20	1573.40
0010	179+48	26122000840	-	-	40	2	-	-	-	-	-	-	-	-	-	-	2	1549.38	1548.24
0010	206+00	26122000842	-	-	-	-	-	-	-	40	-	-	2	-	-	-	2	1478.45	1478.20
0010	251+43	26122000847	-	-	-	-	-	-	40	-	-	2	-	-	-	-	2	1478.45	1477.72
0010	382+00	26122000858	-	-	-	-	-	-	40	-	-	2	-	-	-	-	2	1310.65	1310.40
0010	443+93	26122000862	-	-	-	-	-	40	-	-	2	-	-	-	-	-	2	1191.55	1191.34
0010	453+73	26122000863	-	-	-	-	-	-	40	-	-	2	-	-	-	-	2	1185.55	1185.32
0010	465+81	26122000864	2	48	-	-	-	-	-	-	-	-	-	-	-	-	-	1181.64	1180.50
0010	476+48	26122004622	-	-	-	-	56	-	-	-	-	-	-	-	2	-	2	1125.48	1124.81
0010	476+57	26122000865	-	-	-	-	56	-	-	-	-	-	-	-	2	-	2	1125.00	1123.82
0010	484+04	26122000866	-	-	-	-	-	-	40	-	-	2	-	-	-	-	2	1125.75	1125.60
0010	486+45	26122000867	-	-	-	-	-	-	40	-	-	2	-	-	-	-	2	1124.40	1124.10
0010	486+62	26122000868	-	-	-	-	-	-	40	-	-	2	-	-	-	-	2	1124.75	1124.28
0010	537+69	26122000871	-	-	40	2	-	-	-	-	-	-	-	-	-	-	2	1104.74	1104.62
		TOTAL 0010	2	48	132	5	112	40	280	40	2	14	2	4	2	1	27		

GUARDRAIL

CATEGORY	LOCATION	204.0165 REMOVING GUARDRAIL LF	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
0010	ALDER CREEK NE	50	12.5	37.5	1
0010	ALDER CREEK NW	50	12.5	37.5	1
0010	ALDER CREEK SW	50	12.5	37.5	1
0010	ALDER CREEK SE	50	12.5	37.5	1
	TOTAL 0010	200	50	150	4

CONCRETE

CATEGORY	LOCATION	415.0060 CONCRETE PAVEMENT 6-INCH SY	415.0410 CONCRETE PAVEMENT APPROACH SLAB SY	601.0588 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBT LF	601.0590 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE TBTT LF	602.3010 CONCRETE SURFACE DRAINS CY
0010	ALDER CREEK SOUTH	16	59	89	11	3
0010	ALDER CREEK NORTH	15	59	-	-	-
	TOTAL 0010	31	118	89	11	3

HMA

CATEGORY	STATION	TO	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH	460.5244 HMA PAVEMENT 4 LT 58-34 S TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	REMARKS
0010	32+50	-	42+60		-	-	-	444	-	-	
0010	42+60	-	43+36	4th STREET	-	-	-	43	69	-	
0010	43+33	-	97+75		-	-	-	2,133	-	-	
0010	97+75	-	99+73	ALDER CREEK SOUTH	-	-	-	88	-	-	
0010	100+66	-	102+25	ALDER CREEK NORTH	-	-	-	77	-	-	
0010	102+25	-	176+00		-	-	-	2,849	-	-	
0010	176+00	-	176+55	26122000839	-	-	-	23	37	-	
0010	176+55	-	179+15		-	-	-	108	-	-	
0010	179+15	-	179+75	26122000840	-	-	-	25	39	-	
0010	179+75	-	205+75		-	-	-	997	-	-	
0010	205+75	-	206+35	26122000842	-	-	-	23	37	-	
0010	206+35	-	251+25		-	-	-	1,722	-	-	
0010	251+25	-	251+70	26122000847	-	-	-	18	28	-	
0010	251+70	-	381+80		-	-	-	4,988	-	-	
0010	381+80	-	382+25	26122000858	-	-	-	18	28	-	
0010	382+25	-	443+65		-	-	-	2,354	-	-	
0010	443+65	-	444+25	26122000862	-	-	-	23	37	-	
0010	444+25	-	453+50		-	-	-	355	-	-	
0010	453+50	-	454+00	26122000863	-	-	-	20	31	-	
0010	454+00	-	465+35		-	-	-	436	-	-	
0010	465+35	-	466+30	26122000864	-	-	-	37	59	-	
0010	466+30	-	475+87		-	-	-	367	-	-	
0010	475+87	-	477+14	26122004622 , 26122000865	-	-	-	49	78	-	
0010	477+14	-	481+50		-	-	-	168	-	-	
0010	481+50	-	491+00	MUD CREEK PROFILE ADJUST	-	-	-	365	-	-	
0010	491+00	-	537+45		-	-	-	1,781	-	-	
0010	537+45	-	537+90	26122000871	-	-	-	18	28	-	
0010	537+90	-	539+27		-	-	-	53	-	-	
0010	32+00	-	32+50		-	-	-	15	-	-	
0010	35+93	-	36+29	BUTT JOINT	-	-	-	9	-	-	
0010	36+03	-	36+23	BUTT JOINT	-	-	-	5	-	-	
0010	39+65	-	39+85	BUTT JOINT	-	-	-	6	-	-	
0010	39+66	-	39+86	BUTT JOINT	-	-	-	6	-	-	
0010	43+24	-	43+48	BUTT JOINT	-	-	-	7	-	-	
0010	43+26	-	43+40	BUTT JOINT	-	-	-	4	-	-	
0010	46+45	-	46+81	BUTT JOINT	-	-	-	9	-	-	
0010	47+69	-	48+15	BUTT JOINT	-	-	-	8	-	-	
0010	48+26	-	48+50	BUTT JOINT	-	-	-	5	-	-	
0010	132+45	-	133+13	BUTT JOINT	-	-	-	16	-	-	
0010	539+27	-	539+77	BUTT JOINT	-	-	-	12	-	-	
0010	42+00		42+36	DRIVEWAY	-	-	-	-	-	5	
0010	44+43		45+38	DRIVEWAY	-	-	-	-	-	9	
0010	61+88		62+10	DRIVEWAY	-	-	-	-	-	2	
	32+00		539+77	PROJECTWIDE	5,050	1	1	6	9	4	
				TOTAL 0010	5,050	1	1	19,690	480	20	

PWL MIXTURE USE TABLE

		MIXTURE	UNDERLYING	BID			QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
LOCATION	STATION	USE	SURFACE	ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
! LANES	32+50 to 537+27	UPPER LAYER	BASE AGGREGATE DENSE 1 1/4-INCH OR RELAY MATERIAL	4 LT 58-34 S	19580	2.50	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
!OUS		CULVERT PATCHES	ASPHALTIC SURFACE		480	4.00	QMP AS PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION

RESTORATION

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0160 SEEDING MIXTURE NO. 60 LB	630.0500 SEED WATER MGAL
0010	42+50	-	43+25	4TH STREET	122	0.04	4	-	2.8
0010	97+50	-	103+50	B-26-0045	1,129	0.36	31	-	25.4
0010	175+50	-	177+75	26122000839	138	0.05	4	-	3.1
0010	178+75	-	180+00	26122000840	159	0.06	5	-	3.6
0010	205+50	-	206+50	26122000842	223	0.08	7	-	5.1
0010	251+00	-	252+00	26122000847	103	0.04	3	-	2.4
0010	381+50	-	382+50	26122000858	132	0.05	4	-	3.0
0010	443+50	-	444+50	26122000862	118	0.04	4	-	2.7
0010	453+25	-	454+25	26122000863	105	0.04	3	-	2.4
0010	465+00	-	466+50	26122000864	277	0.09	8	-	6.3
0010	475+75	-	477+25	26122004622, 26122000865	428	0.14	12	-	9.7
0010	481+25	-	485+75	26122000866	226	0.08	7	-	5.1
0010	485+75	-	487+25	26122000867 , 26122000868	116	0.04	4	-	2.7
0010	537+25	-	538+00	26122000871	136	0.05	4	-	3.1
0010				UNDISTRIBUTED	388	0.84	11	5	0.6
				TOTAL 0010	3,800	2	111	5	78

EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	* 606.0300 RIPRAP HEAVY CY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.6005 TURBIDITY BARRIERS SY	628.7005 INLET PROTECTION TYPE A EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	* 645.0120 GEOTEXTILE TYPE HR SY
0010	42+50	-	43+25	4TH STREET	-	-	85	85	-	-	122	-	-	1	-	3	-	-
0010	97+50	-	103+50	B-26-0045	3	50	913	913	-	-	-	1129	180	-	-	-	-	80
0010	175+50	-	177+75	26122000839	-	-	208	208	-	-	-	138	-	-	-	7	-	-
0010	178+75	-	180+00	26122000840	-	-	232	232	-	-	-	159	-	-	-	3	-	-
0010	205+50	-	206+50	26122000842	-	-	244	244	-	-	-	223	-	-	-	10	-	-
0010	251+00	-	252+00	26122000847	-	-	165	165	-	-	-	103	-	-	-	7	-	-
0010	381+50	-	382+50	26122000858	-	-	173	173	-	-	-	132	-	-	-	7	-	-
0010	443+50	-	444+50	26122000862	2	-	187	187	-	-	-	118	-	-	-	5	-	10
0010	453+25	-	454+25	26122000863	-	-	167	167	-	-	-	105	-	-	-	7	-	-
0010	465+00	-	466+50	26122000864	-	-	303	303	-	-	-	277	-	-	-	3	-	-
0010	475+75	-	477+25	26122004622, 26122000865	-	25	344	344	-	-	-	428	-	-	-	36	-	60
0010	481+25	-	485+75	26122000866	-	-	823	823	-	-	-	226	-	-	-	7	-	-
0010	485+75	-	487+25	26122000867 , 26122000868	5	-	1017	1017	-	-	-	116	-	-	-	14	-	20
0010	537+25	-	538+00	26122000871	-	-	170	170	-	-	-	136	-	-	-	3	-	-
0010				UNDISTRIBUTED	-	-	469	469	-	-	70	310	-	-	20	8	300	-
0010				PROJECT WIDE	-	-	-	-	10	5	-	-	-	-	-	-	-	-
				TOTAL 0010	10	75	5,500	5,500	10	5	192	3,600	180	1	20	120	300	170

SIGNS

CATEGORY	STATION	TO	STATION	SIGN CODE	SIGN MESSAGE	SIGN SIZE W [IN]	SIGN SIZE H [IN]	LOCATION	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	32+00	-	539+77	W 14-3	NO PASSING	48	X 36	NO PASSING UPDATES	10	56.6	-	-	
0010								UNDISTRIBUTED	4	-	4	4	
								TOTAL 0010	14	56.6	4	4	

STAKING

CATEGORY	STATION	TO	STATION	LOCATION	621.0100 LANDMARK REFERENCE MONUMENTS EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	SPV.0060.01 SPECIAL (01. REESTABLISH SECTION CORNER MONUMENTS) EACH
0010	300+50				4	-	-	-	-	-	-	-	-	1
0010	326+50				4	-	-	-	-	-	-	-	-	1
0010	352+65				4	-	-	-	-	-	-	-	-	1
0010	379+60				4	-	-	-	-	-	-	-	-	1
0010	407+50				4	-	-	-	-	-	-	-	-	1
0010	433+80				4	-	-	-	-	-	-	-	-	1
0010	460+10				4	-	-	-	-	-	-	-	-	1
0010	487+20				4	-	-	-	-	-	-	-	-	1
0010	512+50				4	-	-	-	-	-	-	-	-	1
0010	42+36	-	43+54	4TH STREET	-	1	118	118	-	1	-	-	236	-
0010	97+75	-	99+74	ALDER CREEK SOUTH	-	-	199	199	100	1	31	-	398	-
0010	100+65	-	102+25	ALDER CREEK NORTH	-	-	160	160	-	1	31	-	320	-
0010	175+63	-	176+91	26122000839	-	-	128	128	-	1	-	-	256	-
0010	178+87	-	180+07	26122000840	-	-	120	120	-	1	-	-	240	-
0010	205+48	-	206+59	26122000842	-	-	111	111	-	1	-	-	222	-
0010	250+89	-	251+99	26122000847	-	-	110	110	-	1	-	-	220	-
0010	381+48	-	382+53	26122000858	-	-	105	105	-	1	-	-	210	-
0010	443+39	-	444+50	26122000862	-	-	111	111	-	1	-	-	222	-
0010	453+22	-	454+27	26122000863	-	-	105	105	-	1	-	-	210	-
0010	465+24	-	466+38	26122000864	-	-	114	114	-	1	-	-	228	-
0010	475+87	-	477+14	26122004622 , 26122000865	-	-	127	127	-	2	-	-	254	-
0010	481+50	-	491+00	MUD CREEK	-	-	950	950	-	1	-	-	1,900	-
0010	537+17	-	538+21	26122000871	-	-	104	104	-	1	-	-	208	-
0010	32+00	-	539+77	PROJECT WIDE	-	-	-	-	-	-	-	50,777	-	-
				TOTAL 0010	36	1	2,562	2,562	100	15	62	50,777	5,124	9

3

DETOUR

CATEGORY	LOCATION	DAYS	#	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	#	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	#	643.0900 TRAFFIC CONTROL SIGNS DAY	CYCLES	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH
00010	DETOUR	90	23	2,070	34	3,060	142	12,780	1	6
	TOTAL 0010			2,070		3,060		12,780		6

MARKING LINE

CATEGORY	LOCATION	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH LF	646.6120 MARKING STOP LINE EPOXY 18-INCH LF
0010	SHOULDER LINES	101,840	-
0010	CENTER LINES	87,280	-
0010	PROJECTWIDE	80	60
	TOTAL 0010	189,200	100

WATER DIVERSION

CATEGORY	STATION	LOCATION	SPV.0060.03 SPECIAL (03. TEMPORARY WATER DIVERSION STATION 179+48) EACH	SPV.0060.04 SPECIAL (04. TEMPORARY WATER DIVERSION STATION 206+00) EACH	SPV.0060.05 SPECIAL (05. TEMPORARY WATER DIVERSION STATION 251+43) EACH	SPV.0060.06 SPECIAL (06. TEMPORARY WATER DIVERSION STATION 382+00) EACH	SPV.0060.09 SPECIAL (09. TEMPORARY WATER DIVERSION STATION 476+50) EACH
0010	179+48	26122000840.00	1	-	-	-	-
0010	206+00	26122000842.00	-	1	-	-	-
0010	251+43	26122000847.00	-	-	1	-	-
0010	382+00	26122000858.00	-	-	-	1	-
0010	476+50	26122004622 , 26122000865	-	-	-	-	1
		TOTAL 0010	1	1	1	1	1

SAWING

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF
0010	42+36	-	42+36	4TH ST CULVERT	22
0010	43+24	-	43+54	4TH ST CULVERT	68
0010	43+26	-	43+54	4TH ST CULVERT	45
0010	43+54	-	43+54	4TH ST CULVERT	22
0010	97+75	-	97+75	B-26-0045	24
0010	102+25	-	102+25	B-26-0045	24
0010	175+63	-	175+63	26122000839	27
0010	176+91	-	176+91	26122000839	26
0010	178+87	-	178+87	26122000840	25
0010	180+07	-	180+07	26122000840	25
0010	205+48	-	205+48	26122000842	22
0010	206+59	-	206+59	26122000842	24
0010	250+89	-	250+89	26122000847	22
0010	251+99	-	251+99	26122000847	22
0010	381+48	-	381+48	26122000858	22
0010	382+53	-	382+53	26122000858	22
0010	443+39	-	443+39	26122000862	22
0010	444+50	-	444+50	26122000862	22
0010	453+22	-	453+22	26122000863	22
0010	454+27	-	454+27	26122000863	23
0010	465+24	-	465+24	26122000864	22
0010	466+38	-	466+38	26122000864	22
0010	475+87	-	475+87	26122004622, 26122000865	21
0010	477+14	-	477+14	26122004622, 26122000865	22
0010	481+50	-	481+50	26122000866	22
0010	491+00	-	491+00	26122000867 , 26122000868	22
0010	537+17	-	537+17	26122000867 , 26122000868	21
0010	538+21	-	538+21	26122000871	21
				TOTAL 0010	704

SPV.0195.01

CATEGORY	LOCATION	SPV.0195.01 SPECIAL (01. SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR) TON
0010	ALDER CREEK	24
0010		
0010		
0010		
0010		
0010		
	TOTAL 0010	24

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
9303-03-21
UPSON - MONTREAL RIVER
STH 77 TO MICHIGAN STATE LINE
STH 122 IRON COUNTY

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC) — W (TYPE)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE — CULVERT

SECTION CORNER SYMBOL (18, 13, 24, 19, 30, 25, 9)
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN — OFF-PREMISE SIGN (41-25)
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	●	○
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	⧓	⧒

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER 25 — UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

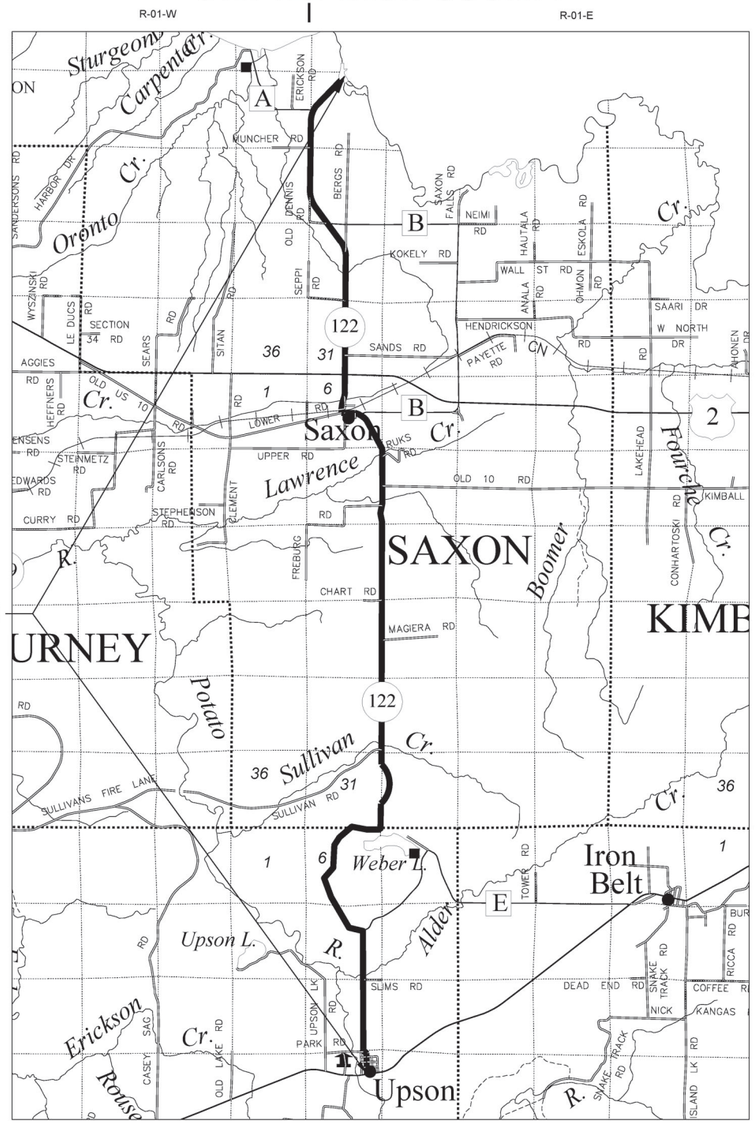
CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ /DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

PROJECT LOCATION

GN

LAYOUT SCALE 0 — 1 MI.



THE NOTES,CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 9303-03-21.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), IRON COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

PROPERTY LINES SHOWN ON THIS PLAT FOR PROPERTIES BEING IMPACTED ARE DRAWN FROM DATA DERIVED FROM FILED/RECORDED MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION IN THE NORTH CENTRAL REGION.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

CONVENTIONAL UTILITY SYMBOLS

WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	☒

PROJECT NUMBER 9303-03-21-4.01
SHEET 2 OF 2

4

FILE NAME : I:\74\GB\74-0597.00 BENESCH_STH 122_IRON CO\CADD\C3D\SHEETSPLAN\93030321_0400.DWG
LAYOUT NAME: 0401-2

PLOT DATE : 6/28/2023 3:35 PM PLOT BY : BADTKE, CHRISTOPHER PLOT NAME : _____

4

TRANSPORTATION PROJECT PLAT NO: 9303-03-21-4.01

THAT PART OF THE SOUTHEAST ¼ OF THE SOUTHEAST ¼, AND THAT PART OF THE SOUTHWEST ¼ OF THE SOUTHEAST ¼ SECTION 7, T45N-R01E, TOWN OF ANDERSON, IRON COUNTY, WISCONSIN.

RELOCATION ORDER STH 122 UPSON - MONTREAL RIVER (STH 77 TO MICHIGAN STATE LINE) - IRON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

174992
Filing Fee: $25.00 Pages: 2

IRON COUNTY, WIS
Daniel J. Soine, Register of Deeds
Recorded on June 29, 2023 at 8:17 AM
This document has been electronically Recorded

9303-03-21-4.01

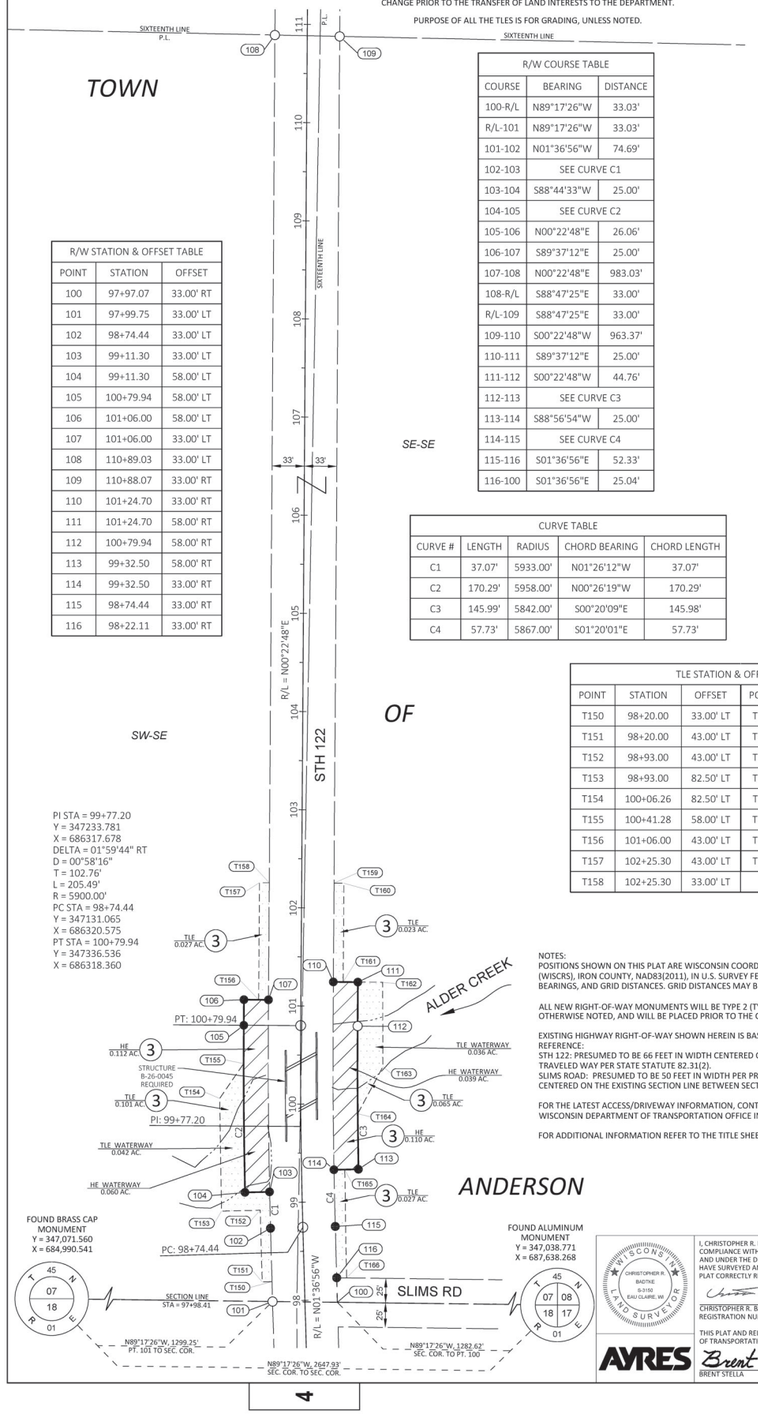
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9303-03-21-4.01
SHEET 1 OF 2

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTERESTS REQUIRED	R/W (ACRES)				
			NEW	EXISTING	TOTAL	HE	TLE
3	IRON COUNTY	HE & TLE	-----	-----	-----	0.222	0.243

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PURPOSE OF ALL THE TLES IS FOR GRADING, UNLESS NOTED.



R/W COURSE TABLE

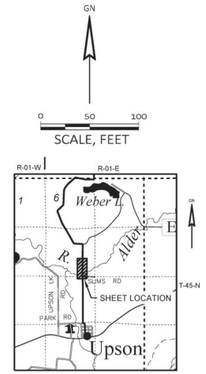
COURSE	BEARING	DISTANCE
100-R/L	N89°17'26"W	33.03'
R/L-101	N89°17'26"W	33.03'
101-102	N01°36'56"W	74.69'
102-103	SEE CURVE C1	
103-104	S88°44'33"W	25.00'
104-105	SEE CURVE C2	
105-106	N00°22'48"E	26.06'
106-107	S89°37'12"E	25.00'
107-108	N00°22'48"E	983.03'
108-R/L	S88°47'25"E	33.00'
R/L-109	S88°47'25"E	33.00'
109-110	S00°22'48"W	963.37'
110-111	S89°37'12"E	25.00'
111-112	S00°22'48"W	44.76'
112-113	SEE CURVE C3	
113-114	S88°56'54"W	25.00'
114-115	SEE CURVE C4	
115-116	S01°36'56"E	52.33'
116-100	S01°36'56"E	25.04'

R/W STATION & OFFSET TABLE

POINT	STATION	OFFSET
100	97+97.07	33.00' RT
101	97+99.75	33.00' LT
102	98+74.44	33.00' LT
103	99+11.30	33.00' LT
104	99+11.30	58.00' LT
105	100+79.94	58.00' LT
106	101+06.00	58.00' LT
107	101+06.00	33.00' LT
108	110+89.03	33.00' LT
109	110+88.07	33.00' RT
110	101+24.70	33.00' RT
111	101+24.70	58.00' RT
112	100+79.94	58.00' RT
113	99+32.50	58.00' RT
114	99+32.50	33.00' RT
115	98+74.44	33.00' RT
116	98+22.11	33.00' RT

CURVE TABLE

CURVE #	LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	37.07'	5933.00'	N01°26'12"W	37.07'
C2	170.29'	5958.00'	N00°26'19"W	170.29'
C3	145.99'	5842.00'	S00°20'09"E	145.98'
C4	57.73'	5867.00'	S01°20'01"E	57.73'



TLE STATION & OFFSET TABLE

POINT	STATION	OFFSET	POINT	STATION	OFFSET
T150	98+20.00	33.00' LT	T159	102+25.31	33.00' RT
T151	98+20.00	43.00' LT	T160	102+25.31	43.00' RT
T152	98+93.00	43.00' LT	T161	101+24.70	43.00' RT
T153	98+93.00	82.50' LT	T162	101+24.70	83.23' RT
T154	100+06.26	82.50' LT	T163	100+38.00	83.85' RT
T155	100+41.28	58.00' LT	T164	99+89.75	58.00' RT
T156	101+06.00	43.00' LT	T165	99+32.50	44.00' RT
T157	102+25.30	43.00' LT	T166	98+21.70	43.03' RT
T158	102+25.30	33.00' LT			

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), IRON COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
STH 122: PRESUMED TO BE 66 FEET IN WIDTH CENTERED ON THE EXISTING CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).
SLIMS ROAD: PRESUMED TO BE 50 FEET IN WIDTH PER PREVIOUS PROJECT NO. 9312-2-21 CENTERED ON THE EXISTING SECTION LINE BETWEEN SECTION 7 AND 18 .

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTH CENTRAL REGION.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2.

I, CHRISTOPHER R. BADTKE, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

CHRISTOPHER R. BADTKE — 06/28/2023
CHRISTOPHER R. BADTKE
REGISTRATION NUMBER: S-3150

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTH CENTRAL REGION.

AYRES — Brent L Stella — 6/29/2023
BRENT STELLA

PLOT DATE : 6/28/2023 3:35: PM
PLOT BY : AYRES ASSOCIATES
PLOT NAME : I:\174\08\Y4-0597.93\BENESCH_STH 122_IRON CO\CAD\C3D\SHEETS\PLAN\9303t321_0401.DWG
FILE NAME : APPRAISAL PLAT DATE : 06/28/2023

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Filing Fee: $25.00 Pages: 1

IRON COUNTY, WIS
Daniel J. Soine, Register of Deeds
Recorded on July 06, 2023 at 10:15 AM
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9303-03-21-4.02

4

TRANSPORTATION PROJECT PLAT NO: 9303-03-21-4.02

THAT PART OF THE NORTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 7, AND THAT PART OF THE NORTHWEST ¼ OF THE SOUTHWEST ¼ OF SECTION 8, ALL IN T46N-R01E, TOWN OF SAXON, IRON COUNTY, WISCONSIN.

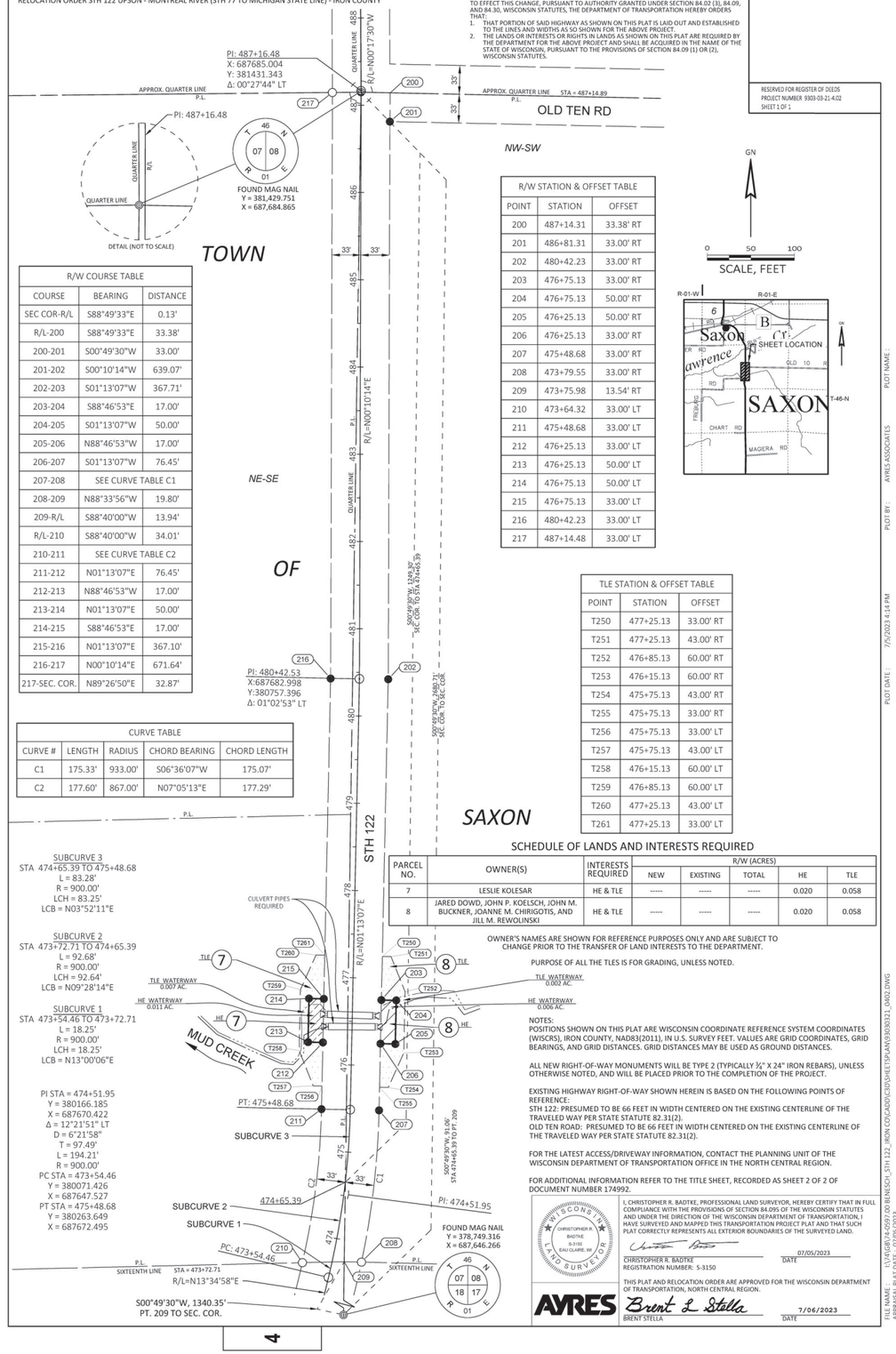
RELOCATION ORDER STH 122 UPSON - MONTREAL RIVER (STH 77 TO MICHIGAN STATE LINE) - IRON COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:

1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9303-03-21-4.02
SHEET 1 OF 1



R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
SEC COR-R/L	S88°49'33"E	0.13'
R/L-200	S88°49'33"E	33.38'
200-201	S00°49'30"W	33.00'
201-202	S00°10'14"W	639.07'
202-203	S01°13'07"W	367.71'
203-204	S88°46'53"E	17.00'
204-205	S01°13'07"W	50.00'
205-206	N88°46'53"W	17.00'
206-207	S01°13'07"W	76.45'
207-208	SEE CURVE TABLE C1	
208-209	N88°33'56"W	19.80'
209-R/L	S88°40'00"W	13.94'
R/L-210	S88°40'00"W	34.01'
210-211	SEE CURVE TABLE C2	
211-212	N01°13'07"E	76.45'
212-213	N88°46'53"W	17.00'
213-214	N01°13'07"E	50.00'
214-215	S88°46'53"E	17.00'
215-216	N01°13'07"E	367.10'
216-217	N00°10'14"E	671.64'
217-SEC. COR.	N89°26'50"E	32.87'

CURVE TABLE				
CURVE #	LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	175.33'	933.00'	S06°36'07"W	175.07'
C2	177.60'	867.00'	N07°05'13"E	177.29'

R/W STATION & OFFSET TABLE		
POINT	STATION	OFFSET
200	487+14.31	33.38' RT
201	486+81.31	33.00' RT
202	480+42.23	33.00' RT
203	476+75.13	33.00' RT
204	476+75.13	50.00' RT
205	476+25.13	50.00' RT
206	476+25.13	33.00' RT
207	475+48.68	33.00' RT
208	473+79.55	33.00' RT
209	473+75.98	13.54' RT
210	473+64.32	33.00' LT
211	475+48.68	33.00' LT
212	476+25.13	33.00' LT
213	476+25.13	50.00' LT
214	476+75.13	50.00' LT
215	476+75.13	33.00' LT
216	480+42.23	33.00' LT
217	487+14.48	33.00' LT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
T250	477+25.13	33.00' RT
T251	477+25.13	43.00' RT
T252	476+85.13	60.00' RT
T253	476+15.13	60.00' RT
T254	475+75.13	43.00' RT
T255	475+75.13	33.00' RT
T256	475+75.13	33.00' LT
T257	475+75.13	43.00' LT
T258	476+15.13	60.00' LT
T259	476+85.13	60.00' LT
T260	477+25.13	43.00' LT
T261	477+25.13	33.00' LT

SCHEDULE OF LANDS AND INTERESTS REQUIRED

PARCEL NO.	OWNER(S)	INTERESTS REQUIRED	R/W (ACRES)				
			NEW	EXISTING	TOTAL	HE	TLE
7	LESLIE KOLESAR	HE & TLE	-----	-----	-----	0.020	0.058
8	JARED DOWD, JOHN P. KOELSCH, JOHN M. BUCKNER, JOANNE M. CHIRIGOTIS, AND JILL M. REWOLINSKI	HE & TLE	-----	-----	-----	0.020	0.058

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PURPOSE OF ALL THE TLES IS FOR GRADING, UNLESS NOTED.

NOTES:
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), IRON COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:
STH 122: PRESUMED TO BE 66 FEET IN WIDTH CENTERED ON THE EXISTING CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).
OLD TEN ROAD: PRESUMED TO BE 66 FEET IN WIDTH CENTERED ON THE EXISTING CENTERLINE OF THE TRAVELED WAY PER STATE STATUTE 82.31(2).

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NORTH CENTRAL REGION.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2 OF DOCUMENT NUMBER 174992.

I, CHRISTOPHER R. BADTKE, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND THAT SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

CHRISTOPHER R. BADTKE
REGISTRATION NUMBER: S-3150

07/05/2023
DATE

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION, NORTH CENTRAL REGION.

BRENT STELLA

7/06/2023
DATE

AYRES

PLOT DATE: 7/5/2023 4:14 PM
PLOT BY: AYRES ASSOCIATES
PLOT NAME:
FILE NAME: I:\746\B\74-05\97.00 BENESCH - STH 122 - IRON CO\CADD\C3D\SHEETS\PLAN\93030321_0402.DWG
APPRAISAL PLAT DATE: 07/05/2023

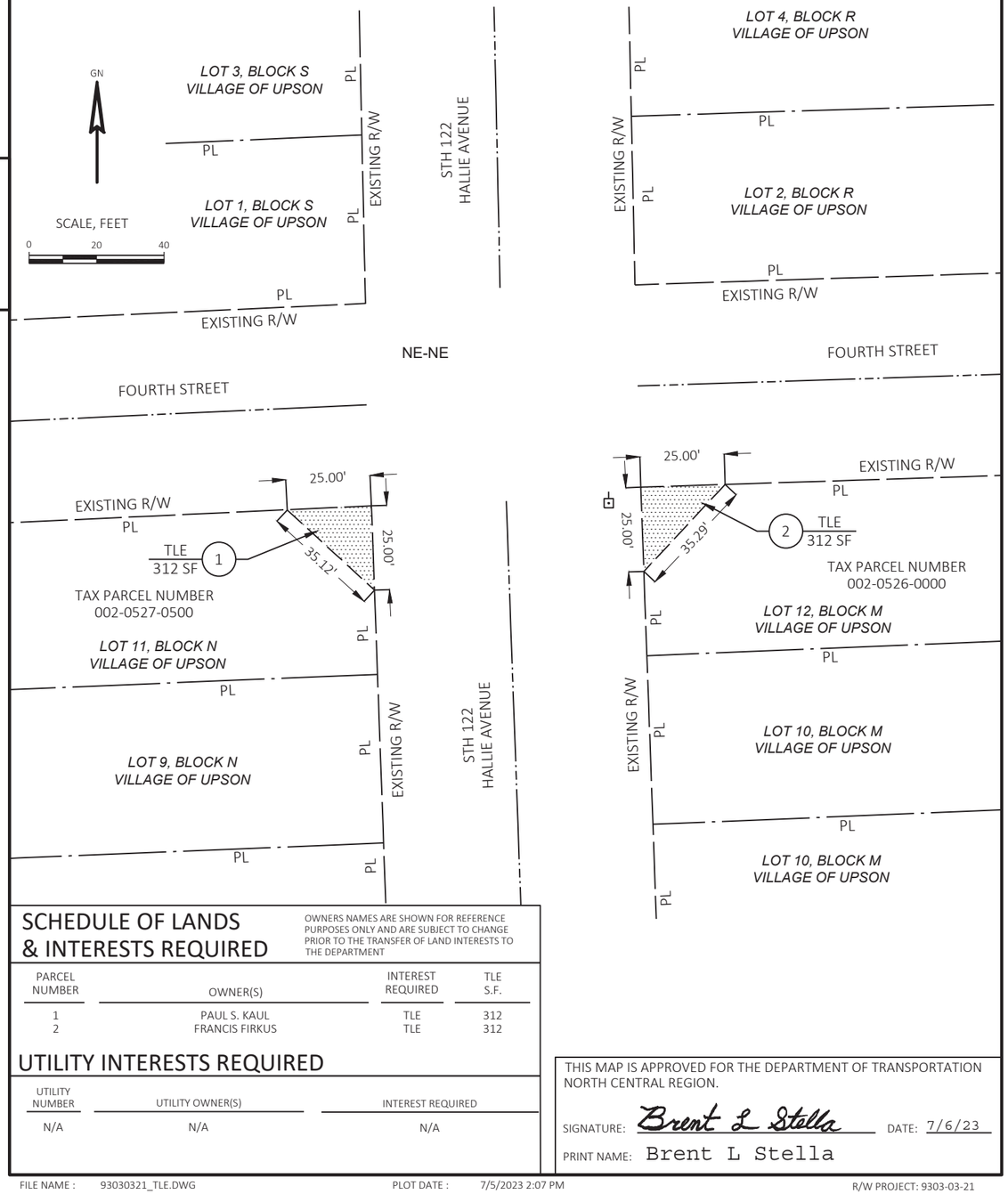
NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

THIS TLE IS FOR THE RIGHT TO CONSTRUCT, CUT, AND/OR FILL SLOPES, INCLUDING FOR SUCH PURPOSE THE RIGHT TO OPERATE THE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES DEEM NECESSARY OR DESIRABLE.

R/W PROJECT NUMBER: 9303-03-21	SHEET NUMBER: 1

TLE ACQUISITION EXHIBIT
RELOCATION ORDER FOR STH122
UPSON-MONTREAL RIVER (STH 77 TO MICHIGAN STATE LINE)
STH 122 IRON COUNTY

PART OF THE NORTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 19, T45N, R01E, TOWN OF ANDERSON, IRON COUNTY, WISCONSIN



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
1	PAUL S. KAUL	TLE	312
2	FRANCIS FIRKUS	TLE	312

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

SIGNATURE: Brent L Stella DATE: 7/6/23

PRINT NAME: Brent L Stella

FILE NAME : 93030321_TLE.DWG PLOT DATE : 7/5/2023 2:07 PM R/W PROJECT: 9303-03-21

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

THIS TLE IS FOR THE RIGHT TO CONSTRUCT, CUT, AND/OR FILL SLOPES, INCLUDING FOR SUCH PURPOSE THE RIGHT TO OPERATE THE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES DEEM NECESSARY OR DESIRABLE.

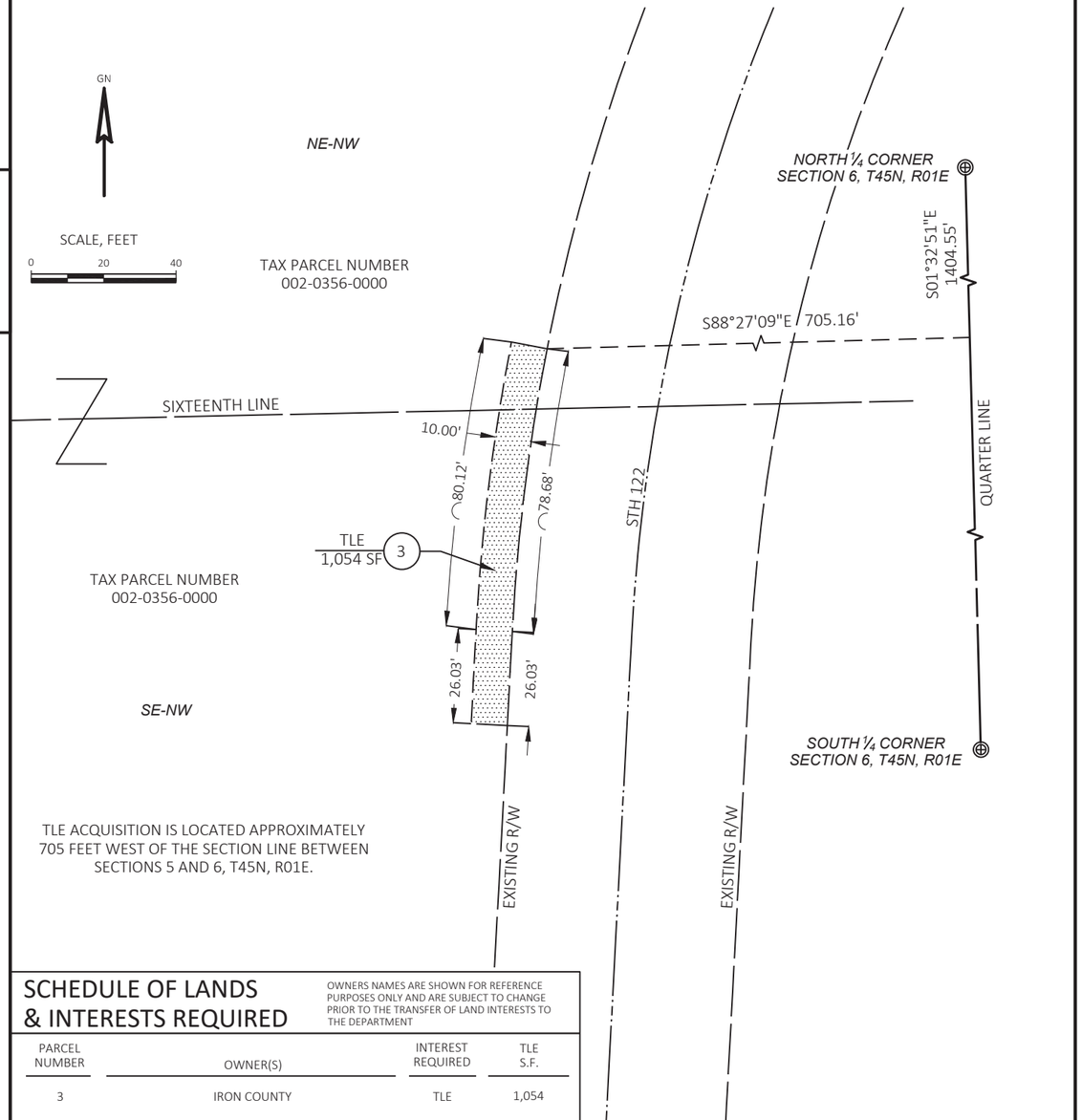
R/W PROJECT NUMBER: 9303-03-21	SHEET NUMBER: 2

TLE ACQUISITION EXHIBIT
RELOCATION ORDER FOR STH122
UPSON-MONTREAL RIVER (STH 77 TO MICHIGAN STATE LINE)

STH 122 — IRON COUNTY

PART OF THE NORTHEAST ¼ OF THE NORTHWEST ¼ AND PART OF THE SOUTHEAST ¼ OF THE NORTHWEST ¼ OF SECTION 6, T45N, R01E, TOWN OF ANDERSON, IRON COUNTY, WISCONSIN

4



TLE ACQUISITION IS LOCATED APPROXIMATELY 705 FEET WEST OF THE SECTION LINE BETWEEN SECTIONS 5 AND 6, T45N, R01E.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
3	IRON COUNTY	TLE	1,054

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

SIGNATURE: Brent L Stella DATE: 7/6/23

PRINT NAME: Brent L Stella

FILE NAME : 93030321_TLE.DWG PLOT DATE : 7/5/2023 2:07 PM R/W PROJECT: 9303-03-21

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

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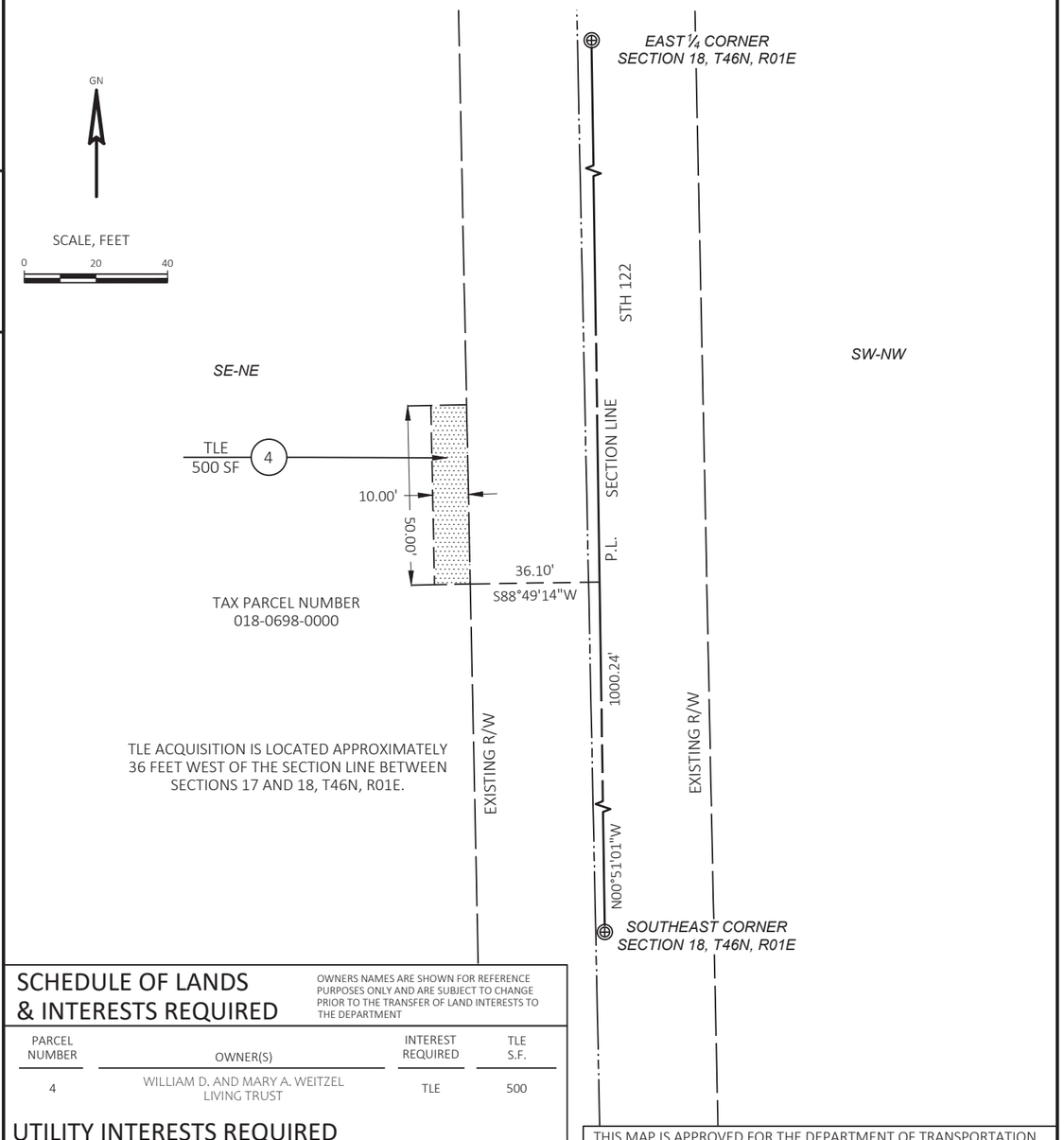
R/W PROJECT NUMBER: 9303-03-21	SHEET NUMBER: 3

TLE ACQUISITION EXHIBIT
RELOCATION ORDER FOR STH122
UPSON-MONTREAL RIVER (STH 77 TO MICHIGAN STATE LINE)
STH 122 IRON COUNTY

PART OF THE SOUTHEAST ¼ OF THE NORTHEAST ¼ OF SECTION 18, T46N, R01E, TOWN OF ANDERSON, IRON COUNTY, WISCONSIN

4



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
4	WILLIAM D. AND MARY A. WEITZEL LIVING TRUST	TLE	500

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

SIGNATURE: Brent L Stella DATE: 7/6/23

PRINT NAME: Brent L Stella

FILE NAME : 93030321_TLE.DWG PLOT DATE : 7/5/2023 2:07 PM R/W PROJECT: 9303-03-21

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

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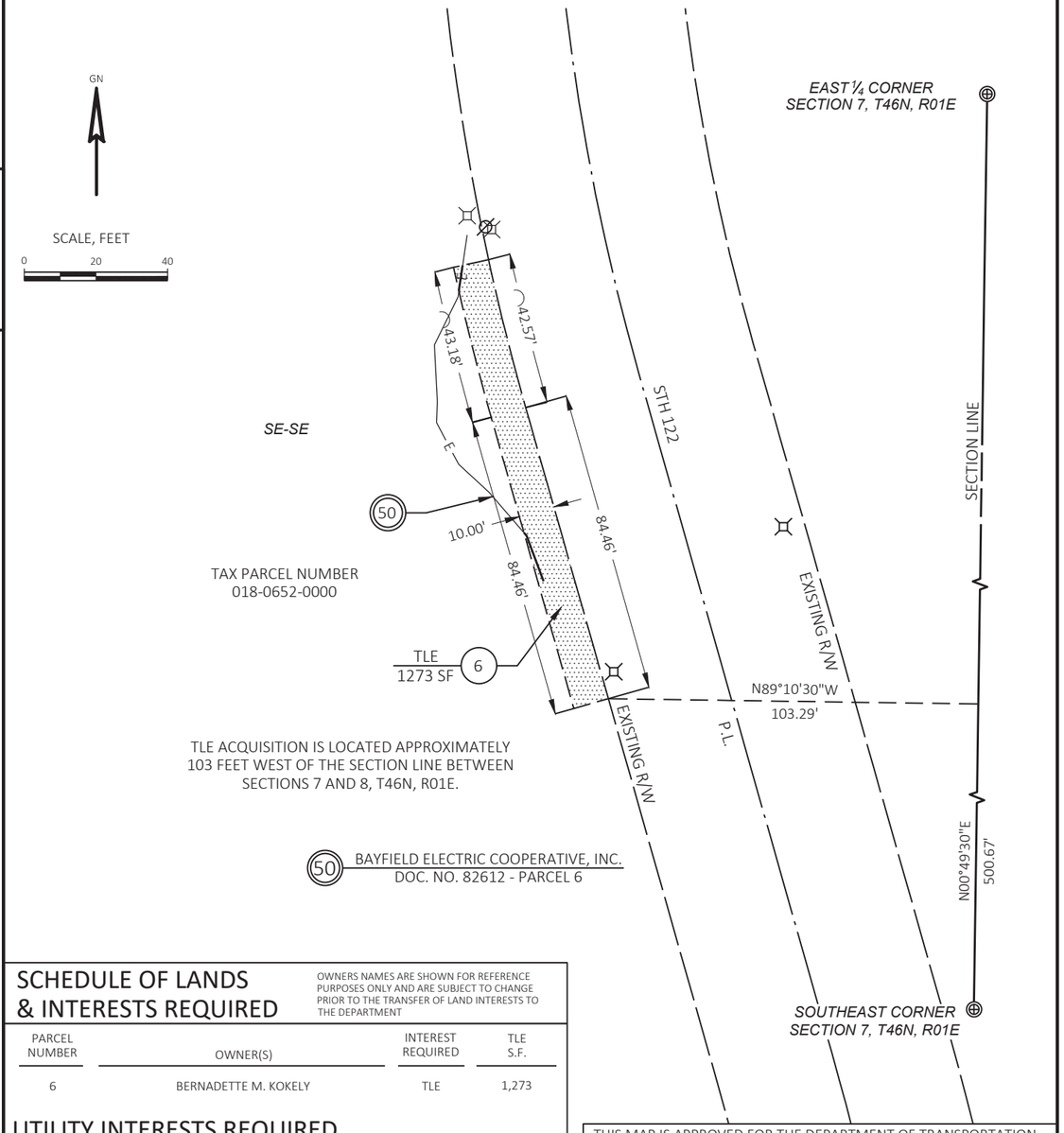
R/W PROJECT NUMBER: 9303-03-21	SHEET NUMBER: 4

TLE ACQUISITION EXHIBIT
RELOCATION ORDER FOR STH122
UPSON-MONTREAL RIVER (STH 77 TO MICHIGAN STATE LINE)
STH 122 IRON COUNTY

PART OF THE SOUTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 7, T46N, R01E, TOWN OF ANDERSON, IRON COUNTY, WISCONSIN

4



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
6	BERNADETTE M. KOKELY	TLE	1,273

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
50	BAYFIELD ELECTRIC COOPERATIVE, INC	TEMPORARY RELEASE OF RIGHTS

THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

SIGNATURE: Brent L Stella DATE: 7/6/23

PRINT NAME: Brent L Stella

FILE NAME : 93030321_TLE.DWG PLOT DATE : 7/5/2023 2:07 PM R/W PROJECT: 9303-03-21

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

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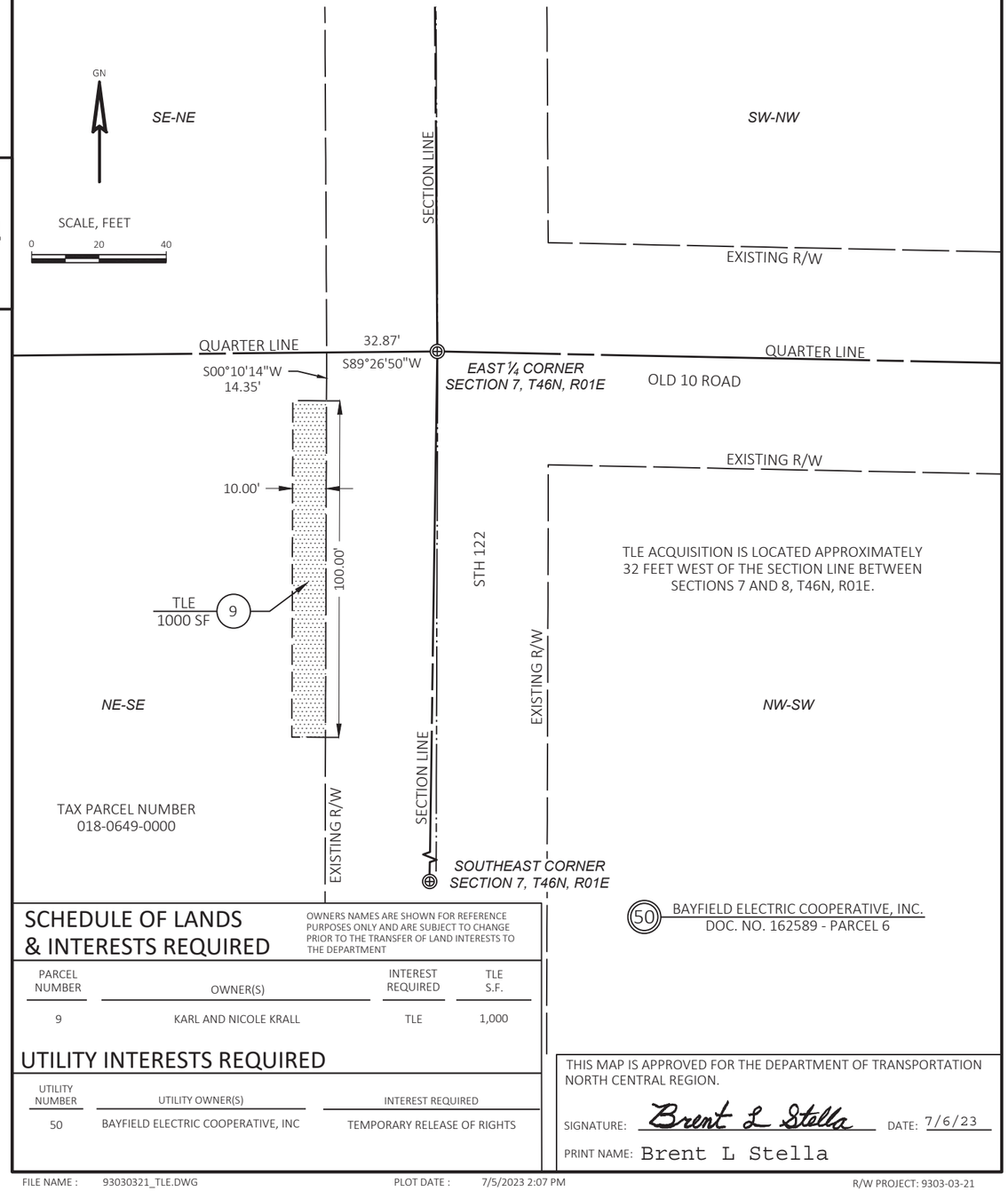
R/W PROJECT NUMBER: 9303-03-21	SHEET NUMBER: 5

TLE ACQUISITION EXHIBIT
RELOCATION ORDER FOR STH122
UPSON-MONTREAL RIVER (STH 77 TO MICHIGAN STATE LINE)
STH 122 IRON COUNTY

PART OF THE NORTHEAST ¼ OF THE SOUTHEAST ¼ OF SECTION 7, T46N, R01E, TOWN OF ANDERSON, IRON COUNTY, WISCONSIN

4



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
9	KARL AND NICOLE KRALL	TLE	1,000

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
50	BAYFIELD ELECTRIC COOPERATIVE, INC	TEMPORARY RELEASE OF RIGHTS

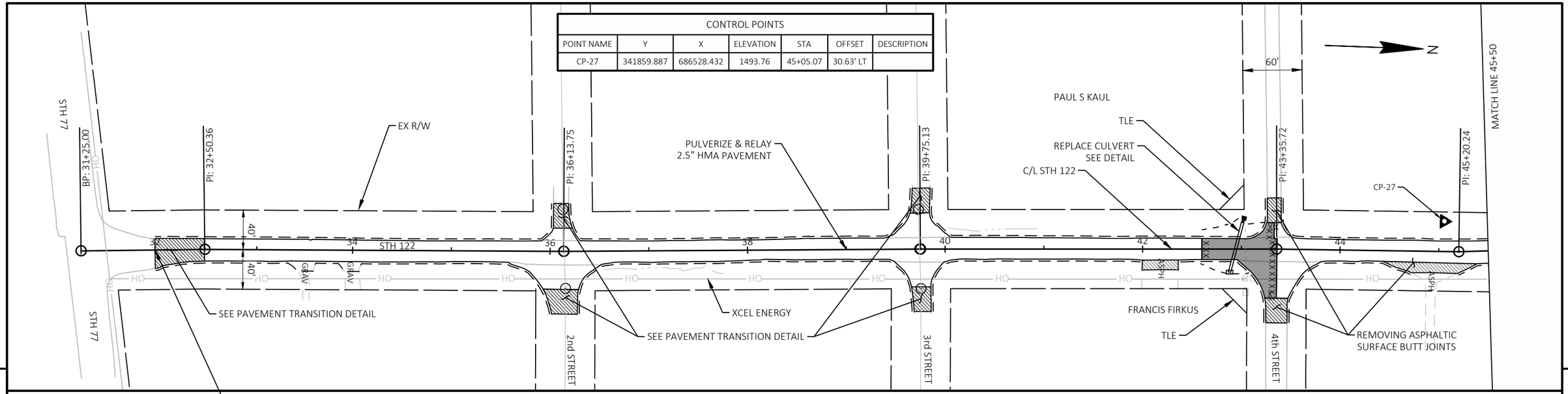
THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION NORTH CENTRAL REGION.

SIGNATURE: Brent L Stella DATE: 7/6/23

PRINT NAME: Brent L Stella

FILE NAME : 93030321_TLE.DWG PLOT DATE : 7/5/2023 2:07 PM R/W PROJECT: 9303-03-21

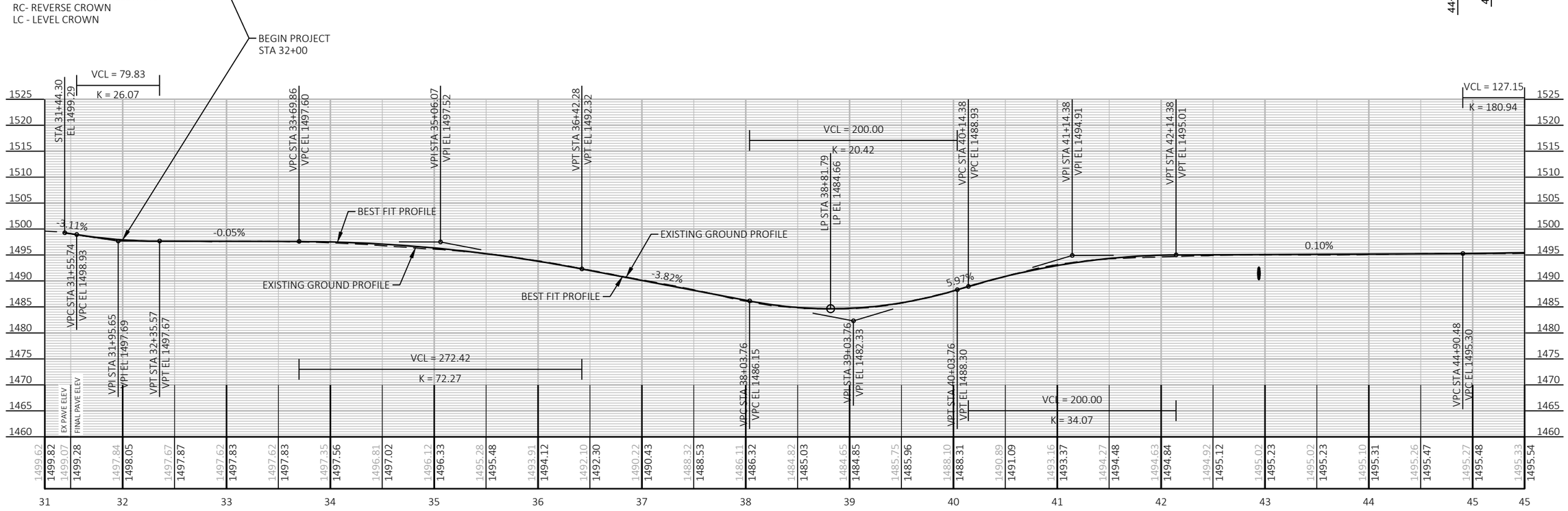
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-27	341859.887	686528.432	1493.76	45+05.07	30.63' LT	



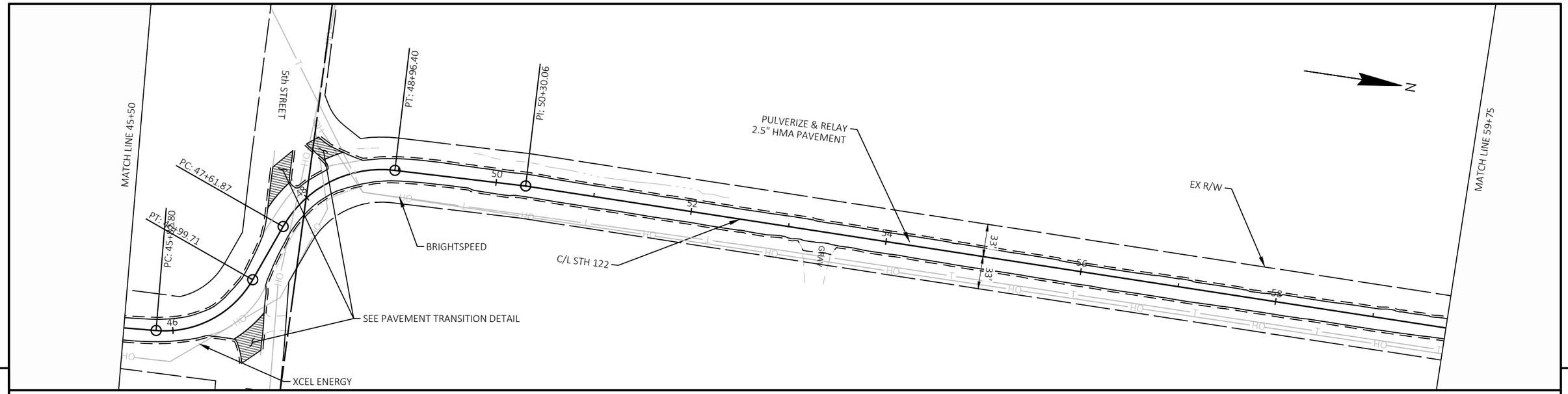
SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

44+85.80 ENC
45+18.13 LC



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 56	E



45+50.46 RC

46+15.13 BFS
HIGH SIDE: 6.00%
LOW SIDE: -6.00%

46+66.79 ENC

46+67.38 EFS
HIGH SIDE: 6.00%
LOW SIDE: -6.00%

46+99.20 LC

47+31.62 RC

47+32.04 RC

47+64.38 LC

47+93.20 BFS
HIGH SIDE: 5.80%
LOW SIDE: -5.80%

47+96.71 BNC

48+65.07 EFS
HIGH SIDE: 5.80%
LOW SIDE: -5.80%

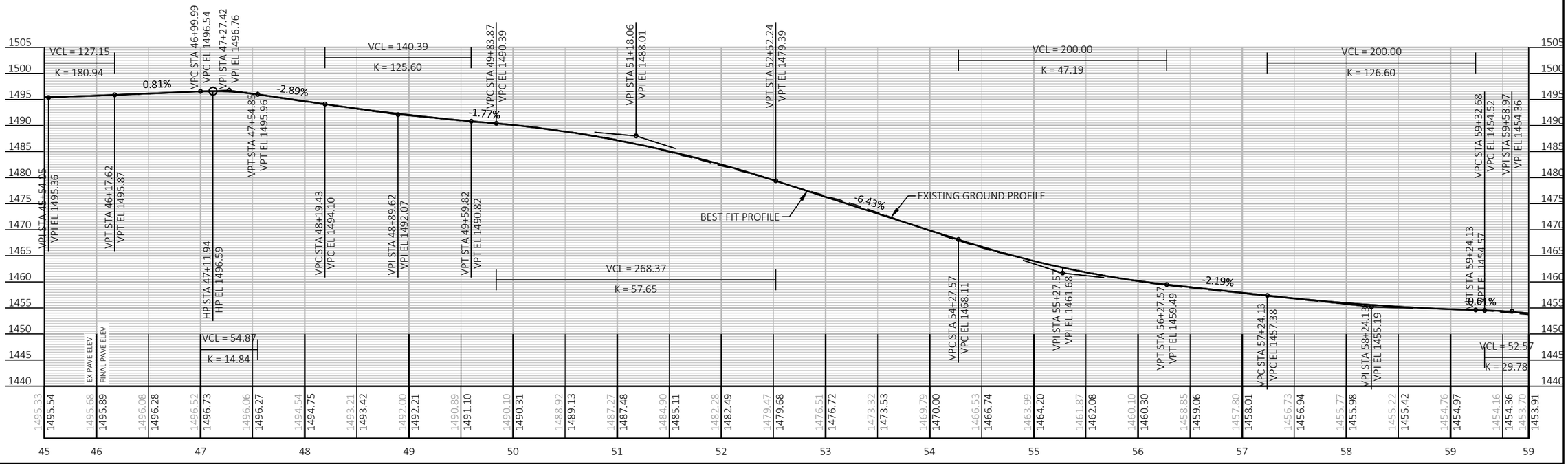
49+26.66 RC

49+59.07 LC

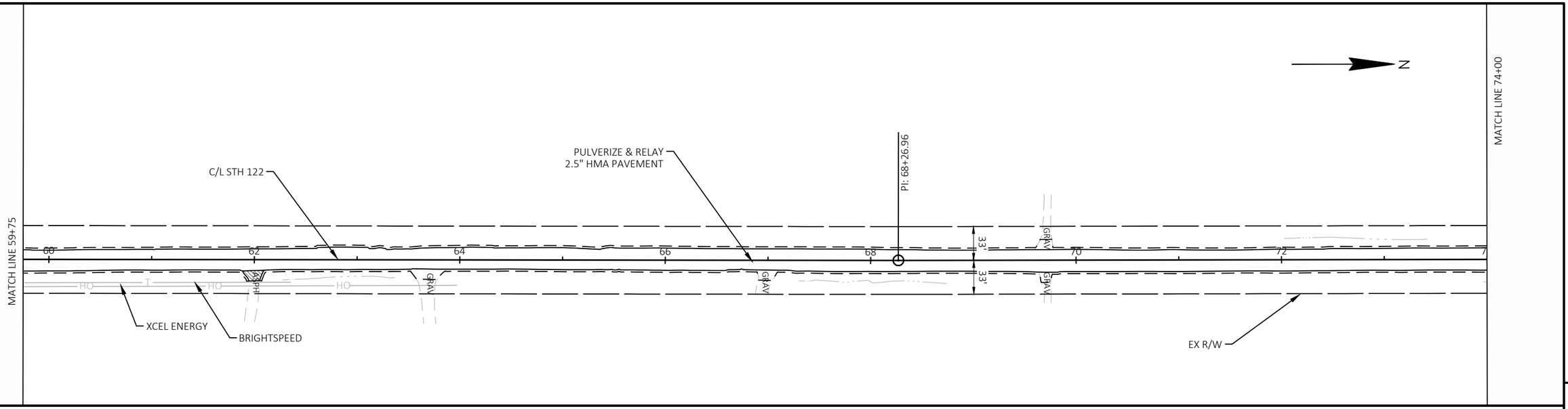
49+91.49 BNC

SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



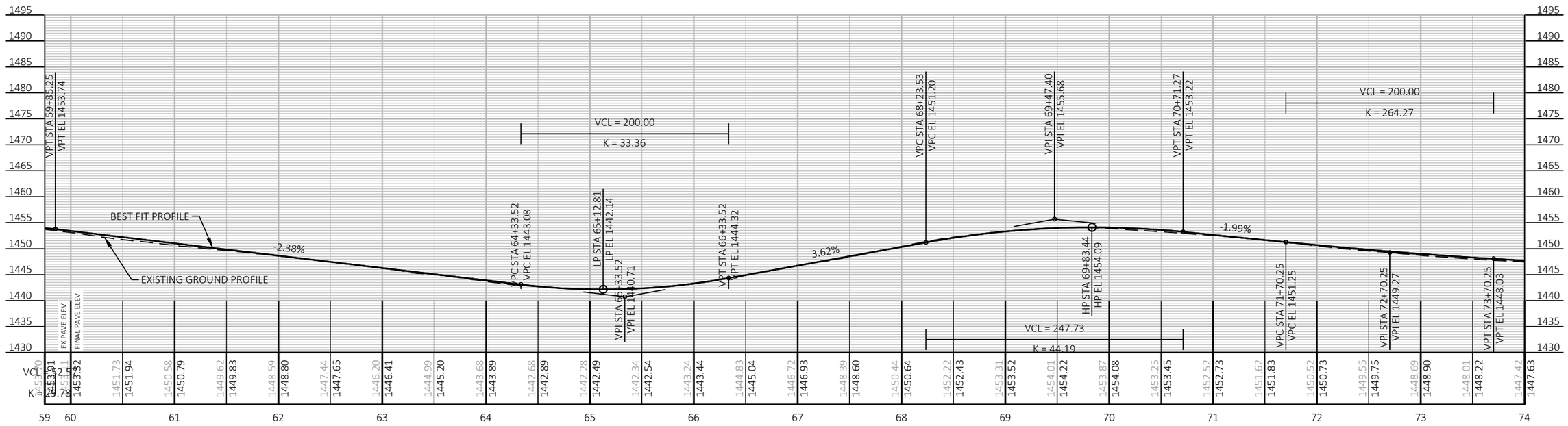
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 57 E



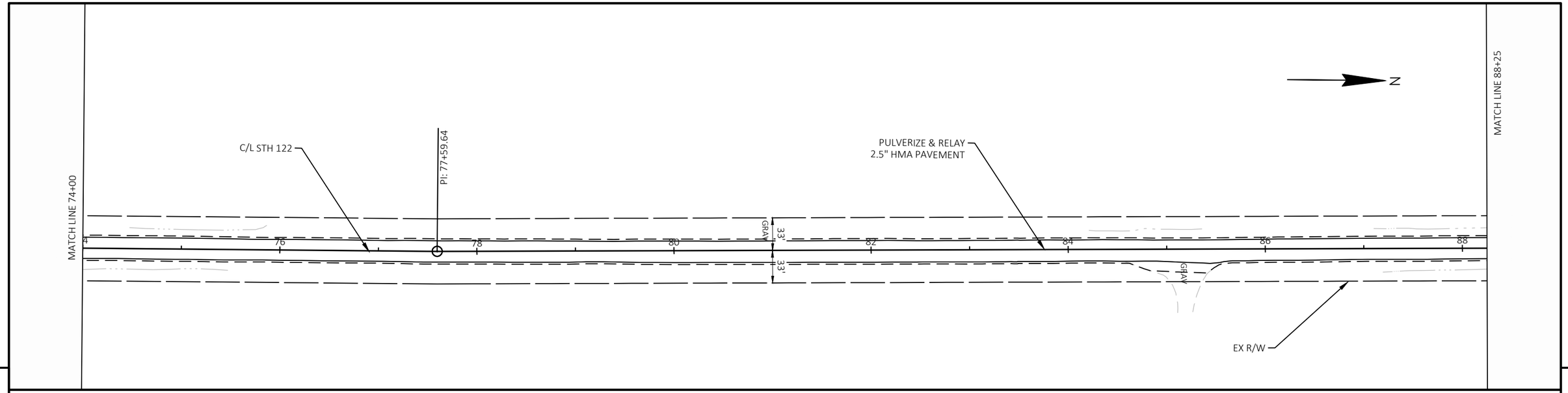
5

5

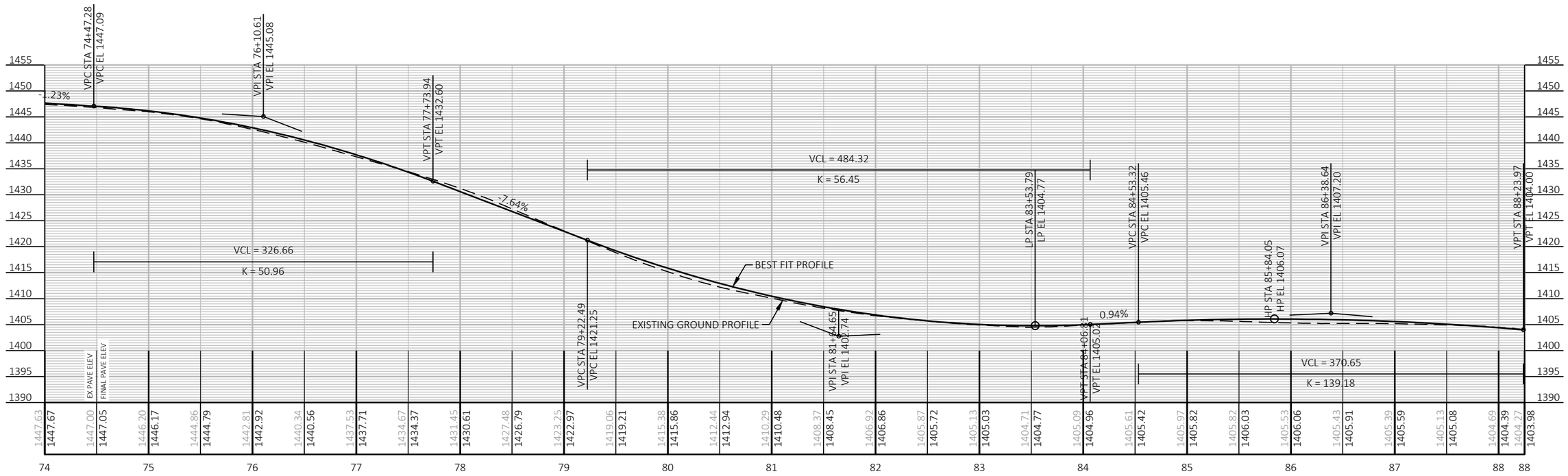
NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 58	E

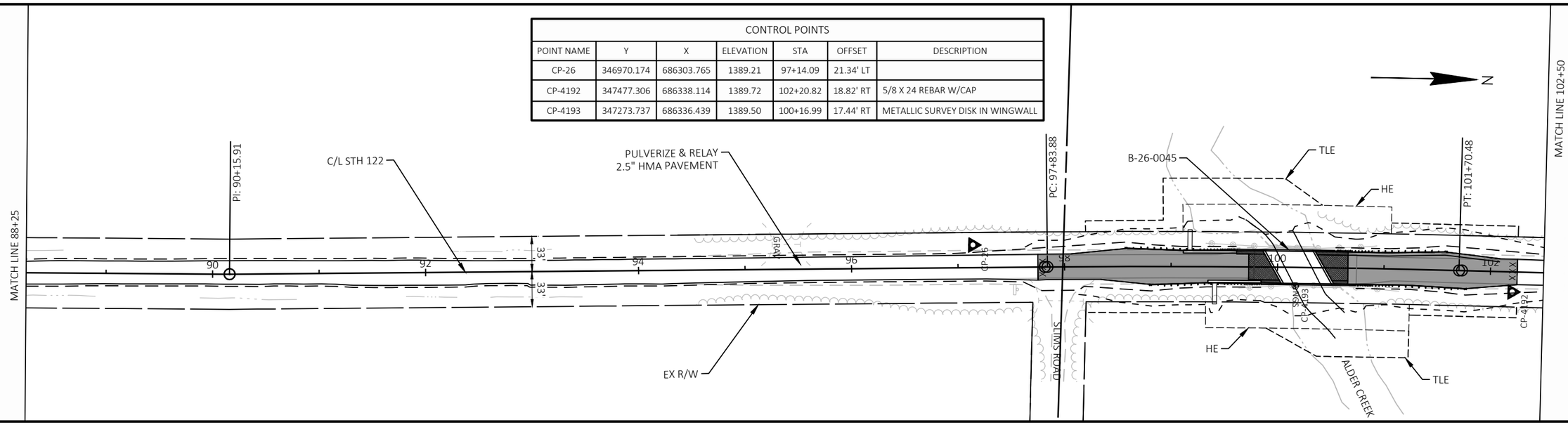


NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



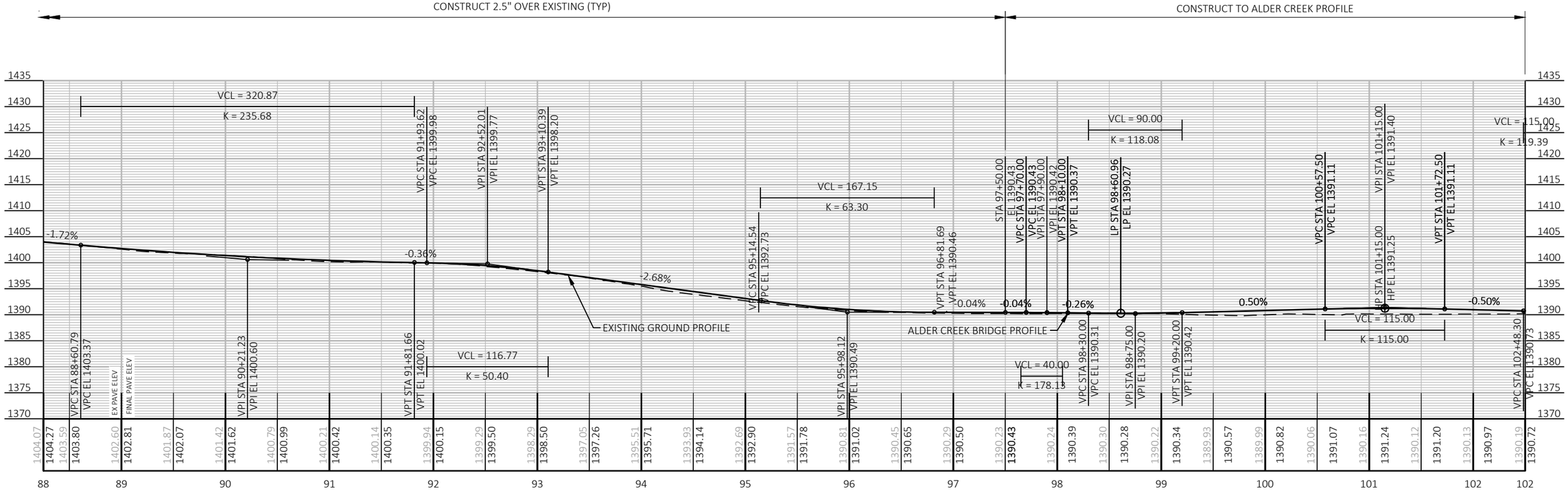
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 59 E

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-26	346970.174	686303.765	1389.21	97+14.09	21.34' LT	
CP-4192	347477.306	686338.114	1389.72	102+20.82	18.82' RT	5/8 X 24 REBAR W/CAP
CP-4193	347273.737	686336.439	1389.50	100+16.99	17.44' RT	METALLIC SURVEY DISK IN WINGWALL

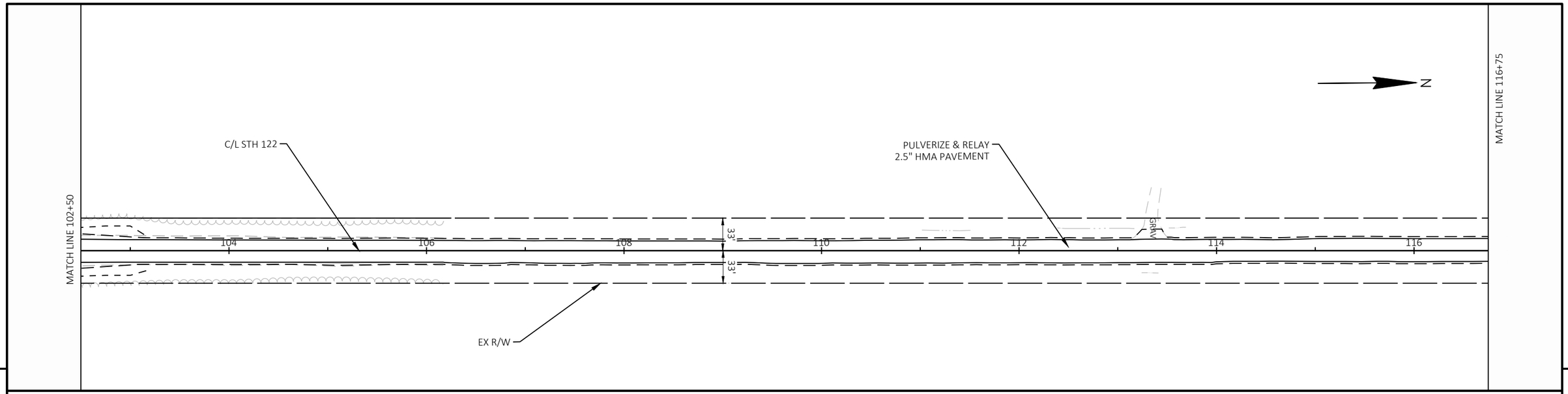


NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN



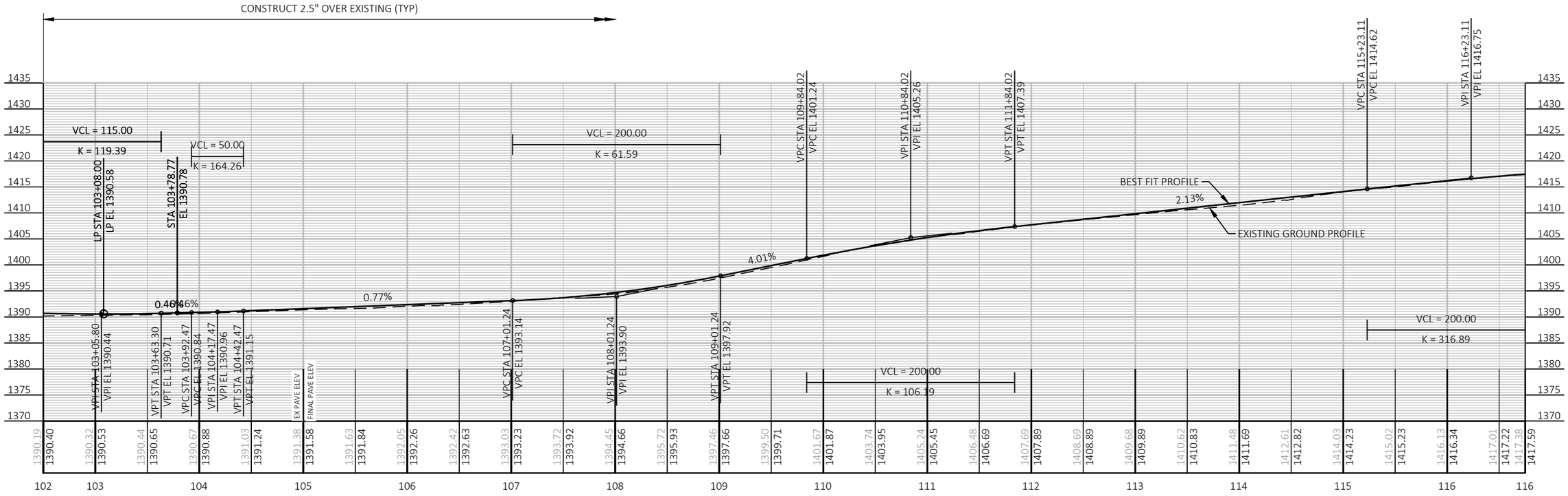
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 60 E



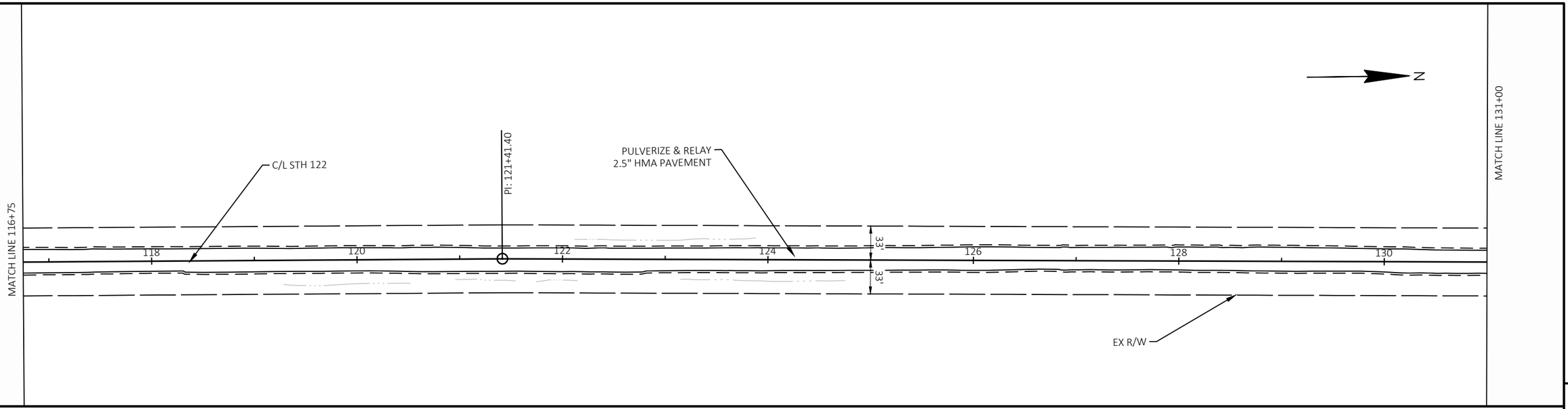
5

5

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 61	E



SUPERELEVATION INFORMATION:
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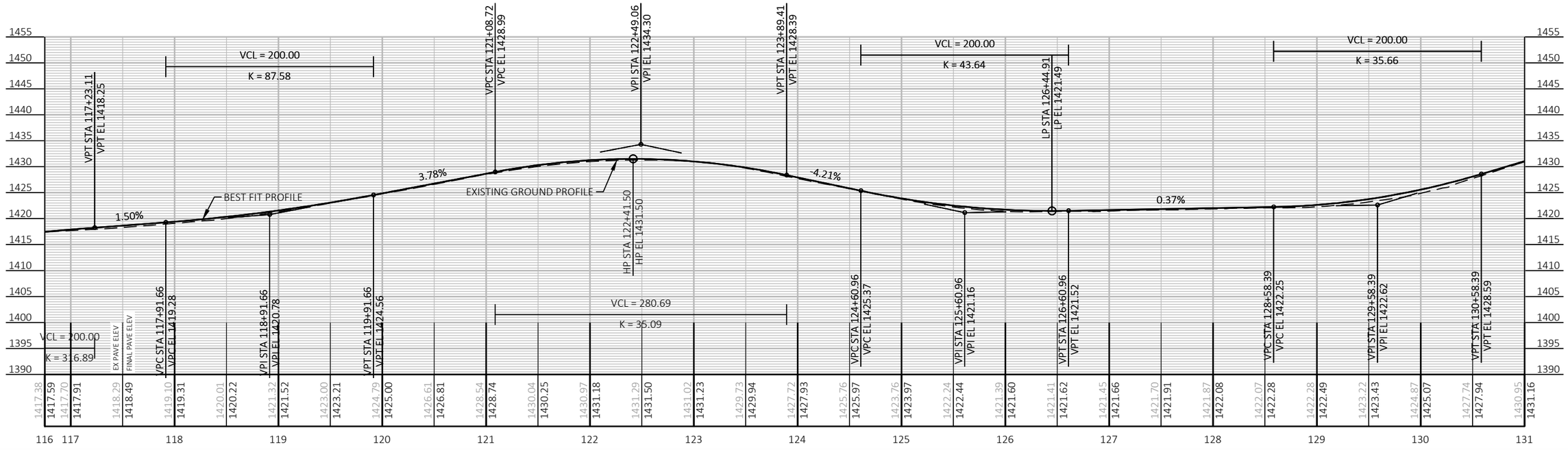
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

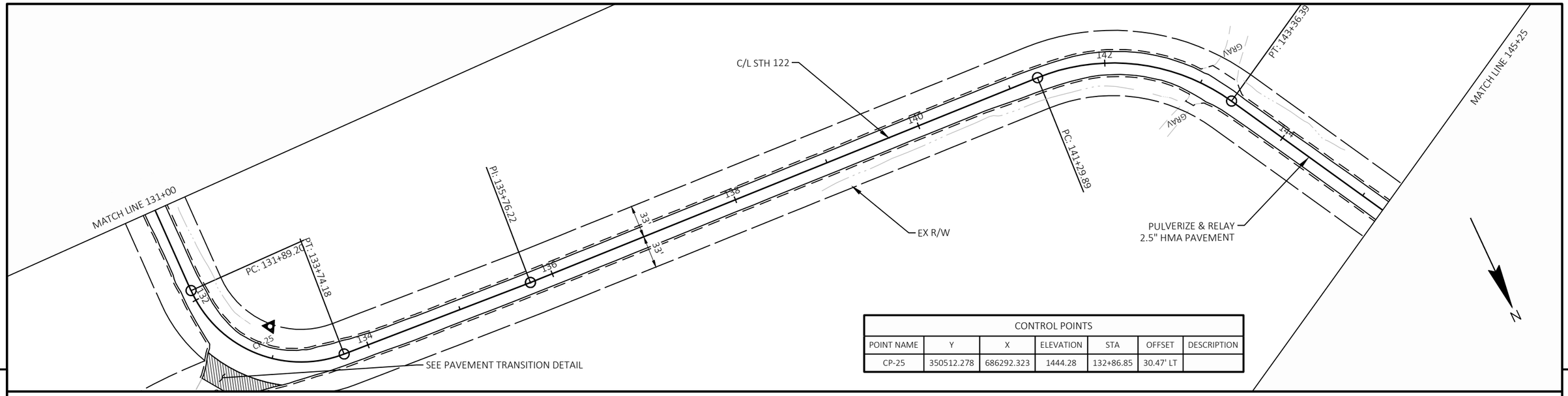
NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

130+96.03 ENC



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 62 E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 07
PLOT DATE : 6/6/2024 12:58 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-25	350512.278	686292.323	1444.28	132+86.85	30.47' LT	

5

SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

131+28.53 LC

131+61.03 RC

132+19.53 BFS
HIGH SIDE: 5.60%
LOW SIDE: -5.60%

133+43.85 EFS
HIGH SIDE: 5.60%
LOW SIDE: -5.60%

134+02.35 RC

134+34.85 LC

134+67.35 BNC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

140+45.39 ENC

140+77.89 LC

141+10.39 RC

141+55.89 BFS
HIGH SIDE: 4.80%
LOW SIDE: -4.80%

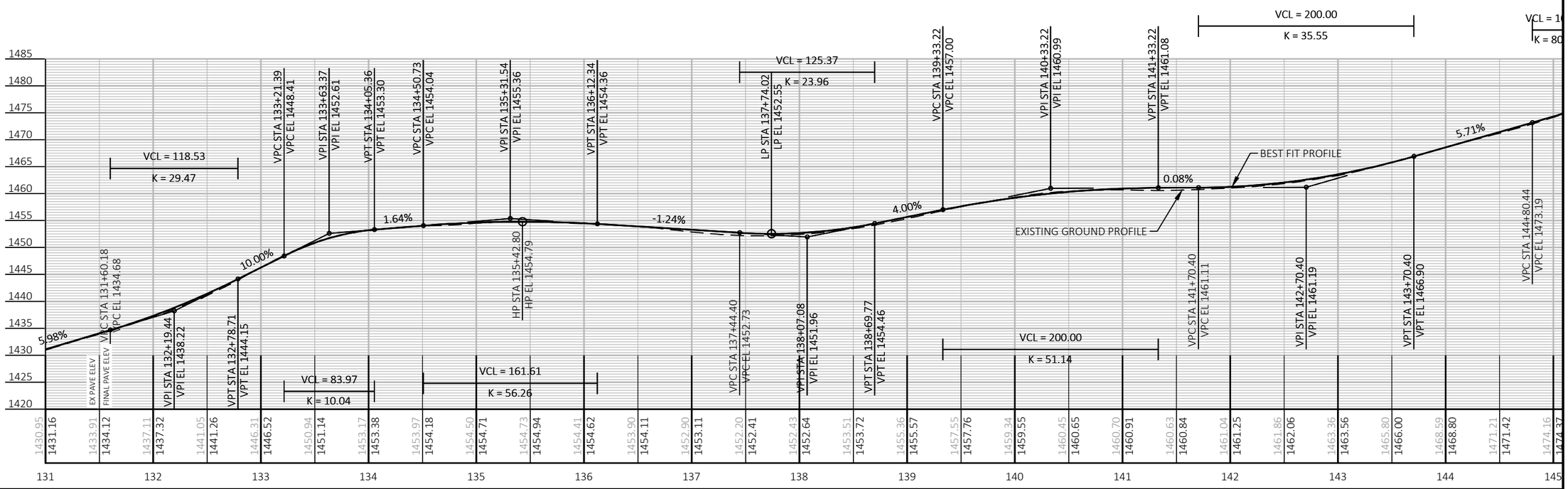
143+10.39 EFS
HIGH SIDE: 4.80%
LOW SIDE: -4.80%

143+55.89 RC

143+88.39 LC

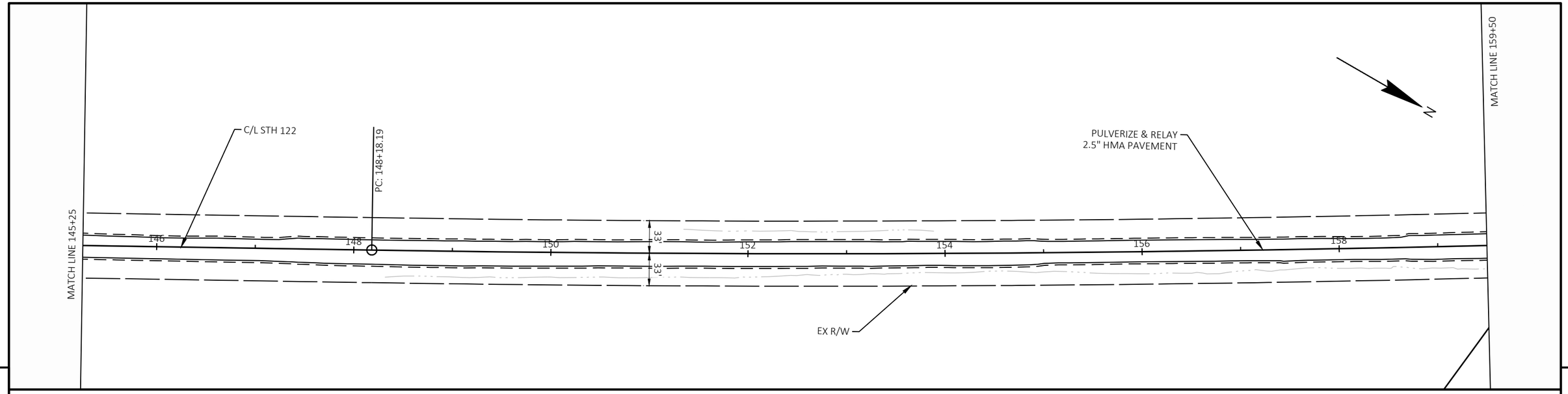
144+20.89 BNC

5



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 63	E

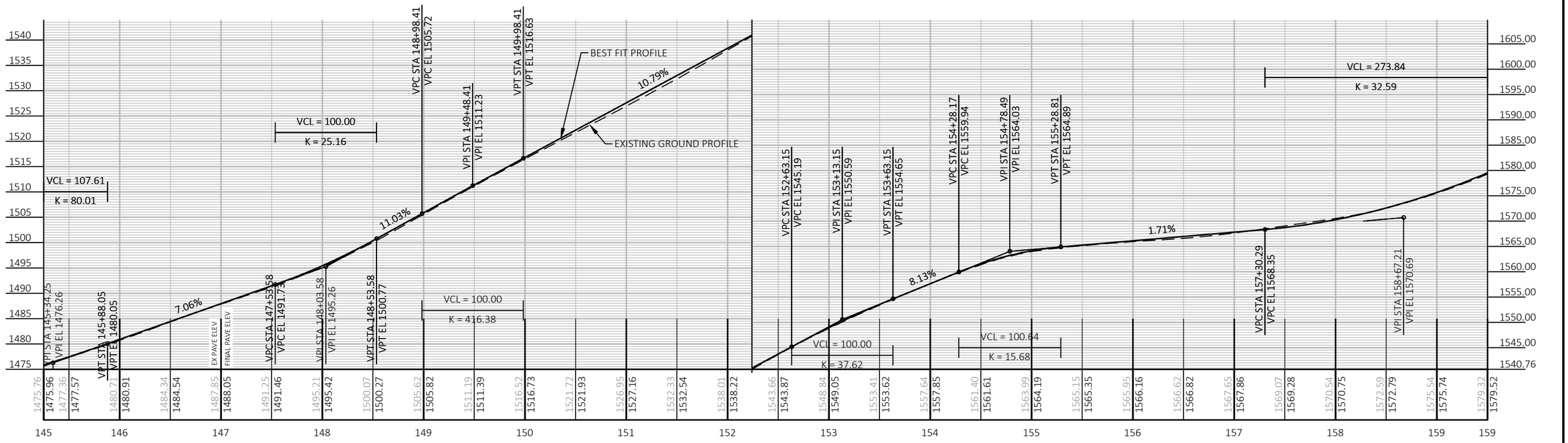
FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 08
PLOT DATE : 6/6/2024 12:59 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



5

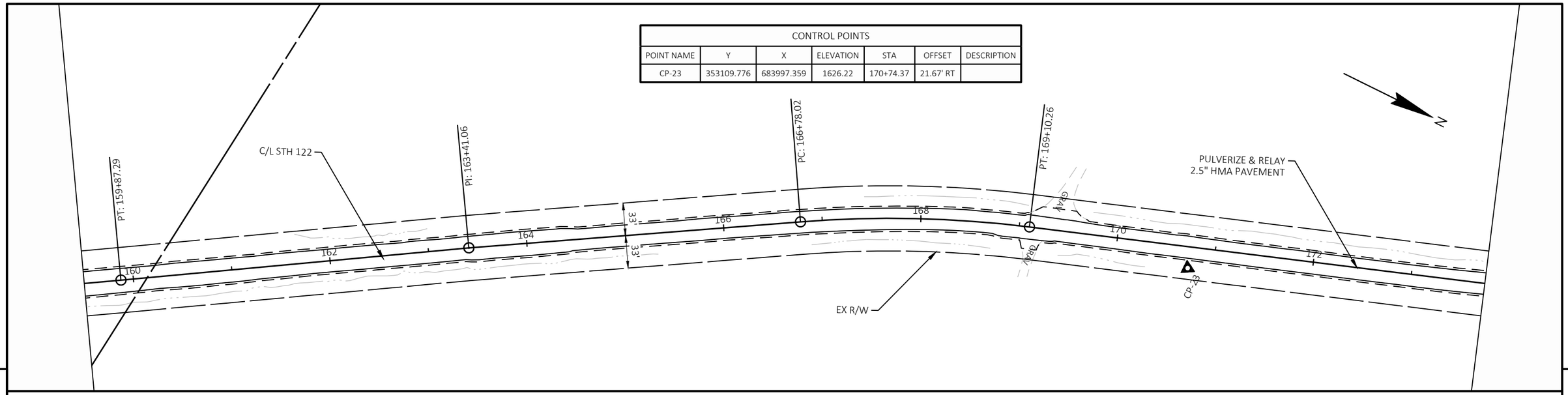
5

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 64	E

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-23	353109.776	683997.359	1626.22	170+74.37	21.67' RT	

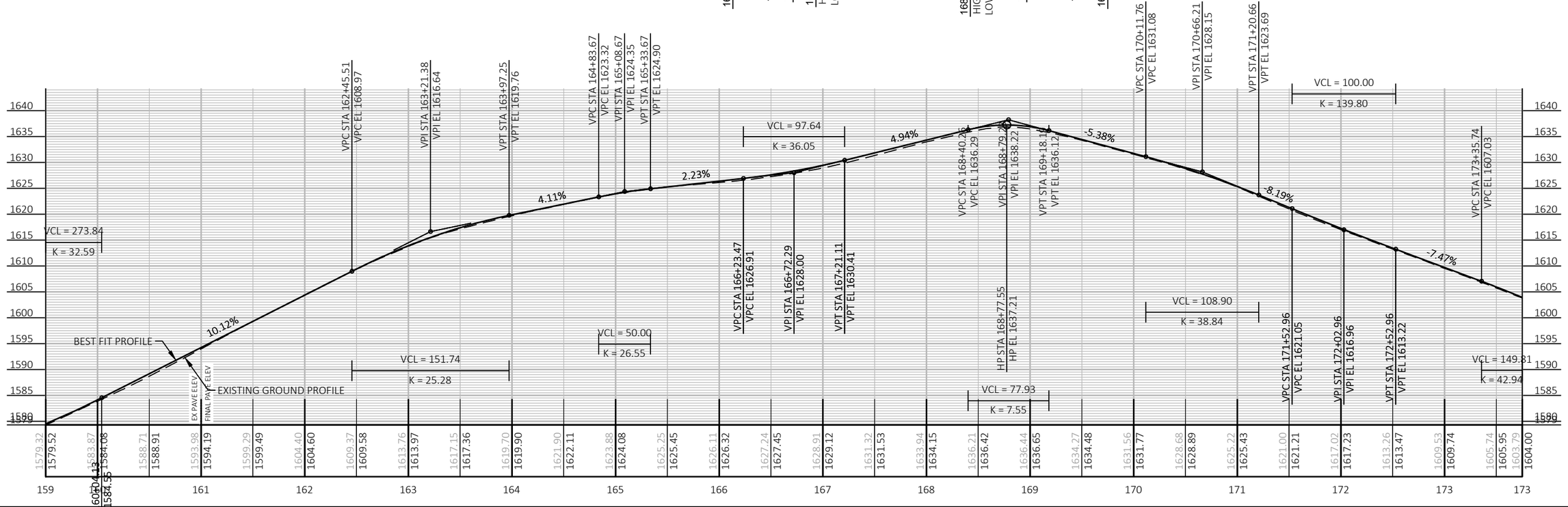


SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

166+13.28 ENC
166+47.35 LC
166+81.42 RC
166+93.35 BFS
HIGH SIDE: 2.70%
LOW SIDE: -2.70%

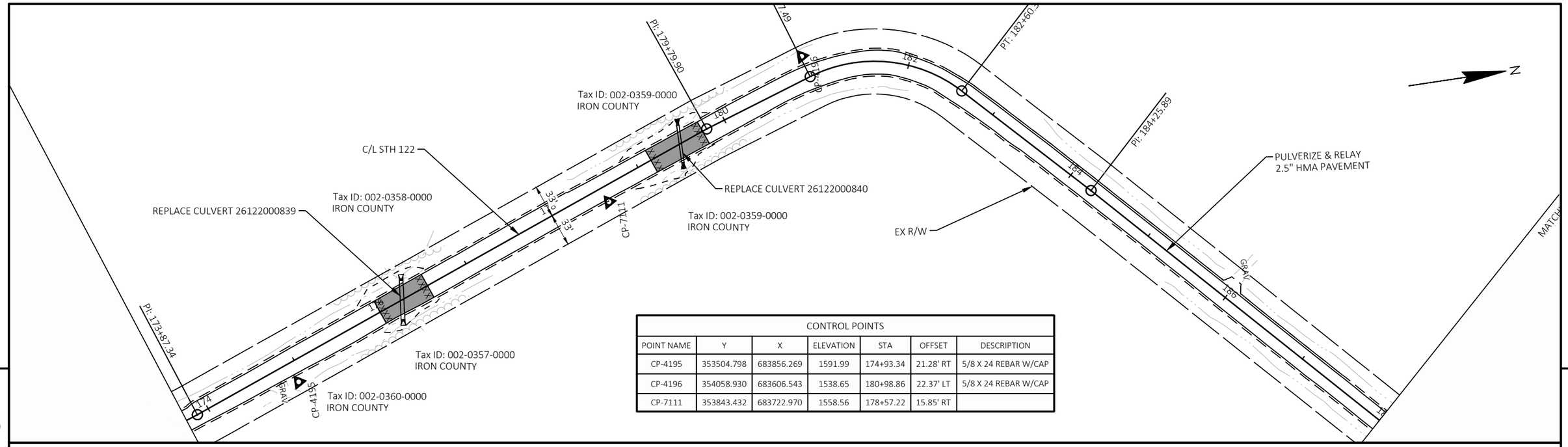
168+94.92 EFS
HIGH SIDE: 2.70%
LOW SIDE: -2.70%
169+06.85 RC
169+40.92 LC
169+75.00 BNC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 65	E

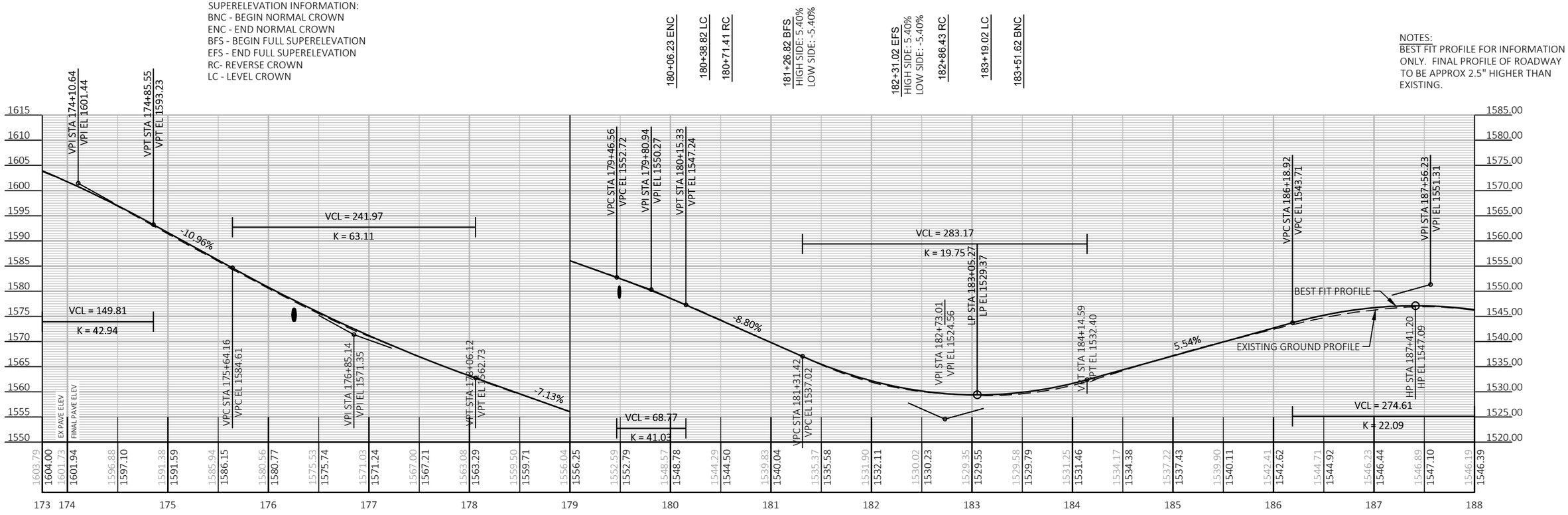
FILE NAME : Y:\MILWAUKEE\202005\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 10
PLOT DATE : 6/6/2024 12:59 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-4195	353504.798	683856.269	1591.99	174+93.34	21.28' RT	5/8 X 24 REBAR W/CAP
CP-4196	354058.930	683606.543	1538.65	180+98.86	22.37' LT	5/8 X 24 REBAR W/CAP
CP-7111	353843.432	683722.970	1558.56	178+57.22	15.85' RT	

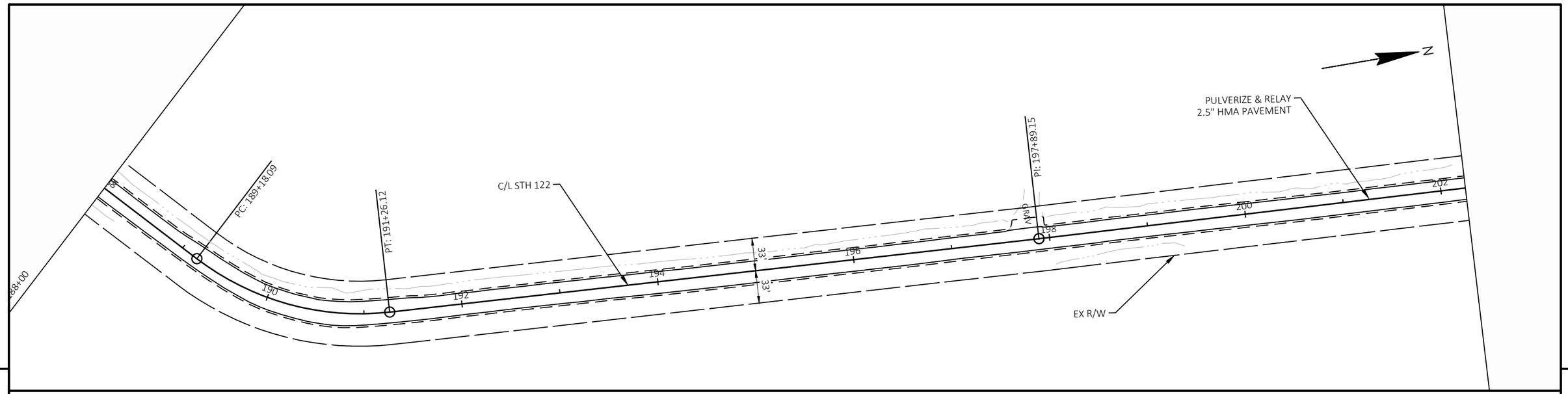
SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 66	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 11
PLOT DATE : 6/6/2024 12:59 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



188+40.37 ENC

188+72.75 LC

189+05.13 RC

189+40.75 BFS
HIGH SIDE: 4.20%
LOW SIDE: -4.20%

191+03.45 EFS
HIGH SIDE: 4.20%
LOW SIDE: -4.20%

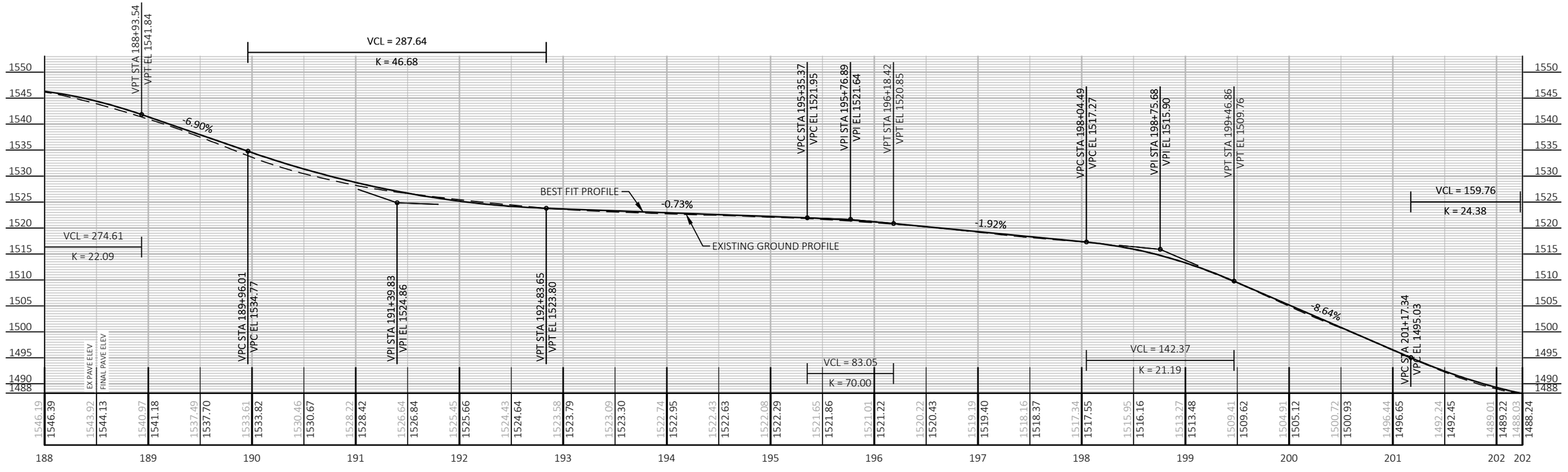
191+39.07 RC

191+71.45 LC

192+03.84 BNC

SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

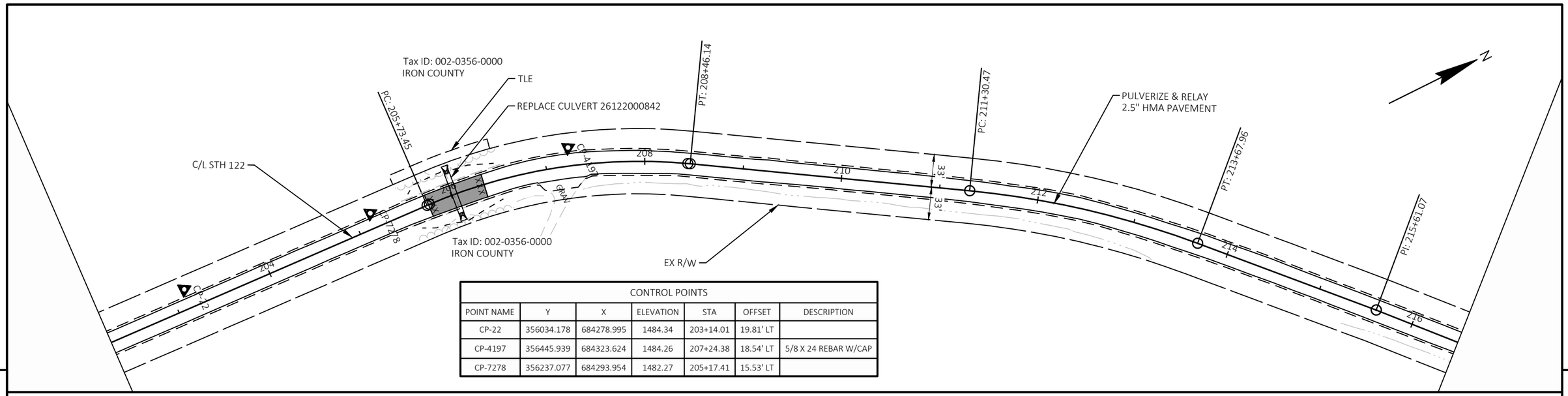


PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 67	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 12

PLOT DATE : 6/6/2024 12:59 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

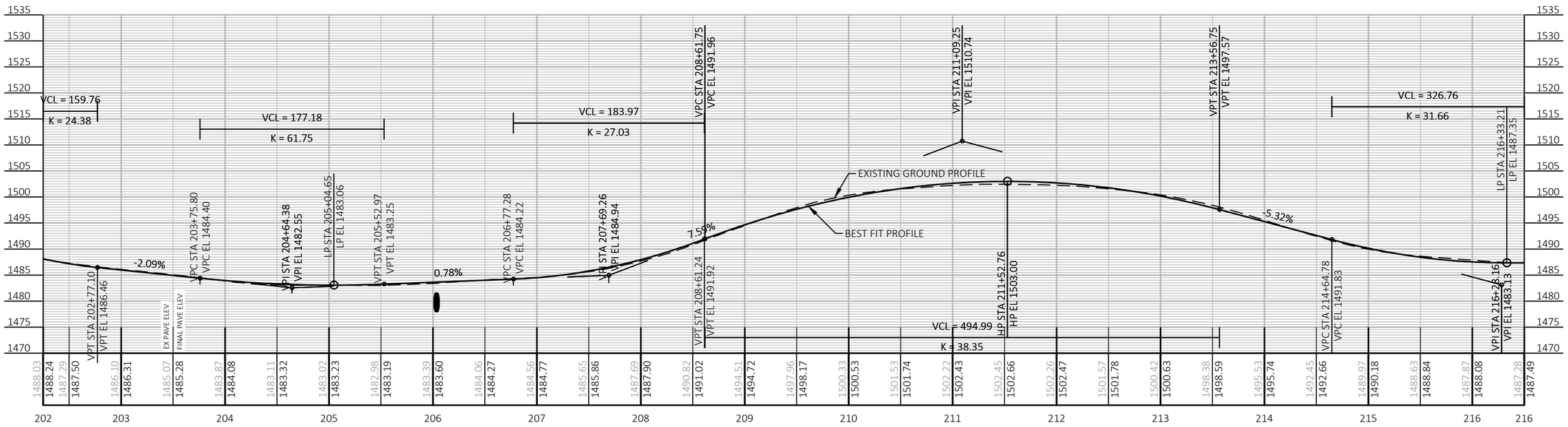


CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-22	356034.178	684278.995	1484.34	203+14.01	19.81' LT	
CP-4197	356445.939	684323.624	1484.26	207+24.38	18.54' LT	5/8 X 24 REBAR W/CAP
CP-7278	356237.077	684293.954	1482.27	205+17.41	15.53' LT	

SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

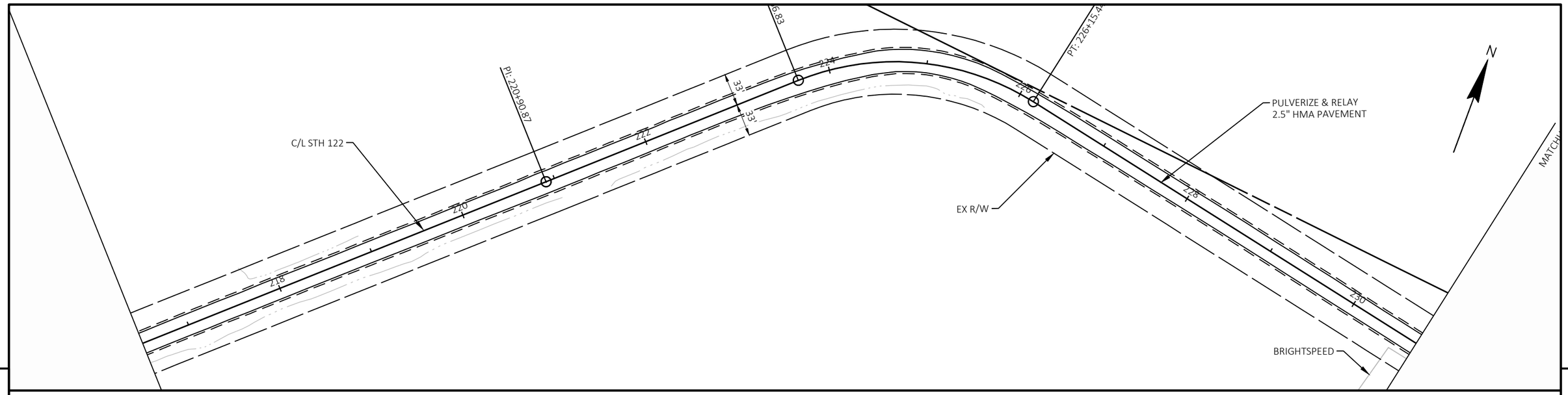
205+04.43 ENC
205+36.79 LC
205+69.14 RC
205+91.79 BFS
HIGH SIDE: 3.40%
LOW SIDE: -3.40%
208+27.81 EFS
HIGH SIDE: 3.40%
LOW SIDE: -3.40%
208+50.46 RC
208+82.81 LC
209+15.16 BNC
210+60.94 ENC
210+95.14 LC
211+29.33 RC
211+48.14 BFS
HIGH SIDE: 3.10%
LOW SIDE: -3.10%
213+50.30 EFS
HIGH SIDE: 3.10%
LOW SIDE: -3.10%
213+69.10 RC
214+03.30 LC
214+37.49 BNC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 68	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 13
PLOT DATE : 6/6/2024 1:00 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



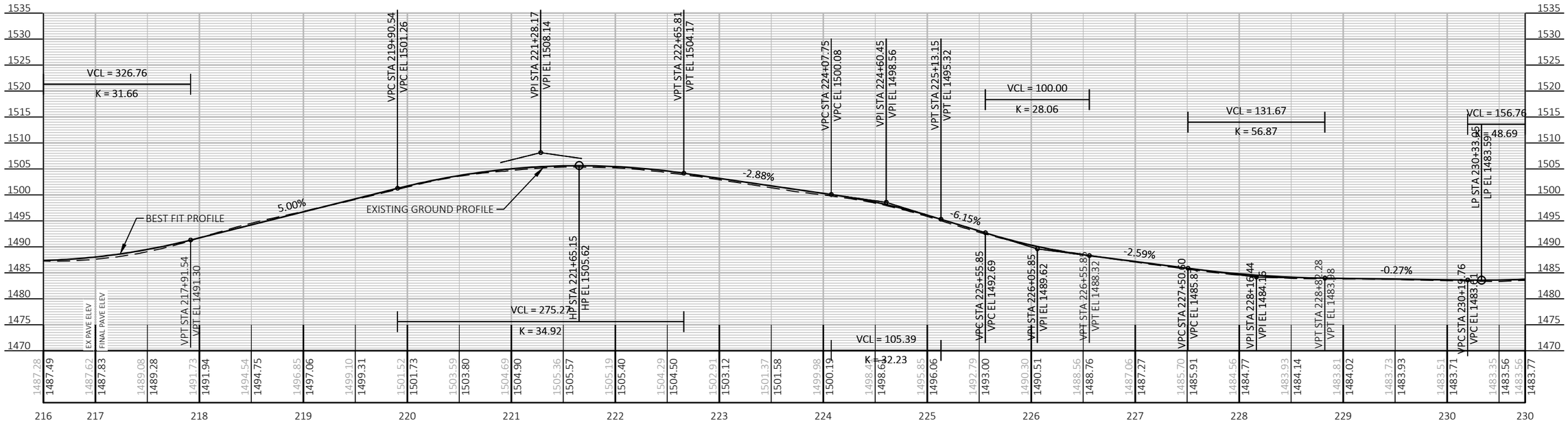
5

SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

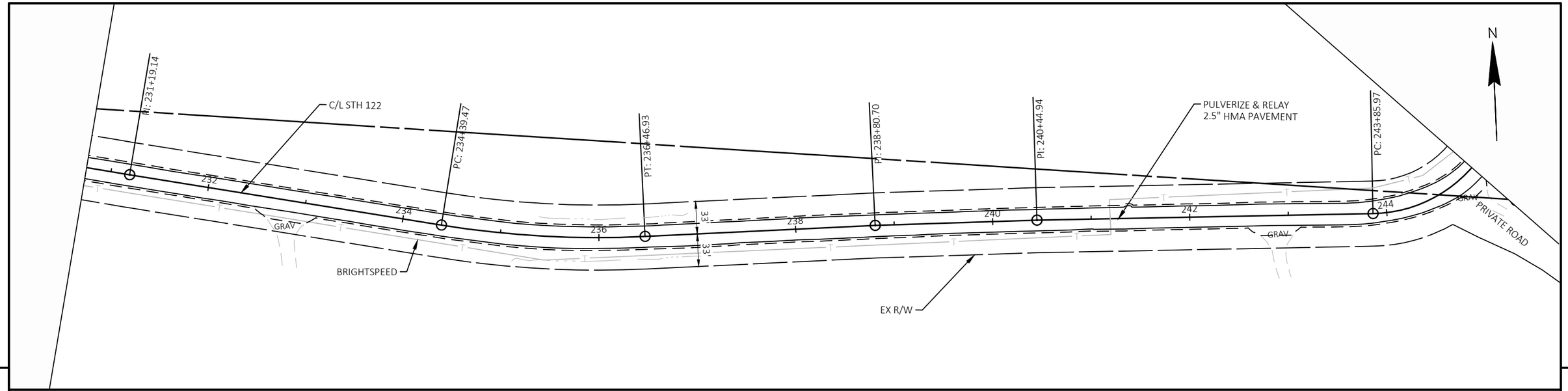
222+87.22 ENC
223+19.50 LC
223+51.77 RC
223+90.50 BFS
HIGH SIDE: 4.40%
LOW SIDE: -4.40%
225+91.78 EFS
HIGH SIDE: 4.40%
LOW SIDE: -4.40%
226+30.50 RC
226+62.78 LC
226+95.05 BNC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

5



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 69	E

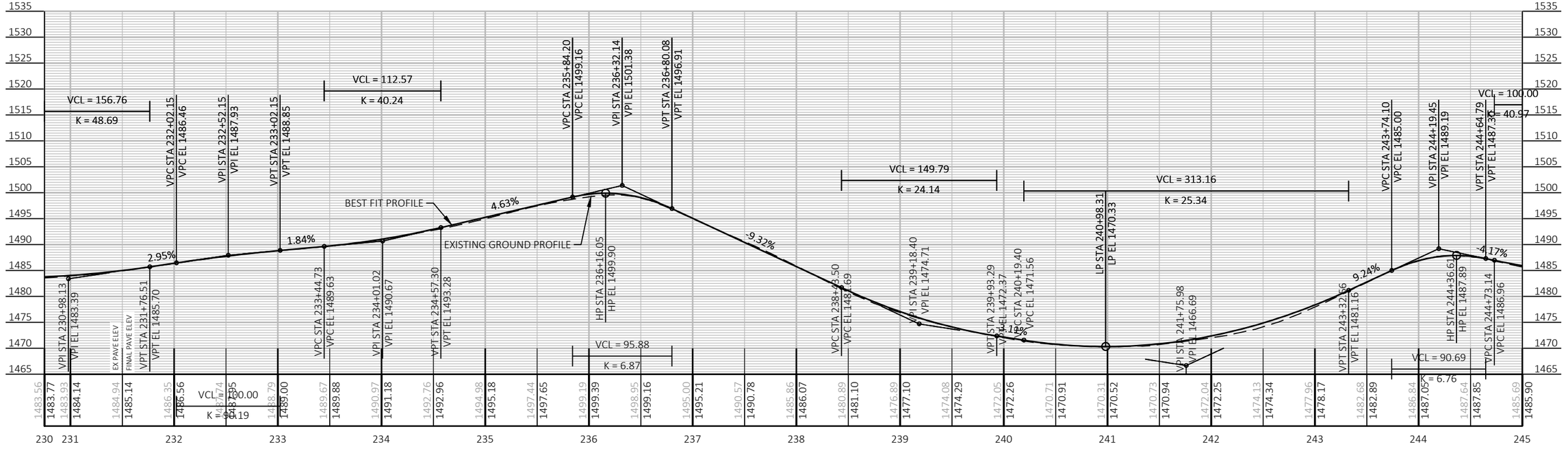


SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

233+46.89 ENC
233+85.46 LC
234+24.04 RC
234+66.46 BFS
HIGH SIDE: 4.20%
LOW SIDE: -4.20%
236+19.93 EFS
HIGH SIDE: 4.20%
LOW SIDE: -4.20%
236+62.36 RC
237+00.93 LC
237+39.50 BNC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

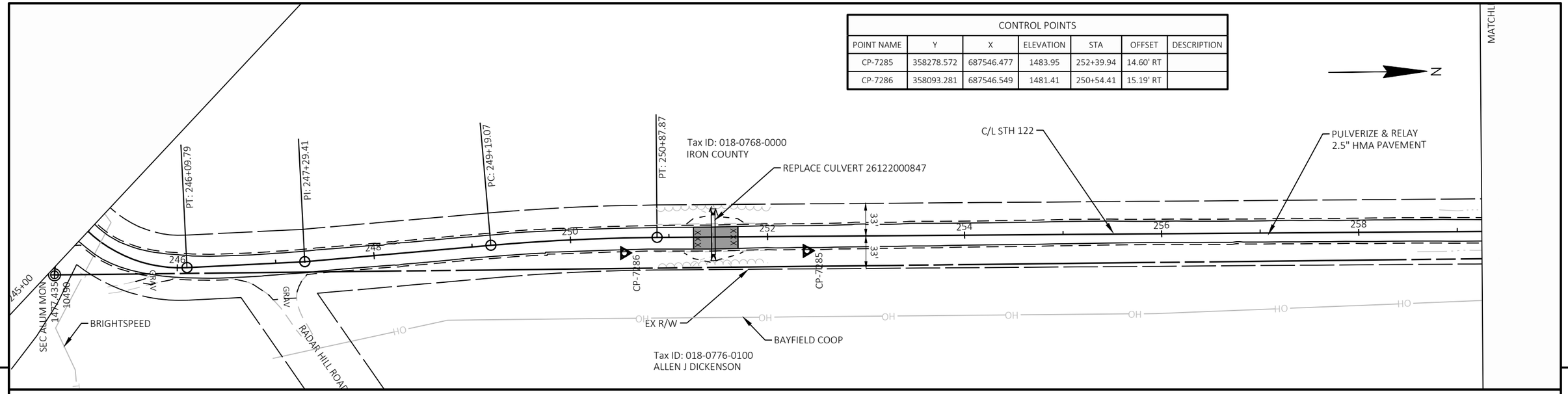
242+94.71 ENC
243+27.30 LC
243+59.89 RC
244+15.30 BFS
HIGH SIDE: 5.40%
LOW SIDE: -5.40%



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 70	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 15
PLOT DATE : 6/6/2024 1:00 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-7285	358278.572	687546.477	1483.95	252+39.94	14.60' RT	
CP-7286	358093.281	687546.549	1481.41	250+54.41	15.19' RT	



245+80.46 EFS
HIGH SIDE: 5.40%
LOW SIDE: -5.40%

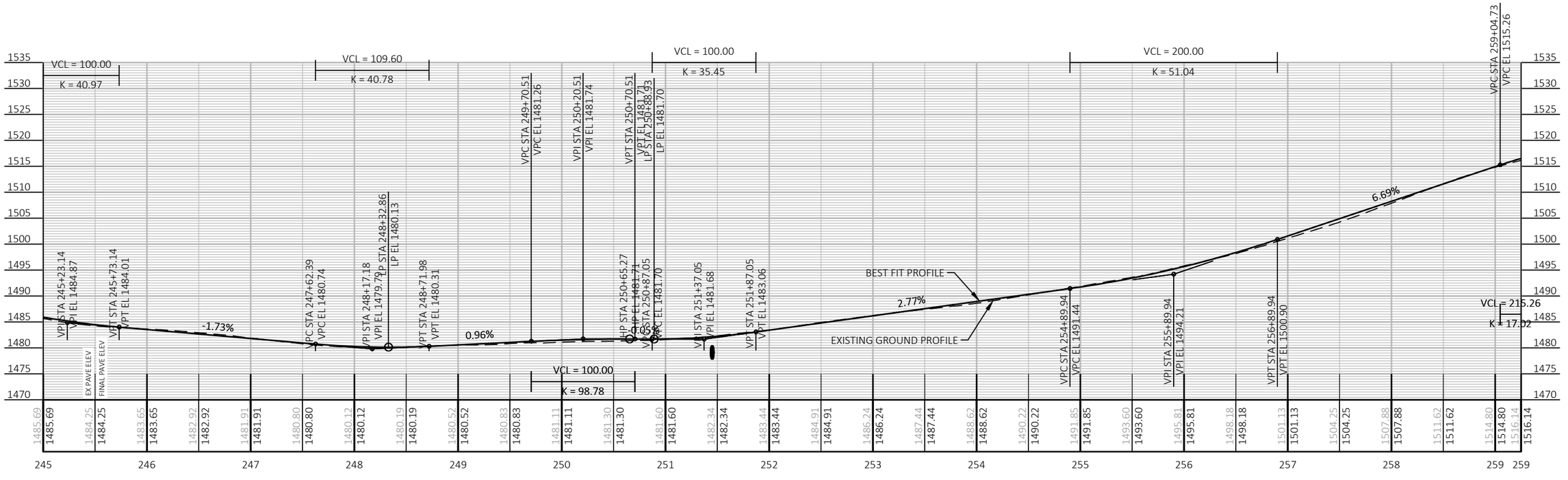
246+35.87 RC

246+68.46 LC

247+01.06 BNC

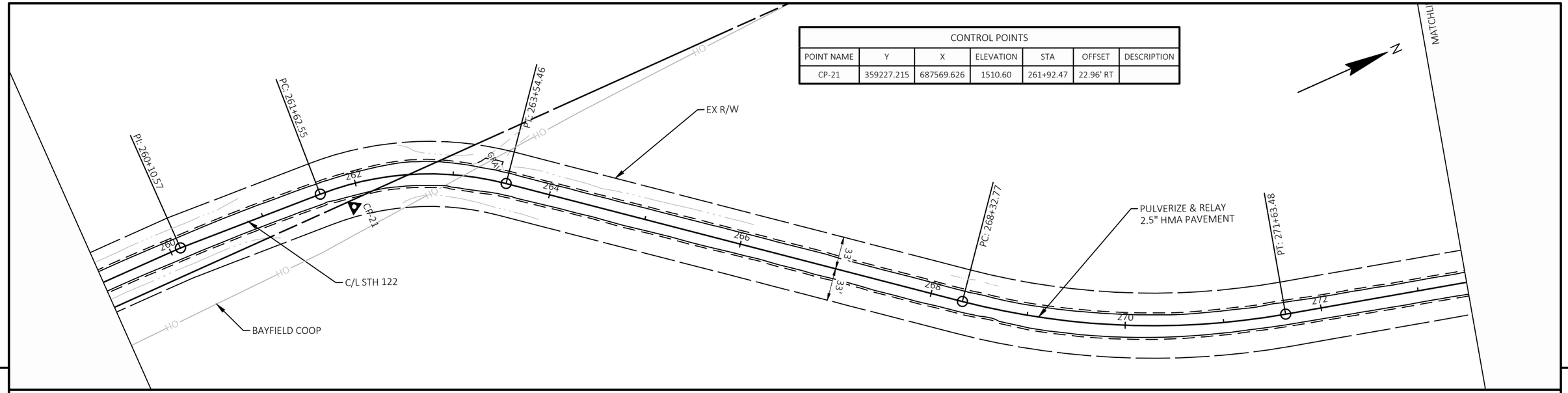
SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 71	E

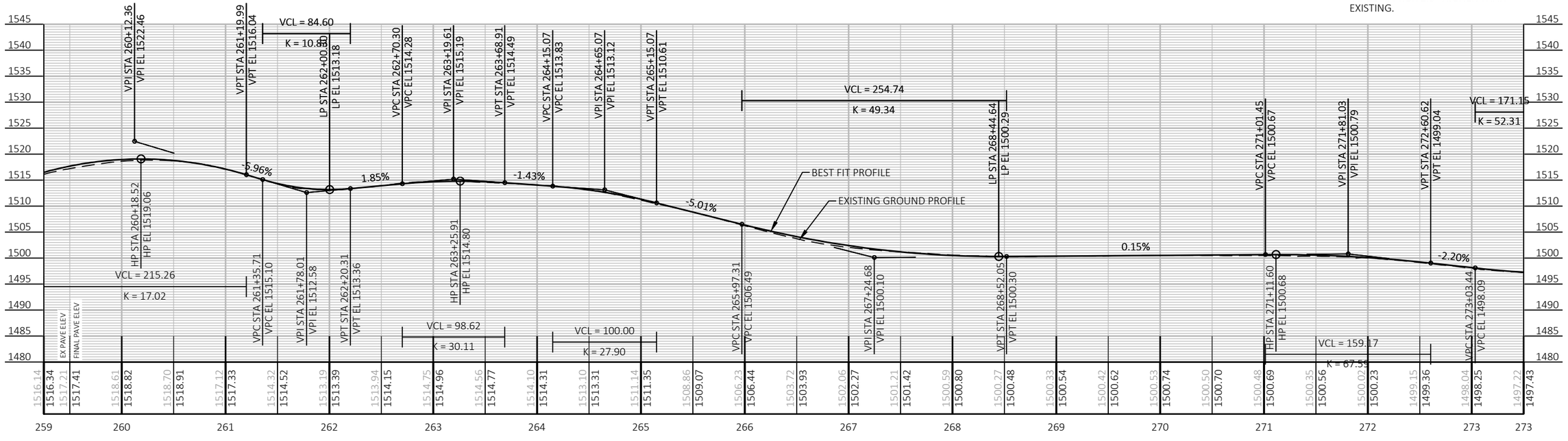
FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 16
PLOT DATE : 6/6/2024 1:00 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

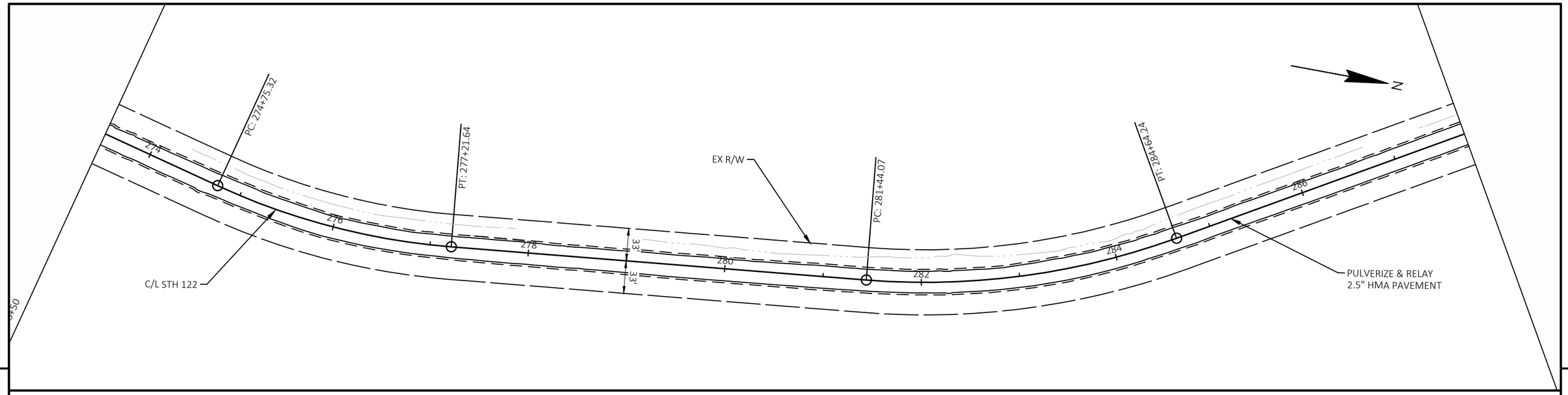
260+72.26 ENC
261+06.55 LC
261+40.83 RC
261+90.55 BFS
HIGH SIDE: 4.90%
LOW SIDE: -4.90%
263+26.46 EFS
HIGH SIDE: 4.90%
LOW SIDE: -4.90%
263+76.17 RC
264+10.46 LC
264+44.75 BNC
267+33.38 ENC
267+72.10 LC
268+10.83 RC
268+63.10 BFS
HIGH SIDE: -4.70%
LOW SIDE: -4.70%
271+33.15 EFS
HIGH SIDE: 4.70%
LOW SIDE: -4.70%
271+85.42 RC
272+24.15 LC
272+62.87 BNC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PLOT: PLAN & PROFILE	SHEET 72	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 17
PLOT DATE : 6/6/2024 1:00 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



273+73.21 ENC

274+11.99 LC

274+50.76 RC

275+06.99 BFS
HIGH SIDE: 4.90%
LOW SIDE: -4.90%

276+89.97 EFS
HIGH SIDE: 4.90%
LOW SIDE: -4.90%

277+46.20 RC

277+84.97 LC

278+23.75 BNC

SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

280+43.32 ENC

280+82.07 LC

281+20.82 RC

281+75.07 BFS
HIGH SIDE: 4.80%
LOW SIDE: -4.80%

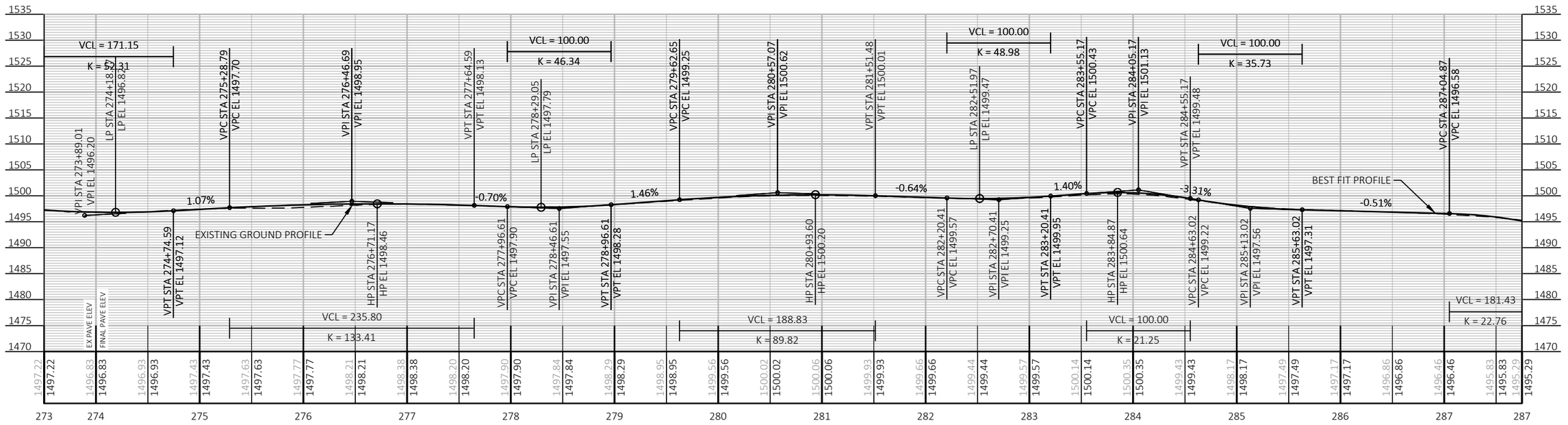
284+33.24 EFS
HIGH SIDE: 4.80%
LOW SIDE: -4.80%

284+87.49 RC

285+26.24 LC

285+64.99 BNC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

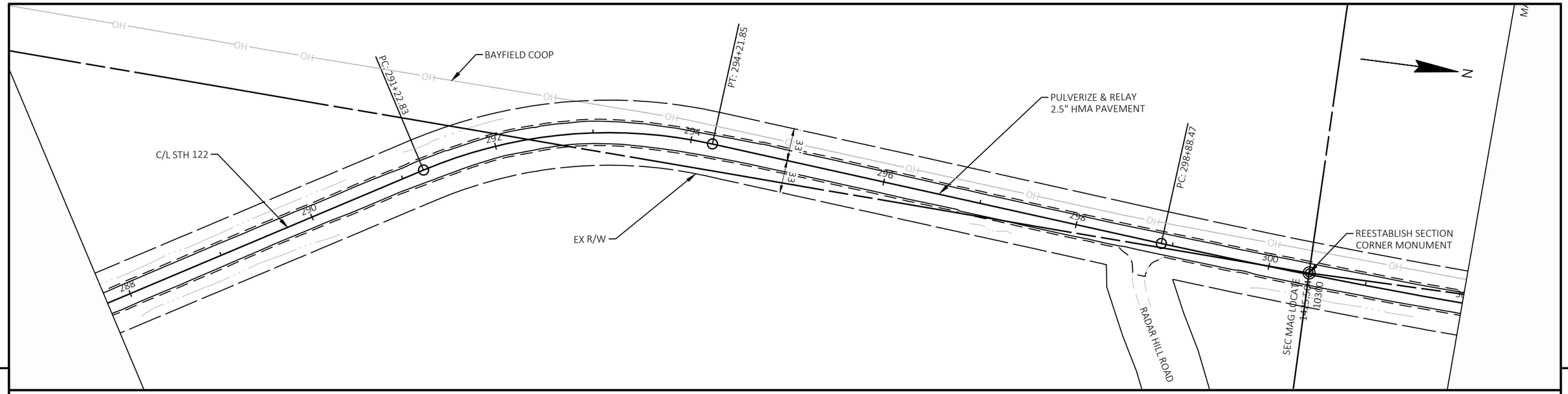


PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 73	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 18

PLOT DATE : 6/6/2024 1:01 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



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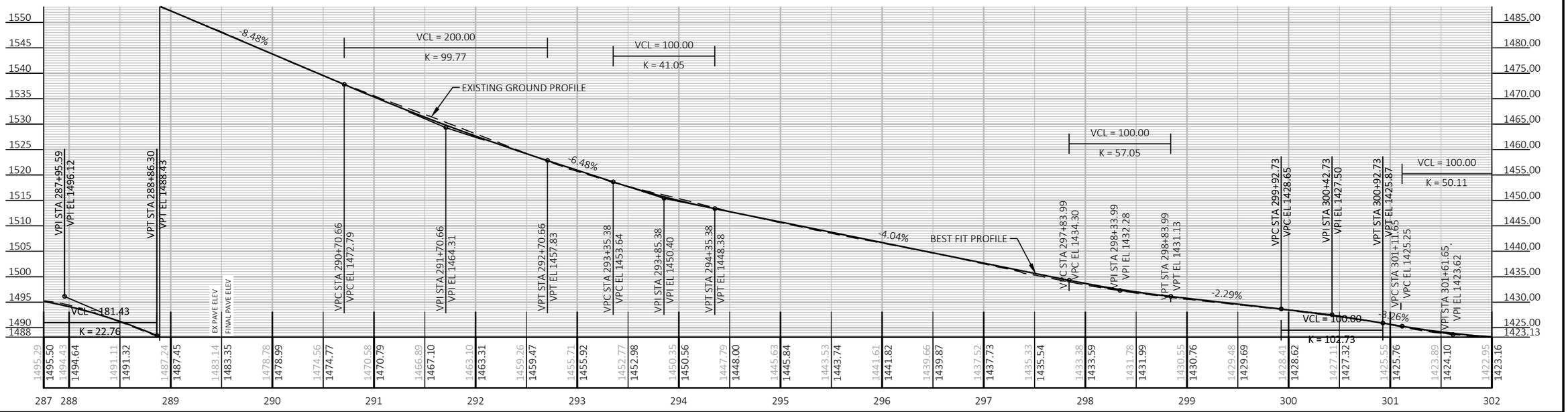
SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

290+51.93 ENC
290+84.16 LC
291+16.38 RC
291+42.16 BFS
HIGH SIDE: 3.60%
LOW SIDE: -3.60%
294+02.52 EFS
HIGH SIDE: 3.60%
LOW SIDE: -3.60%
294+28.30 RC
294+60.52 LC
294+92.74 BNC
298+03.47 ENC
298+54.47 LC
299+05.47 RC
299+05.47 BFS
HIGH SIDE: 2.00%
LOW SIDE: -2.00%

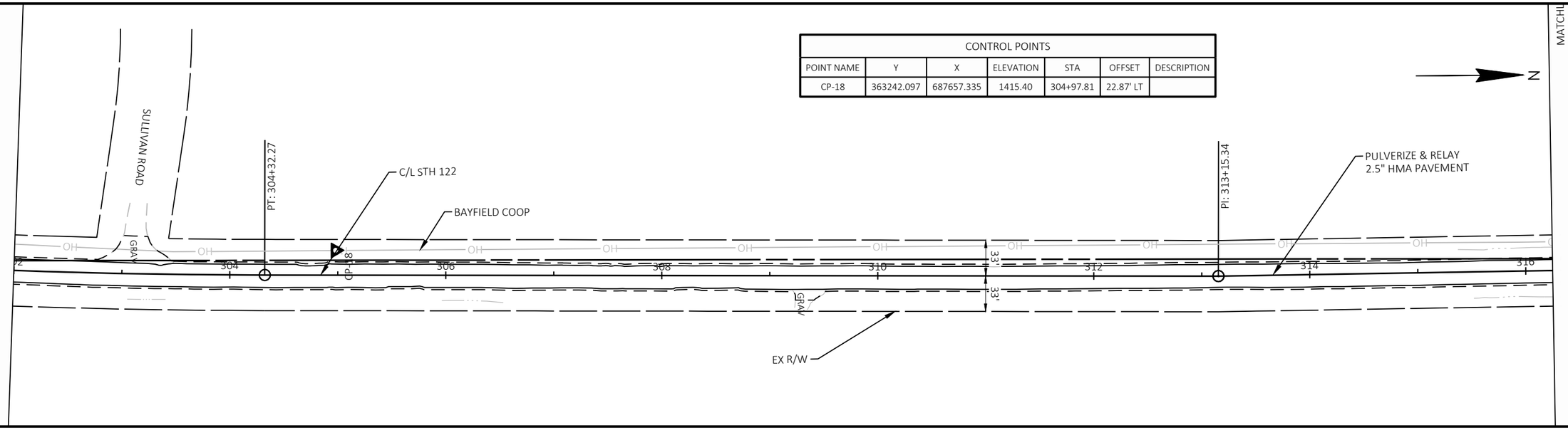
NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

5



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 74	E

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-18	363242.097	687657.335	1415.40	304+97.81	22.87' LT	



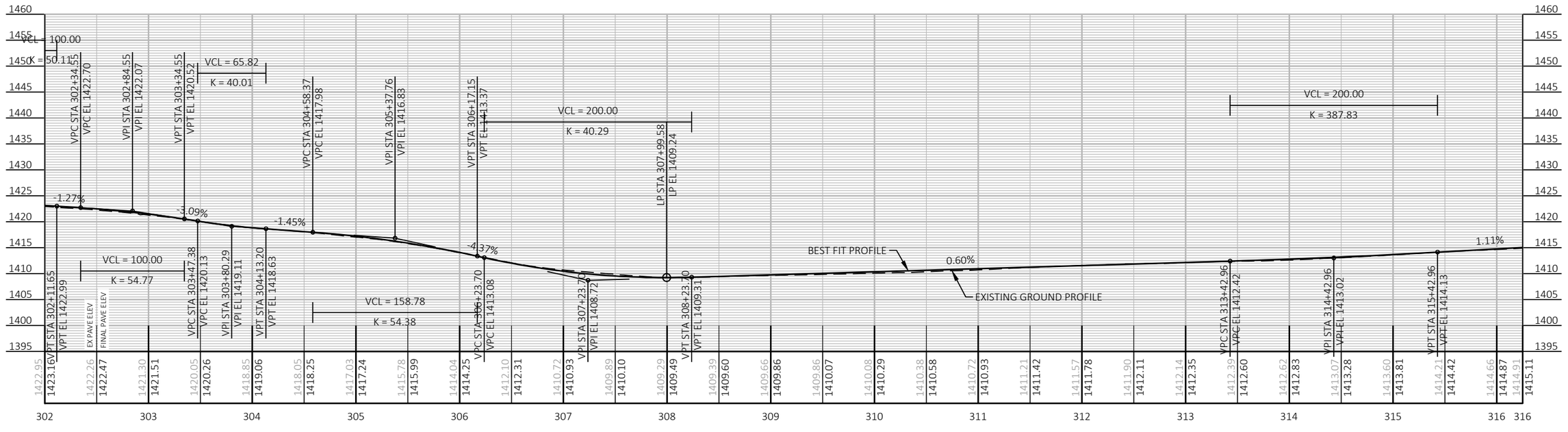
SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

304+15.27 RC
304+15.27 EFS
HIGH SIDE: 2.00%
LOW SIDE: -2.00%

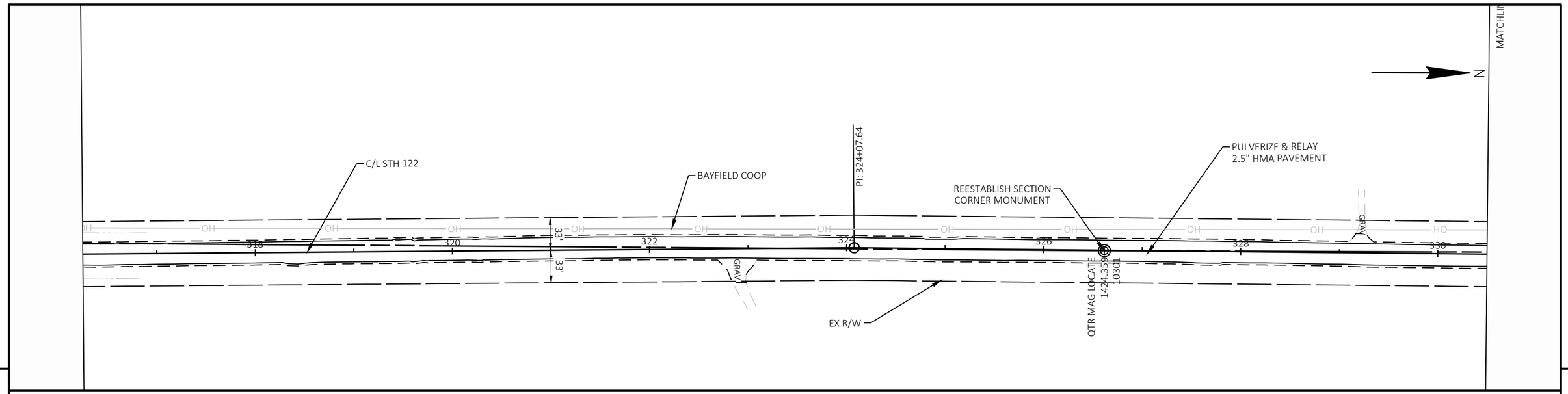
304+66.27 LC

305+17.27 BNC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 75	E



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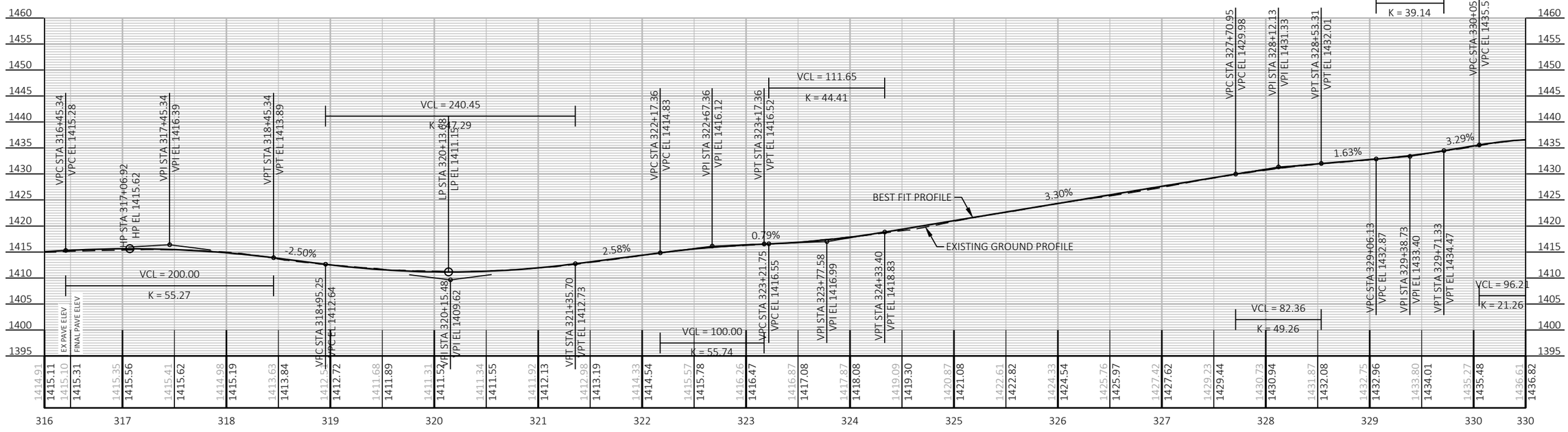
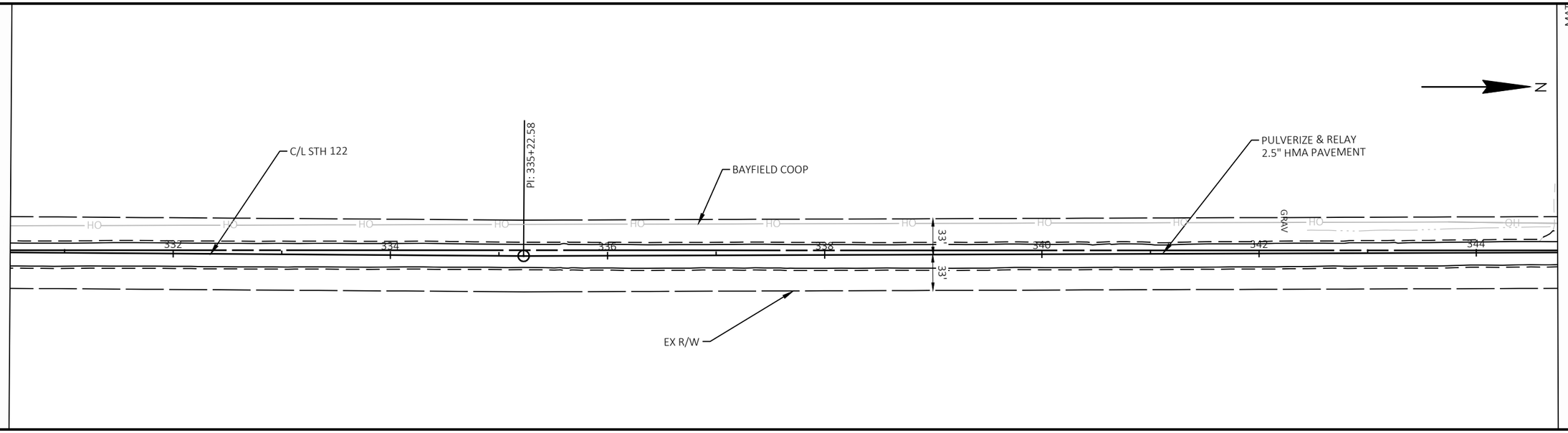
NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

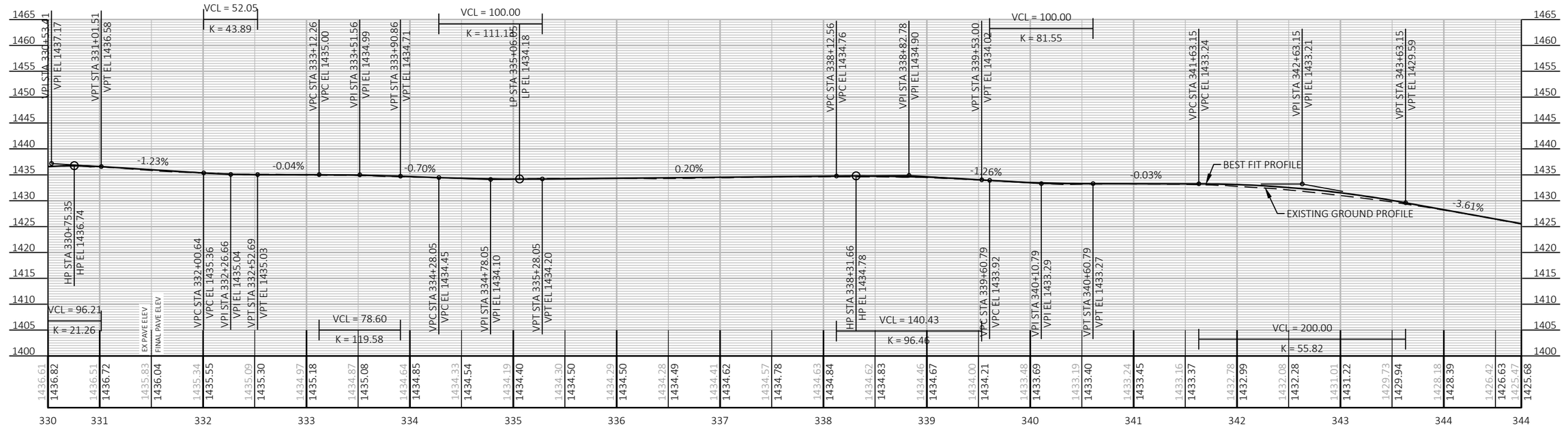


PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PLOT: PLAN & PROFILE	SHEET 76 E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 21
PLOT DATE : 6/6/2024 1:01 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



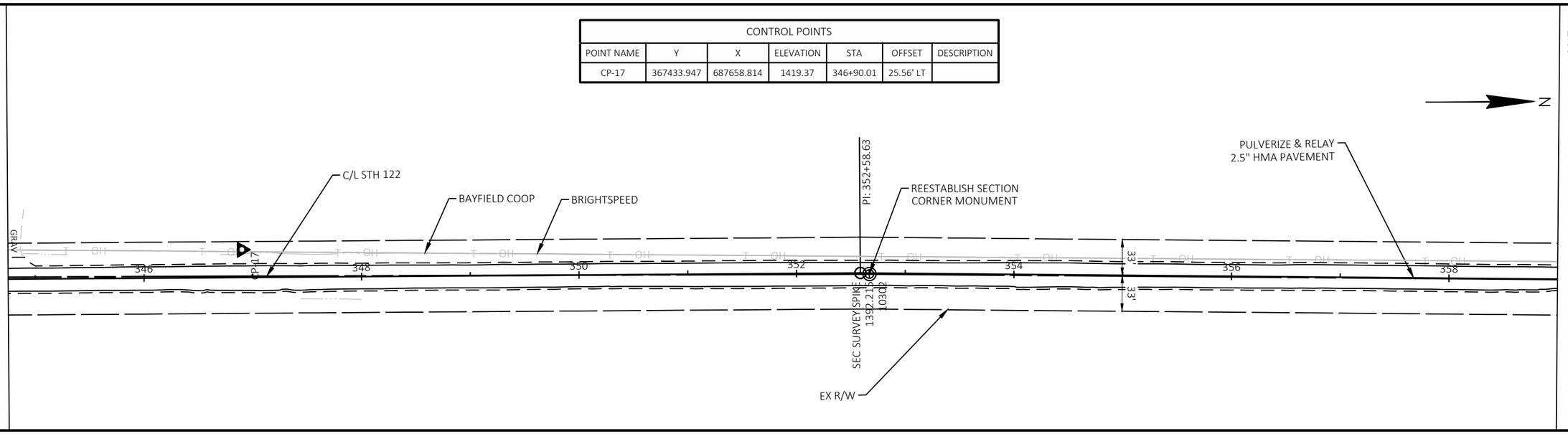
NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



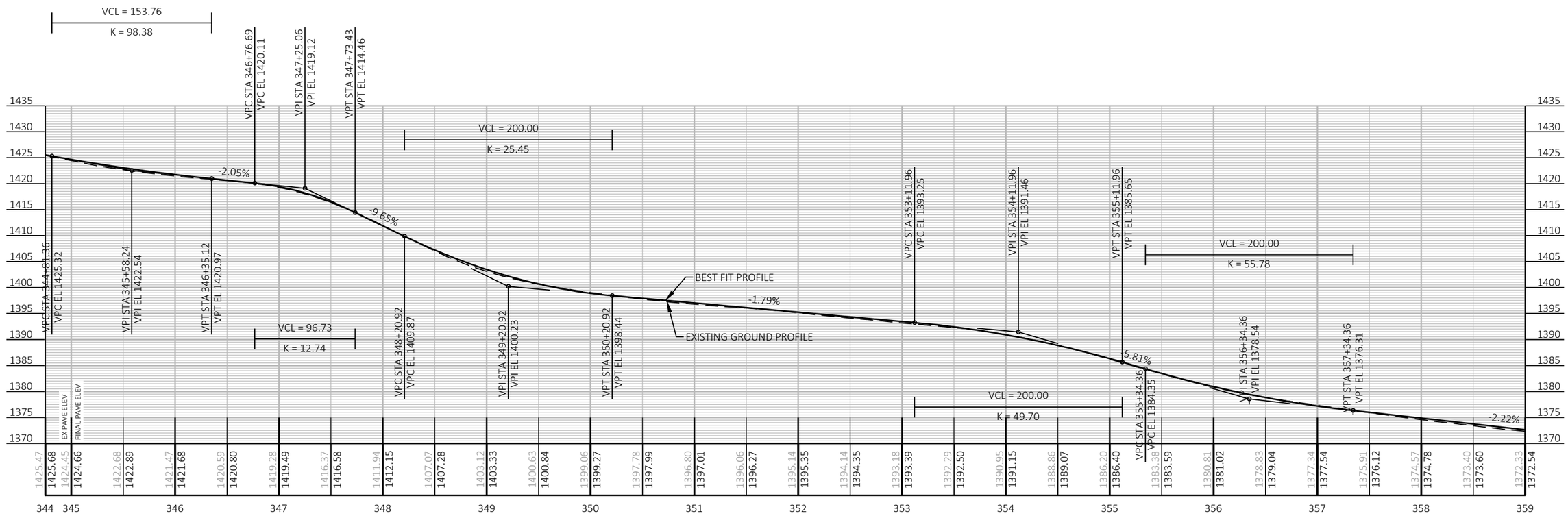
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 77	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 22
PLOT DATE : 6/6/2024 1:01 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

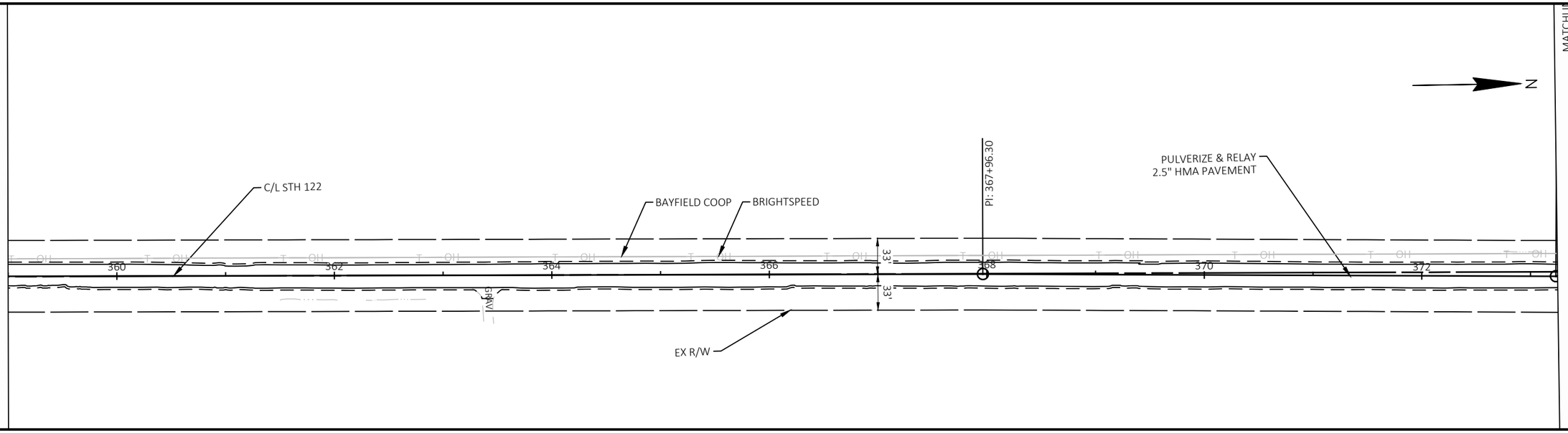
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-17	367433.947	687658.814	1419.37	346+90.01	25.56' LT	



NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 78 E



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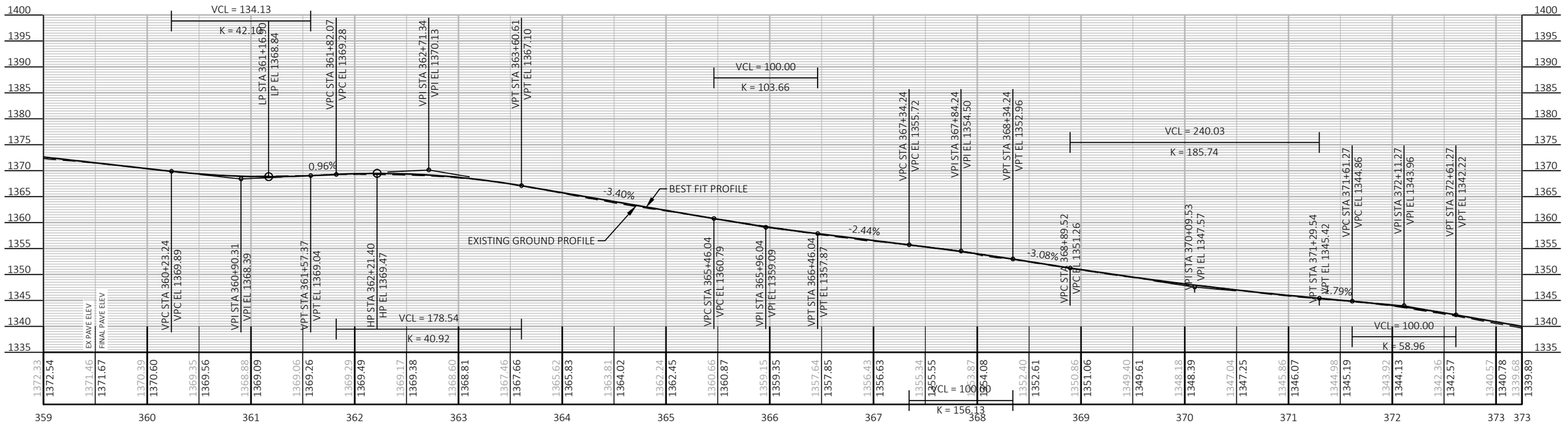
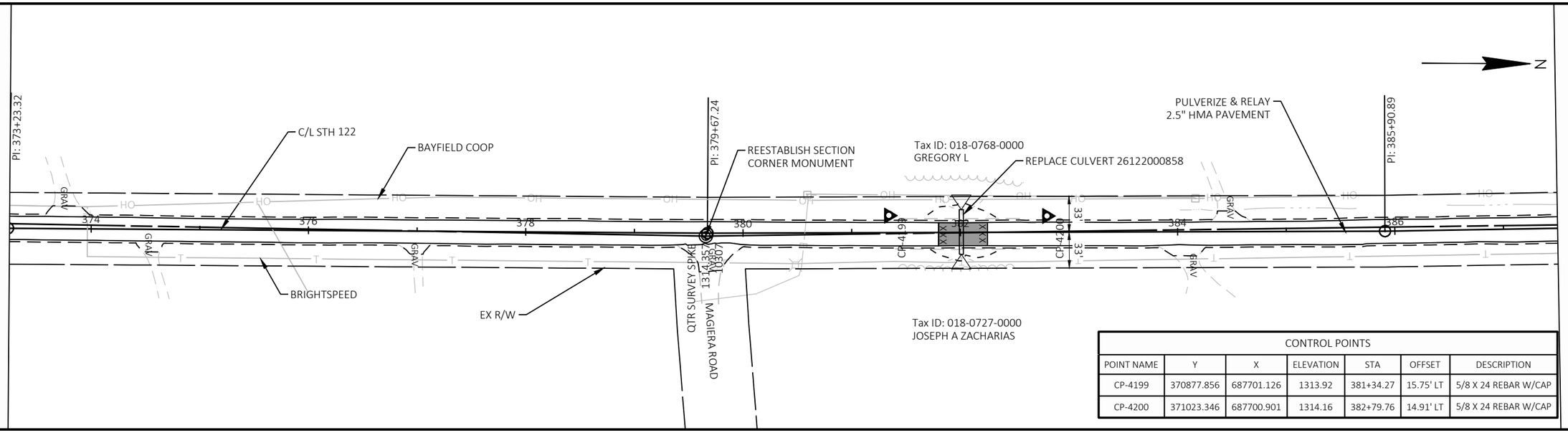
NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

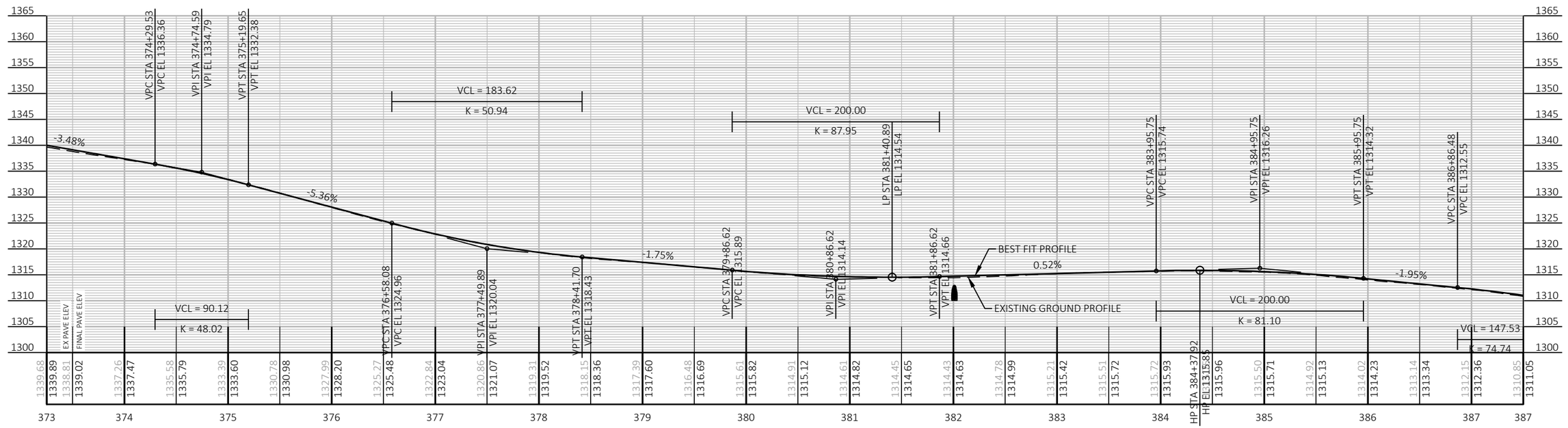


PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 79	E



CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-4199	370877.856	687701.126	1313.92	381+34.27	15.75' LT	5/8 X 24 REBAR W/CAP
CP-4200	371023.346	687700.901	1314.16	382+79.76	14.91' LT	5/8 X 24 REBAR W/CAP

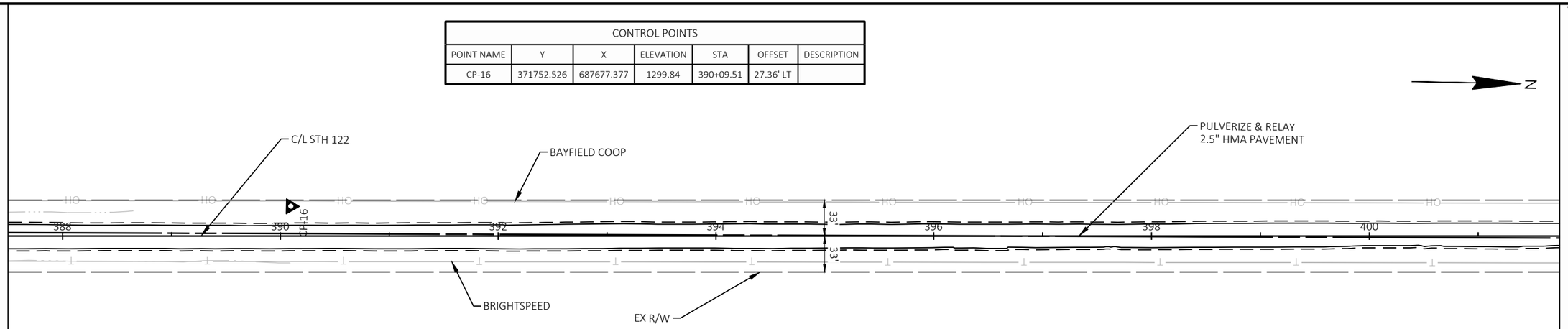
NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



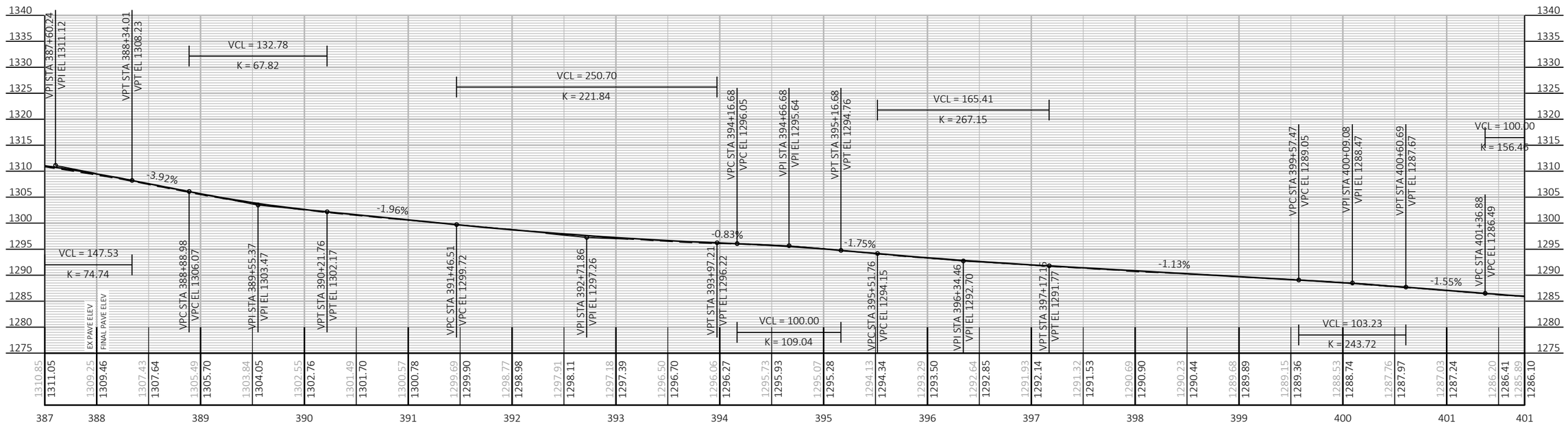
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 80	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 25
PLOT DATE : 6/6/2024 1:02 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

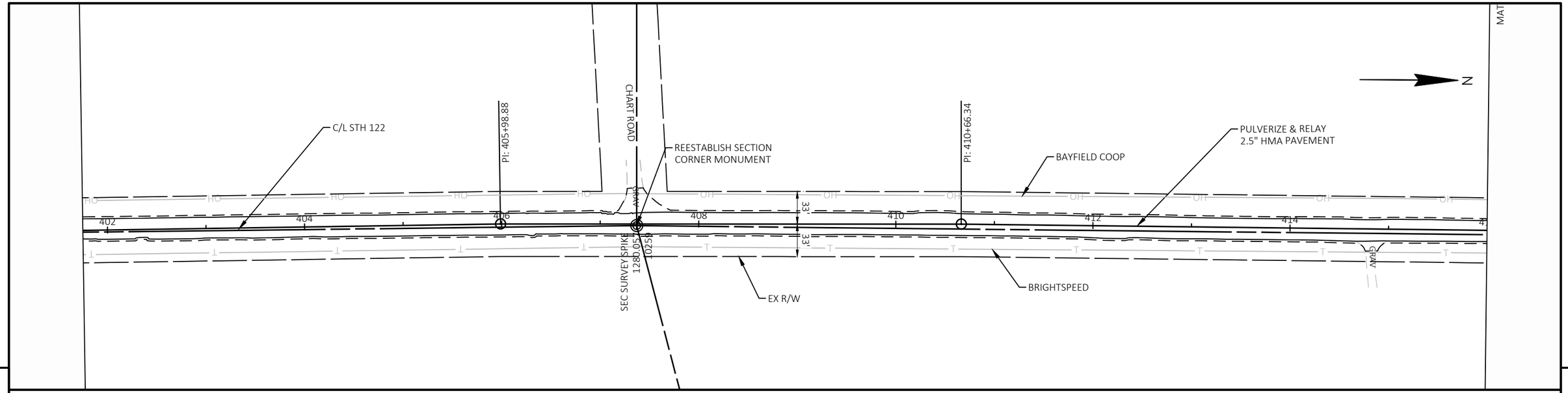
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-16	371752.526	687677.377	1299.84	390+09.51	27.36' LT	

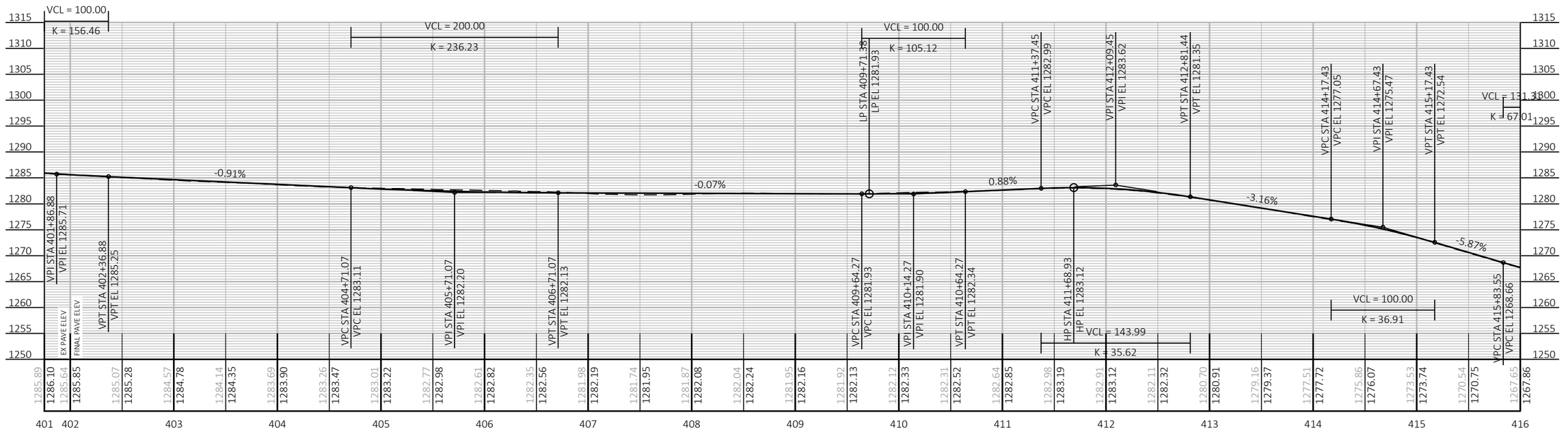


NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



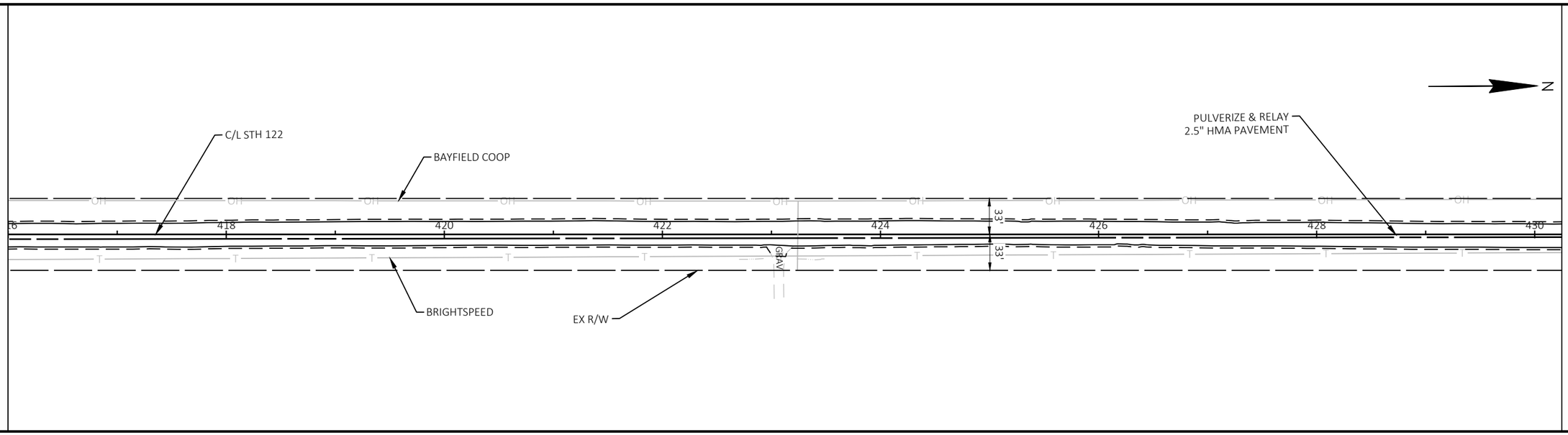
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PLOT: PLAN & PROFILE	SHEET 81	E



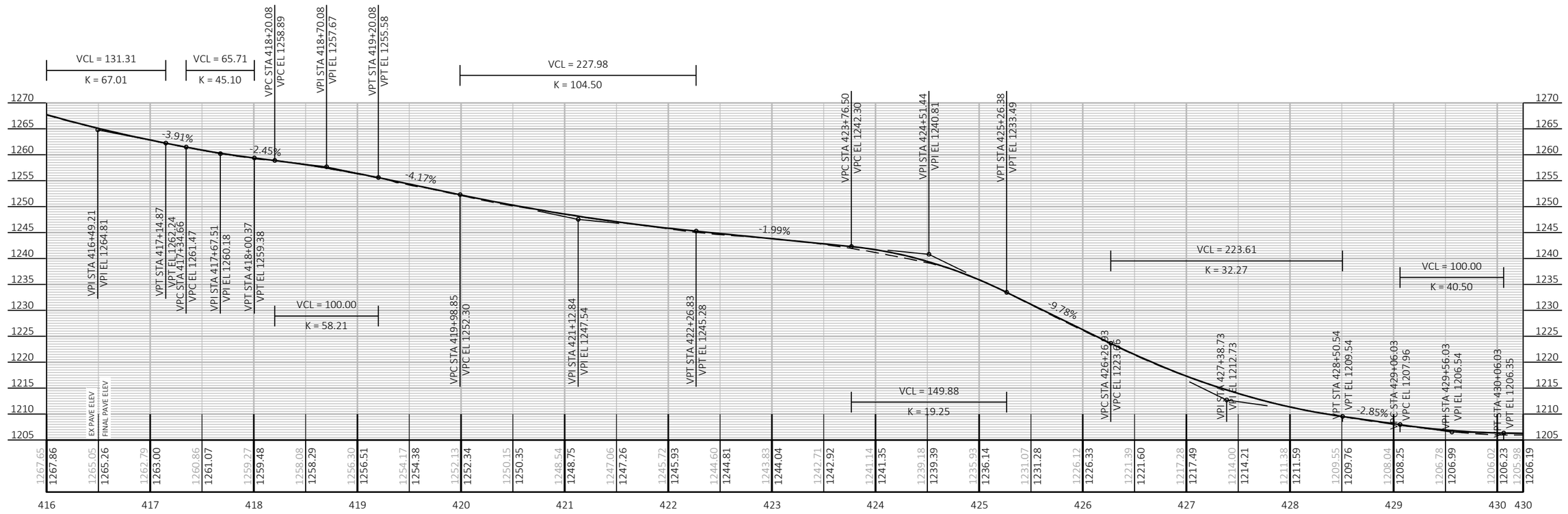


NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 82 E



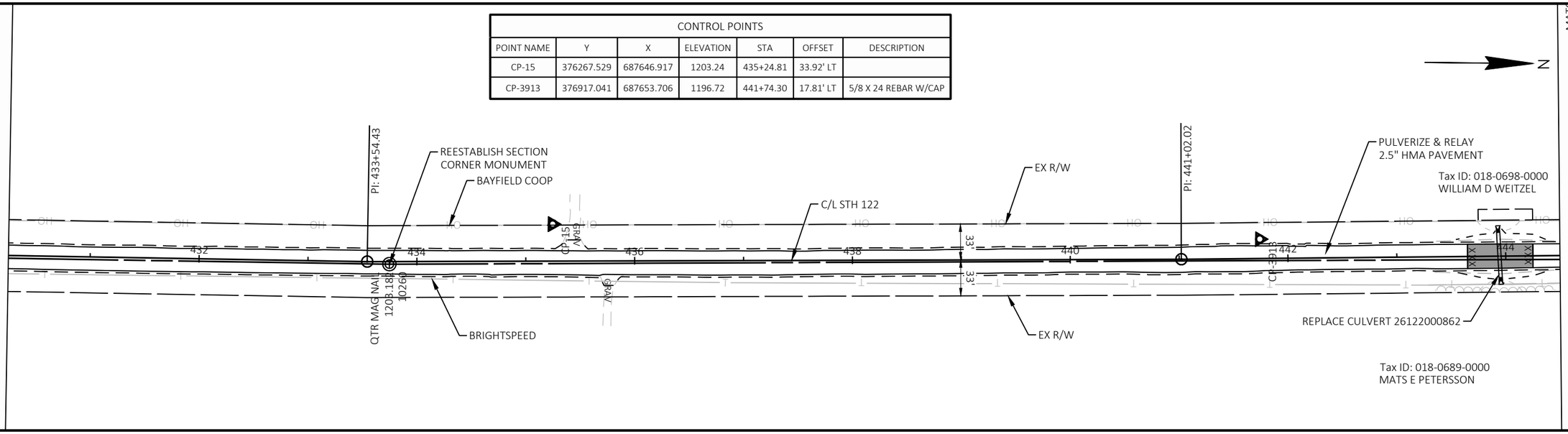
NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

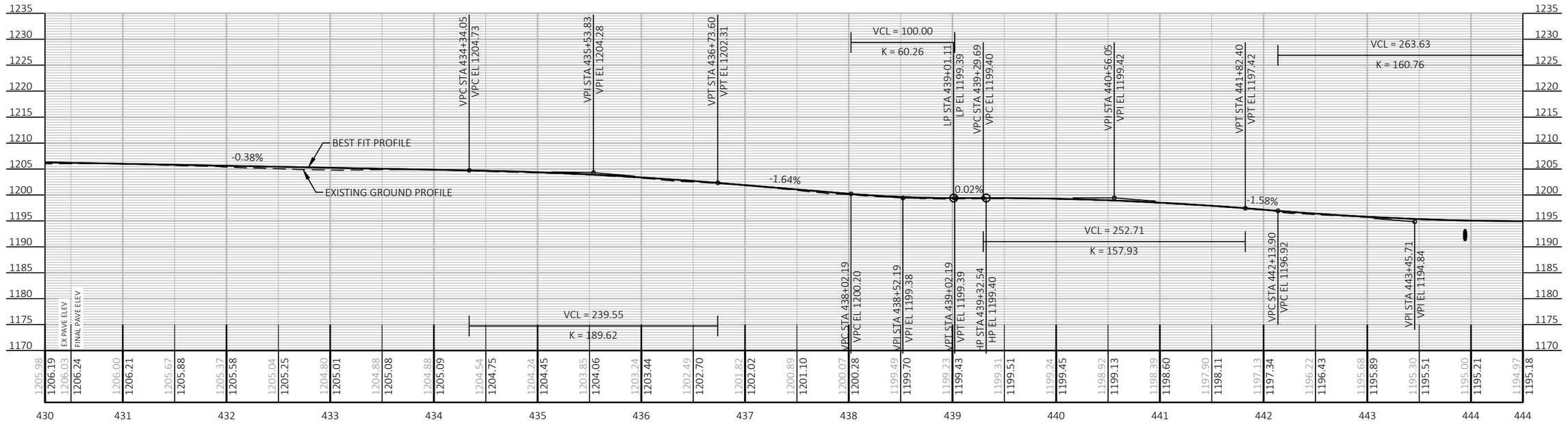


PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 83 E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 28
PLOT DATE : 6/6/2024 1:03 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-15	376267.529	687646.917	1203.24	435+24.81	33.92' LT	
CP-3913	376917.041	687653.706	1196.72	441+74.30	17.81' LT	5/8 X 24 REBAR W/CAP



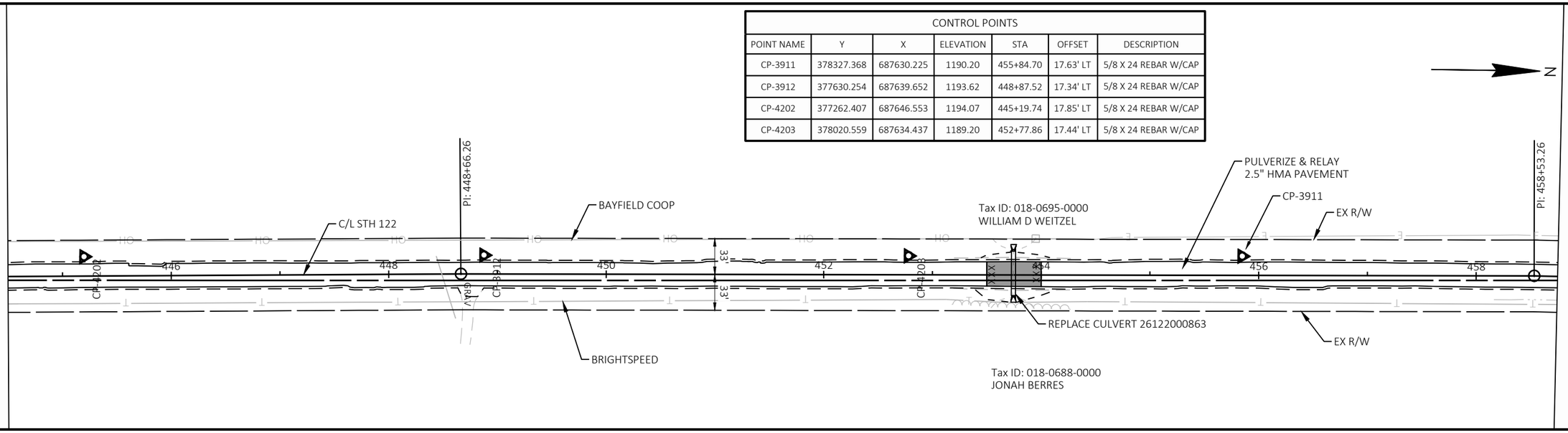


NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

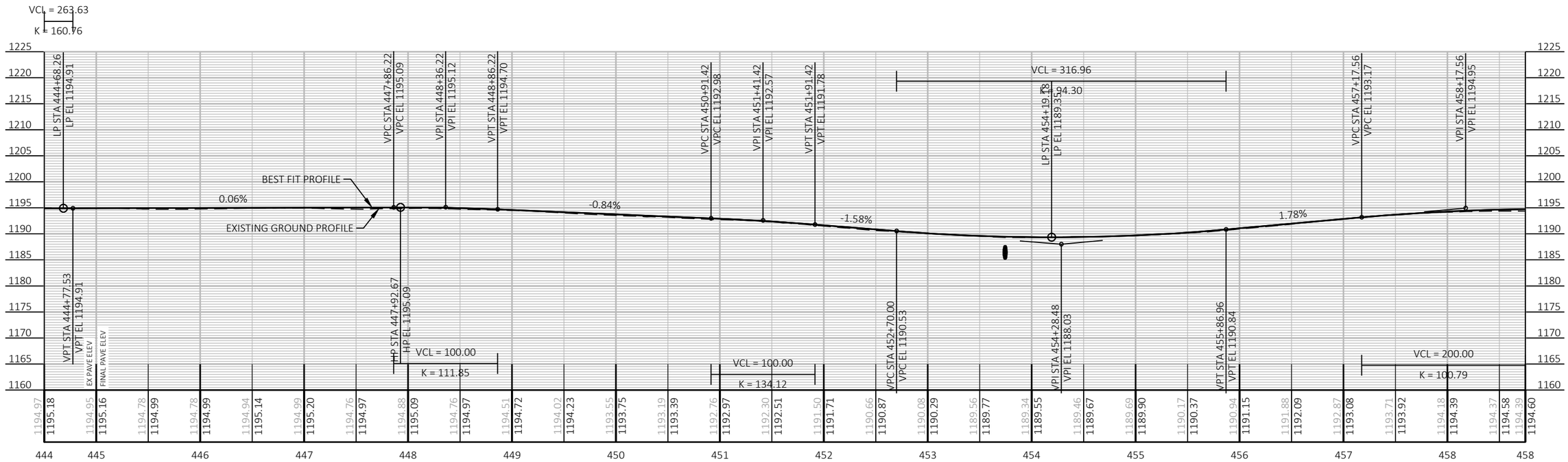
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 84 E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050104-PP.DWG
LAYOUT NAME - 29
PLOT DATE : 6/6/2024 1:03 PM PLOT BY : DEITCH, AIDAN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-3911	378327.368	687630.225	1190.20	455+84.70	17.63' LT	5/8 X 24 REBAR W/CAP
CP-3912	377630.254	687639.652	1193.62	448+87.52	17.34' LT	5/8 X 24 REBAR W/CAP
CP-4202	377262.407	687646.553	1194.07	445+19.74	17.85' LT	5/8 X 24 REBAR W/CAP
CP-4203	378020.559	687634.437	1189.20	452+77.86	17.44' LT	5/8 X 24 REBAR W/CAP

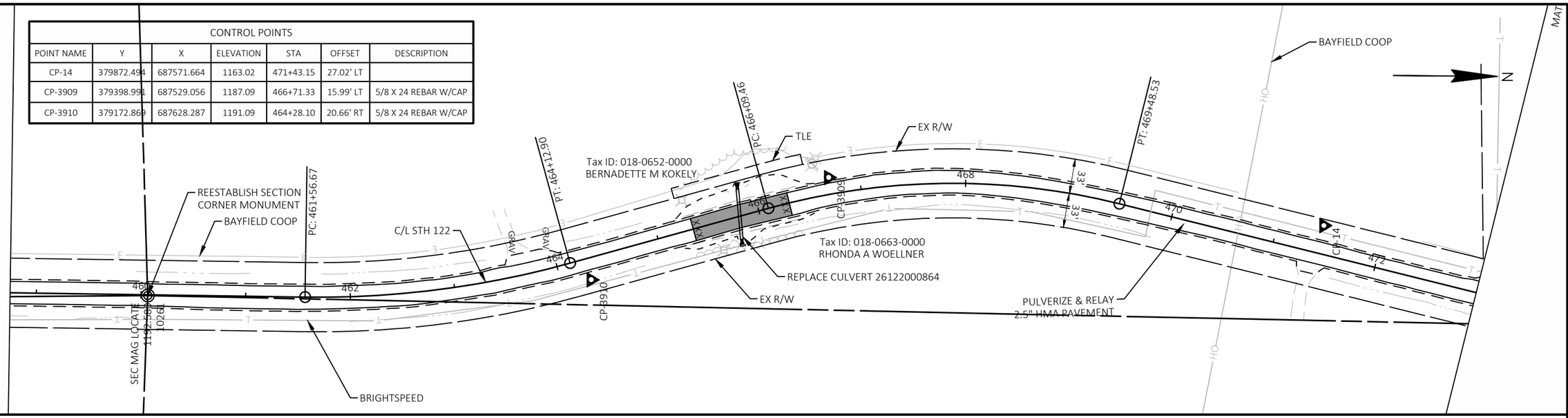


NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 85	E

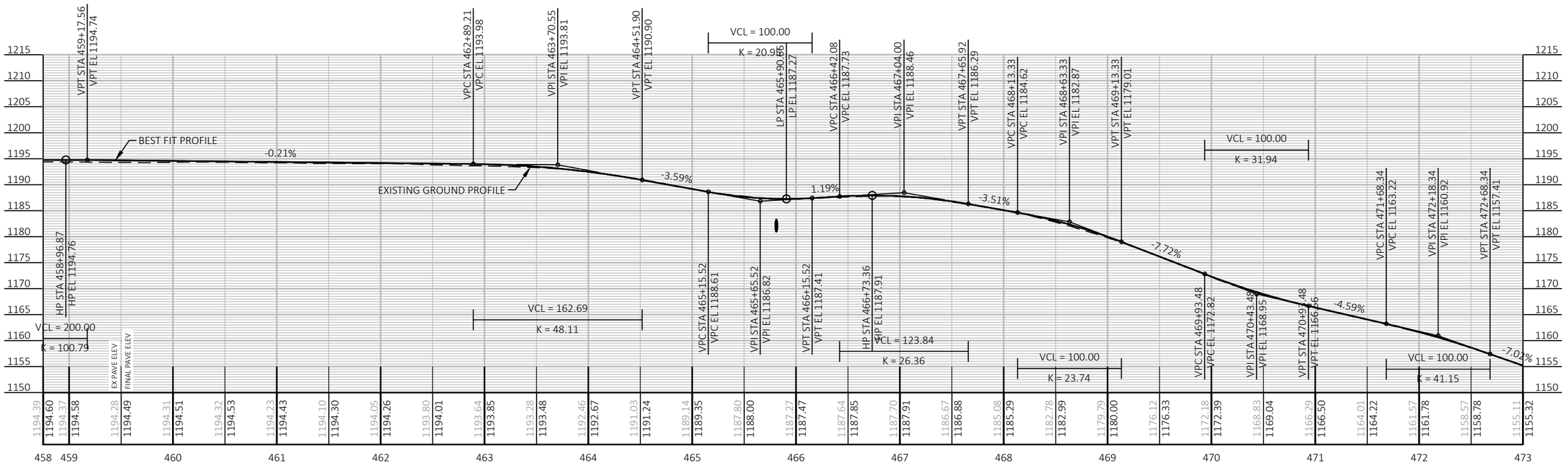
CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-14	379872.494	687571.664	1163.02	471+43.15	27.02' LT	
CP-3909	379398.991	687529.056	1187.09	466+71.33	15.99' LT	5/8 X 24 REBAR W/CAP
CP-3910	379172.869	687628.287	1191.09	464+28.10	20.66' RT	5/8 X 24 REBAR W/CAP



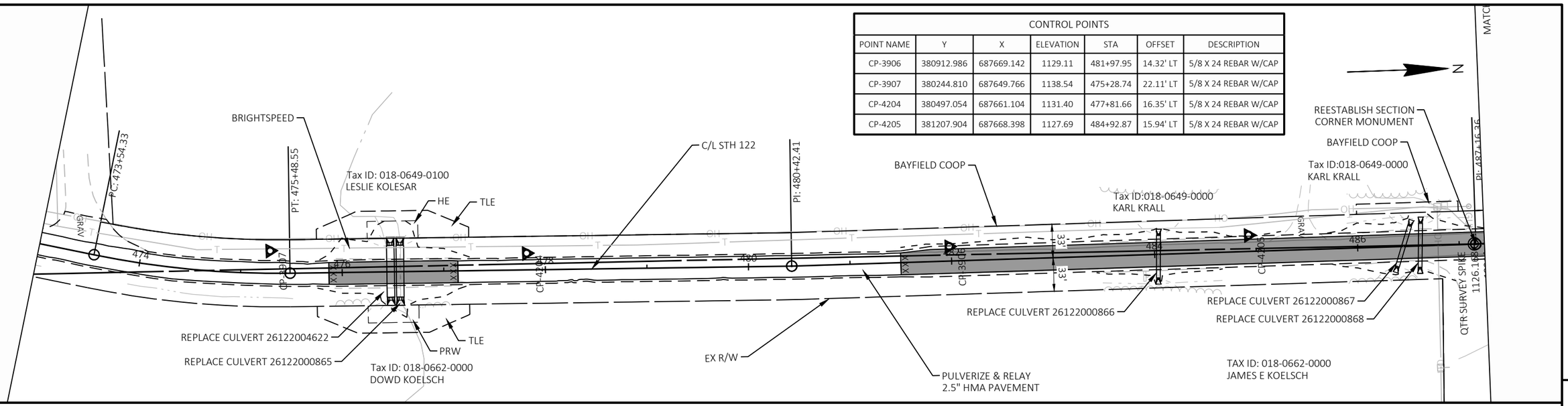
SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

460+85.63 ENC
461+20.00 LC
461+54.38 RC
461+75.00 BFS
HIGH SIDE: 3.20%
LOW SIDE: -3.20%
463+94.57 EFS
HIGH SIDE: 3.20%
LOW SIDE: -3.20%
464+15.20 RC
464+49.57 LC
464+83.95 BNC
465+33.40 ENC
465+67.46 LC
466+01.51 RC
466+30.46 BFS
HIGH SIDE: 3.70%
LOW SIDE: -3.70%
469+27.54 EFS
HIGH SIDE: 3.70%
LOW SIDE: -3.70%
469+56.48 RC
469+90.54 LC
470+24.59 BNC
472+95.83 ENC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 86	E



CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-3906	380912.986	687669.142	1129.11	481+97.95	14.32' LT	5/8 X 24 REBAR W/CAP
CP-3907	380244.810	687649.766	1138.54	475+28.74	22.11' LT	5/8 X 24 REBAR W/CAP
CP-4204	380497.054	687661.104	1131.40	477+81.66	16.35' LT	5/8 X 24 REBAR W/CAP
CP-4205	381207.904	687668.398	1127.69	484+92.87	15.94' LT	5/8 X 24 REBAR W/CAP

473+28.33 LC

473+60.83 RC

473+67.33 BFS
HIGH SIDE: 2.40%
LOW SIDE: -2.40%

475+35.55 EFS
HIGH SIDE: 2.40%
LOW SIDE: -2.40%

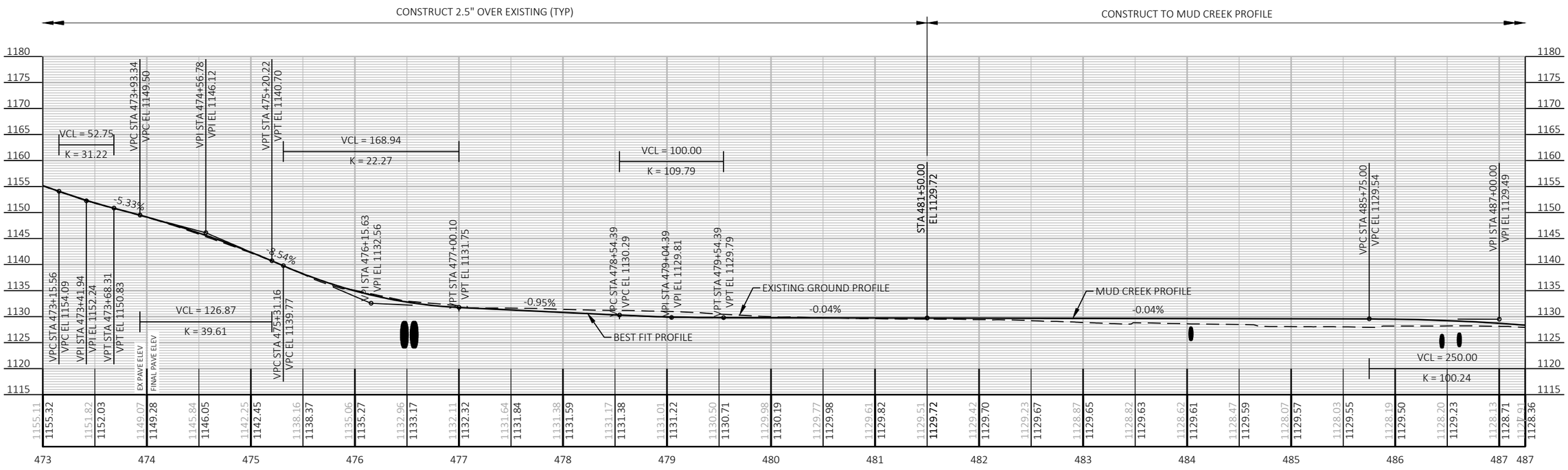
475+42.05 RC

475+74.55 LC

476+07.05 BNC

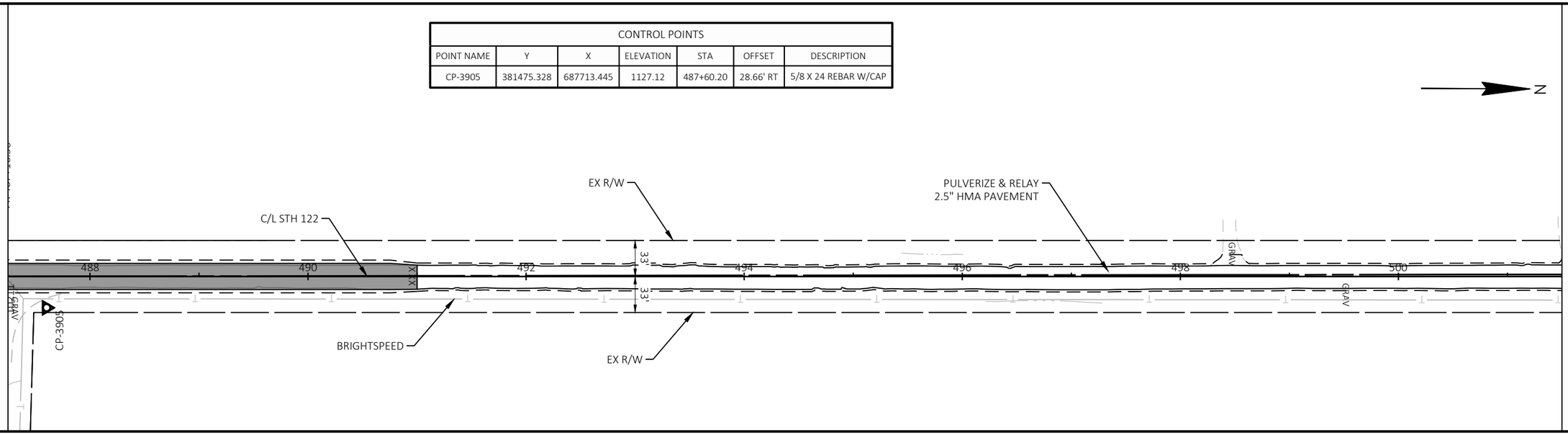
SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 87	E

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-3905	381475.328	687713.445	1127.12	487+60.20	28.66' RT	5/8 X 24 REBAR W/CAP



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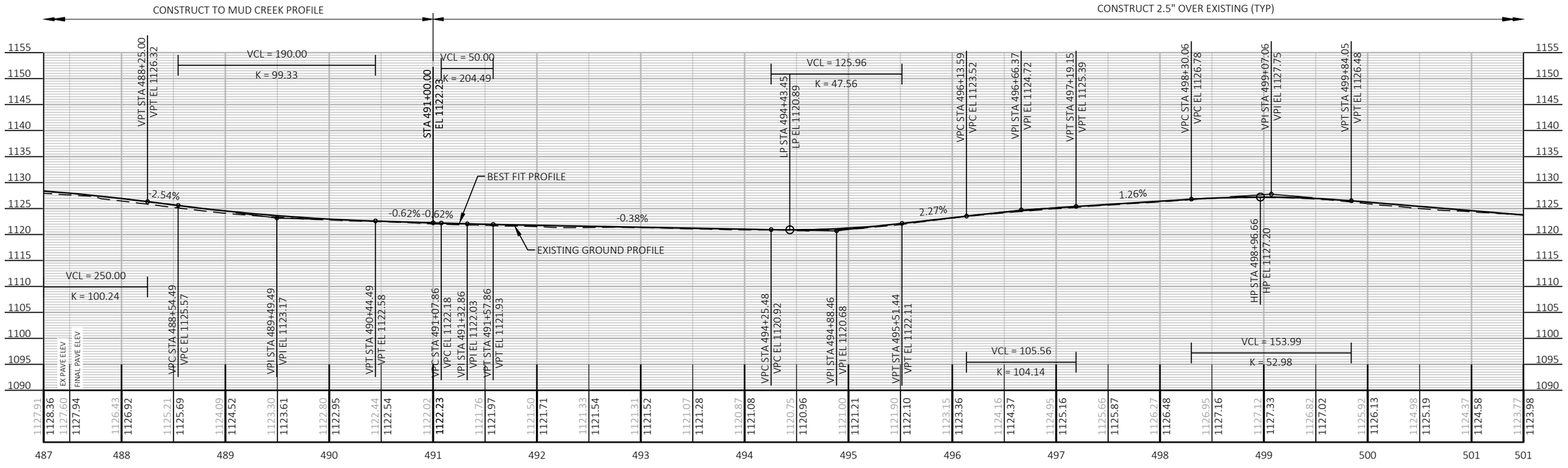
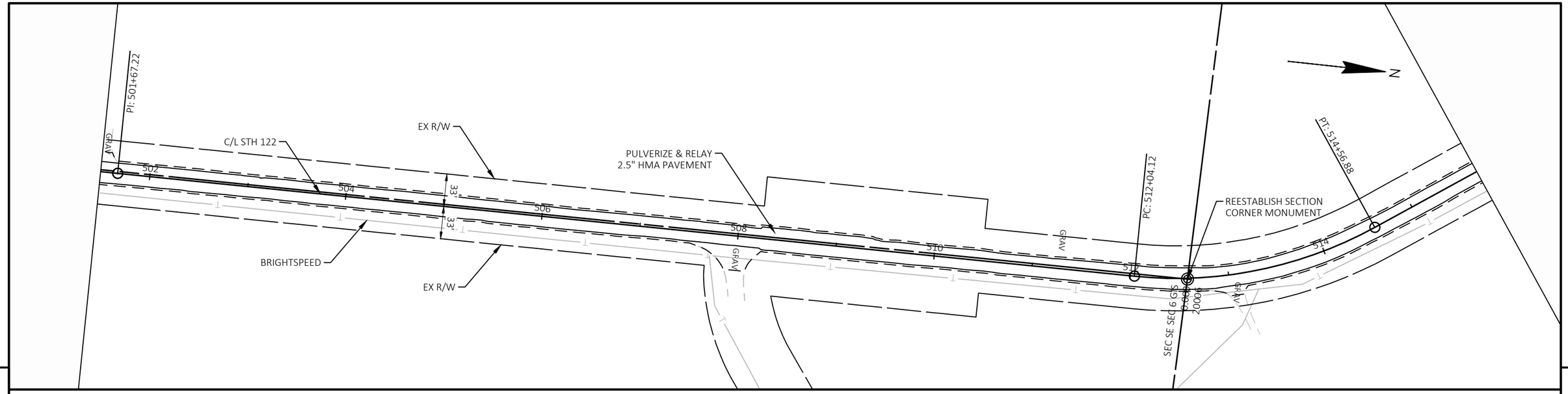
SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

5



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 88	E



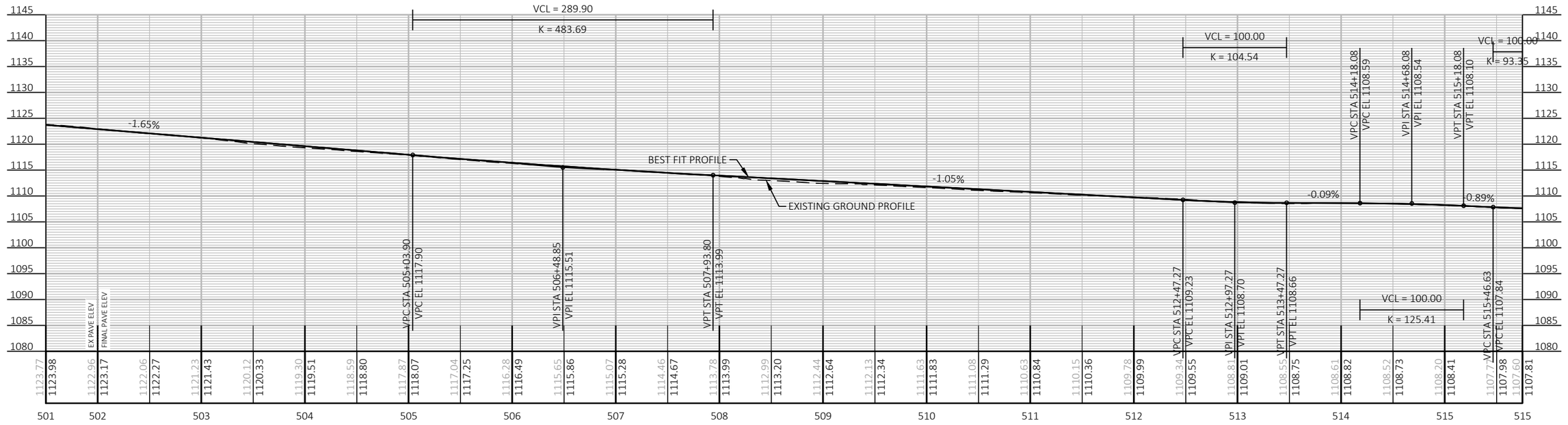
5

SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

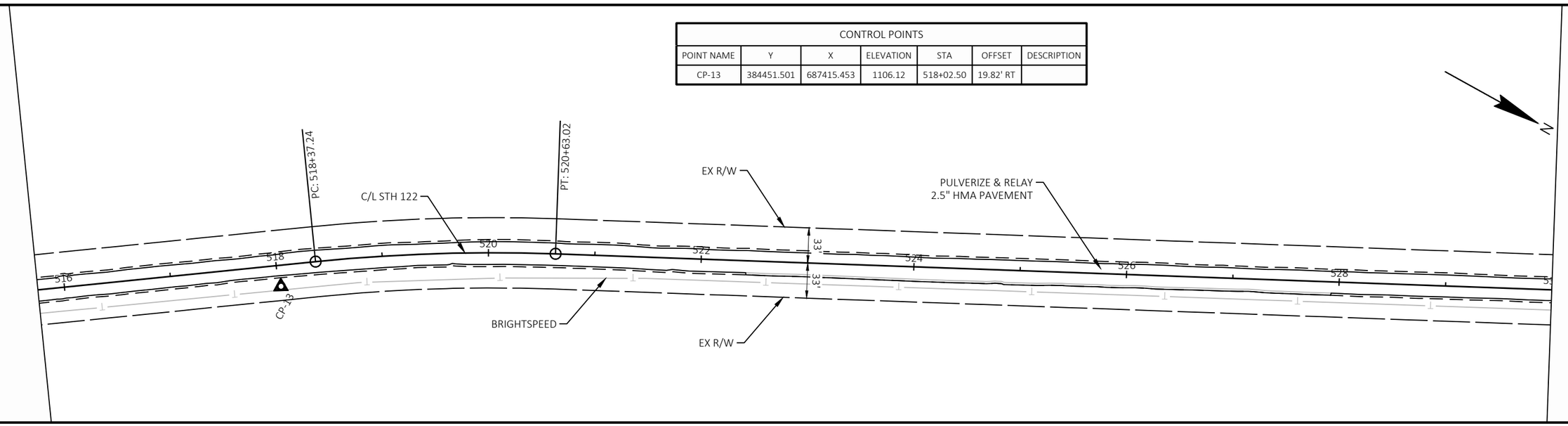
511+20.03 ENC
511+54.12 LC
511+88.21 RC
512+29.12 BFS
HIGH SIDE: 4.40%
LOW SIDE: -4.40%
514+31.89 EFS
HIGH SIDE: 4.40%
LOW SIDE: -4.40%
514+72.80 RC
515+06.89 LC
515+40.98 BNC

5



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 89	E

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-13	384451.501	687415.453	1106.12	518+02.50	19.82' RT	



SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

517+69.75 ENC

518+05.90 LC

518+42.06 RC

518+52.90 BFS
HIGH SIDE: 2.60%
LOW SIDE: -2.60%

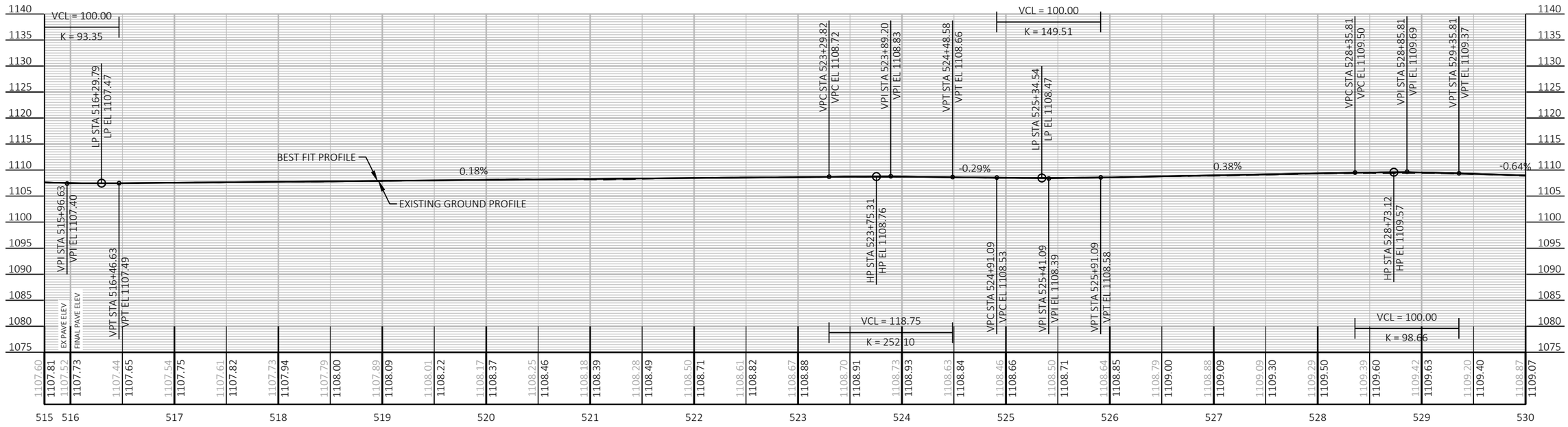
520+47.35 EFS
HIGH SIDE: 2.60%
LOW SIDE: -2.60%

520+58.20 RC

520+94.35 LC

521+30.51 BNC

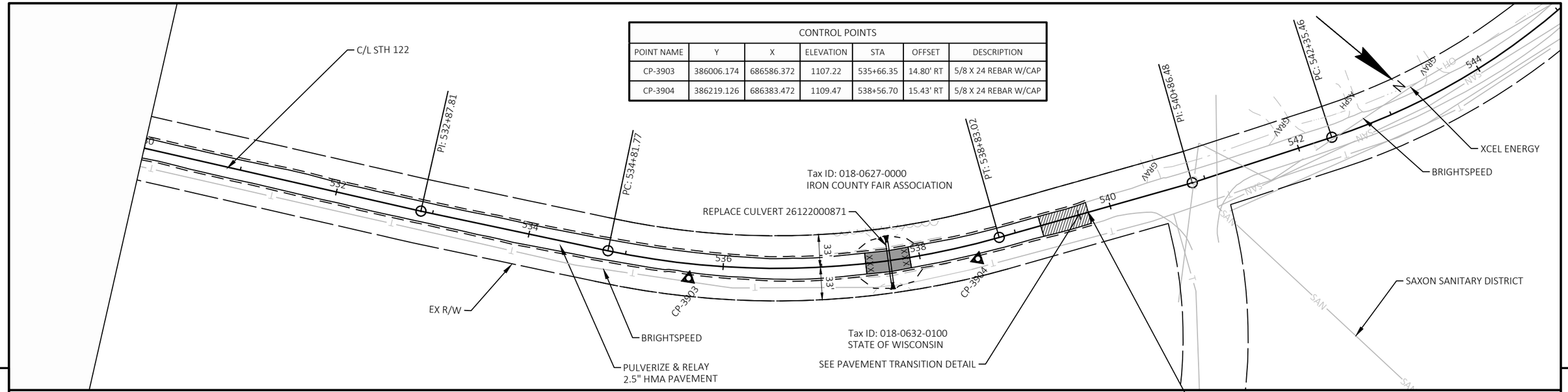
NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 90	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\050104-PP.DWG
LAYOUT NAME - 35
PLOT DATE : 6/6/2024 1:04 PM
PLOT BY : DEITCH, AIDAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

CONTROL POINTS						
POINT NAME	Y	X	ELEVATION	STA	OFFSET	DESCRIPTION
CP-3903	386006.174	686586.372	1107.22	535+66.35	14.80' RT	5/8 X 24 REBAR W/CAP
CP-3904	386219.126	686383.472	1109.47	538+56.70	15.43' RT	5/8 X 24 REBAR W/CAP



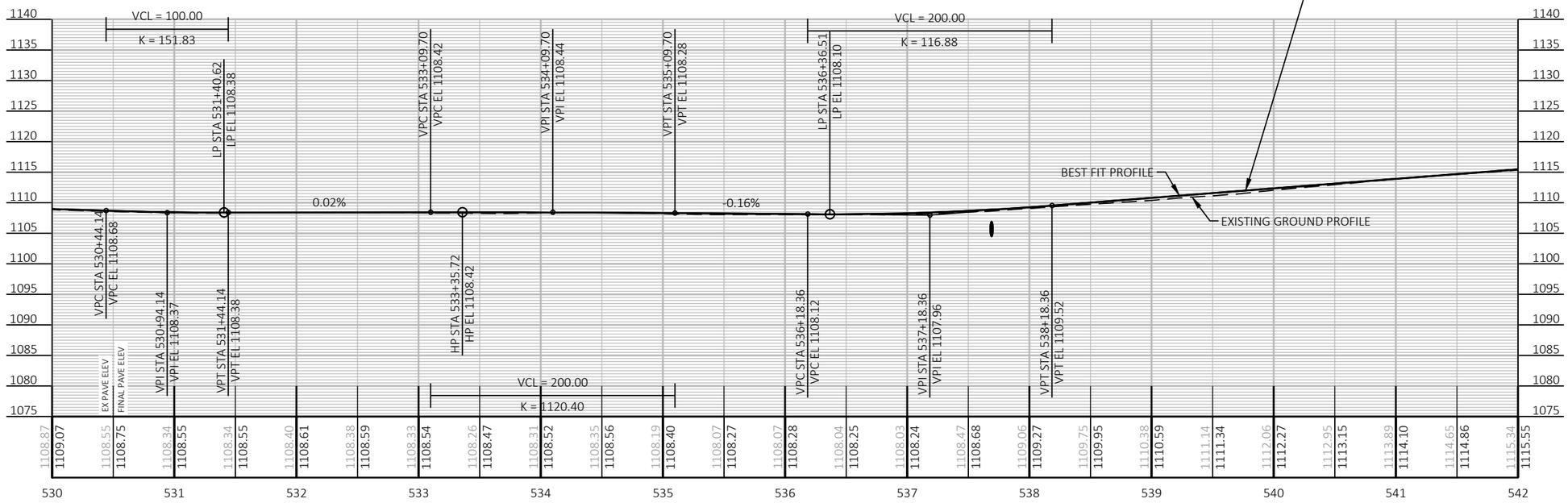
SUPERELEVATION INFORMATION:
BNC - BEGIN NORMAL CROWN
ENC - END NORMAL CROWN
BFS - BEGIN FULL SUPERELEVATION
EFS - END FULL SUPERELEVATION
RC- REVERSE CROWN
LC - LEVEL CROWN

534+21.46 ENC
534+53.77 LC
534+86.07 RC
534+95.77 BFS
HIGH SIDE: 2.60%
LOW SIDE: -2.60%

538+69.02 EFS
HIGH SIDE: 2.60%
LOW SIDE: -2.60%
538+78.71 RC
539+11.02 LC
539+43.33 BNC

541+59.68 ENC
541+94.12 LC

NOTES:
BEST FIT PROFILE FOR INFORMATION ONLY. FINAL PROFILE OF ROADWAY TO BE APPROX 2.5" HIGHER THAN EXISTING.

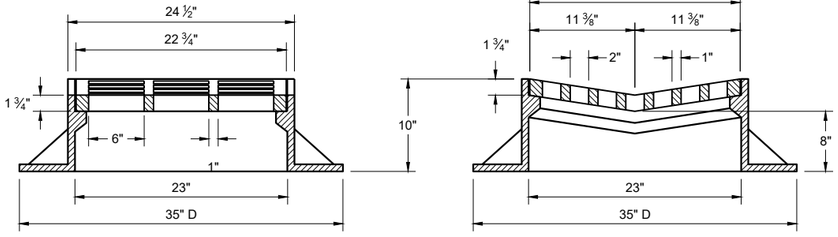


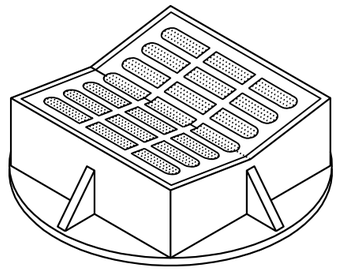
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	PLAN AND PROFILE: PLAN & PROFILE	SHEET 91	E

Standard Detail Drawing List

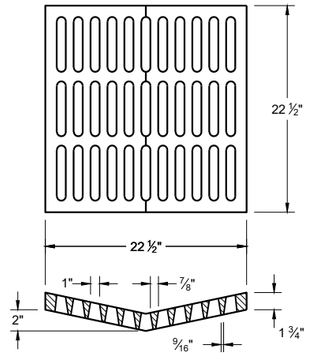
08A05-21B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08C08-03	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D02-08A	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08B	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08D02-08C	CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E11-02	TURBIDITY BARRIER
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A03-07	CONCRETE PAVEMENT SHOULDERS
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13C11-14A	RURAL DOWELED CONCRETE PAVEMENT
13C11-14B	RURAL DOWELED CONCRETE PAVEMENT
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

6





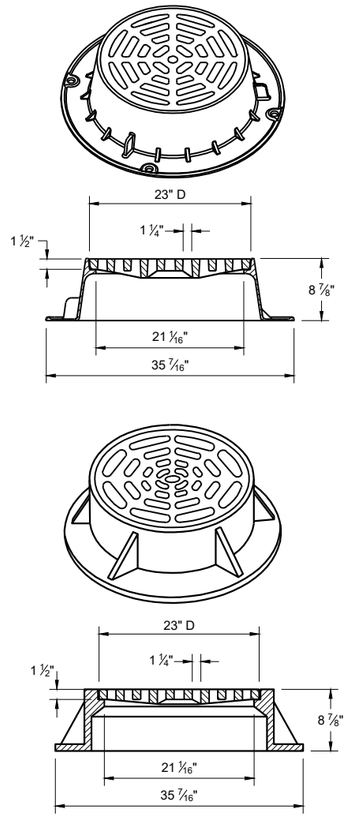
TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE

NOTED AS TYPE B - A ON THE DRAINAGE TABLE



TYPE "C"

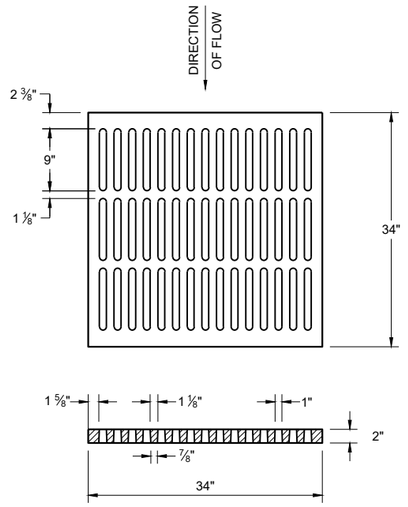
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

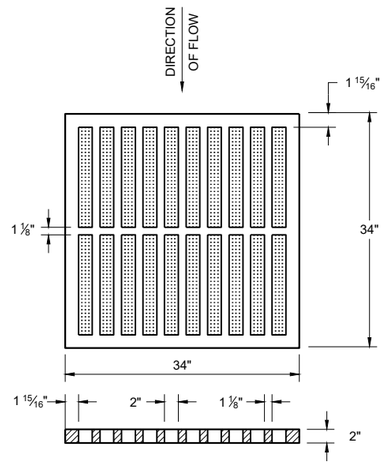
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

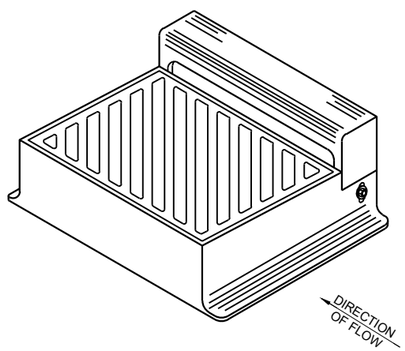
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



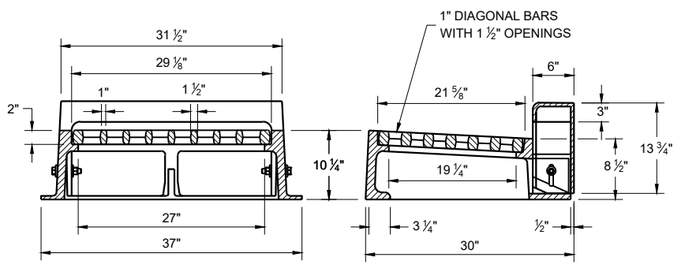
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE



DIAGONAL SLOTS SHALL BE ORIENTEDTO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

INLET COVERS TYPES B, B-A, C, MS, MS-A AND WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

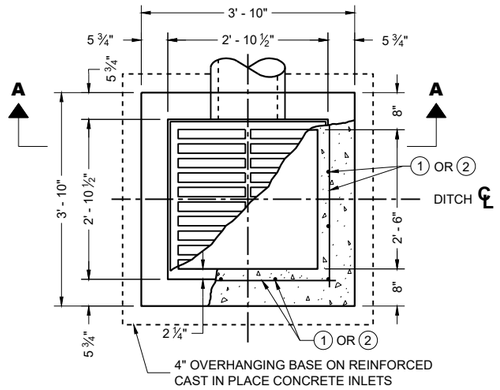
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

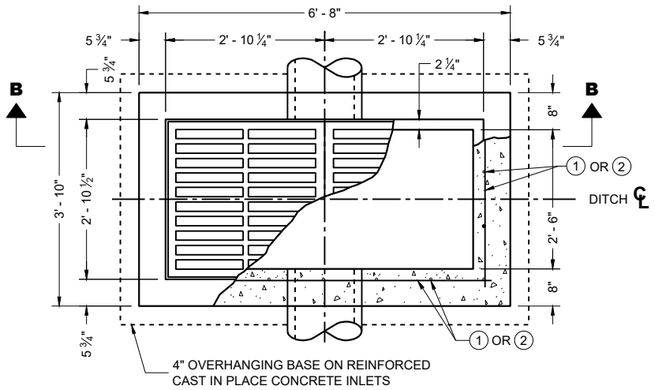
6

SDD 08A05-21b

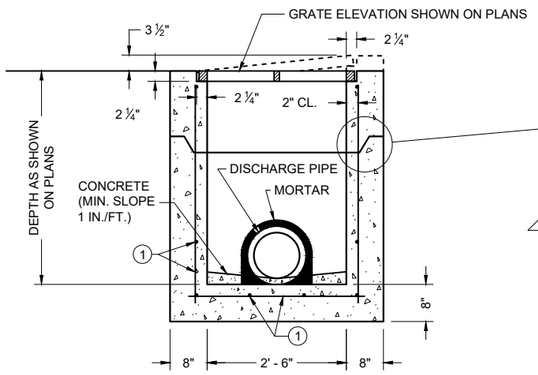
SDD 08A05-21b



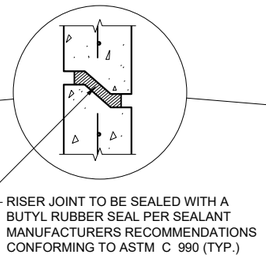
PLAN VIEW

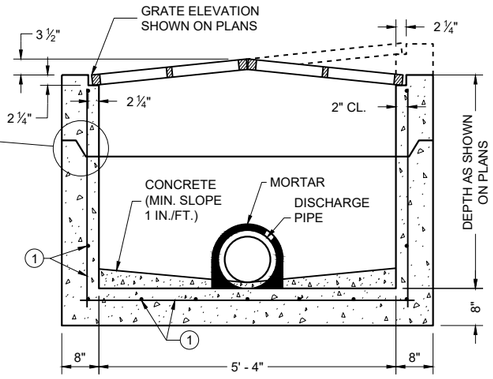


PLAN VIEW

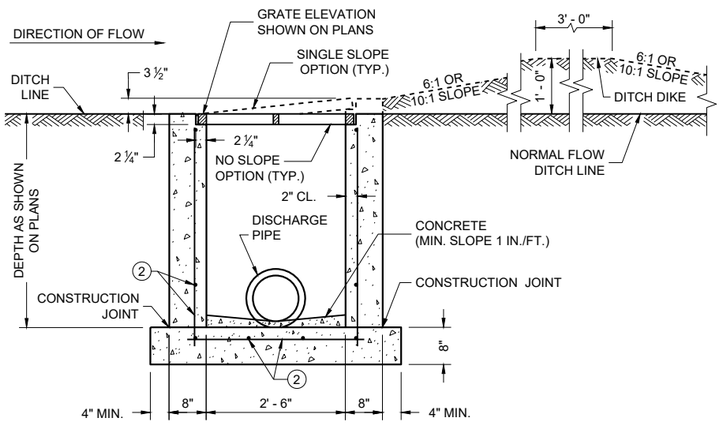


PRECAST REINFORCED CONCRETE SECTION A - A



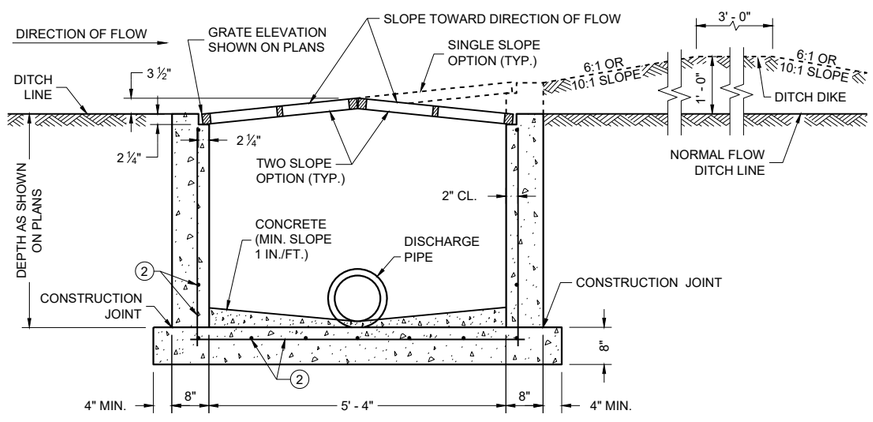


PRECAST REINFORCED CONCRETE SECTION B - B



REINFORCED CAST IN PLACE CONCRETE SECTION A - A

INLETS MEDIAN 1 GRATE



REINFORCED CAST IN PLACE CONCRETE SECTION B - B

INLETS MEDIAN 2 GRATE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP N0T SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

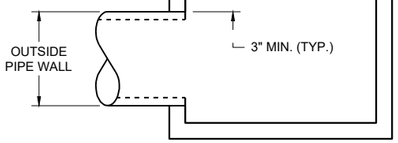
ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

(1) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

(2) CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.



DETAIL "A"

PIPE MATRIX

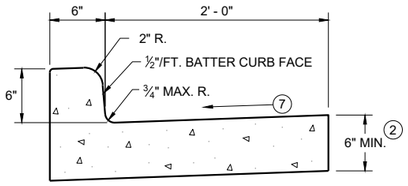
INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42

INLETS
MEDIAN 1 AND 2 GRATE

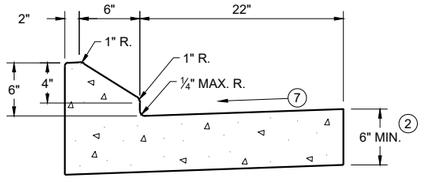
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

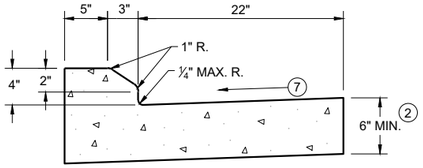
FHWA



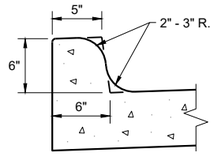
TYPES A (1) & D



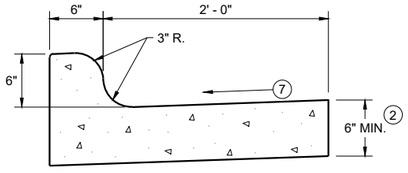
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

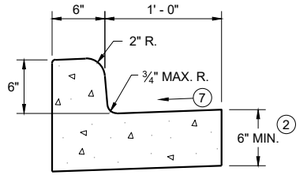


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



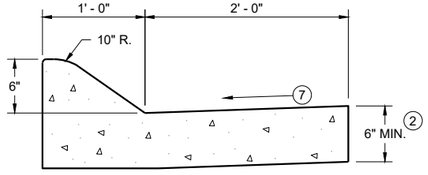
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

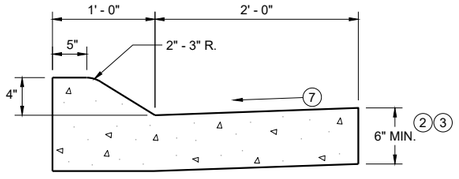


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

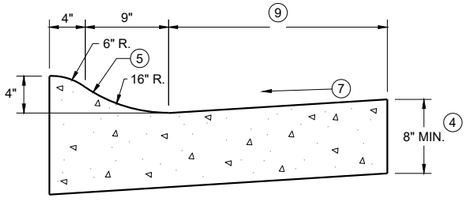


6" SLOPED CURB TYPES A (1) & D



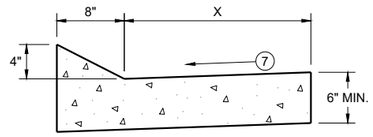
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

TBT & TBTT	X
30"	22"
36"	28"

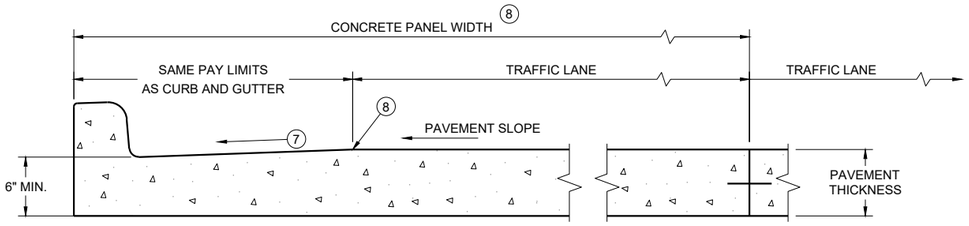


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

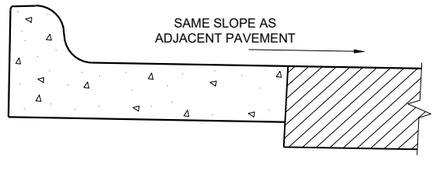
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER (6)
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

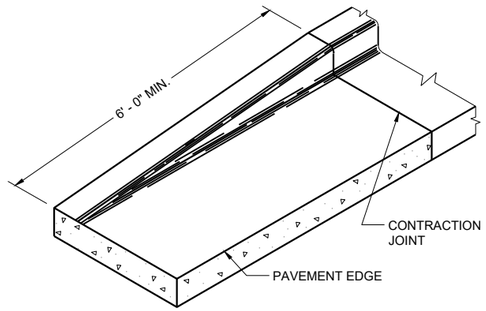
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

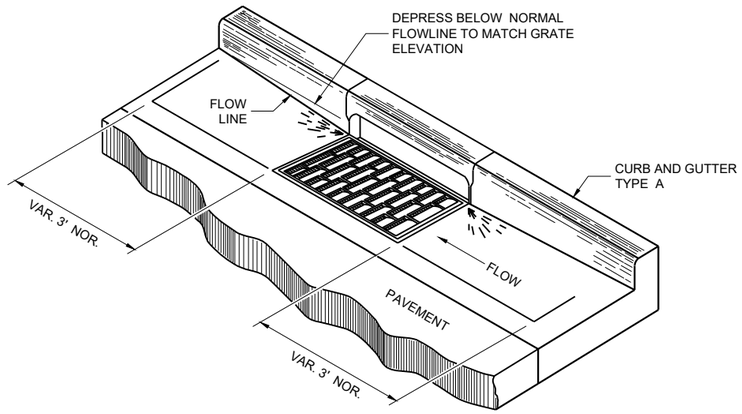
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a

6



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

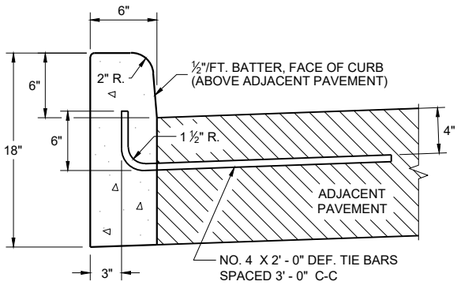
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

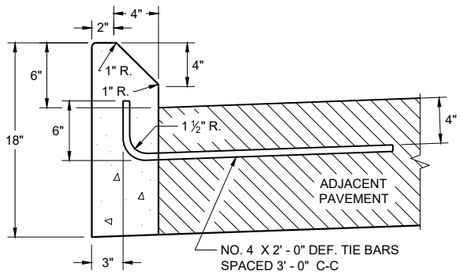
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

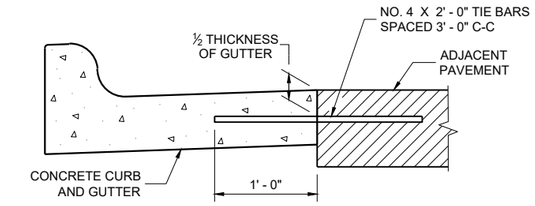


TYPES A (1) & D

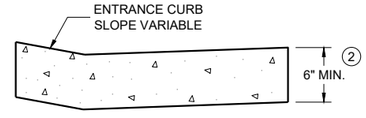


TYPES G (1) & J

CONCRETE CURB

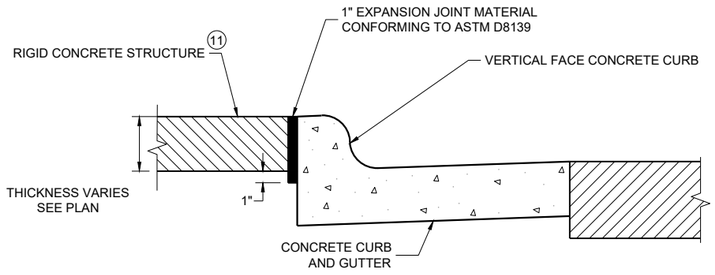


TYPICAL TIE BAR LOCATION (1)

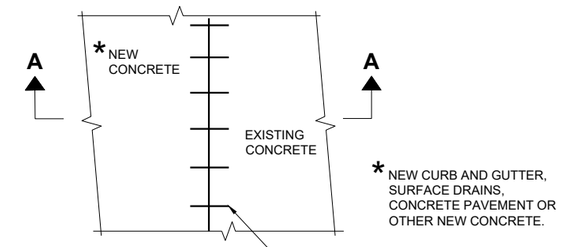


DRIVEWAY ENTRANCE CURB (10)

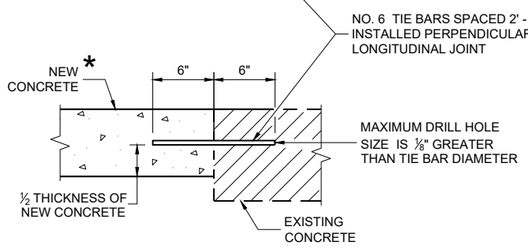
(WHEN DIRECTED BY THE ENGINEER)



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

6
SDD 08D01-23b

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

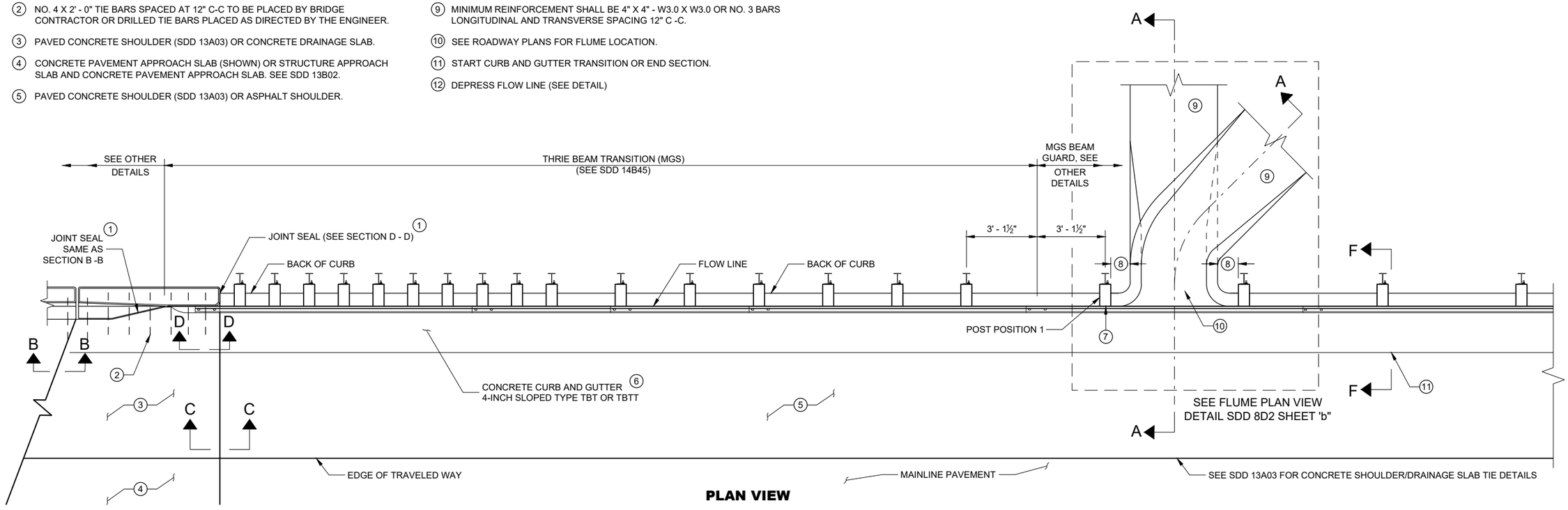
(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

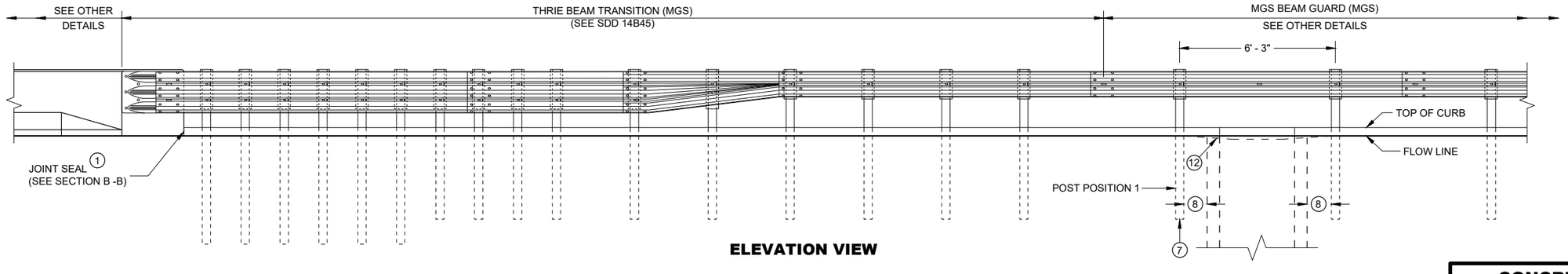
(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)



PLAN VIEW



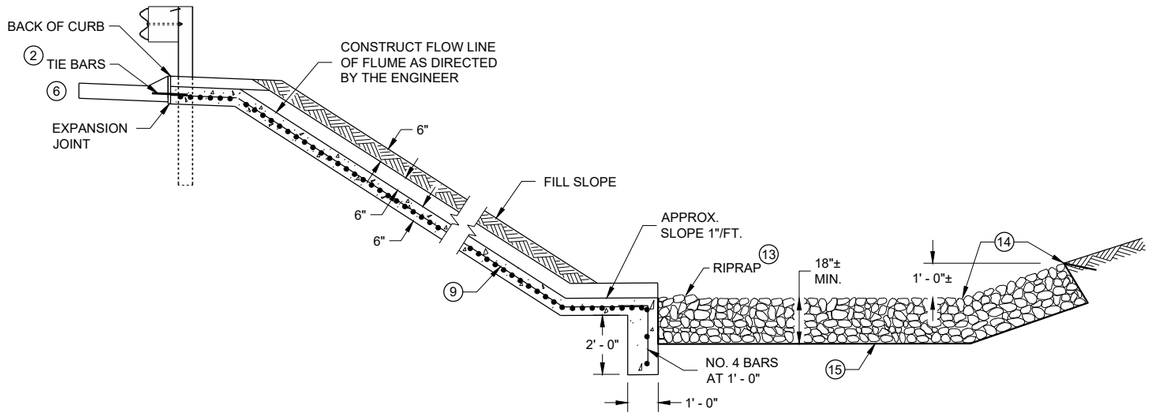
ELEVATION VIEW

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

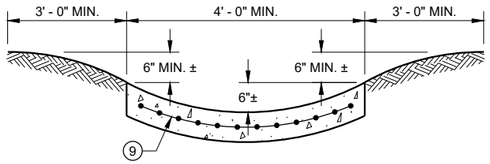
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

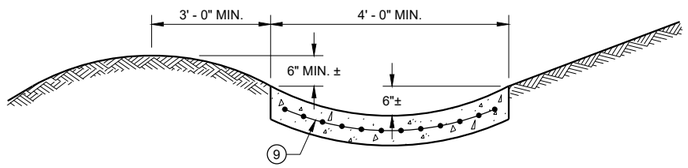
SDD 08D02 - 08a



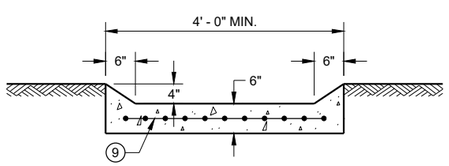
SECTION A - A



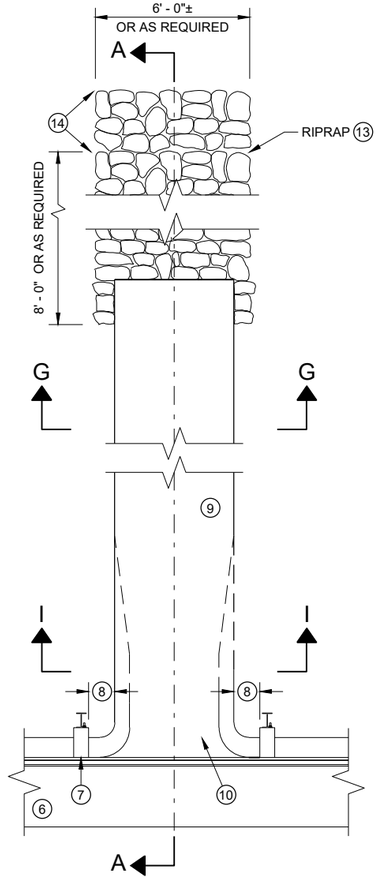
SECTION G - G



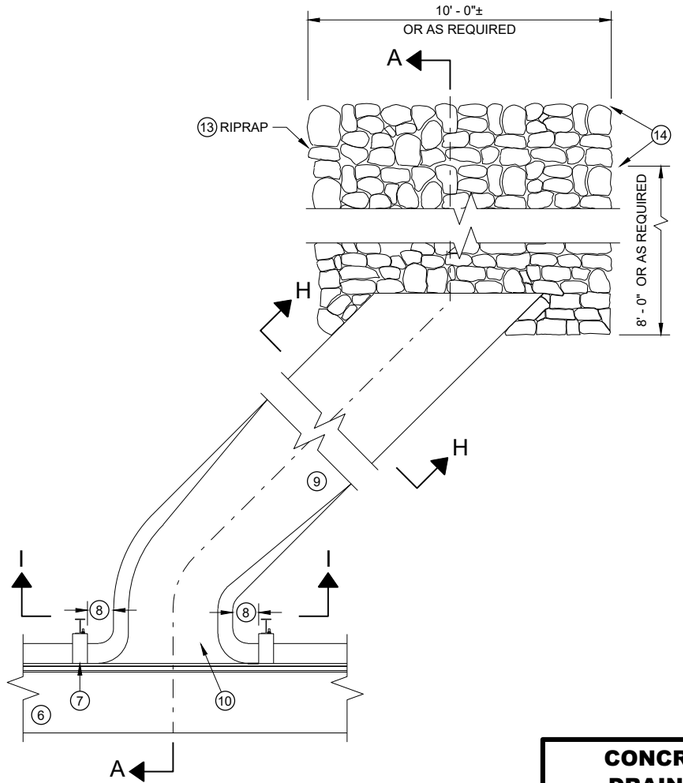
SECTION H - H



SECTION I - I



PLAN VIEW PERPENDICULAR FLUME



PLAN VIEW SKEWED FLUME

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

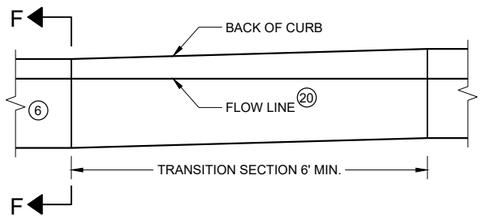
ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

1. USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.
2. NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.
3. PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.
4. CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.
5. PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.
6. CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.
7. PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)
8. CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.
9. MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.
10. SEE ROADWAY PLANS FOR FLUME LOCATION.
11. START CURB AND GUTTER TRANSITION OR END SECTION.
12. DEPRESS FLOW LINE (SEE DETAIL)
13. MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.
14. LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH AS REQUIRED.
15. GEOTEXTILE TYPE HR.

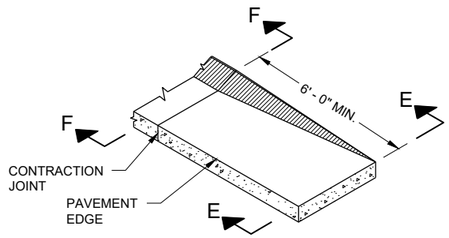
CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

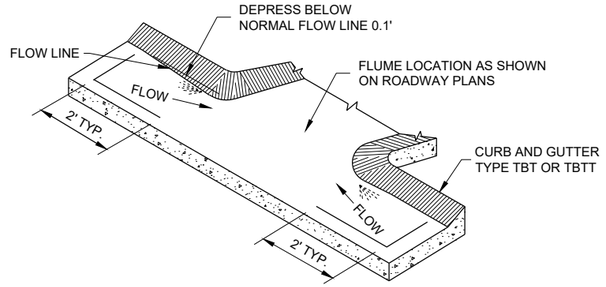
6
SDD 08D02 - 08b



**CURB AND GUTTER TRANSITION SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT**



**CURB AND GUTTER END SECTION
CONCRETE CURB AND GUTTER 4-INCH SLOPED
36 INCH TYPE TBT OR TBTT**



**CURB AND GUTTER FLOW LINE DEPRESSION
AT FLUMES CONCRETE CURB AND GUTTER
4-INCH SLOPED 36 INCH TYPE TBT OR TBTT**

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

ALL STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

(1) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

(2) NO. 4 X 2' - 0" TIE BARS SPACED AT 12" C-C TO BE PLACED BY BRIDGE CONTRACTOR OR DRILLED TIE BARS PLACED AS DIRECTED BY THE ENGINEER.

(3) PAVED CONCRETE SHOULDER (SDD 13A03) OR CONCRETE DRAINAGE SLAB.

(4) CONCRETE PAVEMENT APPROACH SLAB (SHOWN) OR STRUCTURE APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB. SEE SDD 13B02 AND STRUCTURE PLANS.

(5) PAVED CONCRETE SHOULDER (SDD 13A03) OR ASPHALT SHOULDER.

(6) CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE TBT OR TBTT. USE TYPE TBTT CURB WITH NO. 4 X 2' -0" TIE BARS SPACED AT 3' - 0" C-C ONLY WHEN ADJACENT TO CONCRETE PAVEMENTS.

(7) PLACE FLUME BEFORE MSG THRIE BEAM TRANSITION POST 1 (SEE SDD 14B45)

(8) CENTER FLUME BETWEEN POSTS. 6-INCH MINIMUM SEPARATION FROM OUTSIDE EDGE OF FLUME TO POSTS.

(9) MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C -C.

(10) SEE ROADWAY PLANS FOR FLUME LOCATION.

(11) START CURB AND GUTTER TRANSITION OR END SECTION.

(12) DEPRESS FLOW LINE (SEE DETAIL)

(13) MEDIUM RIPRAP UNLESS OTHERWISE SPECIFIED.

(14) LIMITS OF ADDITIONAL RIPRAP WHEN SPECIAL DITCH IS REQUIRED.

(15) GEOTEXTILE TYPE HR.

(16) MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE SPACING 12" C - C.

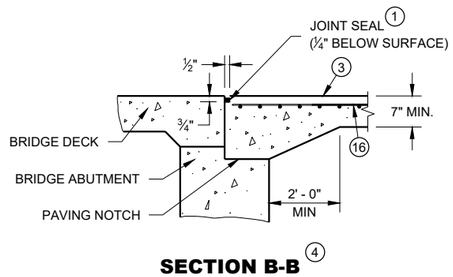
(17) MSG THRIE BEAM TRANSITION POST 1. SEE SDD 14B45 FOR ADDITIONAL CONSTRUCTION DETAILS AND ACCEPTABLE MATERIALS.

(18) MAINTAIN WIDTH, THICKNESS AND CROSS SLOPE OF ADJACENT TYPE TBT OR TBTT CURB. SEE NOTE 6 FOR TIE BAR SPACING.

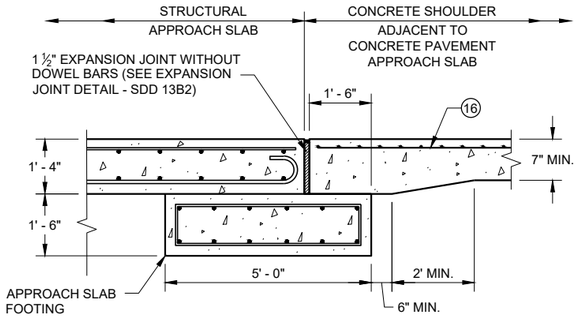
(19) ALIGN FACE OF POST BLOCK WITH FLOW LINE.

(20) MAINTAIN FLOW LINE AT EDGE OF PAVEMENT/FACE OF BEAM GUARD AS APPLICABLE.

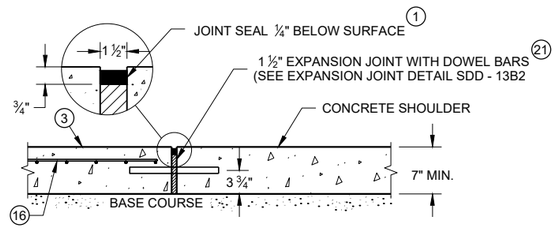
(21) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING HMA PAVEMENTS.



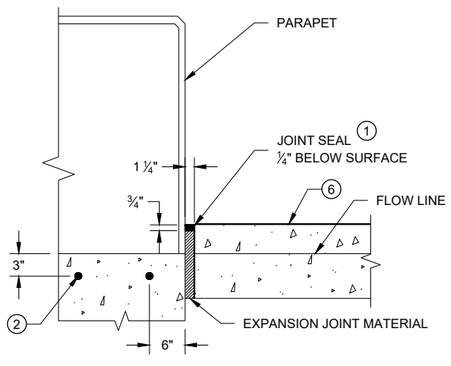
SECTION B-B (4)



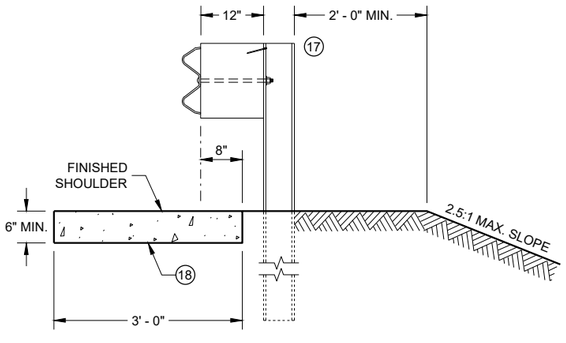
SECTION C - C
JOINT DETAIL FOR BRIDGE WITH STRUCTURAL APPROACH SLAB AND CONCRETE APPROACH SLAB



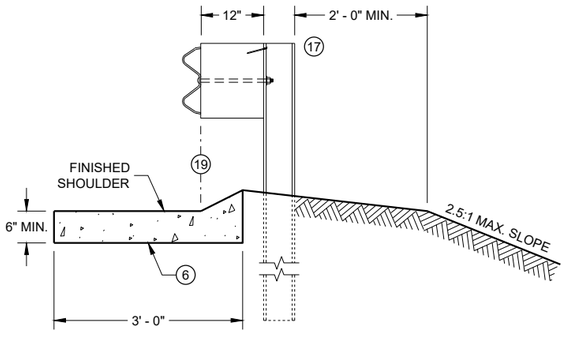
SECTION C - C
JOINT DETAIL FOR BRIDGE APPROACH WITH CONCRETE SHOULDERS



SECTION D - D



SECTION E - E



SECTION F - F

CONCRETE SURFACE DRAINS FLUME TYPE AT STRUCTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

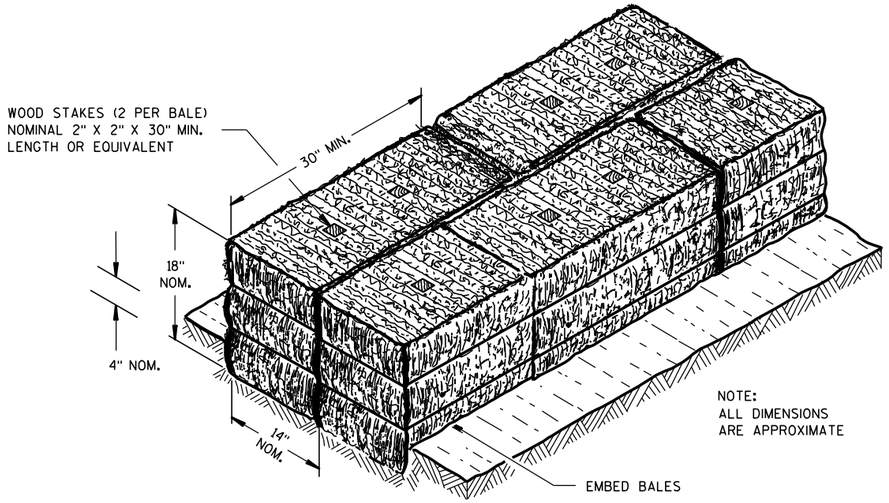
APPROVED
May 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

6

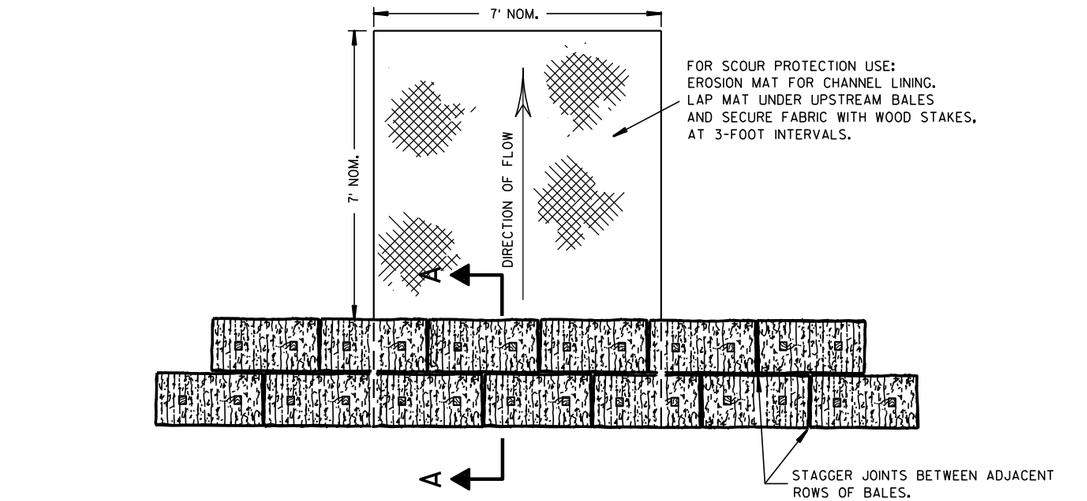
SDD 08D02 - 08c

6

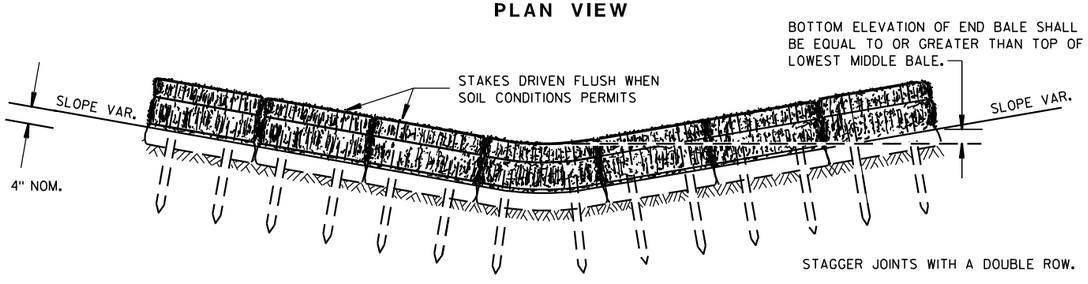
SDD 08D02 - 08c



SECTION A-A



PLAN VIEW



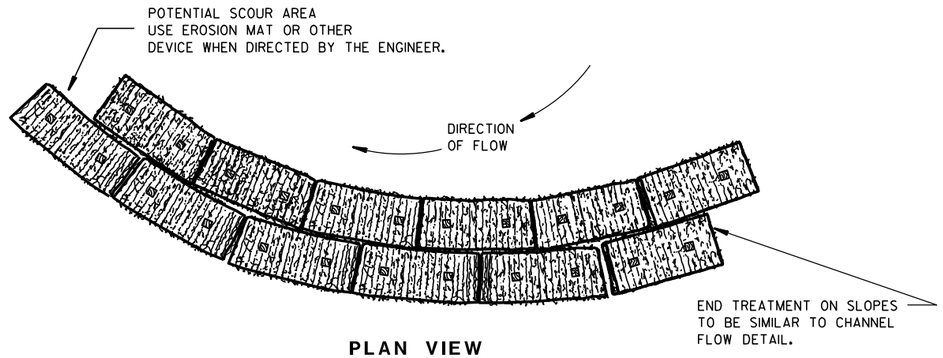
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

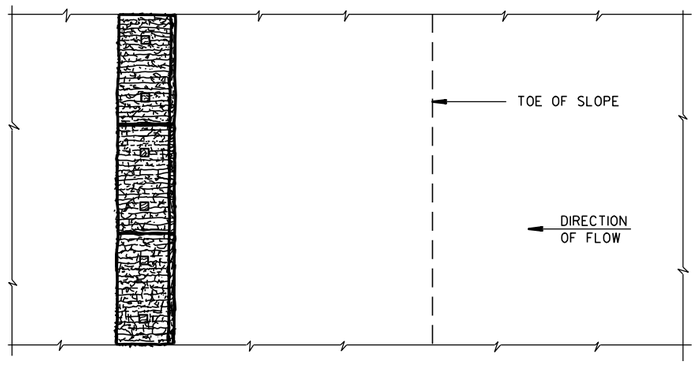
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

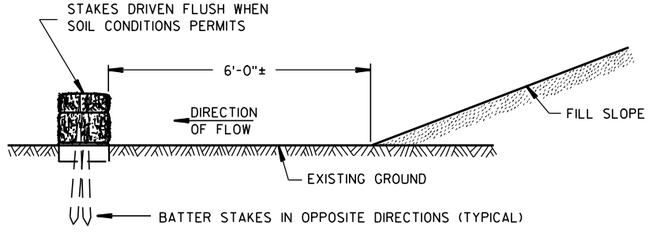


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

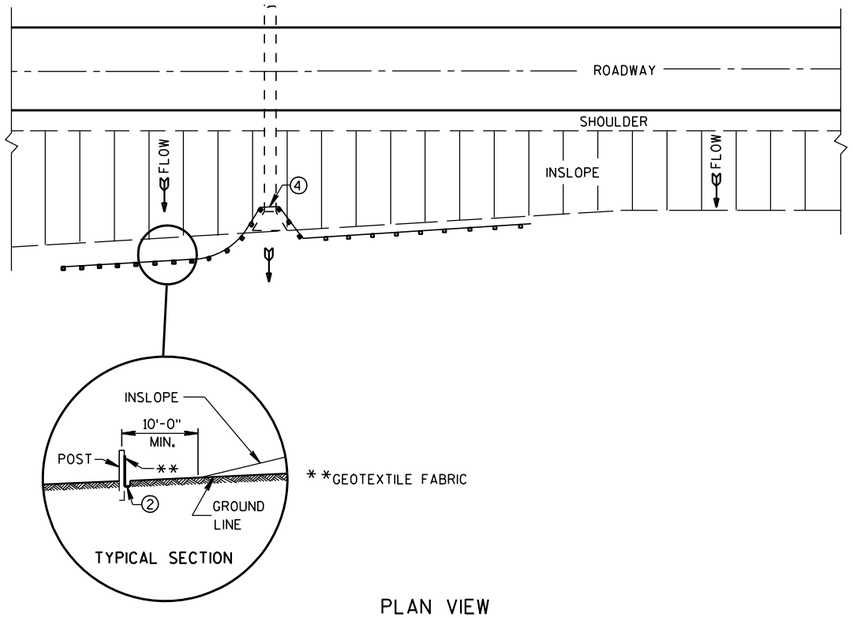
APPROVED
6/04/02 DATE
/S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

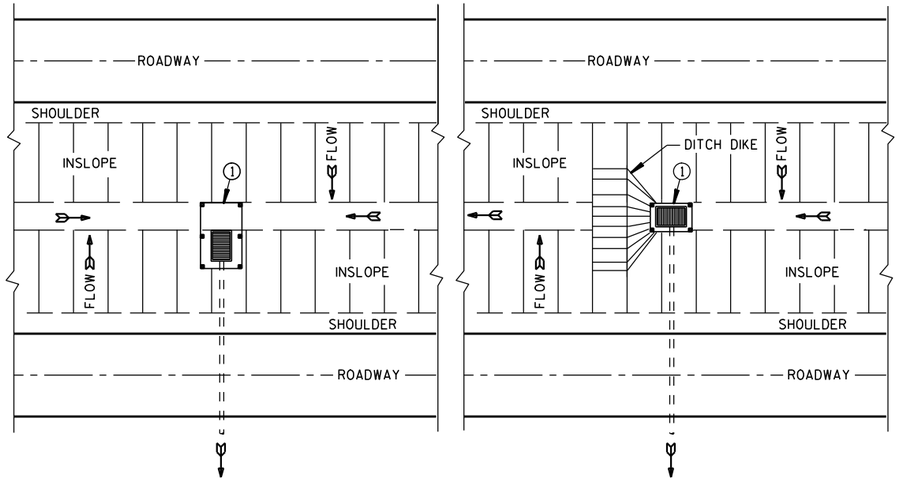
6

S.D.D. 8 E 8-3



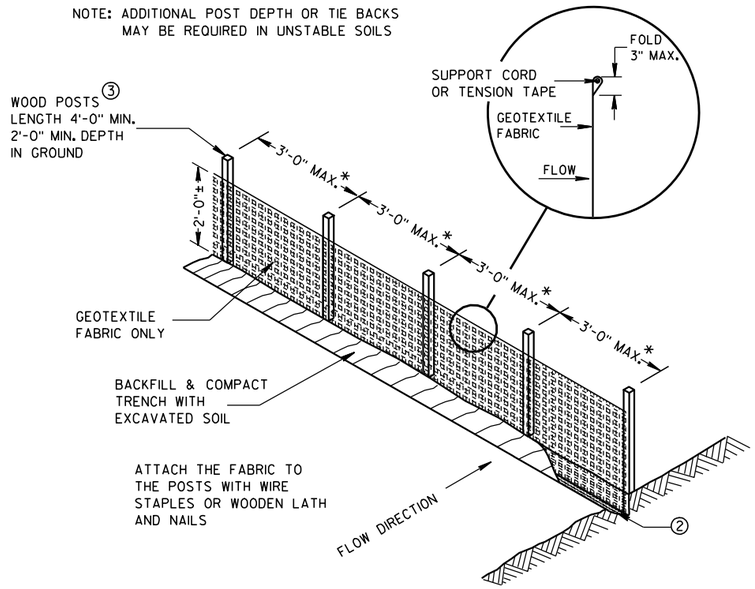
PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE

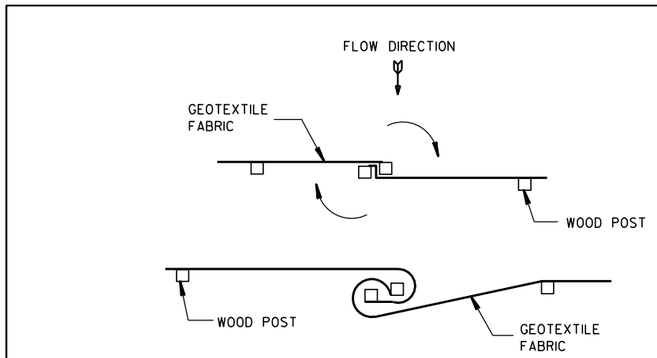


PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS



SILT FENCE

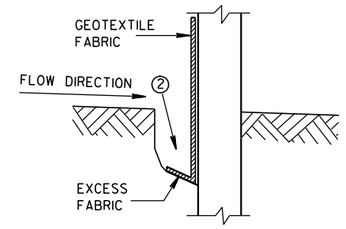


JOINING TWO LENGTHS OF SILT FENCE 5

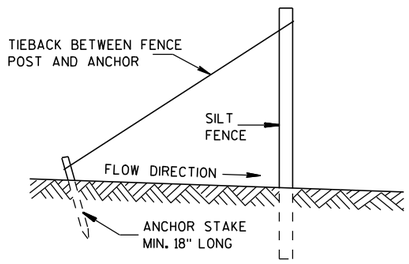
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

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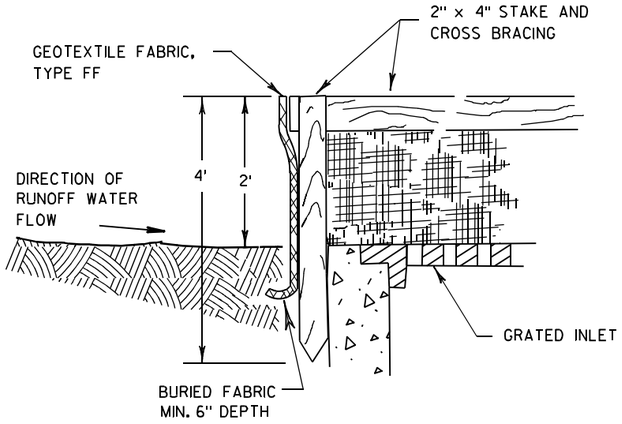
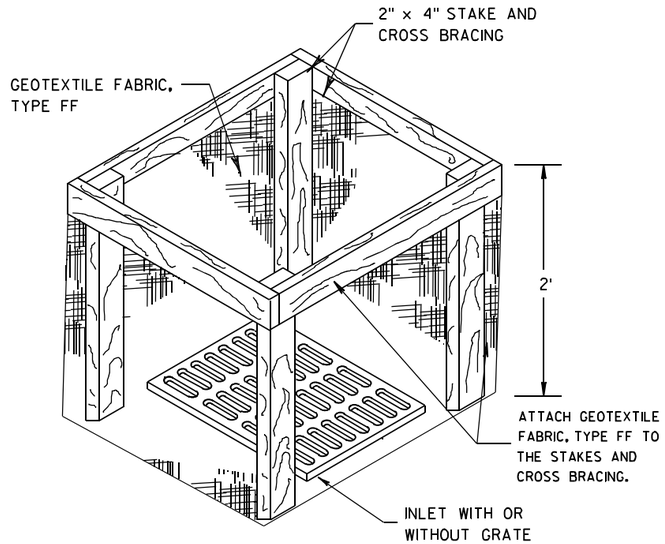
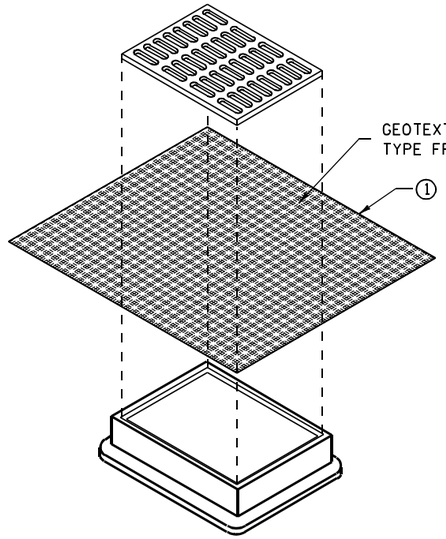
S.D.D. 8 E 9-6



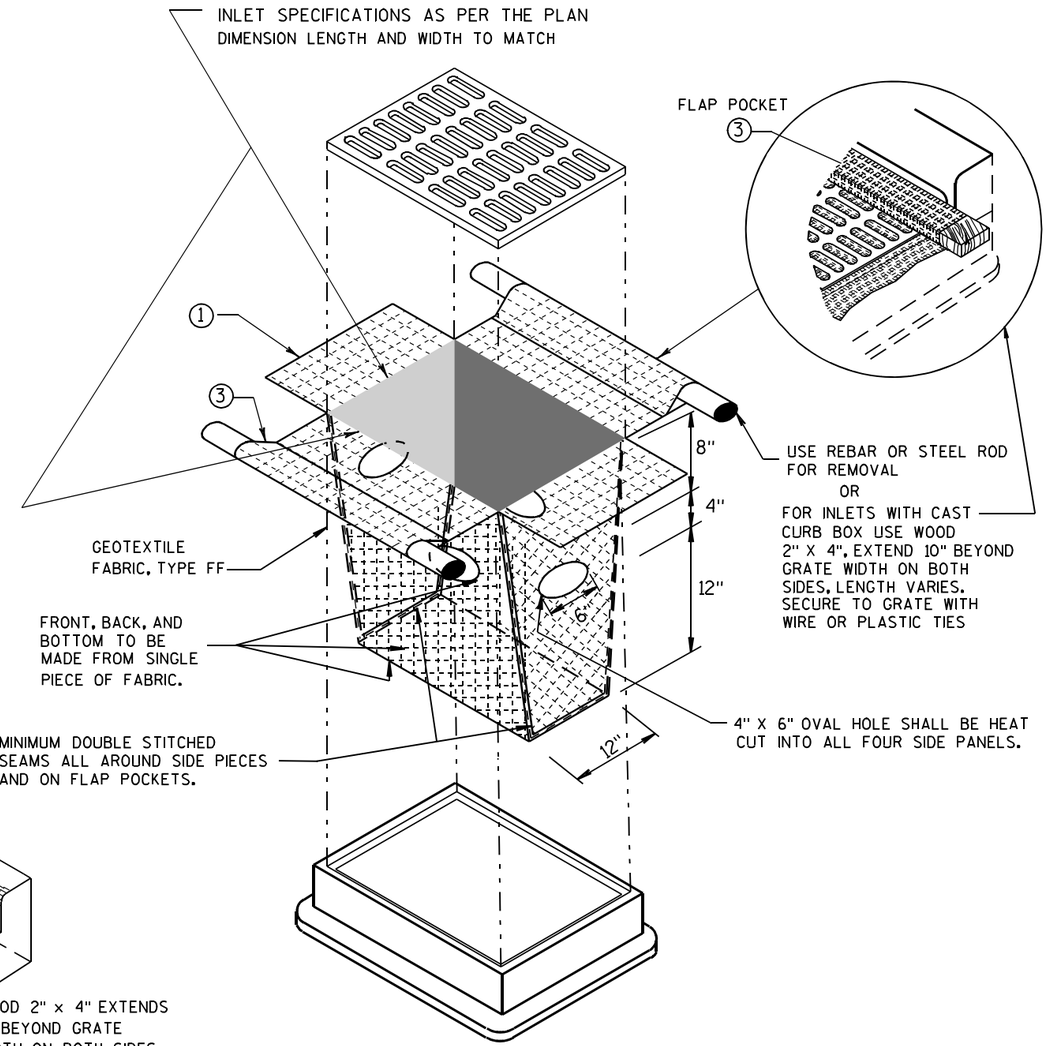


INLET PROTECTION, TYPE A



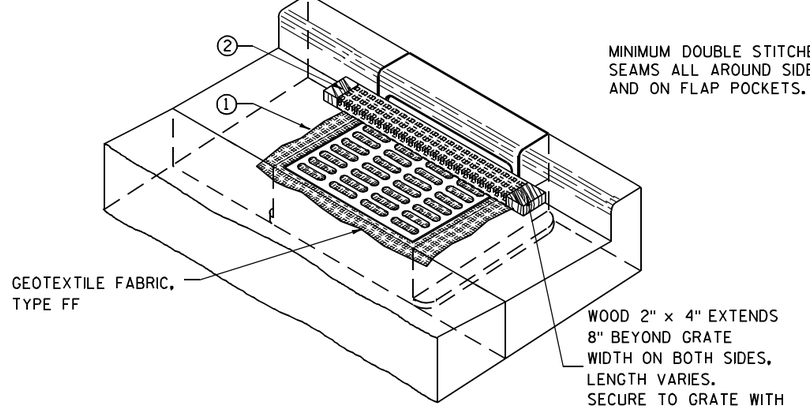
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

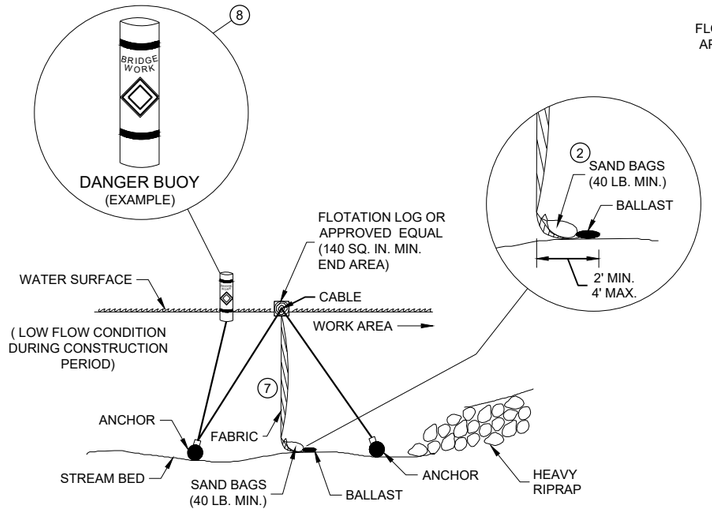
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

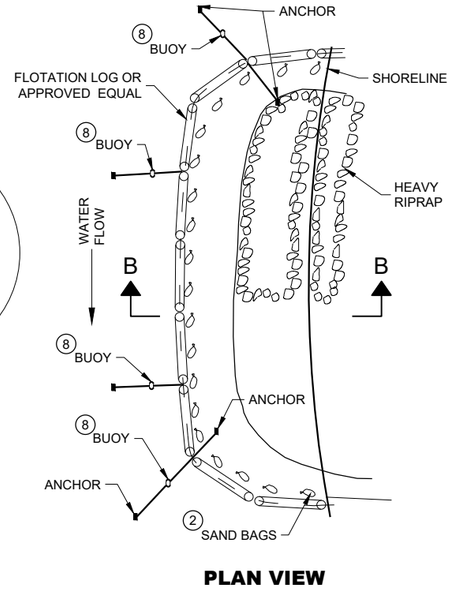
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 10-2

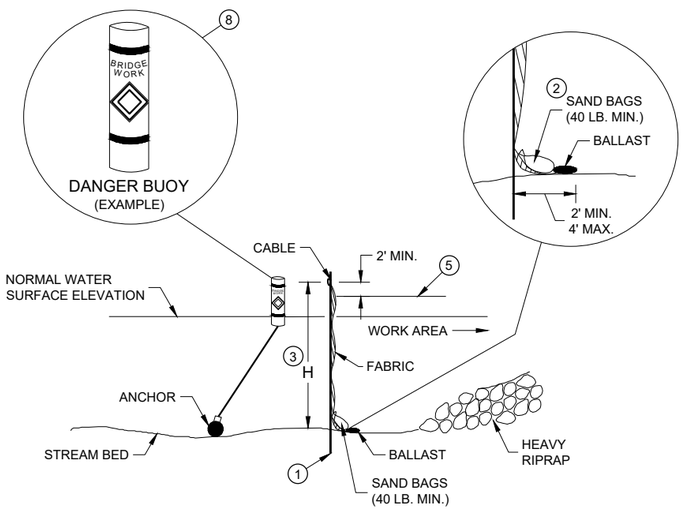


SECTION B - B

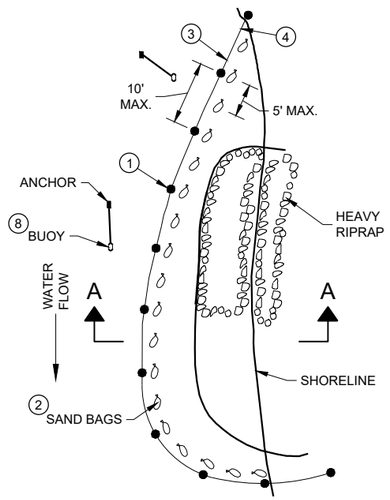


PLAN VIEW

TURBIDITY BARRIER - FLOAT ALTERNATIVE
CAUTION - SEE NOTE 6



SECTION A - A



PLAN VIEW

TURBIDITY BARRIER - STANDARD POST INSTALLATION

TURBIDITY BARRIER PLACEMENT DETAILS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

TURBIDITY BARRIER MAY BE REMOVED AT THE ENGINEERS DISCRETION, WHEN PERMANENT EROSION CONTROL MEASURES HAVE BEEN ESTABLISHED.

(1) DRIVEN STEEL POSTS, PIPES, OR CHANNELS. LENGTH SHALL BE SUFFICIENT TO SECURELY SUPPORT BARRIER AT HIGH WATER ELEVATIONS.

(2) SAND BAGS TO BE USED AS ADDITIONAL BALLAST WHEN ORDERED BY THE ENGINEER TO MEET ADVERSE FIELD CONDITIONS. SPACE AS APPROPRIATE FOR SITE CONDITIONS.

(3) WHEN BARRIER HEIGHT "H" EXCEEDS 8 FEET, POST SPACING MAY NEED TO BE DECREASED.

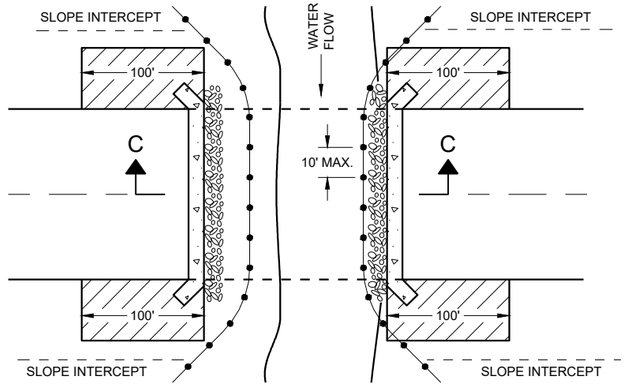
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(5) ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION PERIOD. MINIMUM BARRIER HEIGHT SHALL BE 2' GREATER THAN EITHER THE Q2 ELEVATION OR THE ESTIMATED HIGH WATER ELEVATION DURING CONSTRUCTION, WHICHEVER IS GREATER.

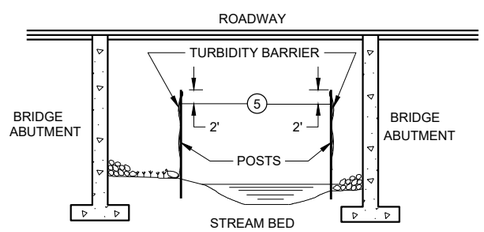
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(7) ALLOW SUFFICIENT SLACK VERTICALLY AND HORIZONTALLY SO THAT SEDIMENT BUILD UP WILL NOT SEPARATE OR LOWER THE TURBIDITY BARRIER.

(8) USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.



PLAN VIEW



SECTION C - C

TURBIDITY BARRIER DETAIL SHOWING TYPICAL PLACEMENT AT STRUCTURES

TURBIDITY BARRIER

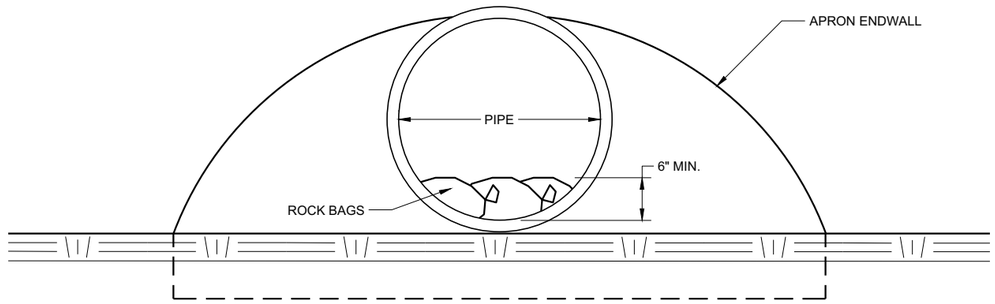
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/4/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

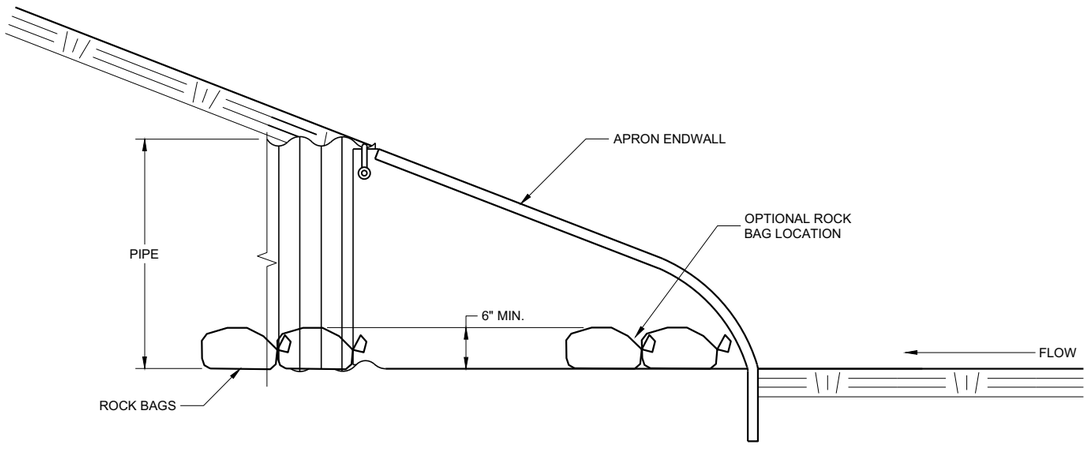
FHWA

6

SDD 08E11 - 02
SDD 08E11 - 02



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

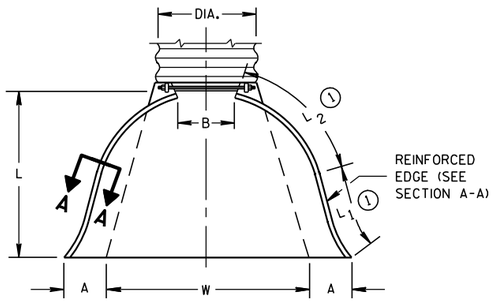
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

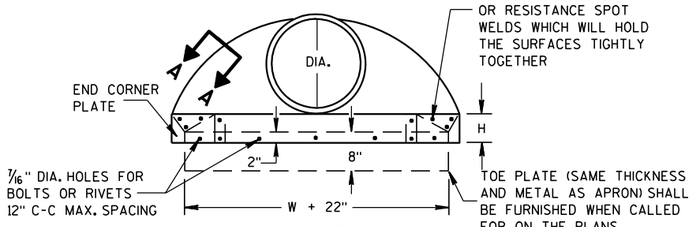
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

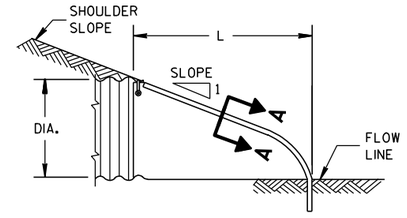
*MINIMUM
**MAXIMUM



PLAN VIEW

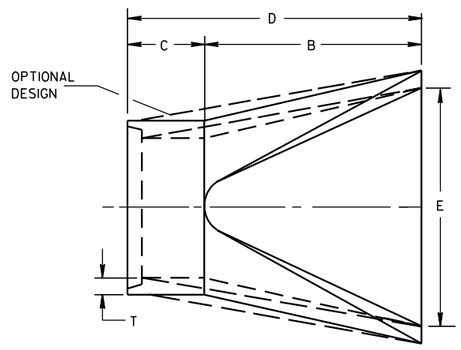


END VIEW

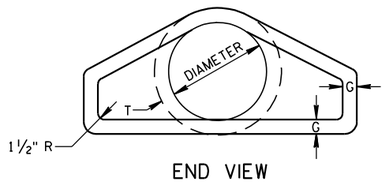


SIDE ELEVATION

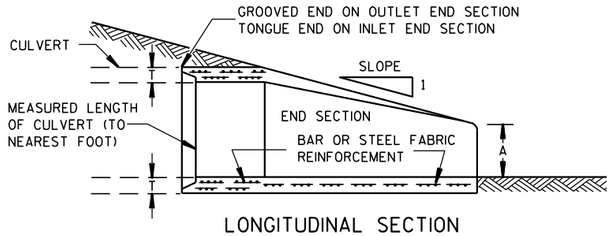
METAL ENDWALLS



PLAN

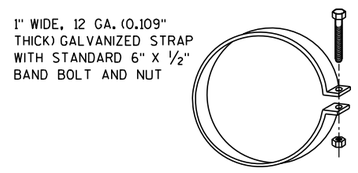


END VIEW



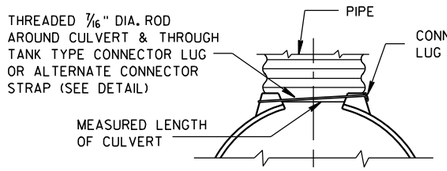
LONGITUDINAL SECTION

CONCRETE ENDWALLS

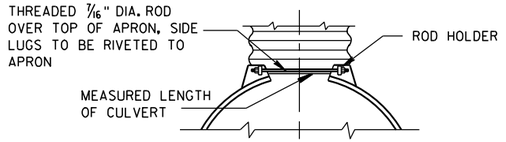


ALTERNATE FOR TYPE 1 CONNECTION

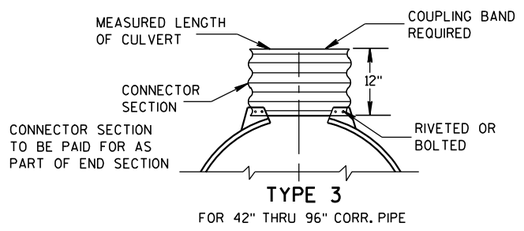
END SECTION CONNECTOR STRAP



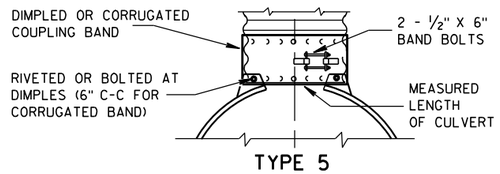
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

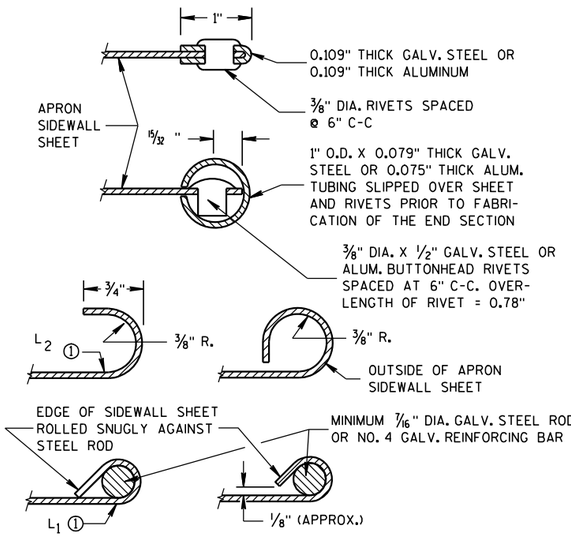
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

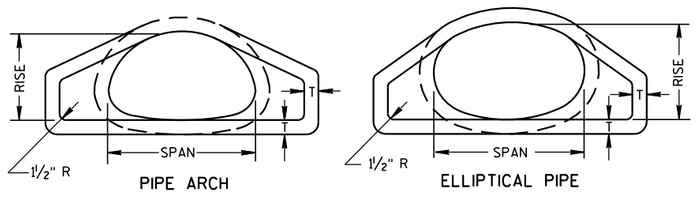
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

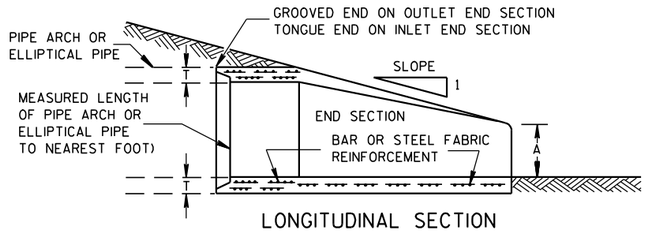
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

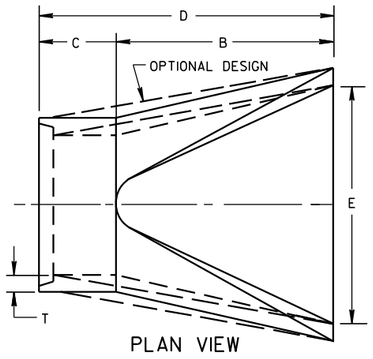
S.D.D. 8 F 1-11



END VIEW

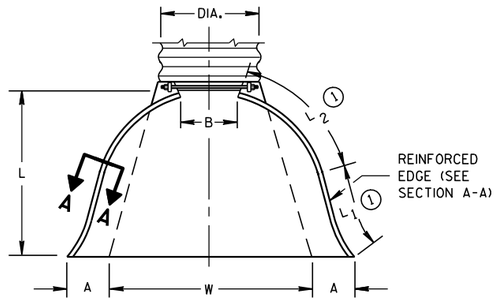


LONGITUDINAL SECTION

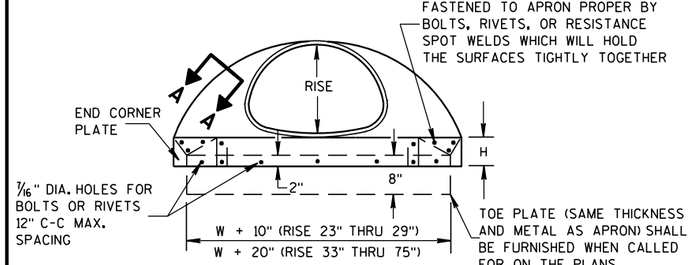


PLAN VIEW

CONCRETE ENDWALLS

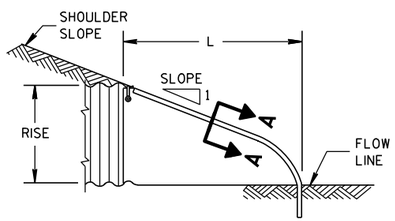


PLAN VIEW



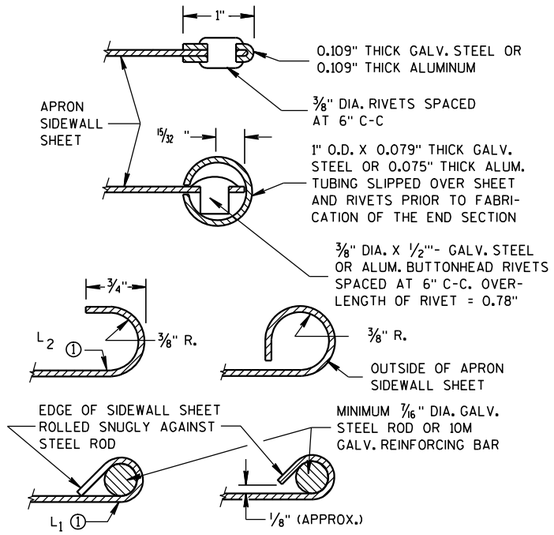
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

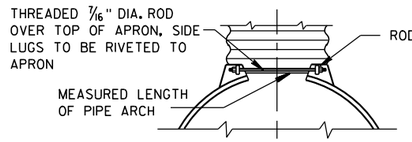
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

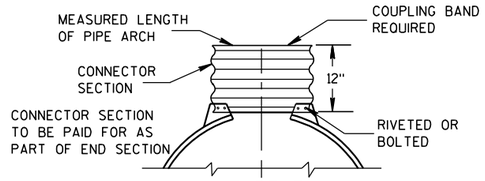
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



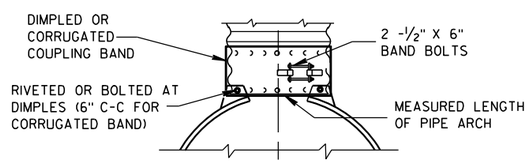
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

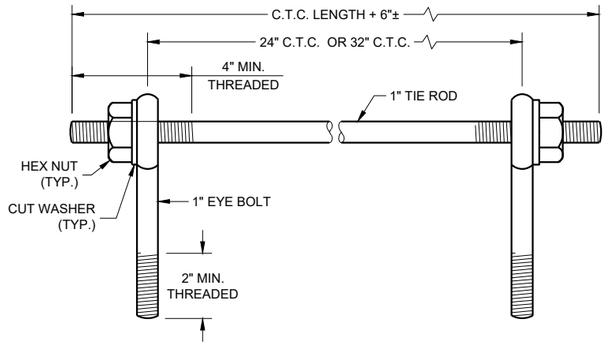
11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

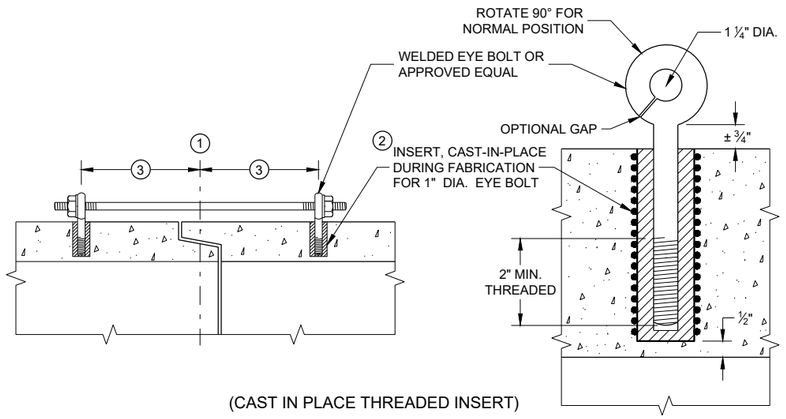
FHWA

6

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

(2) THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

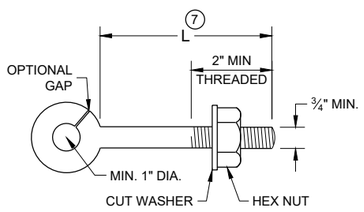
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

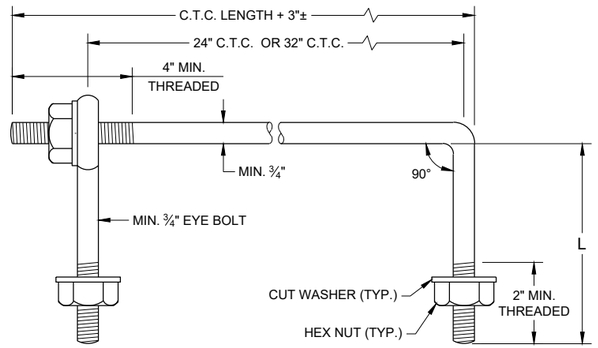
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

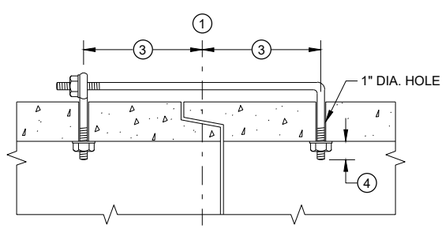


EYE BOLT (7)

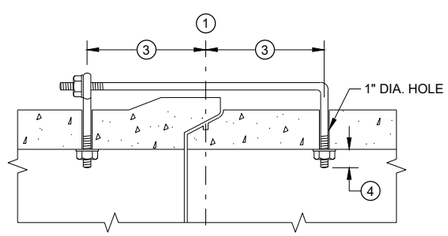
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

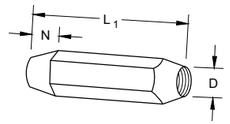
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



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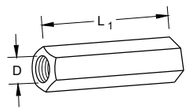
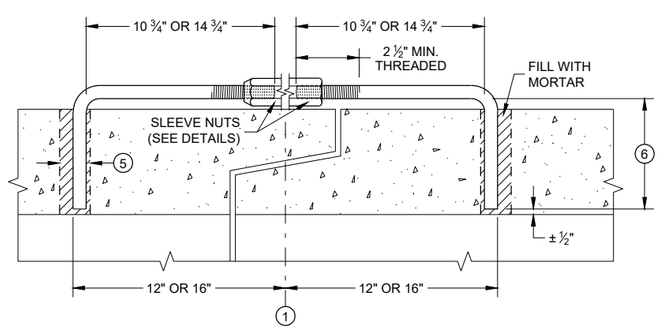


PLAIN

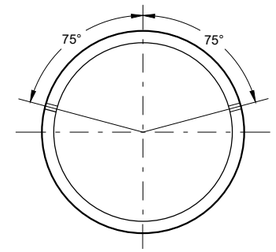
RIGHT AND LEFT THREADS

SLEEVE NUTS



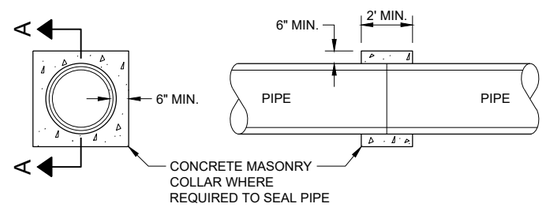
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

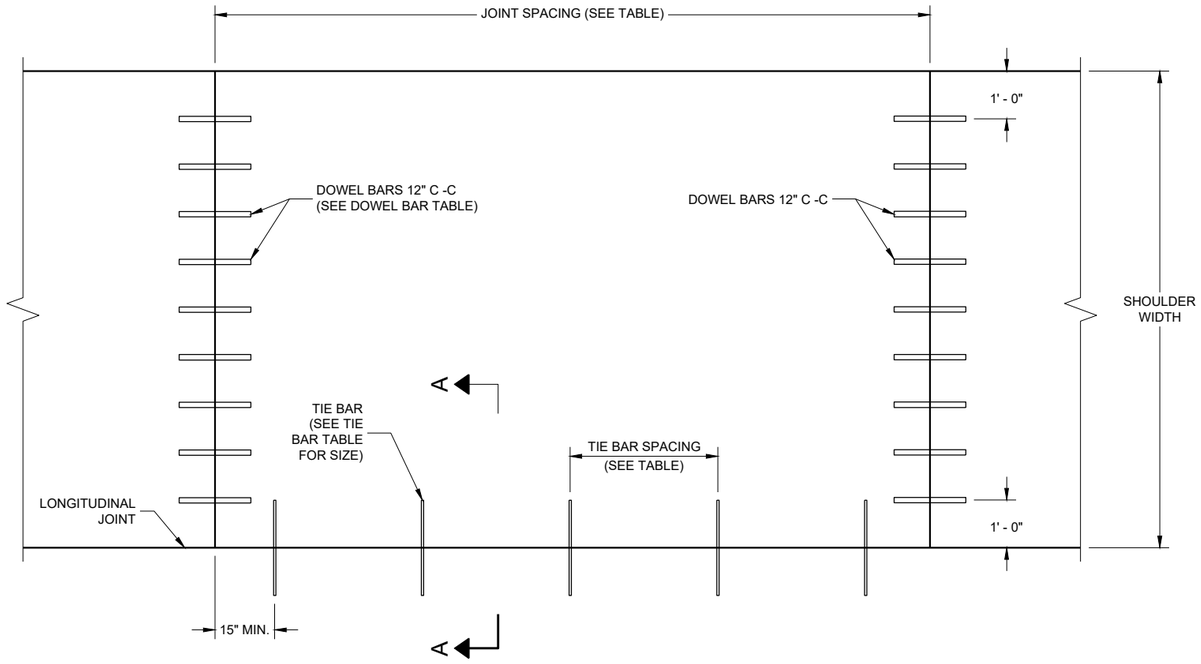
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08F04 - 08

SDD 08F04 - 08



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

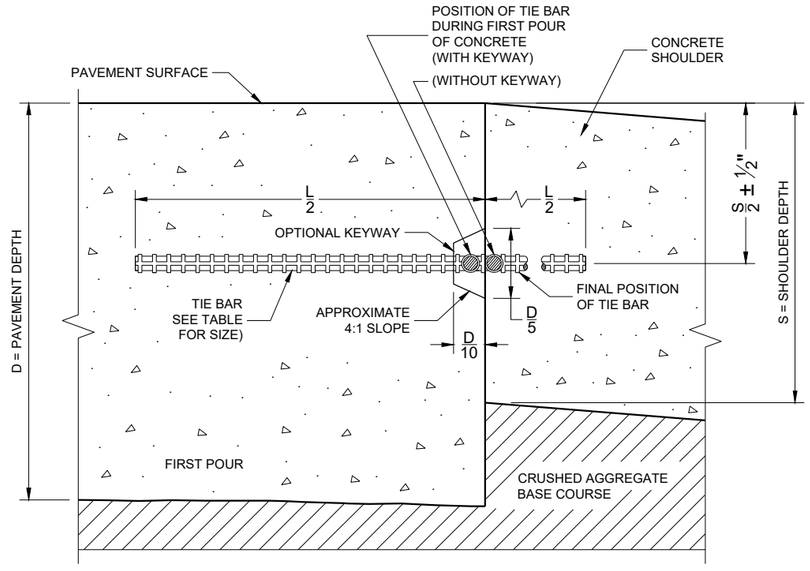
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

TRANSVERSE JOINT DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

FINISH THE SHOULDER PAVEMENT CONFORMING TO SUBSECTION 415.3.8 OF THE STANDARD SPECIFICATIONS.

TIE BARS SHALL CONFORM TO SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS.



SECTION A - A

LONGITUDINAL CONSTRUCTION JOINT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
<10 ½"	NO. 4	30"	36"
>10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BATS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES.

** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER ***	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12"
7", 7 ½"	1"	14"
8" & ABOVE	1 ¼"	15"

*** FOR DOWELED CONCRETE SHOULDERS WITH TRAPEZOIDAL CROSS SECTIONS, CHOSE THE APPROPRIATE DOWEL BAR DIAMETER BASED ON THE SMALLER PAVEMENT DEPTH (LIKELY THE OUTSIDE EDGE OF THE SHOULDER). IF USING BASKETS, USE BASKETS FRO THE AVERAGE THICKNESS OF THE CROSS SECTION.

CONCRETE PAVEMENT SHOULDERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp
PAVEMENT SUPERVIS

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SDD 13A03 - 07

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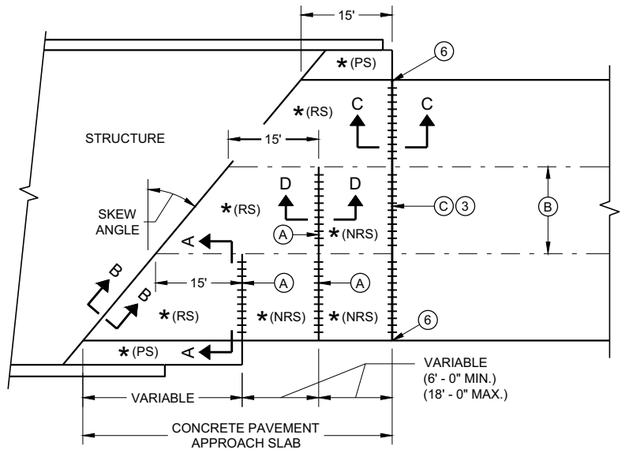
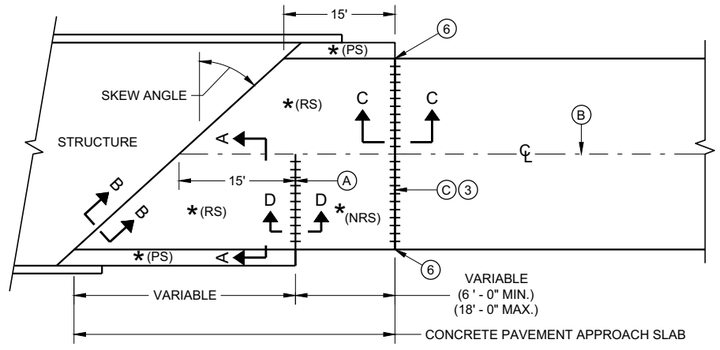
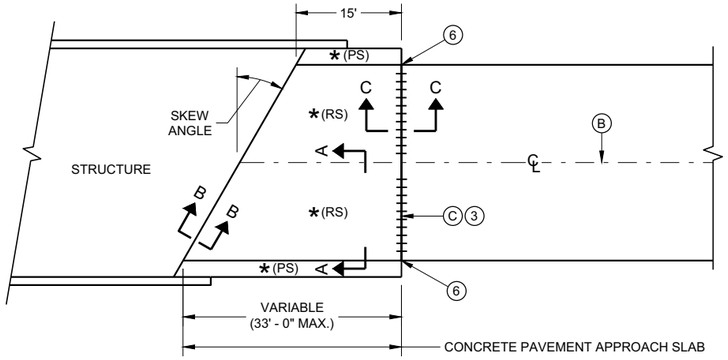


SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

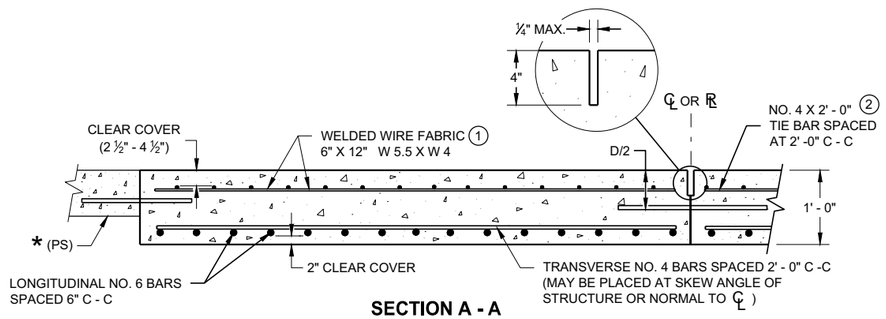
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

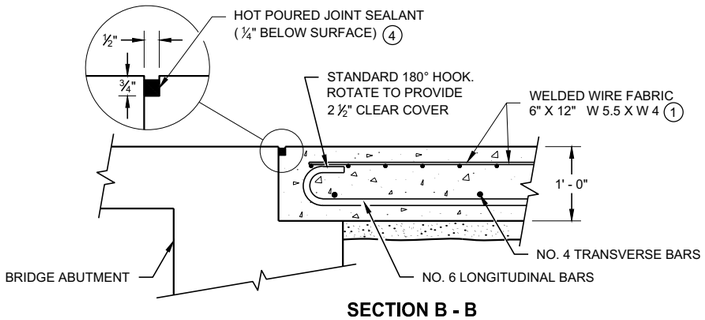
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

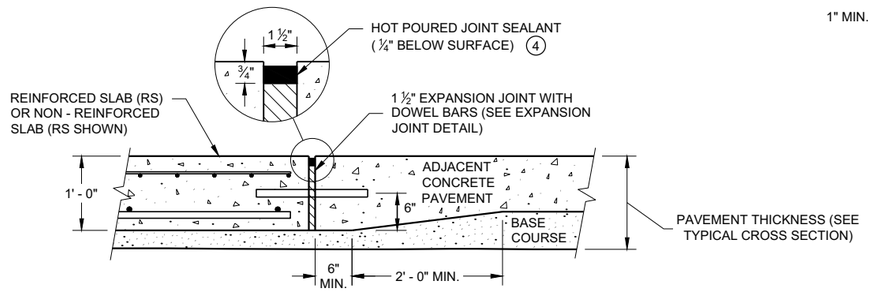
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



SECTION A - A
REINFORCEMENT POSITIONING DETAIL



SECTION B - B
BEND DETAIL
BOTTOM REINFORCEMENT



SECTION C - C
TRANSITION DETAIL
APPROACH SLAB TO ADJACENT PAVEMENT

GENERAL NOTES

THE CONTRACTOR MAY SPLICE NO. 6 BARS IN THE APPROACH SLAB FOR SKEWED STRUCTURES ONLY. STAGGER SPLICES WITH A MAXIMUM OF ONE SPLICE PER BAR. THE LENGTH OF LAP IS 20 INCHES.

TACK WELD DOWEL BARS TO THE BASKETS ON ALTERNATE ENDS.

(1) THE CONTRACTOR MAY USE NO. 4 BARS SPACED AT 2' - 0 " C - C IN BOTH THE LONGITUDINAL AND TRANSVERSE DIRECTIONS FOR TOP REINFORCEMENT AS AN ALTERNATIVE TO THE WELDED WIRE FABRIC.

(2) THE CONTRACTOR MAY OMIT THE BARS BETWEEN REINFORCED SLABS WHERE SLAB REINFORCEMENT BARS EXTEND ACROSS THE CENTERLINE OR REFERENCE LINE.

(3) DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.

(4) USE A JOINT SEALANT CONFORMING TO STANDARD SPECIFICATION 415.2.6.

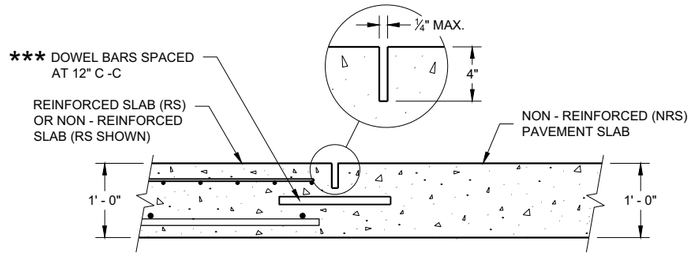
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

(6) EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

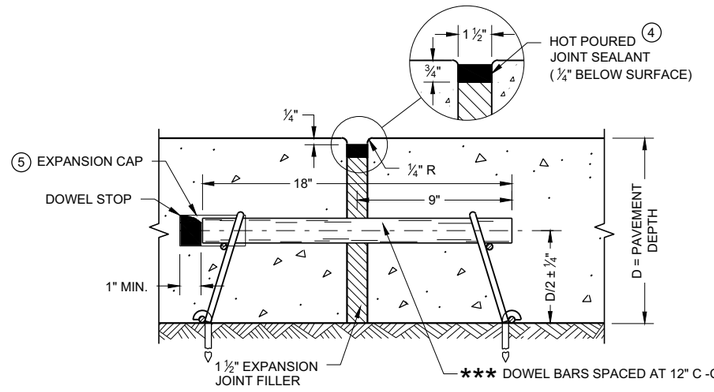
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(B) STANDARD LONGITUDINAL JOINT WITH TIE BARS.

(C) 1 ½" EXPANSION JOINT WITH DOWEL BARS NORMAL TO ℄ OR ℞ .



SECTION D - D
CONTRACTION JOINT



EXPANSION JOINT DETAIL

CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp, P.E.
PAVEMENT SUPERVIS

FHWA

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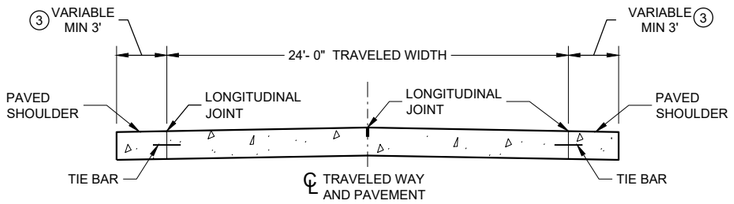
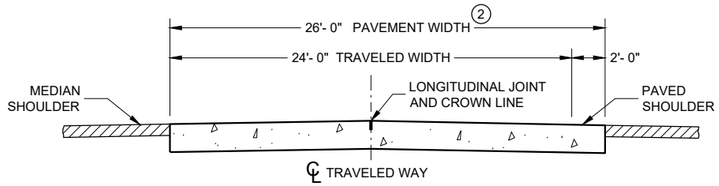
SDD 13B02 - 09a

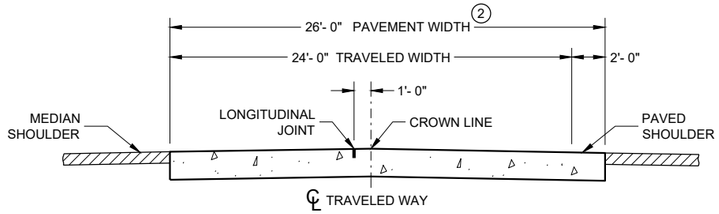


SECTION A - A

TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B - B



ALTERNATIVE SECTION B - B

DIVIDED HIGHWAY (1)

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES FROM AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE CONTRACTION JOINTS.

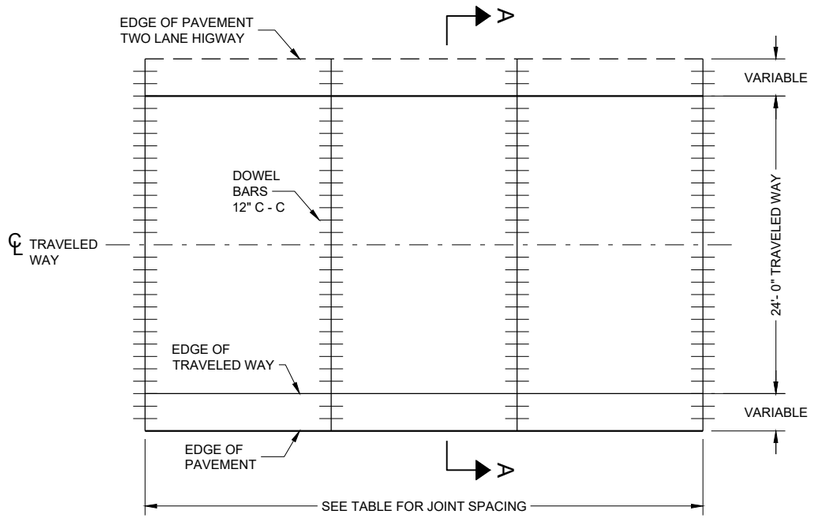
(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED "PAVED SHOULDER" AS CONCRETE PAVEMENT.

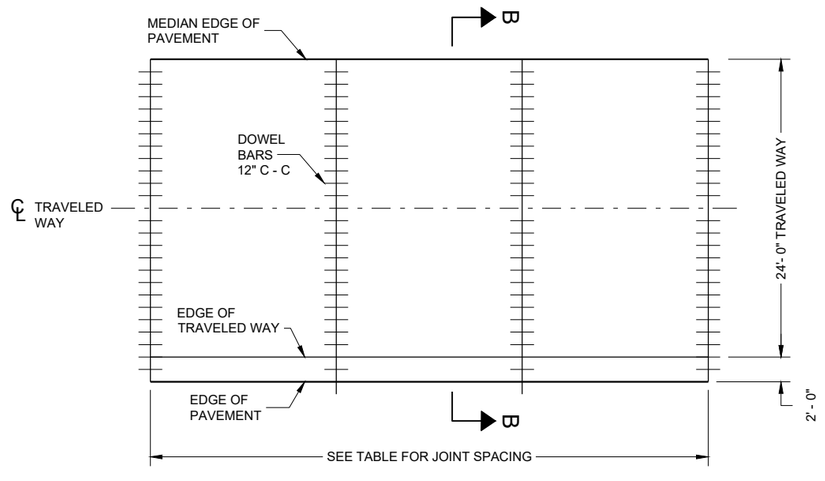
(3) SHOULDER WIDTHS LESS THAN 3 FEET SHALL BE PAVED INTEGRAL TO THE MAINLINE CONCRETE PAVEMENT, SEE SECTION B-B.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8" & ABOVE	1 ¼"	15'



CONTRACTION JOINT LAYOUT FOR TWO-LANE TWO-WAY HIGHWAY



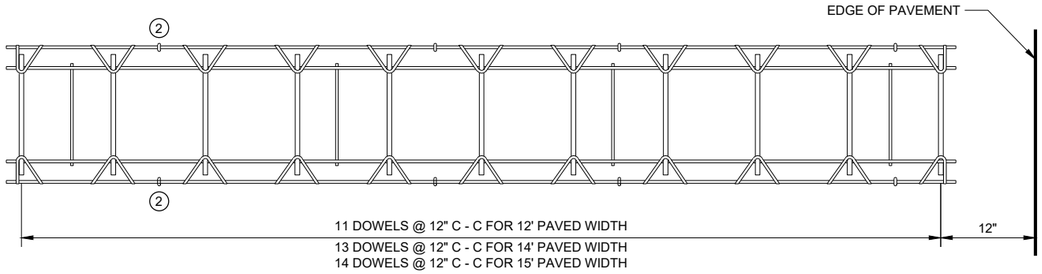
CONTRACTION JOINT LAYOUT FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13C11 - 14a

SDD13C11 - 14a



PLAN VIEW

SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY (1)

GENERAL NOTES

(1) OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTION CONTRACTION JOINTS.

(2) SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

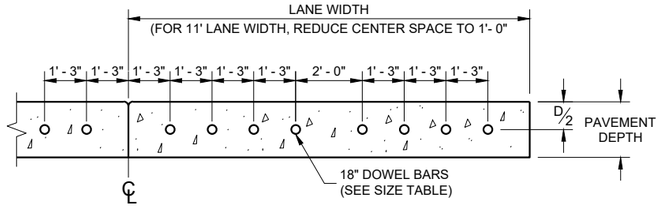
(3) FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A ¼" RADIUS AT FORMED JOINTS.

(4) PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

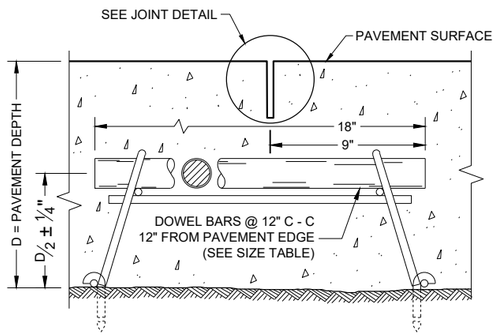
(5) INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C - C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO THE "DRILLED DOWEL BAR CONSTRUCTION JOINT" DETAIL.

(6) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

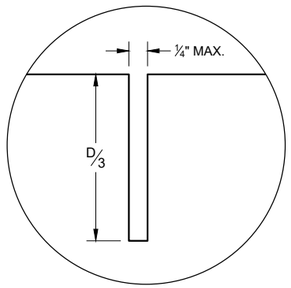
(7) ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS ⅛" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



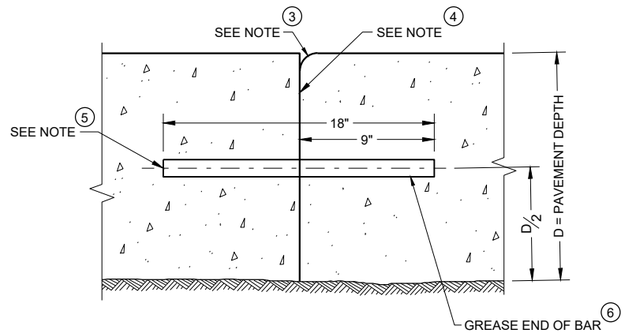
DRILLED DOWEL BAR CONSTRUCTION JOINT (7)



DOWELED CONTRACTION JOINT



JOINT DETAIL



TRANSVERSE CONSTRUCTION JOINT

RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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SDD 13C11 - 14b

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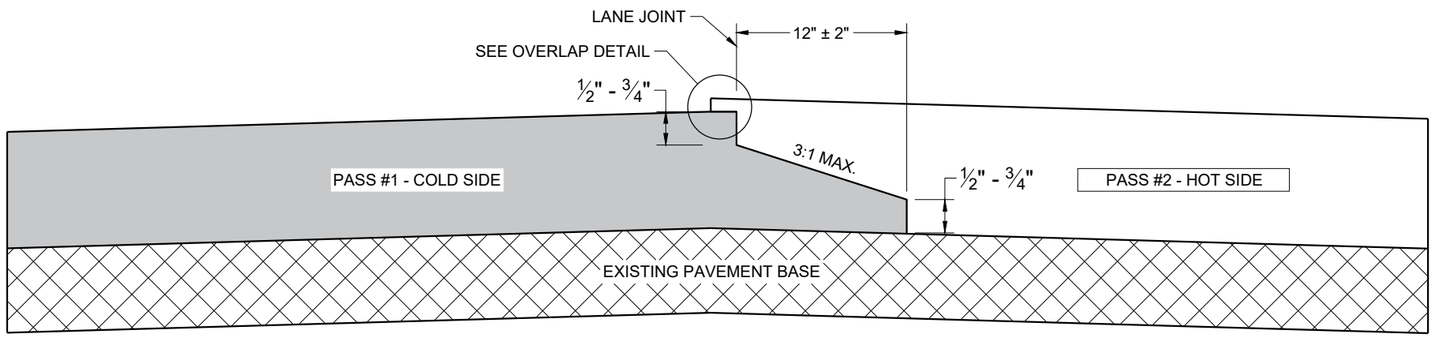
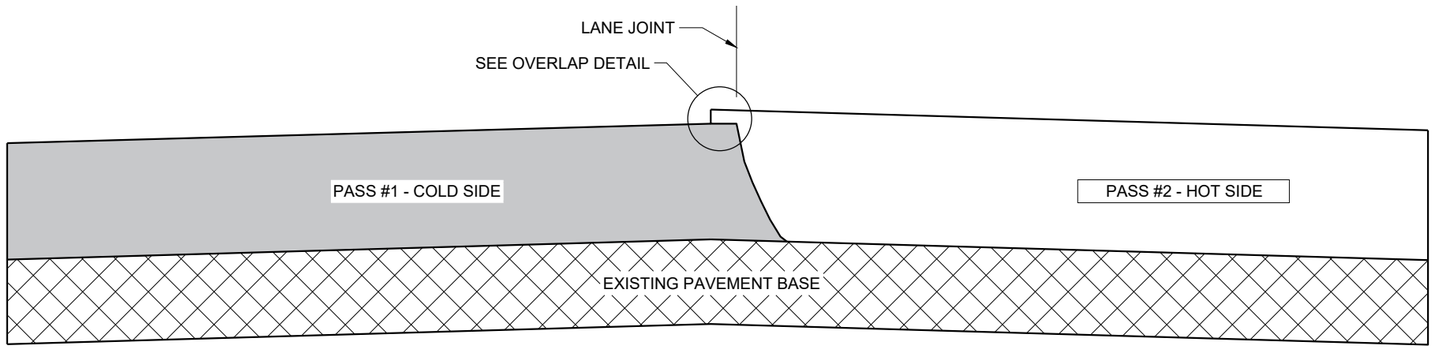
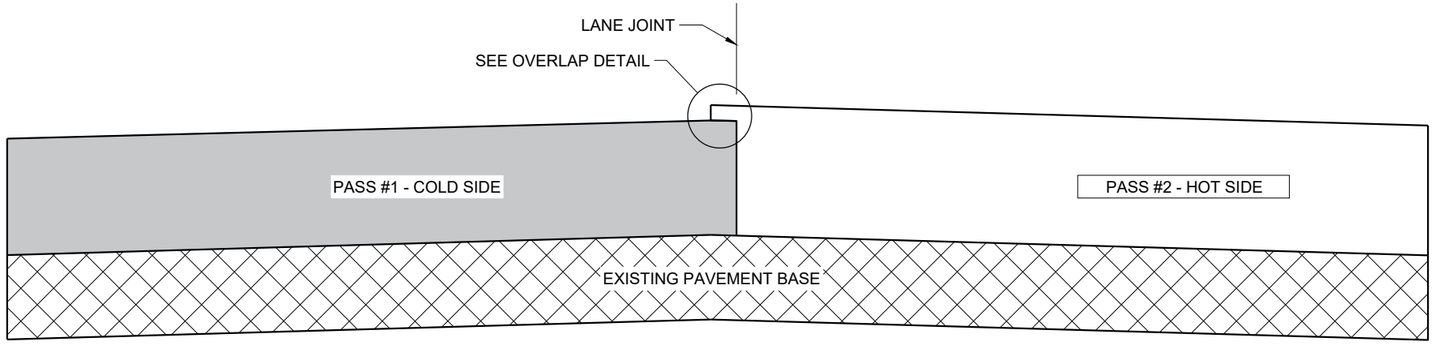


TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

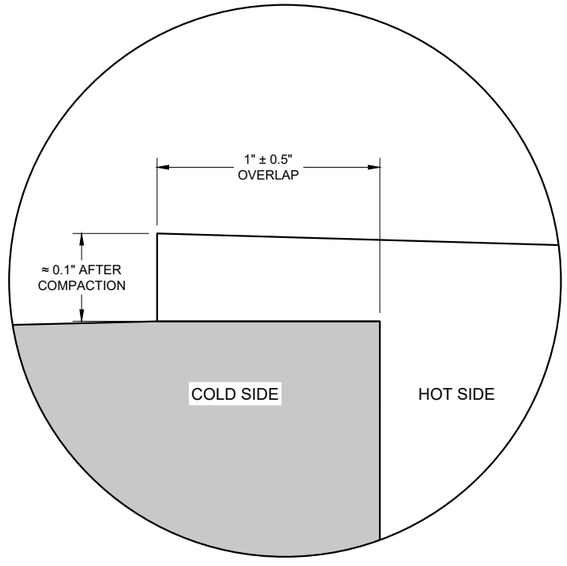
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

SDD 13C19 - 03

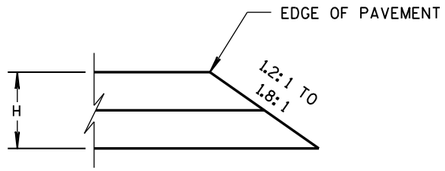
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

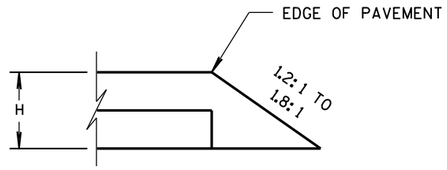
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



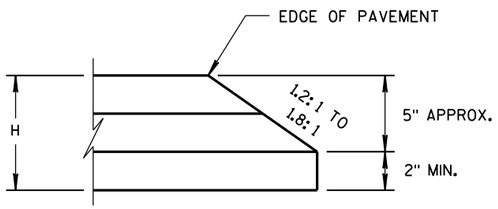
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



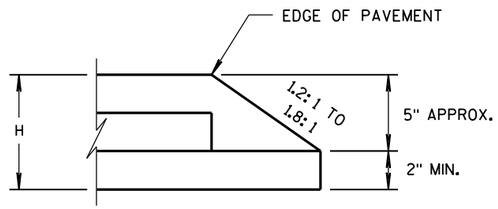
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

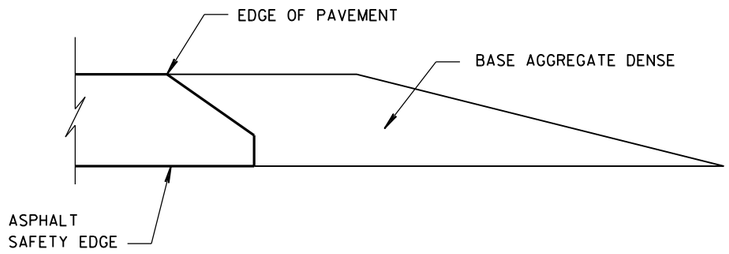
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

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S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

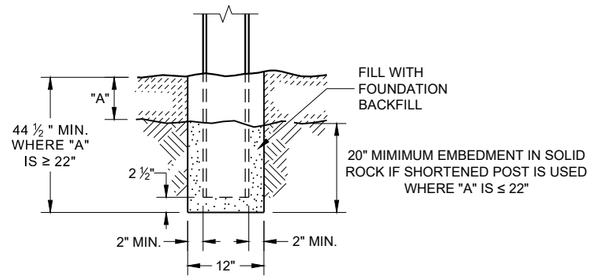
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

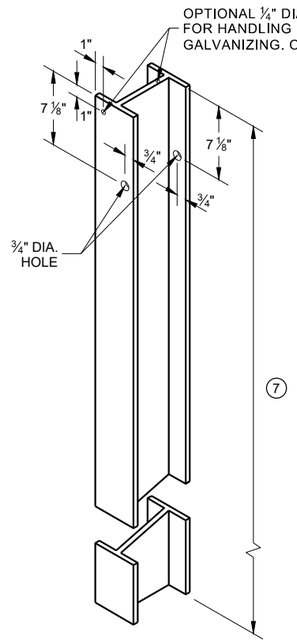
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

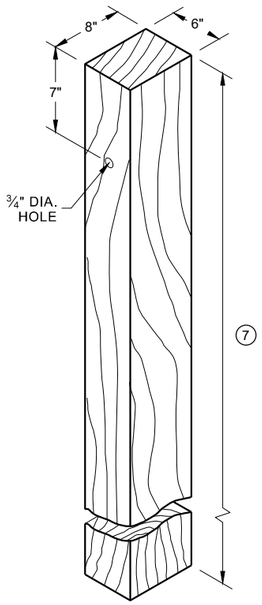
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



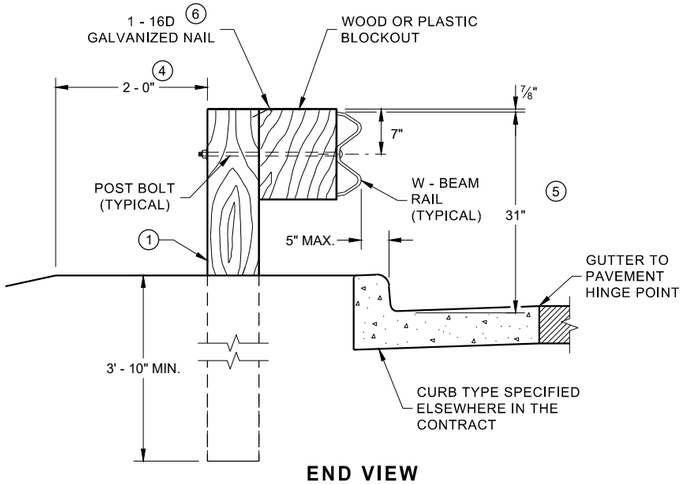
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



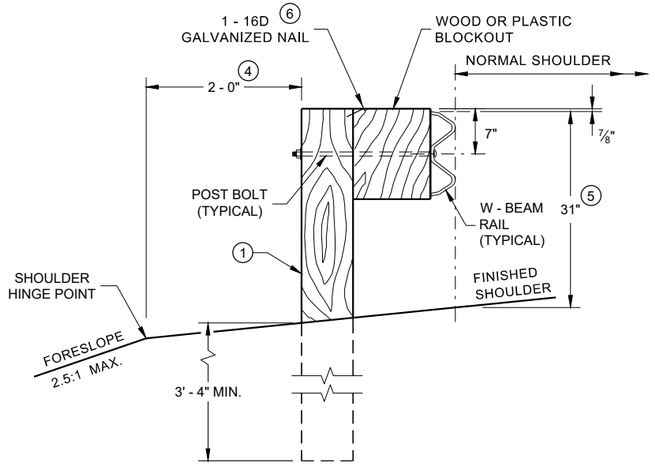
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



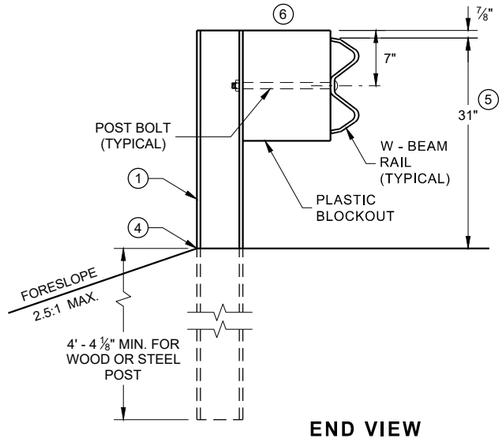
WOOD POST (6" X 8") NOMINAL (1)



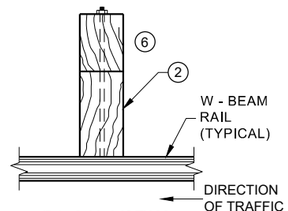
END VIEW
LOCATED ALONG A CURBED ROADWAY



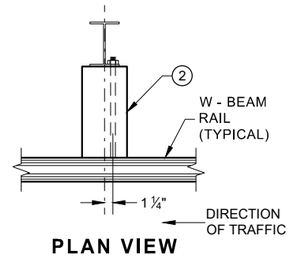
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



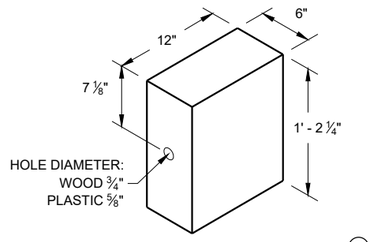
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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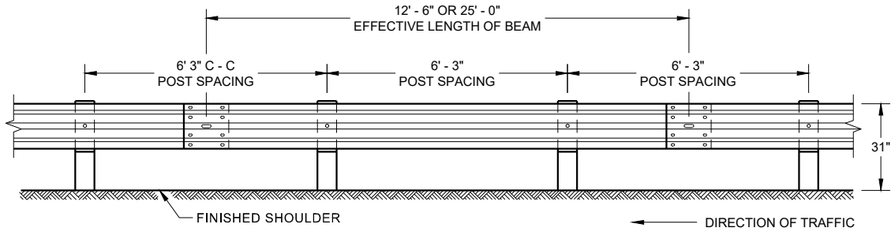
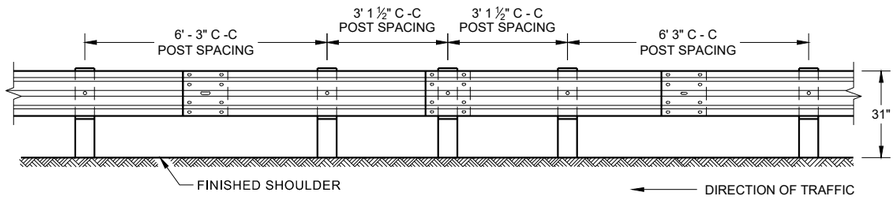
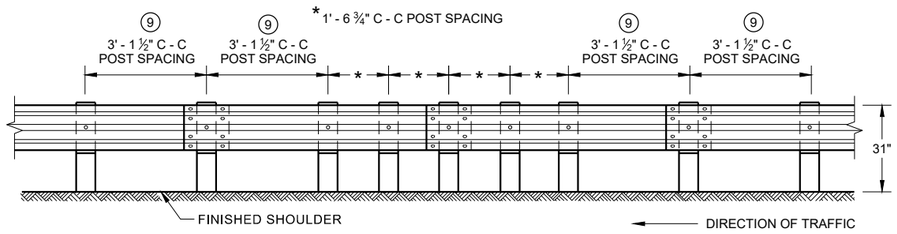


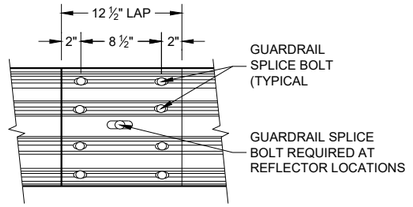
FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

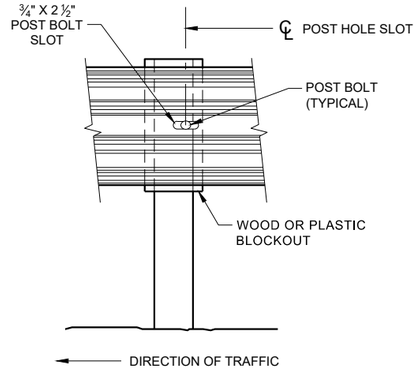
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

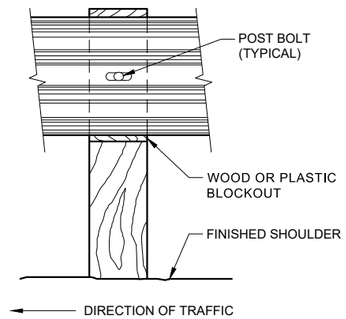
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

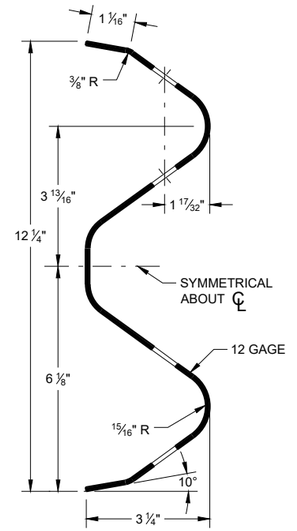
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



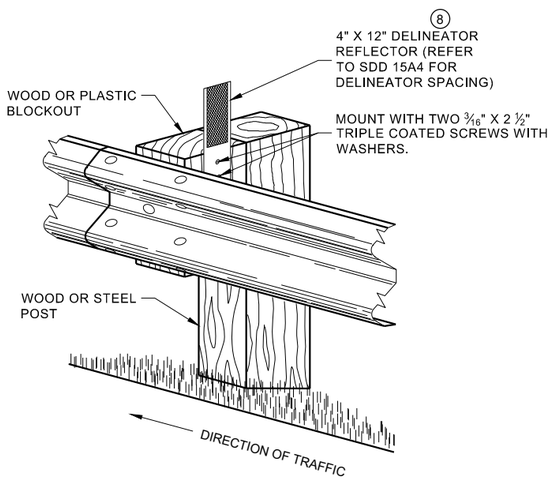
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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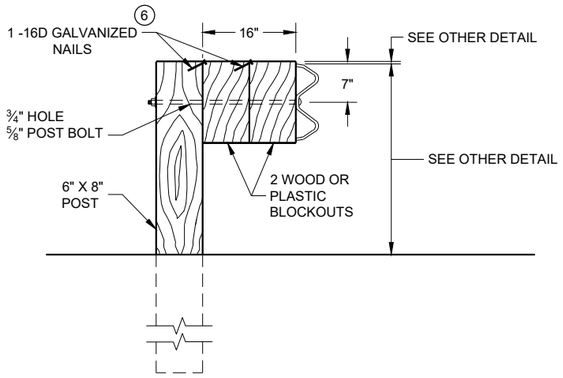
SDD 14B42 - 07b

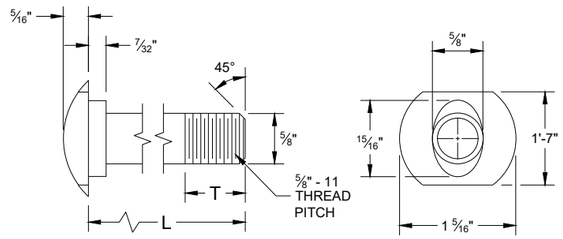


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

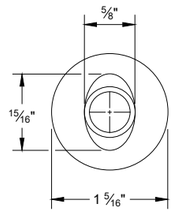
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

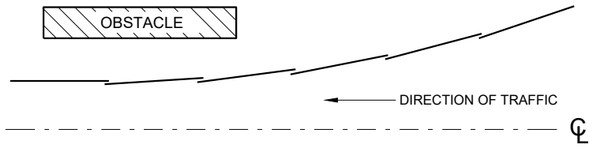


POST BOLT TABLE

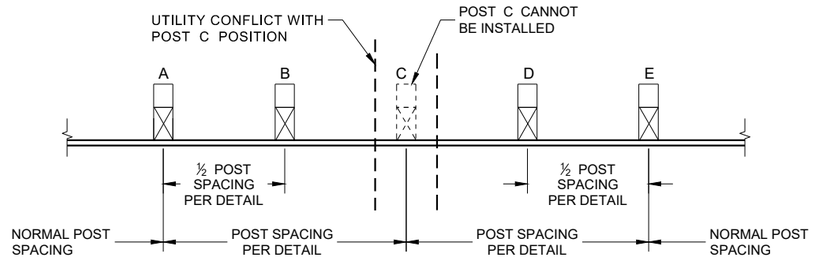
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



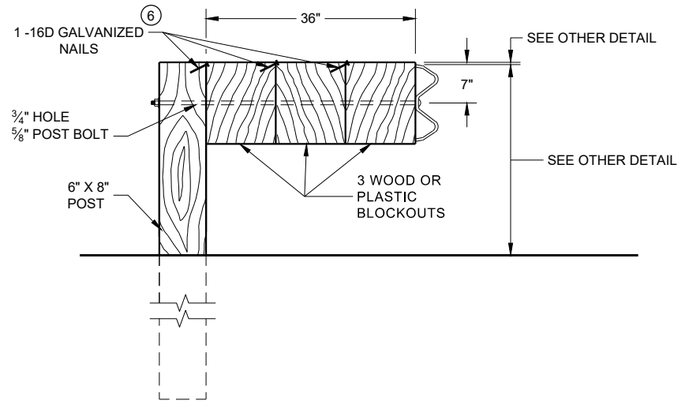
ALTERNATE BOLT HEAD



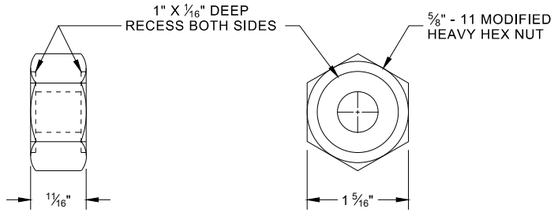
PLAN VIEW
BEAM LAPPING DETAIL



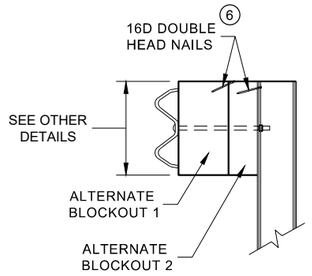
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



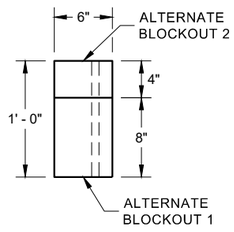
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

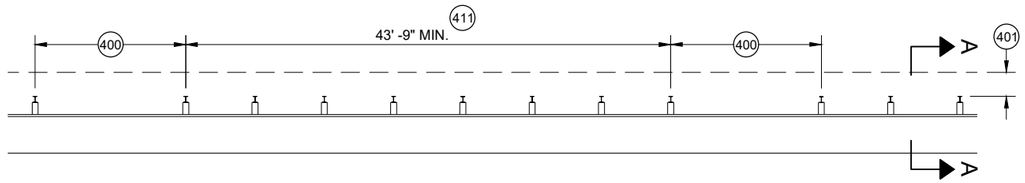
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

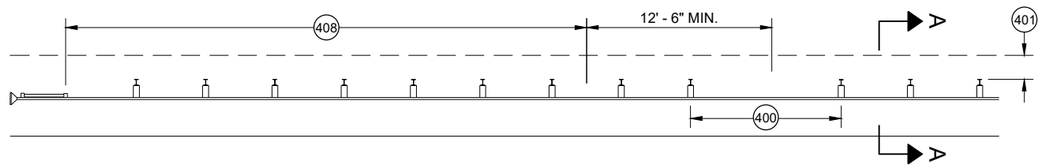
(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

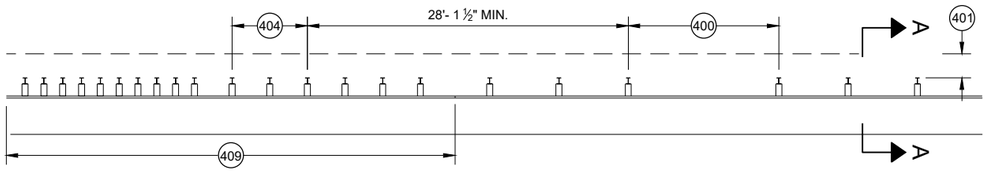
6
SDD 14B42 - 07c



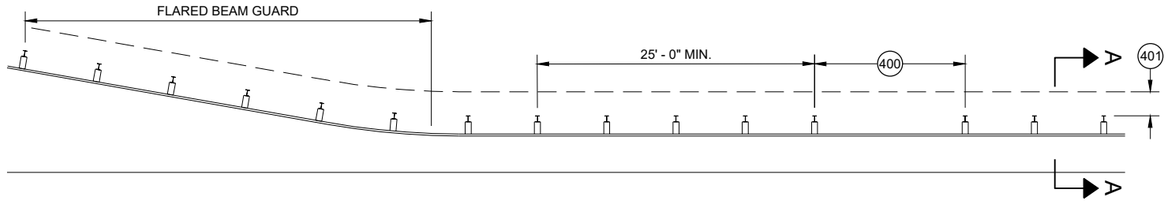
MISSING POST IN MGS GUARDRAIL



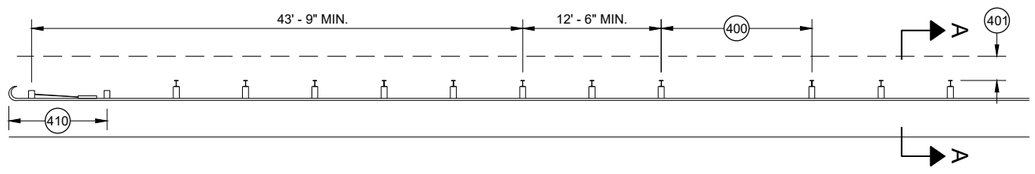
MISSING POST IN MGS GUARDRAIL NEAR EAT



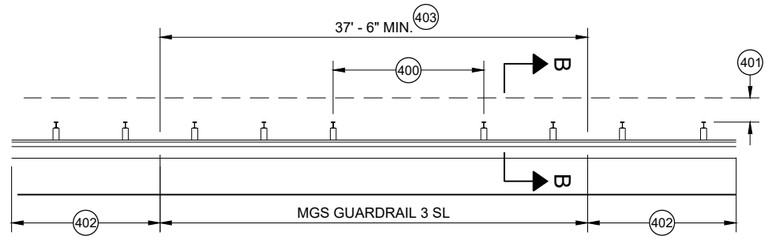
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

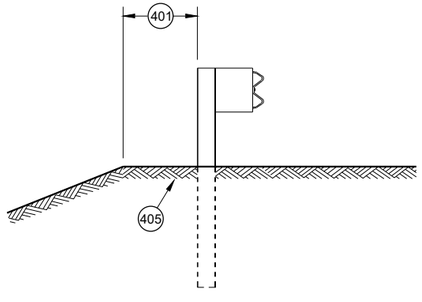


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

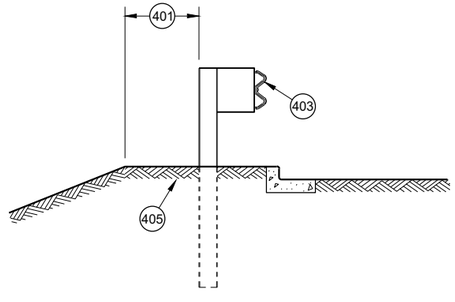


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

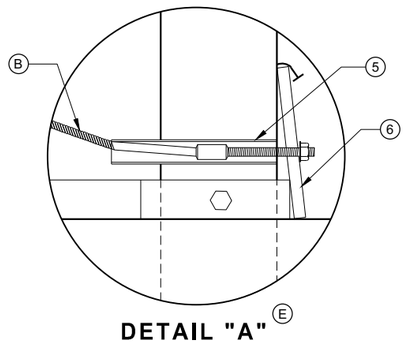
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

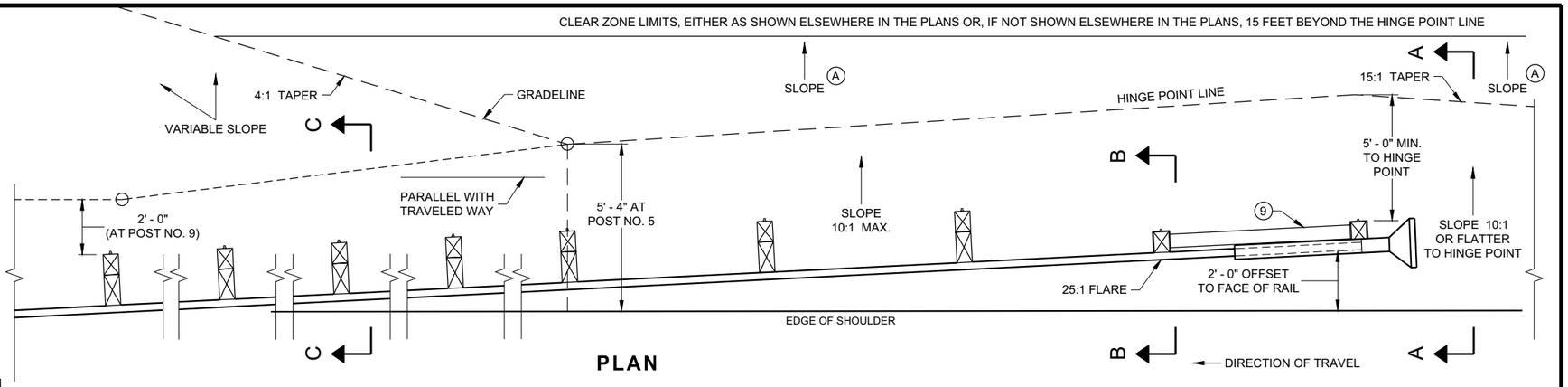
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

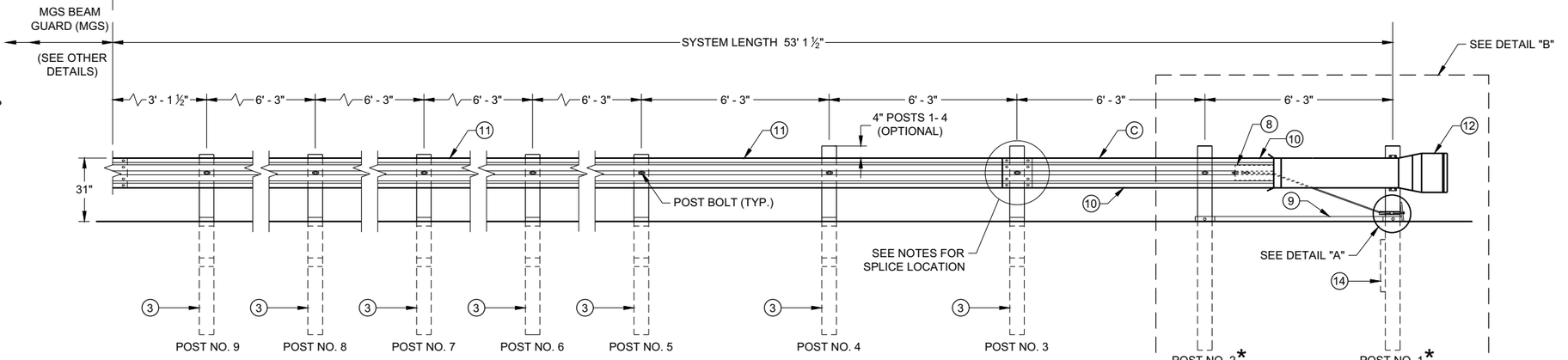
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



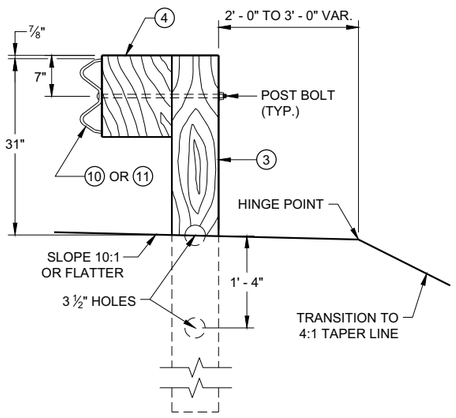
DETAIL "A" (E)



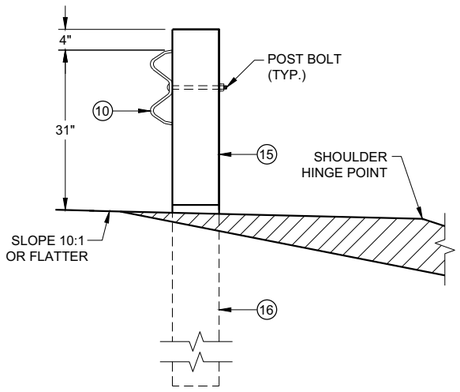
PLAN



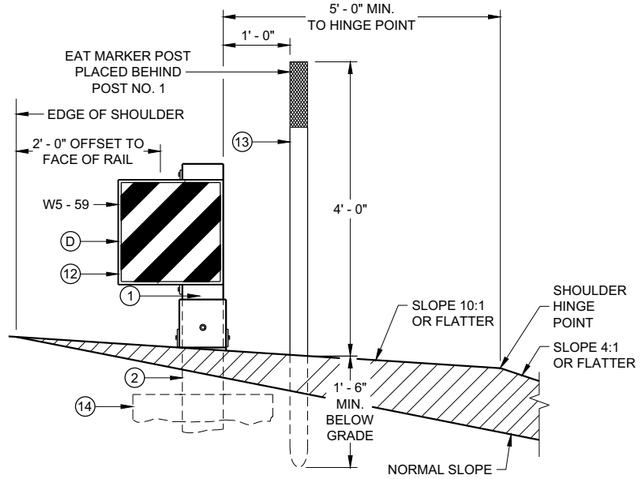
ELEVATION



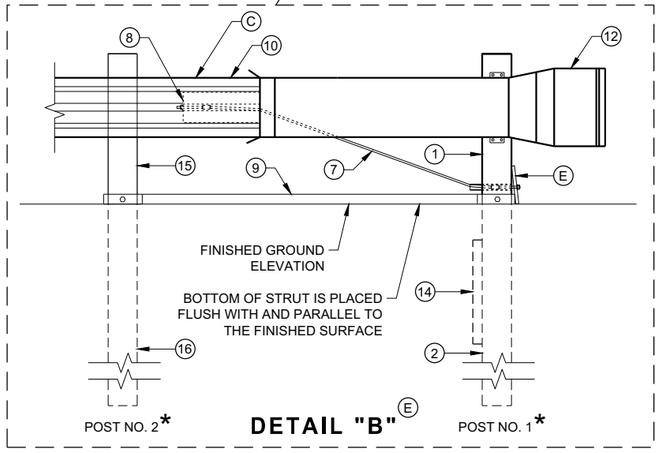
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



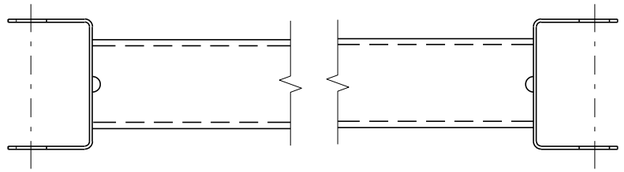
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

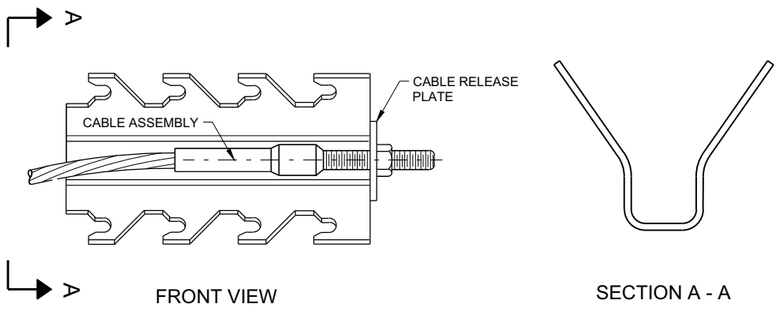
SDD 14B44 - 04a



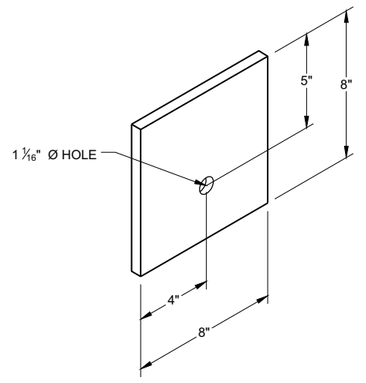
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

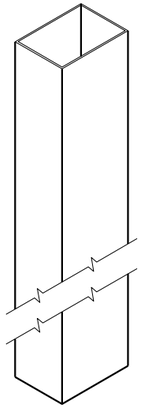
6

SDD 14B44 - 04b

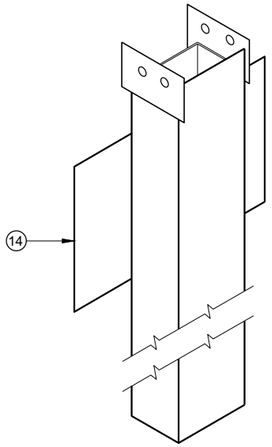
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

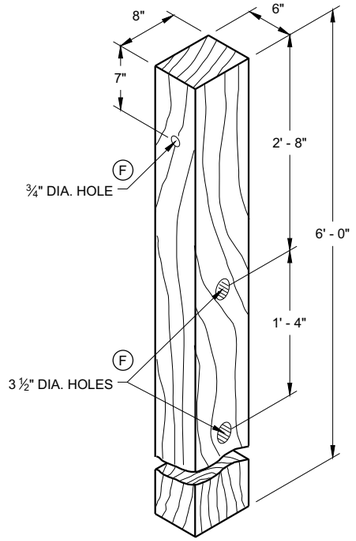
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



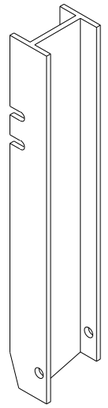
UPPER POST NO. 1 (1) (E)



LOWER POST NO. 1 (2) (E)



WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



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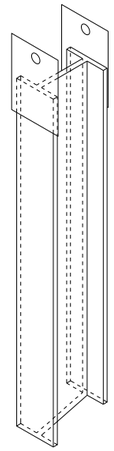

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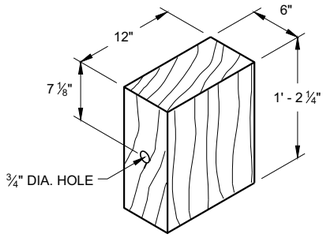
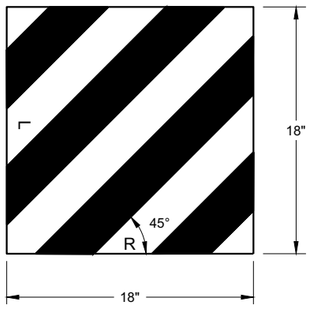
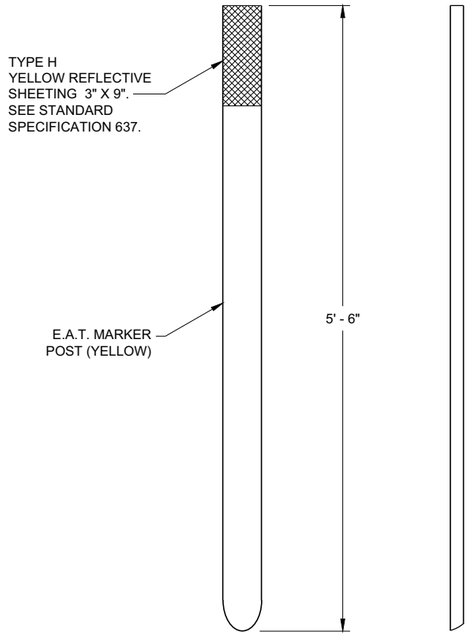


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



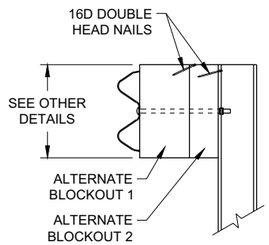
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

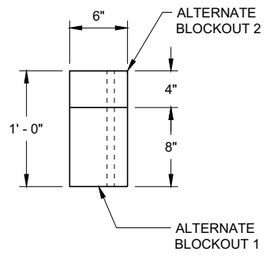


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

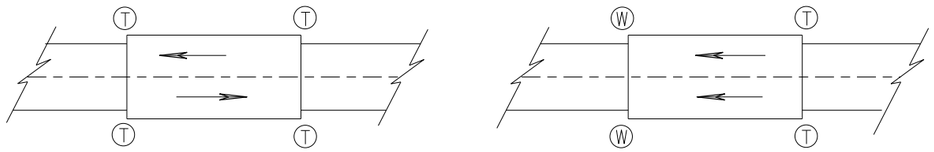
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

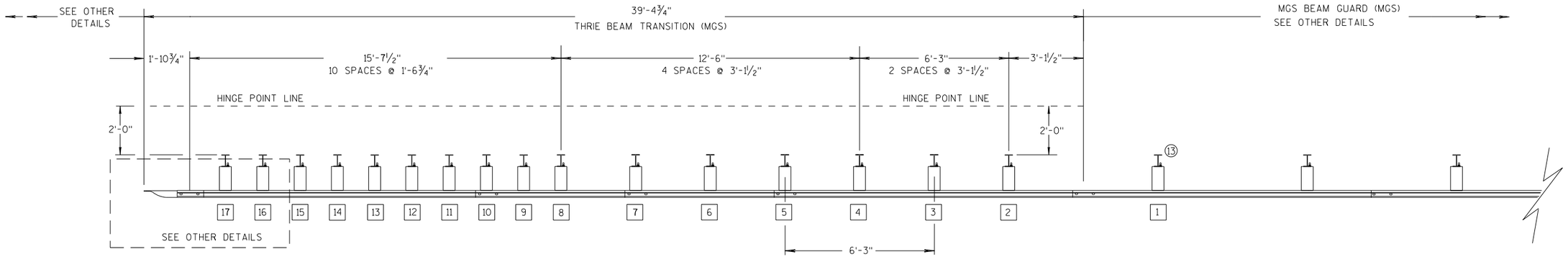
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

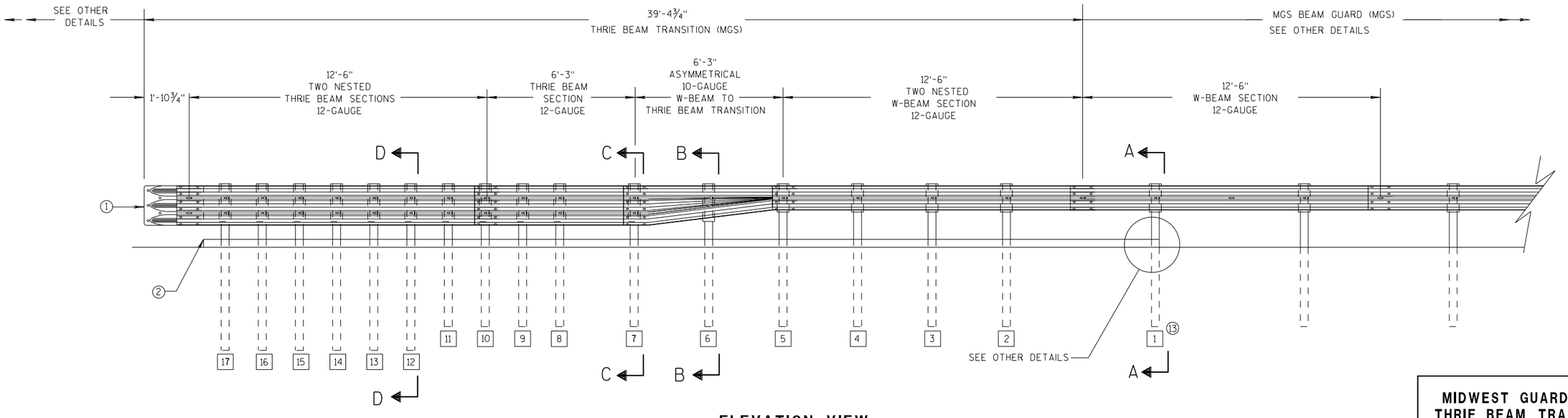
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

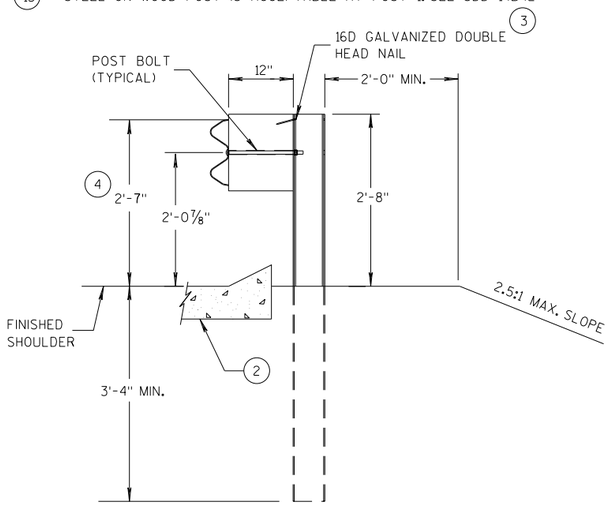
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

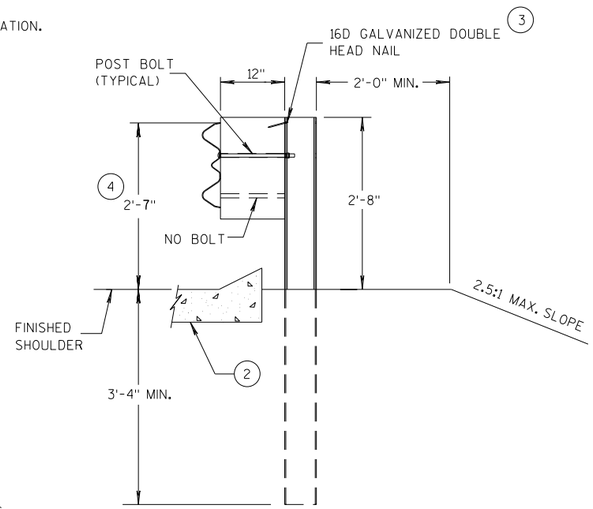
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



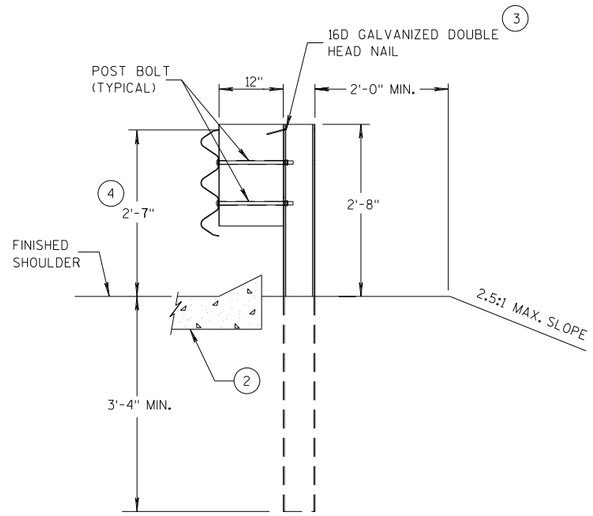
SECTION A-A (13)

POSTS 1-5



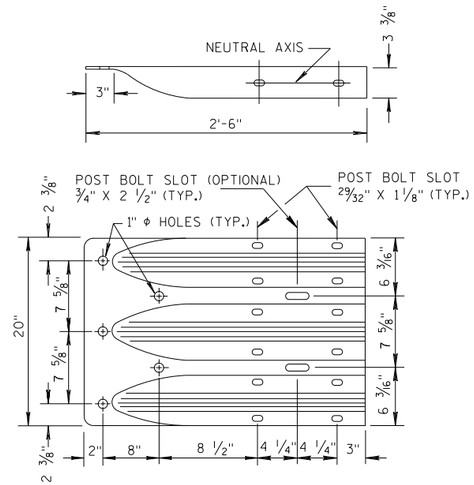
SECTION B-B

POST 6

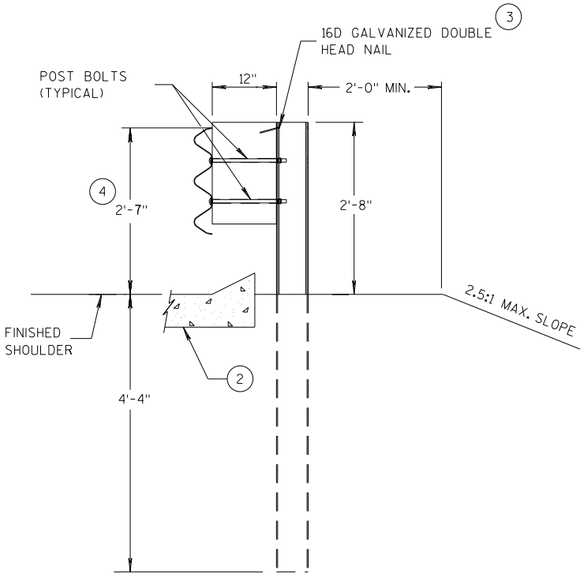


SECTION C-C

POSTS 7-11

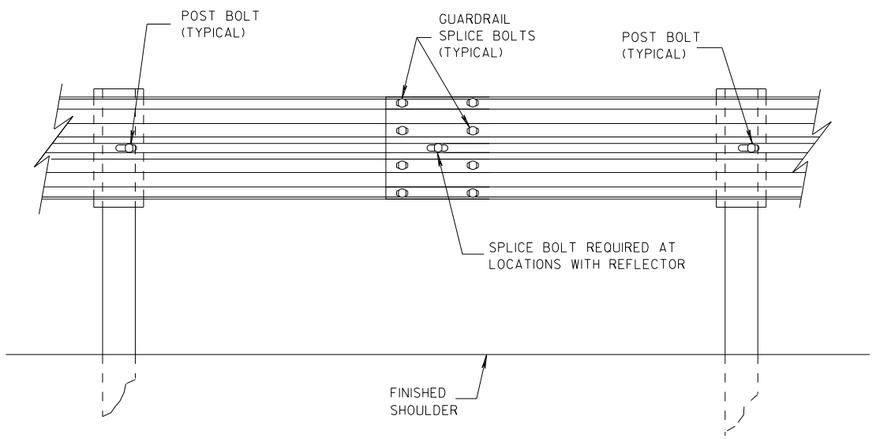


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

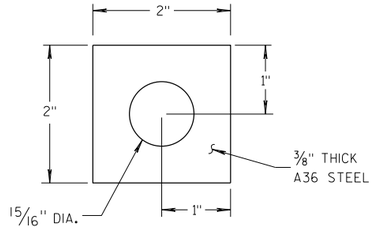
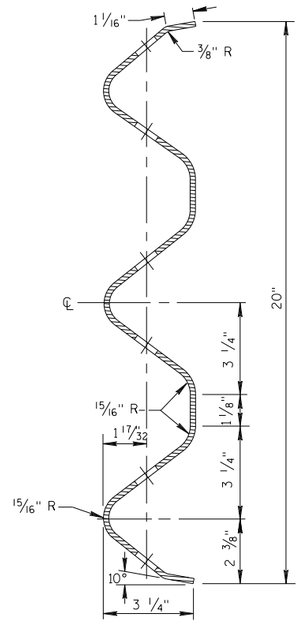


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

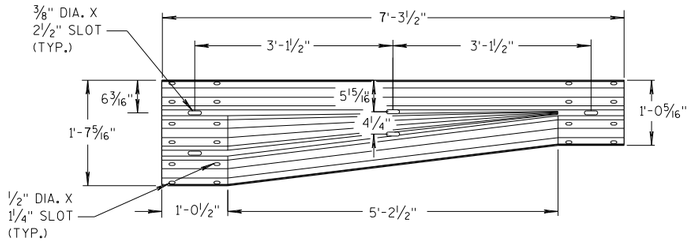
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

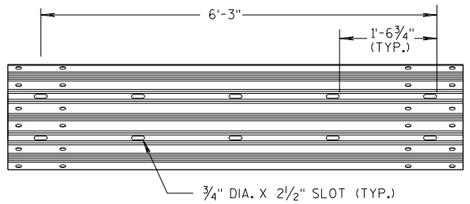
S.D.D. 14 B 45-5b

6

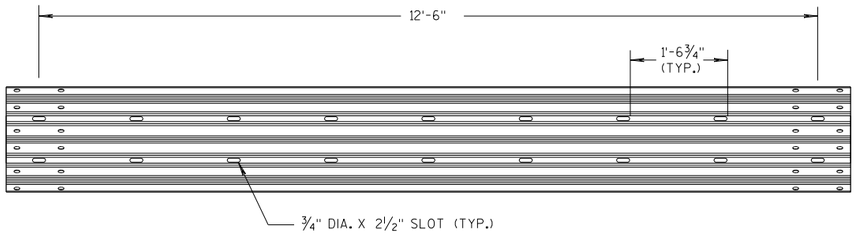
S.D.D. 14 B 45-5b



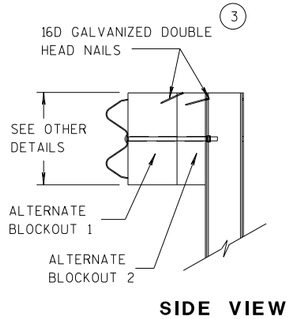
W-BEAM TO THRIE BEAM TRANSITION SECTION



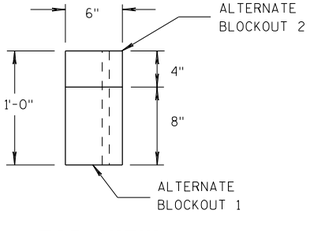
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

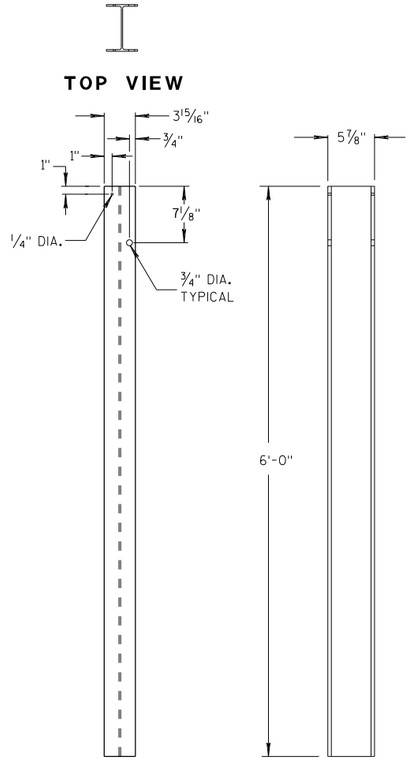


SIDE VIEW



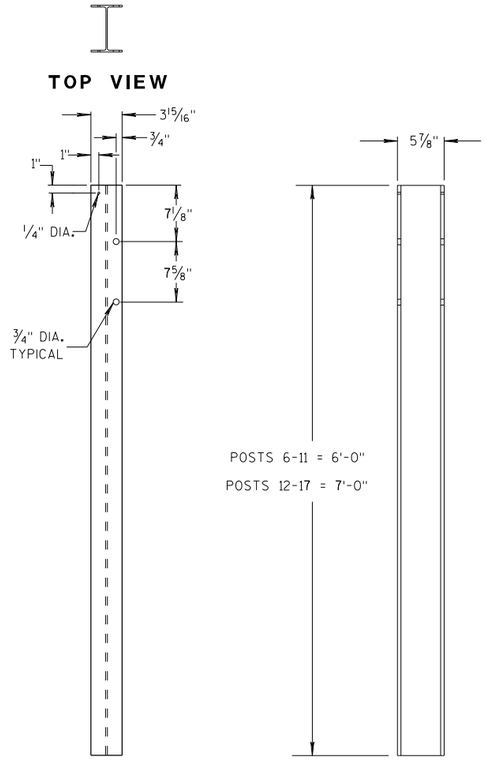
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



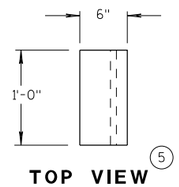
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

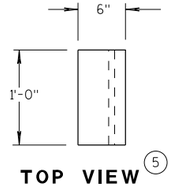


FRONT VIEW SIDE VIEW

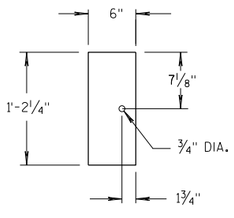
STEEL POSTS 6-17



TOP VIEW (5)

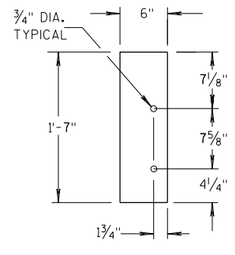


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

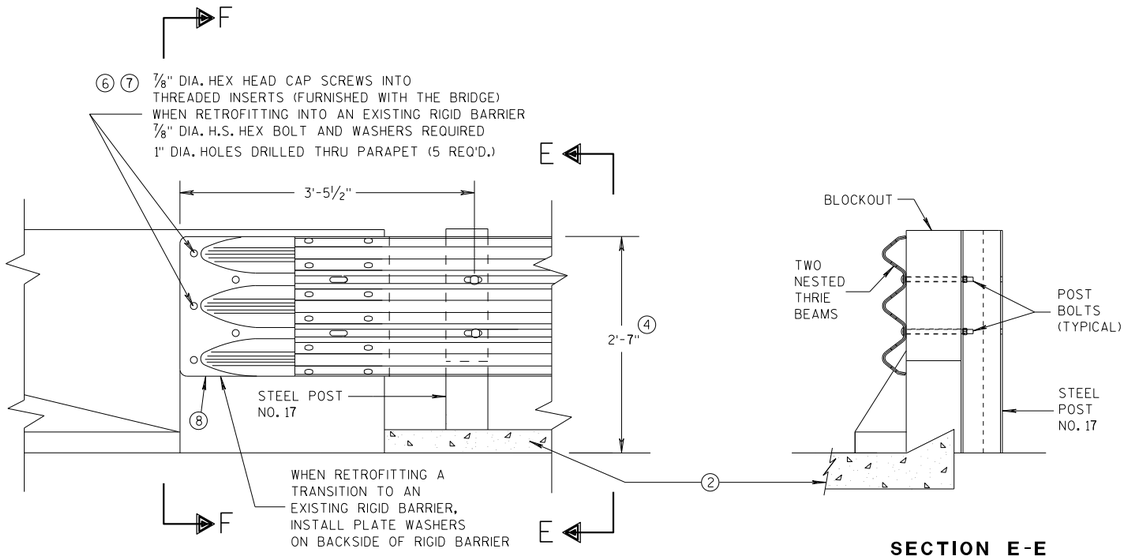
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

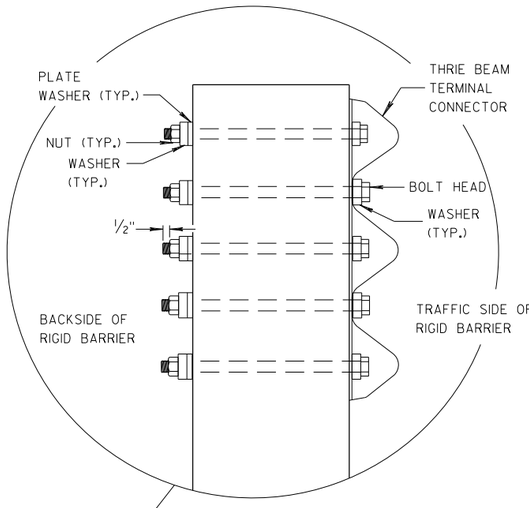
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

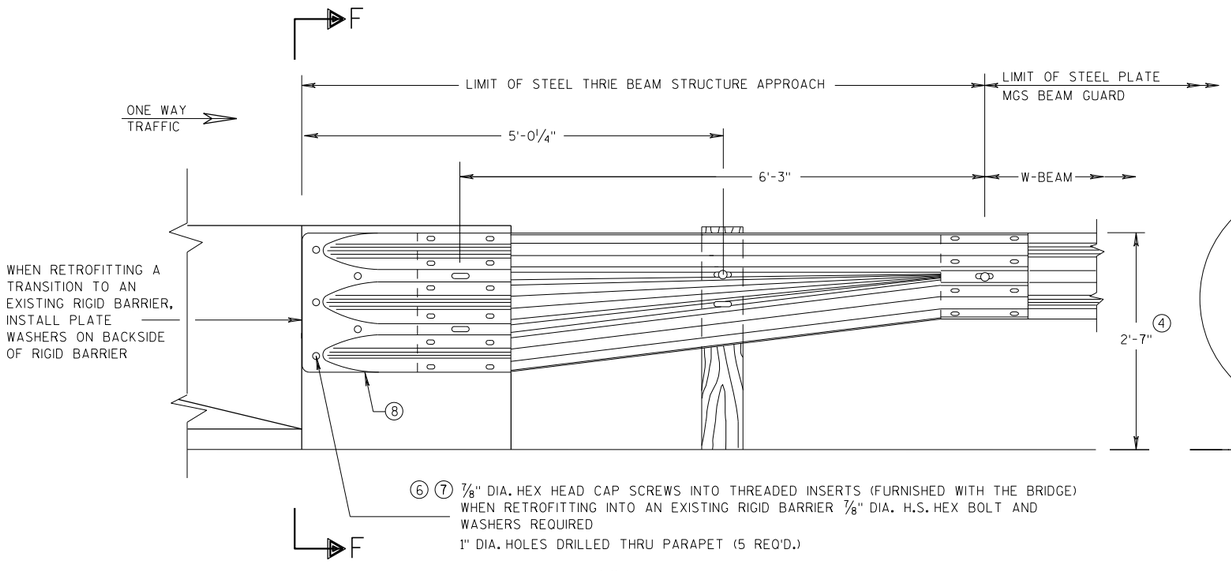
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

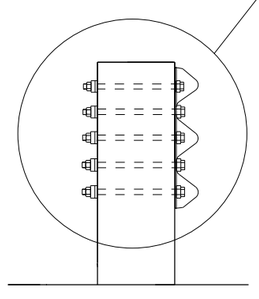
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

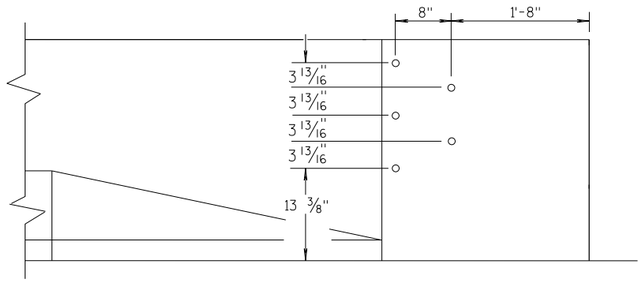




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[illegible] UNIT SUPERVIS[illegible]NT
FHWA

6

S.D.D. 14 B 45-5d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

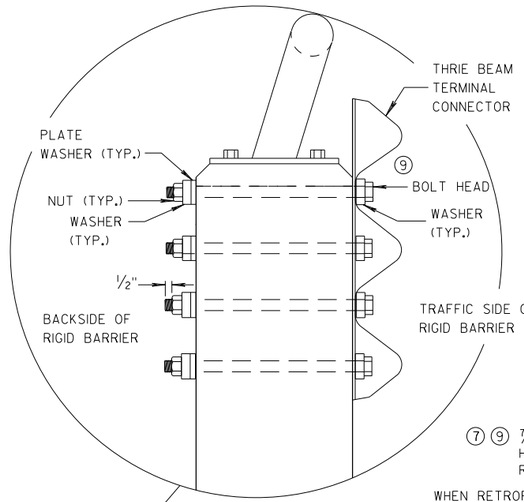
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

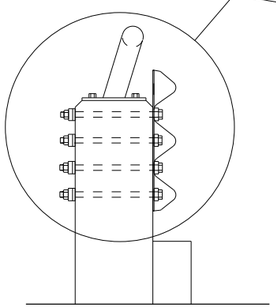
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

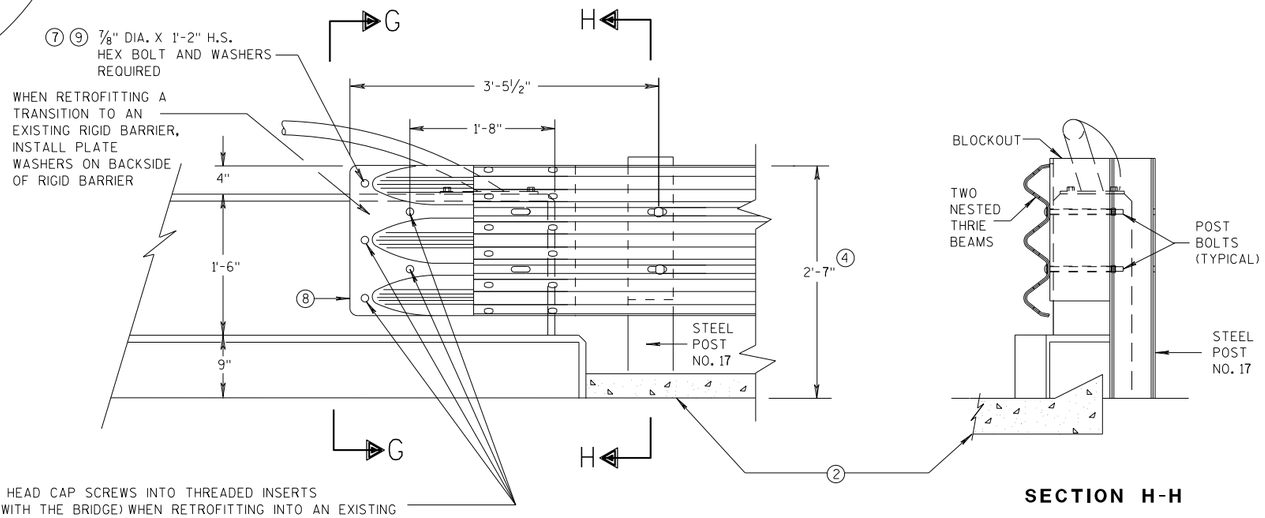
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





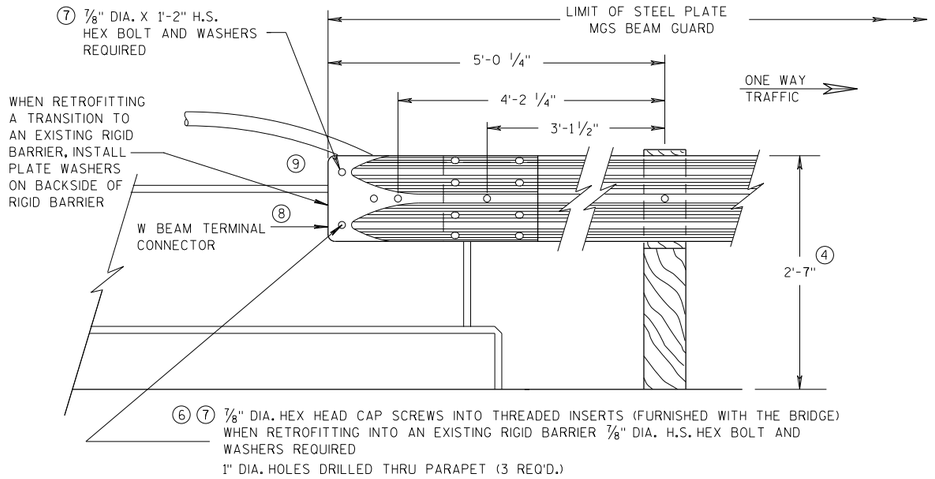
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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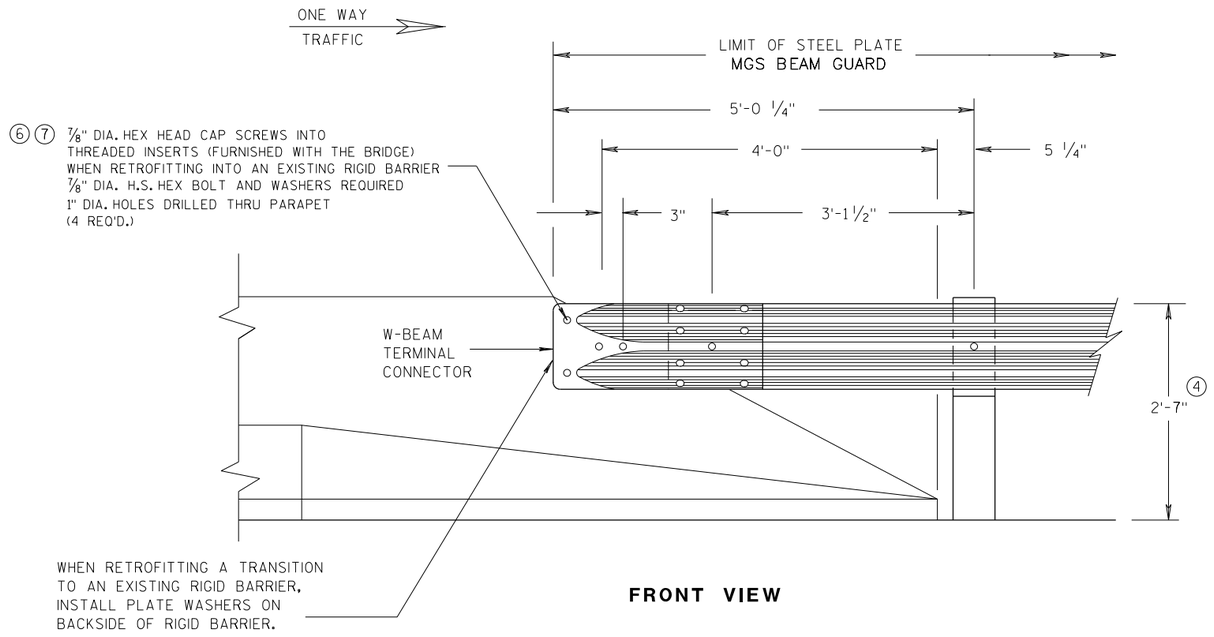


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

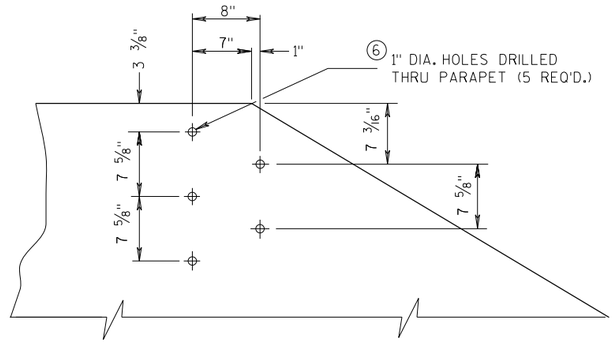
GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

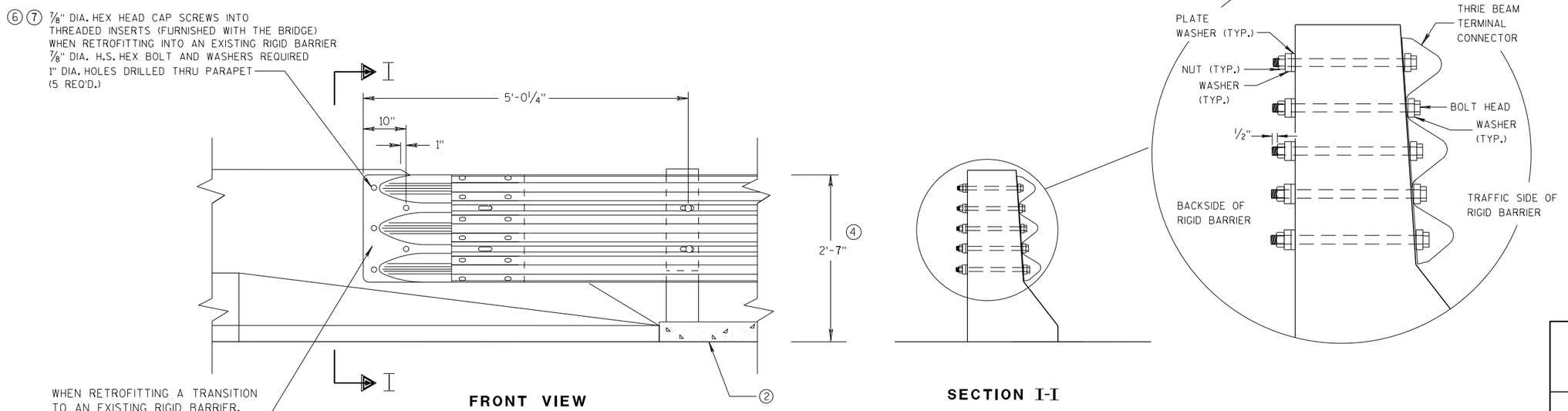
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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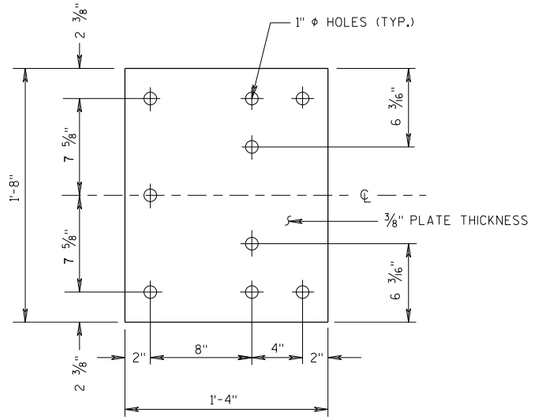
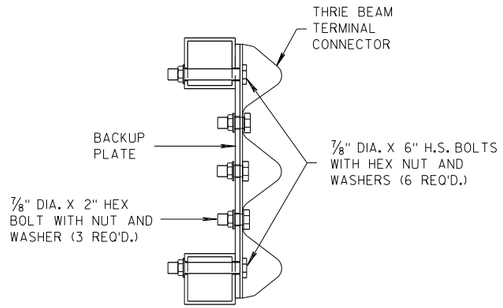
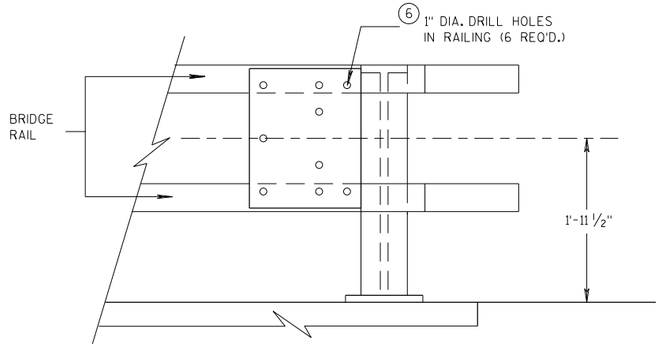


BACK-UP PLATE DETAIL



SECTION J-J

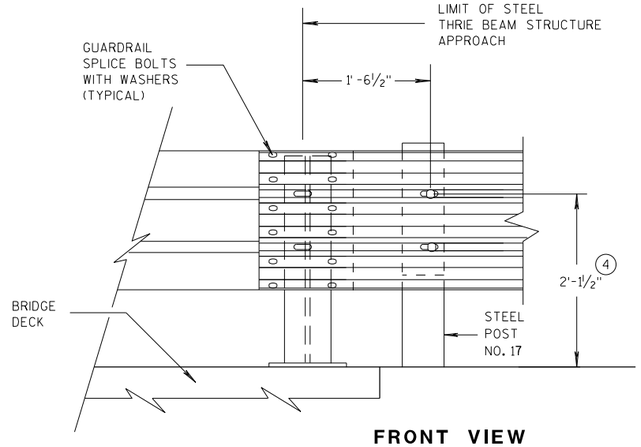


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

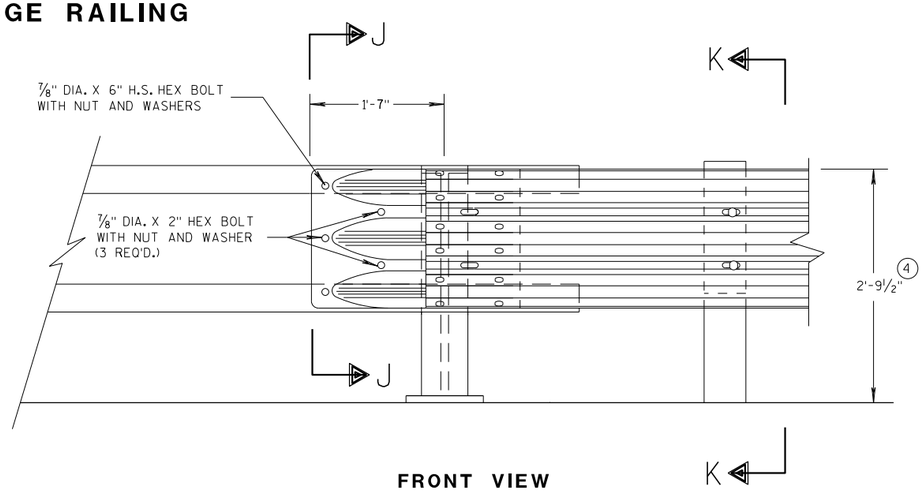
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

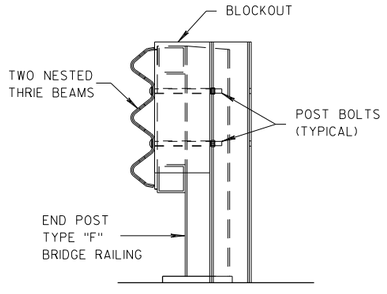


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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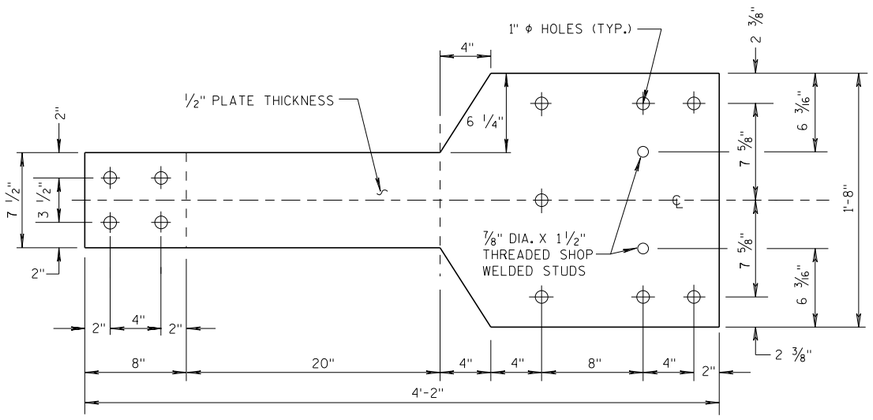
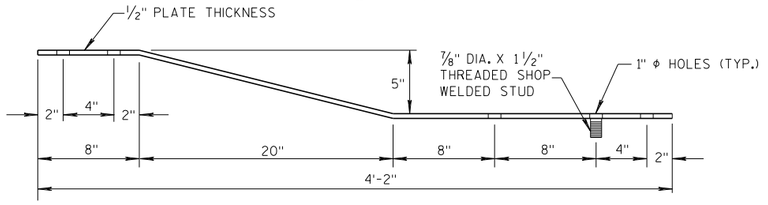
GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

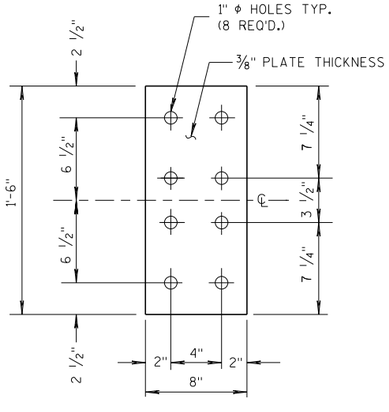


FRONT VIEW



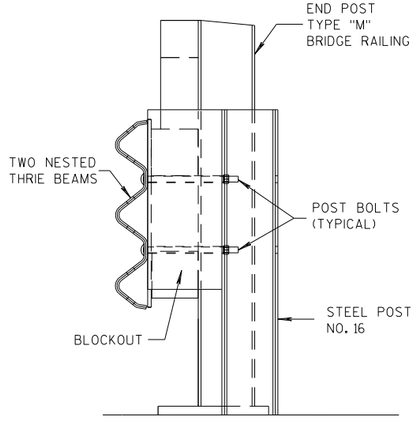
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

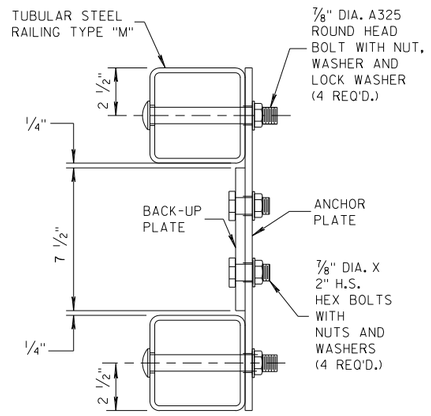


FRONT VIEW

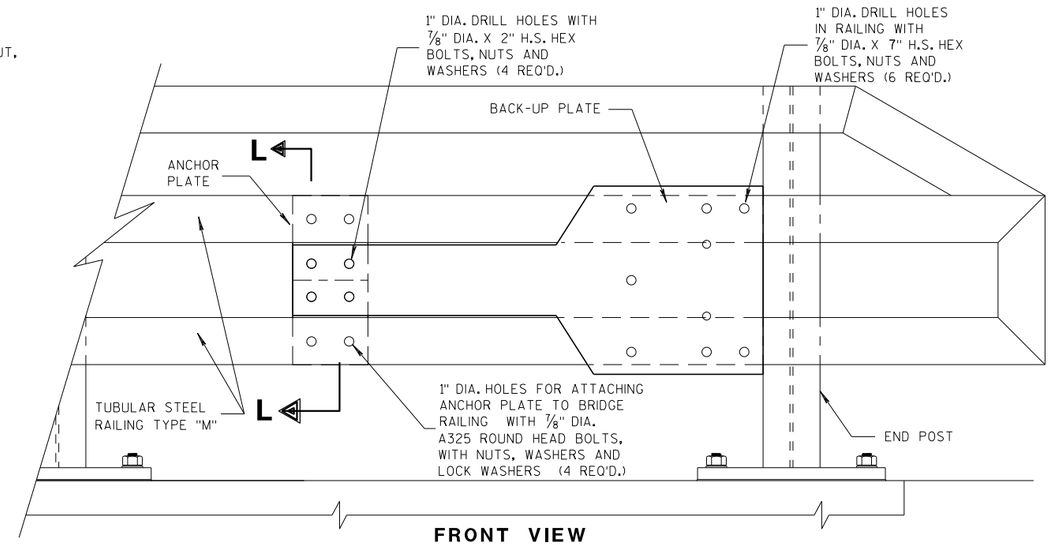
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

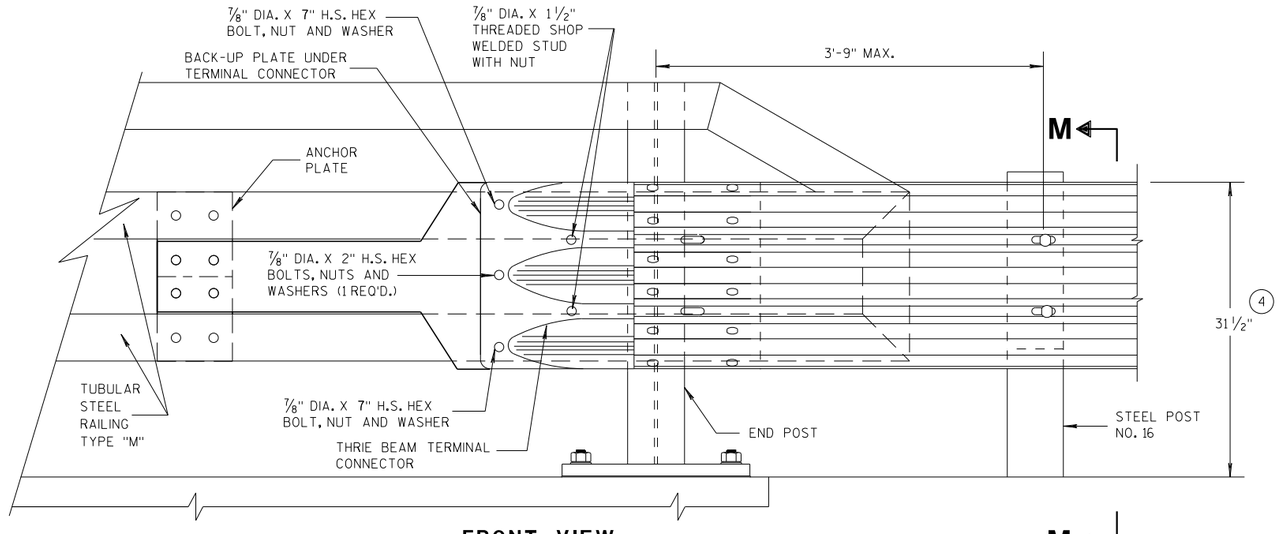


SECTION L-L

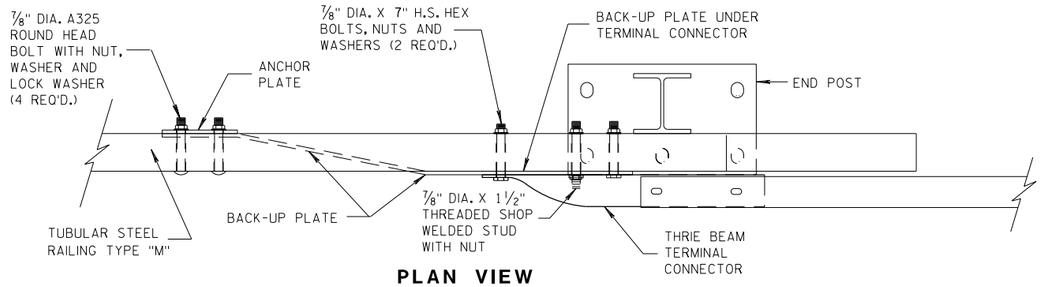


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

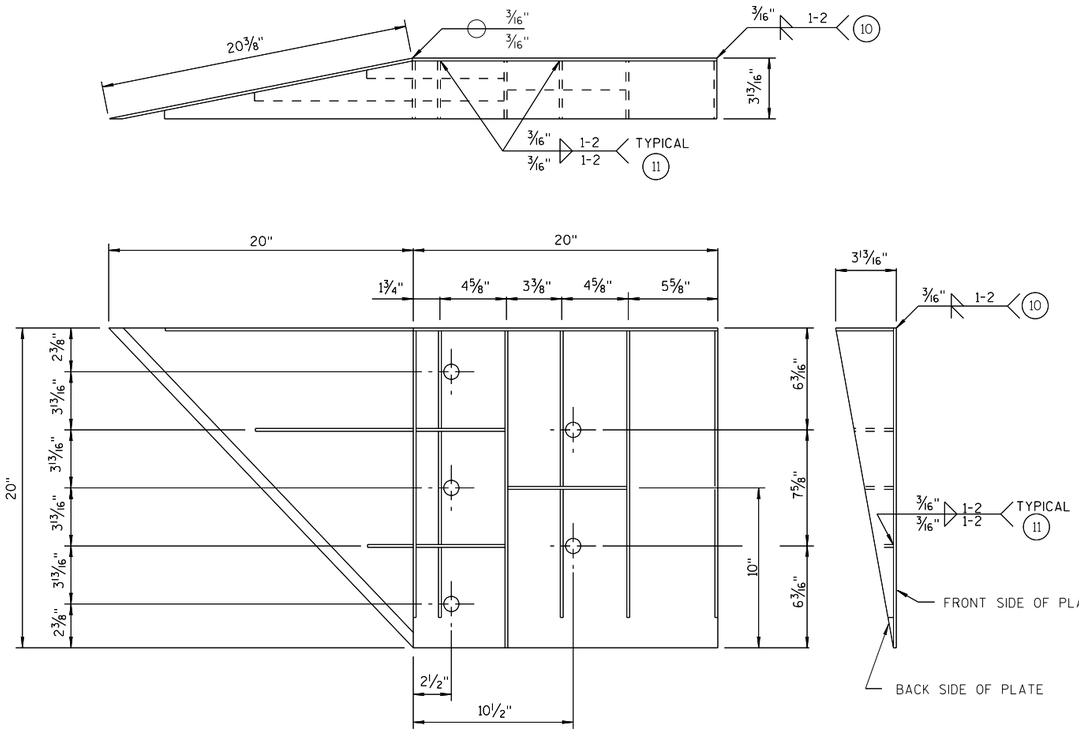
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

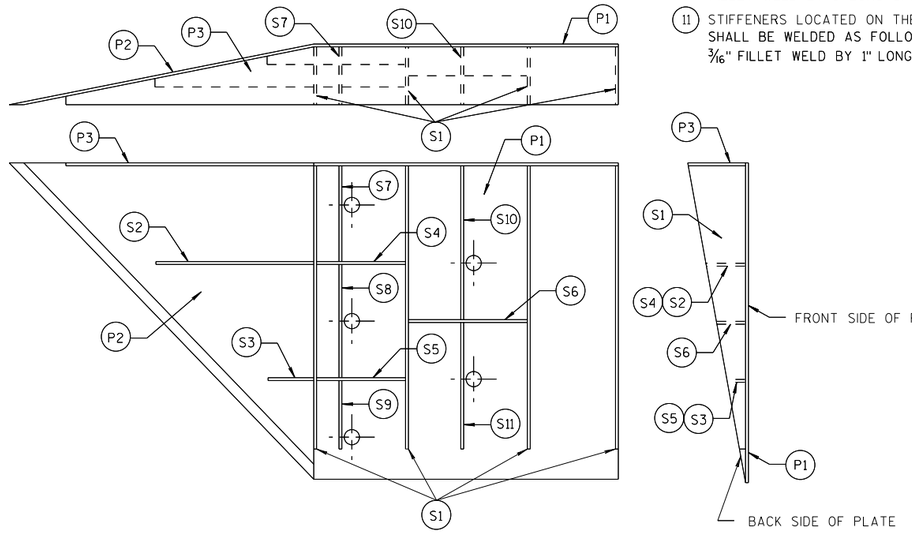


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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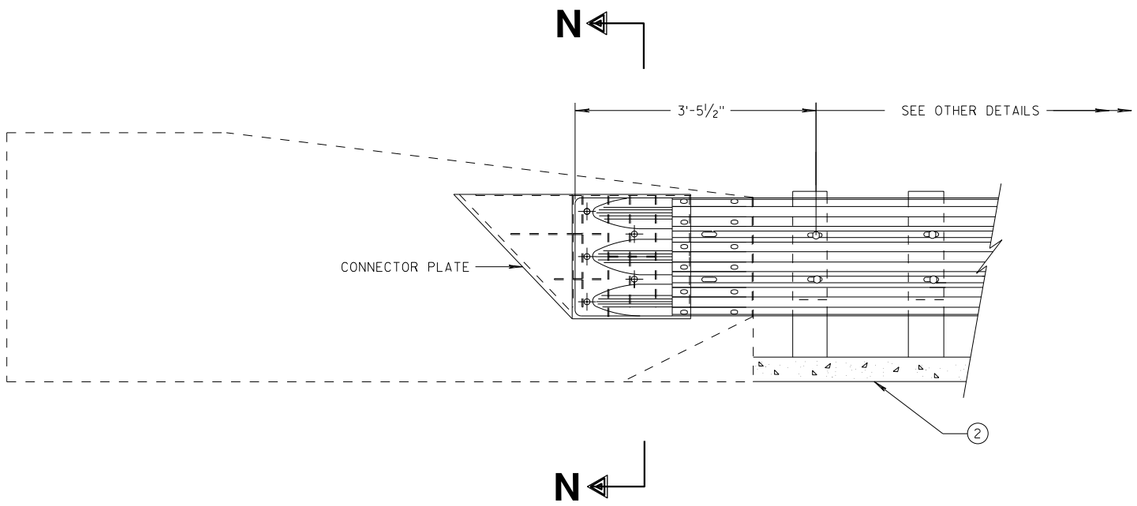
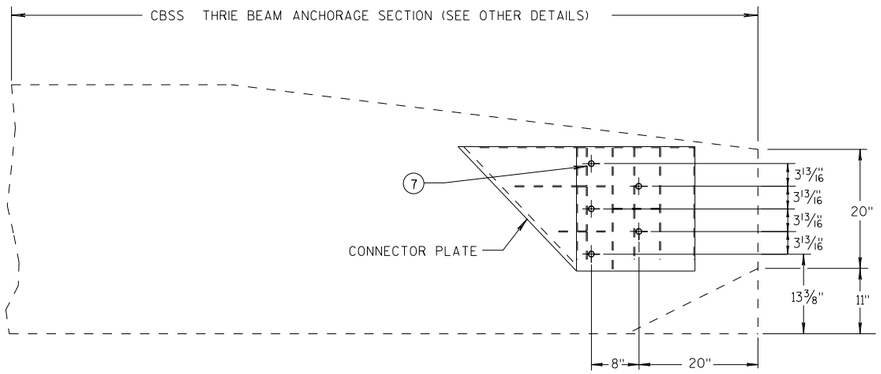


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



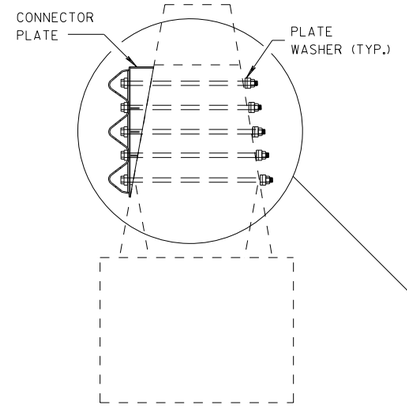
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

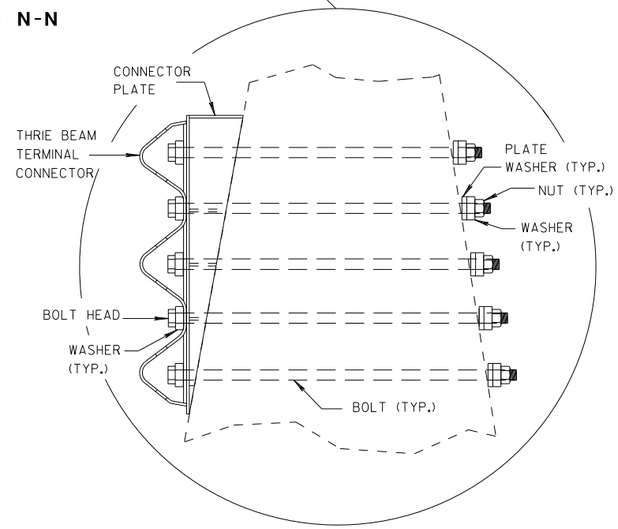
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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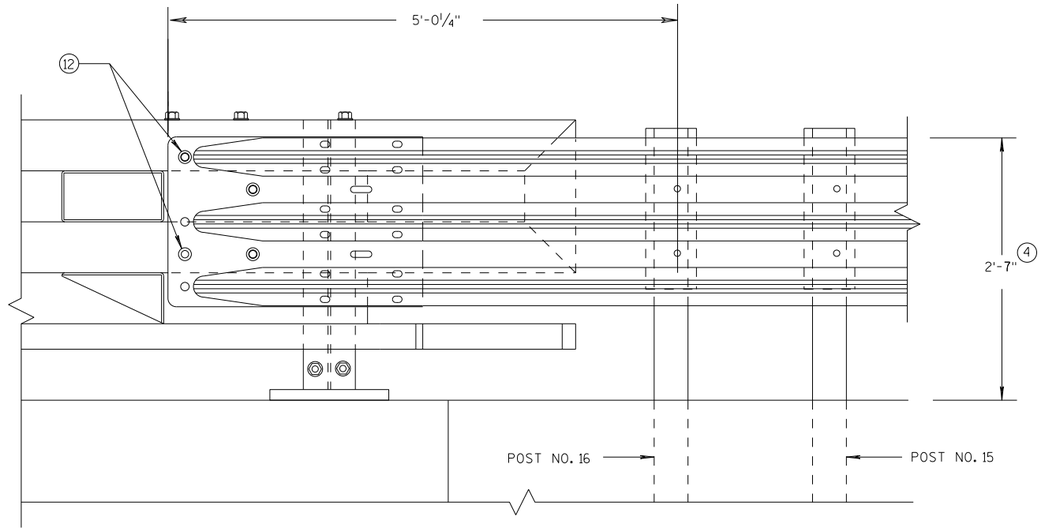
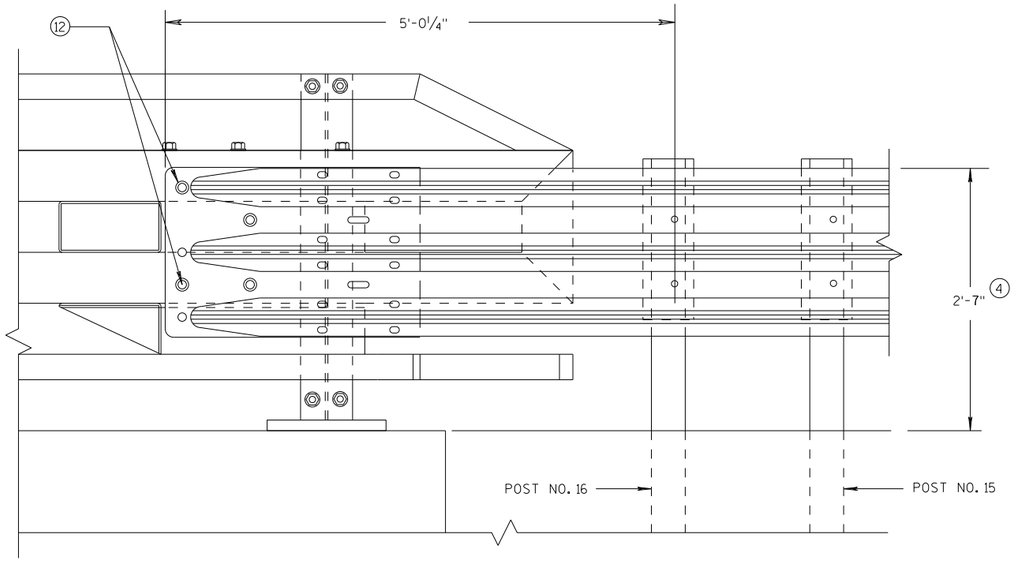


ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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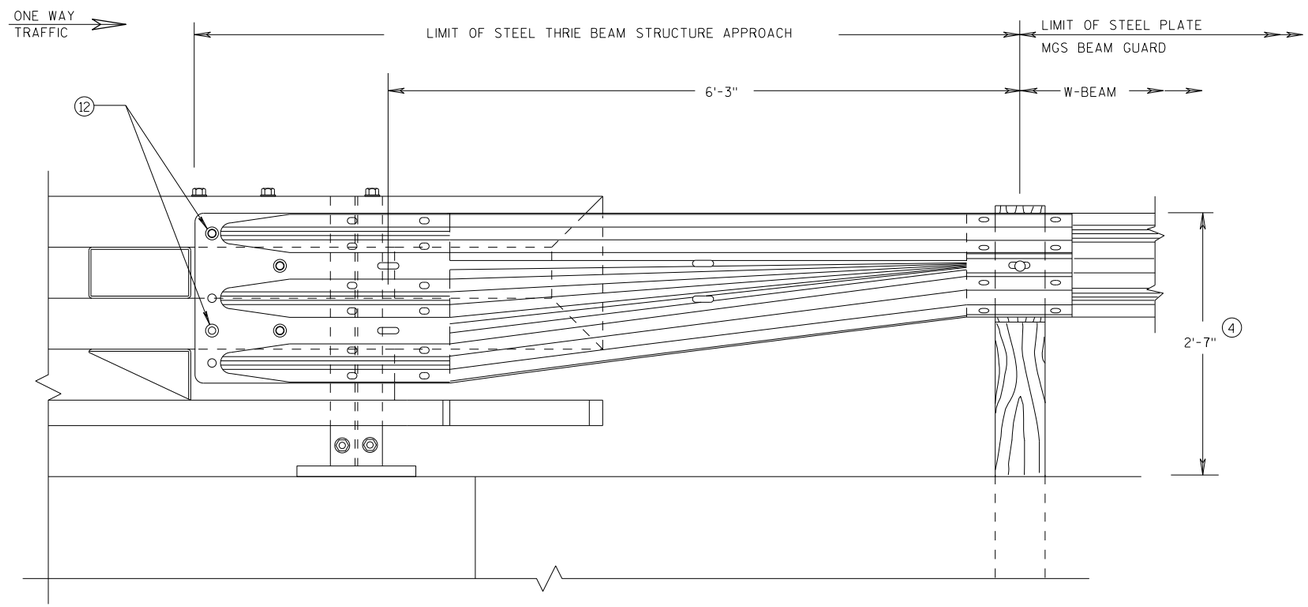


FRONT VIEW

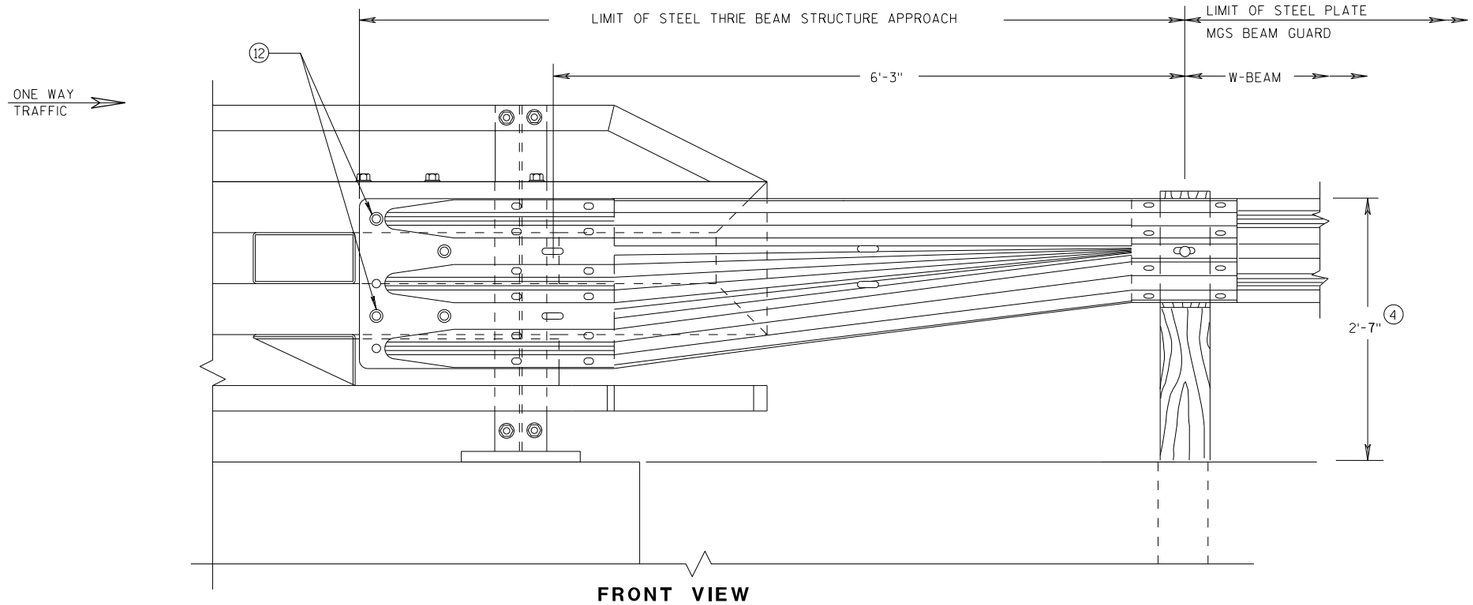
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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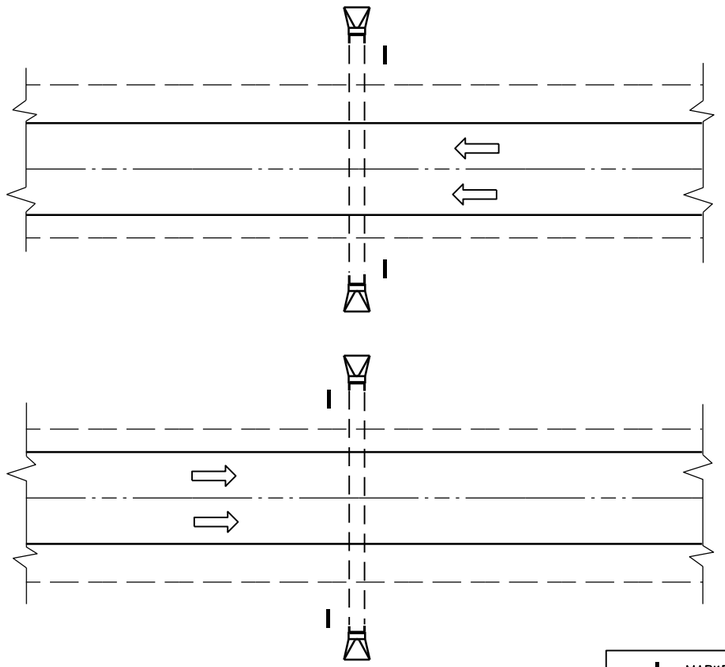
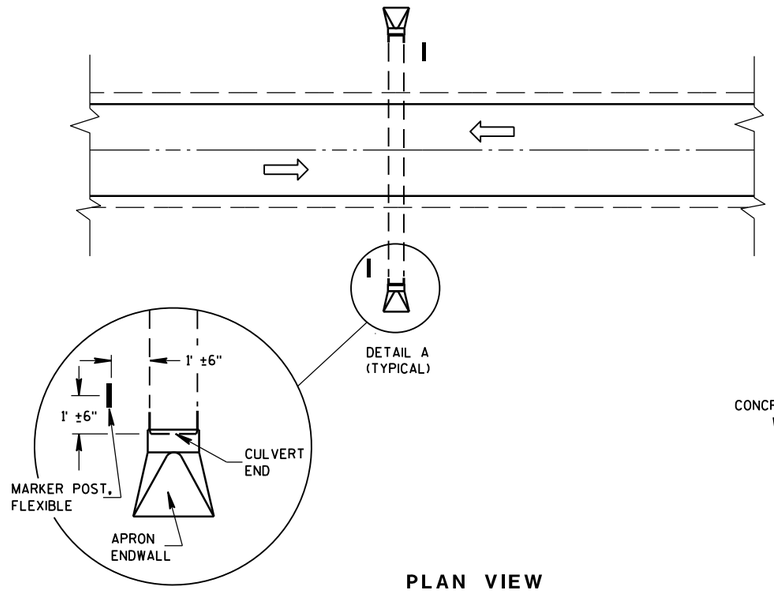


PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

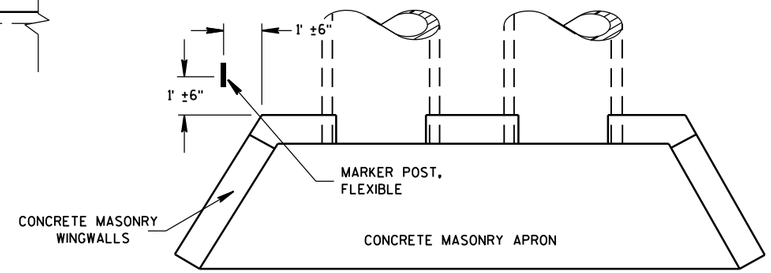
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

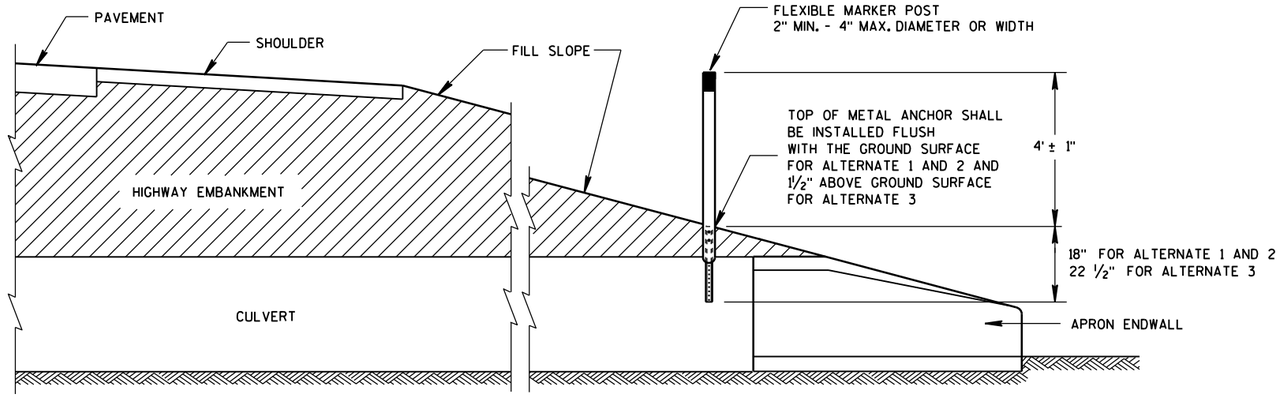
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 A 3-2a

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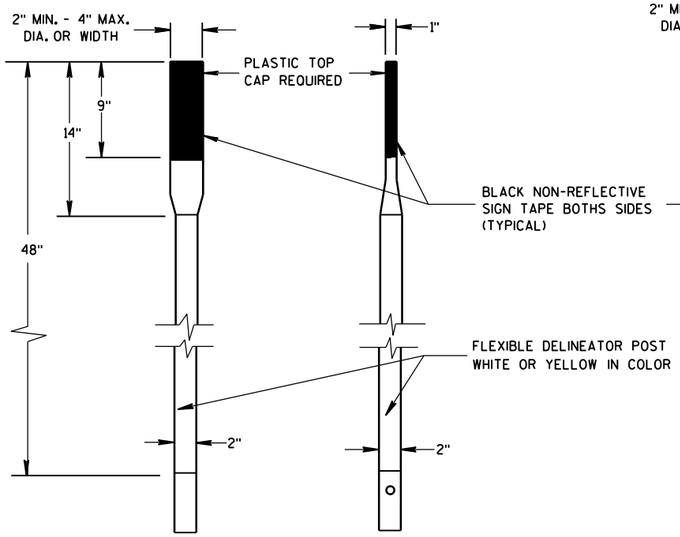
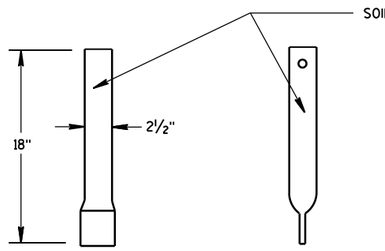
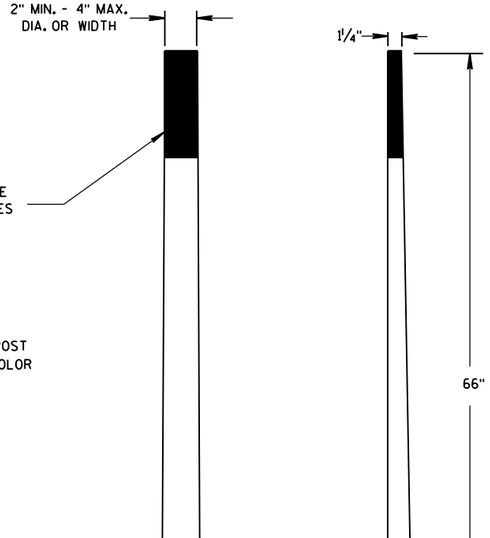
S.D.D. 15 A 3-2a





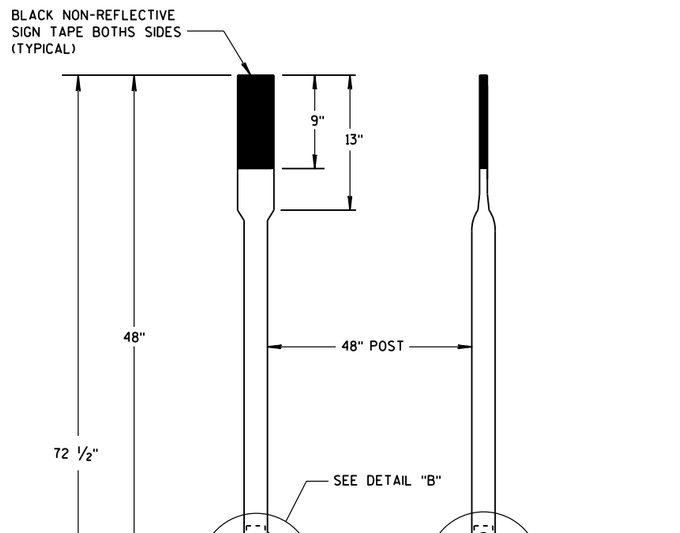
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

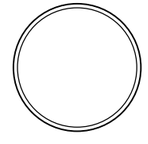
ALTERNATE 2



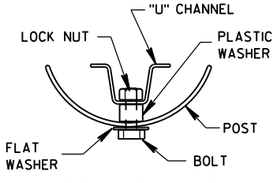
FRONT VIEW SIDE VIEW

ALTERNATE 3

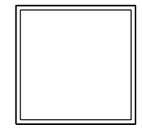
FLEXIBLE MARKER POSTS



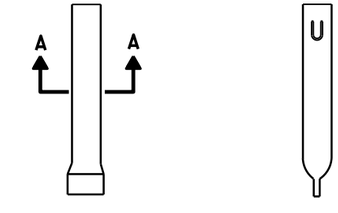
SECTION A-A



SECTION B-B

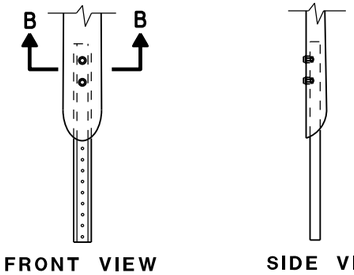


SECTION C-C



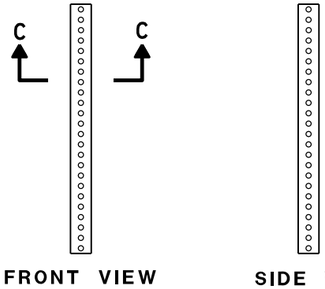
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

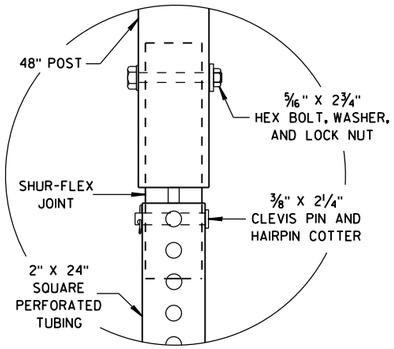
ALTERNATE 2



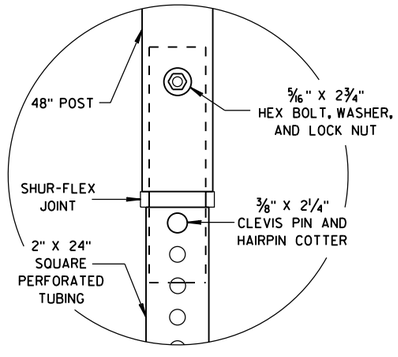
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

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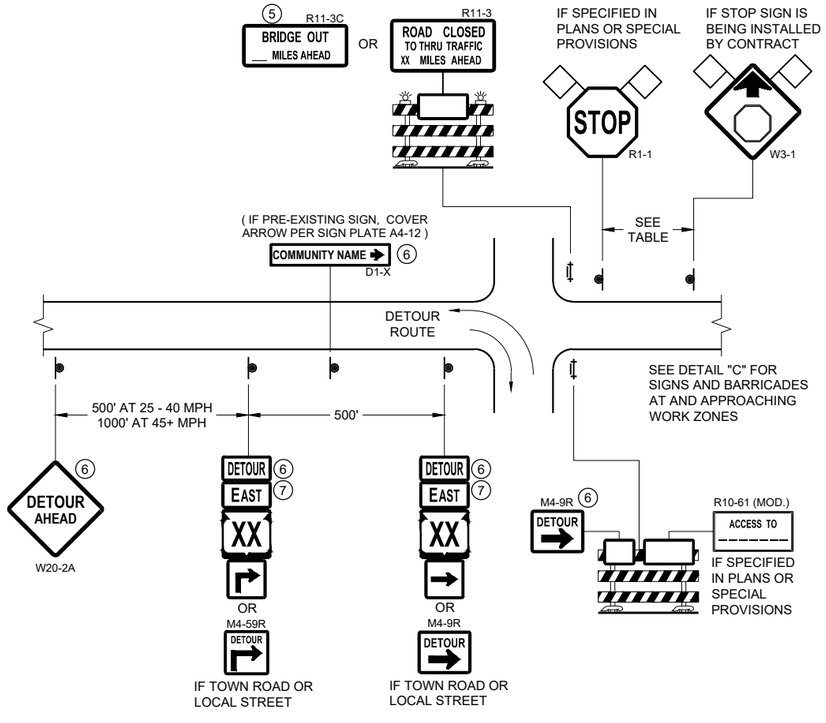
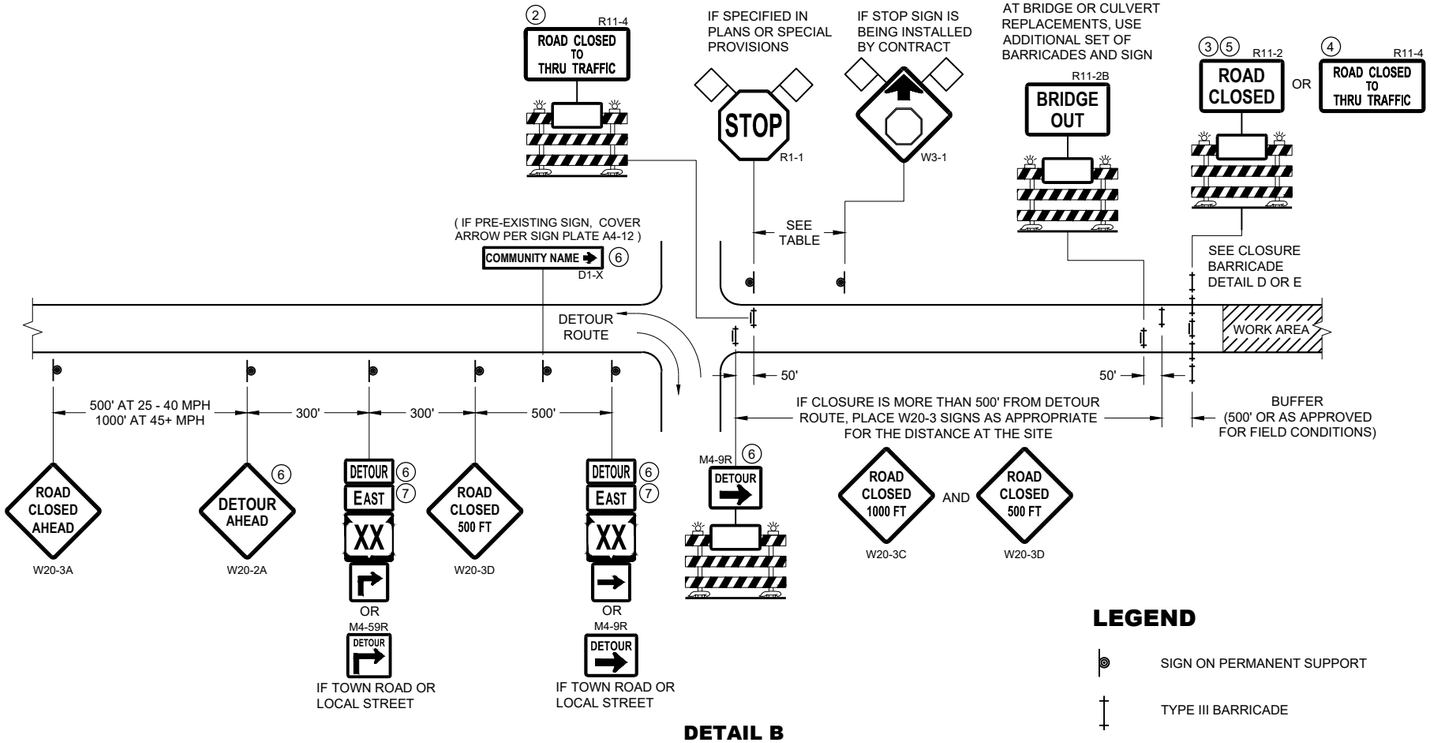
S.D.D. 15 A 3-2b



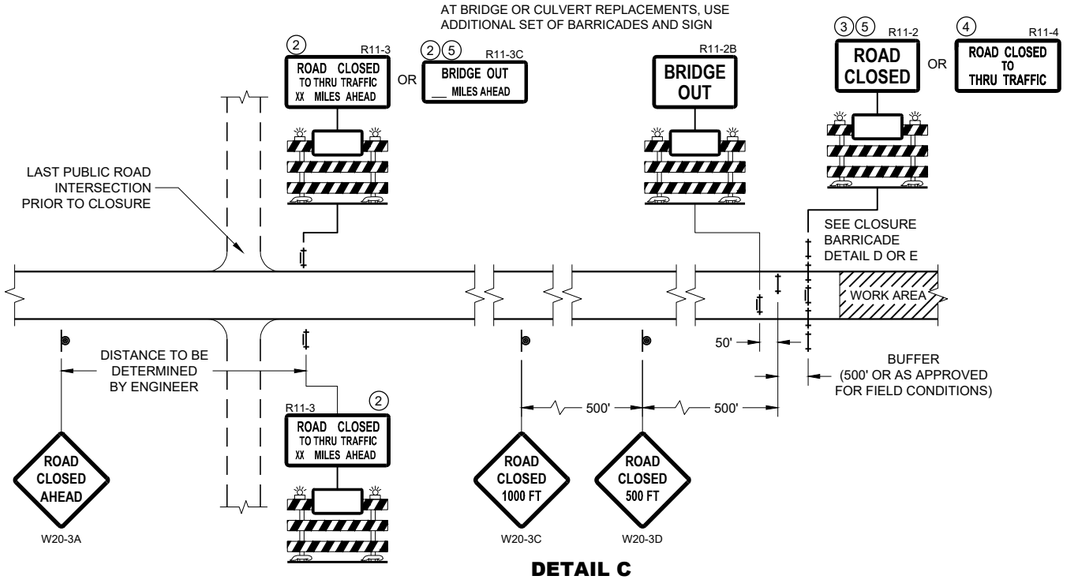
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

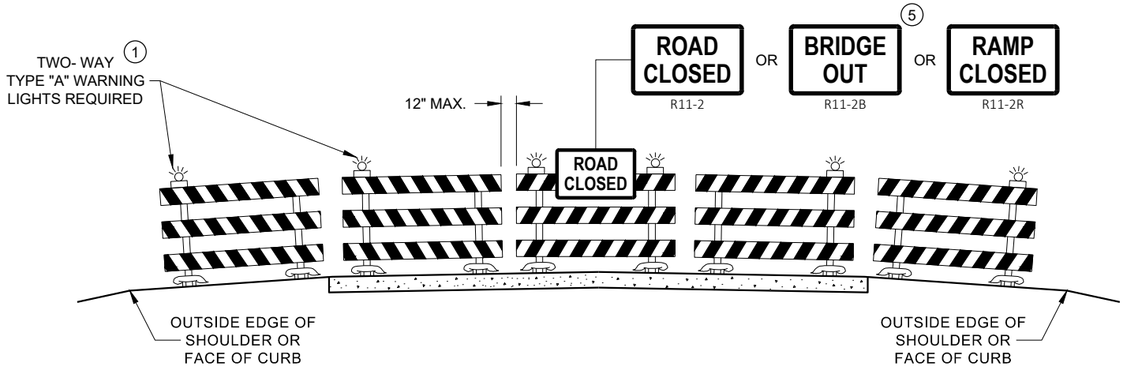
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

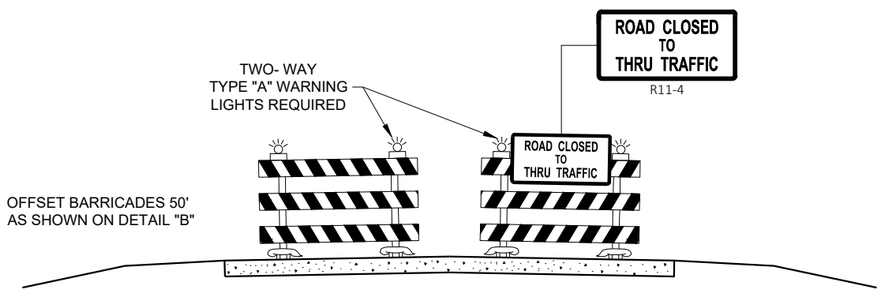
FHWA

SDD 15C02 - 09a

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 09b

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SDD 15C02 - 09b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4 - 8, M3 - X
- XX — M1 - 4; XX — M1 - 6; COUNTY X — M1 - 5A
- M05 - 1; M06 - 1; M06 - 1

GENERAL NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

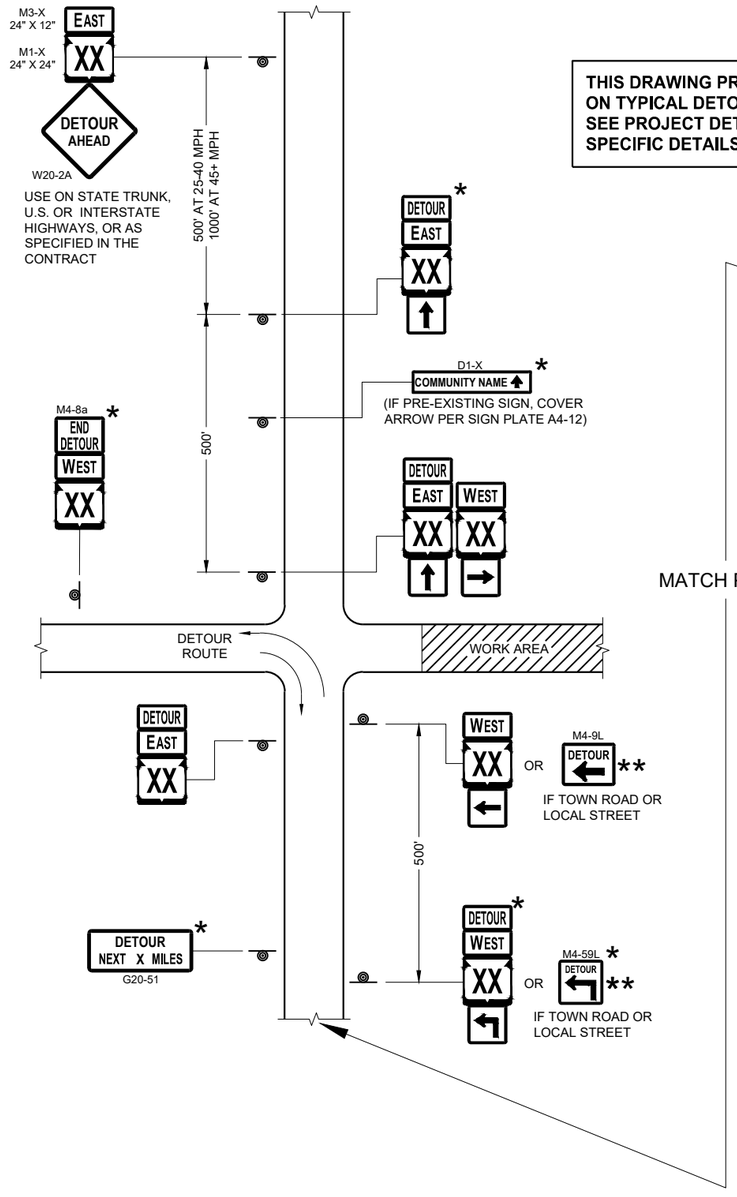
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

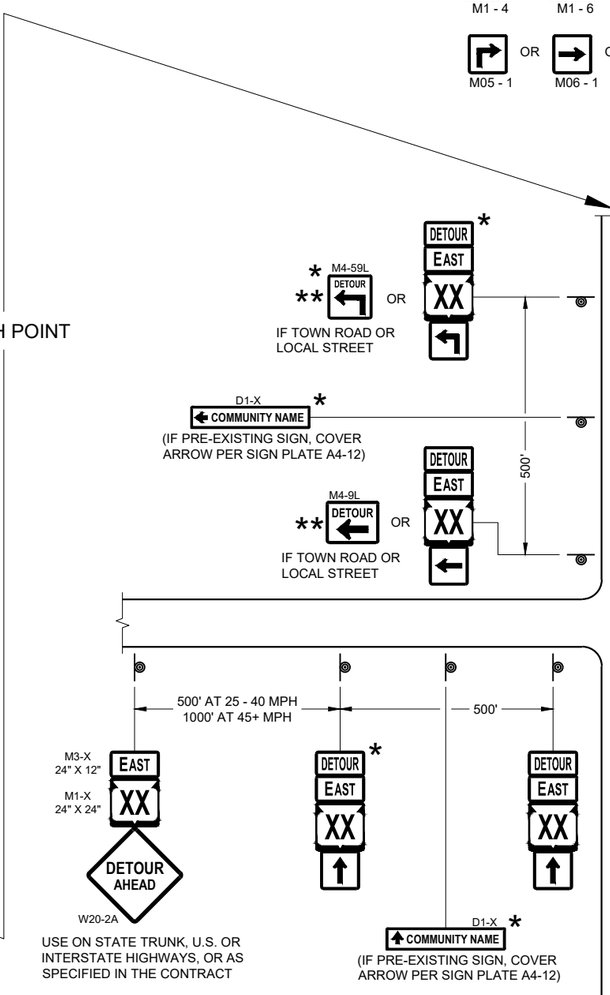
SIGN SIZES SHALL BE AS FOLLOWS:

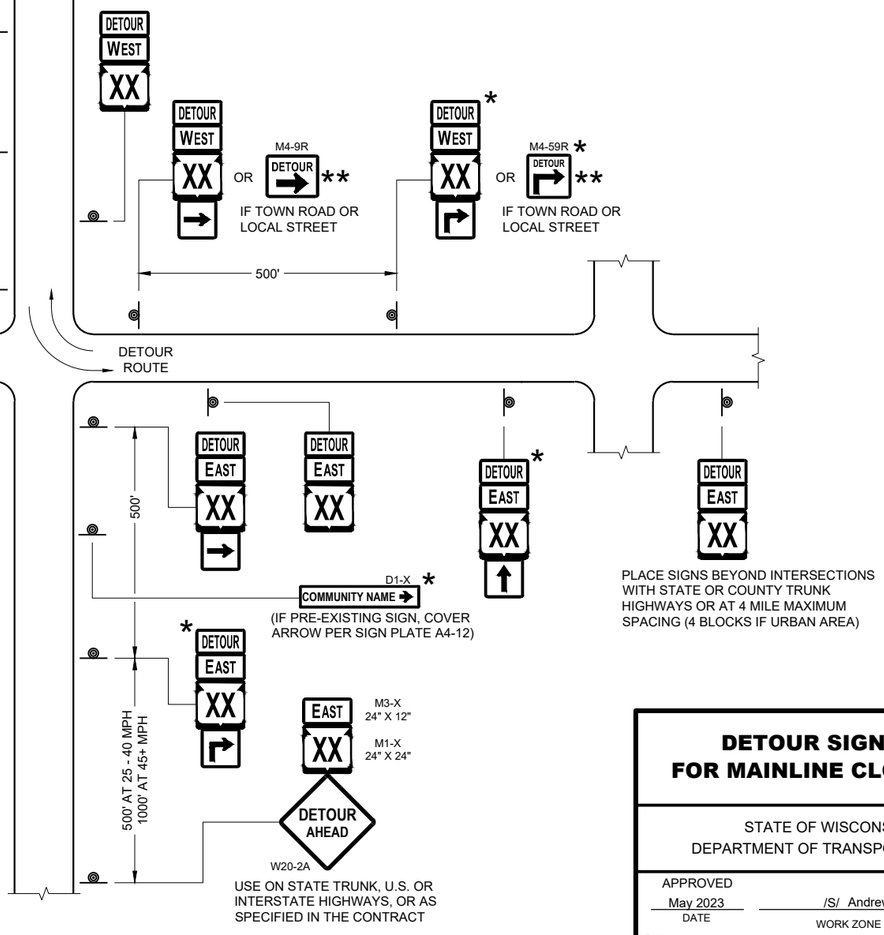
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT







SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

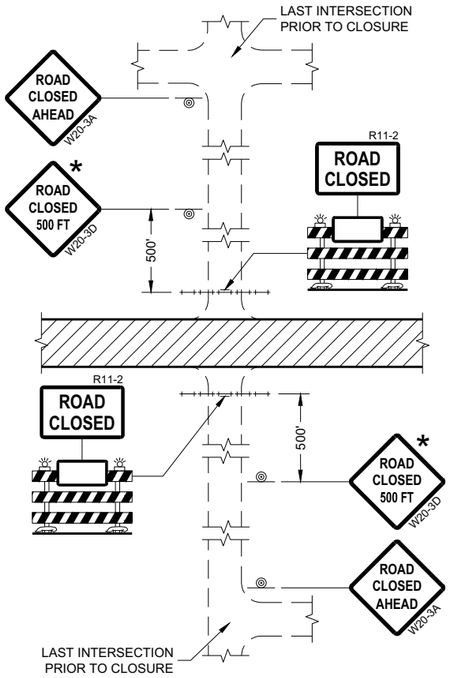
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

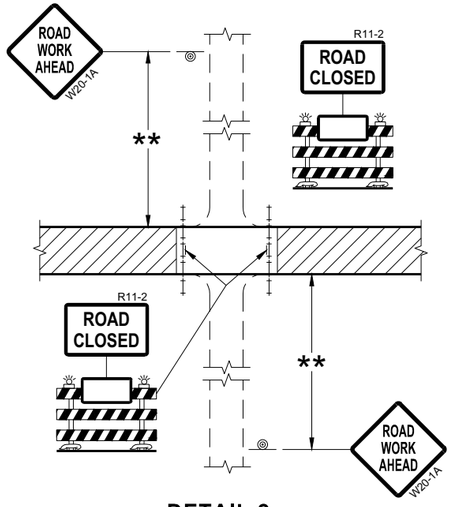
FHWA

6

SDD 15C02 - 09c



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

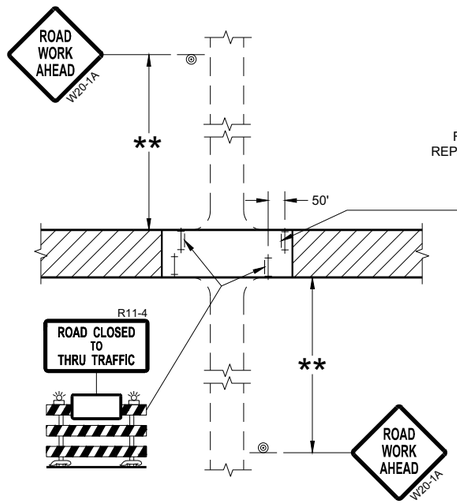
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

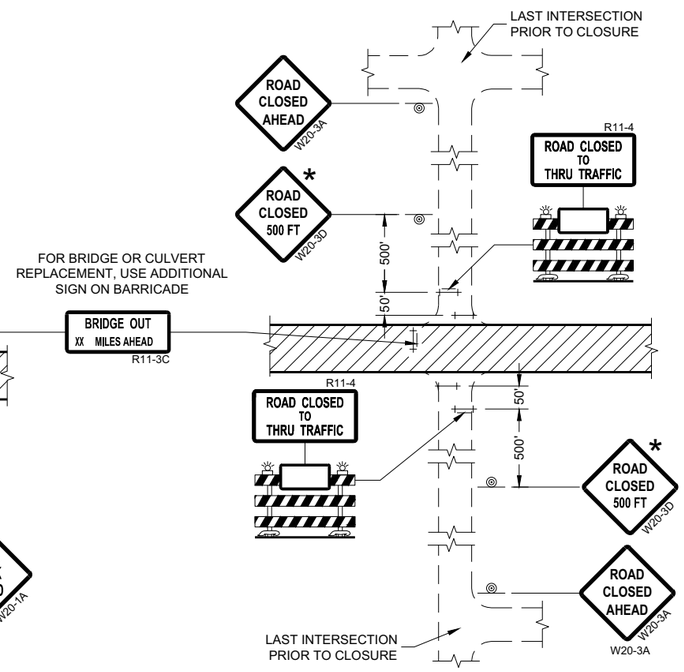
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C03 - 05

SDD 15C03 - 05

GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

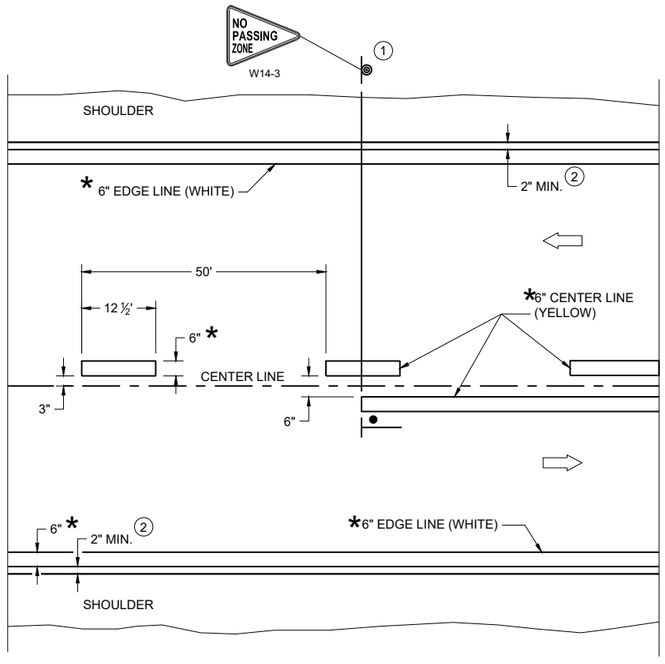
LEGEND

"T" MARKING

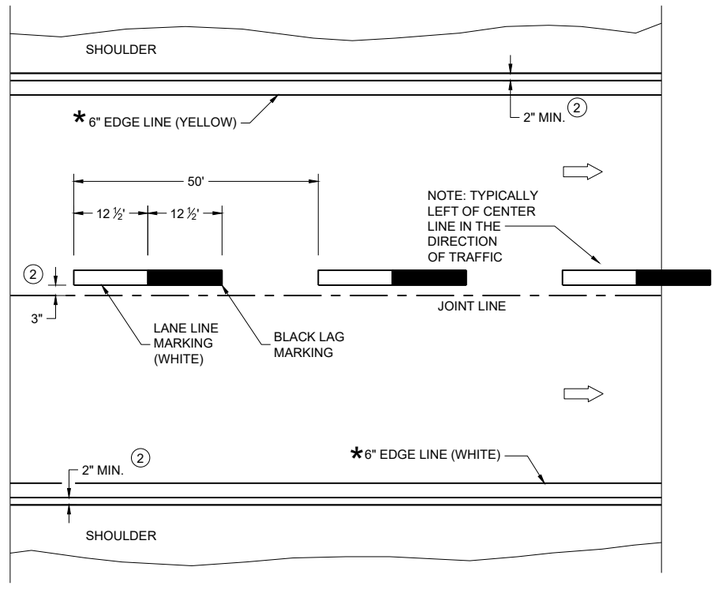
SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

SDD 15C08-23a

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

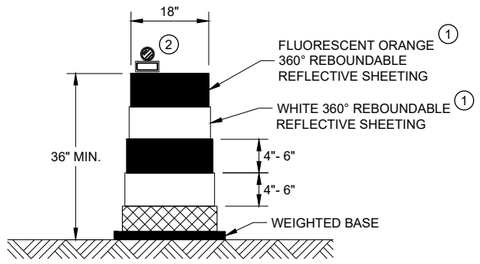
FHWA

6

SDD 15C08-23a

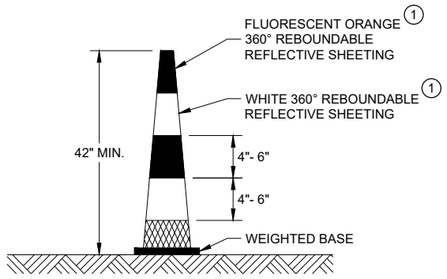
GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



DRUM

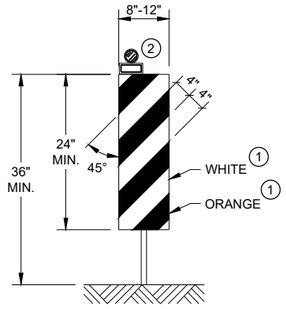
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

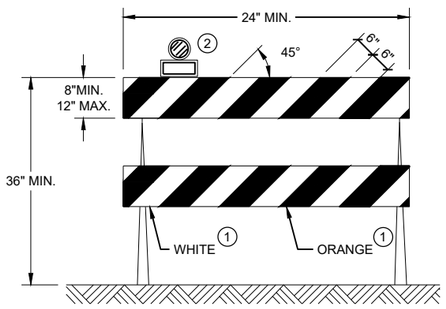
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



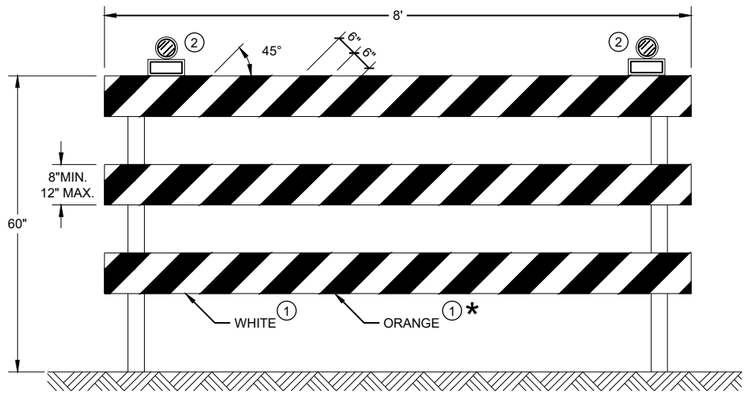
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 10b

6

SDD 15C11 - 10b

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

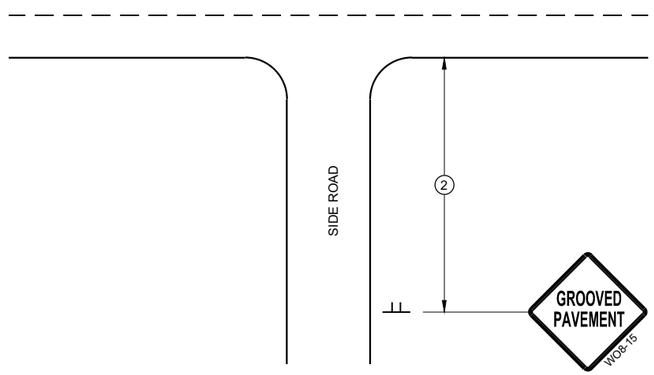
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

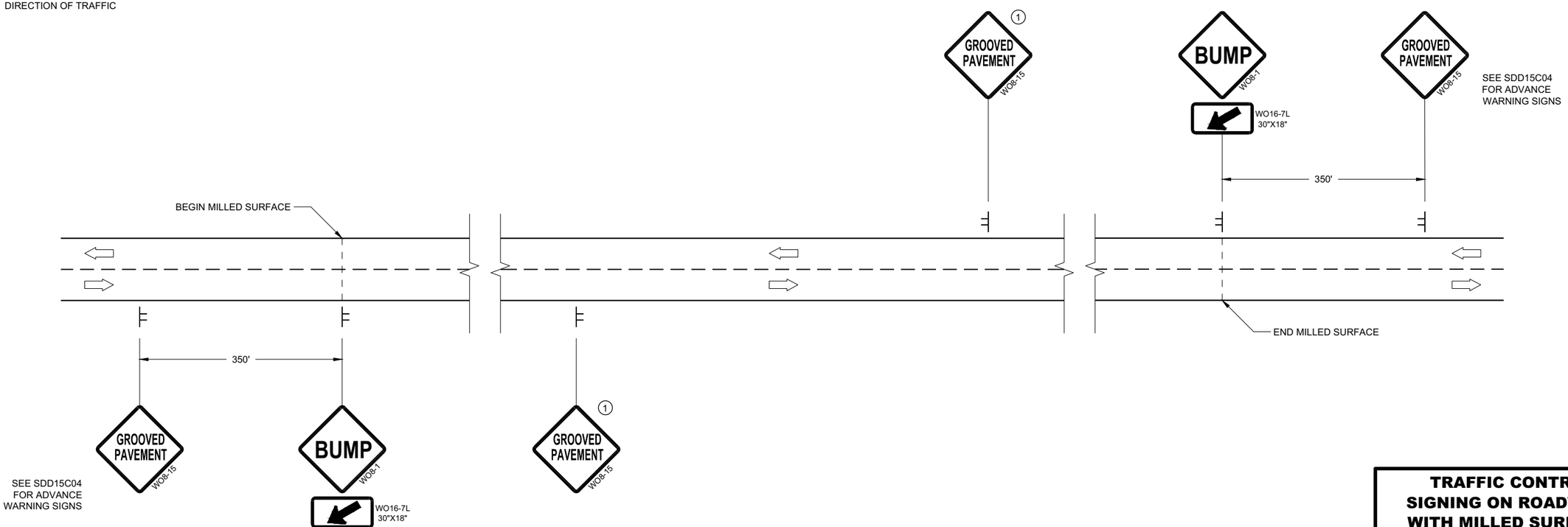
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D44 - 02

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

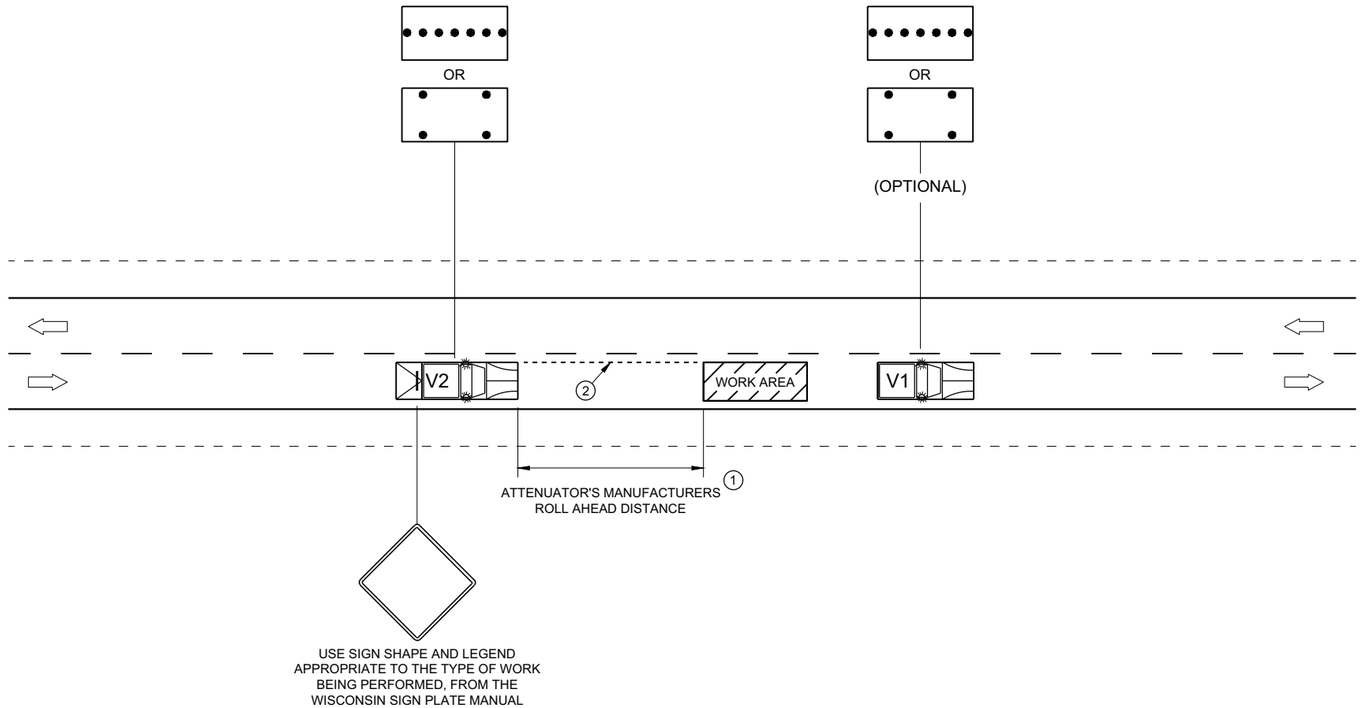
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

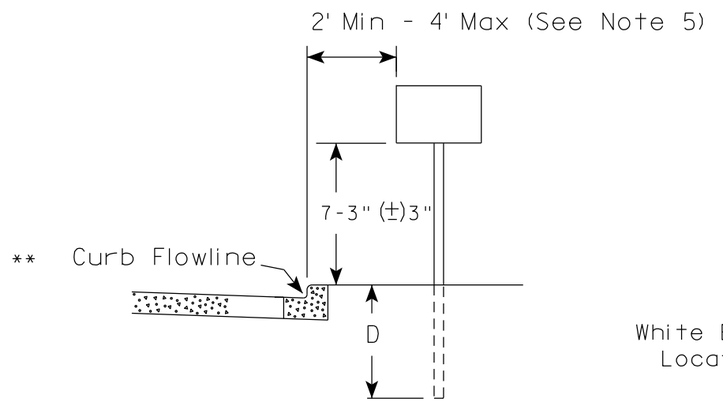
APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

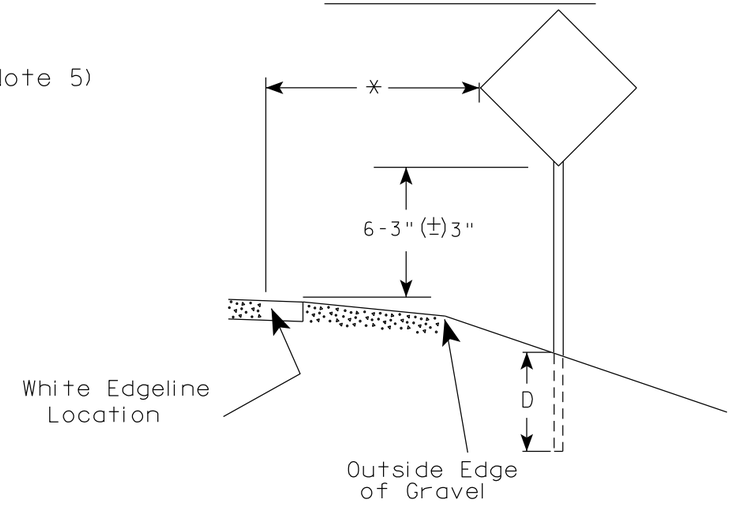
6

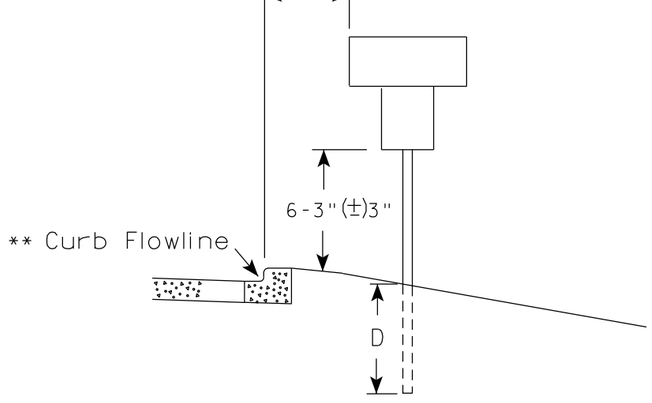
SDD 15D51 - 01

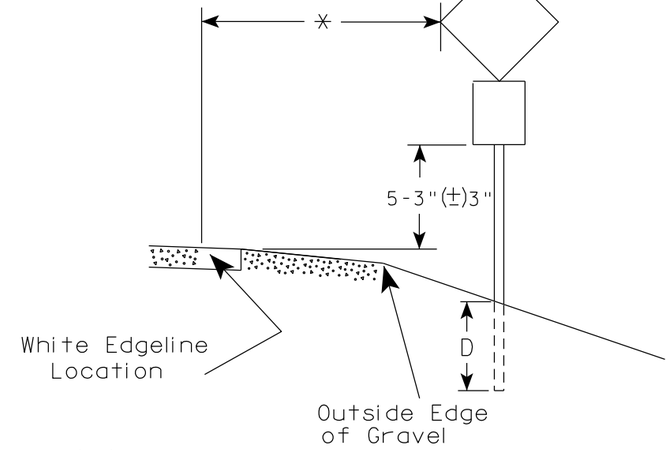
URBAN AREA



RURAL AREA (See Note 2)







** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

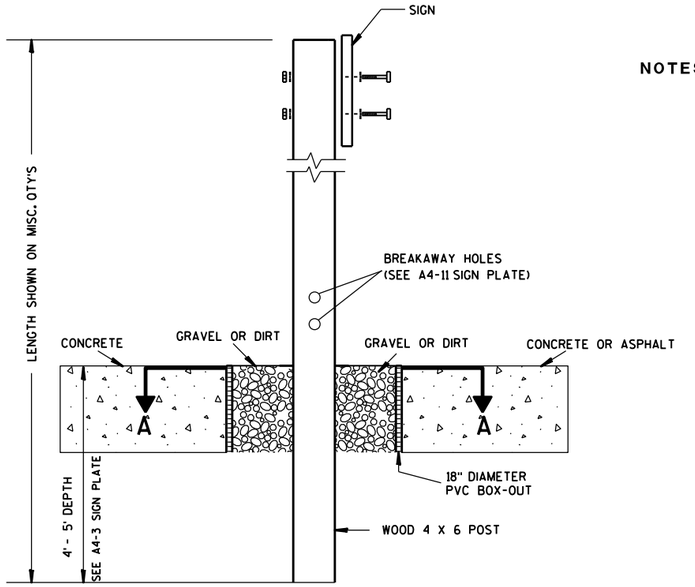
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

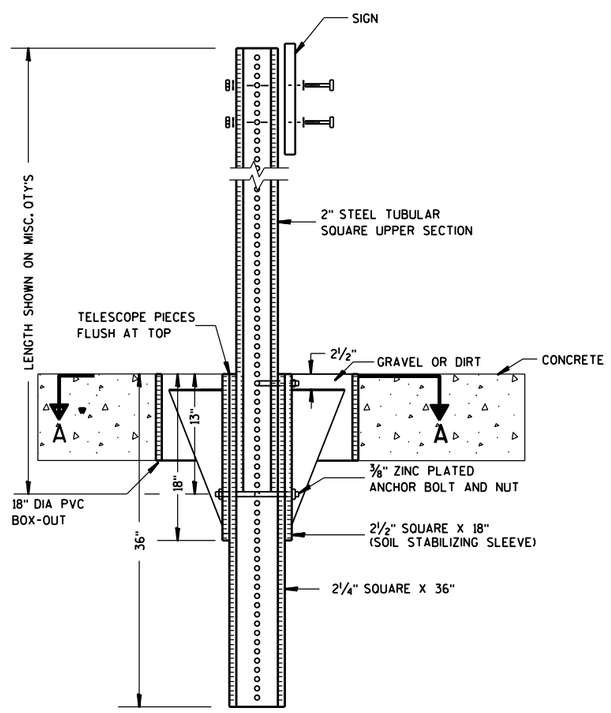
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 143	E



ELEVATION VIEW

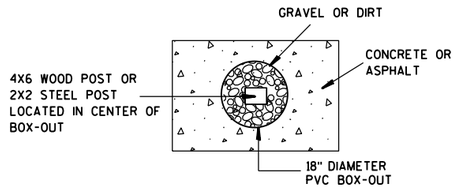
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

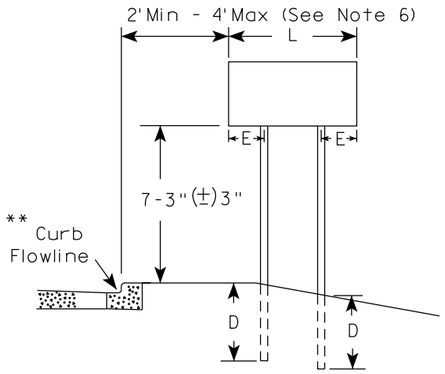
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

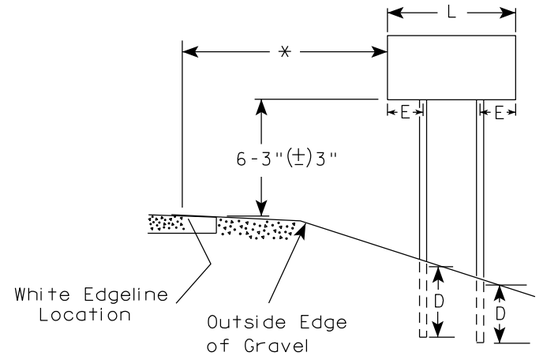
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

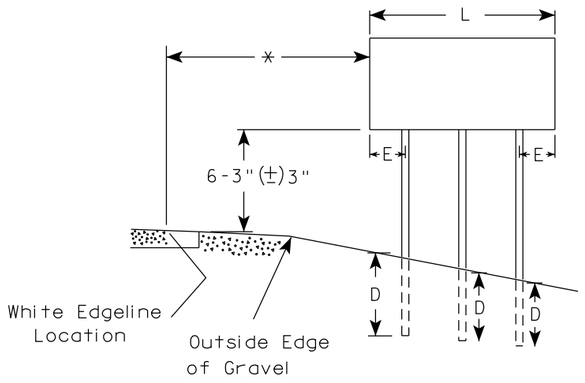
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

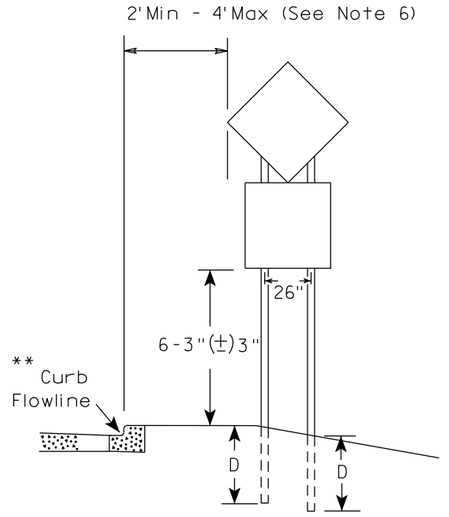
URBAN AREA



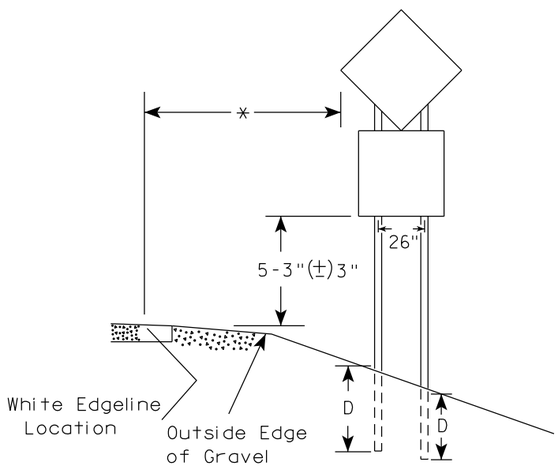
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)		
	L	E
***	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

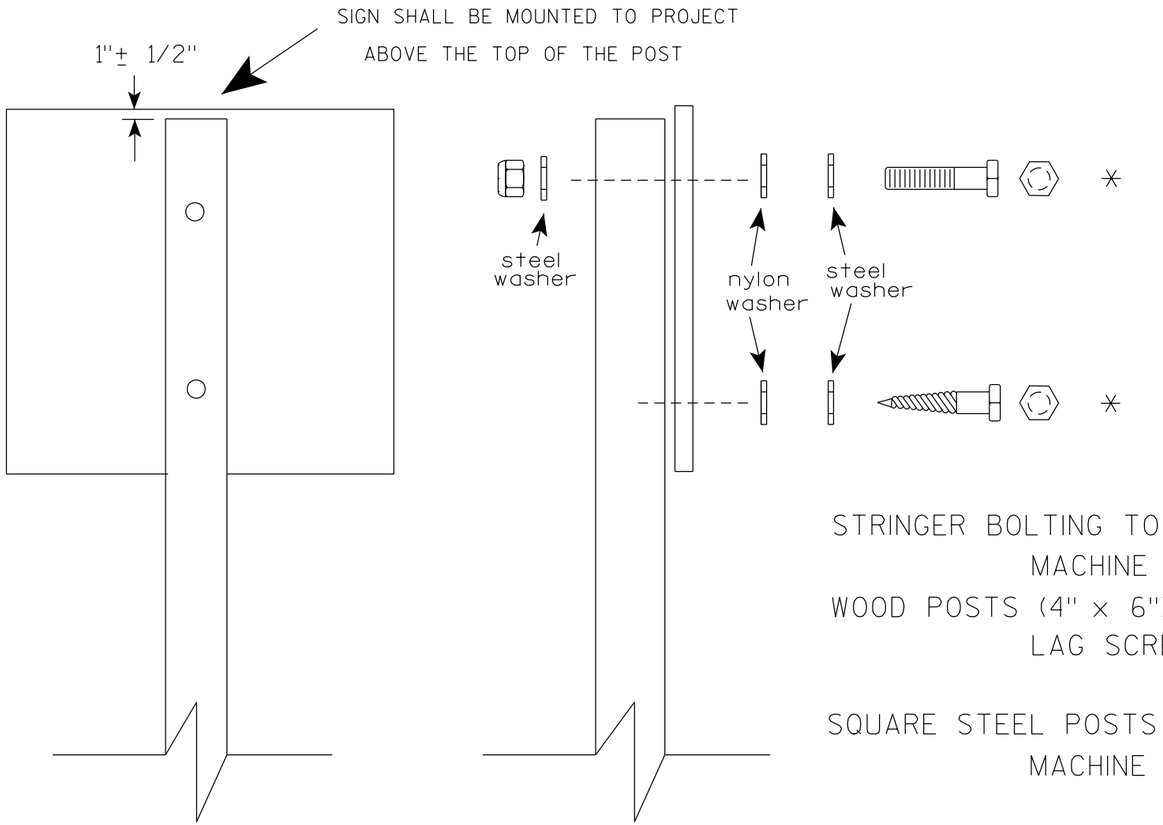
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 145	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

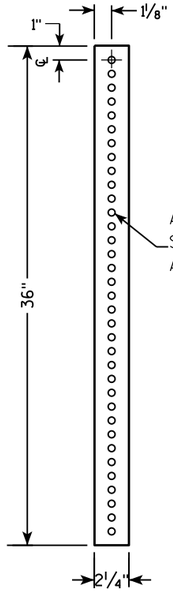
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

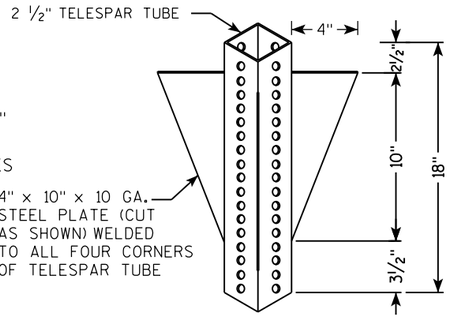
SHEET NO: 146 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

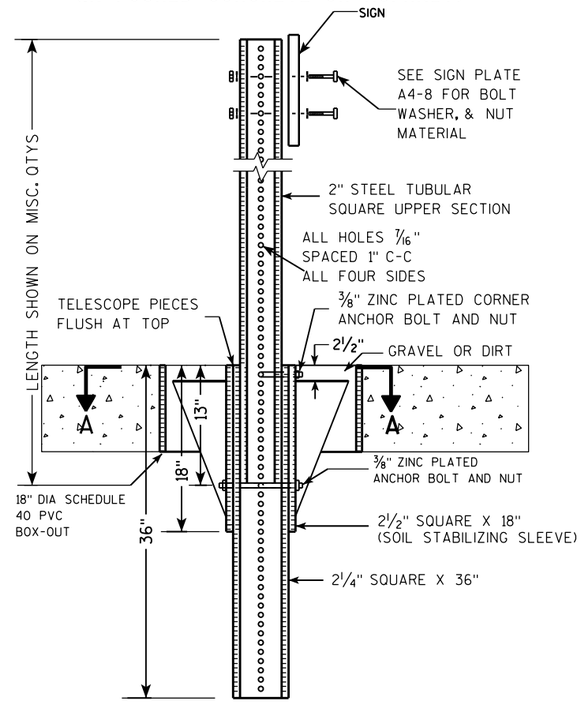
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



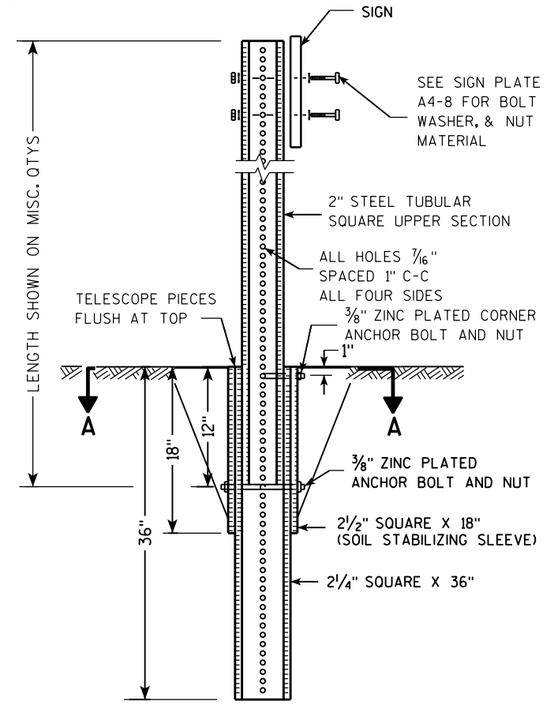
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

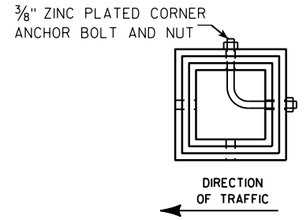


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

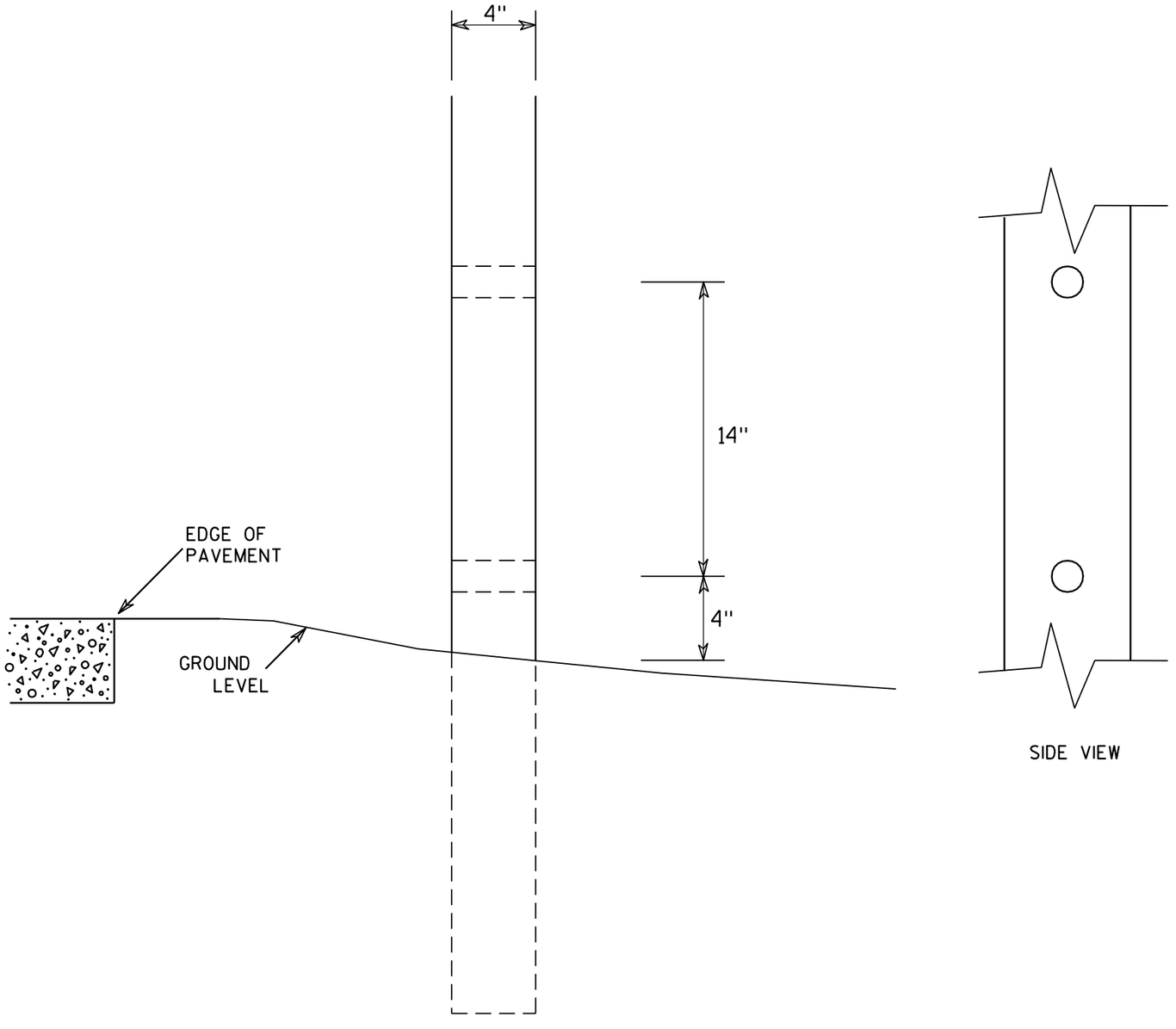
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

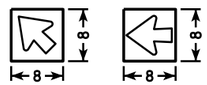
WISCONSIN DEPT OF TRANSPORTATION

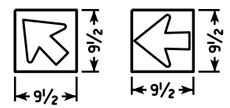
APPROVED Chester J Spang for State Traffic Engineer

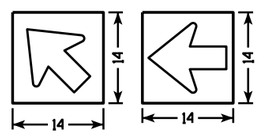
DATE 3/27/97 PLATE NO. A4-11.2

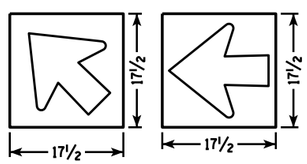
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 148	E

SIGN LAYOUT WITH VARIOUS SIZED MESSAGES







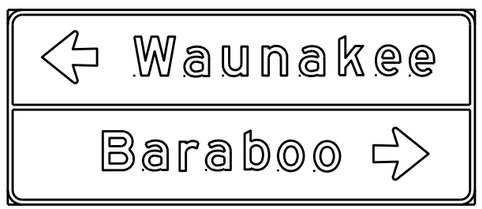


GENERAL NOTES

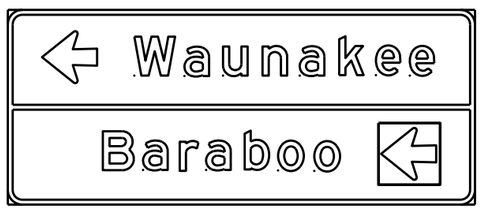
1. Materials shall conform to Standard Specification Section 637.
   Base - Sheet Aluminum 0.040" Thickness
   Sheeting - Orange Type F Reflective
   Arrow - Black Non-Reflective
2. Arrow signs shall be fastened to permanent sign by either aluminum rivets or aluminum self-tapping sheet metal screws. There shall be a minmum of 2 fasteners used per arrow sign.
3. There shall be a spacer consisting of a 0.08" nylon washer between the back of the arrow sign and the face of the permanent sign.
4. Arrows are per standard plate A1-2
5. Use separate arrow sign for each destination
6. Tilt arrow is always at 45 degrees
7. Arrow is centered on arrow sign

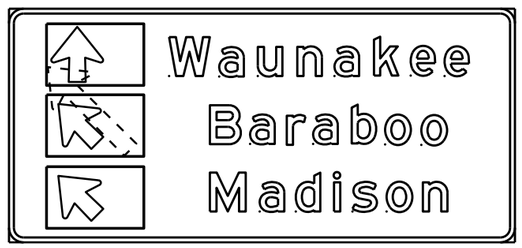
Lower Case Copy Size	Standard Width (Single Arrow)	2 Line Tilt Arrow Cover Width	3 Line Tilt Arrow Cover Width	Height
3¾" Series C	8	9 ½	14 ½	8
4½" Series D & E	9 ½	10	15	9 ½
6" Series D & E	14	16	20 ½	14
8" Series E	17 ½	20 ½	25	17 ½

BEFORE



AFTER





DESTINATION DIRECTIONAL ARROW FOR DETOUR SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/08/14

A4-12.2

PROJECT NO:

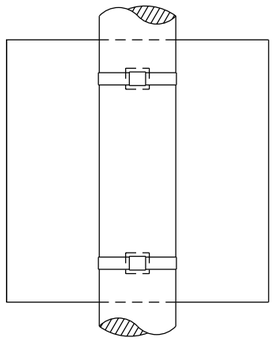
SHEET NO: E

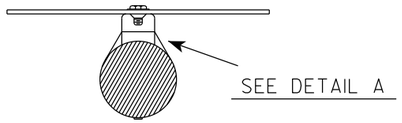
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A412.DGN PLOT DATE : 08-OCT-2014 11:50 PLOT BY : mscsja

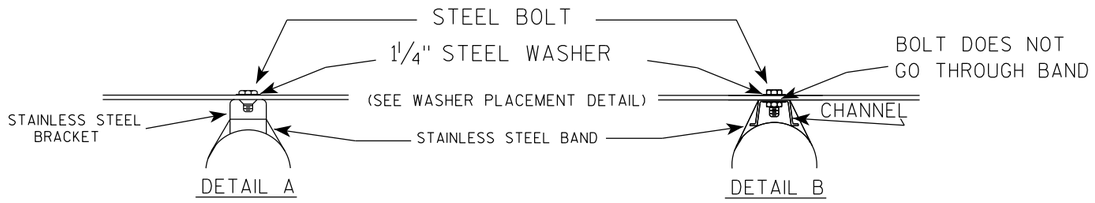
WISDOT/CADDS SHEET 42

BANDING

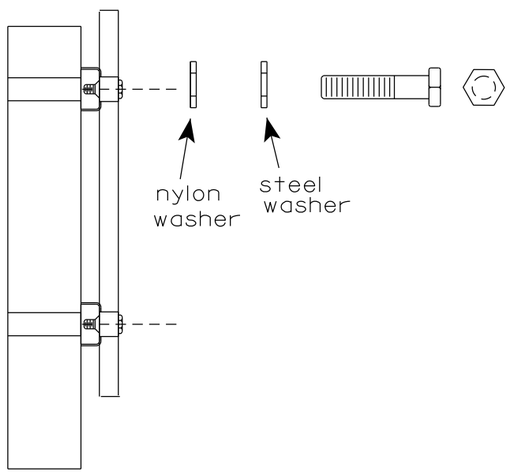
SINGLE SIGN







WASHER PLACEMENT

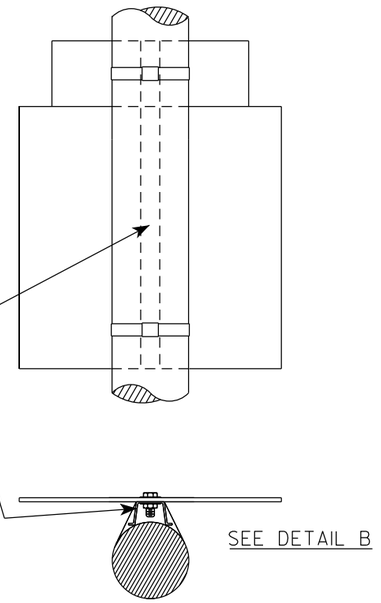


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

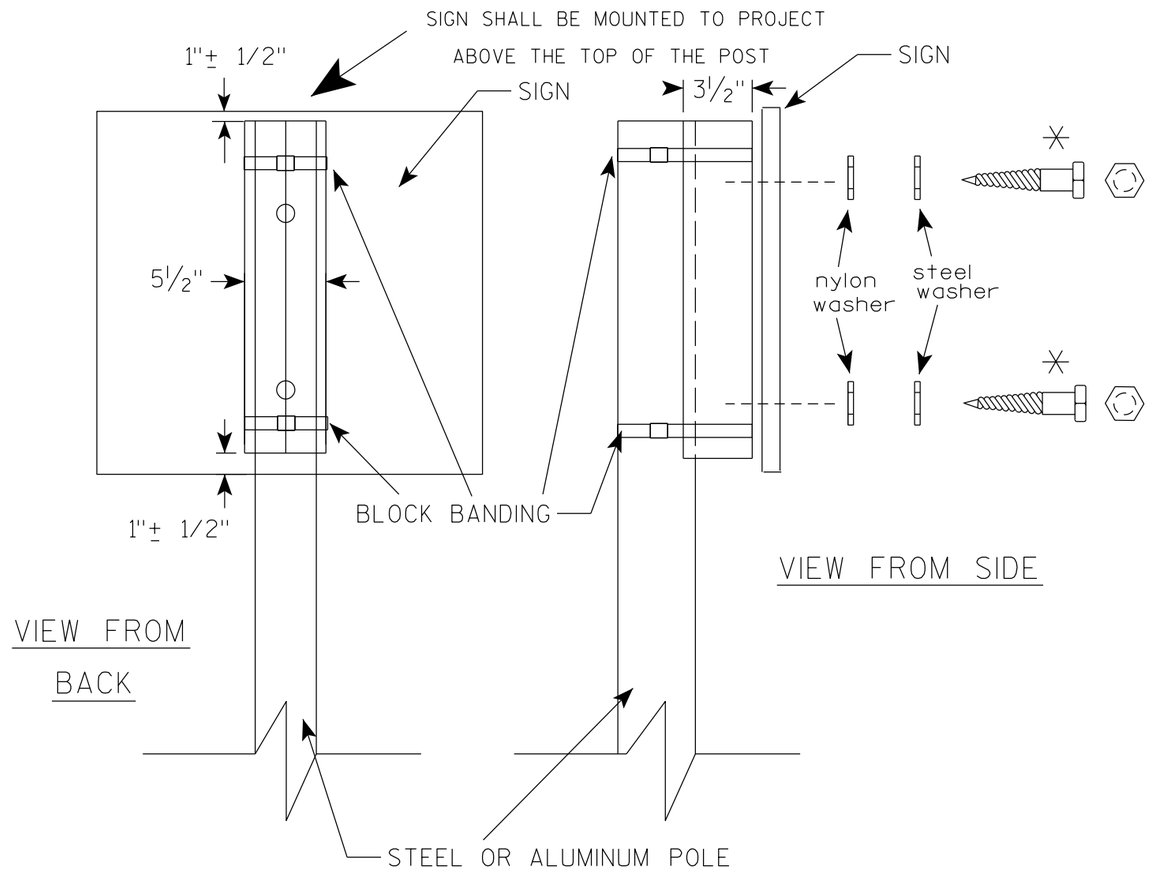
DATE 6/10/19 PLATE NO. A5-9.4

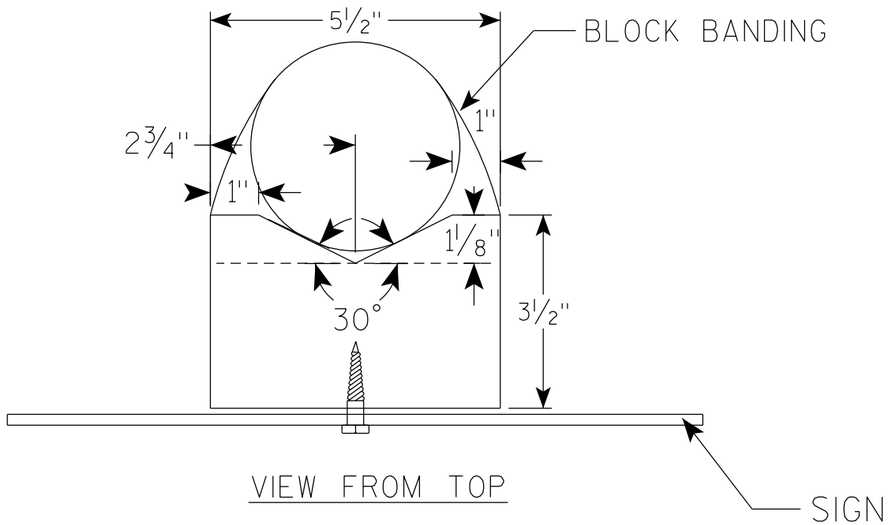
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 150	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

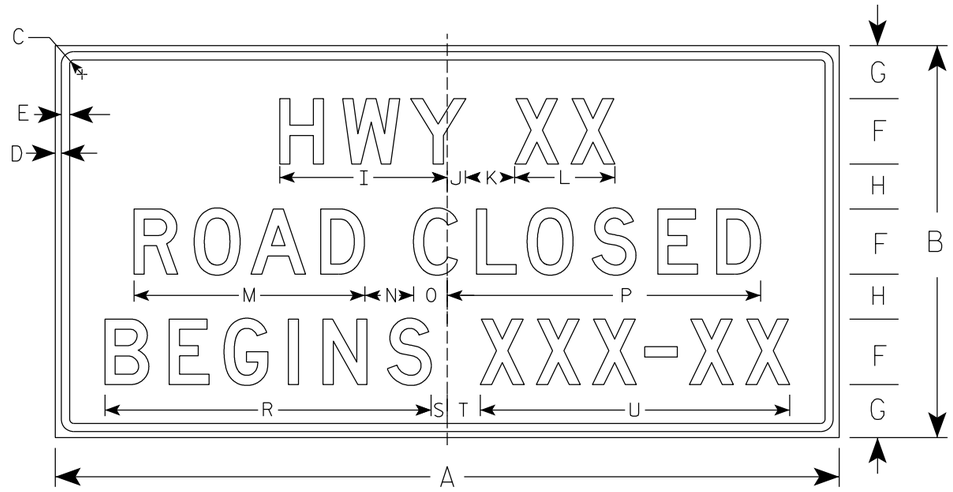
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

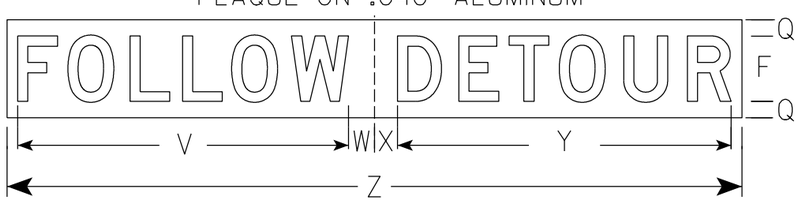
PROJECT NO:

SHEET NO: 151 E



G20-57C

PLAQUE ON .040" ALUMINUM



USE ONLY ONCE WHEN ROAD IS CLOSED

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/8	5	2 7/8	29	2	30	1 3/4	3 1/4	28 3/8	40 1/2	2	2	29 3/4	66	18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	6	4 1/8	38 3/8	2	39 7/8	2	4	37 7/8	29 3/4	3 1/8	2 7/8	40 7/8	90	32.0
5																											

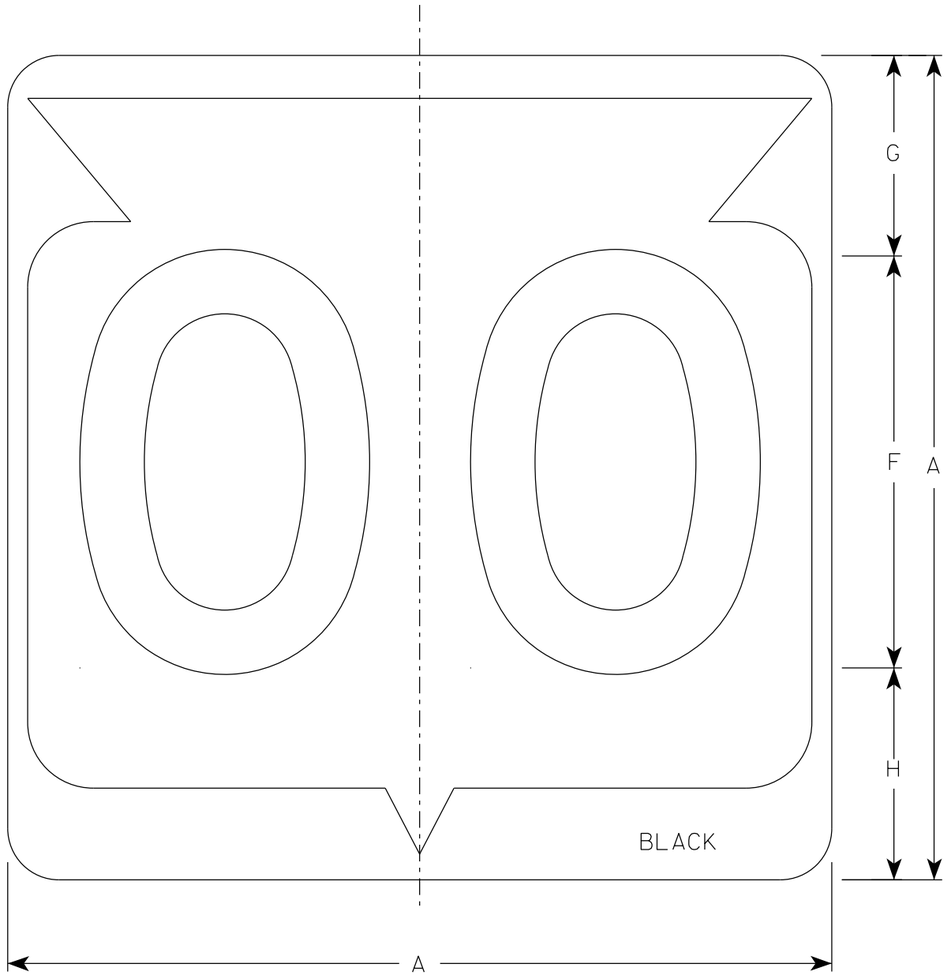
STANDARD SIGN
G20-57C

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/25/19 PLATE NO. G20-57C.1

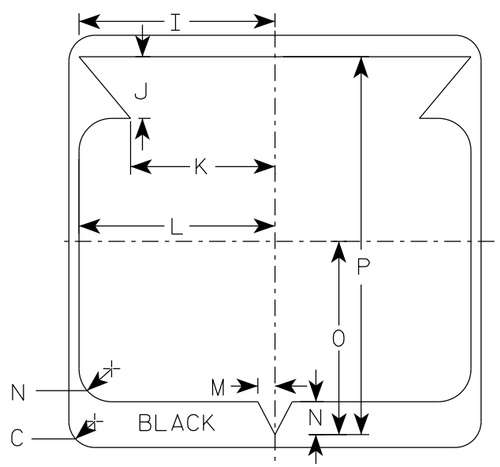
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 152 E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
2M	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

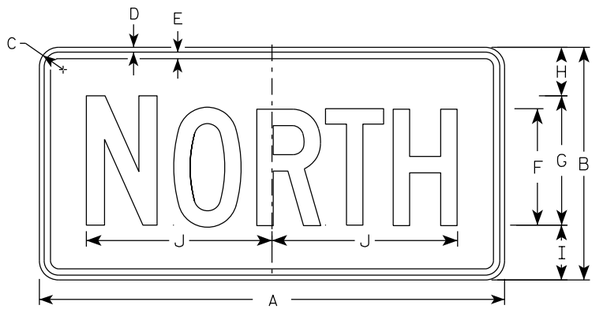
STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

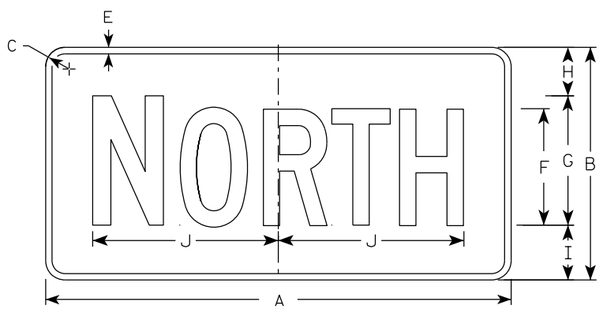
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

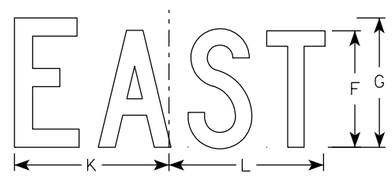
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 153	E



M3-1
MM3-1
MP3-1

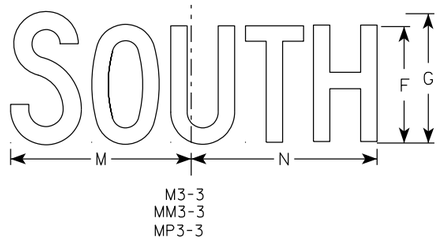


MB3-1
MK3-1
MN3-1

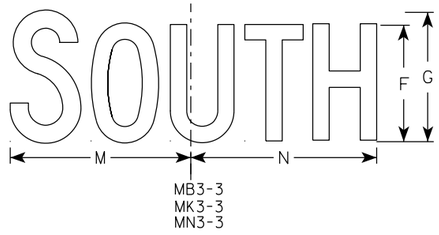


M3-2
MM3-2
MP3-2

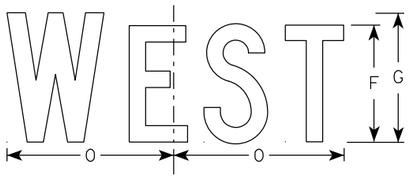
MB3-2
MK3-2
MN3-2



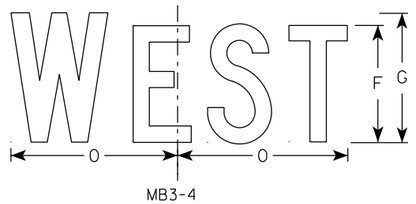
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

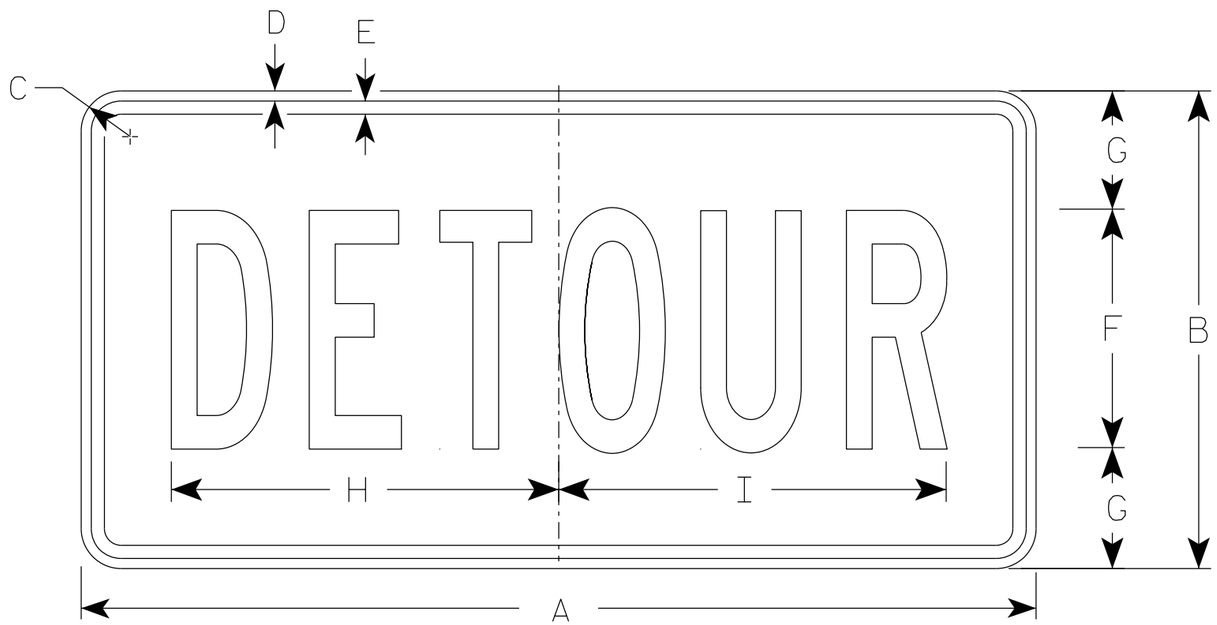
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 154 | E

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M4-8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

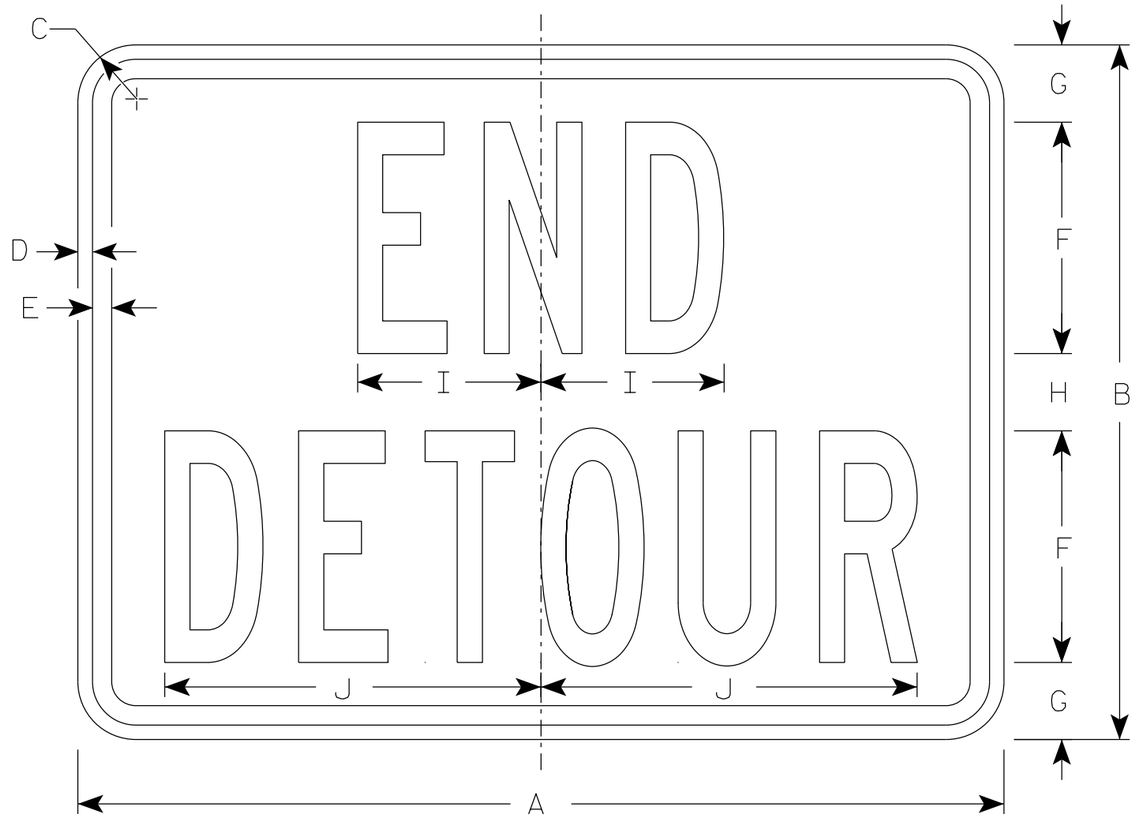
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

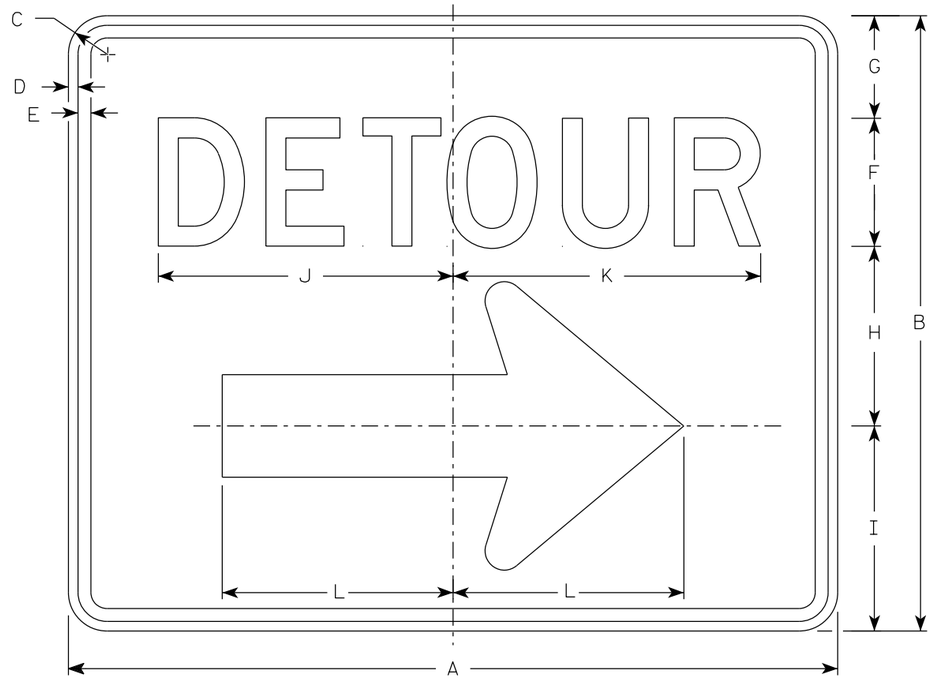
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

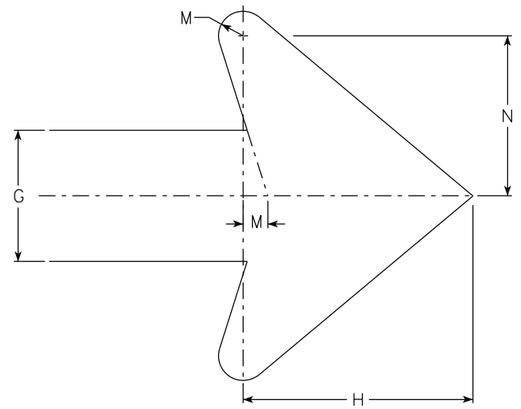
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 156 | E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
2M	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/2	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 7/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

STANDARD SIGN
M4-9 R & L

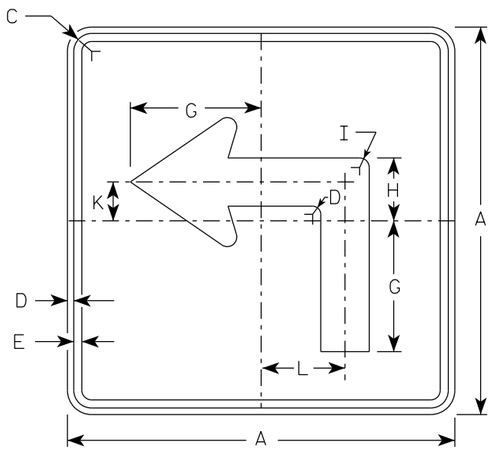
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

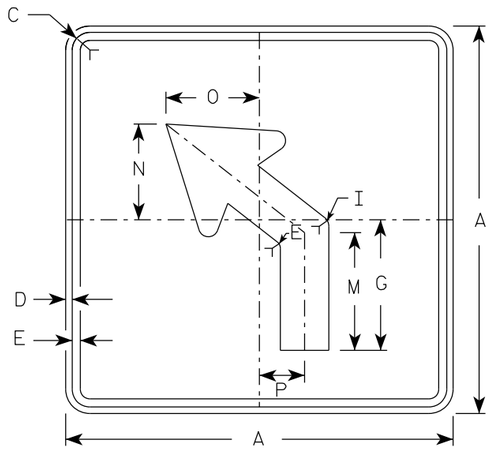
DATE 2/9/2023 PLATE NO. M4-9R.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

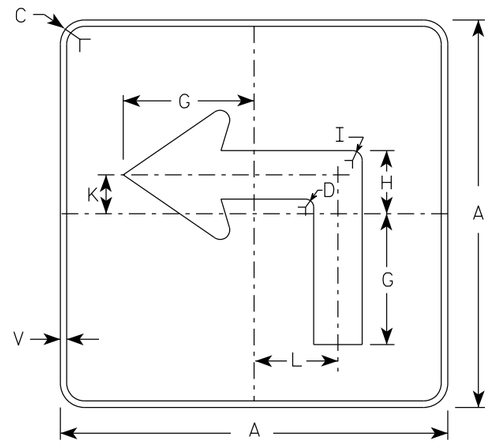
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M49R.dgn PLOT DATE : 21-MARCH 2023 1:40 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



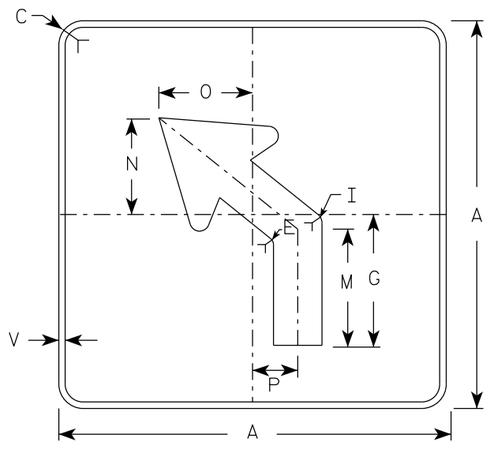
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

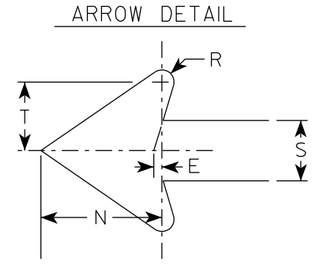


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

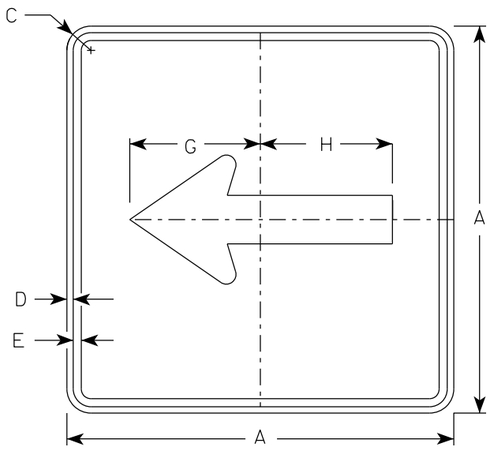
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

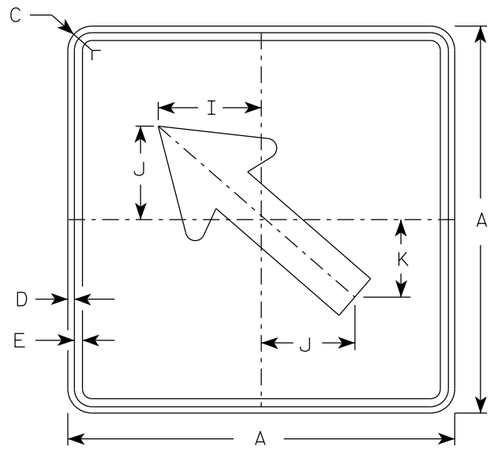
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

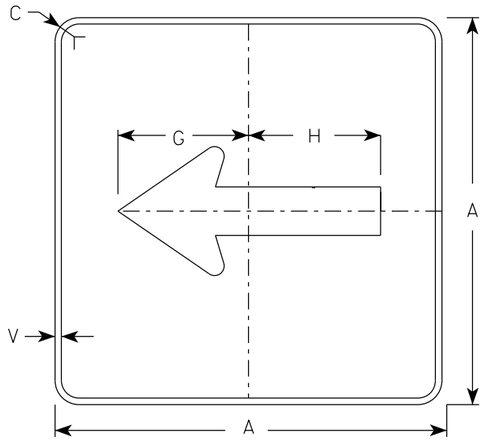
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 158 | E



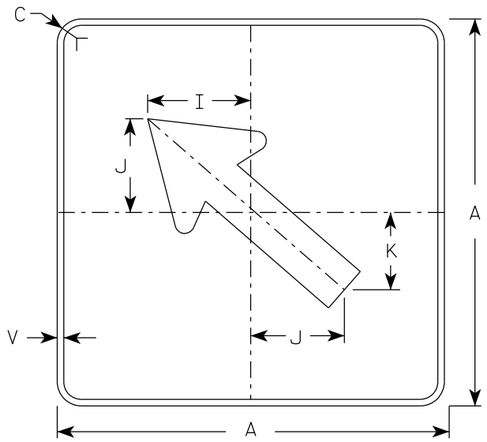
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

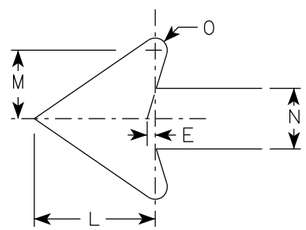


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

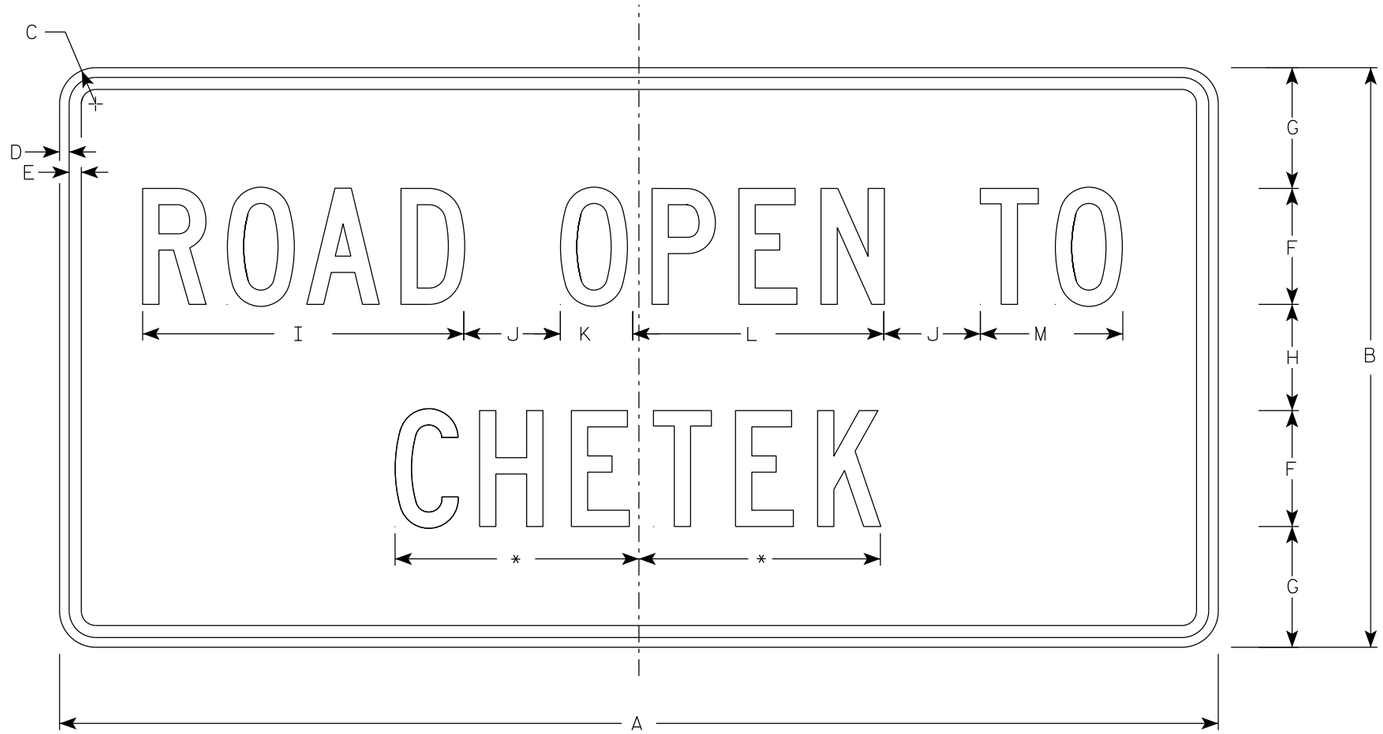
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 159 | E

7

7



R10-61

*See note 5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate message and optically balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/2	1/2	5/8	4	5 1/2	5	10 3/4	2	2 1/8	8 3/8	4 5/8														6.0
2S	60	30	1 7/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
2M	60	30	1 7/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
3																											
4																											
5																											

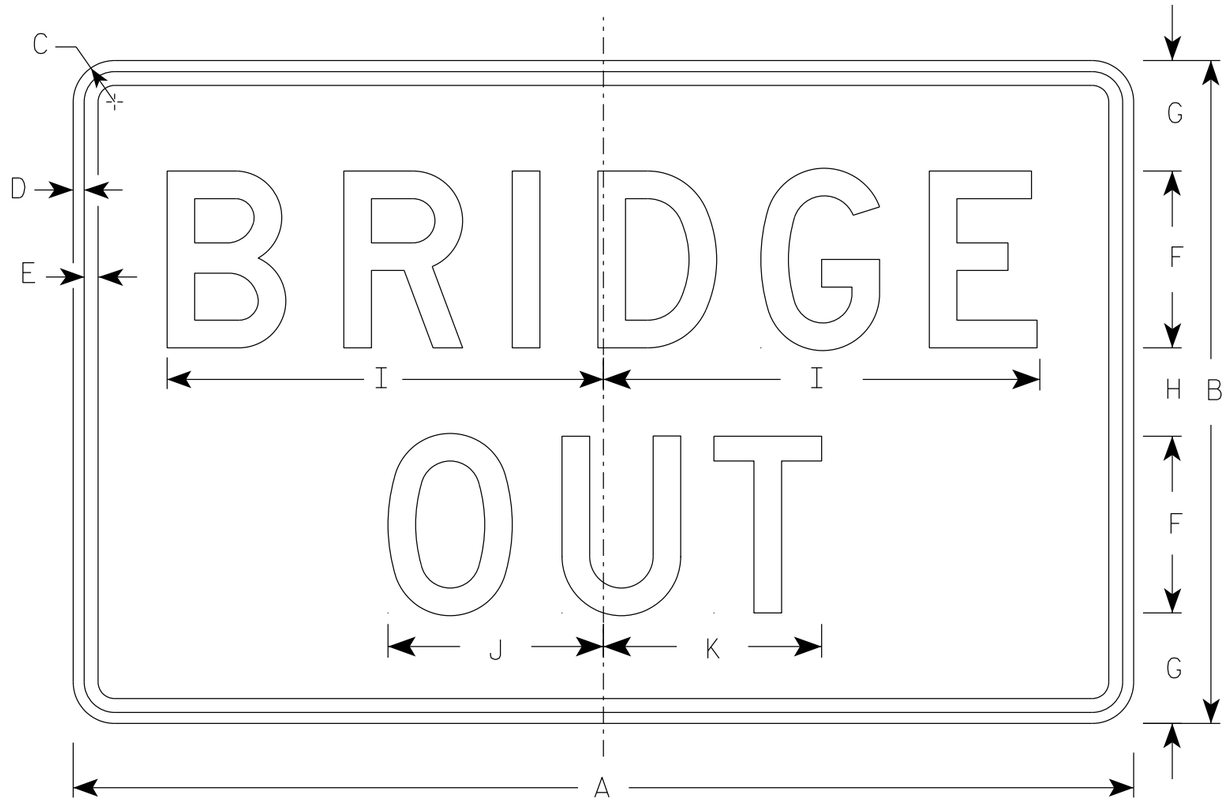
STANDARD SIGN
R10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R10-61.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 160	E



R11-2B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

STANDARD SIGN
R11-2B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

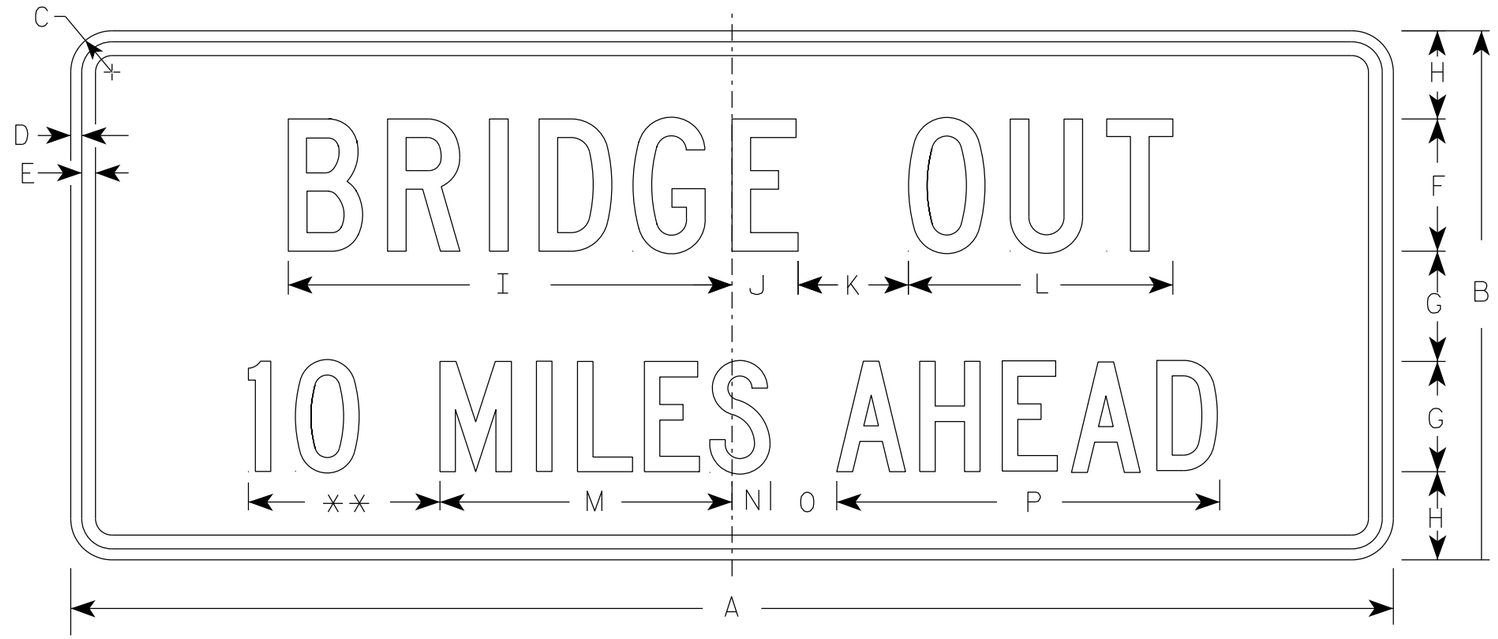
DATE 2/5/24 PLATE NO. R11-2B.3

PROJECT NO:

SHEET NO: 161 E

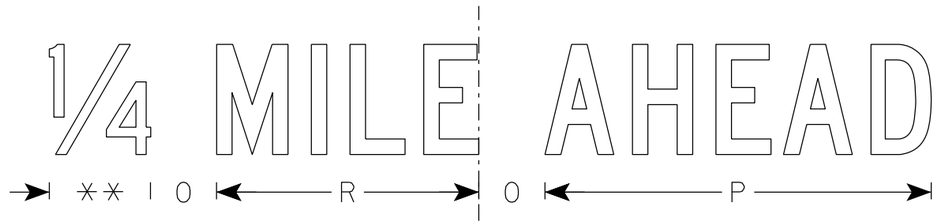
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3C

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	15	1 1/2	1/2	5/8	4	3	2 1/2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4		7 1/8									3.75
2S	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
2M	60	24	1 7/8	1/2	5/8	6	5	4	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8		11 7/8									10.0
3																											
4																											
5																											

STANDARD SIGN
R11-3C

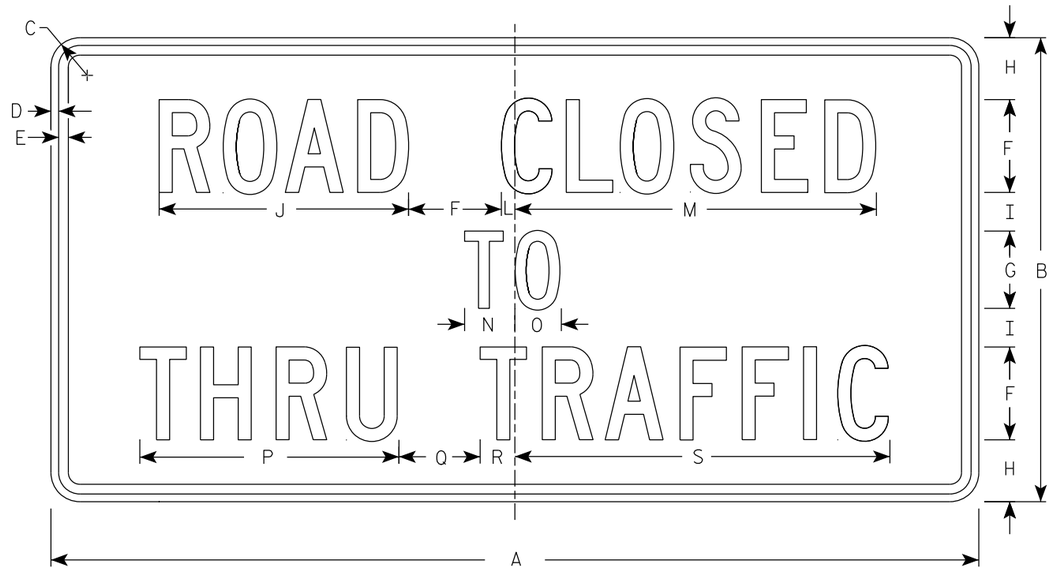
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3C.4

PROJECT NO:

SHEET NO: 162 E



R11-4

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

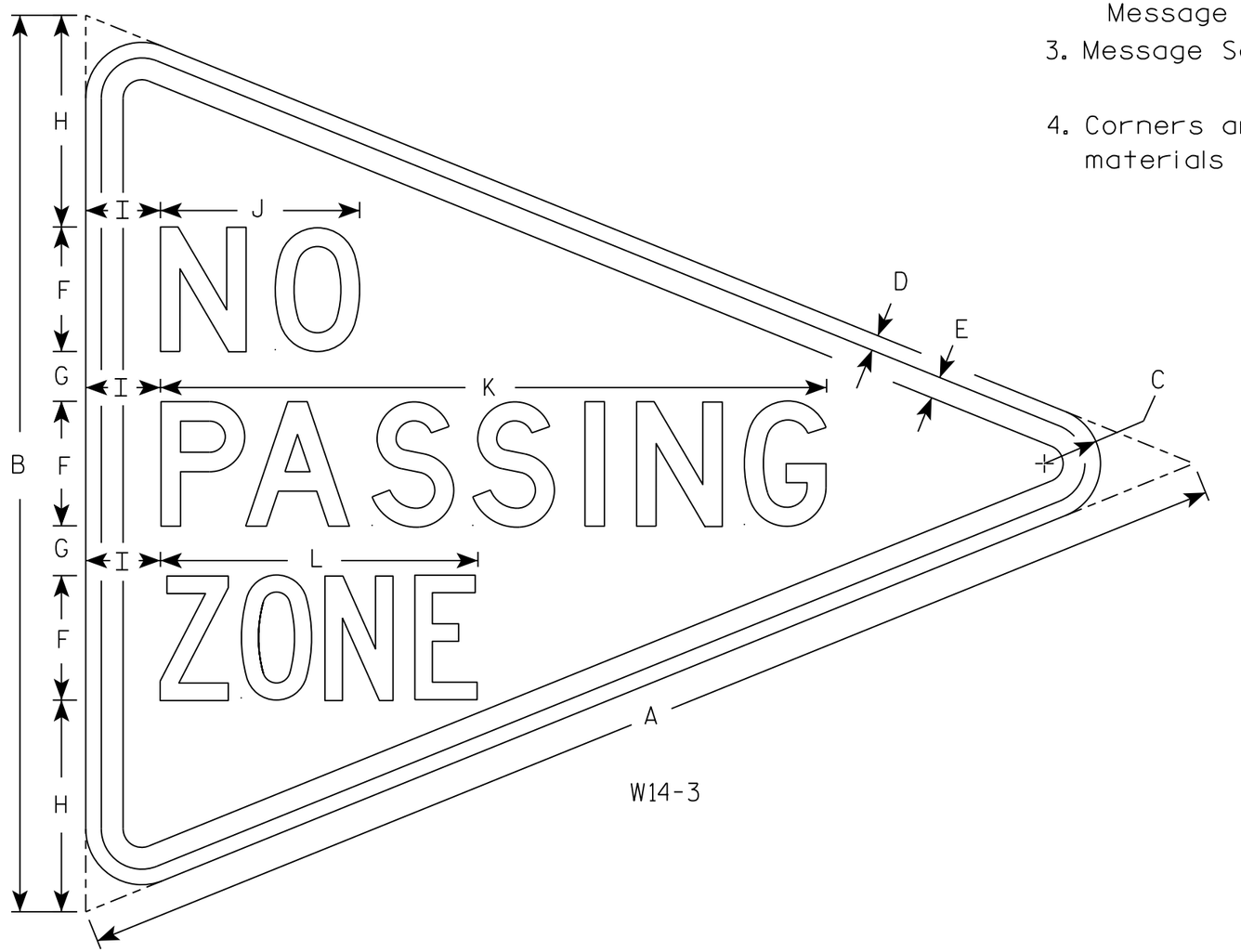
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-4.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 163	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

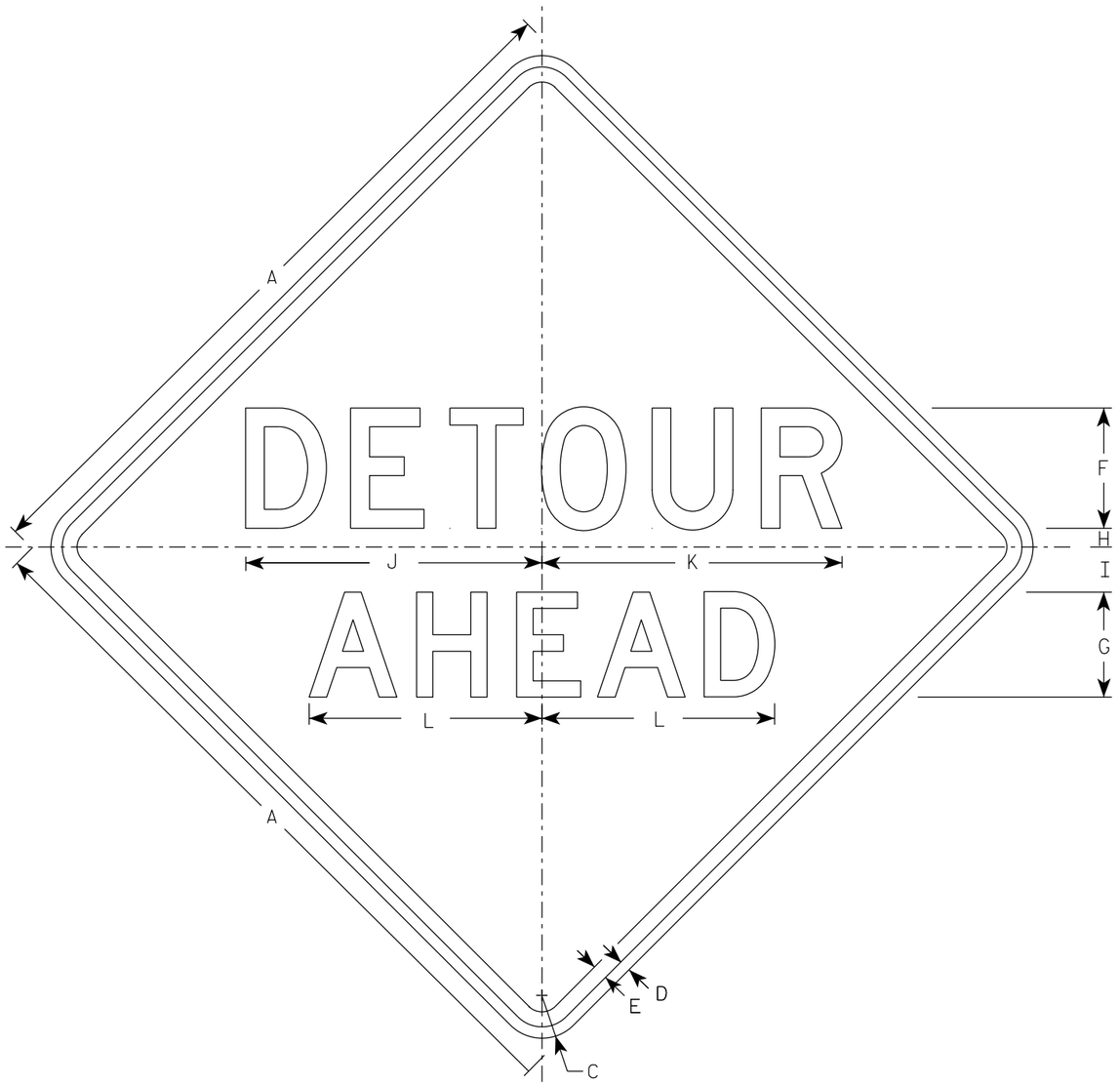
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 164 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W143.DGN PLOT DATE : 21-MAR-2017 08:48 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 5.650195:1.000000

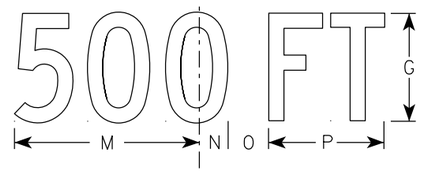
WISDOT/CADDS SHEET 42

7

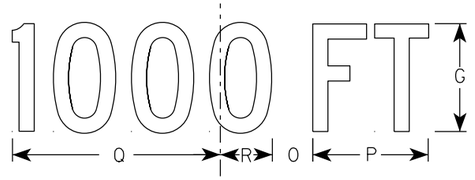
7



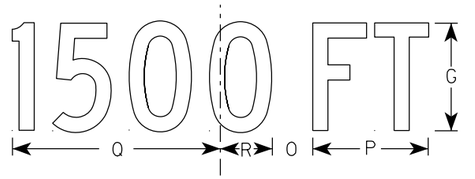
W20-2A



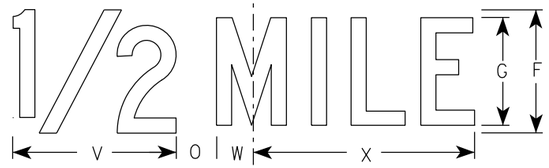
W20-2D



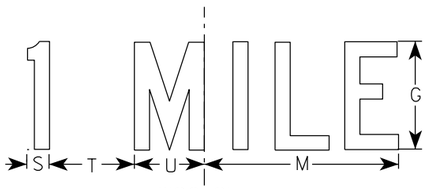
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

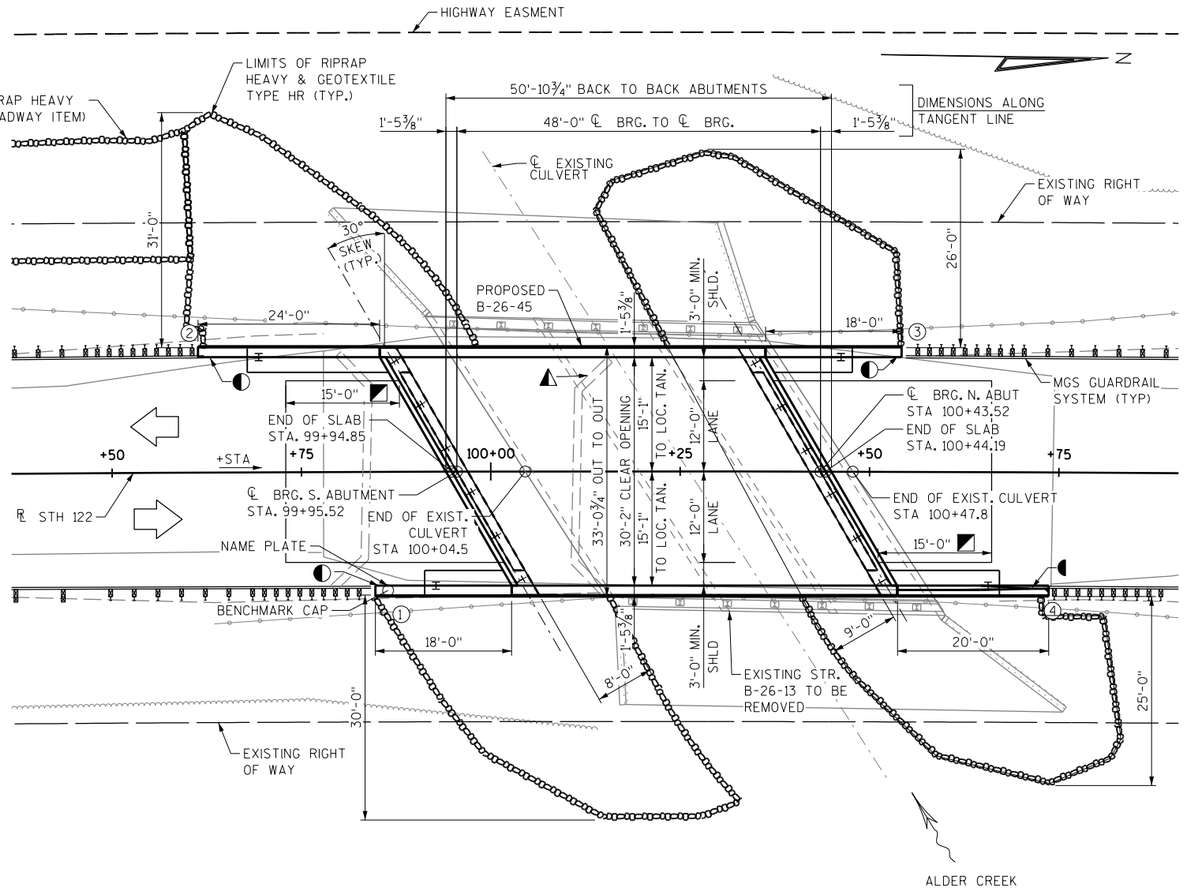
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

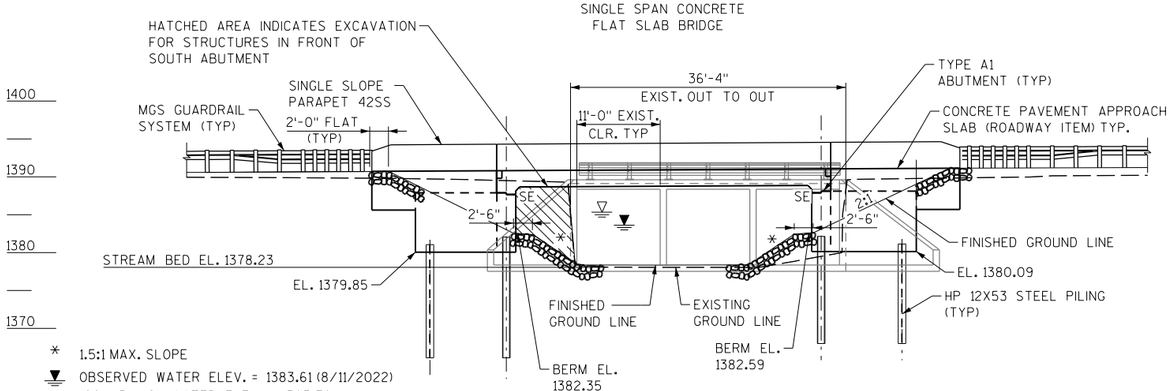
STATE PROJECT NUMBER

9303-03-71



PLAN

SINGLE SPAN CONCRETE
FLAT SLAB BRIDGE



* 1.5:1 MAX. SLOPE

▼ OBSERVED WATER ELEV. = 1383.61 (8/11/2022)

▽ 100 YR HIGH WATER ELEV. = 1385.78

ELEVATION

NORMAL TO ALDER CREEK

BENCHMARKS

NO.	DESCRIPTION	ELEV	STA	OFFSET
CP-26		1389.21	97+14.09	21.34' LT
CP-4192	⅝X24 REBAR W/CAP	1389.72	102+20.83	18.82' RT
CP-4193	NGS ALUMINUM DISK	1389.50	100+16.99	17.44' RT

EXISTING STRUCTURE:

THE EXISTING STRUCTURE (B-26-13) IS A THREE-CELL CAST-IN-PLACE CONCRETE BOX CULVERT THAT IS 46'-0" LONG WITH EACH CELL SPANNING 11'-0". THE STRUCTURE IS SUPPORTED BY A CAST-IN-PLACE CONCRETE FLOOR.

GENERAL NOTES:

1. DRAWINGS SHALL NOT BE SCALED.
2. BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
3. SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.
4. THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
5. THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIP RAP AND GEOTEXTILE TYPE 'HR' TO THE EXTENT SHOWN ON SHEET 1, THE ABUTMENT DETAILS, AND THE ROADWAY PLANS.
6. PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP OF DECK. PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND TOP OF THE PARAPETS.
7. THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-26-45" SHALL BE EXISTING GROUNDLINE.
8. BEVEL EXPOSED EDGES OF CONCRETE 3/4" UNLESS NOTED OTHERWISE.
9. AT ABUTMENTS, CONCRETE POURED UNDER WATER WILL BE ALLOWED AND SHALL BE DONE IN ACCORDANCE WITH SECTION 502.3.5.3 OF THE STANDARD SPECIFICATIONS.
10. EXCAVATION BELOW THE ABUTMENT AND ABUTMENT BEDDING MATERIALS REQUIRES ENGINEER APPROVAL. GEOTEXTILE SHALL BE SET AT THE BOTTOM OF EXCAVATION AND EXTEND 2'-0" ABOVE BOTTOM OF ABUTMENT.

Ⓧ WINGWALL NUMBER

◐ ANCHOR ASSEMBLY FOR STEEL PLATE BEAM GUARD

◩ CONCRETE PAVEMENT APPROACH SLAB (ROADWAY)

◭ POSSIBLE LOCATION OF ORIGINAL STRUCTURE BUILT PRIOR TO B-26-13. FOUNDATIONS MAY REMAIN. REMOVE AS NEEDED, COST INCLUDED IN THE ITEM "REMOVING STRUCTURE B-26-13".

DESIGN DATA

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.05
OPERATING RATING FACTOR: RF = 1.36
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) = 250 KIPS
DESIGN ACCOUNTS FOR FUTURE WEARING SURFACE = 20 PSF

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE ..... f'c = 4,000 psi
ALL OTHER ..... f'c = 3,500 psi
BAR STEEL REINFORCEMENT, GRADE 60 ..... fy = 60,000 psi

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP 12 X 53 STEEL PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 180 TONS/PILE* AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

* THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES TO DETERMINE DRIVEN PILE CAPACITY.

EST. PILE LENGTHS:
SOUTH ABUTMENT ..... 16 FEET
NORTH ABUTMENT ..... 15 FEET

TRAFFIC DATA

STH 122
AADT (2023) = 120
AADT (2043) = 120
DESIGN SPEED = 55 MPH

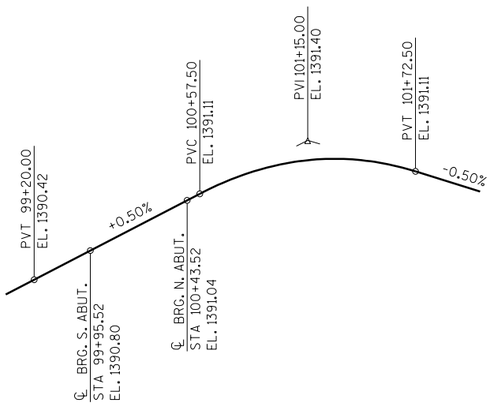
HYDRAULIC DATA:

100 YEAR FLOW ..... 1300 CFS
100 YEAR VELOCITY ..... 5.77 FPS
0100 HIGH WATER ELEV 1385.78
WATERWAY AREA ..... 343.5 SF
DRAINAGE AREA ..... 21.4 SQ MI
SCOUR CRITICAL CODE 5
2 YEAR FLOW ..... 370 CFS
2 YEAR VELOCITY ..... 3.35 FPS
02 HIGH WATER ELEV 1382.33

STRUCTURES DESIGN CONTACTS

BRIDGE OFFICE:
AARON BONK, PE
(608) 261-0261

CONSULTANT:
WILLIAM J. ZIPPEL, PE, SE
ALFRED BENESCH & CO
(414) 308-1321



PROFILE GRADE LINE STH 122

LIST OF DRAWINGS:

1. GENERAL PLAN & ELEVATION
2. TYPICAL SECTIONS & QUANTITIES
3. SUBSURFACE EXPLORATION
4. SOUTH ABUTMENT
5. SOUTH ABUTMENT DETAILS
6. NORTH ABUTMENT
7. NORTH ABUTMENT DETAILS
8. SUPERSTRUCTURE
9. SINGLE SLOPE PARAPET 42SS

NO.	DATE	REVISION	BY

benesch
Alfred Benesch & Company
1300 West Canal Street, Suite 150
Milwaukee, Wisconsin 53233
414-308-1310 Job No. 20294.00

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ SDR 08/19/24
CHIEF STRUCTURES DESIGN ENGINEER DATE

STRUCTURE B-26-45

STH 122 OVER ALDER CREEK

COUNTY	TOWN ~~CITY / VILLAGE~~
IRON	ANDERSON

DESIGN SPEC. AASHTO LRFD DESIGN SPEC.

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
JAP	WJZ	HRC	WJZ

GENERAL PLAN & ELEVATION

SHEET 1 OF 9

166

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SCALE = 1:20

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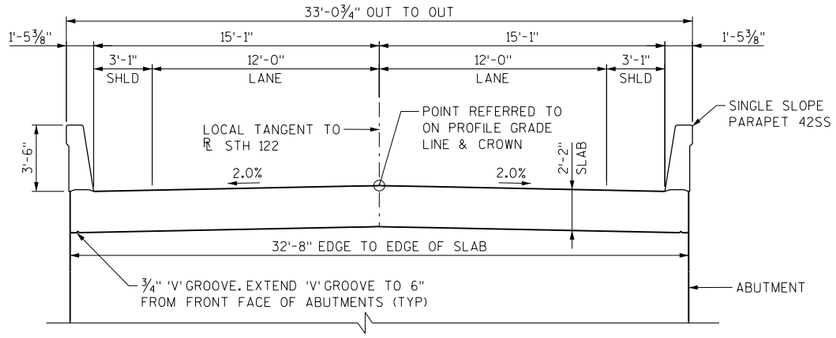
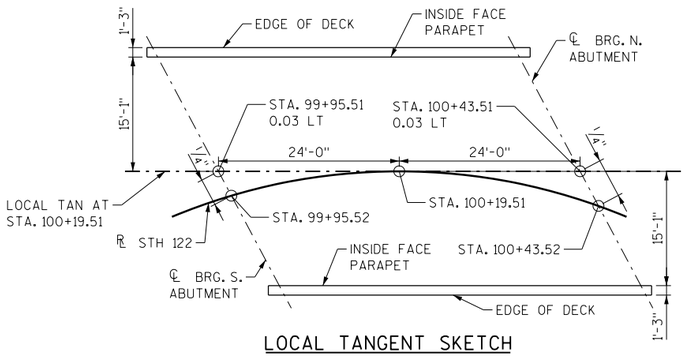


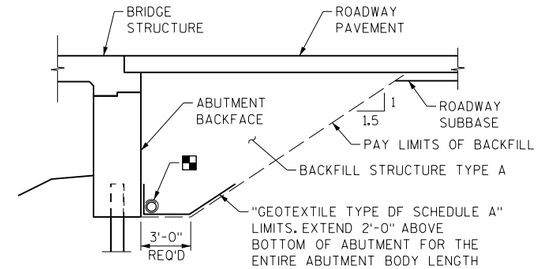
CROSS SECTION THRU SUPERSTRUCTURE



LOCAL TANGENT SKETCH

HORIZONTAL CURVE DATA

P.C. = STA 97+81.26
P.I. = STA 99+77.20
P.T. = STA 101+73.10
R = 11250.00'
DELTA = 1°59'44" (RT)
D = 0°30'33"
L = 391.83'
T = 195.94'



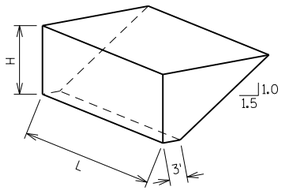
TYPICAL SECTION THRU ABUTMENT

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-26-45" SHALL BE THE EXISTING GROUNDLINE.

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS AND MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE A" REQUIRED DIRECTLY BEHIND ABUTMENTS AND ABUTMENT WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY CONTRACTOR.

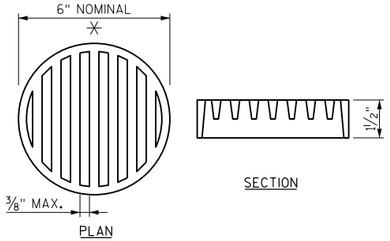
AT THE BACKFACE OF ABUTMENT ALL VOLUME WHICH CANNOT BE PLACED BEFORE ABUTMENT CONSTRUCTION AND IS NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL.

■ PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



ABUTMENT BACKFILL DIAGRAM FOR WINGS PARALLEL TO ROADWAY

L = OUT TO OUT OF ABUTMENT, INCLUDING WINGS (FT)
H = AVERAGE ABUTMENT FILL HEIGHT (FT)
EF = EXPANSION FACTOR (1.20 FOR CY BID ITEMS AND 1.00 FOR TON BID ITEMS)
V_{CF} = (L)(3.0')(H) + (L)(0.5)(1.5H)(H)
V_{CY} = V_{CF}(EF)/27
V_{TON} = V_{CY}(2.0)

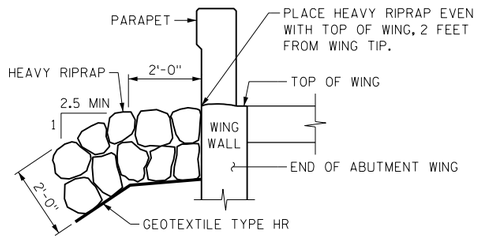


RODENT SHIELD DETAIL

✳ DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SO SLOTS ARE VERTICAL.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

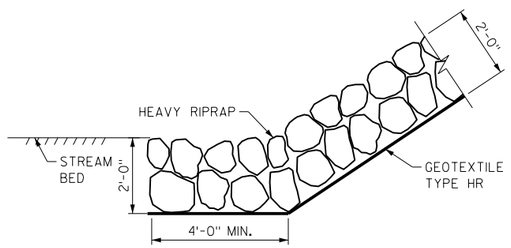
THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



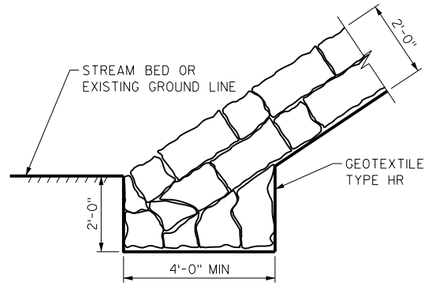
TYPICAL FILL SECTION AT WING TIPS

TOTAL ESTIMATE OF QUANTITIES

BID NO.	BID ITEMS	UNIT	S ABUT	N ABUT	SUPER	TOTAL
203.0211.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-26-13	EACH				1
203.0260	REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS B-26-13	EACH				1
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-26-45	EACH				1
210.1500	BACKFILL STRUCTURE TYPE A	TON	306	306		612
502.0100	CONCRETE MASONRY BRIDGES	CY	60	60	164	284
502.3200	PROTECTIVE SURFACE TREATMENT	SY			171	171
502.3210	PIGMENTED SURFACE SEALER	SY			89	89
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	3332	3332		6664
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	3328	2947	30989	37324
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	11	11		22
550.0500	PILE POINTS	EACH	8	8		16
550.1120	PILING STEEL HP 12-INCH X 53 LB	LF	128	120		248
606.0300	RIPRAP HEAVY	CY	137	134		271
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	96	92		188
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	2	2		4
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	54	53		107
645.0120	GEOTEXTILE TYPE HR	SY	205	201		406
	NON-BID ITEMS					
	NAME PLATE					
	JOINT FILLER -½", ¾"					
	NON-BITUMINOUS JOINT SEALER					



HEAVY RIPRAP TOE DETAIL



HEAVY RIPRAP TOE ALONG WINGWALL DETAIL

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-26-45

DRAWN BY JAP | PLANS CK'D. WJZ

TYPICAL SECTIONS & QUANTITIES

SHEET 2 OF 9

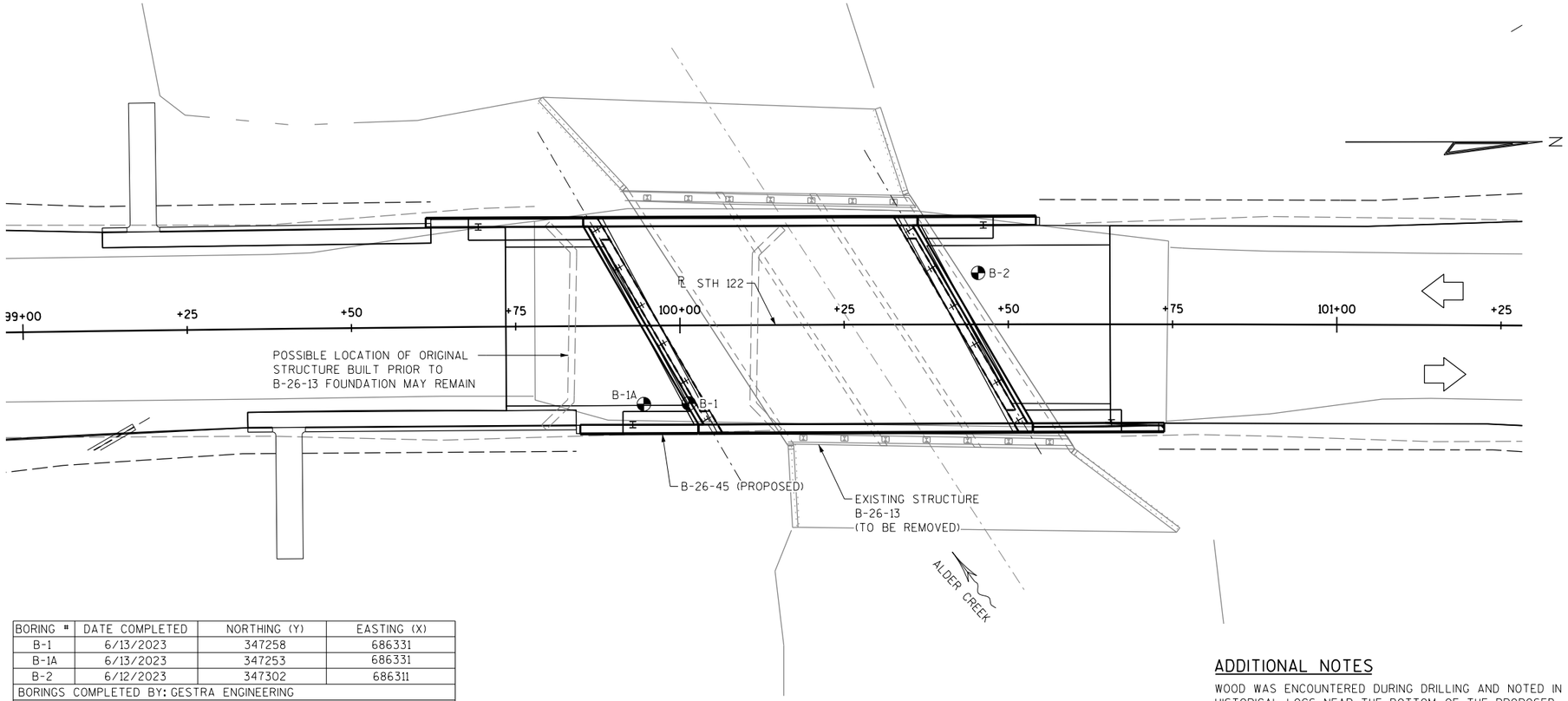
167

FILE= B260045_20-TYP.DGN
SCALE = 1:8

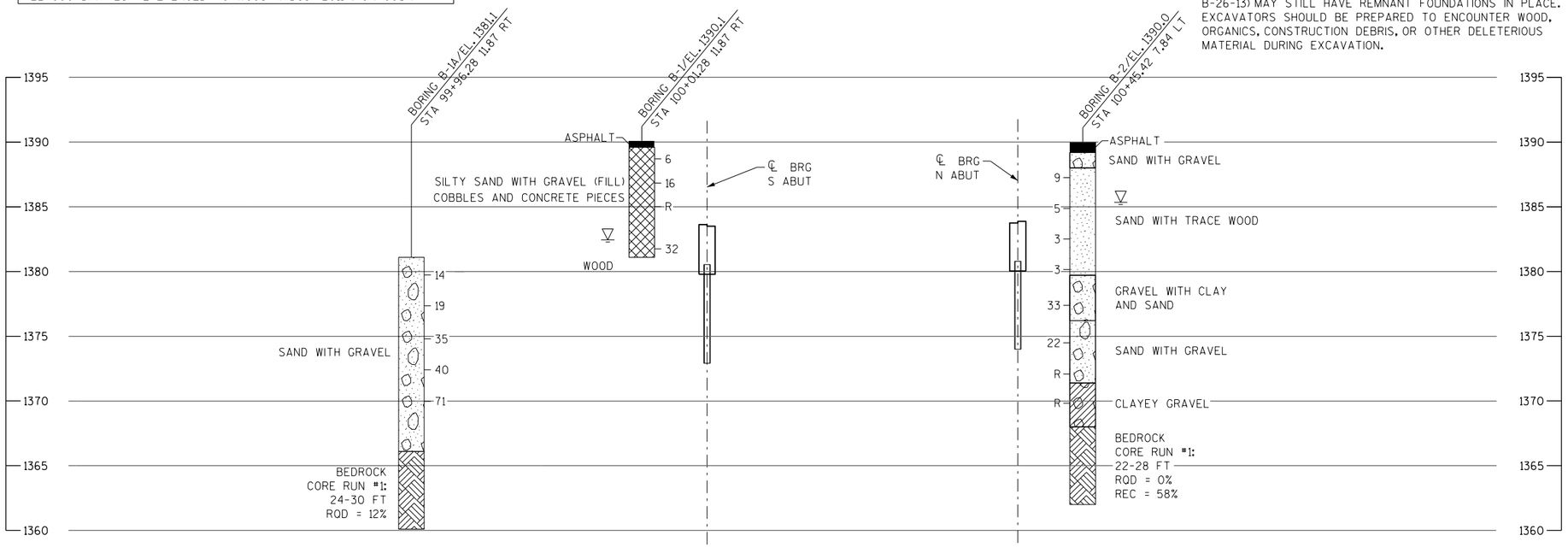
8

STATE PROJECT NUMBER

9303-03-71



BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	6/13/2023	347258	686331
B-1A	6/13/2023	347253	686331
B-2	6/12/2023	347302	686311
BORINGS COMPLETED BY: GESTRA ENGINEERING			
REPORT COMPLETED BY: DOUG BATH, PE			
ALL COORDINATES REFERENCED TO WCCS NAD83 (2011) IRON COUNTY			



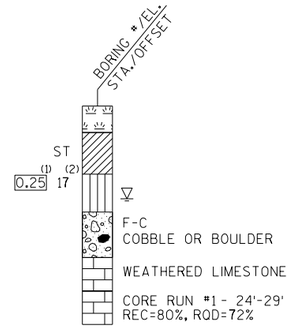
ADDITIONAL NOTES

WOOD WAS ENCOUNTERED DURING DRILLING AND NOTED IN THE HISTORICAL LOGS NEAR THE BOTTOM OF THE PROPOSED ABUTMENTS. THE ORIGINAL STRUCTURE (BUILT PRIOR TO B-26-13) MAY STILL HAVE REMNANT FOUNDATIONS IN PLACE. EXCAVATORS SHOULD BE PREPARED TO ENCOUNTER WOOD, ORGANICS, CONSTRUCTION DEBRIS, OR OTHER DELETERIOUS MATERIAL DURING EXCAVATION.

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING



(1) UNCONFINED STRENGTH, AS DETERMINED BY A POCKET PENETROMETER (TSF)

(2) UNLESS OTHERWISE, SPECIFIED THE SPT 'N' VALUE IS BASED ON AASHTO T-206, STANDARD PENETRATION TEST. THE SPT 'N' VALUE PRESENTED HAS NOT BEEN CORRECTED FOR OVERBURDEN PRESSURE OR HAMMER EFFICIENCY.

GROUND WATER ELEVATION

- ▽ AT TIME OF DRILLING
- ▼ END OF DRILLING
- ▽ AFTER DRILLING

ABBREVIATIONS

F-FINE M-MEDIUM C-COARSE ST-SHELBY TUBE

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-26-45

DRAWN BY NWG | PLANS CK'D. WJZ

SUBSURFACE EXPLORATION

SHEET 3 OF 9

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8

FILE= B260045_30-SUB.DGN
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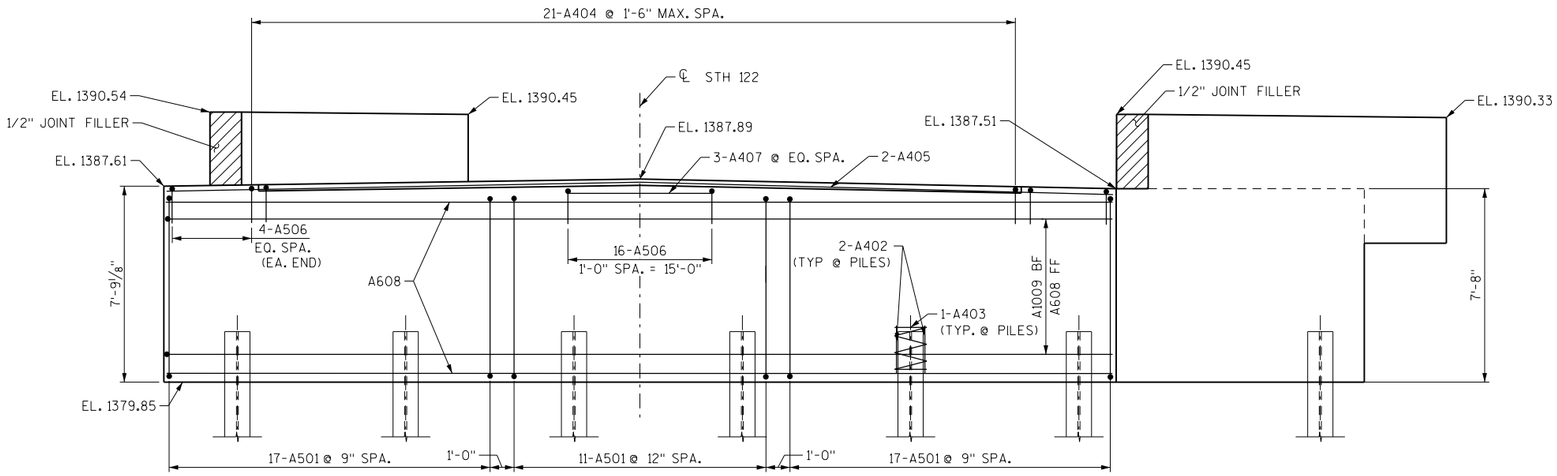
STATE PROJECT NUMBER

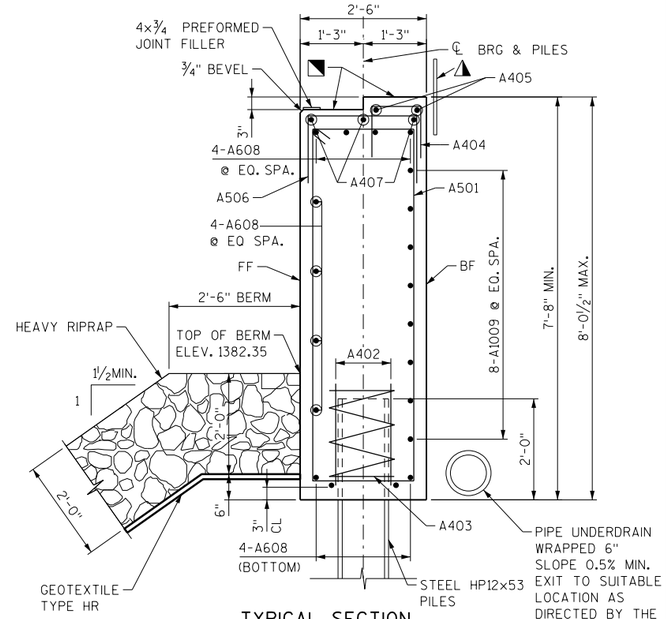
9303-03-71



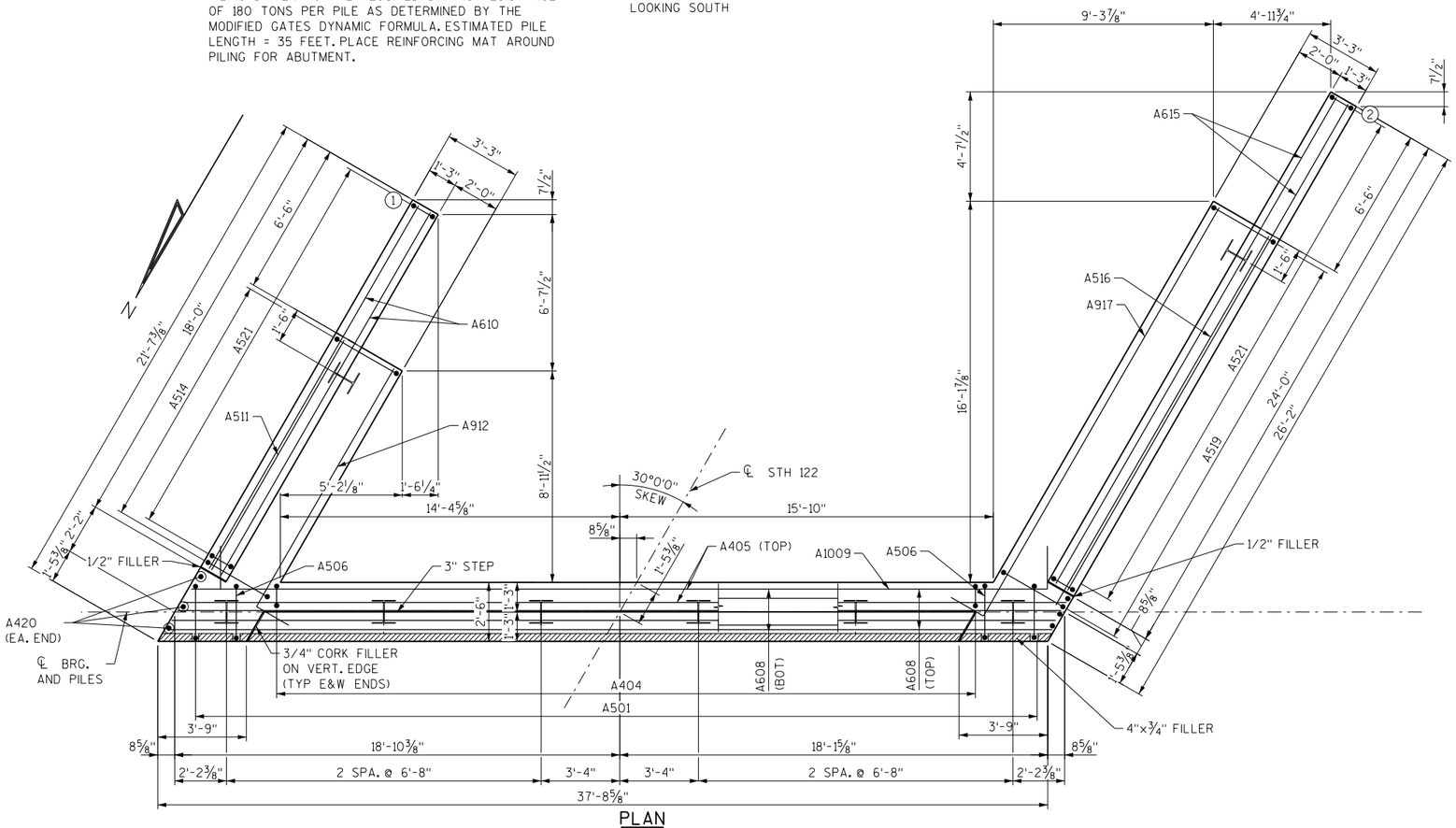
ABUTMENTS TO BE SUPPORTED ON HP12x53 STEEL PILING DRIVEN TO THE REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH = 35 FEET. PLACE REINFORCING MAT AROUND PILING FOR ABUTMENT.

ELEVATION

LOOKING SOUTH



TYPICAL SECTION THROUGH ABUTMENT BODY



PLAN

NOTES:

EXCAVATE TO BOTTOM OF ABUTMENTS BEFORE DRIVING PILES.

DO NOT PLACE FILL ABOVE 3'-0" FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

△ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACK FACE OF ABUTMENTS AND WINGS.

◥ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MUTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

FF DENOTES FRONT FACE

BF DENOTES BACK FACE.

EF DENOTES EACH FACE.

(X) INDICATES WING NUMBER

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-26-45

DRAWN BY BJK | PLANS CK'D. WJZ

SOUTH ABUTMENT

SHEET 4 OF 9

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STATE PROJECT NUMBER

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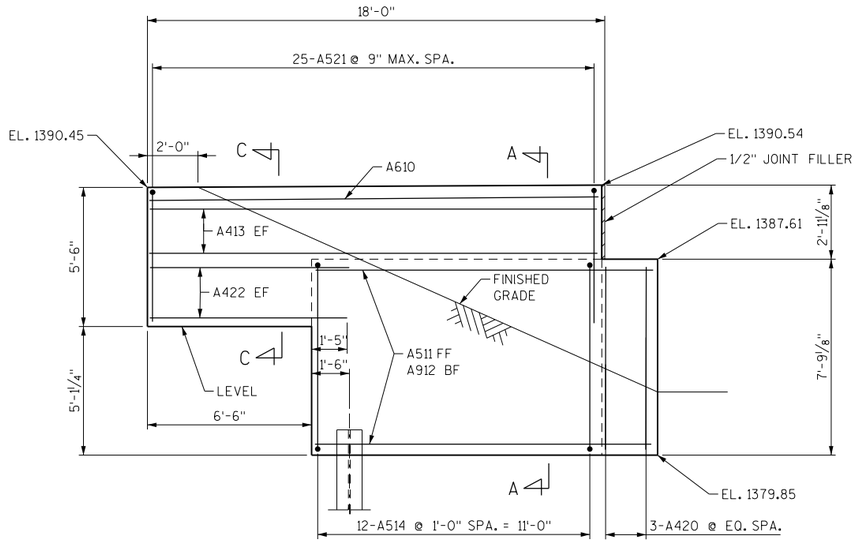
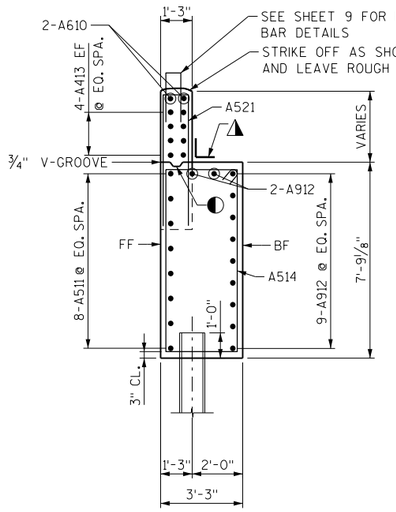
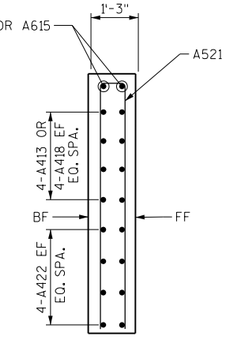


EAST WINGWALL ELEVATION

(WING 1)



SECTION A-A

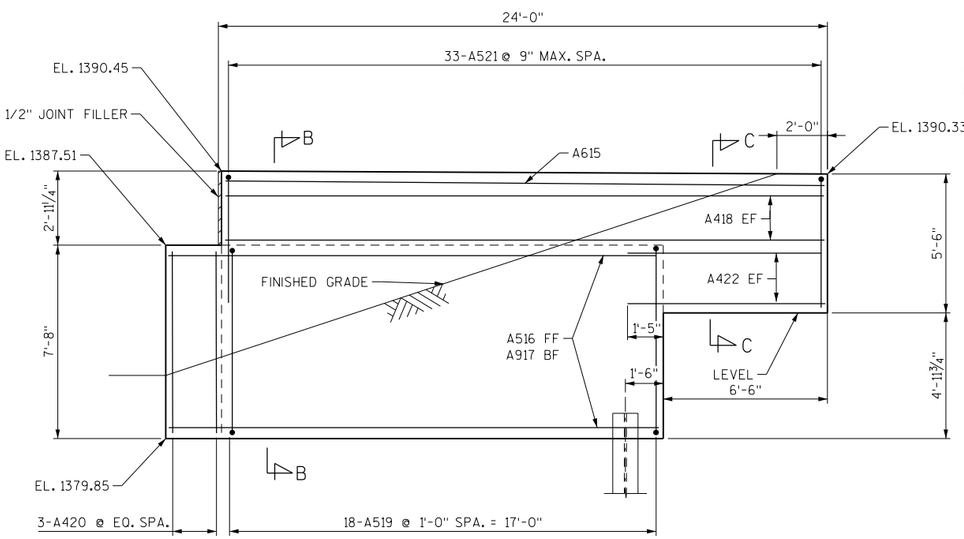


SECTION C-C

(TYP. THRU WING)

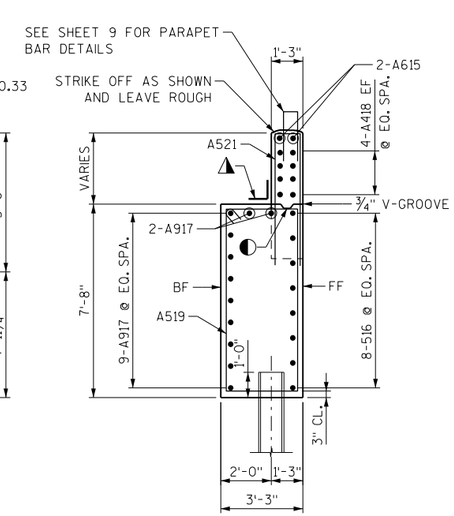
BILL OF BARS - SOUTH ABUTMENT

BAR NO.	COATED BAR	NO. REQ'D	LENGTH	BENT BAR	BUNDLED	⚠ BAR SERIES	3328# COATED 3332# UNCOATED LOCATION
A501		45	19'-0"	X			ABUT BODY STIRRUPS
A402		16	2'-3"				ABUT PILES - 2 PER PILE
A403		8	28'-0"	X			ABUT PILES - 1 PER PILE
A404		21	3'-9"	X			ABUT BODY TOP - TRANSVERSE STEP
A405		2	37'-3"				ABUT BODY TOP - LONGITUDINAL STEP
A506		24	4'-11"	X			ABUT BODY TOP - MIDDLE - TRANSVERSE
A407		3	15'-0"				ABUT BODY TOP - MIDDLE - LONGITUDINAL
A608		12	37'-3"				ABUT BODY HORIZONTAL
A1009		8	38'-1"	X			ABUT BODY HORIZONTAL - BF
A610	X	2	17'-8"				EAST WINGWALL HORIZONTAL BARS TOP
A511	X	8	14'-7"				EAST WINGWALL FOOTING - HORIZONTAL - FF
A912	X	11	13'-4"	X			EAST WINGWALL FOOTING - HORIZONTAL - BF
A413	X	8	17'-8"				EAST WINGWALL - HORIZONTAL - FF & BF
A514	X	12	20'-9"	X			EAST WINGWALL STIRRUPS
A615	X	2	23'-8"				WEST WINGWALL HORIZONTAL BARS TOP
A516	X	8	19'-4"				WEST WINGWALL FOOTING - HORIZONTAL BARS - FF
A917	X	11	21'-6"	X			WEST WINGWALL FOOTING - HORIZONTAL BARS - BF
A418	X	8	23'-8"				WEST WINGWALL - HORIZONTAL FF & BF
A519	X	18	20'-7"	X			WEST WINGWALL STIRRUPS
A420		6	7'-3"				ABUTMENT ENDS - VERTICAL
A521	X	58	11'-0"	X			WINGWALL - U BARS
A422	X	16	7'-11"				WINGWALL - HORIZONTAL FF & BF

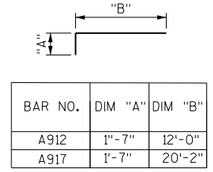


WEST WINGWALL ELEVATION

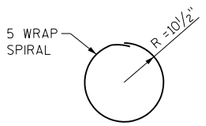
(WING 2)



SECTION B-B



BAR NO.	DIM "A"	DIM "B"
A912	1'-7"	12'-0"
A917	1'-7"	20'-2"



A403

BAR NO.	DIM "A"	DIM "B"	DIM "C"
A501	7'-0"	2'-2"	4"
A514	7'-4"	2'-11"	4"
A519	7'-3"	2'-11"	4"

BAR NO.	DIM "A"	DIM "B"
A404	1'-6"	11"
A506	2'-2"	1'-6"
A1009	1'-10"	35'-0"
A521	5'-2"	11"

NOTES:

SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE)

⚠ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACK FACE OF ABUTMENTS AND WINGS.

◐ OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2"x6" KEYWAY WITH MEMBRANE ON BACK FACE. ¾" V-GROOVE IS ONLY NEEDED IF THE OPTIONAL CONSTRUCTION JOINT IS USED.

SEE SHEET 2 FOR RIPRAP BERM DETAILS

FF DENOTES FRONT FACE.

BF DENOTES BACK FACE.

EF DENOTES EACH FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-26-45

DRAWN BY BJK | PLANS CK'D. WJZ

SOUTH ABUTMENT DETAILS

SHEET 5 OF 9

170

FILE= B260045_SO-SABUTDET.DGN
SCALE = 1:6

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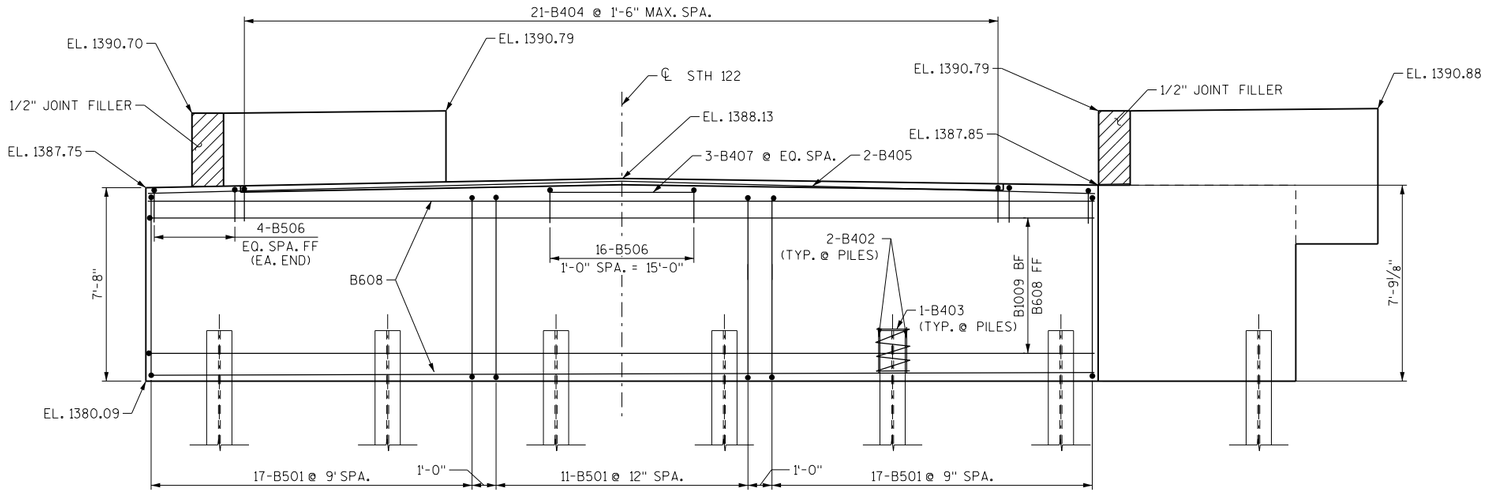
8

STATE PROJECT NUMBER

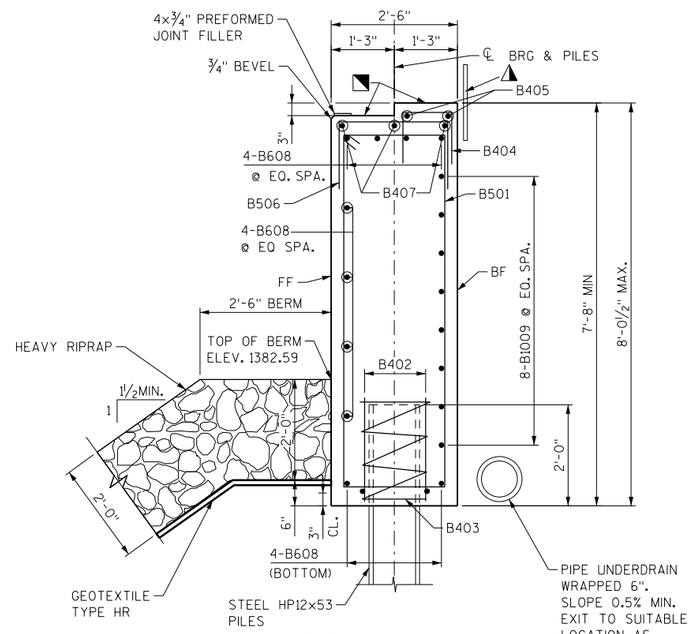
9303-03-71



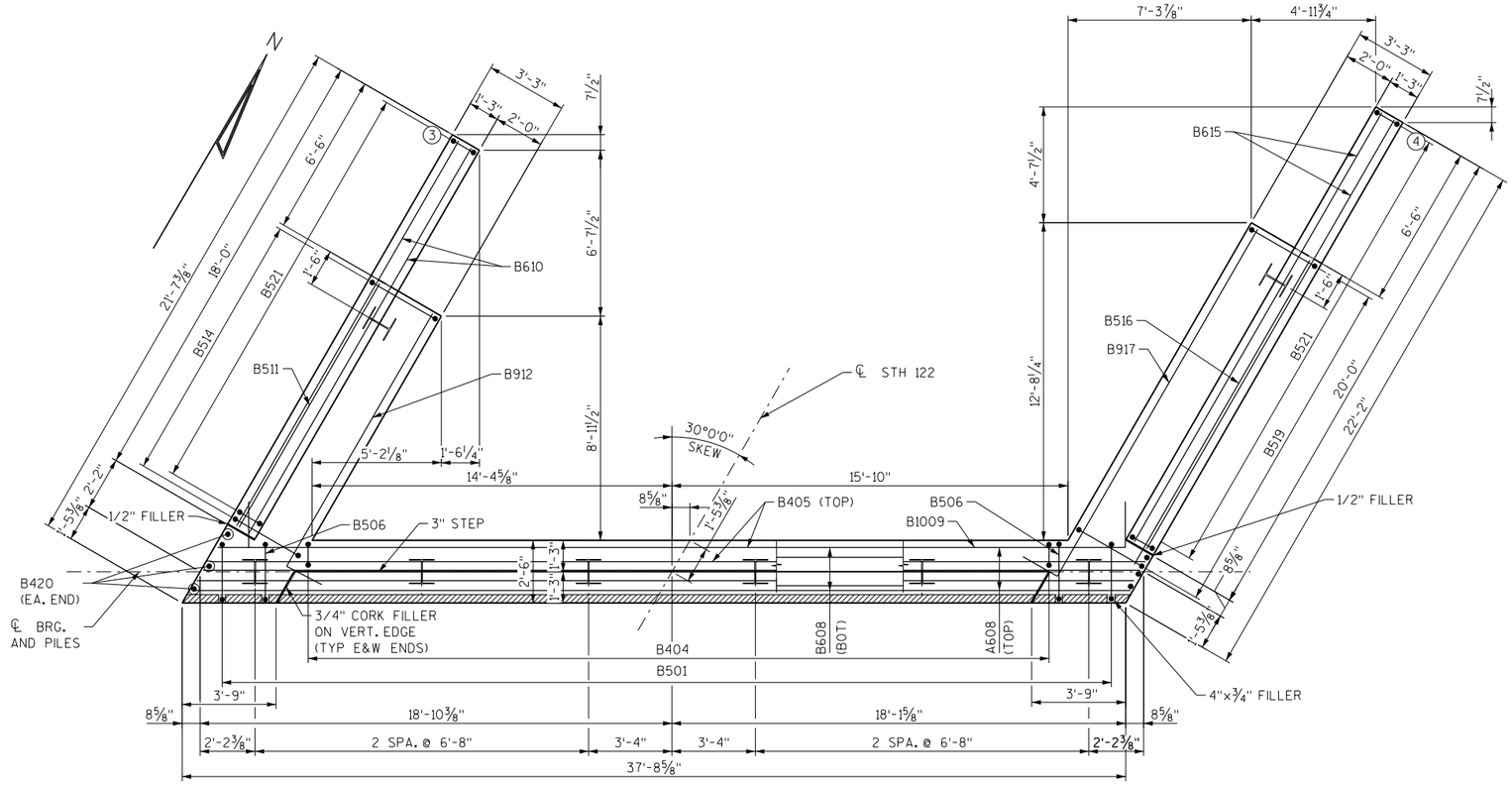
ABUTMENTS TO BE SUPPORTED ON HP12x53 STEEL PILING DRIVEN TO THE REQUIRED DRIVING RESISTANCE OF 180 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTH = 35 FEET. PLACE REINFORCING MAT AROUND PILING FOR ABUTMENT.

ELEVATION

LOOKING NORTH



TYPICAL SECTION THROUGH ABUTMENT BODY



PLAN

NOTES:

EXCAVATE TO BOTTOM OF ABUTMENTS BEFORE DRIVING PILES.

DO NOT PLACE FILL ABOVE 3'-0" FROM BOTTOM OF ABUTMENT UNTIL SUPERSTRUCTURE IS IN PLACE.

SEAL ALL EXPOSED HOIRZ. AND VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).

△ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACK FACE OF ABUTMENTS AND WINGS.

◥ STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING SUPERSTRUCTURE. TOTAL THICKNESS OF SHEETS SHALL BE AT LEAST 0.03".

FF DENTOES FRONT FACE.

BF DENOTES BACK FACE.

EF DENOTES EACH FACE.

Ⓧ INDICATES WING NUMBER.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-26-45

DRAWN BY BJK | PLANS CK'D. WJZ

NORTH ABUTMENT

SHEET 6 OF 9

171

FILE= B260045.60-NABUT.DGN
SCALE = 1:6

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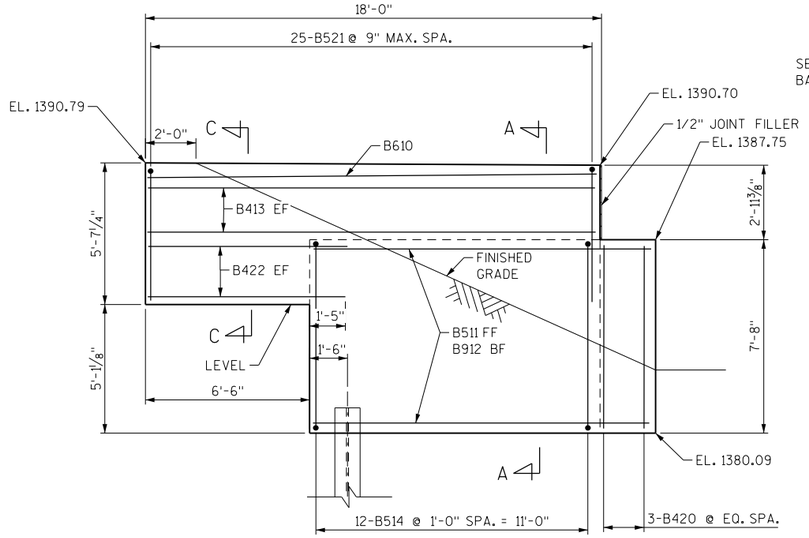
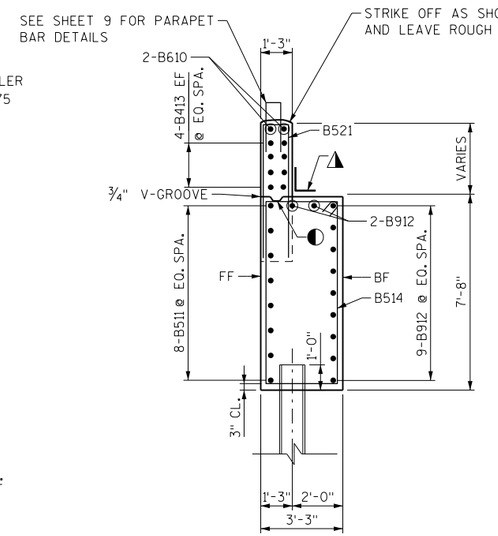
STATE PROJECT NUMBER

9303-03-71

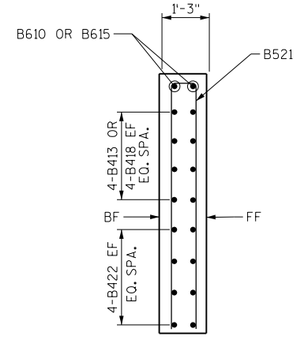


WEST WINGWALL ELEVATION

(WING 3)



SECTION A-A

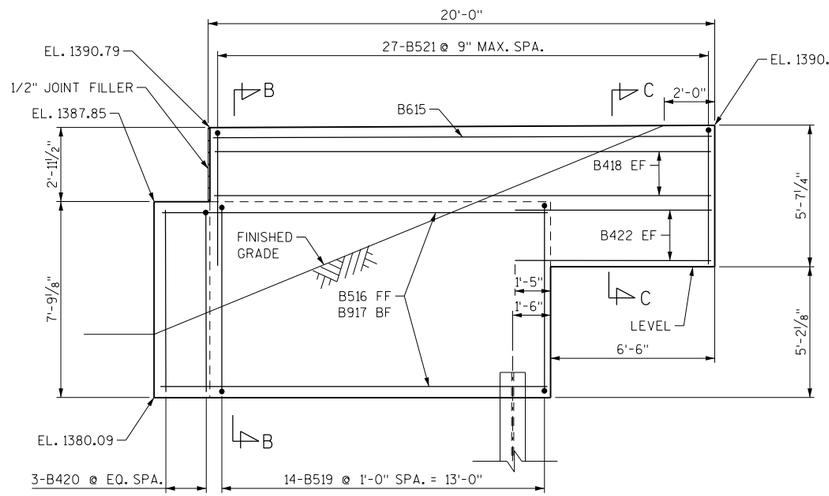


SECTION C-C

(TYP. THRU WING)

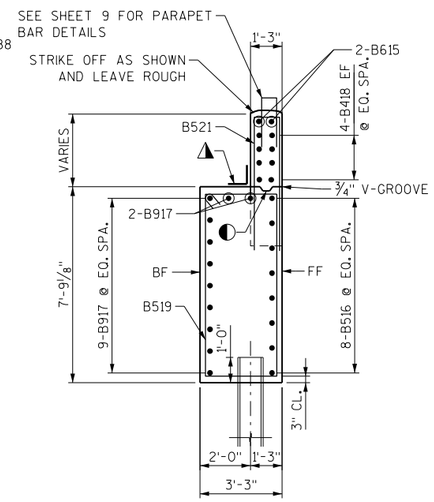
BILL OF BARS - NORTH ABUTMENT

BAR NO.	COATED BAR	NO. REQ'D	LENGTH	BENT BAR	BUNDLED	BAR SERIES ◭	2947# COATED 3332# UNCOATED LOCATION
B501		45	19'-0"	X			ABUT BODY STIRRUPS
B402		16	2'-3"				ABUT PILES - 2 PER PILE
B403		8	28'-0"	X			ABUT PILES - 1 PER PILE
B404		21	3'-9"	X			ABUT BODY TOP - TRANSVERSE STEP
B405		2	37'-3"				ABUT BODY TOP - LONGITUDINAL STEP
B506		24	4'-11"	X			ABUT BODY TOP - MIDDLE - TRANSVERSE
B407		3	15'-0"				ABUT BODY TOP - MIDDLE - LONGITUDINAL
B608		12	37'-3"				ABUT BODY HORIZONTAL
B1009		8	38'-1"	X			ABUT BODY HORIZONTAL - BF
B610	X	2	17'-8"				WEST WINGWALL HORIZONTAL BARS TOP
B511	X	8	14'-7"				WEST WINGWALL FOOTING - FF
B912	X	11	13'-4"	X			WEST WINGWALL FOOTING - BF
B413	X	8	17'-8"				WEST WINGWALL - FF & BF
B514	X	12	20'-7"	X			WEST WINGWALL STIRRUPS
B615	X	2	19'-8"				EAST WINGWALL HORIZONTAL BARS TOP
B516	X	8	15'-4"				EAST WINGWALL FOOTING - HORIZONTAL BARS - FF
B917	X	11	17'-6"	X			EAST WINGWALL FOOTING - HORIZONTAL BARS - BF
B418	X	8	19'-8"				EAST WINGWALL - HORIZONTAL FF & BF
B519	X	14	20'-9"	X			EAST WINGWALL STIRRUPS
B420		6	7'-3"				ABUTMENT ENDS - VERTICAL
B521	X	52	11'-2"	X			WINGWALL - U BARS
B422	X	16	7'-11"				WINGWALL - HORIZONTAL FF & BF

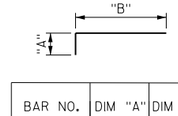


EAST WINGWALL ELEVATION

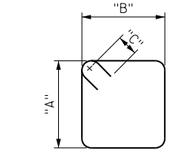
(WING 4)



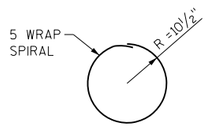
SECTION B-B



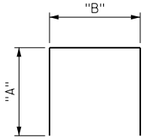
BAR NO.	DIM "A"	DIM "B"
B912	1"-7"	12'-0"
B917	1'-7"	16'-2"



BAR NO.	DIM "A"	DIM "B"	DIM "C"
B501	7'-0"	2'-2"	4"
B514	7'-3"	2'-11"	4"
B519	7'-4"	2'-11"	4"



B403



BAR NO.	DIM "A"	DIM "B"
B404	1'-6"	11"
B506	2'-2"	1'-6"
B1009	1'-10"	35'-0"
B521	5'-3"	11"

NOTES:

SEAL ALL EXPOSED HORIZ. AND VERT. SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE)

◭ 18" RUBBERIZED MEMBRANE WATERPROOFING. SEAL ALL HORIZ. AND VERT. JOINTS ON BACK FACE OF ABUTMENTS AND WINGS.

◐ OPTIONAL CONSTRUCTION JOINT FORMED BY BEVELED 2"x6" KEYWAY WITH MEMBRANE ON BACK FACE. ¾" V-GROOVE IS ONLY NEEDED IF THE OPTIONAL CONSTRUCTION JOINT IS USED.

SEE SHEET 2 FOR RIPRAP BERM DETAILS

FF DENOTES FRONT FACE.

BF DENOTES BACK FACE.

EF DENOTES EACH FACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-26-45

DRAWN BY BJK | PLANS CK'D. WJZ

NORTH ABUTMENT DETAILS

SHEET 7 OF 9

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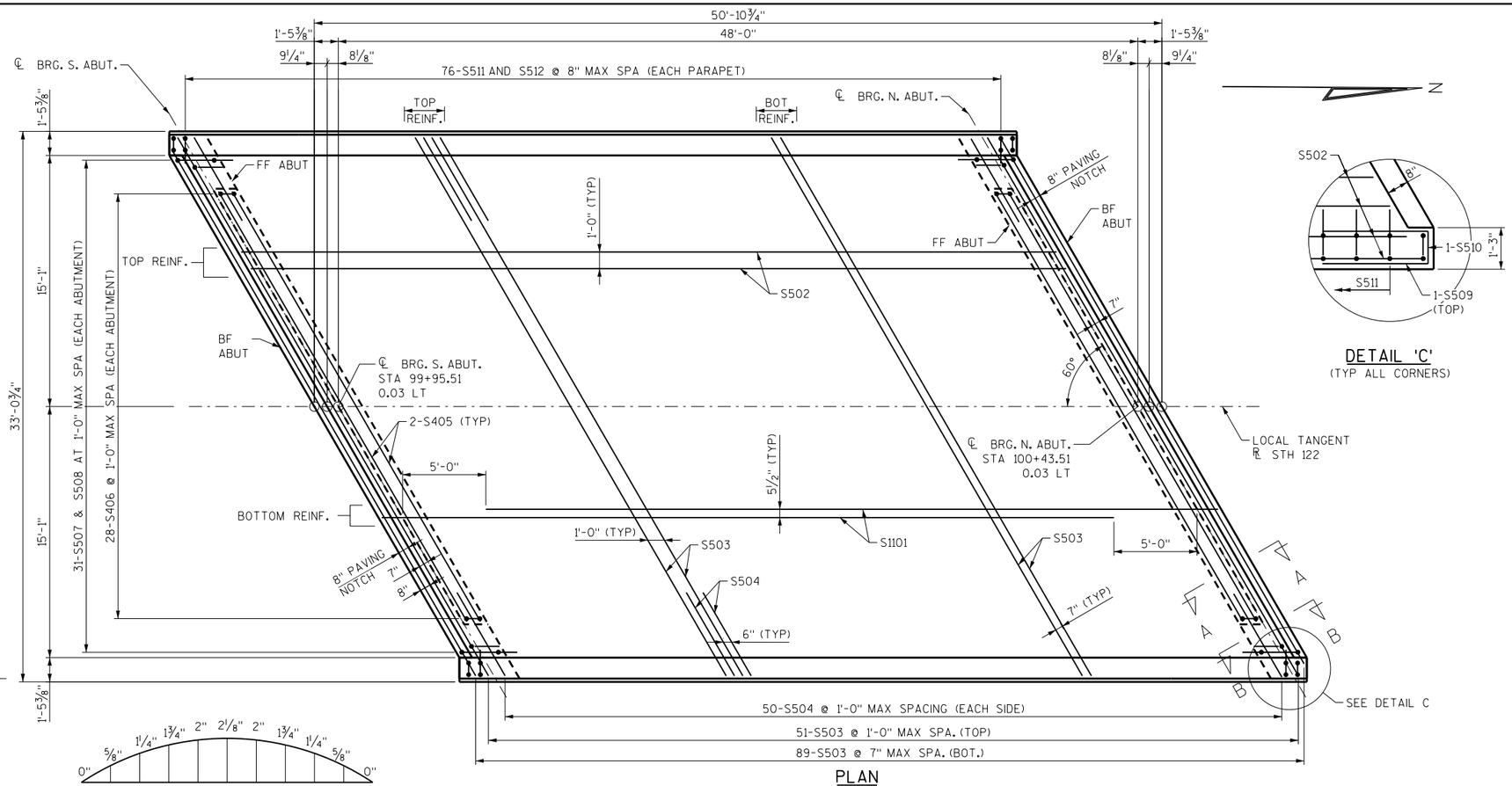
FILE= B260045_70-NABUTDET.DGN
SCALE = 1:6



PLAN

CAMBER DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTION

TOP TRANSVERSE BARS IN SLAB SHALL BE SUPPORTED BY INDIVIDUAL BAR CHAIRS AT APPROXIMATELY 3'-0" CENTERS EACH WAY. BOTTOM LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0".

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

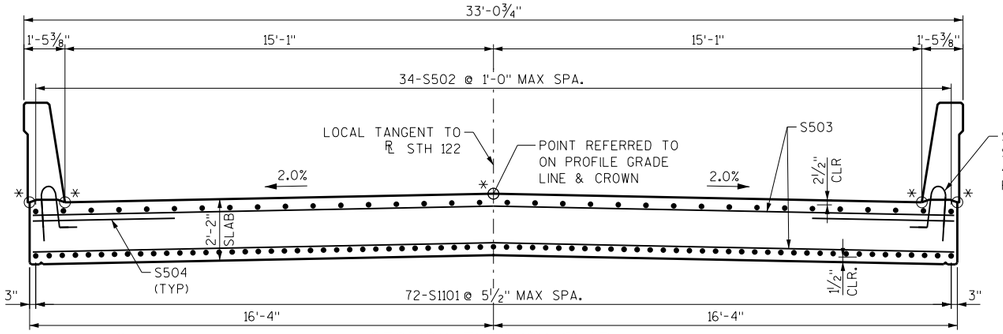
PARAPETS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION & FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE ℄ OF ABUTMENTS AND MIDSPAN. TO VERIFY CAMBER, TAKE ELEVATIONS ALONG GUTTER LINES AND CROWN OR R/L. RECORD ELEVATIONS ON AS BUILT PLANS. SEE STD. 18.03.

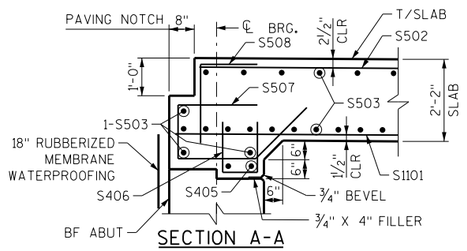
TO DETERMINE FALSEWORK ELEVATION AT EDGE OF SLAB, CROWN OR REFERENCE LINE FOLLOW THIS PROCEDURE:

	TOP OF SLAB ELEVATION AT FINAL GRADE
MINUS...	SLAB THICKNESS
PLUS....	CAMBER
PLUS....	FORM SETTLEMENT/DEFLECTION DUE TO PLACEMENT OF SLAB CONCRETE (TO BE COMPUTED BY THE CONTRACTOR)
EQUALS =	TOP OF SLAB FALSEWORK ELEVATION

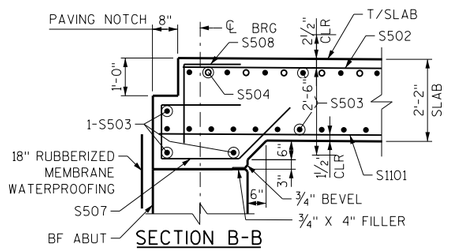


*DENOTES LOCATION OF TOP OF SLAB ELEVATIONS

SECTION THROUGH SLAB



SECTION A-A



SECTION B-B

STATE PROJECT NUMBER

9303-03-71

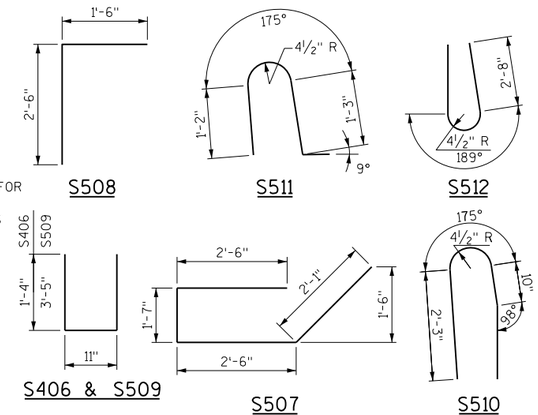
BILL OF BARS

BAR NO.	COATED BAR	NO. REQ'D	LENGTH	BENT BAR	BUNDLED	BAR SERIES	28363# COATED 0# UNCOATED — LOCATION
S1101	X	72	43'-3"				SLAB LONG. BOTTOM
S502	X	34	48'-11"				SLAB LONG. TOP
S503	X	146	37'-4"				SLAB TRANS. TOP & BOT.
S504	X	100	5'-0"				SLAB TRANS. TOP AT ENDS
S405	X	4	29'-10"				SLAB TRANS AT ABUTMENT NOTCHES
S406	X	56	3'-5"	X			SLAB AT ABUTMENTS U-BAR
S507	X	62	8'-4"	X			SLAB AT PAVING NOTCH
S508	X	62	3'-11"	X			SLAB AT PAVING NOTCH
S509	X	4	7'-6"	X			SLAB AT TOP CORNER U-BAR
S510	X	4	5'-2"	X			PARAPET AT CORNERS (DOWEL)
S511	X	152	5'-10"	X			PARAPET VERTICAL (DOWEL)
S512	X	152	6'-8"	X			PARAPET VERTICAL
S513	X	16	50'-6"				PARAPET LONG.

TOP OF SLAB ELEVATIONS

LOCATION	WEST EDGE OF DECK**	WEST GUTTER	CROWN	EAST GUTTER	EAST EDGE OF DECK**
S EO SLAB		1390.45	1390.80	1390.54	
S ℄ BRG	1390.43	1390.46	1390.80	1390.54	1390.52
0.1	1390.45	1390.48	1390.83	1390.57	1390.55
0.2	1390.48	1390.51	1390.85	1390.59	1390.57
0.3	1390.50	1390.53	1390.87	1390.62	1390.60
0.4	1390.52	1390.55	1390.90	1390.64	1390.62
0.5	1390.55	1390.58	1390.92	1390.66	1390.64
0.6	1390.57	1390.60	1390.95	1390.69	1390.67
0.7	1390.60	1390.63	1390.97	1390.71	1390.69
0.8	1390.62	1390.65	1390.99	1390.74	1390.72
0.9	1390.64	1390.67	1391.02	1390.76	1390.74
N ℄ BRG	1390.67	1390.70	1391.04	1390.78	1390.76
N EO SLAB		1390.70	1391.05	1390.79	

**THEORETICAL POINT AT CONTINUED 2% CROSS-SLOPE



NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-26-45

DRAWN BY JAP | PLANS CK'D. WJZ

SUPERSTRUCTURE

SHEET 8 OF 9

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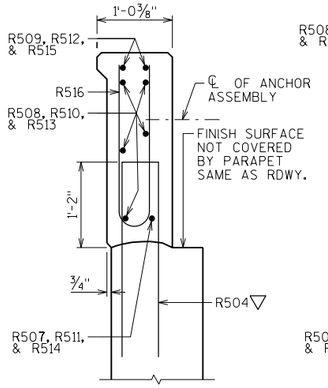
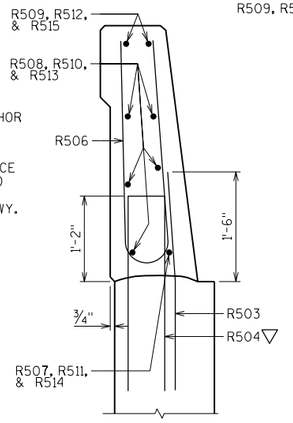
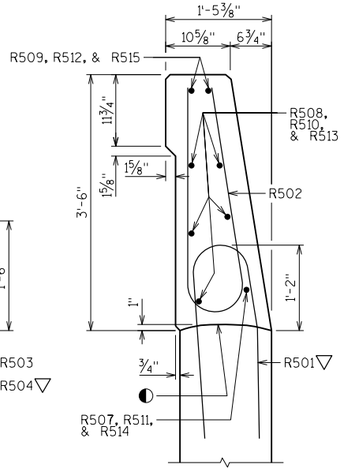
STATE PROJECT NUMBER
9303-03-71



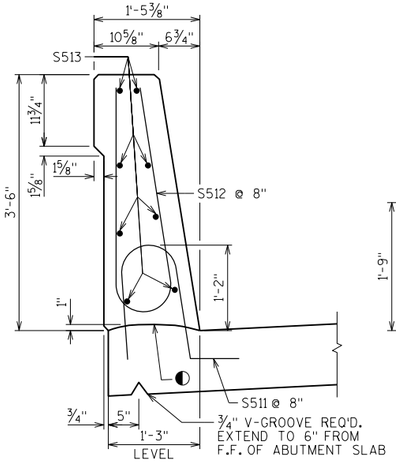
SECTION A-A



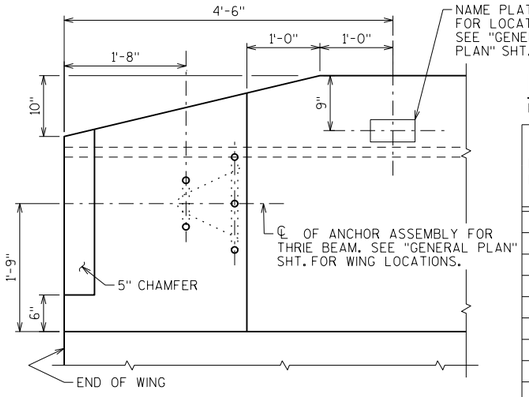
SECTION B-B



SECTION C-C



SECTION THRU PARAPET ON SLAB



PARAPET END TREATMENT DETAIL

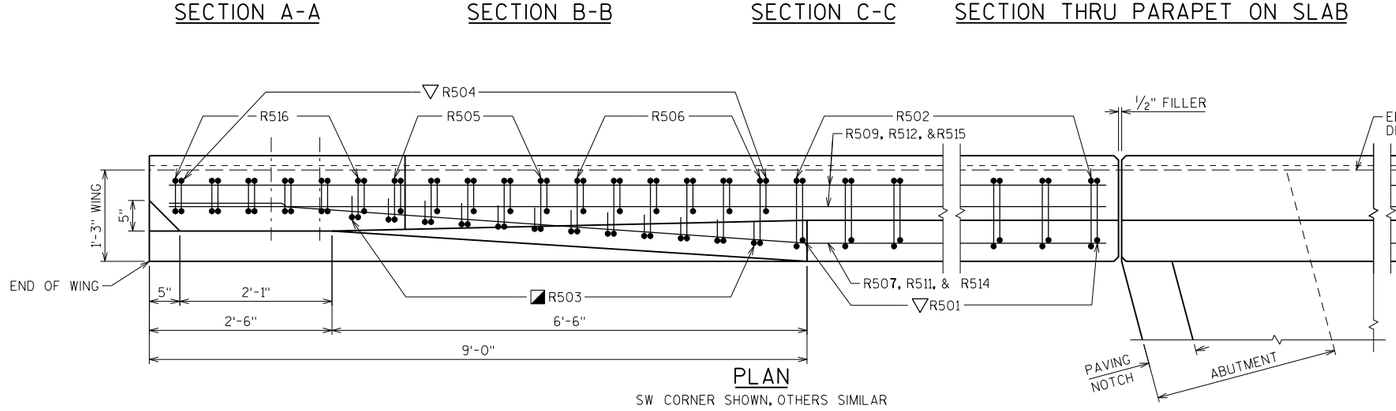
LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR ABUTMENT PARAPETS

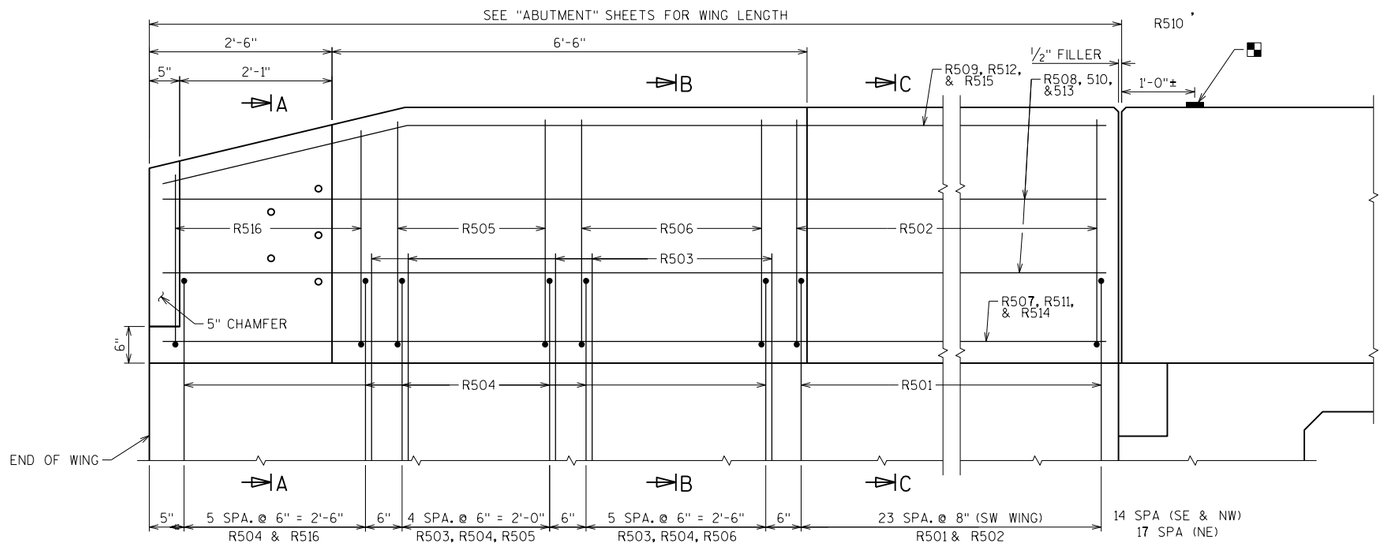
BAR MARK	COAT	N ABUT.	S ABUT.	LENGTH	BENT	BAR SERIES	2626" COATED LOCATION
R501	X	35	41	5'-10"	X		PARAPET VERT.
R502	X	35	41	6'-8"	X		PARAPET VERT.
R503	X	24	24	3'-0"	X		PARAPET VERT.
R504	X	34	34	5'-7"	X		PARAPET VERT.
R505	X	10	10	6'-5"	X		PARAPET VERT.
R506	X	12	12	6'-6"	X		PARAPET VERT.
R507	X	1	1	17'-8"	X		PARAPET HORIZ. SE&NW
R508	X	5	5	17'-8"			PARAPET HORIZ. SE&NW
R509	X	2	2	17'-8"	X		PARAPET HORIZ. SE&NW
R510	X	5	0	19'-8"			PARAPET HORIZ. NE
R511	X	1	0	19'-8"	X		PARAPET HORIZ. NE
R512	X	2	0	19'-8"	X		PARAPET HORIZ. NE
R513	X	0	5	23'-8"			PARAPET HORIZ. SW
R514	X	0	1	23'-8"	X		PARAPET HORIZ. SW
R515	X	0	2	23'-8"	X		PARAPET HORIZ. SW
R516	X	12	12	5'-5"	X	▲	PARAPET VERT.

▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.



PLAN

SW CORNER SHOWN, OTHERS SIMILAR



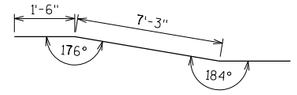
INSIDE ELEVATION

SW CORNER SHOWN, OTHERS SIMILAR

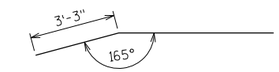
BAR SERIES TABLE

BAR MARK	NO. REQ'D	LENGTH
R516	4 SERIES OF 6	4'-9" TO 6'-1"

BUNDLE AND TAG EACH SERIES SEPARATELY.

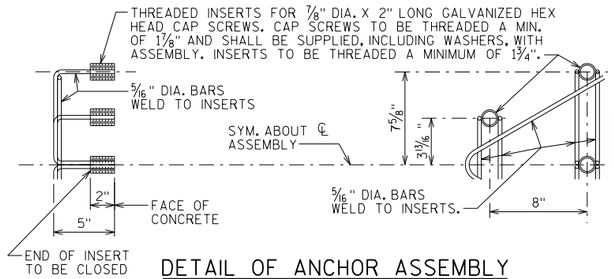


R507, R511, & R514



R509, R512, & R515

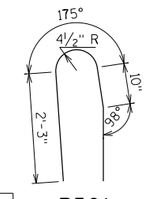
■ BENCH MARK CAP (WHEN SUPPLIED). AVOID PLACING A BENCH MARK CAP BELOW A RAIL OR FENCE SYSTEM THAT IS ATTACHED TO THE TOP OF THE PARAPET.



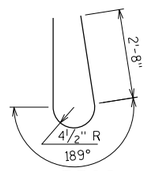
DETAIL OF ANCHOR ASSEMBLY

NOTE: HEX HEAD CAP SCREWS & WASHERS TO BE GALVANIZED IN ACCORDANCE WITH ASTM F2329.

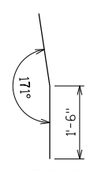
ASSEMBLY SHALL BE BID ITEM "ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD", EACH.



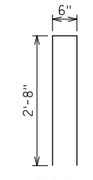
R501



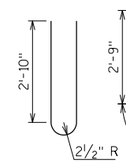
R502



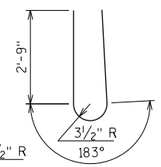
R503



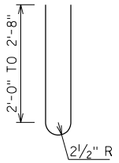
R504



R505



R506



R516

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◪ R503 BARS MAY BE PLACED AFTER CONCRETE IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE. USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501 AND R504 BARS TO BE TIED TO WING STEEL BEFORE WING IS POURED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-26-45

DRAWN BY NWG | PLANS CK'D. WJZ

SINGLE SLOPE PARAPET 42SS

SHEET 9 OF 9

174

8

8

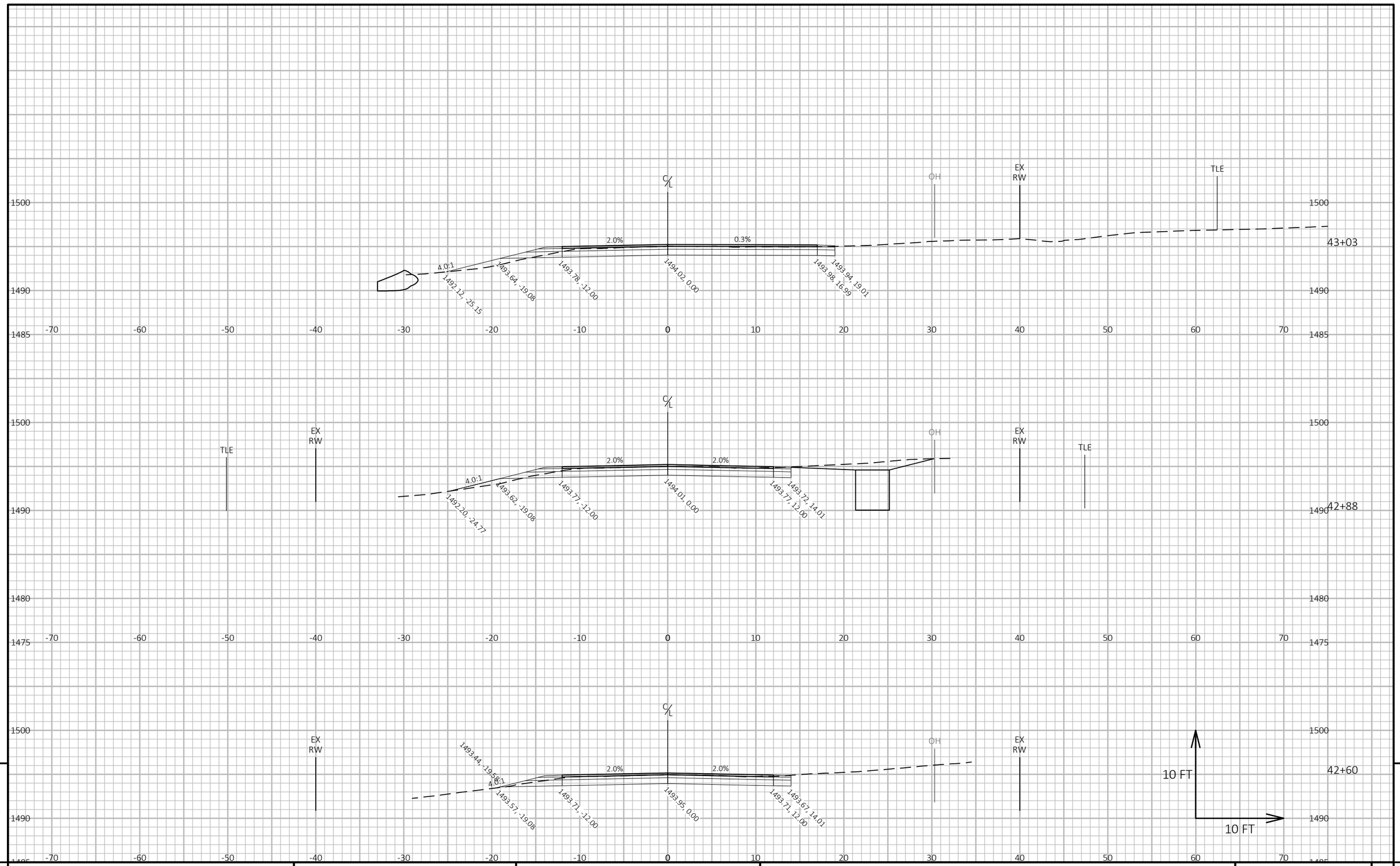
FILE= B260045_90-42SS.DGN
SCALE = 1:2.0728

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.20	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
97+75.00	9775.00	-	42.54	8.00	-	-	-	-	-	-	-
98+00.00	9800.00	25.00	44.20	8.00	-	40	7	-	40	-	33
98+50.00	9850.00	50.00	47.27	8.00	19.54	85	15	18	125	22	81
98+59.21	9859.21	9.21	46.71	8.00	24.57	16	3	8	141	31	85
98+80.94	9880.94	21.73	44.38	8.00	30.10	37	6	22	178	58	89
98+84.21	9884.21	3.27	43.89	8.00	29.61	5	1	4	183	62	89
99+00.00	9900.00	15.79	40.29	8.00	28.97	25	5	17	208	83	88
99+05.94	9905.94	5.94	37.94	8.00	29.41	9	2	6	217	90	88
99+09.21	9909.21	3.27	33.72	8.00	30.64	4	1	4	221	95	86
99+30.94	9930.94	21.73	25.84	8.00	20.01	24	6	20	245	119	80
99+50.00	9950.00	19.06	19.44	8.00	27.33	16	6	17	261	139	70
99+72.80	9972.80	22.80	15.10	8.00	13.05	15	7	17	276	160	57
99+84.21	9984.21	11.41	19.94	8.00	-	7	3	3	283	163	58
100+54.74	10054.74	70.53	-	-	-	-	-	-	283	163	58
100+66.22	10066.22	11.48	11.88	8.00	0.01	3	2	-	286	163	59
101+00.00	10100.00	33.78	2.70	8.00	18.45	9	10	12	295	178	43
101+07.79	10107.79	7.79	2.13	8.00	19.87	1	2	6	296	185	35
101+26.13	10126.13	18.34	1.60	8.00	30.70	1	5	17	297	205	11
101+32.79	10132.79	6.66	1.86	8.00	34.11	-	2	8	297	215	-1
101+50.00	10150.00	17.21	2.63	8.00	43.04	1	5	25	298	245	-35
101+51.13	10151.13	1.13	2.75	8.00	43.25	-	-	2	298	247	-37
101+57.79	10157.79	6.66	3.52	8.00	44.36	1	2	11	299	260	-51
101+76.13	10176.13	18.34	6.38	8.00	44.25	3	5	30	302	296	-89
102+00.00	10200.00	23.87	13.80	8.00	20.46	9	7	29	311	331	-122
102+25.00	10225.00	25.00	21.79	8.00	4.54	16	7	12	327	346	-128

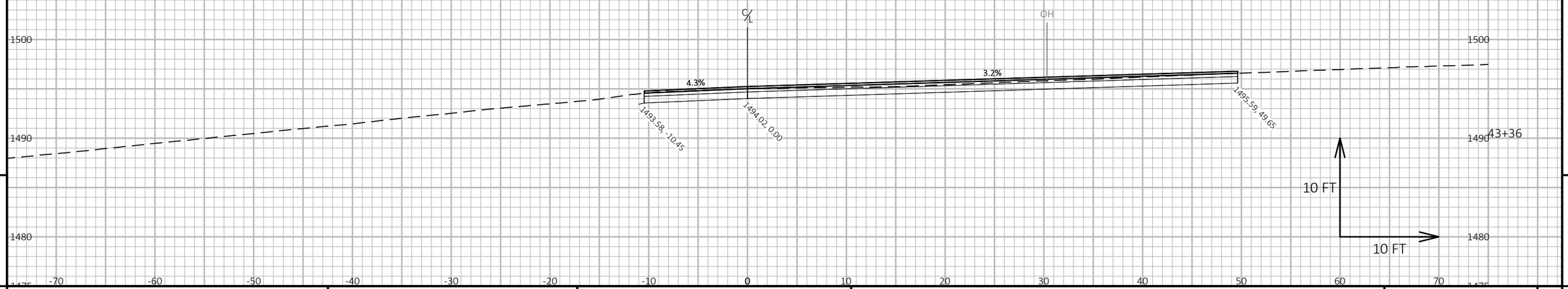
NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
							1.00	1.20	
					NOTE 1	NOTE 3	NOTE 1		NOTE 8
482+00.00	48200.00	0.00	33.32	0.00	0	0	0	0	0
482+50.00	48250.00	50.00	23.99	0.38	53	0	53	0	53
483+00.00	48300.00	50.00	14.09	0.00	35	0	88	0	88
483+50.00	48350.00	50.00	14.45	1.37	26	1	114	1	113
484+02.00	48402.00	52.00	13.47	4.30	27	5	141	7	134
484+50.00	48450.00	48.00	5.27	1.98	17	6	158	14	144
485+00.00	48500.00	50.00	0.04	7.26	5	9	163	25	138
485+50.00	48550.00	50.00	0.00	10.73	0	17	163	46	117
486+00.00	48600.00	50.00	0.00	9.63	0	19	163	68	95
486+36.50	48636.50	36.50	1.83	9.15	1	13	164	84	80
486+53.50	48653.50	17.00	6.31	15.47	3	8	167	94	73
486+60.50	48660.50	7.00	8.70	17.30	2	4	169	98	71
486+63.00	48663.00	2.50	9.69	10.24	1	1	170	100	70
487+00.00	48700.00	37.00	22.95	0.00	22	7	192	108	84
487+50.00	48750.00	50.00	27.15	0.00	46	0	238	108	130
488+00.00	48800.00	50.00	22.76	0.00	46	0	284	108	176
488+50.00	48850.00	50.00	30.70	0.00	50	0	334	108	226
489+00.00	48900.00	50.00	29.98	0.00	56	0	390	108	282
489+50.00	48950.00	50.00	33.61	0.00	59	0	449	108	341
490+00.00	49000.00	50.00	31.12	0.00	60	0	509	108	401
491+00.00	49100.00	100.00	32.27	0.00	117	0	626	108	518

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 177	E



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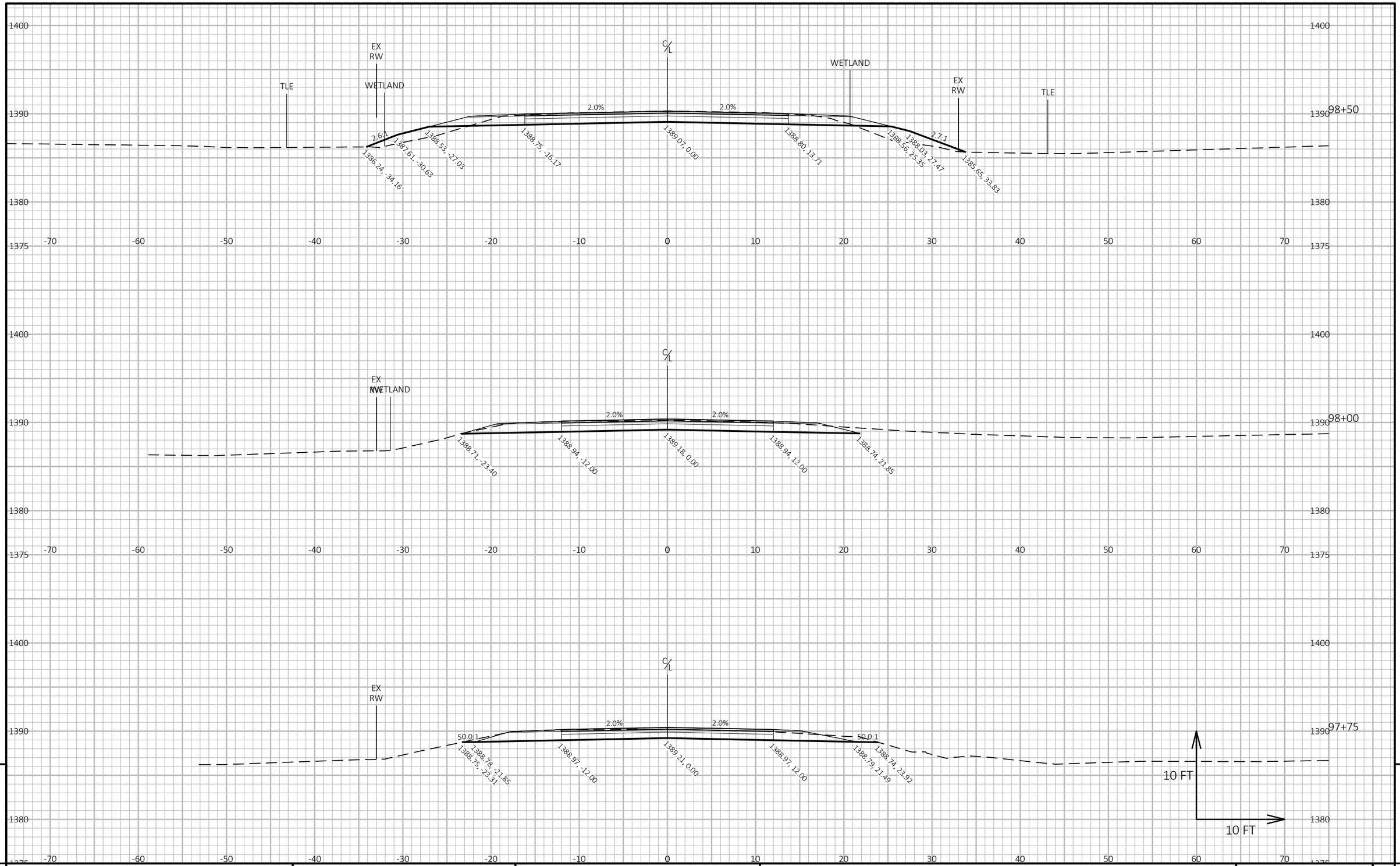
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 178	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090220-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 179	E

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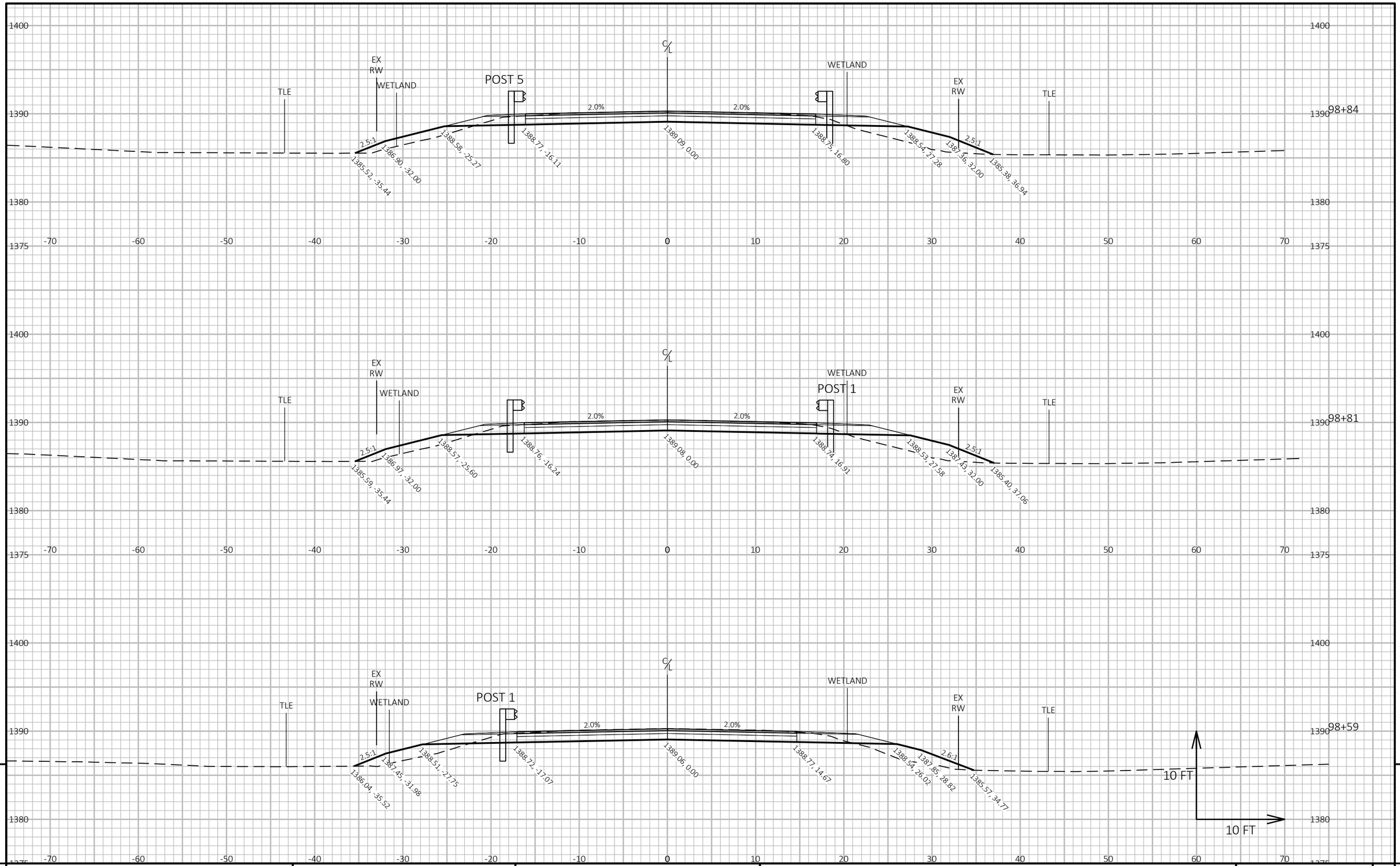
LAYOUT NAME - 01

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 180	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090221-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

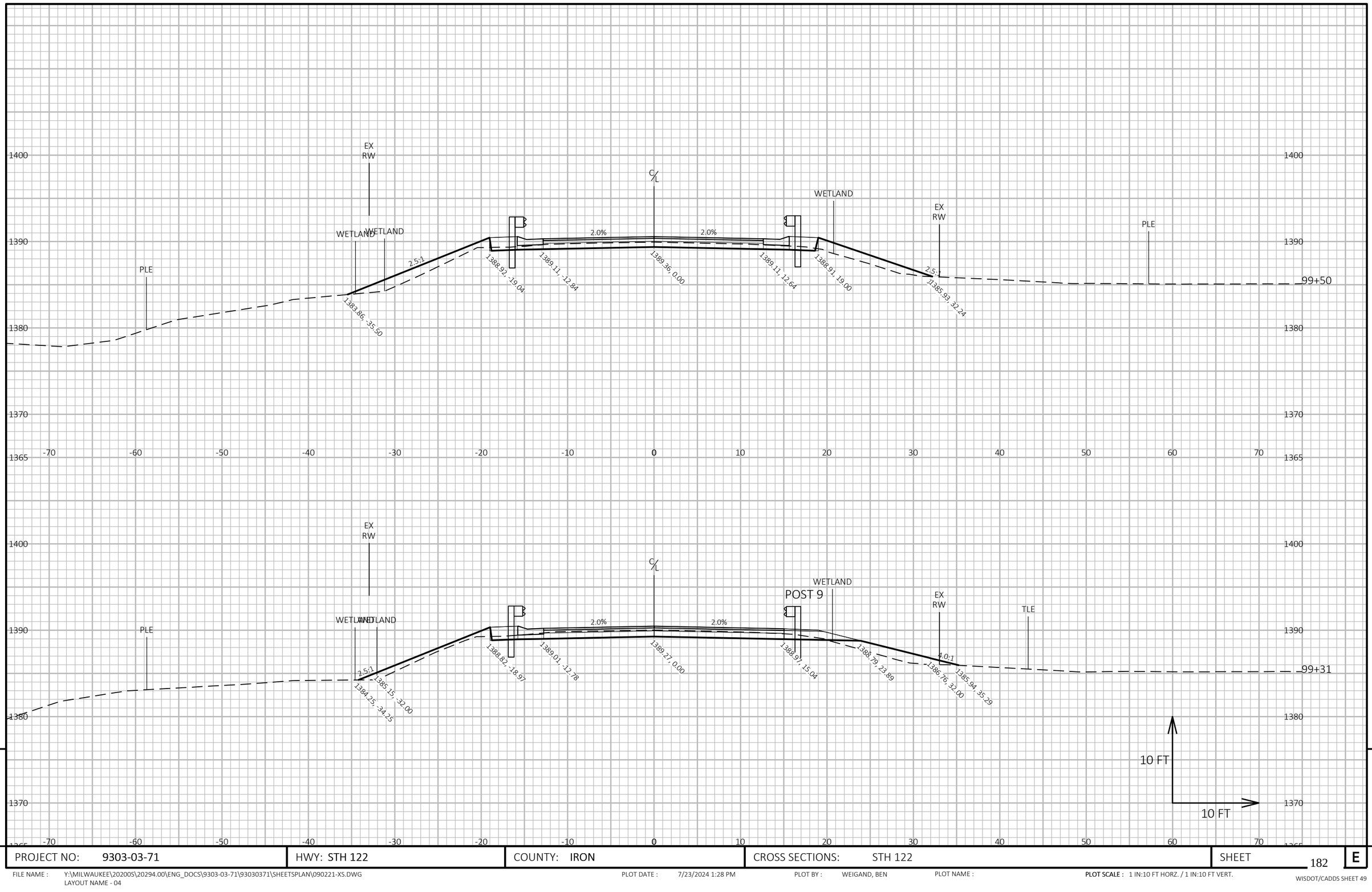
WISDOT/CADDS SHEET 49

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 181	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090221-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 182	E

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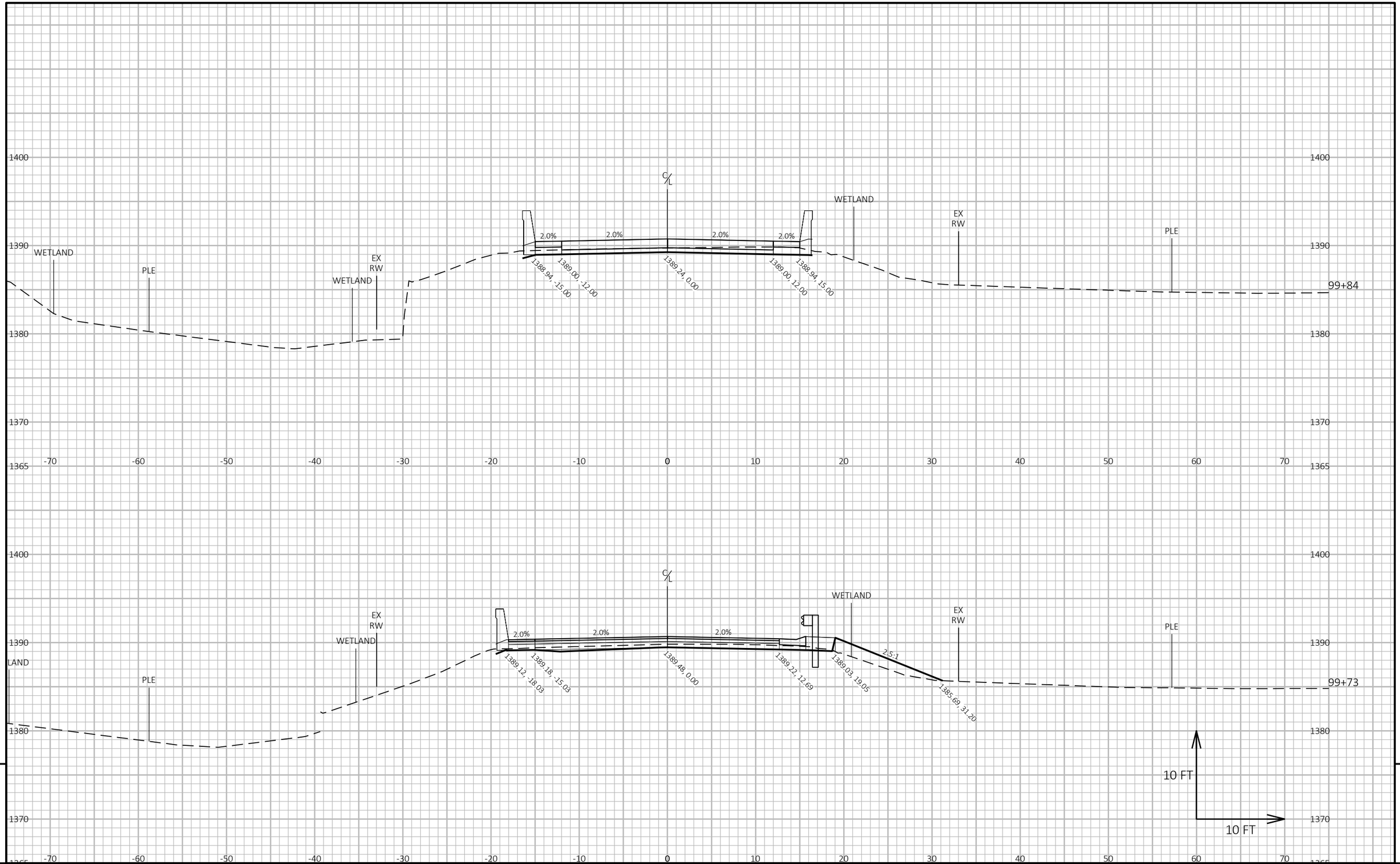
LAYOUT NAME - 04

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 183	E

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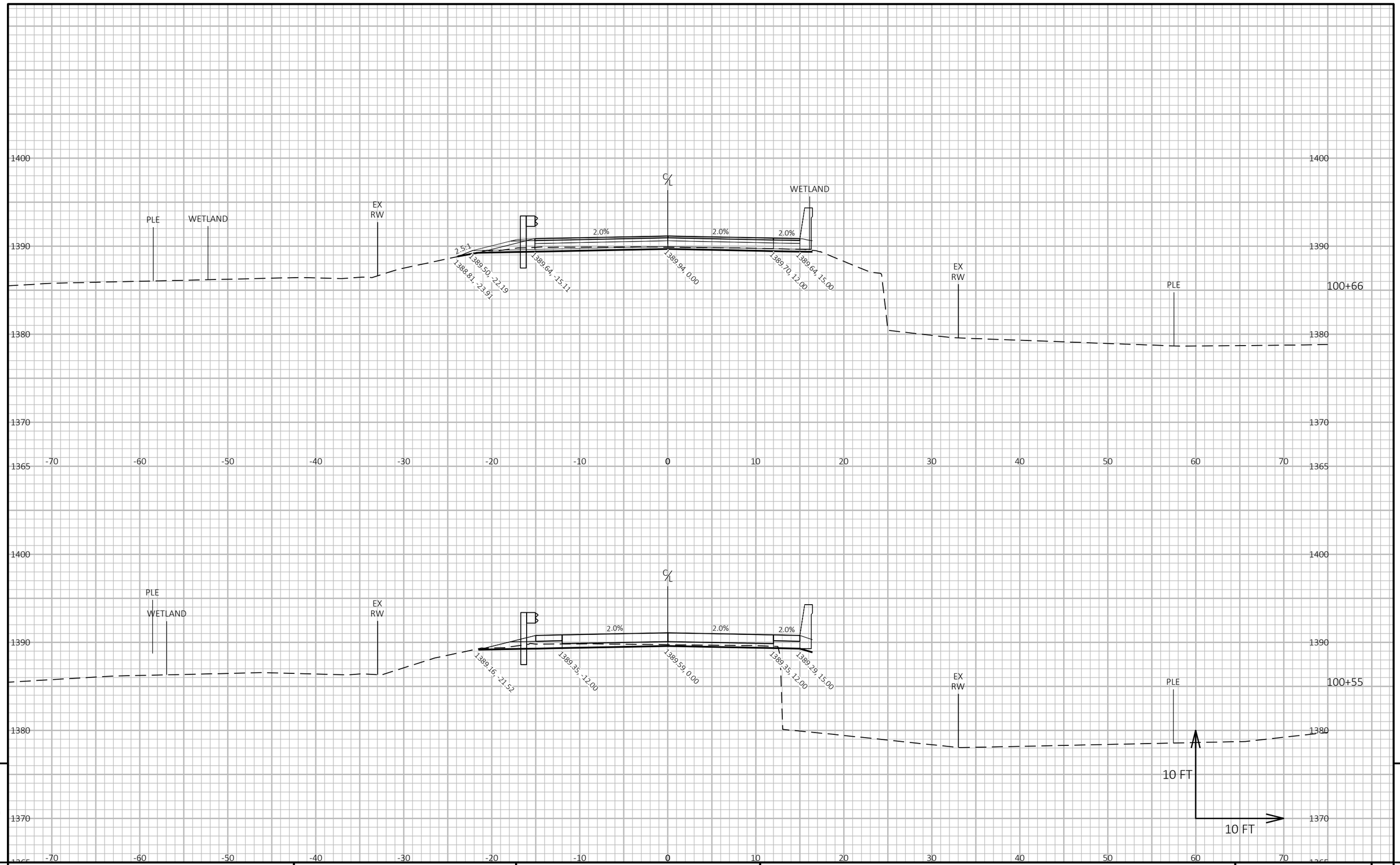
LAYOUT NAME - 05

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 184	E

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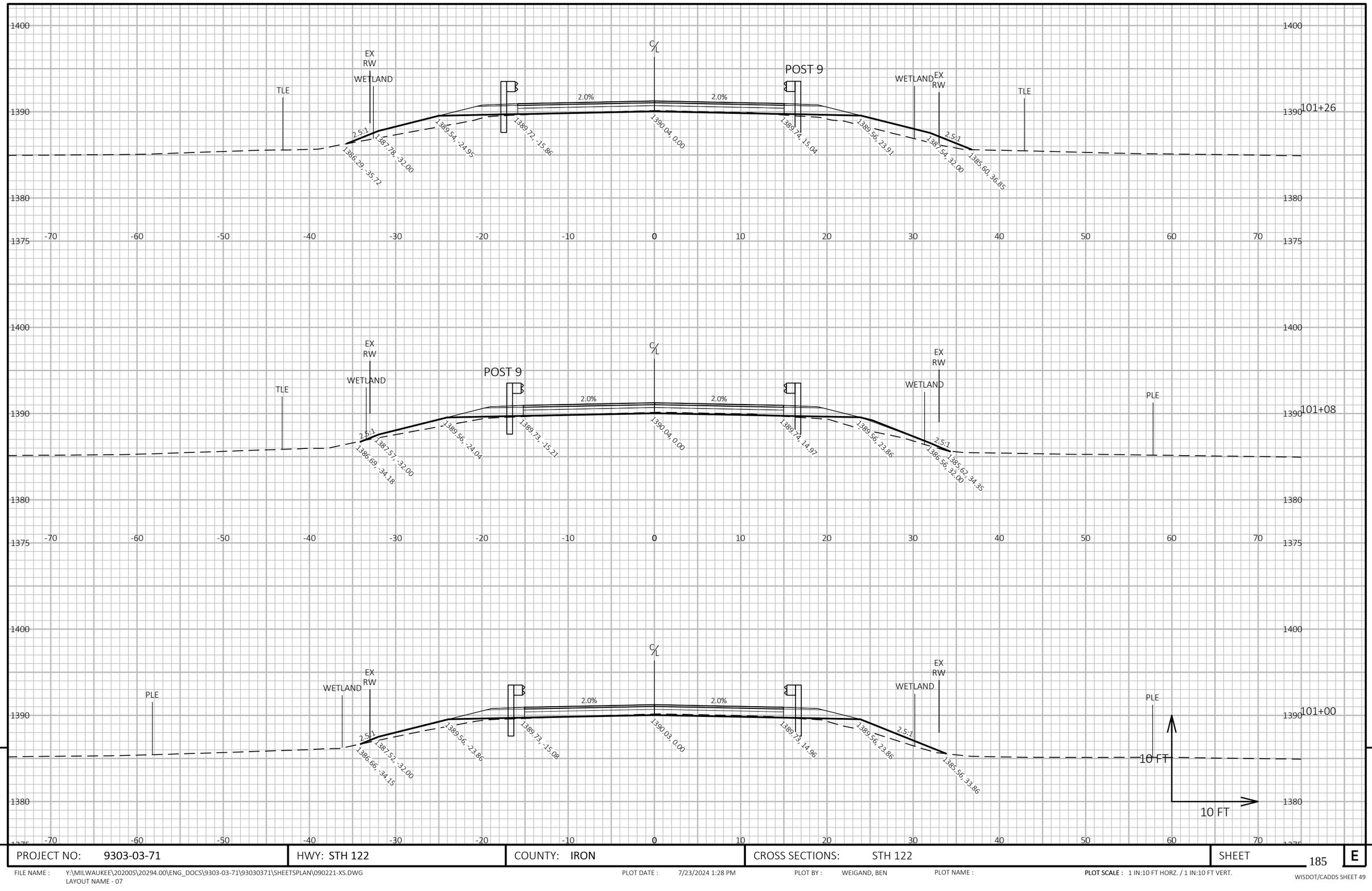
LAYOUT NAME - 06

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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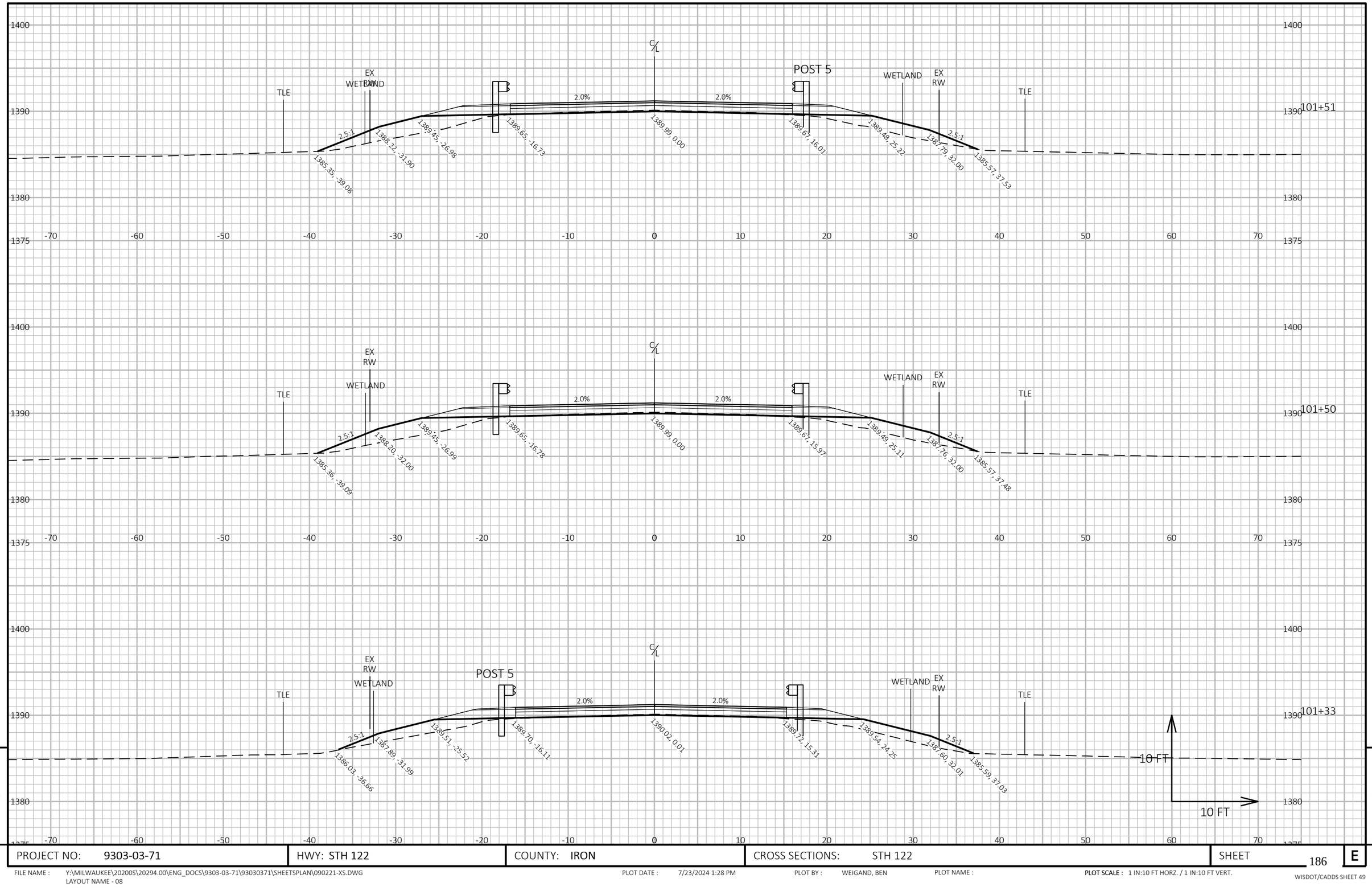
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 185	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090221-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

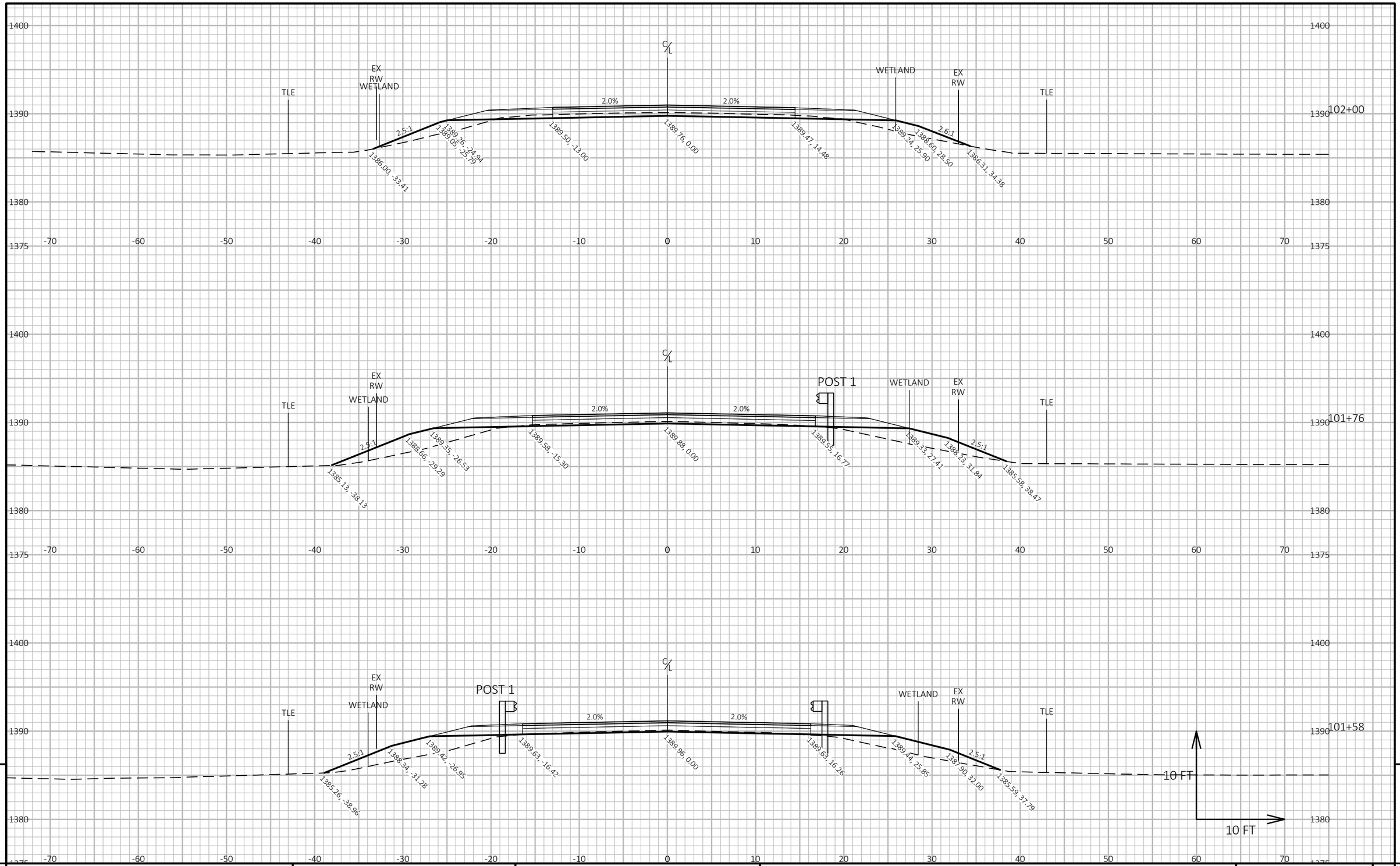
9

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 186	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090221-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



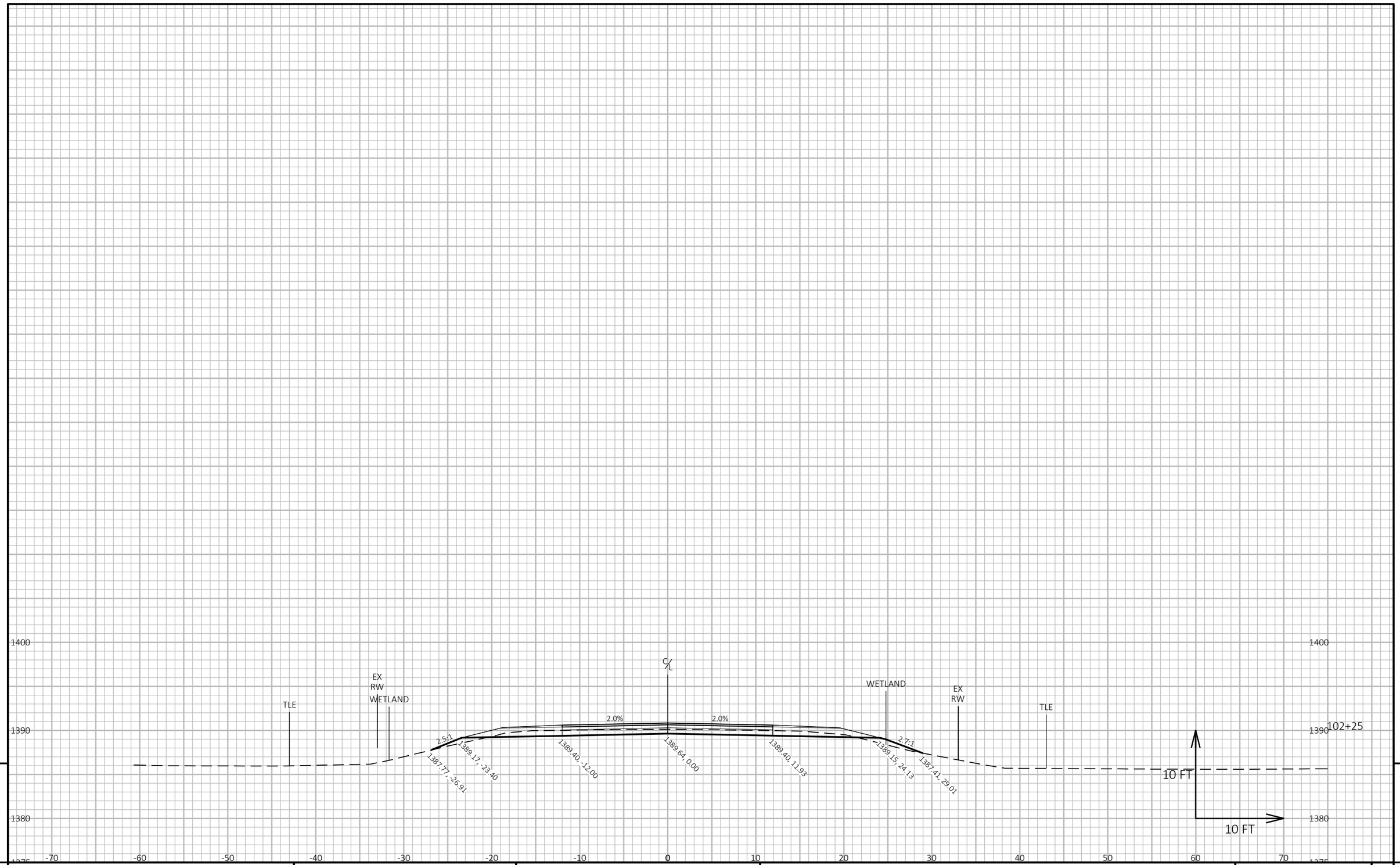
9 9

PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 187	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090221-XS.DWG
LAYOUT NAME - 09

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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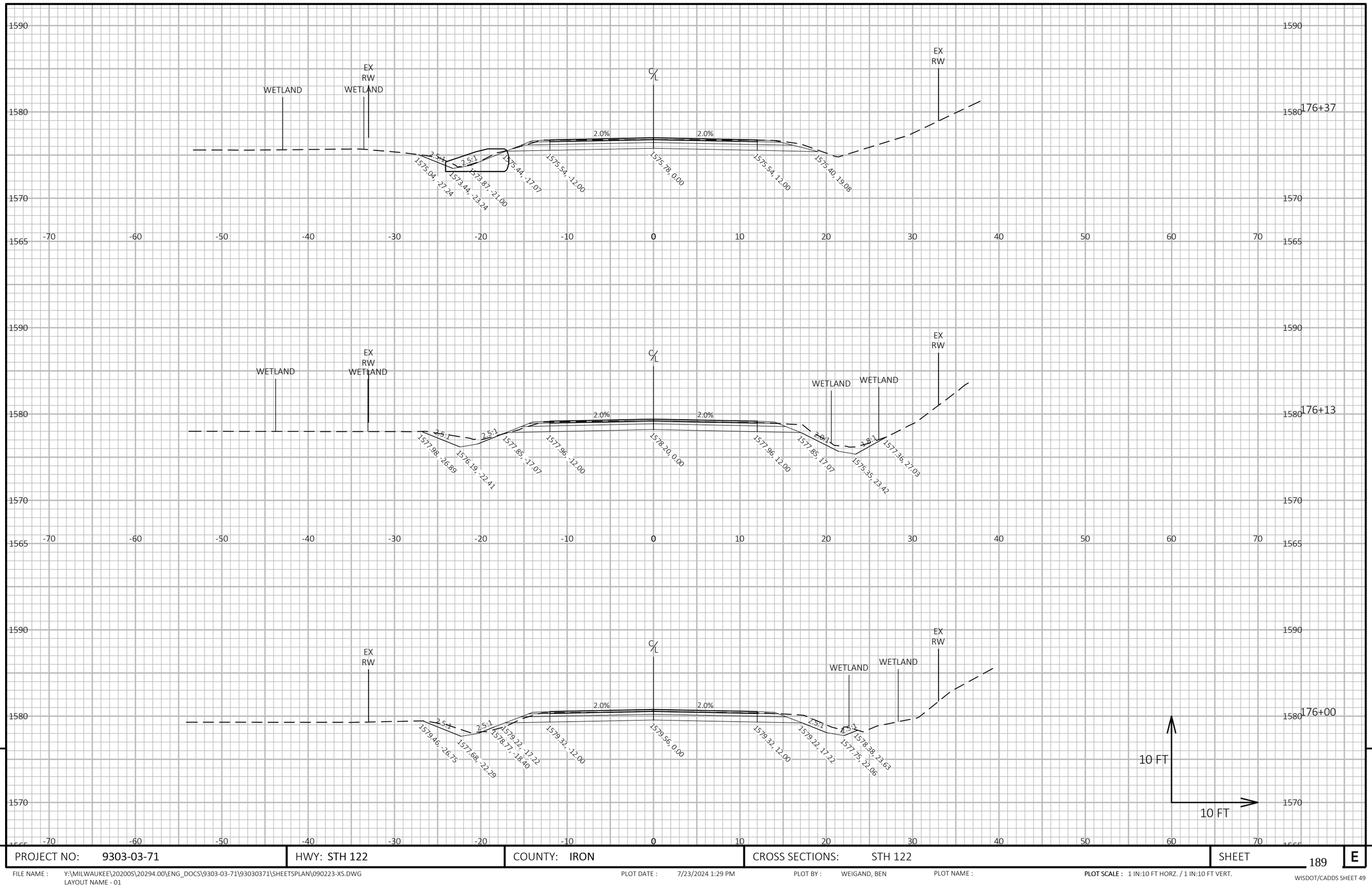
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 188	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090221-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 7/23/2024 1:28 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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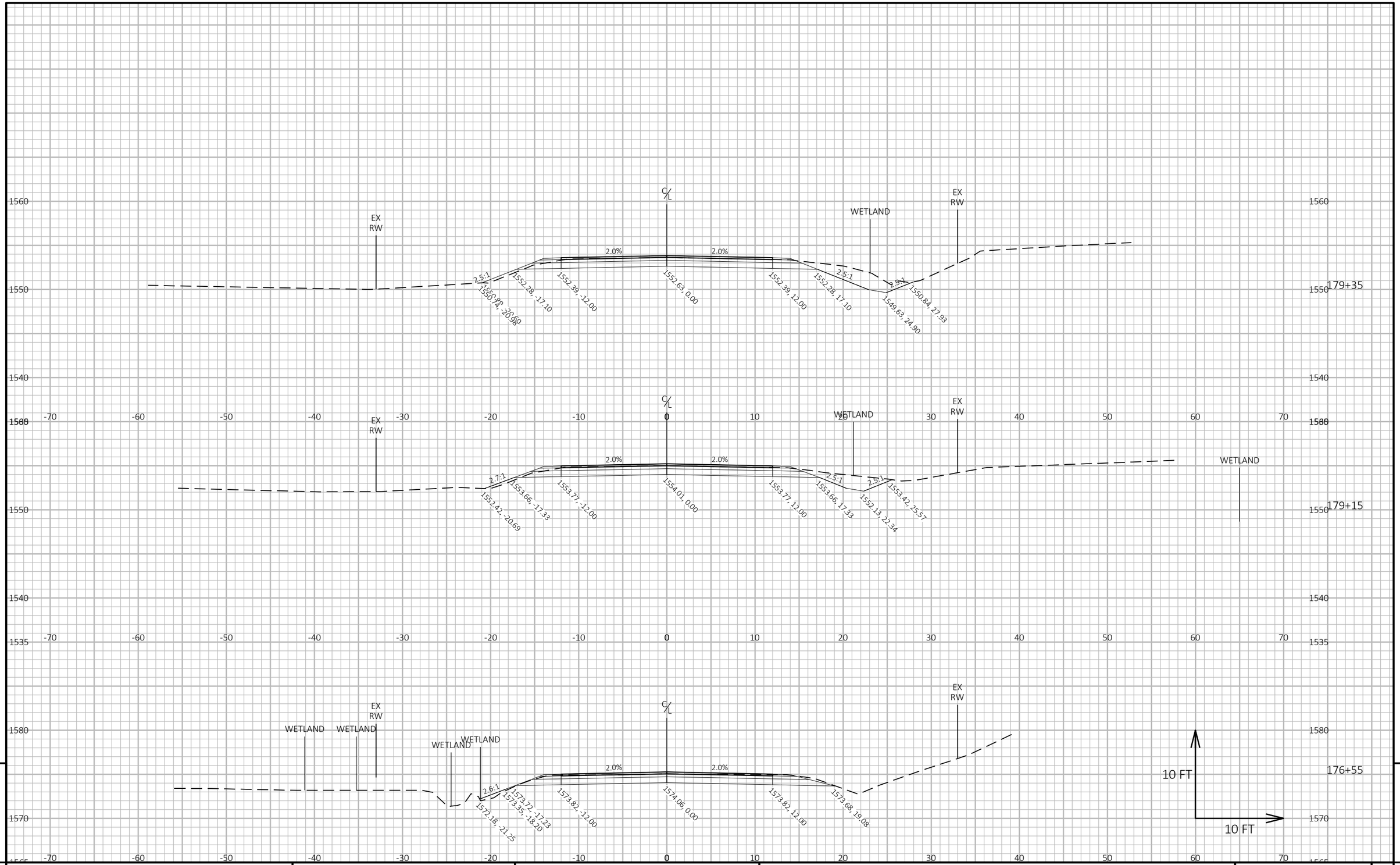
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 189	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090223-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

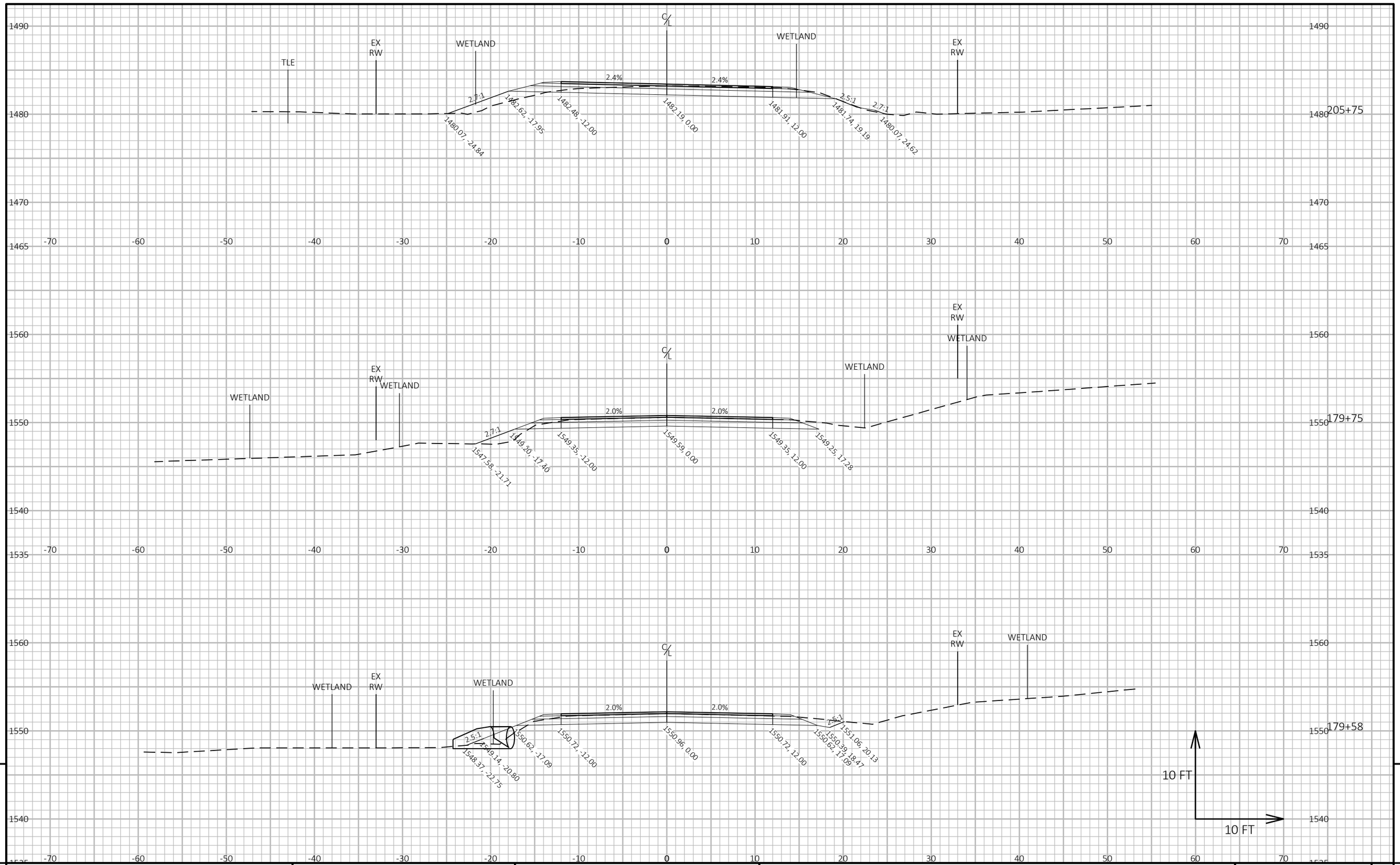


PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 190	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090223-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

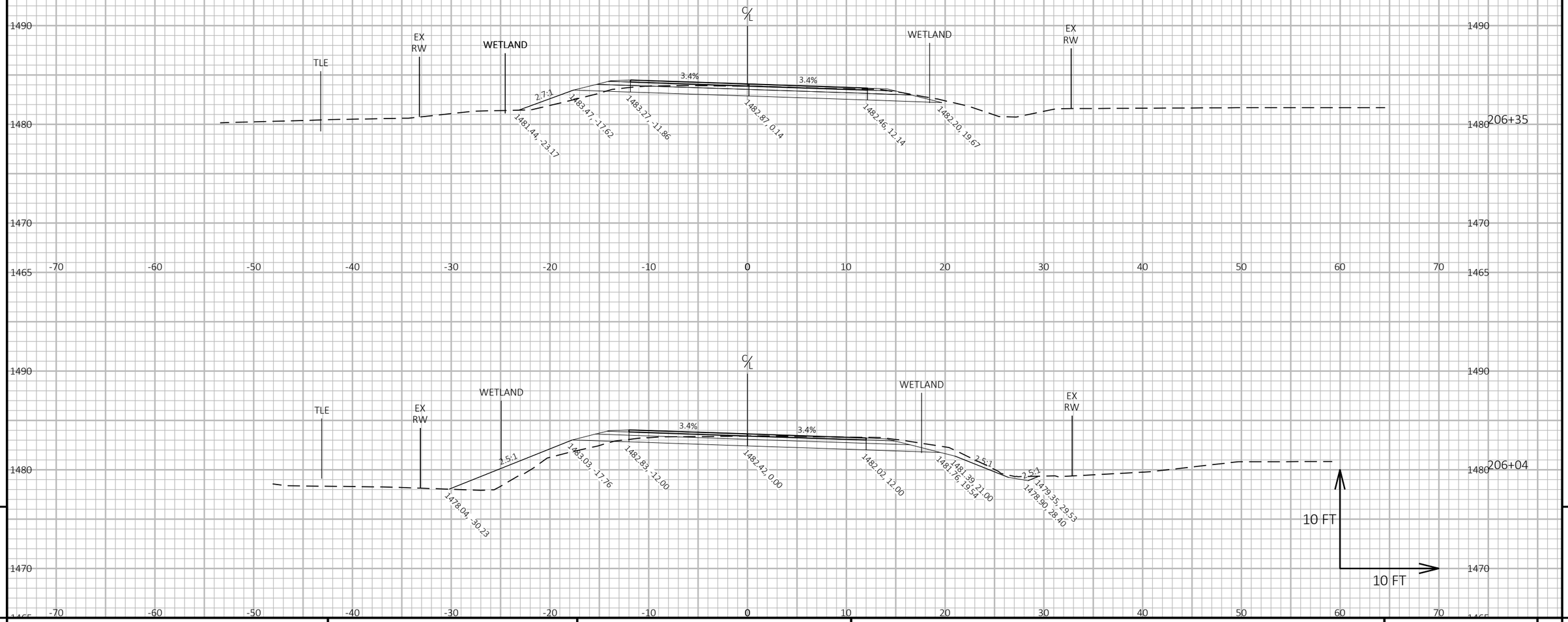


PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 191	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090223-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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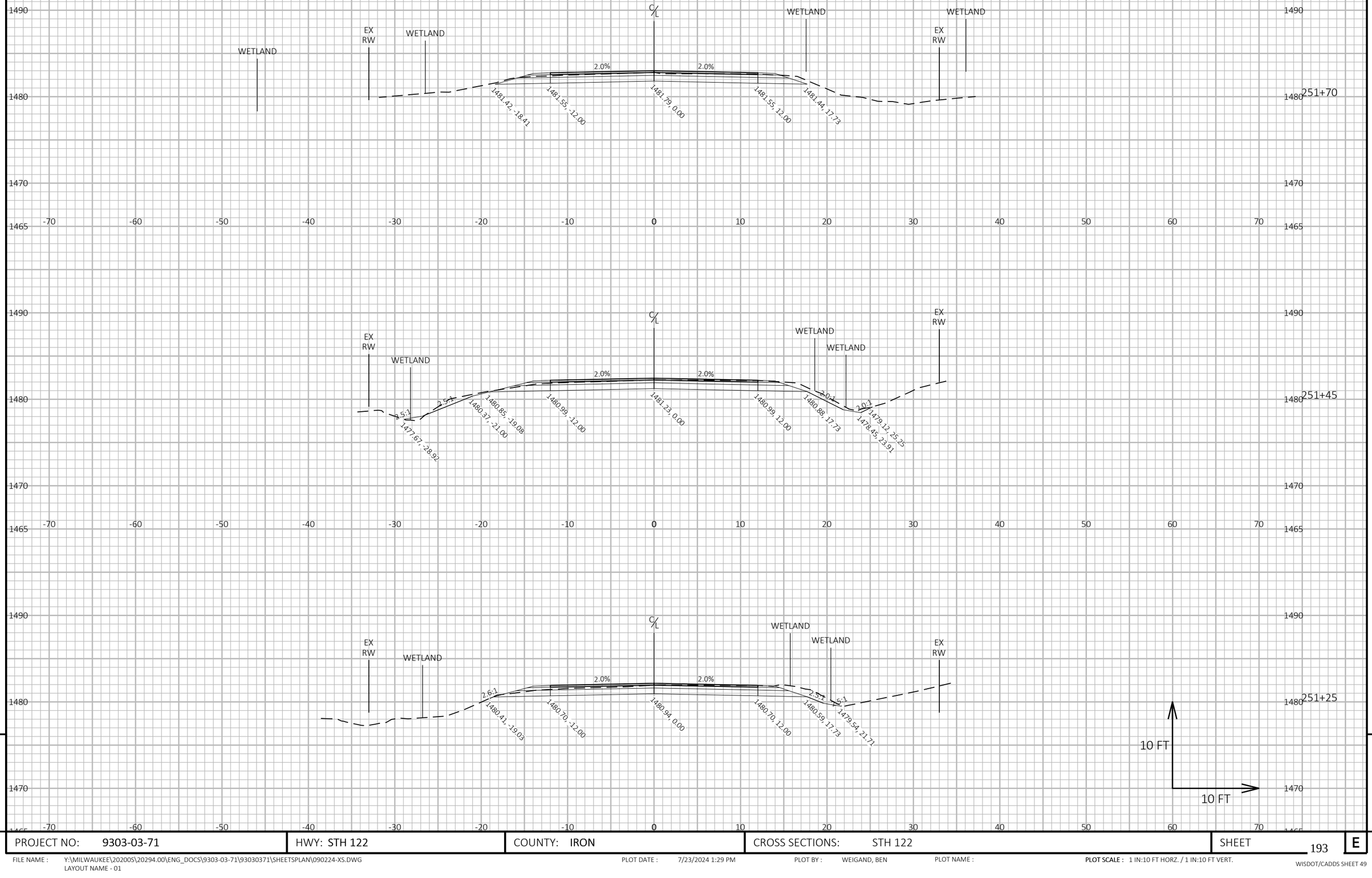
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 192	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090223-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 193	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090224-XS.DWG
LAYOUT NAME - 01

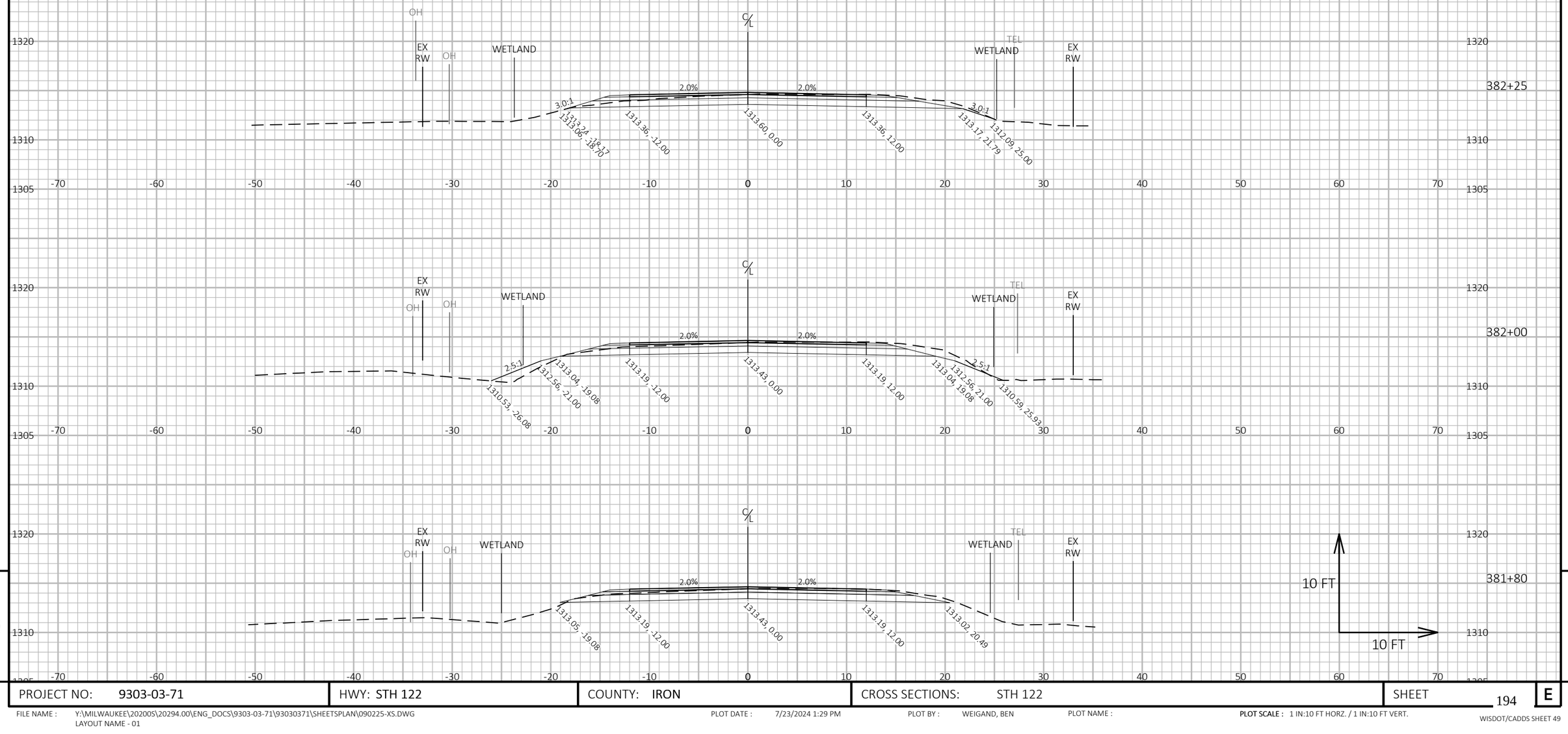
PLOT DATE : 7/23/2024 1:29 PM

PLOT BY : WEIGAND, BEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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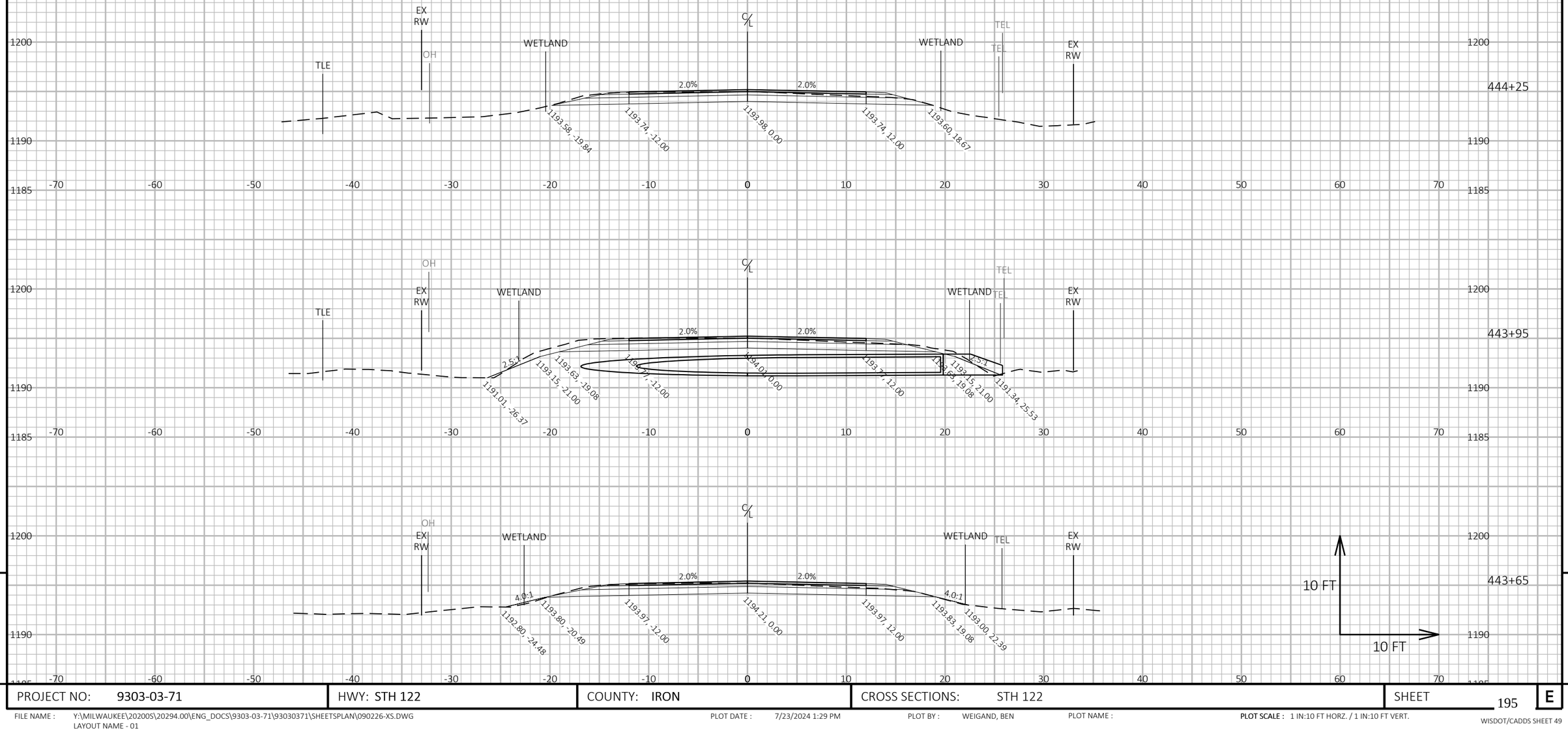
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 194	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090225-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 195	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090226-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 196	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090226-XS.DWG
LAYOUT NAME - 02

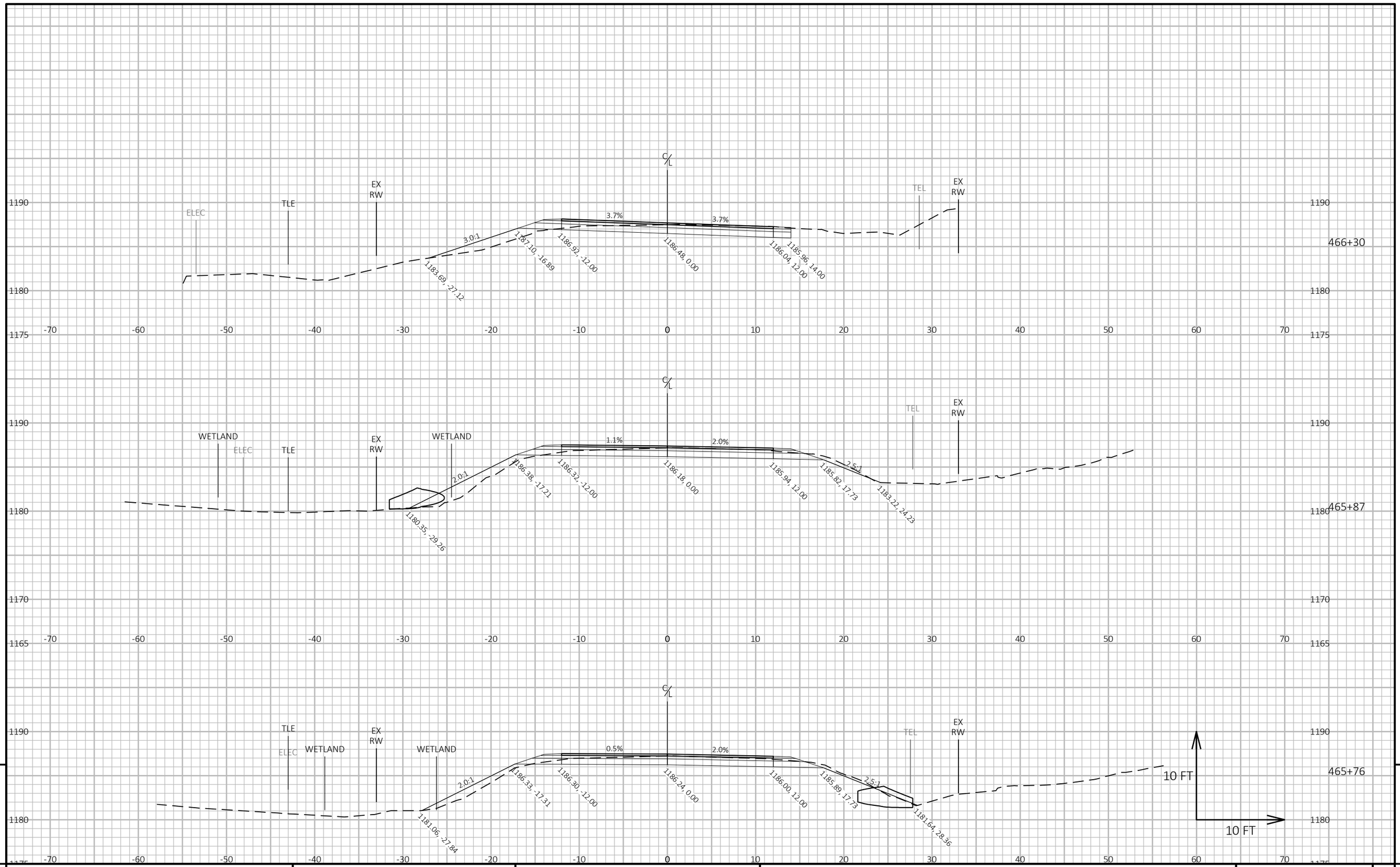
PLOT DATE : 7/23/2024 1:29 PM

PLOT BY : WEIGAND, BEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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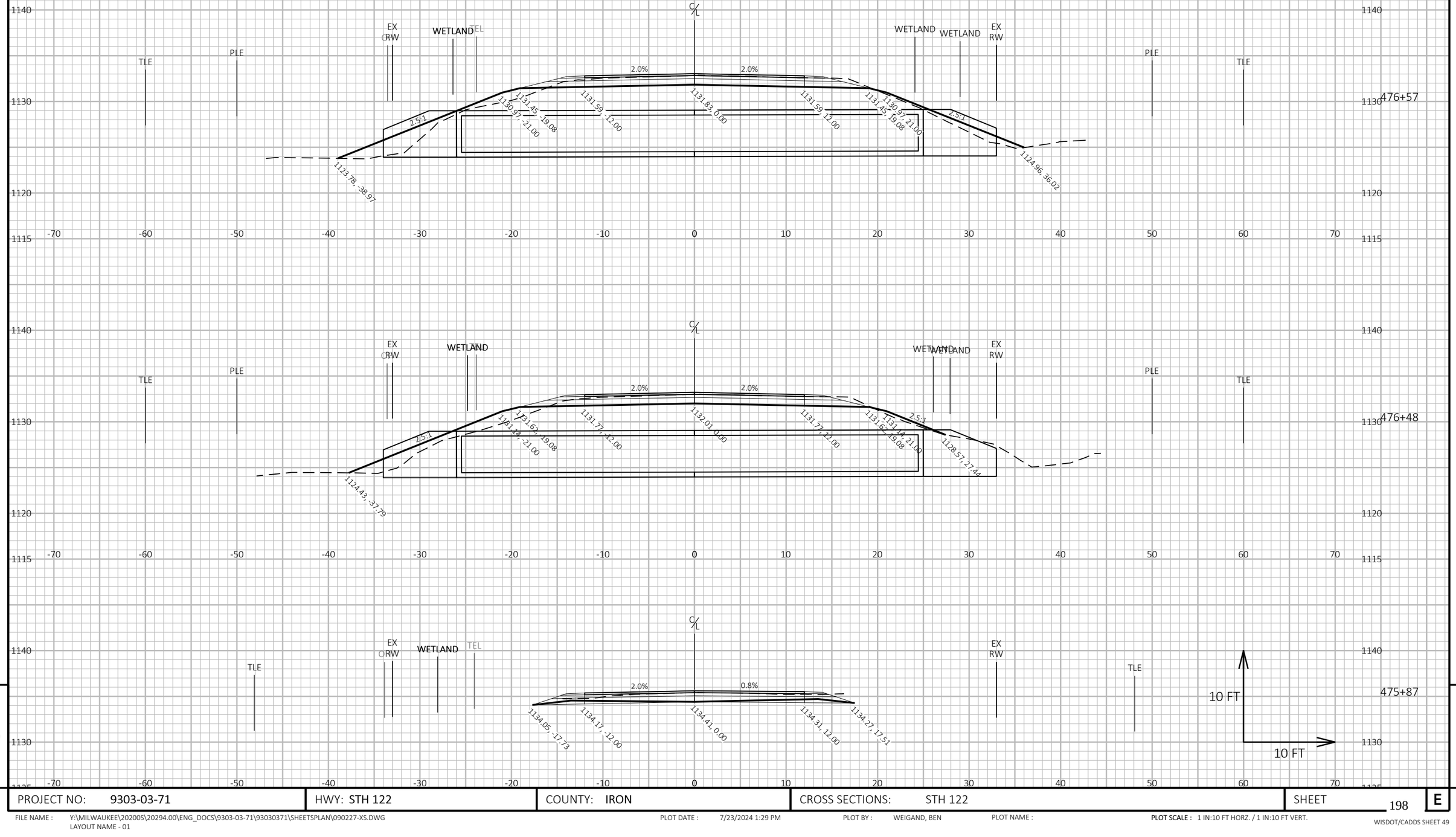
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 197	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090226-XS.DWG
LAYOUT NAME - 03

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 198	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090227-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 7/23/2024 1:29 PM

PLOT BY : WEIGAND, BEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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9

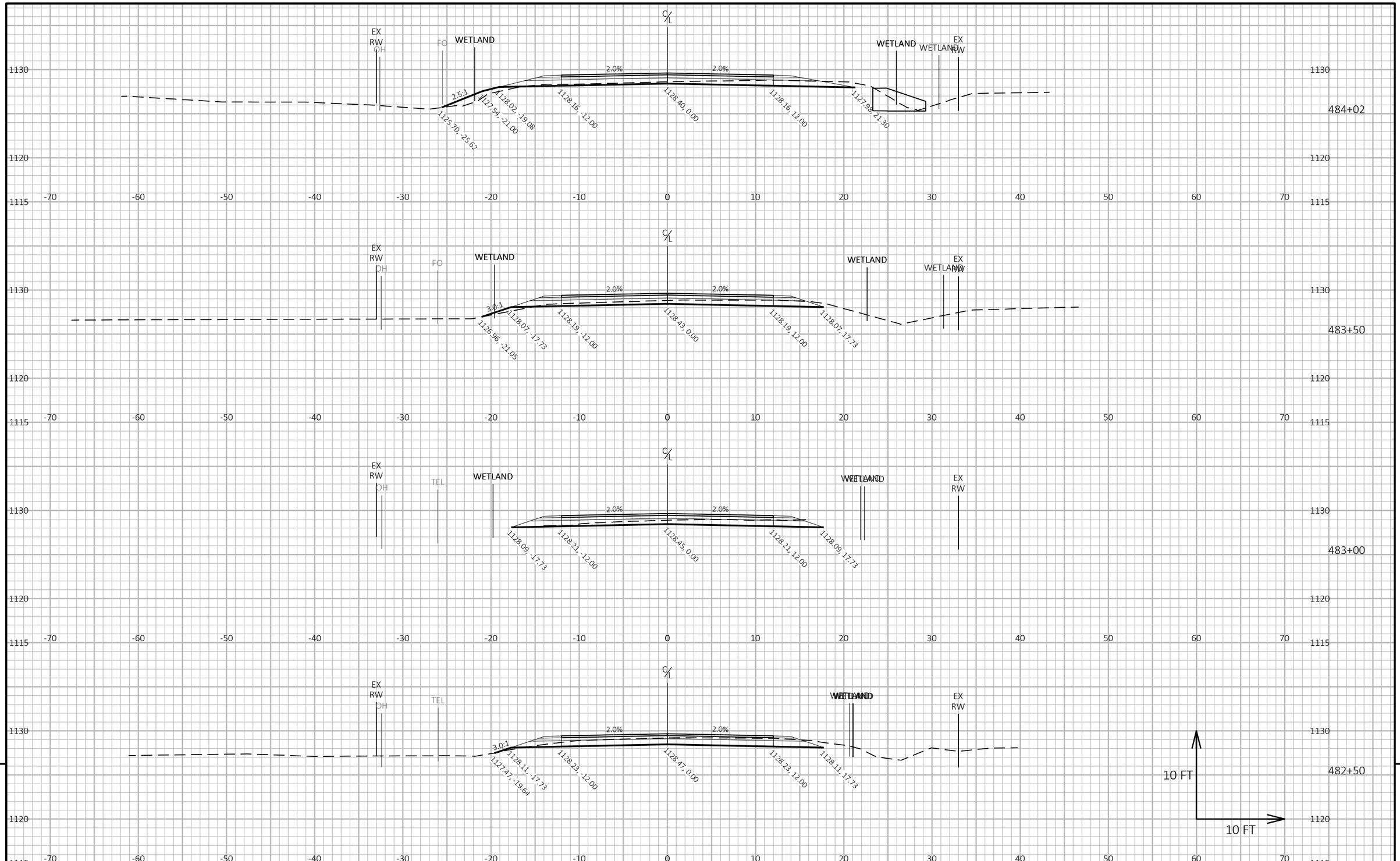
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 199	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090227-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 200	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090227-XS.DWG
LAYOUT NAME - 03

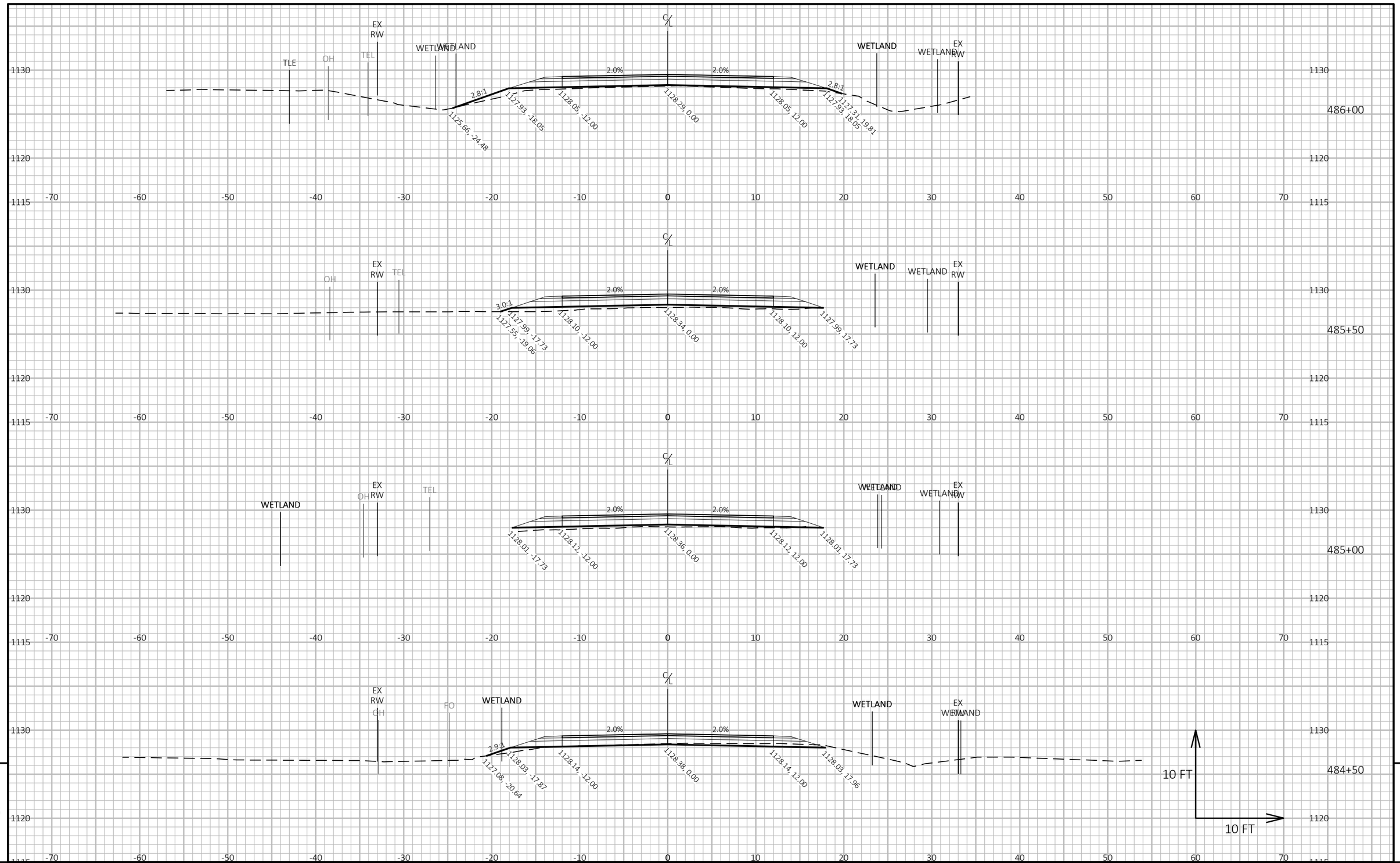
PLOT DATE : 7/23/2024 1:29 PM

PLOT BY : WEIGAND, BEN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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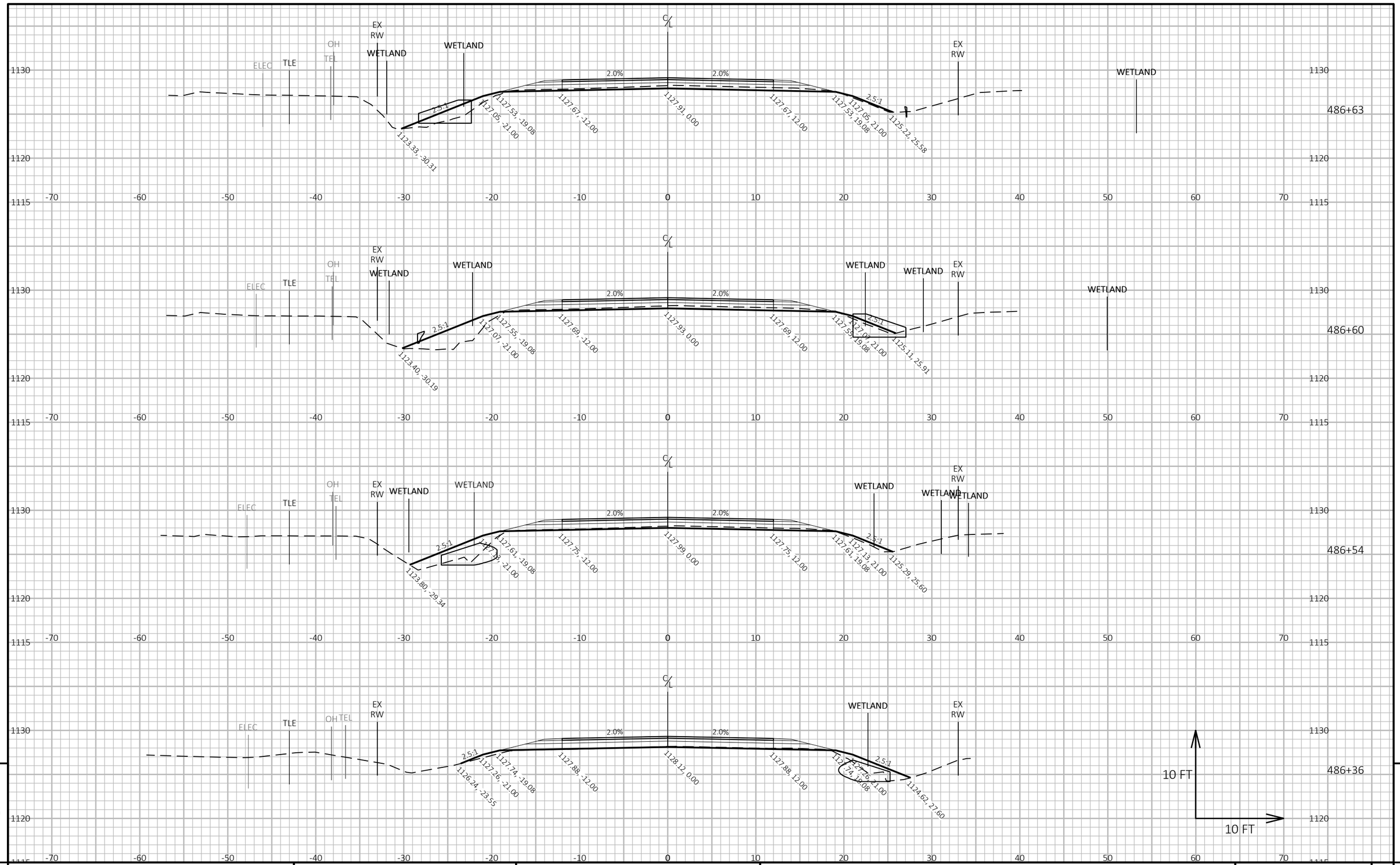
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 201	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090227-XS.DWG
LAYOUT NAME - 04

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

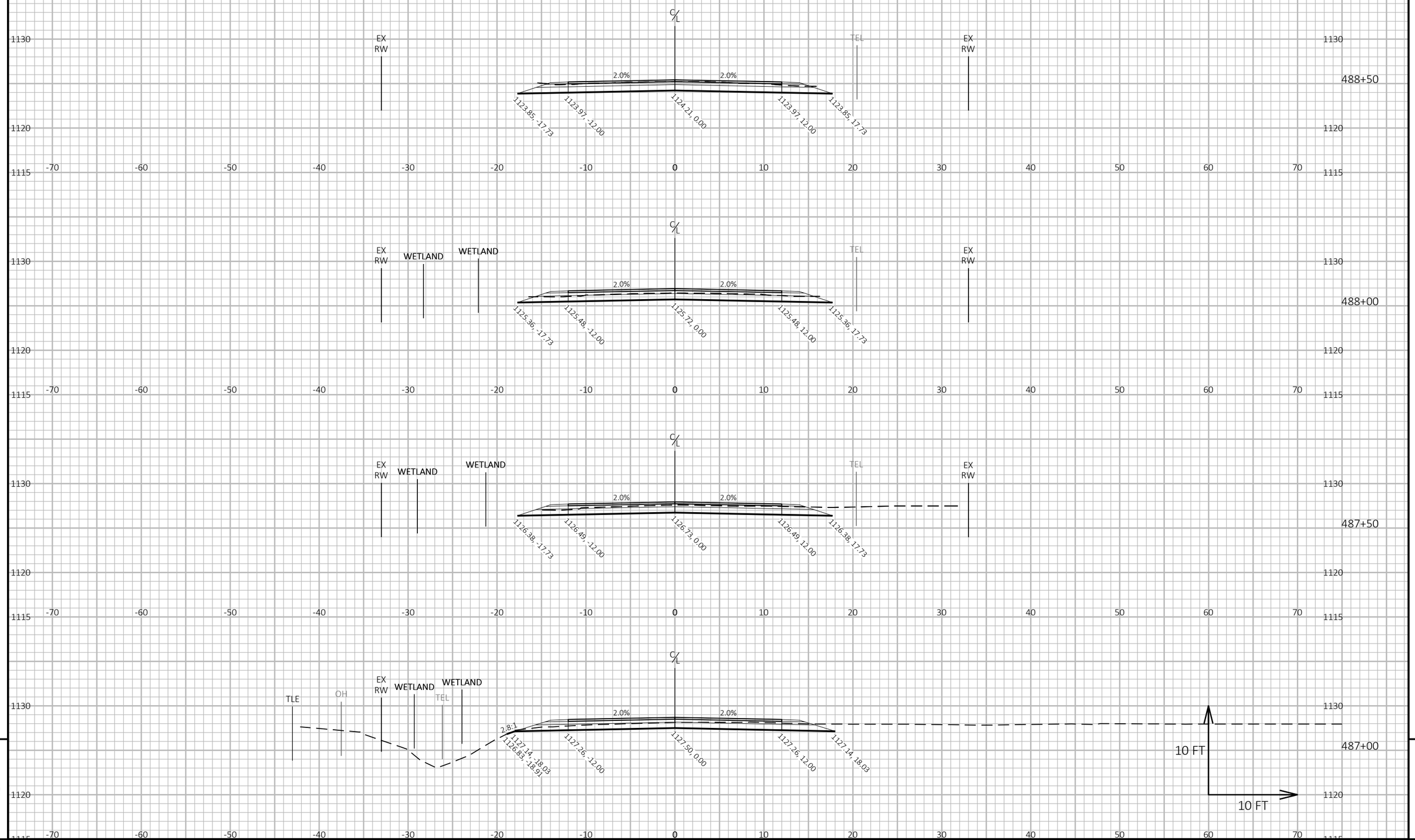


PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 202	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090227-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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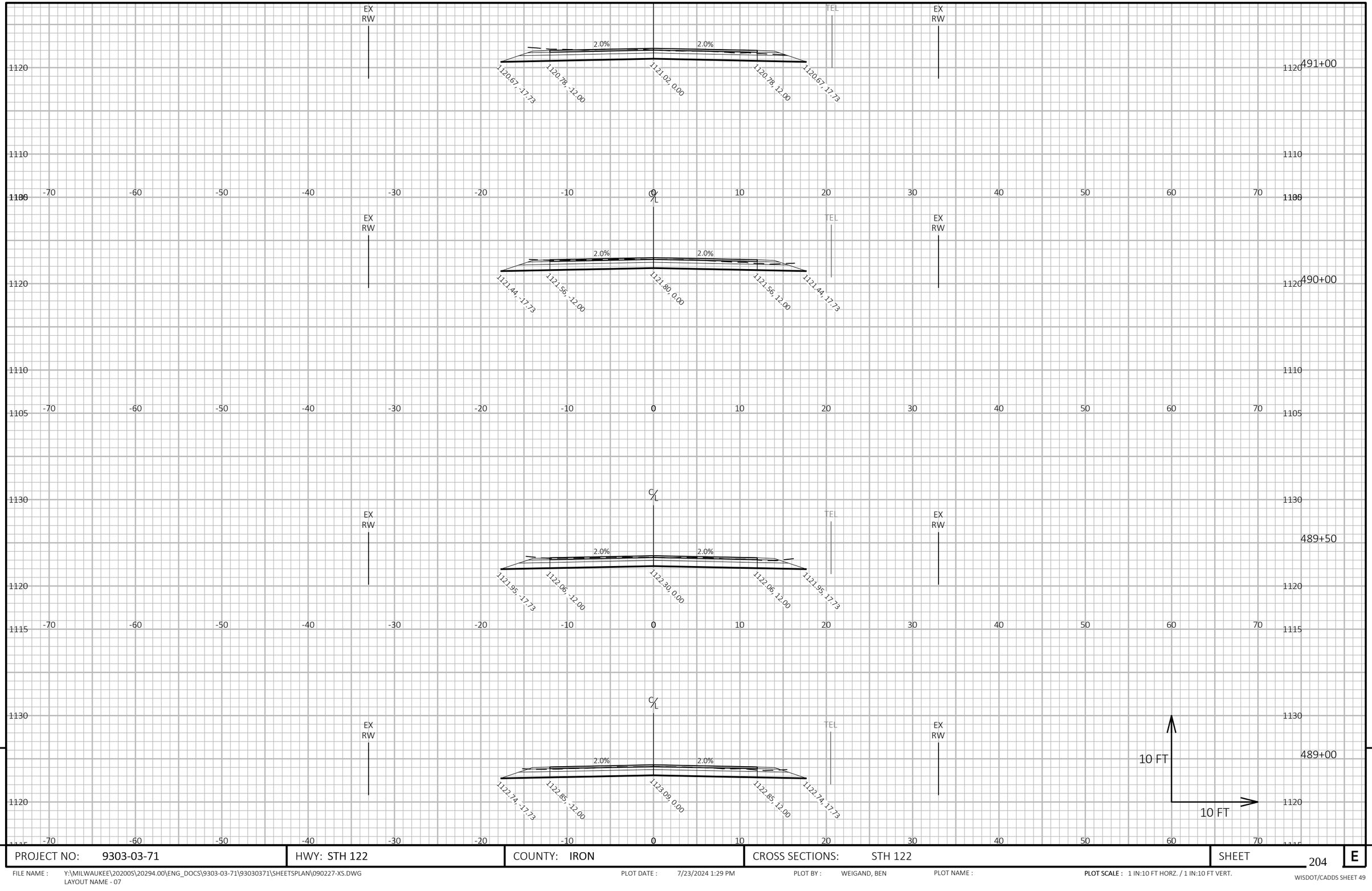
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 203	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090227-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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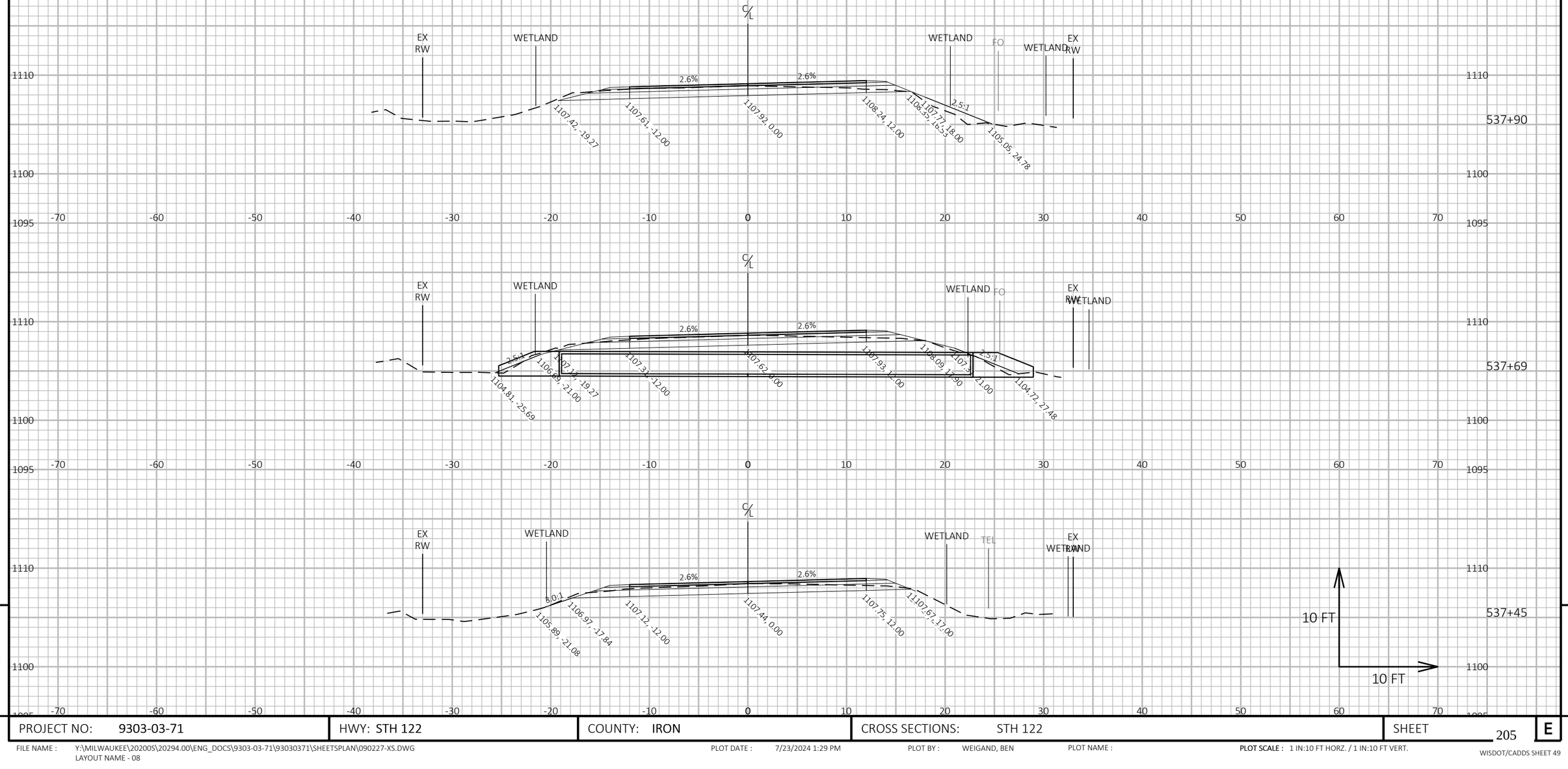
PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 204	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090227-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 9303-03-71	HWY: STH 122	COUNTY: IRON	CROSS SECTIONS: STH 122	SHEET 205	E

FILE NAME : Y:\MILWAUKEE\20200S\20294.00\ENG_DOCS\9303-03-71\93030371\SHEETSPLAN\090227-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 7/23/2024 1:29 PM PLOT BY : WEIGAND, BEN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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