EAU

PROJECT ID: 1550-04-79

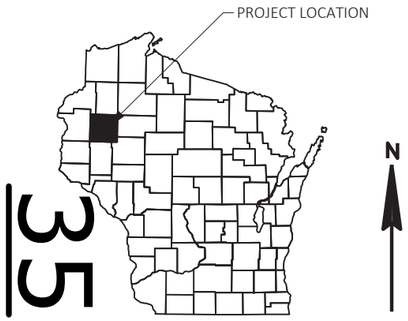
WITH: N/A

COUNTY: BARRON

FEBRUARY 2026

ORDER OF SHEETS

TOTAL SHEETS = 212



DESIGN DESIGNATION

A.A.D.T.	(2026)	=	6,900
A.A.D.T.	(2046)	=	6,900
D.H.V.	(2046)	=	1242
D.D.	(%)	=	50 / 50
T.	(%)	=	7.9 %
DESIGN SPEED	(MPH)	=	45 MPH
ESALS		=	1,600,000

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

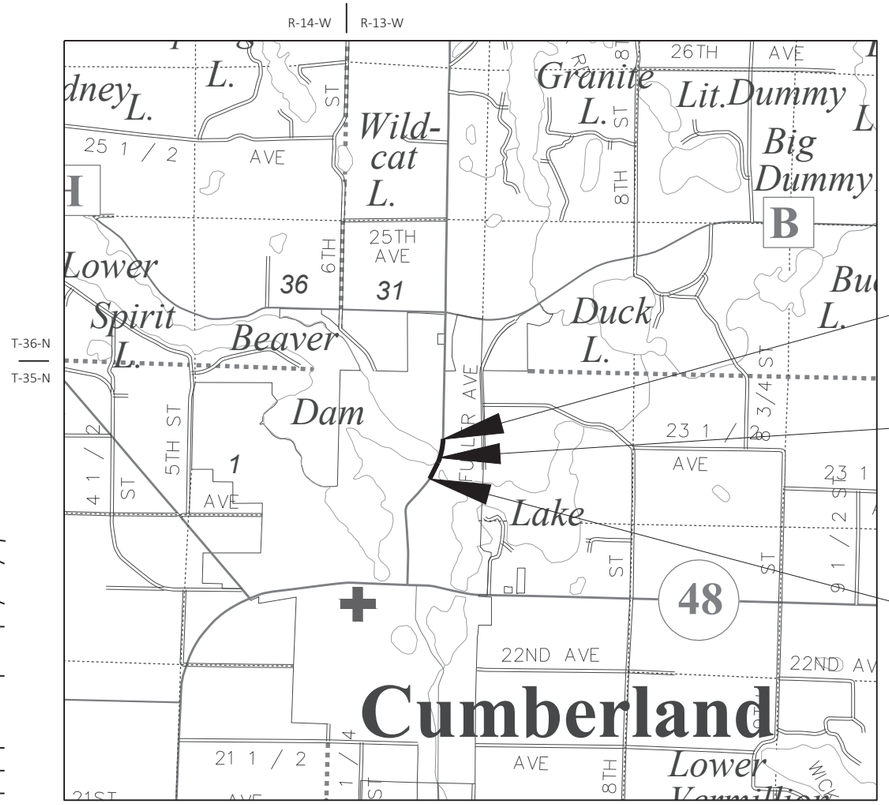
C CUMBERLAND, SUPERIOR AVENUE

BEAVER DAM LAKE B-03-0214

USH 63
BARRON COUNTY

STATE PROJECT NUMBER
1550-04-79

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1550-04-79		



END PROJECT
STA 737+00

STRUCTURE B-03-0214
STA 730+75.51 - STA 731+66.76

BEGIN PROJECT
STA 727+19
Y = 149,325.976
X = 262,404.582

LAYOUT

SCALE 0 1.0 MI

TOTAL NET LENGTH OF CENTERLINE = 0.186 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), BARRON 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

ORIGINAL PLANS PREPARED BY

SEH

WISCONSIN
JUSTIN SHAVLIK
45324-6
CHIPPEWA FALLS
WISCONSIN
09-24-2025
PROFESSIONAL ENGINEER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SEH
Designer	SEH
Project Manager	HEATH HAGNER
Regional Examiner	WISDOT NW REGION
Regional Supervisor	NICHOLAS PITSCH

APPROVED FOR THE DEPARTMENT

DATE: _____ Nicholas Pitsch (Signature)

E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\010101-TI.DWG

PLOT DATE : 9/24/2025 12:12 PM

PLOT BY : JUSTIN SHAVLIK

PLOT NAME :

GENERAL NOTES

WHEN THE QUANTITY OF BASE AGGREGATE OR ASPHALTIC SURFACE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS IS APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS, ARE TO BE 4-INCH TOPSOILED, FERTILIZED, SEEDED AND EMATTED. FINISHED SEEDED SURFACE SHALL BE 1-INCH BELOW THE TOP OF ADJACENT CONCRETE.

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREA WHICH ARE DISTURBED BY THIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

THE LOCATION OF ALL DRIVEWAYS WILL BE DETERMINED BY THE ENGINEER.

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS AND STATIONS ARE SHOWN TO THE EDGE OF PAVEMENT UNLESS NOTED OTHERWISE.

ALL SIDE ROAD EARTHWORK QUANTITIES ARE INCLUDED IN MAINLINE EARTHWORK QUANTITIES.

CONSTRUCT INSIDE EDGE OF SIDEWALK ¼ INCH HIGHER THAN THE TOP OF CURB, WHEN THEY ARE ADJACENT TO EACH OTHER.

TOP OF CASTING ELEVATIONS SHOWN FOR INLETS REFER TO THE CASTING ELEVATION AT THE FRONT EDGE OF CASTING/FLOWLINE OF GRATE/TOP OF CURB BOX.

ALL STORM SEWER INVERTS, ELEVATIONS, PIPE LENGTHS, AND GRADES ARE COMPUTED CENTER-TO-CENTER OF STRUCTURES.

CURB RAMP TYPES ARE SHOWN ON PLAN/INTERSECTION DETAIL SHEETS.

WISDOT MONUMENTS WILL BE SUPPLIED BY THE STATE AND INSTALLED BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER.

EXISTING PIPE CULVERT AND/OR CONCRETE BOX CULVERT SIZES SHOWN ARE APPROXIMATE AND THE CONTRACTOR SHALL BASE ITS BID ON ACTUAL FIELD CONDITIONS

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (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	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP- TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE- TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 3.02 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.37 ACRES

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

SUPERELEVATION TABLE - USH 63

STATION	DESCRIPTION	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
727+19	MATCH EXISTING	-4.00%	-3.00%	0.70%	0.70%
727+57	BEGIN TRANSITION	-4.00%	-3.00%	0.70%	0.70%
728+07	BEGIN FULL SUPER	-4.00%	-3.00%	3.00%	3.00%
736+50	END FULL SUPER	-4.00%	-3.00%	3.00%	3.00%
737+00	MATCH EXISTING	-5.24%	-5.24%	3.00%	3.00%

UTILITY CONTACTS

BRIGHTSPEED OF WESTERN WISCONSIN, LLC - COMMUNICATION LINE
425 ELLINGSON AVE
HAWKINS, WI 54530
TELEPHONE: 980.376.1559
ATTENTION: BRIAN HUHN
EMAIL: BRIAN.HUHN@BRIGHTSPEED.COM

CUMBERLAND MUNICIPAL UTILITY - ELECTRICITY
1265 2ND AVENUE
P.O. BOX 726
CUMBERLAND, WI 54829
TELEPHONE: 715.671.8111
ATTENTION: JORDAN PEICHEL
EMAIL:JORDAN@CMUTILITY.COM

CUMBERLAND MUNICIPAL UTILITY - SEWER
1265 2ND AVENUE
P.O. BOX 726
CUMBERLAND, WI 54829
TELEPHONE: 715.671.8111
ATTENTION: JORDAN PEICHEL
EMAIL:JORDAN@CMUTILITY.COM

CUMBERLAND MUNICIPAL UTILITY - WATER
1265 2ND AVENUE
P.O. BOX 726
CUMBERLAND, WI 54829
TELEPHONE: 715.671.8111
ATTENTION: JORDAN PEICHEL
EMAIL:JORDAN@CMUTILITY.COM

SPECTRUM - COMMUNICATION LINE
2016 18 ¾ STREET
RICE LAKE, WI 54868
TELEPHONE: 715.210.3868
ATTENTION: MICKEY BENIK
EMAIL: MICKEY.BENIK@CHARTER.COM

WE ENERGIES - GAS/PETROLEUM
104 W. SOUTH STREET
RICE LAKE, WI 54868
TELEPHONE: 715.234.9605
ATTENTION: STEVEN CHAVERS
EMAIL: STEVEN.CHAVERS@WE-ENERGIES.COM

DESIGN CONTACT

SEH
10 NORTH BRIDGE STREET
CHIPPEWA FALLS, WI 54729
TELEPHONE: 715.720.6279
ATTENTION: JUSTIN SHAVLIK
EMAIL: JSHAVLIK@SEHINC.COM

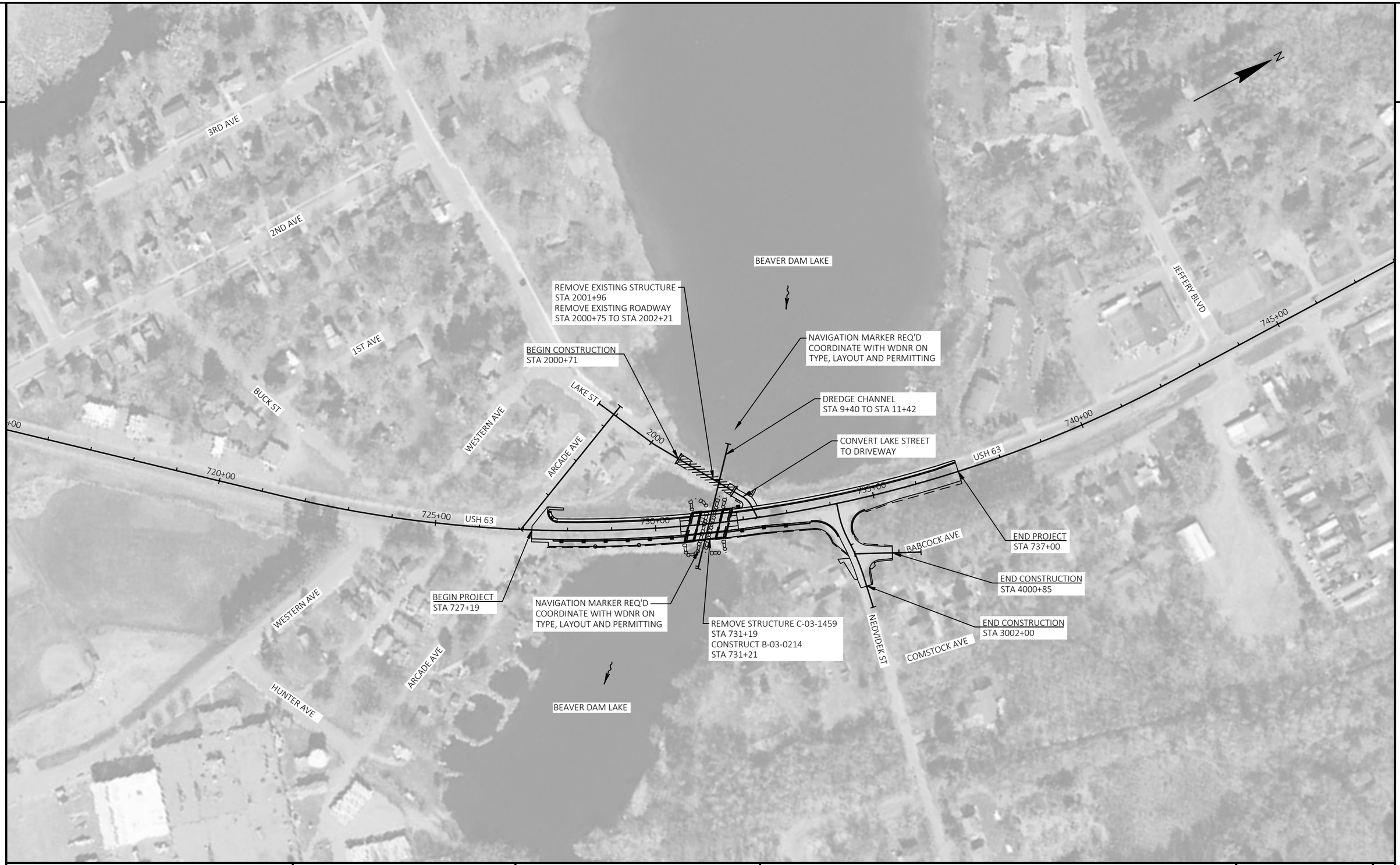
WISDOT CONTACT

NORTHWEST REGION HQ
718 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
TELEPHONE: 715.392.7976
ATTENTION: NICHOLAS PITSCH
EMAIL: NICHOLAS.PITSCH@DOT.WI.GOV

WDNR CONTACT

DNR SPOONER SERVICE CENTER
810 W MAPLE ST
SPOONER, WI 54801
TELEPHONE: 715.635.4229
ATTENTION: AMY CRONK
EMAIL: AMY.CRONK@WISCONSIN.GOV

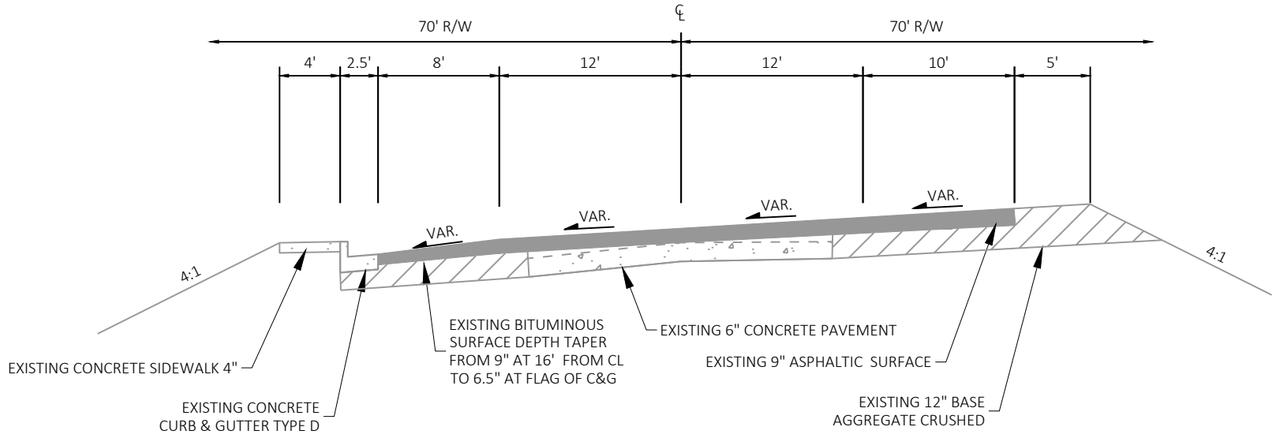
2



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	PROJECT OVERVIEW	SHEET 3	E

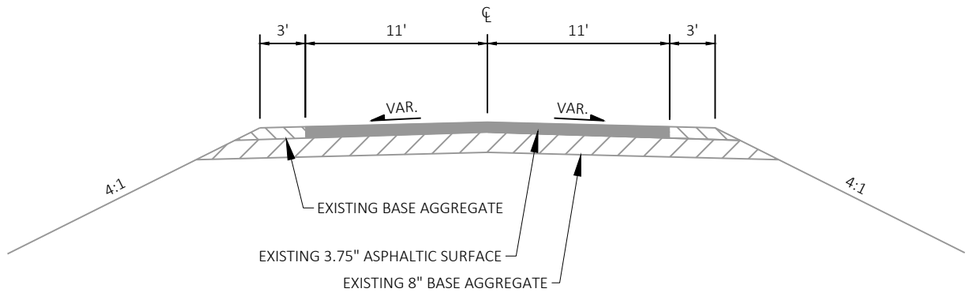
FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\020201_PO.DWG
LAYOUT NAME - Plan 1 IN 100 FT
PLOT DATE : 12/15/2025 7:52 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2



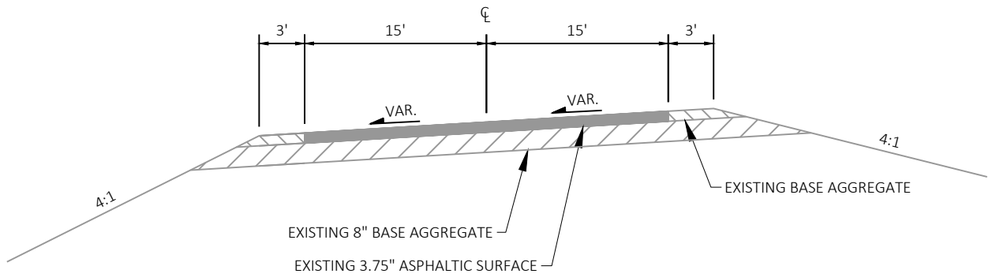
EXISTING TYPICAL SECTION

USH 63
STA 727+19 - STA 737+00



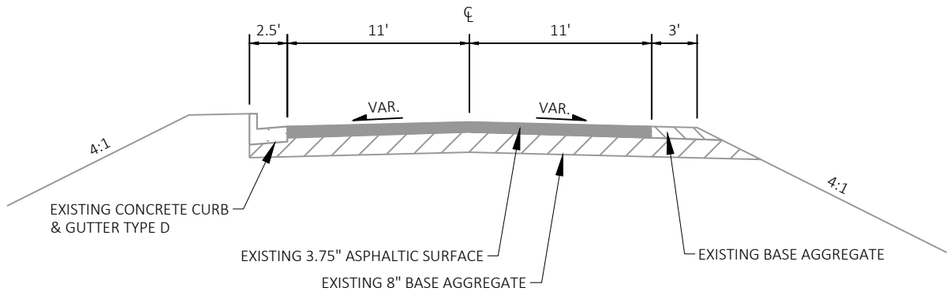
EXISTING TYPICAL SECTION

LAKE ST
STA 2000+52.46 - STA 2002+04.09



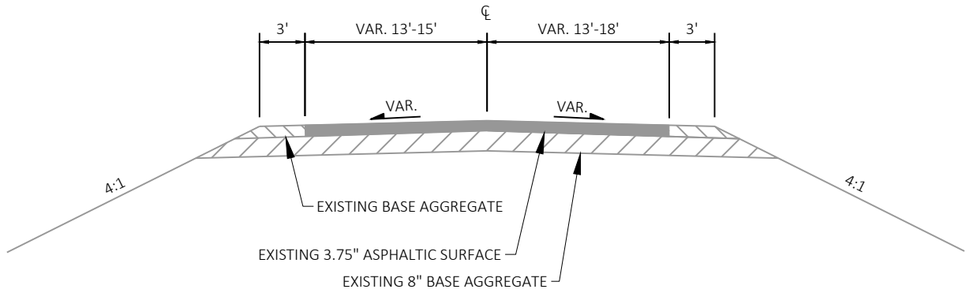
EXISTING TYPICAL SECTION

NEDVIDEK ST
STA 3000+00 - STA 3002+00



EXISTING TYPICAL SECTION

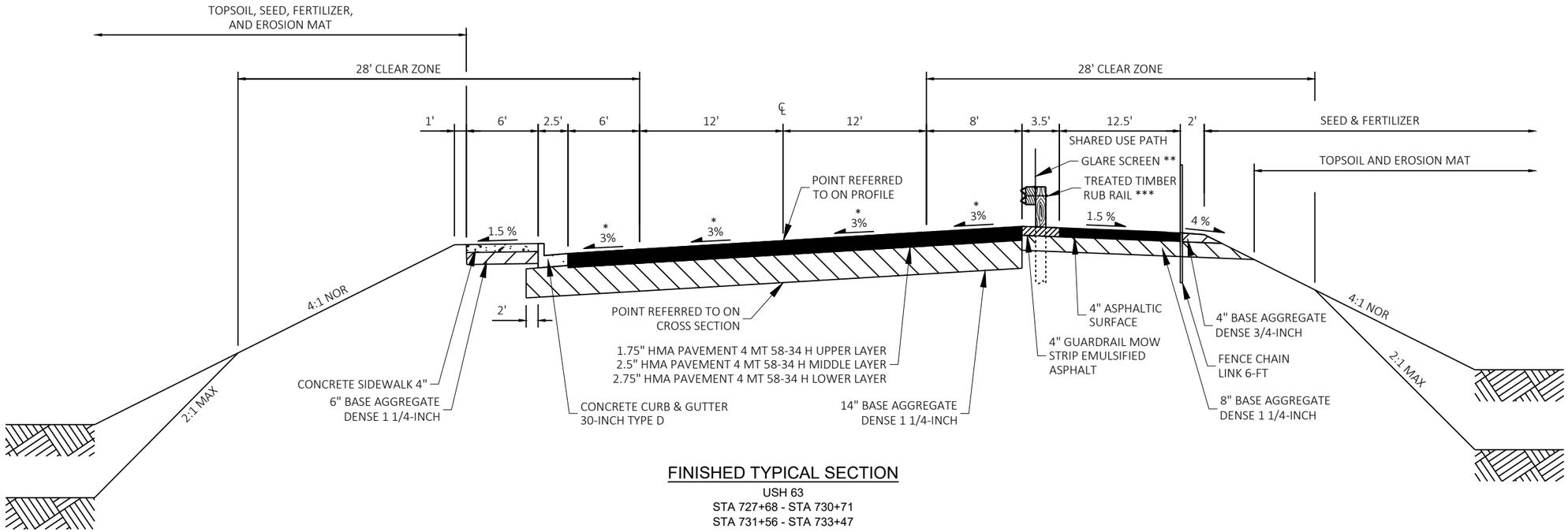
LAKE ST
STA 2002+04.09 - STA 2003+00



EXISTING TYPICAL SECTION

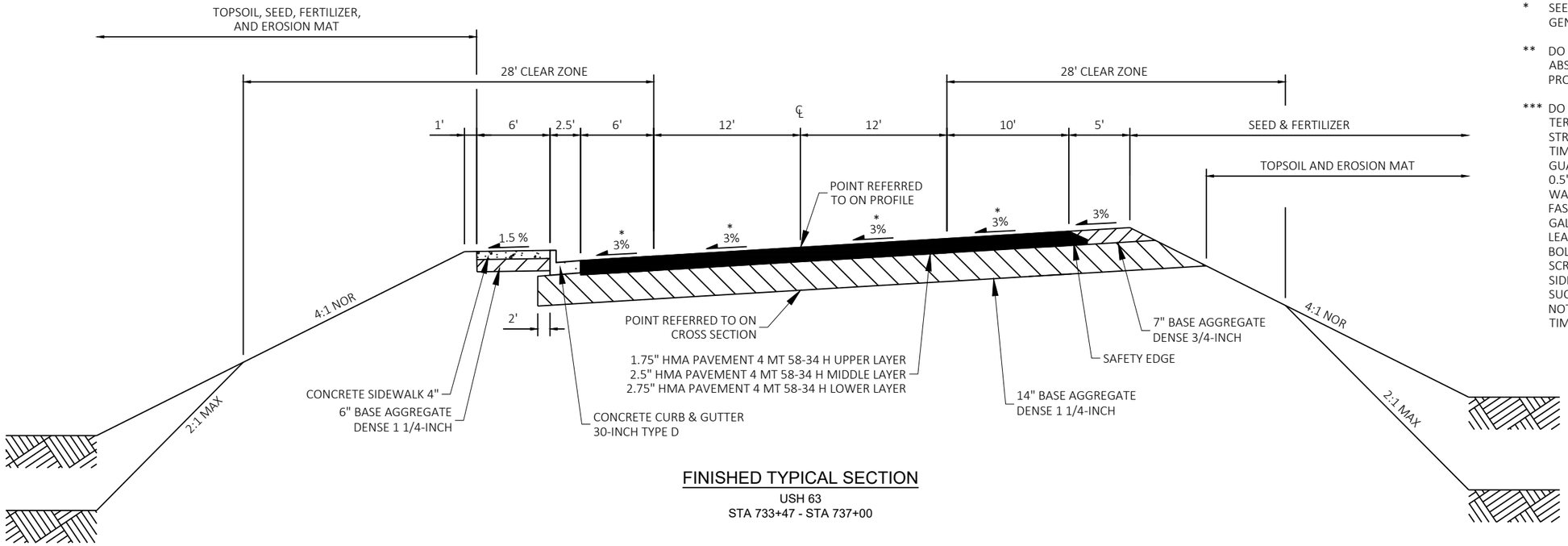
BABCOCK AVE
STA 4000+00 - STA 4000+85

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TYPICAL SECTION	SHEET 4	E



FINISHED TYPICAL SECTION

USH 63
STA 727+68 - STA 730+71
STA 731+56 - STA 733+47



FINISHED TYPICAL SECTION

USH 63
STA 733+47 - STA 737+00

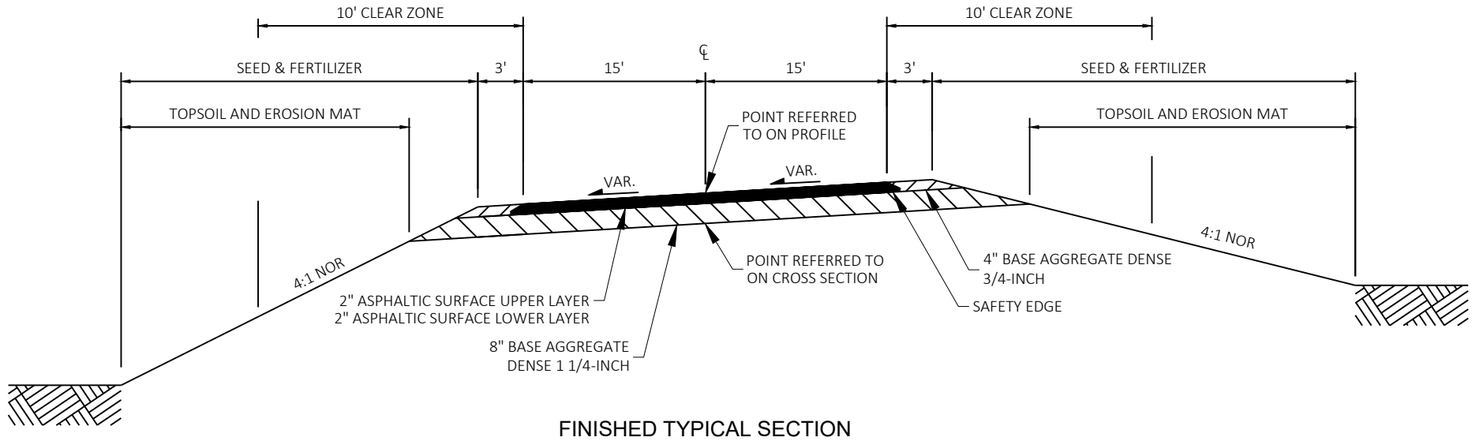
* SEE SUPERELEVATION TABLE ON GENERAL NOTES SHEET

** DO NOT INSTALL ON ENERGY ABSORBING TERMINALS OR PROPOSED STRUCTURE.

*** DO NOT INSTALL ENERGY ABSORBING TERMINALS OR PROPOSED STRUCTURE. ATTACH TREATED TIMBER RUB RAIL TO WOOD GUARDRAIL POSTS WITH TWO 0.5"X6" LAG BOLTS AND 0.5" FLAT WASHERS PER GUARDRAIL POST. ALL FASTENERS SHALL BE HOT DIP GALVANIZED. SPACE LAG BOLTS AT LEAST 2 INCHES FROM GUARDRAIL BOLT. ALL CARRIAGE BOLTS AND LAD SCREWS THAT ARE ADJACENT TO THE SIDEWALK SHALL BE COUNTERSUNK SUCH THAT BOLTS AND NUTS ARE NOT PROTRUDING FROM TREATED TIMBER RUB RAIL.

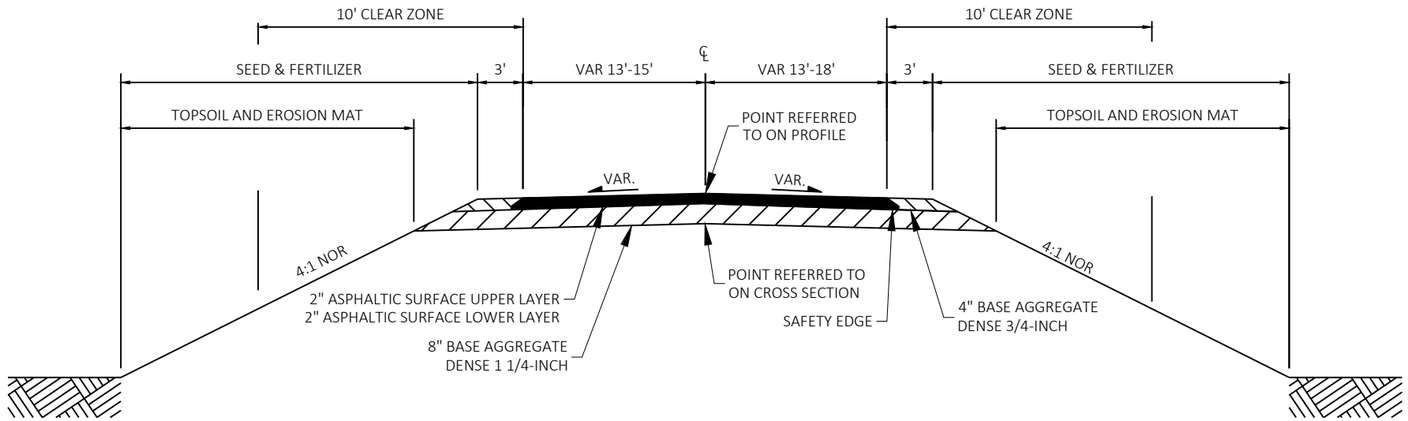
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TYPICAL SECTION	SHEET 5	E

2



FINISHED TYPICAL SECTION

NEDVIDEK ST
STA 3000+00 - STA 3002+00



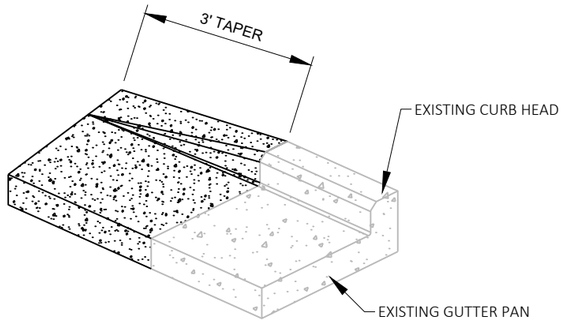
FINISHED TYPICAL SECTION

BABCOCK AVE
STA 4000+00 - STA 4000+85

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TYPICAL SECTION	SHEET 6	E

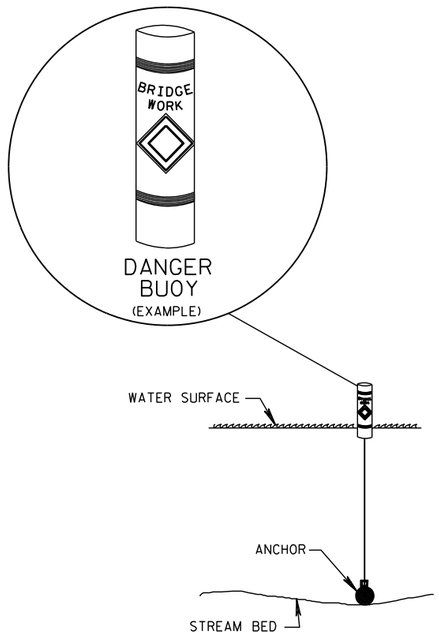
FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - 03-10ft

PLOT DATE : 12/18/2025 10:13 AM PLOT BY : JUSTIN SHAVLIK PLOT NAME : PLOT SCALE : 1 IN:10 FT



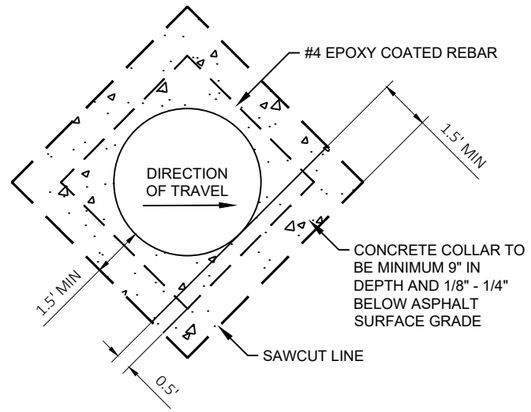
CONCRETE CURB & GUTTER 30-INCH TYPE A - 3' END TRANSITION (ISOMETRIC VIEW)

2002+18 - 2002+21

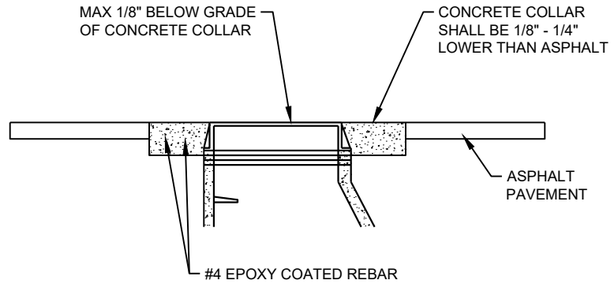


DANGER BUOY PLACEMENT DETAIL

USE AS DIRECTED BY WDNR. BUOY MESSAGE MAY VARY (DANGER, NAVIGATIONAL, BOATS PROHIBITED



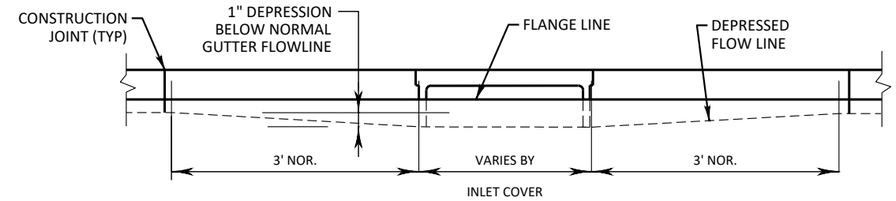
PLAN



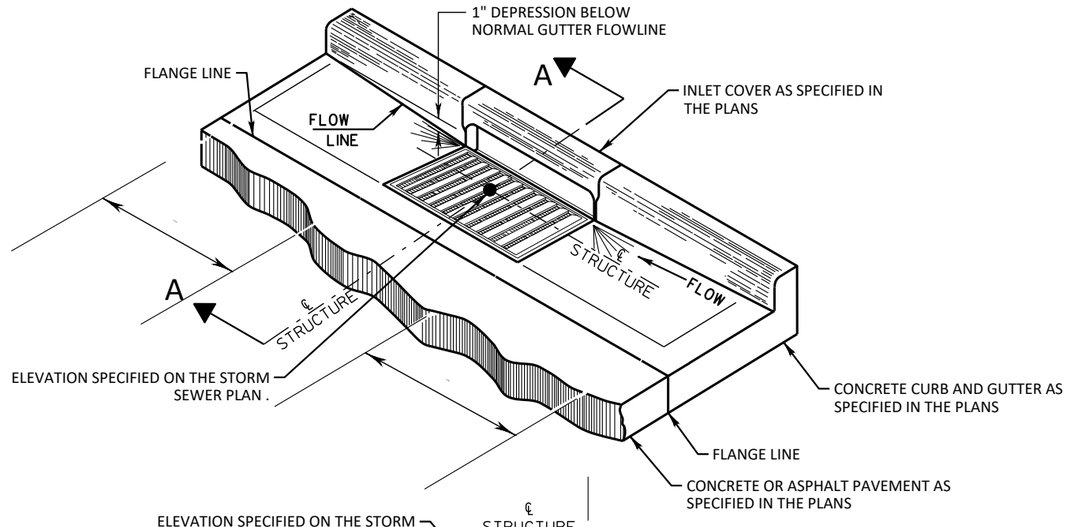
PROFILE

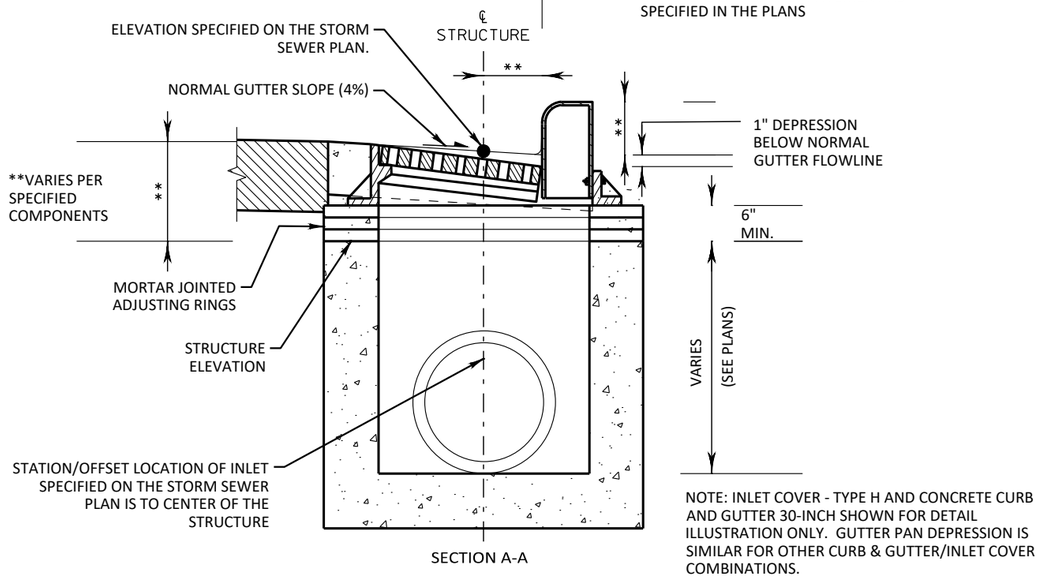
MH CONCRETE DIAMOND

NOTE:
TO BE USED ON ALL MANHOLES LOCATED IN THE ROADWAY. DO NOT INSTALL UNTIL AFTER FINAL LIFT OF ASPHALT HAS BEEN PLACED. FILL ALL SAWCUT OVERRUNS WITH EPOXY



ELEVATION AT FLANGE LINE
(GRATE AND CURB DETAILS OMITTED FOR DRAWING CLARITY)



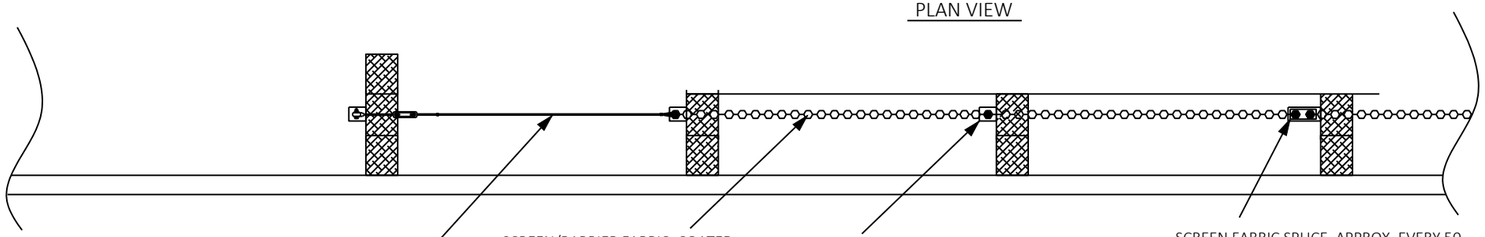


NOTE: INLET COVER - TYPE H AND CONCRETE CURB AND GUTTER 30-INCH SHOWN FOR DETAIL ILLUSTRATION ONLY. GUTTER PAN DEPRESSION IS SIMILAR FOR OTHER CURB & GUTTER/INLET COVER COMBINATIONS.

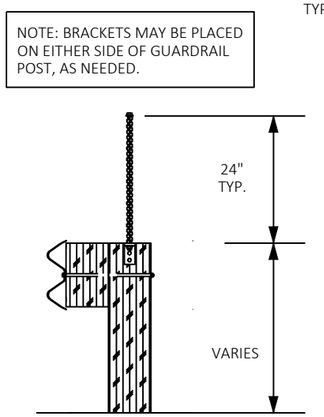
TYPICAL GUTTER PAN DEPRESSION AT INLETS

2

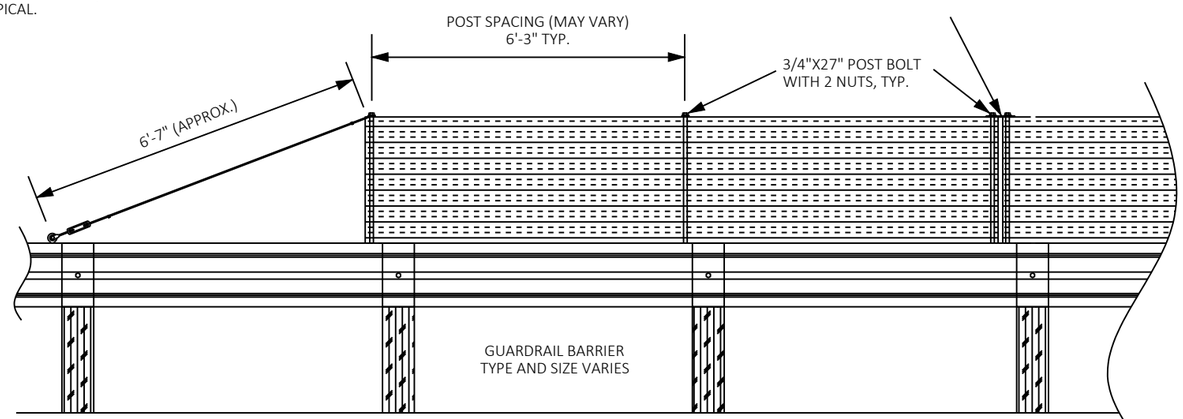
PLAN VIEW



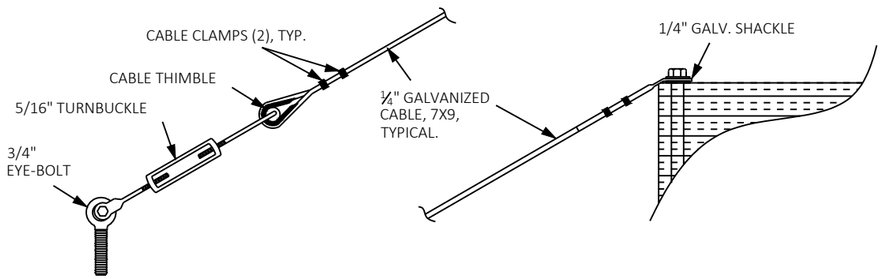
NOTE: BRACKETS MAY BE PLACED ON EITHER SIDE OF GUARDRAIL POST, AS NEEDED.



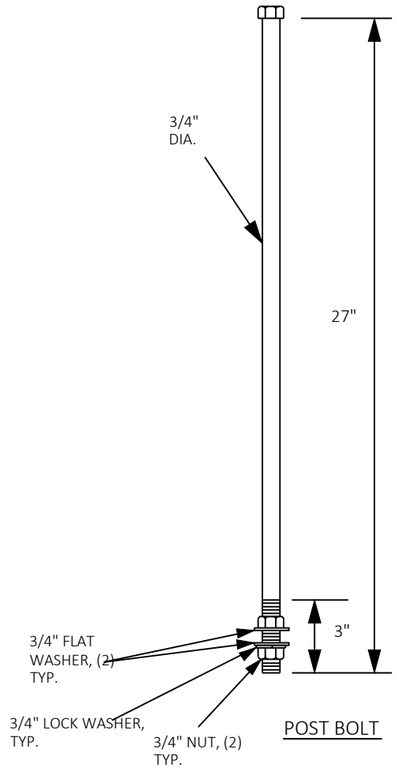
SECTION VIEW



SIDE ELEVATION VIEW



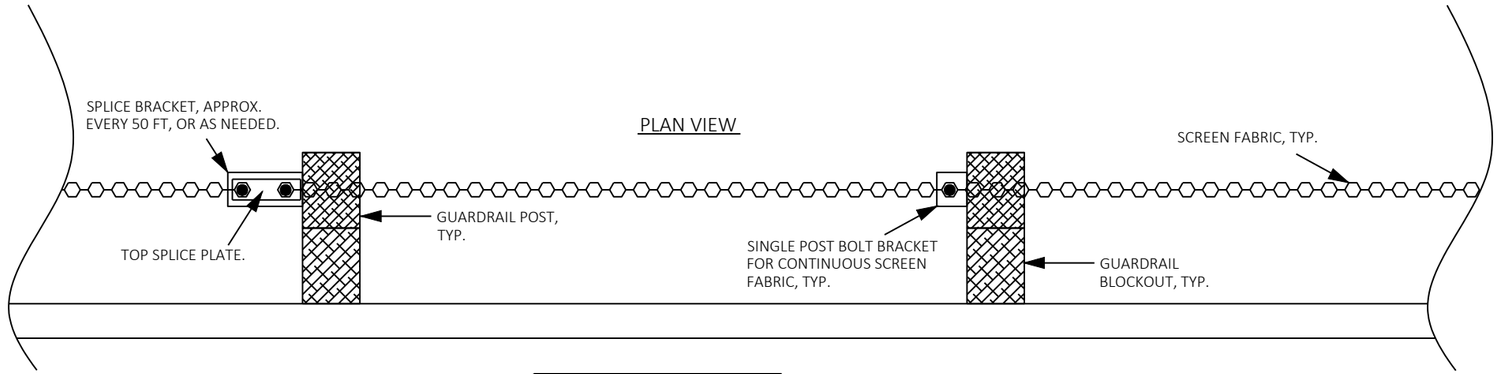
CABLE ANCHOR/END TREATMENT ASSEMBLY



POST BOLT

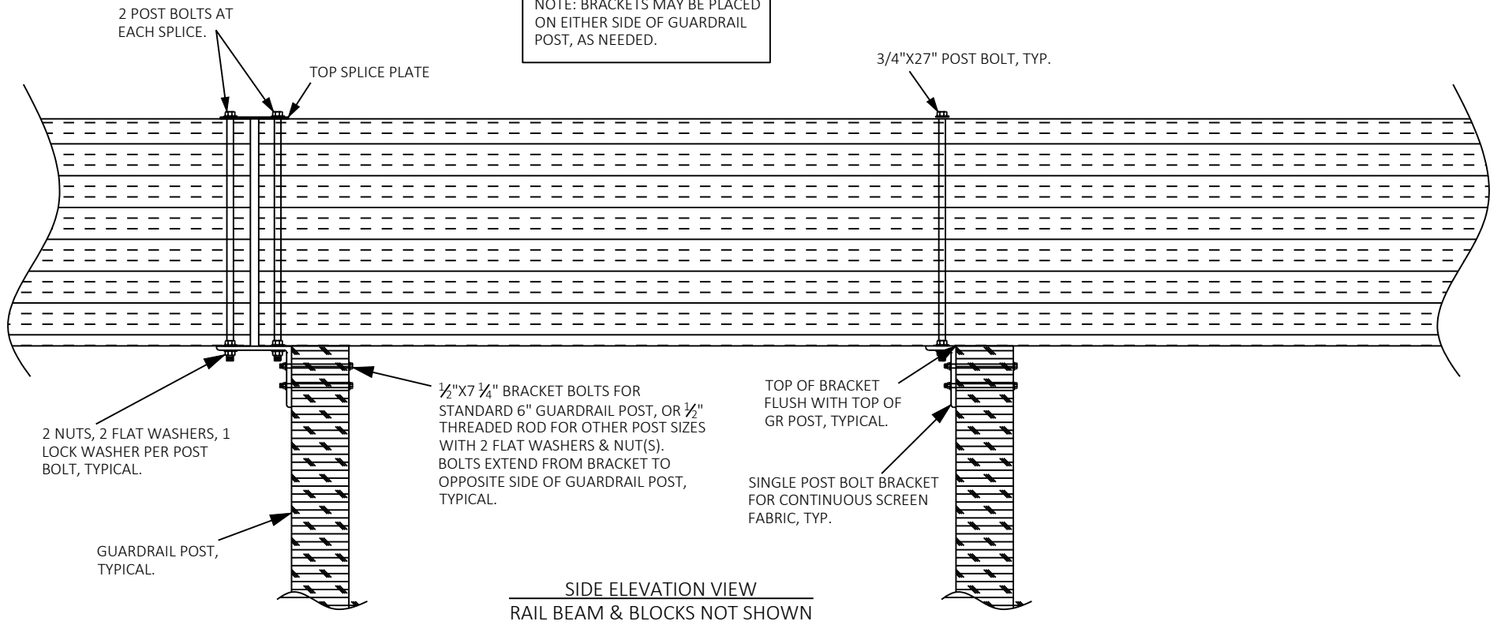
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CONSTRUCTION DETAILS: GLARE SCREEN	SHEET 8	E

2

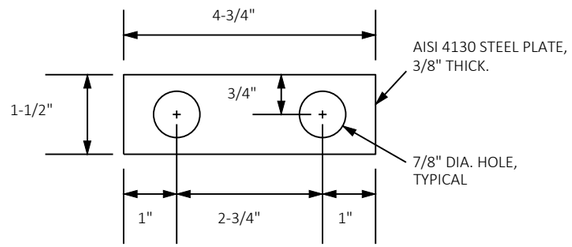


PLAN VIEW

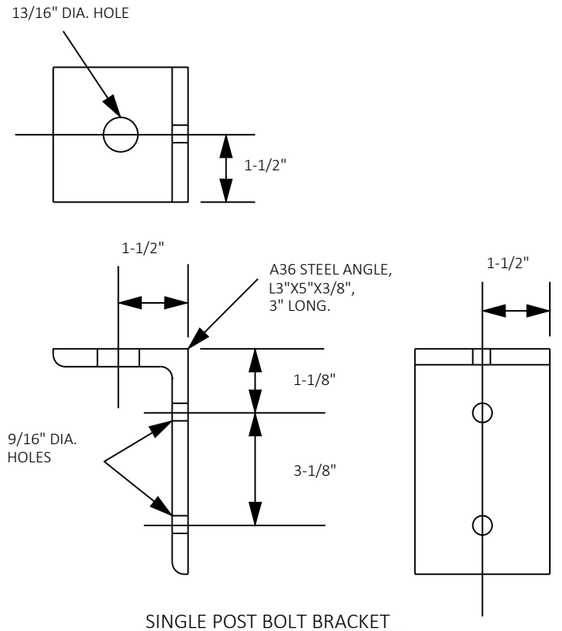
NOTE: BRACKETS MAY BE PLACED ON EITHER SIDE OF GUARDRAIL POST, AS NEEDED.



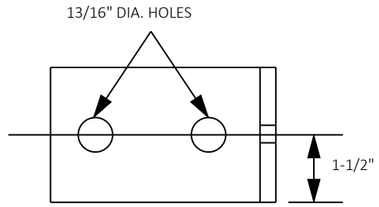
SIDE ELEVATION VIEW
RAIL BEAM & BLOCKS NOT SHOWN

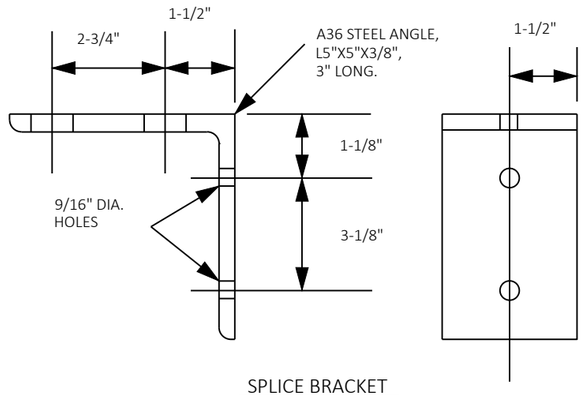


TOP SPLICE PLATE DETAIL



SINGLE POST BOLT BRACKET



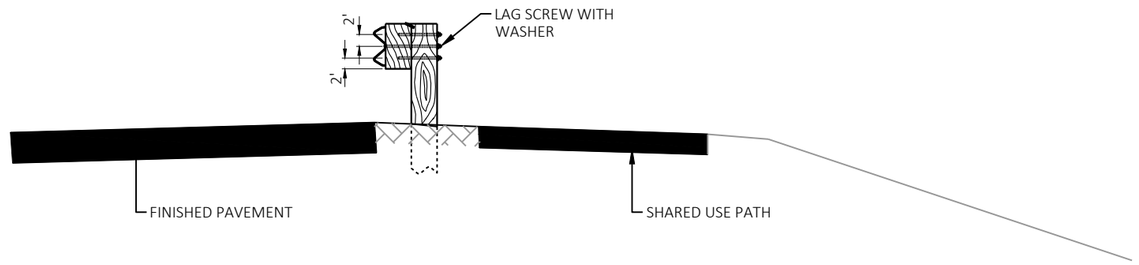


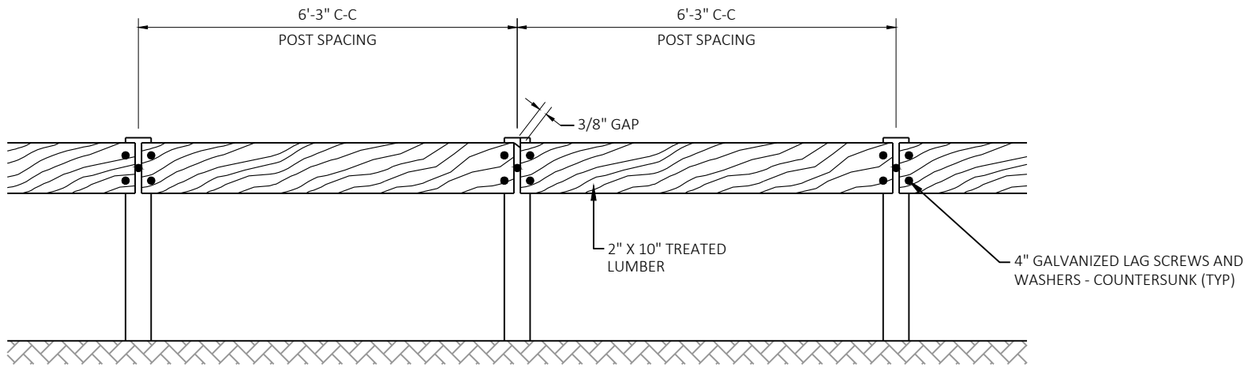
SPLICE BRACKET

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CONSTRUCTION DETAILS: GLARE SCREEN	SHEET 9	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 03
PLOT DATE : 12/15/2025 7:52 AM
PLOT BY : DEAN STODOLA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2





TREATED TIMBER RUB RAIL DETAIL AT GUARDRAIL

NOTES:

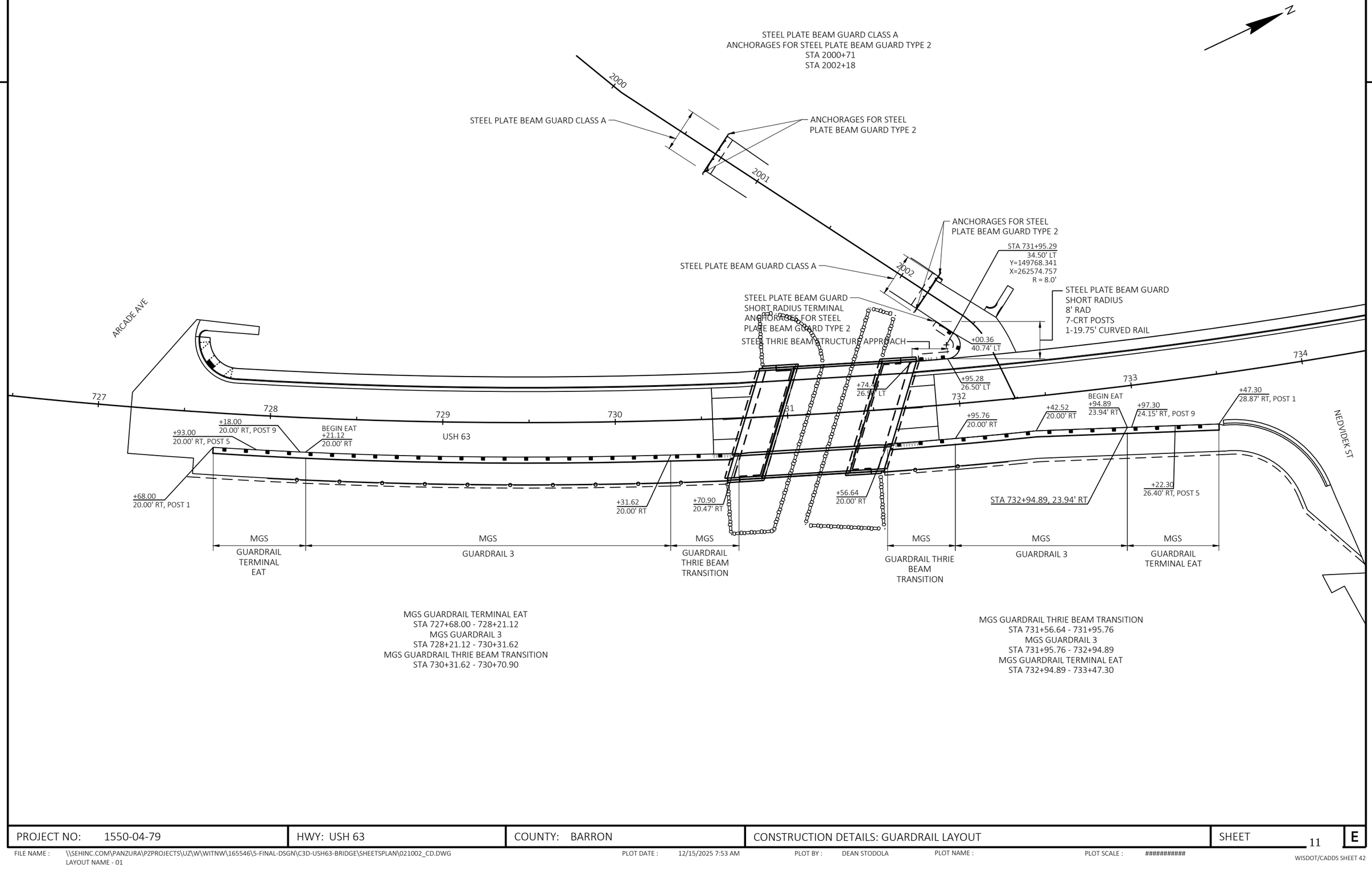
ALL CARRIAGE BOLTS AND LAG SCREWS USED IN CONSTRUCTION THAT ARE ADJACENT TO THE SIDEWALK SHALL BE COUNTERSUNK TO CLEAR HEAD OR BOLT NUT.

2" X 10" TREATED TIMBER RUB RAIL REQUIRED WHERE GUARDRAIL IS ADJACENT TO SIDEWALK. DO NOT PLACE ENERGY ABSORBING TERMINAL.

SEE SDD "MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL" FOR DETAILS NOT SHOWN.

2

STEEL PLATE BEAM GUARD CLASS A
ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2
STA 2000+71
STA 2002+18

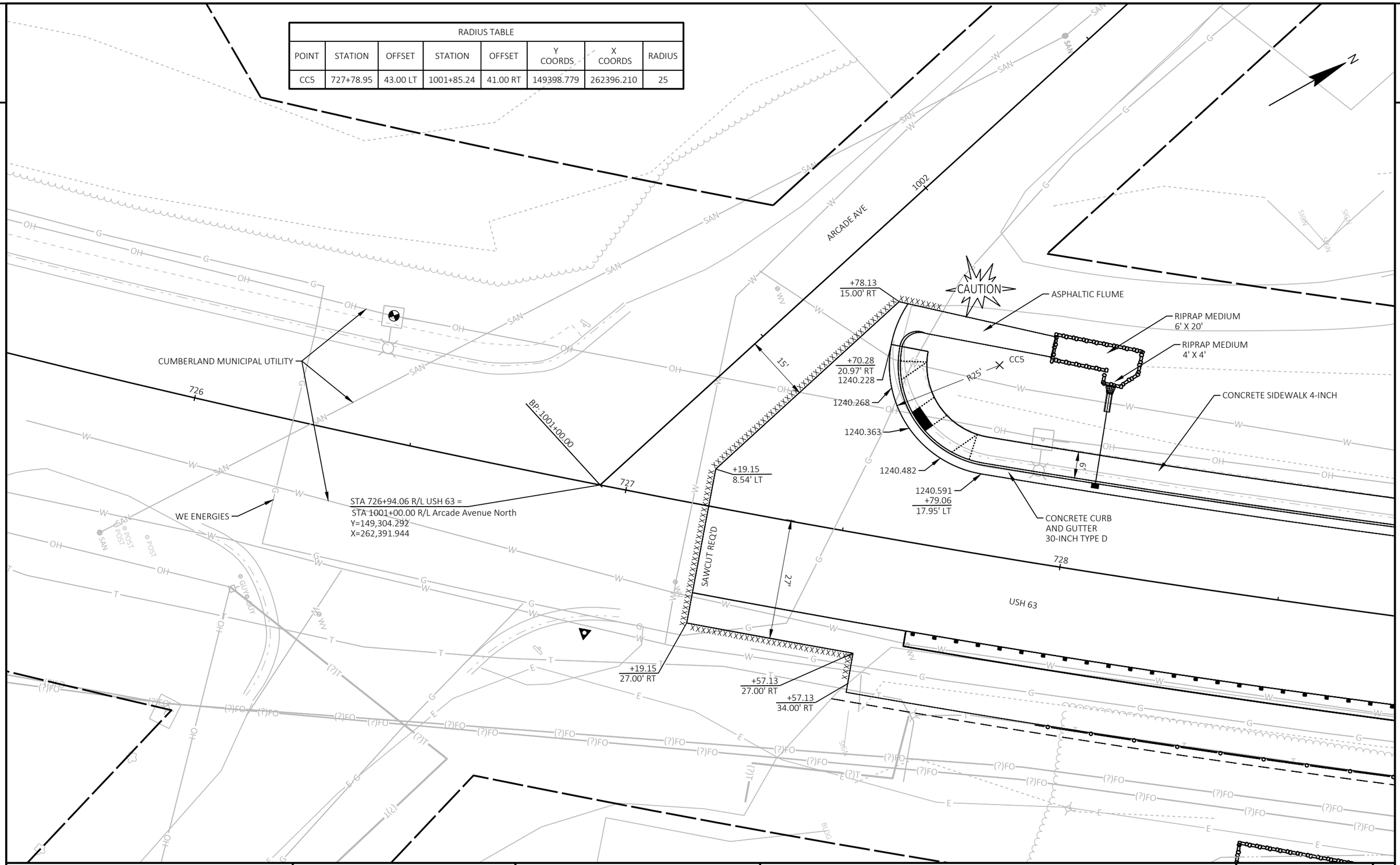


MGS GUARDRAIL TERMINAL EAT
STA 727+68.00 - 728+21.12
MGS GUARDRAIL 3
STA 728+21.12 - 730+31.62
MGS GUARDRAIL THRIE BEAM TRANSITION
STA 730+31.62 - 730+70.90

MGS GUARDRAIL THRIE BEAM TRANSITION
STA 731+56.64 - 731+95.76
MGS GUARDRAIL 3
STA 731+95.76 - 732+94.89
MGS GUARDRAIL TERMINAL EAT
STA 732+94.89 - 733+47.30

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CONSTRUCTION DETAILS: GUARDRAIL LAYOUT	SHEET 11	E

RADIUS TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
CC5	727+78.95	43.00 LT	1001+85.24	41.00 RT	149398.779	262396.210	25



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	INTERSECTION DETAIL - ARCADE AVENUE	SHEET 12	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 01

PLOT DATE : 12/15/2025 7:54 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

733

734

BP: 3000+00.00

STA 734+14.90 R/L USH 63 =
STA 3000+00.00 R/L Nedvidek Street
Y=149,964.820
X=262,675.810

USH 63

+50
27.00' RT
1242.869

1243.055

1243.137

1243.274

CP3

PC: 3000+26.13

+73.75
27.00' RT
1244.295

1244.144

1244.040

1243.935

+53.75
22.00' RT

CONCRETE CURB AND
GUTTER 6-INCH SLOPED
36-INCH TYPE D

R37'

CC2

CC3

+80.80
15.00' LT
1243.831

RIPRAP MEDIUM

+70.44
15.00' RT
1243.398

S88°27'38"E

PT: 3000+77.86

+90.78
15.63' LT

R40'

WE ENERGIES

CC1

R37'

+90.76
14.94' RT

15'

16'

BRIGHTSPEED

CUMBERLAND MUNICIPAL UTILITY

+34.19
18.00' LT

CUMBERLAND MUNICIPAL UTILITY

CONCRETE CURB AND
GUTTER 6-INCH SLOPED
36-INCH TYPE D

PC: 3001+01.63

NEDVIDEK ST

18'

BABCOCK AVE

N26°24'14"E

13'

15'

13'

EP: 4001+50.00

STA 3001+21.98 R/L Nedvidek Street =
STA 4000+00.00 R/L Babcock Avenue
Y=149,947.855
X=262,795.929

BP: 4000+00.00

END CONSTRUCTION
STA 4000+85.28
Y=150,024.237
X=262,833.852
MATCH EXISTING
SAWCUT REQ'D

1243.060

+56.46
15.00' RT

1243.846

R25'

CC4

+69.35
15.00' RT

15'

15'

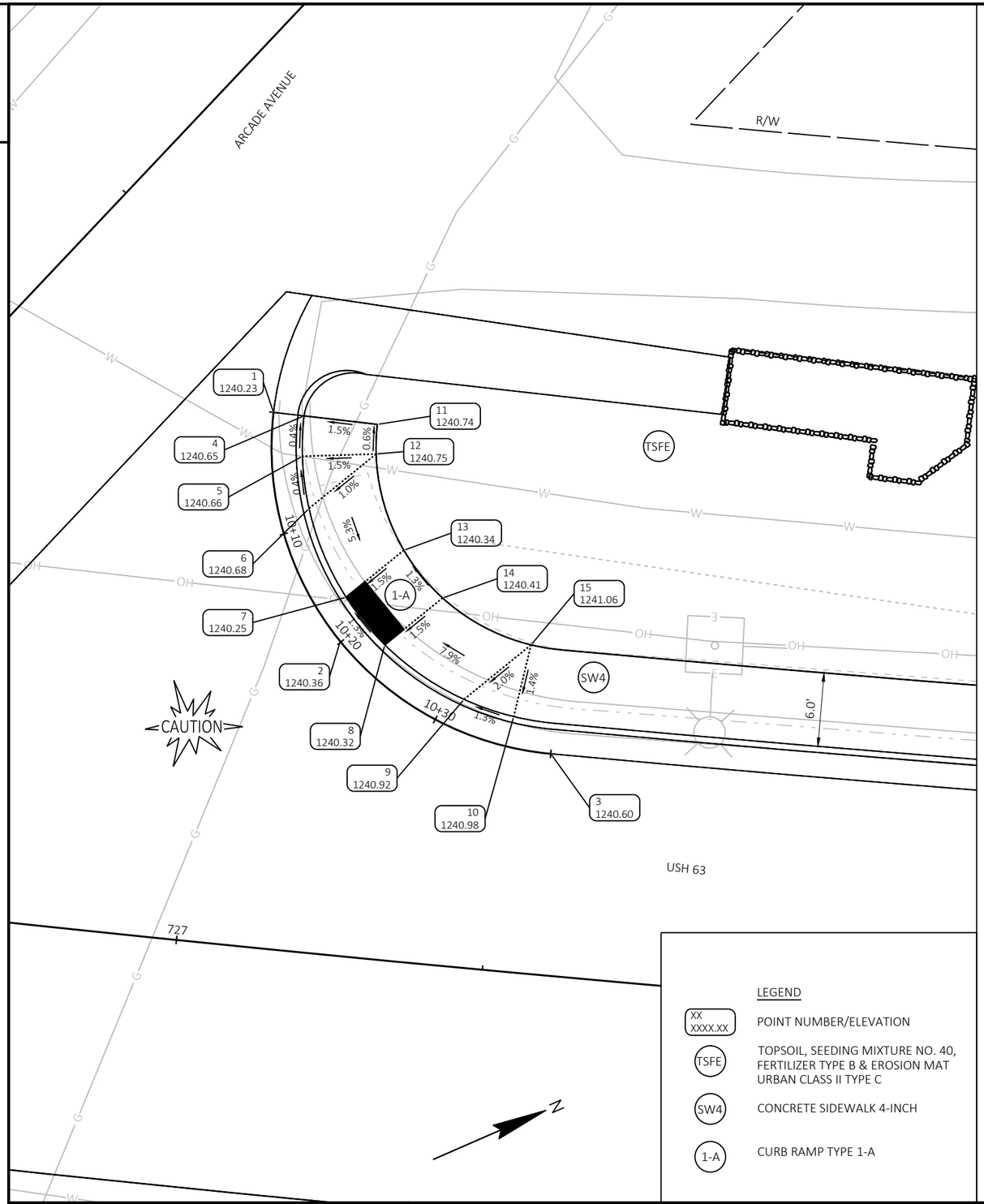
+76.33
15.00' LT

PT: 3001+79.69

RADIUS TABLE							
POINT	STATION	OFFSET	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
CC1	733+48.18	87.01 RT	3000+70.45	75.01 RT	149874.930	262739.660	60' R
CC2	734+73.75	67.00 RT	3000+80.80	55.00 LT	150004.350	262756.249	40' R
CC3	3000+83.73	55.00 LT	4000+34.19	58.00 LT	150004.271	262759.184	40' R
CC4	3001+76.33	40.00 LT	4000+56.46	40.00 RT	149980.636	262856.863	25' R

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	INTERSECTION DETAIL - NEDVIDEK STREET	SHEET 13	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 02
PLOT DATE : 12/15/2025 7:54 AM
PLOT BY : DEAN STODOLA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42



GENERAL CONSTRUCTION NOTES:

SLOPE ARROWS DO NOT DENOTE THE DIRECTION OF WATER FLOW RATHER THEY SHOW THE DIRECTION THAT THE ARROWS WERE DRAWN. NEGATIVE (-) VALUES DENOTE DOWNWARD SLOPE, POSITIVE (+) VALUES DENOTE UPWARD SLOPES.

DETECTABLE WARNING ARE 2 FT WIDE AND 5 FT LONG.

CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.

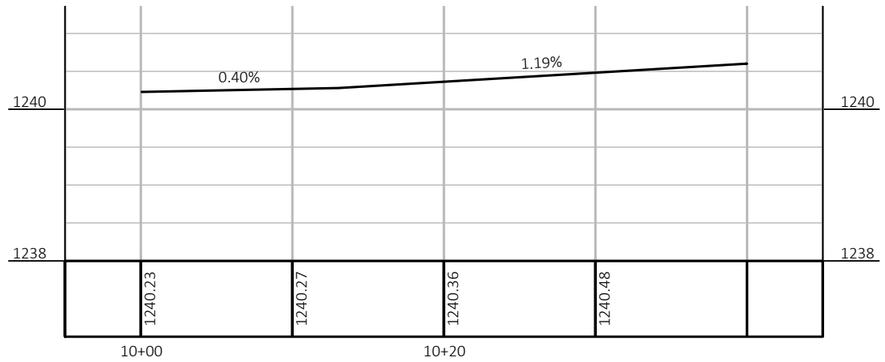
THE ENGINEER MUST ADJUST CURB RAMP ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.

ALL STATION AND OFFSET INFORMATION REFERENCE USH 63 R/L.

DASHED LINES REPRESENT JOINT LOCATIONS. THE ENGINEER MAY ADJUST LOCATIONS TO FIT FIELD CONDITIONS WITHIN THE REQUIREMENTS OF THE STANDARD DETAILS.

USH 63 AND ARCADE AVENUE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	727+53.57	43.49' LT	1240.23	149377.16	262383.65
2	727+60.90	25.48' LT	1240.36	149374.69	262402.91
3	727+78.95	18.00' LT	1240.60	149386.75	262418.12
4	727+56.11	43.45' LT	1240.65	149379.32	262384.91
5	727+56.30	40.17' LT	1240.66	149377.88	262387.87
6	727+57.27	35.99' LT	1240.68	149376.68	262391.98
7	727+61.02	29.11' LT	1240.25	149376.57	262399.79
8	727+64.56	25.56' LT	1240.32	149377.91	262404.61
9	727+71.45	21.75' LT	1240.92	149382.04	262411.25
10	727+75.64	20.74' LT	1240.98	149385.19	262414.14
11	727+62.20	43.35' LT	1240.74	149384.51	262387.92
12	727+62.33	40.94' LT	1240.75	149383.46	262390.09
13	727+65.37	33.36' LT	1240.34	149382.40	262398.17
14	727+68.92	29.80' LT	1240.41	149383.74	262402.99
15	727+76.52	26.68' LT	1241.06	149388.81	262409.36



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CURB RAMP	SHEET 14	E

FILE NAME : \\SP-PZ1.SEHINC.COM\PZPROJECTS1\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\021301 CR.DWG
LAYOUT NAME - 01

PLOT DATE : 12/15/2025 7:55 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

EXISTING 6-INCH SANITARY FORCE MAIN
TOP PIPE EL. = 1226.30

SANITARY FORCE MAIN (APPROX.)
USE EXTREME CAUTION
EXCAVATING OVER FORCE MAIN

BEAVER DAM LAKE

EXISTING 6-INCH SANITARY FORCE MAIN
TOP PIPE EL. = 1227.59

LAKE STREET REMOVAL LIMITS

END DREDGING STA 11+42
MATCH EXISTING EL 1227.7

EXISTING CONTOUR & ELEVATION (TYP)

PROPOSED CONTOUR & ELEVATION (TYP)

EXISTING 6-INCH SANITARY FORCE MAIN
TOP PIPE EL. = 1224.60

CAUTION

USH 63

DREDGING CROSS SECTION BASE LINES
SEE CROSS SECTIONS FOR INFORMATION

DREDGING AREA LIMITS

BEGIN SEDIMENT EXCAVATION STA 9+30
MATCH EXISTING EL 1225.44
PAID AS: EXCAVATION, HAULING, AND
DISPOSAL OF DREDGED SEDIMENT

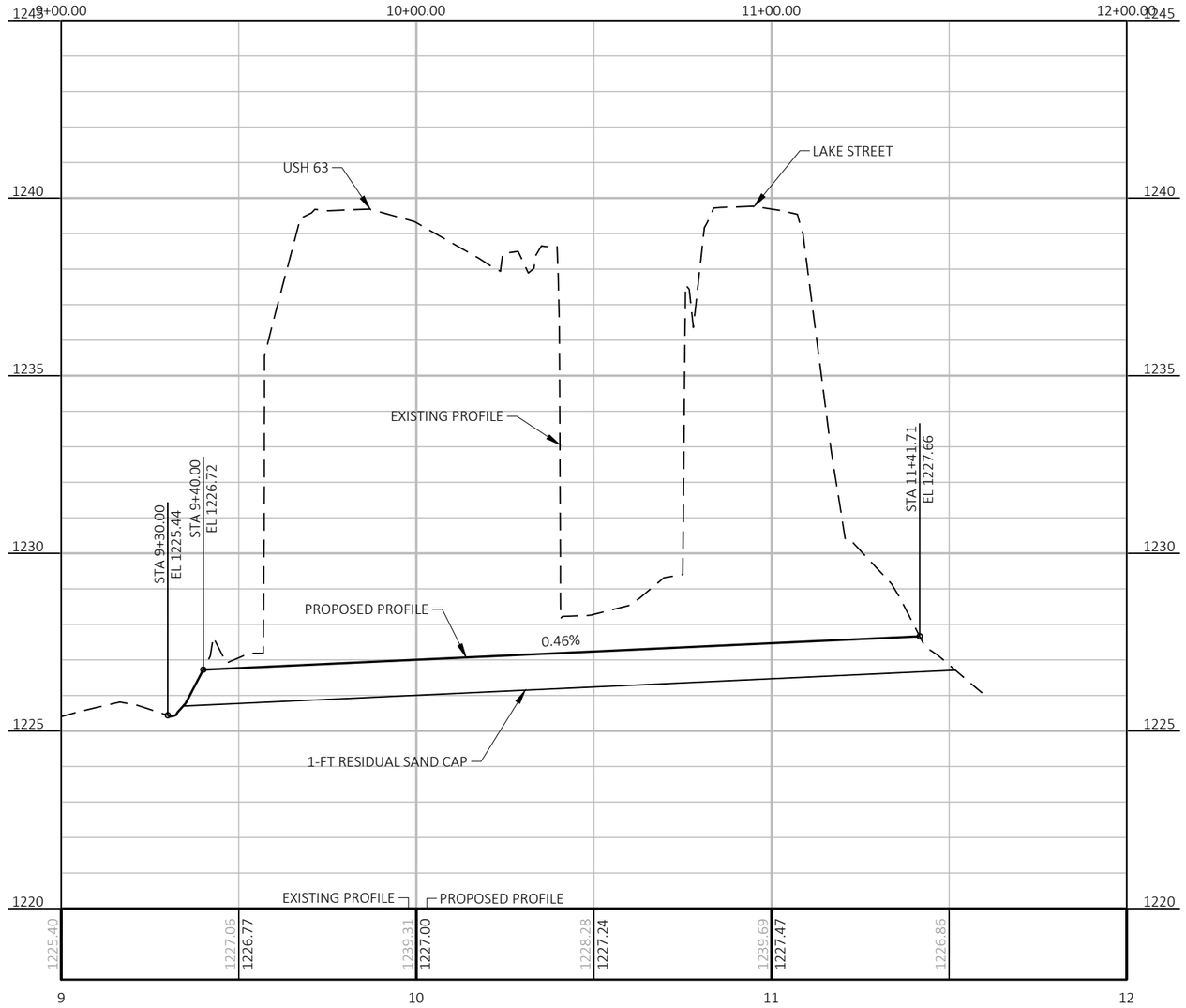
NOTE:
EARTHWORK AREAS WITHIN THE EXISTING ROAD CORE OUTSIDE OF THE EXISTING STRUCTURES TO BE PAID FOR UNDER EXCAVATION BID ITEMS. EARTHWORK AREAS BELOW THE OHW ELEVATION OUTSIDE OF THE ROAD CORE TO BE PAID FOR AS EXCAVATION, HAULING, AND DISPOSAL OF DREDGED SEDIMENT.

BEAVER DAM LAKE

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	DREDGING PLAN VIEW	SHEET 15	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\021701_CM.DWG
LAYOUT NAME - PLN VIEW
PLOT DATE : 12/15/2025 7:56 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	DREDGING PROFILE VIEW	SHEET 16	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\021701_CM.DWG
LAYOUT NAME - PROF VIEW

PLOT DATE : 12/15/2025 7:56 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:40 FT

NOTE:
PLACE RIPRAP MEDIUM TO A MAXIMUM ELEVATION OF 1232.00'

LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE C (2:1 OR STEEPER SLOPES)
- SILT FENCE
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- SILT SCREEN
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- INLET PROTECTION

TURBIDITY BARRIER ACROSS CHANNEL SHALL ONLY BE IN PLACE DURING EXISTING BOX CULVERT REMOVAL & DREDGING OPERATIONS

NAVIGATIONAL MARKER REQ'D COORDINATE WITH WDNR ON TYPE, LAYOUT, AND PERMITTING

EX R/W (TYP)

ARCADE AVE

LAKE ST

1999+00

2000+00

727+00

728+00

729+00

730+00

731+00

732+00

733+00

734+00

735+00

736+00

737+00

USH 63

TLE

SLOPE INTERCEPTS (TYP)

WILDLIFE TRAVEL CORRIDOR. SEE STRUCTURE PLANS (TYP)

TURBIDITY BARRIER ACROSS CHANNEL SHALL ONLY BE IN PLACE DURING EXISTING BOX CULVERT REMOVAL & DREDGING OPERATIONS

NAVIGATIONAL MARKER REQ'D COORDINATE WITH WDNR ON TYPE, LAYOUT, AND PERMITTING

PROP R/W

RIPRAP HEAVY

TURBIDITY BARRIER ALONG CHANNEL SHALL BE IN PLACE AFTER STAGE 1 DREDGING OPERATIONS ARE COMPLETED & PRIOR TO RIPRAP INSTALLATION

TLE

PROP R/W

3001+00

4001+00

BABCOCK AVE

NEDVIDEK ST

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	EROSION CONTROL - STAGE 1	SHEET 17	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\022001-EC-STAGE1.DWG
LAYOUT NAME - 1 IN 100 FT

PLOT DATE : 12/15/2025 7:57 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 41

NOTE:
PLACE RIPRAP MEDIUM TO A MAXIMUM ELEVATION OF 1232.00'

LEGEND

- EROSION MAT URBAN CLASS I TYPE B
- EROSION MAT CLASS II TYPE C (2:1 OR STEEPER SLOPES)
- SILT FENCE
- RIPRAP MEDIUM (UNLESS NOTED OTHERWISE)
- SLOPE INTERCEPT
- TURBIDITY BARRIER
- SILT SCREEN
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECKS
- SURFACE WATER FLOW
- INLET PROTECTION

TURBIDITY BARRIER ALONG CHANNEL SHALL BE IN PLACE AFTER STAGE 2 DREDGING OPERATIONS ARE COMPLETED & PRIOR TO RIPRAP INSTALLATION

NAVIGATIONAL MARKER REQ'D COORDINATE WITH WDNR ON TYPE, LAYOUT, AND PERMITTING

TURBIDITY BARRIER ACROSS PROPOSED CHANNEL SHALL ONLY BE IN PLACE DURING EXISTING BRIDGE/ROADWAY REMOVAL & DREDGING OPERATIONS

EX R/W (TYP)

ARCADE AVE

LAKE ST

1999+00

2000+00

727+00

728+00

729+00

730+00

731+00

732+00

733+00

734+00

735+00

736+00

737+00

USH 63

US 63

TLE

SLOPE INTERCEPTS (TYP)

WILDLIFE TRAVEL CORRIDOR. SEE STRUCTURE PLANS (TYP)

PROP R/W

RIPRAP HEAVY

NAVIGATIONAL MARKER REQ'D COORDINATE WITH WDNR ON TYPE, LAYOUT, AND PERMITTING

3001+00

4001+00

BABCOCK AVE

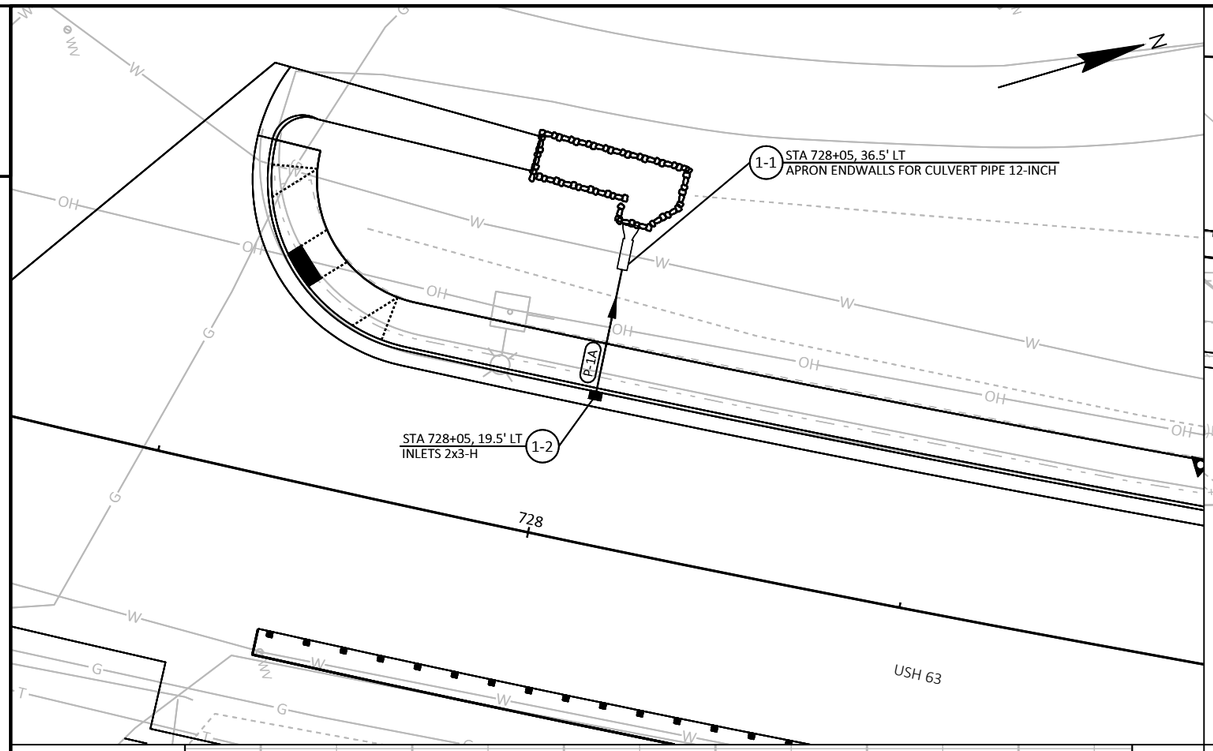
NEDVIDEK ST

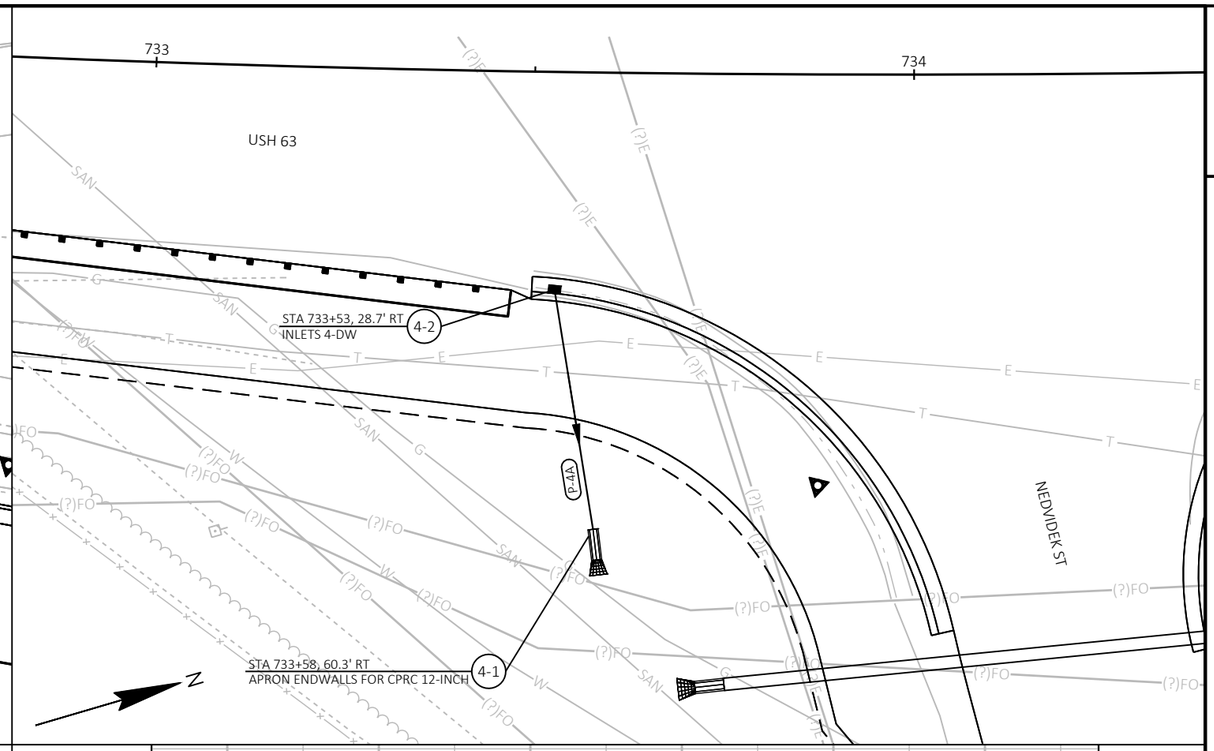
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	EROSION CONTROL - STAGE 2	SHEET 18	E

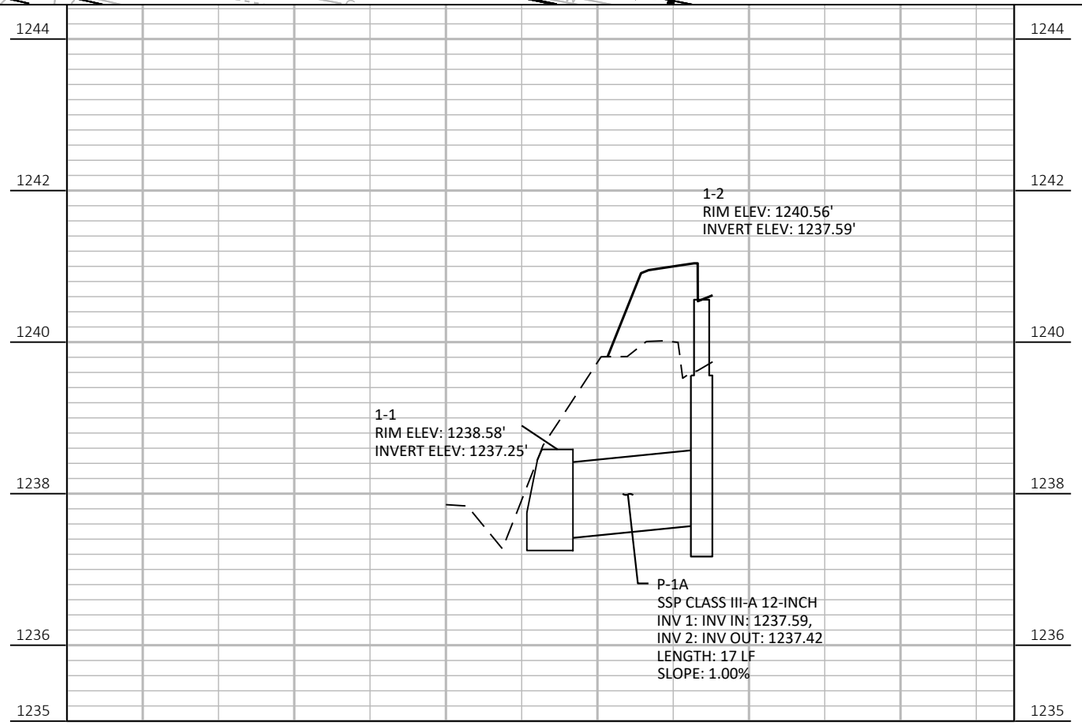
FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\022001-EC-STAGE2.DWG
LAYOUT NAME - 1 IN 100 FT

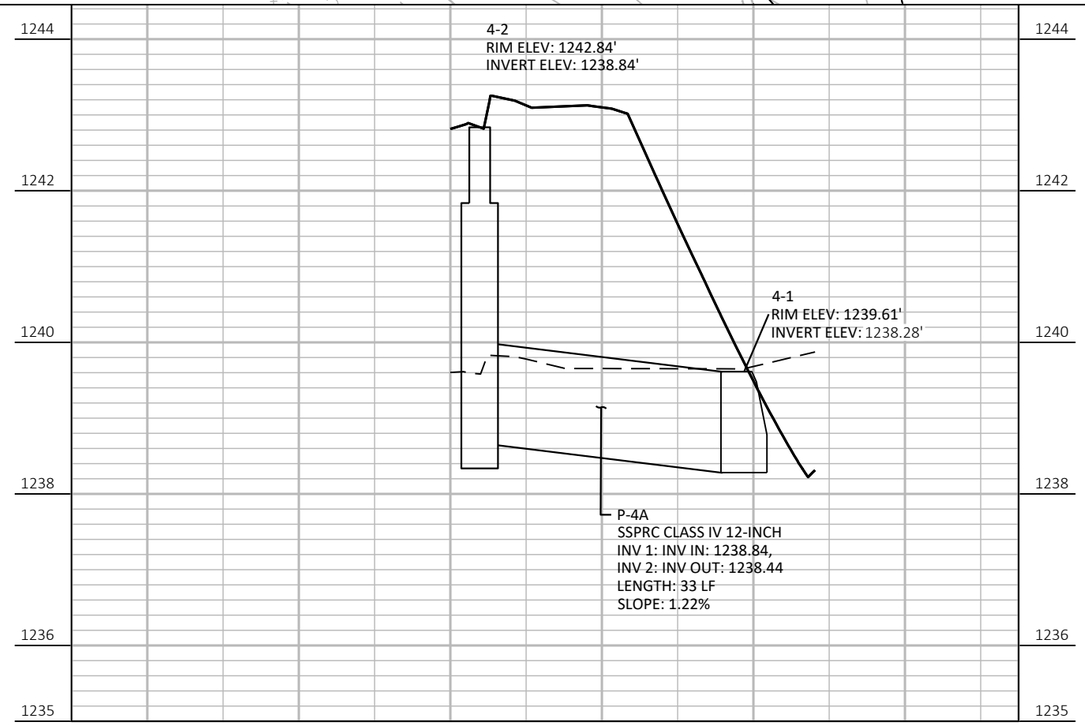
PLOT DATE : 12/15/2025 7:57 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 41



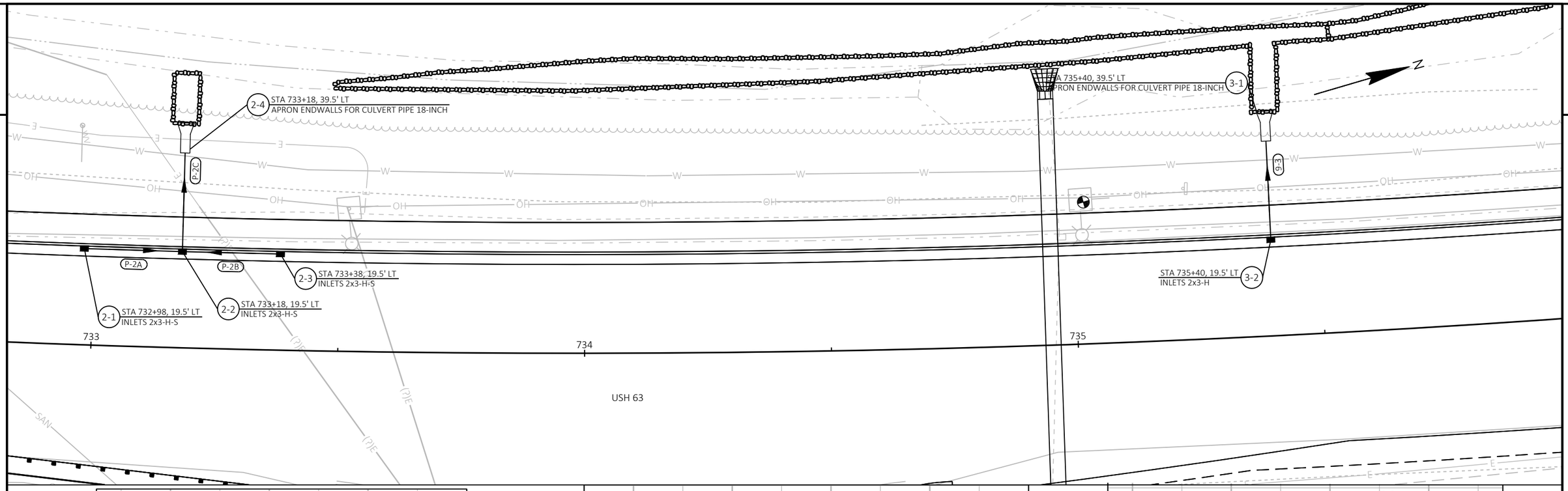


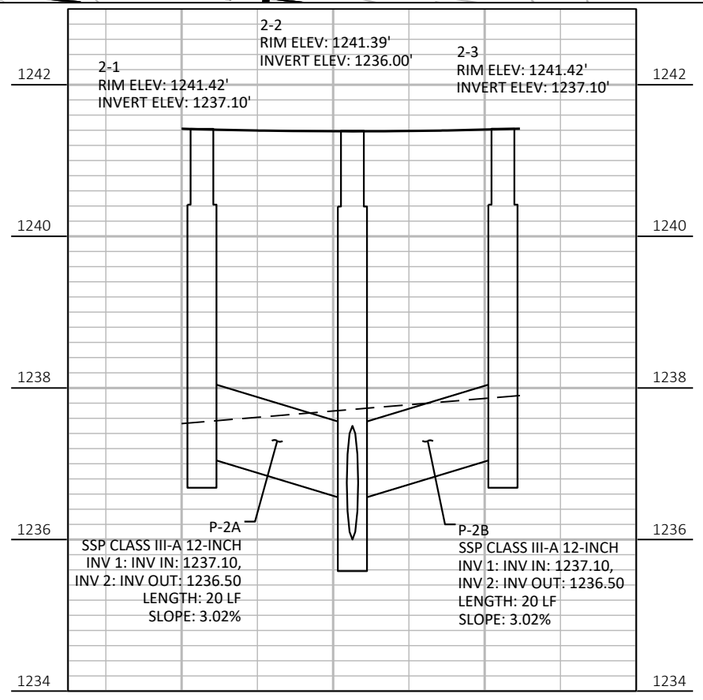


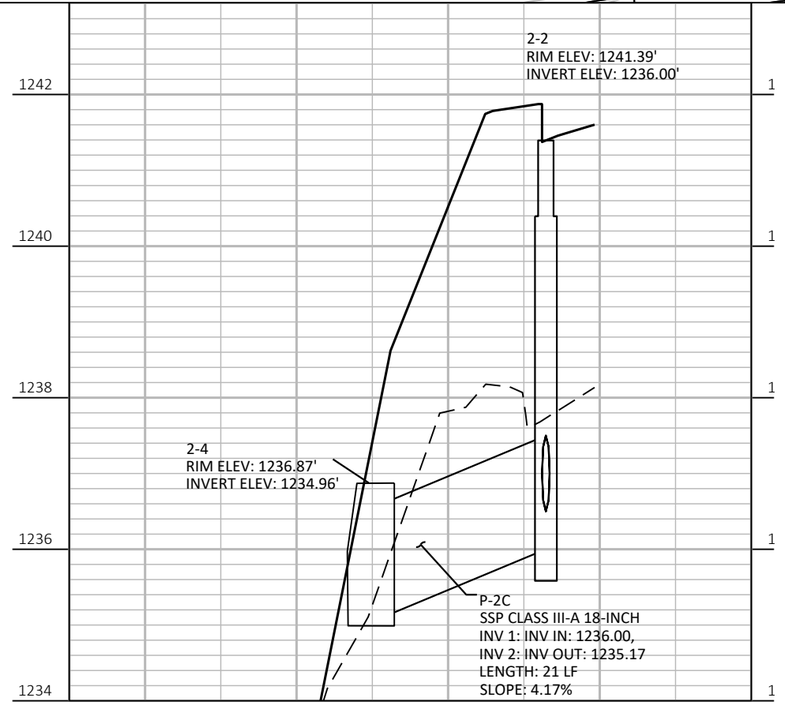


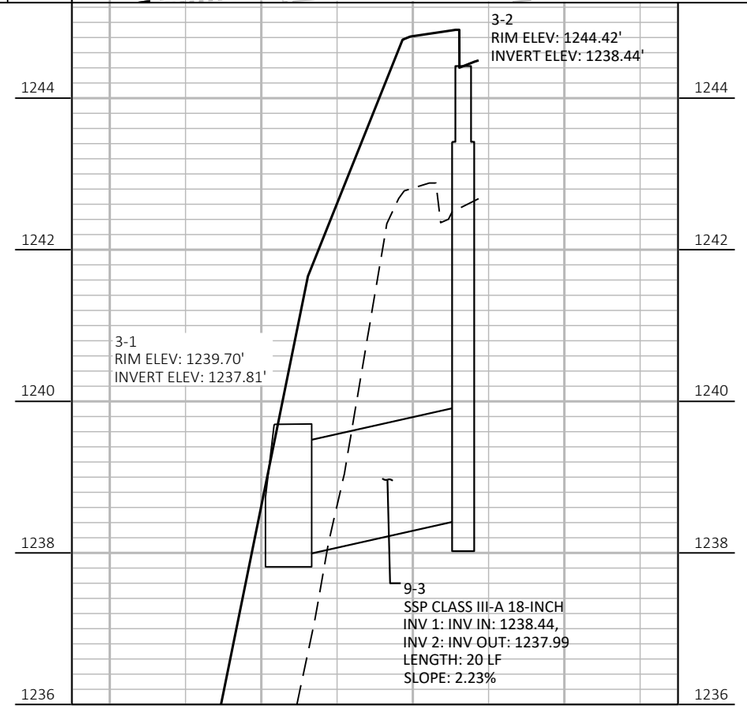
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	STORM SEWER	SHEET 19	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\022501_SS.DWG
LAYOUT NAME - 01
PLOT DATE : 12/15/2025 7:58 AM
PLOT BY : DEAN STODOLA
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 41









PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	STORM SEWER	SHEET 20	E

2

2

INSTALL
NO OUTLET
1-1
W14-2
30"X30"

1999+00

2000+00

INSTALL
1-2
W5-56
18"X18"

ARCADE AVE

LAKE ST

2002+00

REMOVE
1-5

INSTALL
1-6
W5-56
18"X18"

1-7
STOP
REMOVE
SUPERIOR AVE
LAKE ST

MOVE
1-8
ATV ROUTE

MOVE
1-9
SPEED LIMIT
40

MOVE
1-3
ATV ROUTE

727+00

728+00

729+00

730+00

731+00

732+00

733+00

734+00

735+00

736+00

737+00

USH 63

USH 63

MOVE
1-10
ATV ROUTE

MOVE
1-4
SPEED LIMIT
25

MOVE
1-11
ATV ROUTE

MOVE
SUPERIOR AVE
NEDVIDEK ST
1-12
STOP

3001+00

4001+00

BABCOCK AVE

MOVE
1-13
BABCOCK AVE
YIELD

3001+00

NEDVIDEK ST

SIGNING LEGEND

PROPOSED SIGN MOUNTED ON POSTS WOOD

X-X DENOTES SIGN NUMBER

(X) INDICATES SIGN SIZE

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	PERMANENT SIGNING	SHEET 21	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\023201_PS.DWG
LAYOUT NAME - 01

PLOT DATE : 12/15/2025 7:59 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : Custom

GENERAL NOTES: TRAFFIC CONTROL

1. THE FOLLOWING NOTES ARE APPLICABLE TO ALL STAGES. SEE THE STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS FOR ADDITIONAL TRAFFIC CONTROL AND CONSTRUCTION STAGING REQUIREMENTS.
2. THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER IN THE FIELD.
3. ALL "WO" OR "W" DIAMOND SHAPED WARNING SIGNS, SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.
4. MOUNT ALL PORTABLE TRAFFIC CONTROL SIGNS AT A MINIMUM HEIGHT OF 5 FEET, MEASURED FROM THE BOTTOM OF THE SIGN, ABOVE THE EDGE OF PAVEMENT.
5. THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIRABLE) DISTANCE TO EXISTING SIGNS.
6. SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

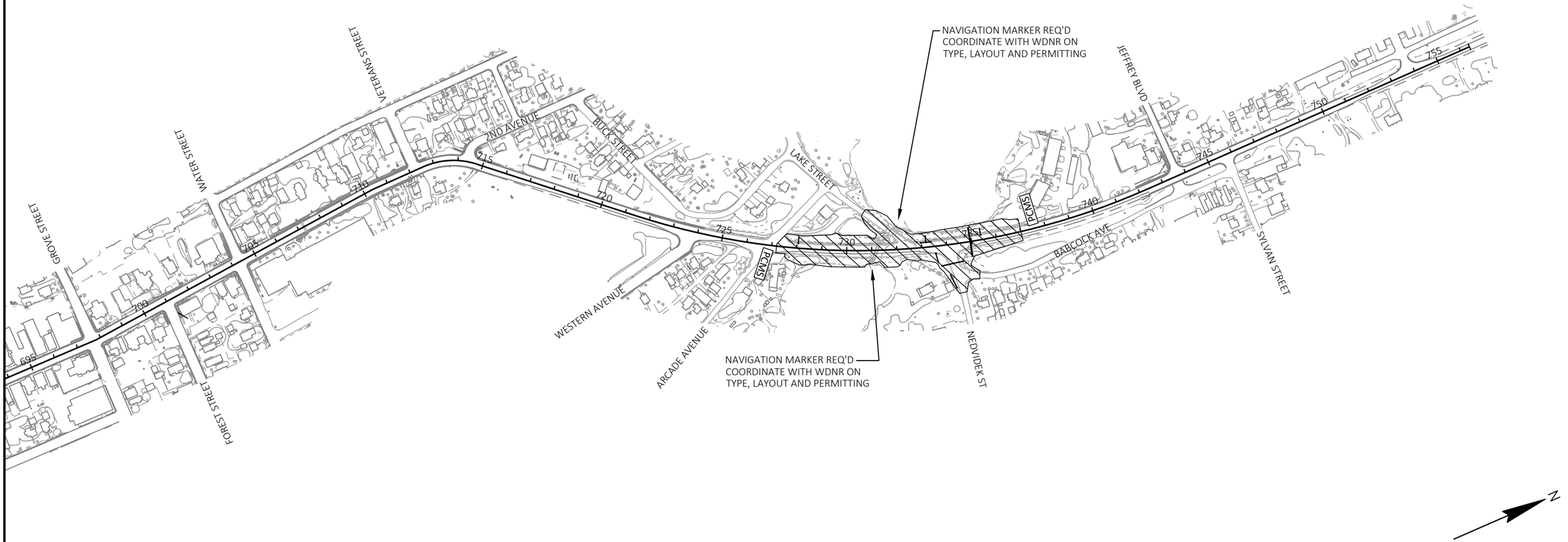
LEGEND

- TYPE III BARRICADE WITHOUT, WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- WORK ZONE
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN

USH 63 PCMS MESSAGE:

FRAME A	FRAME B
BRIDGE CLOSED BEGINS	XXXX/DAY XX/XX

(IN PLACE A MINIMUM OF 7 CALENDAR DAYS PRIOR TO EXTENDED ROAD CLOSURE)



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TRAFFIC CONTROL - OVERVIEW	SHEET 22	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\025100_TC_OVERVIEW.DWG
LAYOUT NAME - OVERVIEW
PLOT DATE : 12/15/2025 8:00 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:400 FT

2

TRAFFIC CONTROL STAGING NOTES

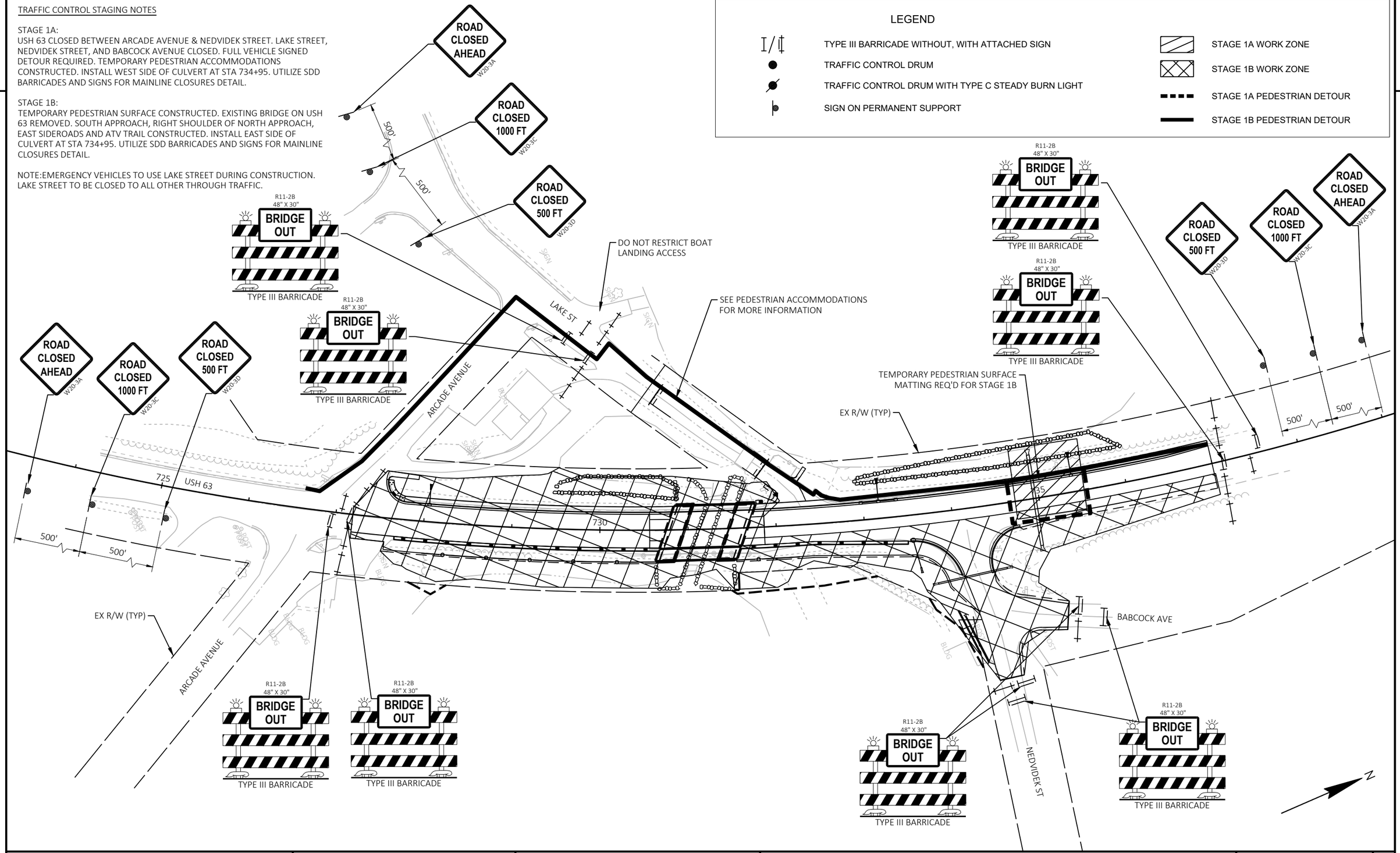
STAGE 1A:
USH 63 CLOSED BETWEEN ARCADE AVENUE & NEDVIDEK STREET. LAKE STREET, NEDVIDEK STREET, AND BABCOCK AVENUE CLOSED. FULL VEHICLE SIGNED DETOUR REQUIRED. TEMPORARY PEDESTRIAN ACCOMMODATIONS CONSTRUCTED. INSTALL WEST SIDE OF CULVERT AT STA 734+95. UTILIZE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL.

STAGE 1B:
TEMPORARY PEDESTRIAN SURFACE CONSTRUCTED. EXISTING BRIDGE ON USH 63 REMOVED. SOUTH APPROACH, RIGHT SHOULDER OF NORTH APPROACH, EAST SIDEROADS AND ATV TRAIL CONSTRUCTED. INSTALL EAST SIDE OF CULVERT AT STA 734+95. UTILIZE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL.

NOTE:EMERGENCY VEHICLES TO USE LAKE STREET DURING CONSTRUCTION. LAKE STREET TO BE CLOSED TO ALL OTHER THROUGH TRAFFIC.

LEGEND

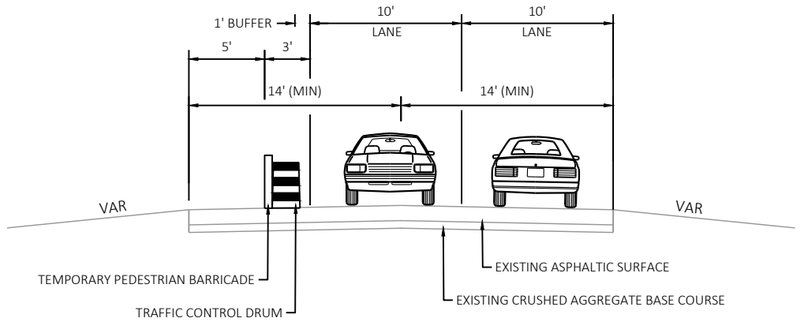
- TYPE III BARRICADE WITHOUT, WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- STAGE 1A WORK ZONE
- STAGE 1B WORK ZONE
- STAGE 1A PEDESTRIAN DETOUR
- STAGE 1B PEDESTRIAN DETOUR



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TRAFFIC CONTROL STAGE 1	SHEET 23	E

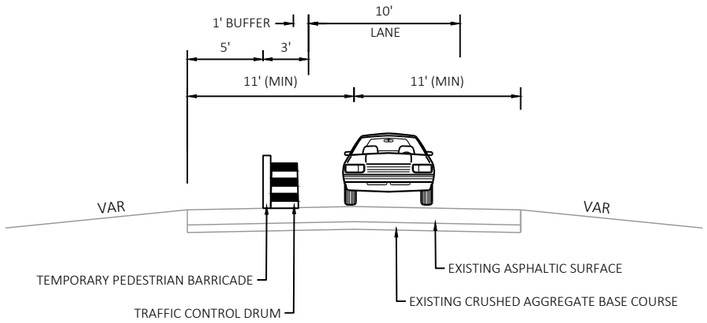
FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\025100_TC.DWG
LAYOUT NAME - TCO 1
PLOT DATE : 12/15/2025 8:00 AM
PLOT BY : DEAN STODOLA
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



TRAFFIC CONTROL TYPICAL SECTION

ARCADE AVENUE



TRAFFIC CONTROL TYPICAL SECTION

LAKE STREET

NOTE: ONLY EMERGENCY VEHICLES TO USE LAKE STREET DURING CONSTRUCTION. LAKE STREET TO BE CLOSED TO ALL OTHER THROUGH TRAFFIC.

2

2

PLACE TEMPORARY PEDESTRIAN SURFACE MATTING FOLLOWING PIPE INSTALLATION

M4-60R
30"X24"

M4-60L
30"X24"

N

USH 63

734+00

735+00

736+00

15'
BUFFER

50'
BUFFER

6' (TYP)

5' DESIRABLE

4' MIN

5' (TYP)

NEDVIDEK ST

LEGEND

TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH

TEMPORARY PEDESTRIAN BARRICADE

TRAFFIC CONTROL DRUM

SIGN ON TEMPORARY SUPPORT

TEMPORARY PEDESTRIAN CURB RAMP

TEMPORARY PEDESTRIAN SURFACE MATTING

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

WORK ZONE

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TRAFFIC CONTROL STAGE 1A - PEDESTRIAN ACCOMMODATION	SHEET 25	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\025100_TC-PEDS1A.DWG
LAYOUT NAME - 1A

PLOT DATE : 12/15/2025 8:01 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

WO11-2
48"X48"

WO16-7L
48"X24"

DO NOT RESTRICT
BOAT LANDING ACCESS

6' (TYP)

4' (MIN)
5' (DESIRABLE)

10' (MIN)

25'

ARCADE AVE

LAKE ST

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

DETOUR
30"X24"
M4-9BL

5' (TYP)

M4-60R
30"X24"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

DETOUR
M4-9BR

USH 63

727+00
728+00
729+00
730+00
731+00
732+00
733+00

LEGEND

- TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH
- TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
- TEMPORARY PEDESTRIAN BARRICADE
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PEDESTRIAN CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
- WORK ZONE
- DIRECTION OF TRAFFIC

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TRAFFIC CONTROL STAGE 1B - PEDESTRIAN ACCOMMODATION	SHEET 26	E

2

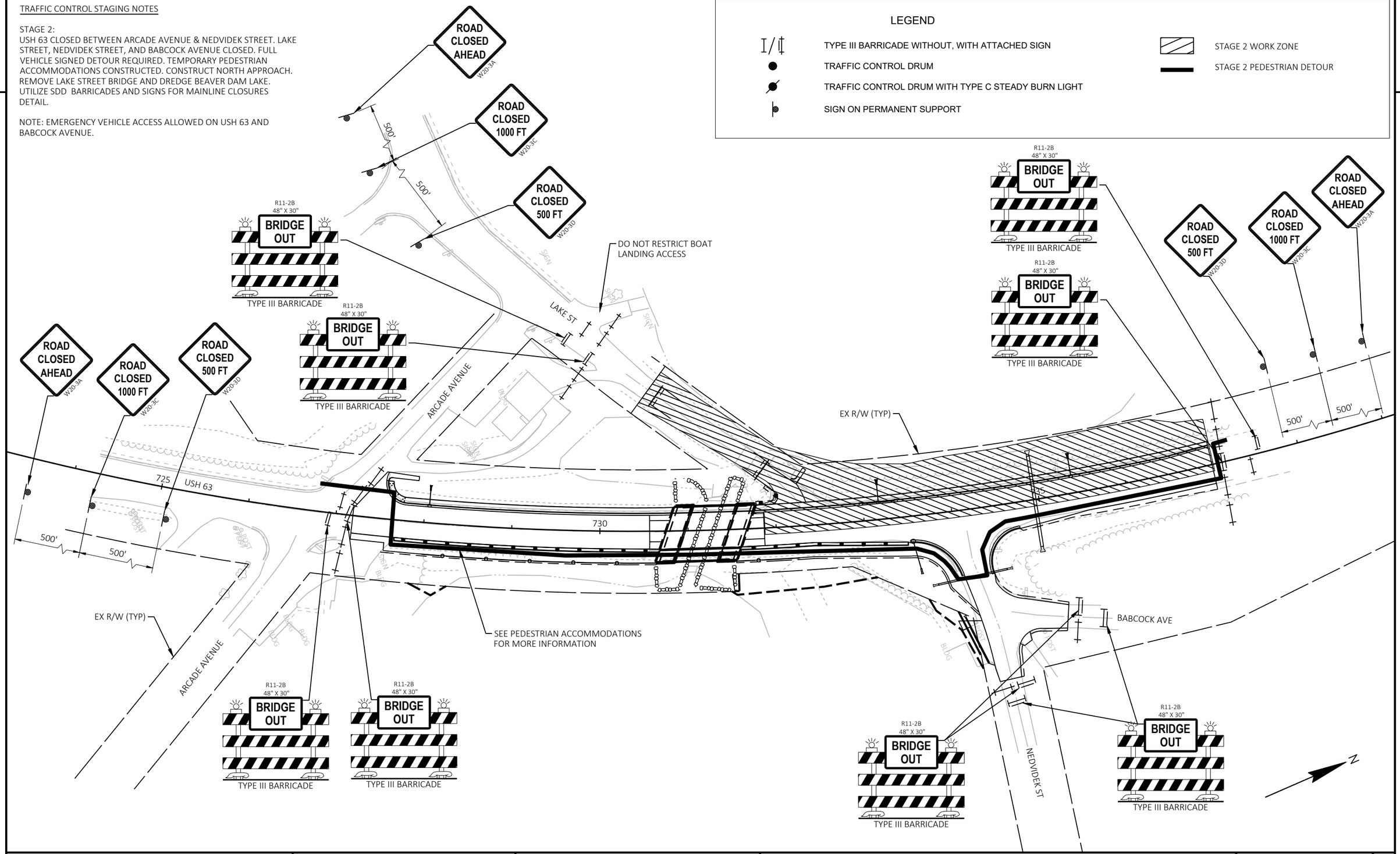
TRAFFIC CONTROL STAGING NOTES

STAGE 2:
USH 63 CLOSED BETWEEN ARCADE AVENUE & NEDVIDEK STREET. LAKE STREET, NEDVIDEK STREET, AND BABCOCK AVENUE CLOSED. FULL VEHICLE SIGNED DETOUR REQUIRED. TEMPORARY PEDESTRIAN ACCOMMODATIONS CONSTRUCTED. CONSTRUCT NORTH APPROACH. REMOVE LAKE STREET BRIDGE AND DREDGE BEAVER DAM LAKE. UTILIZE SDD BARRICADES AND SIGNS FOR MAINLINE CLOSURES DETAIL.

NOTE: EMERGENCY VEHICLE ACCESS ALLOWED ON USH 63 AND BABCOCK AVENUE.

LEGEND

- TYPE III BARRICADE WITHOUT, WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- SIGN ON PERMANENT SUPPORT
- STAGE 2 WORK ZONE
- STAGE 2 PEDESTRIAN DETOUR



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TRAFFIC CONTROL STAGE 2	SHEET 27	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\025100_TC.DWG
LAYOUT NAME - TCO 2
PLOT DATE : 12/15/2025 8:02 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

ARCADE AVE

USH 63

727+00

728+00

729+00

USH 63

SIDEWALK CLOSED AHEAD
DETOUR
M4-9BR
30"X24"

R9-9A
30"X18"

SIDEWALK CLOSED
R9-9
24"X12"

5'
(TYP)

6' (TYP)

NOTE: HMA ATV TRAIL TO BE CONSTRUCTED IN STAGE 1.
PEDESTRIANS TO USE ATV TRAIL IN STAGE 2.

SIGN

BLDG

N

LEGEND

- TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH
- TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
- TEMPORARY PEDESTRIAN BARRICADE
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY PEDESTRIAN CURB RAMP
- TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
- WORK ZONE
- DIRECTION OF TRAFFIC

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TRAFFIC CONTROL STAGE 2 - PEDESTRIAN ACCOMMODATION	SHEET 28	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\025100_TC-PEDS2.DWG
LAYOUT NAME - 2_01

PLOT DATE : 12/15/2025 8:02 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

2

N

732+00

733+00

734+00

USH 63

6' (TYP)

5' (TYP)

NEDVIDEK ST

LEGEND

TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH

TEMPORARY PEDESTRIAN BARRICADE

TRAFFIC CONTROL DRUM

SIGN ON TEMPORARY SUPPORT

TEMPORARY PEDESTRIAN CURB RAMP

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

WORK ZONE

DIRECTION OF TRAFFIC

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TRAFFIC CONTROL STAGE 2 - PEDESTRIAN ACCOMMODATION	SHEET 29	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\025100_TC-PEDS2.DWG
LAYOUT NAME - 2_02

PLOT DATE : 12/15/2025 8:02 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

N

R9-9
24"X12"
SIDEWALK CLOSED
DETOUR
M4-9BL
30"X24"

6' (TYP)

USH 63

735+00

736+00

737+00

738+00

17'

6' (TYP)

5' (TYP)

LEGEND

TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH

TEMPORARY PEDESTRIAN BARRICADE

TRAFFIC CONTROL DRUM

SIGN ON TEMPORARY SUPPORT

TEMPORARY PEDESTRIAN CURB RAMP

TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD

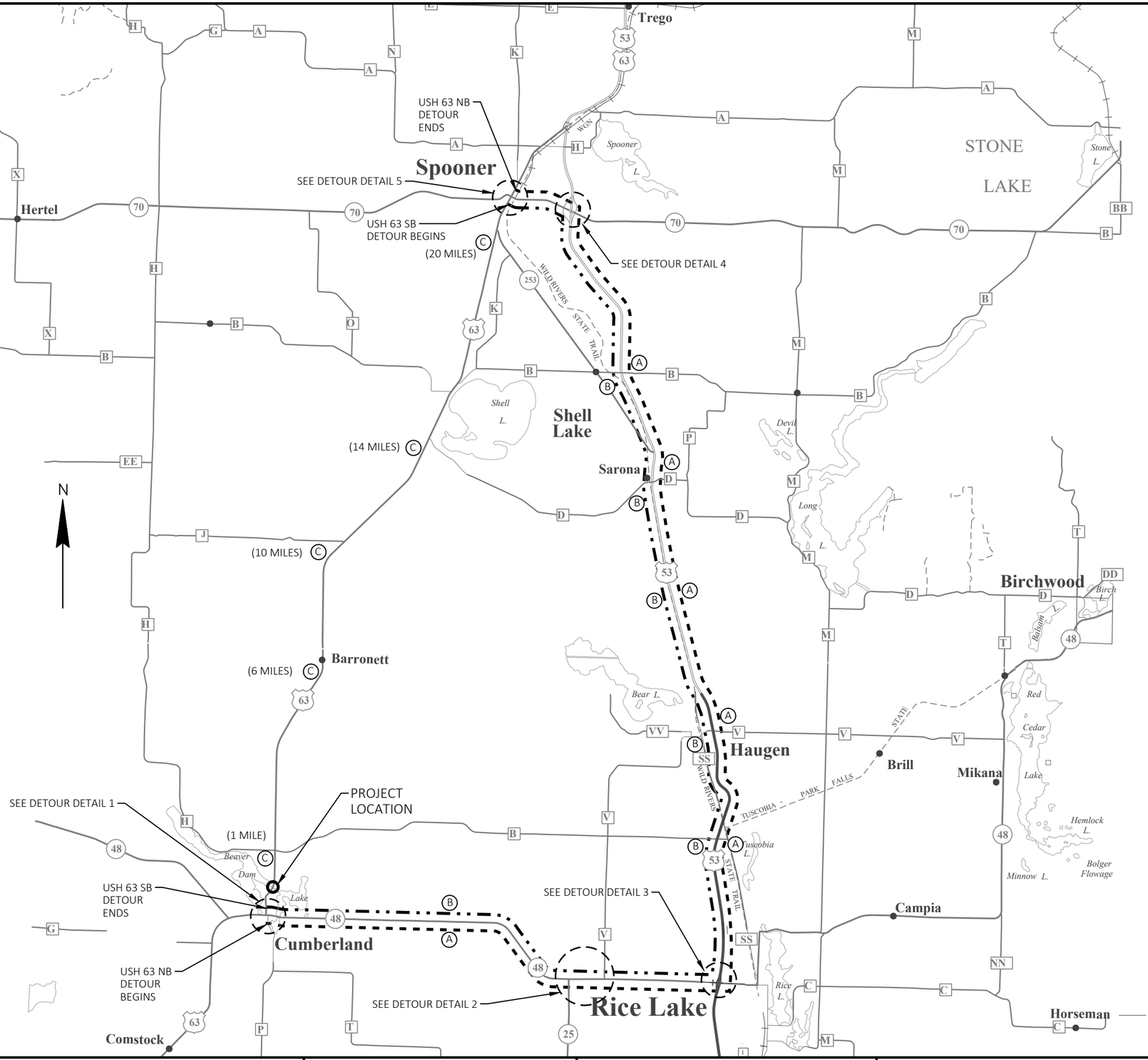
WORK ZONE

DIRECTION OF TRAFFIC

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	TRAFFIC CONTROL STAGE 2 - PEDESTRIAN ACCOMMODATION	SHEET 30	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\025100_TC-PEDS2.DWG
LAYOUT NAME - 2_03

PLOT DATE : 12/15/2025 8:02 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : ##########



GENERAL DETAIL NOTES:

DETAILS AND LOCATION OF TRAFFIC CONTROL DEVICES NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND WISCONSIN SUPPLEMENT TO THE MUTCD.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. INSTALL DETOUR ASSEMBLIES ADJACENT TO EXISTING ROUTE MAKERS WHEN POSSIBLE.

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. USE LARGE SIZE M-SERIES ON USH 53.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

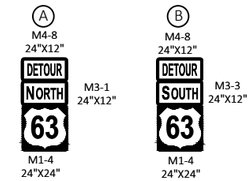
PLACE DETOUR ASSEMBLIES ON THE RIGHT SHOULDER AND MEDIAN SHOULDER ON USH 53 EXCEPT FOR ANY ASSEMBLIES WITH THE MO6-2R ARROW.

LEGEND

NB USH 63

SB USH 63

REASSURANCE SIGNAGE

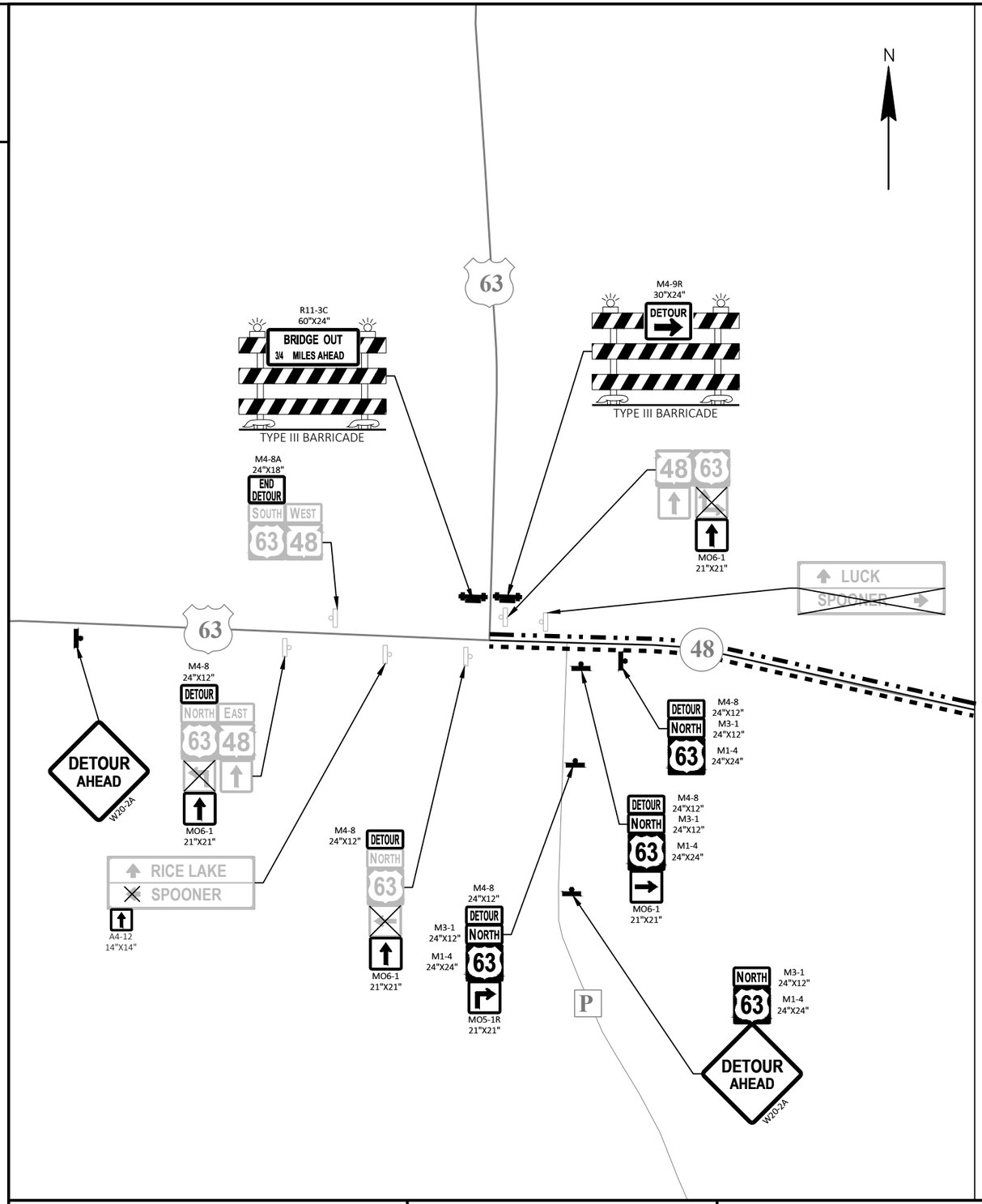


C (DISTANCE)

TYPE III BARRICADE

NOTE:
ADDITIONAL REASSURANCE SIGNS SHOWN ON DETAIL SHEETS.

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	DETOUR OVERVIEW	SHEET 31	E



GENERAL DETAIL NOTES:

DETAILS AND LOCATION OF TRAFFIC CONTROL DEVICES NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND WISCONSIN SUPPLEMENT TO THE MUTCD.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. INSTALL DETOUR ASSEMBLIES ADJACENT TO EXISTING ROUTE MAKERS WHEN POSSIBLE.

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. USE LARGE SIZE M-SERIES ON USH 53.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

* PLACE DETOUR ASSEMBLIES ON THE RIGHT SHOULDER AND MEDIAN SHOULDER ON USH 53 EXCEPT FOR ANY ASSEMBLIES WITH THE MO6-2.

LEGEND

- NB USH 63
- SB USH 63
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- COVER SIGN
- TYPE III BARRICADE WITH SIGNAGE AND LIGHTS

2

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	DETOUR DETAIL 1	SHEET 32	E

GENERAL DETAIL NOTES:

DETAILS AND LOCATION OF TRAFFIC CONTROL DEVICES NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND WISCONSIN SUPPLEMENT TO THE MUTCD.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. INSTALL DETOUR ASSEMBLIES ADJACENT TO EXISTING ROUTE MAKERS WHEN POSSIBLE.

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. USE LARGE SIZE M-SERIES ON USH 53.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

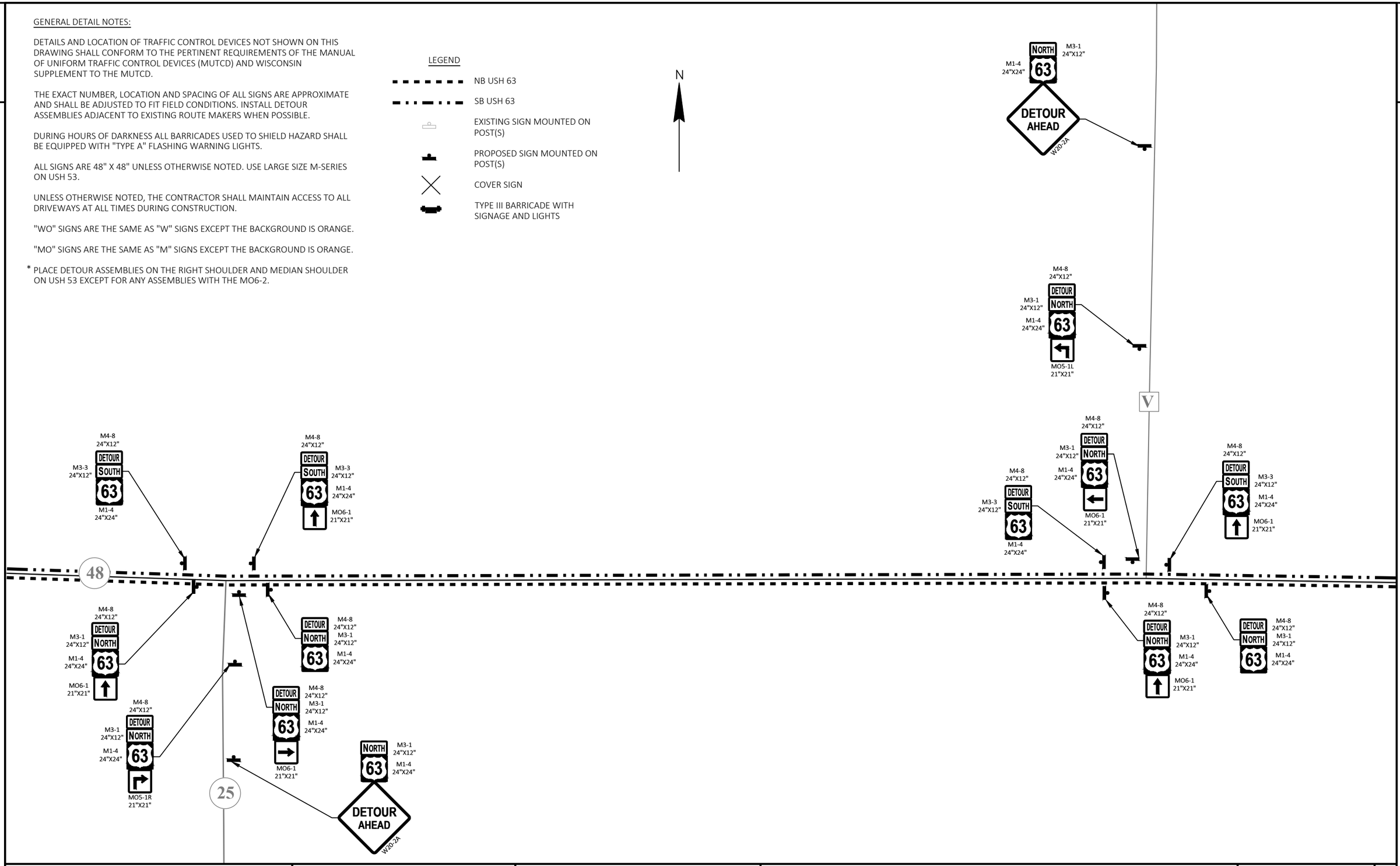
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

* PLACE DETOUR ASSEMBLIES ON THE RIGHT SHOULDER AND MEDIAN SHOULDER ON USH 53 EXCEPT FOR ANY ASSEMBLIES WITH THE MO6-2.

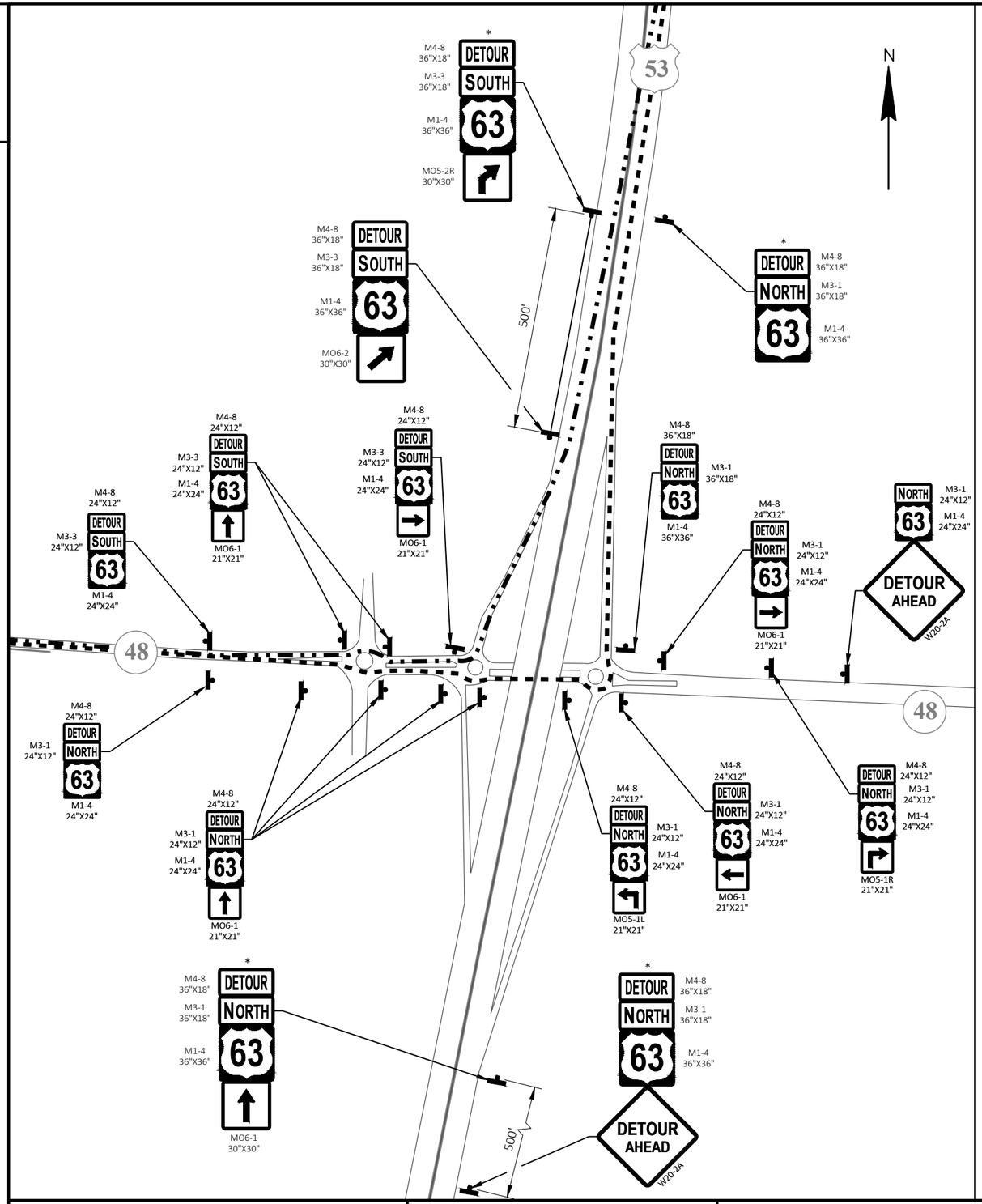
LEGEND

- NB USH 63
- SB USH 63
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- COVER SIGN
- TYPE III BARRICADE WITH SIGNAGE AND LIGHTS

N



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	DETOUR DETAIL 2	SHEET 33	E



GENERAL DETAIL NOTES:

DETAILS AND LOCATION OF TRAFFIC CONTROL DEVICES NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND WISCONSIN SUPPLEMENT TO THE MUTCD.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. INSTALL DETOUR ASSEMBLIES ADJACENT TO EXISTING ROUTE MAKERS WHEN POSSIBLE.

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. USE LARGE SIZE M-SERIES ON USH 53.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

* PLACE DETOUR ASSEMBLIES ON THE RIGHT SHOULDER AND MEDIAN SHOULDER ON USH 53 EXCEPT FOR ANY ASSEMBLIES WITH THE MO6-2.

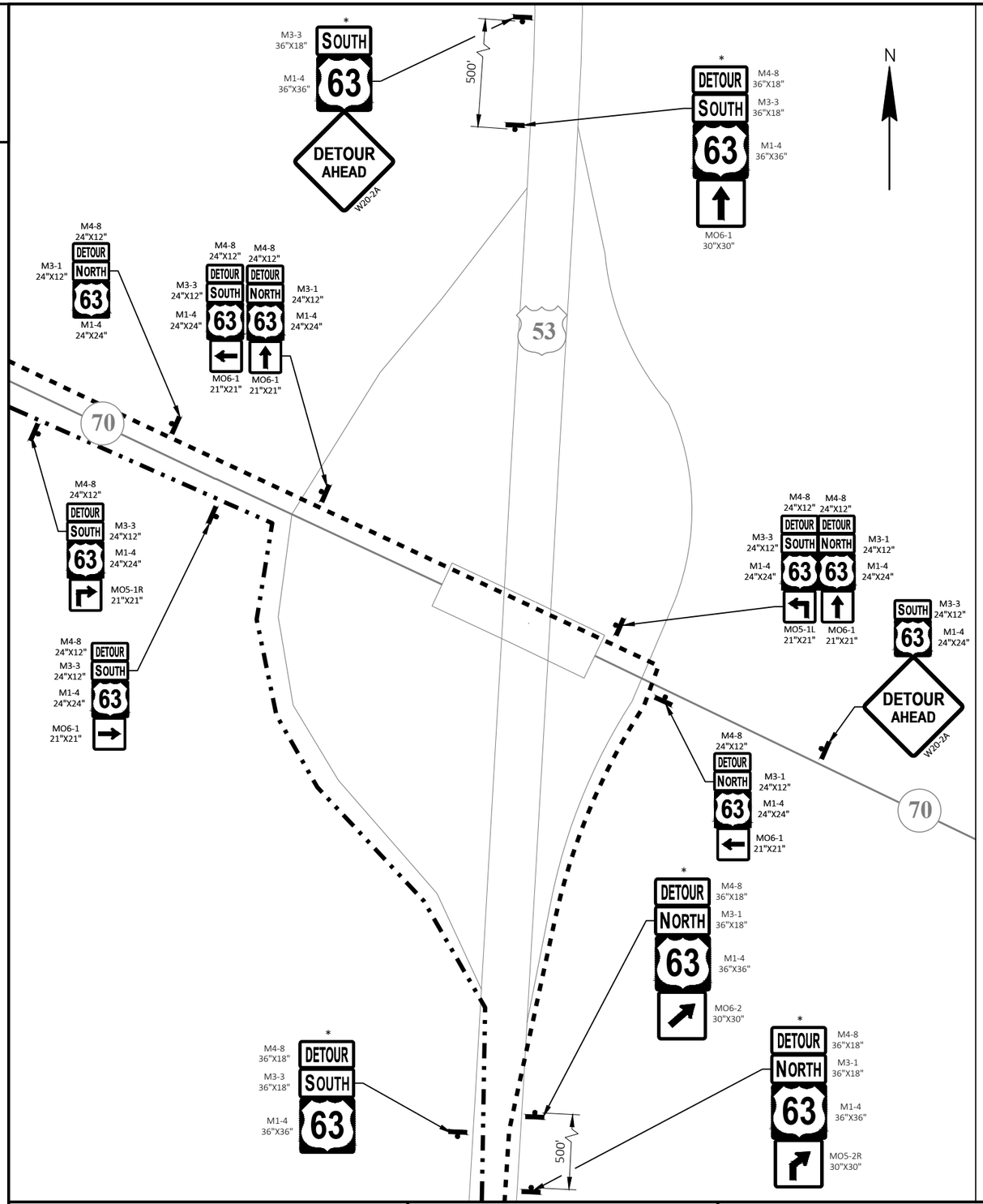
LEGEND

- NB USH 63
- SB USH 63
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- COVER SIGN

2

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	DETOUR DETAIL 3	SHEET 34	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - 03
PLOT DATE : 12/15/2025 8:03 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:600 FT
WISDOT/CADDS SHEET 42



GENERAL DETAIL NOTES:

DETAILS AND LOCATION OF TRAFFIC CONTROL DEVICES NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND WISCONSIN SUPPLEMENT TO THE MUTCD.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. INSTALL DETOUR ASSEMBLIES ADJACENT TO EXISTING ROUTE MAKERS WHEN POSSIBLE.

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. USE LARGE SIZE M-SERIES ON USH 53.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

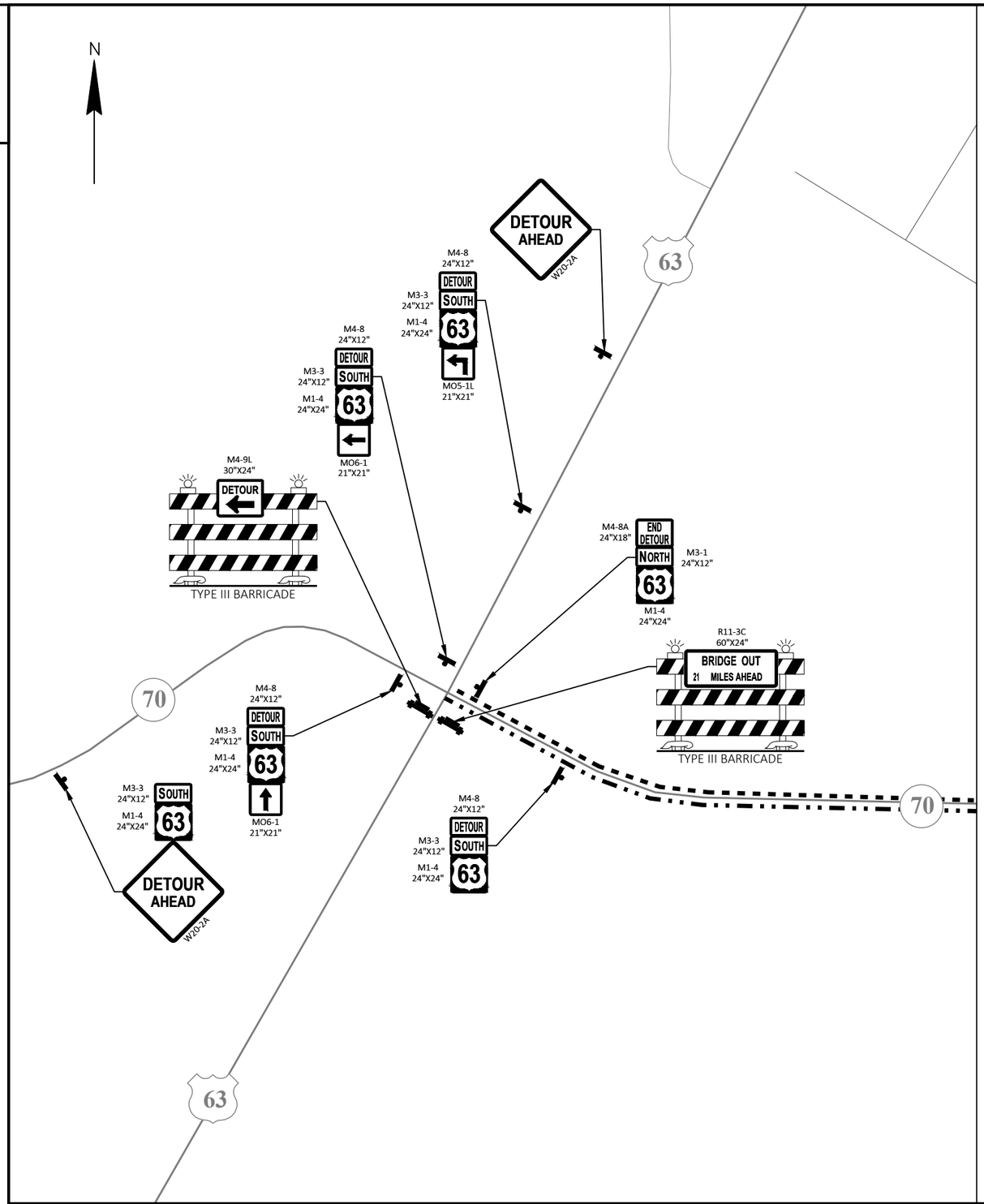
* PLACE DETOUR ASSEMBLIES ON THE RIGHT SHOULDER AND MEDIAN SHOULDER ON USH 53 EXCEPT FOR ANY ASSEMBLIES WITH THE MO6-2.

LEGEND

- NB USH 63
- SB USH 63
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- COVER SIGN

2

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	DETOUR DETAIL 4	SHEET 35	E



GENERAL DETAIL NOTES:

DETAILS AND LOCATION OF TRAFFIC CONTROL DEVICES NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND WISCONSIN SUPPLEMENT TO THE MUTCD.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS ARE APPROXIMATE AND SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. INSTALL DETOUR ASSEMBLIES ADJACENT TO EXISTING ROUTE MAKERS WHEN POSSIBLE.

DURING HOURS OF DARKNESS ALL BARRICADES USED TO SHIELD HAZARD SHALL BE EQUIPPED WITH "TYPE A" FLASHING WARNING LIGHTS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. USE LARGE SIZE M-SERIES ON USH 53.

UNLESS OTHERWISE NOTED, THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES DURING CONSTRUCTION.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

* PLACE DETOUR ASSEMBLIES ON THE RIGHT SHOULDER AND MEDIAN SHOULDER ON USH 53 EXCEPT FOR ANY ASSEMBLIES WITH THE MO6-2.

LEGEND

- NB USH 63
- SB USH 63
- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- COVER SIGN

2

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	DETOUR DETAIL 5	SHEET 36	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - 05
PLOT DATE : 12/15/2025 8:03 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

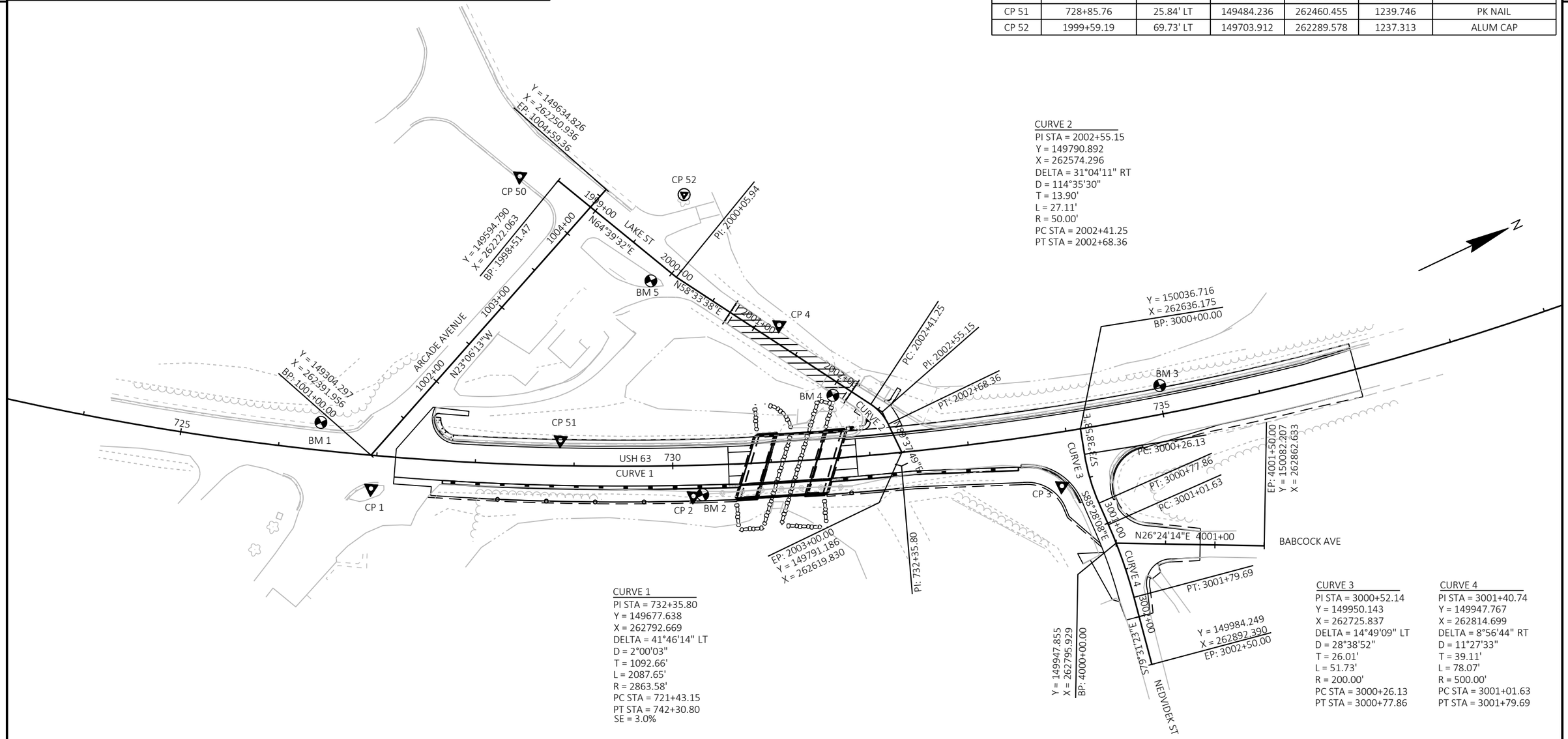
2

BENCH MARK TABLE

POINT	STATION	OFFSET	Y COORD	X COORD	ELEV	DESCRIPTION
BM 1	726+40.16	28.09' LT	149272.818	262340.267	1241.860	3/8-INCH SPK IN PP
BM 2	730+29.46	29.98' RT	149590.591	262572.158	1243.000	PK NAIL IN BG POST
BM 3	735+02.06	28.75' LT	150056.038	262670.759	1241.810	3/8-INCH SPK IN PP
BM 4	731+67.19	63.64' LT	149753.818	262537.727	1240.480	ALUM CAP
BM 5	1999+88.39	19.17' RT	149636.067	262354.012	1241.445	R/R SPK IN PP

CONTROL POINT TABLE

POINT	STATION	OFFSET	Y COORD	X COORD	ELEV	DESCRIPTION
CP 1	726+97.03	33.57' RT	149581.573	262422.415	142.030	PK NAIL
CP 2	730+20.18	31.07L RT	149581.573	262569.353	1239.715	PK NAIL
CP 3	733+87.46	54.24' RT	149923.002	262720.078	1240.760	PK NAIL
CP 4	2001+19.58	16.46' LT	149734.227	262450.045	1237.800	PK NAIL
CP 50	1004+11.42	74.23' LT	149561.606	262201.471	1247.350	PK NAIL
CP 51	728+85.76	25.84' LT	149484.236	262460.455	1239.746	PK NAIL
CP 52	1999+59.19	69.73' LT	149703.912	262289.578	1237.313	ALUM CAP



CURVE 1
PI STA = 732+35.80
Y = 149677.638
X = 262792.669
DELTA = 41°46'14" LT
D = 2°00'03"
T = 1092.66'
L = 2087.65'
R = 2863.58'
PC STA = 721+43.15
PT STA = 742+30.80
SE = 3.0%

CURVE 2
PI STA = 2002+55.15
Y = 149790.892
X = 262574.296
DELTA = 31°04'11" RT
D = 114°35'30"
T = 13.90'
L = 27.11'
R = 50.00'
PC STA = 2002+41.25
PT STA = 2002+68.36

CURVE 3
PI STA = 3000+52.14
Y = 149950.143
X = 262725.837
DELTA = 14°49'09" LT
D = 28°38'52"
T = 26.01'
L = 51.73'
R = 200.00'
PC STA = 3000+26.13
PT STA = 3000+77.86

CURVE 4
PI STA = 3001+40.74
Y = 149947.767
X = 262814.699
DELTA = 8°56'44" RT
D = 11°27'33"
T = 39.11'
L = 78.07'
R = 500.00'
PC STA = 3001+01.63
PT STA = 3001+79.69

Estimate Of Quantities

1550-04-79

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	6.000	6.000
0004	201.0205	Grubbing	STA	6.000	6.000
0006	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0008	203.0220	Removing Structure (structure) 02. C-3-1459	EACH	1.000	1.000
0010	203.0260	Removing Structure Over Waterway Minimal Debris (structure) 01. V-3-066	EACH	1.000	1.000
0012	204.0100	Removing Concrete Pavement	SY	2,180.000	2,180.000
0014	204.0110	Removing Asphaltic Surface	SY	4,430.000	4,430.000
0016	204.0150	Removing Curb & Gutter	LF	1,532.000	1,532.000
0018	204.0155	Removing Concrete Sidewalk	SY	418.000	418.000
0020	204.0165	Removing Guardrail	LF	155.000	155.000
0022	204.0220	Removing Inlets	EACH	3.000	3.000
0024	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	66.000	66.000
0026	204.0245	Removing Storm Sewer (size) 02. 24-Inch	LF	114.000	114.000
0028	204.9060.S	Removing (item description) 01. Removing Watermain Valve Box	EACH	5.000	5.000
0030	204.9060.S	Removing (item description) 02. Removing Geodetic Survey Control Station	EACH	1.000	1.000
0032	204.9090.S	Removing (item description) 01. Removing Watermain 8-Inch	LF	150.000	150.000
0034	205.0100	Excavation Common	CY	4,040.000	4,040.000
0036	206.1001	Excavation for Structures Bridges (structure) 01. B-03-0214	EACH	1.000	1.000
0038	209.2100	Backfill Granular Grade 2	CY	8,222.000	8,222.000
0040	210.1500	Backfill Structure Type A	TON	600.000	600.000
0042	213.0100	Finishing Roadway (project) 01. 1550-04-79	EACH	1.000	1.000
0044	305.0110	Base Aggregate Dense 3/4-Inch	TON	115.000	115.000
0046	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	5,269.000	5,269.000
0048	415.0080	Concrete Pavement 8-Inch	SY	61.000	61.000
0050	415.0410	Concrete Pavement Approach Slab	SY	103.000	103.000
0052	455.0605	Tack Coat	GAL	944.000	944.000
0054	460.2000	Incentive Density HMA Pavement	DOL	990.000	990.000
0056	460.6444	HMA Pavement 4 MT 58-34 H	TON	1,535.000	1,535.000
0058	465.0105	Asphaltic Surface	TON	356.000	356.000
0060	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	35.000	35.000
0062	465.0125	Asphaltic Surface Temporary	TON	12.000	12.000
0064	465.0315	Asphaltic Flumes	SY	33.000	33.000
0066	502.0100	Concrete Masonry Bridges	CY	669.000	669.000
0068	502.3200	Protective Surface Treatment	SY	574.000	574.000
0070	502.3210	Pigmented Surface Sealer	SY	156.000	156.000
0072	505.0400	Bar Steel Reinforcement HS Structures	LB	11,490.000	11,490.000
0074	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	99,440.000	99,440.000
0076	505.0800.S	Bar Steel Reinforcement HS Stainless Structures	LB	580.000	580.000
0078	509.5100.S	Polymer Overlay	SY	72.000	72.000
0080	513.7031	Railing Steel Type C6	LF	183.000	183.000
0082	516.0500	Rubberized Membrane Waterproofing	SY	34.000	34.000
0084	517.1015.S	Concrete Staining Multi-Color (structure) 01. B-03-0214	SF	360.000	360.000
0086	517.1050.S	Architectural Surface Treatment (structure) 01. B-03-0214	SF	360.000	360.000
0088	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	1.000	1.000
0090	520.1015	Apron Endwalls for Culvert Pipe 15-Inch	EACH	2.000	2.000
0092	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	2.000	2.000
0094	520.1030	Apron Endwalls for Culvert Pipe 30-Inch	EACH	2.000	2.000
0096	520.3315	Culvert Pipe Class III-A 15-Inch	LF	80.000	80.000
0098	520.3330	Culvert Pipe Class III-A 30-Inch	LF	104.000	104.000

1550-04-79

Line	Item	Item Description	Unit	Total	Qty
0100	521.1012	Apron Endwalls for Culvert Pipe Steel 12-Inch	EACH	1.000	1.000
0102	521.2005.S	Surface Drain Pipe Corrugated Metal Slotted (inch) 01. 12-Inch	LF	58.000	58.000
0104	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	1.000	1.000
0106	550.0500	Pile Points	EACH	24.000	24.000
0108	550.2128	Piling CIP Concrete 12 3/4 X 0.50-Inch	LF	2,400.000	2,400.000
0110	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	864.000	864.000
0112	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	144.000	144.000
0114	602.0405	Concrete Sidewalk 4-Inch	SF	5,128.000	5,128.000
0116	602.0810	Concrete Driveway 6-Inch	SY	24.000	24.000
0118	606.0200	Riprap Medium	CY	390.000	390.000
0120	606.0300	Riprap Heavy	CY	498.000	498.000
0122	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	32.000	32.000
0124	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	57.000	57.000
0126	608.3018	Storm Sewer Pipe Class III-A 18-Inch	LF	41.000	41.000
0128	611.0613	Inlet Covers Type DW	EACH	1.000	1.000
0130	611.0624	Inlet Covers Type H	EACH	2.000	2.000
0132	611.0639	Inlet Covers Type H-S	EACH	3.000	3.000
0134	611.3004	Inlets 4-FT Diameter	EACH	1.000	1.000
0136	611.3230	Inlets 2x3-FT	EACH	5.000	5.000
0138	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	226.000	226.000
0140	614.0115	Anchorages for Steel Plate Beam Guard Type 2	EACH	5.000	5.000
0142	614.0150	Anchor Assemblies for Steel Plate Beam Guard	EACH	3.000	3.000
0144	614.0200	Steel Thrie Beam Structure Approach	LF	20.600	20.600
0146	614.0305	Steel Plate Beam Guard Class A	LF	50.000	50.000
0148	614.0345	Steel Plate Beam Guard Short Radius	LF	32.200	32.200
0150	614.0390	Steel Plate Beam Guard Short Radius Terminal	EACH	1.000	1.000
0152	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	193.000	193.000
0154	614.2300	MGS Guardrail 3	LF	312.500	312.500
0156	614.2500	MGS Thrie Beam Transition	LF	78.800	78.800
0158	614.2610	MGS Guardrail Terminal EAT	EACH	2.000	2.000
0160	616.0206	Fence Chain Link 6-FT	LF	340.000	340.000
0162	618.0100	Maintenance and Repair of Haul Roads (project) 01. 1550-04-79	EACH	1.000	1.000
0164	619.1000	Mobilization	EACH	1.000	1.000
0166	624.0100	Water	MGAL	50.000	50.000
0168	625.0100	Topsoil	SY	6,160.000	6,160.000
0170	628.1504	Silt Fence	LF	690.000	690.000
0172	628.1520	Silt Fence Maintenance	LF	690.000	690.000
0174	628.1550	Silt Screen	LF	1,050.000	1,050.000
0176	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0178	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0180	628.2008	Erosion Mat Urban Class I Type B	SY	3,990.000	3,990.000
0182	628.2027	Erosion Mat Class II Type C	SY	2,200.000	2,200.000
0184	628.6005	Turbidity Barriers	SY	600.000	600.000
0186	628.7005	Inlet Protection Type A	EACH	10.000	10.000
0188	628.7015	Inlet Protection Type C	EACH	8.000	8.000
0190	628.7504	Temporary Ditch Checks	LF	75.000	75.000
0192	628.7555	Culvert Pipe Checks	EACH	10.000	10.000
0194	629.0205	Fertilizer Type A	CWT	4.000	4.000
0196	630.0140	Seeding Mixture No. 40	LB	168.000	168.000

Estimate Of Quantities

1550-04-79

Line	Item	Item Description	Unit	Total	Qty
0198	630.0200	Seeding Temporary	LB	168.000	168.000
0200	630.0500	Seed Water	MGAL	175.000	175.000
0202	633.5200	Markers Culvert End	EACH	8.000	8.000
0204	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	6.000	6.000
0206	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	1.000	1.000
0208	637.2220	Signs Type II Reflective SH	SF	13.500	13.500
0210	637.2230	Signs Type II Reflective F	SF	3.000	3.000
0212	638.2102	Moving Signs Type II	EACH	8.000	8.000
0214	638.2602	Removing Signs Type II	EACH	7.000	7.000
0216	638.3000	Removing Small Sign Supports	EACH	6.000	6.000
0218	642.5001	Field Office Type B	EACH	1.000	1.000
0220	643.0300	Traffic Control Drums	DAY	7,898.000	7,898.000
0222	643.0420	Traffic Control Barricades Type III	DAY	4,464.000	4,464.000
0224	643.0705	Traffic Control Warning Lights Type A	DAY	4,712.000	4,712.000
0226	643.0900	Traffic Control Signs	DAY	42,944.000	42,944.000
0228	643.0920	Traffic Control Covering Signs Type II	EACH	5.000	5.000
0230	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0232	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	820.000	820.000
0234	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	594.000	594.000
0236	643.5000	Traffic Control	EACH	1.000	1.000
0238	644.1440	Temporary Pedestrian Surface Matting	SF	580.000	580.000
0240	644.1601	Temporary Pedestrian Curb Ramp	DAY	36.000	36.000
0242	644.1605	Temporary Pedestrian Detectable Warning Field	SF	140.000	140.000
0244	644.1810	Temporary Pedestrian Barricade	LF	1,930.000	1,930.000
0246	645.0111	Geotextile Type DF Schedule A	SY	134.000	134.000
0248	645.0120	Geotextile Type HR	SY	1,654.000	1,654.000
0250	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	3,071.000	3,071.000
0252	646.6120	Marking Stop Line Epoxy 18-Inch	LF	23.000	23.000
0254	650.4000	Construction Staking Storm Sewer	EACH	10.000	10.000
0256	650.4500	Construction Staking Subgrade	LF	1,131.000	1,131.000
0258	650.5000	Construction Staking Base	LF	1,131.000	1,131.000
0260	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,005.000	1,005.000
0262	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0264	650.6501	Construction Staking Structure Layout (structure) 01. B-03-0214	EACH	1.000	1.000
0266	650.9000	Construction Staking Curb Ramps	EACH	1.000	1.000
0268	650.9500	Construction Staking Sidewalk (project) 01. 1550-04-79	EACH	1.000	1.000
0270	650.9911	Construction Staking Supplemental Control (project) 01. 1550-04-79	EACH	1.000	1.000
0272	650.9920	Construction Staking Slope Stakes	LF	1,131.000	1,131.000
0274	690.0150	Sawing Asphalt	LF	334.000	334.000
0276	690.0250	Sawing Concrete	LF	13.000	13.000
0278	715.0502	Incentive Strength Concrete Structures	DOL	4,044.000	4,044.000
0280	SPV.0035	Special 01. Excavation, Hauling, and Disposal of Dredged Sediment	CY	630.000	630.000
0282	SPV.0035	Special 02. Residual Sand Cover	CY	655.000	655.000
0284	SPV.0060	Special 01. Reconstructing Sanitary Manholes	EACH	1.000	1.000
0286	SPV.0060	Special 02. Adjusting Sanitary Manhole Covers	EACH	1.000	1.000
0288	SPV.0090	Special 01. Treated Timber Rub Rail	LF	391.000	391.000
0290	SPV.0090	Special 02. Glare Screen	LF	391.000	391.000
0292	SPV.0195	Special 01. Select Crushed Material For Travel Corridor	TON	47.000	47.000

CLEARING & GRUBBING

STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
USH 63			
728+00 - 729+30	RT	2	2
733+00 - 737+00	LT	4	4
ITEM TOTALS		6	6

REMOVING ASPHALTIC SURFACE

STATION	LOCATION	204.0110 SY	REMARKS
USH 63			
728+70 - 735+70	LT & RT	3772	INCLUDES EXISTING ASPHALT BELOW PROPOSED DATUM SURFACE
LAKE ST			
2002+42 - 2003+00	LT & RT	155	
NEDVIDEK ST			
3000+26 - 3001+20	LT & RT	503	
ITEM TOTAL		4430	

STORM SEWER REMOVALS

STATION	LOCATION	204.0220 REMOVING INLETS EACH	204.0245.01 REMOVING STORM SEWER 12-INCH LF	204.0245.02 REMOVING STORM SEWER 24-INCH LF	REMARKS
USH 63					
731+78	LT	1	28	-	INCLUDES 1 AEW
732+57	LT	1	38	-	INCLUDES 1 AEW
734+97	LT & RT	1	-	114	INCLUDES 2 AEW
ITEM TOTALS		3	66	114	

REMOVING SMALL PIPE CULVERTS

STATION	LOCATION	203.0100 EACH
USH 63		
734+96	LT & RT	1
ITEM TOTALS		1

REMOVING CURB & GUTTER

STATION	LOCATION	204.0150 LF
USH 63		
727+56 - 731+97	LT	461
732+44 - 737+00	LT	457
732+44 - 737+00	LT	457
LAKE ST		
2002+04 - 2002+21	LT	17
2002+49 - 2002+69	LT	20
NEDVIDEK ST		
3000+28 - 3000+65	LT & RT	120
ITEM TOTAL		1532

REMOVING WATERMAIN ITEMS

STATION	LOCATION	204.9060.S.01 REMOVING WATERMAIN VALVE BOX EACH	204.9090.S.01 REMOVING WATERMAIN 8-INCH LF
USH 63			
727+69	RT	1	-
730+70 - 731-45	RT	3	75
730+95 - 731-70	LT	-	75
LAKE ST			
2002+36	RT	1	-
ITEM TOTAL		5	150

REMOVING STRUCTURE OVER WATERWAY MINIMAL DEBRIS 01. V-3-066

STATION	LOCATION	203.0260 EACH
LAKE ST		
2001+96	LT & RT	1
ITEM TOTALS		1

REMOVING CONCRETE SIDEWALK

STATION	LOCATION	204.0155 SY
USH 63		
727+56 - 731+95	LT	205
732+44 - 737+00	LT	213
ITEM TOTAL		418

REMOVING CONCRETE PAVEMENT

STATION	LOCATION	204.0100 SY
USH 63		
727+19 - 737+00	LT & RT	2180
ITEM TOTAL		2180

REMOVING GUARDRAIL

STATION	LOCATION	204.0165 LF
USH 63		
731+80 - 731+27	LT & RT	155
ITEM TOTAL		155

REMOVING GEODETIC SURVEY CONTROL STATION

STATION	LOCATION	204.9060.S.02 EACH
LAKE ST		
2002+04	RT	1
ITEM TOTAL		1

3

3

EARTHWORK SUMMARY (PROJECT ID 1550-04-79)

CATEGORY 0010

SUBSTAGE	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	SALVAGED / UNUSABLE PAVEMENT MATERIAL (3)	AVAILABLE MATERIAL (4)	UNEXPANDED FILL	EXPANDED FILL (5) FACTOR 1.25	MASS ORDINATE +/- (6)	WASTE	209.2100 BACKFILL GRANULAR GRADE 2 (10)	COMMENT:
1	727+19 - 730+74	USH 63	335	637	-302	2,279	2,849	-3,151	0	3,151	
1 & 2	731+68 - 737+00	USH 63	364	957	-593	2,922	3,652	-4,245	0	4,245	
1	3000+71 - 3002+00	NEDVIDEK STREET	98	52	47	125	156	-109	0	109	
1	4000+35 - 4000+85	BABCOCK AVENUE	33	15	19	4	5	14	14	0	
2	2000+76 - 2002+13	LAKE STREET	1,831	30	1,801	6	8	1,793	1,793	0	(9)
1 &2	9+30 - 10+75	DREDGING ALIGNMENT	160	53	107	4	5	102	102	0	
1		NEDVIDEK INTERSECTION	19	35	-16	475	594	-610	0	610	(7)
1		BABCOCK INTERSECTION	24	18	7	27	34	-27	0	27	(7)
1		ARCADE AVE INTERSECTION	23	10	13	1	1	12	12	0	(7)
2		LAKE STREET DRIVEWAY	18	20	-2	62	78	-80	0	80	(7)
1	727+19 - 730+74	USH 63	425	0	0	0	0	0	0	0	(8)
1 & 2	731+68 - 737+00	USH 63	710	0	0	0	0	0	0	0	(8)
		PROJECT TOTALS	4,040					-6,301	1,921	8,222	

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT . ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(5) EXPANDED FILL FACTOR = 1.25

DEPENDING ON SELECTIONS:

(6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE STAGE. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE STAGE. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE STAGE.

(7) EARTHWORK VOLUMNS CALCULATED BY SURFACE TO SURFACE COMPARISION

(8) SALVAGED/USUSABLE PAVEMENT MATERIAL UNDER FILL

(9) LAKE STREET REMOVAL MATERIAL CONSIDERED WASTE DUE TO LATE TIMING OF WORK

(10) ALL PROJECT BORROW MATERIAL SHALL UTILIZE BACKFILL GRANULAR GRADE 2

CULVERT ITEMS

INLET			DISCHARGE					521.2005.S.01 SURFACE DRAIN PIPE CORRUGATED METAL SLOTTED 12-INCH	520.3315 CULVERT PIPE REINFORCED CONCRETE CLASS III-A 15-INCH	520.3330 CULVERT PIPE REINFORCED CONCRETE CLASS III-A 30-INCH	521.1012 APRON ENDWALLS FOR CULVERT PIPE STEEL 12-INCH	520.1015 APRON ENDWALLS FOR CULVERT PIPE 15-INCH	520.1030 APRON ENDWALLS FOR CULVERT PIPE 30-INCH	633.5200** MARKERS CULVERT END	*** JOINT TIES
STATION	OFFSET	INVERT ELEVATION FT	STATION	OFFSET	INVERT ELEVATION FT	PIPE SLOPE %	LOCATION	LF	LF	LF	EACH	EACH	EACH	EACH	EACH
734+95	53.9' RT	1233.40	734+95	49.9' LT	1231.84	1.50	USH 63	-	-	104	-	-	2	2	12
3000+71	46.2' RT	1237.73	3000+82	32.9' LT	1236.90	1.03	NEDVIDEK ST	-	80	-	-	2	-	2	12
3001+76	20.8' RT	1240.25	3001+16	31.2' RT	1239.26	1.70	DRIVEWAY	58	-	-	1	-	-	-	-
							ITEM TOTALS	58	80	104	1	2	2	4	24

**ADDITIONAL ITEMS SHOWN ELSEWHERE IN PLANS.
***FOR INFORMATIONAL PURPOSES ONLY

BASE AGGREGATE ITEMS

STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
USH 63				
727+54 - 730+75	RT	25	1745	18
731+67 - 737+00	RT	72	2510	26
NEDVIDEK ST	LT & RT	7	331	3
BABCOCK AVE	LT & RT	11	178	2
DRIVEWAYS	LT & RT	-	75.00	1
ITEM TOTALS		115	4839	50

ASPHALTIC PAVEMENT ITEMS

STATION	LOCATION	455.0605 TACK COAT GAL	460.6444 HMA 4 MT 58-34 H TON	465.0105 ASPHALTIC SURFACE TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON
USH 63						
727+19 - 730+75	LT & RT	273	594	-	-	-
731+64 - 733+00	LT & RT	432	941	-	-	-
SHARED USE PATH	RT	109	-	152	-	-
NEDVIDEK ST	LT & RT	82	-	143	-	-
BABCOCK AVE	LT & RT	35	-	61	-	-
DRIVEWAYS	LT & RT	13	-	-	35	-
UNDISTRIBUTED	LT & RT	-	-	-	-	12
ITEM TOTALS		944	1535	356	35	12

CONCRETE CURB & GUTTER

STATION	LOCATION	601.0411 30-INCH TYPE D LF	601.0557 6-INCH SLOPED 36-INCH TYPE D LF
USH 63			
727+56 - 730+82	LT	339	-
731+74 - 737+00	LT	522	-
LAKE ST			
2002+18-2002+21	LT	3	-
NEDVIDEK ST			
3000+28 - 3000+65	LT & RT	-	144
ITEM TOTALS		864	144

CONCRETE APPROACH SLAB ITEMS

STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0410 CONCRETE APPROACH SLAB SY
USH 63			
730+56 - 730+75	LT & RT	29	51
731+67 - 731+86	LT & RT	32	52
ITEM TOTALS		61	103

CONCRETE SIDEWALK ITEMS

STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.081 CONCRETE DRIVEWAY 6-INCH SY	REMARKS
USH 63				
727+56 - 730+82	LT	2083	-	
731+67 - 737+00	LT	3045		
731+99 - 732+36	LT	-	24	DRIVEWAY
ITEM TOTALS		5128	24	

3

STORM SEWER STRUCTURE ITEMS

STRUCTURE NUMBER	**STATION	**OFFSET	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	522.1012 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 12-INCH EACH	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	611.0624 INLET COVERS TYPE H EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0613 INLET COVERS TYPE DW EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3230 INLETS 2 X 3-FT EACH	* 633.5200 MARKERS CULVERT END EACH	**** JOINT TIES EACH	RIM ELEVATION FT	INVERT ELEVATION FT	***DEPTH FT
1-2	728+05	19.5' LT	-	-	-	1	-	-	-	1	1	-	1240.56	1237.59	1.89
1-1	728+05	36.5' LT	1	-	-	-	-	-	-	-	-	6	-	1237.42	-
2-2	733+18	19.5' LT	-	-	-	-	1	-	-	1	-	-	1241.39	1236.00	4.31
2-4	733+18	39.5' LT	-	-	1	-	-	-	-	-	1	6	-	1235.17	-
2-1	732+98	19.5' LT	-	-	-	-	1	-	-	1	-	-	1241.42	1237.10	3.24
2-3	733+38	19.5' LT	-	-	-	-	1	-	-	1	-	-	1241.42	1237.10	3.24
3-1	735+40	39.5' LT	-	-	1	-	-	-	-	-	1	6	-	1237.99	-
3-2	735+40	19.5' LT	-	-	-	1	-	-	-	1	-	-	1244.42	1238.44	4.90
4-1	733+58	60.3' RT	-	1	-	-	-	-	-	-	1	6	-	1238.45	-
4-2	733.53	28.7' RT	-	-	-	-	-	1	1	-	-	-	1242.84	1238.84	2.92
	ITEM TOTALS		1	1	2	2	3	1	1	5	4	24			

* ADDITIONAL QUANTITIES SHOWN ELSEWHERE

**STATION & OFFSET TO CENTER OF STRUCTURE UNLESS OTHERWISE NOTED IN THE PLANS

***DEPTH = RIM ELEV - INVERT ELEV - COVER HT - 7 INCH ADJ RING HT; INLETS MEDIAN DEPTH = RIM ELEV - INVERT ELEV

****SHOWN FOR INFORMATIONAL PURPOSES ONLY

STORM SEWER PIPE ITEMS

FROM STRUCTURE	TO STRUCTURE	INLET INVERT ELEVATION FT	DISCHARGE INVERT ELEVATION FT	PIPE SLOPE %	608.3012 STORM SEWER PIPE REINFORCED CONCRETE CLASS III-A 12-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.3018 STORM SEWER PIPE REINFORCED CONCRETE CLASS III-A 18-INCH LF
1-2	1-1	1237.59	1237.42	1.00	17	-	-
2-2	2-4	1236.00	1235.17	4.17	-	-	21
2-1	2-2	1237.10	1236.50	3.02	20	-	-
2-3	2-2	1237.10	1236.50	3.02	20	-	-
3-2	3-1	1238.44	1237.99	2.23	-	-	20
4-2	4-1	1238.84	1238.45	1.22	-	32	-
				ITEM TOTALS	57	32	41

3

ASPHALTIC FLUMES

STATION	LOCATION	465.0315 SY
ARCADE AVE		
1001+78	RT	23
LAKE ST		
2002+53	LT	10
ITEM TOTALS		33

FENCE CHAIN LINK 6-FT

STATION	LOCATION	616.0206 LF
USH 63		
728+00 - 730+63	RT	267
731+54 - 732+25	RT	73
ITEM TOTALS		340

MOBILIZATIONS EROSION CONTROL

STATION	628.1905 EROSION CONTROL EACH	628.1910 EMERGENCY EROSION CONTROL EACH
USH 63		
727+19 - 737+00	4	4
ITEM TOTALS	4	4

3

STEEL PLATE BEAM GUARD

STATION	LOCATION	614.0115 ANCHORAGES FOR STEEL PLATE BEAM GUARD TYPE 2 EACH	614.0200 STEEL THRIE BEAM STRUCTURE APPROACH LF	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	614.0345 STEEL PLATE BEAM GUARD SHORT RADIUS LF	614.0390 STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL EACH
USH 63						
731+74 - 732+00	LT	1	20.6	-	32.2	1
LAKE ST						
2000+71	LT &RT	2	-	25	-	-
2002+18	LT &RT	2	-	25	-	-
ITEM TOTALS		5	20.6	50	32.2	1

RESTORATION ITEMS

STATION	LOCATION	625.0100 TOPSOIL SY	629.0205 FERTILIZER TYPE A CWT	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
USH 63						
727+19 - 730+75	LT & RT	1690	1.10	46	46	48
731+67 - 737+00	LT & RT	3120	2.00	84	84	88
LAKE ST	LT & RT	120	0.10	4	4	4
UNDISTRIBUTED (25%)		1230	0.80	34	34	35
ITEM TOTALS		6160	4.00	168	168	175

MGS GUARDRAIL

STATION	LOCATION	614.0397 GUARDRAIL MOW STRIP EMULSIFIED ASPHALT SY	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSISTION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	SPV.0090.01 TREATED TIMBER RUB RAIL LF	SPV.0090.02 GLARE SCREEN LF
USH 63							
727+68 - 730+71	RT	118	212.5	39.4	1	252	252
731+56 - 733+47	RT	75	100	39.4	1	139	139
731+74	LT	-	-	-	-	-	-
LAKE ST							
ITEM TOTALS		193	312.5	78.8	2	391	391

EROSION CONTROL ITEMS

STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1550 SILT SCREEN LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	628.2027 EROSION MAT CLASS II TYPE C SY	628.6005 TURBIDITY BARRIERS SY	628.7005 INLET PROTECTION TYPE A EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	645.0120** GEOTEXTILE TYPE HR SY
USH 63													
727+19 - 730+75	LT & RT	150	250	250	440	760	940	-	1	1	20	-	330
731+67 - 737+00	LT & RT	90	300	300	410	2350	770	-	9	7	40	7	190
LAKE ST	LT & RT	70	-	-	-	80	50	-	-	-	-	-	140
STAGE 1 DREDGING	LT & RT	-	-	-	-	-	-	180	-	-	-	-	-
STAGE 2 DREDGING	LT & RT	-	-	-	-	-	-	300	-	-	-	-	-
UNDISTRIBUTED (25%)		80	140	140	200	800	440	120	-	-	15	3	165
ITEM TOTALS		390	690	690	1050	3990	2200	600	10	8	75	10	825

**ITEMS LOCATED ELSEWHERE IN PLANS.

3

PERMANENT SIGNING

SIGN GROUP CODE	SIGN CODE	SIGN MESSAGE	TYPE II SIZE	634.0612 POSTS WOOD 4X6-INCH 12-FT EACH	634.0614 POSTS WOOD 4X6-INCH 14-FT EACH	637.2220 SIGNS TYPE II REFLECTIVE SH SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1-1	W14-2	NO OUTLET	30" X 30"	-	1	-	3.00	-	-	-	INSTALL
1-2.1	W5-56	END OF ROADWAY	18" X 18"	1	-	2.25	-	-	-	-	INSTALL
1-2.2	W5-56	END OF ROADWAY	18" X 18"	1	-	2.25	-	-	-	-	INSTALL
1-2.3	W5-56	END OF ROADWAY	18" X 18"	1	-	2.25	-	-	-	-	INSTALL
1-3	EXISTING	ATV ROUTE	-	-	-	-	-	1	-	-	SALVAGE & REINSTALL
1-4	EXISTING	SPEED LIMIT AHEAD	-	-	-	-	-	1	-	-	SALVAGE & REINSTALL
1-5	EXISTING	CLEARANCE STRIPER	-	-	-	-	-	-	4	4	REMOVE
1-6.1	W5-56	END OF ROADWAY	18" X 18"	1	-	2.25	-	-	-	-	INSTALL
1-6.2	W5-56	END OF ROADWAY	18" X 18"	1	-	2.25	-	-	-	-	INSTALL
1-6.3	W5-56	END OF ROADWAY	18" X 18"	1	-	2.25	-	-	-	-	INSTALL
1-7	EXISTING	STOP/STREET NAMES	-	-	-	-	-	-	3	2	REMOVE
1-8	EXISTING	ATV ROUTE	-	-	-	-	-	1	-	-	SALVAGE & REINSTALL
1-9	EXISTING	SPEED LIMIT	-	-	-	-	-	1	-	-	SALVAGE & REINSTALL
1-10	EXISTING	ATV ROUTE	-	-	-	-	-	1	-	-	SALVAGE & REINSTALL
1-11	EXISTING	ATV ROUTE	-	-	-	-	-	1	-	-	SALVAGE & REINSTALL
1-12	EXISTING	STOP/STREET NAMES	-	-	-	-	-	1	-	-	SALVAGE & REINSTALL
1-13	EXISTING	YIELD/STREET NAMES	-	-	-	-	-	1	-	-	SALVAGE & REINSTALL
ITEM TOTALS				6	1	13.50	3.00	8	7	6	

MARKING LINE

STATION	LOCATION	646.2040 GROOVED WET REF EPOXY 6-INCH LF	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	REMARKS
USH 63				
727+19 - 737+00	CL	1066	-	DOUBLE YELLOW CENTERLINE
727+19 - 737+00	LT & RT	2005	-	WHITE EDGELINE
NEDVIDEK ST				WHITE
3000+34	RT	-	23	
ITEM TOTALS		3071	23	

CONSTRUCTION STAKING

STATION	LOCATION	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.6000 PIPE CULVERTS EACH	650.9000 CURB RAMPS EACH	650.9500 SIDEWALK (01. 1550-04-79) EACH	650.9911 SUPPLEMENTAL CONTROL (01. 1550-04-79) EACH	650.9920 SLOPE STAKES LF
USH 63										
727+19 - 730+75	LT & RT	2	356	356	339	-	1	1	1	356
731+67 - 737+00	LT & RT	8	533	533	522	1	-	-	-	533
NEDVIDEK ST	LT & RT	-	174	174	144	2	-	-	-	174
BABCOCK AVE	LT & RT	-	68	68	-	-	-	-	-	68
ITEM TOTALS		10	1131	1131	1005	3	1	1	1	1131

TRAFFIC CONTROL

STAGE	643.0300 TRAFFIC CONTROL DRUMS NO.	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0900 TRAFFIC CONTROL SIGNS NO.	643.0900 TRAFFIC CONTROL SIGNS DAY	*643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF	643.3350 TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH LF	644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP NO.	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	CALENDAR DAYS
PRE-CONST	10	70	-	-	-	-	-	-	-	2	14	-	-	-	-	-	-	-	-	7
DETOUR	-	-	9	1116	18	0	319	39556	5	-	-	-	-	-	-	-	-	-	-	124
STAGE 1A	24	96	27	108	38	152	21	84	0	-	-	0	160	450	2	8	40	160	4
STAGE 1B	74	6808	27	2484	38	3496	28	2576	0	-	-	820	84	0	0	0	40	800	92
STAGE 2	33	924	27	756	38	1064	26	728	0	-	-	0	350	130	1	28	60	970	28
ITEM TOTALS		7898		4464		4712		42944	5		14	820	594	580		36	140	1930	

* NUMBER OF CYCLES = 1

LOCATION	*650.6501 CONSTRUCTION STAKING STRUCTURE LAYOUT (STRUCTURE) (01. B-03-0214) EACH
USH 63	1
ITEM TOTAL	1

*CATEGORY 0020

3

SAWING

STATION	LOCATION	690.0150 ASPHALT LF	690.0250 CONCRETE LF
USH 63			
727+19	LT & RT	140	-
737+00	LT & RT	42	7
LAKE ST			
2000+71	LT & RT	24	-
2002+18	LT & RT	20	-
2002+21	LT	-	3
2002+49	LT	-	3
NEDVIDEK ST			
3002+00	LT & RT	25	-
DRIVEWAYS	LT & RT	57	-
BABCOCK AVE	LT & RT		
4000+85	LT & RT	26	-
ITEM TOTAL		334	13

SANITARY SEWER STRUCTURE ITEMS

STATION	LOCATION	SPV.0060.01 RECONSTRUCTING SANITARY MANHOLES EACH	SPV.0060.02 ADJUSTING SANITARY MANHOLE COVERS EACH
LAKE ST			
2002+45	LT	1	-
NEDVIDEK ST			
3001+46	LT	-	1
ITEM TOTALS		1	1

3

DREDGING AND COVER ITEMS

STAGE	STATION	LOCATION	SPV.0035.01 EXCAVATION, HAULING, AND DISPOSAL OF DREDGED SEDIMENT CY	SPV.0035.02 RESIDUAL SAND COVER CY
1	9+30 - 10+50	DREDGE ALIGNMENT	175	160
	STAGE SUBTOTAL		175	160
2	2000+76 - 2002+13	LAKE STREET	310	210
2	10+50 - 11+42	DREDGE ALIGNMENT	145	285
	STAGE SUBTOTAL		455	495
	PROJECT TOTAL		630	655

TRANSPORTATION PROJECT PLAT NO: 1550-04-22-4.01

THAT PART OF PARCEL A, CSM 376, V. 4, P. 85, DOC. 370897, LOCATED IN PART OF GOVERNMENT LOT 3 AND THAT PART OF GOVERNMENT LOT 5, ALL IN SECTION 6, TOWNSHIP 35 NORTH, RANGE 13 WEST, CITY OF CUMBERLAND, BARRON COUNTY, WISCONSIN.

RELOCATION ORDER USH 63 C CUMBERLAND, SUPERIOR AVENUE, BEAVER DAM LAKE C-03-1459, BARRON 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 NAMED 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.

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

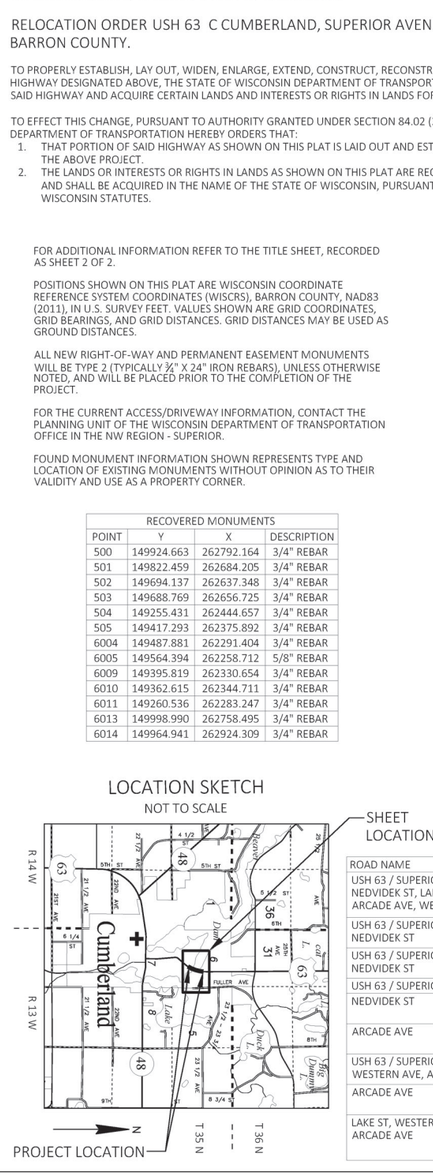
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), BARRON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT 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.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NW REGION - SUPERIOR.

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.

RECOVERED MONUMENTS			
POINT	Y	X	DESCRIPTION
500	149924.663	262792.164	3/4" REBAR
501	149822.459	262684.205	3/4" REBAR
502	149694.137	262637.348	3/4" REBAR
503	149688.769	262656.725	3/4" REBAR
504	149255.431	262444.657	3/4" REBAR
505	149417.293	262375.892	3/4" REBAR
6004	149487.881	262291.404	3/4" REBAR
6005	149564.394	262258.712	5/8" REBAR
6009	149395.819	262330.654	3/4" REBAR
6010	149362.615	262344.711	3/4" REBAR
6011	149260.536	262283.247	3/4" REBAR
6013	149998.990	262758.495	3/4" REBAR
6014	149964.941	262924.309	3/4" REBAR



ROAD NAME	BASIS OF EXISTING R/W
USH 63 / SUPERIOR AVE, NEDVIDEK ST, LAKE ST, ARCADE AVE, WESTERN AVE	R/W PLAT 1550-04-24 (2023)
USH 63 / SUPERIOR AVE, NEDVIDEK ST	ASSESSOR'S PLAT NO. 10 (2008)
USH 63 / SUPERIOR AVE, NEDVIDEK ST	CSM 5307, V. 36, P. 130, DOC. 722668 (2006)
USH 63 / SUPERIOR AVE	MOS 6662 (2003)
NEDVIDEK ST	CSM 4680, V. 32, P. 123, DOC. 667311 (2002)
ARCADE AVE	CSM 376, V. 4, P. 85, DOC. 370897 (1969)
USH 63 / SUPERIOR AVE, WESTERN AVE, ARCADE AVE	DIVISION JOB NO. 8663 (1939)
ARCADE AVE	HEBERLEIN'S ADDITION TO THE CITY OF CUMBERLAND (1919)
LAKE ST, WESTERN AVE, ARCADE AVE	MANSFIELD AND LANG'S ADDITION TO THE CITY OF CUMBERLAND (1881)

I, JASON L. CANCE 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 WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN JASON L. CANCE S-2688 CHIPPEWA FALLS WI LAND SURVEYOR

SIGNATURE: _____ DATE: 8-27-24

PRINT NAME: JASON L. CANCE

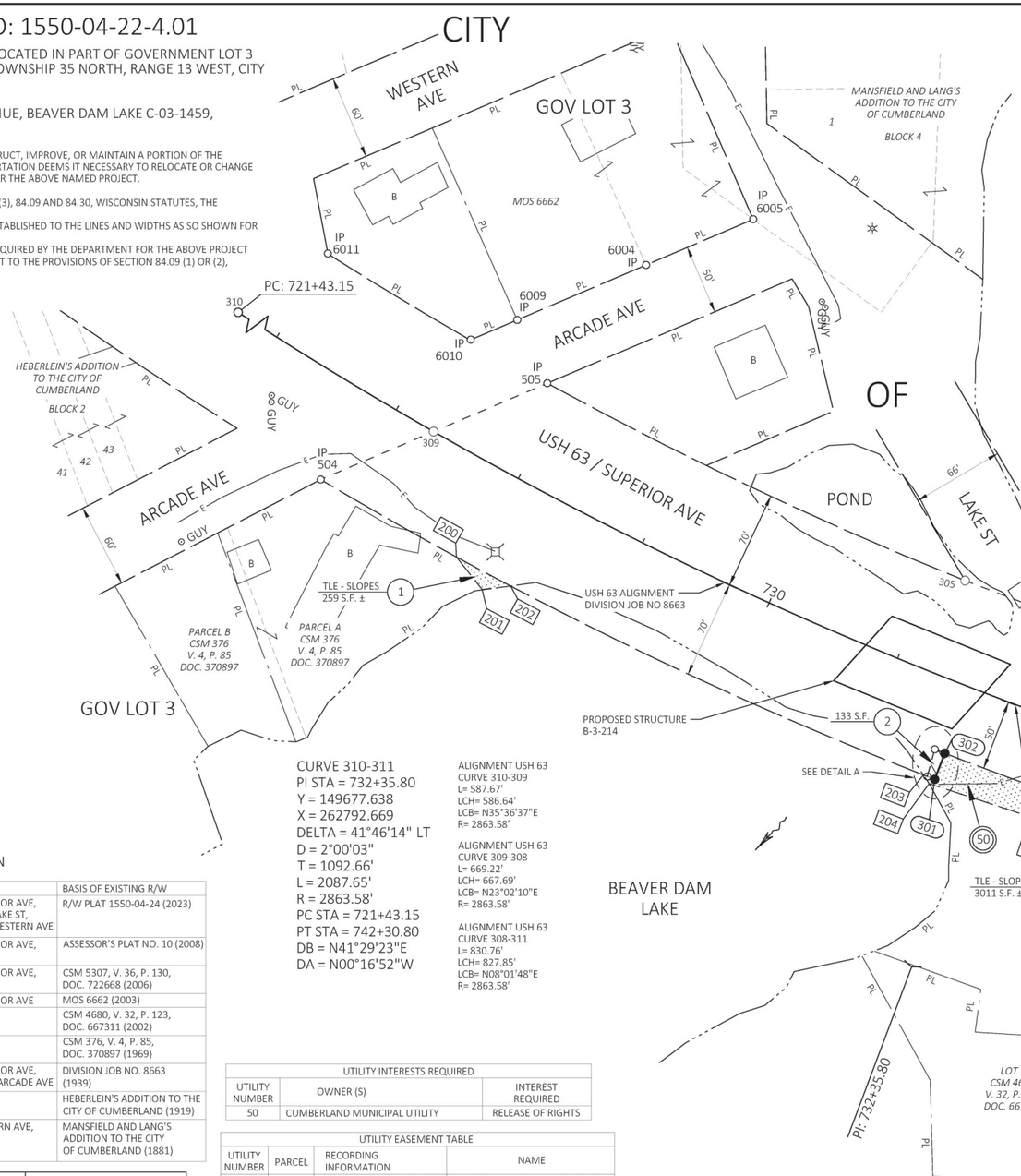
REGISTRATION NUMBER: S-2688

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION

SIGNATURE: Aaron Gustafson DATE: 8-27-24

PRINT NAME: AARON GUSTAFSON

SEH
10 N BRIDGE ST
CHIPPEWA FALLS WI 54729



CURVE 310-311
PI STA = 732+35.80
Y = 149677.638
X = 262792.669
DELTA = 41°46'14" LT
D = 2°00'03"
T = 1092.66'
L = 2087.65'
R = 2863.58'
PC STA = 721+43.15
PT STA = 742+30.80
DB = N41°29'23"E
DA = N00°16'52"W

ALIGNMENT USH 63
CURVE 310-309
L= 587.67'
LCH= 586.64'
LCB= N35°36'37"E
R= 2863.58'

ALIGNMENT USH 63
CURVE 309-308
L= 669.22'
LCH= 667.69'
LCB= N23°02'10"E
R= 2863.58'

ALIGNMENT USH 63
CURVE 308-311
L= 830.76'
LCH= 827.85'
LCB= N08°01'48"E
R= 2863.58'

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
50	CUMBERLAND MUNICIPAL UTILITY	RELEASE OF RIGHTS

UTILITY EASEMENT TABLE			
UTILITY NUMBER	PARCEL	RECORDING INFORMATION	NAME
50	2	NO RECORD OF EASEMENT	CUMBERLAND MUNICIPAL UTILITY

SECTION LINE - COURSE TABLE		
COURSE	BEARING	DISTANCE
132 - 100	N 00° 28' 24" W	681.60'
100 - 621	N 00° 28' 24" W	666.58'
132 - 621	N 00° 28' 24" W	1348.18'

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W SQUARE FEET REQUIRED			TLE SQUARE FEET
			NEW	EXISTING	TOTAL	
1	THOMAS W. GERLACH	TLE	-	-	-	259
2	KEVIN M. & ELIZABETH M. MCCLAIN	FEE/TLE	447	-	447	3727

FEE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
301	731+56.00	70.46' RT
302	731+56.00	50.46' RT
303	733+94.00	113.98' RT
304	734+12.00	166.00' RT
305	731+24.11	69.56' LT
306	732+32.37	69.51' LT
307	734+00.04	69.42' LT
308	734+00.04	0.00'
309	727+30.82	0.00'
500	734+08.73	122.93' RT
501	732+82.69	50.52' RT
503	731+50.45	70.45' RT
504	726+79.04	70.24' RT
505	727+85.56	69.71' LT

TLE STATION & OFFSET TABLE		
POINT	STATION	OFFSET
200	727+88.00	70.29' RT
201	728+14.50	82.00' RT
202	728+31.00	70.31' RT
203	731+47.55	70.45' RT
204	731+53.50	74.69' RT
205	732+50.00	71.00' RT
206	733+10.00	65.43' RT
207	733+64.00	96.17' RT
208	733+70.00	110.00' RT
209	733+95.00	135.00' RT
210	734+13.19	182.00' RT

FEE - COURSE TABLE		
COURSE	BEARING	DISTANCE
100 - 304	S 89° 31' 36" W	1372.09'
304 - 303	S 86° 20' 05" W	55.34'
303 - 501	S 46° 34' 07" W	130.91'
501 - 302	SEE CURVE TABLE	
302 - 301	S 68° 46' 34" E	20.00'
301 - 503	SEE CURVE TABLE	
503 - 504	SEE CURVE TABLE	
504 - 309	N 23° 01' 03" W	87.64'
309 - 505	N 23° 01' 03" W	88.22'
505 - 305	SEE CURVE TABLE	
305 - 306	N 20° 48' 26" E	105.63'
306 - 307	SEE CURVE TABLE	
307 - 308	S 73° 39' 32" E	69.42'
308 - 500	S 77° 52' 38" E	123.25'
500 - 304	S 78° 25' 32" E	43.21'

CURVE 501-302
L= 128.92'
LCH= 128.91'
LCB= S19°59'02"W
R= 2914.90'

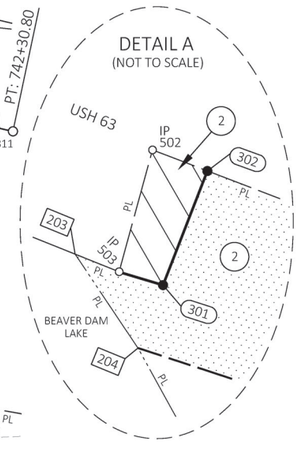
CURVE 301-504
L= 488.68'
LCH= 488.12'
LCB= S26°01'15"W
R= 2934.90'

CURVE 301-503
L= 5.69'
LCH= 5.69'
LCB= S21°18'23"W
R= 2934.90'

CURVE 503-504
L= 482.99'
LCH= 482.45'
LCB= S26°04'35"W
R= 2934.90'

CURVE 505-305
L= 330.32'
LCH= 330.13'
LCB= N25°16'33"E
R= 2794.90'

CURVE 306-307
L= 163.60'
LCH= 163.57'
LCB= N18°02'52"E
R= 2794.90'



Document Number: 905437
MARGO KATTERHAGEN
Barron County, Wisconsin
Register of Deeds
Recorded On:
08/27/2024 10:52:27 AM
Number of Pages: 2

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RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 1550-04-22-4.01
SHEET 1 OF 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
1550-04-22
C CUMBERLAND, SUPERIOR AVENUE
BEAVER DAM LAKE C-03-1459
USH 63
BARRON 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 (B) TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL (18, 13, 24, 25, 36, 29)
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN (81-25)

R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP XXXXX

	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

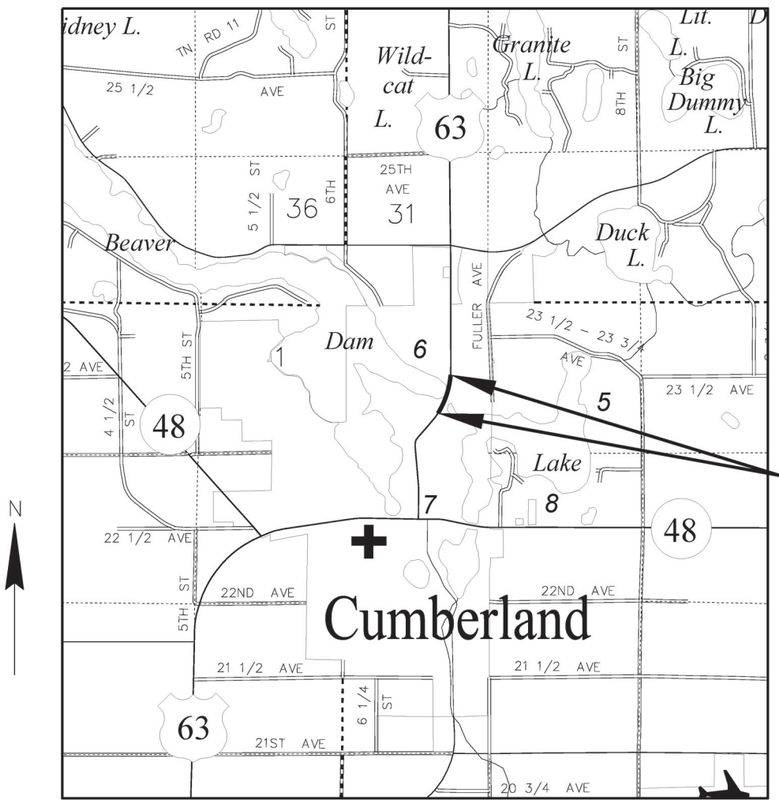
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	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

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	



LAYOUT
SCALE 0 1 MI

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 1550-04-22.

NOTES:

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

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT 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.

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, CENTERLINE OF EXISTING PAVEMENTS AND/OR EXISTING OCCUPATIONAL LINES.

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.

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.

PROPERTY LINES SHOWN ON THIS PLAT FOR PROPERTIES BEING IMPACTED ARE DRAWN FROM DATA DERIVED FROM FILED/RECORDED MAPS AND DOCUMENTS OF PUBLIC RECORD. 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.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN THE NW REGION - SUPERIOR.

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.

PROJECT NUMBER 1550-04-22-4.01
SHEET 2 OF 2
AMENDMENT NO:

FILE NAME : X:\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\RW\DWG\040101-RP.DWG
LAYOUT NAME: Title
PLOT DATE : 8/27/2024 7:31 AM PLOT BY : SEH
1550-04-22-4.01

SCALE, FEET 0 50 100

ALL UTILITIES ARE APPROXIMATE
ACTUAL LOCATION MUST BE FIELD VERIFIED

N

1999+00

2000+00

BM 100

CUMBERLAND MUNICIPAL UTILITY

DREDGE CHANNEL

EXISTING R/W (TYP)

CUMBERLAND MUNICIPAL UTILITY

ARCADE AVE

LAKE ST

CP 4

STA 734+14.90 USH 63 =
STA 3000+00 NEDVIDEK AVE

STA 732+32.43 USH 63 =
STA 2003+00 LAKE ST

STA 734+95
1-30"X104' CPRC CLASS III-A REQ'D
2-30" AEW'S REQ'D

CLEARING BY OTHERS PRIOR TO CONSTRUCTION
STA 733+17 - STA 737+00 LT

SLOPE INTERCEPT (TYP)

STA 736+50
18.00' LT

BM 3

BM 1

BM 4

CP 51

CP 1

CP 2

BM 2

CP 3

CAUTION

CAUTION

724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739

EXISTING R/W EASEMENT

BRIGHTSPEED

3001+00

4001+00

BABCOCK AVE

END PROJECT
STA 737+00
MATCH EXISTING
SAWCUT REQ'D

WE ENERGIES

BRIGHTSPEED

CUMBERLAND MUNICIPAL UTILITY

SLOPE INTERCEPT (TYP)

CLEARING BY OTHERS PRIOR TO CONSTRUCTION
STA 728+00 - STA 729+27 RT

BEGIN PROJECT
STA 727+19
MATCH EXISTING
SAWCUT REQ'D
Y = 149,325.976
X = 262,404.582

TLE

PROPOSED 50' SINGLE-SPAN FLAT-SLAB BRIDGE B-3-214
SKEWED 20 DEGREES LHF
SEE STRUCTURE PLANS

FENCE CHAIN LINK 6-FT
STA 728+00 TO STA 730+63
STA 731+54 TO STA 732+25

REMOVE EXISTING STRUCTURE C-3-1459

TLE

CONCRETE PAVEMENT APPROACH SLAB (TYP)

CONCRETE PAVEMENT 8-INCH (TYP)

CUMBERLAND MUNICIPAL UTILITY & SPECTRUM

WE ENERGIES

TLE

PROP R/W

NEDVIDEK ST

NO STAGING OF PERSONNEL, EQUIPMENT OR SUPPLIES

5

5

1260 1255 1250 1245 1240 1235 1230 1225

VCL = 200.00
K = 102.81

VCL = 420.00
K = 81.28

VCL = 130.00
K = 68.37

STA 727+03.82
EL 1241.40

LP STA 727+80.79
LP EL 1241.13

VPC STA 729+50.00
VPC EL 1242.49

VPI STA 730+15.00
VPI EL 1243.40

VPT STA 730+80.00
VPT EL 1243.08

LP STA 733+18.05
LP EL 1241.99

STA 737+00.00
EL 1250.97

PROPOSED PROFILE

-0.54%

1.40%

-0.50%

4.67%

EXISTING PROFILE

VPC STA 727+25.00
VPC EL 1241.28

VPI STA 728+25.00
VPI EL 1240.74

VPT STA 729+25.00
VPT EL 1242.14

HP STA 730+45.89
HP EL 1243.17

VPC STA 732+77.50
VPC EL 1242.10

VPI STA 734+87.50
VPI EL 1241.05

VPT STA 736+97.50
VPT EL 1250.85

STA 731+19
REMOVE STRUCTURE C-03-1459
CONCRETE BOX CULVERT
78' OVERALL LENGTH
48' CLEAR ROADWAY WIDTH

STA 731+21
STRUCTURE B-03-0214 REQ'D
PROPOSED SINGLE-SPAN REINFORCED CONCRETE SLAB
53.4' OVERALL LENGTH
40' CLEAR ROADWAY WIDTH

STA 734+95
(1) CPRC CLASS III-A 30-INCH
SKEW 4° LHF

EXISTING PROFILE — PROPOSED PROFILE

724	725	726	727	728	729	730	731	732	733	734	735	736	737	738
1241.23	1241.57	1241.74	1241.75	1241.63	1241.42	1241.14	1241.18	1240.82	1241.15	1240.56	1241.36	1240.29	1241.82	1240.00
1242.49	1239.68	1243.01	1239.51	1243.16	1239.36	1242.98	1239.25	1242.73	1239.00	1242.48	1238.80	1242.23	1238.80	1242.01
1239.07	1242.06	1239.75	1242.41	1240.74	1243.06	1242.10	1244.03	1243.91	1245.30	1246.13	1246.88	1248.52	1248.77	1250.97
1250.97														

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	PLAN AND PROFILE: USH 63	SHEET 50	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 01

PLOT DATE : 12/15/2025 8:05 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL UTILITIES ARE APPROXIMATE
ACTUAL LOCATION MUST BE FIELD VERIFIED

SCALE, FEET 0 20 40

EXISTING R/W (TYP)

CUMBERLAND MUNICIPAL UTILITY

SLOPE INTERCEPT (TYP)

CUMBERLAND MUNICIPAL UTILITY (SANITARY FORCE MAIN)

REMOVE EXISTING ROADWAY STA 2000+75 TO STA 2002+14

REMOVE EXISTING STRUCTURE V-3-066 STA 2001+96

CONCRETE CURB & GUTTER 30-INCH TYPE A 3' END TRANSITION

ASPHALTIC FLUME STA 2002+53

RECONSTRUCTING SANITARY MANHOLES & CONCRETE DIAMOND

1999+00

2000+00

LAKE ST

SPECTRUM

CUMBERLAND MUNICIPAL UTILITY

PROPOSED DWY

USH 63

CAUTION

WE ENERGIES

BRIGHTSPEED

STA 732+32.43 USH 63 = STA 2003+00 LAKE ST

CUMBERLAND MUNICIPAL UTILITY

EXISTING LAKE STREET BRIDGE

EXISTING PROFILE

PROPOSED DRIVEWAY PROFILE

STA 2000+75.00 EL 1239.31

-11.35%

STA 2001+11.00 EL 1229.50

-3.54%

STA 2001+65.37 EL 1227.58

-1.00%

STA 2001+78.37 EL 1227.45

0.82%

STA 2001+91.97 EL 1227.56

64.59%

STA 2001+98.85 EL 1232.00

50.00%

STA 2002+14.10 EL 1239.63

EXISTING SANITARY FORCE MAIN PROFILE (APPROX)

EXISTING PROFILE — PROPOSED PROFILE

STA 2001+96
REMOVE STRUCTURE V-03-0066
CONCRETE BOX CULVERT
14' OVERALL LENGTH
23' CLEAR ROADWAY WIDTH

1242.51 1240.93 1239.92 1239.31 1239.32 1232.50 1239.29 1228.12 1239.91 1232.58 1238.54 1238.88

1999 2000 2001 2002 2003 2004

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	PLAN AND PROFILE: LAKE STREET	SHEET 51	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 02

PLOT DATE : 12/15/2025 8:05 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

ALL UTILITIES ARE APPROXIMATE
ACTUAL LOCATION MUST BE FIELD VERIFIED

SCALE, FEET 0 20 40

N

BRIGHTSPEED

END CONSTRUCTION
STA 4000+85
SAWCUT REQ'D

ADJUSTING SANITARY MANHOLE COVERS & CONCRETE DIAMOND

BABCOCK AVE

CUMBERLAND MUNICIPAL UTILITY

STA 3000+00 NEDVIDEK ST =
STA 734+14.90 USH 63

BRIGHTSPEED

3001+00

3002+00

NEDVIDEK ST

STA 3000+83
1-15"X80' CPRC CLASS III-A REQ'D
2-15" AEW'S REQ'D

STA 3000+45 RT
1-12"X58' SURFACE DRAIN PIPE
CORRUGATED METAL SLOTTED REQ'D
1-12" AEW REQ'D
SEAL EAST END

USH 63

EXISTING R/W (TYP)

CAUTION

STA 3001+53
CONSTRUCT ASPH PE

WE ENERGIES

PROP R/W

SLOPE INTERCEPT (TYP)

END CONSTRUCTION
STA 3002+00
SAWCUT REQ'D

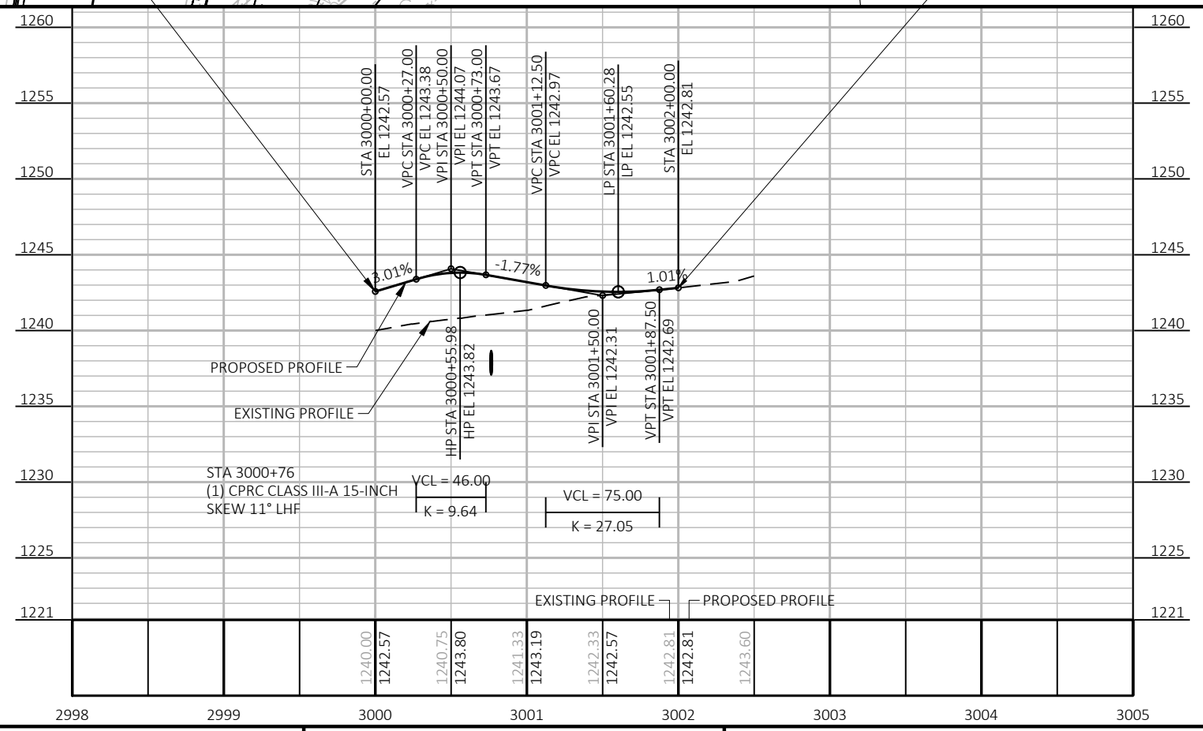
CUMBERLAND MUNICIPAL UTILITY

CUMBERLAND MUNICIPAL UTILITY & SPECTRUM

CUMBERLAND MUNICIPAL UTILITY

5

5



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	PLAN AND PROFILE: NEDVIDEK STREET	SHEET 52	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 03

PLOT DATE : 12/15/2025 8:06 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

ALL UTILITIES ARE APPROXIMATE
ACTUAL LOCATION MUST BE FIELD VERIFIED

SCALE, FEET 0 20 40

N

732

CAUTION

EXISTING R/W (TYP)

BRIGHTSPEED

WE ENERGIES

BRIGHTSPEED

TLE

CUMBERLAND MUNICIPAL UTILITY

CUMBERLAND MUNICIPAL UTILITY & SPECTRUM

SLOPE INTERCEPT (TYP)

CUMBERLAND MUNICIPAL UTILITY

WE ENERGIES

PROP R/W

3001+00 NEDVIDEK ST

4001+00

BABCOCK AVE

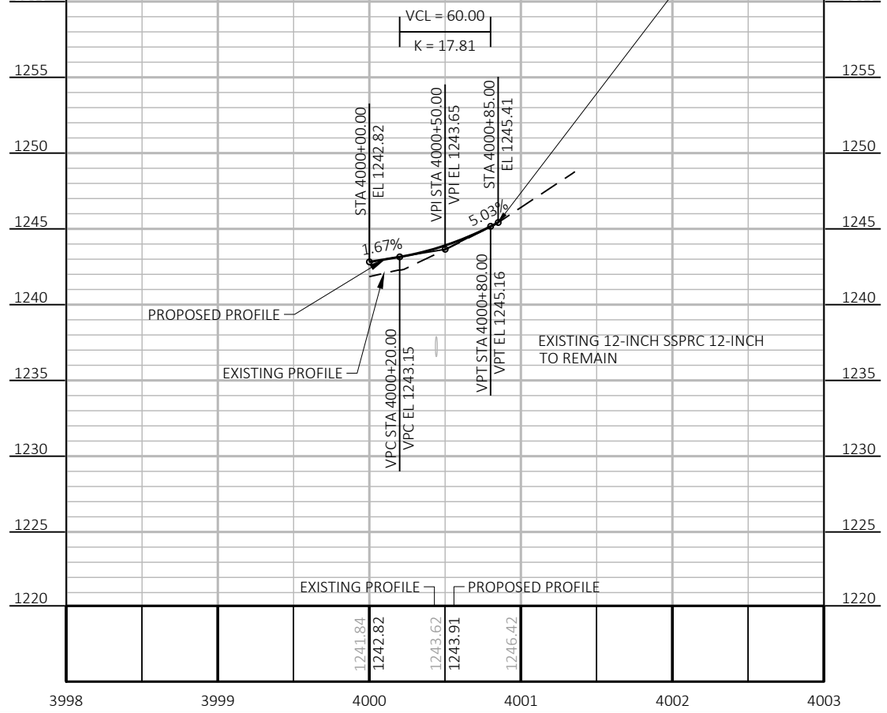
END CONSTRUCTION
STA 4000+85
SAWCUT REQ'D

STA 4000+44
CONSTRUCT ASPH PE

3001+00

5

5



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	PLAN AND PROFILE: BABCOCK AVENUE	SHEET 53	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\050101_PP.DWG
LAYOUT NAME - 04

PLOT DATE : 12/15/2025 8:06 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

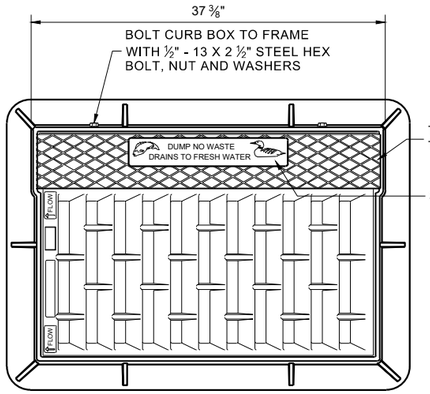
08A05-22A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-22B	INLET COVERS TYPE B, B-A, C, MS, MS-A, DW & WM
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08C07-03	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT, 2.5X3-FT & 2X3.5-FT
08D01-24A	CONCRETE CURB & GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-22A	CURB RAMPS TYPES 1 AND 1-A
08D05-22G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D13-02	SLOTTED CORRUGATED METAL PIPE SURFACE DRAINS
08D18-05	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
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
08E12-01	SILT SCREEN
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
13A03-07	CONCRETE PAVEMENT SHOULDERS
13B02-09A	CONCRETE PAVEMENT APPROACH SLAB
13B02-09B	STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B16-04A	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B16-04B	ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2
14B20-12A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-12C	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS
14B28-04A	GUARDRAIL MOW STRIP
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)
14B47-06A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-06G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
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
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

6

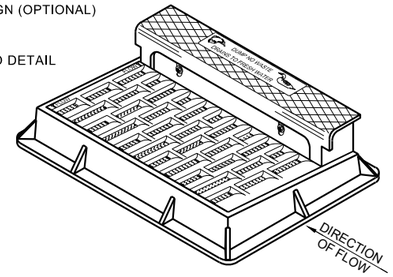
Standard Detail Drawing List

15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C06-12	SIGNING & MARKING FOR TWO LANE BRIDGES
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C26-04	END-OF-ROADWAY SIGNING
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D30-11A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

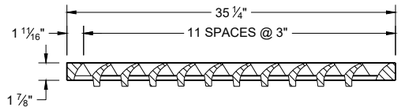
6

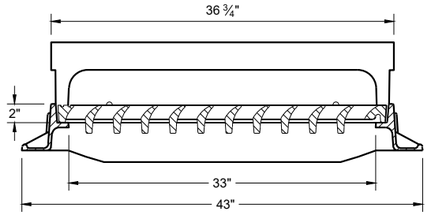


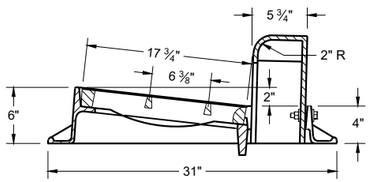
NOTE: EITHER CASTING IS ACCEPTABLE

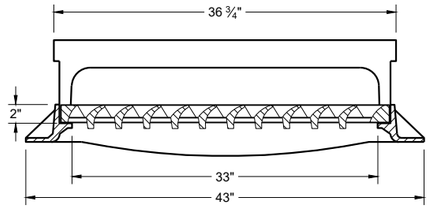


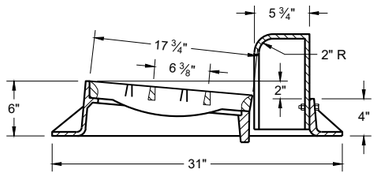
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







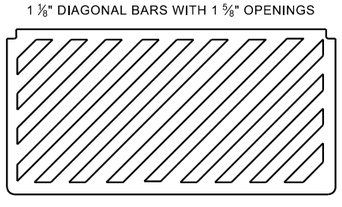




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

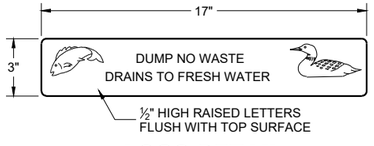
1 ⅛" DIAGONAL BARS WITH 1 ⅝" OPENINGS



SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35" X 17 ¾" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



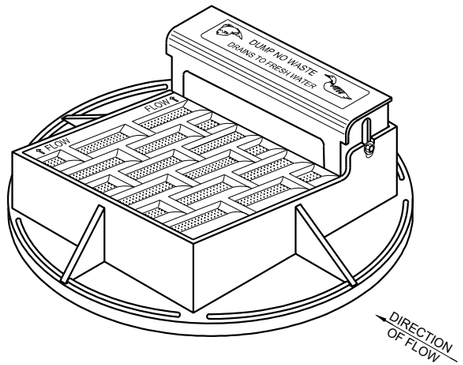
LOGO DETAIL

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.

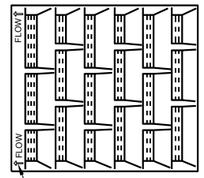
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

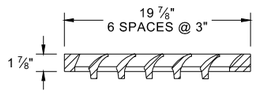
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

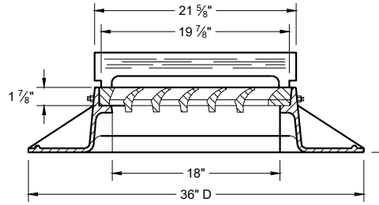


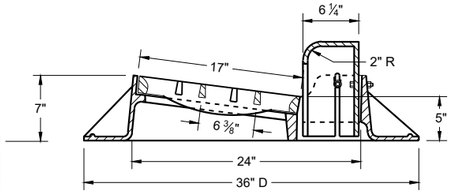
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE



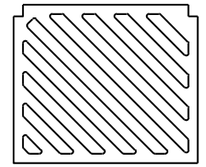






TYPE "A"

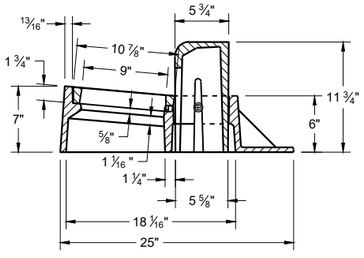
1" DIAGONAL BARS
WITH 1 ½" OPENINGS



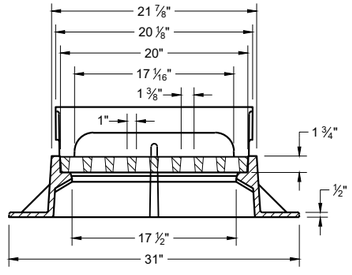
SPECIAL GRATE FOR TYPE "A" COVER

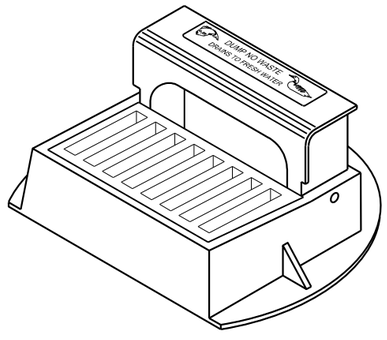
(MEASURES 19 ¾" X 17" X 1 ⅞")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "Z"





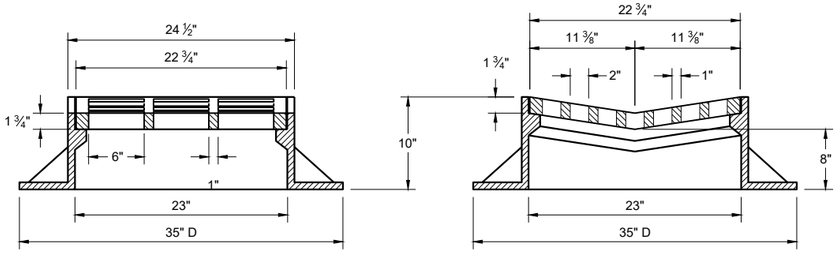
INLET COVERS
TYPES A, H, A-S, H-S AND Z

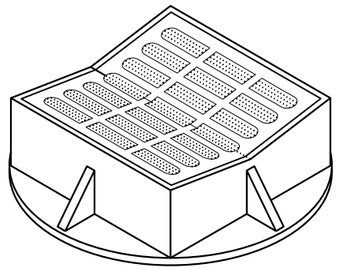
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE

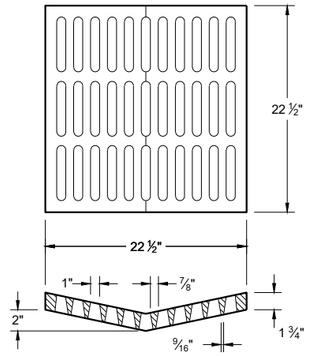
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

FHWA





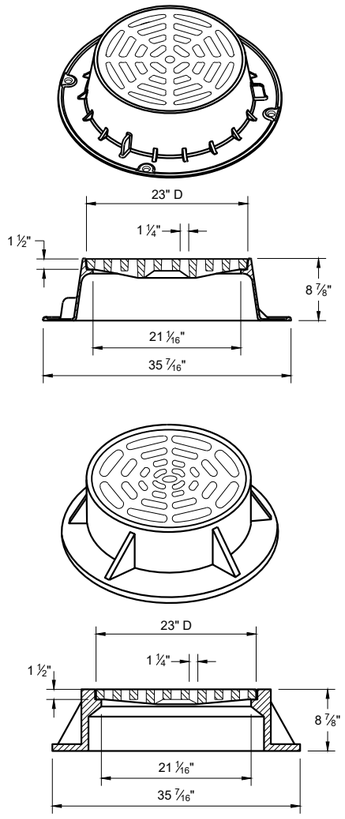
TYPE "B"



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"

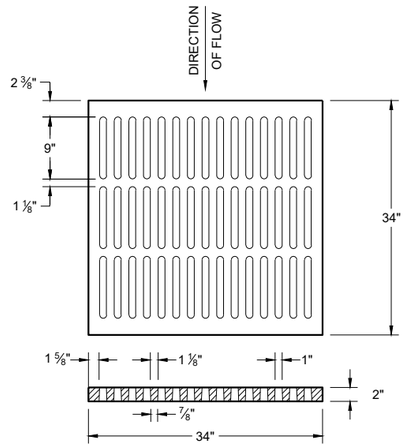
NOTE: EITHER CASTING IS ACCEPTABLE

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.

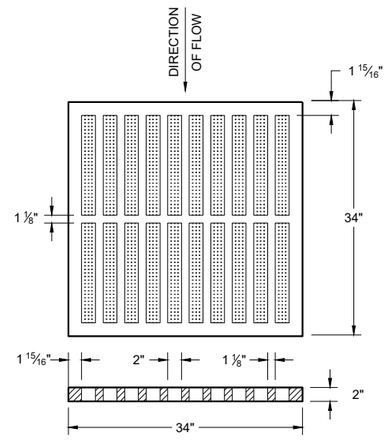
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS PERMITTED

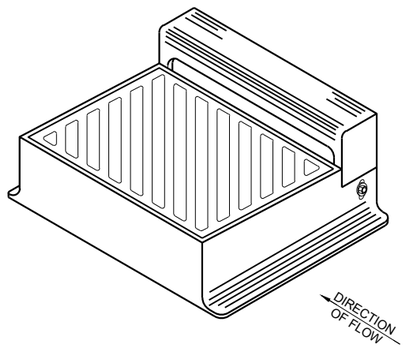
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



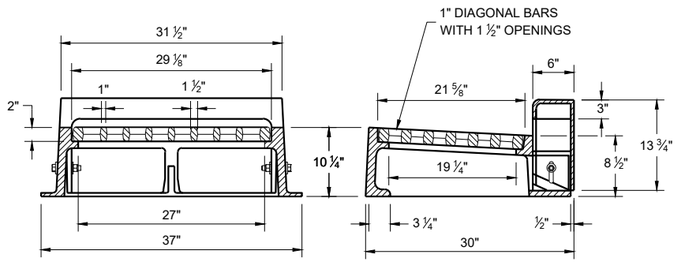
TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS

NOTED AS TYPE MS ON THE DRAINAGE TABLE

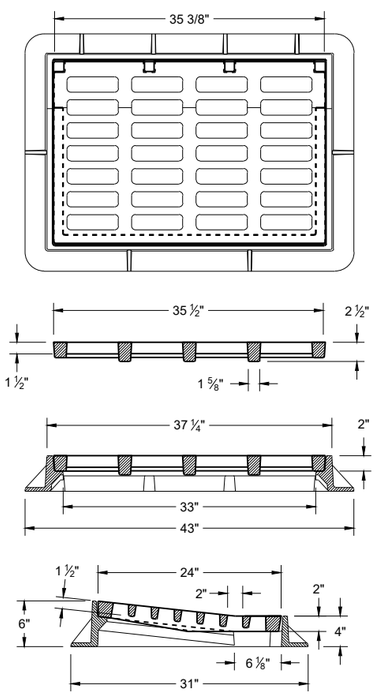


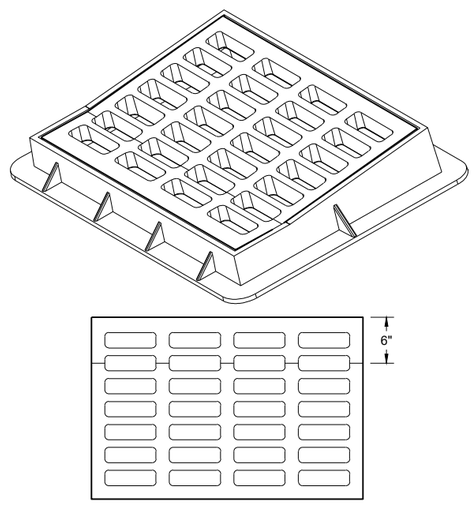
DIAGONAL SLOTS SHALL BE ORIENTEDTO THE DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



TYPE "WM"

NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"





TYPE "DW"

NOTES: FOR USE IN A SUMP CONDITION. THIS OPTION IS ONLY TO BE USED IF NO OTHER INLETS ARE APPLICABLE.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

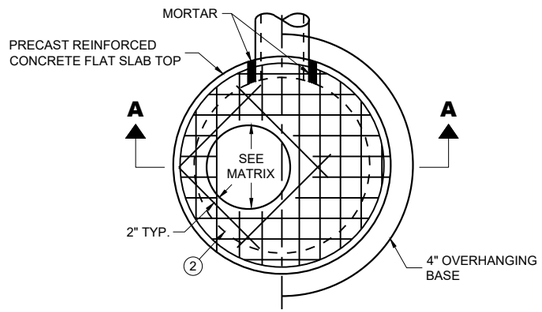
APPROVED
February 2025
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

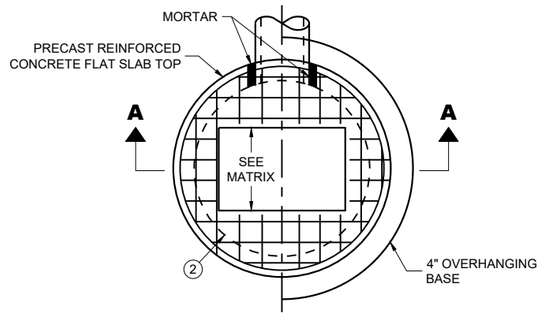
FHWA

6

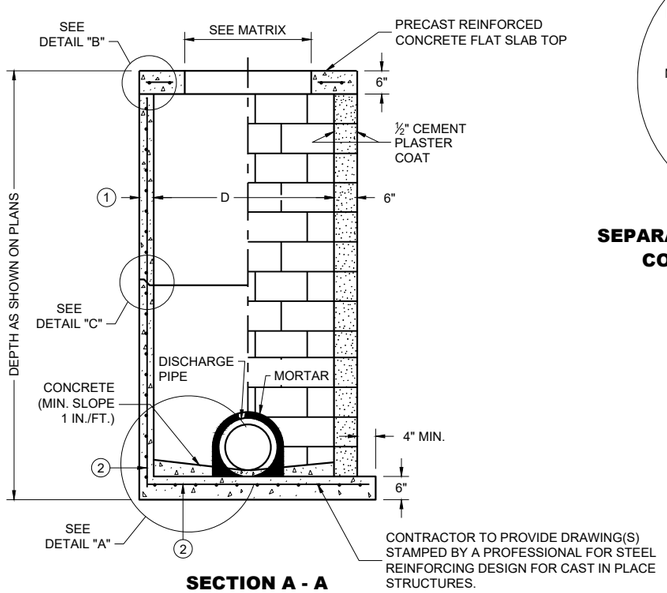
SDD 08A05-22b



PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

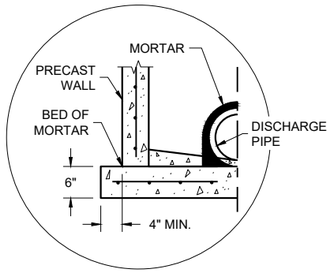
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

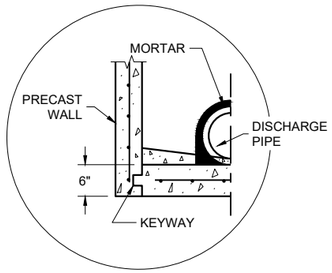
INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V V-B	WM	Z
	OPENING SIZE (FT.)											
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

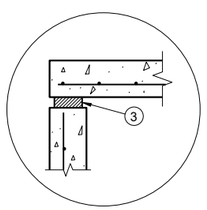


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

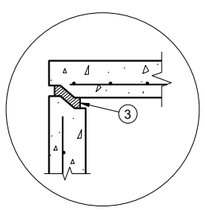


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

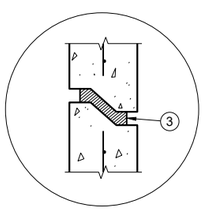
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B" **DETAIL "C"**

INLETS 3-FT AND 4-FT DIAMETER

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.

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 UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES 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 BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

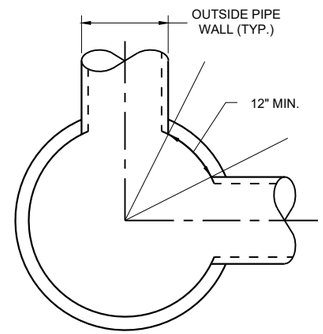
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "D".

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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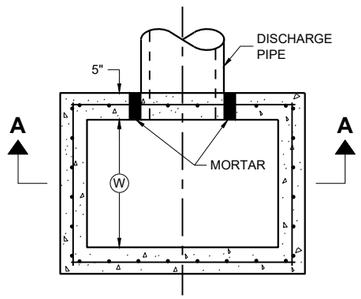
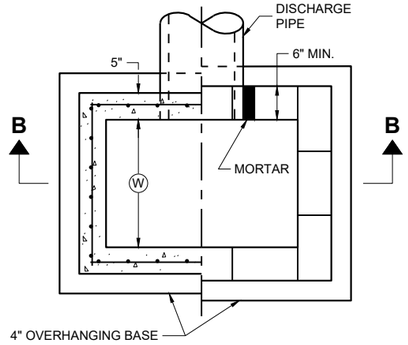
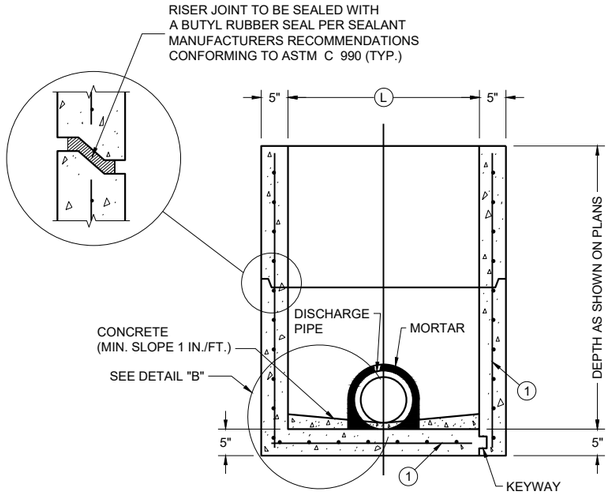
SDD 08C06-03



PLAN VIEW



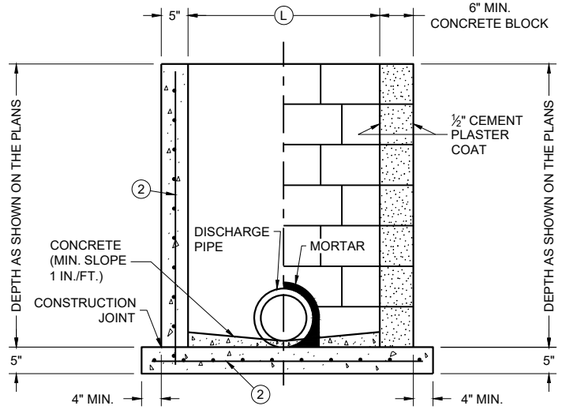
PLAN VIEW



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

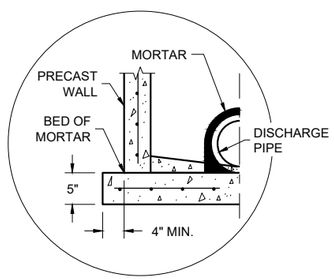
SECTION A - A



CAST IN PLACE REINFORCED CONCRETE

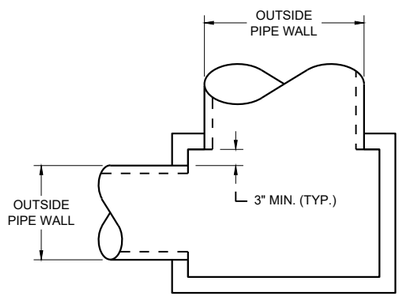
CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (1)

SECTION B - B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "B"



DETAIL "A"

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 UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES 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 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.

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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.

CATCH BASIN COVER MATRIX

INLET SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE									
			ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM	V V-B
2 X 2-FT	2	2	X	X				X				
2 X 2.5-FT	2	2.5			X			X	X	X	X	
2 X 3-FT	2	3					X					
2.5 X 3-FT	2.5	3				X						
2 X 3.5-FT	2	3.5										X

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	WIDTH (IN)	LENGTH (IN)
2 X 2-FT	12	12
2 X 2.5-FT	12	18
2 X 3-FT	12	24
2.5 X 3-FT	18	24
2 X 3.5-FT	12	30

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2X3.5-FT

INLETS 2 X 2-FT, 2 X 2.5-FT, 2 X 3-FT, 2.5 X 3-FT AND 2 X 3.5-FT

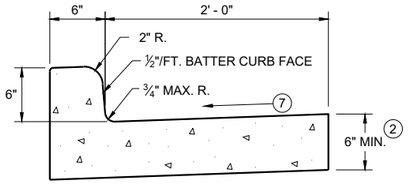
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

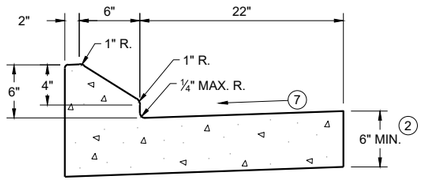
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

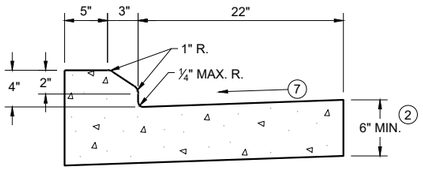
6
SDD 08C07-03



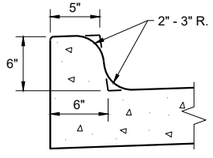
TYPES A (1) & D



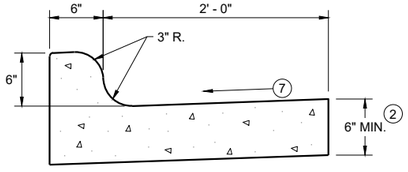
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

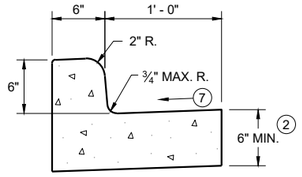


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



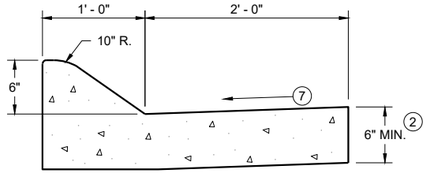
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

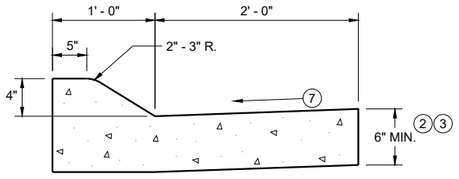


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

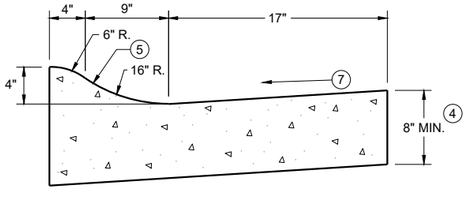


6" SLOPED CURB TYPES A (1) & D



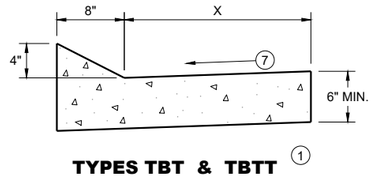
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T
CONCRETE CURB AND GUTTER 30"

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

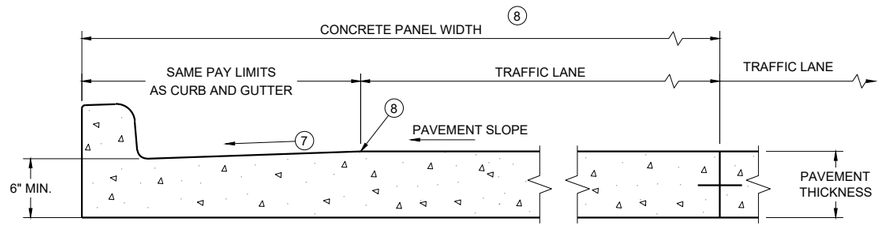


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

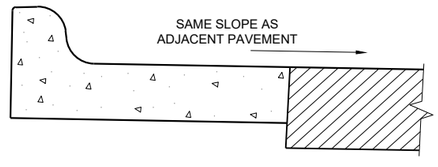
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

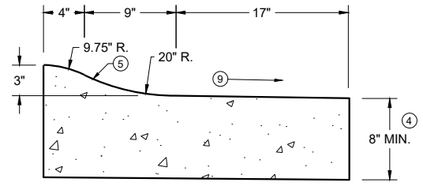
(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(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.

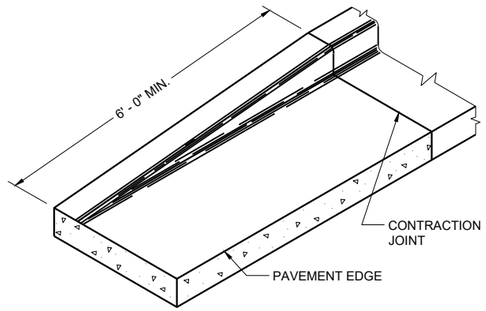
(9) SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY



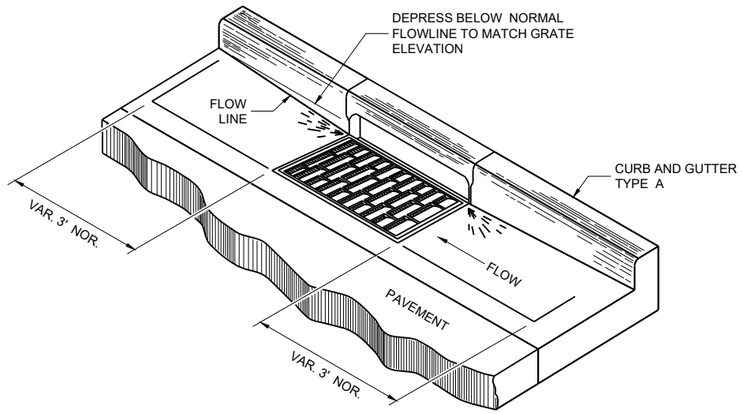
3" SLOPED CURB TYPES R (1) & T

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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.

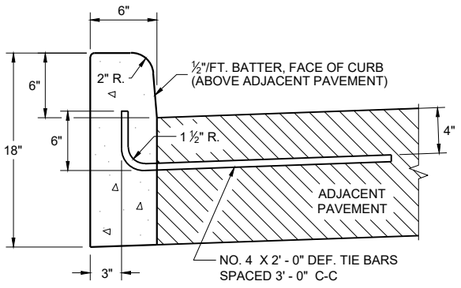
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

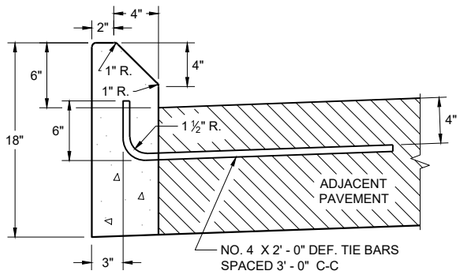
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(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.

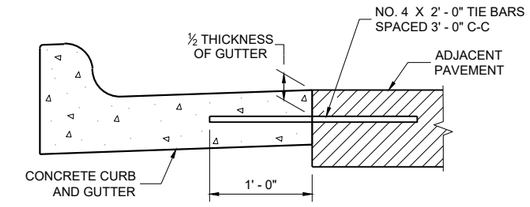


TYPES A (1) & D

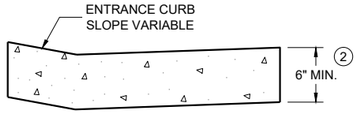


TYPES G (1) & J

CONCRETE CURB

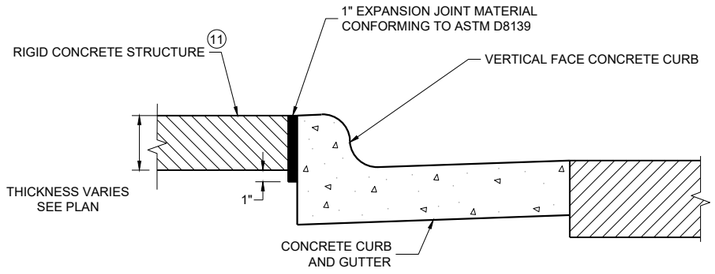


TYPICAL TIE BAR LOCATION (1)

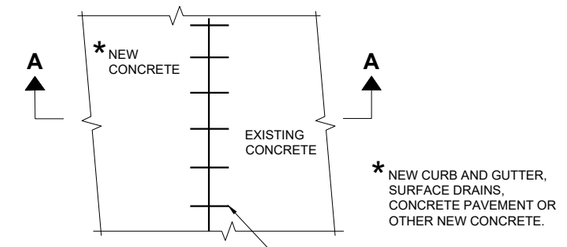


DRIVEWAY ENTRANCE CURB (10)

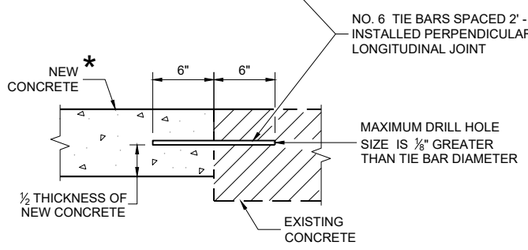
(WHEN DIRECTED BY THE ENGINEER)



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
February 2025 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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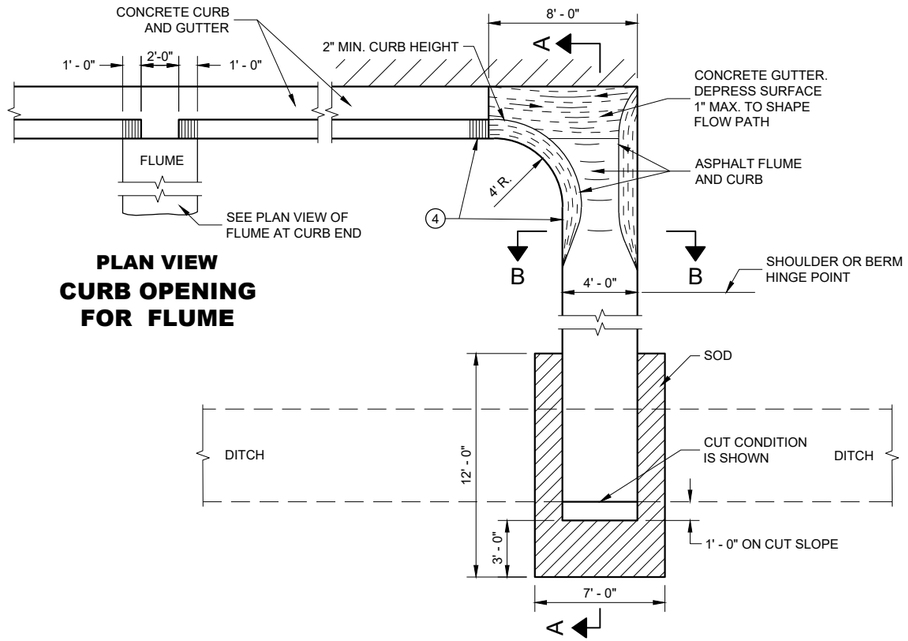
SDD 08D01-24b

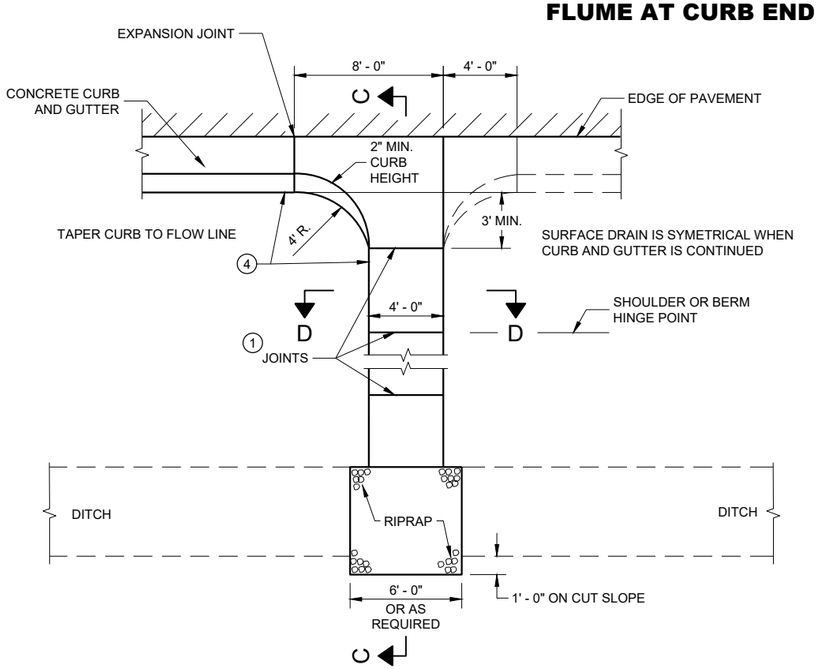
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



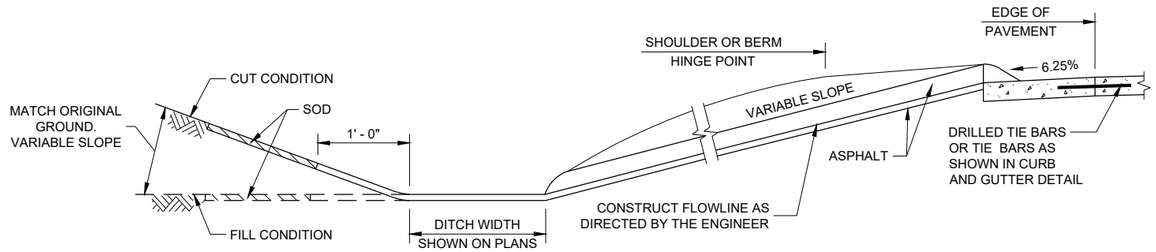
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

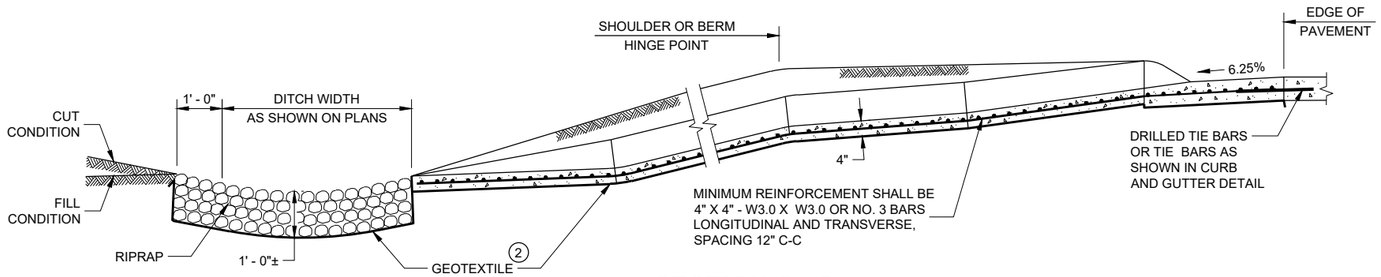
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

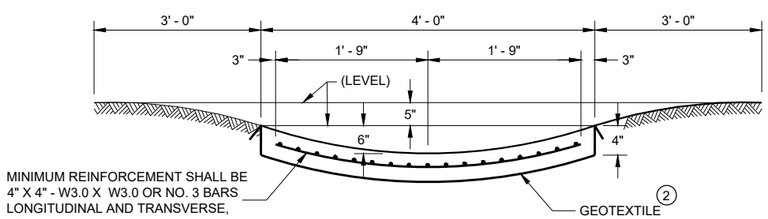


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 08D04 - 07

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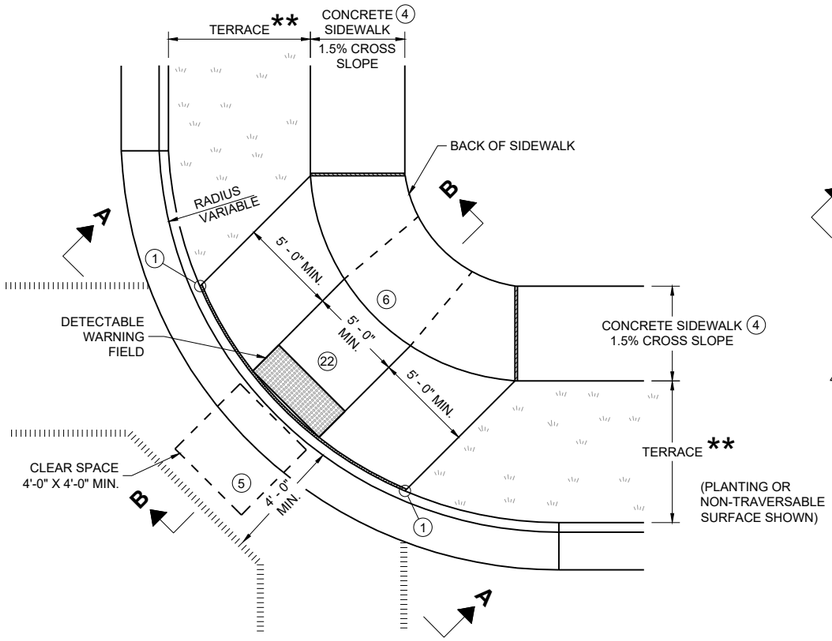
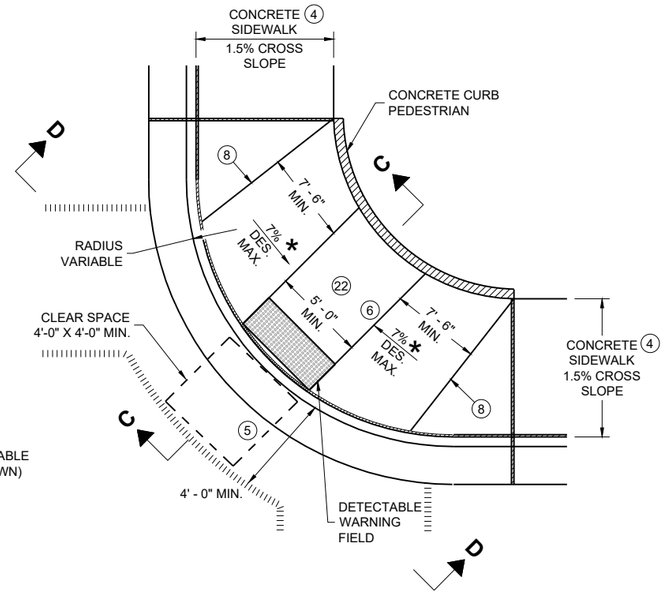


PLAN VIEW

CURB RAMP TYPE 1

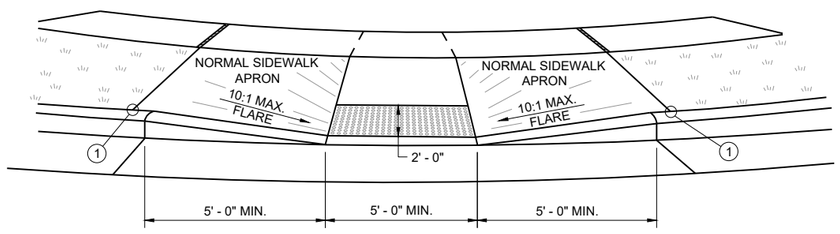
(CENTER OF CORNER RADIUS)



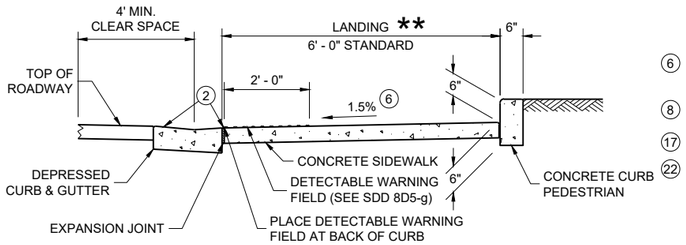
PLAN VIEW

CURB RAMP TYPE 1 - A

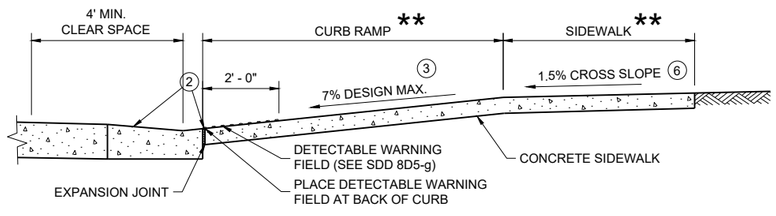
(NO TERRACE)



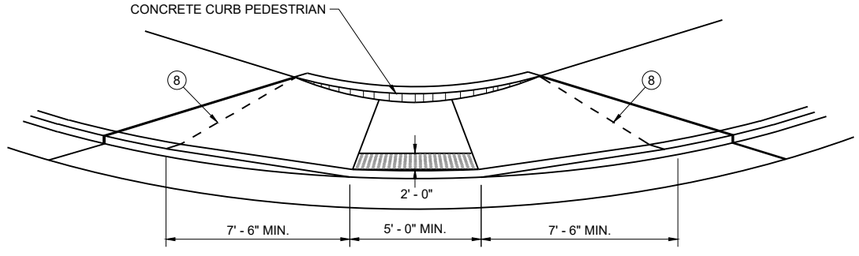
VIEW A - A FOR TYPE 1



SECTION C - C FOR TYPE 1 - A



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE CURB RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF CURB RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE CURB RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A CLEAR SPACE IN THE STREET AND GUTTER AREA. WHEN THE GUTTER CROSS SLOPE EXCEEDS 2.1%, CONSTRUCT THE CLEAR SPACE IN THE STREET AREA AND THE 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE. FOR RECONSTRUCTION AND MODERNIZATION PROJECTS THE CLEAR SPACE SLOPE PARALLEL TO THE CURBLINE SHOULD BE 2.1% MAX FOR CROSSINGS THAT ARE STOP AND YIELD CONTROLLED, AND 5% MAX FOR THOSE THAT ARE SIGNAL CONTROLLED. FOR PERPETUATION AND REHABILITATION PROJECTS THE SLOPE OF THE CLEAR SPACE PARALLEL TO THE CURBLINE WILL MATCH THE ROADWAY LONGITUDINAL SLOPE. THE SLOPE OF THE CLEAR SPACE PERPENDICULAR TO THE CURBLINE WILL MATCH THE ROADWAY CROSS SLOPE BUT SHOULD NOT EXCEED 5% UNLESS THE ROADWAY IS SUPERELEVATED (WHEN SUPERELEVATED THE ROADWAY CROSS SLOPE SHOULD MATCH THE SUPERELEVATION).

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

LEGEND

═══	½" EXPANSION JOINT SIDEWALK
– – – –	CONTRACTION JOINT FIELD LOCATED
ıı ıı ıı ıı	PAVEMENT MARKING CROSSWALK (WHITE)
*	MAXIMUM 8.3%
**	WIDTH SHOWN ELSEWHERE IN THE PLANS

CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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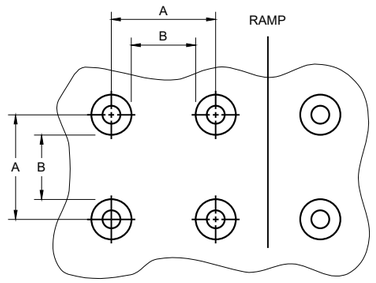
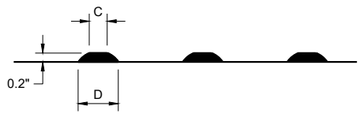
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

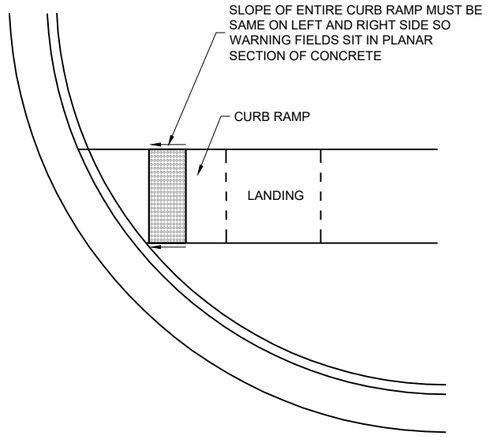
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

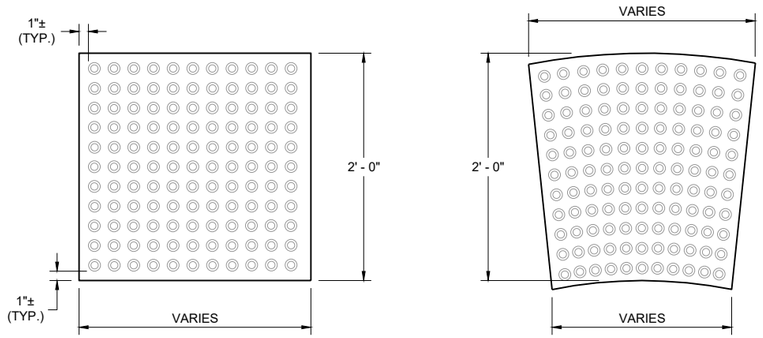
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

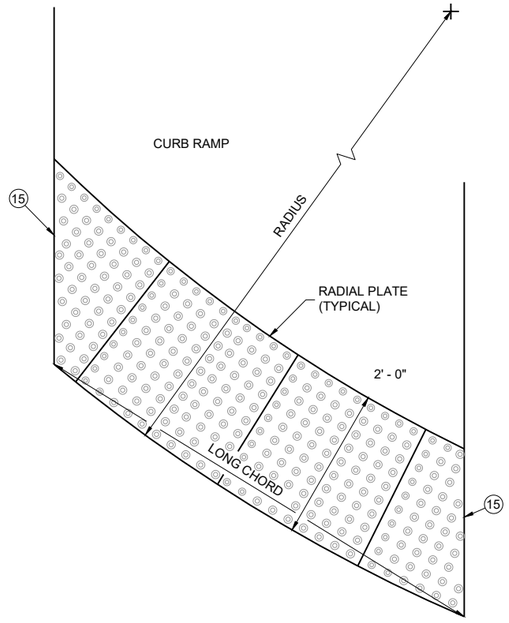
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



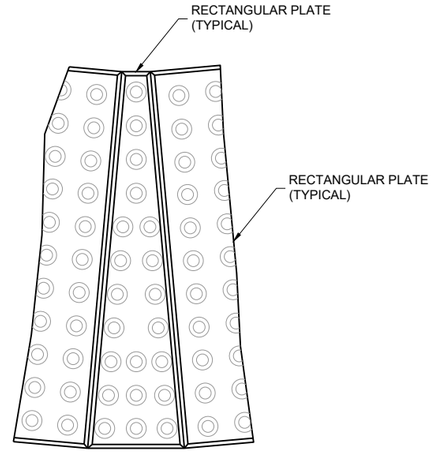
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodney Taylor — <position>

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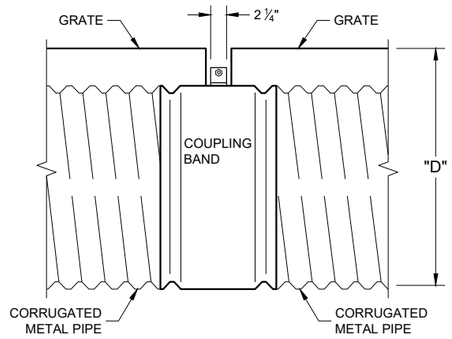
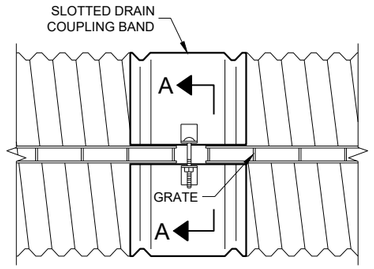


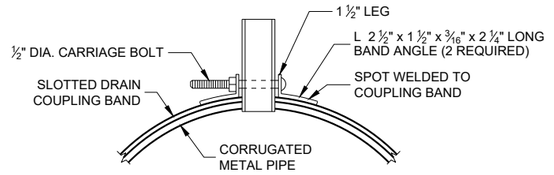
SIDE VIEW



PLAN VIEW

TYPICAL COUPLING BAND FOR SLOTTED DRAIN

(ALTERNATES PERMITTED AS APPROVED BY THE ENGINEER)



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.

THE PIPE FOR THE SLOTTED DRAIN SHALL MEET AASHTO DESIGNATION M-36, AND THE GRATE ASSEMBLIES SHALL BE MADE FROM STRUCTURAL STEEL SUITABLY WELDED TO FORM THE OPEN SLOT AND HOT-DIP GALVANIZED TO MEET THE PROVISIONS OF AASHTO DESIGNATION M-111.

NORMAL PIPE SIZES ARE 12-INCH THROUGH 24-INCH DIAMETER IN 0.064 INCH THICKNESS, AND 30-INCH DIAMETER PIPE IN 0.079 INCH THICKNESS.

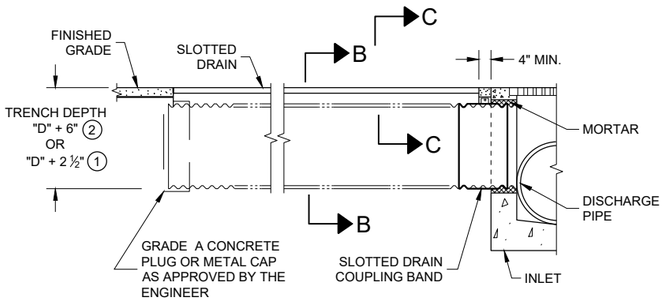
(1) 2 ½" NORMAL GRATE DEPTH

(2) 6" SPECIAL GRATE DEPTH, WHEN SPECIFIED ON THE PLANS.

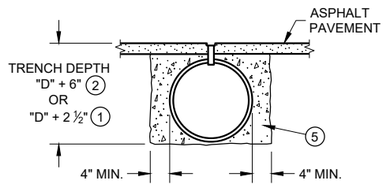
(3) FOR SCREEDING DIRECTLY OVER THE SLOTTED DRAIN WITH ASPHALT PAVER. FOR CONCRETE SURFACE USE 3" WIDE TAPE OVER THE SLOT TO KEEP MATERIAL OUT OF THE PIPE.

(4) WHEN THE SURFACE IS CONCRETE PAVEMENT THE GRADE AS SHOWN ON THE PLANS WILL BE FLUSH WITH THE TOP OF THE SLOTTED DRAIN.

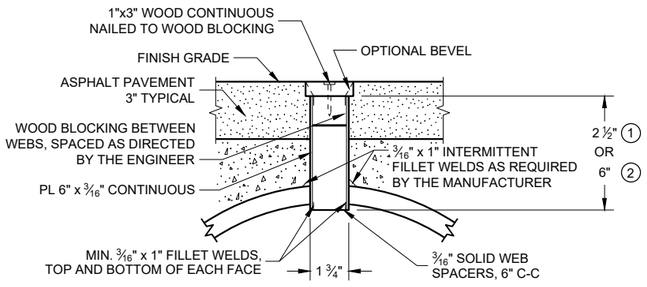
(5) ENCASE CORRUGATED METAL PIPE SURFACE DRAIN IN GRADE "A" CONCRETE CONFORMING TO STANDARD SPECIFICATION 501 AS MODIFIED IN STANDARD SPECIFICATION 716. PROVIDE QMP FOR CLASS III ANCILLARY CONCRETE PER STANDARD SPECIFICATION 716. UTILIZING HIGH EARLY STRENGTH (HES) CONCRETE CONFORMING TO STANDARD SPECIFICATION 710.4(5) IS ALLOWED AND MAY BE REQUIRED BY THE PLANS OR AS DIRECTED BY THE ENGINEER.



SLOTTED DRAIN INSTALLATION TYPE "A"

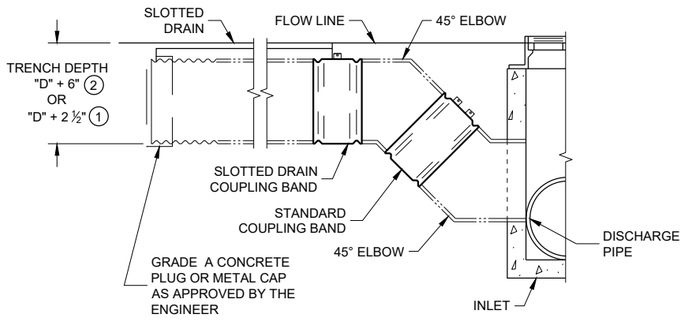


SECTION B - B

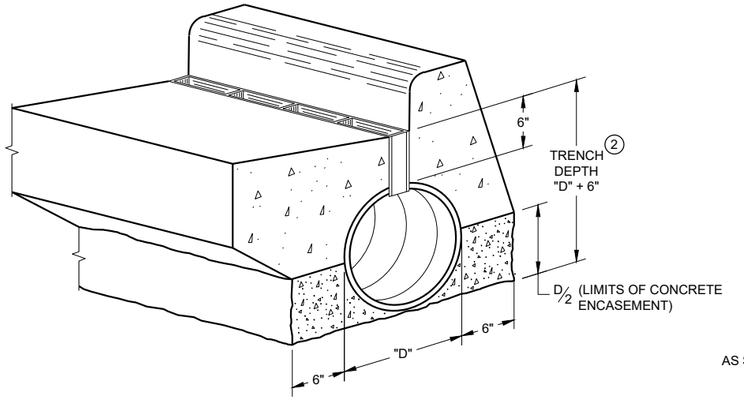


SECTION C - C
GRATE SLOT DETAIL

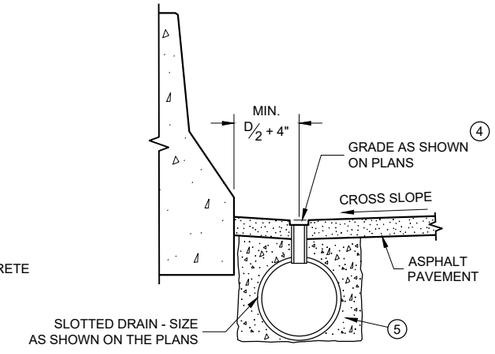
NOTE:
TO PREVENT "FLOATING" OF THE SLOTTED DRAIN DURING BACKFILL OPERATIONS, PROVIDE ADEQUATE WEDGES OR POUR THE LEAN GROUT ON TOP OF THE PLUGGED SLOT ALLOWING IT TO SLOUGH TO THE SIDES OF THE PIPE. THIS WILL PROVIDE ENOUGH WEIGHT ON TOP TO KEEP THE PIPE FROM FLOATING



SLOTTED DRAIN INSTALLATION TYPE "B"



SLOTTED DRAIN INSTALLATION IN FLOW LINE OF CURB AND GUTTER TYPE "C"



SLOTTED DRAIN INSTALLATION AT MEDIAN BARRIER TYPE "D"

SLOTTED CORRUGATED METAL PIPE SURFACE DRAINS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

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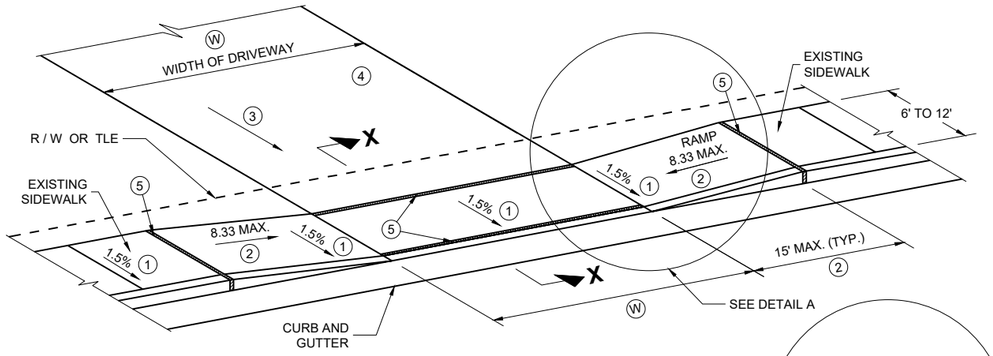
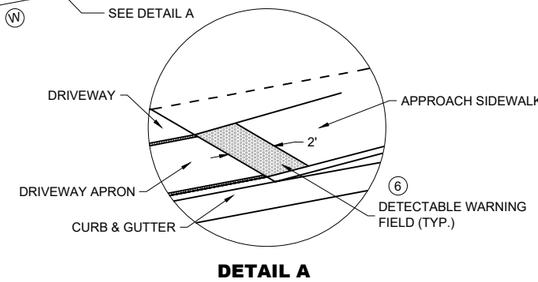
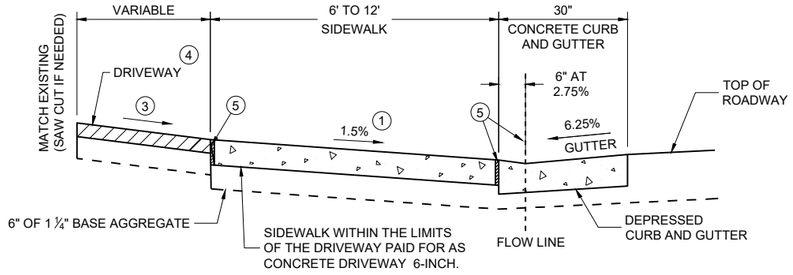


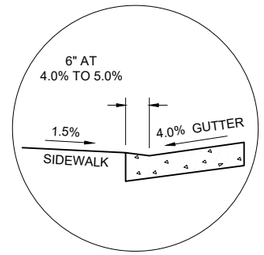
TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



DETAIL A



SECTION X - X



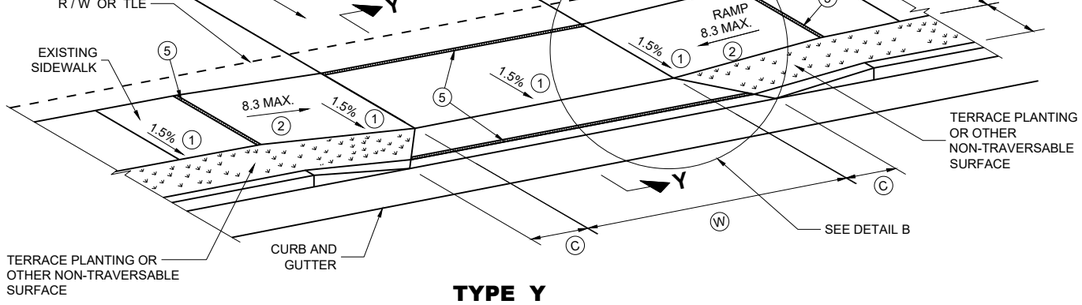
SECTION X - X
4% GUTTER SLOPE

Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

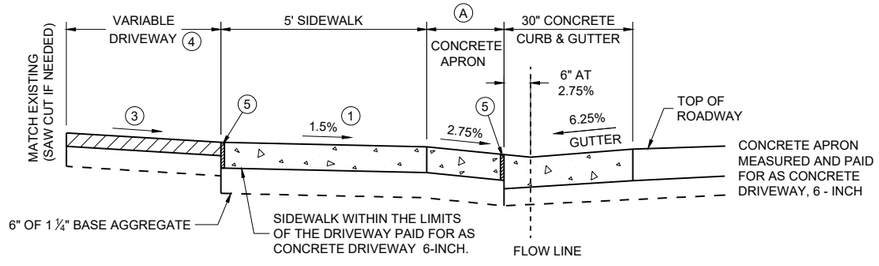
TABLE Y

Ⓐ FEET	Ⓒ FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'



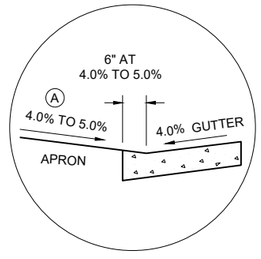
TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

Ⓐ:MEASURE FROM BACK OF CURB



NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y - Y



SECTION Y - Y
4% GUTTER SLOPE

DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER
(URBAN AND SUBURBAN)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1%.

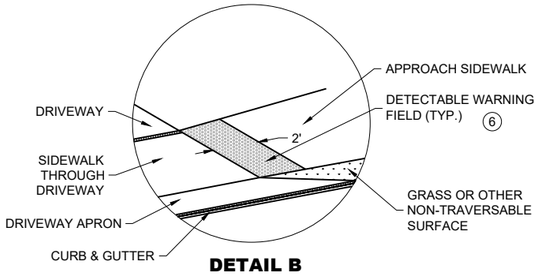
② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ 1/2" EXPANSION JOINT FILLER

⑥ DETECABLE WARNING FIELDS ARE REQUIRED WHEN A PEDESTRIAN CIRCULATION ROUTE CROSSES A DRIVEWAY THAT IS TRAFFIC SIGNAL, STOP, OR YIELD SIGN CONTROLLED. DETECTABLE WARNING FIELDS TO BE 2 FT DEEP AND EXTEND THE WIDTH OF THE PEDESTRIAN CIRCULATION ROUTE.



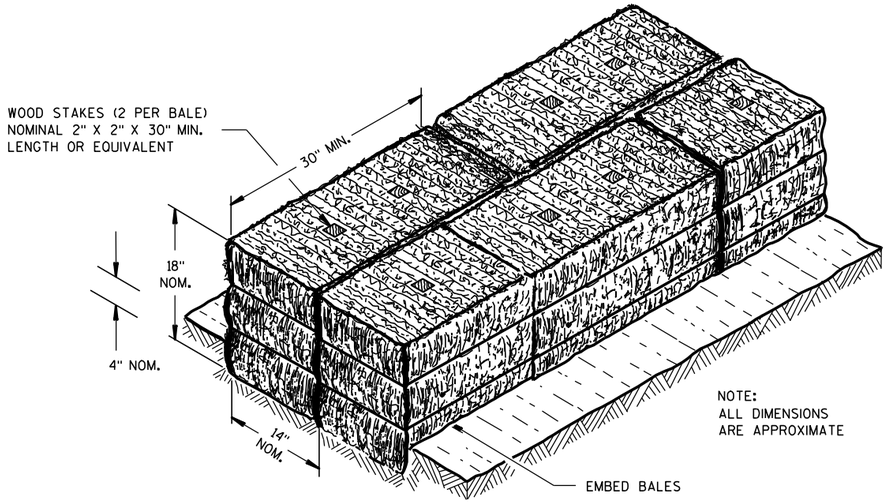
DETAIL B

DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y

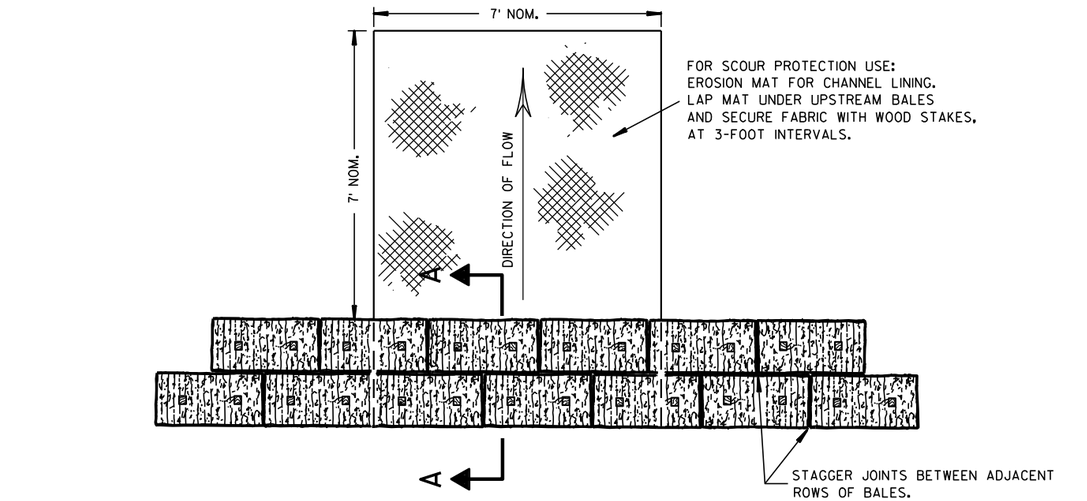
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 (DATE)
/S/ Rodney Taylor

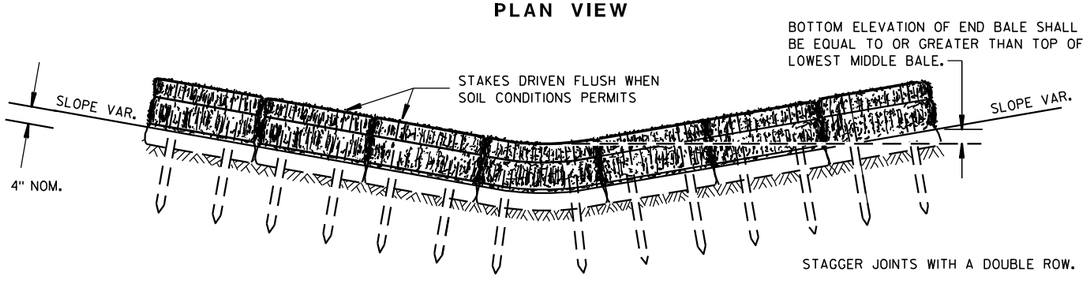
FHWA



SECTION A-A



PLAN VIEW



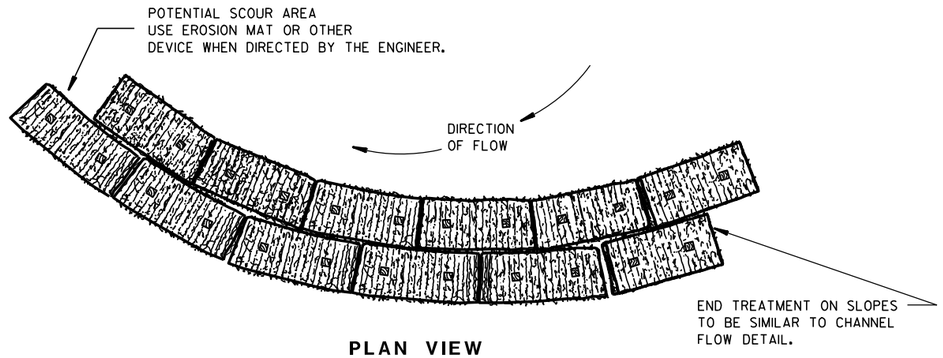
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

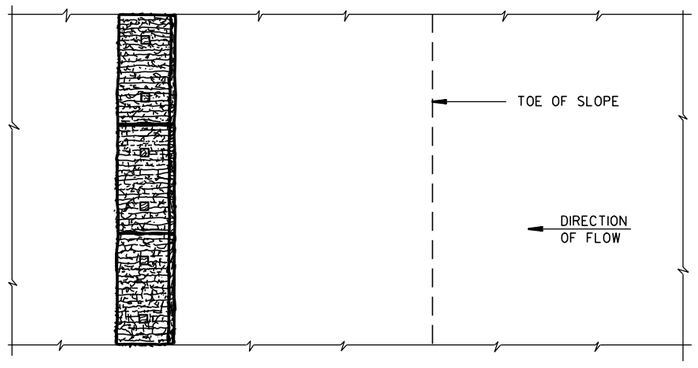
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

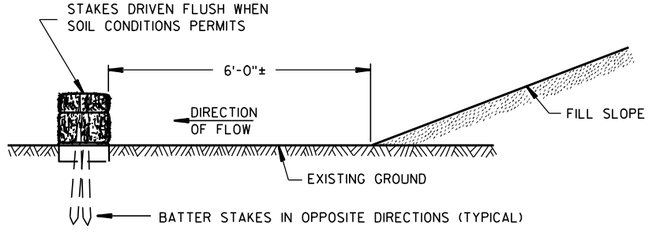


PLAN VIEW

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

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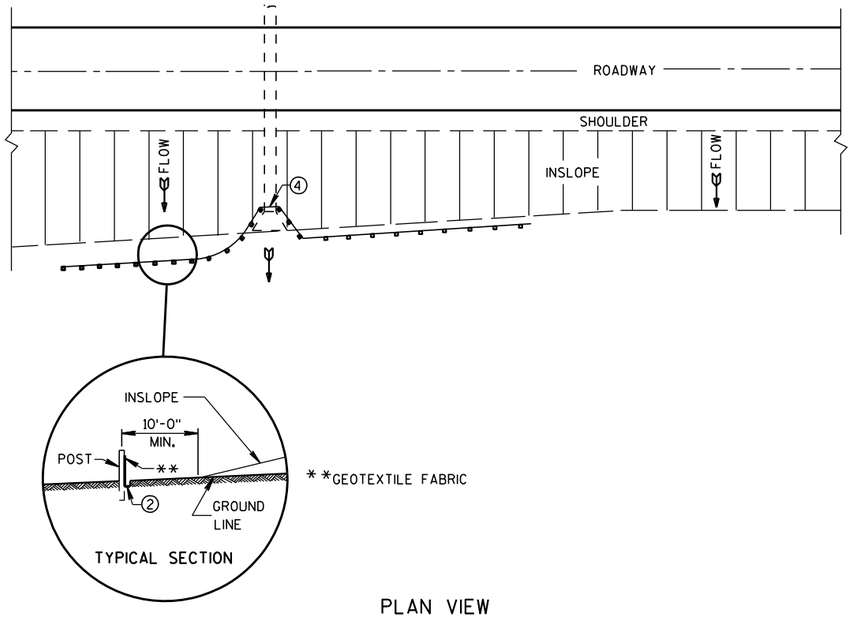
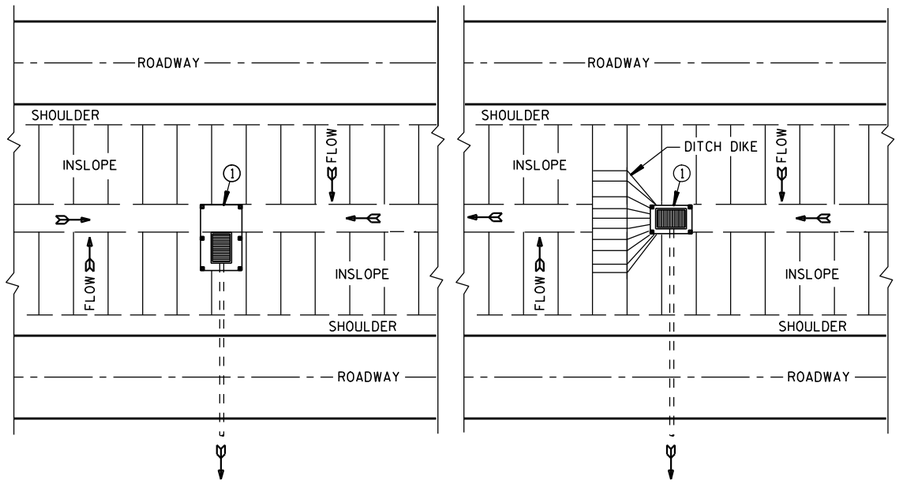
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



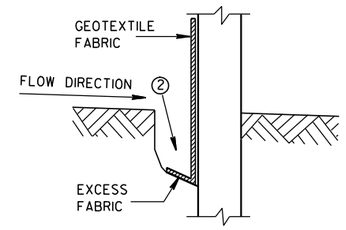
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

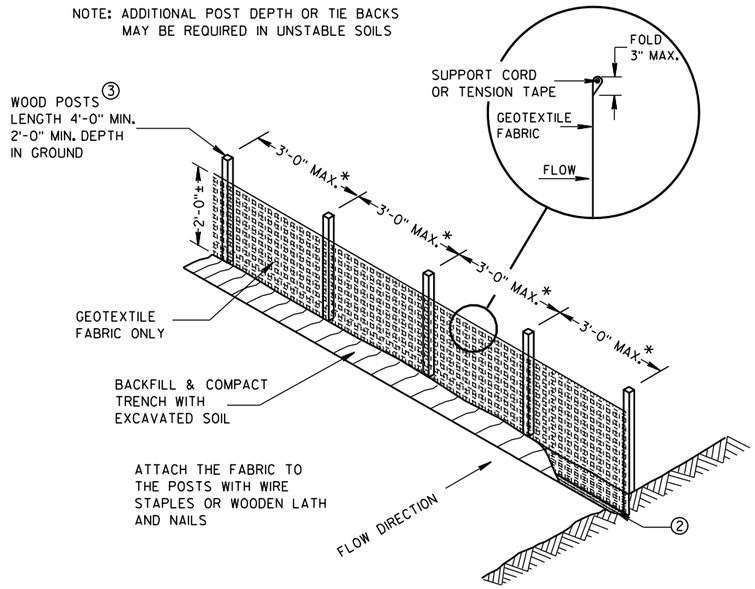
GENERAL NOTES

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

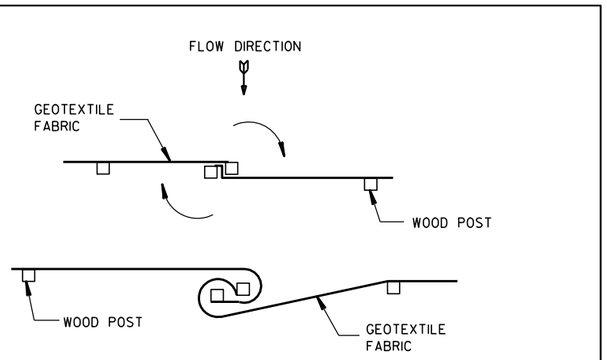
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL 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.



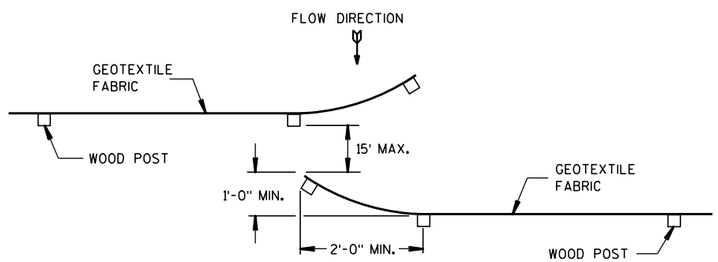
TRENCH DETAIL



SILT FENCE

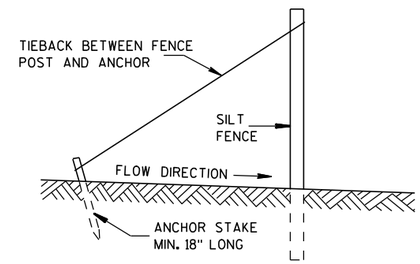


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



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

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S.D.D. 8 E 9-6

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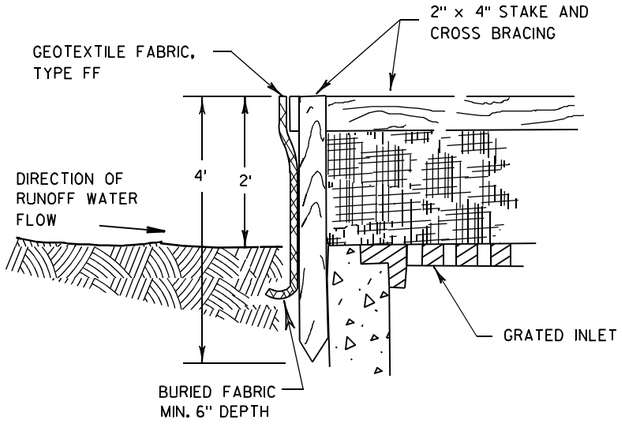
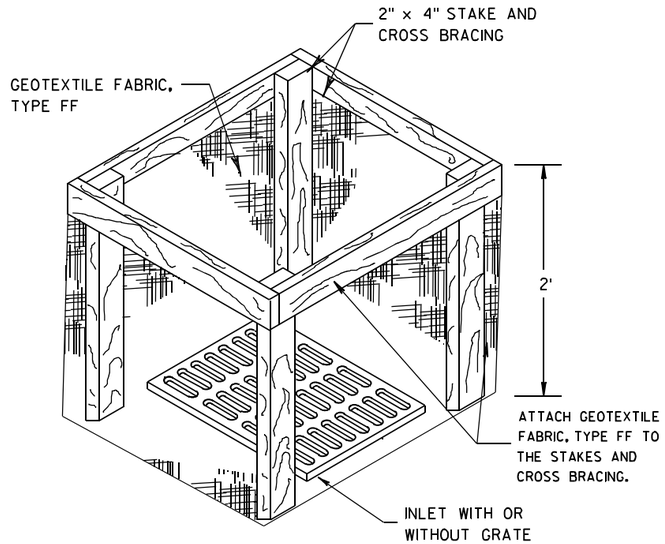
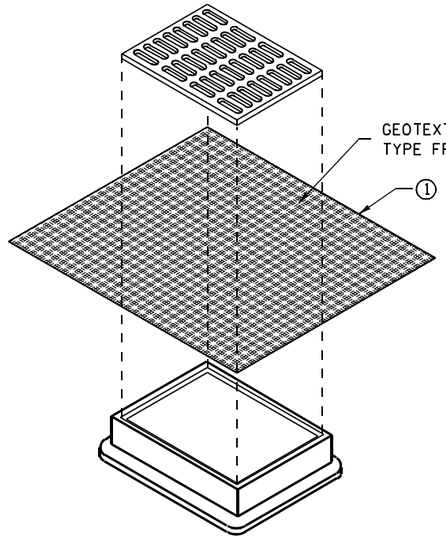
S.D.D. 8 E 9-6



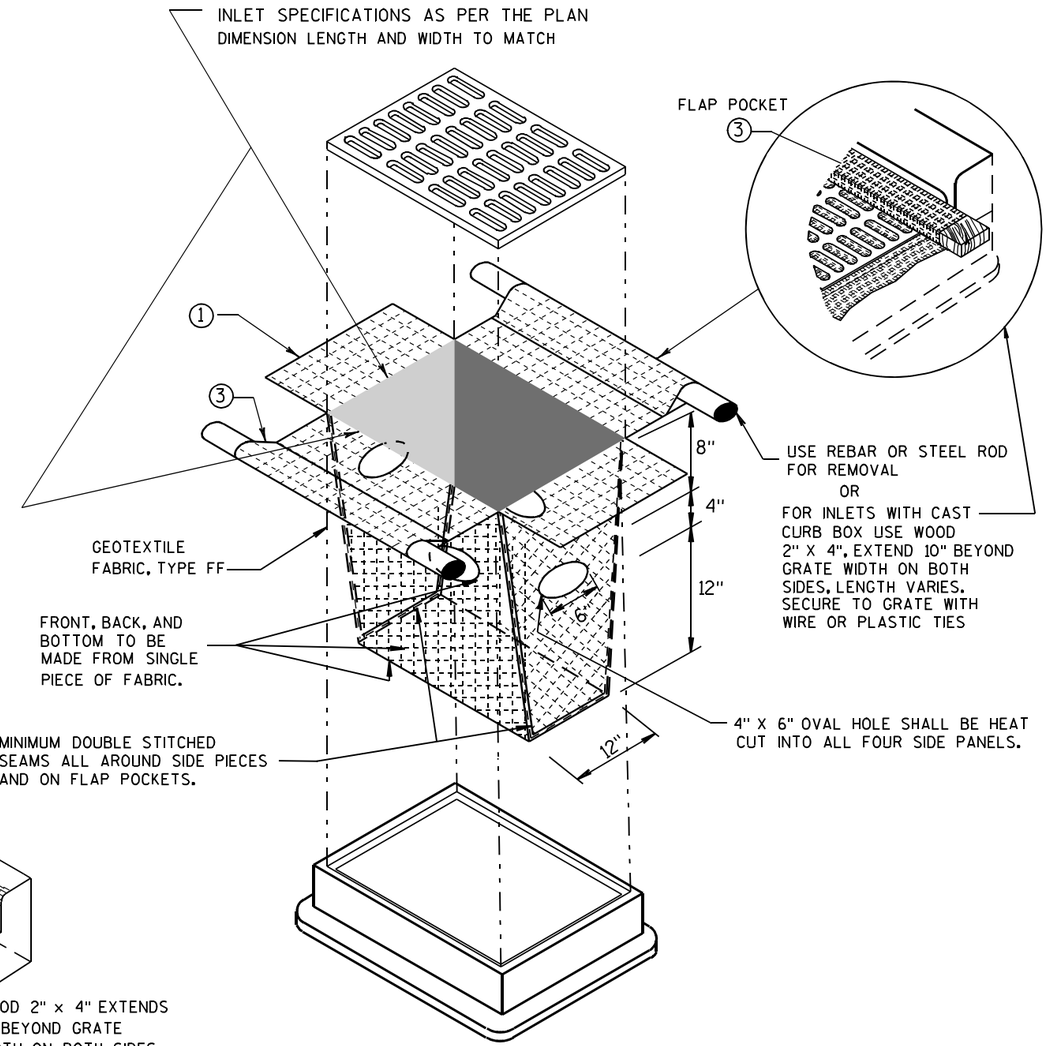


INLET PROTECTION, TYPE A



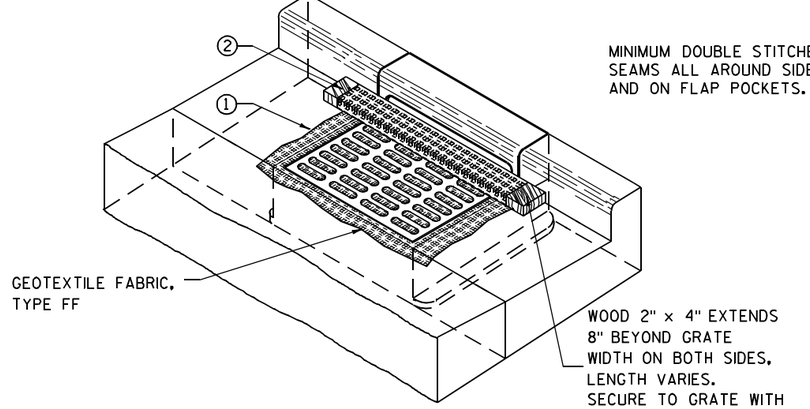
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(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

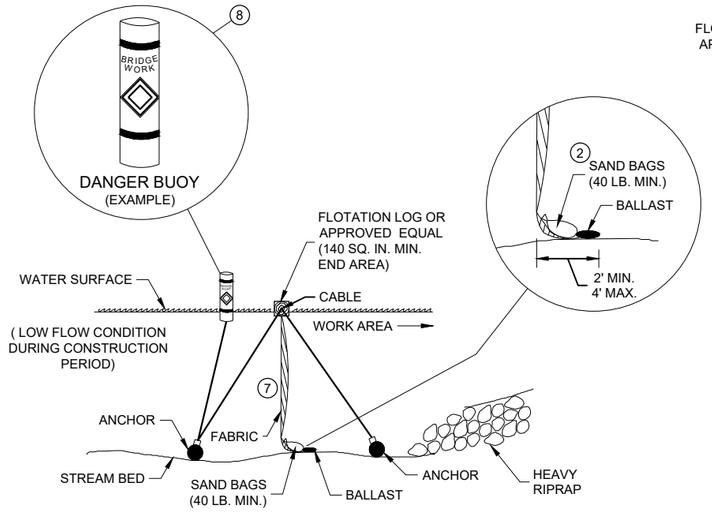
APPROVED

10/16/02
DATE

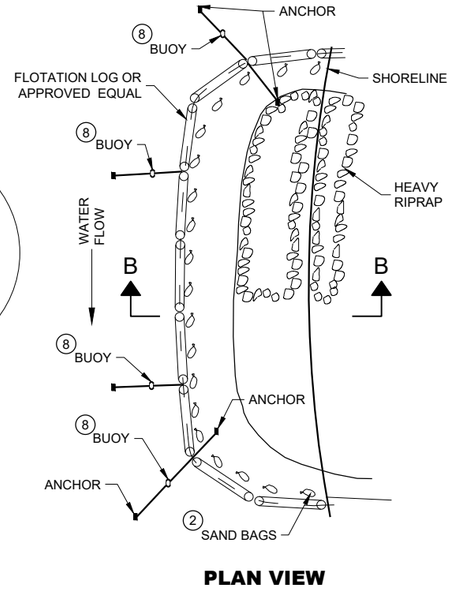
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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

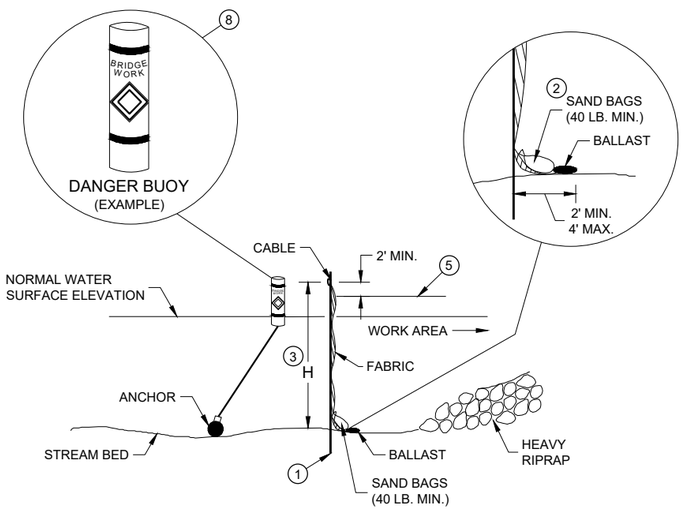


SECTION B - B

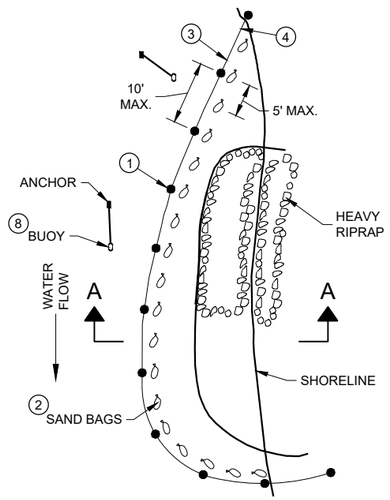


PLAN VIEW

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.

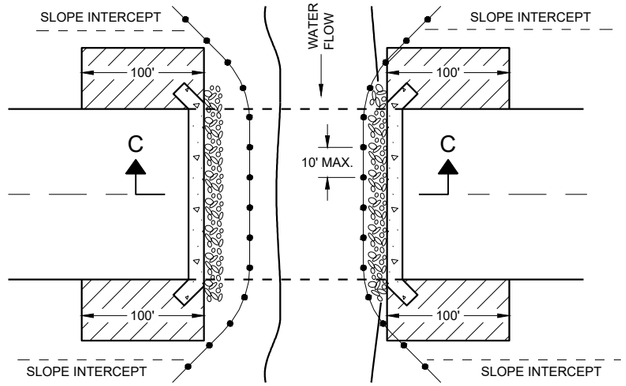
(4) IN WATERWAYS SUBJECT TO FLUCTUATING WATER ELEVATIONS, PROVISIONS SHOULD BE MADE TO ALLOW THE WATER TO EQUALIZE ON EACH SIDE OF THE BARRIER. THIS MAY BE ACCOMPLISHED BY LEAVING A PORTION OF THE BARRIER OPEN ON THE UPSTREAM END.

(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.

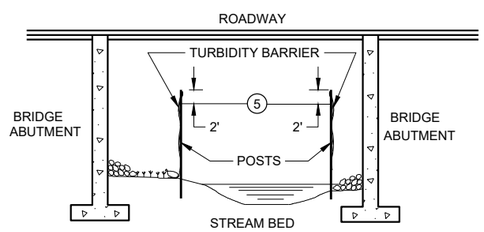
(6) FLOAT ALTERNATIVE WILL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER, AND IS MEANT FOR LOCATIONS WHERE BEDROCK PREVENTS THE INSTALLATION OF POSTS.

(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 DEVELOI
ENGINEER

FHWA

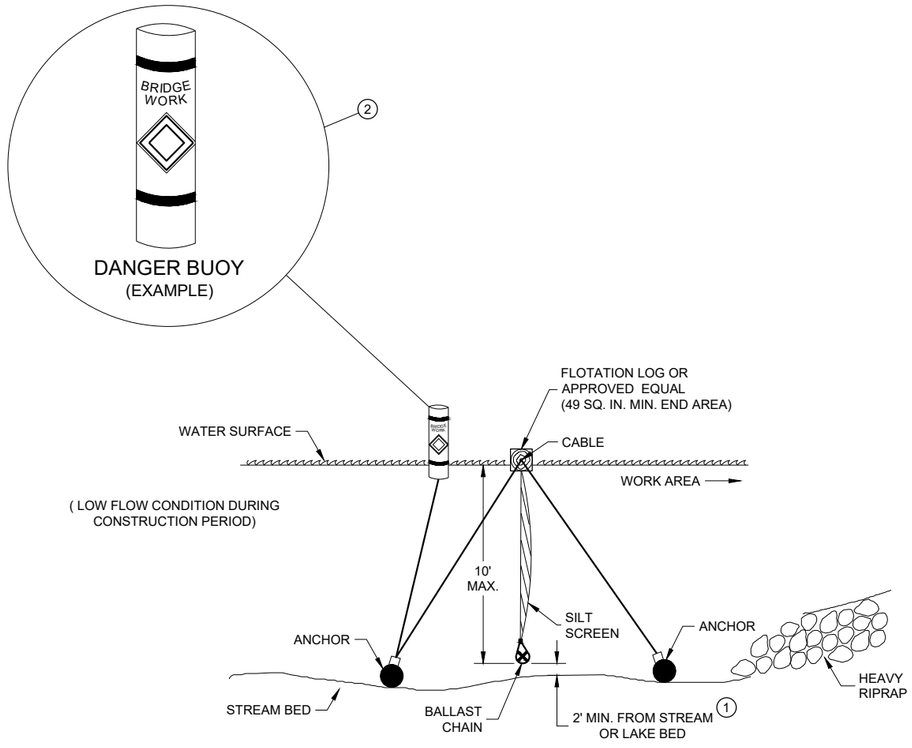
6
SDD 08E11 - 02

GENERAL NOTES

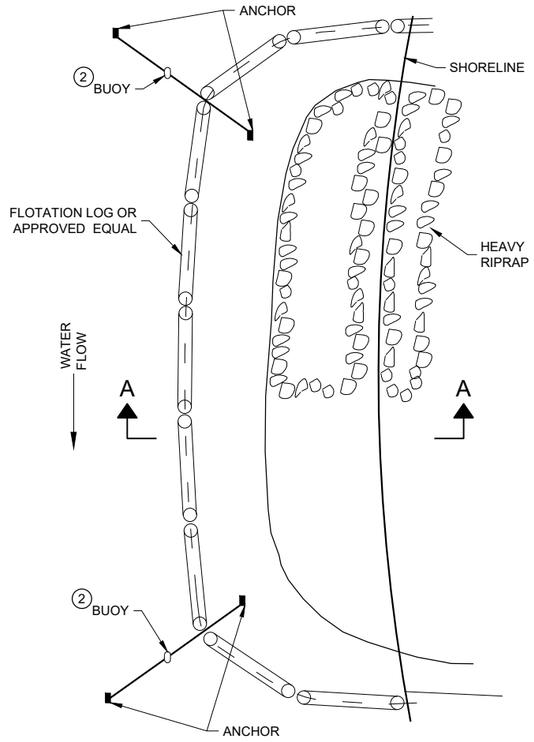
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) 2' MINIMUM SHALL BE MAINTAINED DURING CONSTRUCTION PERIOD.

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



SECTION A - A



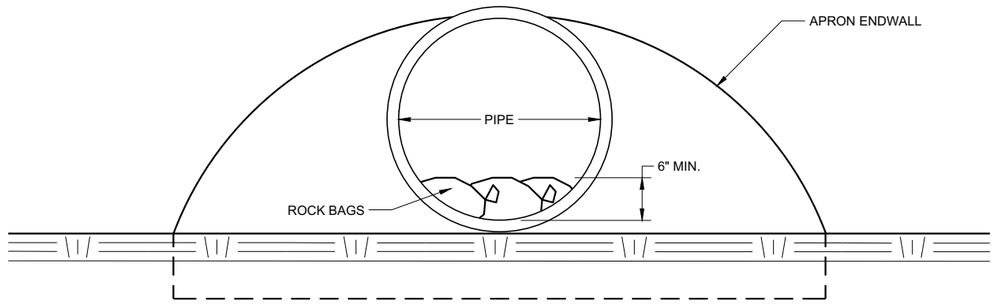
PLAN VIEW

SILT SCREEN PLACEMENT DETAIL

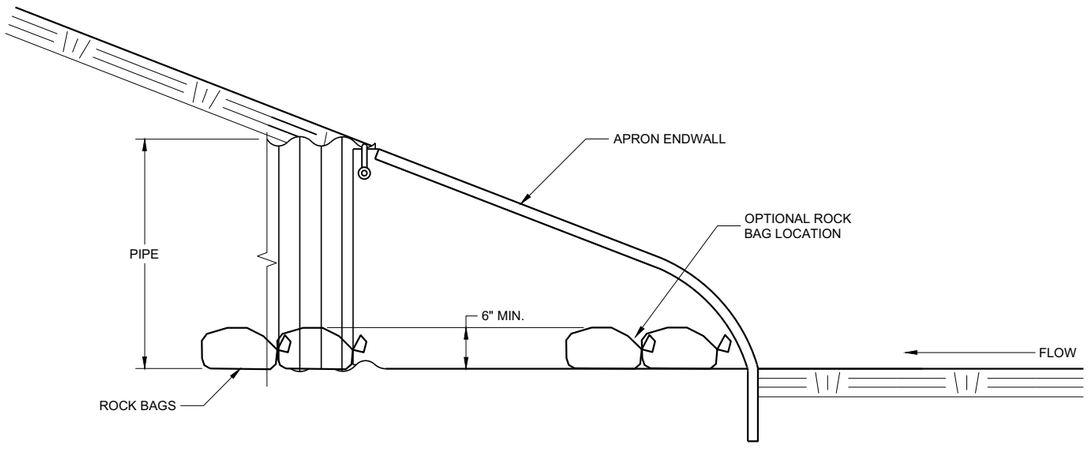
SILT SCREEN	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/04/02 DATE	/S/ Beth Cannestra CHIEF ROADWAY DEVELOI ENGINEER
FHWA	

6

SDD 08E12 - 01



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

METAL APRON ENDWALLS

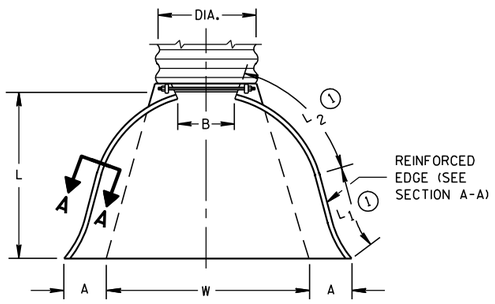
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

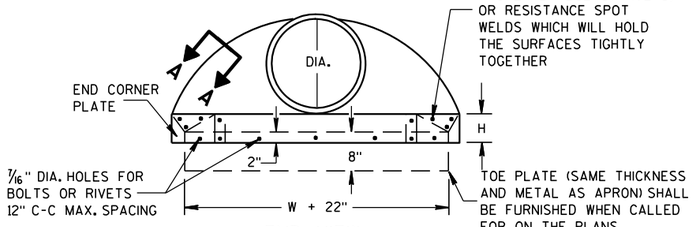
REINFORCED CONCRETE APRON ENDWALLS

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

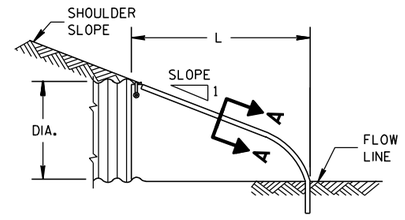
*MINIMUM
**MAXIMUM



PLAN VIEW

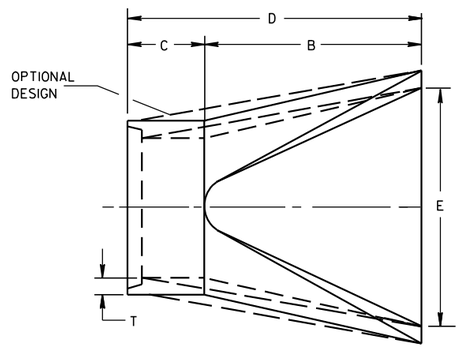


END VIEW

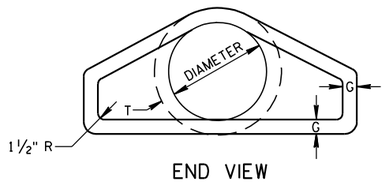


SIDE ELEVATION

METAL ENDWALLS



PLAN



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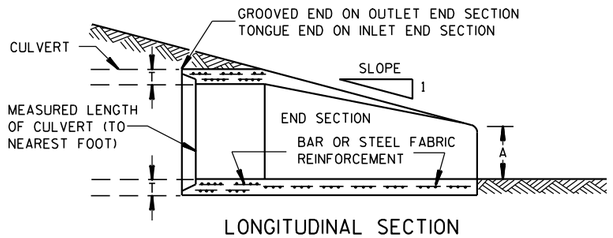
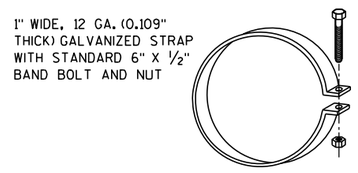


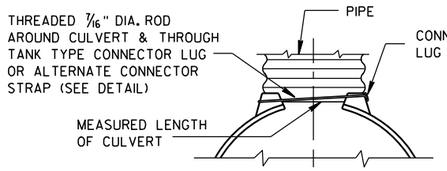
LONGITUDINAL SECTION

CONCRETE ENDWALLS

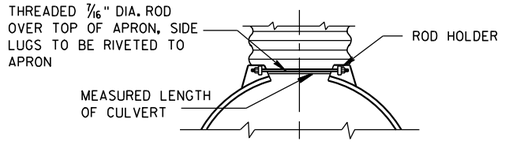


ALTERNATE FOR TYPE 1 CONNECTION

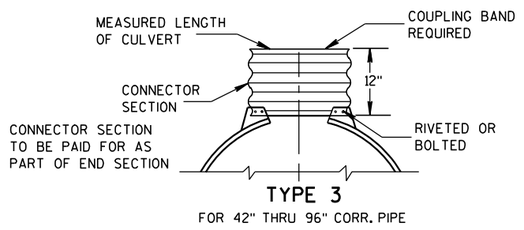
END SECTION CONNECTOR STRAP



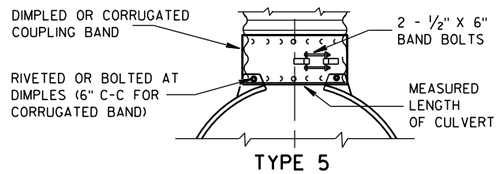
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

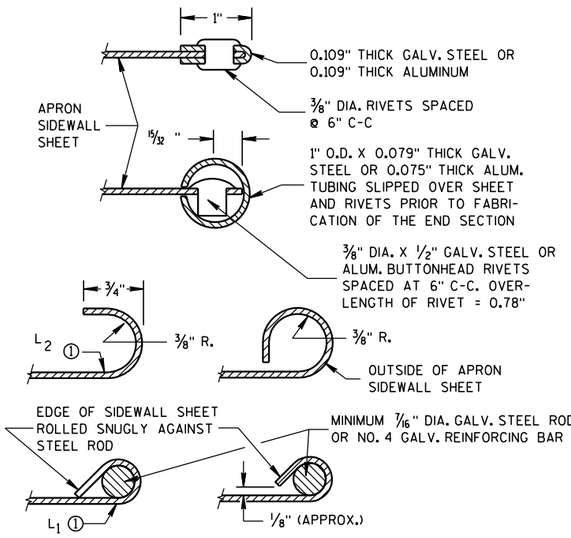
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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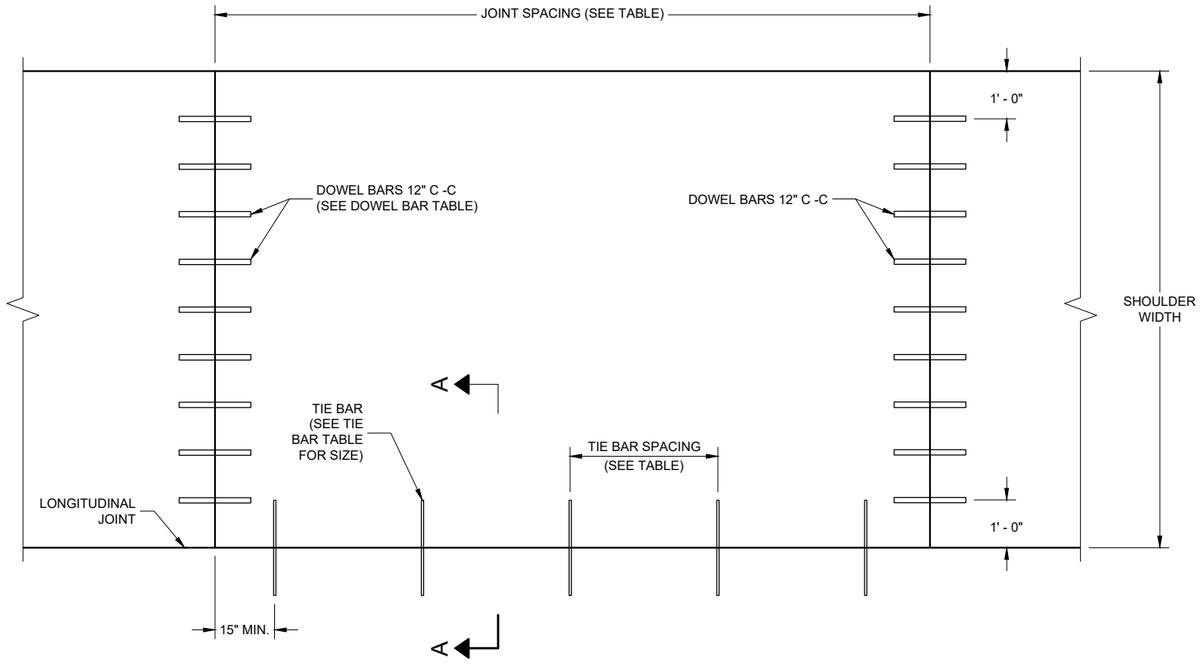
S.D.D. 8 F 1-11



PLAN VIEW

CONCRETE PAVEMENT SHOULDER

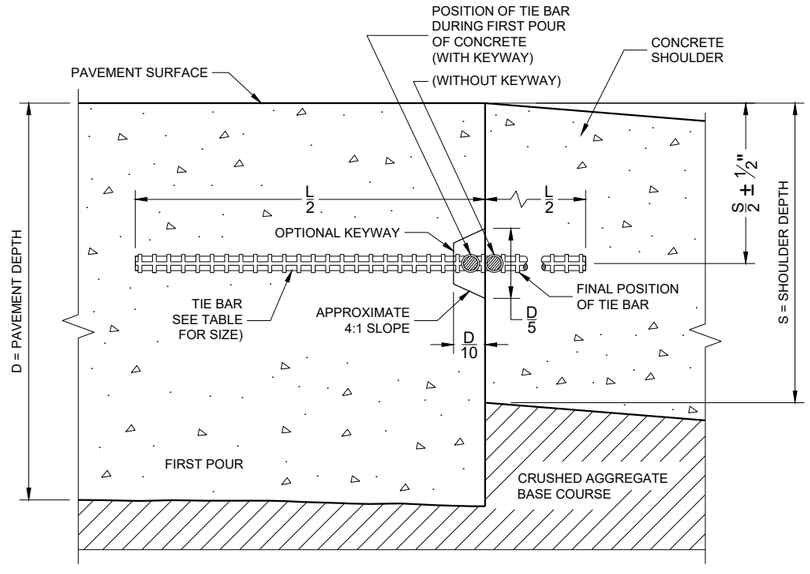
GENERAL NOTES

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

FHWA

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SDD 13A03 - 07

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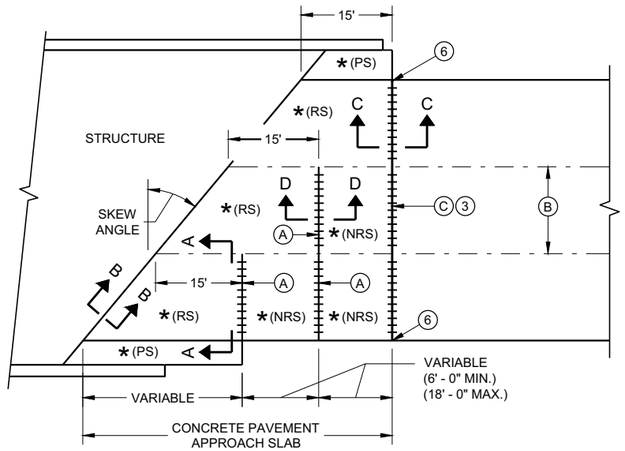
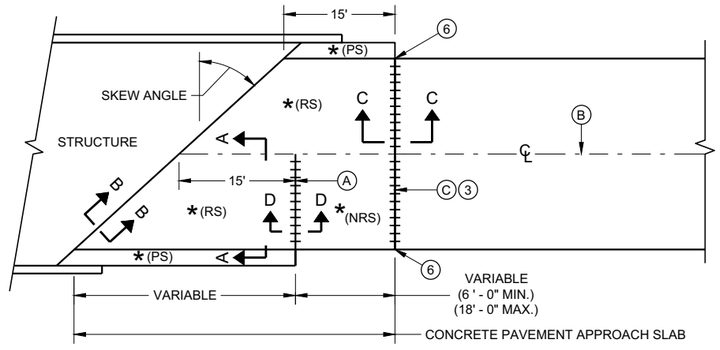
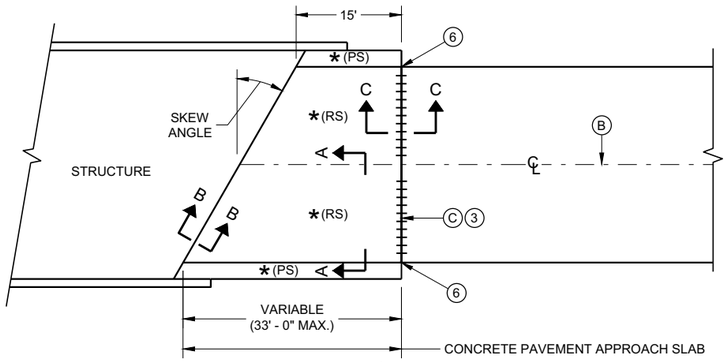
SDD 13A03 - 07



SKEWED APPROACH
(PAVEMENT MORE THAN TWO LANES)



SKEWS > 20°
(PAVEMENT WIDTH ≤ 30')



SKEWS ≤ 20°
(PAVEMENT WIDTH ≤ 30')

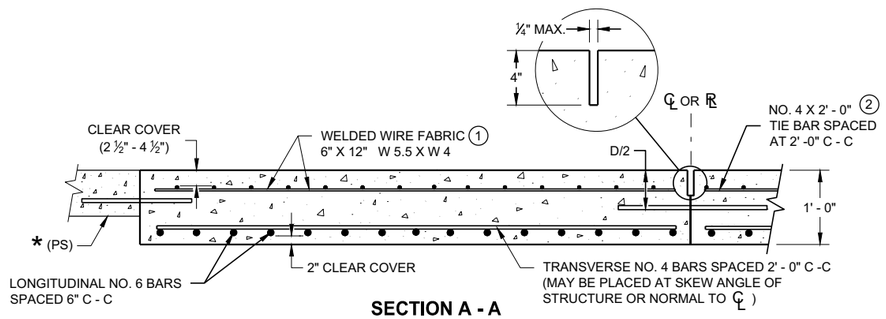
APPROACH SLAB AND ADJACENT PAVEMENT

* (RS) = REINFORCED CONCRETE SLAB

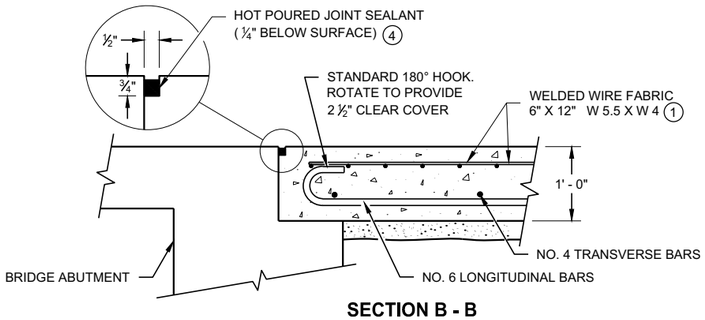
* (PS) = PAVED CONCRETE SHOULDER OR CONCRETE DRAINAGE SLAB

* (NRS) - NON - REINFORCED CONCRETE SLAB

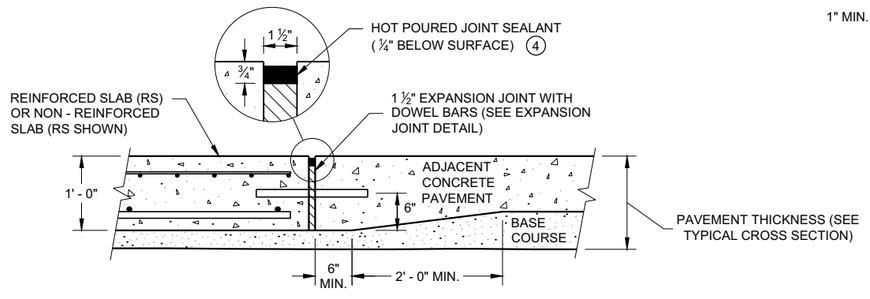
*** STANDARD DOWEL BAR DIAMETER (SEE SDD 13C11 AND SDD 13C13)



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.

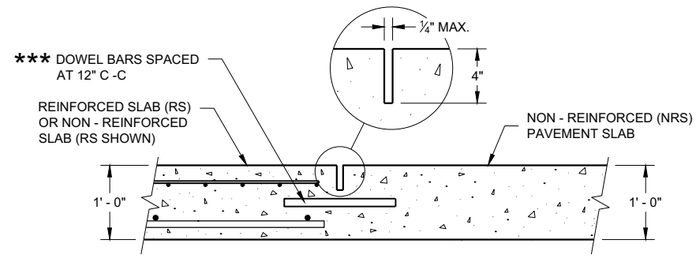
(5) PLACE EXPANSION CAP ON THE END OF THE DOWEL THAT IS NOT TACK WELDED TO THE BASKET. DO NOT FORCE DOWEL BAR PAST THE DOWEL STOP.

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

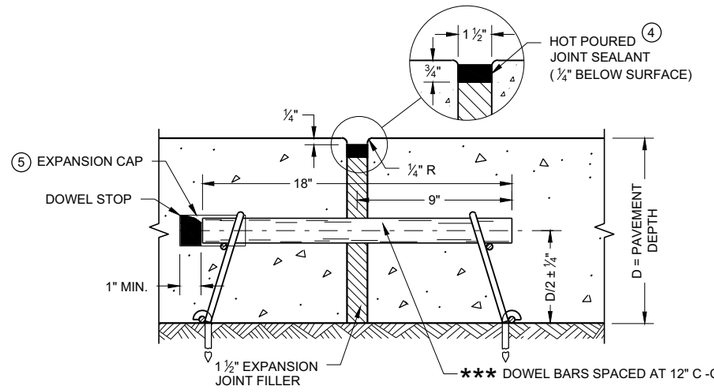
(A) STANDARD CONTRACTION JOINT NORMAL TO ℄ OR ℞.

(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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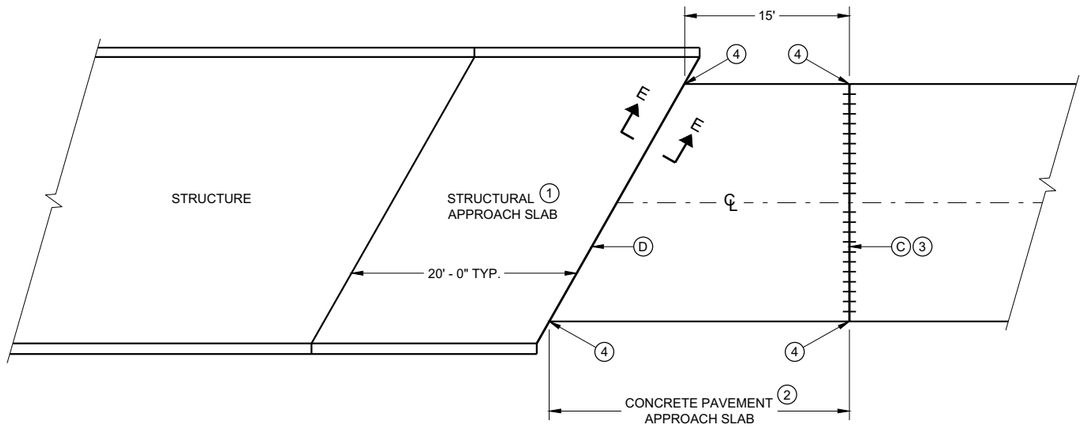
SDD 13B02 - 09a



BRIDGE APPROACHES

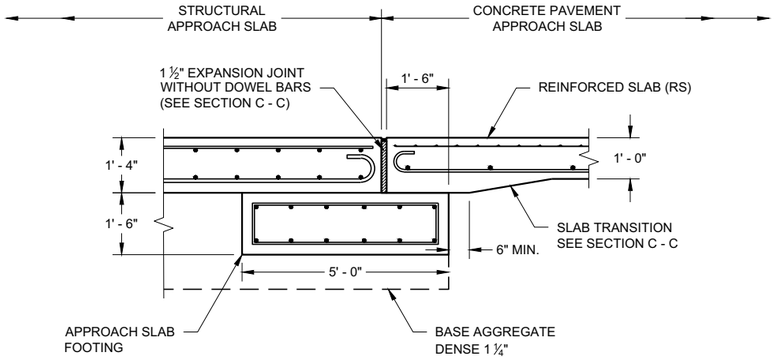
GENERAL NOTES

ALL PROJECTS THAT INVOLVE A STRUCTURAL APPROACH SLAB WILL ALSO HAVE A CONCRETE PAVEMENT APPROACH SLAB.

1. SEE BRIDGE PLAN.
2. CONFORM TO SDD 13B02 SHEET A FOR CONCRETE PAVEMENT APPROACH SLAB DETAILS
3. DO NOT CONSTRUCT AN EXPANSION JOINT OR INSTALL DOWEL BARS WHEN ABUTTING AN HMA PAVEMENT.
4. EXTEND EXPANSION JOINT THROUGH ANY ADJACENT TIED CONCRETE.

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

D. 1 ½" EXPANSION JOINT (NO DOWELS)



SECTION E - E
FOOTING DETAIL
STRUCTURAL APPROACH SLAB TO CONCRETE BRIDGE APPROACH

STRUCTURAL APPROACH SLAB AND CONCRETE PAVEMENT APPROACH SLAB

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE
/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

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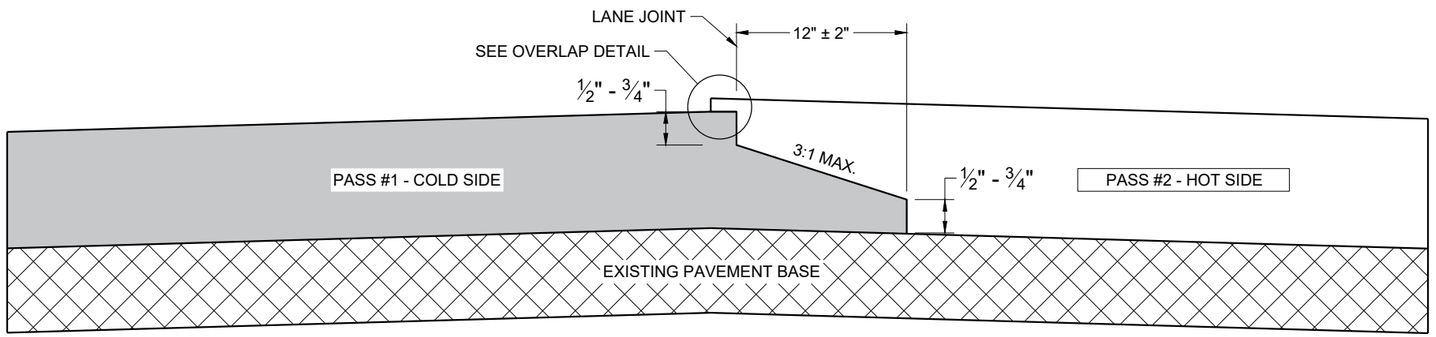
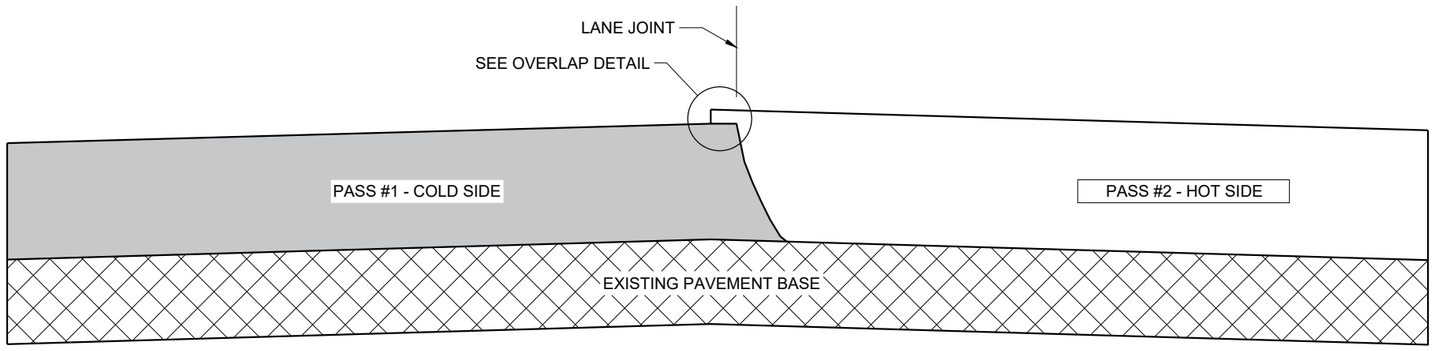
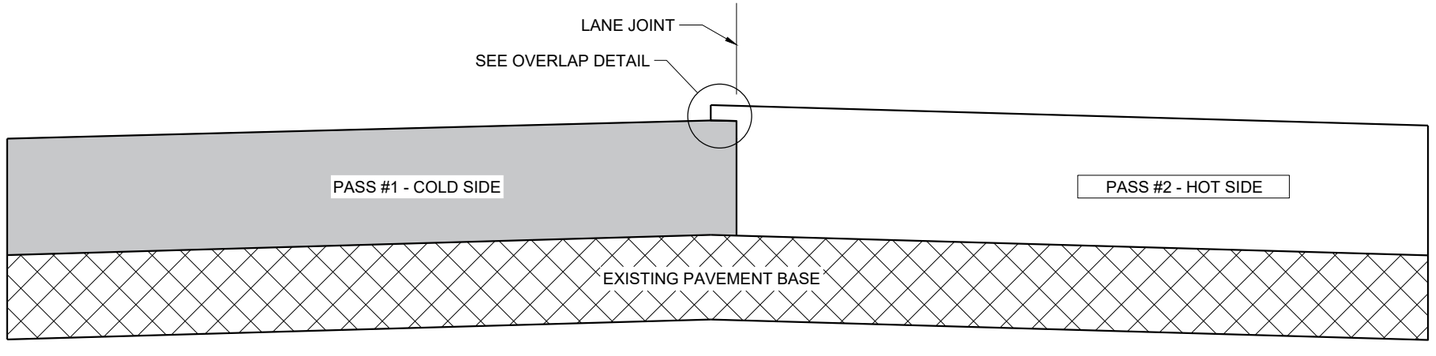
SDD 13B02 - 09b
SDD 13B02 - 09b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

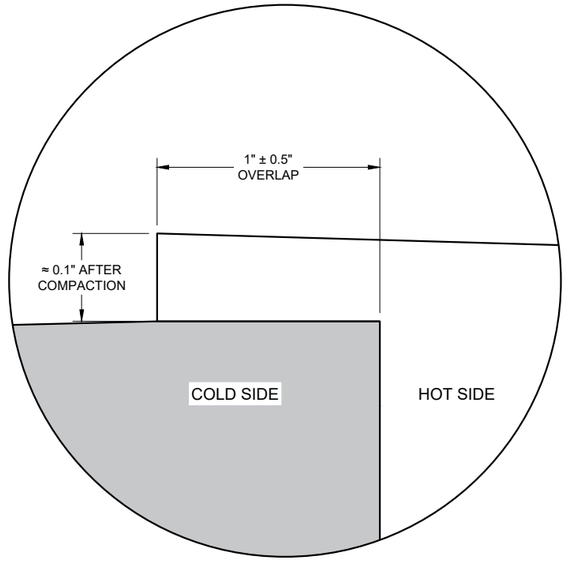
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

SDD 14B15a Steel Plate Beam Guard, Class "A", Installation and Elements

GENERAL NOTES

1. WOOD OR STEEL POSTS (w6X9 OR w6X8.5) AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6"X8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS. DO NOT MIX STEEL AND WOOD POSTS IN A SINGLE INSTALLATION.

2. USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGE SPELTER COATING ON GALVANIZED POSTS.

3. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

4. USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

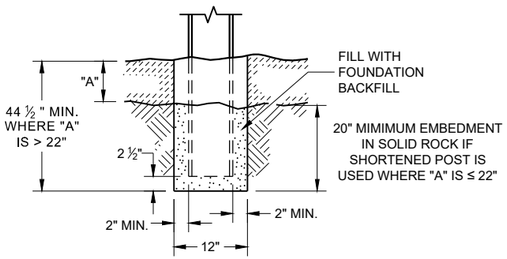
5. IF THE DISTACE FROM BACK OF POST TO SHOULDER HIGHE POINT IS LESS THAN 2 FEET, INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

6. IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCHES IN DIAMETER POST HOLE 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 ADEQUATELY.

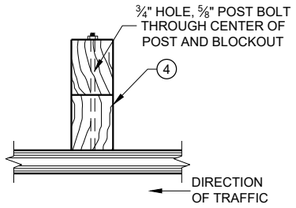
7. WHEN USING STEEL POSTS AND WOOD BLOCKOUTS, INSTALL FOUR 16d GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

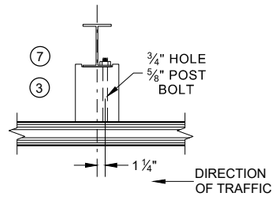
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



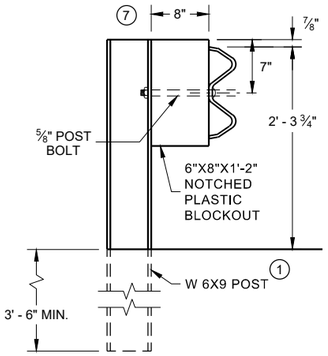
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)



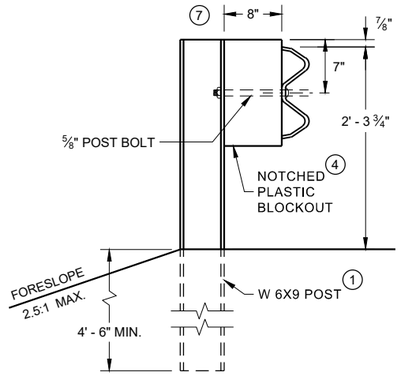
PLAN VIEW
WOOD POST, BLOCKOUT AND BEAM



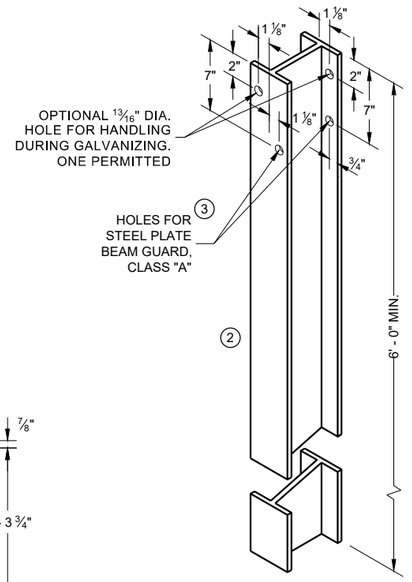
PLAN VIEW
WOOD POST, BLOCKOUT AND BEAM



END VIEW
STEEL POST AND NOTCHED PLASTIC BLOCKOUT ALTERNATIVE STANDARD INSTALLATION

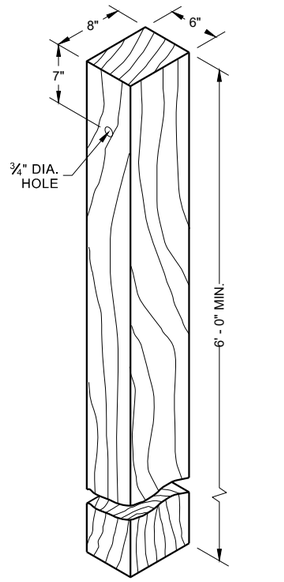


END VIEW
LONGER POST AT HALF POST SPACING W BEAM (LHW)

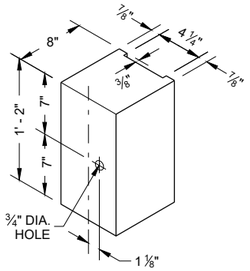


STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)

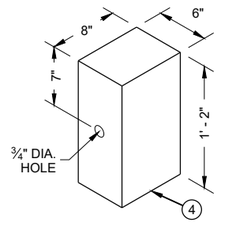
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



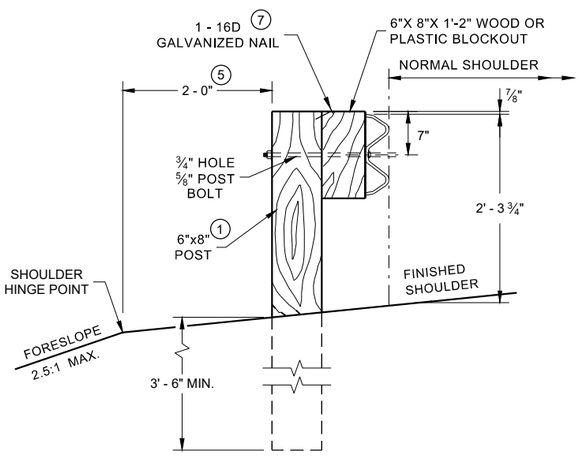
WOOD POST (6" X 8") NOMINAL (1)



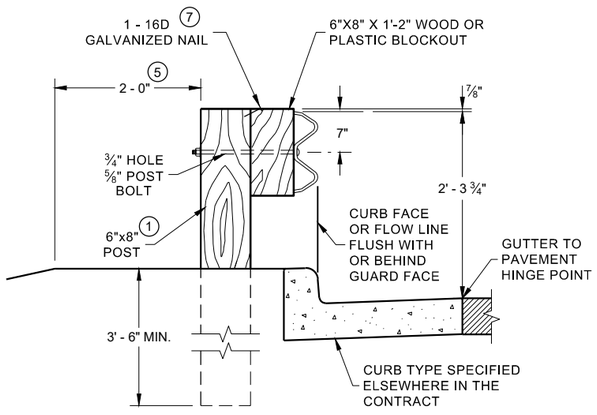
TYPICAL NOTCHED PLASTIC BLOCKOUT FOR STEEL POSTS



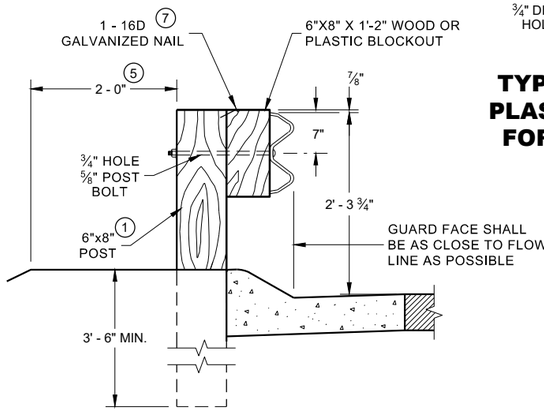
WOOD OR PLASTIC BLOCKOUT FOR WOOD POSTS



END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



END VIEW
LOCATED ALONG A CURBED ROADWAY

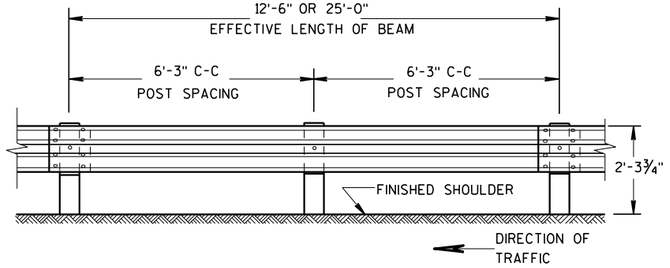


END VIEW
LOCATED ALONG A MOUNTABLE CURBED ROADWAY

STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION AND ELEMENTS

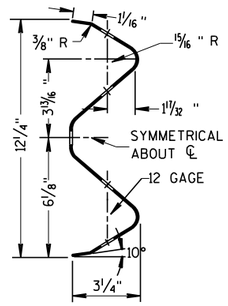
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B15 -11a

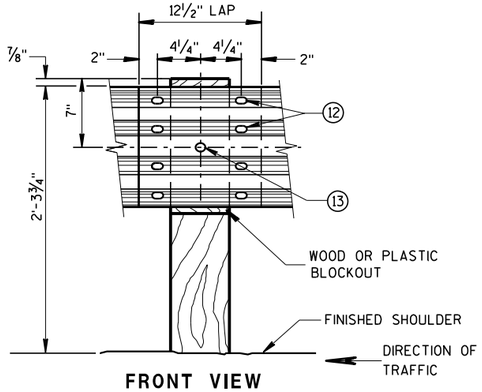


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

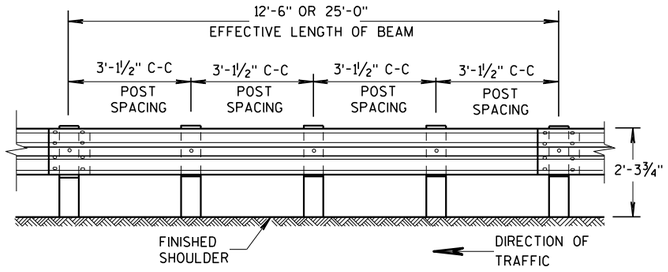
GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINA. START REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 100 FEET (MAX.) TO THE END OF GUARDRAIL RUN, USING A MINIMUM OF 3 REFLECTORS.

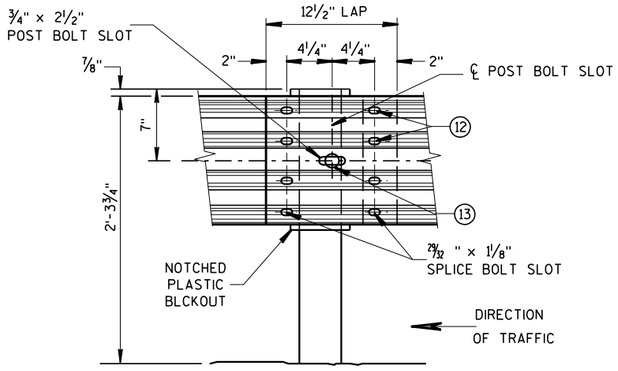
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) ⅝" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH ⅝" DIA. F844 FLAT WASHER UNDER NUT.



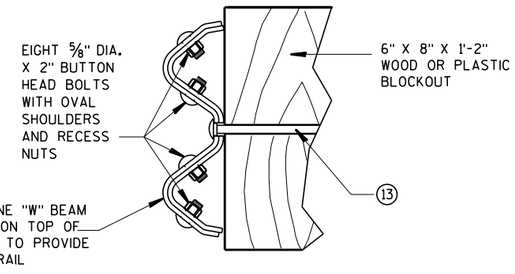
FRONT VIEW

POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

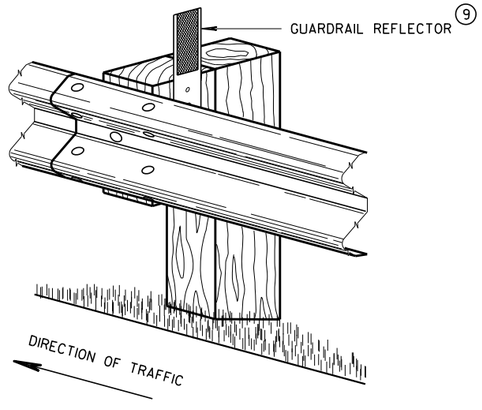


NESTED W BEAM (NW)

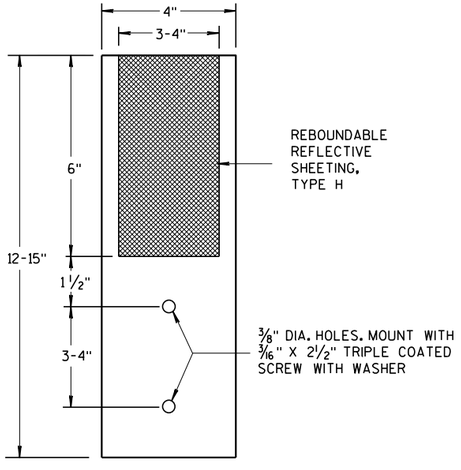
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

* USE DOUBLE SIDED WHITE GUADRAIL REFLECTORS ON ROADWAYS WITH BI-DIRECTIONAL TRAFFIC (NO MEDIAN). USE SINGLE SIDED WHITE (RIGHT SIDE) AND SINGLE SIDED YELLOW (LEFT SIDE) ON ROADWAYS WITH MEDIAN SEPARATION.



4" X 12" GUARDRAIL REFLECTOR DETAIL AND TYPICAL INSTALLATION *



4"x 12" GUARDRAIL REFLECTOR

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCO 79
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 15-11b

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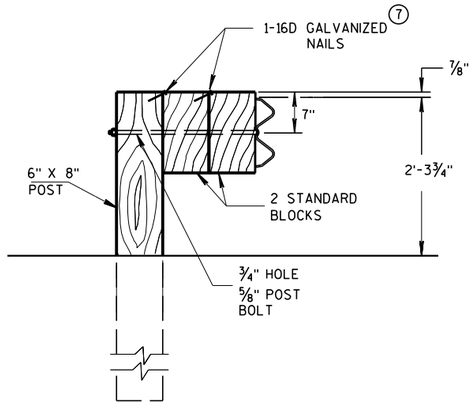
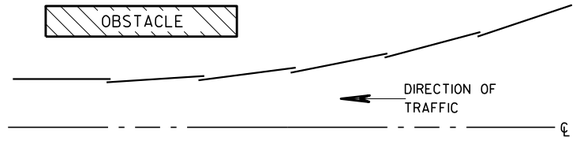
S.D.D. 14 B 15-11b



DETAIL FOR DOUBLE BLOCKS

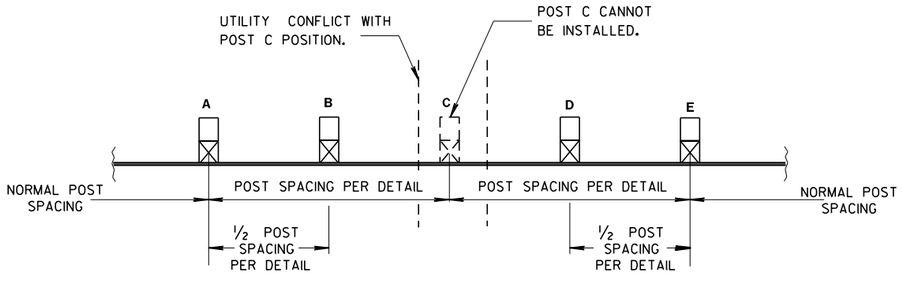
THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED



PLAN VIEW
BEAM LAPPING DETAIL

DETAIL FOR TRIPLE BLOCKS

TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA 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.

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

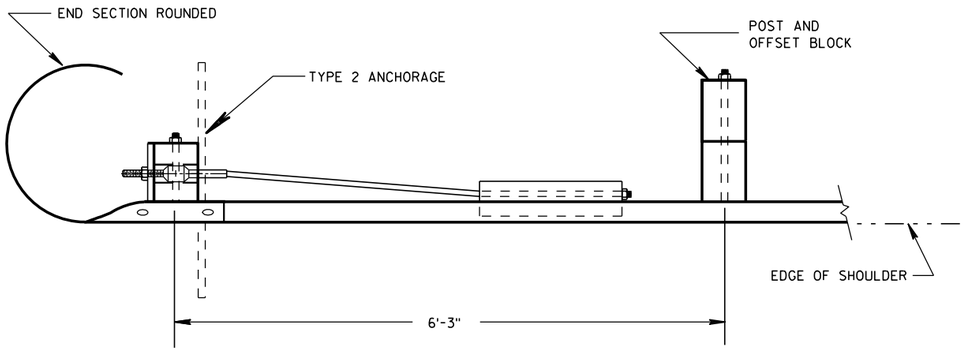
APPROVED
June 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

6

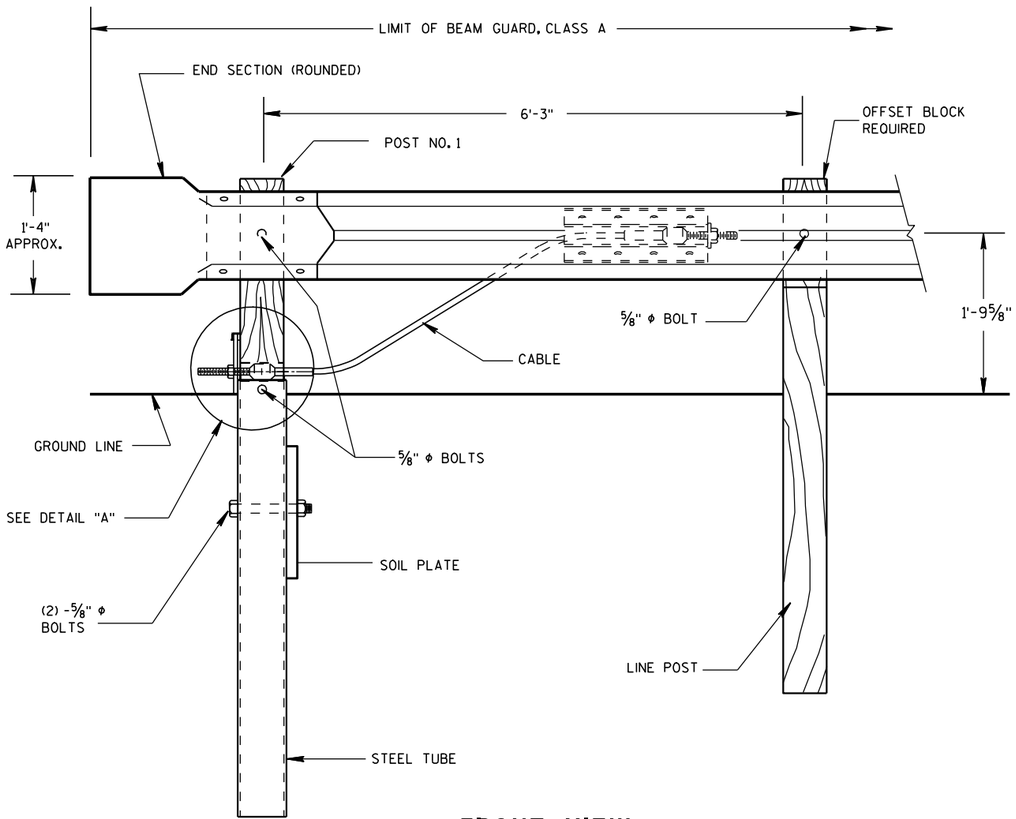
S.D.D. 14 B 15-11c

6

S.D.D. 14 B 15-11c



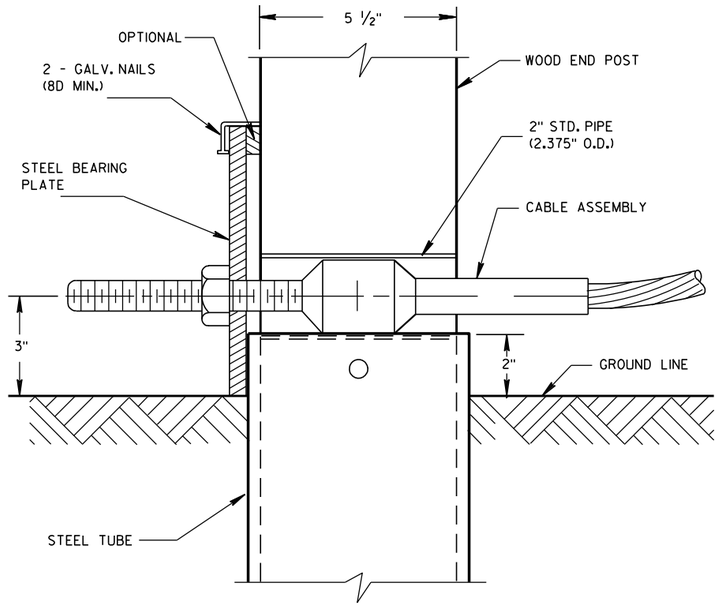
PLAN VIEW



FRONT VIEW

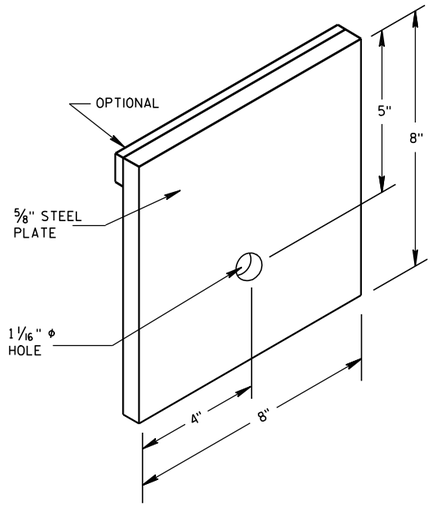
END TREATMENT WITH TYPE 2 ANCHORAGE

(USE ON ONE-WAY ROADWAYS ONLY - DEPARTING END)



DETAIL "A"

POST NO. 1



STEEL BEARING PLATE

ANCHORAGE FOR STEEL
PLATE BEAM GUARD
TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 16-4a

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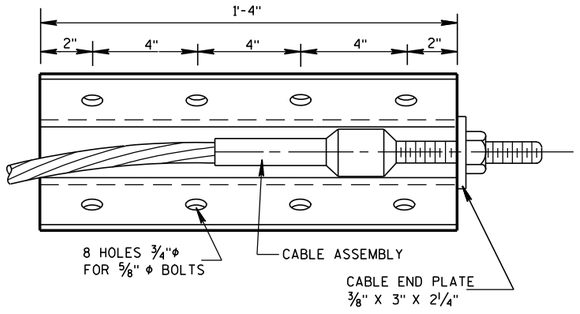
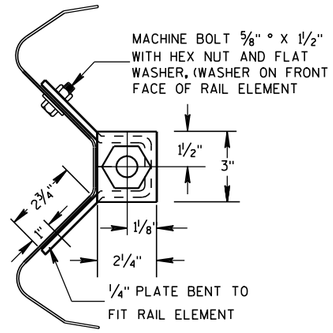
S.D.D. 14 B 16-4a

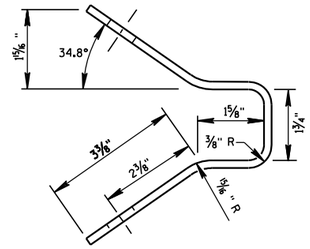


FRONT VIEW

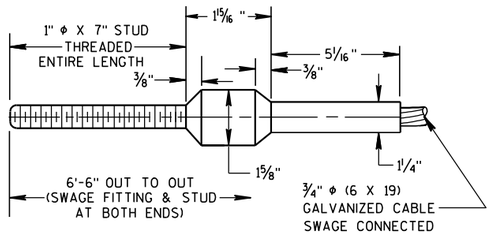


END VIEW

ANCHOR PLATE DETAIL



END VIEW OF BRACKET



CABLE ASSEMBLY

CABLE, SWAGE FITTING, STUD AND NUT SHALL DEVELOP A MINIMUM BREAKING STRENGTH OF 40,000 LB (TIGHTEN UNTIL TAUT)

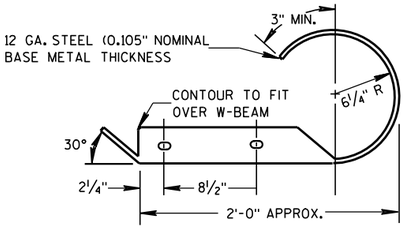
GENERAL NOTES

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

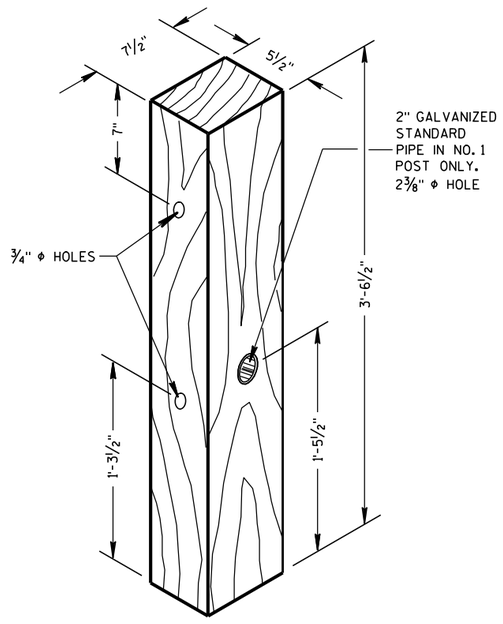
STRUCTURAL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500 GRADE B OR ASTM A-501.

POST NO. 1 SHALL BE WOOD BREAKAWAY POST INSERTED AND BOLTED INTO STEEL TUBE.

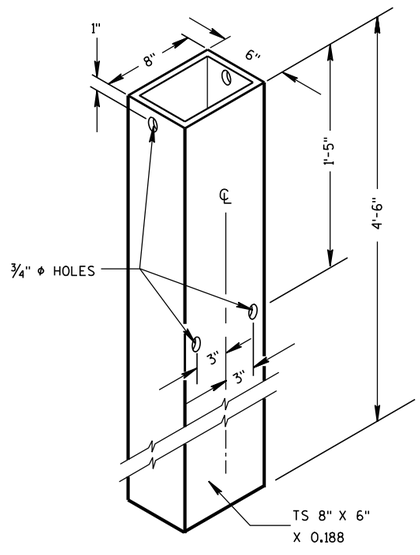
TYPE 2 ANCHORAGE SHALL CONSIST OF A STEEL TUBE, SOIL PLATE WOOD BREAKAWAY POST, BEARING PLATE, ANCHOR PLATE, CABLE ASSEMBLY AND ALL ASSOCIATED HARDWARE, ALL STEEL PARTS SHALL BE GALVANIZED.



PLAN VIEW

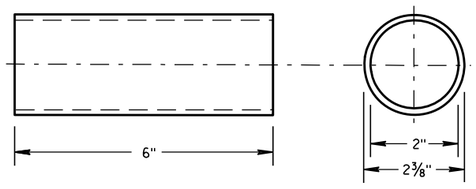


WOOD BREAKAWAY POST



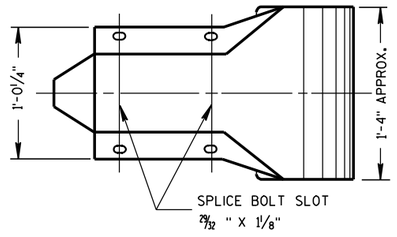
STEEL TUBE

STEEL TUBE SHALL CONFORM TO REQUIREMENTS OF ASTM A500

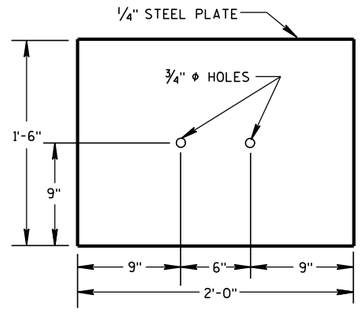


BREAKAWAY TERMINAL POST SLEEVE

GALVANIZED STANDARD STRENGTH STEEL PIPE, ASTM 53 GRADE "B"



FRONT VIEW
W BEAM END SECTION ROUNDED



SOIL PLATE

ANCHORAGE FOR STEEL PLATE BEAM GUARD TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/21/2007 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
82
FHWA

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S.D.D. 14 B 16-4b

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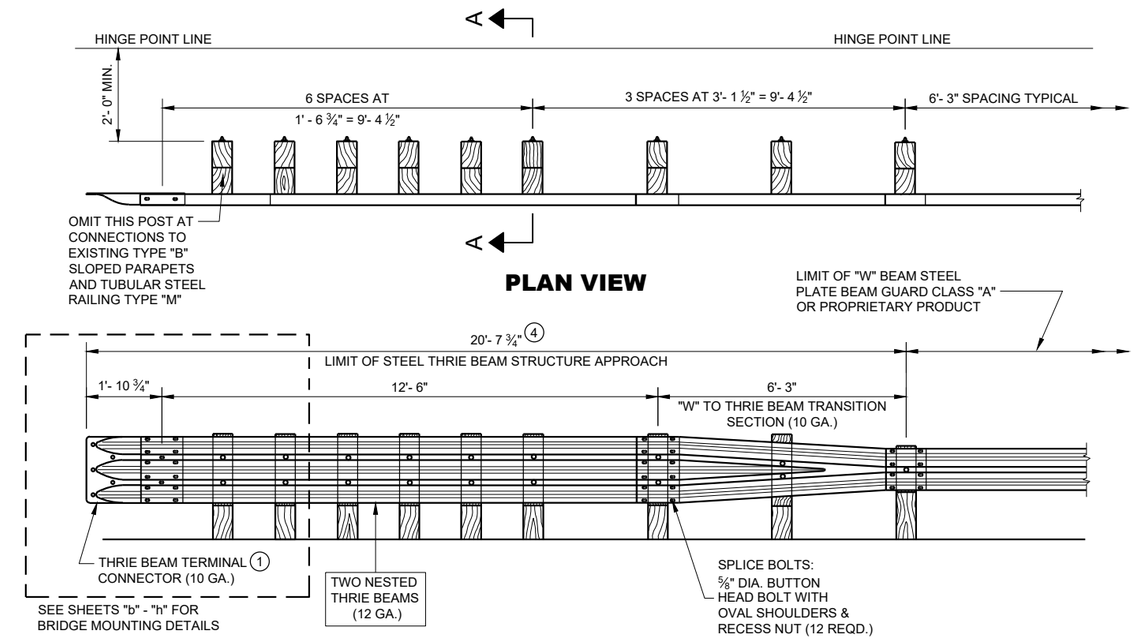
S.D.D. 14 B 16-4b



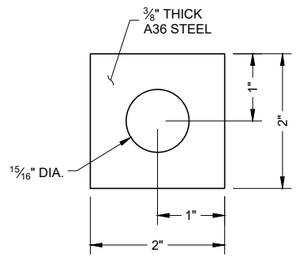


PLATE WASHER DETAIL

GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

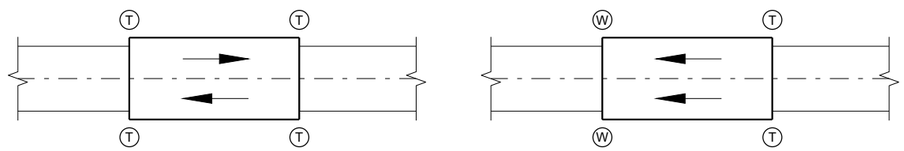
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

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

(2) MINIMUM EMBEDMENT SHALL BE 4'- 0".

(3) POST BOLTS ARE ⅝" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A ⅝" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.

(4) ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



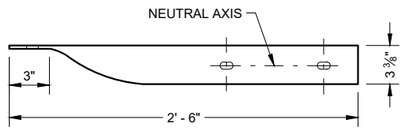
TWO WAY TRAFFIC

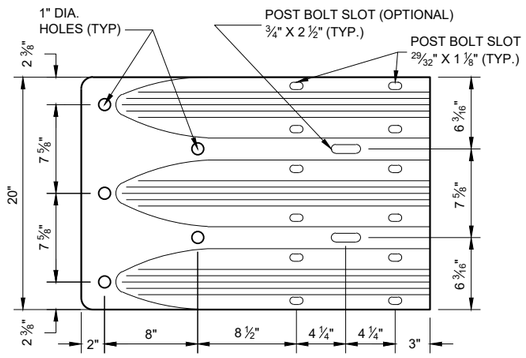
ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

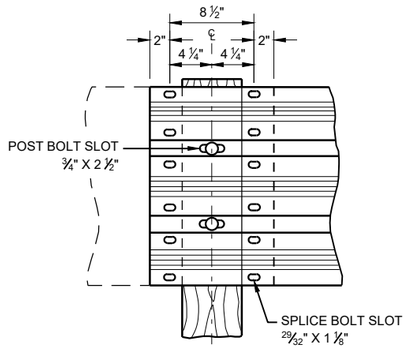
(W) W-BEAM CONNECTION WHEN REQUIRED

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

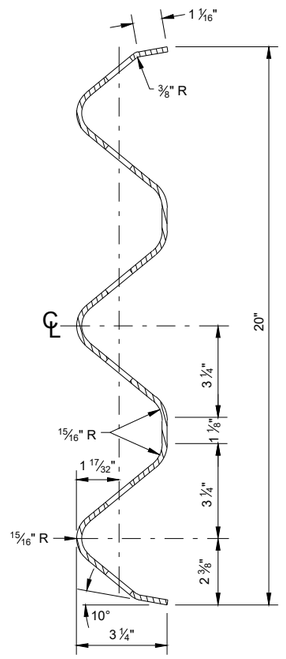




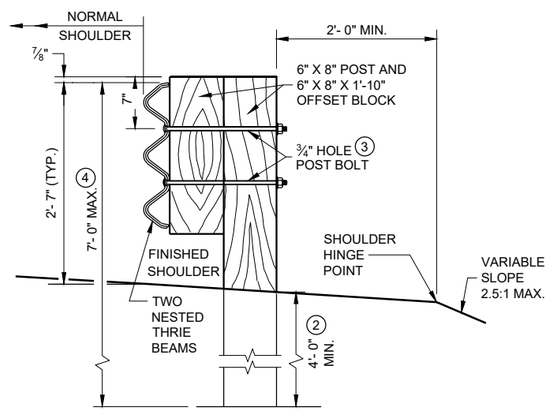
THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE



SECTION THRU BEAM RAIL ELEMENT



SECTION A-A

STEEL THRIE BEAM STRUCTURE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 14B20 - 12a

SDD 14B20 - 12a

GENERAL NOTES

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

BOLTS, NUTS AND WASHERS SHALL CONFORM TO ASTM A325, A449 AND GALVANIZED PER STANDARD SPECIFICATIONS 614.

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

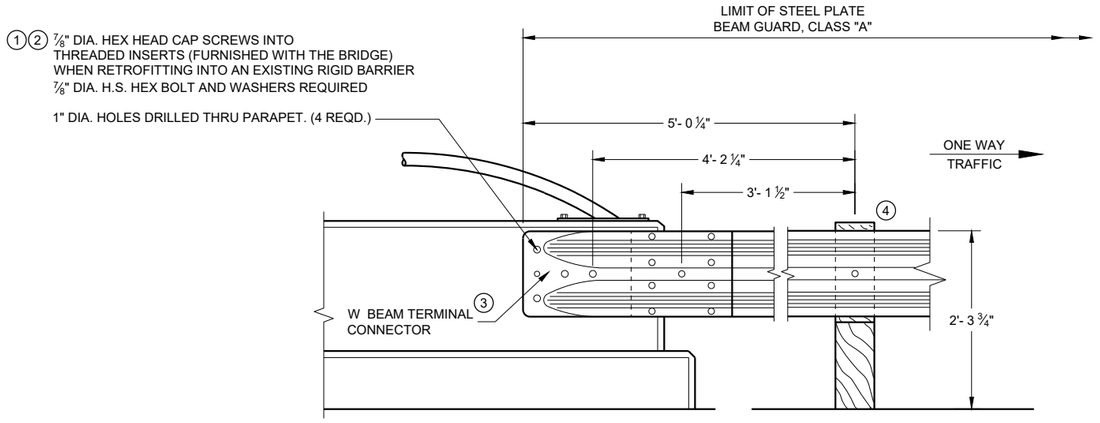
(2) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

(3) 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".

(4) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POST WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS.

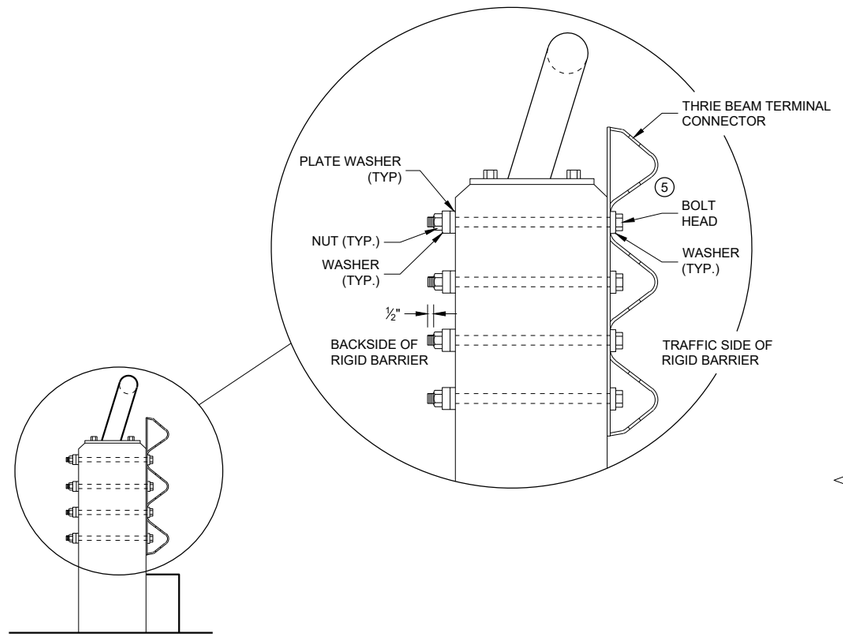
(5) BOLT, NUT AND WASHERS NO REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PARAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE THE EDGE OF PARAPET.

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

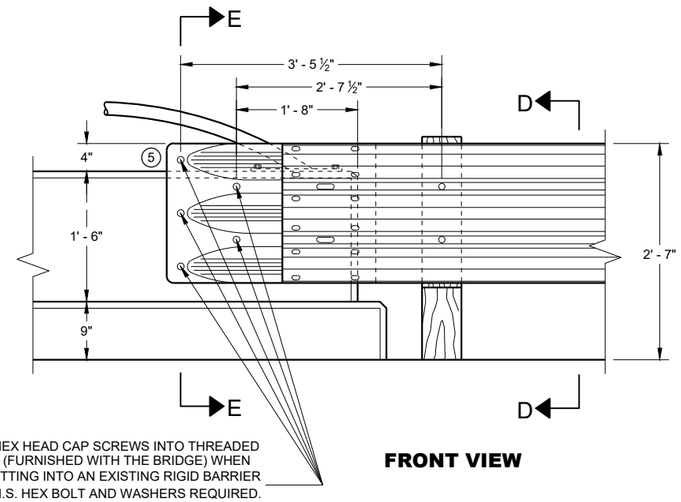


FRONT VIEW

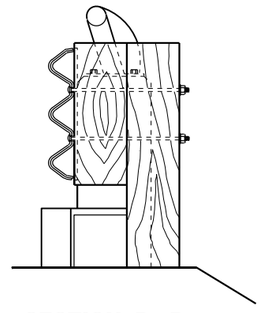
W BEAM CONNECTION TO VERTICAL FACE PARAPET
(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



SECTION E - E



FRONT VIEW



SECTION D - D

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO VERTICAL FACED PARAPETS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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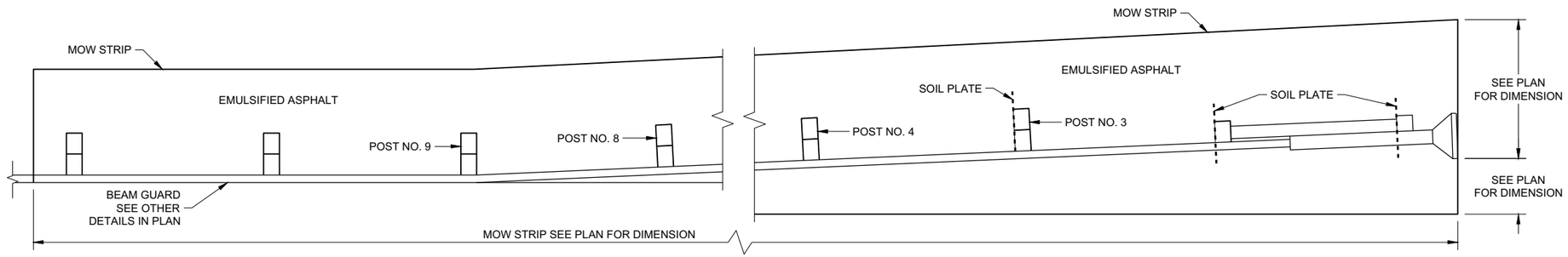
SDD 14B20 - 12c



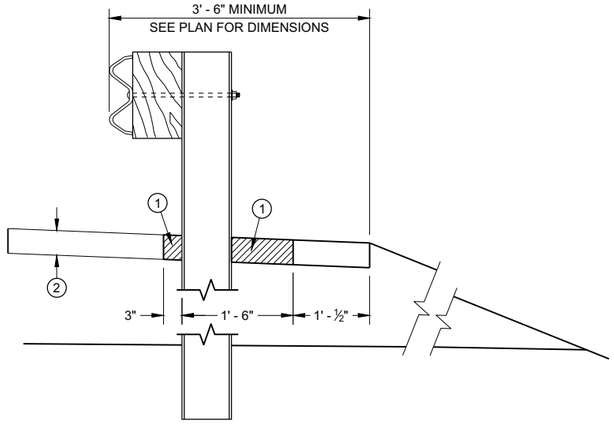
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL

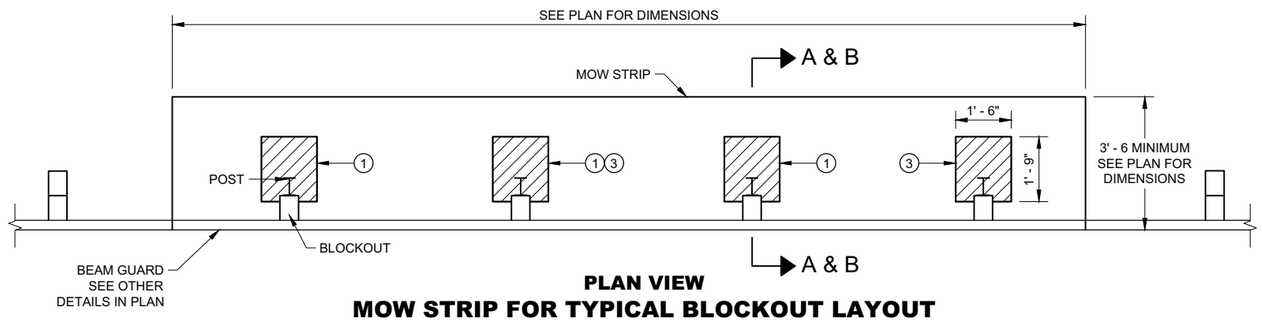
GENERAL NOTES

ONLY USE STEEL POSTS IN CONCRETE AND ASPHALT MOW STRIPS.

1. CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.
2. DEPTH OF MOW STRIP:
   ASPHALT - 4"
   CONCRETE - 4"
   EMULSIFIED ASPHALT - 1" OR LESS
3. FOR EMULSIFIED ASPHALT, MOW STRIP STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS)

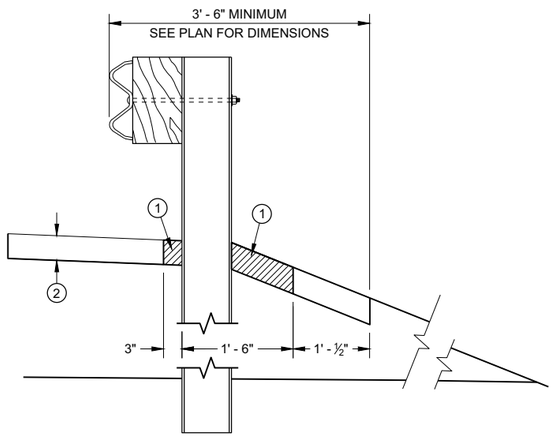


SECTION A - A

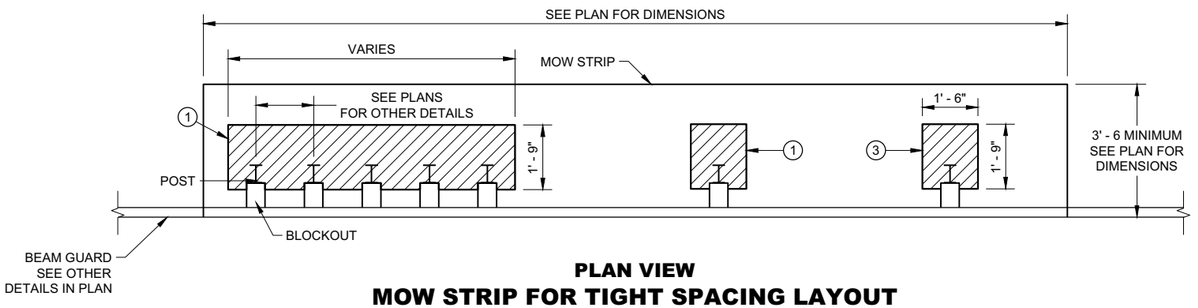


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

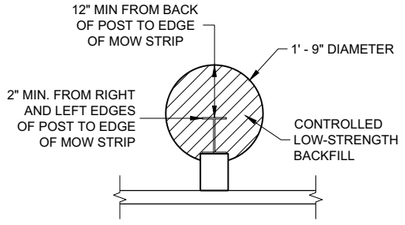


SECTION B - B

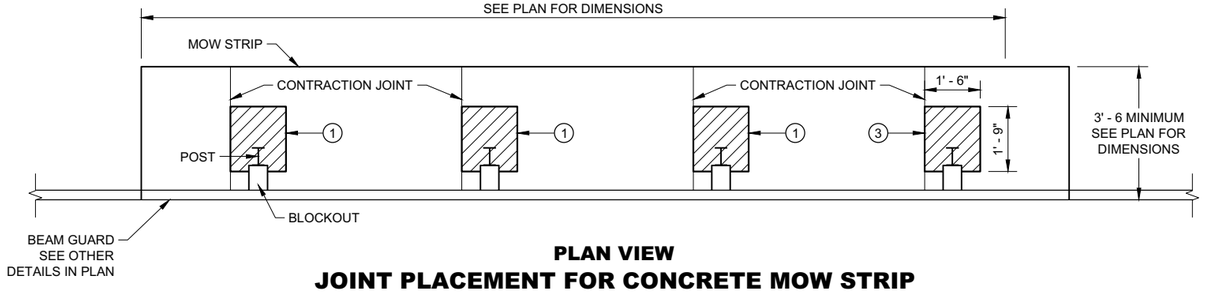


PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



ALTERNATIVE HMA MOW STRIP DESIGN



PLAN VIEW

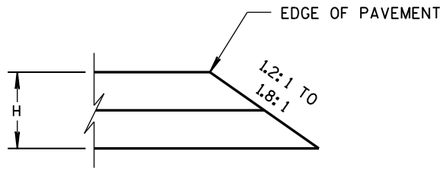
JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

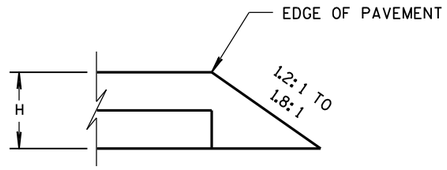
6

SDD 14B28 - 04a



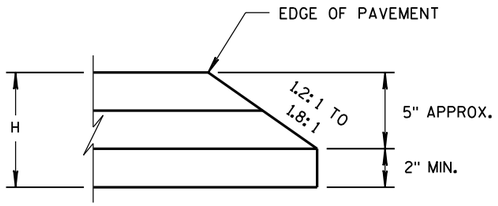
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



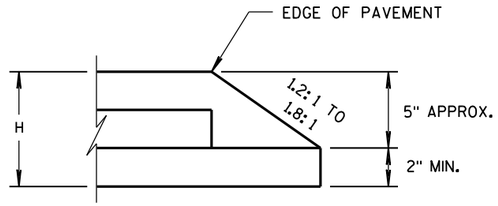
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

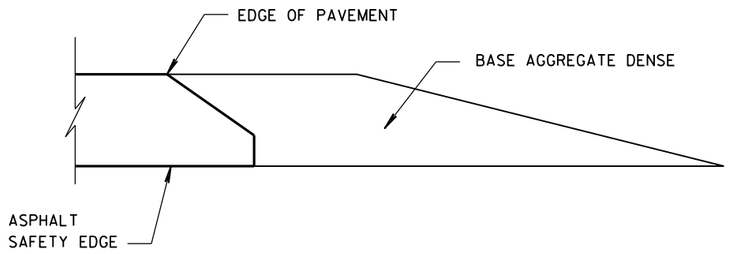
FOR H GREATER THAN 5"



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

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.

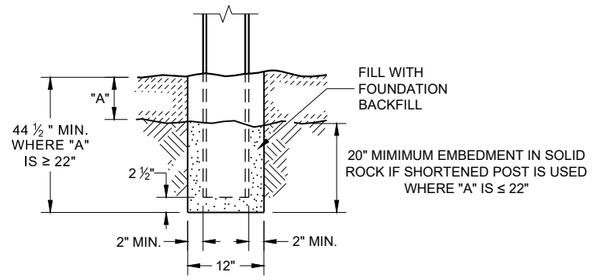
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

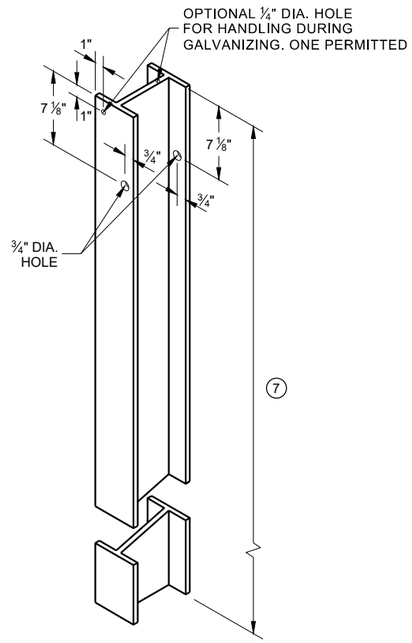
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

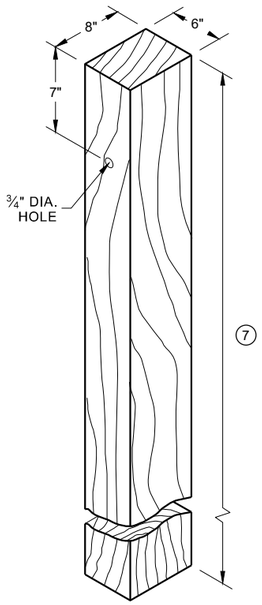
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



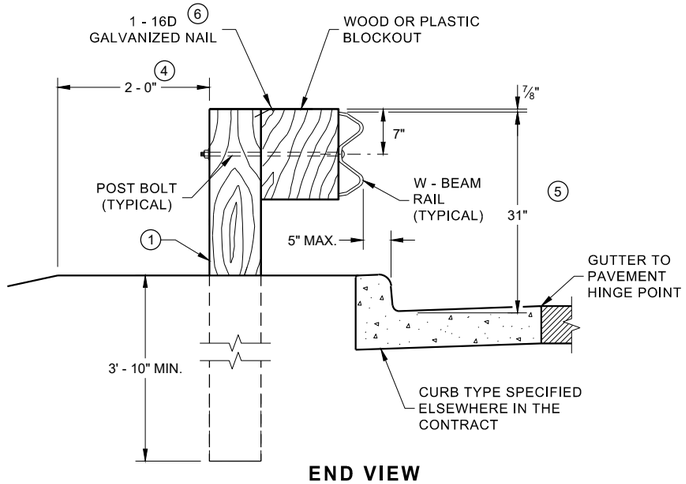
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



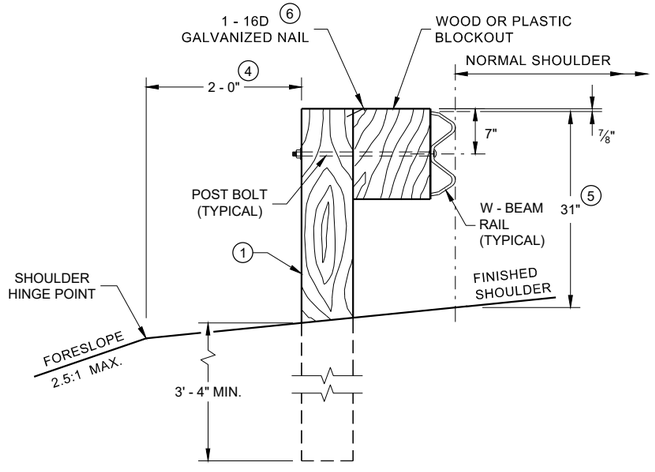
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



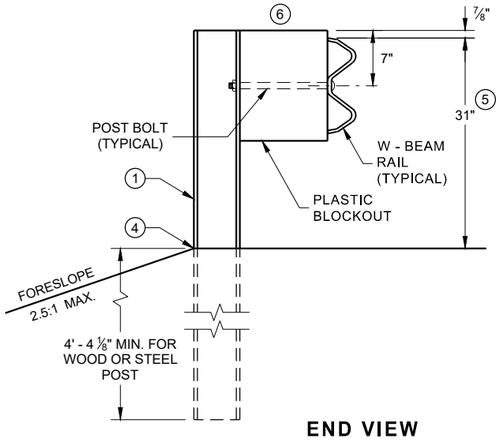
WOOD POST (6" X 8") NOMINAL (1)



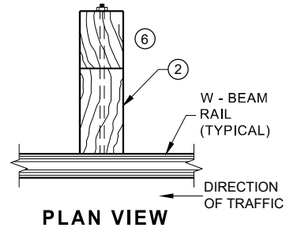
END VIEW
LOCATED ALONG A CURBED ROADWAY



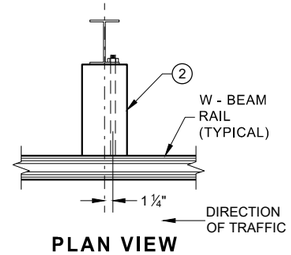
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



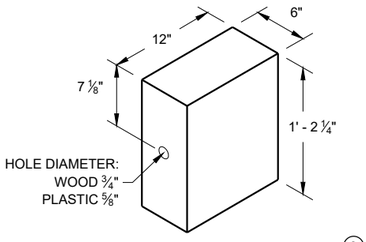
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



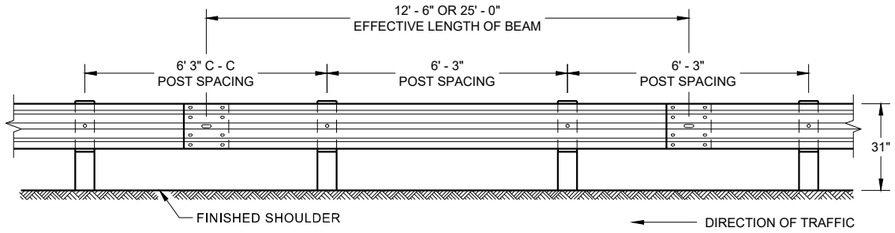
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

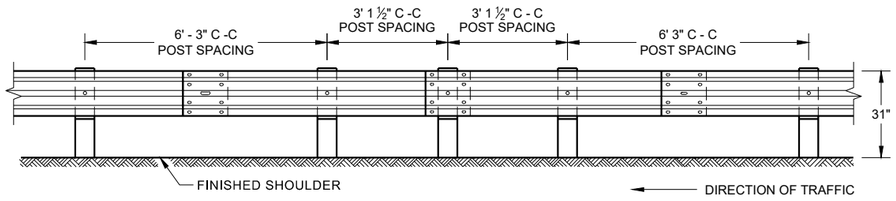
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07a

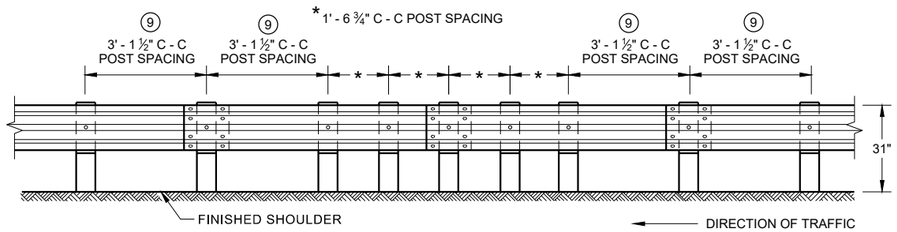
SDD 14B42 - 07a



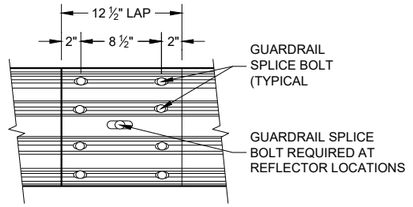
FRONT VIEW
POST SPACING STANDARD INSTALLATION



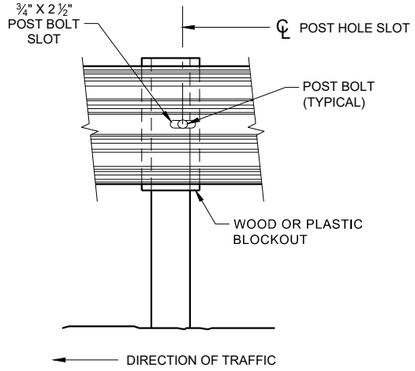
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



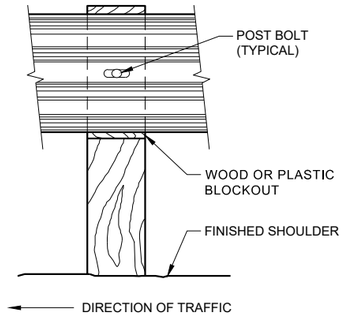
FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST

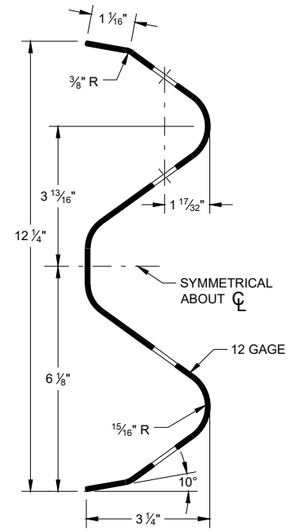
GENERAL NOTES

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

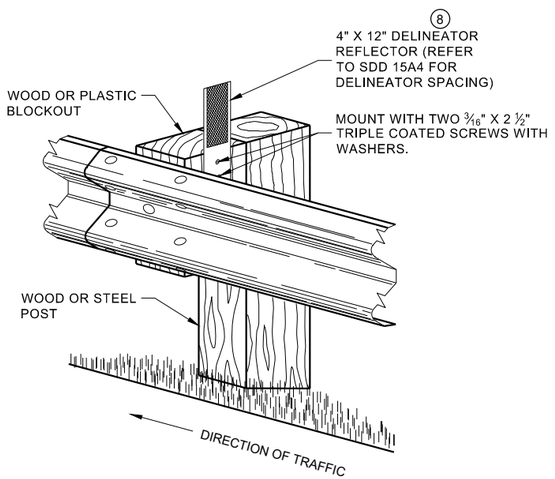
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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.



SECTION THRU W-BEAM RAIL



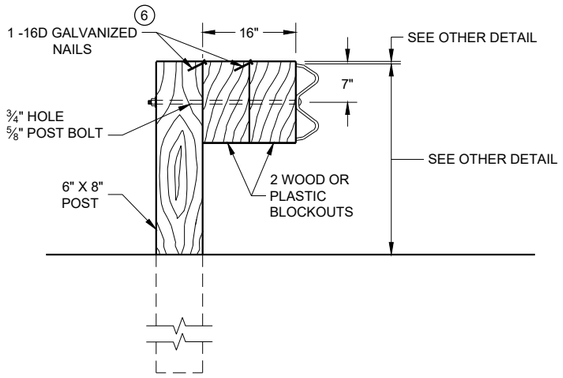
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

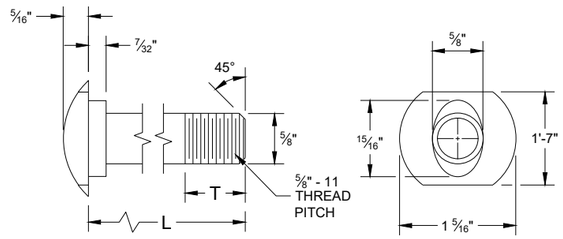


DETAIL FOR 16" BLOCKOUT DEPTH

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.

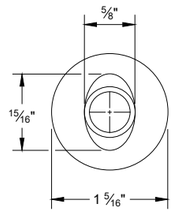
NOTE:

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.

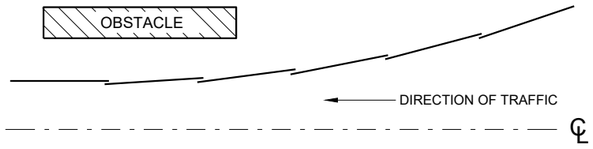


POST BOLT TABLE

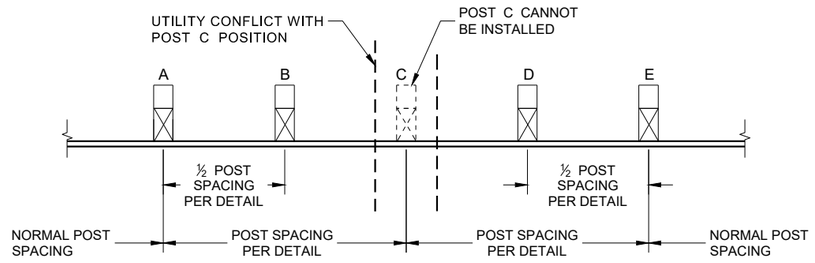
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



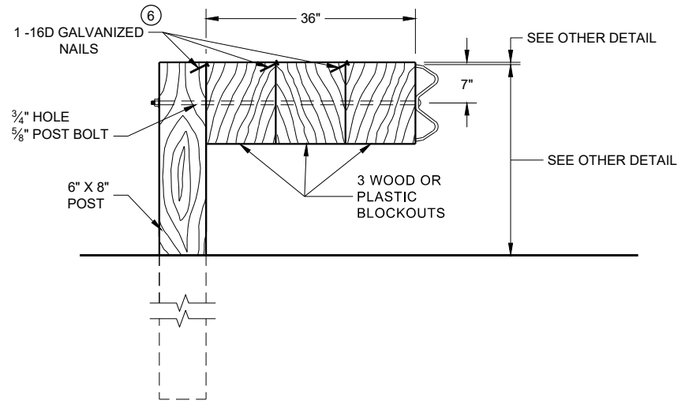
ALTERNATE BOLT HEAD



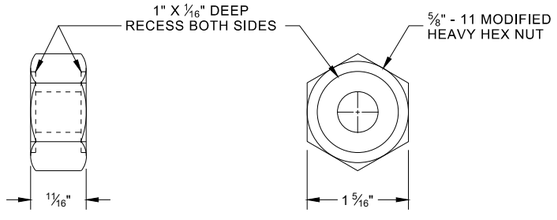
PLAN VIEW
BEAM LAPPING DETAIL



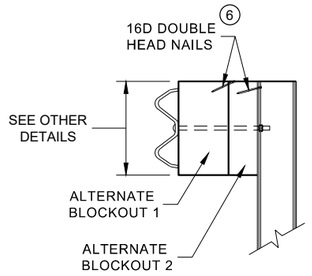
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



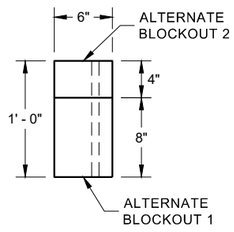
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

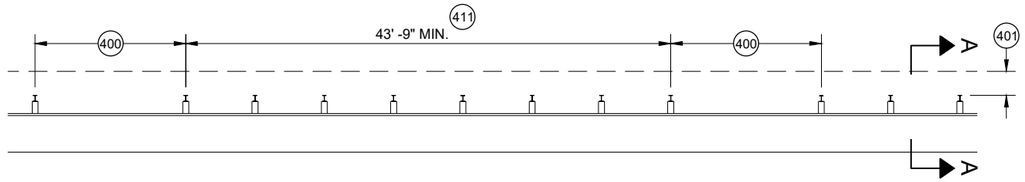
ALTERNATE WOOD BLOCKOUT DETAIL

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.

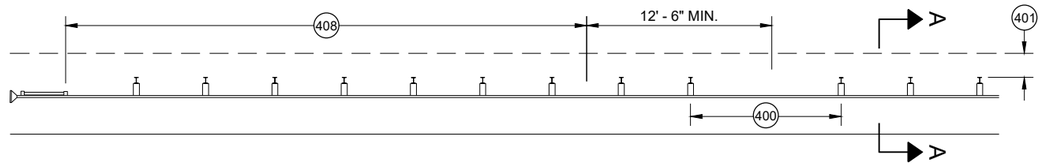
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

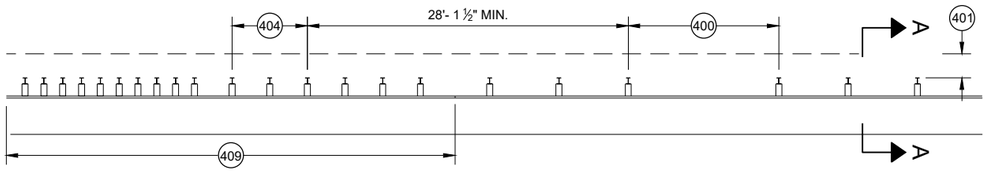
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



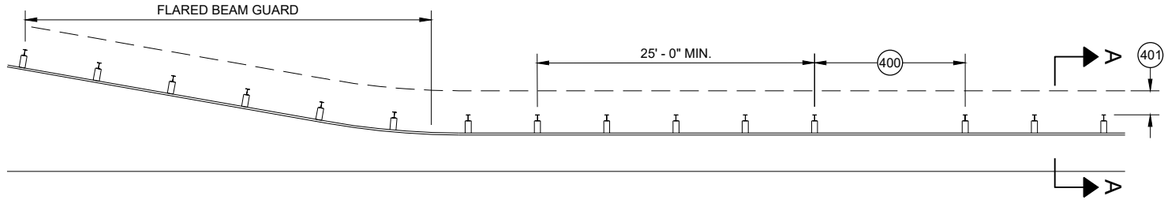
MISSING POST IN MGS GUARDRAIL



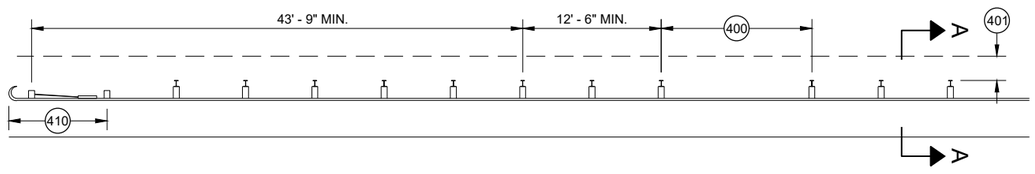
MISSING POST IN MGS GUARDRAIL NEAR EAT



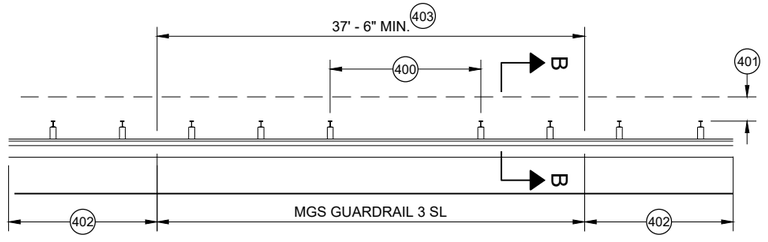
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

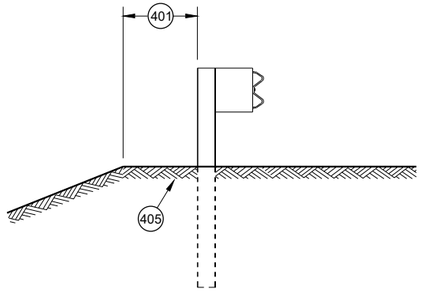


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

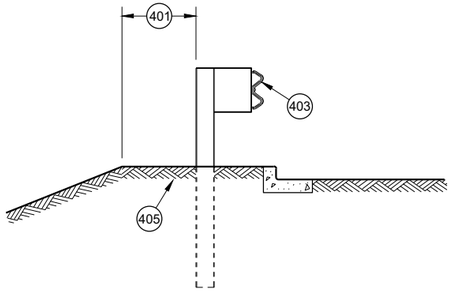


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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.

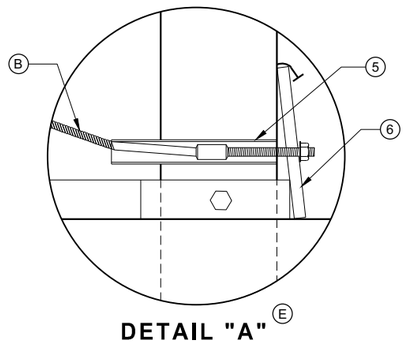
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

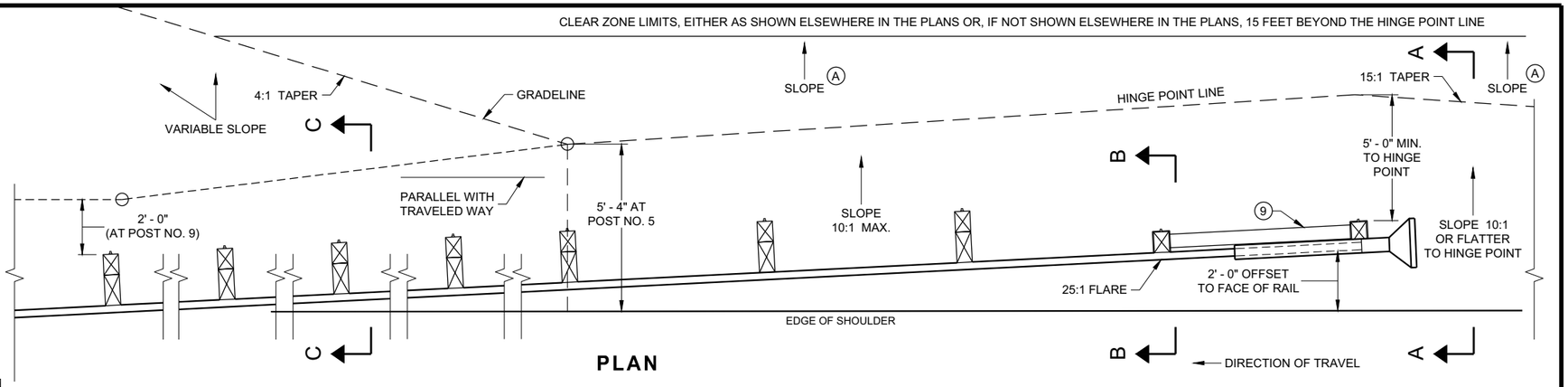
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

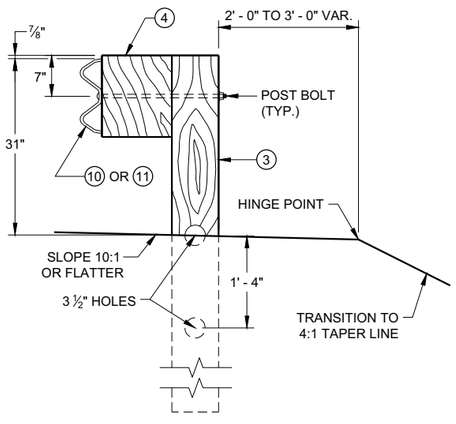
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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.

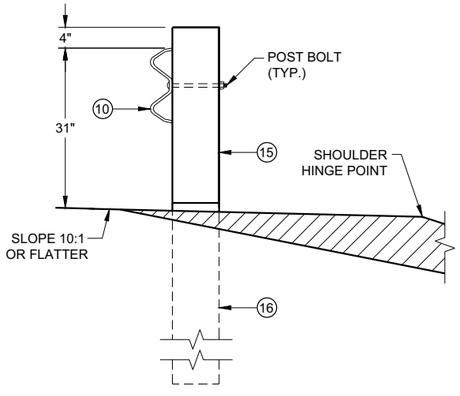


DETAIL "A" (E)

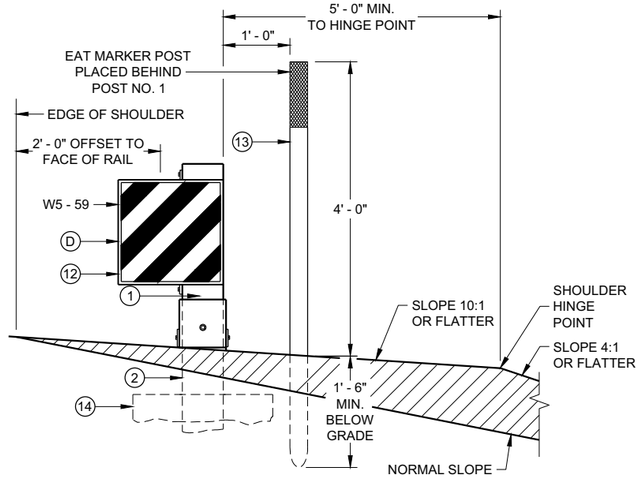




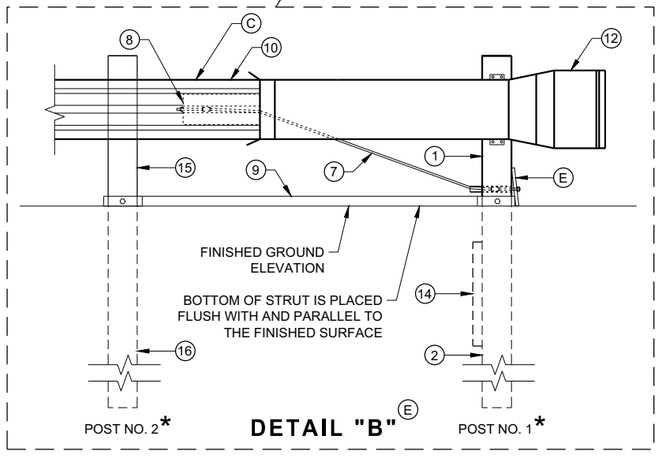
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



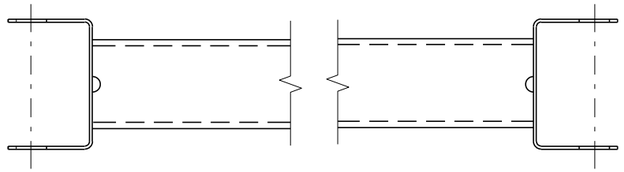
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

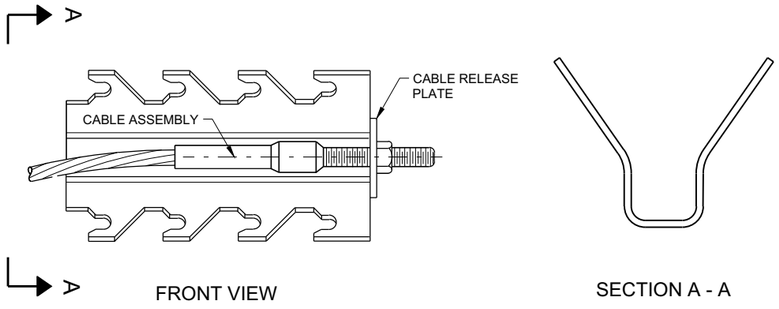
SDD 14B44 - 04a



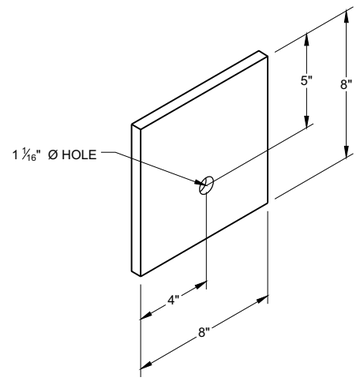
GENERIC GROUND STRUT ⑨ Ⓔ

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

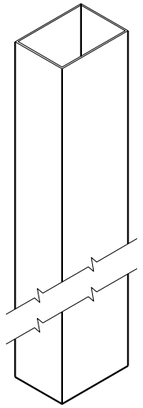
6

SDD 14B44 - 04b

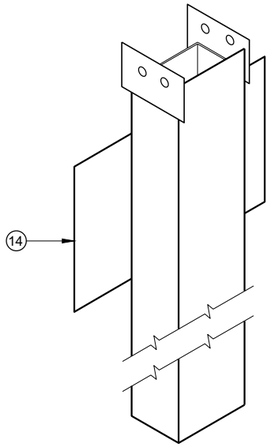
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

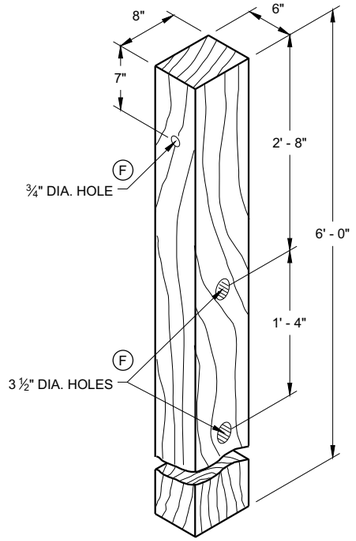
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



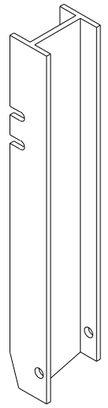
UPPER POST NO. 1 (1) (E)



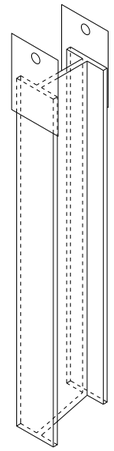
LOWER POST NO. 1 (2) (E)



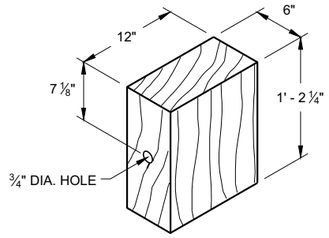
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



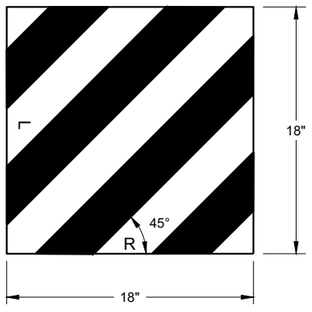
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

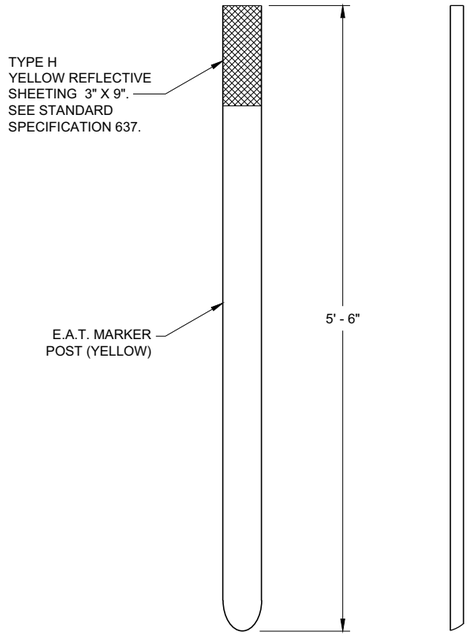


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



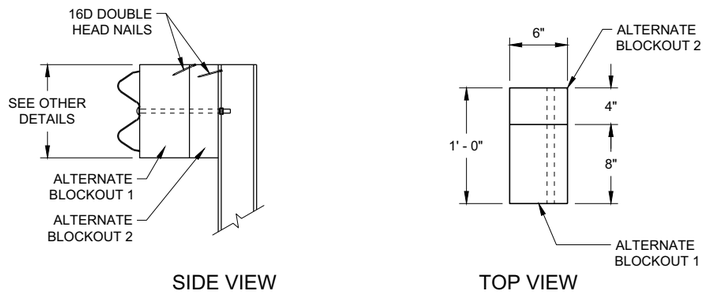
W5 - 59

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)

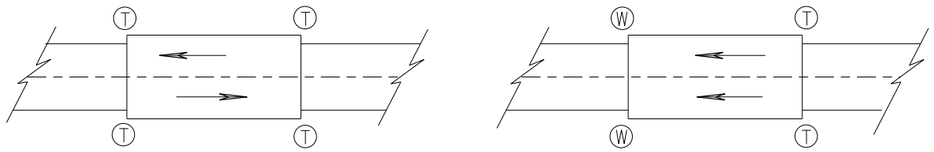
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

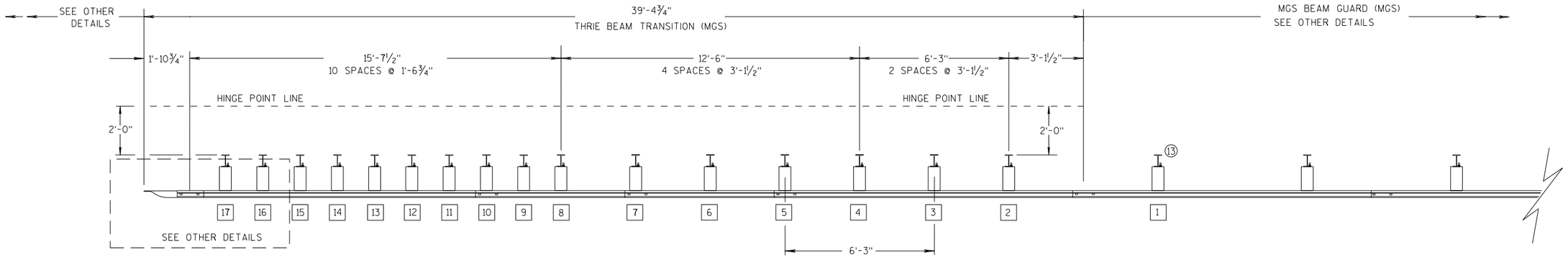
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

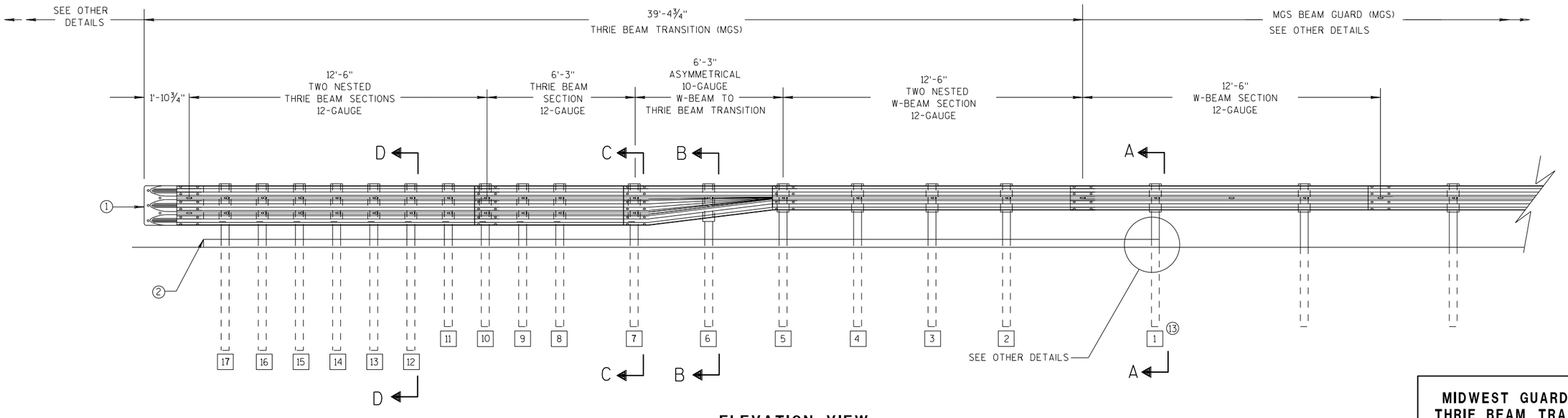
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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

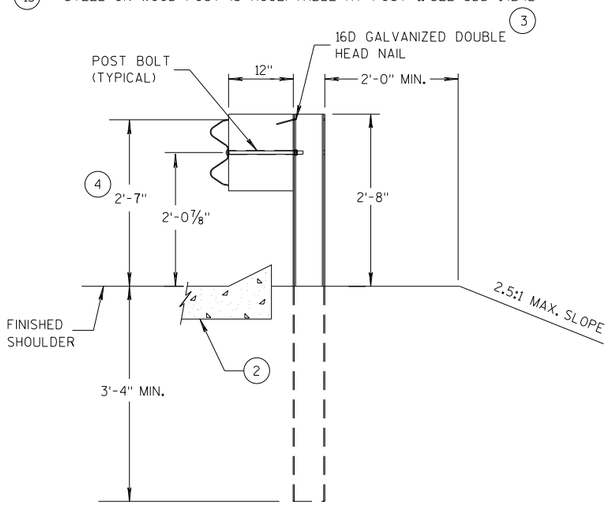
GENERAL NOTES

(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.

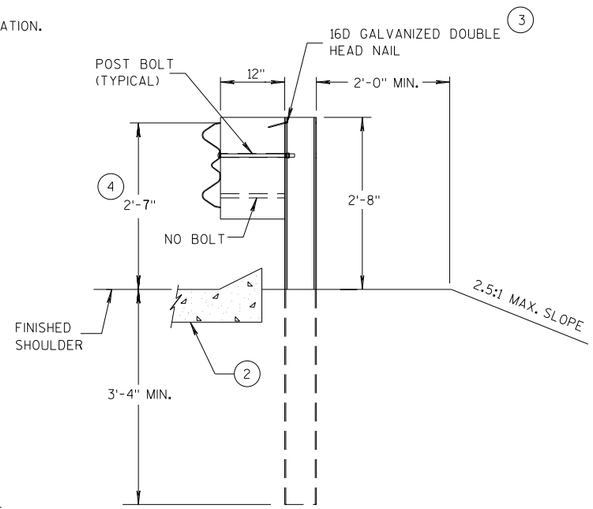
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



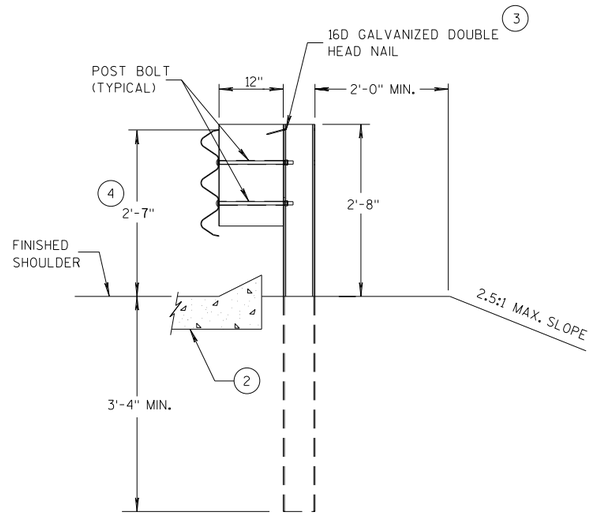
SECTION A-A (13)

POSTS 1-5



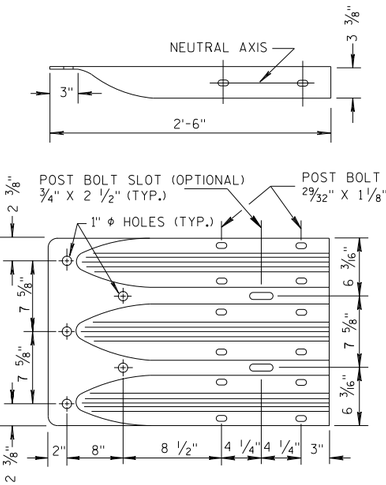
SECTION B-B

POST 6

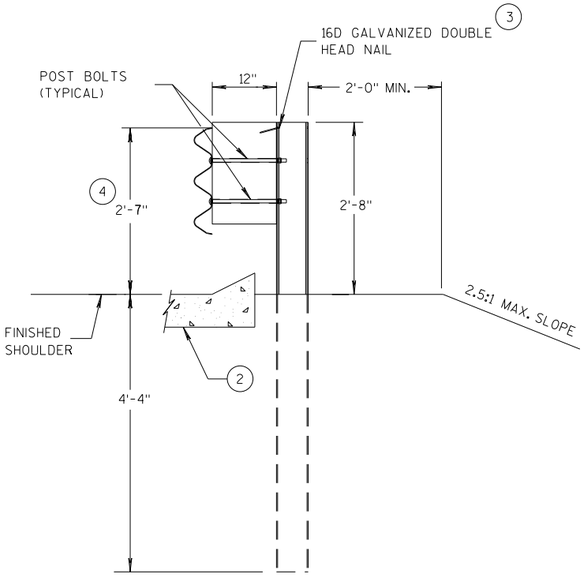


SECTION C-C

POSTS 7-11

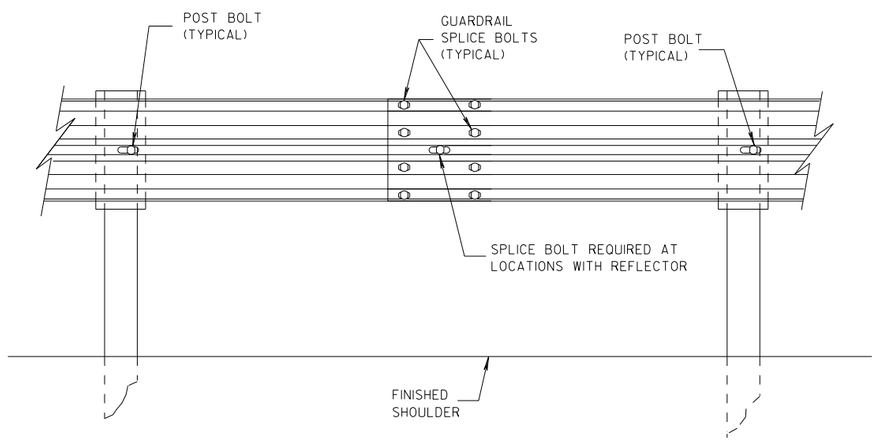


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

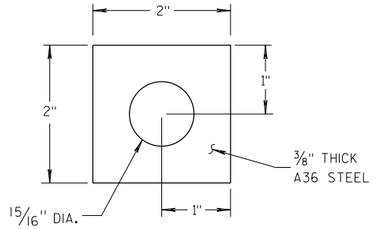
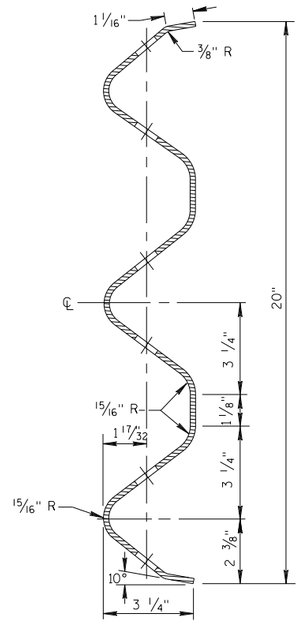


PLATE WASHER DETAIL



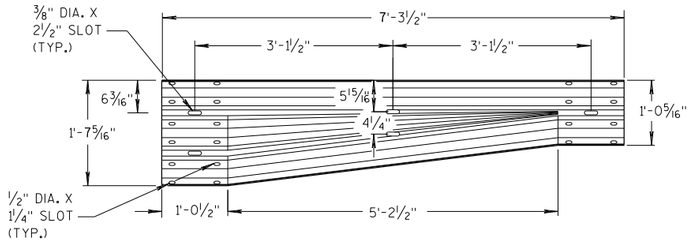
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

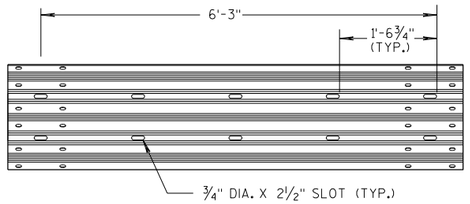
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

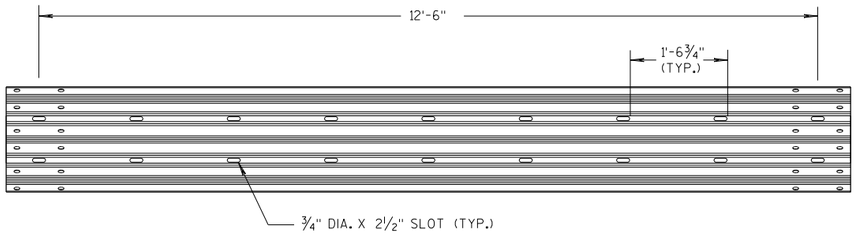
S.D.D. 14 B 45-5b



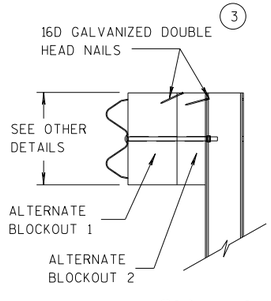
W-BEAM TO THRIE BEAM TRANSITION SECTION



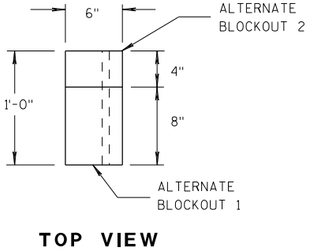
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

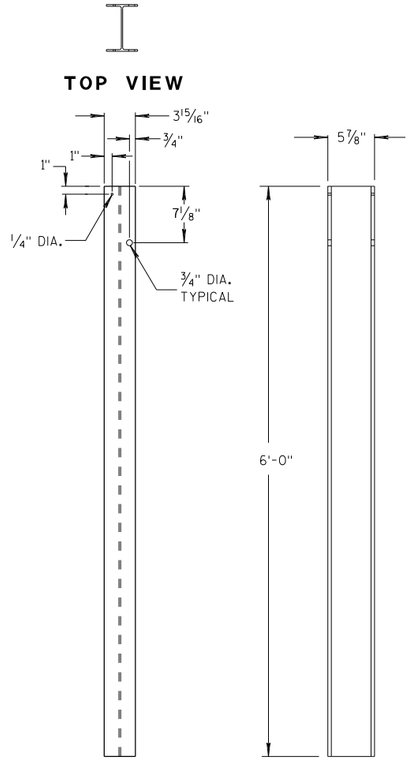


SIDE VIEW



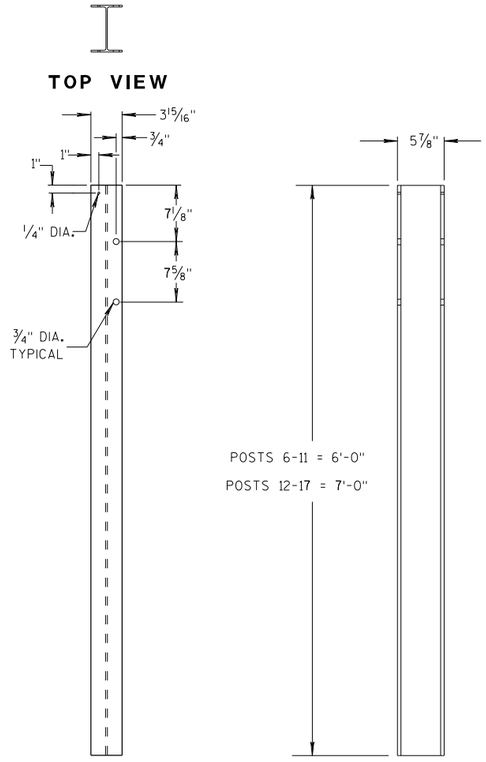
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



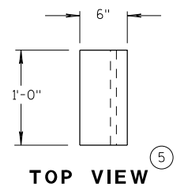
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

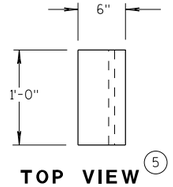


FRONT VIEW SIDE VIEW

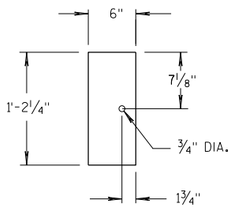
STEEL POSTS 6-17



TOP VIEW (5)

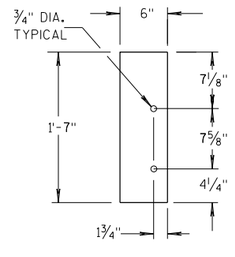


TOP VIEW (5)



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

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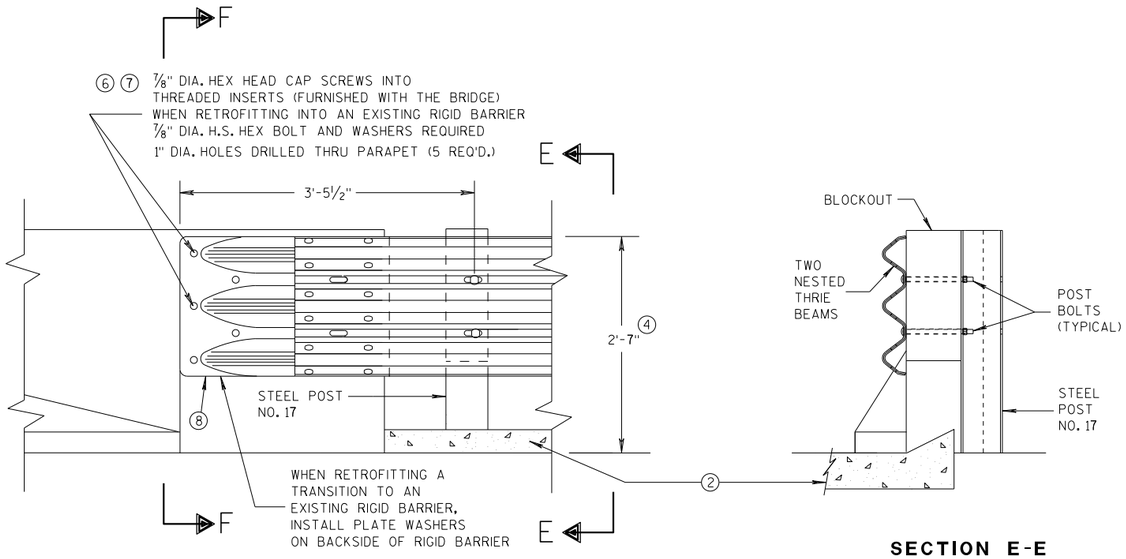


FRONT VIEW

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.

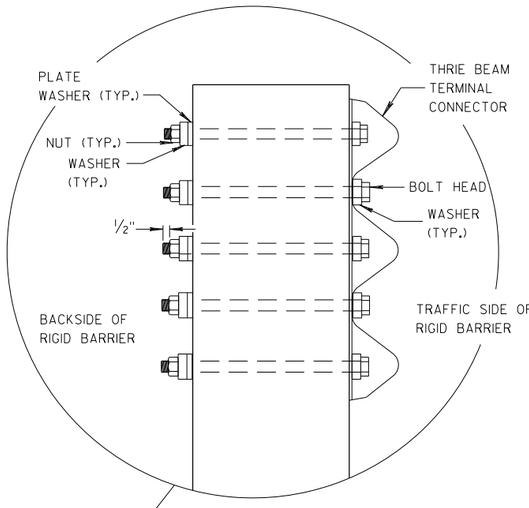
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

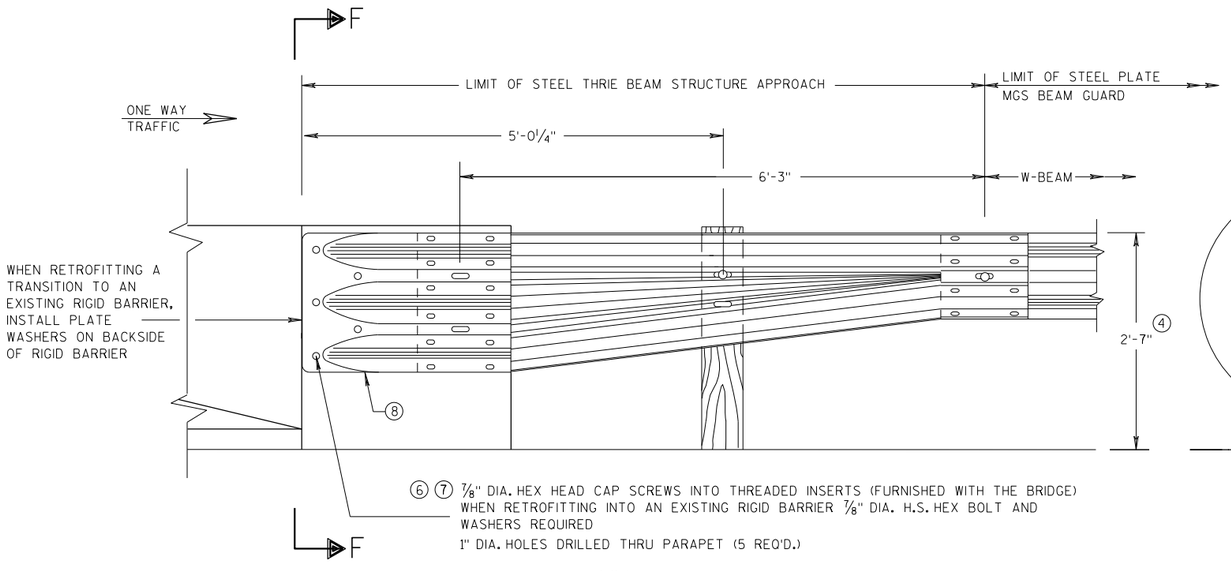
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

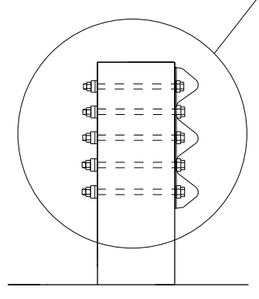
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. 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".

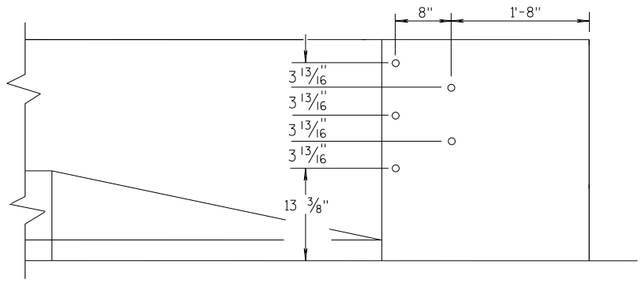




FRONT VIEW



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
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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.

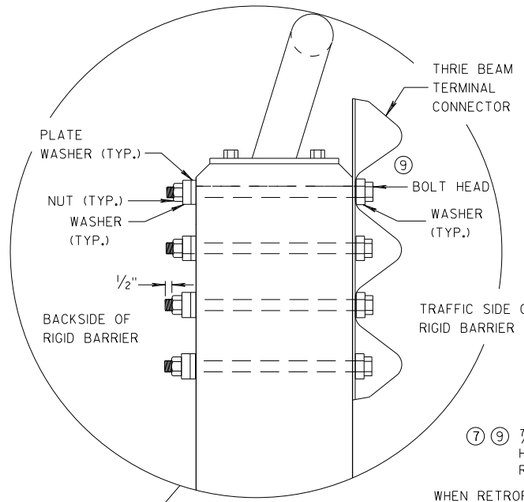
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

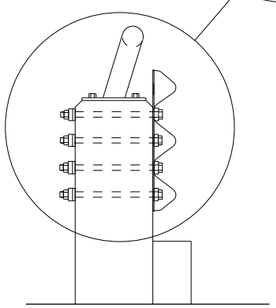
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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.

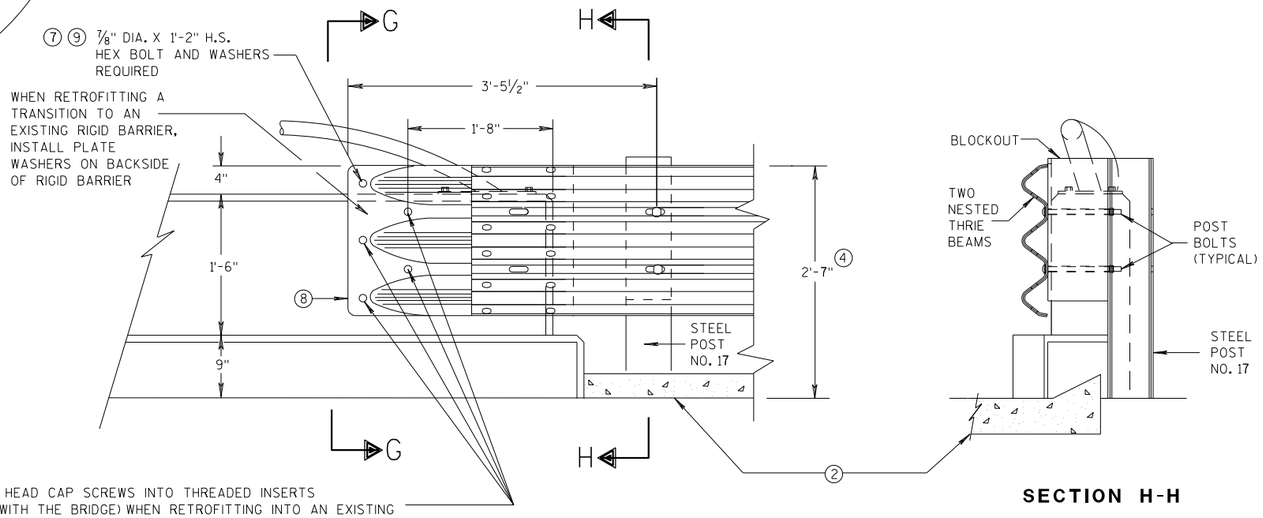
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(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.





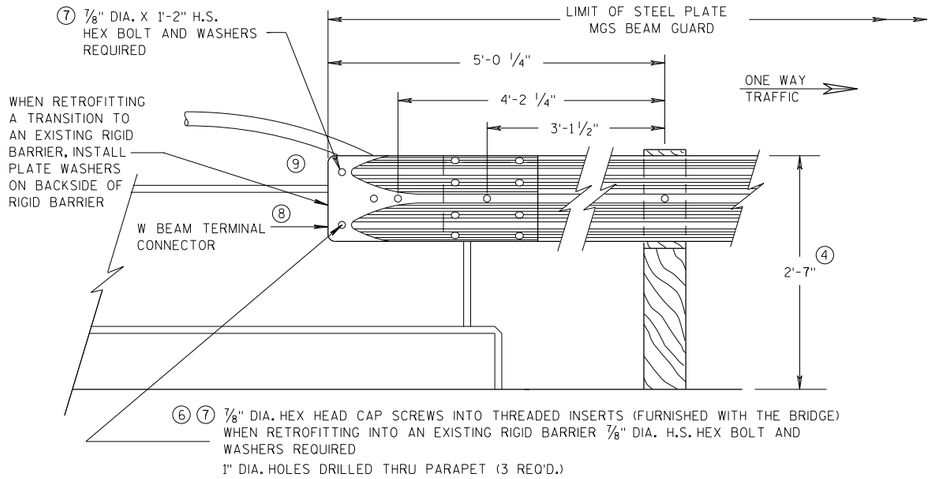
SECTION G-G



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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07/2018 — DATE
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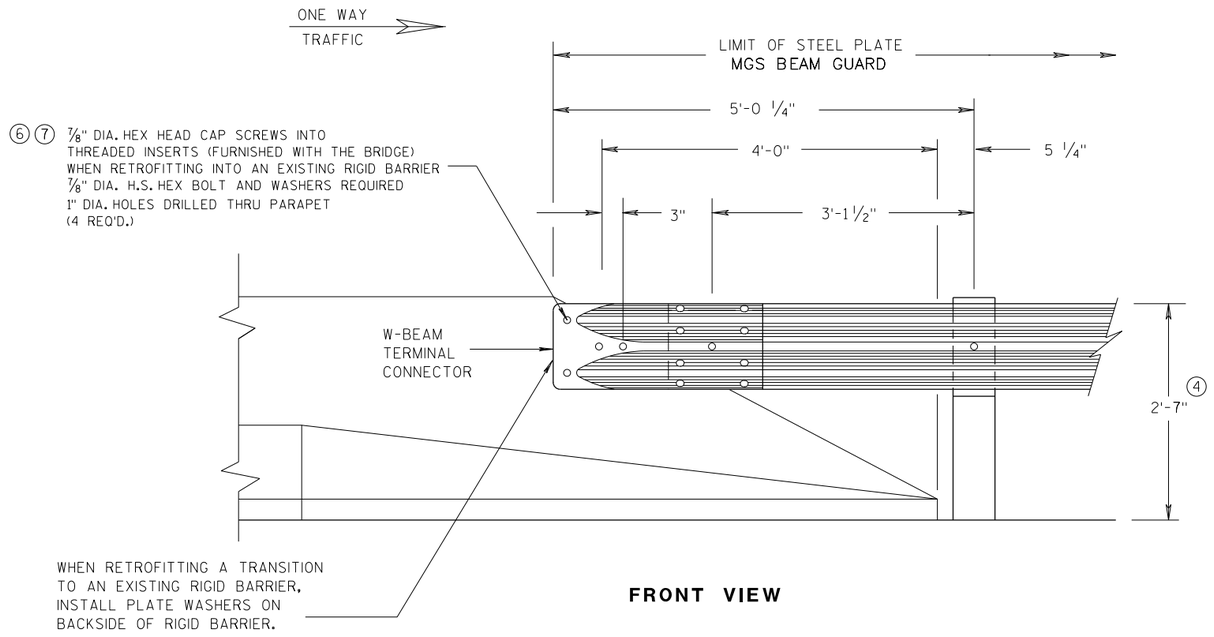


FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

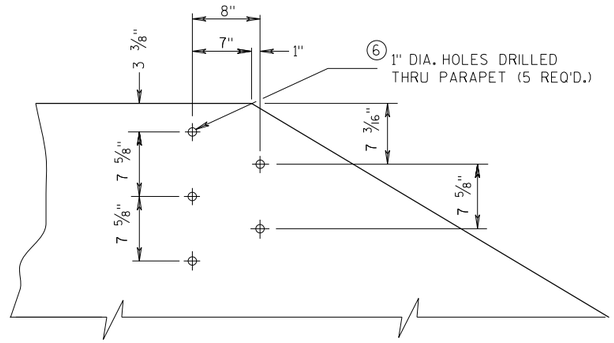
GENERAL NOTES

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

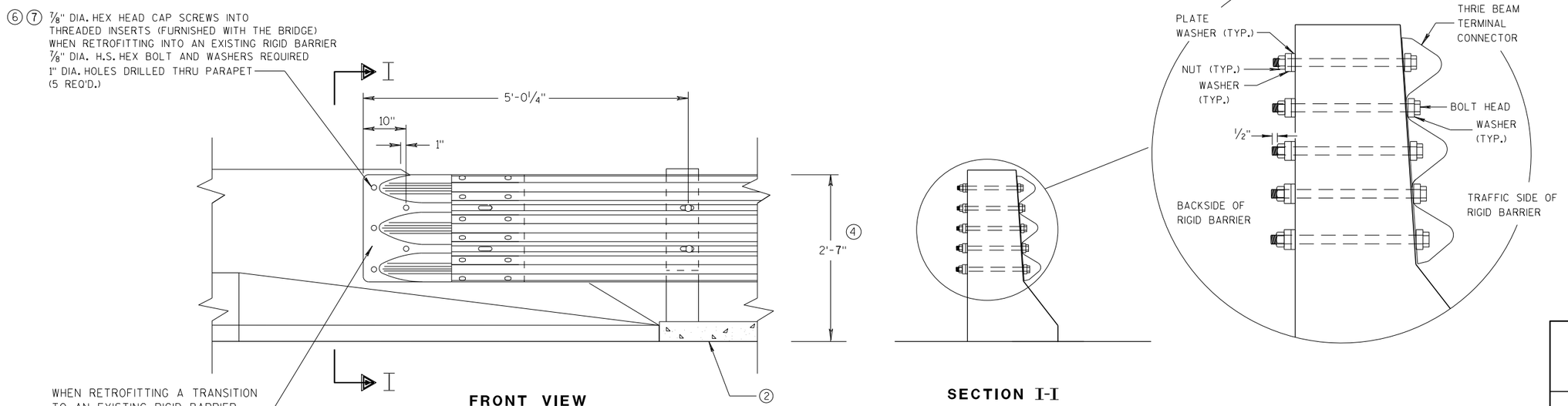
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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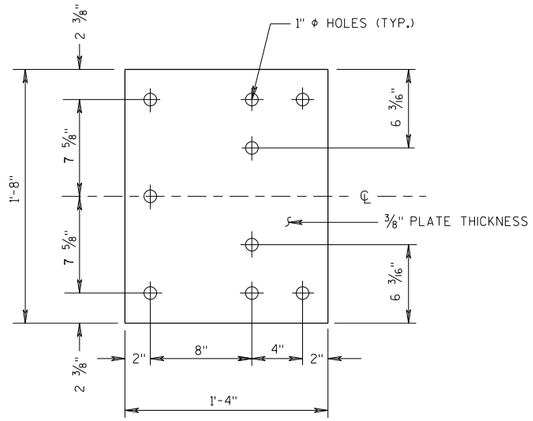
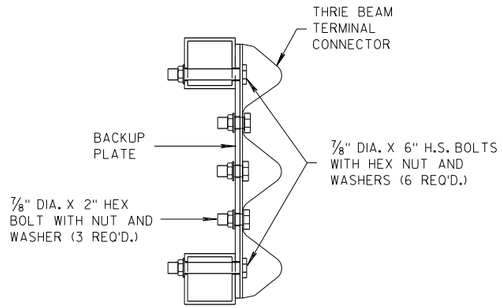
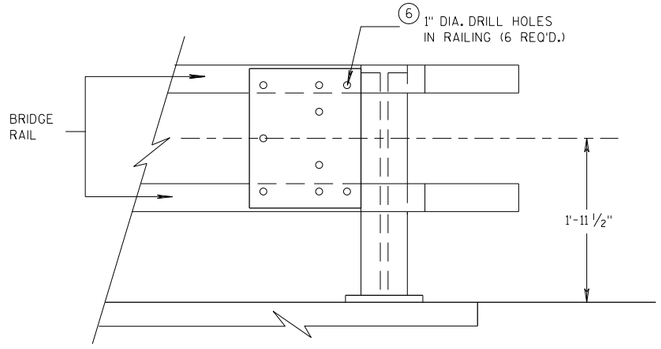


BACK-UP PLATE DETAIL



SECTION J-J

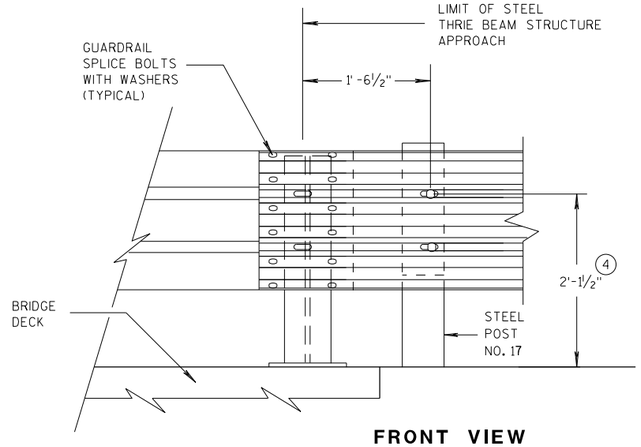


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

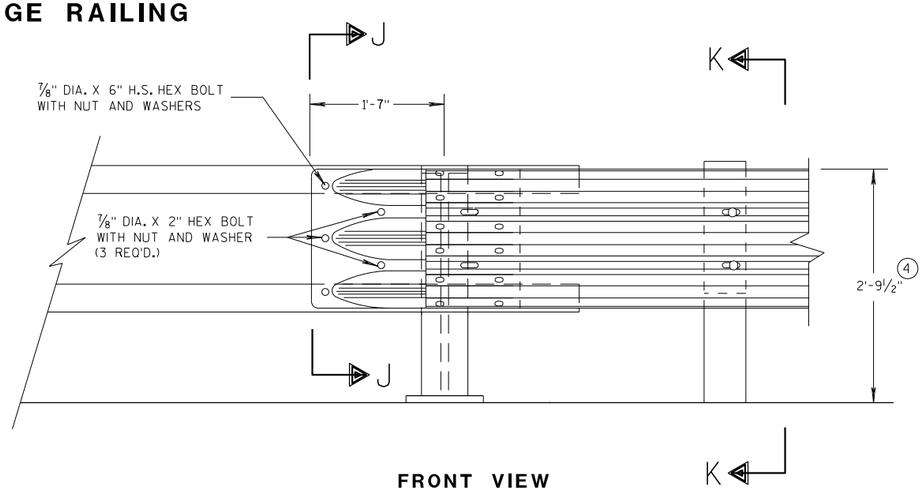
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

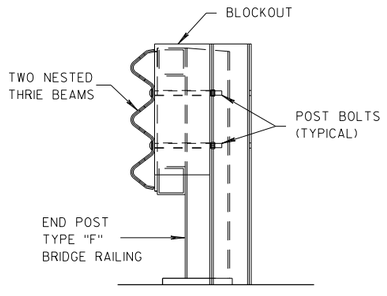


FRONT VIEW

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)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED 07/2018 — DATE
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ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

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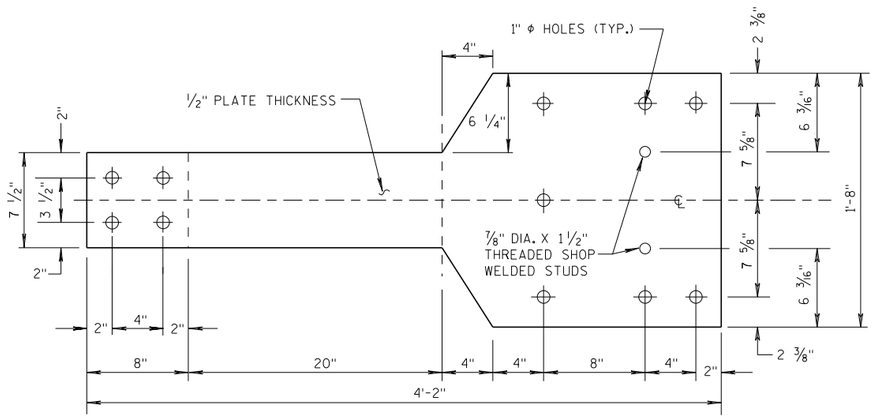
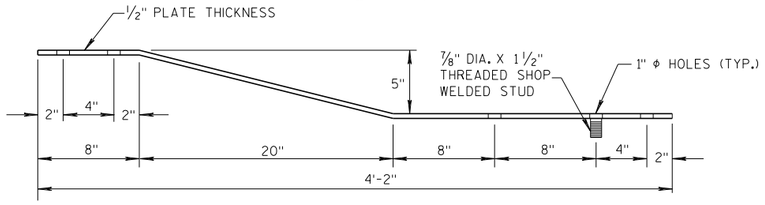
GENERAL NOTES

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

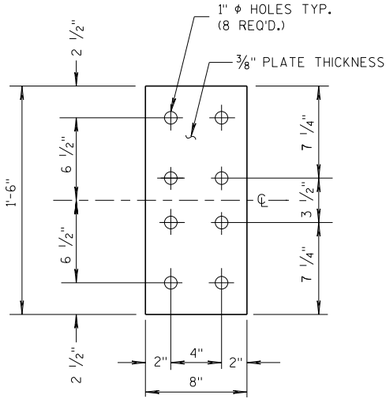


FRONT VIEW



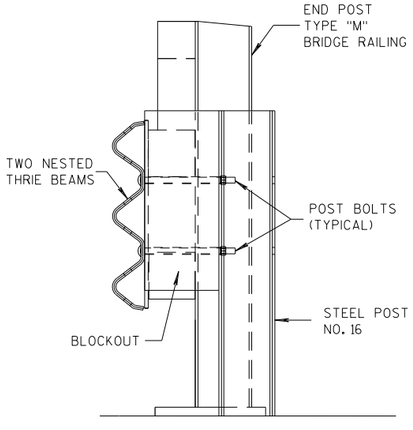
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

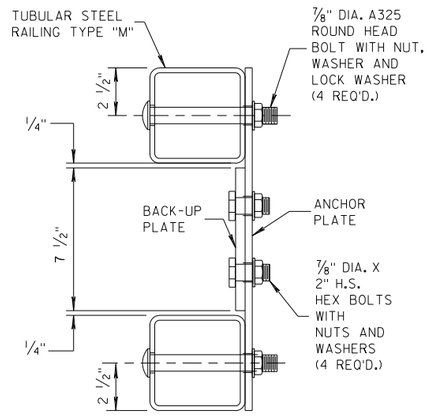


FRONT VIEW

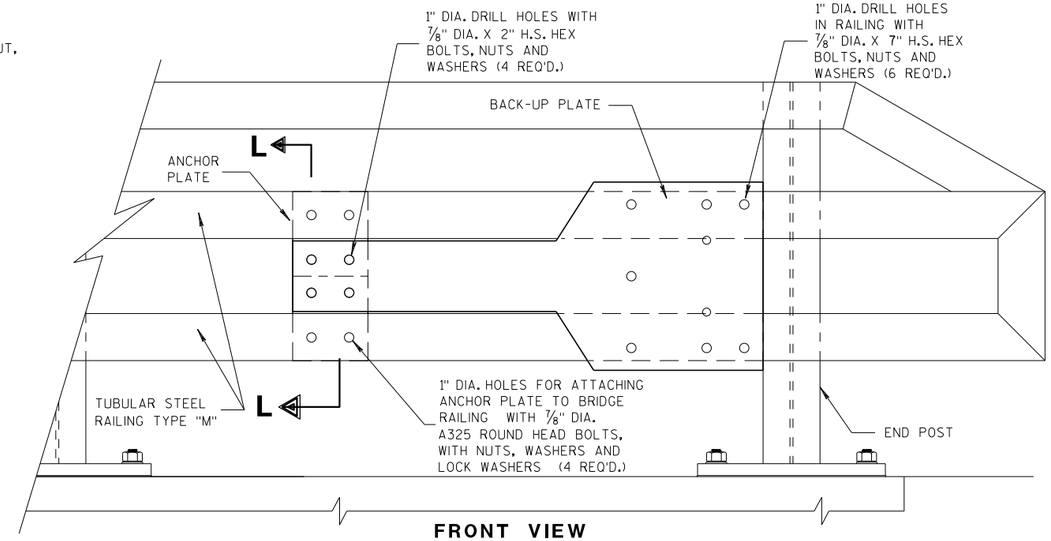
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

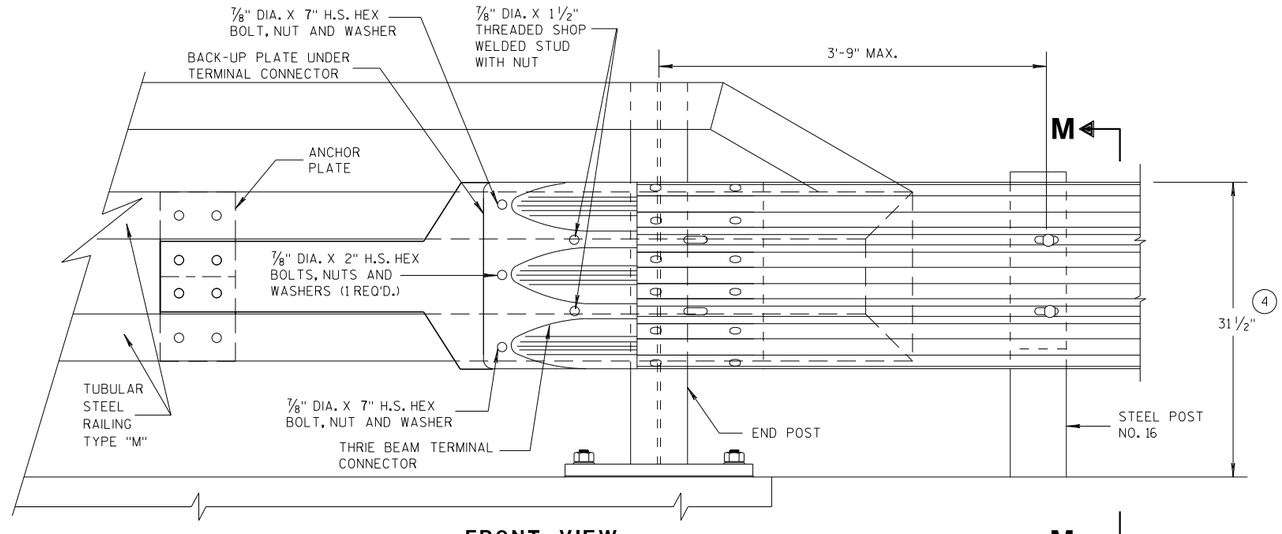


SECTION L-L

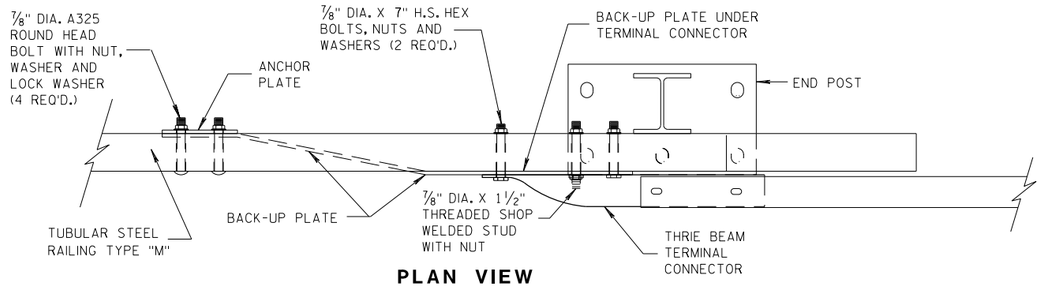


FRONT VIEW

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
DEPARTMENT OF TRANSPORTATION

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07/2018 — DATE
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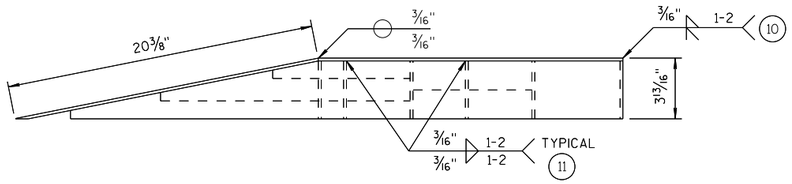
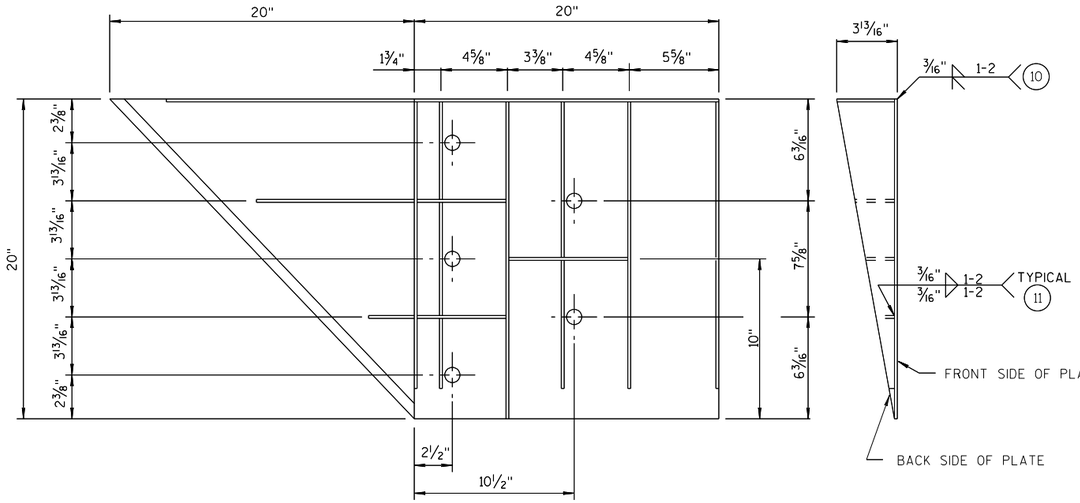




WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

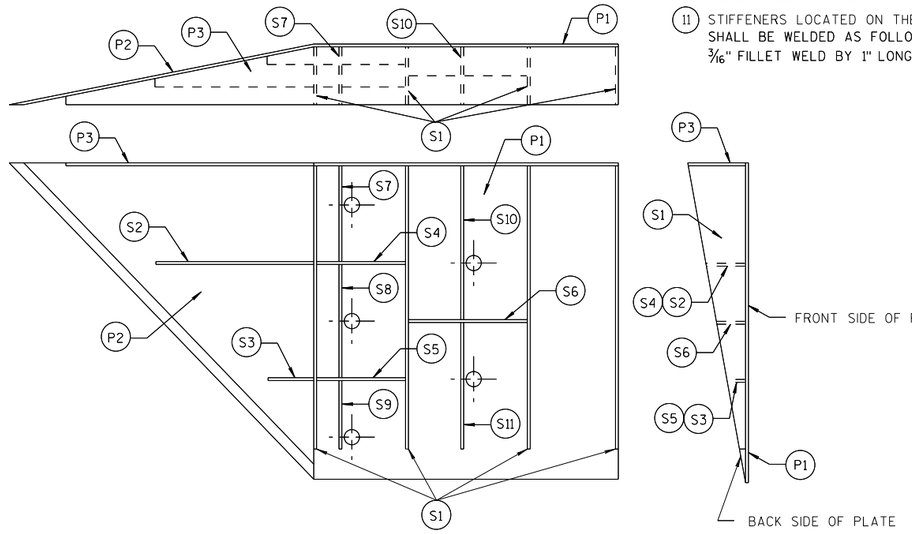


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

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".

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

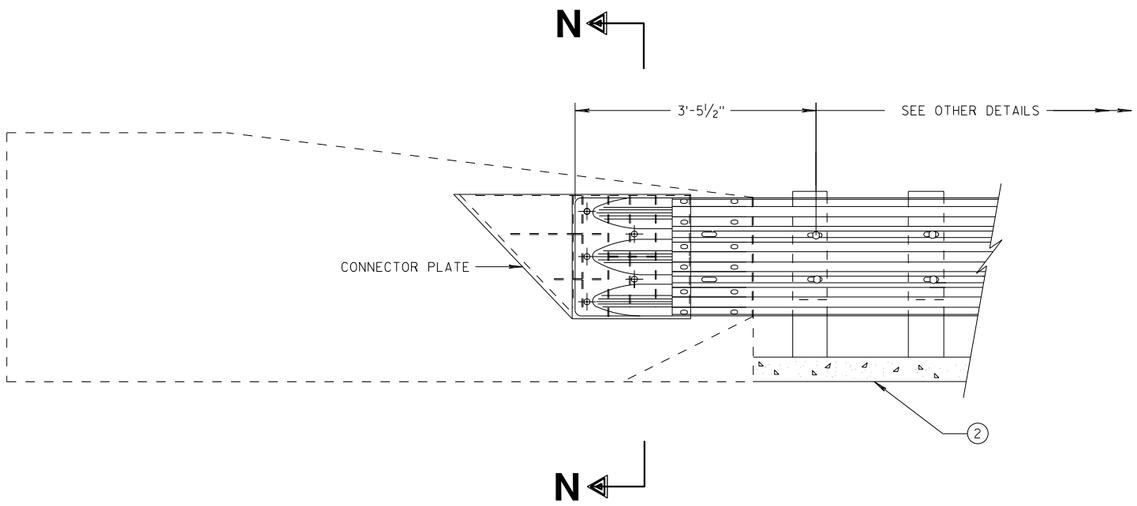
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

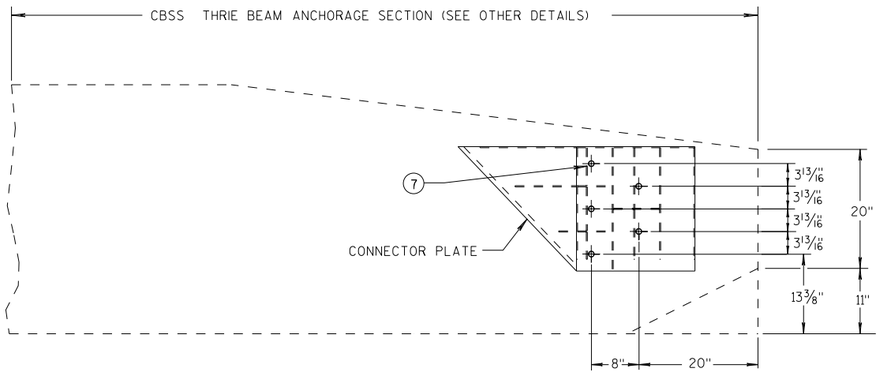
APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS I
UNIT SUPERVI

6
S.D.D. 14 B 45-5i



THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



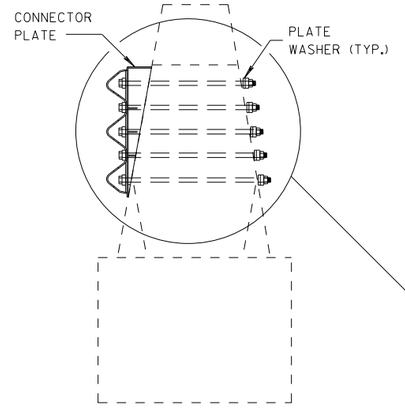
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

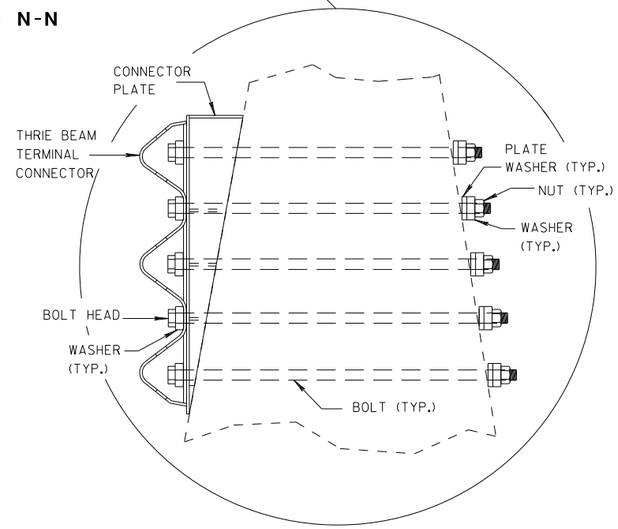
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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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DATE
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S.D.D. 14 B 45-5j

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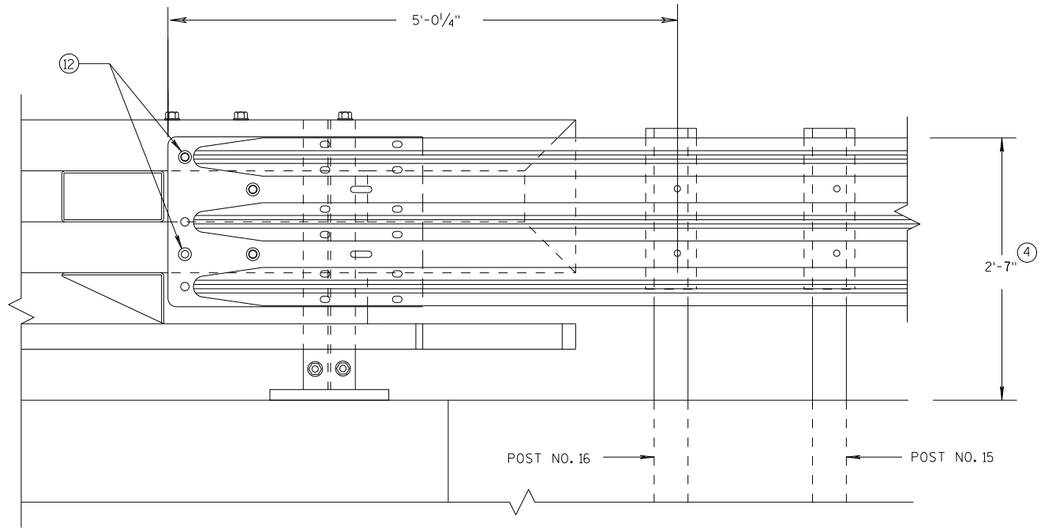
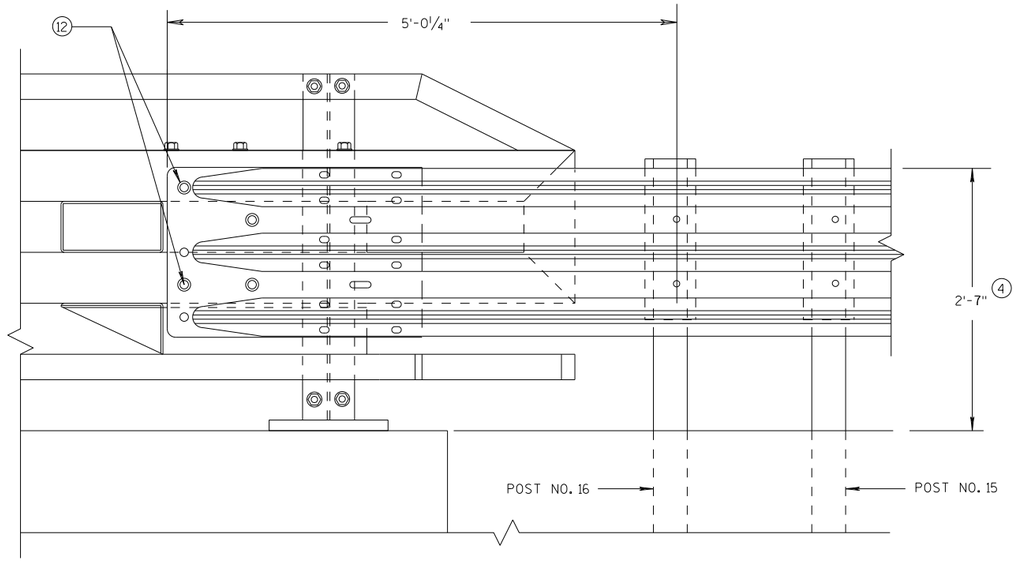
S.D.D. 14 B 45-5j



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
DEPARTMENT OF TRANSPORTATION

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

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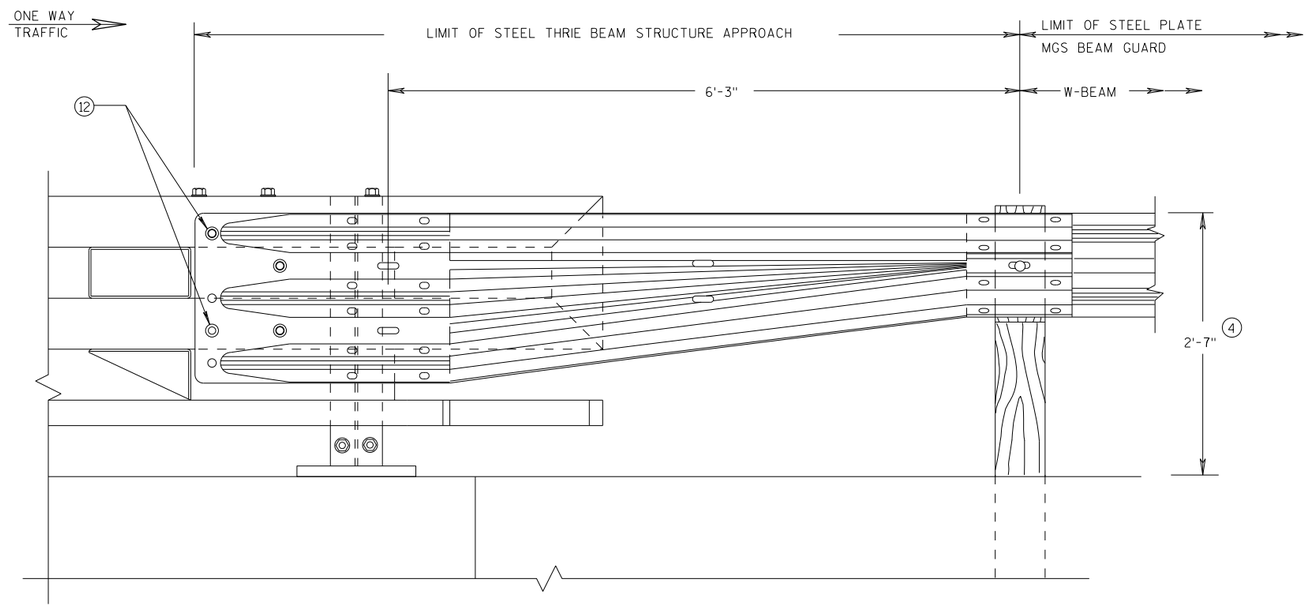
S.D.D. 14 B 45-5k



FRONT VIEW

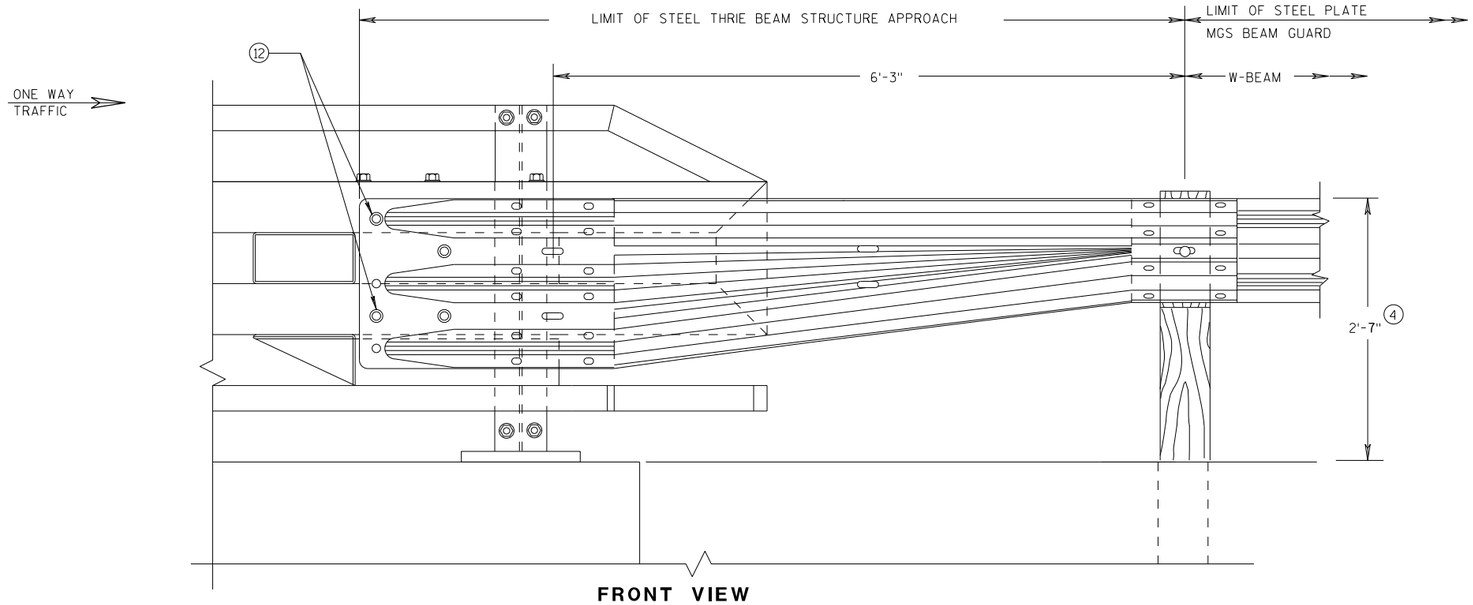
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(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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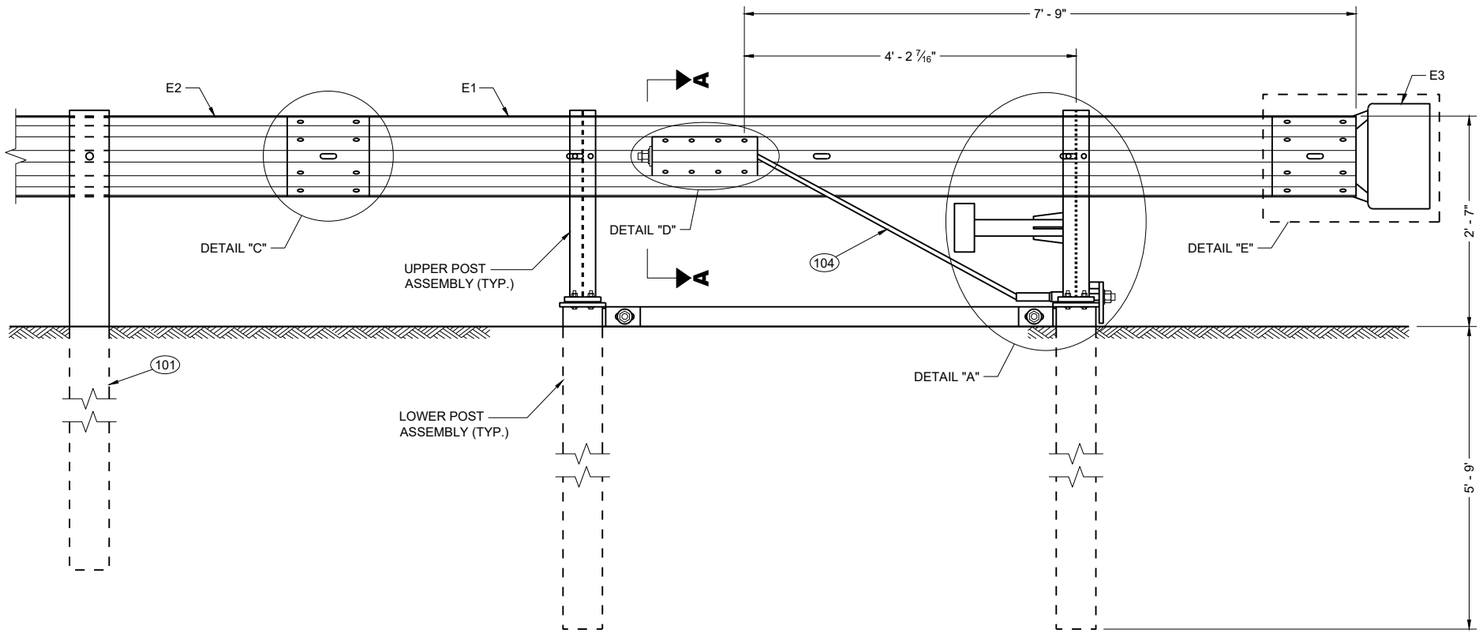
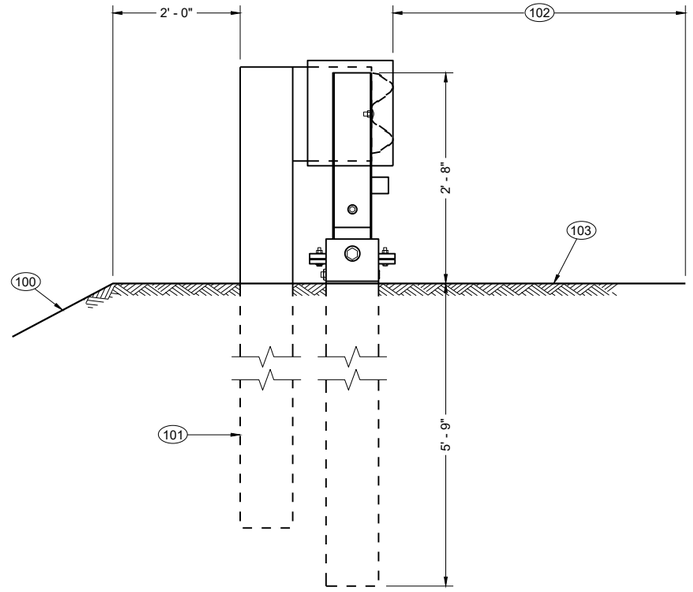


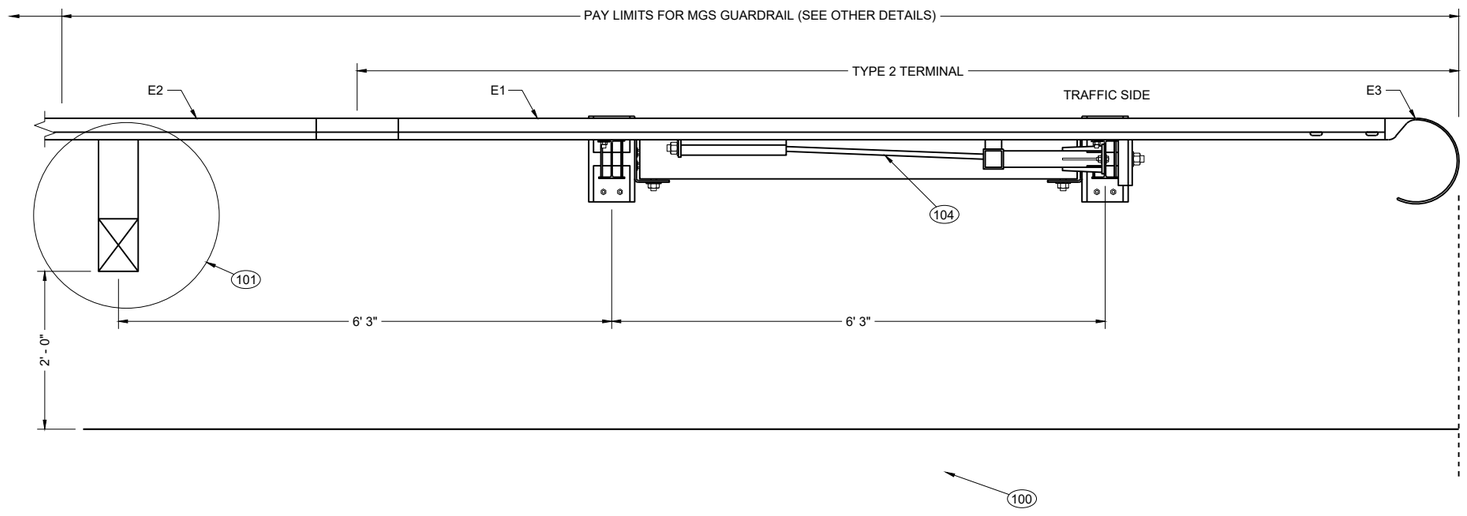
BACK VIEW

TYPE 2 TERMINAL



SIDE VIEW

TYPE 2 TERMINAL



TOP VIEW

TYPE 2 TERMINAL

GENERAL NOTES

SEE SDD 14B42 FOR MORE INFORMATION

(100) MAXIMUM SLOPE IS 2.5:1.

(101) SEE SDD 14B42 FOR MORE INFORMATION.

(102) SHOULDER

(103) MAXIMUM SLOPE IS 10:1.

(104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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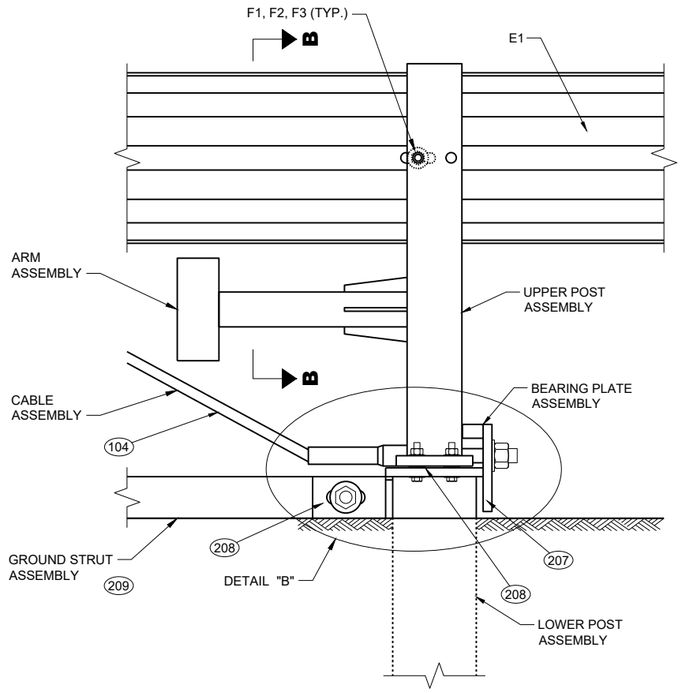
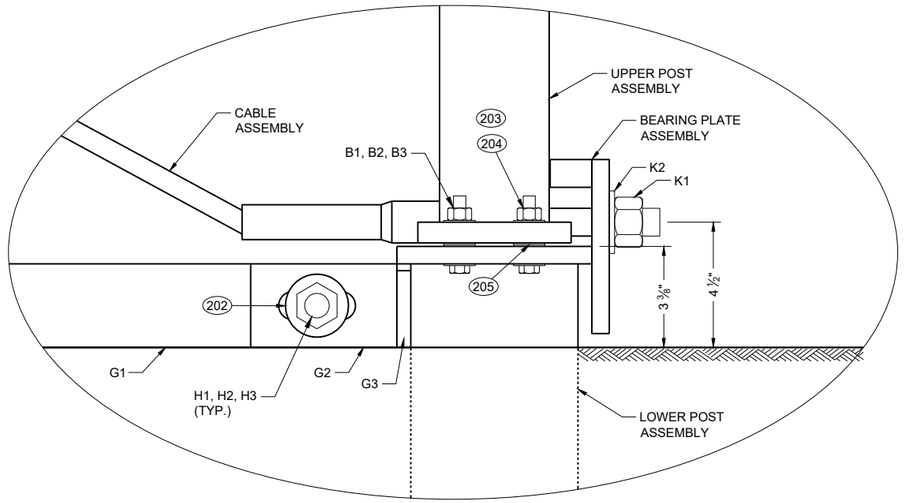
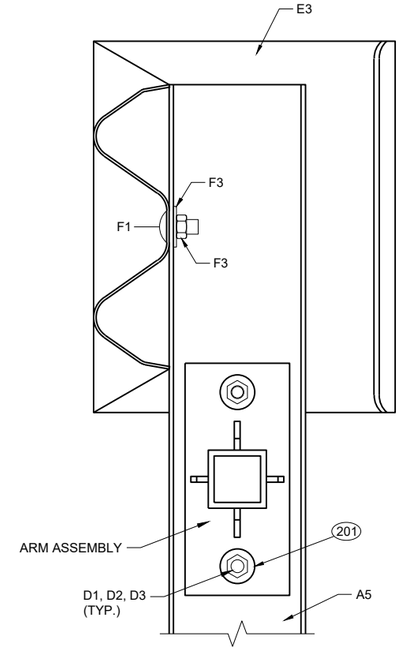
SDD 14B47-07a



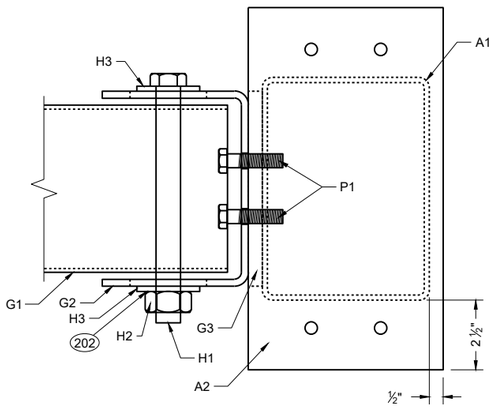
DETAIL "A"



DETAIL "B"

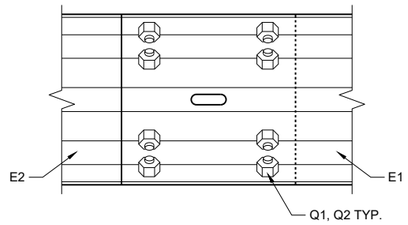


SECTION B - B

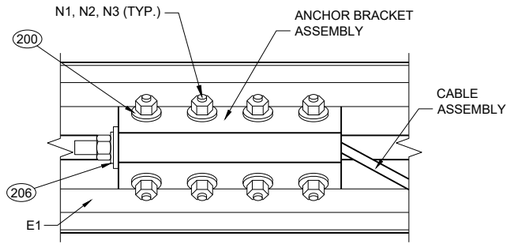


TOP VIEW

GROUND STRUT CONNECTION DETAIL



DETAIL "C"



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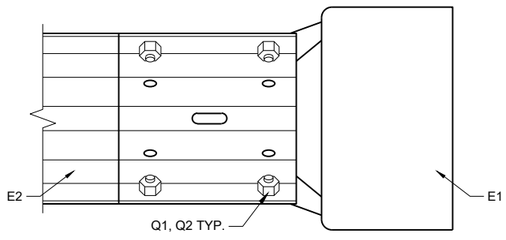


DETAIL "E"

GENERAL NOTES

200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.

202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.

204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

207 NO MATERIAL IS TO BE PLACED AGAINST THE VERTICAL FACES OF BEARING PLATE.

208 PREVENT OR REMOVE MATERIALS THAT BLOCK ACCESS TO BOLTS FOR POST ASSEMBLIES AND GROUND STRUT.

209 PREVENT OR REMOVE MATERIALS THAT IMPEDE REMOVAL OF GROUND STRUT.

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

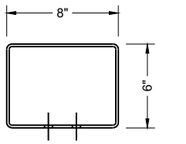
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

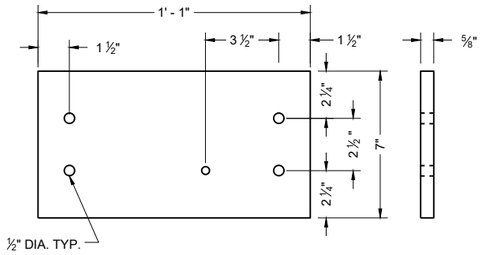
SDD 14B47-07b

GENERAL NOTES

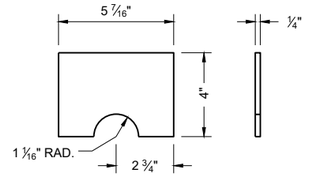
(300) TAP FOR 1/2" AFTER GALVANIZATION



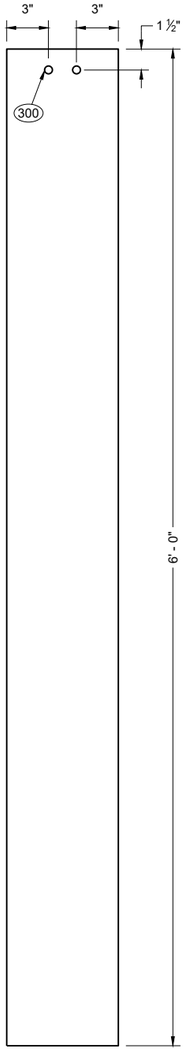
TOP VIEW



LOWER PLATE (A2)

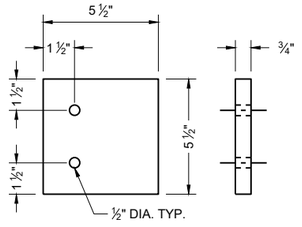


POST GUSSET (A3)

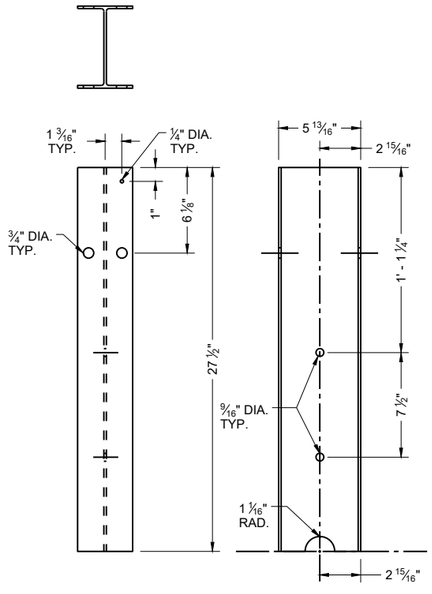


SIDE VIEW

FOUNDATION TUBE (A1)

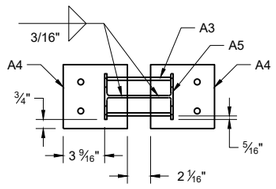


UPPER PLATE (A4)

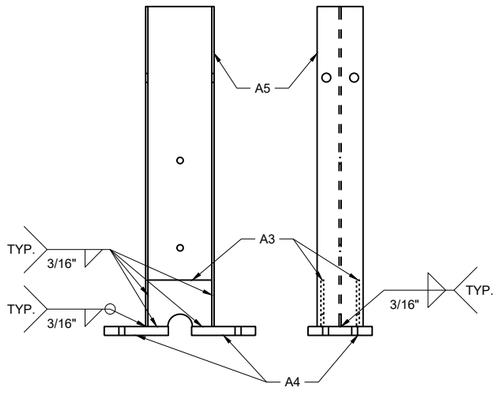


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

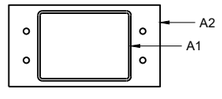


PLAN VIEW

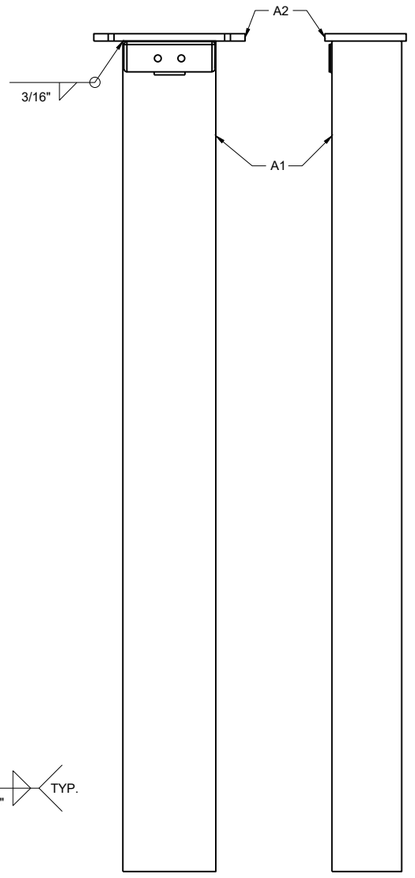


SIDE VIEW FRONT VIEW

UPPER POST ASSEMBLY

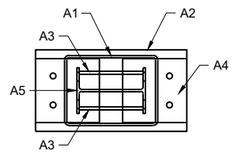


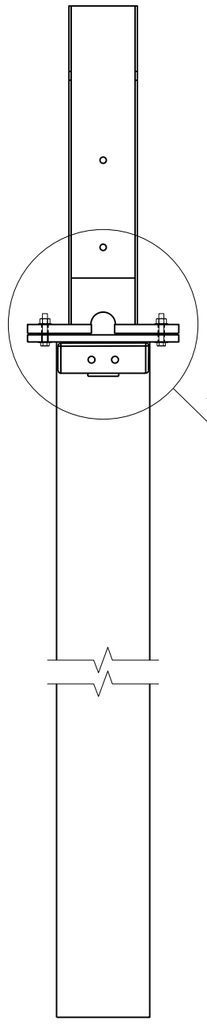
PLAN VIEW



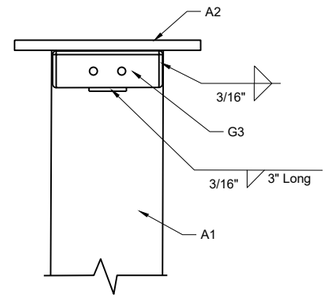
FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY

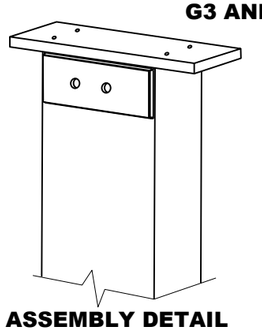




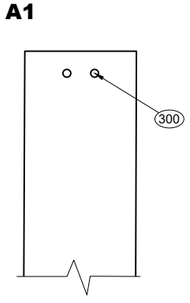
ASSEMBLED POST



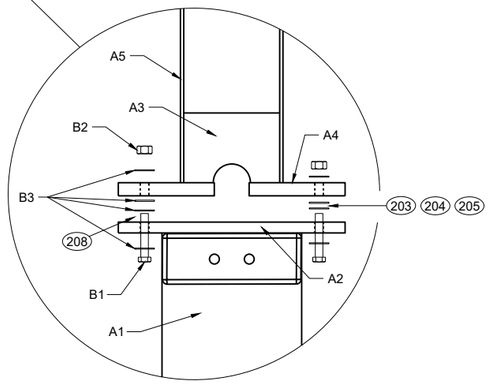
WELDING DETAIL G3 AND A1



ASSEMBLY DETAIL ISOMETRIC



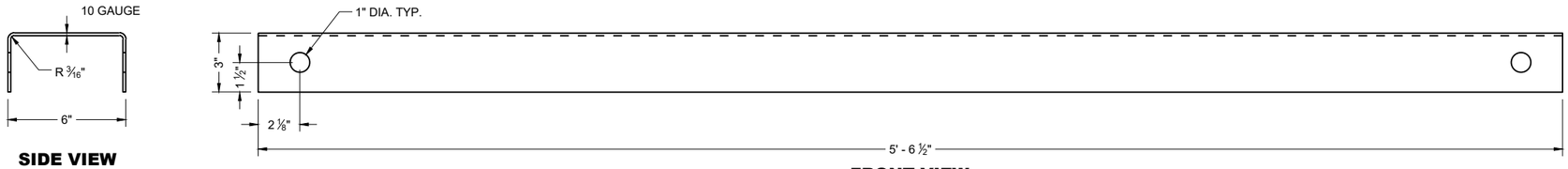
A1



POST CONNECTION DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

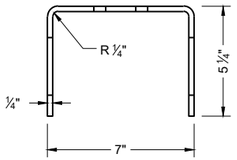
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



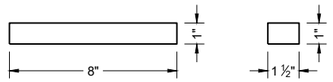
SIDE VIEW

FRONT VIEW

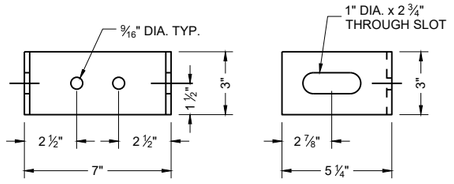
GROUND STRUT CHANNEL (G1)



TOP VIEW

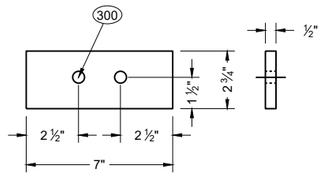


BEARING PLATE FLANGE (L2)

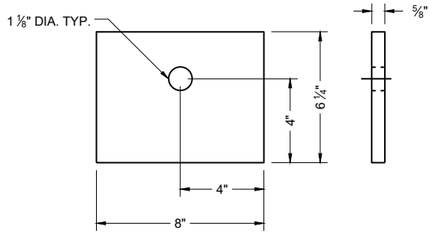


FRONT VIEW SIDE VIEW

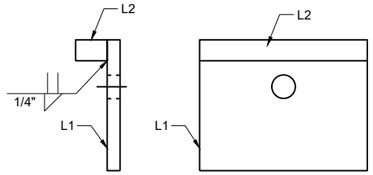
GROUND STRUT CONNECTOR (G2)



GROUND STRUT PLATE (G3)

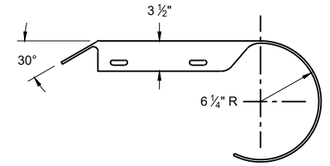


BEARING PLATE (L1)

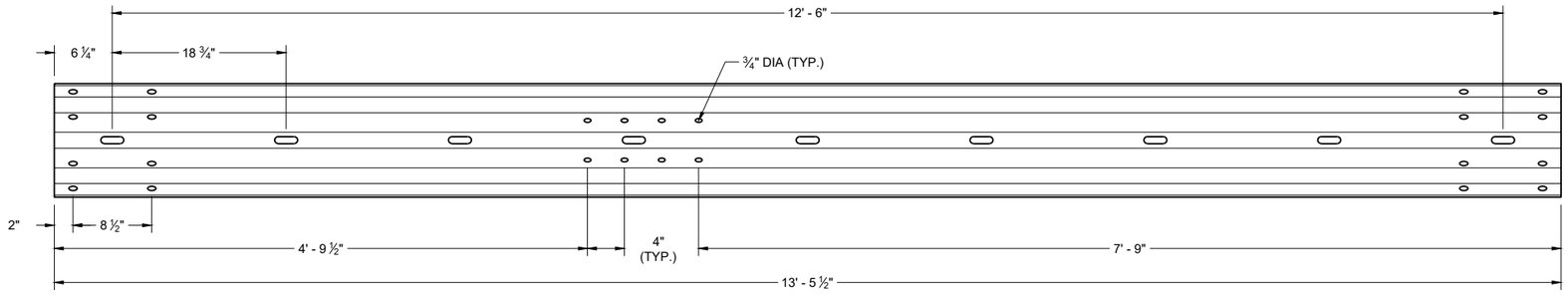


SIDE VIEW FRONT VIEW

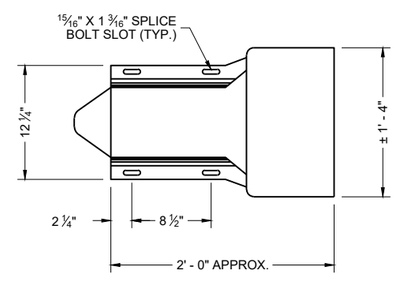
BEARING PLATE ASSEMBLY



PLAN VIEW

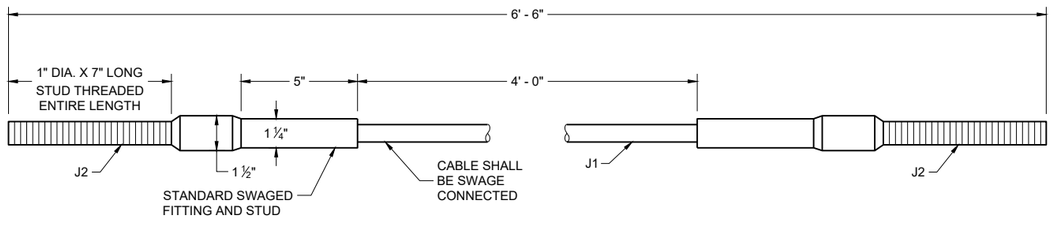


TYPE 2 GUARDRAIL (E1)



ELEVATION VIEW

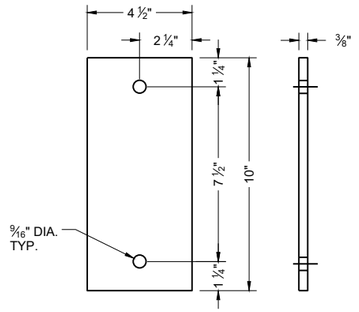
ROUNDED BUFFER END (E3)



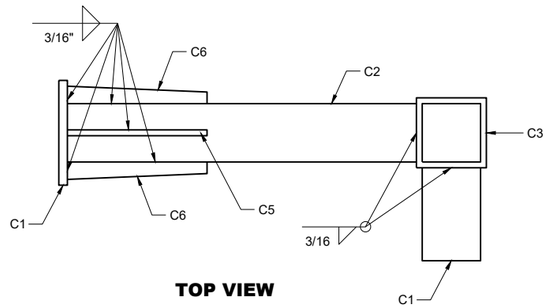
CABLE ASSEMBLY

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

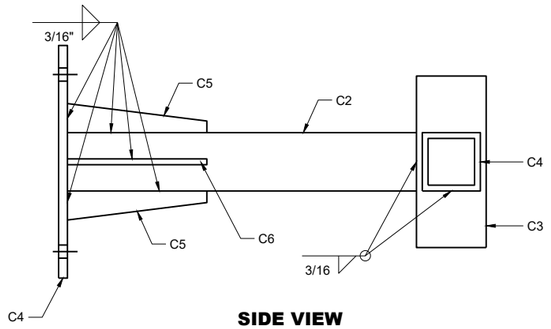
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



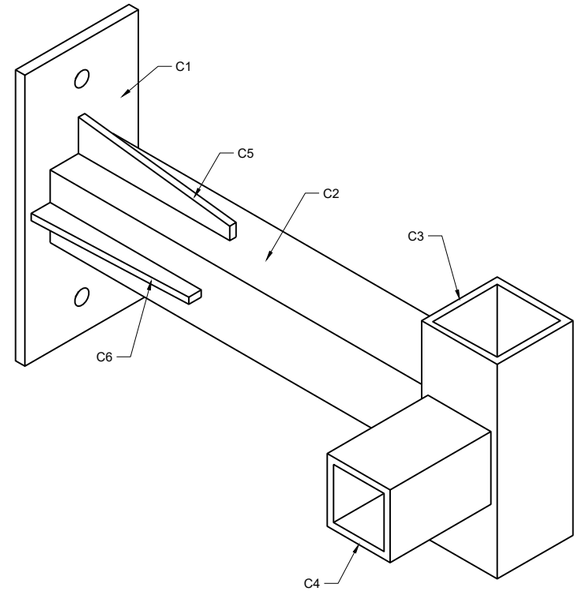
ARM PLATE (C1)



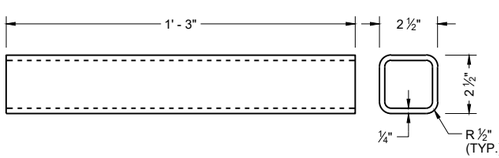
TOP VIEW
ARM ASSEMBLY



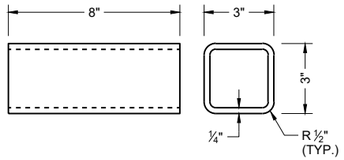
SIDE VIEW
ARM ASSEMBLY



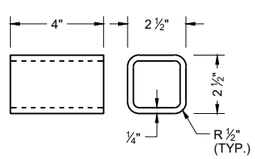
ISOMETRIC VIEW
ARM ASSEMBLY



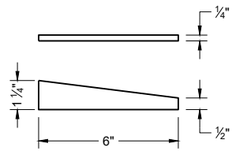
ARM TUBE 1 (C2)



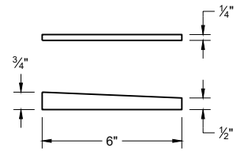
ARM TUBE 2 (C3)



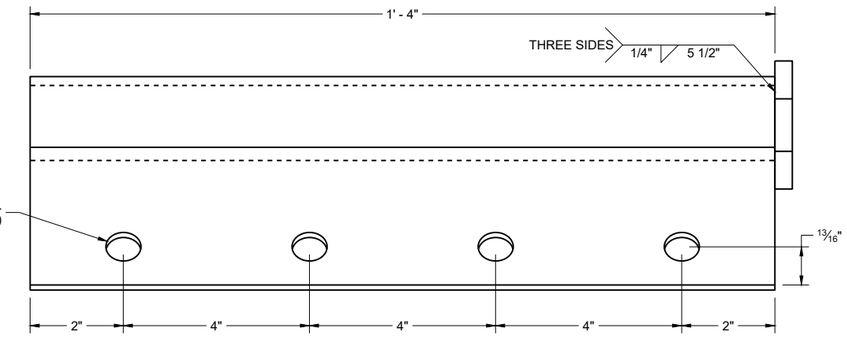
ARM TUBE 3 (C4)

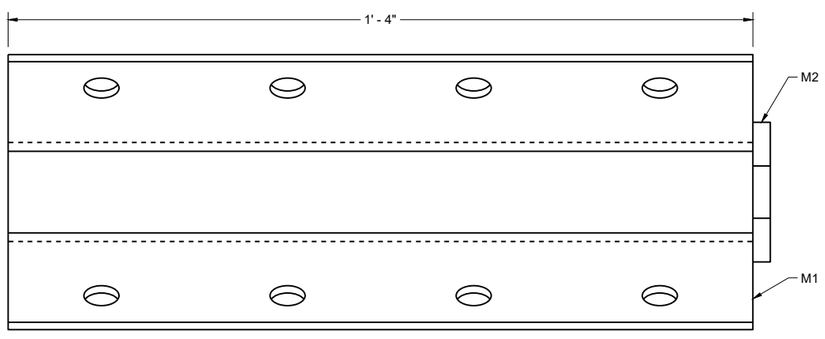


ARM GUSSET PLATE 1 (C5)

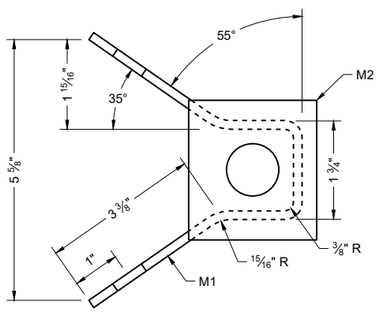


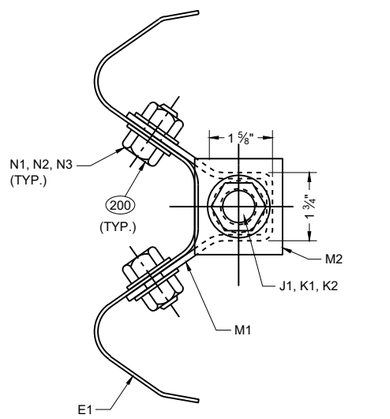
ARM GUSSET PLATE 2 (C6)

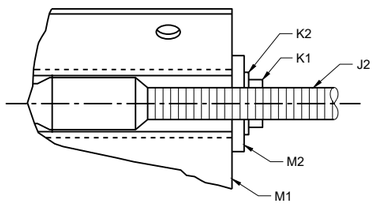




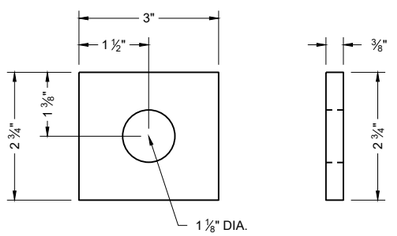
ANCHOR BRACKET (M1, M2)







SECTION A - A



ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	TYPE 2 FOUNDATION TUBE	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
A2	LOWER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
A3	POST GUSSET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
A4	UPPER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/4" THICKNESS
A5	TYPE 2 POST	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI, w6x9 or w6x8.5	
B1	BREAKAWAY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED . PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	7/16" DIA.
B2	BREAKAWAY BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/16" DIA.
B3	BREAKAWAY BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
C1	ARM ASSEMBLY PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
C2	ARM ASSEMBLY TUBE 1	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
C3	ARM ASSEMBLY TUBE 2	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 3" x 3" x 1/4"
C4	ARM ASSEMBLY TUBE 3	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 2 1/2" x 2 1/2" X 1/4"
C5	ARM ASSEMBLY GUSSET PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
C6	ARM ASSEMBLY GUSSET PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
D1	ARM ASSEMBLY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	1/2" DIA.
D2	ARM ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	1/2" DIA.
D3	ARM ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
E1	TYPE 2 GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E2	BEAM GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E3	BEAM GUARD ROUNDED BUFFER END	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
F1	POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
F2	POST BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
F3	POST BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
G1	GROUND STRUT CHANNEL	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" x 11 3/4" x 10 GAUGE
G2	GROUND STRUT CONNECTOR	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
G3	GROUND STRUT PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" THICKNESS

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47-07f

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	7/8" DIA.
H2	GROUND STRUT BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/8" DIA.
H3	GROUND STRUT BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	3/4" DIA.
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. MIN BREAKING STRENGTH OF 42.7 KIPS ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."	
K1	CABLE ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	BEARING PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
L2	BEARING PLATE FLANGE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1" THICKNESS
M1	BEAM GUARD ANCHOR BRACKET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	
M2	BEAM GUARD ANCHOR END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
N1	ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	ANCHOR BRACKET BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
N3	ANCHOR BRACKET BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 /ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
P1	FOUNDATION TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
Q1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
Q2	SPLICE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	5/8" DIA.

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2025 — DATE
/S/ Rodney Taylor — <position>

FHWA

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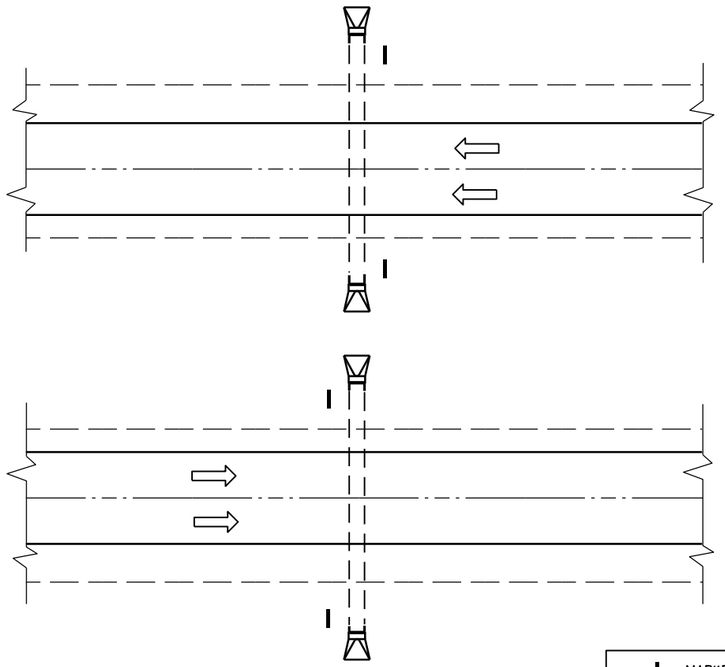
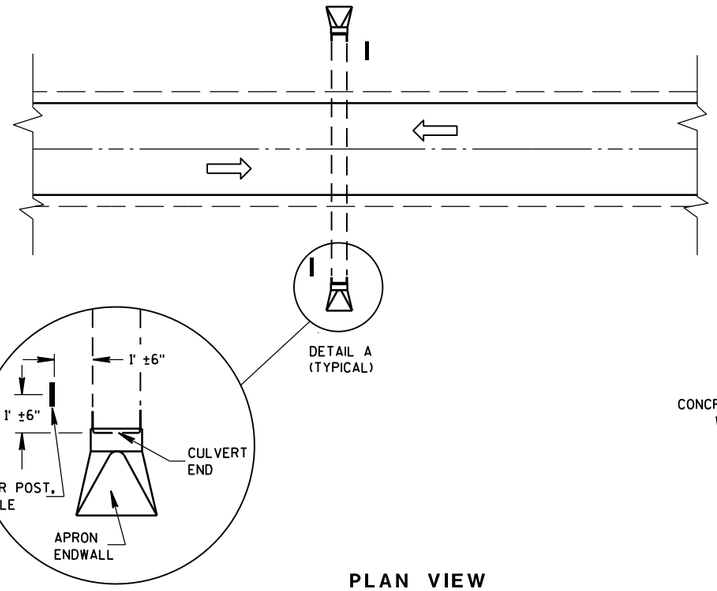
SDD 14B47-07g



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

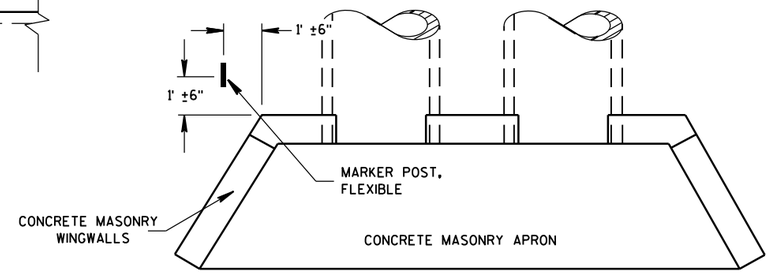
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

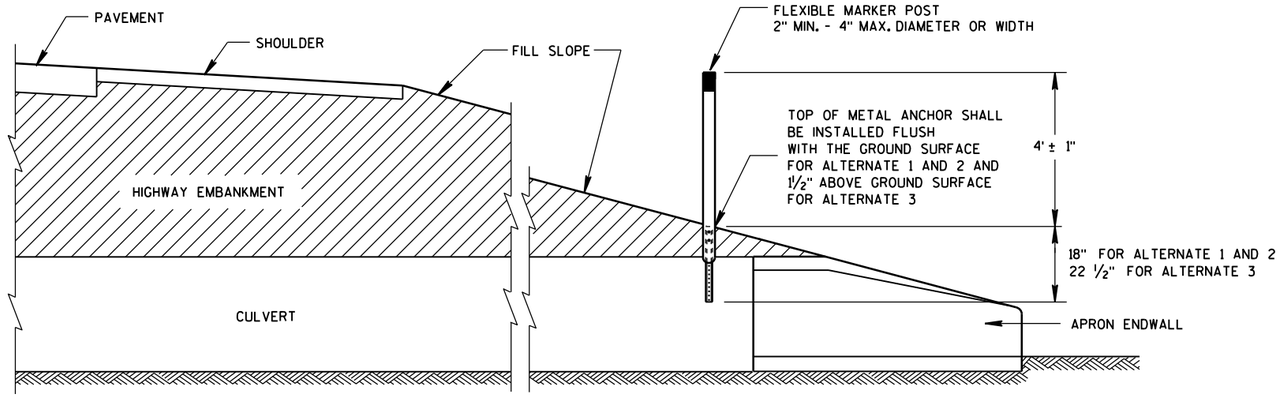
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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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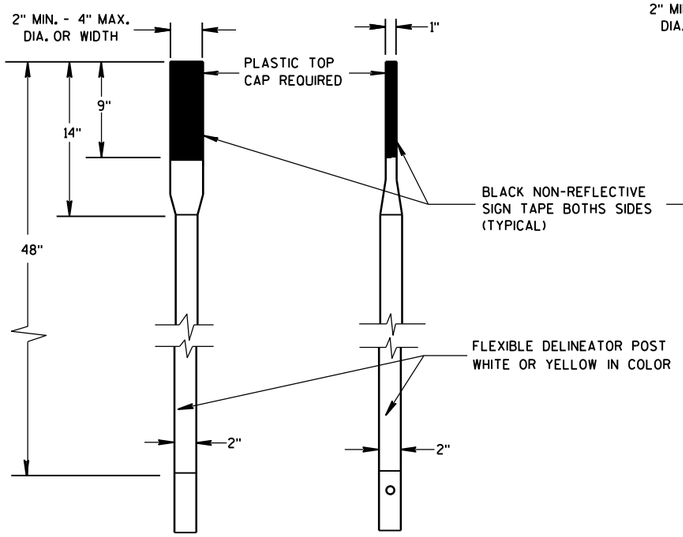
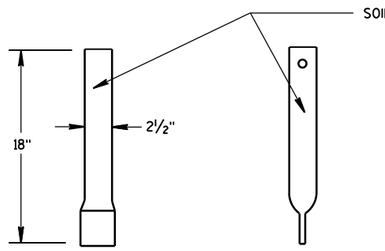
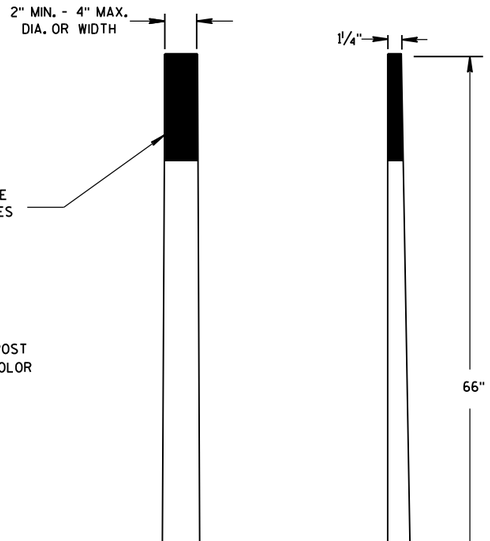
S.D.D. 15 A 3-2a





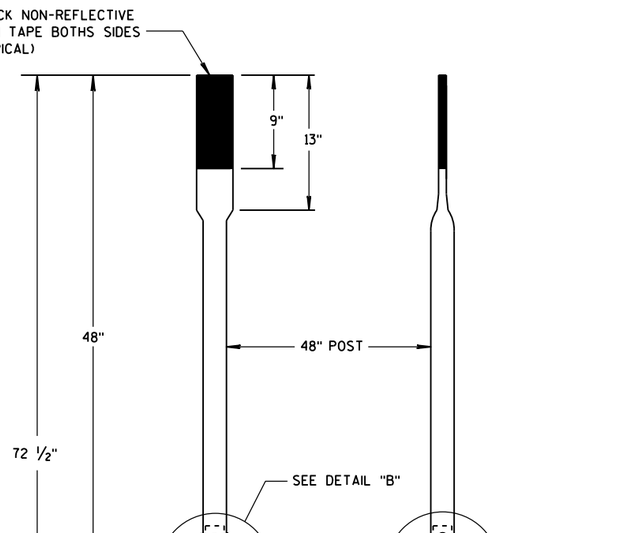
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

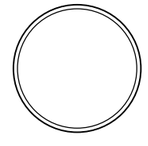
ALTERNATE 2



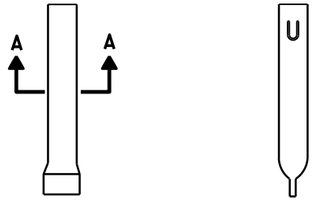
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

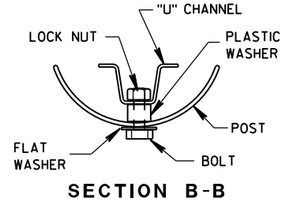


SECTION A-A

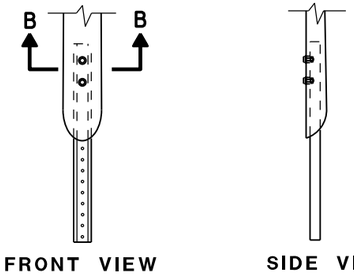


FRONT VIEW SIDE VIEW

ALTERNATE 1

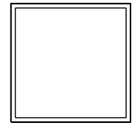


SECTION B-B

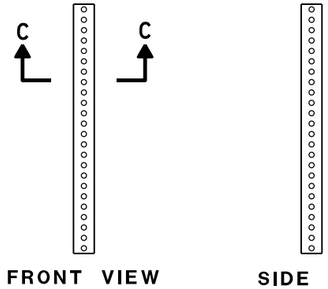


FRONT VIEW SIDE VIEW

ALTERNATE 2



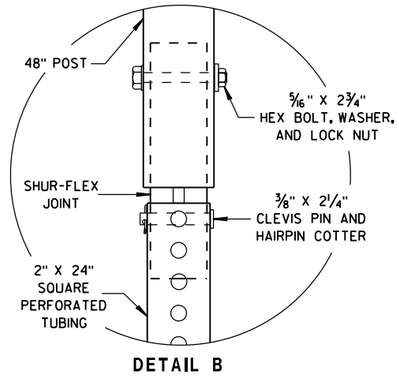
SECTION C-C



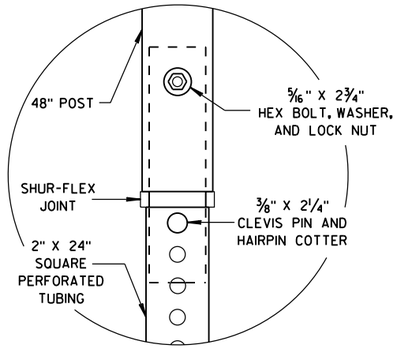
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

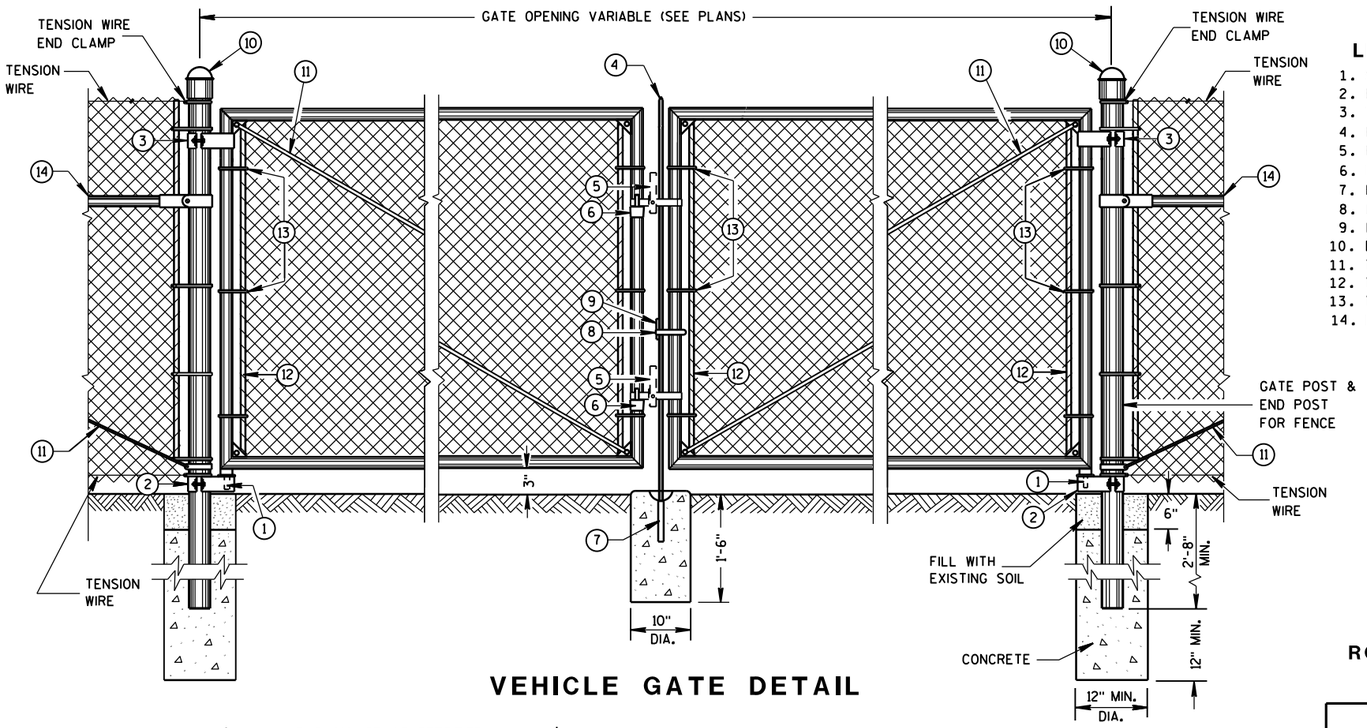
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

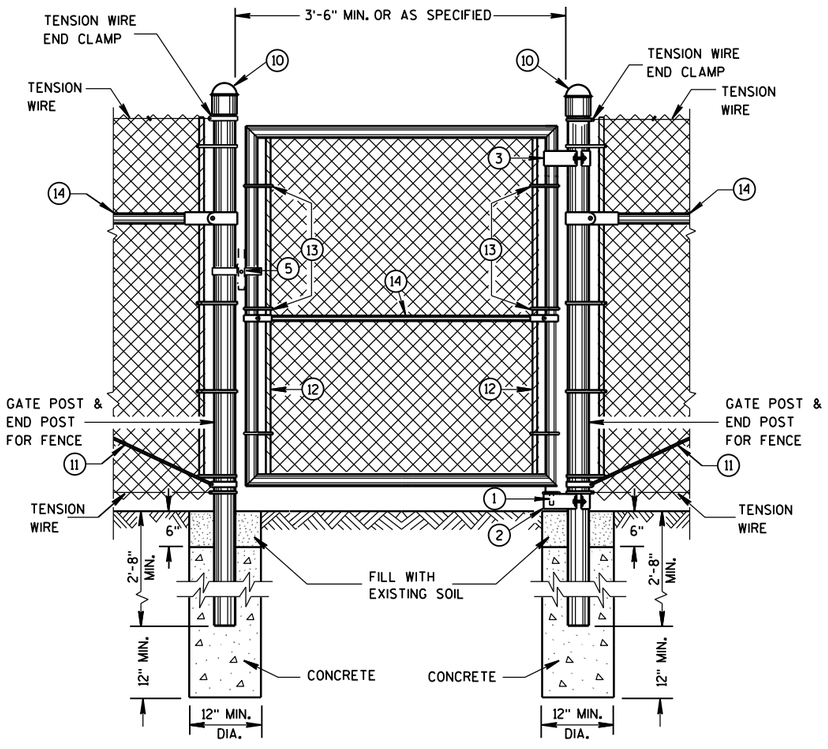
S.D.D. 15 A 3-2b

6

S.D.D. 15 A 3-2b



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

1. STRAIGHT PLUG
2. BOTTOM HINGE
3. TOP HINGE
4. PLUNGER ROD
5. FULCRUM LATCH
6. FORK CATCH *
7. PLUNGER ROD CATCH
8. LOCK KEEPER GUIDE
9. LOCK KEEPER
10. DOME TOPS
11. TRUSS RODS
12. TENSION BAR
13. TENSION BANDS
14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

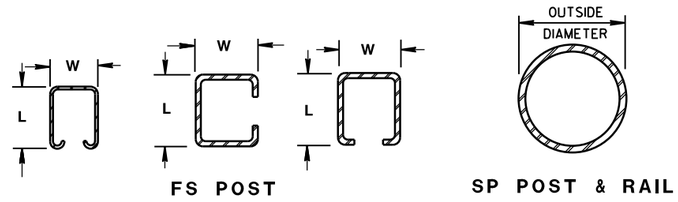
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



CROSS SECTIONS OF POSTS AND RAILS

ROLLED-FORMED STEEL FENCE POST (2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST (1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

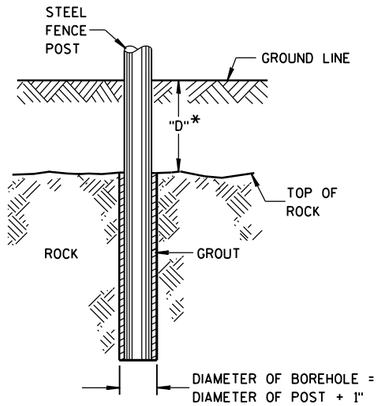
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

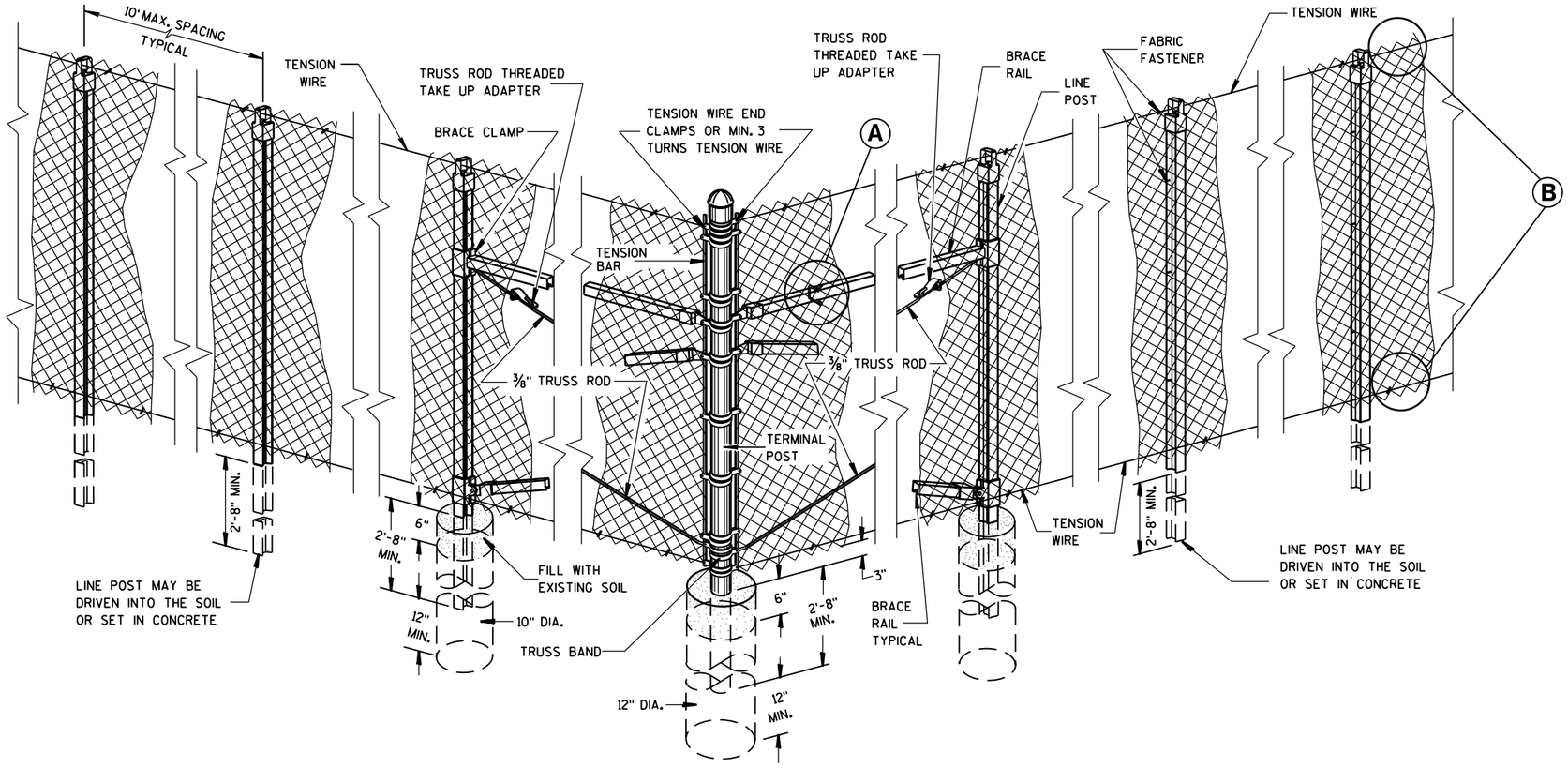
6

S.D.D. 15 B 3-15a

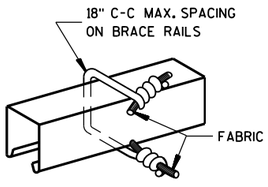


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



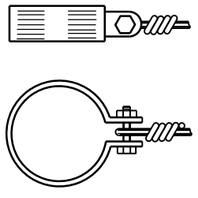
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



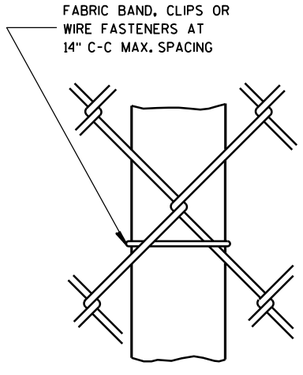
BRACE RAIL

FABRIC FASTENER

Ⓐ



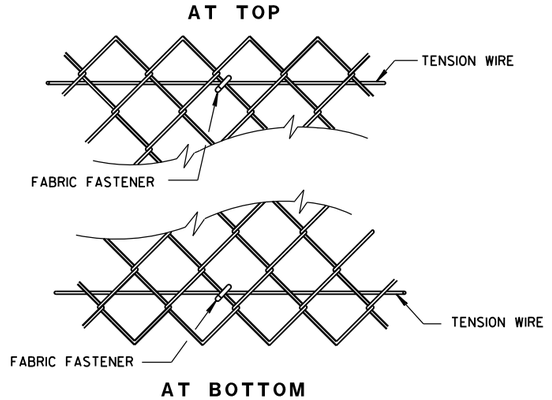
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

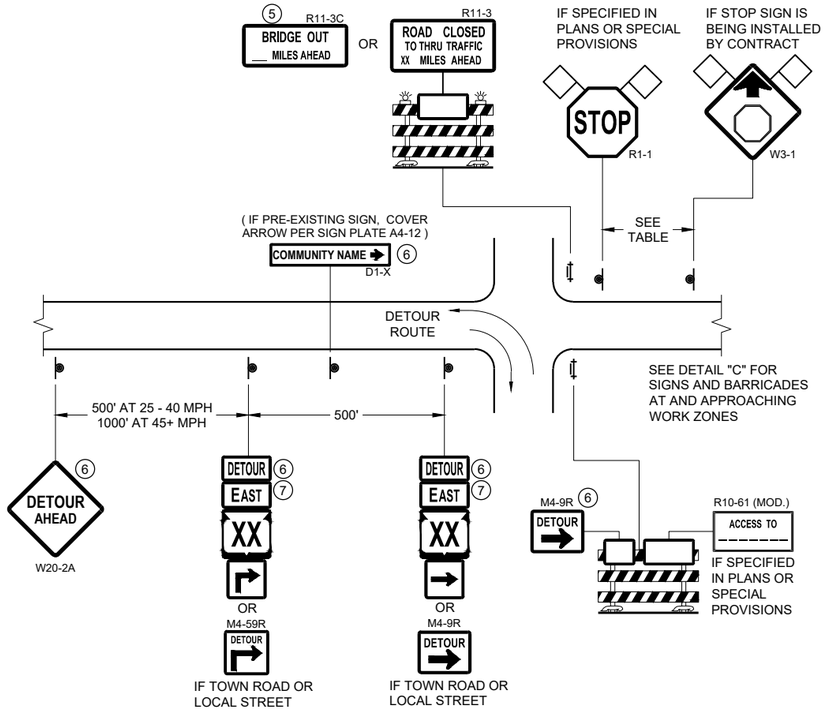
APPROVED
FEB. 2015 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 15 B 3-15b

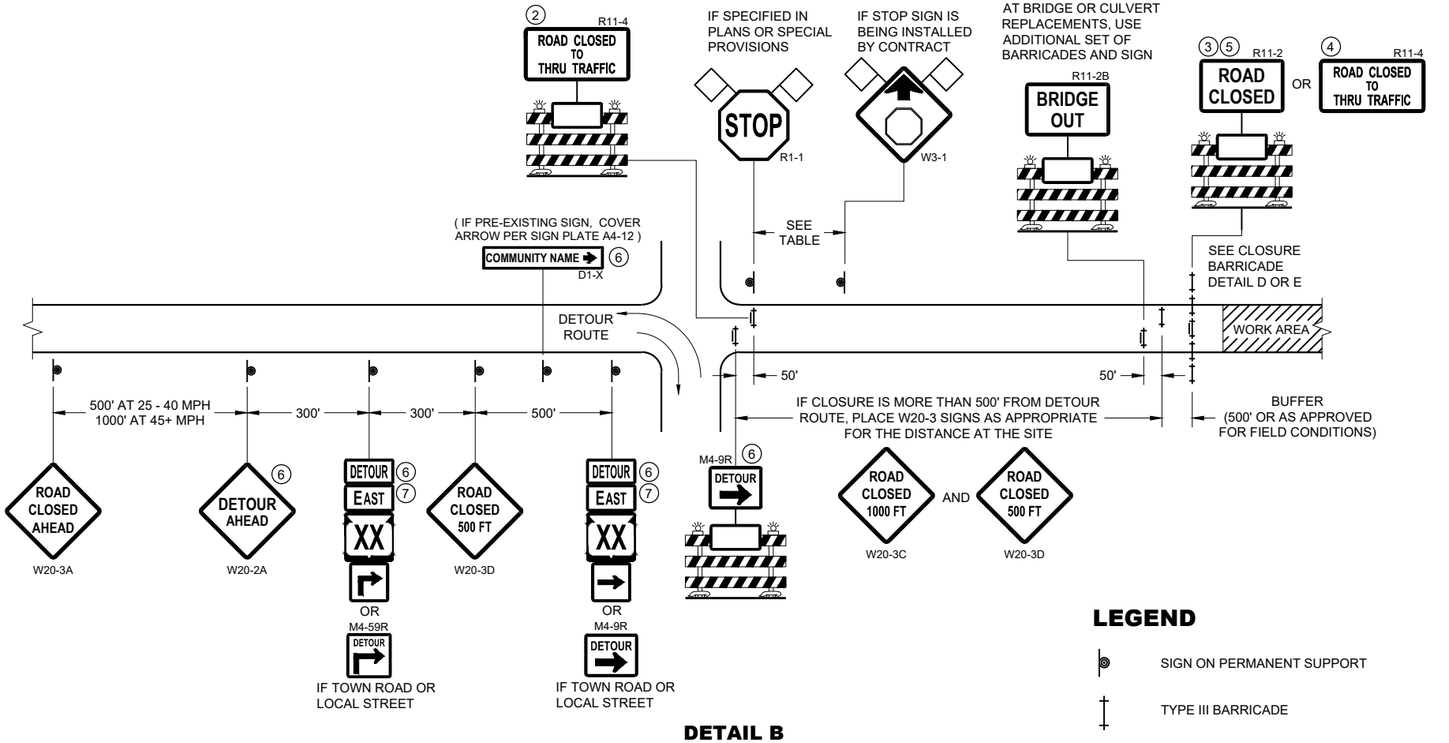
6

S.D.D. 15 B 3-15b



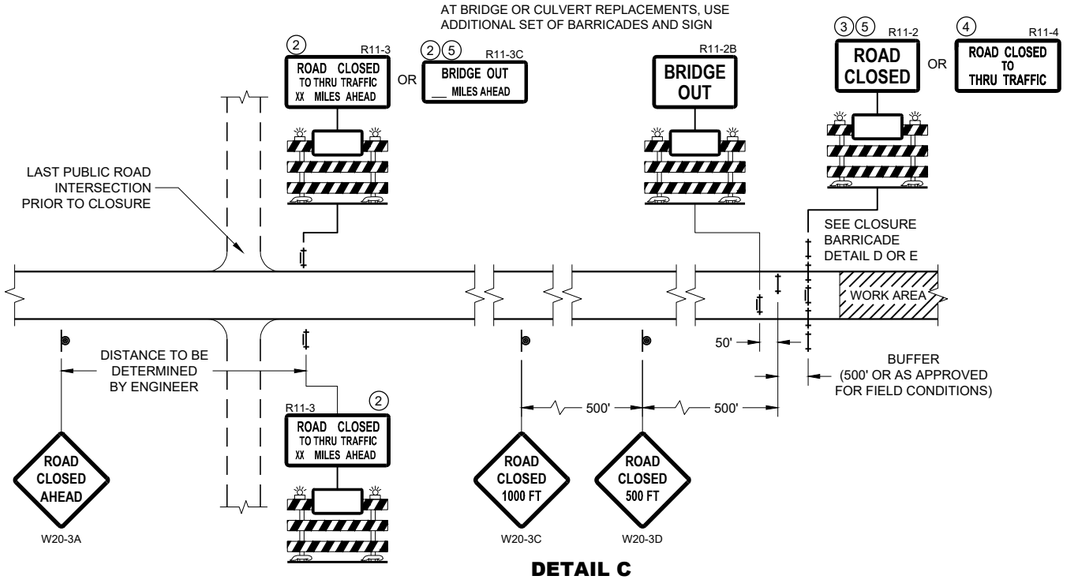
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

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

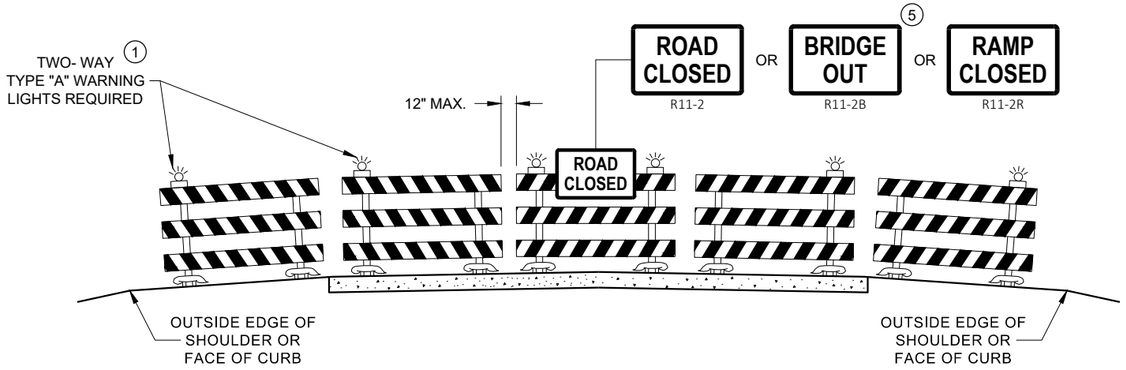
FHWA

6

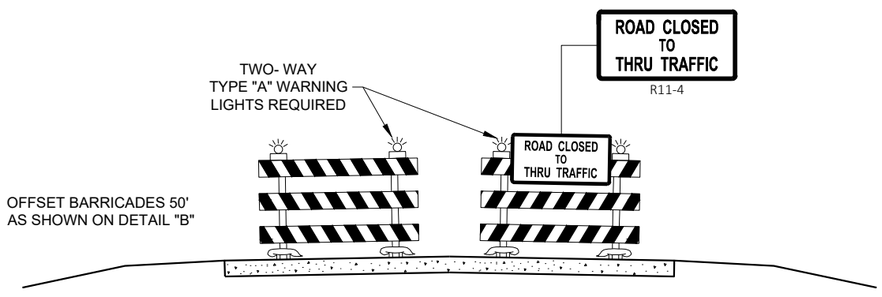
SDD 15C02 - 09a

6

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

6

SDD 15C02 - 09b

6

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
- OR XX — M1 - 6
- OR COUNTY X — M1 - 5A
- M05 - 1
- OR M06 - 1
- OR 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.

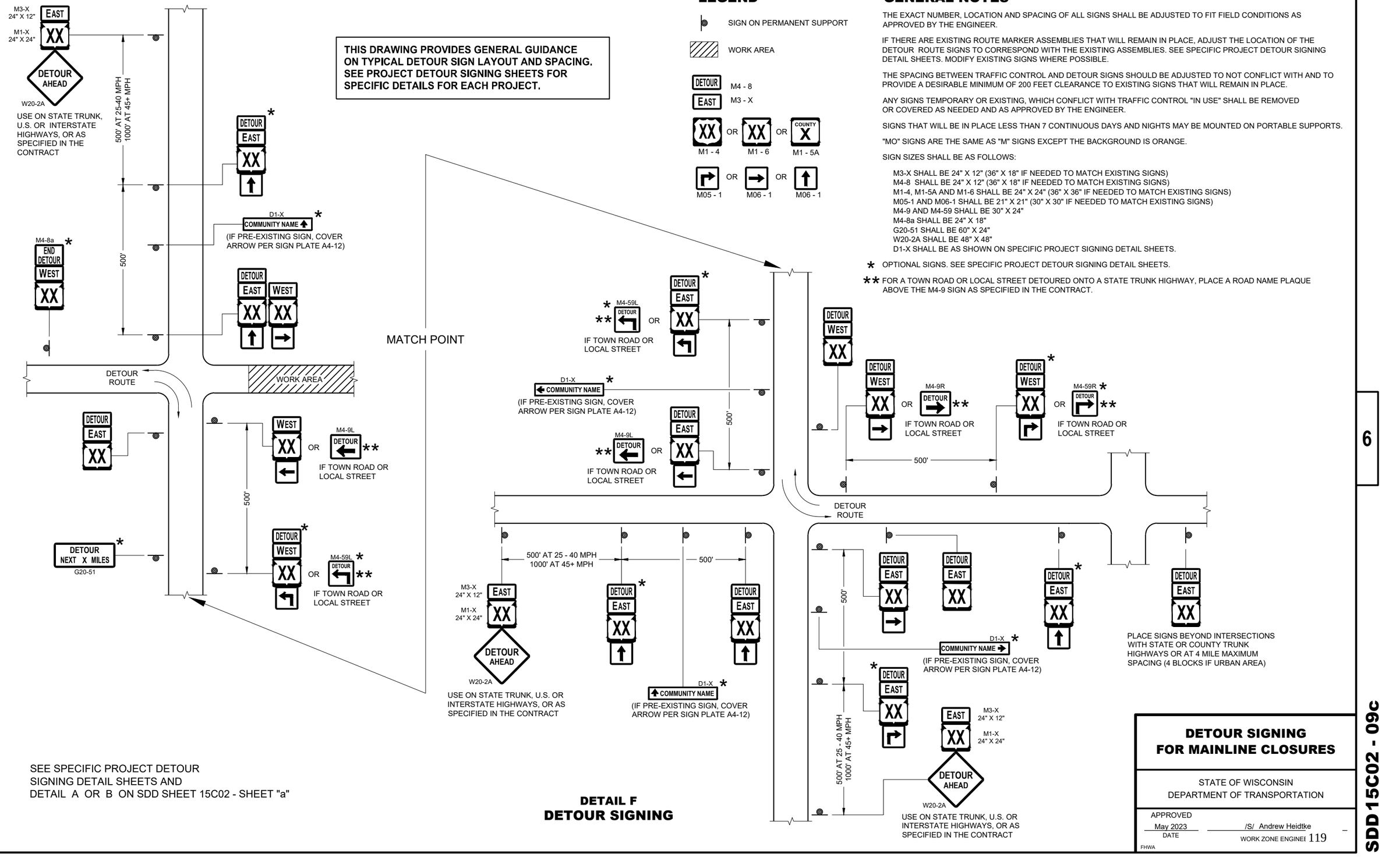
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

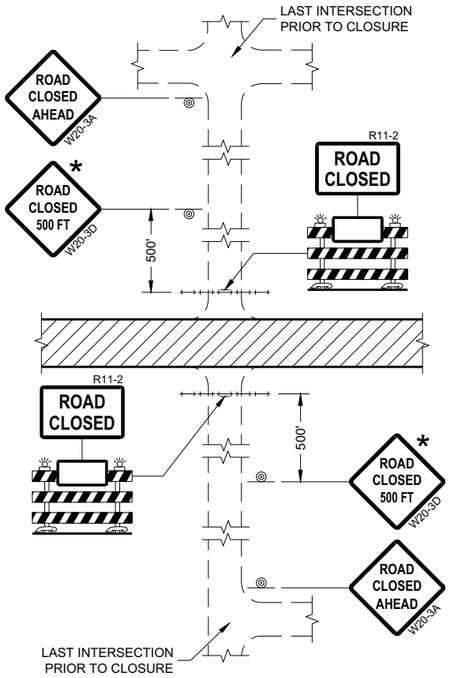
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

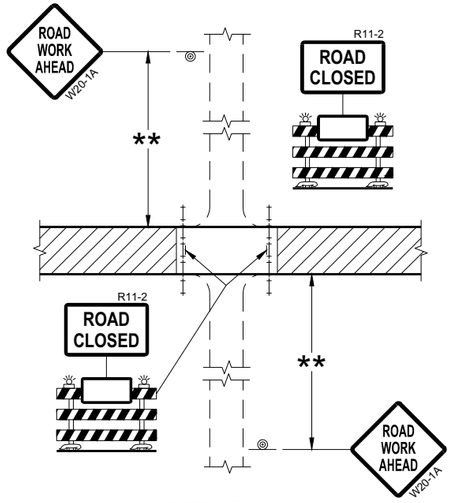
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 09c
6



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.

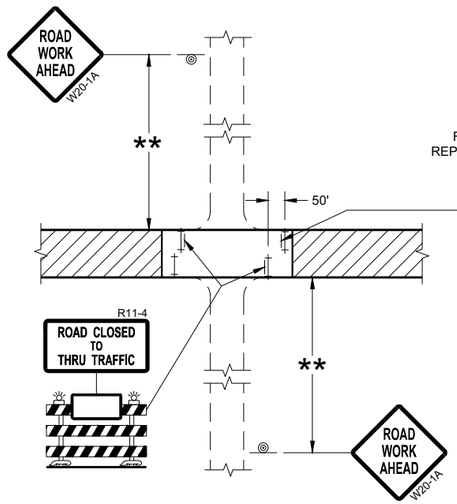
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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.

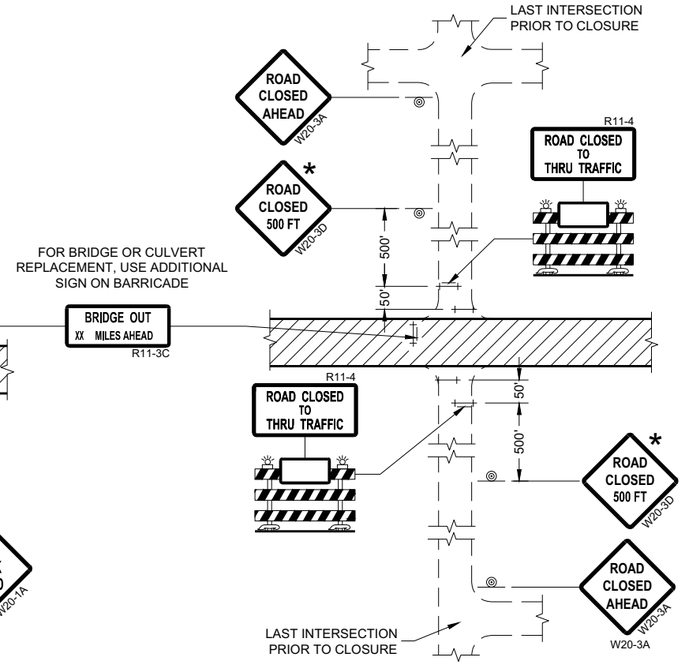
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* 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 ENGINEER

FHWA

6

SDD 15C03 - 05

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

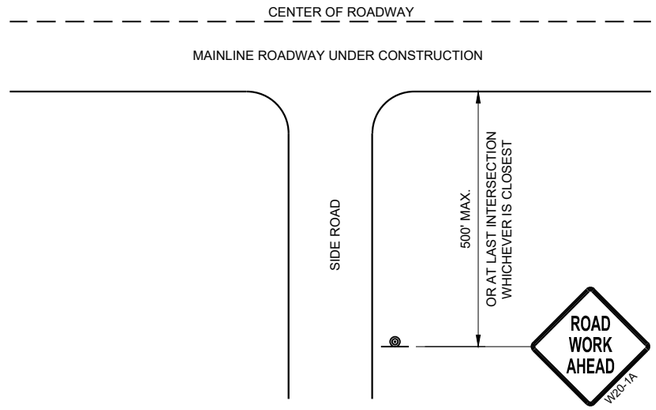
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



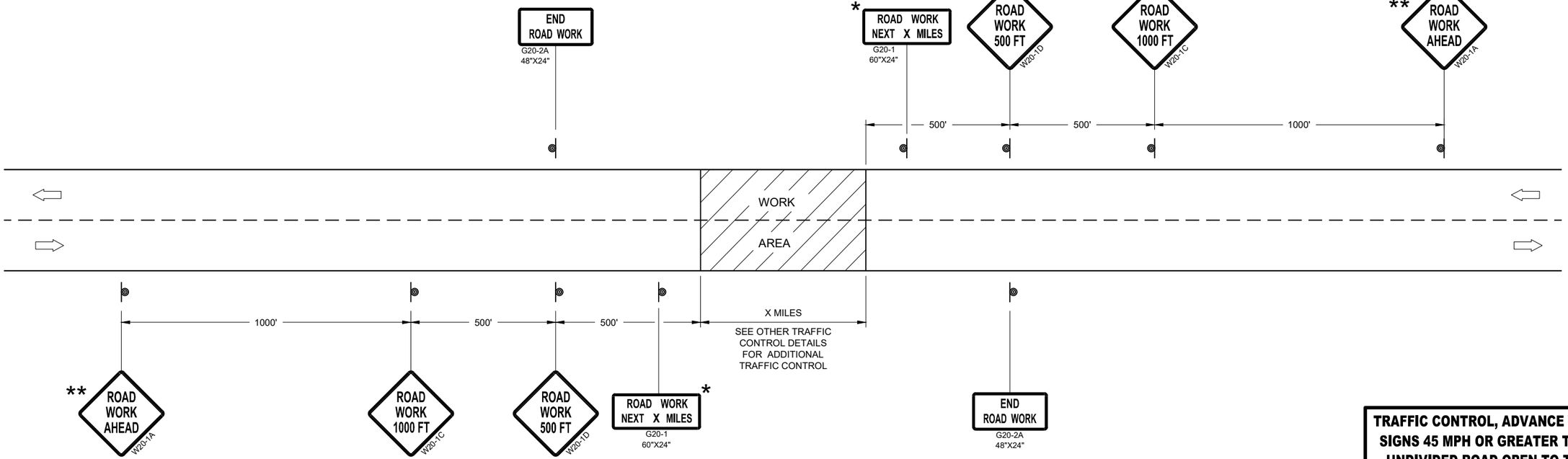
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

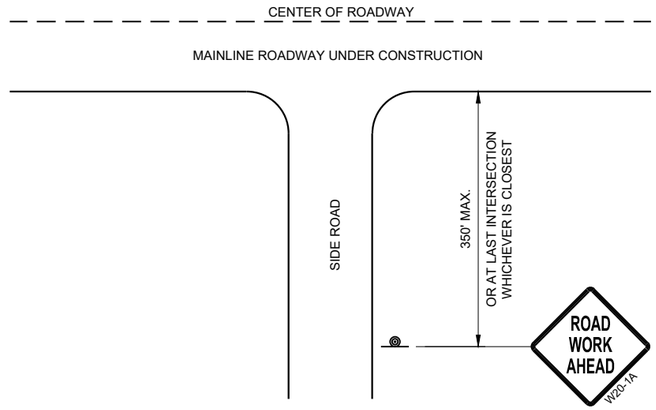
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



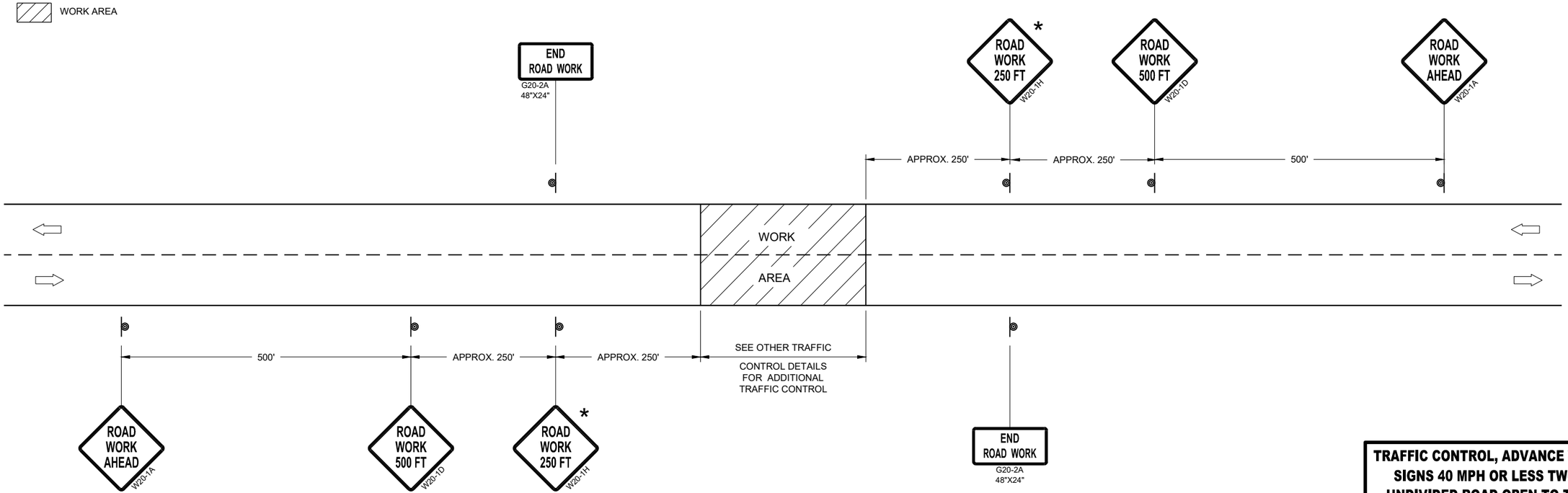
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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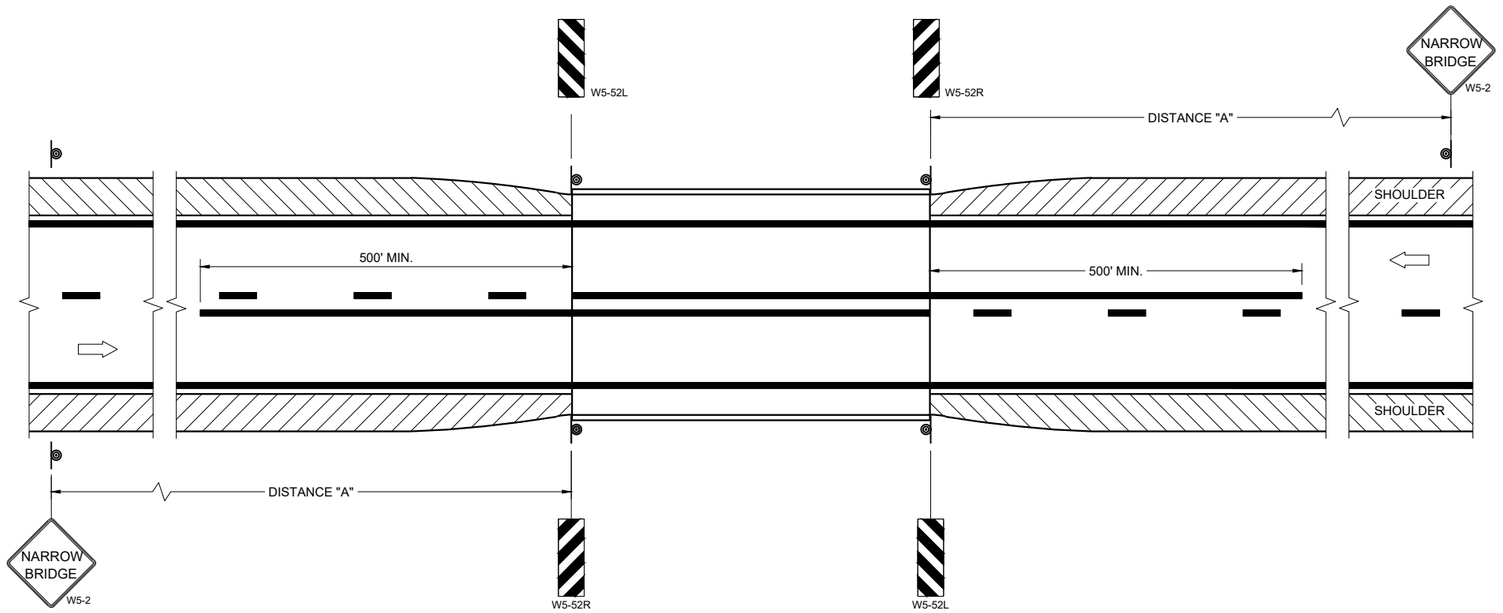
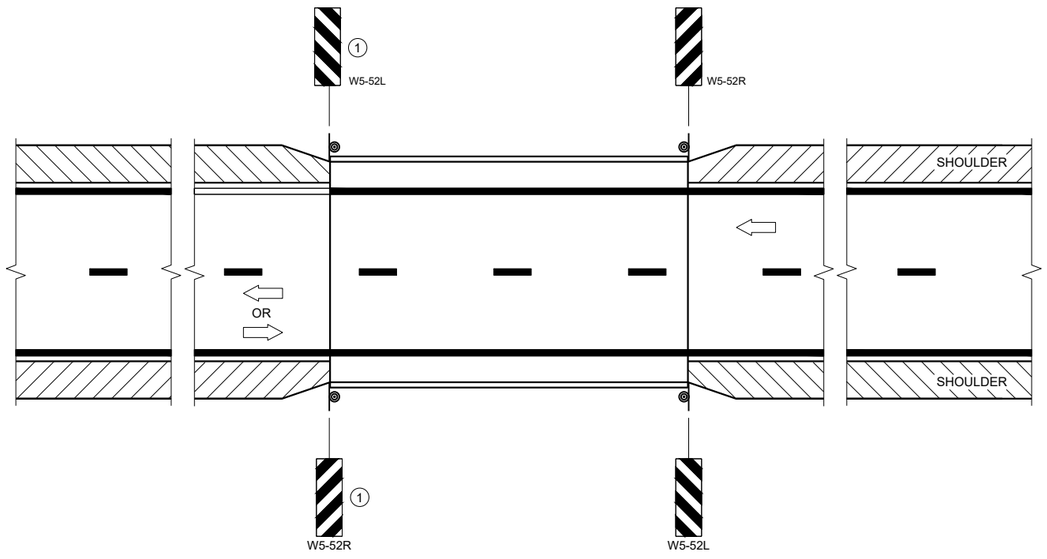
SDD 15C05 - 05



SITUATION 1

WARRANTING CRITERIA:
BRIDGE WIDTH IS AT LEAST 16 FEET BUT LESS THAN 24 FEET.



SITUATION 2

WARRANTING CRITERIA:
1. BRIDGE WIDTH IS AT LEAST 24 FEET AND
2. BRIDGE SHOULDER WIDTH IS LESS THAN 6 FEET

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THE DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

LOCATE W5-52 SIGN POST(S) BEHIND GUARDRAIL WHEN PRESENT.

PLACE THE EDGE OF THE W5-52 SIGN IN LINE WITH FACE OF CURB OR PARAPET.

ON BRIDGE ONLY PROJECTS, PLACE 300 FEET OF EDGELINE.

OMIT EDGELINES ON ROADWAYS WITHOUT EXISTING EDGELINES.

(1) OMIT ON ONE-WAY TRAVELED WAYS.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	150'
30	200'
35	250'
40	300'
45	400'
50	550'
55	700'

SIGNING AND MARKING FOR TWO LANE BRIDGES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer
FHWA

6
SDD 15C06-12

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.

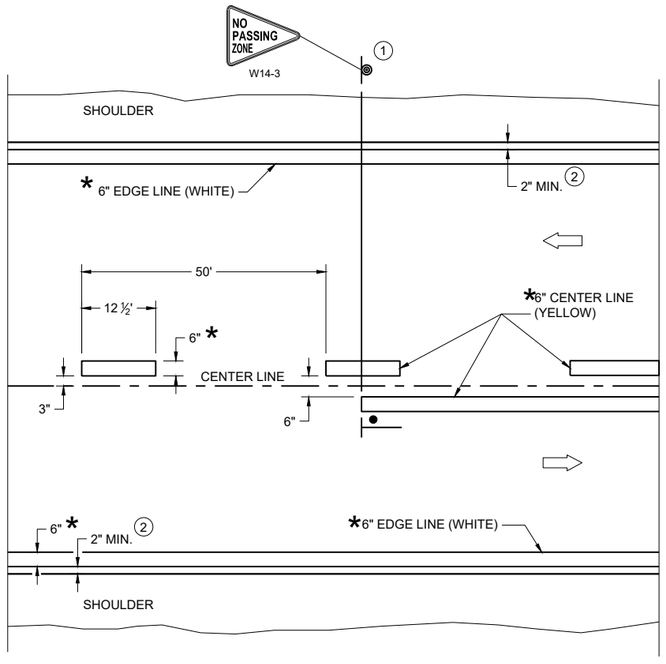
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

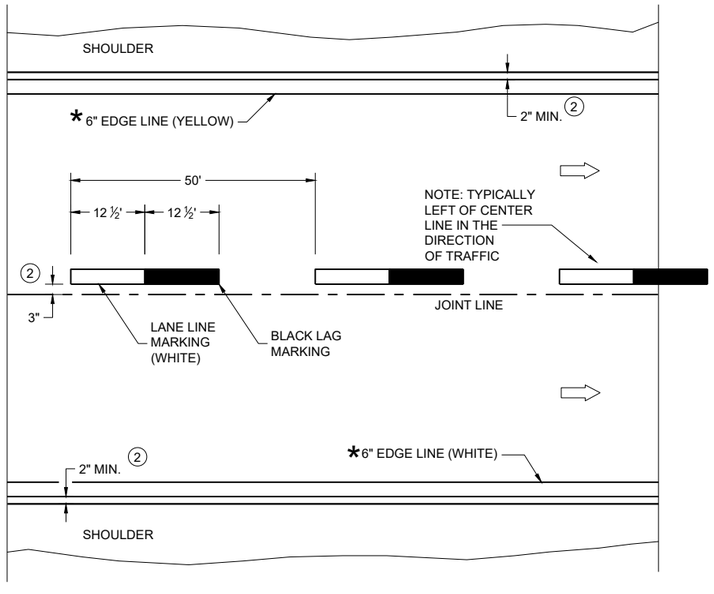
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

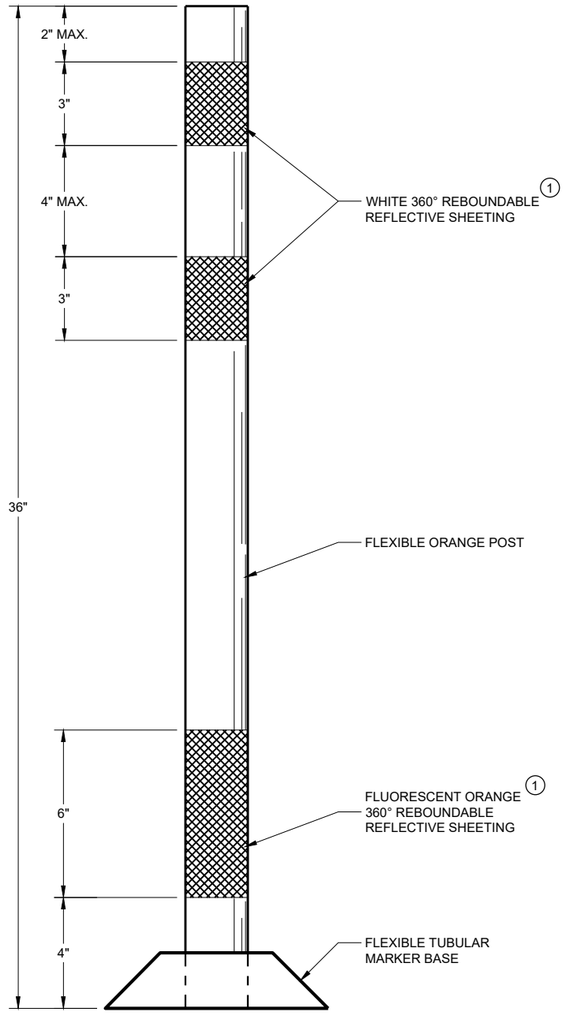
APPROVED
December 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

SDD 15C08-24a

SDD 15C08-24a



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

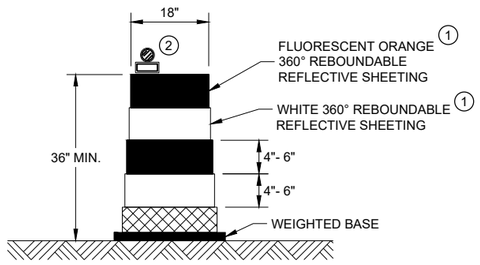
6

SDD 15C11 - 10a

SDD 15C11 - 10a

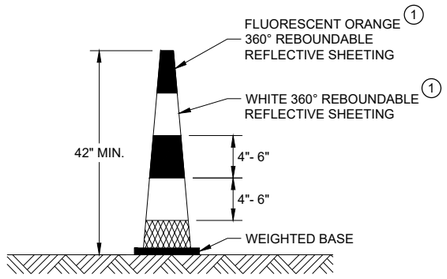
GENERAL NOTES

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

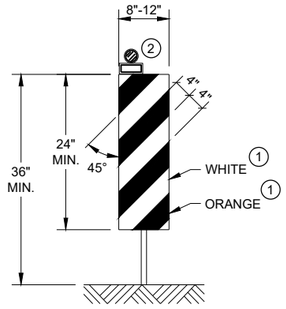
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

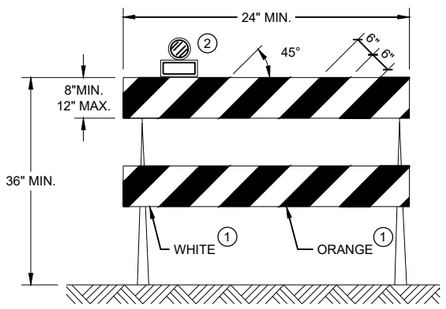
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



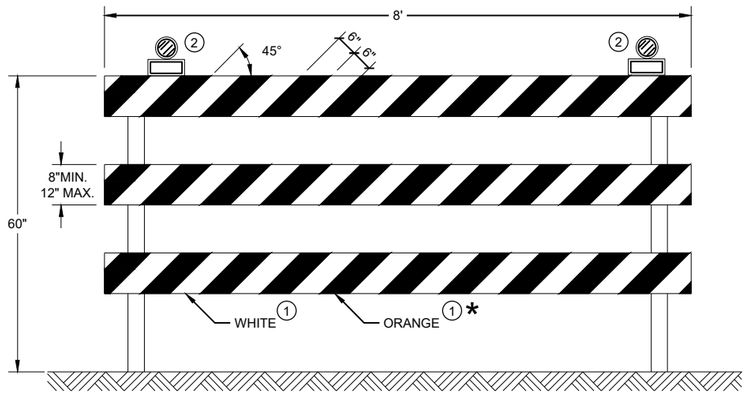
VERTICAL PANEL

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

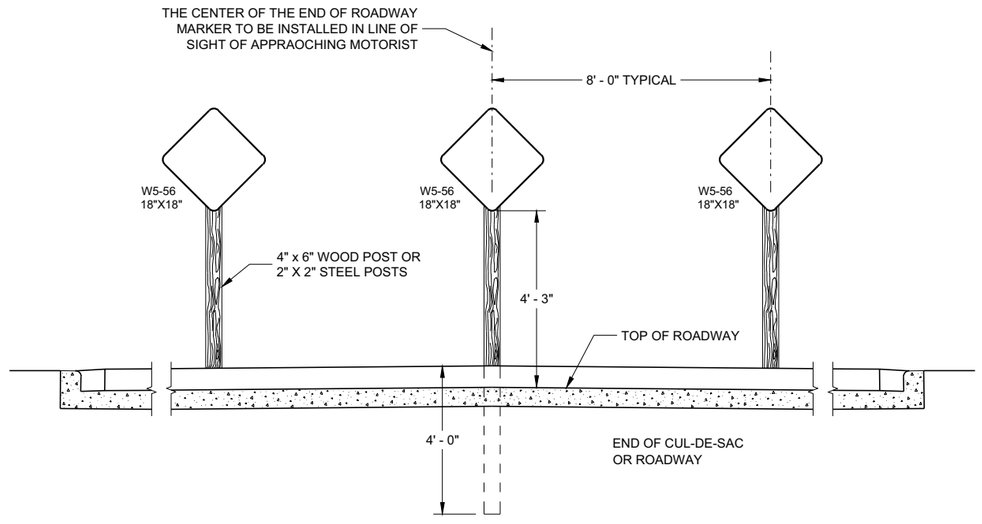
SDD 15C11 - 10b

GENERAL NOTES

SIGN LOCATIONS SHOWN ARE TYPICAL PLACEMENT AND MAY BE ADJUSTED BY THE ENGINEER AS FIELD CONDITIONS DICTATE.

THE MINIMUM NUMBER OF END-OF-ROADWAY SIGNS ARE THREE (AS SHOWN). ADDITIONAL END-OF-ROADWAY SIGNS MAY BE INSTALLED AS FIELD CONDITIONS DICTATE. (SEE SIGNING PLAN).

WHEN BEAMGUARD IS REQUIRED, PLACE END-OF-ROADWAY SIGNING BEHIND BEAMGUARD.



TYPICAL SIGN INSTALLATION

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SDD 15C26 - 04

SDD 15C26 - 04

END-OF-ROADWAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2019
DATE

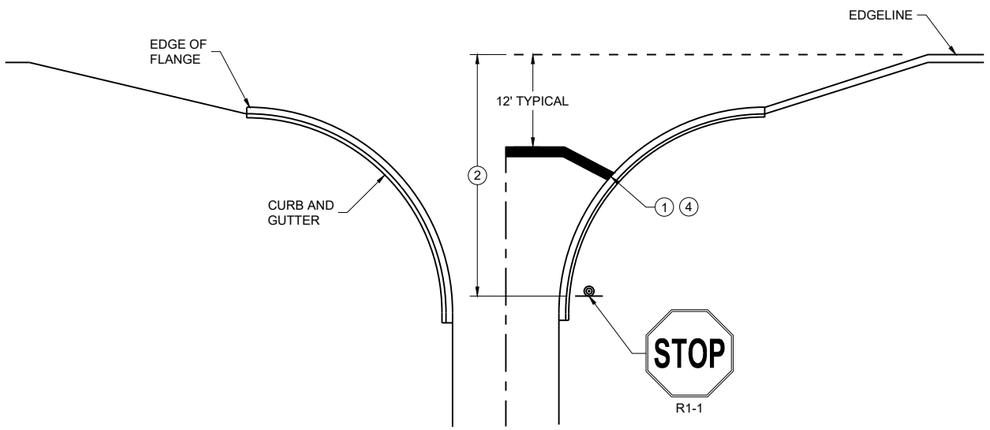
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA

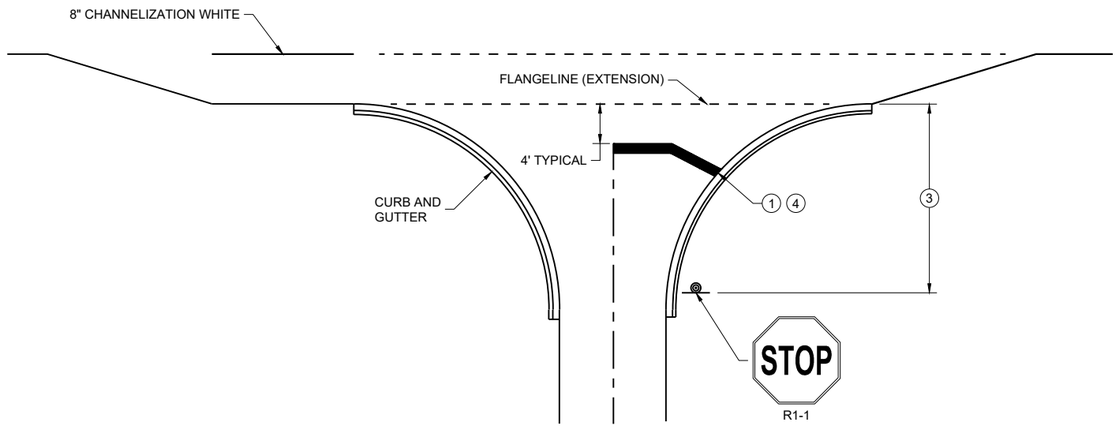
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

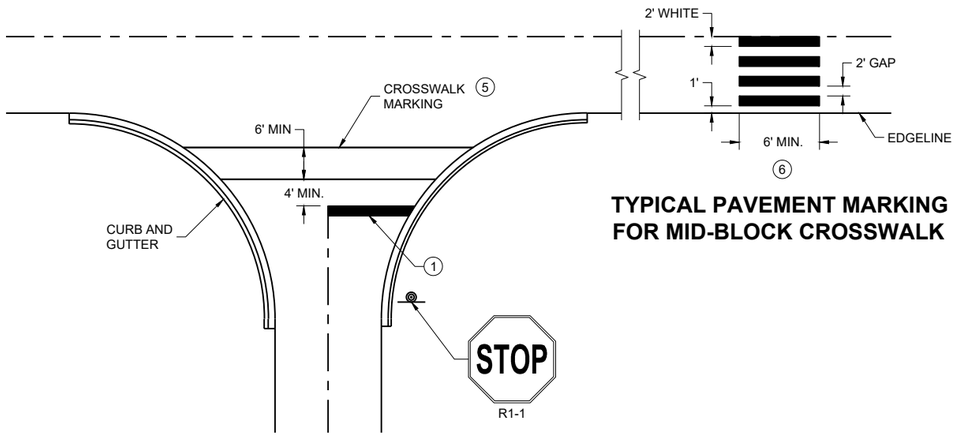
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

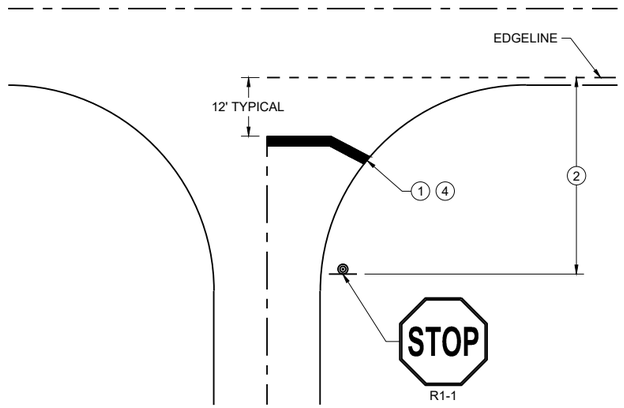


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK (5)

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

March 2024 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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SDD 15C33-05

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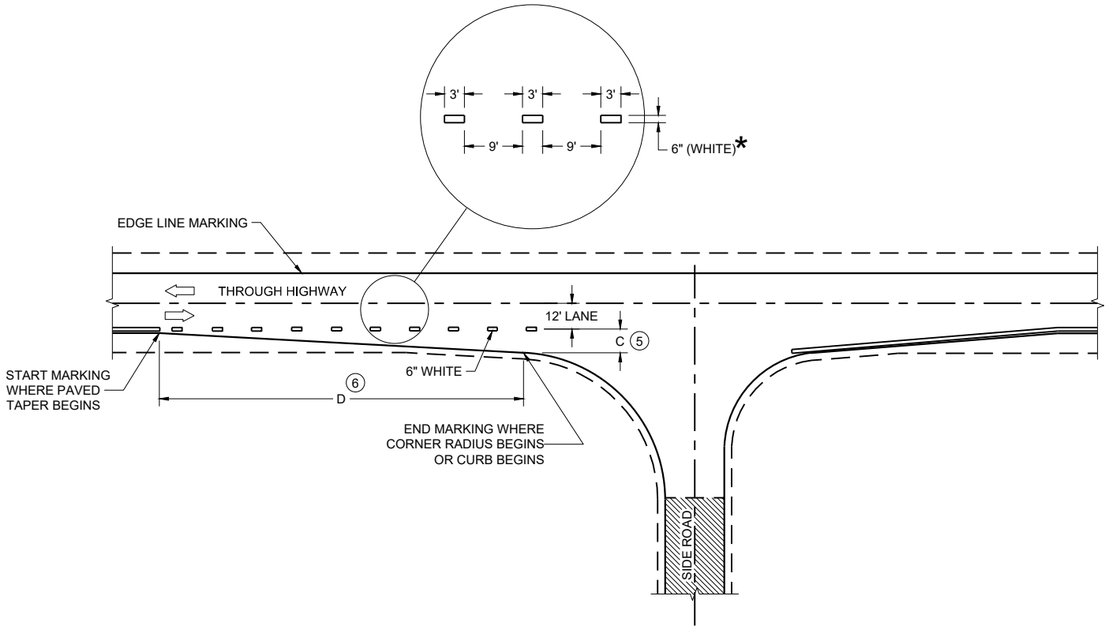
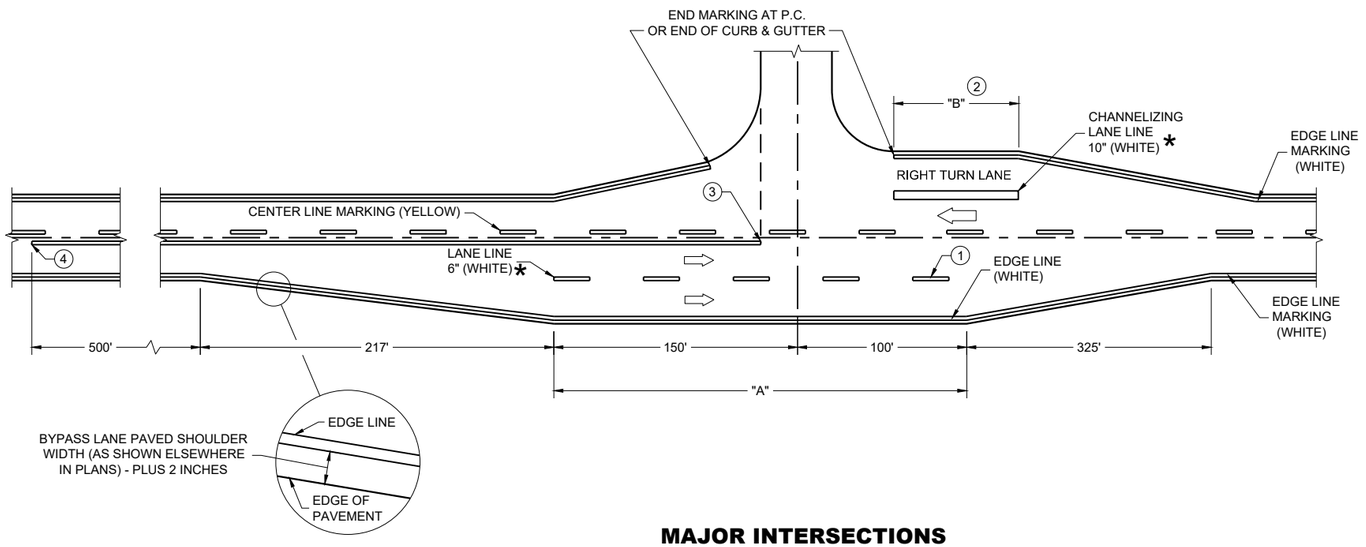


MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

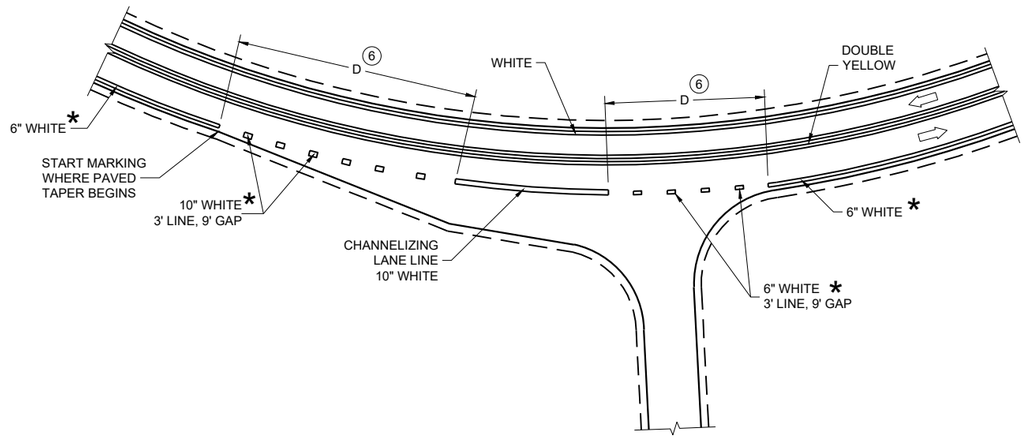
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

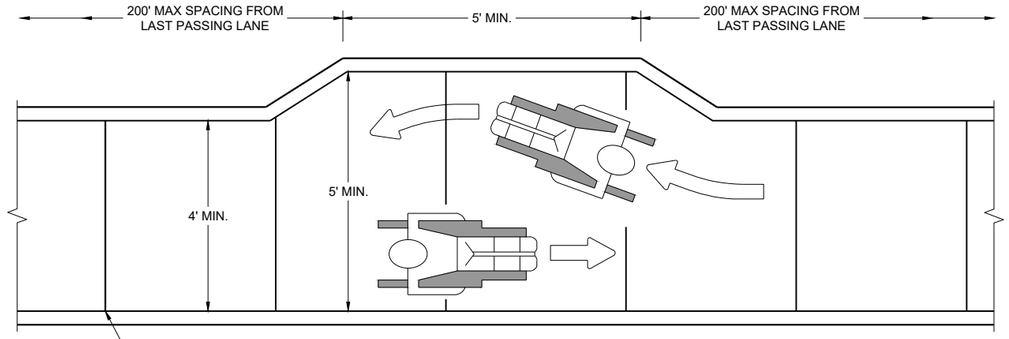
DIRECTION OF TRAVEL



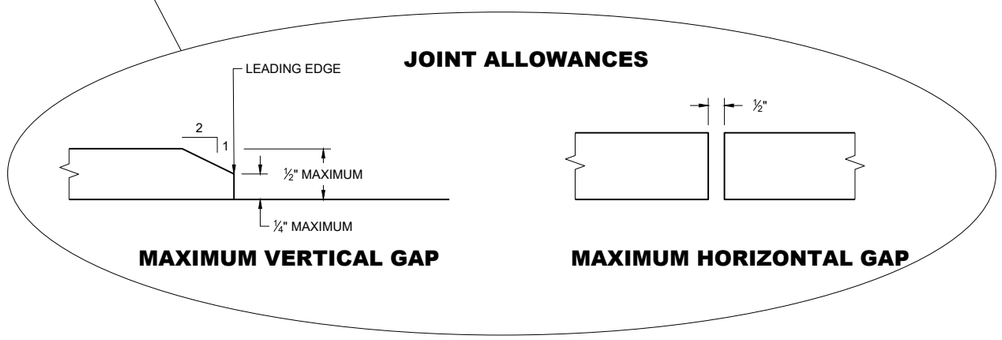
INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



NARROW SIDEWALK PASSING DETAIL



MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP

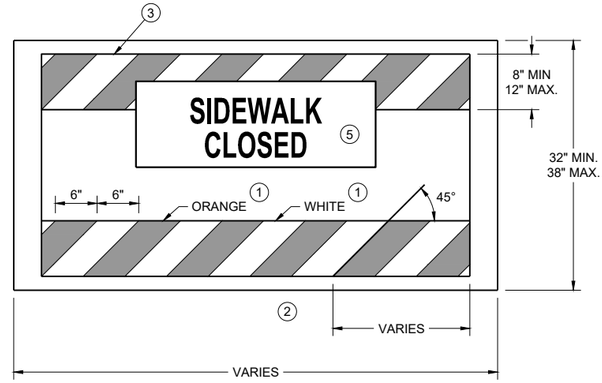
GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

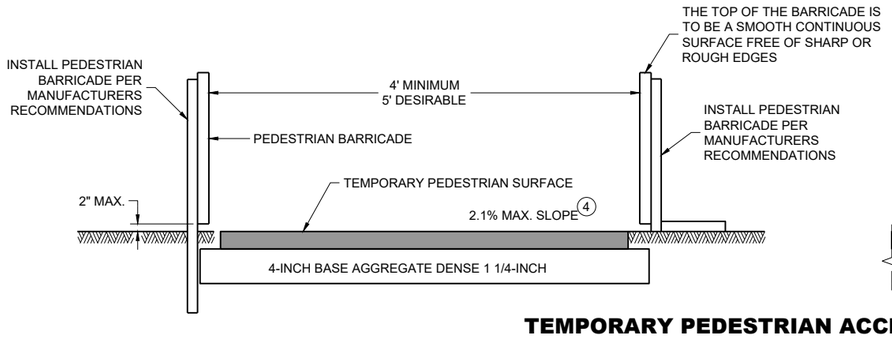
1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
3. PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

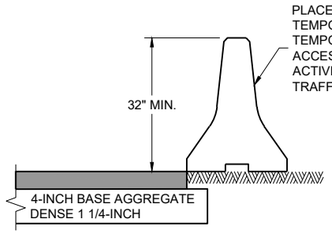
4. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
5. WHERE SIGNS FOR TEMPORARY PEDESTRIAN ACCOMMODATIONS ARE SHOWN BEING PLACED BEHIND TEMPORARY PEDESTRIAN BARRICADE, THE SIGNS MAY BE MOUNTED ON THE TEMPORARY PEDESTRIAN BARRICADE INSTEAD. A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE SHALL BE USED IF MOUNTED ON THE BARRICADE. THE TOP OF THE SIGN SHALL BE MOUNTED BELOW THE TOP OF THE BARRICADE TO ALLOW A CONTINUOUS HAND-TRAILING EDGE.

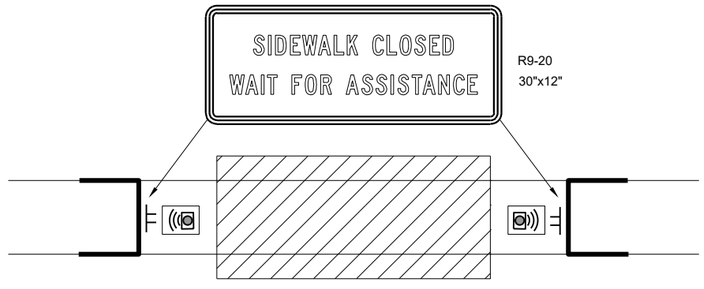


TEMPORARY PEDESTRIAN BARRICADE *



TEMPORARY PEDESTRIAN ACCESS





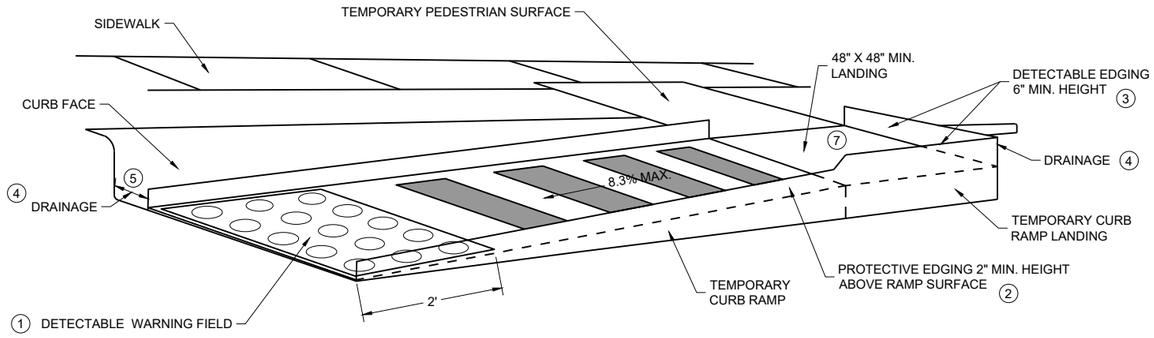
TEMPORARY PEDESTRIAN FLAGGING

LEGEND

- TEMPORARY PEDESTRIAN BARRICADE
- AUDIBLE MESSAGE DEVICE
- TEMPORARY SIGN SUPPORT
- WORK AREA

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PERSPECTIVE VIEW

GENERAL NOTES

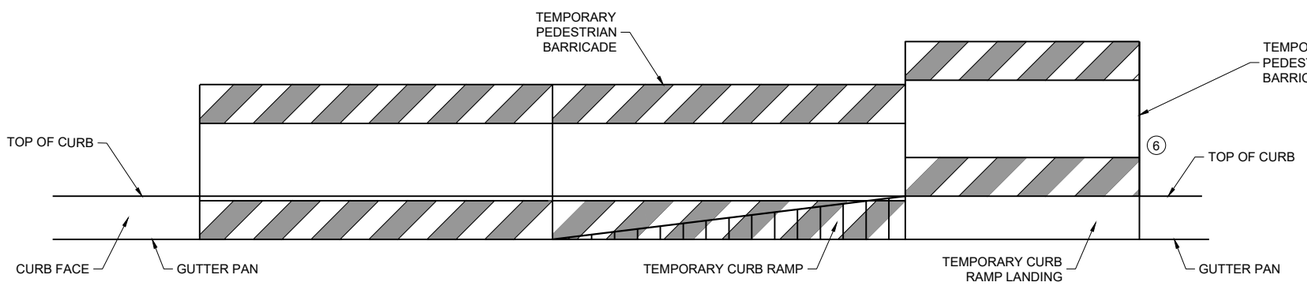
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

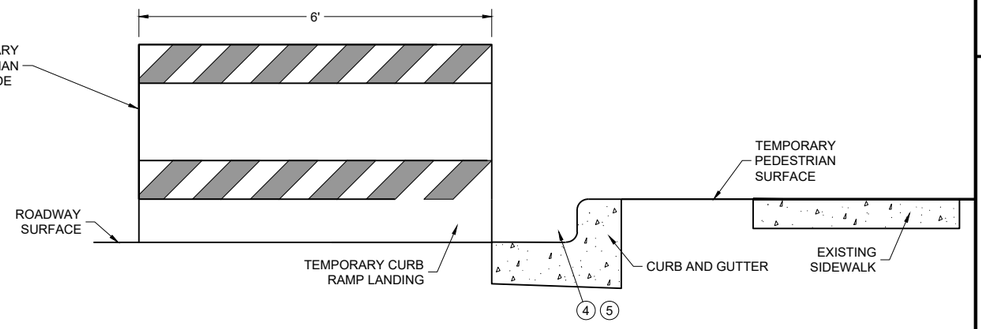
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
6. IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.
7. LANDING TO BE SLOPED A MAXIMUM OF 2.1% IN ALL DIRECTIONS OF PEDESTRIAN TRAVEL.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

6

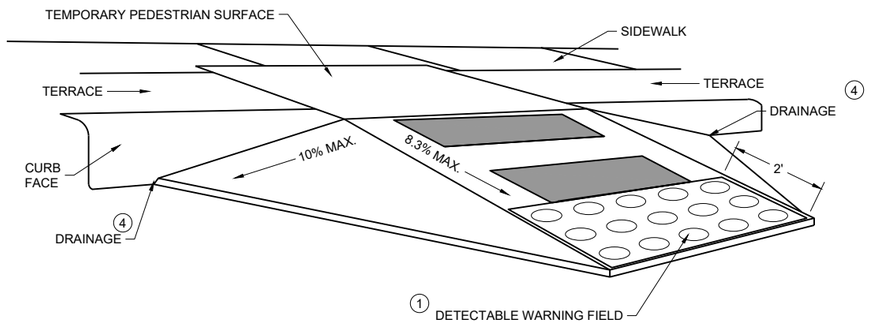
SDD 15D30-12b

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

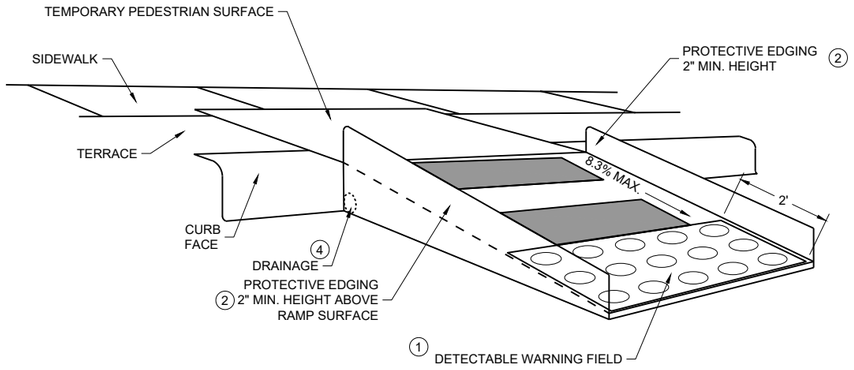
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-12b



WITH SIDE APRON 5



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

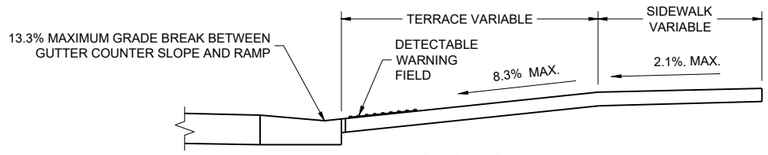
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

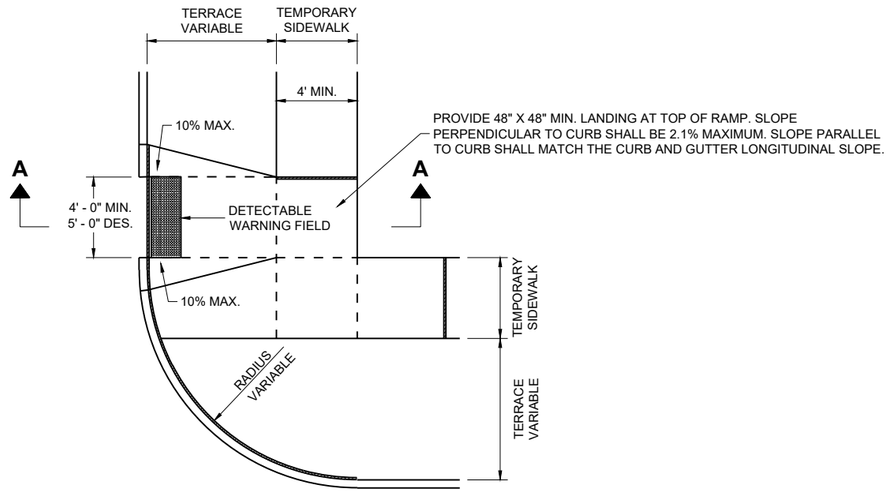
CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES



SECTION A - A



PLAN VIEW
TEMPORARY TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

6

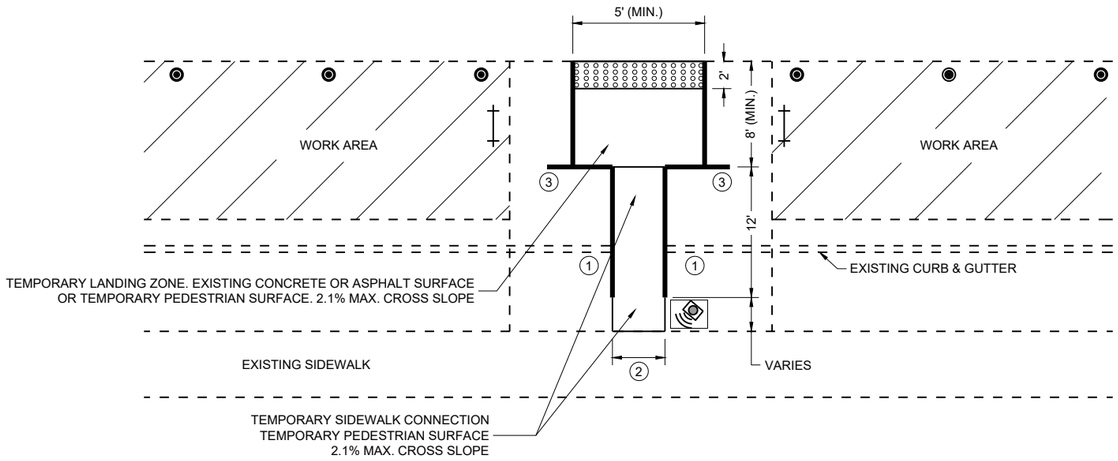
SDD 15D30-12d

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

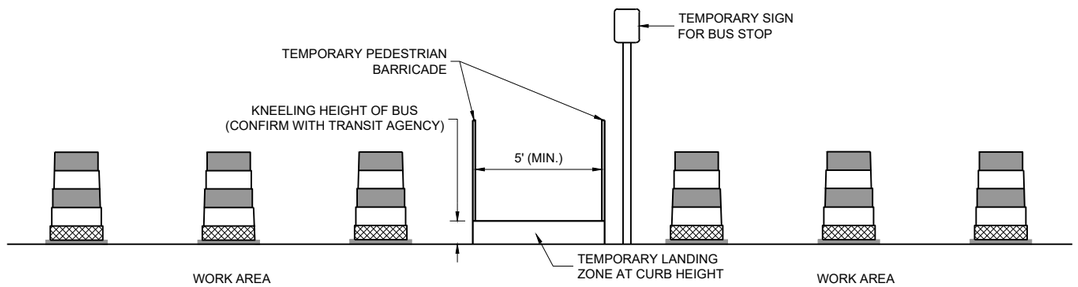
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-12d



PLAN VIEW



PROFILE VIEW TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

6

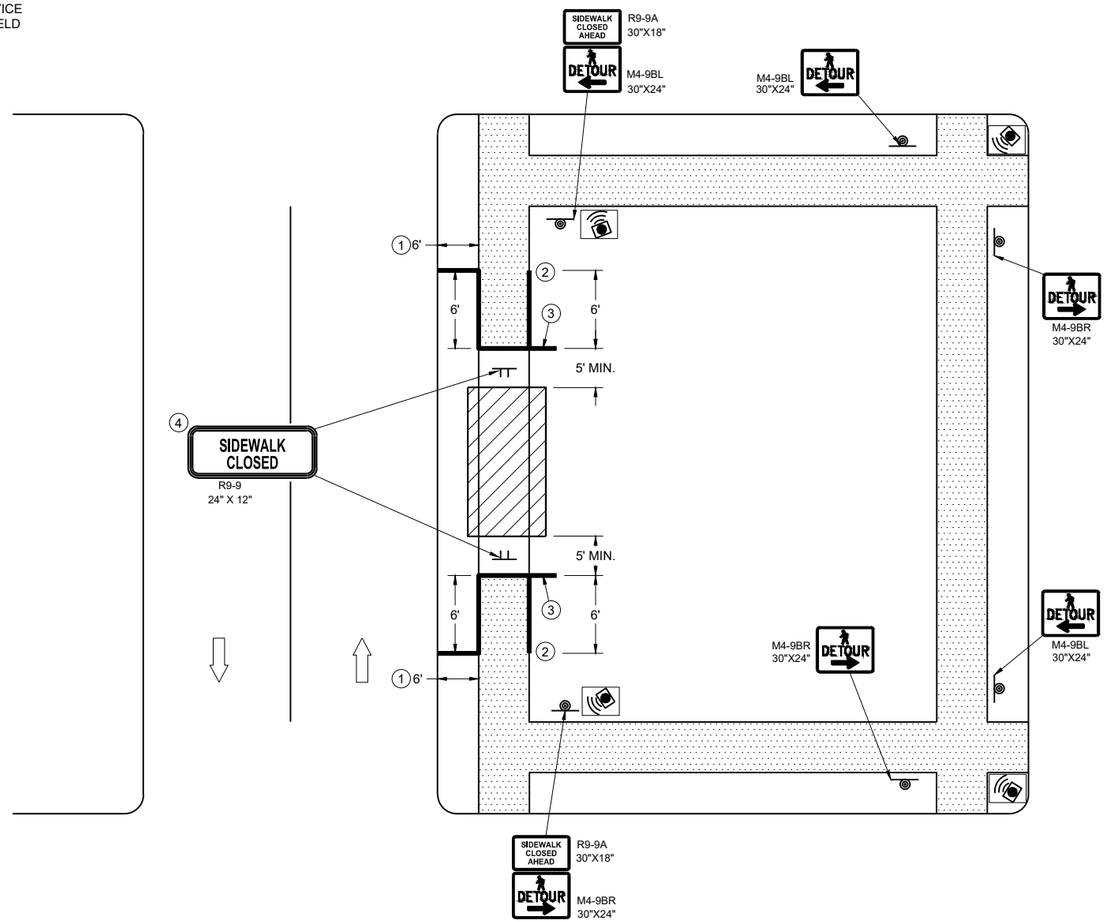
SDD 15D30-12e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-12f

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

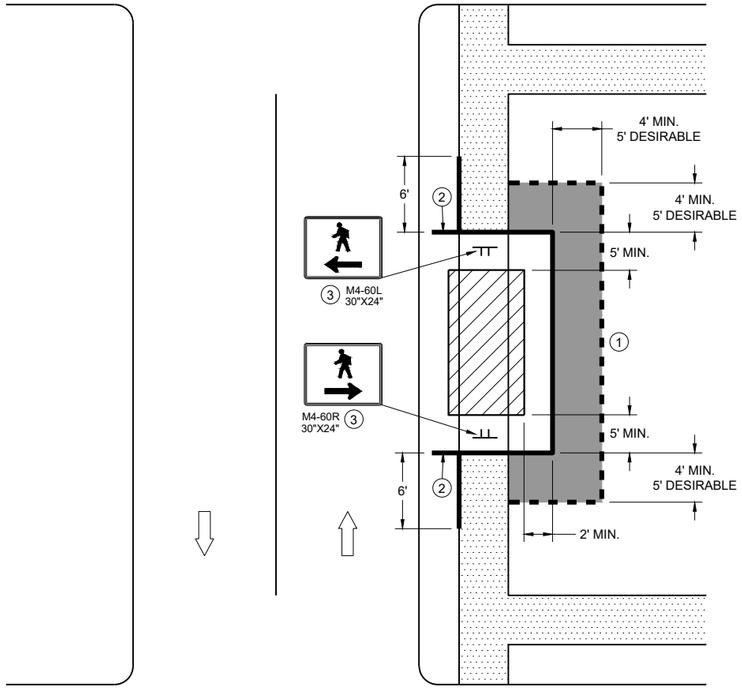
WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

(1) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(2) IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.

(3) MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK BYPASS
SINGLE SIDE

6

SDD 15D30-12g

6

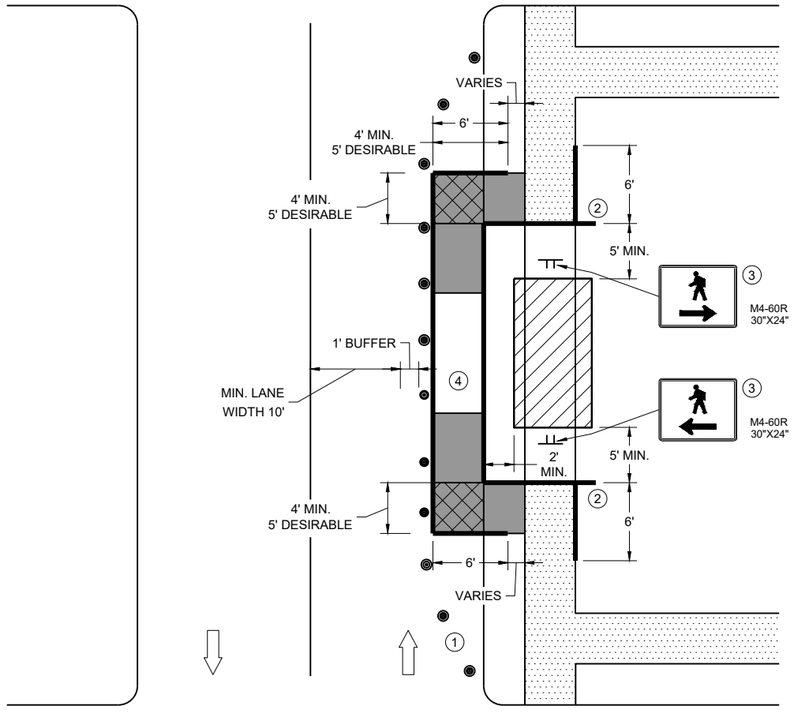
SDD 15D30-12g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



SIDEWALK BYPASS, SINGLE SIDE

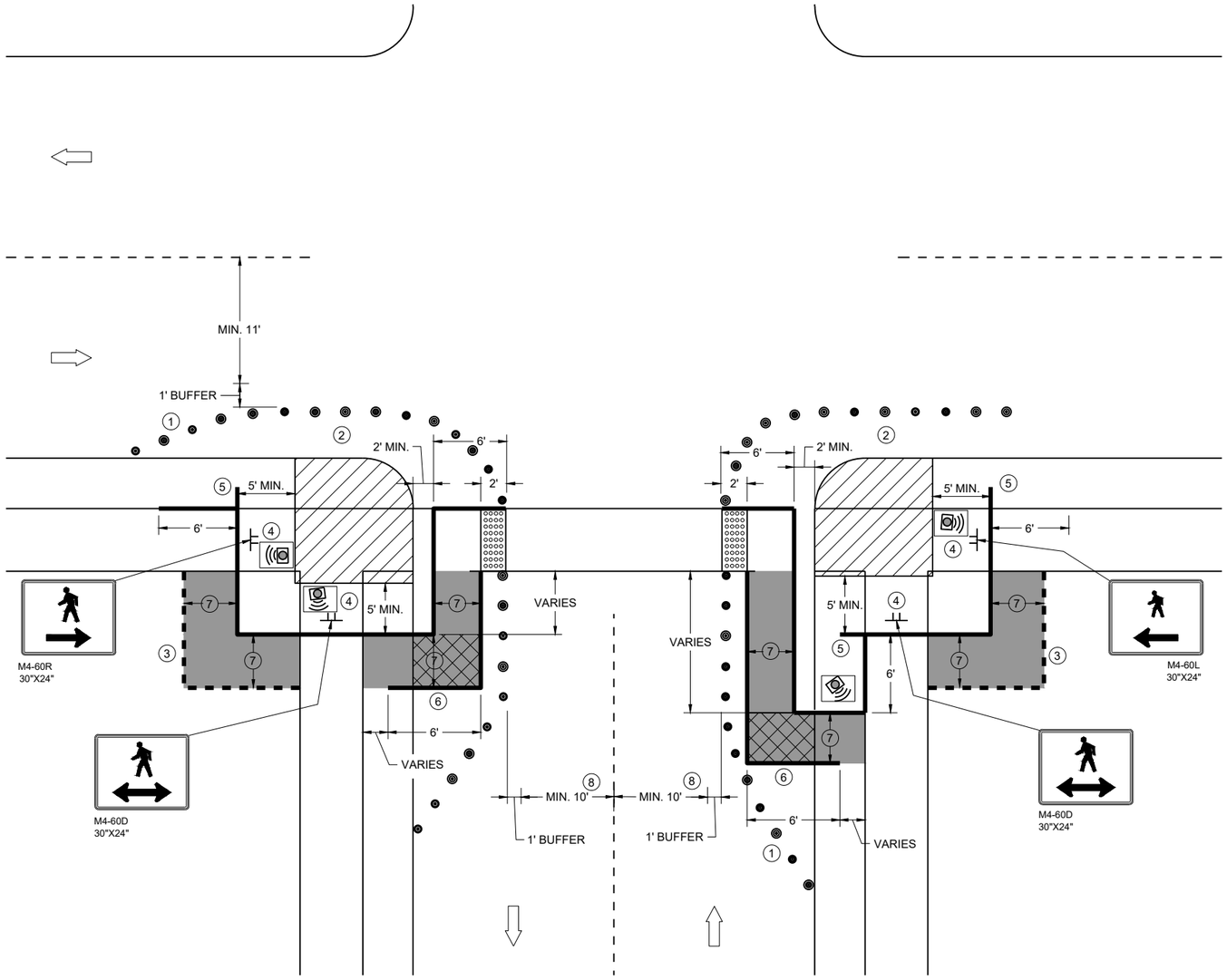
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

6



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
2. PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
3. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
4. MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
5. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
6. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

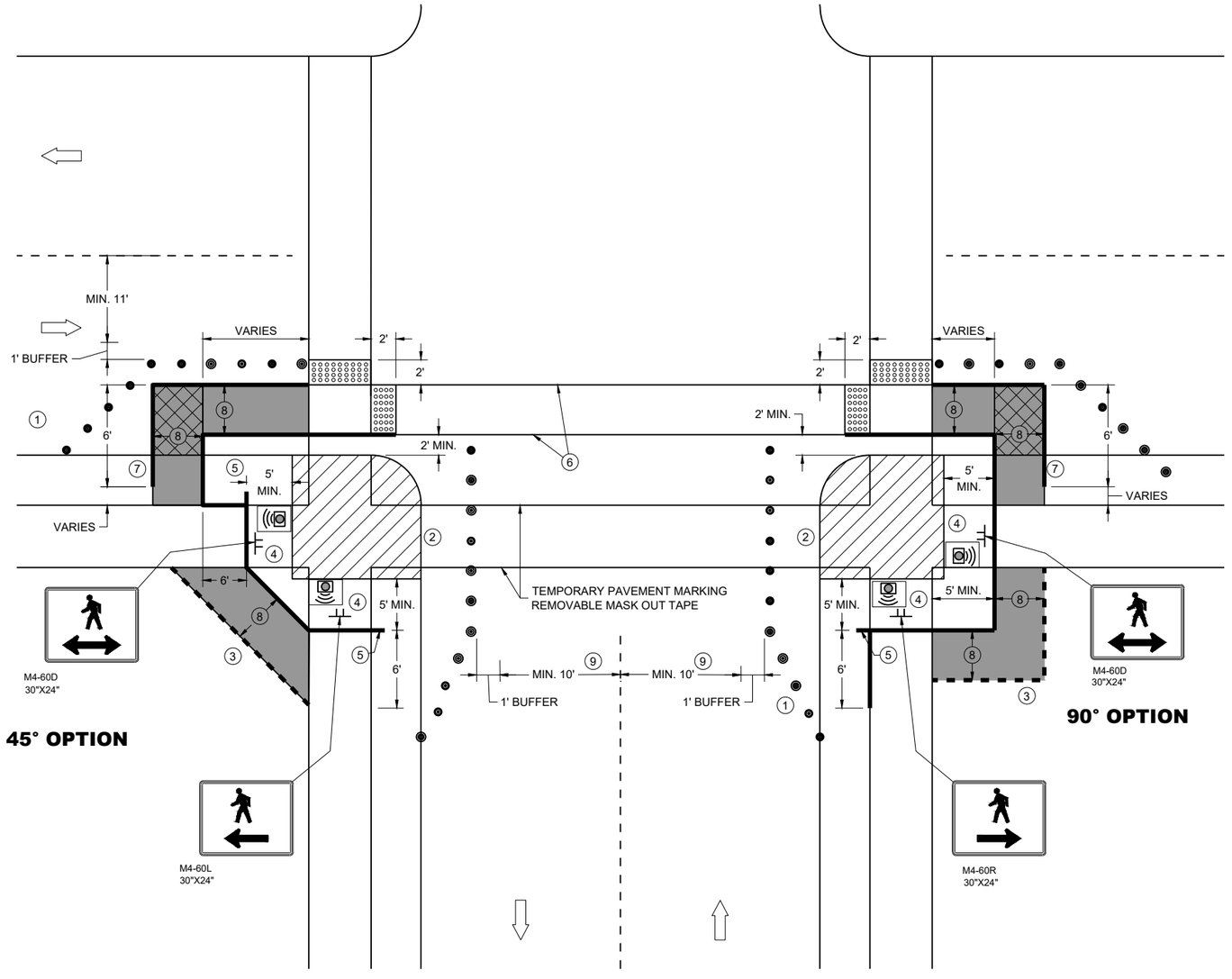
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15D30-12i



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

(3) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) WHITE 6" TEMPORARY PAVEMENT MARKING

(7) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(8) 4 FEET MINIMUM, 5 FEET DESIRABLE

(9) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15D30-12j

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

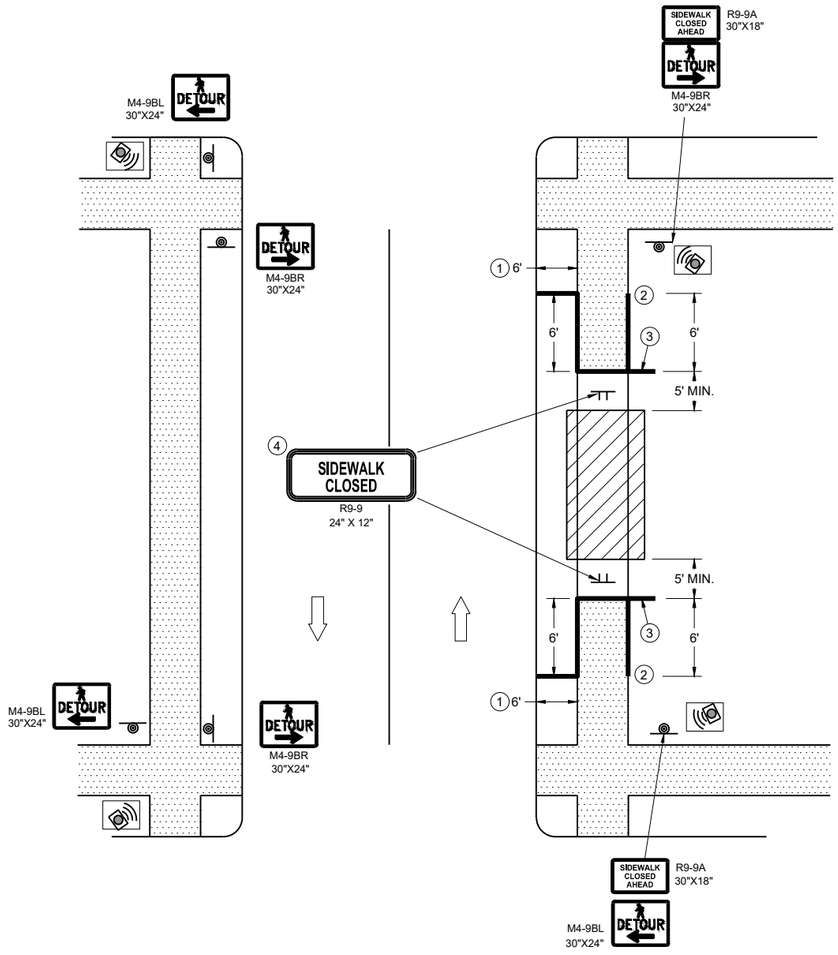
UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC

TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

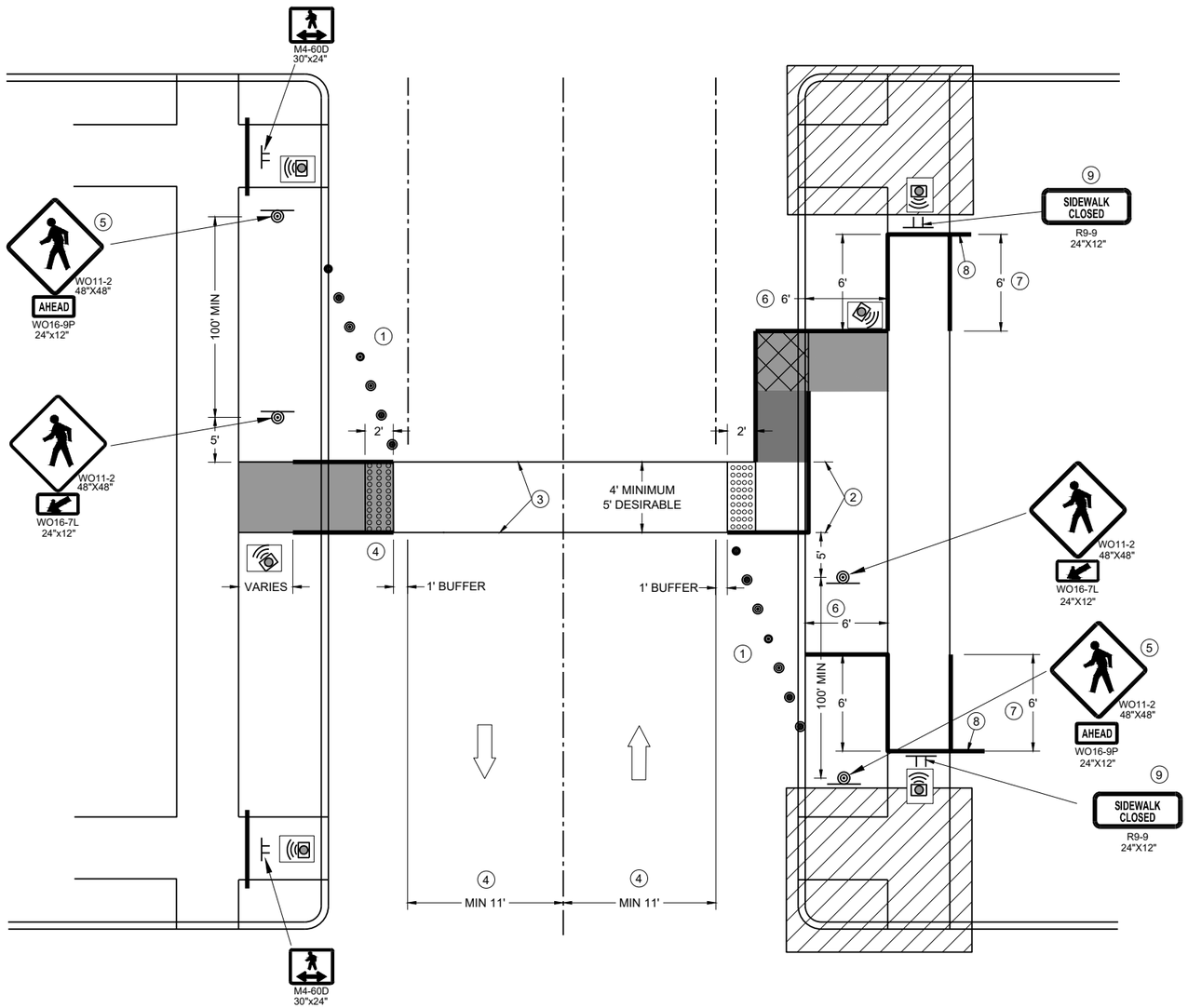
1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

6

SDD 15D30-12k

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

1. SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
2. 4 FEET MINIMUM, 5 FEET DESIRABLE.
3. WHITE 6" TEMPORARY PAVEMENT MARKING.
4. IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
5. IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
6. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
7. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
8. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
9. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

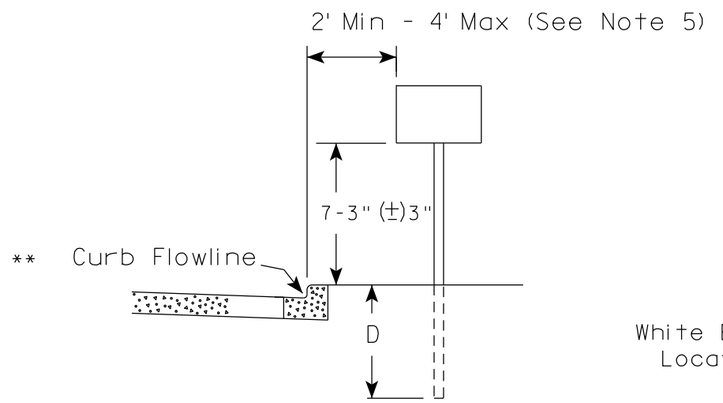
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

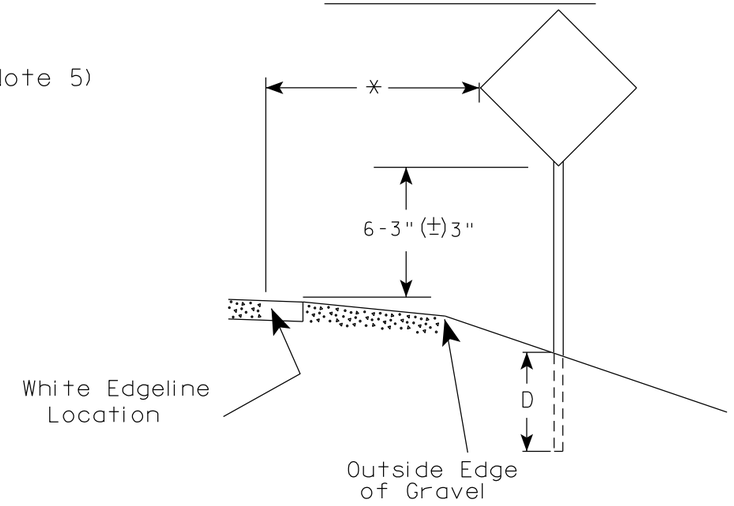
FHWA

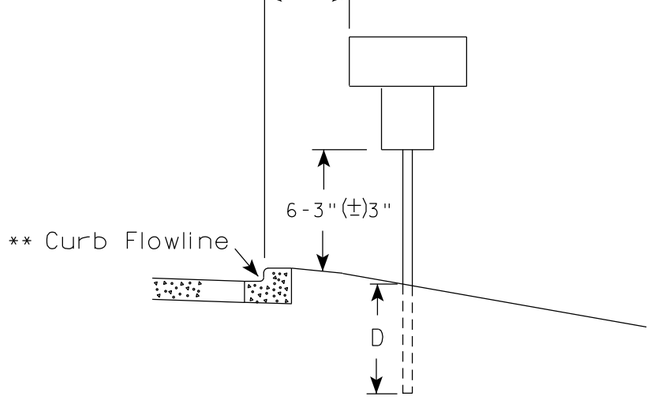
6
SDD 15D30-12I

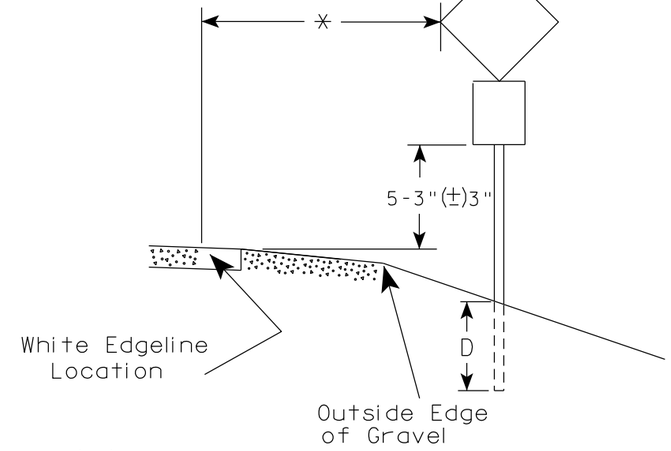
URBAN AREA



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.

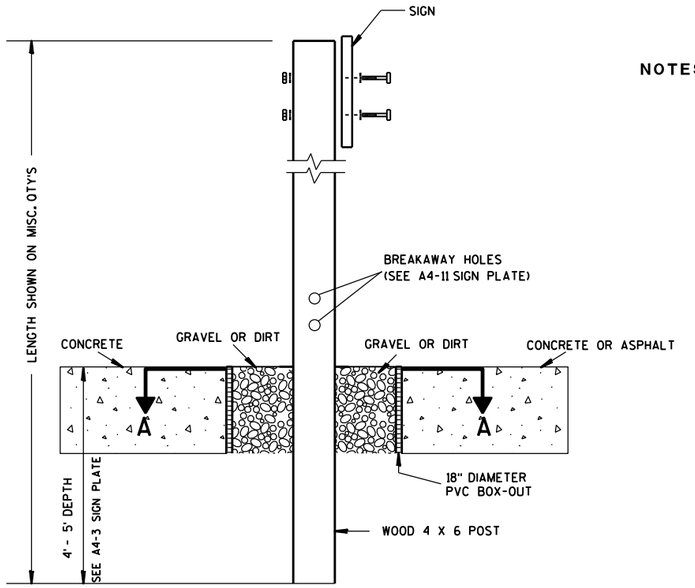
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

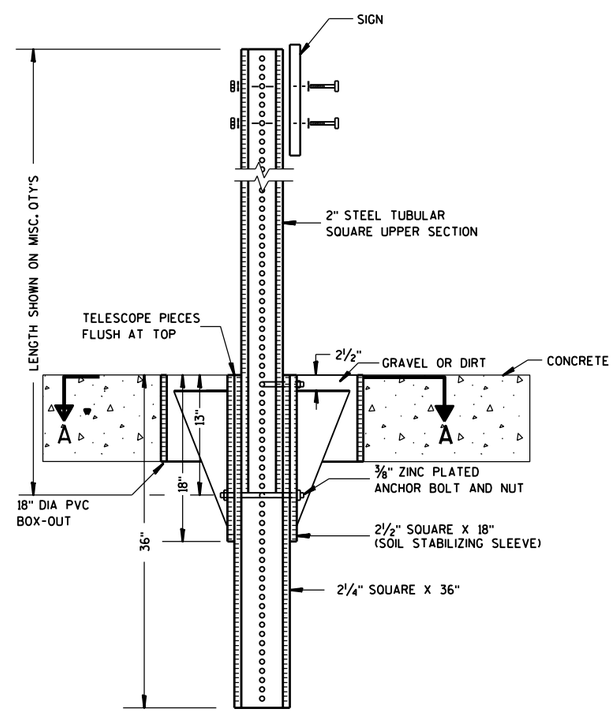
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 142	E



ELEVATION VIEW

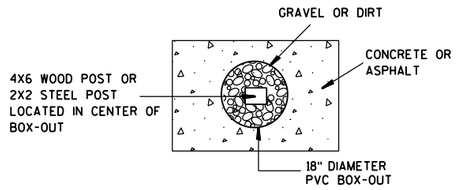
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

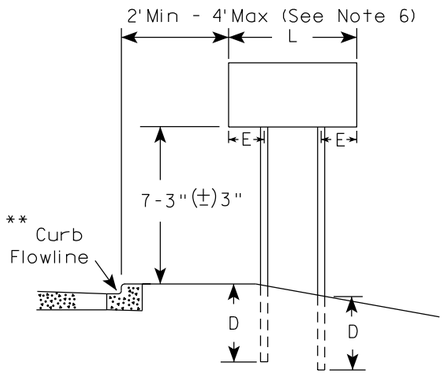
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

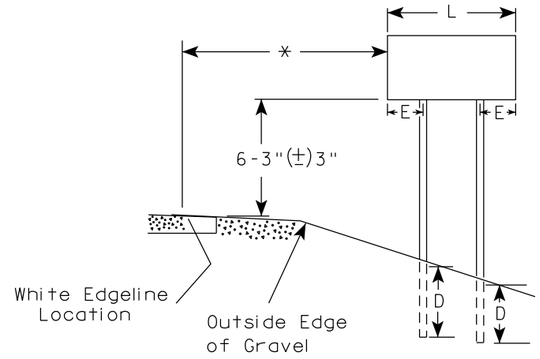
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

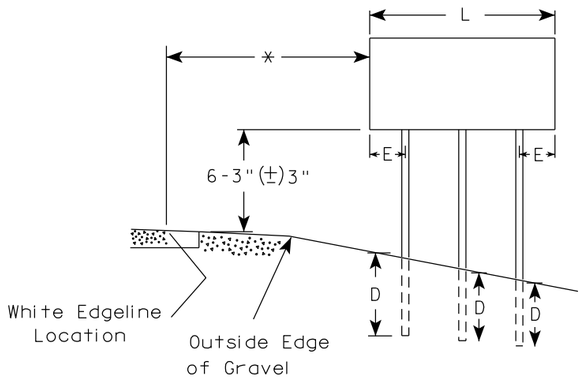
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

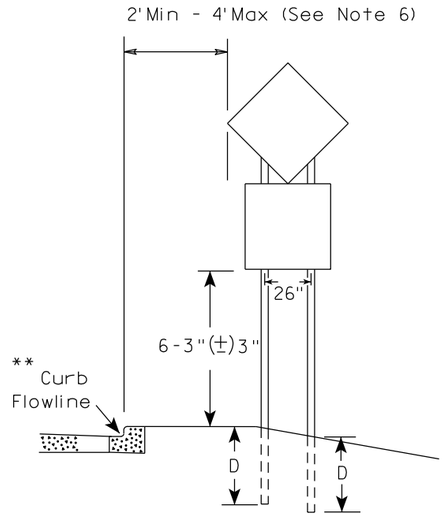
URBAN AREA



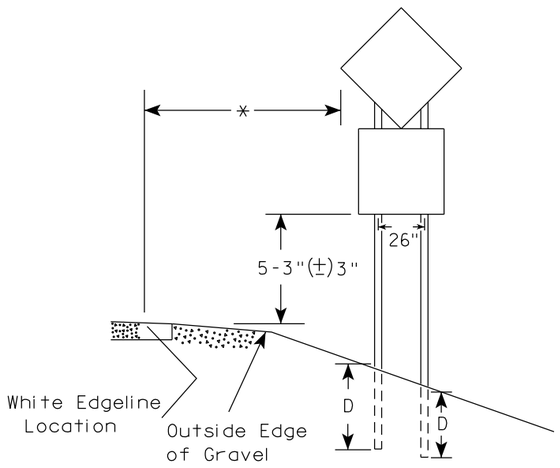
RURAL AREA (See Note 3)







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'

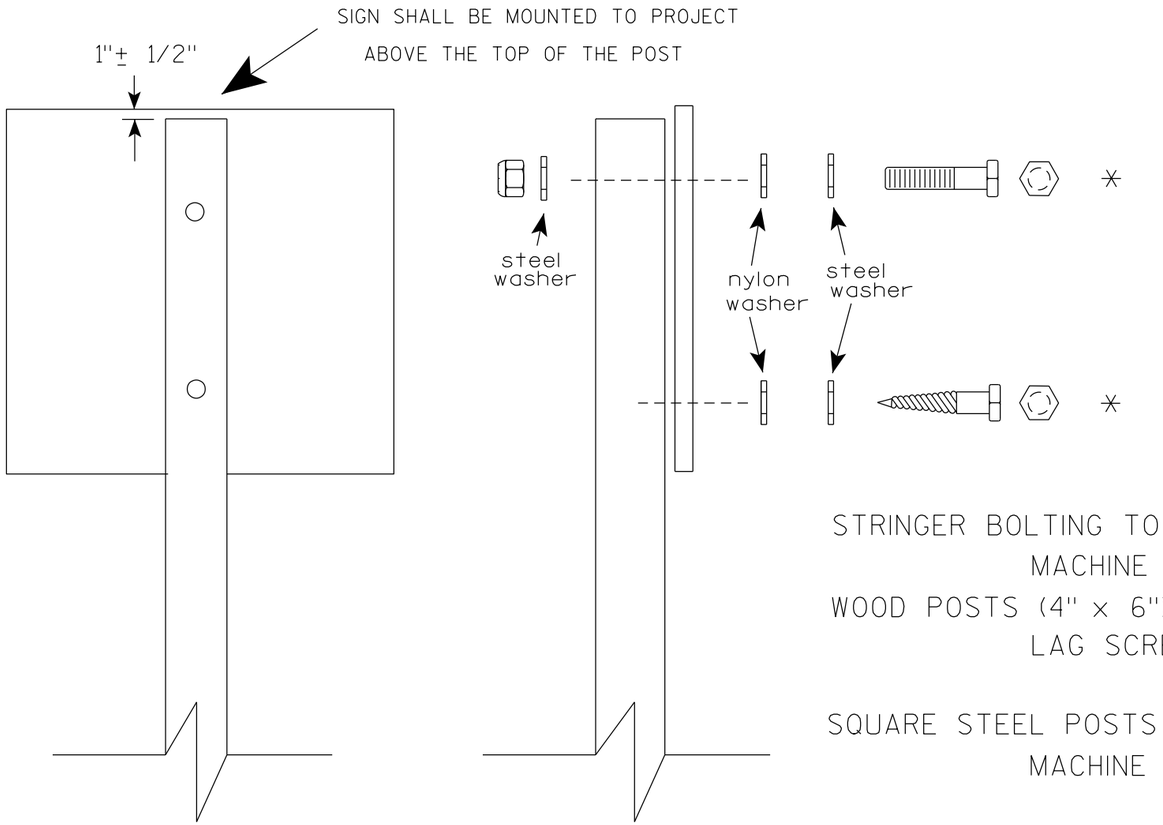
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 144	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

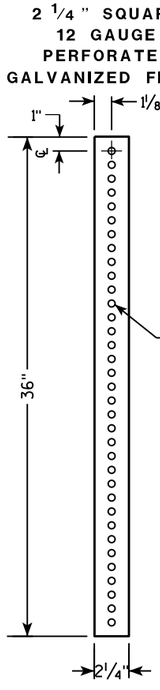
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

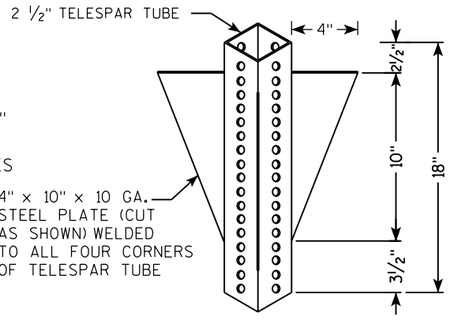
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

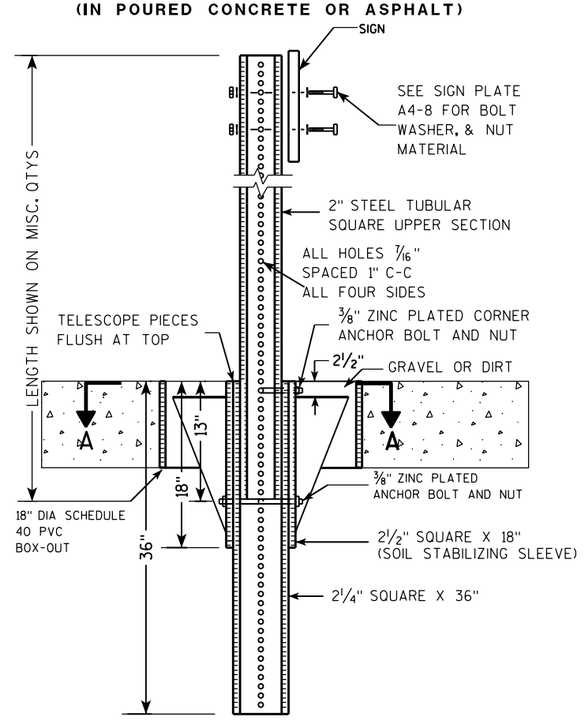
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



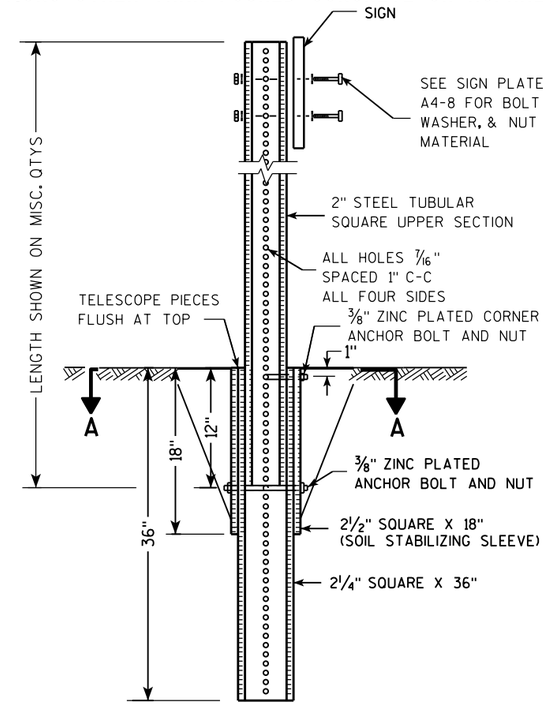
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

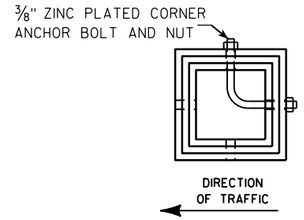


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

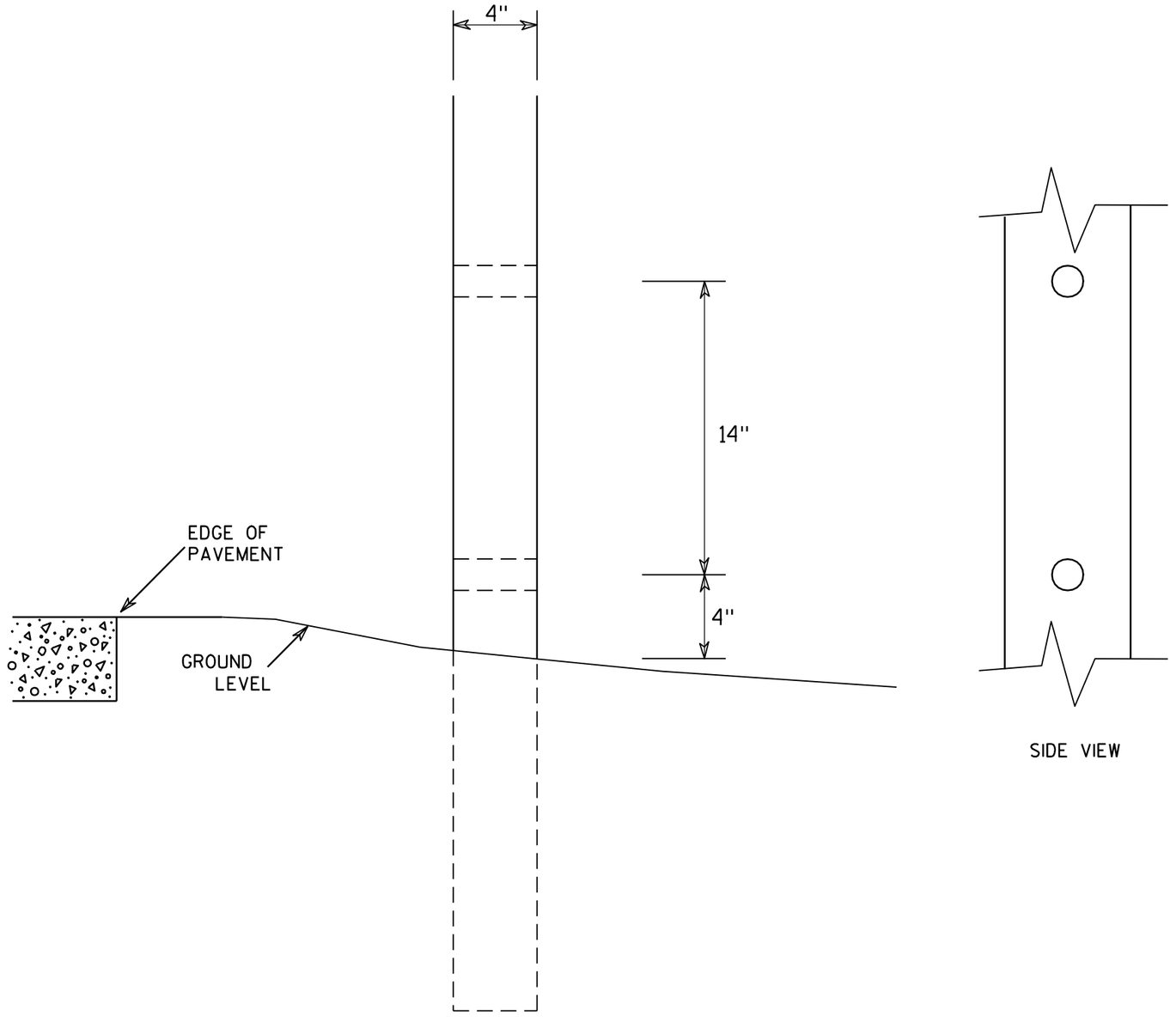
WISCONSIN DEPT OF TRANSPORTATION

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.

7

7

4 X 6 WOOD POST MODIFICATIONS

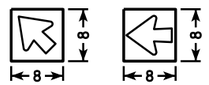
WISCONSIN DEPT OF TRANSPORTATION

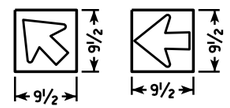
APPROVED Chester J Spang
for State Traffic Engineer

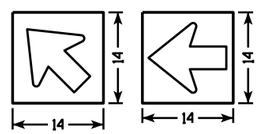
DATE 3/27/97 PLATE NO. A4-11.2

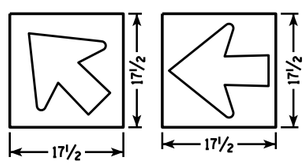
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 147	E

SIGN LAYOUT WITH VARIOUS SIZED MESSAGES







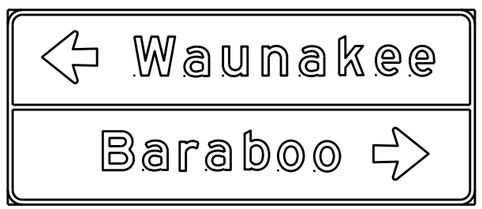


GENERAL NOTES

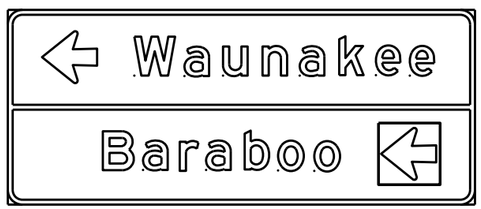
1. Materials shall conform to Standard Specification Section 637.
   Base - Sheet Aluminum 0.040" Thickness
   Sheeting - Orange Type F Reflective
   Arrow - Black Non-Reflective
2. Arrow signs shall be fastened to permanent sign by either aluminum rivets or aluminum self-tapping sheet metal screws. 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

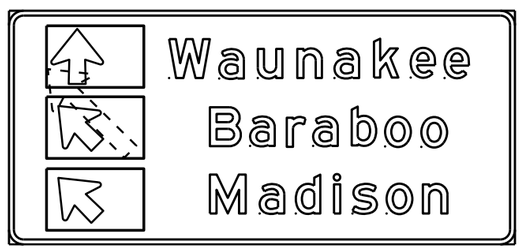
Lower Case Copy Size	Standard Width (Single Arrow)	2 Line Tilt Arrow Cover Width	3 Line Tilt Arrow Cover Width	Height
3¾" Series C	8	9 ½	14 ½	8
4½" Series D & E	9 ½	10	15	9 ½
6" Series D & E	14	16	20 ½	14
8" Series E	17 ½	20 ½	25	17 ½

BEFORE



AFTER





DESTINATION DIRECTIONAL ARROW FOR DETOUR SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/08/14

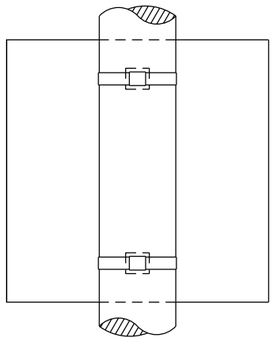
A4-12.2

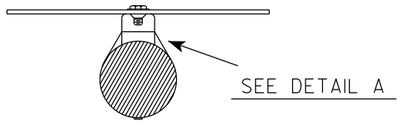
PROJECT NO:

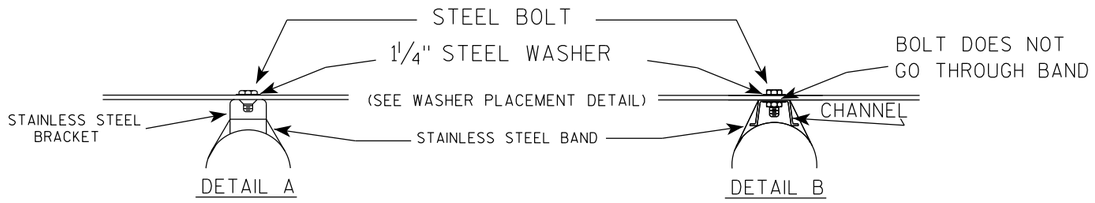
SHEET NO: E

BANDING

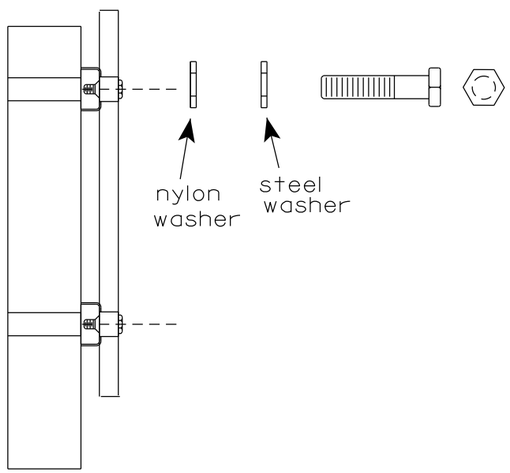
SINGLE SIGN







WASHER PLACEMENT

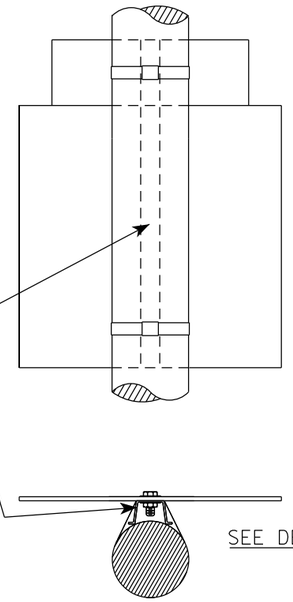


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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

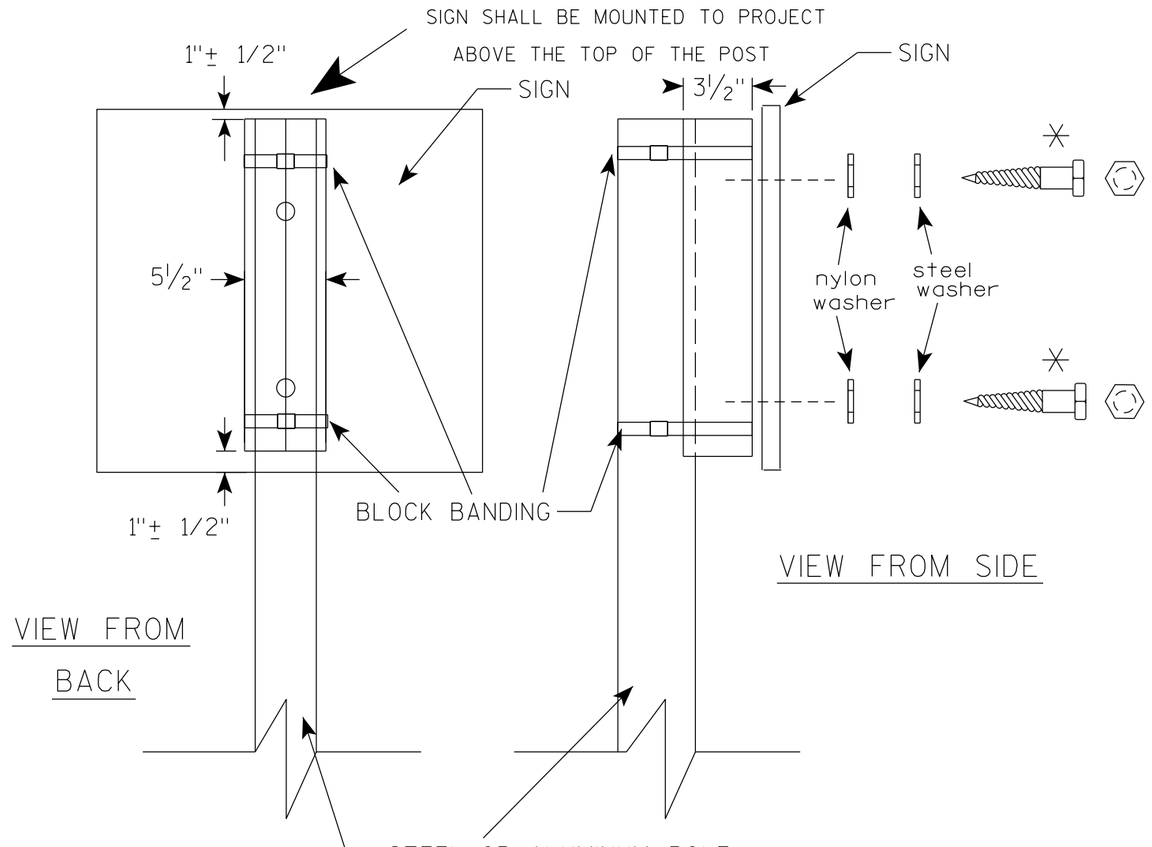
DATE 6/10/19 PLATE NO. A5-9.4

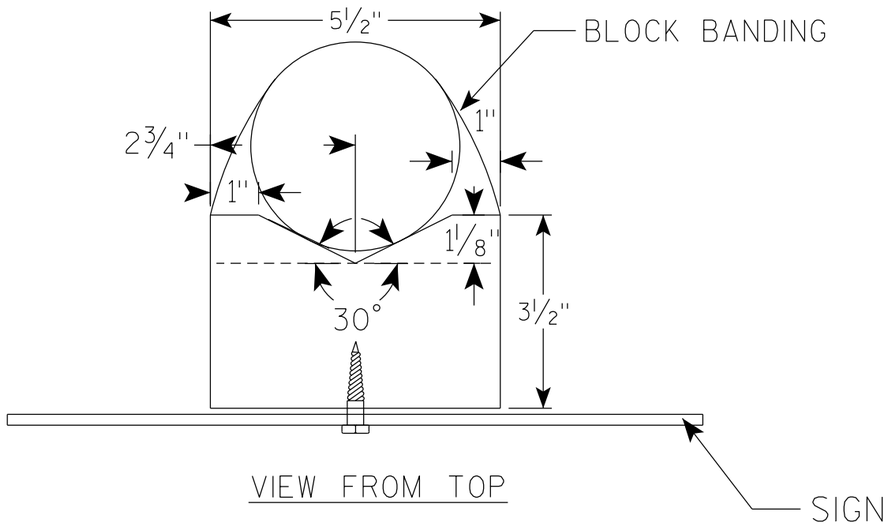
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 149	E

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

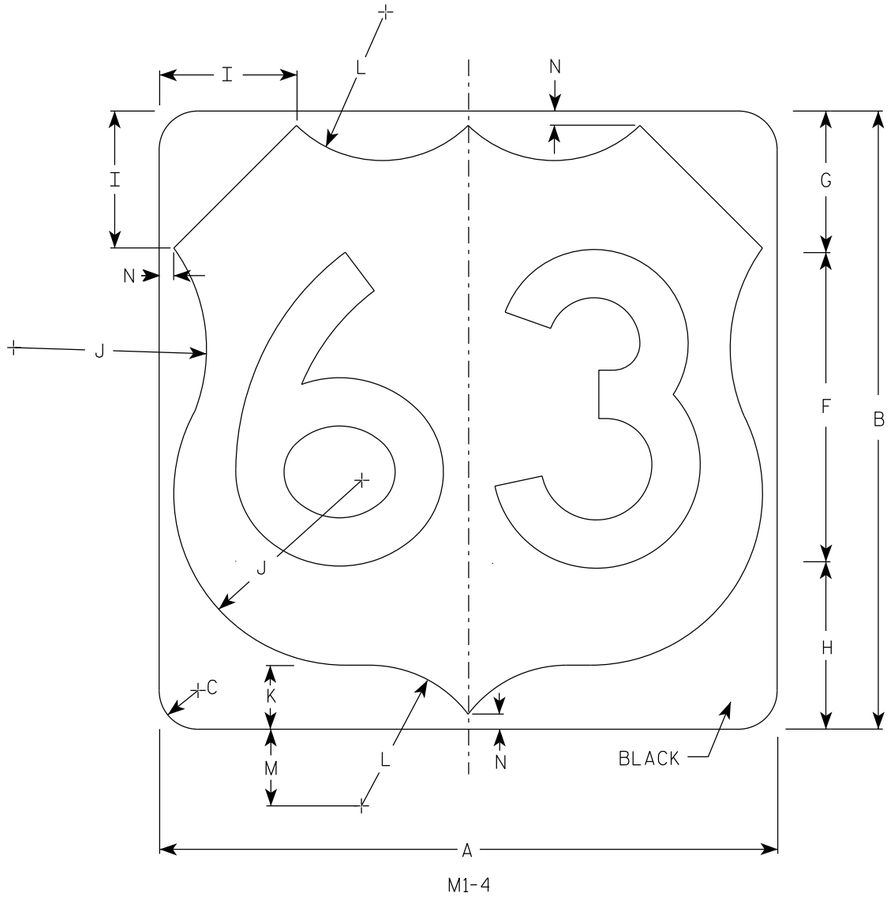
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

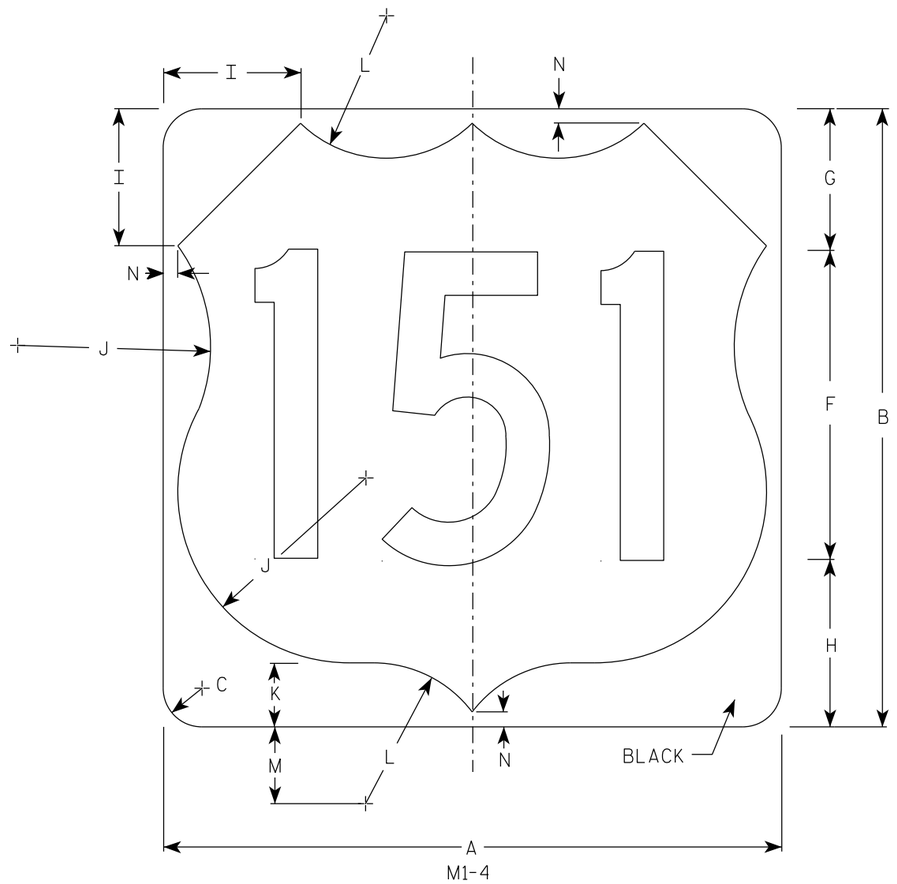
SHEET NO: 150 E

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



M1-4



M1-4

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	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0
2M	24	24	1 ½			12	5 ½	6 ½	5	7 ½	2 ½	5 ½	3	½													4.0
3	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0
4	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0
5	36	36	2 ¼			18	8 ¼	9 ¼	7 ¼	11 ¼	3 ¾	8 ¼	4 ½	¾													9.0

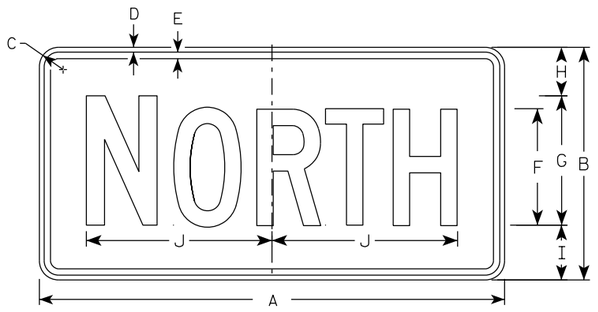
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

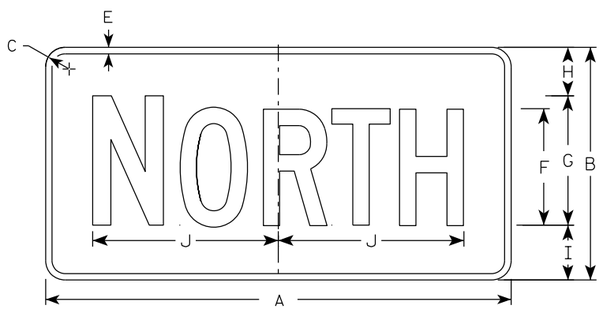
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

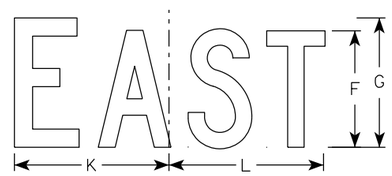
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 151 E



M3-1
MM3-1
MP3-1

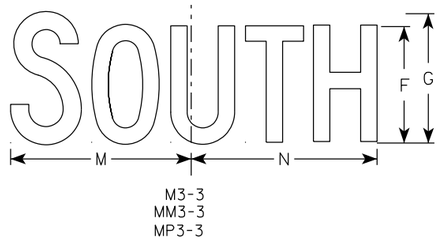


MB3-1
MK3-1
MN3-1

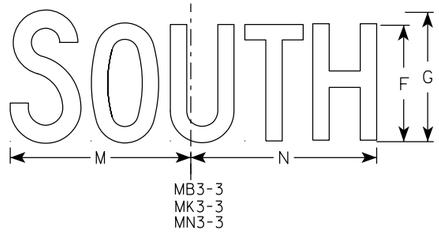


M3-2
MM3-2
MP3-2

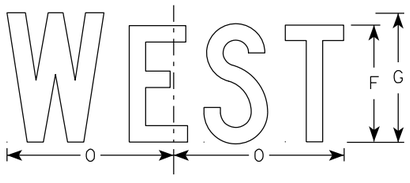
MB3-2
MK3-2
MN3-2



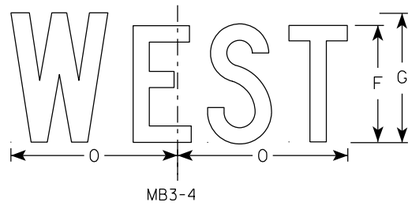
M3-3
MM3-3
MP3-3



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

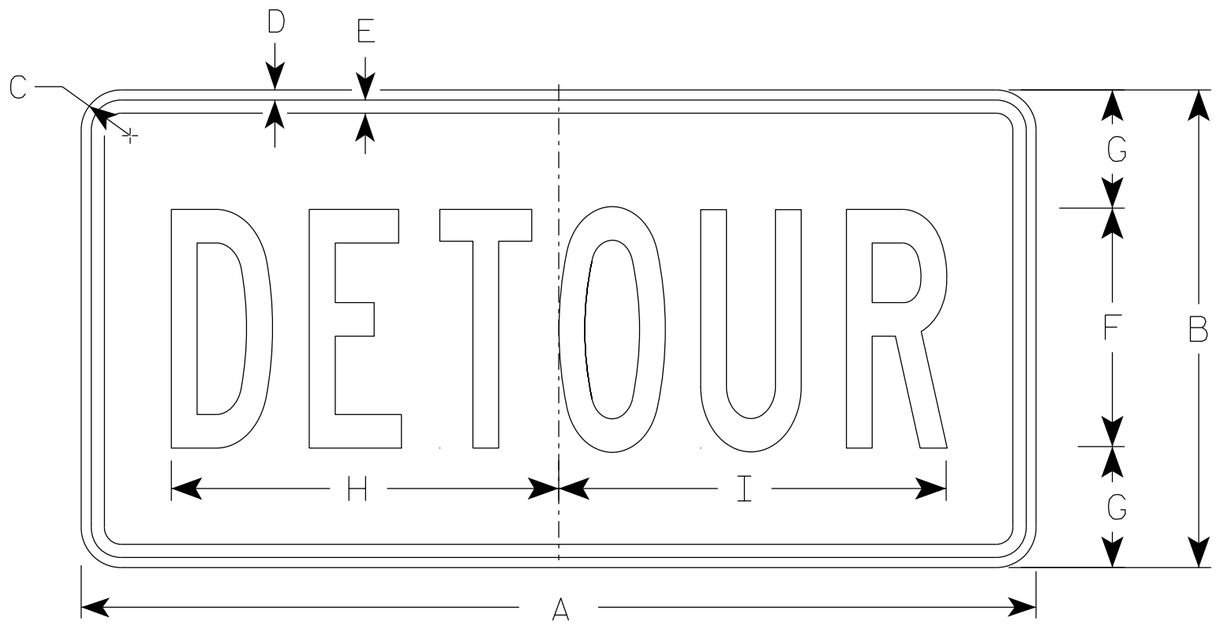
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

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: 152 | E



M4-8

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	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

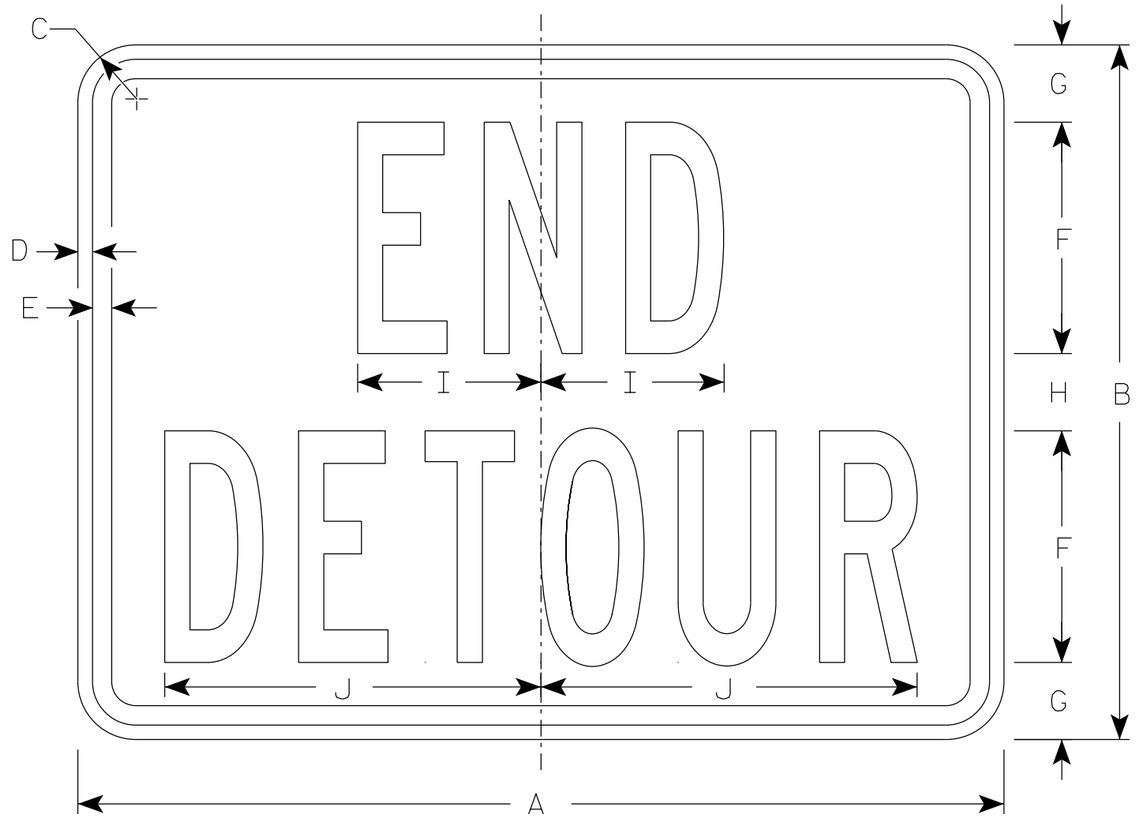
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M48.dgn PLOT DATE : 9-FEB 2023 7:38 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



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

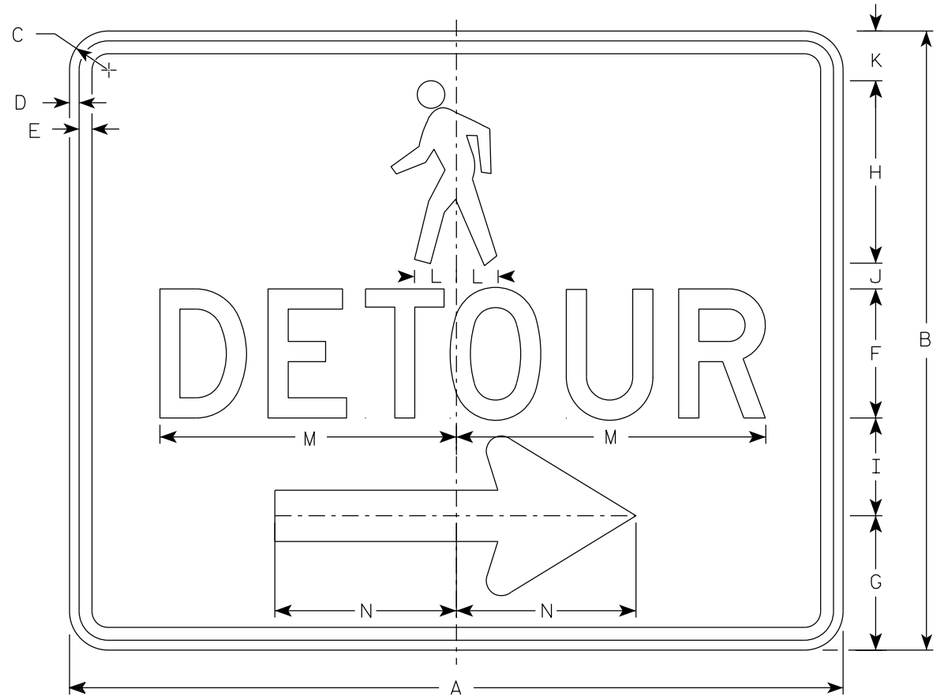
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 154 | E

7

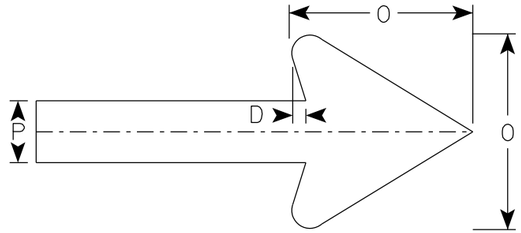
7



M4-9BR

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.
5. M4-9BL is the same as M4-9BR 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																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

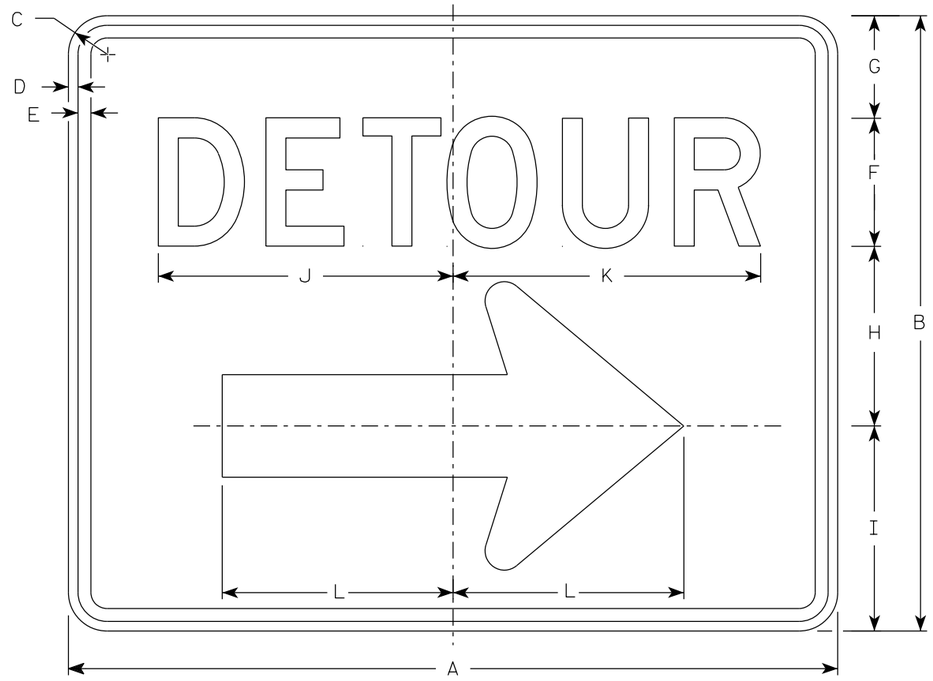
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

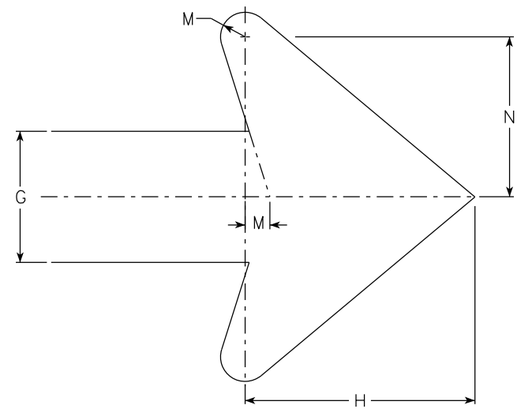
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 155 | E



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

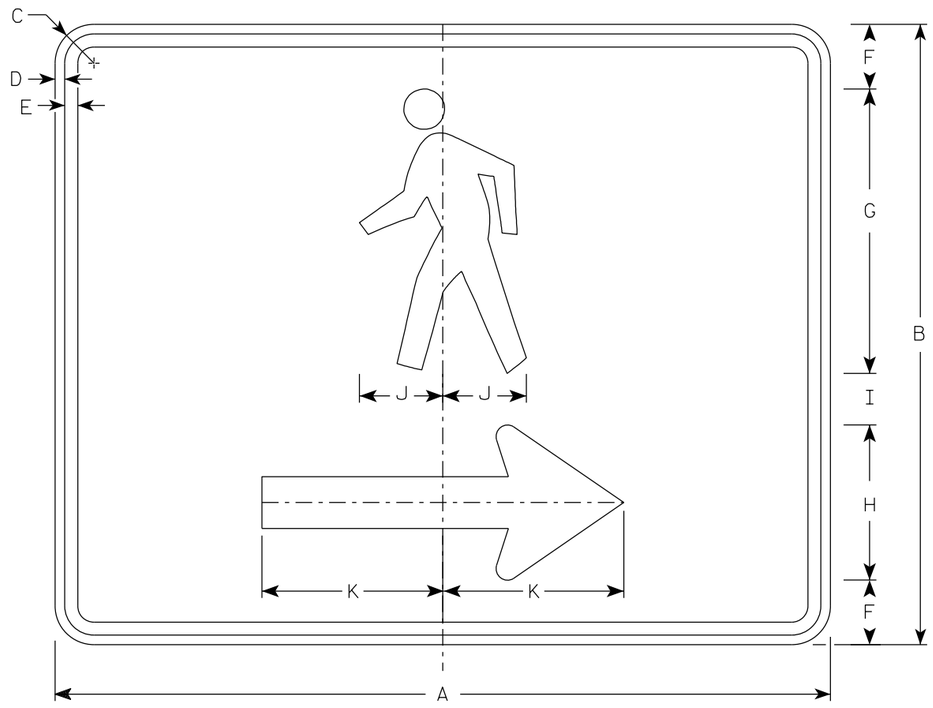
DATE 2/9/2023 PLATE NO. M4-9R.6

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

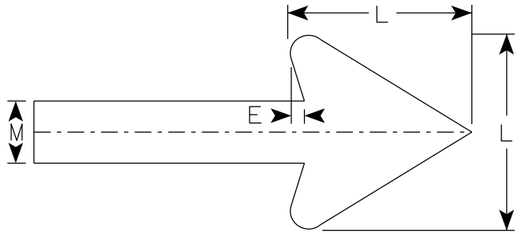
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M49R.dgn PLOT DATE : 21-MARCH 2023 1:40 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
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. M4-60L is the same as M4-60R except the arrow is reversed.



M4-60R



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	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
2M	30	24	1 ½	⅜	½	2 ½	11	6	2	3 ¼	7	6	2														5.00
3																											
4																											
5																											

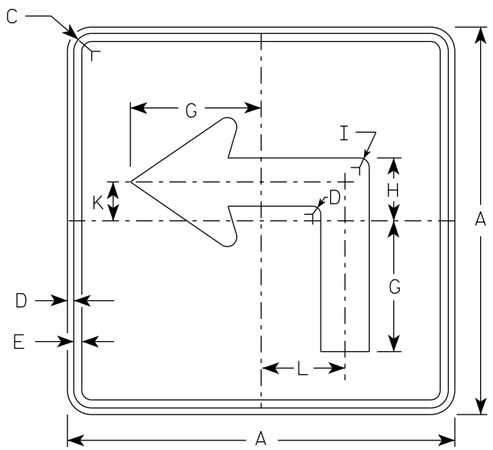
STANDARD SIGN
M4-60 L&R

WISCONSIN DEPT OF TRANSPORTATION

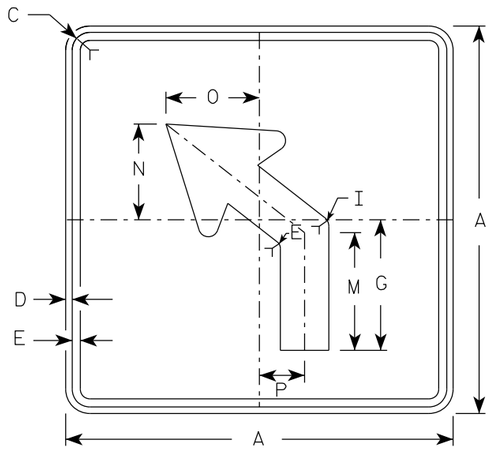
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60.2

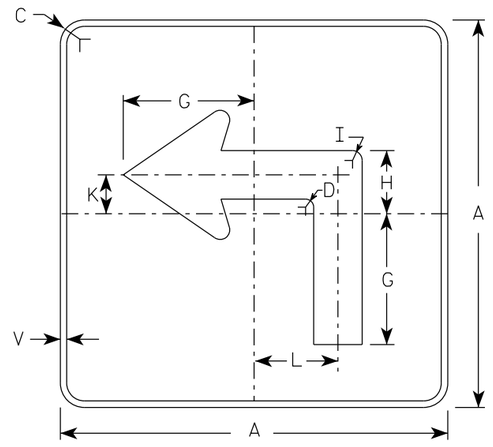
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 157 | E



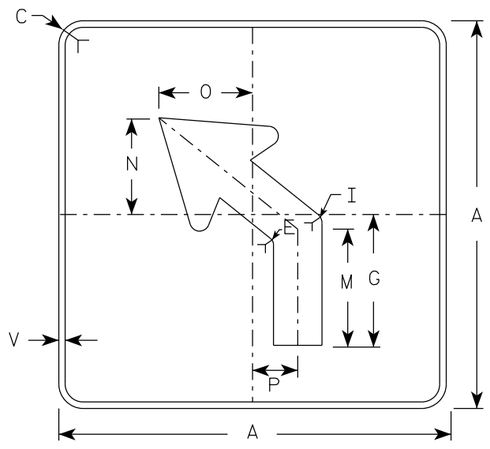
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

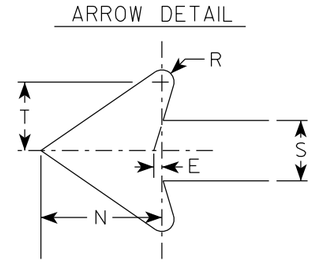


MB5-2L
MK5-2L
MN5-2L
MR5-2L

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

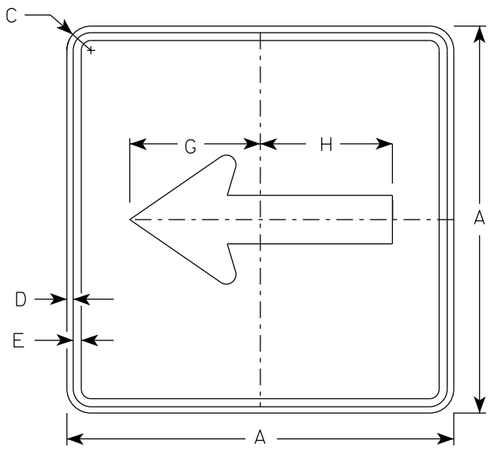
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

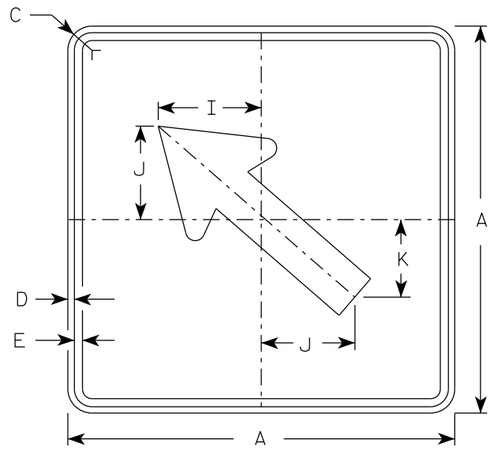
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

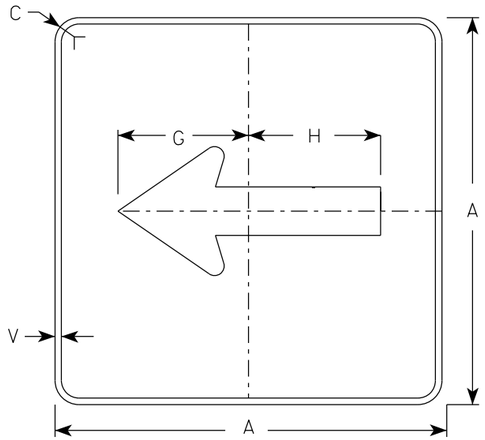
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 158 | E



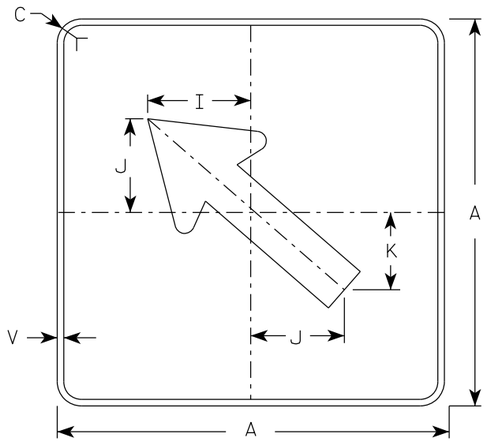
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

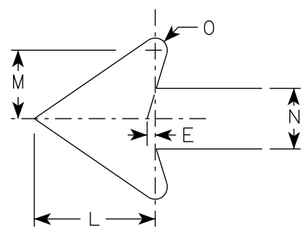


MB6-2
MK6-2
MN6-2
MR6-2

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

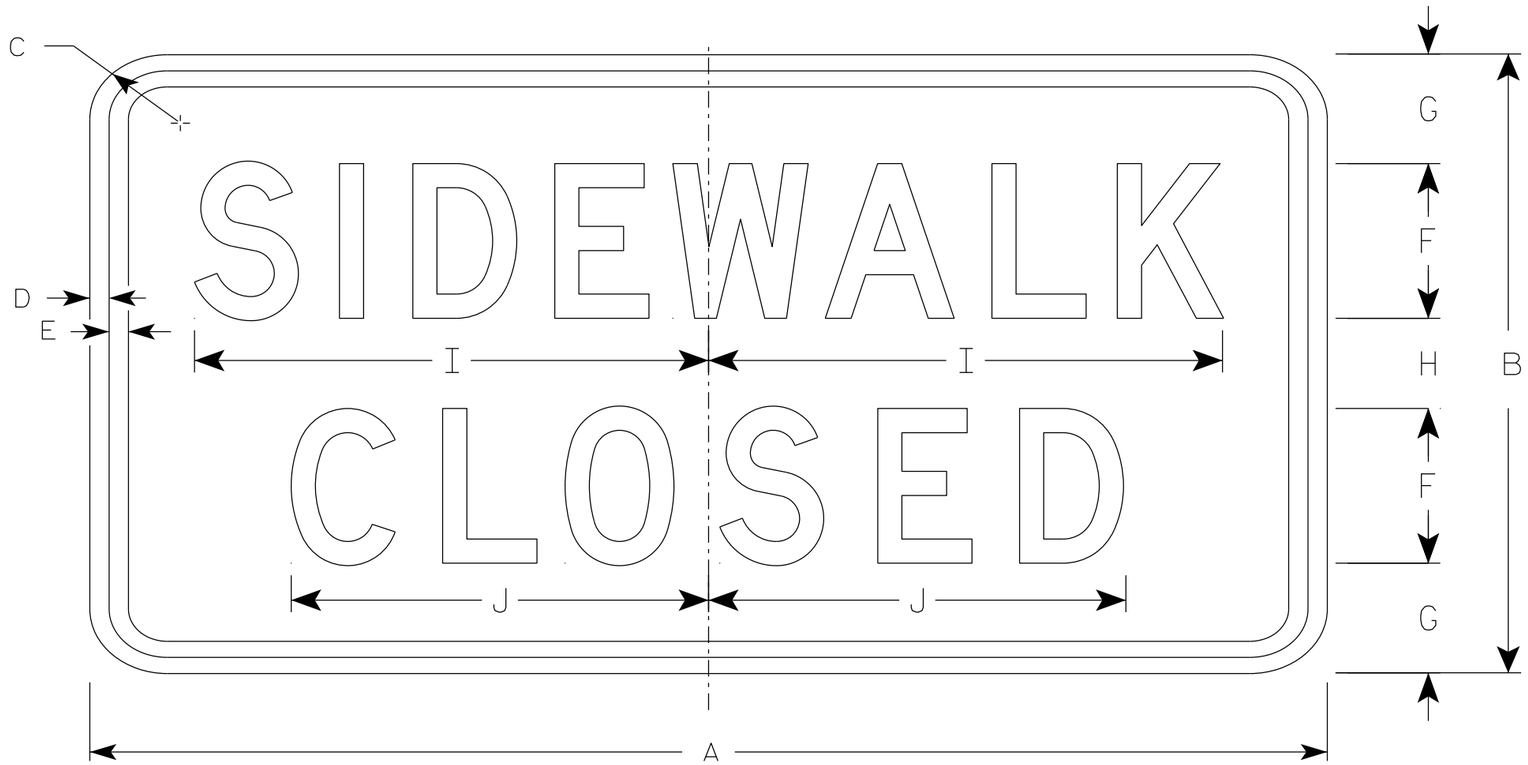
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 159 | E

7

7



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

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 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

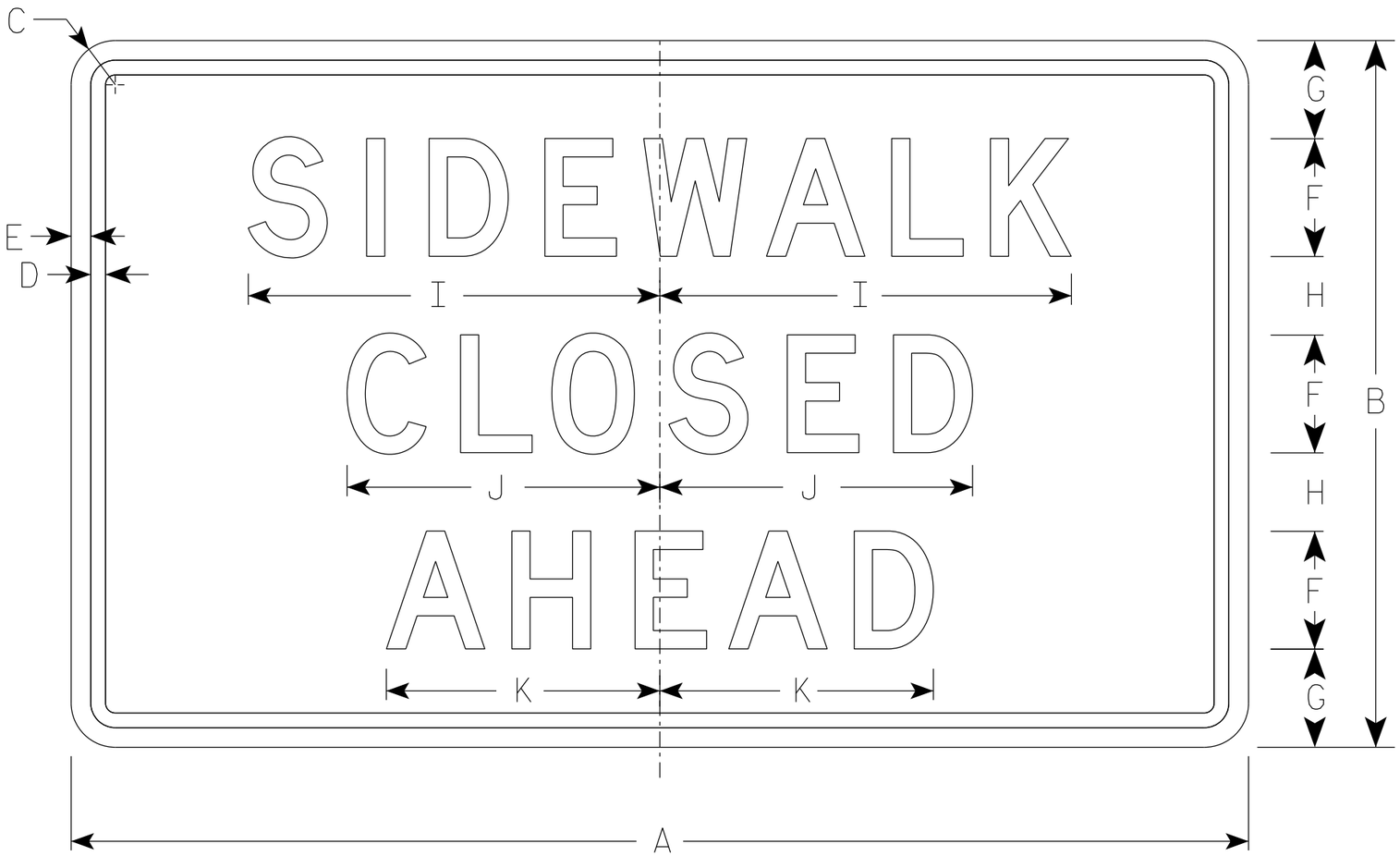
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 160 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



R9-9A

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	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
2M	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
3																											
4																											
5																											

STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

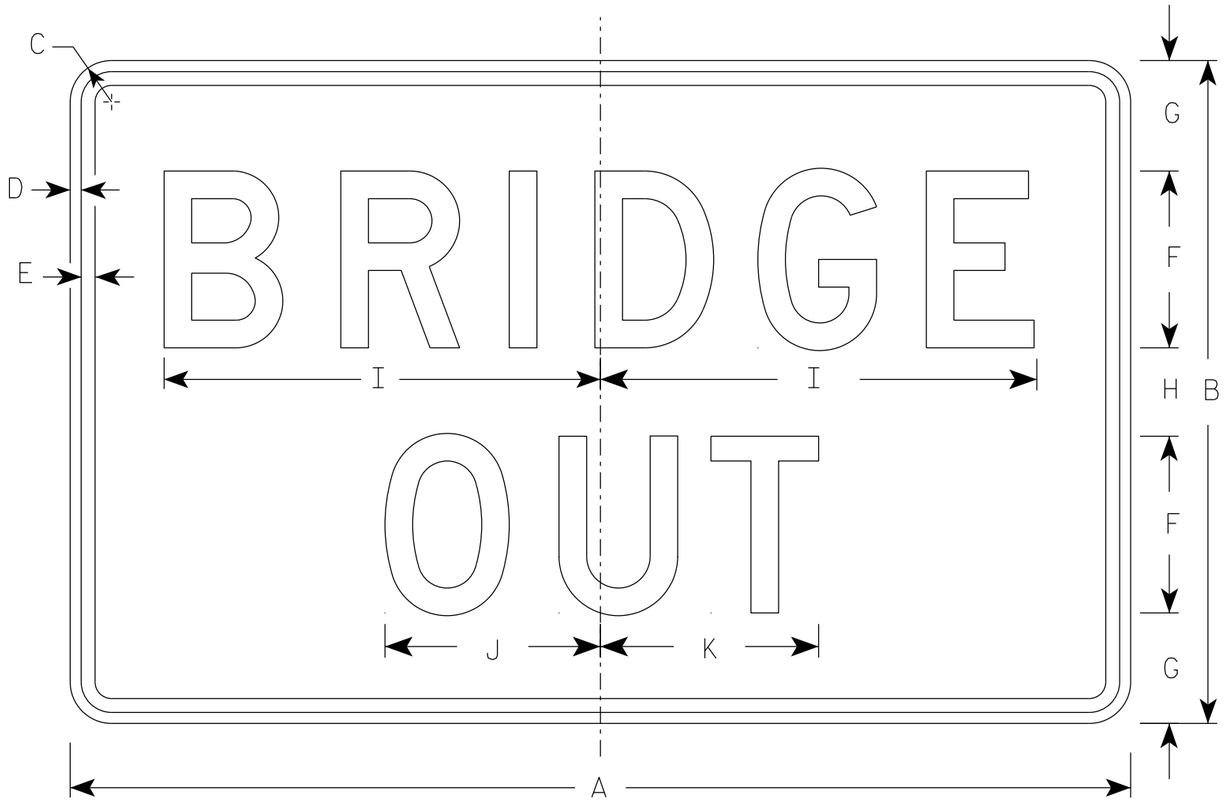
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 161 | E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R99A.DGN PLOT DATE : 24-JAN 2024 11:58 PLOT BY : mscj9h PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7 7



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: 162 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R112B.dgn PLOT DATE : 5-FEB 2024 2:20 PLOT BY : mscj9h

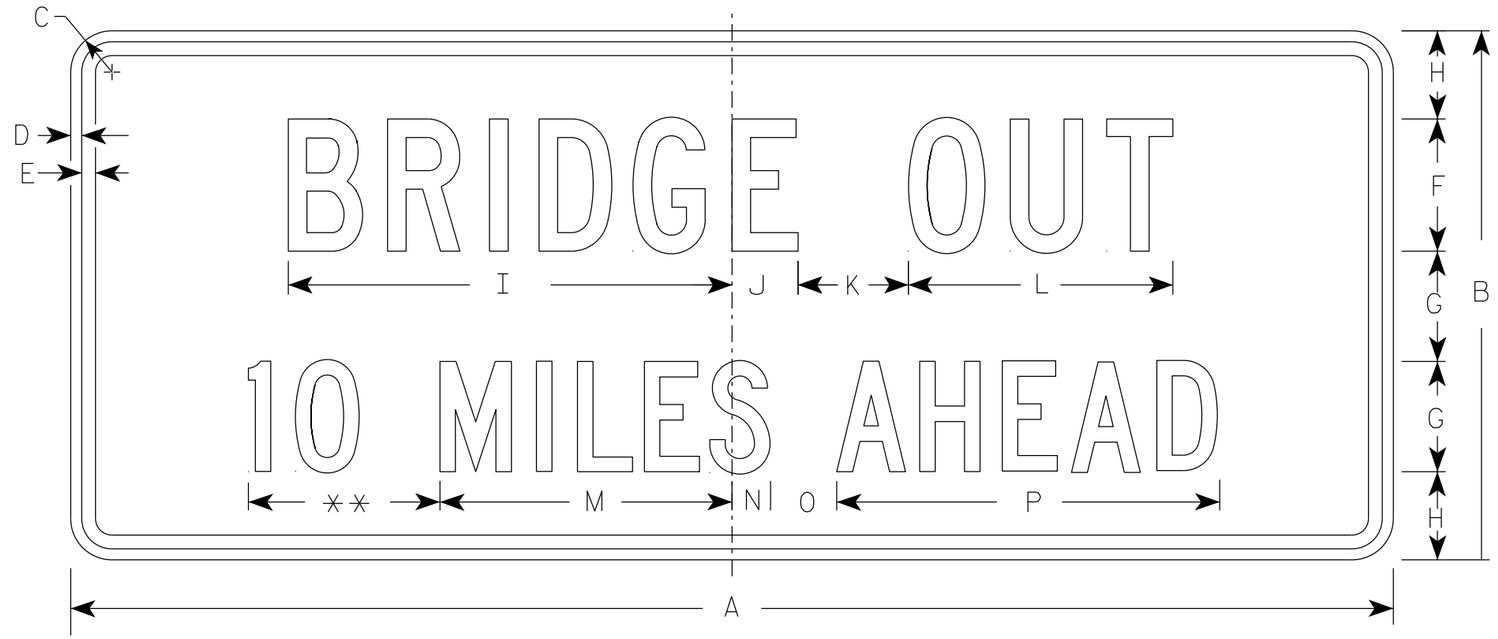
WISDOT/CADDS SHEET 42

7

7

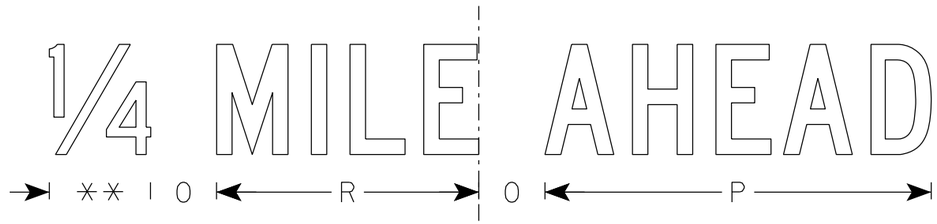
NOTES

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

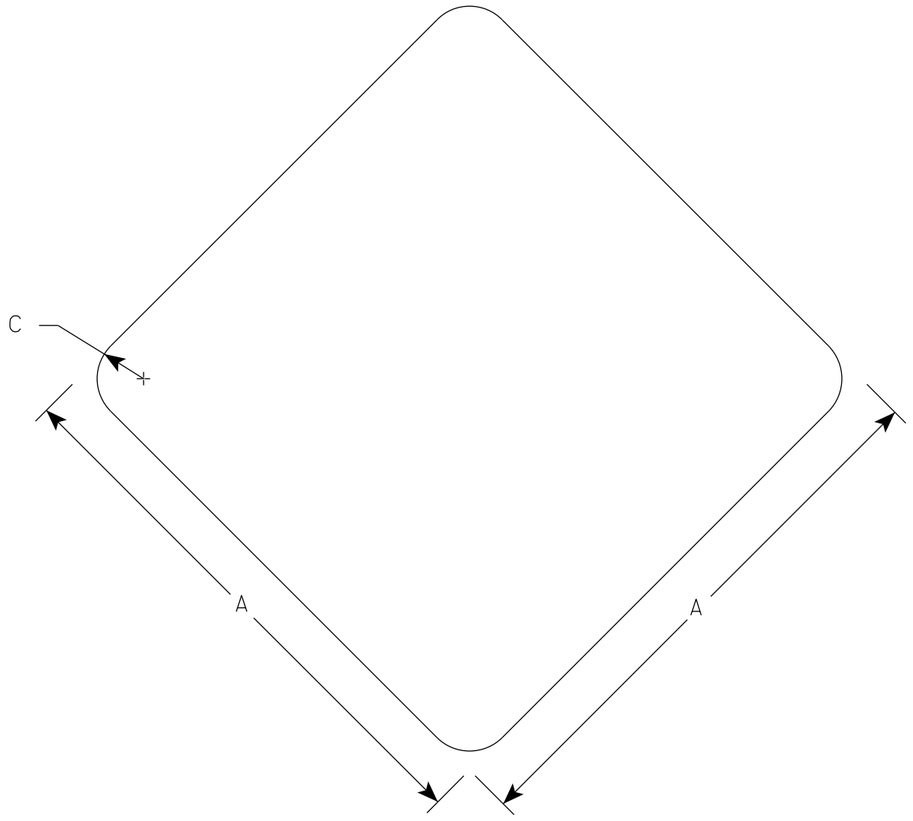
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3C.4

PROJECT NO:

SHEET NO: 163 E



W5-56

NOTES

1. Sign is Type II - Type SH Reflective
2. Color:
   Background - Red

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	12		1 ½																								1.0
2S	18		1 ½																								2.25
2M	18		1 ½																								2.25
3																											
4																											
5																											

STANDARD SIGN

W5-56

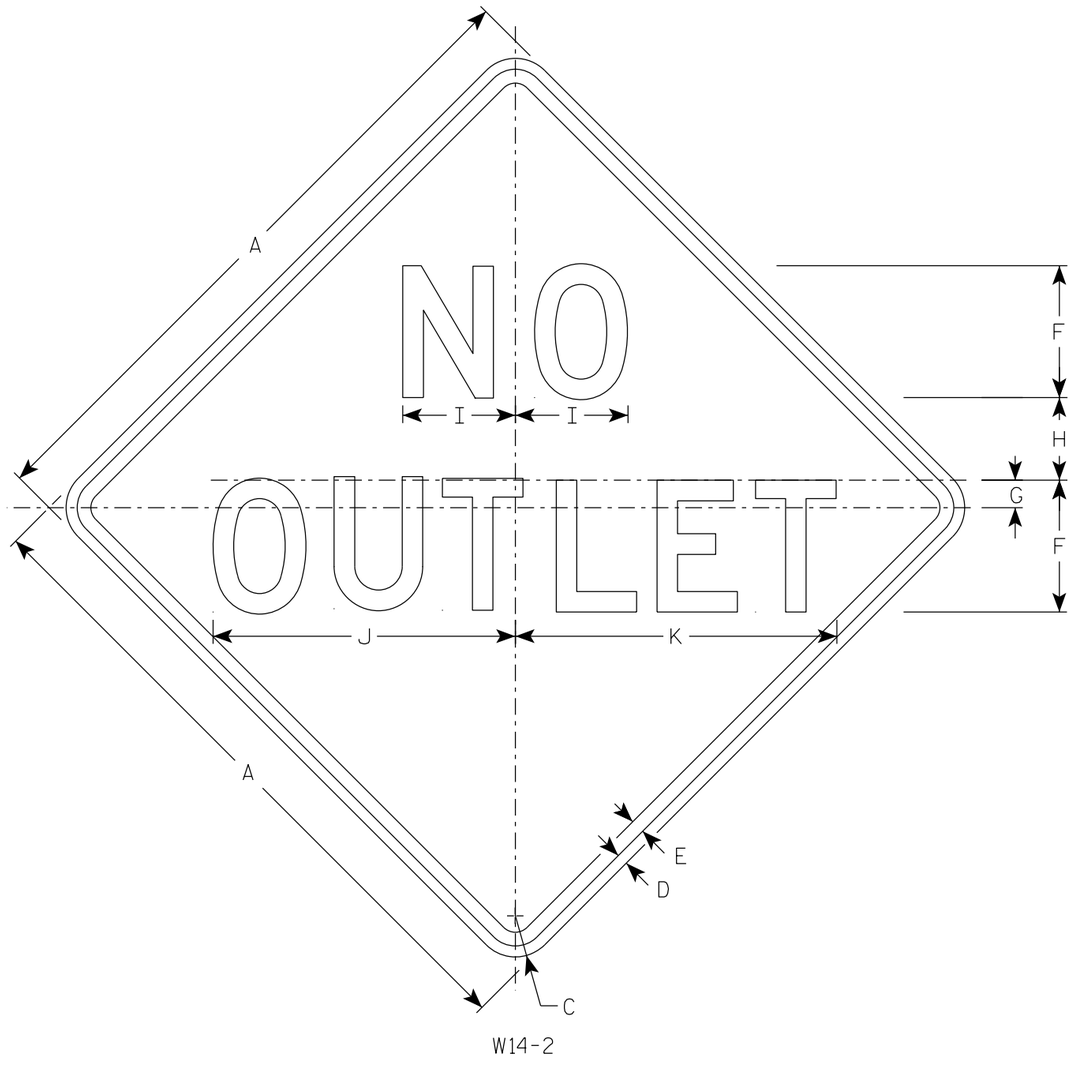
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/5/2024 PLATE NO. W5-56.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate_W556.dgn PLOT DATE : 5-MARCH 2024 1:56 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W14-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - D

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	24		1 1/2	3/8	1/2	5	1	2 3/4	4 1/8	11 3/4	12 3/8																4.0
2S	30		1 7/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
2M	30		1 7/8	1/2	5/8	6	1 1/4	3 3/4	5 1/8	13 3/4	14 5/8																6.25
3	36		2 1/4	5/8	3/4	7	1 3/8	4 5/8	6	16 1/8	17 1/8																9.0
4																											
5																											

STANDARD SIGN
W14-2

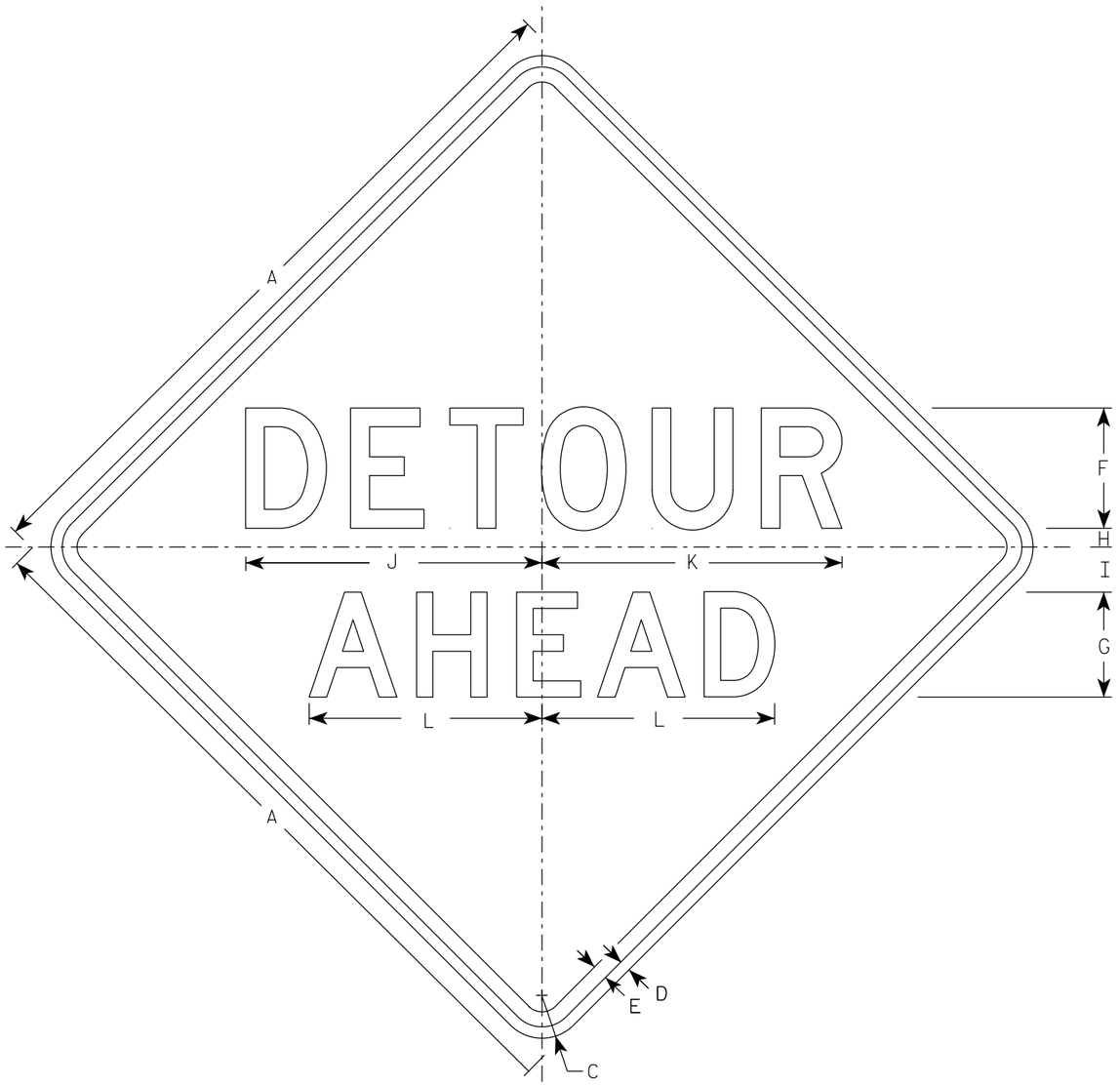
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

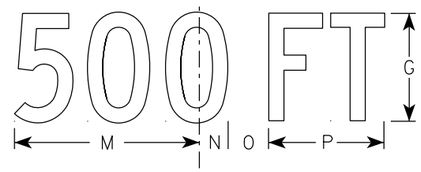
DATE 1/8/2024 PLATE NO. W14-2.4

PROJECT NO:

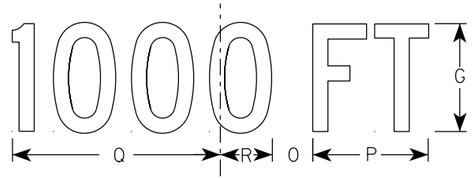
SHEET NO: 165 E



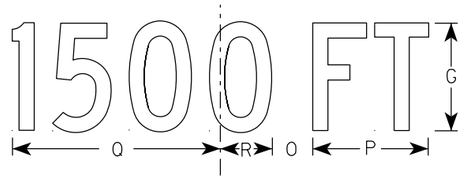
W20-2A



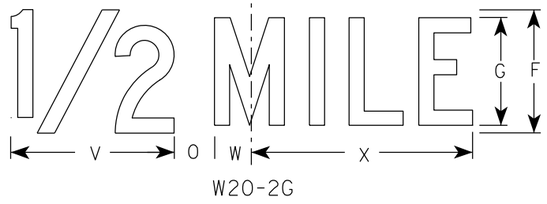
W20-2D



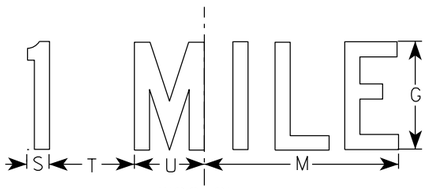
W20-2C



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

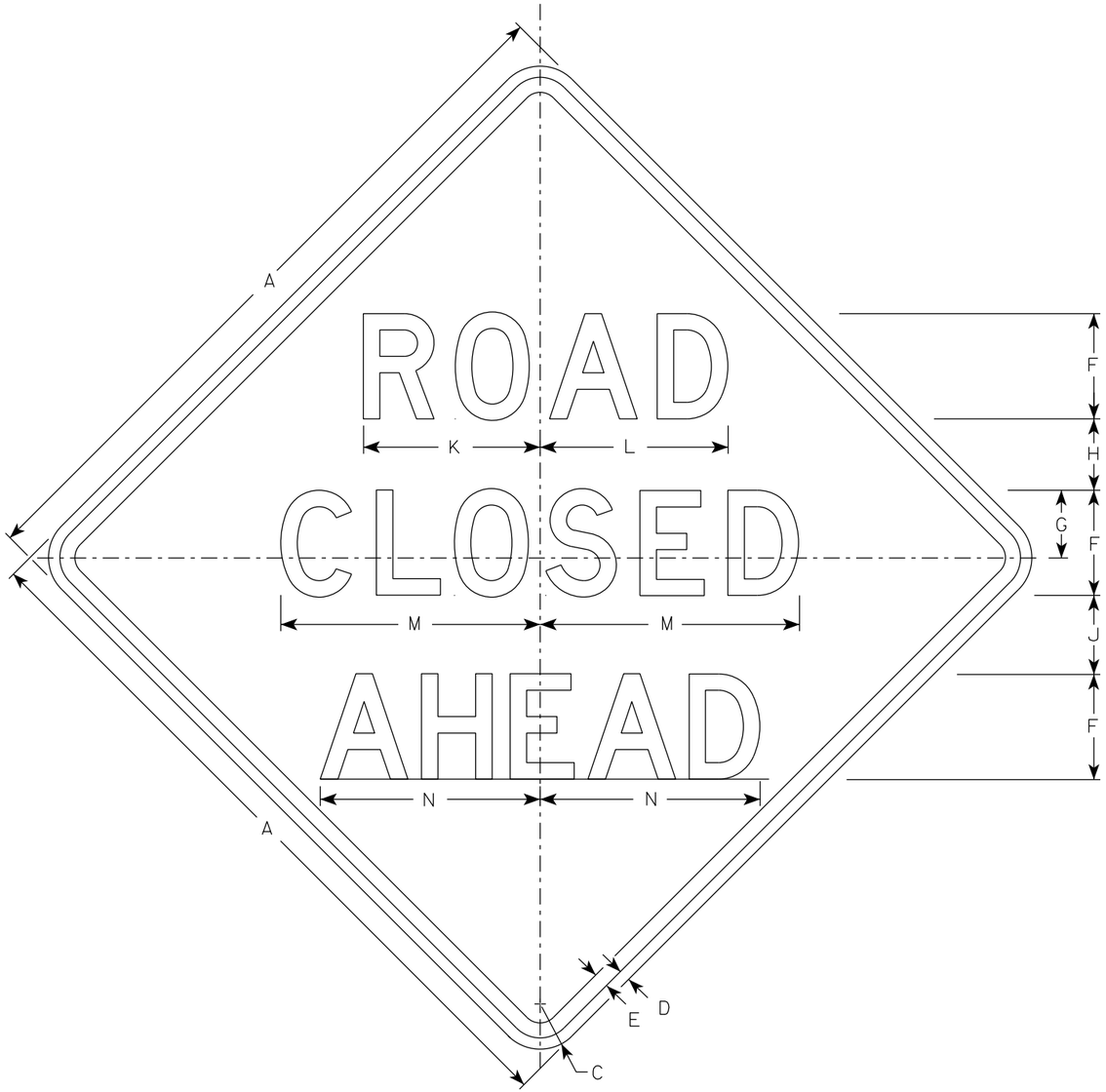
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

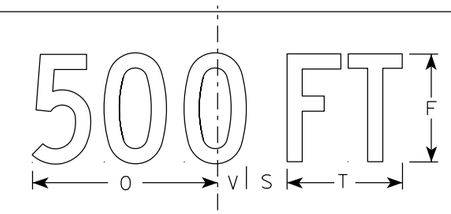
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: E

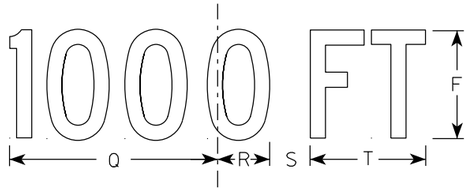
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



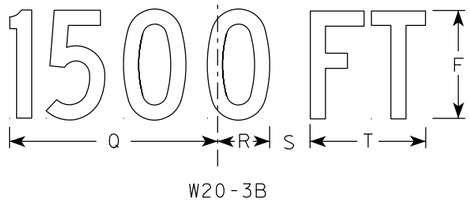
W20-3A



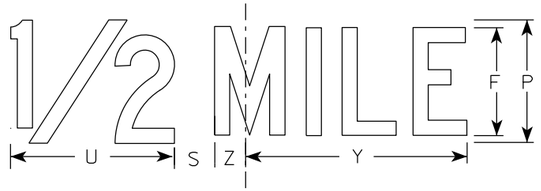
W20-3D



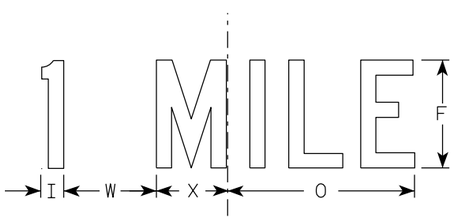
W20-3C



W20-3B



W20-3G



W20-3F

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. Lines 1 and 2 are Series D.
   Line 3 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	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

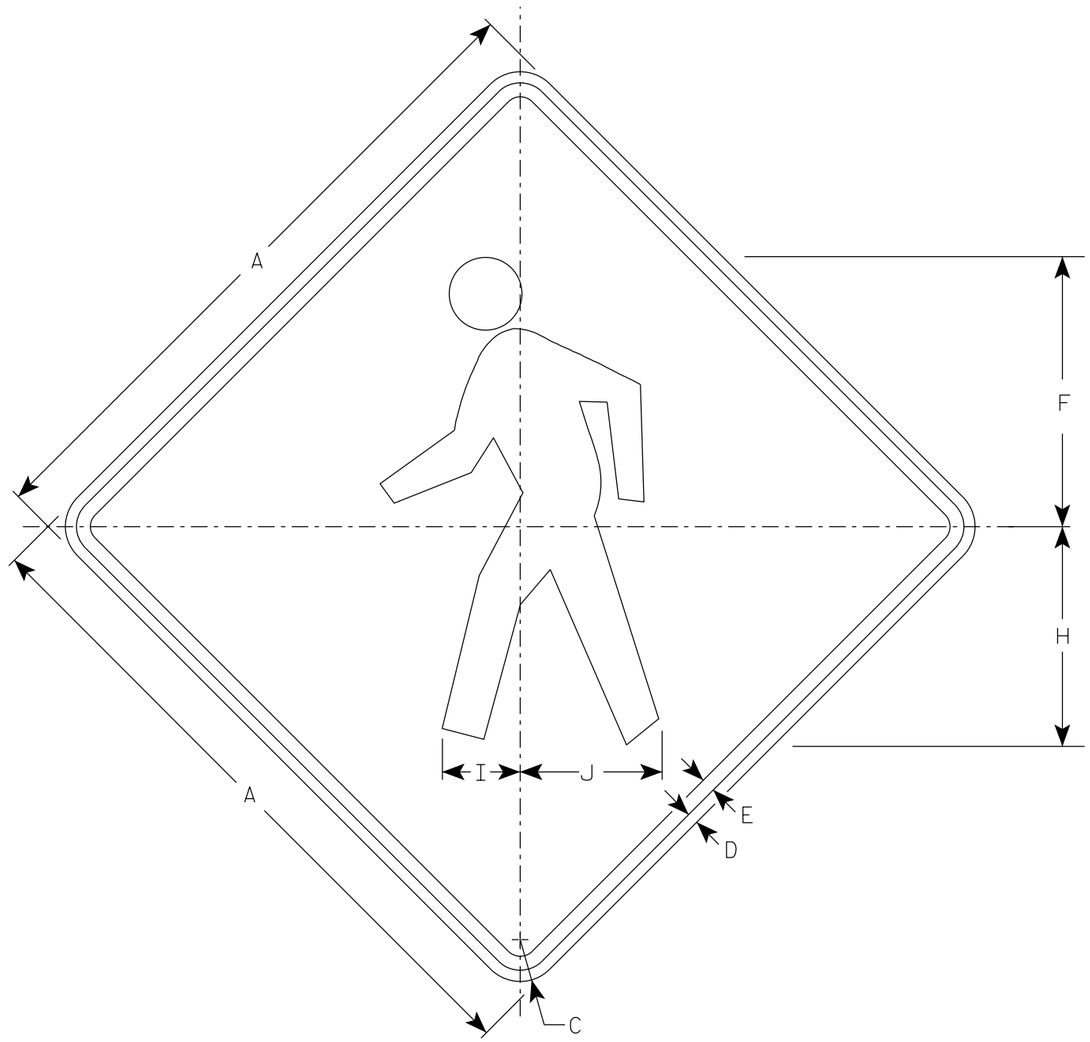
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



WO11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
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.

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	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
2S	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
2M	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
3	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
4	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN

WO11-2

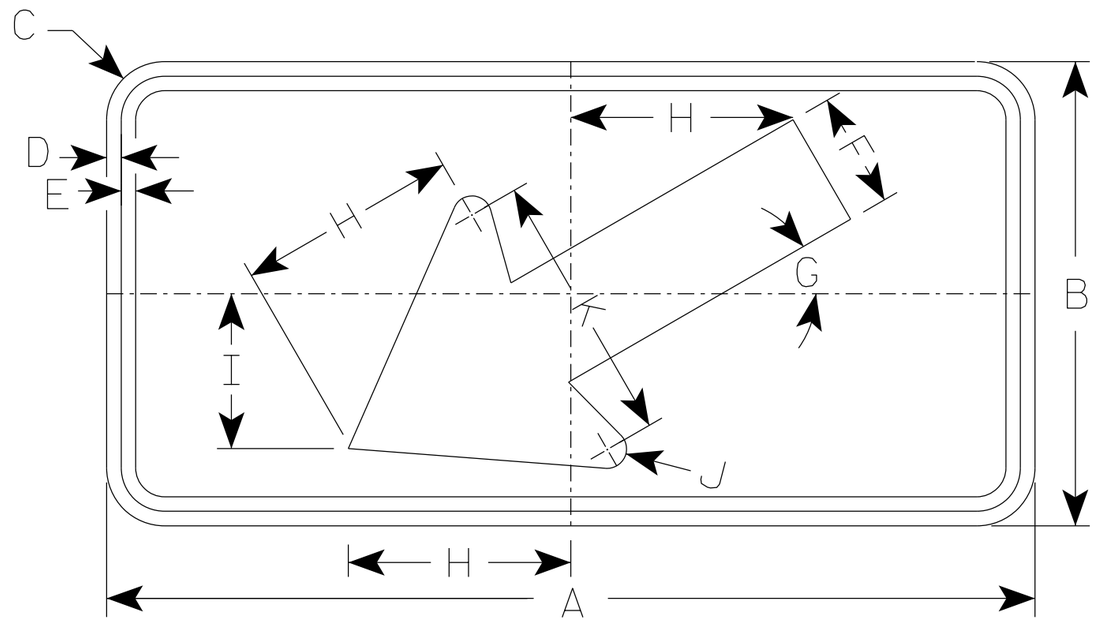
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

For State Traffic Engineer

DATE 2/1/2024 PLATE NO. WO11-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 168 E



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

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	30	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0

STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W016-7.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 169	E

REMOVAL OF THIS MATERIAL TO BE INCLUDED IN THE EXCAVATION FOR STRUCTURES BRIDGES BID ITEM.

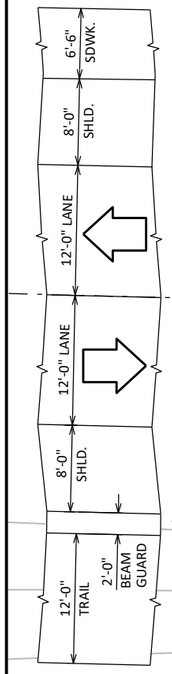
◆ ALL VOIDS BETWEEN HEAVY RIPRAP IN TRAVEL CORRIDOR SHOULD BE FILLED USING SELECT CRUSHED MATERIAL. WORK SHALL BE PAID FOR AS "SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR".

✳ PROVIDE FOR THRIE BEAM GUARD RAIL ATTACHMENT. AT UNUSED ANCHOR ASSEMBLIES CAULK HOLES SHUT WITH "100% SILICONE CAULK."

◐ BENCH MARK CAP - FOR LOCATIONS SEE PARAPET SHEET.

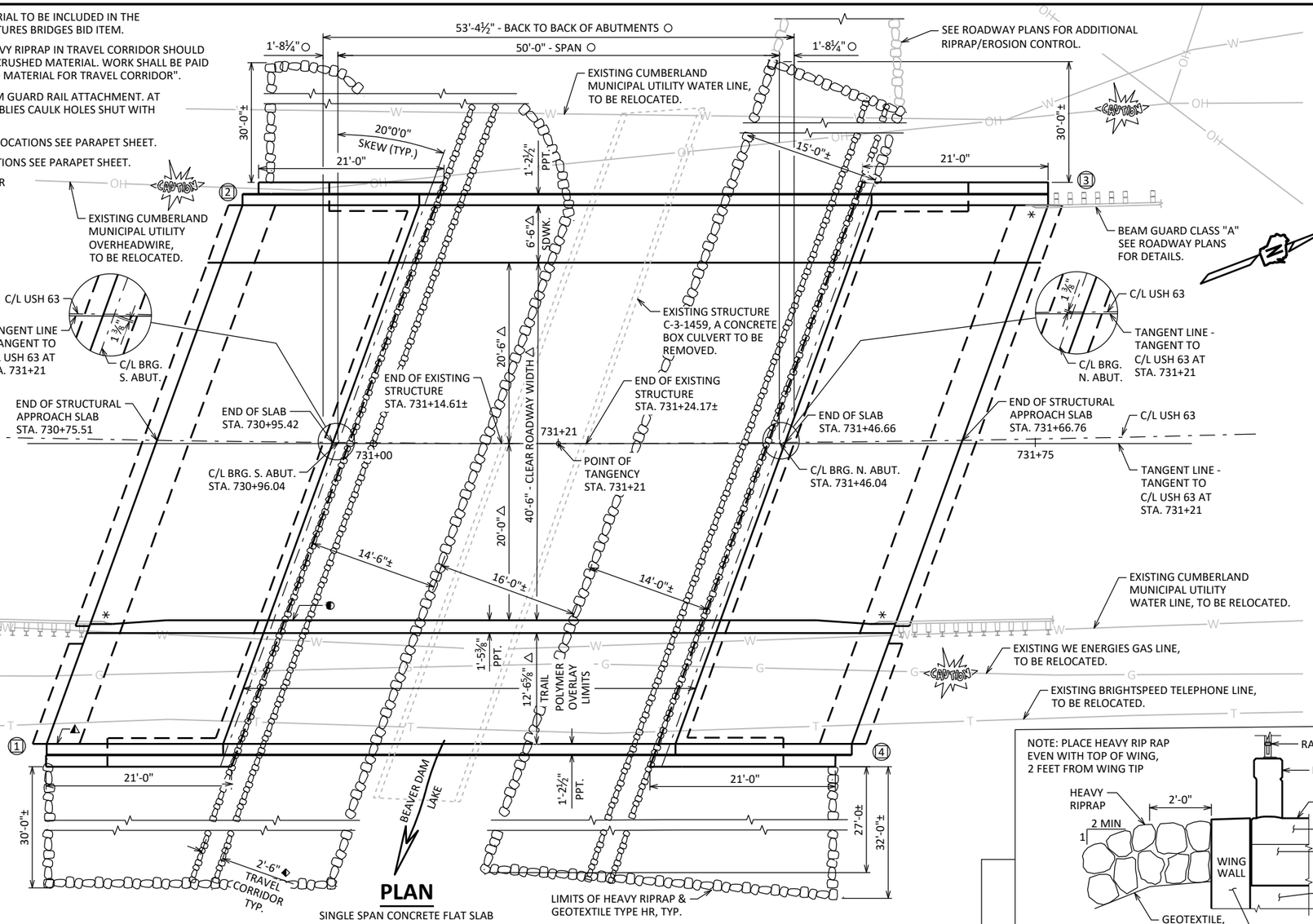
◭ NAME PLATE - FOR LOCATIONS SEE PARAPET SHEET.

(n) INDICATES WING NUMBER



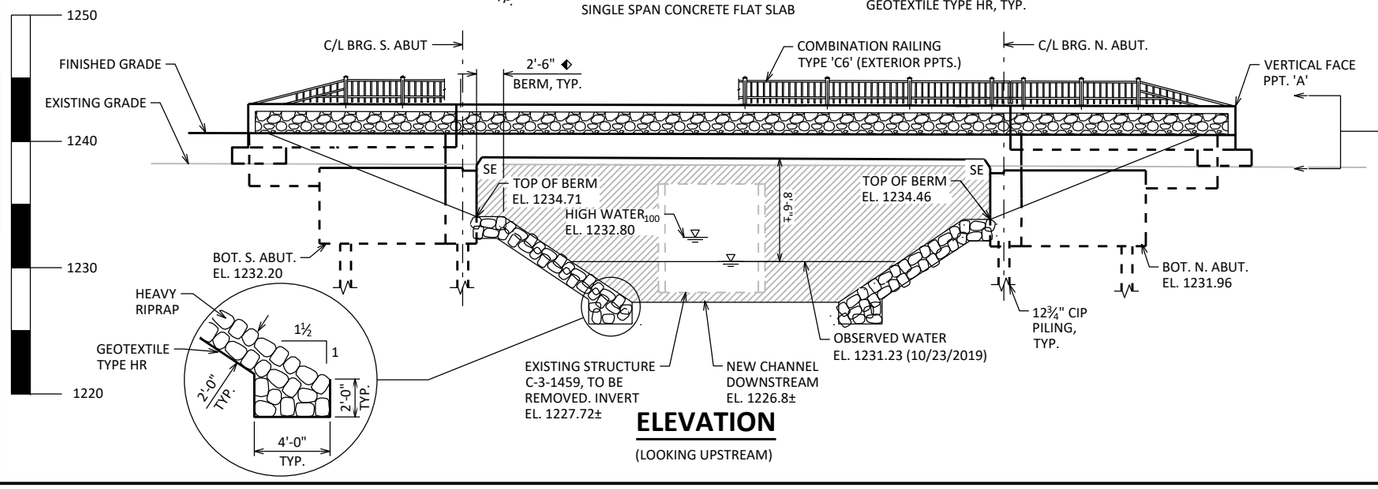
○ MEASURED ALONG TANGENT LINE

△ MEASURED NORMAL TO TANGENT LINE



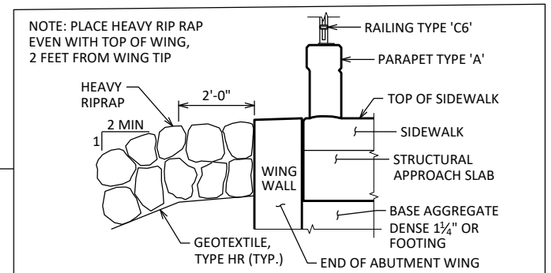
PLAN

SINGLE SPAN CONCRETE FLAT SLAB

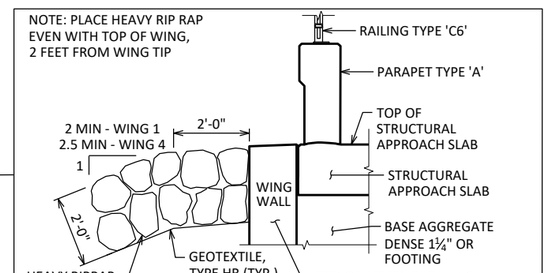


ELEVATION

(LOOKING UPSTREAM)



TYPICAL FILL SECTION AT WING 2



TYPICAL FILL SECTION AT EAST WING TIPS

DESIGN DATA

STATE PROJECT NUMBER

1550-04-79

LIVE LOAD:

DESIGN LOADING: HL-93
INVENTORY RATING: RF = 1.18
OPERATING RATING: RF = 1.53
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE & STRUCTURAL APPROACH SLAB ——— f'_c = 4,000 PSI
ALL OTHER ——— f'_c = 3,500 PSI

BAR STEEL REINFORCEMENT
GRADE 60 ——— f_y = 60,000 PSI
STAINLESS, GRADE 60 ——— f_y = 60,000 PSI

FOUNDATION DATA

ABUTMENTS TO BE SUPPORTED ON 12¾" DIA. X 0.50" CIP CONCRETE PILING DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 190 TONS ** PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.
ESTIMATED 90'-0" LONG AT SOUTH ABUTMENT. PILE POINTS REQUIRED.
ESTIMATED 110'-0" LONG AT NORTH ABUTMENT. PILE POINTS REQUIRED.

**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 PILE CAPACITY.

HYDRAULIC DATA

100-YEAR FREQUENCY:

HW_{100} = EL. 1232.8
HW_{100} ELEVATION IS BASED ON A BARRON COUNTY FLOOD INSURANCE STUDY DATED 12/03/2009
DRAINAGE AREA = 10.3 SQ. MI.
ROADWAY OVERTOPPING = N/A
SCOUR CRITICAL CODE = 8

CURVE DATA

USH 63:

P.I. = 732+35.80
Δ = 41°46'14"
D = 2°00'03"
T = 1092.66'
L = 2087.65'
R = 2863.58'
S.E. = 3.0%
P.C. = 721+43.15
P.T. = 742+30.80

TRAFFIC DATA

USH 63:

ADT = 5,800 (2042)
R.D.S. = 45 MPH

LIST OF DRAWINGS:

STRUCTURE DESIGN CONTACTS:

ALEXIS HANLEY 608-266-3350
DOMINIQUE BECHLE 608-261-8205

NO.	DATE	REVISION	BY

WISCONSIN DEPARTMENT OF TRANSPORTATION

BUREAU OF STRUCTURES

ACCEPTED DMB 11/01/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-3-214

USH 63 OVER BEAVER DAM LAKE

COUNTY	CITY
BARRON	CUMBERLAND

DESIGN SPEC.
AASHTO LRFD BRIDGE DESIGN SPECIFICATION

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
LIH	CAD	LIH	CAD

GENERAL PLAN

SHEET 1 OF 16
170

SCALE =

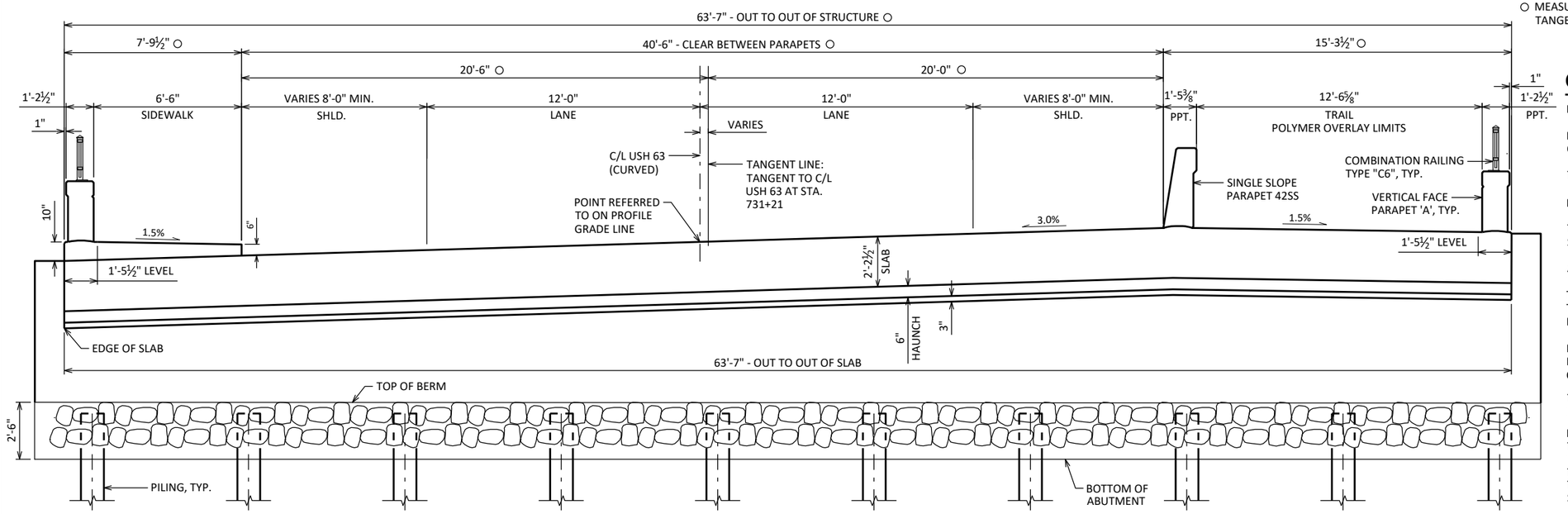
I.D. 1550-04-09A DATE: OCT. 2025

8

8

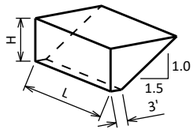
STATE PROJECT NUMBER

1550-04-79



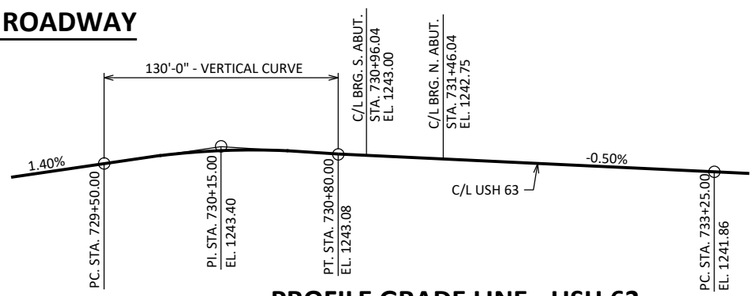
CROSS SECTION THROUGH ROADWAY

LOOKING NORTH



ABUTMENT BACKFILL DIAGRAM

L = OUT TO OUT OF ABUTMENT BODY 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)



PROFILE GRADE LINE - USH 63

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

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

THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES BRIDGES B-3-214" SHALL BE THE EXISTING GROUNDLINE.

AT THE BACK FACE 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 TYPE A. ALSO EXCLUDED IS THE BASE AGGREGATE DENSE 1 1/4-INCH" AS DETAILED ON THE STRUCTURAL APPROACH SLAB SHEETS.

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.

THE QUANTITY FOR BACKFILL STRUCTURE IS CALCULATED BASED ON THE DETAIL SHOWN IN THE PLANS.

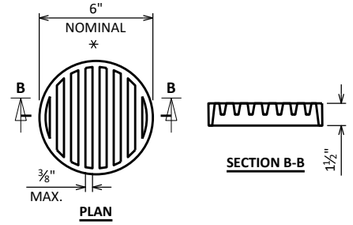
PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF SUPERSTRUCTURE SLAB SURFACE (EXCLUDING THE TRAIL PORTION RECIEVING A POLYMER OVERLAY) AND APPROACH SLAB SURFACES (INCLUDING THE TRAIL PORTION) AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES AT ABUTMENT DIAPHRAGMS AND TO THE TOP OF SIDEWALK AND FACE OF SIDEWALK CURB.

PIGMENTED SURFACE SEALER TO BE APPLIED TO THE FRONT FACE AND THE TOP OF THE PARAPETS, INCLUDING PARAPETS ON APPROACH SLABS. ALSO APPLY TO THE BACKFACE OF 42SS INTERIOR PARAPET.

THE SLOPE OF THE FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH HEAVY RIPRAP AND GEOTEXTILE TYPE "HR" TO THE EXTENT SHOWN ON SHEET 1 AND THE ABUTMENT DETAILS.

SLAB FALSEWORK SHALL BE SUPPORTED ON PILES OR THE SUBSTRUCTURE, UNLESS AN ALTERNATE METHOD IS APPROVED BY THE ENGINEER.

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.



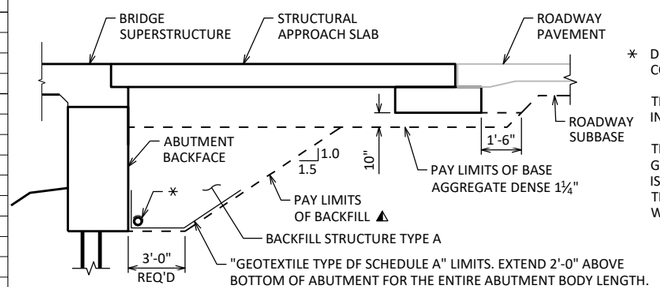
TOTAL ESTIMATED QUANTITIES

ALL BID ITEMS ARE CAT. 0020

BID ITEM NUMBER	BID ITEMS	UNIT	SUPER.	SOUTH APPROACH	SOUTH ABUT.	NORTH ABUT.	NORTH APPROACH	TOTALS	AESTHETICS
203.0220	REMOVING STRUCTURE (C-03-1459)	EACH	---	---	---	---	---	1	---
206.1001	EXCAVATION FOR STRUCTURES BRIDGES B-03-214	EACH	---	---	---	---	---	1	---
210.1500	BACKFILL STRUCTURE TYPE A	TON	---	---	300	300	---	600	---
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH	TON	---	215	---	---	215	430	---
502.0100	CONCRETE MASONRY BRIDGES	CY	311.7	92.5	85.9	85.9	92.5	669	7.5
502.3200	PROTECTIVE SURFACE TREATMENT	SY	306	134	---	---	134	574	---
502.3210	PIGMENTED SURFACE SEALER	SY	88	34	---	---	34	156	---
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	---	5,745	5,745	---	11,490	---
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	62,385	15,815	2,715	2,710	15,815	99,440	---
505.0800.S	BAR STEEL REINFORCEMENT HS STAINLESS STRUCTURES	LB	580	---	---	---	---	580	---
■ 509.5100.S	POLYMER OVERLAY	SY	72	---	---	---	---	72	---
513.7031	RAILING STEEL TYPE C6	LF	103	40	---	---	40	183	---
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	---	---	17	17	---	34	---
517.1015.S	CONCRETE STAINING MULTI-COLOR (B-3-214)	SF	---	---	---	---	---	360	360
517.1050.S	ARCHITECTURAL SURFACE TREATMENT (B-3-214)	SF	---	---	---	---	---	360	360
550.0500	PILE POINTS	EACH	---	---	12	12	---	24	---
550.2128	PILING CIP CONCRETE 12 3/4 X 0.50-INCH	LF	---	---	1,080	1,320	---	2,400	---
606.0300	RIPRAP HEAVY	CY	---	---	254	244	---	498	---
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	---	---	113	113	---	226	---
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	---	1	---	---	2	3	---
645.0111	GEOTEXTILE TYPE DF SCHEDULE A	SY	---	---	67	67	---	134	---
645.0120	GEOTEXTILE TYPE HR	SY	---	---	420	409	---	829	---
SPV.0195	SELECT CRUSHED MATERIAL FOR TRAVEL CORRIDOR	TON	---	---	23	24	---	47	---
	NON-BID ITEMS								
	FILLER	SIZE	---	---	---	---	---	1/2", 3/4", 1 1/2"	---

"AESTHETICS" COLUMN IS THE PORTION OF TOTAL QUANTITY REQUIRED DUE TO AESTHETIC/CSS INCORPORATED INTO THE BRIDGE.

■ POLYMER OVERLAY TO BE APPLIED TO THE EXPOSED TOP OF SLAB SURFACE WITHIN THE LIMITS OF THE ATV TRAIL, EXCEPT ON THE STRUCTURAL APPROACH SLAB SURFACES.



TYPICAL SECTION THRU ABUTMENT

▲ BACKFILL PAY LIMITS. BACKFILL BEYOND PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

* PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.

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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

DRAWN BY LIH | PLANS CK'D CAD

CROSS SECTION & QUANTITIES

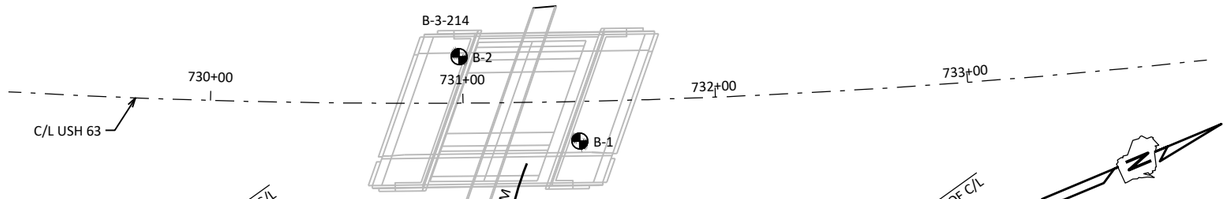
SHEET 2
171

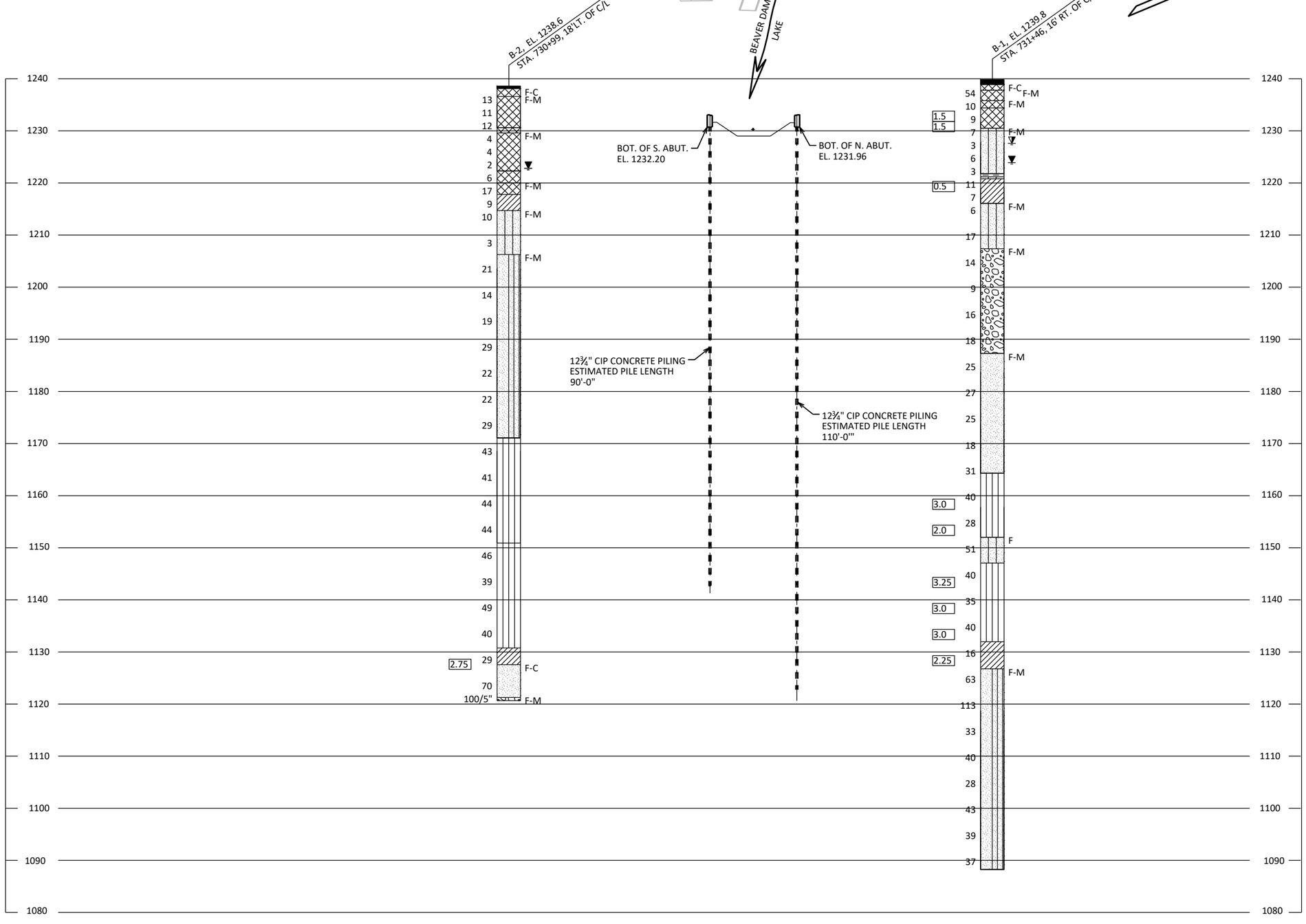
SCALE =

8

8

BORING #	DATE COMPLETED	NORTHING (Y)	EASTING (X)
B-1	1/23/2024	149704.7	262604.6
B-2	1/05/2024	149673.5	262555.3
BORINGS COMPLETED BY: AET			
REPORT COMPLETED BY: WISDOT			
ALL COORDINATES REFERENCED TO WCCS NAD 83 (91) BARRON COUNTY			
COORDINATES COLLECTED USING NON-SURVEY GRADE EQUIPMENT			





STATE PROJECT NUMBER

1550-04-79

MATERIAL SYMBOLS

ASPHALT, TOPSOIL, PEAT, CONCRETE, FILL, GRAVEL, SAND, CLAY, SILT, BOULDERS OR COBBLES, LIMESTONE, BEDROCK (UNKNOWN), SHALE, SANDSTONE, IGNEOUS/META

LEGEND OF BORING

BORING #/EL
STA/OFFSET

[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
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

DRAWN BY LIH | PLANS CK'D CAD

SUBSURFACE EXPLORATION

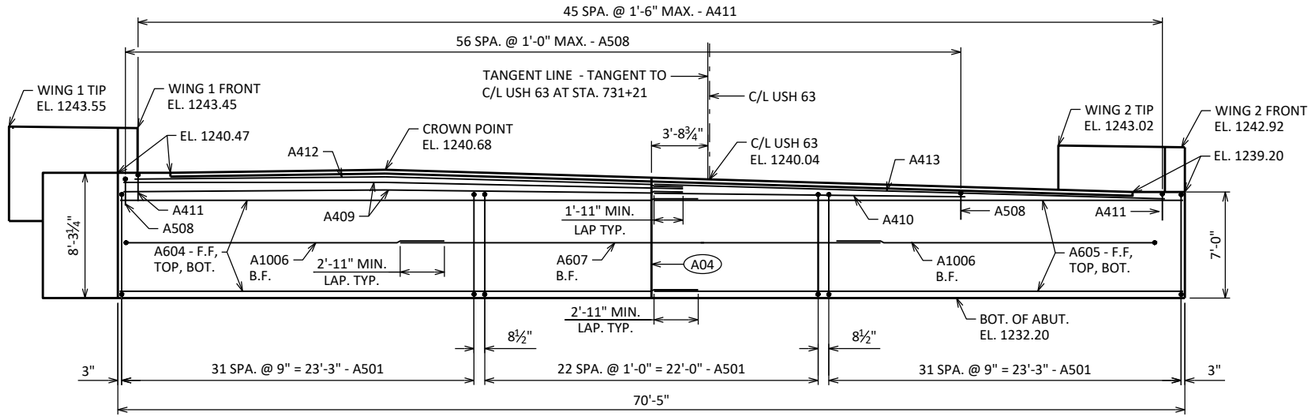
SHEET 3
172

8

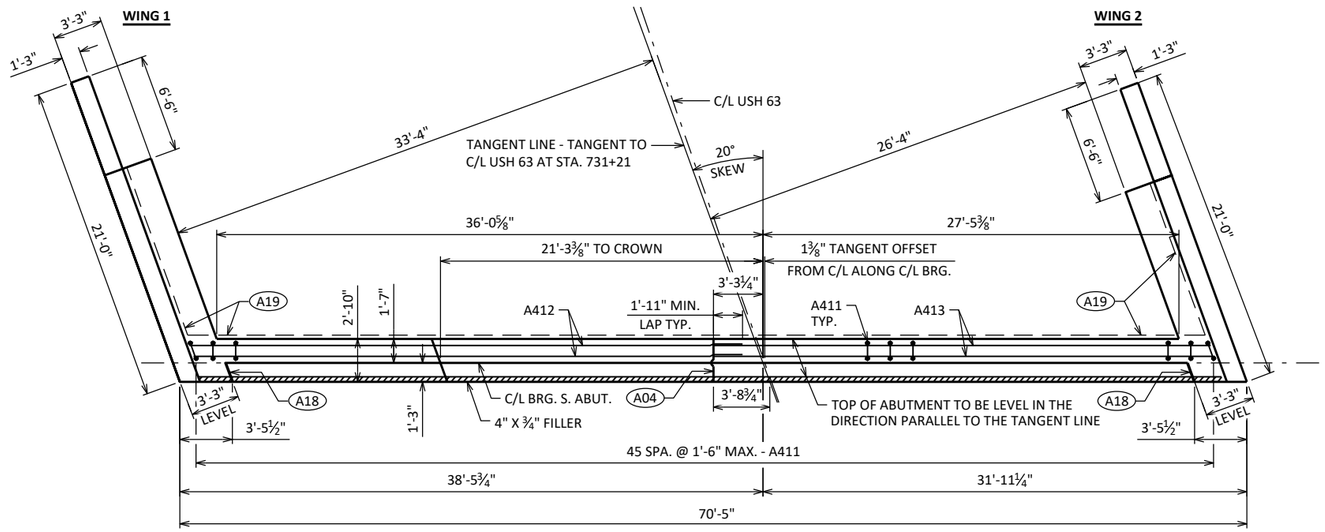
8

STATE PROJECT NUMBER

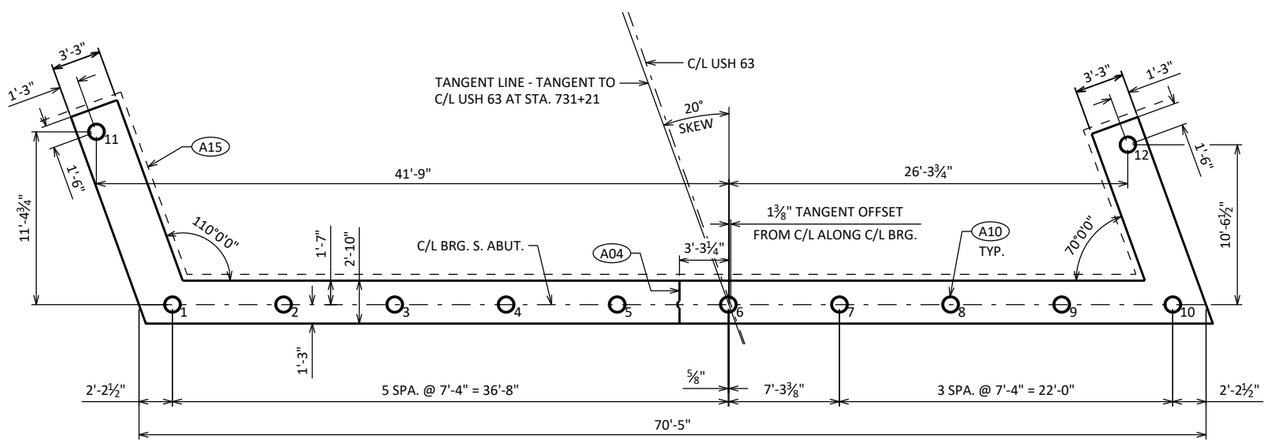
1550-04-79



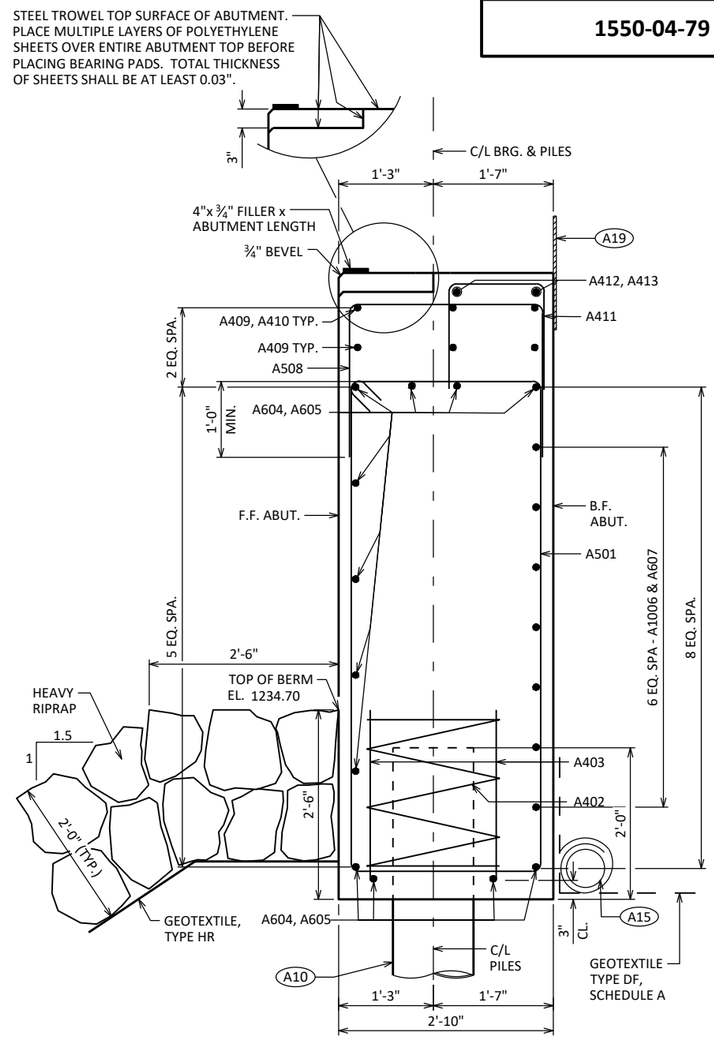
ELEVATION - LOOKING SOUTH



PLAN



PILE PLAN



SECTION THRU BODY

A04 VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. ¾" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

A10 SUPPORT ABUTMENT ON 12¾" DIA. X 0.50" CIP CONCRETE PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 190 TONS. PILE POINTS REQUIRED.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A18 ¾" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH SKEW/TANGENT LINE.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

DRAWN BY LIH | PLANS CK'D CAD

SOUTH ABUTMENT

SHEET 4
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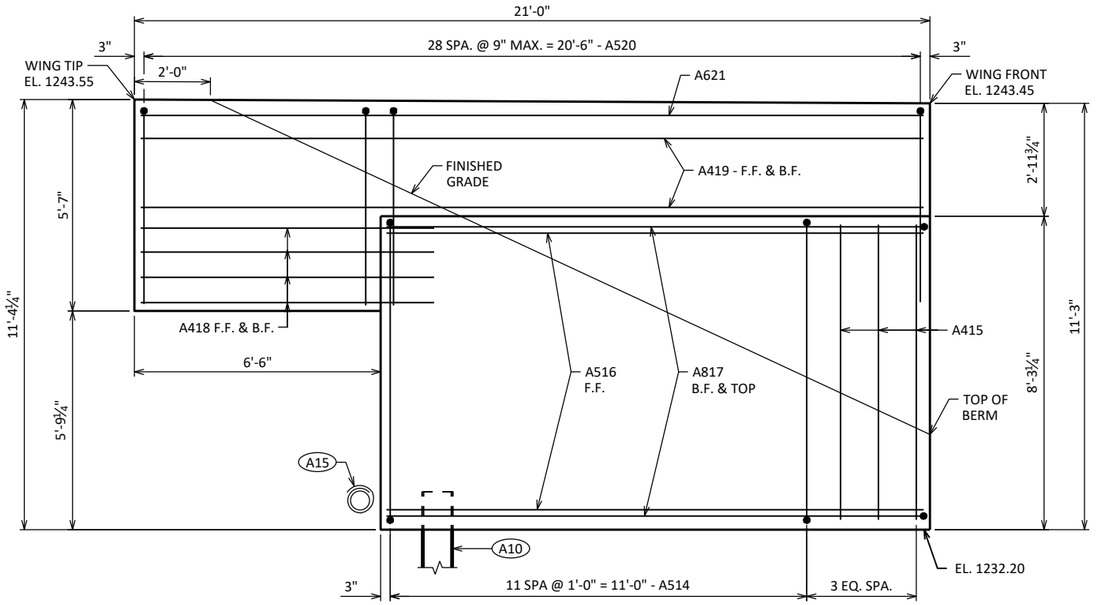
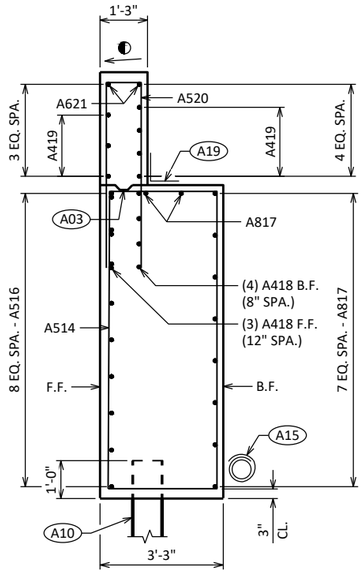
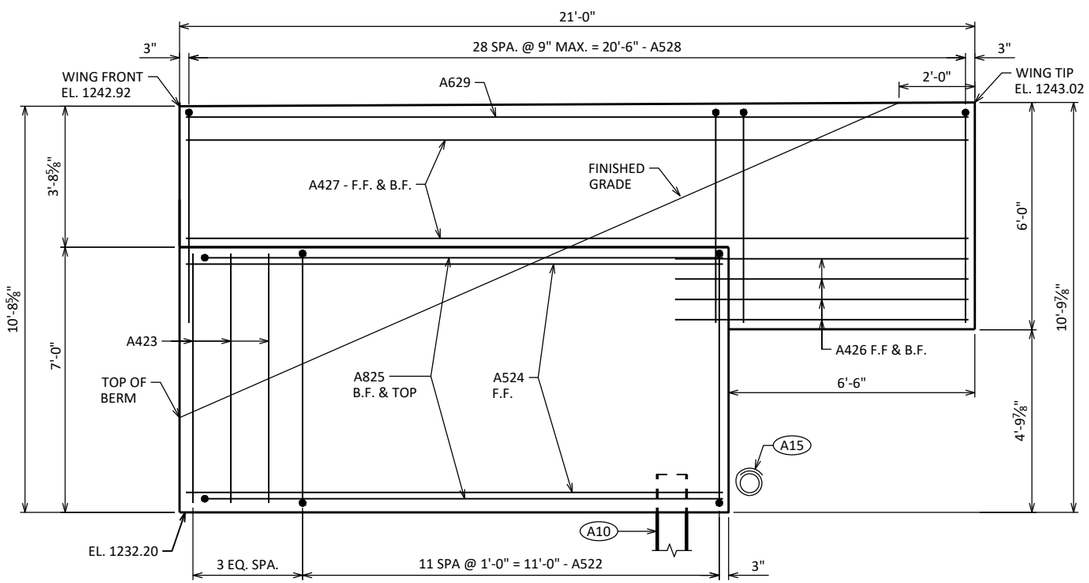


WING 1 ELEVATION



SECTION THRU WING 1



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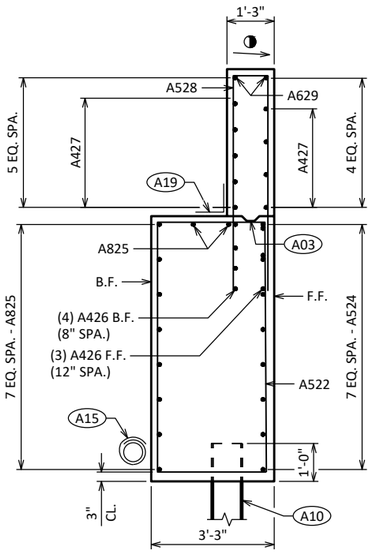
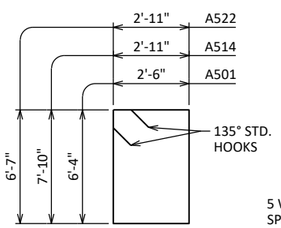
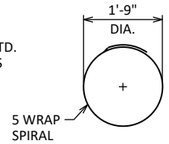


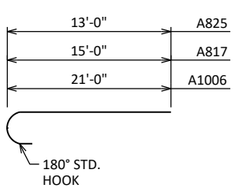
SECTION THRU WING 2



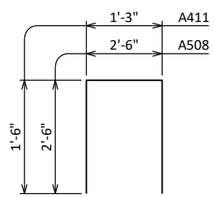
A501, A514, A522



A402



A1006, A817, A825



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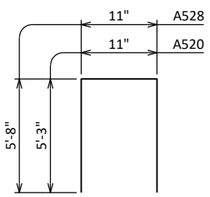


A520, A528

◑ SLOPE TO DRAIN.

(A03) OPTIONAL CONST. JOINT FORMED BY A BEVELED 2X6 KEYWAY.

(A10) SUPPORT ABUTMENT ON 12¾" DIA. X 0.50" CIP CONCRETE PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 190 TONS. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

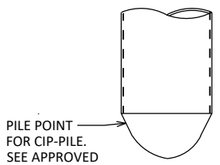
STATE PROJECT NUMBER

1550-04-79

BILL OF BARS

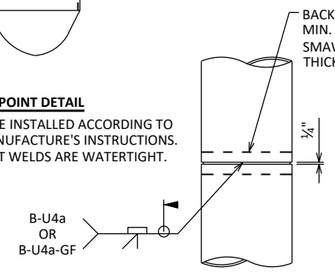
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A501		87	18'-4"	X		BODY - STIRRUPS - VERT.
A402		10	28'-0"	X		BODY - BOT. - SPIRAL - 1 PER BODY PILE
A403		20	2'-3"			BODY - BOT. - 2 PER BODY PILE - VERT.
A604		12	39'-0"			BODY - HORIZ. - F.F. - TOP & BOT.
A605		12	34'-0"			BODY - HORIZ. - F.F. - TOP & BOT.
A1006		14	22'-5"	X		BODY - HORIZ. - B.F. - ENDS
A607		7	33'-10"			BODY - HORIZ. - B.F. - CENTER
A508		57	7'-3"	X		BODY - VERT.
A409		6	38'-0"			BODY - HORIZ.
A410		3	20'-6"			BODY - HORIZ.
A411		46	4'-1"	X		BODY - VERT.
A412		2	36'-7"			BODY - HORIZ. - TOP
A413		2	33'-2"			BODY - HORIZ. - TOP
A514	X	12	22'-2"	X		WING 1 - STIRRUPS
A415	X	3	7'-10"			WING 1 - VERT. - END OF ABUT.
A516	X	9	14'-2"			WING 1 - HORIZ. - F.F.
A817	X	10	15'-11"	X		WING 1 - HORIZ. - B.F. & TOP
A418	X	7	7'-9"			WING 1 - HORIZ.
A419	X	7	20'-8"			WING 1 - HORIZ. - F.F. & B.F.
A520	X	29	11'-2"	X		WING 1 - VERT.
A621	X	2	20'-8"			WING 1 - HORIZ. - TOP
A522	X	12	19'-8"	X		WING 2 - STIRRUPS
A423	X	3	6'-7"			WING 2 - VERT. - END OF ABUT.
A524	X	8	14'-0"			WING 2 - HORIZ. - F.F.
A825	X	10	13'-11"	X		WING 2 - HORIZ. - B.F. & TOP
A426	X	7	7'-9"			WING 2 - HORIZ.
A427	X	9	20'-5"			WING 2 - HORIZ. - F.F. & B.F.
A528	X	29	12'-0"	X		WING 2 - VERT.
A629	X	2	20'-5"			WING 2 - HORIZ. - TOP

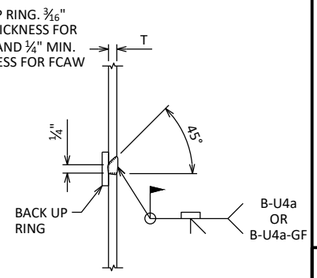


PILE POINT DETAIL

PILE POINT SHALL BE INSTALLED ACCORDING TO THE PILE POINT MANUFACTURE'S INSTRUCTIONS. ENSURE PILE POINT WELDS ARE WATERTIGHT.



CAST-IN-PLACE 'PIPE' PILE



C.I.P. PILE WELD DETAIL

CIP PILE DETAILS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

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SOUTH ABUTMENT DETAILS

SHEET 5
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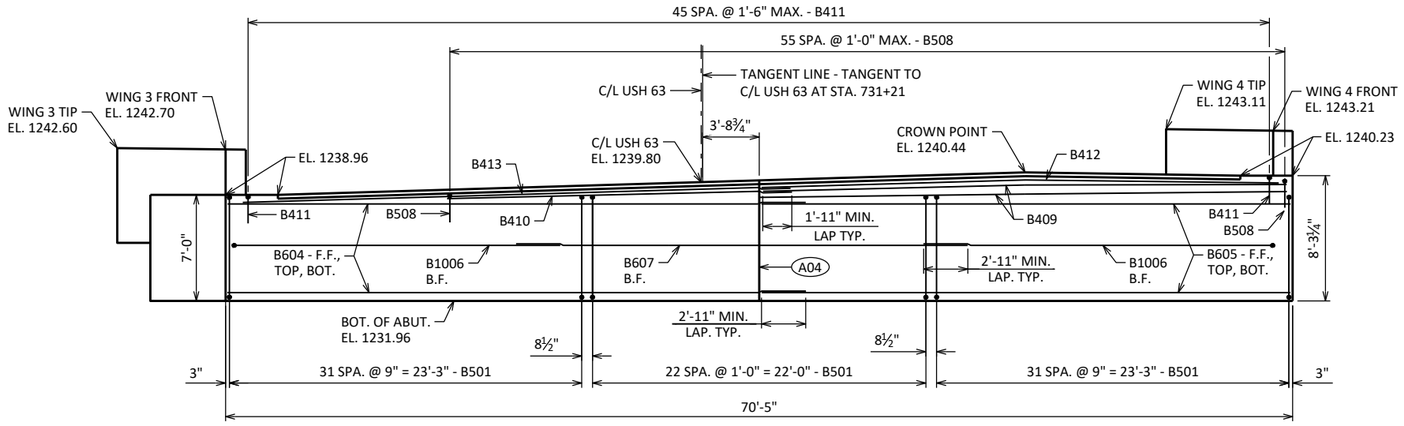
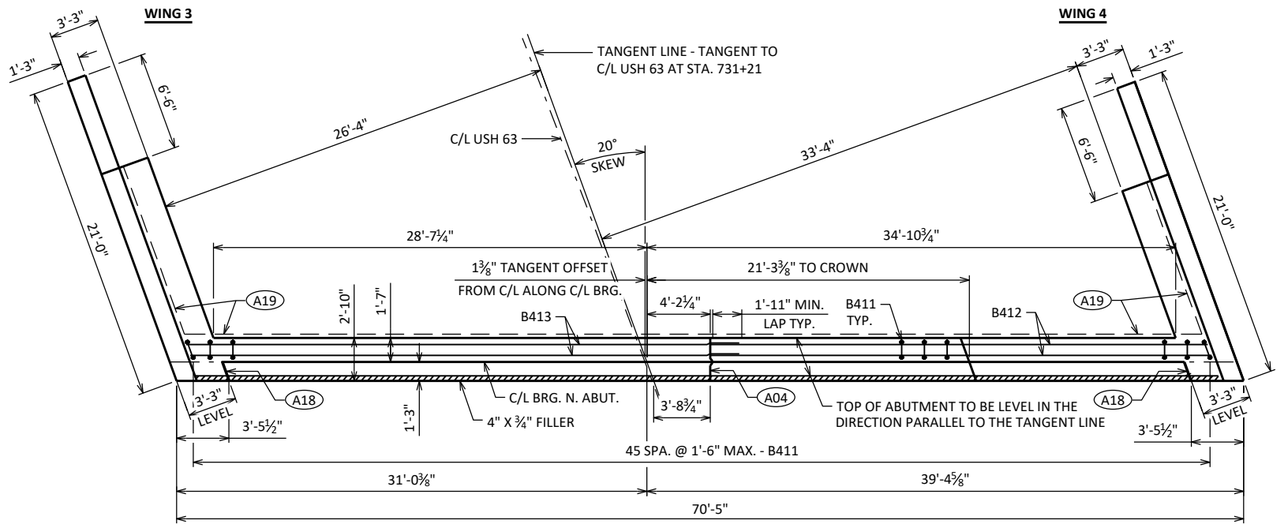
STATE PROJECT NUMBER

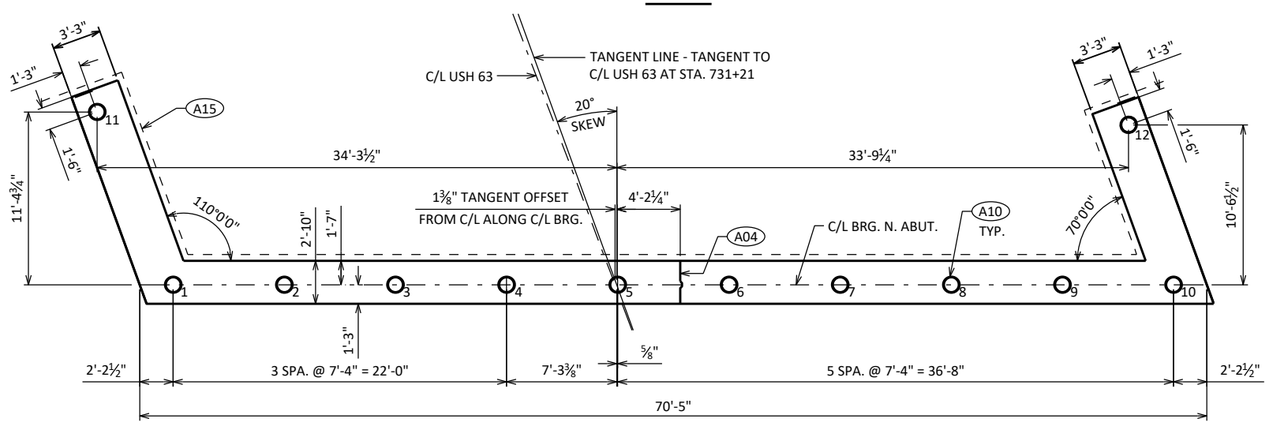
1550-04-79



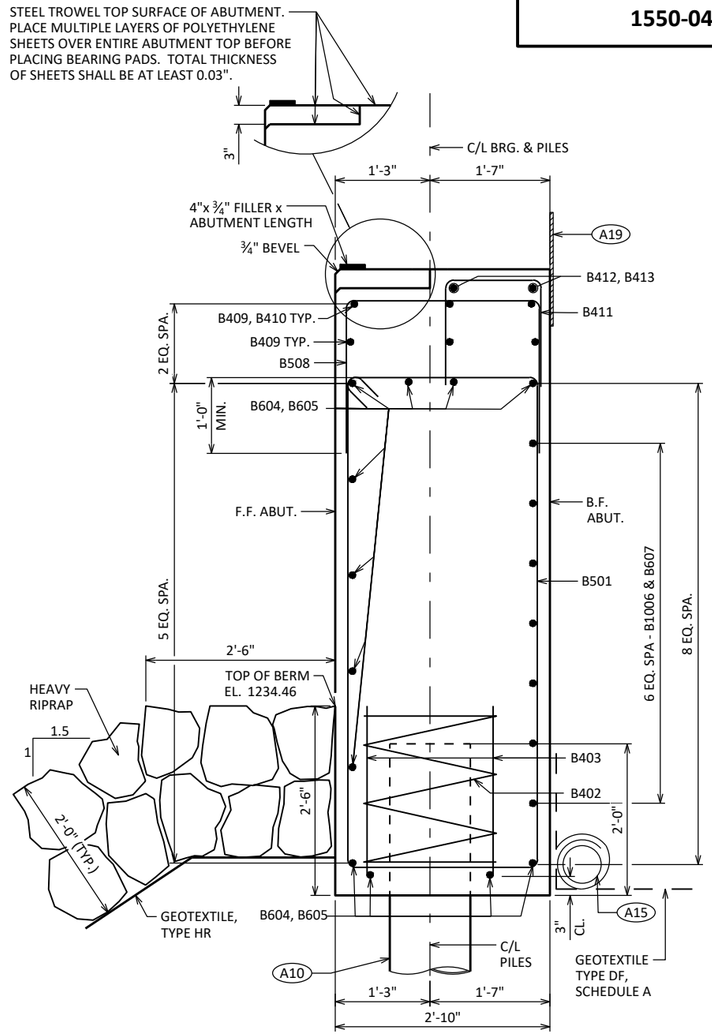
ELEVATION - LOOKING NORTH



PLAN



PILE PLAN



SECTION THRU BODY

A04 VERT. CONST. JOINT: KEYWAY FORMED BY A BEVELED 2 x 8. ¾" "V" GROOVE @ THE FRONT FACE AND 18" RMW @ BACKFACE. FOR OPTIONAL DETAILS SEE "ALTERNATE CONSTRUCTION JOINT" SHEET.

A10 SUPPORT ABUTMENT ON 12¾" DIA. X 0.50" CIP CONCRETE PILING, ESTIMATED 110'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 190 TONS. PILE POINTS REQUIRED.

A15 PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

A18 ¾" CORK FILLER UP VERT. BEAM SEAT FACES THAT RUN PARALLEL WITH SKEW/TANGENT LINE.

A19 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

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NORTH ABUTMENT

SHEET 6
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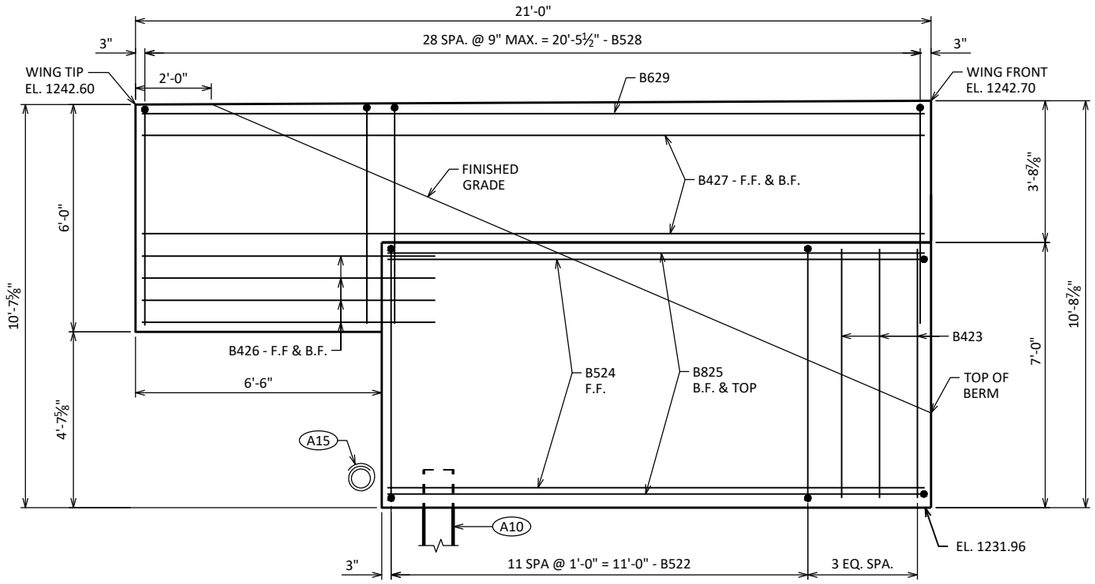
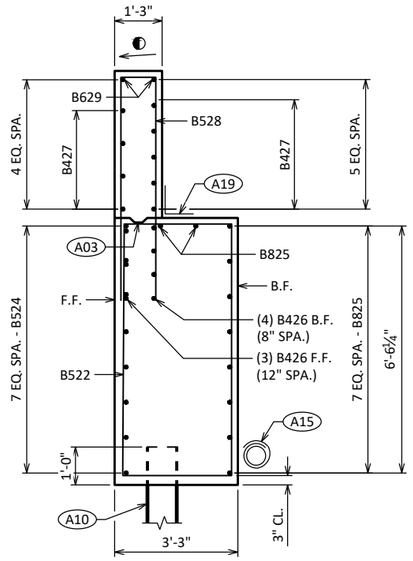
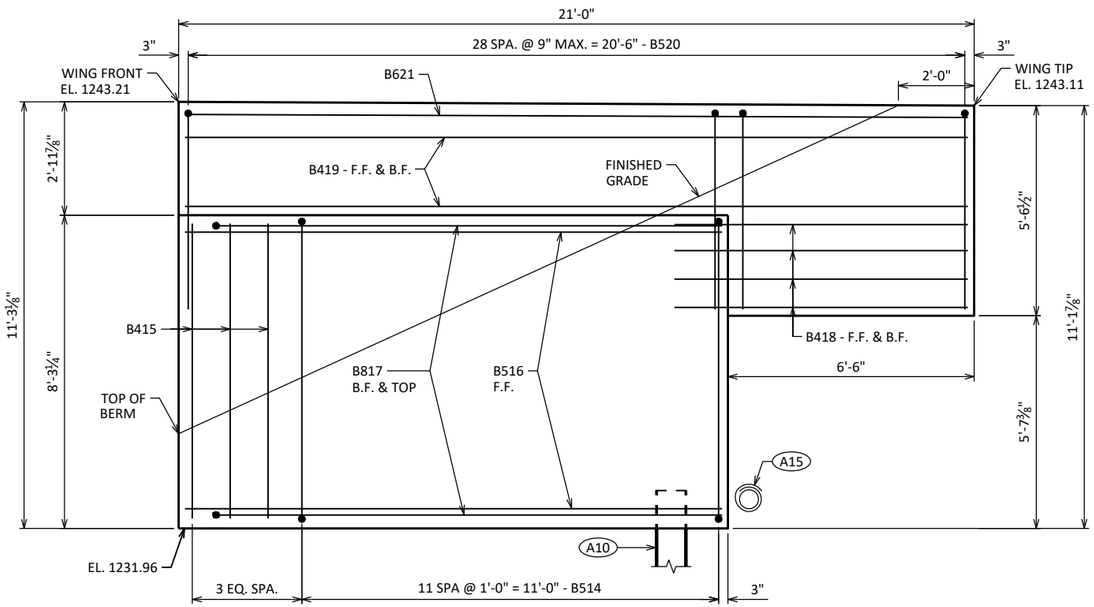


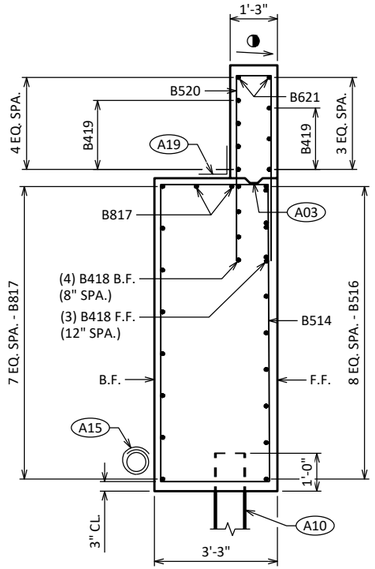
WING 3 ELEVATION



SECTION THRU WING 3



WING 4 ELEVATION

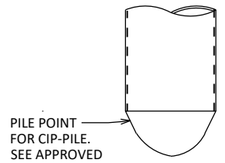


SECTION THRU WING 4

BILL OF BARS

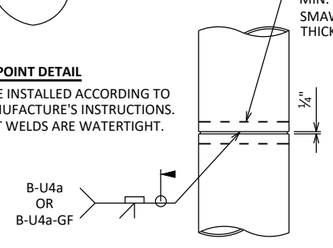
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
B501		87	18'-4"	X		BODY - STIRRUPS - VERT.
B402		10	28'-0"	X		BODY - BOT. - SPIRAL - 1 PER BODY PILE
B403		20	2'-3"			BODY - BOT. - 2 PER BODY PILE - VERT.
B604		12	39'-0"			BODY - HORIZ. - F.F., TOP & BOT.
B605		12	34'-0"			BODY - HORIZ. - F.F, TOP & BOT.
B1006		14	22'-5"	X		BODY - HORIZ - B.F. - ENDS
B607		7	33'-10"			BODY - HORIZ. - B.F. - CENTER
B508		57	7'-3"	X		BODY - VERT.
B409		6	38'-0"			BODY - HORIZ.
B410		3	20'-6"			BODY - HORIZ.
B411		46	4'-1"	X		BODY - VERT.
B412		2	36'-7"			BODY - HORIZ. - TOP
B413		2	33'-2"			BODY - HORIZ. - TOP
B514	X	12	22'-2"	X		WING 4 - STIRRUPS
B415	X	3	7'-10"			WING 4 - VERT. - END OF ABUT.
B516	X	9	14'-0"			WING 4 - HORIZ. - F.F.
B817	X	10	13'-11"	X		WING 4 - HORIZ. - B.F. & TOP
B418	X	7	7'-9"			WING 4 - HORIZ.
B419	X	7	20'-5"			WING 4 - HORIZ. - F.F. & B.F.
B520	X	29	11'-0"	X		WING 4 - VERT.
B621	X	2	20'-5"			WING 4 - HORIZ. - TOP
B522	X	12	19'-8"	X		WING 3 - STIRRUPS
B423	X	3	6'-7"			WING 3 - VERT. - END OF ABUT.
B524	X	8	14'-2"			WING 3 - HORIZ. - F.F.
B825	X	10	15'-11"	X		WING 3 - HORIZ. - B.F. & TOP
B426	X	7	7'-9"			WING 3 - HORIZ.
B427	X	9	20'-8"			WING 3 - HORIZ. - F.F. & B.F.
B528	X	29	12'-0"	X		WING 3 - VERT.
B629	X	2	20'-8"			WING 3 - HORIZ. - TOP

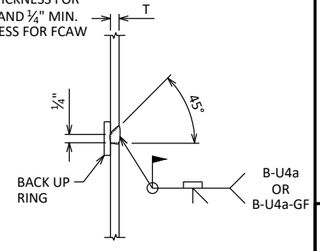


PILE POINT DETAIL

PILE POINT SHALL BE INSTALLED ACCORDING TO THE PILE POINT MANUFACTURE'S INSTRUCTIONS. ENSURE PILE POINT WELDS ARE WATERTIGHT.

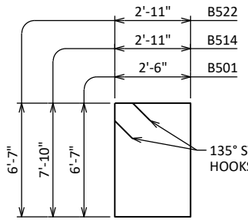


CAST-IN-PLACE 'PIPE' PILE

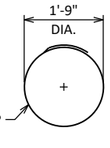


C.I.P. PILE WELD DETAIL

CIP PILE DETAILS



B501, B514, B522



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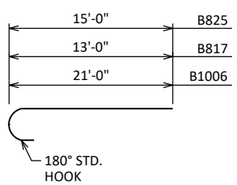
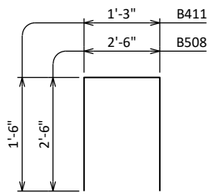
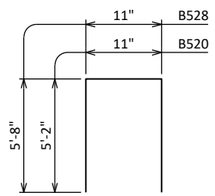


B1006, B817, B825



B508, B411



B520, B528

◑ SLOPE TO DRAIN.

(A03) OPTIONAL CONST. JOINT FORMED BY A BEVELED 2X6 KEYWAY.

(A10) SUPPORT ABUTMENT ON 12¾" DIA. X 0.50" CIP CONCRETE PILING, ESTIMATED 90'-0" LONG WITH A REQUIRED DRIVING RESISTANCE OF 190 TONS. PILE POINTS REQUIRED.

(A15) PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. RODENT SHIELD REQUIRED.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

DRAWN BY LIH | PLANS CK'D CAD

NORTH ABUTMENT DETAILS

SHEET 7
176

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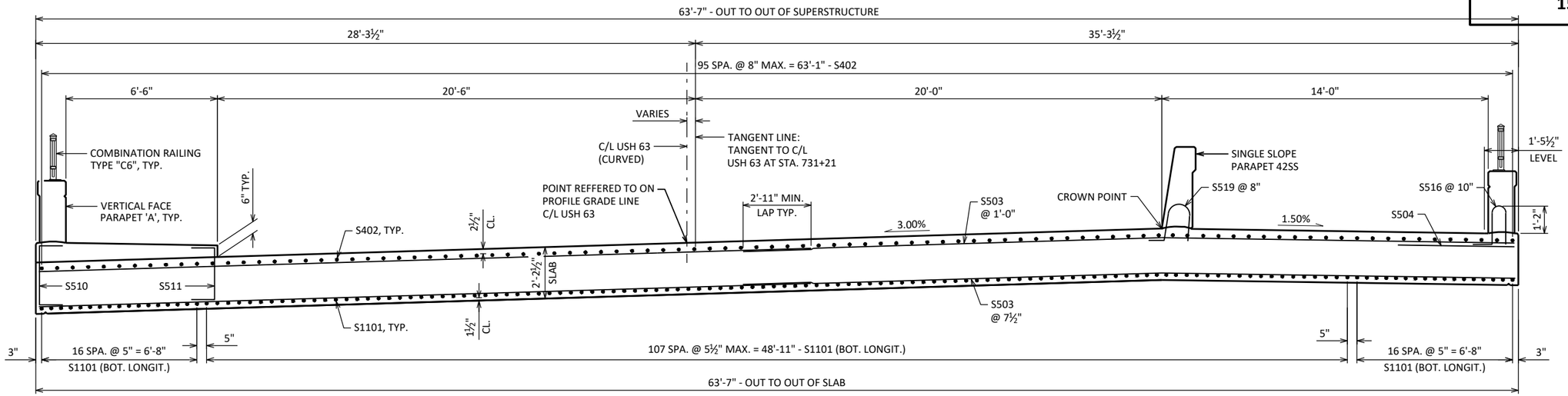
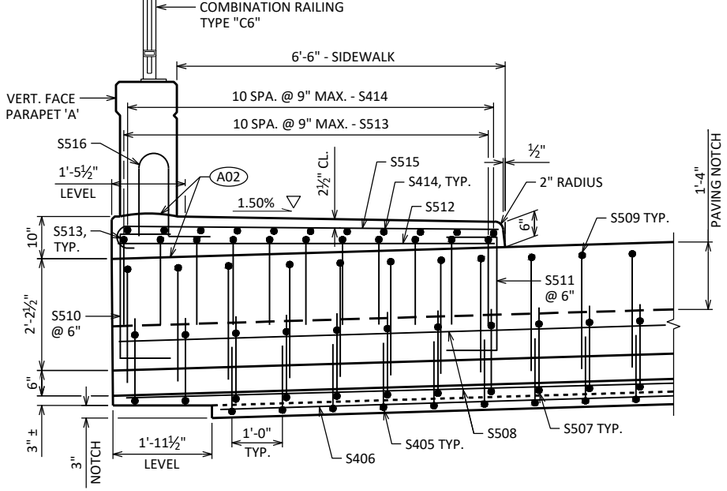
STATE PROJECT NUMBER

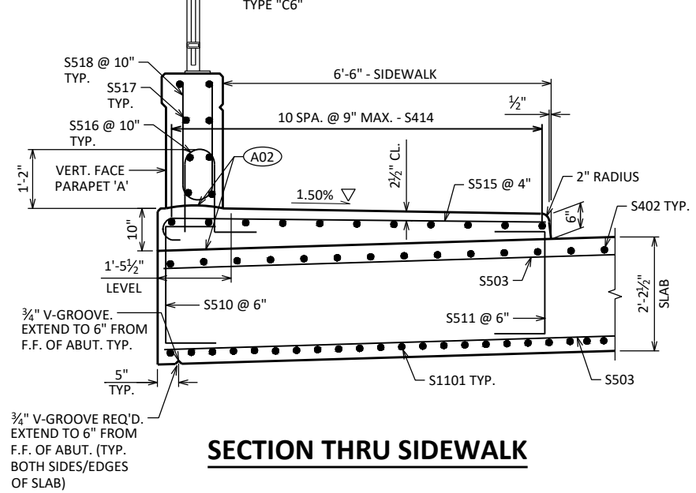
1550-04-79



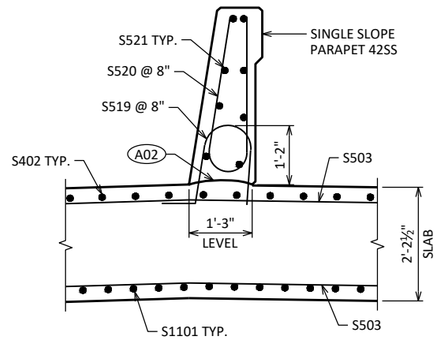
CROSS SECTION THRU ROADWAY



SECTION THRU SIDEWALK AT ABUT. DIAPHRAGM



SECTION THRU SIDEWALK



SECTION THRU INT. PARAPET

NOTES

FILL IN THE TABLE OF "SURVEY TOP OF SLAB ELEVATIONS" ON AS BUILT PLANS.

☆ EDGE OF SLAB ELEVATION IS THE TOP OUTER EDGE OF THE SLAB BENEATH SIDEWALK. (FOR SIDEWALK OR OPEN RAILING APPLICATIONS)

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 BAR CHAIRS AT APPROXIMATELY 4'-0" CENTERS.

ALL SLAB THICKNESS DIMENSIONS ARE MINIMUM. ANY TOLERANCES NECESSARY TO CORRECT CONSTRUCTION DISCREPANCIES ARE TO BE PLUS (+).

PARAPETS AND SIDEWALK PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

(A02) CONST. JOINT - STRIKE OFF AND LEAVE ROUGH AS SHOWN

▽ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

TOP OF SLAB ELEVATIONS

LOCATION	C/L S. ABUT.	1/10 PT.	2/10 PT.	3/10 PT.	4/10 PT.	5/10 PT.	6/10 PT.	7/10 PT.	8/10 PT.	9/10 PT.	C/L N. ABUT.
W. EDGE OF SLAB	1242.11	1242.08	1242.05	1242.03	1242.00	1241.98	1241.96	1241.93	1241.91	1241.88	1241.86
W. GUTTERLINE	1242.35	1242.32	1242.30	1242.27	1242.25	1242.22	1242.20	1242.17	1242.15	1242.12	1242.10
C/L USH 63	1243.00	1242.97	1242.95	1242.92	1242.90	1242.87	1242.85	1242.82	1242.80	1242.77	1242.75
CROWN POINT	1243.64	1243.61	1243.59	1243.56	1243.53	1243.51	1243.48	1243.46	1243.43	1243.41	1243.39
E. EDGE OF SLAB	1243.46	1243.43	1243.40	1243.38	1243.35	1243.33	1243.30	1243.28	1243.25	1243.23	1243.20

SURVEY TOP OF SLAB ELEVATIONS

LOCATION	C/L BRG. WEST ABUTMENT	5/10 PT.	C/L BRG. EAST ABUTMENT
WEST EDGE OF SLAB ☆			
C/L USH 63			
EAST EDGE OF SLAB ☆			

PRIOR TO RELEASING SLAB FALSEWORK, TAKE TOP OF SLAB ELEVATIONS AT THE C/L BRG. ABUTMENTS AND AT 5/10 POINTS TO VERIFY CAMBER. TAKE ELEVATIONS ALONG EDGES OF SLAB AND C/L USH 63. RECORD THE ELEVATIONS IN THE ABOVE TABLE FOR THE "AS BUILT" PLANS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

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SUPERSTRUCTURE CROSS SECTION

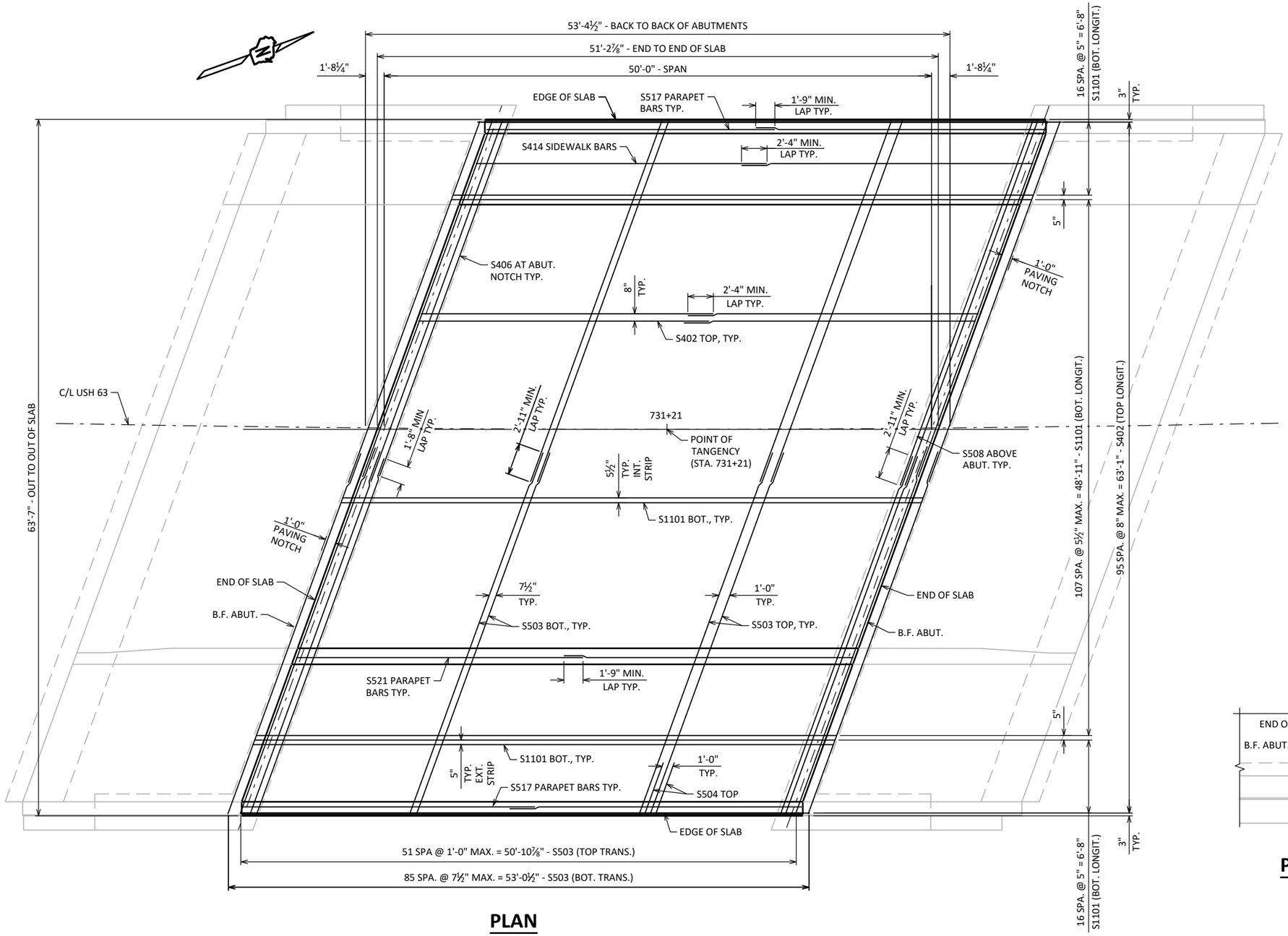
SHEET 8
177

8

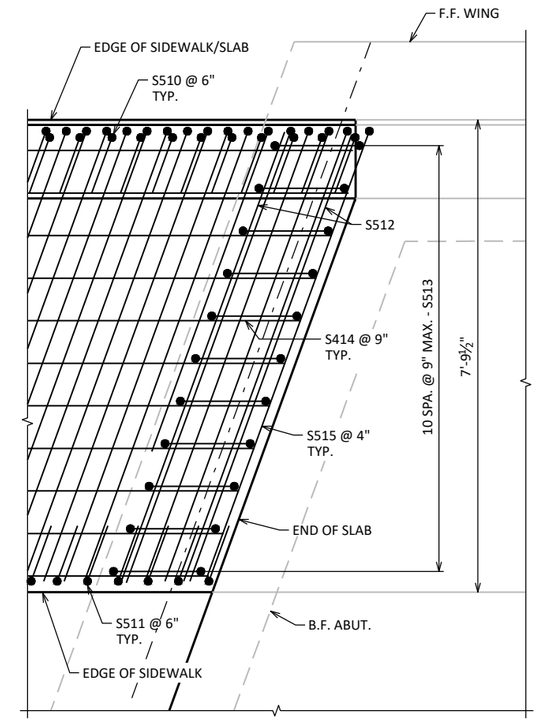
8

STATE PROJECT NUMBER

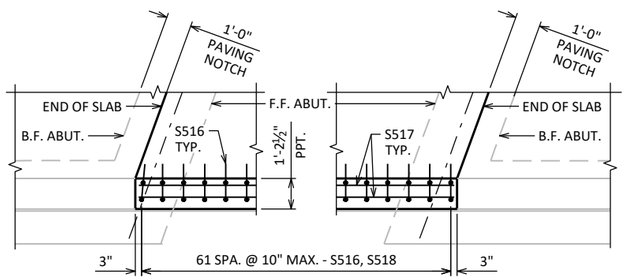
1550-04-79



PLAN



PARTIAL PLAN SHOWING SIDEWALK REINFORCEMENT



PARTIAL PLAN SHOWING EXTERIOR PARAPET REINFORCEMENT

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NO.	DATE	REVISION	BY

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STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

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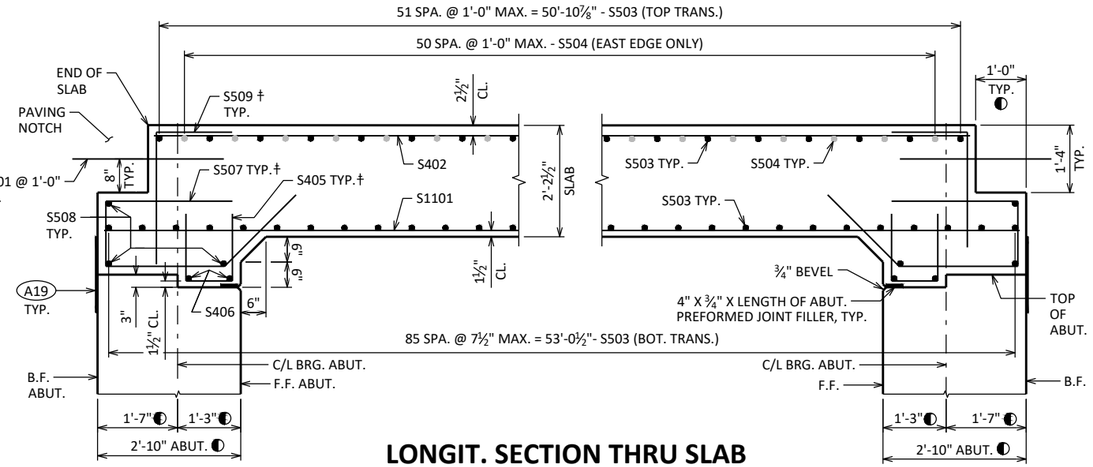
SUPERSTRUCTURE PLAN

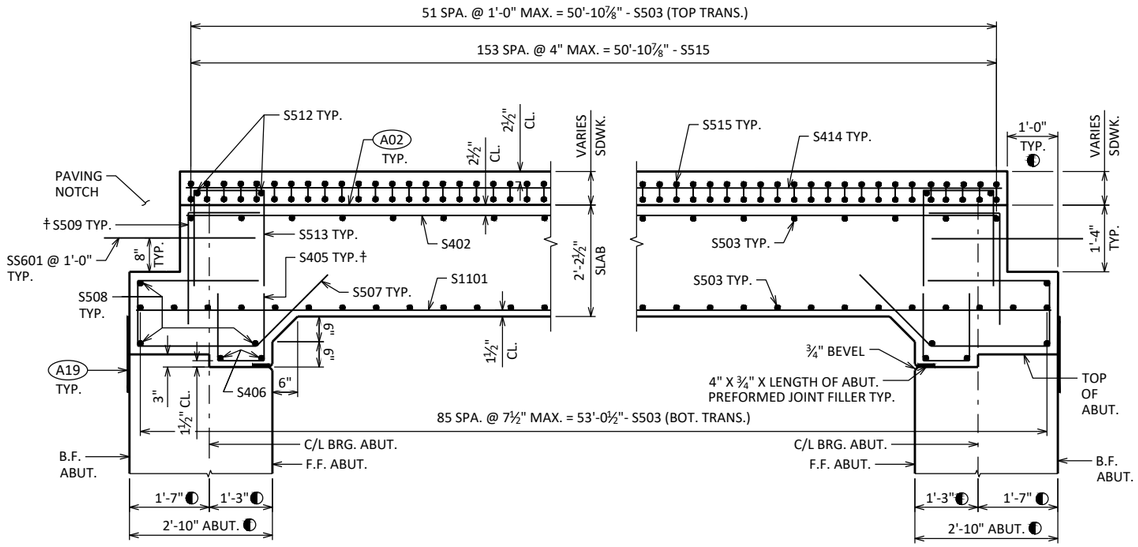
SHEET 9



LONGIT. SECTION THRU SLAB

◐ MEASURED NORMAL TO C/L OF ABUT.

‡ 1'-0" MAX. SPACING. BARS PLACED PARALLEL TO TANGENT LINE. SPACING PERPENDICULAR TO TANGENT LINE.



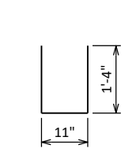
LONGIT. SECTION THRU SIDEWALK

◐ MEASURED NORMAL TO C/L OF ABUT.

‡ 1'-0" MAX. SPACING. BARS PLACED PARALLEL TO TANGENT LINE. SPACING PERPENDICULAR TO TANGENT LINE.

(A02) CONST. JOINT: POUR CONCRETE ABOVE THIS JOINT AFTER SUPERSTRUCTURE CONCRETE IS IN PLACE. STRIKE OFF AND LEAVE ROUGH.

(A19) 18" (RMW) RUBBERIZED MEMBRANE WATERPROOFING SEAL ALL HORIZ. & VERT. JOINTS AT BACKFACE.



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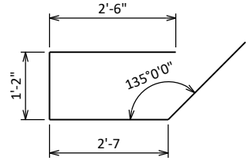

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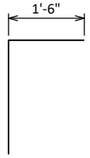

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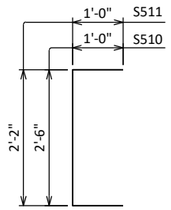
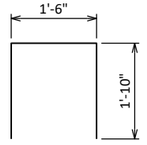


S510, S511



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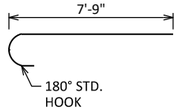
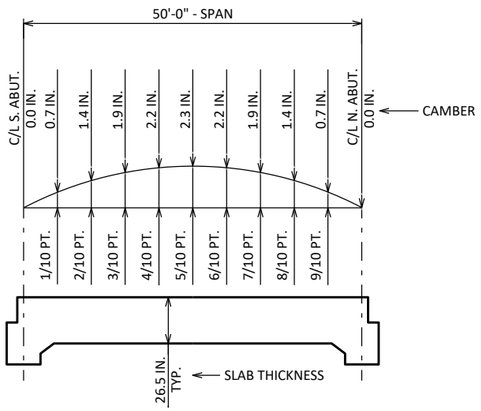


S515



CAMBER AND SLAB THICKNESS DIAGRAM

CAMBER SHOWN IS BASED ON 3 TIMES DEAD LOAD DEFLECTIONS. CAMBER SPANS AS SHOWN TO PROVIDE FOR DEAD LOAD DEFLECTION AND FUTURE CREEP. CAMBER DOES NOT INCLUDE ALLOWANCE FOR FORM SETTLEMENT.
PARAPETS AND SIDEWALKS PLACED ON TOP OF THE SLAB SHALL BE POURED AFTER FALSEWORK HAS BEEN RELEASED.

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

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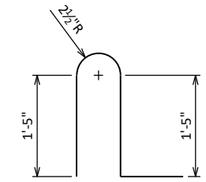
BILL OF BARS

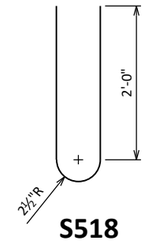
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
S1101	X	142	53'-0"			SLAB - BOT. - LONGIT.
S402	X	192	26'-7"			SLAB - TOP - LONGIT.
S503	X	276	35'-0"			SLAB - TOP & BOT. - TRANS.
S504	X	51	5'-0"			SLAB - TOP - TRANS. - EAST EDGE
S405	X	122	3'-5"	X		DIAPH. - BOT. - VERT. - AT NOTCH
S406	X	8	32'-5"			DIAPH. - BOT. - HORIZ. - AT NOTCH
S507	X	130	8'-0"	X		DIAPH. - BOT. - VERT.
S508	X	12	35'-1"			DIAPH. - BOT. - HORIZ.
S509	X	130	3'-11"	X		DIAPH. - VERT. - L-BARS
S510	X	102	4'-3"	X		SLAB/SIDEWALK - VERT. - TRANS.
S511	X	102	3'-11"	X		SLAB/SIDEWALK - VERT. - TRANS.
S512	X	4	7'-9"			SIDEWALK - TOP - HORIZ. - TRANS. - ABOVE ABUT.
S513	X	22	4'-11"	X		SIDEWALK/DIAPH. - VERT. - LONGIT. - ABOVE ABUT.
S414	X	22	26'-7"			SIDEWALK - HORIZ. - LONGIT.
S515	X	154	8'-4"	X		SIDEWALK - TOP - HORIZ. -TRANS.
S516	X	124	4'-4"	X		EXT. PARAPET - VERT.
S517	X	32	26'-4"			EXT. PARAPET - HORIZ.
S518	X	124	4'-9"	X		EXT. PARAPET - VERT.
S519	X	78	4'-5"	X		INT. PARPAPET - VERT.
S520	X	78	6'-8"	X		INT. PARAPET - VERT.
S521	X	16	26'-7"			INT. PARAPET - HORIZ.
SS601	X	128	3'-0"			SLAB TO APPROACH SLAB

STAINLESS STEEL REINFORCEMENT



S516



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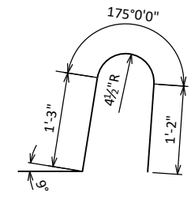

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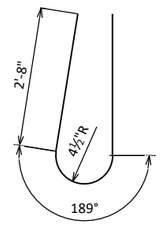

S520

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
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STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

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SUPERSTRUCTURE DETAILS

SHEET 10
179

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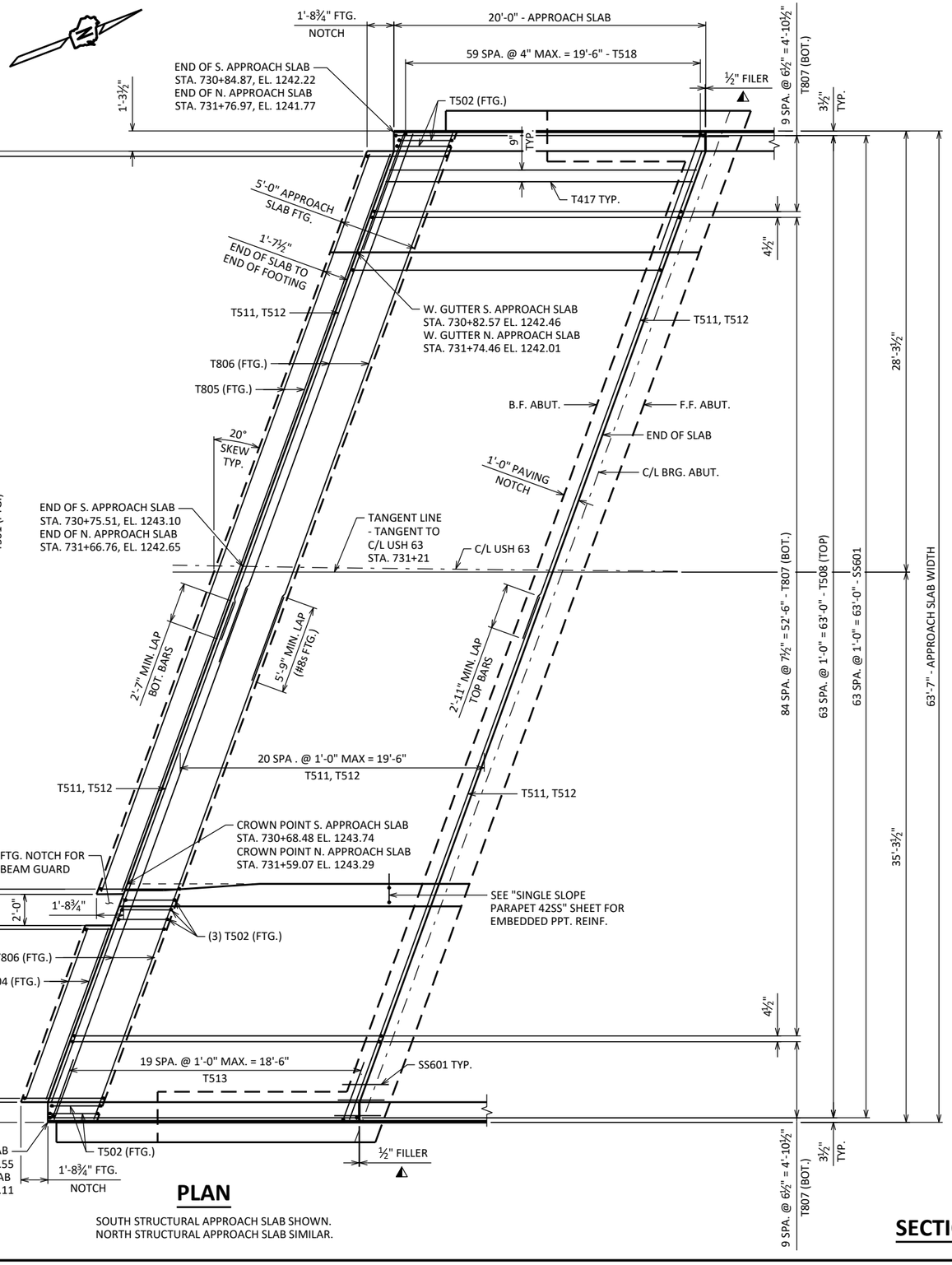
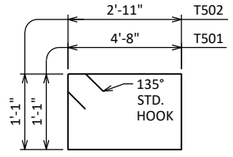
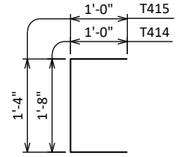


PLAN

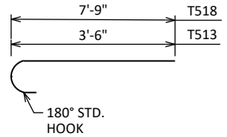
SOUTH STRUCTURAL APPROACH SLAB SHOWN.
NORTH STRUCTURAL APPROACH SLAB SIMILAR.



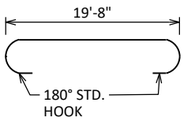
T501, T502



T414, T415



T513, T518



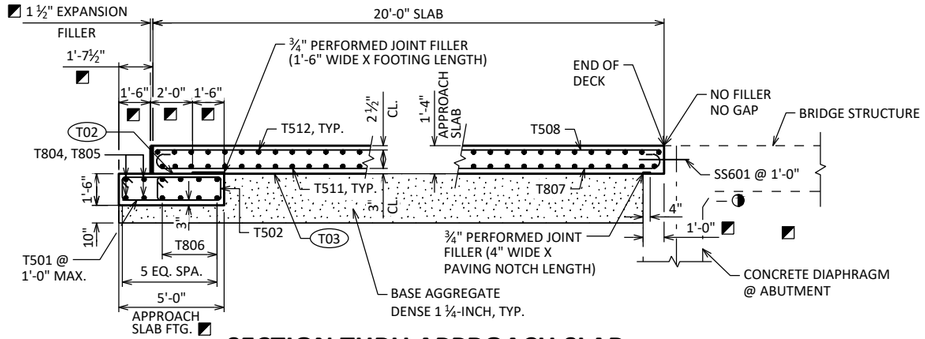
T807

BILL OF BARS

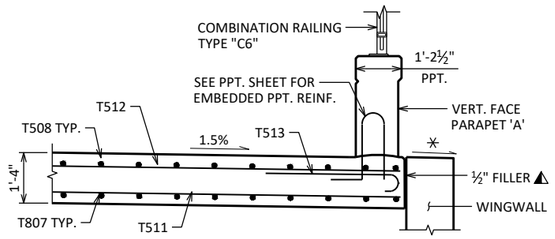
NOTE: THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.

BAR MARK	COAT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
T501	X	120	12'-2"	X		APPROACH SLAB FTG. - STIRRUP
T502	X	14	8'-8"	X		APPROACH SLAB FTG. - STIRRUP - @ NOTCHES
						NOT USED
T804	X	8	11'-8"			APPROACH SLAB FTG. - TRANS
T805	X	8	50'-4"			APPROACH SLAB FTG. - TRANS
T806	X	32	36'-7"			APPROACH SLAB FTG. - TRANS
T807	X	210	21'-6"	X		APPROACH SLAB - LONIT. - BOT.
T508	X	128	19'-8"			APPROACH SLAB - LONIT. - TOP
						NOT USED
						NOT USED
T511	X	84	35'-0"			APPROACH SLAB - TRANS. - BOT.
T512	X	84	35'-2"			APPROACH SLAB - TRANS. - TOP
T513	X	40	4'-1"	X		APPROACH SLAB - TRANS. - TOP - EDGE
T414	X	80	3'-6"			APPROACH SLAB/SIDEWALK - VERT. - EDGE
T415	X	80	3'-2"			APPROACH SLAB/SIDEWALK - VERT. - EDGE
						NOT USED
T417	X	22	19'-8"			SIDEWALK - LONGIT. - TOP & BOT.
T518	X	120	8'-4"	X		SIDEWALK - TRANS. - TOP

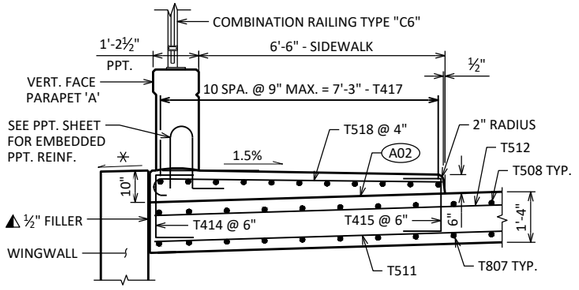
NOTE: SEE PARAPET SHEETS FOR ADDITIONAL PARAPET REINFORCEMENT EMBEDDED IN APPROACH SLABS.



SECTION THRU APPROACH SLAB



SECTION THRU EAST EDGE OF APPROACH SLAB



SECTION THRU SIDEWALK/WEST EDGE OF APPROACH SLAB

- ⚹ SLOPE TO DRAIN
- ◭ SEAL ALL EXPOSED HORIZONTAL AND VERTICAL SURFACES OF ½" FILLER WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP AND HOLD ⅛" BELOW SURFACE OF CONCRETE).
- ◑ APPLY PROTECTIVE SURFACE TREATMENT TO PAVING NOTCH SURFACES PRIOR TO POURING STRUCTURAL APPROACH SLAB.
- ◩ MEASURED NORMAL TO ABUTMENT.
- (T02) CONST. JOINT-STRIKE OFF AS SHOWN AND LEAVE ROUGH. FOR APPROACH SLAB POUR, MATCH BRIDGE SLOPE.
- (T03) STEEL TROWEL TOP SURFACE OF FOOTING AND PLACE MULTIPLE LAYERS (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE LENGTH OF THE FOOTING.

  PLACE MULTIPLE LAYER (0.03" MIN. TOTAL THK.) OF POLYETHYLENE SHEETS OVER THE ENTIRE TOP OF SUBGRADE BENEATH SLAB.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

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STRUCTURAL APPROACH SLAB

SHEET 11
180

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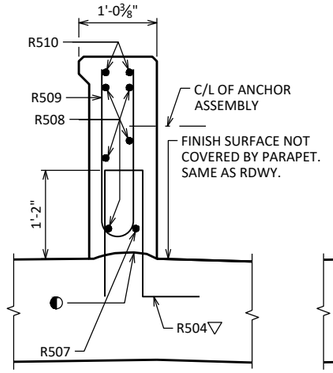
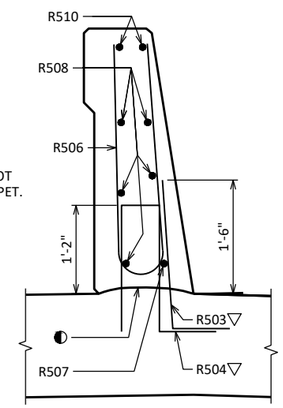
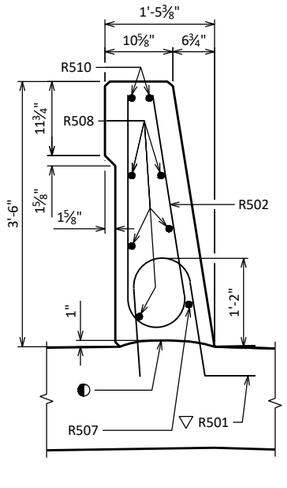
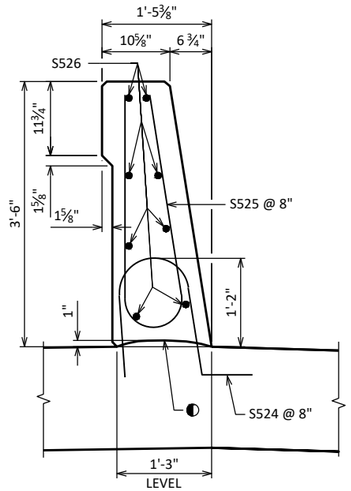
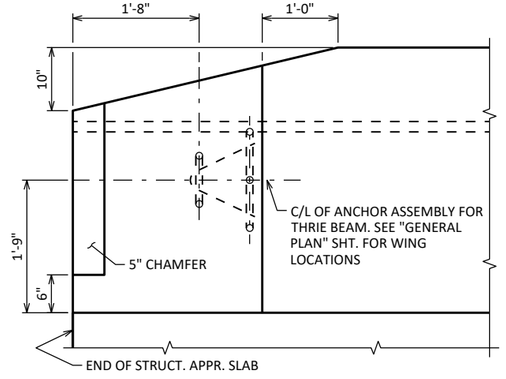










PARAPET END TREATMENT DETAIL

LOOKING AT INSIDE FACE OF PARAPET

BILL OF BARS

FOR STRUCTURAL APPOACH SLAB PARAPETS

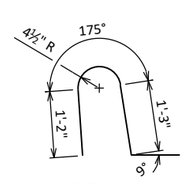
BAR MARK	COAT	S. ABUT.	N. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R501	X	14	14	4'-5"	X		PARAPET VERT.
R502	X	14	14	6'-8"	X		PARAPET VERT.
R503	X	12	12	2'-9"	X		PARAPET VERT.
R504	X	17	17	4'-4"	X		PARAPET VERT.
R505	X	5	5	6'-5"	X		PARAPET VERT.
R506	X	6	6	6'-6"	X		PARAPET VERT.
R507	X	1	1	19'-7"	X		PARAPET HORIZ.
R508	X	5	5	19'-8"			PARAPET HORIZ.
R509	X	6	6	5'-5"	X	⚠	PARAPET VERT.
R510	X	2	2	19'-7"	X		PARAPET HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY.

BAR MARK	NO. REQ'D.	LENGTH
R509	2 SERIES OF 6	4'-9" TO 6'-1"



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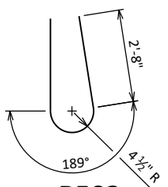

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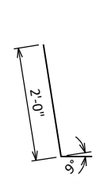
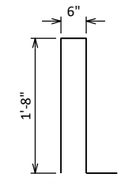
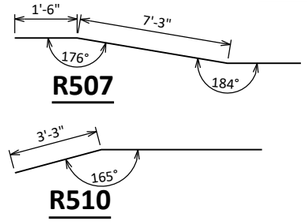


R503

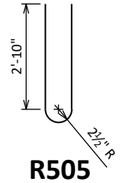


R504



R507

R510



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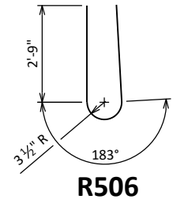

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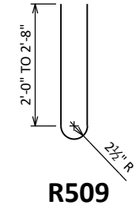


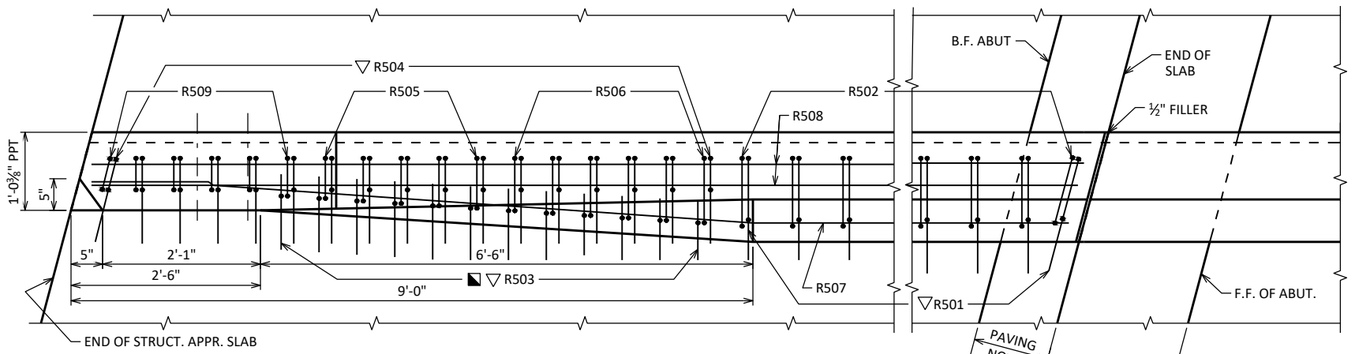
R509

SECTION A-A

SECTION B-B

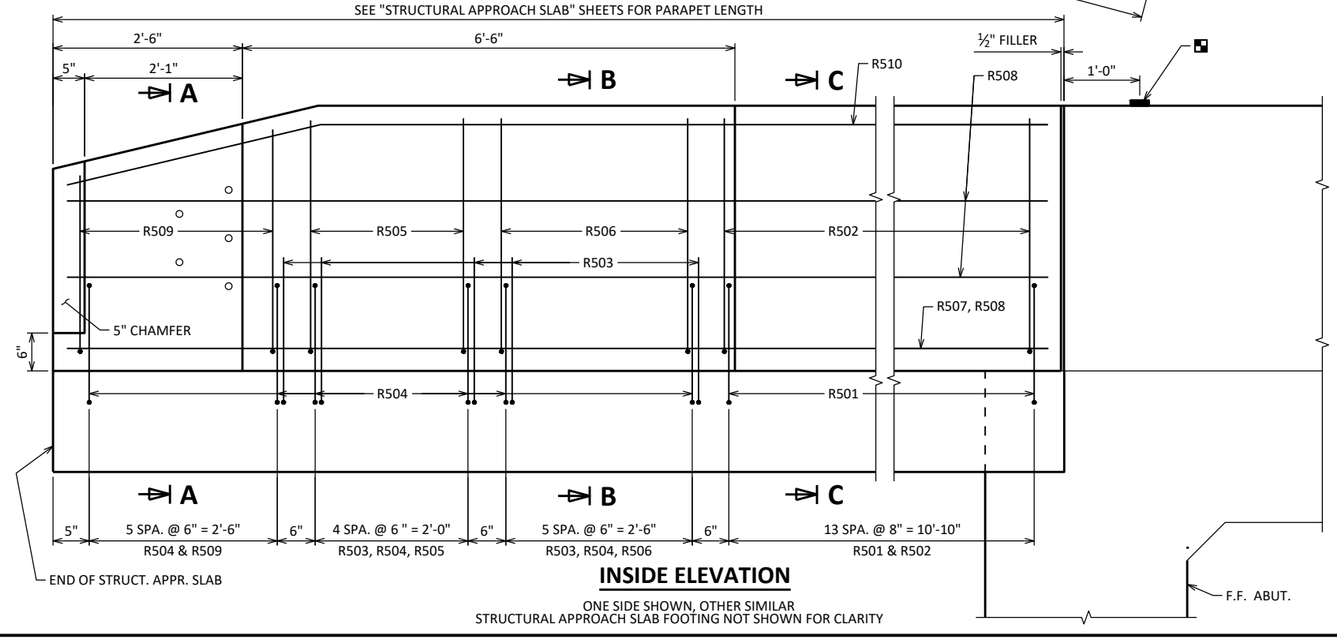
SECTION C-C

SECTION THRU PARAPET ON DECK



PLAN

ONE SIDE SHOWN, OTHER SIMILAR



INSIDE ELEVATION

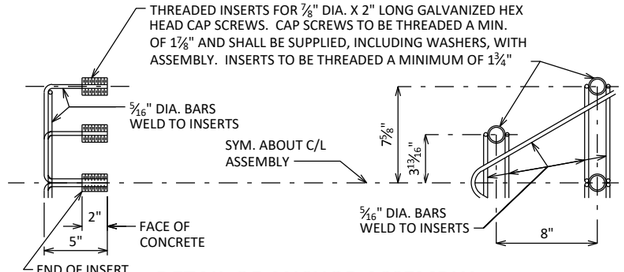
ONE SIDE SHOWN, OTHER SIMILAR
STRUCTURAL APPROACH SLAB FOOTING NOT SHOWN FOR CLARITY

■ BENCH MARK CAP - SEE GENERAL PLAN SHEET FOR LOCATION.

◐ CONST. JOINT - STRIKE OFF AS SHOWN

◪ USE CARE TO PLACE R503 BARS CORRECTLY ALONG TRANSITION OF PARAPET.

▽ R501, R503, AND R504 BARS TO BE TIED TO STRUCTURAL APPROACH SLAB STEEL BEFORE STRUCTURAL APPROACH SLAB IS POURED.



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.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

DRAWN BY LIH | PLANS CK'D CAD

SINGLE SLOPE PARAPET 42SS

SHEET 12
181

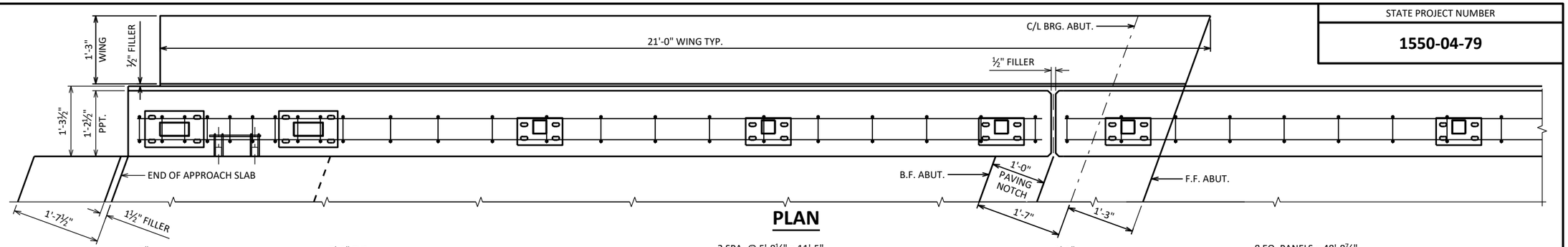
SCALE = 2.00

8

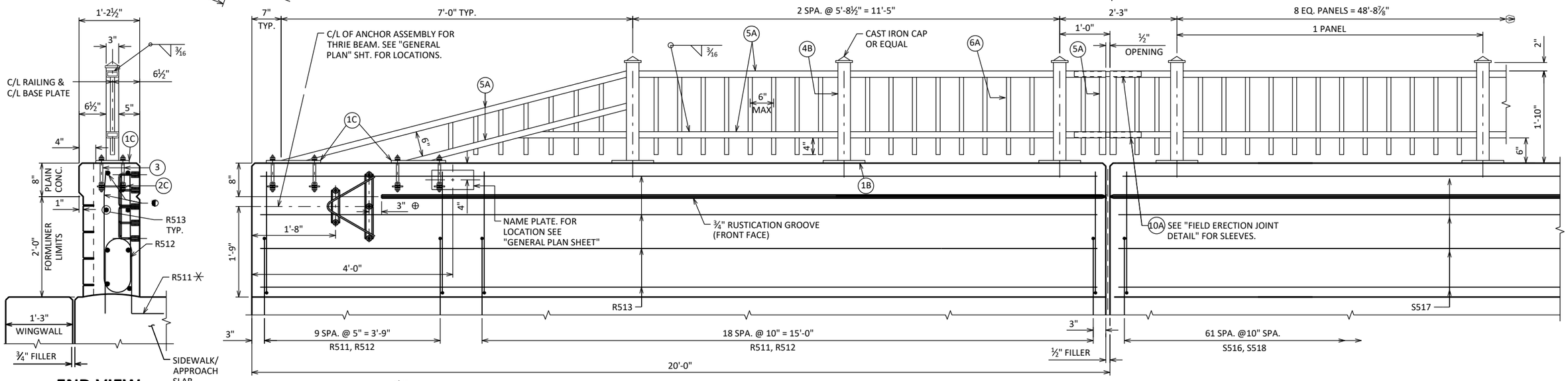
8

STATE PROJECT NUMBER

1550-04-79

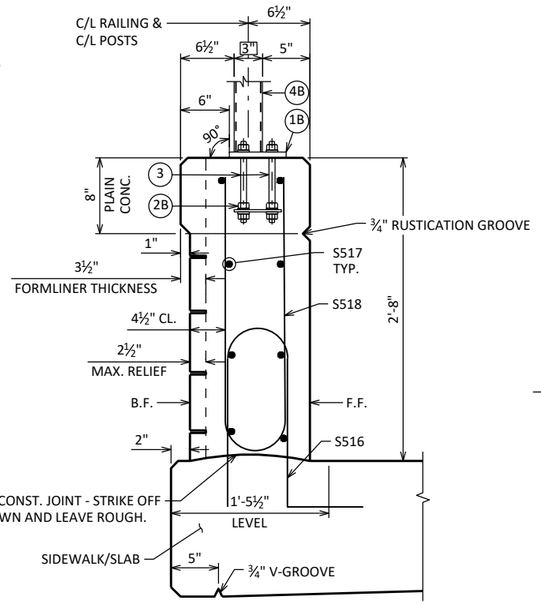


PLAN



END VIEW

◐ WHEN ADHESIVE ANCHORS ARE USED, FIELD BEND AND/OR DISPLACE TO AVOID HITTING LONGITUDINAL BAR WHEN DRILLING FOR ADHESIVE ANCHORS.



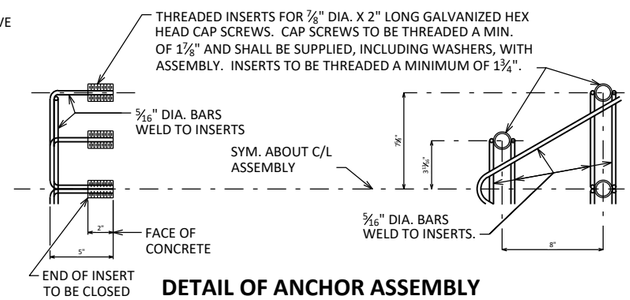
SECTION THRU PARAPET ON BRIDGE

✳ ADJUST LOCATIONS OF BARS TO ALLOW PLACEMENT OF ANCHOR ASSEMBLY FOR RAILING AND BEAM GUARD.

ELEVATION OF PARAPET

SEE "COMBINATION RAIL TYPE C6 DETAILS" SHEET FOR RAILING LEGEND.

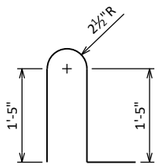
⊕ EXTEND ¾" GROOVE TO END OF PARAPET WHEN ANCHOR ASSEMBLY IS NOT USED.



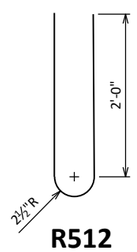
DETAIL OF ANCHOR ASSEMBLY

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.



R511



R512

BILL OF BARS

FOR STRUCTURAL APPOACH SLAB PARAPETS

BAR MARK	COAT	S. ABUT.	N. ABUT.	LENGTH	BENT	BAR SERIES	LOCATION
R511	X	58	58	4'-4"	X		PARAPET VERT.
R512	X	58	58	4'-9"	X		PARAPET VERT.
R513	X	16	16	19'-8"			PARAPET HORIZ.

⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

DRAWN BY LIH | PLANS CK'D CAD

PARAPET 'A' & COMBINATION RAILING TYPE "C6"

SHEET 13
182

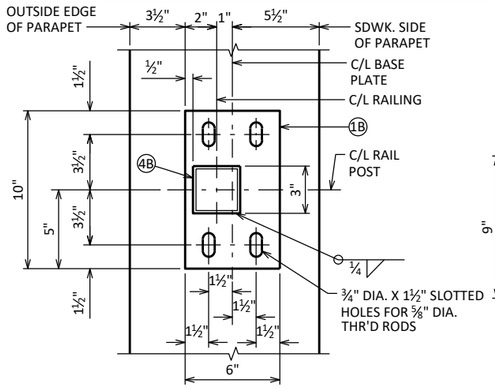
SCALE = 2.00

8

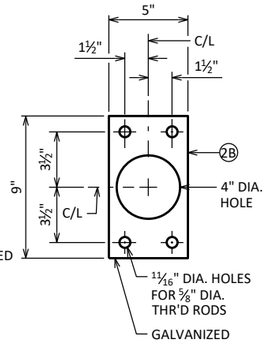
8

STATE PROJECT NUMBER

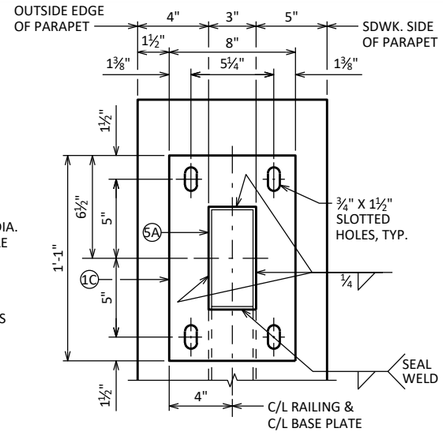
1550-04-79



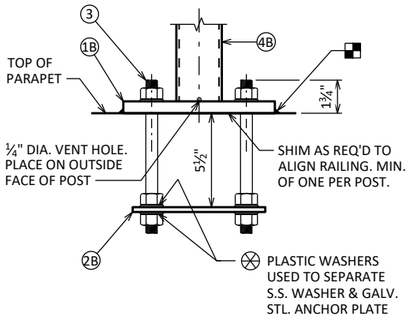
TYPICAL RAIL POST BASE PLATE



ANCHOR PLATE

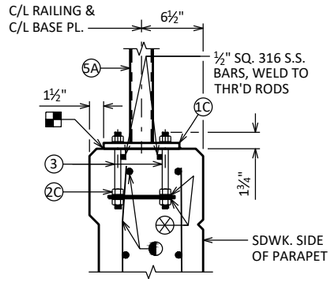


END RAIL BASE PLATE



ANCHORAGE FOR RAIL POSTS

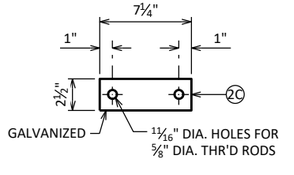
NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.



ANCHORAGE FOR END RAIL

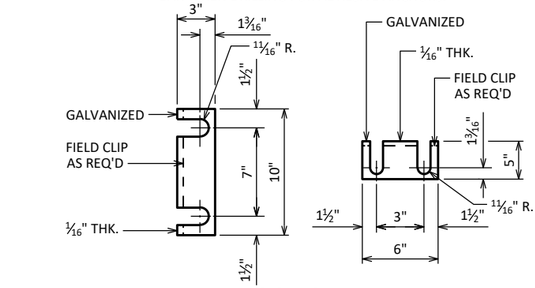
NOTE: ANCHOR PLATE NOT REQUIRED WHEN ADHESIVE ANCHORS ARE USED.

◐ WHEN ADHESIVE ANCHORS ARE USED, FIELD BEND AND/OR DISPLACE TO AVOID HITTING LONGITUDINAL BAR WHEN DRILLING FOR ADHESIVE ANCHORS.



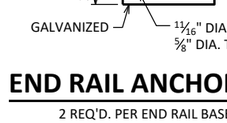
END RAIL ANCHOR PLATE

2 REQ'D. PER END RAIL BASE PLATE



RAIL POST SHIM DETAIL

(2 SETS PER POST)

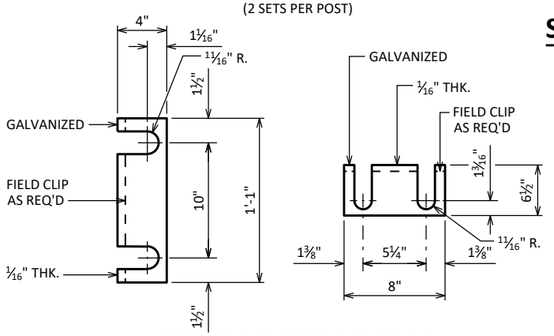


SHOP RAIL SPLICE DETAIL

(LOCATION MUST BE SHOWN ON SHOP DRAWINGS)

FIELD ERECTION JOINT DETAIL

☆ MIN. ⅝" FLAT SURFACE DIA. PUNCHINGS OR STUDS MAY BE USED AS AN ALTERNATE.



END RAIL SHIM DETAIL

(2 SETS PER POST)

LEGEND

- (1B) PLATE ⅝" X 6" X 10" WITH ¾" X 1½" SLOTTED HOLES.
- (1C) PLATE ⅝" X 8" X 1'-1" WITH ¾" X 1½" SLOTTED HOLES.
- (2B) ¼" X 5" X 9" ANCHOR PLATE WITH 1 1/16" DIA. HOLES FOR THR'D RODS NO. 3.
- (2C) ¼" X 2½" X 7¼" ANCHOR PLATE WITH 1 1/16" DIA. HOLES FOR THR'D RODS NO. 3.
- (3) ⅝" DIA. X 9" LONG, TYPE 316 STAINLESS STEEL THREADED RODS (MIN. TENSILE STRENGTH = 70 KSI) WITH NUT AND WASHERS OF SAME ALLOY GROUP. ALTERNATIVE ANCHORAGE: CONCRETE ADHESIVE ANCHORS ⅝-INCH. EMBED 7" IN CONCRETE FOR RAIL POSTS. EMBED 5" IN CONCRETE FOR END RAILS. ADHESIVE ANCHORS SHALL CONFORM TO SECTIONS 502.2.12 OF THE STANDARD SPECIFICATIONS.
- (4B) STRUCTURAL TUBING 3" X 3" X 3/16". PLACE VERTICAL. WELD TO NO. 1 & 5.
- (5A) STRUCTURAL TUBING 3" X 1½" X 3/16" RAILS. WELD TO NO. 1 & NO. 4. INSIDE OF TUBE TO BE PAINTED AT ALL FIELD ERECTION & EXPANSION JOINTS.
- (6A) BAR 1" X 1" PICKETS. WELD TO NO. 5. PLACE VERTICAL.
- (6C) BAR 1" X 1½" PICKETS. WELD TO NO. 11. PLACE VERTICAL.
- (9A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. PROVIDE "SLIDING FIT".
- (10A) RECTANGULAR SLEEVE FABRICATED FROM 3/16" PLATES. (1'-4" @ FIELD ERECTION JTS.)

RAILING NOTES

BID ITEM SHALL BE "RAILING STEEL TYPE C6", WHICH SHALL INCLUDE ALL STEEL ITEMS SHOWN.

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT, AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

ALL PLATES, BARS, AND RECTANGULAR SLEEVES SHALL CONFORM TO ASTM A709 GRADE 36. ALL STRUCTURAL TUBING SHALL CONFORM TO ASTM A500 GRADE B.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET NORMAL TO GRADE.

CUT BOTTOM OF POST TO MAKE POST VERTICAL IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTION.

STEEL SHIMS SHALL BE PROVIDED & USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT, AND SHALL BE GALVANIZED.

■ CAULK AROUND PERIMETER OF BASE PLATES, NO. 1, AND FILL BOLT SLOT OPENINGS IN SHIMS AND BASE PLATES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

ALL JOINTS AND RECESSES IN CONCRETE PARAPET ARE TO BE VERTICAL.

ALL MATERIAL (EXCEPT NO. 3) SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING, THE STEEL RAILING SHALL BE GIVEN A NO. 6 BLAST CLEANING PER SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH AN APPROVED TIE COAT AND TOP COAT AS SPECIFIED IN THE CONTRACT DOCUMENTS. THE RAILING SHALL BE PAINTED AMS STD. COLOR NO. 27038, BLACK.

VENT HOLES SHALL BE DRILLED IN POST AND RAIL MEMBERS AS REQUIRED TO FACILITATE GALVANIZING AND DRAINAGE.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE 3 OR 4 POSTS.

TOUCH-UP PAINTING TO BE DONE AT COMPLETION OF STEEL RAILING INSTALLATION TO THE SATISFACTION OF THE ENGINEER AT NO EXTRA COST.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

DRAWN BY LIH | PLANS CK'D CAD

COMBINATION RAIL TYPE "C6" DETAILS

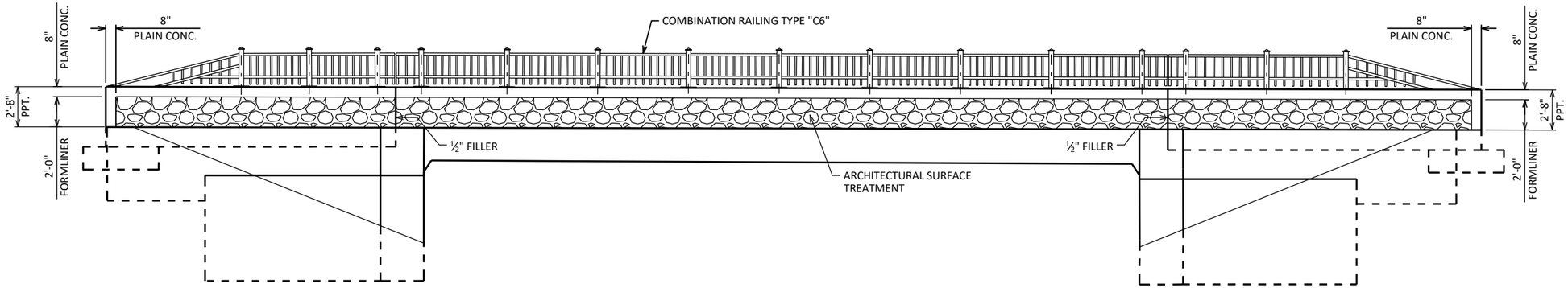
SHEET 14
183

SCALE = 2.00

8

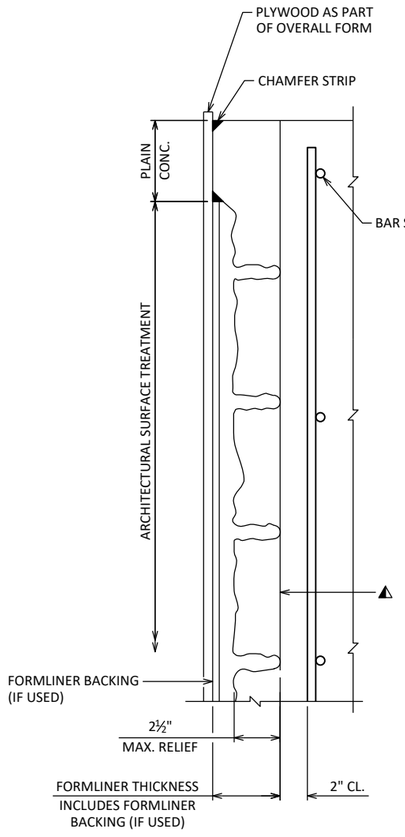
8

STATE PROJECT NUMBER
1550-04-79



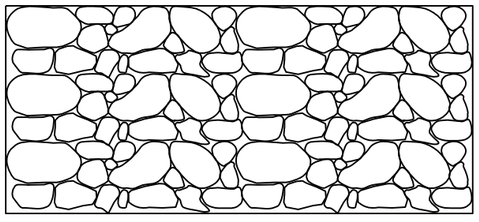
OUTSIDE ELEVATION

(TYPICAL BOTH SIDES OF BRIDGE)



SECTION THRU FORMLINER

⚠ STRUCTURAL CONCRETE CAN ONLY BE ASSUMED TO THIS LINE. PROVIDE ADDITIONAL STRUCTURE SIZE AS NECESSARY TO MAINTAIN MINIMUM FULL STRUCTURAL CONCRETE DIMENSIONS AS INDICATED ON THE STANDARDS.



FIELD STONE - RANDOM

FORMLINER THICKNESS = 3½"
SIZES BETWEEN 6" & 24"
MAX. RELIEF = 2½"

GENERAL NOTES

ALL FORMLINER WORK SHALL BE PAID FOR UNDER THE BID ITEM "ARCHITECTURAL SURFACE TREATMENT".

ARCHITECTURAL SURFACE TREATMENT FORMLINER REQUIRED AT BACKFACE OF EXTERIOR PARAPETS SHALL BE "FIELD STONE - RANDOM" FORMLINER PATTERN.

FORMLINER COURSING ON PARAPETS SHALL BE PARALLEL TO TOP OF PARAPET.

ALL ARCHITECTURAL SURFACE TREATMENT FORMLINER AREAS SHALL BE STAINED. WORK SHALL BE PAID FOR UNDER THE BID ITEM "CONCRETE STAINING MULTI-COLOR B-3-214".

ALL PLAIN CONCRETE AREAS SHALL NOT BE STAINED.

IF TOUCH UP PAINTING IS REQUIRED, IT SHALL BE DONE TO THE SATISFACTION OF THE FIELD ENGINEER AT NO ADDITIONAL COST.

FORMLINER PATTERN TO BE CONTINUOUS ACROSS JOINTS BETWEEN SUPERSTRUCTURE AND APPROACH SLAB PARAPETS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

DRAWN BY LIH | PLANS CK'D CAD

AESTHETIC DETAILS

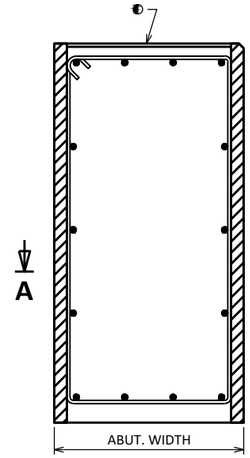
SHEET 15
184

8

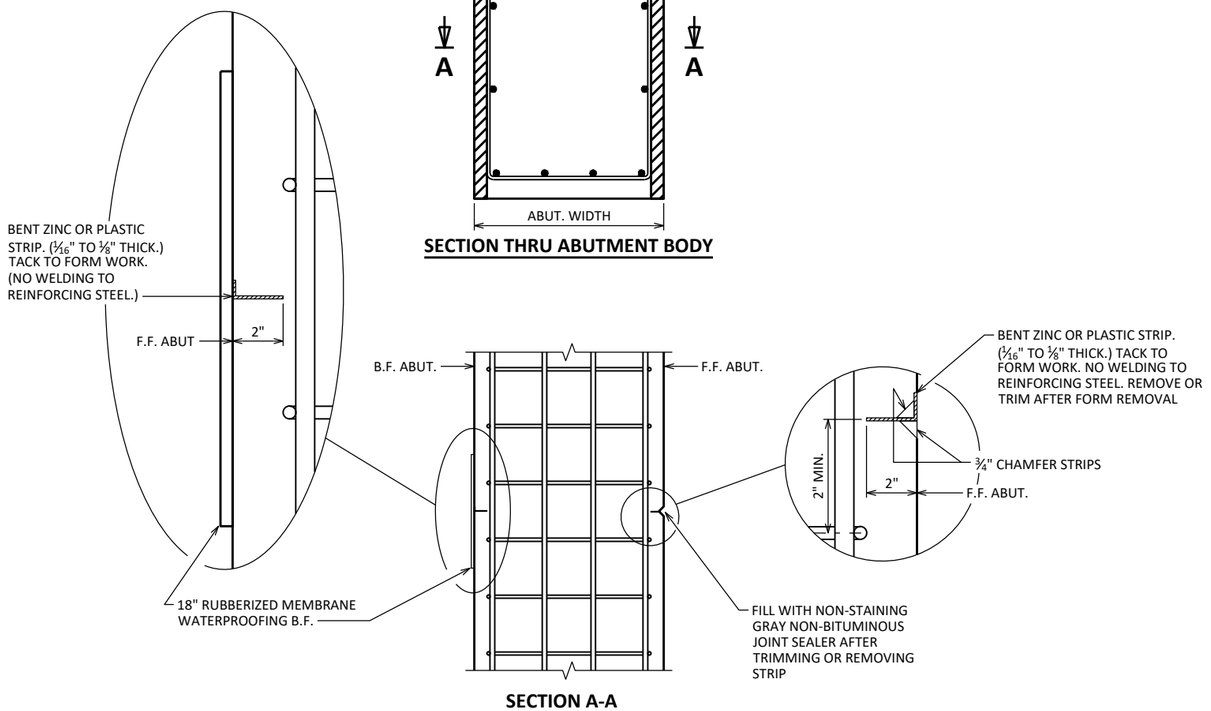
8

STATE PROJECT NUMBER

1550-04-79



SECTION THRU ABUTMENT BODY



SECTION A-A

ALTERNATE CONSTRUCTION JOINT AT ABUTMENT

NOTES

PARTIAL ZINC OR PLASTIC BULKHEAD MAY BE USED AS ALTERNATIVE CONSTRUCTION JOINT, WITH THE PERMISSION OF THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.

VERTICAL CONSTRUCTION JOINT KEYWAY IS NOT REQUIRED WHEN USING ALTERNATE CONSTRUCTION JOINT.

CARE IS TO BE USED IN CASTING CONCRETE AROUND BULKHEAD TO PREVENT DISLOCATION OR MISALIGNMENT OF THE BULKHEAD.

SAW CUTTING JOINT IS NOT ALLOWED.

◐ USE A JOINT TOOL TO CONSTRUCT A CONTRACTION JOINT APPROXIMATELY ½" DEEP.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-3-214

DRAWN BY LIH | PLANS CK'D CAD

ALTERNATE CONSTRUCTION JOINT

SHEET 16
185

SCALE = 2.00

8

8

STH 63 (SOUTH OF BRIDGE)

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	727+19	72719	0	62.03	0	0	0	0	0	0
	727+26	72726	7	76.39	0	18	0	18	0	18
	727+50	72750	24	74.47	0	67	0	85	0	85
	727+68	72768	18	74.3	5.8	50	2	135	2	132
	727+79	72779	11	68.09	14.59	29	4	164	8	156
	727+93	72793	14	64.3	27.07	34	11	198	21	177
	728+00	72800	7	60.14	36	16	8	214	31	183
	728+18	72818	18	50.67	57.58	37	31	251	70	181
	728+50	72850	32	31.83	71.87	49	77	300	166	134
	729+00	72900	50	2.43	166.64	32	221	332	442	-111
	729+50	72950	50	0	276.15	2	410	334	955	-621
	730+00	73000	50	0	338.76	0	569	334	1,666	-1,333
	730+50	73050	50	0	356.63	0	644	334	2,471	-2,137
	730+64	73064	14	0	388.15	0	193	334	2,713	-2,379
	730+74	73074	10	4.07	200.12	1	109	335	2,849	-2,514
						335	2279			

STH 63 (NORTH OF BRIDGE)

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	731+68	73168	0	0	185.05	0	0	0	0	0
	731+77	73177	9	0	217.74	0	67	0	84	-84
	732+00	73200	23	0	204.02	0	180	0	308	-308
	732+50	73250	50	0	183.25	0	359	0	757	-757
	732+97	73297	47	0	198.87	0	333	0	1,172	-1,172
	733+00	73300	3	0.02	199.65	0	22	0	1,200	-1,200
	733+22	73322	22	0.2	198.65	0	162	0	1,403	-1,403
	733+47	73347	25	5.53	197.72	3	184	3	1,632	-1,630
	733+50	73350	3	0	146.95	0	19	3	1,656	-1,653
	734+00	73400	50	0	146.38	0	272	3	1,996	-1,993
	734+50	73450	50	0	137.53	0	263	3	2,324	-2,321
	734+74	73474	24	0	126.53	0	117	3	2,471	-2,468
	734+95	73495	21	0	214.19	0	133	3	2,637	-2,634
	735+00	73500	5	0	203.94	0	39	3	2,685	-2,682
	735+50	73550	50	10.87	149.62	10	327	13	3,094	-3,081
	736+00	73600	50	45.42	125.94	52	255	65	3,413	-3,348
	736+50	73650	50	85.4	40.38	121	154	186	3,606	-3,419
	737+00	73700	50	106.42	0	178	37	364	3,652	-3,288
						364	2922			

NEDVIDEK STREET

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	3000+71	300071	0	0	55.63	0	0	0	0	0
	3000+81	300081	10	19.27	151.63	4	38	4	48	-44
	3001+00	300100	19	20.12	37.99	14	67	17	131	-114
	3001+25	300125	25	9.39	0.46	14	18	31	154	-123
	3001+50	300150	25	22.96	1.2	15	1	46	155	-109
	3001+76	300176	26	30.48	0.38	26	1	72	156	-84
	3002+00	300200	24	29.27	0.01	27	0	98	156	-57
						98	125			

BABCOCK AVENUE

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	4000+35	400035	0	2.95	8.21	0	0	0	0	0
	4000+50	400050	15	7.06	1.5	3	3	3	3	-1
	4000+57	400057	7	22.61	1.43	4	0	7	4	3
	4000+85	400085	28	28.5	0.07	27	1	33	5	28
						33	4			

9

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PROJECT NO: 1550-04-79 | HWY: USH 63 | COUNTY: BARRON | EARTHWORK DATA | SHEET 186 E

LAKE STREET - EARTHWORK CUTS AND FILLS LESS DREDGING VOLUMES

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	2000+76	200076	0	5.84	0.43	0	0	0	0	0
	2000+90	200090	14	151.82	0	41	0	41	0	41
	2001+00	200100	10	283.01	0	81	0	121	0	121
	2001+25	200125	25	514.67	0	369	0	491	0	491
	2001+49	200149	24	538.25	0	468	0	959	0	959
	2001+50	200150	1	538.25	0	20	0	979	0	978
	2001+75	200175	25	508.45	0	485	0	1,463	0	1,463
	2002+00	200200	25	178.07	2.76	318	1	1,781	2	1,779
	2002+13	200213	13	30.96	16.99	50	5	1,831	8	1,824
						1831	6			

DREDGE ALIGNMENT - EARTHWORK CUTS AND FILLS LESS DREDGING VOLUMES

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	9+30	930	0	0	0	0	0	0	0	0
	9+40	940	10	4.07	0	1	0	1	0	1
	9+50	950	10	85.5	0	17	0	17	0	17
	9+75	975	25	0	0	40	0	57	0	57
	10+00	1000	25	0	0	0	0	57	0	57
	10+25	1025	25	0	0	0	0	57	0	57
	10+50	1050	25	85.25	0	39	0	96	0	96
	10+75	1075	25	52.33	8.6	64	4	160	5	155
						160	4			

NOTE: CUT VOLUMES FOR STATION 9+50 - 10+25 INCLUDED IN ITEM 206.1001 EXCAVATION FOR STRUCTURES BRIDGES

LAKE STREET - DREDGING VOLUMES ONLY

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	2000+76	200076	0	0	0	0	0	0	0	0
	2000+90	200090	14	0	0	0	0	0	0	0
	2001+00	200100	10	0	0	0	0	0	0	0
	2001+25	200125	25	37.63	0	17	0	17	0	17
	2001+49	200149	24	73.96	0	50	0	67	0	67
	2001+50	200150	1	73.96	0	3	0	70	0	70
	2001+75	200175	25	130.16	0	95	0	164	0	164
	2002+00	200200	25	121.7	0	117	0	281	0	281
	2002+13	200213	13	0	0	29	0	310	0	310
						310	0			

DREDGE ALIGNMENT - DREDGING VOLUMES ONLY

CATEGORY	STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT	INCREMENTAL VOL (CY) FILL	CUMULATIVE VOL (CY) CUT 1.00	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	CUMULATIVE VOL (CY) MASS ORDINATE
0010	9+30	930	0	58.79	0	0	0	0	0	0
	9+40	940	10	87.05	0	27	0	27	0	27
	9+50	950	10	95.56	0	34	0	61	0	61
	9+75	975	25	11.7	0	50	0	110	0	110
	10+00	1000	25	13.3	0	12	0	122	0	122
	10+25	1025	25	14.7	0	13	0	135	0	135
	10+50	1050	25	70.6	0	39	0	175	0	175
	10+75	1075	25	242.91	0	145	0	320	0	320
						320	0			

9

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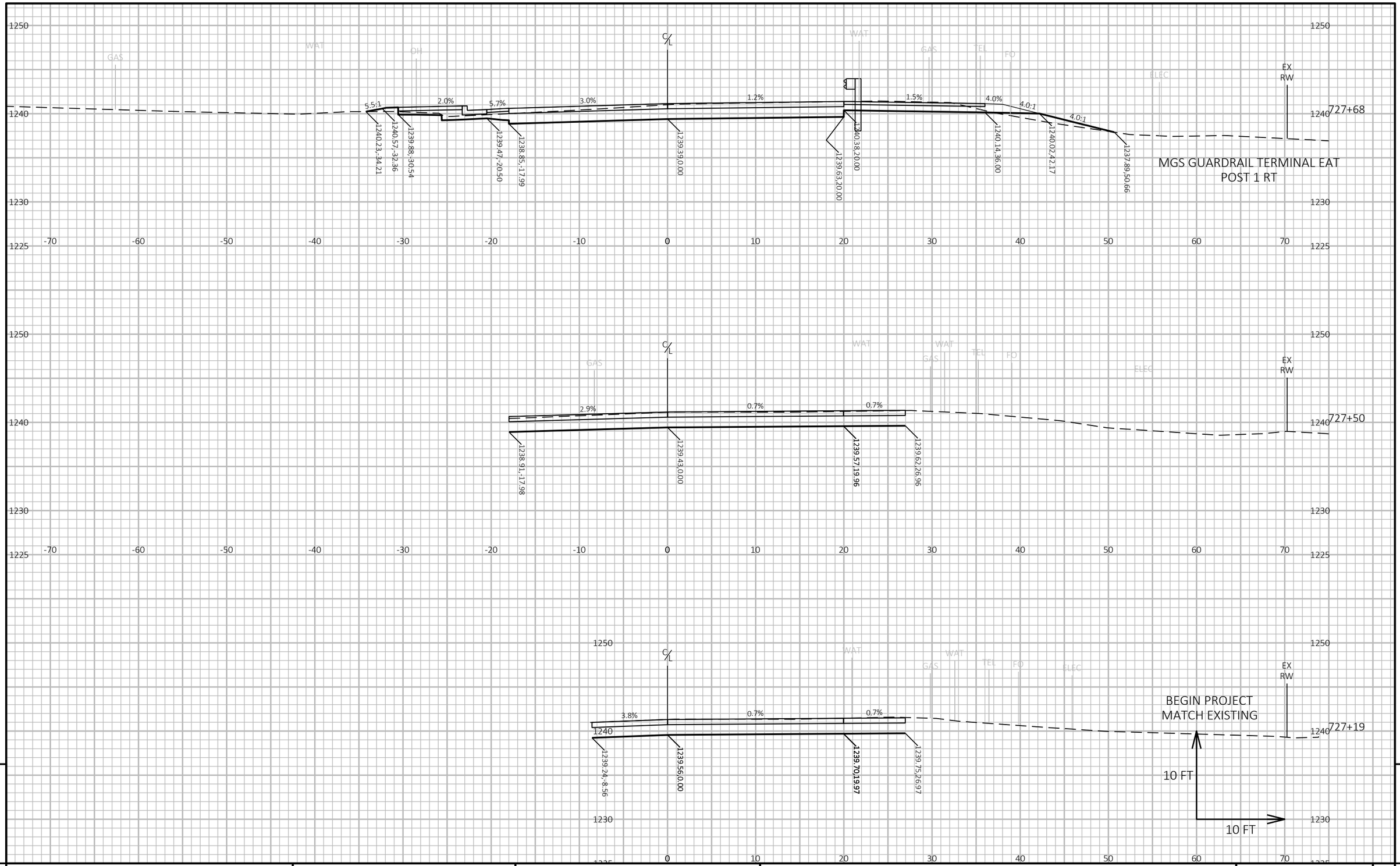
PROJECT NO: 1550-04-79 | HWY: USH 63 | COUNTY: BARRON | EARTHWORK DATA | SHEET 187 | E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090101-EW.DWG
LAYOUT NAME - 02

PLOT DATE : 12/15/2025 8:06 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49



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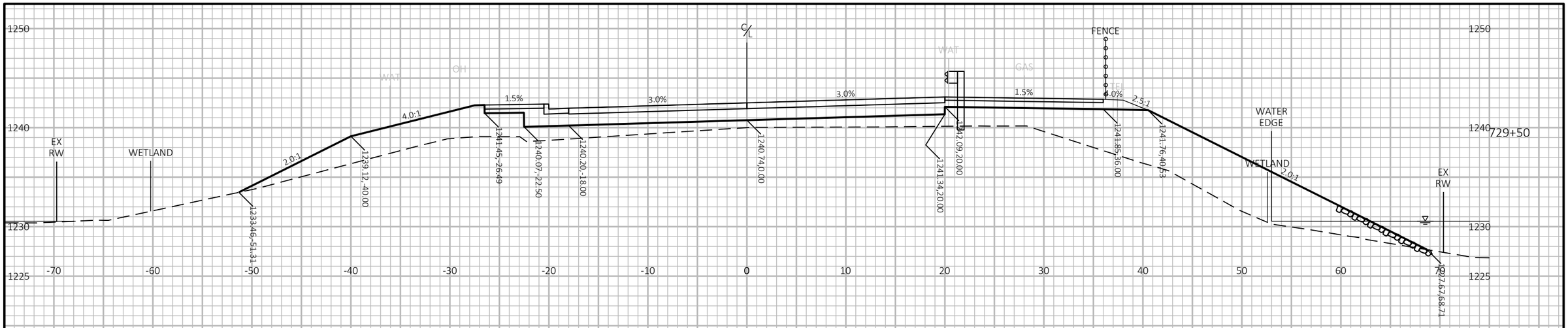
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 188	E

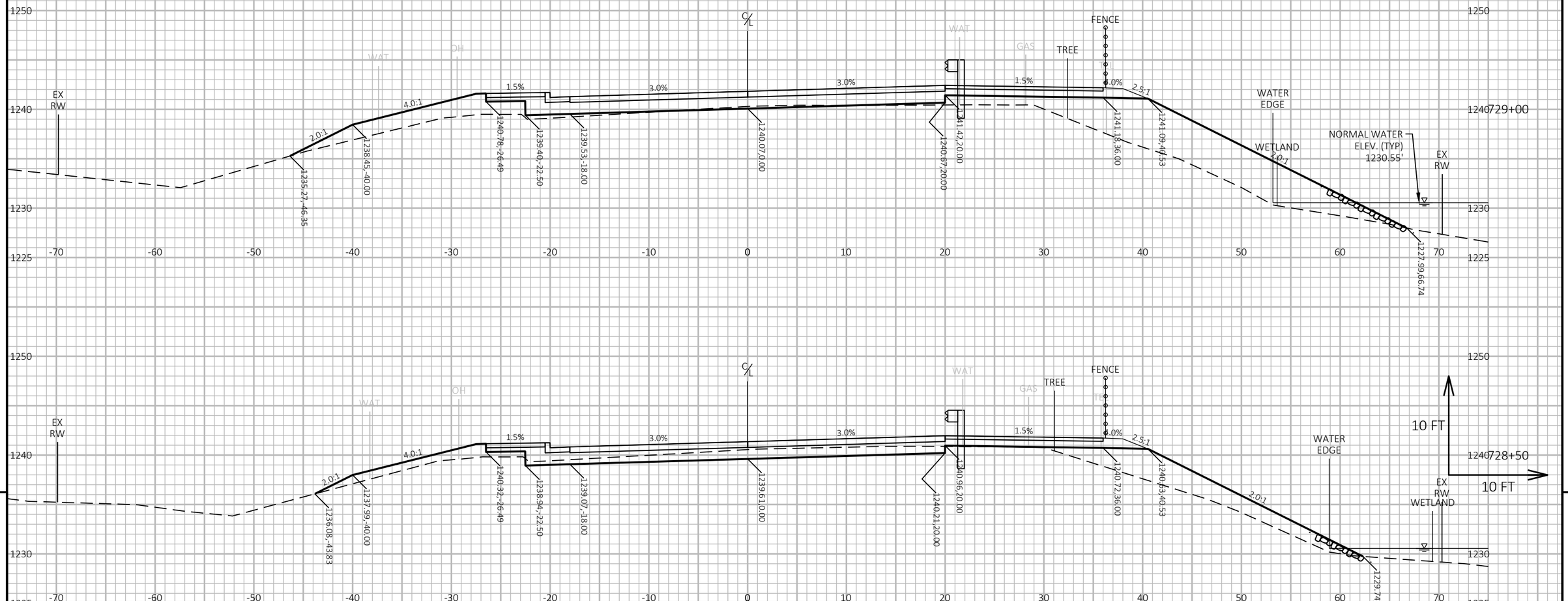
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 189	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-12

PLOT DATE : 12/15/2025 8:06 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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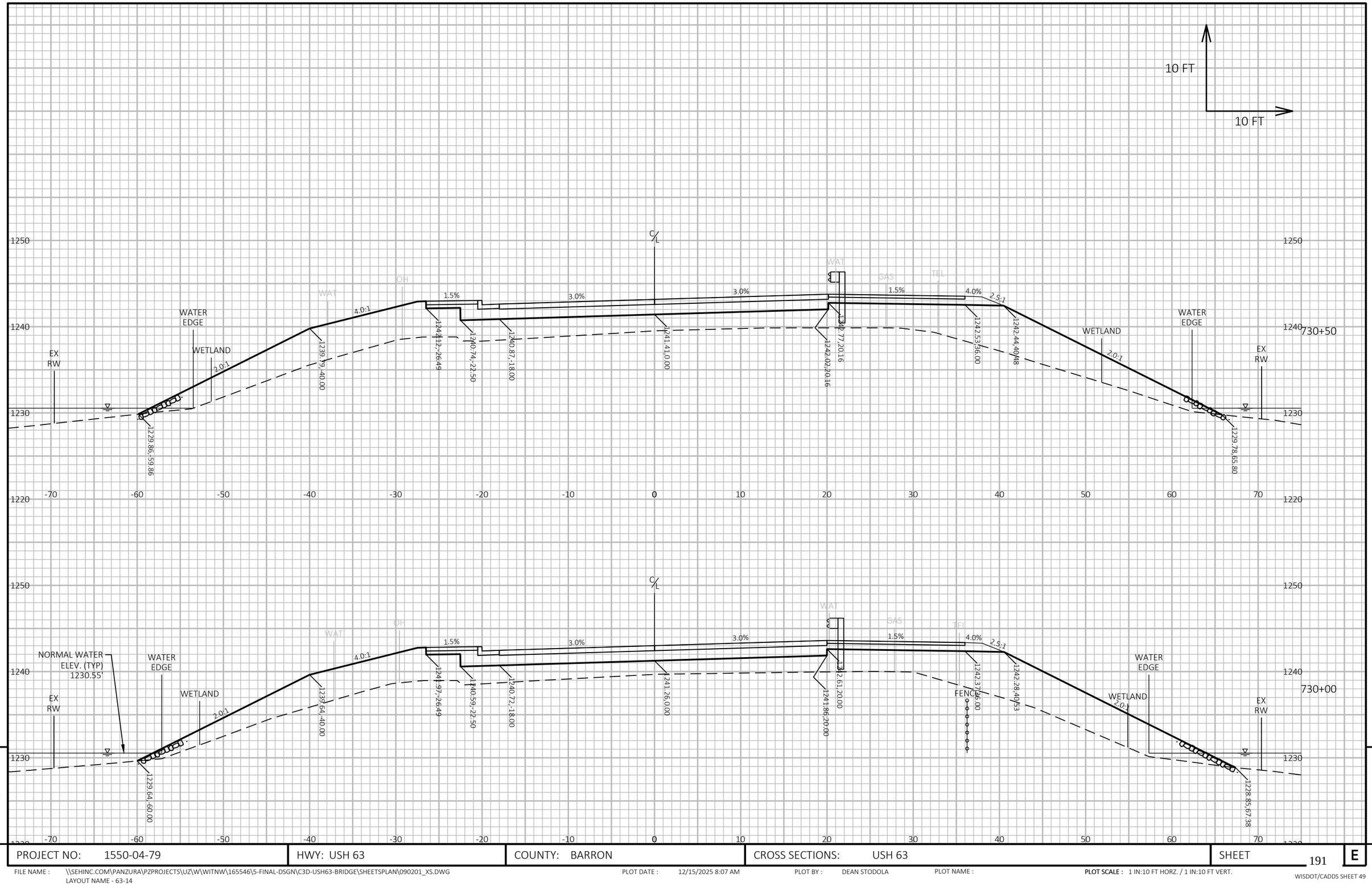
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 190	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-13

PLOT DATE : 12/15/2025 8:07 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 191	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-14

PLOT DATE : 12/15/2025 8:07 AM

PLOT BY : DEAN STODOLA

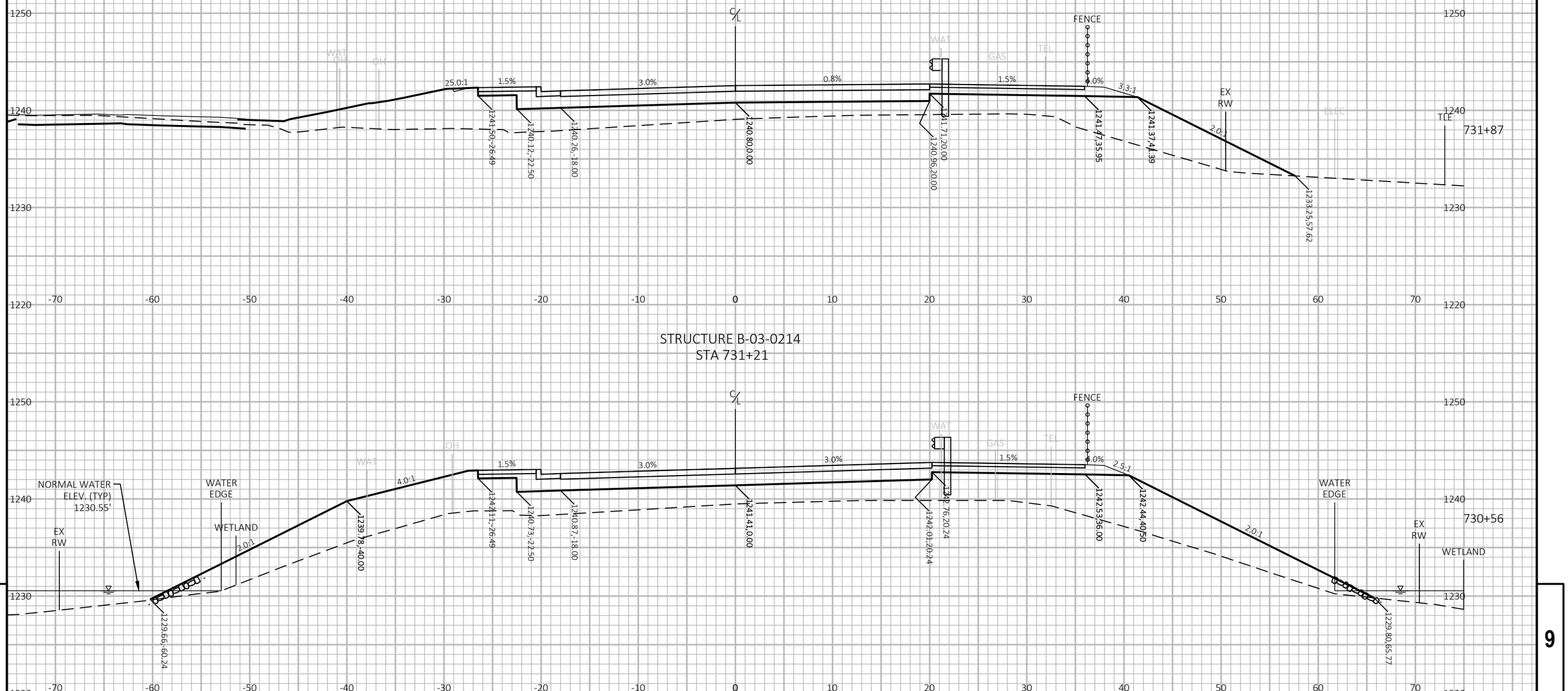
PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

10 FT
10 FT

STRUCTURE B-03-0214
STA 731+21



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 192	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-15

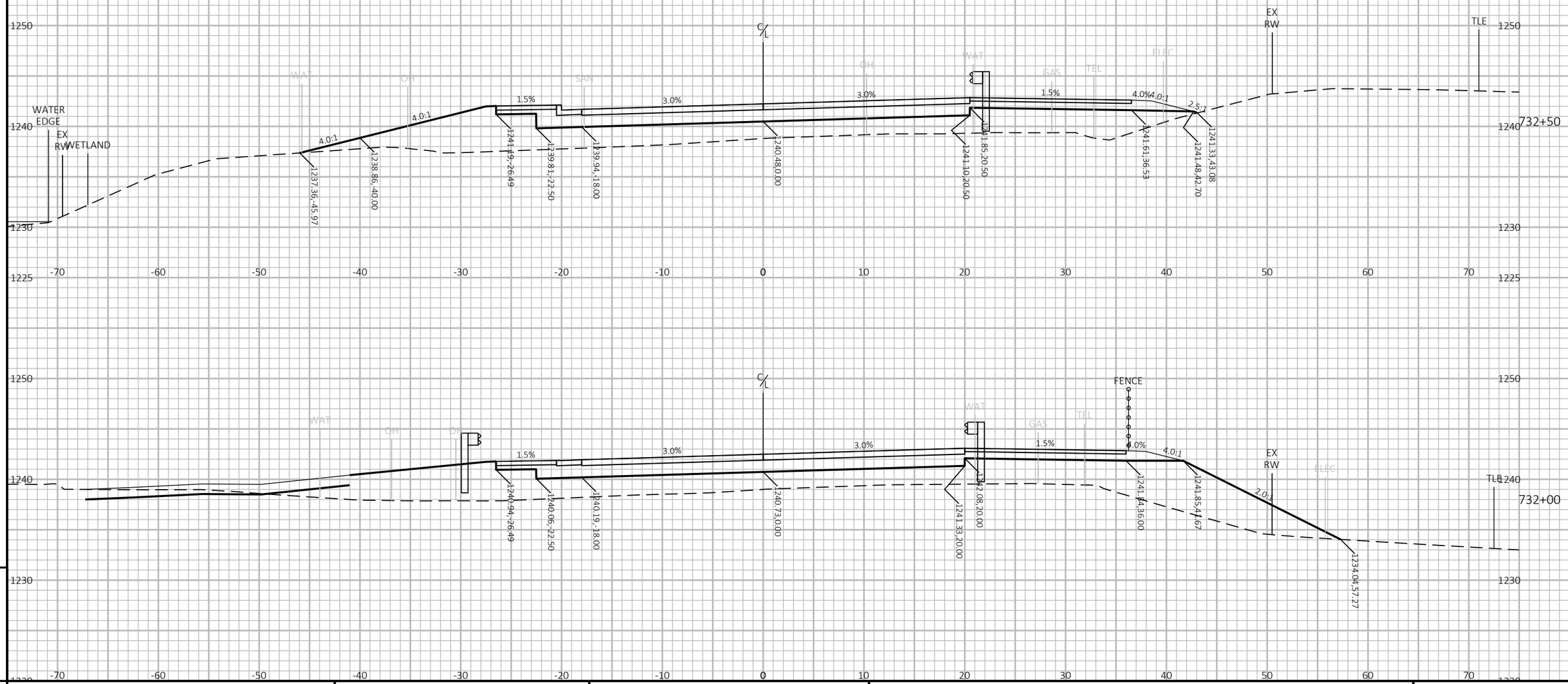
PLOT DATE : 12/15/2025 8:07 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

10 FT

10 FT

MGS GUARDRAIL TERMINAL EAT
POST 9 RT



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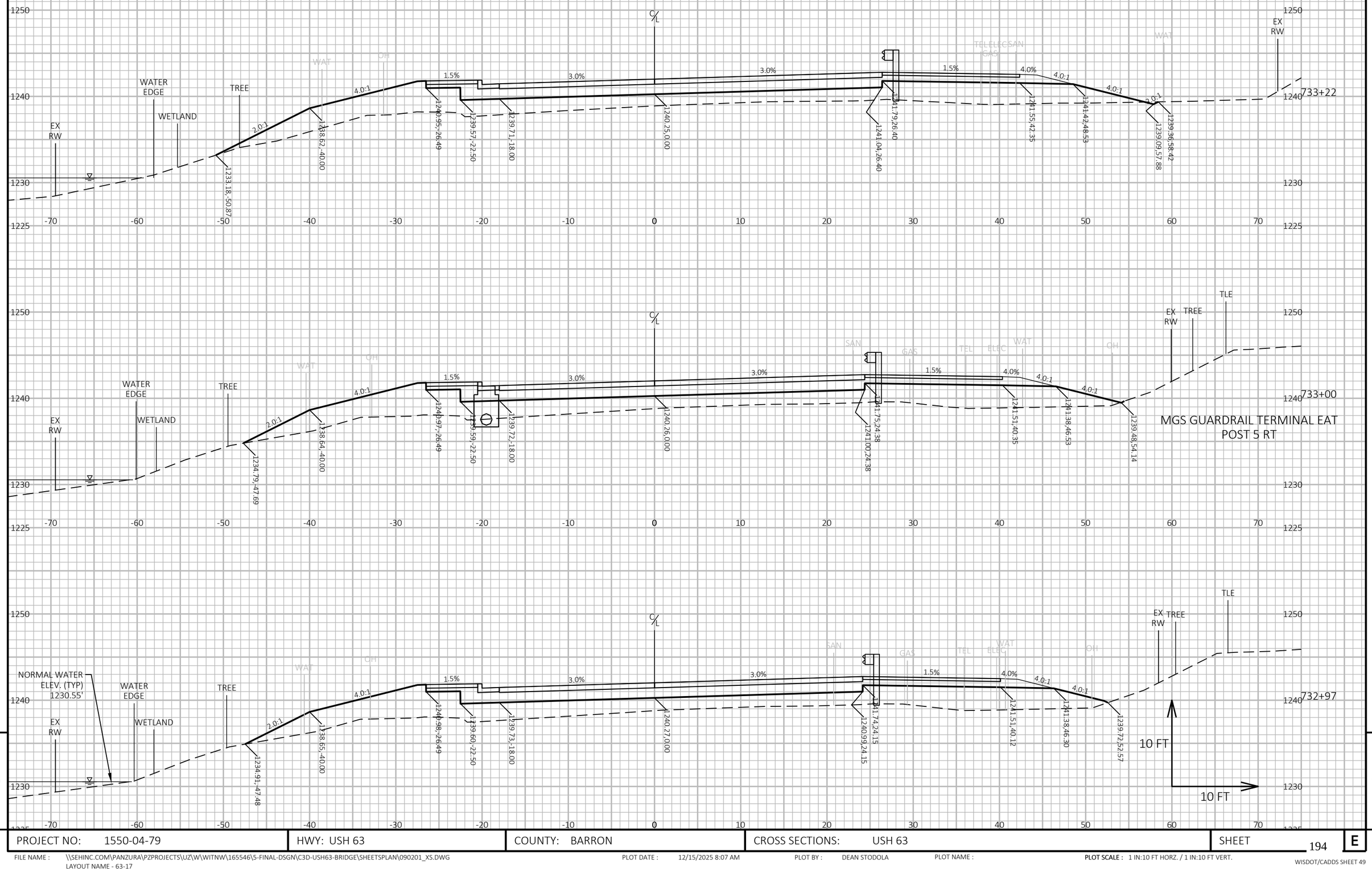
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 193	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-16

PLOT DATE : 12/15/2025 8:07 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 194	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-17

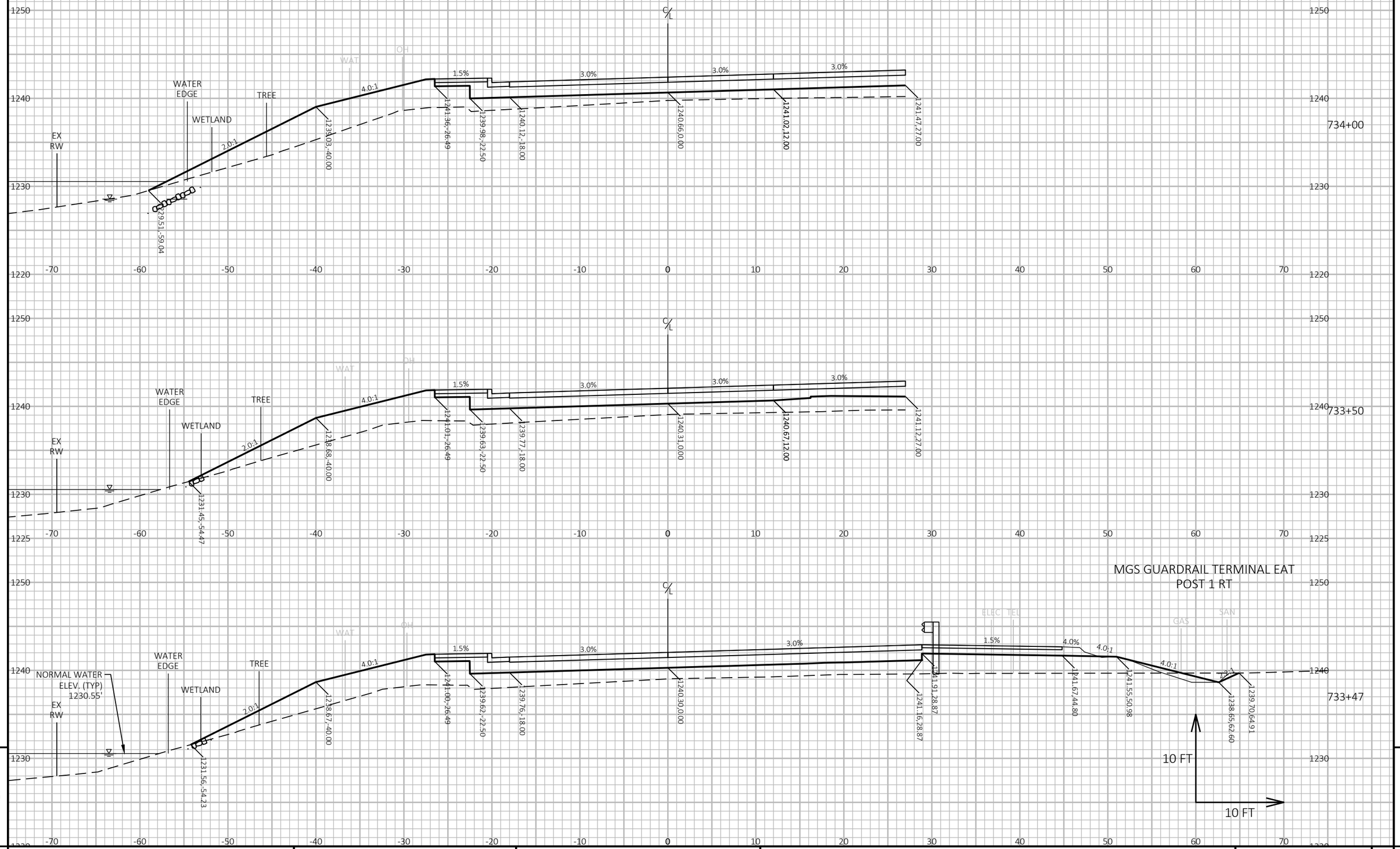
PLOT DATE : 12/15/2025 8:07 AM

PLOT BY : DEAN STODOLA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 195	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-18

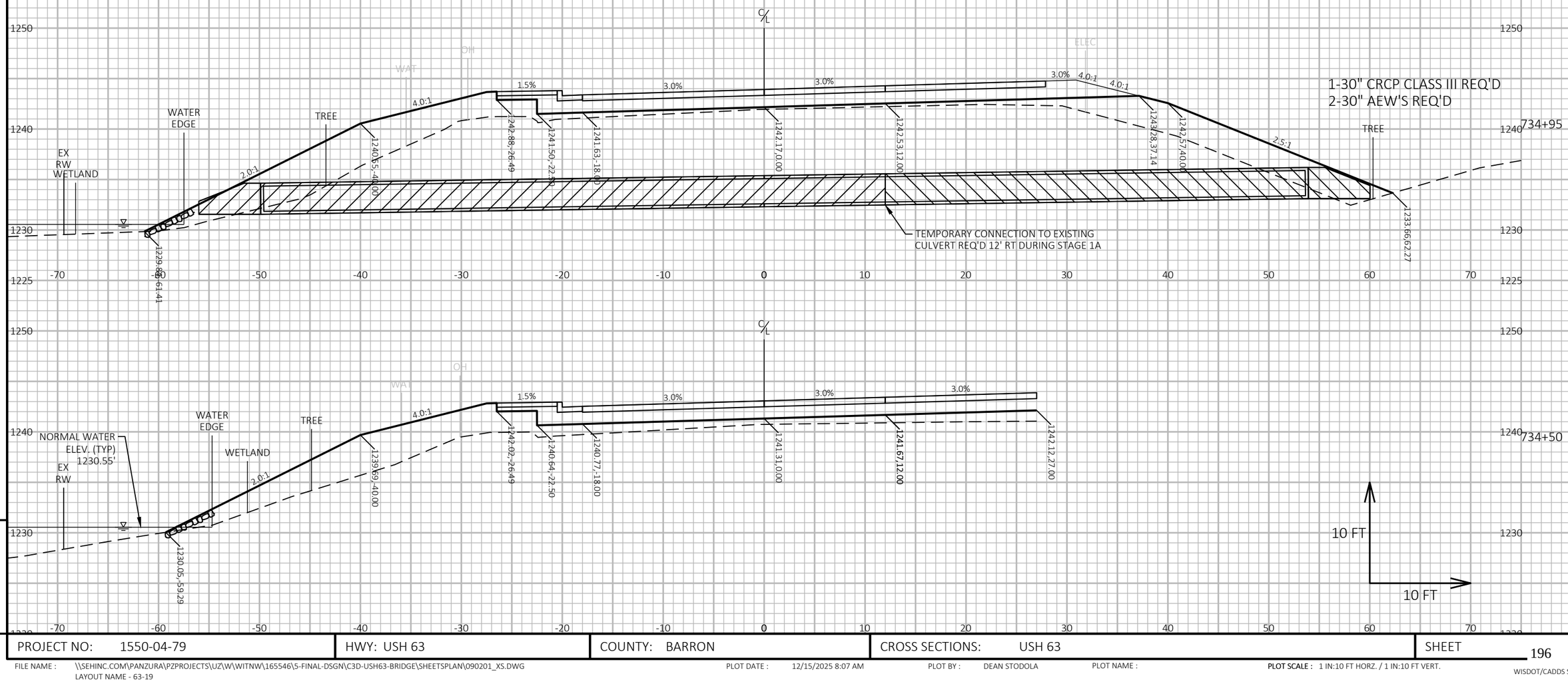
PLOT DATE : 12/15/2025 8:07 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

STAGE 1A CULVERT INSTALLATION

STAGE 1B CULVERT INSTALLATION

1-30" CRCP CLASS III REQ'D
2-30" AEW'S REQ'D

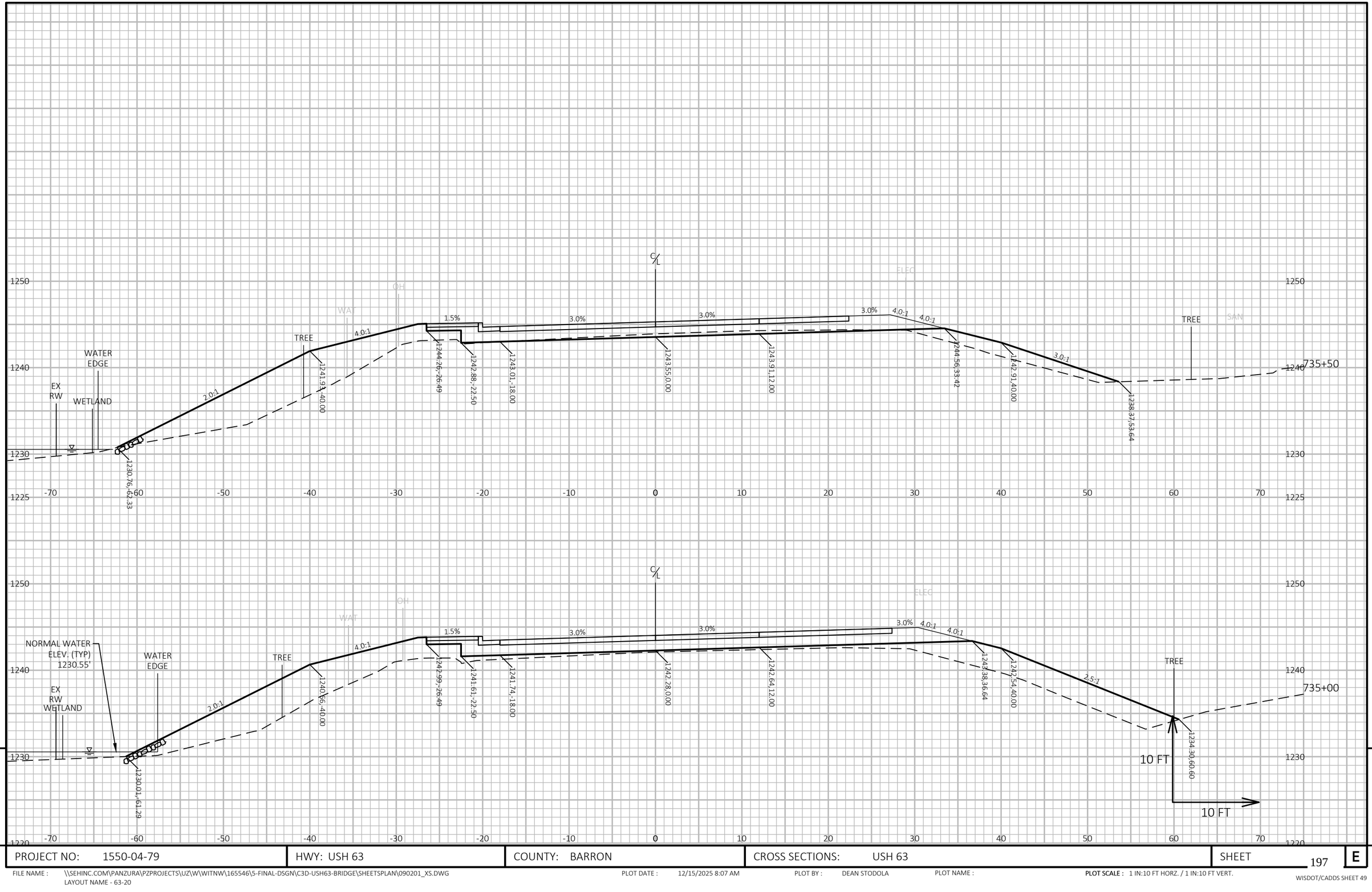


PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 196	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-19

PLOT DATE : 12/15/2025 8:07 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

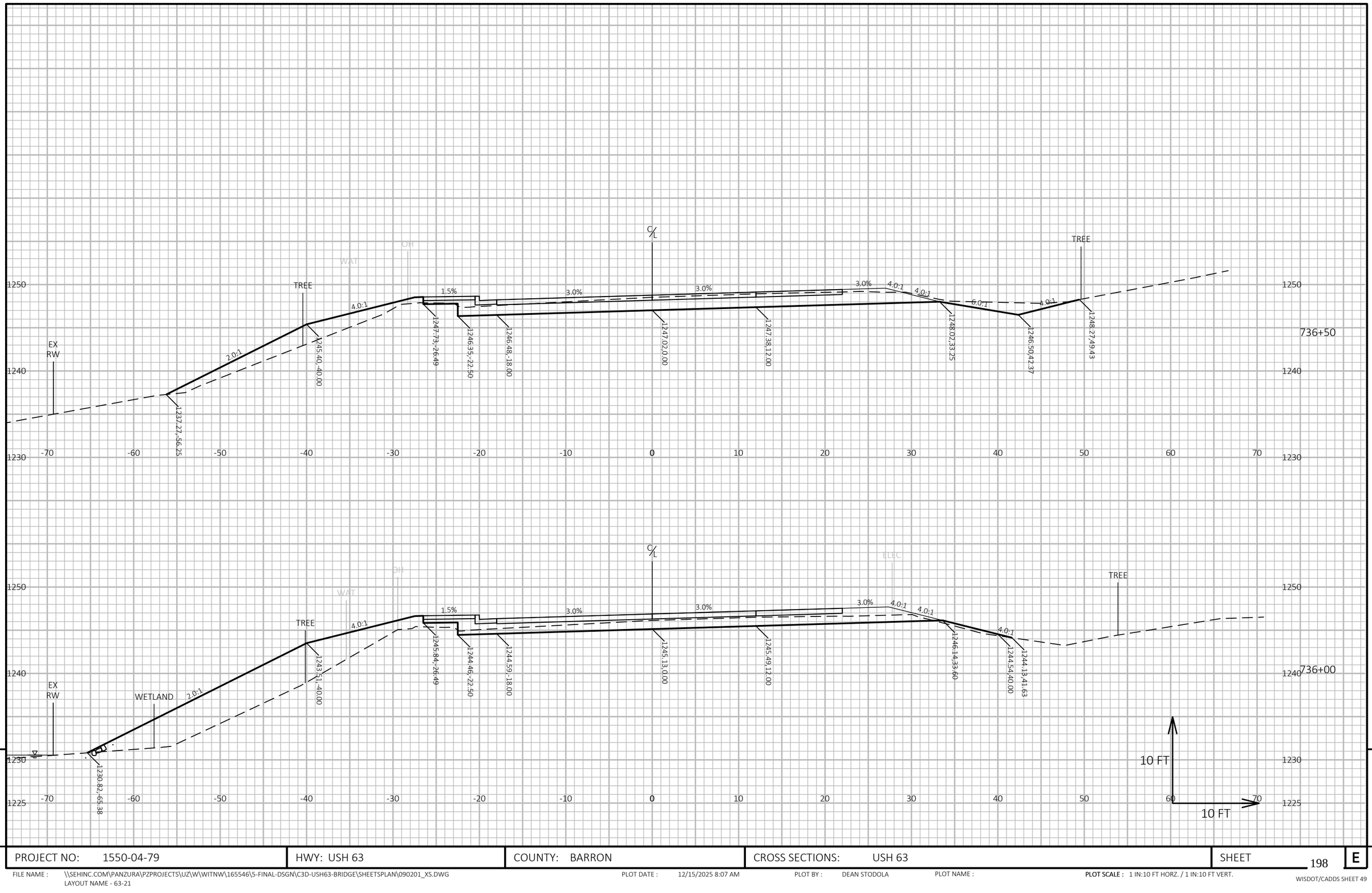


PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 197	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-20

PLOT DATE : 12/15/2025 8:07 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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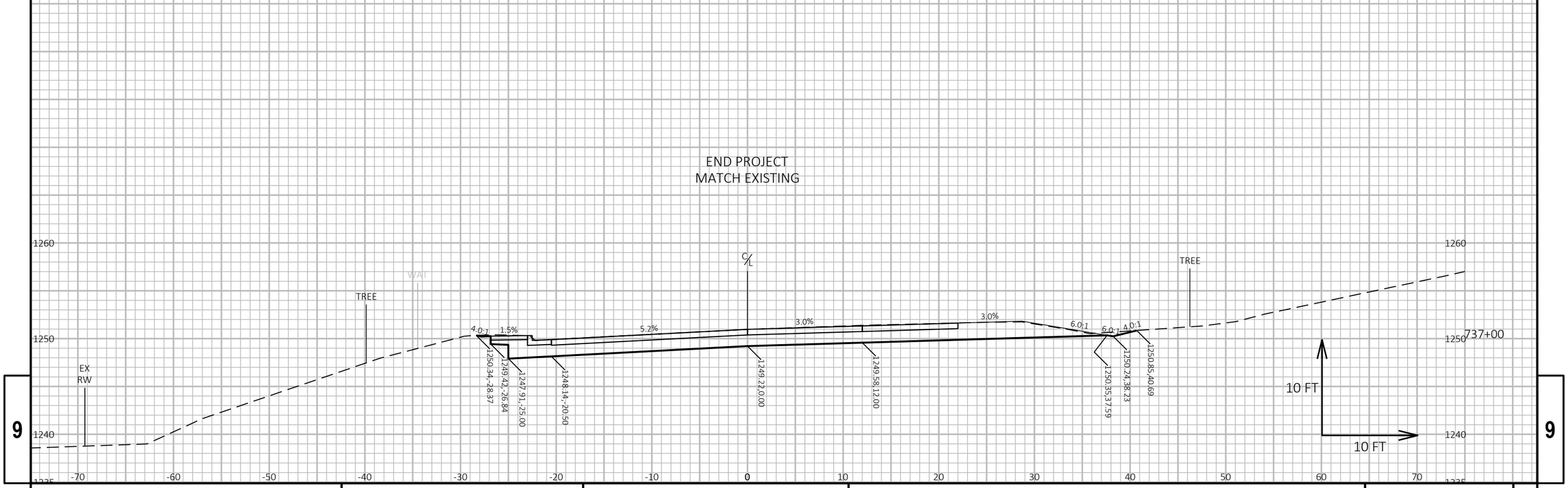
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 198	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-21

PLOT DATE : 12/15/2025 8:07 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END PROJECT
MATCH EXISTING



9 9

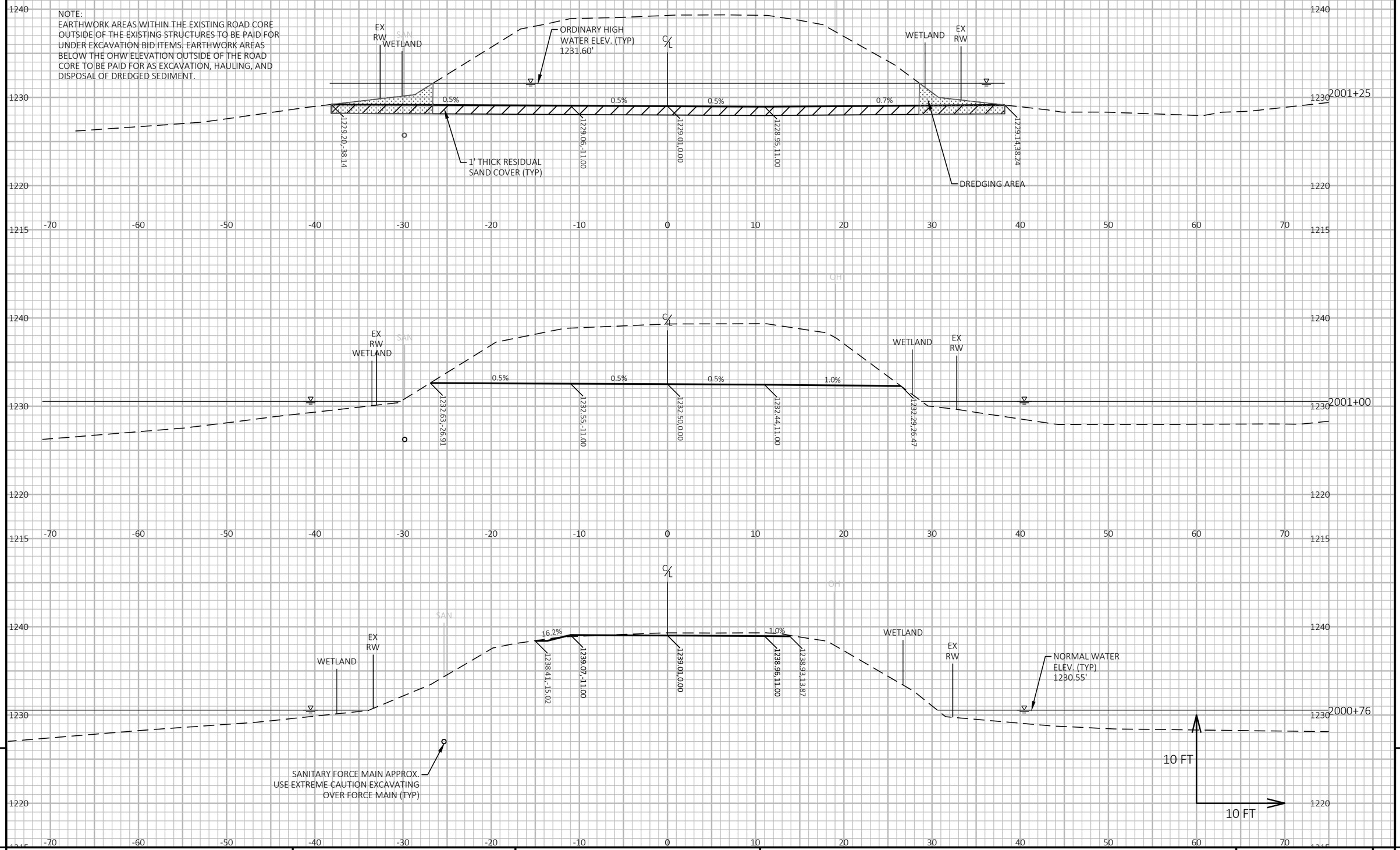
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: USH 63	SHEET 199	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 63-22

PLOT DATE : 12/15/2025 8:07 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

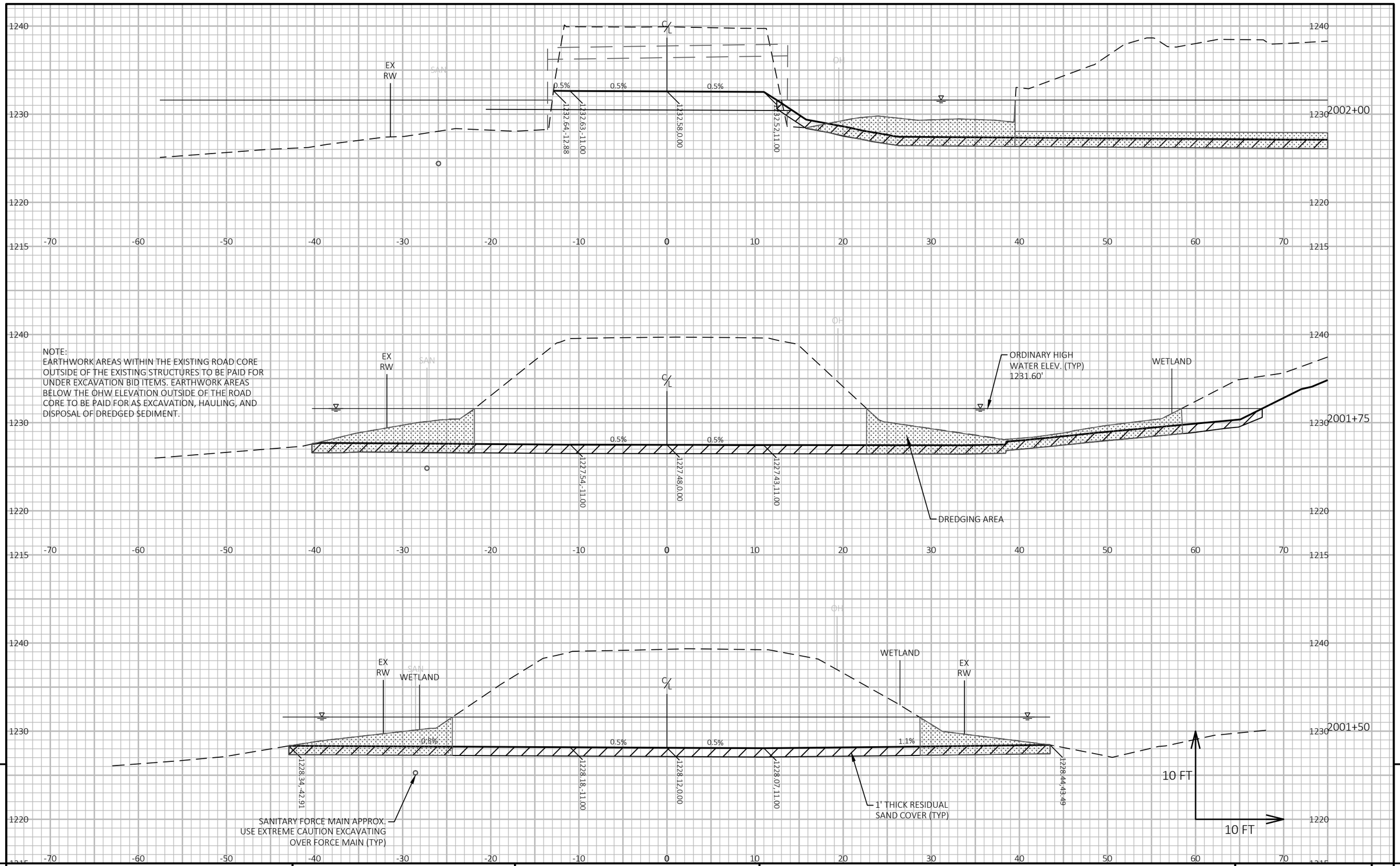
WISDOT/CADDS SHEET 49

NOTE:
EARTHWORK AREAS WITHIN THE EXISTING ROAD CORE OUTSIDE OF THE EXISTING STRUCTURES TO BE PAID FOR UNDER EXCAVATION BID ITEMS. EARTHWORK AREAS BELOW THE OHW ELEVATION OUTSIDE OF THE ROAD CORE TO BE PAID FOR AS EXCAVATION, HAULING, AND DISPOSAL OF DREDGED SEDIMENT.



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: LAKE STREET - REMOVAL	SHEET 200	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - LS1
PLOT DATE : 12/15/2025 8:07 AM
PLOT BY : DEAN STODOLA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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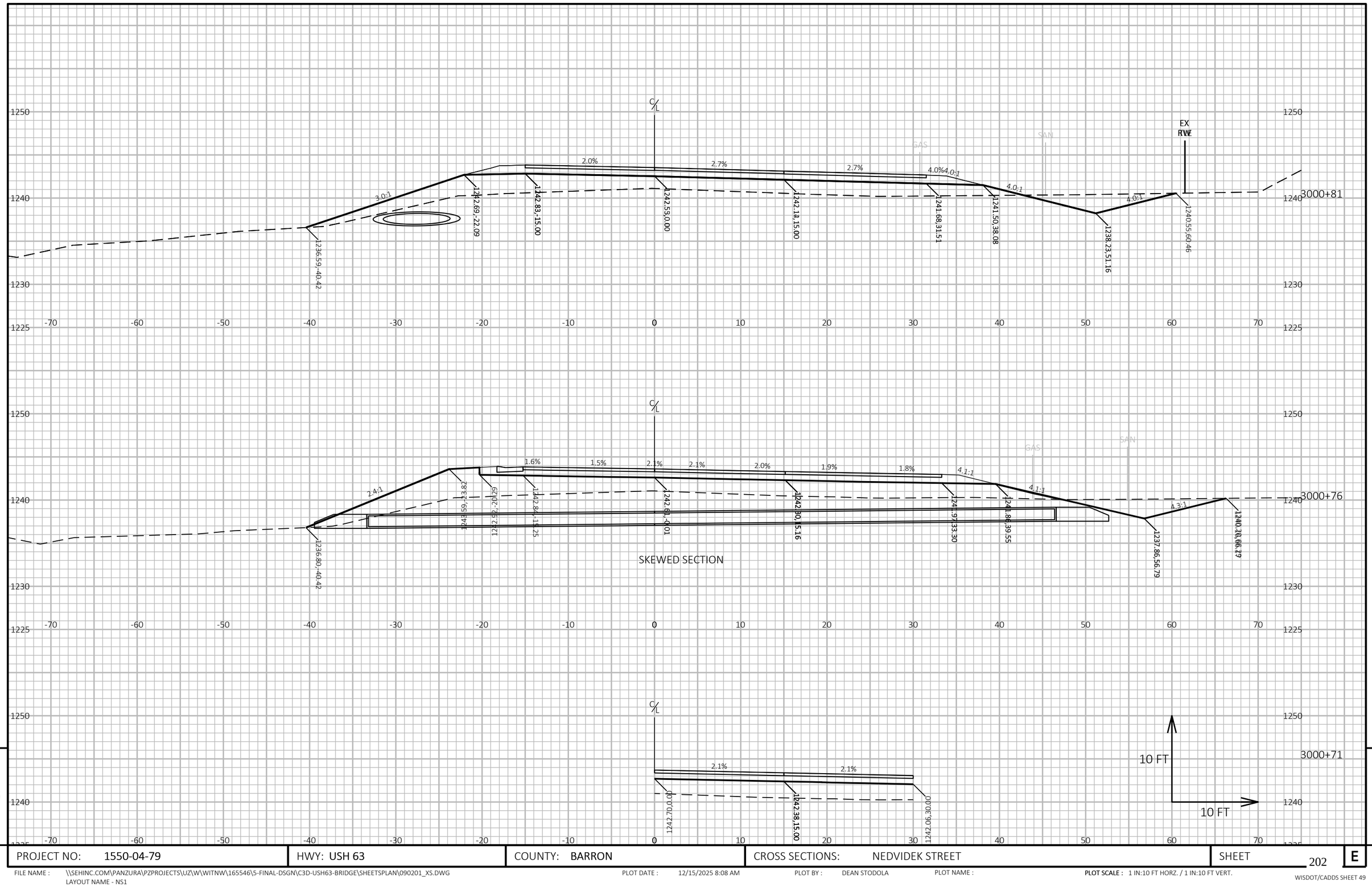
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: LAKE STREET - REMOVAL	SHEET 201	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - LS2

PLOT DATE : 12/15/2025 8:07 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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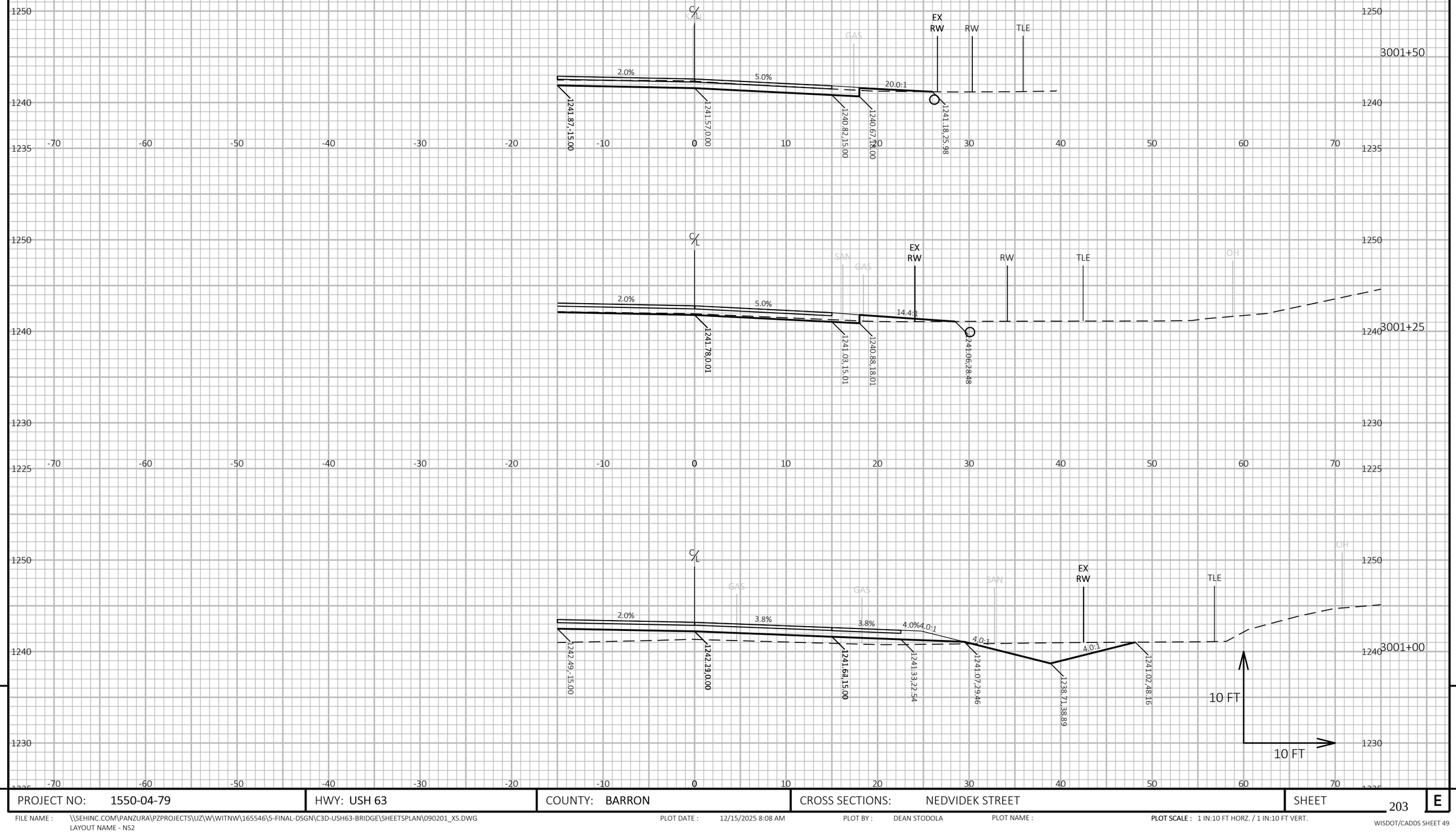
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: NEDVIDEK STREET	SHEET 202	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - NS1

PLOT DATE : 12/15/2025 8:08 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

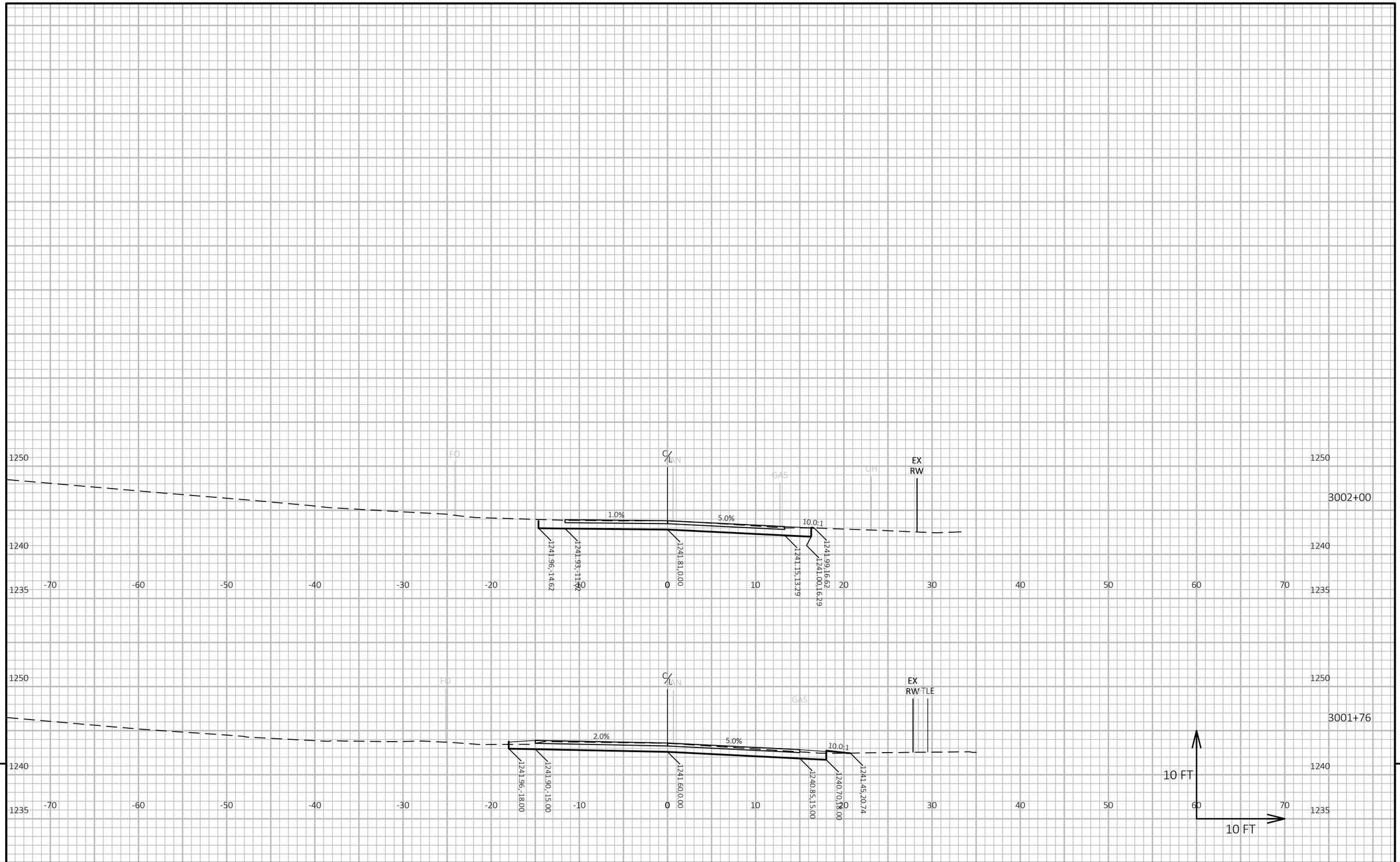


PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: NEDVIDEK STREET	SHEET 203	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - NS2

PLOT DATE : 12/15/2025 8:08 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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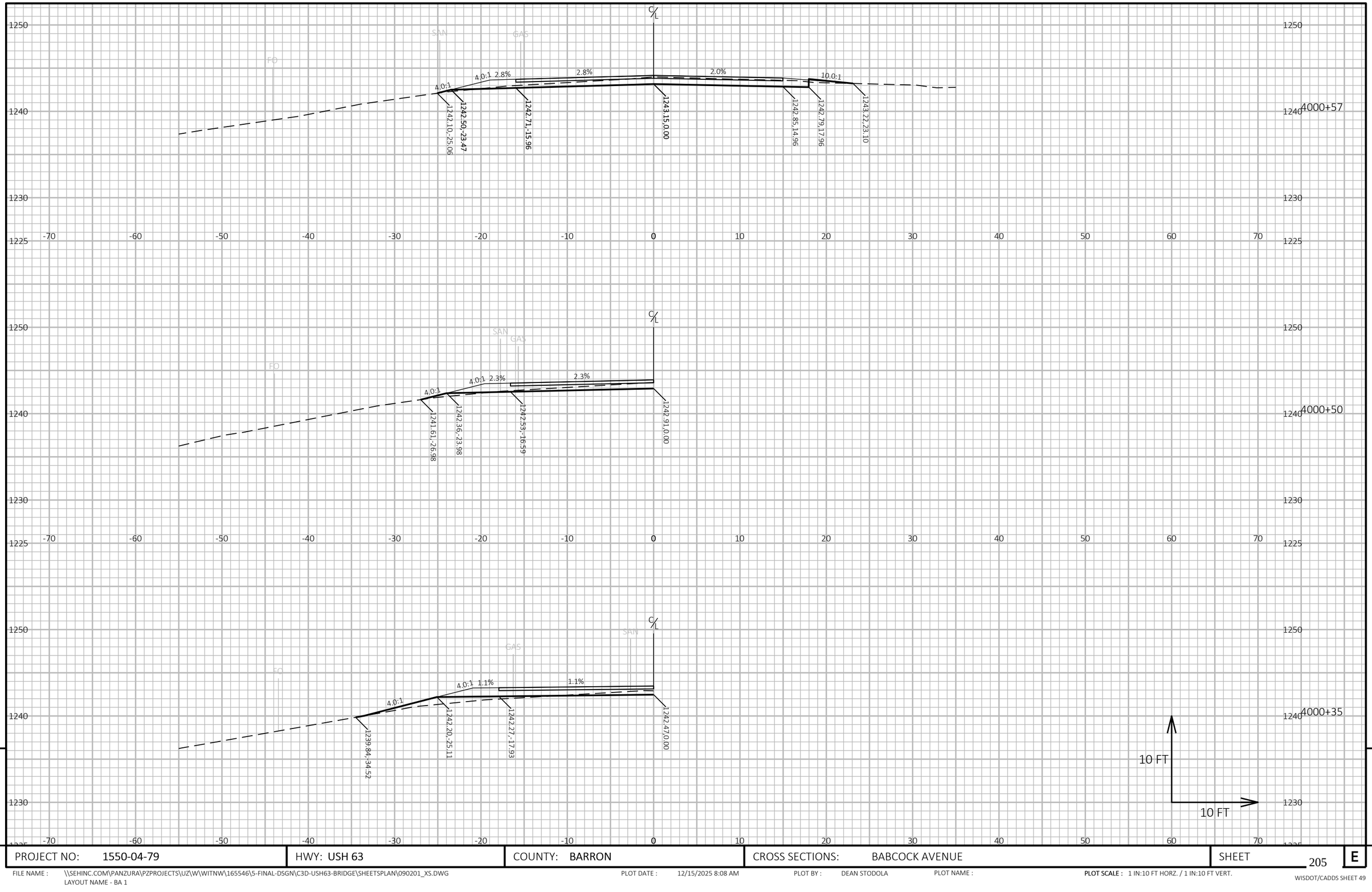
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: NEDVIDEK STREET	SHEET 204	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - NS3

PLOT DATE : 12/15/2025 8:08 AM PLOT BY : DEAN STODOLA PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

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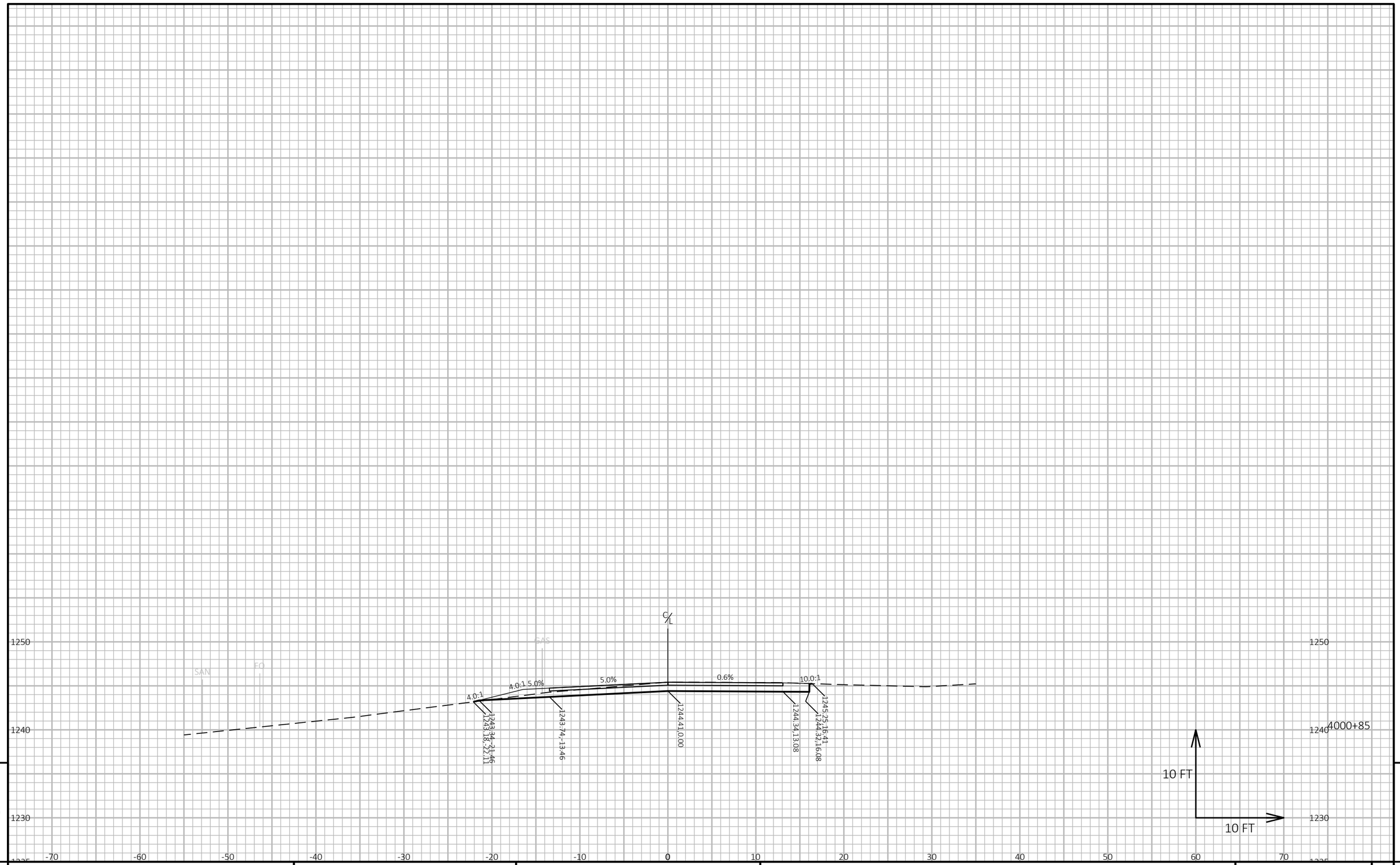
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: BABCOCK AVENUE	SHEET 205	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - BA 1

PLOT DATE : 12/15/2025 8:08 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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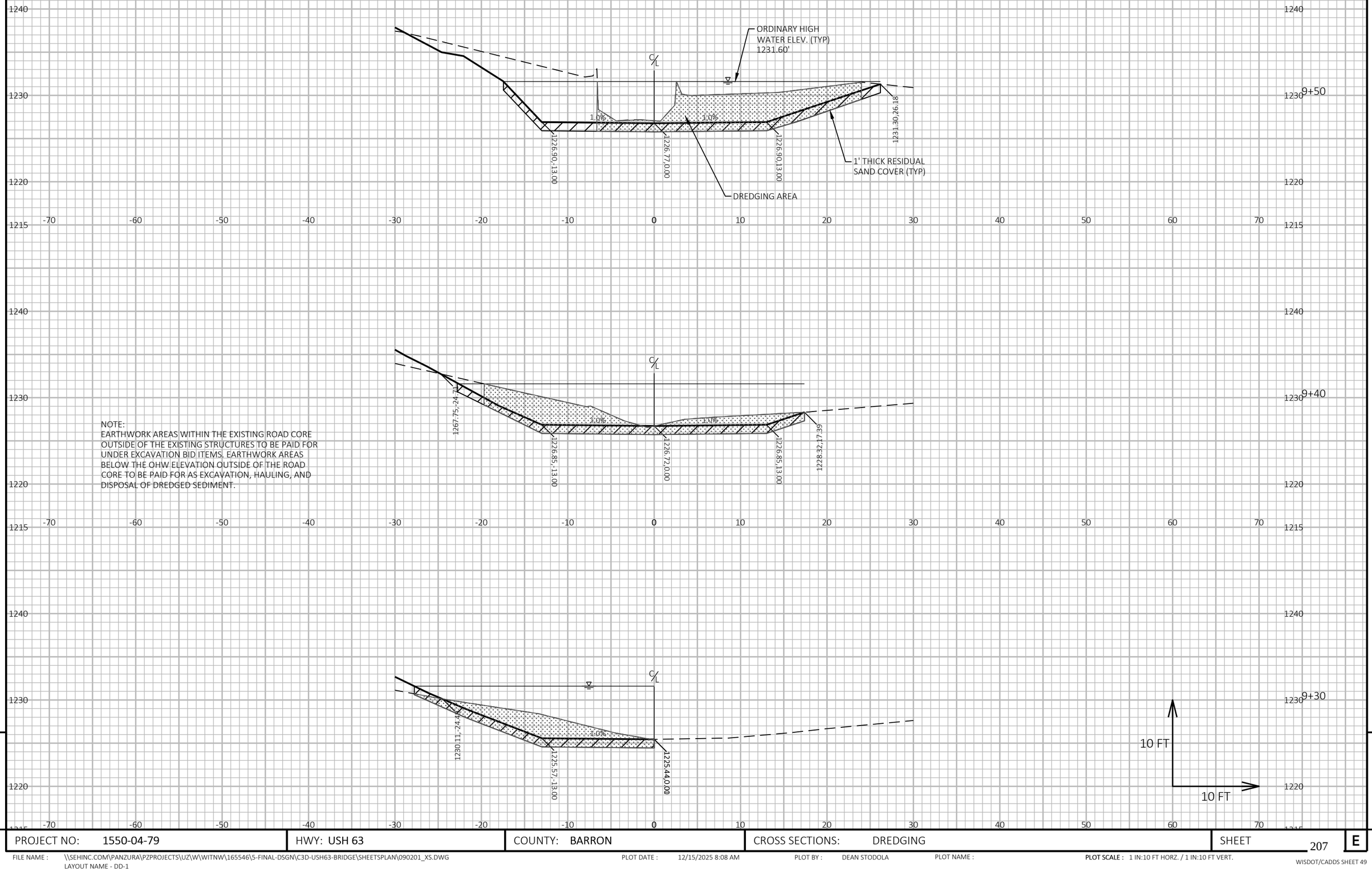
9

PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: BABCOCK AVENUE	SHEET 206	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - BA 2

PLOT DATE : 12/15/2025 8:08 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



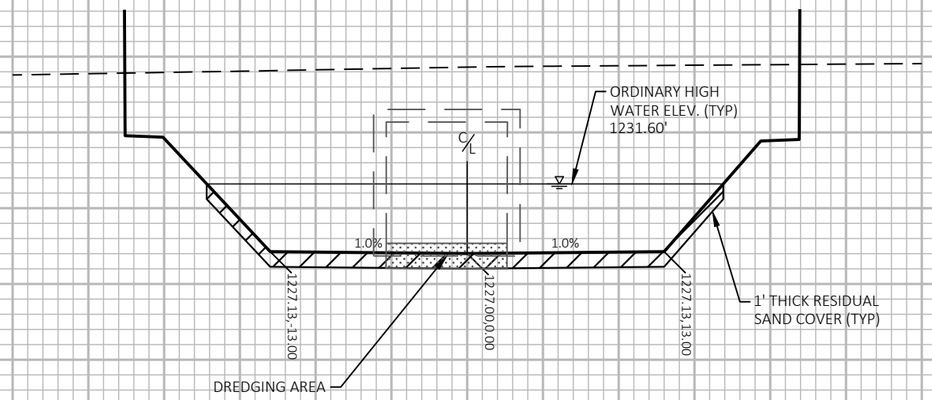
NOTE:
EARTHWORK AREAS WITHIN THE EXISTING ROAD CORE OUTSIDE OF THE EXISTING STRUCTURES TO BE PAID FOR UNDER EXCAVATION BID ITEMS. EARTHWORK AREAS BELOW THE OHW ELEVATION OUTSIDE OF THE ROAD CORE TO BE PAID FOR AS EXCAVATION, HAULING, AND DISPOSAL OF DREDGED SEDIMENT.

9 9

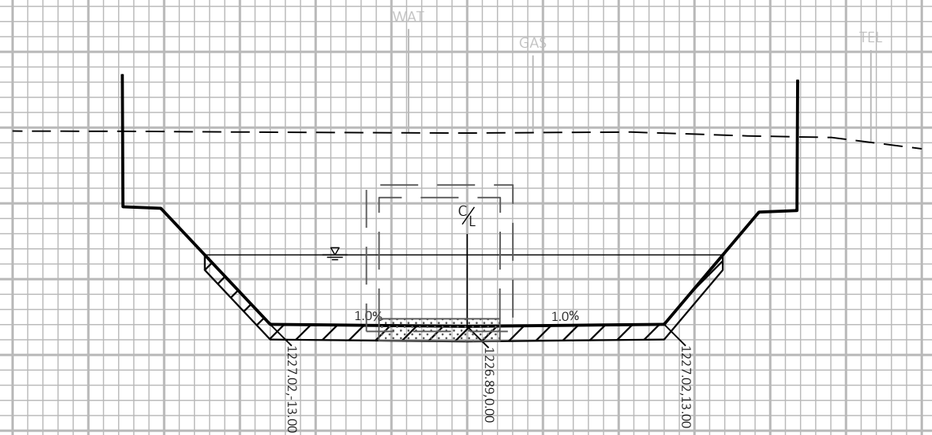
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: DREDGING	SHEET 207	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - DD-1
PLOT DATE : 12/15/2025 8:08 AM
PLOT BY : DEAN STODOLA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

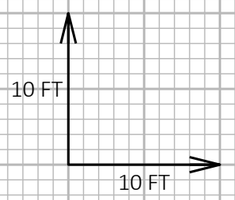
NOTE:
EARTHWORK AREAS WITHIN THE EXISTING ROAD CORE OUTSIDE OF THE EXISTING STRUCTURES TO BE PAID FOR UNDER EXCAVATION BID ITEMS. EARTHWORK AREAS BELOW THE OHW ELEVATION OUTSIDE OF THE ROAD CORE TO BE PAID FOR AS EXCAVATION, HAULING, AND DISPOSAL OF DREDGED SEDIMENT.



10+00



9+75



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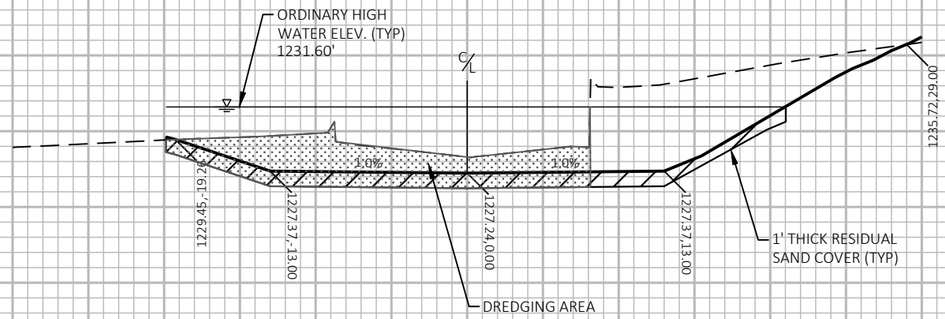
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: DREDGING	SHEET 208	E

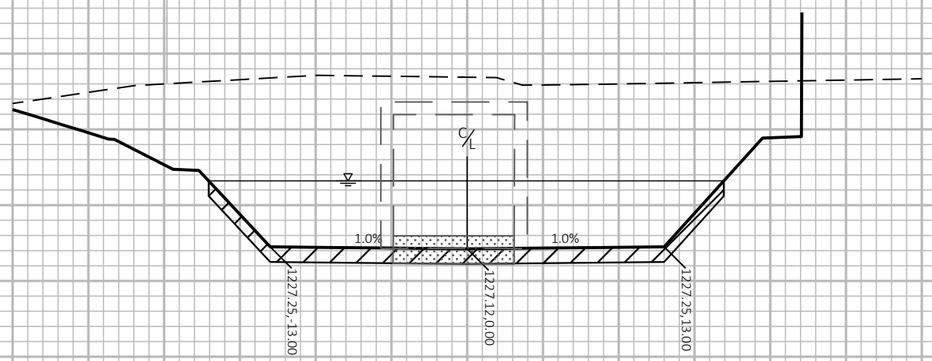
FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - DD-2

PLOT DATE : 12/15/2025 8:08 AM PLOT BY : DEAN STODOLA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



NOTE:
EARTHWORK AREAS WITHIN THE EXISTING ROAD CORE OUTSIDE OF THE EXISTING STRUCTURES TO BE PAID FOR UNDER EXCAVATION BID ITEMS. EARTHWORK AREAS BELOW THE OHW ELEVATION OUTSIDE OF THE ROAD CORE TO BE PAID FOR AS EXCAVATION, HAULING, AND DISPOSAL OF DREDGED SEDIMENT.



10+50

10+25

10 FT

10 FT

9

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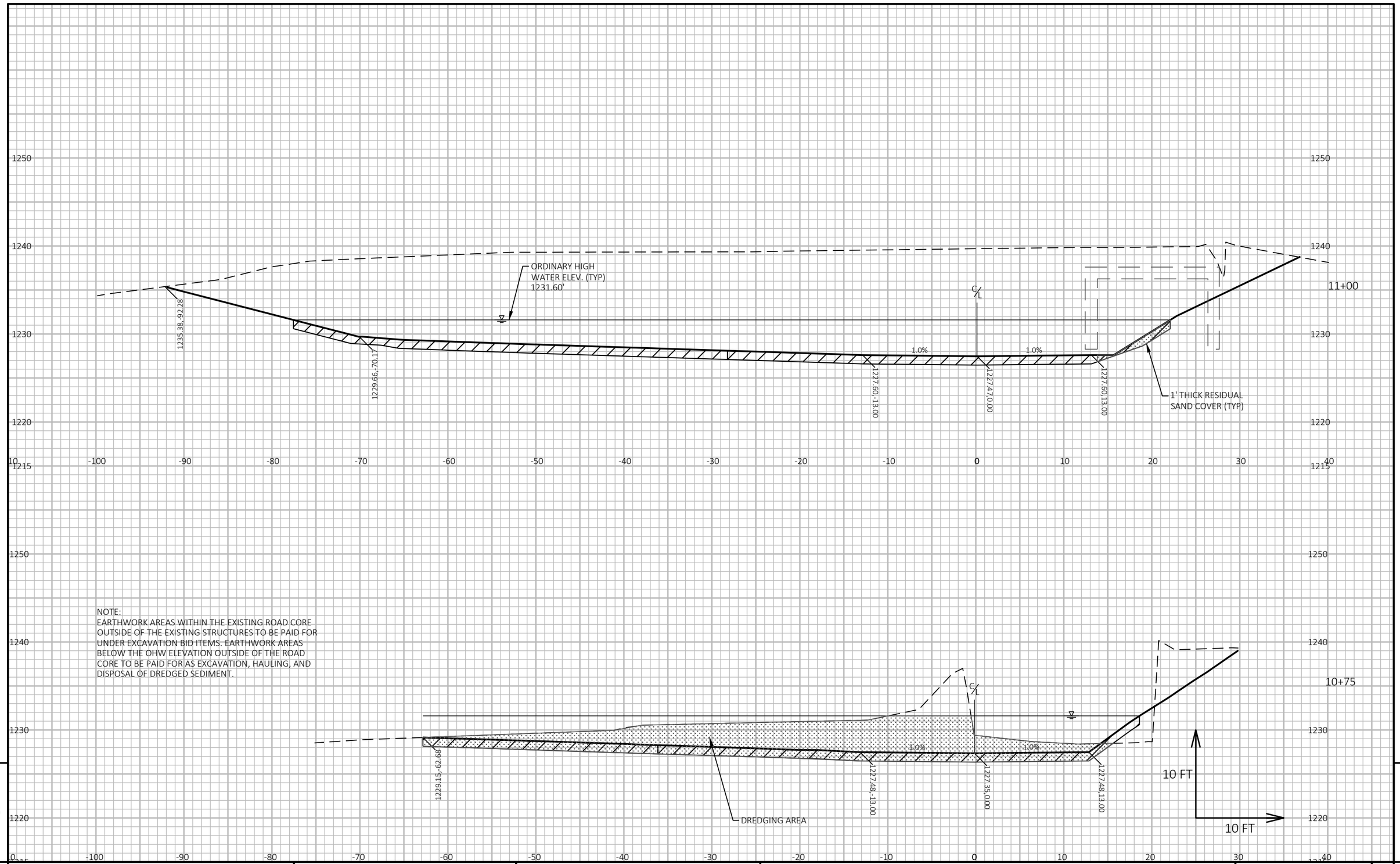
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: DREDGING	SHEET 209	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - DD-3

PLOT DATE : 12/15/2025 8:08 AM PLOT BY : DEAN STODOLA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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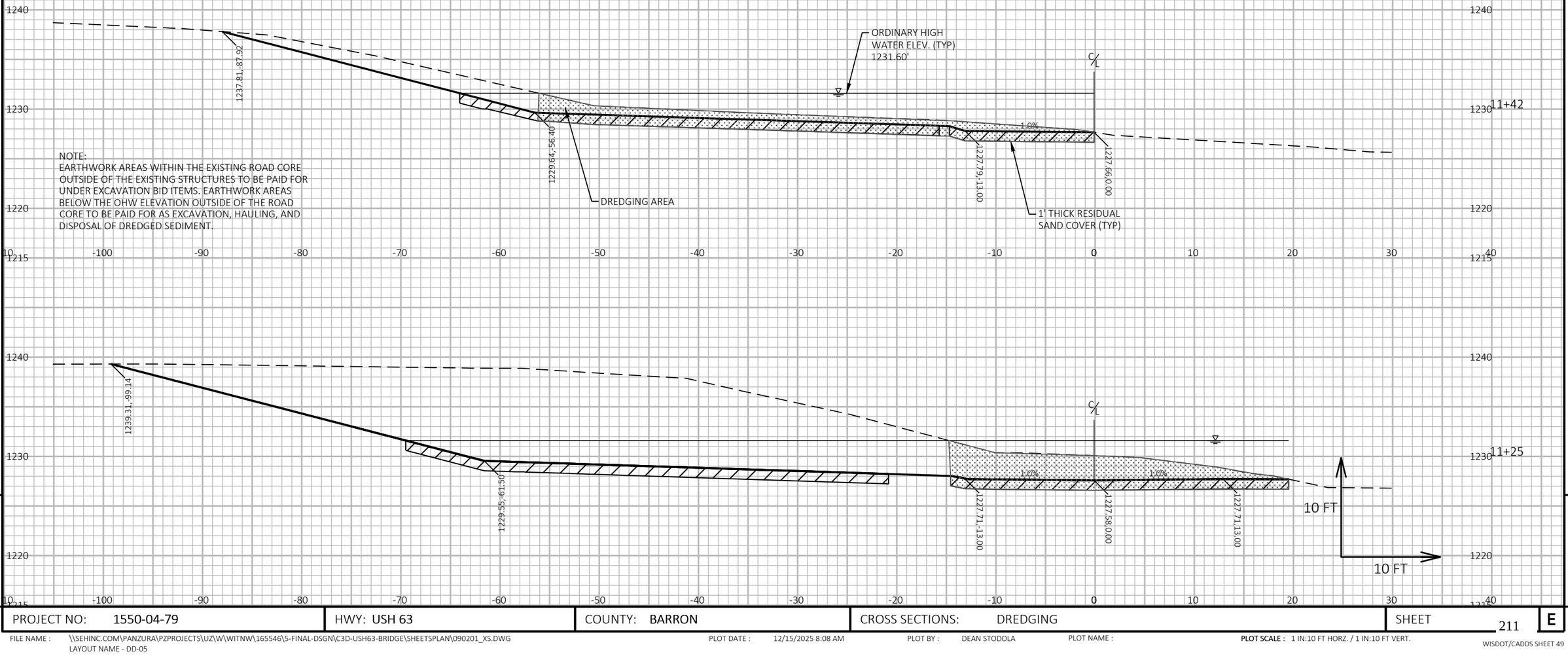
PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: DREDGING	SHEET 210	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - DD-4
PLOT DATE : 12/15/2025 8:08 AM
PLOT BY : DEAN STODOLA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



PROJECT NO: 1550-04-79	HWY: USH 63	COUNTY: BARRON	CROSS SECTIONS: DREDGING	SHEET 211	E

FILE NAME : \\SEHINC.COM\PANZURA\PZPROJECTS\UZ\W\WITNW\165546\5-FINAL-DSGN\C3D-USH63-BRIDGE\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - DD-05

PLOT DATE : 12/15/2025 8:08 AM PLOT BY : DEAN STODOLA 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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