RHI FEBRUARY 2021

PROJECT ID: 1175-21-71

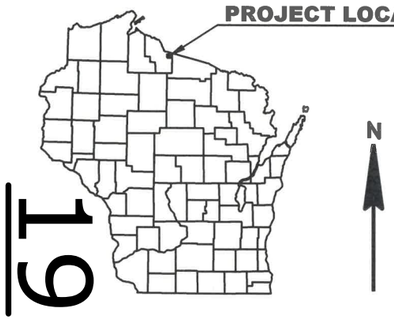
COUNTY: IRON

ORDER OF SHEETS

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

TOTAL SHEETS = 426

PROJECT LOCATION



19

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

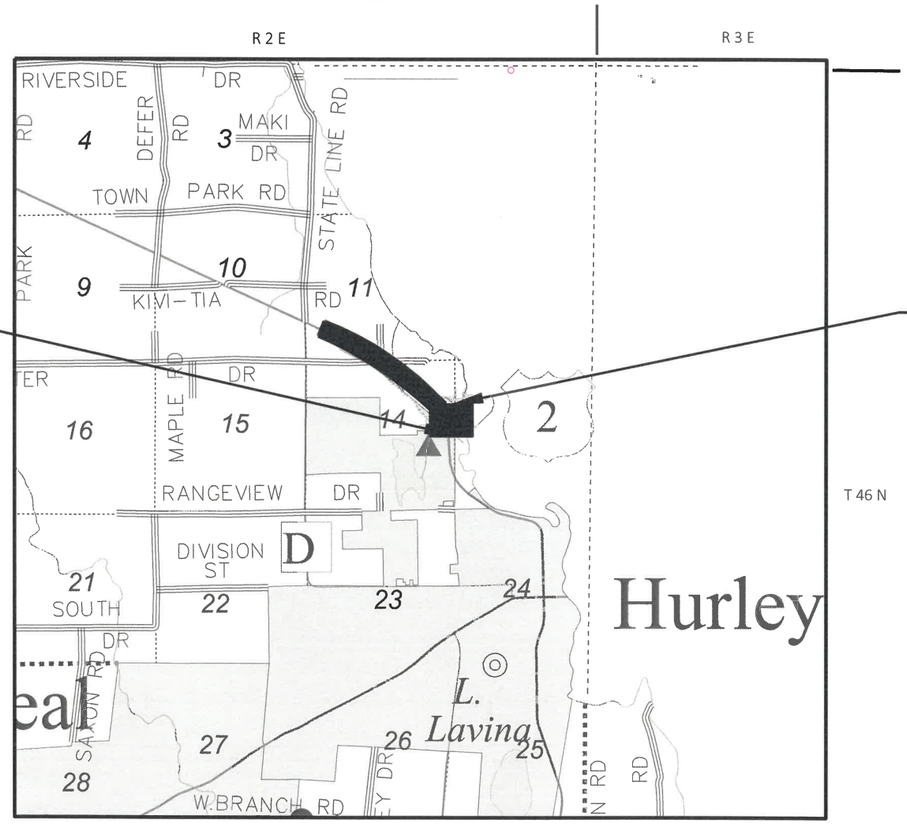
MANITOWISH - HURLEY

USH 51 OVERHEAD REMOVAL B-26-0006

USH 51
IRON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1175-21-71	WISC 2021176	1

STATE PROJECT NUMBER
1175-21-71



T 46 N

BEGIN PROJECT
STA. 108+36NB
Y=375898.151
X=740293.001

END PROJECT
STA. 116+65.65

DESIGN DESIGNATION		USH 51	USH 2
A.A.D.T.	=	4100	4600
A.A.D.T.	=	5100	5600
D.H.V.	=	638	1708
D.D.	=	58/42	61/39
T.	=	6.3%	18.8%
DESIGN SPEED	=	50 MPH	60 MPH
ESALS	=	3,000,000	3,000,000

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

LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 0.157 Mi.

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), IRON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS PREPARED BY
AYRES



DATE: 10-26-2020

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	AYRES
Designer	AYRES
Project Manager	DANIEL ERVA
Regional Supervisor	ROBIN STAFFORD

APPROVED FOR THE DEPARTMENT
DATE: 10/27/2020 (Signature)

E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\010101-TI.DWG PLOT DATE : 10/26/2020 10:34 AM PLOT BY : AYRES PLOT NAME :

GENERAL NOTES

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

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

RESHAPE AND SEEDING OF ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS OUTSIDE OF THE ENGINEER DETERMINED CONSTRUCTION LIMITS ARE INCIDENTAL TO THE CONTRACT.

CURB AND GUTTER ELEVATIONS ARE ALONG THE FLANGE LINE UNLESS OTHERWISE NOTED. RADIUS POINTS, UNLESS OTHERWISE NOTED, ARE TO FACE OF CURB.

CURVE DATA IS BASED ON ARC DEFINITION.

BEARINGS SHOWN ON THIS PLAN ARE TRUE BEARINGS.

PROPERTY LINES SHOWN ARE APPROXIMATE.

ANY DOWEL BARS, TIE BARS, REINFORCEMENT, OR TERMINAL ANCHORS, FOUND IN EXISTING PAVEMENT WILL BE INCIDENTAL TO THE ITEM "REMOVING PAVEMENT".

PROJECT AND UTILITY CONTACTS

* WISCONSIN DEPARTMENT OF NATURAL RESOURCES
NORTH REGION HEADQUARTERS
ATTN: JON SIMONSEN
107 SUTLIFF AVENUE
RHINELANDER, WI 54501
PHONE: (715) 367-1936
EMAIL: jonathan.simonsen@wisconsin.gov

* CENTURYLINK-COMMUNICATION LINE
ATTN: BEN BAKER
625 SOUTH AVENUE
HAWKINS, WI 54530
PHONE: 715-567-0725
EMAIL: ben.baker@Centurylink.com

* MERIT NETWORK, INC.-COMMUNICATION LINE
ATTN: JAMIE LaROCCA
880 TECHNOLOGY DRIVE, SUITE 8
ANN ARBOR, MI 48108
PHONE: 734-527-5698
EMAIL: j.larocca@merit.edu

* NORTHERN NATURAL GAS COMPANY-GAS/PETROLEUM
ATTN: KAREN PERREAULT
118 US HWY 41E
NEGAUNEE, MI 49866
PHONE: 402-530-3102
E-MAIL: karen .perreault@nngco.com

* XCEL ENERGY-ELECTRICITY
ATTN: BRENNAN HENRY
1751 LIBERTY STREET
IRONWOOD, MI 49938
PHONE: 715-737-3317
EMAIL: brennan.j.henry@xcelenergy.com

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

* -MEMBER OF DIGGERS HOTLINE

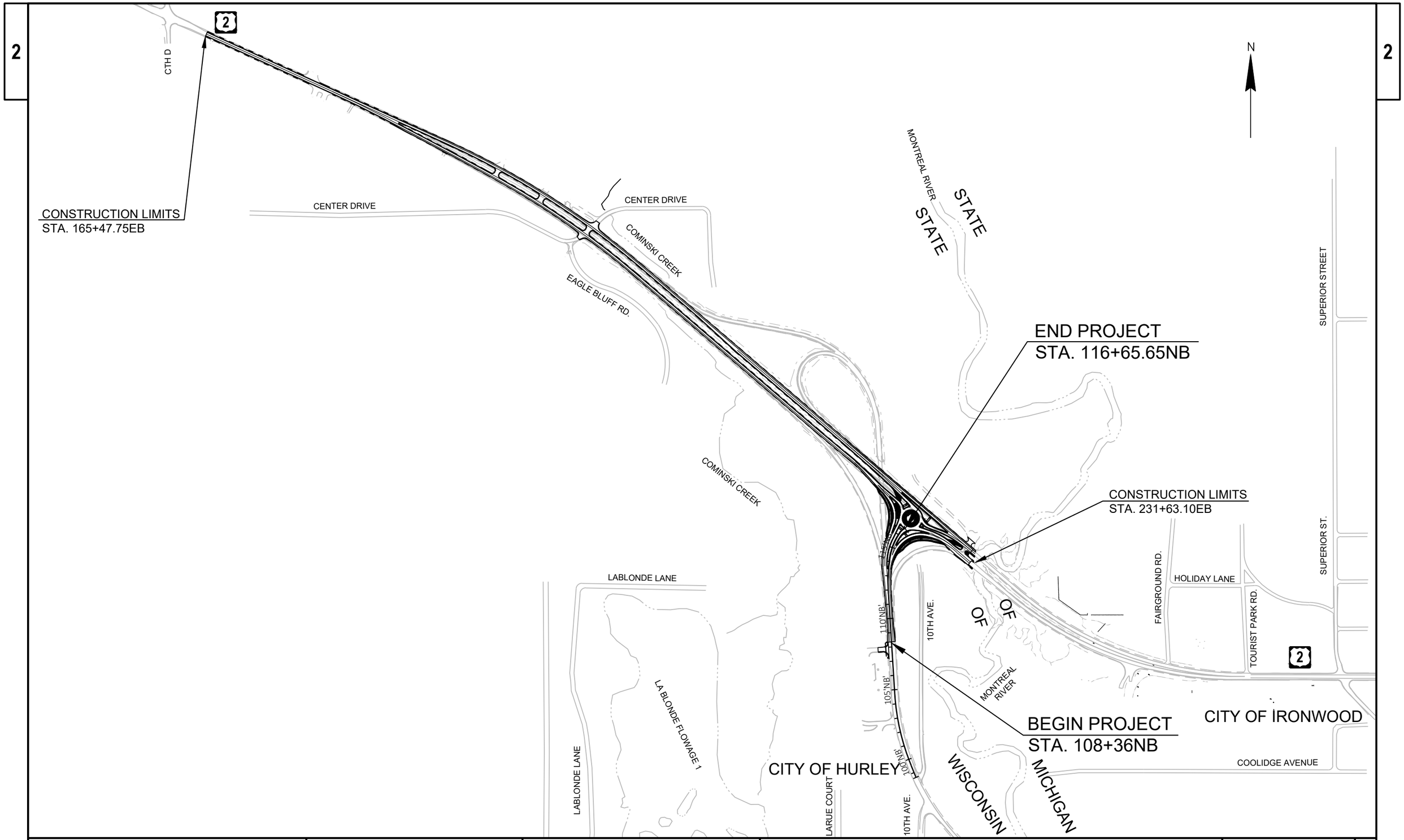
RUNOFF COEFFICIENT TABLE

	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 AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 17.2 ACRES
SOIL GROUP A & D

ORDER OF SECTION 2 SHEETS

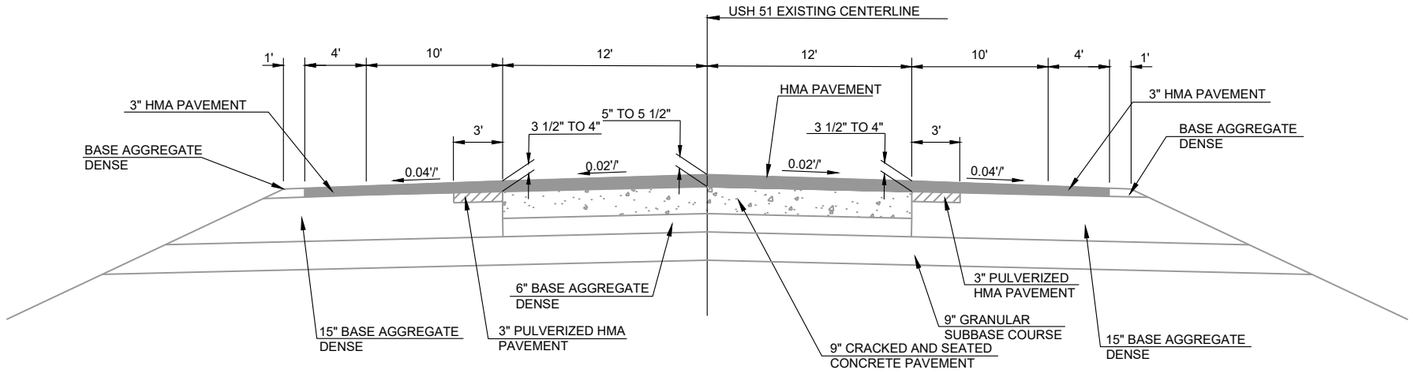
GENERAL NOTES & CONTACTS
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
PLAN OFFSETS
PAVING GRADES
CURB RAMPS
EROSION CONTROL
STORM SEWER
PLANTING
PERMANENT SIGNING
LIGHTING
PAVEMENT MARKING
TRAFFIC CONTROL
STAGE CONSTRUCTION
ALIGNMENT



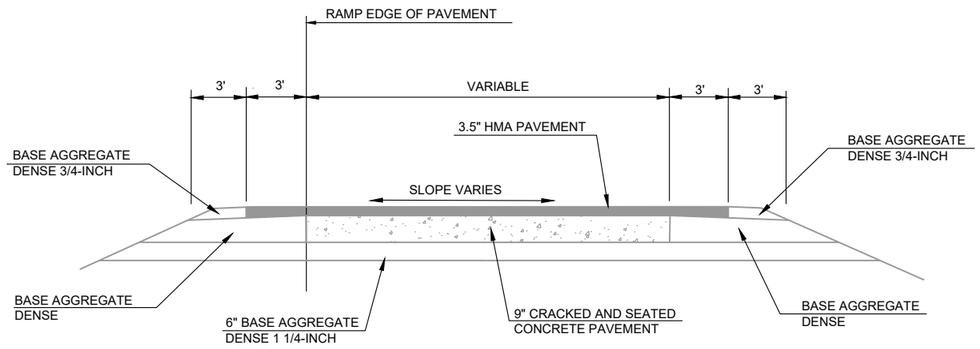
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po
PLOT DATE : 12/3/2020 2:21 PM
PLOT BY : SOUFAL, KEVIN
PLOT NAME :
PLOT SCALE : 1 IN:600 FT
WISDOT/CADDS SHEET 42

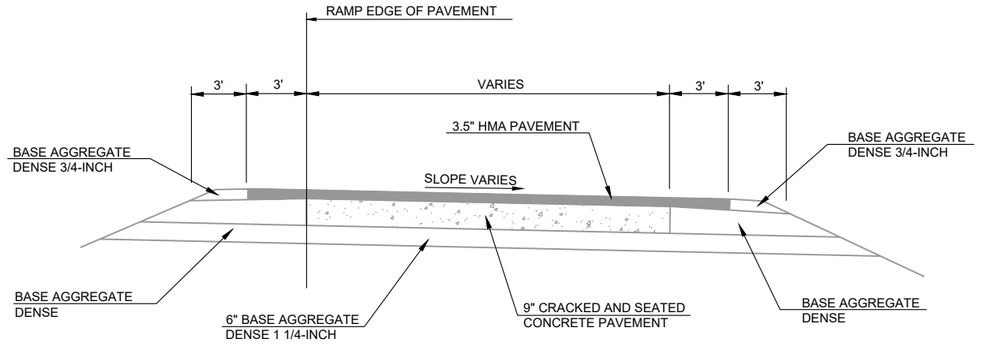
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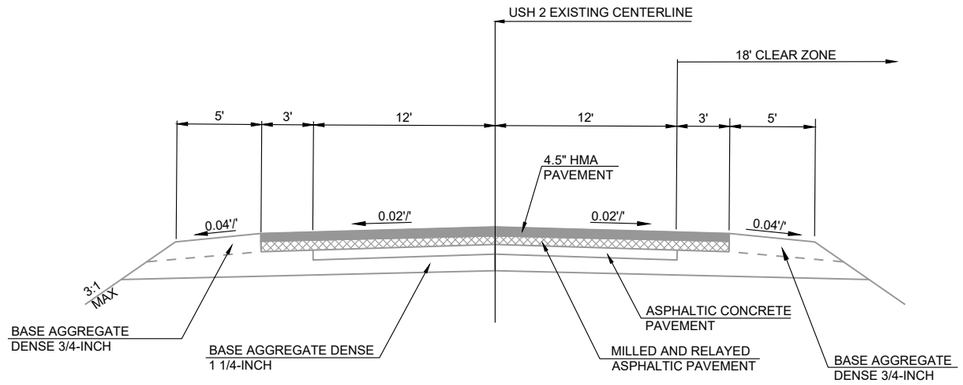
EXISTING TYPICAL SECTION FOR USH 51



EXISTING TYPICAL SECTION FOR RAMPS

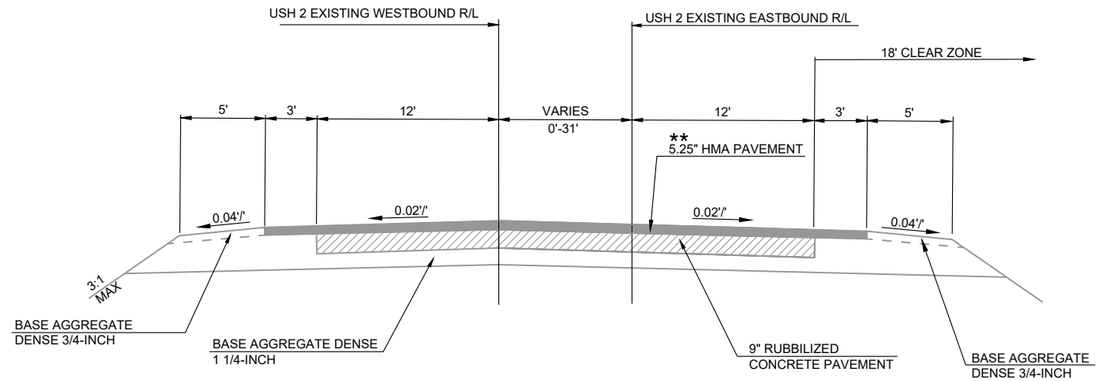


EXISTING SUPERELEVATED TYPICAL SECTION FOR RAMPS



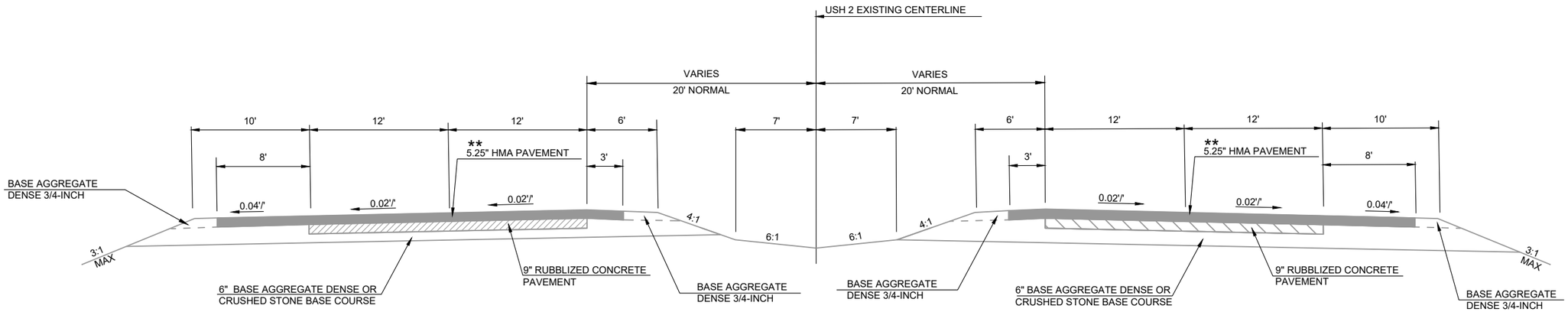
EXISTING TYPICAL SECTION FOR USH 2

STA. 165+47.75EB - STA. 175+18.99EB



EXISTING TYPICAL SECTION FOR USH 2

STA. 175+18.99EB - STA. 182+40.99EB

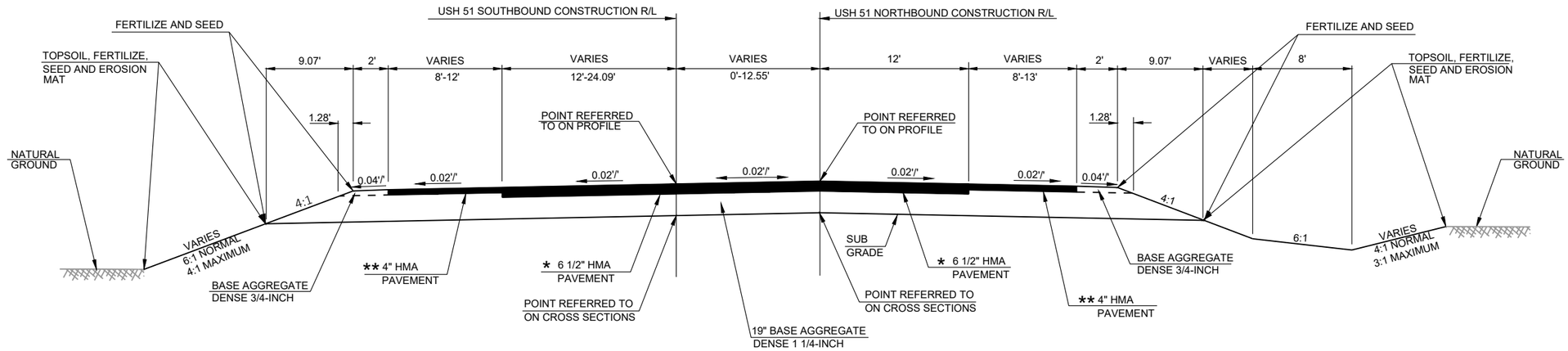


EXISTING TYPICAL SECTION FOR USH 2

STA. 182+40.99EB - STA. 231+60.95EB

** THESE PAVEMENT THICKNESSES ARE SHOULDER EDGE ON 2-LANE AND OUTER SHOULDER EDGE ON 4-LANE. THICKNESS VARIES FROM THERE TO COMPENSATE FOR EXISTING 0.015'/' CROWN OF EXISTING RUBBILIZED CONCRETE PAVEMENT.

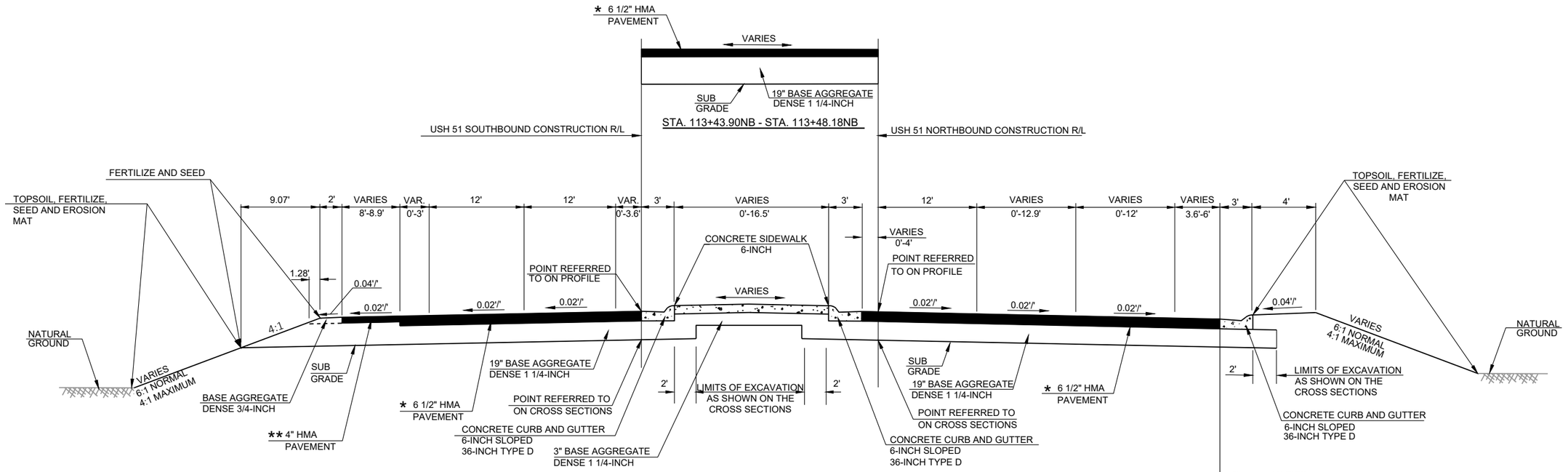
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TYPICAL FINISHED SECTION FOR USH 51

STA. 108+36NB - STA. 113+43.90NB USH 51

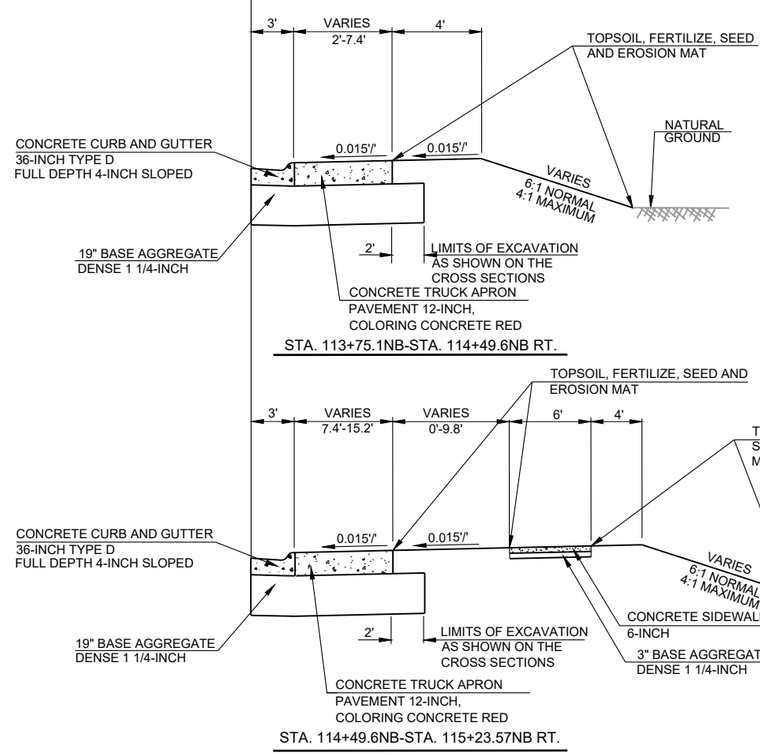
PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)
** 4" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER)



TYPICAL FINISHED SECTION FOR USH 51

STA. 113+43.90NB - STA. 115+23.57NB

PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)
** 4" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER)

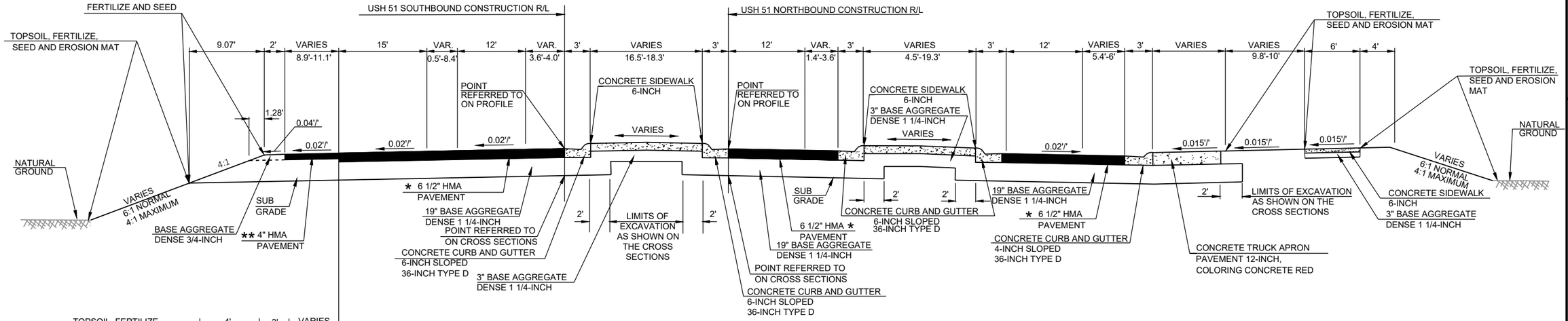


STA. 113+75.1NB-STA. 114+49.6NB RT.

STA. 114+49.6NB-STA. 115+23.57NB RT.

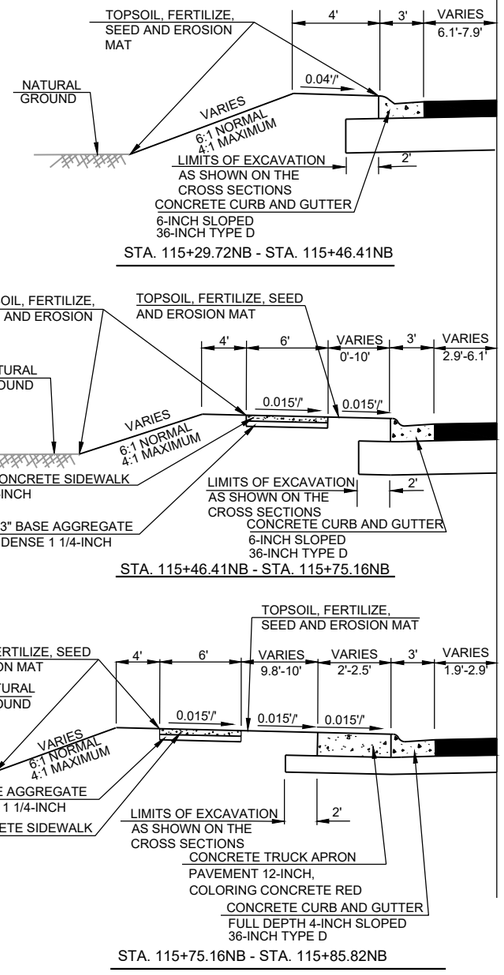
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TYPICAL SECTIONS	SHEET 7	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\020304-TS.DWG
LAYOUT NAME - 020304-ts
PLOT DATE : 8/31/2020 10:16 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:200 FT



TYPICAL FINISHED SECTION FOR USH 51

STA. 115+23.57NB - STA. 115+85.82NB

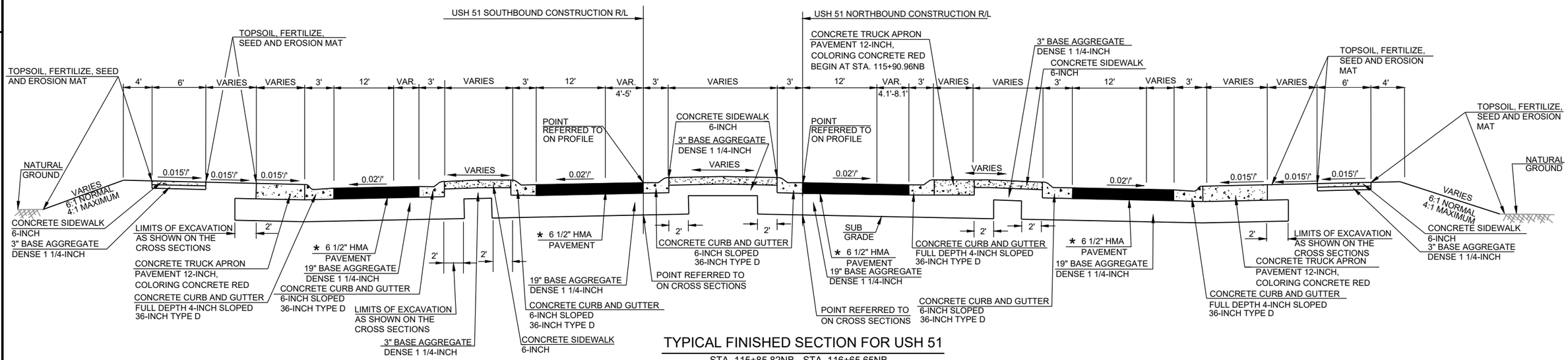


STA. 115+29.72NB - STA. 115+46.41NB

STA. 115+46.41NB - STA. 115+75.16NB

STA. 115+75.16NB - STA. 115+85.82NB

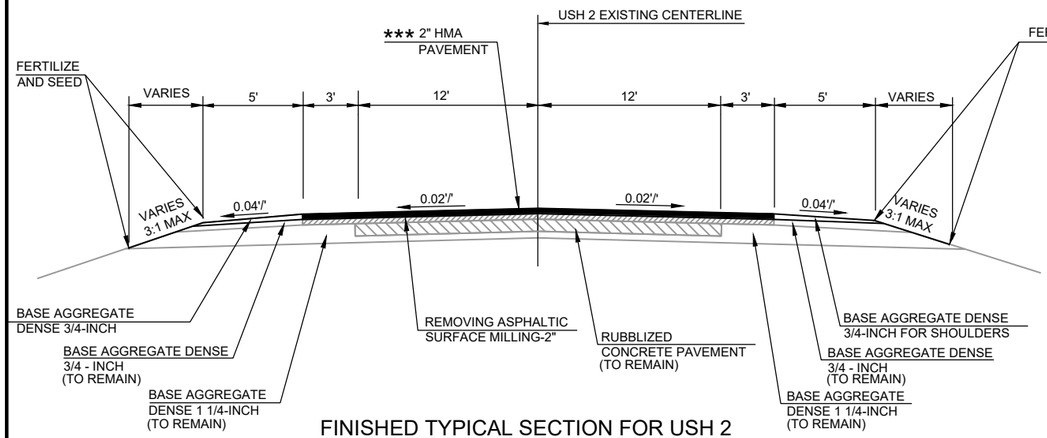
PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)
** 4" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER)



TYPICAL FINISHED SECTION FOR USH 51

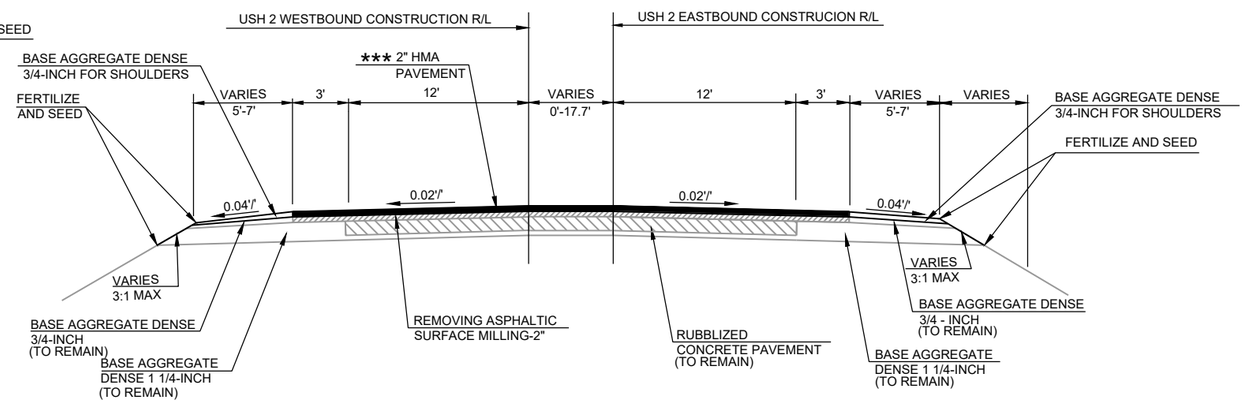
STA. 115+85.82NB - STA. 116+65.65NB

PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)
*** 2" HMA PAVEMENT	2" (4 MT 58-34 V)



FINISHED TYPICAL SECTION FOR USH 2

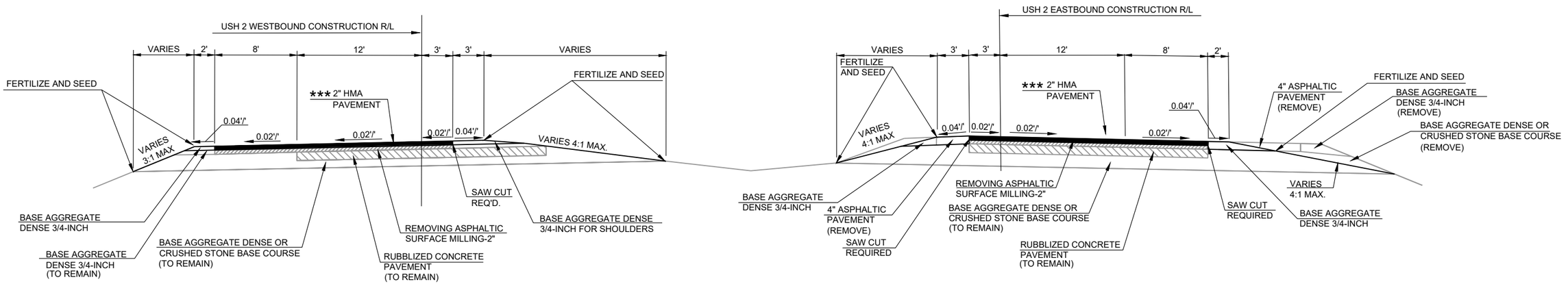
STA. 165+47.75EB - STA. 175+18.99EB



FINISHED TYPICAL SECTION FOR USH 2

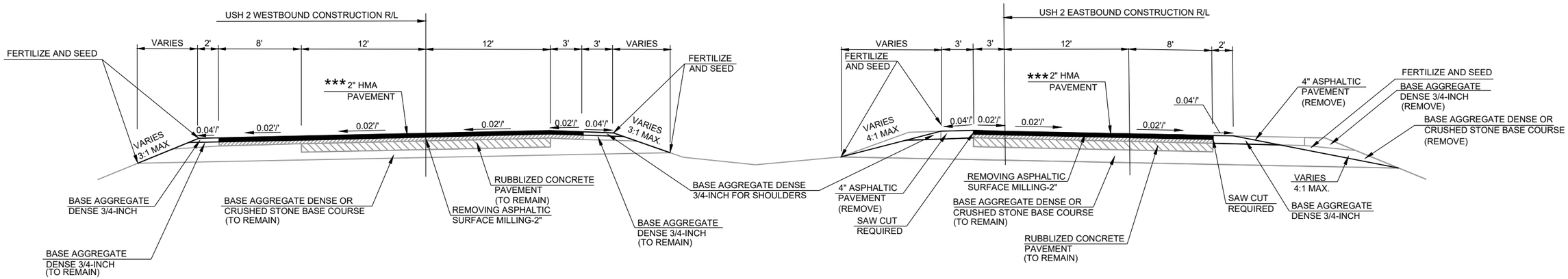
STA. 175+18.99EB - STA. 180+31.15EB

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TYPICAL SECTIONS	SHEET 9	E



FINISHED TYPICAL SECTION FOR USH 2

STA. 180+31.5EB - STA. 205+35.3EB



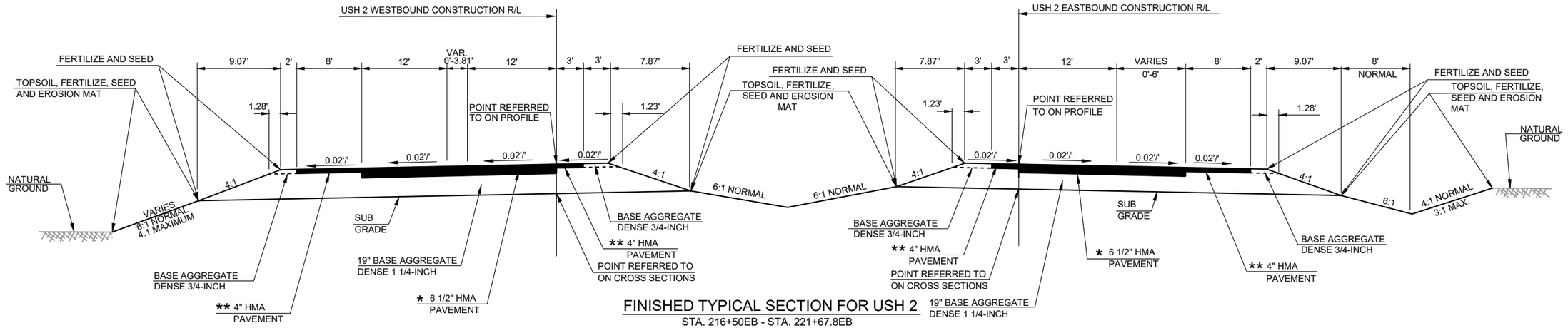
FINISHED TYPICAL SECTION FOR USH 2

STA. 205+35.3EB - STA. 216+50EB

PAVEMENT LAYERS	
*** 2" HMA PAVEMENT	2" (4 MT 58-34 V)

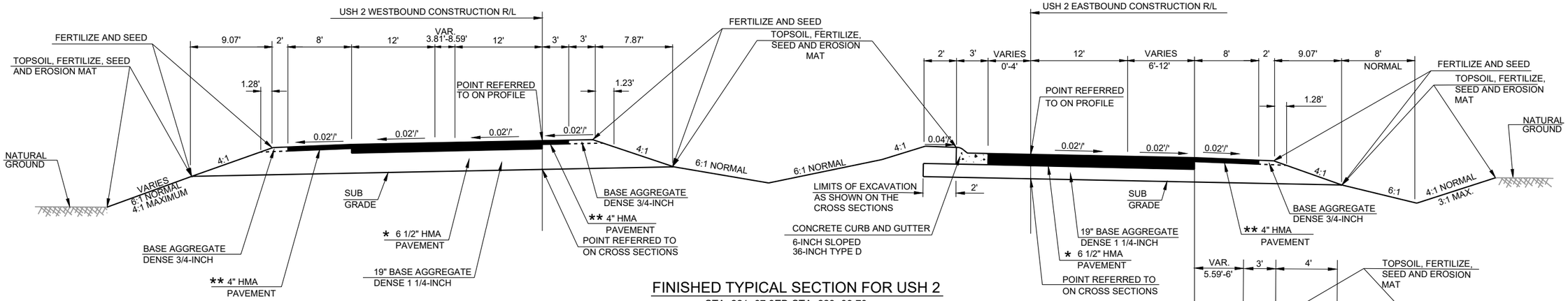
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TYPICAL SECTIONS	SHEET 10	E

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LAYOUT NAME - 020307-ts
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FINISHED TYPICAL SECTION FOR USH 2

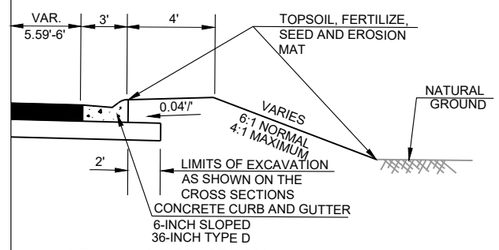
STA. 216+50EB - STA. 221+67.8EB



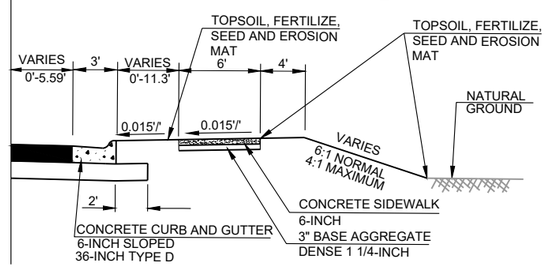
FINISHED TYPICAL SECTION FOR USH 2

STA. 221+67.8EB-STA. 223+09.70

PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)
** 4" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER)

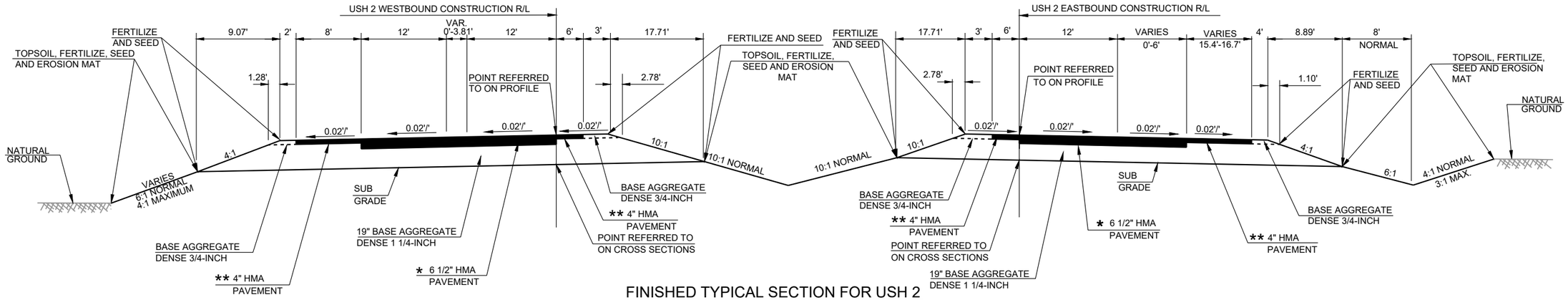


STA. 222+32.04EB - STA. 222+71.20EB USH 2



STA. 222+71.20EB-STA. 223+09.70 USH 2

2

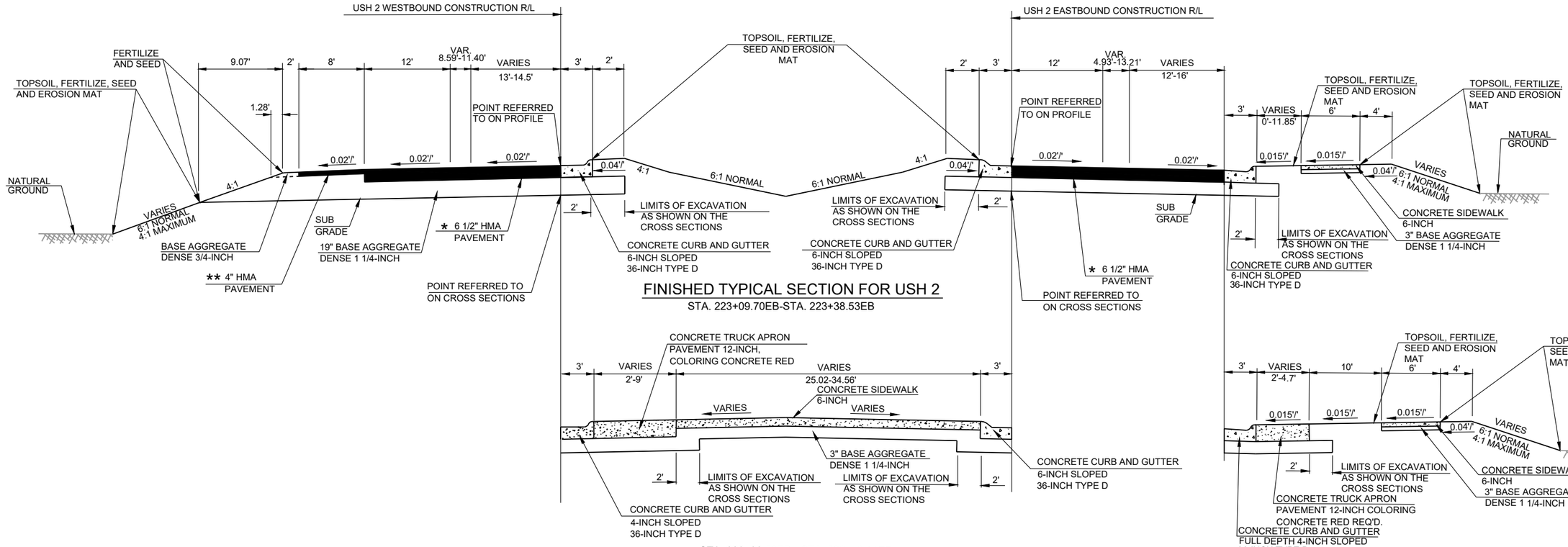


FINISHED TYPICAL SECTION FOR USH 2

STA. 230+42.69EB - STA. 231+60.95EB

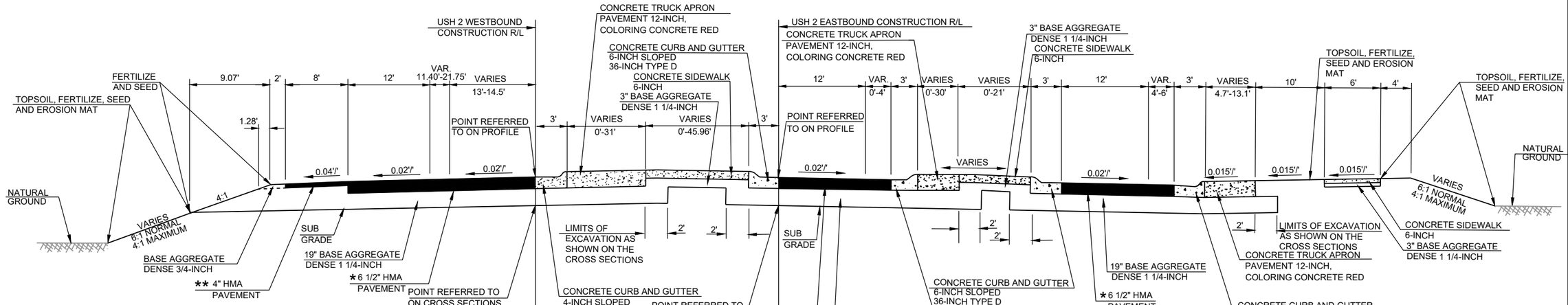
PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)
** 4" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER)

2



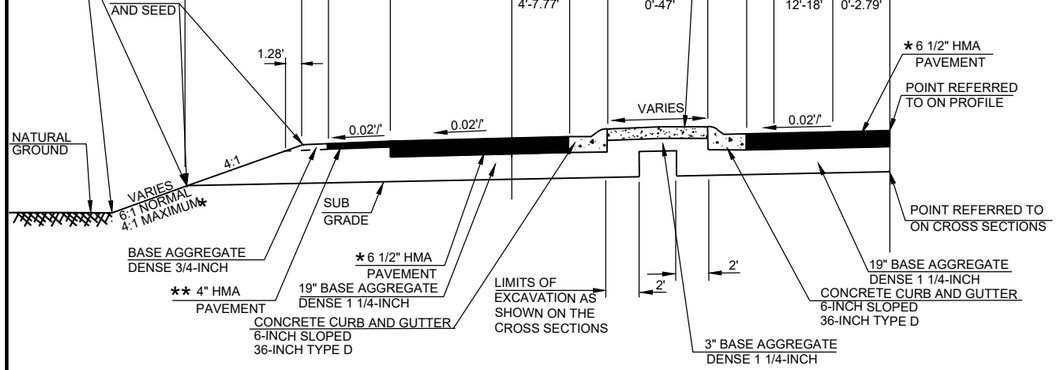
PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)
** 4" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER)

2

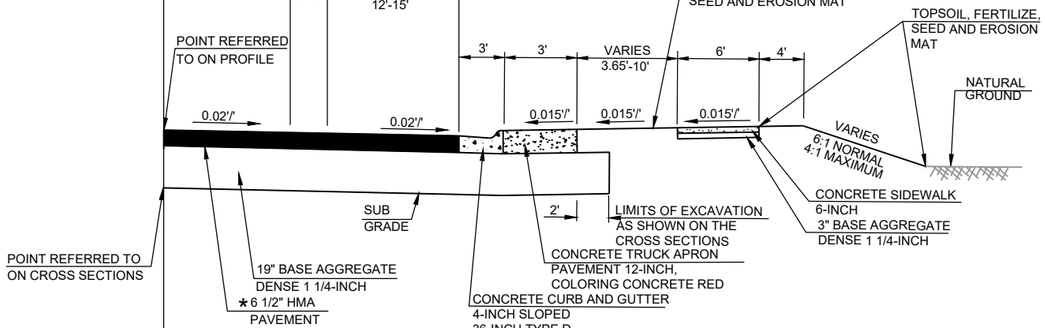


FINISHED TYPICAL SECTION FOR USH 2

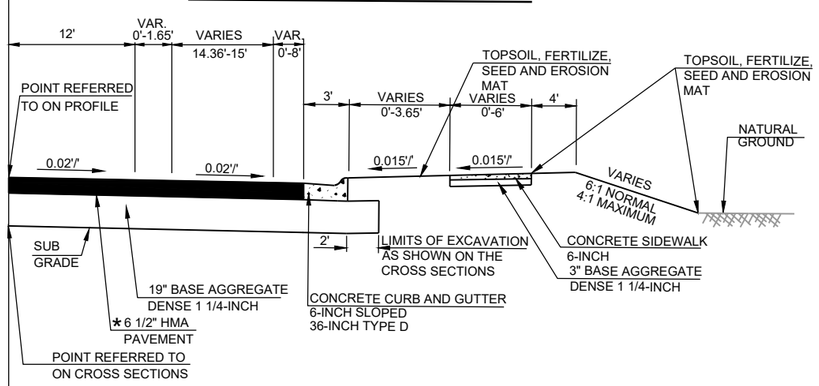
STA. 223+73.21EB-STA. 225+13.03EB
STA. 226+73.03EB-STA. 229+14.91EB



STA. 224+19.86EB-STA. 225+13.03EB
STA. 226+73.03EB-STA. 228+69.41EB

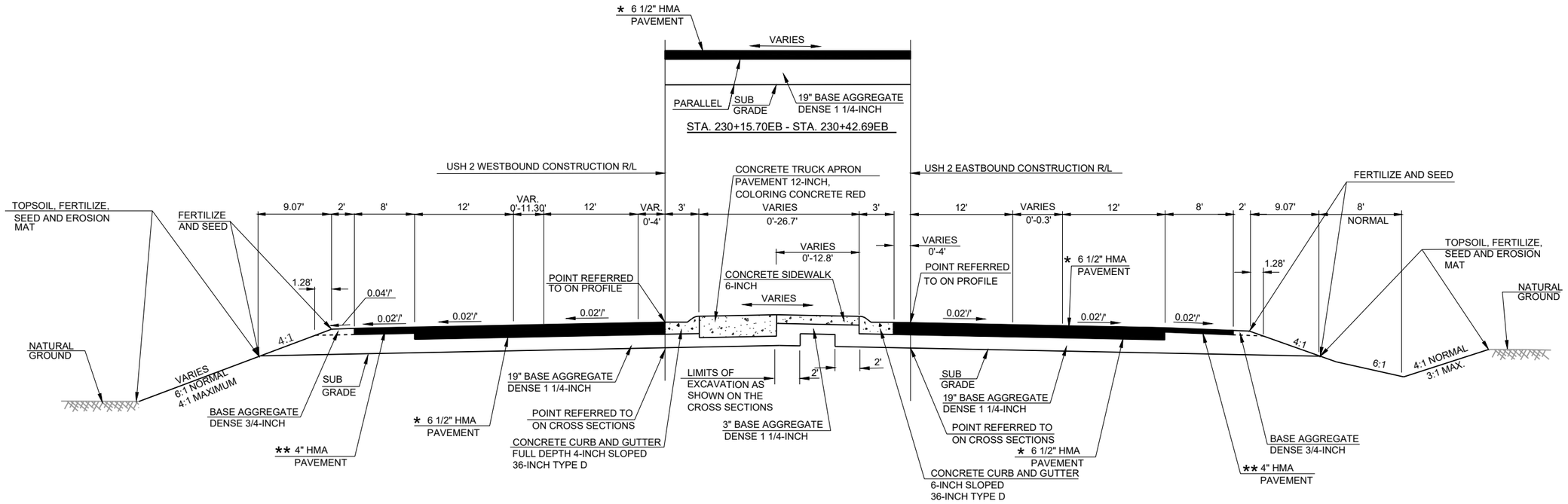


STA. 227+60.26EB-STA. 228+71.85EB



STA. 228+71.85EB-STA. 229+14.91EB

PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)
** 4" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER)

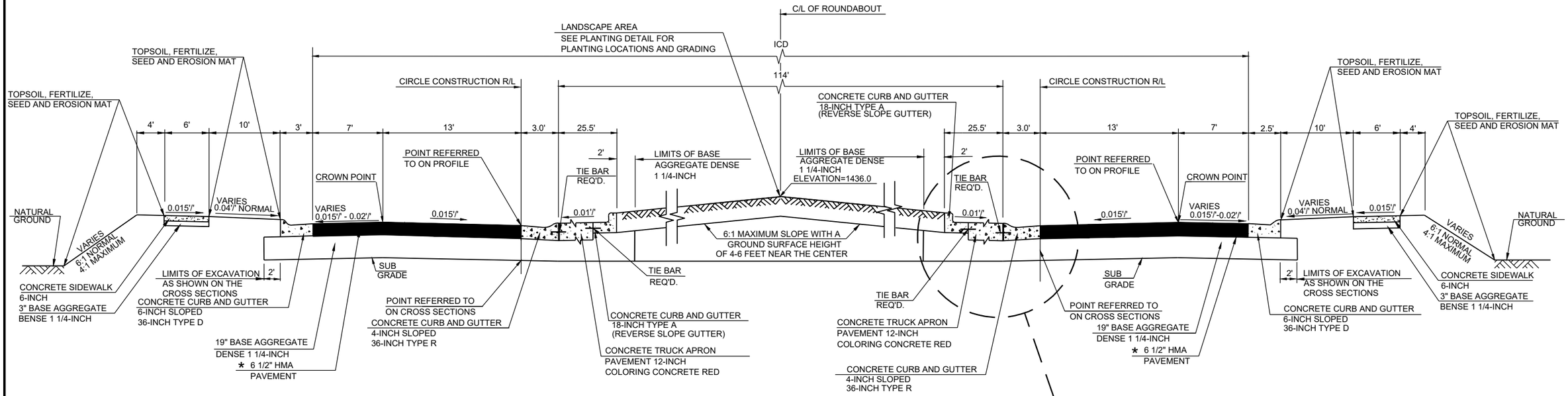


TYPICAL FINISHED SECTION FOR USH 2

STA. 229+14.91EB - STA. 230+42.69EB

PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)
** 4" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER)

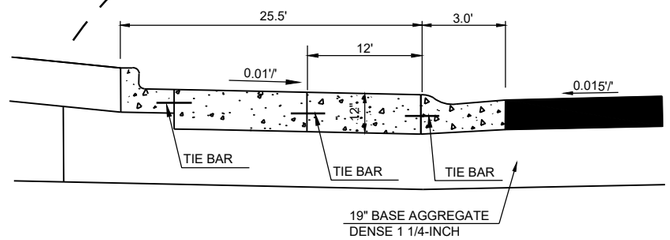
2



TYPICAL FINISHED SECTION FOR USH 51/USH 2

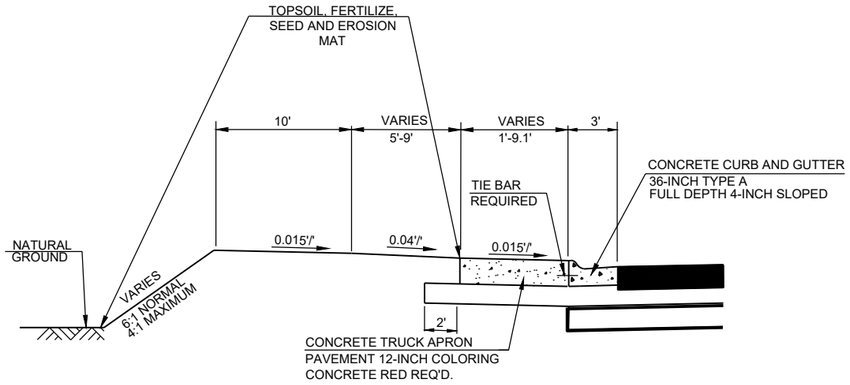
ROUNDABOUT DETAIL

PAVEMENT LAYERS	
* 6 1/2" HMA PAVEMENT	1 3/4" (4 MT 58-34 V UPPER LAYER) 2 1/4" (3 MT 58-28 S LOWER LAYER) 2 1/2" (3 MT 58-28 S LOWER LAYER)

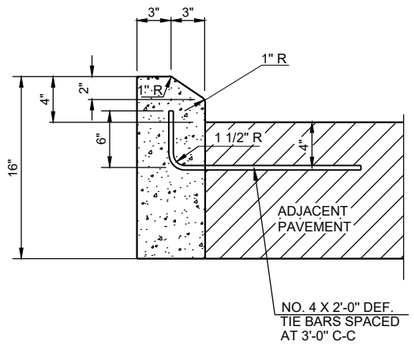


TRUCK APRON (TYPICAL)

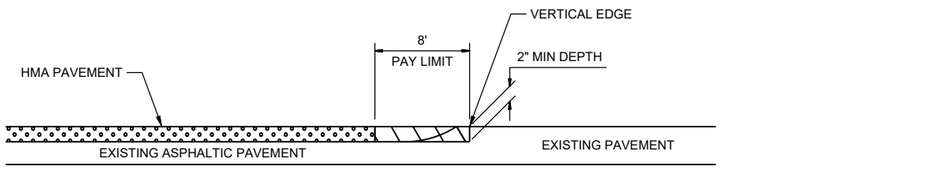
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TYPICAL SECTIONS	SHEET 16	E



TYPICAL SECTION AT OUTSIDE TRUCK APRON



CONCRETE CURB, TYPE G MODIFIED

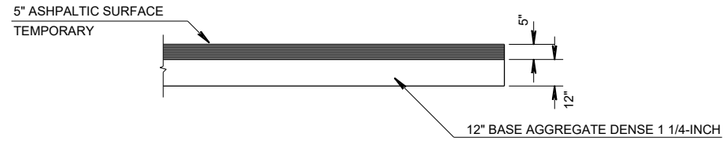


* SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

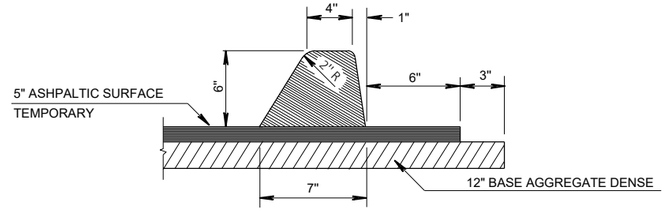
REMOVING ASPHALTIC SURFACE, MILLING

REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE

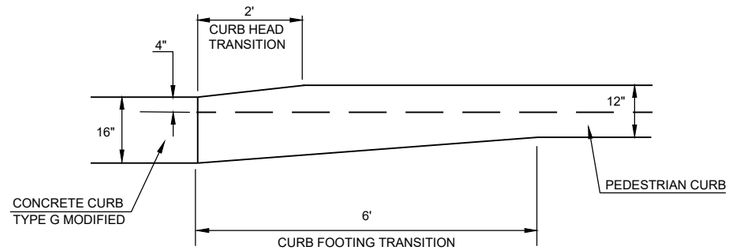
BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



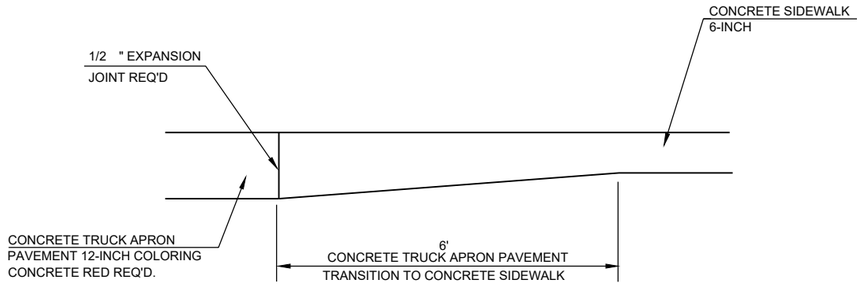
DETAIL FOR TEMPORARY PAVEMENT



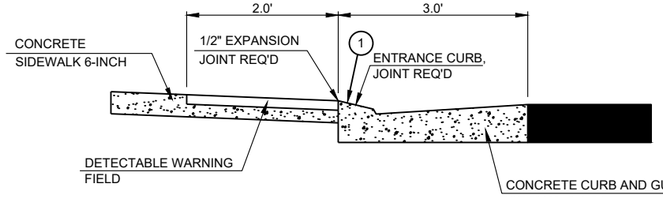
ASPHALTIC CURB DETAIL



DETAIL FOR PEDESTRIAN CURB TRANSITION

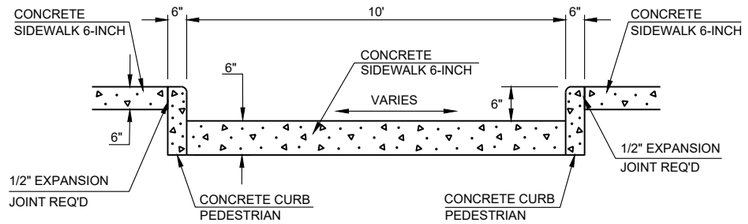


DETAIL FOR CONCRETE TRUCK APRON PAVEMENT TRANSITION TO CONCRETE SIDEWALK

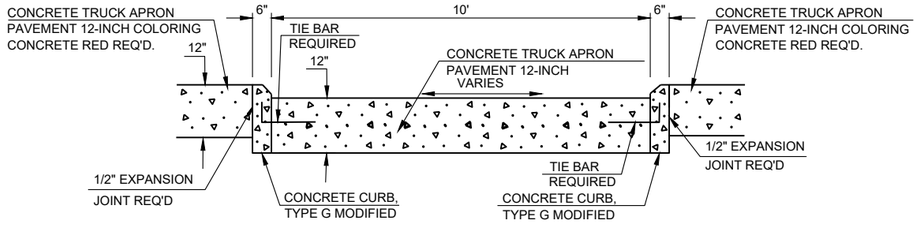


SECTION A-A

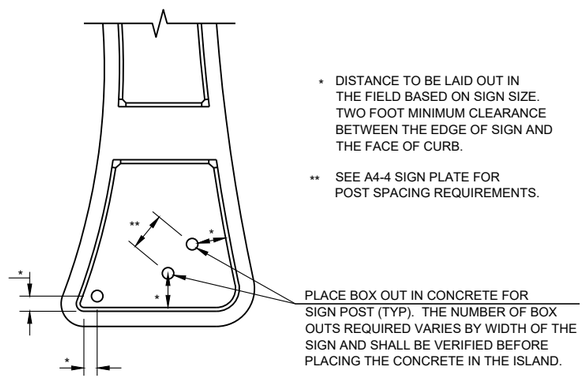
1 NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%.



SECTION B-B



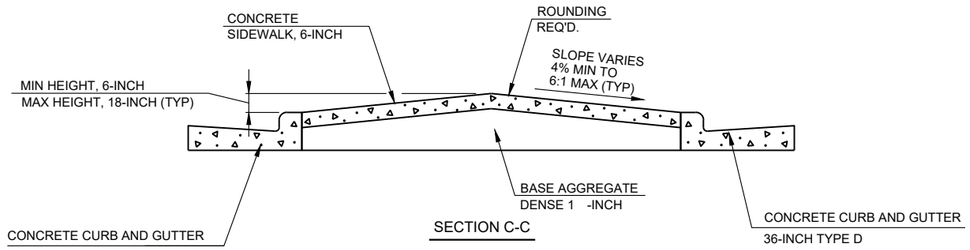
SECTION B-B
AT TRUCK APRON LOCATIONS



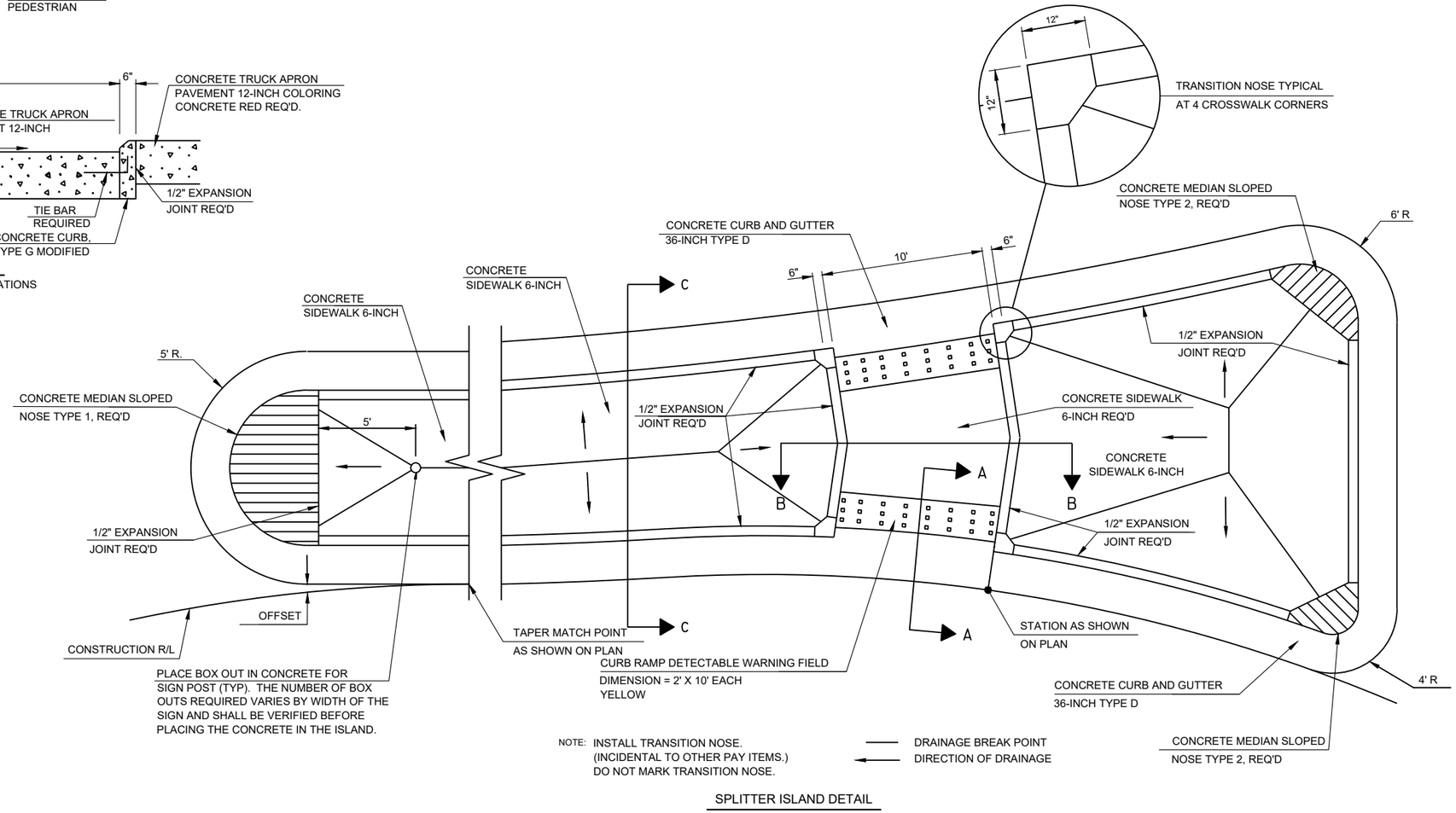
* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

** SEE A4-4 SIGN PLATE FOR POST SPACING REQUIREMENTS.

ISLAND SIGN LOCATION DETAIL (TYP)

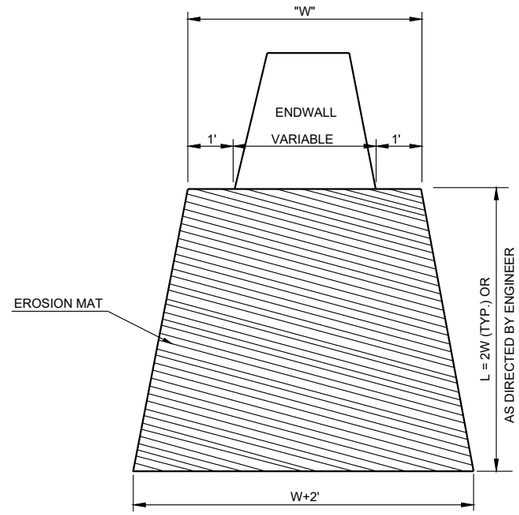


SECTION C-C

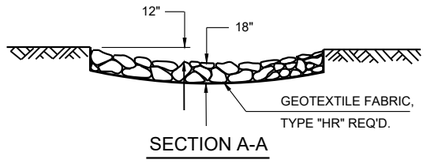


SPLITTER ISLAND DETAIL

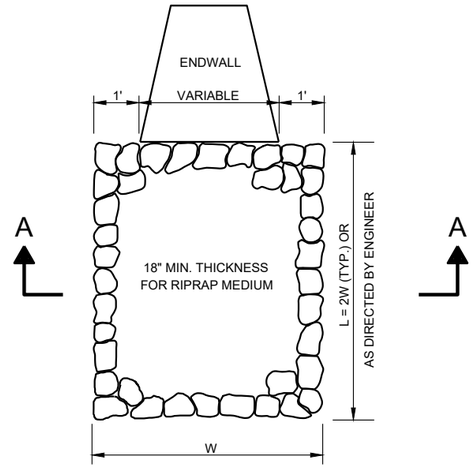
2



EROSION MAT TREATMENT AT CULVERTS

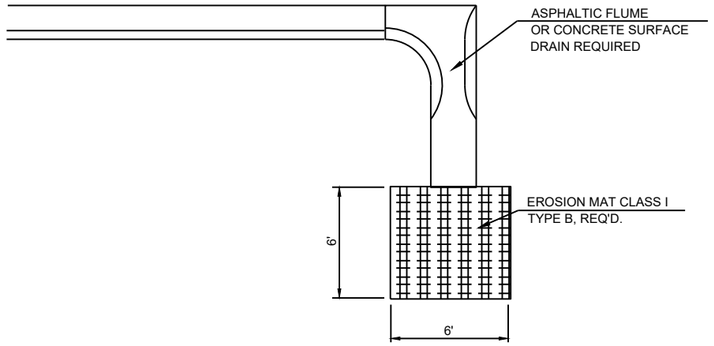


SECTION A-A

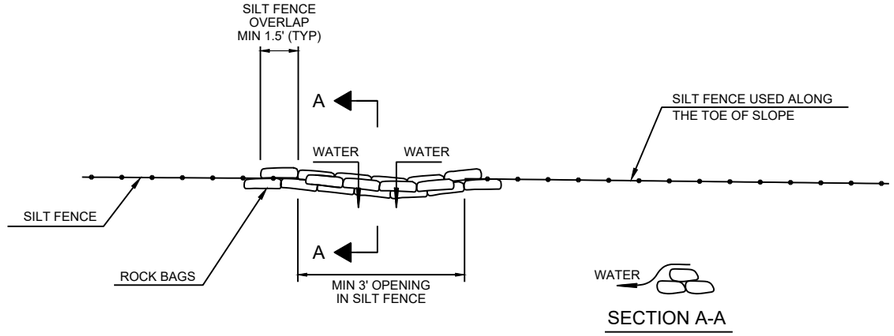


RIPRAP MEDIUM TREATMENT AT CULVERTS

2

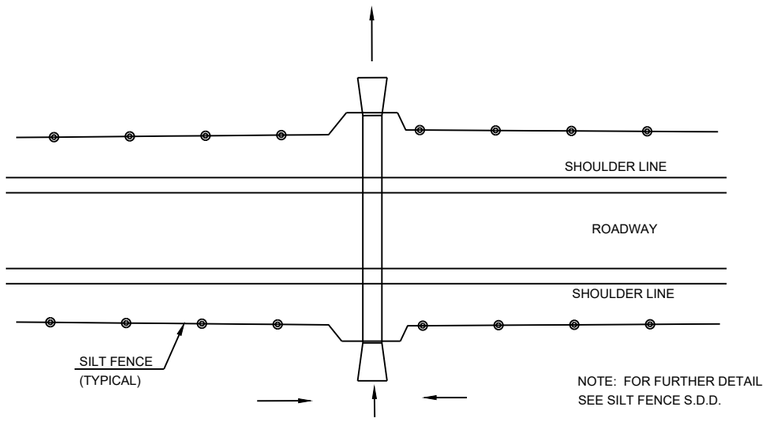


EROSION MAT AT ASPHALT FLUME AND CONCRETE SURFACE DRAIN

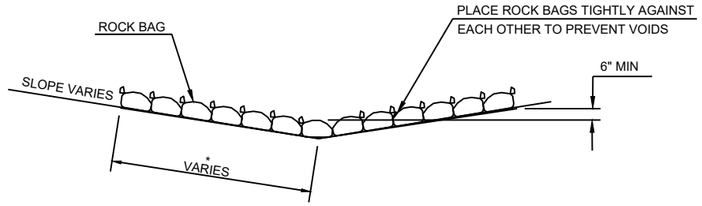


ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

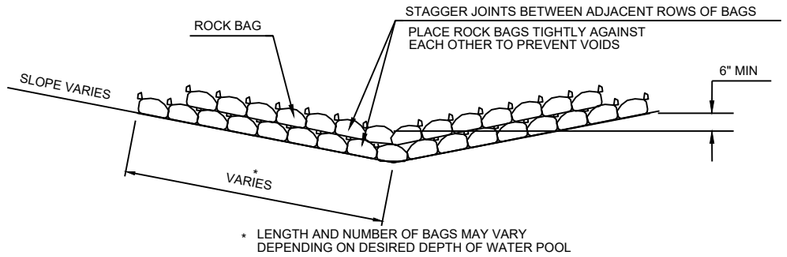
PAID AS ROCK BAGS



TYPICAL SILT FENCE DETAIL AT CROSS DRAIN PIPES



SIDE VIEW (SINGLE LAYER)



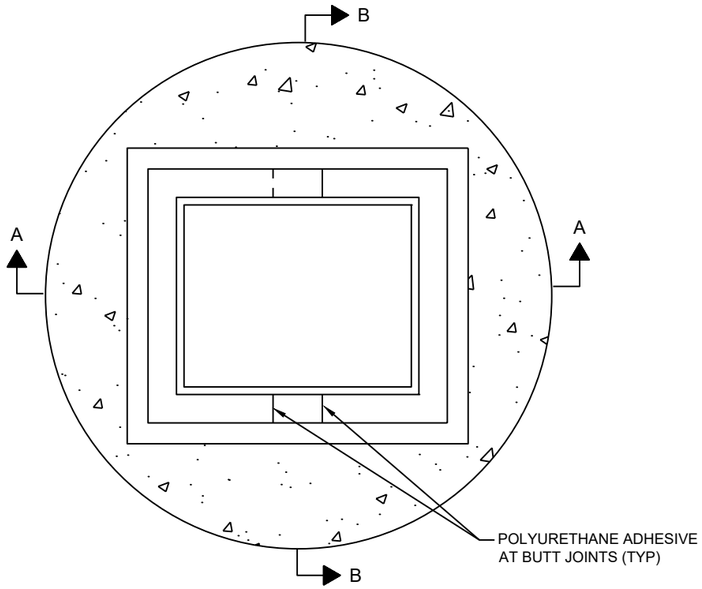
SIDE VIEW (MULTIPLE LAYER)

ROCK BAGS DITCH CHECK

PAID AS ROCK BAGS

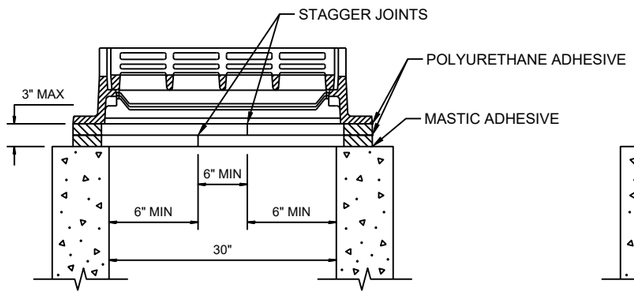
(SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS)

2

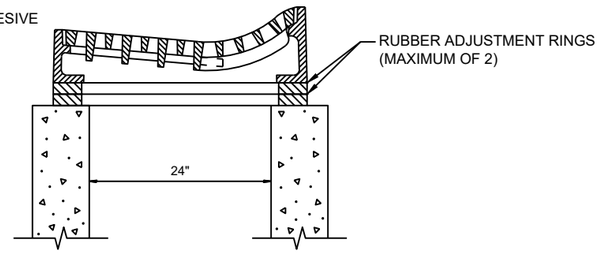


PLAN VIEW

NOTE: ALL CUTS MADE TO RUBBER ADJUSTMENT RINGS WILL BE PERPENDICULAR AND PROVIDE A TIGHT JOINT.



SECTION A-A



SECTION B-B

RUBBER RING CUTTING DETAIL FOR CATCH BASINS WITH TYPE "T" CASTINGS

2

LEGEND

CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED

CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED

XXXX XXXX SAW CUT

TREE TO BE REMOVED

LIMITS OF ASPHALT PAVEMENT

OBLITERATING OLD ROAD

N

EXISTING R/W

CENTURY LINK

BURIED ELECTRIC LINE (APPROXIMATE LOCATION)

SEE PLAN DETAIL FOR DRIVEWAY CONSTRUCTION

XCEL ENERGY

SLOPE INTERCEPTS

CP#2

18"CMCP (TO REMAIN)

105NB USH 51 106NB 107NB 108NB 109NB 110NB 111

2' 8' 12' 12' 8' 2'

CONSTRUCTION LIMITS
ST. 107+15NB

BEGIN PROJECT
STA. 108+36NB

SLOPE INTERCEPTS

MATCHLINE STA. 111+00NB

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 22	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021201-pd

PLOT DATE : 8/31/2020 10:17 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

XCEL ENERGY

EXISTING R/W

CENTURY LINK

SLOPE INTERCEPTS

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

CONCRETE SIDEWALK
6-INCH REQ'D.

MATCHLINE STA. 111+00NB

NB

USH 51

112SB

112NB

113SB

113NB

114SB

114NB

115SB

115NB

116SB

2'

8'

12'

8'

2'

14'

15'

12'

18'

XCEL ENERGY

SLOPE INTERCEPTS

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

CONCRETE SIDEWALK
6-INCH REQ'D.

XCEL ENERGY

CENTURY LINK

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

CONCRETE SIDEWALK
6-INCH REQ'D.

MATCHLINE STA. 116+00NB

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- X TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 23	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021202-PD.DWG
LAYOUT NAME - 021202-pd

PLOT DATE : 8/31/2020 10:18 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

MERIT NETWORK

WETLAND W-5
RPE (D) WETLAND
709 SF
0.016 ACRES

SLOPE INTERCEPTS

LIMIT OF WETLANDS

EXISTING R/W

LIMIT OF WETLANDS

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

CP#3

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

MATCHLINE STA. 223+00EB

MATCHLINE STA. 229+00EB

224WBT 225WBT 226WBT 227WBT 228WBT

224WB 225WB 228WB

224EB 225EB 227WB 228EB

USH 2

CONCRETE SIDEWALK
6-INCH REQ'D.

CONCRETE CURB AND
GUTTER 4-INCH SLOPED
36-INCH TYPE R REQ'D.

CONCRETE CURB AND
GUTTER REVERSE SLOPE
18-INCH TYPE A REQ'D.

3CC

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

CONCRETE SIDEWALK
6-INCH REQ'D.

LIMIT OF
WETLANDS

USH 51

NB

(REMOVE)
NGS MONUMENT
HURLBRGPS

MATCHLINE

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

CONCRETE SIDEWALK
6-INCH REQ'D.

CONCRETE SIDEWALK
6-INCH REQ'D.

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

CENTURY LINK

SLOPE
INTERCEPTS

STA. 116+00NB

SLOPE
INTERCEPTS

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 24	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021203-PD.DWG
LAYOUT NAME - 021203-pd

PLOT DATE : 8/31/2020 10:18 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED

CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED

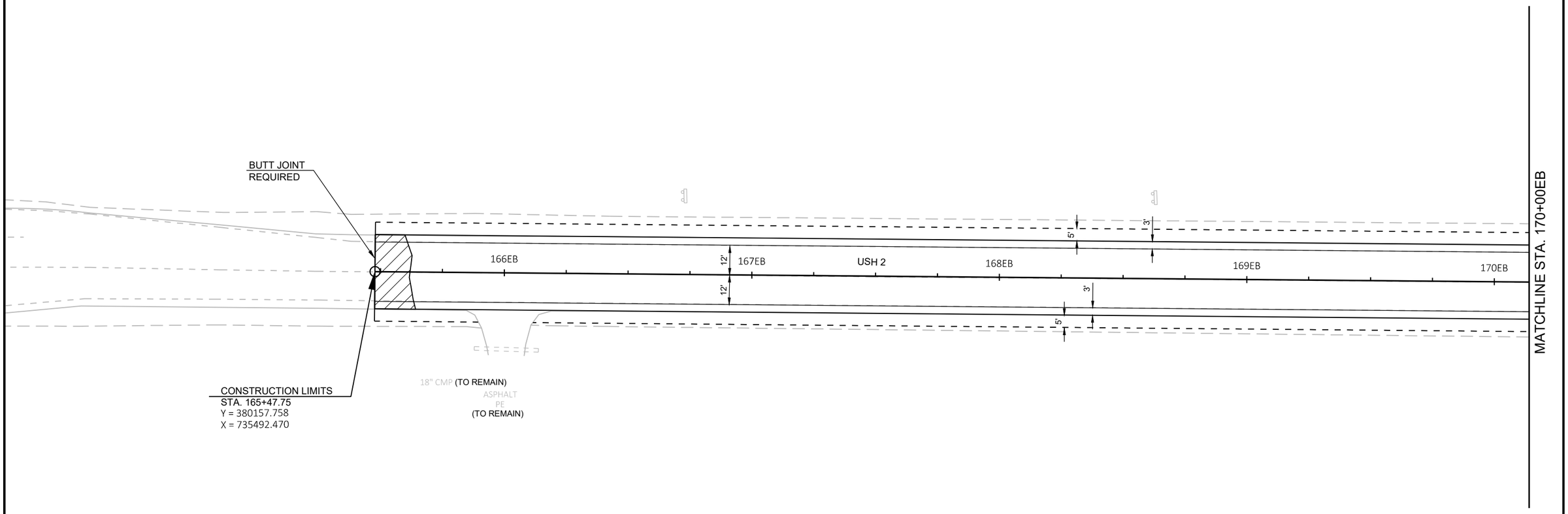
XXXX XXXX SAW CUT

TREE TO BE REMOVED

LIMITS OF ASPHALT PAVEMENT

OBLITERATING OLD ROAD

N



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 25	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021204-PD.DWG
LAYOUT NAME - 021204-pd

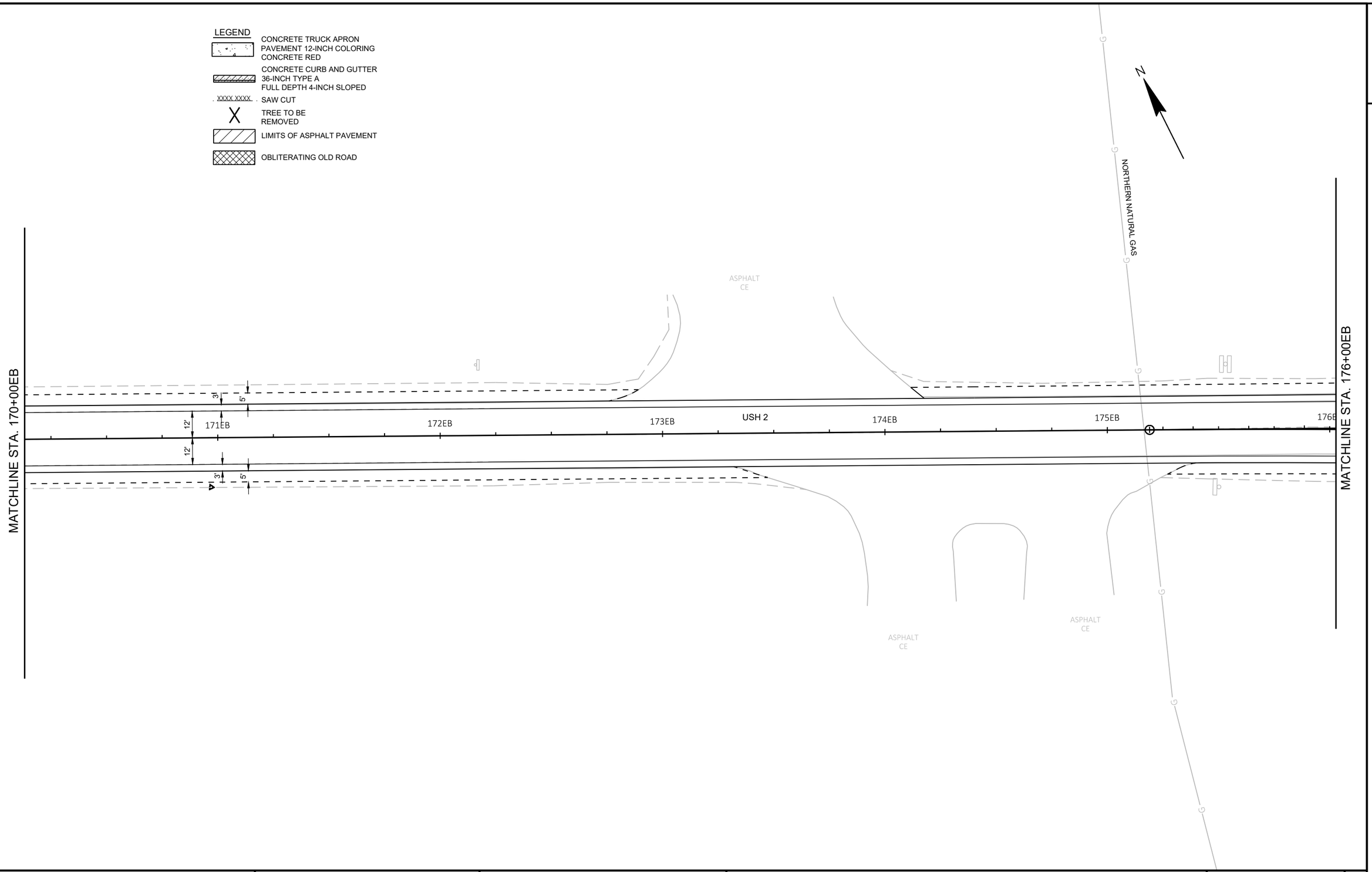
PLOT DATE : 9/2/2020 9:42 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 26	E

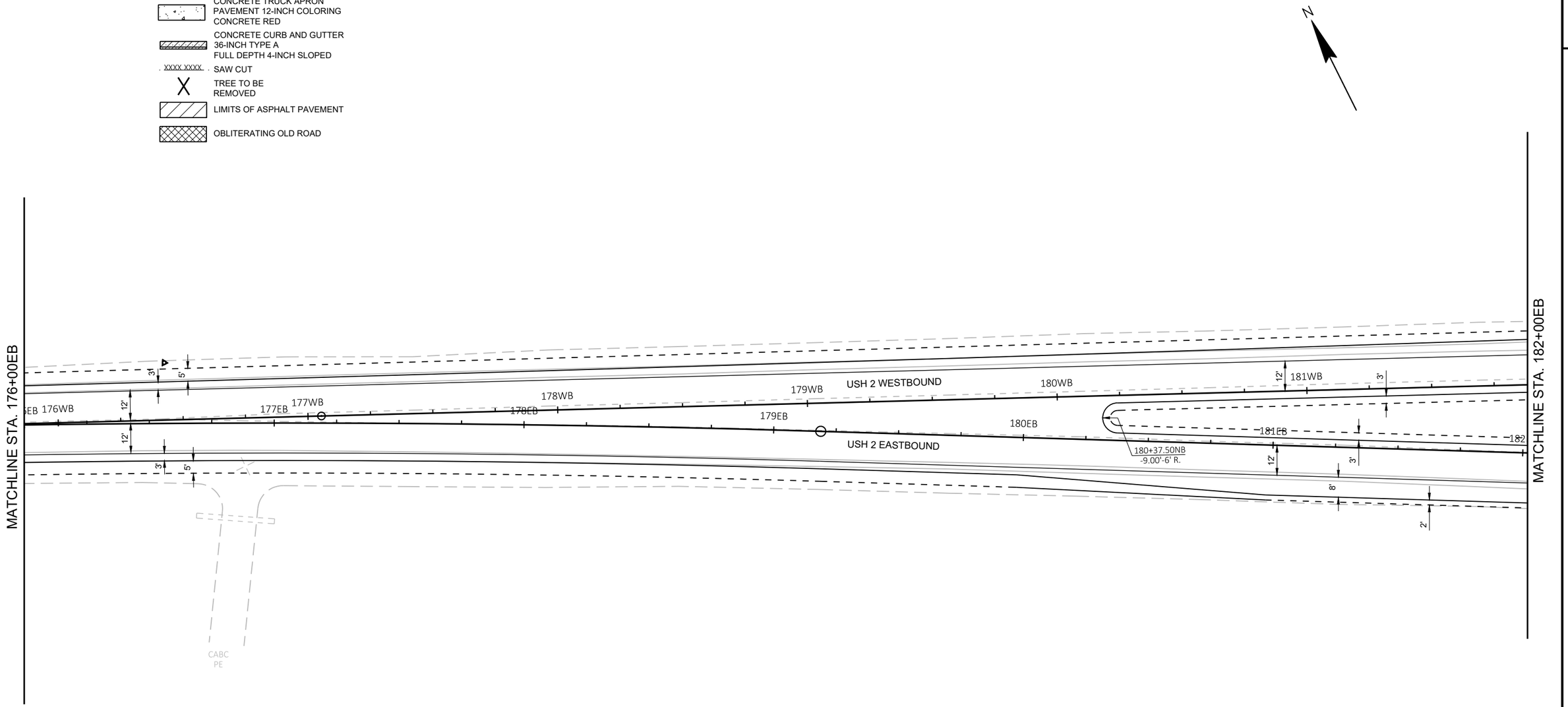
FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021205-PD.DWG
LAYOUT NAME - 021205-pd

PLOT DATE : 8/31/2020 10:18 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- X TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 27	E

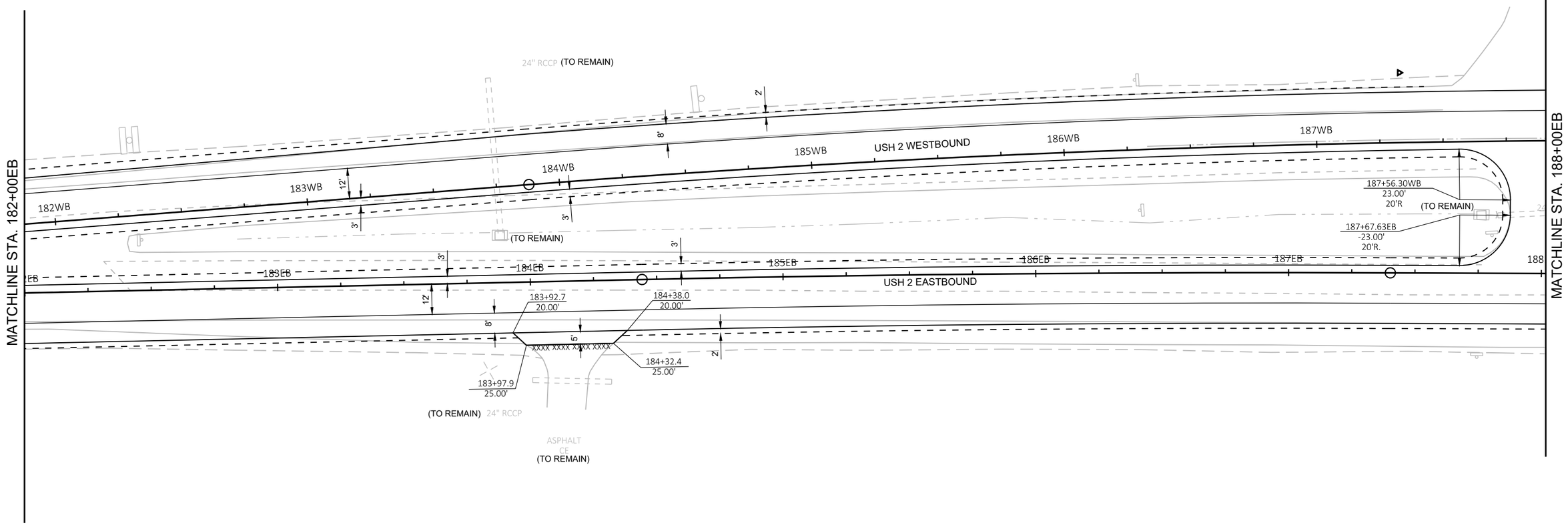
FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021206-PD.DWG
LAYOUT NAME - 021206-pd

PLOT DATE : 8/31/2020 10:18 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 28	E

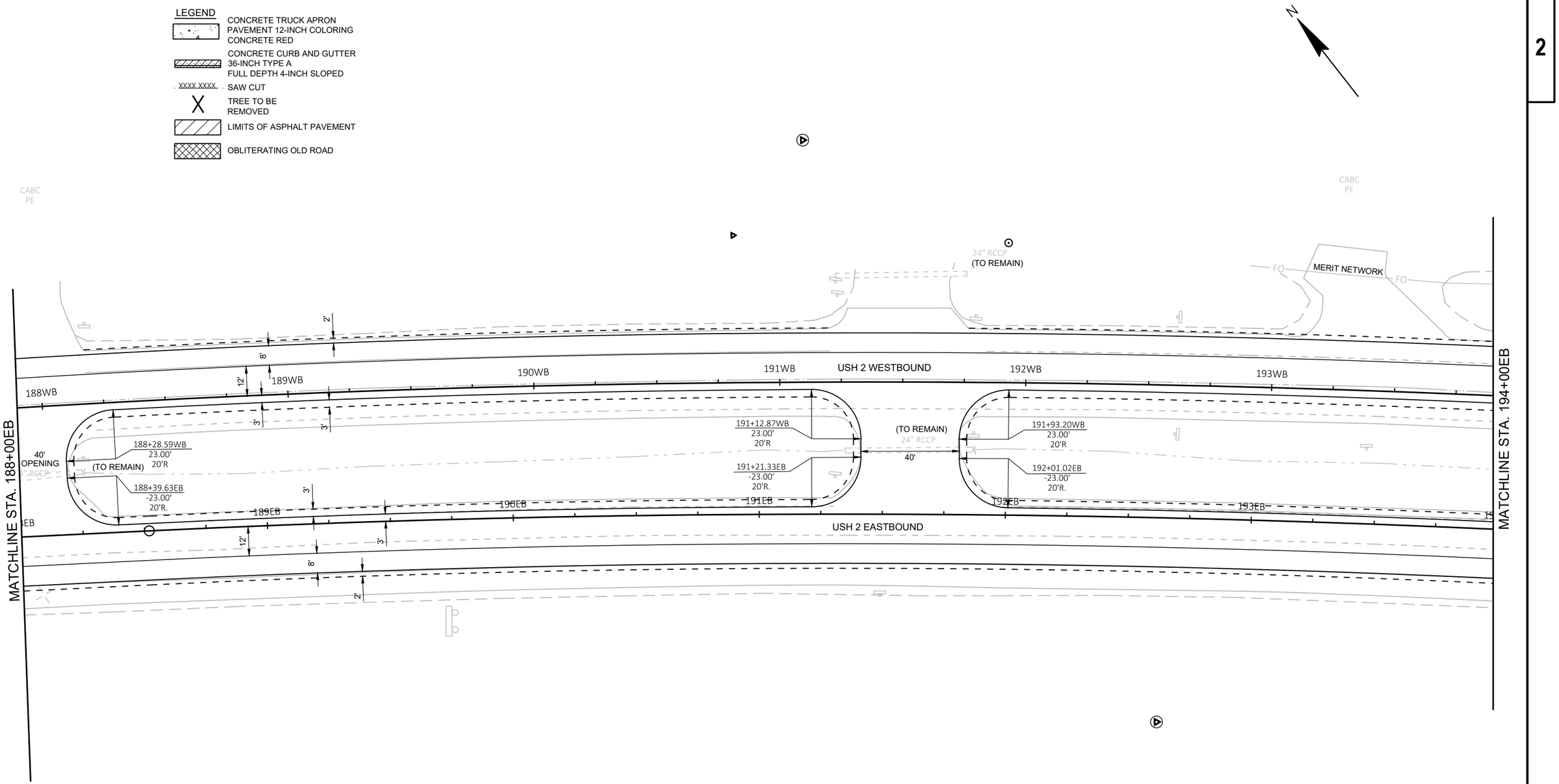
FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021207-PD.DWG
LAYOUT NAME - 021207-pd

PLOT DATE : 8/31/2020 10:19 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 29	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021208-PD.DWG
LAYOUT NAME - 021208-pd

PLOT DATE : 8/31/2020 10:19 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- X TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD

CENTER DR.

36"RCCP (TO REMAIN)

SLOPE INTERCEPTS

195+16.17WB
62.00'
40'R

195+25.00WB
62.00'
40'R

CENTURY LINK

MERIT NETWORK

POST

2'
8'
12'

194WB

195WB

196WB

197WB

USH 2 WESTBOUND

198WB

199WB

MATCHLINE STA. 194+00EB

3'
3'

195+12.62WB
23.00'
20'R

36'

195+17.35EB
23.00'
20'R

195EB

195+88.92WB
23.00'
20'R

(TO REMAIN)
INLET

195+93.05EB
23.00'
20'R

196EB

197EB

198EB

199EB

CENTURY LINK

MATCHLINE STA. 200+00EB

USH 2 EASTBOUND

195+00.45EB
42.00'
20'R

BUTT JOINT REQUIRED

CENTURY LINK

195+89.28EB
62.00'
40'R

SLOPE INTERCEPTS

XCEL ENERGY

LIMITS OF WETLANDS

18" CMP (TO REMAIN)

CENTER DR.

15" CMP (TO REMAIN)

XCEL ENERGY

OH

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 30	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021209-PD.DWG
LAYOUT NAME - 021209-pd

PLOT DATE : 10/29/2020 5:19 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

EXISTING R/W

60"RCCP (TO REMAIN)

30"RCCP
(REMOVE)

SLOPE
INTERCEPTS

LIMIT OF
WETLANDS

MERIT NETWORK

FO

2'
8'
12'
3'
3'

WB 201WB 202WB 203WB USH 2 WESTBOUND 204WB 205WB 206

MATCHLINE STA. 200+00EB

USH 2

INLET (TO REMAIN)

3'
3'
12'
8'
2'

EB 201EB 202EB 203EB 204EB 205EB 206

USH 2 EASTBOUND

MATCHLINE STA. 206+00EB

LEGEND

CONCRETE TRUCK APRON
PAVEMENT 12-INCH COLORING
CONCRETE RED

CONCRETE CURB AND GUTTER
36-INCH TYPE A
FULL DEPTH 4-INCH SLOPED

XXXX XXXX SAW CUT

TREE TO BE
REMOVED

LIMITS OF ASPHALT PAVEMENT

OBLITERATING OLD ROAD

SLOPE
INTERCEPTS

T

XCEL ENERGY

OH

EXISTING R/W

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 31	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021210-PD.DWG
LAYOUT NAME - 021210-pd

PLOT DATE : 10/29/2020 5:21 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

MERIT NETWORK

F.O.

DO NOT DISTURB

GPH6

NGS MONUMENT
HURLEY GPS

OBLITERATE OLD ROAD

SLOPE INTERCEPTS

N

MATCHLINE STA. 206+00EB

MATCHLINE STA. 212+00EB

USH 2

USH 2 WESTBOUND

USH 2 EASTBOUND

207WB 208WB 209WB 210WB 211WB

207EB 208EB 209EB 210EB 211EB

2' 8' 12' 3'

CENTURY LINK

XCEL ENERGY

LIMITS OF WETLANDS

SLOPE INTERCEPTS

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- X TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 32	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021211-PD.DWG
LAYOUT NAME - 021211-pd

PLOT DATE : 10/29/2020 5:23 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD

N

MATCHLINE STA. 212+00EB

MATCHLINE STA. 218+00EB

SLOPE INTERCEPTS

LIMIT OF WETLANDS

WETLAND W-5
RPE (D) WETLAND
498 SF
0.011 ACRES

SLOPE INTERCEPTS

36"RCCP (TO REMAIN)

2'
8'
12'
12'
3'
3'

WB

USH 2 WESTBOUND

213WB 214WB 215WB 216WB 217WB 21

INLET (TO REMAIN)

3'
3'
12'
8'
2'

2EB 215EB 214EB 215EB 216EB 217EB 2

USH 2 EASTBOUND

CENTURY LINK

LIMIT OF WETLANDS

SLOPE INTERCEPTS

24"RCCP (TO REMAIN)

XCEL ENERGY

LIMIT OF WETLANDS

LIMIT OF WETLANDS

EXISTING R/W

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 33	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021212-PD.DWG
LAYOUT NAME - 021212-pd

PLOT DATE : 8/31/2020 10:20 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED

CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED

SAW CUT

TREE TO BE REMOVED

LIMITS OF ASPHALT PAVEMENT

OBLITERATING OLD ROAD

MATCHLINE STA. 218+00EB

MATCHLINE STA. 223+00EB

LIMITS OF WETLANDS

SLOPE INTERCEPTS

REMOVE GUARDRAIL

MERIT NETWORK

REMOVE EXISTING STRUCTURE B-26-0006

USH 51

REMOVE GUARDRAIL

219WBT

220WBT

221WBT

222WBT

219WB

220WB

221WB

222WB

2'

8'

12'

12'

3'

3'

USH 2

REMOVE GUARDRAIL

(REMOVE) NGS MONUMENT

219EB

220EB

221EB

222EB

3'

3'

12'

8'

2'

12'

6'

CP#4

REMOVE GUARDRAIL

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D REQ'D.

CENTURY LINK

36"RCCP (REMOVE)

XCEL ENERGY

SLOPE INTERCEPTS

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 34	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021213-PD.DWG
LAYOUT NAME - 021213-pd

PLOT DATE : 10/29/2020 5:27 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

RECONSTRUCT CE
STA. 230+10WBT

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

EXISTING R/W

SLOPE
INTERCEPTS

MERIT NETWORK

CENTURY LINK

MATCHLINE STA. 229+00EB

229WBT

230WBT

231WB

232WB

233WB

234WB

230WB

29WB

EB

230EB

231EB

232EB

233EB

234EB

CP#5

USH 2

REMOVE
GUARDRAIL

CONCRETE SIDEWALK
6-INCH REQ'D.

SLOPE
INTERCEPTS

REMOVE
GUARDRAIL

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

CONSTRUCTION LIMITS
STA. 231+63EB

MONTREAL RIVER

XCEL ENERGY

LIMITS OF
WETLANDS

EXISTING R/W

XCEL ENERGY

35'

57'

27'

2'

8'

12'

4"

5'

12'

12'

15'

14'

LEGEND

CONCRETE TRUCK APRON
PAVEMENT 12-INCH COLORING
CONCRETE RED

CONCRETE CURB AND GUTTER
36-INCH TYPE A
FULL DEPTH 4-INCH SLOPED

XXXX XXXX SAW CUT

TREE TO BE
REMOVED

LIMITS OF ASPHALT PAVEMENT

OBLITERATING OLD ROAD

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 35	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021214-PD.DWG
LAYOUT NAME - 021214-pd

PLOT DATE : 10/29/2020 5:31 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

LEGEND

- CONCRETE TRUCK APRON PAVEMENT 12-INCH COLORING CONCRETE RED
- CONCRETE CURB AND GUTTER 36-INCH TYPE A FULL DEPTH 4-INCH SLOPED
- XXXX XXXX SAW CUT
- X TREE TO BE REMOVED
- LIMITS OF ASPHALT PAVEMENT
- OBLITERATING OLD ROAD

SIGN

REST AREA EXIT

MATCH EXISTING

EXISTING R/W

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

30'

MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP

MARKING LINE EPOXY 4-INCH (YELLOW)

MARKING ARROW EPOXY (WHITE)

CENTURY LINK

MARKING LINE EPOXY 4-INCH (WHITE)

REINSTALL MOVED SIGNS
TYPE II AND MOVED SMALL
SIGN SUPPORT

REINSTALL SALVAGED
LIGHTING UNIT

DO NOT ENTER
R5-1

107+32.08
-65'

40' R.

1442.24

R3-1

BURIED ELECTRIC LINE
(APPROXIMATE LOCATION)

XCEL ENERGY

REINSTALL MOVED SIGNS
TYPE II AND MOVED SMALL
SIGN SUPPORT

STOP
R1-1

REINSTALL MOVED SIGNS
TYPE II AND MOVED SMALL
SIGN SUPPORT

DO NOT ENTER
R5-1

STOP
R1-1

R3-2

1442.61

108+27.21
-50'

25' R.

1439.8

18"CMCP

ASPHALTIC FLUME
REQ'D.

1439.3

ASPHALTIC FLUME
REQ'D.

97'

1442.11

MARKING STOPLINE
EPOXY 18-INCH (WHITE)

1442.55

1441.98

1442.48

25'

23'

1-18" CP REQ'D.

CONCRETE CURB AND GUTTER
6-INCH SLOPED
36-INCH TYPE D REQ'D.

25'

USH 51

107NB

108NB

109NB

CONSTRUCTION LIMITS
STA. 107+15NB

BEGIN PROJECT
STA. 108+36NB

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAIL FOR ENTRANCE REPLACEMENT	SHEET 36	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021215-PD.DWG
LAYOUT NAME - 021215-pd

PLOT DATE : 8/31/2020 10:20 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

2

N

SLOPE INTERCEPTS

LIMITS OF WETLANDS

EXISTING R/W

228WB

229WB

230WB

231WB

232WB

233WB

228EB

229EB

230EB

231EB

232EB

233EB

27'

28'

USH 2
CP#5

REMOVE EXISTING BEAM GUARD

SLOTTED THRIE BEAM RAIL REQ'D.

POST 1
230+49.27EB
-26.9'

POST 5
230+62.75EB
-30.7'

POST 8
230+74.54EB
-34.0'

POST 1
230+49.27EB
-17.2'

POST 5
230+62.93EB
-14.2'

POST 9
230+82.89EB
-9.7'

POST 12
230+99.54EB
-6.0'

REMOVE EXISTING BEAM GUARD

MGS GUARDRAIL 3 REQ'D.

POST 1
230+21.96EB
41.4'

POST 5
230+48.52EB
40.4'

POST 9
230+75.09EB
39.4'

LIMITS OF WETLANDS

XCEL ENERGY

CENTURY LINK

MONTREAL RIVER

EXISTING R/W

SLOPE INTERCEPTS

XCEL ENERGY

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN DETAILS	SHEET 37	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021216-PD.DWG
LAYOUT NAME - 021216-pd

PLOT DATE : 10/29/2020 5:35 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

REST AREA EXIT

105NB USH 51 106NB 107NB 108NB

1442.80 1442.79 1442.77 1442.70 1442.59 1442.44 1442.24 1441.99 1441.69 1441.35 1440.97

109NB 110NB

1443.04 1443.03 1443.01 1442.94 1442.83 1442.68 1442.48 1442.25 1441.97 1441.65 1441.28

1442.80 1442.79 1442.77 1442.70 1442.59 1442.44 1442.25 1442.01 1441.73 1441.41 1441.04

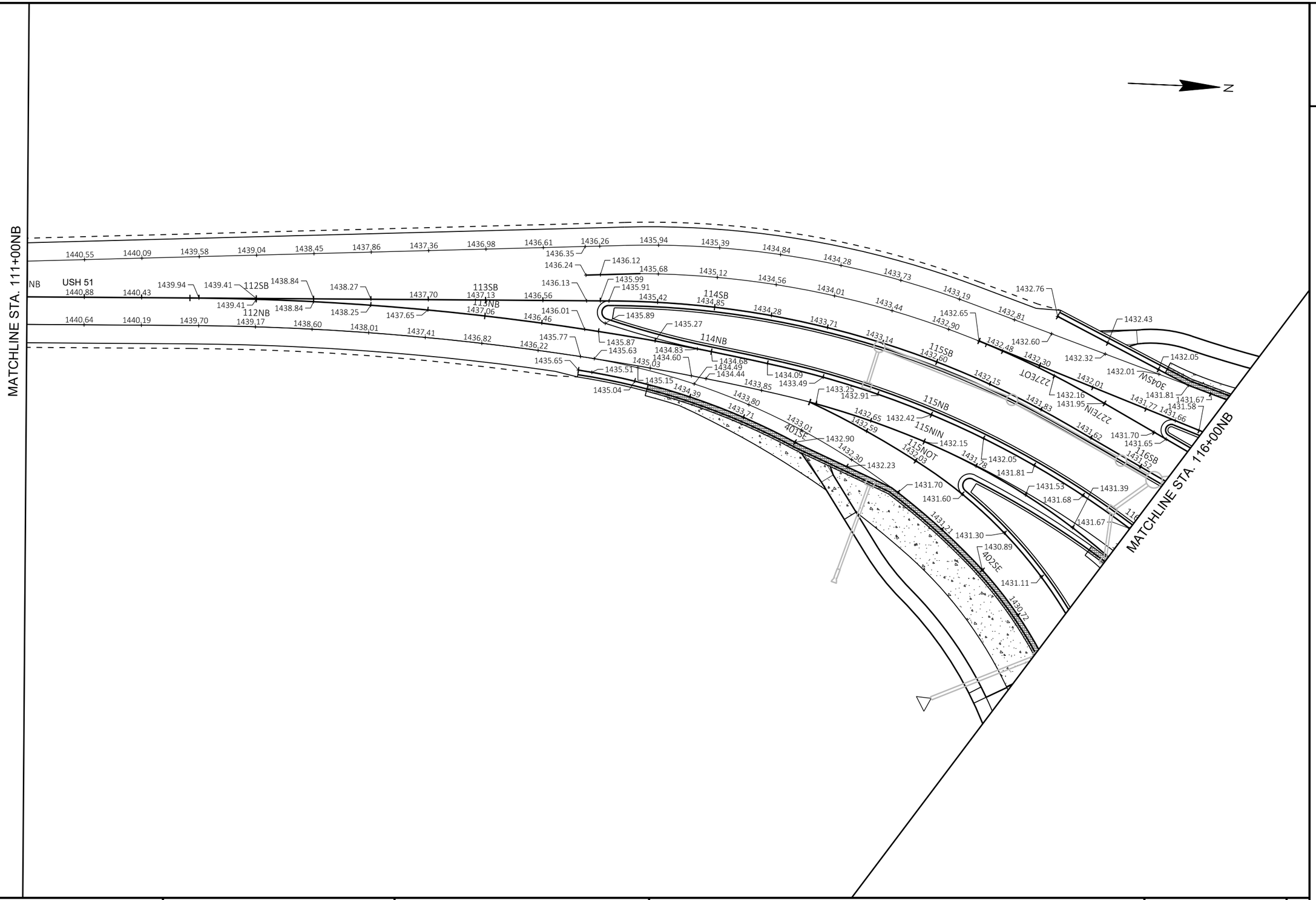
MATCHLINE STA. 111+00NB

BEGIN PROJECT
STA. 108+36NB

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN GRADES	SHEET 38	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021215-GR.DWG
LAYOUT NAME - 021215-gr
PLOT DATE : 8/31/2020 10:21 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN GRADES	SHEET 39	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021216-GR.DWG
LAYOUT NAME - 021216-gr

PLOT DATE : 8/31/2020 10:21 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

MATCHLINE STA. 223+00EB

MATCHLINE STA. 229+00EB

MATCHLINE STA. 116+00NB

N

USH 2

USH 2

USH 51 NB

224WBT

225WBT

226WBT

227WBT

228WBT

5WIN

6WIN

7WIN

8WIN

224WB

225WB

227WB

228WB

224EB

228EB

224EIN

224EOT

225EB

225EIN

225EOT

226EB

226EIN

226EOT

301SW

302SW

303SW

403SE

404SE

405SE

116NOT

116NIN

117NOT

117NIN

118NOT

118NIN

119NOT

119NIN

1436.00

24"

2CC

3CC

1CC

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN GRADES	SHEET 40	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021217-GR.DWG
LAYOUT NAME - 021217-gr

PLOT DATE : 8/31/2020 10:21 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

1415.97

1412.43 1413.01 1413.58 1414.15 1414.75 1415.37

1412.59 1413.17 1413.74 1414.31 1414.91 1415.53 1416.13

1412.83 1413.41 1413.98 1414.55 1415.15 1415.77 1416.37

212WB 213WB 214WB 215WB 216WB 217WB 218

1413.07 1413.64 1414.21 1414.79 1415.39 1416.00 1416.63

1413.01 1413.58 1414.15 1414.73 1415.33 1415.94 1416.57

USH 2

MATCHLINE STA. 218+00EB

1416.11

212EB 213EB 214EB 215EB 216EB 217EB 218

1412.80 1413.32 1414.38 1414.94 1415.51

??? 1413.38 1413.91 1414.44 1415.00 1415.57 1416.17

1413.85 1415.93

1412.62 1413.15 1413.67 1414.20 1414.76 1415.33

1415.77

1412.46 1412.99 1413.51 1414.04 1414.60 1415.17

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN GRADES	SHEET 41	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021218-GR.DWG
LAYOUT NAME - 021218-gr

PLOT DATE : 8/31/2020 10:21 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

MATCHLINE STA. 218+00EB

MATCHLINE STA. 223+00EB

USH 2

1415.99 1416.62 1417.24 1417.96 1418.55 1418.68 1419.38 1420.08 1420.78 1421.48 1422.18 1422.88 1423.58 1424.28 1424.94 1425.56 1426.14 1426.67 1427.16 1427.61 1428.02

1416.15 1416.78 1417.40 1418.12 1418.71 1418.84 1419.54 1420.24 1420.94 1421.64 1422.34 1423.05 1423.75 1424.45 1425.11 1425.73 1426.30 1426.84 1427.33 1427.78 1428.19

1416.39 1417.02 1417.64 1418.36 1418.95 219WBT 1419.08 1419.78 1420.48 1421.18 220WBT 1421.88 1422.59 1423.29 1423.99 221WBT 1424.69 1425.36 1425.98 1426.55 222WBT 1427.09 1427.58 1428.03 1428.44

1416.63 1417.28 1417.94 1418.62 1419.19 219WB 1419.32 1420.02 1420.73 1421.43 220WB 1422.14 1422.84 1423.54 1424.25 221WB 1424.95 1425.65 1426.31 1426.92 222WB 1427.49 1428.01 1428.48 1428.90

1416.57 1417.22 1417.88 1418.56 1419.13 1421.37 1422.78 1423.49 1424.19 1424.89 1425.59 1426.25 1426.86 1427.43 1427.95 1428.42 1428.84 1429.21

1416.11 1416.73 1417.37 1418.04 1418.59 219EB 1420.81 220EB 1421.50 1422.20 1422.89 1423.59 221EB 1424.28 1424.98 1425.67 1426.96 222EB

1416.17 1416.79 1417.43 1418.10 1418.65 1418.78 1419.48 1420.17 1420.87 1421.56 1422.26 1422.95 1423.65 1424.34 1425.04 1425.73 1426.12 1426.38 1426.99 1427.57 1428.10 1428.59

1415.93 1416.55 1417.19 1417.85 1418.41 1418.53 1419.23 1419.92 1420.62 1421.32 1422.01 1422.70 1423.37 1424.04 1424.70 1425.36 1425.98 1426.56 1427.10 1427.29 1427.78 1427.85 1428.19

1415.77 1416.39 1417.03 1417.69 1418.24 1418.37 1419.06 1419.75 1420.45 1421.15 1421.85 1422.53 1423.20 1423.87 1424.53 1425.18 1425.81 1426.39 1426.91 1427.16 1427.66 1428.01 1428.34 1428.30 1428.11

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN GRADES	SHEET 42	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021219-GR.DWG
LAYOUT NAME - 021219-gr

PLOT DATE : 8/31/2020 10:22 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

N

MATCHLINE STA. 229+00EB

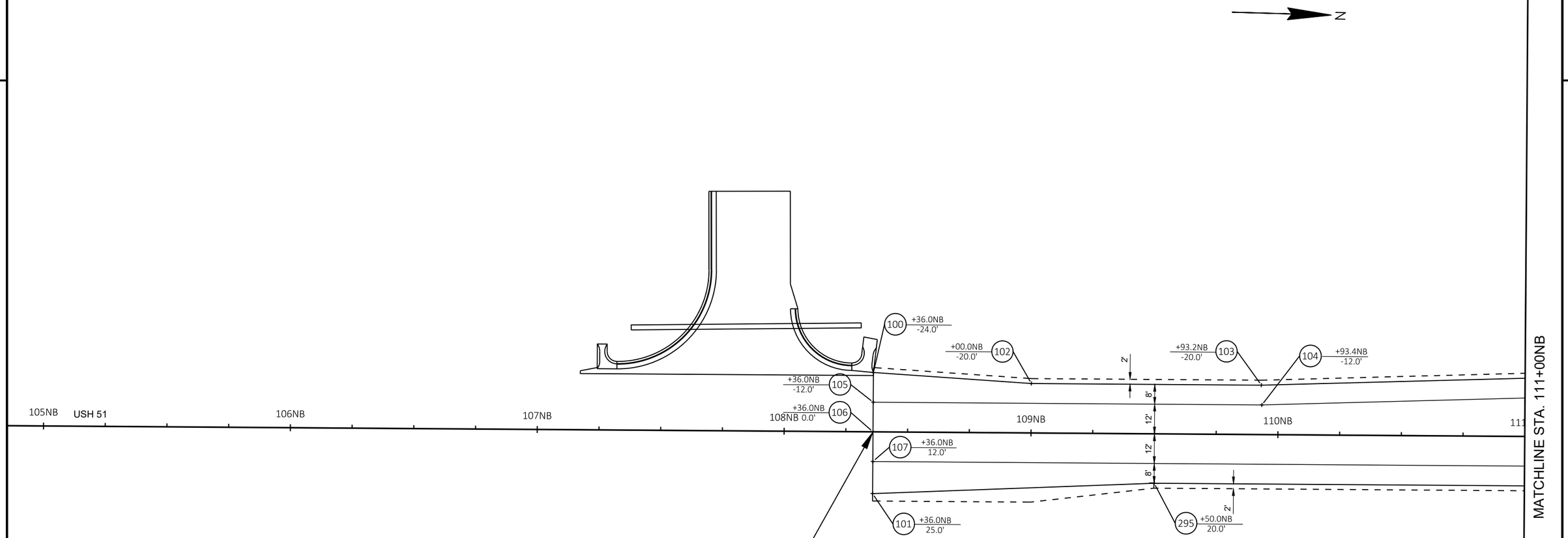
229WBT 1429.35 1429.48 1429.60 1429.71 1429.83 1429.92
1429.51 1429.64 1429.76 1429.87 1429.99 1430.08
1429.75 1429.88 1430.00 1430.11 1430.23 1430.32 1430.33 1430.43
11WIN
230WBT
1429.88 1429.95 1430.03 1430.11 1430.18 1430.26
29WB 1430.13 1430.20 1430.28 1430.36 1430.44 1430.52 1430.60 1430.66
1430.25 1430.29 1430.30 1430.54
1430.58
1430.63
1429.67
1430.49 1430.54
231WB 232WB 233WB 234WB
USH 2
EB 1430.51 1430.59 1430.64 1430.66 1430.74 1430.82 1430.90 1430.97 1431.05
230EB 1430.66
1430.80 1430.86 1430.93
231EB
232EB 233EB 234EB
120NIN
1430.21 1430.26 1430.31 1430.35 1430.42 1430.50 1430.58 1430.66 1430.73 1430.81
1429.93 1430.04 1430.18 1430.26 1430.34 1430.42 1430.49 1430.57
1429.75 1429.77 1429.86 1429.92 1429.98 1430.08 1430.19 1430.26

CONSTRUCTION LIMITS
STA. 231+63.10EB

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN GRADES	SHEET 43	E

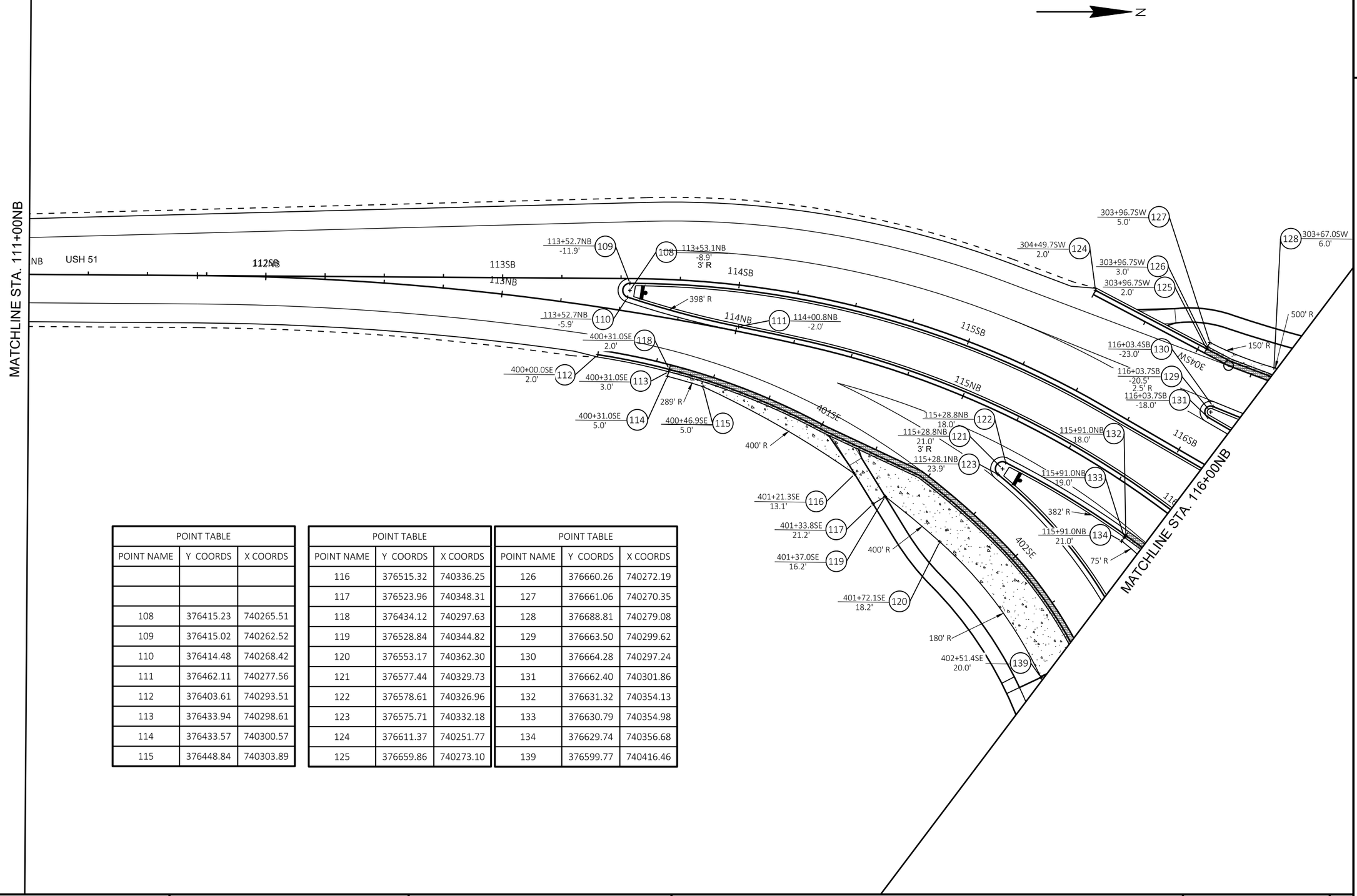
FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021220-GR.DWG
LAYOUT NAME - 021220-gr
PLOT DATE : 8/31/2020 10:22 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



BEGIN PROJECT
STA. 108+36NB
Y = 375898.151
X = 740293.001

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
100	375896.63	740269.05
101	375899.72	740317.95
102	375960.77	740269.03
103	376053.75	740263.18
104	376054.52	740271.14
105	375897.40	740281.02
106	375898.15	740293.00
107	375898.90	740304.98
295	376013.18	740305.81

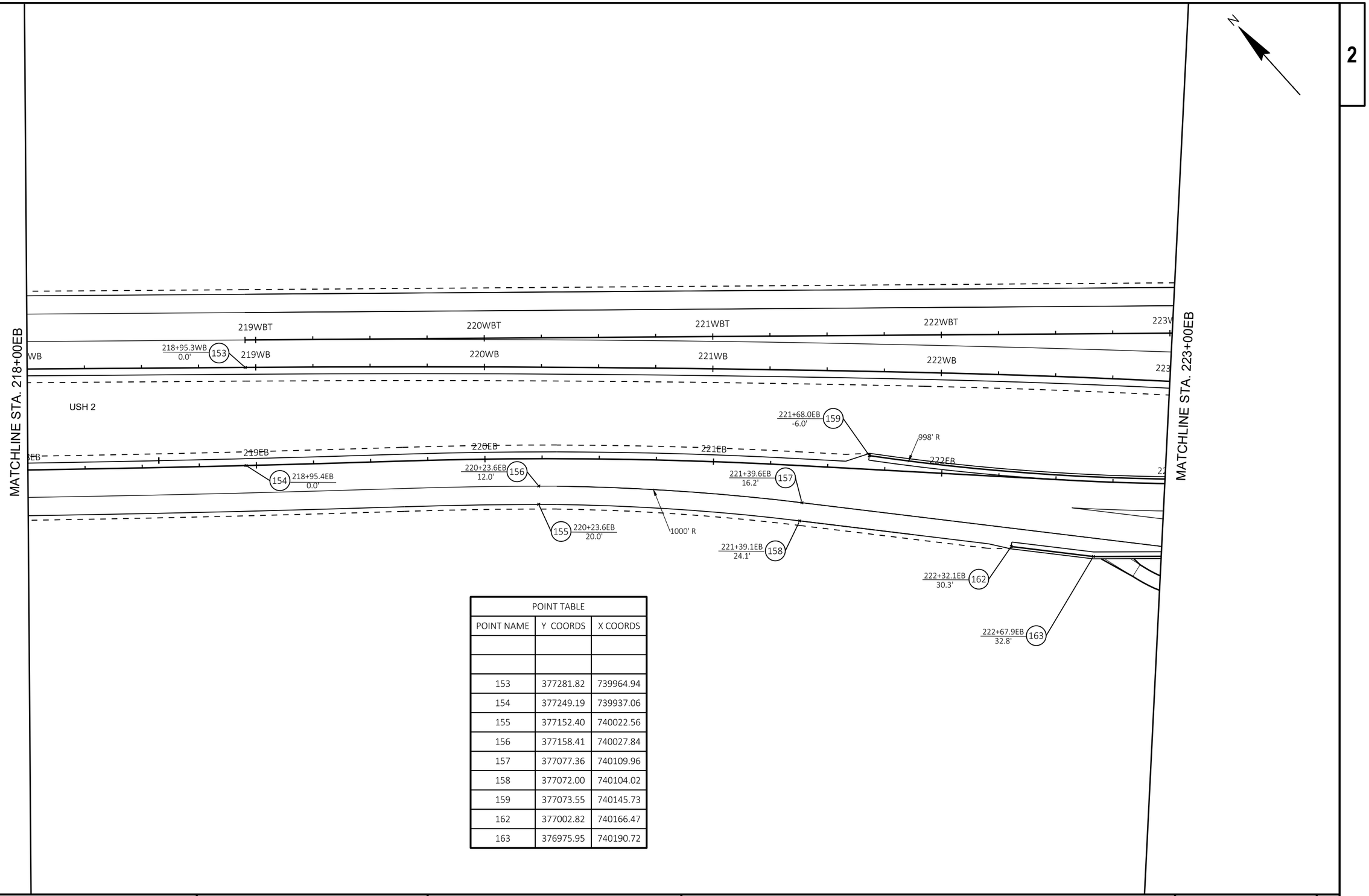


POINT TABLE		
POINT NAME	Y COORDS	X COORDS
108	376415.23	740265.51
109	376415.02	740262.52
110	376414.48	740268.42
111	376462.11	740277.56
112	376403.61	740293.51
113	376433.94	740298.61
114	376433.57	740300.57
115	376448.84	740303.89

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
116	376515.32	740336.25
117	376523.96	740348.31
118	376434.12	740297.63
119	376528.84	740344.82
120	376553.17	740362.30
121	376577.44	740329.73
122	376578.61	740326.96
123	376575.71	740332.18
124	376611.37	740251.77
125	376659.86	740273.10

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
126	376660.26	740272.19
127	376661.06	740270.35
128	376688.81	740279.08
129	376663.50	740299.62
130	376664.28	740297.24
131	376662.40	740301.86
132	376631.32	740354.13
133	376630.79	740354.98
134	376629.74	740356.68
139	376599.77	740416.46

2



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
153	377281.82	739964.94
154	377249.19	739937.06
155	377152.40	740022.56
156	377158.41	740027.84
157	377077.36	740109.96
158	377072.00	740104.02
159	377073.55	740145.73
162	377002.82	740166.47
163	376975.95	740190.72

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
164	377003.44	740272.11
165	376983.50	740292.48
166	376982.86	740291.85
167	376981.43	740290.46
168	376960.00	740306.28
169	376907.69	740326.10
170	376906.36	740324.96
171	376905.60	740324.31
172	376939.95	740368.76
173	376944.34	740227.34

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
174	376934.74	740235.73
175	376934.09	740234.97
176	376932.80	740233.44
177	376758.79	740288.72
178	376726.07	740285.47
179	376716.49	740282.61
180	376716.06	740284.04
181	376911.06	740282.58
182	376881.02	740322.26
183	376876.67	740326.98

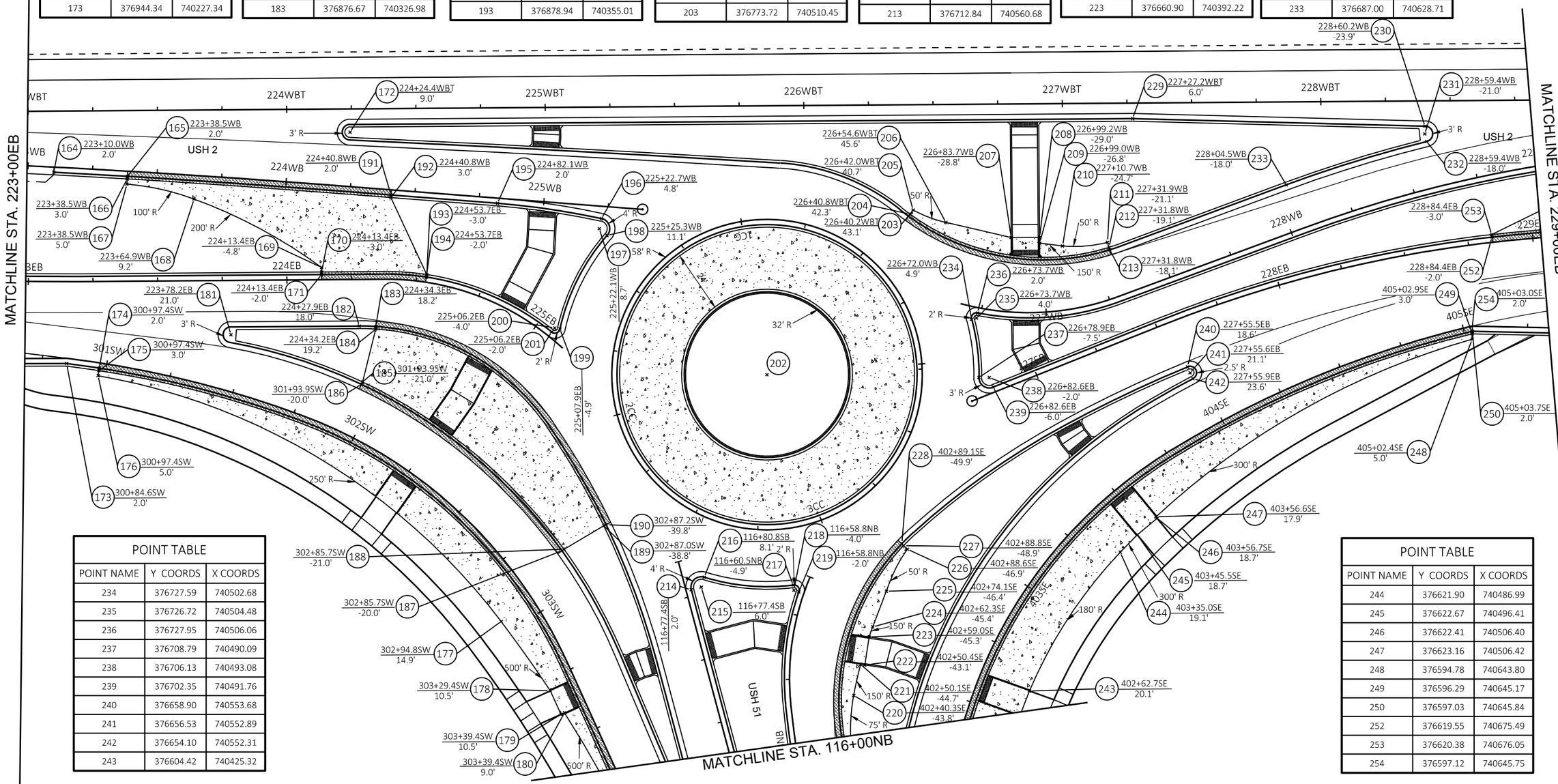
POINT TABLE		
POINT NAME	Y COORDS	X COORDS
184	376875.96	740326.28
185	376863.87	740309.02
186	376863.47	740308.11
187	376763.99	740324.41
188	376763.90	740325.40
189	376760.66	740342.99
190	376760.40	740343.95
191	376911.19	740364.79
192	376910.49	740364.08
193	376878.94	740355.01

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
194	376878.29	740354.25
195	376881.77	740393.75
196	376850.94	740420.21
197	376848.54	740417.00
198	376844.58	740417.56
199	376829.23	740380.05
200	376830.84	740378.86
201	376830.48	740376.89
202	376763.37	740428.90
203	376773.72	740510.45

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
204	376773.94	740511.43
205	376774.38	740513.38
206	376762.42	740519.78
207	376741.43	740535.00
208	376734.28	740543.36
209	376732.59	740541.91
210	376725.93	740547.87
211	376715.59	740561.89
212	376713.76	740561.09
213	376712.84	740560.68

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
214	376719.79	740352.23
215	376718.03	740355.82
216	376720.14	740359.22
217	376695.27	740383.22
218	376693.61	740382.11
219	376691.87	740383.11
220	376647.74	740372.89
221	376655.03	740382.78
222	376653.77	740383.85
223	376660.90	740392.22

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
224	376662.89	740395.81
225	376669.87	740408.85
226	376676.79	740425.64
227	376678.78	740425.46
228	376679.78	740425.37
229	376745.32	740600.64
230	376668.92	740684.06
231	376666.71	740682.03
232	376664.04	740680.67
233	376687.00	740628.71

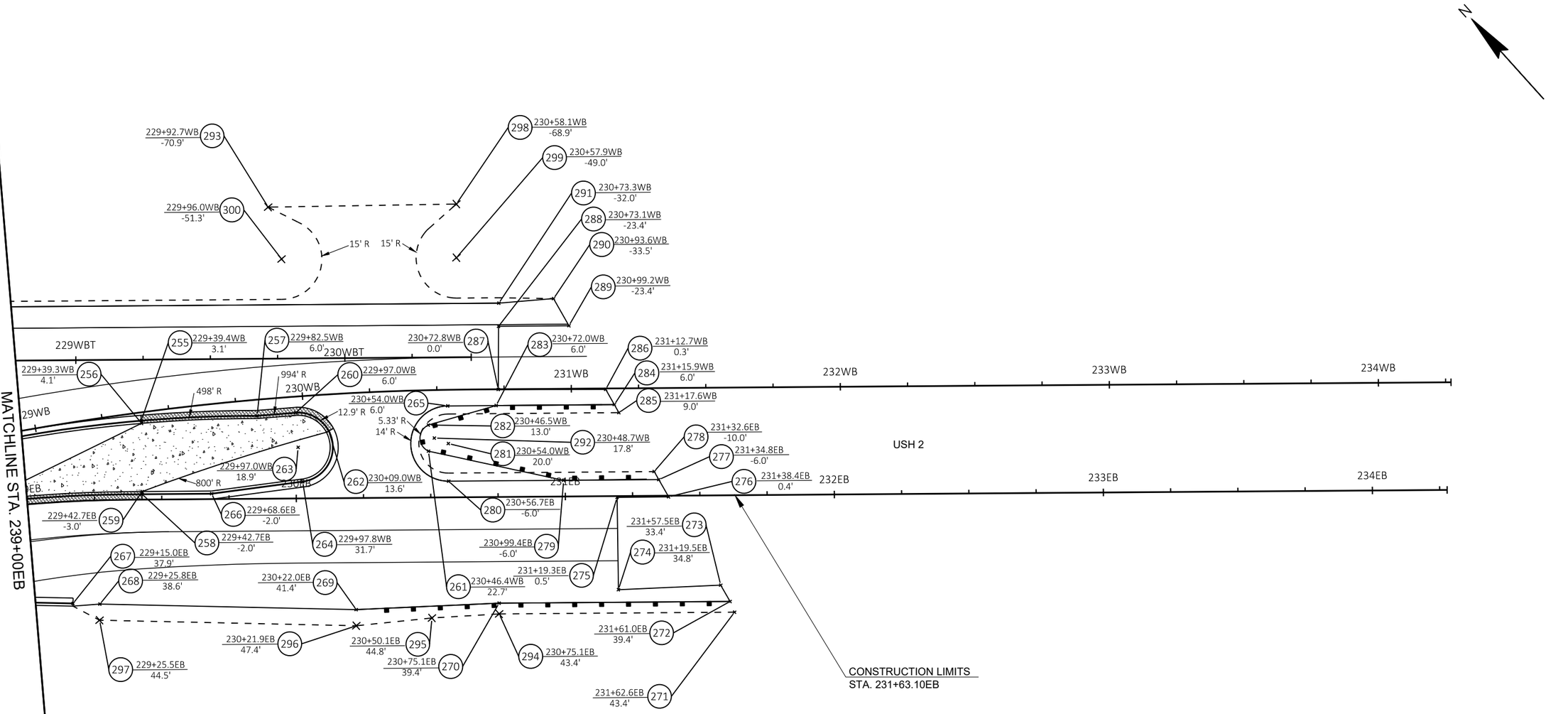


POINT TABLE		
POINT NAME	Y COORDS	X COORDS
234	376727.59	740502.68
235	376726.72	740504.48
236	376727.95	740506.06
237	376708.79	740490.09
238	376706.13	740493.08
239	376702.35	740491.76
240	376658.90	740553.68
241	376656.53	740552.89
242	376654.10	740552.31
243	376604.42	740425.32

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
244	376621.90	740486.99
245	376622.67	740496.41
246	376622.41	740506.40
247	376623.16	740506.42
248	376594.78	740643.80
249	376596.29	740645.17
250	376597.03	740645.84
252	376619.55	740675.49
253	376620.38	740676.05
254	376597.12	740645.75

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN OFFSETS	SHEET 47	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021225-OF.DWG
LAYOUT NAME - 021225-of
PLOT DATE : 8/31/2020 11:50 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT



POINT TABLE		
POINT NAME	Y COORDS	X COORDS
255	376604.51	740739.44
256	376603.71	740738.85
257	376577.62	740773.08
258	376583.70	740721.72
259	376584.46	740722.37
260	376569.10	740784.65
261	376525.93	740812.56
262	376555.91	740789.48
263	376558.79	740776.94
264	376548.06	740769.85

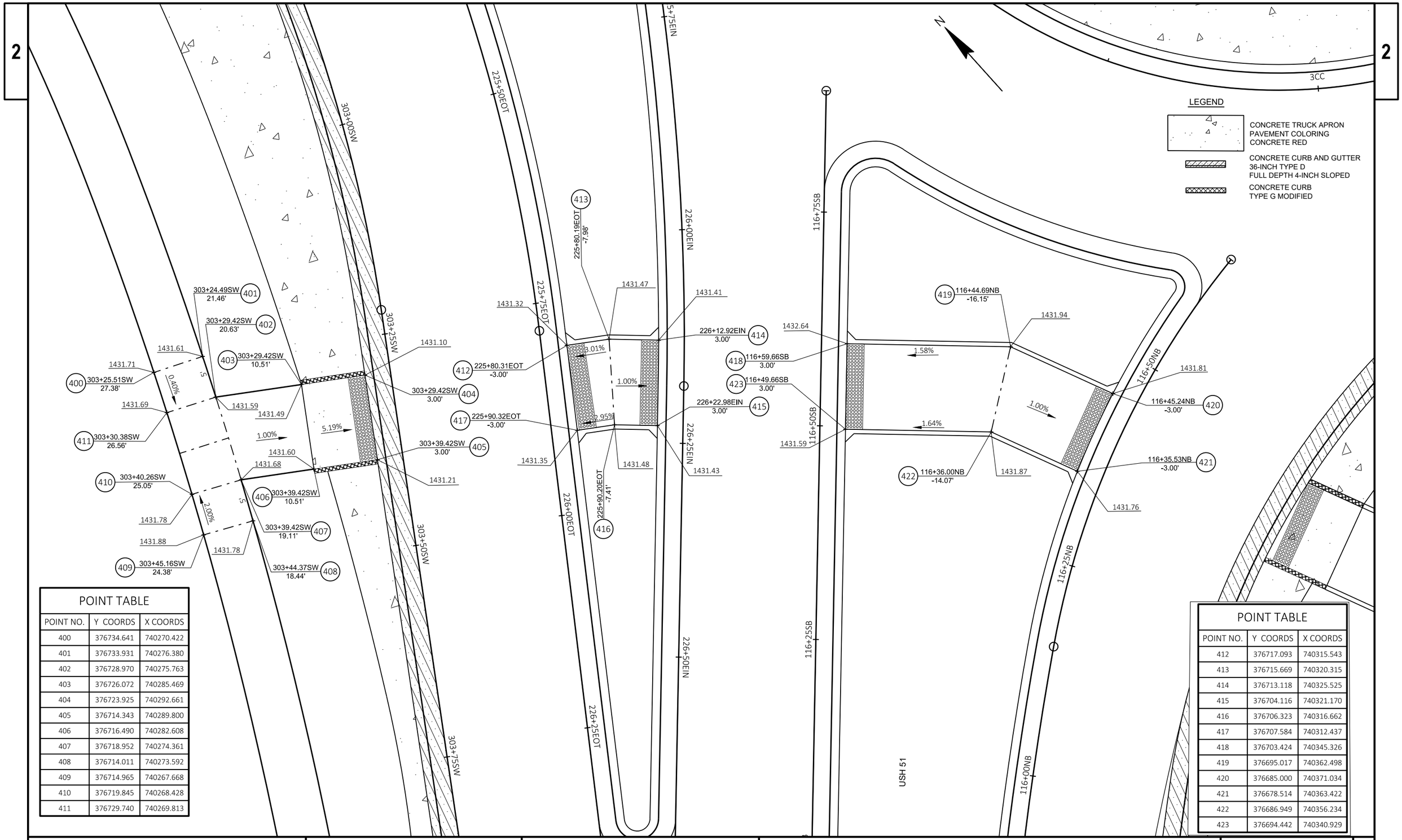
POINT TABLE		
POINT NAME	Y COORDS	X COORDS
265	376533.91	740828.99
266	376566.88	740741.36
267	376569.92	740675.71
268	376563.19	740683.11
269	376499.14	740753.67
270	376466.10	740795.32
271	376406.15	740859.18
272	376410.25	740860.54
273	376417.09	740861.87
274	376440.77	740832.08

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
275	376466.97	740854.20
276	376454.57	740868.80
277	376461.78	740870.23
278	376465.17	740870.89
279	376484.80	740843.35
280	376512.60	740810.90
281	376523.21	740819.99
282	376533.30	740818.87
283	376522.22	740842.66
284	376493.66	740876.05

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
285	376490.29	740875.38
286	376500.03	740877.33
287	376526.21	740847.18
288	376543.84	740862.64
289	376526.85	740882.53
290	376538.17	740884.80
291	376550.26	740868.38
292	376528.18	740817.39
293	376633.45	740827.05
294	376463.07	740792.72

POINT TABLE		
POINT NAME	Y COORDS	X COORDS
295	376478.32	740772.87
296	376494.59	740749.75
297	376558.75	740679.08
298	376588.41	740880.60
299	376573.35	740867.55
300	376615.64	740818.17

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN OFFSETS	SHEET 48	E

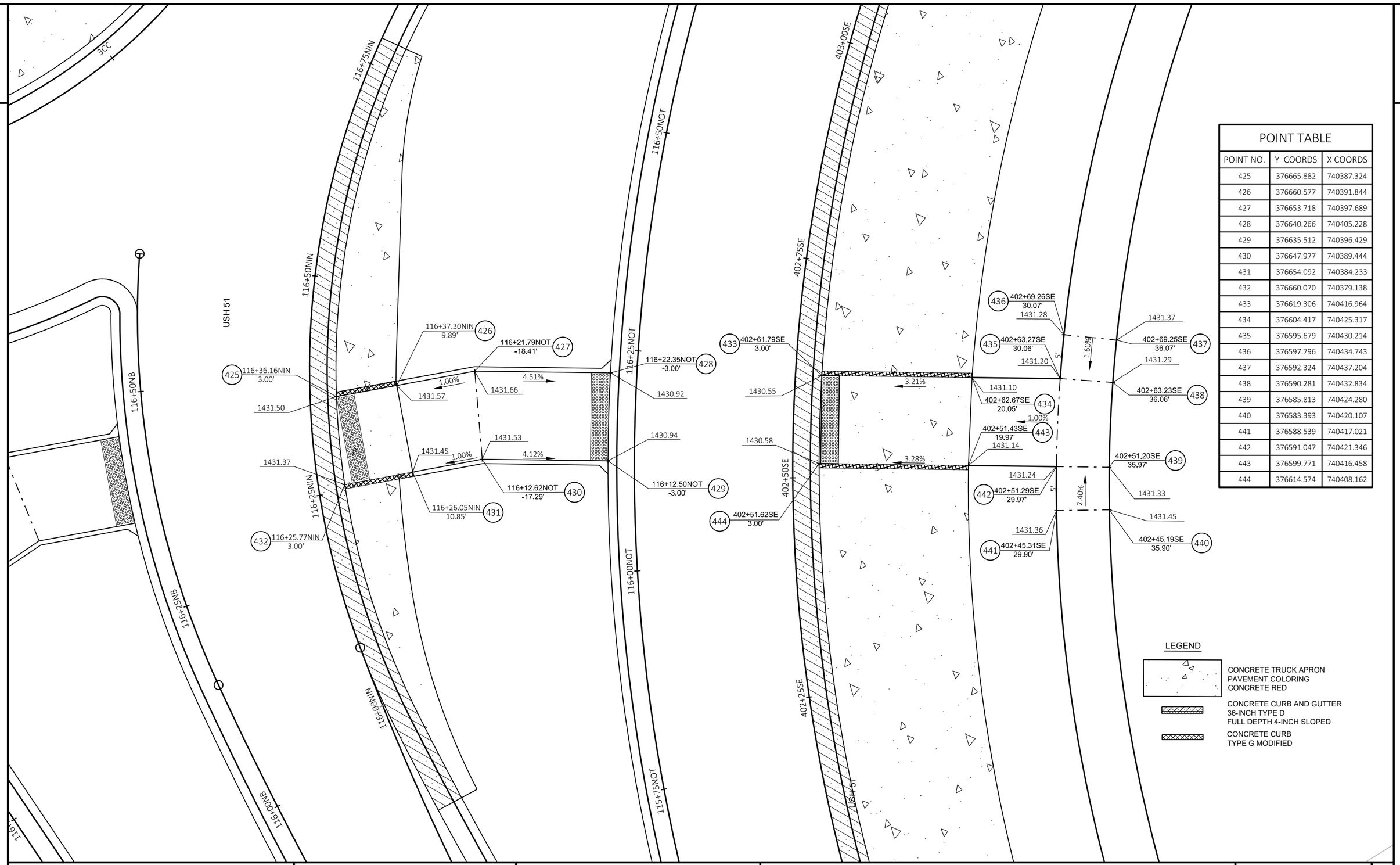


POINT TABLE		
POINT NO.	Y COORDS	X COORDS
400	376734.641	740270.422
401	376733.931	740276.380
402	376728.970	740275.763
403	376726.072	740285.469
404	376723.925	740292.661
405	376714.343	740289.800
406	376716.490	740282.608
407	376718.952	740274.361
408	376714.011	740273.592
409	376714.965	740267.668
410	376719.845	740268.428
411	376729.740	740269.813

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
412	376717.093	740315.543
413	376715.669	740320.315
414	376713.118	740325.525
415	376704.116	740321.170
416	376706.323	740316.662
417	376707.584	740312.437
418	376703.424	740345.326
419	376695.017	740362.498
420	376685.000	740371.034
421	376678.514	740363.422
422	376686.949	740356.234
423	376694.442	740340.929

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CURB RAMPS	SHEET 49	E

2



POINT TABLE		
POINT NO.	Y COORDS	X COORDS
425	376665.882	740387.324
426	376660.577	740391.844
427	376653.718	740397.689
428	376640.266	740405.228
429	376635.512	740396.429
430	376647.977	740389.444
431	376654.092	740384.233
432	376660.070	740379.138
433	376619.306	740416.964
434	376604.417	740425.317
435	376595.679	740430.214
436	376597.796	740434.743
437	376592.324	740437.204
438	376590.281	740432.834
439	376585.813	740424.280
440	376583.393	740420.107
441	376588.539	740417.021
442	376591.047	740421.346
443	376599.771	740416.458
444	376614.574	740408.162

LEGEND

CONCRETE TRUCK APRON
PAVEMENT COLORING
CONCRETE RED

CONCRETE CURB AND GUTTER
36-INCH TYPE D
FULL DEPTH 4-INCH SLOPED

CONCRETE CURB
TYPE G MODIFIED

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CURB RAMPS	SHEET 50	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021229-CR.DWG
LAYOUT NAME - 021229-cr
PLOT DATE : 10/29/2020 9:55 AM
PLOT BY : SOUFAL, KEVIN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
445	376606.261	740491.683
446	376612.238	740491.167
447	376606.640	740496.565
448	376612.625	740496.152
449	376622.665	740496.406
450	376638.339	740496.801
451	376638.086	740506.798
452	376622.413	740506.402
453	376613.142	740506.168
454	376613.270	740511.167
455	376607.271	740511.269
456	376607.145	740506.374

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
457	376662.339	740497.407
458	376668.147	740497.553
459	376672.931	740498.705
460	376670.750	740508.466
461	376666.836	740507.523
462	376662.087	740507.403
463	376698.815	740504.940
464	376708.205	740507.202
465	376716.869	740514.622
466	376710.239	740522.110
467	376703.526	740516.361
468	376695.506	740514.429

LEGEND

CONCRETE TRUCK APRON
PAVEMENT COLORING
CONCRETE RED

CONCRETE CURB AND GUTTER
36-INCH TYPE D
FULL DEPTH 4-INCH SLOPED

CONCRETE CURB
TYPE G MODIFIED

N

403+39.20SE 446 28.98'
403+45.50SE 449 18.67'
403+45.99SE 450 3.00'
403+50SE
403+39.54SE 445 34.97'
403+45.59SE 447 34.70'
403+45.13SE 448 28.71'
403+56.98SE 453 27.94'
403+56.15SE 451 3.00'
403+57.66SE 456 33.91'
403+56.64SE 452 18.67'
403+62.85SE 454 27.44'
403+63.63SE 455 33.41'
403+75SE
404+00

1431.12 1431.03 1430.81 1430.27 1431.00 1430.91 1430.86 1430.23 1430.95 1430.77 1430.90 1430.99
2.40% 5' 1.00% 3.42% 1.00% 5' 0.80%

117+00NOT
117+25NIN
117+16.74NOT -8.81' 458
117+16.61NOT -3.00' 457
117+25NOT
117+26.46NOT -3.00' 462
117+26.35NOT -7.75' 461
117+50NIN
117+52.78NIN 3.00' 459
117+62.85NIN 3.00' 460
117+50NOT
117+75NIN
118+00NIN

1430.61 1431.67 1430.97 1431.85 1431.63 1430.58
6.00% 1.00% 5.30%

226+75EB
226+96.19EB -3.00' 463
226+95.24EB -12.61' 464
226+75WB
227+00EB
226+87.35WB 3.00' 465
226+97.06WB 3.00' 466
227+06.24EB -3.00' 468
227+05.42EB -11.21' 467
227+00WB
227+25EB
227+25WB
227+50EB

1431.34 1431.44 1431.36 1431.15 1431.27 1431.10
1.00% 2.58% 2.95%

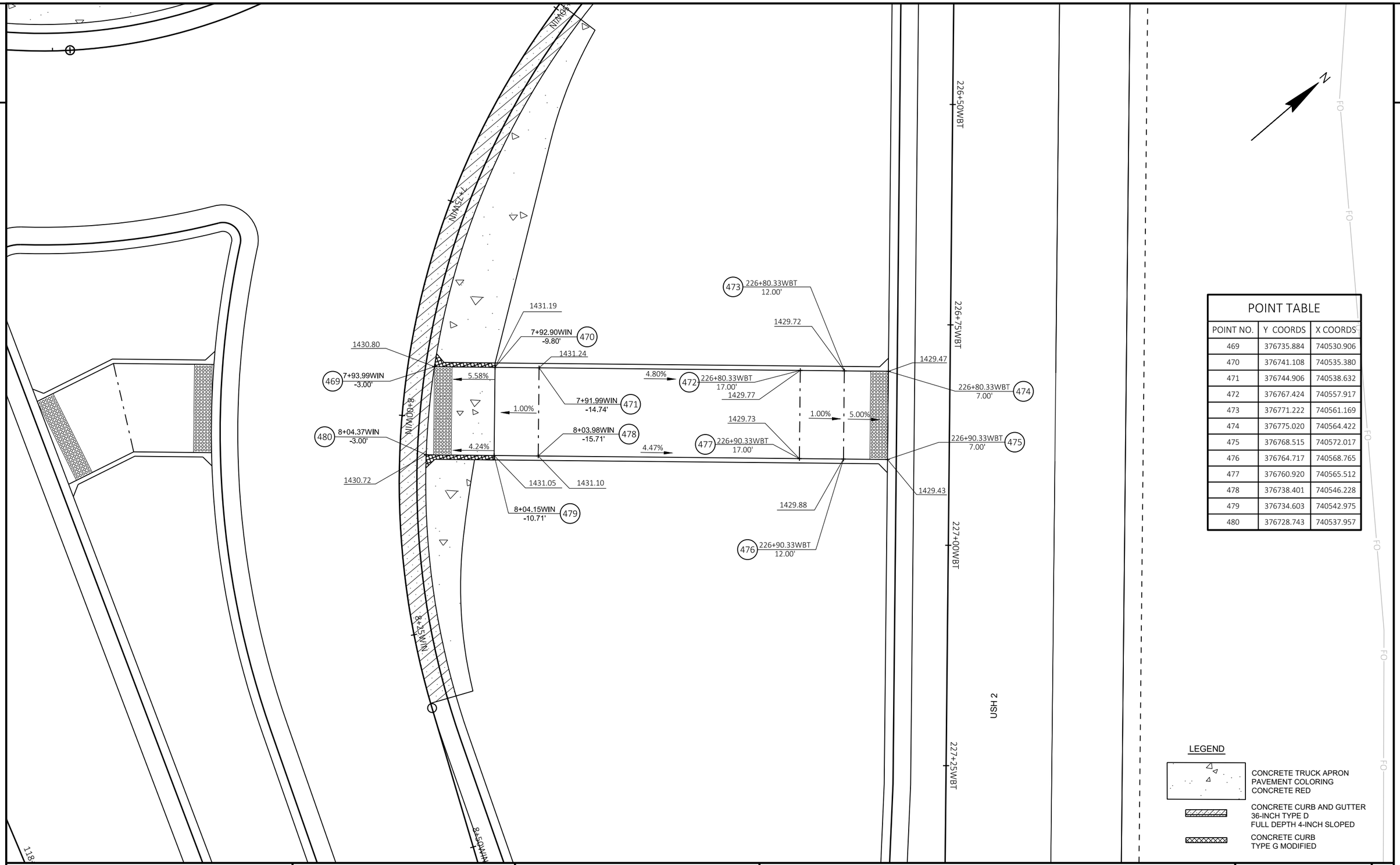
USH 2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CURB RAMPS	SHEET 51	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021230-CR.DWG
LAYOUT NAME - 021230-cr
PLOT DATE : 10/29/2020 9:56 AM
PLOT BY : SOUFAL, KEVIN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

2

2



POINT TABLE		
POINT NO.	Y COORDS	X COORDS
469	376735.884	740530.906
470	376741.108	740535.380
471	376744.906	740538.632
472	376767.424	740557.917
473	376771.222	740561.169
474	376775.020	740564.422
475	376768.515	740572.017
476	376764.717	740568.765
477	376760.920	740565.512
478	376738.401	740546.228
479	376734.603	740542.975
480	376728.743	740537.957

LEGEND

CONCRETE TRUCK APRON
PAVEMENT COLORING
CONCRETE RED

CONCRETE CURB AND GUTTER
36-INCH TYPE D
FULL DEPTH 4-INCH SLOPED

CONCRETE CURB
TYPE G MODIFIED

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CURB RAMPS	SHEET 52	E

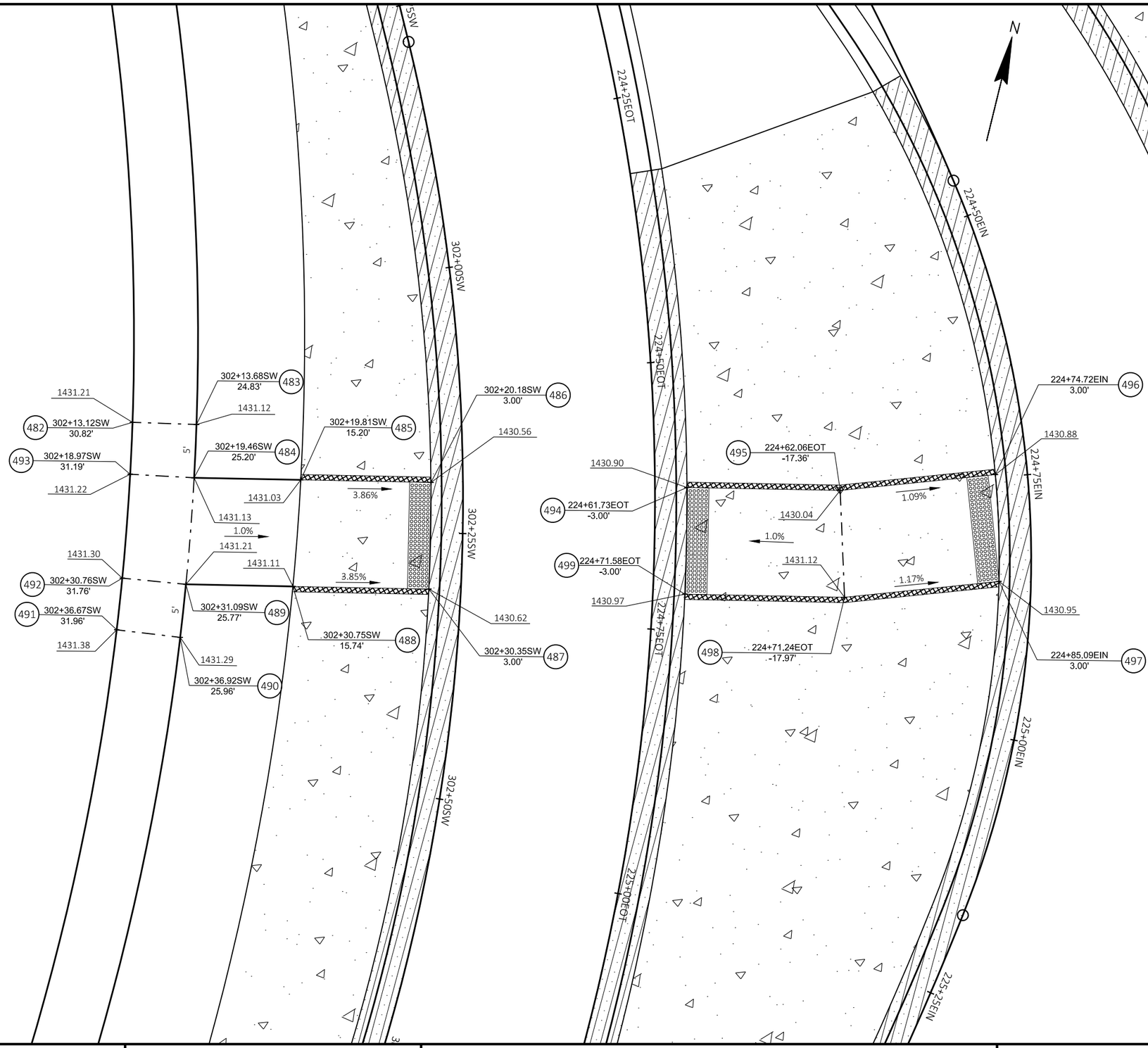
FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021231-CR.DWG
LAYOUT NAME - 021231-cr

PLOT DATE : 10/29/2020 9:56 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
482	376828.068	740267.248
483	376829.421	740273.093
484	376824.539	740274.169
485	376826.938	740283.883
486	376829.865	740295.731
487	376820.157	740298.129
488	376817.100	740285.754
489	376814.695	740276.018
490	376809.754	740276.787
491	376808.893	740270.849
492	376813.710	740270.099
493	376823.308	740268.297
494	376835.623	740319.039
495	376839.068	740332.984

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
496	376844.273	740346.654
497	376834.684	740349.573
498	376829.505	740335.974
499	376825.914	740321.437



LEGEND

CONCRETE TRUCK APRON
PAVEMENT COLORING
CONCRETE RED

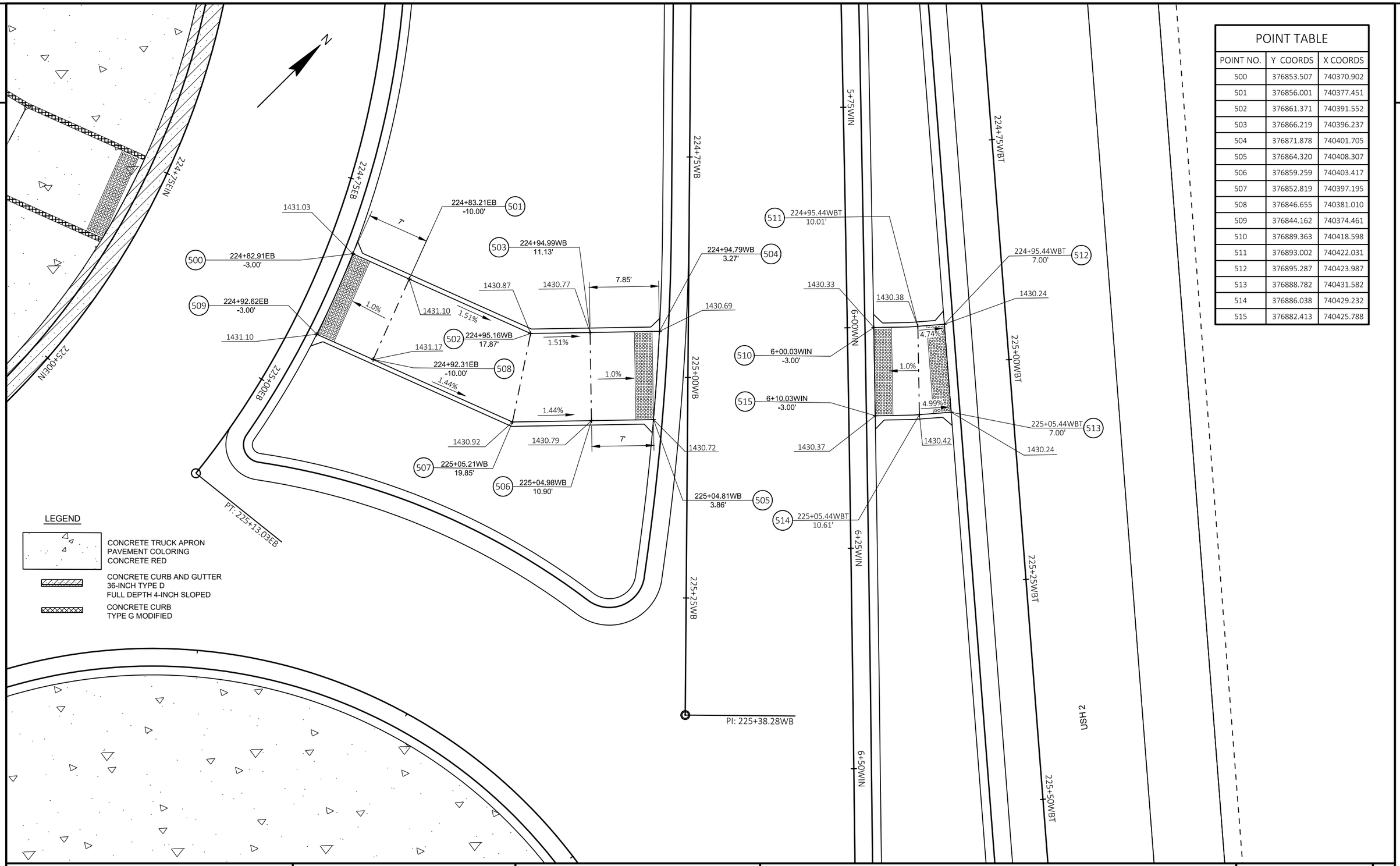
CONCRETE CURB AND GUTTER
36-INCH TYPE D
FULL DEPTH 4-INCH SLOPED

CONCRETE CURB
TYPE G MODIFIED

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CURB RAMPS	SHEET 53	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\021232-CR.DWG
LAYOUT NAME - 021232-cr
PLOT DATE : 10/29/2020 9:56 AM
PLOT BY : SOUFAL, KEVIN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
500	376853.507	740370.902
501	376856.001	740377.451
502	376861.371	740391.552
503	376866.219	740396.237
504	376871.878	740401.705
505	376864.320	740408.307
506	376859.259	740403.417
507	376852.819	740397.195
508	376846.655	740381.010
509	376844.162	740374.461
510	376889.363	740418.598
511	376893.002	740422.031
512	376895.287	740423.987
513	376888.782	740431.582
514	376886.038	740429.232
515	376882.413	740425.788



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CURB RAMPS	SHEET 54	E

2

2

N

REST AREA EXIT

EXISTING R/W

SIGN

18"CMCP

105NB

USH 51

106NB

107NB

108NB

109NB

110NB

111

MATCHLINE STA. 111+00NB

SIGN

BEGIN PROJECT
STA. 108+36NB

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 55	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 8/31/2020 10:24 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

EXISTING R/W

N

MATCHLINE STA. 111+00NB

NB

USH 51

112SB

112NB

113SB

113NB

114SB

114NB

115SB

115NB

116SB

MATCHLINE STA. 116+00NB

R

R

R

LEGEND

EROSION MAT URBAN CLASS I, TYPE A

EROSION MAT CLASS II, TYPE C

EROSION MAT CLASS I, TYPE B

SILT FENCE

SLOPE INTERCEPT

TEMPORARY DITCH CHECKS

SURFACE WATER FLOW

RIP RAP MEDIUM

INLET PROTECTION

CULVERT PIPE CHECK

ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 56	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022002-EC.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 8/31/2020 10:24 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LIMITS OF WETLANDS

LIMITS OF WETLANDS

MATCHLINE STA. 223+00EB

MATCHLINE STA. 229+00EB

224WBT

225WBT

226WBT

227WBT

228WBT

224WB

225WB

USH 2

224EB

225EB

227WB

228WB

228EB

24'

2CC

3CC

LIMITS OF WETLANDS

USH 51

NB

MATCHLINE STA. 116+00NB

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 57	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022003-EC.DWG
LAYOUT NAME - 022003-ec

PLOT DATE : 8/31/2020 10:24 AM PLOT BY : AYRES PLOT NAME : PLOT SCALE : 1 IN:40 FT

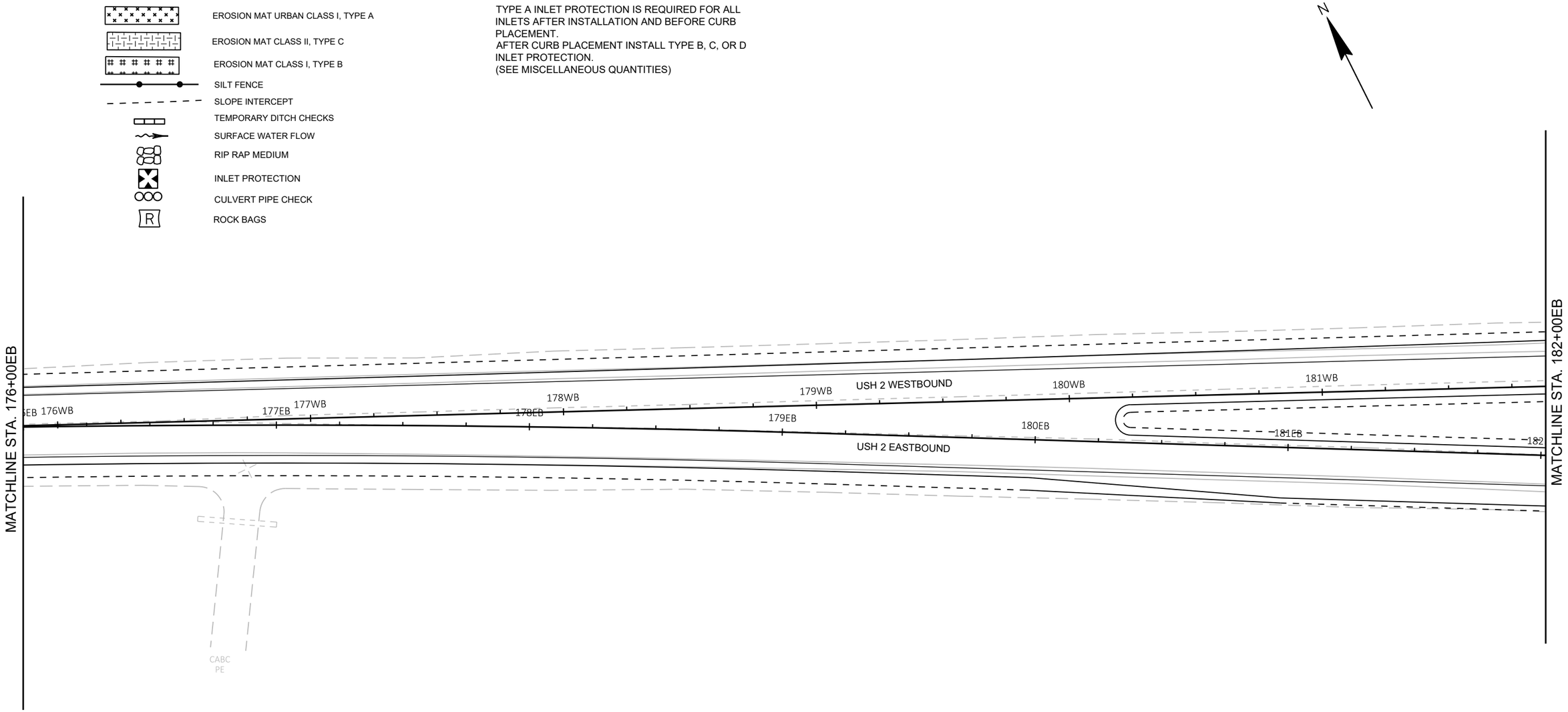
2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 58	E

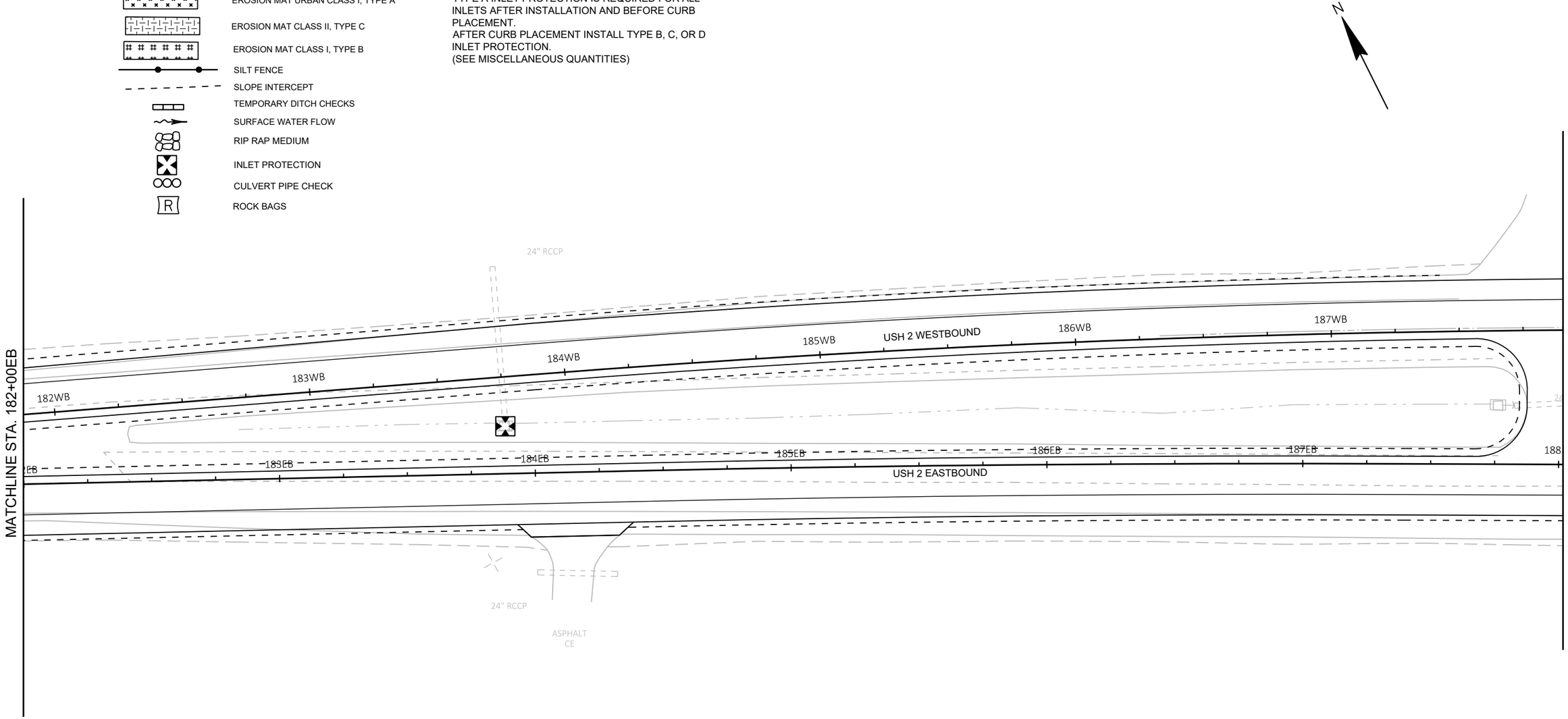
FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022004-EC.DWG
LAYOUT NAME - 022004-ec
PLOT DATE : 8/31/2020 10:24 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)



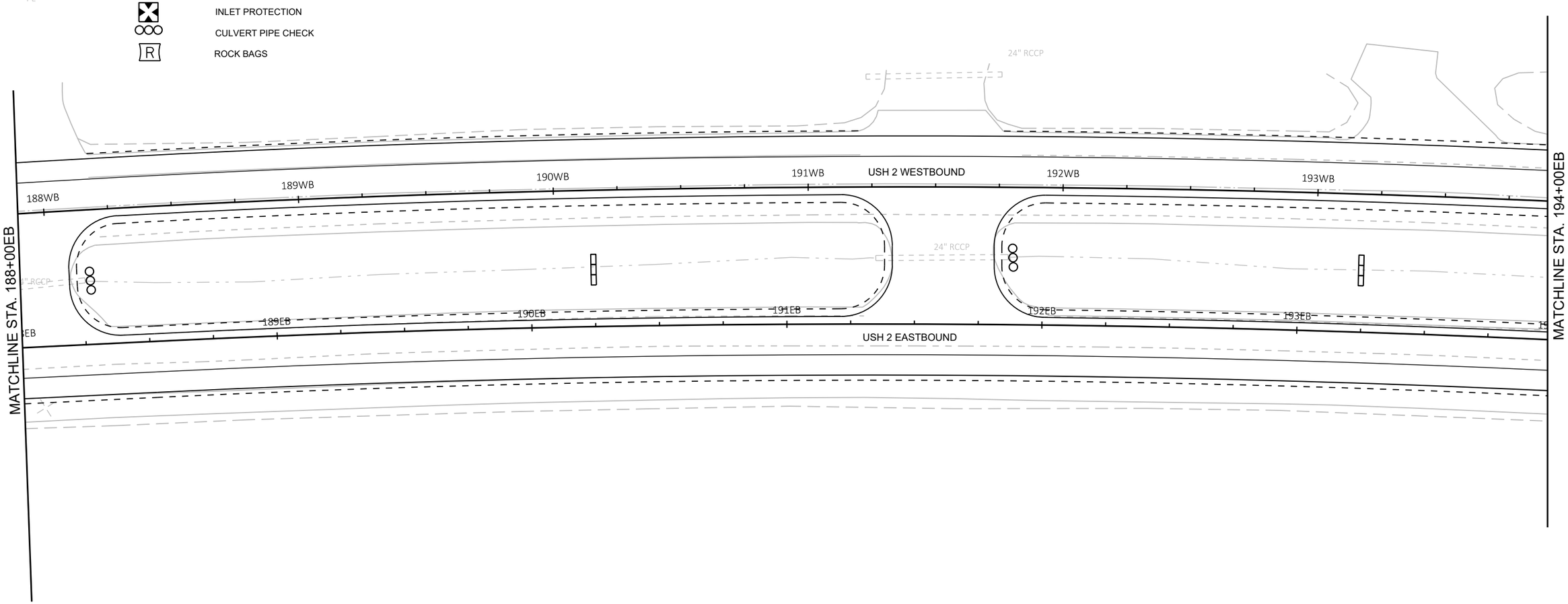
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 59	E

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 60	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022006-EC.DWG
LAYOUT NAME - 022006-ec
PLOT DATE : 8/31/2020 10:25 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

CENTER DRIVE

36"RCCP

194WB 195WB 196WB 197WB USH 2 WESTBOUND 198WB 199WB

INLET

194EB 195EB 196EB 197EB 198EB 199EB

USH 2 EASTBOUND

LIMITS OF WETLANDS

CENTER DRIVE

18" CMP

15" CMP

MATCHLINE STA. 200+00EB

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 61	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022007-EC.DWG
LAYOUT NAME - 022007-ec

PLOT DATE : 8/31/2020 10:25 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

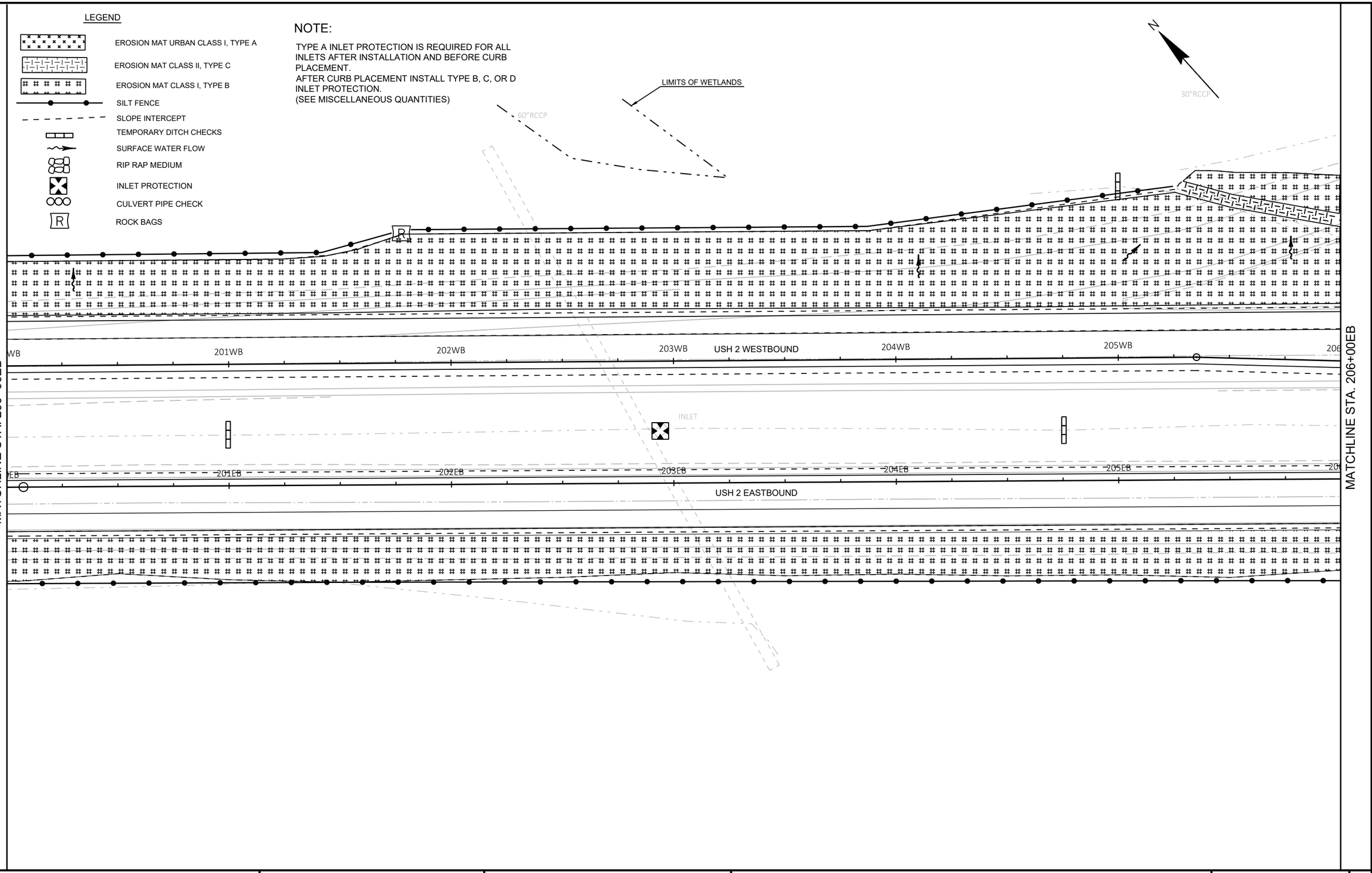
2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)



2

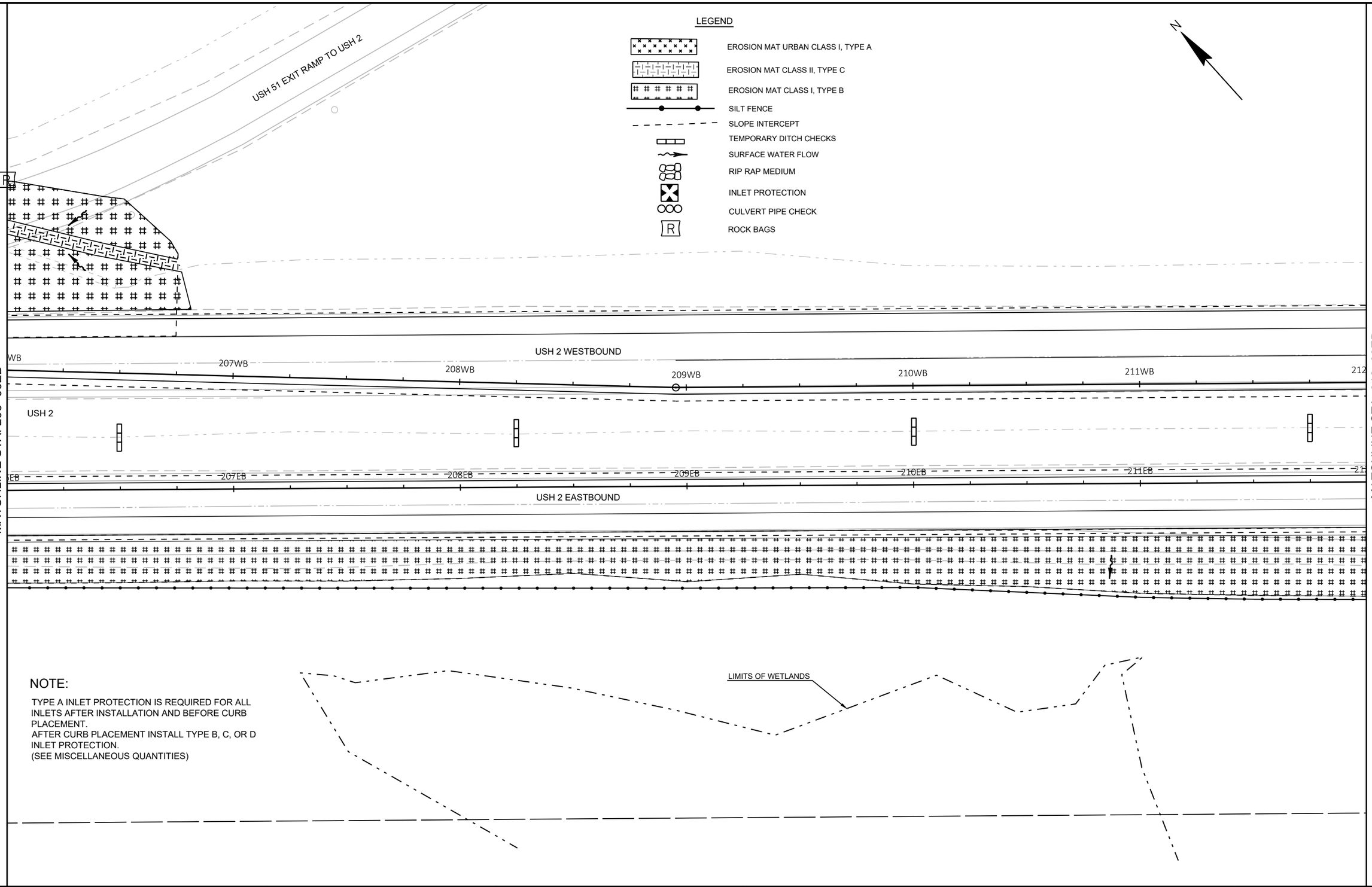
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 62	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022008-EC.DWG
LAYOUT NAME - 022008-ec

PLOT DATE : 8/31/2020 10:25 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2



NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 63	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022009-EC.DWG
LAYOUT NAME - 022009-ec
PLOT DATE : 8/31/2020 10:25 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

N

USH 2 EXIT RAMP

LIMITS OF WETLANDS

USH 2 WESTBOUND

213WB 214WB 215WB 216WB 217WB

INLET

213EB 214EB 215EB 216EB 217EB

USH 2 EASTBOUND

LIMITS OF WETLANDS

24"RCCP

MATCHLINE STA. 212+00EB

MATCHLINE STA. 218+00EB

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 64	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022010-EC.DWG
LAYOUT NAME - 022010-ec

PLOT DATE : 8/31/2020 10:26 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS (R)

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

LIMITS OF WETLANDS

USH 51

N

MATCHLINE STA. 218+00EB

USH 2 WESTBOUND

219WBT 220WBT 221WBT 222WBT 223W

WB 219WB 220WB 221WB 222WB 223

EB 219EB 220EB 221EB 222EB 22

USH 2 EASTBOUND

MATCHLINE STA. 223+00EB

36"RCCP

R

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 65	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022011-EC.DWG
LAYOUT NAME - 022011-ec

PLOT DATE : 8/31/2020 10:26 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

NOTE:

TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

EXISTING R/W

MATCHLINE STA. 229+00EB

229WBT

230WBT

230WB

29WB

EB

230EB

231WB

232WB

233WB

234WB

USH 2 WESTBOUND

USH 2

231EB

232EB

233EB

234EB

USH 2 EASTBOUND

CONSTRUCTION LIMITS
STA. 231+63.10EB

LIMITS OF WETLANDS

EXISTING R/W

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL	SHEET 66	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022012-EC.DWG
LAYOUT NAME - 022012-ec

PLOT DATE : 10/29/2020 11:35 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS (R)
- ASPHALTIC FLUME (ASPH)

N

EXISTING R/W

REST AREA EXIT

EXISTING R/W

CP#1

BEGIN TEMPORARY PAVEMENT
STAGE 1-STA. 9+15TRN

ASPH

8TRN

9TRN

10TRN

11TRN

18"CMCP

12TRN

13TRN

14TRN

15T

CP#2

101'

USH 51

MATCH LINE STA. 15+00TRN

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL-TEMPORARY	SHEET 67	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022013-EC.DWG
LAYOUT NAME - 022013-ec

PLOT DATE : 8/31/2020 10:26 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS (R)
- ASPHALTIC FLUME (ASPH)

N

P.L

EXISTING R/W

EXISTING R/W

SLOPE INTERCEPTS

SLOPE INTERCEPTS

MATCH LINE STA. 15+00TRN

MATCH LINE STA. 23+00TRN

RN

17'

12'

16TRN

17TRN

18TRN

19TRN

20TRN

21TRN

22TRN

23TRN

USH 51

USH 2

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL-TEMPORARY	SHEET 68	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022014-EC.DWG
LAYOUT NAME - 022014-ec

PLOT DATE : 9/1/2020 6:46 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS (R)
- ASPHALTIC FLUME (ASPH)

N

EXISTING R/W

INLET

27TRN

26TRN

28TRN

25TRN

36"RCCP

SLOPE INTERCEPTS

EXISTING R/W

24TRN

SLOPE INTERCEPTS

USH 2

END TEMPORARY PAVEMENT
STA. 27+11TRN

MATCH LINE STA. 23+00TRN

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL-TEMPORARY	SHEET 69	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022015-EC.DWG
LAYOUT NAME - 022015-ec

PLOT DATE : 8/31/2020 10:27 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

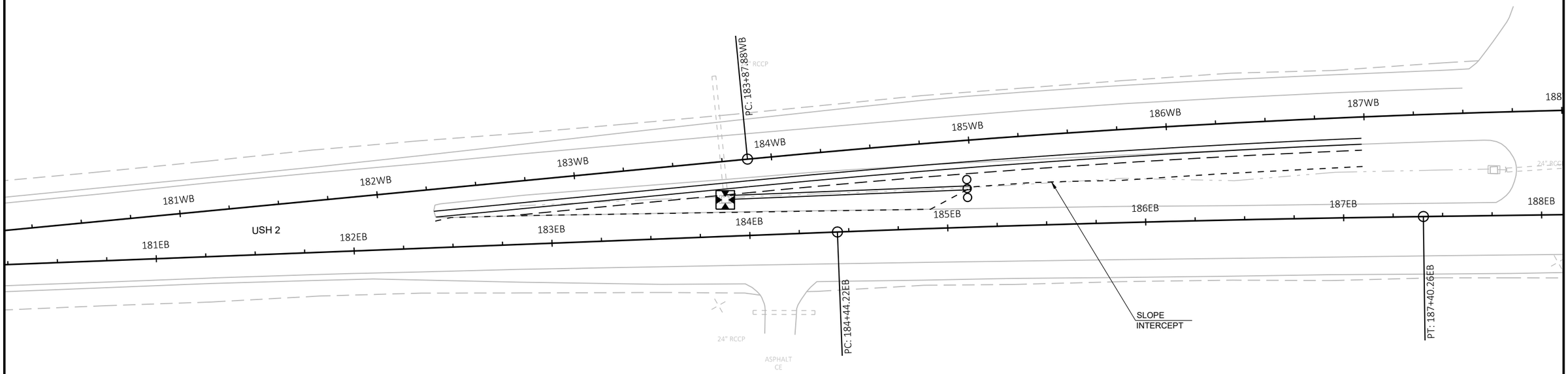
WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS (R)
- ASPHALTIC FLUME (ASPH)

N



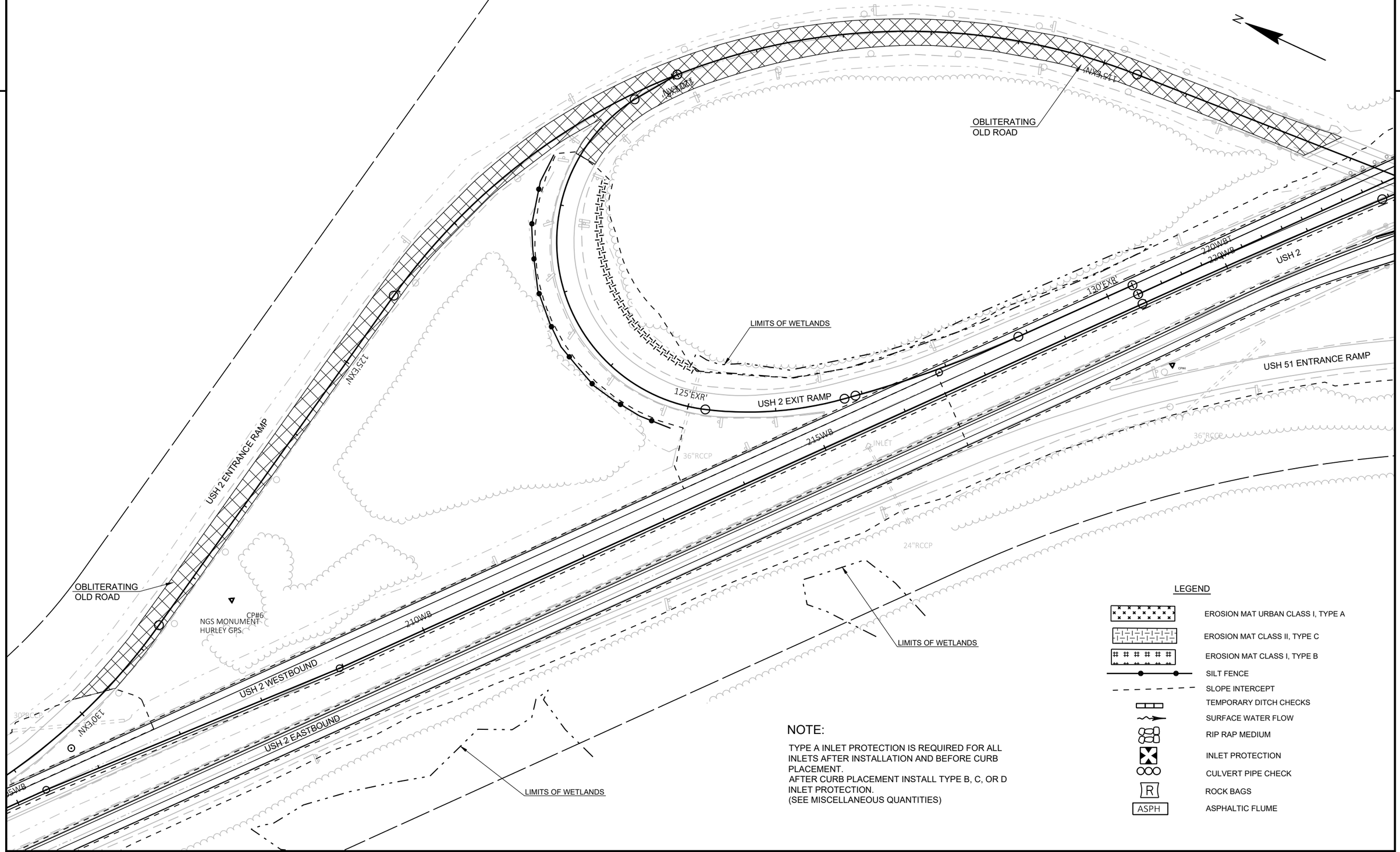
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	EROSION CONTROL-TEMPORARY	SHEET 70	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022016-EC.DWG
LAYOUT NAME - 022016-ec

PLOT DATE : 8/31/2020 10:27 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



NOTE:

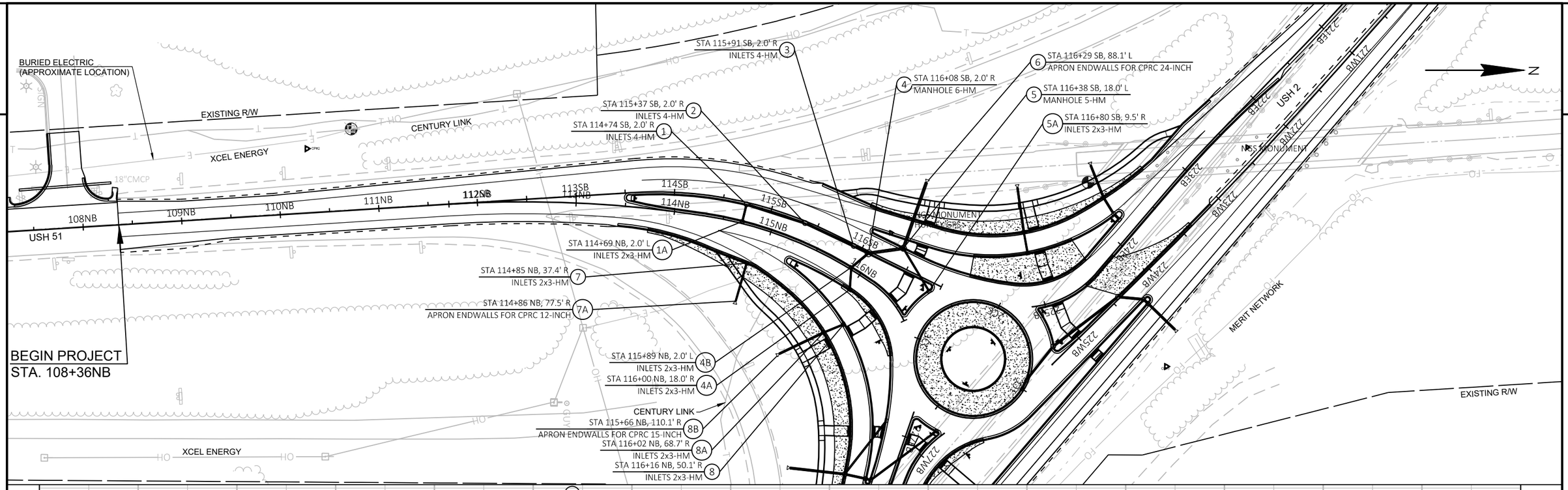
TYPE A INLET PROTECTION IS REQUIRED FOR ALL INLETS AFTER INSTALLATION AND BEFORE CURB PLACEMENT.
AFTER CURB PLACEMENT INSTALL TYPE B, C, OR D INLET PROTECTION.
(SEE MISCELLANEOUS QUANTITIES)

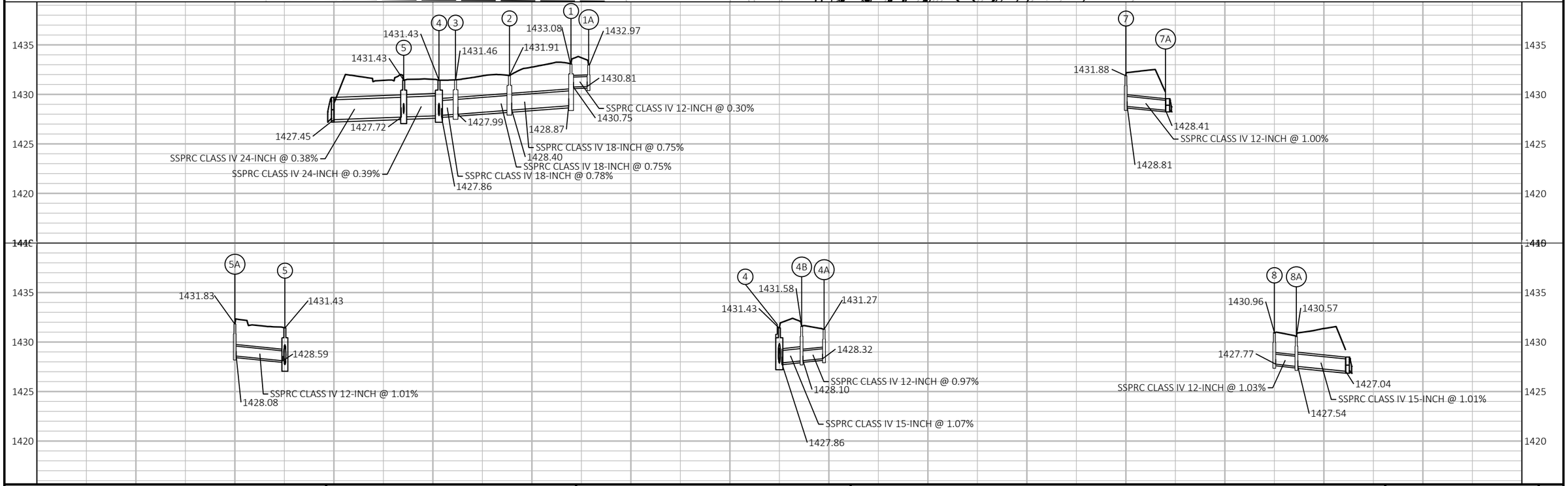
LEGEND

- EROSION MAT URBAN CLASS I, TYPE A
- EROSION MAT CLASS II, TYPE C
- EROSION MAT CLASS I, TYPE B
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECKS
- SURFACE WATER FLOW
- RIP RAP MEDIUM
- INLET PROTECTION
- CULVERT PIPE CHECK
- ROCK BAGS (R)
- ASPHALTIC FLUME (ASPH)

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	DETAIL FOR EROSION CONTROL AND ROADWAY OBLITERATION	SHEET 71	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022017-EC.DWG
LAYOUT NAME - 022017-ec
PLOT DATE : 8/31/2020 10:27 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:100 FT





PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STORM SEWER	SHEET 72	E

2

STA 225+24 WB, 12.4' R
INLETS 4-HM
11B

STA 224+25 WB, 61.9' L
APRON ENDWALLS FOR CPRC 18-INCH
11F

STA 224+25 WB, 24.2' L
INLETS 2x3-H
11E

STA 224+26 WB, 18.1' L
INLETS 2x3-H
11D

STA 224+42 WB, 2.0' R
INLETS 4-HM
11C

STA 1+00 CC, 2.0' L
INLETS 2x2.5-T
11

STA 1+10 CC, 2.0' L
INLETS 2x2.5-T
11A

STA 226+73 WB, 6.4' R
INLETS 2x3-HM
12

STA 226+61 WB, 72.7' L
INLETS 2x3-HM
13D

STA 227+79 WB, 54.2' L
INLETS 4-HM
13A

STA 227+99 WB, 95.2' L
APRON ENDWALLS FOR CPRC 18-INCH
13

STA 228+56 WB, 18.0' L
INLETS 2x3-HM
14

STA 228+79 WB, 2.0' R
INLETS 4-HM
14A

STA 228+76 EB, 2.0' L
INLETS 4-HM
14B

STA 228+50 EB, 34.3' R
INLETS 4-HM
14C

STA 228+39 EB, 36.3' R
INLETS 4-HM
13B

STA 228+53 EB, 75.0' R
APRON ENDWALLS FOR CPRC 24-INCH
13C

STA 227+53 EB, 18.7' R
INLETS 2x3-HM
12A

STA 227+56 EB, 45.5' R
INLETS 4-HM
12C

STA 227+72 EB, 99.3' R
APRON ENDWALLS FOR CPRC 18-INCH
12E

STA 227+53 EB, 23.9' R
INLETS 2x3-HM
12B

STA 226+91 EB, 23.6' R
INLETS 2x3-H
12D

STA 223+82 EB, 17.0' R
INLETS 2x3-HM
10

STA 223+81 EB, 25.6' R
INLETS 2x3-HM
10A

STA 223+75 EB, 44.3' R
INLETS 2x3-HM
10B

STA 223+59 EB, 75.1' R
APRON ENDWALLS FOR CPRC 15-INCH
10C

STA 225+10 EB, 54.2' R
INLETS 2x3-HM
9

STA 225+13 EB, 76.2' RT
INLETS 2x3-HM
9A

STA 224+24 EB, 116.8' R
APRON ENDWALLS FOR CPRC 15-INCH
9B

EXISTING R/W

EXISTING R/W

MERIT NETWORK

CENTURY LINK

XCEL ENERGY

36"RCCP

NGS MONUMENT
HOLLEY CORS ARP

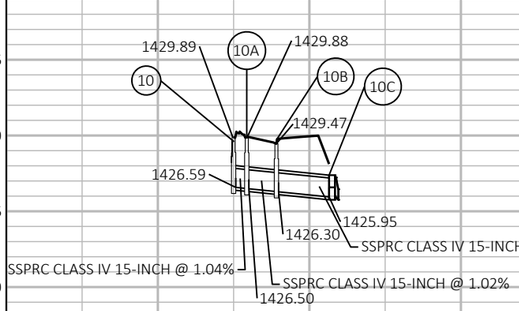
T1658

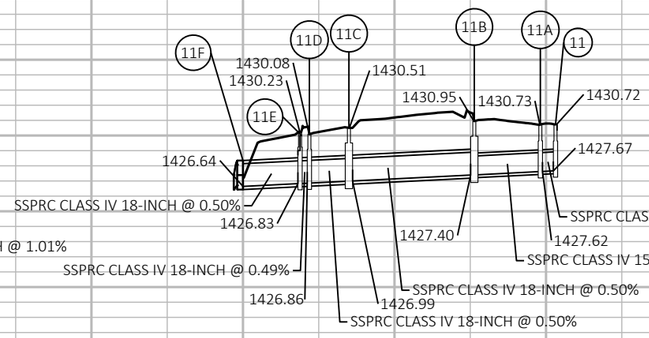
USH 2

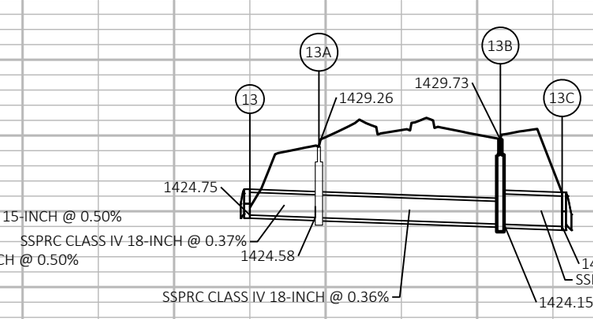
USH 51

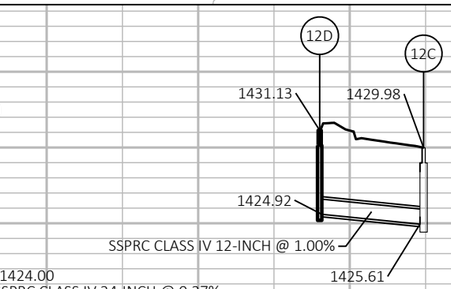
NGS MONUMENT

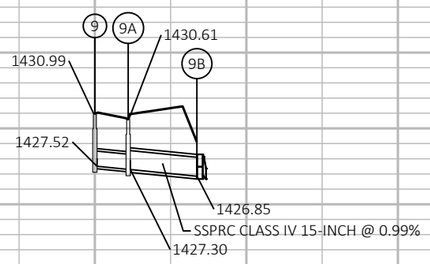
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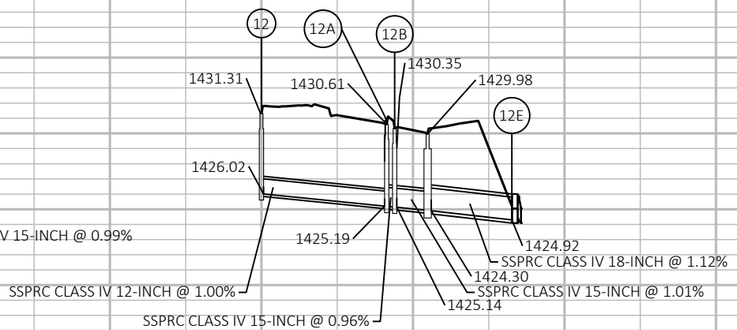


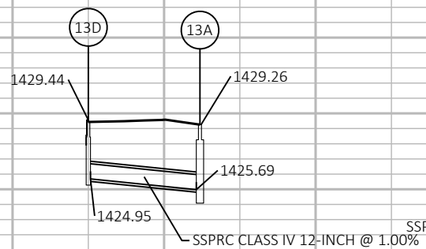


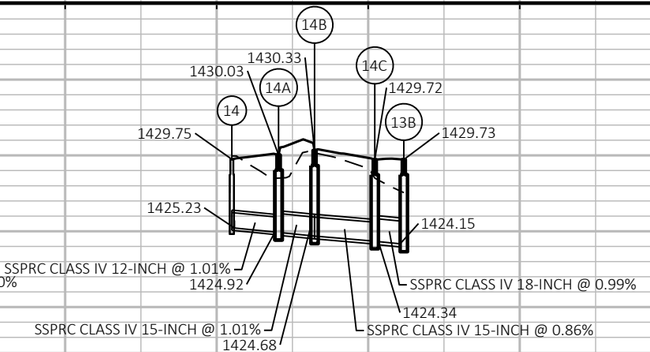








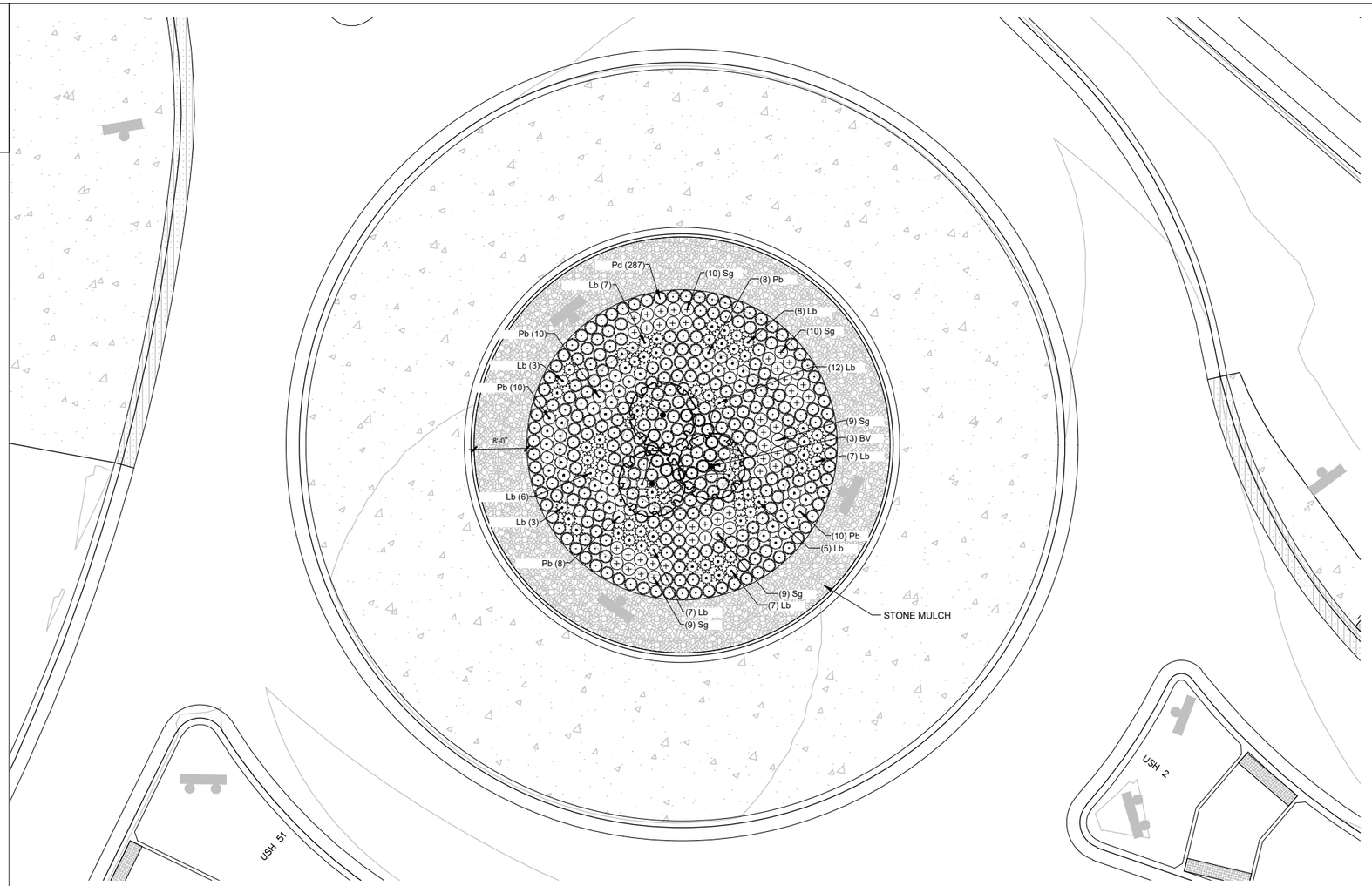




PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STORM SEWER	SHEET 73	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\022502-SS.DWG
LAYOUT NAME - 022502-ss

PLOT DATE : 8/31/2020 10:28 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:100 FT



LEGEND

STONE MULCH

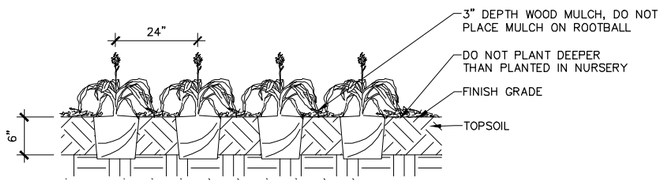
LARGE SHRUB

PERENNIAL/GRASSES

PLANT LEGEND

TREES	COMMON NAME
BV	BLACKHAW VIBURNUM
PERENNIALS	**COMMON NAME**
Lb	LITTLE BLUESTEM
Pb	PRAIRIE BLAZING STAR
Pd	PRAIRIE DROPSEED
Sg	SHOWY GOLDENROD

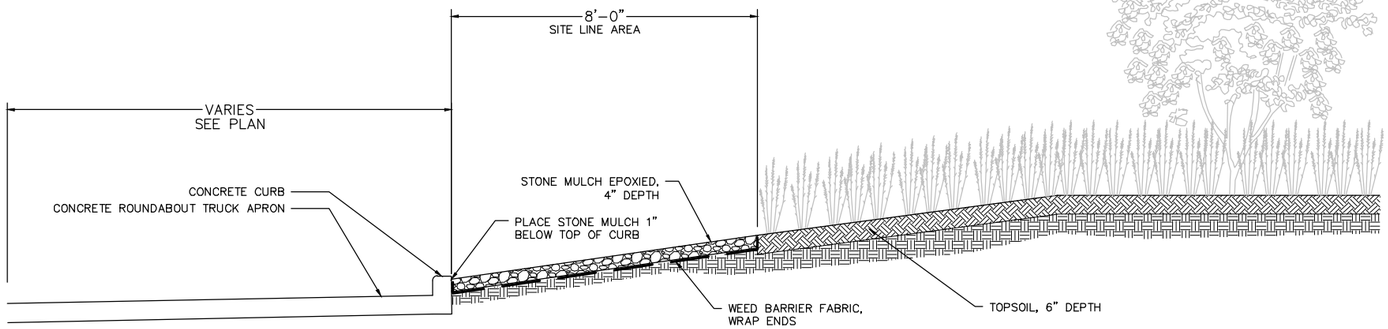
NOTES:
1. PLANTED AREAS TO RECEIVE 3" DEPTH WOOD MULCH.
2. LANDSCAPE BED IN ROUNDABOUT TO HAVE 6" DEPTH OF TOPSOIL.
3. ALL PERENNIAL PLANTS AND GRASSES SHALL BE PLANTED 24" O.C. WITH TRIANGULAR SPACING WHERE POSSIBLE.



NOTE: PLANT WITH TRIANGULAR SPACING WHEREVER POSSIBLE.

PERENNIAL PLANTING

SCALE: NTS



TYPICAL SECTION

SCALE: NTS

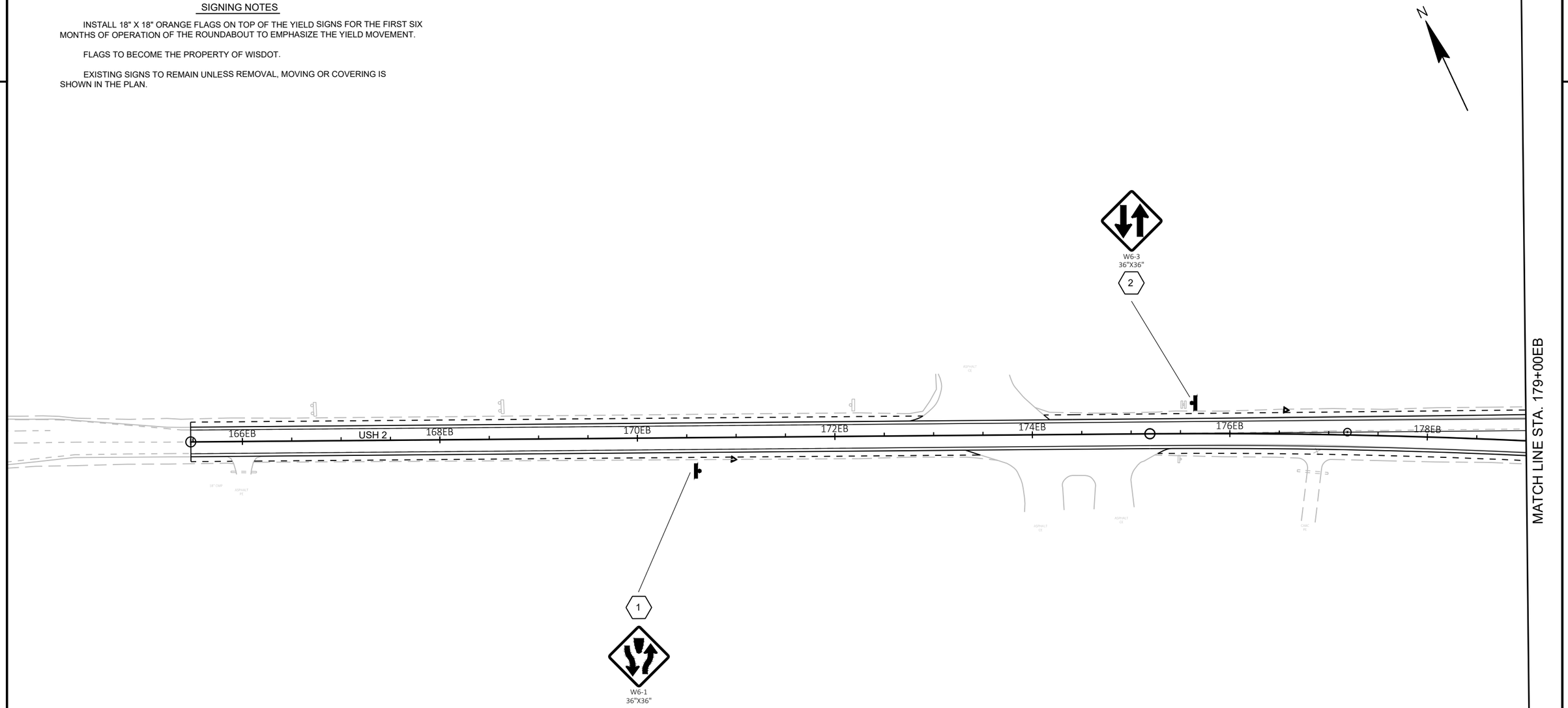
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	LANDSCAPE PLAN	SHEET 74	E

SIGNING NOTES

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

FLAGS TO BECOME THE PROPERTY OF WISDOT.

EXISTING SIGNS TO REMAIN UNLESS REMOVAL, MOVING OR COVERING IS SHOWN IN THE PLAN.



LEGEND

- WOOD POST WITH SIGN
- POSTS TUBULAR STEEL 2X2-INCH WITH SIGN
- SIGN-PLACE NEW
- 18"X18" TEMPORARY ORANGE FLAG

2

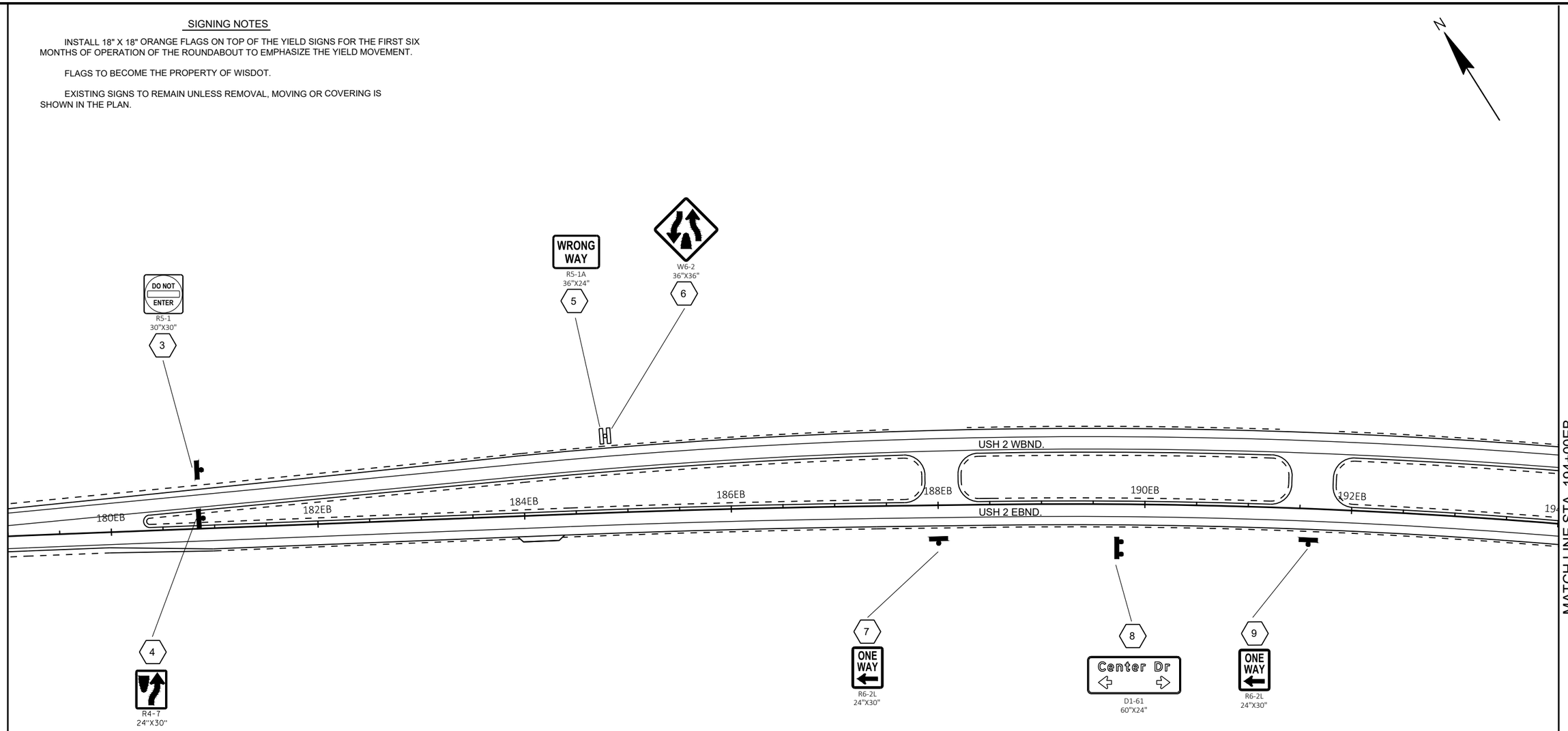
2

SIGNING NOTES

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

FLAGS TO BECOME THE PROPERTY OF WISDOT.

EXISTING SIGNS TO REMAIN UNLESS REMOVAL, MOVING OR COVERING IS SHOWN IN THE PLAN.



LEGEND

- WOOD POST WITH SIGN
- POSTS TUBULAR STEEL 2X2-INCH WITH SIGN
- SIGN-PLACE NEW
- 18"X18" TEMPORARY ORANGE FLAG

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PERMANENT SIGNING	SHEET 76	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023202-PS.DWG
LAYOUT NAME - 023202-ps
PLOT DATE : 10/29/2020 10:45 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

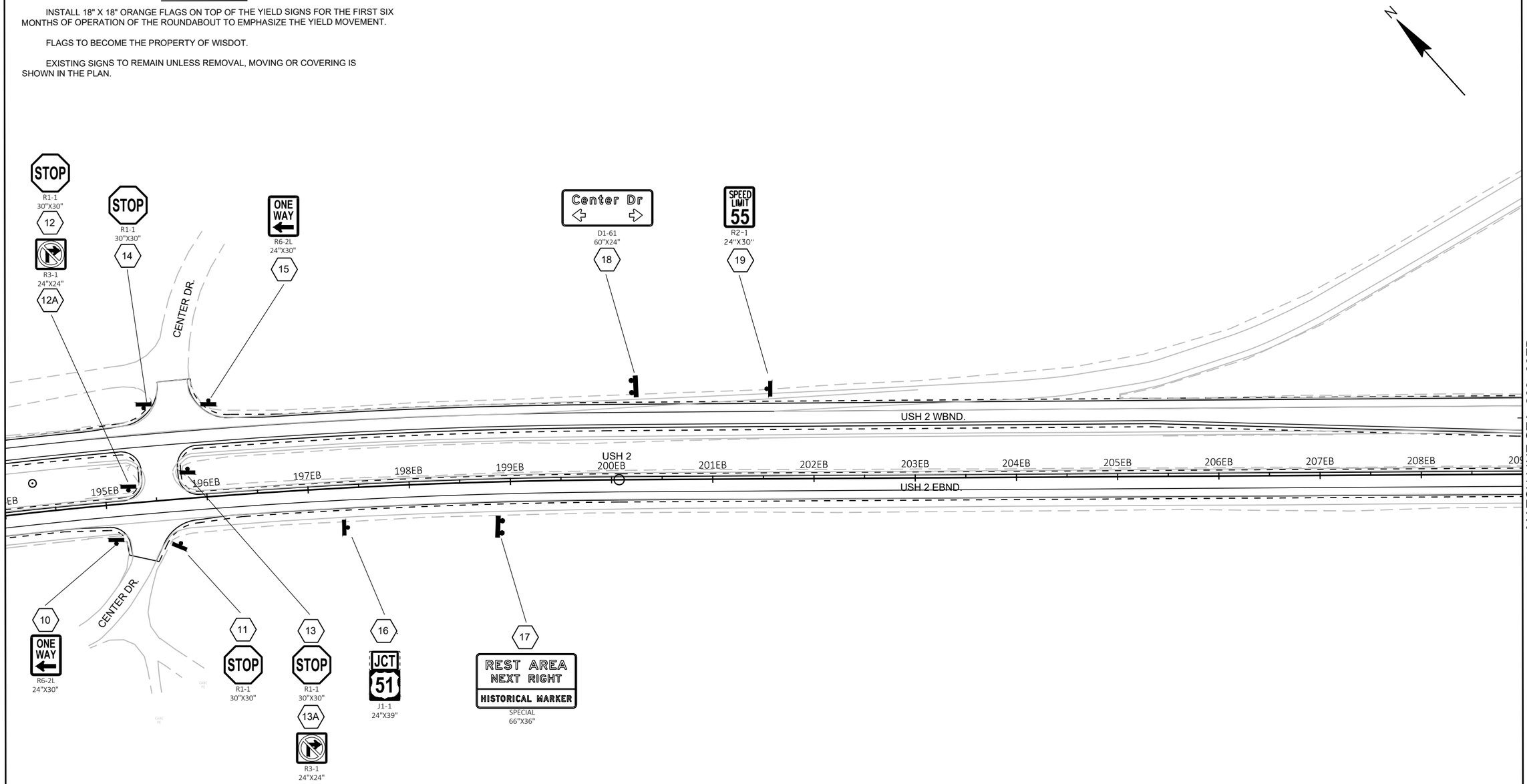
2

SIGNING NOTES

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

FLAGS TO BECOME THE PROPERTY OF WISDOT.

EXISTING SIGNS TO REMAIN UNLESS REMOVAL, MOVING OR COVERING IS SHOWN IN THE PLAN.



LEGEND

- WOOD POST WITH SIGN
- POSTS TUBULAR STEEL 2X2-INCH WITH SIGN
- SIGN-PLACE NEW
- 18"X18" TEMPORARY ORANGE FLAG

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PERMANENT SIGNING	SHEET 77	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023203-PS.DWG
LAYOUT NAME - 023203-ps

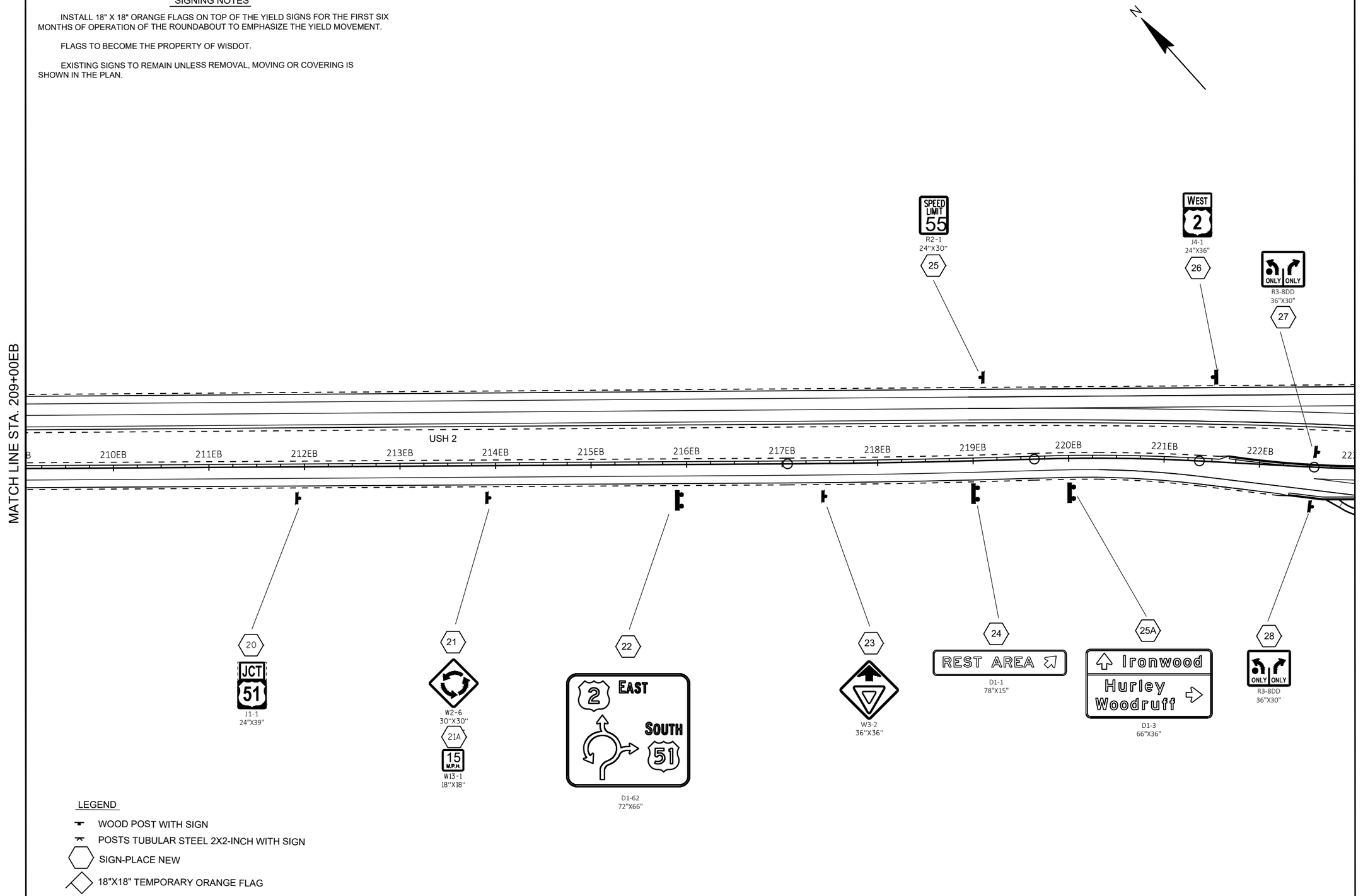
PLOT DATE : 10/29/2020 10:45 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

SIGNING NOTES

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

FLAGS TO BECOME THE PROPERTY OF WISDOT.

EXISTING SIGNS TO REMAIN UNLESS REMOVAL, MOVING OR COVERING IS SHOWN IN THE PLAN.



LEGEND

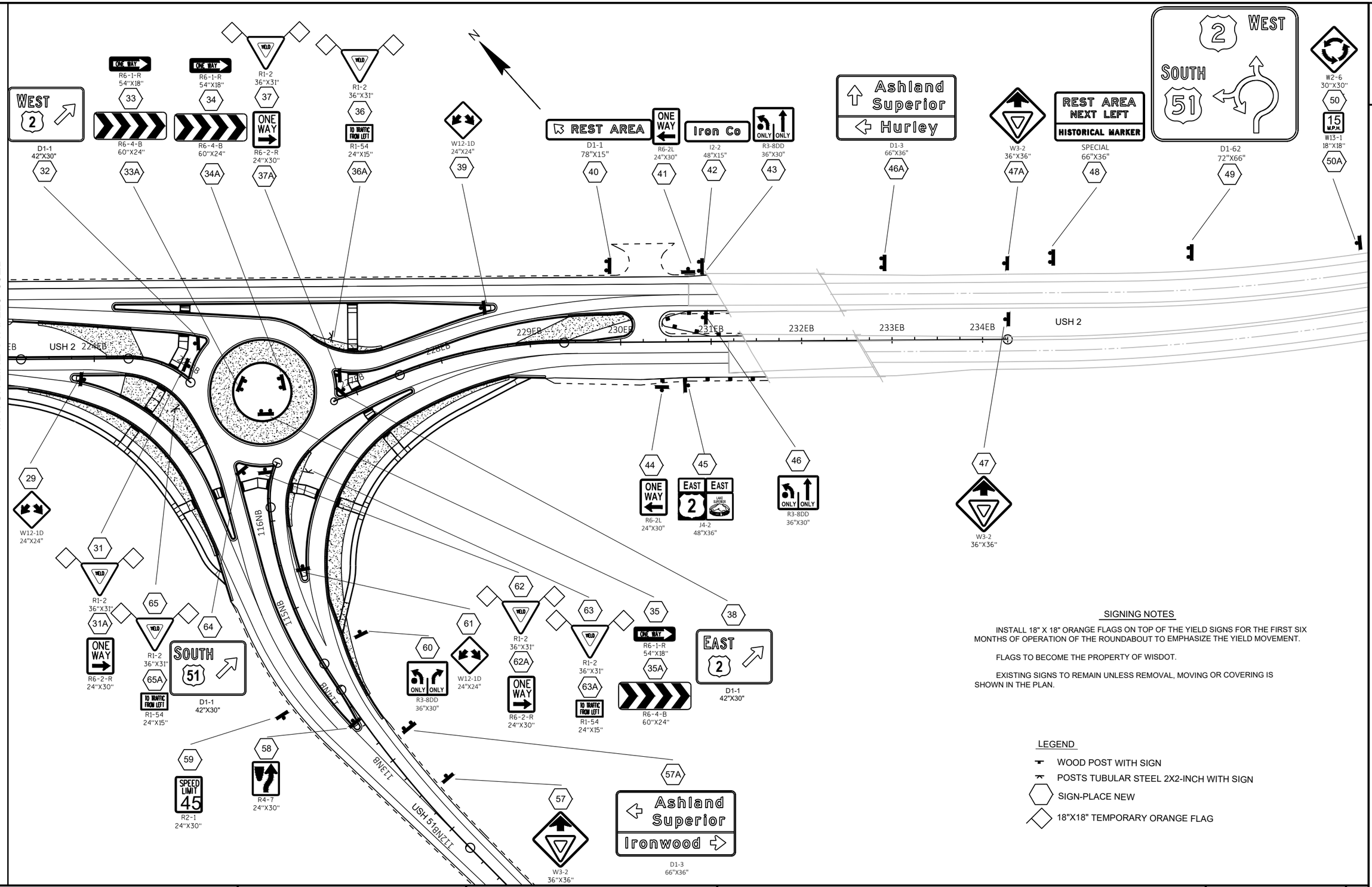
- WOOD POST WITH SIGN
- POSTS TUBULAR STEEL 2X2-INCH WITH SIGN
- SIGN-PLACE NEW
- 18"X18" TEMPORARY ORANGE FLAG

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PERMANENT SIGNING	SHEET 78	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023204-PS.DWG
LAYOUT NAME - 023204-ps

PLOT DATE : 10/29/2020 10:45 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

MATCH LINE STA. 223+00EB



SIGNING NOTES

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

FLAGS TO BECOME THE PROPERTY OF WISDOT.

EXISTING SIGNS TO REMAIN UNLESS REMOVAL, MOVING OR COVERING IS SHOWN IN THE PLAN.

LEGEND

- WOOD POST WITH SIGN
- POSTS TUBULAR STEEL 2X2-INCH WITH SIGN
- SIGN-PLACE NEW
- 18"X18" TEMPORARY ORANGE FLAG

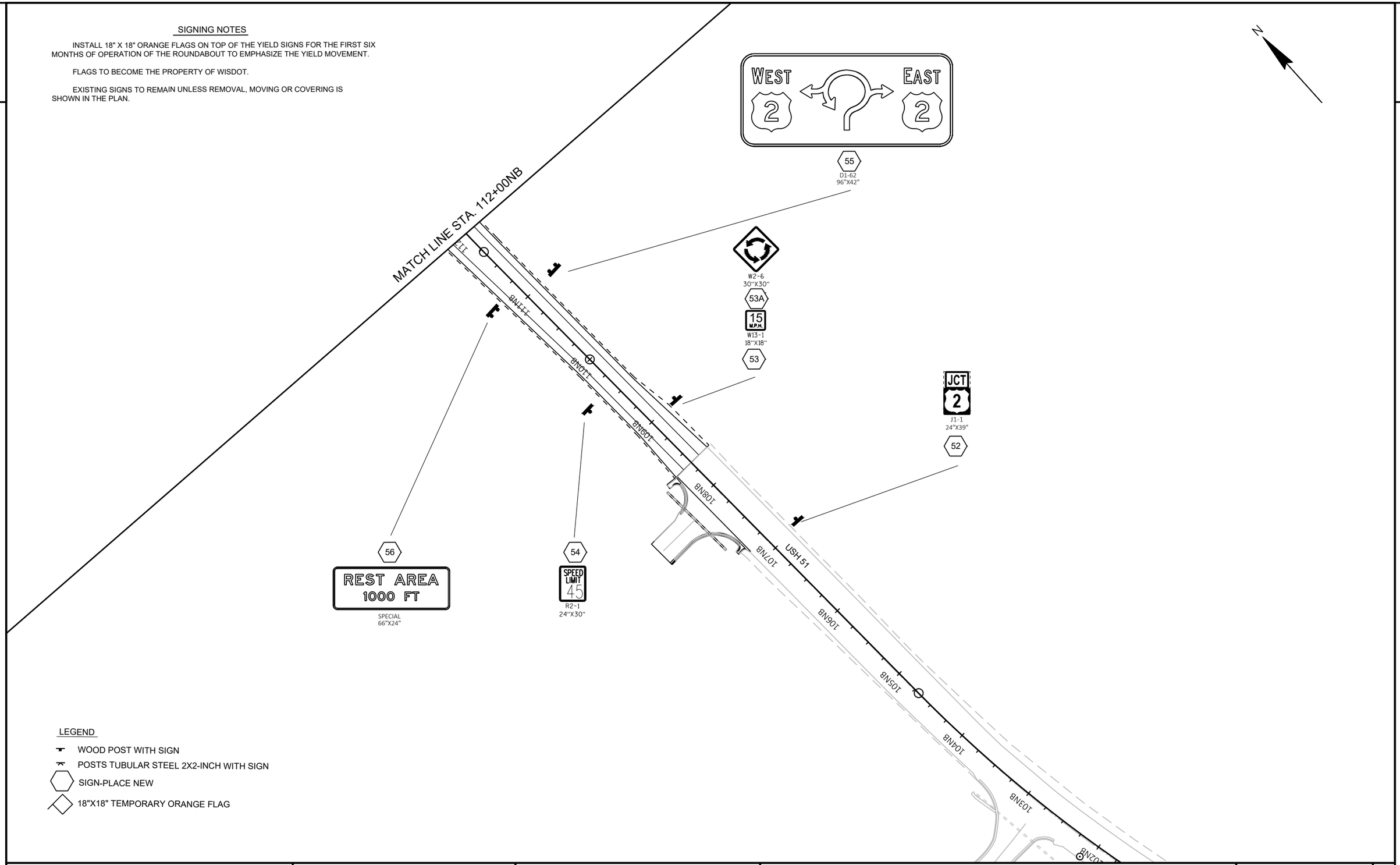
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PERMANENT SIGNING	SHEET 79	E

SIGNING NOTES

INSTALL 18" X 18" ORANGE FLAGS ON TOP OF THE YIELD SIGNS FOR THE FIRST SIX MONTHS OF OPERATION OF THE ROUNDABOUT TO EMPHASIZE THE YIELD MOVEMENT.

FLAGS TO BECOME THE PROPERTY OF WISDOT.

EXISTING SIGNS TO REMAIN UNLESS REMOVAL, MOVING OR COVERING IS SHOWN IN THE PLAN.



LEGEND

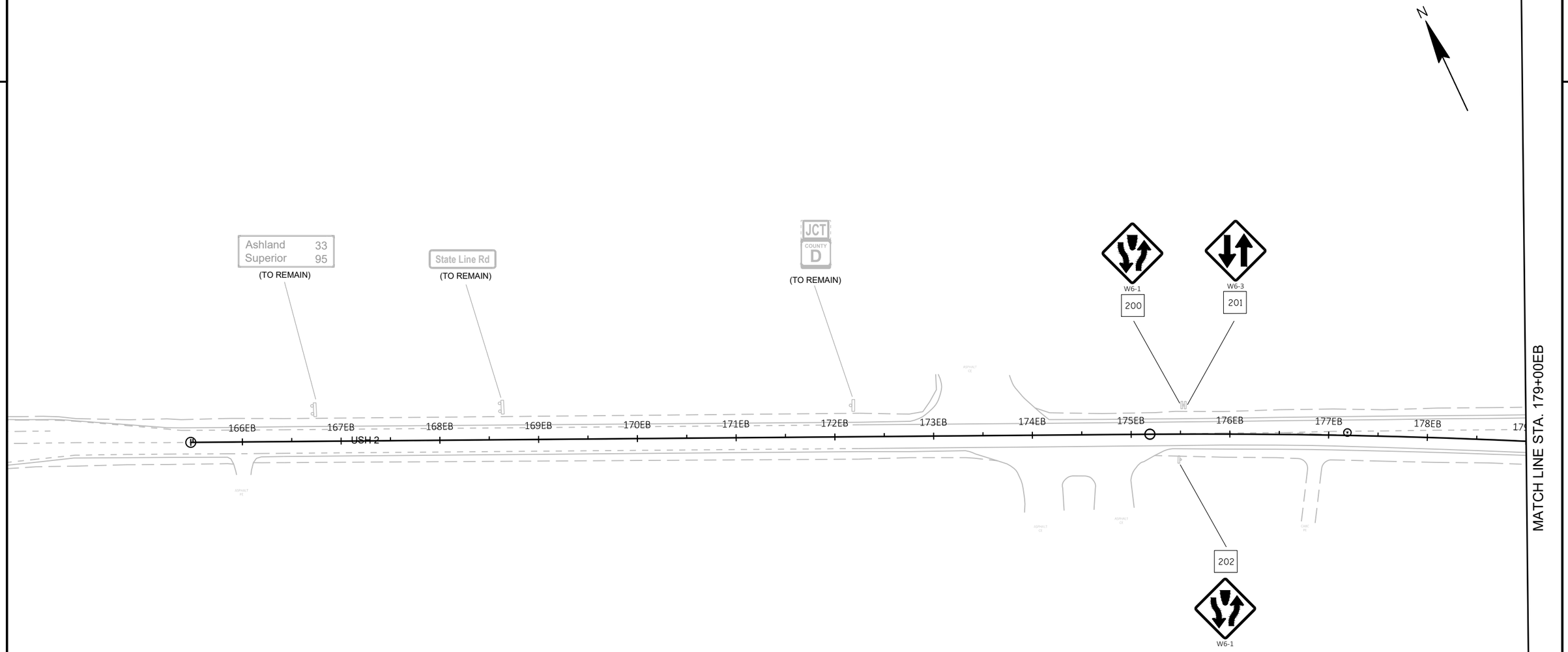
- WOOD POST WITH SIGN
- POSTS TUBULAR STEEL 2X2-INCH WITH SIGN
- SIGN-PLACE NEW
- 18"X18" TEMPORARY ORANGE FLAG

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PERMANENT SIGNING	SHEET 80	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023206-PS.DWG
LAYOUT NAME - 023206-ps

PLOT DATE : 10/29/2020 10:46 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



SIGN-REMOVE EXISTING

SIGN-MOVE WITH SUPPORT

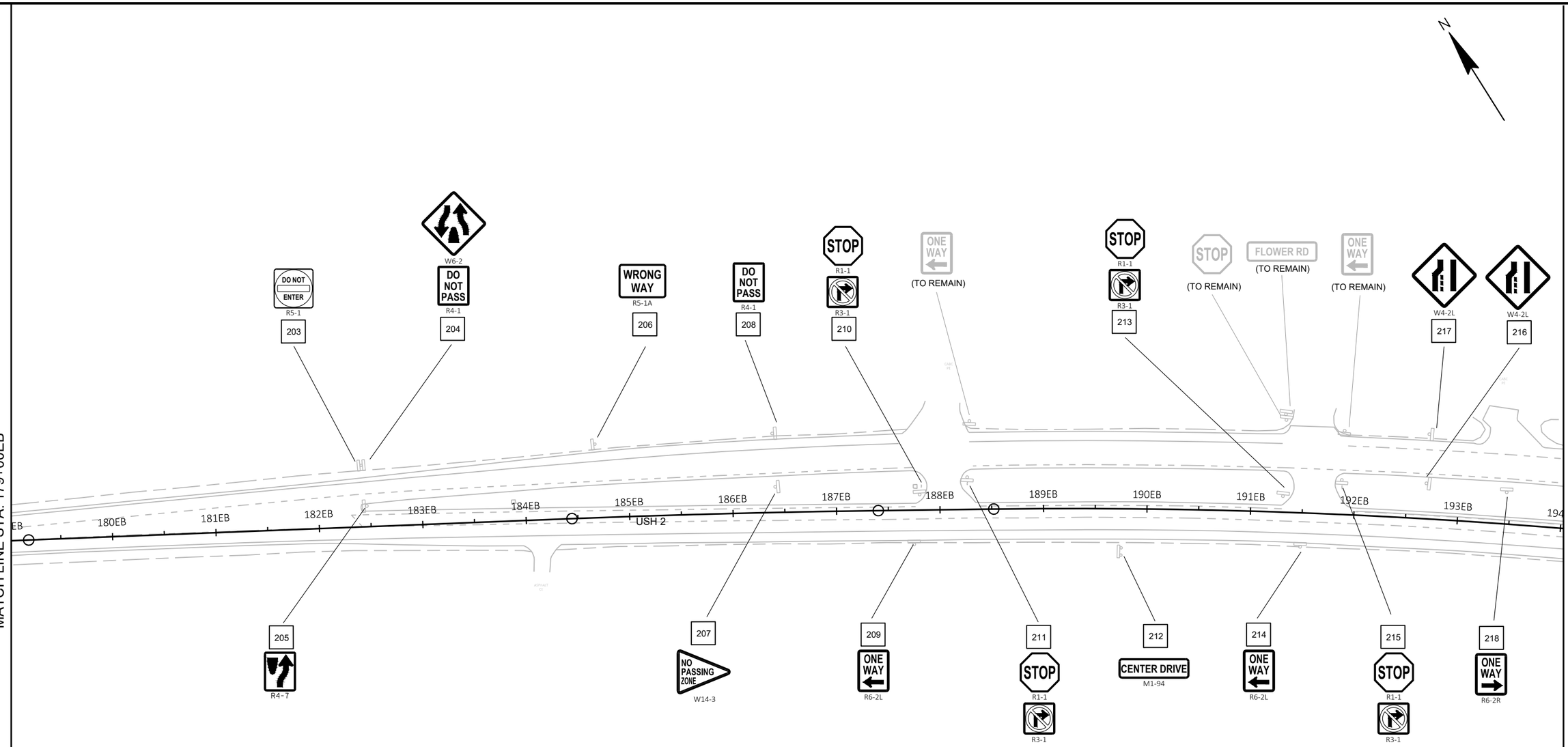
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	SIGN REMOVALS	SHEET 81	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023207-PS.DWG
LAYOUT NAME - 023207-ps

PLOT DATE : 10/7/2020 9:51 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCH LINE STA. 179+00EB



MATCH LINE STA. 194+00EB

2

SIGN-REMOVE EXISTING

SIGN-MOVE WITH SUPPORT

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	SIGN REMOVALS	SHEET 82	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023208-PS.DWG
LAYOUT NAME - 023208-ps

PLOT DATE : 10/7/2020 9:51 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA. 194+00EB

MATCH LINE STA. 209+00EB

N

STOP
R1-1
221

ONE WAY
R6-2L
224

STOP
R1-1
R3-1
223

CENTER DR
D1-60
227

SPEED LIMIT 55
R2-1
228

WEST 2 WEST
(TO REMAIN)

SIGN
(TO REMAIN)

CENTER DR.

PRIVATE SIGN
(TO REMAIN)

195EB 196EB 197EB 198EB 199EB 200EB 201EB 202EB 203EB 204EB 205EB 206EB 207EB 208EB

USH 2

PRIVATE SIGN
(TO REMAIN)

219
ONE WAY
R6-2L

CENTER DR.

220
STOP
R1-1
R3-1

USH 2
CENTER DR
(TO REMAIN)

222
STOP
R1-1

225
JCT 51
J1-1

226
REST AREA
NEXT RIGHT
WEATHER INFO
HISTORICAL MARKER
SPECIAL

400
SIS

229
SOUTH TO 51 77
J2-2

230
REST AREA
D1-1

231
Ironwood
Hurley
Woodruff
D1-3

SIGN-REMOVE EXISTING

SIGN-MOVE WITH SUPPORT

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	SIGN REMOVALS	SHEET 83	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023209-PS.DWG
LAYOUT NAME - 023209-ps

PLOT DATE : 10/7/2020 9:52 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE STA. 209+00EB

USH 2 ENTRANCE RAMP

USH 51 ENTRANCE RAMP

USH 2

USH 2 EXIT RAMP

USH 51

MATCH LINE STA. 224+00EB

N

SPEED LIMIT 45 R2-1 — 257

W1-8 — 255

R3-2 — 256

R4-7

SPEED LIMIT 45 R2-1 — 262

KEEP RIGHT R4-52R — 263

241 W1-8

242 W1-8

243 W1-8

244 W1-8

252 SPEED LIMIT 45 W3-5

W1-8 — 245

WRONG WAY R5-1A

W1-8 — 246

254 DO NOT ENTER R5-1

WEST 2 J3-1 — 247

258 R3-2

R4-7

W1-8 — 248

259 WEST 2 J3-1

RAMP 20 MPH W13-3 — 249

260 W6-3

261 SPEED LIMIT 45 R2-1

SOUTH 51 J3-1 — 250

264 KEEP RIGHT R4-52R

RAMP 20 MPH W13-3 — 251

265 SPEED LIMIT 45 R2-1

Ashland Superior

Hurley D1-3

REST AREA D5- — 266

W5-52R — 267

W4-1R — 232

233 RAMP 45 MPH W13-3

234 EAST SOUTH TO 2 51 77 J2-3

235 EAST 2 J3-1

236 YIELD AHEAD W3-2

237 SPEED LIMIT 45 W3-5

238 W4-1R

239 W5-52L

240 YIELD R1-2

SIGN-REMOVE EXISTING

SIGN-MOVE WITH SUPPORT

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	SIGN REMOVALS	SHEET 84	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023210-PS.DWG
LAYOUT NAME - 023210-ps

PLOT DATE : 10/7/2020 9:52 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE STA. 224+00EB

N

IRON COUNTY IS ZONED
PERMIT REQUIRED
SPECIAL
278

WEST SOUTH TO
2 51 77
J2-3
279

SIS
282

STOP
R1-1
R3-1
284

ONE WAY
R6-2L
285

DO NOT ENTER
R5-1
286

Iron County
I2-2
SPEED LIMIT 55
R2-1

REST AREA NEXT RIGHT
WEATHER INFO
HISTORICAL MARKER
SPECIAL
289

SIGN
(TO REMAIN)

USH 2

225EB
227EB
228EB
229EB
230EB
231EB
232EB
233EB
234EB

W4-1R
269

W1-2L
W1-2L
271

272
DO NOT ENTER
R5-1

116NB

USH 51 EXIT RAMP

280
EAST
J4-1

281
YIELD
R1-2

283
STOP
R1-1
R3-1

288
EAST
2
J4-1

273
WRONG WAY
R5-1A

115NB

268
WRONG WAY
R5-1A

USH 2 EXIT RAMP

WEST WEST
2
J4-2

277

114NB

113NB

274
SPEED LIMIT 45
R2-1

275
YIELD
R1-2

DO NOT ENTER
R5-1

USH 51 SB

MATCH LINE STA. 112+00NB

SIGN-REMOVE EXISTING

SIGN-MOVE WITH SUPPORT

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	SIGN REMOVALS	SHEET 85	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023211-PS.DWG
LAYOUT NAME - 023211-ps
PLOT DATE : 10/7/2020 9:52 AM
PLOT BY : SOUFAL, KEVIN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA. 112+00NB

112

111NB

110NB

109NB

108NB

107NB

106NB

105NB

104NB

103NB

102NB

USH 51

291

REST AREA
1000 FEET

D5-

293

SPEED LIMIT 45

R2-1

294

CHECK TURN SIGNAL

W8-68

290

EAST EAST

2

J3-2

292

RAMP 30 MPH

W13-3

Ashland Superior

Ironwood

D1-3

295

401

DO NOT ENTER

R5-1

R3-1

402

STOP

R1-1

403

STOP

R1-1

404

DO NOT ENTER

R5-1

R3-2

SIGN

SIGN

SIGN

MOVE WITH SUPPORT FOR CONSTRUCTION
REINSTALL IN SAME LOCATION

SIGN-REMOVE EXISTING

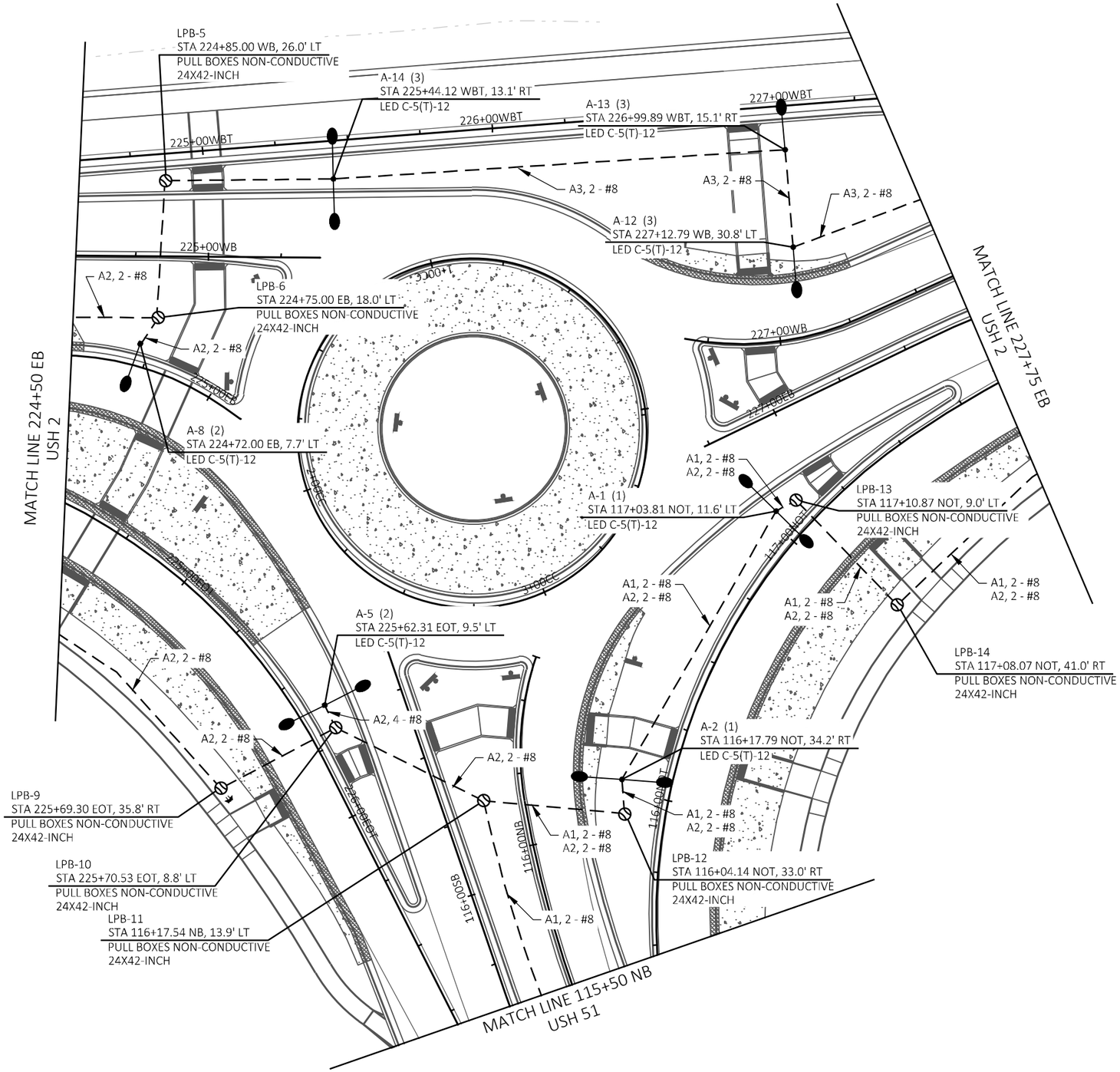
SIGN-MOVE WITH SUPPORT

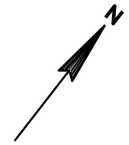
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	SIGN REMOVALS	SHEET 86	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023212-PS.DWG
LAYOUT NAME - 023212-ps

PLOT DATE : 10/7/2020 9:52 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

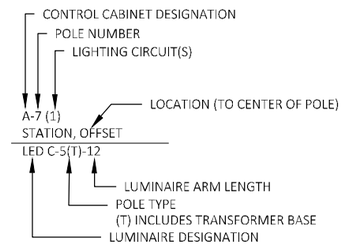
WISDOT/CADDS SHEET 42





LEGEND

- SINGLE LIGHTING UNIT
- TWIN LIGHTING UNIT
- PULL BOX NON-CONDUCTIVE (24 X 42-INCH)
- CONDUIT NON-METALLIC SCHEDULE 40 2-INCH UNLESS NOTED
- LIGHTING CONTROL CABINET (LCC-#)
- = CONDUIT STUB
- A2, 2 - #8 — LIGHTING CONTROL CABINET DESIGNATION CIRCUIT #, CONDUIT WIRE CONFIGURATION



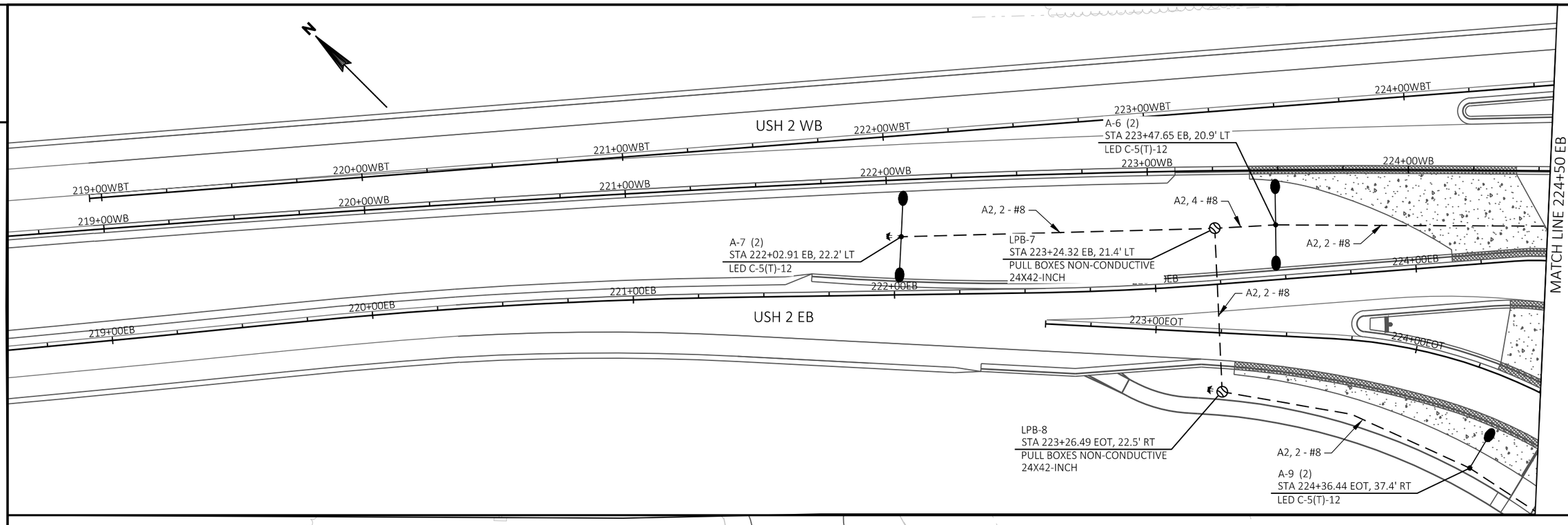
GENERAL LIGHTING NOTES:

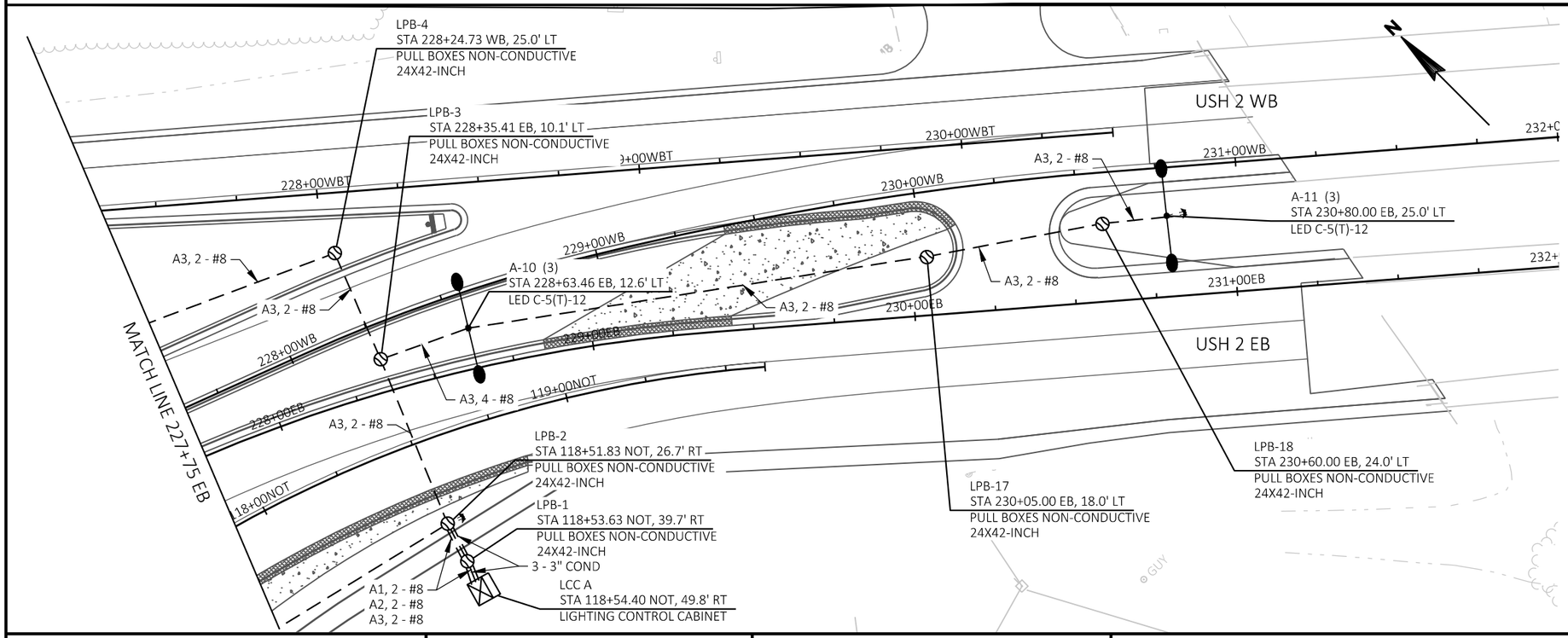
1. ALL CONDUITS WITH WIRES SHALL ALSO INCLUDE 1 - #8 GROUND.
2. ALL EMPTY CONDUITS SHALL INCLUDE LOCATING WIRE.

PROJECT NO: 1175-21-01	HWY: USH 51	COUNTY: IRON	LIGHTING PLAN (ROUNDABOUT L26-2000)	SHEET 87	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023601-LP.DWG
01 023501 lp

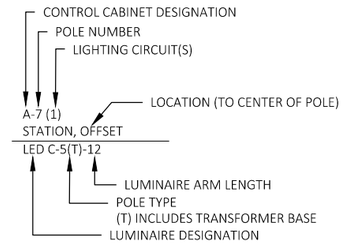
PLOT DATE : 8/28/2020 7:45 AM PLOT BY : AYRES ASSOCIATES PLOT NAME : PLOT SCALE : ##########





LEGEND

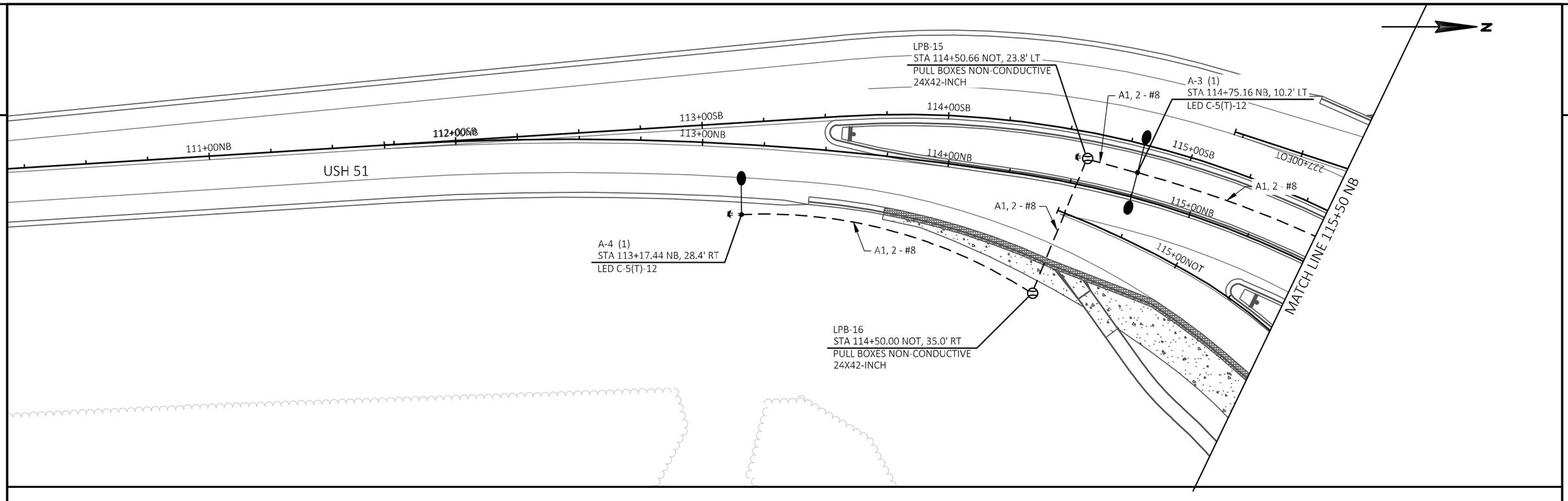
- SINGLE LIGHTING UNIT
- TWIN LIGHTING UNIT
- PULL BOX NON-CONDUCTIVE (24 X 42-INCH)
- CONDUIT NON-METALLIC SCHEDULE 40 2-INCH UNLESS NOTED
- LIGHTING CONTROL CABINET (LCC-#)
- CONDUIT STUB
- A2, 2 - #8 — LIGHTING CONTROL CABINET DESIGNATION CIRCUIT #, CONDUIT WIRE CONFIGURATION



GENERAL LIGHTING NOTES:

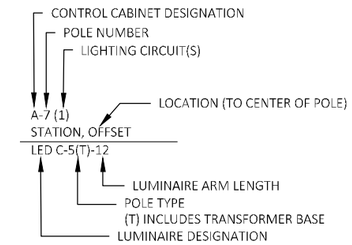
1. ALL CONDUITS WITH WIRES SHALL ALSO INCLUDE 1 - #8 GROUND.
2. ALL EMPTY CONDUITS SHALL INCLUDE LOCATING WIRE.

PROJECT NO: 1175-21-01	HWY: USH 51	COUNTY: IRON	LIGHTING PLAN (ROUNDABOUT L26-2000)	SHEET 88	E



LEGEND

●——●	SINGLE LIGHTING UNIT
●——●——●	TWIN LIGHTING UNIT
(PB)	PULL BOX NON-CONDUCTIVE (24 X 42-INCH)
----------	CONDUIT NON-METALLIC SCHEDULE 40 2-INCH UNLESS NOTED
⊠	LIGHTING CONTROL CABINET (LCC-#)
= ⇶	CONDUIT STUB
A2, 2 - #8	LIGHTING CONTROL CABINET DESIGNATION CIRCUIT #, CONDUIT WIRE CONFIGURATION



GENERAL LIGHTING NOTES:

1. ALL CONDUITS WITH WIRES SHALL ALSO INCLUDE 1 - #8 GROUND.
2. ALL EMPTY CONDUITS SHALL INCLUDE LOCATING WIRE.

PROJECT NO: 1175-21-01	HWY: USH 51	COUNTY: IRON	LIGHTING PLAN (ROUNDABOUT L26-2000)	SHEET 89	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\023601-LP.DWG
03 023501 lp
PLOT DATE : 8/28/2020 7:45 AM
PLOT BY : AYRES ASSOCIATES
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

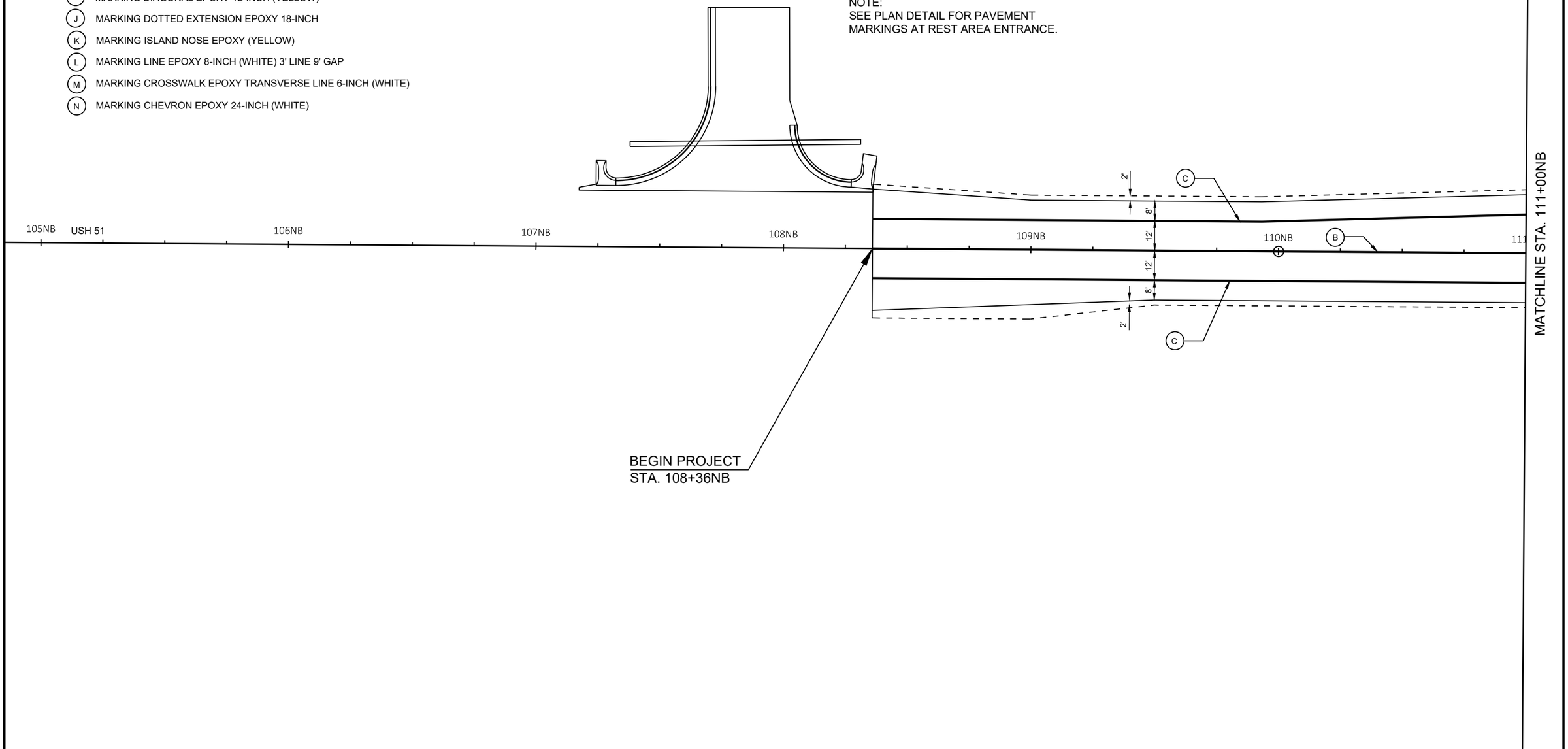
2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)

N

NOTE:
SEE PLAN DETAIL FOR PAVEMENT
MARKINGS AT REST AREA ENTRANCE.

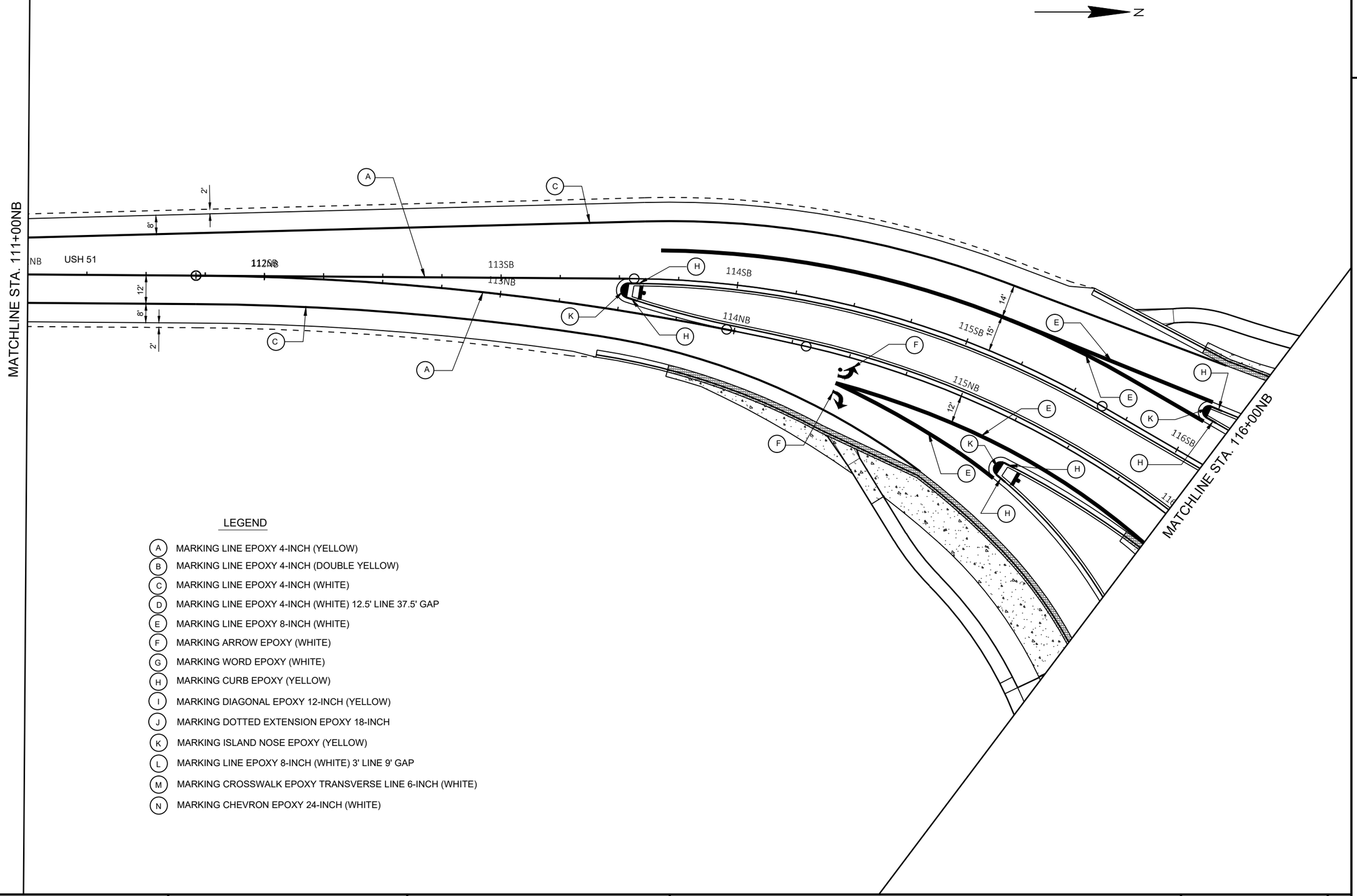


2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 90	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024501-pm
PLOT DATE : 12/7/2020 5:36 AM
PLOT BY : DANA, ANDY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2



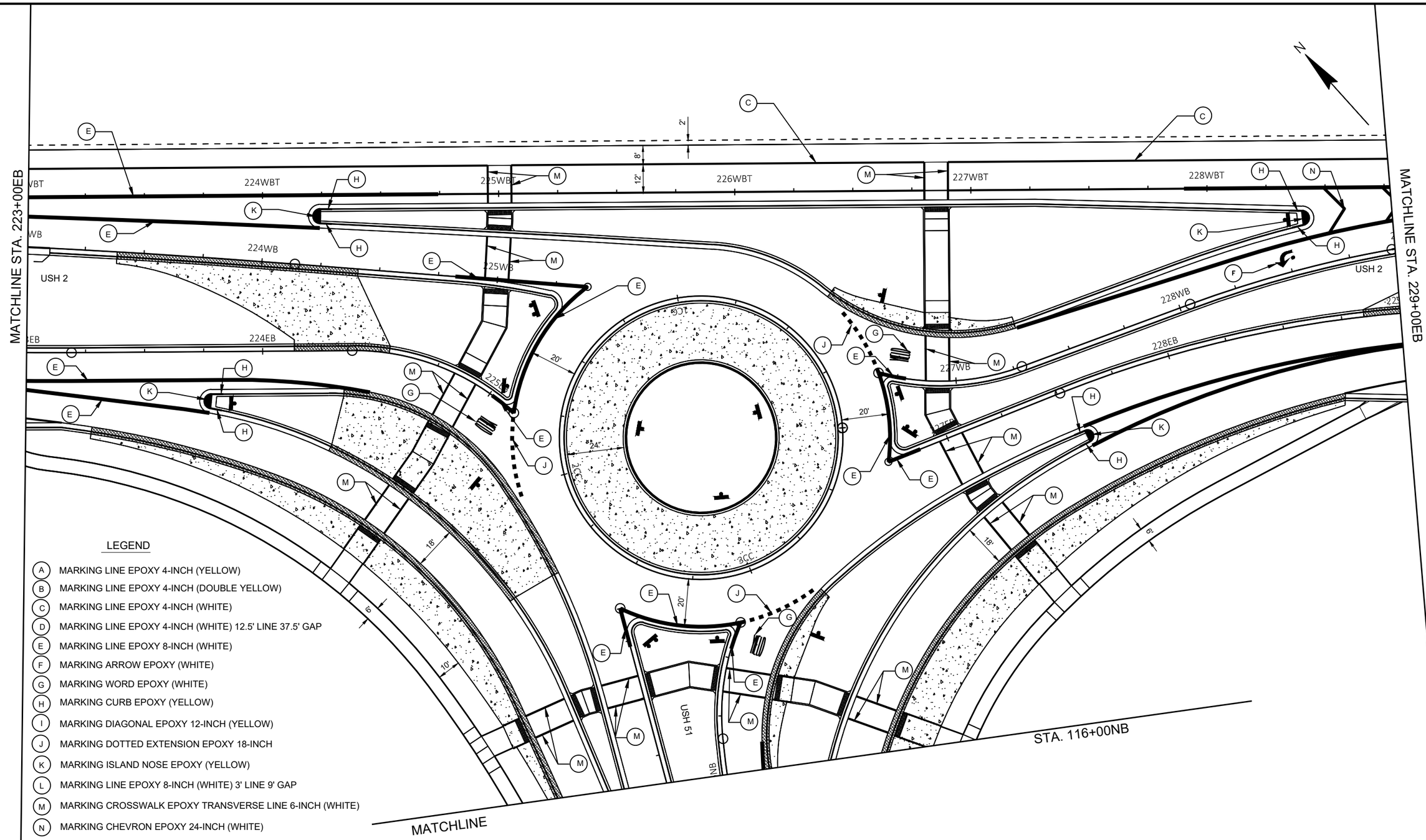
LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 91	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024502-PM.DWG
LAYOUT NAME - 024502-pm
PLOT DATE : 12/7/2020 8:28 AM
PLOT BY : DANA, ANDY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



LEGEND

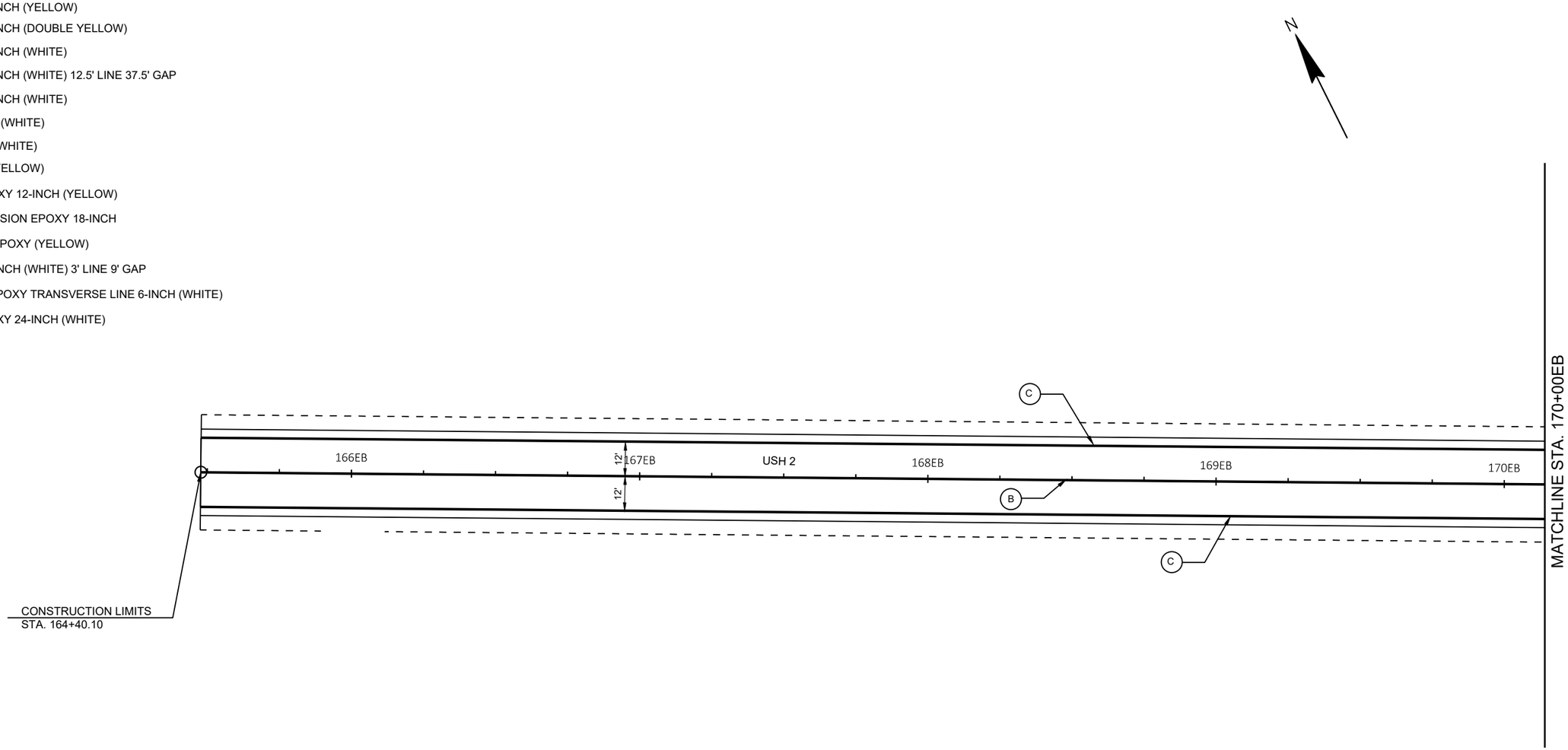
- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 92	E

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 93	E

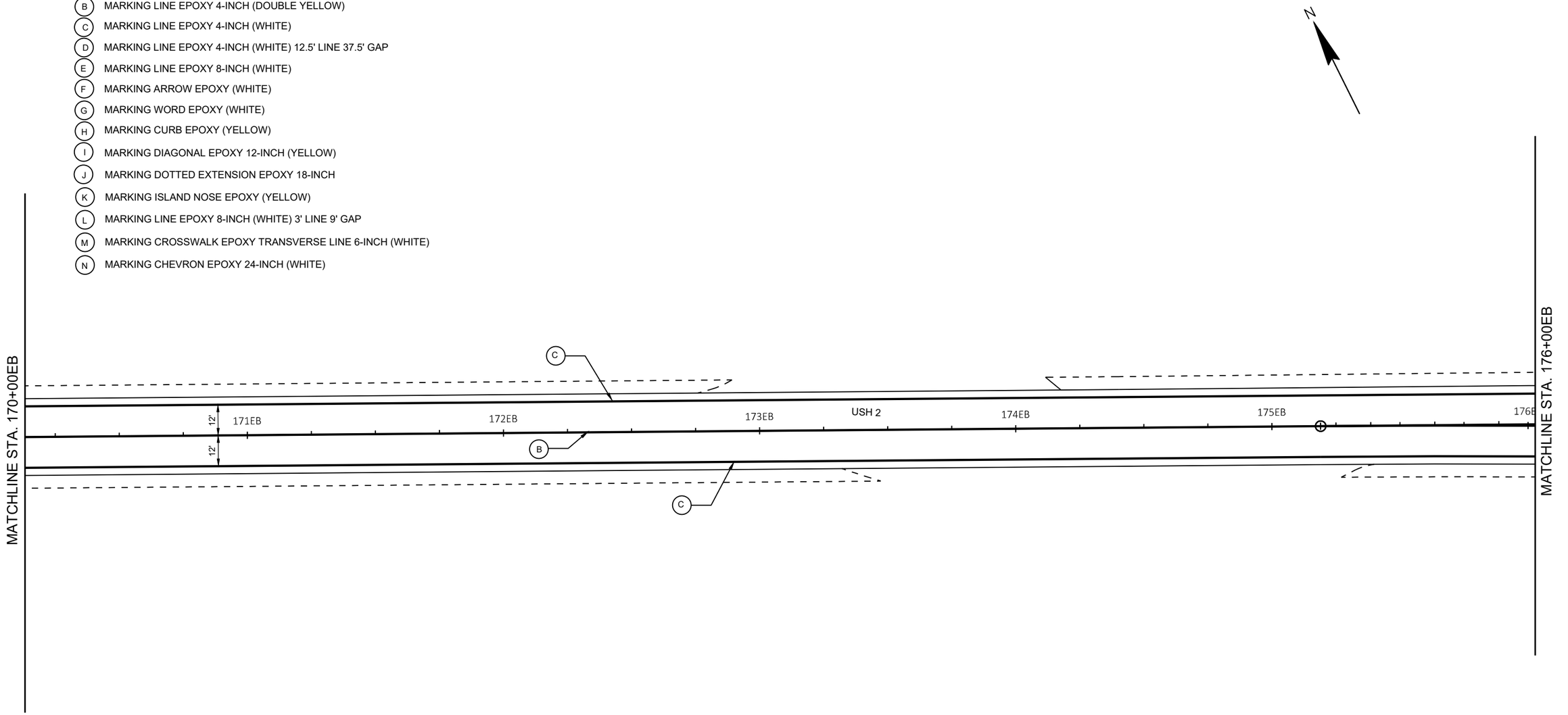
FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024504-PM.DWG
LAYOUT NAME - 024504 pm

PLOT DATE : 12/7/2020 8:38 AM PLOT BY : DANA, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)



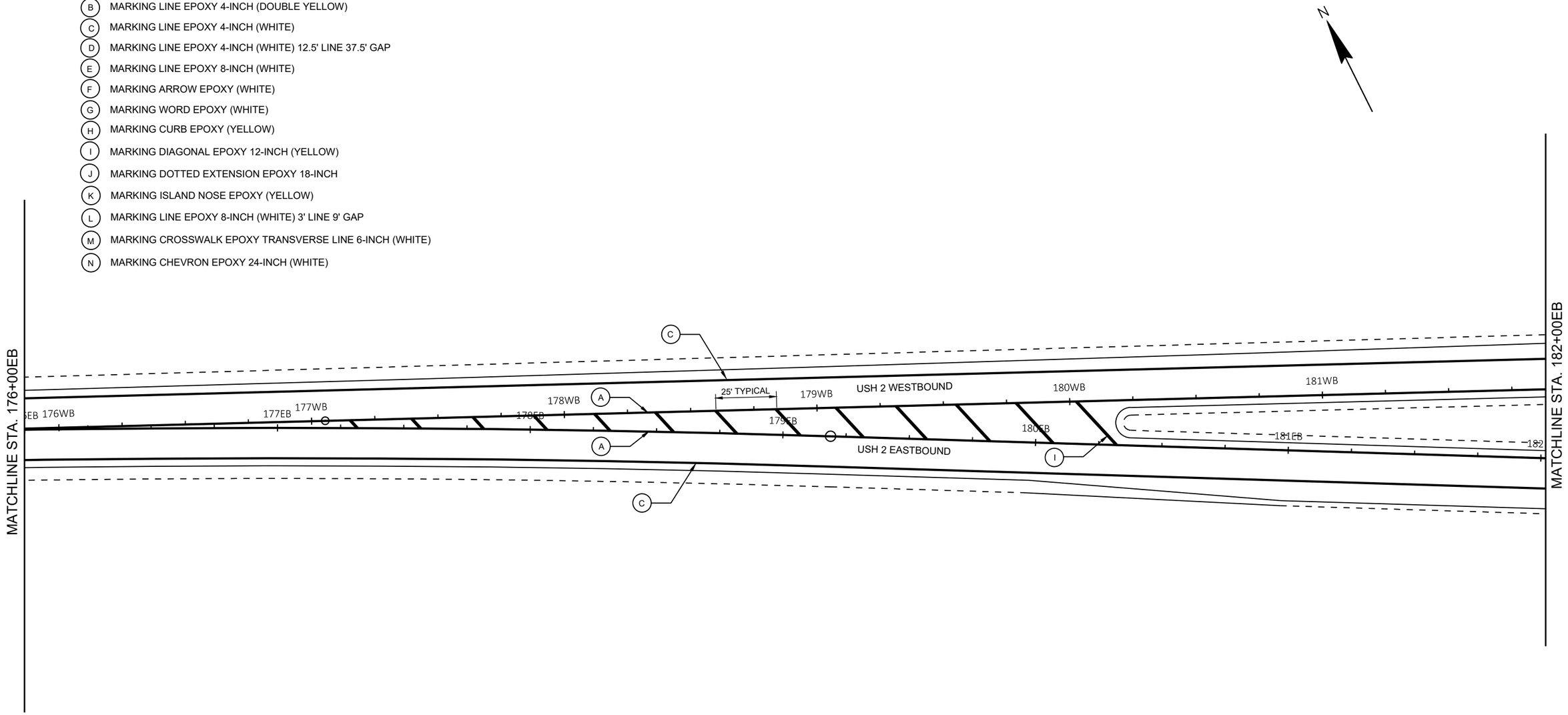
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 94	E

2

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 95	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024506-PM.DWG
LAYOUT NAME - 024506-pm

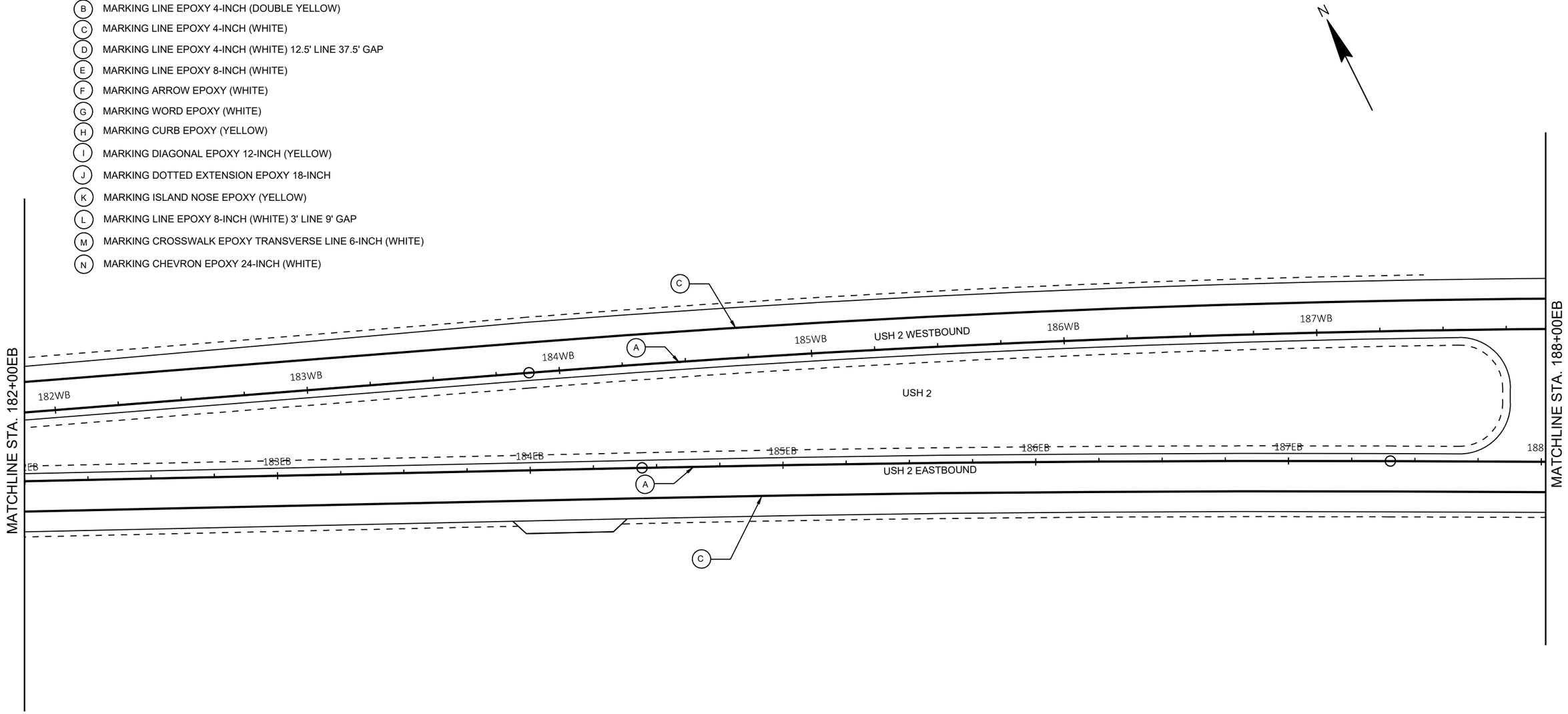
PLOT DATE : 12/7/2020 8:47 AM PLOT BY : DANA, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)



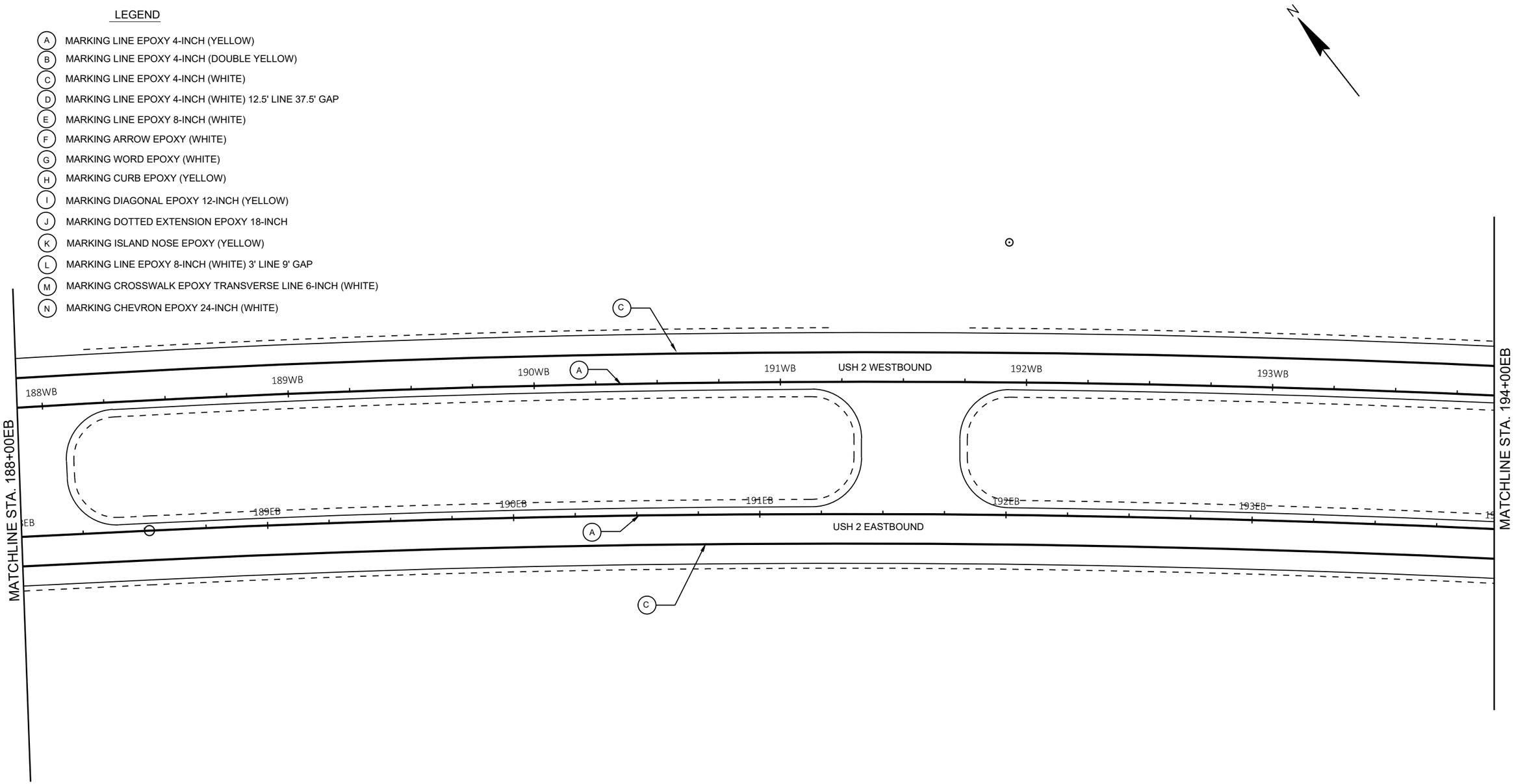
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 96	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024507-PM.DWG
LAYOUT NAME - 024507-pm

PLOT DATE : 12/7/2020 9:00 AM PLOT BY : DANA, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)



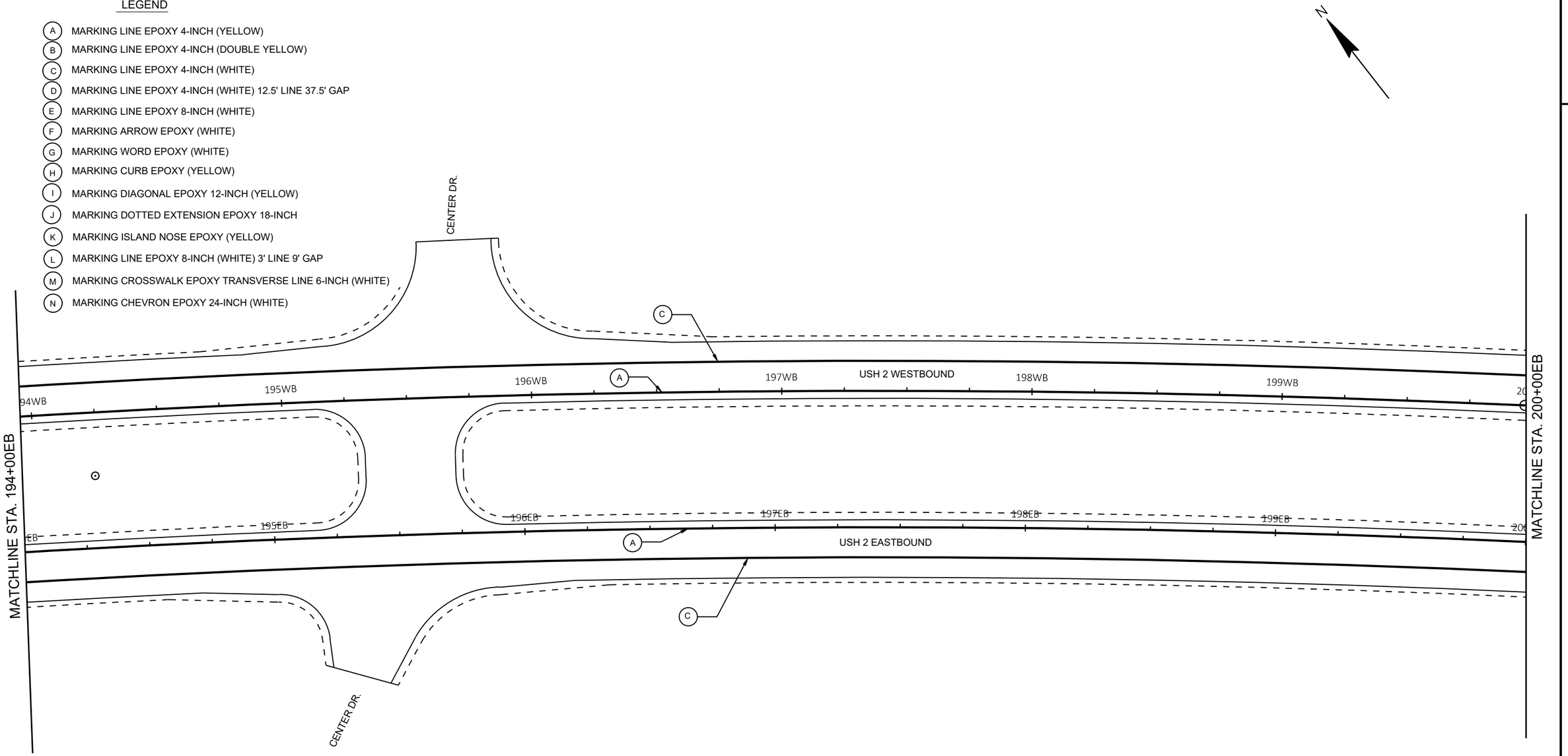
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 97	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024508-PM.DWG
LAYOUT NAME - 024508-pm
PLOT DATE : 12/7/2020 9:06 AM PLOT BY : DANA, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)



2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 98	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024509-PM.DWG
LAYOUT NAME - 024509-pm

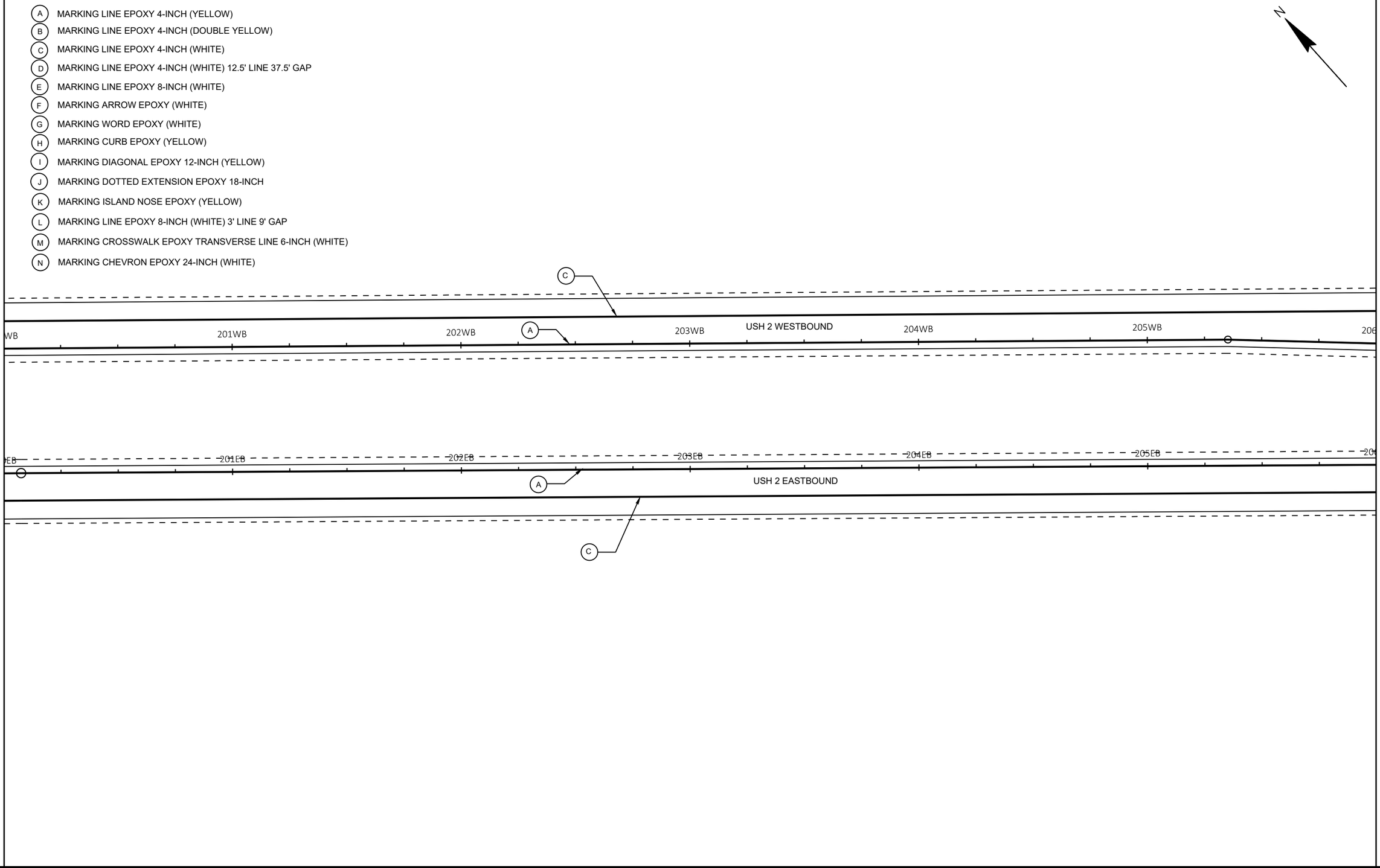
PLOT DATE : 12/7/2020 9:17 AM PLOT BY : DANA, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)



2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 99	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024510-PM.DWG
LAYOUT NAME - 024510-pm

PLOT DATE : 12/7/2020 9:22 AM PLOT BY : DANA, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)

N

MATCHLINE STA. 206+00EB

WB 207WB 208WB 209WB 210WB 211WB 212

USH 2 WESTBOUND

EB 207EB 208EB 209EB 210EB 211EB 21

USH 2 EASTBOUND

MATCHLINE STA. 212+00EB

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 100	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024511-PM.DWG
LAYOUT NAME - 024511-pm

PLOT DATE : 12/7/2020 9:25 AM PLOT BY : DANA, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)

N

MATCHLINE STA. 212+00EB

MATCHLINE STA. 218+00EB

C

USH 2 WESTBOUND

WB 213WB 214WB D 215WB 216WB A 217WB 21

EB 213EB 214EB 215EB 216EB 217EB 21

A

USH 2 EASTBOUND

C

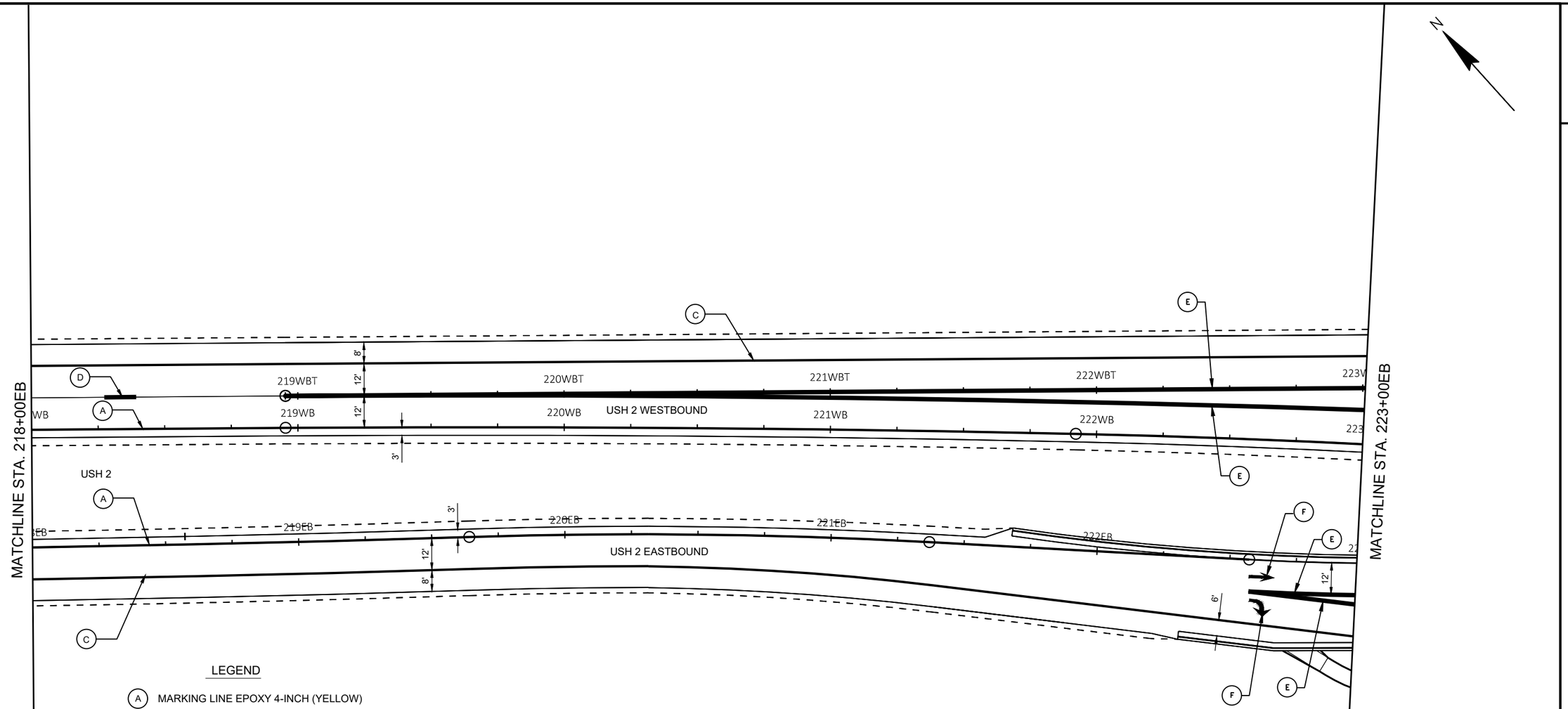
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 101	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024512-PM.DWG
LAYOUT NAME - 024512-pm

PLOT DATE : 12/7/2020 9:28 AM PLOT BY : DANA, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

2



LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 102	E

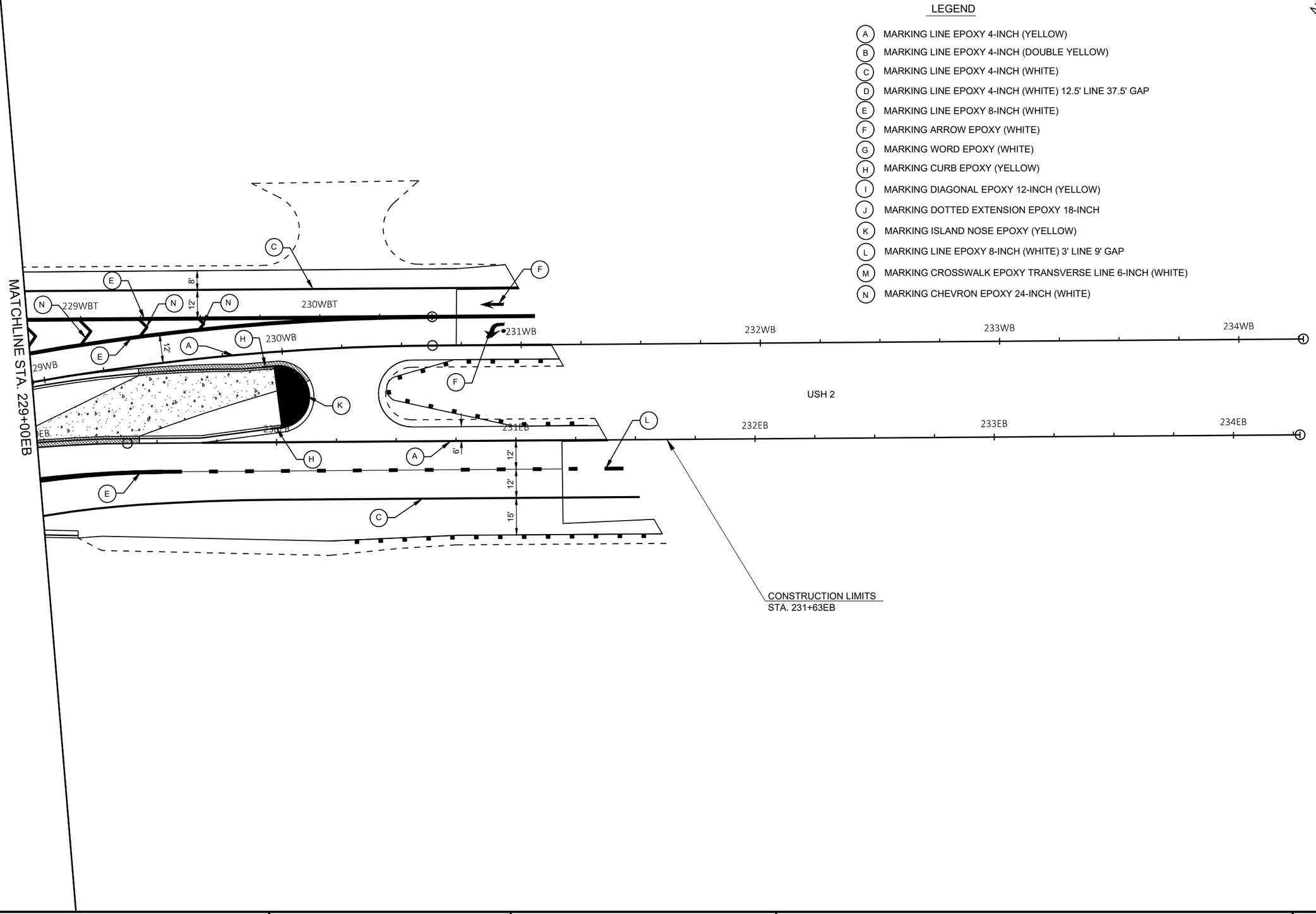
FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024513-PM.DWG
LAYOUT NAME - 024513-pm
PLOT DATE : 12/7/2020 9:31 AM
PLOT BY : DANA, ANDY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

- (A) MARKING LINE EPOXY 4-INCH (YELLOW)
- (B) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
- (C) MARKING LINE EPOXY 4-INCH (WHITE)
- (D) MARKING LINE EPOXY 4-INCH (WHITE) 12.5' LINE 37.5' GAP
- (E) MARKING LINE EPOXY 8-INCH (WHITE)
- (F) MARKING ARROW EPOXY (WHITE)
- (G) MARKING WORD EPOXY (WHITE)
- (H) MARKING CURB EPOXY (YELLOW)
- (I) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (J) MARKING DOTTED EXTENSION EPOXY 18-INCH
- (K) MARKING ISLAND NOSE EPOXY (YELLOW)
- (L) MARKING LINE EPOXY 8-INCH (WHITE) 3' LINE 9' GAP
- (M) MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- (N) MARKING CHEVRON EPOXY 24-INCH (WHITE)



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PAVEMENT MARKING	SHEET 103	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024514-PM.DWG
LAYOUT NAME - 024514-pm

PLOT DATE : 12/7/2020 10:16 AM PLOT BY : DANA, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

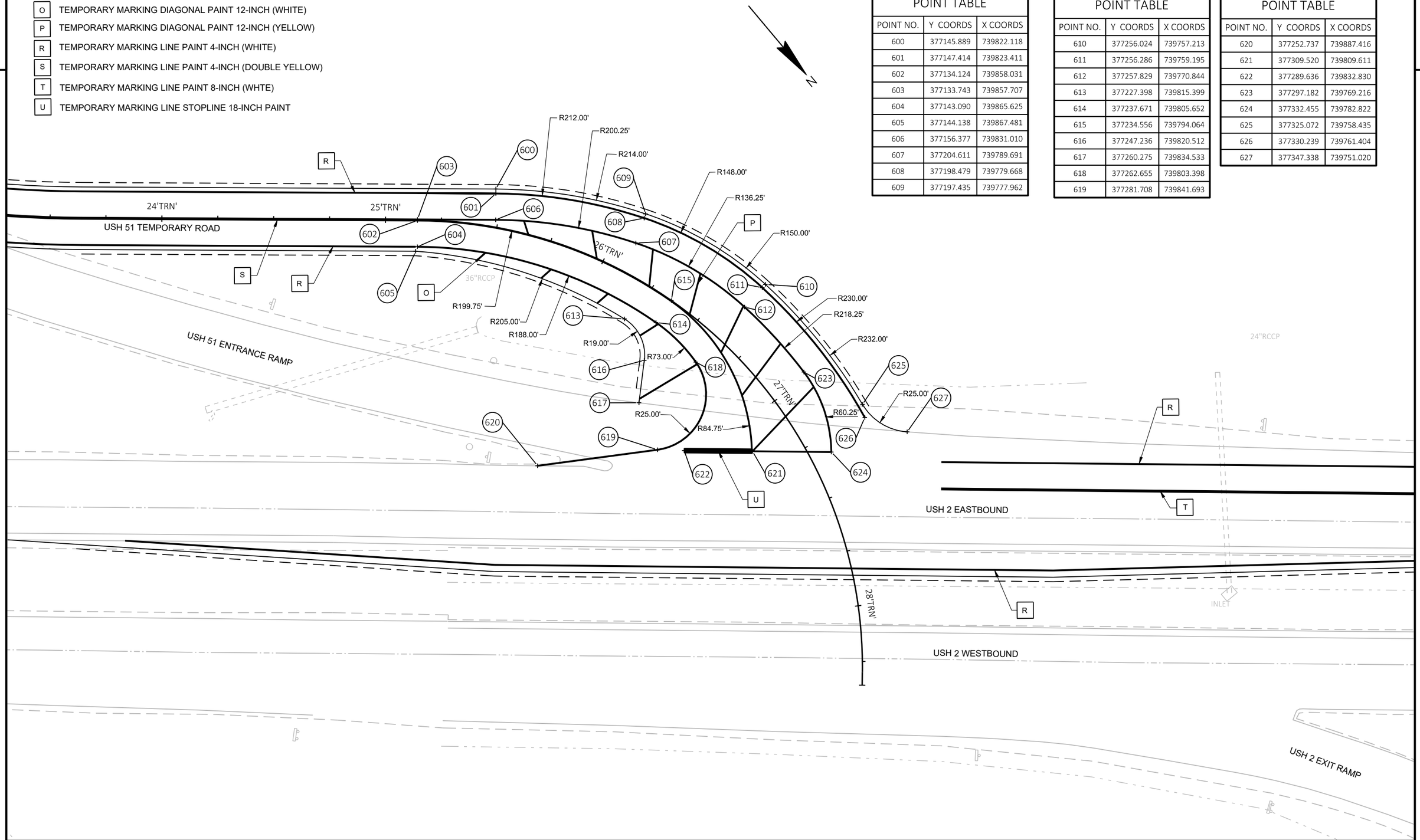
LEGEND

- O TEMPORARY MARKING DIAGONAL PAINT 12-INCH (WHITE)
- P TEMPORARY MARKING DIAGONAL PAINT 12-INCH (YELLOW)
- R TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- S TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- T TEMPORARY MARKING LINE PAINT 8-INCH (WHTE)
- U TEMPORARY MARKING LINE STOPLINE 18-INCH PAINT

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
600	377145.889	739822.118
601	377147.414	739823.411
602	377134.124	739858.031
603	377133.743	739857.707
604	377143.090	739865.625
605	377144.138	739867.481
606	377156.377	739831.010
607	377204.611	739789.691
608	377198.479	739779.668
609	377197.435	739777.962

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
610	377256.024	739757.213
611	377256.286	739759.195
612	377257.829	739770.844
613	377227.398	739815.399
614	377237.671	739805.652
615	377234.556	739794.064
616	377247.236	739820.512
617	377260.275	739834.533
618	377262.655	739803.398
619	377281.708	739841.693

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
620	377252.737	739887.416
621	377309.520	739809.611
622	377289.636	739832.830
623	377297.182	739769.216
624	377332.455	739782.822
625	377325.072	739758.435
626	377330.239	739761.404
627	377347.338	739751.020



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TEMPORARY PAVEMENT MARKING AND PAVEMENT EDGE LAYOUT - STAGE 1	SHEET 104	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024515-PM.DWG
LAYOUT NAME - 024515-pm

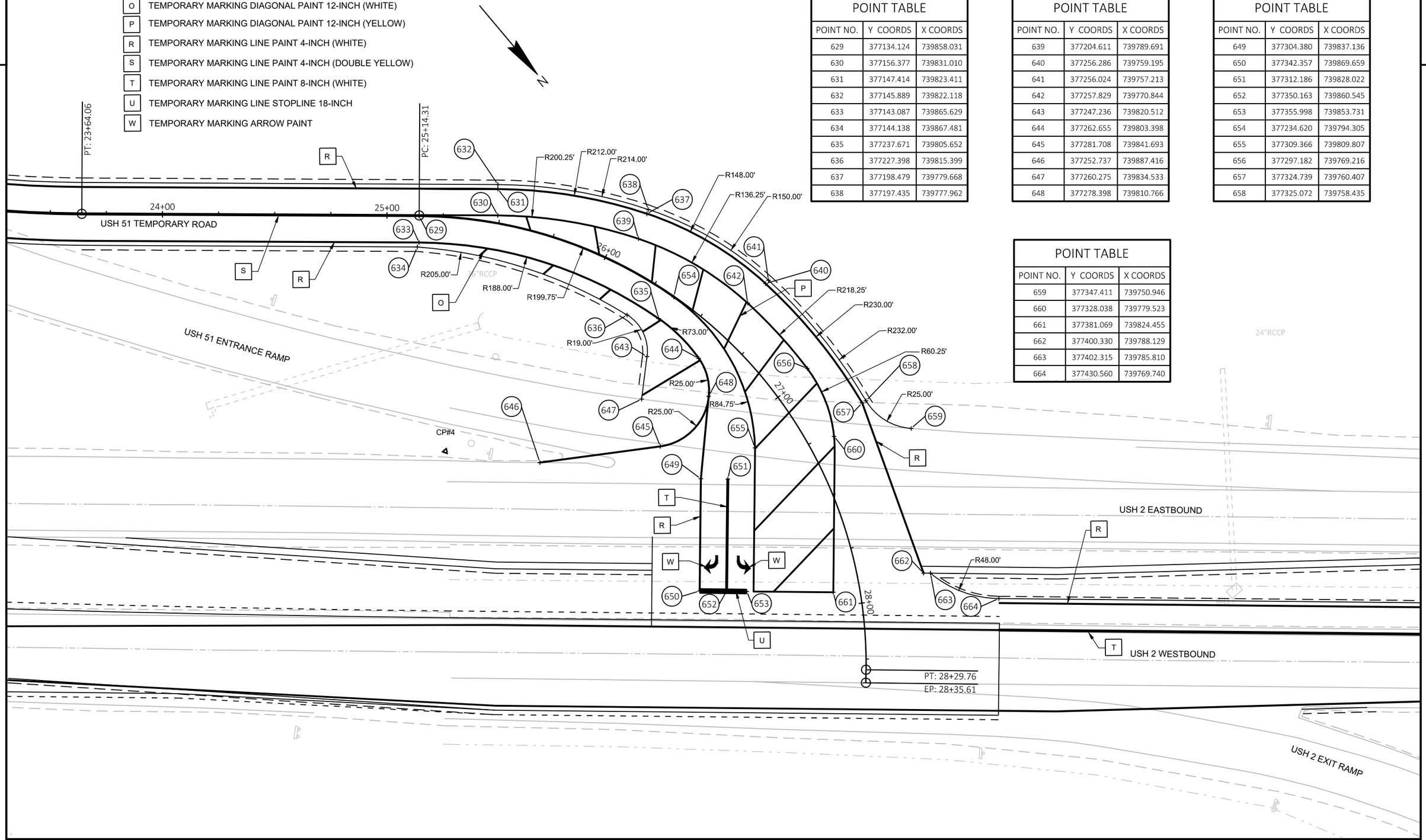
PLOT DATE : 9/2/2020 10:24 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- O TEMPORARY MARKING DIAGONAL PAINT 12-INCH (WHITE)
- P TEMPORARY MARKING DIAGONAL PAINT 12-INCH (YELLOW)
- R TEMPORARY MARKING LINE PAINT 4-INCH (WHITE)
- S TEMPORARY MARKING LINE PAINT 4-INCH (DOUBLE YELLOW)
- T TEMPORARY MARKING LINE PAINT 8-INCH (WHITE)
- U TEMPORARY MARKING LINE STOPLINE 18-INCH
- W TEMPORARY MARKING ARROW PAINT



POINT TABLE		
POINT NO.	Y COORDS	X COORDS
629	377134.124	739858.031
630	377156.377	739831.010
631	377147.414	739823.411
632	377145.889	739822.118
633	377143.087	739865.629
634	377144.138	739867.481
635	377237.671	739805.652
636	377227.398	739815.399
637	377198.479	739779.668
638	377197.435	739777.962

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
639	377204.611	739789.691
640	377256.286	739759.195
641	377256.024	739757.213
642	377257.829	739770.844
643	377247.236	739820.512
644	377262.655	739803.398
645	377281.708	739841.693
646	377252.737	739887.416
647	377260.275	739834.533
648	377278.398	739810.766

POINT TABLE		
POINT NO.	Y COORDS	X COORDS
649	377304.380	739837.136
650	377342.357	739869.659
651	377312.186	739828.022
652	377350.163	739860.545
653	377355.998	739853.731
654	377234.620	739794.305
655	377309.366	739809.807
656	377297.182	739769.216
657	377324.739	739760.407
658	377325.072	739758.435

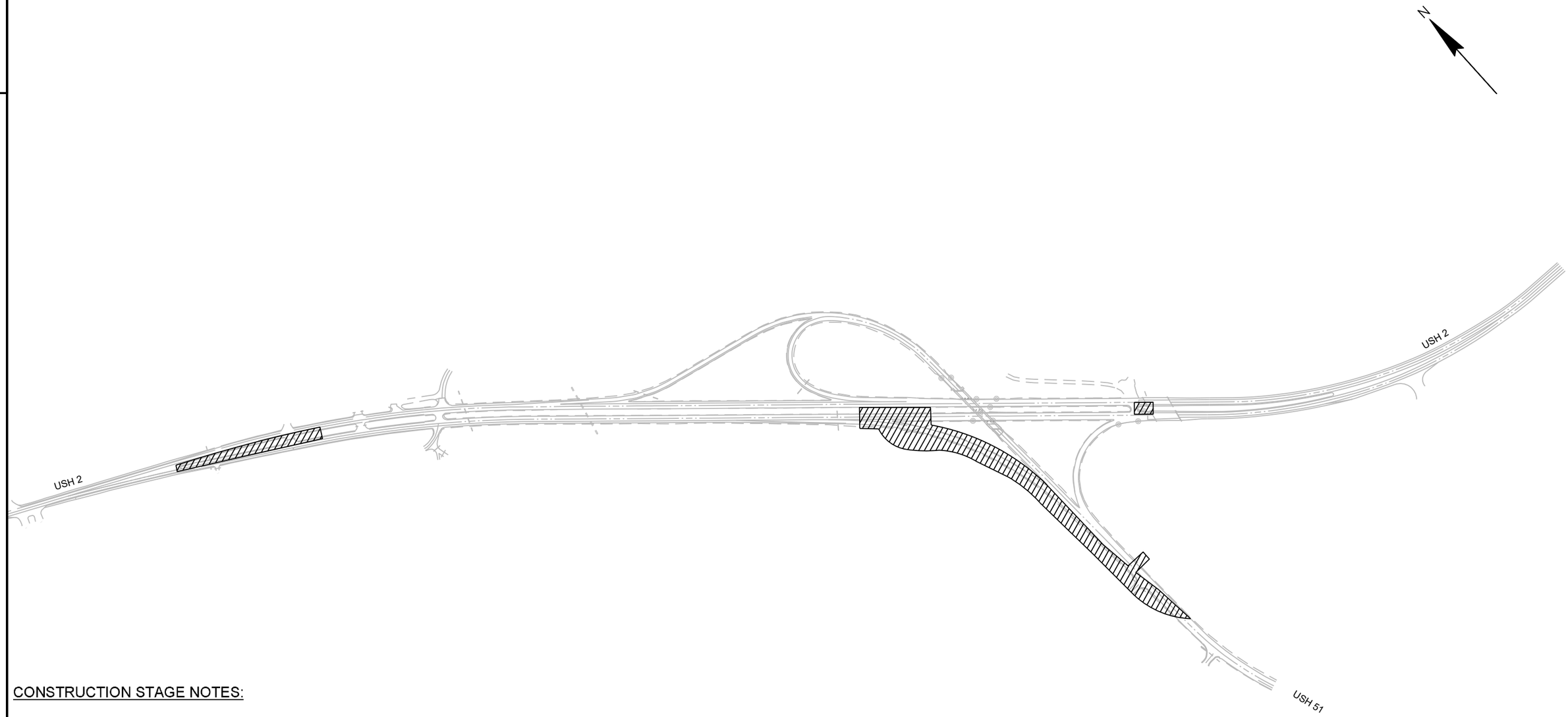
POINT TABLE		
POINT NO.	Y COORDS	X COORDS
659	377347.411	739750.946
660	377328.038	739779.523
661	377381.069	739824.455
662	377400.330	739788.129
663	377402.315	739785.810
664	377430.560	739769.740

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TEMPORARY PAVEMENT MARKINGAND PAVEMENT EDGE LAYOUT - STAGE 3	SHEET 105	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\024516-PM.DWG
LAYOUT NAME - 024516-pm
PLOT DATE : 9/2/2020 10:33 AM
PLOT BY : SOUFAL, KEVIN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2



CONSTRUCTION STAGE NOTES:

STAGE WORK
- CONSTRUCT TEMPORARY ROAD FOR USH 51
- CONSTRUCT TEMPORARY BYPASS FOR USH 2
- CONSTRUCT TEMPORARY WIDENING FOR WEST CROSSOVER
- CONSTRUCT NEW MAINTENANCE CROSSOVER AND THRIE BEAM BULLNOSE TERMINAL

TRAFFIC IMPACTS
- SHOULDER CLOSURES EB AND WB USH 2
- SHOULDER CLOSURES SB USH 51
- SHOULDER CLOSURES & FLAGGING EB USH 2 TO USH 51 SB RAMP

LEGEND
WORK AREA

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.

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.

ANY SIGN WHICH CONFLICTS WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED AS SHOWN IN SIGN REMOVALS OR COVERED AS SHOWN IN THE MISCELLANEOUS QUANTITIES.

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

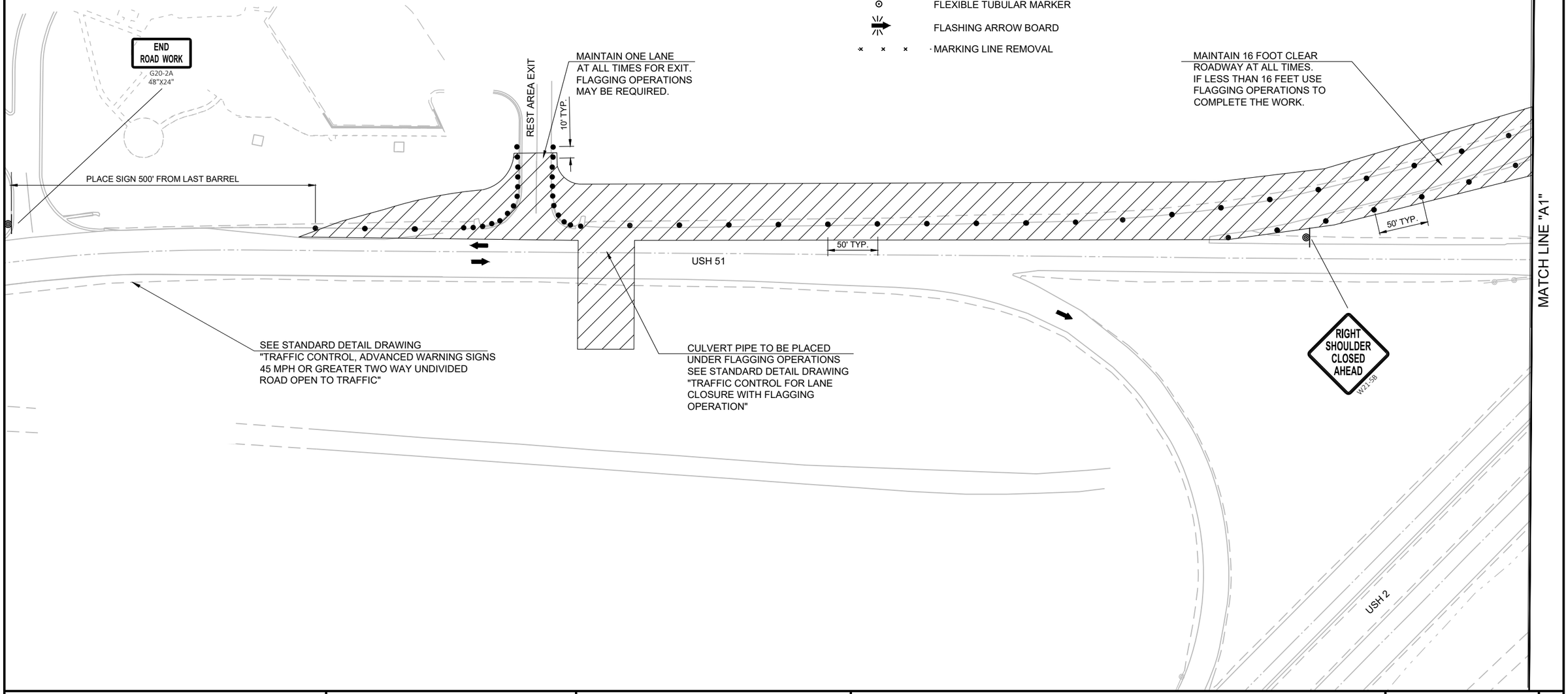
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

N



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 1	SHEET 107	E

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.

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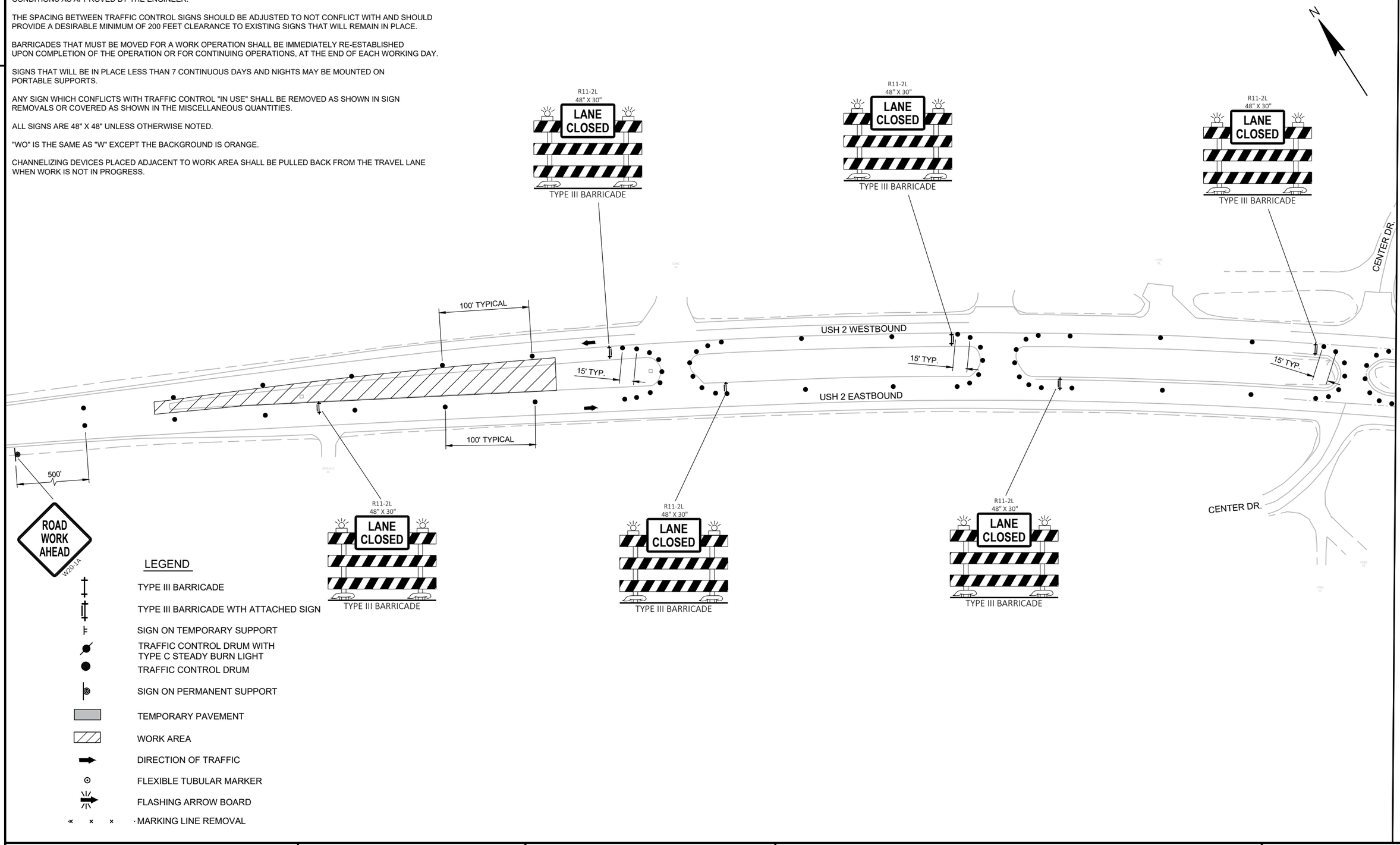
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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2

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.

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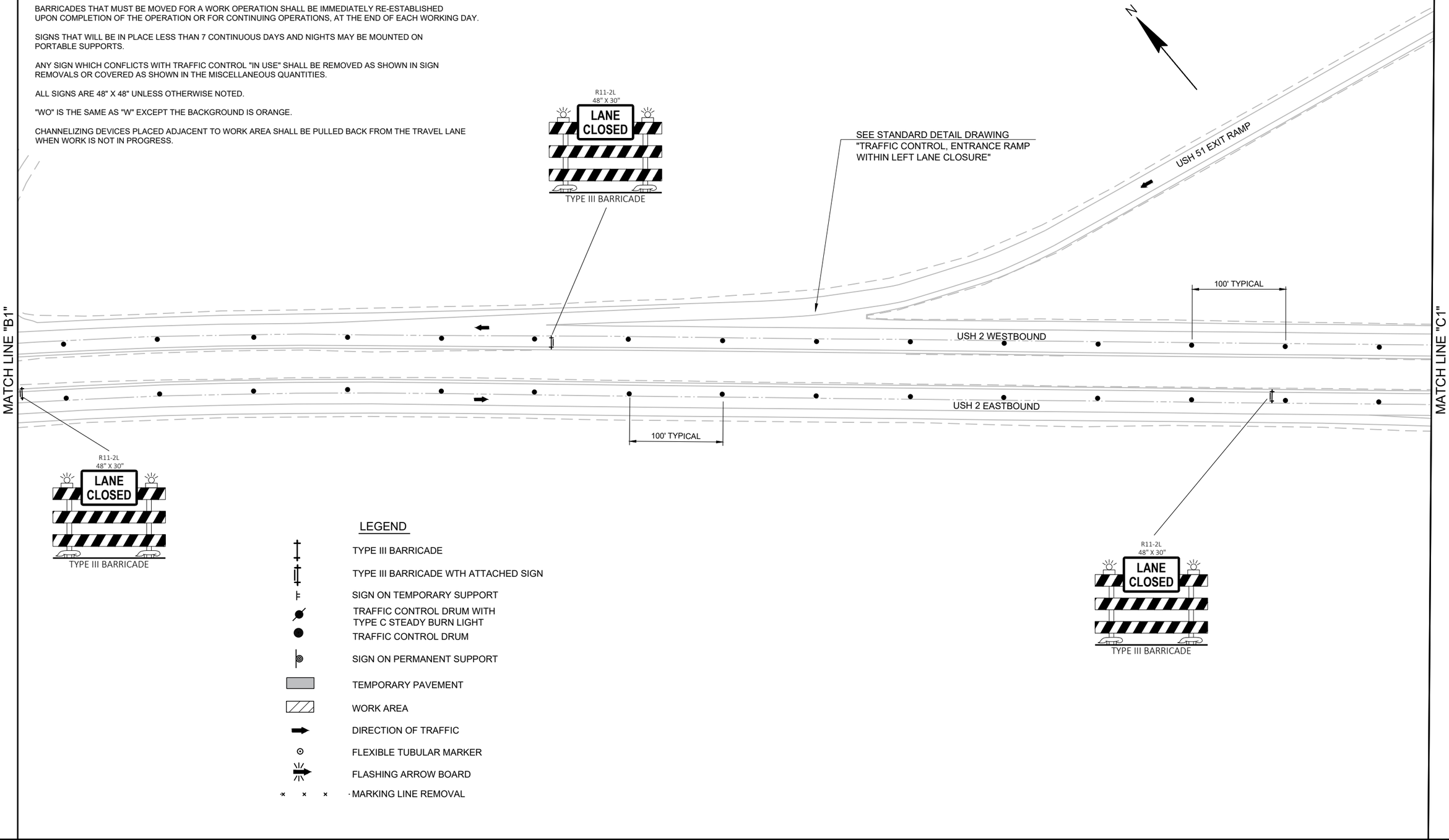
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 1	SHEET 109 E

2

2

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.

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MATCH LINE "C1"

MATCH LINE "D1"

USH 51 EXIT RAMP

USH 2 EXIT RAMP

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

N

SALVAGE GUARDRAIL END TREATMENTS

STEEL PLATE BEAMGUARD TEMPORARY 112.5' REQ'D.

STEEL PLATE BEAMGUARD ENERGY ABSORBING TERMINAL TEMPORARY REQ'D.

100' TYPICAL

USH 2 WESTBOUND

USH 2 EASTBOUND

100' TYPICAL

50' TYP.

50' TYP.

USH 51 ENTRANCE RAMP

50' TYP.

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

SIGNING AND ARROW BOARD
PER STANDARD DETAIL DRAWING "TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH"

MATCH LINE "A1"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 1	SHEET 110	E

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

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.

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TAPER AND SIGNING PER STANDARD DETAIL DRAWING "TRAFFIC CONTROL LANE CLOSURE"

MAINTAIN MEDIAN CROSSING OPENING AT ALL TIMES.

MATCH LINE "D1"

100' TYPICAL

USH 2 WESTBOUND

USH 2 EASTBOUND

25' TYP.

100' TYPICAL

100' TYPICAL

100' TYPICAL

USH 51 EXIT RAMP

STANDARD DETAIL DRAWING "TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE"

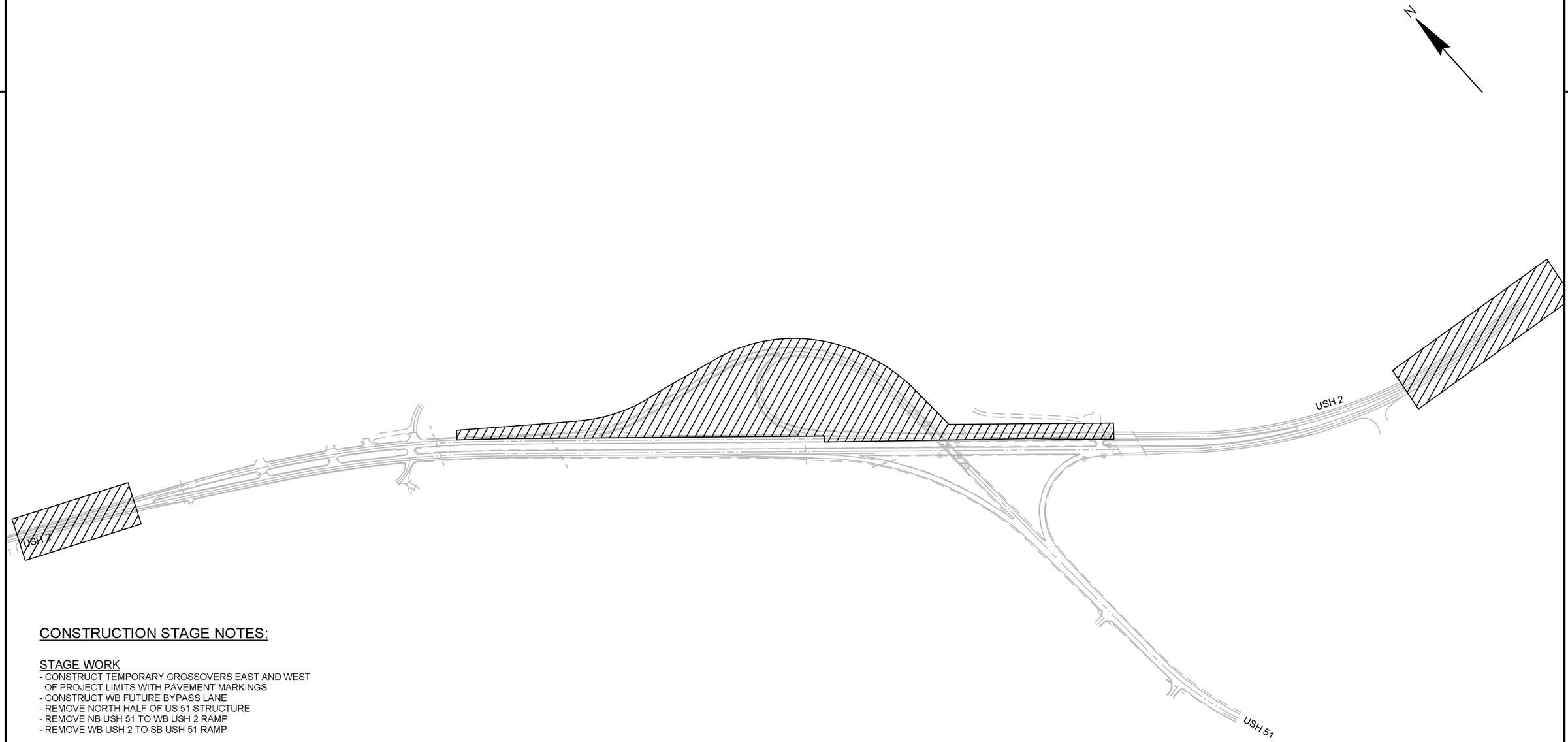


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 1	SHEET 111	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\025005-TC.DWG
LAYOUT NAME - 025005-tc

PLOT DATE : 10/29/2020 9:04 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



CONSTRUCTION STAGE NOTES:

STAGE WORK
- CONSTRUCT TEMPORARY CROSSOVERS EAST AND WEST OF PROJECT LIMITS WITH PAVEMENT MARKINGS
- CONSTRUCT WB FUTURE BYPASS LANE
- REMOVE NORTH HALF OF US 51 STRUCTURE
- REMOVE NB USH 51 TO WB USH 2 RAMP
- REMOVE WB USH 2 TO SB USH 51 RAMP

TRAFFIC IMPACTS
- BIDIRECTIONAL TRAFFIC ON EB USH 2 LANES
- TEMPORARY CROSSOVERS EAST AND WEST OF PROJECT LIMITS
- USH 51 ACCESS VIA TEMPORARY ROADWAY
- CONSTRUCT WB USH 2 BYPASS LANE

LEGEND
WORK AREA

GENERAL NOTES

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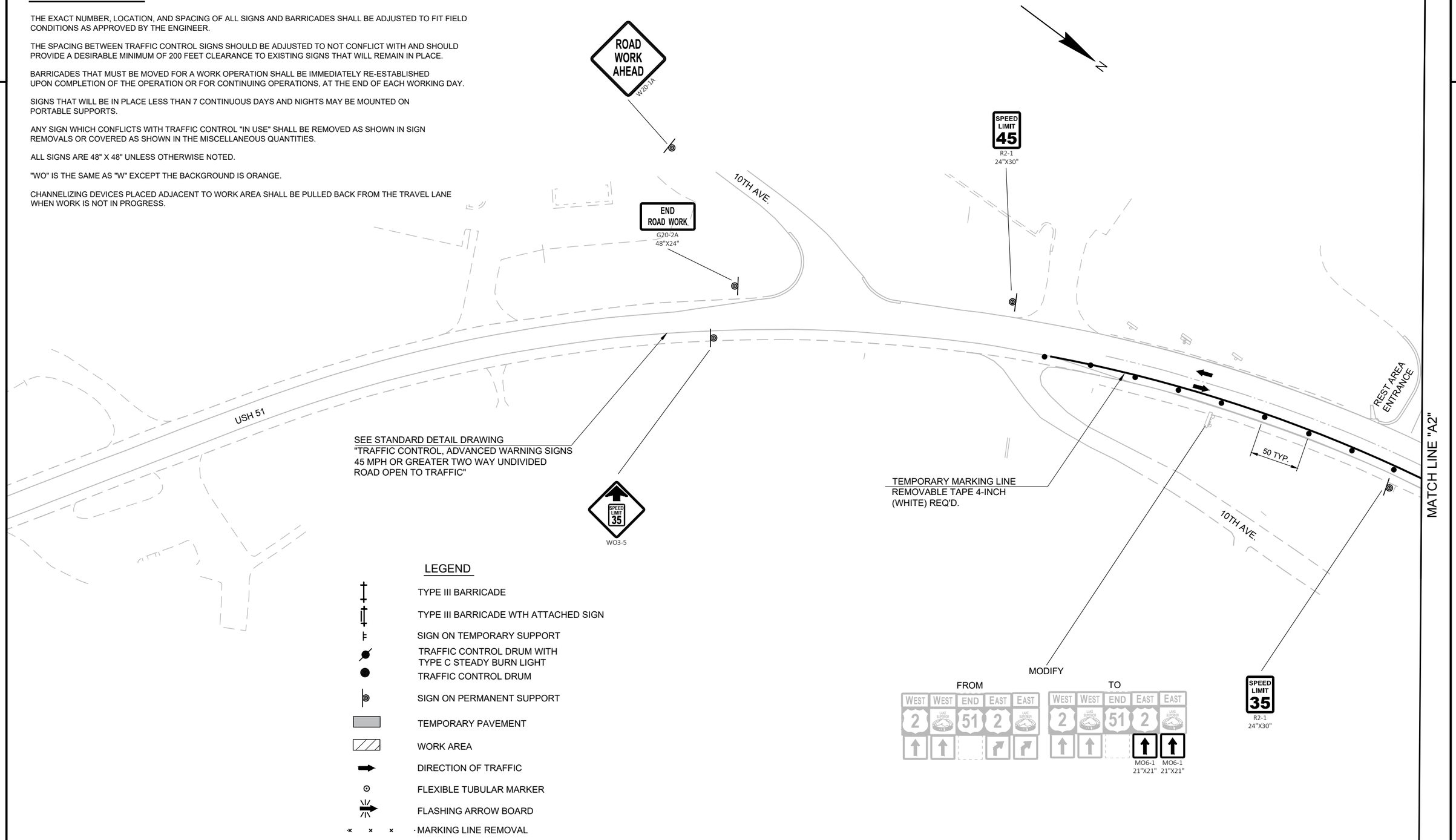
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ANY SIGN WHICH CONFLICTS WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED AS SHOWN IN SIGN REMOVALS OR COVERED AS SHOWN IN THE MISCELLANEOUS QUANTITIES.

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

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CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

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.

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CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

MATCH LINE "A2"

MATCH LINE "B2"

WO1-6 48" X 24"

TYPE III BARRICADE

TEMPORARY MARKING STOPLINE PAINT 18-INCH REQ'D.

STOP R1-1 30"X30"

STOP R1-1 30"X30"

WO1-4L

REST AREA EXIT

TEMPORARY MARKING LINE 4-INCH PAINT (DOUBLE YELLOW) REQ'D.

SOUTH 51 J4-1 24"X36"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW) REQ'D.

10' TYP.

11'

50' TYP.

USH 51

WO1-4L

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE) REQ'D.

WO1-6 48" X 24"

TYPE III BARRICADE

R3-2 24"X24"

END TAPE BEGIN PAINT

CRASH CUSHION TEMPORARY REQ'D.

TEMPORARY MARKING LINE 4-INCH PAINT (WHITE) REQ'D.

CRASH CUSHION TEMPORARY REQ'D.

JCT 2 J1-1 24"X39"

R11-2 48" X 30" ROAD CLOSED

TYPE III BARRICADE

TO SOUTH 2 51 J2-2 48"X57"

R11-2 48" X 30" ROAD CLOSED

TYPE III BARRICADE

CONCRETE BARRIER TEMPORARY PRECAST REQ'D. AND ANCHORING CONCRETE BARRIER TEMPORARY PRECAST REQ'D.

MODIFY

FROM	TO
Ashland Superior	Ashland Superior
Ironwood	Ironwood
D1-3	D1-3 A4-12 9 1/2"

GENERAL NOTES

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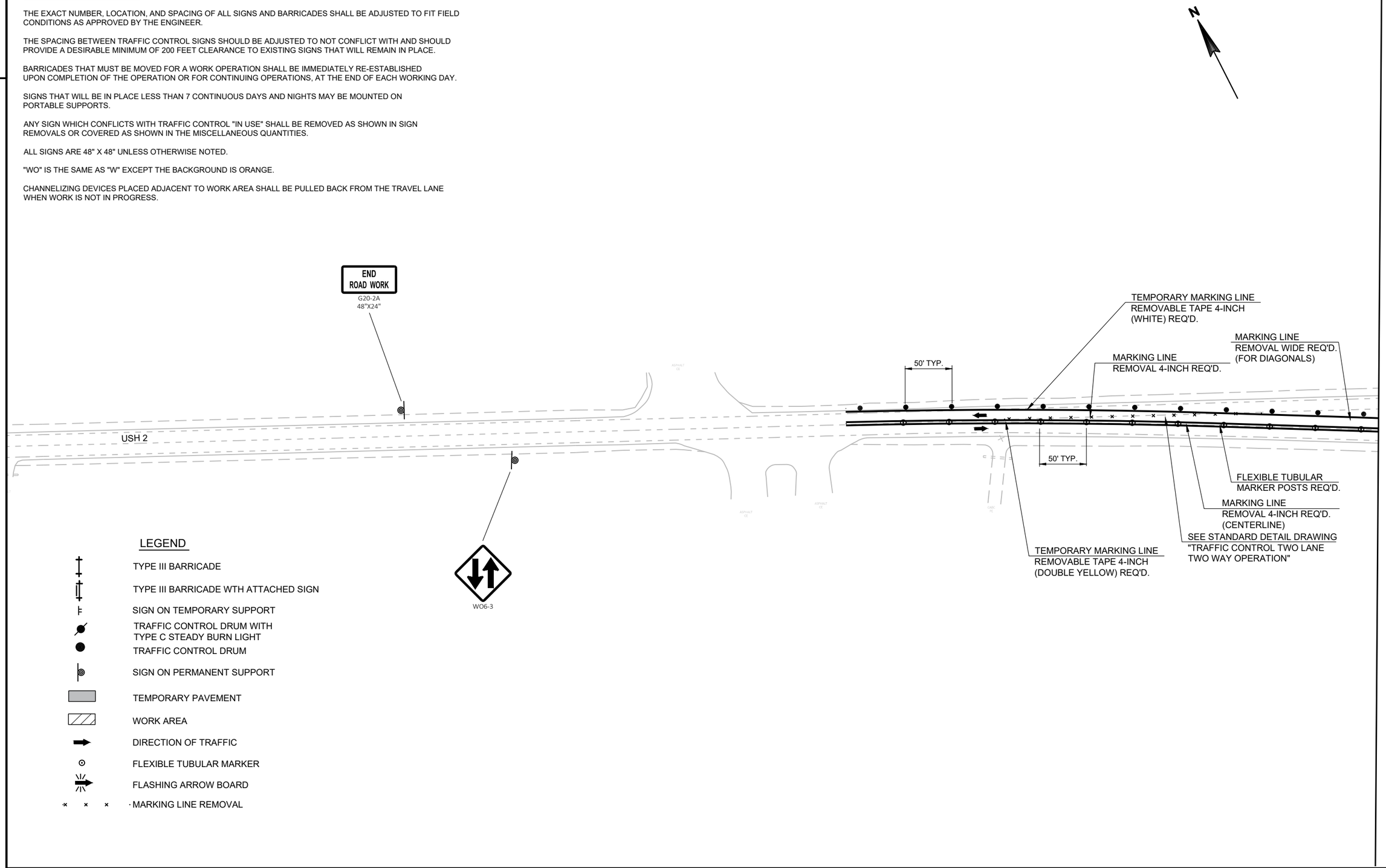
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ANY SIGN WHICH CONFLICTS WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED AS SHOWN IN SIGN REMOVALS OR COVERED AS SHOWN IN THE MISCELLANEOUS QUANTITIES.

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CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

GENERAL NOTES

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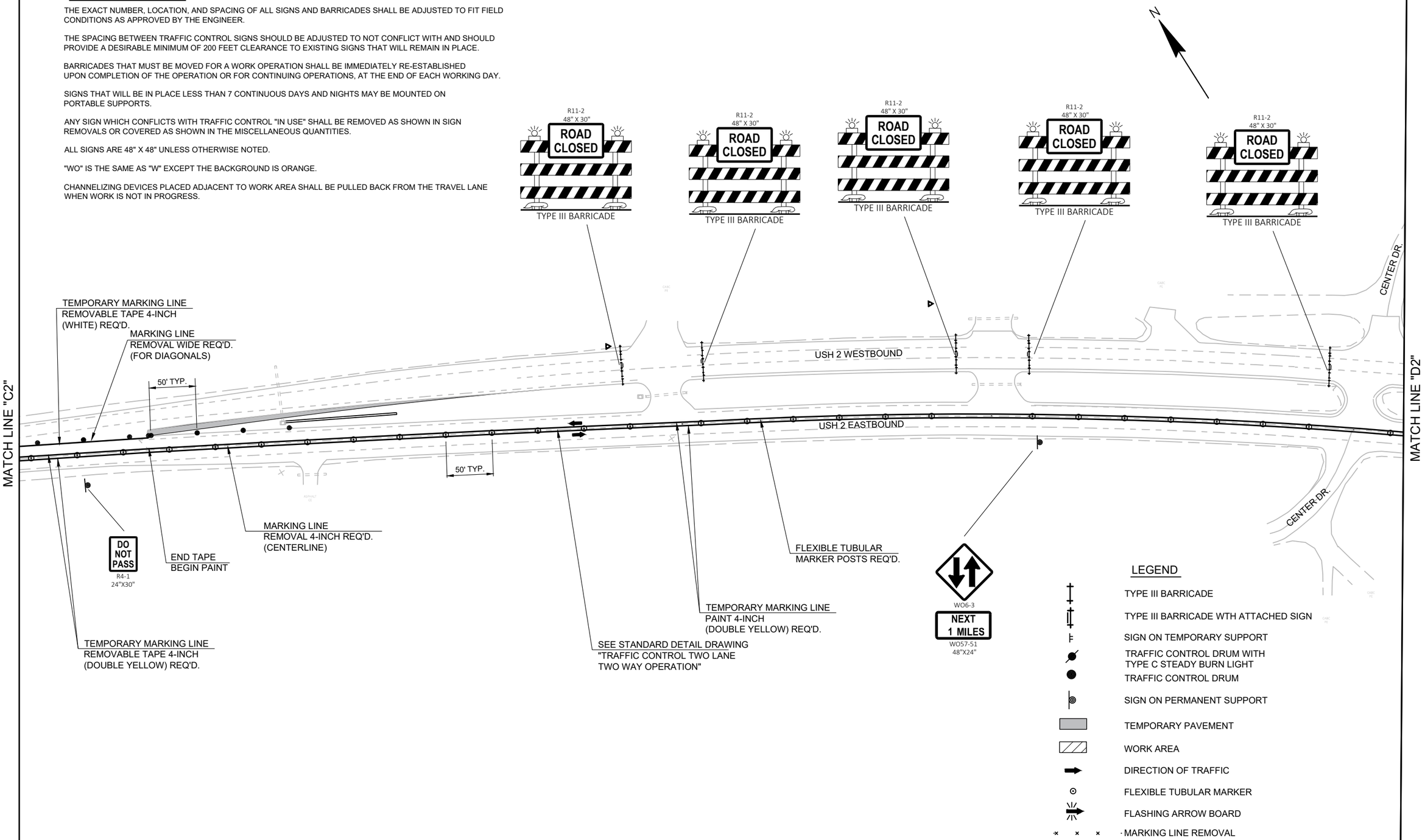
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2

GENERAL NOTES

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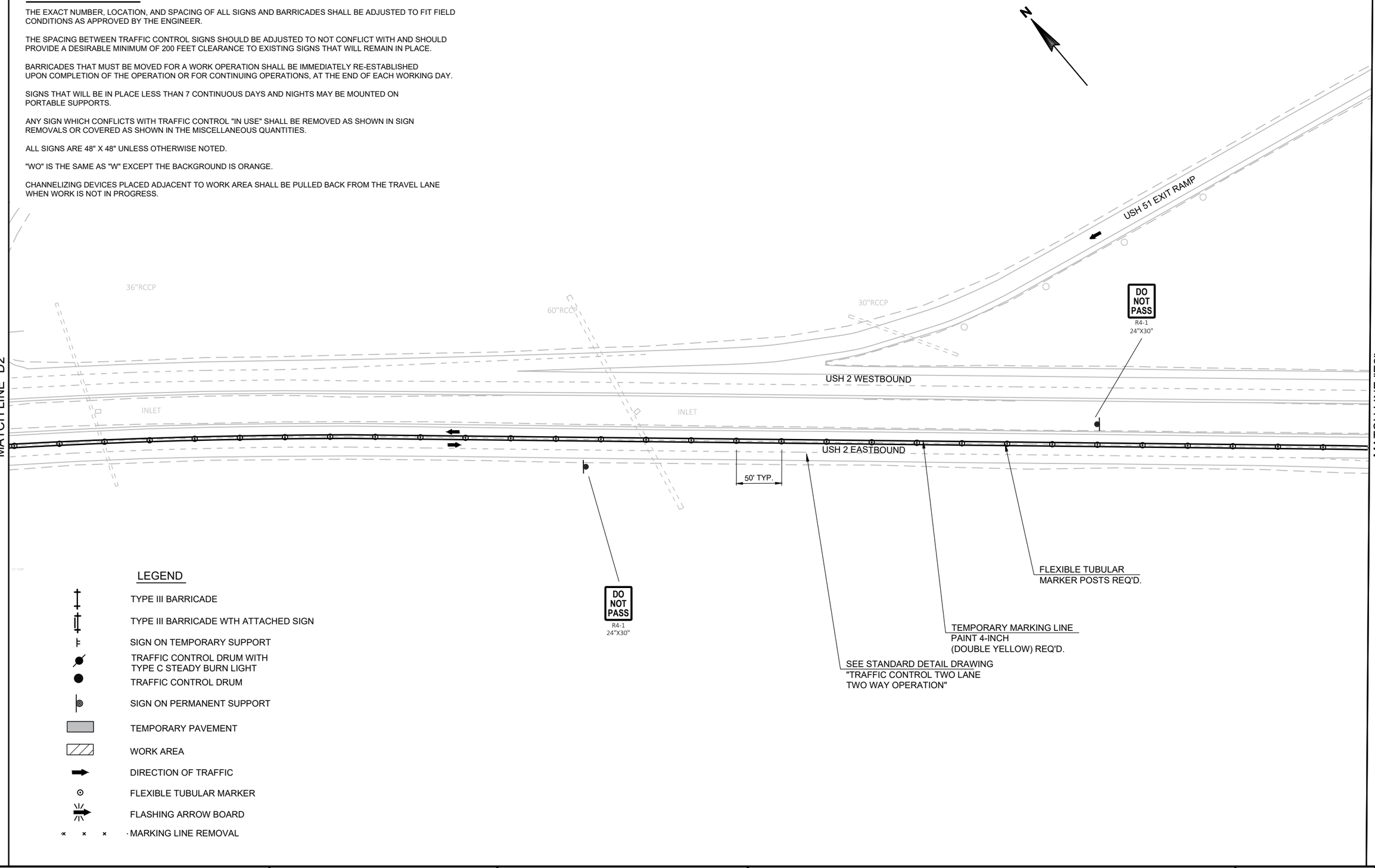
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- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 2	SHEET 117	E

2

2

MATCH LINE "E2"

MATCH LINE "F2"

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N

USH 2 ENTRANCE RAMP

USH 2 EXIT RAMP

WEST 2 | EAST 2
J2-2
48"X57"

TEMPORARY MARKING LINE
STOPLINE 18-INCH PAINT REQ'D.

TEMPORARY MARKING LINE
PAINT 4-INCH REQ'D.

STOP
R1-1
30"X30"

SOUTH TO WEST
51 77 2
J2-3
72"X57"

MARKING LINE
REMOVAL 4-INCH REQ'D.

REMOVE NORTH HALF
OF BRIDGE

USH 2 WESTBOUND

50' TYP.

USH 2 EASTBOUND

TEMPORARY MARKING
DIAGONAL PAINT 12-INCH
(WHITE) REQ'D.

USH 51

USH 51 ENTRANCE RAMP

25' TYP.

25' TYP.

DO NOT PASS
R4-1
24"X30"

SEE STANDARD DETAIL DRAWING
"TRAFFIC CONTROL TWO LANE
TWO WAY OPERATION"

TEMPORARY MARKING LINE
PAINT 4-INCH REQ'D.

BEGIN RIGHT TURN LANE
R3-20R
24"X36"

TEMPORARY MARKING LINE
PAINT 8-INCH REQ'D.

TEMPORARY MARKING LINE
PAINT 4-INCH REQ'D.

TEMPORARY MARKING LINE
PAINT 4-INCH
(DOUBLE YELLOW) REQ'D.

TEMPORARY MARKING
WORD PAINT REQ'D.

TEMPORARY MARKING
ARROW PAINT REQ'D.

FLEXIBLE TUBULAR
MARKER POSTS REQ'D.

SEE STANDARD DETAIL DRAWING
"TRAFFIC CONTROL TWO LANE
TWO WAY OPERATION"

TEMPORARY MARKING
DIAGONAL PAINT 12-INCH
(YELLOW) REQ'D.

WO1-6
48"X24"

WO1-6
48"X24"

WO3-1
48"X48"

SPEED LIMIT 35
R2-1
24"X30"

TEMPORARY MARKING LINE
PAINT 4-INCH REQ'D.

TEMPORARY MARKING LINE
PAINT 4-INCH
(DOUBLE YELLOW) REQ'D.

WO1-2R
48"X48"

25 MPH
WO13-1
36"X36"

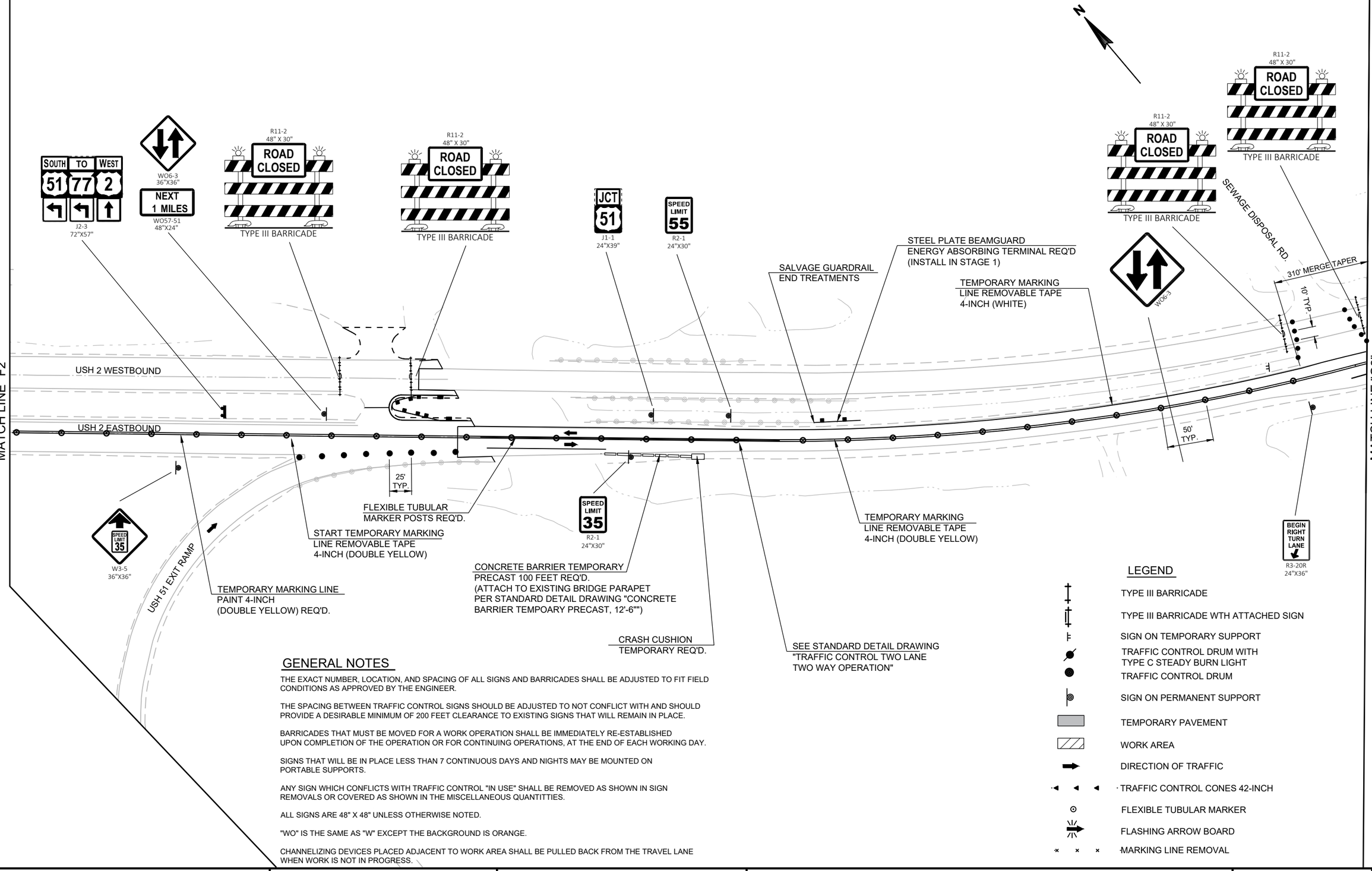
MATCH LINE "B2"

LEGEND

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- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 2	SHEET 118	E

2



GENERAL NOTES

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LEGEND

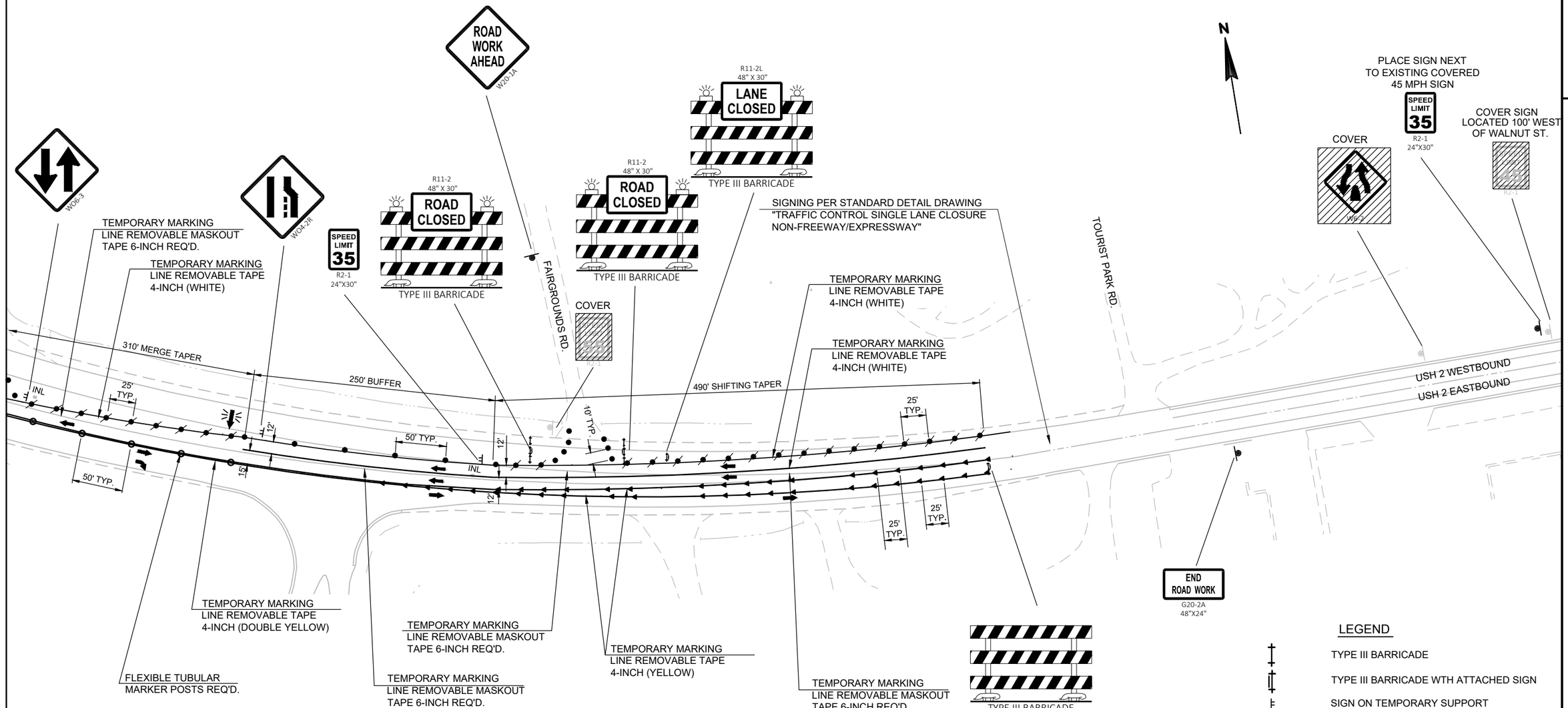
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- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL CONES 42-INCH
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 2	SHEET 119	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\025012-TC.DWG
LAYOUT NAME - 025012-tc
PLOT DATE : 12/18/2020 8:39 AM
PLOT BY : DANA, ANDY
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2

MATCH LINE "G2"



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL CONES 42-INCH
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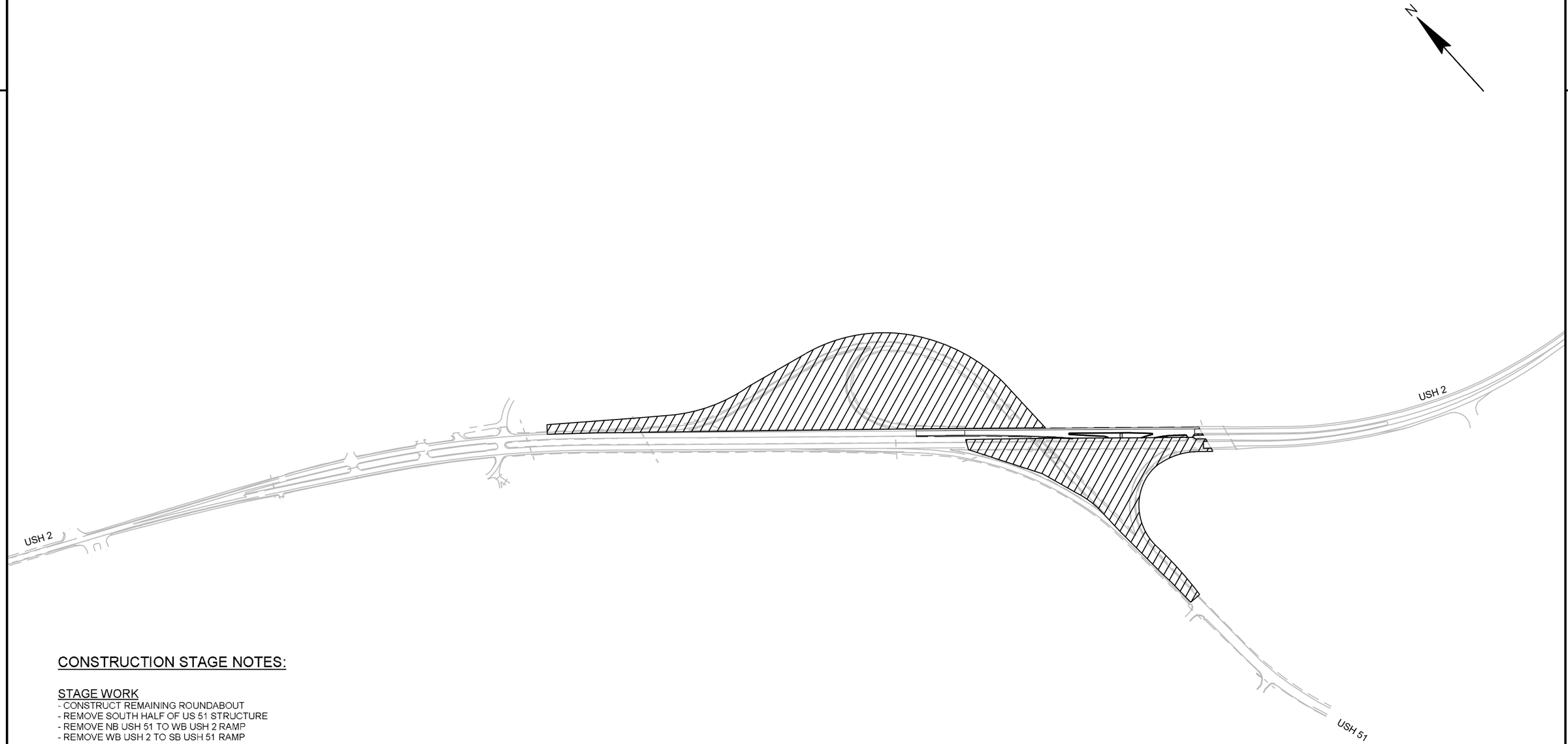
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 2	SHEET 120	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\025013-TC.DWG
LAYOUT NAME - 025013-tc
PLOT DATE : 12/7/2020 10:56 AM
PLOT BY : DANA, ANDY
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

2



CONSTRUCTION STAGE NOTES:

STAGE WORK
- CONSTRUCT REMAINING ROUNDABOUT
- REMOVE SOUTH HALF OF US 51 STRUCTURE
- REMOVE NB USH 51 TO WB USH 2 RAMP
- REMOVE WB USH 2 TO SB USH 51 RAMP
- REMOVE NB USH 51 TO EB USH 2 RAMP

TRAFFIC IMPACTS
- BIDIRECTIONAL TRAFFIC ON WB USH 2 LANES AND FUTURE ROUNDABOUT BYPASS LANE
- TEMPORARY CROSSOVERS EAST AND WEST OF PROJECT LIMITS
- US 51 ACCESS VIA TEMPORARY ROADWAY

LEGEND
WORK AREA

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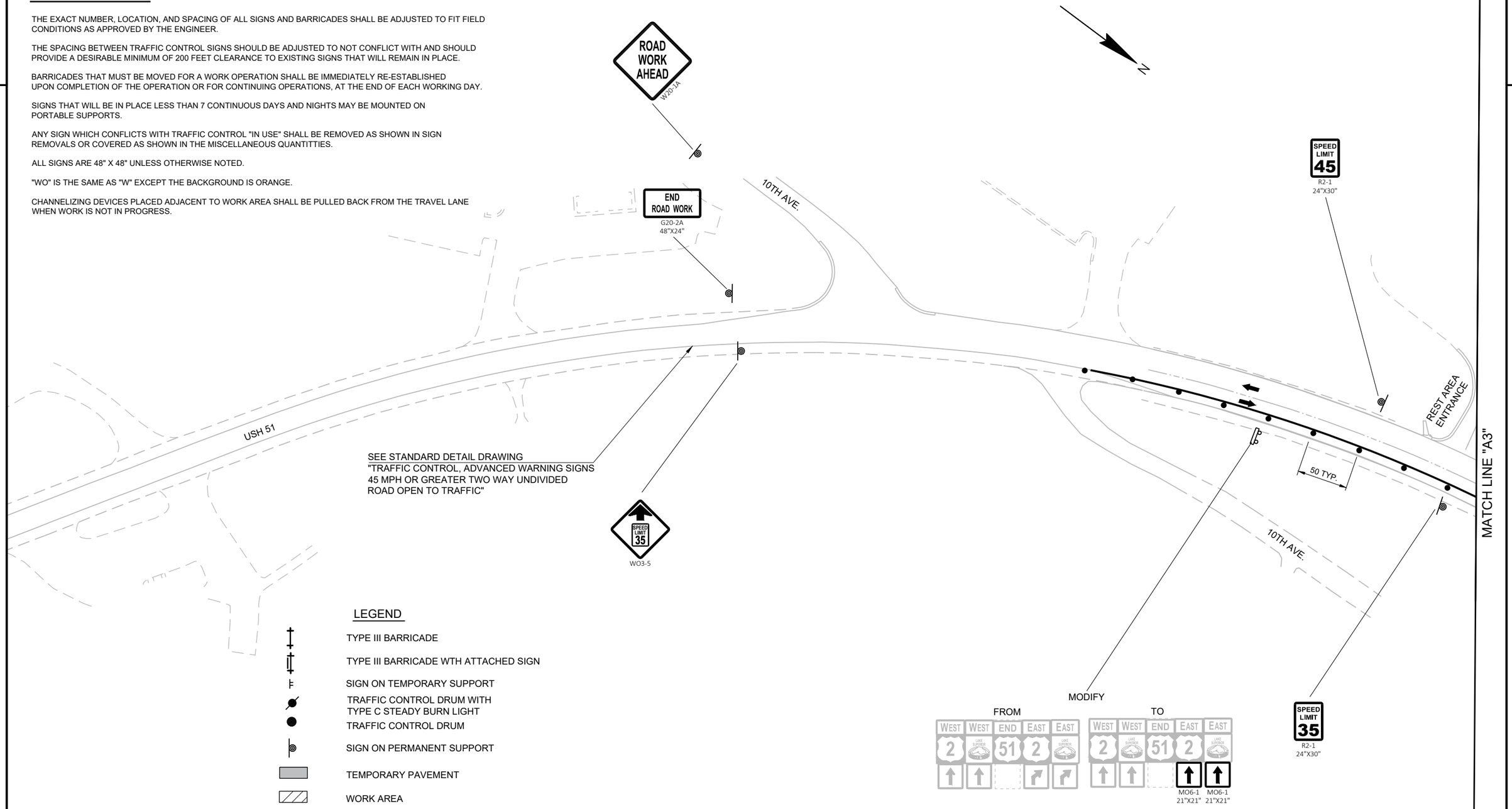
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- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 3	SHEET 122	E

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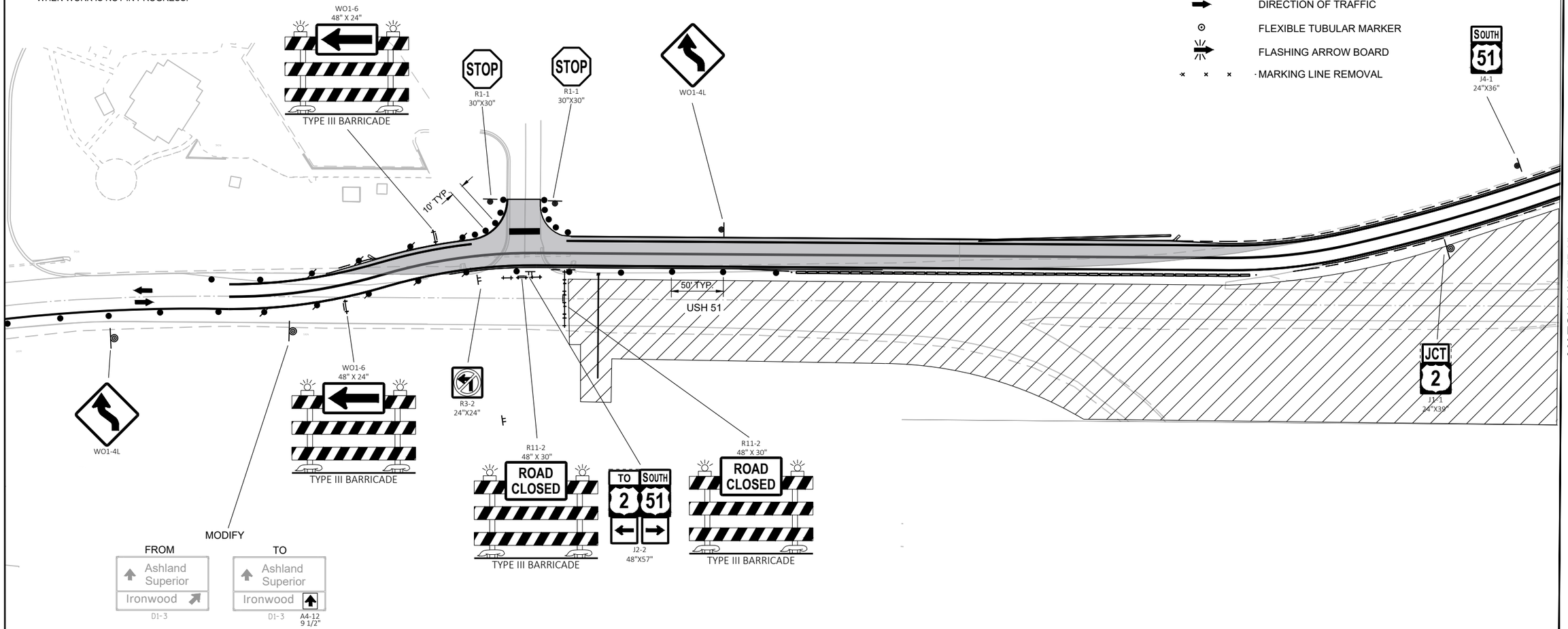
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N

LEGEND

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- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
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- MARKING LINE REMOVAL



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 3	SHEET 123	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\025015-TC.DWG
LAYOUT NAME - 025015-tc
PLOT DATE : 10/29/2020 9:07 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

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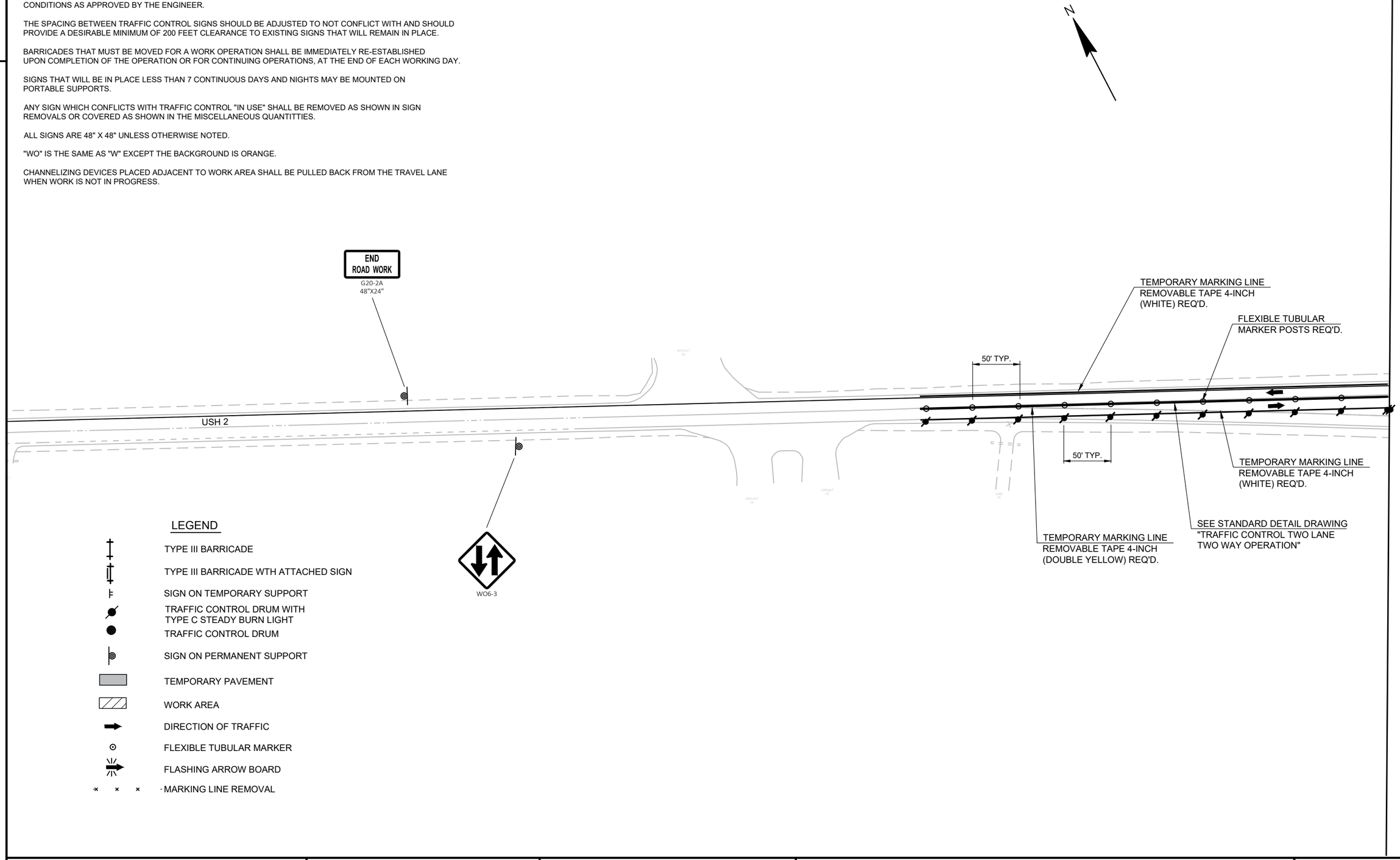
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- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 3	SHEET 124	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\025016-TC.DWG
LAYOUT NAME - 025016-tc
PLOT DATE : 10/29/2020 9:07 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

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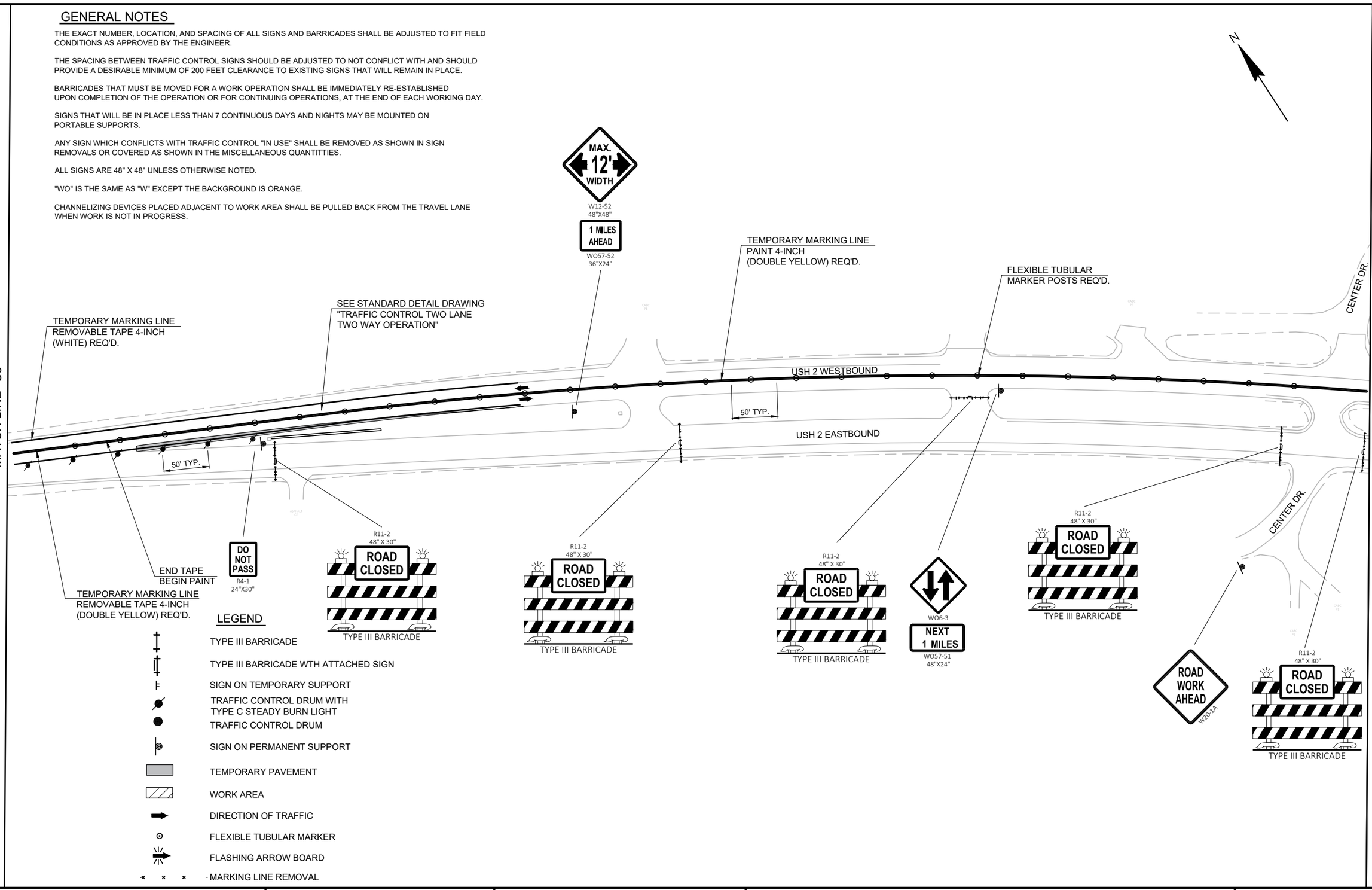
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- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 3	SHEET 125	E

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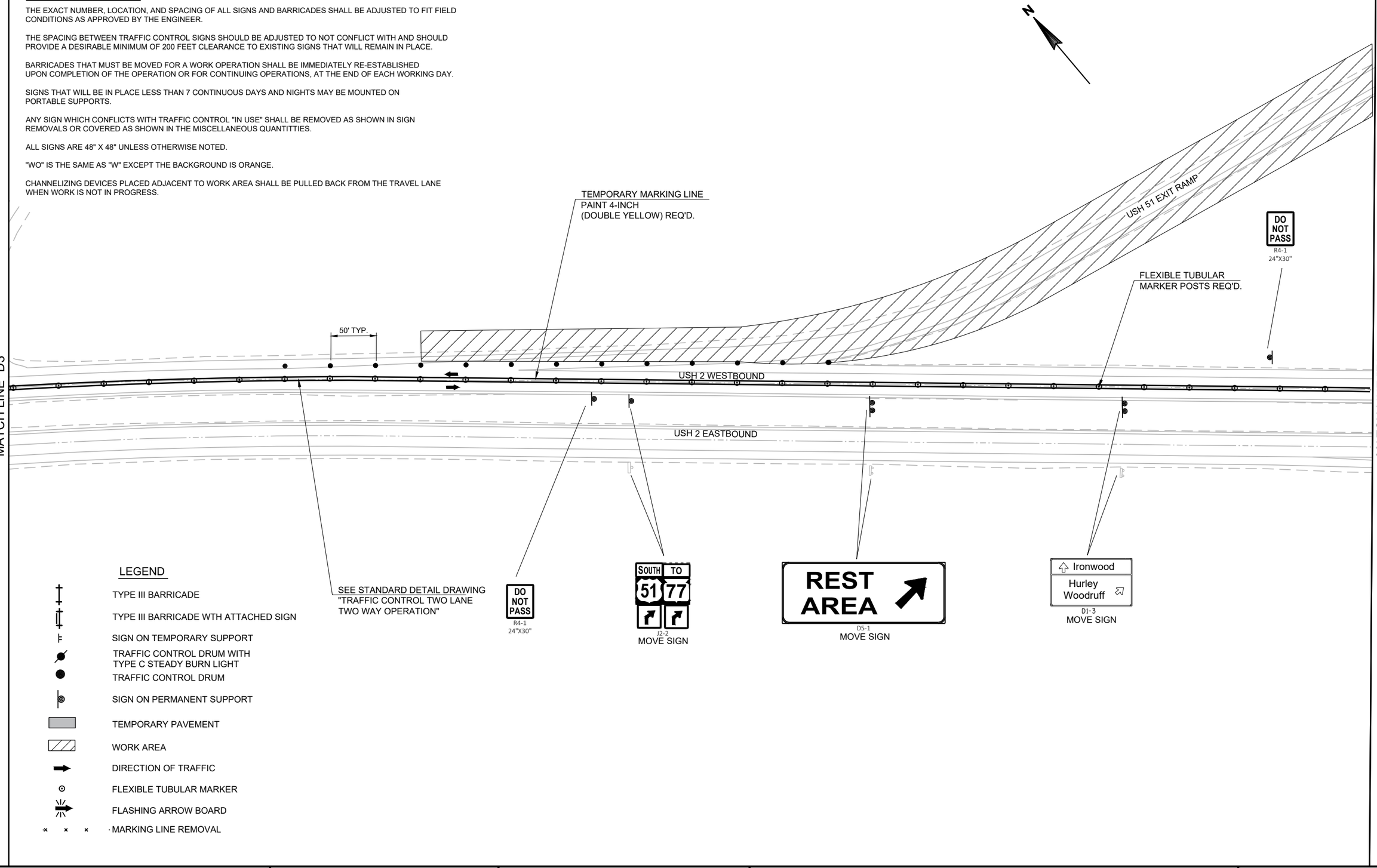
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ANY SIGN WHICH CONFLICTS WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED AS SHOWN IN SIGN REMOVALS OR COVERED AS SHOWN IN THE MISCELLANEOUS QUANTITTIES.

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

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 3	SHEET 126	E

2

2

MATCH LINE "E3"

MATCH LINE "F3"

R11-2R
48" X 30"
RAMP CLOSED
TYPE III BARRICADE

MOVE SIGN
SOUTH TO
51 77
J3-2
48"X57"

MOVE SIGN
FROM STAGE 2
WEST EAST
2 2
J2-2
48"X57"

TEMPORARY MARKING LINE
STOPLINE 18-INCH PAINT REQ'D.

SOUTH TO WEST
51 77 2
J2-3
72"X57"
MOVE SIGN
FROM STAGE 2

STOP
R1-1
30"X30"

MAX. 14' WIDTH
W12-52
48"X48"

SEE STANDARD DETAIL DRAWING
"TRAFFIC CONTROL TWO LANE
TWO WAY OPERATION"

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH
(DOUBLE YELLOW) REQ'D.

FLEXIBLE TUBULAR
MARKER POSTS REQ'D.

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH
(WHITE) REQ'D.

TEMPORARY MARKING
ARROW PAINT REQ'D.

TEMPORARY MARKING
DIAGONAL PAINT 12-INCH
(YELLOW) REQ'D.

25' TYP.

50' TYP.

104'TRW'
106'TRW'
108'TRW'
110'TRW'
114'TRW'
116'TRW'

USH 2 WESTBOUND

USH 2 EASTBOUND

BEGIN
RIGHT
TURN
LANE
R3-20R
24"X36"

MARKING LINE
REMOVAL 4-INCH REQ'D.

TEMPORARY MARKING
ARROW PAINT REQ'D.

TEMPORARY MARKING LINE
PAINT 8-INCH (WHITE) REQ'D.

TEMPORARY MARKING LINE
PAINT 4-INCH REQ'D.

TEMPORARY MARKING
WORD PAINT REQ'D.

END PAINT
BEGIN REMOVABLE TAPE
TEMPORARY MARKING LINE
PAINT 4-INCH (WHITE) REQ'D.

STOP
R1-1
30"X30"

TEMPORARY MARKING LINE
PAINT 4-INCH (WHITE) REQ'D.

MARKING REMOVAL LINE
WIDE REQ'D. (STOP LINE)

TEMPORARY MARKING LINE
PAINT 8-INCH (WHITE) REQ'D.

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH
(WHITE) REQ'D.

25' TYP.

EAST
2
M1-4
24"X24"

MAX. 14' WIDTH
W12-52
48"X48"

WO1-2R
48"X48"

25 M.P.H.
W13-1
36"X36"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
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GENERAL NOTES

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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 3	SHEET 127	E

2

N

WO6-3
NEXT
1 MILES
WO57-51
48"X24"

MOVE SIGN
FROM STAGE 2
SOUTH TO WEST
51 77 2
J2-3
72"X57"

TEMPORARY MARKING
LINE REMOVABLE TAPE
4-INCH (WHITE)

CRASH CUSHION
TEMPORARY REQ'D.

CONCRETE BARRIER TEMPORARY
PRECAST REQ'D.
(CONNECT BARRIER TO EXISTING
BRIDGE PARAPET PER STANDARD
DETAIL DRAWING)

FLEXIBLE TUBULAR
MARKER POSTS REQ'D.

MOVE SIGN
FROM STAGE 2
JCT
51
J1-1
24"X39"

SPEED
LIMIT
55
R2-1
24"X30"

SEE STANDARD DETAIL DRAWING
"TRAFFIC CONTROL TWO LANE
TWO WAY OPERATION"

TEMPORARY MARKING
LINE REMOVABLE TAPE
4-INCH (DOUBLE YELLOW)

TEMPORARY MARKING
LINE REMOVABLE TAPE
4-INCH (DOUBLE YELLOW)

SEWAGE DISPOSAL RD.

50' TYP.

25'
TYP.

USH 2 WESTBOUND

USH 2 EASTBOUND

125' SHIFTING
TAPER

MATCH LINE "F3"

MATCH LINE "G3"

MATCH LINE "B3"

SPEED
LIMIT
35
WO3-5

R11-2
48" X 30"
ROAD
CLOSED
TYPE III BARRICADE

SPEED
LIMIT
35
R2-1
24"X30"

TEMPORARY MARKING
LINE REMOVABLE TAPE
4-INCH (WHITE)

R11-2
48" X 30"
ROAD
CLOSED
TYPE III BARRICADE

TEMPORARY MARKING
LINE REMOVABLE TAPE
4-INCH (DOUBLE YELLOW)

LEGEND

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- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL CONES 42-INCH
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- FLASHING ARROW BOARD
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 3	SHEET 128	E

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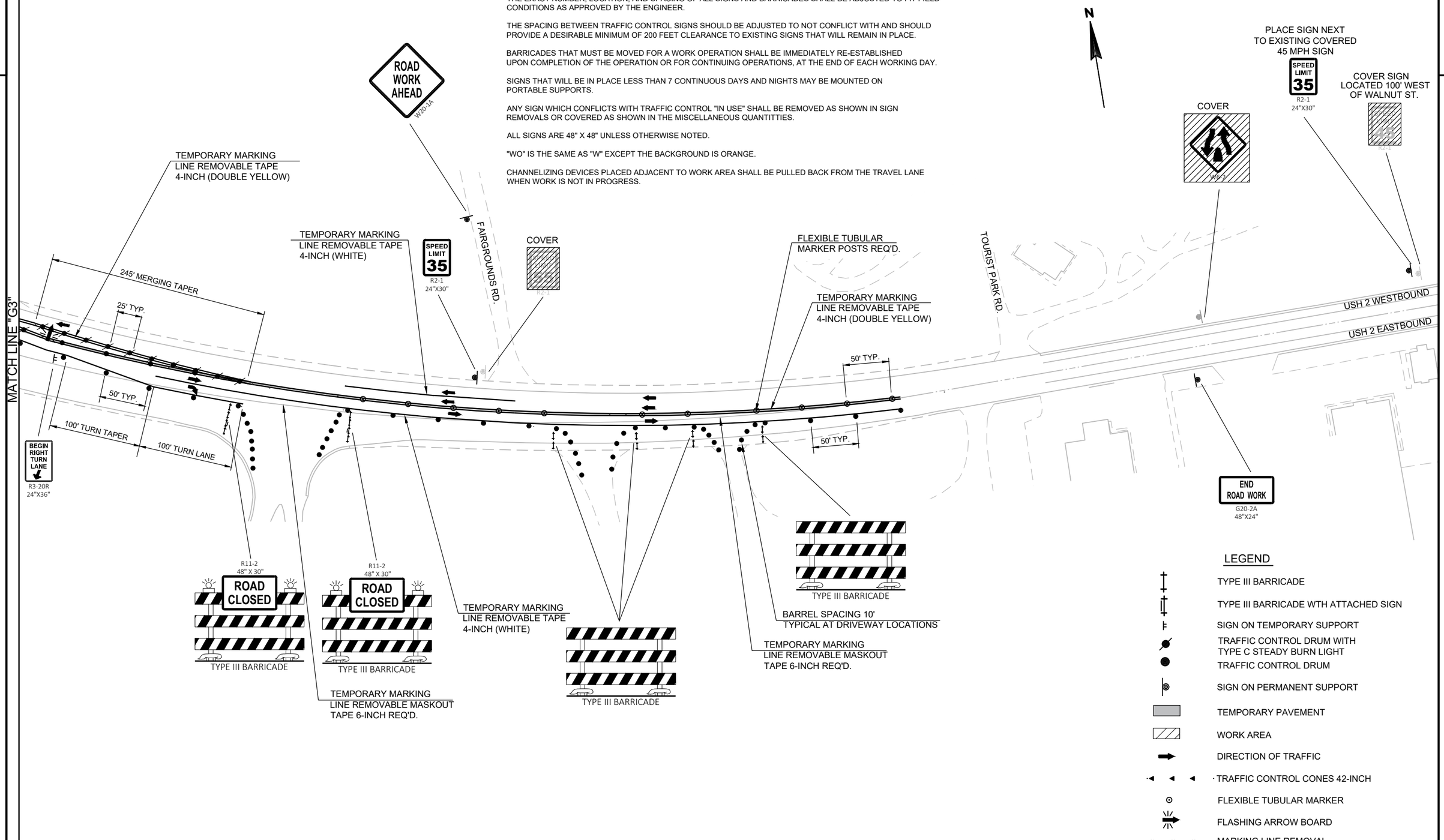
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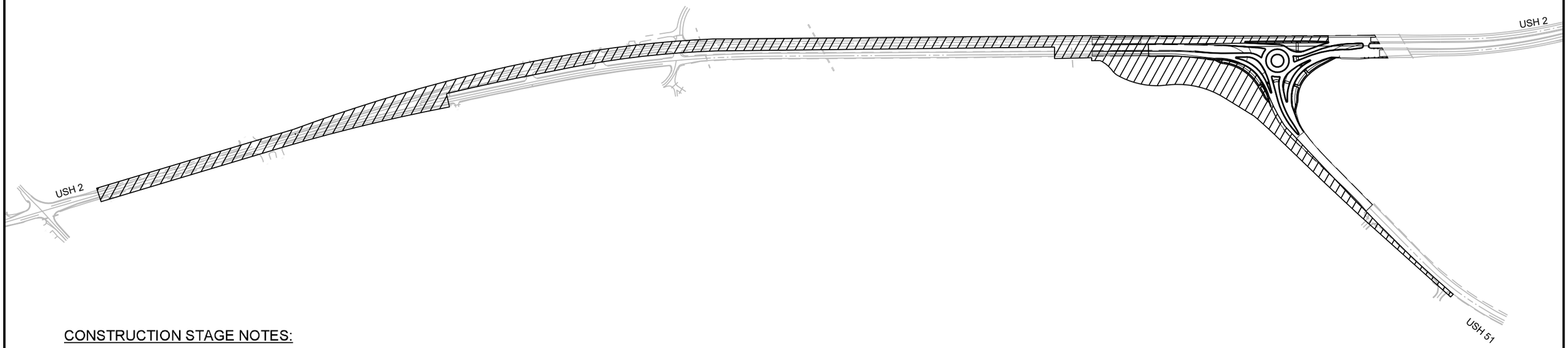


LEGEND

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- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL CONES 42-INCH
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 3	SHEET 129	E

2



CONSTRUCTION STAGE NOTES:

STAGE WORK
- CONSTRUCT REMAINING USH 51
- REMOVE TEMPORARY USH 51
- COMPLETE MILLING AND PAVING ON USH 2
- REMOVE SHOULDER PAVEMENT ON WB USH 2
- REPLACE REMOVED PAVEMENT MARKINGS FOR TEMPORARY CROSSOVERS

TRAFFIC IMPACTS
- SHOULDER CLOSURES AND FLAGGING EB AND WB USH 2
- SHOULDER CLOSURES AND FLAGGING NB AND SB USH 51

LEGEND
WORK AREA

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STAGE CONSTRUCTION-STAGE 4	SHEET 130	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\026001-S4.DWG
LAYOUT NAME - 026001-s4
PLOT DATE : 8/31/2020 10:38 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:500 FT
WISDOT/CADDS SHEET 42

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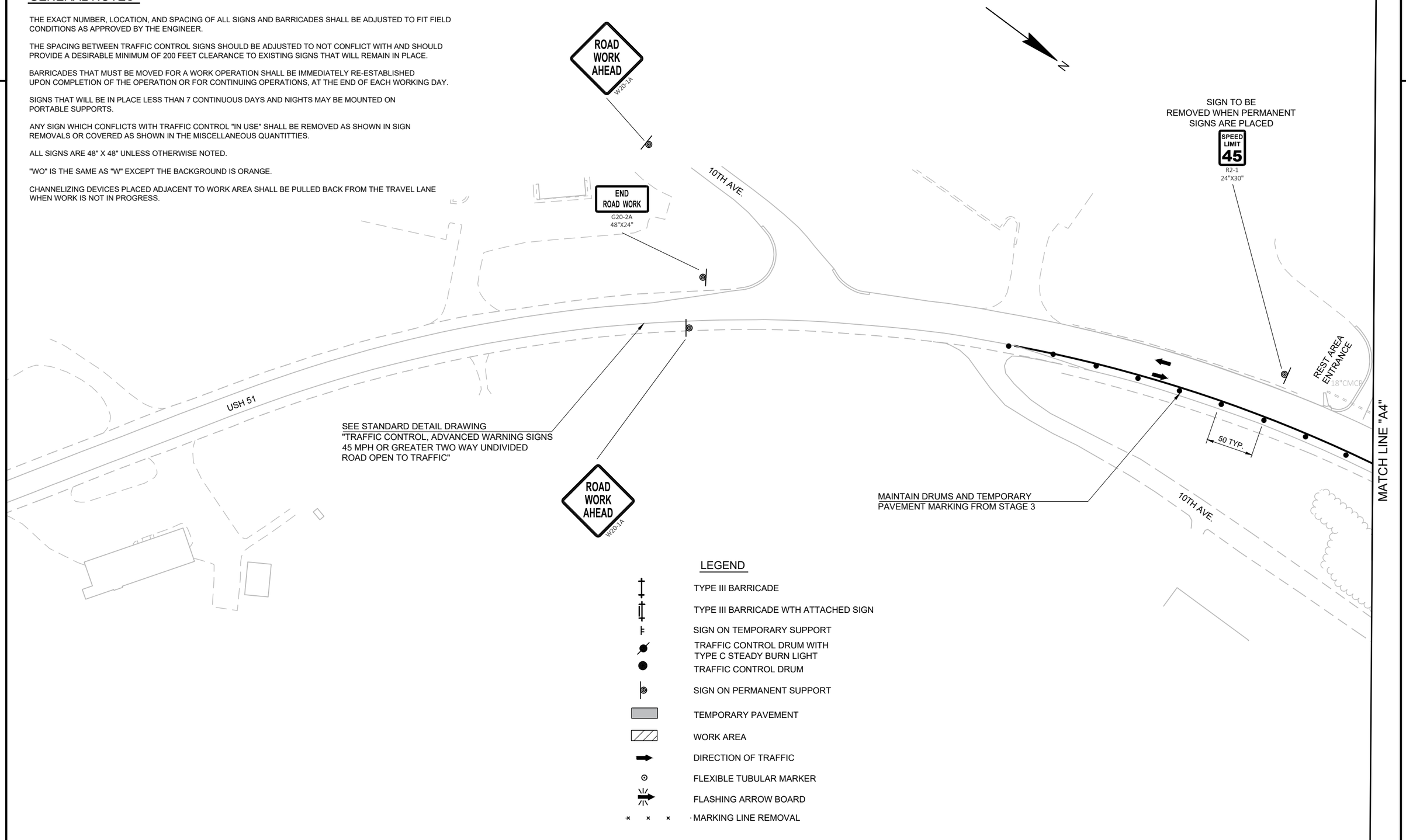
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- TRAFFIC CONTROL DRUM
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- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 4	SHEET 131	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\025022-TC.DWG
LAYOUT NAME - 025022-tc
PLOT DATE : 10/29/2020 9:09 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 42

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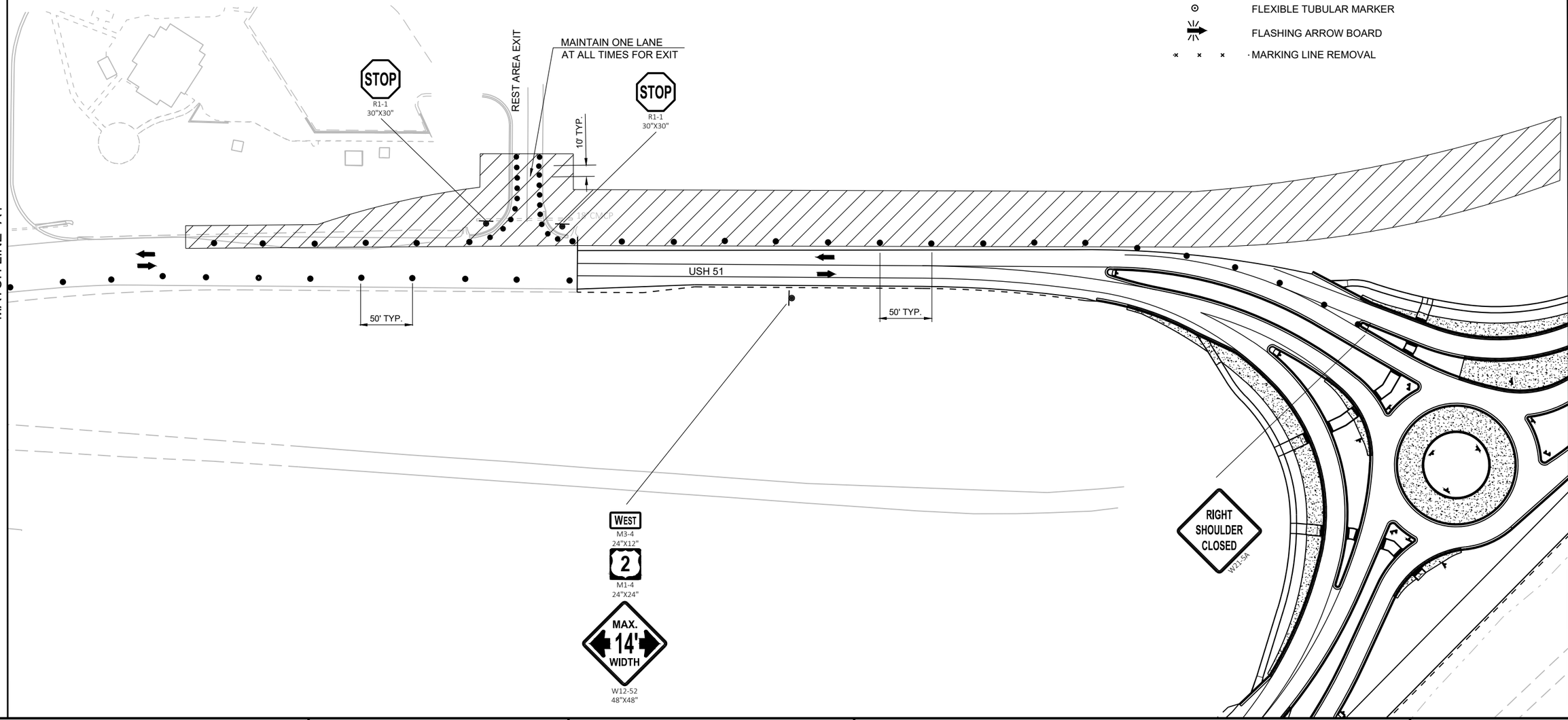
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N

LEGEND

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- TRAFFIC CONTROL DRUM
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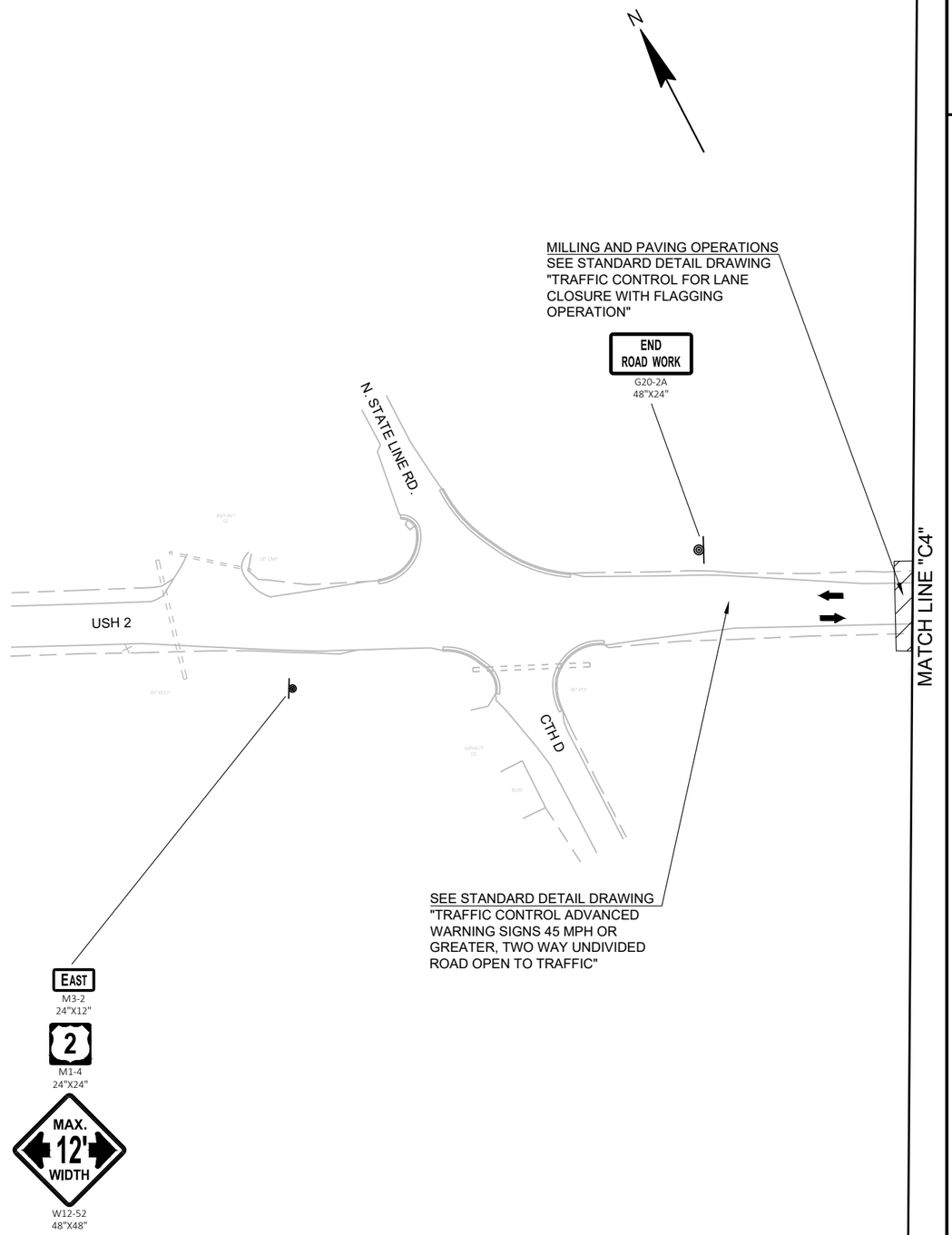
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2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 4	SHEET 133	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\025024-TC.DWG
LAYOUT NAME - 025024-tc

PLOT DATE : 10/29/2020 9:09 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

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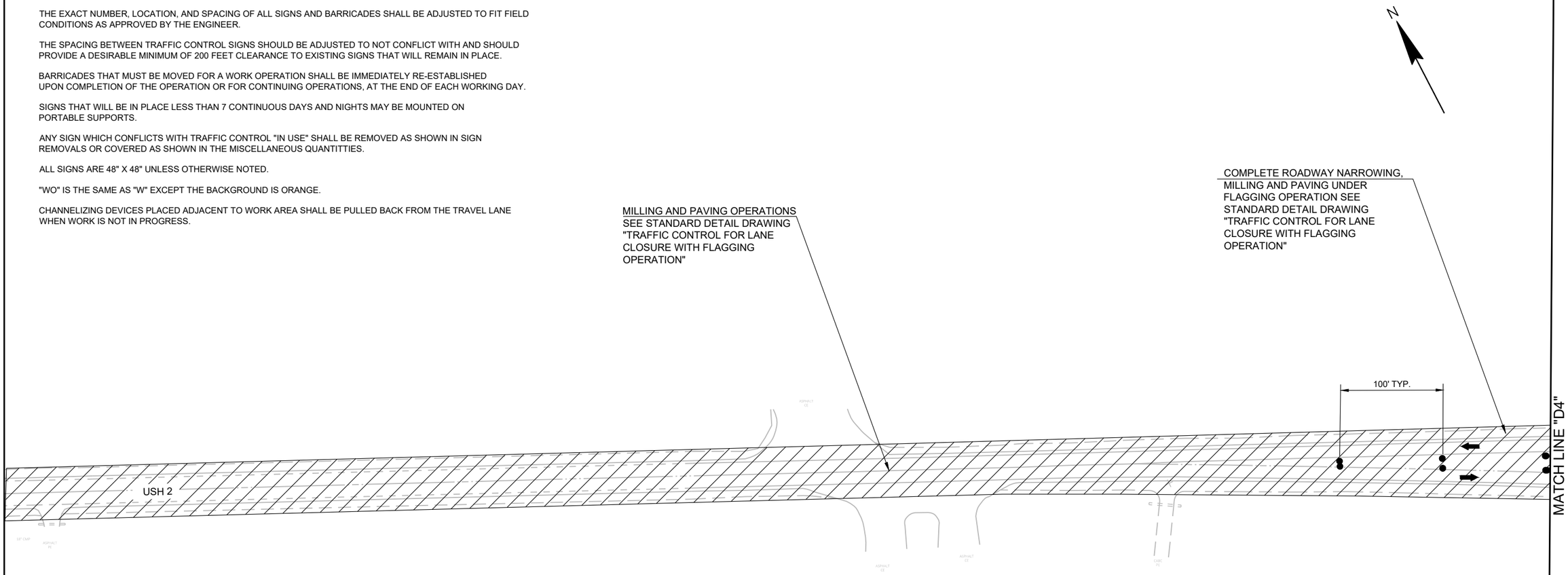
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 4	SHEET 134	E

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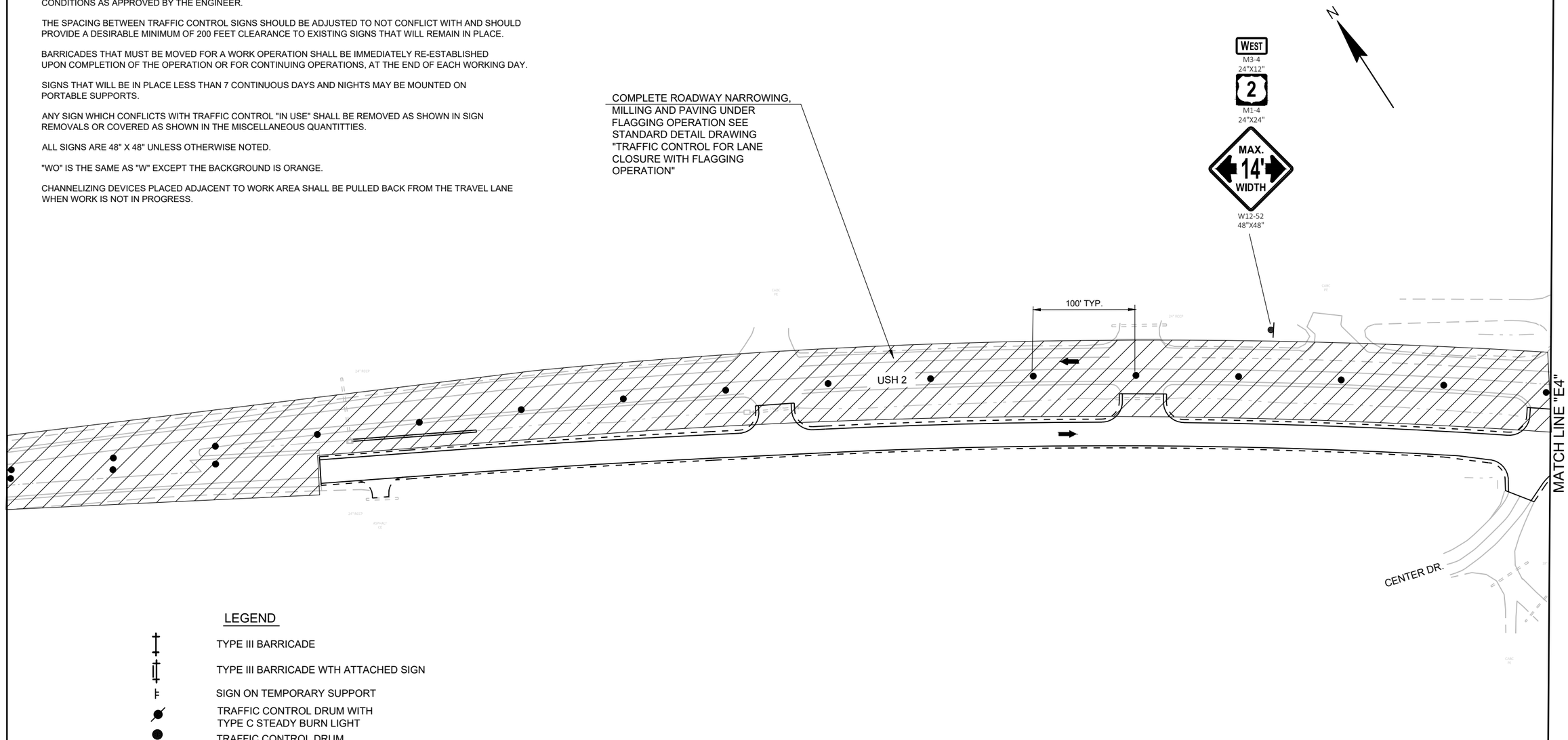
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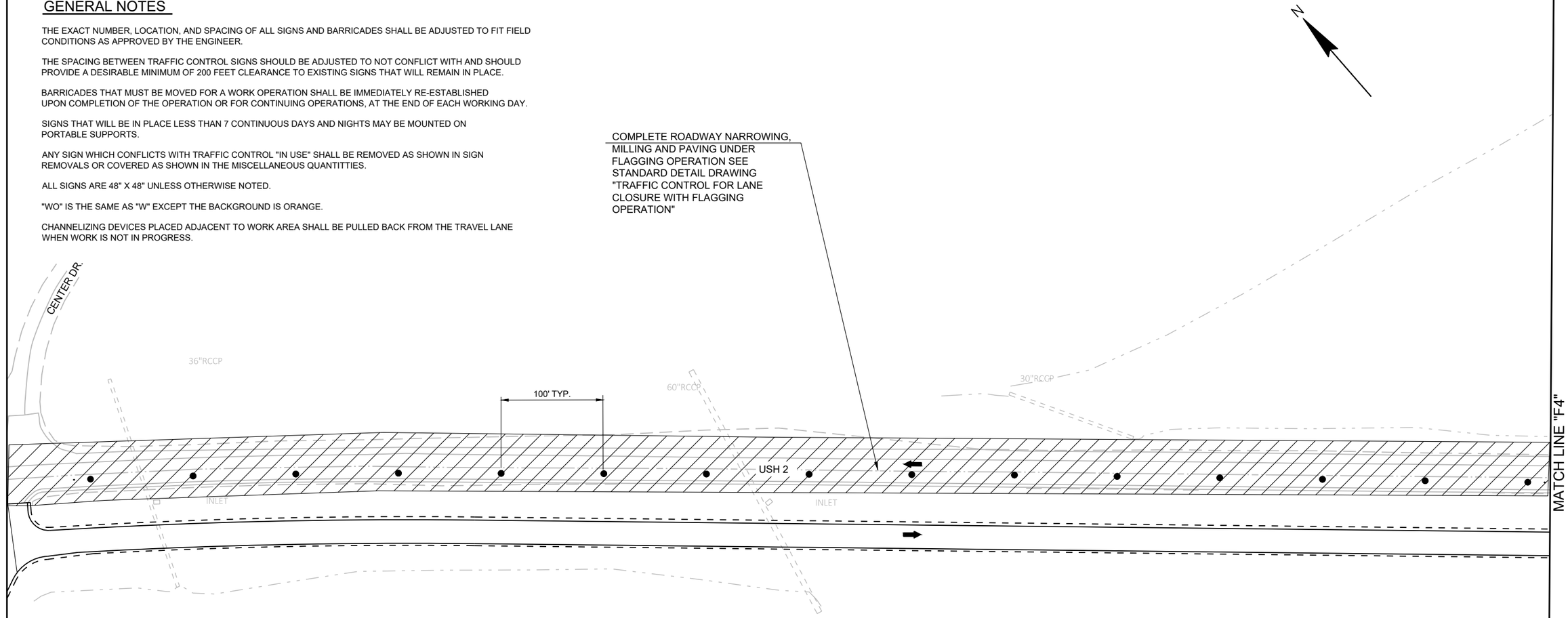
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- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 4	SHEET 136	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\025027-TC.DWG
LAYOUT NAME - 025027-tc

PLOT DATE : 10/29/2020 9:10 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : Custom

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.

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.

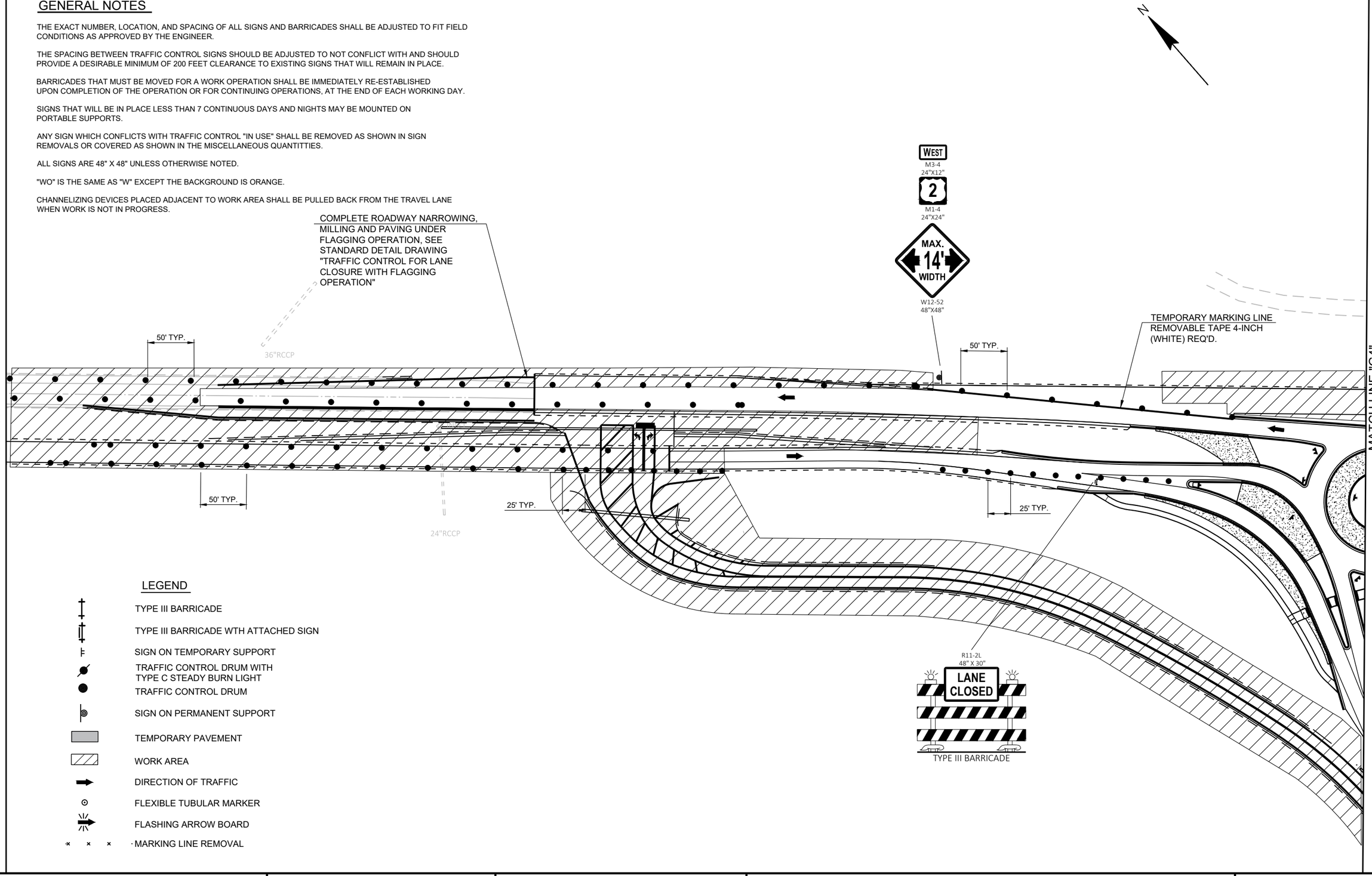
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGN WHICH CONFLICTS WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED AS SHOWN IN SIGN REMOVALS OR COVERED AS SHOWN IN THE MISCELLANEOUS QUANTITTIES.

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

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

2

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.

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.

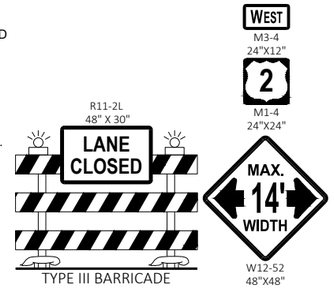
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY SIGN WHICH CONFLICTS WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED AS SHOWN IN SIGN REMOVALS OR COVERED AS SHOWN IN THE MISCELLANEOUS QUANTITTIES.

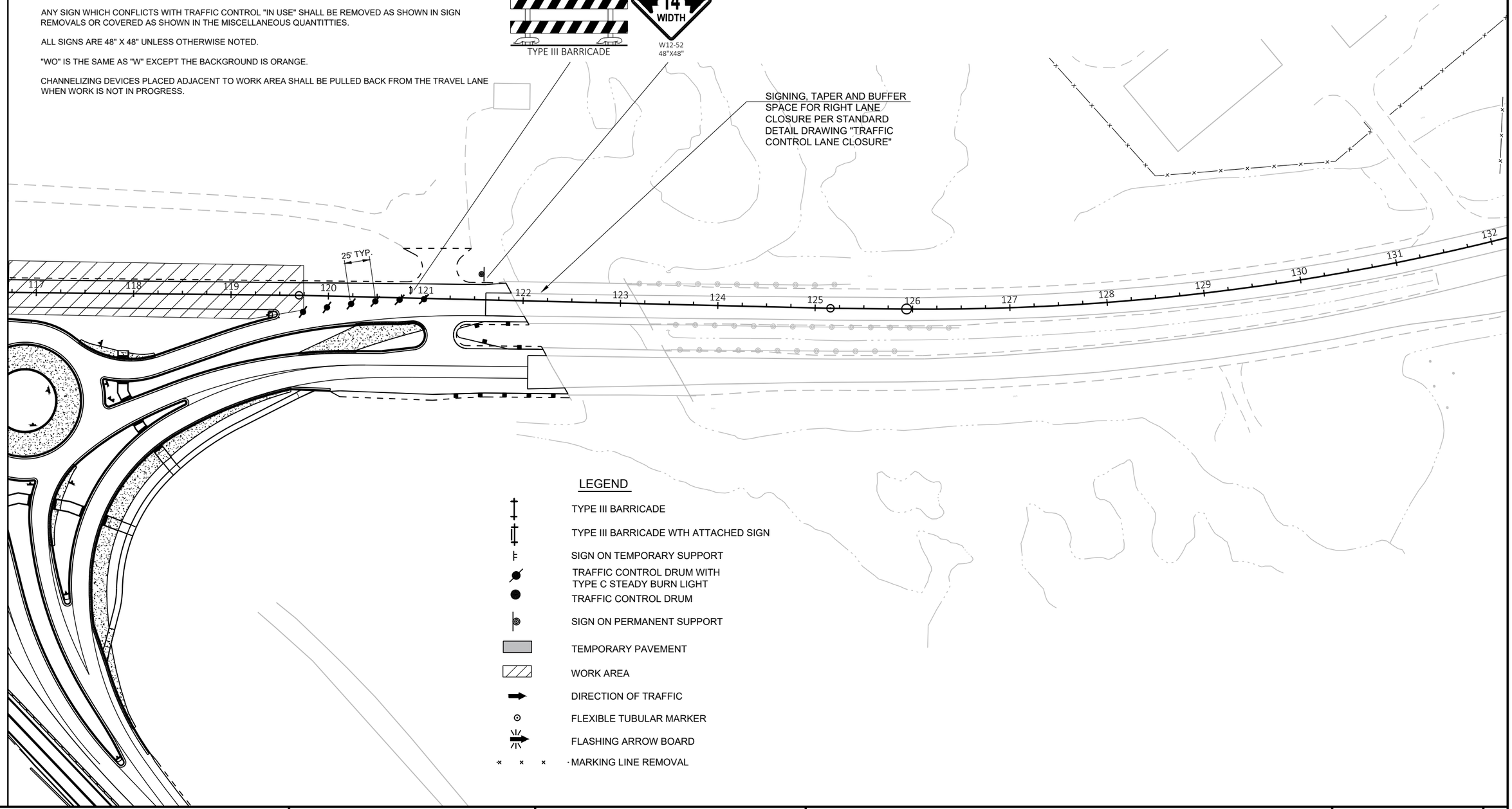
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.



SIGNING, TAPER AND BUFFER SPACE FOR RIGHT LANE CLOSURE PER STANDARD DETAIL DRAWING "TRAFFIC CONTROL LANE CLOSURE"



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TEMPORARY PAVEMENT
- WORK AREA
- DIRECTION OF TRAFFIC
- FLEXIBLE TUBULAR MARKER
- FLASHING ARROW BOARD
- MARKING LINE REMOVAL

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	TRAFFIC CONTROL-STAGE 4	SHEET 138	E

LEGEND

TEMPORARY PAVEMENT

XXXX XXXX SAW CUT

N

REMOVE CONCRETE CURB AND GUTTER

ASPHALTIC CURB 6-INCH REQ'D. STA. 9+67-STA. 17+35 LEFT

ASPHALTIC FLUME REQUIRED

XCEL ENERGY

CENTURY LINK

40' R

30' R

REMOVE CULVERT PIPE

SLOPE INTERCEPTS

CP#1

CP#2

BEGIN TEMPORARY PAVEMENT STAGE 1-STA. 9+15TRN

10TRN

11TRN

12TRN

13TRN

14TRN

18"CMCP

9TRN

8TRN

USH 51

SALVAGE LIGHT POLE REMOVE CONCRETE BASE

INLETS 3-FT DIAMETER WITH INLET COVERS TYPE B REQUIRED STA. 11+80TRN-20' RT.

101'

REMOVE ASPHALTIC FLUME

REMOVE ASPHALTIC FLUME

CULVERT PIPE TEMPORARY 18-INCH REQUIRED

SIGN

MATCH LINE STA. 15+00TRN

2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STAGE CONSTRUCTION-TEMPORARY PAVEMENT-STAGE 1	SHEET 139	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\026002-S1.DWG
LAYOUT NAME - 026002-s1

PLOT DATE : 8/31/2020 10:38 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

TEMPORARY PAVEMENT

XXXX XXXX SAW CUT

N

MATCH LINE STA. 15+00TRN

MATCH LINE STA. 23+00TRN

INLETS 3-FT DIAMETER
WITH INLET COVERS
TYPE B REQUIRED
STA. 15+50TRN-17' LT.

ASPHALTIC CURB
6-INCH REQ'D.
STA. 9+67-STA. 17+35 LEFT

CULVERT PIPE TEMPORARY
18-INCH REQUIRED

END TEMPORARY PAVEMENT
STA. 19+13TRN

ASPHALTIC FLUME
REQUIRED

BEGIN TEMPORARY PAVEMENT
STA. 21+45TRN

SLOPE
INTERCEPTS

SLOPE
INTERCEPTS

XCEL ENERGY

CENTURY LINK

16TRN

17TRN

18TRN

19TRN

20TRN

21TRN

22TRN

23TRN

17'

12'

14'

14'

2

2

USH 51

XCEL ENERGY

XCEL ENERGY

CENTURY LINK

NGS MONUMENT
HURLEY GPS

USH 2

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STAGE CONSTRUCTION-TEMPORARY PAVEMENT-STAGE 1	SHEET 140	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\026003-S1.DWG
LAYOUT NAME - 026003-s1

PLOT DATE : 8/31/2020 10:39 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

TEMPORARY PAVEMENT

XXXX XXXX SAW CUT

CULVERT PIPE TEMPORARY
36-INCH REQUIRED

XCEL ENERGY

CENTURY LINK

27+21.24
-27.0'
25'R

INLET

26TRN

27TRN

28TRN

SLOPE
INTERCEPTS

25TRN

36"RCCP

2'

14'

14'

2'

CP#4

24TRN

USH 2

SLOPE
INTERCEPTS

END TEMPORARY PAVEMENT
STA. 27+11TRN

MATCH LINE STA. 23+00TRN

N

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STAGE CONSTRUCTION-TEMPORARY PAVEMENT-STAGE 1	SHEET 141	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\026004-S1.DWG
LAYOUT NAME - 026004-s1

PLOT DATE : 8/31/2020 10:39 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

LEGEND

TEMPORARY PAVEMENT

XXXX XXXX SAW CUT

N

BEGIN TEMPORARY
PAVEMENT-STAGE 1
STA. 220+92EB

CULVERT PIPE TEMPORARY
24-INCH REQUIRED

INSTALL PIPE INTO
EXISTING INLET

COVER PLATES
TEMPORARY REQ'D.

SLOPE
INTERCEPTS

TEMPORARY CULVERT
PIPE REQ'D.

SLOPE
INTERCEPTS

BEGIN TEMPORARY
PAVEMENT-STAGE 1
STA. 213+11EB

PRC: 219+54.08EB

PC: 217+05.72EB

221EB
220EB
219EB
218EB
217EB
216EB
215EB
214EB
213EB

28NB
27NB
26NB
25NB
24NB
21NB

CP#4

INLET

36"RCCP
24"RCCP

USH 2

CENTURY LINK

XCEL ENERGY

OH

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STAGE CONSTRUCTION-TEMPORARY PAVEMENT-STAGE 1	SHEET 142	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\026005-S1.DWG
LAYOUT NAME - 026005-s1

PLOT DATE : 8/31/2020 10:39 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

TEMPORARY PAVEMENT

SAW CUT

N

INSTALL PIPE INTO
EXISTING INLET

COVER PLATES
TEMPORARY REQ'D.

BEGIN TEMPORARY
PAVEMENT-STAGE 1
STA. 182+28WB

END TEMPORARY
PAVEMENT-STAGE 1
STA. 186+58WB

PC: 183+87.88WB

24" RCCP

181WB 182WB 183WB 184WB 185WB 186WB 187WB 188

181EB USH 2 182EB 183EB 184EB 185EB 186EB 187EB 188EB

24" RCCP

ASPHALT
CE

PC: 184+44.22EB

CULVERT PIPE TEMPORARY
24-INCH REQUIRED

SLOPE
INTERCEPT

PT: 187+40.26EB

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STAGE CONSTRUCTION-TEMPORARY PAVEMENT-STAGE 1	SHEET 143	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\026006-S1.DWG
LAYOUT NAME - 026006-s1

PLOT DATE : 8/31/2020 10:39 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

TEMPORARY PAVEMENT

SAW CUT

MERIT NETWORK

FO

36"RCCP

BP: 100+00.00TRW

101TRW

102TRW

103TRW

104TRW

105TRW

106T

MATCH LINE STA. 106+00TRW

USH 2

BEGIN TEMPORARY
PAVEMENT-STAGE 2
STA. 102+59'TRW'

11'

CENTURY LINK

XCEL ENERGY

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STAGE CONSTRUCTION-TEMPORARY PAVEMENT-STAGE 2	SHEET 144	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\026002-S2.DWG
LAYOUT NAME - 026002-s2

PLOT DATE : 8/31/2020 10:39 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

TEMPORARY PAVEMENT

XXXX XXXX SAW CUT

N

MERIT NETWORK

MATCH LINE STA. 106+00TRW

USH 2 WESTBOUND

USH 2 EASTBOUND

PI 109+78.76TRW

106TRW

107TRW

108TRW

109TRW

110TRW

111TRW

112TRW

113TRW

12'

22'

12'

END TEMPORARY
PAVEMENT-STAGE 2
STA. 109+10'TRW'

CP#4

CENTURY LINK

24"RCCP

36"RCCP

TEMPORARY CULVERT
PIPE-STAGE 1
(TO REMAIN)

XCEL ENERGY

SLOPE
INTERCEPTS
STAGE 1

SLOPE
INTERCEPTS
STAGE 1

2'

2'

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STAGE CONSTRUCTION-TEMPORARY PAVEMENT-STAGE 2	SHEET 145	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\026003-S2.DWG
LAYOUT NAME - 026003-s2

PLOT DATE : 8/31/2020 10:39 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

LEGEND

TEMPORARY PAVEMENT

XXXX XXXX SAW CUT

N

MATCH LINE STA. 113+00TRW

INSTALL ONLY LOWER LAYERS OF HMA PAVEMENT

COVER PLATES TEMPORARY REQ'D.

COVER PLATES TEMPORARY REQ'D.

PI: 115+21.08TRW

PI: 119+69.77TRW

TRW 114TRW 115TRW 116TRW 117TRW 118TRW 119TRW 120TRW

USH 2 WESTBOUND

15'

DO NOT INSTALL CURB AND PAVE TO WIDTH SHOWN

USH 2

ANTICIPATED CURB AND PAVING LIMITS

COVER PLATES TEMPORARY REQ'D.

ANTICIPATED CURB AND PAVING LIMITS

USH 2 EASTBOUND

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	STAGE CONSTRUCTION-TEMPORARY PAVEMENT-STAGE 2	SHEET 146	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\026004-S2.DWG
LAYOUT NAME - 026004-s2

PLOT DATE : 8/31/2020 10:40 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:50 FT

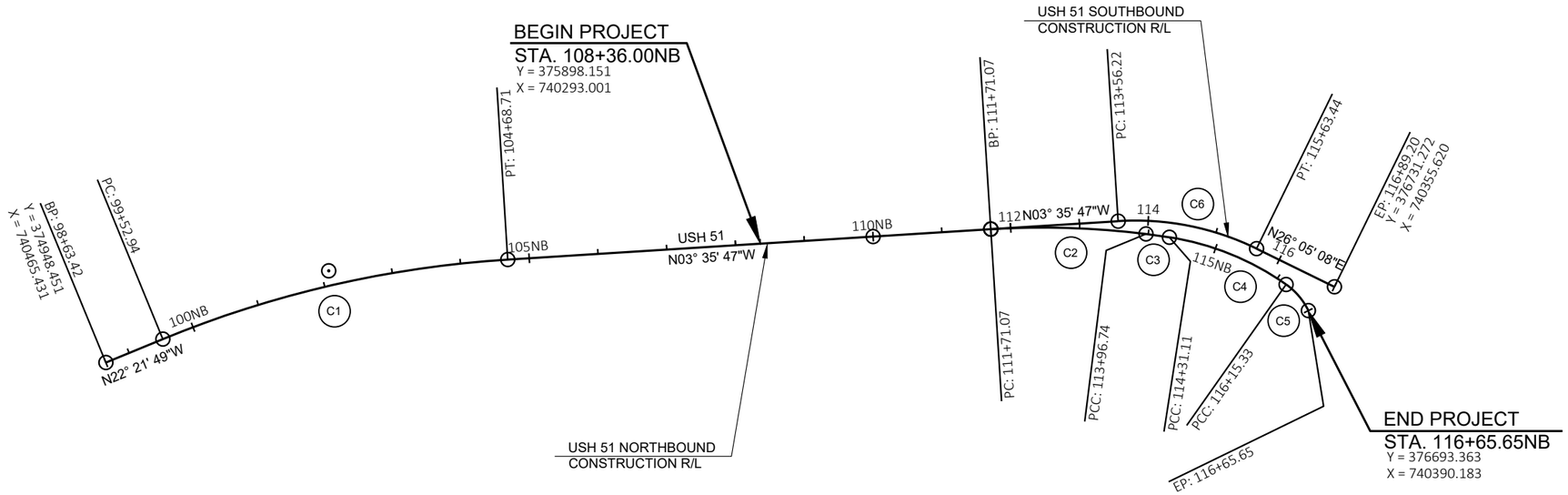
WISDOT/CADDS SHEET 42

2

USH 51 SOUTHBOUND CONSTRUCTION R/L

C6

PI STA = 114+62.21SB
Y = 376523.133
X = 740253.719
DELTA = 29°40'55"
D = 14°19'26"
T = 105.99'
L = 207.22'
R = 400.00'
PC STA = 113+56.22SB
Y = 376417.351
X = 740260.368
PT STA = 115+63.44SB
Y = 376618.328
X = 740300.325
BK = N03°35'47"W
AH = N26°05'08"E



USH 51 NORTHBOUND CONSTRUCTION R/L

C1

PI STA = 102+13.16NB
Y = 375271.881
X = 740332.363
DELTA = 18°46'02"
D = 3°38'19"
T = 260.22'
L = 515.78'
R = 1574.65'
PC STA = 99+52.94NB
Y = 375031.234
X = 740431.372
PT STA = 104+68.71NB
Y = 375531.588
X = 740316.040
BK = N22°21'49"W
AH = N03°35'47"W

C2

PI STA = 112+84.24NB
Y = 376345.506
X = 740264.883
DELTA = 10°46'29"
D = 4°46'29"
T = 113.17'
L = 225.67'
R = 1200.00'
PC STA = 111+71.07NB
Y = 376232.562
X = 740271.982
PT STA = 113+96.74NB
Y = 376457.787
X = 740279.024
BK = N03°35'47"W
AH = N07°10'42"E

C3

PI STA = 114+13.93NB
Y = 376474.840
X = 740281.172
DELTA = 1°38'28"
D = 4°46'29"
T = 17.19'
L = 34.37'
R = 1200.00'
PC STA = 113+96.74NB
Y = 376457.787
X = 740279.024
PT STA = 114+31.11NB
Y = 376491.824
X = 740283.808
BK = N07°10'42"E
AH = N08°49'10"E

C4

PI STA = 115+24.88NB
Y = 376584.486
X = 740298.185
DELTA = 26°23'12"
D = 14°19'26"
T = 93.77'
L = 184.21'
R = 400.00'
PC STA = 114+31.11NB
Y = 376491.824
X = 740283.808
PT STA = 116+15.33NB
Y = 376661.103
X = 740352.245
BK = N08°49'10"E
AH = N35°12'22"E

C5

PI STA = 116+41.03NB
Y = 376682.110
X = 740367.067
DELTA = 28°50'11"
D = 57°17'45"
T = 25.71'
L = 50.33'
R = 100.00'
PC STA = 116+15.33NB
Y = 376661.103
X = 740352.245
PT STA = 116+65.65NB
Y = 376693.363
X = 740390.183
BK = N35°12'22"E
AH = N64°02'34"E

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	ALIGNMENT DIAGRAM	SHEET 147	E

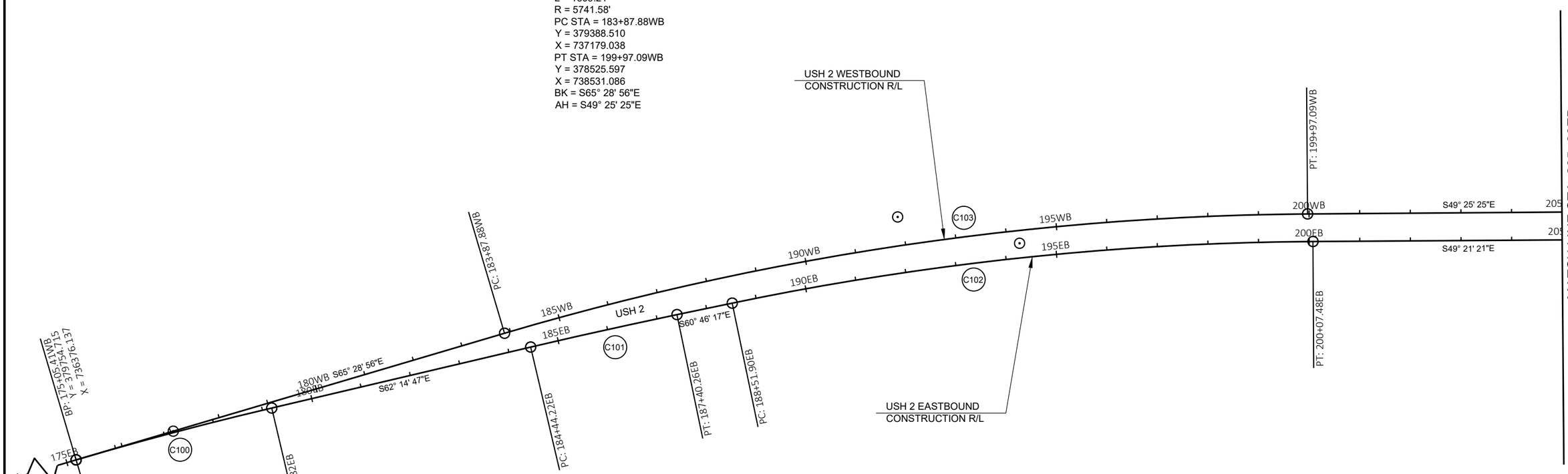
2

N

USH 2 WESTBOUND CONSTRUCTION R/L WB

C103

PI STA = 191+97.79WB
Y = 379052.414
X = 737915.924
DELTA = 16°03'31"
D = 0°59'52"
T = 809.91'
L = 1609.21'
R = 5741.58'
PC STA = 183+87.88WB
Y = 379388.510
X = 737179.038
PT STA = 199+97.09WB
Y = 378525.597
X = 738531.086
BK = S65° 28' 56"E
AH = S49° 25' 25"E



USH 2 EASTBOUND CONSTRUCTION R/L EB

C100

PI STA = 177+18.96EB
Y = 379671.732
X = 736558.075
DELTA = 3°14'08"
D = 0°48'33"
T = 199.97'
L = 399.83'
R = 7080.00'
PC STA = 175+18.99EB
Y = 379754.715
X = 736376.137
PT STA = 179+18.82EB
Y = 379578.613
X = 736735.039
BK = S65° 28' 56"E
AH = S62° 14' 47"E

C101

PI STA = 185+92.25EB
Y = 379265.018
X = 737330.996
DELTA = 1°28'30"
D = 0°29'54"
T = 148.03'
L = 296.04'
R = 11500.00'
PC STA = 184+44.22EB
Y = 379333.951
X = 737199.995
PT STA = 187+40.26EB
Y = 379192.736
X = 737460.179
BK = S62° 14' 47"E
AH = S60° 46' 17"E

C102

PI STA = 194+31.61EB
Y = 378855.155
X = 738063.503
DELTA = 11°24'56"
D = 0°59'16"
T = 579.71'
L = 1155.59'
R = 5800.00'
PC STA = 188+51.90EB
Y = 379138.225
X = 737557.601
PT STA = 200+07.48EB
Y = 378477.556
X = 738503.372
BK = S60° 46' 17"E
AH = S49° 21' 21"E

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	ALIGNMENT DIAGRAM	SHEET 148	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\027202-AD.DWG
LAYOUT NAME - 027202-ad
PLOT DATE : 8/31/2020 10:40 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

USH 2 WESTBOUND CONSTRUCTION R/L 'WB'

C12

PI STA = 220+43.78WB
Y = 377185.304
X = 740077.648
DELTA = 1°42'08"
D = 0°34'25"
T = 148.39'
L = 296.75'
R = 9988.00'
PC STA = 218+95.39WB
Y = 377281.824
X = 739964.942
PT STA = 221+92.14WB
Y = 377085.478
X = 740187.437
BK = S49°25'25"E
AH = S47°43'17"E

C13

PI STA = 223+03.09WB
Y = 377010.841
X = 740269.524
DELTA = 3°10'39"
D = 1°25'57"
T = 110.95'
L = 221.83'
R = 4000.00'
PC STA = 221+92.14WB
Y = 377085.478
X = 740187.437
PT STA = 224+13.98WB
Y = 376931.768
X = 740347.347
BK = S47°43'17"E
AH = S44°32'38"E

USH 2 WESTBOUND CONSTRUCTION R/L 'WB'

C14

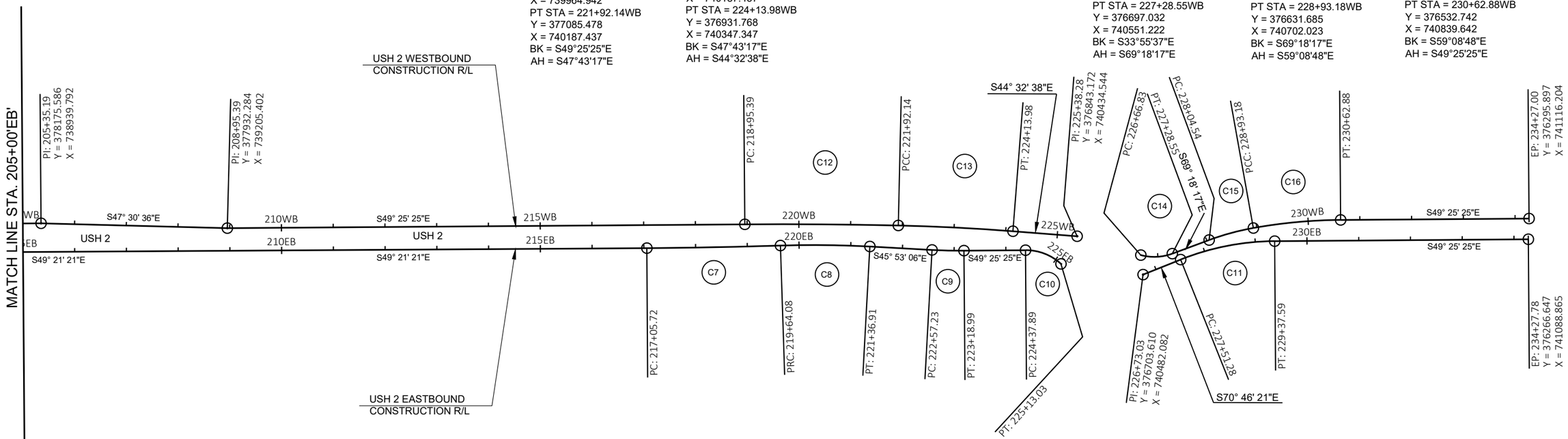
PI STA = 226+98.71WB
Y = 376708.299
X = 740521.398
DELTA = 35°22'39"
D = 57°18'56"
T = 31.88'
L = 61.72'
R = 99.97'
PC STA = 226+66.83WB
Y = 376734.752
X = 740503.604
PT STA = 227+28.55WB
Y = 376697.032
X = 740551.222
BK = S33°55'37"E
AH = S69°18'17"E

C15

PI STA = 228+48.97WB
Y = 376654.475
X = 740663.873
DELTA = 10°09'28"
D = 11°27'33"
T = 44.44'
L = 88.64'
R = 500.00'
PC STA = 228+04.54WB
Y = 376670.179
X = 740622.302
PT STA = 228+93.18WB
Y = 376631.685
X = 740702.023
BK = S69°18'17"E
AH = S59°08'48"E

C16

PI STA = 229+78.23WB
Y = 376588.066
X = 740775.040
DELTA = 9°43'23"
D = 5°43'46"
T = 85.05'
L = 169.70'
R = 1000.00'
PC STA = 228+93.18WB
Y = 376631.685
X = 740702.023
PT STA = 230+62.88WB
Y = 376532.742
X = 740839.642
BK = S59°08'48"E
AH = S49°25'25"E



USH 2 EASTBOUND CONSTRUCTION R/L 'EB'

C7

PI STA = 218+34.91EB
Y = 377287.249
X = 739889.968
DELTA = 1°28'49"
D = 0°34'23"
T = 129.19'
L = 258.37'
R = 10000.00'
PC STA = 217+05.72EB
Y = 377371.398
X = 739791.942
PT STA = 219+64.08EB
Y = 377205.660
X = 739990.135
BK = S49°21'21"E
AH = S50°50'11"E

C8

PI STA = 220+50.55EB
Y = 377151.052
X = 740057.178
DELTA = 4°57'04"
D = 2°51'53"
T = 86.47'
L = 172.83'
R = 2000.00'
PC STA = 219+64.08EB
Y = 377205.660
X = 739990.135
PT STA = 221+36.91EB
Y = 377090.862
X = 740119.257
BK = S50°50'11"E
AH = S45°53'06"E

C9

PI STA = 222+88.12EB
Y = 376985.606
X = 740227.816
DELTA = 3°32'19"
D = 5°43'46"
T = 30.89'
L = 61.76'
R = 1000.00'
PC STA = 222+57.23EB
Y = 377007.108
X = 740205.639
PT STA = 223+18.99EB
Y = 376965.513
X = 740251.278
BK = S45°53'06"E
AH = S49°25'25"E

C10

PI STA = 224+77.33EB
Y = 376862.519
X = 740371.545
DELTA = 43°03'15"
D = 57°17'45"
T = 39.45'
L = 75.14'
R = 100.00'
PC STA = 224+37.89EB
Y = 376888.176
X = 740341.584
PT STA = 225+13.03EB
Y = 376823.316
X = 740375.921
BK = S49°25'25"E
AH = S06°22'10"E

USH 2 EASTBOUND CONSTRUCTION R/L 'EB'

C11

PI STA = 228+45.53EB
Y = 376646.804
X = 740644.957
DELTA = 21°20'56"
D = 11°27'33"
T = 94.25'
L = 186.30'
R = 500.00'
PC STA = 227+51.28EB
Y = 376677.840
X = 740555.969
PT STA = 229+37.59EB
Y = 376585.501
X = 740716.540
BK = S70°46'21"E
AH = S49°25'25"E

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	ALIGNMENT DIAGRAM	SHEET 149	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\027203-AD.DWG
LAYOUT NAME - 027203-ad
PLOT DATE : 8/31/2020 10:40 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

RAB NE ISLAND INSIDE EDGE OF PAVEMENT 'WIN'

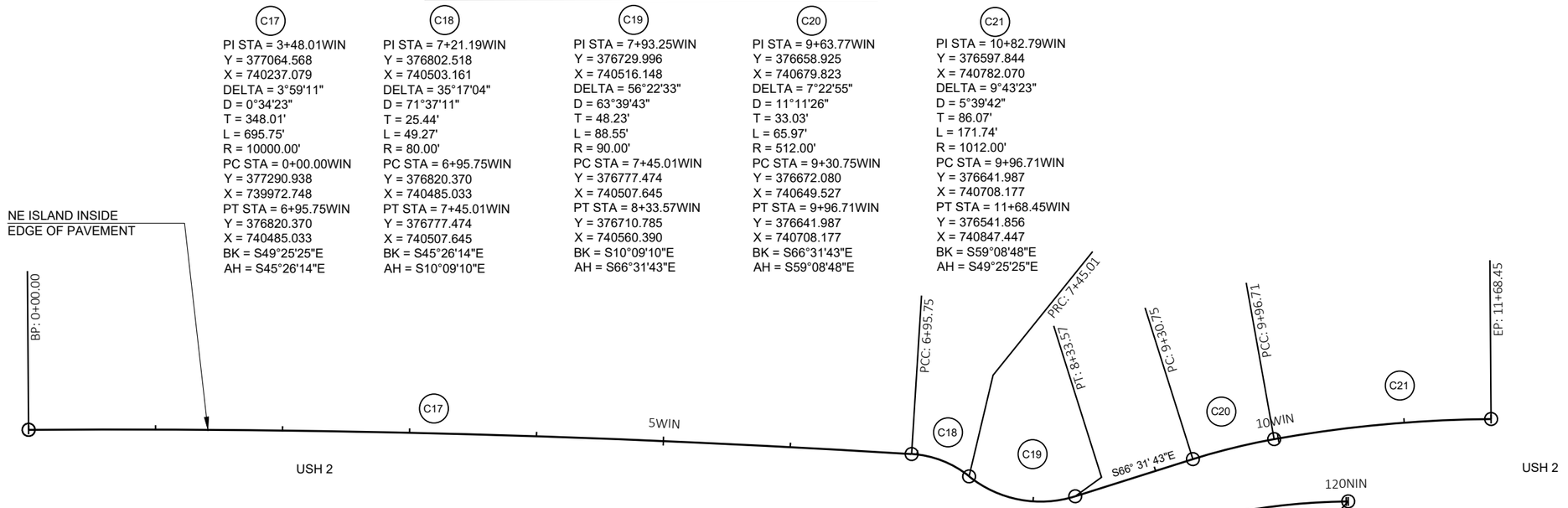
C17
PI STA = 3+48.01WIN
Y = 377064.568
X = 740237.079
DELTA = 3°59'11"
D = 0°34'23"
T = 348.01'
L = 695.75'
R = 10000.00'
PC STA = 0+00.00WIN
Y = 377290.938
X = 739972.748
PT STA = 6+95.75WIN
Y = 376820.370
X = 740485.033
BK = S49°25'25"E
AH = S45°26'14"E

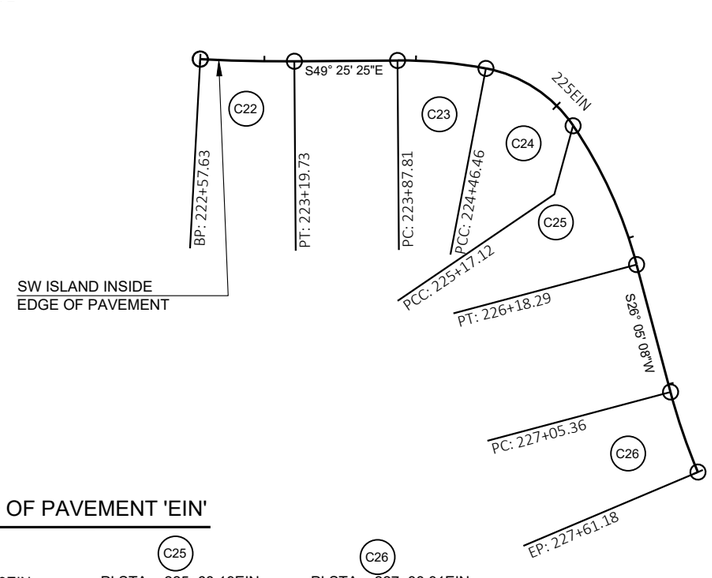
C18
PI STA = 7+21.19WIN
Y = 376802.518
X = 740503.161
DELTA = 35°17'04"
D = 71°37'11"
T = 25.44'
L = 49.27'
R = 80.00'
PC STA = 6+95.75WIN
Y = 376820.370
X = 740485.033
PT STA = 7+45.01WIN
Y = 376777.474
X = 740507.645
BK = S45°26'14"E
AH = S10°09'10"E

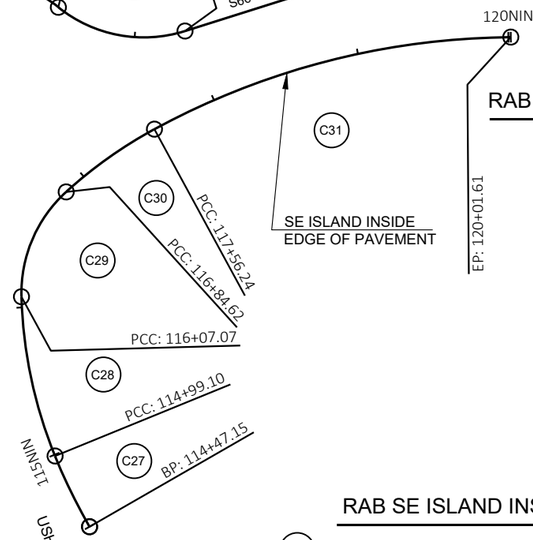
C19
PI STA = 7+93.25WIN
Y = 376729.996
X = 740516.148
DELTA = 56°22'33"
D = 63°39'43"
T = 48.23'
L = 88.55'
R = 90.00'
PC STA = 7+45.01WIN
Y = 376777.474
X = 740507.645
PT STA = 8+33.57WIN
Y = 376710.785
X = 740560.390
BK = S10°09'10"E
AH = S66°31'43"E

C20
PI STA = 9+63.77WIN
Y = 376658.925
X = 740679.823
DELTA = 7°22'55"
D = 11°11'26"
T = 33.03'
L = 65.97'
R = 512.00'
PC STA = 9+30.75WIN
Y = 376672.080
X = 740649.527
PT STA = 9+96.71WIN
Y = 376641.987
X = 740708.177
BK = S66°31'43"E
AH = S59°08'48"E

C21
PI STA = 10+82.79WIN
Y = 376597.844
X = 740782.070
DELTA = 9°43'23"
D = 5°39'42"
T = 86.07'
L = 171.74'
R = 1012.00'
PC STA = 9+96.71WIN
Y = 376641.987
X = 740708.177
PT STA = 11+68.45WIN
Y = 376541.856
X = 740847.447
BK = S59°08'48"E
AH = S49°25'25"E







RAB SE ISLAND INSIDE EDGE OF PAVEMENT 'NIN'

C27
PI STA = 114+73.16NIN
Y = 376530.833
X = 740303.375
DELTA = 7°40'15"
D = 14°46'01"
T = 26.01'
L = 51.95'
R = 388.00'
PC STA = 114+47.15NIN
Y = 376505.309
X = 740298.359
PT STA = 114+99.10NIN
Y = 376555.459
X = 740311.752
BK = N11°07'02"E
AH = N18°47'18"E

C28
PI STA = 115+53.67NIN
Y = 376607.127
X = 740329.330
DELTA = 20°37'15"
D = 19°05'55"
T = 54.58'
L = 107.97'
R = 300.00'
PC STA = 114+99.10NIN
Y = 376555.459
X = 740311.752
PT STA = 116+07.07NIN
Y = 376649.294
X = 740363.977
BK = N18°47'18"E
AH = N39°24'33"E

RAB SW ISLAND INSIDE EDGE OF PAVEMENT 'EIN'

C22
PI STA = 222+88.69EIN
Y = 376976.603
X = 740219.881
DELTA = 3°30'58"
D = 5°39'42"
T = 31.06'
L = 62.10'
R = 1012.00'
PC STA = 222+57.63EIN
Y = 376998.215
X = 740197.572
PT STA = 223+19.73EIN
Y = 376956.399
X = 740243.472
BK = S45°54'28"E
AH = S49°25'25"E

C23
PI STA = 224+17.23EIN
Y = 376892.981
X = 740317.526
DELTA = 11°12'03"
D = 19°05'55"
T = 29.42'
L = 58.65'
R = 300.00'
PC STA = 223+87.81EIN
Y = 376912.116
X = 740295.182
PT STA = 224+46.46EIN
Y = 376869.870
X = 740335.727
BK = S49°25'25"E
AH = S38°13'22"E

C24
PI STA = 224+83.73EIN
Y = 376840.593
X = 740358.785
DELTA = 44°59'13"
D = 63°39'43"
T = 37.27'
L = 70.67'
R = 90.00'
PC STA = 224+46.46EIN
Y = 376869.870
X = 740335.727
PT STA = 225+17.12EIN
Y = 376803.585
X = 740354.396
BK = S38°13'22"E
AH = S06°45'51"W

C25
PI STA = 225+68.19EIN
Y = 376752.872
X = 740348.381
DELTA = 19°19'17"
D = 19°05'55"
T = 51.07'
L = 101.17'
R = 300.00'
PC STA = 225+17.12EIN
Y = 376803.585
X = 740354.396
PT STA = 226+18.29EIN
Y = 376707.005
X = 740325.925
BK = S06°45'51"W
AH = S26°05'08"W

C26
PI STA = 227+33.31EIN
Y = 376603.699
X = 740275.348
DELTA = 7°59'48"
D = 14°19'26"
T = 27.96'
L = 55.83'
R = 400.00'
PC STA = 227+05.36EIN
Y = 376628.810
X = 740287.642
PT STA = 227+61.18EIN
Y = 376577.123
X = 740266.667
BK = S26°05'08"W
AH = S18°05'20"W

RAB SE ISLAND INSIDE EDGE OF PAVEMENT 'NIN'

C29
PI STA = 116+48.44NIN
Y = 376681.256
X = 740390.240
DELTA = 49°22'17"
D = 63°39'43"
T = 41.37'
L = 77.55'
R = 90.00'
PC STA = 116+07.07NIN
Y = 376649.294
X = 740363.977
PT STA = 116+84.62NIN
Y = 376682.136
X = 740431.599
BK = N39°24'33"E
AH = N88°46'50"E

C30
PI STA = 117+20.60NIN
Y = 376682.902
X = 740467.574
DELTA = 13°40'44"
D = 19°05'55"
T = 35.98'
L = 71.62'
R = 300.00'
PC STA = 116+84.62NIN
Y = 376682.136
X = 740431.599
PT STA = 117+56.24NIN
Y = 376675.139
X = 740502.709
BK = N88°46'50"E
AH = S77°32'25"E

C31
PI STA = 118+81.45NIN
Y = 376648.126
X = 740624.965
DELTA = 28°07'00"
D = 11°27'33"
T = 125.21'
L = 245.36'
R = 500.00'
PC STA = 117+56.24NIN
Y = 376675.139
X = 740502.709
PT STA = 120+01.61NIN
Y = 376566.685
X = 740720.063
BK = S77°32'25"E
AH = S49°25'25"E

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	ALIGNMENT DIAGRAM	SHEET 150	E

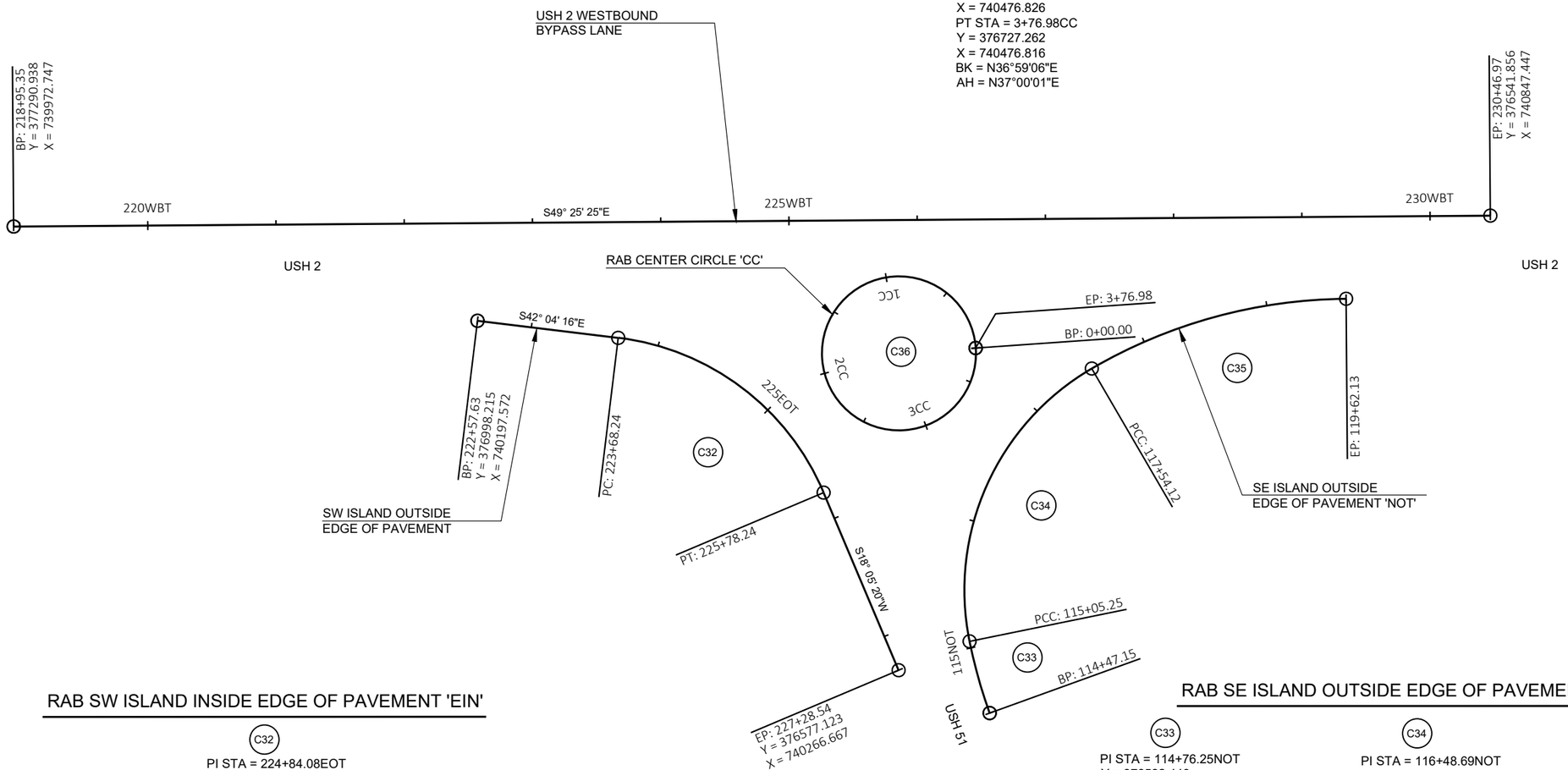
FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\027204-AD.DWG
LAYOUT NAME - 027204-ad
PLOT DATE : 8/31/2020 10:40 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2

RAB CENTER CIRCLE 'CC'

C36

PI STA = -0+00.01CC
Y = 376727.269
X = 740476.821
DELTA = 359°59'05"
D = 95°29'35"
T = 0.01'
L = 376.98'
R = 60.00'
PC STA = 0+00.00CC
Y = 376727.275
X = 740476.826
PT STA = 3+76.98CC
Y = 376727.262
X = 740476.816
BK = N36°59'06"E
AH = N37°00'01"E



RAB SW ISLAND INSIDE EDGE OF PAVEMENT 'EIN'

C32

PI STA = 224+84.08EOT
Y = 376830.118
X = 740349.305
DELTA = 60°09'36"
D = 28°38'52"
T = 115.84'
L = 210.00'
R = 200.00'
PC STA = 223+68.24EOT
Y = 376916.110
X = 740271.685
PT STA = 225+78.24EOT
Y = 376720.001
X = 740313.337
BK = S42°04'16"E
AH = S18°05'20"W

RAB SE ISLAND OUTSIDE EDGE OF PAVEMENT 'NOT'

C33

PI STA = 114+76.25NOT
Y = 376532.449
X = 740308.866
DELTA = 8°19'22"
D = 14°19'26"
T = 29.10'
L = 58.10'
R = 400.00'
PC STA = 114+47.15NOT
Y = 376505.309
X = 740298.359
PT STA = 115+05.25NOT
Y = 376557.783
X = 740323.192
BK = N21°09'49"E
AH = N29°29'11"E

C34

PI STA = 116+48.69NOT
Y = 376682.637
X = 740393.792
DELTA = 71°17'36"
D = 28°38'52"
T = 143.43'
L = 248.86'
R = 200.00'
PC STA = 115+05.25NOT
Y = 376557.783
X = 740323.192
PT STA = 117+54.12NOT
Y = 376655.810
X = 740534.693
BK = N29°29'11"E
AH = S79°13'13"E

C35

PI STA = 118+60.53NOT
Y = 376635.906
X = 740639.234
DELTA = 29°47'48"
D = 14°19'26"
T = 106.42'
L = 208.02'
R = 400.00'
PC STA = 117+54.12NOT
Y = 376655.810
X = 740534.693
PT STA = 119+62.13NOT
Y = 376566.685
X = 740720.063
BK = S79°13'13"E
AH = S49°25'25"E

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	ALIGNMENT DIAGRAM	SHEET 151	E

2

SE OUTSIDE EDGE OF PAVEMENT 'SE'

C39

PI STA = 400+51.21SE
Y = 376454.812
X = 740295.675
DELTA = 19°45'43"
D = 19°29'18"
T = 51.21'
L = 101.40'
R = 294.00'
PC STA = 400+00.00SE
Y = 376403.770
X = 740291.518
PT STA = 401+01.40SE
Y = 376501.442
X = 740316.844
BK = N04°39'19"E
AH = N24°25'02"E

C40

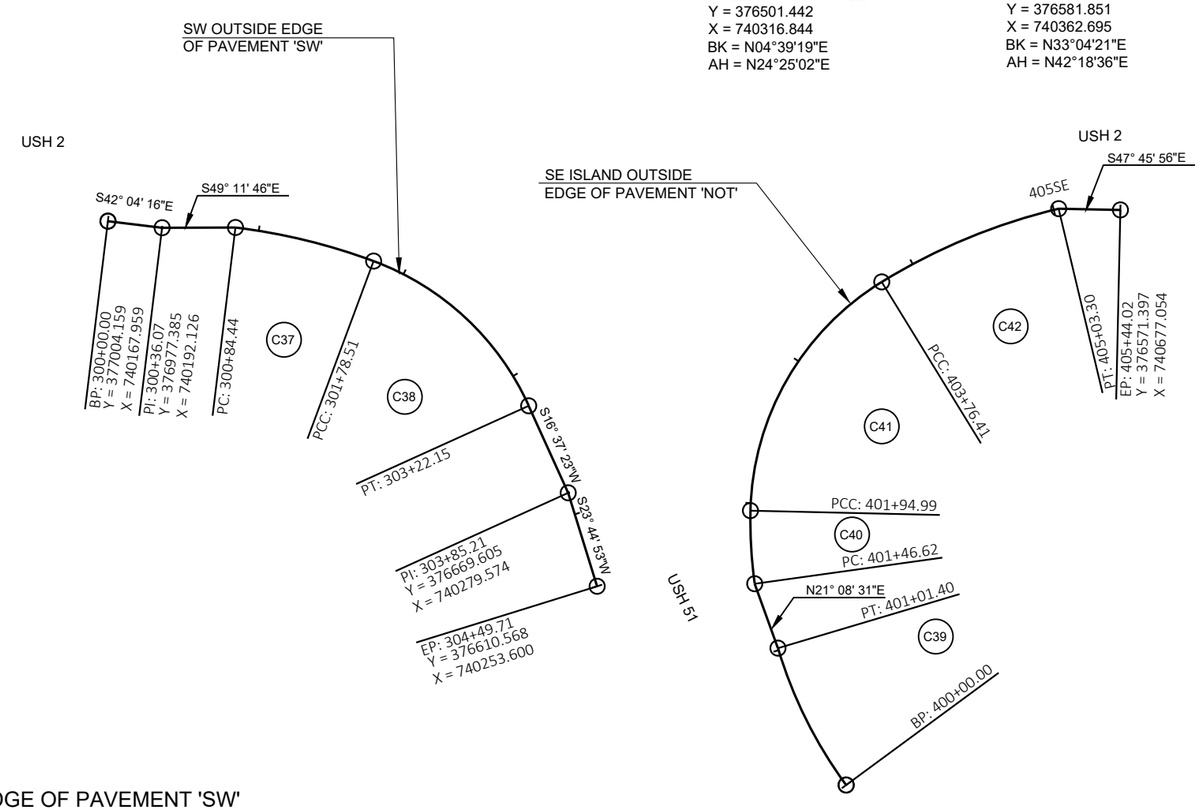
PI STA = 401+70.86SE
Y = 376563.928
X = 740346.380
DELTA = 9°14'16"
D = 19°05'55"
T = 24.24'
L = 48.37'
R = 300.00'
PC STA = 401+46.62SE
Y = 376543.618
X = 740333.154
PT STA = 401+94.99SE
Y = 376581.851
X = 740362.695
BK = N33°04'21"E
AH = N42°18'36"E

C41

PI STA = 402+94.04SE
Y = 376655.099
X = 740429.368
DELTA = 57°06'42"
D = 31°28'52"
T = 99.05'
L = 181.42'
R = 182.00'
PC STA = 401+94.99SE
Y = 376581.851
X = 740362.695
PT STA = 403+76.41SE
Y = 376638.884
X = 740527.080
BK = N42°18'36"E
AH = S80°34'41"E

C42

PI STA = 404+40.39SE
Y = 376628.410
X = 740590.200
DELTA = 18°10'33"
D = 14°19'26"
T = 63.98'
L = 126.89'
R = 400.00'
PC STA = 403+76.41SE
Y = 376638.884
X = 740527.080
PT STA = 405+03.30SE
Y = 376598.769
X = 740646.903
BK = S80°34'41"E
AH = S62°24'08"E



SW OUTSIDE EDGE OF PAVEMENT 'SW'

C37

PI STA = 301+31.69SW
Y = 376910.700
X = 740260.402
DELTA = 13°28'25"
D = 14°19'26"
T = 47.25'
L = 94.06'
R = 400.00'
PC STA = 300+84.44SW
Y = 376945.774
X = 740228.743
PT STA = 301+78.51SW
Y = 376869.214
X = 740283.019
BK = S42°04'16"E
AH = S28°35'50"E

C38

PI STA = 302+54.30SW
Y = 376802.664
X = 740319.299
DELTA = 45°13'13"
D = 31°28'52"
T = 75.80'
L = 143.64'
R = 182.00'
PC STA = 301+78.51SW
Y = 376869.214
X = 740283.019
PT STA = 303+22.15SW
Y = 376730.035
X = 740297.616
BK = S28°35'50"E
AH = S16°37'23"W

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	ALIGNMENT DIAGRAM	SHEET 152	E

2

USH 51 TEMPORARY ROAD CONSTRUCTION R/L

C43
PI STA = 5+32.21'TRN'
Y = 375274.357
X = 740332.580
DELTA = 17°52'49"
D = 3°30'16"
T = 257.21'
L = 510.23'
R = 1635.00'
PC STA = 2+75.00'TRN'
Y = 375035.297
X = 740427.483
PT STA = 7+85.23'TRN'
Y = 375531.007
X = 740315.660
BK = N21°39'08"W
AH = N03°46'19"W

C44
PI STA = 8+92.48'TRN'
Y = 375638.026
X = 740308.604
DELTA = 16°37'18"
D = 11°07'31"
T = 75.23'
L = 149.40'
R = 515.00'
PC STA = 8+17.26'TRN'
Y = 375562.960
X = 740313.553
PT STA = 9+66.66'TRN'
Y = 375708.540
X = 740282.389
BK = N03°46'19"W
AH = N20°23'37"W

C45
PI STA = 10+44.57'TRN'
Y = 375781.569
X = 740255.239
DELTA = 16°47'50"
D = 11°07'31"
T = 76.04'
L = 150.98'
R = 515.00'
PC STA = 9+68.53'TRN'
Y = 375710.300
X = 740281.735
PT STA = 11+19.51'TRN'
Y = 375857.455
X = 740250.470
BK = N20°23'37"W
AH = N03°35'47"W

C46
PI STA = 18+51.88'TRN'
Y = 376588.382
X = 740204.529
DELTA = 13°19'33"
D = 11°07'31"
T = 60.16'
L = 119.78'
R = 515.00'
PC STA = 17+91.72'TRN'
Y = 376528.339
X = 740208.303
PT STA = 19+11.50'TRN'
Y = 376645.938
X = 740187.018
BK = N03°35'47"W
AH = N16°55'21"W

C47
PI STA = 20+21.43'TRN'
Y = 376751.103
X = 740155.021
DELTA = 6°52'03"
D = 3°07'39"
T = 109.93'
L = 219.59'
R = 1832.00'
PC STA = 19+11.50'TRN'
Y = 376645.938
X = 740187.018
PT STA = 21+31.09'TRN'
Y = 376851.688
X = 740110.679
BK = N16°55'21"W
AH = N23°47'24"W

C48
PI STA = 22+49.60'TRN'
Y = 376960.130
X = 740062.873
DELTA = 25°55'07"
D = 11°07'31"
T = 118.51'
L = 232.97'
R = 515.00'
PC STA = 21+31.09'TRN'
Y = 376851.688
X = 740110.679
PT STA = 23+64.06'TRN'
Y = 377036.769
X = 739972.476
BK = N23°47'24"W
AH = N49°42'31"W

C49
PI STA = 27+15.61'TRN'
Y = 377264.108
X = 739704.325
DELTA = 90°22'15"
D = 28°38'52"
T = 201.30'
L = 315.45'
R = 200.00'
PC STA = 25+14.31'TRN'
Y = 377133.933
X = 739857.869
PT STA = 28+29.76'TRN'
Y = 377416.806
X = 739835.491
BK = N49°42'31"W
AH = N40°39'44"E

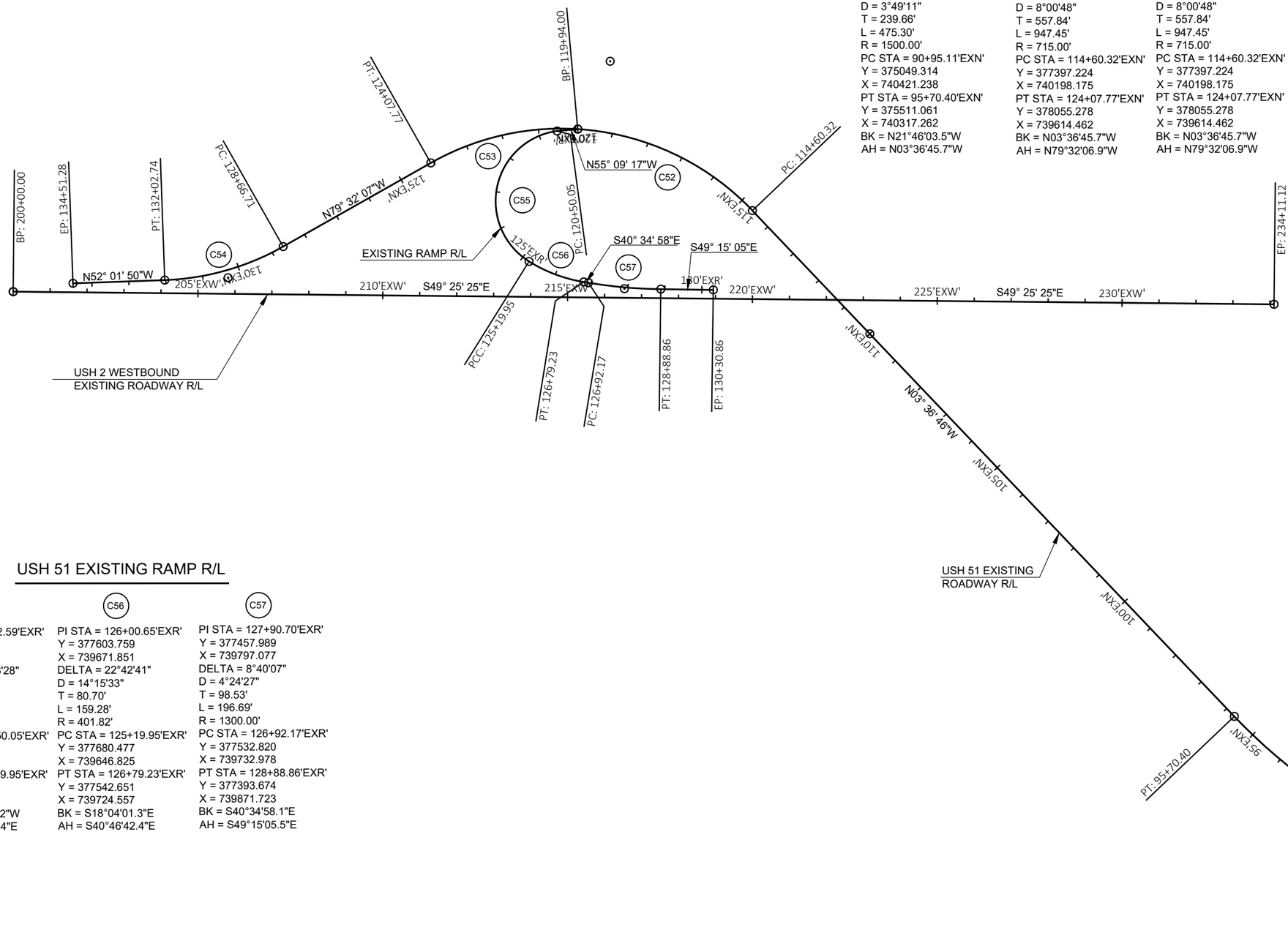
USH 2 TEMPORARY WESTBOUND CONSTRUCTION R/L

C50
PI STA = 134+90.83'TRW'
Y = 375670.474
X = 741864.521
DELTA = 40°24'00"
D = 2°21'00"
T = 897.01'
L = 1719.06'
R = 2438.00'
PC STA = 125+93.82'TRW'
Y = 376253.537
X = 741182.861
PT STA = 143+12.88'TRW'
Y = 375668.244
X = 742761.525
BK = S49°27'28"E
AH = S89°51'27"E

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	ALIGNMENT DIAGRAM-TEMPORARY ALIGNMENTS	SHEET 153	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\027207-AD.DWG
LAYOUT NAME - 027207-ad
PLOT DATE : 8/31/2020 10:40 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:300 FT

2



USH 51 EXISTING ROADWAY R/L

C51	C52	C53	C54
PI STA = 93+34.76'EXN'	PI STA = 120+18.16'EXN'	PI STA = 120+18.16'EXN'	PI STA = 130+38.03'EXN'
Y = 375271.881	Y = 377953.957	Y = 377953.957	Y = 378169.753
X = 740332.363	X = 740163.024	X = 740163.024	X = 738994.682
DELTA = 18°09'18"	DELTA = 75°55'21"	DELTA = 75°55'21"	DELTA = 27°30'17"
D = 3°49'11"	D = 8°00'48"	D = 8°00'48"	D = 8°11'06"
T = 239.66'	T = 557.84'	T = 557.84'	T = 171.32'
L = 475.30'	L = 947.45'	L = 947.45'	L = 336.03'
R = 1500.00'	R = 715.00'	R = 715.00'	R = 700.00'
PC STA = 90+95.11'EXN'	PC STA = 114+60.32'EXN'	PC STA = 114+60.32'EXN'	PC STA = 128+66.71'EXN'
Y = 375049.314	Y = 377397.224	Y = 377397.224	Y = 378138.637
X = 740421.238	X = 740198.175	X = 740198.175	X = 739163.151
PT STA = 95+70.40'EXN'	PT STA = 124+07.77'EXN'	PT STA = 124+07.77'EXN'	PT STA = 132+02.74'EXN'
Y = 375511.061	Y = 378055.278	Y = 378055.278	Y = 378275.155
X = 740317.262	X = 739614.462	X = 739614.462	X = 738859.625
BK = N21°46'03.5"W	BK = N03°36'45.7"W	BK = N03°36'45.7"W	BK = N79°32'06.9"W
AH = N03°36'45.7"W	AH = N79°32'06.9"W	AH = N79°32'06.9"W	AH = N52°01'50.3"W

USH 51 EXISTING RAMP R/L

C55	C56	C57
PI STA = 125+82.59'EXR'	PI STA = 126+00.65'EXR'	PI STA = 127+90.70'EXR'
Y = 378186.842	Y = 377603.759	Y = 377457.989
X = 739481.924	X = 739671.851	X = 739797.077
DELTA = 140°23'28"	DELTA = 22°42'41"	DELTA = 8°40'07"
D = 29°52'37"	D = 14°15'33"	D = 4°24'27"
T = 532.54'	T = 80.70'	T = 98.53'
L = 469.90'	L = 159.28'	L = 196.69'
R = 191.77'	R = 401.82'	R = 1300.00'
PC STA = 120+50.05'EXR'	PC STA = 125+19.95'EXR'	PC STA = 126+92.17'EXR'
Y = 377901.862	Y = 377680.477	Y = 377532.820
X = 739931.795	X = 739646.825	X = 739732.978
PT STA = 125+19.95'EXR'	PT STA = 126+79.23'EXR'	PT STA = 128+88.86'EXR'
Y = 377680.477	Y = 377542.651	Y = 377393.674
X = 739646.825	X = 739724.557	X = 739871.723
BK = N57°38'49.2"W	BK = S18°04'01.3"E	BK = S40°34'58.1"E
AH = S18°02'17.4"E	AH = S40°46'42.4"E	AH = S49°15'05.5"E

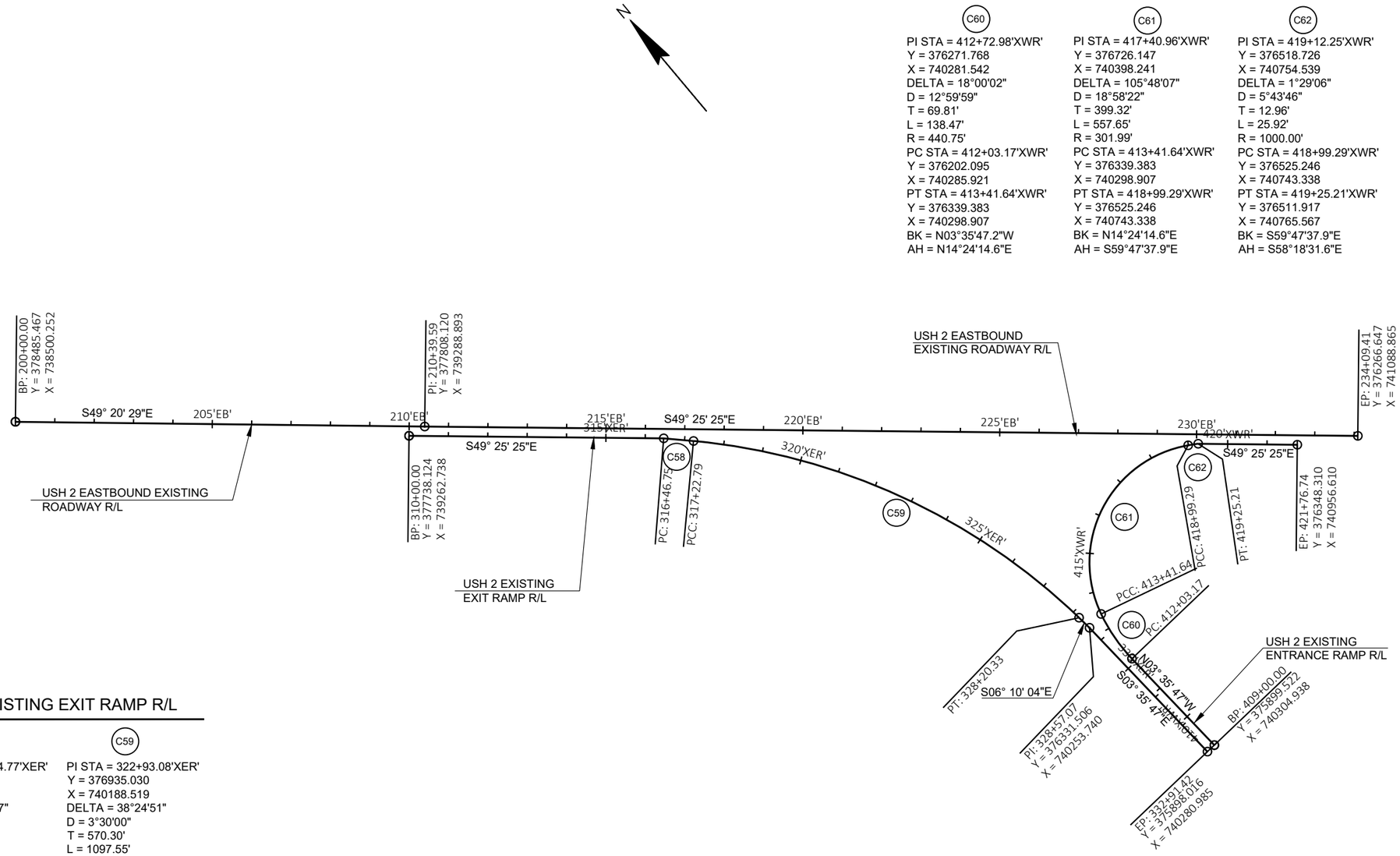
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	ALIGNMENT DIAGRAM-EXISTING ALIGNMENTS	SHEET 154	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\027208-AD.DWG
LAYOUT NAME - 027208-ad
PLOT DATE : 8/31/2020 10:40 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:300 FT
WISDOT/CADDS SHEET 42

2

USH 2 EXISTING ENTRANCE RAMP R/L

C60	C61	C62
PI STA = 412+72.98'XWR'	PI STA = 417+40.96'XWR'	PI STA = 419+12.25'XWR'
Y = 376271.768	Y = 376726.147	Y = 376518.726
X = 740281.542	X = 740398.241	X = 740754.539
DELTA = 18°00'02"	DELTA = 105°48'07"	DELTA = 1°29'06"
D = 12°59'59"	D = 18°58'22"	D = 5°43'46"
T = 69.81'	T = 399.32'	T = 12.96'
L = 138.47'	L = 557.65'	L = 25.92'
R = 440.75'	R = 301.99'	R = 1000.00'
PC STA = 412+03.17'XWR'	PC STA = 413+41.64'XWR'	PC STA = 418+99.29'XWR'
Y = 376202.095	Y = 376339.383	Y = 376525.246
X = 740285.921	X = 740298.907	X = 740743.338
PT STA = 413+41.64'XWR'	PT STA = 418+99.29'XWR'	PT STA = 419+25.21'XWR'
Y = 376339.383	Y = 376525.246	Y = 376511.917
X = 740298.907	X = 740743.338	X = 740765.567
BK = N03°35'47.2"W	BK = N14°24'14.6"E	BK = S59°47'37.9"E
AH = N14°24'14.6"E	AH = S59°47'37.9"E	AH = S58°18'31.6"E



USH 51 EXISTING EXIT RAMP R/L

C58	C59
PI STA = 316+84.77'XER'	PI STA = 322+93.08'XER'
Y = 377368.301	Y = 376935.030
X = 739761.524	X = 740188.519
DELTA = 0°52'17"	DELTA = 38°24'51"
D = 1°08'45"	D = 3°30'00"
T = 38.02'	T = 570.30'
L = 76.04'	L = 1097.55'
R = 5000.00'	R = 1637.02'
PC STA = 316+46.75'XER'	PC STA = 317+22.79'XER'
Y = 377394.971	Y = 377341.222
X = 739734.429	X = 739788.210
PT STA = 317+22.79'XER'	PT STA = 328+20.33'XER'
Y = 377341.222	Y = 376368.033
X = 739788.210	X = 740249.792
BK = S45°27'11.9"E	BK = S44°34'55.2"E
AH = S44°34'55.2"E	AH = S06°10'04.1"E

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	ALIGNMENT DIAGRAM-EXISTING ALIGNMENTS	SHEET 155	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\027209-AD.DWG
LAYOUT NAME - 027209-ad
PLOT DATE : 8/31/2020 10:41 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:300 FT
WISDOT/CADDS SHEET 42

1175-21-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	10.000	10.000
0004	201.0115	Clearing	ACRE	1.600	1.600
0006	201.0205	Grubbing	STA	10.000	10.000
0008	201.0215	Grubbing	ACRE	1.600	1.600
0010	203.0100	Removing Small Pipe Culverts	EACH	4.000	4.000
0012	203.0200	Removing Old Structure (station) 01. STA 111+00 EXN	LS	1.000	1.000
0014	204.0100	Removing Concrete Pavement	SY	21,840.000	21,840.000
0016	204.0110	Removing Asphaltic Surface	SY	24,200.000	24,200.000
0018	204.0115	Removing Asphaltic Surface Butt Joints	SY	145.000	145.000
0020	204.0120	Removing Asphaltic Surface Milling	SY	25,045.000	25,045.000
0022	204.0150	Removing Curb & Gutter	LF	130.000	130.000
0024	204.0165	Removing Guardrail	LF	1,500.000	1,500.000
0026	204.0180	Removing Delineators and Markers	EACH	50.000	50.000
0028	204.0195	Removing Concrete Bases	EACH	1.000	1.000
0030	204.9060.S	Removing (item description) 01. Utility Cabinet	EACH	1.000	1.000
0032	205.0100	Excavation Common	CY	61,713.000	61,713.000
0034	205.0200	Excavation Rock	CY	9,843.000	9,843.000
0036	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1175-21-71	LS	1.000	1.000
0038	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	19.000	19.000
0040	213.0100	Finishing Roadway (project) 01. 1175-21-71	EACH	1.000	1.000
0042	214.0100	Obliterating Old Road	STA	18.000	18.000
0044	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,705.000	3,705.000
0046	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	37,710.000	37,710.000
0048	305.0500	Shaping Shoulders	STA	132.000	132.000
0050	305.0504.S	Hauling Excess Shoulder Material	CY	2,420.000	2,420.000
0052	405.0100	Coloring Concrete WisDOT Red	CY	800.000	800.000
0054	416.0512	Concrete Truck Apron 12-Inch	SY	2,390.000	2,390.000
0056	450.4000	HMA Cold Weather Paving	TON	700.000	700.000
0058	455.0605	Tack Coat	GAL	4,365.000	4,365.000
0060	460.2000	Incentive Density HMA Pavement	DOL	5,810.000	5,810.000
0062	460.6243	HMA Pavement 3 MT 58-34 S	TON	4,280.000	4,280.000
0064	460.6644	HMA Pavement 4 MT 58-34 V	TON	4,795.000	4,795.000
0066	465.0105	Asphaltic Surface	TON	80.000	80.000
0068	465.0110	Asphaltic Surface Patching	TON	100.000	100.000
0070	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	60.000	60.000
0072	465.0125	Asphaltic Surface Temporary	TON	1,950.000	1,950.000
0074	465.0310	Asphaltic Curb	LF	730.000	730.000
0076	465.0315	Asphaltic Flumes	SY	15.000	15.000
0078	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	21,420.000	21,420.000

1175-21-71

Line	Item	Item Description	Unit	Total	Qty
0080	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	1,220.000	1,220.000
0082	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	2.000	2.000
0084	520.2018	Culvert Pipe Temporary 18-Inch	LF	286.000	286.000
0086	520.2024	Culvert Pipe Temporary 24-Inch	LF	475.000	475.000
0088	520.2036	Culvert Pipe Temporary 36-Inch	LF	120.000	120.000
0090	520.3318	Culvert Pipe Class III-A 18-Inch	LF	94.000	94.000
0092	522.1012	Apron Endwalls for Culvert Pipe Reinforced Concrete 12-Inch	EACH	1.000	1.000
0094	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	3.000	3.000
0096	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	3.000	3.000
0098	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0100	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	205.000	205.000
0102	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	1,438.000	1,438.000
0104	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	3,618.000	3,618.000
0106	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	LF	365.000	365.000
0108	601.0600	Concrete Curb Pedestrian	LF	370.000	370.000
0110	602.0415	Concrete Sidewalk 6-Inch	SF	33,035.000	33,035.000
0112	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	440.000	440.000
0114	603.8000	Concrete Barrier Temporary Precast Delivered	LF	575.000	575.000
0116	603.8125	Concrete Barrier Temporary Precast Installed	LF	575.000	575.000
0118	603.8500	Anchoring Concrete Barrier Temporary Precast	LF	575.000	575.000
0120	606.0200	Riprap Medium	CY	30.000	30.000
0122	608.0005	Storm Sewer Rock Excavation	CY	485.000	485.000
0124	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	433.000	433.000
0126	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	327.000	327.000
0128	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	527.000	527.000
0130	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	148.000	148.000
0132	611.0430	Reconstructing Inlets	EACH	4.000	4.000
0134	611.0627	Inlet Covers Type HM	EACH	33.000	33.000
0136	611.0652	Inlet Covers Type T	EACH	2.000	2.000
0138	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
0140	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000
0142	611.3004	Inlets 4-FT Diameter	EACH	11.000	11.000
0144	611.3225	Inlets 2x2.5-FT	EACH	2.000	2.000

1175-21-71

Line	Item	Item Description	Unit	Total	Qty
0146	611.3230	Inlets 2x3-FT	EACH	20.000	20.000
0148	611.8120.S	Cover Plates Temporary	EACH	4.000	4.000
0150	614.0010	Barrier System Grading Shaping Finishing	EACH	1.000	1.000
0152	614.0200	Steel Thrie Beam Structure Approach	LF	35.000	35.000
0154	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	1.000	1.000
0156	614.0230	Steel Thrie Beam	LF	10.000	10.000
0158	614.0360	Steel Plate Beam Guard Temporary	LF	113.000	113.000
0160	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	1.000	1.000
0162	614.0380	Steel Plate Beam Guard Energy Absorbing Terminal Temporary	EACH	1.000	1.000
0164	614.0905	Crash Cushions Temporary	EACH	4.000	4.000
0166	614.0925	Salvaged Guardrail End Treatments	EACH	1.000	1.000
0168	614.2300	MGS Guardrail 3	LF	50.000	50.000
0170	614.2500	MGS Thrie Beam Transition	LF	39.400	39.400
0172	614.2610	MGS Guardrail Terminal EAT	EACH	1.000	1.000
0174	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1175-21-71	EACH	1.000	1.000
0176	619.1000	Mobilization	EACH	1.000	1.000
0178	620.0300	Concrete Median Sloped Nose	SF	225.000	225.000
0180	624.0100	Water	MGAL	435.000	435.000
0182	625.0100	Topsoil	SY	64,120.000	64,120.000
0184	625.0105	Topsoil	CY	33.000	33.000
0186	627.0200	Mulching	SY	30,500.000	30,500.000
0188	628.1504	Silt Fence	LF	7,000.000	7,000.000
0190	628.1520	Silt Fence Maintenance	LF	7,000.000	7,000.000
0192	628.1905	Mobilizations Erosion Control	EACH	14.000	14.000
0194	628.1910	Mobilizations Emergency Erosion Control	EACH	11.000	11.000
0196	628.2004	Erosion Mat Class I Type B	SY	37,900.000	37,900.000
0198	628.2006	Erosion Mat Urban Class I Type A	SY	960.000	960.000
0200	628.2027	Erosion Mat Class II Type C	SY	6,560.000	6,560.000
0202	628.7005	Inlet Protection Type A	EACH	45.000	45.000
0204	628.7010	Inlet Protection Type B	EACH	5.000	5.000
0206	628.7015	Inlet Protection Type C	EACH	40.000	40.000
0208	628.7504	Temporary Ditch Checks	LF	630.000	630.000
0210	628.7555	Culvert Pipe Checks	EACH	45.000	45.000
0212	628.7560	Tracking Pads	EACH	8.000	8.000
0214	628.7570	Rock Bags	EACH	60.000	60.000
0216	629.0210	Fertilizer Type B	CWT	70.000	70.000
0218	630.0120	Seeding Mixture No. 20	LB	2,835.000	2,835.000
0220	630.0140	Seeding Mixture No. 40	LB	30.000	30.000

1175-21-71

Line	Item	Item Description	Unit	Total	Qty
0222	630.0200	Seeding Temporary	LB	150.000	150.000
0224	630.0500	Seed Water	MGAL	990.000	990.000
0226	632.0201	Shrubs (species) (size) (root) 01. Viburnum Pruinfolium, 48" HT, Blackhaw Viburnum	EACH	3.000	3.000
0228	632.9101	Landscape Planting Surveillance and Care Cycles	EACH	10.000	10.000
0230	633.5200	Markers Culvert End	EACH	9.000	9.000
0232	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	3.000	3.000
0234	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	51.000	51.000
0236	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	18.000	18.000
0238	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	4.000	4.000
0240	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	3.000	3.000
0242	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	3.000	3.000
0244	637.2210	Signs Type II Reflective H	SF	518.250	518.250
0246	637.2230	Signs Type II Reflective F	SF	113.250	113.250
0248	638.2102	Moving Signs Type II	EACH	6.000	6.000
0250	638.2602	Removing Signs Type II	EACH	91.000	91.000
0252	638.3000	Removing Small Sign Supports	EACH	101.000	101.000
0254	638.4000	Moving Small Sign Supports	EACH	4.000	4.000
0256	642.5201	Field Office Type C	EACH	1.000	1.000
0258	643.0300	Traffic Control Drums	DAY	49,000.000	49,000.000
0260	643.0420	Traffic Control Barricades Type III	DAY	10,200.000	10,200.000
0262	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	400.000	400.000
0264	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	400.000	400.000
0266	643.0705	Traffic Control Warning Lights Type A	DAY	13,700.000	13,700.000
0268	643.0715	Traffic Control Warning Lights Type C	DAY	7,100.000	7,100.000
0270	643.0800	Traffic Control Arrow Boards	DAY	340.000	340.000
0272	643.0900	Traffic Control Signs	DAY	16,000.000	16,000.000
0274	643.0920	Traffic Control Covering Signs Type II	EACH	4.000	4.000
0276	643.1050	Traffic Control Signs PCMS	DAY	140.000	140.000
0278	643.1070	Traffic Control Cones 42-Inch	DAY	2,500.000	2,500.000
0280	643.5000	Traffic Control	EACH	1.000	1.000
0282	645.0120	Geotextile Type HR	SY	30.000	30.000
0284	646.1020	Marking Line Epoxy 4-Inch	LF	27,300.000	27,300.000
0286	646.3020	Marking Line Epoxy 8-Inch	LF	4,490.000	4,490.000
0288	646.5020	Marking Arrow Epoxy	EACH	7.000	7.000
0290	646.5120	Marking Word Epoxy	EACH	3.000	3.000
0292	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	52.000	52.000
0294	646.7120	Marking Diagonal Epoxy 12-Inch	LF	220.000	220.000
0296	646.7220	Marking Chevron Epoxy 24-Inch	LF	75.000	75.000
0298	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	295.000	295.000

1175-21-71

Line	Item	Item Description	Unit	Total	Qty
0300	646.8120	Marking Curb Epoxy	LF	52.000	52.000
0302	646.8220	Marking Island Nose Epoxy	EACH	25.000	25.000
0304	646.9000	Marking Removal Line 4-Inch	LF	1,170.000	1,170.000
0306	646.9100	Marking Removal Line 8-Inch	LF	1,100.000	1,100.000
0308	646.9200	Marking Removal Line Wide	LF	480.000	480.000
0310	649.0105	Temporary Marking Line Paint 4-Inch	LF	29,770.000	29,770.000
0312	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	1,080.000	1,080.000
0314	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	16,885.000	16,885.000
0316	649.0205	Temporary Marking Line Paint 8-Inch	LF	750.000	750.000
0318	649.0505	Temporary Marking Arrow Paint	EACH	6.000	6.000
0320	649.0605	Temporary Marking Word Paint	EACH	2.000	2.000
0322	649.0805	Temporary Marking Stop Line Paint 18-Inch	LF	80.000	80.000
0324	649.0905	Temporary Marking Diagonal Paint 12-Inch	LF	295.000	295.000
0326	649.0960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	2,350.000	2,350.000
0328	650.4000	Construction Staking Storm Sewer	EACH	44.000	44.000
0330	650.4500	Construction Staking Subgrade	LF	9,301.000	9,301.000
0332	650.5000	Construction Staking Base	LF	9,301.000	9,301.000
0334	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,988.000	3,988.000
0336	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0338	650.7000	Construction Staking Concrete Pavement	LF	1,815.000	1,815.000
0340	650.8000	Construction Staking Resurfacing Reference	LF	9,245.000	9,245.000
0342	650.8500	Construction Staking Electrical Installations (project) 01. 1175-21-71	LS	1.000	1.000
0344	650.9000	Construction Staking Curb Ramps	EACH	22.000	22.000
0346	650.9910	Construction Staking Supplemental Control (project) 01. 1175-21-71	LS	1.000	1.000
0348	650.9920	Construction Staking Slope Stakes	LF	6,760.000	6,760.000
0350	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	2,196.000	2,196.000
0352	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	60.000	60.000
0354	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	18.000	18.000
0356	654.0105	Concrete Bases Type 5	EACH	14.000	14.000
0358	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0360	655.0610	Electrical Wire Lighting 12 AWG	LF	3,240.000	3,240.000
0362	655.0620	Electrical Wire Lighting 8 AWG	LF	7,708.000	7,708.000
0364	656.0200	Electrical Service Meter Breaker Pedestal (location) 01. LCC A	LS	1.000	1.000
0366	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	14.000	14.000
0368	657.0322	Poles Type 5-Aluminum	EACH	14.000	14.000
0370	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	23.000	23.000
0372	659.1125	Luminaires Utility LED C	EACH	23.000	23.000

1175-21-71

Line	Item	Item Description	Unit	Total	Qty
0374	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0376	690.0150	Sawing Asphalt	LF	13,850.000	13,850.000
0378	690.0250	Sawing Concrete	LF	1,950.000	1,950.000
0380	740.0440	Incentive IRI Ride	DOL	5,730.000	5,730.000
0382	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,000.000	2,000.000
0384	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,260.000	1,260.000
0386	SPV.0035	Special 01. Excavation Waste	CY	59,011.000	59,011.000
0388	SPV.0060	Special 01. Inlets 2x3-FT Temporary	EACH	2.000	2.000
0390	SPV.0060	Special 02. Storm Sewer Plug 18-Inch	EACH	1.000	1.000
0392	SPV.0060	Special 03. Apron Endwalls Temporary 18-Inch	EACH	1.000	1.000
0394	SPV.0060	Special 04. Apron Endwalls Temporary 24-Inch	EACH	2.000	2.000
0396	SPV.0060	Special 05. Apron Endwalls Temporary 36-Inch	EACH	2.000	2.000
0398	SPV.0060	Special 30. Perennials, Little Bluestem, CG, #1	EACH	65.000	65.000
0400	SPV.0060	Special 31. Perennials, Prairie Blazing Star, CG, #1	EACH	46.000	46.000
0402	SPV.0060	Special 32. Perennials, Prairie Drop Seed, CG, #1	EACH	287.000	287.000
0404	SPV.0060	Special 33. Perennials, Showy Goldenrod, CG, #1	EACH	47.000	47.000
0406	SPV.0060	Special 40. Salvage, Store and Reinstall Lighting Unit	EACH	1.000	1.000
0408	SPV.0060	Special 41. Department Furnished-Contractor Installed Cellular Connector Nodes (LLC729)	EACH	23.000	23.000
0410	SPV.0090	Special 01. Concrete Curb Type G Modified	LF	168.000	168.000
0412	SPV.0165	Special 01. Stone Mulch Epoxied	SF	1,383.000	1,383.000
0414	SPV.0165	Special 02. Weed Barrier	SF	1,383.000	1,383.000

3

CLEARING AND GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0105 CLEARING STA	201.0115 CLEARING ACRE	201.0205 GRUBBING STA	201.0215 GRUBBING ACRE
STAGE 1								
0010	14+00	-	28+00	USH 51 TEMPORARY ROAD	-	0.6	-	0.6
				STAGE 1 SUBTOTALS	0	0.6	0	0.6
STAGE 2								
0010	222WB+00	-	224WB+00	USH 2, WB, LT	2	-	2	-
0010	226WBT+00	-	227WBT+00	USH 2, WB BYPASS, LT	1	-	1	-
0010	121+00	-	126+00	EXISTING USH 2WB-USH 51 SB EXIT	5	-	5	-
				STAGE 2 SUBTOTALS	8	0.0	8	0.0
STAGE 3								
0010	108NB+00	-	110NB+00	USH 51, NB, RT	2	-	2	-
0010	115NB+00	-	117NB+00	USH 51, NB	-	0.8	-	0.8
0010	221EB+50	-	223EB+00	USH 2, EB, RT	-	0.2	-	0.2
				STAGE 3 SUBTOTALS	2	1.0	2	1.0
				TOTAL 0010	10	1.6	10	1.6

REMOVING DRAINAGE

CATEGORY	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	REMARKS
STAGE 1				
0010	11TRN+00	USH 51 TEMPORARY ROAD	1	18-INCH CMP
		STAGE 1 SUBTOTALS	1	
STAGE 2				
0010	205WB+75	USH 2, WB, LT	1	30-INCH RCP
0010	214WB+00	USH 2, WB, LT	1	36-INCH RCP
			2	
STAGE 3				
0010	219EB+50	USH 2, EB, RT	1	36-INCH RCP
		STAGE 3 SUBTOTALS	1	
		TOTAL 0010	4	

REMOVING OLD STRUCTURE

CATEGORY	LOCATION	203.0200.01 111+00 LS
STAGE 2		
0020	NORTH HALF	0.5
	STAGE 2 SUBTOTAL	0.5
STAGE 3		
0020	SOUTH HALF	0.5
	STAGE 3 SUBTOTAL	0.5
	TOTAL 0010	1

3

REMOVING CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	204.0100 SY
STAGE 2					
0010	216+50	-	230+57	EXISTING USH 2, WB	3,320
0010	112+24	-	134+51	EXISTING USH 51 NB - USH 2 WB RAMP	4,815
0010	119+94	-	130+31	EXISTING USH 2 WB - USH 51 SB RAMP	1,745
				STAGE 2 SUBTOTALS	9,880
STAGE 3					
0010	218+05	-	231+00	EXISTING USH 2, EB	3,560
0010	99+58	-	109+70	EXISTING USH 51	3,055
0010	412+03	-	419+24	EXISTING USH 51 NB - USH 2 EB RAMP	1,370
				STAGE 3 SUBTOTALS	7,985
STAGE 4					
0010	100NB+76	-	114SB+60	USH 51, SB, LT	1,365
0010	215WB+15	-	216WB+50	USH 2, WB, LT	70
0010	210+60	-	326+60	EXISTING USH 2 EB - USH 51 SB RAMP	2,540
				STAGE 4 SUBTOTALS	3,975
				TOTAL 0010	21,840

NOTE: CONCRETE PAVEMENT UNDER EXISTING ASPHALTIC PAVEMENT

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	204.0110 ASPHALTIC SURFACE SY	204.0115 BUTT JOINTS SY	204.0120 MILLING SY	REMARKS
STAGE 1								
0010	10TRN+50			USH 51 TEMPORARY ROAD, RT	7	-	-	ASPHALTIC FLUME
0010	11TRN+50			USH 51 TEMPORARY ROAD, RT	6	-	-	ASPHALTIC FLUME
0010	11TRN+00			USH 51 TEMPORARY ROAD	302	-	-	EXISTING DRIVEWAY
				STAGE 1 SUBTOTALS	315	0	0	
STAGE 2								
0010	216+50	-	230+57	EXISTING USH 2, WB, LT & RT	1,786	-	-	EXISTING SHOULDER
0010	112+24	-	134+51	EXISTING USH 51 NB - USH 2 WB RAMP, LT & RT	1,724	-	-	EXISTING SHOULDER
0010	119+94	-	130+31	EXISTING USH 2 WB - USH 51 SB RAMP, LT & RT	670	-	-	EXISTING SHOULDER
				STAGE 2 SUBTOTALS	4,180	0	0	
STAGE 3								
0010	183EB+00	-	216EB+50	USH 2, EB	4,740	40	8,550	RESURFACING AND SHOULDER REMOVAL
0010	218+05		231+00	EXISTING USH 2, EB, LT & RT	1,870			EXISTING SHOULDER AND BYPASS LANE
0010	99+58		109+70	EXISTING USH 51, NB, LT & RT	380	-	-	EXISTING SHOULDER
0010	412+03		326+60	EXISTING USH 51 NB - USH 2 EB RAMP, LT & RT	820	-	-	EXISTING SHOULDER
0010				CENTER DR (SOUTH)	-	25	175	RESURFACING
				STAGE 3 SUBTOTALS	7,810	65	8,725	
STAGE 4								
0010	165EB+35	-	183EB+00	USH 2, EB	290	35	3,260	RESURFACING AND SHOULDER REMOVAL
0010	165EB+35	-	216WB+50	USH 2, WB	3,355	45	13,060	RESURFACING AND SHOULDER REMOVAL
0010	216WB+50	-	219WB+82	USH 2, WB, LT & RT	1,315	-	-	TEMPORARY CROSSOVER, TURN LANE, AND BYPASS LANE
0010	224WBT+20	-	228WBT+40	USH 2, WB BYPASS LANE, RT	375	-	-	TEMPORARY SHOULDER
0010				USH 51 BYPASS AND EXISTING RAMP	6,560	-	-	
				STAGE 4 SUBTOTALS	11,895	80	16,320	
				TOTAL 0010	24,200	145	25,045	

NOTE: ASPHALTIC SURFACE QUANTITY INCLUDES ALL PAVEMENT REMOVALS TYPICALLY INCLUDED UNDER EXCAVATION COMMON. SEE 'EXCAVATION WASTE' SPECIAL PROVISION FOR PAYMENT INFORMATION.

REMOVING CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	204.0150 LF
STAGE 1					
0010	10TRN+50	-	11TRN+50	USH 51 TEMPORARY ROAD	130
				STAGE 1 SUBTOTAL	130
				TOTAL 0010	130

REMOVING DELINEATORS AND MARKERS

CATEGORY	STATION	TO	STATION	LOCATION	204.0180 EACH	REMARKS
STAGE 1						
0010	210+60	-	326+60	EXISTING USH 2 EB - USH 51 SB RAMP	15	
				STAGE 1 SUBTOTAL	15	
STAGE 2						
0010	208WB+20			USH 2, WB, LT	4	GEODETIC MONUMENT
0010	112+24	-	134+51	EXISTING USH 51 NB - USH 2 WB RAMP	11	
				STAGE 2 SUBTOTAL	15	
STAGE 3						
0010	116SB+00			USH 51, SB, LT	5	GEODETIC MONUMENT
0010	412+03	-	419+24	EXISTING USH 51 NB - USH 2 EB RAMP	15	
					20	
				TOTAL 0010	50	

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 LF	REMARKS
STAGE 2						
0010	223EB+00	-	223EB+50	USH 2, EB, LT	50	END TREATMENT ONLY
0010	221WB+50	-	224WB+00	USH 2, WB, LT & RT	395	
0010	113+25	-	113+75	EXISTING USH 51, LT & RT	230	
				STAGE 2 SUBTOTAL	675	
STAGE 3						
0010	221EB+40	-	223EB+50	USH 2, EB, LT & RT	350	
0010	229EB+30	-	231EB+55	USH 2, EB, RT	225	
0010	108+65	-	109+70	EXISTING USH 51, LT & RT	140	
				STAGE 3 SUBTOTAL	715	
STAGE 4						
0010	230EB+70	-	231EB+35	USH 2, MEDIAN	110	
				STAGE 4 SUBTOTAL	110	
				TOTAL 0010	1,500	

REMOVING CONCRETE BASES

CATEGORY	STATION	LOCATION	204.0195 EACH
STAGE 1			
0010	107NB+55	USH 51, NB, LT	1
		STAGE 1 SUBTOTAL	1
		TOTAL 0010	1

REMOVING UTILITY CABINET

CATEGORY	STATION	LOCATION	204.9060.S.01 EACH
STAGE 3			
0010	115NB+25	USH 51, NB, RT	1
		STAGE 3 SUBTOTAL	1
		TOTAL 0010	1

EARTHWORK SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	CUT (1)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (2)	205.0100 EXCAVATION COMMON (3)	205.0200 EXCAVATION ROCK (4)	EXPANDED ROCK FACTOR 1.10	UNEXPANDED FILL	EXPANDED FILL (5) FACTOR 1.25	MASS ORDINATE +/- (6)	SPV.0035.01 EXCAVATION WASTE (7)	REMARKS
DIVISION 1														
0010	196EB+19	-	231EB+19	USH 2, EB	14,701	2,301	12,400	0	0	7,537	9,421	2,979	2,979	
0010	225WBT+00	-	228WBT+00	USH 2, WB BYPASS LANE	420	165	255	0	0	556	695	-440	0	
0010	108NB+36	-	116NB+50	USH 51, NB	25,350	782	24,568	5,518	6,070	3	-7,584	32,152	32,152	
0010	223EOT+00	-	226EOT+50	USH 2, EB RIGHT TURN LANE	11,271	155	11,116	3,127	3,440	1,530	-2,387	13,503	13,503	
0010	115NOT+50	-	117NOT+50	USH 51, NB RIGHT TURN LANE	4,319	79	4,240	558	614	68	-682	4,922	4,922	
0010	0CC+00	-	3CC+50	ROUNDABOUT CIRCLE	1,339	102	1,237	640	704	3,678	3,718	-2,481	0	
0010	321XER+50	-	325XER+50	USH 2, EB EXIT RAMP	844	136	708	0	0	1	1	707	707	
0010	121XWR+50	-	126XWR+00	USH 2, WB EXIT RAMP	3,143	170	2,973	0	0	424	530	2,443	2,443	
0010	9TRN+15	-	26TRN+79	USH 51 TEMPORARY BYPASS	1,999	0	1,999	0	0	1,214	1,518	482	482	STAGE 1
0010	212EXE+90	-	2020EXE+93	USH 2, EB TEMPORARY WIDENING	258	0	258	0	0	517	646	-388	0	STAGE 1
0010	102TRW+55	-	107TRW+55	USH 2, WB TEMPORARY RIGHT TURN LANE	219	0	219	0	0	63	79	140	140	STAGE 2
0010	182WB+28	-	186WB+98	USH 2, WB TEMPORARY CROSSOVER	140	0	140	0	0	45	56	84	84	STAGE 1
0010	9TRN+15	-	26TRN+79	USH 51 TEMPORARY BYPASS	1,000	0	1,000	0	0	0	0	1,000	1,000	STAGE 4 (REMOVAL)
0010	212EXE+90	-	2020EXE+93	USH 2, EB TEMPORARY WIDENING	500	0	500	0	0	0	0	500	500	STAGE 4 (REMOVAL)
0010	102TRW+55	-	107TRW+55	USH 2, WB TEMPORARY RIGHT TURN LANE	50	0	50	0	0	0	0	50	50	STAGE 4 (REMOVAL)
0010	182WB+28	-	186WB+98	USH 2, WB TEMPORARY CROSSOVER	50	0	50	0	0	0	0	50	50	STAGE 4 (REMOVAL)
				DIVISION 1 TOTALS	65,603	3,890	61,713	9,843	10,827	15,636	6,011	55,702	59,011	

NOTES:
(1) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) COMMON EXCAVATION = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL. ITEM NUMBER 205.0100.
(4) ROCK EXCAVATION REQUIRED FOR LIGHT BASES AND SIGN POSTS.
(5) EXPANDED FILL FACTOR = 1.25, EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR
(6) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE STAGE. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(7) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

PREPARE FOUNDATION

CATEGORY	STATION	TO	STATION	LOCATION	211.0100.01 ASPHALTIC PAVING (1175-21-71) LS	211.0400 ASPHALTIC SHOULDERS STA	REMARKS
STAGE 1							
0010	18TRN+75	-	22TRN+00	USH 51 TEMPORARY ROAD, LT	-	4	SHOULDER WIDENING
0010	18TRN+75	-	22TRN+00	USH 51 TEMPORARY ROAD, RT	-	4	SHOULDER WIDENING
0010	182WB+28	-	186WB+58	USH 2, EB, RT	-	5	SHOULDER WIDENING
0010	232EB+80	-	234EB+10	USH 2, WB, RT	-	1	SHOULDER WIDENING
				STAGE 1 SUBTOTALS	0	14	
STAGE 4							
0010	178EB+25	-	183EB+00	USH 2, EB, RT	-	5	
0010	UNDISTRIBUTED			USH 2, WB	1	-	
				STAGE 4 SUBTOTALS	1	5	
				TOTAL 0010	1	19	

OBLITERATING OLD ROAD

CATEGORY	STATION	TO	STATION	LOCATION	214.0100 STA
STAGE 2					
0010	112+24	-	129+64	EXISTING USH 51 NB - USH 2 WB RAMP	18
					18
				TOTAL 0010	18

BASE AGGREGATE DENSE AND WATER

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	305.0500 SHAPING SHOULDERS STA	305.0504.S HAULING EXCESS SHOULDER MATERIAL CY	624.0100 WATER MGAL	REMARKS
STAGE 1										
0010	9TRN+60	-	27TRN+05	USH 51 TEMPORARY ROAD	179	4,319	-	-	45	
0010	182WB+25	-	186WB+25	USH 2, WB, RT	62	294	-	-	4	TEMPORARY SHOULDER WIDENING
0010	213EB+11	-	220EB+92	USH 2, EB, LT	85	910	-	-	10	TEMPORARY BYPASS LANE
				STAGE 1 SUBTOTALS	326	5,523	0	0	59	
STAGE 2										
0010	211WB+50	-	216WB+50	USH 2, WB, RT	50	612	-	-	7	TEMPORARY TURN LANE'
0010	214WB+62	-	216WB+50	USH 2, WB, LT	24	201	-	-	3	TEMPORARY BYPASS LANE
0010	216WB+50	-	224WB+40	USH 2, WB	101	4,164	-	-	43	INCLUDING TEMPORARY BYPASS LANE AND CROSSOVER
0010	218WBT+95	-	231WBT+10	USH 2, WB BYPASS LANE	146	5,013	-	-	52	
0010	228WB+57	-	231WB+10	USH 2, WB	9	718	-	-	8	
				STAGE 2 SUBTOTALS	330	10,708	0	0	113	
STAGE 3										
0010	108NB+36	-	116NB+65	USH 51, NB	50	3,195	-	-	33	
0010	108NB+36	-	116SB+89	USH 51, SB	-	2,413	-	-	25	
0010	113NB+48	-	116NB+55	USH 51, LT, MEDIAN	-	102	-	-	2	
0010	115NOT+25	-	117NOT+72	RAB SE SLIP LANE	-	725	-	-	8	
0010	113NB+75	-	119NOT+07	RAB SE SLIP LANE, RT	-	705	-	-	8	
0010	115NOT+25	-	117NOT+72	RAB SE SLIP LANE, LT ISLAND	-	143	-	-	2	
0010	223EOT+81	-	226EOT+36	RAB SW SLIP LANE	-	727	-	-	8	
0010	222EOT+81	-	226EOT+81	RAB SW SLIP LANE, RT	-	359	-	-	4	
0010	223EOT+81	-	226EOT+36	RAB SW SLIP LANE, LT ISLAND	-	355	-	-	4	
0010	218EB+25	-	225EB+13	USH 2, EB	73	3,406	-	-	35	
0010	224WB+40	-	225WB+38	USH 2, WB	-	112	-	-	2	
0010	223EB+40	-	225EB+02	USH 2, EB, LT MEDIAN	-	311	-	-	4	
0010	226EB+73	-	231EB+19	USH 2, EB	52	2,895	-	-	30	
0010	226WB+67	-	228WB+57	USH 2, WB	-	521	-	-	6	
0010	7WIN+50	-	8WIN+33	RAB NE ISLAND, LT	-	63	-	-	1	
0010	226EB+73	-	230EB+08	USH 2, EB, LT MEDIAN	-	304	-	-	4	
0010	0CC+00	-	3CC+77	RAB CIRCLE	-	2,289	-	-	23	
0010	183EB+00	-	216EB+50	USH 2, EB, LT	1,096	-	68	1,325	11	RESURFACING AND SHOULDER REMOVAL
0010	232EB+80	-	234+10	USH 2, EB, LT & RT	5	-	-	-	-	
				STAGE 3 SUBTOTALS	1,276	18,625	68	1,325	210	
STAGE 4										
0010	108NB+36	-	115SB+30	USH 51, LT	62	1,705	-	-	20	
0010	165EB+35	-	183EB+00	USH 2, EB	224	-	3	55	3	RESURFACING AND SHOULDER REMOVAL
0010	165EB+35	-	216WB+50	USH 2, WB	1,300	-	46	880	13	RESURFACING AND SHOULDER REMOVAL
0010	216EB+50	-	218EB+25	USH 2, EB	37	980	3	30	11	
0010	216WB+50	-	218WB+05	USH 2, WB, RT	26	-	8	130	1	TEMPORARY CROSSOVER REMOVAL
0010	218WB+05	-	223WB+10	USH 2, WB, RT	28	-	-	-	1	PAVE SURFACE LAYER
0010	216WB+50	-	219WB+82	USH 2, WB, LT	42	-	4		1	TEMPORARY BYPASS LANE REMOVAL
0010	219WBT+82		231WBT+10	USH 2, WB PASSING LANE, LT	54	-	-	-	1	PAVE SURFACE LAYER
0010	224WBT+25	-	228WBT+37	USH 2, WB PASSING LANE, RT MEDIAN	-	169	-	-	2	
				STAGE 4 SUBTOTALS	1,773	2,854	64	1,095	53	
				TOTAL 0010	3,705	37,710	132	2,420	435	

ASPHALT PAVEMENT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	450.4000 HMA COLD WEATHER PAVING TON	455.0605 TACK COAT GAL	460.6243 HMA PAVEMENT 3 MT 58-34 S TON	460.6644 HMA PAVEMENT 4 MT 58-34 V TON	465.0105 ASPHALTIC SURFACE TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	465.0310 ASPHALTIC CURB LF	REMARKS
STAGE 1														
0010	9TRN+60	-	27TRN+05	USH 51 TEMPORARY ROAD	-	-	-	-	-	-	-	1,365	730	
0010	182WB+25	-	186WB+25	USH 2, WB, RT	-	-	-	-	-	-	-	47	-	TEMPORARY SHOULDER WIDENING
0010	213EB+11	-	220EB+92	USH 2, EB, LT	-	-	-	-	-	-	-	195	-	TEMPORARY BYPASS LANE
0010	232EB+80	-	234EB+10	USH 2, EB, LT	-	-	-	-	-	-	-	5	-	2-INCH THICK PAD FOR CONCRETE BARRIER TEMPORARY PRECAST
				STAGE 1 SUBTOTALS	0	0	0	0	0	0	0	1,611	730	
STAGE 2														
0010	211WB+50	-	218WB+05	USH 2, WB, RT	-	-	-	-	-	-	-	265	-	TURN LANE AND CROSSOVER
0010	214WB+62	-	219WB+82	USH 2, WB, LT	-	-	-	-	-	-	-	74	-	TEMPORARY BYPASS LANE
0010	216WB+50	-	224WB+40	USH 2, WB	-	112	528	-	-	-	-	-	-	BINDER LAYERS ONLY - TOP LAYER TO BE COMPLETED IN STAGE 4
0010	218WBT+95	-	231WBT+10	USH 2, WB BYPASS LANE	-	381	867	-	-	-	-	-	-	BINDER LAYERS ONLY - TOP LAYER TO BE COMPLETED IN STAGE 4
0010	228WB+57	-	231WB+10	USH 2, WB	-	55	125	-	-	-	-	-	-	BINDER LAYERS ONLY - TOP LAYER TO BE COMPLETED IN STAGE 4
				STAGE 2 SUBTOTALS	0	548	1,520	0	0	0	0	339	0	
STAGE 3														
0010	108NB+36	-	116NB+65	USH 51, NB	-	217	489	206	-	-	-	-	-	
0010	108NB+36	-	116SB+89	USH 51, SB	-	244	555	205	-	-	-	-	-	
0010	115NOT+25	-	117NOT+72	RAB SE SLIP LANE	-	57	129	48	-	-	-	-	-	
0010	223EOT+81	-	226EOT+36	RAB SW SLIP LANE	-	59	134	50	-	-	-	-	-	
0010	216EB+50	-	218EB+25	USH 2, EB	-	54	-	52	-	-	-	-	-	WEDGING
0010	218EB+25	-	225EB+13	USH 2, EB	-	203	459	195	-	-	-	-	-	
0010	224WB+40	-	225WB+38	USH 2, WB	-	29	66	25	-	-	-	-	-	
0010	226EB+73	-	231EB+19	USH 2, EB	-	197	446	186	-	-	-	-	-	
0010	226WB+67	-	228WB+57	USH 2, WB	-	45	101	37	-	-	-	-	-	
0010	0CC+00	-	3CC+77	RAB CIRCLE	-	118	267	99	-	-	-	-	-	
0010	230EB+10	-	230EB+45	USH 2, EB, LT CROSSOVER	-	13	29	-	-	-	-	-	-	BINDER LAYERS ONLY - TOP LAYER TO BE COMPLETED IN STAGE 4
0010	183EB+00	-	216EB+50	USH 2, EB	-	600	-	985	-	-	-	-	-	RESURFACING
0010				CENTER DR (SOUTH)	-	13	-	21	-	-	-	-	-	RESURFACING
0010	UNDISTRIBUTED			PROJECT LIMITS	-	-	-	-	-	50	-	-	-	RESURFACING AREA - UNDISTRIBUTED PATCHING
				STAGE 3 SUBTOTALS	0	1,849	2,675	2,109	0	50	0	0	0	
STAGE 4														
0010	108NB+36	-	115SB+30	USH 51, LT	-	40	85	66	-	-	-	-	-	
0010	107NB+75			USH 51, NB, LT	-	-	-	-	-	-	60	-	-	
0010	216EB+50	-	218EB+25	USH 2, EB	-	41	-	46	-	-	-	-	-	
0010	216WB+50	-	224WB+40	USH 2, WB	-	232	-	203	-	-	-	-	-	LOWER LAYERS INSTALLED IN STAGE 2
0010	218WBT+95	-	231WBT+10	USH 2, WB BYPASS LANE	-	363	-	305	80	-	-	-	-	LOWER LAYERS INSTALLED IN STAGE 2
0010	228WB+57	-	231WB+10	USH 2, WB	-	55	-	46	-	-	-	-	-	LOWER LAYERS INSTALLED IN STAGE 2
0010	230EB+10	-	230EB+45	USH 2, EB, LT CROSSOVER	-	13	-	11	-	-	-	-	-	LOWER LAYERS INSTALLED IN STAGE 3
0010	165EB+35	-	183EB+00	USH 2, EB	-	240	-	397	-	-	-	-	-	RESURFACING
0010	165EB+35	-	216WB+50	USH 2, WB	-	918	-	1,505	-	-	-	-	-	RESURFACING
0010				CROSSOVERS AND CENTER DR (NORTH)	-	66	-	107	-	-	-	-	-	RESURFACING
0010	UNDISTRIBUTED			PROJECT LIMITS	700	-	-	-	-	50	-	-	-	RESURFACING AREA - UNDISTRIBUTED PATCHING
					700	1,968	85	2,686	80	50	60	0	0	
				TOTAL 0010	700	4,365	4,280	4,795	80	100	60	1,950	730	

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	465.0315 SY
STAGE 1			
0010	17TRN+35	USH 51 TEMPORARY ROAD, LT	5
		STAGE 1 SUBTOTAL	
STAGE 4			
0010	107NB+25	USH 51, NB, LT	5
0010	108NB+35	USH 51, NB, LT	5
		STAGE 4 SUBTOTAL	
		TOTAL 0010	15

ASPHALTIC RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	465.0425 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL LF	465.0475 ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF
STAGE 3						
0010	183EB+00	-	216EB+50	USH 2, EB	6,200	-
0010	218EB+25	-	222EB+25	USH 2, EB	700	-
0010	229EB+00	-	231EB+25	USH 2, EB	200	-
0010	108NB+36	-	113NB+40	USH 51, NB	500	360
				STAGE 3 SUBTOTALS	7,600	360
STAGE 4						
0010	164EB+40	-	177EB+00	USH 2	2,520	860
0010	177EB+00	-	183EB+00	USH 2, EB	1,200	-
0010	177WB+00	-	231WB+00	USH 2, WB	9,400	-
0010	108NB+36	-	115SB+25	USH 51, SB, LT	700	-
				STAGE 4 SUBTOTALS	13,820	860
				TOTAL 0010	21,420	1,220

CULVERT PIPES AND TERMPORARY DRAINAGE

CATEGORY	STATION	TO	STATION	LOCATION	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	520.3318 CULVERT PIPE CLASS III-A 18-INCH LF	APRON ENDWALLS TEMPORARY 520.2018 18-INCH LF	520.2024 24-INCH LF	520.2036 36-INCH LF	SPV.0060.03 18-INCH EACH	SPV.0060.04 24-INCH EACH	SPV.0060.05 36-INCH EACH	611.0430 RECONSTRUCTING INLETS EACH	* 611.8120.S COVER PLATES TEMPORARY EACH	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	SPV.0060.01 INLETS 2X3-FT TEMPORARY EACH	SPV.0060.02 STORM SEWER PLUG 18-INCH EACH	THICKNESS STEEL INCH	REMARKS
STAGE 1																			
0010	11TRN+80			USH 51 TEMPORARY ROAD, RT	-	-	101	-	-	-	-	-	-	-	-	1	-	-	
0010	15TRN+50	-	17TRN+35	USH 51 TEMPORARY ROAD, LT	-	-	185	-	-	1	-	-	-	-	-	1	-	-	
0010	26TRN+85			USH 51 TEMPORARY ROAD	-	-	-	-	120	-	-	2	-	-	1	-	-	-	
0010	183EB+88	-	185EB+12	USH 2, EB, LT	-	-	-	125	-	-	1	-	1	1	1	-	-	-	
0010	215EB+47	-	218EB+97	USH 2, EB, LT	-	-	-	350	-	-	1	-	1	-	1	-	-	-	
				STAGE 1 SUBTOTALS	0	0	286	475	120	1	2	2	2	1	3	2	0		
STAGE 2																			
0010	##WBT+##			USH 2, WB BYPASS, LT	-	-	-	-	-	-	-	-	-	-	-	-	1	-	AT STRUCTURE NO. 13
				STAGE 2 SUBTOTALS	0	0	0	0	0	0	0	0	0	0	0	0	1		
STAGE 4																			
0010	183WB+75			USH 2, WB, RT	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
0010	215EB+45			USH 2, EB, LT	-	-	-	-	-	-	-	-	1	-	-	-	-	-	
0010	107NB+75			USH 51, LT	2	94	-	-	-	-	-	-	-	-	-	-	-	0.064	
				STAGE 4 SUBTOTALS	2	94	0	0	0	0	0	0	2	0	0	0	0		
				TOTAL 0010	2	94	286	475	120	1	2	2	4	1	3	2	1		

* ADDITIONAL QUANTITY SHOWN ELSEWHERE

3

CONCRETE CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	601.0405 18-INCH TYPE A LF	601.0553 4-INCH SLOPED 36-INCH TYPE D LF	601.0557 6-INCH SLOPED 36-INCH TYPE D LF	601.0580 4-INCH SLOPED 36-INCH TYPE R LF	601.0600 CONCRETE CURB PEDESTRIAN LF	SPV.0090.01 CONCRETE CURB TYPE G MODIFIED LF
STAGE 2										
0010	223WB+10	-	224WB+40	USH 2, WB, RT	-	103	29	-	-	-
0010	5WIN+29	-	6WIN+95	RAB NE ISLAND, LT	-	-	167	-	-	-
0010	9WIN+42	-	9WIN+60	RAB NE ISLAND, LT	-	-	19	-	-	-
0010	228WB+57	-	230WB+12	USH 2, WB, RT	-	72	82	-	-	-
				STAGE 2 SUBTOTALS	0	175	297	0	0	0
STAGE 3										
0010	113NB+48	-	116NB+55	USH 51, LT, MEDIAN	-	-	674	-	61	-
0010	113NB+44	-	118NOT+81	RAB SE SLIP LANE, RT	-	468	72	-	-	123
0010	115NOT+25	-	117NOT+72	RAB SE SLIP LANE, LT ISLAND	-	90	442	-	66	15
0010	222EB+32	-	227EOT+00	RAB SW SLIP LANE, RT	-	297	150	-	-	15
0010	223EOT+81	-	226EOT+36	RAB SW SLIP LANE, LT ISLAND	-	226	324	-	20	-
0010	221EB+68	-	225EB+02	USH 2, EB, LT	-	41	324	-	77	-
0010	224WB+40	-	225WB+15	USH 2, WB, RT	-	-	111	-	-	-
0010	6WIN+95	-	9WIN+42	RAB NE ISLAND, LT	-	82	163	-	-	15
0010	226EB+74	-	230EB+08	USH 2, EB, LT	-	59	306	-	38	-
0010	226WB+77	-	228WB+57	USH 2, WB, RT	-	-	200	-	-	-
0010	0CC+00	-	3CC+77	RAB CIRCLE	205	-	-	365	-	-
				STAGE 3 SUBTOTALS	205	1,263	2,766	365	262	168
STAGE 4										
0010	224WBT+25	-	228WBT+38	USH 2, WB PASSING LANE, RT	-	-	425	-	108	-
0010	107NB+30	-	108NB+25	USH 51, LT	-	-	130	-	-	-
				STAGE 4 SUBTOTALS	0	0	555	0	108	0
				TOTAL 0010	205	1,438	3,618	365	370	168

CONCRETE SIDEWALK ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	405.0100 COLORING CONCRETE WISDOT RED CY	416.0512 CONCRETE TRUCK APRON 12-INCH SY	602.0415 CONCRETE SIDEWALK 6-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
STAGE 2									
0010	9WIN+60			RAB NE ISLAND, LT	-	-	-	-	57
				STAGE 2 SUBTOTALS	0	0	0	0	57
STAGE 3									
0010	113NB+48	-	116NB+55	USH 51, LT, MEDIAN	-	-	5,472	40	56
0010	113NB+75	-	119NOT+07	RAB SE SLIP LANE, RT	188	565	2,242	40	-
0010	115NOT+25	-	117NOT+72	RAB SE SLIP LANE, LT ISLAND	16	49	4,112	80	56
0010	222EOT+70	-	226EOT+81	RAB SW SLIP LANE, RT	85	255	2,330	40	-
0010	223EOT+81	-	226EOT+36	RAB SW SLIP LANE, LT ISLAND	106	317	1,678	80	56
0010	223EB+40	-	225EB+02	USH 2, EB, LT MEDIAN	70	210	4,018	40	-
0010	7WIN+50	-	8WIN+33	RAB NE ISLAND, LT	15	44	-	20	-
0010	226EB+74	-	230EB+08	USH 2, EB, LT MEDIAN	65	195	4,236	40	-
0010	0CC+00	-	3CC+77	RAB CIRCLE	255	755	-	-	-
				STAGE 3 SUBTOTALS	800	2,390	24,088	380	168
STAGE 4									
0010	224WBT+25	-	228WBT+37	USH 2, WB PASSING LANE, RT MEDIAN	-	-	8,947	60	-
				STAGE 4 SUBTOTALS	0	0	8,947	60	0
				TOTAL 0010	800	2,390	33,035	440	225

RIPRAP AND GEOTEXTILE TYPE HR

CATEGORY	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
STAGE 2				
0010	224WB+25	USH 2, WB, LT	3	3
0010	227WB+99	USH 2, WB, LT	3	3
		STAGE 2 SUBTOTALS	6	6
STAGE 3				
0010	116SB+29	USH 51, SB, LT	5	5
0010	114NB+86	USH 51, NB, RT	3	3
0010	116NB+66	USH 51, NB, RT	3	3
0010	224EB+24	USH 2, EB, RT	3	3
0010	223EB+59	USH 2, EB, RT	3	3
0010	227EB+72	USH 2, EB, RT	3	3
0010	228EB+53	USH 2, EB, RT	4	4
		STAGE 3 SUBTOTALS	24	24
		TOTAL 0010	30	30

CONCRETE BARRIER TEMPORARY PRECAST

CATEGORY	STATION	TO	STATION	LOCATION	603.8000 DELIVERED LF	603.8125 INSTALLED LF	603.8500 ANCHORING CONCRETE BARRIER TEMPORARY PRECAST LF	614.0905 CRASH CUSHIONS TEMPORARY EACH	BACK WIDTH FT	OBJECT MARKING PATTERN	CRASH LEVEL TEST	TRAFFIC DIRECTION	CRASH CUSHION SHIELDS
STAGE 1													
0010	13TRN+70	-	18TRN+20	USH 51 TEMPORARY ROAD, RT	450	450	450	-					
	13TRN+70			USH 51 TEMPORARY ROAD, RT	-	-	-	1	2	OM-3R	TL-2	BIDIRECTIONAL	TEMPORARY BARRIER ON RIGHT SHOULDER OF TEMPORARY LANES
	18TRN+20			USH 51 TEMPORARY ROAD, RT	-	-	-	1	2	OM-3L	TL-2	BIDIRECTIONAL	TEMPORARY BARRIER ON RIGHT SHOULDER OF TEMPORARY LANES
				STAGE 1 SUBTOTALS	450	450	450	2					
STAGE 2													
0010				USH 2, EB, LT (EAST OF MONTRAL RIVER)	100	100	100	1	2	OM-3L	TL-2	BIDIRECTIONAL	TEMPORARY BARRIER ON RIGHT SHOULDER OF TEMPORARY LANES
				STAGE 2 SUBTOTALS	100	100	100	1					
STAGE 3													
0010	230WB+50	-	231WB+00	USH 2, WB, LT	25	25	25	1	2	OM-3L	TL-2	BIDIRECTIONAL	TEMPORARY BARRIER ON RIGHT SHOULDER OF TEMPORARY LANES
					25	25	25	1					
				TOTAL 0010	575	575	575	4					

STORM SEWER PIPES REINFORCED CONCRETE

						STORM SEWER PIPE REINFORCED CONCRETE			
				608.0005	608.0412	608.0415	608.0418	608.0424	
				STORM SEWER	CLASS IV	CLASS IV	CLASS IV	CLASS IV	
				ROCK EXCAVATION	12-INCH	15-INCH	18-INCH	24-INCH	
CATEGORY	FROM		TO	LOCATION	CY	LF	LF	LF	LF	REMARKS
STAGE 2										
0010	11C	-	11D	USH 2, WB	-	-	-	26	-	
0010	11D	-	11E	USH 2, WB BYPASS	-	-	-	6	-	
0010	11E	-	11F	USH 2, WB BYPASS	-	-	-	38	-	
0010	13	-	13A	USH 2, WB BYPASS	-	-	-	46	-	
0010	13D	-	13A	USH 2, WB BYPASS	-	74	-	-	-	
0010	13A	-	SOUTH	USH 2, WB	-	-	-	30	-	TO 13B
				STAGE 2 SUBTOTALS		74	0	146	0	
STAGE 3										
0010	1	-	1A	USH 51, SB	10	18	-	-	-	
0010	1	-	2	USH 51, SB	37	-	-	62	-	
0010	2	-	3	USH 51, SB	26	-	-	54	-	
0010	3	-	4	USH 51, SB	10	-	-	17	-	
0010	4A	-	4B	USH 51, NB	10	23	-	-	-	
0010	4B	-	4	USH 51, SB	20	-	23	-	-	
0010	4	-	5	USH 51, SB	23	-	-	-	36	
0010	5A	-	5	USH 51, SB	25	51	-	-	-	
0010	5	-	6	USH 51, SB	66	-	-	-	71	
0010	7A	-	7	USH 51, NB	33	40	-	-	-	
0010	8	-	8A	SW SLIP LANE	5	22	-	-	-	
0010	8A	-	8B	SW SLIP LANE	32	-	50	-	-	
0010	9	-	9A	SW SLIP LANE	11	22	-	-	-	
0010	9A	-	9B	SW SLIP LANE	38	-	45	-	-	
0010	10	-	10A	SW SLIP LANE	-	-	9	-	-	
0010	10A	-	10B	SW SLIP LANE	-	-	20	-	-	
0010	10B	-	10C	SW SLIP LANE	14	-	35	-	-	
0010	11	-	11A	ROUNDABOUT	-	-	10	-	-	
0010	11A	-	11B	ROUNDABOUT	-	-	44	-	-	
0010	11B	-	11C	USH 2, WB	-	-	-	83	-	
0010	12	-	12A	USH 2, EB	-	83	-	-	-	
0010	12A	-	12B	USH 2, EB	-	-	5	-	-	
0010	12B	-	12C	SE SLIP LANE	-	-	22	-	-	
0010	12D	-	12C	SE SLIP LANE	-	69	-	-	-	
0010	12C	-	12E	SE SLIP LANE	-	-	-	56	-	
0010	NORTH	-	13B	USH 2, EB	-	-	-	90	-	FROM 13A
0010	13B	-	13C	SE SLIP LANE	-	-	-	-	41	
0010	14	-	14A	USH 2, WB	27	31	-	-	-	
0010	14A	-	14B	USH 2, WB	30	-	24	-	-	
0010	14B	-	14C	USH 2, EB	43	-	40	-	-	
0010	14C	-	13B	SE SLIP LANE	25	-	-	19	-	
				STAGE 3 SUBTOTALS	485	359	327	381	148	
				TOTAL 0010	485	433	327	527	148	

STORM SEWER STRUCTURES AND COVERS

					APRON ENDWALLS REINFORCED CONCRETE				INLET COVERS		MANHOLES		INLETS			*		
					522.1012	522.1015	522.1018	522.1024	611.0627	611.0652	611.2005	611.2006	611.3004	611.3225	611.3230	611.8120.S	633.5200	650.4000
					12-INCH	15-INCH	18-INCH	24-INCH	TYPE HM	TYPE T	5-FT DIA	6-FT DIA	4-FT DIA	2X2.5-FT	2X3-FT	COVER PLATES TEMPORARY	MARKERS CULVERT END	CONSTRUCTION STAKING STORM SEWER
CATEGORY	STRUCTURE	STATION	OFFSET	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
STAGE 2																		
0010	11C	224WB+42	2'RT	USH 2, WB	-	-	-	-	1	-	-	-	1	-	-	-	-	1
0010	11D	224WB+26	18.1'LT	USH 2, WB	-	-	-	-	-	-	-	-	-	-	1	-	-	1
0010	11E	224WB+25	24.2'LT	USH 2, WB	-	-	-	-	-	-	-	-	-	-	1	1	-	1
0010	11F	224WB+25	61.9'LT	USH 2, WB	-	-	1	-	-	-	-	-	-	-	-	-	1	1
0010	13	227WB+99	95.2'LT	USH 2, WB	-	-	1	-	-	-	-	-	-	-	-	-	1	1
0010	13A	227WB+79	54.2'LT	USH 2, WB	-	-	-	-	-	-	-	-	1	-	-	1	-	1
0010	13D	226WB+61	72.7'LT	USH 2, WB	-	-	-	-	-	-	-	-	-	-	1	1	-	1
0010	14	228WB+56	18'LT	USH 2, WB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	14A	228WB+79	2'RT	USH 2, WB	-	-	-	-	1	-	-	-	1	-	-	-	-	1
				STAGE 2 SUBTOTALS	0	0	2	0	3	0	0	0	3	0	4	3	2	9
STAGE 3																		
0010	1	114SB+74	2'RT	USH 51, SB	-	-	-	-	1	-	-	-	1	-	-	-	-	1
0010	1A	114NB+69	2'LT	USH 51, NB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	2	115SB+37	2'RT	USH 51, SB	-	-	-	-	1	-	-	-	1	-	-	-	-	1
0010	3	115SB+91	2'RT	USH 51, SB	-	-	-	-	1	-	-	-	1	-	-	-	-	1
0010	4	116SB+08	2'RT	USH 51, SB	-	-	-	-	1	-	-	1	-	-	-	-	-	1
0010	4A	116NB+00	18'RT	USH 51, NB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	4B	115NB+89	2'LT	USH 51, NB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	5	116SB+38	18'LT	USH 51, SB	-	-	-	-	1	-	1	-	-	-	-	-	-	1
0010	5A	116SB+80	9.5'RT	USH 51, SB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	6	116SB+29	88.1'LT	USH 51, SB	-	-	-	1	-	-	-	-	-	-	-	-	1	1
0010	7	114NB+85	37.4'RT	USH 51, NB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	7A	114NB+86	77.5'RT	USH 51, NB	1	-	-	-	-	-	-	-	-	-	-	-	1	1
0010	8	116NB+16	50.1'RT	USH 51, NB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	8A	116NB+02	68.7'RT	USH 51, NB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	8B	116NB+66	110.1'RT	USH 51, NB	-	1	-	-	-	-	-	-	-	-	-	-	1	1
0010	9	225EB+10	54.2'RT	USH 2, EB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	9A	225EB+13	76.2'RT	USH 2, EB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	9B	224EB+24	116.8'RT	USH 2, EB	-	1	-	-	-	-	-	-	-	-	-	-	1	1
0010	10	223EB+82	17'RT	USH 2, EB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	10A	223EB+81	25.6'RT	USH 2, EB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	10B	223EB+75	44.3'RT	USH 2, EB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	10C	223EB+59	75.1'RT	USH 2, EB	-	1	-	-	-	-	-	-	-	-	-	-	1	1
0010	11	1CC+00	2'LT	ROUNDABOUT	-	-	-	-	-	1	-	-	-	1	-	-	-	1
0010	11A	1CC+10	2'LT	ROUNDABOUT	-	-	-	-	-	1	-	-	-	1	-	-	-	1
0010	11B	225WB+24	12.4'RT	USH 2, WB	-	-	-	-	1	-	-	-	1	-	-	-	-	1
0010	12	226WB+73	6.4'RT	USH 2,WB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	12A	227EB+53	18.7'RT	USH 2, EB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	12B	227EB+53	23.9'RT	USH 2, EB	-	-	-	-	1	-	-	-	-	-	1	-	-	1
0010	12C	227EB+56	45.5'RT	USH 2, EB	-	-	-	-	1	-	-	-	1	-	-	-	-	1
0010	12D	226EB+91	23.6'RT	USH 2, EB	-	-	-	-	1	-	-	-	-	-	1	-	-	1

STORM SEWER STRUCTURES AND COVERS (CONTINUED)

					APRON ENDWALLS REINFORCED CONCRETE				INLET COVERS		MANHOLES		INLETS			*			
					522.1012	522.1015	522.1018	522.1024	611.0627	611.0652	611.2005	611.2006	611.3004	611.3225	611.3230	611.8120.S	633.5200	650.4000	
CATEGORY	STRUCTURE	STATION	OFFSET	LOCATION	12-INCH EACH	15-INCH EACH	18-INCH EACH	24-INCH EACH	TYPE HM EACH	TYPE T EACH	5-FT DIA EACH	6-FT DIA EACH	4-FT DIA EACH	2X2.5-FT EACH	2X3-FT EACH	COVER PLATES TEMPORARY EACH	MARKERS CULVERT END EACH	CONSTRUCTION STAKING STORM SEWER EACH	REMARKS
0010	12E	227EB+72	99.3' RT	USH 2, EB	-	-	1	-	-	-	-	-	-	-	-	-	1	1	
0010	13B	228EB+39	36.3' RT	USH 2, EB	-	-	-	-	1	-	-	-	1	-	-	-	-	1	
0010	13C	228EB+53	75.0' RT	USH 2, EB	-	-	-	1	-	-	-	-	-	-	-	-	1	1	
0010	14B	228EB+76	2' LT	USH 2, EB	-	-	-	-	1	-	-	-	1	-	-	-	-	1	
0010	14C	228EB+60	34.3' RT	USH 2, EB	-	-	-	-	1	-	-	-	1	-	-	-	-	1	
				STAGE 3 SUBTOTALS	1	3	1	2	26	2	1	1	8	2	16	0	7	35	
STAGE 4																			
0010	11D	224WB+26	18' LT	USH 2, WB	-	-	-	-	1	-	-	-	-	-	-	-	-	-	CASTING ONLY
0010	11E	224WB+25	24.2' LT	USH 2, WB	-	-	-	-	1	-	-	-	-	-	-	-	-	-	CASTING ONLY
0010	13A	227WB+79	54.2' LT	USH 2, WB	-	-	-	-	1	-	-	-	-	-	-	-	-	-	CASTING ONLY
0010	13D	226WB+61	72.7' LT	USH 2, WB	-	-	-	-	1	-	-	-	-	-	-	-	-	-	CASTING ONLY
					0	0	0	0	4	0	0	0	0	0	0	0	0	0	
				TOTAL 0010	1	3	3	2	33	2	1	1	11	2	20	3	9	44	

* ADDITIONAL QUANTITY SHOWN ELSEWHERE

BARRIER SYSTEM GRADING SHAPING FINISHING

FOR INFORMATIONAL PURPOSES ONLY

CATEGORY	LOCATION	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	EXCAVATION COMMON SY	FILL SY	WASTE SY	TOPSOIL SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 20 LB	SEED WATER MGAL
0010	USH 2, EB, LT, MICHIGAN	1	40	20	15	200	0.1	6	5
	TOTAL 0010	1							

GUARDRAIL ITEMS

					STEEL THRIE BEAM			STEEL PLATE TEMPORARY		STEEL PLATE	MGS GUARDRAIL		
					614.0200 STEEL THRIE BEAM STRUCTURE APPROACH	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL	614.0230 STEEL THRIE BEAM	614.0360 STEEL PLATE BEAM GUARD TEMPORARY	614.0380 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL TEMPORARY	614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL	614.2300 MGS GUARDRAIL 3	614.2500 MGS THRIE BEAM TRANSITION	614.2610 MGS GUARDRAIL TERMINAL EAT
CATEGORY	STATION	TO	STATION	LOCATION	LF	EACH	LF	LF	EACH	EACH	LF	LF	EACH
STAGE 1													
0010	223EB+35	-	223EB+85	USH 2, EB, LT	-	-	-	112.5	1	-	-	-	-
0010	MICHIGAN			USH 2, EB, LT	-	-	-	-	-	1	-	-	-
					0	0	0	112.5	1	1	0	0	0
STAGE 3													
0010	230EB+18	-	231EB+59	USH 2, EB, RT	-	-	-	-	-	-	50	39.4	1
				STAGE 3 SUBTOTALS	0	0	0	0	0	0	50	39.4	1
STAGE 4													
0010	230EB+67	-	231EB+35	USH 2, MEDIAN	35	1	10	-	-	-	-	-	-
				STAGE 4 SUBTOTALS	35	1	10	0	0	0	0	0	0
				TOTAL 0010	35	1	10	113	1	1	50	39	1

NOTE: PAY LIMITS FOR WESTBOUND BULLNOSE GUARDRAIL STRUCTURE APPROACH DOES NOT INCLUDE THE TRANSITION SECTION SHOWN IN THE STANDARD DETAIL DRAWING.

SILT FENCE

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 MAINTENANCE LF
STAGE 1						
0010	19TRN+50	-	25TRN+50	USH 51 TEMPORARY BYPASS	600	600
0010				UNDISTRIBUTED	150	150
				STAGE 1 SUBTOTALS	750	750
STAGE 2						
0010	199WB+00	-	205WB+50	USH 2, WB, LT	650	650
0010	216WB+50	-	220WB+75	USH 2, WB, LT	550	550
0010	121XWR+50	-	126XWR+00	EXISTING USH 2 WB EXIT RAMP	400	400
0010				UNDISTRIBUTED	400	400
				STAGE 2 SUBTOTALS	2,000	2,000
STAGE 3						
0010	195EB+65	-	216EB+75	USH 2, EB, RT	2,120	2,120
0010	219EB+00	-	114SB+00	RAB SW SLIP LANE, RT	675	675
0010	113NB+50	-	229EB+30	RAB SE SLIP LANE, RT	290	290
0010	230EB+00	-	231EB+25	USH 2, EB, RT	140	140
0010				UNDISTRIBUTED	775	775
				STAGE 3 SUBTOTALS	4,000	4,000
STAGE 4						
0010		-		UNDISTRIBUTED	250	250
				STAGE 4 SUBTOTALS	250	250
				TOTAL 0010	7,000	7,000

EROSION CONTROL MOBILIZATIONS

CATEGORY	LOCATION	628.1905 EROSION CONTROL EACH	628.1910 EMERGENCY EROSION CONTROL EACH
STAGE 1			
0010	PROJECT LIMITS	3	3
	STAGE 1 SUBTOTALS	3	3
STAGE 2			
0010	PROJECT LIMITS	3	3
	STAGE 2 SUBTOTALS	3	3
STAGE 3			
0010	PROJECT LIMITS	5	3
	STAGE 3 SUBTOTALS	5	3
STAGE 4			
0010	PROJECT LIMITS	3	2
	STAGE 4 SUBTOTALS	3	2
	TOTAL 0010	14	11

INLET PROTECTION

CATEGORY	STATION	LOCATION	628.7005 TYPE A EACH	628.7010 TYPE B EACH	628.7015 TYPE C EACH
STAGE 1					
0010	11TRN+80	USH 51 TEMPORARY ROAD, RT	1	1	-
0010	15TRN+50	USH 51 TEMPORARY ROAD, LT	1	-	1
0010	183EB+88	USH 2, EB, LT	1	1	-
0010	215EB+47	USH 2, EB, LT	1	1	-
0010		UNDISTRIBUTED	-	2	4
		STAGE 1 SUBTOTALS	4	5	5
STAGE 2					
0010	197EB+00	USH 2, EB, LT	1	-	-
0010	203EB+00	USH 2, EB, LT	1	-	-
0010		STORM SEWER - WB BYPASS LANE	7	-	3
		STAGE 2 SUBTOTALS	9	0	3
STAGE 3					
0010		STORM SEWER - ROUNDABOUT	28	-	28
		STAGE 3 SUBTOTALS	28	0	28
STAGE 4					
0010		STORM SEWER - WB BYPASS LANE	4	-	4
		STAGE 4 SUBTOTALS	4	0	4
		TOTAL 0010	45	5	40

TEMPORARY DITCH CHECKS

CATEGORY	STATION	TO	STATION	LOCATION	628.7504 LF
STAGE 1					
0010	8TRN+00	-	21 TRN+50	USH 51 TEMPORARY BYPASS, LT & RT	50
0010				UNDISTRIBUTED	20
				STAGE 1 SUBTOTAL	70
STAGE 2					
0010	188WB+00	-	214WB+00	USH 2, MEDIAN	100
0010	205WB+00	-	229WB+00	USH 2, WB, LT	80
0010				UNDISTRIBTUED	50
				STAGE 2 SUBTOTAL	230
STAGE 3					
0010	109NB+00	-	230EB+25	USH 51, NB - USH 2, EB, RT	100
0010	217EB+00	-	227EOT+00	USH 2, EB - USH 51, SB, RT	90
0010				UNDISTRIBUTED	50
				STAGE 3 SUBTOTAL	240
STAGE 4					
0010	109NB+00	-	115SB+50	USH 51, SB, LT	70
0010				UNDISTRIBUTED	20
				STAGE 4 SUBTOTAL	90
				TOTAL 0010	630

CULVERT PIPE CHECKS

CATEGORY	STATION	TO	STATION	LOCATION	628.7555 EACH
STAGE 1					
0010	24TRN+00	-	27TRN+00	USH 51 TEMPORARY BYPASS, RT	6
0010	185WB+00			USH 2, MEDIAN	3
0010	219EB+00			USH 2, MEDAIN	3
0010				UNDISTRIBUTED	3
				STAGE 1 SUBTOTAL	15
STAGE 2					
0010	188WB+00	-	192WB+00	USH 2, MEDIAN	6
0010	227WBT+50			USH 2, WB BYPASS, LT	3
0010				UNDISTRIBUTED	6
				STAGE 2 SUBTOTAL	15
STAGE 3					
0010				UNDISTRIBUTED	10
				STAGE 3 SUBTOTAL	10
STAGE 4					
0010	108NB+35			USH 51, NB, LT	3
0010				UNDISTRIBUTED	2
				STAGE 4 SUBTOTAL	5
				TOTAL 0010	45

TRACKING PADS

CATEGORY	LOCATION	628.7560 EACH
STAGE 1		
0010	USH 2	1
0010	USH 51	1
	STAGE 1 SUBTOTAL	2
STAGE 2		
0010	USH 2	1
0010	USH 51	1
	STAGE 2 SUBTOTAL	2
STAGE 3		
0010	USH 2	1
0010	USH 51	1
0010	WASTE SITE	1
	STAGE 3 SUBTOTAL	3
STAGE 4		
0010	UNDISTRIBUTED - ALL STAGES	1
	STAGE 4 SUBTOTAL	1
	TOTAL 0010	8

ROCK BAGS

CATEGORY	STATION	LOCATION	628.7570 EACH
STAGE 1			
0010		UNDISTRIBUTED	10
		STAGE 1 SUBTOTAL	10
STAGE 2			
0010	199WB+25	USH 2, WB, LT	5
0010	201WB+75	USH 2, WB, LT	5
0010		UNDISTRIBUTED	10
		STAGE 2 SUBTOTAL	20
STAGE 3			
0010	115NB+75	RAB SE SLIP LANE, RT	5
0010		UNDISTRIBUTED	10
		STAGE 3 SUBTOTAL	15
STAGE 4			
0010	221EB+00	RAB SW SLIP LANE, RT	5
0010	115SB+75	RAB SW SLIP LANE, RT	5
0010		UNDISTRIBUTED	5
		STAGE 4 SUBTOTAL	15
		TOTAL 0010	60

ROUNDABOUT LANDSCAPING

				SHRUBS	PERENNIALS					
CATEGORY	LOCATION	625.0105 TOPSOIL CY	632.9101 LANDSCAPE PLANTING SURVEILLANCE AND CARE CYCLES EACH	632.0201.01 VIBURNUM PRUINFOLIUM, 48" HT, BLACKHAW VIBURNUM EACH	SPV.0060.30 LITTLE BLUESTEM, CG, #1 EACH	SPV.0060.31 PRAIRIE BLAZING STAR, CG, #1 EACH	SPV.0060.32 PRAIRIE DROP SEED, CG, #1 EACH	SPV.0060.33 SHOWY GOLDENROD, CG, #1 EACH	SPV.0165.01 STONE MULCH EPOXIED SF	SPV.0165.02 WEED BARRIER SF
STAGE 3										
0010	RAB CIRCLE	33	10	3	65	46	287	47	1,383	1,383
	TOTAL 0010	33	10	3	65	46	287	47	1,383	1,383

LANDSCAPING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.2027 EROSION MAT CLASS II TYPE C SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	REMARKS
STAGE 1															
0010	9TRN+03	-	27TRN+00	USH 51 TEMPORARY BYPASS	2,730	2,385	345	-	-	1.8	-	-	75	35	
0010	182WB+25	-	186WB+25	USH 2, WB, RT	275	-	275	-	-	0.2	-	-	10	5	TEMPORARY SHOULDER WIDENING
0010	211EB+50	-	220EB+92	USH 2, EB, MEDIAN	835	835	-	-	-	0.6	-	-	25	10	TEMPORARY BYPASS LANE AND TURN LANE
0010				UNDISTRIBUTED	770	645	125	-	-	0.6	-	-	25	10	
				STAGE 1 SUBTOTALS	4,610	3,865	745	0	0	3.2	0	0	135	60	
STAGE 2															
0010	112+24	-	129+64	EXISTING USH 51 NB EXIT RAMP	7,845	7,845	-	-	-	5.0	215	-	-	90	OBLITERATED ROAD
0010	199WB+00	-	206WB+75	USH 2, WB, LT	2,290	-	2,120	-	170	1.5	65	-	-	30	
0010	213WB+25	-	230WB+75	USH 2, WB, LT	3,950	-	2,390	-	1,560	2.5	110	-	-	45	
0010	121XWR+50	-	126XWR+00	EXISTING USH 2 WB EXIT RAMP	3,510	3,175	-	-	335	2.3	95	-	-	40	
0010				UNDISTRIBUTED	3,525	2,205	905	-	415	2.3	100	-	15	45	
				STAGE 2 SUBTOTALS	21,120	13,225	5,415	0	2,480	13.6	585	0	15	250	
STAGE 3															
0010	108NB+36	-	231EB+25	USH 51, NB - USH 2, EB, RT	6,345	1,295	3,580	320	1,150	4.0	165	10	-	145	
0010	230EB+75	-	231EB+25	USH 2, LT MEDIAN	85	-	85	-	-	0.1	5	-	-	5	
0010	196EB+00	-	216EB+50	USH 2, EB, RT	4,705	-	4,705	-	-	3.0	130	-	-	110	
0010	218EB+25	-	223EB+25	USH 2, EB, LT MEDIAN	1,000	-	470	-	530	0.7	30	-	-	25	
0010	218EB+25	-	227EOT+00	USH 2, EB - USH 51, SB, RT	4,625	-	3,385	360	880	3.0	115	10	-	105	
0010	108NB+36	-	113NB+44	USH 51, NB, RT	-	-	-	-	-	0.4	15	-	-	-	SHOUDLER GRAVEL
0010	183EB+00	-	216EB+50	USH 2, EB, LT & RT	-	-	-	-	-	7.1	305	-	-	-	SHOUDLER GRAVEL
0010	218EB+25	-	222EB+32	USH 2, EB, LT & RT	-	-	-	-	-	0.5	25	-	-	-	SHOUDLER GRAVEL
0010	229EB+25	-	231EB+19	USH 2, EB, LT & RT	-	-	-	-	-	0.3	10	-	-	-	SHOUDLER GRAVEL
0010				WASTE SITE	-	11,800	-	-	-	7.5	320	-	-	-	FOR ALL STAGES
0010				UNDISTRIBUTED	3,360	260	2,445	140	515	2.2	90	5	-	80	
				STAGE 3 SUBTOTALS	20,120	13,355	14,670	820	3,075	28.8	1,210	25	0	470	
STAGE 4															
0010	9TRN+03	-	28TRN+00	USH 51 TEMPORARY BYPASS	15,175	-	14,225	115	835	9.6	410	5	-	175	INCLUDING EXISTING EXIT RAMP REMOVAL
0010	108NB+36	-	115SB+30	USH 51, SB, LT	-	-	-	-	-	0.5	20	-	-	-	SHOULDER GRAVEL
0010	165EB+35	-	183EB+00	USH 2, EB, LT & RT	-	-	-	-	-	1.3	55	-	-	-	SHOULDER GRAVEL
0010	165EB+35	-	216WB+50	USH 2, WB, LT & RT	-	-	-	-	-	9.2	395	-	-	-	SHOULDER GRAVEL
0010	216EB+50	-	218EB+25	USH 2, EB, LT & RT	-	-	-	-	-	0.3	10	-	-	-	SHOULDER GRAVEL
0010	216WB+50	-	231WB+10	USH 2, WB, LT & RT	-	-	-	-	-	1.4	60	-	-	-	SHOULDER GRAVEL
0010				UNDISTRIBUTED	3,095	55	2,845	25	170	2.1	90	-	-	35	
				STAGE 4 SUBTOTALS	18,270	55	17,070	140	1,005	24.4	1,040	5	0	210	
				TOTAL 0010	64,120	30,500	37,900	960	6,560	70.0	2,835	30	150	990	

ERECTION OF TYPE II SIGNS AND SUPPORTS

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	W		H	634.0412 12-FT EACH	634.0614 14-FT EACH	634.0616 16-FT EACH	634.0618 18-FT EACH	634.0620 20-FT EACH	634.0814 14-FT EACH	637.2210 REFLECTIVE H SF	637.2230 REFLECTIVE F SF	REMARKS
0010	1	USH 2, E. OF CTH D	W6-1	36"	X	36"	---	1	---	---	---	---	---	9.00	
0010	2	"	W6-3	36"	X	36"	---	1	---	---	---	---	---	9.00	
0010	3	USH 2 WBND., E. OF CTH D	R5-1	30"	X	30"	---	1	---	---	---	---	6.25	---	
0010	4	USH 2 EBND. MEDIAN, E. OF CTH D	R4-7	24"	X	30"	---	1	---	---	---	---	5.00	---	
0010	5	USH 2 WBND., W. OF CENTER DR.	R5-1A	36"	X	24"	---	1	---	---	---	---	6.00	---	
0010	6	"	W6-2	36"	X	36"	---	---	---	---	---	---	---	9.00	MOUNT ON BACK OF SIGN #5
0010	7	USH 2 WBND., W. OF CENTER DR.	R6-2L	24"	X	30"	---	1	---	---	---	---	5.00	---	
0010	8	"	D1-61	60"	X	24"	---	1	1	---	---	---	---	10.00	SEE SIGN DETAIL
0010	9	"	R6-2L	24"	X	30"	---	1	---	---	---	---	5.00	---	
0010	10	CENTER DR.	R6-2L	24"	X	30"	---	1	---	---	---	---	5.00	---	
0010	11	"	R1-1	30"	X	30"	---	1	---	---	---	---	5.18	---	
0010	12	CENTER DR., USH 2 MEDIAN	R1-1	30"	X	30"	---	---	1	---	---	---	5.18	---	
0010	12A	"	R3-1	24"	X	24"	---	---	---	---	---	---	4.00	---	MOUNT BELOW SIGN #12
0010	13	"	R1-1	30"	X	30"	---	---	1	---	---	---	5.18	---	
0010	13A	"	R3-1	24"	X	24"	---	---	---	---	---	---	4.00	---	MOUNT BELOW SIGN #13
0010	14	CENTER DR.	R1-1	30"	X	30"	---	1	---	---	---	---	5.18	---	
0010	15	"	R6-2L	24"	X	30"	---	1	---	---	---	---	5.00	---	
0010	16	USH 2 EBND., E. OF CENTER DR.	J1-1	24"	X	39"	---	1	---	---	---	---	6.50	---	SEE PLAN SHEET
0010	17	"	SPECIAL	66"	X	36"	---	1	1	---	---	---	16.50	---	SEE SIGN DETAIL
0010	18	USH 2 WBND., E. OF CENTER DR.	D1-61	60"	X	24"	---	1	1	---	---	---	10.00	---	SEE SIGN DETAIL
0010	19	"	R2-1	24"	X	30"	---	1	---	---	---	---	5.00	---	55 MPH
0010	20	USH 2 EBND., W. OF USH 51	J1-1	24"	X	39"	---	1	---	---	---	---	6.50	---	SEE PLAN SHEET
0010	21	"	W2-6	30"	X	30"	---	---	1	---	---	---	---	9.00	
0010	21A	"	W13-1	18"	X	18"	---	---	---	---	---	---	---	2.25	MOUNT BELOW SIGN #21
0010	22	"	D1-62	72"	X	66"	---	---	---	1	1	---	33.00	---	SEE SIGN DETAIL
0010	23	"	W3-2	36"	X	36"	---	1	---	---	---	---	---	9.00	
0010	24	"	D1-1	78"	X	15"	---	2	---	---	---	---	8.13	---	SEE SIGN DETAIL
0010	25	USH 2 WBND., W. OF USH 51	R2-1	24"	X	30"	---	1	---	---	---	---	5.00	---	55 MPH
0011	25A	USH 2 EBND., W. OF USH 51	D1-3	66"	X	36"	---	1	1	---	---	---	16.50	---	SEE SIGN DETAIL
0010	26	USH 2 WBND., W. OF USH 51	J4-1	24"	X	36"	---	1	---	---	---	---	6.00	---	SEE PLAN SHEET
0010	27	USH 2 EBND., W. OF USH 51	R3-8DD	36"	X	30"	---	1	---	---	---	---	7.50	---	
0010	28	"	R3-8DD	36"	X	30"	---	1	---	---	---	---	7.50	---	
0010	29	USH 2 EBND., SPLITTER ISLAND	W12-1D	24"	X	24"	1	---	---	---	---	---	---	4.00	
0010	30	VACANT	---	-	-	-	---	---	---	---	---	---	---	---	
0010	31	A	R1-2	36"	X	31"	---	---	1	---	---	---	3.88	---	
0010	31A	"	R6-2R	24"	X	30"	---	---	---	---	---	---	5.00	---	MOUNT BELOW SIGN #31
0010	32	"	D1-1	42"	X	30"	---	1	---	---	---	---	8.75	---	SEE SIGN DETAIL
0010	33	IN ROUNDABOUT CENTER CIRCLE	R6-1R	54"	X	18"	---	2	---	---	---	---	6.75	---	
0010	33A	"	R6-4B	60"	X	24"	---	---	---	---	---	---	10.00	---	MOUNT BELOW SIGN #33
0010	34	"	R6-1R	54"	X	18"	---	2	---	---	---	---	6.75	---	
0010	34A	"	R6-4B	60"	X	24"	---	---	---	---	---	---	10.00	---	MOUNT BELOW SIGN #34
0010	35	"	R6-1R	54"	X	18"	---	2	---	---	---	---	6.75	---	
0010	35A	IN ROUNDABOUT CENTER CIRCLE	R1-2	60"	X	24"	---	---	---	---	---	---	10.00	---	MOUNT BELOW SIGN #35
0010	36	USH 2 WBND. BYPASS ISLAND	R1-2	36"	X	31"	---	1	---	---	---	1.00	3.88	---	
0010	36A	"	R1-54	24"	X	15"	---	---	---	---	---	---	2.50	---	MOUNT BELOW SIGN #36

ERECTION OF TYPE II SIGNS AND SUPPORTS (CONTINUED)

							POSTS WOOD 4X6-INCH					POSTS TUBULAR STEEL 2X2-INCH	SIGNS TYPE II		
							634.0614	634.0614	634.0616	634.0618	634.0620	634.0814	637.2210	637.2230	
							12-FT	14-FT	16-FT	18-FT	20-FT	14- FT	REFLECTIVE H	REFLECTIVE F	
CATEGORY	SIGN NO.	LOCATION	SIGN CODE	W	X	H	EACH	EACH	EACH	EACH	EACH	EACH	SF	SF	REMARKS
0010	37	USH 2 EBND. MEDIAN, E. OF ROUNDABOUT	R1-2	36"	X	31"	---	---	1	---	---	---	3.88	---	
0010	37A	"	R6-2R	24"	X	30"	---	---	---	---	---	---	5.00	---	MOUNT BELOW SIGN #37
0010	38	"	D1-1	42"	X	30"	---	1	---	---	---	---	8.75	---	SEE SIGN DETAIL
0010	38A		---	-	-	-	---	---	---	---	---	---	---	---	
0010	39	USH 2 WBND. BYPASS ISLAND	W12-1D	24"	X	24"	1	---	---	---	---	---	---	4.00	
0010	40	USH 2 WBND., E. OF USH 51	D1-1	78"	X	15"	---	2	---	---	---	---	8.13	---	SEE SIGN DETAIL
0010	41	"	R6-2L	24"	X	30"	---	1	---	---	---	---	5.00	---	
0010	42	"	I2-2	60"	X	15"	---	1	1	---	---	---	6.25	---	SEE SIGN DETAIL
0010	43	"	R3-8DD	36"	X	30"	---	---	---	---	---	---	7.50	---	MOUNT BELOW SIGN #42
0010	44	USH 2 EBND., E. OF USH 51	R6-2L	24"	X	30"	---	---	1	---	---	---	5.00	---	
0010	45	"	J4-2	48"	X	36"	---	1	---	---	---	---	12.00	---	SEE PLAN SHEET
0010	46	USH 2 MEDIAN, E. OF USH 51	R3-8DD	36"	X	30"	---	---	---	---	---	---	7.50	---	
0011	46A	USH 2 WBND., E. OF USH 51	D1-3	66"	X	36"	---	1	1	---	---	---	16.50	---	SEE SIGN DETAIL
0010	47	"	W3-2	36"	X	36"	---	1	---	---	---	---	---	9.00	
0010	47A	USH 2 WBND., E. OF USH 51	W3-2	36"	X	36"	---	1	---	---	---	---	---	9.00	
0010	48	USH 2 WBND., E. OF USH 51	SPECIAL	66"	X	36"	---	---	1	1	---	---	16.50	---	SEE SIGN DETAIL
0010	49	"	D1-62	72"	X	66"	---	---	---	1	1	---	33.00	---	SEE SIGN DETAIL
0010	50	"	W2-6	30"	X	30"	---	---	1	---	---	---	---	6.25	
0010	50A	"	W13-1	18"	X	18"	---	---	---	---	---	---	---	2.25	15 MPH, MOUNT BELOW SIGN #50
0010	51	VACANT	---	-	-	-	---	---	---	---	---	---	---	---	
0010	52	USH 51, S. OF USH 2	J1-1	24"	X	39"	---	1	---	---	---	---	6.50	---	SEE PLAN SHEET
0010	53	"	W2-6	30"	X	30"	---	---	1	---	---	---	---	6.25	
0010	53A	"	W13-1	18"	X	18"	---	---	---	---	---	---	---	2.25	15 MPH, MOUNT BELOW SIGN 53
0010	54	"	R2-1	24"	X	30"	---	1	---	---	---	---	5.00	---	45 MPH
0010	55	"	D1-62	96"	X	42"	---	---	---	1	1	---	28.00	---	SEE SIGN DETAIL
0010	56	"	SPECIAL	66"	X	24"	---	1	1	---	---	---	11.00	---	SEE SIGN DETAIL
0010	57	"	W3-2	36"	X	36"	---	1	---	---	---	---	---	9.00	
0010	57A	"	D1-3	66"	X	36"	---	1	1	---	---	---	16.50	---	SEE SIGN DETAIL
0010	58	USH 51 MEDIAN, S. OF ROUNDABOUT	R4-7	24"	X	30"	---	1	---	---	---	---	5.00	---	
0010	59	USH 51, S. OF ROUNDABOUT	R2-1	24"	X	30"	---	1	---	---	---	---	5.00	---	55 MPH
0010	60	"	R3-8DD	36"	X	30"	---	1	---	---	---	---	7.50	---	
0010	61	USH 51 SPLITTER ISLAND MEDIAN, S. OF ROUNDABOUT	W12-1D	24"	X	24"	1	---	---	---	---	---	---	4.00	
0010	62	USH 51 MEDIAN, S. OF ROUNDABOUT	R1-2	36"	X	31"	---	---	1	---	---	---	3.88	---	
0010	62A	"	R6-2R	24"	X	30"	---	---	---	---	---	---	5.00	---	MOUNT BELOW SIGN #62
0010	63	USH 51 SPLITTER ISLAND, S. OF ROUNDABOUT	R1-2	36"	X	31"	---	---	---	---	---	1	3.88	---	
0010	63A	USH 51 SPLITTER ISLAND, S. OF ROUNDABOUT	R1-54A	24"	X	15"	---	---	---	---	---	---	2.50	---	
0010	64	USH 51 MEDIAN, S. OF ROUNDABOUT	D1-1	42"	X	30"	---	1	---	---	---	---	8.75	---	
0010	65	USH 51 SPLITTER ISLAND, W. OF ROUNDABOUT	R1-2	36"	X	31"	---	---	---	---	---	1	3.88	---	
0010	65A	"	R1-54	24"	X	15"	---	---	---	---	---	---	2.50	---	
			TOTAL 0010				3	51	18	4	3	3	518.25	113.25	

3

REMOVING TYPE II SIGNS AND SUPPORTS

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	200	USH 2, E. OF CTH D	W6-1	1	1	
0010	201	"	W6-3	1	1	
0010	202	"	W6-1	1	1	
0010	203	"	R5-1	1	1	
0010	204	"	W6-2	1	1	REMOVE R4-1 ALSO
0010	205	USH 2 MEDIAN, E. OF CTH D	R4-7	1	1	
0010	206	USH 2, E. OF CTH D	R5-1A	1	1	
0010	207	USH 2 MEDIAN, E. OF CTH D	W14-3	1	1	
0010	208	USH 2, E. OF CTH D	R4-1	1	1	
0010	209	USH 2 EBND., W. OF CENTER DR.	R6-2L	1	1	
0010	210	USH 2 MEDIAN, W. OF CENTER DR.	R1-1	1	1	REMOVE R3-1 ALSO
0010	211	"	R1-1	1	1	REMOVE R3-1 ALSO
0010	212	USH 2 EBND., W. OF CENTER DR.	M1-94	1	2	
0010	213	USH 2 MEDIAN, W. OF CENTER DR.	R1-1	1	1	REMOVE R3-1 ALSO
0010	214	USH 2 EBND., W. OF CENTER DR.	R6-2L	1	1	
0010	215	USH 2 MEDIAN, W. OF CENTER DR.	R1-1	1	1	REMOVE R3-1 ALSO
0010	216	USH 2 WBND., W. OF CENTER DR.	W4-2L	1	1	REMOVE FROM TRAFFIC SIGNAL
0010	217	"	W4-2L	1	1	"
0010	218	"	R6-2R	1	1	
0010	219	CENTER DR.	R6-2L	1	1	
0010	220	"	R1-1	1	1	REMOVE R3-1 ALSO
0010	221	"	R1-1	1	1	
0010	222	"	R1-1	1	1	
0010	223	"	R1-1	1	1	REMOVE R3-1 ALSO
0010	224	"	R6-2L	1	1	
0010	225	USH 2 EBND., E. OF CENTER DR.	J1-1	1	1	
0010	226	"	D5-2	1	2	
0010	227	USH 2 WBND., E. OF CENTER DR.	D1-60	1	2	
0010	228	USH 2 WBND., E. OF CENTER DR.	R2-1	1	1	
0010	229	USH 2 EBND., E. OF CENTER DR.	J2-2	1	1	
0010	230	"	D5-	1	2	
0010	231	"	D1-3	1	2	
0010	232	USH 2 WBND., W. OF USH 51	W4-1R	1	1	
0010	233	USH 2 EBND., W. OF USH 51	R1-2	1	1	
0010	234	"	J2-3	1	2	
0010	235	"	J3-1	1	1	
0010	236	USH 2 EXIT RAMP TO USH 51	W3-2	1	1	
0010	237	"	W3-5	1	1	
0010	238	USH 2 EBND., AT USH 51	W4-1R	1	1	
0010	239	USH 51 OVERPASS BRIDGE	W5-51L	1	1	
		SUBTOTAL		40	46	

REMOVING TYPE II SIGNS AND SUPPORTS (CONTINUED)

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	240	USH 2 EXIT RAMP TO USH 51	R1-2	1	1	
0010	241	USH 51 ENTRANCE RAMP	W1-8	1	1	
0010	242	"	W1-8	1	1	
0010	243	"	W1-8	1	1	
0010	244	"	W1-8	1	1	
0010	245	"	W1-8	1	1	
0010	246	"	W1-8	1	1	
0010	247	USH 2 WBND., W. OF USH 51	J13-1	1	1	
0010	248	USH 51 ENTRANCE RAMP	W1-8	1	1	
0010	249	"	W13-3	1	1	
0010	250	"	J3-1	1	1	
0010	251	"	W13-3	1	1	
0010	252	"	W3-5	1	1	REMOVE R5-1A ALSO
0010	253	VACANT	---	---	---	
0010	254	USH 51 ENTRANCE RAMP	R5-1	1	1	
0010	255	"	W1-8	1	1	
0010	256	"	R3-2	1	1	REMOVE R4-7 ALSO
0010	257	USH 2 ENTRANCE RAMP	R2-1	1	1	
0010	258	USH 51 ENTRANCE RAMP	R3-2	1	1	REMOVE R4-7 ALSO
0010	259	USH 2 ENTRANCE RAMP	J3-1	1	1	
0010	260	USH 51 ENTRANCE RAMP	W6-3	1	1	
0010	261	USH 51, N. OF USH 2	R2-1	1	1	
0010	262	"	R2-1	1	1	
0010	263	"	R4-52R	1	1	
0010	264	"	R4-52R	1	1	
0010	265	"	R2-1	1	1	
0010	266	USH 2 WBND., AT USH 51	D1-3	1	2	REMOVE D5- , REST AREA RIGHT ARROW
0010	267	USH 51 OVERPASS BRIDGE	W5-52R	1	1	
0010	268	USH 2 EXIT RAMP	R5-1A	1	1	
0010	269	USH 51, S. OF USH 2	W4-1R	1	1	REMOVE W1-2L ALSO
0010	270	VACANT	---	---	---	
0010	271	USH 51, S. OF USH 2	W1-2L	1	1	
0010	272	USH 51 EXIT RAMP	R5-1A	1	1	
0010	273	"	R5-1A	1	1	
0010	274	USH 51, S. OF USH 2	R2-1	1	1	
0010	275	"	R1-2	1	1	REMOVE R5-1 ALSO
0010	276	VACANT	---	---	---	
0010	277	USH 51, S. OF USH 2	J4-2	1	1	
0010	278	USH 2 WBND., W. OF MONTREAL RIVER	SP	1	1	IRON COUNTY IS ZONED
0010	279	"	J2-3	1	1	
		SUBTOTAL		37	38	

REMOVING TYPE II SIGNS AND SUPPORTS (CONTINUED)

CATEGORY	SIGN NO.	LOCATION	SIGN CODE	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	280	USH 51 EXIT RAMP	J4-1	1	1	
0010	281	"	R1-2	1	1	
0010	282	USH 2 WBND., W. OF MONTREAL RIVER	SIS	1	2	
0010	283	USH 2 MEDIAN, W. OF MONTREAL RIVER	R1-1	1	1	REMOVE R3-1 ALSO
0010	284	"	R1-1	1	1	REMOVE R3-1 ALSO
0010	285	USH 2 WBND., W. OF MONTREAL RIVER	R6-2L	1	1	
0010	286	USH 51 OVERPASS BRIDGE	R5-1A	1	1	REMOVE 12-2 AND R2-1 ALSO
0010	287	VACANT	---	---	---	
0010	288	USH 2 EBND., W. OF MONTREAL RIVER	J4-1	1	1	
0010	289	USH 2 WBND., E. OF MONTREAL RIVER	D5-	1	2	
0010	290	USH 51, S. OF USH 2	J3-2	1	1	
0010	291	"	D5-	1	2	
0010	292	"	W13-3	1	1	
0010	293	"	R2-1	1	1	
0010	294	"	W8-68	1	1	
		SUBTOTAL		14	17	
		TOTAL 0010		91	101	

MOVING TYPE II SIGNS AND SUPPORTS

CATEGORY	SIGN NO.	LOCATION	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	REMARKS
STAGE 1					
0010	401	USH 51, SOUTH OF USH 2	2	1	R5-1, R3-1, MOVE FOR TEMPORARY ROAD
0010	402	"	1	1	R1-1
0010	403	"	1	1	R1-1
0010	404	"	2	1	R5-1, R3-1, MOVE FOR TEMPORARY ROAD
		STAGE 1 SUBTOTAL	6	4	

NOTE: REMOVE SIGNS IN STAGE 1, REINSTALL IN STAGE 4

TRAFFIC CONTROL

CATEGORY	STAGE	DAYS	643.0300 DRUMS DAY	643.0420 BARRICADES TYPE III DAY	643.0500 FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 WARNING LIGHTS TYPE A DAY	643.0715 WARNING LIGHTS TYPE C DAY	643.0800 ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.0920 COVERING SIGNS TYPE II EACH	STAGES	643.1050 SIGNS PCMS DAY	643.1070 CONES 42-INCH DAY	COMMENTS
PROJECT 1175-21-71															
0010	STAGE 1	30	9,900	600	-	-	1,200	900	30	1,230	-	-	28	-	BEFORE BEGINNING OF STAGE 1, "CONSTRUCTION TO BEGIN ON XX/XX"
0010	STAGE 2	40	7,000	2,880	180	180	3,600	2,000	80	3,600	3	2	28	1,800	WEEK PRIOR TO STAGE 2, "CHANGE IN TRAFFIC PATTERN TO BEGIN ON XX/XX"
0010	STAGE 3	100	20,000	5,700	170	170	7,600	3,500	200	9,100	-	-	28	-	WEEK PRIOR TO STAGE 3, "CHANGE IN TRAFFIC PATTERN TO BEGIN ON XX/XX"
0010	STAGE 4	30	7,500	30	-	-	60	-	-	570	-	-	28	-	WEEK PRIOR TO STAGE 4, "CHANGE IN TRAFFIC PATTERN TO BEGIN ON XX/XX"
0010	UNDISTRIBUTED		4,600	990	50	50	1,240	700	30	1,500	1	-	28	700	
	TOTAL 0010		49,000	10,200	400	400	13,700	7,100	340	16,000	4		140	2,500	

3

PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	646.3020 MARKING LINE EPOXY 8-INCH LF	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	646.6320 MARKING DOTTED EXTENSION EPOXY 18-INCH LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH LF	646.7220 MARKING CHEVRON EPOXY 24-INCH LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH
STAGE 3														
0010	108NB+36	-	116NB+00	USH 51, NB & SB	2,940	575	2	-	-	50	-	-	30	3
0010	183EB+00	-	216EB+50	USH 2, EB	6,700	-	-	-	-	-	-	-	-	-
0010	218EB+25	-	224EB+40	USH 2, EB	930	310	2	-	-	-	-	-	10	1
0010	227EB+50	-	231EB+25	USH 2, EB	450	575	-	-	-	-	-	-	10	1
0010	0CC+00	-	3CC+77	RAB CIRCLE	-	280	-	3	52	-	-	260	-	-
				STAGE 3 SUBTOTALS	11,020	1,740	4	3	52	50	0	260	50	5
STAGE 4														
0010	164EB+40	-	180EB+30	USH 2, EB & WB	5,520	-	-	-	-	170	-	-	-	-
0010	180EB+30	-	183EB+00	USH 2, EB	540	-	-	-	-	-	-	-	-	-
0010	216EB+50	-	218EB+25	USH 2, EB	350	-	-	-	-	-	-	-	-	-
0010	180WB+20	-	205WB+35	USH 2, WB	5,030	-	-	-	-	-	-	-	-	-
0010	205WB+35	-	231WB+10	USH 2, WB & WB PASSING LANE	4,840	2,750	3	-	-	-	75	35	2	20
				STAGE 4 SUBTOTALS	16,280	2,750	3	0	0	170	75	35	2	20
				TOTAL 0010	27,300	4,490	7	3	52	220	75	295	52	25

MARKING REMOVAL LINE AND TEMPORARY MARKING LINE

CATEGORY	STATION	TO	STATION	LOCATION	646.9000 4-INCH LF	646.9100 8-INCH LF	646.9200 WIDE LF	649.0120 TEMPORARY MARKING LINE EPOXY 4-INCH LF	649.0150 4-INCH LF	649.0960 MASK OUT 6-INCH LF	649.0105 4-INCH LF	649.0205 8-INCH LF	649.0505 ARROW EACH	649.0605 WORD EACH	649.0805 STOP LINE 18-INCH LF	649.0905 DIAGONAL 12-INCH LF	REMARKS
STAGE 2																	
0010	8TRN+10	-	27TRN+25	USH 51 TEMPORARY ROAD	-	-	-	-	1,200	-	7,460	-	-	-	60	205	INCULDING TEMPORARY INTERSECTION
0010	212EB+00	-	221EB+00	USH 2, EB, LT & RT	550	550	120	-	-	-	1,150	350	2	1	-	-	TEMPORARY TURN LANE AND BYPASS LANE
0010	176EB+00	-	EAST OF PROJECT LIMITS	USH 2, EB	-	-	270	-	6,450	1,500	9,700	-	-	-	-	-	TWO LANE, TWO WAY TRAFFIC
				STAGE 2 SUBTOTALS	550	550	390	0	7,650	1,500	18,310	350	2	1	60	205	
STAGE 3																	
0010	27TRN+25	-	28TRN+00	USH 51 TEMPORARY ROAD	270	-	-	-	-	-	460	50	2	-	20	90	INCLUDING TEMPORARY CROSSOVER
0010	211EB+50	-	221WB+00	USH 2, WB, LT & RT	350	550	90	-	-	-	1,300	350	2	1	-	-	TEMPORARY TURN LANE AND BYPASS LANE
0010	176EB+00	-	EAST OF PROJECT LIMITS	USH 2, WB	-	-	-	-	8,400	850	9,700	-	-	-	-	-	TWO LANE, TWO WAY TRAFFIC
				STAGE 3 SUBTOTALS	620	550	90	0	8,400	850	11,460	400	4	1	20	90	
STAGE 4																	
	164EB+40	-	175EB+20	USH 2, EB	-	-	-	1,080	-	-	-	-	-	-	-	-	FOR PLACEMENT PRIOR TO MILLING RUMBLE STRIPS
	220WBT+85	-	224WBT+20	USH 2, WB, BYPASS, RT	-	-	-	-	335	-	-	-	-	-	-	-	
0010				UNDISTRIBUTED	-	-	-	-	500	-	-	-	-	-	-	-	
					0	0	0	1,080	835	0	0	0	0	0	0	0	
				TOTAL 0010	1,170	1,100	480	1,080	16,885	2,350	29,770	750	6	2	80	295	

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER AND CURB & GUTTER LF	650.7000 CONCRETE PAVEMENT LF	650.8000 RESURFACING REFERENCE LF	650.9000 CURB RAMPS EACH	650.9910.01 SUPPLEMENTAL CONTROL (1175-21-71) LS	650.9920 SLOPE STAKES LF
STAGE 1												
0010	9TRN+15	-	27TRN+10	USH 51 TEMPORARY ROAD	1,475	1,475	-	-	-	-	-	1,795
0010	182WB+28	-	186WB+58	USH 2, WB, RT	-	-	-	-	-	-	-	158
0010	213EB+11	-	220EB+92	USH 2, EB, LT	781	781	-	-	-	-	-	189
0010	165EB+35	-	216EB+50	USH 2, EB	-	-	-	-	5,115	-	-	-
0010	175WB+20	-	216WB+50	USH 2, WB	-	-	-	-	4,130	-	-	-
0010				PROJECT LIMITS	-	-	-	-	-	-	1	-
				STAGE 1 SUBTOTALS	2,256	2,256	0	0	9,245	0	1	2,142
STAGE 2												
0010	211WB+55	-	218WB+05	USH 2, WB, RT TURN LANE	650	650	-	-	-	-	-	340
0010	218WBT+95	-	230WBT+47	USH 2, WB BYPASS LANE	1,152	1,152	-	-	-	-	-	1,152
0010	216WB+50	-	224WB+40	USH 2, WB	790	790	29	103	-	-	-	90
0010	5WIN+29	-	6WIN+95	RAB NE ISLAND, LT	-	-	167	-	-	-	-	-
0010	9WIN+42	-	9WIN+60	RAB NE ISLAND, LT	-	-	19	-	-	-	-	-
0010	228WB+57	-	230WB+12	USH 2, WB	155	155	82	72	-	-	-	-
0010				PROJECT LIMITS	-	-	-	-	-	-	-	-
				STAGE 2 SUBTOTALS	2,747	2,747	297	175	0	0	0	1,582
STAGE 3												
0010	108NB+36	-	116NB+55	USH 51, NB	819	819	-	-	-	-	-	508
0010	111SB+71	-	116SB+89	USH 51, SB	518	518	-	-	-	-	-	-
0010	113NB+48	-	116NB+55	USH 51, LT, MEDIAN	-	-	735	-	-	2	-	-
0010	113NB+44	-	119NOT+62	RAB SE SLIP LANE, RT	515	515	72	468	-	2	-	618
0010	115NOT+25	-	117NOT+72	RAB SE SLIP LANE, LT ISLAND	-	-	508	90	-	4	-	-
0010	222EB+32	-	227EOT+28	RAB SW SLIP LANE, RT	471	471	150	297	-	2	-	468
0010	223EOT+81	-	226EOT+36	RAB SW SLIP LANE, LT ISLAND	-	-	344	226	-	4	-	-
0010	218EB+25	-	225EB+13	USH 2, EB	688	688	401	41	-	2	-	407
0010	224WB+40	-	225WB+38	USH 2, WB	98	98	111	-	-	-	-	-
0010	6WIN+95	-	9WIN+42	RAB NE ISLAND, LT	-	-	163	82	-	1	-	-
0010	226EB+73	-	231EB+19	USH 2, EB	446	446	344	59	-	2	-	166
0010	226WB+66	-	228WB+57	USH 2, WB	191	191	200	-	-	-	-	-
0010	0CC+00	-	3CC+77	RAB CIRCLE	377	377	-	377	-	-	-	-
0010				PROJECT LIMITS	-	-	-	-	-	-	-	-
				STAGE 3 SUBTOTALS	4,123	4,123	3,028	1,640	0	19	0	2,167
STAGE 4												
0010	107NB+30	-	108NB+25	USH 51, LT	-	-	130	-	-	-	-	-
0010	108NB+36	-	115SB+30	USH 51, LT	-	-	-	-	-	-	-	694
0010	216EB+50	-	218EB+25	USH 2, EB	175	175	-	-	-	-	-	175
0010	224WBT+25	-	228WBT+38	USH 2, WB PASSING LANE, RT	-	-	533	-	-	3	-	-
				STAGE 4 SUBTOTALS	175	175	663	0	0	3	0	869
				TOTAL 0010	9,301	9,301	3,988	1,815	9,245	22	1	6,760

3

SAWING

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	REMARKS
STAGE 1							
0010	105NB+96	-	108NB+36	USH 51, LT	240	-	
0010	11TRN+00			USH 51 TEMPORARY ROAD, LT	30	3	
0010	216EB+90	-	218EB+10	USH 2, EB, RT	120	-	
0010	213EB+11	-	220EB+40	USH 2, EB, LT	730	-	
				STAGE 1 SUBTOTALS	1,120	3	
STAGE 2							
0010	216WB+50			USH 2, WB	3	40	
0010	215WB+15	-	216WB+50	USH 2, WB, LT	-	135	
0010	211WB+55	-	216WB+50	USH 2, WB, RT	497	-	
				STAGE 1 SUBTOTALS	500	175	
STAGE 3							
0010	108NB+36			USH 51, NB	23	30	
0010	100NB+76	-	114SB+60	USH 51, SB, LT	-	515	
0010	216EB+50			USH 2, EB	28	15	
0010	218EB+05			USH 2, EB	3	55	
0010	183EB+00	-	216EB+50	USH 2, EB, LT & RT	5,836	590	INCLUDES SIDE ROAD
				STAGE 1 SUBTOTALS	5,890	1,205	
STAGE 4							
0010	165EB+34			USH 2, EB	30	-	
0010	180EB+30	-	183EB+00	USH 2, EB, LT	272	-	
	183EB+00			USH 2, EB	23	-	
0010	180WB+20	-	208WB+90	USH 2, WB, LT & RT	4,540	432	INCLUDES CROSSOVERS AND SIDE ROAD
0010	211WB+55	-	219WB+82	USH 2, WB, LT & RT	1,035	135	
0010	224WBT+25	-	228WBT+38	USH 2, WB PASSING LANE, RT	440	-	
				STAGE 1 SUBTOTALS	6,340	567	
				TOTAL 0010	13,850	1,950	

SALVAGE, STORE AND REINSTALL LINGHTING UNIT

CATEGORY	STATION	LOCATION	SPV.0060.40 EACH
STAGE 1			
0010	107NB+55	USH 51, NB, LT	1
		STAGE 1 SUBTOTAL	1
		TOTAL 0010	1

3

CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS

LOCATION	650.8500 LS
PROJECT (1175-21-71)	1
TOTALS	1

LIGHTING CONTROL CABINET AND BASES

DESCRIPTION	STATION	OFFSET	CONCRETE CONTROL CABINET BASES TYPE L30 654.0230 EACH	ELECTRICAL SERVICE METER BREAKER PEDESTAL (LCC A) 656.0200 LS	LIGHTING CONTROL CABINETS 120/240 30-INCH 659.2130 EACH
LCC A	118+54.40 NOT	49.8' RT	1	1	1
	TOTALS		1	1	1

PULL BOXES NON-CONDUCTIVE 24X42-INCH

DESCRIPTION	STATION	OFFSET	653.0164 EACH
LPB-1	118+53.63 NOT	39.7' RT	1
LPB-2	118+51.83 NOT	26.7' RT	1
LPB-3	228+35.41 EB	10.1' LT	1
LPB-4	228+24.72 WB	25.0' LT	1
LPB-5	224+85.00 WB	26.0' LT	1
LPB-6	224+75.00 EB	18.0' LT	1
LPB-7	223+24.32 EB	21.4' LT	1
LPB-8	223+26.49 EOT	22.5' RT	1
LPB-9	225+69.30 EOT	35.8' RT	1
LPB-10	225+70.53 EOT	8.8' LT	1
LPB-11	116+17.54 NB	13.9' LT	1
LPB-12	116+04.14 NOT	33.0' RT	1
LPB-13	117+10.87 NOT	9.0' LT	1
LPB-14	117+08.07 NOT	41.0' RT	1
LPB-15	114+50.66 NOT	23.8' LT	1
LPB-16	114+50.00 NOT	35.0' RT	1
LPB-17	230+05.00 EB	18.0' LT	1
LPB-18	230+60.00 EB	24.0' LT	1
TOTALS			18

CONCRETE BASES TYPE 5

DESCRIPTION	STATION	OFFSET	654.0105 EACH
A-1	117+03.81 NOT	11.6' LT	1
A-2	116+17.79 NOT	34.2' RT	1
A-3	114+75.16 NB	10.2' LT	1
A-4	113+17.44 NB	28.4' RT	1
A-5	225+62.31 EOT	9.5' LT	1
A-6	223+47.65 EB	20.9' LT	1
A-7	222+02.91 EB	22.2' LT	1
A-8	224+72.00 EB	7.7' LT	1
A-9	224+36.44 EOT	37.4' RT	1
A-10	228+63.46 EB	12.6' LT	1
A-11	230+80.00 EB	25.0' LT	1
A-12	227+12.78 WB	30.8' LT	1
A-13	226+99.89 WBT	15.1' RT	1
A-14	225+44.12 WBT	13.1' RT	1
TOTALS			14

CONDUIT RIGID NONMETALLIC SCHEDULE 40 AND ELECTRICAL WIRE LIGHTING

FROM	TO	3-INCH 652.0235 LF	2-INCH 652.0225 LF	8 AWG 655.0620 LF
LCC A	LPB-1	21	-	91
LPB-1	LPB-2	39	-	133
STUB		-	10	-
LPB-2	LPB-3	-	55	183
LPB-3	A-10	-	29	175
A-10	LPB-17	-	145	453
LPB-17	LPB-18	-	55	183
LPB-18	A-11	-	20	78
STUB		-	10	-
LPB-3	LPB-4	-	36	126
LPB-4	A-12	-	108	342
A-12	A-13	-	34	120
A-13	A-14	-	156	486
A-14	LPB-5	-	58	-
LPB-5	LPB-6	-	58	-
LPB-6	A-6	-	134	420
A-6	LPB-7	-	23	145
LPB-7	A-7	-	120	378
STUB		-	10	-
LPB-6	A-8	-	12	54
LPB-7	LPB-8	-	63	207
STUB		-	10	-
LPB-8	A-9	-	100	318
A-9	LPB-9	-	107	339
STUB		-	10	-
LPB-9	LPB-10	-	45	153
LPB-10	A-5	-	9	75
LPB-10	LPB-11	-	57	189
LPB-11	LPB-12	-	48	270
LPB-12	A-2	-	12	90
A-2	A-1	-	106	560
A-1	LPB-13	-	8	70
LPB-13	LPB-14	-	50	280
LPB-14	LPB-2	-	127	665
LPB-11	A-3	-	147	459
A-3	LPB-15	-	21	81
STUB		-	10	-
LPB-15	LPB-16	-	59	195
LPB-16	A-4	-	124	390
STUB		-	10	-
TOTALS		60	2196	7708

LIGHTING UNITS AND ELECTRICAL WIRE LIGHTING

DESCRIPTION	STATION	OFFSET	ELECTRICAL WIRE LIGHTING 12 AWG 655.0610 LF	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE 657.0255 EACH	POLES TYPE 5 - ALUMINUM 657.0322 EACH	LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT 657.0710 EACH	LUMINAIRES UTILITY LED C 659.1125 EACH	DEPARTMENT FURNISHED - CONTRACTOR INSTALLED CELLULAR CONNECTOR NODES (LLC7290) SPV.0060.xx EACH
A-1	117+03.81 NOT	11.6' LT	270	1	1	2	2	2
A-2	116+17.79 NOT	34.2' RT	270	1	1	2	2	2
A-3	114+75.16 NB	10.2' LT	270	1	1	2	2	2
A-4	113+17.44 NB	28.4' RT	162	1	1	1	1	1
A-5	225+62.31 EOT	9.5' LT	270	1	1	2	2	2
A-6	223+47.65 EB	20.9' LT	270	1	1	2	2	2
A-7	222+02.91 EB	22.2' LT	270	1	1	2	2	2
A-8	224+72.00 EB	7.7' LT	162	1	1	1	1	1
A-9	224+36.44 EOT	37.4' RT	162	1	1	1	1	1
A-10	228+63.46 EB	12.6' LT	270	1	1	2	2	2
A-11	230+80.00 EB	25.0' LT	270	1	1	2	2	2
A-12	227+12.78 WB	30.8' LT	162	1	1	1	1	1
A-13	226+99.89 WBT	15.1' RT	162	1	1	1	1	1
A-14	225+44.12 WBT	13.1' RT	270	1	1	2	2	2
TOTALS			3240	14	14	23	23	23

NOTE:
THE DEPARTMENT IS ESTABLISHING A "LIGHTING CONTROL-MANAGEMENT SYSTEM" FOR THIS ROUNDABOUT OUTSIDE THE PROJECT. THE DEPARTMENT WILL UTILIZE "CELLULAR CONNECTOR NODES" AND THE "CITY TOUCH-INTERACT CITY CONTROL SYSTEM" AS PART OF AN ILLUMINATION DIMMING STRATEGY, AND IS RESPONSIBLE FOR SETTING UP THE SYSTEM IN CONJUNCTION WITH THIS PROJECT.

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
51	110+77NB	SPK IN PP#14-89/45-82.2' LT.	1449.42
52	223+73EB	WISDOT DISK-65.9' RT.	1446.74
53	231+62EB	WISDOT DISK-41.8' RT.	1430.49

CP#1
3/4-INCH REBAR WITH CAP
STA. 104+10.44NB-56.56' LT.
Y=375467.872
X=740264.491

CP#2
3/4-INCH REBAR WITH CAP
STA. 110+31.01NB-65.05' LT.
Y=376088.700
X=740215.844

N

EXISTING R/W
CENTURY LINK
XCEL ENERGY
PT: 104+68.71
SLOPE INTERCEPTS
BM #51
PC: 111+71.07
PCC: 113+96.74
PCC: 114+31.11
BURIED TELEPHONE LINE (APPROXIMATE LOCATION)
LIMIT OF WETLANDS
BM #52
PCC: 116+15.33
MONUMENT FOUND
USH 2
EP: 116+65.65
MERIT NETWORK
104NB
USH 51
106NB
108NB
110NB
112NB
114NB
116NB
BURIED ELECTRIC LINE (APPROXIMATE LOCATION)
SLOPE INTERCEPTS
BURIED ELECTRIC LINE (APPROXIMATE LOCATION)
BURIED TELEPHONE LINE (APPROXIMATE LOCATION)
XCEL ENERGY

BEGIN PROJECT
STA. 108+36NB
Y = 375898.151
X = 740293.001

VPC STA 108+75.00
VPC EL 1443.03
VPI STA 110+50.00
VPI EL 1443.00
VPT STA 112+25.00
VPT EL 1438.84
VCL = 150.00
K = 52.14
EXISTING PROFILE
STA 116+65.65
EL 1431.98
-0.02%
FINISHED GRADE
-2.38%
0.50%
STA 108+36.00
EL 1443.04
VCL = 350.00
K = 148.34
VPC STA 114+65.00
VPC EL 1433.13
VPI STA 115+40.00
VPI EL 1431.35
VPT STA 116+15.00
VPT EL 1431.73

1460 1455 1450 1445 1440 1435 1430 1425 1420

1440.00	1440.42	1440.88	1441.35	1441.75	1442.15	1442.53	1442.84	1443.11	1443.04	1443.40	1443.01	1443.67	1442.83	1443.88	1442.48	1444.02	1441.97	1444.13	1441.28	1444.21	1440.43	1444.21	1439.41	1444.18	1438.25	1444.18	1437.06	1443.99	1435.87	1443.40	1434.68	1441.93	1433.49	1445.28	1432.42	1447.45	1431.81	1444.40	1431.67	1437.86	1431.90
105+00	106+00	107+00	108+00	109+00	110+00	111+00	112+00	113+00	114+00	115+00	116+00	117+00	118+00																														

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: USH 51 NORTHBOUND	SHEET 186	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp
PLOT DATE : 8/31/2020 10:41 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
51	110+77NB	SPK IN PP#14-89/45-82.2' LT.	1449.42
52	223+73EB	WISDOT DISK-65.9' RT.	1446.74
53	231+62EB	WISDOT DISK-41.8' RT.	1430.49

CP#1
3/4-INCH REBAR WITH CAP
STA. 104+10.44NB-56.56' LT.
Y=375467.872
X=740264.491

CP#2
3/4-INCH REBAR WITH CAP
STA. 110+31.01NB-65.05' LT.
Y=376088.700
X=740215.844

N

EXISTING R/W
SLOPE INTERCEPTS
CENTURY LINK
XCEL ENERGY
USH 51
BM #51
BP: 111+71.07
PC: 113+56.22
112SB
114SB
116SB
BURIED TELEPHONE LINE (APPROXIMATE LOCATION)
BURIED ELECTRIC LINE (APPROXIMATE LOCATION)
BEGIN PROJECT
STA. 108+36NB
SLOPE INTERCEPTS
BURIED ELECTRIC LINE (APPROXIMATE LOCATION)
BURIED TELEPHONE LINE (APPROXIMATE LOCATION)
PT: 115+63.44
LIMIT OF WETLANDS
BM #52
EP: 116+89.20
USH 2
MERIT NETWORK

STA 111+71.07
EL 1440.02
STA 111+99.71
EL 1439.42
VCL = 150.00
K = 53.97
EXISTING PROFILE
-2.11%
-2.28%
FINISHED GRADE
LOW POINT STA 116+08.02
LOW POINT EL 1431.50
STA 116+89.20
EL 1431.85
0.50%
VPC STA 114+85.00
VPC EL 1432.92
VPI STA 115+60.00
VPI EL 1431.21
VPT STA 116+35.00
VPT EL 1431.58

1455 1450 1445 1440 1435 1430 1425 1420

1444.21 1439.41 1444.24 1438.27 1444.32 1437.13 1444.34 1435.99 1444.16 1434.85 1443.93 1433.71 1442.94 1432.60 1444.64 1431.83 1445.48 1431.52 1443.30 1431.66

105+00 106+00 107+00 108+00 109+00 110+00 111+00 112+00 113+00 114+00 115+00 116+00 117+00 118+00

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: USH 51 SOUTHBOUND	SHEET 187 E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050102-PP.DWG
LAYOUT NAME - 050102-pp
PLOT DATE : 8/31/2020 10:41 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
51	110+77NB	SPK IN PP#14-89/45-82.2' LT.	1449.42
52	223+73EB	WISDOT DISK-65.9' RT.	1446.74
53	231+62EB	WISDOT DISK-41.8' RT.	1430.49

WETLANDS W-5
RPE (D) WETLAND
498 SF
0.011 ACRE

LIMIT OF WETLANDS

SLOPE INTERCEPTS

PC: 217+05.12EB

PRC: 219+64.08EB

PT: 221+36.91EB

STA. 111+00EXN
REMOVE STRUCTURE B-26-0006
4 SPAN CONTINUOUS STEEL DECK GIRDER
247.6' OVERALL LENGTH
39' OVERALL WIDTH

BURIED FIBER OPTIC CABLE
(APPROXIMATE LOCATION)

MERIT NETWORK

EXISTING R/W

CP#3
12-INCH SPIKE
STA. 224+49.85EB-117.05' LT.
Y=376959.051
X=740436.384

LIMIT OF WETLANDS

WETLANDS W-3
RPE (D) WETLAND
709 SF
0.016 ACRE

PC: 222+57.23EB

PT: 223+18.99EB

PC: 224+37.89EB

PT: 225+13.03EB

211EB USH 2 212EB 213EB 214EB 215EB 216EB 217EB 218EB 219EB 220EB 221EB 222EB 223EB 224EB

INLET

NGS MONUMENT

BM #52

SLOPE INTERCEPTS

LIMIT OF WETLANDS

XCEL ENERGY

EXISTING R/W

CENTURY LINK

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

WETLANDS W-4
RPE (D) WETLAND
350 SF
0.008 ACRE

LIMIT OF WETLANDS

NGS MONUMENT
HUXLEY CORS

NOTE:
SEE PLAN DETAILS FOR WORK
PRIOR TO STA. 211+00.

CP#4
3/4-INCH REBAR WITH CAP
STA. 218+97.59EB-37.13' RT.
Y=377221.832
X=739916.420

VPI STA 223+00.00
VPI EL 1429.90

VCL = 200.00
K = 290.43

FINISHED GRADE

2.09%

2.78%

0.65%

0.18%

STA 216+50.00
EL 1412.86

VPC STA 217+00.00
VPC EL 1413.91

VPI STA 218+00.00
VPI EL 1416.00

VPT STA 219+00.00
VPT EL 1418.78

EXISTING PROFILE

VPC STA 221+37.50
VPC EL 1425.38

VCL = 325.00
K = 152.54

VPT STA 224+62.50
VPT EL 1430.96

STA 225+13.03
EL 1431.29

1435 1430 1425 1420 1415 1410 1405 1400

1402.96 1403.94 1404.94 1405.92 1406.91 1407.89 1408.89 1409.95 1410.92 1411.89 1412.86 1413.87 1413.91 1414.89 1415.00 1415.86 1416.17 1416.88 1417.43 1417.92 1418.78 1418.96 1420.17 1419.83 1421.56 1420.64 1422.95 1421.42 1424.34 1422.16 1425.73 1422.81 1426.99 1423.55 1428.10 1424.22 1429.04 1424.95 1429.81 1425.68 1430.42 1426.31 1430.87 1426.29 1431.20 1424.67 1431.35

212+00 213+00 214+00 215+00 216+00 217+00 218+00 219+00 220+00 221+00 222+00 223+00 224+00 225+00

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: USH 2 EASTBOUND	SHEET 188	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050103-PP.DWG
LAYOUT NAME - 050103-pp

PLOT DATE : 12/3/2020 9:30 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

WETLANDS W-3
RPE (D) WETLAND
709 SF
0.016 ACRE

LIMIT OF WETLANDS
SLOPE INTERCEPTS
LIMIT OF WETLANDS
BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)
EXISTING R/W
MERIT NETWORK
PC: 227+31.28EB
PI: 226+73.03EB
225+13.03EB
PT: 229+37.59EB
EP: 234+27.78EB
229EB
230EB
231EB
232EB
233EB
234EB
USH 2
BM #53
BURIED ELECTRIC LINE (APPROXIMATE LOCATION)
BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)
BURIED TELEPHONE LINE (APPROXIMATE LOCATION)
CENTURY LINK
LIMIT OF WETLANDS
XCEL ENERGY
EXISTING R/W
SLOPE INTERCEPTS
BURIED TELEPHONE LINE (APPROXIMATE LOCATION)

CP#5
3/4-INCH REBAR WITH CAP
STA. 230+82.86EB-19.14' LT.
Y=376505.551
X=740839.327

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
51	110+77NB	SPK IN PP#14-89/45-82.2' LT.	1449.42
52	223+73EB	WISDOT DISK-65.9' RT.	1446.74
53	231+62EB	WISDOT DISK-41.8' RT.	1430.49

VCL = 100.00
K = 99.90
STA 226+73.20
EL 1431.57
STA 231+19.24
EL 1431.11
FINISHED GRADE
-0.69%
0.31%
EXISTING PROFILE
VPC STA 228+07.47
VPC EL 1430.65
VPI STA 228+57.47
VPI EL 1430.30
VPT STA 229+07.47
VPT EL 1430.46

1427.35	1431.53	1426.01	1431.39	1428.33	1431.04	1429.29	1430.70	1429.88	1430.44	1430.32	1430.43	1430.51	1430.59	1430.56	1430.74	1430.61	1430.90	1430.96	1431.05			1431.64	1431.55	1431.67											

227+00 228+00 229+00 230+00 231+00 232+00 233+00 234+00 235+00 236+00 237+00 238+00 239+00 240+00

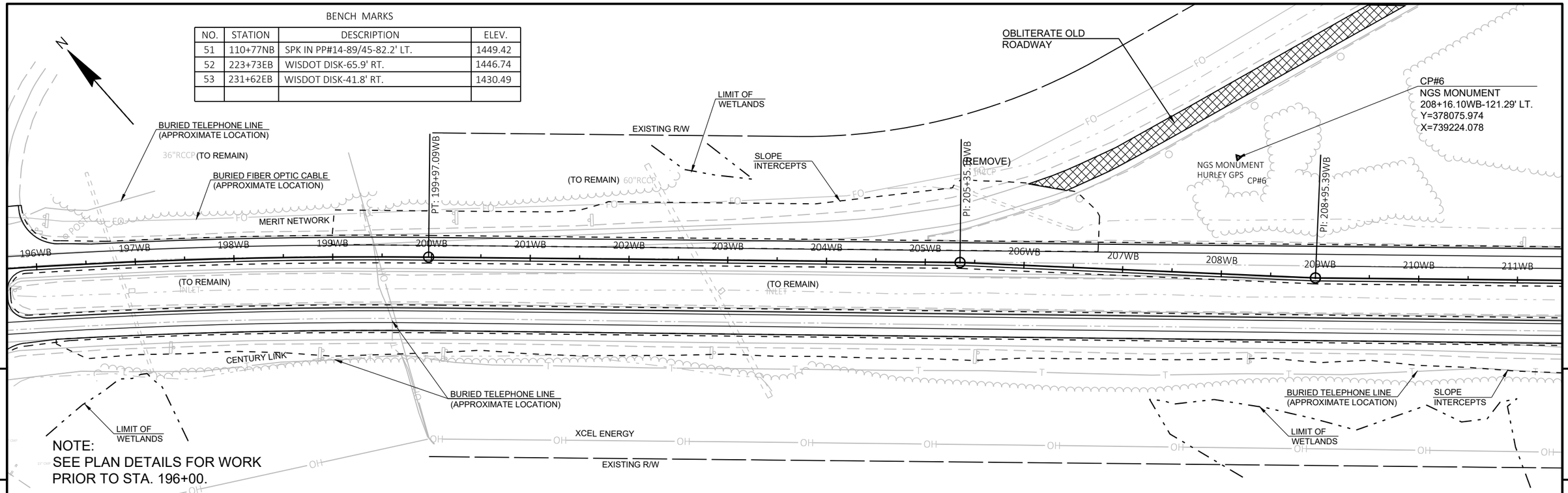
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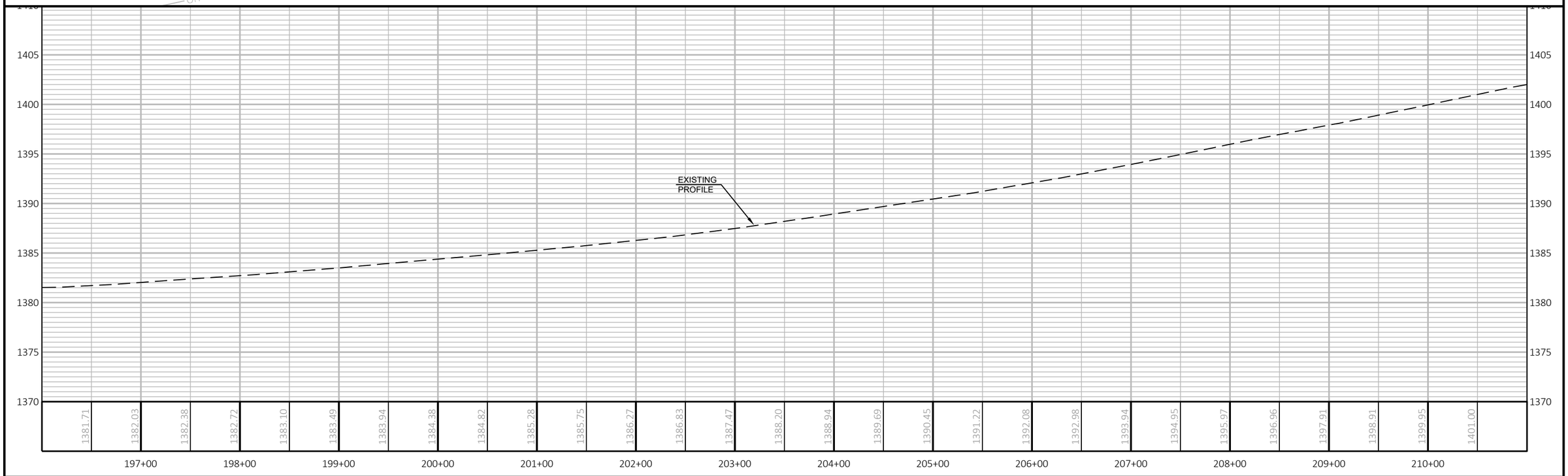
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: USH 2 EASTBOUND	SHEET 189	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050104-PP.DWG
LAYOUT NAME - 050104-pp
PLOT DATE : 8/31/2020 10:42 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:100 FT

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
51	110+77NB	SPK IN PP#14-89/45-82.2' LT.	1449.42
52	223+73EB	WISDOT DISK-65.9' RT.	1446.74
53	231+62EB	WISDOT DISK-41.8' RT.	1430.49





PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: USH 2 WESTBOUND	SHEET 190	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050105-PP.DWG
LAYOUT NAME - 050105-pp
PLOT DATE : 8/31/2020 10:42 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
51	110+77NB	SPK IN PP#14-89/45-82.2' LT.	1449.42
52	223+73EB	WISDOT DISK-65.9' RT.	1446.74
53	231+62EB	WISDOT DISK-41.8' RT.	1430.49

LIMIT OF WETLANDS
WETLANDS W-5
RPE (D) WETLAND
498 SF
0.011 ACRE
OBLITERATE OLD ROADWAY
SLOPE INTERCEPTS
36"RCCP
LIMIT OF WETLANDS
PC: 218+95.39WB
OBLITERATE OLD ROADWAY
SLOPE INTERCEPTS
STA. 111+00EXN
REMOVE STRUCTURE B-26-0006
4 SPAN CONTINUOUS STEEL DECK GIRDER
247.6' OVERALL LENGTH
39' OVERALL WIDTH
BURIED FIBER OPTIC CABLE (APPROXIMATE LOCATION)
MERIT NETWORK
PCC: 221+92.14WB
PT: 224+13.98WB
PI: 225+38.28WB
CP#3
12-INCH SPIKE
STA. 224+49.85EB-117.05' LT.
Y=376959.051
X=740436.384
WETLANDS W-3
RPE (D) WETLAND
709 SF
0.016 ACRE
LIMIT OF WETLANDS
EXISTING R/W
211WB 212WB 213WB 214WB 215WB 216WB 217WB 218WB 219WB 220WB 221WB 222WB 223WB 224WB 225WB
INLET
NGS MONUMENT
CENTURY LINK
SLOPE INTERCEPTS
LIMIT OF WETLANDS
24"RCCP (TO REMAIN)
36"RCCP
XCEL ENERGY
EXISTING R/W
BURIED TELEPHONE LINE (APPROXIMATE LOCATION)
BM #52
WETLANDS W-4
RPE (D) WETLAND
350 SF
0.008 ACRE
LIMIT OF WETLANDS
NGS MONUMENT HUTTLEY 1933
CP#4
3/4-INCH REBAR WITH CAP
STA. 218+97.59EB-37.13' RT.
Y=377221.832
X=739916.420

VCL = 200.00
K = 376.39
FINISHED GRADE
EXISTING PROFILE
2.29%
2.82%
0.40%
VCL = 325.00
K = 134.41
STA 216+50.00 EL 1413.07
VPC STA 217+00.00 VPC EL 1414.21
VPI STA 218+00.00 VPI EL 1416.50
VPT STA 219+00.00 VPT EL 1419.32
VPC STA 221+12.50 VPC EL 1425.31
VPI STA 222+75.00 VPI EL 1429.89
VPT STA 224+37.50 VPT EL 1430.54
STA 225+38.29 EL 1430.94

1440 1435 1430 1425 1420 1415 1410 1405 1400

1402.87 1403.85 1404.86 1405.81 1406.78 1407.79 1408.86 1410.00 1411.00 1412.01 1413.07 1414.11 1414.21 1415.09 1415.39 1416.09 1416.63 1417.05 1417.94 1418.10 1419.32 1419.09 1420.73 1419.99 1422.14 1420.85 1423.54 1421.62 1424.95 1422.25 1426.31 1423.11 1427.49 1423.77 1428.48 1424.36 1429.28 1424.46 1429.90 1423.87 1430.33 1424.01 1430.59 1424.59 1430.79 1427.14 1430.98

212+00 213+00 214+00 215+00 216+00 217+00 218+00 219+00 220+00 221+00 222+00 223+00 224+00 225+00

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: USH 2 WESTBOUND	SHEET 191 E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050106-PP.DWG
LAYOUT NAME - 050106-pp
PLOT DATE : 12/3/2020 9:29 AM
PLOT BY : SOUFAL, KEVIN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
51	110+77NB	SPK IN PP#14-89/45-82.2' LT.	1449.42
52	223+73EB	WISDOT DISK-65.9' RT.	1446.74
53	231+62EB	WISDOT DISK-41.8' RT.	1430.49

WETLANDS W-3
RPE (D) WETLAND
709 SF
0.016 ACRE

LIMITS OF WETLANDS

BURIED FIBER OPTIC CABLE
(APPROXIMATE LOCATION)

SLOPE
INTERCEPTS

EXCEL ENERGY

PC: 226+66.83WB

PT: 227+28.55WB

PC: 227+28.04SWB

PCC: 228+93.18WB

EXISTING R/W

PT: 230+62.88WB

MERIT NETWORK

EP: 234+27.00WB

227WB

228WB

229WB

230WB

231WB

232WB

233WB

234WB

BM #53

LIMITS OF WETLANDS

CENTURY LINK

XCEL ENERGY

EXISTING R/W

CP#5
3/4-INCH REBAR WITH CAP
STA. 230+82.86EB-19.14' LT.
Y=376505.551
X=740839.327

SLOPE
INTERCEPTS

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

BURIED ELECTRIC LINE
(APPROXIMATE LOCATION)

BURIED FIBER OPTIC CABLE
(APPROXIMATE LOCATION)

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

VCL = 100.00
K = 99.39

STA 226+66.83
EL 1431.34

FINISHED
GRADE

0.31%

-0.69%

0.31%

STA 230+73.13
EL 1430.67

EXISTING
PROFILE

VPC STA 228+10.00
VPC EL 1430.35

VPI STA 228+60.00
VPI EL 1430.00

VPT STA 229+10.00
VPT EL 1430.16

| | | |

BURIED FIBER OPTIC CABLE
(APPROXIMATE LOCATION)

BP: 218+95.35WBT

OBLITERATE OLD
ROADWAY

LIMIT OF
WETLANDS

MERIT NETWORK

STA. 111+00EXN
REMOVE STRUCTURE B-26-0006
4 SPAN CONTINUOUS STEEL DECK GIRDER
247.6' OVERALL LENGTH
39' OVERALL WIDTH

SLOPE
INTERCEPTS

CP#3
12-INCH SPIKE
STA. 224+49.85EB-117.05' LT.
Y=376959.051
X=740436.384

WETLANDS W-3
RPE (D) WETLAND
709 SF
0.016 ACRE

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
51	110+77NB	SPK IN PP#14-89/45-82.2' LT.	1449.42
52	223+73EB	WISDOT DISK-65.9' RT.	1446.74
53	231+62EB	WISDOT DISK-41.8' RT.	1430.49

LIMIT OF
WETLANDS

LIMIT OF
WETLANDS

EXISTING R/W

EP: 230+46.97WBT

219WBT 220WBT 221WBT 222WBT 223WBT 224WBT 225WBT 226WBT 227WBT 228WBT 229WBT 230WBT

USH 2

NGS MONUMENT

BM #53

BM #52

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

SLOPE
INTERCEPTS

CENTURY LINK

XCEL ENERGY

EXISTING R/W

CP#4
3/4-INCH REBAR WITH CAP
STA. 218+97.59EB-37.13' RT.
Y=377221.832
X=739916.420

WETLANDS W-4
RPE (D) WETLAND
350 SF
0.008 ACRE

NGS MONUMENT
HUDLEY CO

CENTURY LINK

SLOPE
INTERCEPTS

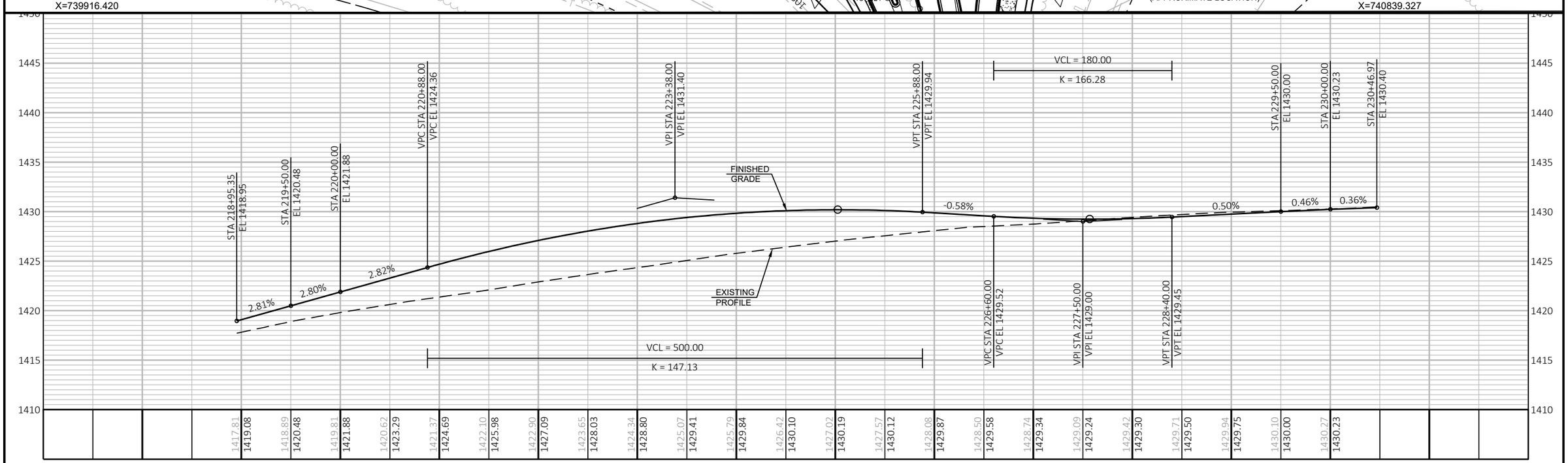
LIMIT OF
WETLANDS

EXISTING R/W

BURIED TELEPHONE LINE
(APPROXIMATE LOCATION)

XCEL ENERGY

CP#5
3/4-INCH REBAR WITH CAP
STA. 230+82.86EB-19.14' LT.
Y=376505.551
X=740839.327



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: USH 2 WESTBOUND BYPASS LANE	SHEET 193	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050108-PP.DWG
LAYOUT NAME - 050108-pp

PLOT DATE : 12/3/2020 11:31 AM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

USH 2

BM #52

EP: 3+76.98CC

BP: 0+00.00CC

EP: 116+65.65

SLOPE INTERCEPTS

N

BENCH MARKS

NO.	STATION	DESCRIPTION	ELEV.
51	110+77NB	SPK IN PP#14-89/45-82.2' LT.	1449.42
52	223+73EB	WISDOT DISK-65.9' RT.	1446.74
53	231+62EB	WISDOT DISK-41.8' RT.	1430.49

VCL = 75.00

K = 50.00

STA 0+00.00
EL 1431.38

VPC STA 0+52.50
VPC EL 1430.91

VPI STA 1+00.00
VPI EL 1430.62

VPT STA 1+37.50
VPT EL 1430.91

STA 3+80.03
EL 1431.38

FINISHED GRADE

-0.75%

0.75%

-0.75%

EXISTING PROFILE

VPC STA 2+47.50
VPC EL 1431.73

VPI STA 2+90.00
VPI EL 1432.05

VPT STA 3+32.50
VPT EL 1431.73

VCL = 85.00

K = 56.67

1438 1436 1434 1432 1430 1428 1426 1424

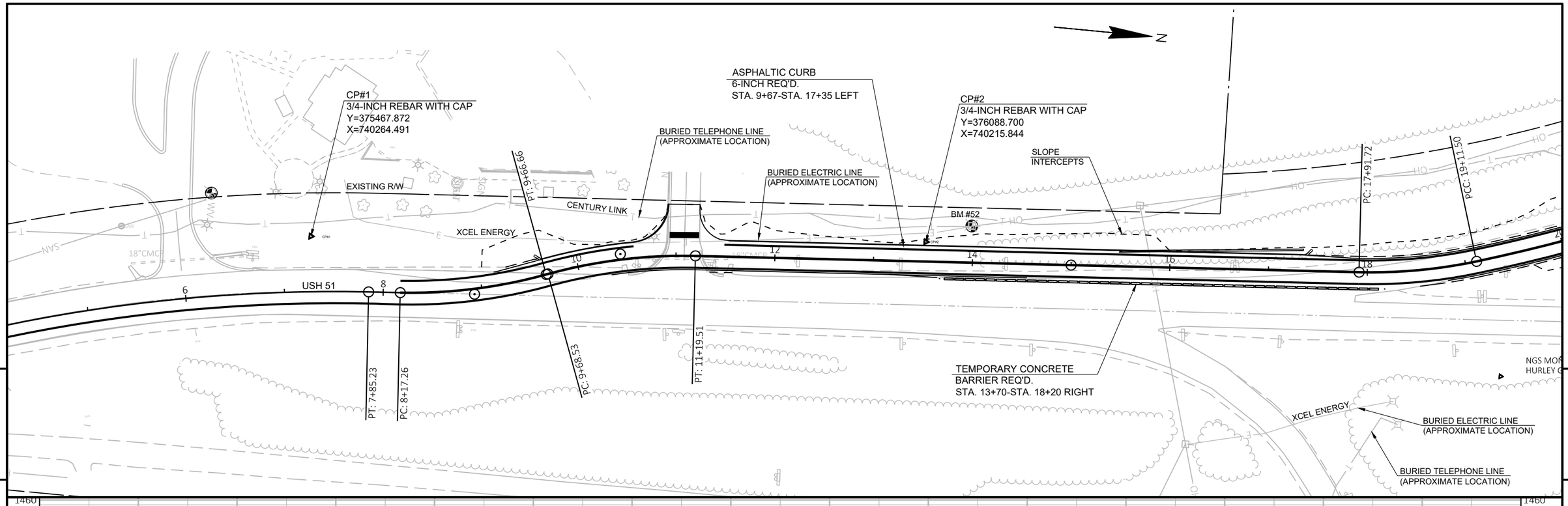
-1	-0	0	1	2	3	4	5
		1425.22 1431.38	1428.10 1431.19	1428.40 1431.00	1428.24 1430.83	1427.73 1430.77	1427.77 1430.83
		1427.21 1431.00	1425.25 1431.19	1429.74 1431.38	1437.09 1431.56	1437.36 1431.75	1436.77 1431.87
		1436.51 1431.88	1435.42 1431.78	1432.21 1431.60	1425.28 1431.41		

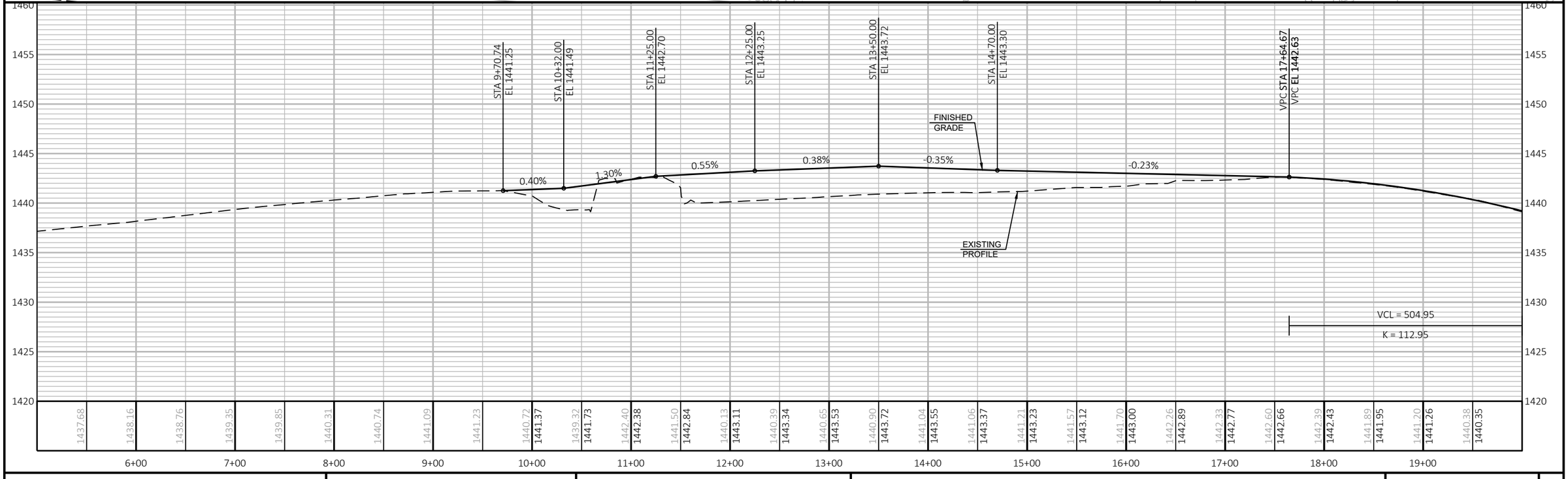
-0+50 0+00 0+50 1+00 1+50 2+00 2+50 3+00 3+50 4+00 4+50

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: ROUNDABOUT CIRCLE	SHEET 194	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050109-PP.DWG
LAYOUT NAME - 050109-pp

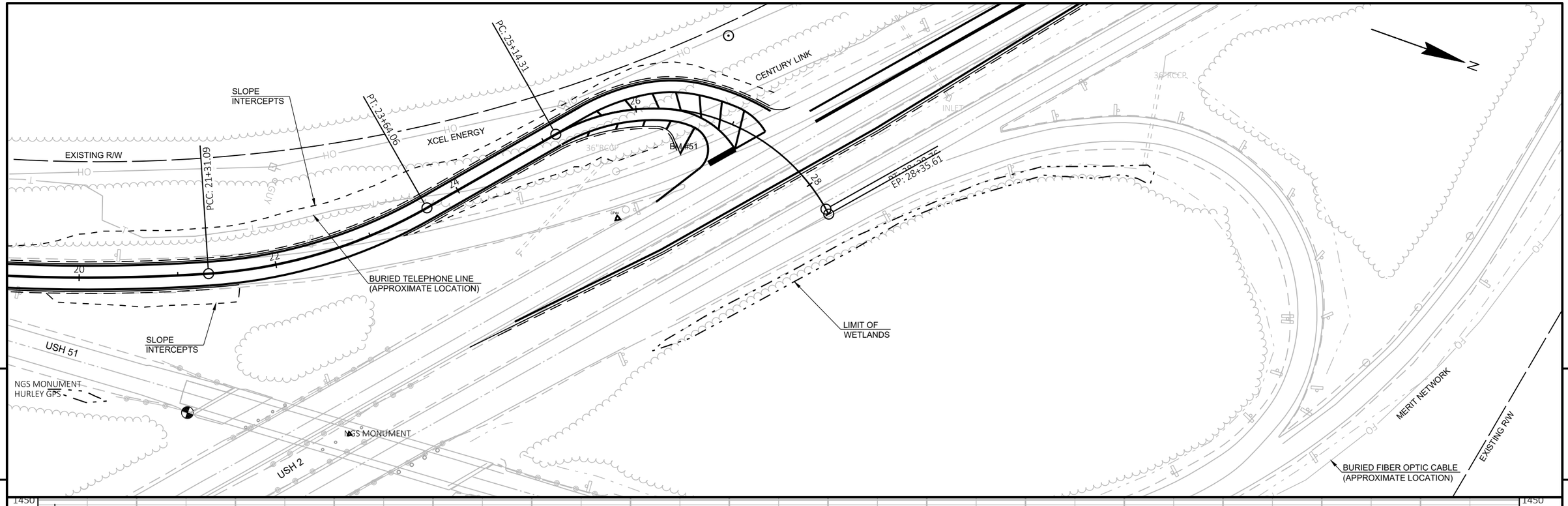
PLOT DATE : 9/2/2020 12:09 PM PLOT BY : SOUFAL, KEVIN PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: TEMPORARY ROADWAY-STAGE 1	SHEET 195	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050110-PP.DWG
LAYOUT NAME - 050110-pp
PLOT DATE : 8/31/2020 10:43 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



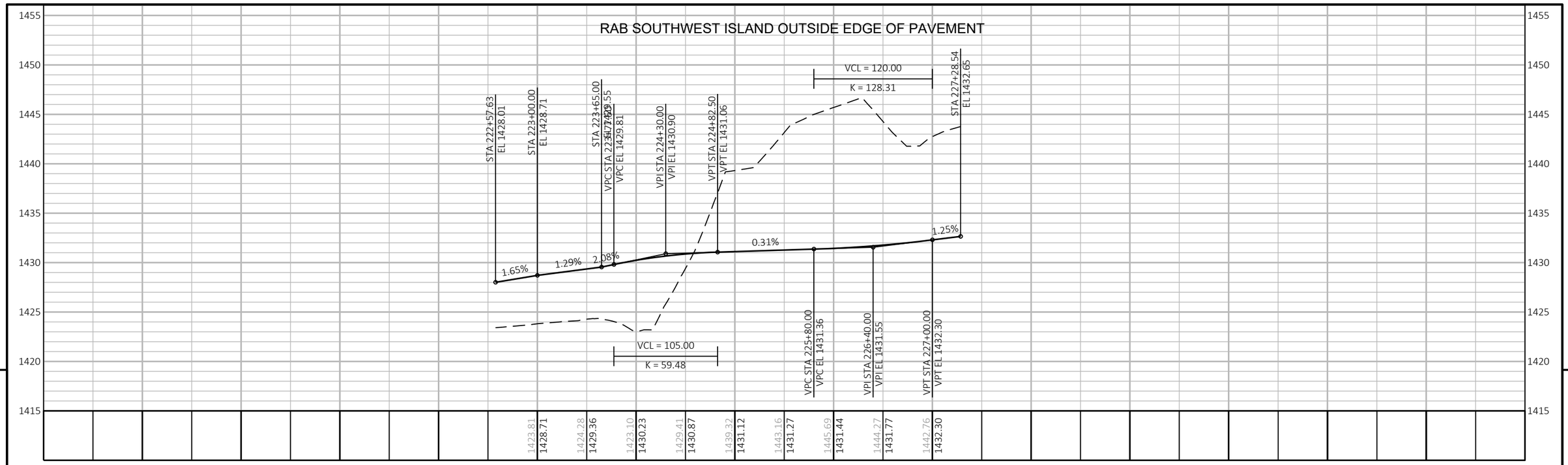
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PLAN AND PROFILE: TEMPORARY ROADWAY-STAGE 1	SHEET 196	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\050111-PP.DWG
LAYOUT NAME - 050111-pp

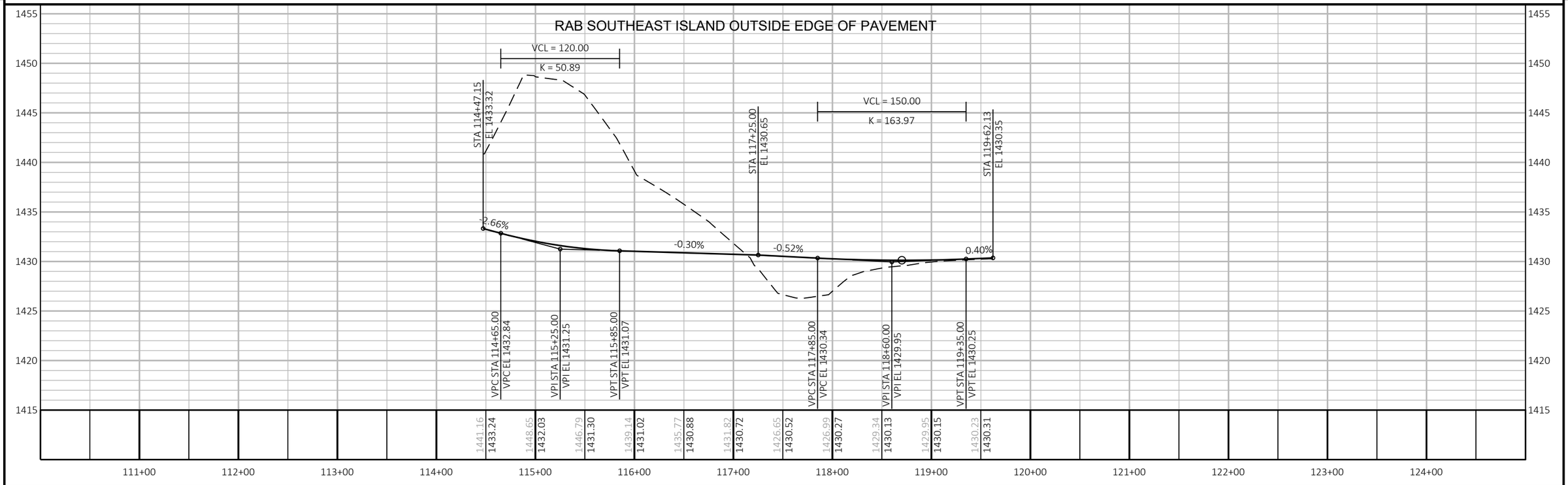
PLOT DATE : 8/31/2020 10:44 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

RAB SOUTHWEST ISLAND OUTSIDE EDGE OF PAVEMENT



RAB SOUTHEAST ISLAND OUTSIDE EDGE OF PAVEMENT



PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PROFILES	SHEET 197	E

Standard Detail Drawing List

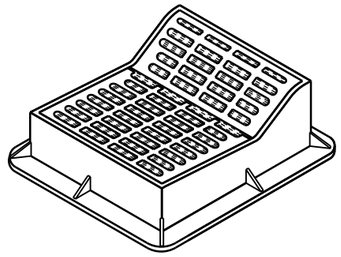
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08D01-21A	CONCRETE CURB & GUTTER
08D01-21B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09B02-10	CONDUIT
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C19-02	HMA LONGITUDINAL JOINTS
14A02-01	TREE PLANTING DETAIL
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B08-02A	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02B	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02C	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02D	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B08-02E	CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B26-04A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04F	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04G	STEEL THRIE BEAM BULLNOSE TERMINAL
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

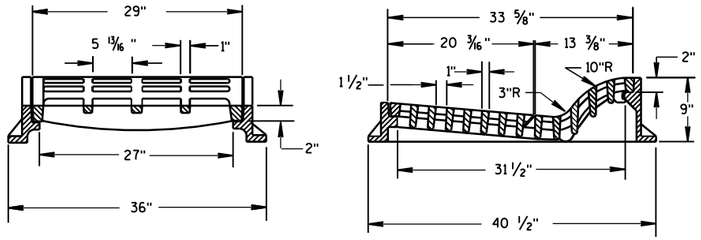
6

Standard Detail Drawing List

14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	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)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15D	ROUNDABOUT ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-07A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-04	MEDIAN ISLAND MARKING
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-06C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C27-03B	PAVEMENT MARKING (ISLANDS)
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D06-04	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D15-05B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-05B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-05C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

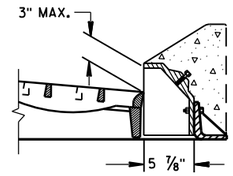
6





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

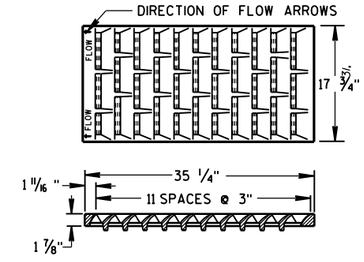
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

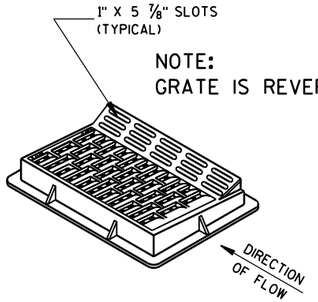
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

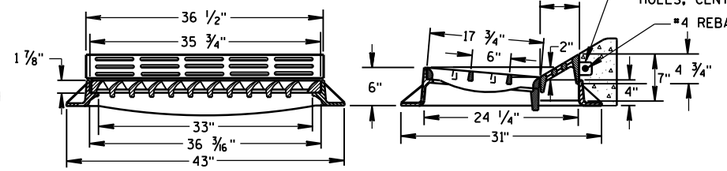
GENERAL NOTES

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



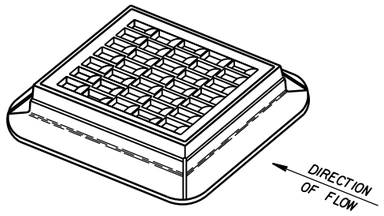


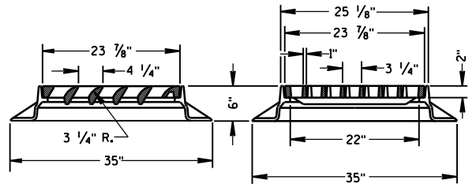


TYPE "HM"

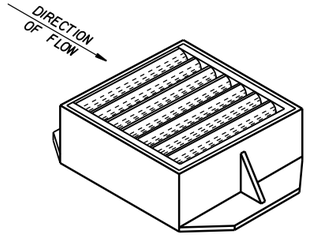
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

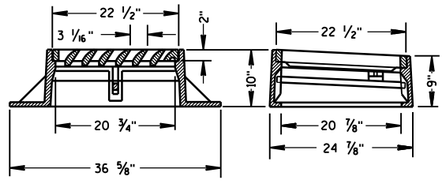
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



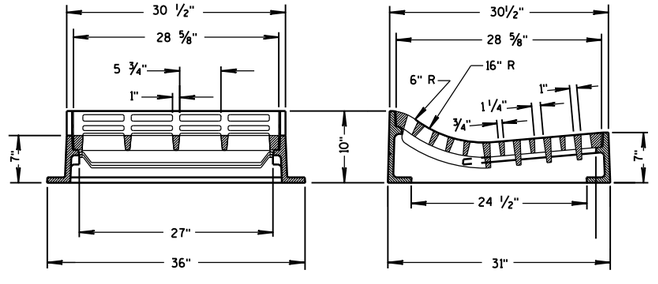


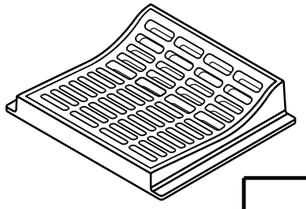
TYPE "S"





TYPE "V"





TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

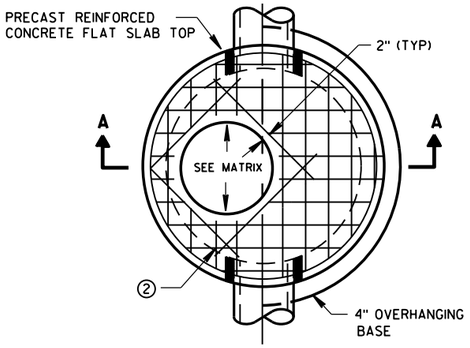
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013
DATE

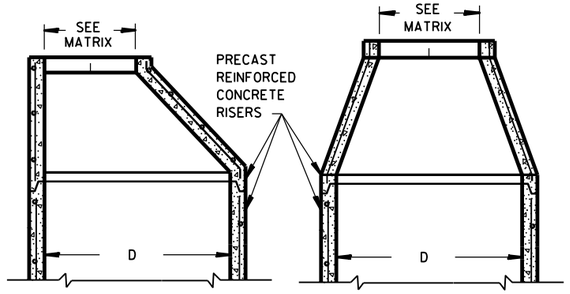
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

FHWA

6
S.D.D. 8 A 5-19c

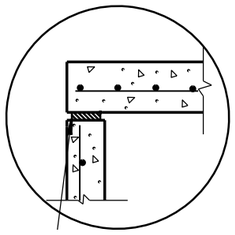


PLAN VIEW CIRCULAR OPENING

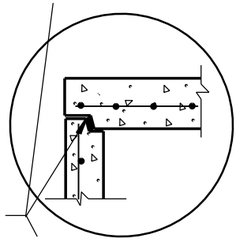


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

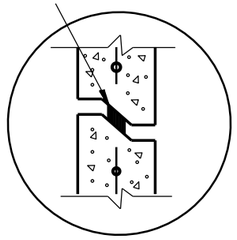


TOP WITH PLAIN END JOINT



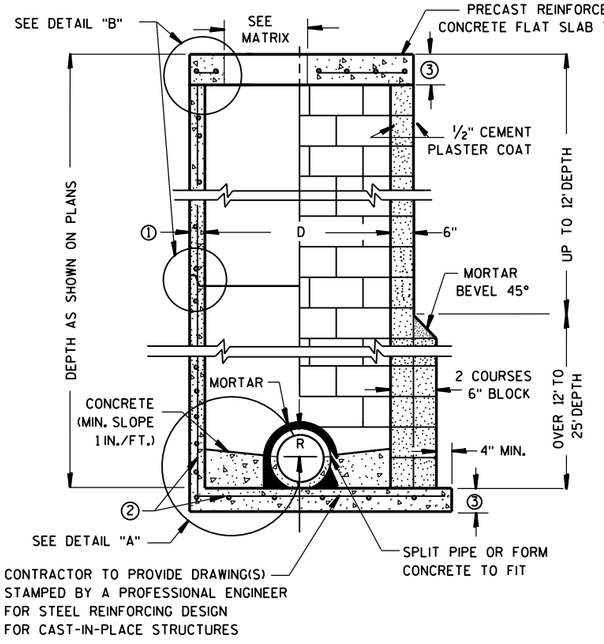
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



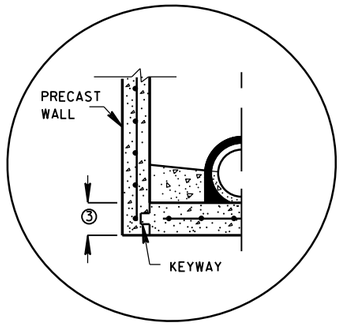
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

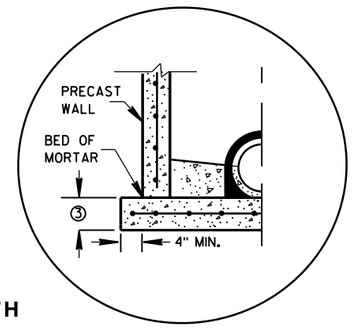


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

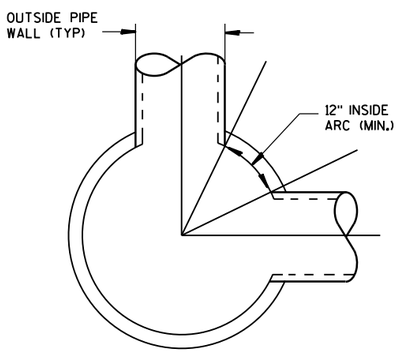


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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 MANHOLE 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.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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 "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

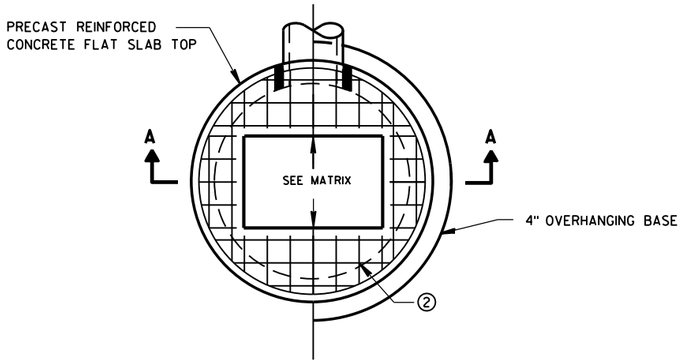
APPROVED

Sept., 2016
DATE

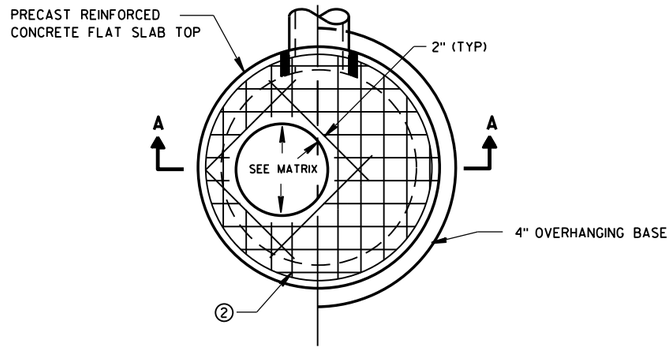
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERV

FHWA

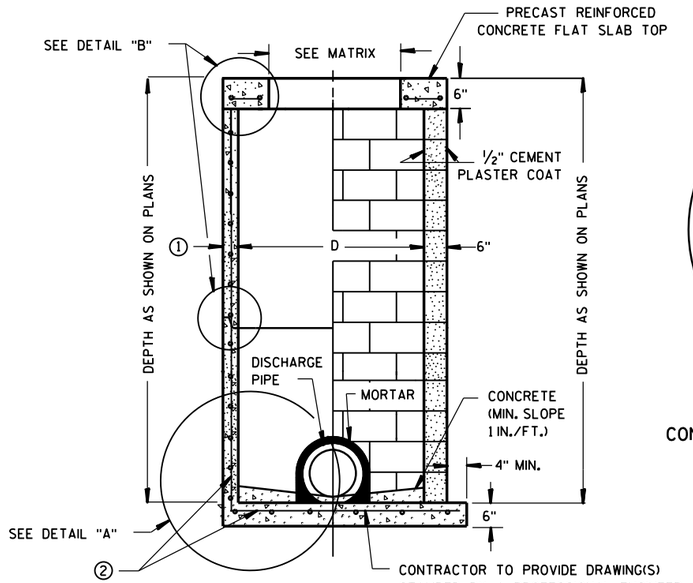
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S.D.D. 8 B 9-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

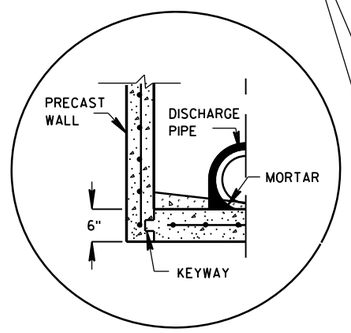


SECTION A-A

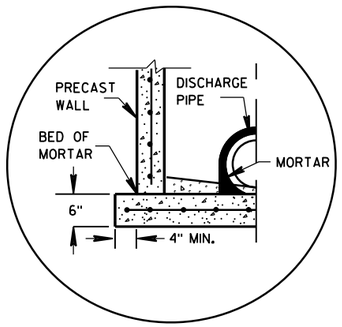
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

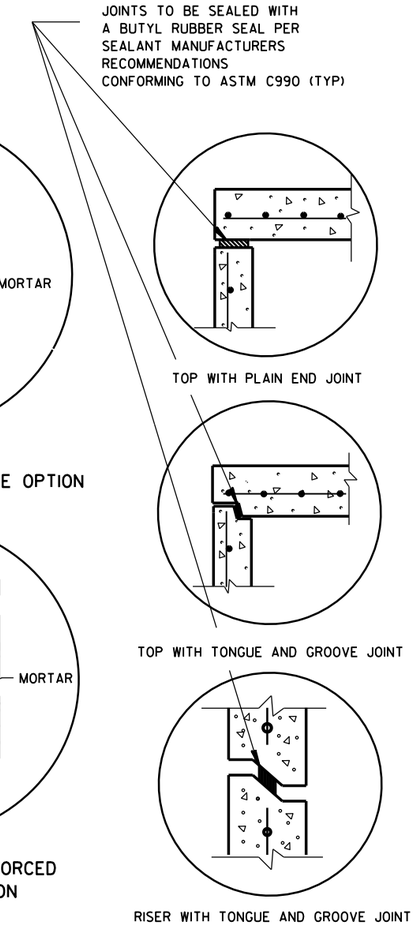


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



TOP WITH PLAIN END JOINT

TOP WITH TONGUE AND GROOVE JOINT

RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

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.

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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.

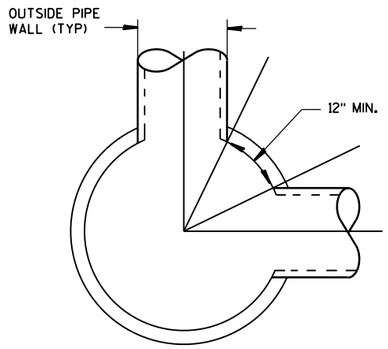
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

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

INLETS 3-FT AND 4-FT DIAMETER

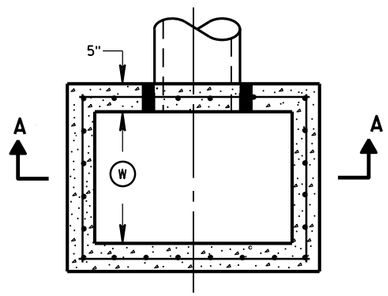
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS | ENT UNIT SUPERVI
FHWA

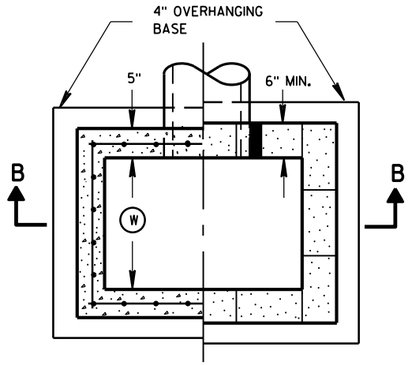
INLETS 3-FT AND 4-FT DIAMETER

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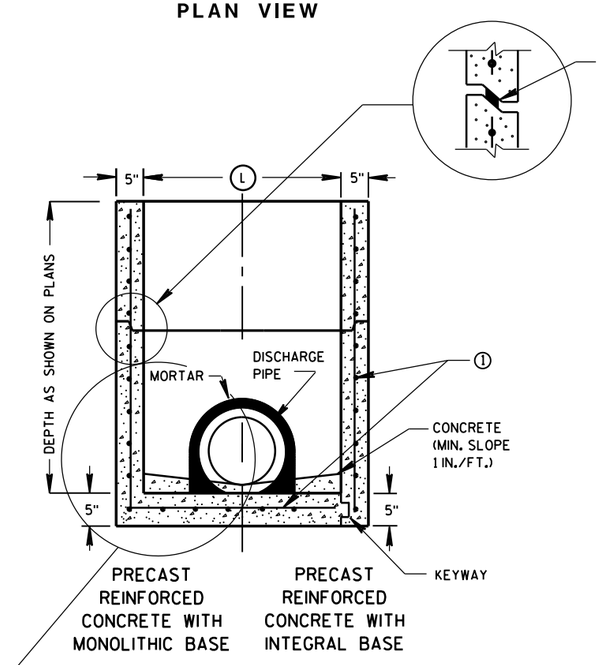
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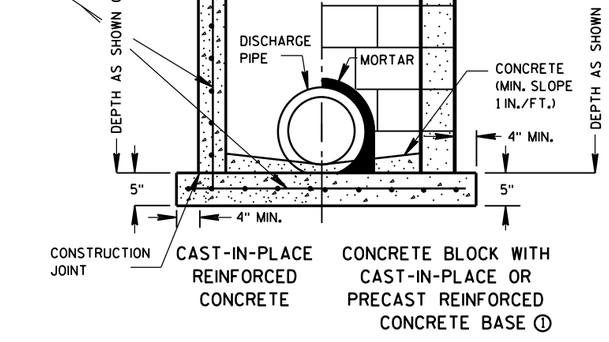
PLAN VIEW



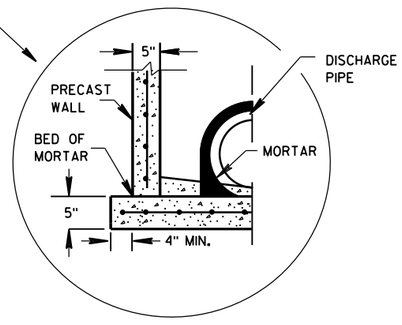
PLAN VIEW



SECTION A-A



SECTION B-B



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

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.

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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 INCH 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 PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

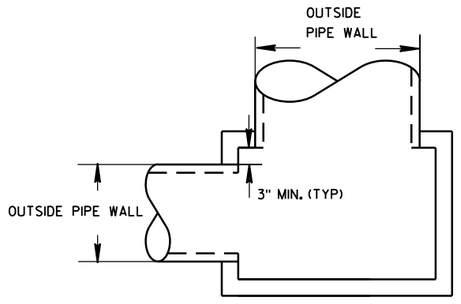
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

INLET COVER MATRIX

INLET SIZE		INLET COVER TYPE	ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

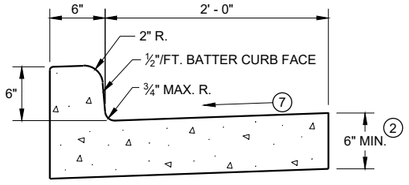
APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D IT UNIT SUPERVIS
FHWA

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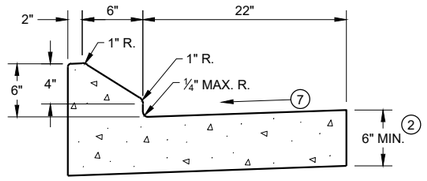
S.D.D. 8 C 7-2

6

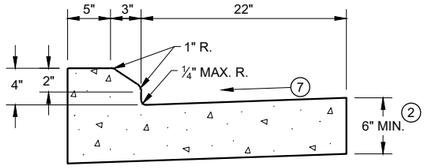
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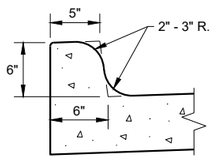
TYPES A[1] & D



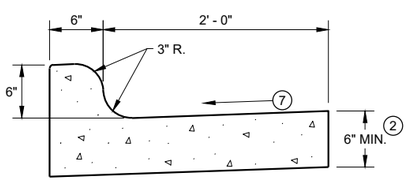
6" SLOPED CURB TYPES G[1] & J



4" SLOPED CURB TYPES G[1] & J

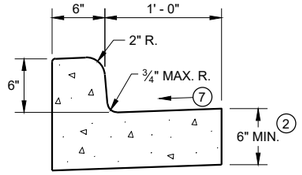


TYPES K[1] & L
(OPTIONAL CURB SHAPE)



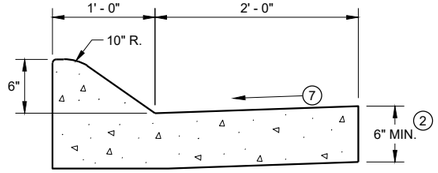
TYPES K[1] & L

CONCRETE CURB AND GUTTER 30"

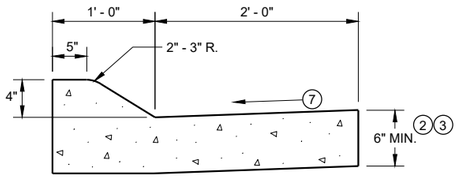


TYPES A[1] & D

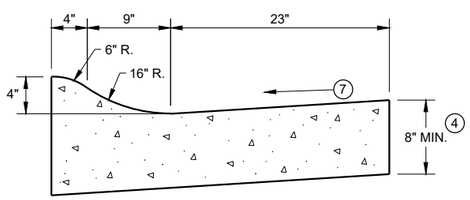
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A[1] & D



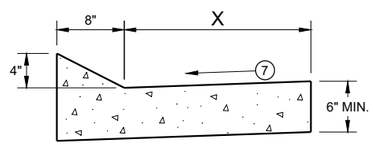
4" SLOPED CURB TYPES A[1] & D



4" SLOPED CURB TYPES R[1] & T[5]

CONCRETE CURB AND GUTTER 36"

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

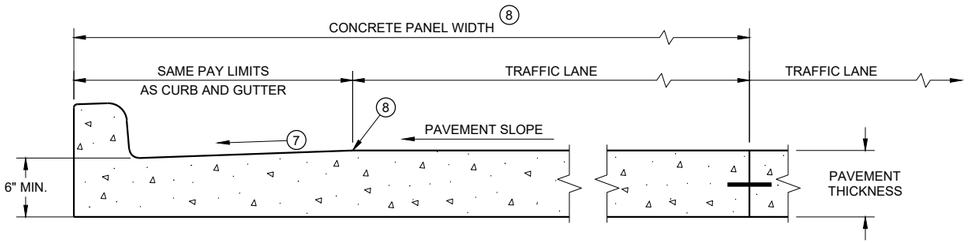


TYPES TBT & TBTT[1]

CONCRETE CURB AND GUTTER

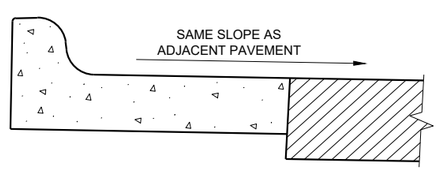
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

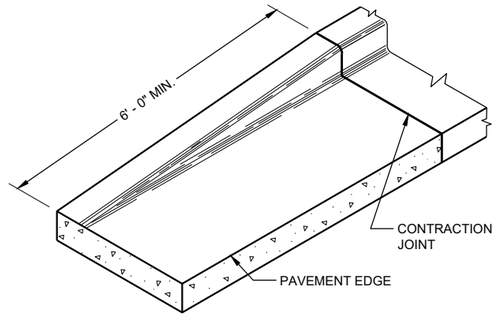
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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. 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.

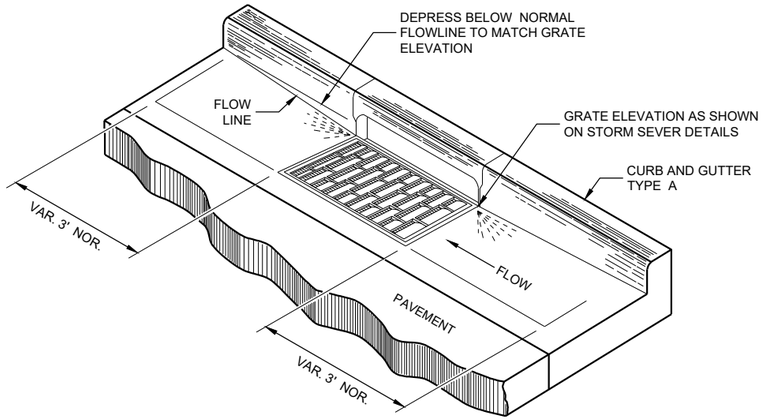
6

SDD 08D01 - 21a

CONCRETE CURB AND GUTTER



END SECTIONCURB 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.

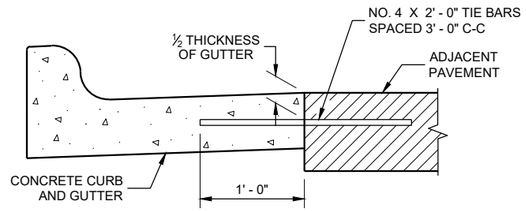
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

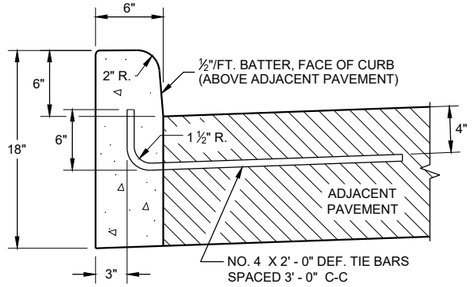
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

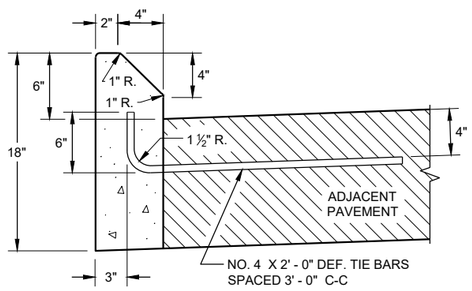
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

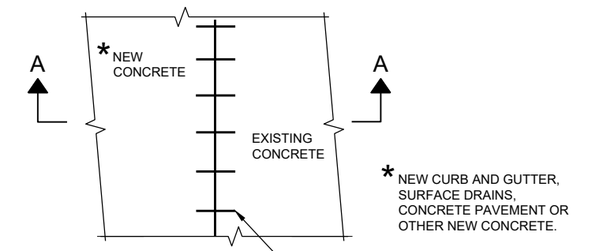


TYPES A (1) & D

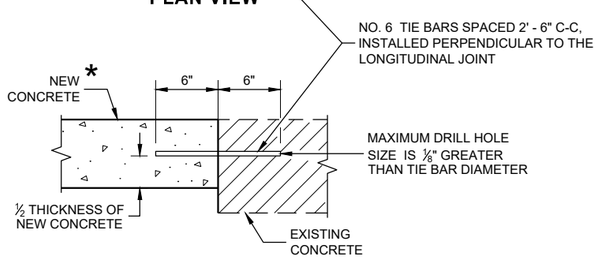


TYPES G (1) & J

CONCRETE CURB

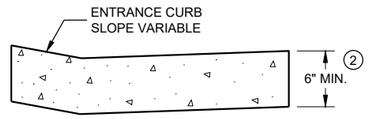


PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

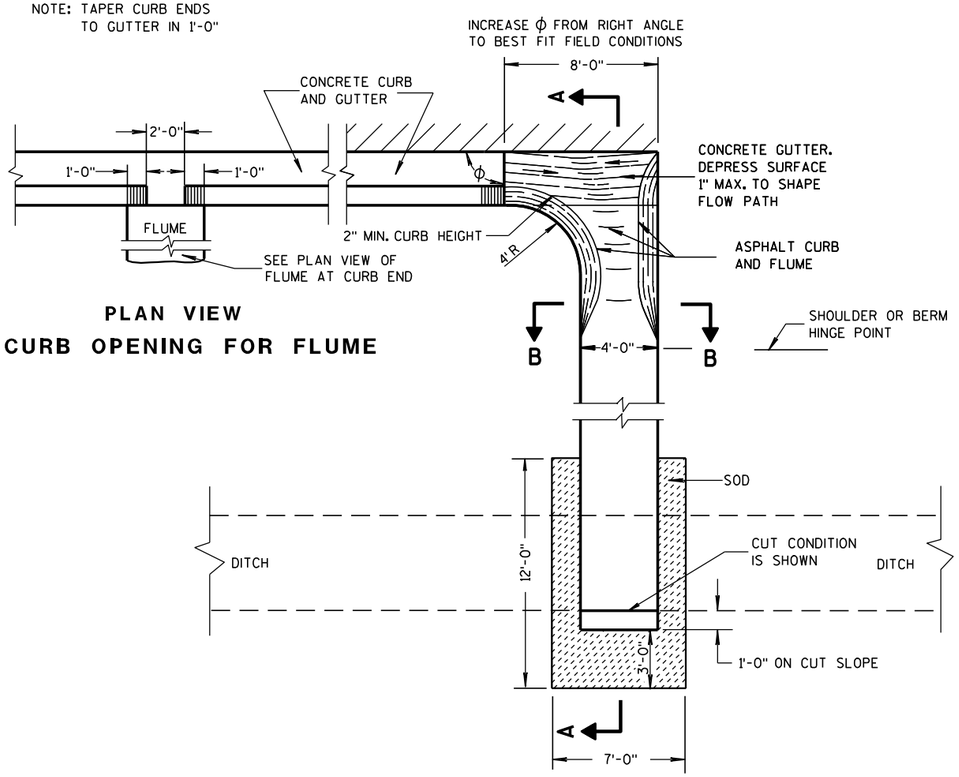
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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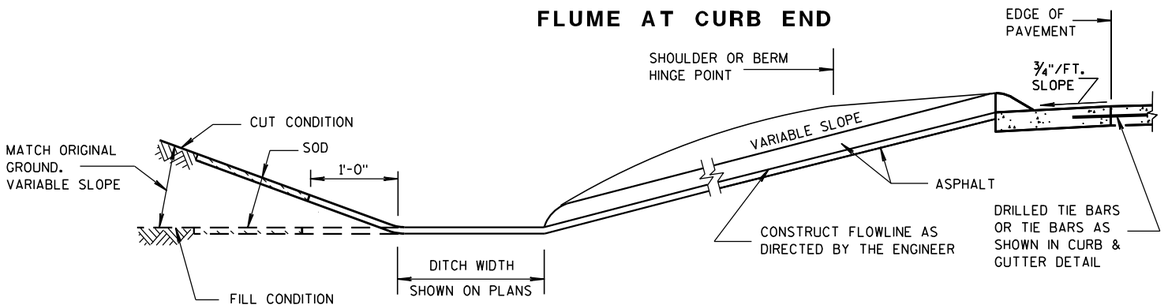
SDD08D01 - 21b

ASPHALTIC FLUME

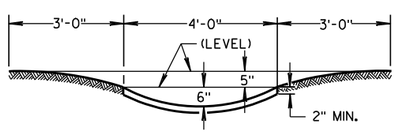


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

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.

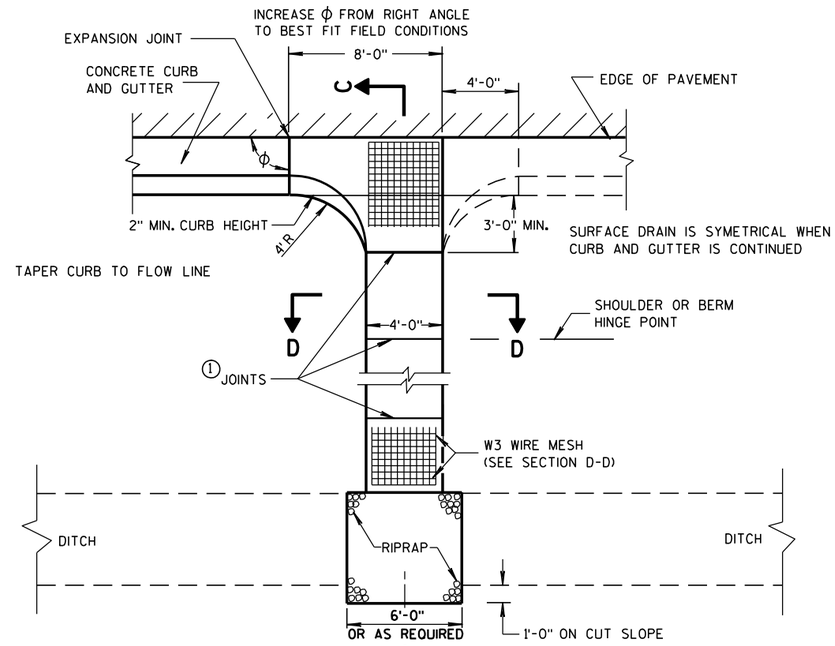
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

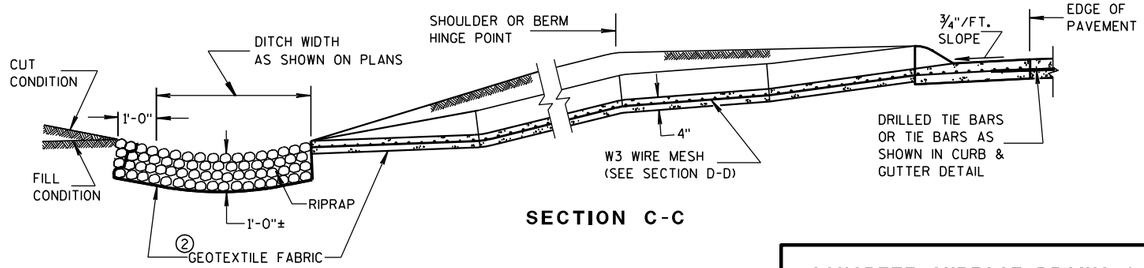
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

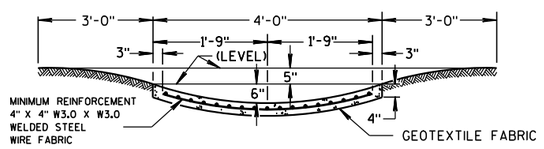
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

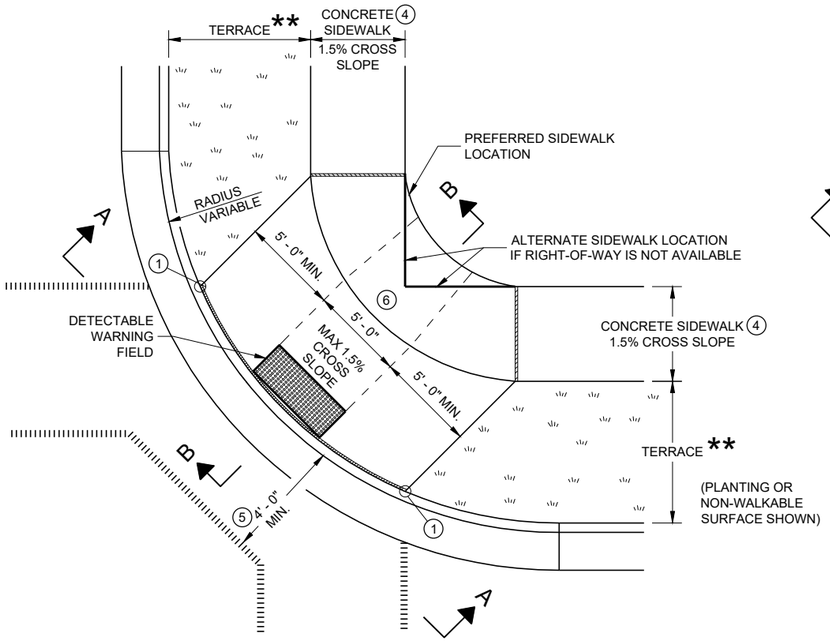
APPROVED
9-4-08 DATE
/S/ Jerry H. [illegible]
ROADWAY STANDARDS ENGINEER
206
[illegible]MENT
FHWA

6

S.D.D. 8 D 4-5

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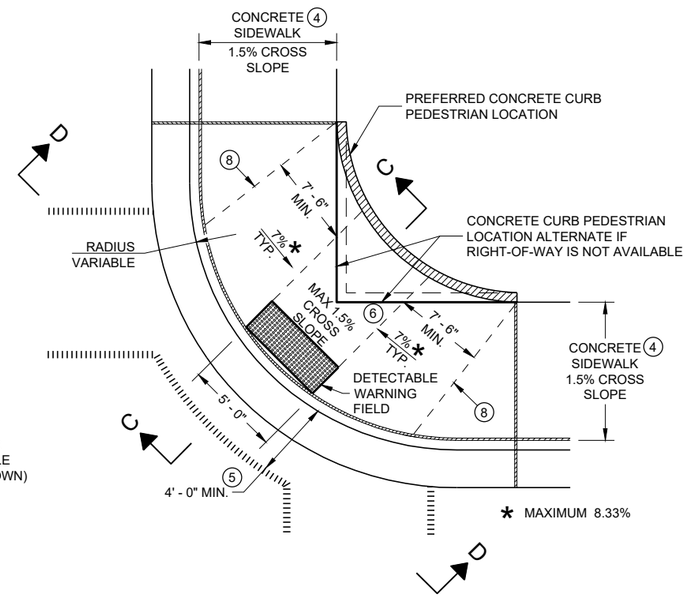
S.D.D. 8 D 4-5



PLAN VIEW

CURB RAMP TYPE 1

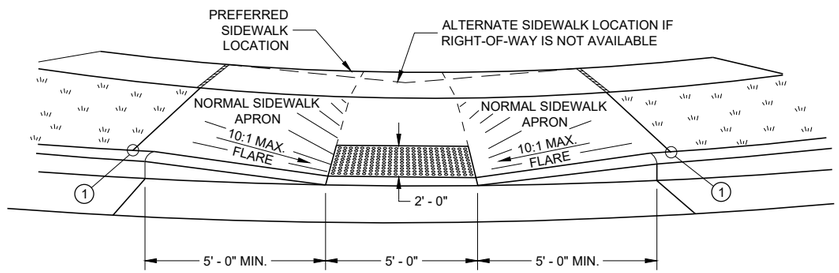
(CENTER OF CORNER RADIUS)



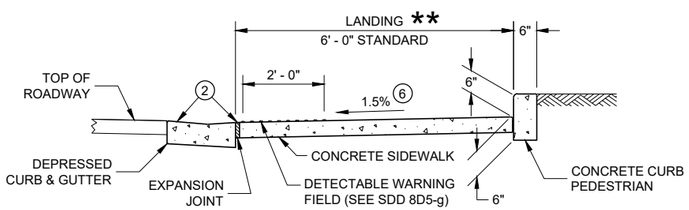
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

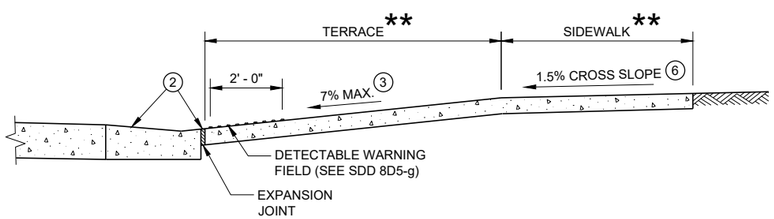


VIEW A - A FOR TYPE 1

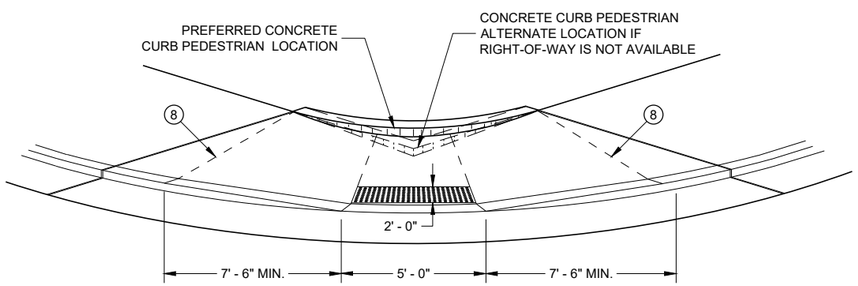


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



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 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 RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF 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 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

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

LEGEND

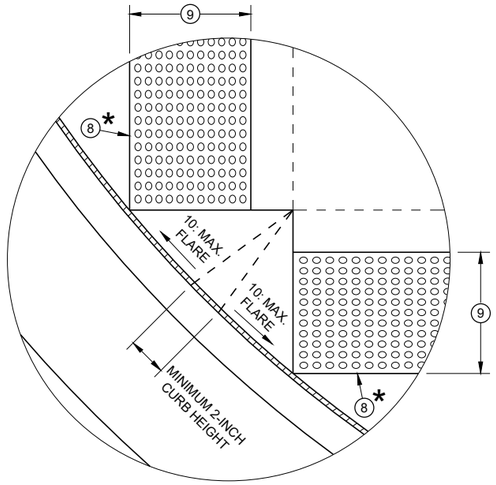
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

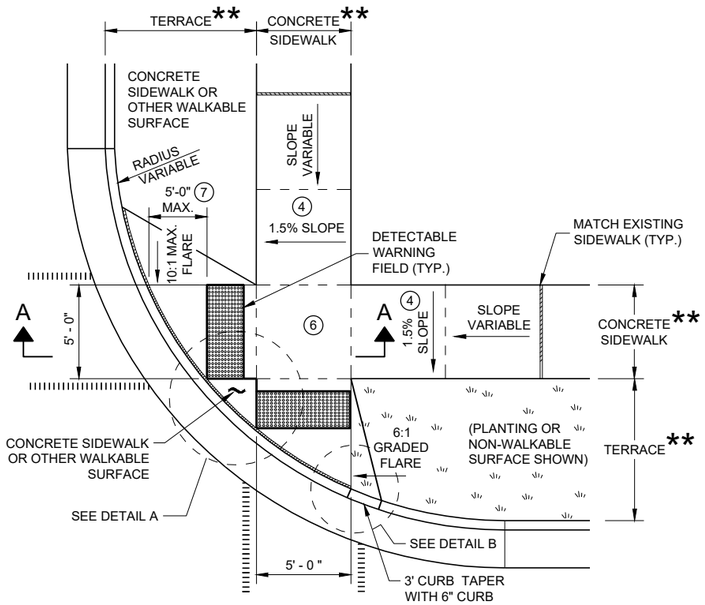
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

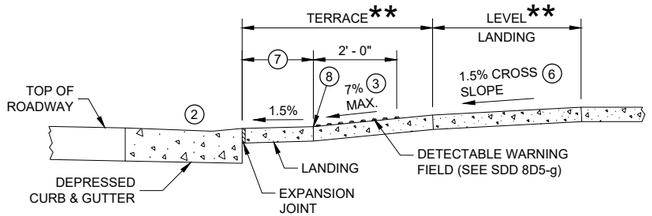
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

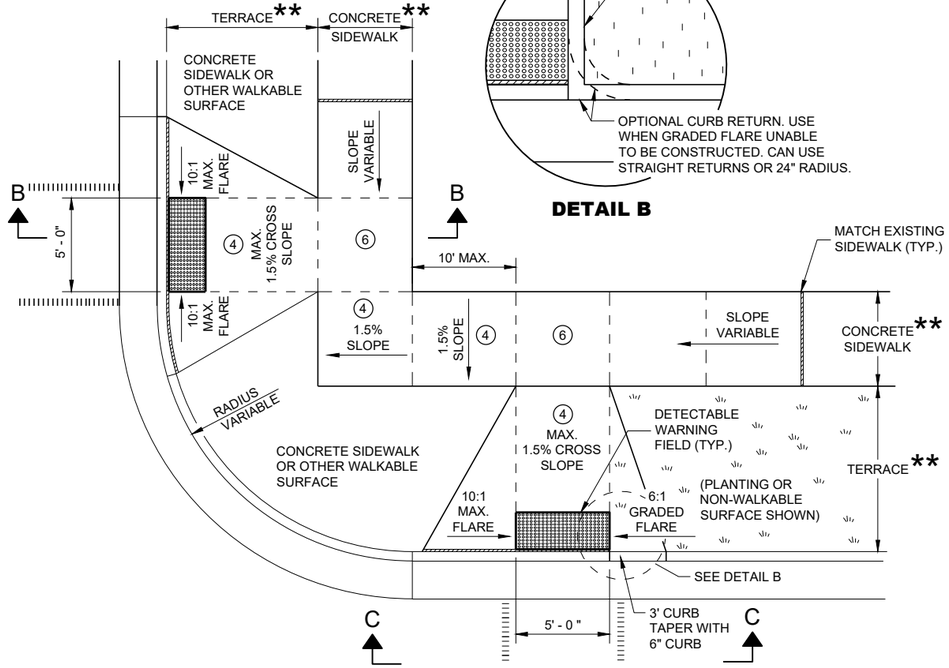
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

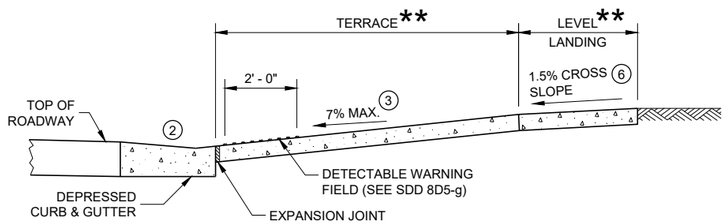
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

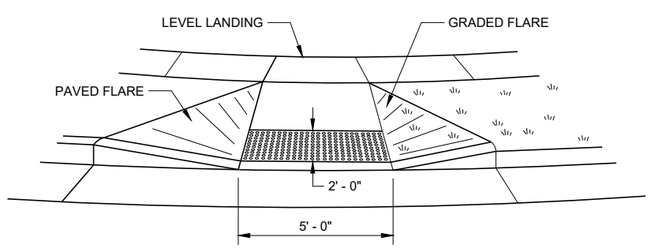
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



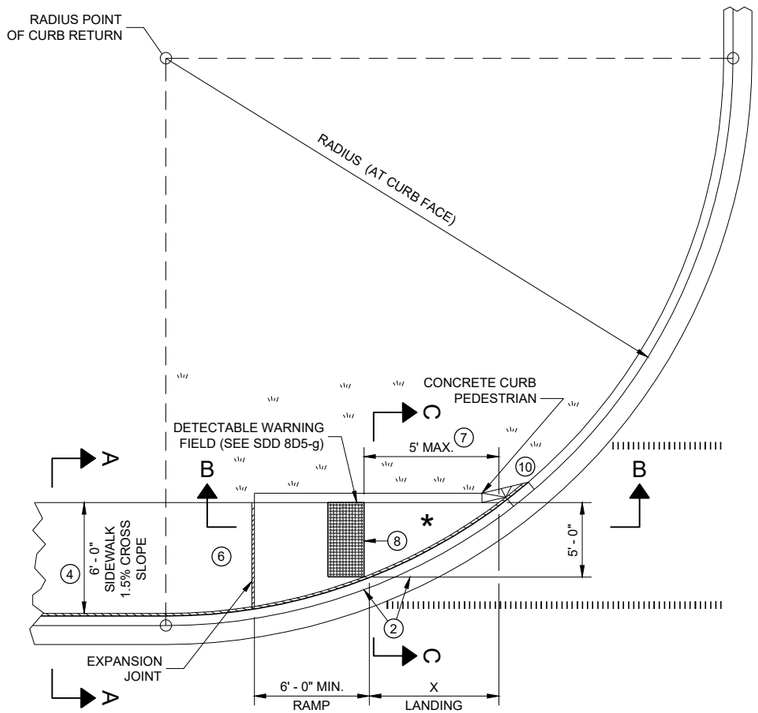
VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

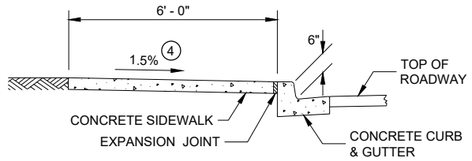


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

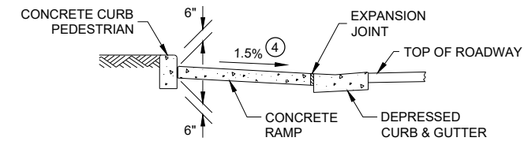
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

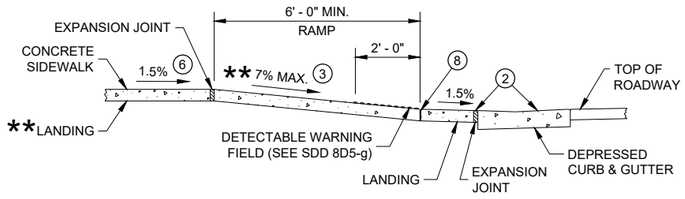
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



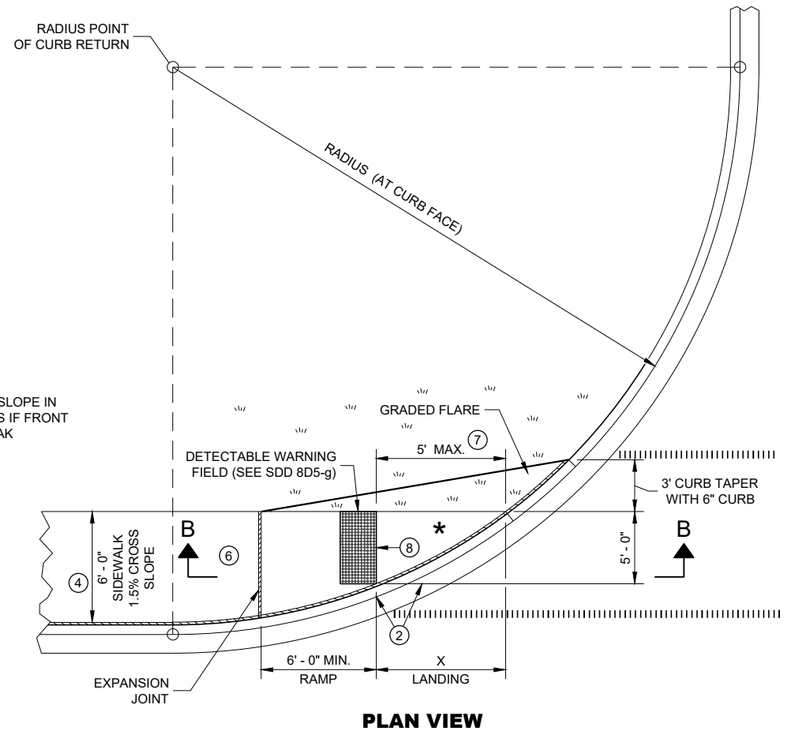
SECTION C - C FOR TYPE 4A



** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

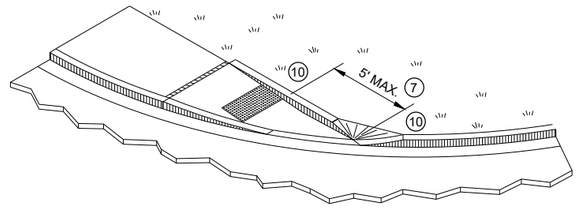
SECTION B - B FOR TYPE 4A AND TYPE 4A1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

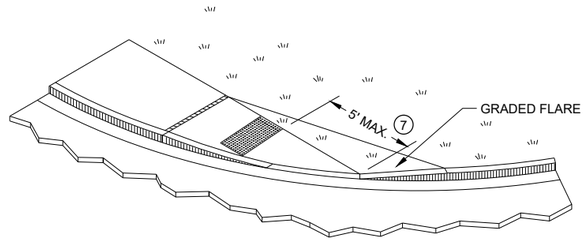


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



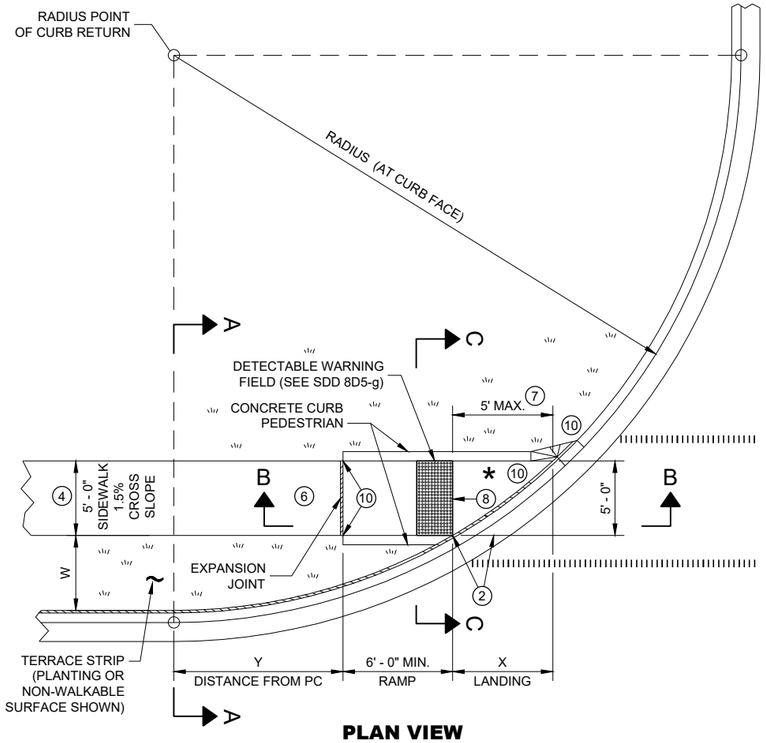
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c

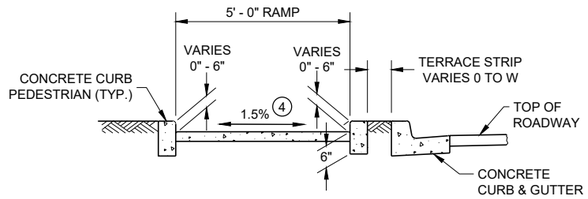


PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

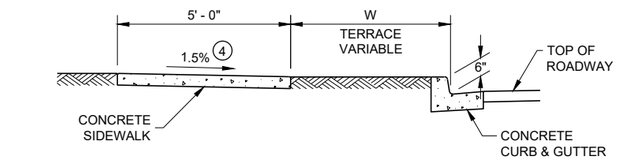
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

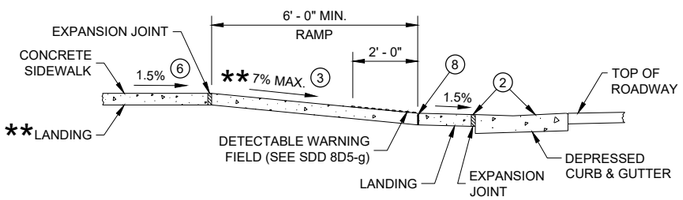
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



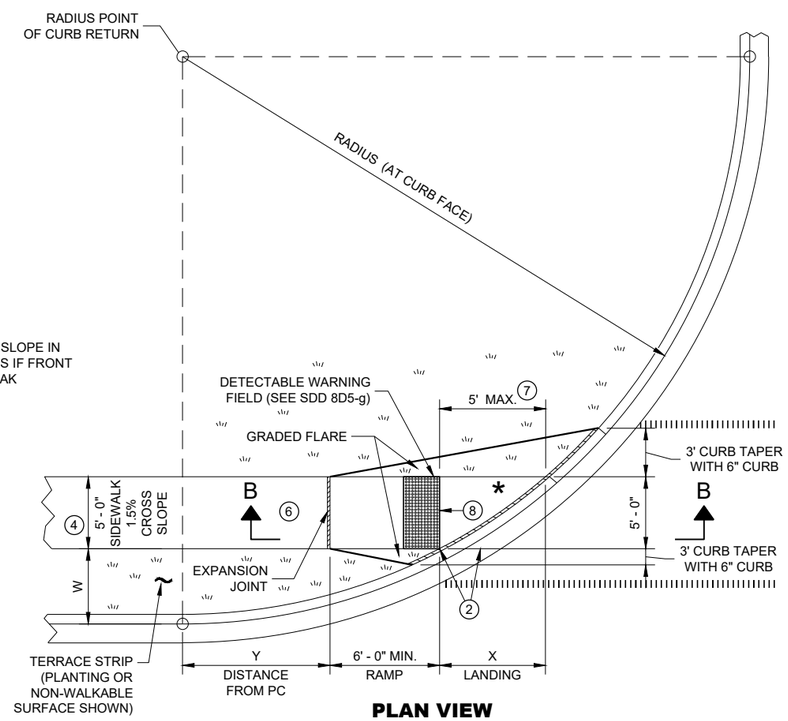
SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

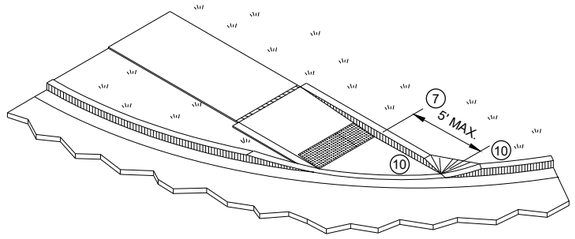
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

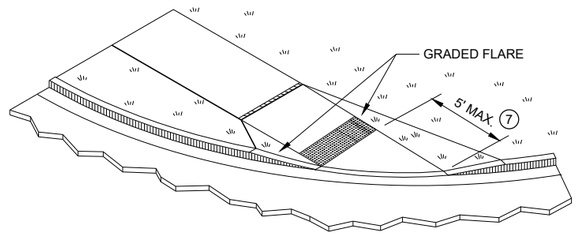


PLAN VIEW

CURB RAMP TYPE 4B1



ISOMETRIC VIEW FOR TYPE 4B



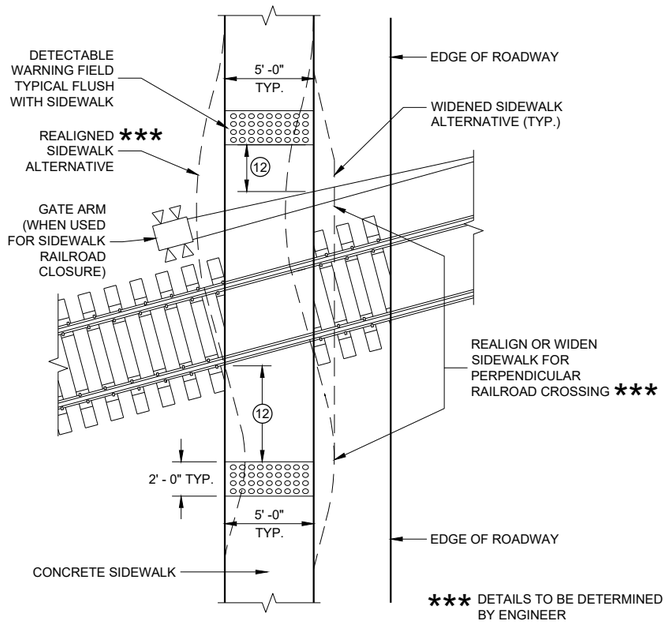
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

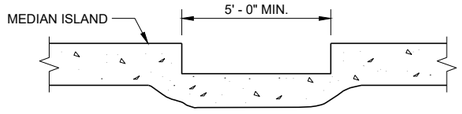
6

SDD 08D05 - 20d

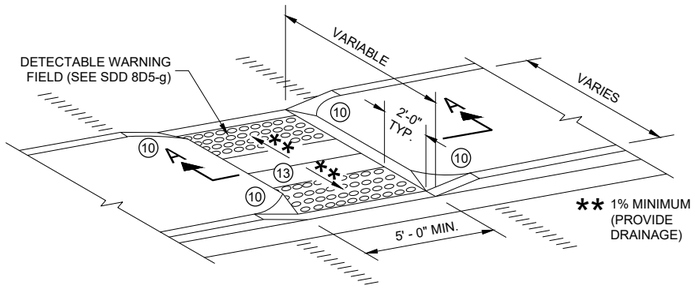


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

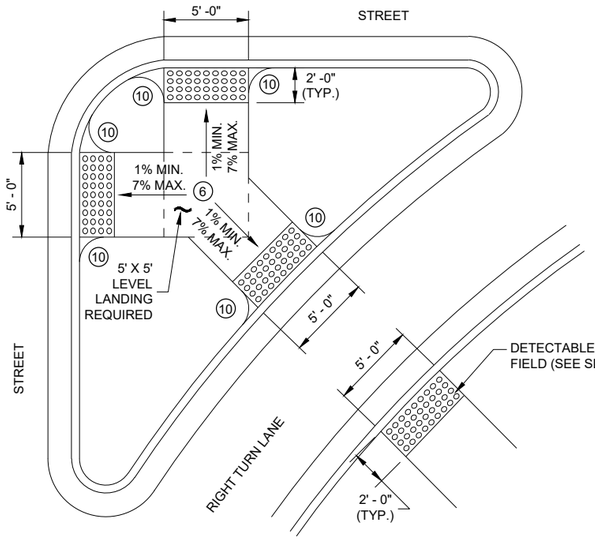
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

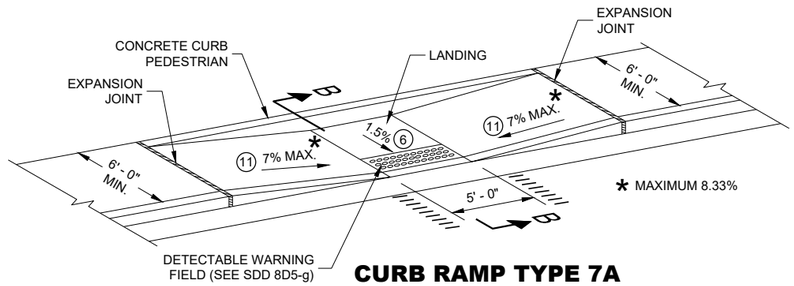
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

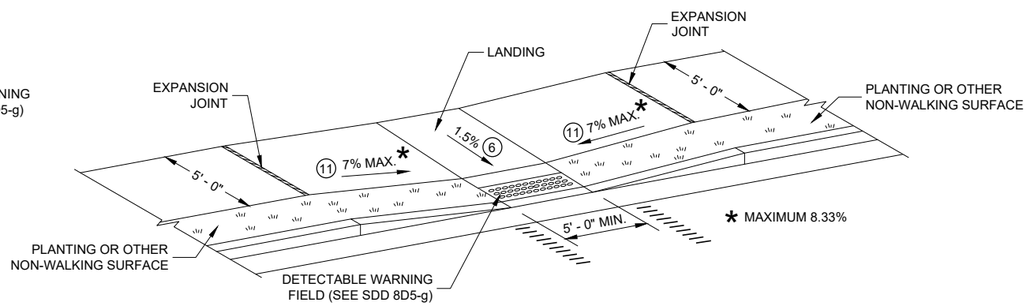
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

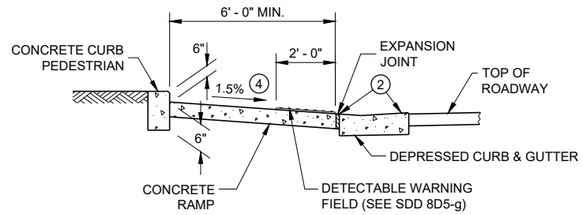
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

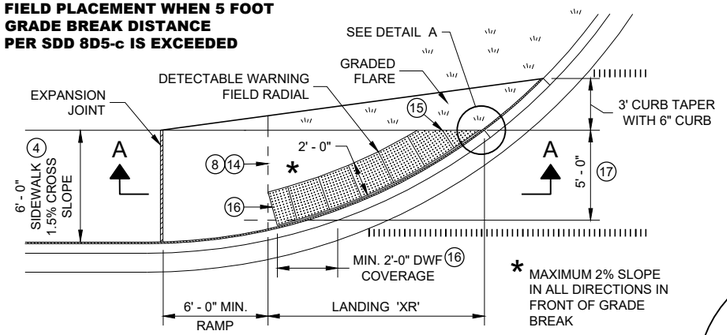
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20e

SDD 08D05 - 20e

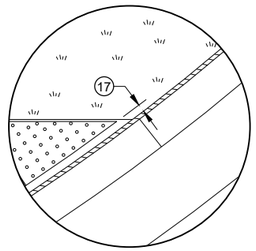
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



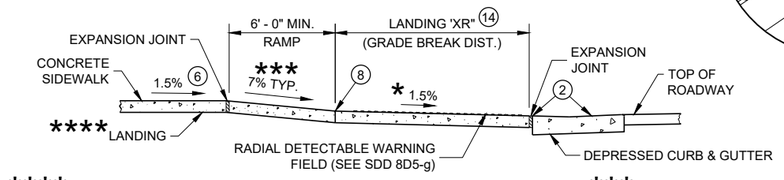
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

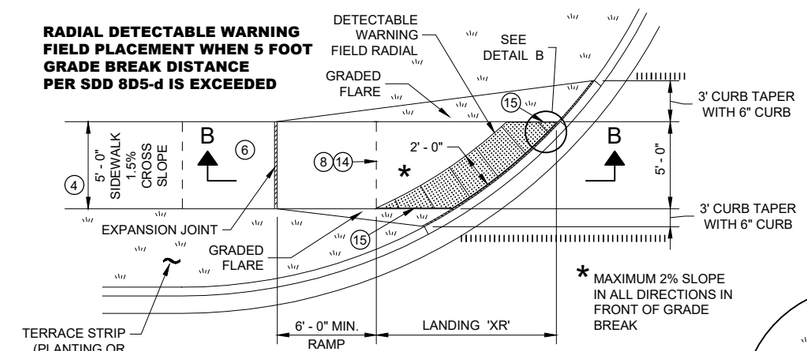


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

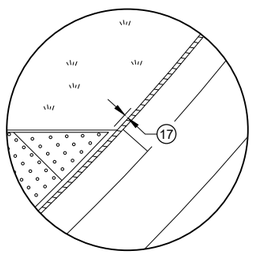
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



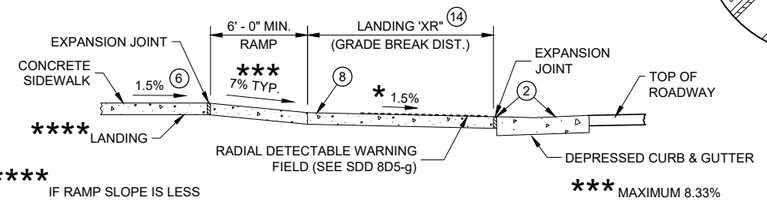
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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.

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

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

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

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

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

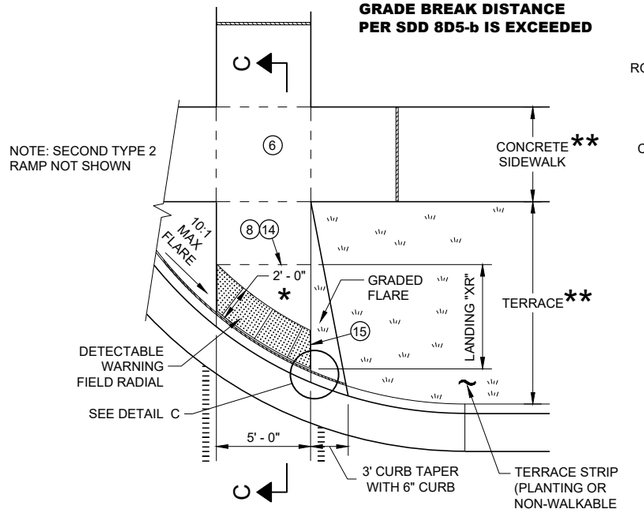
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

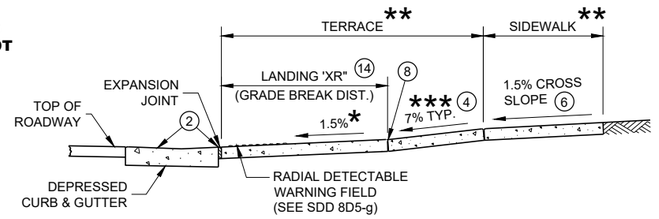


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

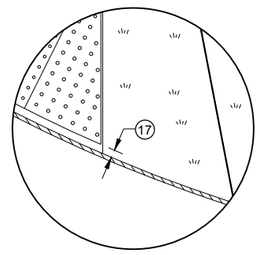


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

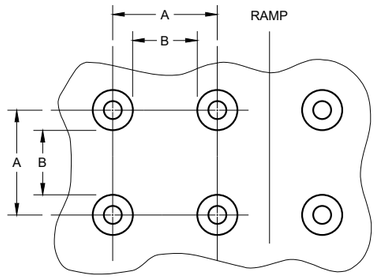
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

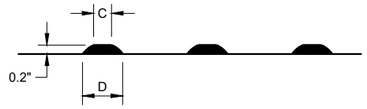
SDD 08D05 - 20f

	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.

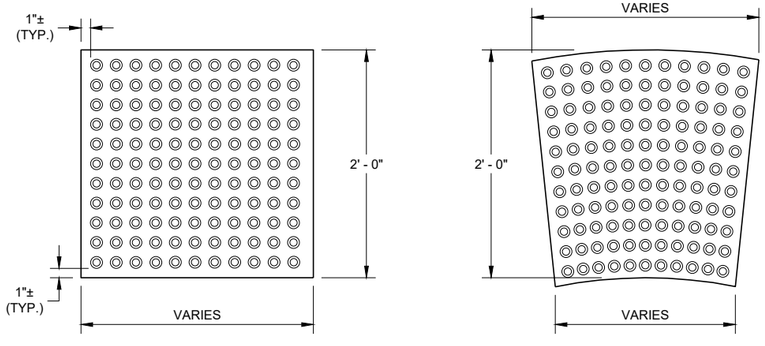


PLAN VIEW



ELEVATION VIEW

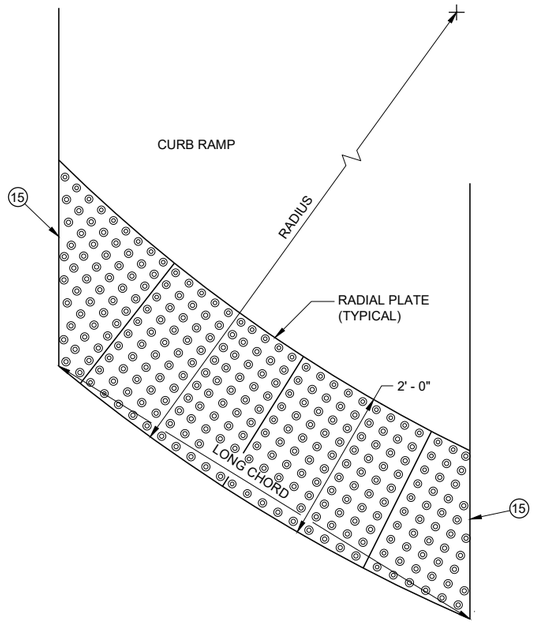
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES

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.

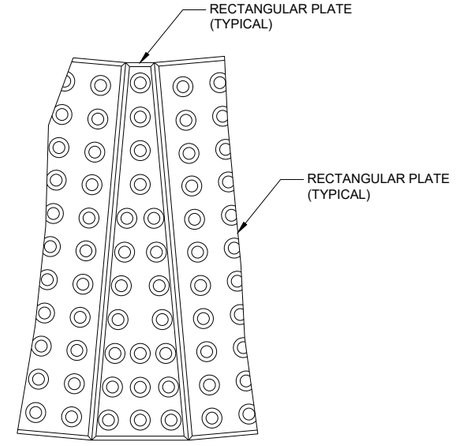
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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.



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

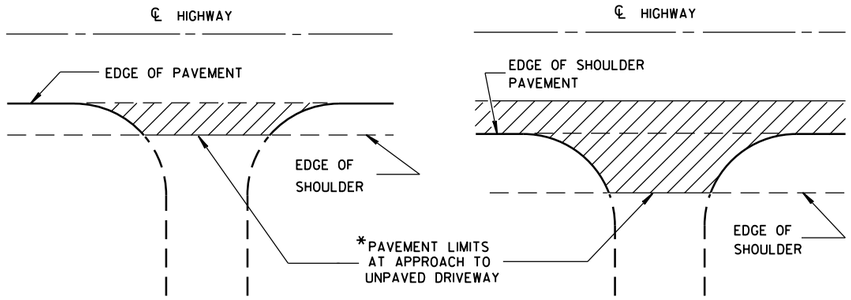
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

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SDD 08D05 - 20g

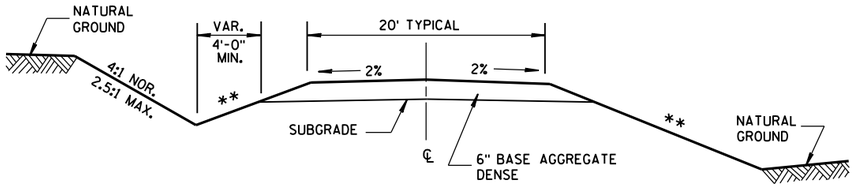


*WHERE DRIVEWAY IS PAVED, APPROACH PAVEMENT SHOULD BE EXTENDED TO MATCH DRIVEWAY PAVEMENT.

PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB & GUTTER OR SIDEWALK)

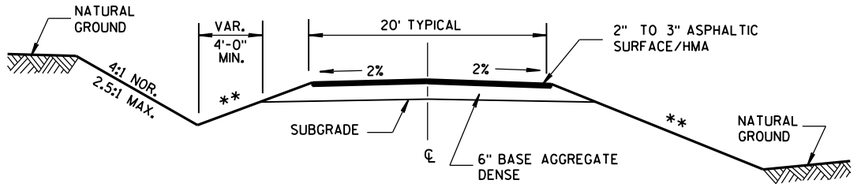


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

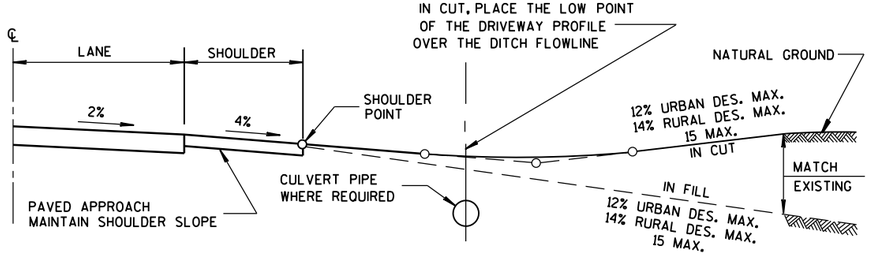
** SLOPE CAN VARY WITH SPEED. SEE 11-45-2.6.2.

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥35 TO <60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE



TYPICAL DRIVEWAY PROFILES

DRIVEWAYS WITHOUT CURB & GUTTER

STATE OF WISCONSIN
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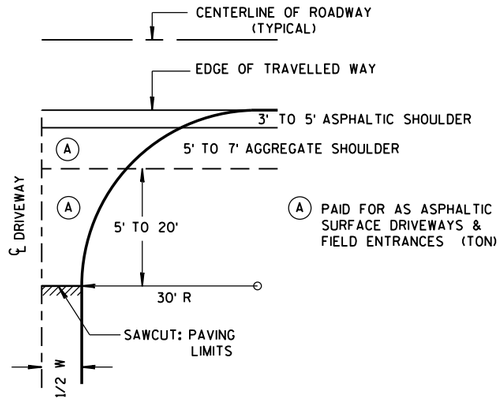
APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS UNIT SUPERV
FHWA

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S.D.D. 8 D 21-1

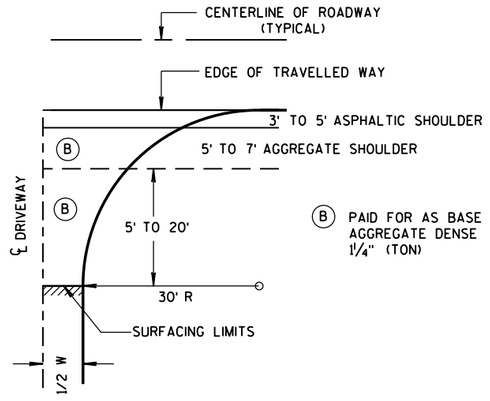
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S.D.D. 8 D 21-1



PLAN VIEW
HALF SECTION

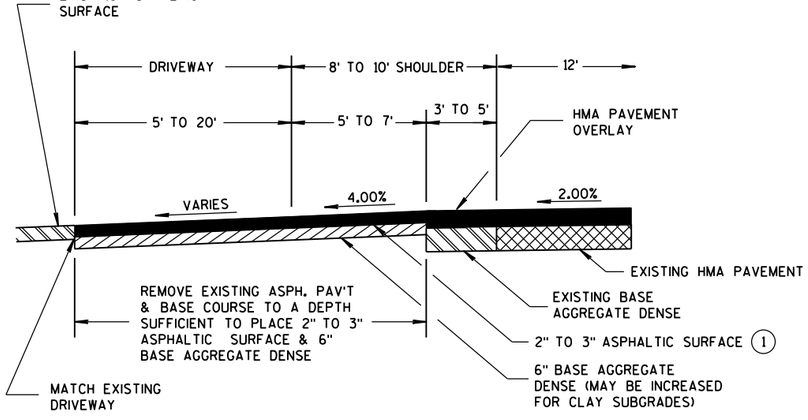
W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION

GENERAL NOTES

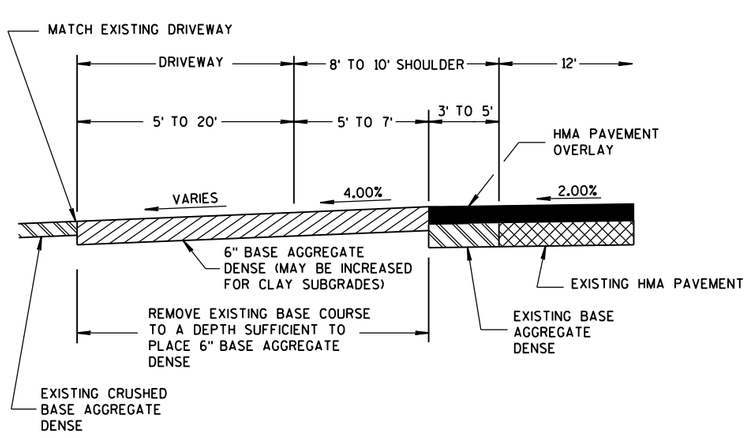
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

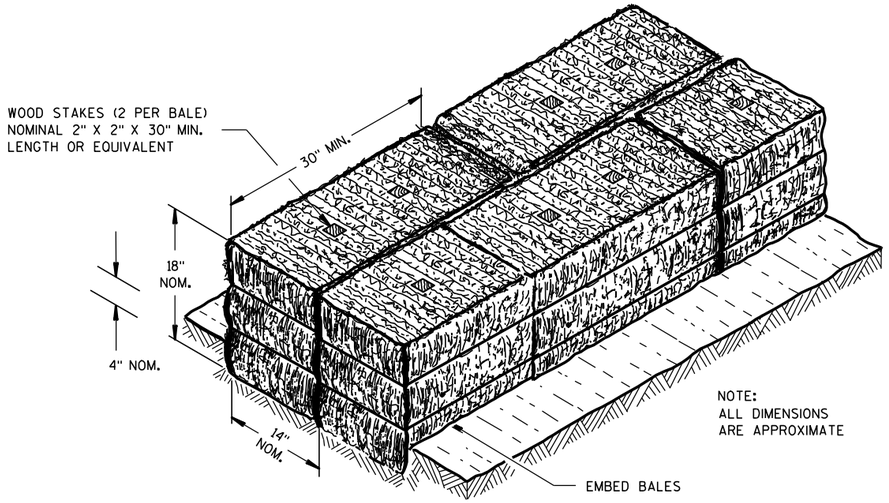
APPROVED
December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

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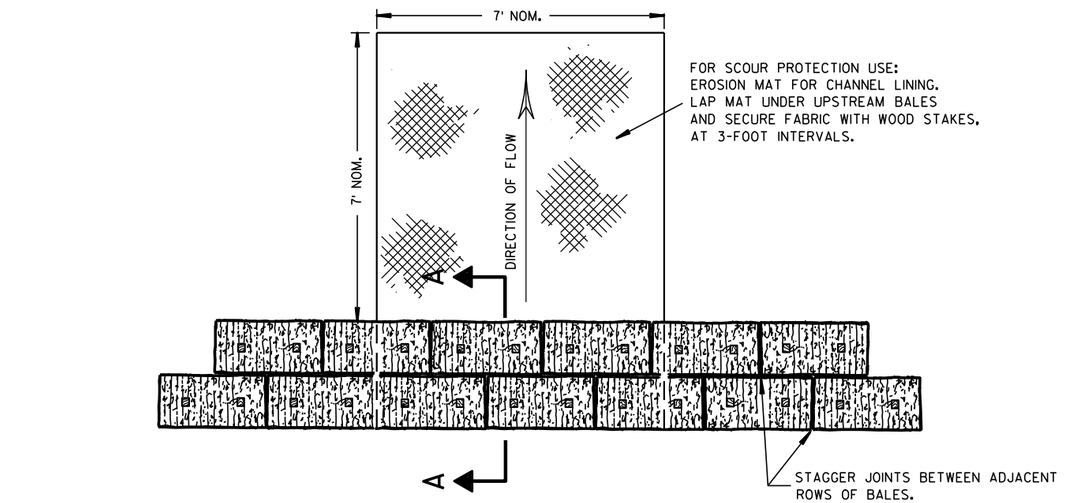
S.D.D. 8 D 22-1

6

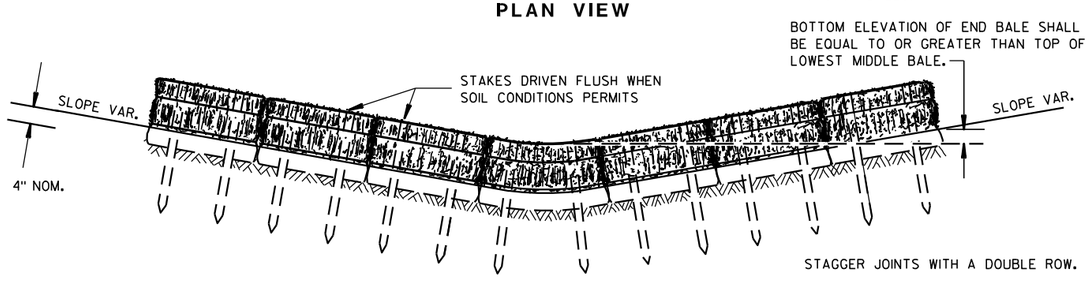
S.D.D. 8 D 22-1



SECTION A-A



PLAN VIEW



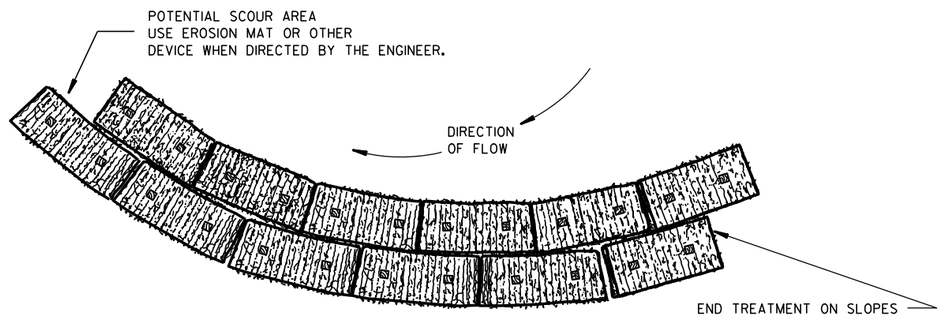
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

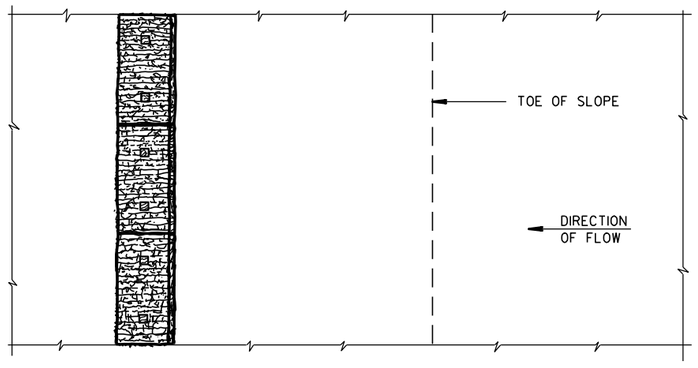
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

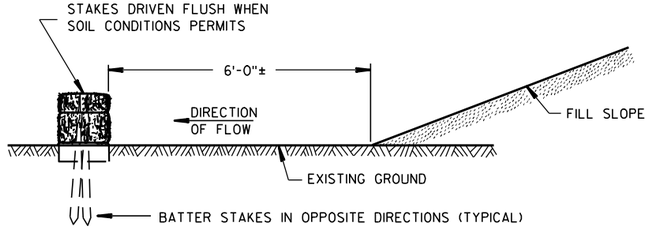


PLAN VIEW

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

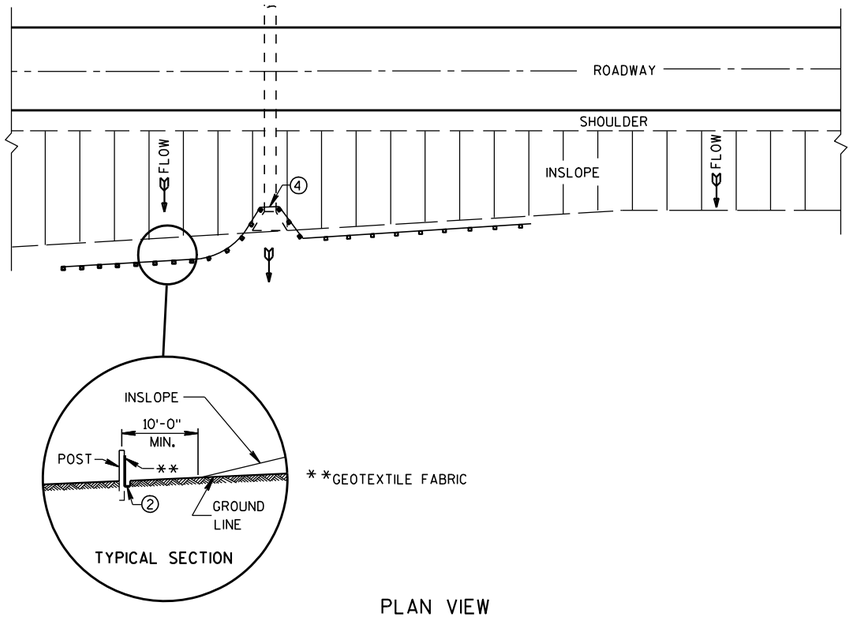
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

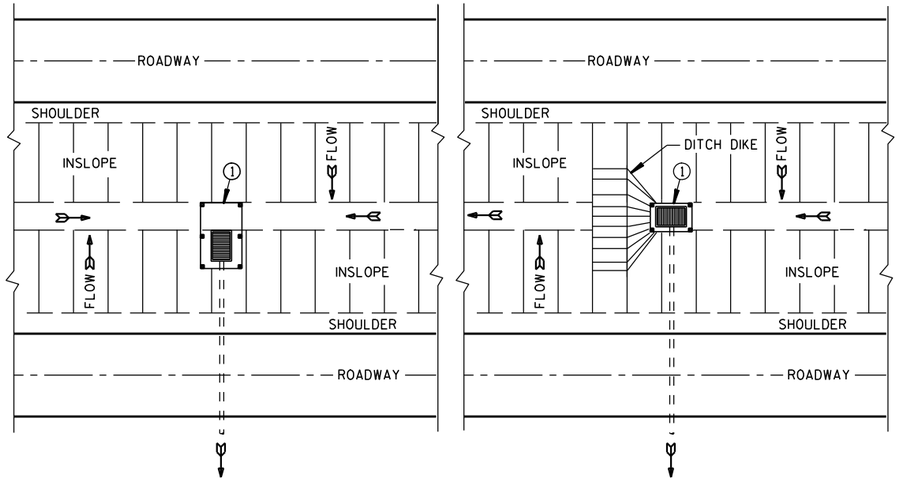
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S.D.D. 8 E 8-3



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.

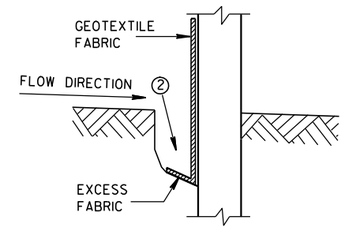
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

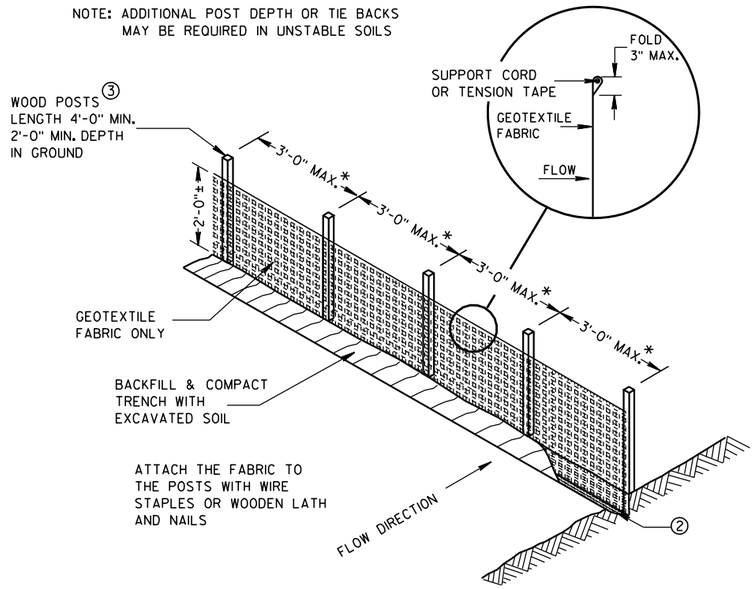
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

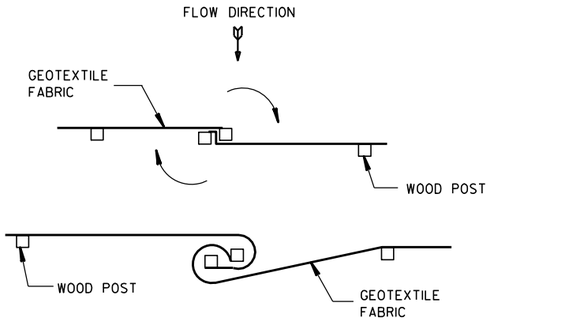
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



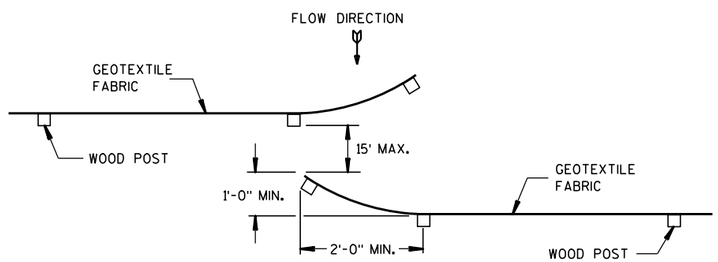
TRENCH DETAIL



SILT FENCE

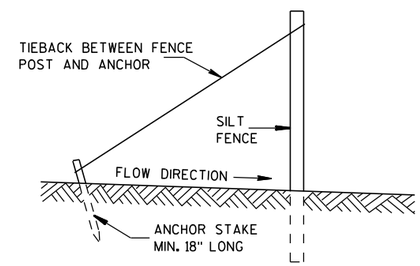


TWIST METHOD



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

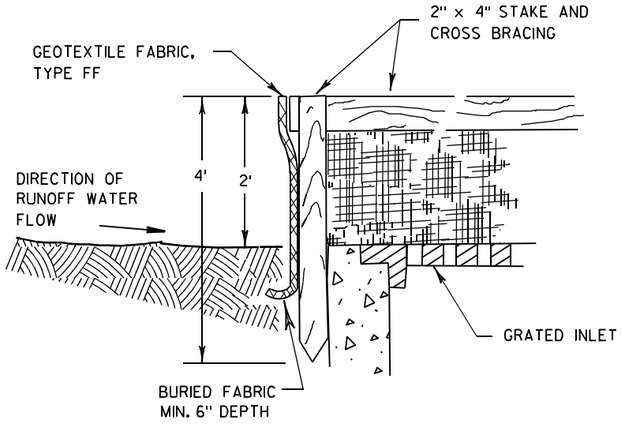
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

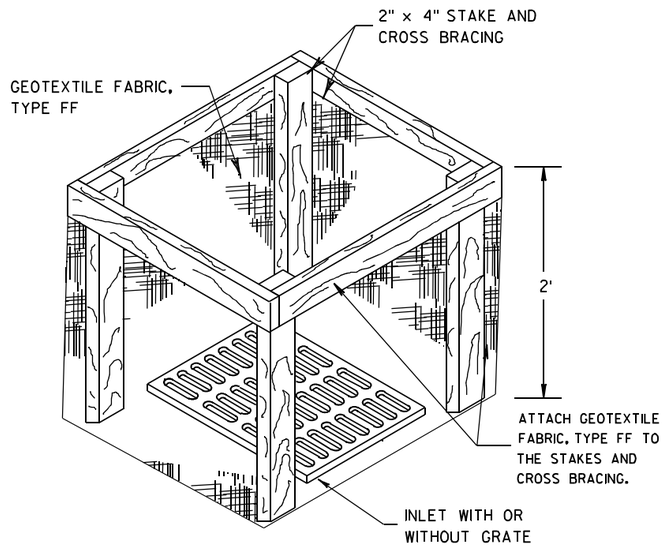
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S.D.D. 8 E 9-6

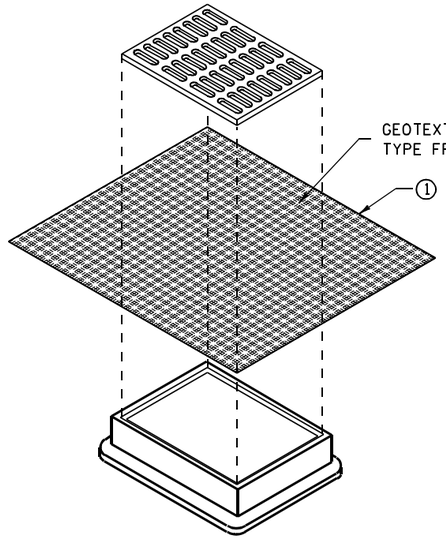
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S.D.D. 8 E 9-6



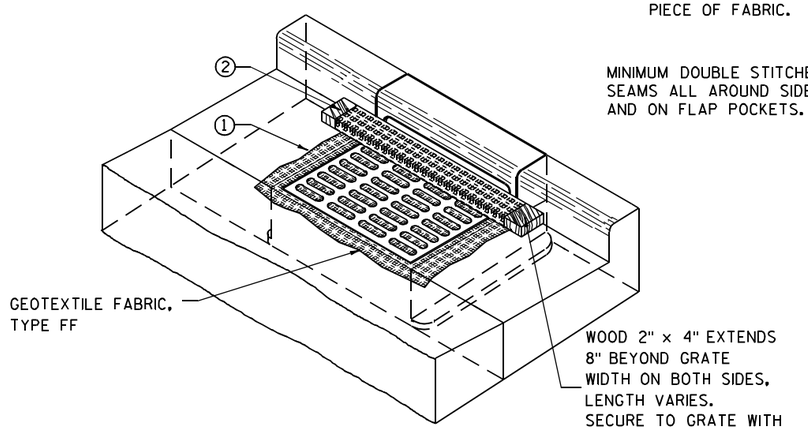


INLET PROTECTION, TYPE A

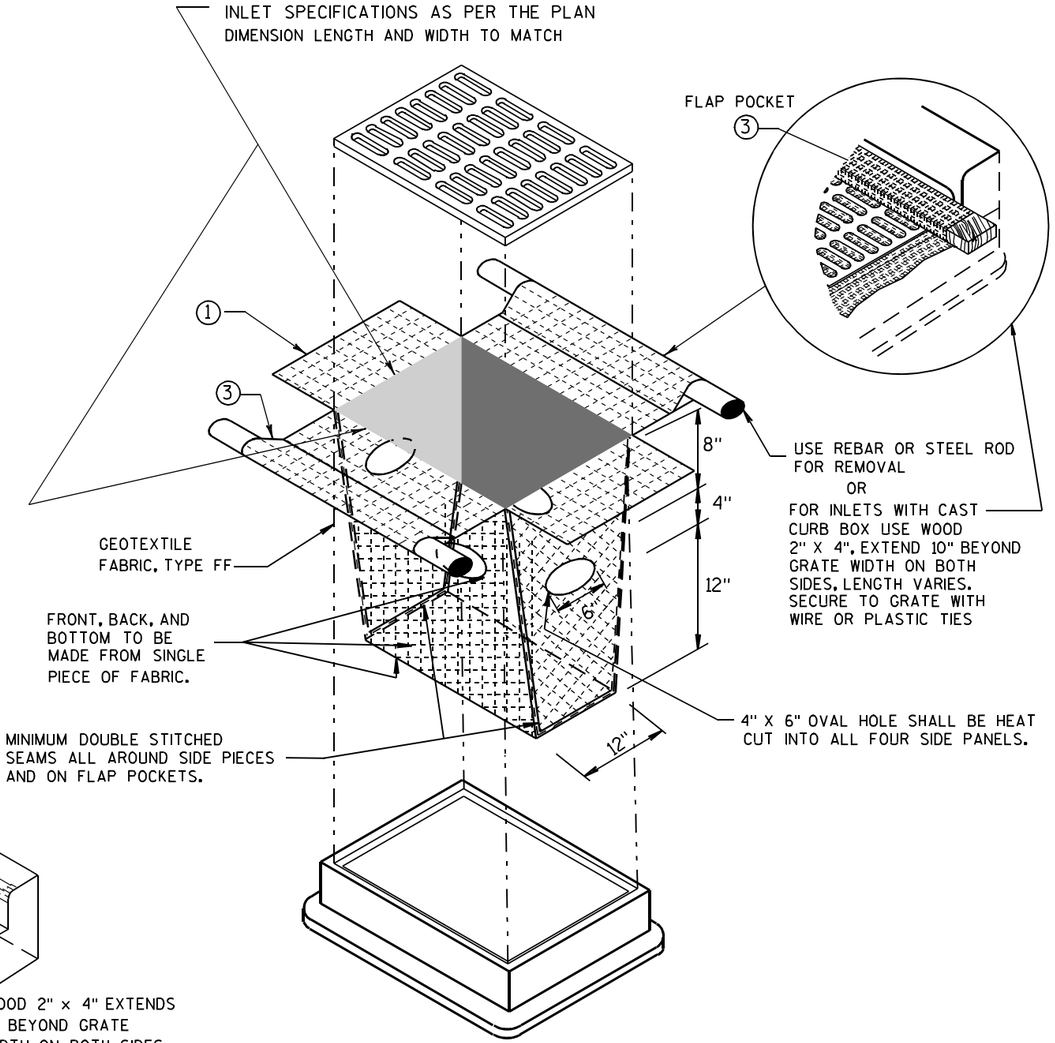


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

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

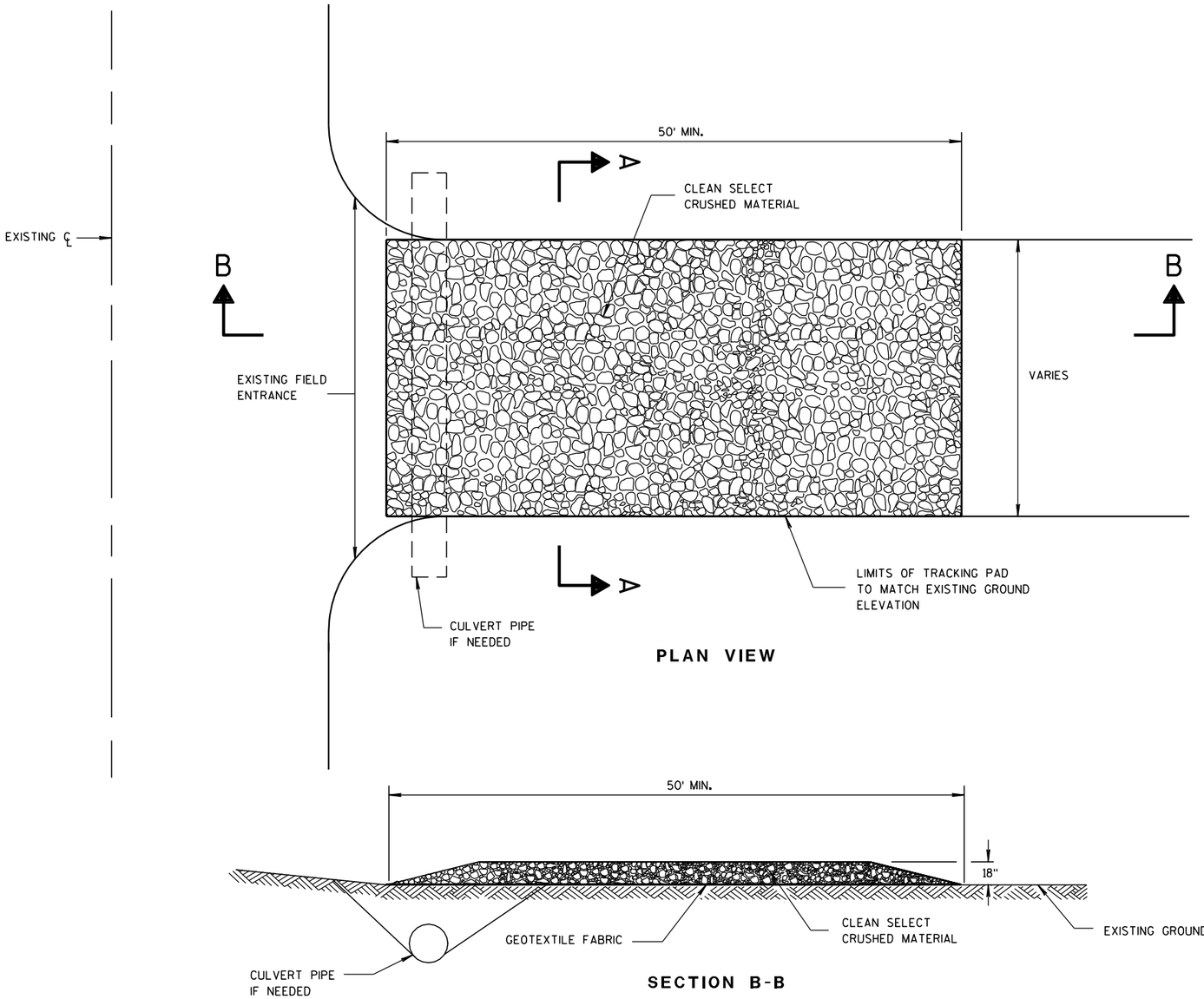
FHWA

6

S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



PLAN VIEW

SECTION B-B

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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

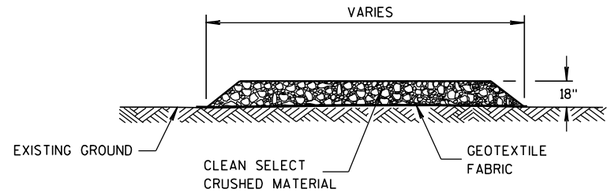
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



SECTION A-A

TRACKING PAD

TRACKING PAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

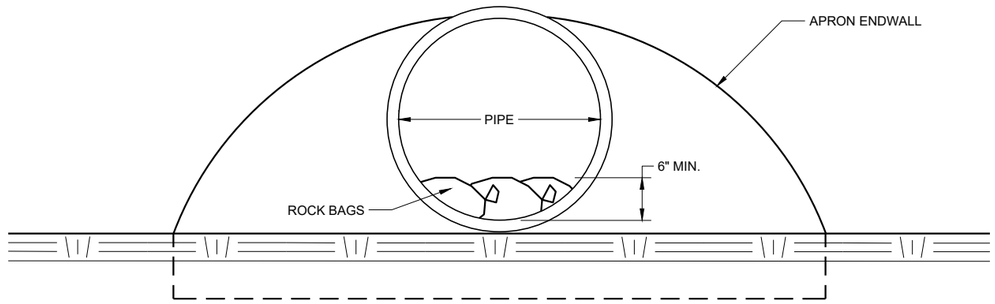
APPROVED
3/24/2011 — DATE
/S/ Jerry H. Zoda — ROADWAY STANDARDS ENGINEER
FHWA

6

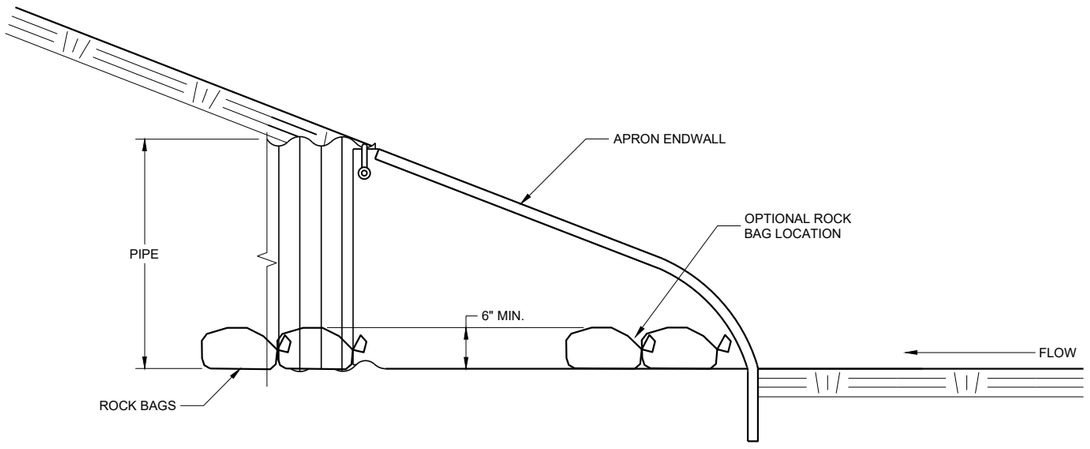
S.D.D. 8 E 14-1

6

S.D.D. 8 E 14-1



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

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SDD 08E15 - 01

METAL APRON ENDWALLS

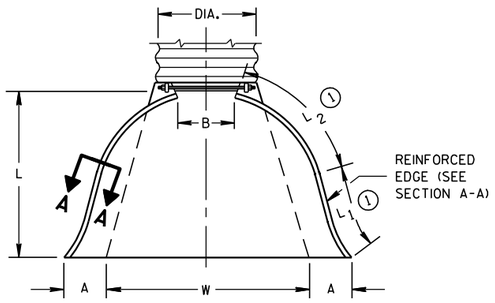
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

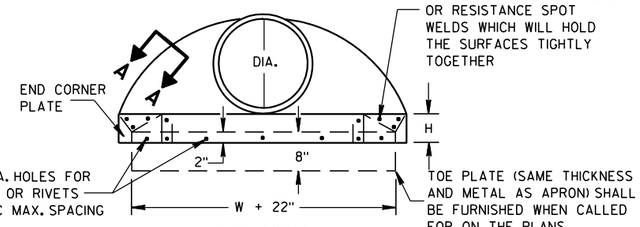
REINFORCED CONCRETE APRON ENDWALLS

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

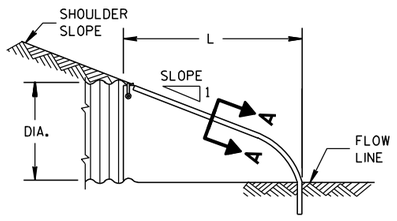
*MINIMUM
**MAXIMUM



PLAN VIEW

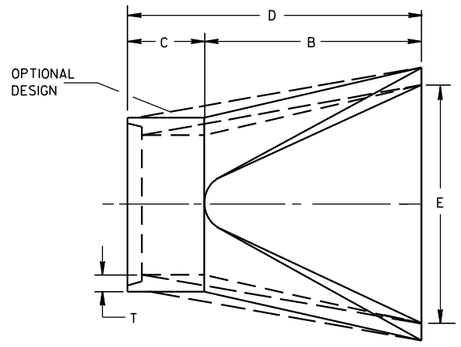


END VIEW

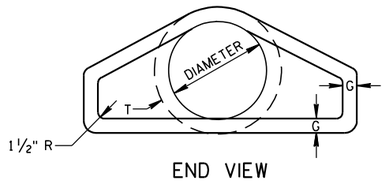


SIDE ELEVATION

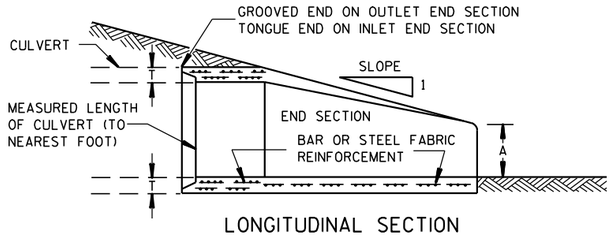
METAL ENDWALLS



PLAN

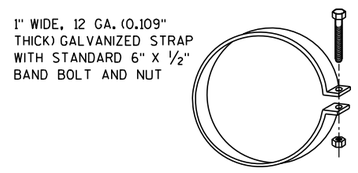


END VIEW



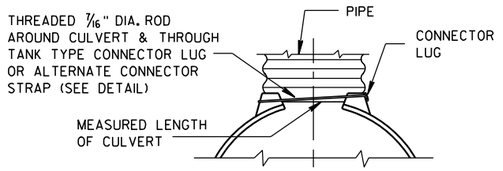
LONGITUDINAL SECTION

CONCRETE ENDWALLS

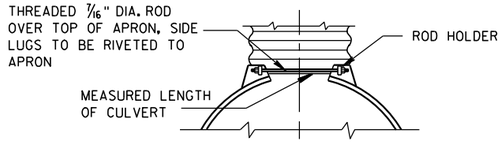


ALTERNATE FOR TYPE 1 CONNECTION

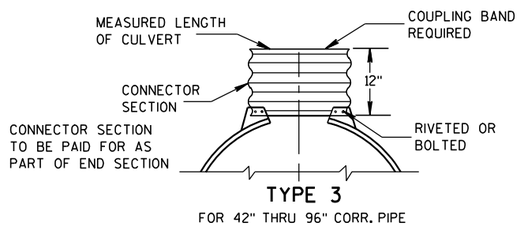
END SECTION CONNECTOR STRAP



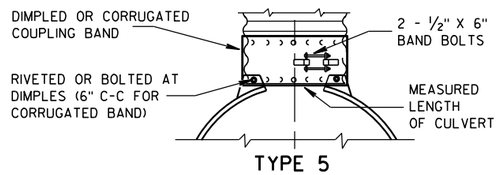
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

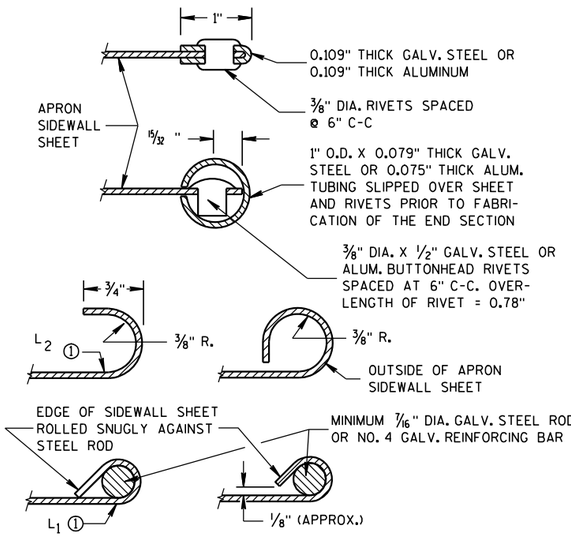
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

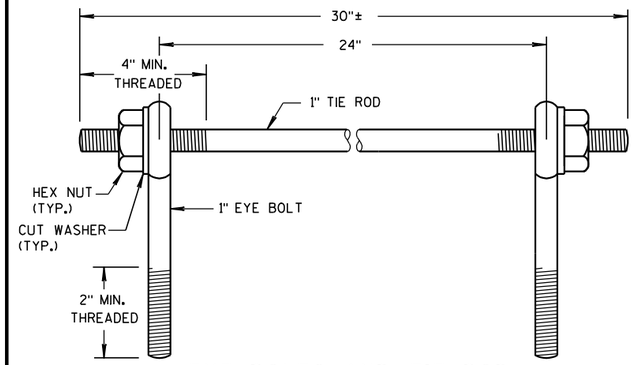
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

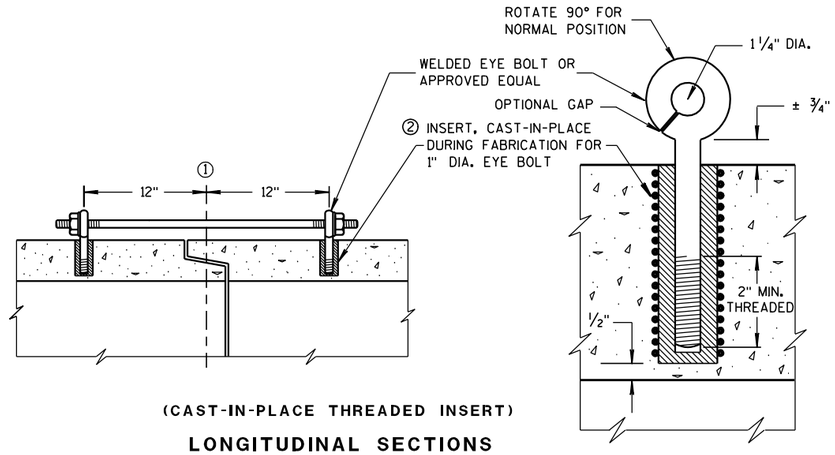
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

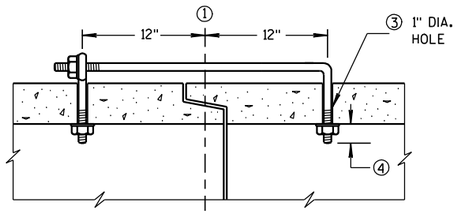
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

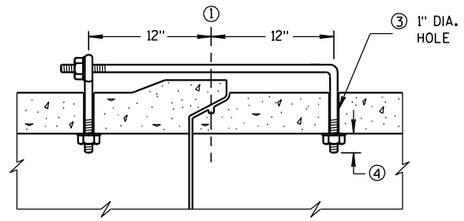
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

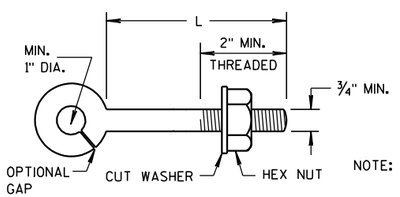


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

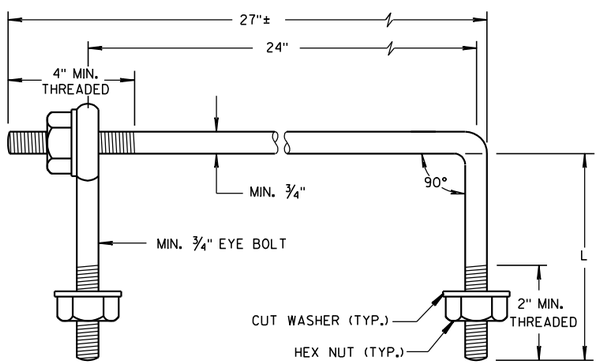
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

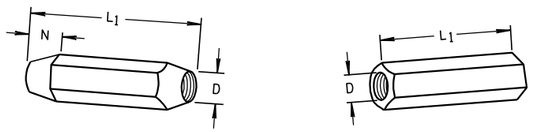
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

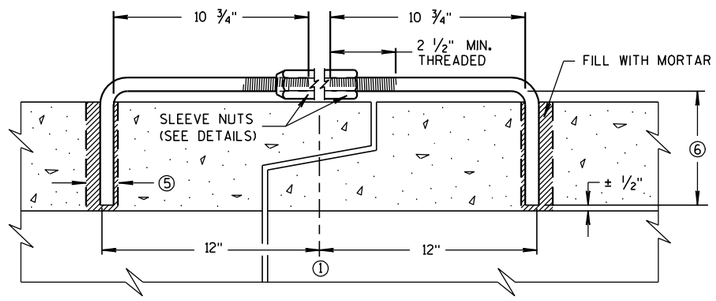
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

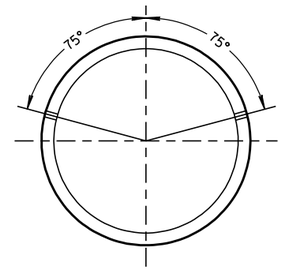
SLEEVE NUTS



LONGITUDINAL SECTION

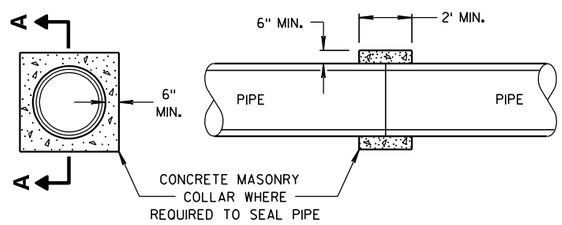
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

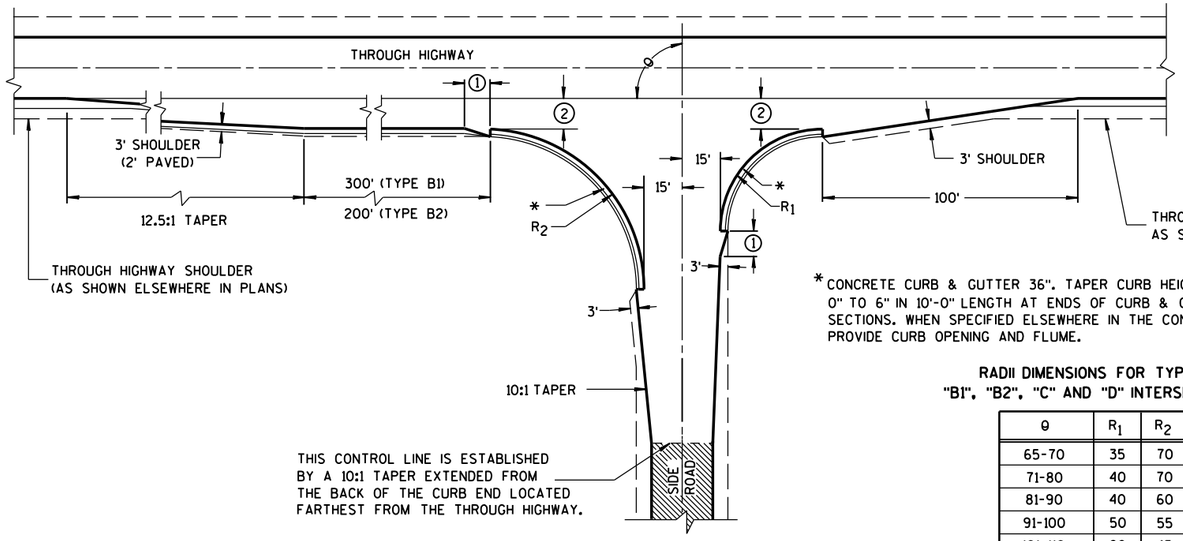
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
222
FHWA

6

S.D.D. 8 F 4-7

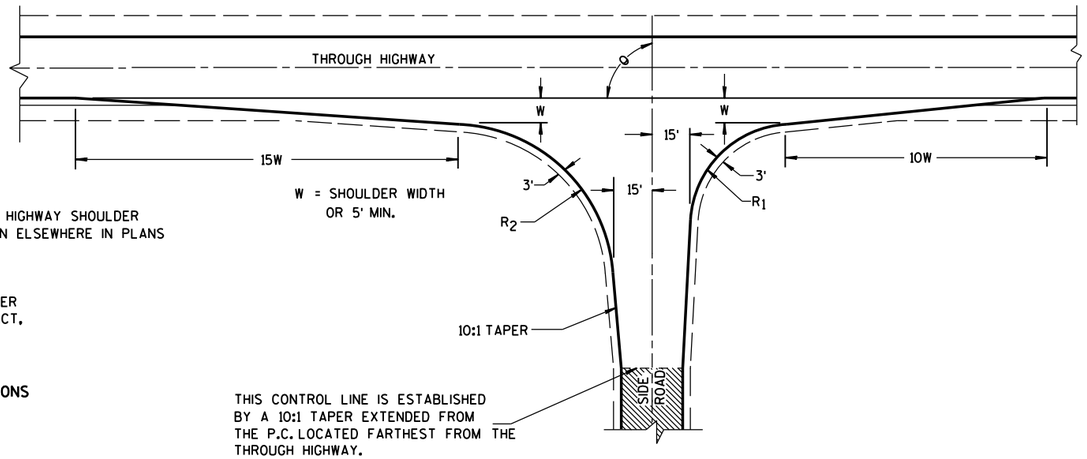


TYPE "B1" AND "B2"

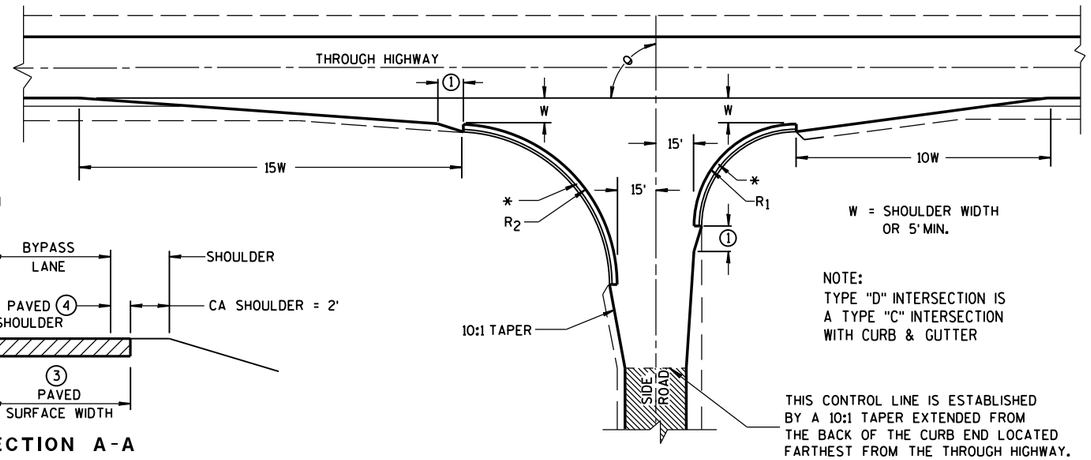
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

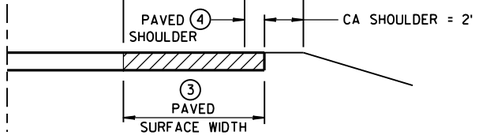
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

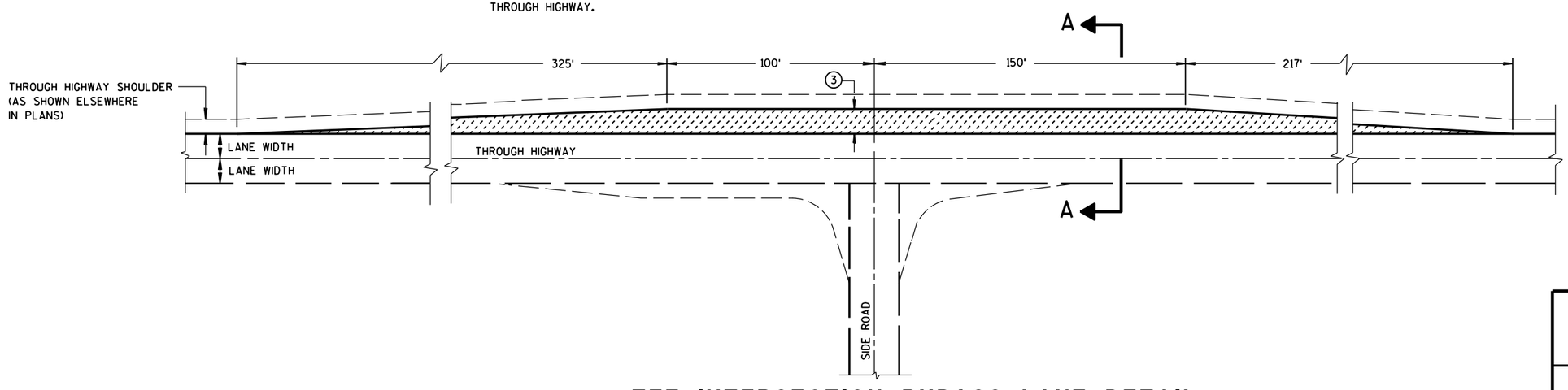
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



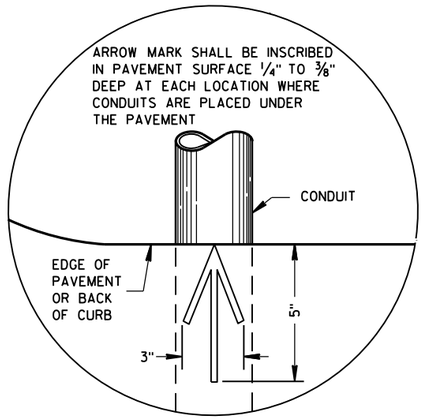
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

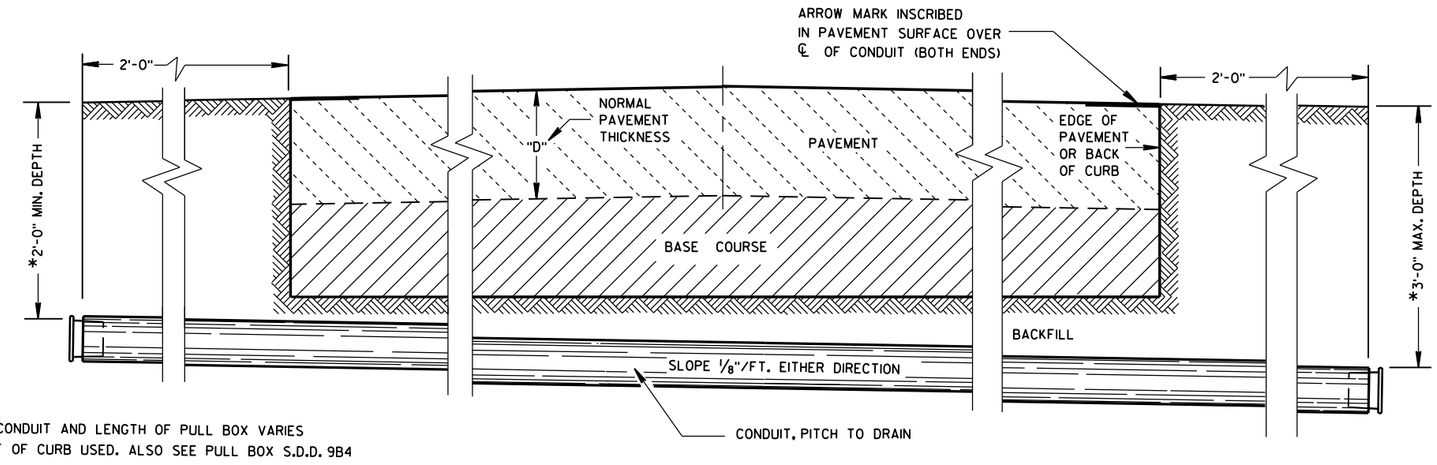
6

S.D.D. 9 A 1-13a



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL 224
FHWA

6

S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

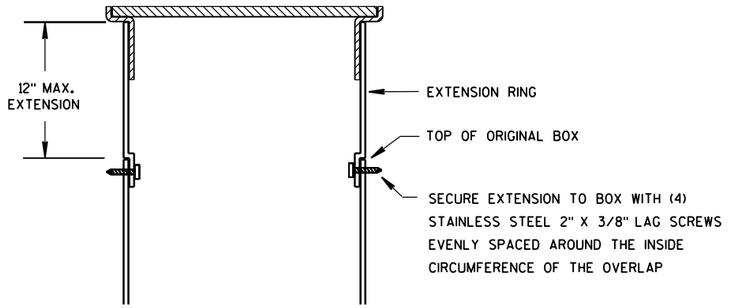
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

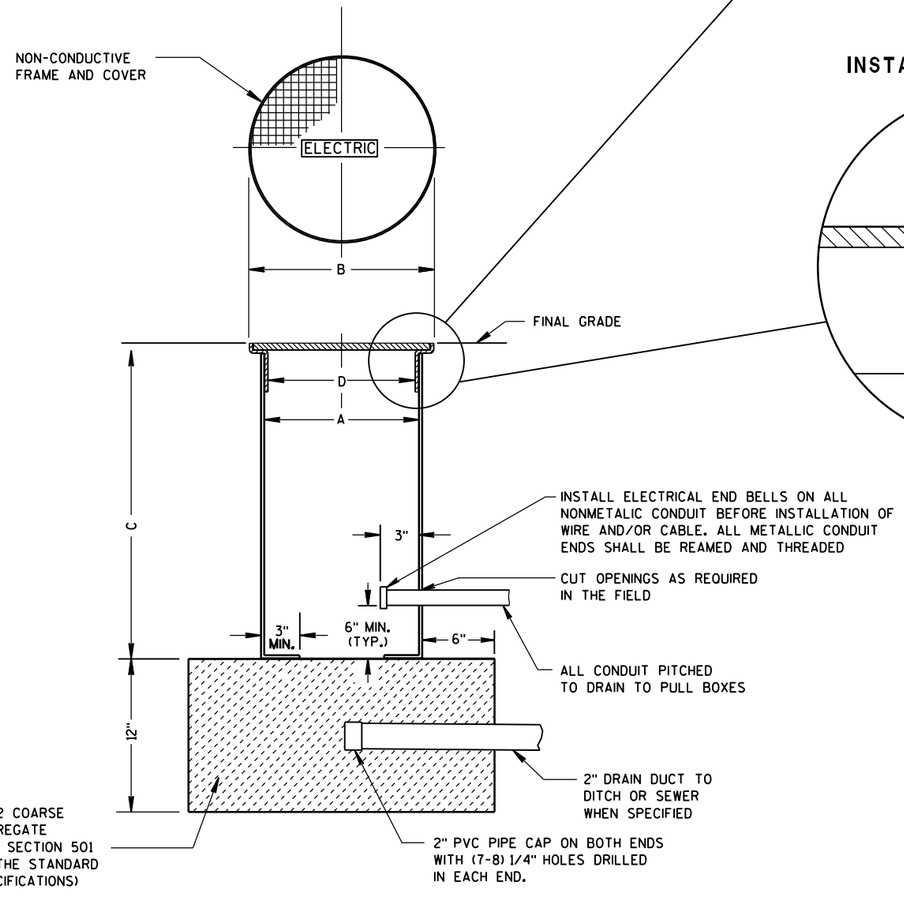
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.

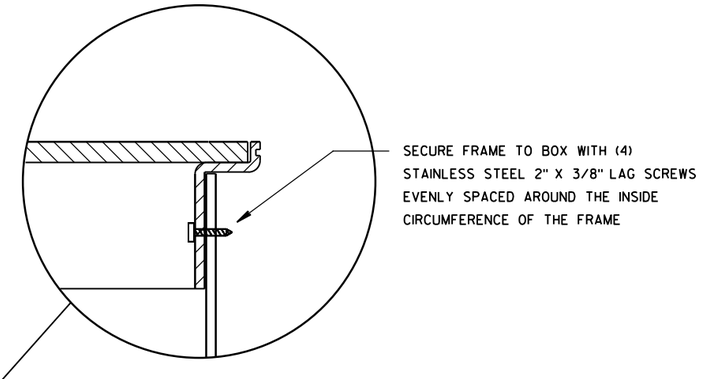


BOX EXTENSION

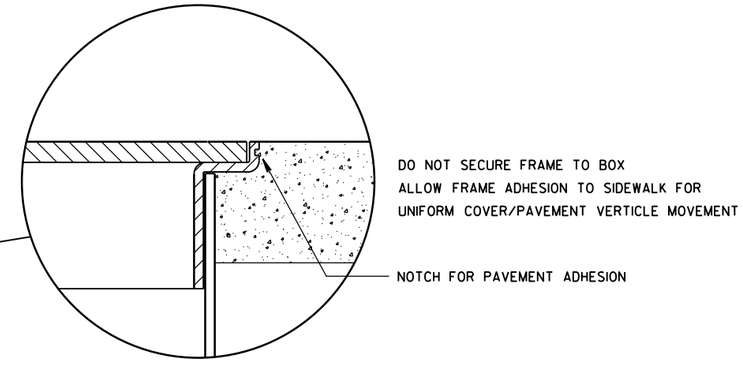


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



PULL BOX NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

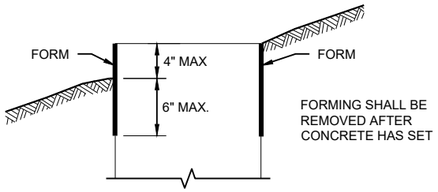
6

S.D.D. 9 B 16-1

6

S.D.D. 9 B 16-1

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

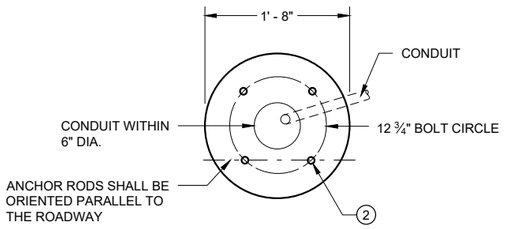
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

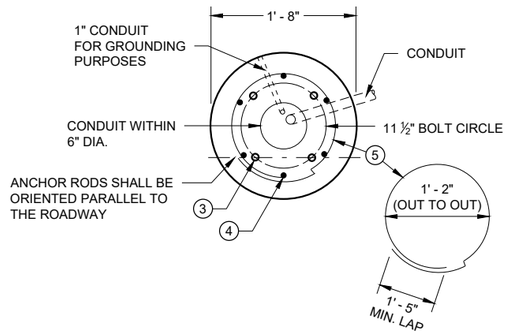
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

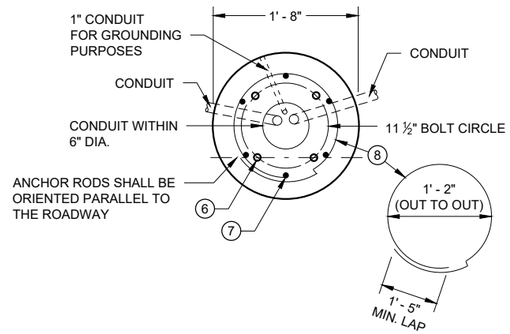
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

(2) (4) 1" DIA. X 3' - 6" ANCHOR RODS.

(3) (4) 1" DIA. X 5' - 0" ANCHOR RODS.

(4) (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

(5) (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

(6) (4) 1" DIA. X 3' - 6" ANCHOR RODS.

(7) (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

(8) (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

(9) EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

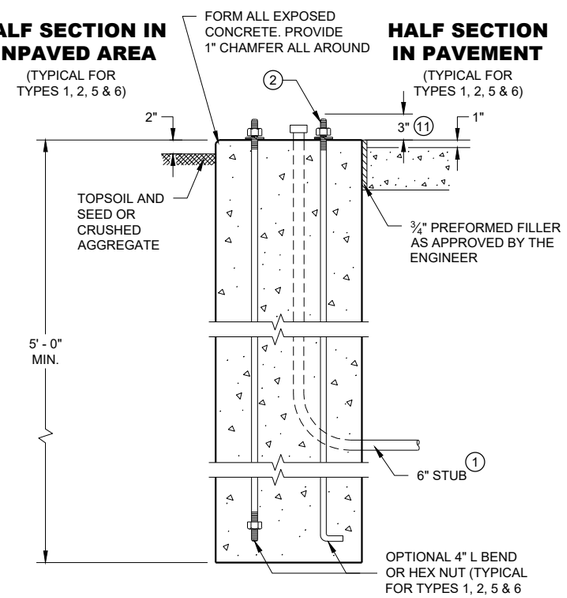
(10) ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

(11) ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

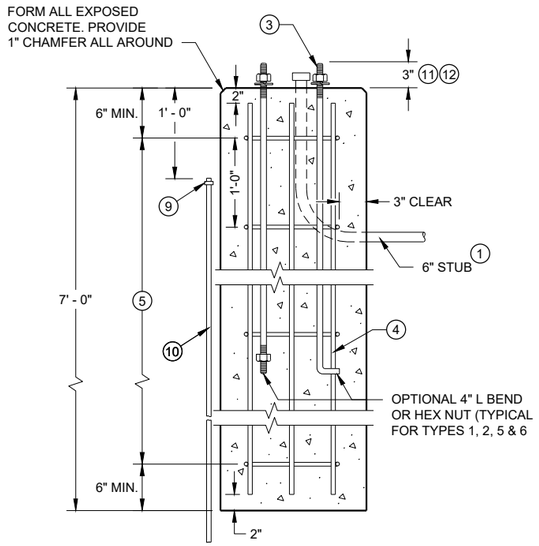
(12) FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

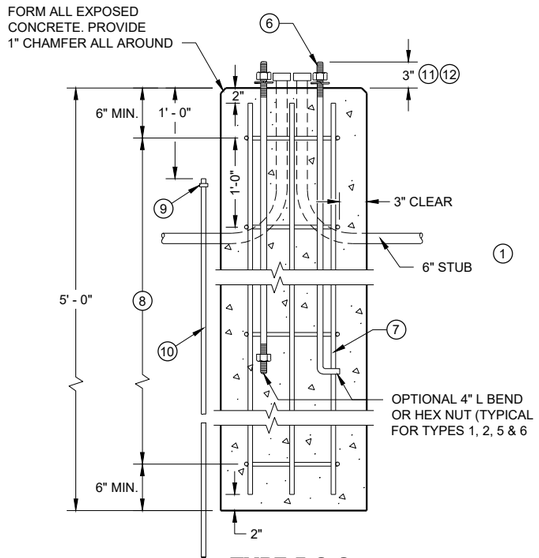
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

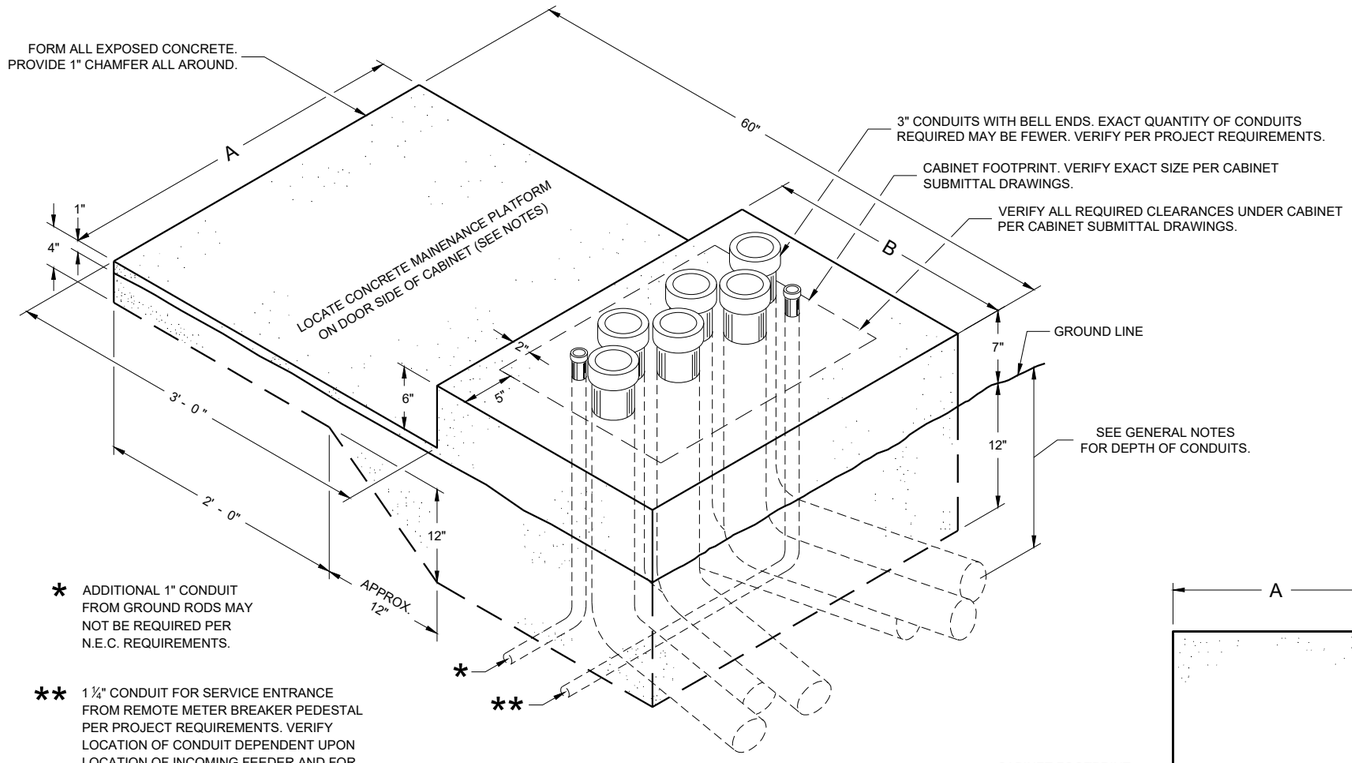
CONCRETE BASES

CONCRETE BASES TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 226

FHWA



* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

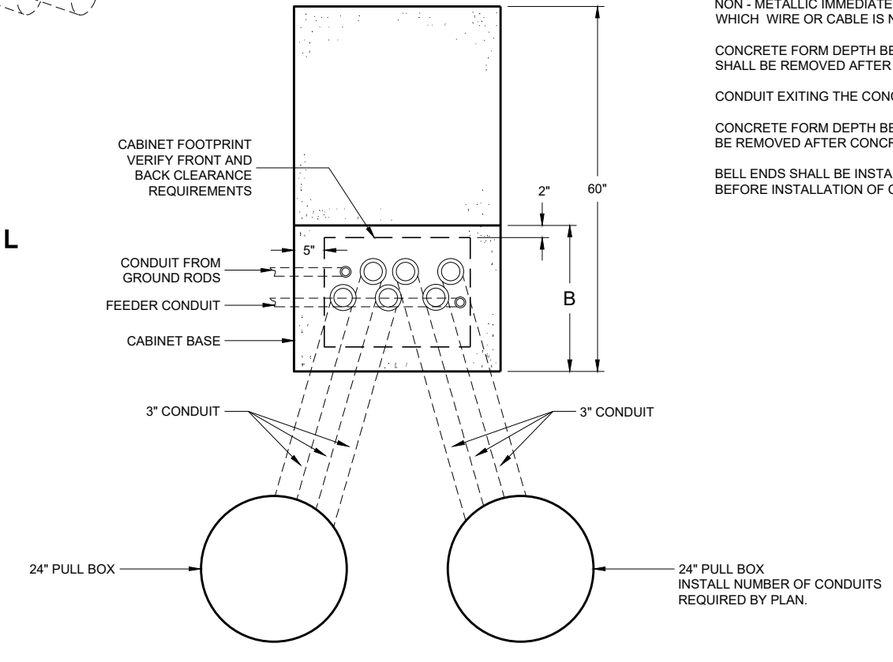
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE

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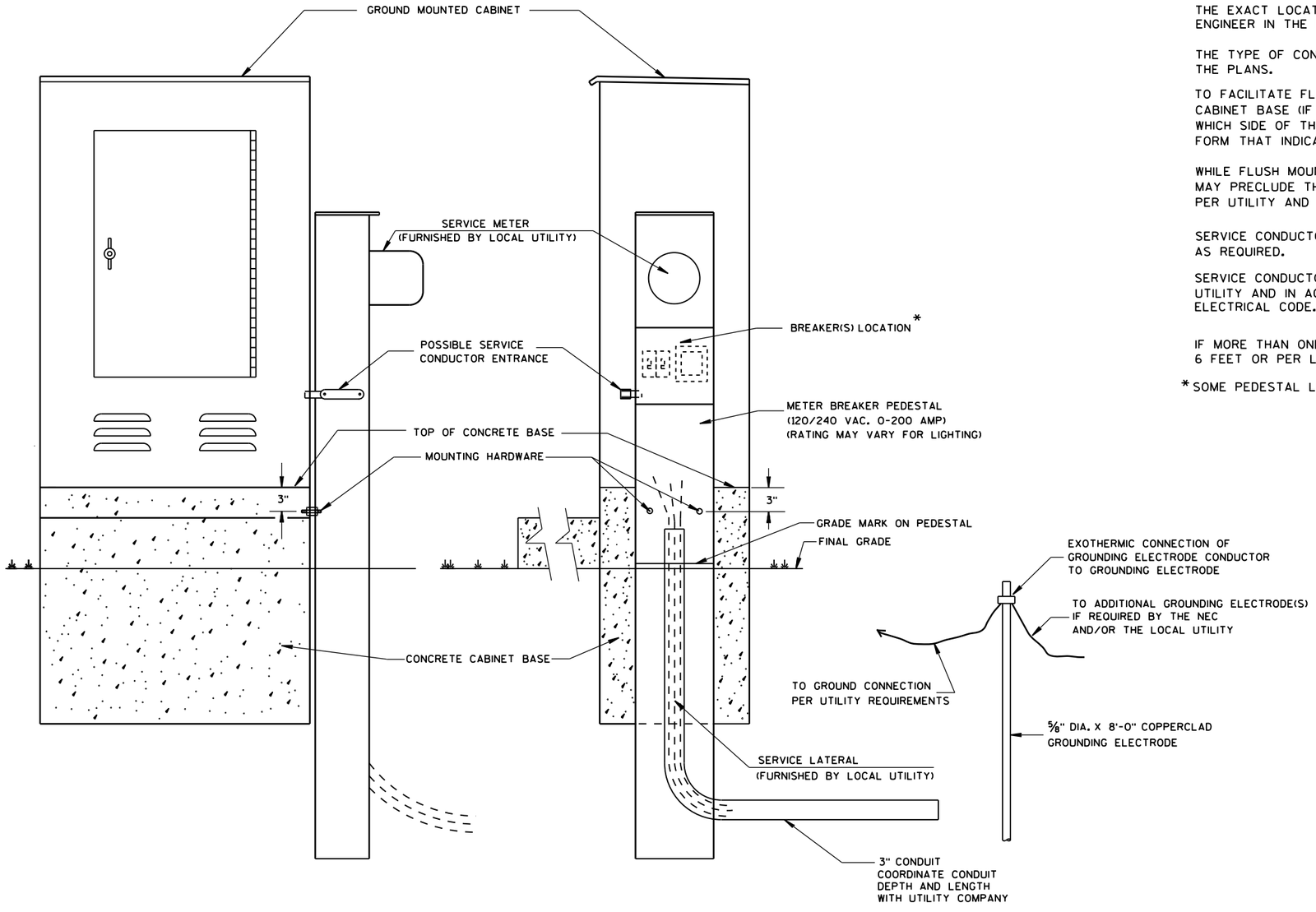
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TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

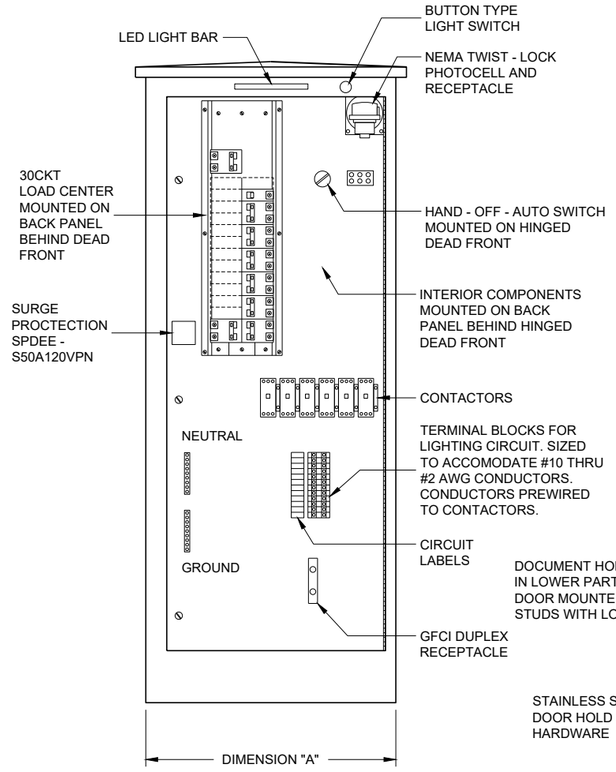
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

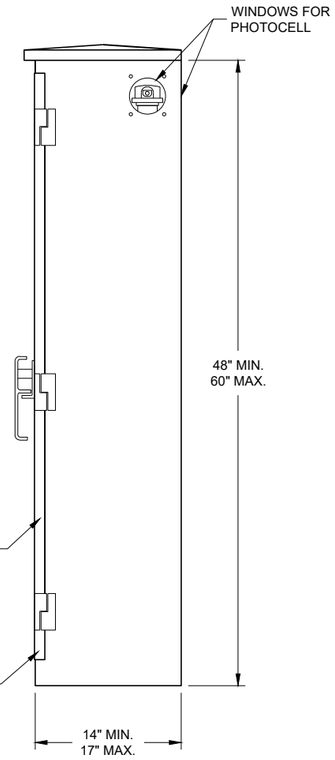
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FRONT INTERIOR ELEVATION



SIDE VIEW



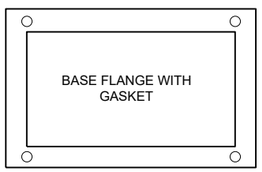
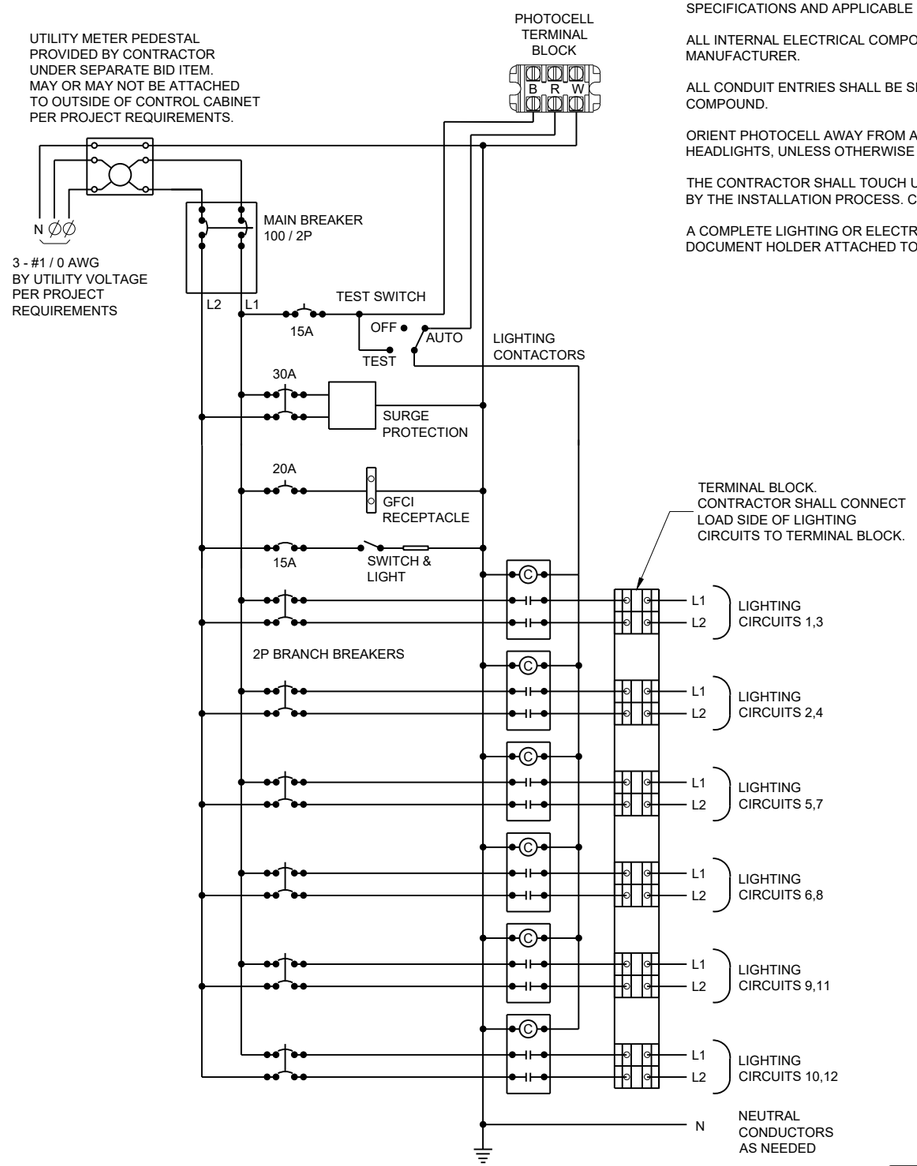


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

GENERAL NOTES

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

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

LIGHTING CONTROL CABINET
120 / 240 VOLT

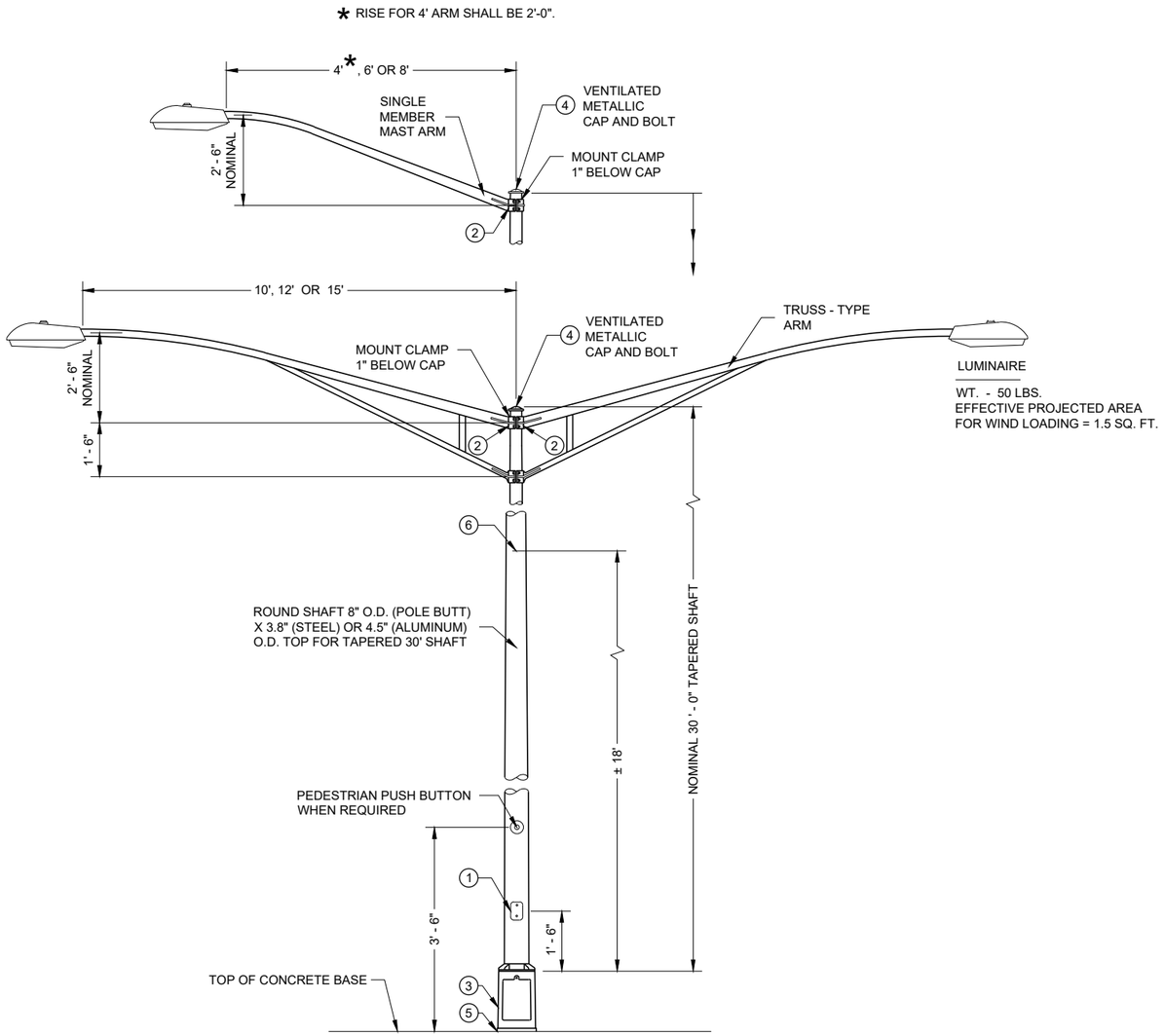
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TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

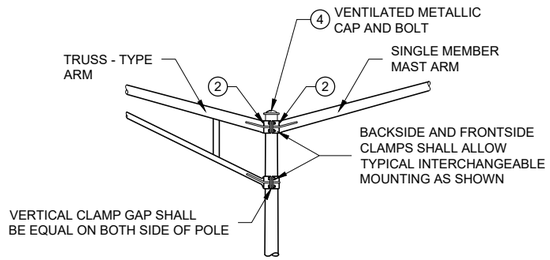
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

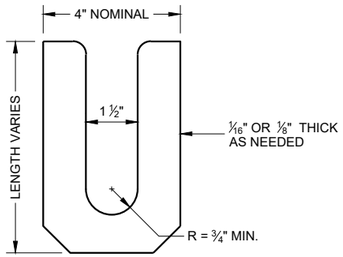


INTERCHANGEABLE MOUNTING DETAIL

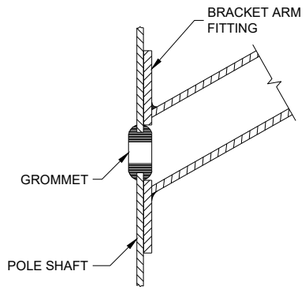
POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

SDD 09E01 - 15d

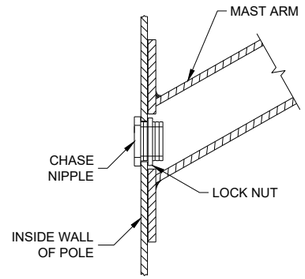
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LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

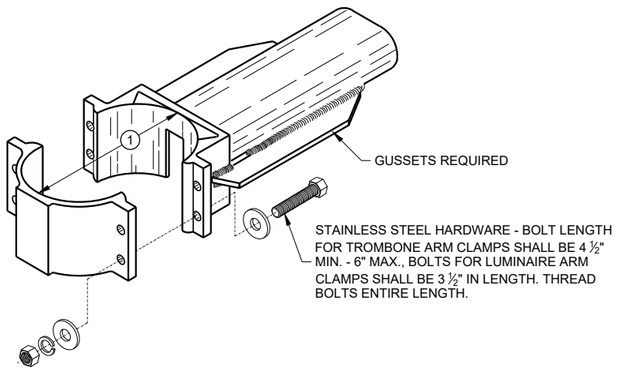
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

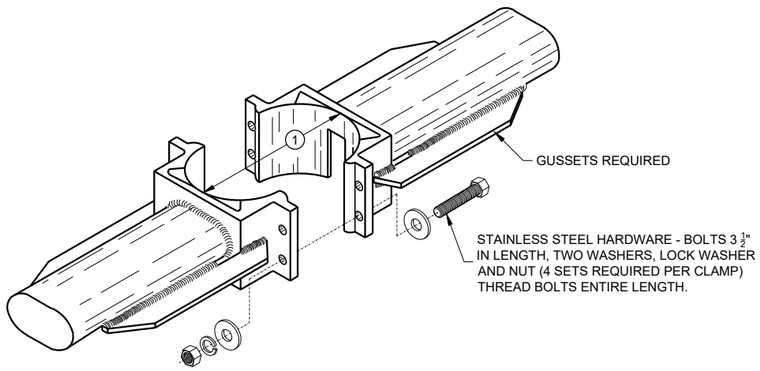
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

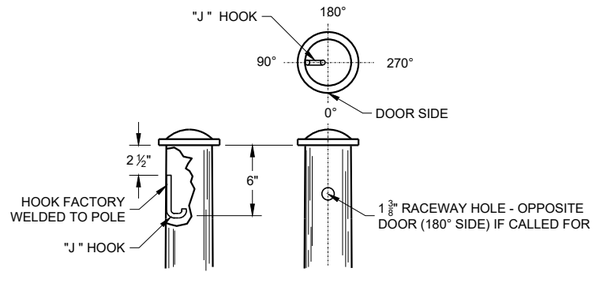
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



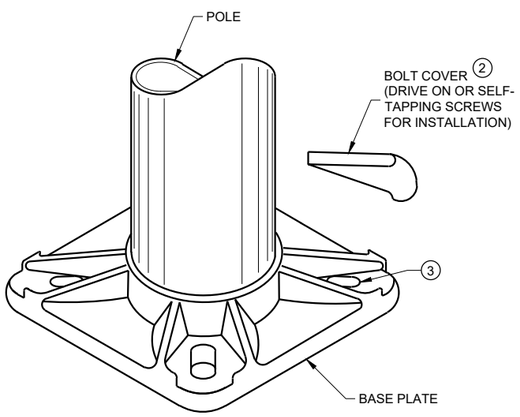
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



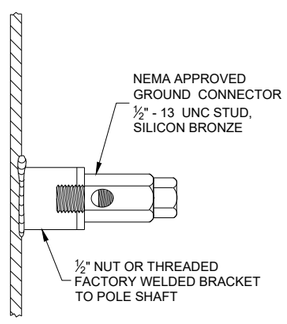
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

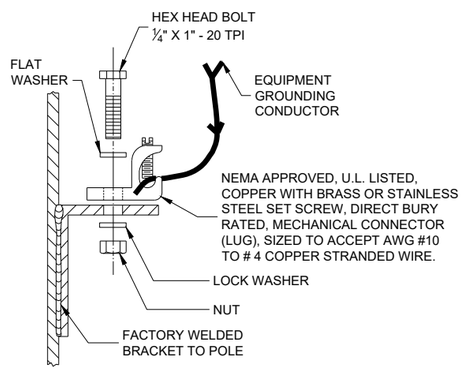


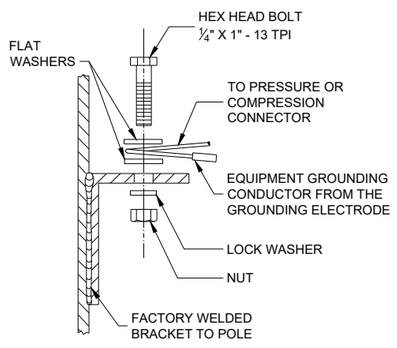
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

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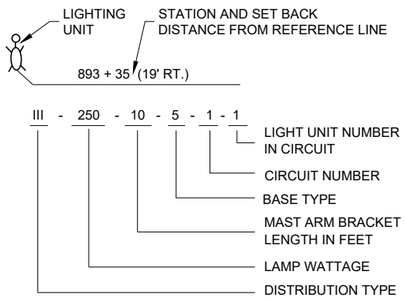
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GENERAL NOTES

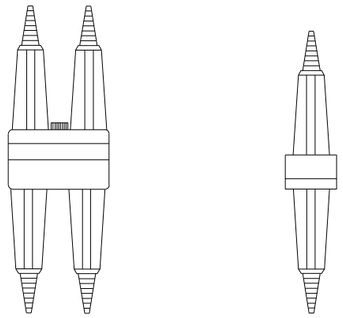
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

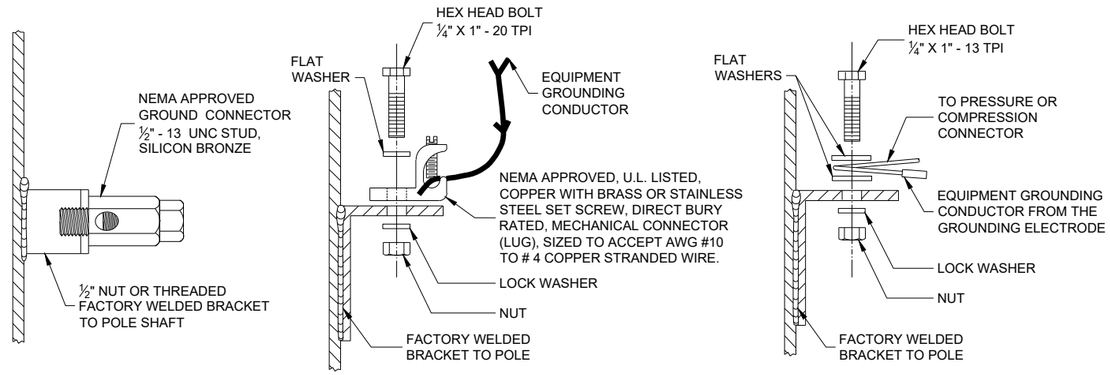


LIGHTING UNIT CODE
(TYPICAL)

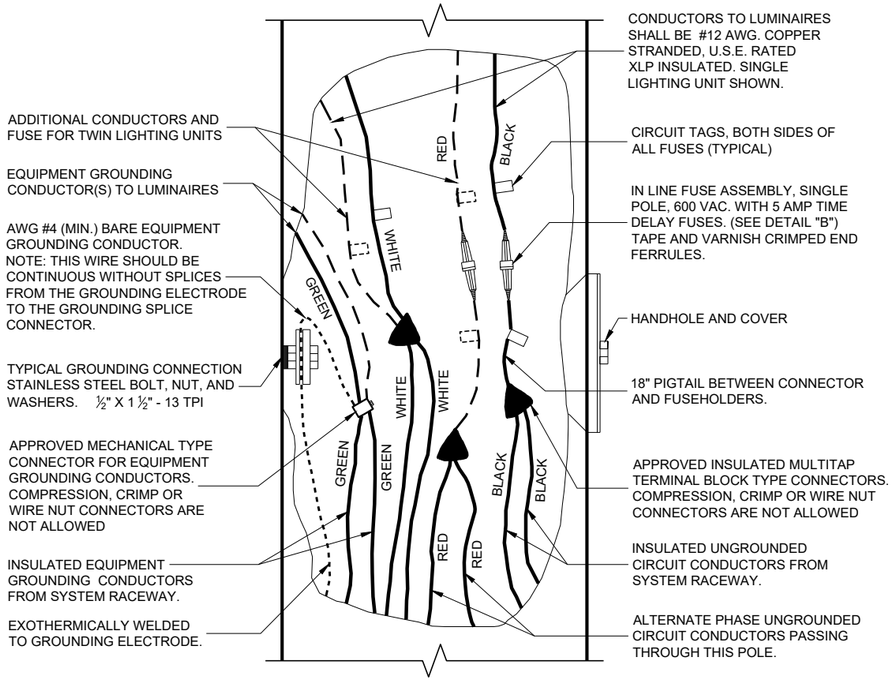


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

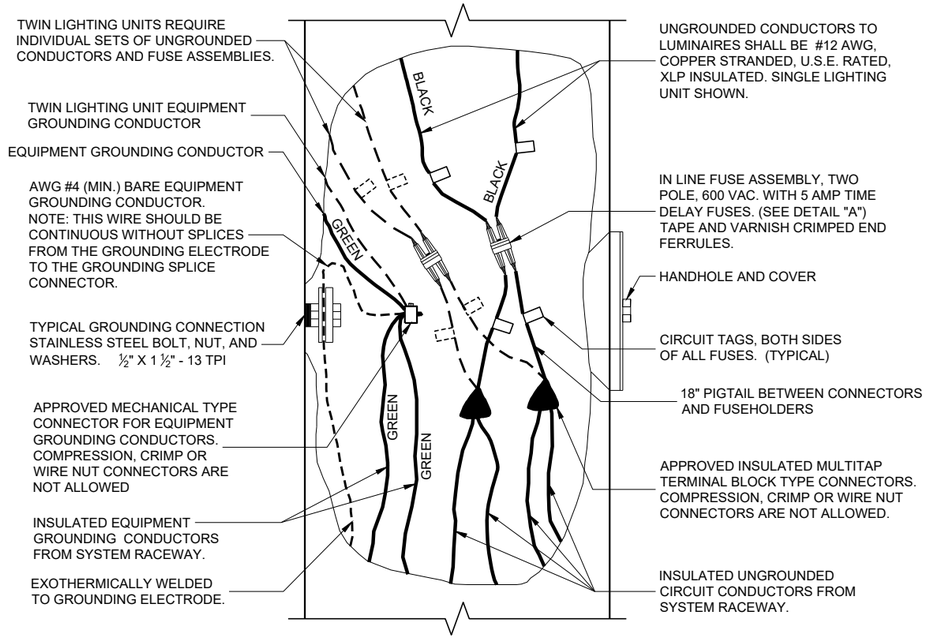
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



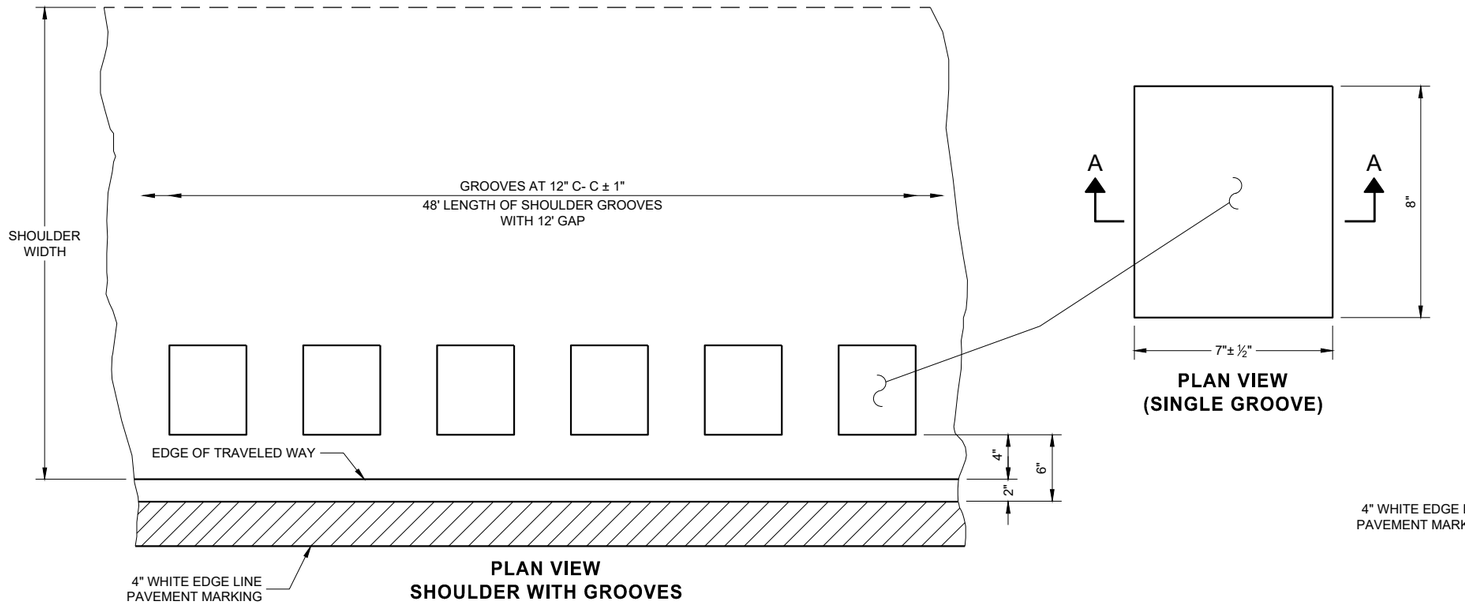
2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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PLAN VIEW
SHOULDER WITH GROOVES

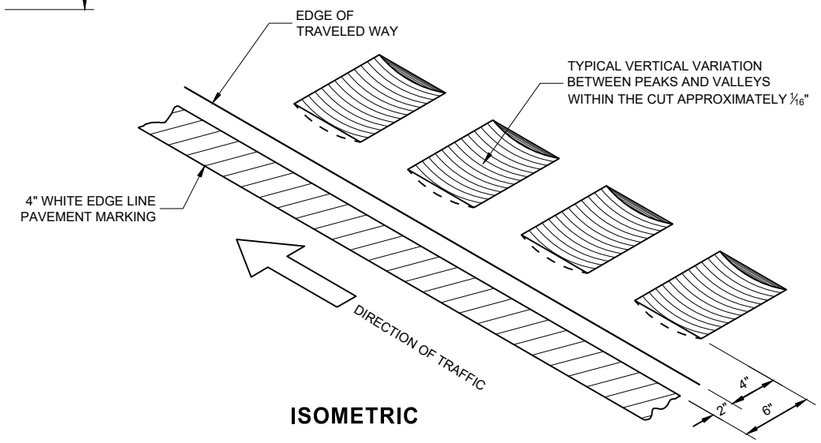
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

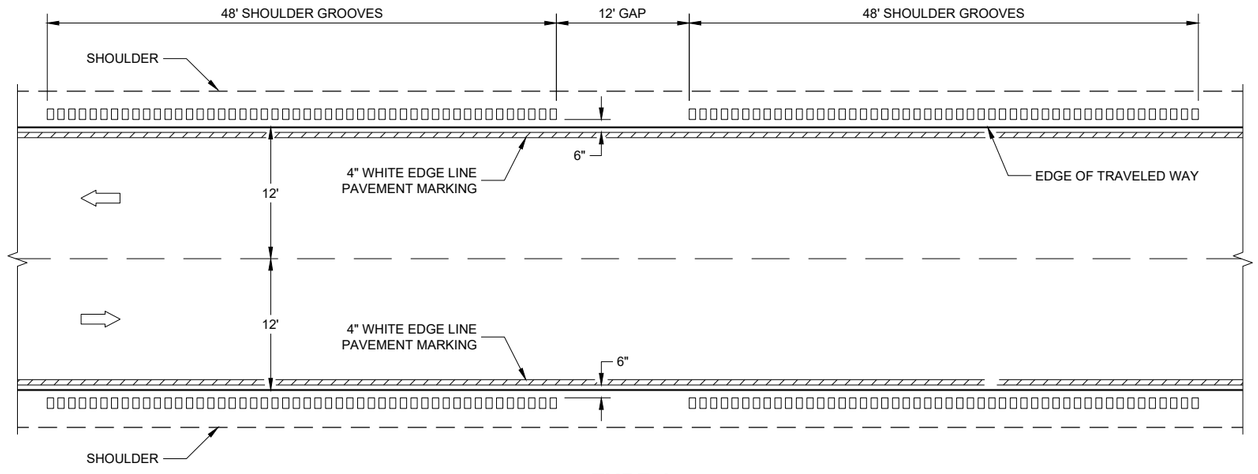
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

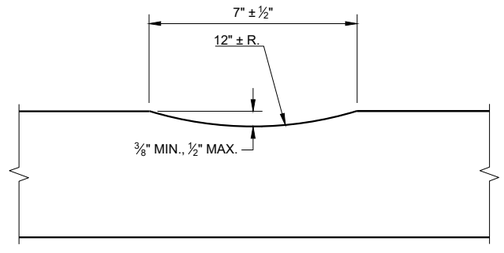


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

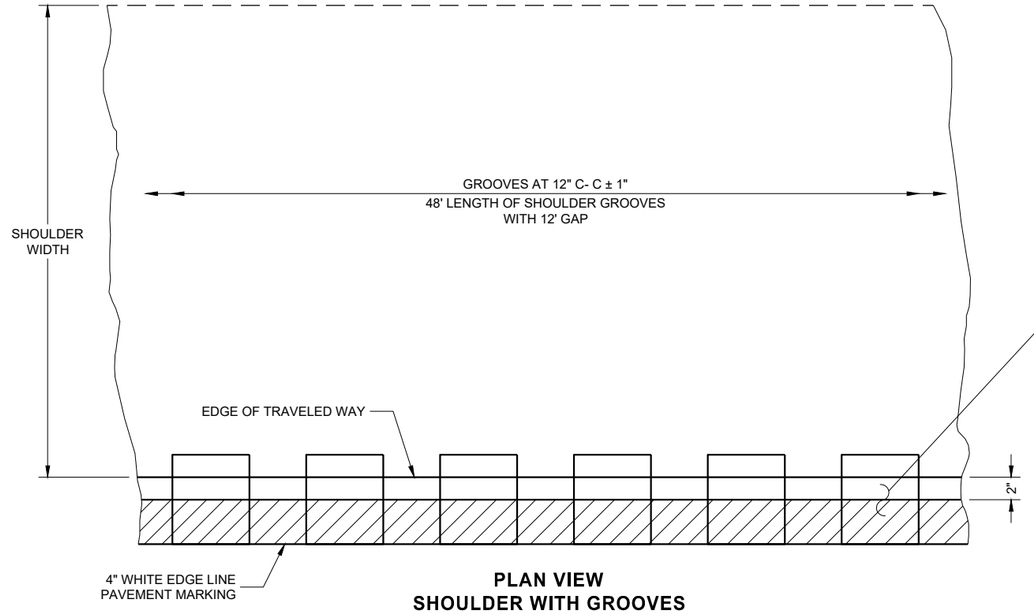
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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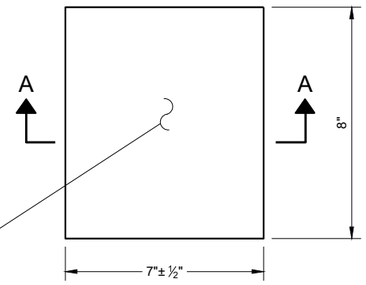
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PLAN VIEW
SHOULDER WITH GROOVES



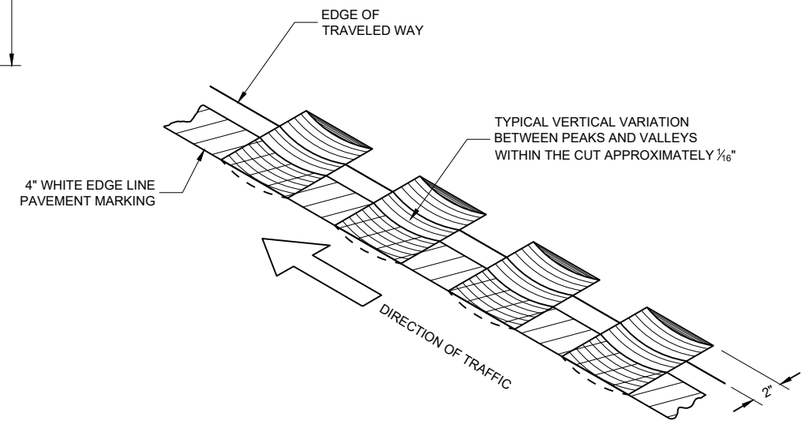
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

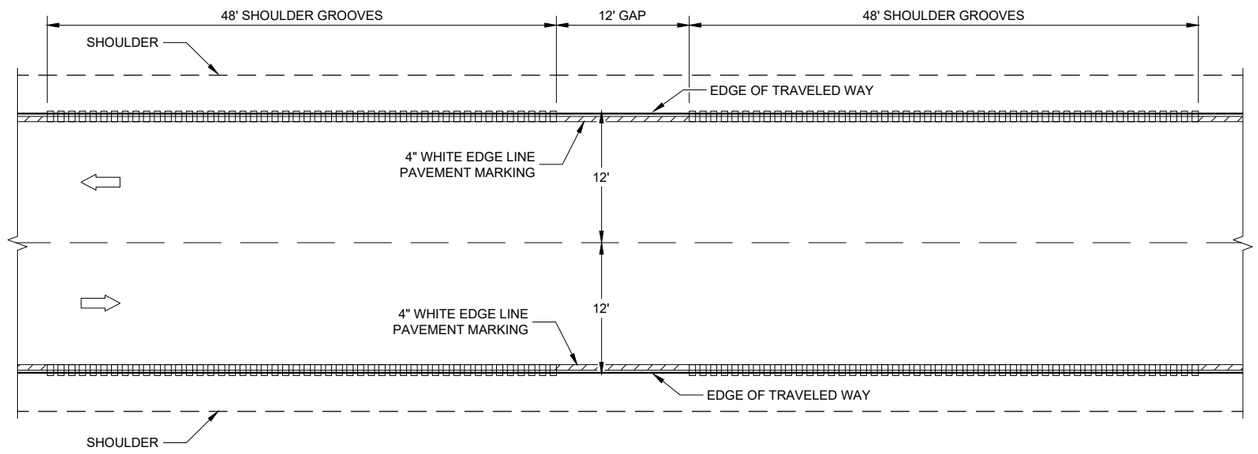
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

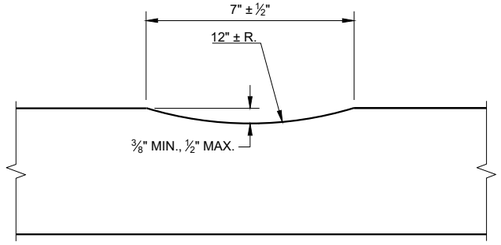


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2 - LANE SHOULDER RUMBLE STRIP



SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

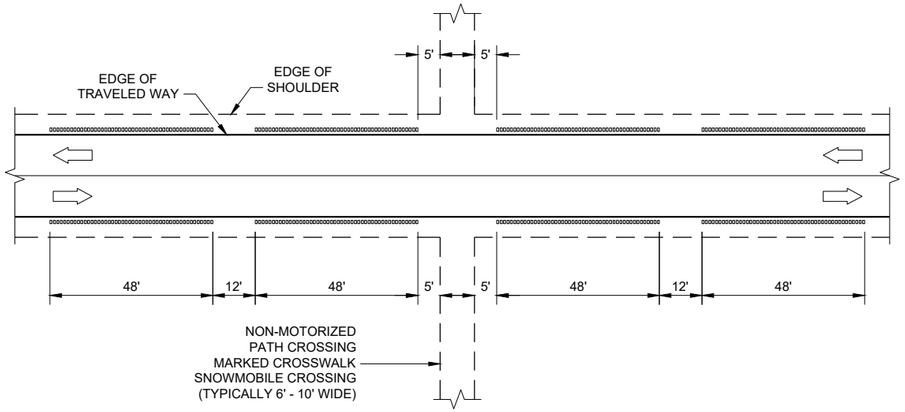
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

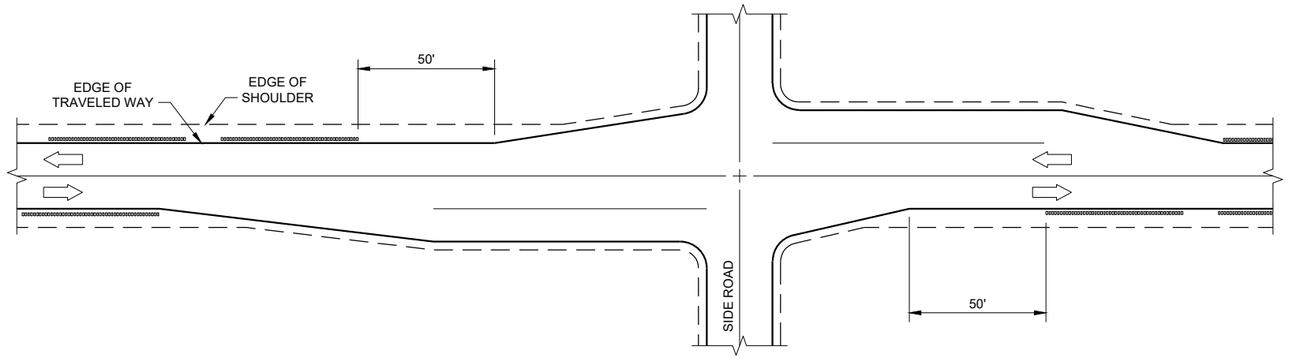
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SDD 13A10 - 02b

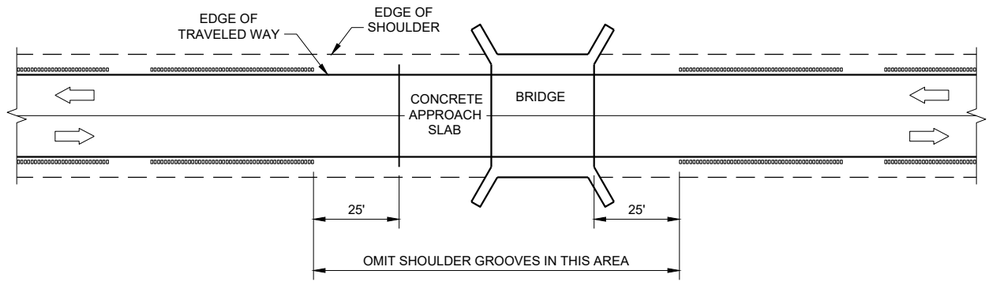
SDD13A10 - 02b



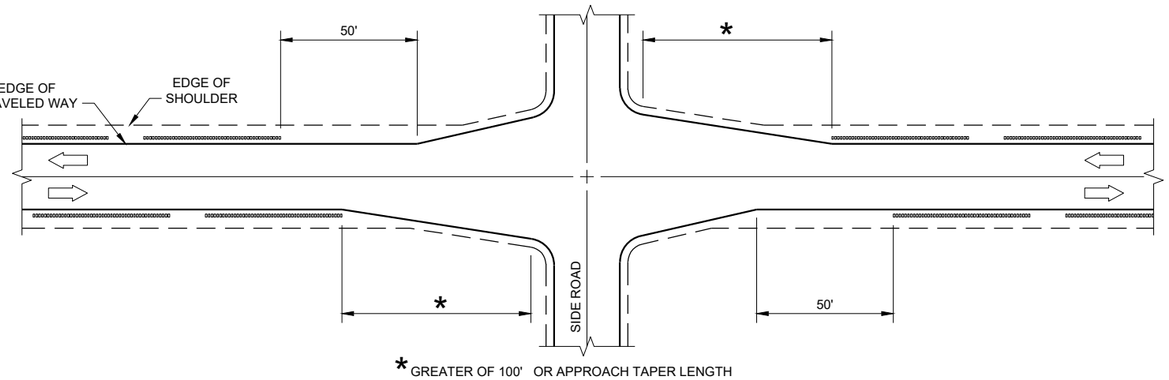
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

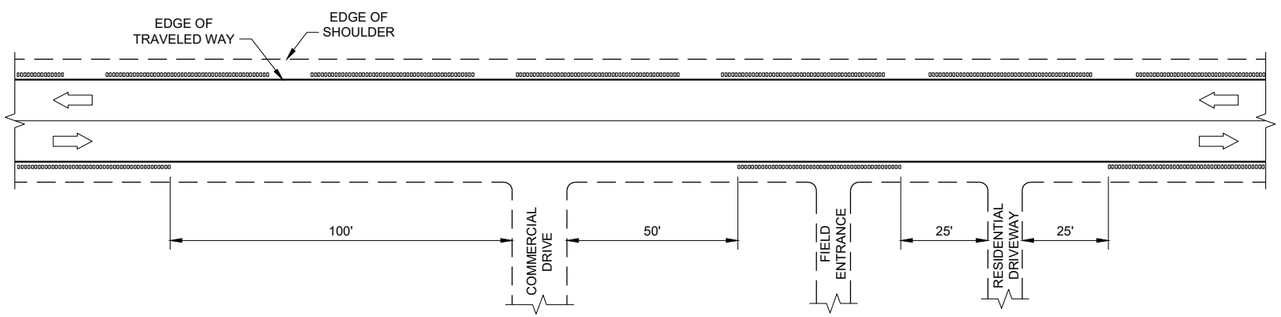


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

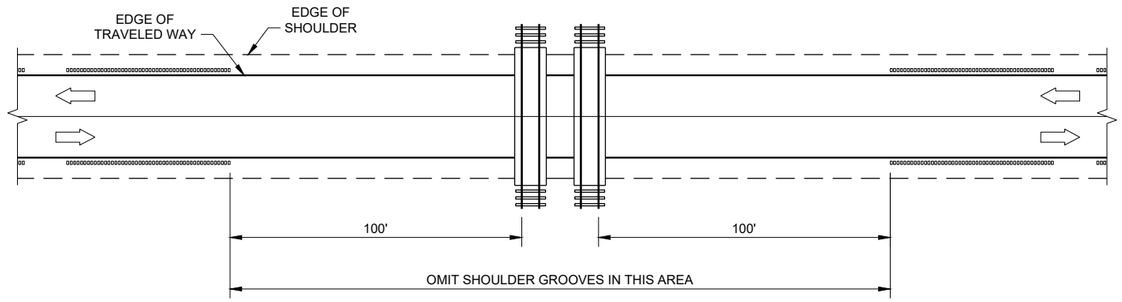
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

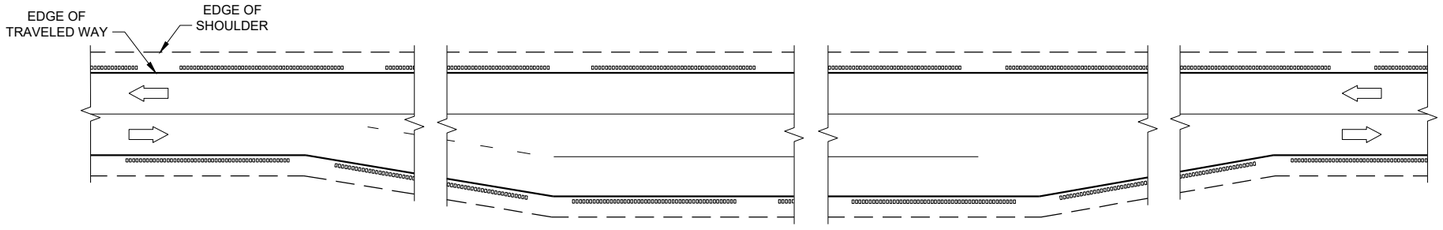
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

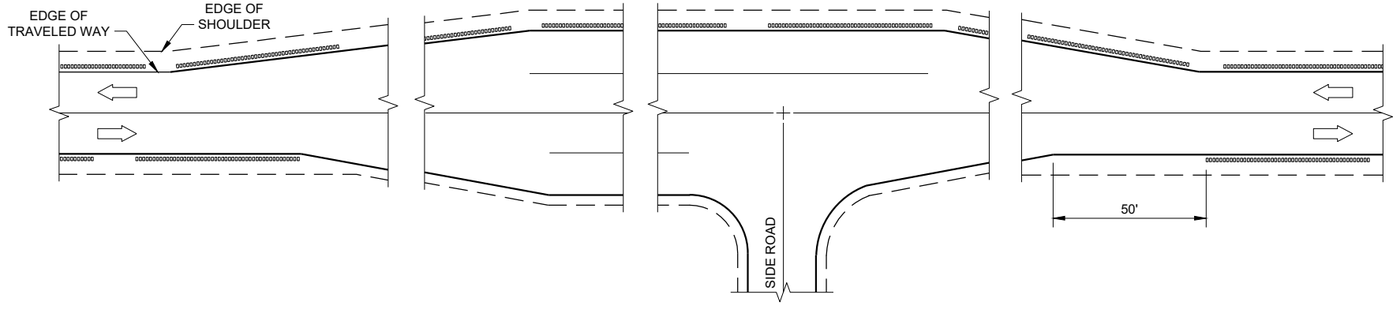
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

SDD 13A10 - 02d

SDD13A10 - 02d

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

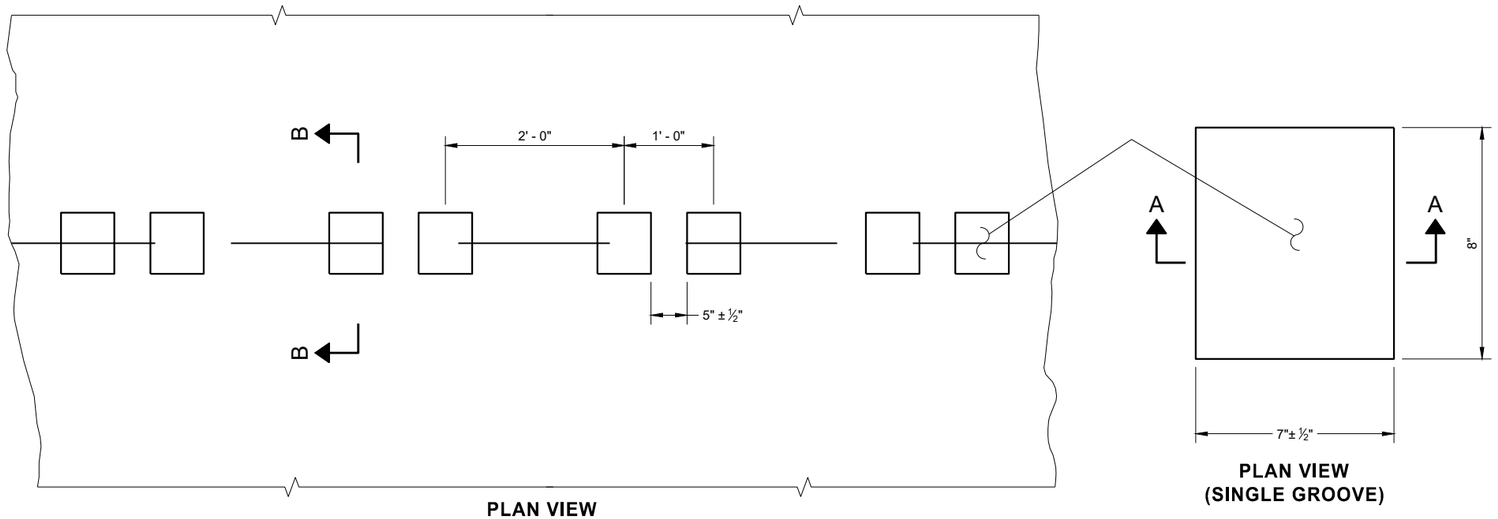
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

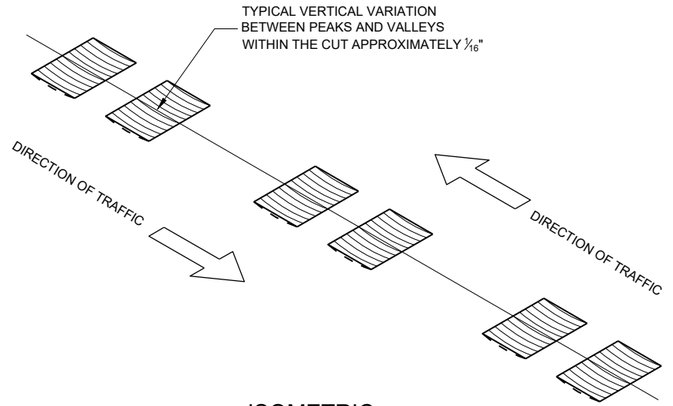
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

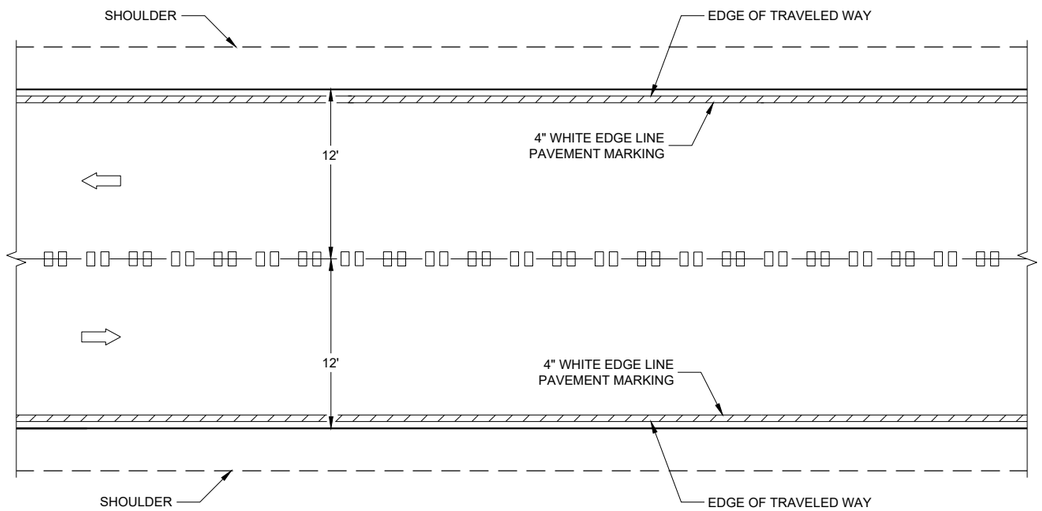
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

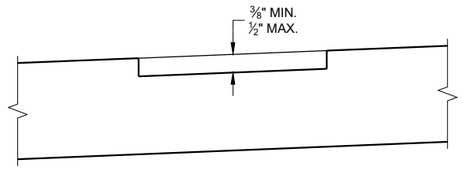
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



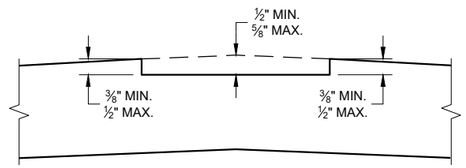
ISOMETRIC



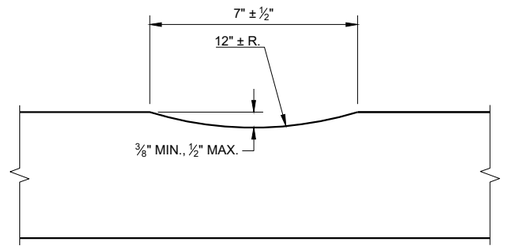
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

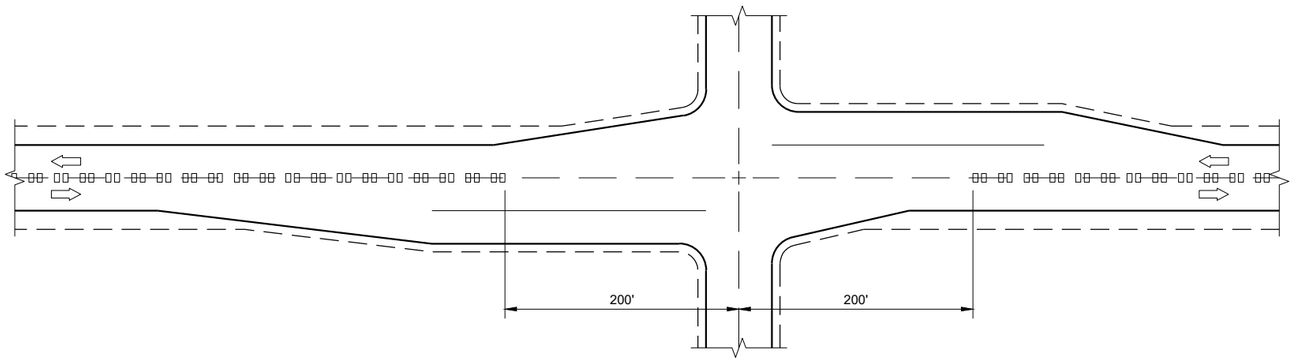
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

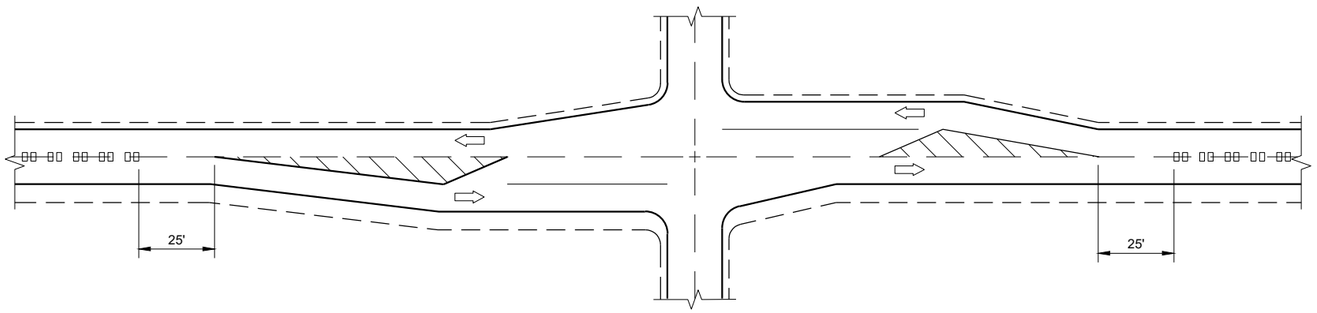
SDD 13A11 - 03a

6

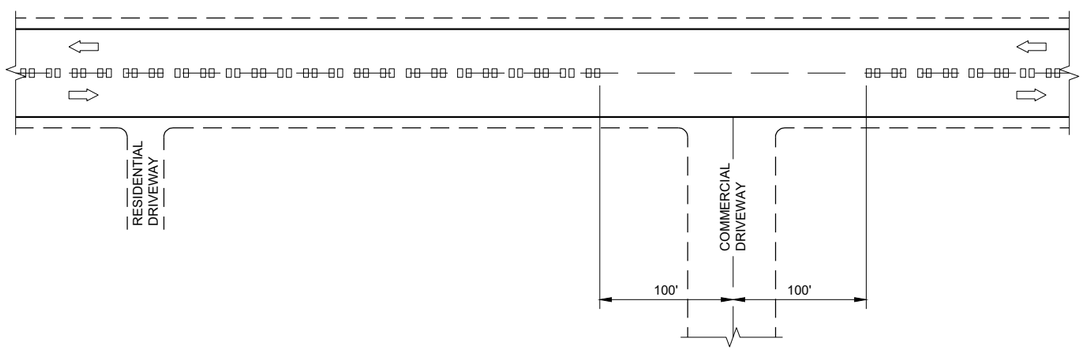
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



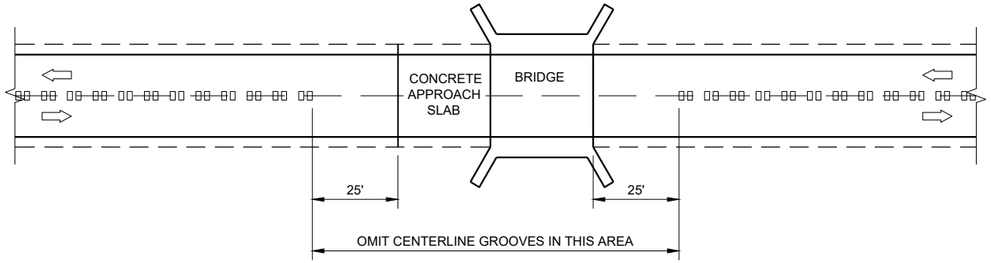
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



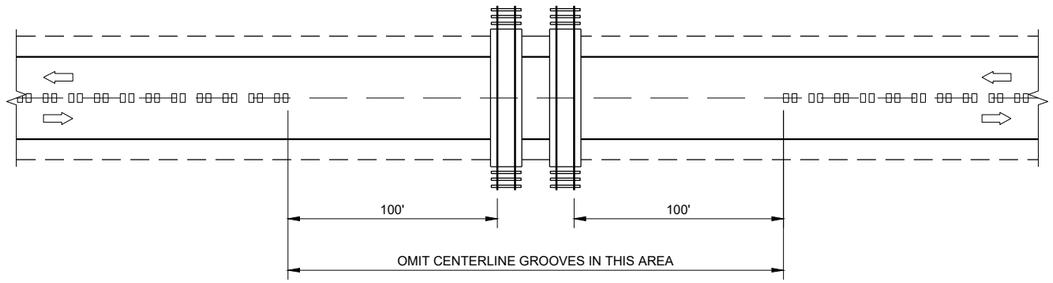
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

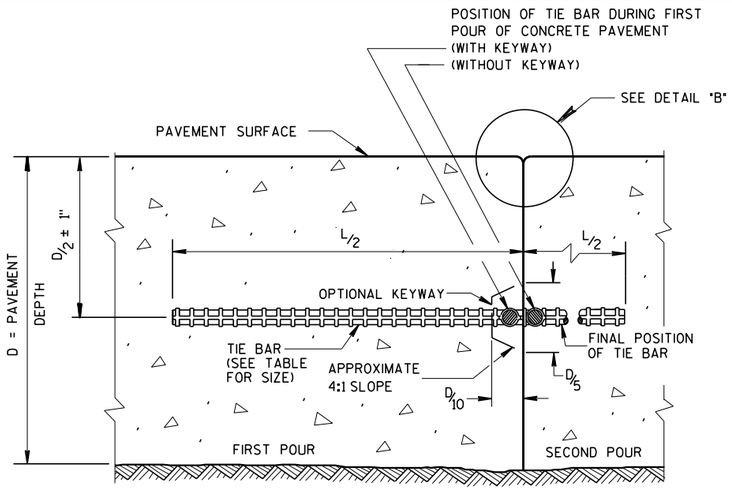
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

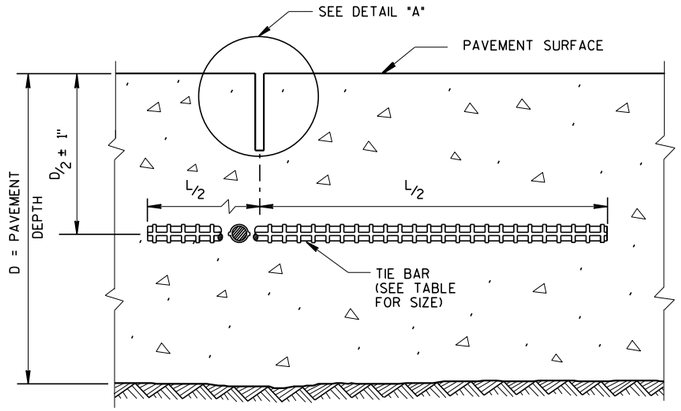
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 13A11 - 03b



CONSTRUCTION JOINT



SAWED JOINT

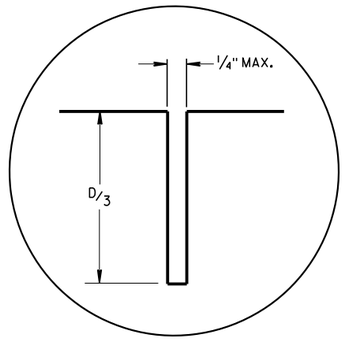
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

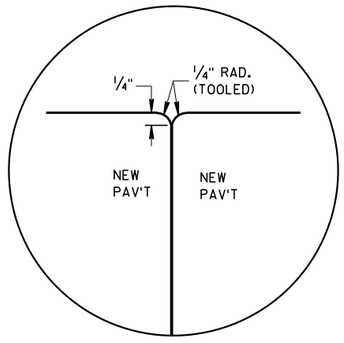
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

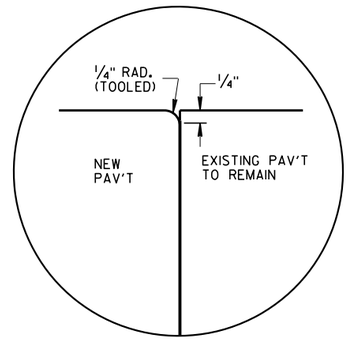
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



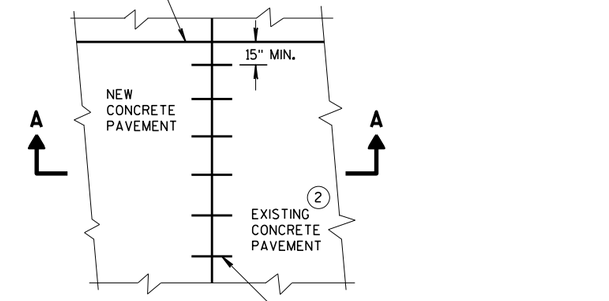
DETAIL "A"



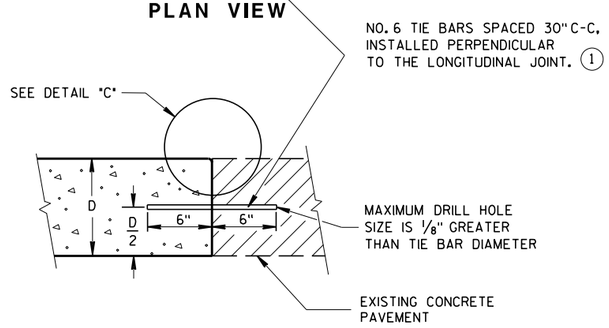
DETAIL "B"



DETAIL "C"



PLAN VIEW



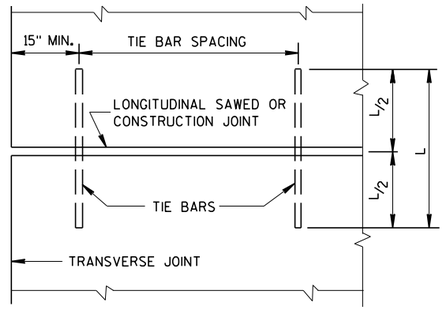
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

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



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

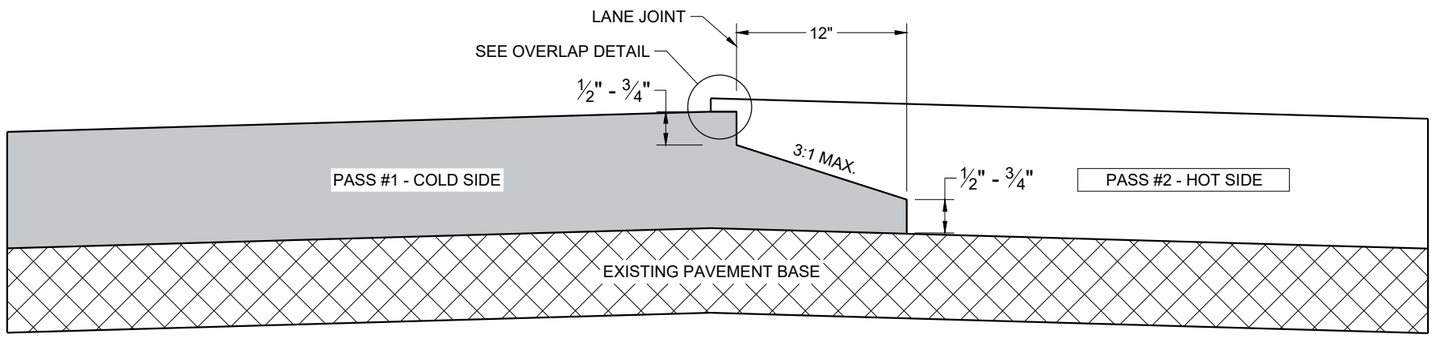
APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPE
FHWA

6

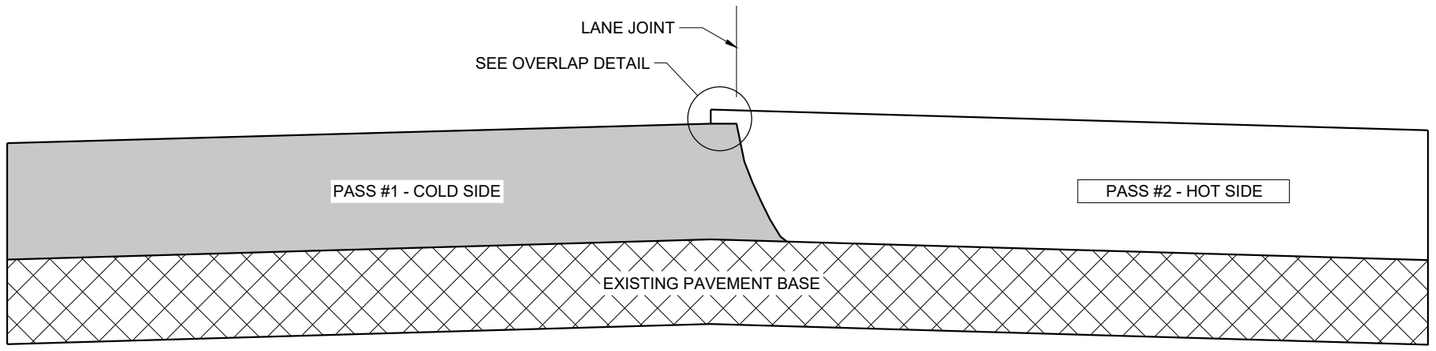
S.D.D. 13 C 1-19

6

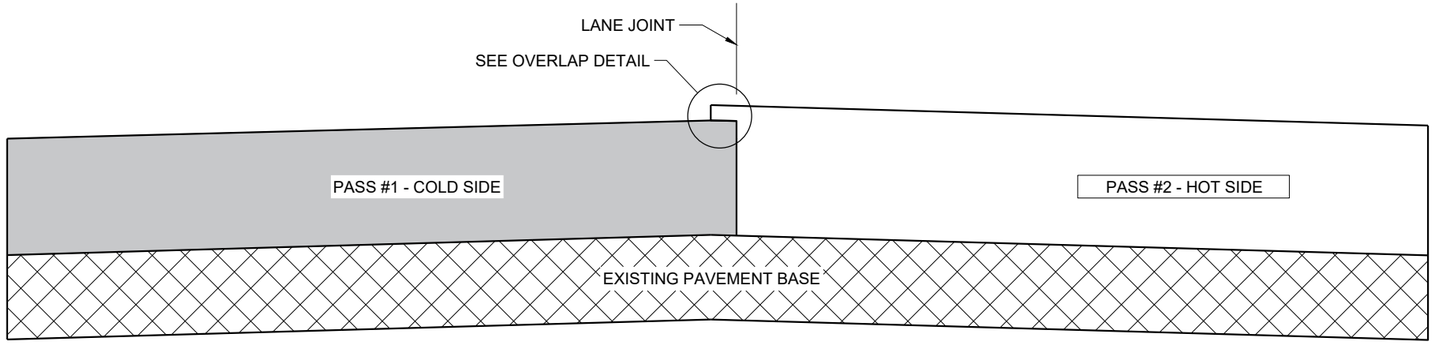
S.D.D. 13 C 1-19



TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL LONGITUDINAL JOINT



TYPICAL PAVEMENT CROSS SECTION
OF MILLED LONGITUDINAL JOINT

GENERAL NOTES

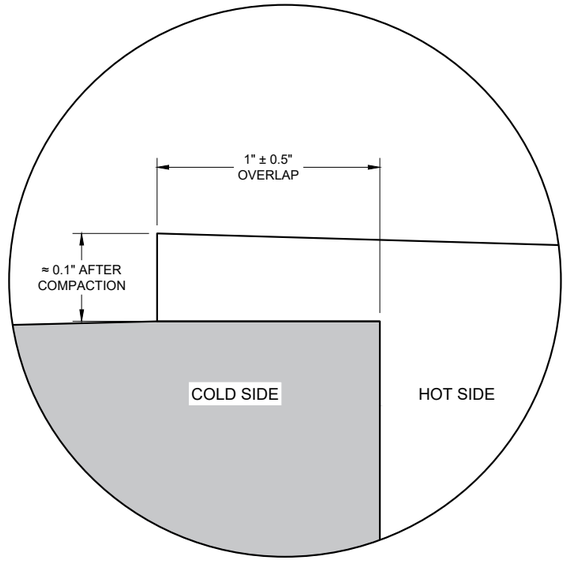
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

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)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

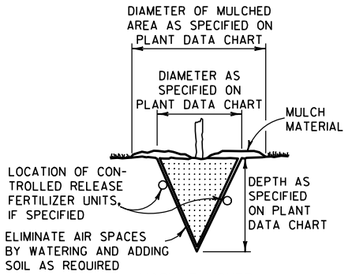
APPROVED
February 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

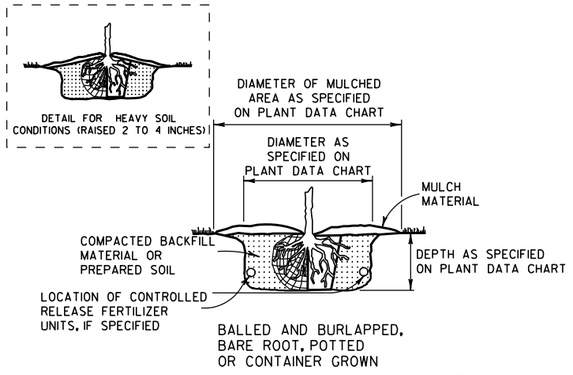
FHWA

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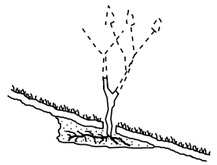
SDD 13C19 - 02



MACHINE MOVED

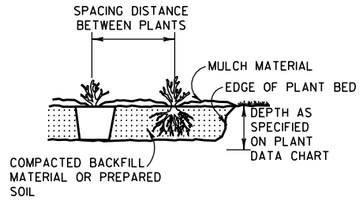


BALLED AND BURLAPPED, BARE ROOT, POTTED OR CONTAINER GROWN



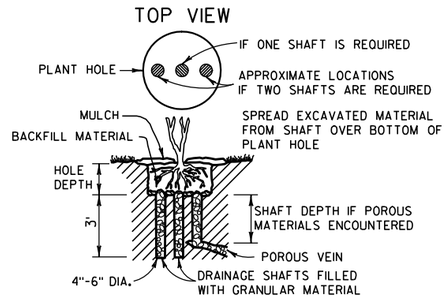
ACCOMMODATE ROOTS (SMOOTH AND STAGHORN SUMAC)

NOTE:
1) ENGINEER SHALL REQUIRE 3 SLITS IN POT TO SPEED DETERIORATION
2) METAL, PLASTIC OR OTHER NONDEGRADABLE POTS SHALL BE REMOVED PRIOR TO PLANTING



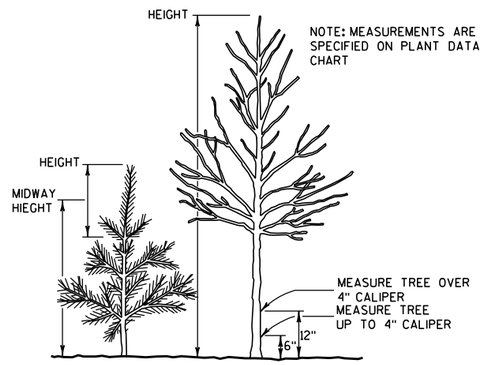
PREPARED BED (BARE ROOT AND POTTED)

PLANTING

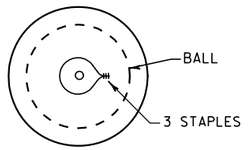


NOTE:
DRAINAGE SHAFT AS SPECIFIED ON PLANT DATA CHART

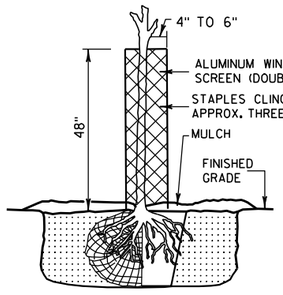
DRAINING



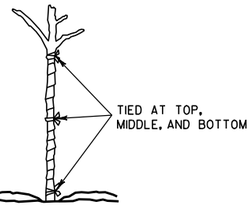
MEASURING



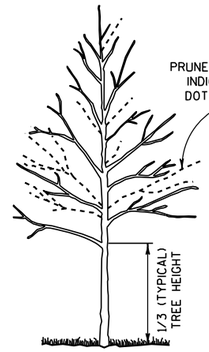
TOP VIEW



RODENT PROTECTION



WRAPPING

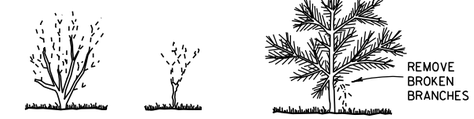


TALL DECIDUOUS TREES (ASH, MAPLE, LINDEN, OAK)

SINGLE STEMMED LOW DECIDUOUS TREES (CRABS AND OTHER SINGLE STEM TYPE)

MULTI-STEMMED LOW DECIDUOUS TREES OR LARGE SHRUBS (HAWTHORN, SERVICEBERRY)

NOTE: WHEN PRUNING, PRESERVE CHARACTER AND SHAPE OF TREE. AVOID LEAVING STUBS - REMOVE BRANCH OR TWIG BACK TO THE NEAREST CROTCH
1) PRUNE TO REMOVE DEAD AND BROKEN BRANCHES
2) PRUNE TO REMOVE BRANCHES THAT TOUCH OR ARE TOO CLOSE TO OTHER BRANCHES

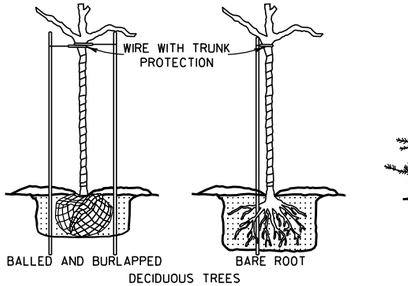


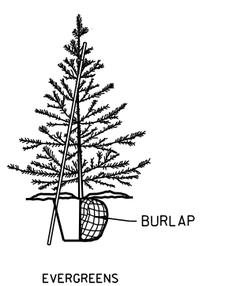
SHRUBS (GRAY DOGWOOD ARROWWOOD VIBURNUM)

SUMAC

TREE TYPE EVERGREENS (PINE, SPRUCE, FIR) EVERGREENS USUALLY ARE NOT PRUNED

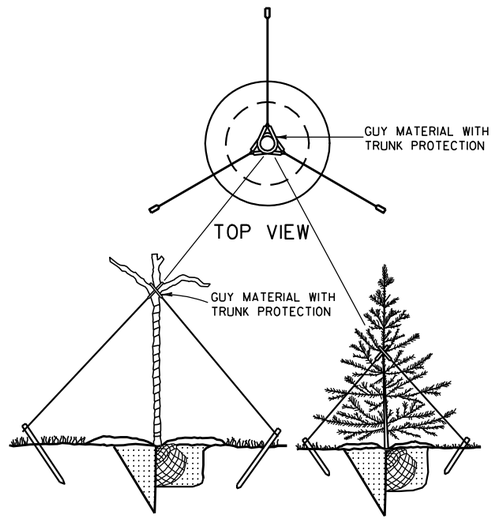
PRUNING



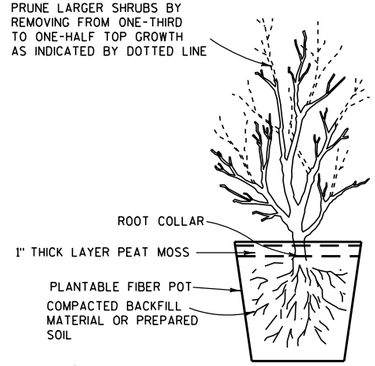


NOTE: BRACING STAKE
1) SHALL BE DRIVEN INTO THE GROUND AS CLOSE TO THE TREE AS POSSIBLE WITHOUT DAMAGING THE BRANCHES.
2) MAY BE DRIVEN AT SUCH AN ANGLE THAT IT DOES NOT PENETRATE THE BALL OR POT.
3) SHALL NOT PROTRUDE ABOVE THE TOP OF THE TREE; AND
4) SHALL HAVE A HOLE NEAR THE TOP TO HOLD THE WIRE IN PLACE.

BRACING



GUYING



POTTING

NOTES

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

BRACING, WRAPPING, GUYING, RODENT PROTECTION, FERTILIZER AND MULCH SHALL BE USED ONLY WHEN SPECIFIED ON THE PLANT DATA CHART (PART OF PLAN) OR SPECIAL PROVISIONS.

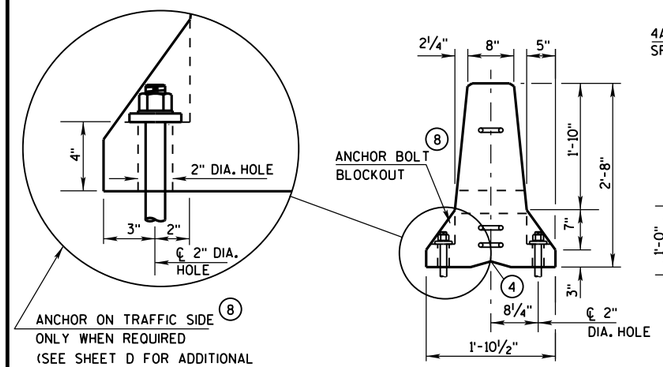
TREE PLANTING DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

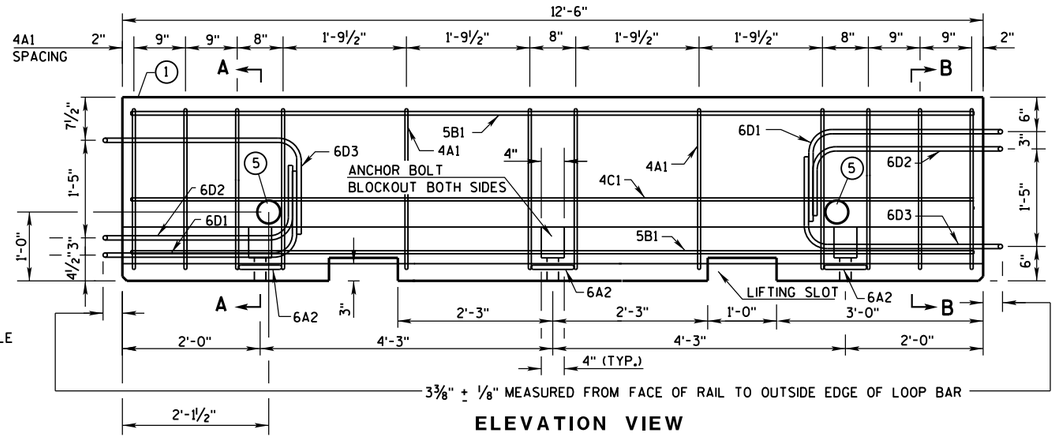
APPROVED
4/11/94 — DATE
/S/ Rory L. Rhinesmith — CHIEF METHODS DEVELOPMENT ENGINEER
FHWA

6

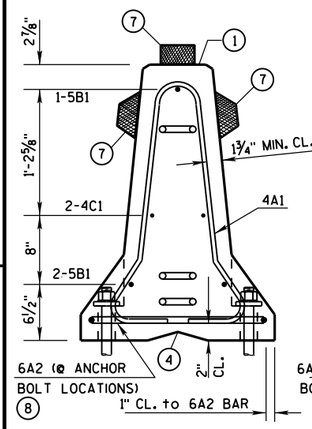
S.D.D. 14 A 2-1



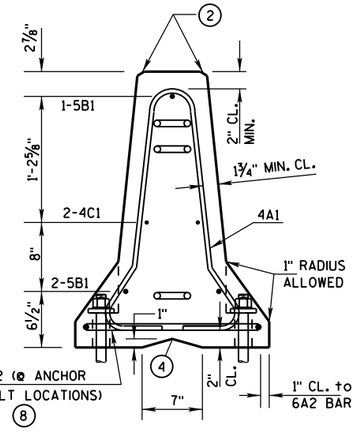
END VIEW



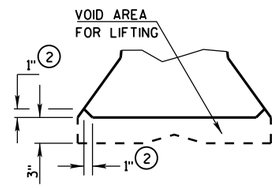
ELEVATION VIEW



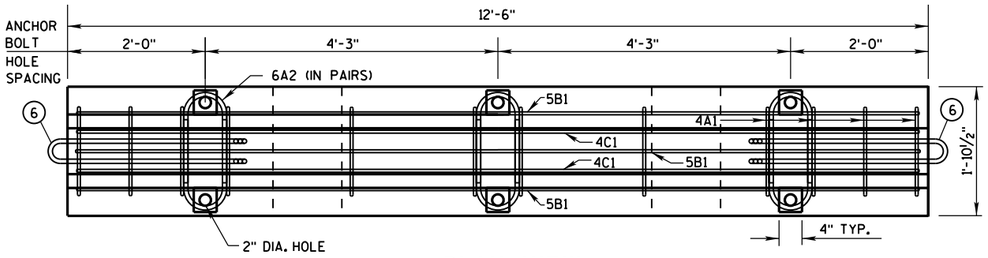
SECTION A-A
(STIRRUP PLACEMENT)



SECTION B-B
(STIRRUP PLACEMENT)

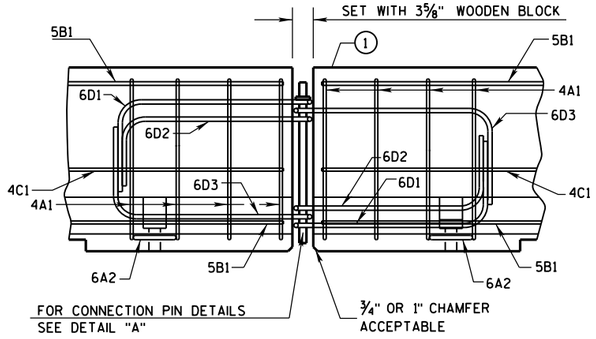


DETAIL "B"
LIFTING SLOT DETAIL

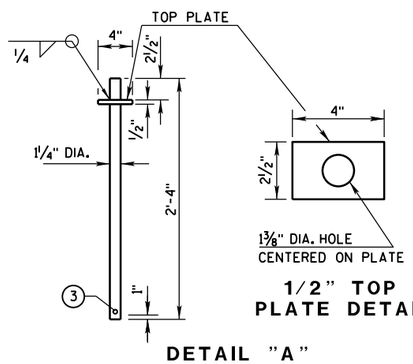


PLAN VIEW

DETAILS OF BARRIER SECTION

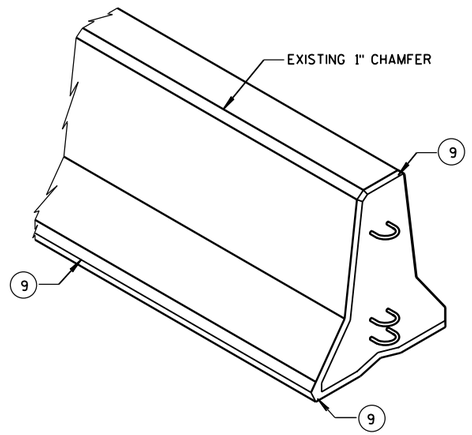


DETAILS OF BARRIER CONNECTION



1/2" TOP
PLATE DETAIL

DETAIL "A"
CONNECTION PIN
(A36 STEEL (10.9 LB EACH))



GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(a) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRCAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE ¾" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-½" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN ⅛" OF THE PLAN DIMENSION.

CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

(1) MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
- a. TYPE: WI CBTP
- b. MANUFACTURER
- c. DATE MANUFACTURED (MONTH AND YEAR)

(2) 1" CHAMFER TO PREVENT SPALLING.

(3) A ⅜" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..

(4) "V" NOTCH IS OPTIONAL.

(5) THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).

(6) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

(7) USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURES INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.

(8) SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.

(9) 1" CHAMFER OPTIONAL.

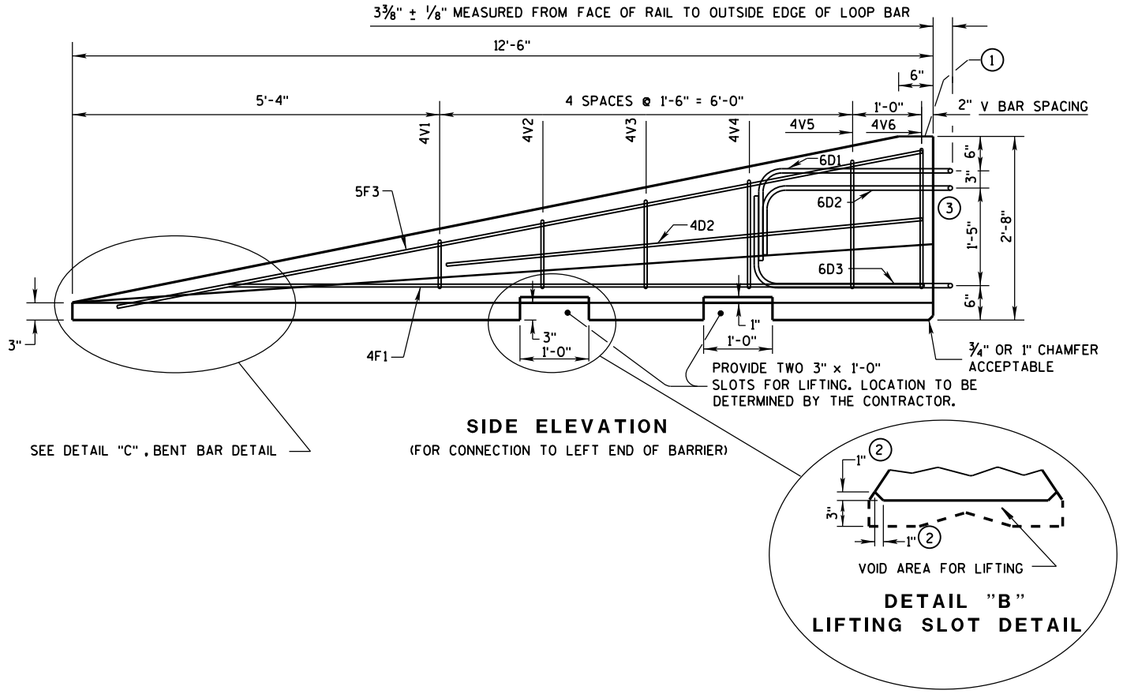
f'c = 4,000 psi

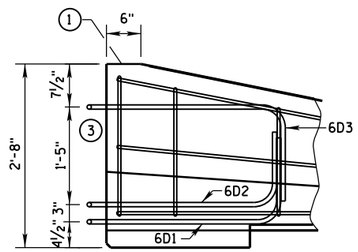
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

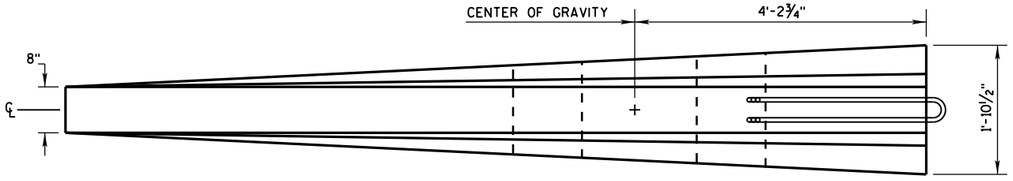
S.D.D. 14 B 7-15a

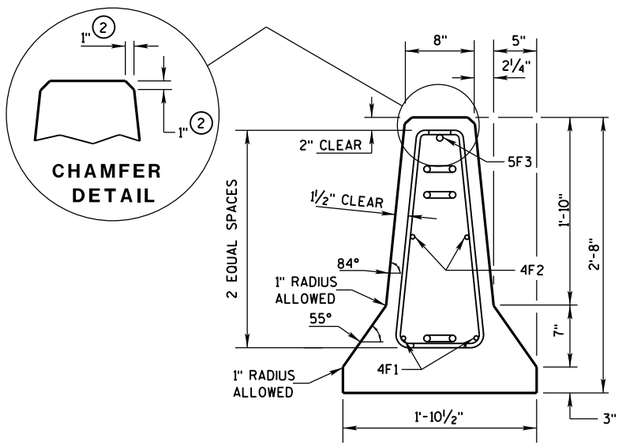


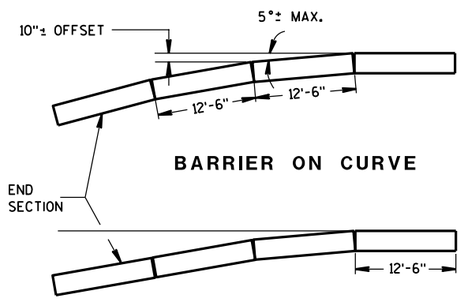


GENERAL NOTES

1. MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
   a. TYPE WICBTP
   b. MANUFACTURER
   c. DATE MANUFACTURED (MONTH AND YEAR)
2. 1" CHAMFER TO PREVENT SPALLING.
3. NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.







POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

DETAILS OF BARRIER TAPER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

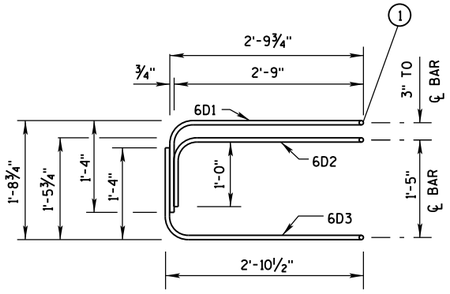
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15b

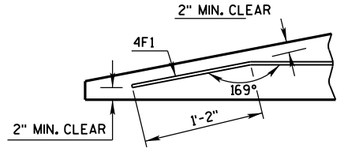
BARRIER TAPER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER TAPER SECTION)

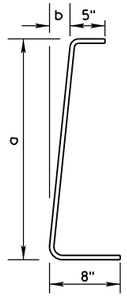
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"
LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"



ELEVATION
LOOP BAR ASSEMBLY



DETAIL "C"
BENT BAR DETAIL



BAR	a	b
V1	10"	1"
V2	1'-1"	1¼"
V3	1'-5"	1⅝"
V4	1'-8"	1⅞"
V5	2'-0½"	2⅜"
V6	2'-3"	2¾"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY

TAPER BARRIER SECTION

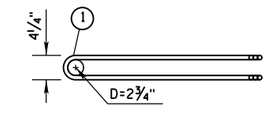
GENERAL NOTES

(1) NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

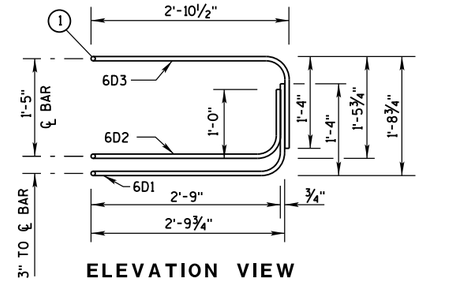
BARRIER SECTION BILL OF MATERIALS

(PER 12'-6" BARRIER SECTION)

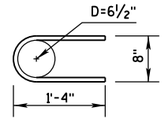
BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



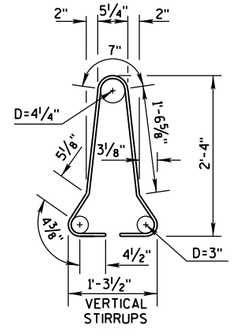
PLAN VIEW
LOOP BAR ASSEMBLY
(MARKED END SHOWN, INVERT FOR OTHER END)



ELEVATION VIEW



6A2



4A1

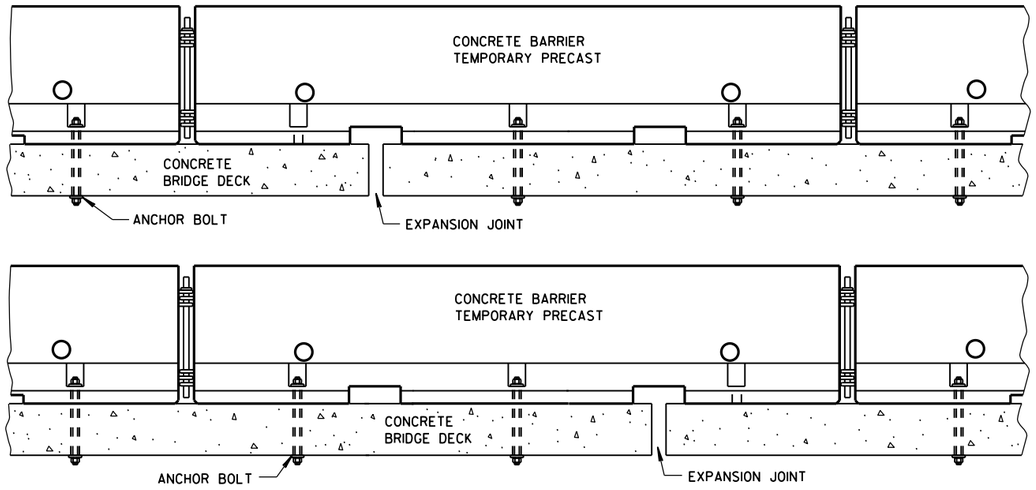
BARRIER SECTION

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 7-15c



TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)

GENERAL NOTES

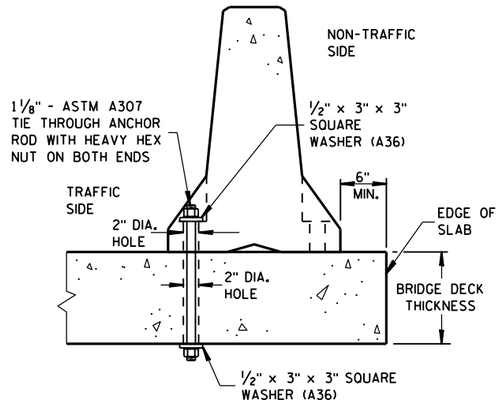
SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERICAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

(1) 1⅛" DIAMENTER A307 THREADED ROD. ½" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL. ASTM A563A HEAVY HEX NUT.

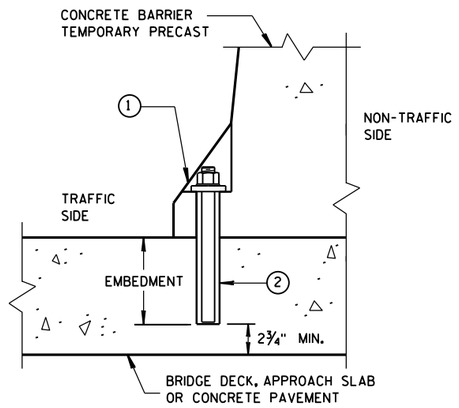
(2) ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5¼" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.

(3) ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THAN DRIVE ASPHALT ANCHOR PIN.



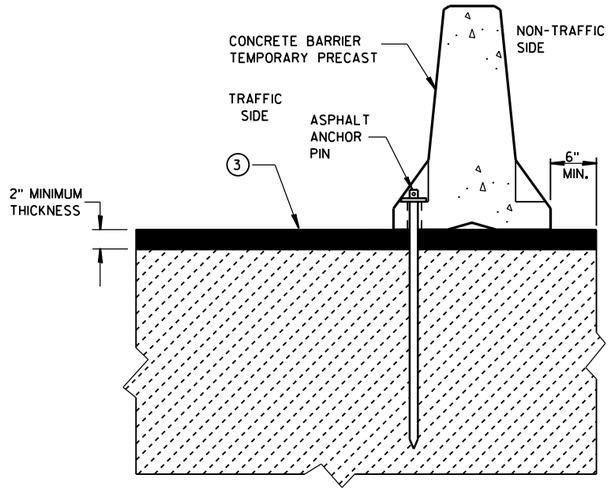
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOTUSE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

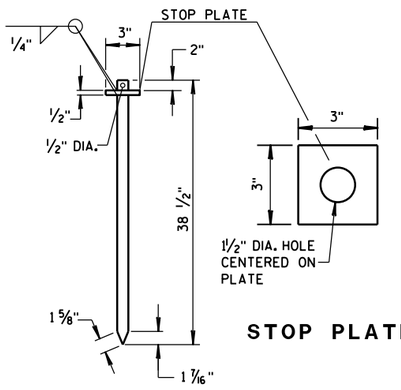


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



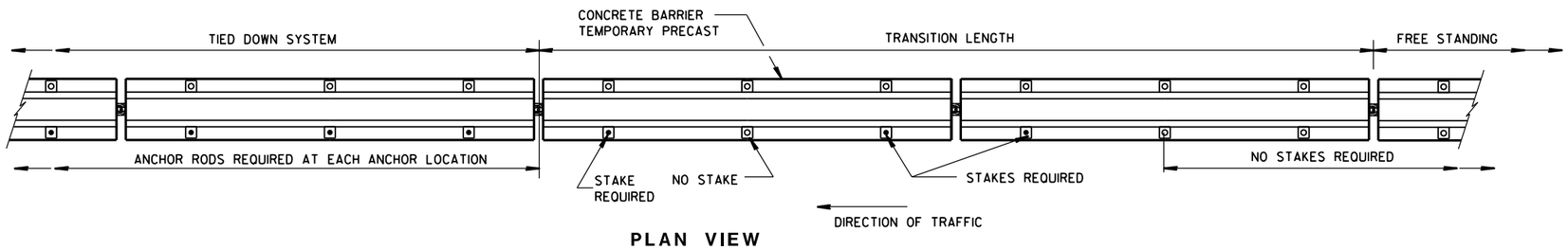
STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



STOP PLATE

ASPHALT ANCHOR PIN

(ASTM A36 STEEL)



PLAN VIEW

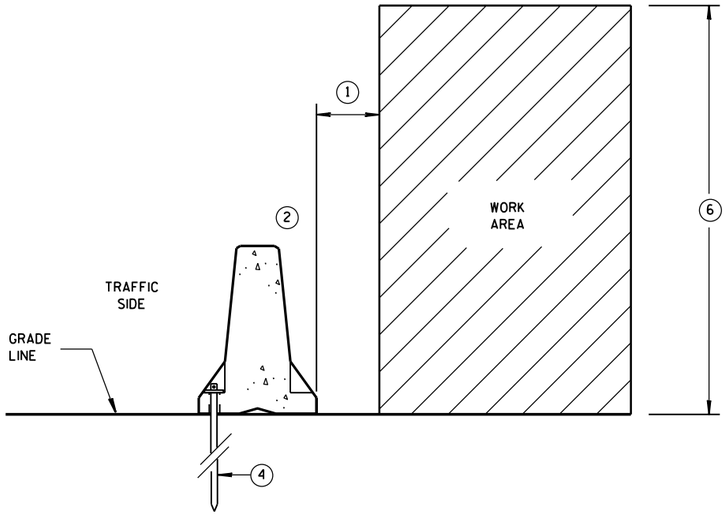
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

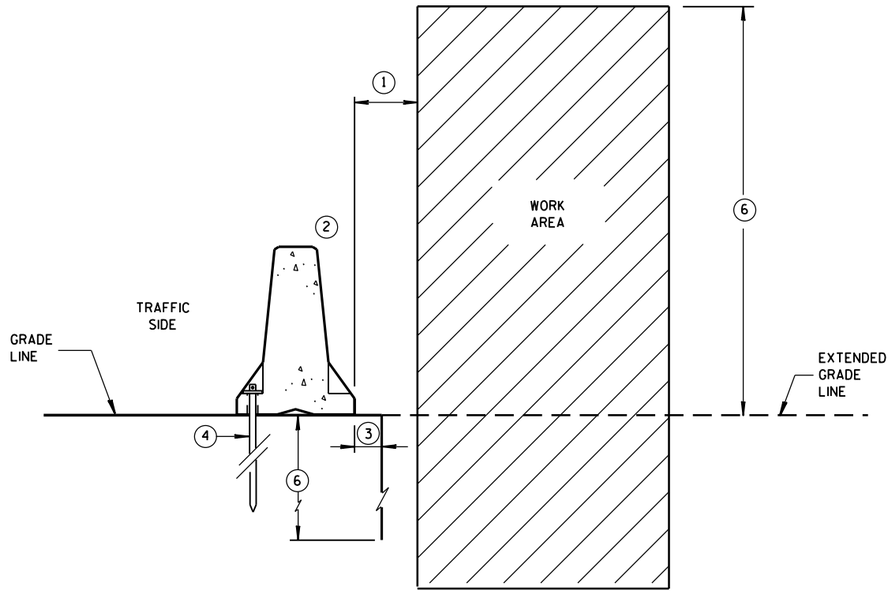
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15d



ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

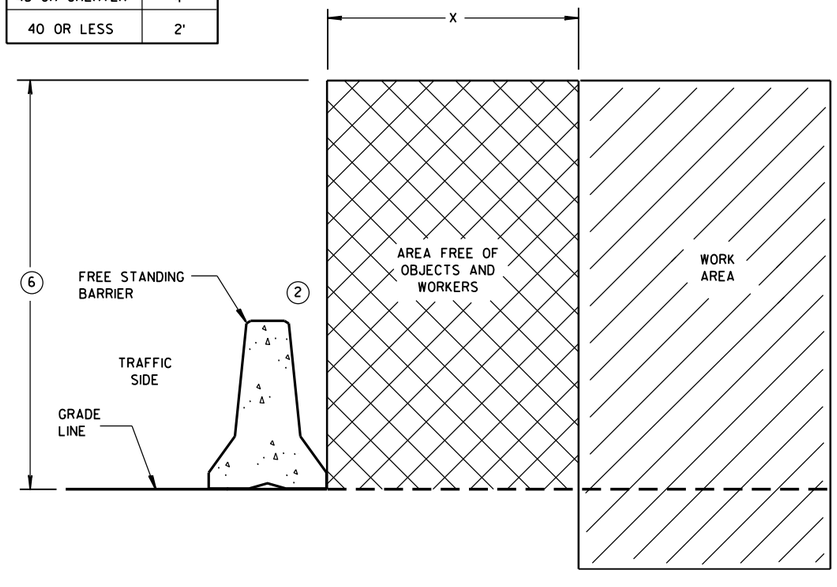


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

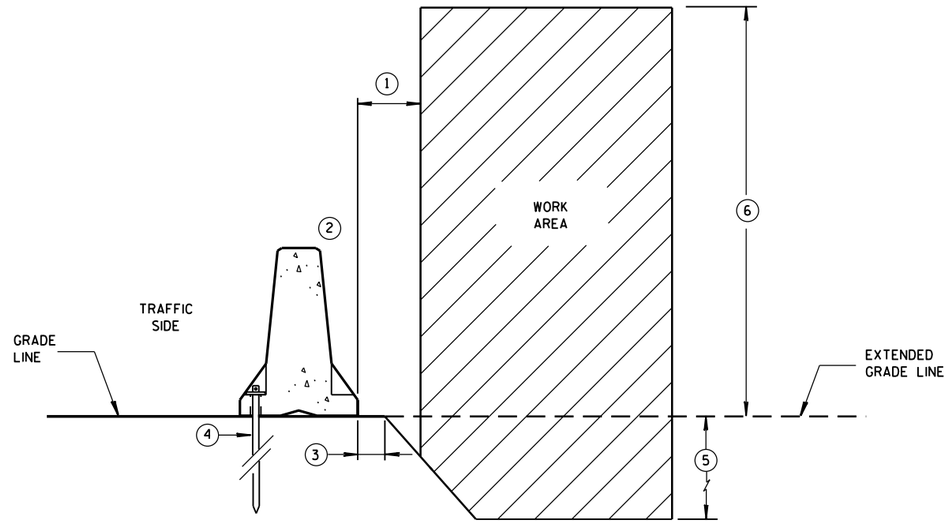
GENERAL NOTES

1. WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
2. OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
3. SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
4. SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
5. DEPTH OF 3 FEET OR MORE.
6. Y = 6'-6".

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



FREE STANDING BARRIER SPACE REQUIREMENTS



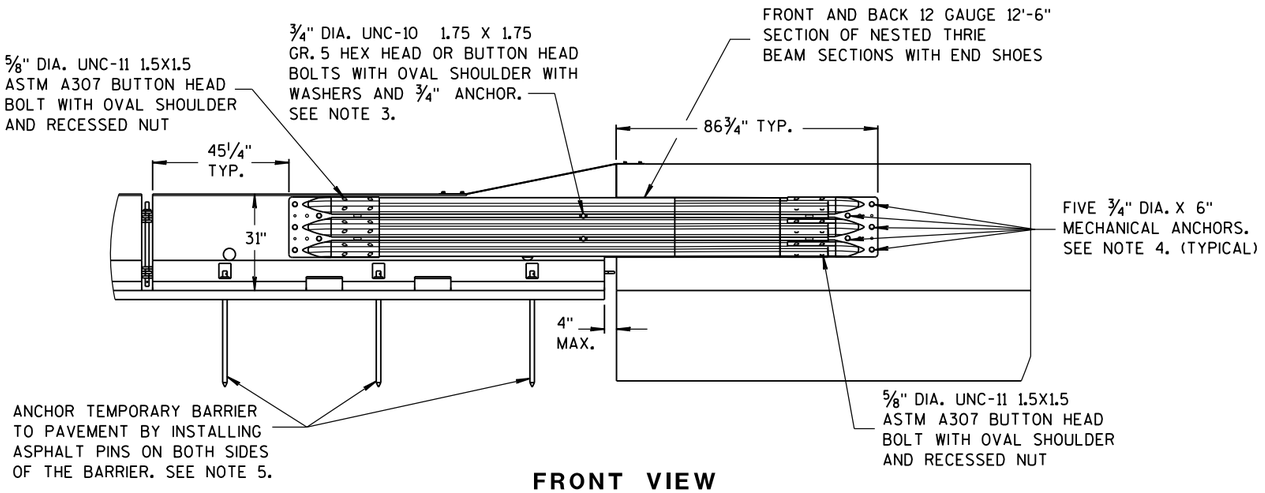
ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 7-15e

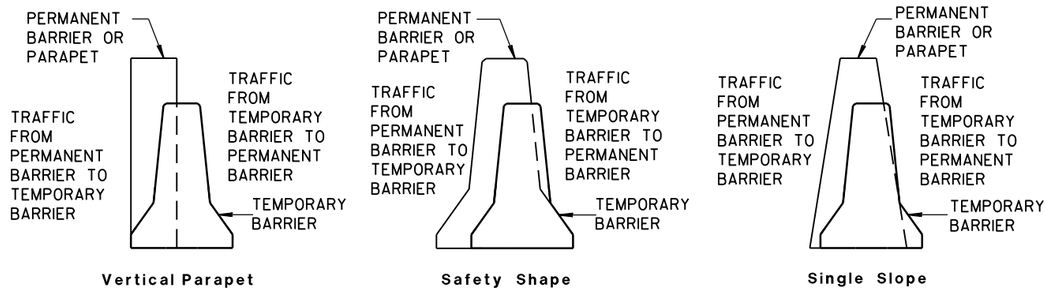


FRONT VIEW

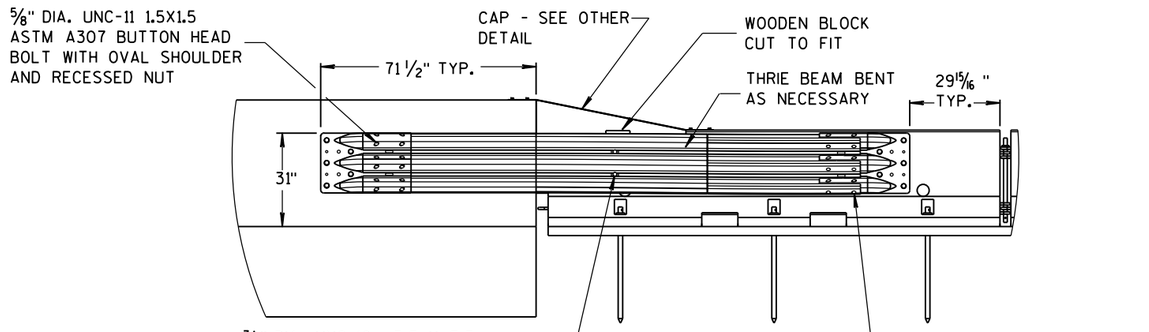
NOTES

NESTED THRIE BEAM IS REQUIRED ON BOTH SIDES OF THE TEMPORARY BARRIER FOR ALL INSTALLATIONS REGARDLESS OF TRAFFIC.

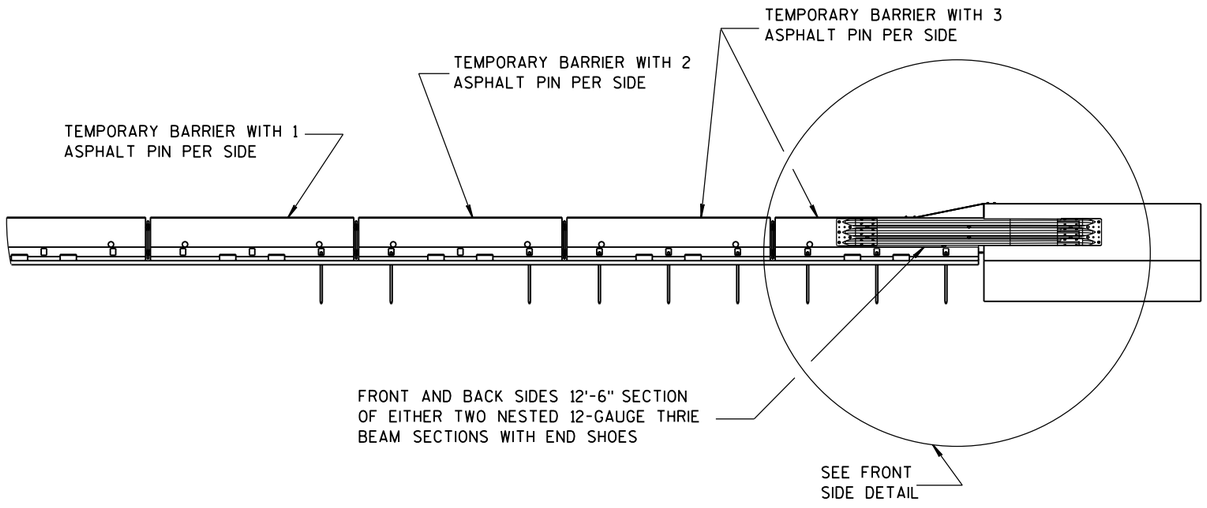
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



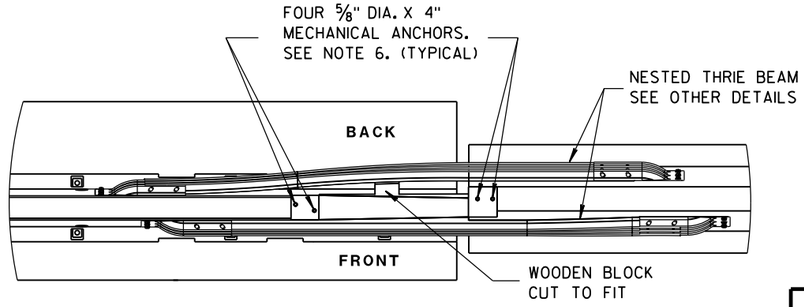
TEMPORARY BARRIER PLACEMENT FOR BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM



BACK VIEW



FRONT VIEW



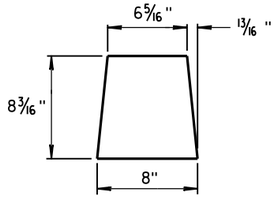
PLAN VIEW

BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM

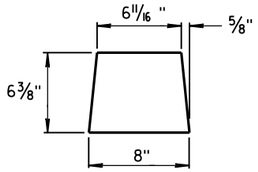
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

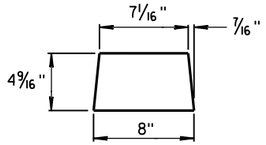
6
S.D.D. 14 B 7-15f



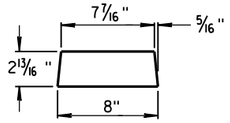
GUSSET 1



GUSSET 2

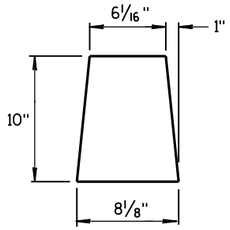


GUSSET 3

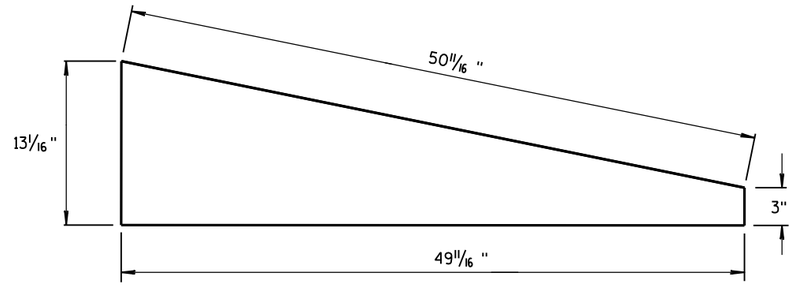


GUSSET 4

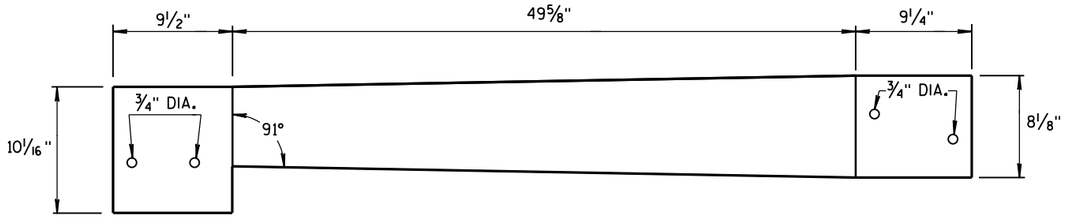
GUSSETS

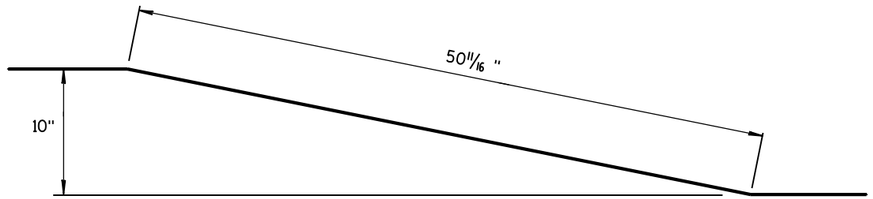


END PLATE



SIDE PLATE

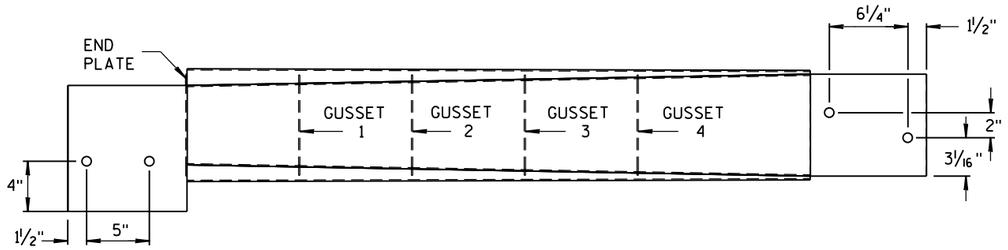


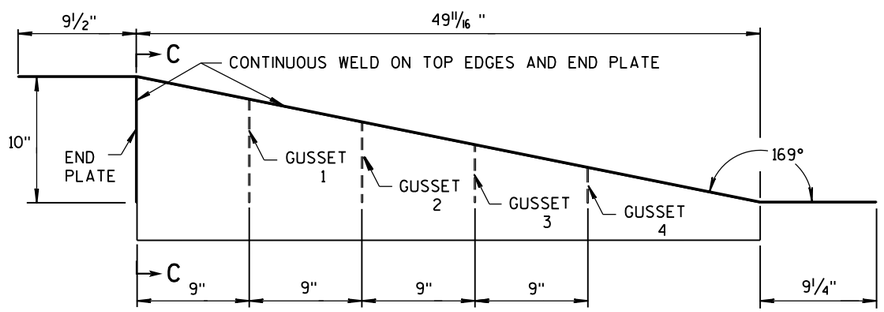


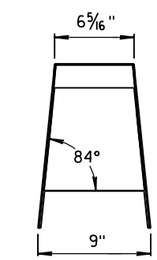
TOP PLATE

SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.







SECTION C-C

NOTES

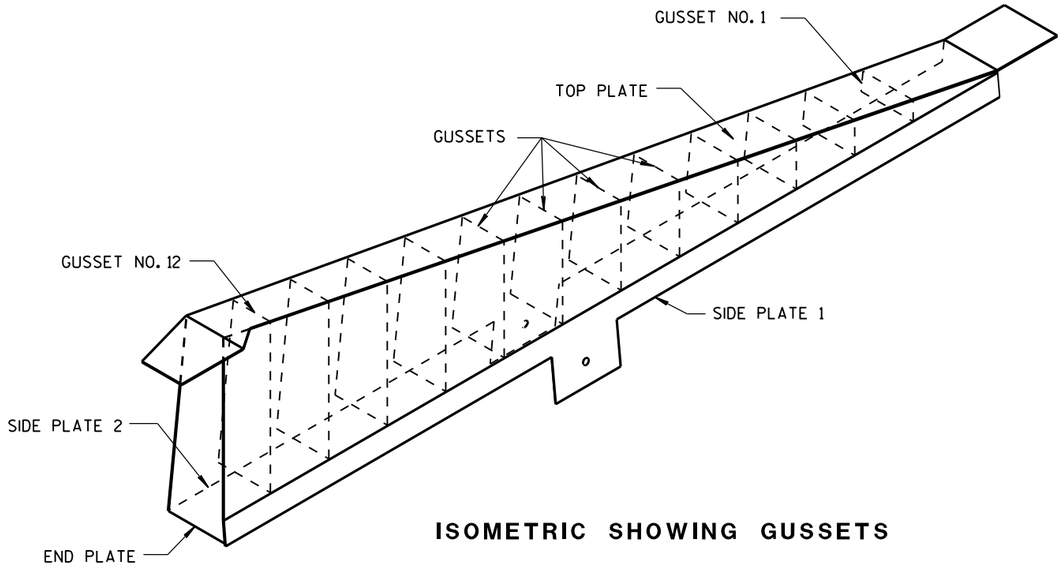
1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

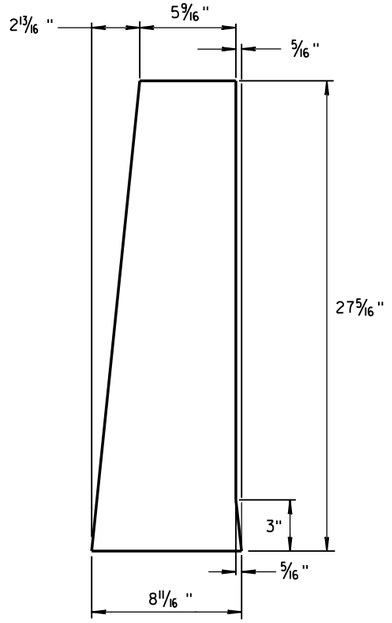
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6
S.D.D. 14 B 7-15g

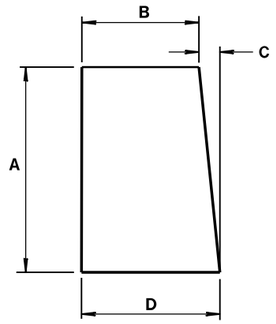


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



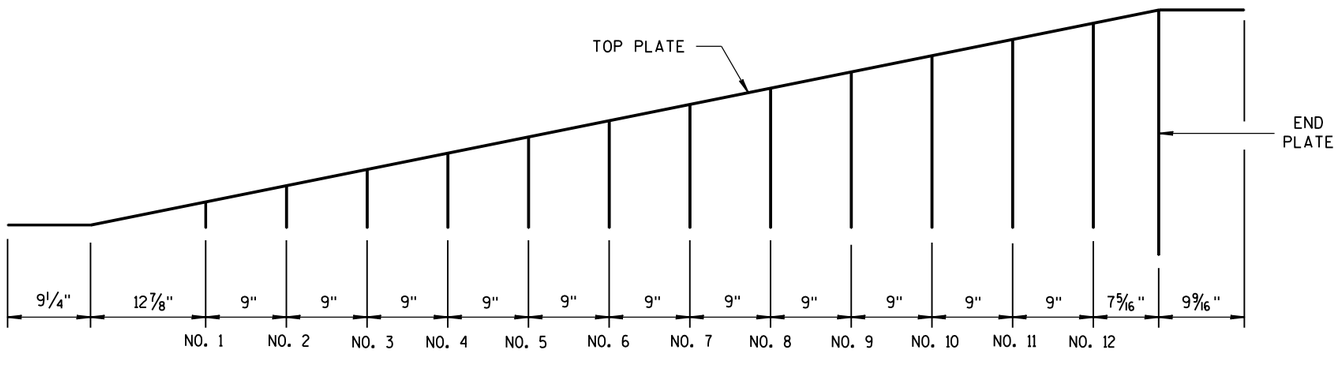
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 11/16 "	7 9/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 15/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 9/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.



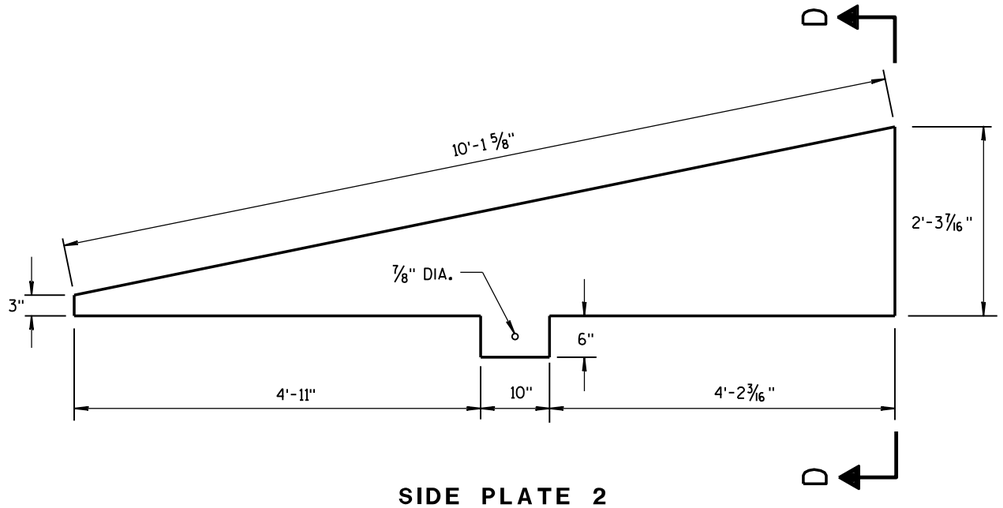
GUSSET LOCATION

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

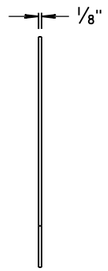
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

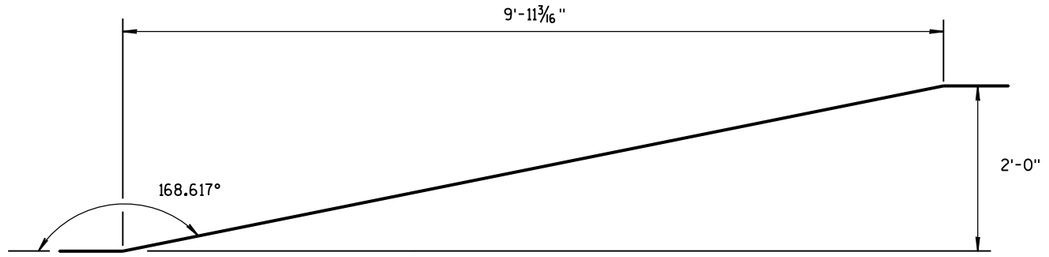
6
S.D.D. 14 B 7-15h



SIDE PLATE 2

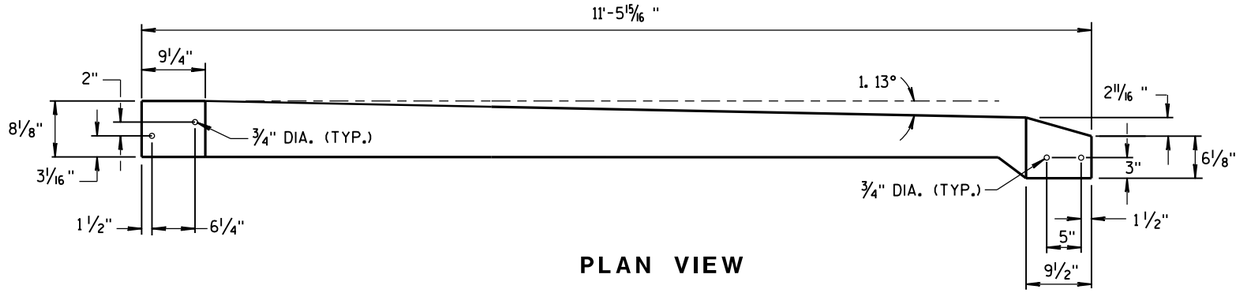


END VIEW



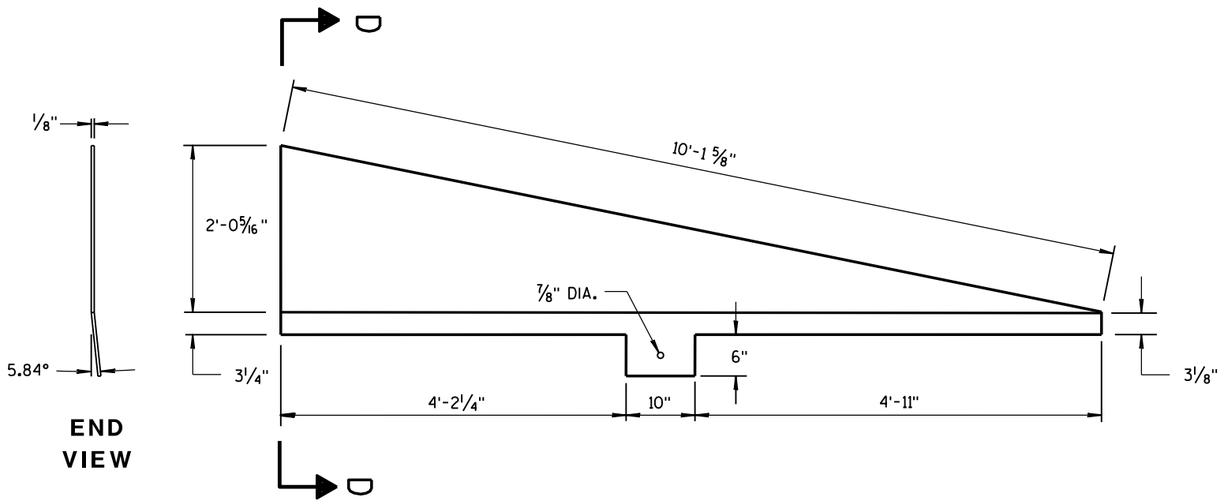
SIDE VIEW

TOP PLATE



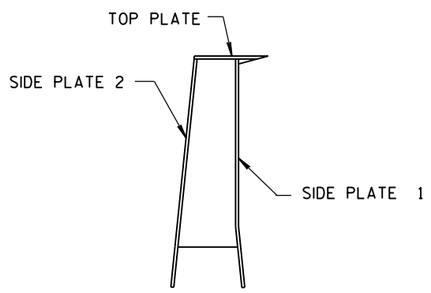
PLAN VIEW

TOP PLATE



END VIEW

SIDE PLATE 1



SECTION D-D

CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

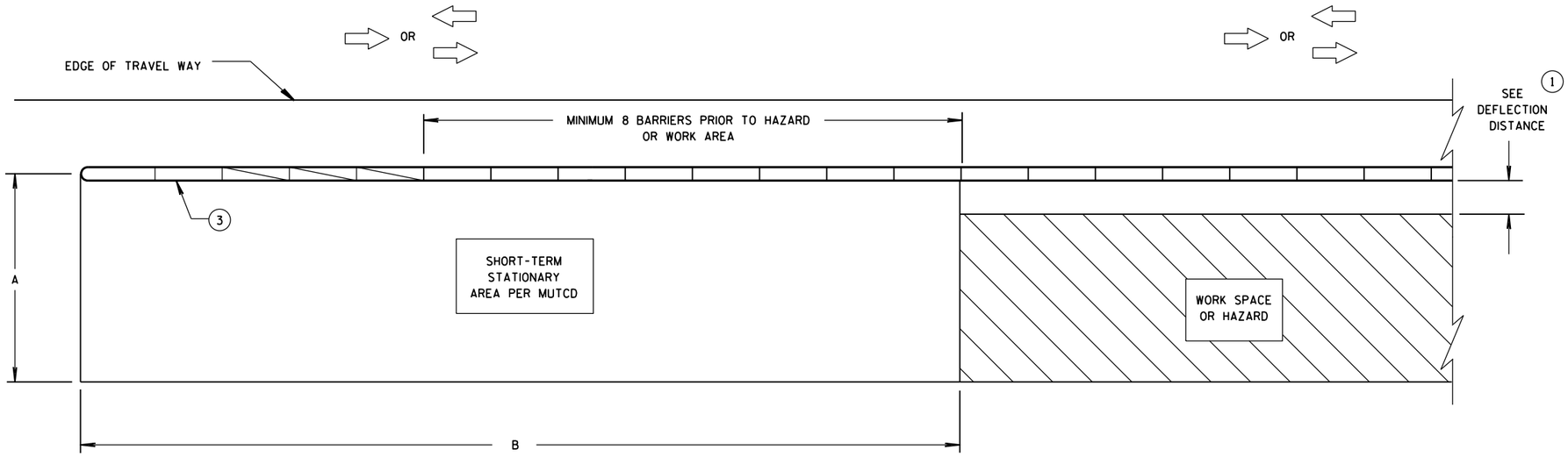
UNIT SUPERV 250 ENT

6

S.D.D. 14 B 7-15i

6

S.D.D. 14 B 7-15i



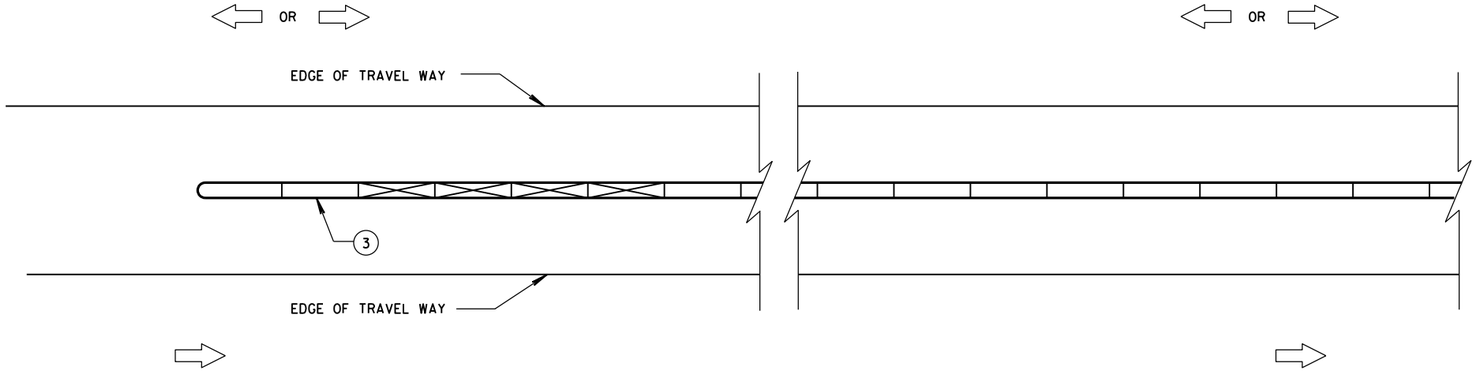
CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE OF BARRIER

DIMENSION A TABLE (2)

FACILITY	POSTED SPEED MPH	DIMENSION A	
		MIN. FT	MAX. FT
FREEWAY/EXPRESSWAY	ALL	15	20
NON-FREEWAY/EXPRESSWAY	GREATER THAN OR EQUAL TO 45	10	15
NON-FREEWAY/EXPRESSWAY	LESS THAN 45	8	10
AADT LESS THAN 1,500	ALL	8	10

DIMENSION B TABLE (2)

POSTED SPEEDS MPH	DIMENSION B FT
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON BOTH SIDES OF BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

GENERAL NOTES

SEE STANDARD DETAIL DRAWING 14B7 FOR MORE INFORMATION.

DETAILS PROVIDE A GENERAL LAYOUT OF TEMPORARY CONCRETE BARRIER, CRASH CUSHIONS, SAND BARREL ARRAYS AND TIE DOWN TRANSITIONS. DETAILS PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

ADDITIONAL TEMPORARY BARRIER MAY BE REQUIRED TO PROTECT TRAVELING PUBLIC FROM HAZARDS, CONTRACTOR'S OPERATIONS OR TO CONTROL TRAFFIC.

TEMPORARY BARRIER MAY BE REQUIRED TO BE ANCHORED TO PAVEMENT OR BRIDGE DECK.

FOR DETAILS ON CRASH CUSHION OR SAND BARREL ARRAYS SEE OTHER SECTIONS OF THE PLAN AND MANUFACTURE'S DETAILS.

SLOPES LEADING TO TEMPORARY BARRIER, CRASH CUSHION OR SAND BARREL ARRAY ARE 10:1 OR LESS.

(1) FOR DEFLECTION INFORMATION SEE STANDARD DETAIL DRAWING 14B7.

(2) VALUES PROVIDED MAY NOT FIT ALL POSSIBLE SITUATIONS OR SITE CONDITIONS. SEE OTHER SECTIONS OF THE CONTRACT OR PROJECT ENGINEER FOR MORE DETAILS.

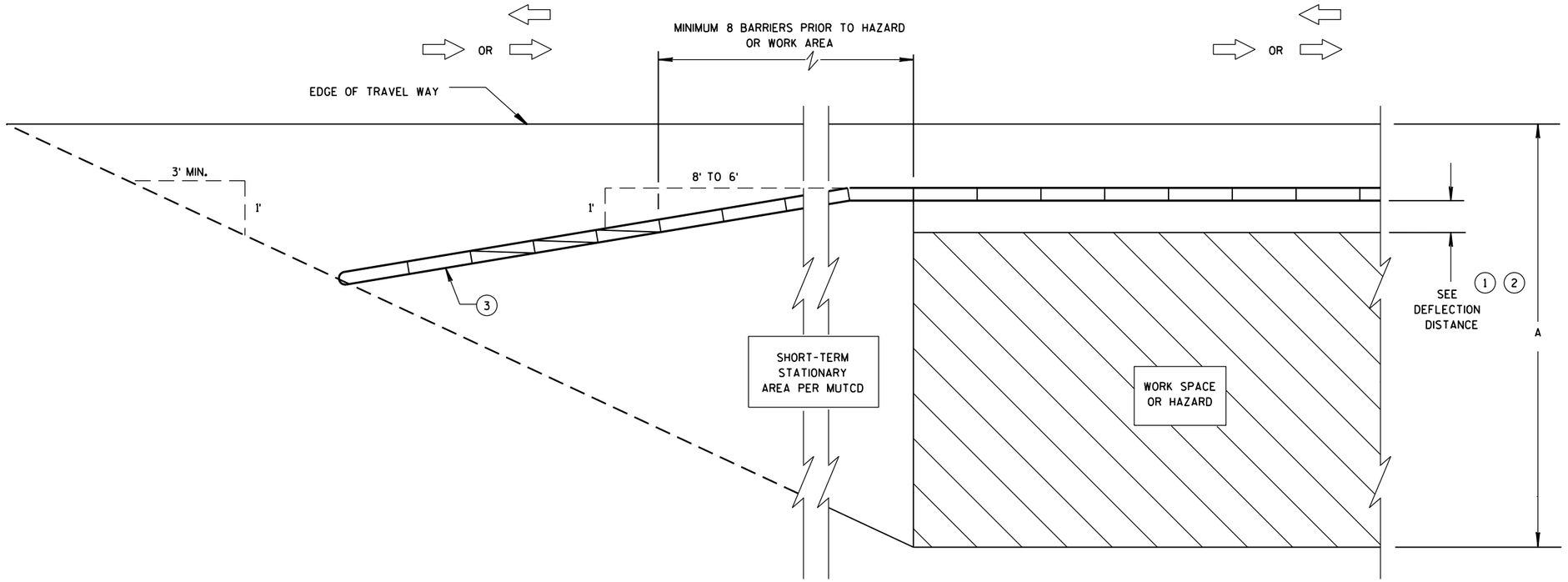
(3) ANCHOR TEMPORARY BARRIER ACCORDING TO CRASH CUSHION OR SAND BARREL MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS ARE NOT PROVIDED, ANCHOR 3 PINS ON TRAFFIC SIDE.

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

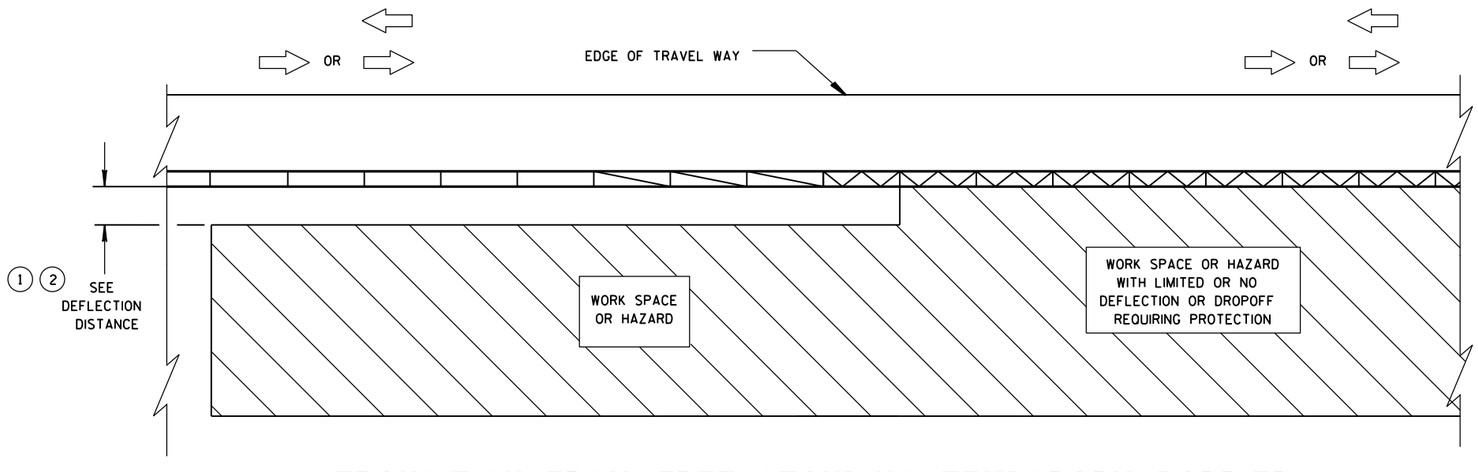
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2a



CRASH CUSHION/SAND BARREL ARRAY AND TEMPORARY BARRIER INSTALLATION FOR TRAFFIC ON ONE SIDE - FLARED INSTALLATION



TRANSITION FROM FREE STANDING TEMPORARY BARRIER TO ANCHORED BARRIER

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

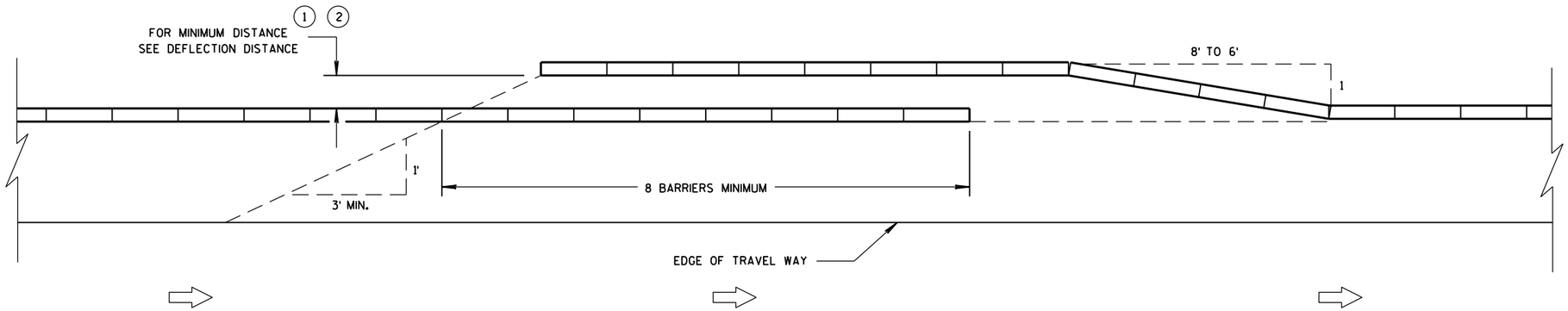
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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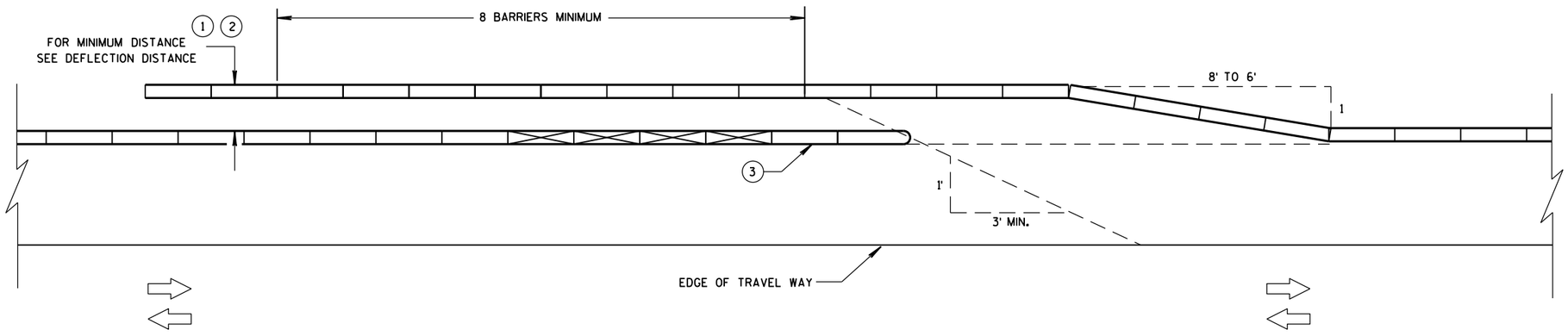
S.D.D. 14 B 8-2b

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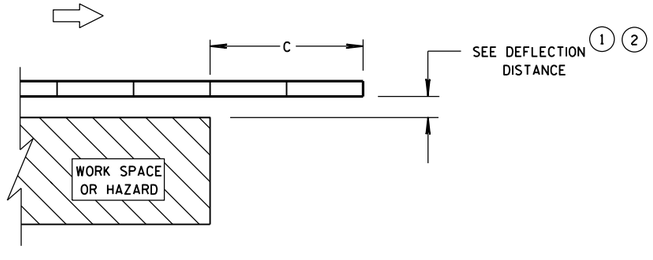
S.D.D. 14 B 8-2b



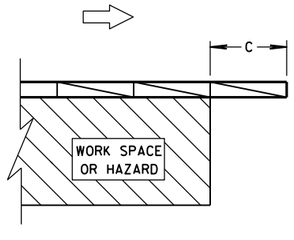
TEMPORARY BARRIER OVERLAP - ONE-WAY TRAFFIC



TEMPORARY BARRIER OVERLAP - TWO-WAY TRAFFIC



ENDING TEMPORARY BARRIER DOWNSTREAM - UNANCHORED



ENDING TEMPORARY BARRIER DOWNSTREAM - ANCHORED

LEGEND

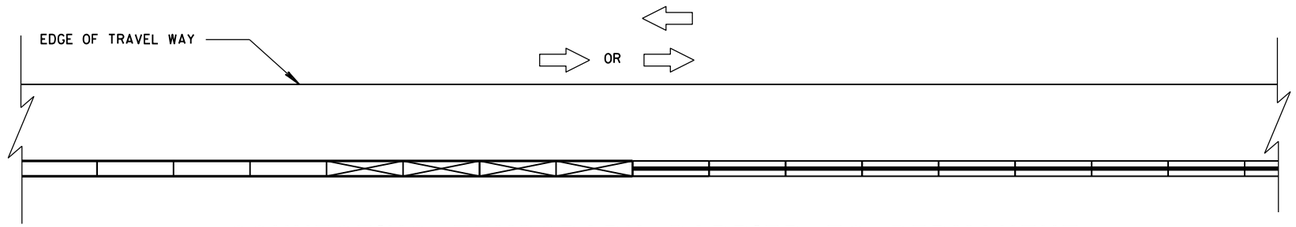
- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

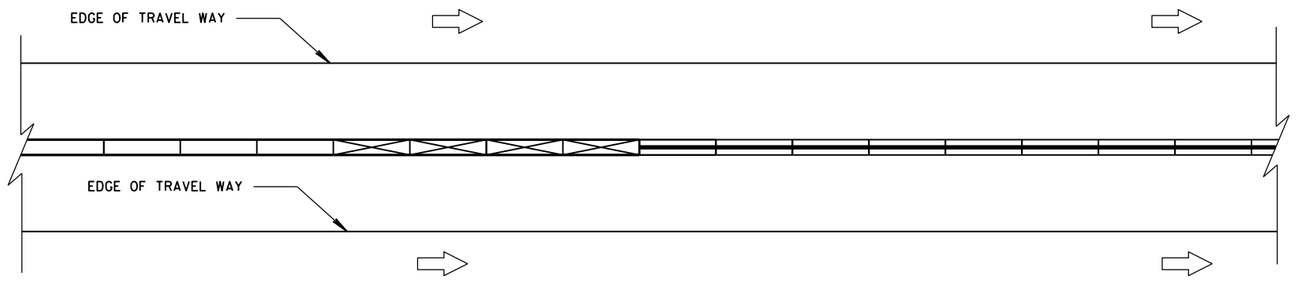
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

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S.D.D. 14 B 8-2c



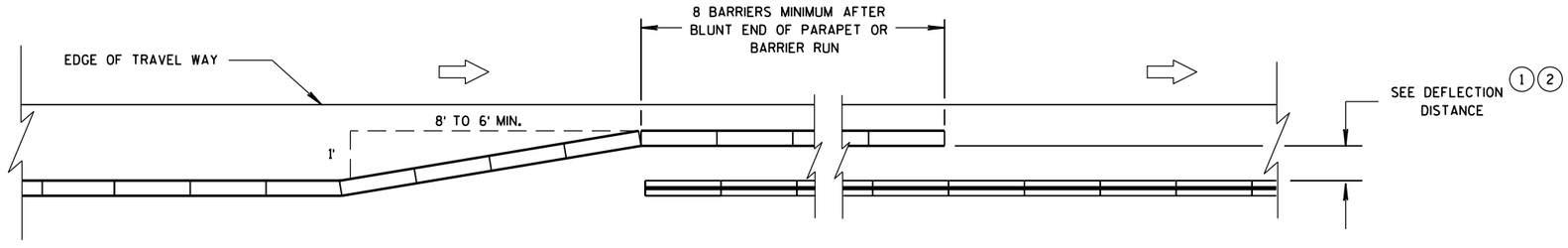
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON ONE SIDE



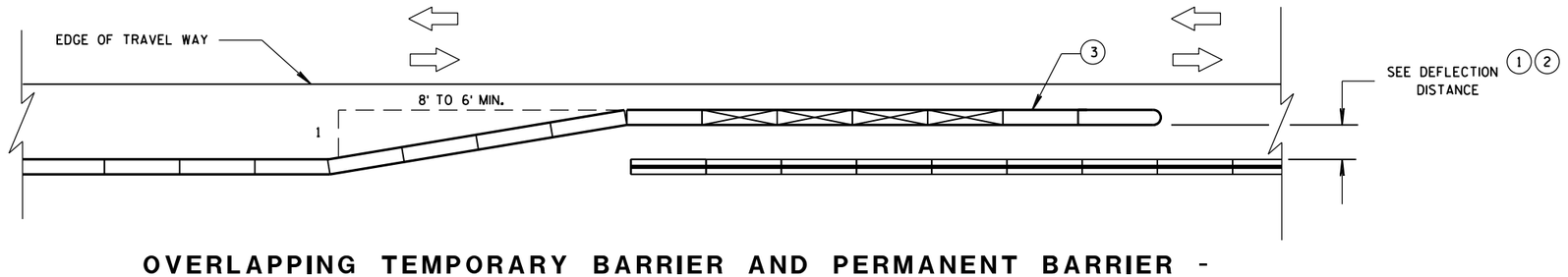
CONNECTING TEMPORARY BARRIER TO PERMANENT
CONCRETE BARRIER-TRAFFIC ON BOTH SIDES

LEGEND

- DIRECTION OF TRAVEL
- CRASH CUSHION OR SAND BARREL ARRAY
- SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS
- SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS
- 3 PINS PLACED ON TRAFFIC SIDE OF BARRIER
- PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET
- FREE STANDING TEMPORARY BARRIER



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
ONE WAY TRAFFIC



OVERLAPPING TEMPORARY BARRIER AND PERMANENT BARRIER -
TWO WAY TRAFFIC

CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 14 B 8-2d

LEGEND

DIRECTION OF TRAVEL

CRASH CUSHION OR SAND BARREL ARRAY

SEE FREE STANDING TRANSITION TO TIED-DOWN SYSTEM DETAILS

SEE BI-DIRECTIONAL TRANSITION TO TIED-DOWN SYSTEM DETAILS

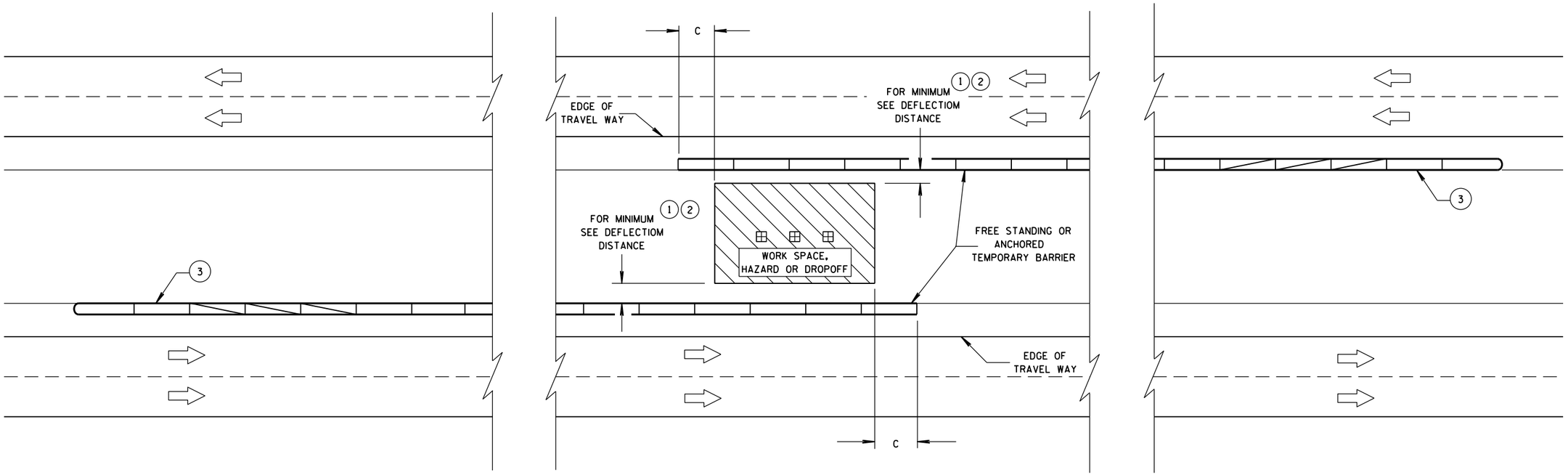
3 PINS PLACED ON TRAFFIC SIDE OF BARRIER

PERMANENT CONCRETE BARRIER OR CONCRETE PARAPET

FREE STANDING TEMPORARY BARRIER

DIMENSION C TABLE (2)

AVAILABLE DEFLECTION DISTANCE	MINIMUM LENGTH OF BARRIER BEYOND HAZARD FT
GREATER THAN 8'	12.5
LESS THAN OR EQUAL TO 8' BUT GREATER THAN 4'	50
LESS THAN OR EQUAL TO 4'	100



CRASH CUSHION/SAND BARREL ARRAY AND OTHER TEMPORARY BARRIER LAYOUT DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINNER
FHWA

BILL OF MATERIALS

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

(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.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

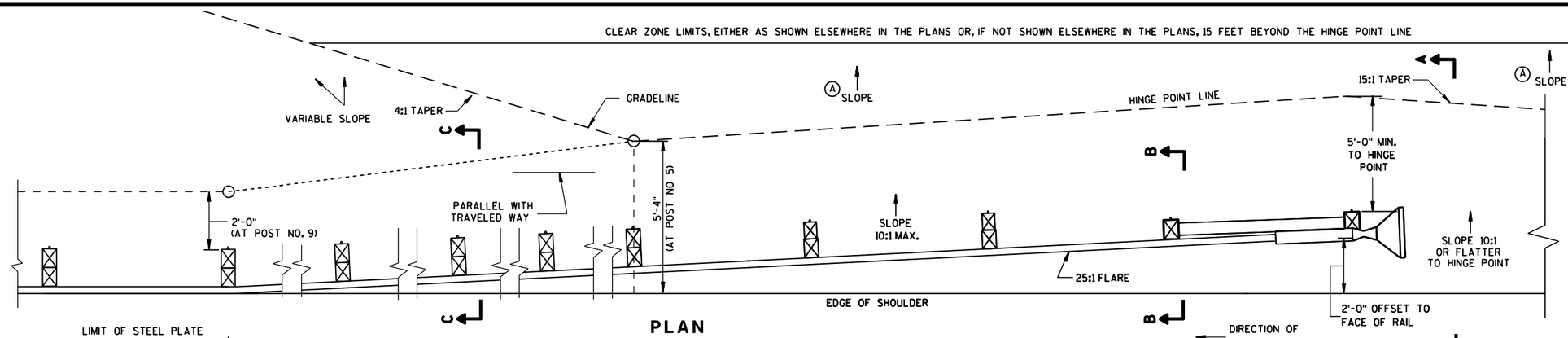
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

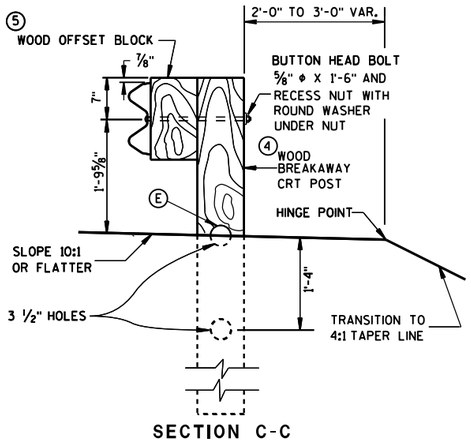
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

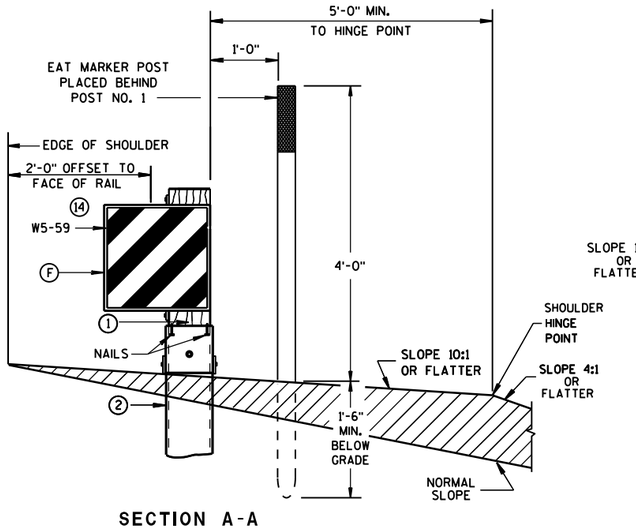
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

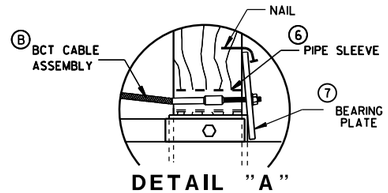




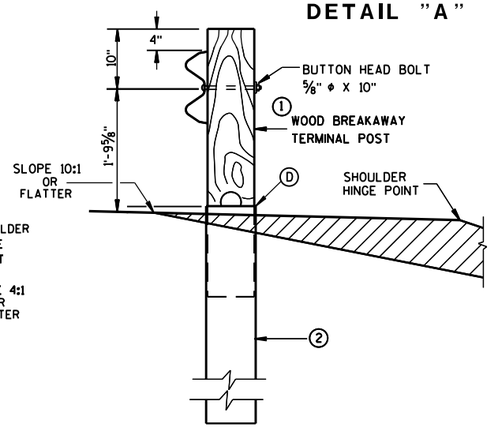
SECTION C-C
TYPICAL AT POST NOS. 6, 8



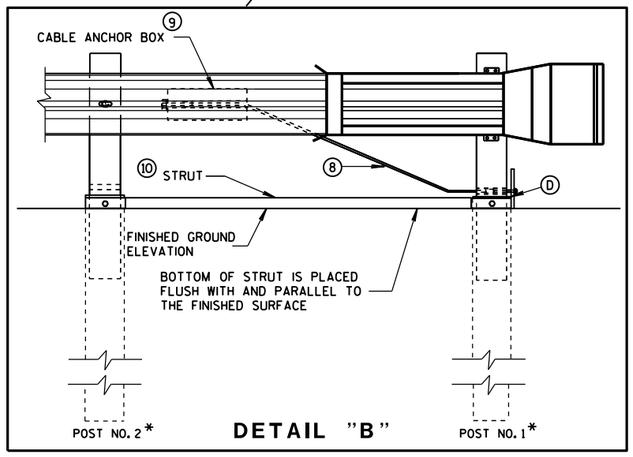
SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



SECTION B-B
TYPICAL AT POST NO. 2*



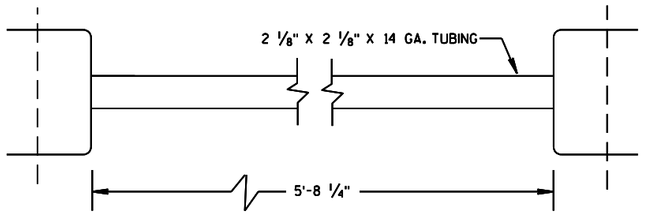
DETAIL "B"

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

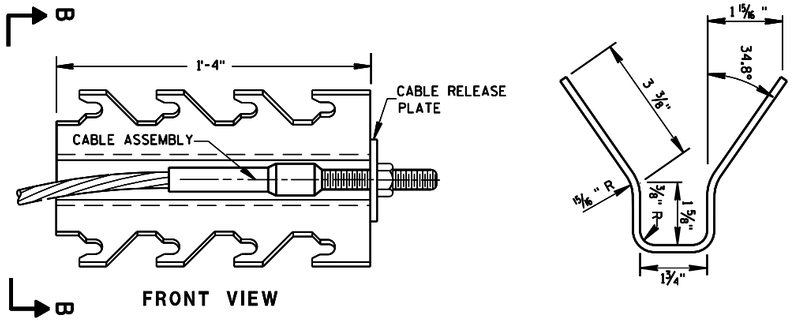
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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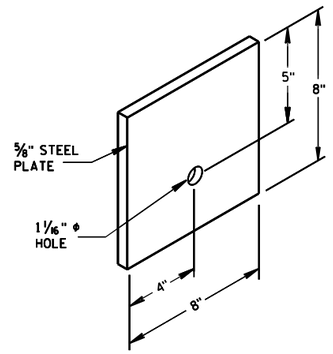
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL



⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

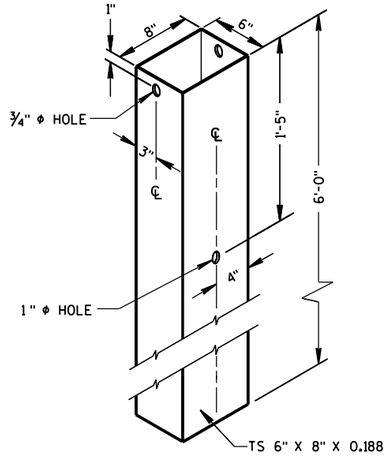
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S.D.D. 14 B 24-9b

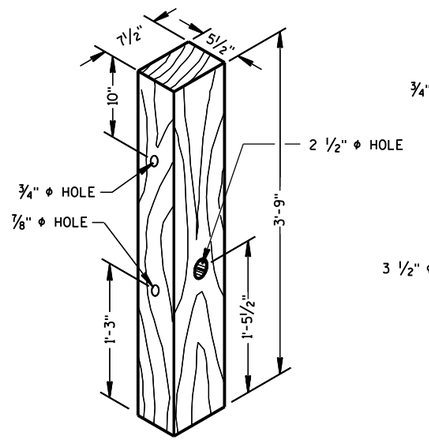
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

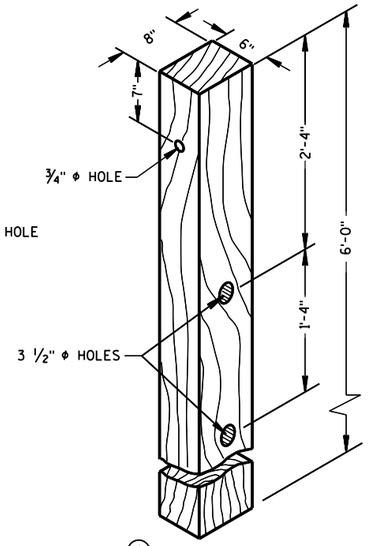
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

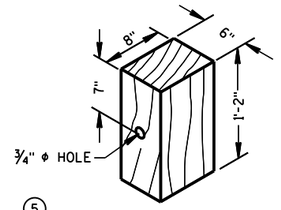


④ CRT POST
(POSTS NO'S 5-8)

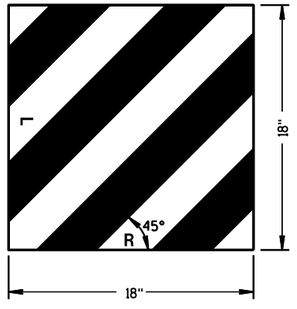
WOOD BREAKAWAY POSTS

GENERAL NOTES

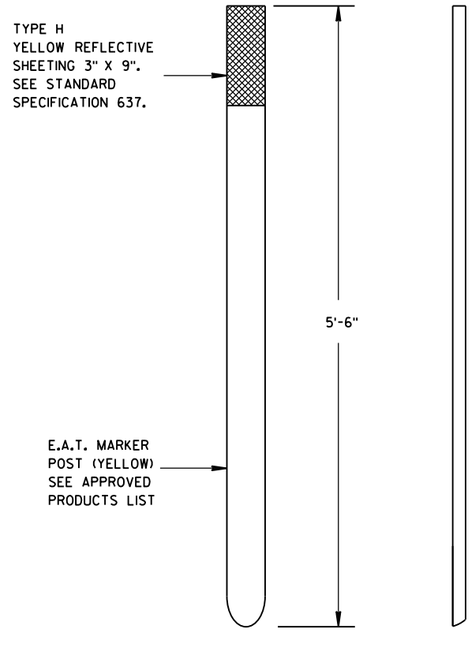
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV...

258

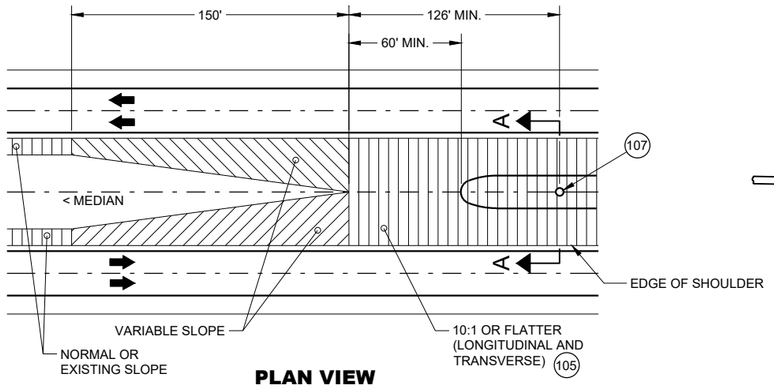
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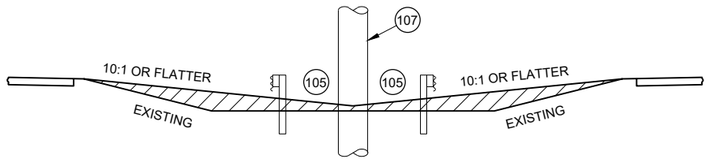
S.D.D. 14 B 24-9c

6

S.D.D. 14 B 24-9c



PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)



SECTION A -A
MEDIAN GRADING
(ALL INSTALLATIONS)

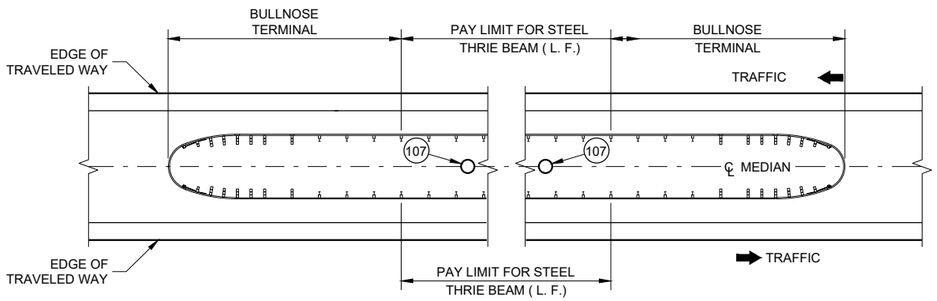
GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

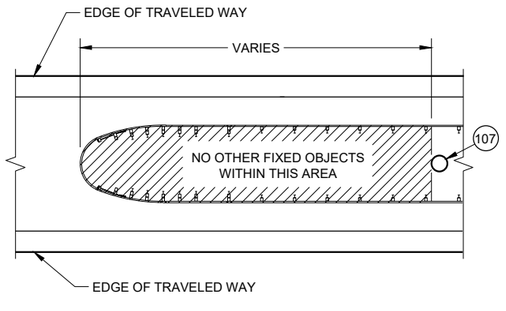
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

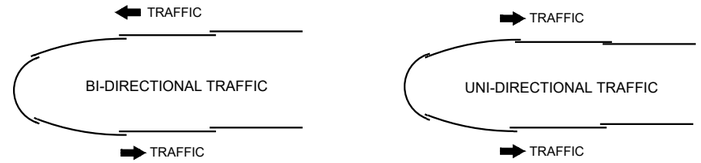
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.
- (100) DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- (101) U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- (102) NOSE CABLE WITH SWAGGED END BUTTONS.
- (103) NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- (104) THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.
- (105) MINIMUM WORKING WIDTH 4' - 2".
- (106) MAX. WIDTH OF SYSTEM IS 14' - 2 ½" MEASURED FROM THE BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.
- (107) FIXED OBJECT OR OTHER HAZARD.
- (108) PLAN IS TO PROVIDE STATION OFFSET TO CENTER OF POST 5 IN PLANS.



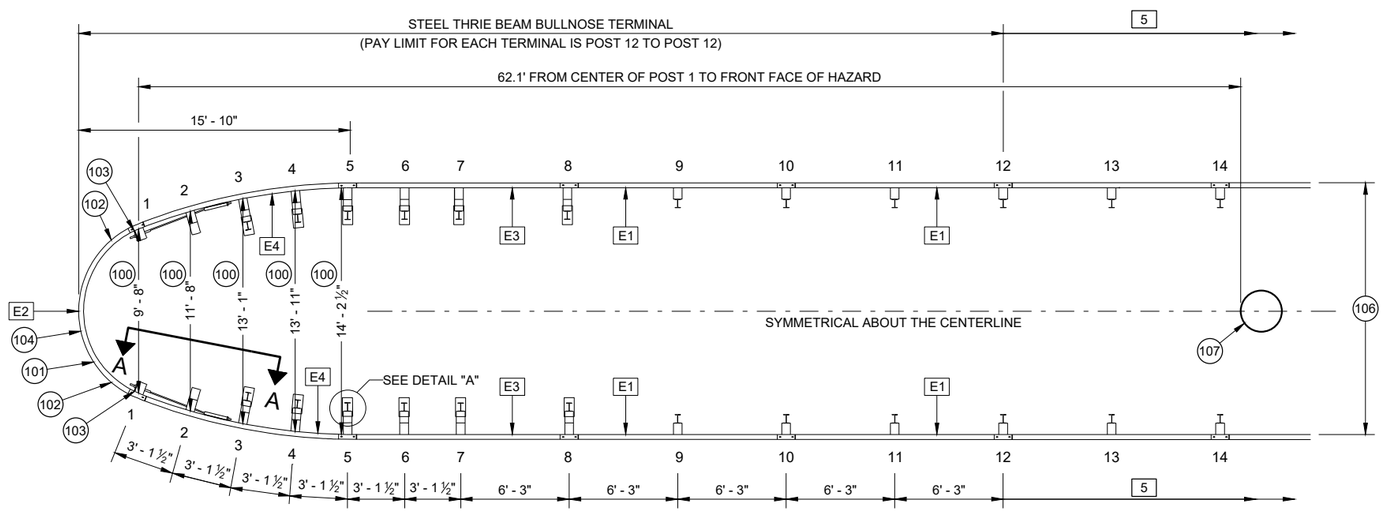
MEDIAN HAZARD PROTECTION PAY LIMITS



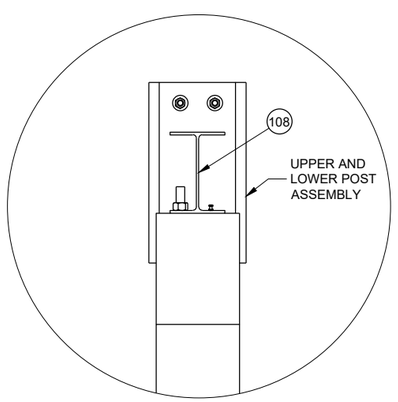
HAZARD FREE AREA
INSIDE BULLNOSE



LAPPING DETAIL



PLAN VIEW
TYPICAL BULLNOSE LAYOUT



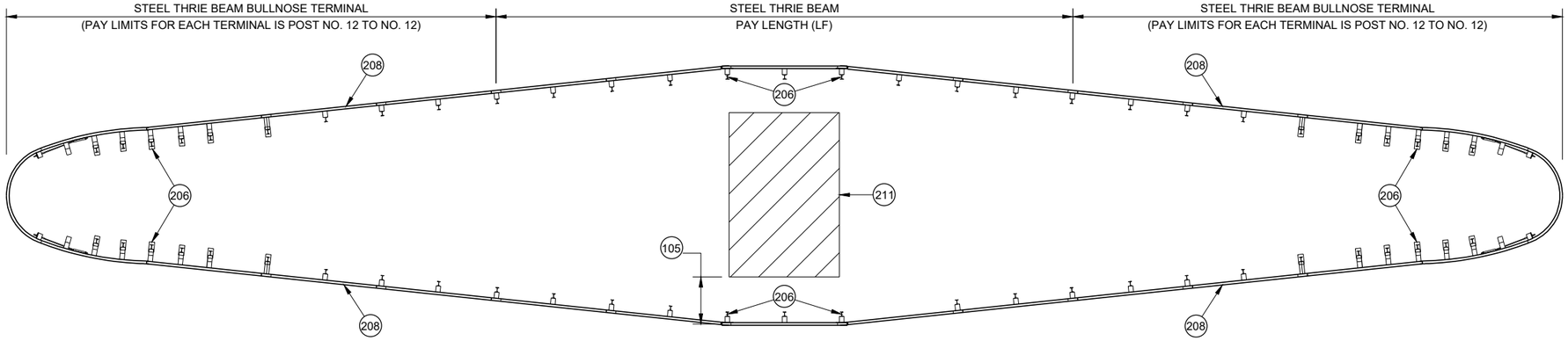
DETAIL "A"

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B26 - 04a

SDD 14B26 - 04a



VARIABLE WIDTH BULLNOSE

GENERAL NOTES

200 6' - 3" ASYMMETRICAL 10-GAUGE W-BEAM TO THRIE BEAM GUARD TRANSITION. SEE SDD 14B45 FOR MORE INFORMATION.

201 W-BEAM RAIL. SEE SDD 14B42 FOR MORE INFORMATION.

202 SEE POST NO. 9 AND ALL STEEL THRIE BEAM POST BEYOND DETAIL.

203 SEE SDD 14B42 FOR INSTALLATION INFORMATION.

204 SEE SDD 14B45 FOR INSTALLATION DETAILS. REPLACE ASYMMETRICAL W-BEAM TO THRIE BEAM TRANSITION AND W-BEAM RAIL WITH E1. PAY FOR MODIFIED THRIE BEAM TRANSITION.

205 CONCRETE BARRIER OR BRIDGE RAIL.

206 SEE PLAN FOR STATION AND OFFSET TO CENTER OF POST.

207 SEE PLAN FOR STATION AND OFFSET TO CENTER OF SPLICE.

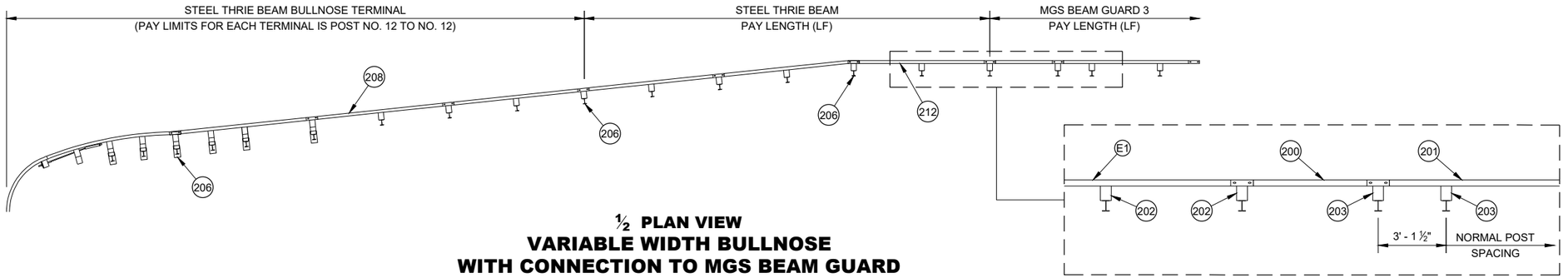
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

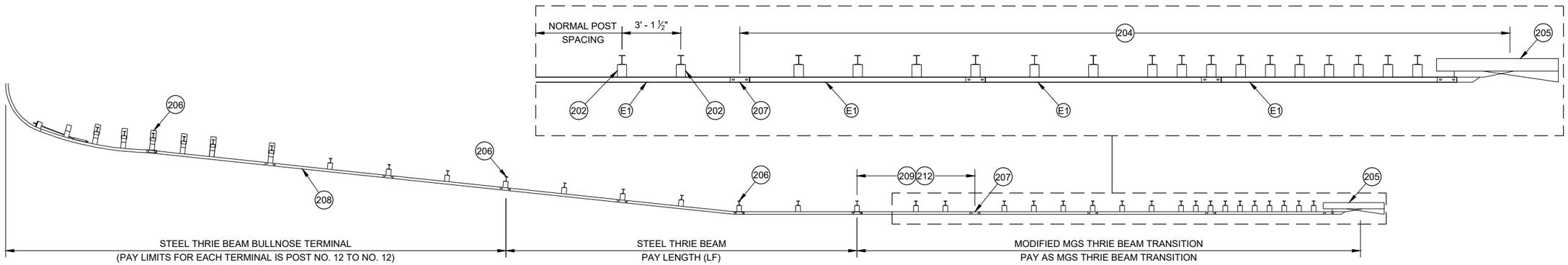
211 WIDER HAZARD TO BE SHIELDED.

212 TRANSITION RAIL HEIGHT TO 31" OVER THE LENGTH OF A 12' - 6" BEAM SECTION.



½ PLAN VIEW

VARIABLE WIDTH BULLNOSE WITH CONNECTION TO MGS BEAM GUARD



½ PLAN VIEW

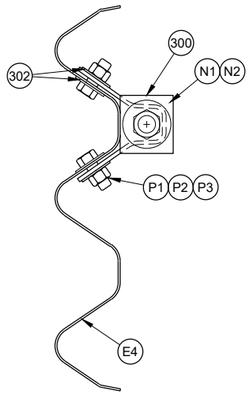
VARIABLE WIDTH BULLNOSE WITH CONNECTION TO RIGID BARRIER

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

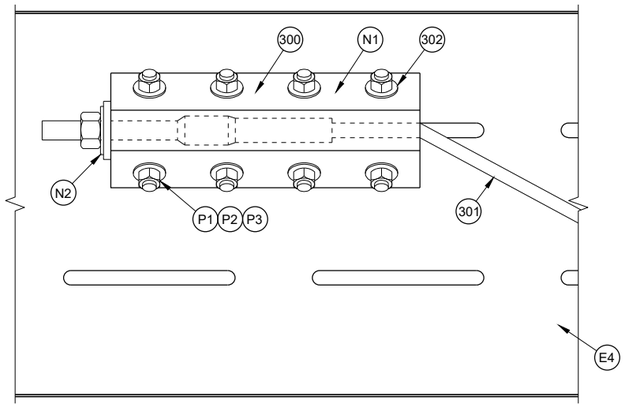
6

SDD 14B26 - 04b

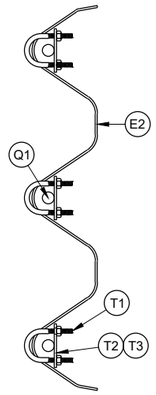


PROFILE VIEW

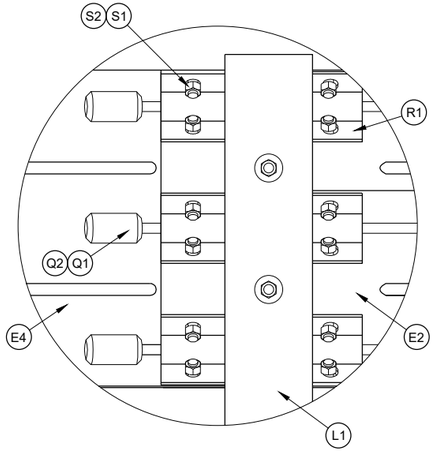
CABLE ANCHOR ASSEMBLY CONNECTION



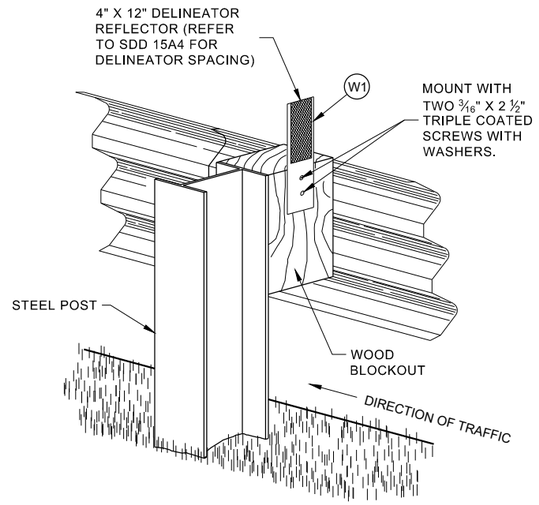
CABLE ANCHOR ASSEMBLY



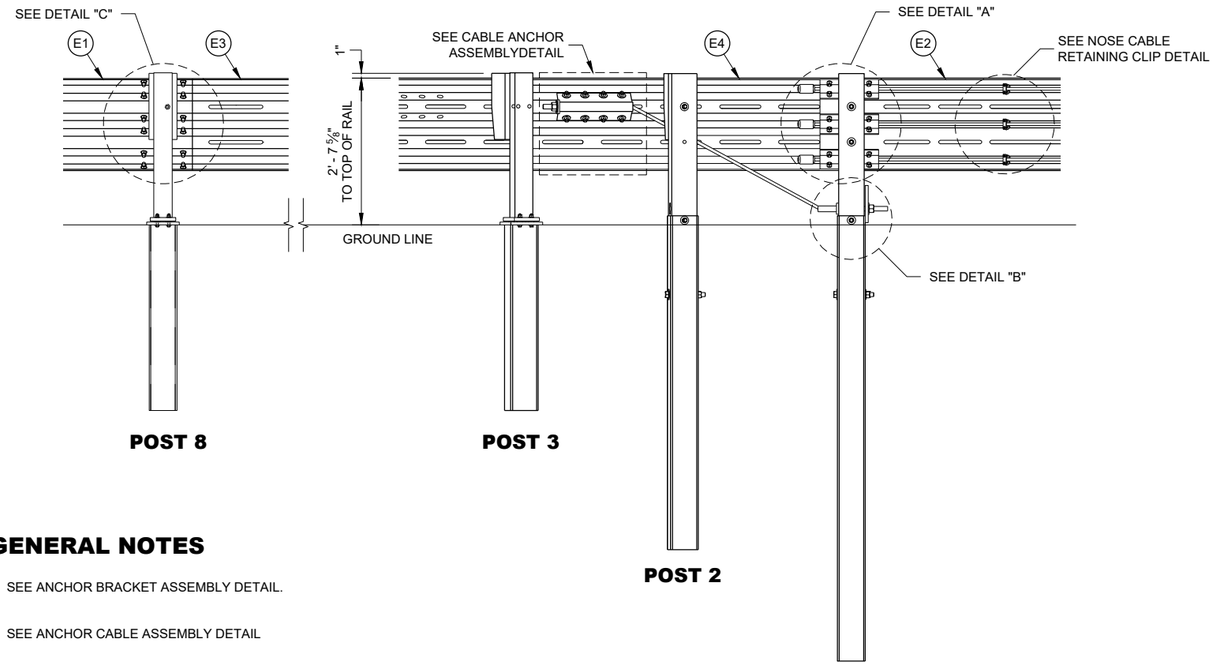
NOSE CABLE RETAINING CLIP



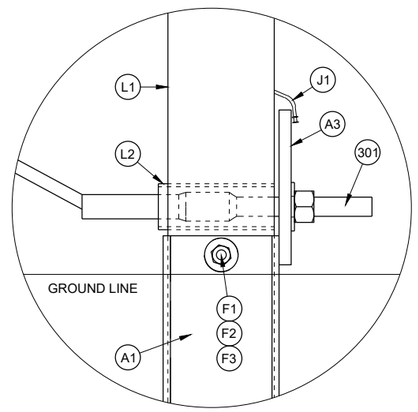
DETAIL "A"



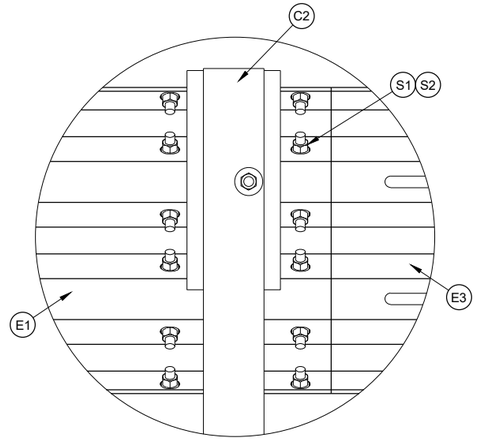
ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION



CROSS SECTION A - A



DETAIL "B"



DETAIL "C"
THRIE BEAM SPLICE

GENERAL NOTES

(300) SEE ANCHOR BRACKET ASSEMBLY DETAIL.

(301) SEE ANCHOR CABLE ASSEMBLY DETAIL

(302) ONE WASHER BETWEEN BOLT HEAD AND RAIL AND BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

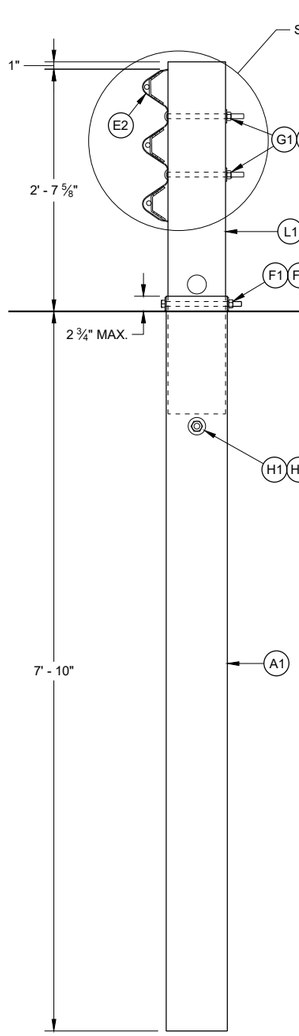
(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

STEEL THRIE BEAM BULLNOSE TERMINAL

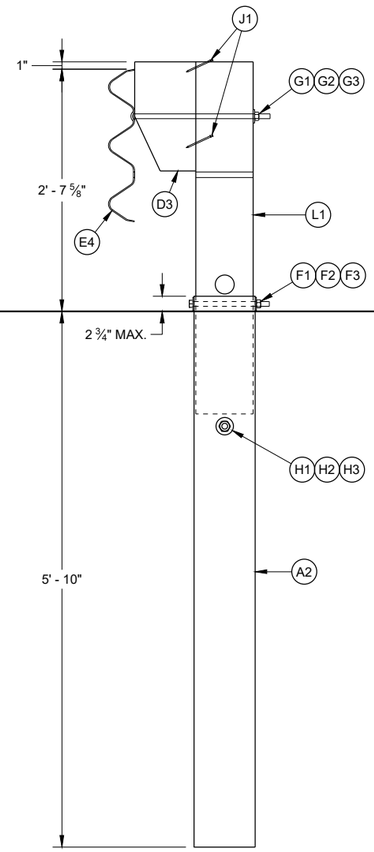
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

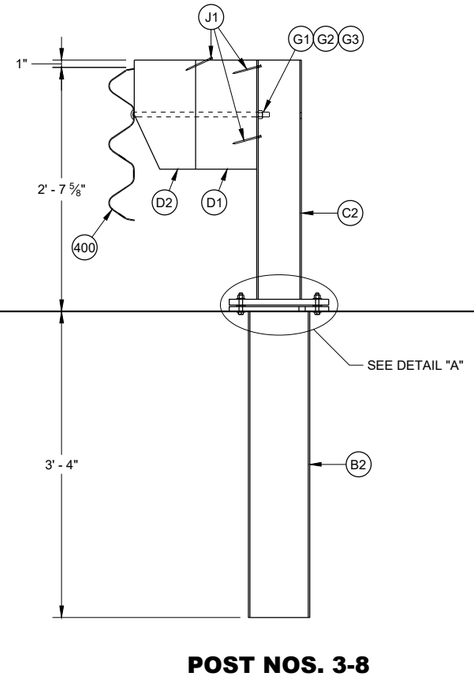
SDD 14B26 - 04c



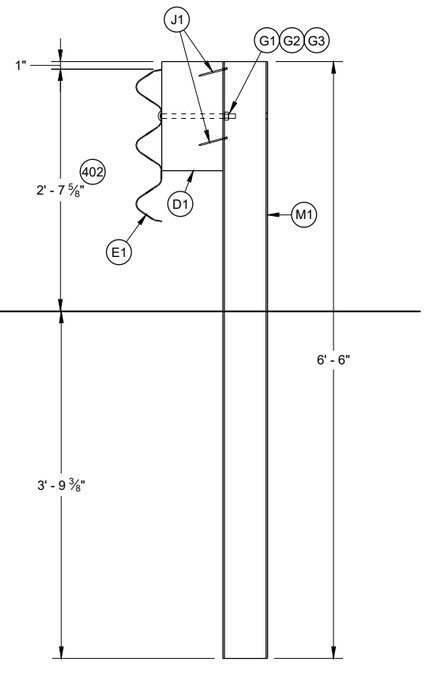
POST NO. 1



POST NO. 2



POST NOS. 3-8



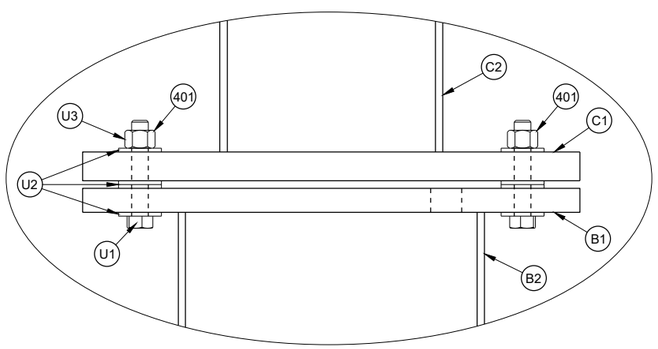
POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND

GENERAL NOTES

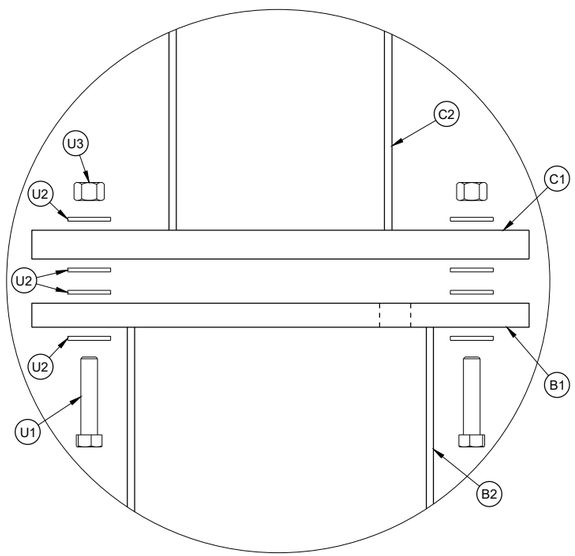
400 RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

401 TORQUE BOLD BETWEEN 60-75 FT-LB

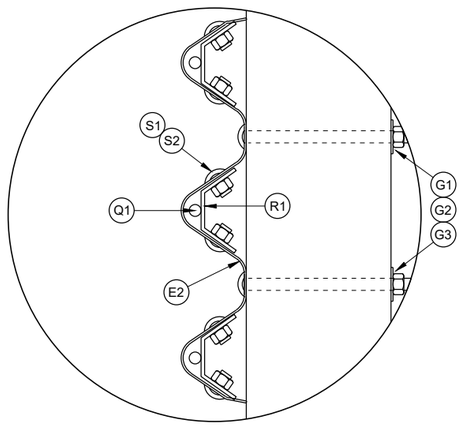
402 HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".



DETAIL "A"



EXPLODED VIEW
DETAIL "A"



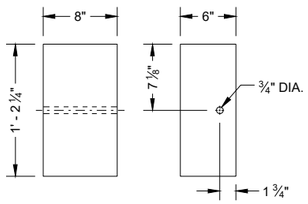
DETAIL "B"

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

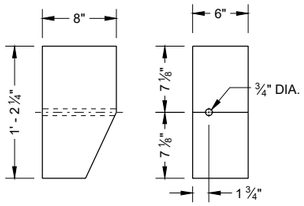
6

SDD 14B26 - 04d



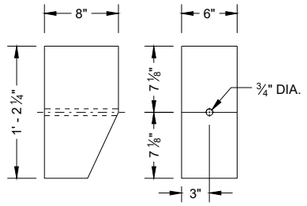
ELEVATION PROFILE

BLOCKOUT (D1)



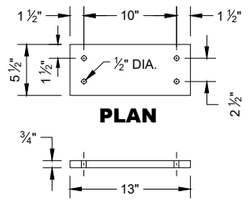
ELEVATION PROFILE

BLOCKOUT (D2)



ELEVATION PROFILE

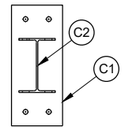
BLOCKOUT (D3)



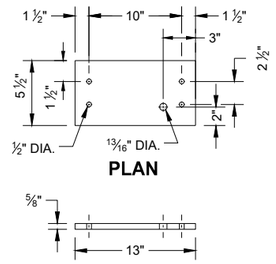
PLAN

PROFILE

UPPER SHEAR PLATE (C1)



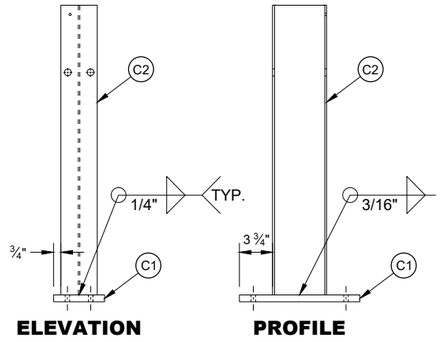
PLAN



PLAN

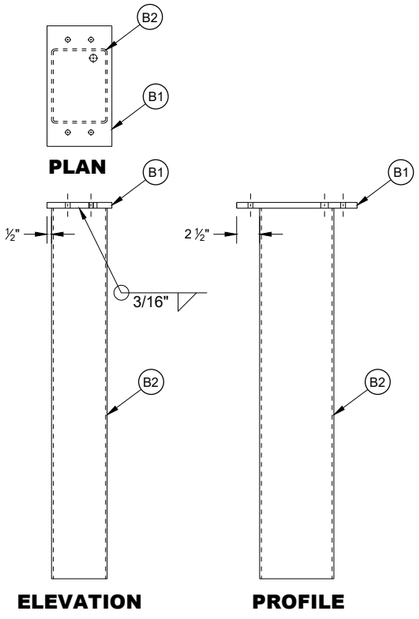
PROFILE

LOWER SHEAR PLATE (B1)



ELEVATION PROFILE

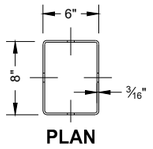
UPPER POST ASSEMBLY



PLAN

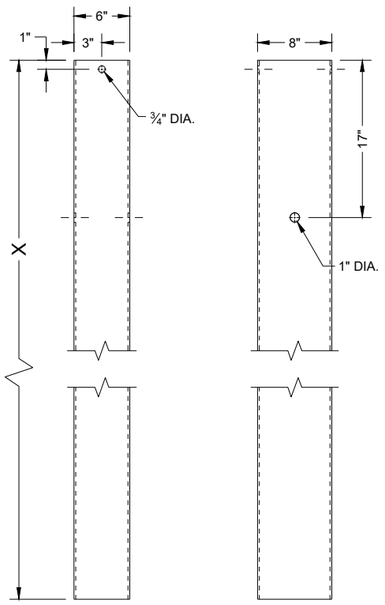
ELEVATION PROFILE

LOWER POST ASSEMBLY



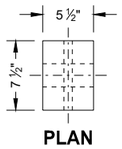
PLAN

PART	LENGTH "X"
A1	8' - 0"
A2	6' - 0"
B2	3' - 6"

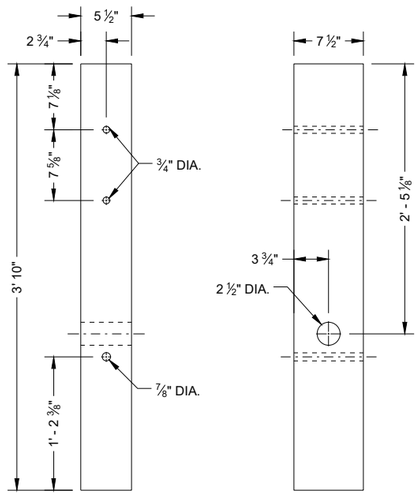


ELEVATION PROFILE

FOUNDATION TUBE

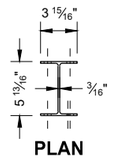


PLAN

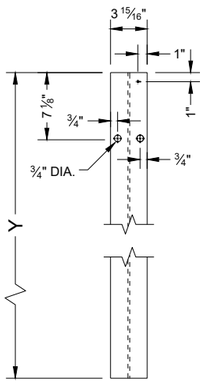


ELEVATION PROFILE

BCT POST (L1)



PLAN



ELEVATION

POST

PART	LENGTH "Y"
M1	6' - 6"
M2	5' - 8 5/8"
C2	2' - 8 5/8"

STEEL THRIE BEAM BULLNOSE TERMINAL

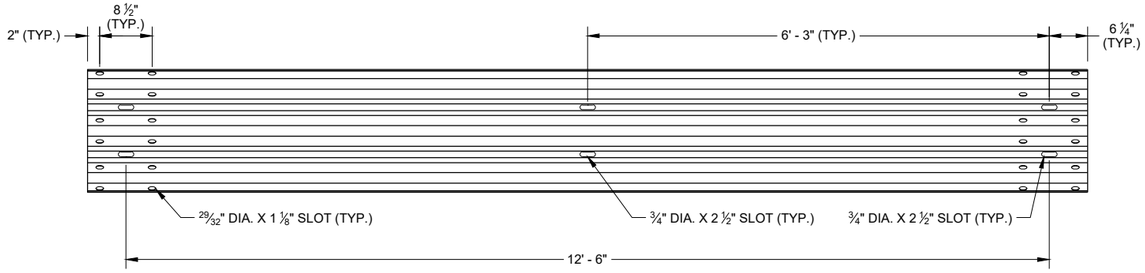
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

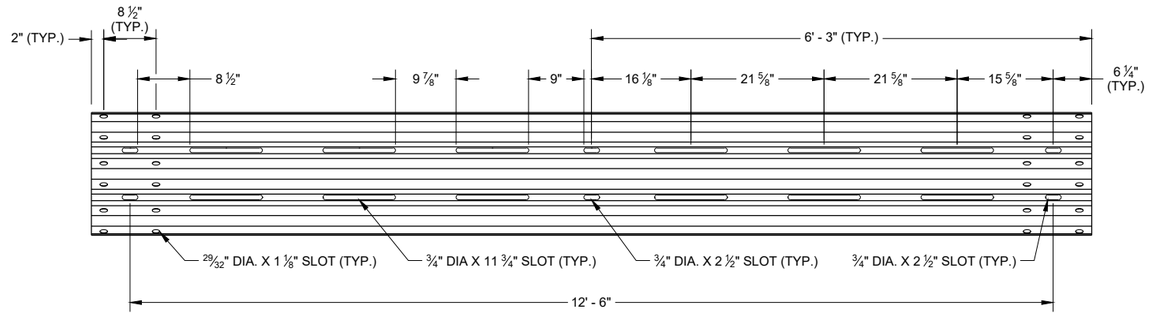
SDD 14B26 - 04e

6

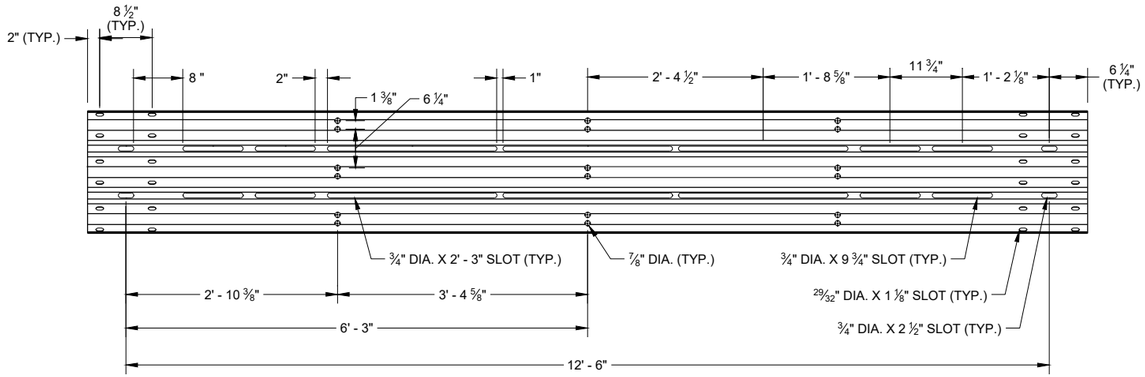
SDD 14B26 - 04e



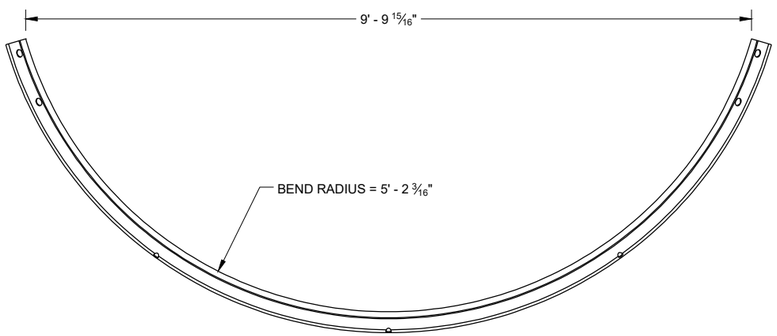
SLOTTED THRIE BEAM RAIL E1



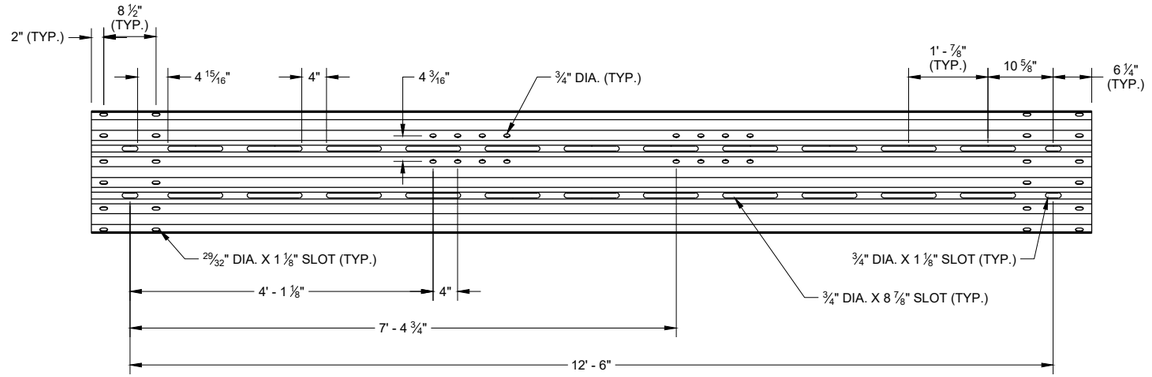
SLOTTED THRIE BEAM RAIL E3



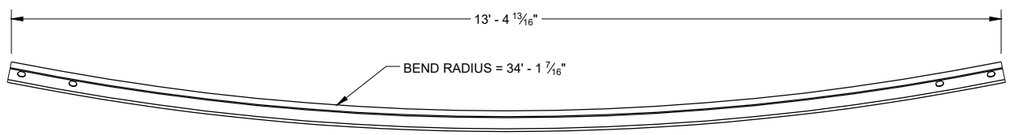
ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E2



PLAN VIEW
SLOTTED THRIE BEAM RAIL E2



ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E4



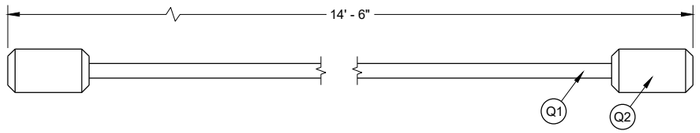
PLAN VIEW
SLOTTED THRIE BEAM RAIL E4

STEEL THRIE BEAM BULLNOSE TERMINAL

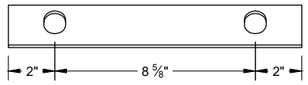
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

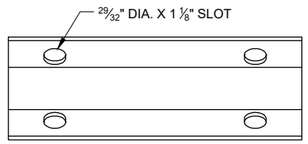
SDD 14B26 - 04f



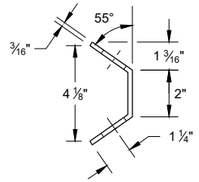
NOSE CABLE AND SWAGE BUTTON



PLAN VIEW

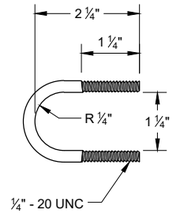


ELEVATION VIEW

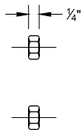


PROFILE VIEW

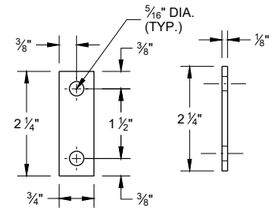
NOSE CABLE ANCHOR (R1)



U - BOLT (T1)

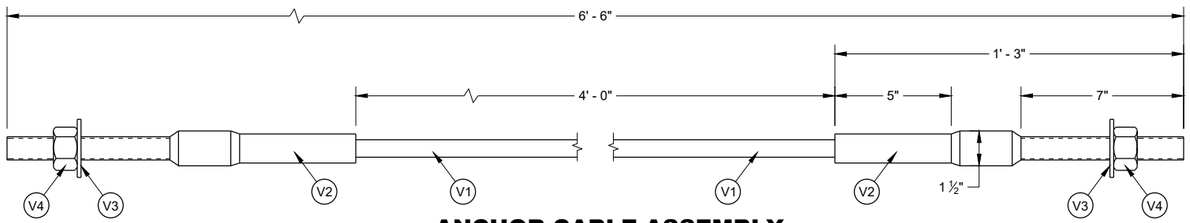


U - BOLT NUT (T3)

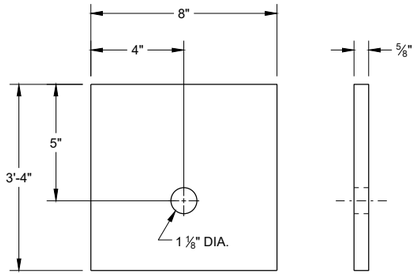


ELEVATION VIEW **PROFILE VIEW**

U - BOLT PLATE WASHER (T2)

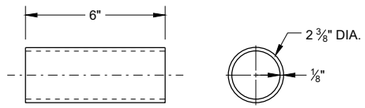


ANCHOR CABLE ASSEMBLY



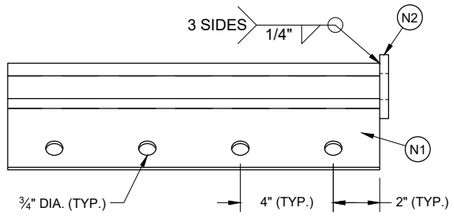
ELEVATION VIEW **PROFILE VIEW**

BCT BEARING PLATE (A3)

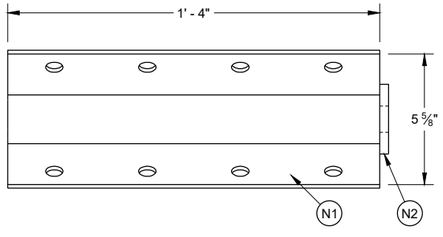


ELEVATION VIEW **PROFILE VIEW**

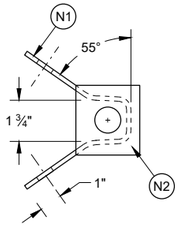
BCT POST SLEEVE (L2)



PLAN VIEW

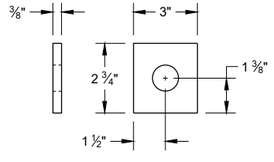


ELEVATION VIEW



PROFILE VIEW

ANCHOR BRACKET ASSEMBLY (N1)



ANCHOR BRACKET END PLATE (N2)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B26 - 04g

(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.

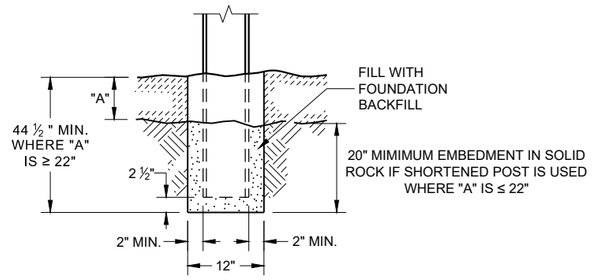
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

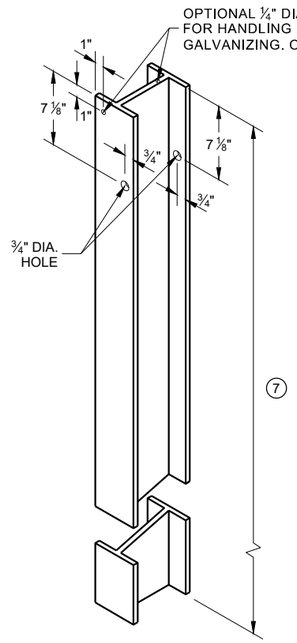
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS +1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

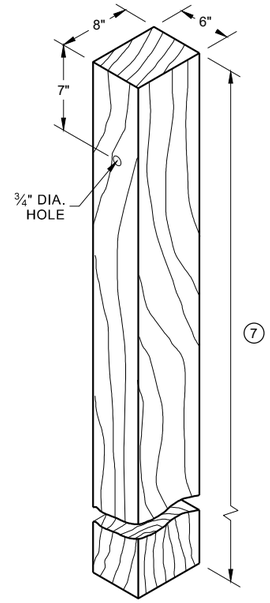
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



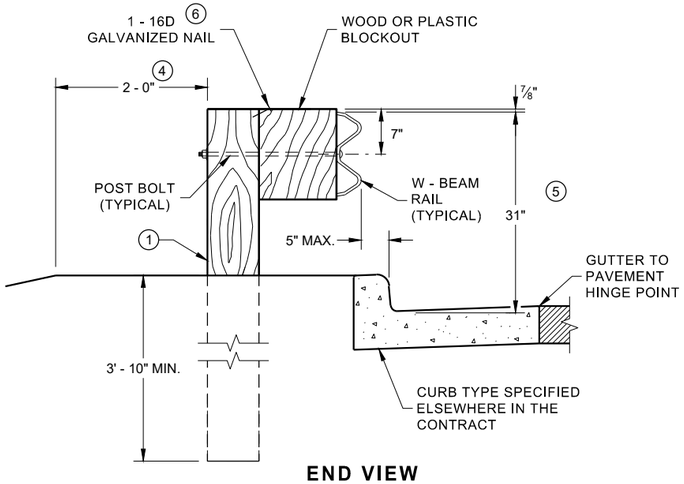
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



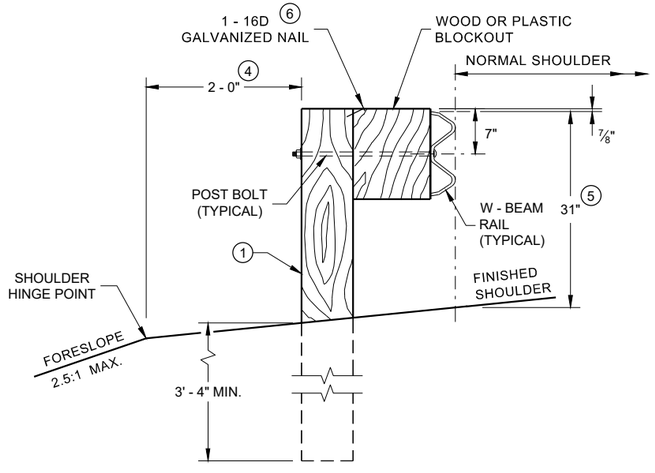
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



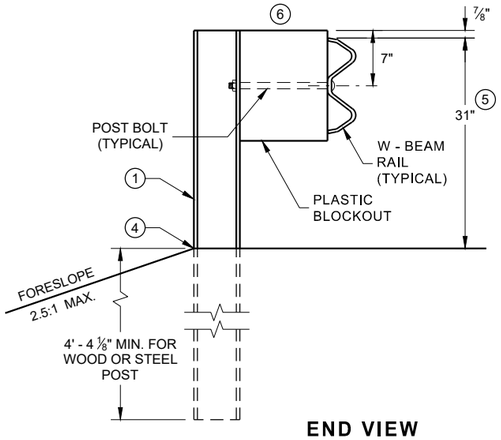
WOOD POST (6" X 8") NOMINAL (1)



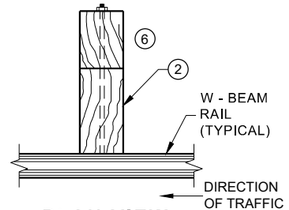
END VIEW
LOCATED ALONG A CURBED ROADWAY



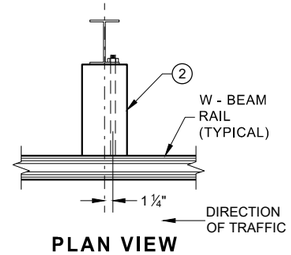
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



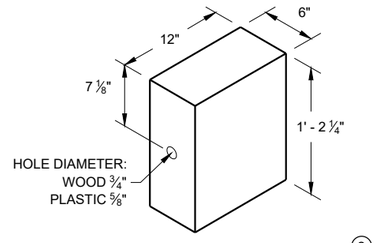
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW WOOD POST, BLOCKOUT & BEAM



PLAN VIEW STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

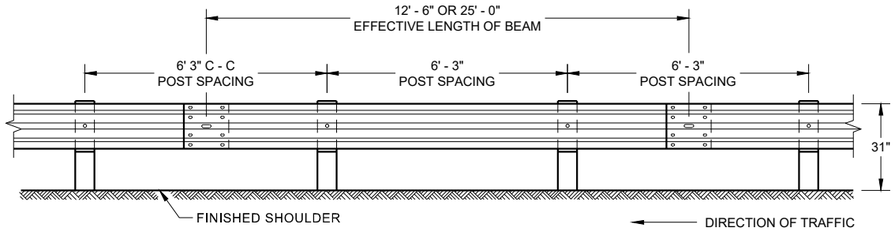
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

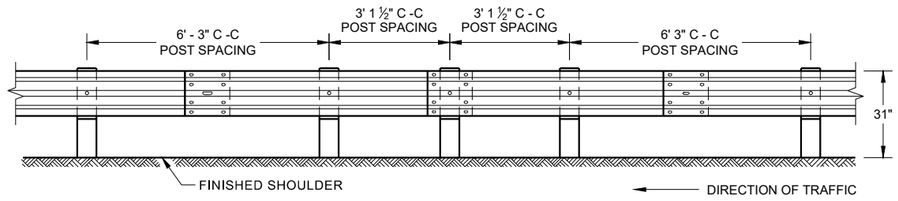
SDD 14B42 - 06a

6

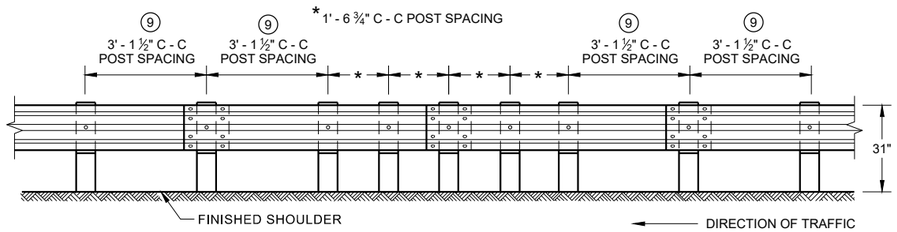
SDD 14B42 - 06a



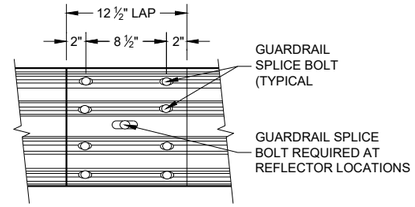
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

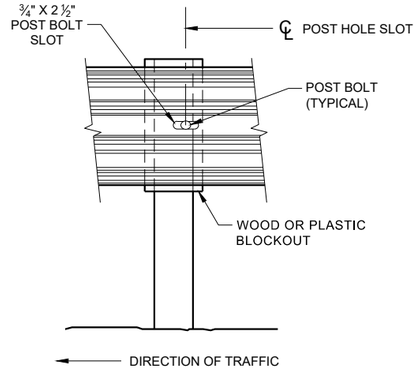
GENERAL NOTES

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

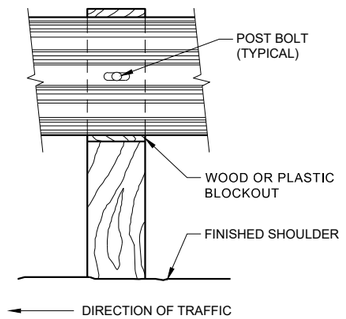
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

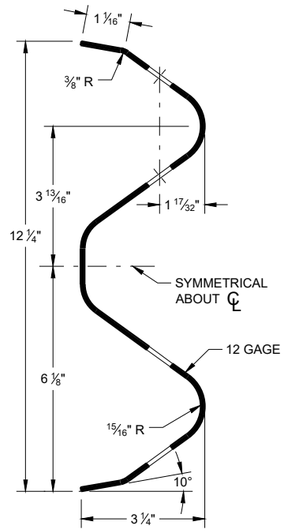
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



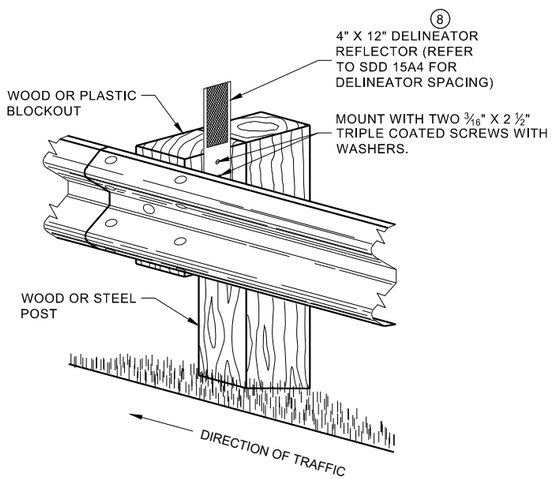
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



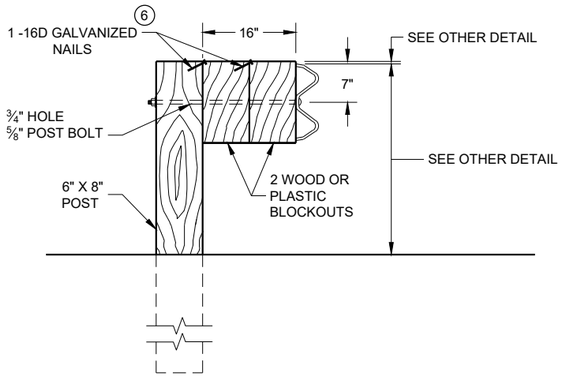
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 06b

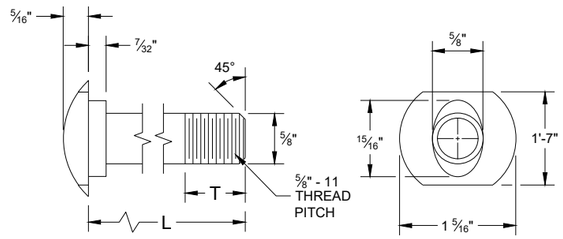


DETAIL FOR 16" BLOCKOUT DEPTH

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

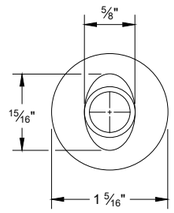
NOTE:

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

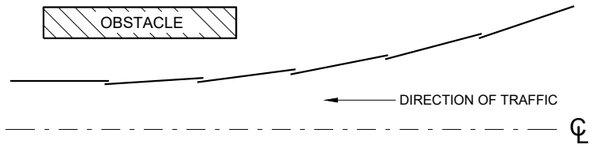


POST BOLT TABLE

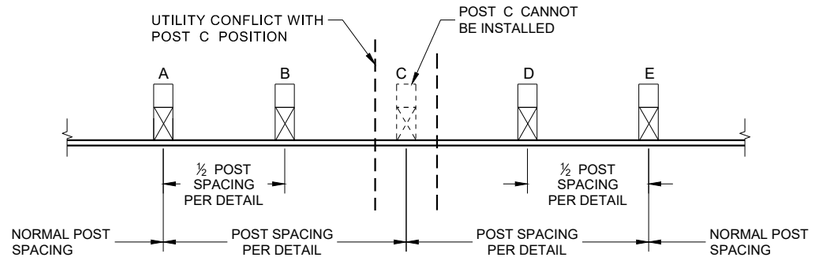
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



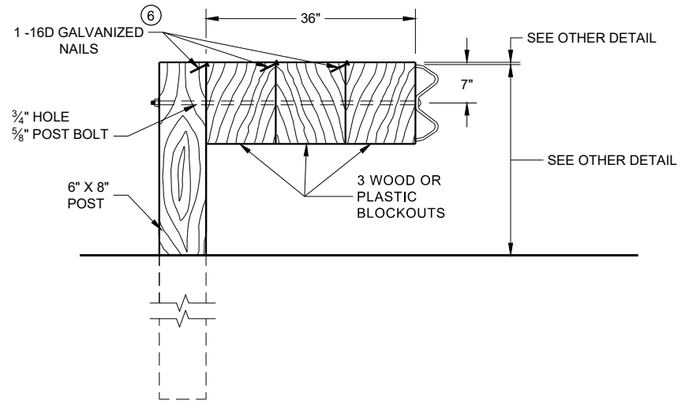
ALTERNATE BOLT HEAD



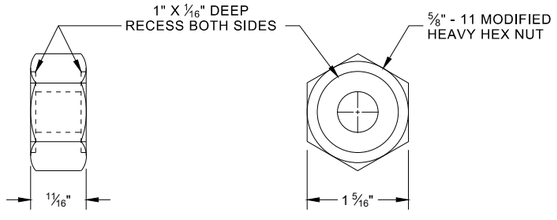
PLAN VIEW
BEAM LAPPING DETAIL



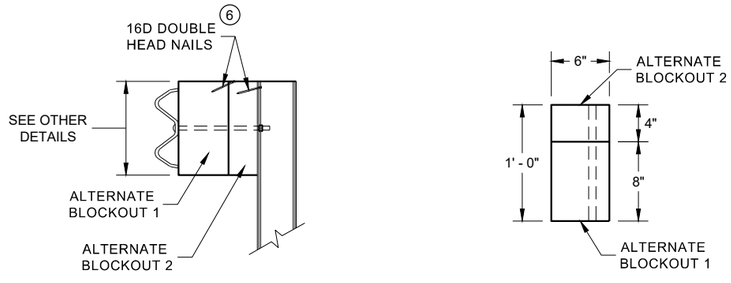
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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

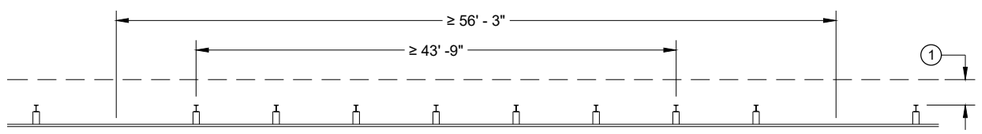
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

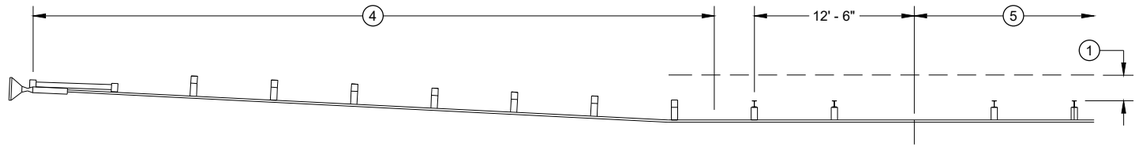
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

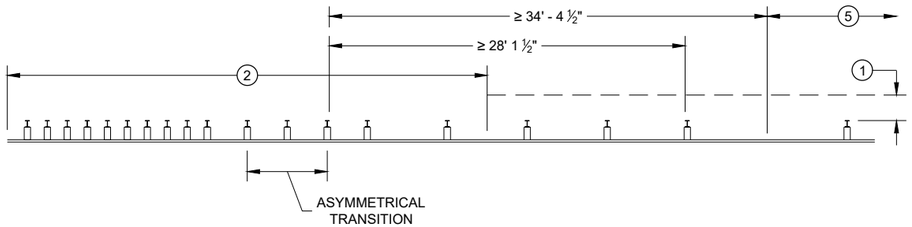
SDD 14B42 - 06c



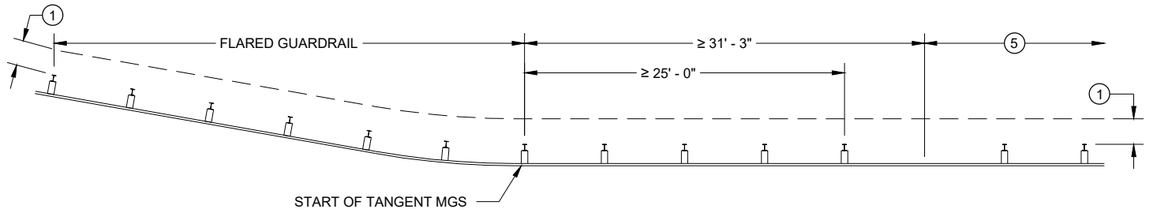
MISSING POST IN NORMAL BEAM GUARD RUN



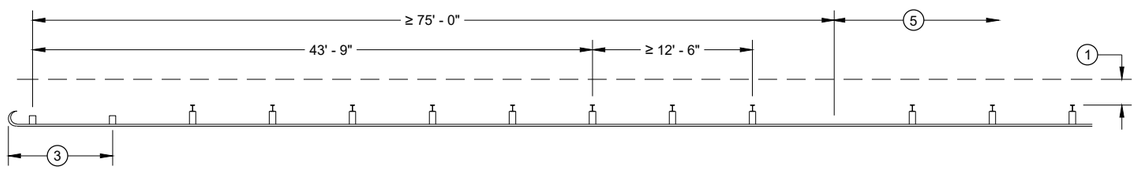
MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



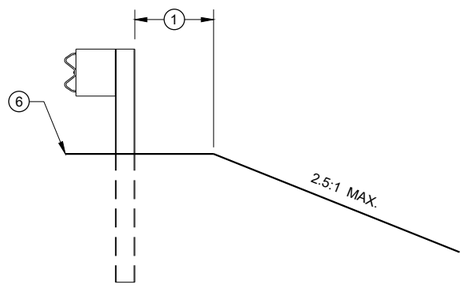
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



MISSING POST IN NORMAL BEAM GUARD RUN NEAR FLARED BEAM GUARD



MISSING POST IN NORMAL BEAM GUARD RUN NEAR TYPE 2 TERMINAL



CROSS SECTION VIEW

1. MINIMUM OF 2 FEET OF GRADING BEHIND POST.
2. SEE SDD 14B45 FOR MORE DETAILS.
3. SEE SDD 14B47 FOR MORE DETAILS.
4. SEE SDD 14B44 FOR MORE DETAILS.
5. SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
6. SEE PLAN FOR SHOULDER DESIGN.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

SDD 14B42 - 06d

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.

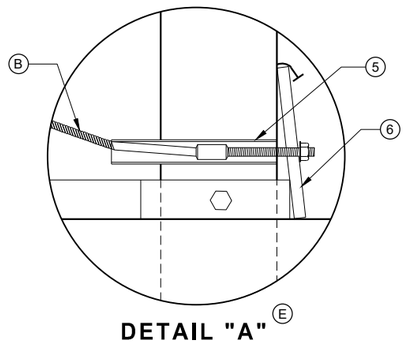
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

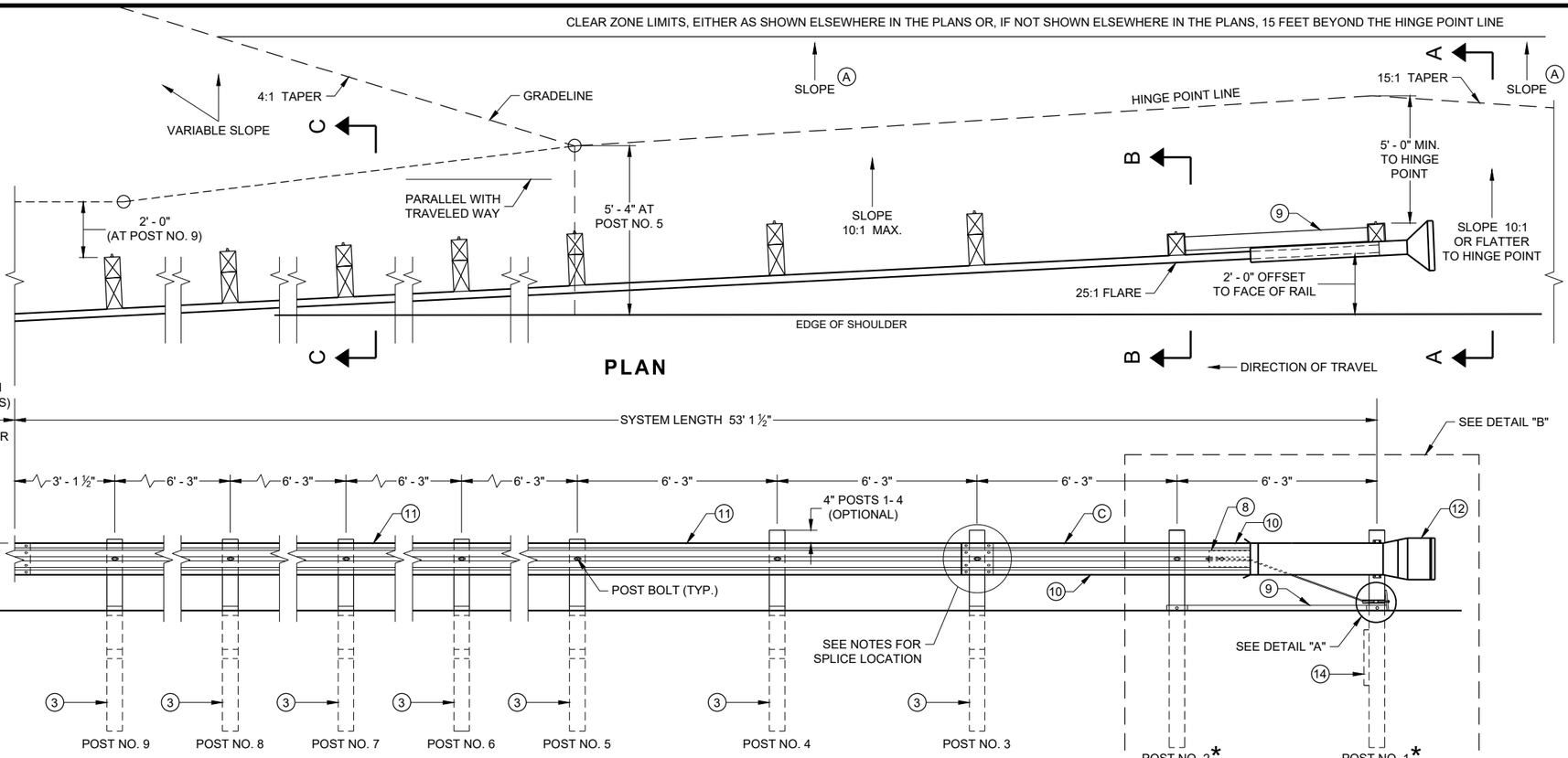
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

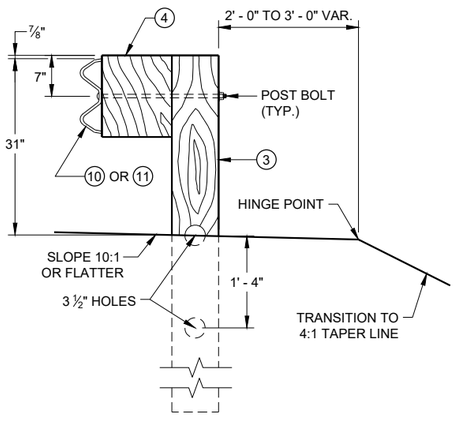
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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.

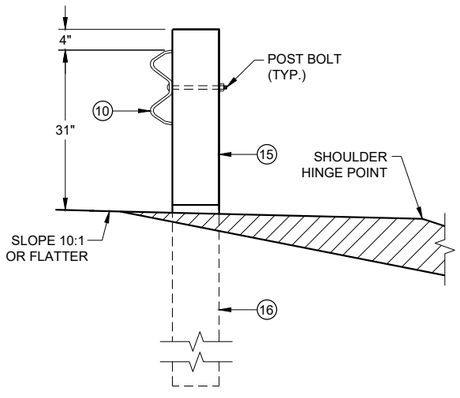


DETAIL "A" (E)

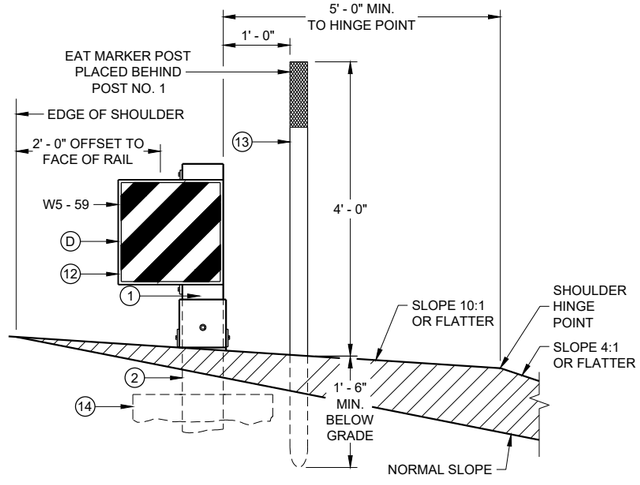




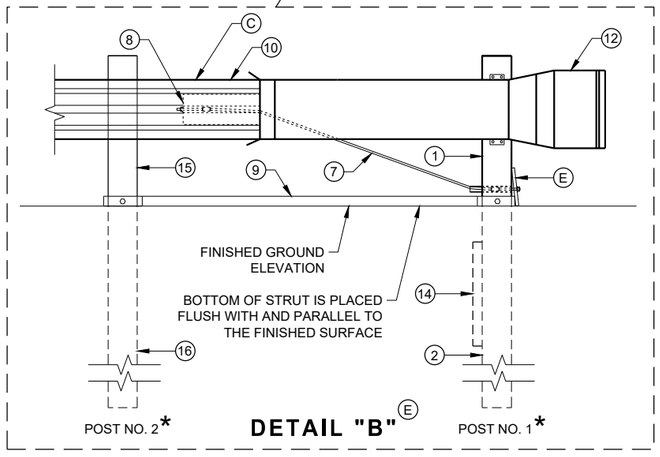
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



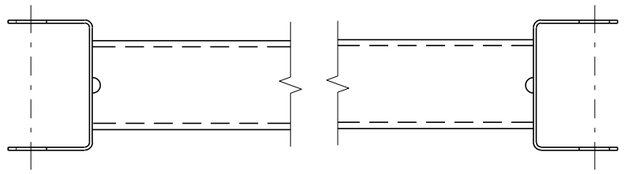
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

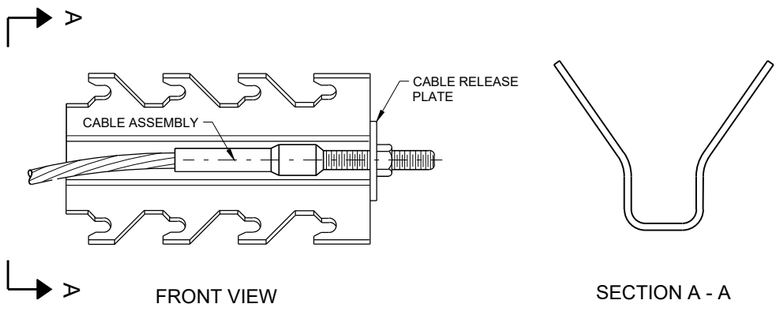
SDD 14B44 - 04a



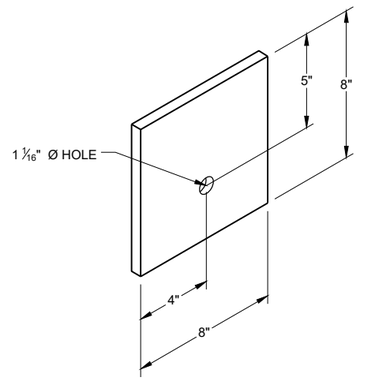
GENERIC GROUND STRUT ⑨ Ⓔ

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

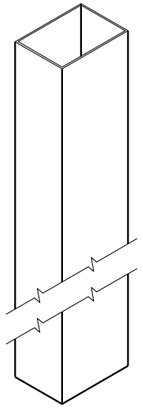
6

SDD 14B44 - 04b

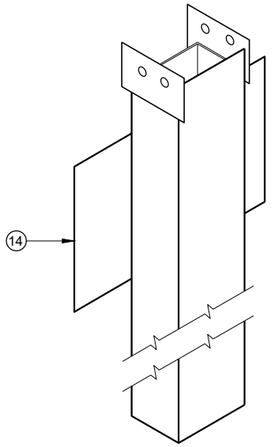
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

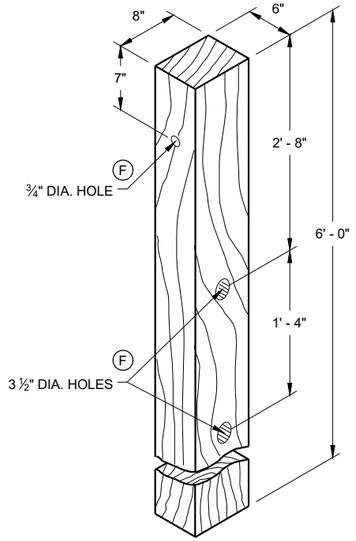
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



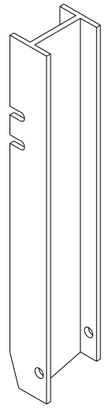
UPPER POST NO. 1 (1) (E)



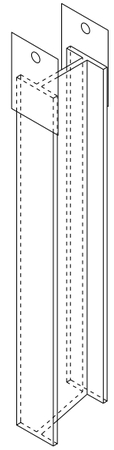
LOWER POST NO. 1 (2) (E)



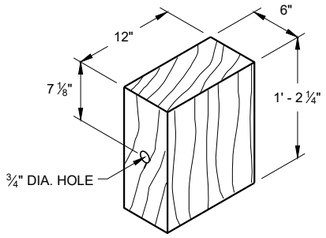
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



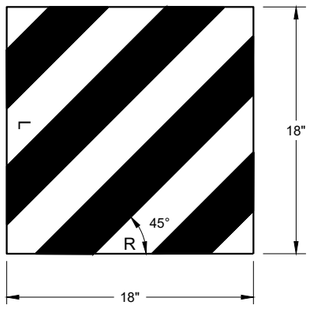
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

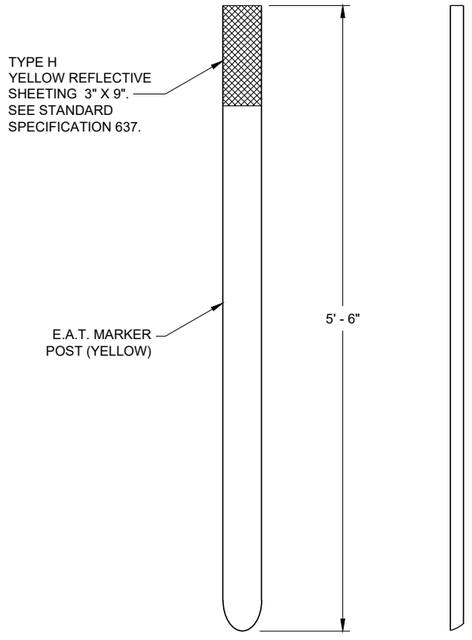


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



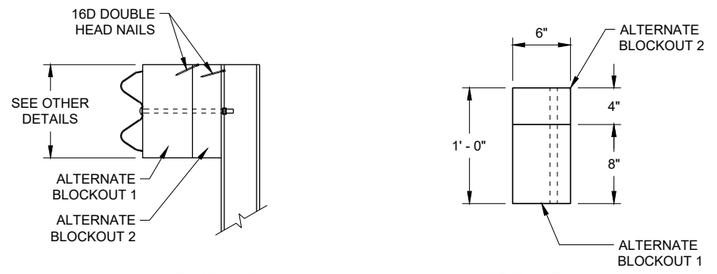
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

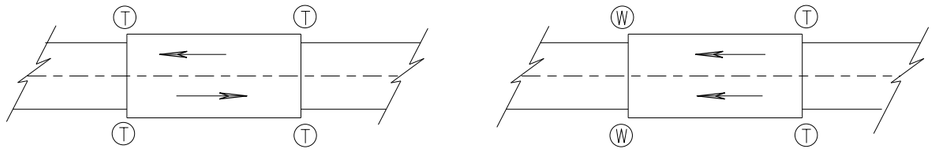
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

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.

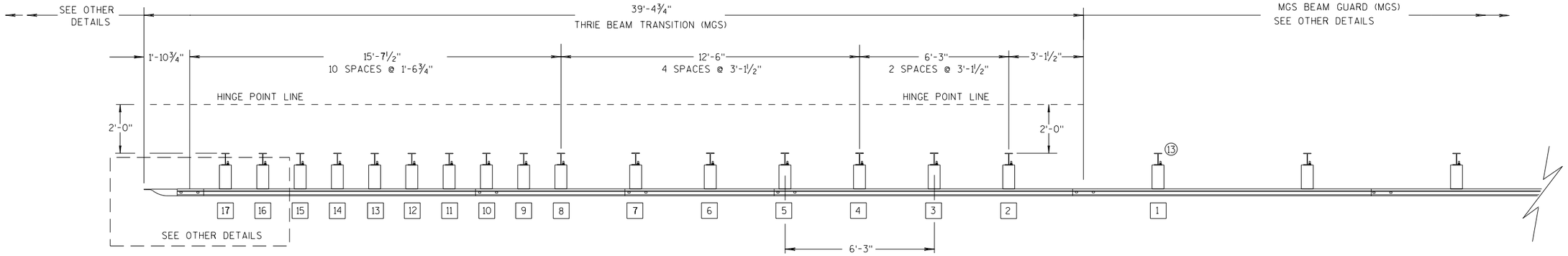
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

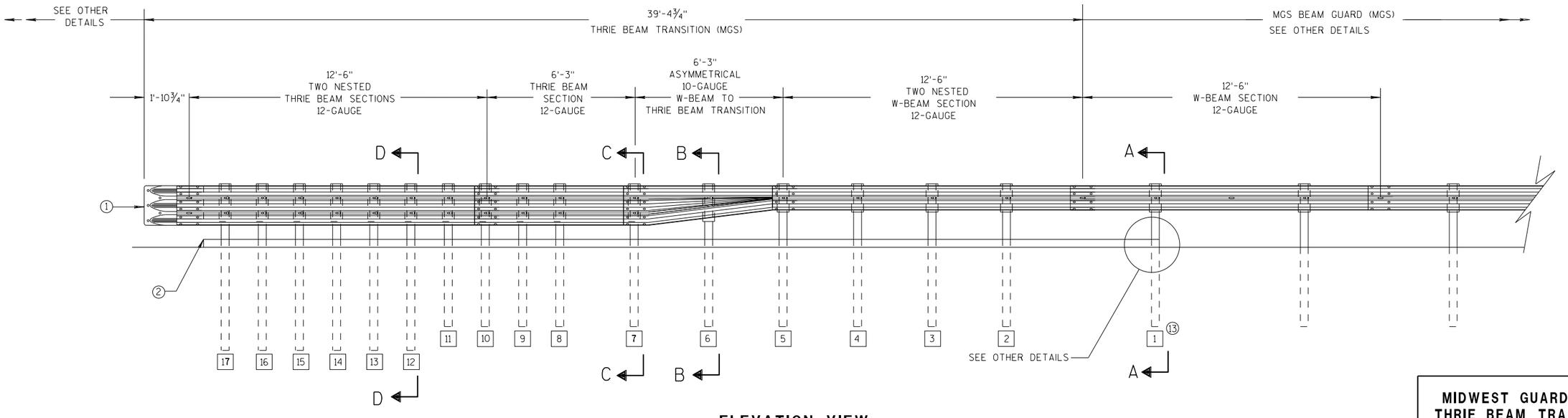
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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 273

6

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

6

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

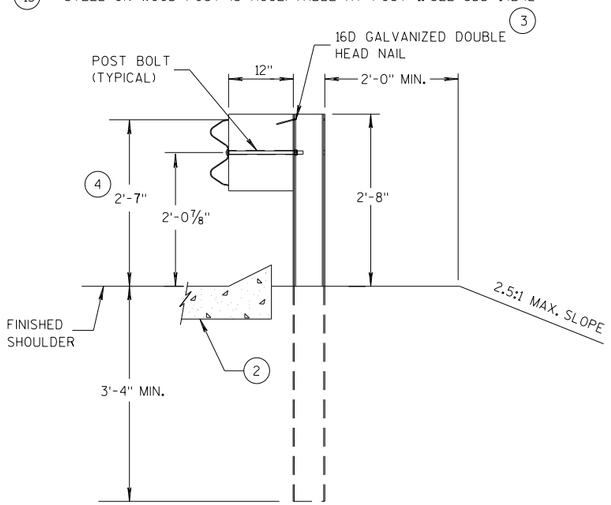
GENERAL NOTES

(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.

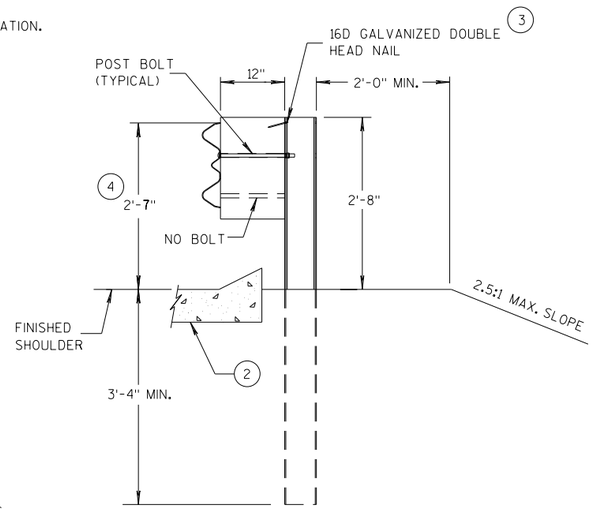
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



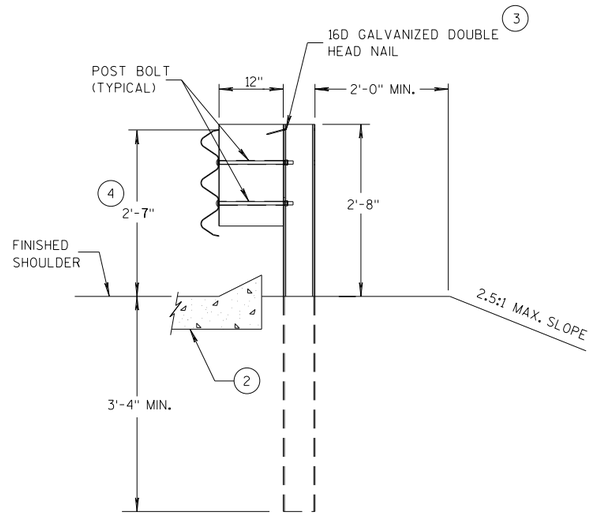
SECTION A-A (13)

POSTS 1-5



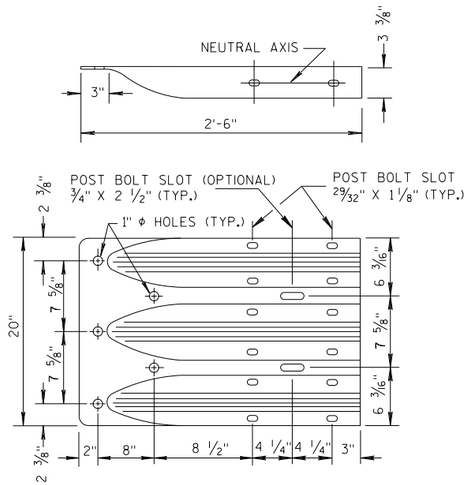
SECTION B-B

POST 6

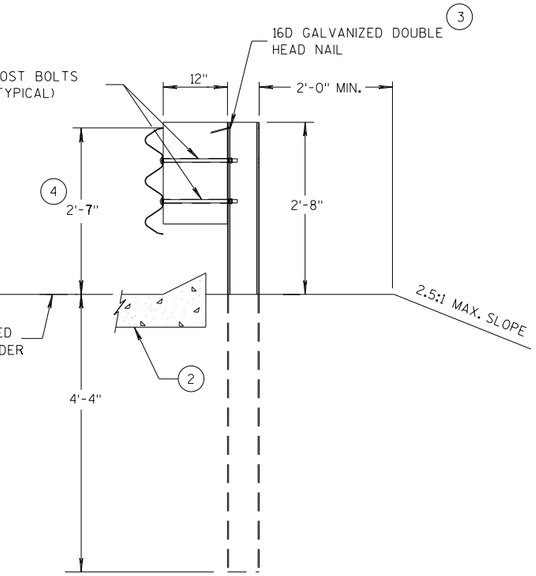


SECTION C-C

POSTS 7-11

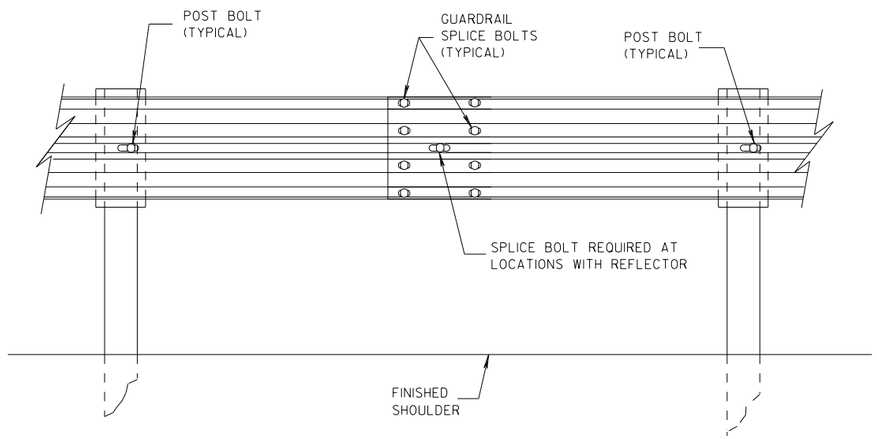


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

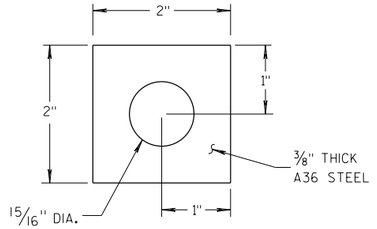
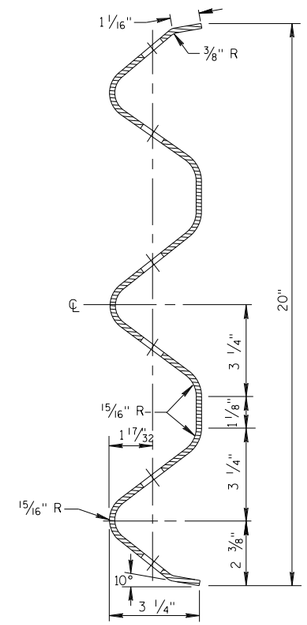


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

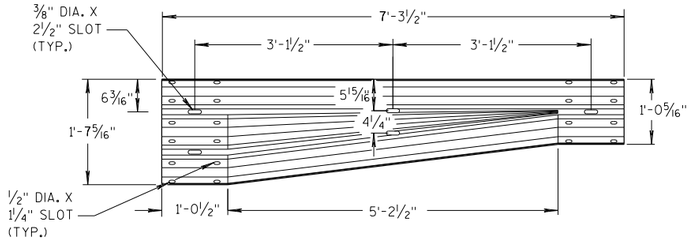
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 274

6

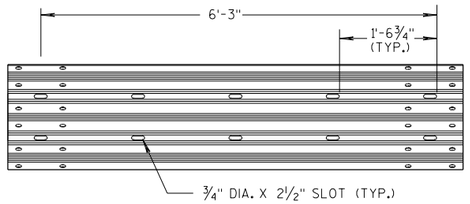
S.D.D. 14 B 45-5b

6

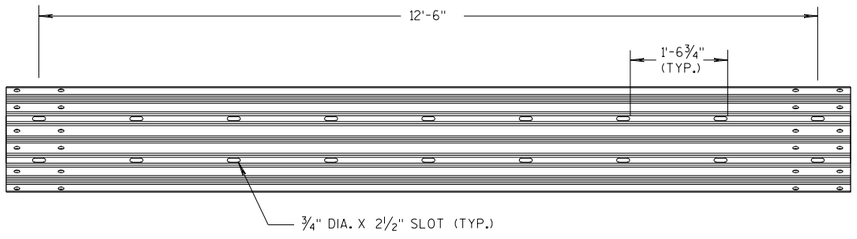
S.D.D. 14 B 45-5b



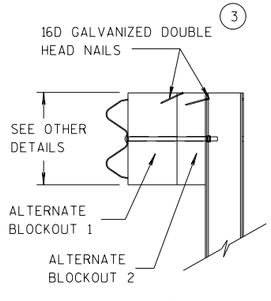
W-BEAM TO THRIE BEAM TRANSITION SECTION



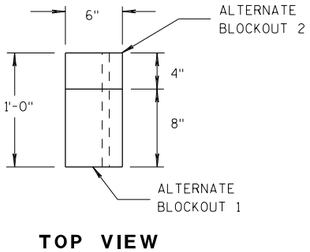
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

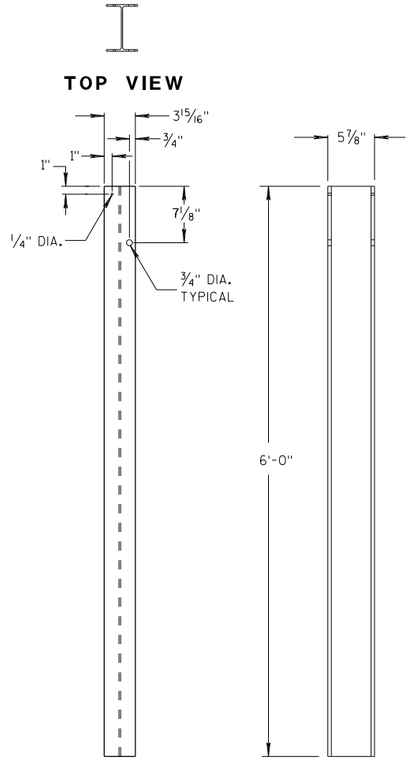


SIDE VIEW



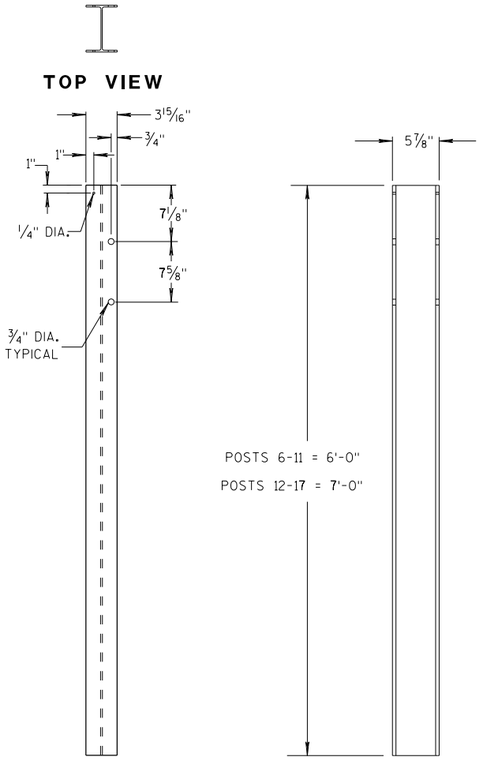
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



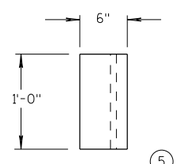
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

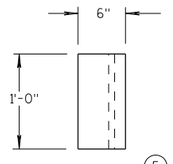


FRONT VIEW SIDE VIEW

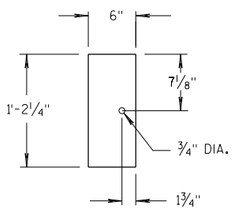
STEEL POSTS 6-17



TOP VIEW (5)

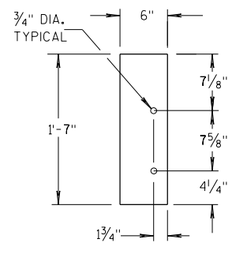


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

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

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

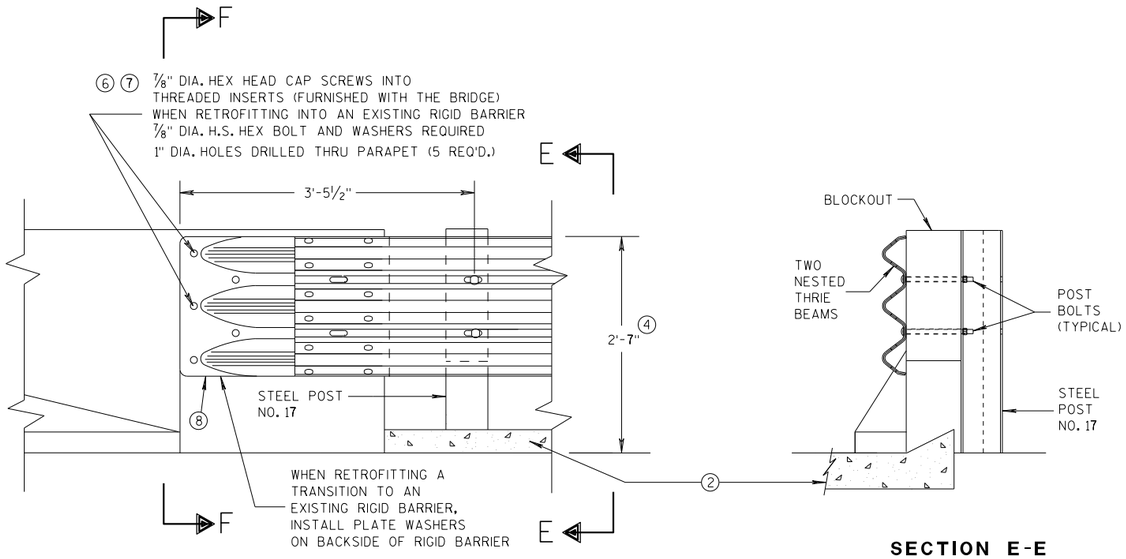
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 275

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



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

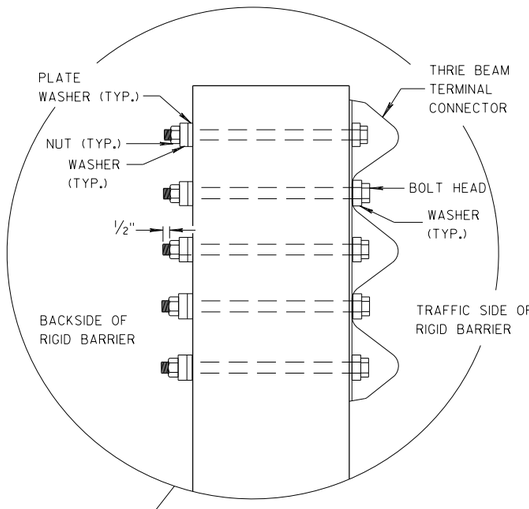
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

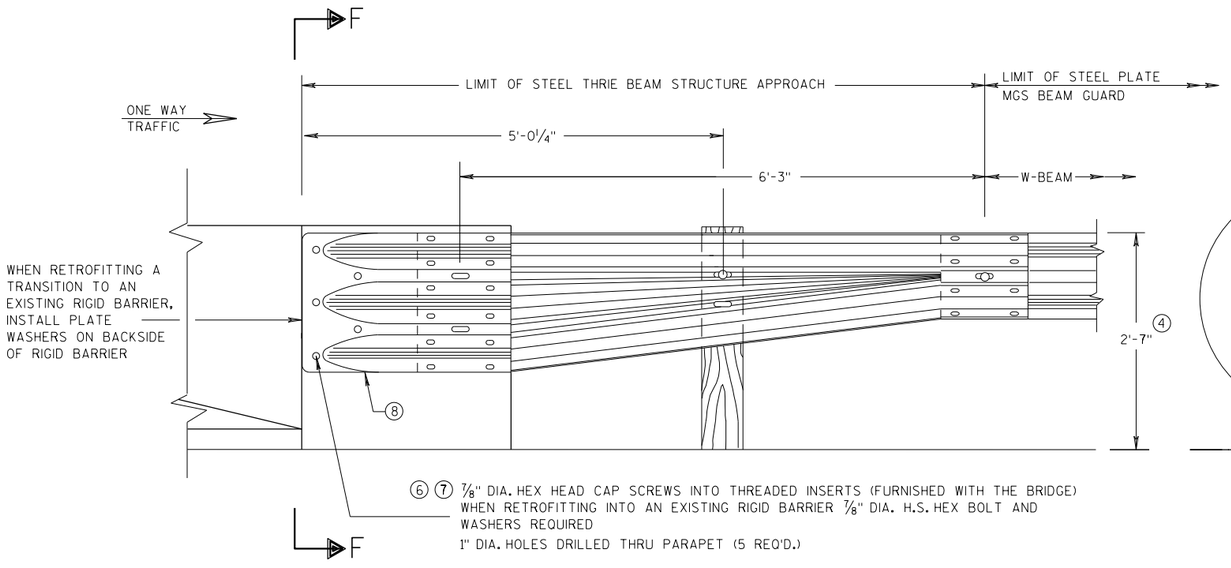
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

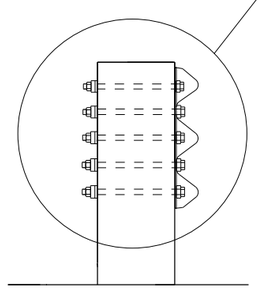
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

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

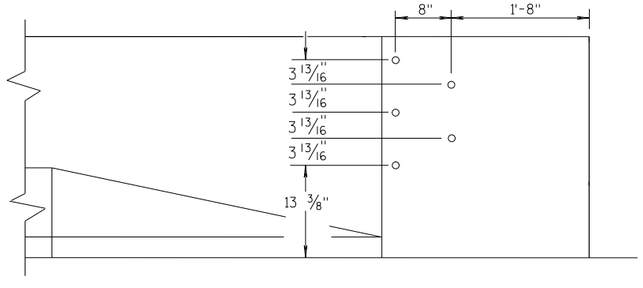




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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

6

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

GENERAL NOTES

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

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

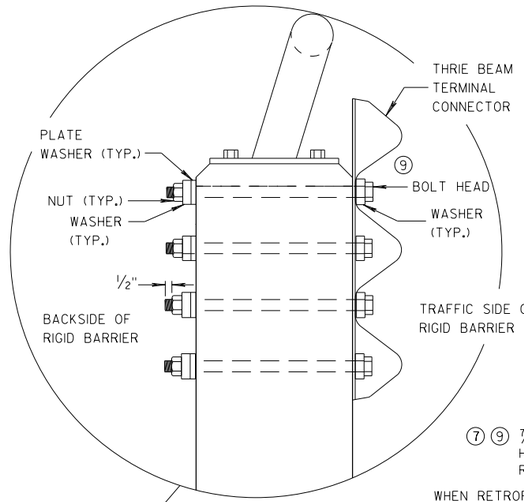
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

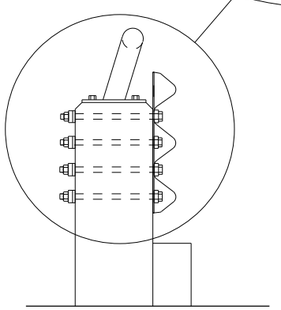
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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

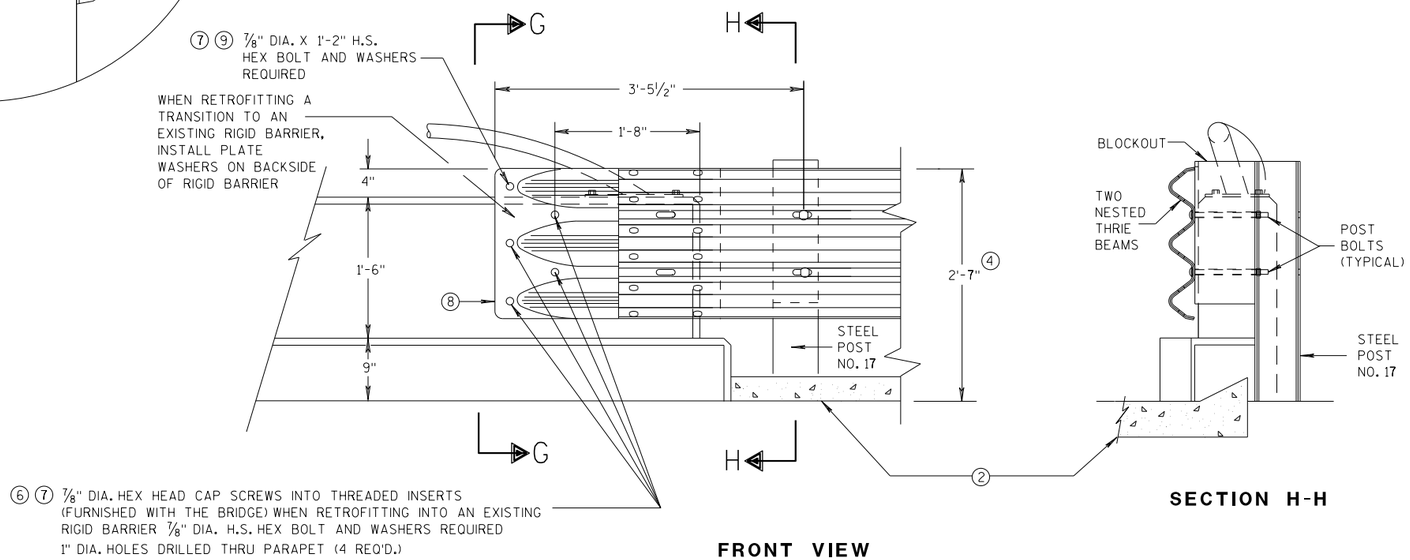
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





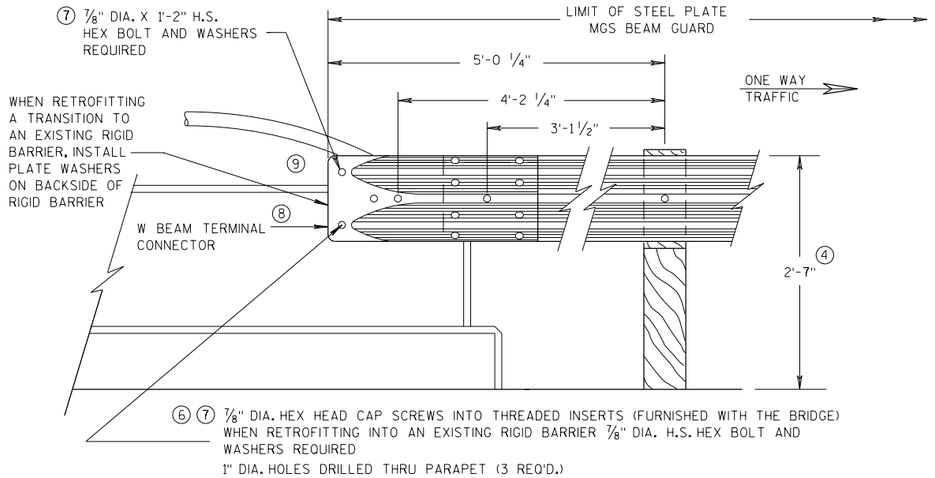
SECTION G-G



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

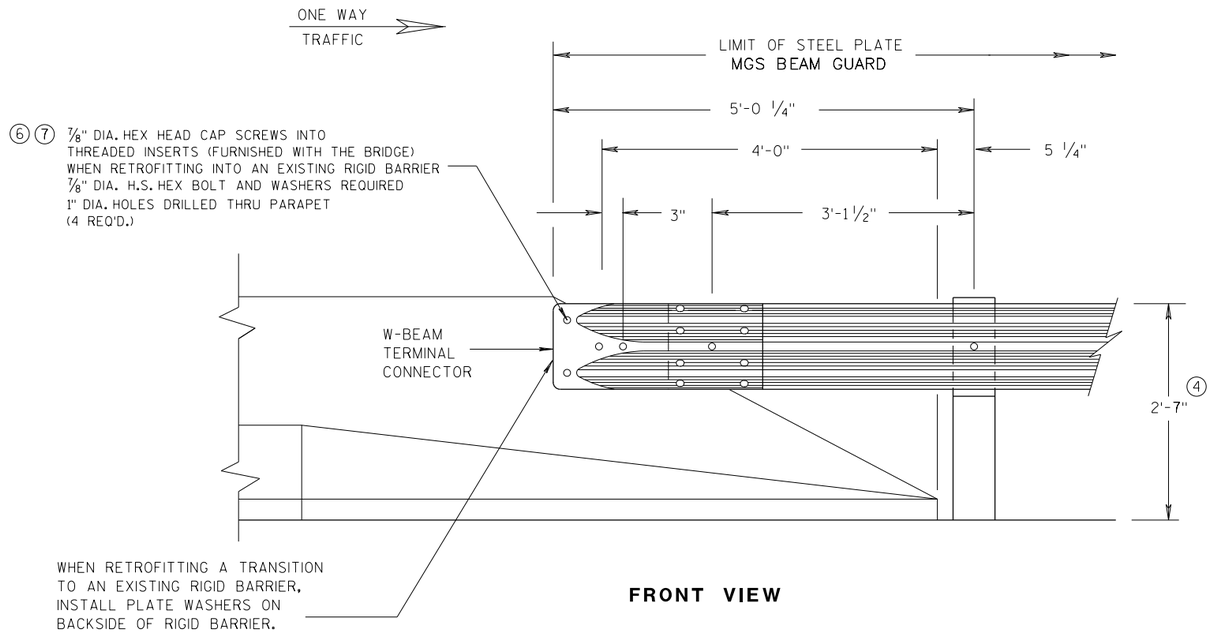
APPROVED
07/2018 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVI
FHWA

6

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

6

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



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

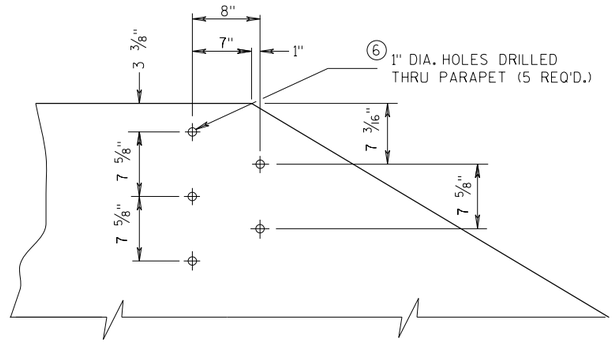
GENERAL NOTES

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

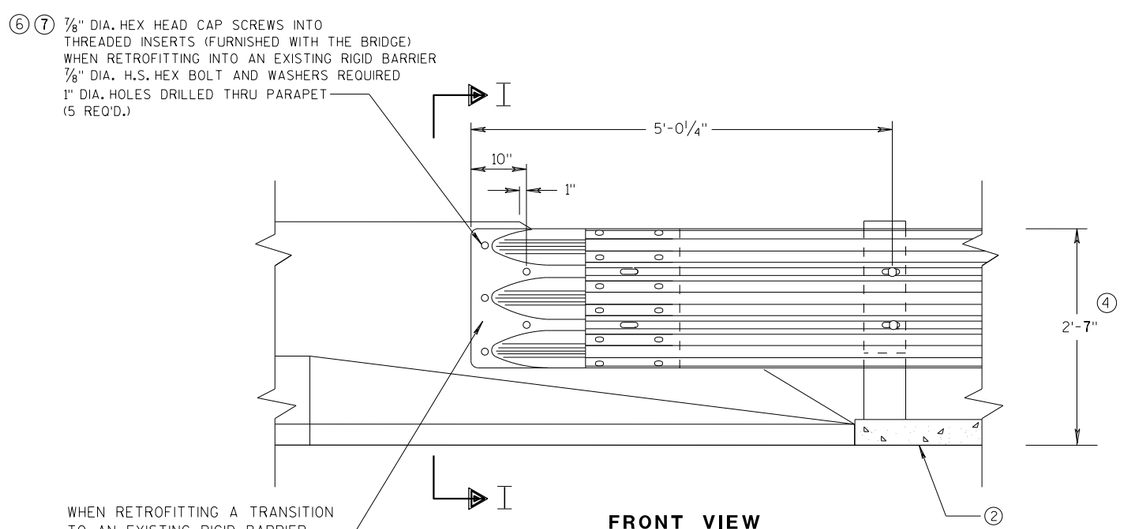
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

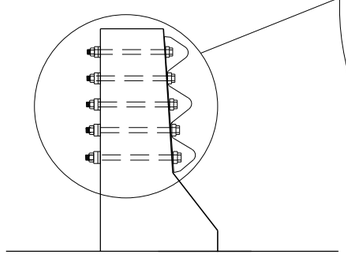
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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



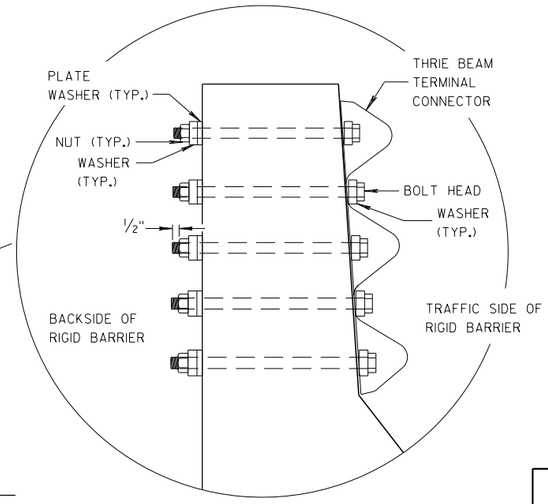
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



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

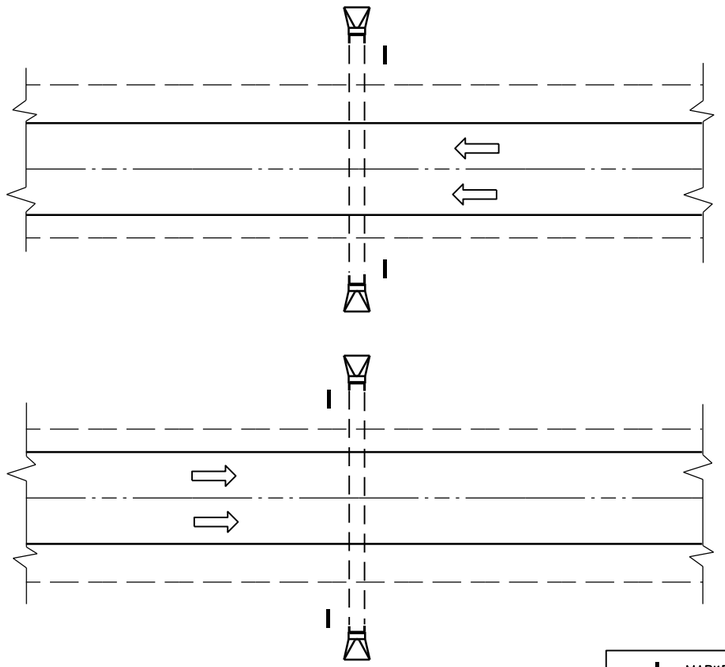
APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

6

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

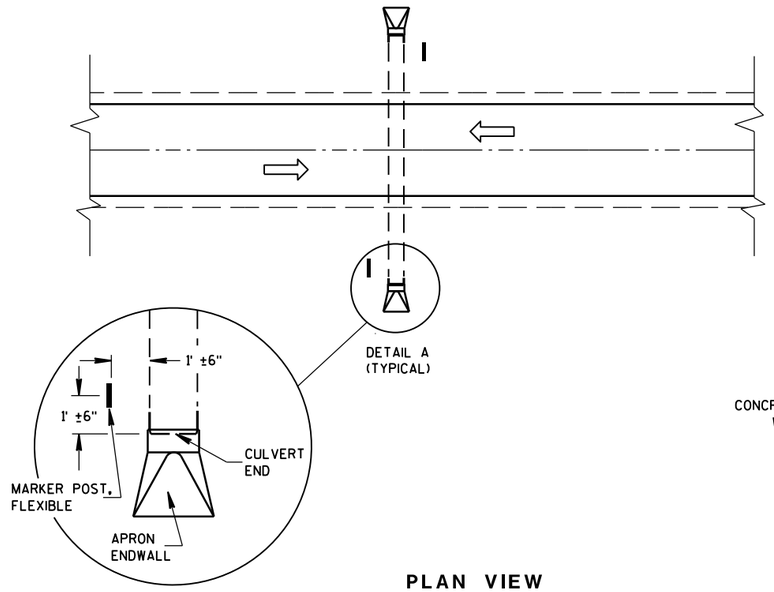
6

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



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

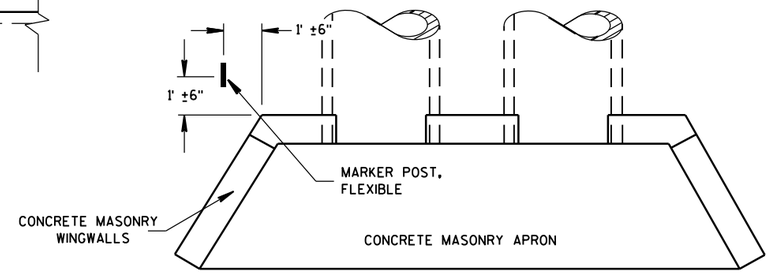
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

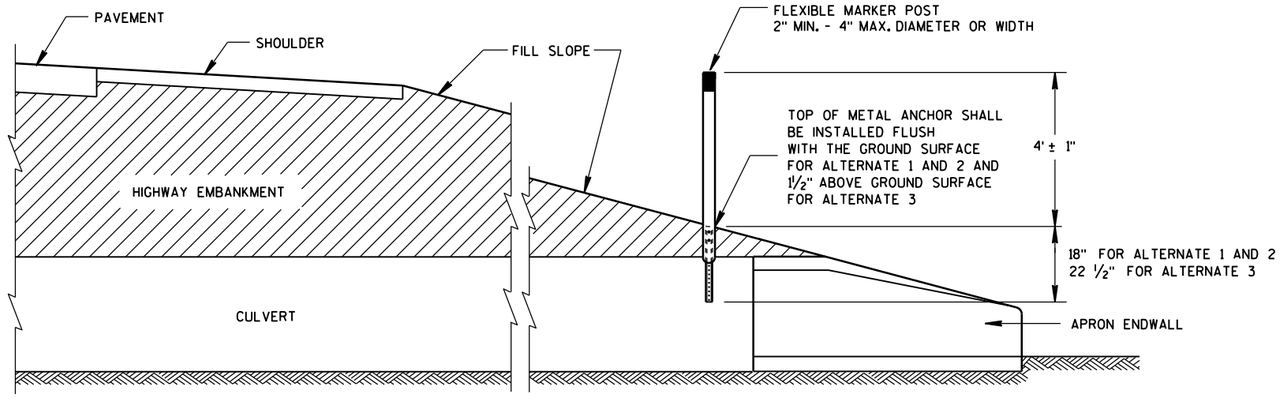
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

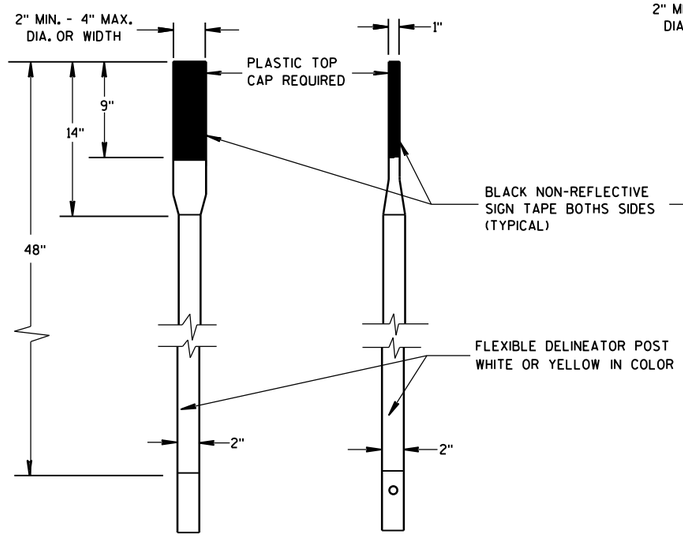
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

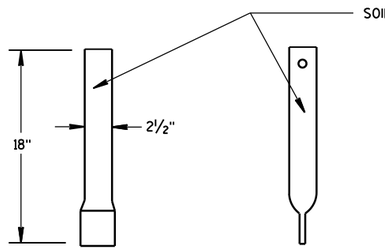
6

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

6

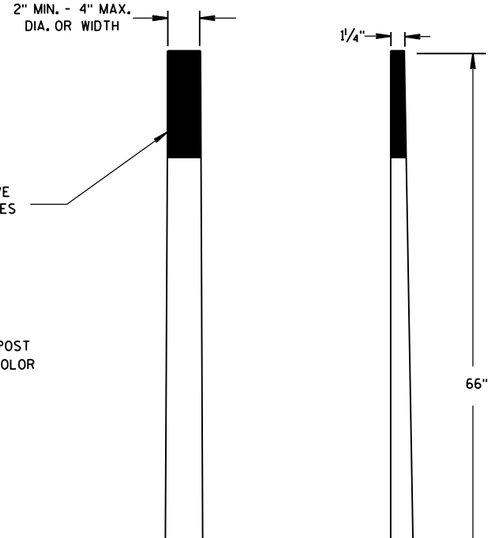
S.D.D. 15 A 3-2a





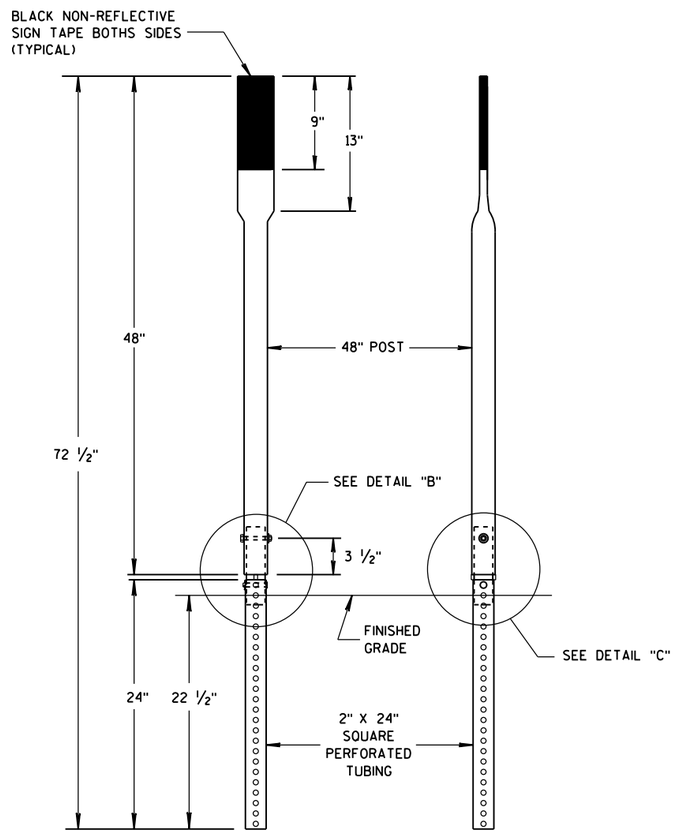
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

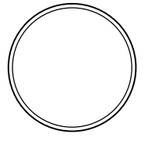
ALTERNATE 2



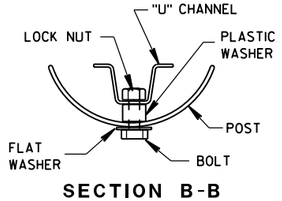
FRONT VIEW SIDE VIEW

ALTERNATE 3

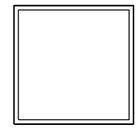
FLEXIBLE MARKER POSTS



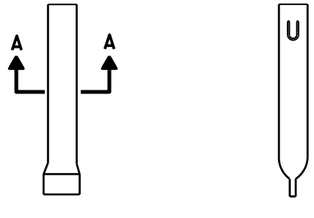
SECTION A-A



SECTION B-B

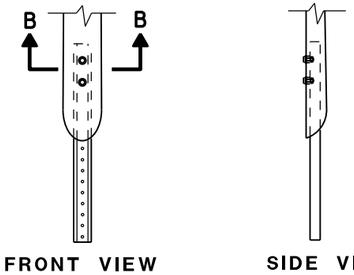


SECTION C-C



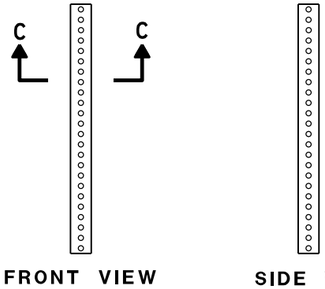
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

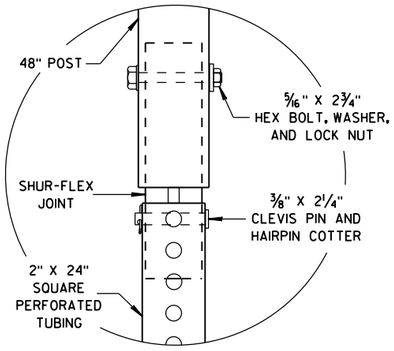
ALTERNATE 2



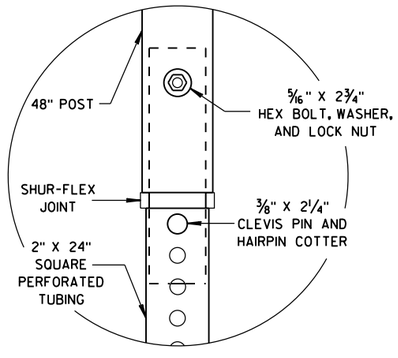
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

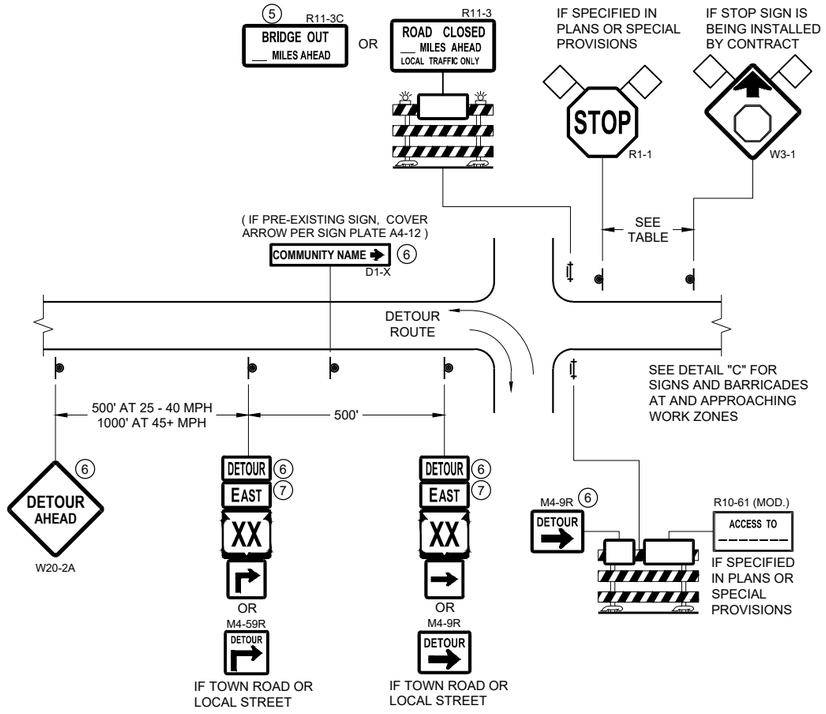
APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

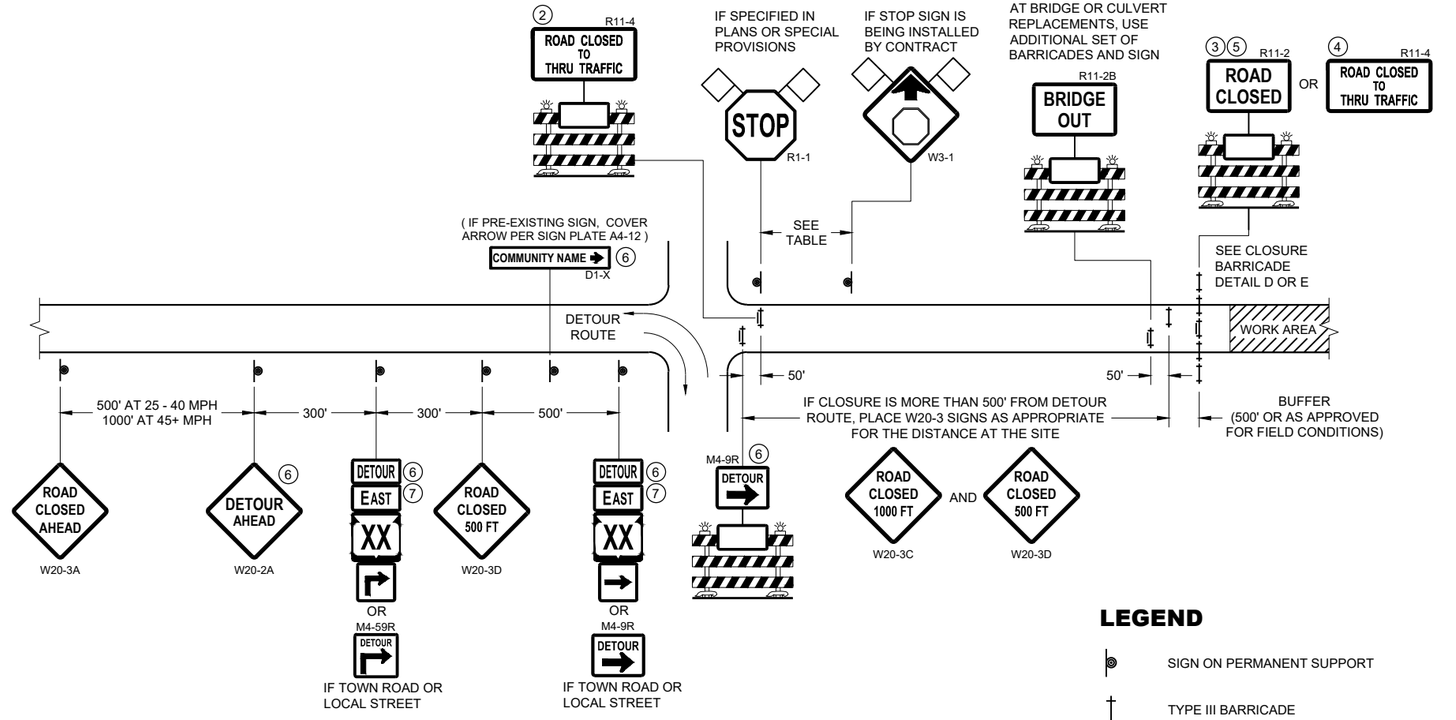
6

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

6

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





DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

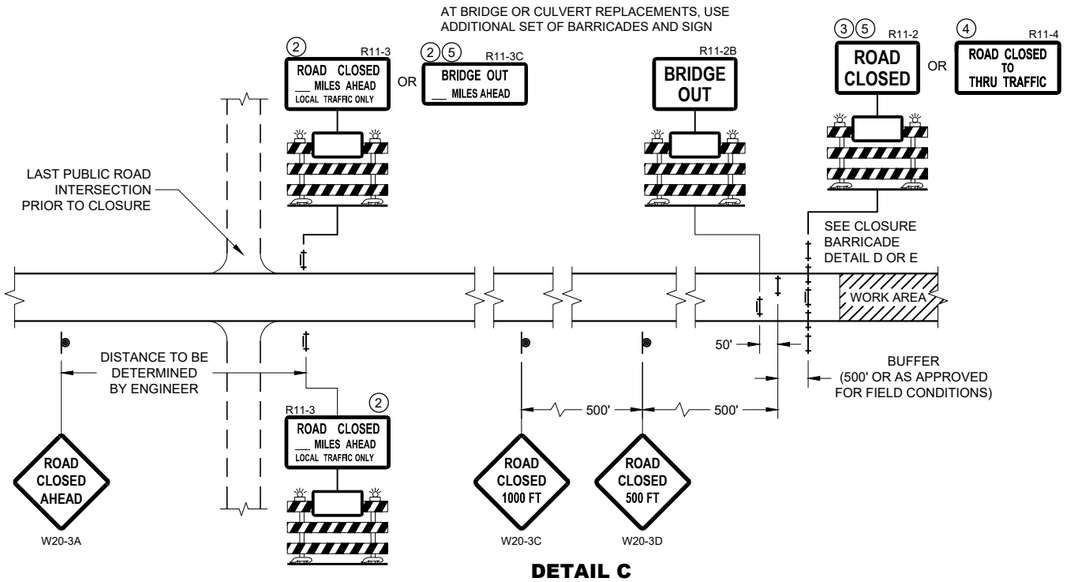
- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8

EAST M3 - X

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M06 - 1



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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

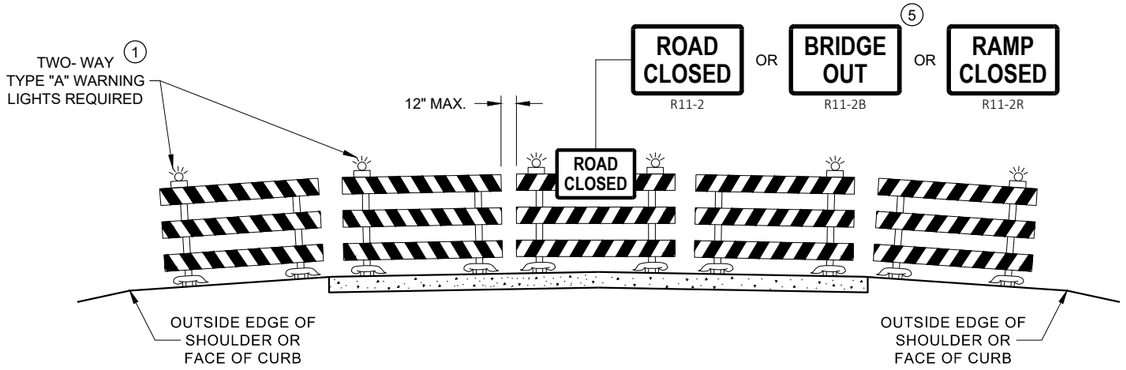
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

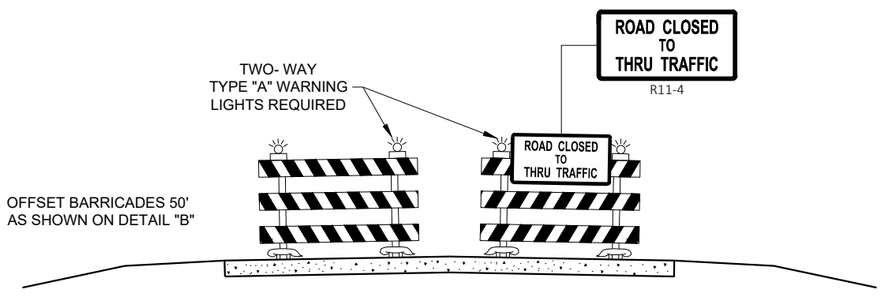
6

SDD 15C02 - 08a

SDD 15C02 - 08a



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

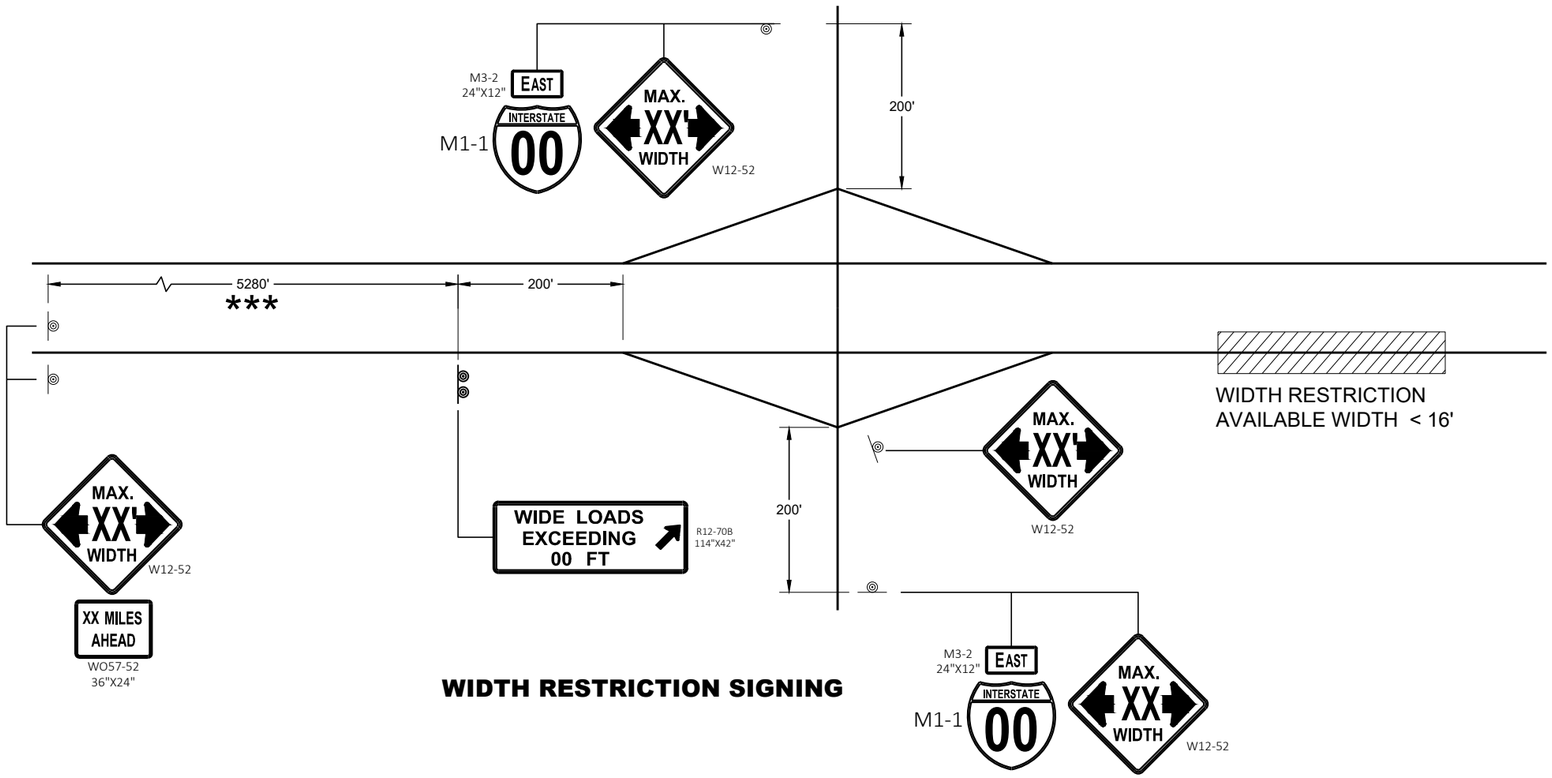
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C02 - 08b



WIDTH RESTRICTION SIGNING

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

THE SPACING BETWEEN 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.

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

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

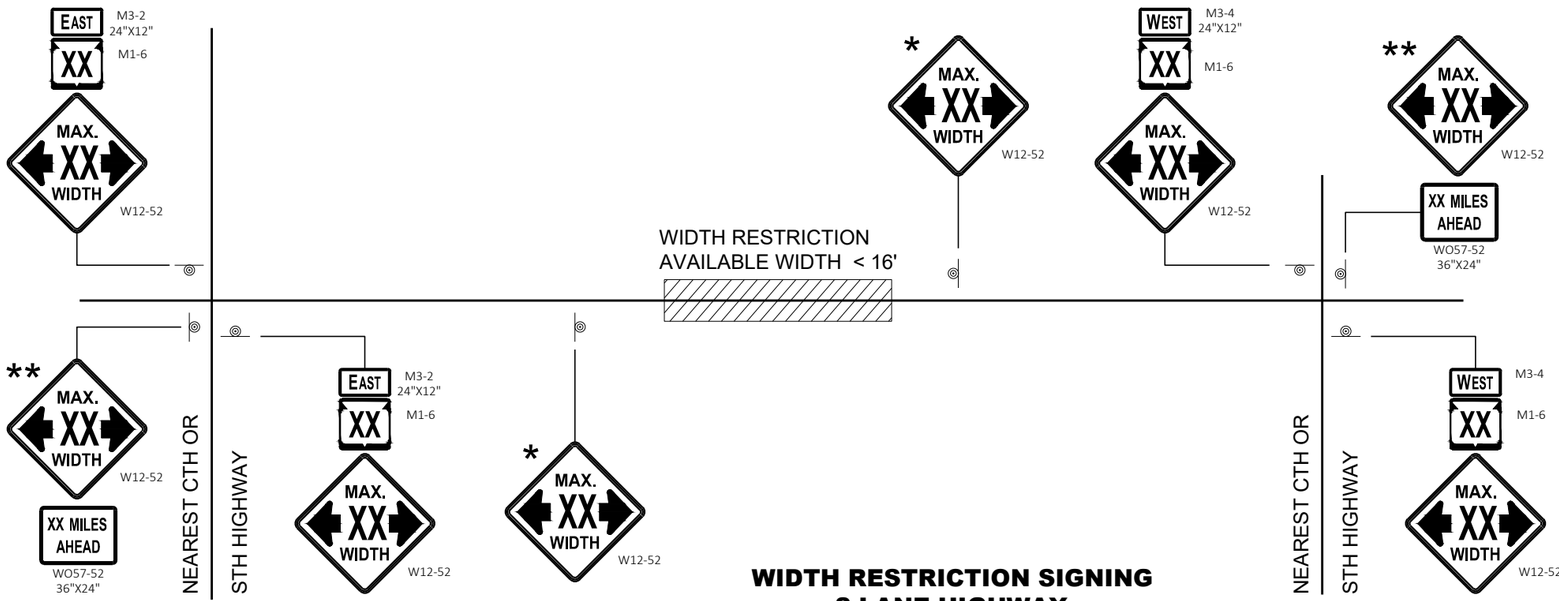
* PLACE 500 FEET BEFORE THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE 283

FHWA

6

SDD 15C02 - 08f

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.

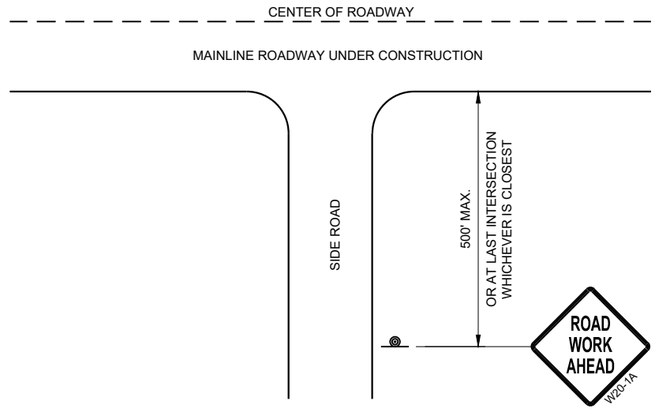
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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.



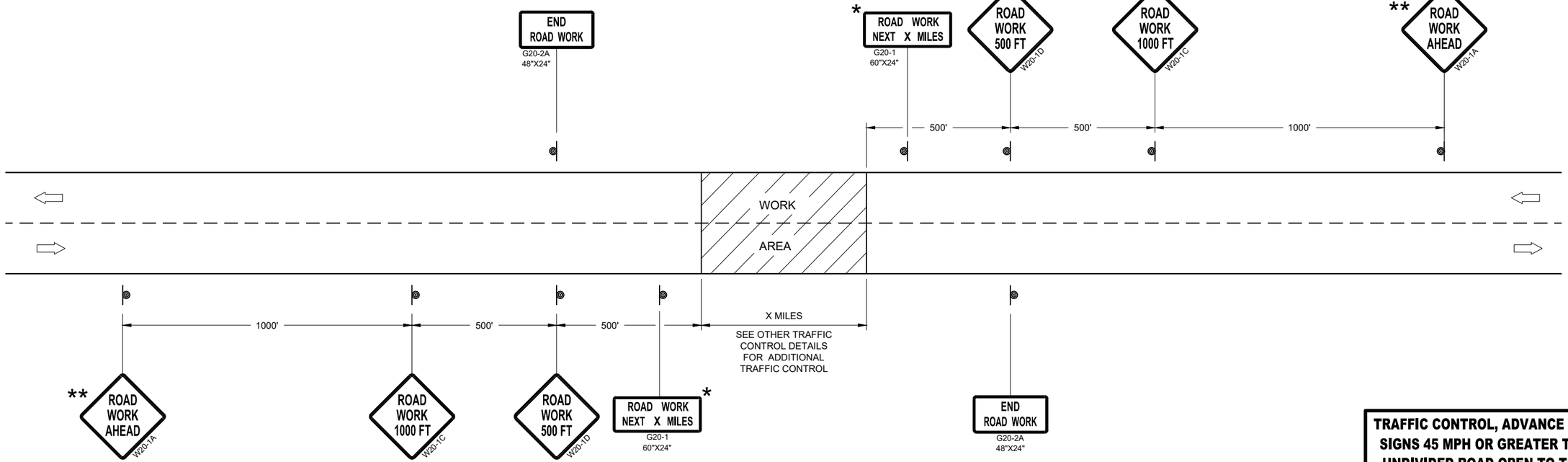
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

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 TRAFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

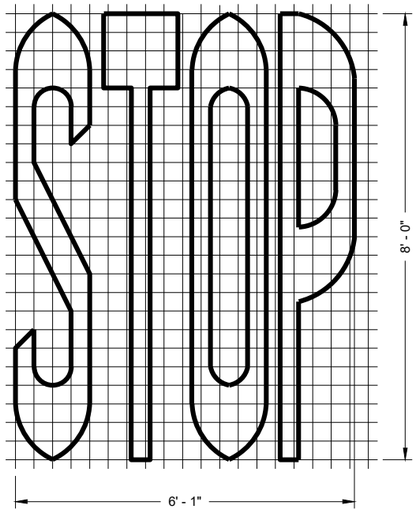
APPROVED
July 2018
DATE

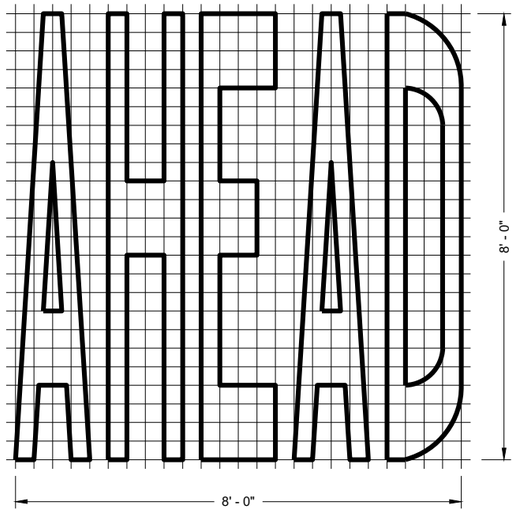
/S/ Andrew Heidtke
WORK ZONE ENGINEE

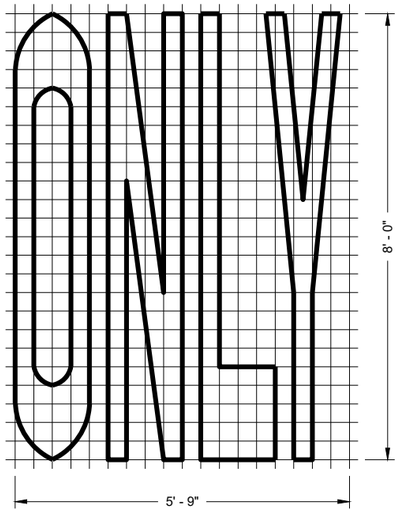
FHWA

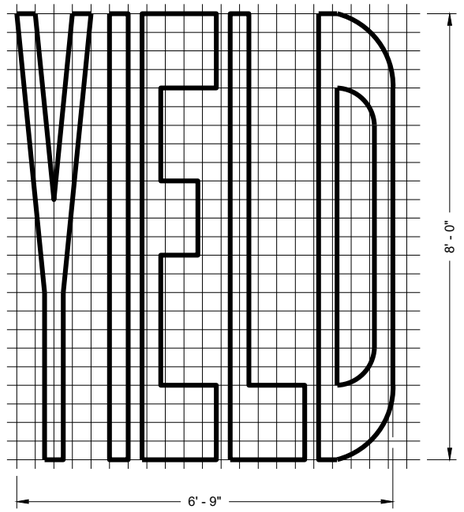
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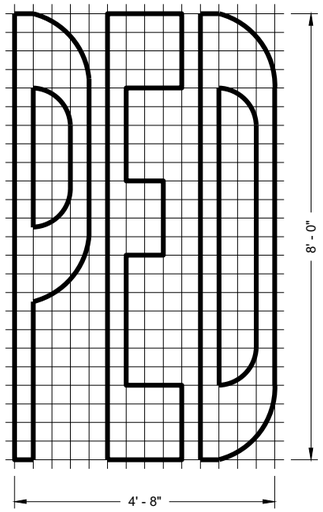
SDD 15C04 - 05

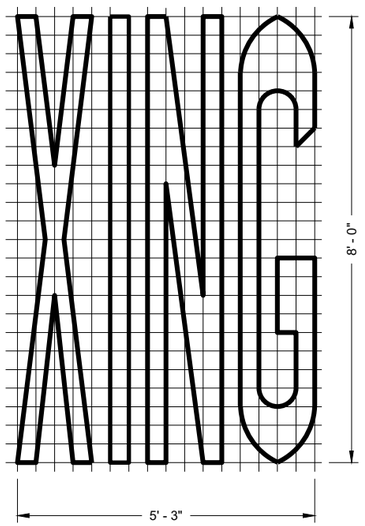


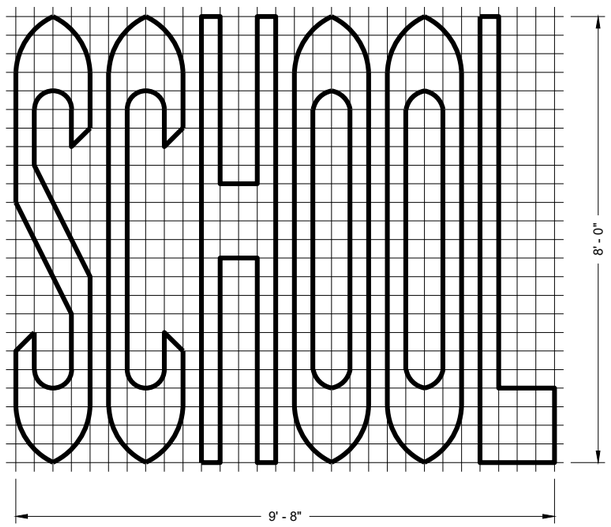




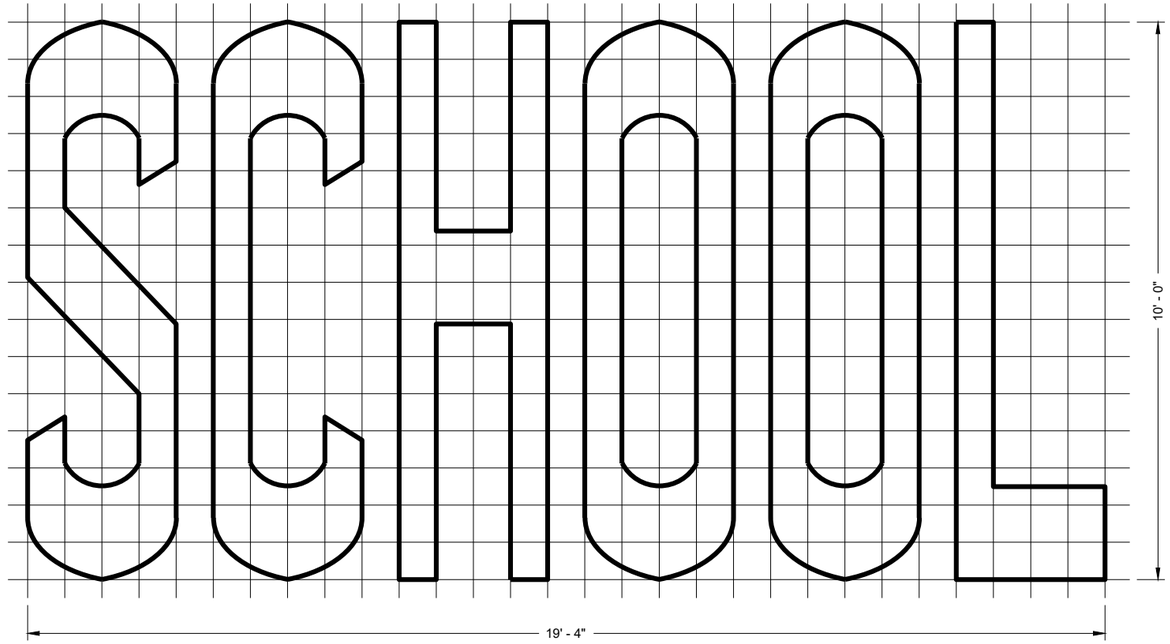








SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

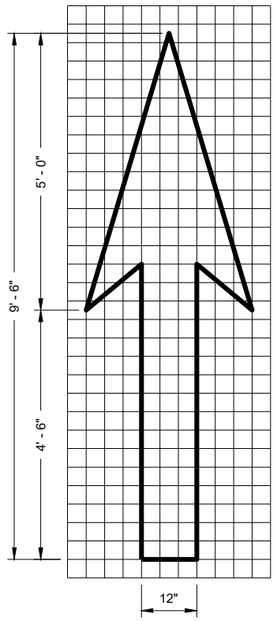
/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

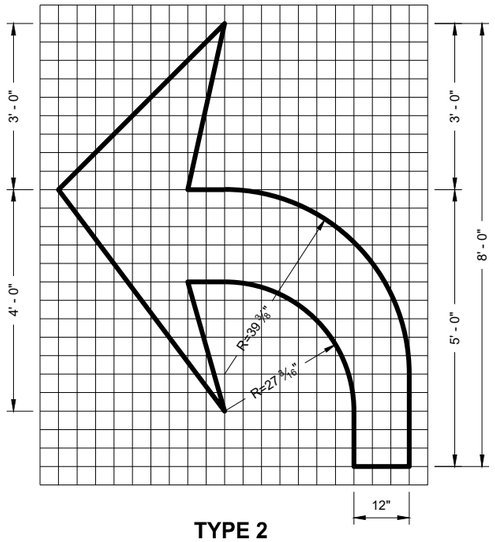
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SDD 15C07 - 15b

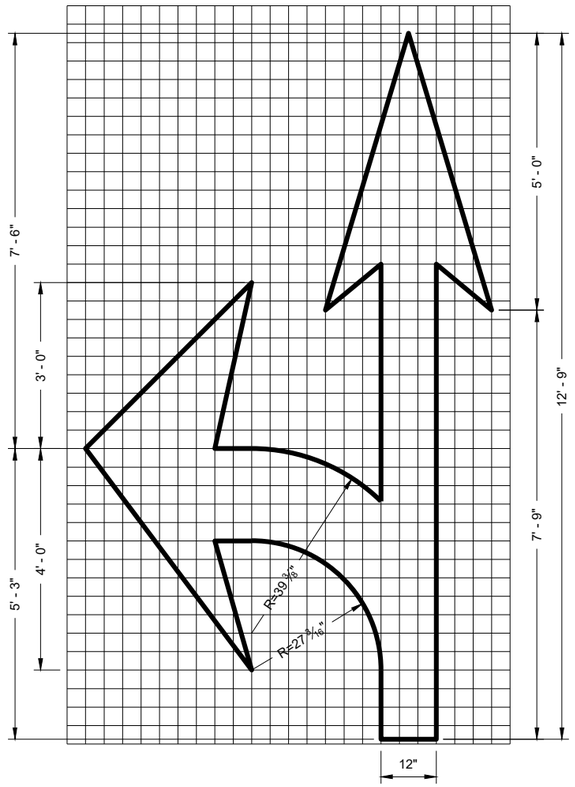
SDD 15C07 - 15b



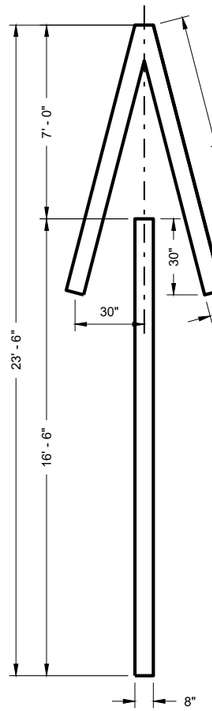
TYPE 1



TYPE 2



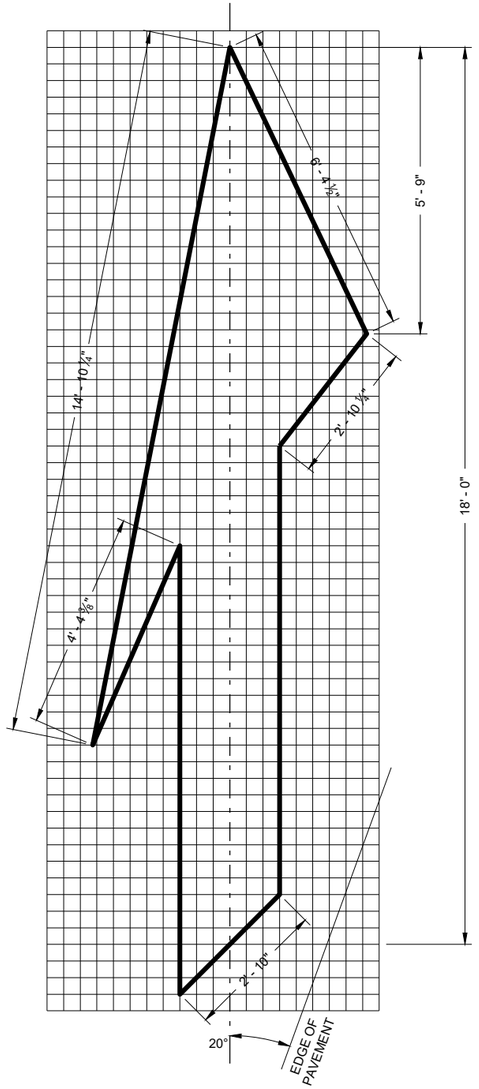
TYPE 3



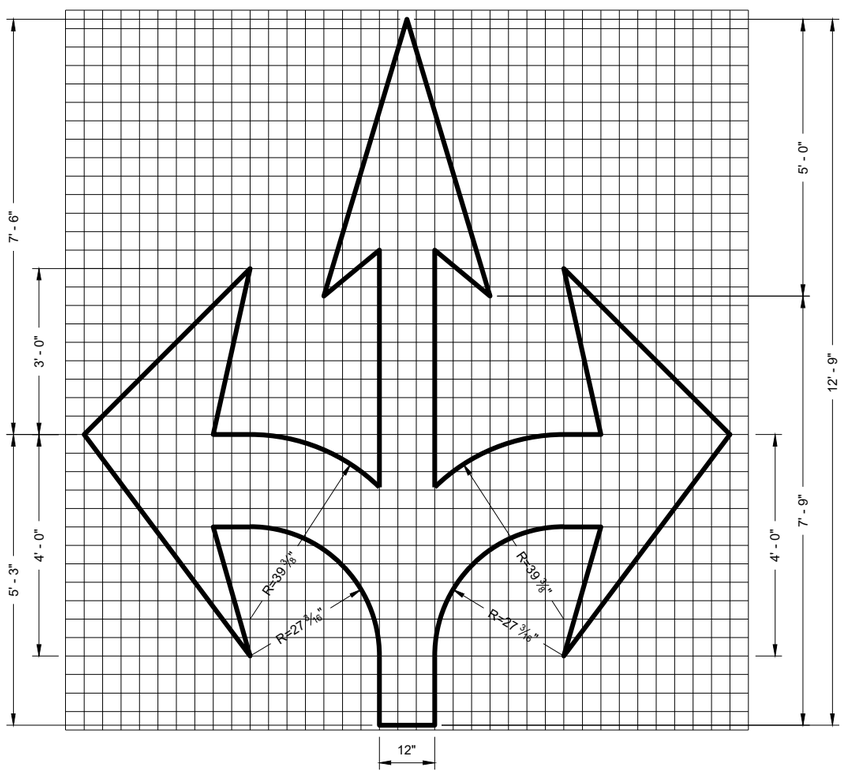
TYPE 4

GENERAL NOTES

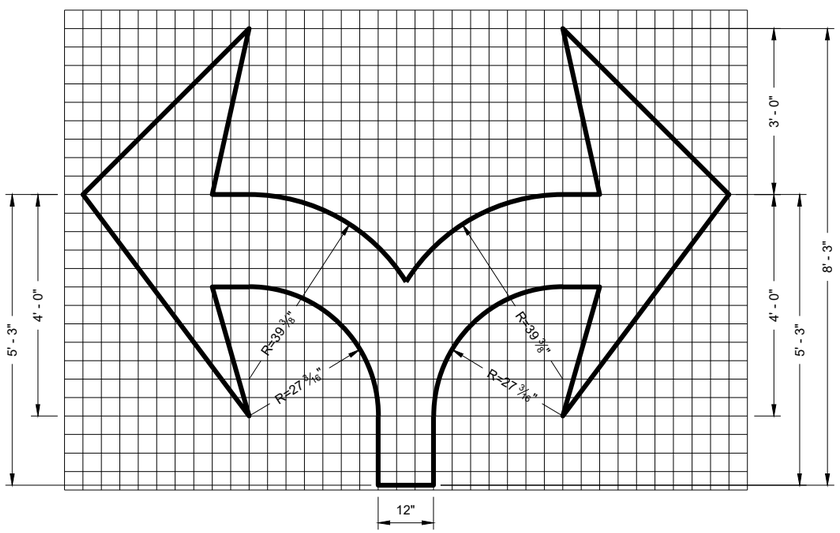
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

286

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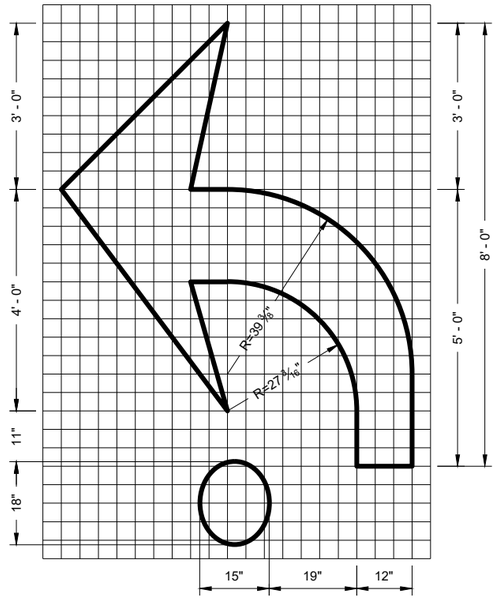
SDD 15C07 - 15c

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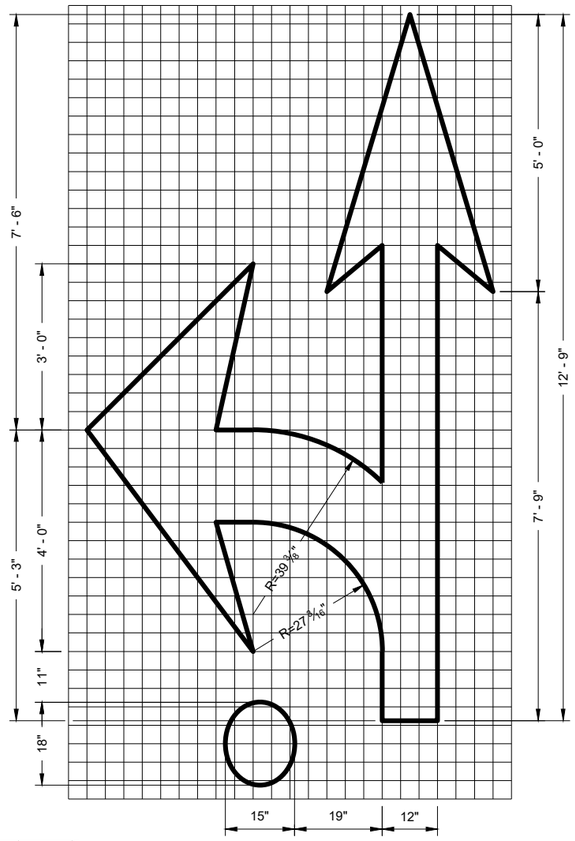
SDD 15C07 - 15c

GENERAL NOTES

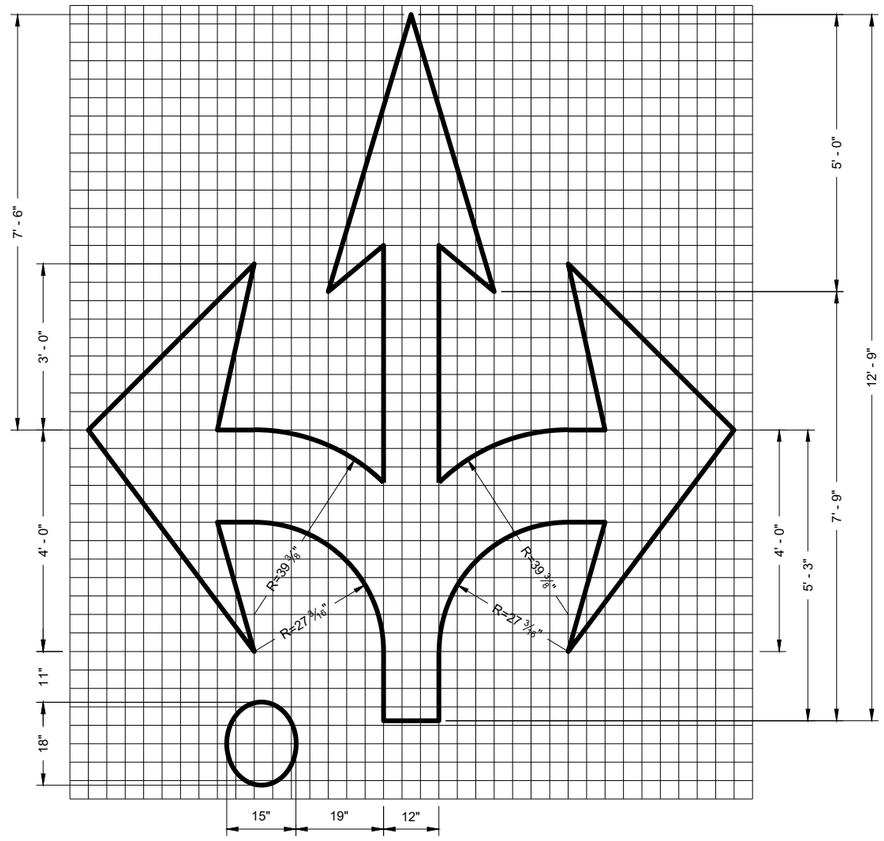
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



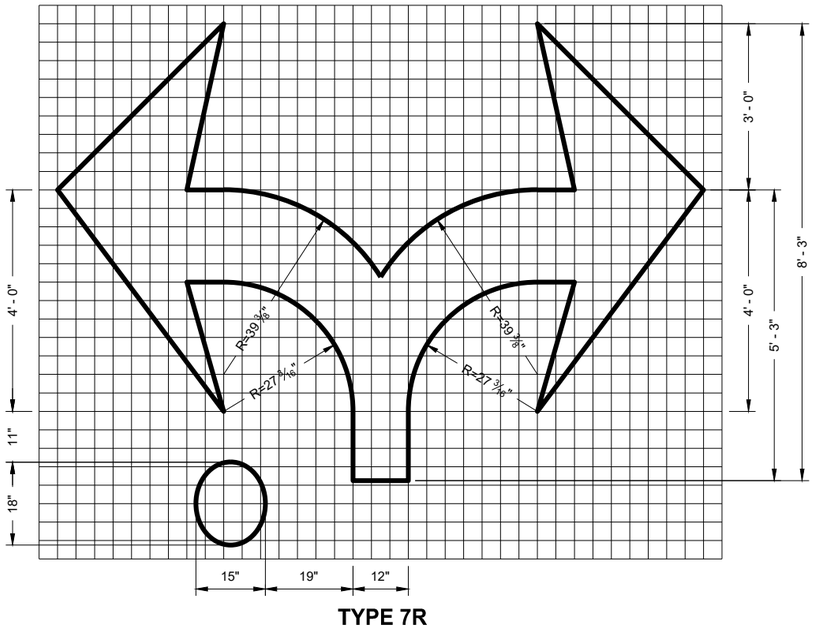
TYPE 2R



TYPE 3R



TYPE 6R



TYPE 7R

ROUNDABOUT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

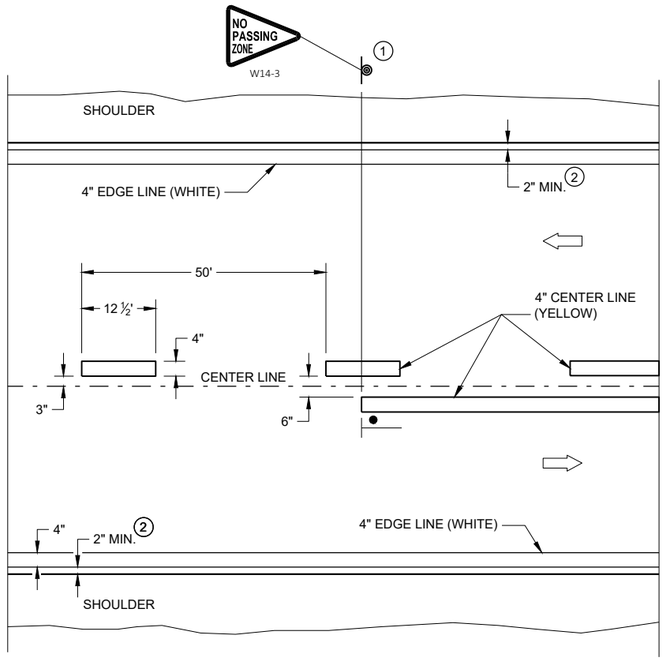
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

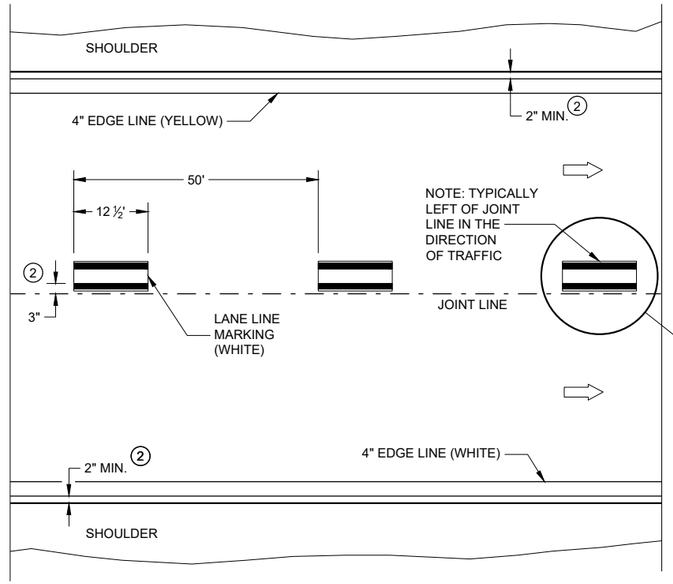
FHWA

SDD 15C07 - 15d

SDD15C07 - 15d

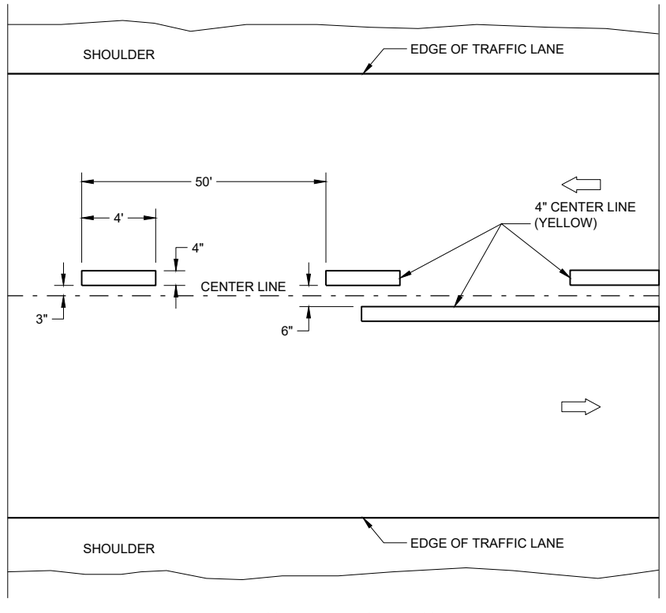


TWO WAY TRAFFIC

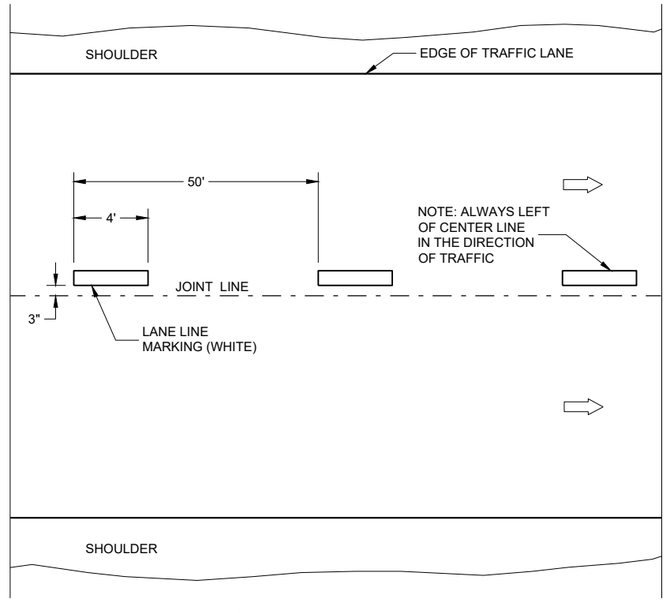


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

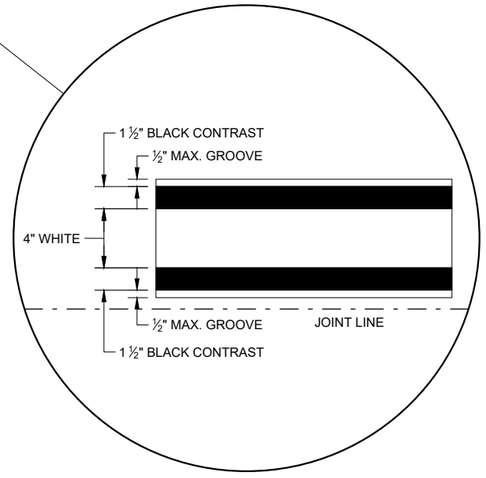
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

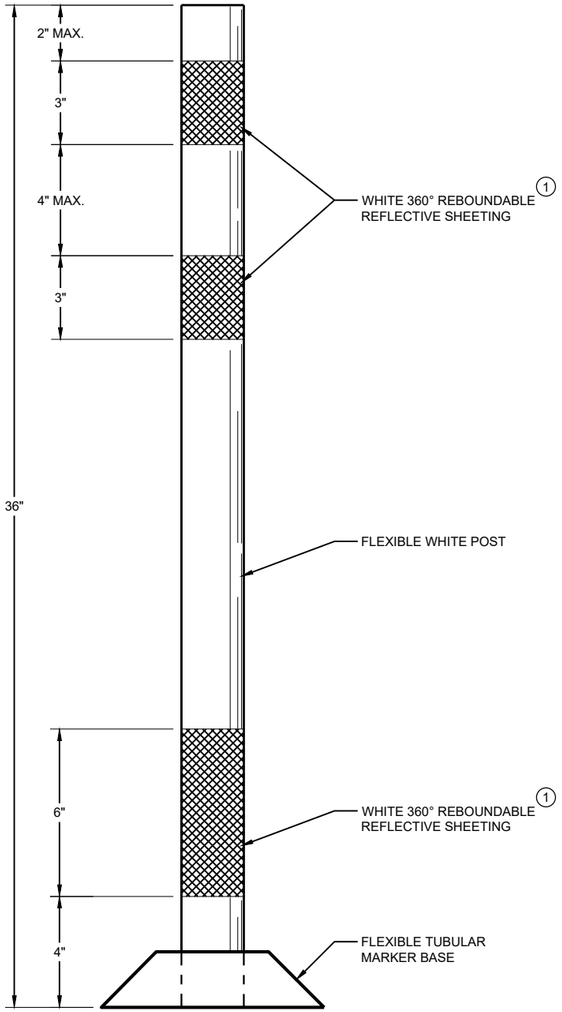
APPROVED
February 2020
DATE

/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

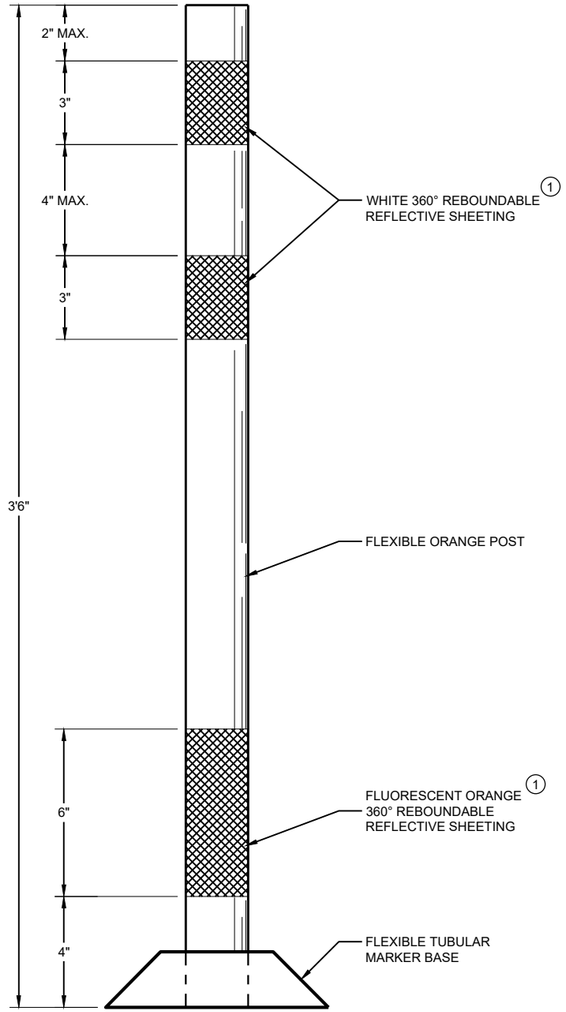
FHWA

SDD 15C08 - 20a

SDD 15C08 - 20a



FLEXIBLE TUBULAR MARKER POST PERMANENT CROSSOVER



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.

6

SDD 15C11 - 07a

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

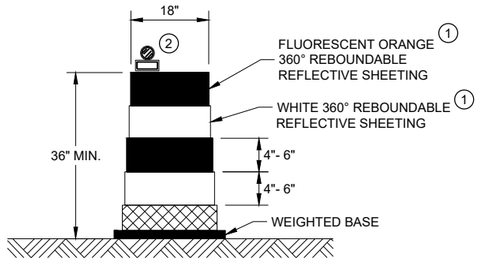
FHWA

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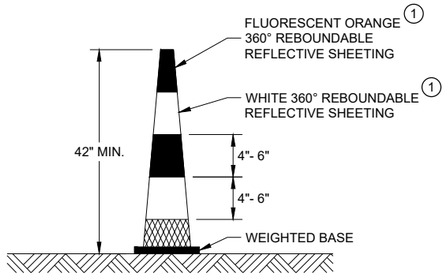
SDD 15C11 - 07a

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.

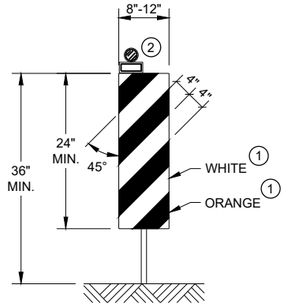


DRUM



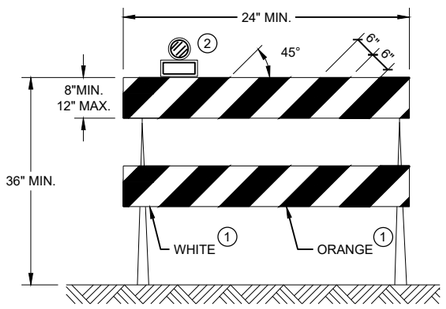
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



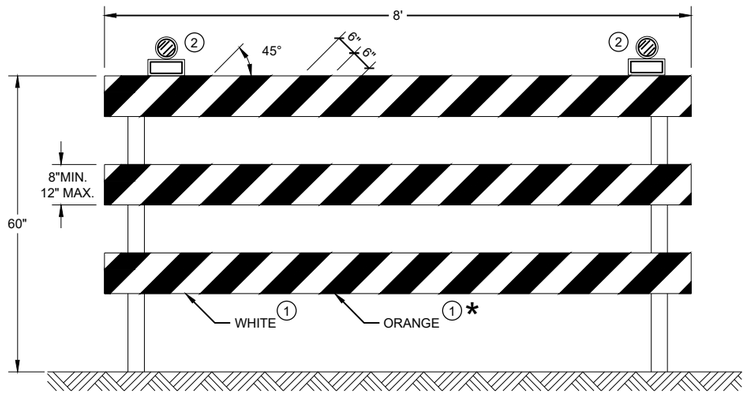
VERTICAL PANEL

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
June 2017 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C11 - 07b

6

SDD 15C11 - 07b

LEGEND

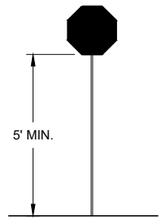
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

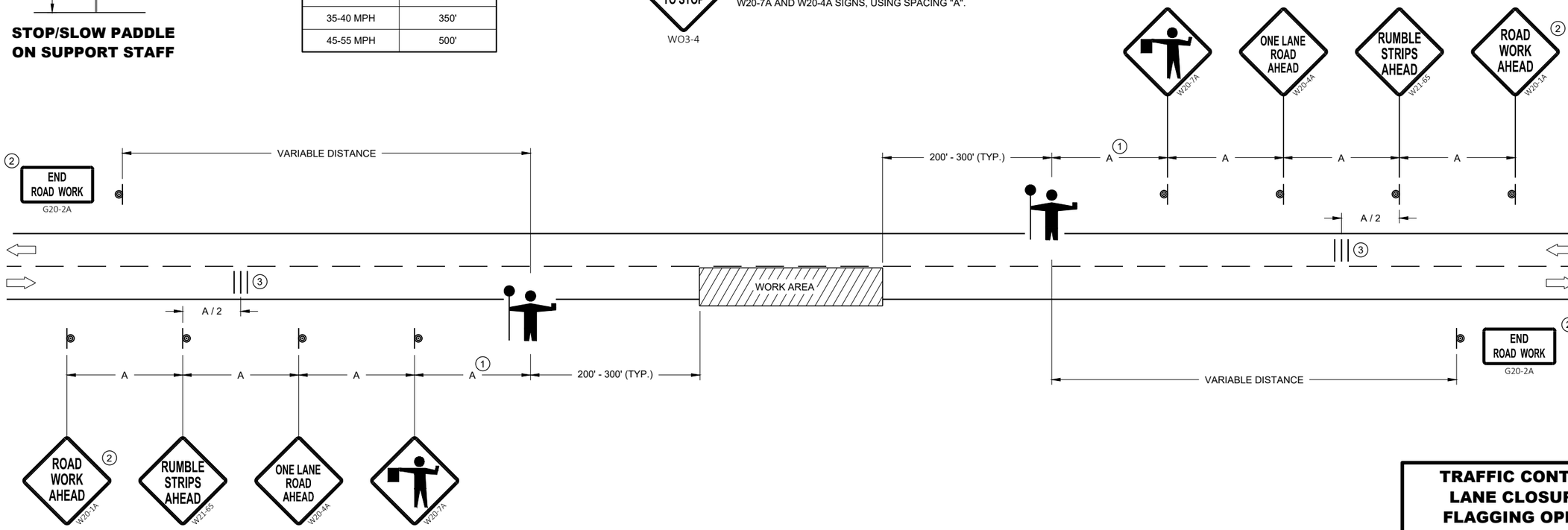
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

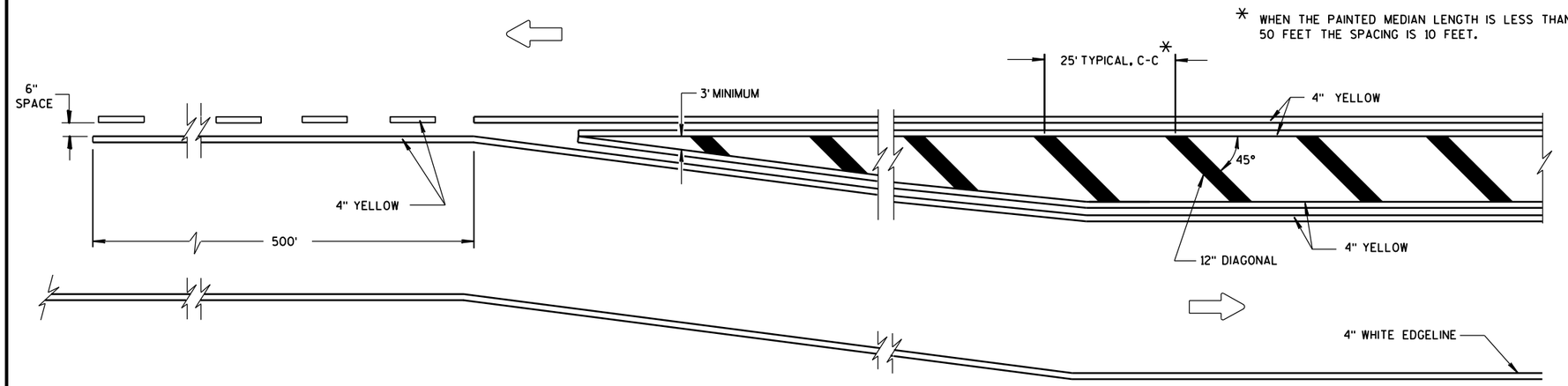
APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C12 - 07

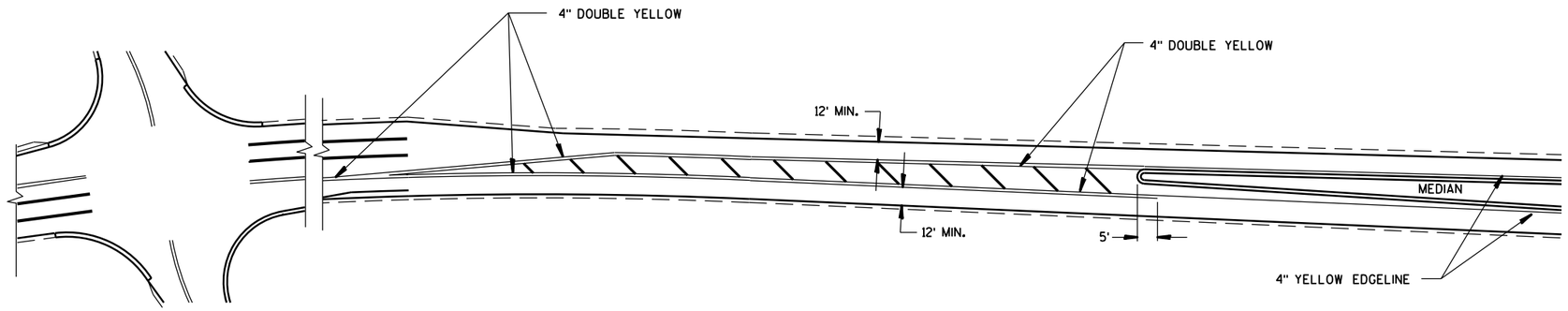


MEDIAN ISLAND DETAIL

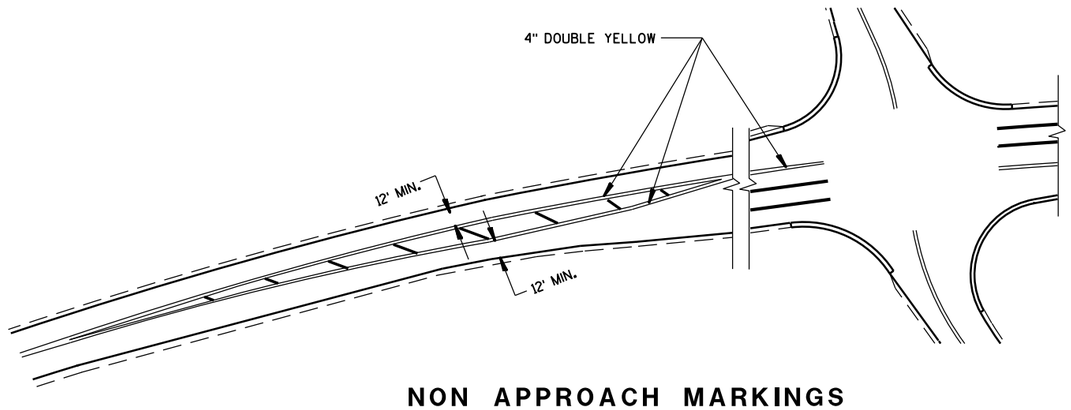
GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE FHWA	/S/ Matthew Rauch STATE SIGNING AND MARK 292 EER

6

S.D.D. 15 C 18-4

6

S.D.D. 15 C 18-4

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

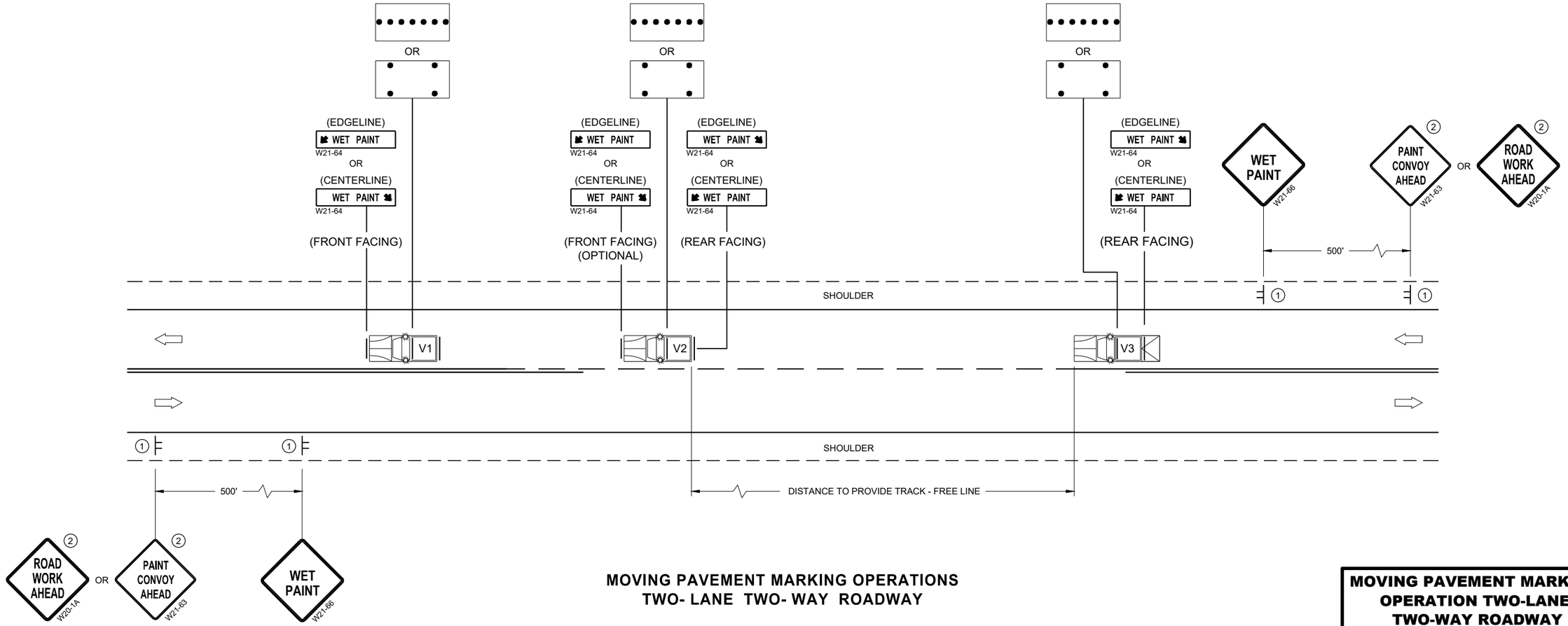
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

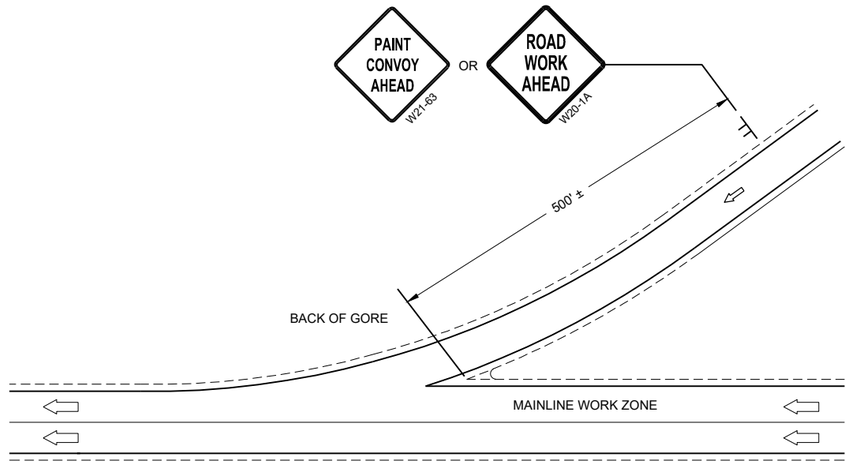
SDD 15C19 - 06a

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SDD 15C19 - 06a

LEGEND

- V1 MARKING VEHICLE
- V2 SHADOW VEHICLE
- V3 TRAIL VEHICLE
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)



GENERAL NOTES

ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.

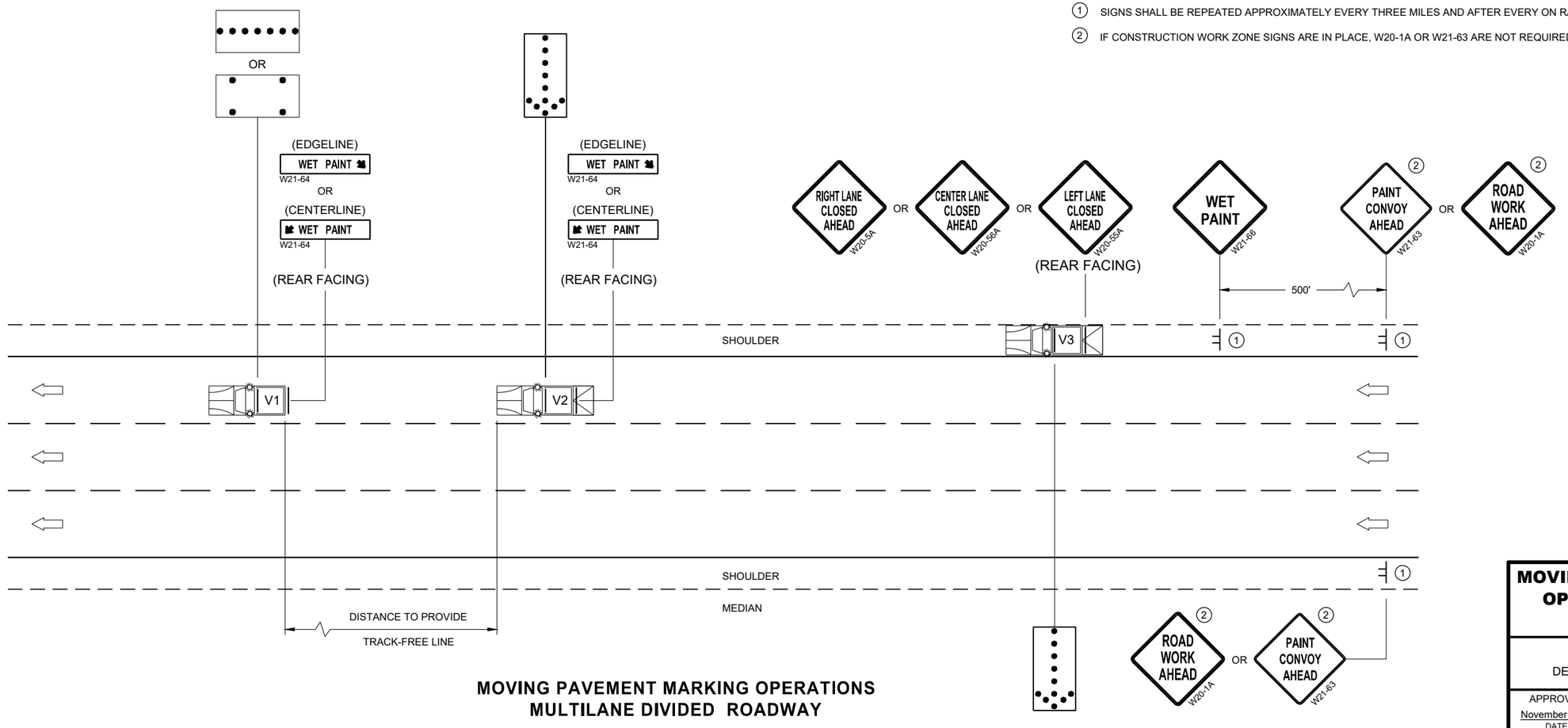
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM HEIGHT OF 18" FOR WET PAVEMENT MARKINGS

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY ON RAMP.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

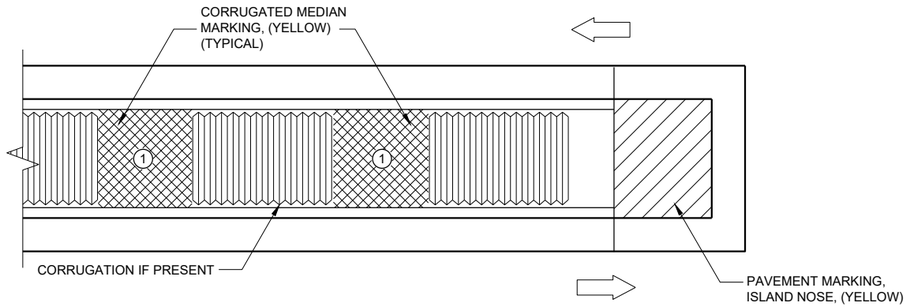
FHWA

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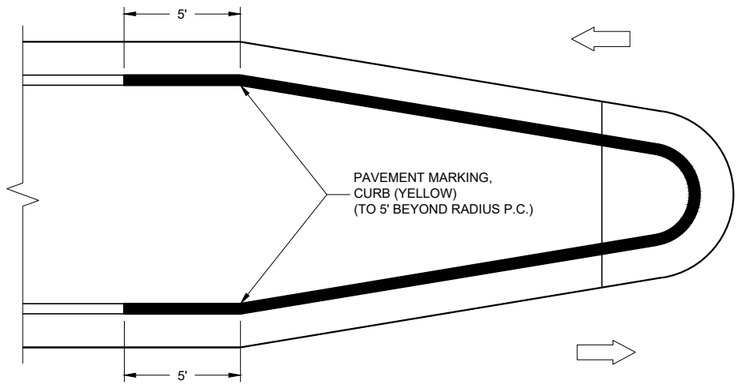
SDD 15C19 - 06c

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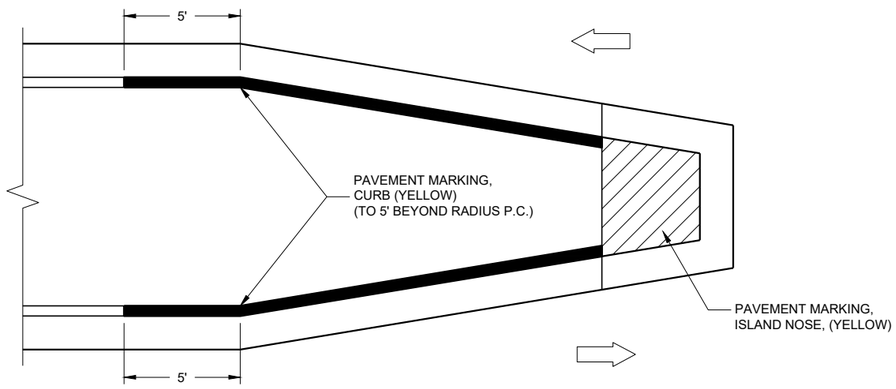
SDD 15C19 - 06c



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

**PAVEMENT MARKINGS
(ISLANDS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF
ENGINEER

FHWA

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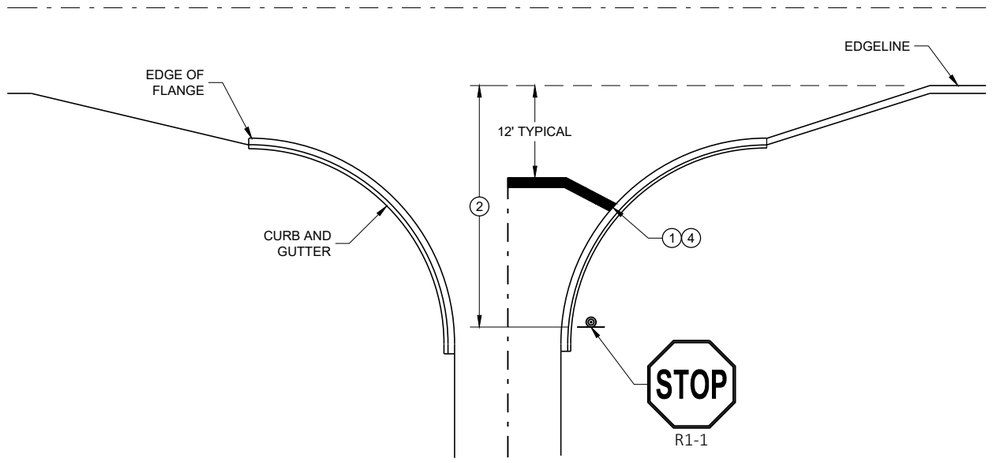
SDD 15C27 - 03b

SDD15C27 - 03b

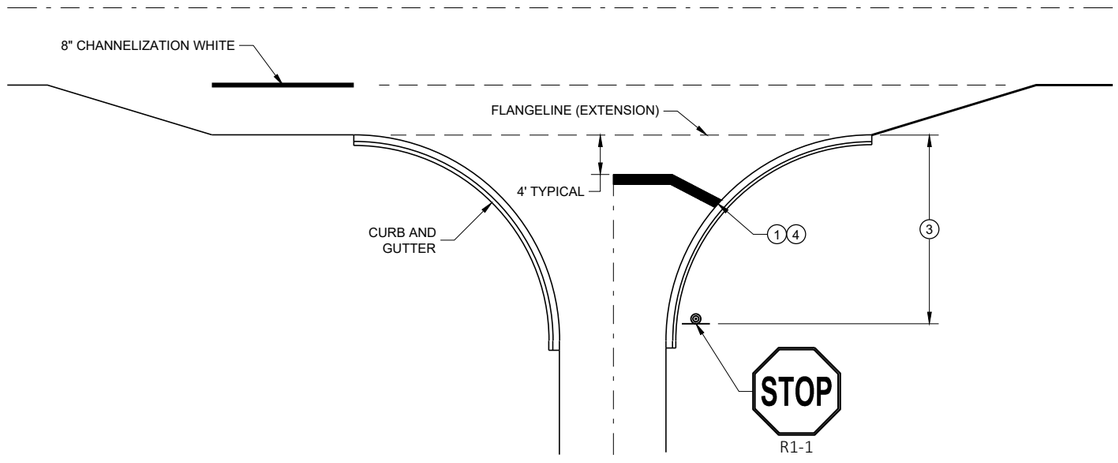
GENERAL NOTES

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

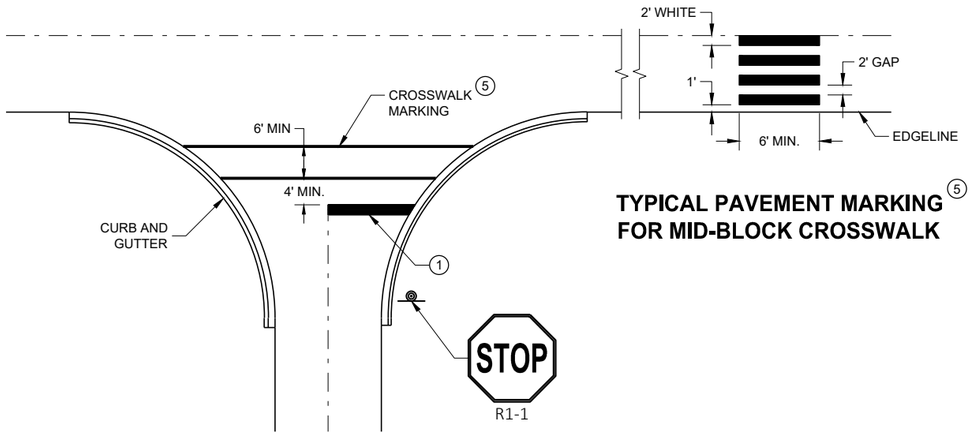
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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 INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

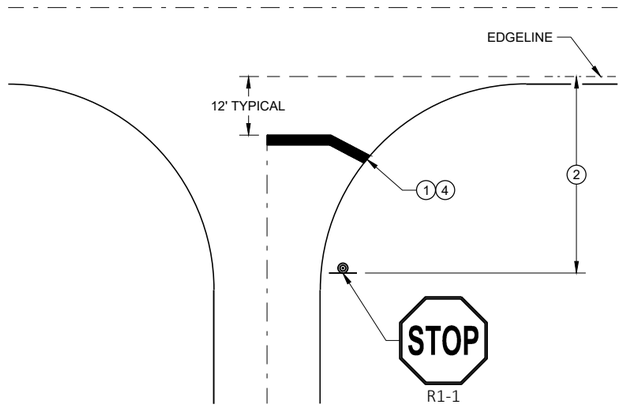


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS 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
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C33 - 04

LEGEND

SIGN ON PERMANENT SUPPORT

DELINEATOR, FLEXIBLE/TUBULAR MARKER

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50 FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4 INCH DOUBLE YELLOW.



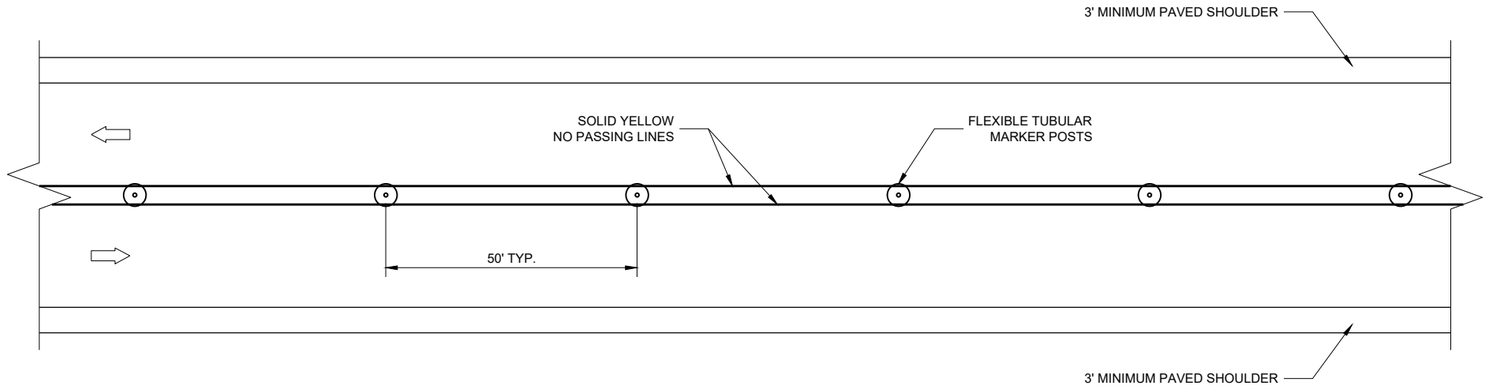
(1)



(2)

(1) THE WO6-3 AND WO57-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND / OR 500 FEET BEYOND ANY SIDE ROAD. THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE WO6-3 AND THE WO57-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN THE SIGNS.

(2) CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"



TWO LANE, TWO WAY OPERATION

TRAFFIC CONTROL
TWO LANE TWO WAY
OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
STATE TRAFFIC ENGINEER O 297

FHWA

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

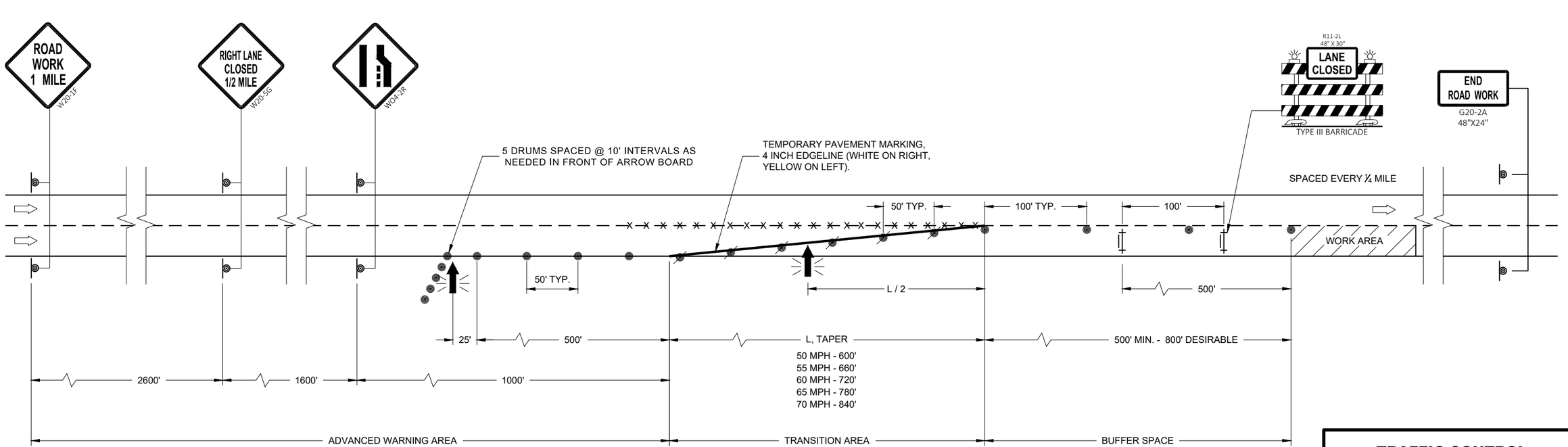
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



6

SDD 15D12 - 09a

TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D12 - 09a

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

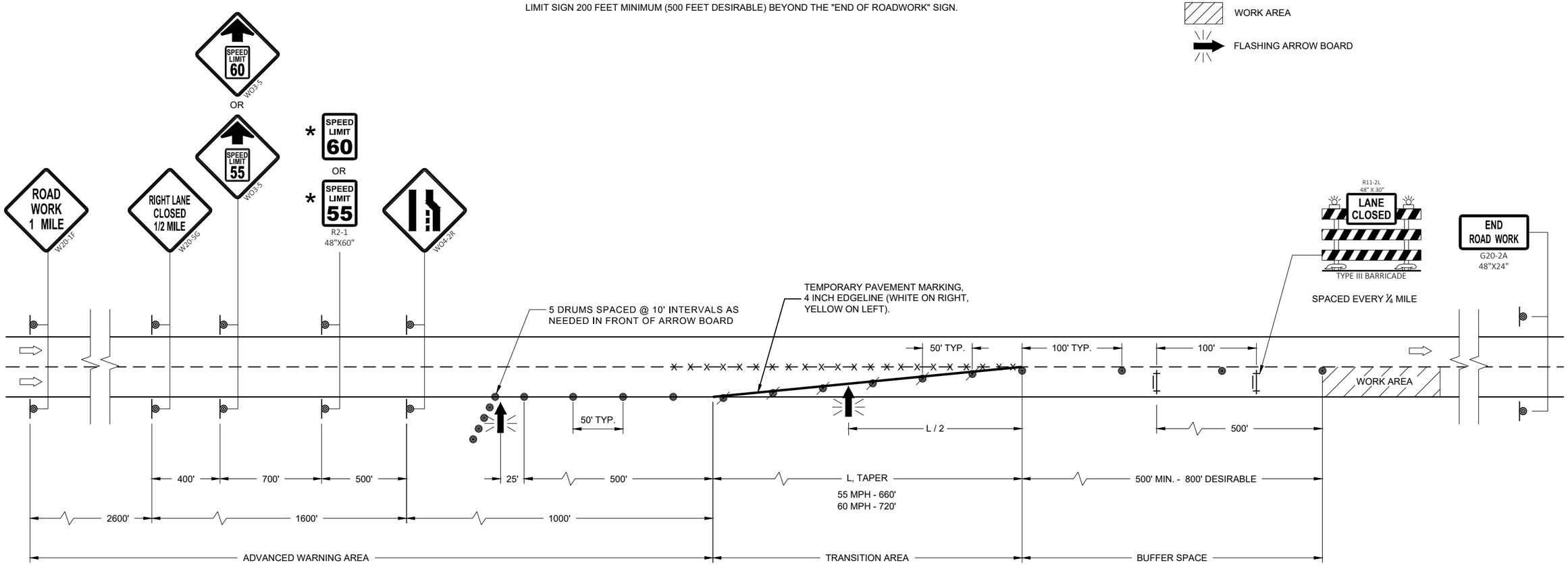
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D12 - 09b

6
SDD 15D12 - 09b

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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.

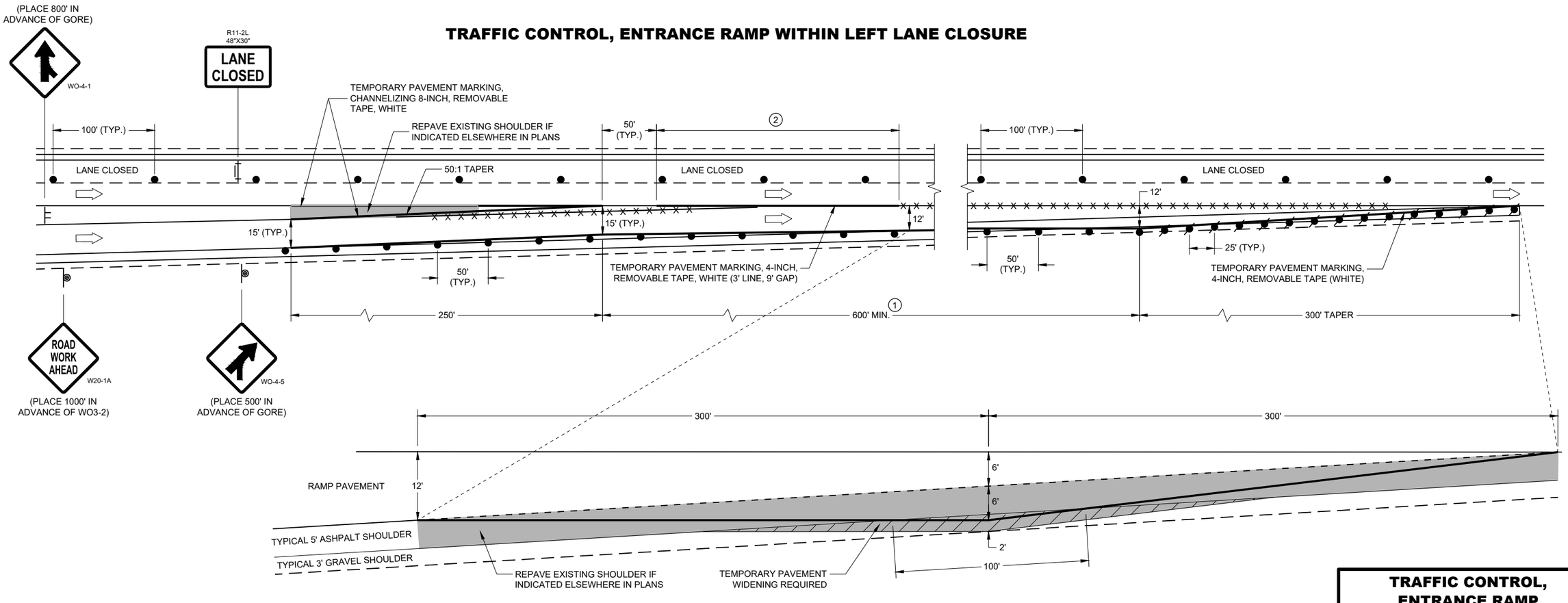
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY MARKING AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LEFT LANE CLOSURE



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY, ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D15 - 05b

SDD15D15 - 05b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

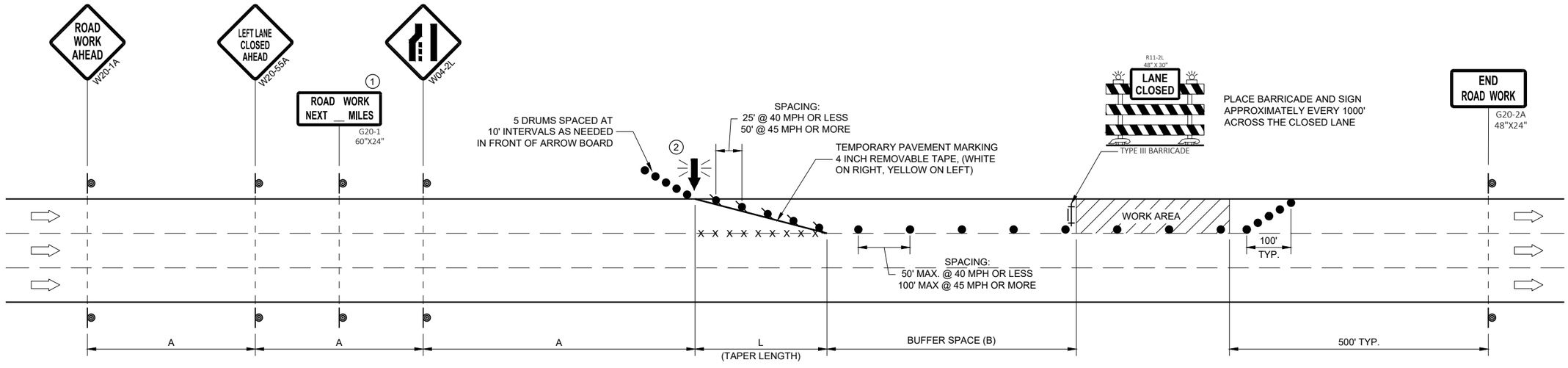
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD 15D20 - 05a
SDD15D20 - 05a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA



GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

BARRICADES IN A CLOSED LANE 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.

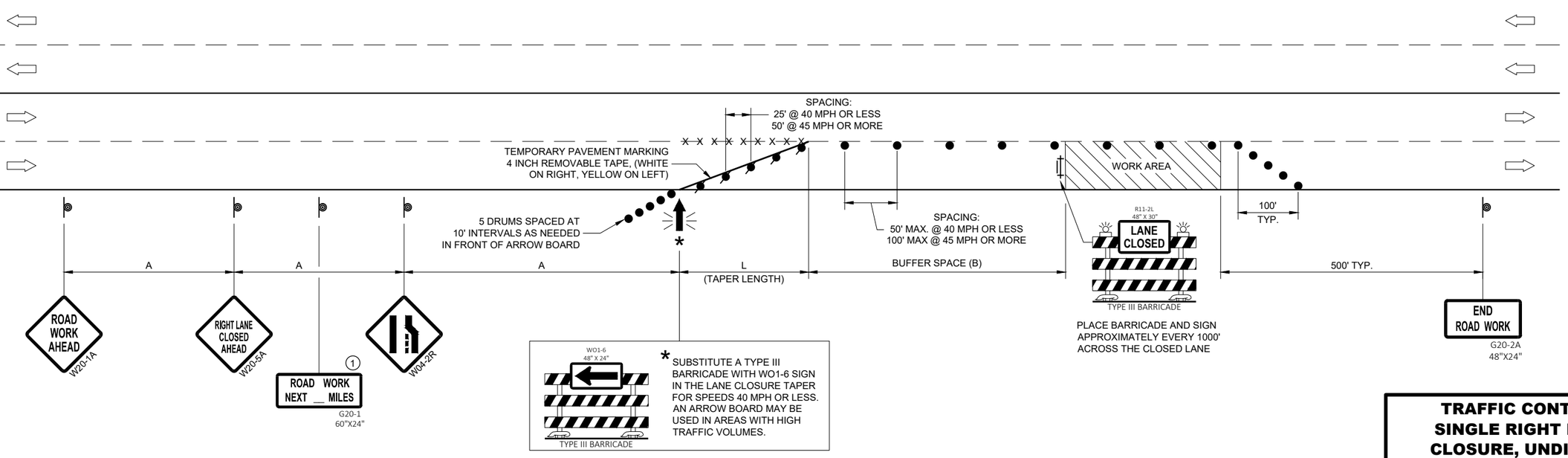
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'





TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2020 — DATE

/S/ Andrew Heidtke — STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

6

SDD 15D20 - 05b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

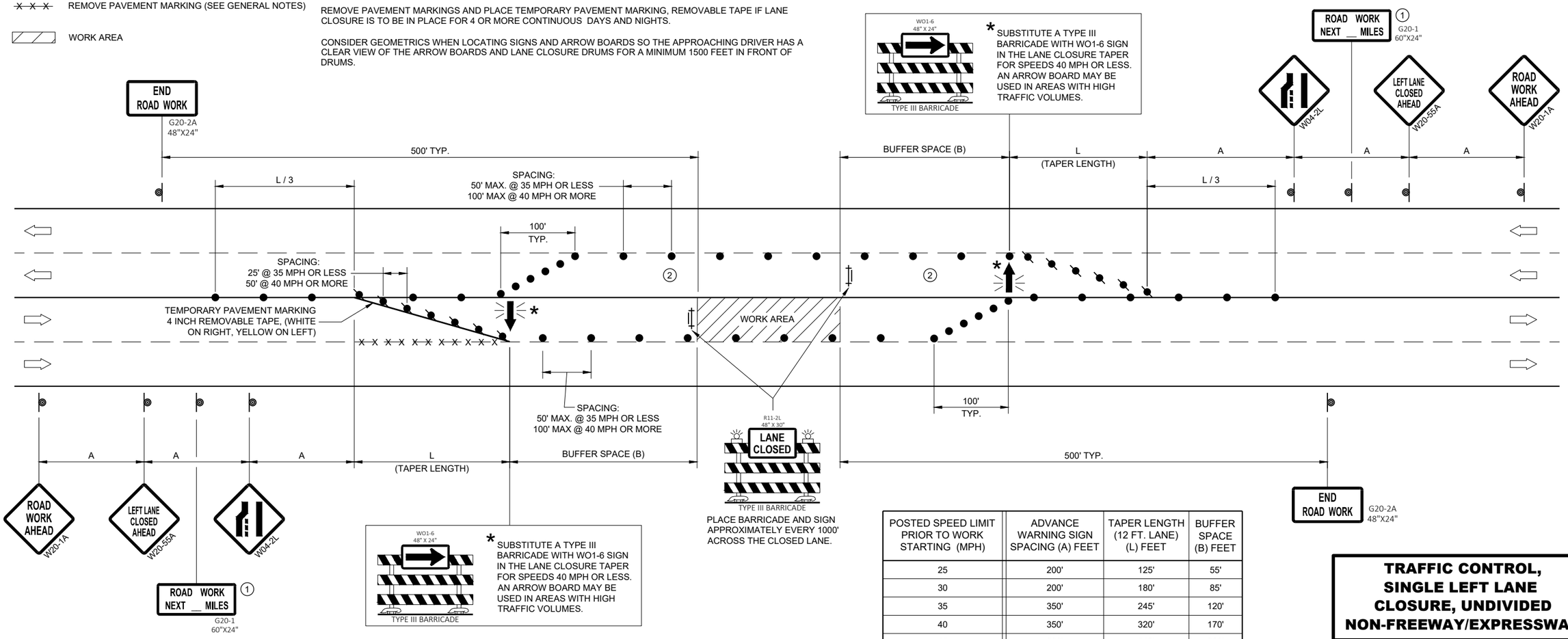
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CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



WO1-6 48" X 24"

* SUBSTITUTE A TYPE III BARRICADE WITH WO1-6 SIGN IN THE LANE CLOSURE TAPER FOR SPEEDS 40 MPH OR LESS. AN ARROW BOARD MAY BE USED IN AREAS WITH HIGH TRAFFIC VOLUMES.

TYPE III BARRICADE

* SUBSTITUTE A TYPE III BARRICADE WITH WO1-6 SIGN IN THE LANE CLOSURE TAPER FOR SPEEDS 40 MPH OR LESS. AN ARROW BOARD MAY BE USED IN AREAS WITH HIGH TRAFFIC VOLUMES.

TYPE III BARRICADE

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'

TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

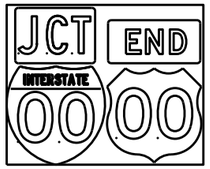
SDD 15D20 - 05c

SDD 15D20 - 05c

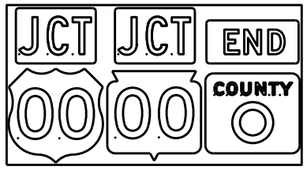
TYPICAL ASSEMBLIES



J1-1



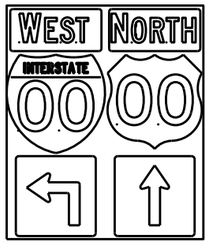
J1-2



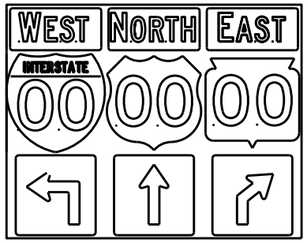
J1-3



J2-1



J2-2

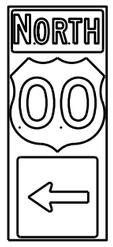


J2-3

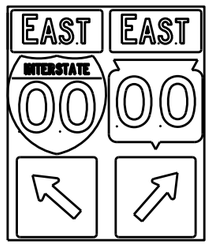


JV

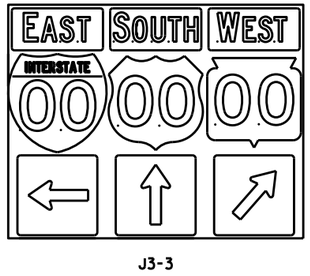
(Typical Vertical J-Assembly
See Note 10 and 11)



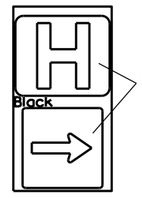
J3-1



J3-2



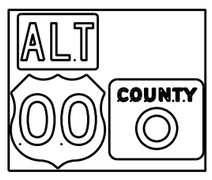
J3-3



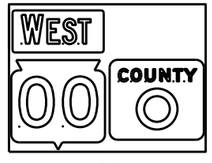
JH-1



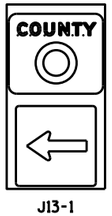
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

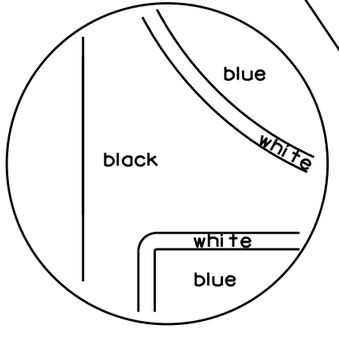


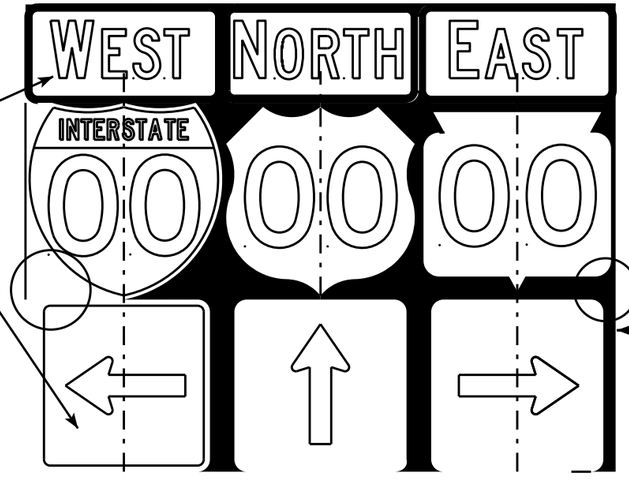
J23-1

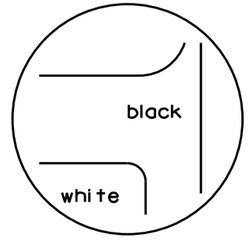


J22-1

[blue background with interstate]







[black background]

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Black Non-reflective
   Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

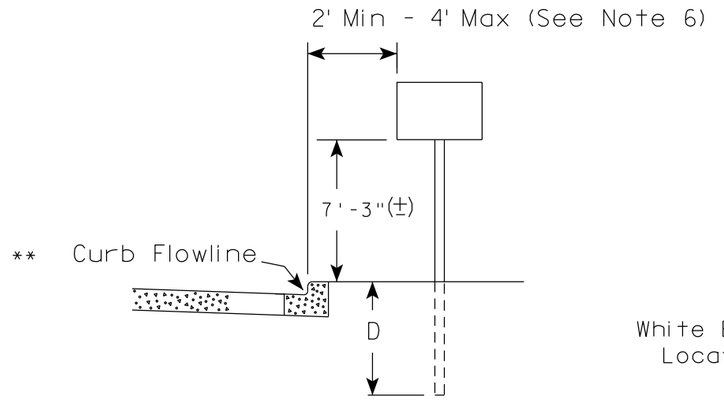
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: SHEET NO: E

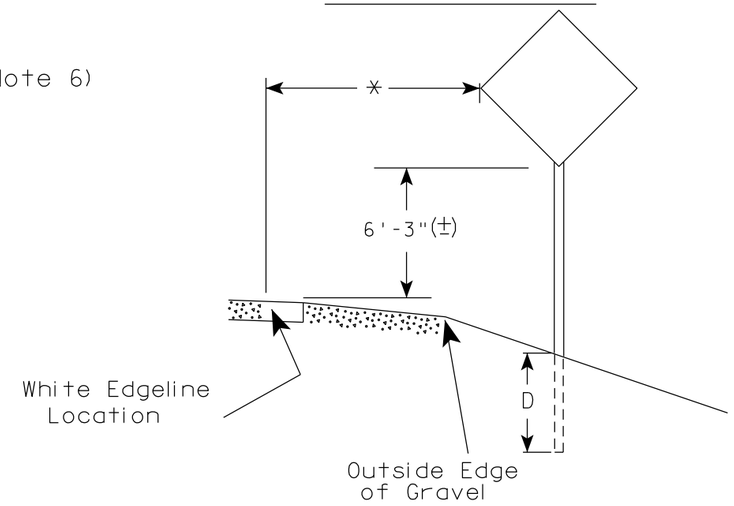
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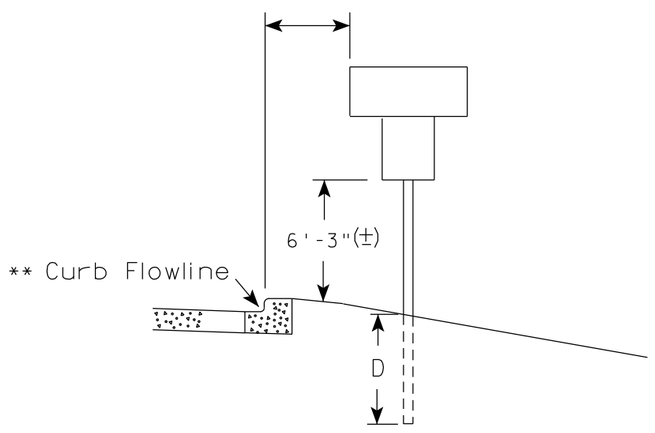
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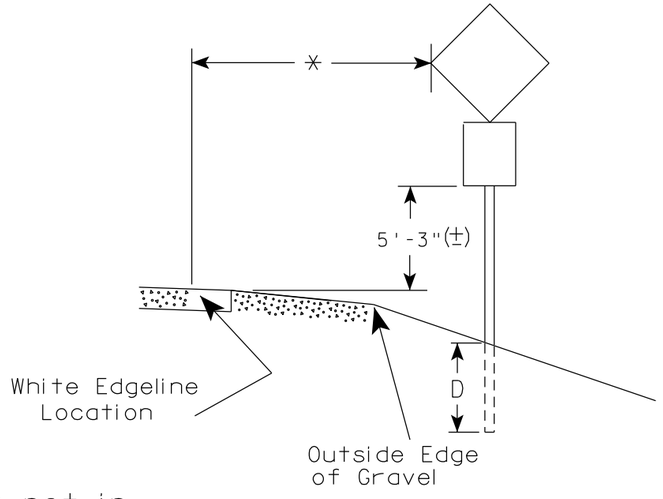
URBAN AREA



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" (±). 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. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

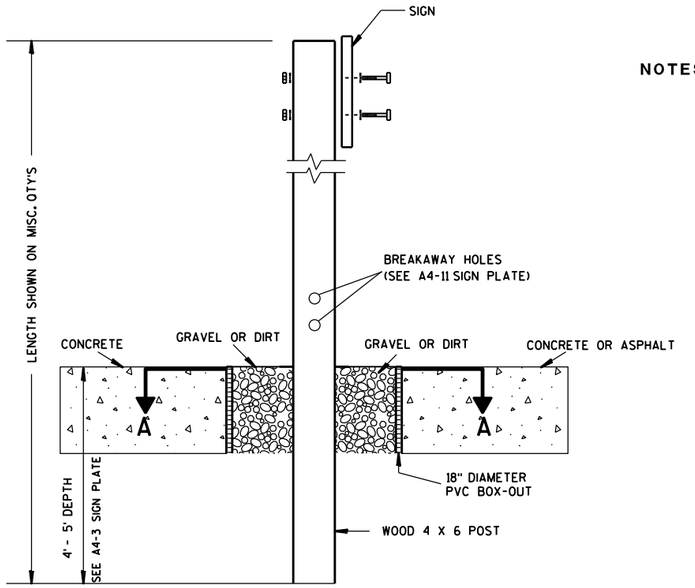
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

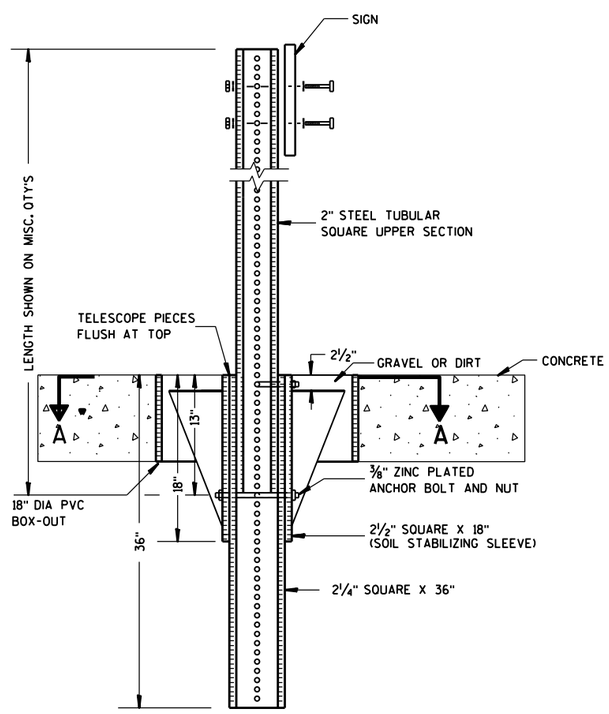
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 305	E



ELEVATION VIEW

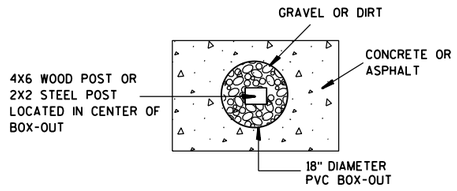
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

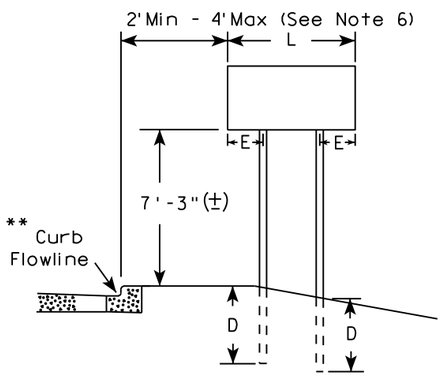
APPROVED Matthew R Rauch
for State Traffic Engineer

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

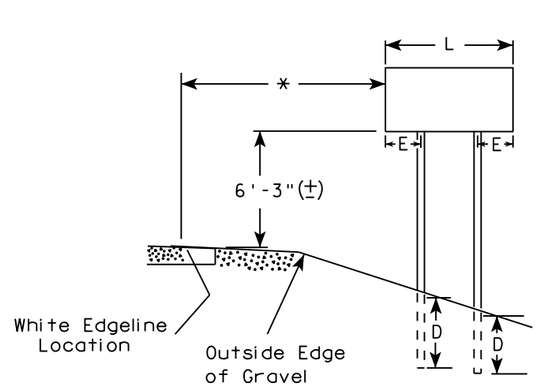
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

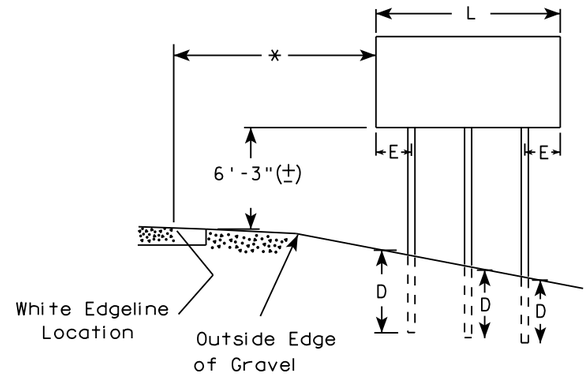
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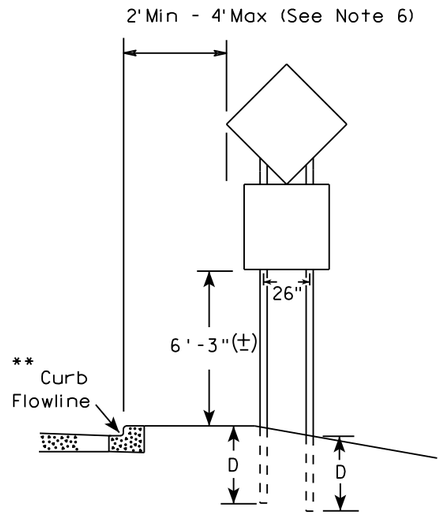
URBAN AREA



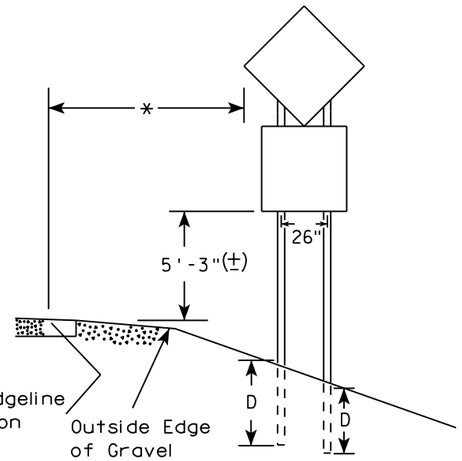
RURAL AREA (See Note 3)







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" (±) or 6'-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" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-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" (±).

* 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'

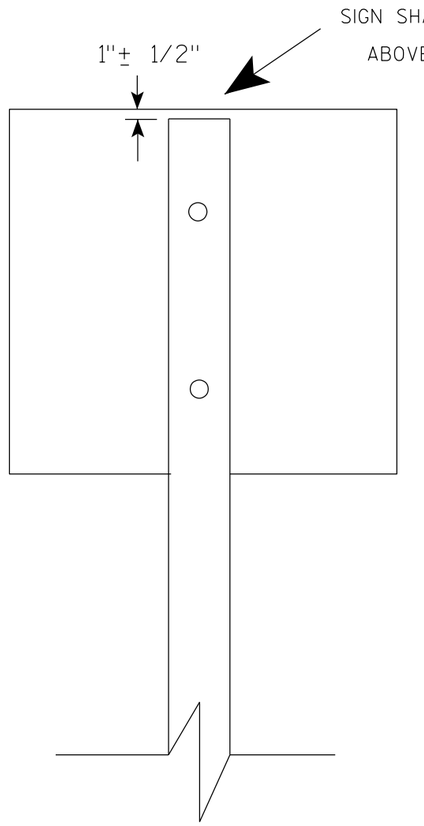
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

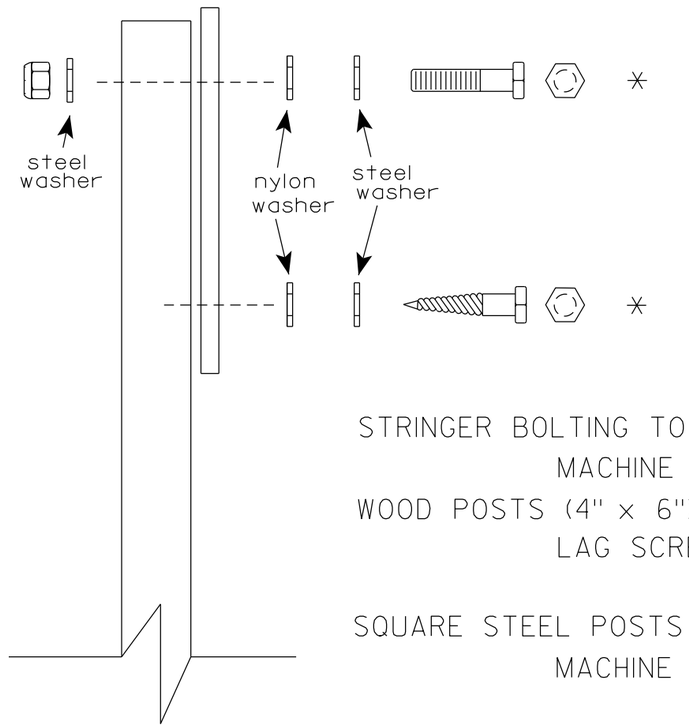
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 307	E





Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 308 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 01-APRIL-2020 PLOT BY : dotc4c

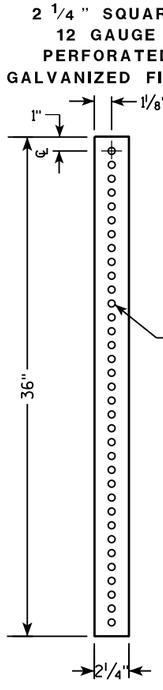
WISDOT/CADDS SHEET 42

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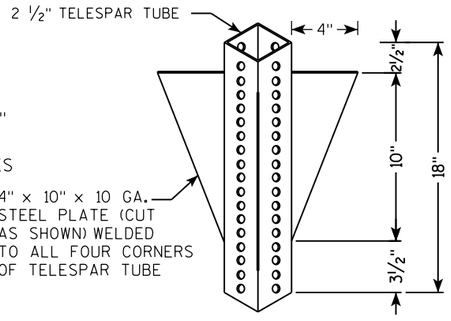
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TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

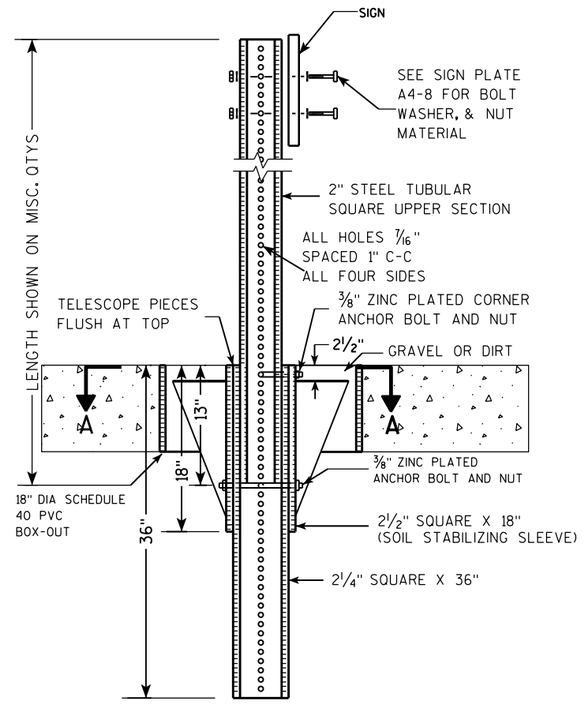
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



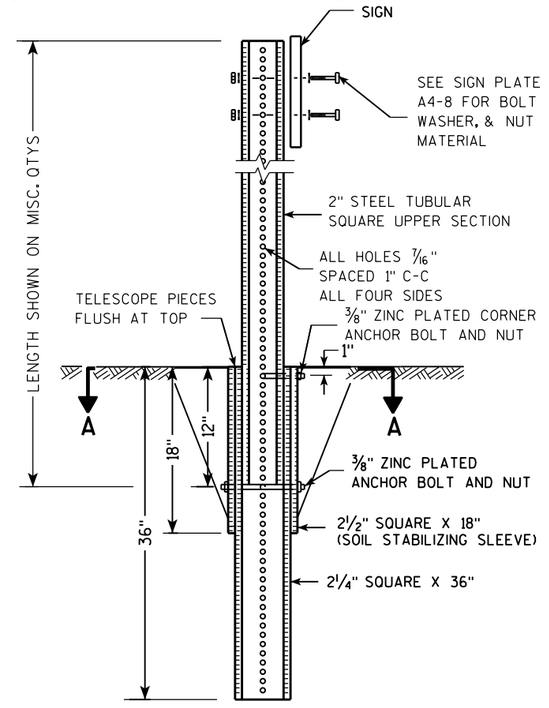
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

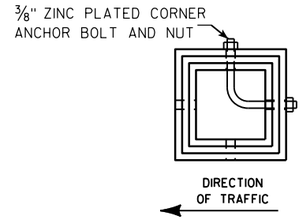


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

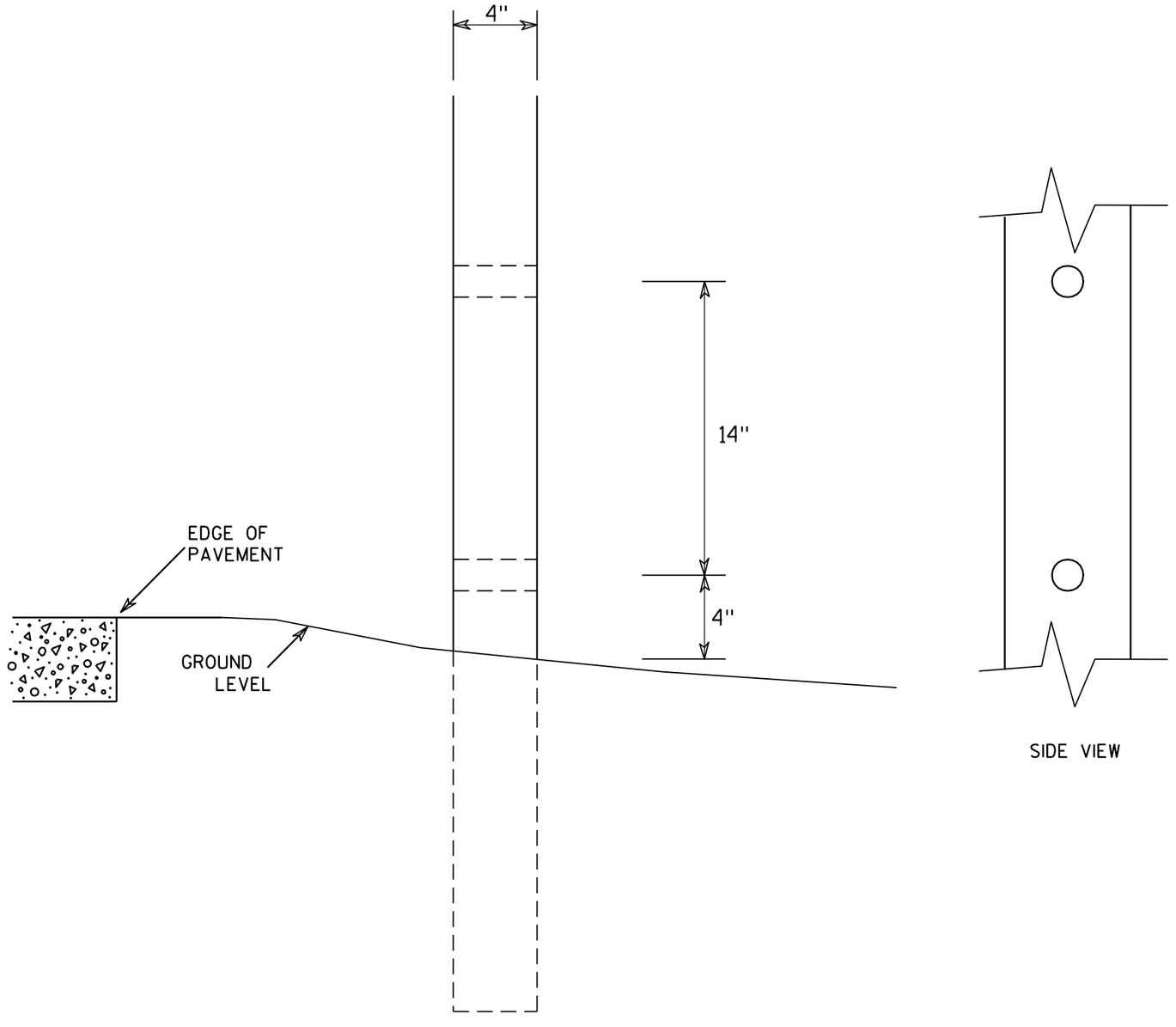
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 309 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

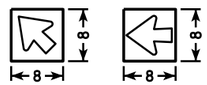
APPROVED Chester J Spang for State Traffic Engineer

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

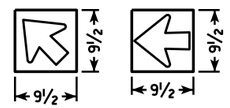
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 310	E

SIGN LAYOUT WITH VARIOUS SIZED MESSAGES

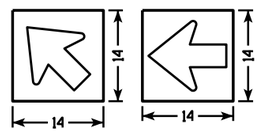




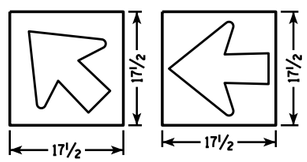










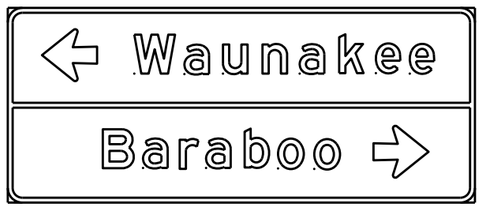


GENERAL NOTES

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

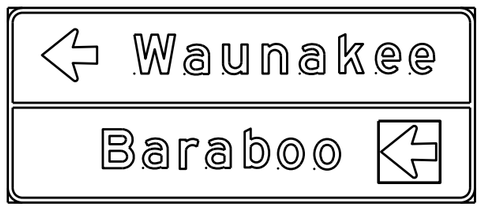
Lower Case Copy Size	Standard Width (Single Arrow)	2 Line Tilt Arrow Cover Width	3 Line Tilt Arrow Cover Width	Height
3¾" Series C	8	9 ½	14 ½	8
4½" Series D & E	9 ½	10	15	9 ½
6" Series D & E	14	16	20 ½	14
8" Series E	17 ½	20 ½	25	17 ½

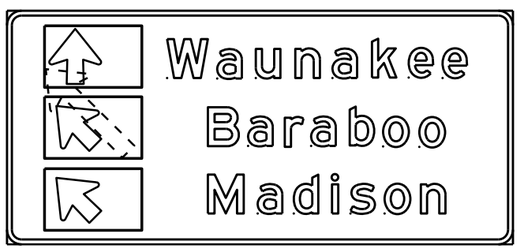
BEFORE





AFTER





DESTINATION DIRECTIONAL ARROW FOR DETOUR SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/08/14

PROJECT NO:

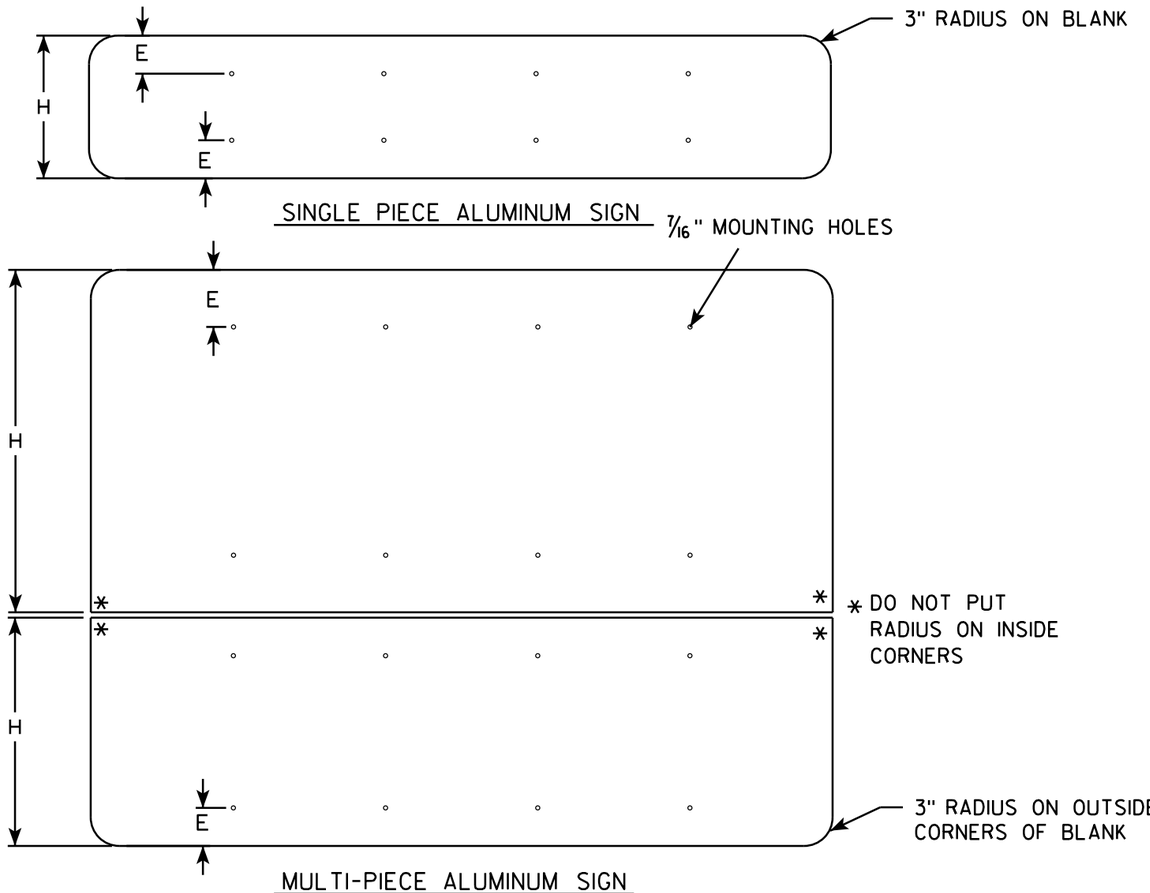
SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A412.DGN PLOT DATE : 08-OCT-2014 11:50 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

7

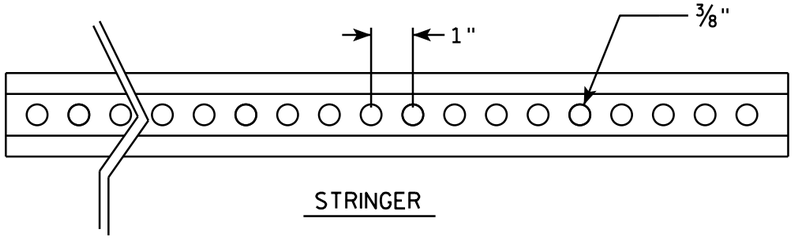
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GENERAL NOTES

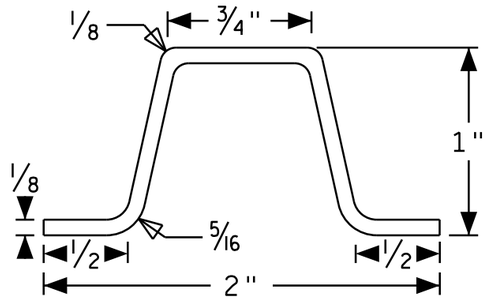
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

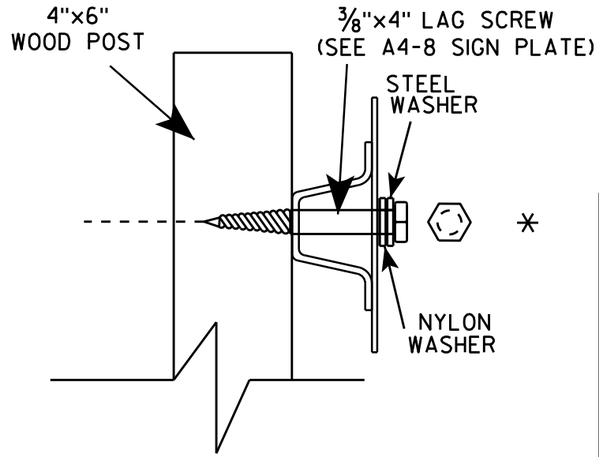


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

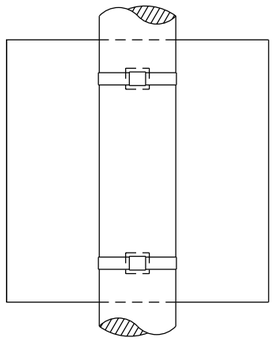
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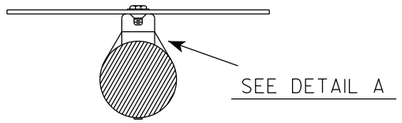
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

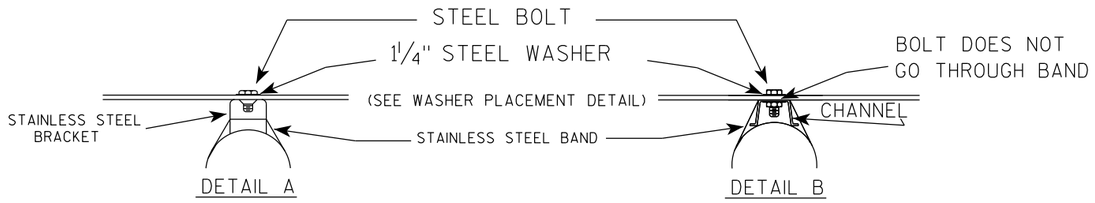
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BANDING

SINGLE SIGN



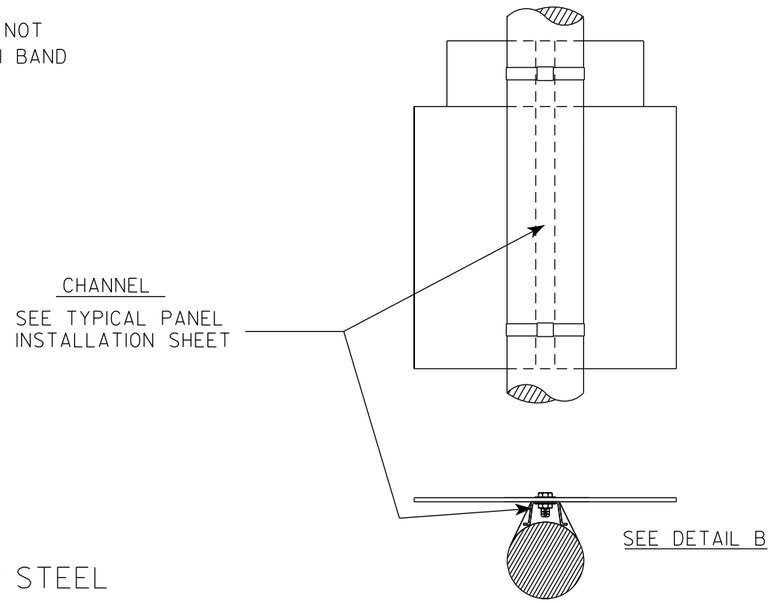




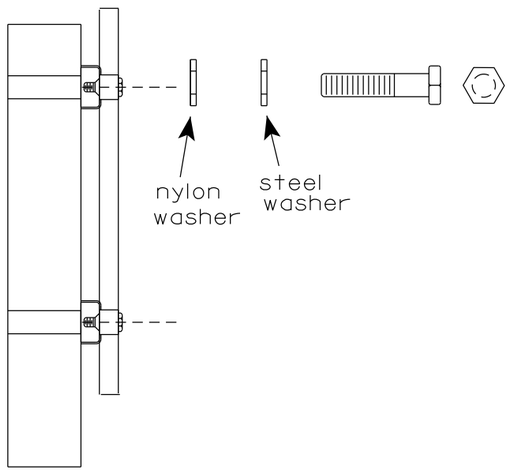
GENERAL NOTES

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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

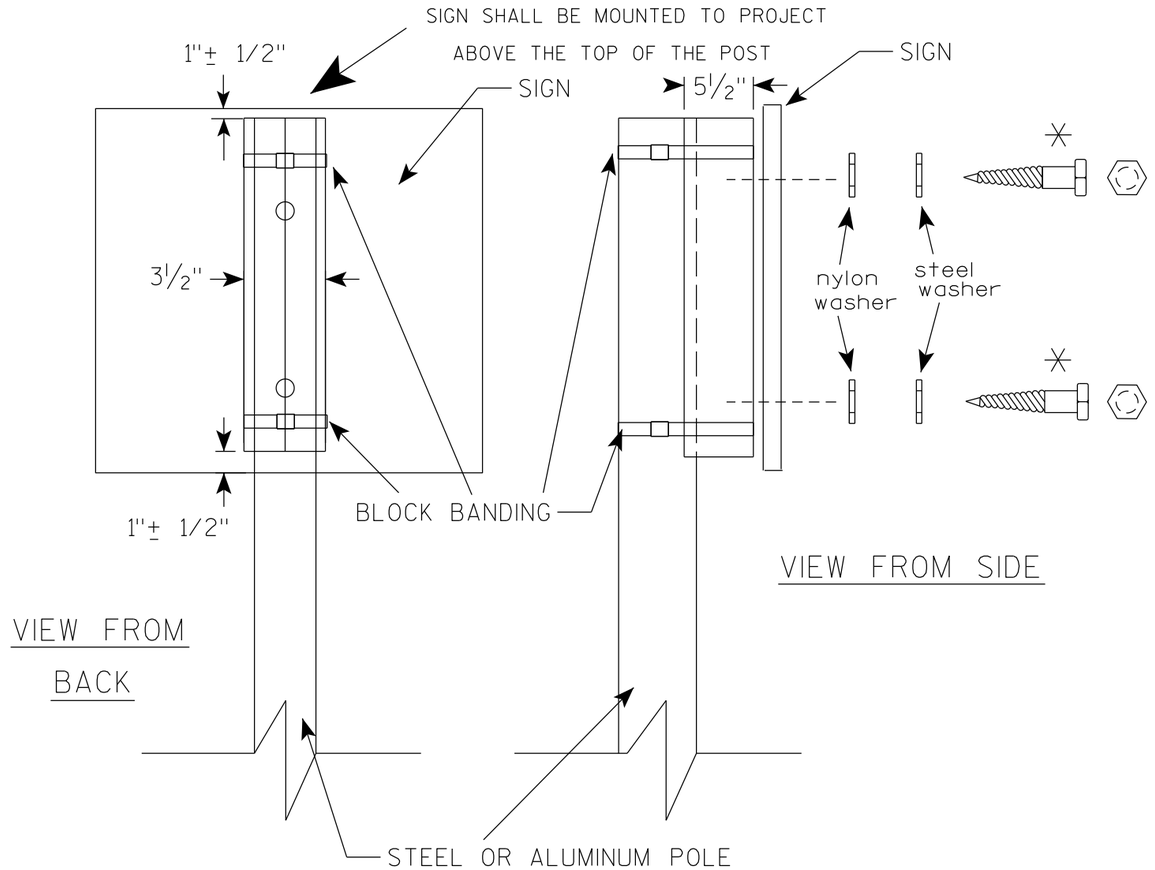
DATE 6/10/19 PLATE NO. A5-9.4

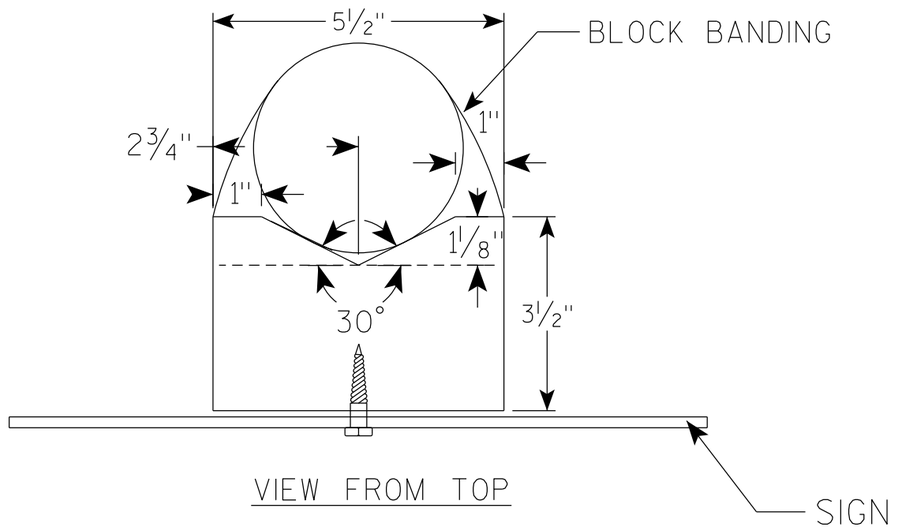
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 313	E

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

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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"

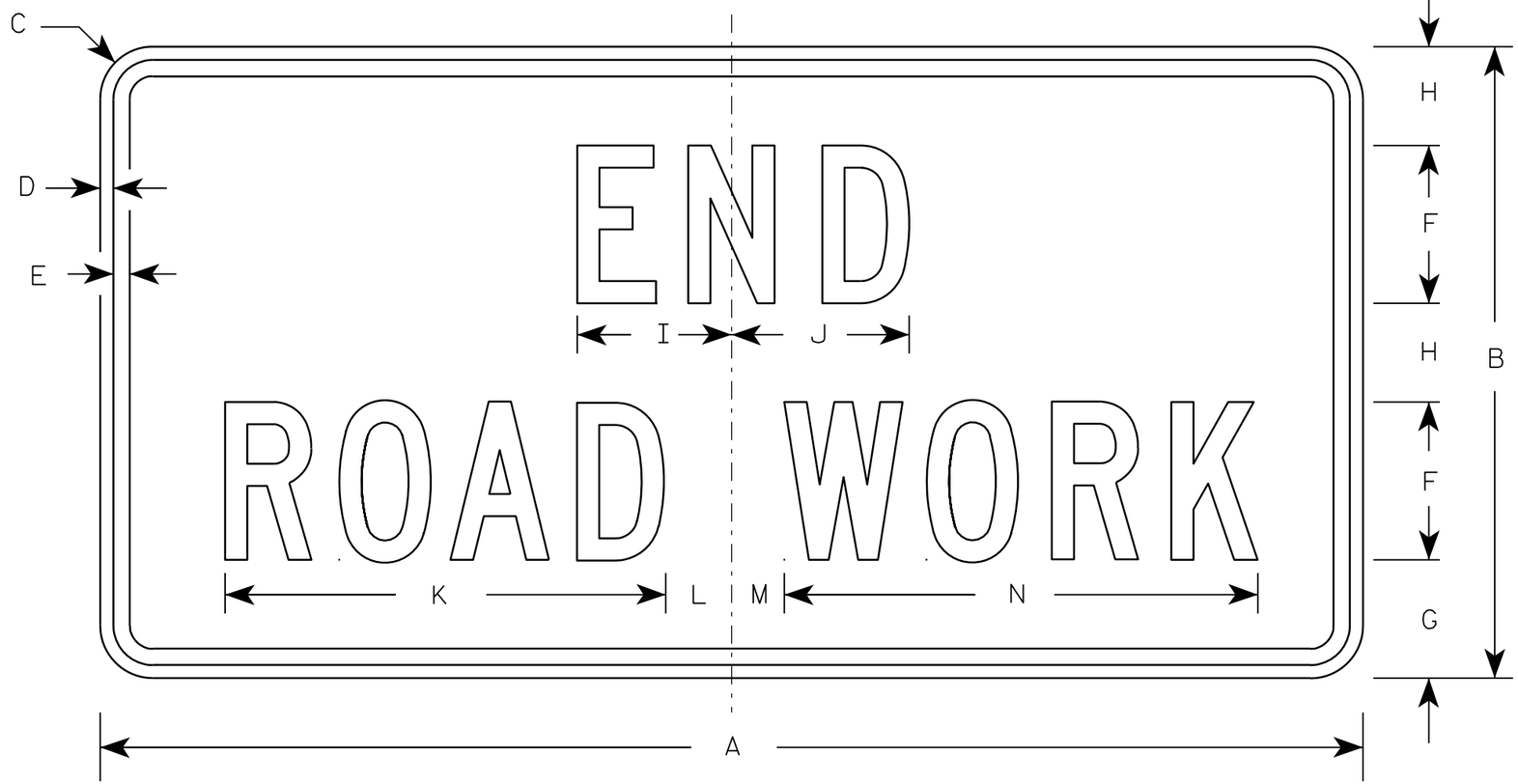
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:				SHEET NO: 314	E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   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.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

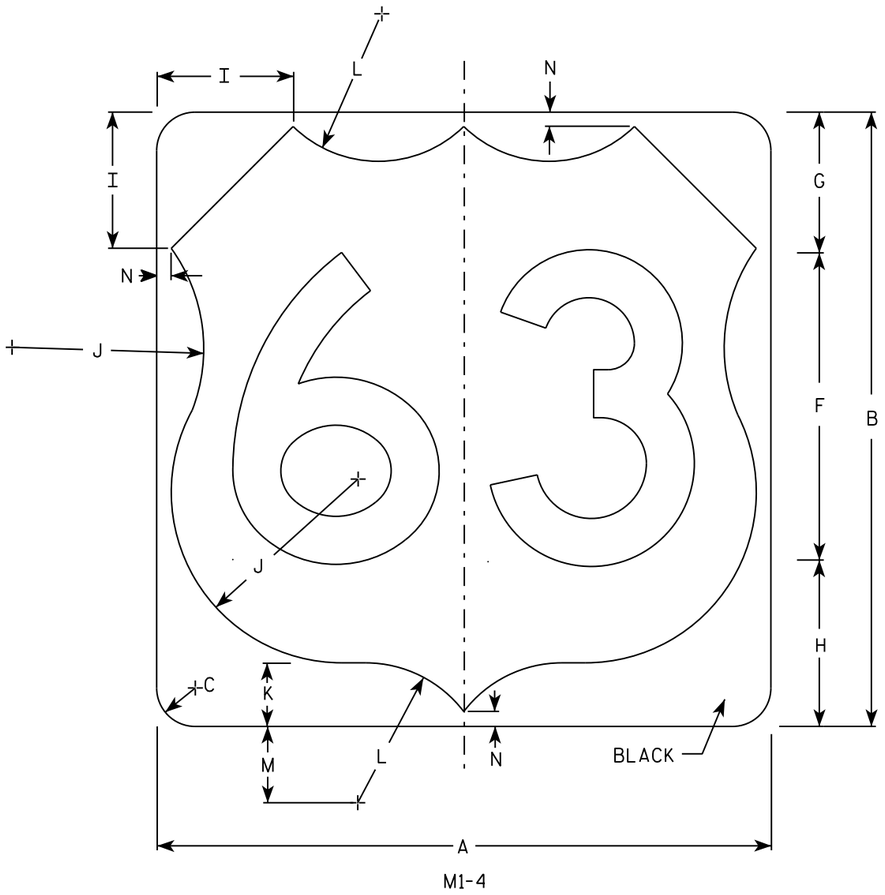
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

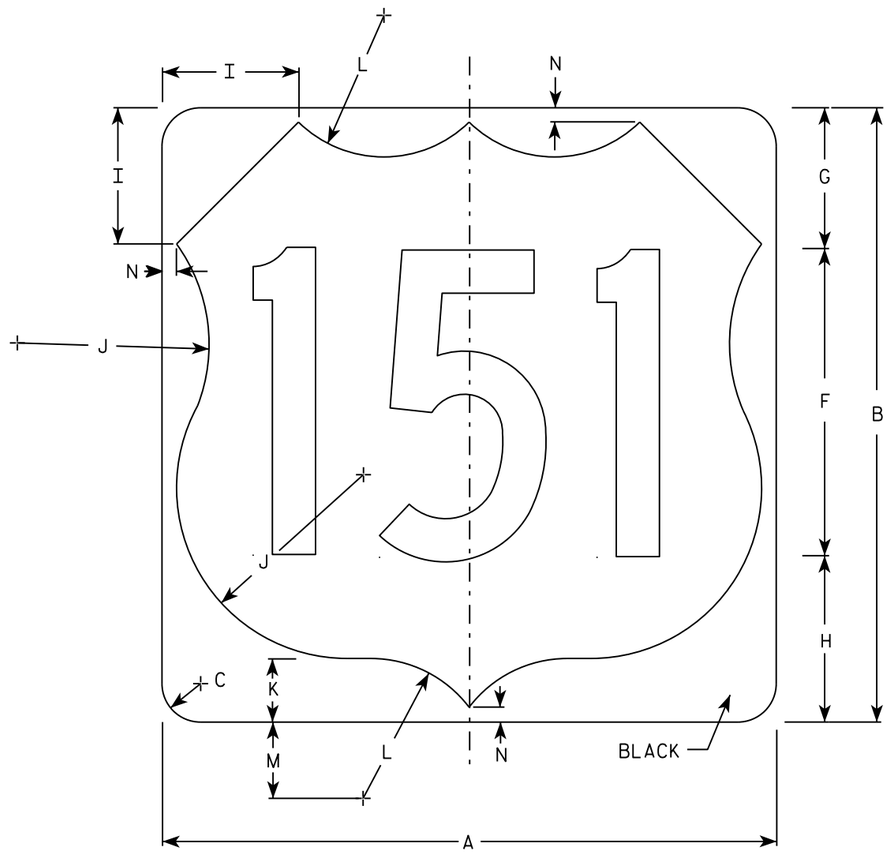
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 315	E

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
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.



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 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

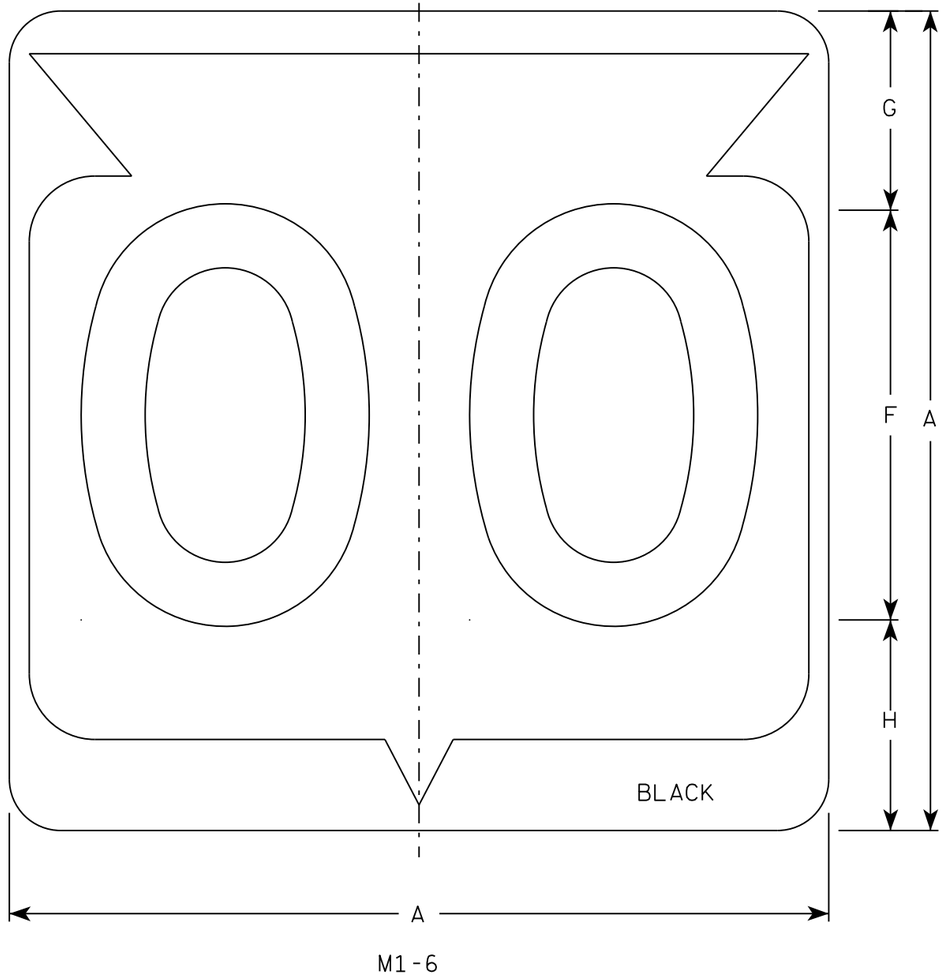
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-4.10

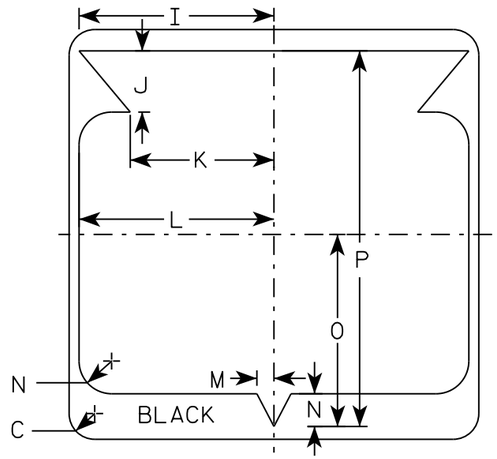
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 316	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
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		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

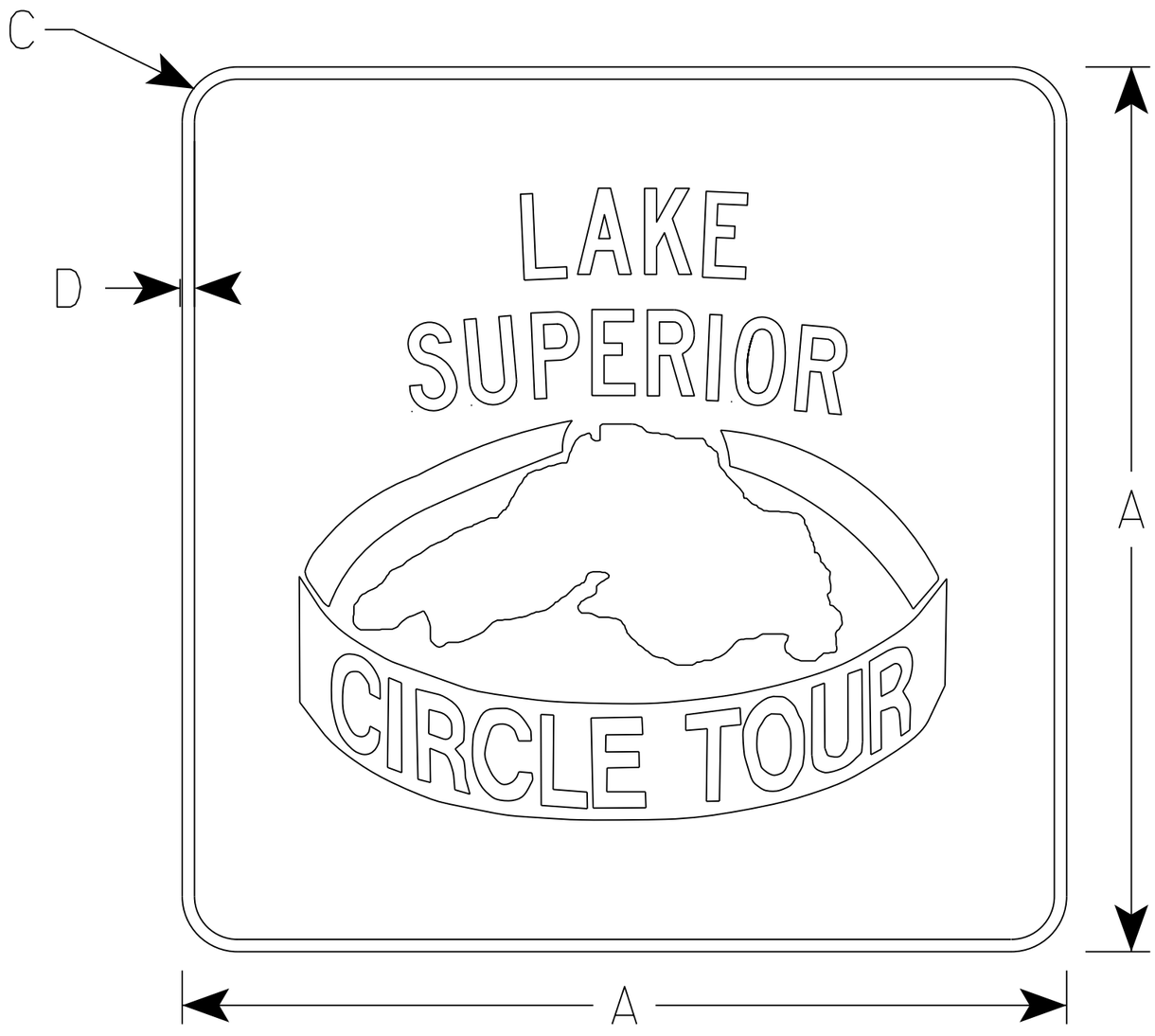
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 317 E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White - Graphics - White
   Circle Tour Message is Green
3. Message Series - Special
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.	Area m2
1																												
2	24		1 1/8	1/2																							4.0	.36
3																												
4	36		1 5/8	3/4																							9.0	.81
5																												

STANDARD SIGN
M1-91

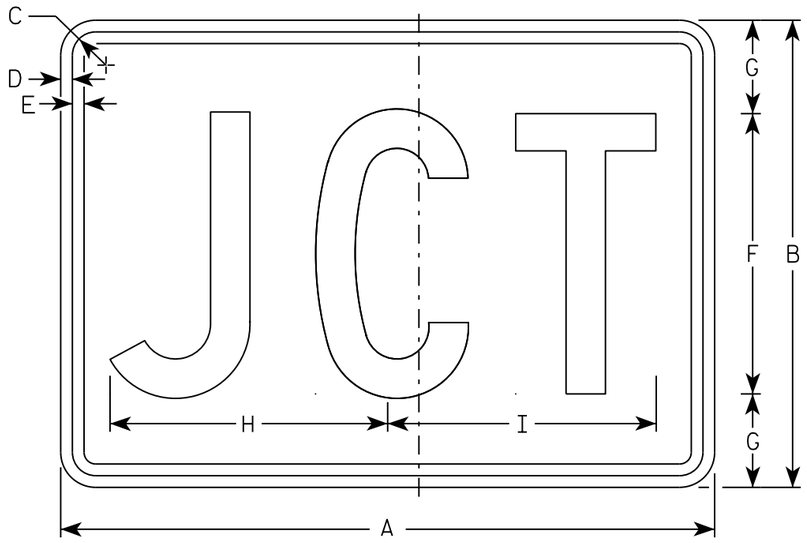
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

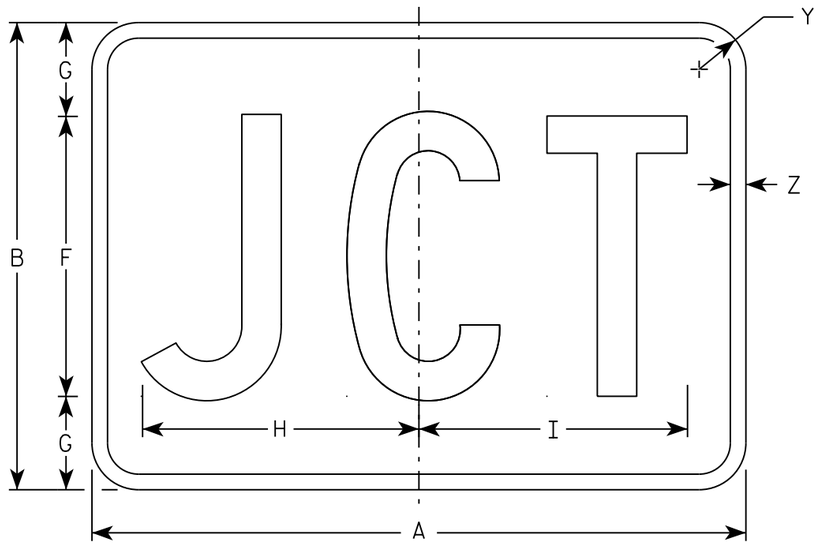
DATE 11/5/15 PLATE NO. M1-91.2

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M191.DGN PLOT DATE : 01-DEC-2015 18:00 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 5.837526:1.000000



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
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. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

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	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN
M2-1

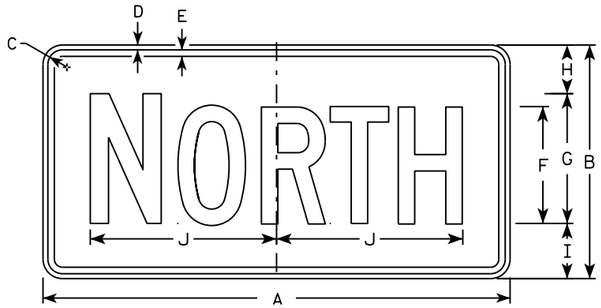
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

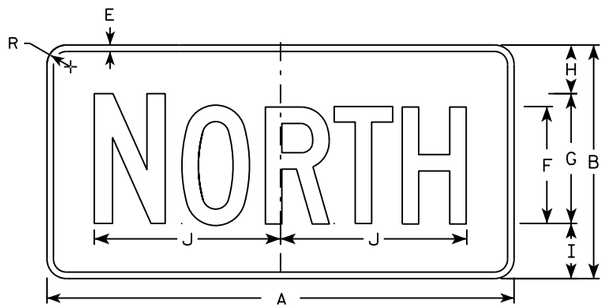
DATE 10/15/15 PLATE 319 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



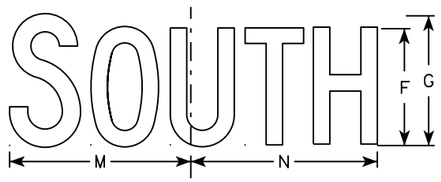
MB3-1
MK3-1
MN3-1



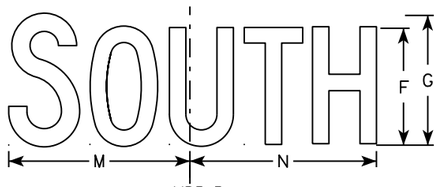
M3-2
MM3-2
MP3-2



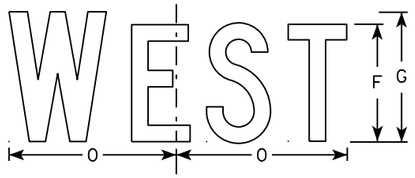
MB3-2
MK3-2
MN3-2



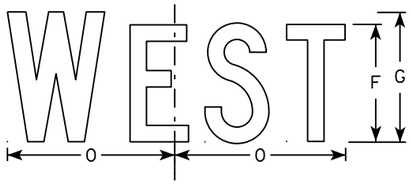
M3-3
MM3-3
MP3-3



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
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																											
2	24	12	1 1/8	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			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

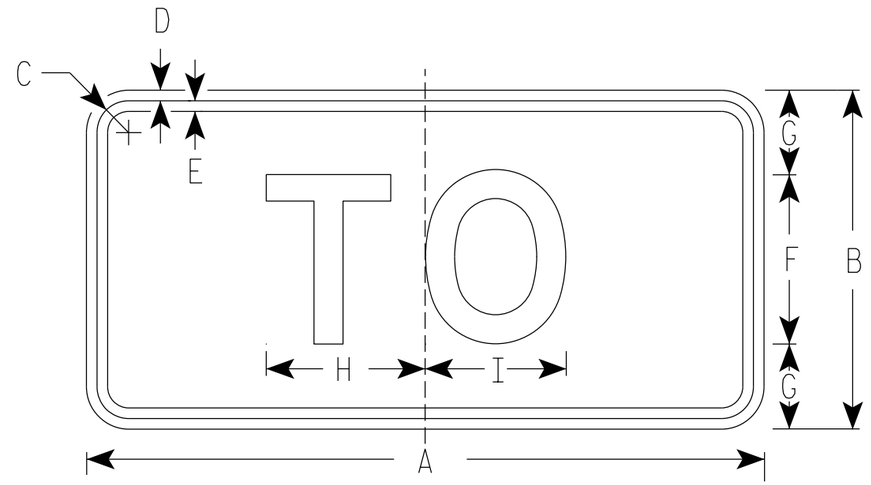
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

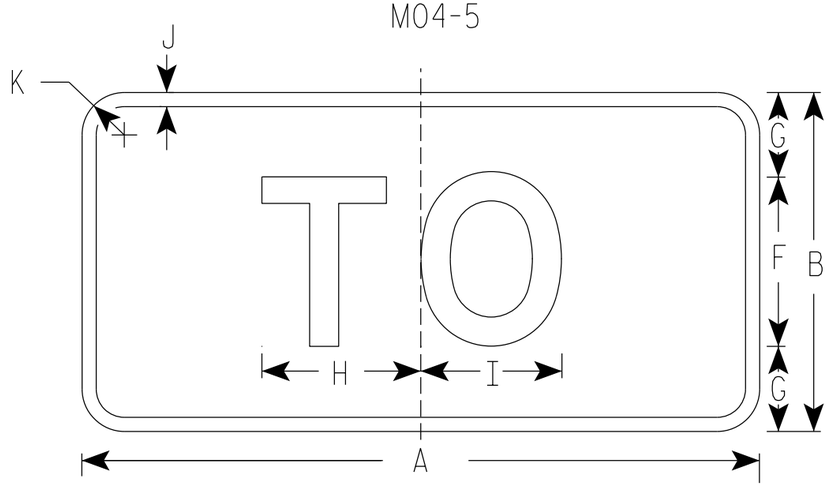
DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-5
MM4-5
MP4-5
MO4-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
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. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   MO4-5 Background - Orange Type F Reflective
   Message - Black

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 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

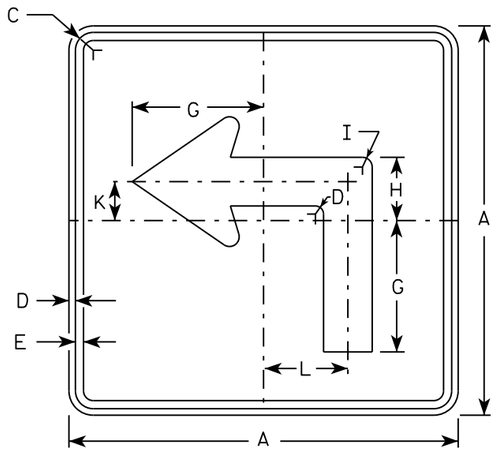
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

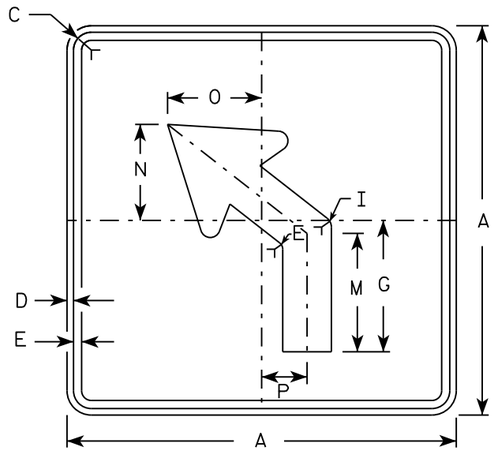
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

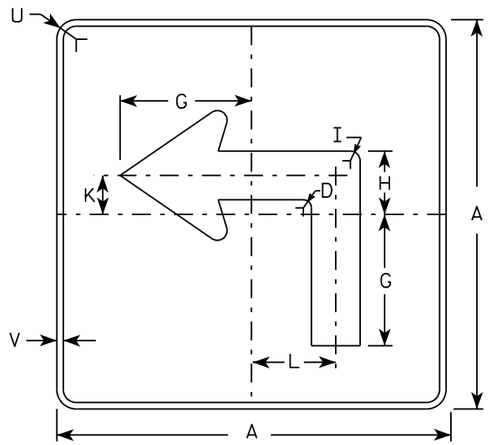
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 321 | E



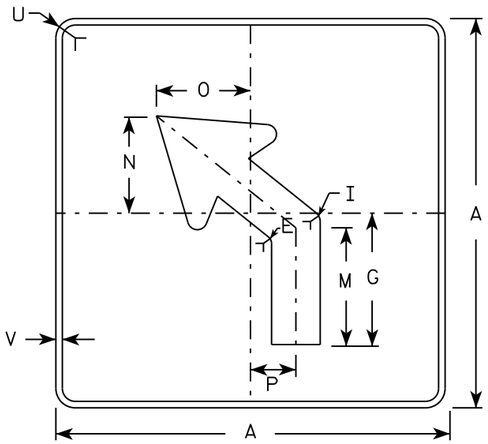
M5-1L
MM5-1L
MO5-1L
MP5-1L



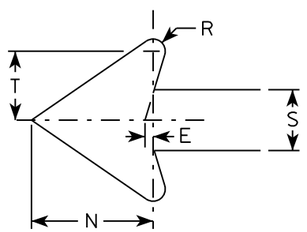
M5-2L
MM5-2L
MO5-2L
MP5-2L



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 - Type H Reflective
   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.

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	21		1 1/8	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 1/2	1/2					3.06
3	30		1 3/8	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 7/8	1/2					6.25
4	30		1 3/8	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 7/8	1/2					6.25
5	30		1 3/8	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 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

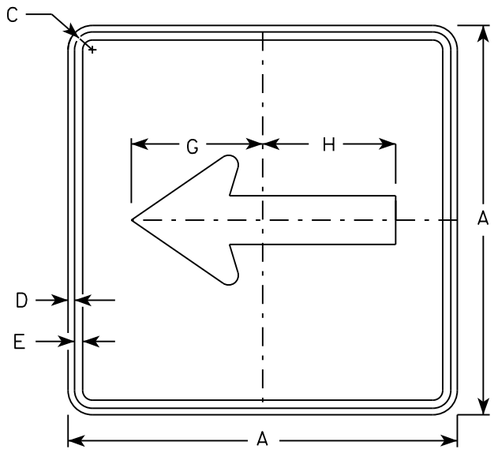
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

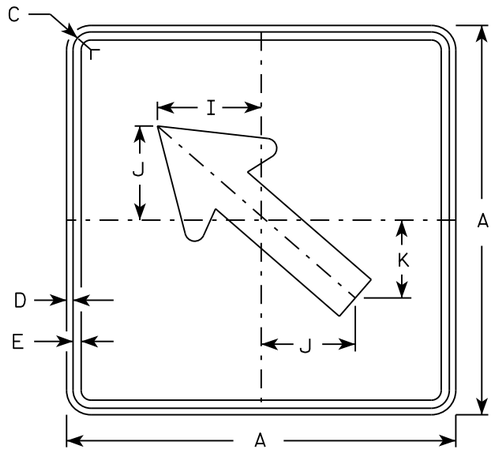
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



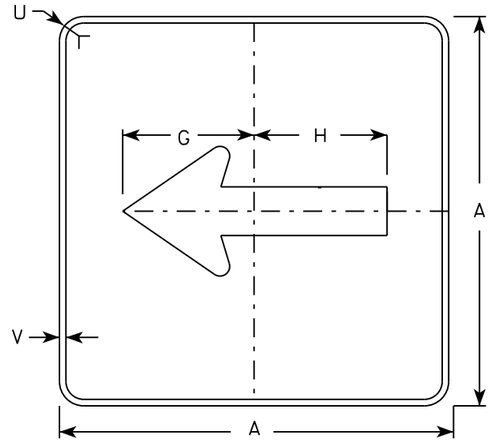
M6-1
MM6-1
MO6-1
MP6-1



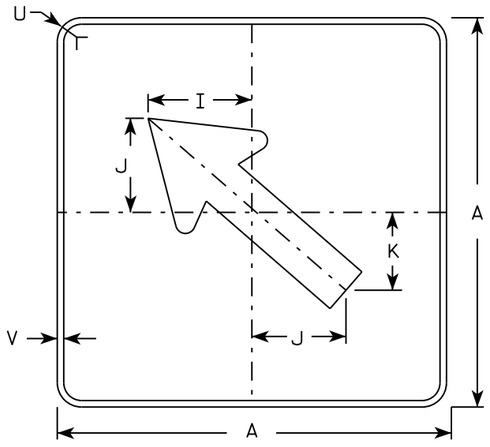
M6-2
MM6-2
MO6-2
MP6-2

NOTES

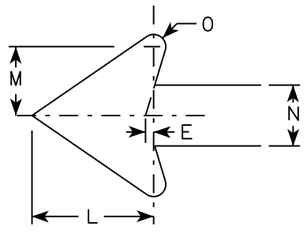
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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



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



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



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	21		1 1/8	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 1/2	1/2						3.06
3	30		1 3/8	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 7/8	1/2						6.25
4	30		1 3/8	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 7/8	1/2						6.25
5	30		1 3/8	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 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

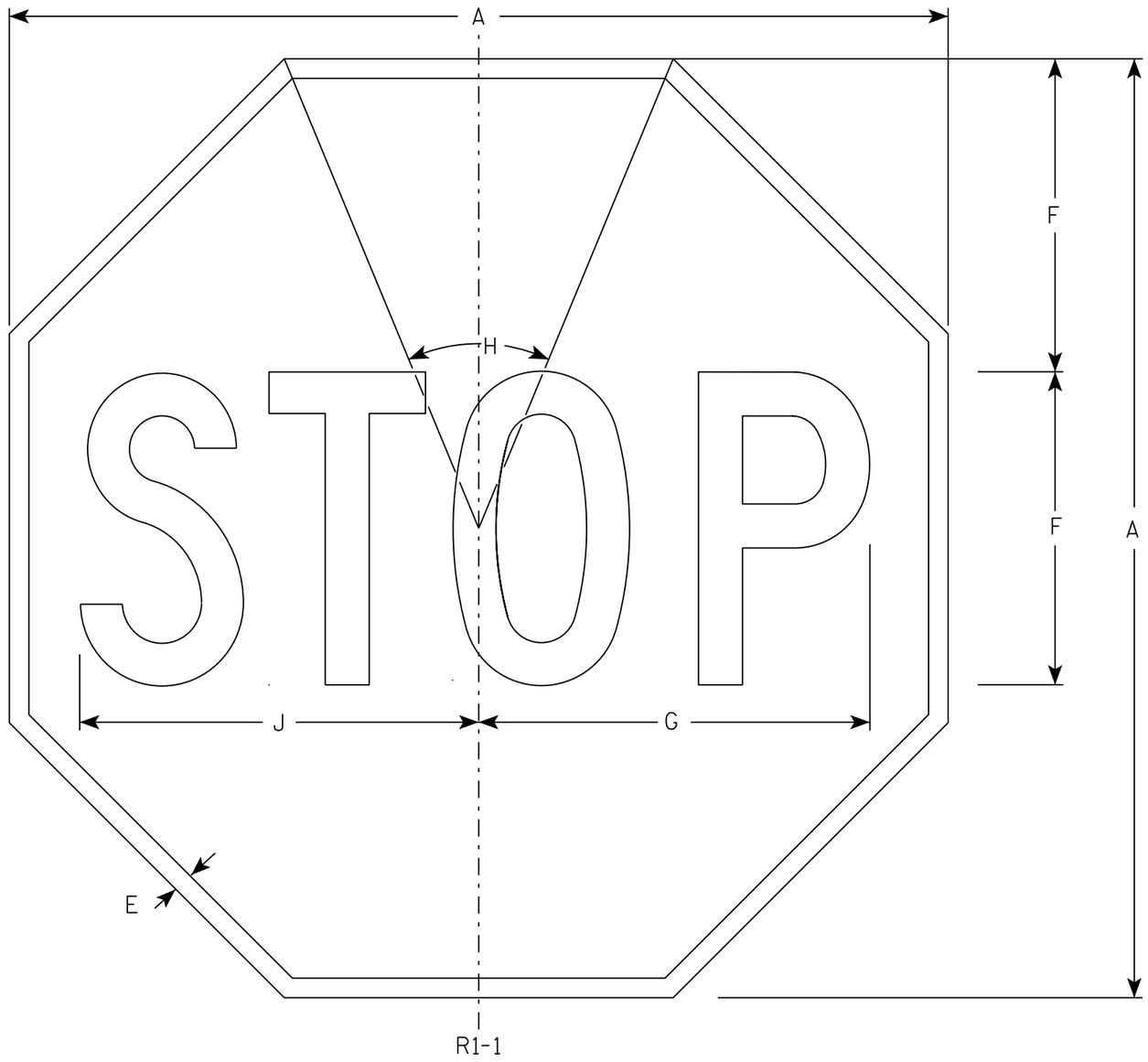
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 323 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN

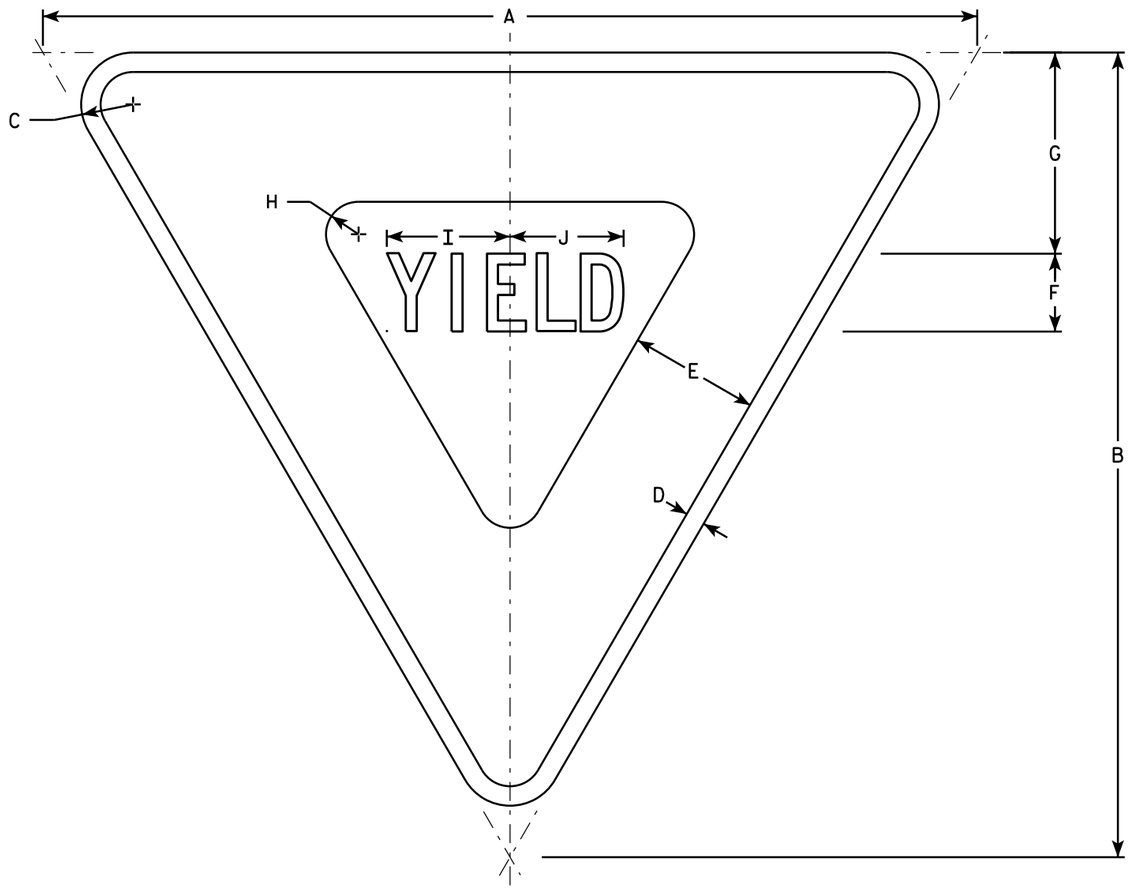
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 324	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   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. The border strip and word message are reflectorized 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	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

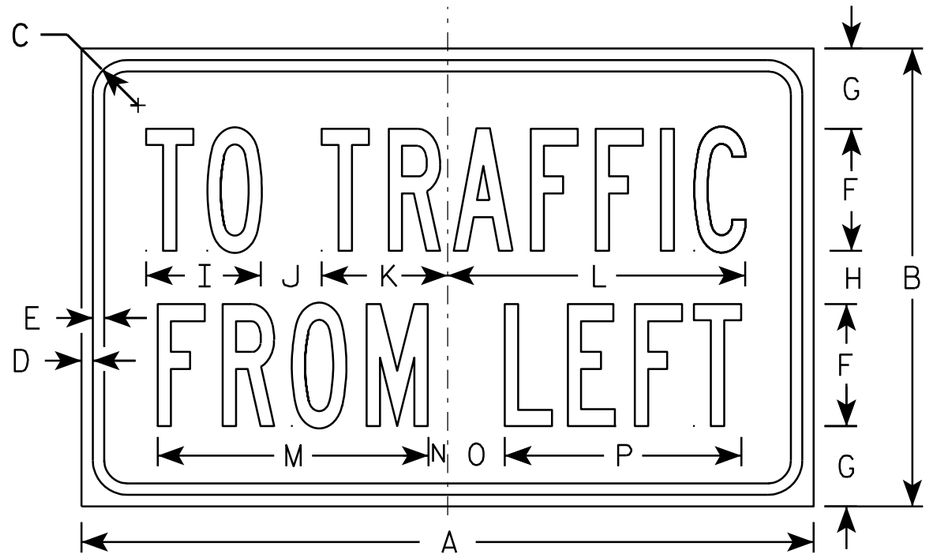
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R1-54

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - B

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	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
2M	24	15	1 1/8	3/8	3/8	4	2 5/8	1 3/4	3 3/4	2	4 1/8	9 3/4	8 7/8	5/8	1 7/8	7 3/4											2.5
3																											
4																											
5																											

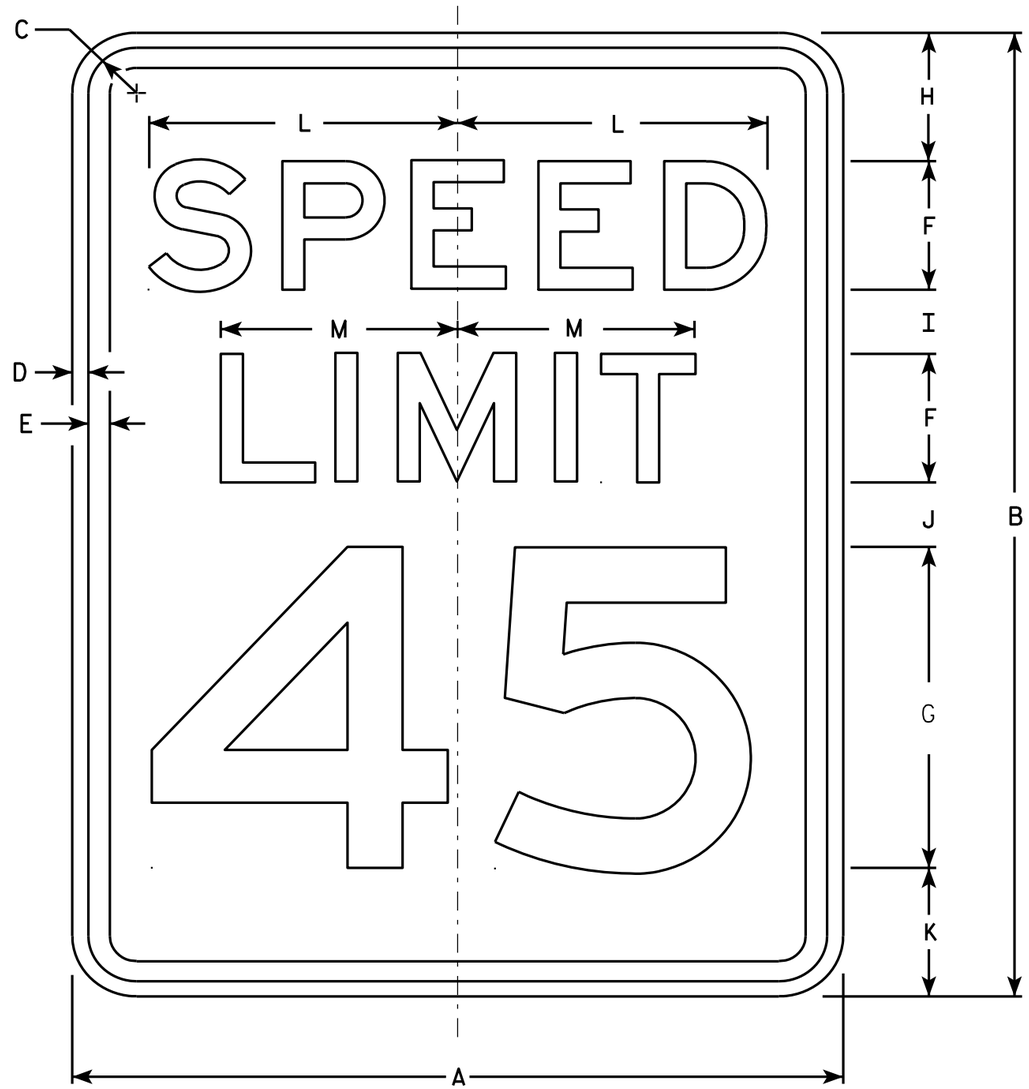
STANDARD SIGN
R1-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-54.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 326	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
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 and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

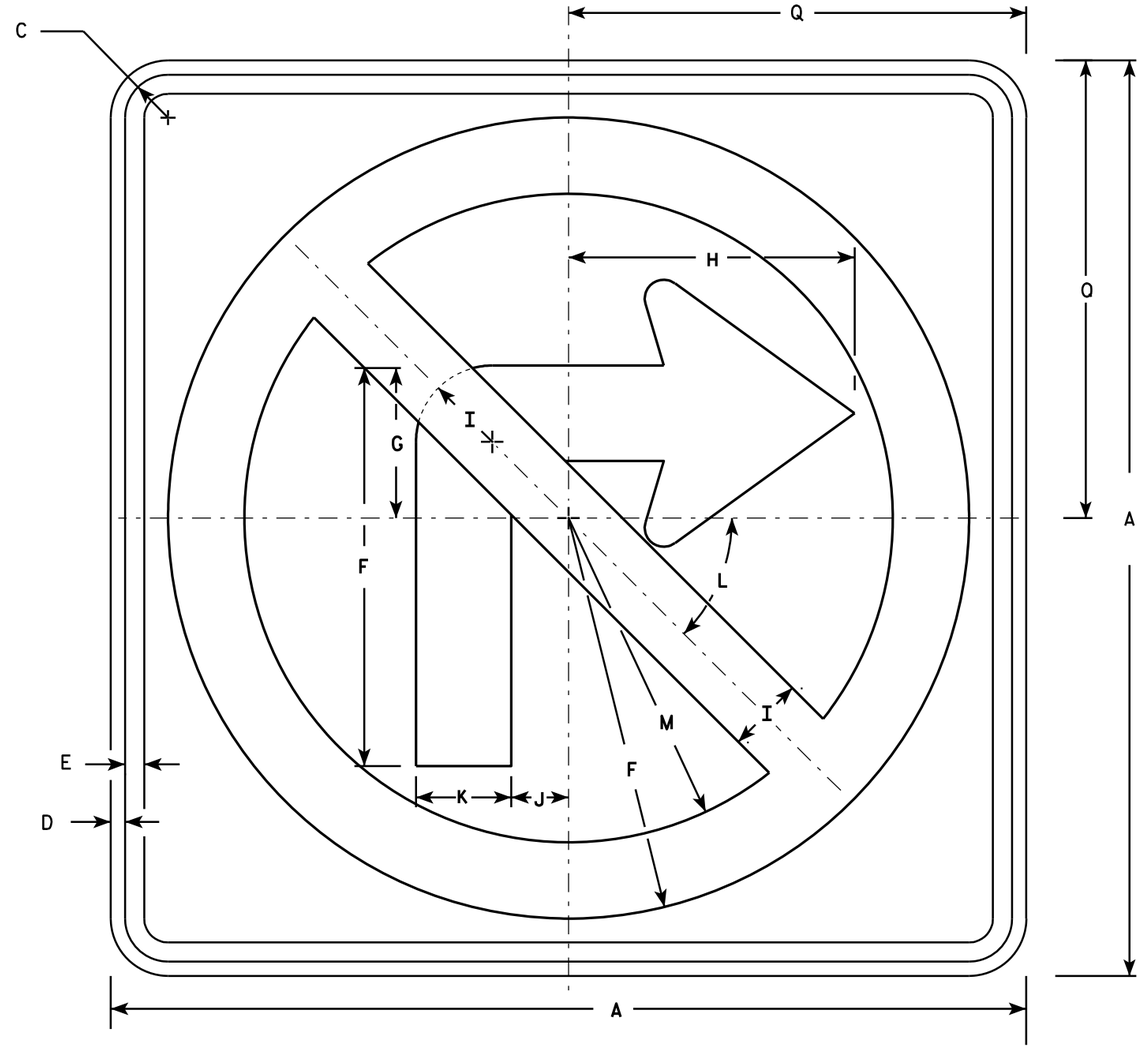
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

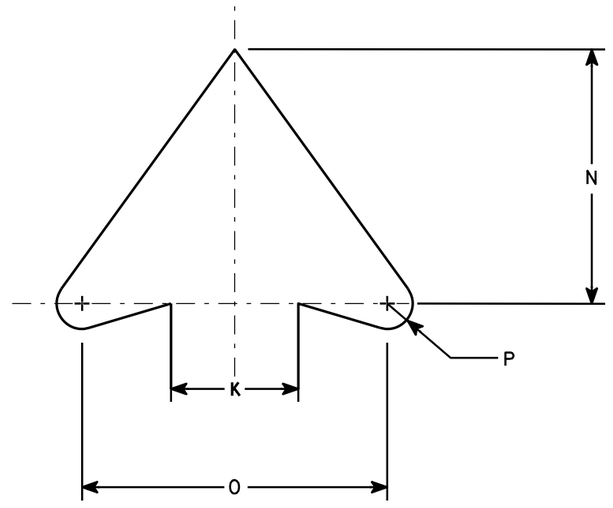
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 327	E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

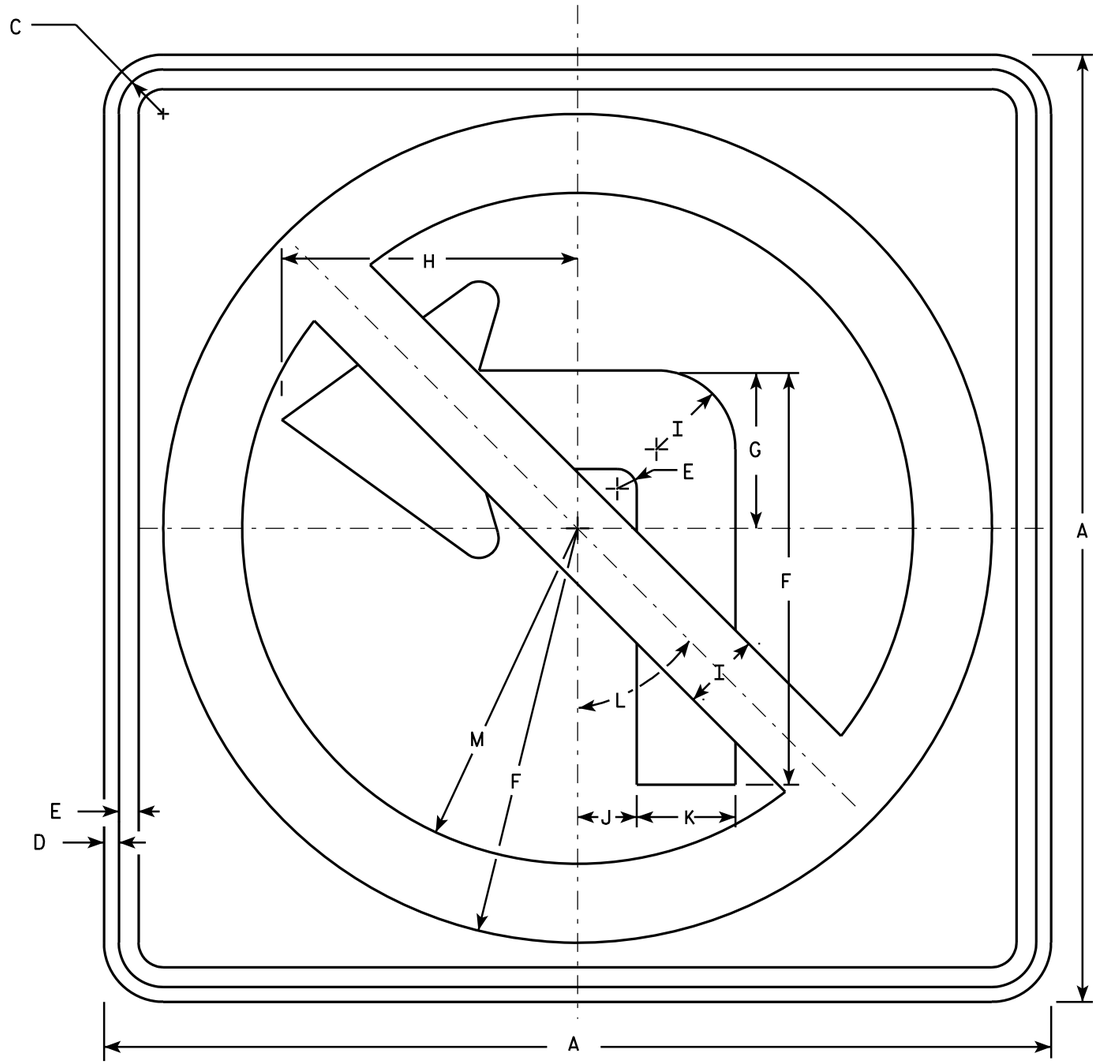
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

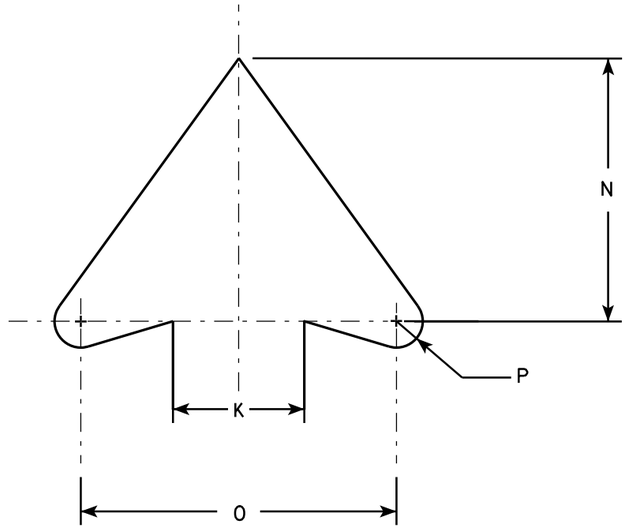
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 328 | E



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

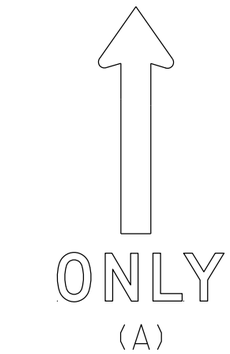
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

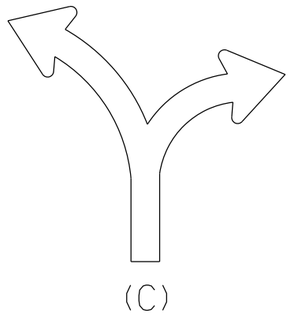
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 329	E

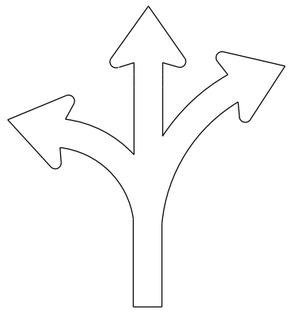


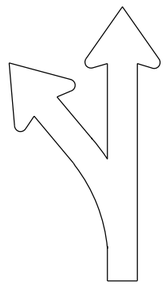
(A)

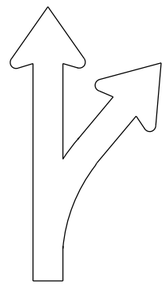


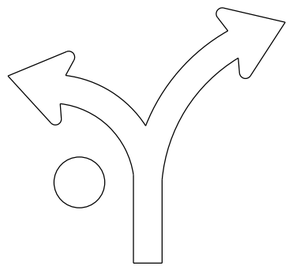
(B)

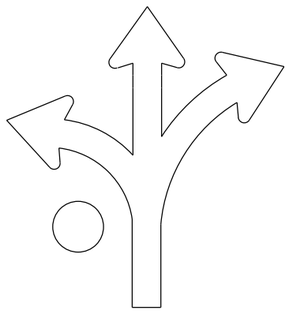

(C)

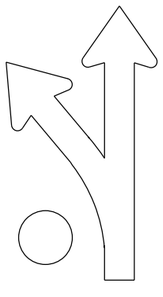

(D)

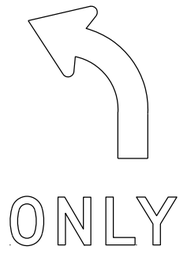

(E)


(F)

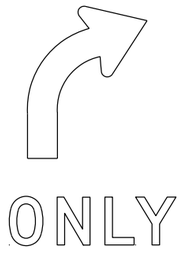

(G)


(H)

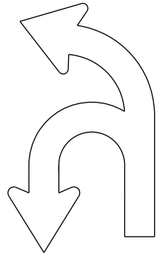

(I)



(L)



(R)


(U)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1	Letter =	3.75 sq ft for Size 2
		6.0 sq ft for Size 3
		10.0 sq ft for Size 4 or 5
2	Letters =	7.5 sq ft for Size 2
		12.0 sq ft for Size 3
		20.0 sq ft for Size 4 or 5
3	Letters =	11.25 sq ft for Size 2
		18.0 sq ft for Size 3
		30.0 sq ft for Size 4 or 5
4	Letters =	15.0 sq ft for Size 2
		24.0 sq ft for Size 3
		40.0 sq ft for Size 4 or 5
5	Letters =	18.75 sq ft for Size 2
		30.0 sq ft for Size 3
		50.0 sq ft for Size 4 or 5
6	Letters =	22.5 sq ft for Size 2
		36.0 sq ft for Size 3
		60.0 sq ft for Size 4 or 5

6. When letters C,D,G,H are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

7

7

PROJECT NO:

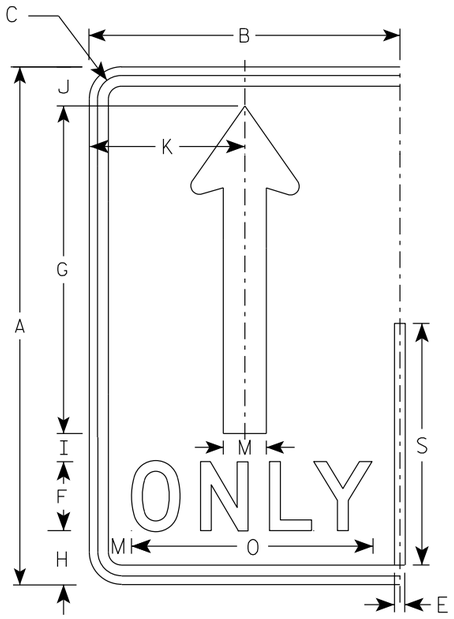
SHEET NO: 330 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 21-MAY 2019 4:37 PLOT BY : mscj9h PLOT NAME :

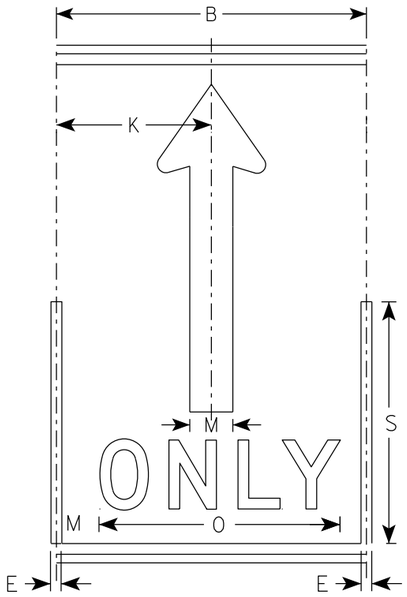
WISDOT/CADDS SHEET 42

NOTES

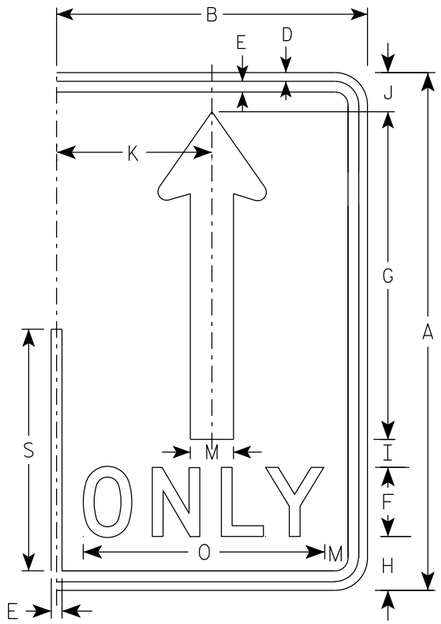
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



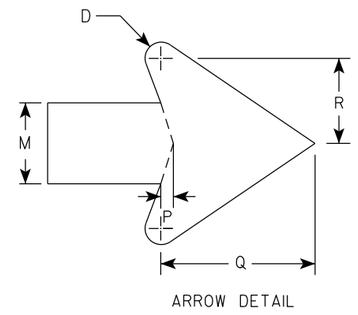
(A)



(A)



(A)



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	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

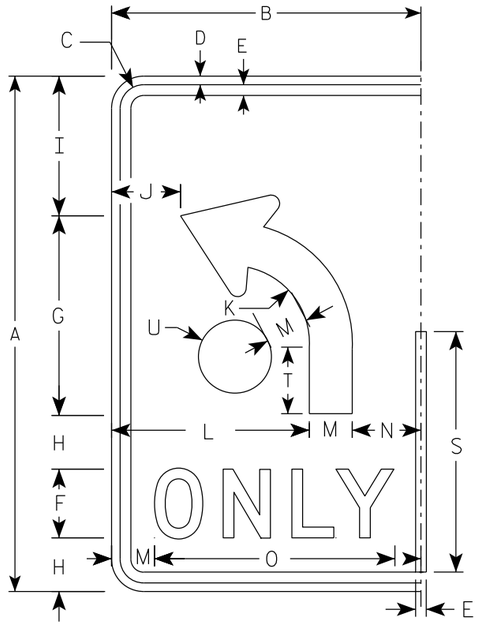
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

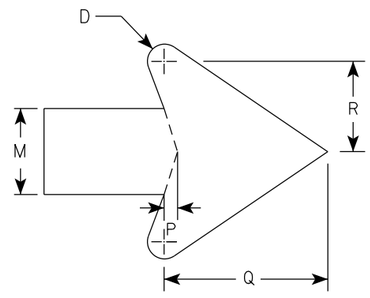
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 331 | E

NOTES

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



(B)



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	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN
R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

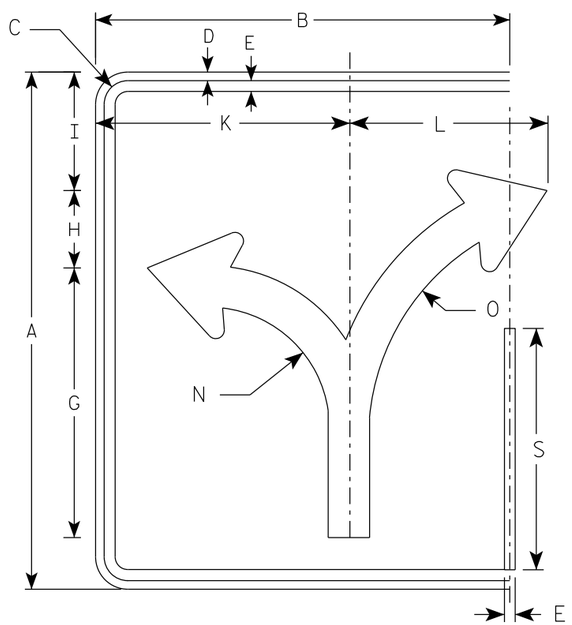
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

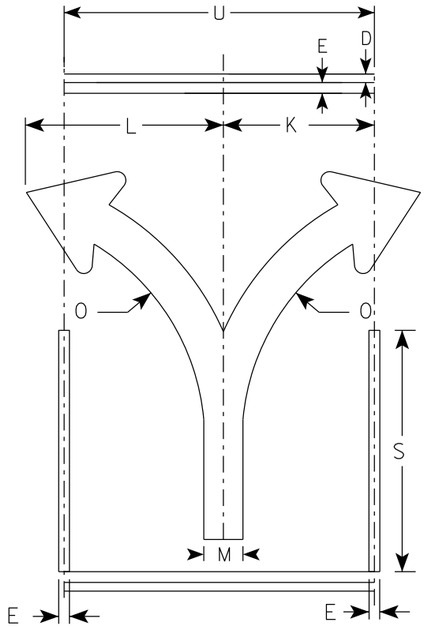
SHEET NO: 332 E

NOTES

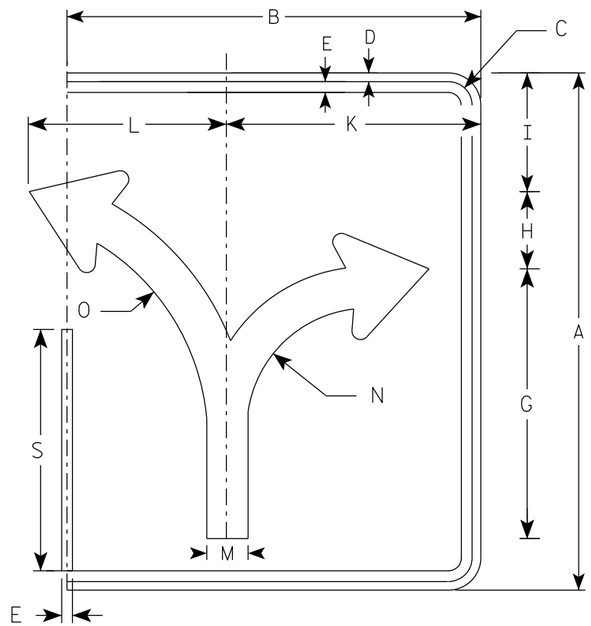
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



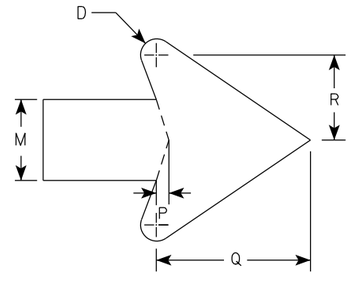
(C)



(C)



(C)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

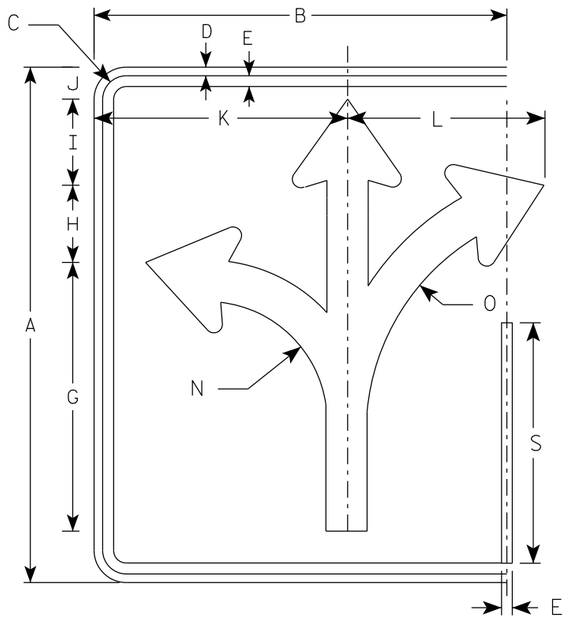
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

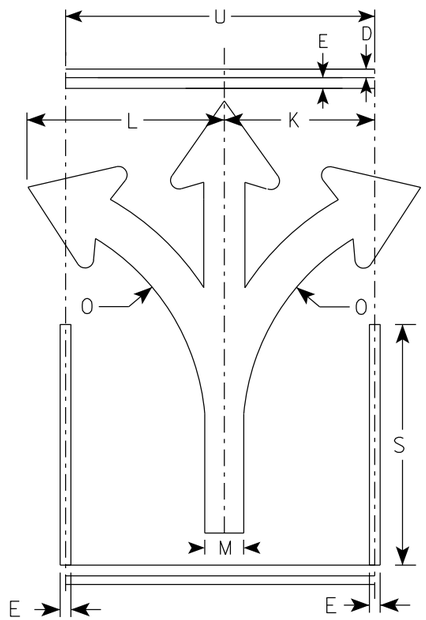
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 333 | E

NOTES

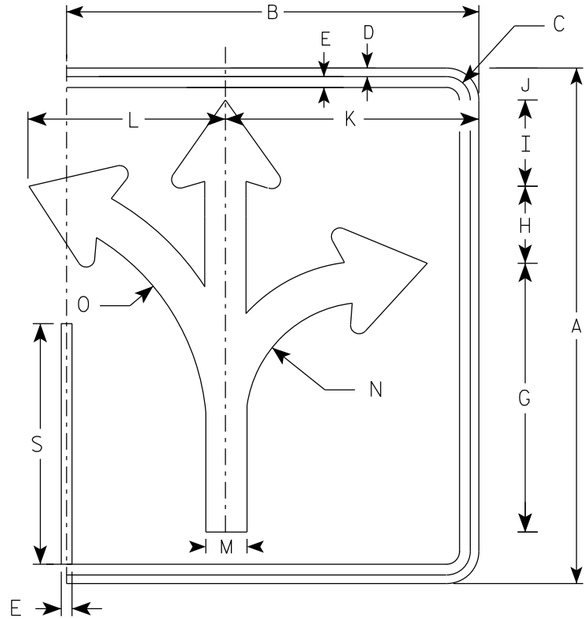
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



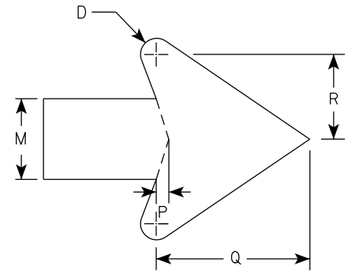
(D)



(D)



(D)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

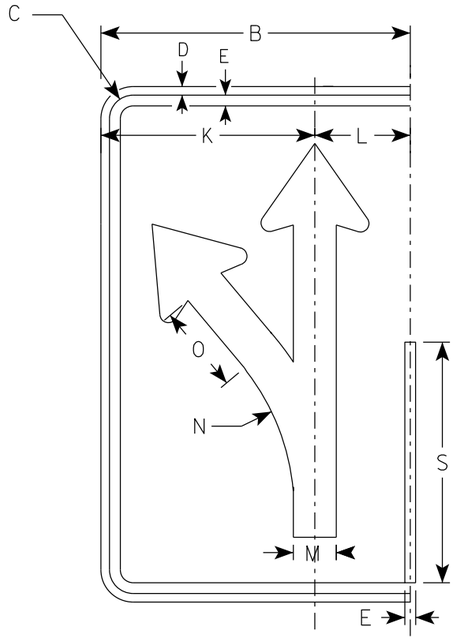
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 334 | E

7

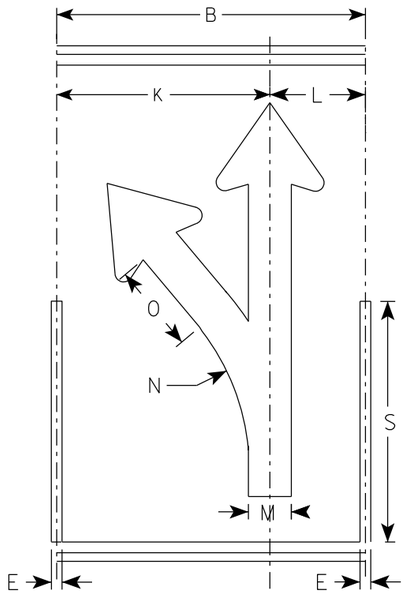
7

NOTES

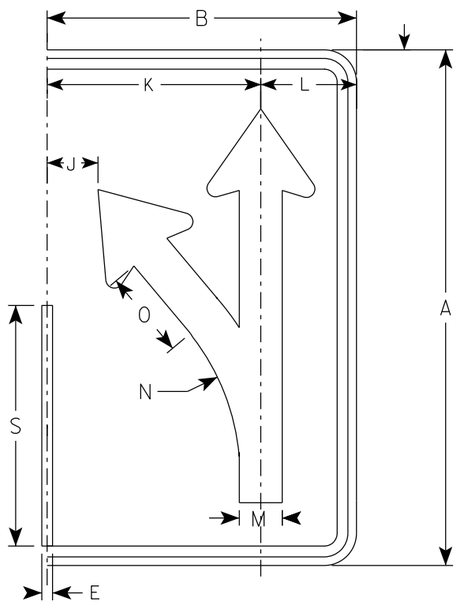
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



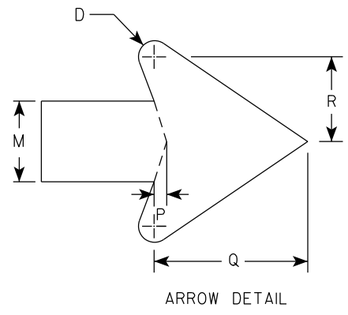
(E)



(E)



(E)



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	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

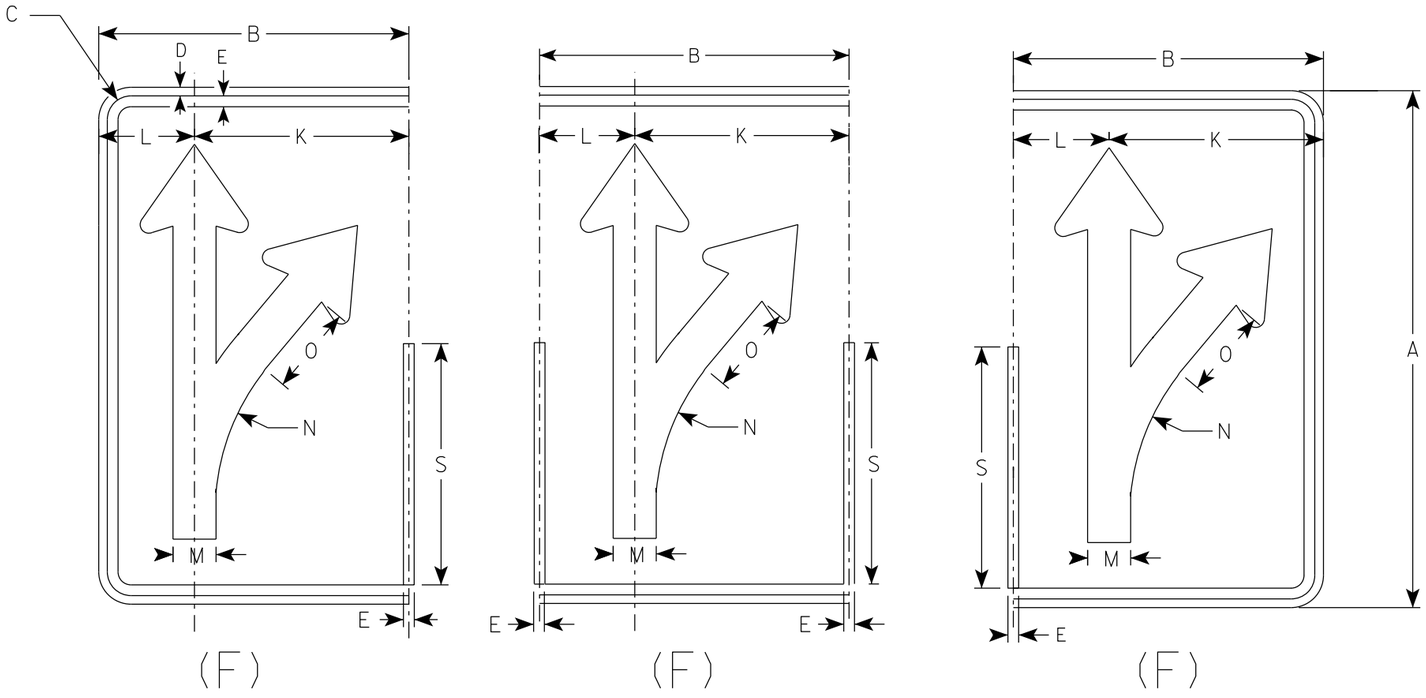
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

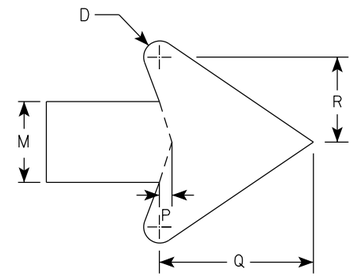
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 335 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(F) (F) (F)



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	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

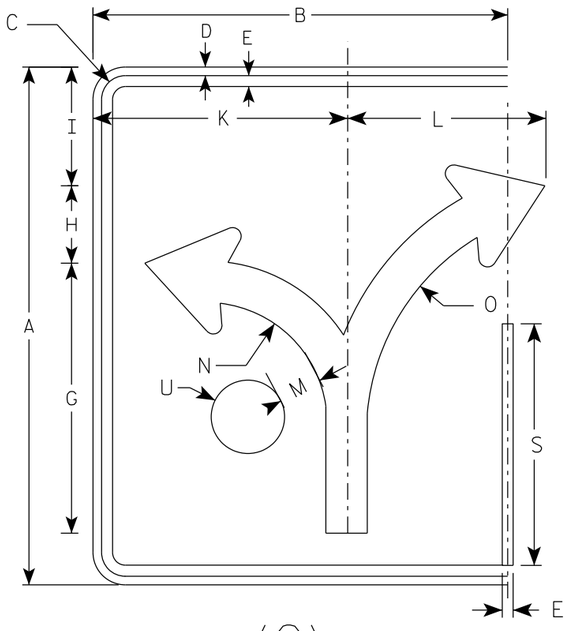
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

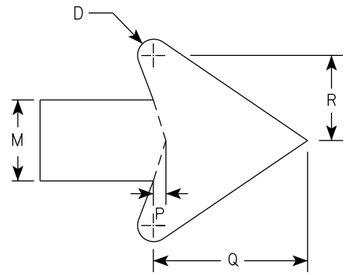
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 336 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



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 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

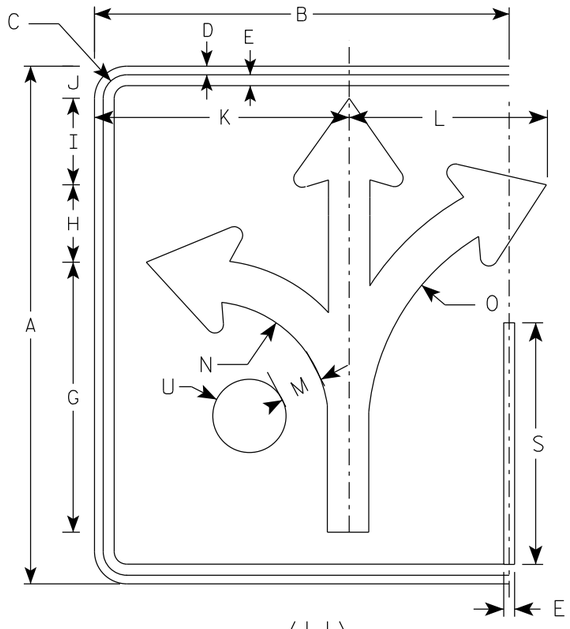
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 337	E

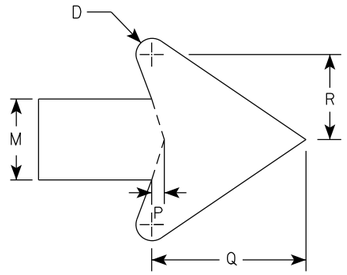
FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 21-MAY 2019 4:38 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



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 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 3/8	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 3/8	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

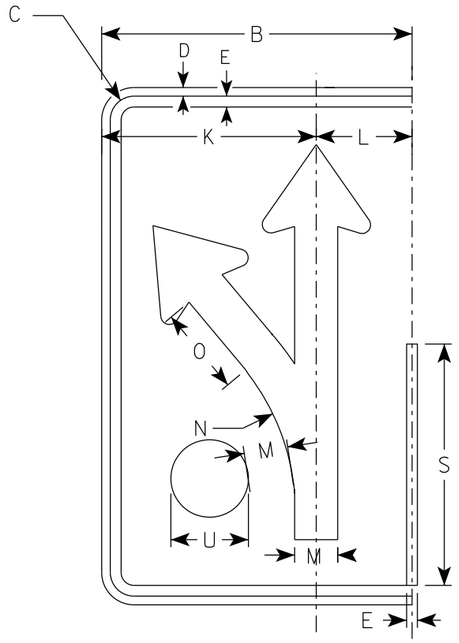
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

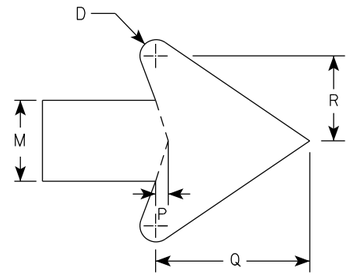
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 338	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



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	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 3/8	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

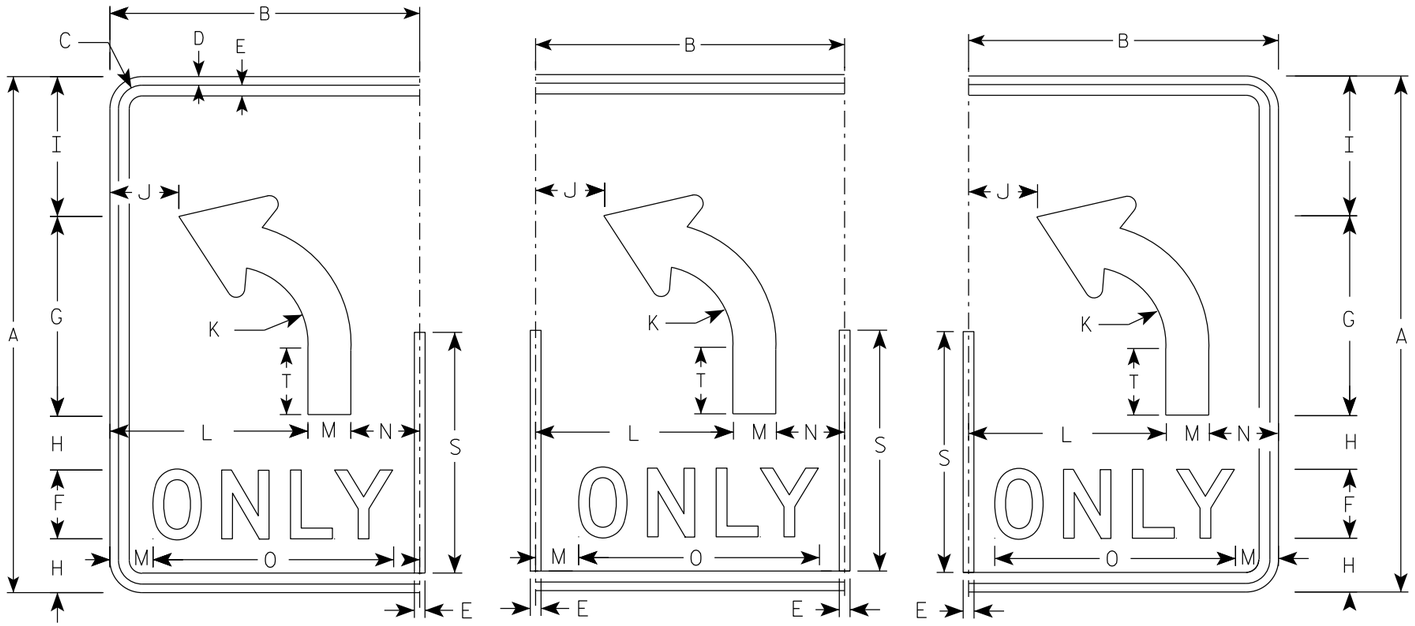
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

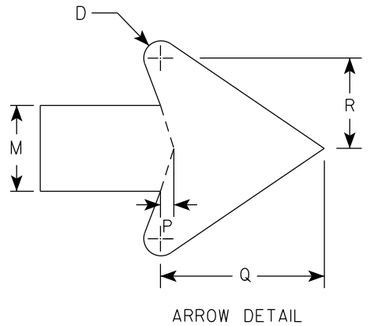
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 339 | E

NOTES

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



(L) (L) (L)



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	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4		5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

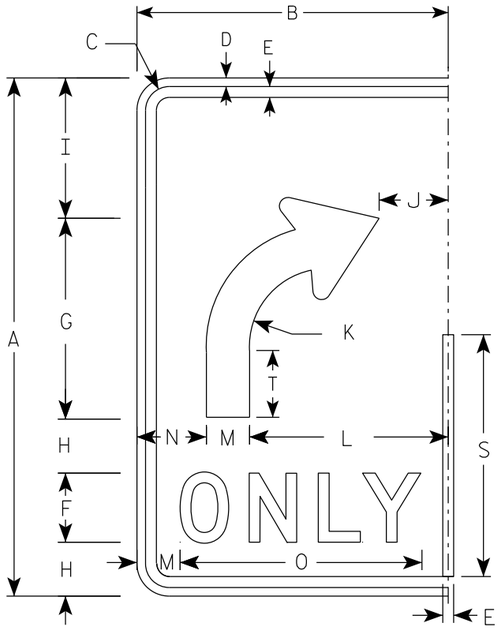
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

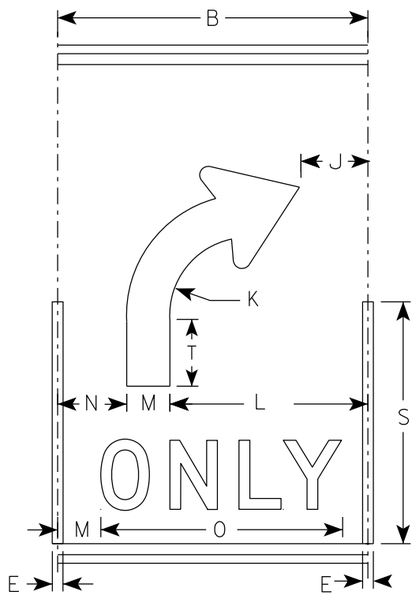
SHEET NO: 340 E

NOTES

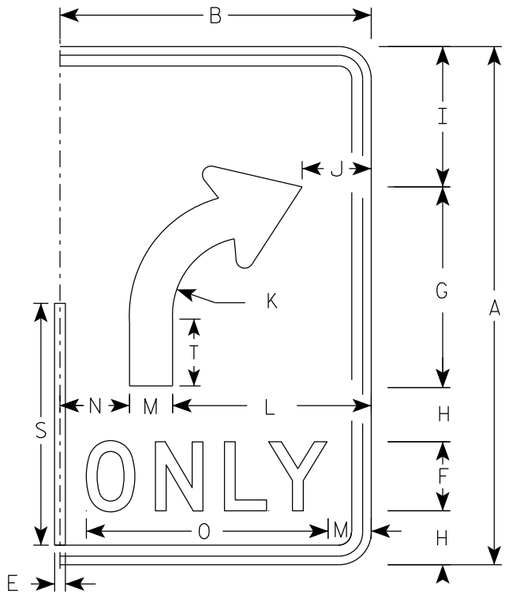
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



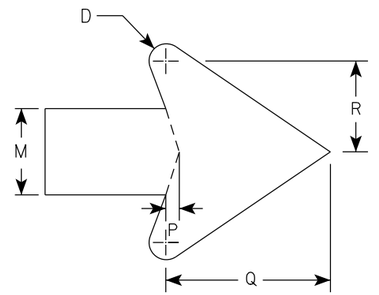
(R)



(R)



(R)



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	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 3/8	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 3/8	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

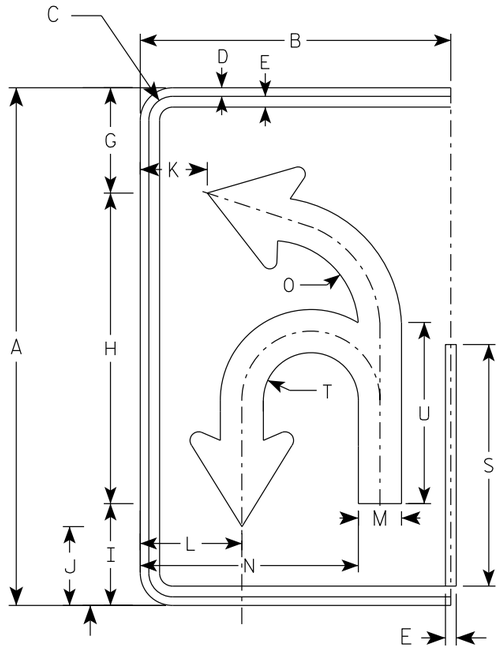
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

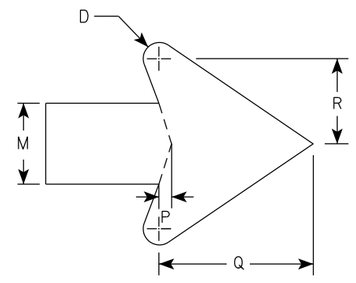
SHEET NO: 341 **E**

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(U)



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	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 3/8	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 3/8	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

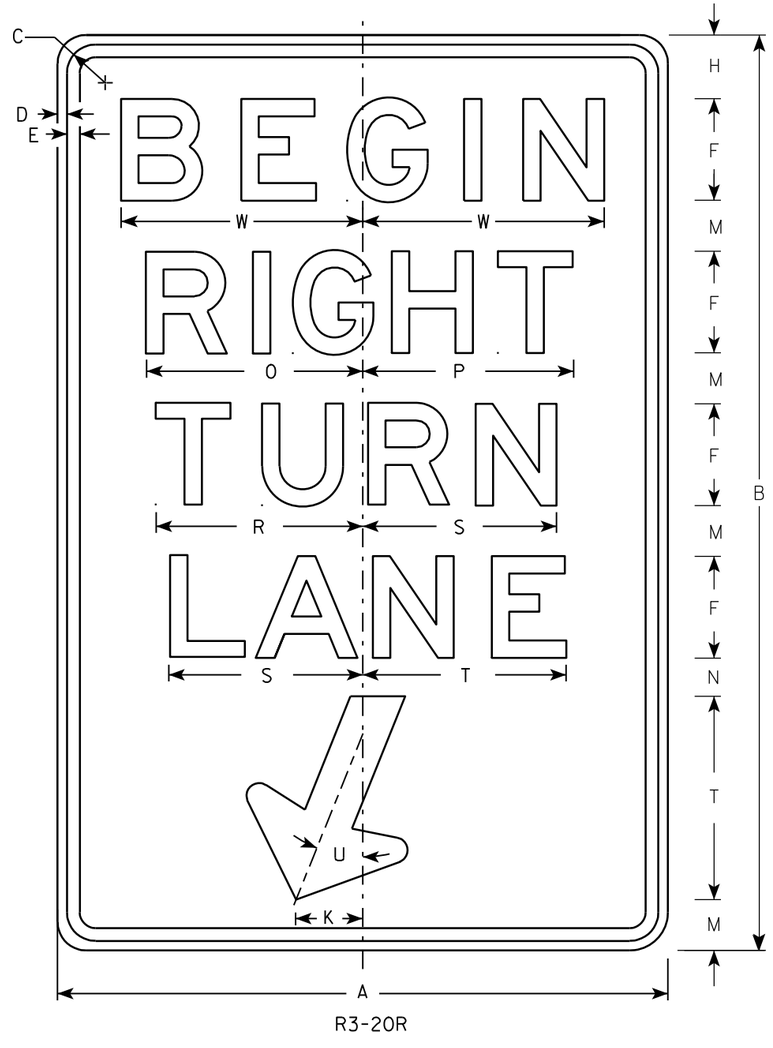
STANDARD SIGN
R3-8 (U) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

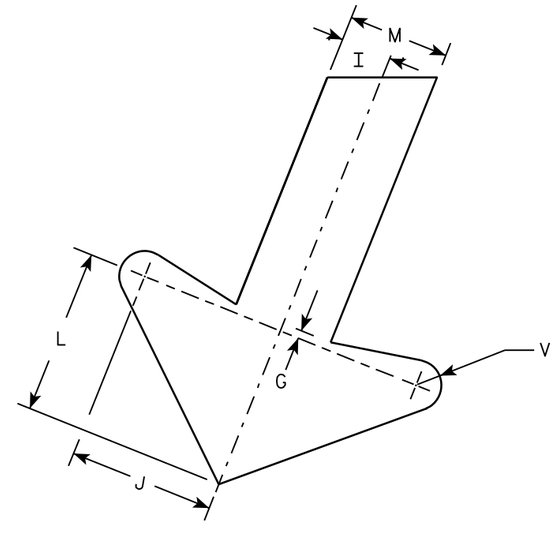
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 342 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
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.



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	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

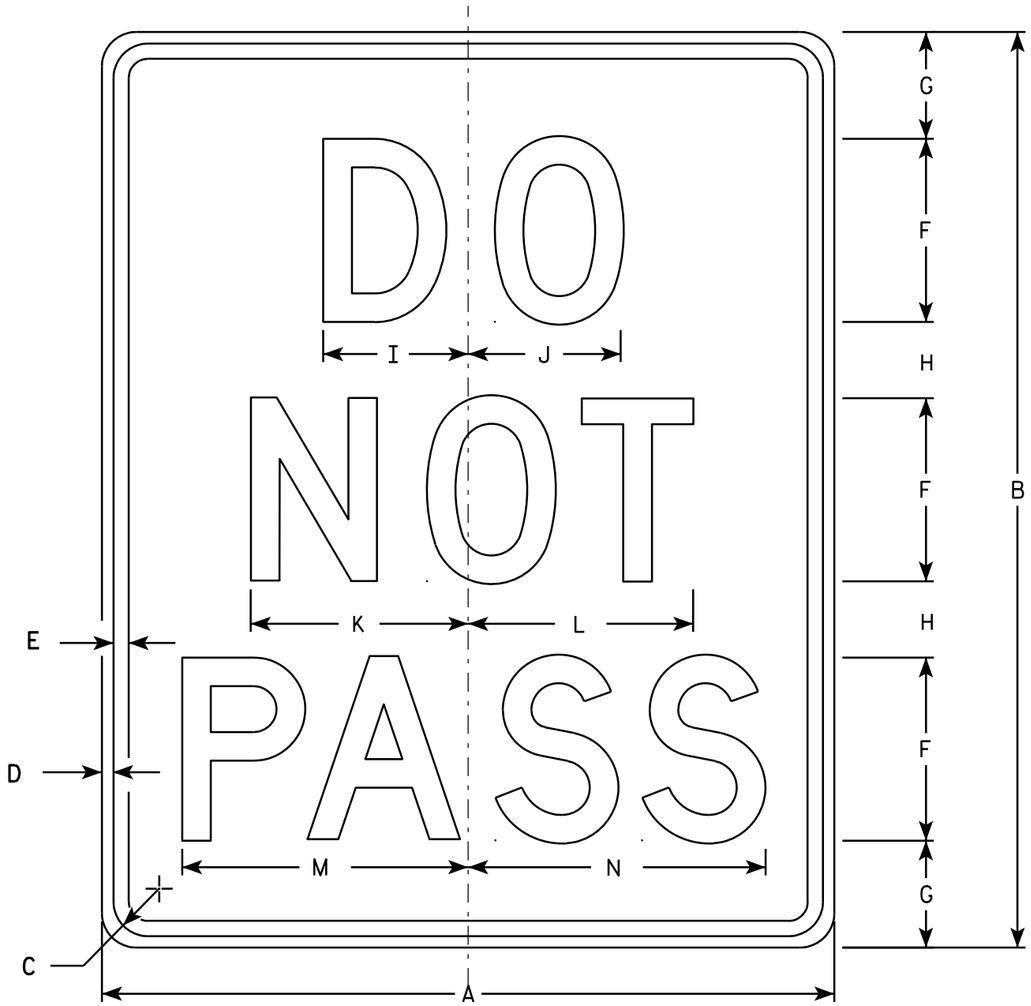
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 343 | E



R4-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

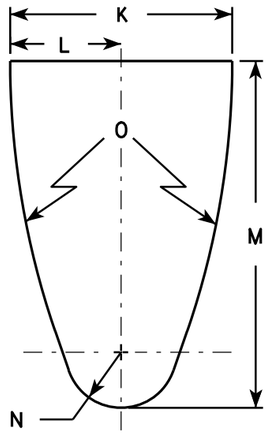
STANDARD SIGN
R4-1

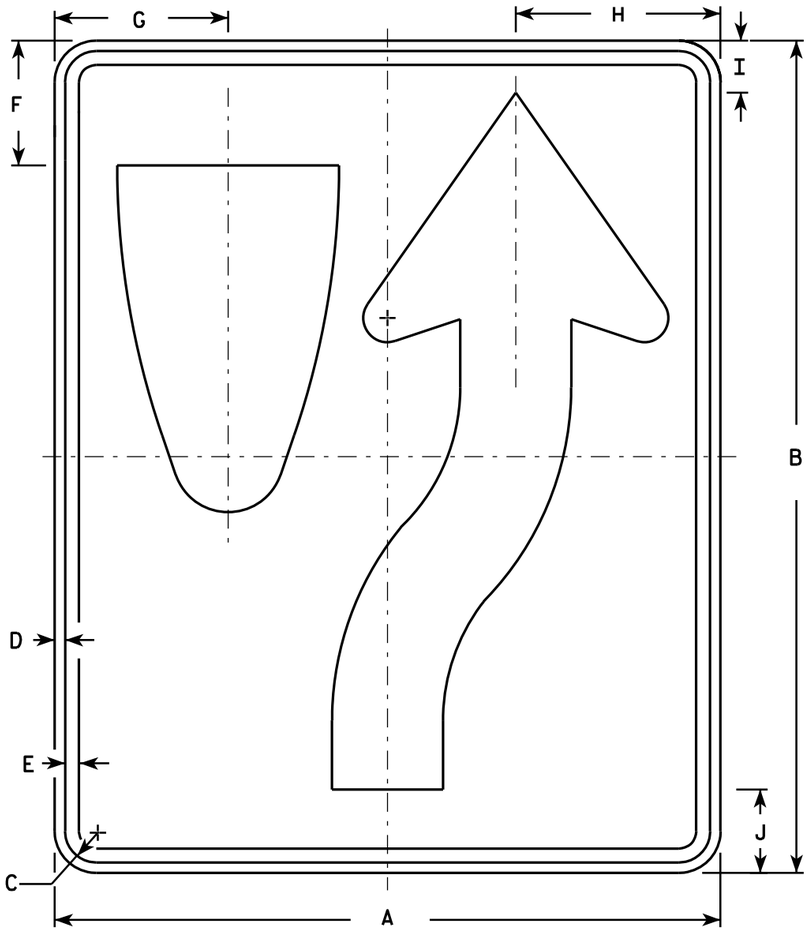
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 344 | E

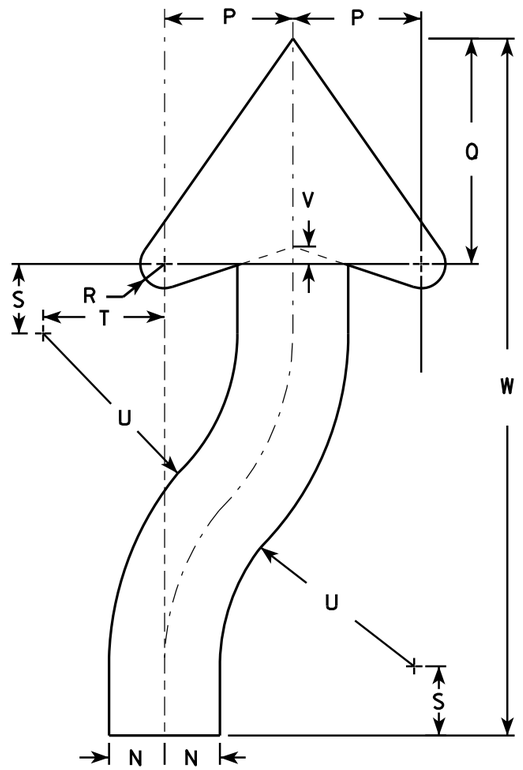




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend 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	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

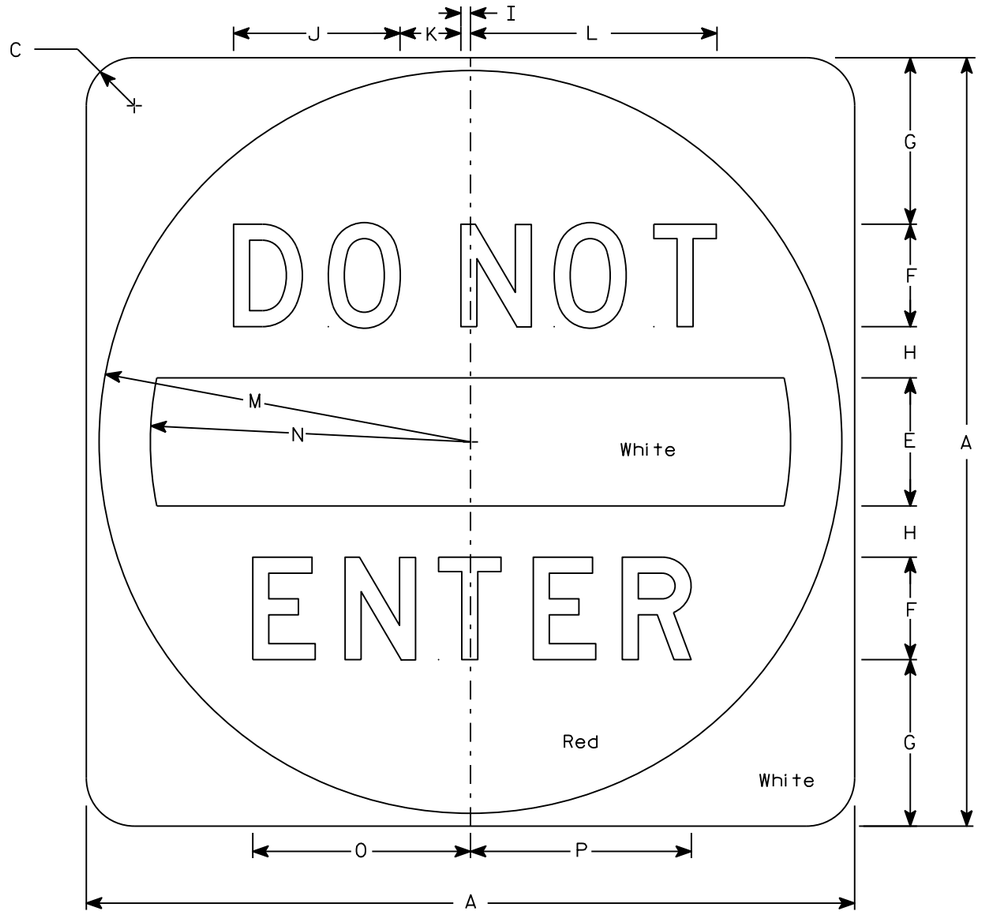
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 345	E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
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																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

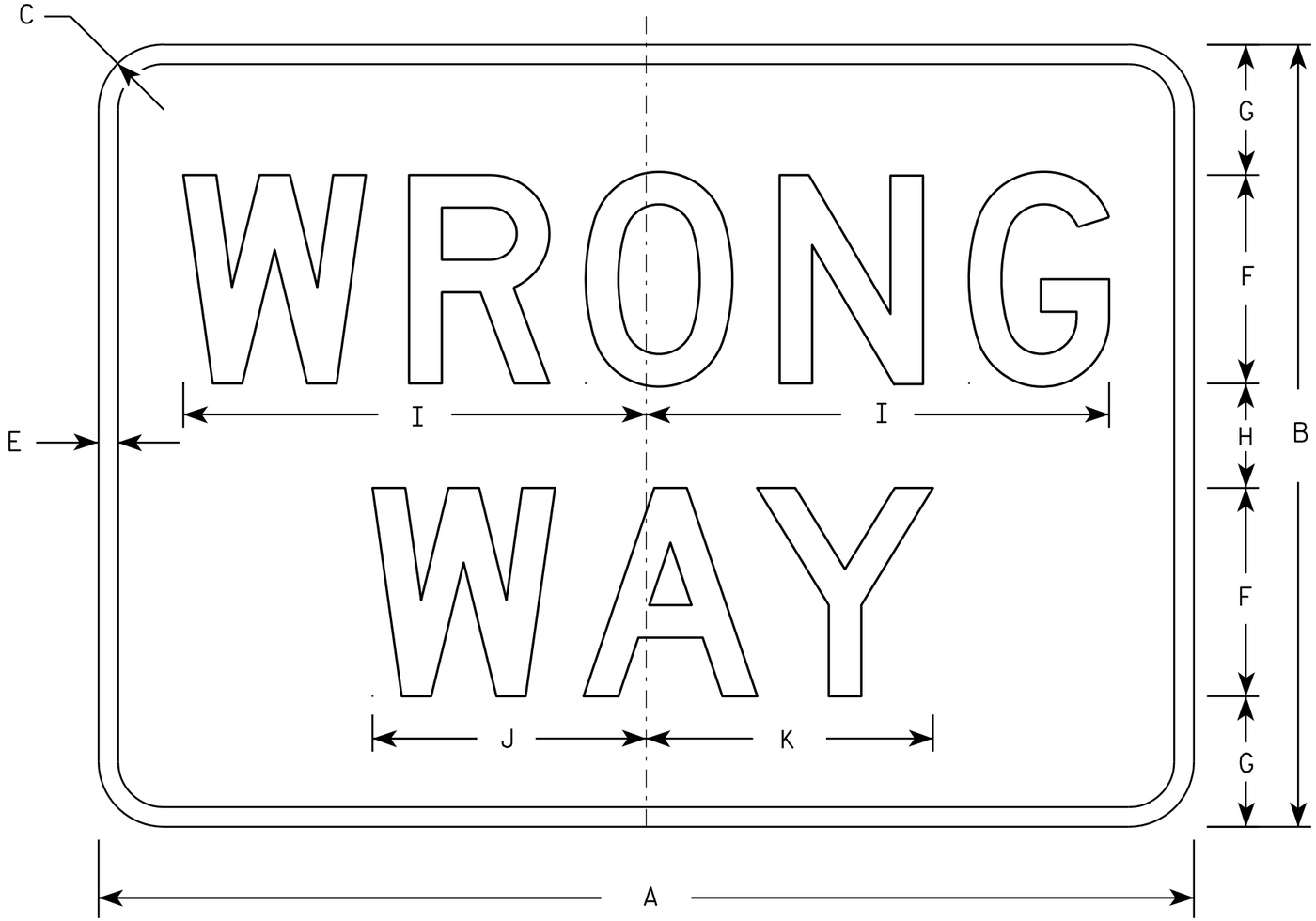
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 346 | E



R5-1A

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
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	30	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

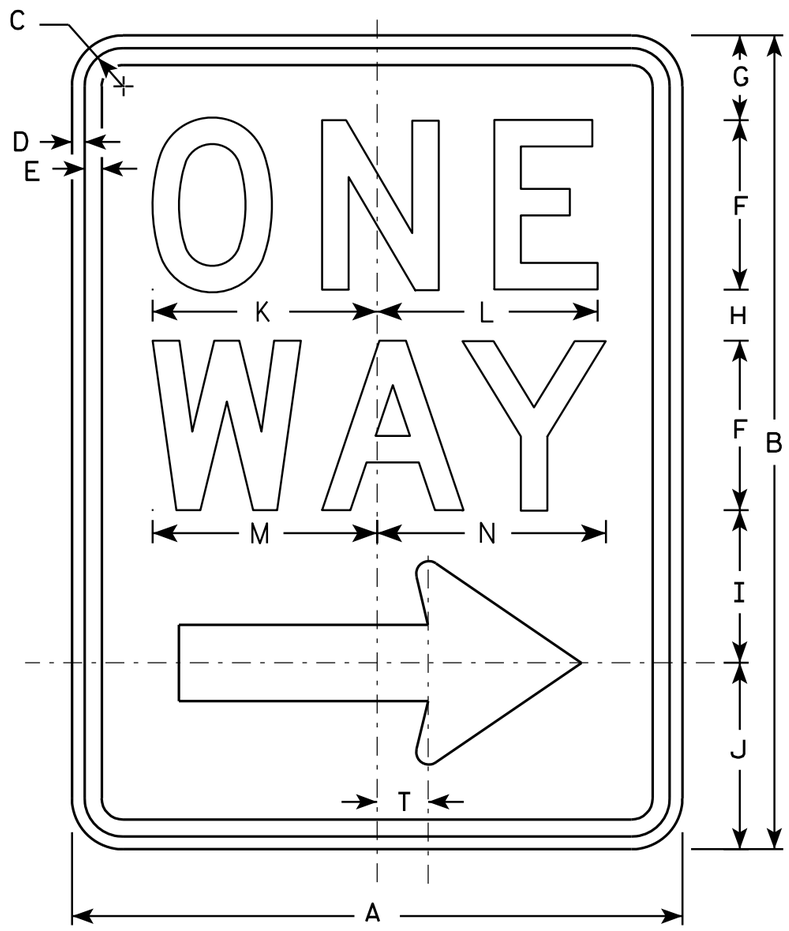
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

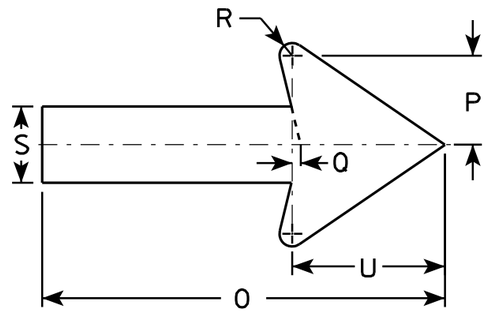
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 347 | E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

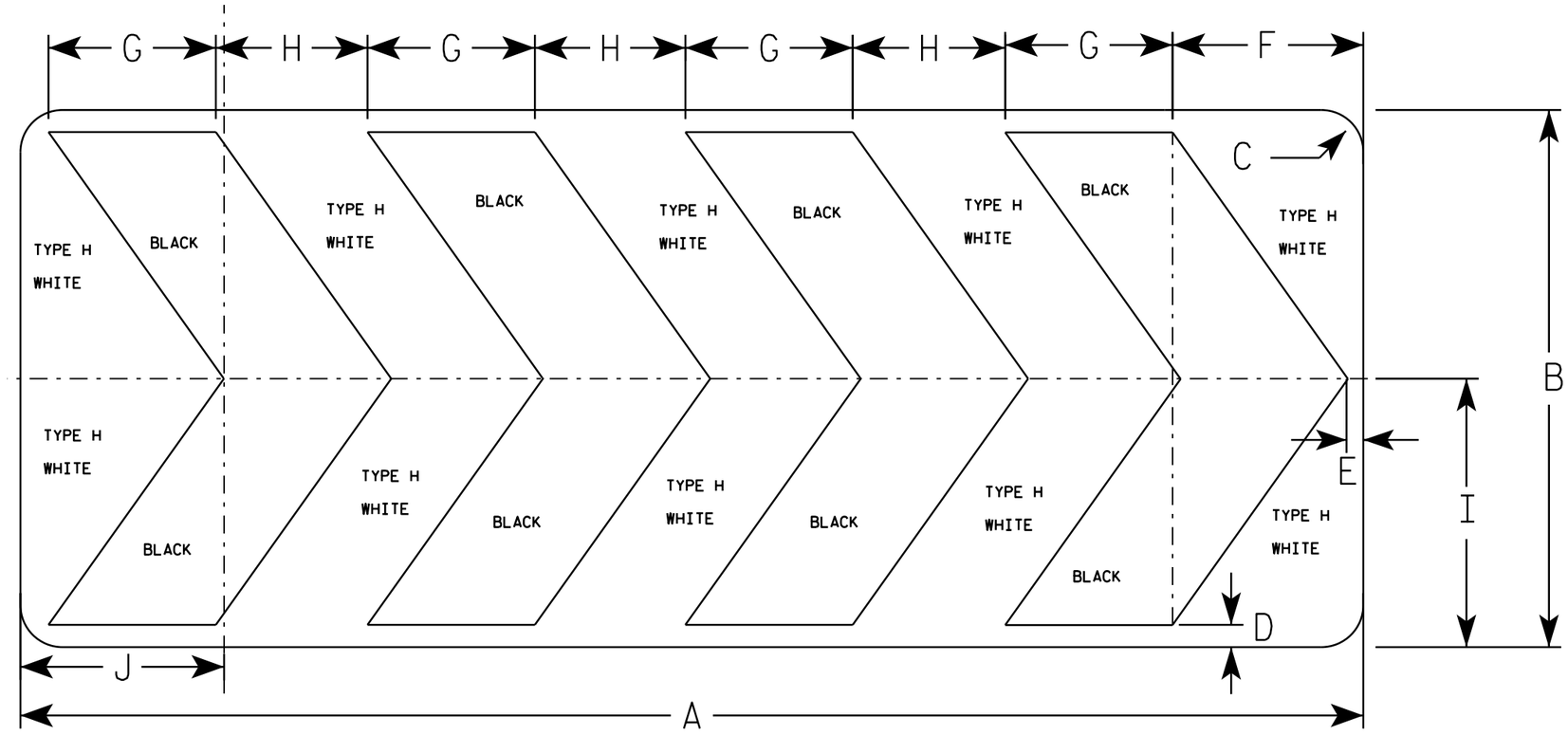
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 348	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - WHITE
   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.



R6-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

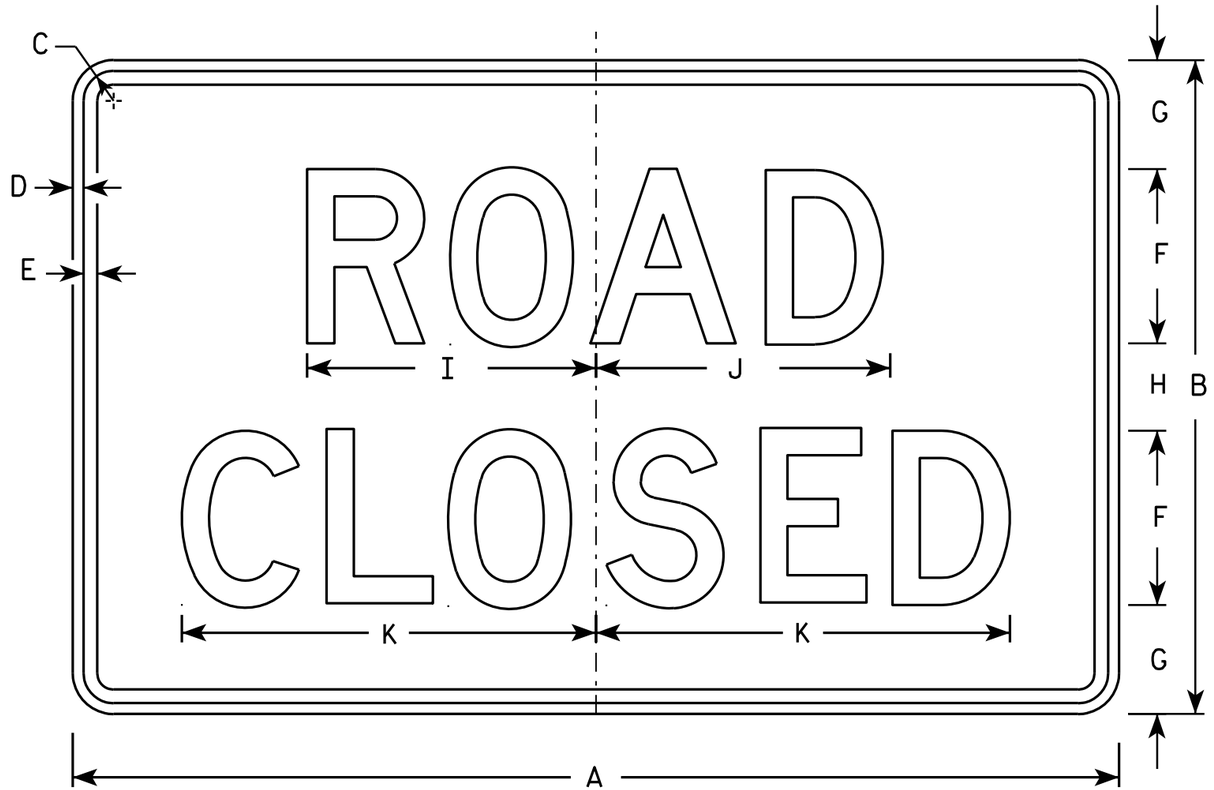
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

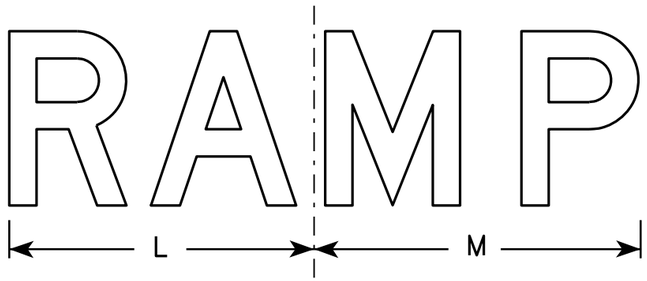
WISDOT/CADDS SHEET 42



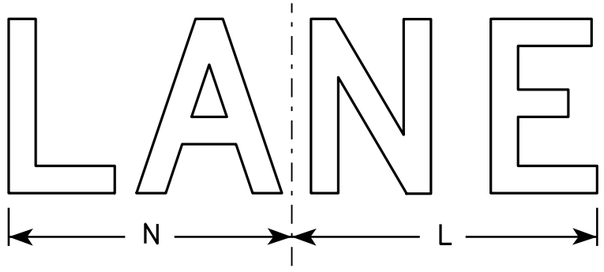
R11-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.
5. Modify the message as required.



R11-2R



R11-2L

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 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

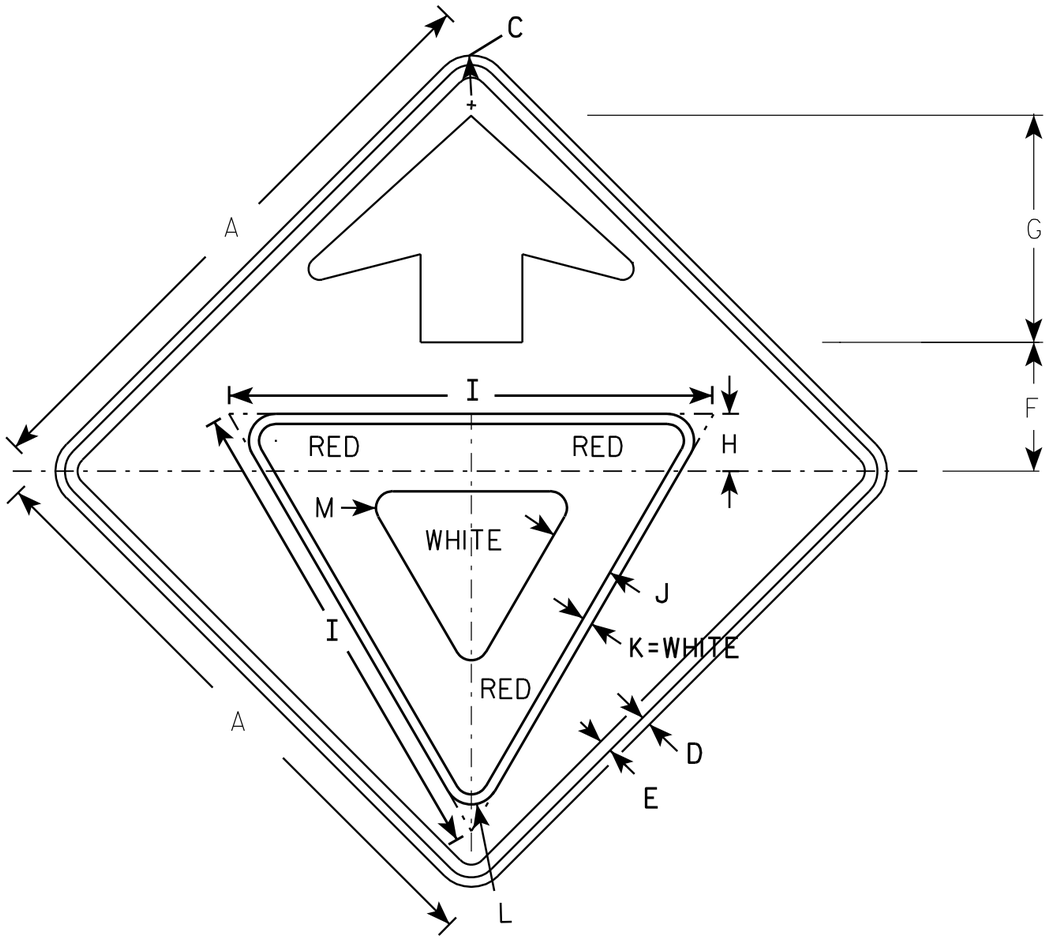
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

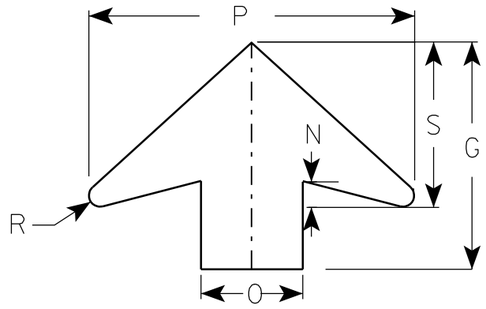
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 350	E



W3-2

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - YELLOW
   Arrow & Border - BLACK
   Yield Symbol - WHITE BORDER ON RED BACKGROUND



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	30		1 3/8	1/2	5/8	6 1/4	11 1/4	3	25	3 3/8	1/2	1 3/8	7/8	1 1/4	5	16		1/2	8								6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 3/8	28	3 3/4	5/8	1 1/2	1	1 5/8	6	19 1/4		5/8	9 3/4								9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	38	5	3/4	2 1/8	1 3/8	2	8	25 5/8		7/8	13								16.0

STANDARD SIGN
W3-2

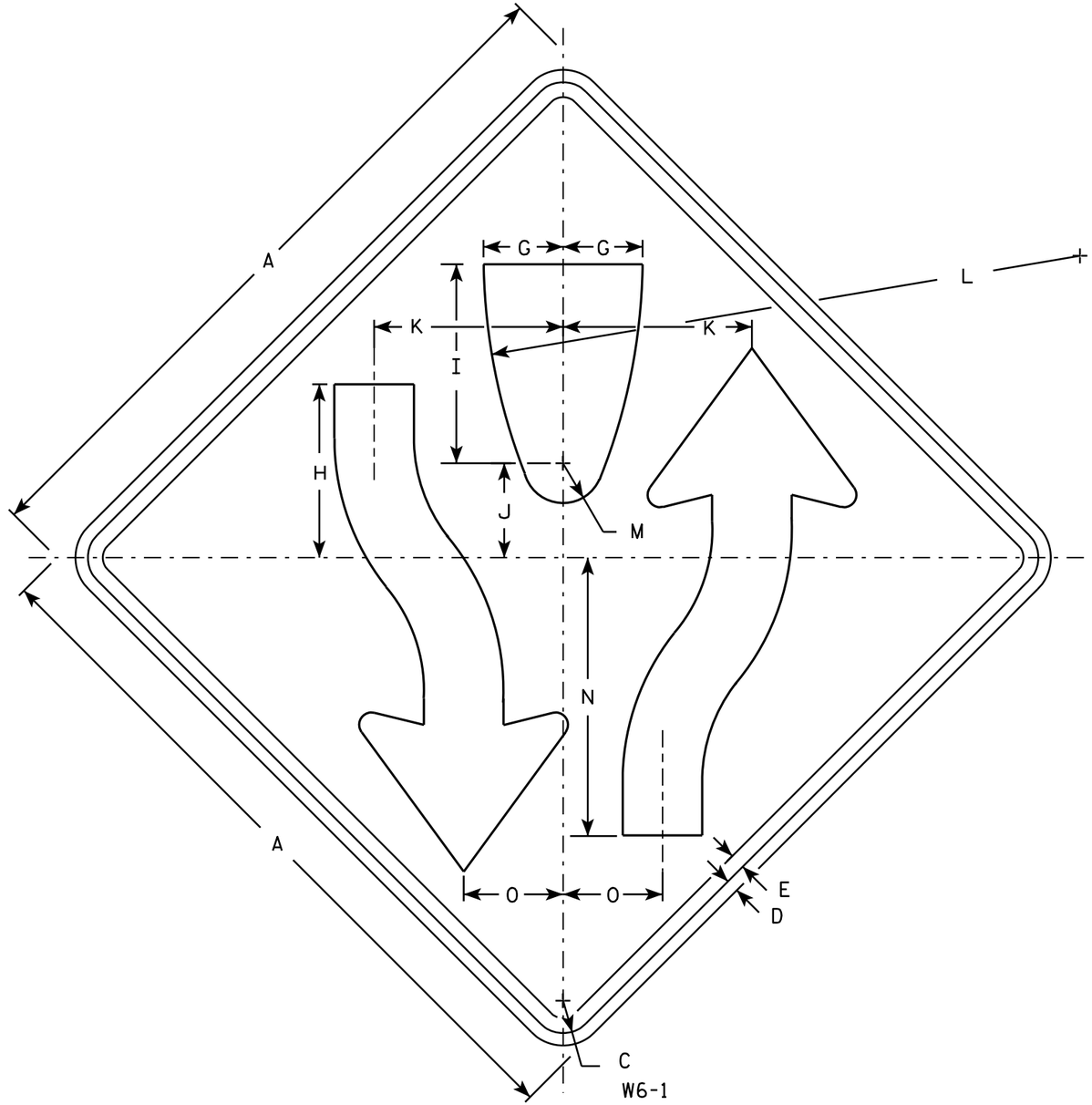
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W3-2..9

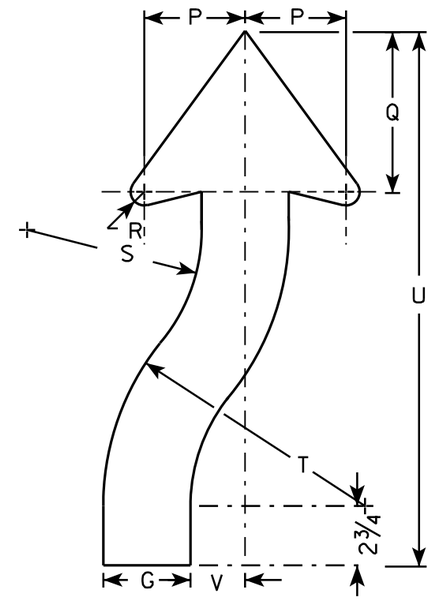
PROJECT NO:

SHEET NO: 351 E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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. W6-2 same as W6-1 but is rotated 180° when mounted.



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	30		1 3/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3																											
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

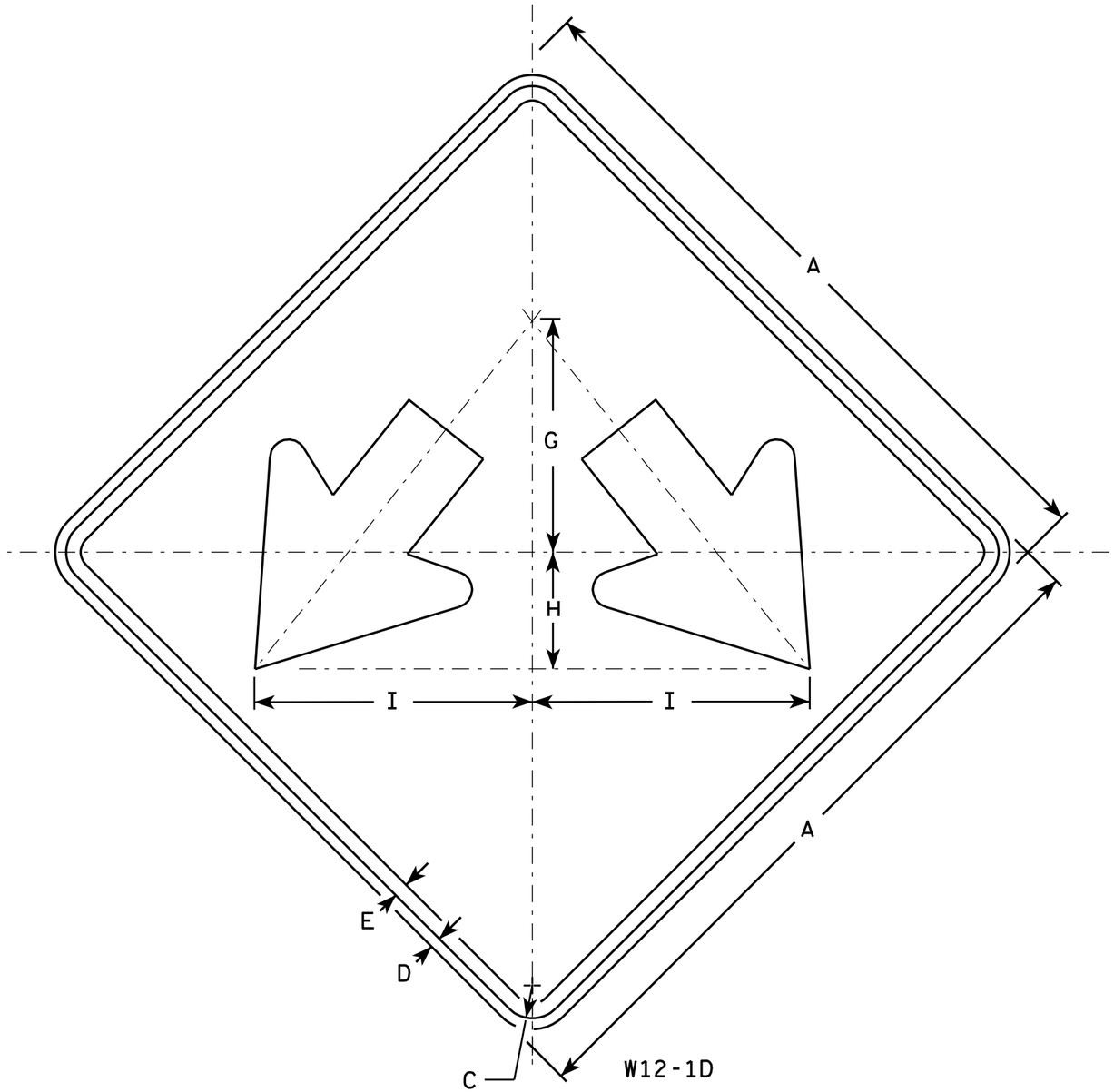
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W6-1.14

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 352	E

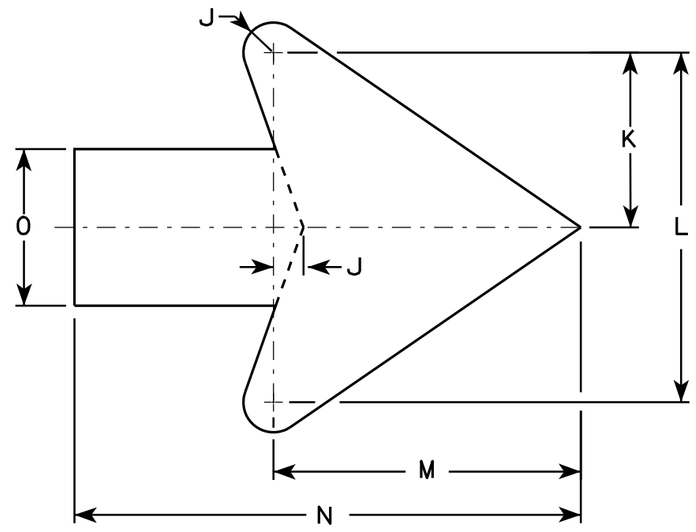
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W61.DGN PLOT DATE : 12-MAR-2013 14:02 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.946657:1.000000

WISDOT/CADDS SHEET 42



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   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.



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	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

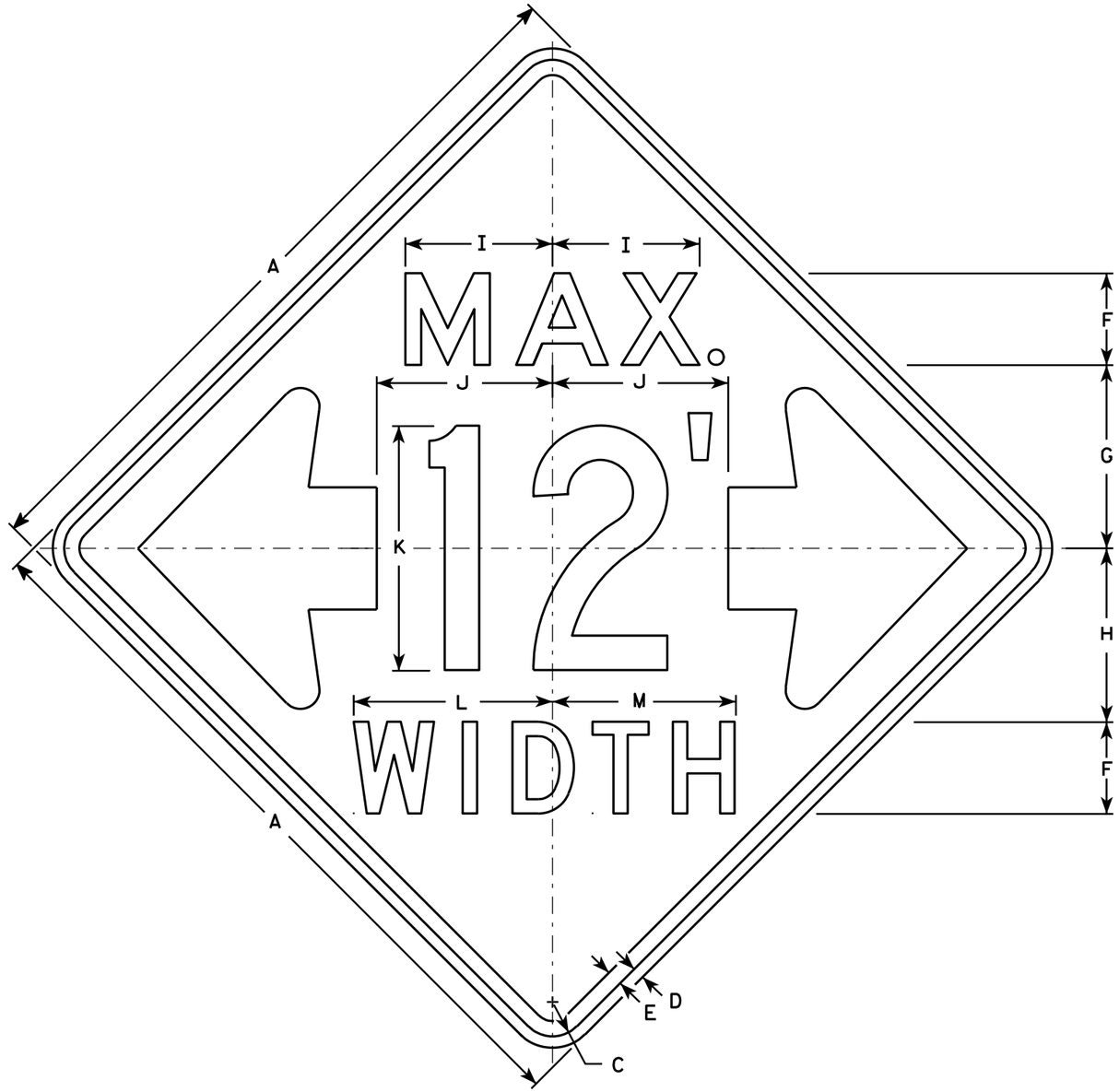
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 353	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W121D.DGN PLOT DATE : 13-MAR-2013 13:26 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 4.713802:1.000000

WISDOT/CADDS SHEET 42

7

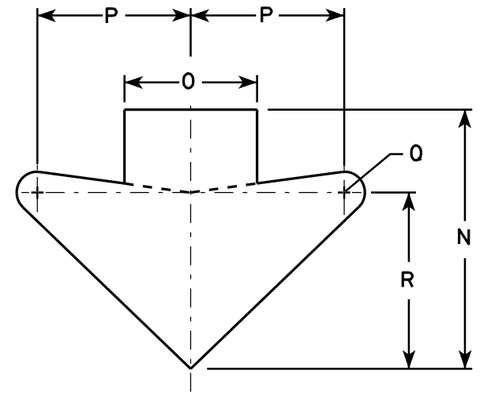
7



W12-52

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



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	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
2M	48		2 1/4	3/4	1	6	12	11 3/8	9 5/8	11 1/2	16	13	12	15 5/8	8	9 1/4	1 1/4	10 5/8									16.0
3																											
4																											
5																											

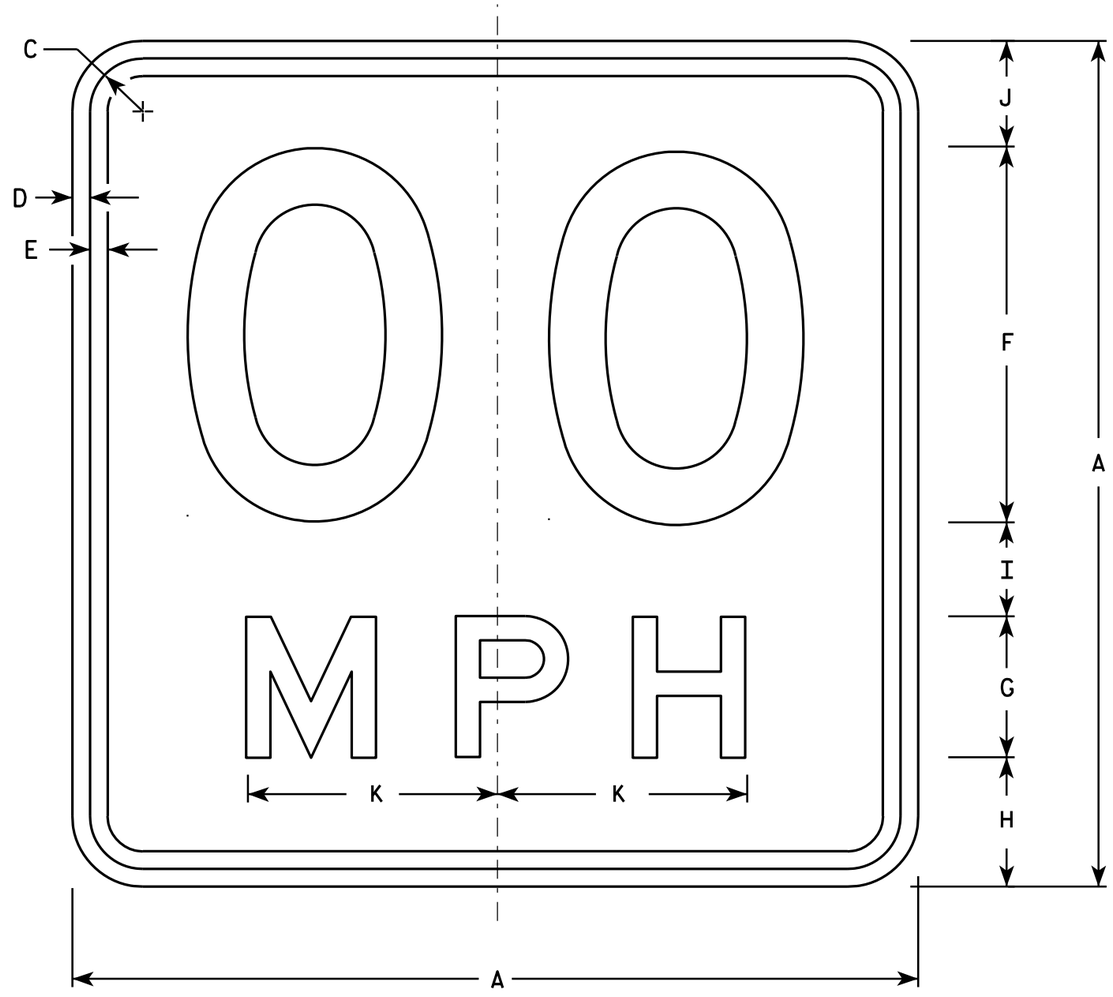
STANDARD SIGN
W12-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 354	E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
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 and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

	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	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

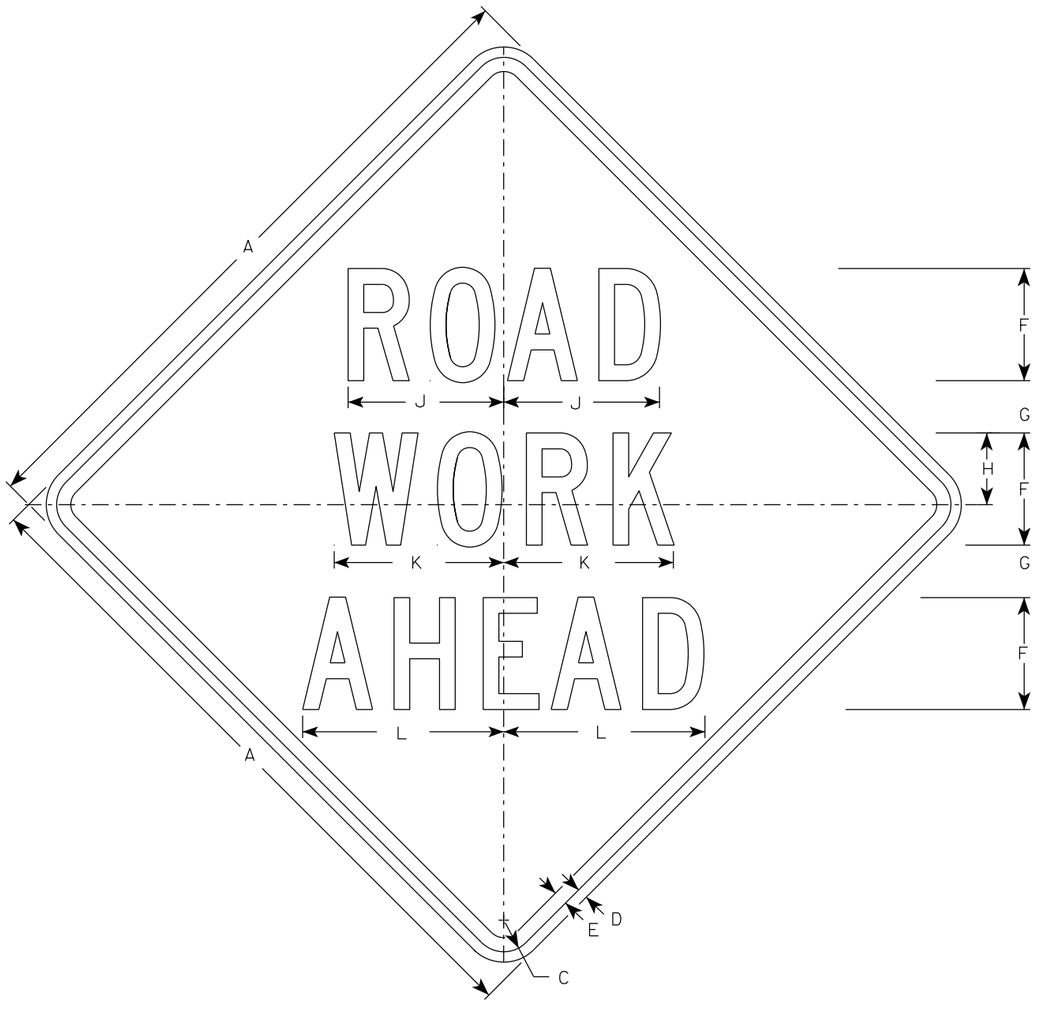
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

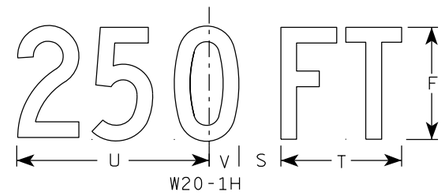
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 355 | E

NOTES

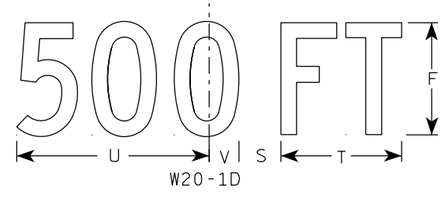
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



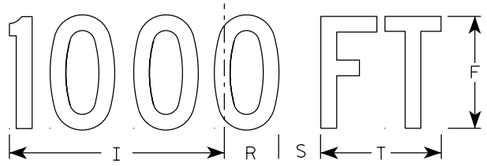
W20-1A



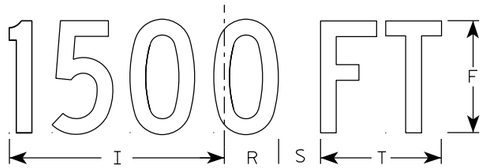
W20-1H



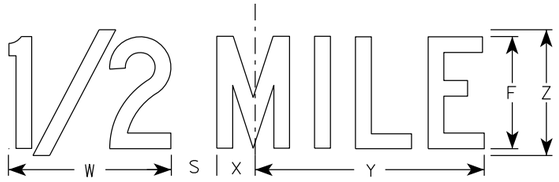
W20-1D



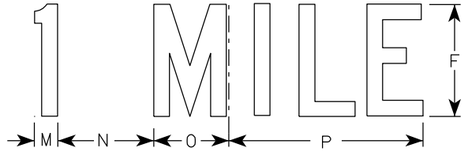
W20-1C



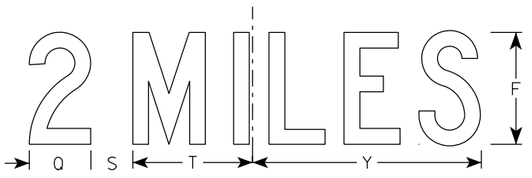
W20-1B



W20-1G



W20-1F



W20-1E

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		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

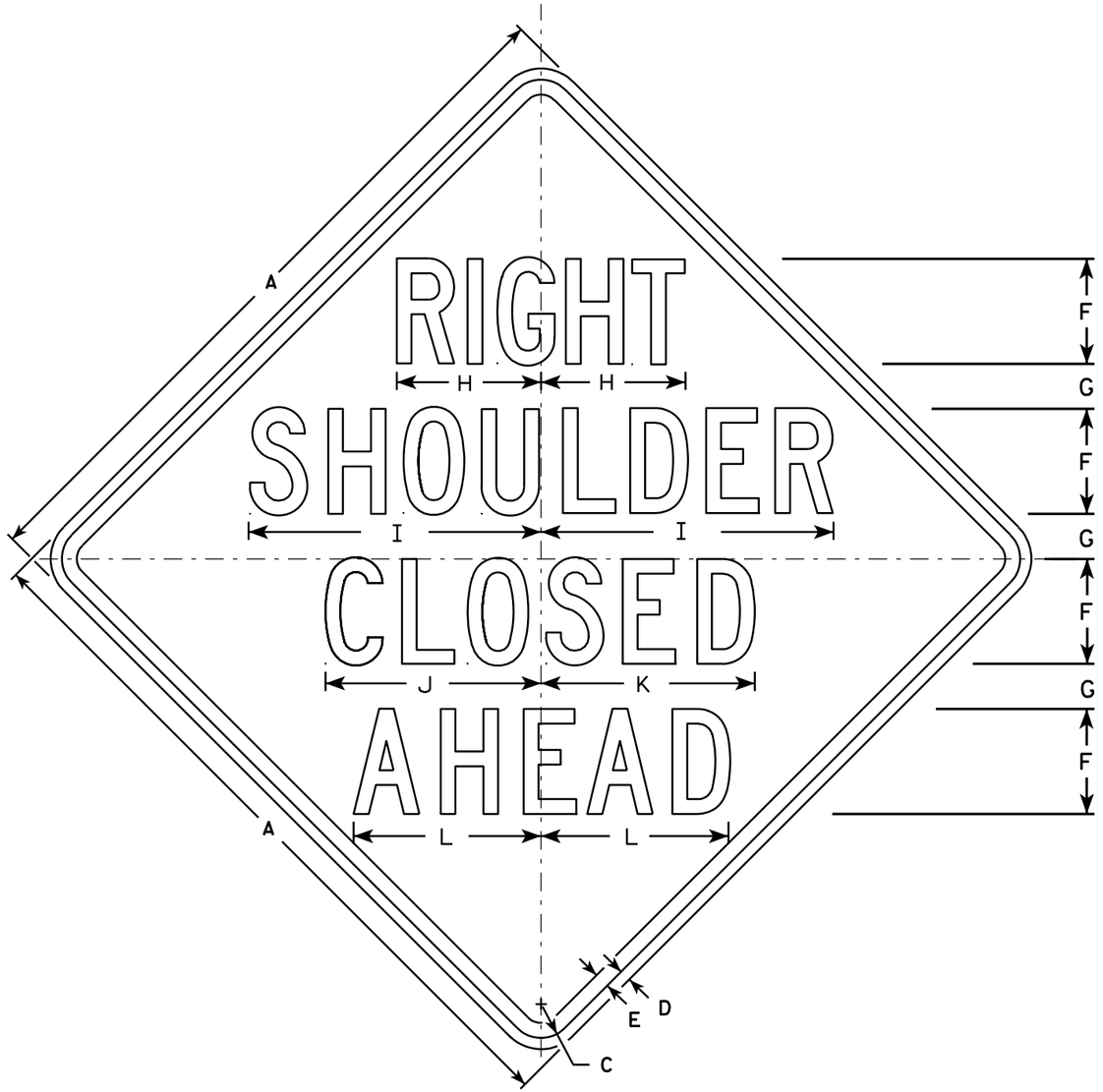
SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

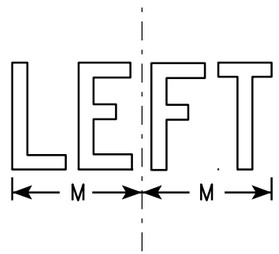
WISDOT/CADDS SHEET 42

7

7



W21-5B



W21-5BL

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 1/4	7 3/8	14 1/4	10 1/4	10 1/8	8 7/8	6 1/4														9.0
2S	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
2M	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
3	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
4	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0
5	48		2 1/4	3/4	1	7	3	9 5/8	19 1/2	14 3/8	14 1/4	12 1/2	8 1/2														16.0

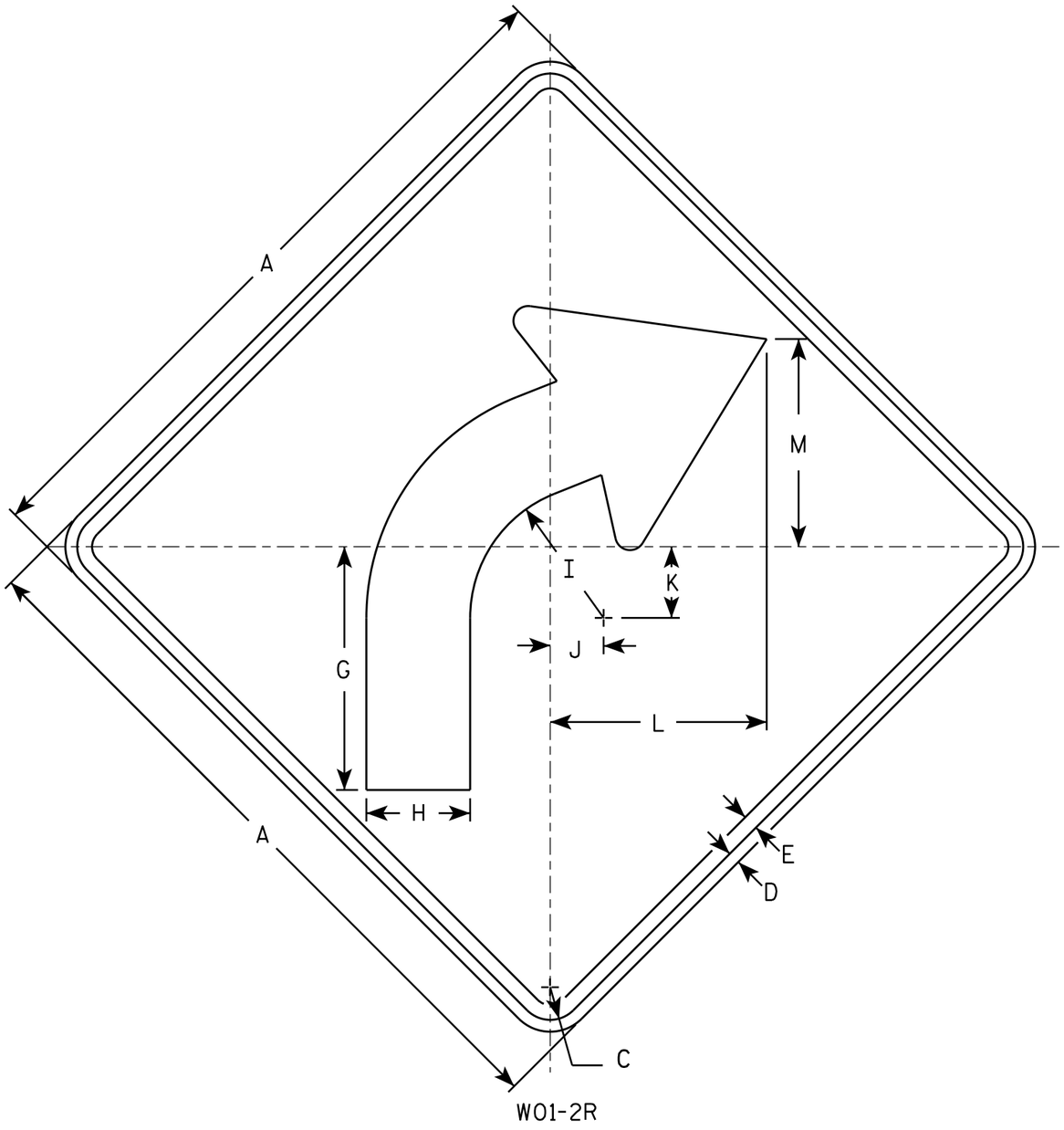
STANDARD SIGN
W21-5B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/11 PLATE NO. W21-5B.3

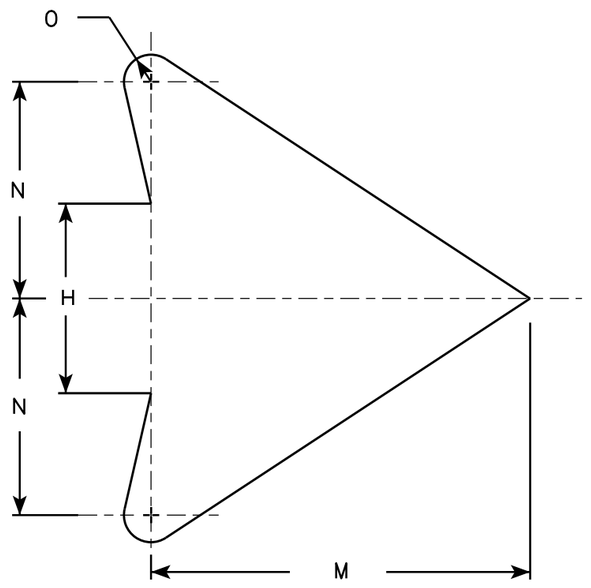
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 357	E



W01-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. W01-2L is the same as W01-2R except the arrow is reversed along the vertical centerline.



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	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												4.0
2S	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
2M	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
3	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
4	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN
W01-2

WISCONSIN DEPT OF TRANSPORTATION

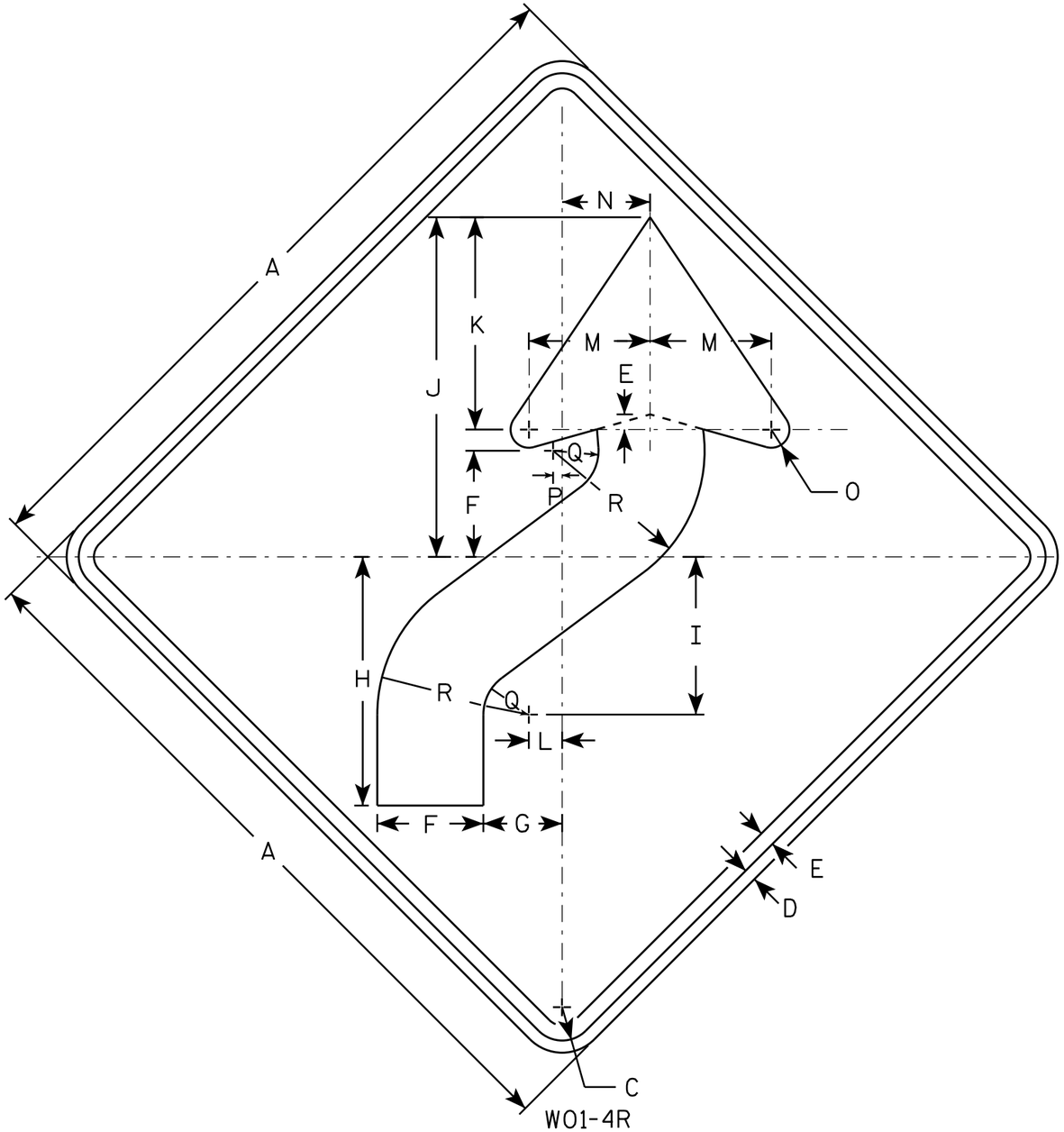
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-1.1

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

7

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W012.DGN PLOT DATE : 28-FEB-2014 11:34 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.992871:1.000000 WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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. W01-4L is the same as W01-4R 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	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
W01-4

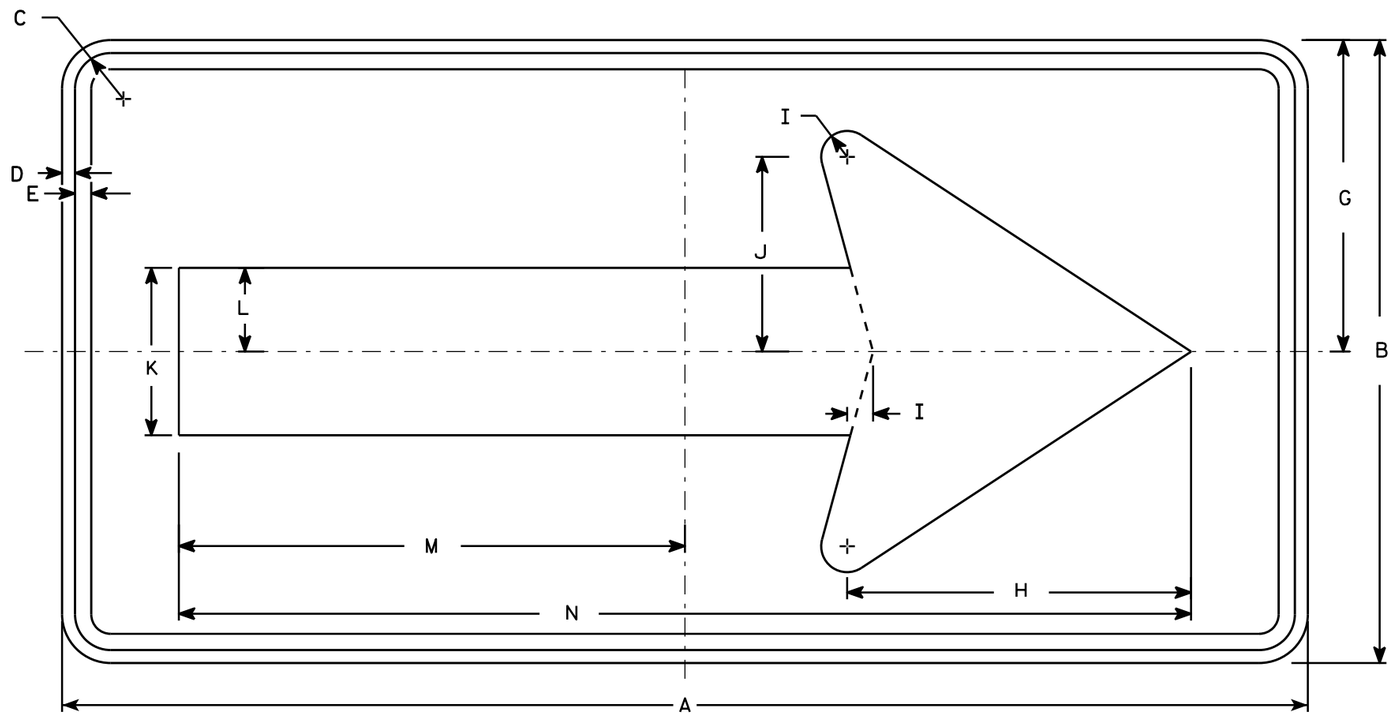
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000 WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

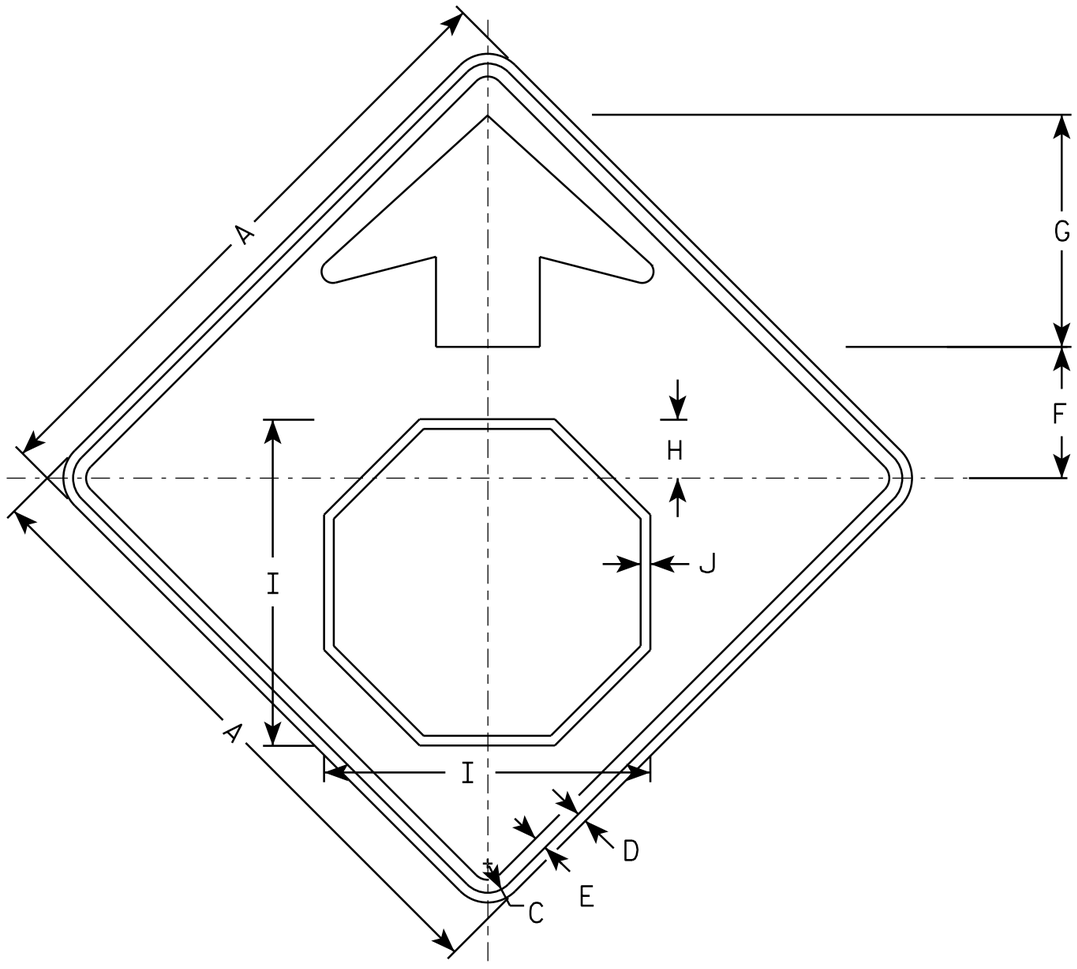
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

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

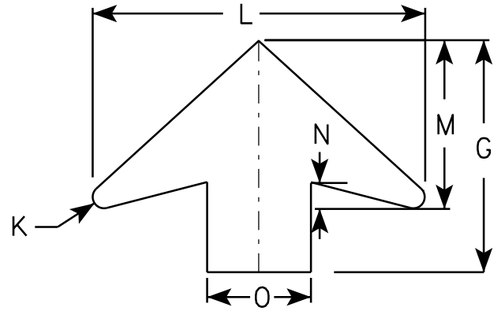
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W03-1

NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - ORANGE
   Arrow & Border - BLACK
   Stop Symbol - WHITE BORDER ON RED BACKGROUND



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	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2S	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
2M	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
3	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

STANDARD SIGN
W03-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

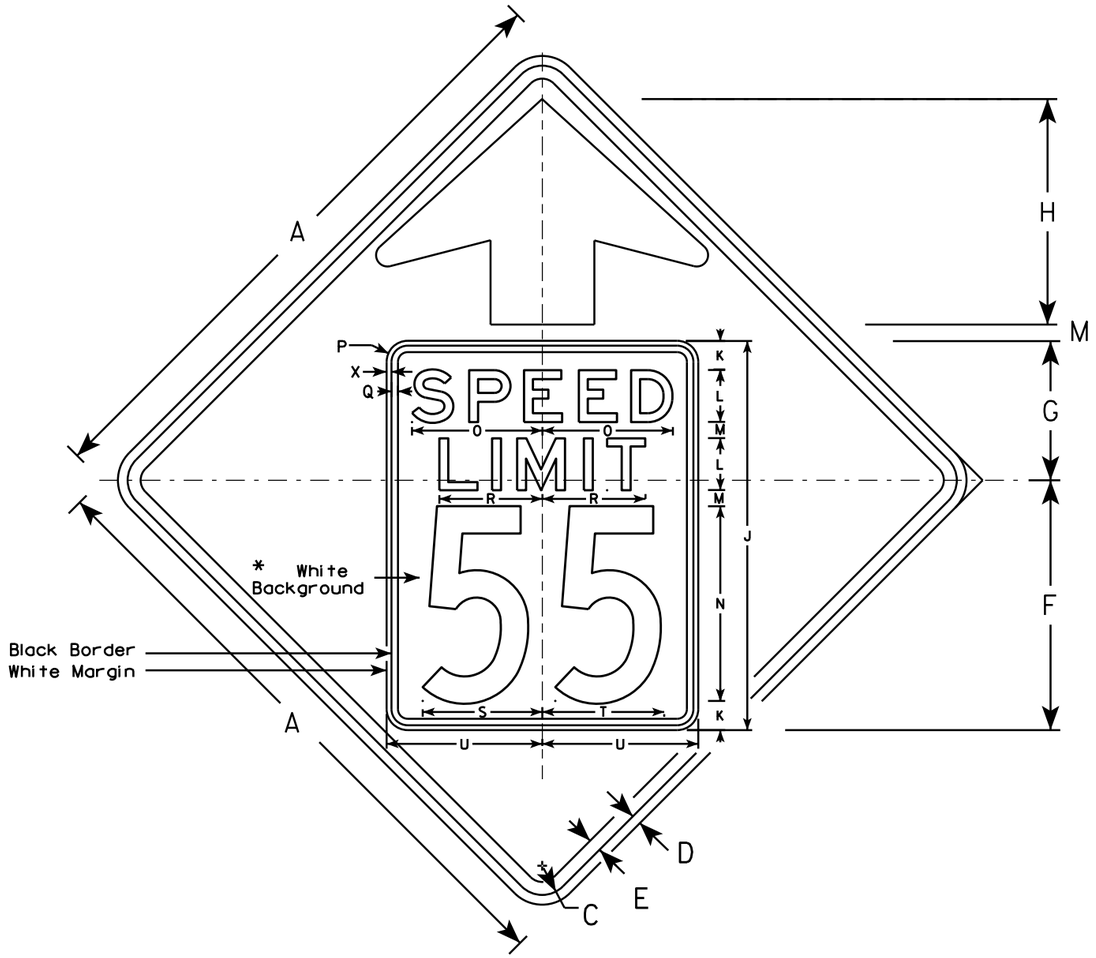
DATE 11/20/13 PLATE 03-1.1

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W031.DGN PLOT DATE : 20-NOV-2013 10:54 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

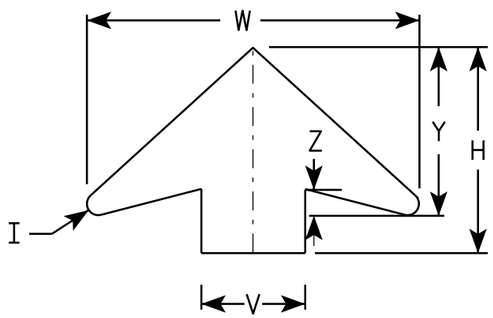


W03-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
   Background - ORANGE*
   Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



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	36		1 5/8	5/8	3/4	14 1/2	9 1/2	11 1/2	5/8	24	2	3	1	12	7 1/8	1 1/2	3/8	5 3/4	7 1/4	7 1/8	9	6	19 1/4	3/8	9 3/4	1 5/8	9.0
2S	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
2M	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
3	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
4	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0
5	48		2 1/4	3/4	1	19 1/4	10 3/4	17 3/8	7/8	30	2 1/4	4	1 1/4	15	10	1 5/8	1/2	8	9 1/4	9 3/8	12	8	25 5/8	3/8	13	2	16.0

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

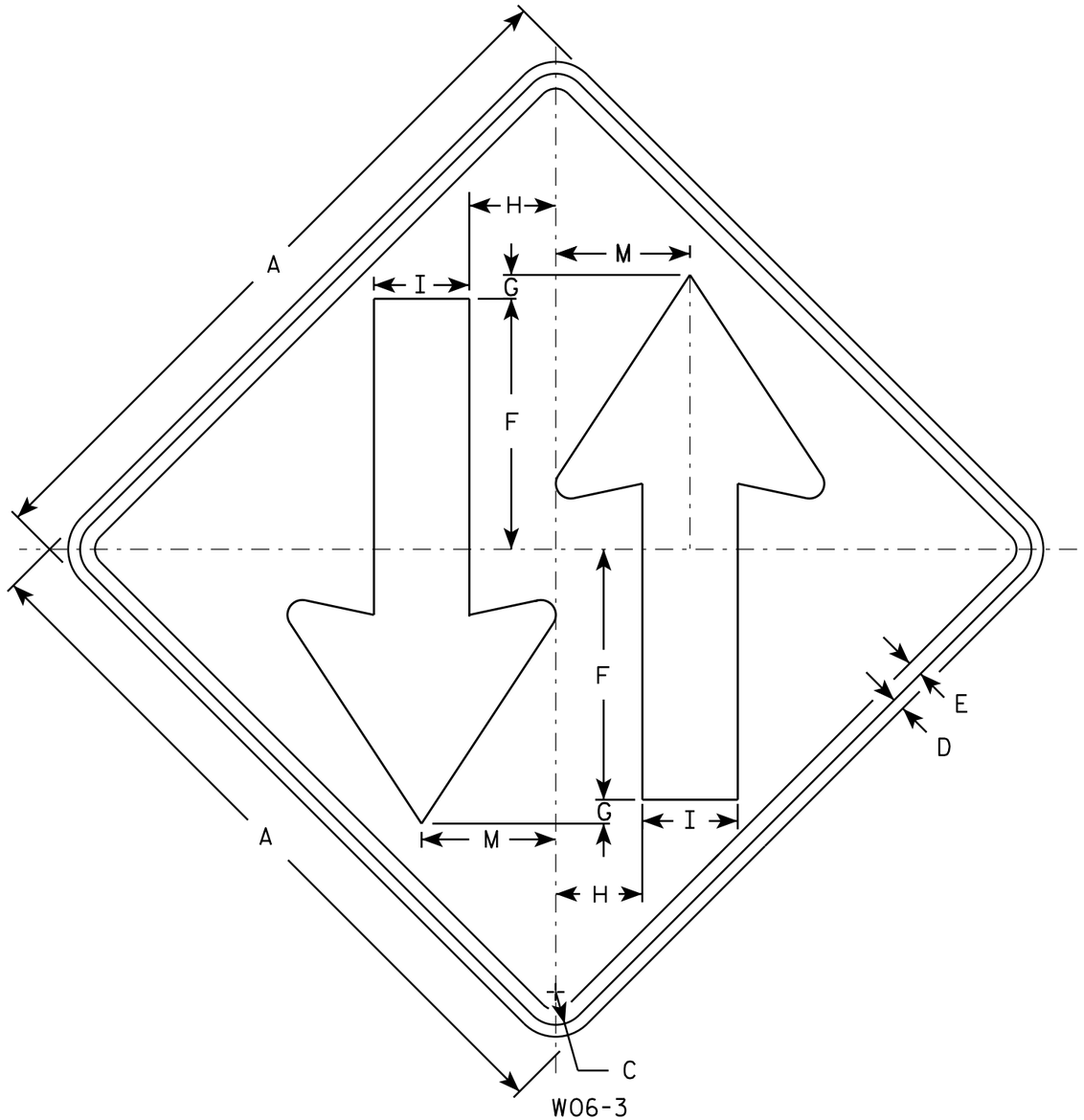
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-5.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

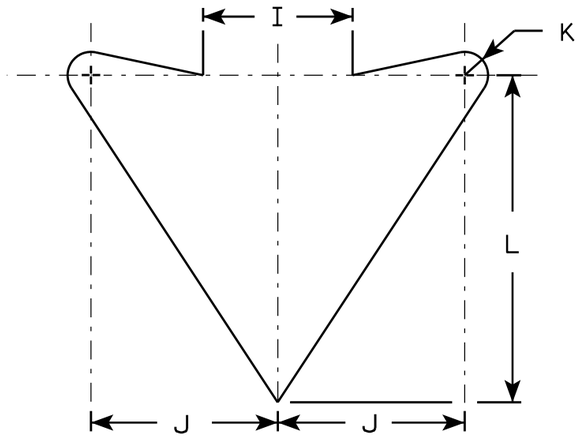
WISDOT/CADDS SHEET 42



W06-3

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
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.



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	36		1 5/8	5/8	3/4	12	1	4 1/4	5	6	3/4	10 1/2	6 3/4														9.0
2S	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
2M	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
3	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
4	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0
5	48		2 1/4	3/4	1	15 1/2	1	6	6	8	1	14	9														16.0

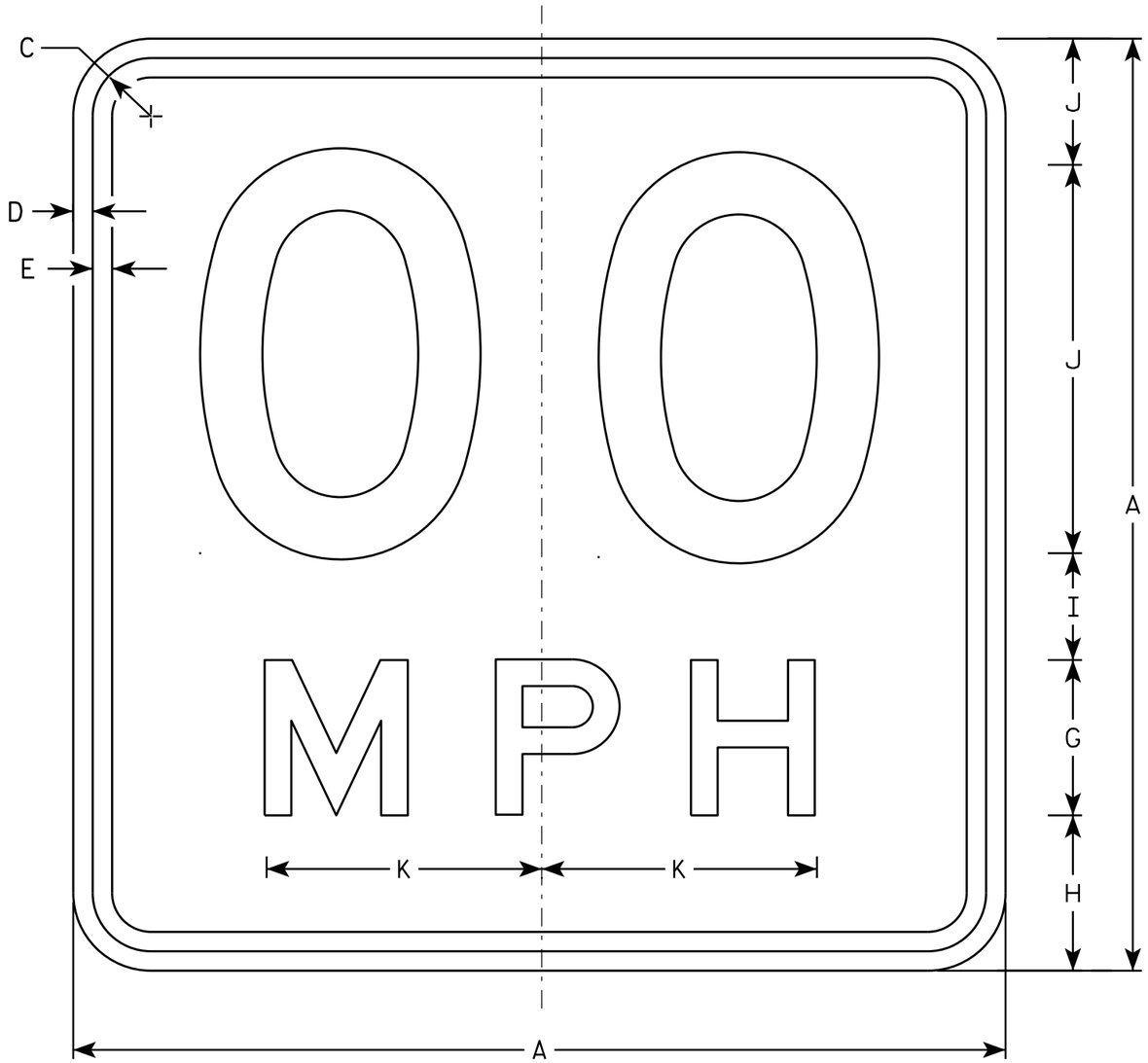
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 363 W06-3.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W013-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 6
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 and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

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 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

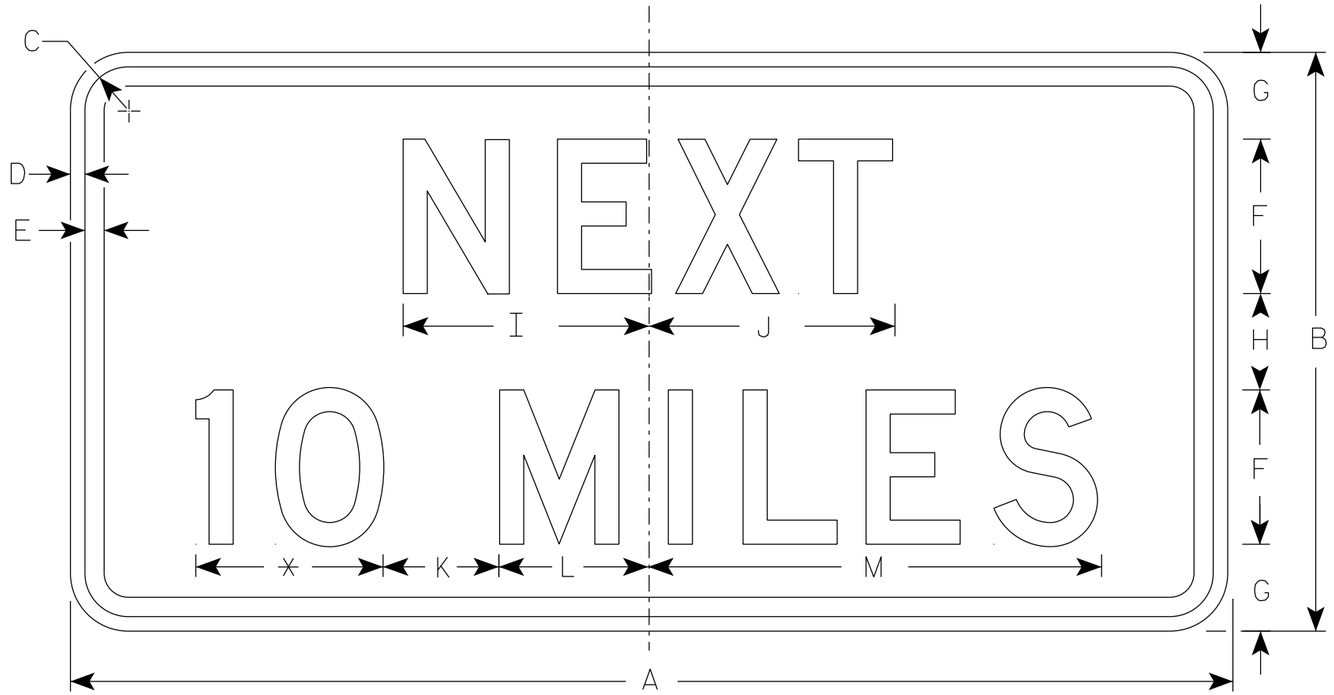
STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/13 PLATE 364 W013-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W057-51

* See note 5

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. Round distance to the nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 3/4	2 1/2	7 7/8	8	5	4 1/8	15 3/8														4.5
2S	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
2M	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
3	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
4	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
5	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0

STANDARD SIGN
W057-51

WISCONSIN DEPT OF TRANSPORTATION

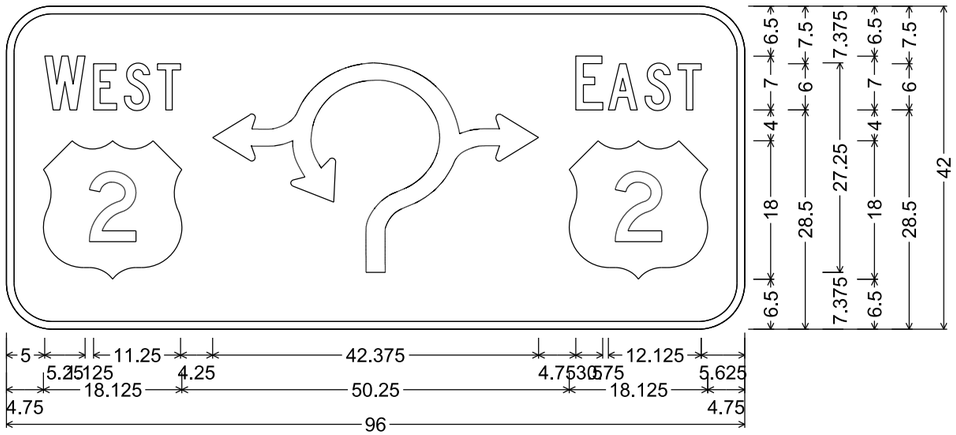
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/1/19 PLATE NO. W057-51.3

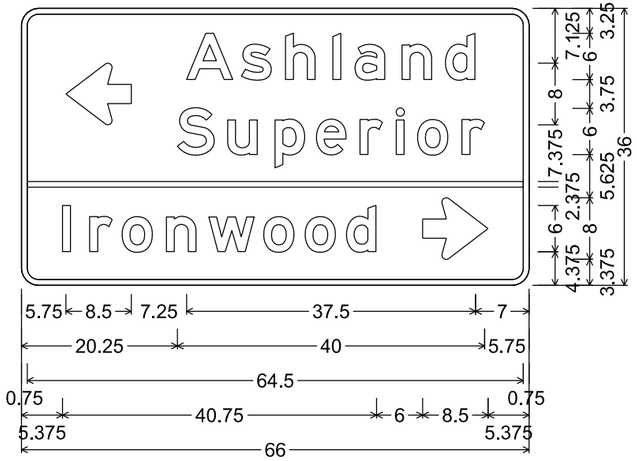
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 365	E

NOTES

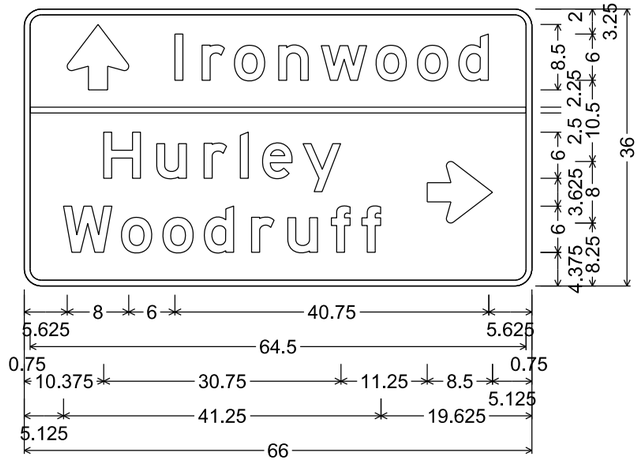
1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted



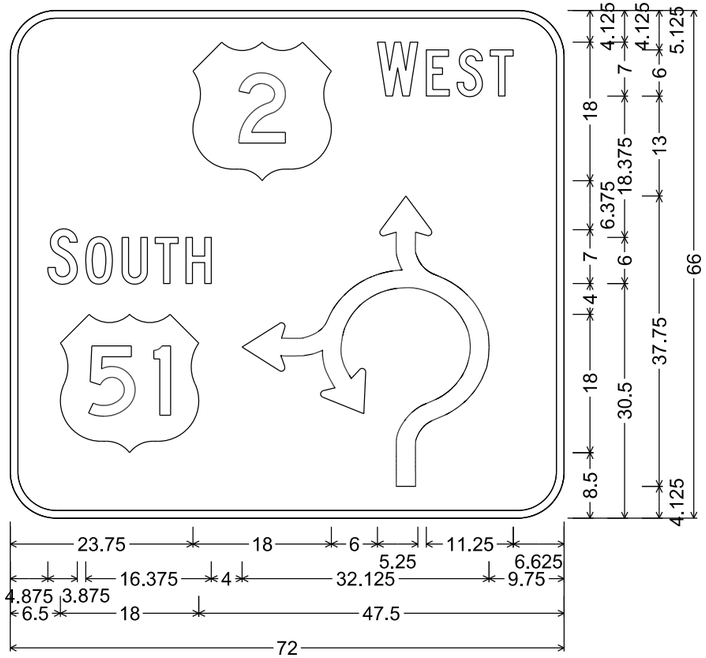
D1-62; 6.000" Radius, 1.000" Border,
"WEST", C; "EAST", C



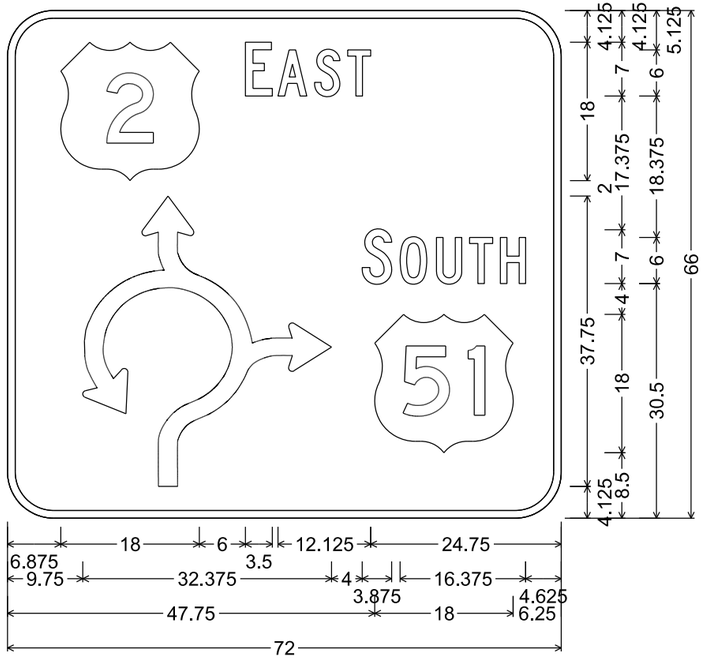
D1-3; 2.250" Radius, 0.750" Border



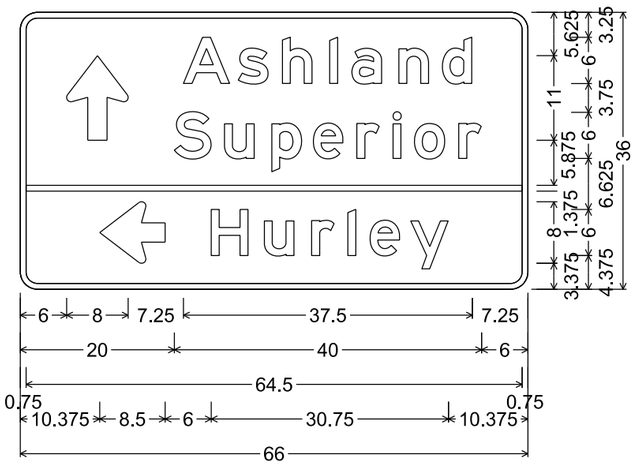
D1-3; 2.250" Radius, 0.750" Border



D1-62; 6.000" Radius, 1.000" Border,
"WEST", C; "SOUTH", C



D1-62; 6.000" Radius, 1.000" Border,
"EAST", C; "SOUTH", C



D1-3; 2.250" Radius, 0.750" Border

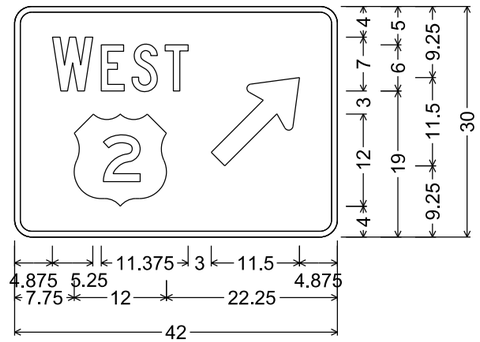
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	PERMANENT SIGNING	SHEET NO: 366	E



2.250" Radius, 0.750" Border, White on, Blue;
"REST", E; "AREA", E; "NEXT", E; "RIGHT", E;
"HISTORICAL MARKER", D



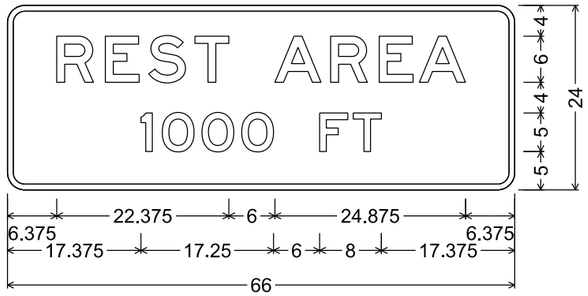
2.250" Radius, 0.750" Border, White on, Blue;
"REST", E; "AREA", E; "NEXT", E; "LEFT", E;
"HISTORICAL MARKER", D



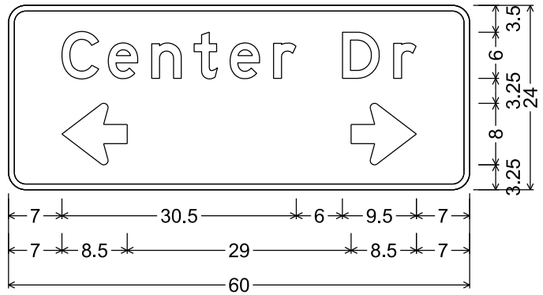
D1-1; 2.250" Radius, 0.750" Border,
"WEST", C

NOTES

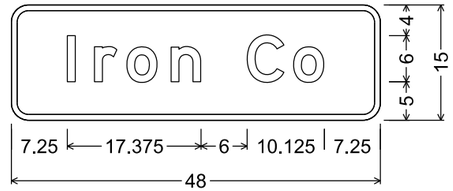
1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green except as noted
   Message - White
3. Message Series - E except as noted



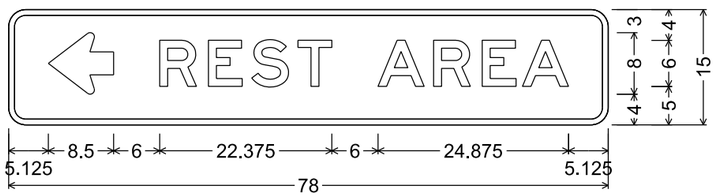
2.250" Radius, 0.750" Border, White on, Blue



D1-61; 2.250" Radius, 0.750" Border



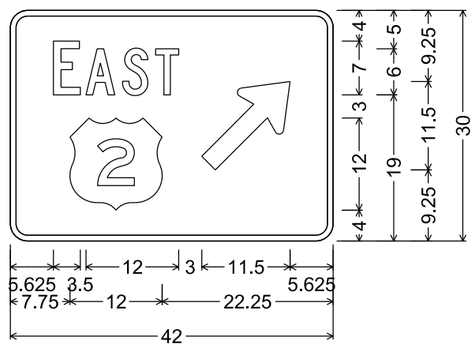
I2-2; 2.250" Radius, 0.750" Border



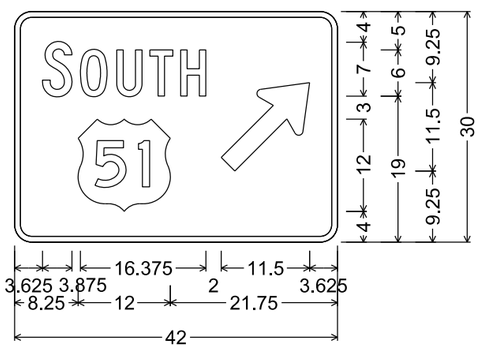
D1-1; 2.250" Radius, 0.750" Border, White on, Blue



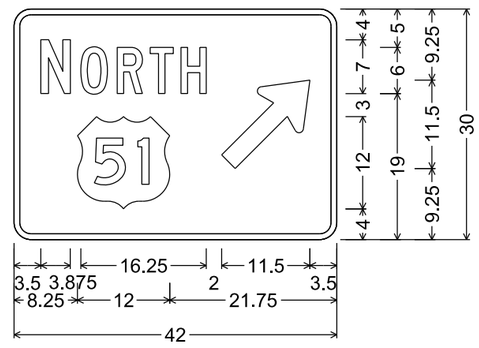
D1-1; 2.250" Radius, 0.750" Border, White on, Blue



D1-1; 2.250" Radius, 0.750" Border,
"EAST", C



D1-1; 2.250" Radius, 0.750" Border,
"SOUTH", C



D1-1; 2.250" Radius, 0.750" Border,
"NORTH", C

7

7

EARTHWORK - USH 2 'EB'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Expanded Fill	Expanded Rock	Mass Ordinate
									1.00	1.25	1.10	
					Note 1	Note 2	Note 3		Note 1			Note 4
196+19.39	16.2	4.2	0.0	0.0	0	0	0	0	0	0	0	0
196+50	13.3	4.2	0.2	0.0	17	5	0	0	17	0	0	12
197+00	11.8	4.2	0.0	0.0	23	8	0	0	40	0	0	27
197+50	11.5	4.2	0.0	0.0	22	8	0	0	62	0	0	41
198+00	10.8	4.2	0.0	0.0	21	8	0	0	82	0	0	54
198+50	12.0	4.2	0.0	0.0	21	8	0	0	103	0	0	67
199+00	64.3	8.3	0.0	0.0	71	12	0	0	174	0	0	126
199+50	66.8	8.3	0.0	0.0	121	15	0	0	296	0	0	232
200+00	71.4	8.3	0.0	0.0	128	15	0	0	424	0	0	345
200+50	77.5	8.3	0.0	0.0	138	15	0	0	561	0	0	467
201+00	81.5	8.3	0.0	0.0	147	15	0	0	709	0	0	599
201+50	85.9	8.3	0.0	0.0	155	15	0	0	864	0	0	739
202+00	98.3	8.3	0.0	0.0	171	15	0	0	1,034	0	0	894
202+50	96.5	8.3	0.0	0.0	180	15	0	0	1,215	0	0	1,059
203+00	99.9	8.3	0.4	0.0	182	15	0	0	1,396	1	0	1,225
203+50	98.2	8.3	0.0	0.0	183	15	0	0	1,580	1	0	1,393
204+00	99.9	8.3	0.0	0.0	184	15	0	0	1,763	1	0	1,561
204+50	115.5	8.3	0.0	0.0	199	15	0	0	1,963	1	0	1,745
205+00	150.6	8.3	0.0	0.0	246	15	0	0	2,209	1	0	1,976
205+50	251.0	8.3	0.0	0.0	372	15	0	0	2,581	1	0	2,333
206+00	249.8	8.3	0.2	0.0	464	15	0	0	3,045	2	0	2,781
206+50	132.0	8.3	8.0	0.0	353	15	8	0	3,398	11	0	3,109
207+00	11.0	4.2	0.0	0.0	132	12	7	0	3,531	20	0	3,221
207+50	11.5	4.2	0.0	0.0	21	8	0	0	3,551	20	0	3,234
208+00	11.9	4.2	0.0	0.0	22	8	0	0	3,573	20	0	3,248
208+50	11.4	4.2	0.4	0.0	22	8	0	0	3,595	21	0	3,261
209+00	12.8	4.2	0.0	0.0	22	8	0	0	3,617	21	0	3,275
209+50	11.6	4.2	1.0	0.0	23	8	1	0	3,640	22	0	3,289
210+00	14.1	4.2	0.0	0.0	24	8	1	0	3,663	23	0	3,304
210+50	18.4	4.6	0.0	0.0	30	8	0	0	3,694	23	0	3,326
211+00	23.3	5.0	0.0	0.0	39	9	0	0	3,732	23	0	3,355
211+50	26.4	5.4	0.0	0.0	46	10	0	0	3,778	23	0	3,392
212+00	26.4	5.8	0.0	0.0	49	10	0	0	3,827	23	0	3,430
212+50	27.5	6.3	0.0	0.0	50	11	0	0	3,877	23	0	3,469
213+00	29.0	6.7	0.0	0.0	52	12	0	0	3,929	23	0	3,509
213+50	81.0	10.8	6.4	0.0	102	16	6	0	4,031	31	0	3,588
214+00	276.5	11.3	0.0	0.0	331	20	6	0	4,362	38	0	3,891
214+50	199.7	11.7	0.0	0.0	441	21	0	0	4,803	38	0	4,310
215+00	251.2	23.8	0.3	0.0	417	33	0	0	5,221	39	0	4,695
215+50	169.1	23.8	2.8	0.0	389	44	3	0	5,610	42	0	5,036
216+00	141.2	20.8	0.0	0.0	287	41	3	0	5,897	45	0	5,279
216+50	306.5	41.7	0.0	0.0	262	39	0	0	6,159	45	0	5,502
217+00	338.9	42.5	0.0	0.0	598	78	0	0	6,756	45	0	6,022
217+50	333.5	43.8	0.0	0.0	623	80	0	0	7,379	45	0	6,564
218+00	340.5	45.4	1.5	0.0	624	83	1	0	8,003	47	0	7,104

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Mass Ordinate	Cut - Salvaged Pavt - ((Fill - Expanded Rock) * Fill Factor)

EARTHWORK - USH 2 'EB' (CONTINUED)

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Expanded Fill	Expanded Rock	Mass Ordinate
									1.00	1.25	1.10	
					Note 1	Note 2	Note 3		Note 1			Note 4
218+50	344.8	48.3	4.8	0.0	634	87	6	0	8,637	55	0	7,645
219+00	216.7	44.6	8.6	0.0	520	86	12	0	9,157	70	0	8,063
219+50	196.7	43.3	12.1	0.0	383	81	19	0	9,540	94	0	8,340
220+00	127.4	43.3	29.2	0.0	300	80	38	0	9,840	142	0	8,512
220+50	129.9	43.3	103.3	0.0	238	80	123	0	10,078	295	0	8,517
221+00	158.8	42.9	203.1	0.0	267	80	284	0	10,346	650	0	8,350
221+50	73.4	29.6	295.0	0.0	215	67	461	0	10,561	1,226	0	7,921
222+00	47.8	28.3	387.5	0.0	112	54	632	0	10,673	2,016	0	7,190
222+50	80.7	29.6	540.2	0.0	119	54	859	0	10,792	3,090	0	6,181
223+00	0.0	30.0	362.7	0.0	75	55	836	0	10,866	4,135	0	5,156
223+50	0.0	30.4	451.6	0.0	0	56	754	0	10,866	5,078	0	4,157
224+00	1.0	31.3	408.4	0.0	1	57	796	0	10,867	6,073	0	3,106
224+50	0.0	31.7	450.7	0.0	1	58	795	0	10,868	7,067	0	2,054
225+00	0.0	0.0	171.6	0.0	0	29	576	0	10,868	7,788	0	1,305
225+13.03	51.6	0.0	6.5	0.0	12	0	43	0	10,881	7,841	0	1,263
226+73.04	49.8	0.0	6.7	0.0	0	0	0	0	10,881	7,841	0	1,263
227+00	0.2	16.0	217.3	0.0	25	8	112	0	10,906	7,981	0	1,140
227+50	157.4	16.0	234.1	0.0	146	30	418	0	11,052	8,504	0	734
228+00	216.1	27.9	131.7	0.0	346	41	339	0	11,398	8,927	0	616
228+50	332.3	41.7	59.8	0.0	508	64	177	0	11,905	9,149	0	838
229+00	344.4	42.1	31.6	0.0	627	78	85	0	12,532	9,254	0	1,281
229+50	335.9	43.3	34.2	0.0	630	79	61	0	13,162	9,331	0	1,755
230+00	266.1	36.7	30.0	0.0	557	74	59	0	13,719	9,405	0	2,165
230+21.97	264.7	35.8	0.0	0.0	216	29	12	0	13,935	9,420	0	2,336
230+46.97	292.3	48.8	0.0	0.0	258	39	0	0	14,193	9,420	0	2,554
230+50	294.6	48.8	0.0	0.0	33	5	0	0	14,226	9,420	0	2,582
230+71.97	266.4	37.1	0.0	0.0	228	35	0	0	14,454	9,420	0	2,775
231+00	124.8	18.8	1.2	0.0	203	29	1	0	14,657	9,421	0	2,948
231+19	0.0	18.8	0.0	0.0	44	13	0	0	14,701	9,421	0	2,979
					14,701	2,301	7,537	0				

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Mass Ordinate	Cut - Salvaged Pavt - ((Fill - Expanded Rock) * Fill Factor)

EARTHWORK - USH 2 'WBT'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)				
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Expanded Fill	Expanded Marsh Backfill	Expanded Rock	Mass Ordinate
									1.00	1.25	1.00	1.10	
					Note 1	Note 2	Note 3		Note 1		Note 4		Note 4
225+00	0.0	18.8	241.3	0.0	0	0	0	0	0	0	0	0	0
225+50	0.0	13.8	57.0	0.0	0	30	276	0	0	345	0	0	-375
226+00	8.0	14.6	29.7	0.0	7	26	80	0	7	446	0	0	-495
226+50	34.2	14.6	48.9	0.0	39	27	73	0	46	537	0	0	-574
227+00	55.8	14.6	26.0	0.0	83	27	69	0	130	623	0	0	-604
227+50	80.1	14.6	16.7	0.0	126	27	40	0	256	673	0	0	-555
228+00	98.0	14.6	3.0	0.0	165	27	18	0	420	695	0	0	-440
					420	165	556	0					

EARTHWORK - STH 51 'NB'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Expanded Fill	Expanded Rock	Mass Ordinate
									1.00	1.25	1.10	
					Note 1	Note 2	Note 3		Note 1			Note 4
108+36	152.3	22.1	0.1	0.0	0	0	0	0	0	0	0	0
108+50	174.5	22.1	0.3	0.0	85	11	0	0	85	0	0	73
109+00	224.4	22.1	0.0	0.0	369	41	0	0	454	0	0	401
109+50	268.2	22.1	0.0	0.0	456	41	0	0	910	0	0	816
110+00	329.2	22.9	0.0	0.0	553	42	0	0	1,463	0	0	1,328
110+50	391.1	24.2	0.0	0.0	667	44	0	0	2,130	0	0	1,951
111+00	506.0	25.0	0.0	0.0	831	46	0	0	2,961	0	0	2,736
111+50	622.1	26.3	0.0	0.0	1,045	48	0	0	4,006	0	0	3,733
112+00	767.0	30.0	0.0	0.0	1,286	52	0	0	5,292	0	0	4,968
112+50	951.3	33.3	0.0	0.4	1,591	59	0	0	6,883	0	0	6,500
113+00	1,125.9	33.3	0.1	45.9	1,923	62	0	43	8,806	-59	47	8,421
113+50	1,175.9	33.8	0.0	141.0	2,131	62	0	173	10,937	-296	238	10,728
114+00	1,232.4	36.3	0.0	293.2	2,230	65	0	402	13,167	-849	680	13,445
114+50	1,542.3	41.3	0.0	453.8	2,569	72	0	692	15,736	-1,800	1,441	16,894
115+00	2,333.4	35.4	0.0	738.3	3,589	71	0	1,104	19,325	-3,318	2,655	21,929
115+50	1,252.5	18.8	1.3	674.7	3,320	50	1	1,308	22,645	-5,116	4,094	26,997
116+00	647.4	0.0	0.0	474.4	1,759	17	1	1,064	24,404	-6,577	5,265	30,200
116+50	247.1	0.0	0.0	210.6	828	0	0	634	25,233	-7,449	5,963	31,900
116+65.65	159.6	0.0	0.0	125.1	118	0	0	97	25,350	-7,583	6,070	32,152
					25,350	782	3	5,518				

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Mass Ordinate	Cut - Salvaged Pavt - ((Fill - Expanded Rock) * Fill Factor)

EARTHWORK - USH 2 EB RIGHT TURN LANE 'EOT'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	Mass Ordinate
					Note 1	Note 2	Note 3		Note 1			Note 4
223+00	318.59	2.5	215.79	84.99	0	0	0	0	0	0	0	0
223+50	624.36	1.3	161.20	97.89	873	4	349	169	873	203	186	666
224+00	850.30	16.7	178.37	84.15	1,365	17	314	169	2,239	365	372	1,854
224+50	988.48	14.2	146.21	131.94	1,703	29	301	200	3,941	465	592	3,427
225+00	1097.34	13.8	84.42	304.71	1,931	26	214	404	5,872	176	1,037	5,621
225+50	1089.92	14.6	86.40	418.17	2,025	26	158	669	7,898	-546	1,773	8,343
226+00	936.51	14.6	58.09	445.41	1,876	27	134	800	9,774	-1,479	2,652	11,124
226+50	680.72	14.6	6.81	327.28	1,497	27	60	715	11,271	-2,387	3,439	13,503
					11,271	155	1,530	3,127				

EARTHWORK - STH 51 NB RIGHT TURN LANE 'NOT'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	Mass Ordinate
					Note 1	Note 2	Note 3		Note 1			Note 4
115+50	1136.4	10.8	0.0	256.7	0	0	0	0	0	0	0	0
116+00	699.7	10.4	0.0	164.8	1,700	20	0	390	1,700	-537	429	2,217
116+50	602.8	10.4	0.0	8.4	1,206	19	0	160	2,906	-757	606	3,624
117+00	370.3	10.4	0.0	0.0	901	19	0	8	3,807	-768	614	4,517
117+50	182.0	12.1	74.0	0.0	511	21	68	0	4,319	-682	614	4,922
					4,319	79	68	558				

EARTHWORK - ROUNDABOUT 'CC'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	Mass Ordinate
					Note 1	Note 2	Note 3		Note 1			Note 4
00+00.1	0.0	0.0	499.4	0.0	0	0	0	0	0	0	0	0
00+50	0.0	19.2	292.2	0.0	0	18	732	0	0	914	0	-932
01+00	0.0	15.0	330.4	0.0	0	32	577	0	0	1,635	0	-1,684
01+50	0.0	20.8	361.1	0.0	0	33	640	0	0	2,435	0	-2,518
02+00	88.7	0.0	297.9	0.0	82	19	610	0	82	3,198	0	-3,218
02+50	313.7	0.0	173.4	180.1	373	0	436	167	455	3,514	183	-3,161
03+00	247.6	0.0	162.6	165.5	520	0	311	320	974	3,463	535	-2,591
03+50	146.7	0.0	239.8	0.0	365	0	373	153	1,339	3,718	704	-2,481
					1,339	102	3,678	640				

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Mass Ordinate	Cut - Salvaged Pavt - ((Fill - Expanded Rock) * Fill Factor)

EARTHWORK - USH 2 EB EXIT RAMP 'XER'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Expanded Fill	Expanded Rock	Mass Ordinate
									1.00	1.25	1.10	
					Note 1	Note 2	Note 3		Note 1			Note 4
321+50	99.9	9.2	0.0	0.0	0	0	0	0	0	0	0	0
322+00	100.3	9.2	0.0	0.0	185	17	0	0	185	0	0	168
322+50	45.6	9.2	0.0	0.0	135	17	0	0	320	0	0	286
323+00	52.9	9.2	0.0	0.0	91	17	0	0	412	0	0	361
323+50	53.7	9.2	0.0	0.0	99	17	0	0	510	0	0	442
324+00	51.9	9.2	0.0	0.0	98	17	0	0	608	0	0	523
324+50	52.0	9.2	0.0	0.0	96	17	0	0	705	0	0	602
325+00	39.2	9.2	0.4	0.0	84	17	0	0	789	0	0	669
325+50	20.4	9.2	0.1	0.0	55	17	0	0	844	1	0	707
					844	136	1	0				

EARTHWORK - USH 2 WB EXIT RAMP 'XWR'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Expanded Fill	Expanded Rock	Mass Ordinate
									1.00	1.25	1.10	
					Note 1	Note 2	Note 3		Note 1			Note 4
121+50	103.8	9.2	4.4	0.0	0	0	0	0	0	0	0	0
122+00	191.5	9.2	4.1	0.0	273	17	8	0	273	10	0	246
122+50	257.5	10.4	7.3	0.0	416	18	11	0	689	23	0	631
123+00	235.2	10.4	15.0	0.0	456	19	21	0	1,145	49	0	1,042
123+50	223.7	10.4	22.7	0.0	425	19	35	0	1,570	93	0	1,404
124+00	216.9	10.4	30.4	0.0	408	19	49	0	1,978	154	0	1,731
124+50	174.5	10.4	42.5	0.0	362	19	68	0	2,340	238	0	1,990
125+00	144.8	10.4	73.1	0.0	296	19	107	0	2,636	372	0	2,132
125+50	126.7	10.4	31.5	0.0	251	19	97	0	2,887	493	0	2,244
126+00	149.4	10.4	0.0	0.0	256	19	29	0	3,143	530	0	2,443
					3,143	170	424	0				

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Mass Ordinate	Cut - Salvaged Pavt - ((Fill - Expanded Rock) * Fill Factor)

EARTHWORK - STH 51 TEMPORARY BYPASS 'TRN'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	Mass Ordinate
					Note 1	Note 2	Note 3		Note 1			Note 4
09+14.59	19.0	0.0	0.0	0.0	0	0	0	0	0	0	0	0
09+50	38.2	0.0	3.0	0.0	38	0	2	0	38	2	0	35
10+00	14.7	0.0	6.4	0.0	49	0	9	0	87	13	0	73
10+50	28.0	0.0	7.6	0.0	40	0	13	0	126	30	0	96
11+00	105.3	0.0	0.0	0.0	123	0	7	0	249	38	0	211
11+50	21.5	0.0	1.8	0.0	117	0	2	0	367	41	0	326
12+00	9.4	0.0	22.7	0.0	29	0	23	0	395	69	0	326
12+50	11.3	0.0	18.6	0.0	19	0	38	0	415	117	0	298
13+00	18.4	0.0	13.6	0.0	28	0	30	0	442	154	0	288
13+50	24.6	0.0	13.0	0.0	40	0	25	0	482	185	0	297
14+00	56.1	0.0	9.2	0.0	75	0	21	0	557	210	0	346
14+50	62.7	0.0	6.6	0.0	110	0	15	0	666	229	0	438
15+00	54.9	0.0	4.5	0.0	109	0	10	0	775	241	0	534
15+50	44.0	0.0	3.8	0.0	92	0	8	0	867	251	0	616
16+00	16.1	0.0	6.1	0.0	56	0	9	0	923	262	0	660
16+50	13.8	0.0	5.3	0.0	28	0	11	0	950	276	0	675
17+00	12.8	0.0	9.1	0.0	25	0	13	0	975	292	0	683
17+50	11.9	0.0	7.3	0.0	23	0	15	0	998	311	0	687
18+00	11.8	0.0	3.3	0.0	22	0	10	0	1,020	323	0	696
18+50	12.4	0.0	0.0	0.0	22	0	3	0	1,042	327	0	715
19+00	14.2	0.0	0.0	0.0	25	0	0	0	1,067	327	0	740
19+50	12.8	0.0	2.8	0.0	25	0	3	0	1,092	331	0	761
20+00	16.9	0.0	15.2	0.0	27	0	17	0	1,119	351	0	768
20+50	16.2	0.0	22.5	0.0	31	0	35	0	1,150	395	0	755
21+00	16.0	0.0	24.4	0.0	30	0	43	0	1,180	450	0	730
21+50	18.4	0.0	25.6	0.0	32	0	46	0	1,212	507	0	704
22+00	8.0	0.0	24.8	0.0	24	0	47	0	1,236	566	0	671
22+50	8.1	0.0	48.8	0.0	15	0	68	0	1,251	651	0	600
23+00	8.8	0.0	80.2	0.0	16	0	119	0	1,267	800	0	467
23+50	4.2	0.0	120.4	0.0	12	0	186	0	1,279	1,032	0	247
24+00	0.0	0.0	68.9	0.0	4	0	175	0	1,283	1,251	0	31
24+50	32.6	0.0	3.8	0.0	30	0	67	0	1,313	1,336	0	-23
25+00	93.9	0.0	0.2	0.0	117	0	4	0	1,430	1,340	0	90
25+50	125.5	0.0	11.3	0.0	203	0	11	0	1,633	1,354	0	280
26+00	103.9	0.0	19.8	0.0	212	0	29	0	1,846	1,390	0	456
26+50	35.4	0.0	51.9	0.0	129	0	66	0	1,975	1,473	0	502
26+78.91	9.7	0.0	15.6	0.0	24	0	36	0	1,999	1,518	0	481
					1,999	0	1,214	0				

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Mass Ordinate	Cut - Salvaged Pavt - ((Fill - Expanded Rock) * Fill Factor)

EARTHWORK - USH 2 EB TEMPORARY WIDENEING 'EXE'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	Mass Ordinate
					Note 1	Note 2	Note 3		Note 1			Note 4
212+89.94	7.7	0.0	0.0	0.0	0	0	0	0	0	0	0	0
213+00	7.7	0.0	0.0	0.0	3	0	0	0	3	0	0	3
213+50	7.7	0.0	0.2	0.0	14	0	0	0	17	0	0	17
214+00	8.0	0.0	2.3	0.0	15	0	2	0	32	3	0	29
214+50	8.3	0.0	4.7	0.0	15	0	7	0	47	11	0	36
215+00	7.5	0.0	7.8	0.0	15	0	12	0	61	26	0	36
215+50	7.3	0.0	45.0	0.0	14	0	49	0	75	87	0	-12
216+00	7.1	0.0	42.6	0.0	13	0	81	0	88	188	0	-100
216+50	8.8	0.0	34.7	0.0	15	0	72	0	103	278	0	-175
217+00	9.3	0.0	32.6	0.0	17	0	62	0	120	356	0	-236
217+50	9.2	0.0	32.2	0.0	17	0	60	0	137	431	0	-293
218+00	9.4	0.0	33.3	0.0	17	0	61	0	154	506	0	-352
218+50	9.1	0.0	34.4	0.0	17	0	63	0	171	585	0	-413
219+00	8.6	0.0	6.5	0.0	16	0	38	0	188	632	0	-444
219+50	9.5	0.0	2.7	0.0	17	0	9	0	204	643	0	-438
220+00	11.2	0.0	0.1	0.0	19	0	3	0	224	646	0	-422
220+50	9.4	0.0	0.0	0.0	19	0	0	0	243	646	0	-403
220+92.09	9.6	0.0	0.0	0.0	15	0	0	0	258	646	0	-389
					258	0	517	0				

EARTHWORK - USH 2 WB TEMPORARY RIGHT TURN LANE 'TRW'

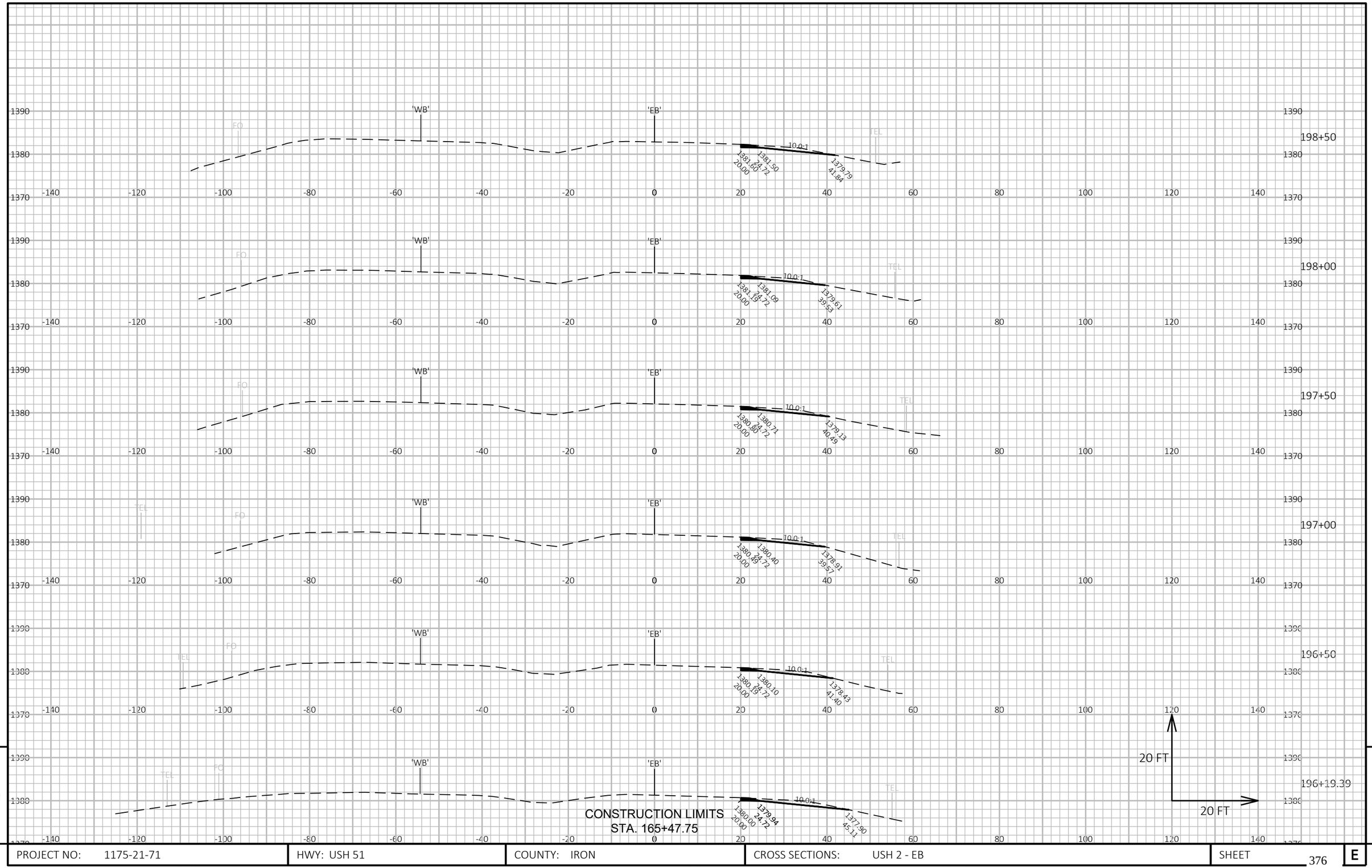
STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut 1.00	Expanded Fill 1.25	Expanded Rock 1.10	Mass Ordinate
					Note 1	Note 2	Note 3		Note 1			Note 4
102+54.79	11.3	0.0	0.0	0.0	0	0	0	0	0	0	0	0
103+00	9.6	0.0	0.0	0.0	17	0	0	0	17	0	0	17
103+50	8.6	0.0	3.8	0.0	17	0	4	0	34	4	0	30
104+00	9.1	0.0	5.8	0.0	16	0	9	0	51	16	0	35
104+50	9.7	0.0	5.4	0.0	17	0	10	0	68	29	0	39
105+00	9.3	0.0	6.0	0.0	18	0	11	0	85	42	0	44
105+50	9.0	0.0	6.5	0.0	17	0	12	0	102	56	0	46
106+00	8.8	0.0	5.0	0.0	16	0	11	0	119	70	0	49
106+50	19.9	0.0	0.3	0.0	27	0	5	0	145	76	0	70
107+00	20.0	0.0	0.5	0.0	37	0	1	0	182	77	0	106
107+50	17.8	0.0	1.2	0.0	35	0	2	0	217	79	0	139
107+54.79	0.0	0.0	0.0	0.0	2	0	0	0	219	79	0	140
					219	0	63	0				

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Mass Ordinate	Cut - Salvaged Pavt - ((Fill - Expanded Rock) * Fill Factor)

EARTHWORK - USH 2 WB TEMPORARY CROSSOVER 'WB'

STATION	AREA (SF)				Incremental Vol (CY) (Unadjusted)				Cumulative Vol (CY)			
	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Salvaged/Unusable Pavement Material	Fill	Rock Exc	Cut	Expanded Fill	Expanded Rock	Mass Ordinate
									1.00	1.25	1.10	
					Note 1	Note 2	Note 3		Note 1			Note 4
182+27.96	4.4	0.0	0.0	0.0	0	0	0	0	0	0	0	0
182+50	7.4	0.0	0.0	0.0	5	0	0	0	5	0	0	5
183+00	8.8	0.0	0.0	0.0	15	0	0	0	20	0	0	20
183+50	5.9	0.0	1.6	0.0	14	0	1	0	34	2	0	32
184+00	6.1	0.0	9.7	0.0	11	0	11	0	45	15	0	30
184+50	7.4	0.0	10.7	0.0	12	0	19	0	57	39	0	18
185+00	6.9	0.0	2.5	0.0	13	0	12	0	70	54	0	16
185+50	10.3	0.0	0.0	0.0	16	0	2	0	86	57	0	30
186+00	10.0	0.0	0.0	0.0	19	0	0	0	105	57	0	48
186+50	9.4	0.0	0.0	0.0	18	0	0	0	123	57	0	66
186+98.27	9.5	0.0	0.0	0.0	17	0	0	0	140	57	0	83
					140	0	45	0				

Notes:	
1 - Cut	Cut includes Salvaged/Unusable Pavement material
2 - Salvaged/Unusable Pavement Material	This does not show up in cross sections
3 - Fill	Does not include Unusable Pavement Exc volume
4 - Mass Ordinate	Cut - Salvaged Pavt - ((Fill - Expanded Rock) * Fill Factor)



9

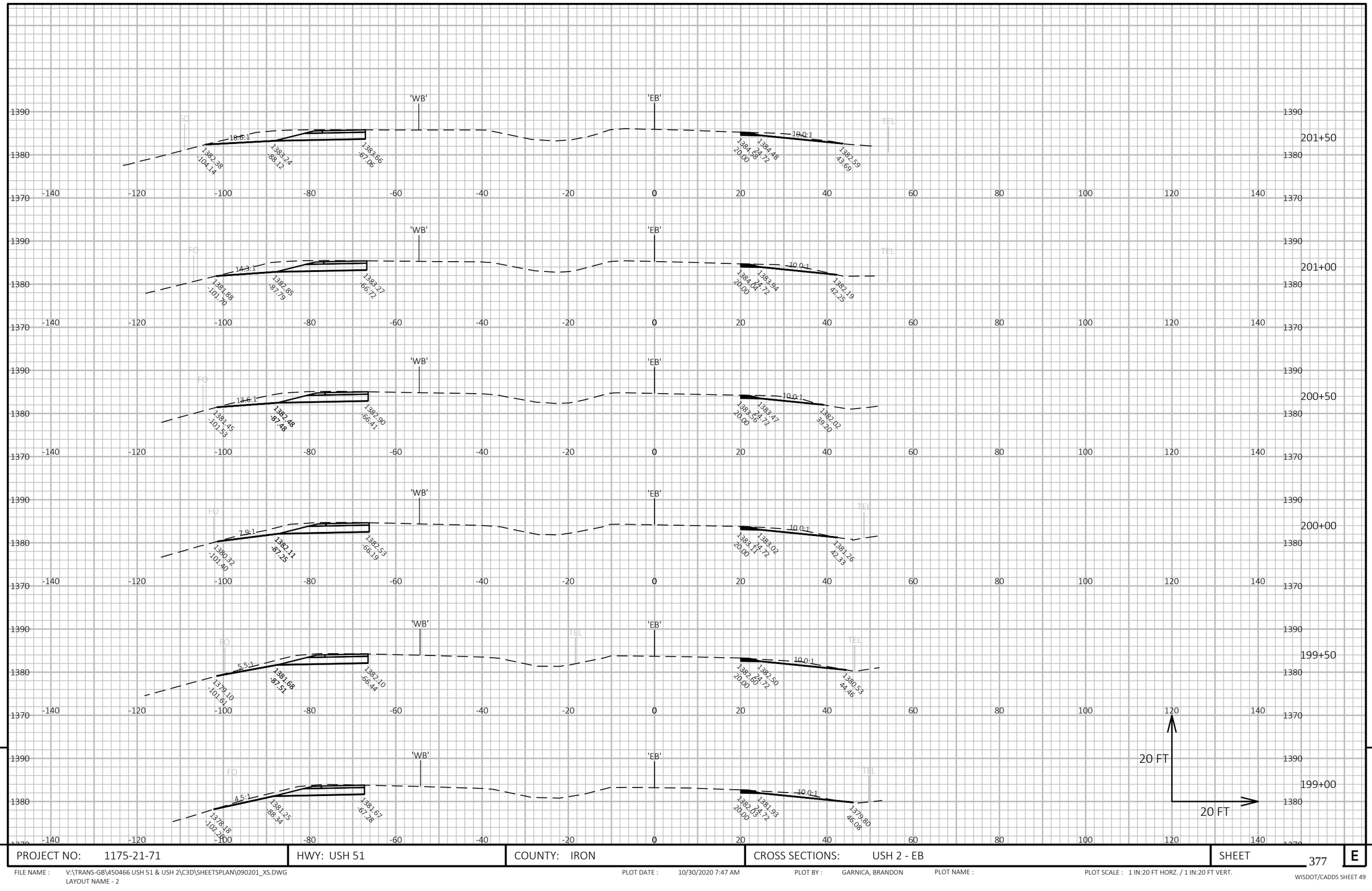
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9

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LAYOUT NAME - 1

PLOT DATE : 10/30/2020 7:47 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

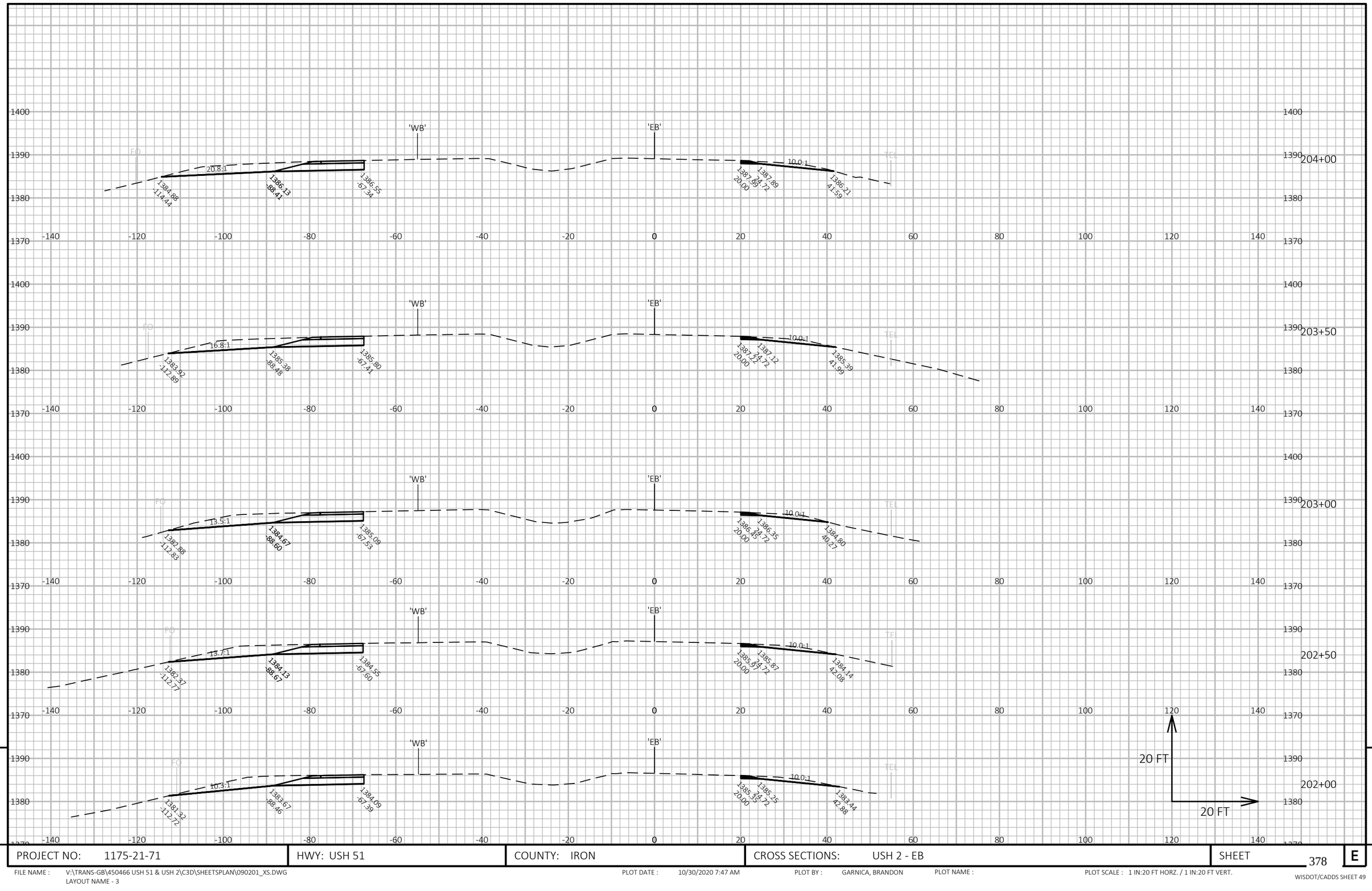


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LAYOUT NAME - 2

PLOT DATE : 10/30/2020 7:47 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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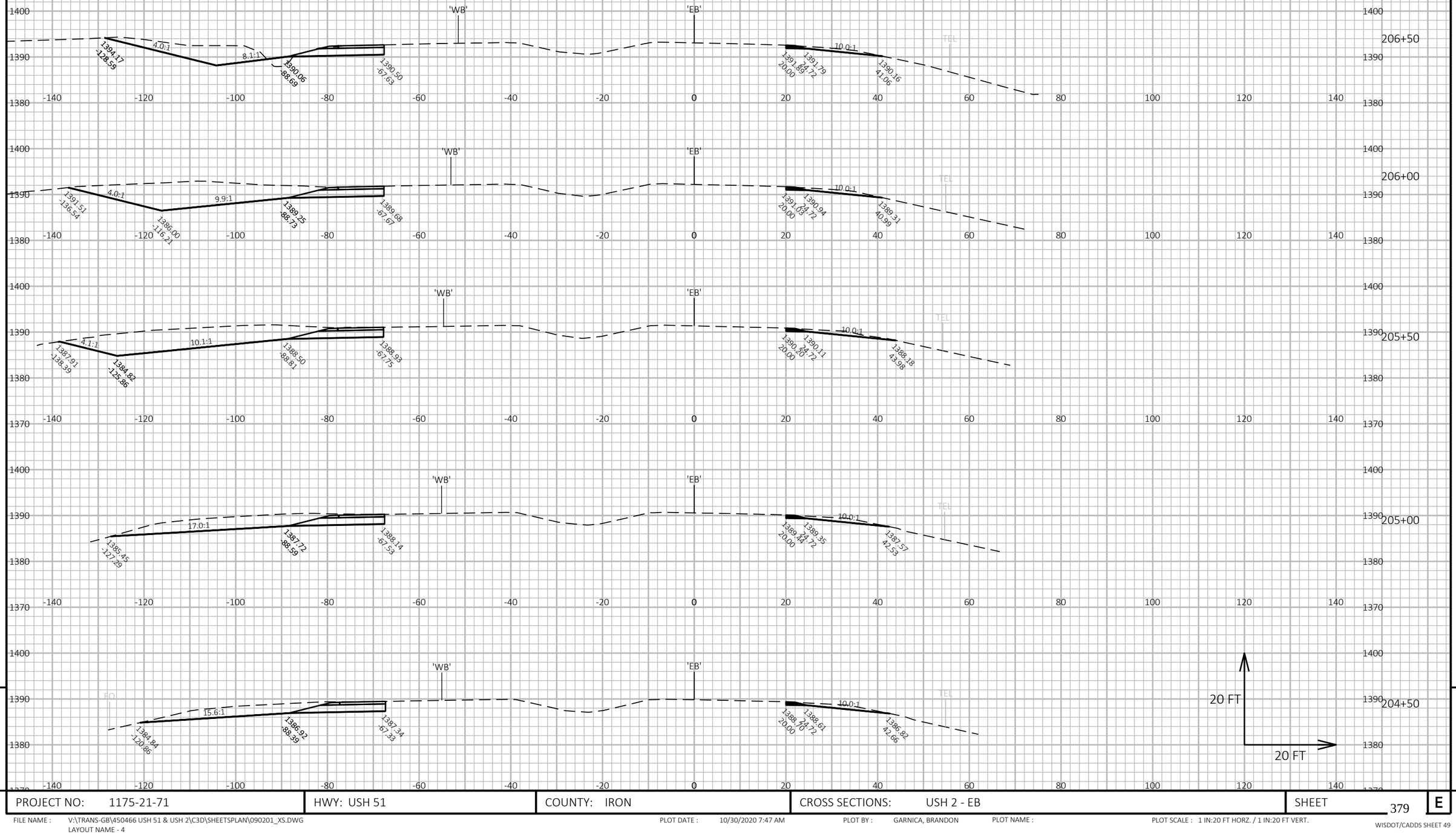
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 378	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 3

PLOT DATE : 10/30/2020 7:47 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

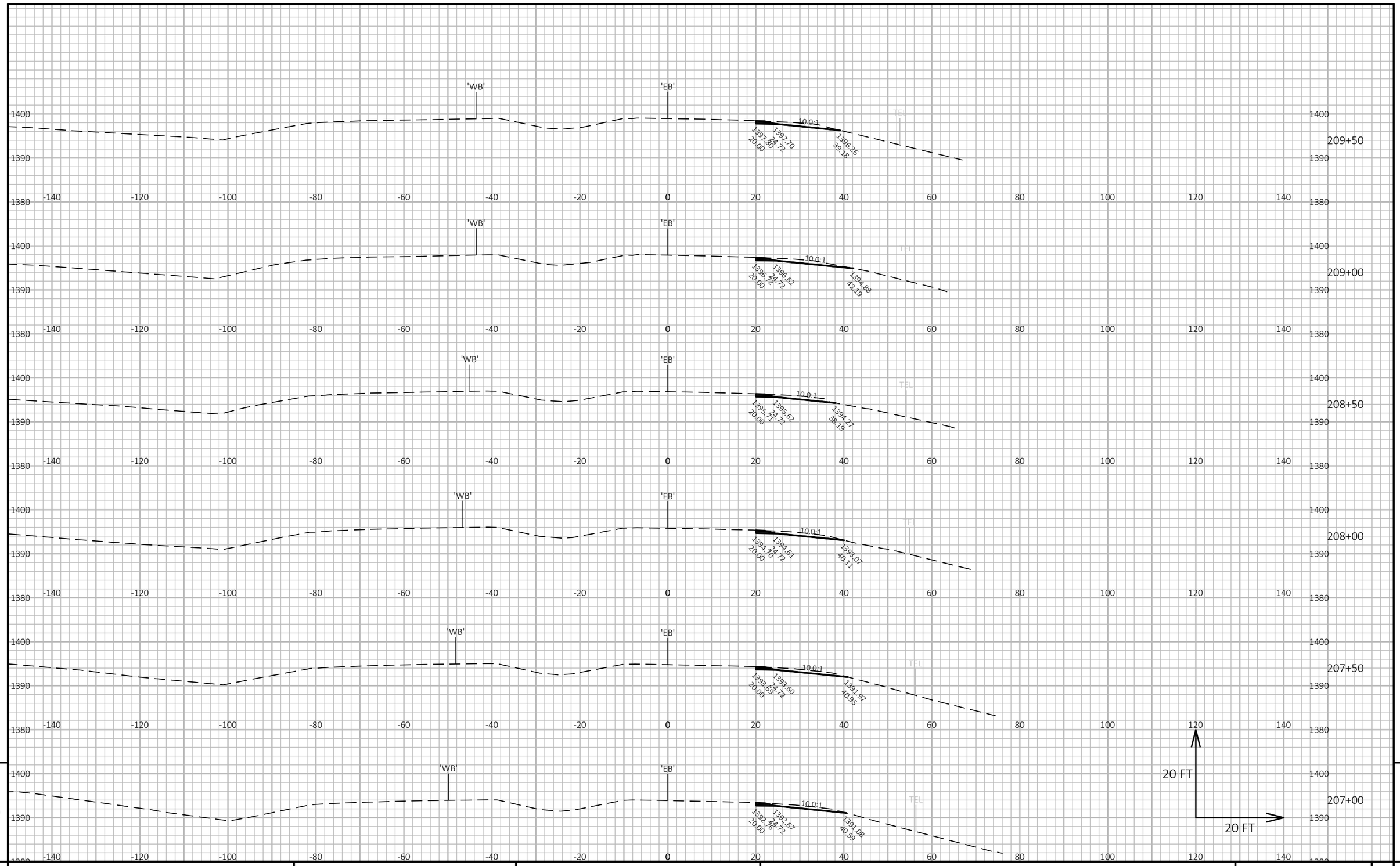


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 379	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 4

PLOT DATE : 10/30/2020 7:47 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

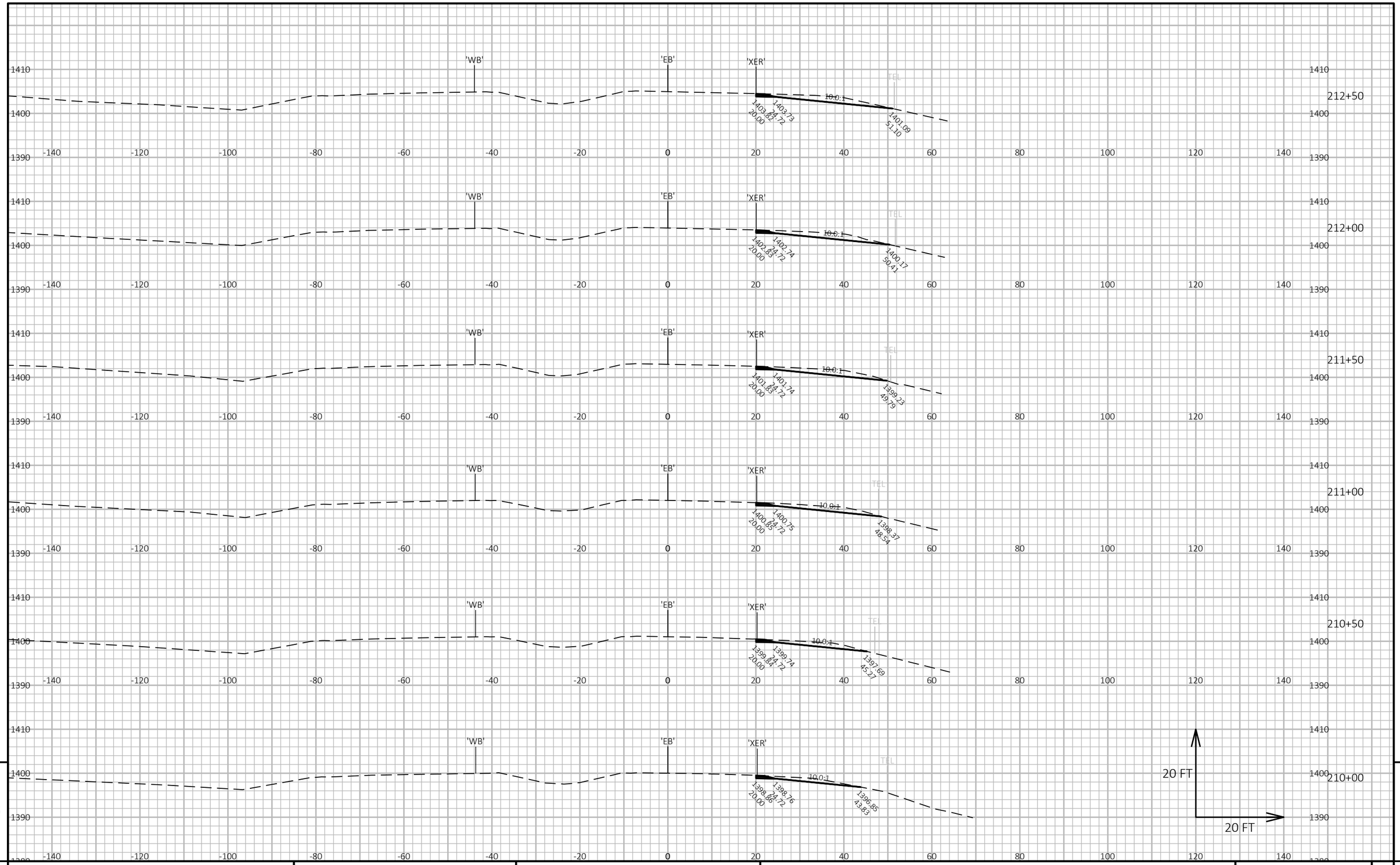


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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 380	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 5
PLOT DATE : 10/30/2020 7:47 AM
PLOT BY : GARNICA, BRANDON
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.
WISDOT/CADDS SHEET 49



9

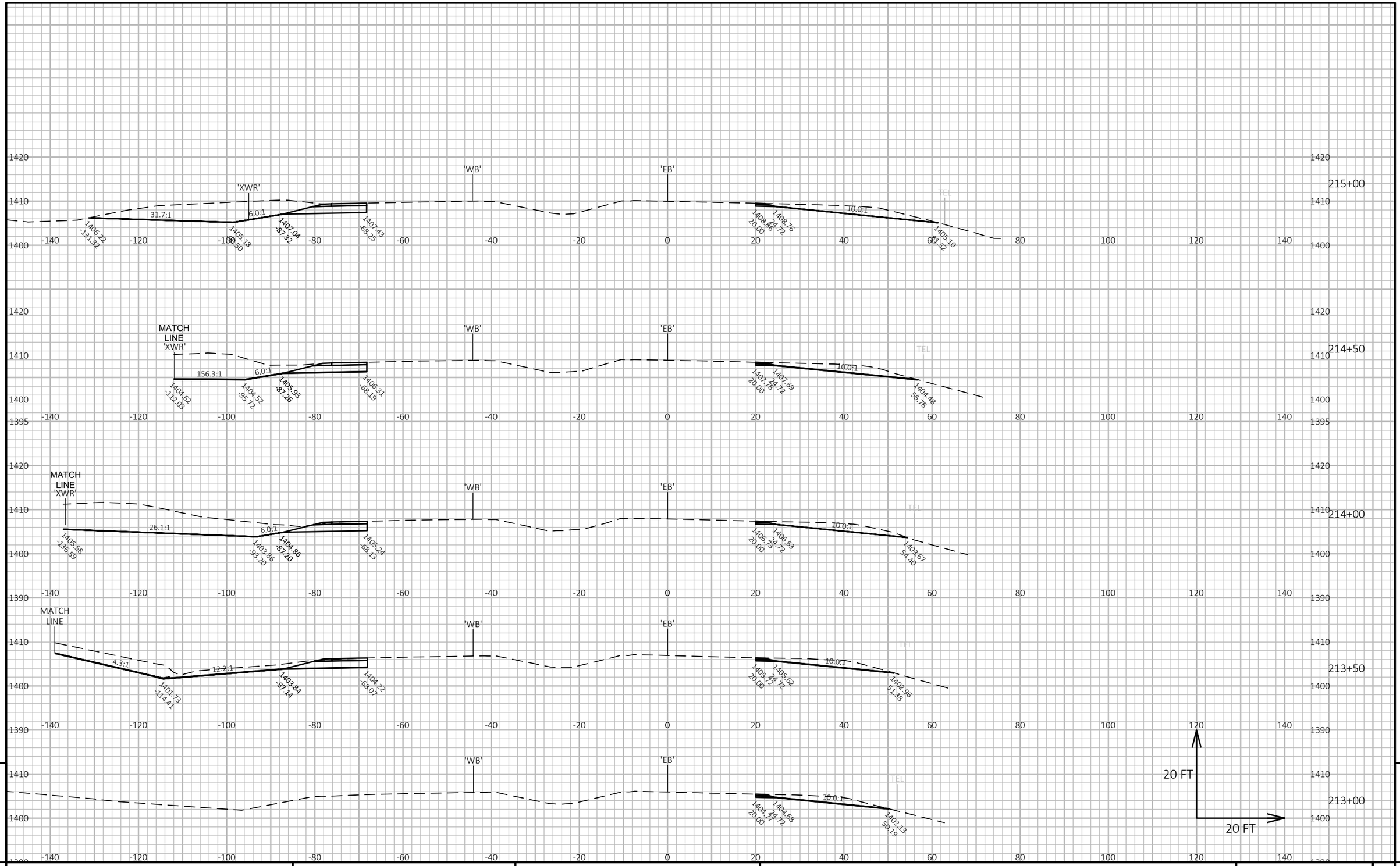
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 381	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 6

PLOT DATE : 10/30/2020 7:47 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

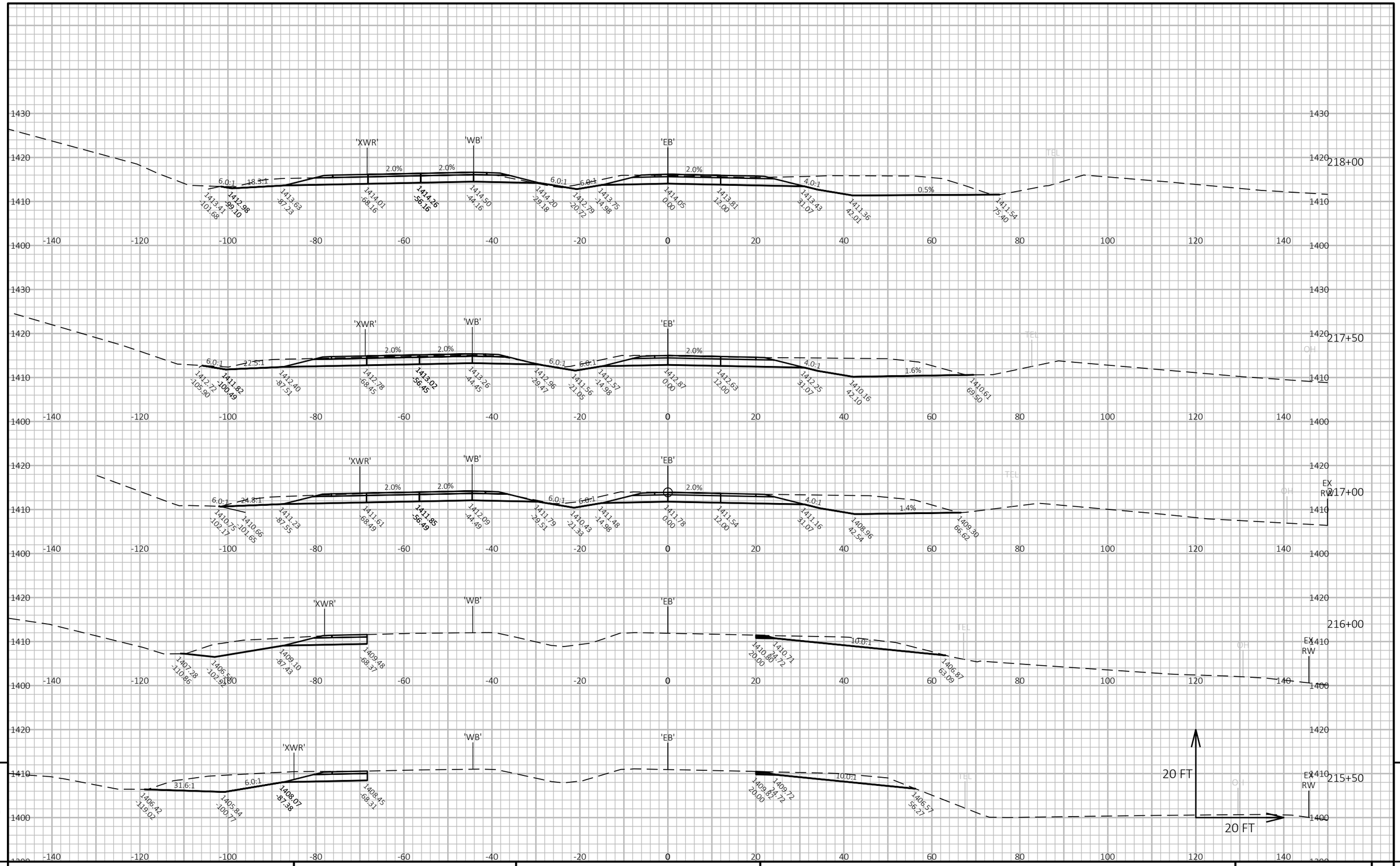


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 382	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 7

PLOT DATE : 10/30/2020 7:47 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 383	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 8

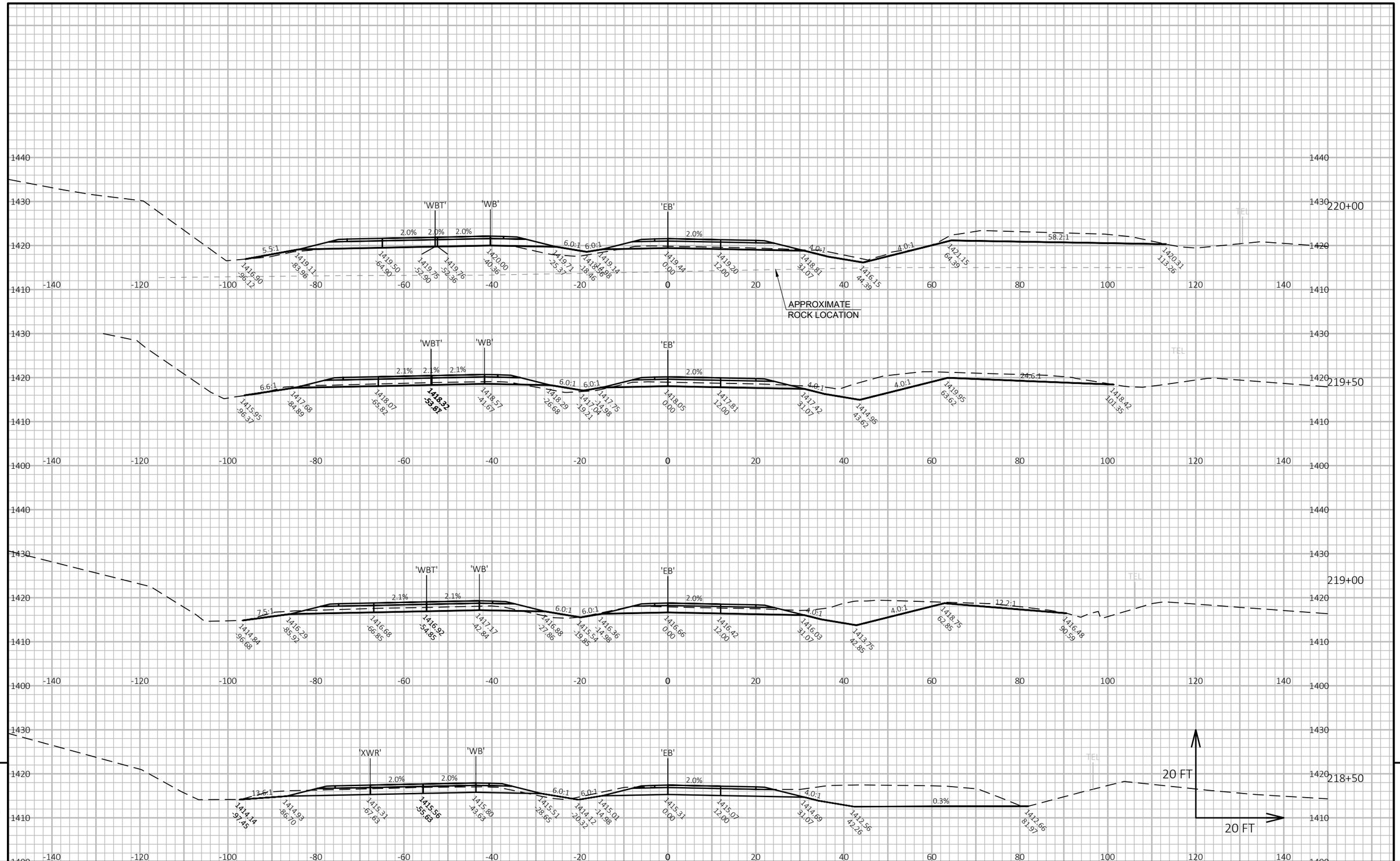
PLOT DATE : 10/30/2020 7:48 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 384	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 9

PLOT DATE : 10/30/2020 7:48 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 385	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 9 (2)

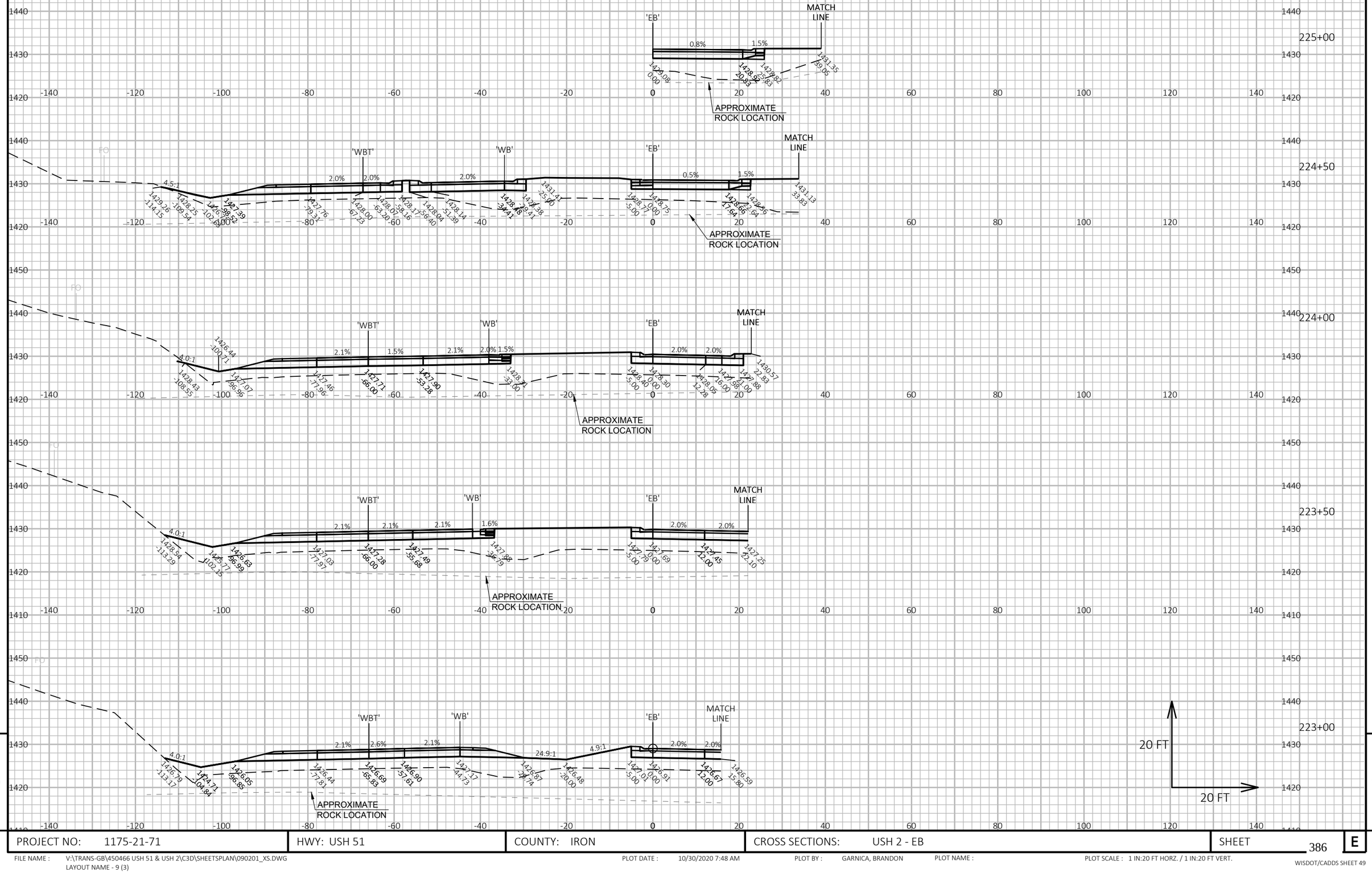
PLOT DATE : 10/30/2020 7:48 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

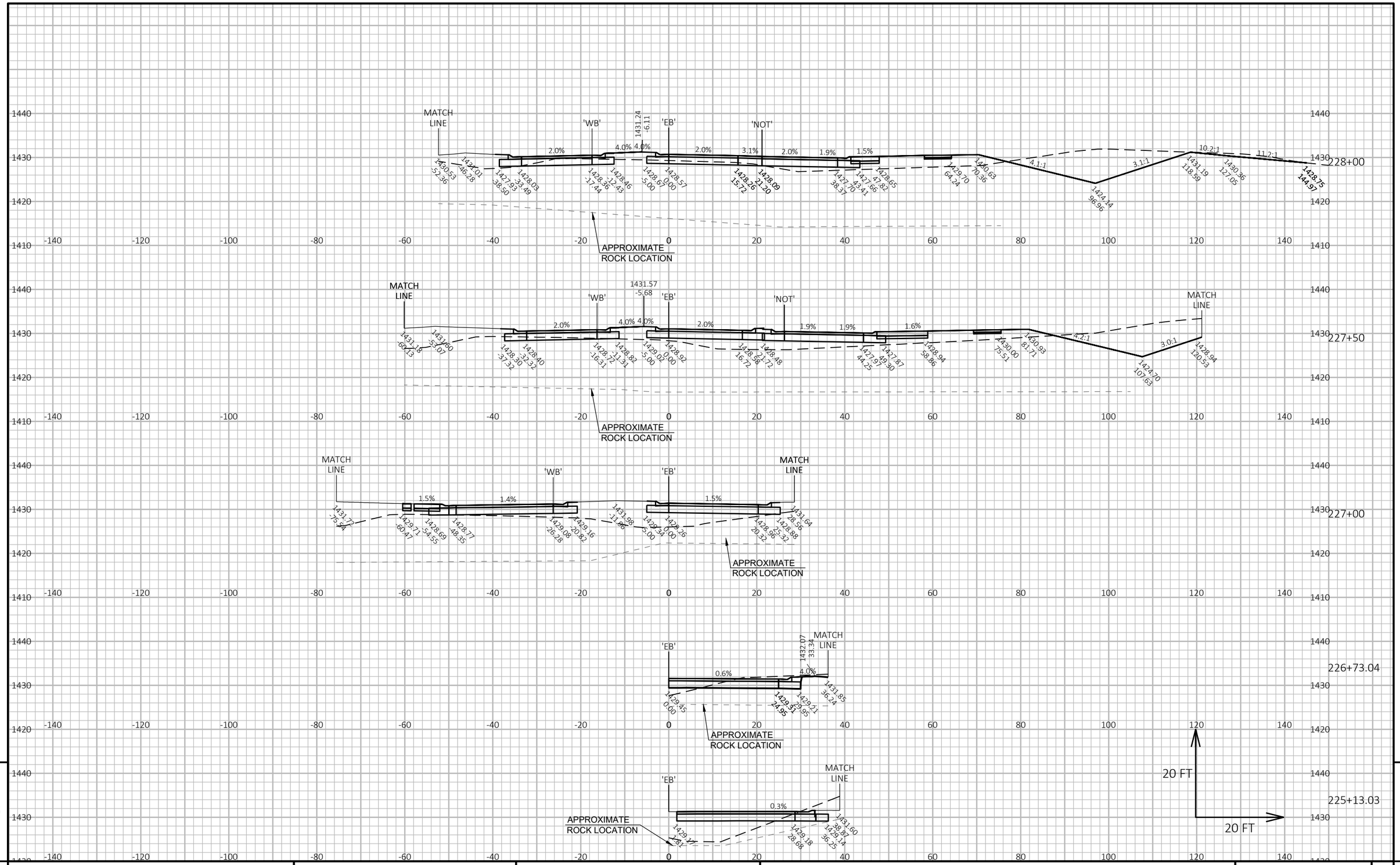
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 386	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 9 (3)

PLOT DATE : 10/30/2020 7:48 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

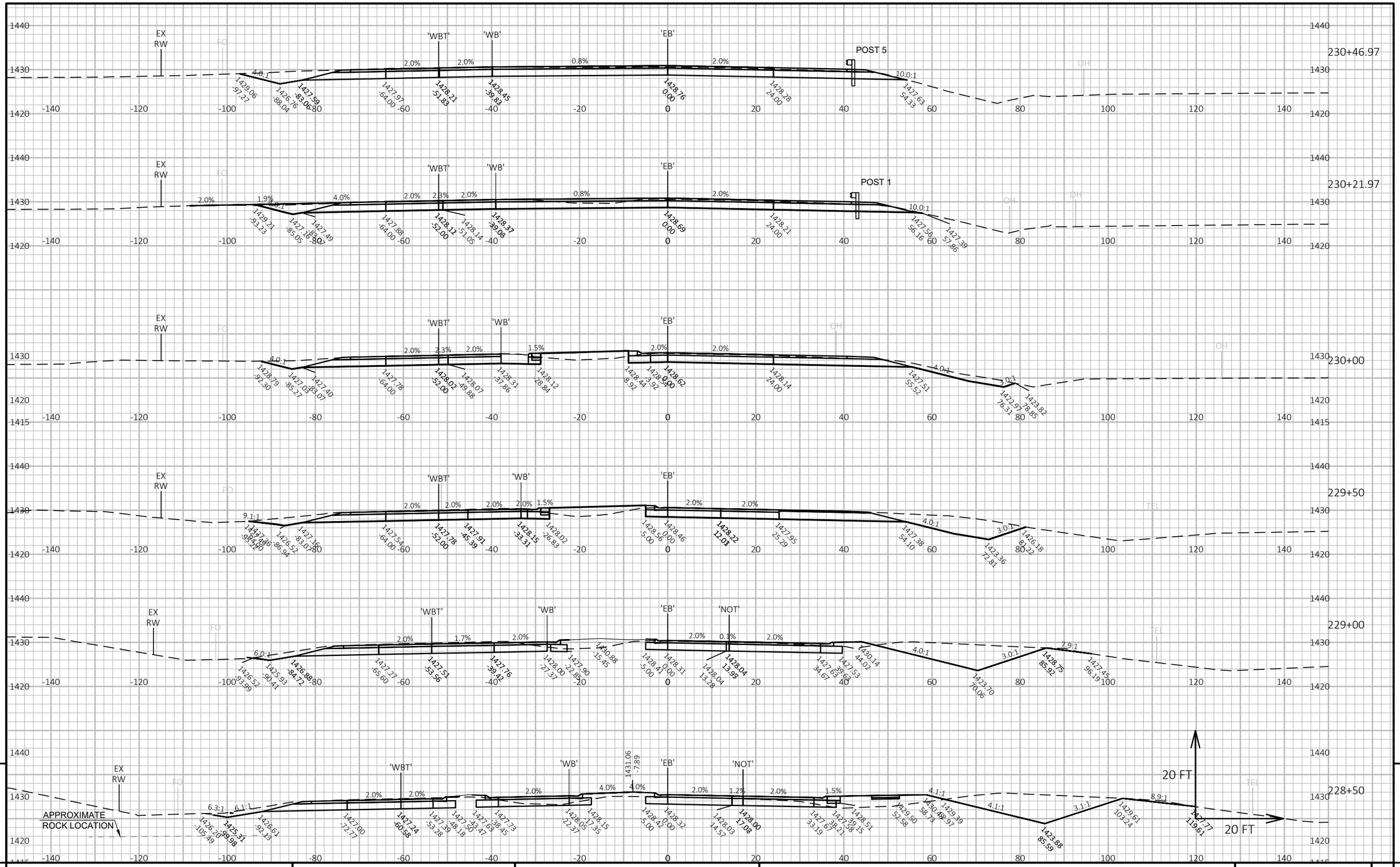
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 387	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 9 (4)

PLOT DATE : 10/30/2020 8:37 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 388	E

9

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 9 (5)

PLOT DATE : 10/30/2020 8:37 AM

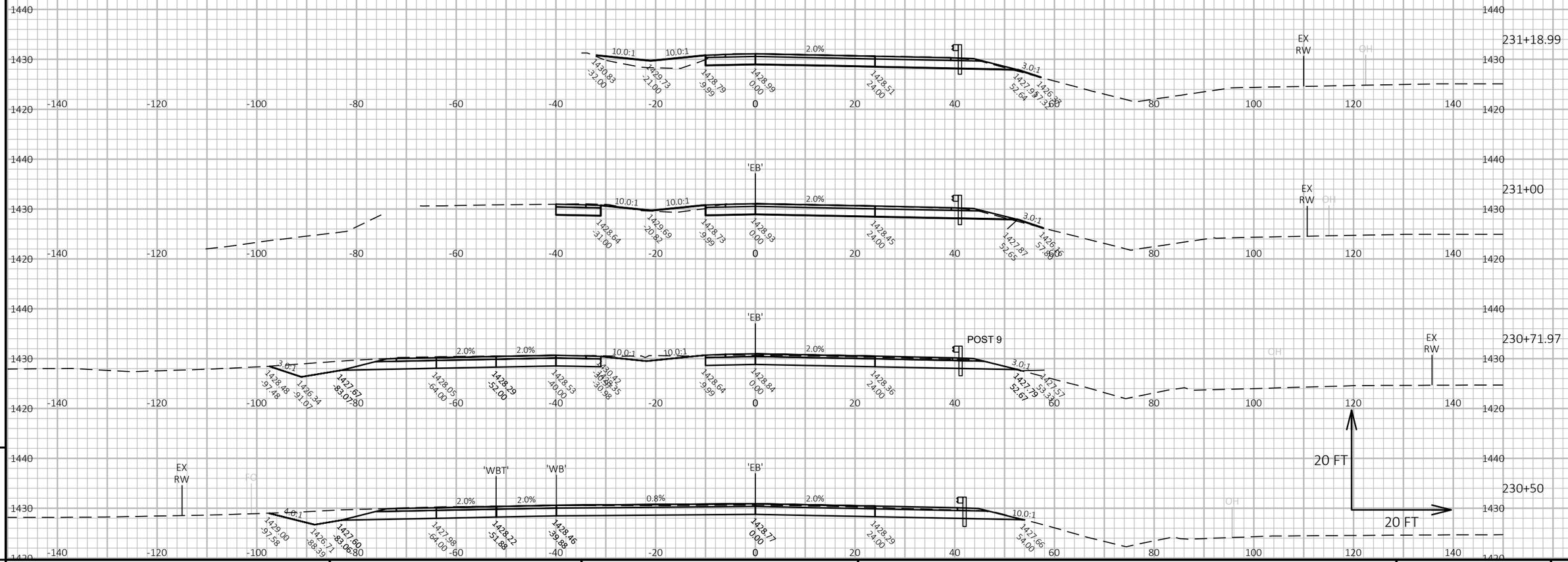
PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

CONSTRUCTION LIMITS
STA. 231+63.10EB



9

9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB	SHEET 389	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 9 (6)

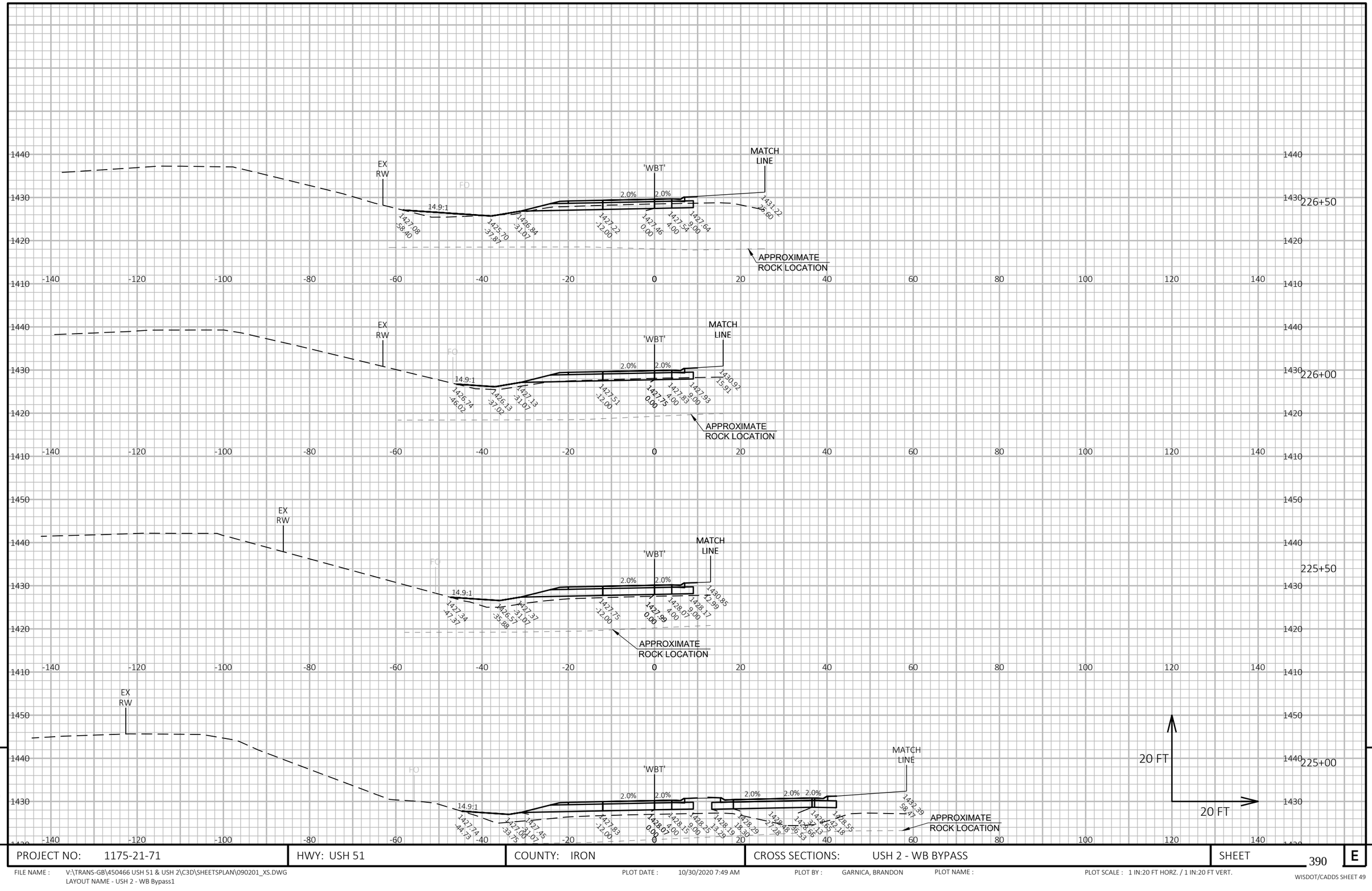
PLOT DATE : 10/30/2020 7:59 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

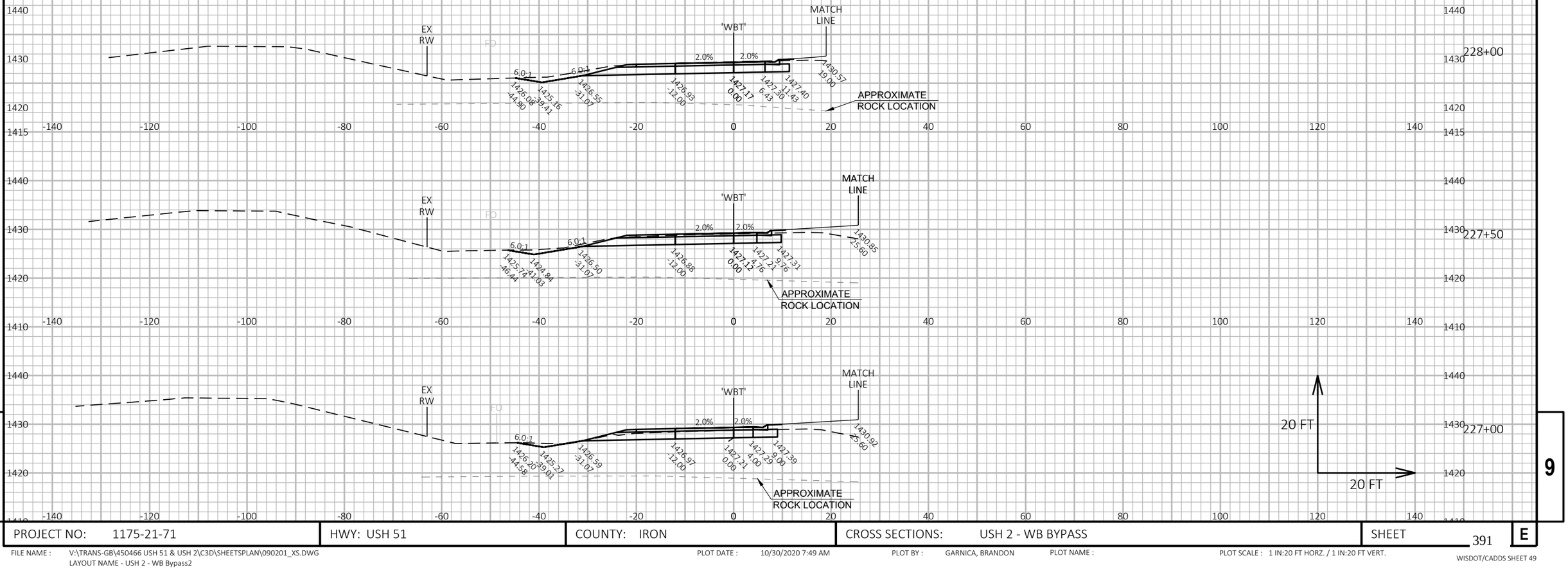


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - WB BYPASS	SHEET 390 E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - USH 2 - WB Bypass1

PLOT DATE : 10/30/2020 7:49 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

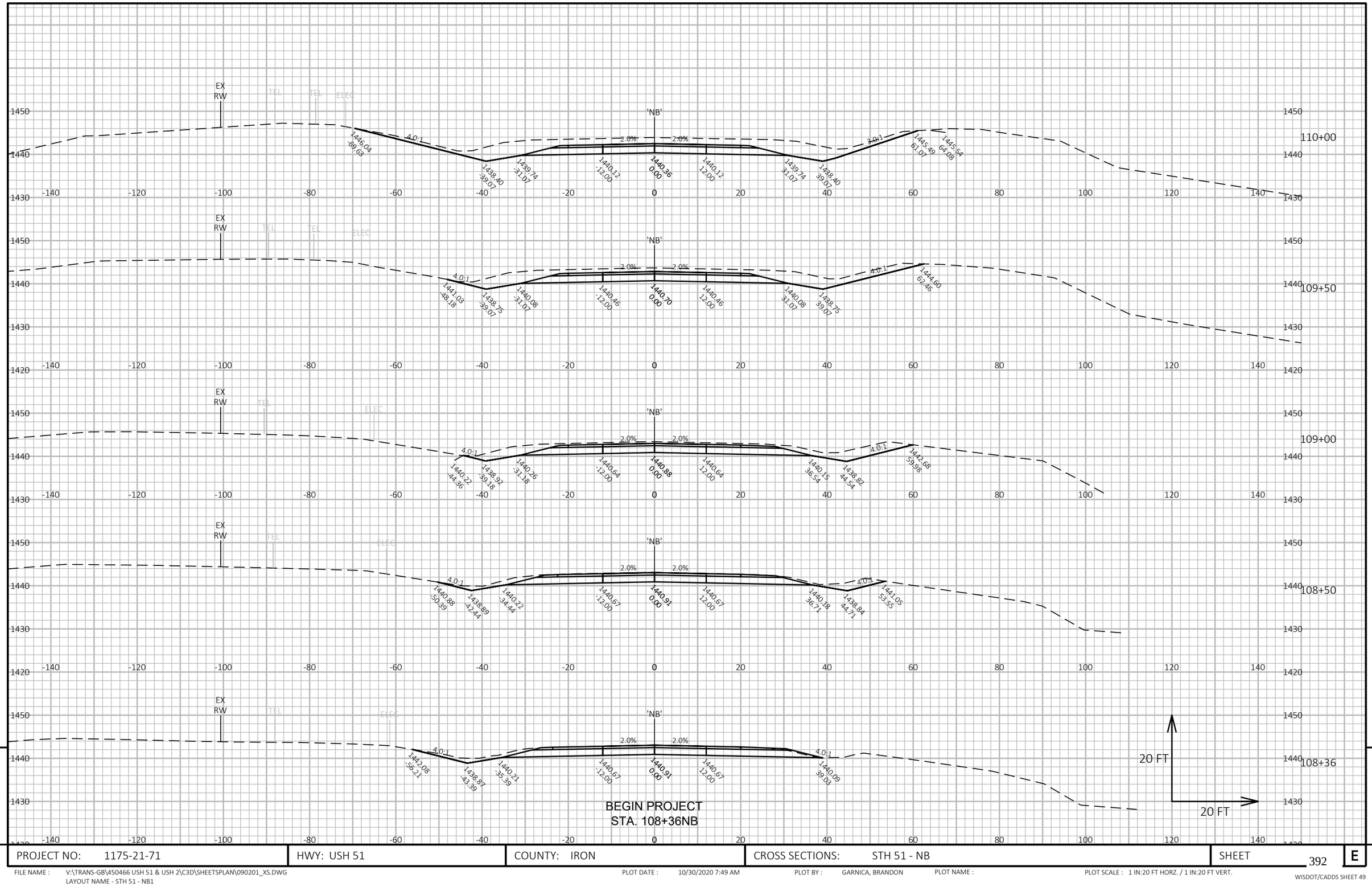


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - WB BYPASS	SHEET 391	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - USH 2 - WB Bypass2

PLOT DATE : 10/30/2020 7:49 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: STH 51 - NB	SHEET 392	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 51 - NB1

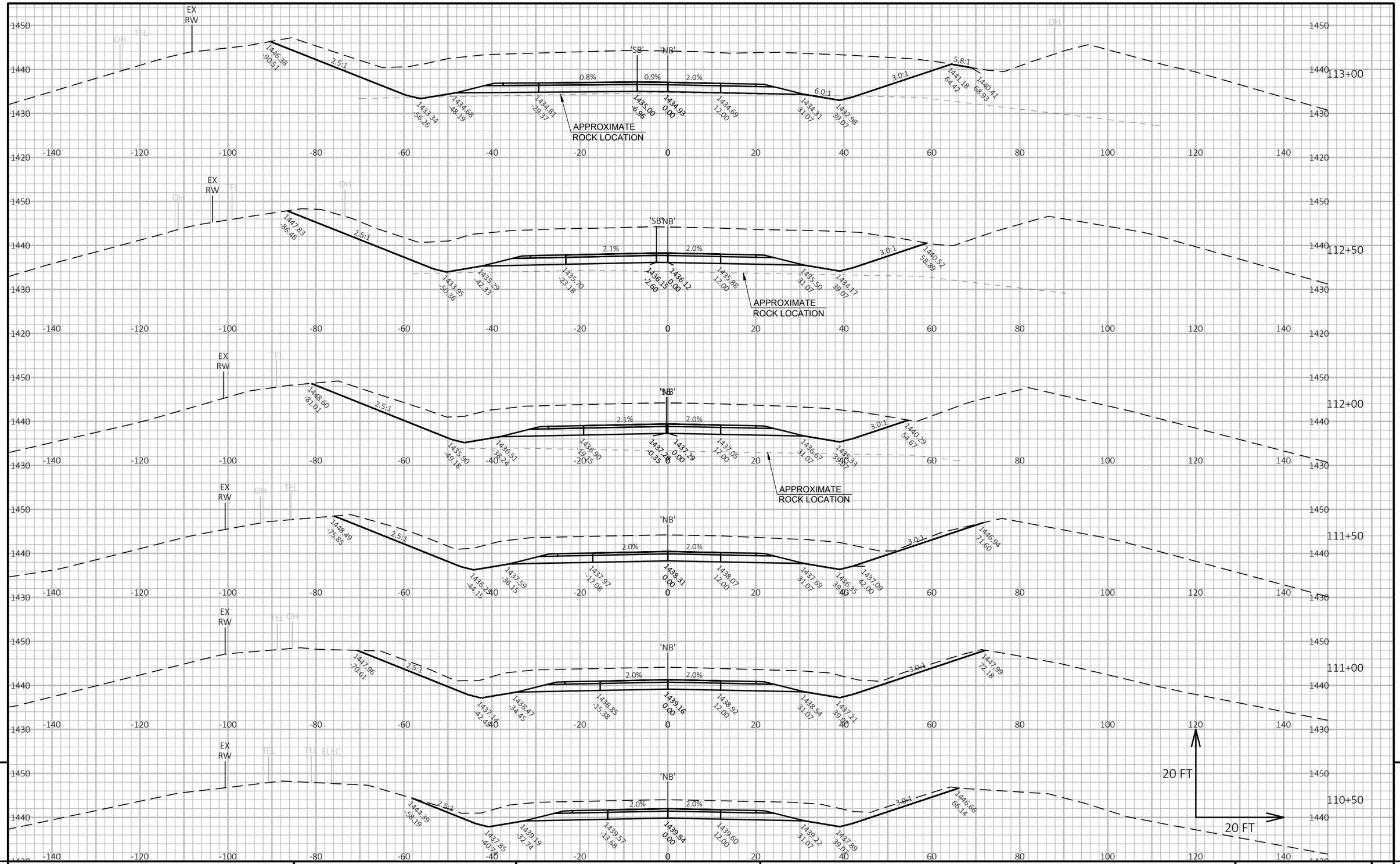
PLOT DATE : 10/30/2020 7:49 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: STH 51 - NB	SHEET 393	E

9

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 51 - NB2

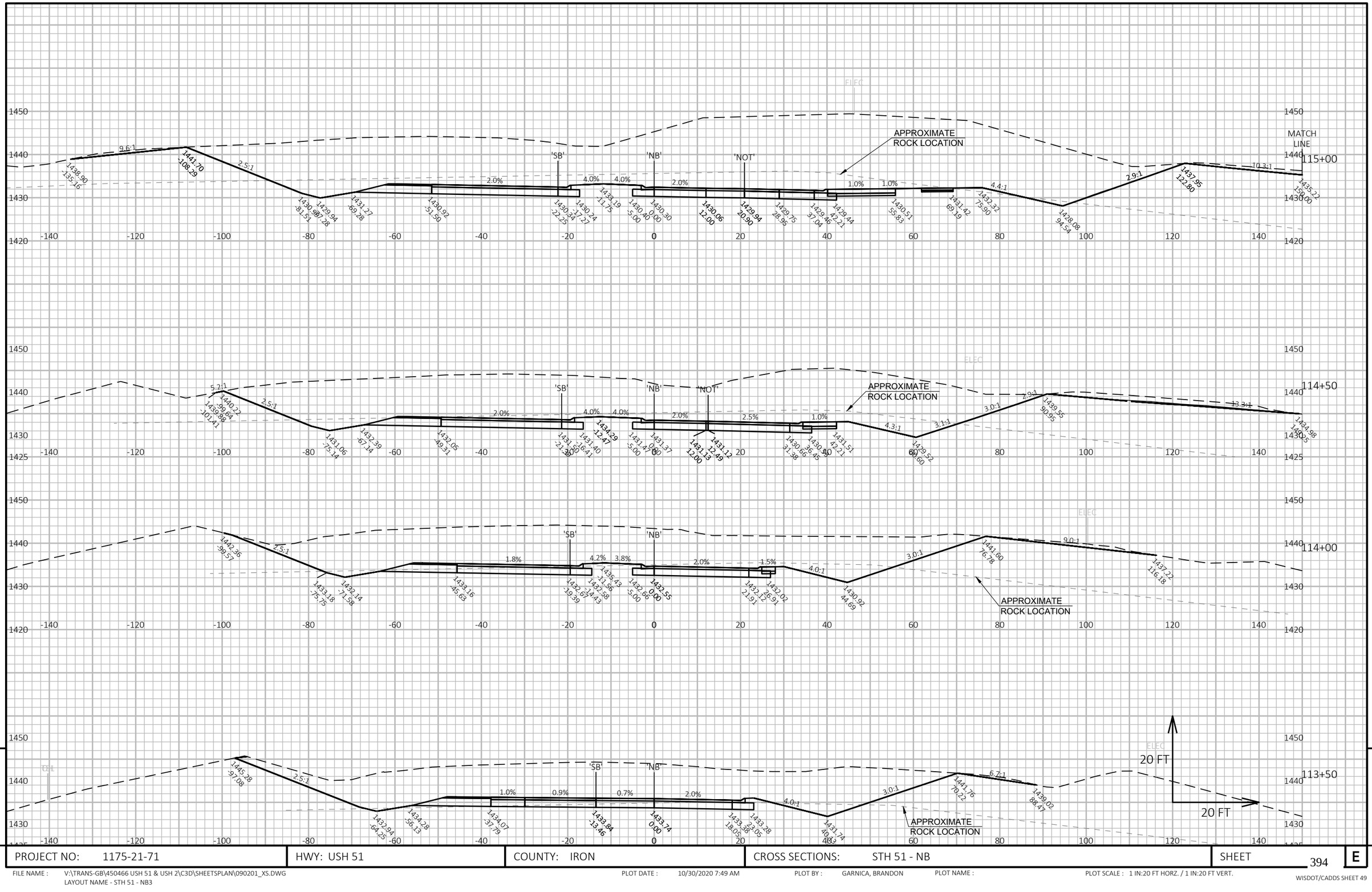
PLOT DATE : 10/30/2020 7:49 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

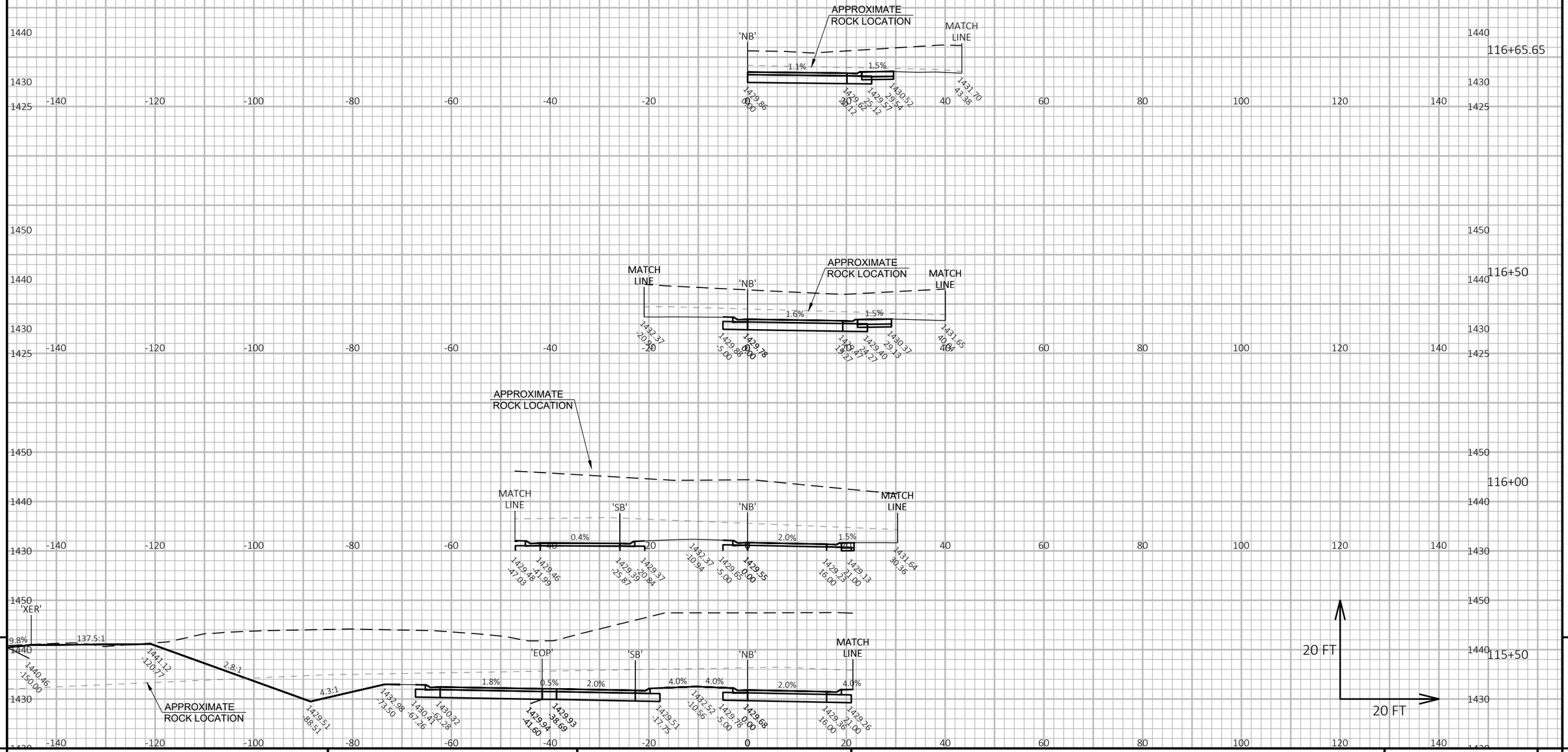


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: STH 51 - NB	SHEET 394 E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 51 - NB3

PLOT DATE : 10/30/2020 7:49 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

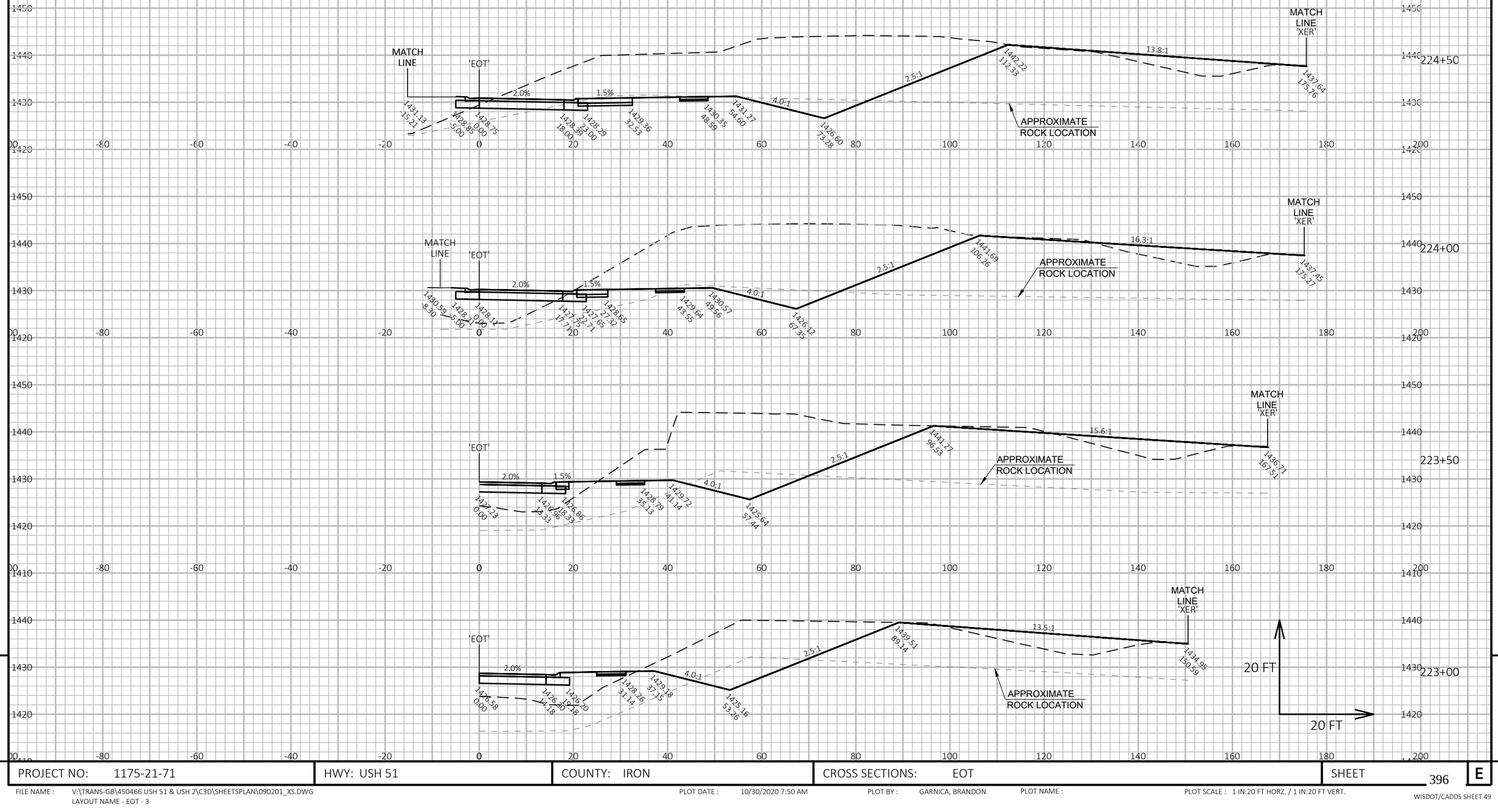


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: STH 51 - NB	SHEET 395	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - STH 51 - NB4

PLOT DATE : 10/30/2020 7:50 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

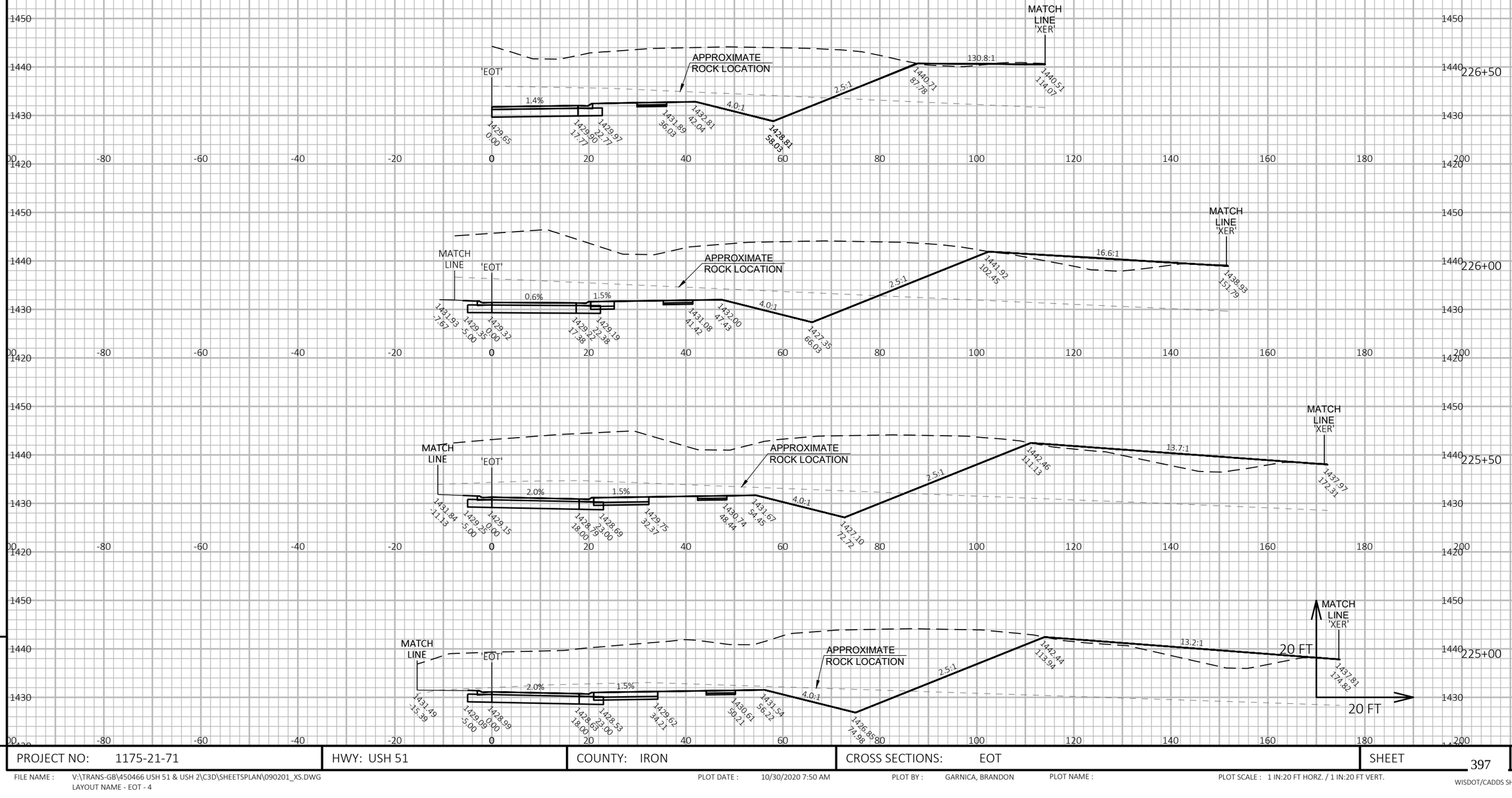
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: EOT	SHEET 396	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - EOT - 3

PLOT DATE : 10/30/2020 7:50 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

9



9

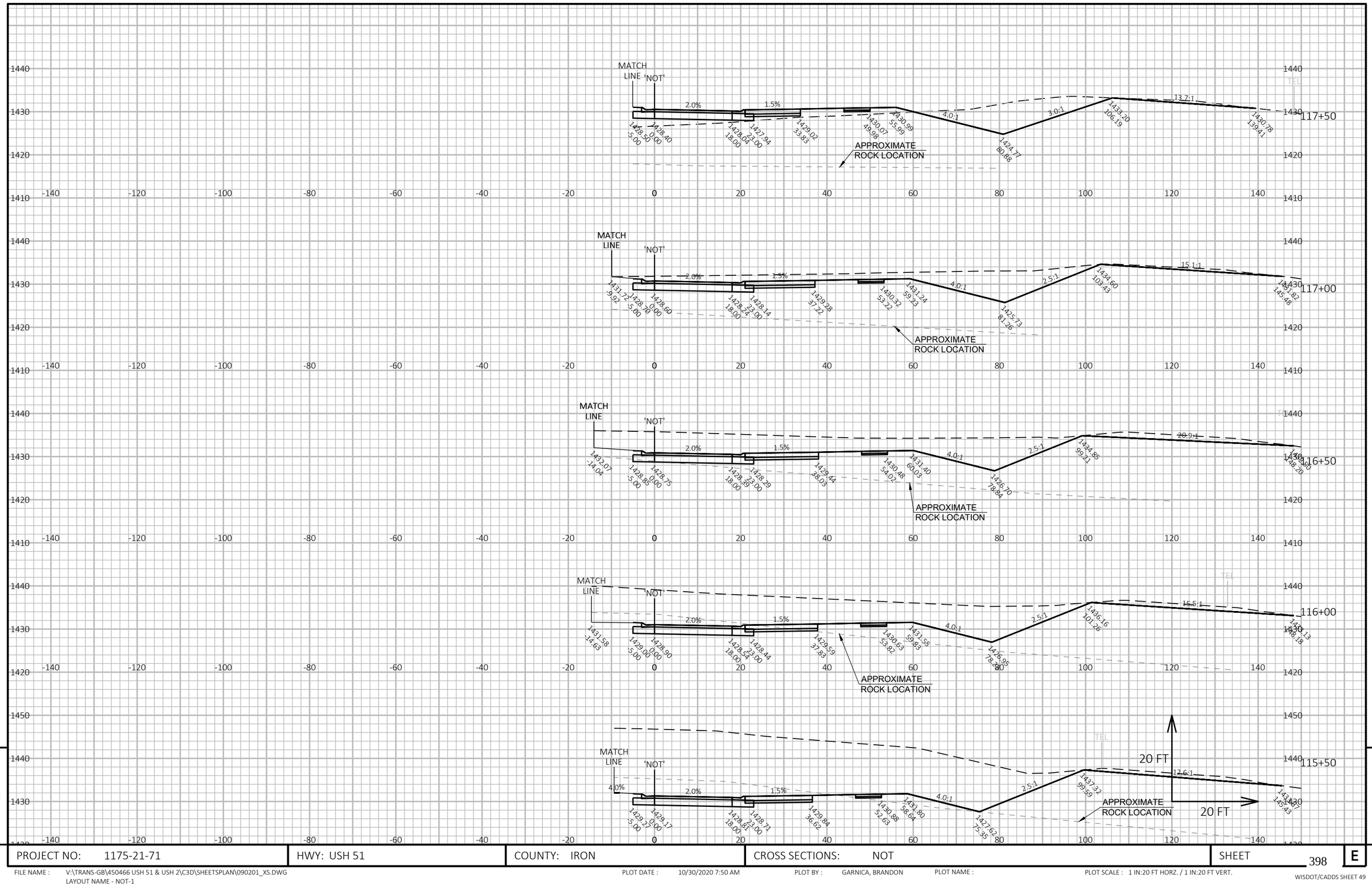
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: EOT	SHEET 397	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - EOT - 4

PLOT DATE : 10/30/2020 7:50 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

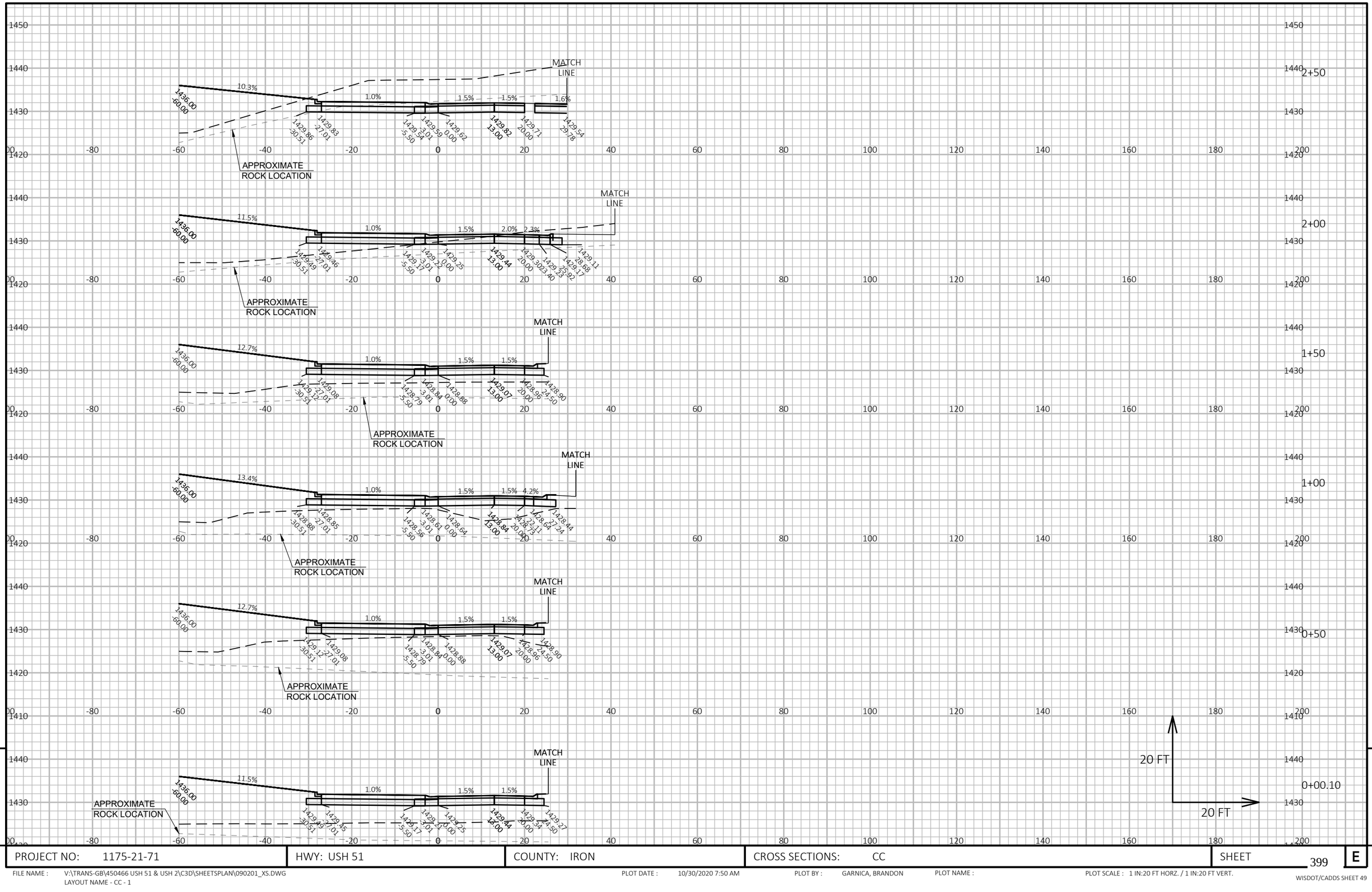
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: NOT	SHEET 398	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - NOT-1

PLOT DATE : 10/30/2020 7:50 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: CC	SHEET 399	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - CC - 1

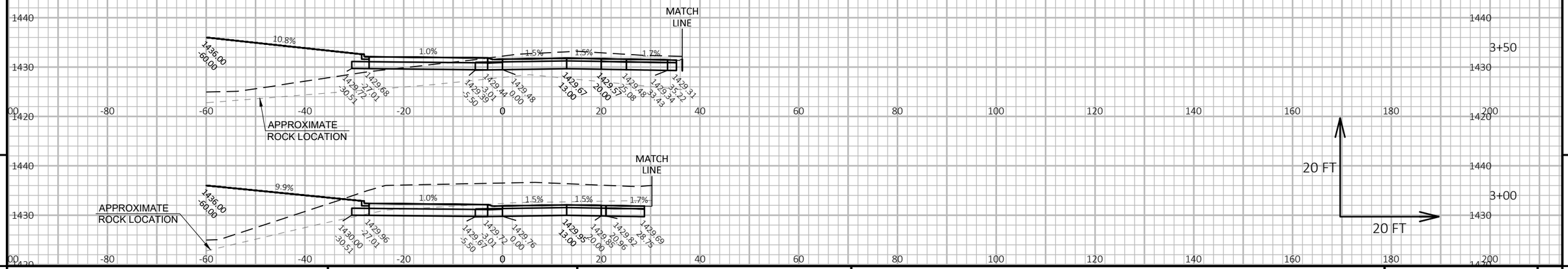
PLOT DATE : 10/30/2020 7:50 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

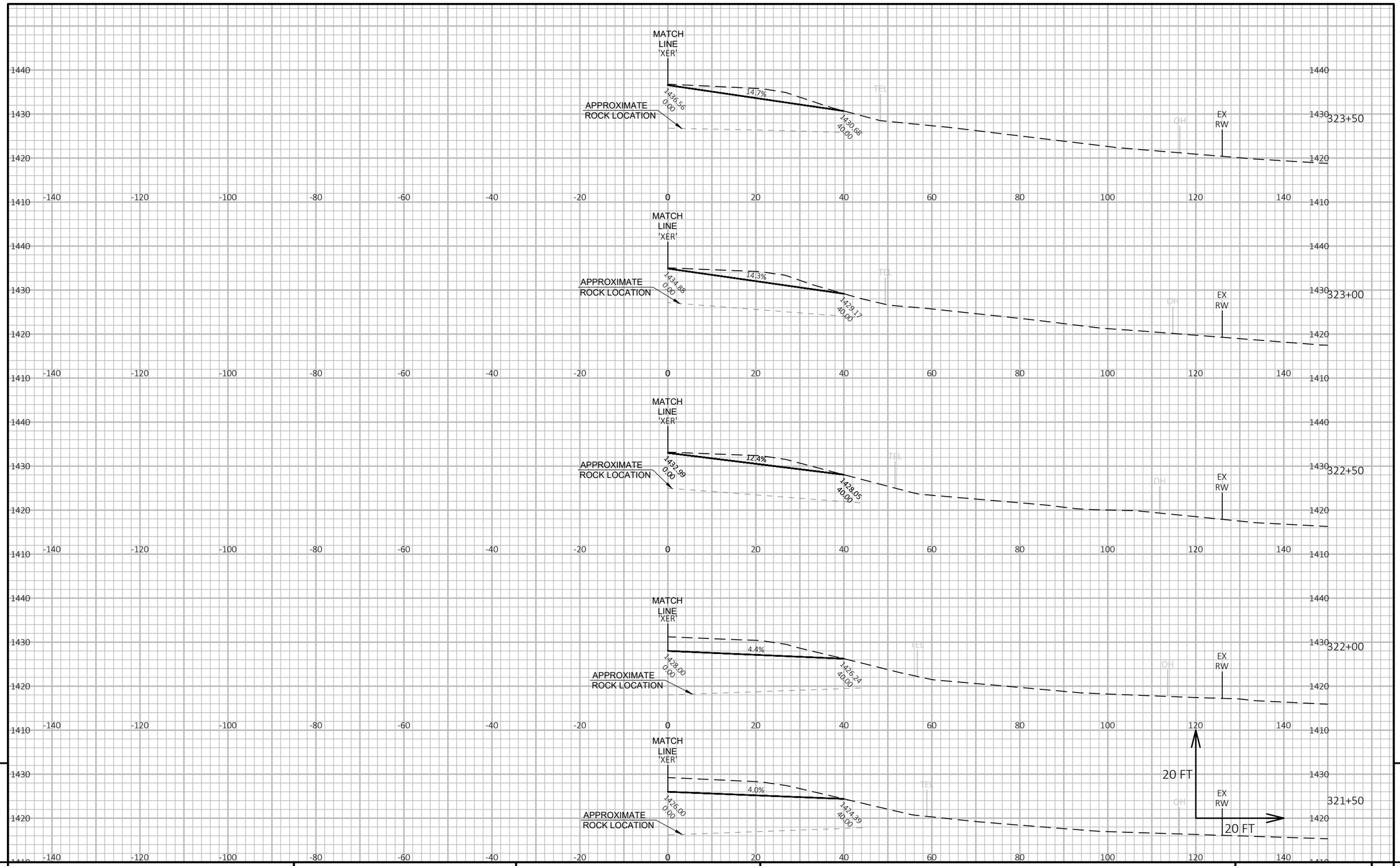
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: CC	SHEET 400	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - CC - 1 (2)

PLOT DATE : 10/30/2020 7:50 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

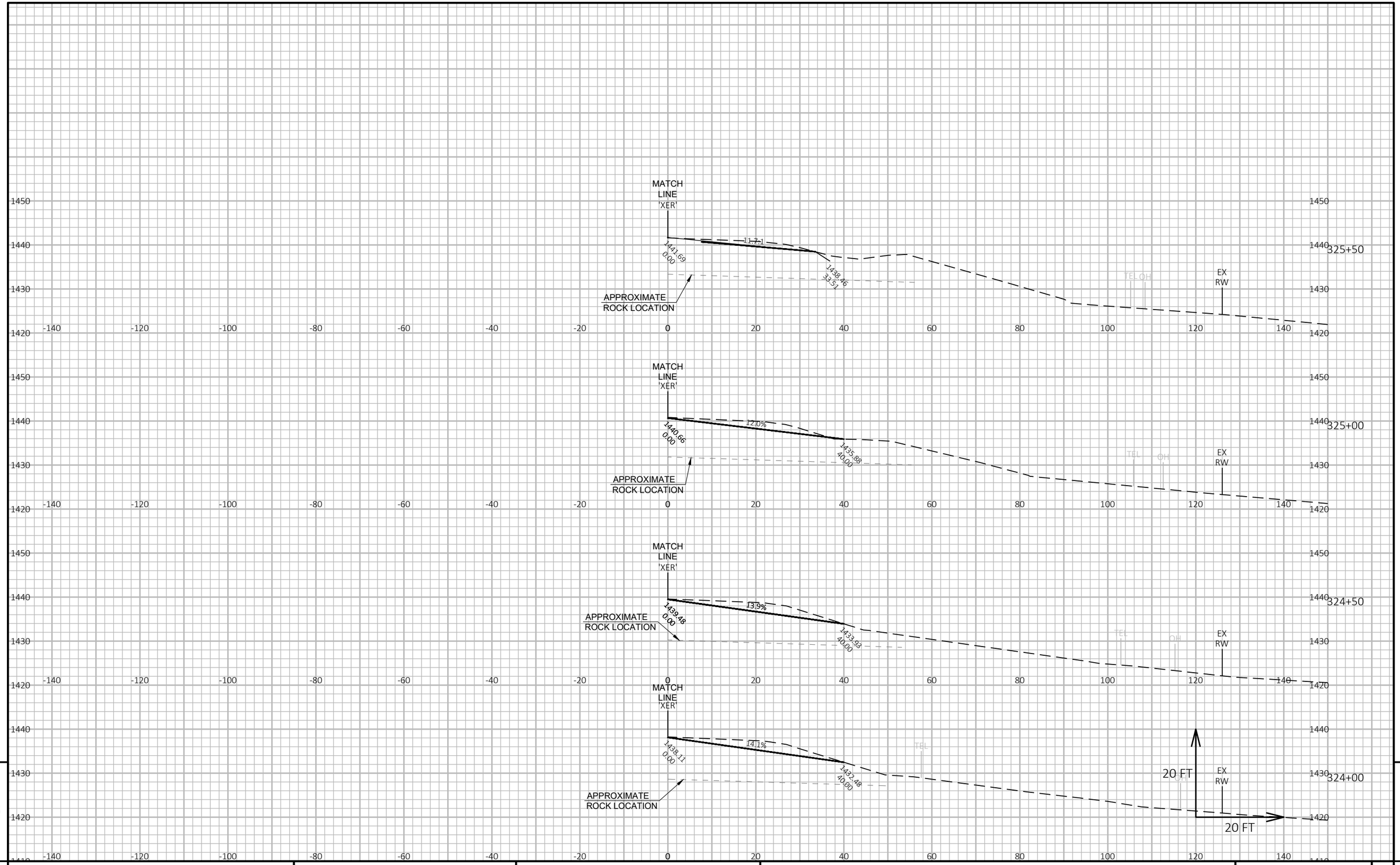
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: EXISTING USH 2 (EB) OFF-RAMP	SHEET 401	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Existing USH 2 (EB) Off-Ramp

PLOT DATE : 10/30/2020 7:50 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

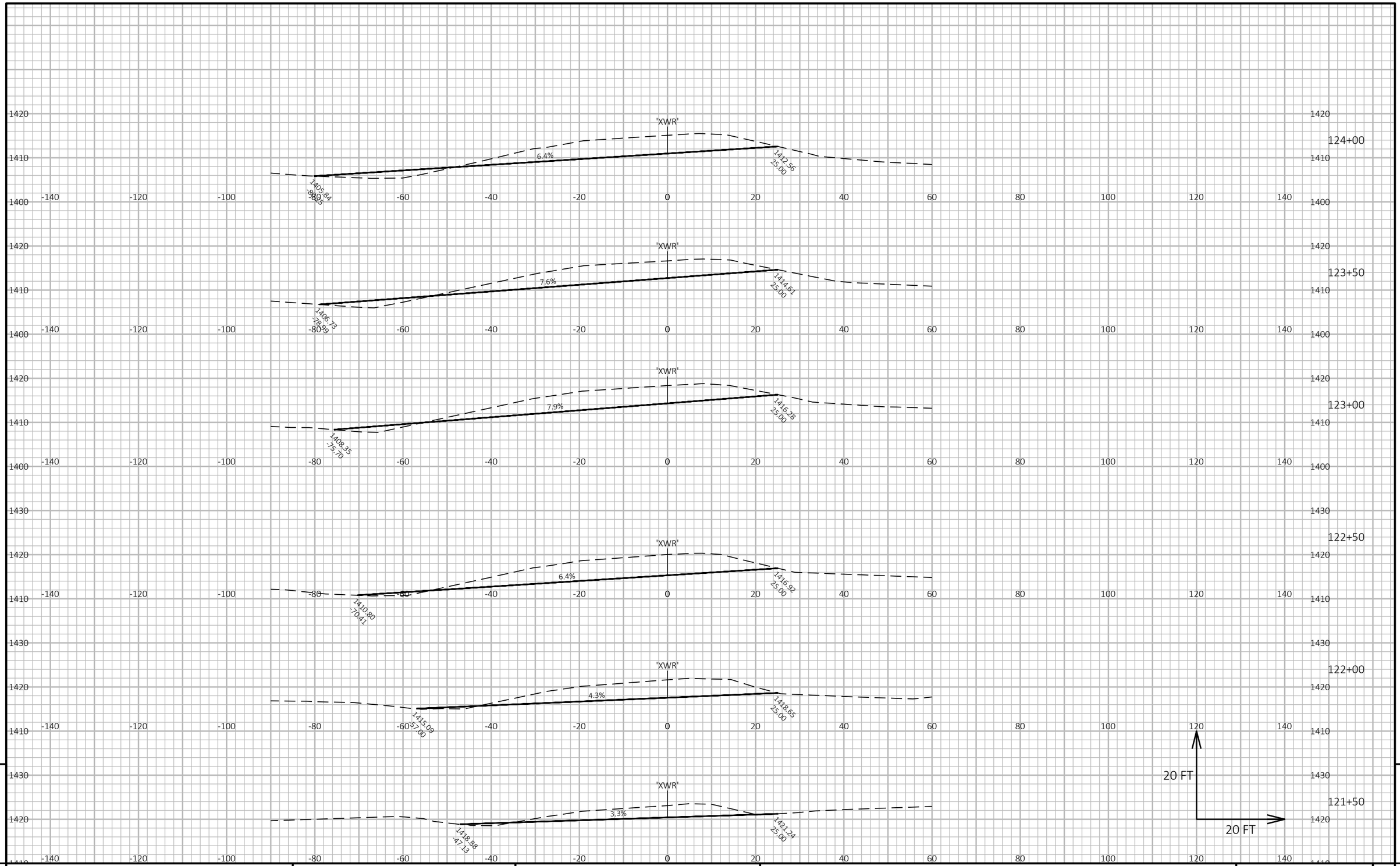
9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: EXISTING USH 2 (EB) OFF-RAMP	SHEET 402	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - Existing USH 2 (EB) Off-Ramp - 2

PLOT DATE : 10/30/2020 7:50 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

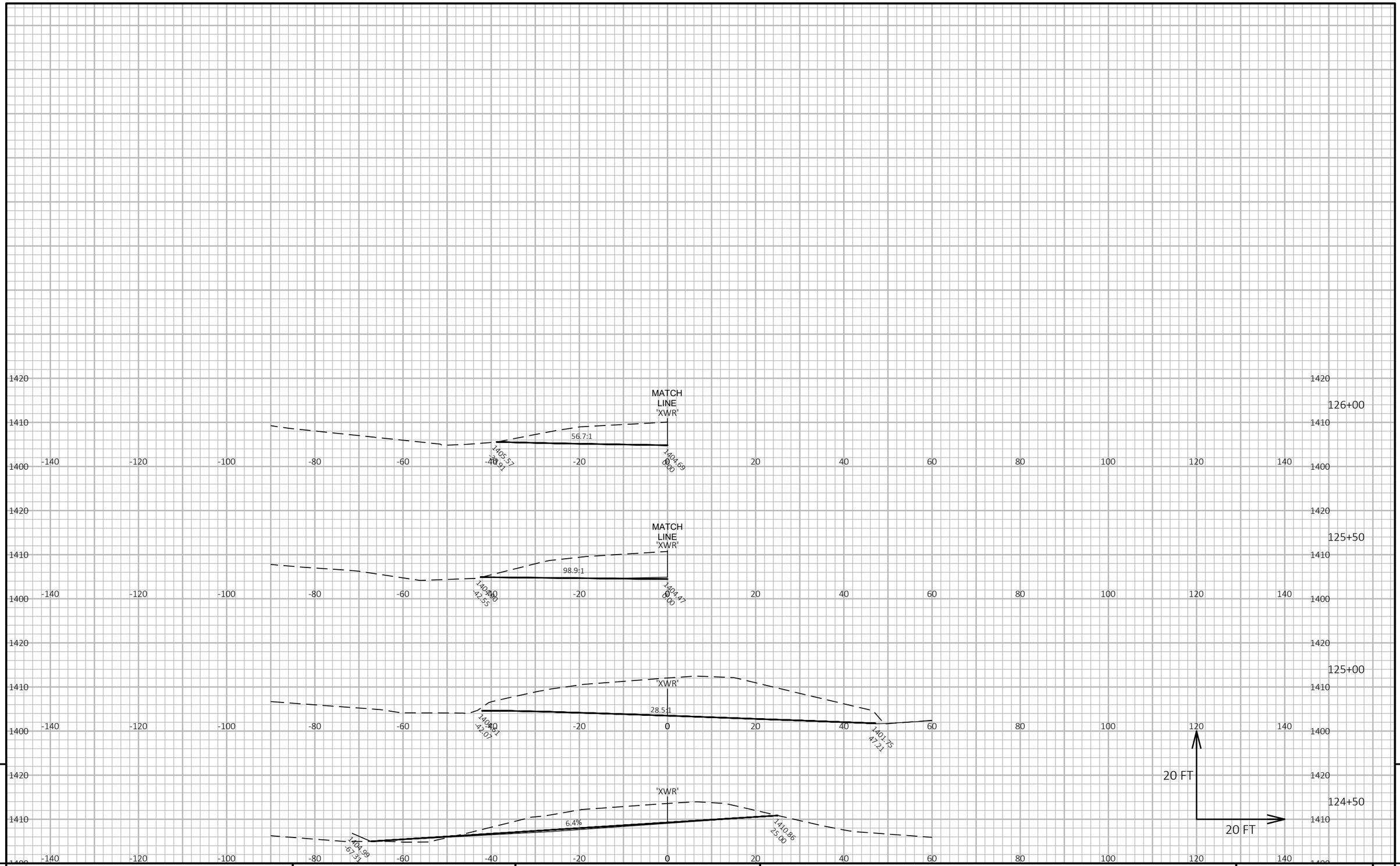


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: EXISTING USH 2 (WB) OFF-RAMP	SHEET 403 E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 2 WB Off-Ramp - 1

PLOT DATE : 10/30/2020 7:50 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

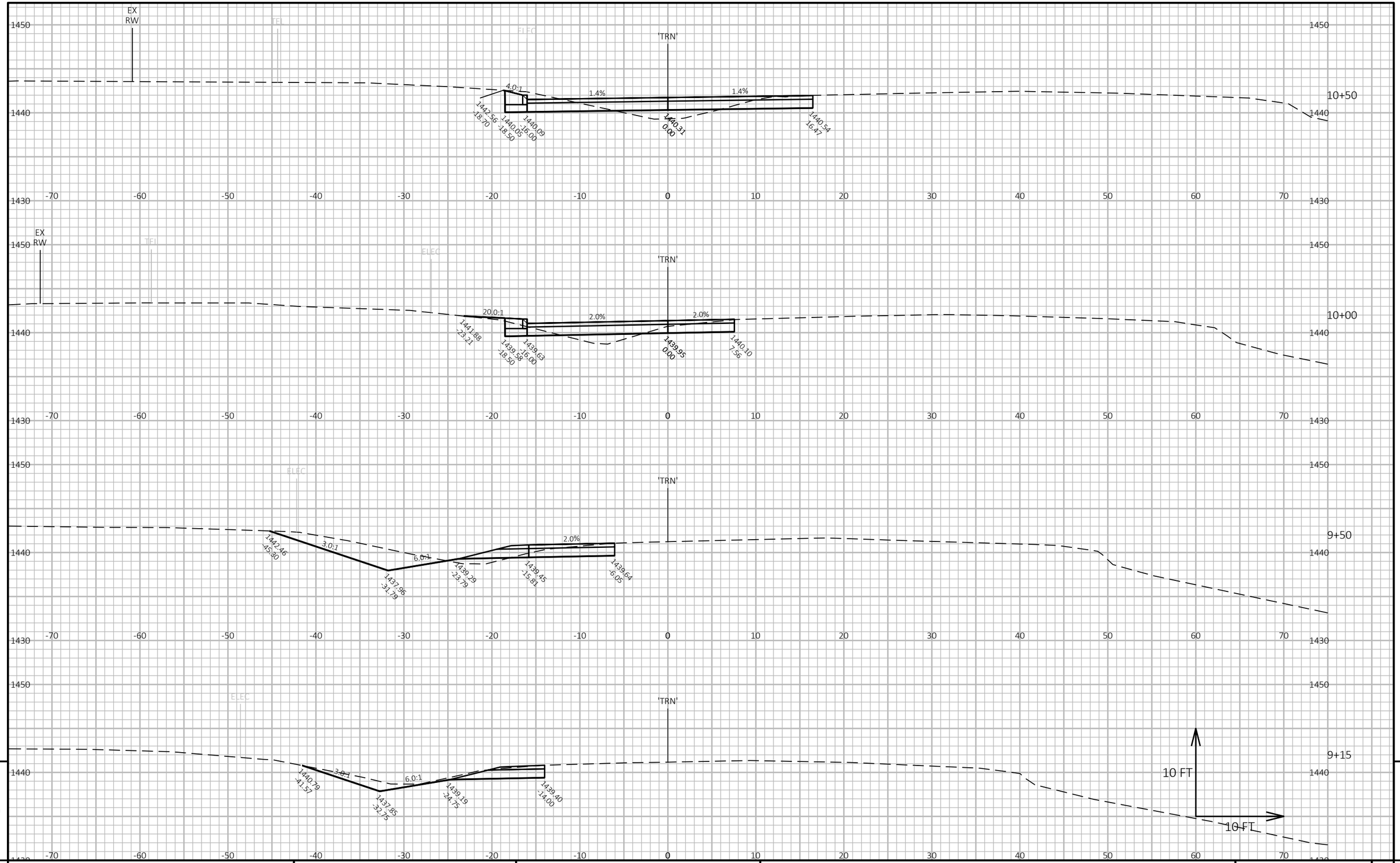
9

PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: EXISTING USH 2 (WB) OFF-RAMP	SHEET 404	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 2 WB Off-Ramp - 2

PLOT DATE : 10/30/2020 7:50 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



9

9

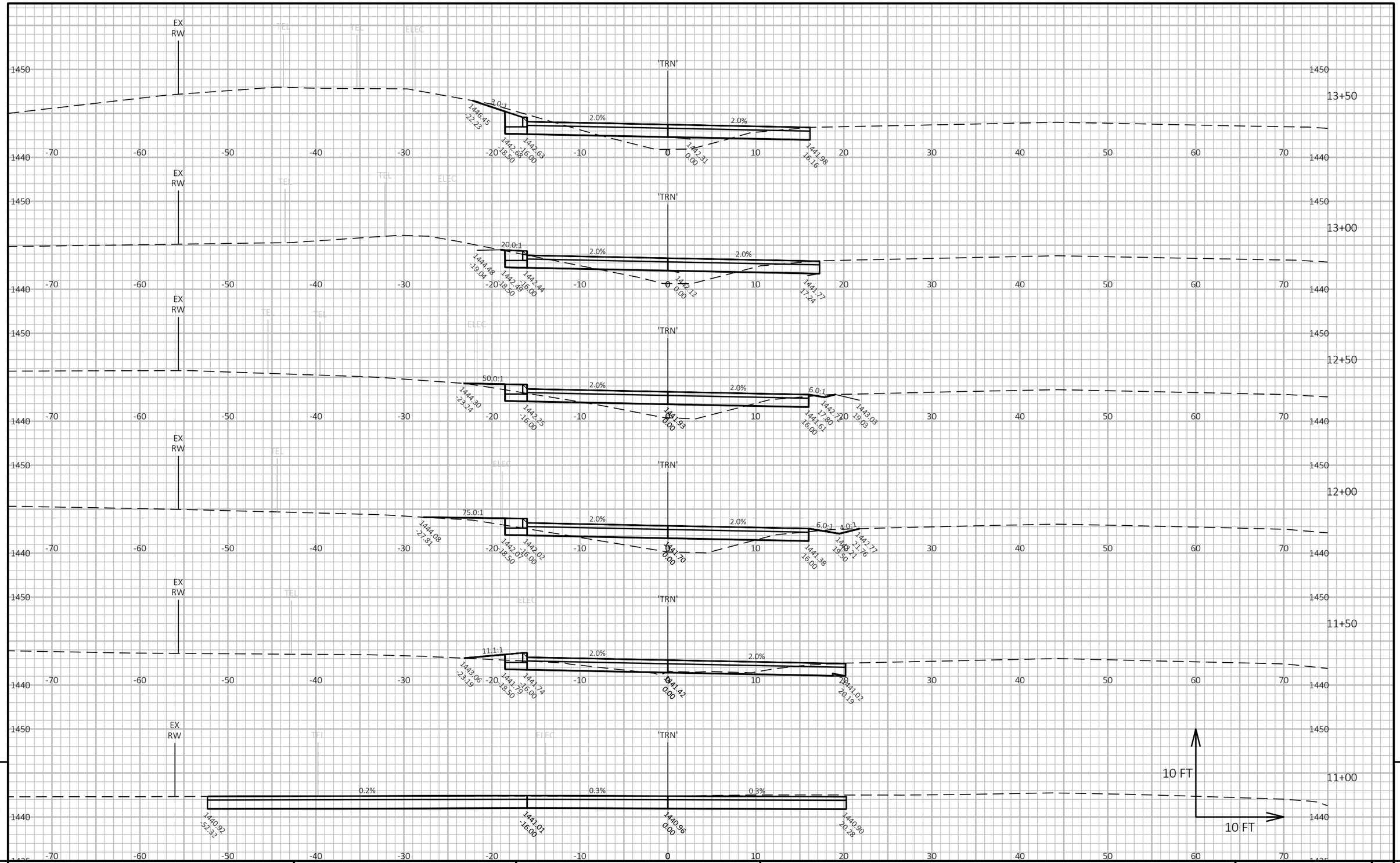
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 405	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090201xs

PLOT DATE : 10/30/2020 7:51 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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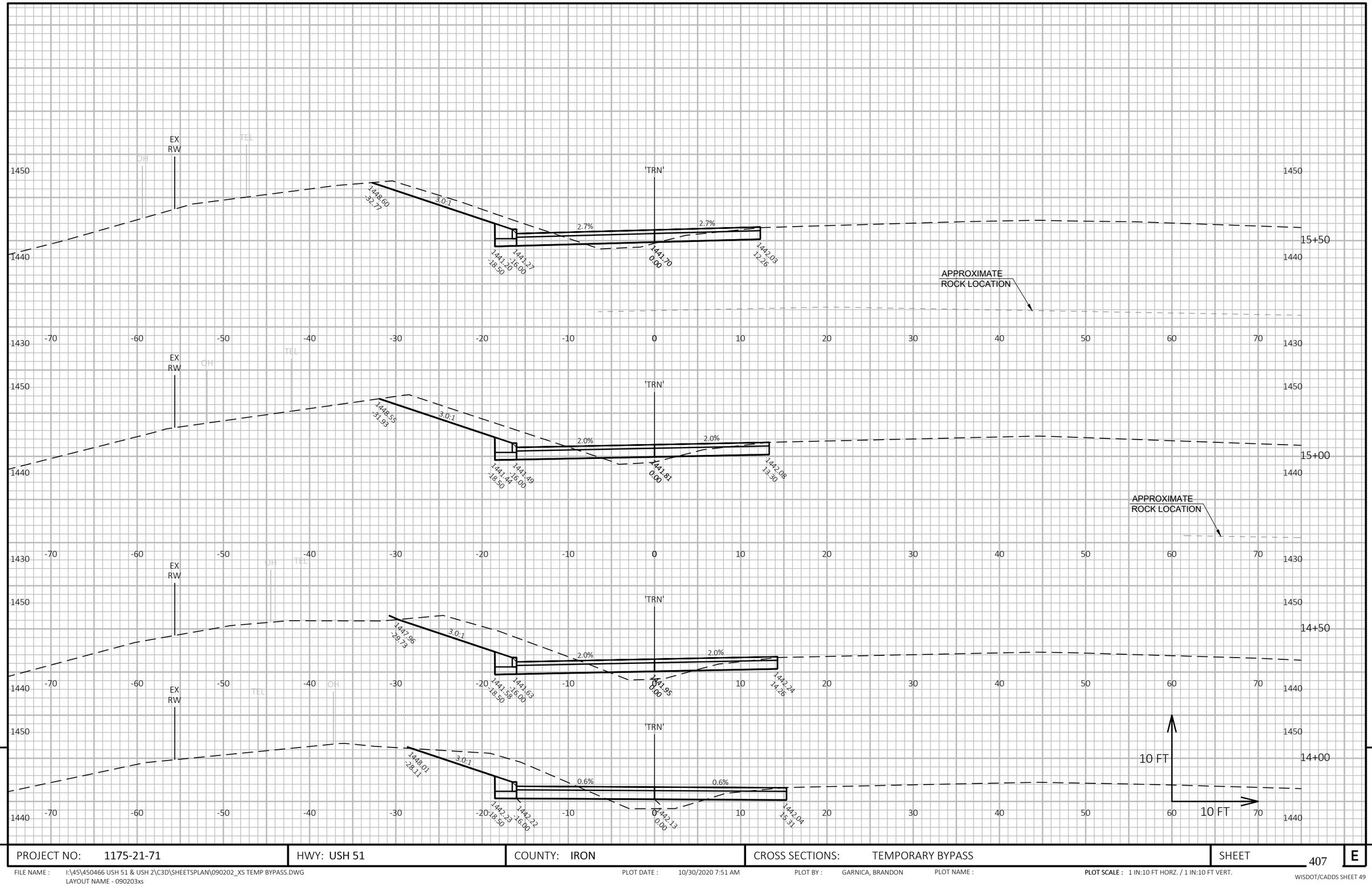
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 406	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090202xs

PLOT DATE : 10/30/2020 7:51 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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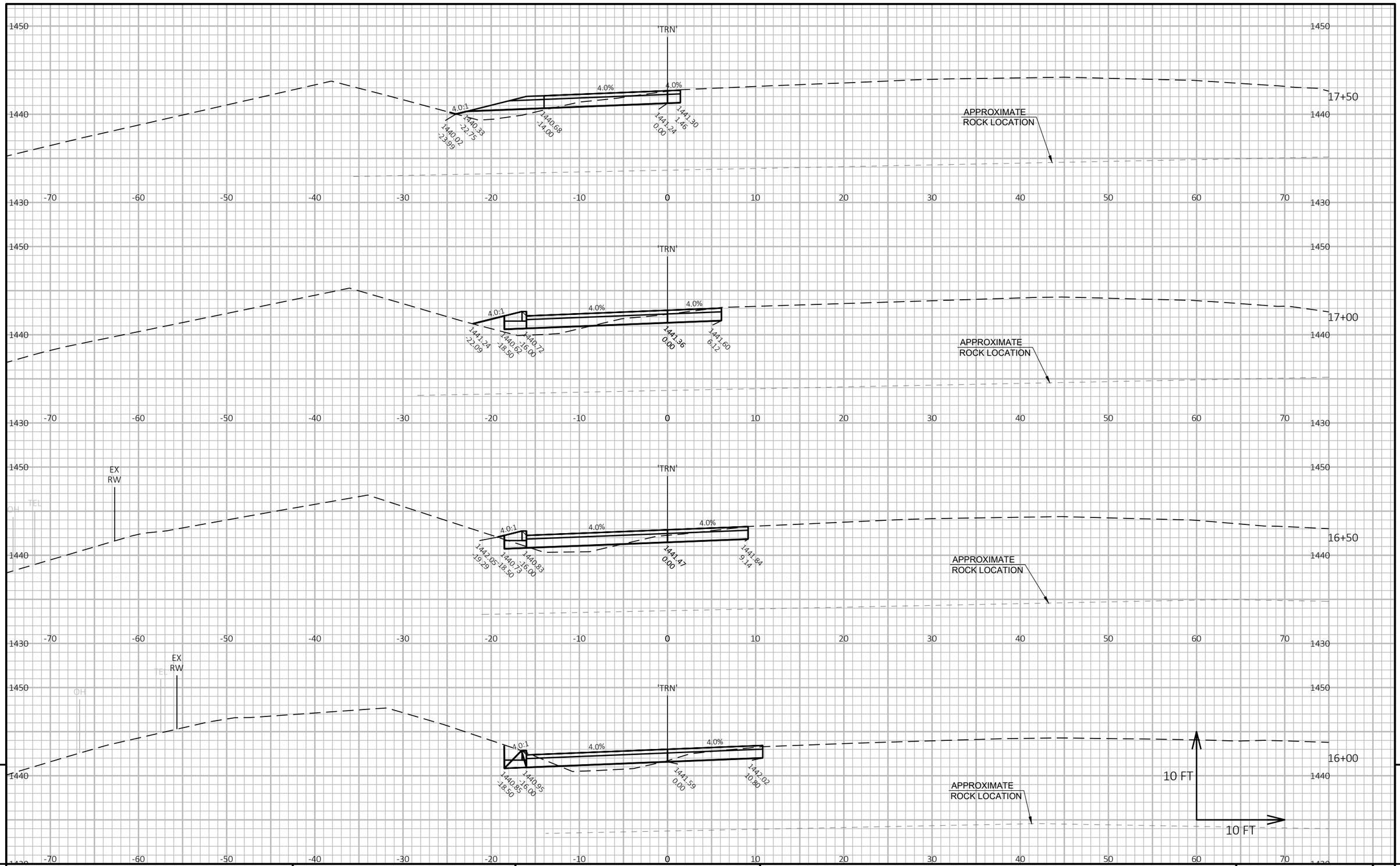
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 407	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090203xs

PLOT DATE : 10/30/2020 7:51 AM PLOT BY : GARNICA, BRANDON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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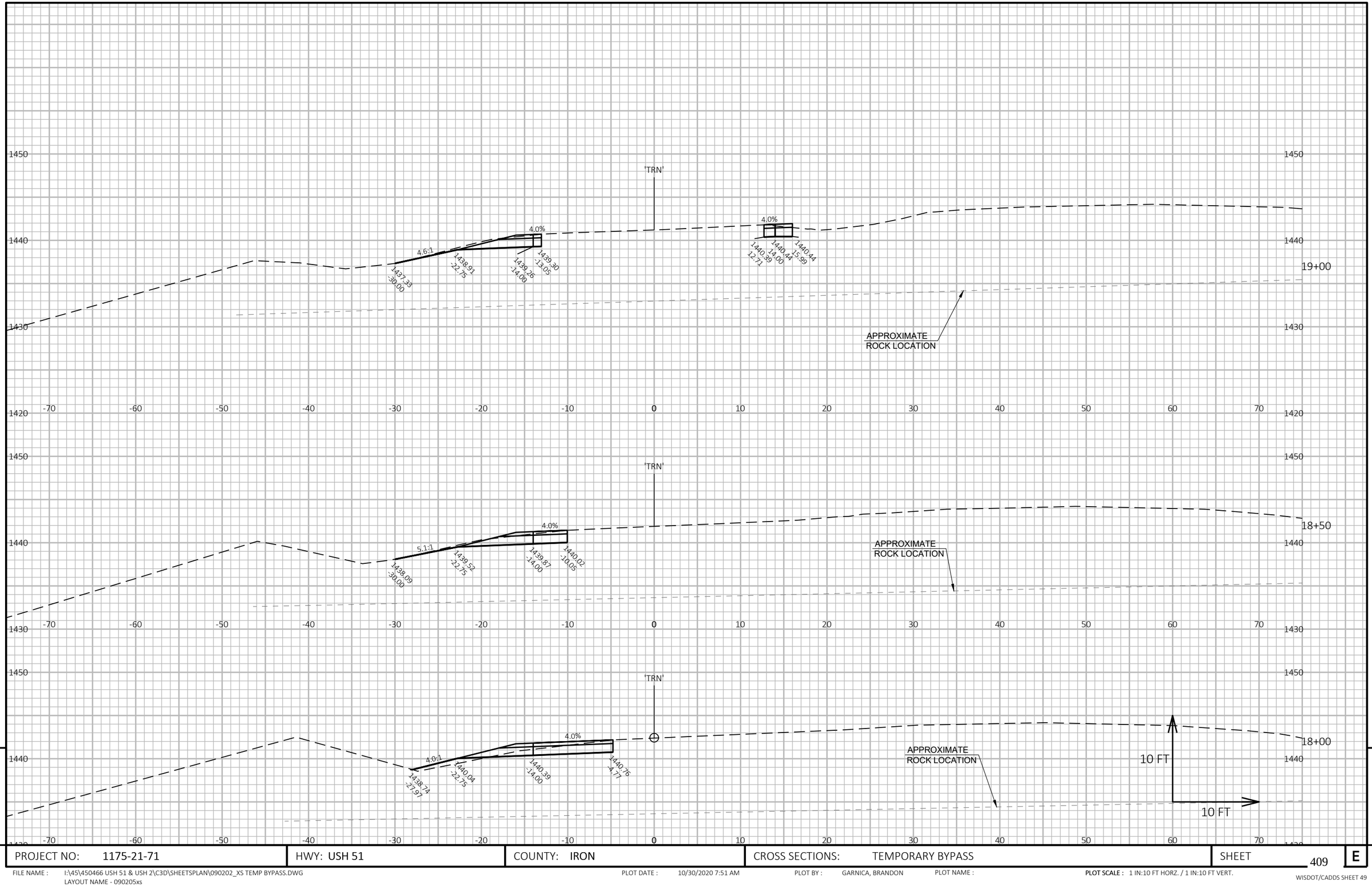
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 408	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090204xs

PLOT DATE : 10/30/2020 7:51 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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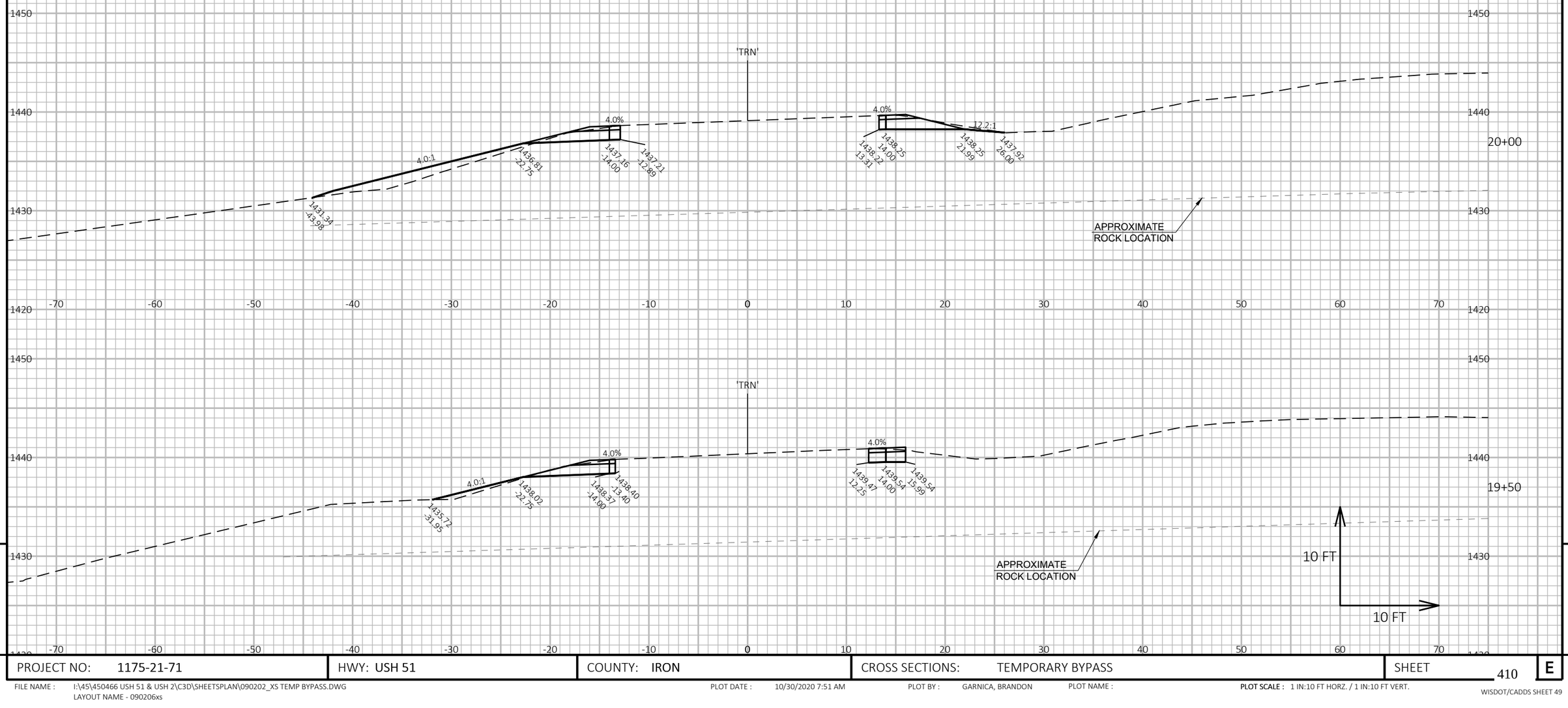
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 409	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090205xs

PLOT DATE : 10/30/2020 7:51 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

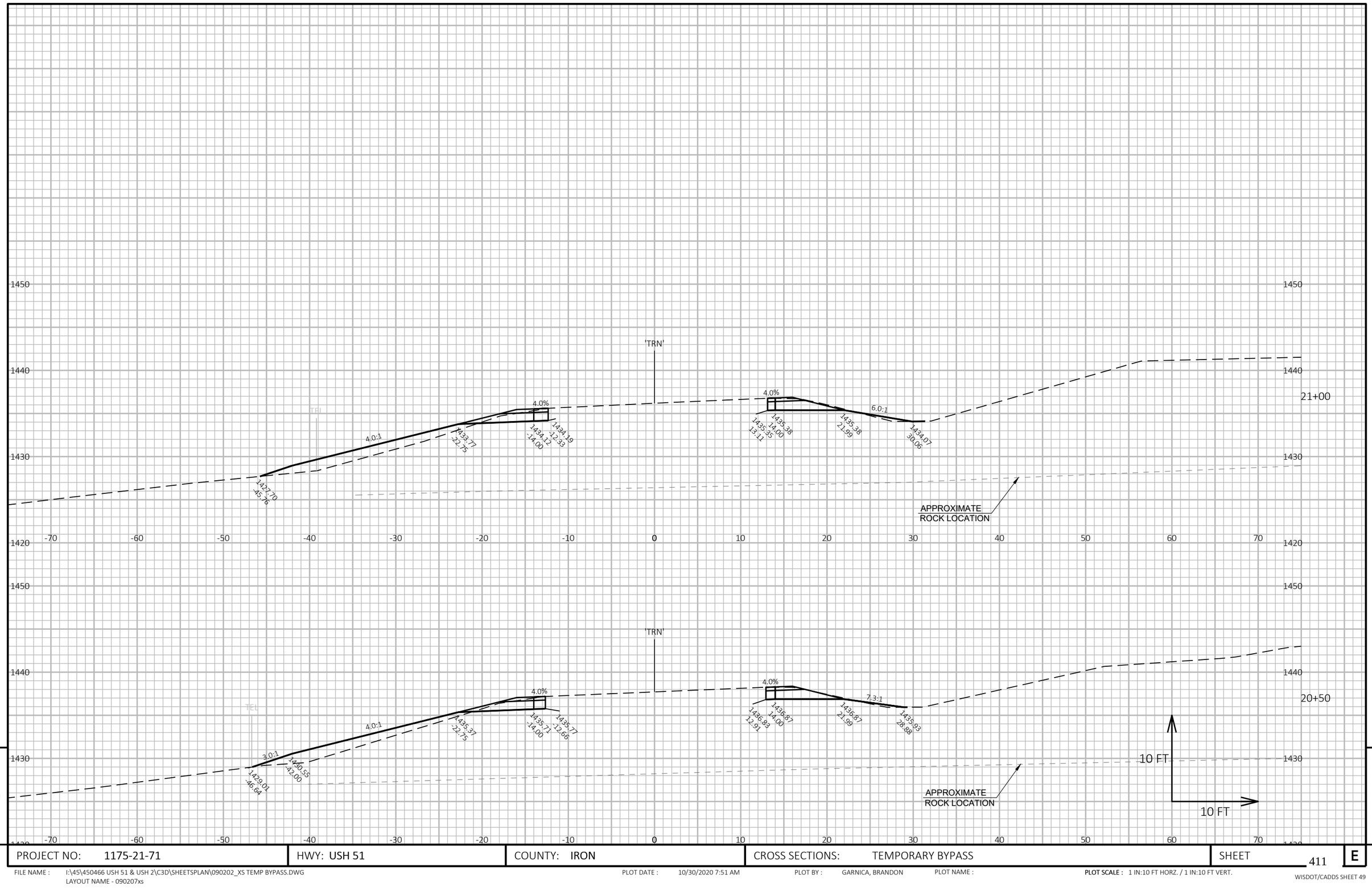


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 410	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090206xs

PLOT DATE : 10/30/2020 7:51 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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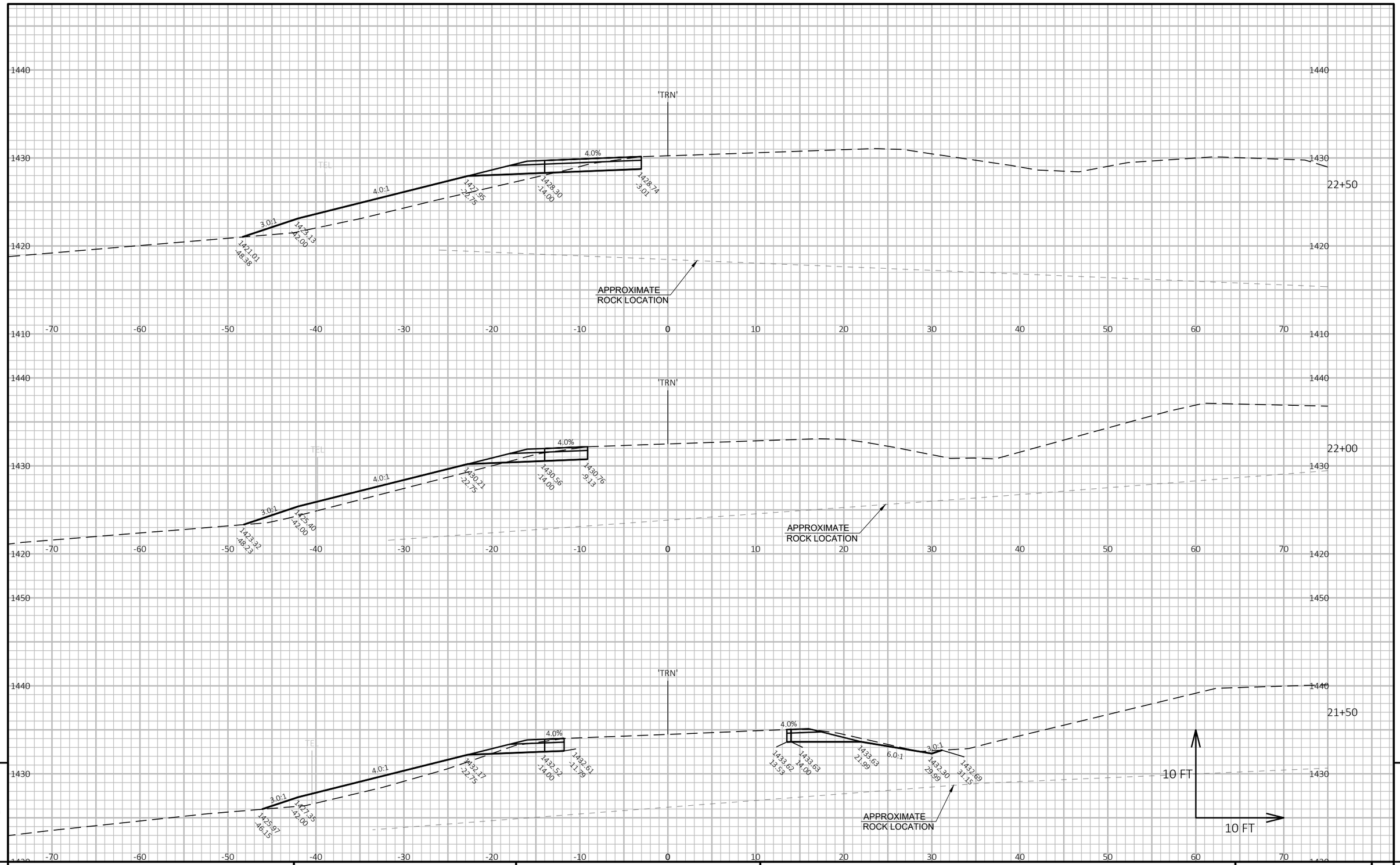
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 411	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090207xs

PLOT DATE : 10/30/2020 7:51 AM PLOT BY : GARNICA, BRANDON PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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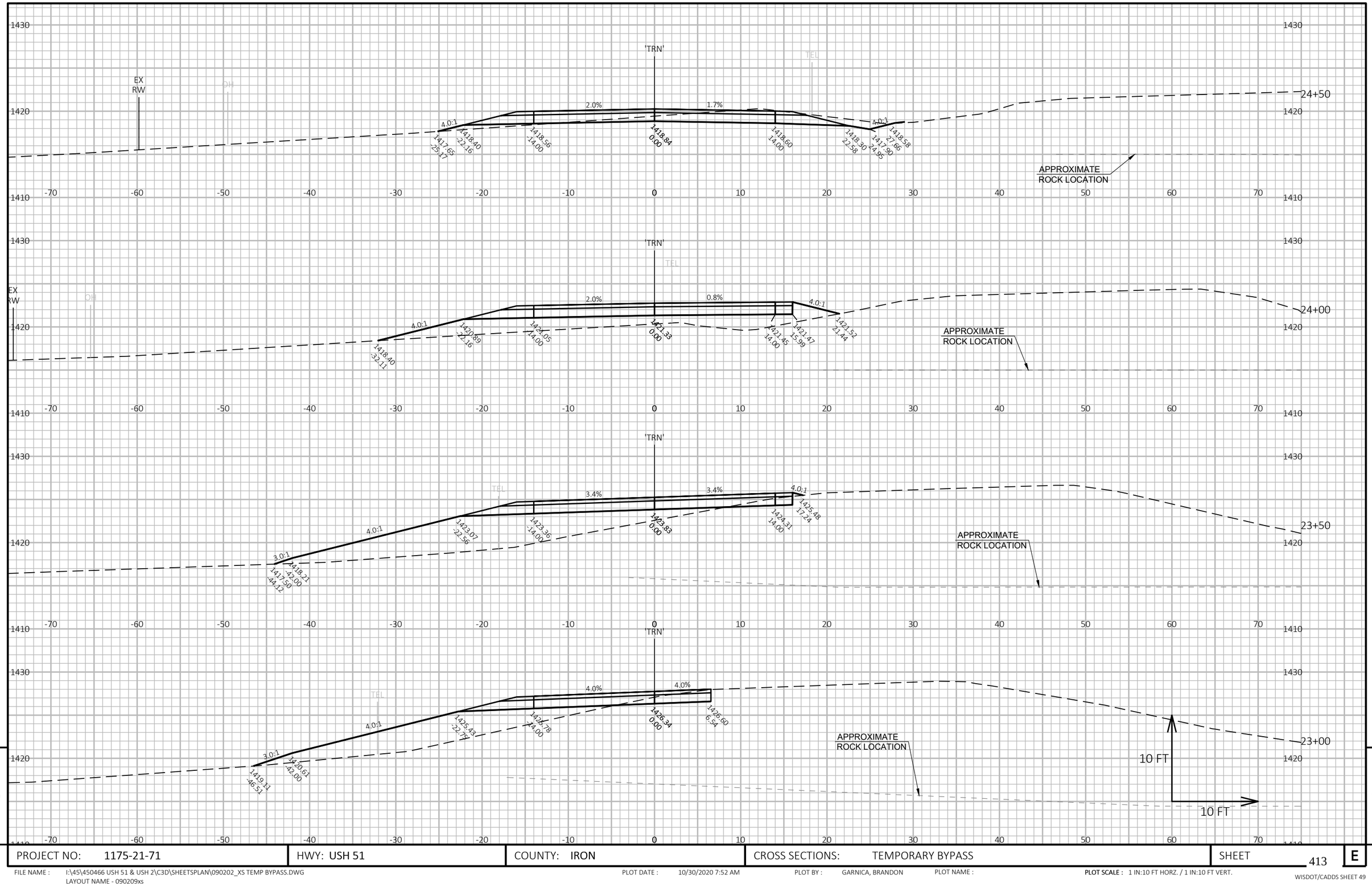
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 412	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090208xs

PLOT DATE : 10/30/2020 7:52 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

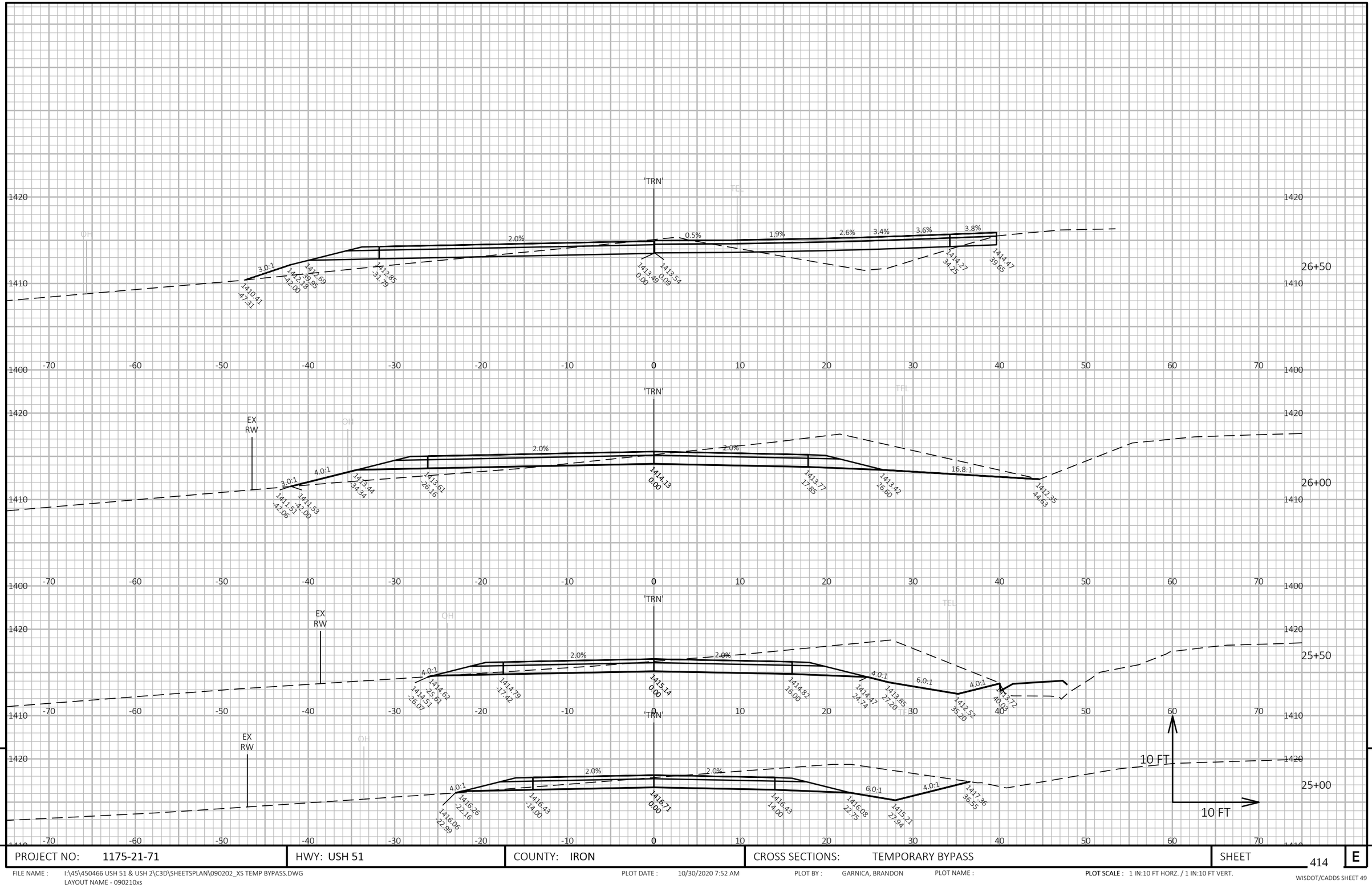


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 413 E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090209xs

PLOT DATE : 10/30/2020 7:52 AM PLOT BY : GARNICA, BRANDON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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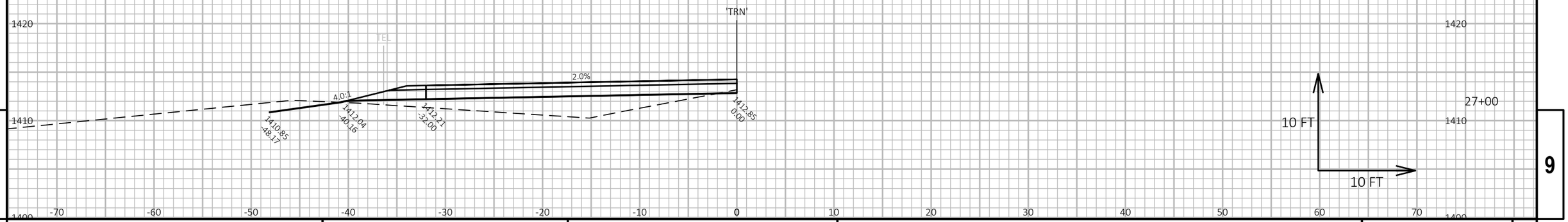
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 414	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090210xs

PLOT DATE : 10/30/2020 7:52 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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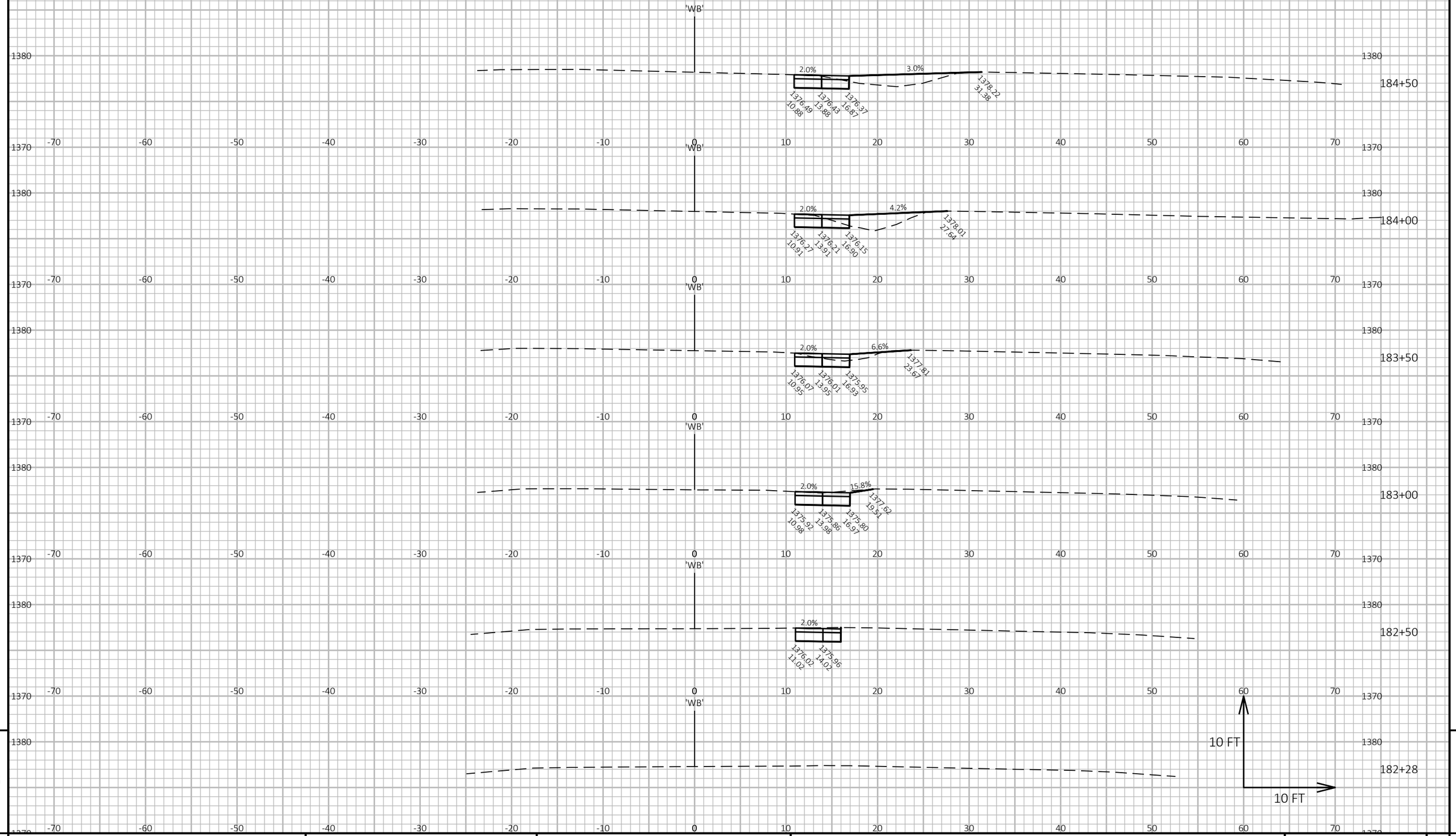
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: TEMPORARY BYPASS	SHEET 415	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - 090211xs

PLOT DATE : 10/30/2020 7:52 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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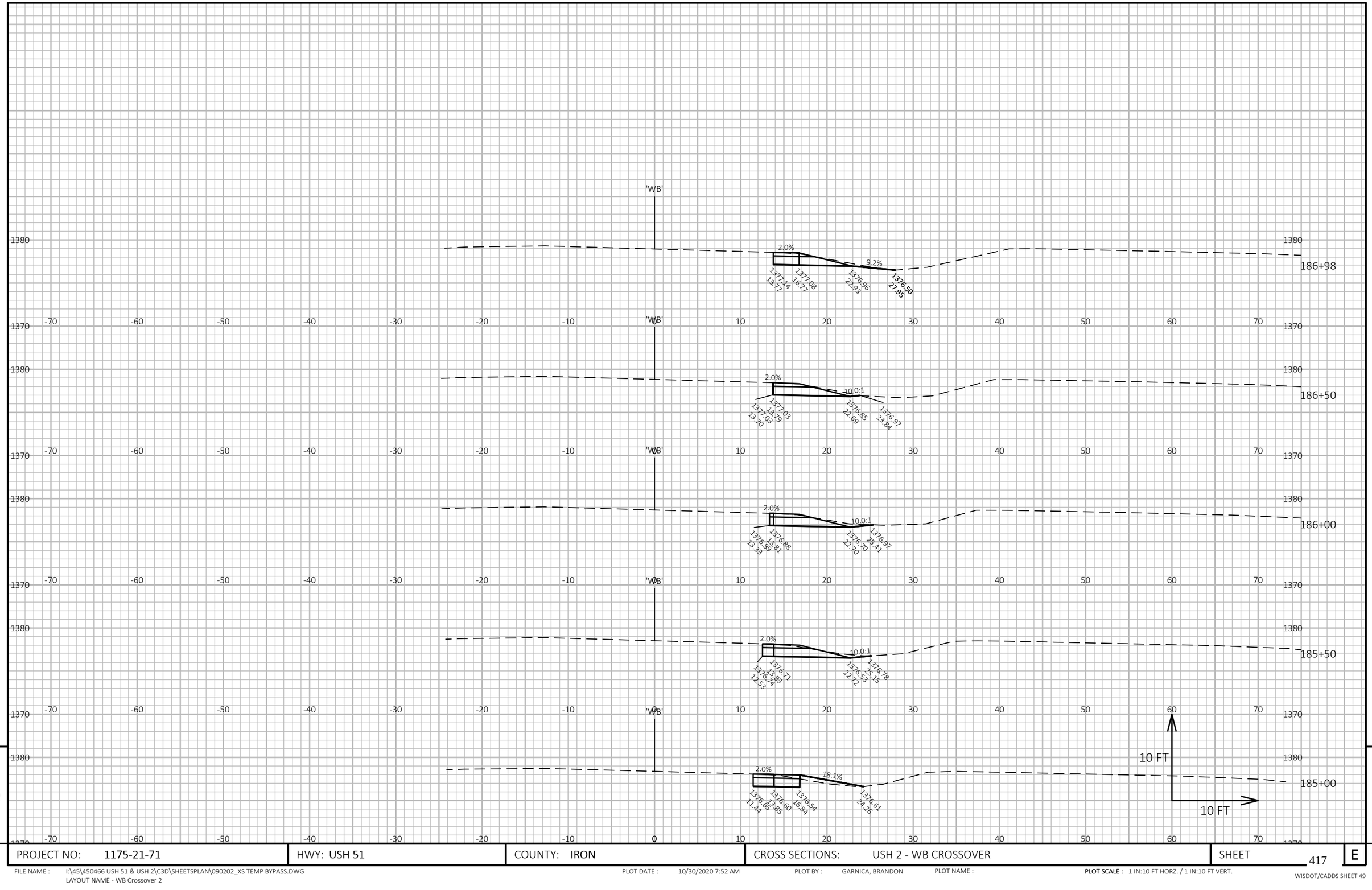
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - WB CROSSOVER	SHEET 416	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - WB Crossover 1

PLOT DATE : 10/30/2020 7:52 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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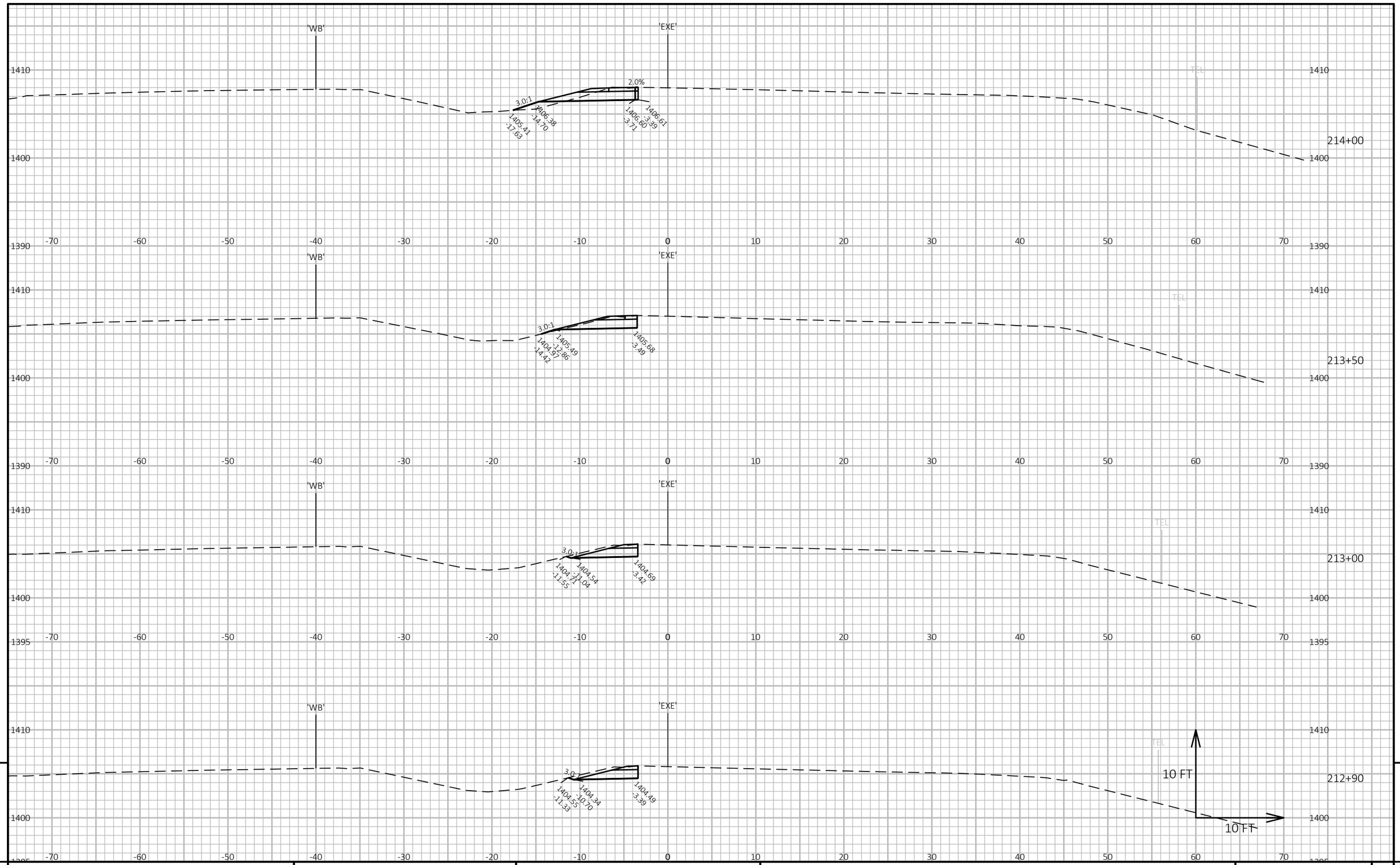
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - WB CROSSOVER	SHEET 417	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - WB Crossover 2

PLOT DATE : 10/30/2020 7:52 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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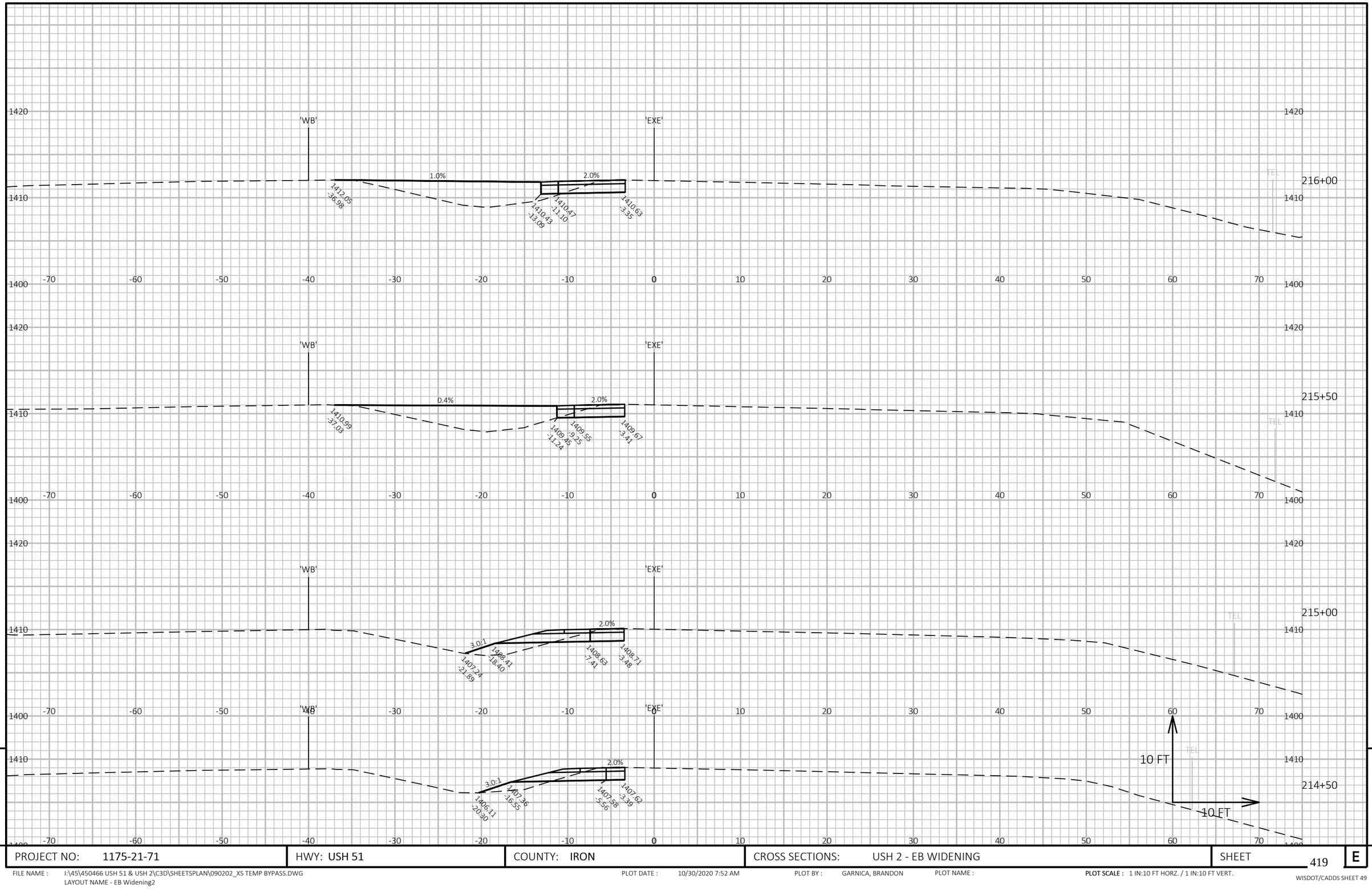
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB WIDENING	SHEET 418	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - EB Widening1

PLOT DATE : 10/30/2020 7:52 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB WIDENING	SHEET 419	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - EB Widening2

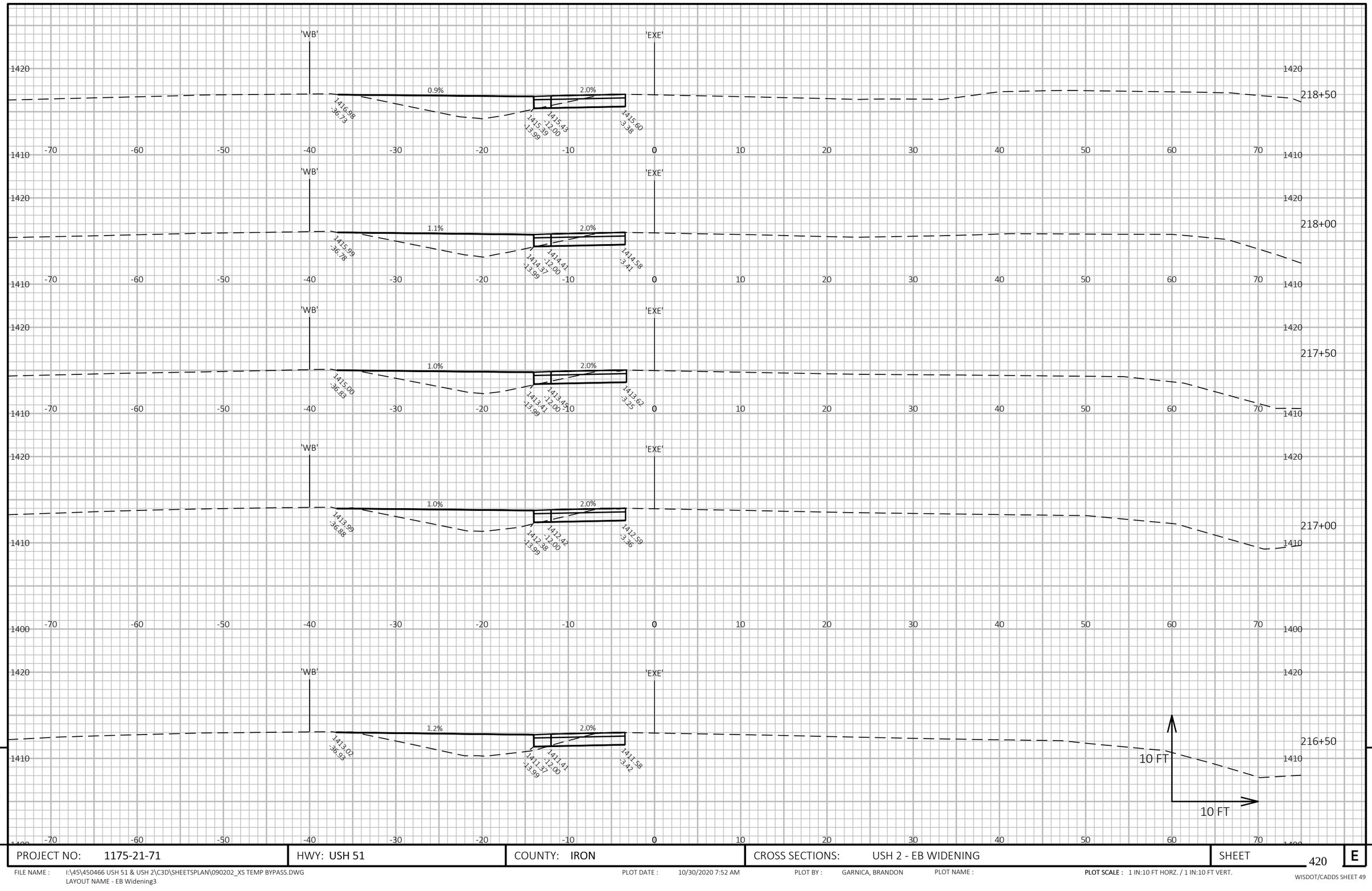
PLOT DATE : 10/30/2020 7:52 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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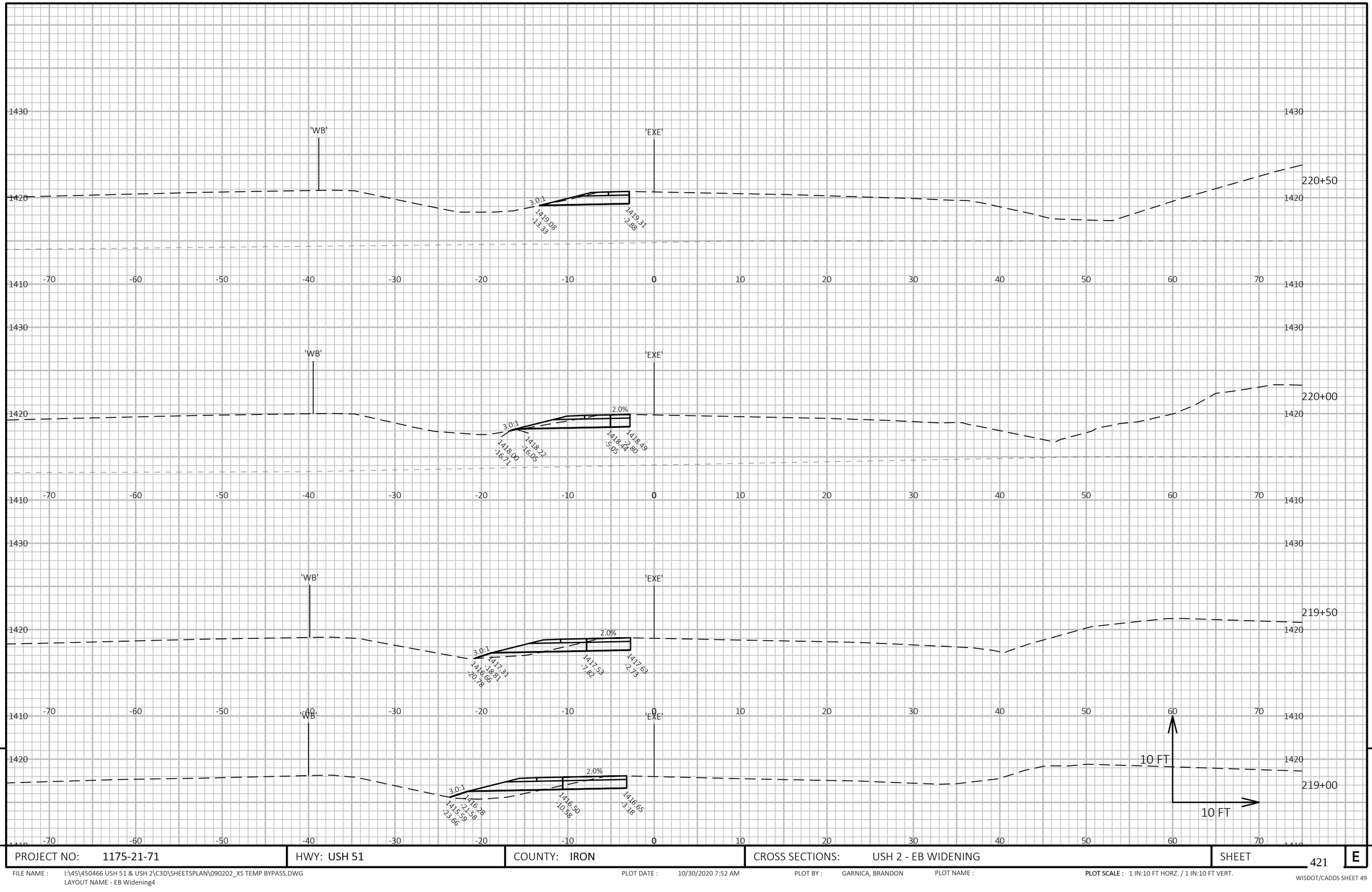
PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB WIDENING	SHEET 420	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - EB Widening3

PLOT DATE : 10/30/2020 7:52 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB WIDENING	SHEET 421	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - EB Widening4

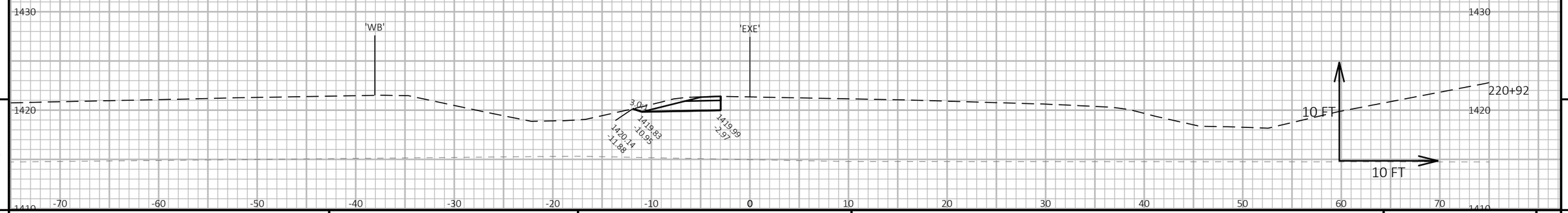
PLOT DATE : 10/30/2020 7:52 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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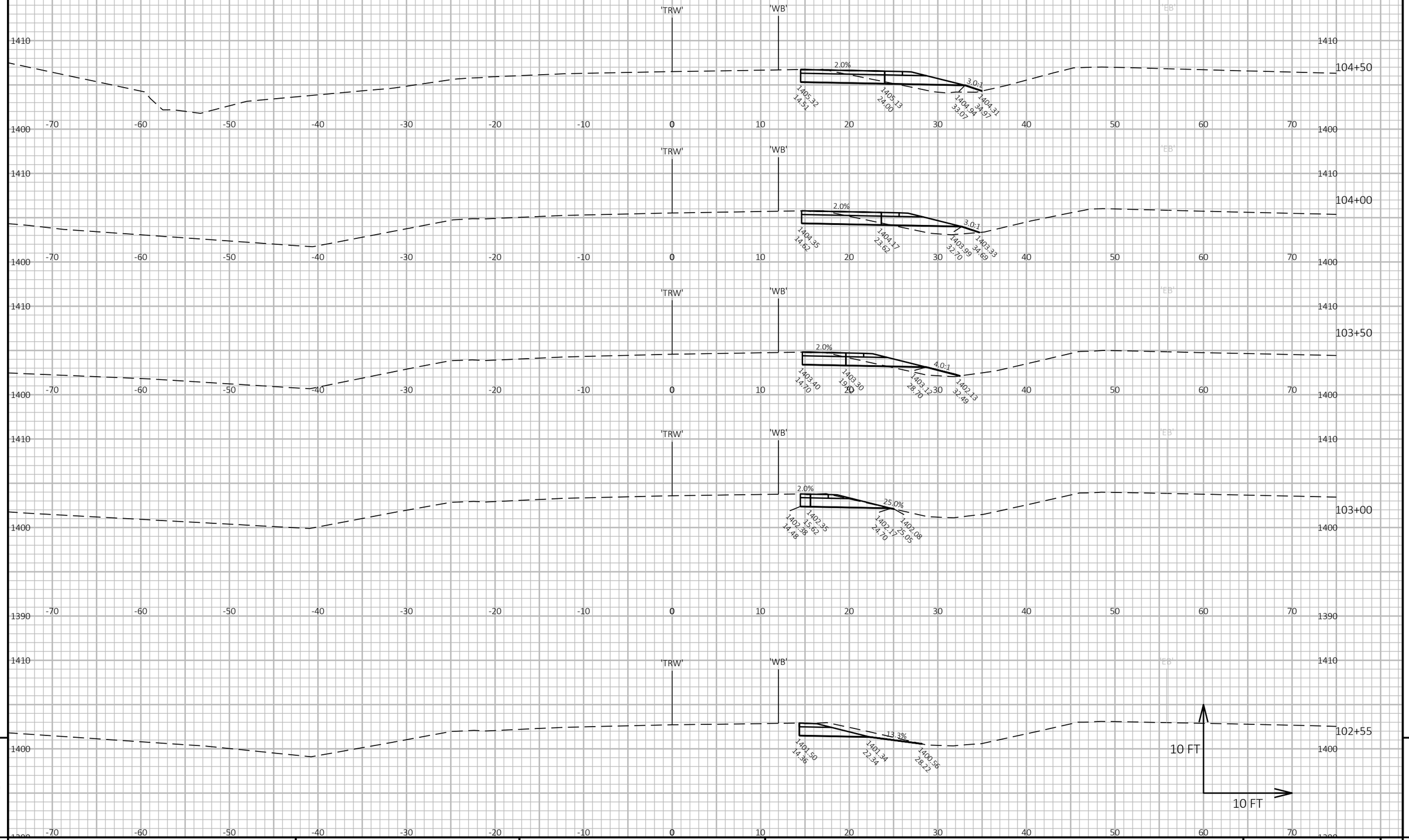
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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - EB WIDENING	SHEET 422	E

FILE NAME : V:\TRANS-GB\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - EB Widening4 (2)

PLOT DATE : 10/30/2020 7:53 AM PLOT BY : GARNICA, BRANDON PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

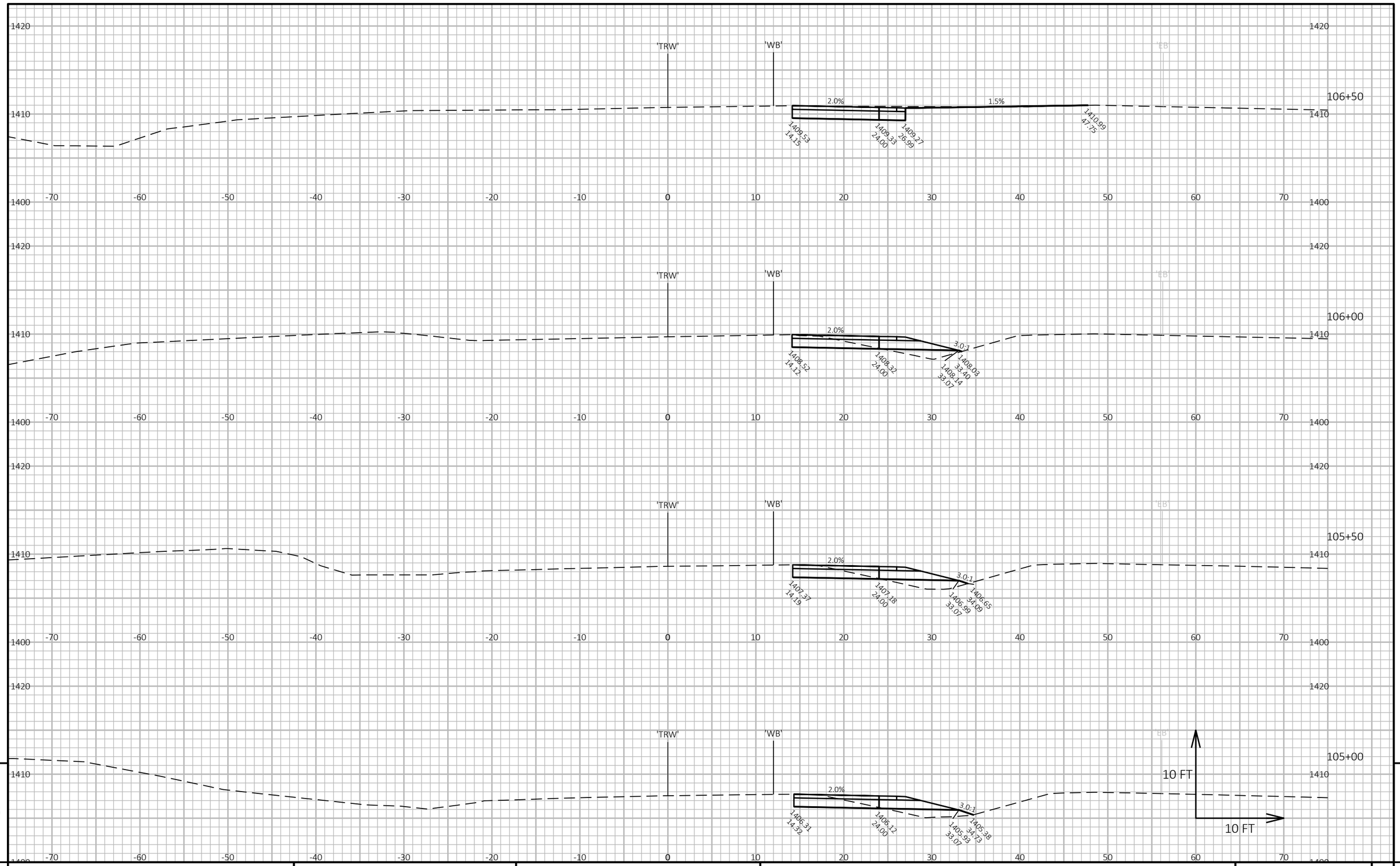


PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - WB TURN LANE	SHEET 423	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - WB Turn Lane 1

PLOT DATE : 10/30/2020 7:53 AM PLOT BY : GARNICA, BRANDON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - WB TURN LANE	SHEET 424	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - WB Turn Lane 2

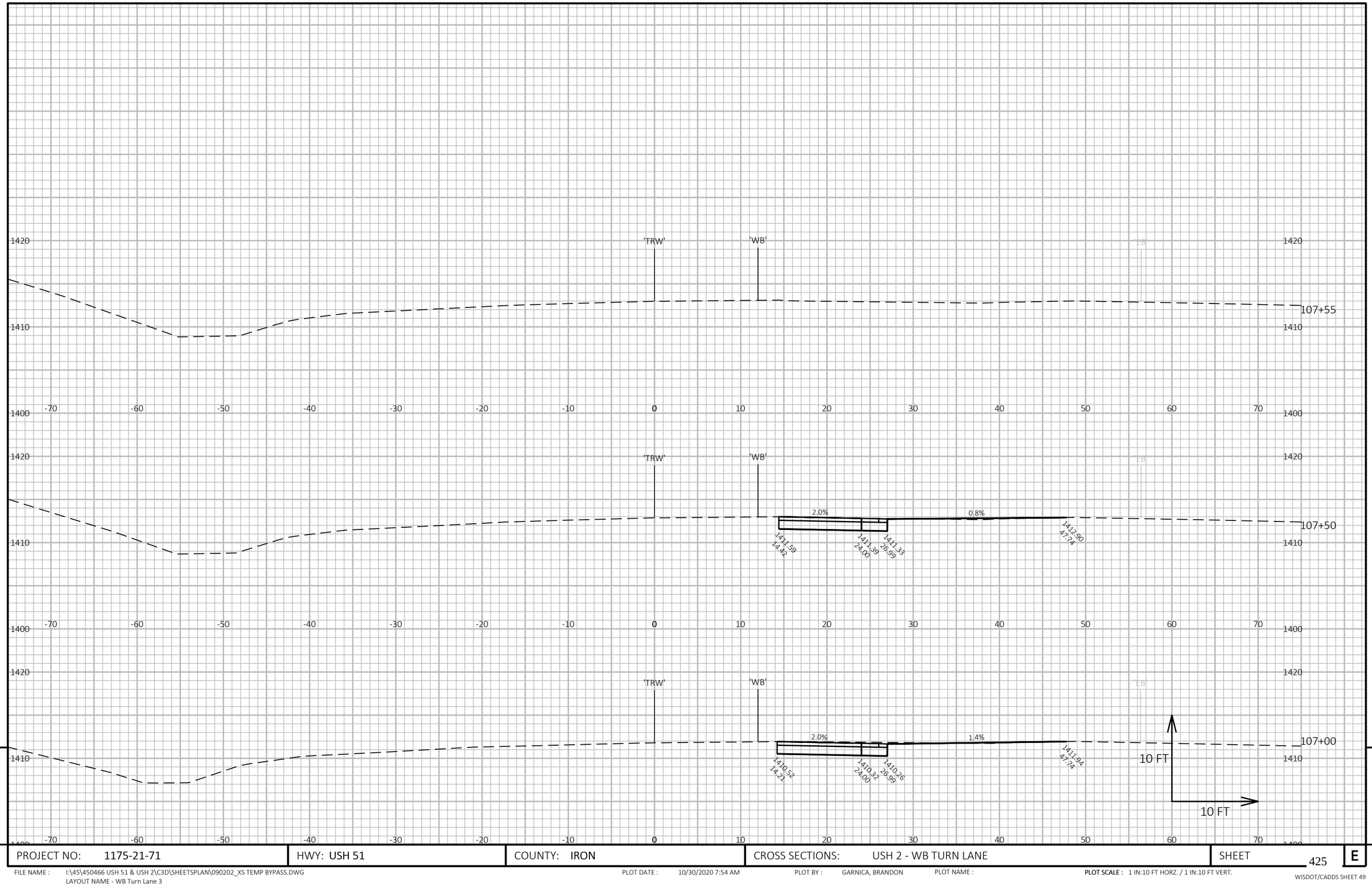
PLOT DATE : 10/30/2020 7:53 AM

PLOT BY : GARNICA, BRANDON

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 1175-21-71	HWY: USH 51	COUNTY: IRON	CROSS SECTIONS: USH 2 - WB TURN LANE	SHEET 425	E

FILE NAME : I:\45\450466 USH 51 & USH 2\C3D\SHEETSPLAN\090202_XS TEMP BYPASS.DWG
LAYOUT NAME - WB Turn Lane 3

PLOT DATE : 10/30/2020 7:54 AM PLOT BY : GARNICA, BRANDON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Wisconsin Department of Transportation

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through innovation and exceptional service.

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