GRE

FEBRUARY 2022

PROJECT ID: 4430-19-71

WITH: N/A

COUNTY: DOOR

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 = 348





STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4430-19-71	———	———

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

STH 42, CITY OF STURGEON BAY

S. JUNCTION STH 57 - BAYVIEW BRIDGE

STH 42
DOOR COUNTY

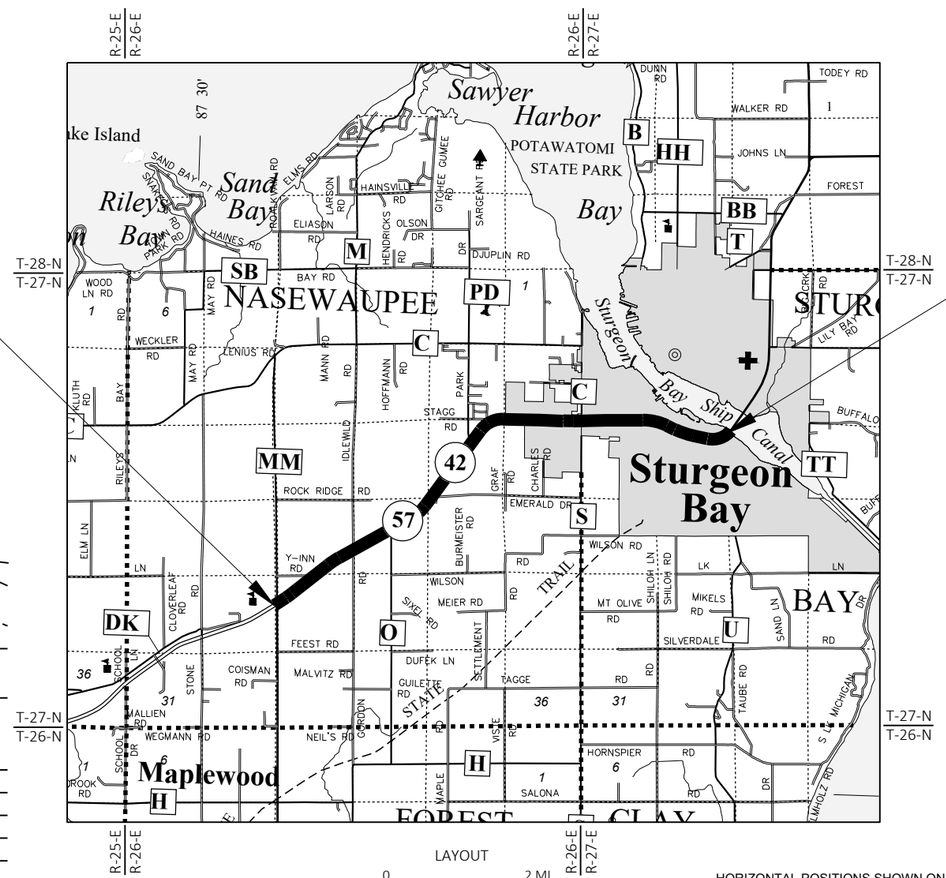
STATE PROJECT NUMBER
4430-19-71

DESIGN DESIGNATION 4430-19-00

A.A.D.T.	2022	=	15,960
A.A.D.T.	2042	=	18,220
D.H.V.		=	1,111
D.D.		=	59/41
T.		=	7.1% (AADT)
DESIGN SPEED		=	50 - 60 mph
ESALS		=	2,500,000

BEGIN PROJECT
STA 100+00.00 'NB'
Y= 140,028.043
X= 466,244.945

END PROJECT
STA 481+88.67 'SB'
Y= 152,710.811
X= 498,853.818



LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 7.232 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DOOR 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 2012A.

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE	300'EB'	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
MARSH AREA		TELEPHONE	T
		WATER	W
WOODED OR SHRUB AREA		UTILITY PEDESTAL	
		POWER POLE	
		TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	NE REGION
Designer	D. SCHROEDER
Project Manager	P. BRAUER
Regional Examiner	
Regional Supervisor	T. RABE

APPROVED FOR THE DEPARTMENT

DATE: 4/30/2021 Paul Brauer, P.E. (Signature)

E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\010101-TI.DWG PLOT DATE : 10/26/2021 9:01 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME :

GENERAL NOTES

LOCATIONS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE, THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

EXISTING R/W SHOWN IS APPROXIMATE. VERIFY EXISTING R/W THROUGH RECORDED PLATS AND FIELD SURVEY.

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAILS
TRAFFIC CONTROL
DETOUR PLAN
ALIGNMENT PLAN

DNR LIASION

MATT SCHAEVE
DEPARTMENT OF NATURAL RESOURCES
NORTHEAST REGION
2984 SHAWANO AVE
GREEN BAY, WI 54313
(920)366-1544
matthew.schaeve@wisconsin.gov

DOOR COUNTY COMMISSIONER

JOHN KOLODZIEJ
HIGHWAY COMMISSIONER
1001 S. DULUTH AVE
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(920)746-2500
kolodzie@co.door.wi.us

NE REGION SURVEY COORDINATOR

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cormac.mcinnis@dot.wi.gov

NE REGION DESIGN PROJECT MANAGER

PAUL BRAUER, PE
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GREEN BAY, WI 54304
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paul.brauer@dot.wi.gov

UTILITY CONTACTS

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GREEN BAY, WI 54304
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Thomas.goral@wisconsinpublicservice.com

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jstawicki@wppienergy.org

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Joel.sawicki@wisconsinpublicservice.com

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jbieri@wppienergy.org

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cdailey@atcllc.com

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joseph.potier@suez.com

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AT&T WISCONSIN - COMMUNICATION LINE
FIRST FLOOR ENGINEERING
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GREEN BAY, WI 54301
(920) 433-4250
Sg2528@att.com

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212 CHURCH AVE.
CASCO, WI 54205
(920) 837-2344
Matt.gunderson@centurylink.com

VINCE ALBIN
CHARTER COMMUNICATIONS - COMMUNICATION LINE
3520 E. DESTINATION DR.
APPLETON, WI 54915
(920) 831-9249
Vince.albin@charter.com

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

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP- TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE- TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 150 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 2.13 ACRES

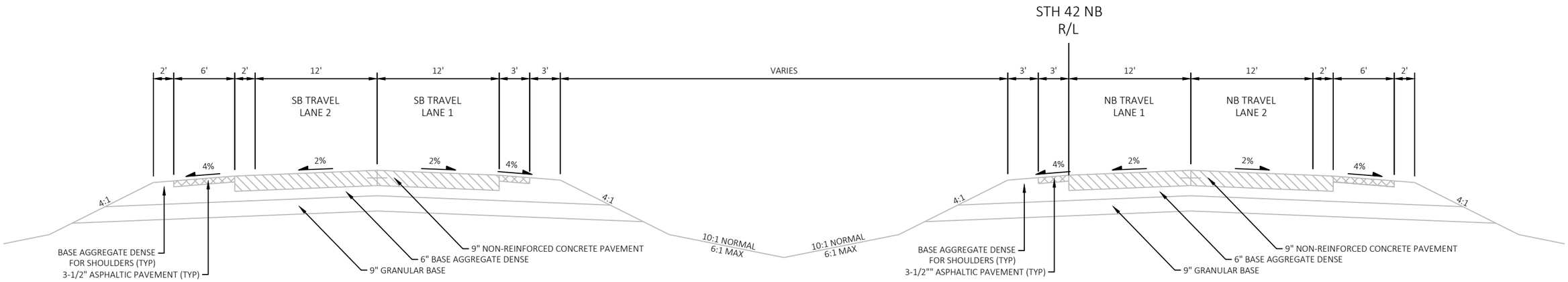


PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 020201-po

PLOT DATE : 4/29/2021 2:00 PM PLOT BY : KIRST, DOUGLAS P PLOT NAME : PLOT SCALE : 1 IN:0.5 MI

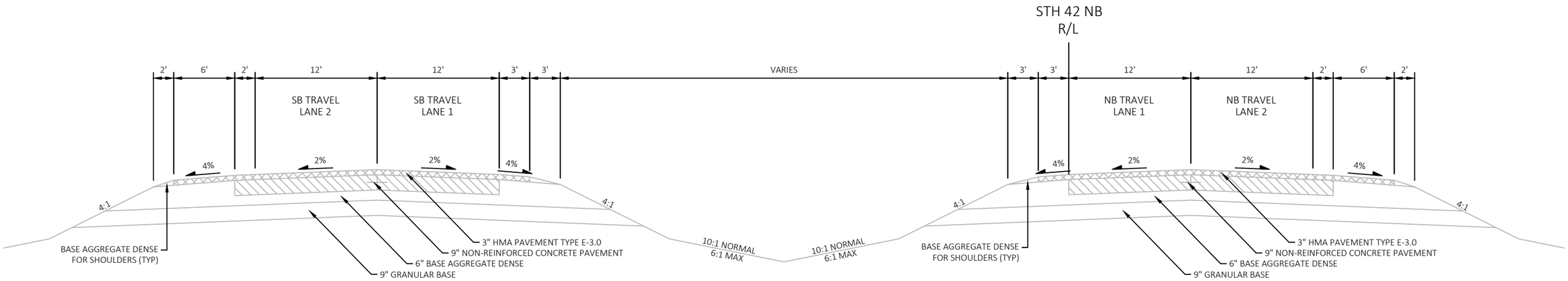
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION STH 42/57

STA 100+00'NB' TO STA 305+84'NB'

EXCEPT THE FOLLOWING LOCATIONS
STA 129+51'NB' TO STA 150+81'NB' (SB LANES ONLY)
STA 169+33'NB' TO STA 220+63'NB' (NB LANES ONLY)
STA 238+82'NB' TO STA 299+37'NB' (SB LANES ONLY)



EXISTING TYPICAL SECTION STH 42/57

STA 129+51'NB' TO STA 150+81'NB' (SB LANES ONLY)
STA 169+33'NB' TO STA 220+63'NB' (NB LANES ONLY)
STA 238+82'NB' TO STA 299+37'NB' (SB LANES ONLY)

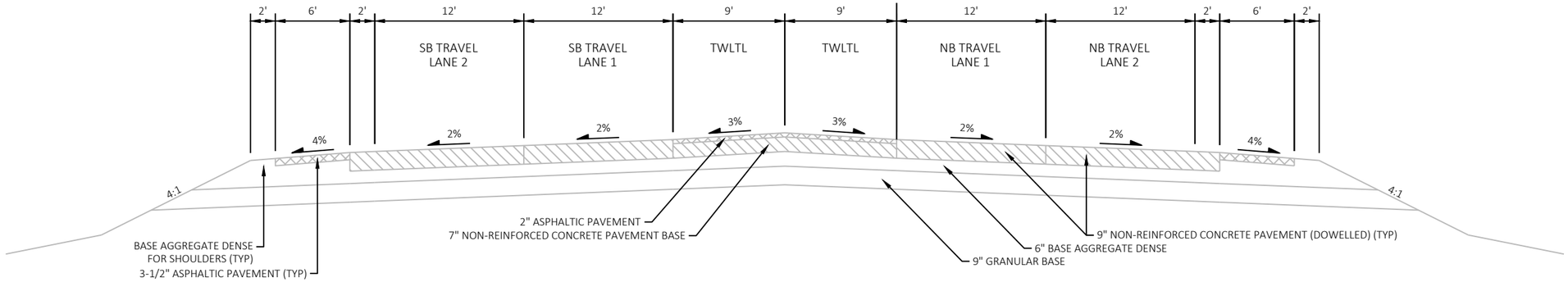
PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EXISTING TYPICAL SECTIONS	SHEET 4	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020301-ts

PLOT DATE : 9/13/2021 8:13 AM PLOT BY : CAMPSHURE, MICHAEL R PLOT NAME : PLOT SCALE : 1IN:10 FT

2

STH 42 NB
R/L



EXISTING TYPICAL SECTION STH 42/57

STA 305+84'NB' TO STA 335+80'NB'

STH 42NB
R/L

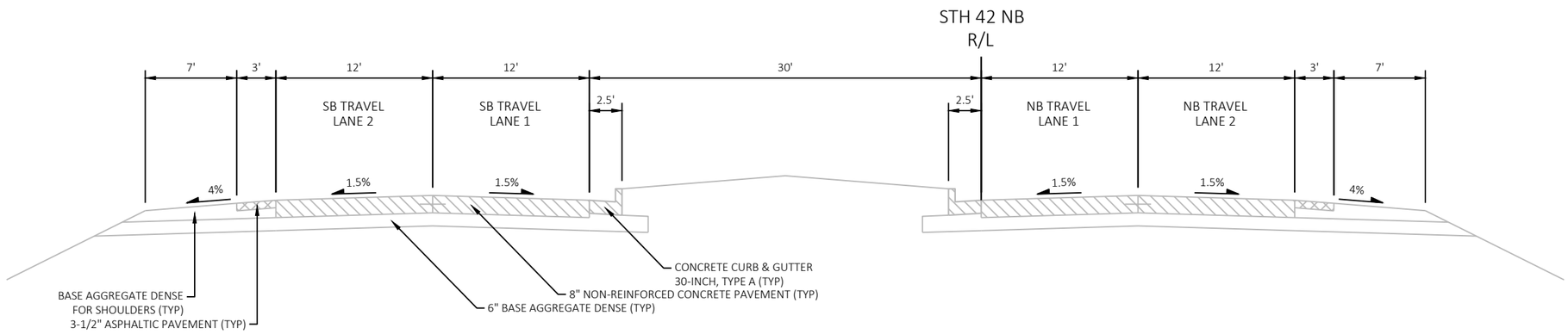
STA 351+51'NB' TO 364+77'NB'

EXISTING TYPICAL SECTION STH 42/57

STA 335+80'NB' TO STA 369+90'NB'

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EXISTING TYPICAL SECTIONS	SHEET 5	E

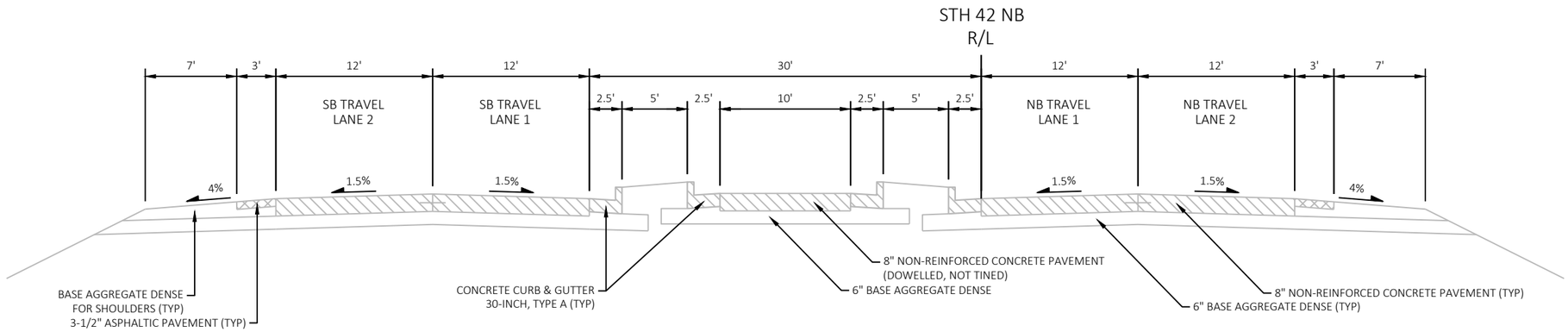
2



EXISTING TYPICAL SECTION STH 42/57

STA 378+56'NB' TO STA 464+66'NB'

EXCEPT THE FOLLOWING LOCATIONS
STA 397+57'NB' TO STA 406+11'NB' (LANSING AVE)
STA 410+56'NB' TO STA 419+53'NB' (NEENAH AVE)
STA 421+90'NB' TO STA 429+80'NB' (OXFORD AVE /SHILOH RD)

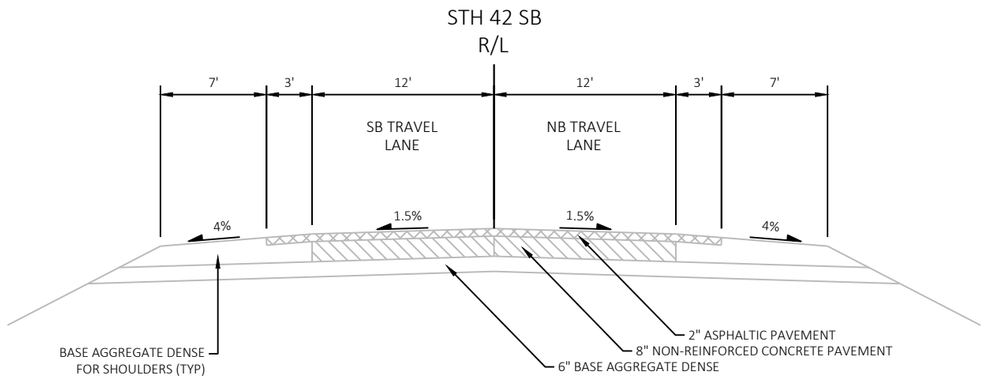


EXISTING TYPICAL SECTION STH 42/57

STA 369+90'NB' TO STA 378+56'NB' (CTH S (DULUTH AVE))
STA 397+57'NB' TO STA 406+11'NB' (LANSING AVE)
STA 410+56'NB' TO STA 419+53'NB' (NEENAH AVE)
STA 455+00'NB' TO STA 468+00'NB' (CTH U /CIRCLE RIDGE)

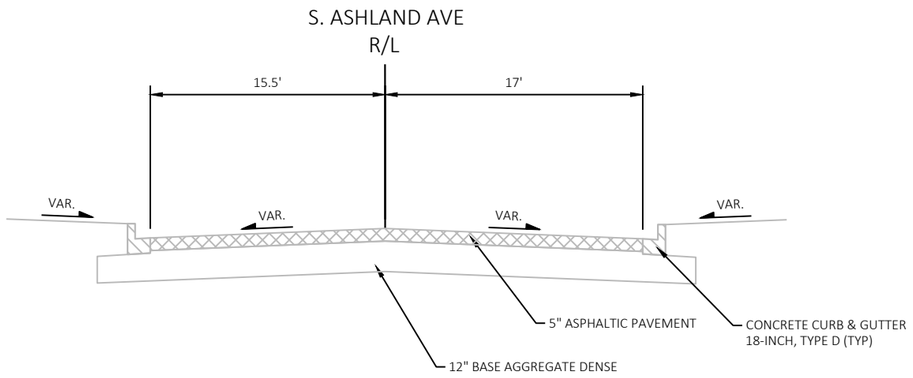
PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EXISTING TYPICAL SECTIONS	SHEET 6	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020303-ts
PLOT DATE : 9/13/2021 8:13 AM
PLOT BY : CAMPSHURE, MICHAEL R
PLOT NAME :
PLOT SCALE : 1IN:10 FT
WISDOT/CADDS SHEET 42



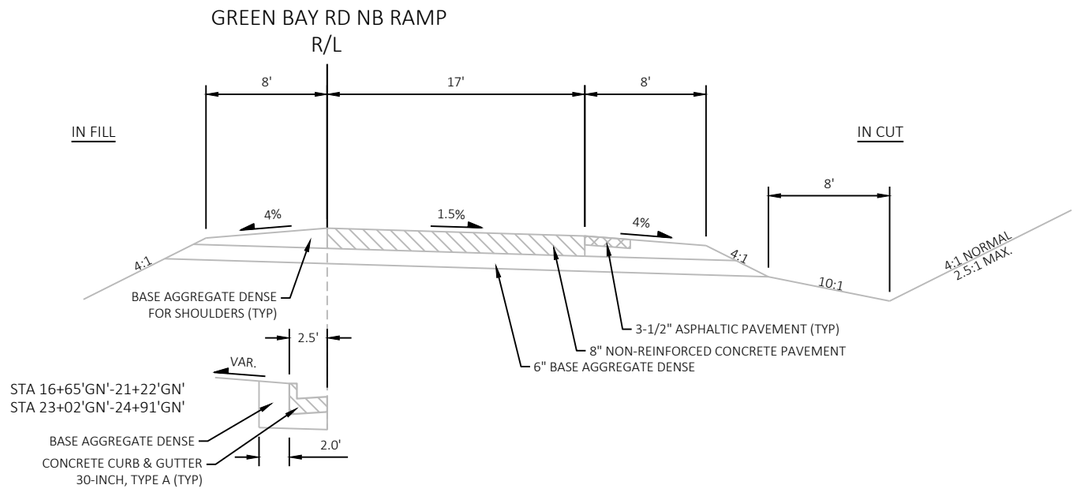
EXISTING TYPICAL SECTION STH 42/57

STA 464+66'SB' TO STA 481+89'SB'



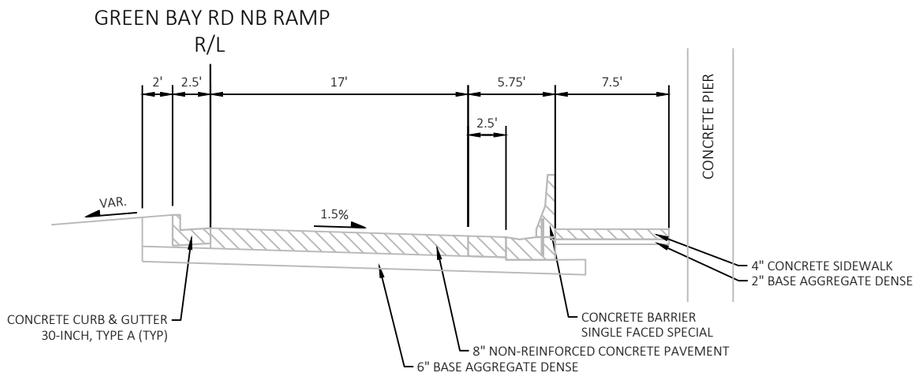
EXISTING TYPICAL SECTION S. ASHLAND AVE

STA 39+45'A' TO STA 40+96'A'



EXISTING TYPICAL SECTION GREEN BAY RD NB RAMP

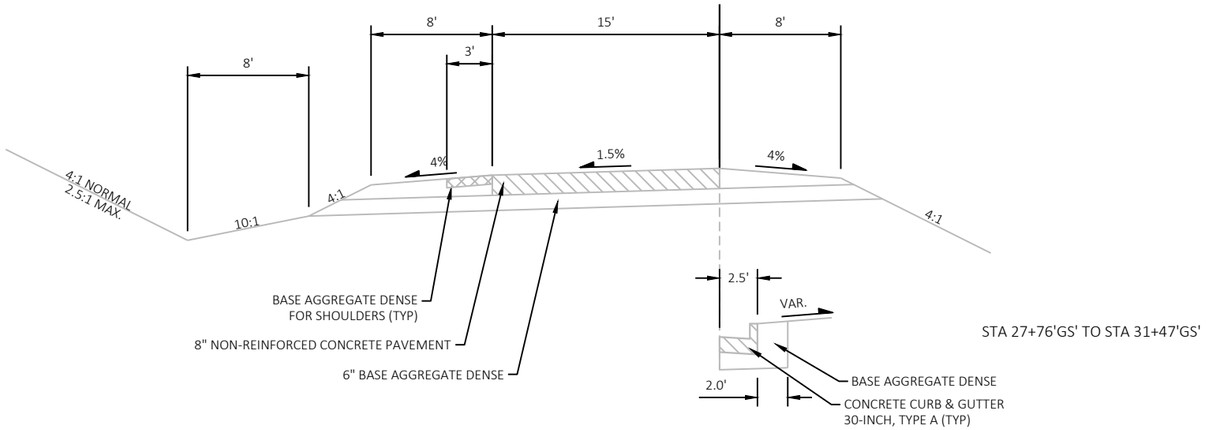
STA 14+10'GN' TO 21+22'GN'
STA 23+02'GN' TO 30+06'GN'



EXISTING TYPICAL SECTION GREEN BAY RD NB RAMP

STA 21+22'GN' TO 23+02'GN'

GREEN BAY RD SB RAMP
R/L

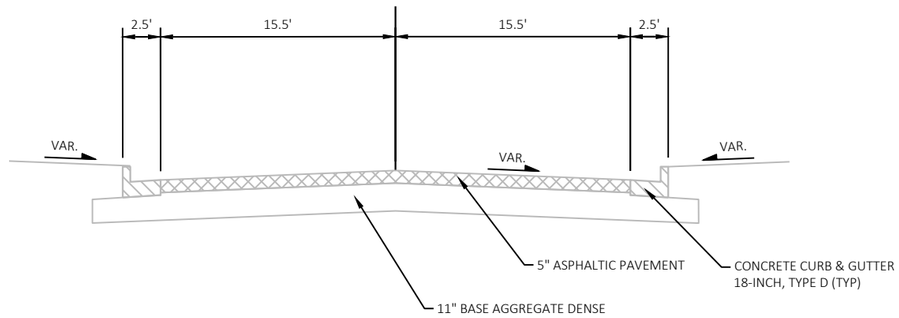


STA 27+76'GS' TO STA 31+47'GS'

EXISTING TYPICAL SECTION GREEN BAY RD SB RAMP

STA 20+00'GS' TO STA 31+47'GS'

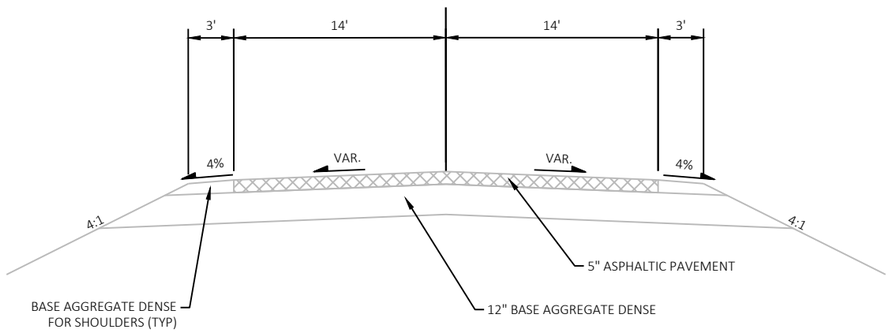
S. NEENAH AVE
R/L



EXISTING TYPICAL SECTION S. NEENAH AVE

STA 66+04'N' TO STA 67+16'N'

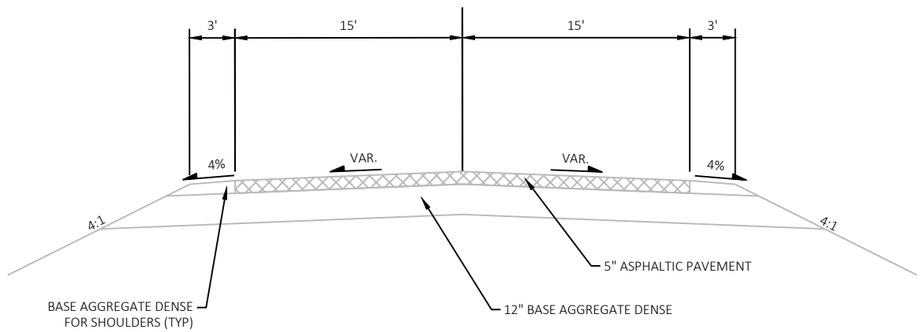
CTH U
R/L



EXISTING TYPICAL SECTION CTH U

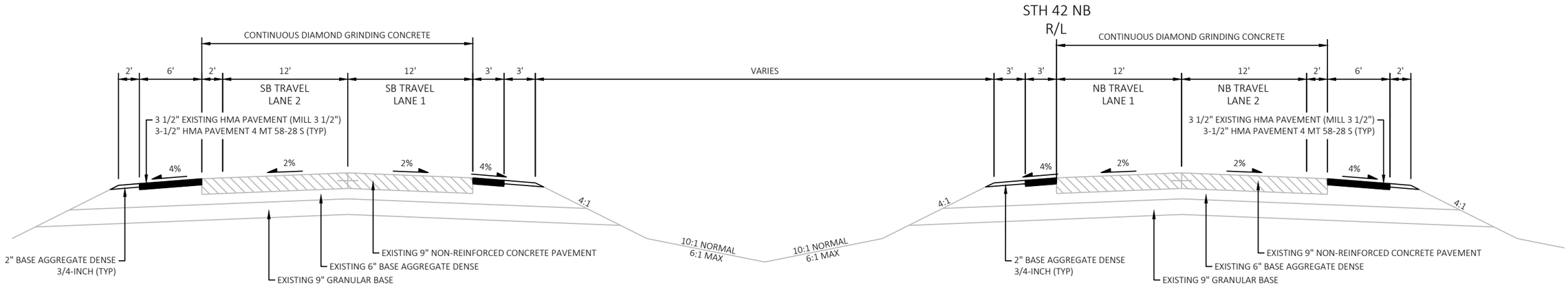
STA 78+99'U' TO 79+53'U'

CIRCLE RIDGE RD
R/L



EXISTING TYPICAL SECTION CIRCLE RIDGE RD

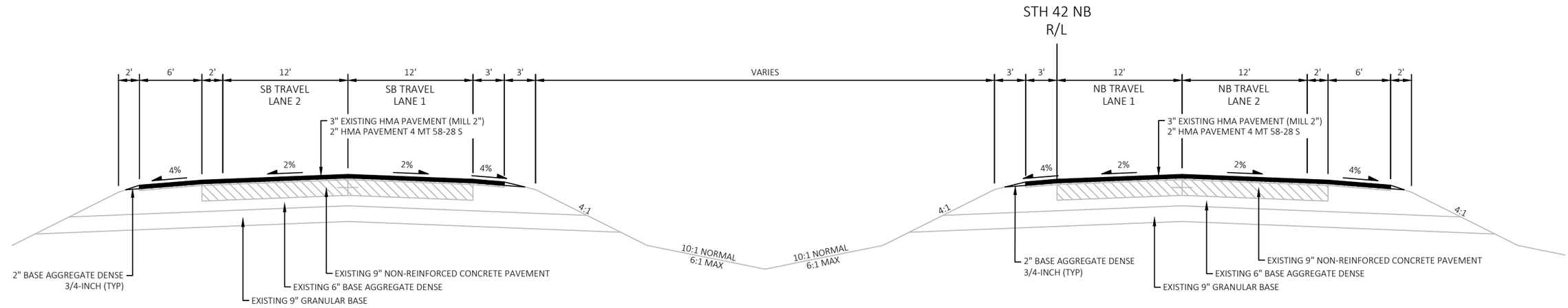
STA 81+69'CI' TO 82+01'CI'



FINISHED TYPICAL SECTION STH 42/57

STA 100+00'NB' TO STA 305+84'NB'

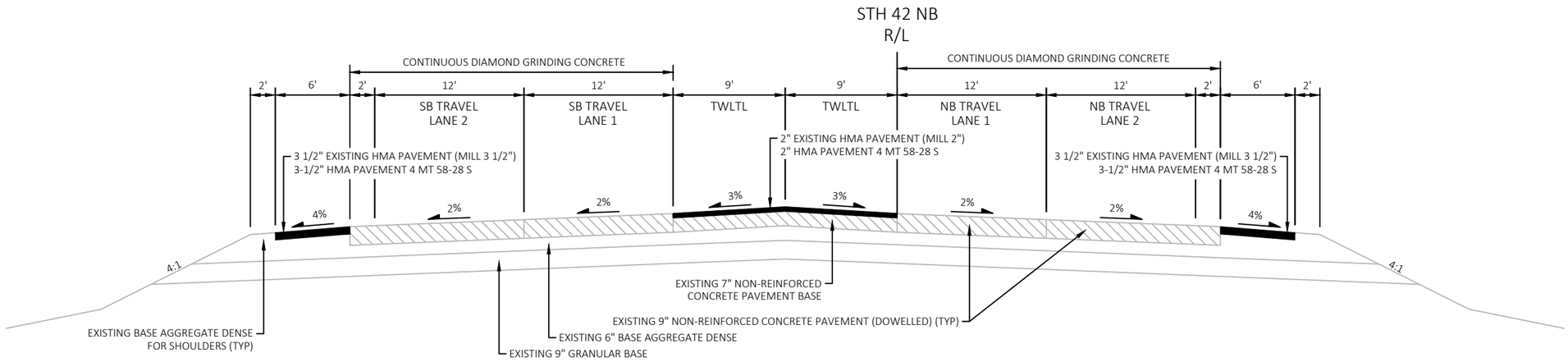
EXCEPT THE FOLLOWING LOCATIONS
STA 129+51'NB' TO STA 150+81'NB' (SB LANES ONLY)
STA 169+33'NB' TO STA 220+63'NB' (NB LANES ONLY)
STA 238+82'NB' TO STA 299+37'NB' (SB LANES ONLY)



FINISHED TYPICAL SECTION STH 42/57

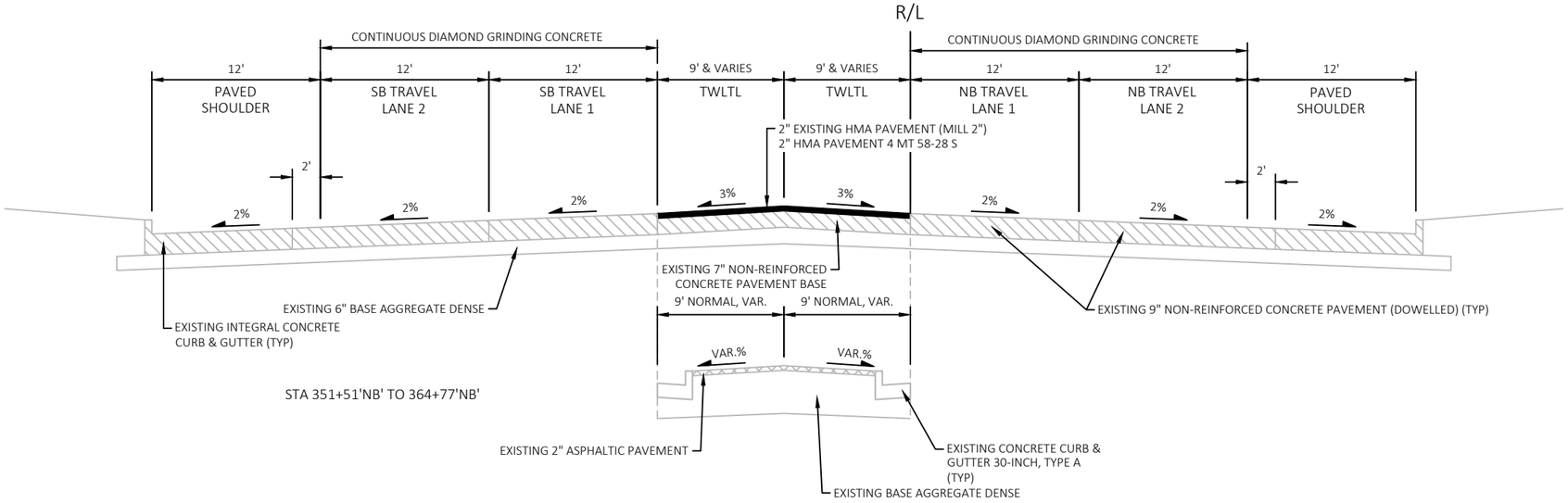
STA 129+51'NB' TO STA 150+81'NB' (SB LANES ONLY)
STA 169+33'NB' TO STA 220+63'NB' (NB LANES ONLY)
STA 238+82'NB' TO STA 299+37'NB' (SB LANES ONLY)

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	FINISHED TYPICAL SECTIONS	SHEET 9	E



FINISHED TYPICAL SECTION STH 42/57

STA 305+84'NB' TO STA 335+80'NB'



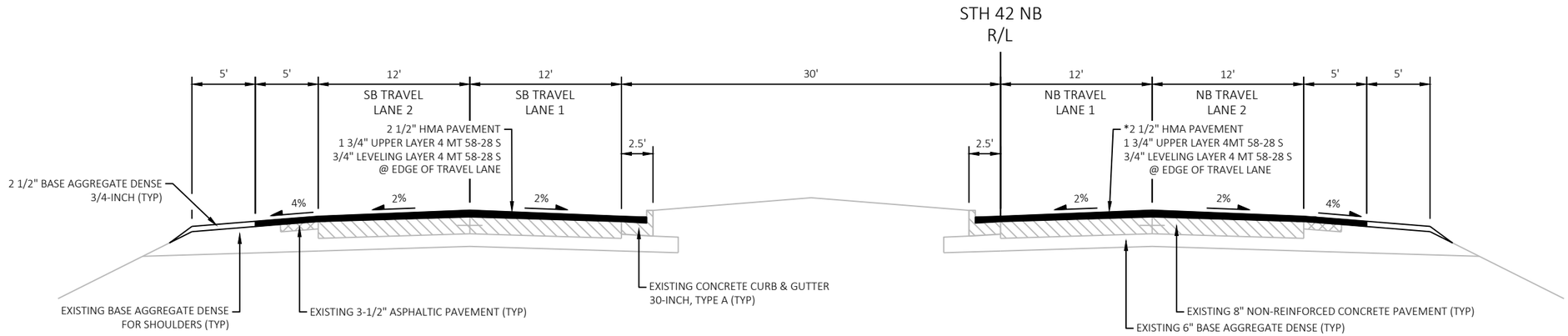
FINISHED TYPICAL SECTION STH 42/57

STA 335+80'NB' TO STA 369+90'NB'

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	FINISHED TYPICAL SECTIONS	SHEET 10	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020307-ts

PLOT DATE : 10/12/2021 8:45 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1IN:10 FT

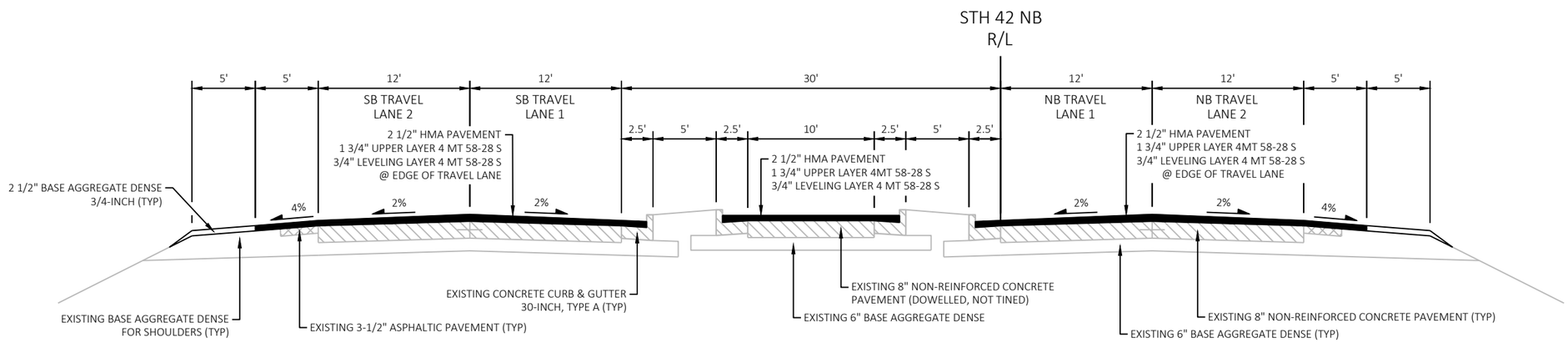


FINISHED TYPICAL SECTION STH 42/57

STA 378+56'NB' TO STA 464+66'NB'
STA 464+65'SB' TO 471+56'SB' RT (NB LANES ONLY)

EXCEPT THE FOLLOWING LOCATIONS
STA 397+57'NB' TO STA 406+11'NB' (LANSING AVE)
STA 410+56'NB' TO STA 419+53'NB' (NEENAH AVE)
STA 421+90'NB' TO STA 429+80'NB' (OXFORD AVE /SHILOH RD)

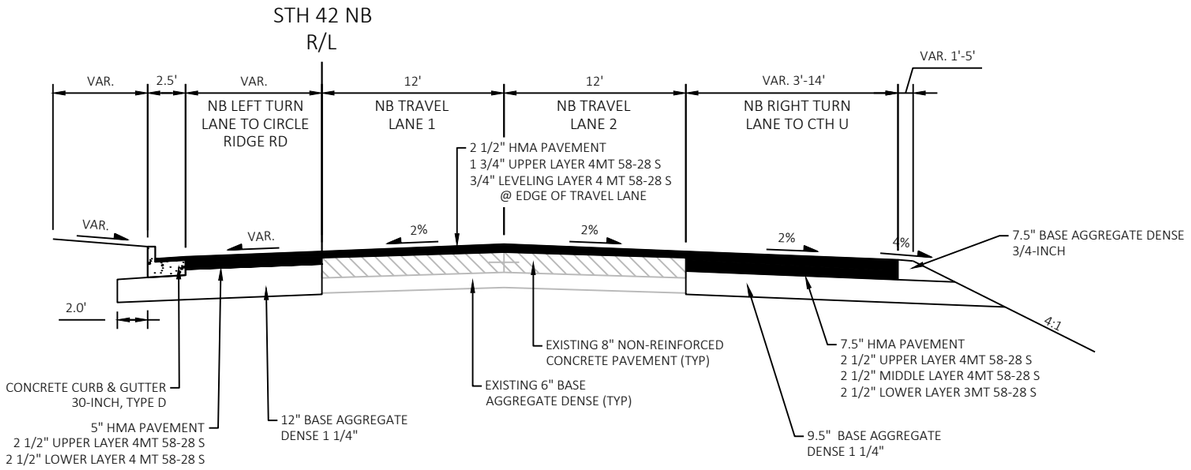
*MILL 2-INCHES OF EXISTING ASPHALT:
NB ROADWAY: 464+65'SB' TO 471+56'SB'



FINISHED TYPICAL SECTION STH 42/57

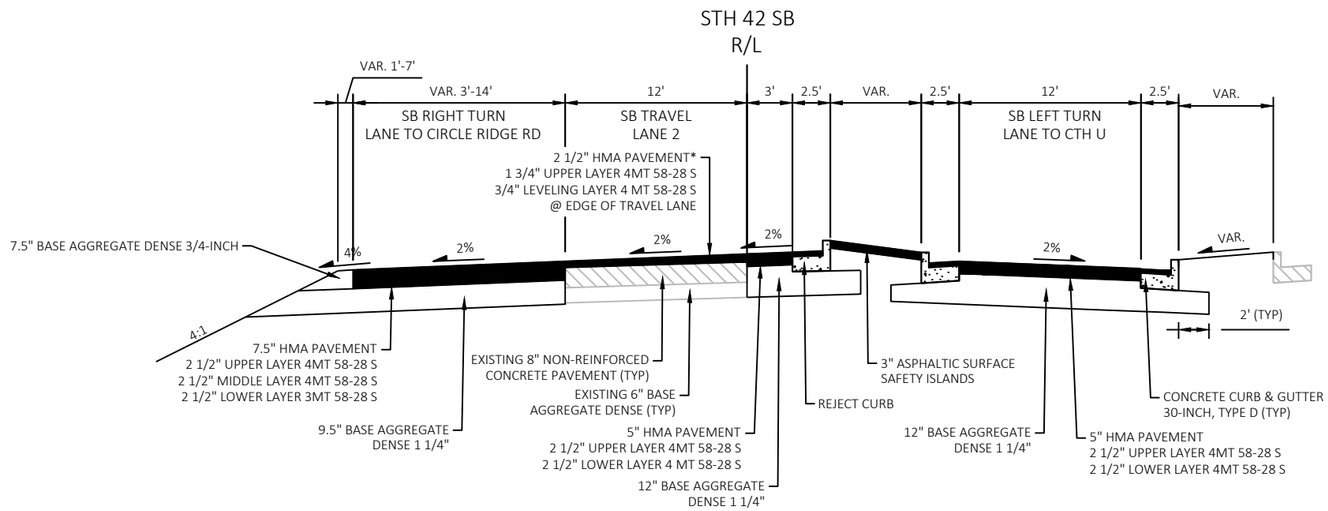
STA 369+90'NB' TO STA 378+56'NB' (CTH S (DULUTH AVE))
STA 397+57'NB' TO STA 406+11'NB' (LANSING AVE)
STA 410+56'NB' TO STA 419+53'NB' (NEENAH AVE)
STA 455+00'NB' TO STA 468+00'NB' (CTH U /CIRCLE RIDGE)

2



FINISHED TYPICAL SECTION STH 42 NB AT CTH U

STA 458+14'NB' TO 462+40'NB RT
STA 459+17'NB' TO 462+55'NB' LT
STA 463+19'NB' TO 464+65'NB' RT

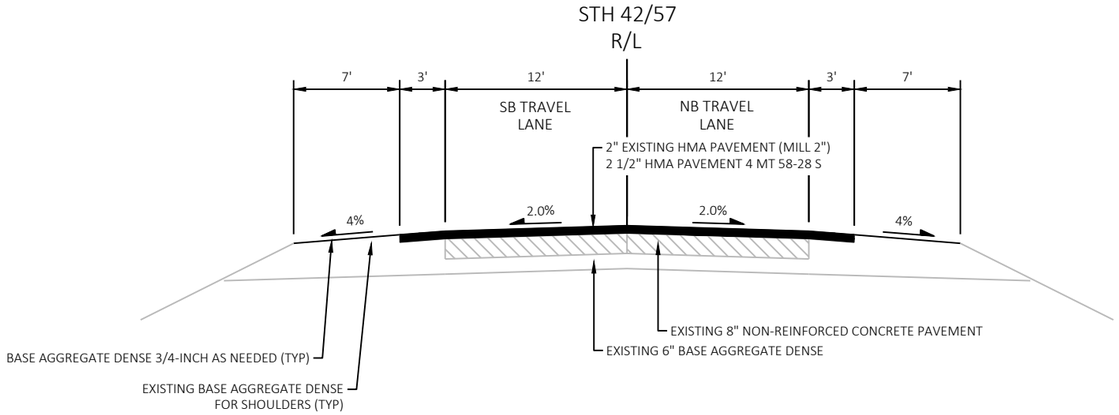


*MILL 2-INCHES OF EXISTING ASPHALT FROM SB TRAVEL LANE 2: 465+46'SB' TO 471+56'SB'

FINISHED TYPICAL SECTION STH 42 SB AT CIRCLE RIDGE RD

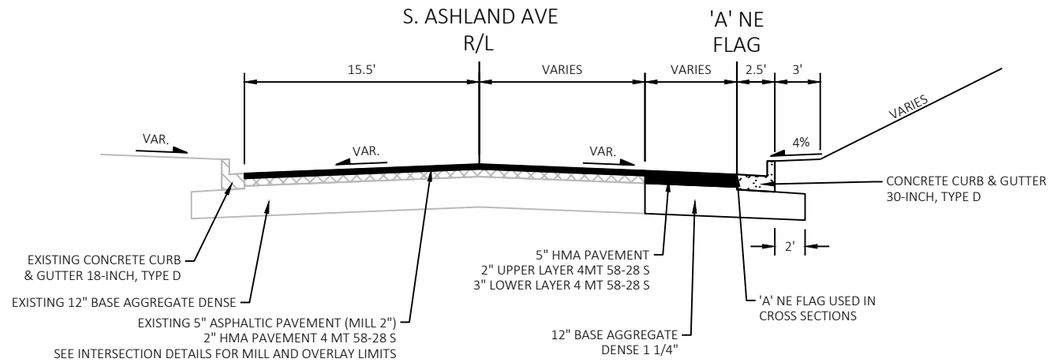
STA 463+23'SB' TO 471+56'SB' RT
STA 463+52'SB' TO 467+65'SB' LT

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	FINISHED TYPICAL SECTIONS	SHEET 12	E



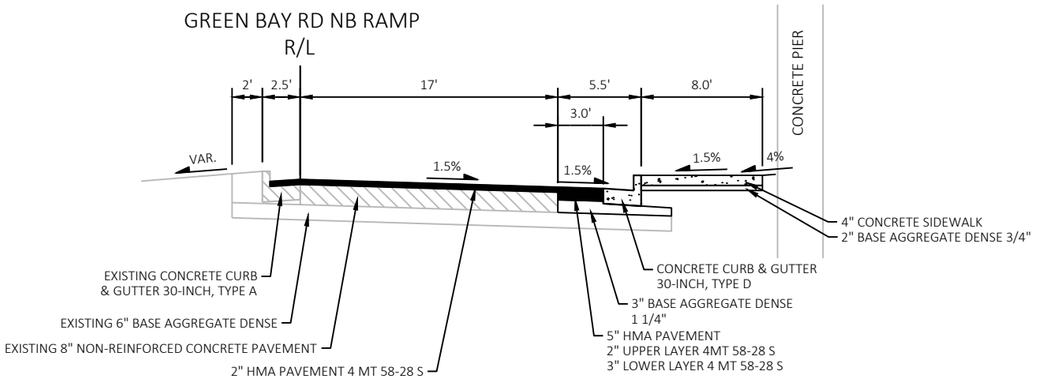
FINISHED TYPICAL SECTION STH 42/57

STA 471+56'SB' TO STA 481+89'SB'



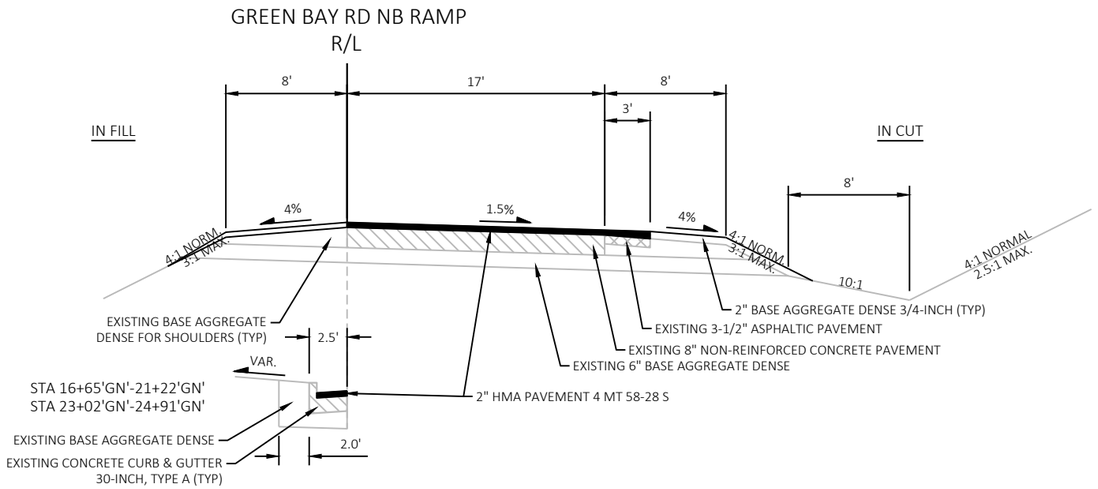
FINISHED TYPICAL SECTION S. ASHLAND AVE

STA 39+45'A' TO STA 40+96'A'



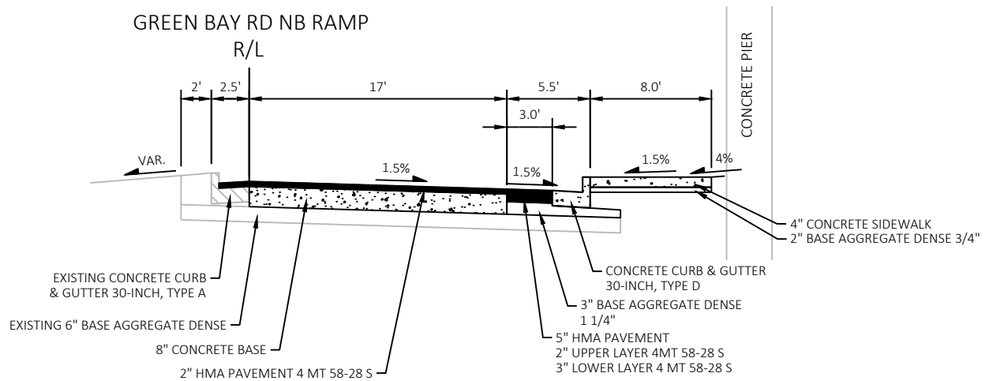
FINISHED TYPICAL SECTION GREEN BAY RD NB RAMP

STA 20+56'GN' TO 20+90'GN'
STA 22+86'GN' TO 23+02'GN



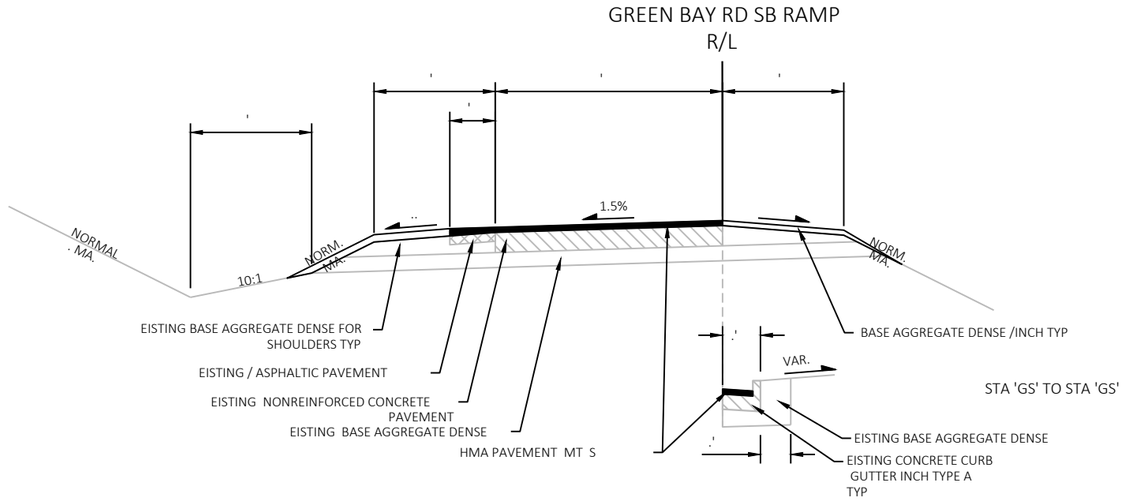
FINISHED TYPICAL SECTION GREEN BAY RD NB RAMP

STA 14+10'GN' TO 20+56'GN'
STA 23+02'GN' TO 30+06'GN'



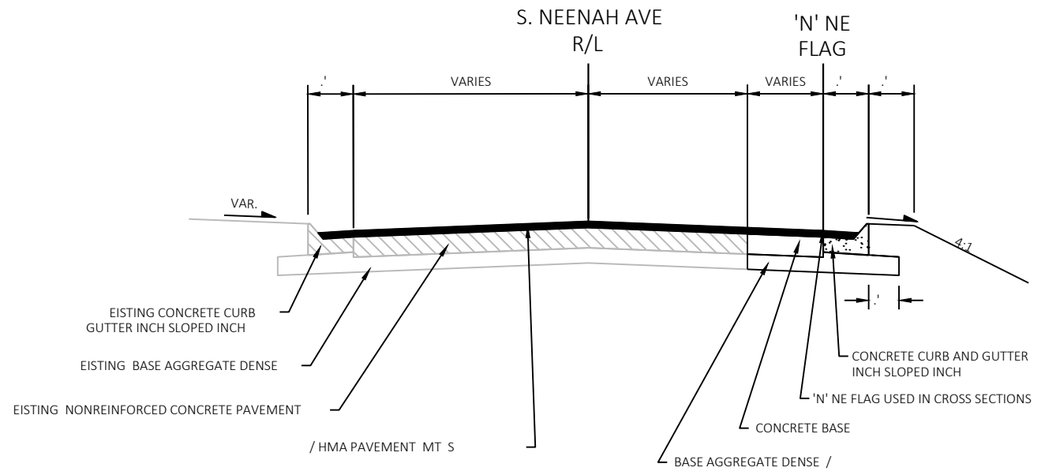
FINISHED TYPICAL SECTION GREEN BAY RD NB RAMP

STA 20+90'GN' TO 22+86'GN'



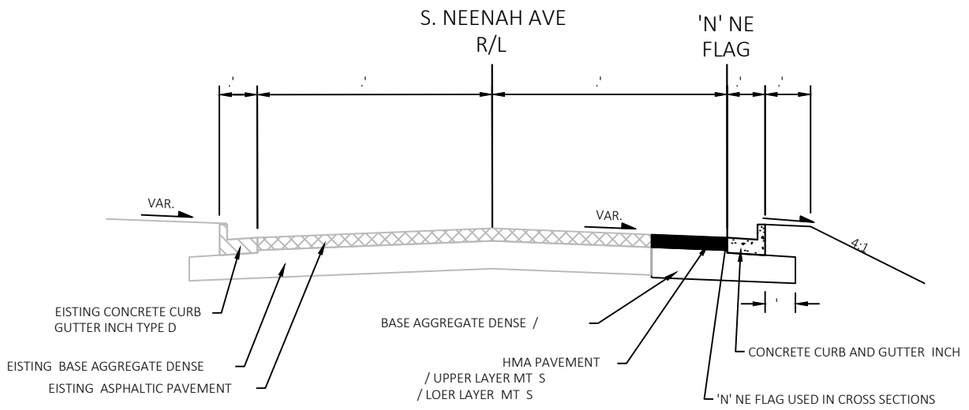
FINISHED TYPICAL SECTION GREEN BAY RD SB RAMP

STA 'GS' TO STA 'GS'



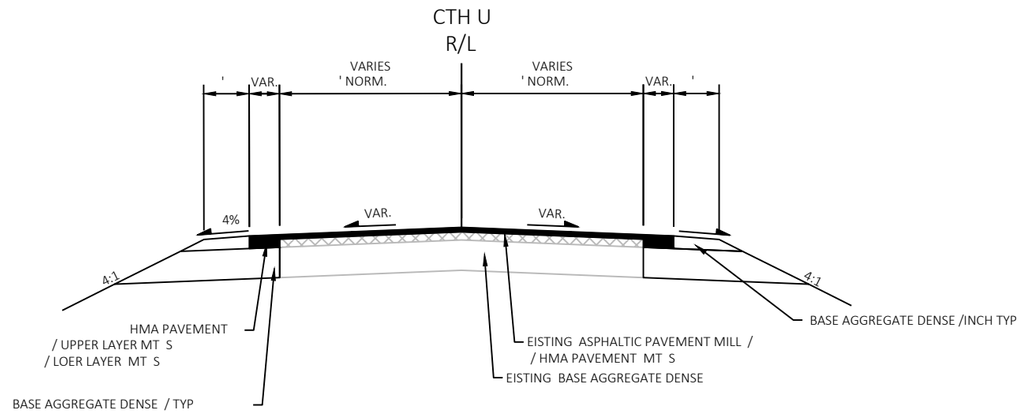
FINISHED TYPICAL SECTION S. NEENAH AVE

STA 'N' TO 'N'



FINISHED TYPICAL SECTION S. NEENAH AVE

STA 'N' TO STA 'N'



FINISHED TYPICAL SECTION CTH U

STA 'U' TO 'U'

PROECT NO 4430-19-71	HY STH	COUNTY DOOR	FINISHED TYPICAL SECTIONS	SHEET 14	E

FILE NAME NPDSCDSHEETSPLANTS.DG
LAYOUT NAME

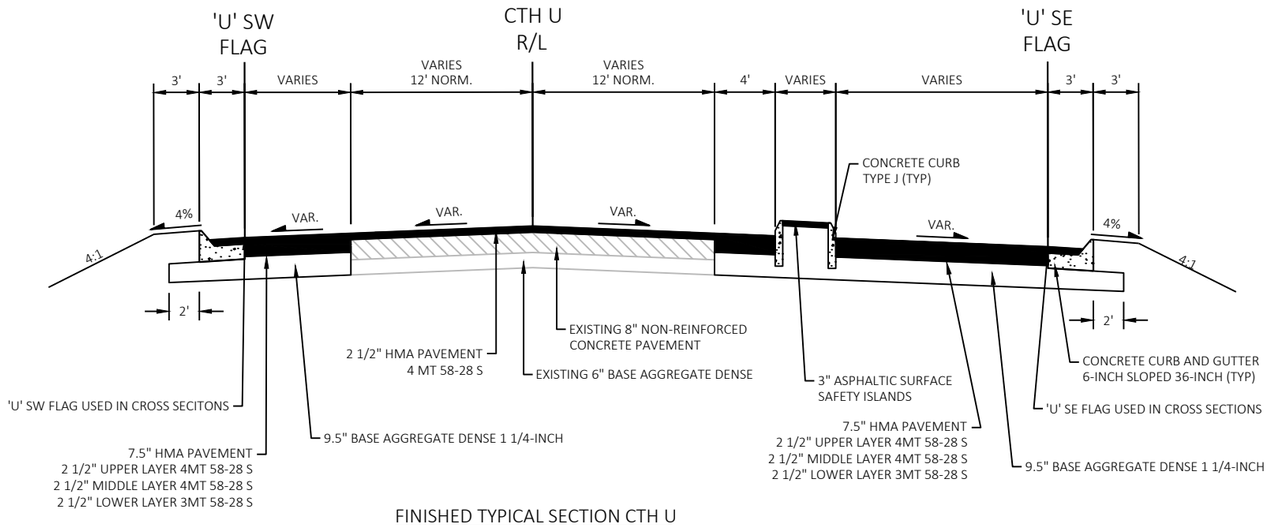
PLOT DATE // AM

PLOT BY SCHROEDER DERE

PLOT NAME

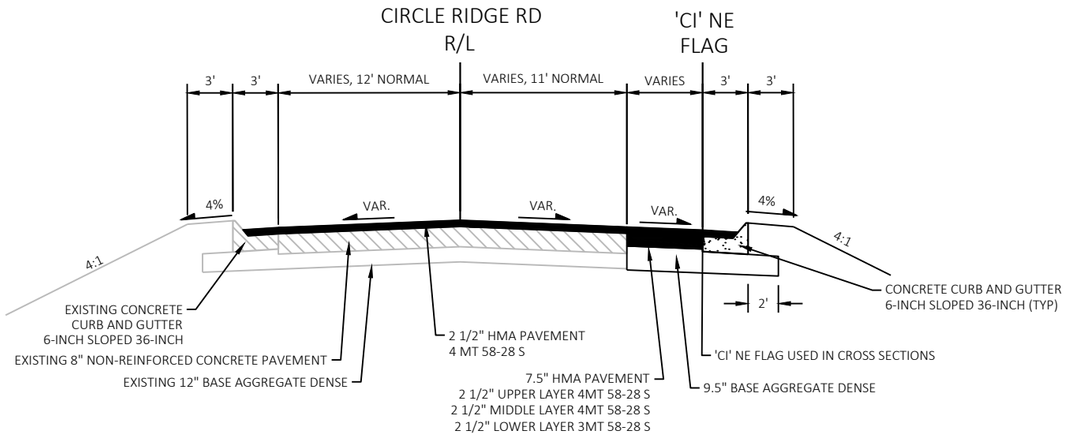
PLOT SCALE IN FT

ISDOT/CADDS SHEET



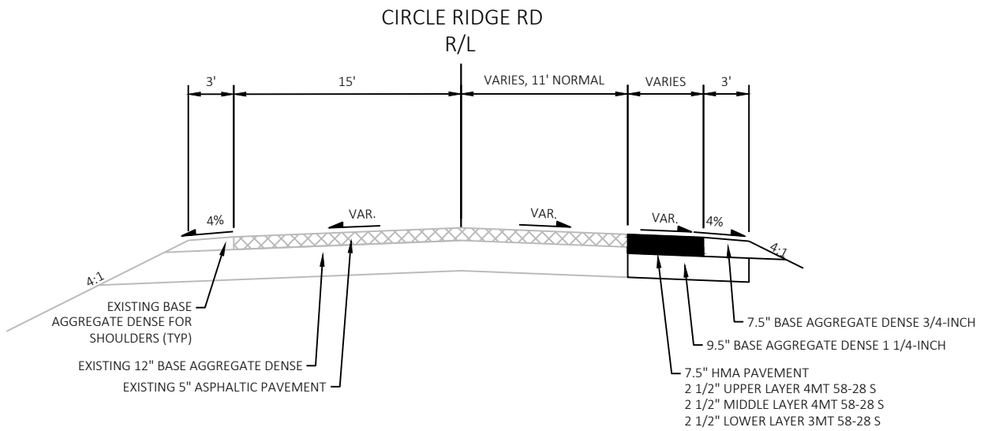
FINISHED TYPICAL SECTION CTH U

STA 78+99'U' TO 79+53'U'



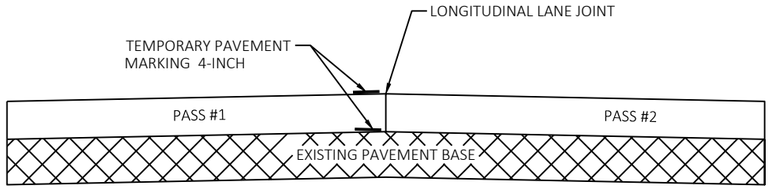
FINISHED TYPICAL SECTION CIRCLE RIDGE RD

STA 81+16'CI' TO 81+69'CI'

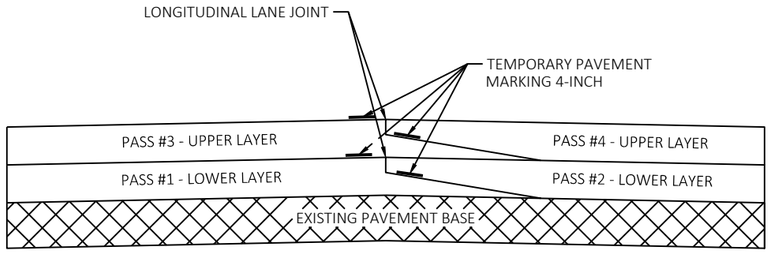


FINISHED TYPICAL SECTION CIRCLE RIDGE RD

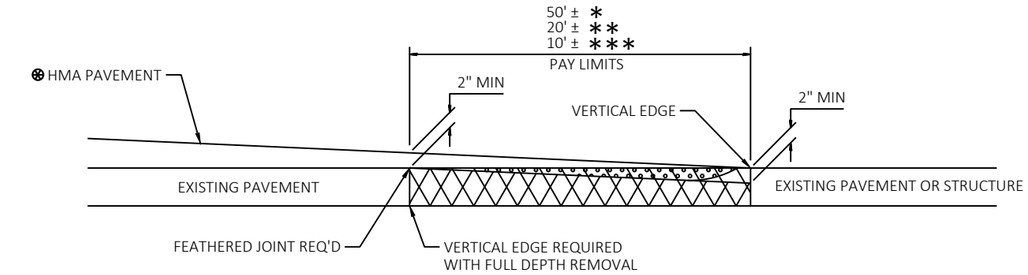
STA 81+69'CI' TO 82+01'CI'



PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN HMA PAVEMENTS



PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN HMA PAVEMENTS



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

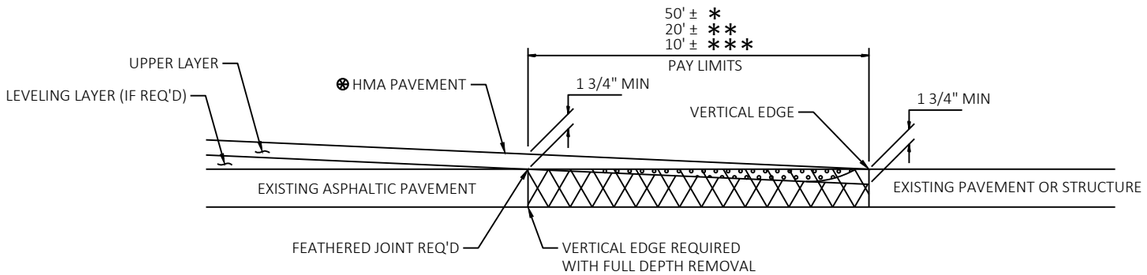
REMOVING PAVEMENT BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)

ASPHALTIC WEDGING (FULL DEPTH REMOVAL OPTION)

REMOVING PAVEMENT BUTT JOINTS (MILLING OPTION)

BUTT JOINT DETAIL FOR PAVEMENT OVERLAY (PROFILE CHANGE)

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES



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

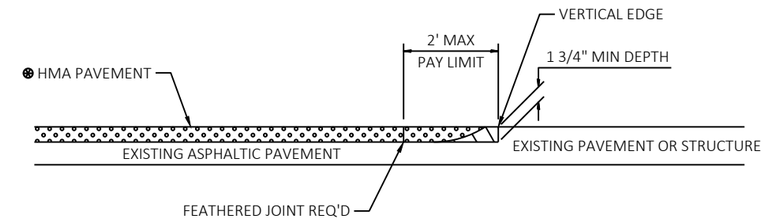
REMOVING ASPHALTIC SURFACE, BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)

ASPHALTIC WEDGING (FULL DEPTH REMOVAL OPTION)

REMOVING ASPHALTIC SURFACE, BUTT JOINTS (MILLING OPTION)

BUTT JOINT DETAIL FOR NON MILLED ASPHALTIC PAVEMENTS (PROFILE CHANGE)

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES

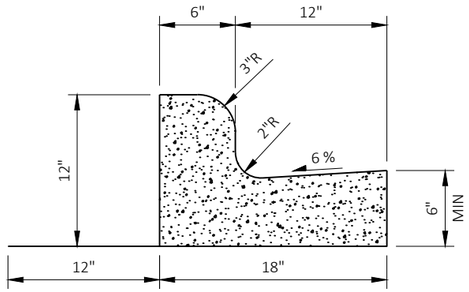


SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

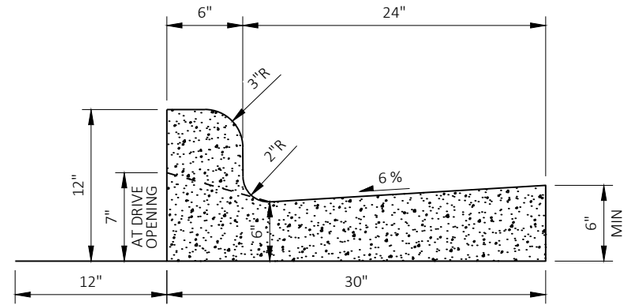
REMOVING ASPHALTIC SURFACE, MILLING

REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE

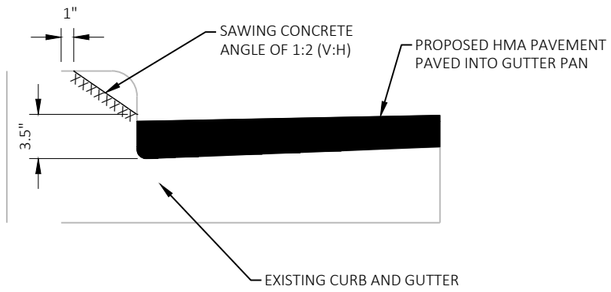
BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



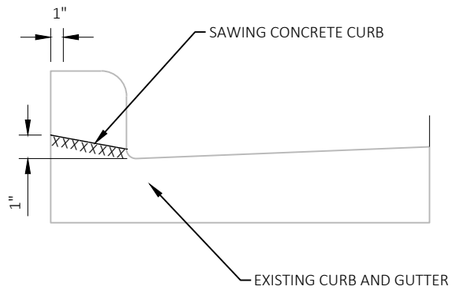
CONCRETE CURB & GUTTER 18-INCH TYPE D SPECIAL



CONCRETE CURB & GUTTER 30-INCH TYPE D SPECIAL



MOUNTABLE

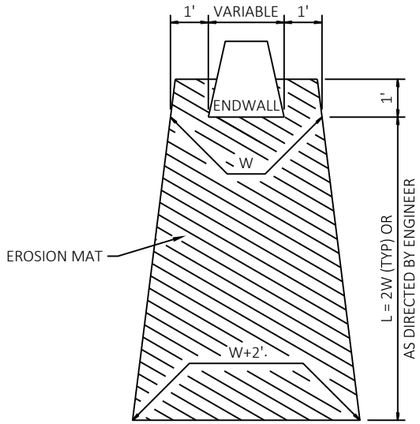


DRIVEWAY

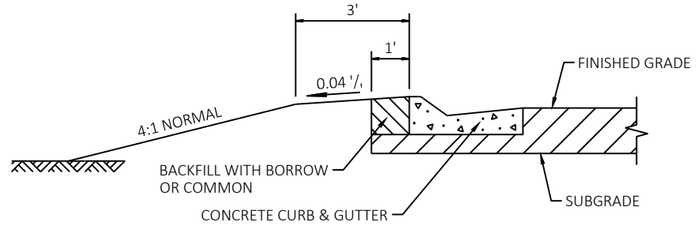
SAWING CONCRETE CURB HEAD

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CONSTRUCTION DETAILS	SHEET 17	E

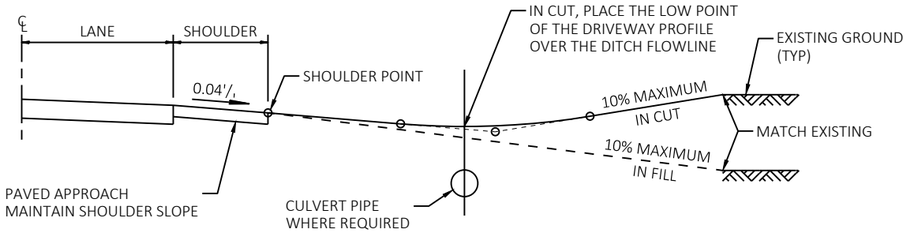
FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 020102-cd
PLOT DATE : 9/13/2021 9:41 AM
PLOT BY : CAMPSHURE, MICHAEL R
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



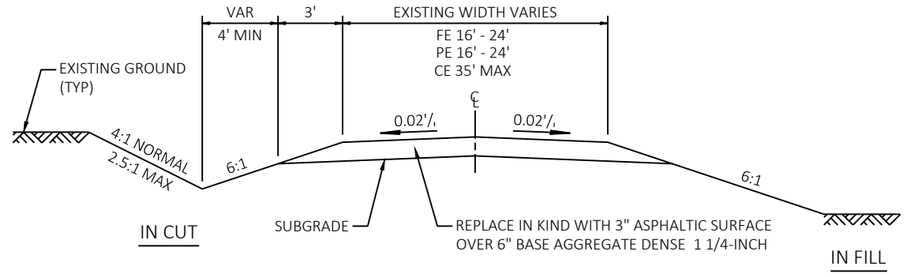
EROSION MAT TREATMENT AT CULVERTS



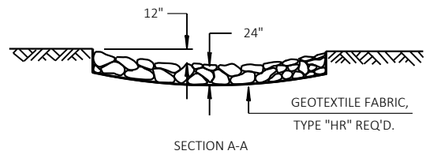
BERM DETAIL BEHIND CURB & GUTTER



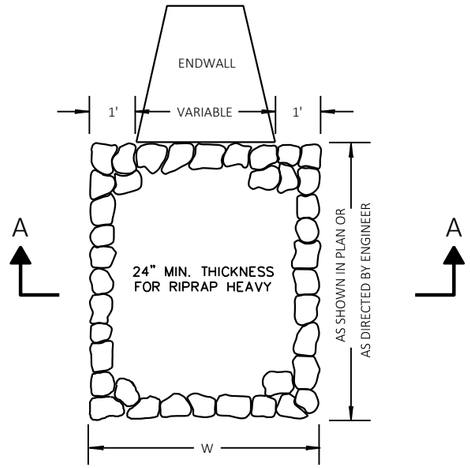
TYPICAL DRIVEWAY PROFILES



TYPICAL CROSS SECTION FOR DRIVEWAYS

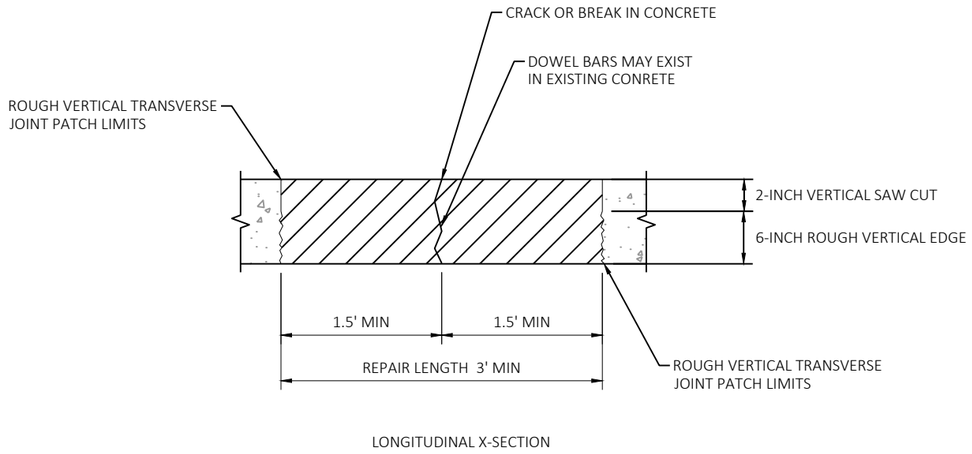


SECTION A-A



RIPRAP HEAVY TREATMENT AT APRON ENDWALS

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CONSTRUCTION DETAILS	SHEET 19	E



LONGITUDINAL X-SECTION

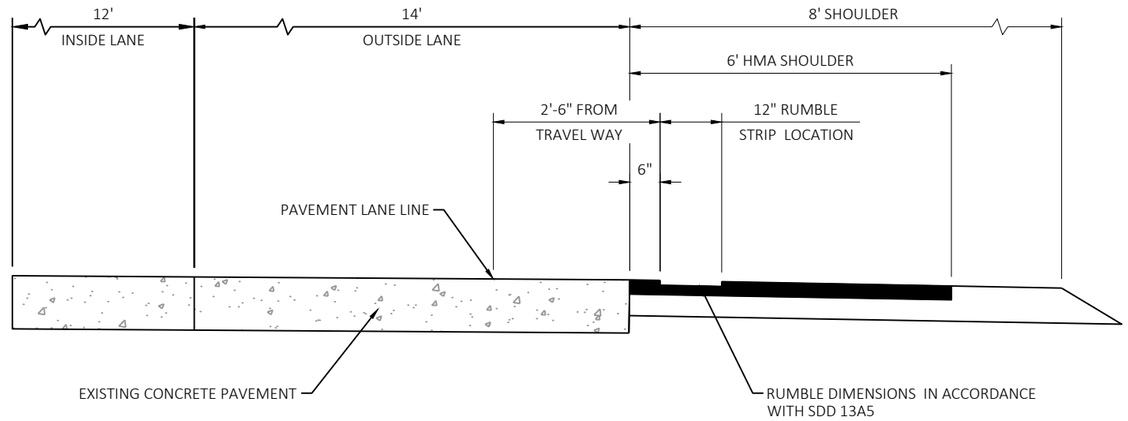
UNDOWELED BASE PATCHING CONCRETE

NOTES:

USE THIS CONSTRUCTION DETAIL IN CONJUNCTION WITH SDD 13C14 BASE PATCHING CONCRETE.

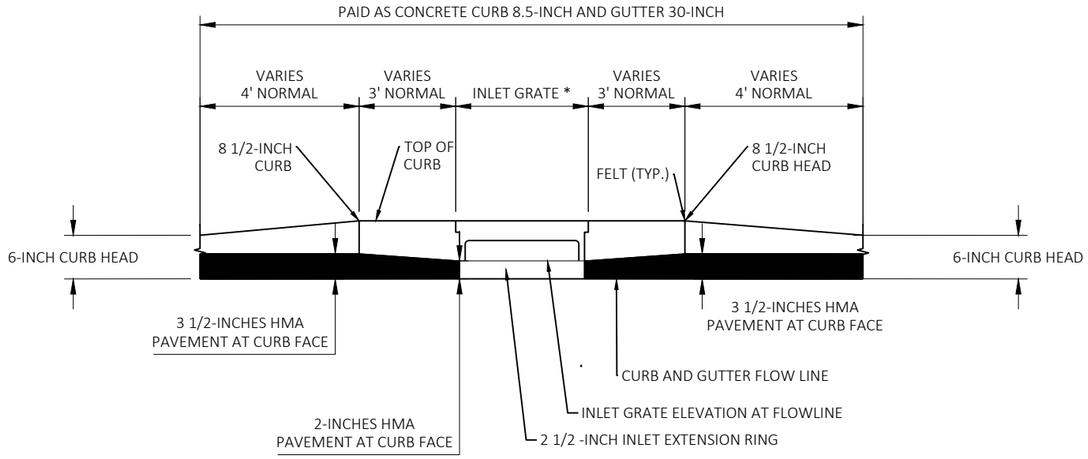
USE OF A VERMEER SAW IS ALSO AN ACCEPTABLE ALTERNATIVE TO CREATING A ROUGH VERTICAL EDGE.

PURPOSE OF THIS DETAIL IS TO MODIFY MINIMUM REPAIR LENGTH AND HIGHLIGHT THE ROUGH VERTICAL TRANSVERSE JOINT PATCH LIMITS.

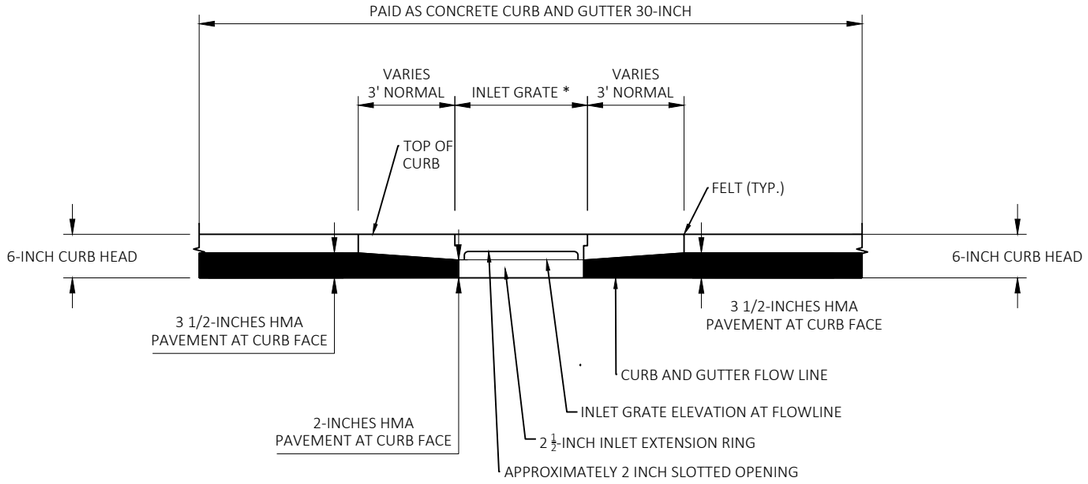


RUMBLE STRIPS IN HMA SHOULDERS ADJACENT TO CONCRETE LANES

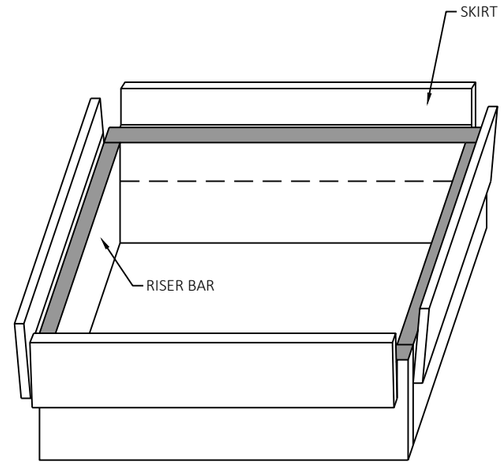
*RAISE CURB BOX HEIGHT TO 8 $\frac{1}{2}$-INCEHS

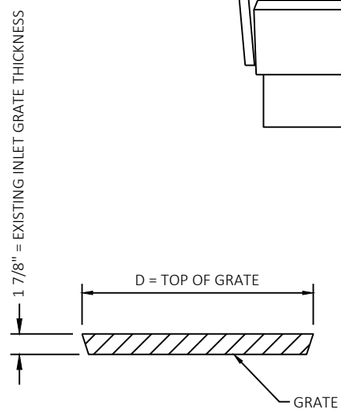


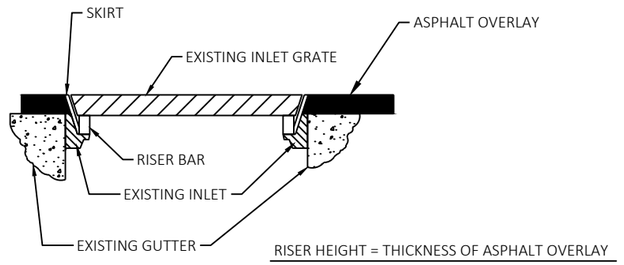
CONCRETE CURB 8 1/2-INCH AND GUTTER 30-INCH
INLET GRATE ELEVATIONS IN OVERLAY



CONCRETE CURB AND GUTTER 30-INCH
INLET GRATE ELEVATIONS IN OVERLAY







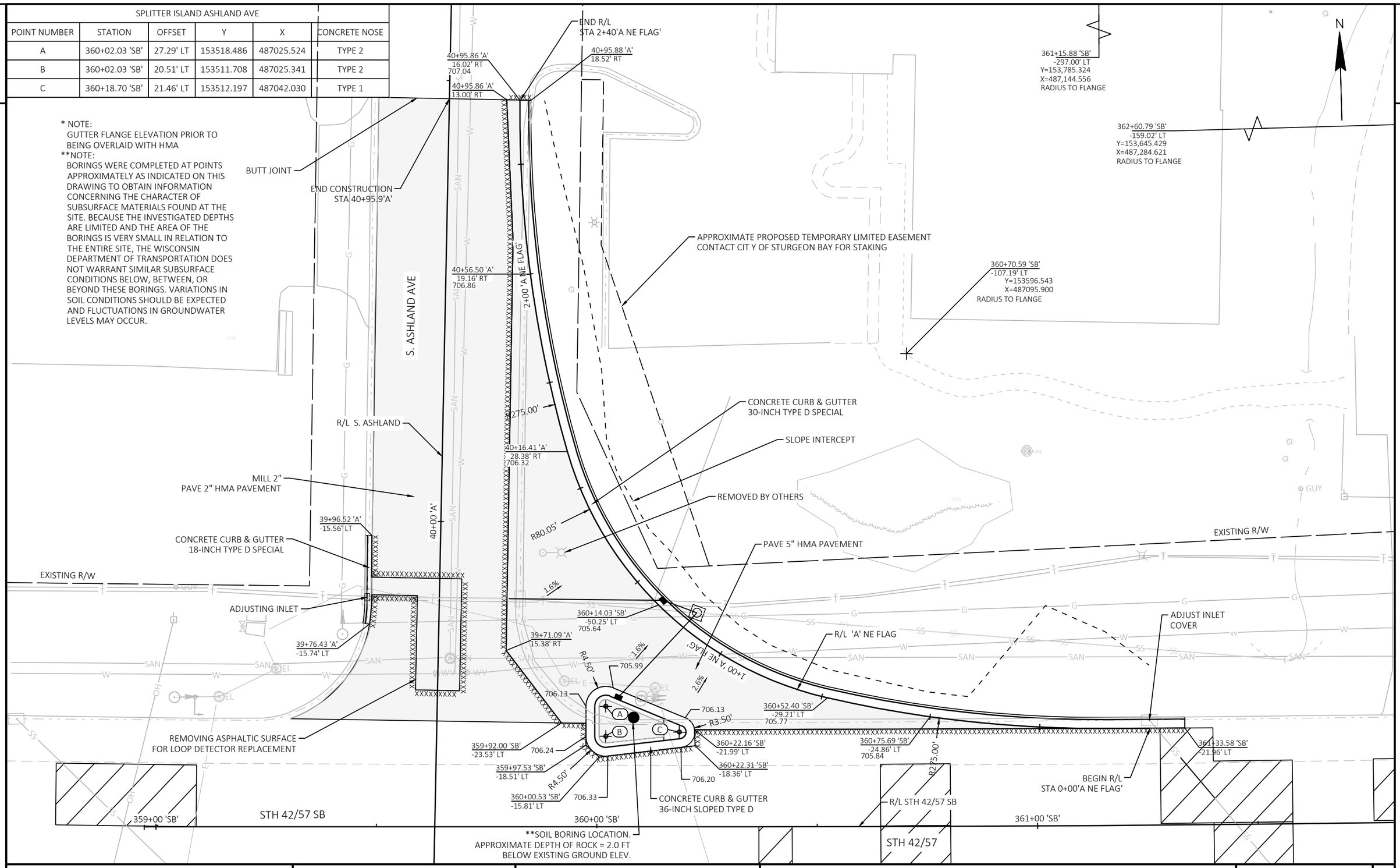
NOTE:
THIS IS ONE EXAMPLE OF INLET EXTENSION RINGS.
CONTRACTOR TO FIELD MEASURE INLETS FOR SIZING.

INLET EXTENSION RINGS

SPLITTER ISLAND ASHLAND AVE					
POINT NUMBER	STATION	OFFSET	Y	X	CONCRETE NOSE
A	360+02.03 'SB'	27.29' LT	153518.486	487025.524	TYPE 2
B	360+02.03 'SB'	20.51' LT	153511.708	487025.341	TYPE 2
C	360+18.70 'SB'	21.46' LT	153512.197	487042.030	TYPE 1

* NOTE:
GUTTER FLANGE ELEVATION PRIOR TO BEING OVERLAID WITH HMA

**NOTE:
BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	S. ASHLAND AVE.	SHEET 22	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021001-ID.DWG
LAYOUT NAME - 021001-id
PLOT DATE : 10/25/2021 2:58 PM
PLOT BY : SCHROEDER, DEREK W
PLOT NAME :
PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

* NOTE: GUTTER FLANGE ELEVATION PRIOR TO BEING OVERLAID WITH HMA

** NOTE: DO NOT PLACE TRANSITION C&G UNTIL ROADWAY IS READY FOR ASPHALT OVERLAY. THE GAP WILL ACT AS TEMPORARY FLUME FOR DRAINAGE. EITHER INSTALL TEMPORARY ASPHALT FLUME OR USE SOME OTHER ENGINEER APPROVED METHOD TO CONVEY WATER AWAY FROM BASE.

***NOTE: BORINGS WERE COMPLETED AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING TO OBTAIN INFORMATION CONCERNING THE CHARACTER OF SUBSURFACE MATERIALS FOUND AT THE SITE. BECAUSE THE INVESTIGATED DEPTHS ARE LIMITED AND THE AREA OF THE BORINGS IS VERY SMALL IN RELATION TO THE ENTIRE SITE, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT SIMILAR SUBSURFACE CONDITIONS BELOW, BETWEEN, OR BEYOND THESE BORINGS. VARIATIONS IN SOIL CONDITIONS SHOULD BE EXPECTED AND FLUCTUATIONS IN GROUNDWATER LEVELS MAY OCCUR.

67+16.22 'N'
11.50' RT

67+16.22 'N'
15.39' RT
618.48

67+16.22 'N'
17.89' RT

END R/L
STA 4+41'N NE FLAG'

R80.00'

67+09.15 'N'
15.71' RT
618.65

67+16.32 'N'
95.39' RT
Y=153736.361
X=492588.890
RADIUS TO FLANGE

67+16.04 'N'
625.93' RT
Y = 153740.462
X = 493119.413
RADIUS TO FLANGE

N

66+93.76 'N'
17.10' RT
619.02

PAVE 5" HMA PAVEMENT

66+89.31 'N'
14.49' RT

4+00 'N NE FLAG'

S. NEENAH AVE

EXISTING R/W

66+61.50 'N'
20.00' RT
619.87

CONCRETE CURB & GUTTER
30-INCH
NO GUTTER OVERLAY

R608.38'

R/L 'N' NE FLAG

66+26.15 'N'
24.23' RT
620.80

RAISE C&G FLANGE 2.5"
TO MATCH HMA PAVEMENT.
END GUTTER OVERLAY AND
CONCRETE PAVEMENT

R/L S. NEENAH AVE

BUTT JOINT

1.7%

TRANSITION BETWEEN C&G TYPES
≈10' **

66+23.80 'N'
24.58' RT
620.87
620.66*

***SOIL BORING LOCATION.
APPROXIMATE DEPTH OF ROCK =
5.0 FT BELOW EXISTING GROUND
ELEV.

415+52.30 'SB'
-74.00' LT
Y=153624.717
X=492573.163
RADIUS TO FLANGE

EXISTING R/W

66+03.26 'N'
15.22' RT

66+03.75 'N'
28.00' RT
621.42
621.21*

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

SLOPE INTERCEPT

2.2%

65+76.51 'N'
37.52' RT
621.94
621.73*

65+78.19 'N'
15.07' RT

3+00 'N NE FLAG'

R50.00'

8-INCH CONCRETE BASE

PAVE 2 1/2" HMA PAVEMENT

ASPHALTIC FLUME

BEGIN R/L
STA 2+50'N NE FLAG'

PAVE 2 1/2" HMA PAVEMENT

1.9%

2.3%

PAVE 2 1/2" HMA PAVEMENT

415+14.31 'SB'
-22.02' LT

415+52.30 'SB'
-24.00' LT
621.46
621.25*

415+60.30 'SB'
-21.08' LT

R/L STH 42/57 SB

414+00 'SB'

415+00 'SB'

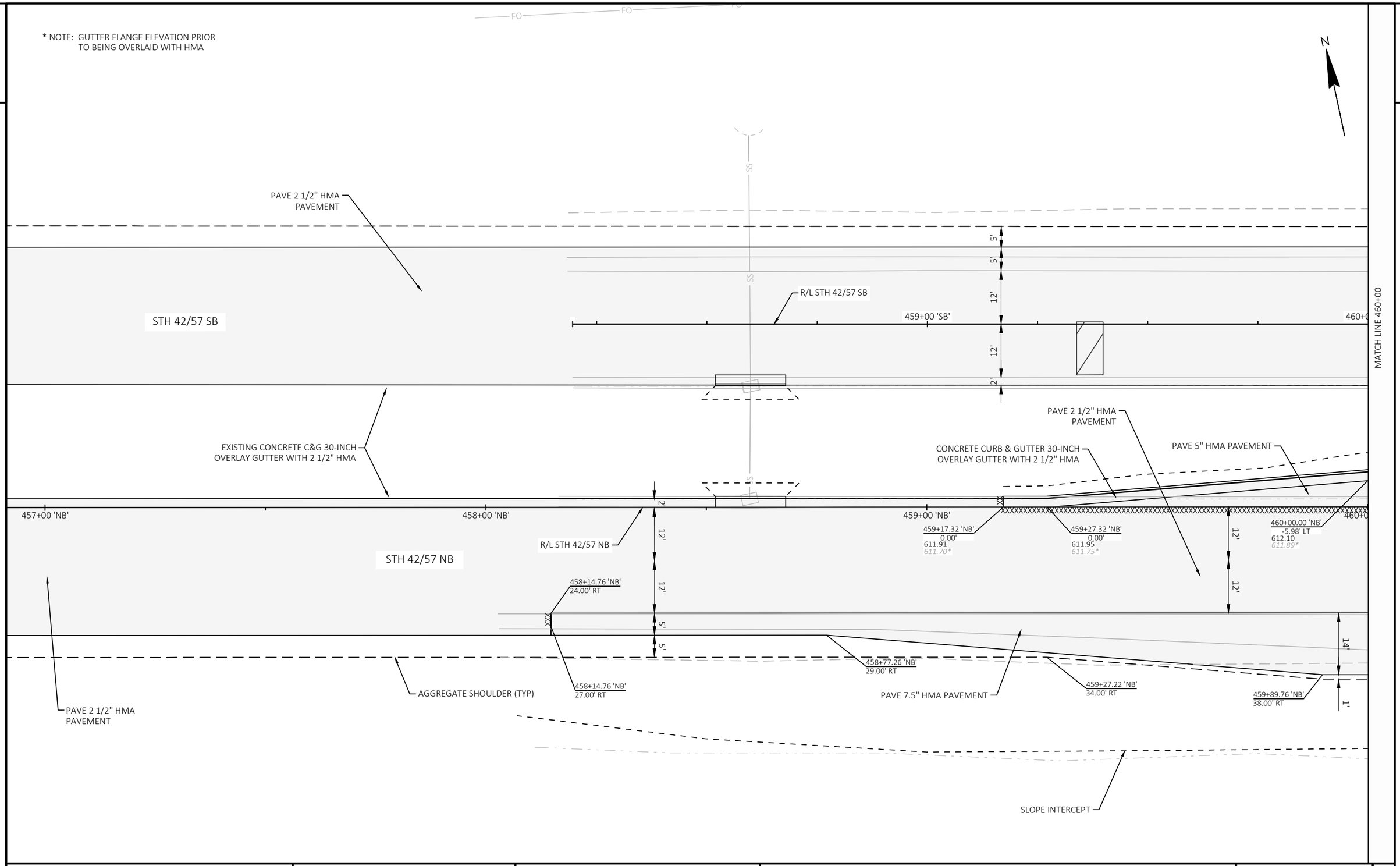
416+00 'SB'

STH 42/57 SB

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	S. NEENAH AVE	SHEET 23	E

2

* NOTE: GUTTER FLANGE ELEVATION PRIOR TO BEING OVERLAID WITH HMA



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CIRCLE RIDGE RD - CTH U	SHEET 24	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021001-ID.DWG
LAYOUT NAME - 021003-id

PLOT DATE : 10/25/2021 2:59 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

N

* NOTE: GUTTER FLANGE ELEVATION PRIOR TO BEING OVERLAID WITH HMA

MATCH LINE 460+00

MATCH LINE 463+00

EXISTING CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH OVERLAY GUTTER WITH 2 1/2" HMA

462+23.41 'SB'
-38.00' LT
Y=152,351.126
X=497,052.298
RADIUS TO FLANGE

81+63.28 'CI'
15.47' RT
612.21
612.00*

81+16.17 'CI'
11.00' RT

R/L CIRCLE RIDGE RD

PAVE 2 1/2"HMA PAVEMENT

PAVE 2 1/2"HMA PAVEMENT

PAVE 2 1/2"HMA PAVEMENT

STH 42/57 SB

461+00 'SB'

462+00 'SB'

EXISTING CONCRETE CURB & GUTTER 30-INCH OVERLAY GUTTER WITH 2 1/2" HMA

R/L STH 42/57 SB

CONCRETE CURB & GUTTER 30-INCH OVERLAY GUTTER WITH 2 1/2" HMA

CONCRETE MEDIAN NOSE TYPE 1

462+38.37 'NB'
-25.45' LT
Y=152,295.225
X=497,055.625
RADIUS TO FLANGE

462+38.37 'NB'
-29.45' LT

462+55.37 'NB'
-29.45' LT

461+89.13 'NB'
-29.46' LT

461+89.13 'NB'
-26.96' LT

R4.00'

462+39.43 'NB'
-21.59' LT
611.85
611.64*

SLOPE INTERCEPT

PAVE 5"HMA PAVEMENT

CONCRETE CURB & GUTTER 30-INCH OVERLAY GUTTER WITH 2 1/2" HMA

461+63.93 'NB'
-19.47' LT
611.57
611.36*

462+05.13 'NB'
-19.46' LT
611.72
611.51*

462+23.53 'NB'
-19.45' LT
611.79
611.58*

R60.00'

PAVE 2 1/2"HMA PAVEMENT

PAVE 5"HMA PAVEMENT

460+50.00 'NB'
-10.09' LT
612.00
611.79*

461+63.93 'NB'
-7.43' LT
611.94
611.73*

CONCRETE CORRUGATED MEDIAN

PAVEMENT GRADE BREAK

462+55.37 'NB'
-7.44' LT
611.99
611.79*

462+55.37 'NB'
0.00'

460+74.32 'NB'
0.00' RT
612.24
612.04*

461+00 'NB'

462+00 'NB'

R/L STH 42/57 NB

STH 42/57 NB

PAVE 2 1/2"HMA PAVEMENT

PAVE 2 1/2"HMA PAVEMENT

460+09.86 'NB'
24.00' RT

PAVE 2 1/2"HMA PAVEMENT

462+39.76 'NB'
24.00' RT

462+39.76 'NB'
36.00' RT
611.89
611.68*

462+93.66 'NB'
24.00' RT

462+36.43 'NB'
38.00' RT

79+46.16 'U'
-45.01' LT
611.65
611.44*

R50.00'

79+34.95 'U'
-35.12' LT
611.50
611.29*

R/L 'U' SW FLAG

10+50 'U' SW FLAG

PAVE 7.5" HMA PAVEMENT

SLOPE INTERCEPT

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH OVERLAY GUTTER WITH 2 1/2" HMA

79+07.55 'U'
-27.14' LT
612.03
611.82*

ASPHALTIC FLUME

PAVE 7.5" HMA PAVEMENT

5'
5'
12'
12'
2'
7.4'
12'
12'
14'
1'

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CIRCLE RIDGE RD - CTH U	SHEET 25	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021001-ID.DWG
LAYOUT NAME - 021004-id

PLOT DATE : 10/25/2021 2:59 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE 463+00

MATCH LINE 466+00

PAVE 7.5" HMA PAVEMENT

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

10+50 'C/NE FLAG'

R60.00'

SLOPE INTERCEPT

465+36.38 'SB'
-56.21' LT

RIPRAP HEAVY

464+85.40 'SB'
-1430.29' LT
Y=153658.969
X=497596.958

RADIUS TO FLANGE
R=1456.68'

N

465+29.18 'SB'
-48.08' LT

465+46.47 'SB'
-6.00' LT
END ASPHALT OVERLAY
BEGIN MILL AND OVERLAY

PAVE 7.5" HMA PAVEMENT

PAVE 2 1/2" HMA PAVEMENT

463+55.25 'SB'
-26.00' LT
611.31

1'

MILL 2"
PAVE 2 1/2" HMA PAVEMENT

463+51.91 'SB'
-18.00' LT

14'

ASPHALTIC SURFACE SAFETY ISLAND

PC; 465+97.36

463+51.91 'SB'
-12.00' LT

12'

PAVE 5" HMA PAVEMENT

STH 42/57

2.0%

R/L STH 42/57 SB

2.0%

2.0%

R4.00'

463+22.50 'SB'
0.00'

463+29.50 'SB'
3.00' RT
611.99
611.79*

464+00 'SB'

465+00 'SB'

465+37.41 'SB'
3.00' RT
609.95
609.75*

466+0

463+25.50 'SB'
7.00' RT

PAVE 5" HMA PAVEMENT

D

E

14.4'

3'

463+71.91 'SB'
17.42' RT
611.61
611.40*

463+96.76 'SB'
16.53' RT
611.51
611.30*

464+21.75 'SB'
15.63' RT
611.38
611.17*

CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

CONCRETE MEDIAN NOSE TYPE 1

465+44.41 'SB'
3.00' RT
609.85
609.64*

2.0%

PAVE 5" HMA PAVEMENT

463+25.50 'SB'
13.42' RT

R4.01'

463+29.50 'SB'
17.43' RT
611.73
611.53*

1.4%

463+58.65 'SB'
32.99' RT
611.43
611.22*

R60'

1.7%

463+72.28 'SB'
31.42' RT
611.36
611.15*

2.0%

463+97.27 'SB'
30.52' RT
611.23
611.02*

14'

PAVE 5"
HMA PAVEMENT

2.0%

464+71.71 'SB'
13.82' RT
610.95
610.75*

465+07.80 'SB'
26.53' RT
610.37
610.16*

465+37.41 'SB'
11.45' RT
610.00
609.79*

0.8%

465+65.64 'SB'
24.18' RT
609.89
609.68*

463+22.51 'SB'
26.65' RT
611.63

463+53.99 'SB'
34.28' RT
611.46
611.25*

R3.37'

F

463+68.67 'SB'
39.41' RT

464+22.25 'SB'
29.62' RT
611.10
610.89*

464+72.22 'SB'
27.81' RT
610.67
610.47*

465+15.74 'SB'
33.75' RT

465+37.84 'SB'
25.45' RT
610.11
609.90*

R1456.68'

CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

0 'NB'

463+22.51 'SB'
41.43' RT

463+54.67 'SB'
40.84' RT

463+68.66 'SB'
41.41' RT

463+58.66 'SB'
41.18' RT

464+00 'NB'

ASPHALTIC SURFACE
SAFETY ISLAND

R/L STH 42/57 NB

EXISTING CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2 1/2"" HMA

REMOVING EXISTING ASPHALT
FROM GUTTER PAN BY MILLING

12'

STH 42/57 NB

PAVE 2 1/2" HMA PAVEMENT

12'

464+65.69 'NB'
12.00' RT
END CONCRETE OVERLAY
BEGIN MILL AND OVERLAY

MILL 2"
PAVE 2 1/2" HMA PAVEMENT

17'

HMA PAVING JOINT
PAVE THROUGH LANE AT 17-FT WDITH

5'

463+19.52 'NB'
24.39' RT

464+20.86 'NB'
24.00' RT

79+44.95 'U'
12.00' RT

CONCRETE CURB TYPE J

R2.50'

R2.50'

Z

Y

463+94.08 'NB'
36.00' RT
611.40
611.19*

R50.00'

10+50 'U SE FLAG'

R/L 'U' SE FLAG

PAVE 7.5" HMA PAVEMENT

79+19.35 'U'
155.59' RT

79+17.38 'U'
173.50' RT

79+11.70 'U'
45.89' RT
611.17
610.96*

SLOPE INTERCEPT

463+72.41 'NB'
50.01' RT
Y=152193.677
X=497171.164
RADIUS TO FLANGE

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

ASPHALTIC FLUME

X

R2.50'

78+89.14 'U'
67.20' RT

* NOTE: GUTTER FLANGE ELEVATION PRIOR
TO BEING OVERLAID WITH HMA

REJECT CURB AND GUTTER

SB SLOTTED LEFT TURN LANE					
POINT NUMBER	STATION	OFFSET	Y	X	CONCRETE NOSE
D	463+29.50 'NB'	7.00' RT	152285.130	497146.771	TYPE 2
E	463+29.53 'NB'	13.40' RT	152278.868	497145.472	TYPE 2
F	463+55.03 'NB'	37.49' RT	152250.015	497165.434	TYPE 1

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CIRCLE RIDGE RD - CTH U	SHEET 26	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021001-ID.DWG
LAYOUT NAME - 021005-id

PLOT DATE : 10/25/2021 3:00 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

* NOTE: GUTTER FLANGE ELEVATION PRIOR TO BEING OVERLAID WITH HMA

N

SLOPE INTERCEPT

464+85.40 'SB'
-1430.29' LT
Y=153658.969
X=497596.958
RADIUS TO FLANGE
R=1465.68'

WIDEN PAVED SHOULDER FOR TURN LANE TAPER
PAID UNDER PREPARE FOUNDATION FOR ASPHLATIC SHOULDERS

AGGREGATE SHOULDER (TYP)

466+64.50 'SB'
-22.00' LT

466+21.23 'SB'
-25.46' LT

1'

467+14.49 'SB'
-17.00' LT
606.97

PAVE 7.5" HMA PAVEMENT

467+65.00 'SB'
-15.00' LT

467+65.00 'SB'
-12.00' LT

MILL 2"
PAVE 2 1/2" HMA PAVEMENT

MILL 2"
PAVE 2 1/2" HMA PAVEMENT

R/L STH 42/57 SB

STH 42/57 SB

MATCH LINE 466+00

MATCH LINE 469+00

12'

4.8%

5'

12'

467+00 'SB'

468+00 'SB'

PAVE 5" HMA PAVEMENT

4.0%

466+21.69 'SB'
20.17' RT
609.52
*609.31**

4.8%

PAVE 5" HMA PAVEMENT

4.8%

468+31.00 'SB'
3.00' RT
606.60
*606.39**

VAR. (TYP.)

MEDIAN SWALE

467+24.02 'SB'
11.92' RT
608.24
*608.04**

R1456.68'

CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

REMOVING EXISTING ASPHALT
FROM GUTTER PAN BY MILLING

467+00.00 'SB'
13.89' RT
608.61
*608.40**

467+00.00 'SB'
21.41' RT
608.84
*608.63**

VAR.

STH 42/57 NB

EXISTING CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

MILL 2"
PAVE 2 1/2" HMA PAVEMENT

17'

HMA PAVING JOINT
PAVE THROUGH LANE AT 17-FT WDITH

5'

REJECT CURB AND GUTTER

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CIRCLE RIDGE RD - CTH U	SHEET 27	E

2

2

* NOTE: GUTTER FLANGE ELEVATION PRIOR TO BEING OVERLAID WITH HMA

N

471+49.00 'SB'
-69.46' LT

RIPRAP HEAVY

7.3'

471+49.49 'SB'
-46.82' LT

PAVE 5" HMA PAVEMENT

MILL 2"
PAVE 2 1/2" HMA PAVEMENT

MILL 2"
PAVE 2 1/2" HMA PAVEMENT

PAVE 5" HMA PAVEMENT

CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

MATCH LINE 469+00

469+10.86 'SB'
3.00' RT
605.77
*605.57**

3'

R/L STH 42/57 SB

12'

470+68.36 'SB'
3.00' RT
604.65
*604.44**

STH 42/57 SB

471+48.67 'SB'
6.21' RT
604.50
*604.29**

471+58.61 'SB'
0.00'

472+00 'SB'

470+00 'SB'

471+00 'SB'

471+55.43 'SB'
6.39' RT
604.49
*604.28**

CONCRETE MEDIAN NOSE TYPE 1

5' (TYP)

EXISTING CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

REMOVING EXISTING ASPHALT
FROM GUTTER PAN BY MILLING

MEDIAN SWALE

470+36.78 'SB'
21.76' RT

471+58.59 'SB'
15.75' RT

471+48.67 'SB'
16.22' RT
605.00
*604.80**

471+55.62 'SB'
15.89' RT
604.98
*604.77**

470+17.13 'SB'
20.21' RT

470+17.40 'SB'
25.70' RT

470+36.92 'SB'
24.71' RT

STH 42/57 NB

17'

HMA PAVING JOINT
PAVE THROUGH LANE AT 17-FT WDITH

5'

MILL 2"
PAVE 2 1/2" HMA PAVEMENT

CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

MILL 2"
PAVE 2 1/2" HMA PAVEMENT

AGGREGATE SHOULDER (TYP)

REJECT CURB AND GUTTER

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CIRCLE RIDGE RD - CTH U	SHEET 28	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021001-ID.DWG
LAYOUT NAME - 021007-id

PLOT DATE : 10/25/2021 3:01 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

462+39.76 'NB'
36.00' RT
611.89
611.68*

462+36.43 'NB'
38.00' RT

462+93.66 'NB'
24.00' RT

79+46.16 'U'
-45.01' LT
611.65
611.44*

79+34.95 'U'
-35.12' LT
611.50
611.29*

79+07.55 'U'
-27.14' LT
612.03
611.82*

78+99.08 'U'
0.00'

462+39.76 'NB'
86.00' RT
Y=152,185.898
X=497,033.938
RADIUS TO FLANGE

79+44.95 'U'
12.00' RT

463+19.52 'NB'
24.39' RT

79+11.70 'U'
45.89' RT
611.17
610.96*

463+51.71 'NB'
80.51' RT
611.91
611.70*

463+94.08 'NB'
36.00' RT
611.40
611.19*

464+22.25 'SB'
29.62' RT
611.10
610.89*

464+00 'NB'

464+20.86 'NB'
24.00' RT

78+89.14 'U'
67.20' RT

78+79.33 'U'
66.46' RT

78+77.12 'U'
30.34' RT
611.96

464+01.46 'NB'
85.45' RT
Y=152152.989
X=497192.251
RADIUS TO FLANGE

78+13.69 'U'
-13.79' LT
613.01

78+08.30 'U'
-13.80' LT
613.06

78+06.93 'U'
-14.35' LT
613.06

78+06.93 'U'
-12.01' LT

78+06.93 'U'
12.00' RT

78+06.93 'U'
14.77' RT
612.59

77+85.53 'U'
54.07' RT
Y=152062.197
X=497163.833
RADIUS TO EOA

R50.00'
R2.50'
R94.62'
79+00 'U'
10+50 'U' SW FLAG'
10+50 ' U SE FLAG'
12'
15'
12'
12'
4'
2'

BEGIN R/L
STA 10+00'U' SW FLAG'

PAVE 7.5" HMA PAVEMENT

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

R/L 'U' SW FLAG

ASPHALTIC FLUME

PAVE 2 1/2" HMA PAVEMENT

END R/L
STA 10+69'U' SW FLAG'

END MILL AND OVERLAY
BEGIN ASPHALT OVERLAY

PAVE 5" HMA PAVEMENT

SLOPE INTERCEPT

AGGREGATE SHOULDER (TYP)

R/L CTH U

MILL 2 1/2"
PAVE 2 1/2" HMA PAVEMENT

TRANSITION
FROM
MILL/OVERLAY
TO
CONCRETE
OVERLAY
~25'

CONCRETE CURB TYPE J

PAVE 7.5" HMA PAVEMENT

END R/L
STA 10+82' U SE FLAG'

R/L 'U' SE FLAG

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

SLOPE INTERCEPT

ASPHALTIC FLUME

BEGIN R/L
STA 10+16' U SE FLAG'

2 1/2" ASPHALTIC SURFACE

AGGREGATE SHOULDER (TYP)

PAVE 5" HMA PAVEMENT

STH 42/57 NB

CTH U

EXISTING R/W

GUY

N

* NOTE: GUTTER FLANGE ELEVATION PRIOR
TO BEING OVERLAID WITH HMA

SPLITTER ISLAND CTH U					
POINT NUMBER	STATION	OFFSET	Y	X	CONCRETE NOSE
X	78+99.01 'U'	18.36' RT	152176.050	497129.331	TYPE 1
Y	79+34.10 'U'	31.94' RT	152210.999	497143.283	TYPE 2
Z	79+35.38 'U'	18.53' RT	152212.418	497129.891	TYPE 2

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CIRCLE RIDGE RD - CTH U	SHEET 29	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021001-ID.DWG
LAYOUT NAME - 021008-id

PLOT DATE : 10/25/2021 3:01 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

* NOTE: GUTTER FLANGE ELEVATION PRIOR TO BEING OVERLAID WITH HMA

N

2

CIRCLE RIDGE RD

EXISTING R/W

R/L CIRCLE RIDGE RD

BUTT JOINT REQ'D

82+01.47 'CI'
11.00' RT

82+01.39 'CI'
14.94' RT
611.87

82+00

END R/L
STA 10+83'CI NE FLAG'

PAVE 2 1/2" HMA PAVEMENT

81+70.78 'CI'
15.00' RT
612.28
612.07*

R/L 'CI' NE FLAG

81+70.78 'CI'
75.00' RT
Y=152369.513
X=497187.552
RADIUS TO FLANGE

11'

4'

81+63.28 'CI'
15.47' RT
612.21
612.00*

PAVE 7.5" HMA PAVEMENT

EXISTING CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

SLOPE INTERCEPT

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH
OVERLAY GUTTER WITH 2 1/2" HMA

10+50 'CI NE FLAG'

ASPHALTIC FLUME

81+29.86 'CI'
31.12' RT
611.48
611.27*

R60.00'

BEGIN R/L
STA 10+00'CI NE FLAG'

463+55.25 'SB'
-26.00' LT
611.31

463+46.59 'SB'
-24.23' LT
611.40
611.19*

463+51.91 'SB'
-18.00' LT

81+16.17 'CI'
11.00' RT

STH 42/57 SB

462+00 'SB'

461+89.13 'NB'
-29.46' LT

461+89.13 'NB'
26.96' LT

5'

461+63.93 'NB'
-19.47' LT
611.57

462+38.37 'NB'
-29.45' LT

462+55.37 'NB'
-29.45' LT

463+00 'SB'

463+22.50 'SB'

R4.00'

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CIRCLE RIDGE RD - CTH U	SHEET 30	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021001-ID.DWG
LAYOUT NAME - 021009-id

PLOT DATE : 10/25/2021 3:02 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

STH 42/57 SB

282+00 'NB'

283+00 'NB'

284+00 'NB'

285+00 'NB'

286+00 'NB'

287+00 'NB'

STH 42/57 NB

R/L STH 42 NB

282+14.67 'NB'
32.00' RT

282+74.67 'NB'
38.00' RT

283+24.67 'NB'
36.00' RT

284+43.69 'NB'
36.26' RT

284+02.80 'NB'
36.00' RT

SAWING CONCRETE CURB HEAD - DRIVEWAY

284+64.00 'NB'
36.27' RT

284+98.00 'NB'
36.00' RT

285+63.63 'NB'
36.00' RT

286+26.13 'NB'
36.00' RT

287+05.31 'NB'
32.00' RT

286+87.12 'NB'
34.16' RT

EXISTING R/W

53.125'
EAT

75.00'
MGS GUARDRAIL 3

SLOPE INTERCEPT (TYP.)

284+48.00 'NB'
38.00' RT

TLE

53.125'
EAT

62.50'
MGS GUARDRAIL 3

62.50'
MGS GUARDRAIL 3 K

EXISTING R/W

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN DETAILS	SHEET 31	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021201-pd

PLOT DATE : 4/29/2021 2:27 PM PLOT BY : KIRST, DOUGLAS P PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

N

264.40'
MGS GUARDRAIL 3

MGS TYPE 2 TERMINAL

383+95.98 'SB'
-20.13' LT

384+15.98 'SB'
-22.00' LT

386+40.00 'SB'
-22.00' LT

386+80.38 'SB'
-22.58' LT

SAWING CONCRETE CURB HEAD - MOUNTABLE

STH 42/57 SB

382+00'SB' 383+00'SB' 384+00'SB' 385+00'SB' 386+00'SB' 387+00'SB'

R/L STH 42 SB

386+41.58 'NB'
-25.72' LT
START TAPER

NON STARNDARD
W-BEAM LENGTH
FIELD CUT AND
DRILLING REQ'D

385+56.78 'NB'
-27.07' LT

385+66.36 'NB'
20.99' LT
POST #5

6.25'
W TO THRIE BEAM TRANSITION

385+54.16 'NB'
-18.80' LT
POST #1

3.00' (TYP)

386+06.84 'NB'
-23.65' LT
POST #12

9.85'

14.21'

TAPER 25:1

386+16.63 'NB'
-4.13' LT
START TAPER

3.00' (TYP)

POST #1
385+54.19 'NB'
-8.94' LT

382+00 'NB' 383+00 'NB' 384+00 'NB' 385+00 'NB' 386+00 'NB' 387+00 'NB'

R/L STH 42 NB

STH 42/57 NB

384+91.12 'NB'
-2.09' LT

385+66.39 'NB'
-6.79' LT
POST #5

6.50'

386+06.87 'NB'
-4.86' LT
POST #12

39.41'
MGS THRIE BEAM TRANSITION

383+78.79 'NB'
29.00' RT

384+48.79 'NB'
36.00' RT

384+98.79 'NB'
34.00' RT

SAWING CONCRETE CURB HEAD - MOUNTABLE

386+01.92 'NB'
34.00' RT

386+41.32 'NB'
34.58' RT

SLOPE INTERCEPT (TYP.)

53.125'
EAT

100.00'
MGS GUARDRAIL 3

39.396'
MGS THRIE BEAM TRANSITION

USE 0.75-INCH BAD TO GRADE AROUND ENERGY
ABSORBING TERMINALS

SS

SS

GUY

OH

MATCH LINE 387+25

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN DETAILS	SHEET 32	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021202-pd

PLOT DATE : 12/2/2021 10:46 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

MATCH LINE 387+25

39.391'
MGS THRIE BEAM TRANSITION

125.01'
MGS GUARDRAIL 3

53.131'
EAT

USE 0.75-INCH BAD TO GRADE AROUND ENERGY ABSORBING TERMINALS

388+02.89 'SB'
-22.58' LT

388+42.29 'SB'
-22.00' LT

389+67.29 'SB'
-22.00' LT

39.43
MGS THRIE BEAM TRANSTION

388+26.95 'NB'
-25.46' LT
START TAPER

390+20.42 'SB'
-23.87' LT

390+87.71 'SB'
-17.00' LT

388+00'SB'

389+00'SB'

390+00'SB'

391+00'SB'

392+00'SB'

393+00'SB'

STH 42/57 SB

SAWING CONCRETE CURB HEAD - MOUNTABLE

388+36.56 'NB'
-24.74' LT
POST #12

388+77.20 'NB'
-22.81' LT
POST #5

389+52.45 'NB'
-27.79' LT

PC: 390+39.83

R/L STH 42 SB

388+89.41 'NB'
-20.65' LT
POST #1

3.00' (TYP)

6.25'
W TO THRIE BEAM TRANSITION

TAPER 25:1

14.21'

9.91'

388+89.30 'NB'
-10.74' LT POST #1

START TAPER 388+02.04 'NB'
-4.11' LT

3.00' (TYP)

388+00 'NB'

389+00 'NB'
388+88.54 'NB'
-3.37' LT

390+00 'NB'

391+00 'NB'

392+00 'NB'

393+00 'NB'

PC: 390+83.51

R/L STH 42 NB

STH 42/57 NB

NON STANDARD W-BEAM LENGTH FIELD CUT AND DRILLING REQ'D

POST #12
388+36.58 'NB'
-6.15' LT

388+77.23 'NB'
-8.60' LT
POST #5

SAWING CONCRETE CURB HEAD - MOUNTABLE

392+53.27 'NB'
34.00' RT

393+03.49 'NB'
29.00' RT

387+63.64 'NB'
34.58' RT

388+00.00 'NB'
34.00' RT

SLOPE INTERCEPT (TYP.)

MGS TYPE 2 TERMINAL

MGS W-BEAM TERMINAL CONNECTOR

489.38'
MGS GUARDRAIL 3

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN DETAILS	SHEET 33	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021203-pd
PLOT DATE : 12/2/2021 10:47 AM
PLOT BY : SCHROEDER, DEREK W
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

N

GREEN BAY RD NB RAMP

R/L GREEN BAY RD NB RAMP

15+00'GN'

20+00'GN'

PAVE 2" HMA PAVEMENT

20+10.68 'GN'
17.00' RT

20+10.68 'GN'
20.01' RT

20+55.95 'GN'
24.98' RT
663.78

20+46.92 'GN'
23.97' RT

20+50.06 'GN'
-171.00' LT
Y=153,468.165
X=489,530.455
RADIUS TO FLANGE

20+89.94 'GN'
0.00'
661.87

20+89.94 'GN'
17.00' RT
662.76

21+00'GN'

661.58 CONC
661.74 HMA

662.41 CONC
662.57 HMA

661.32 CONC
661.49 HMA

661.94 CONC
662.11 HMA

661.04 CONC
661.21 HMA

661.43 CONC
661.59 HMA

660.83 CONC
661.00 HMA

660.96 CONC
661.13 HMA

660.65 CONC
660.82 HMA

660.63 CONC
660.80 HMA

22+00'GN'

MATCH LINE 22+25

6.0%

4.0%

1.5%

0.0%

1.5%

CONCRETE BASE 8-INCH, NON-DOWELED
OVERLAID WITH 2" HMA PAVEMENT

EXISTING CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2" HMA

PT: 21+17.42

21+40.00 'GN'
20.00' RT
661.89

661.66

661.16

660.78

21+60.50 'GN'
22.50' RT
661.81

8"

21+60.50 'GN'
30.50' RT
661.93

CONCRETE SIDEWALK
4-INCH

PAVE 5" HMA PAVEMENT

CONCRETE CURB & GUTTER
30-INCH

SLOPE INTERCEPT

PAVE 5" HMA PAVEMENT

R196.01'

21+12.08 'GN'
21.96' RT
662.57

R24.82'

R34.61'

21+30.27 'GN'
40.26' RT
661.18

21+37.78 'GN'
44.44' RT
661.31

21+60.09 'GN'
55.32' RT
Y=153,443.432
X=489,766.291
24.82' RADIUS TO ESW

21+60.50 'GN'
57.11' RT
Y=153,443.169
X=489,768.101
34.61' RADIUS TO ESW

SS

OH

GUY

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN DETAILS	SHEET 34	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021202-PD.DWG
LAYOUT NAME - 021204-pd

PLOT DATE : 12/1/2021 7:38 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE 22+25

CONCRETE BASE 8-INCH, NON-DOWELED
OVERLAID WITH 2" HMA PAVEMENT

EXISTING CONCRETE CURB & GUTTER 30-INCH
OVERLAY GUTTER WITH 2" HMA

660.00 CONC
660.17 HMA

659.89 CONC
660.06 HMA

PAVE 2" HMA PAVEMENT

PC: 24+86.66

23+00'GN'

24+00'GN'

25+00'GN'

660.46 CONC
660.62 HMA

660.26 CONC
660.42 HMA

22+86.01 'GN'
0.00'
660.06

GREEN BAY RD NB RAMP

R/L GREEN BAY RD NB RAMP

660.37 CONC
660.53 HMA

660.09 CONC
660.26 HMA

659.66 CONC
659.83 HMA

22+86.01 'GN'
17.00' RT
659.83

659.67

23+02.28 'GN'
16.98' RT

659.27

658.85

23+72.67 'GN'
17.00' RT
658.47

24+10.20 'GN'
17.04' RT

660.49

660.22

659.80 CONC
659.96 HMA

659.62

659.22

658.81

24+10.17 'GN'
20.00' RT

659.92

23+08.65 'GN'
22.50' RT
659.83

23+72.67 'GN'
20.00' RT
658.43

1.5%

8'

1.5%

R58.12'

R68.52'

ASPHALTIC FLUME

23+09.22 'GN'
30.50' RT
659.94

CONCRETE SIDEWALK
4-INCH

PAVE 5" HMA PAVEMENT

SLOPE INTERCEPT

CONCRETE CURB & GUTTER
30-INCH

23+54.23 'GN'
39.86' RT
656.73

23+48.75 'GN'
46.01' RT
656.85

SS

HO

OH

23+09.22 'GN'
88.62' RT
Y=153570.677
X=489850.884
58.12' RADIUS TO ESW

23+08.65 'GN'
91.07' RT
Y=153569.282
X=489852.923
68.52' RADIUS TO ESW

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN DETAILS	SHEET 35	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\021202-PD.DWG
LAYOUT NAME - 021205-pd

PLOT DATE : 12/1/2021 7:39 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

MATCH LINE 115+25

EXISTING R/W

CTH MM

R/L STH 42/CTH MM

R/L STH 42/57 NB

STH 42/57

102 104 106 108 110 112 114

B B B

STH 42/57

EXISTING R/W

C C

B

STH 42

EXISTING R/W

LEGEND

SILT FENCE		TEMPORARY DITCH CHECK	
ROCK BAGS		SURFACE WATER FLOW	
EROSION MAT URBAN CLASS I TYPE A		INLET PROTECTION	
CULVERT PIPE CHECK	A B C	INLET PROTECTION TYPE	

EXISTING R/W

R/L STH 42/57 NB

116 118 120 122 124 126 128 130

STH 42/57

RIPRAP

EXISTING R/W

MATCH LINE 115+25

FLAG FLAG FLAG

CANOPY

FILLER CAPS

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 36	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 10/29/2021 10:05 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

EXISTING R/W

STH 42/57

132 134 136 138 140 142 144

STH 42/57

R/L STH 42/57 NB

Y INN RD

R/L Y INN RD

EXISTING R/W

T.ANKS

EXISTING R/W

MATCH LINE 145+75

2

LEGEND

SILT FENCE		TEMPORARY DITCH CHECK	
ROCK BAGS		SURFACE WATER FLOW	
EROSION MAT URBAN CLASS I TYPE A		INLET PROTECTION	
CULVERT PIPE CHECK	A B C	INLET PROTECTION TYPE	

SEPC

EXISTING R/W

STH 42/57

146 148 150 152 154 156 158 160

STH 42/57

R/L STH 42/57 NB

EXISTING R/W

MATCH LINE 145+75

MATCH LINE 14

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 37	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 10/29/2021 9:42 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

MATCH LINE 176+25

EXISTING R/W

STH 42/57

B

162 164 166 168 170 172 174 176

STH 42/57

R/L STH 42/57 NB

B

EXISTING R/W

LEGEND

SILT FENCE		TEMPORARY DITCH CHECK	
ROCK BAGS		SURFACE WATER FLOW	
EROSION MAT URBAN CLASS I TYPE A		INLET PROTECTION	
CULVERT PIPE CHECK	A B C	INLET PROTECTION TYPE	

MATCH LINE 191+

R/L IDLEWILD RD

IDLEWILD RD

SEPTIC

SEPV

EXISTING R/W

STH 42/57

B

178 180 182 184 186 188 190

STH 42/57

R/L STH 42/57 NB

IDLEWILD RD

EXISTING R/W

MATCH LINE 176+25

2

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 38	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022003-ec

PLOT DATE : 10/29/2021 9:43 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCH LINE

EXISTING R/W

STH 42/57

192 194 196 198 200 202 204 206

STH 42/57

R/L STH 42/57 NB

EXISTING R/W

LEGEND

SILT FENCE		TEMPORARY DITCH CHECK	
ROCK BAGS		SURFACE WATER FLOW	
EROSION MAT URBAN CLASS I TYPE A		INLET PROTECTION	
CULVERT PIPE CHECK	A B C	INLET PROTECTION TYPE	

MATCH LINE 222+

EXISTING R/W

STH 42/57

B

208 210 212 214 216 218 220

STH 42/57

R/L STH 42/57 NB

EXISTING R/W

16

CTH O

R/L STH 42/57

MATCH LINE 206+75

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 39	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022004-ec

PLOT DATE : 10/29/2021 9:44 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

EXISTING R/W

STH 42/57

STH 42/57

224 226 228 230 232 234 236

R/L STH 42/57 NB

EXISTING R/W

LEGEND

- SILT FENCE
- ROCK BAGS
- EROSION MAT URBAN CLASS I TYPE A
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- INLET PROTECTION
- A B C INLET PROTECTION TYPE

EXISTING R/W

CANOPY

STH 42/57

B

238 240 242 244 246 248 250 252

R/L STH 42/57 NB

STH 42/57

R/L EMERALD DR

EXISTING R/W

EMERALD DR

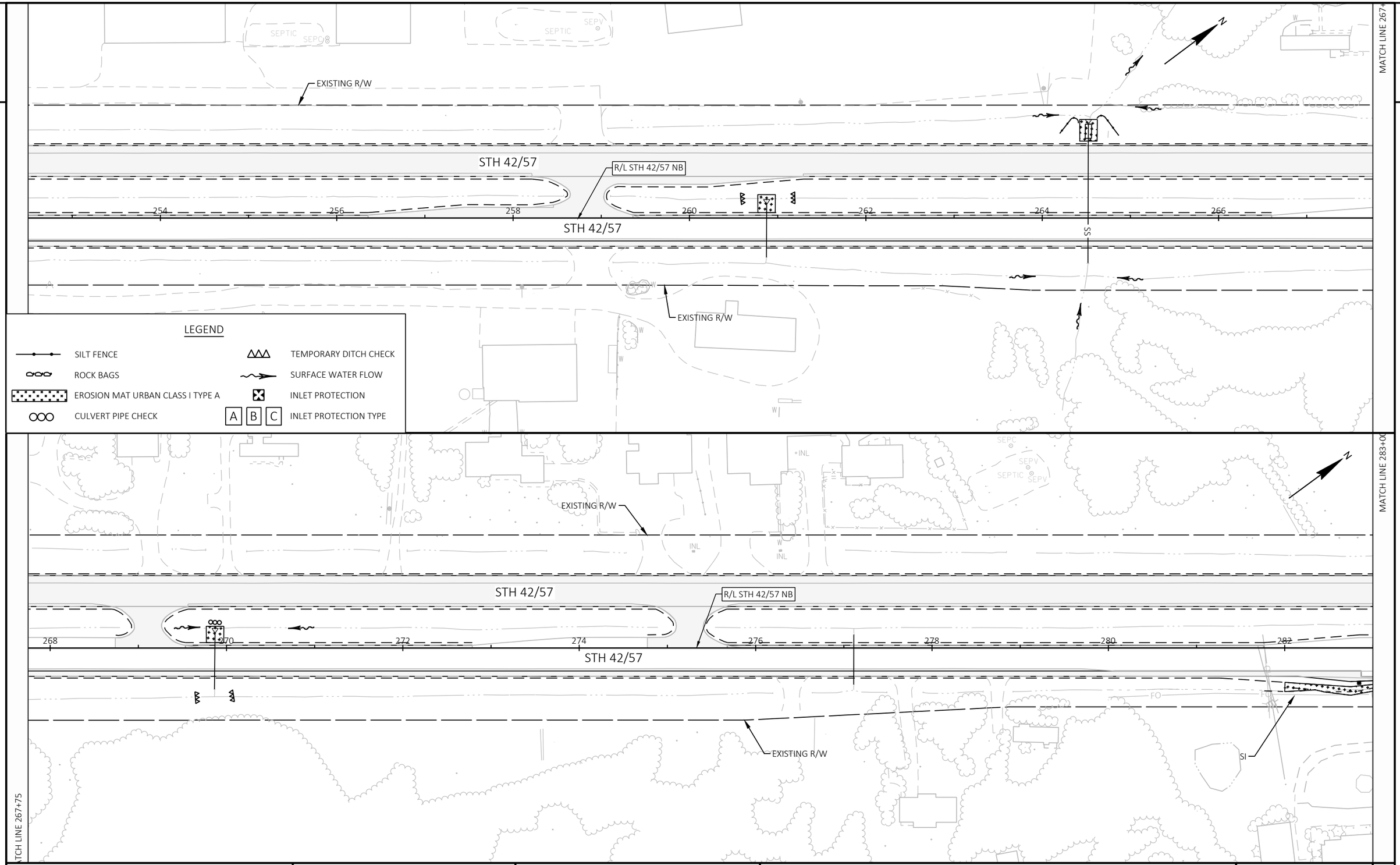
EXISTING R/W

LINE 237+25

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 40	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022005-ec

PLOT DATE : 10/29/2021 9:45 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 41	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022006-ec

PLOT DATE : 12/1/2021 4:02 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

EXISTING R/W

PARK DR

24

R/L CTH PD

EXISTING R/W

MATCH LINE 298+25

2

STH 42/57

R/L STH 42/57 NB

284 286 288 290 292 294 296 298

STH 42/57

22

SS

TLE

SI

FO

CTH PD

EXISTING R/W

SEPTIC

SEPTIC

LEGEND

SILT FENCE		TEMPORARY DITCH CHECK	
ROCK BAGS		SURFACE WATER FLOW	
EROSION MAT URBAN CLASS I TYPE A		INLET PROTECTION	
CULVERT PIPE CHECK	A B C	INLET PROTECTION TYPE	

EXISTING R/W

R/L STAGG RD

STAGG RD

R/L STH 42/57 NB

STH 42/57

30

306 308 310 312

304

302

300

STH 42/57

EXISTING R/W

EXISTING R/W

ENTERPRISE RD

298+25

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 42	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022007-ec

PLOT DATE : 12/1/2021 4:03 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

N

34

GRANT RD

MATCH LINE 344

R/L GRANT RD

314 316 318 320 322 324 326 328

STH 42/57

R/L STH 42/57 NB

EXISTING R/W

SEPV SEPV

LEGEND

- SILT FENCE
- ROCK BAGS
- EROSION MAT URBAN CLASS I TYPE A
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- INLET PROTECTION
- A B C INLET PROTECTION TYPE

N

MATCH LINE 328+75

330 332 334 336 338 340 342

SS SS

STH 42/57

R/L STH 42/57 NB

EXISTING R/W

MH MH MH

FLAG

INL INL

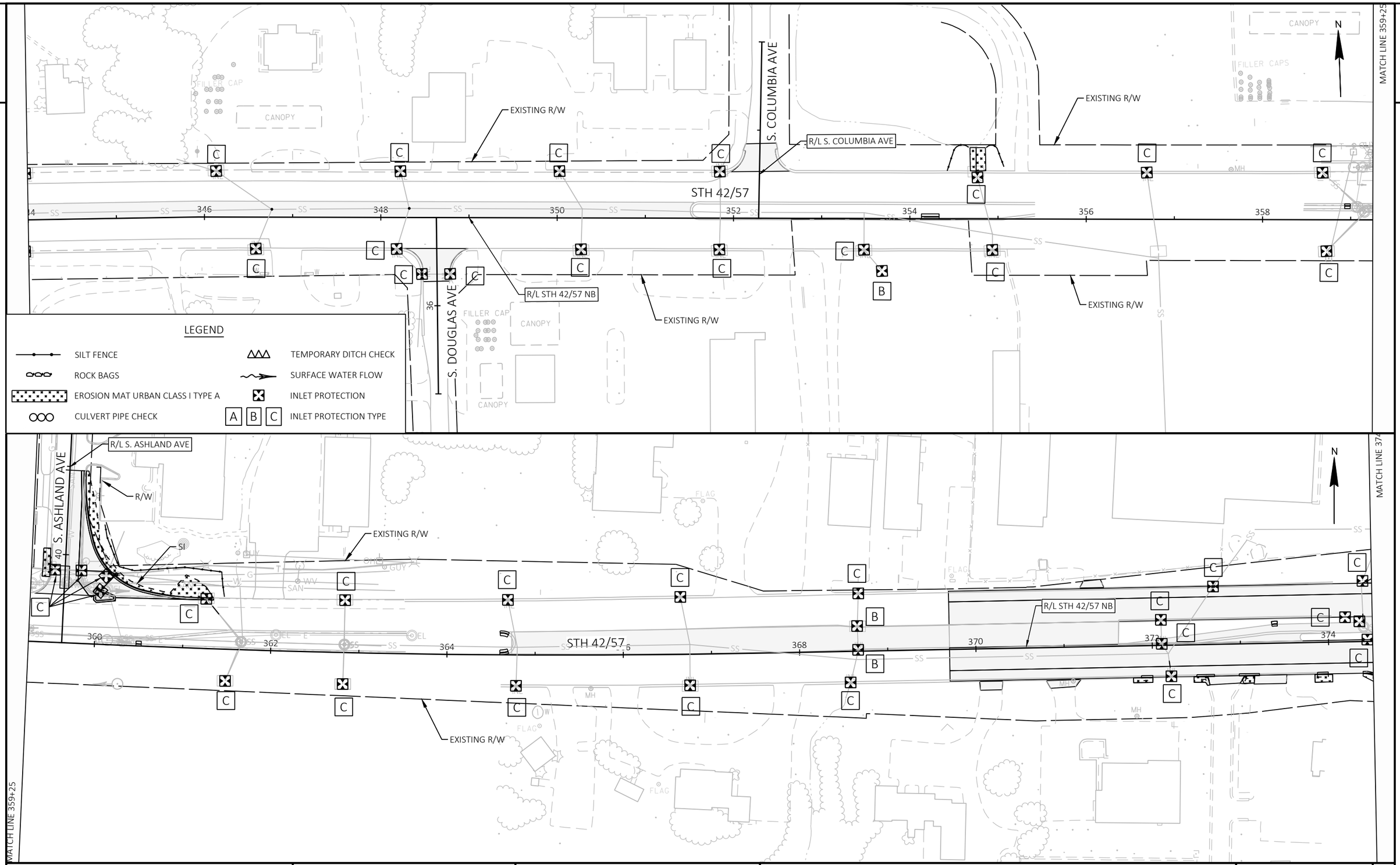
B C C C C B

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 43	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022008-ec

PLOT DATE : 10/29/2021 9:48 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 44	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022009-ec

PLOT DATE : 10/29/2021 9:49 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

CTH C

EXISTING R/W

R/L CTH C/S

R/L GREEN BAY RD SB RAMP

EXISTING STRUCTURES B-15-005 & B-15-006
GAP OUT

DO NOT DISTURB WETLAND AREA

GREEN BAY RD

EXISTING R/W

SI

STH 42/57

R/L STH 42/57 NB

STH 42/57

CTH S

EXISTING R/W

R/L GREEN BAY RD NB RAMP

EXISTING R/W

EXISTING R/W

SI

SI

SI

EXISTING R/W

N

MATCH LINE 389

2

LEGEND

- SILT FENCE
- ROCK BAGS
- EROSION MAT URBAN CLASS I TYPE A
- CULVERT PIPE CHECK
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW
- INLET PROTECTION
- A B C INLET PROTECTION TYPE

EXISTING R/W

EXISTING R/W

N

MATCH LINE 401

SI

S. LANSING AVE

STH 42/57

R/L STH 42/57 NB

STH 42/57

SI

EXISTING R/W

S. LANSING AVE

EXISTING R/W

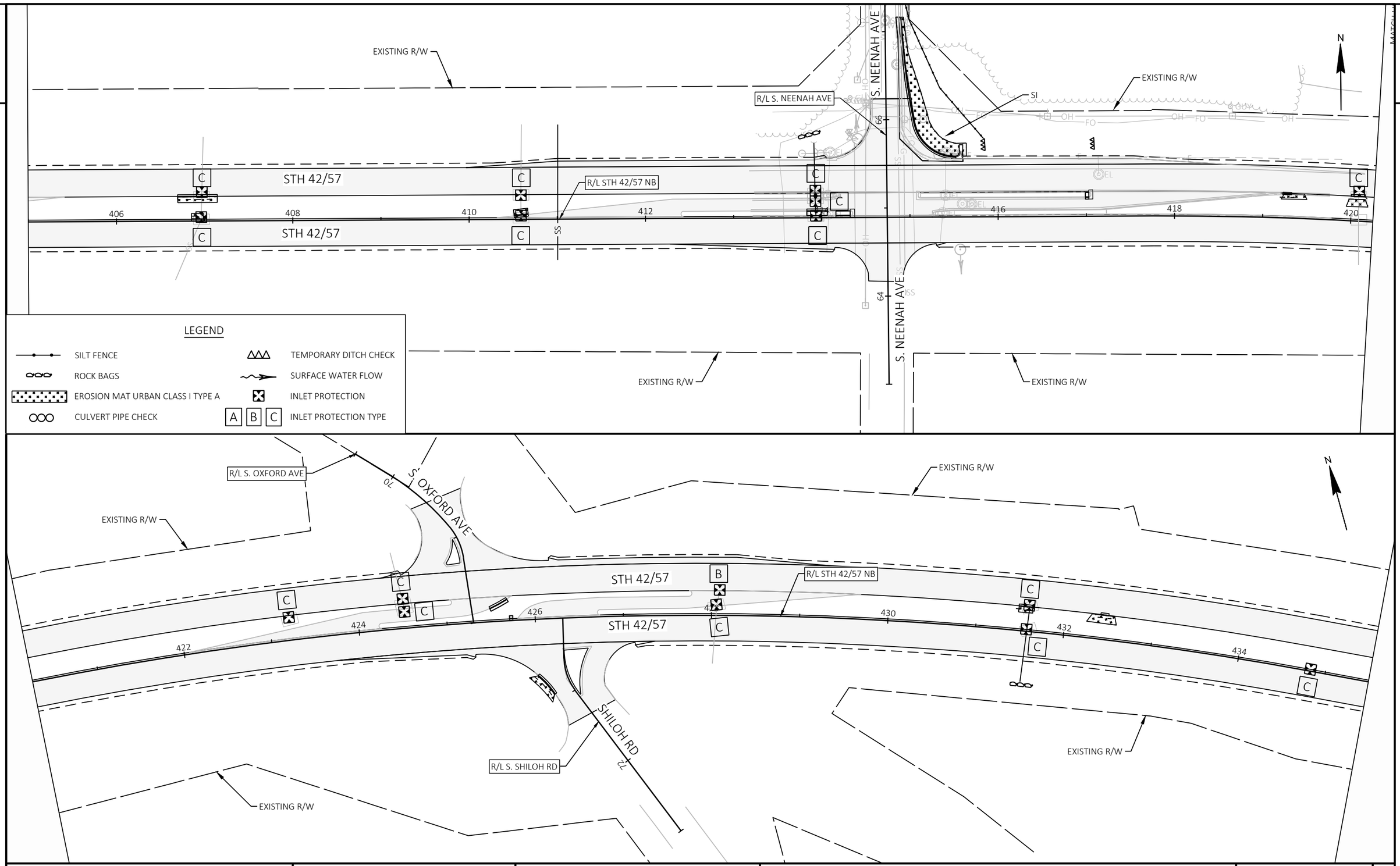
9+75

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 45	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022010-ec

PLOT DATE : 10/29/2021 9:50 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

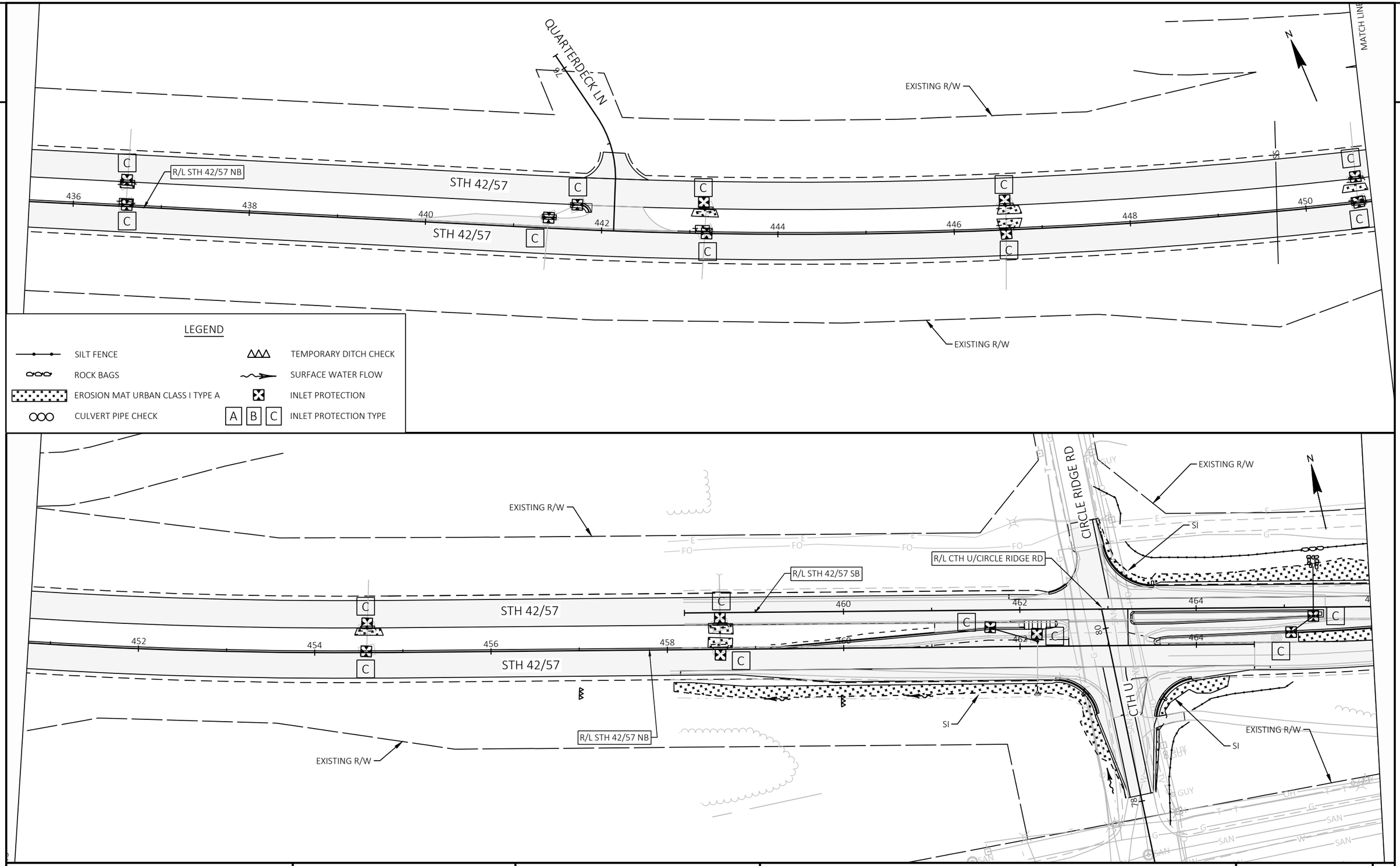


PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 46	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022011-ec

PLOT DATE : 10/29/2021 9:52 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

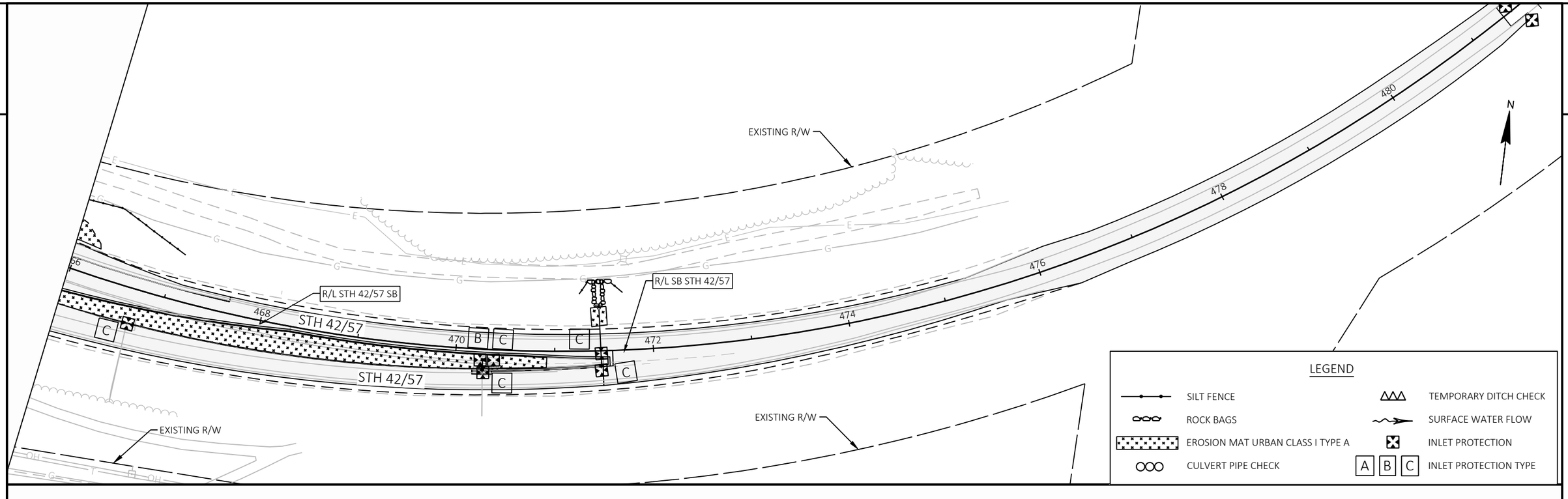
2



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 47	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022012-ec

PLOT DATE : 10/29/2021 9:54 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	EROSION CONTROL	SHEET 48	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022013-ec

PLOT DATE : 10/29/2021 9:54 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

N

RELAID STORM SEWER 12-INCH
INSTALL JOINT TIES

354+74.94'NB'
-80.94' LT

354+75.02'NB'
-52.83' LT

INL

STH 42 SB

355+00'NB'

R/L STH 42 NB

STH 42 NB

INL

INL

CULVERT PIPE PATCHING
PATCH PIPE OBVERT OF 29x45 RCHE

372+71.17'NB'
-68.05' LT

STH 42 SB

REPLACE 8FT 12-INCH SSPRC CLASS IV

374+39.47'NB'
-31.49' LT

CONCRETE
COLLAR REQ'D

374+39.72'N
-23.50' LT

INL

372+18.91'NB'
17.57' RT

373+00 'NB'

REPLACE 8FT 12-INCH SSPRC CLASS IV

R/L STH 42 NB

STH 42 NB

CONCRETE
COLLAR REQ'D

372+19.88'NB'
25.51' RT

INL

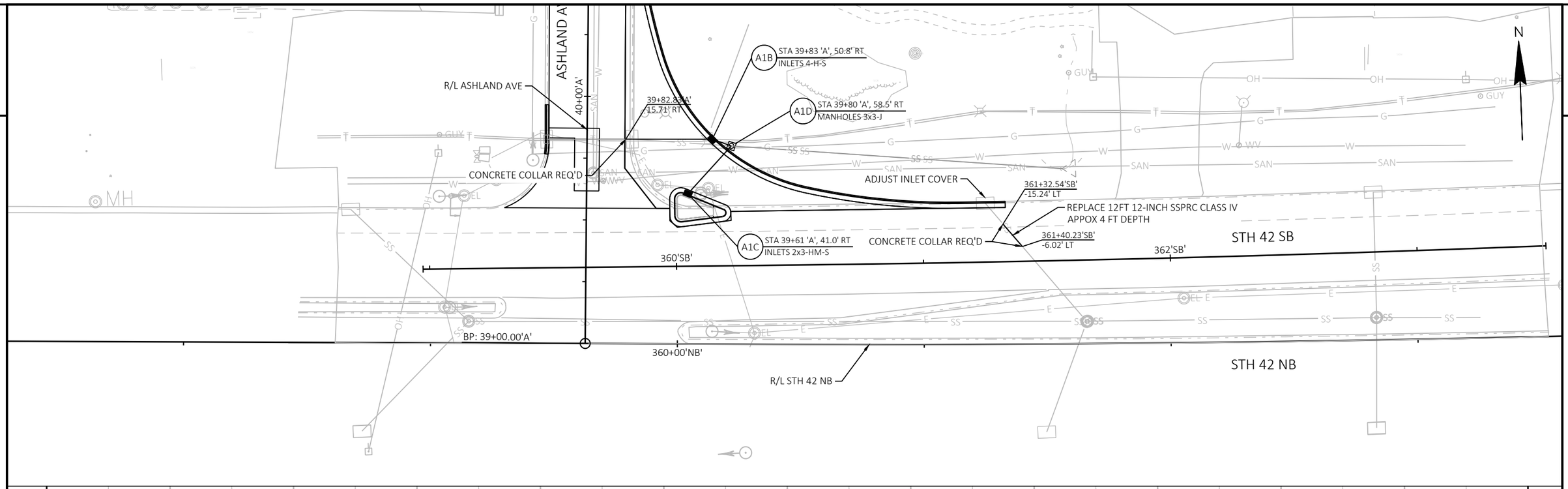
MH

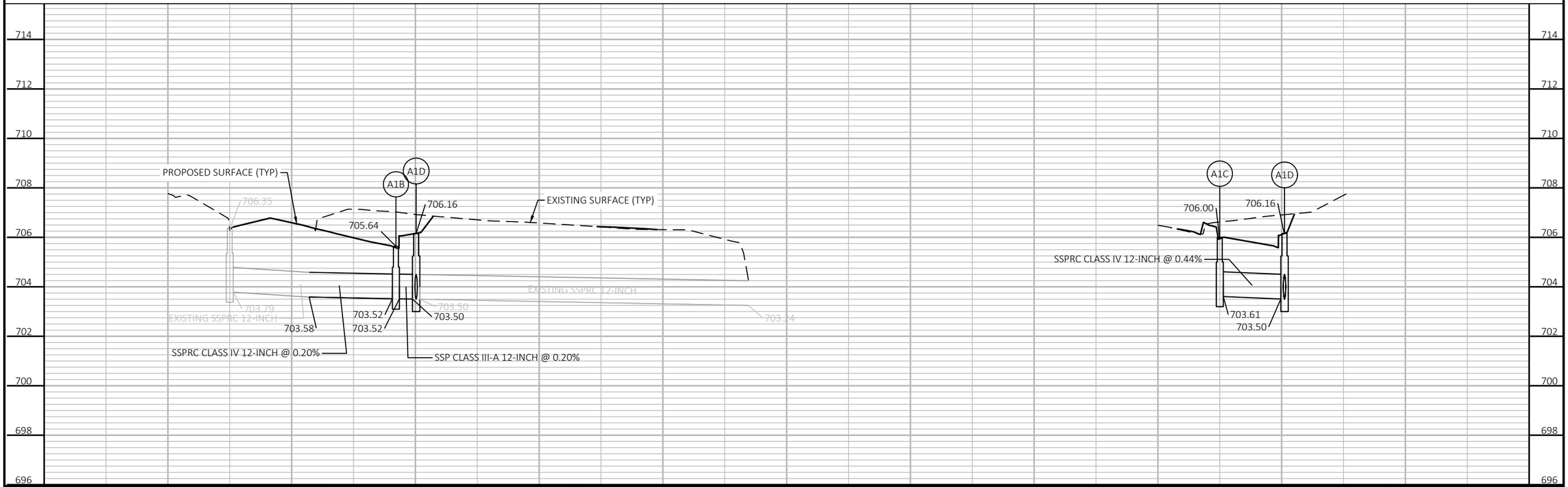
PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	STORM SEWER PLAN	SHEET 49	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022501-ss

PLOT DATE : 4/30/2021 3:03 AM PLOT BY : KIRST, DOUGLAS P PLOT NAME : PLOT SCALE : 1 IN:40 FT

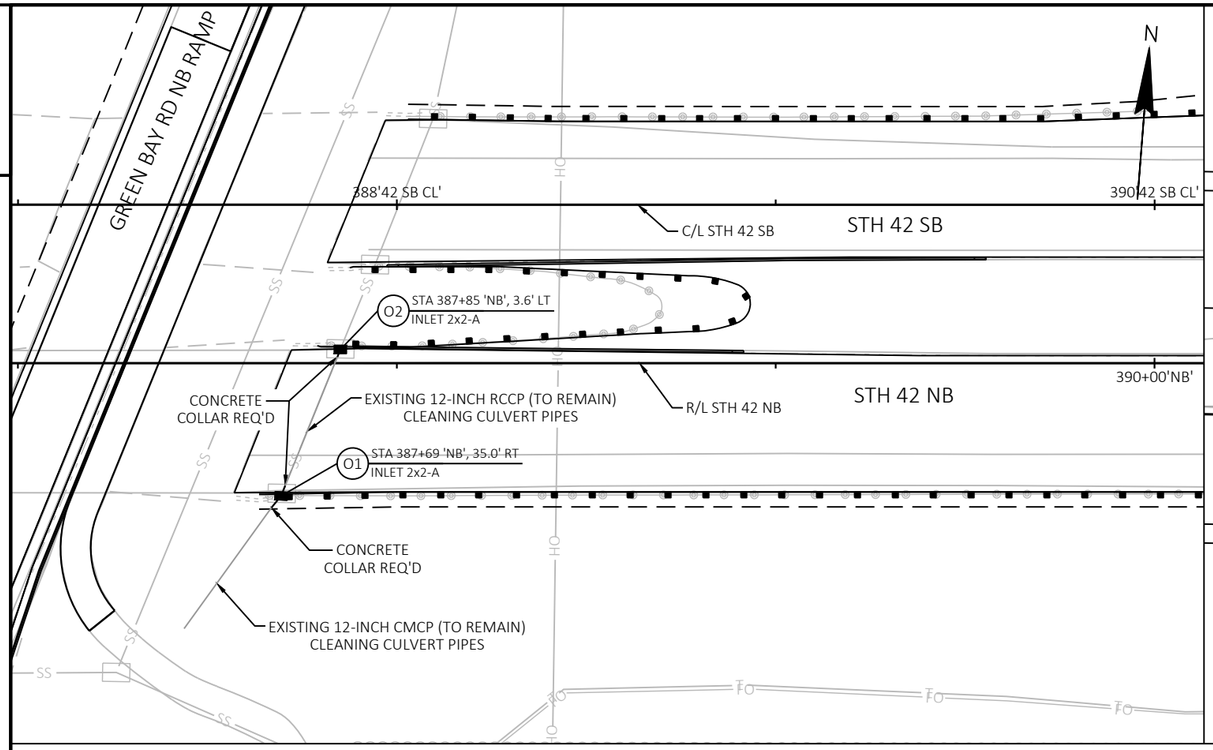
WISDOT/CADDS SHEET 42

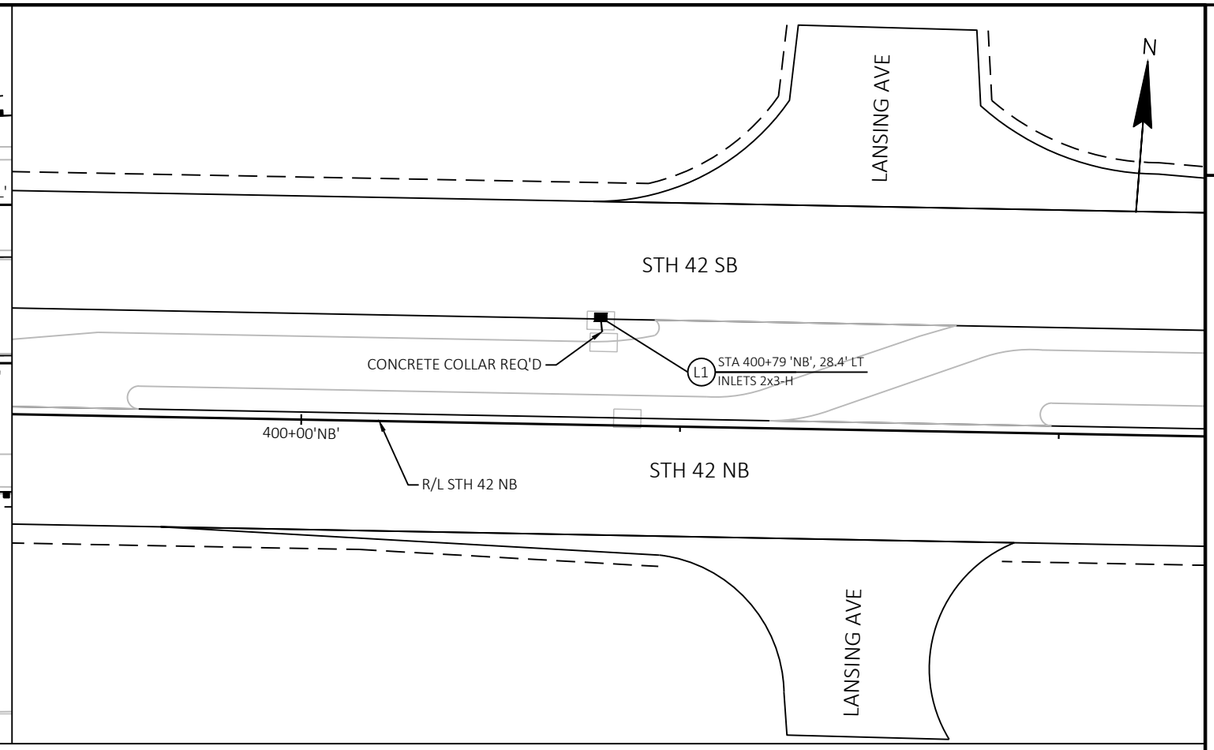


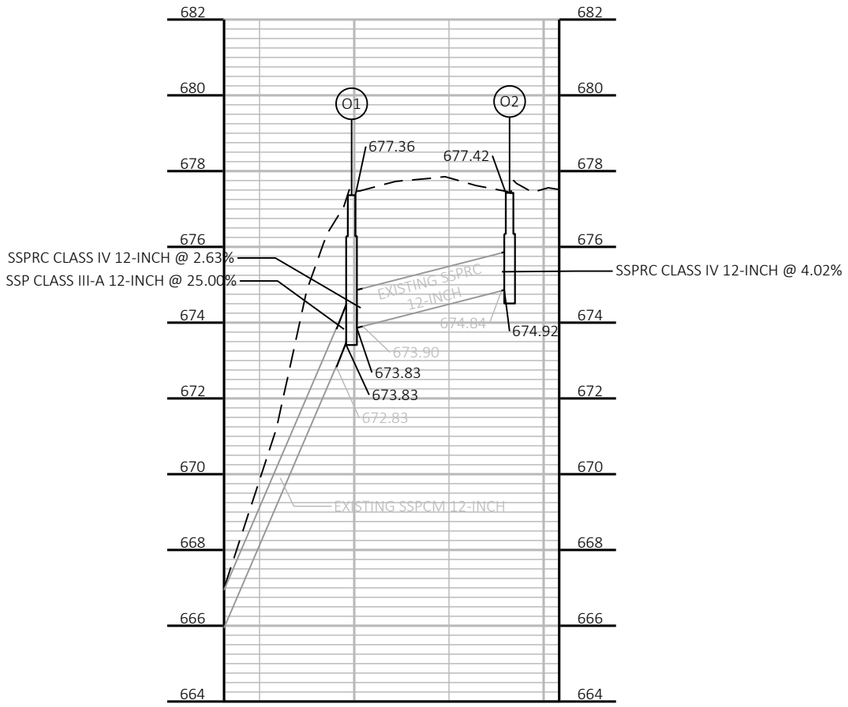


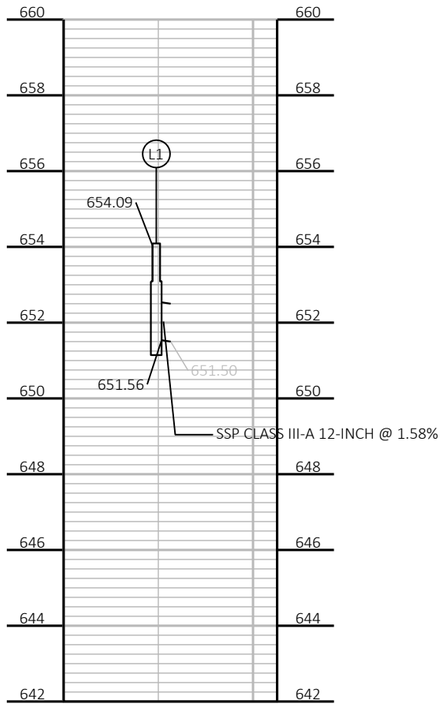
PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	STORM SEWER	SHEET 50	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022502-ss
PLOT DATE : 4/30/2021 3:04 AM
PLOT BY : KIRST, DOUGLAS P
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41









PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	STORM SEWER	SHEET 51	E

2

459+00'SB' 460+00'SB' STH 42 SB 461+00'SB' R/L STH 42 SB 462+00'SB' 463+00'SB' 464+00'SB' 465+00'SB'

STA 461+67 'NB', 21.0' LT
INLETS 2x3-H-S
U1A

460+00'NB'

STH 42 NB

R/L STH 42 NB

STA 462+20 'NB', 5.5' LT
MANHOLES 3x3-J
U1B

CONCRETE COLLAR REQ'D

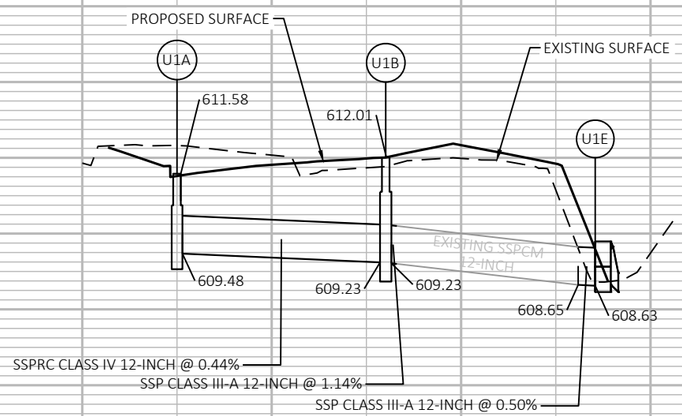
462+19.34'NB'
45.33' RT

CONCRETE COLLAR REQ'D

STA 462+19 'NB', 49.8' RT
APRON ENDWALLS FOR CULVERT PIPE 12-INCH
U1E

CTH U

N

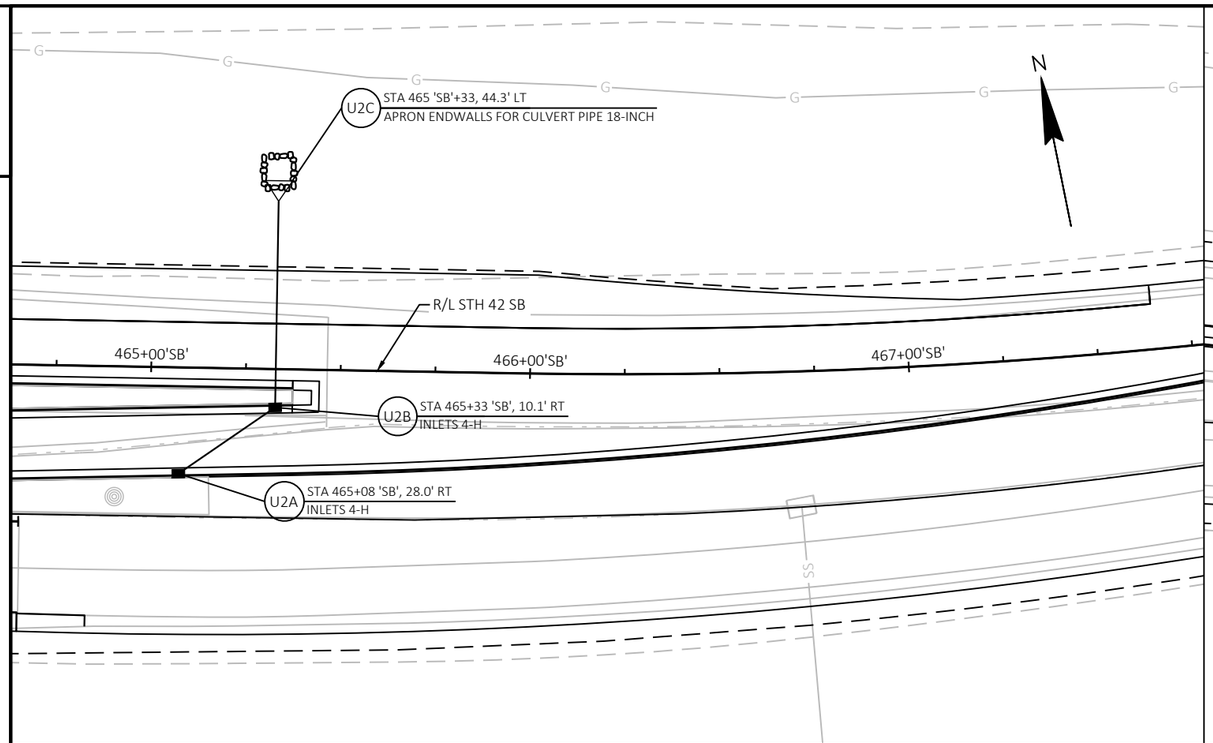


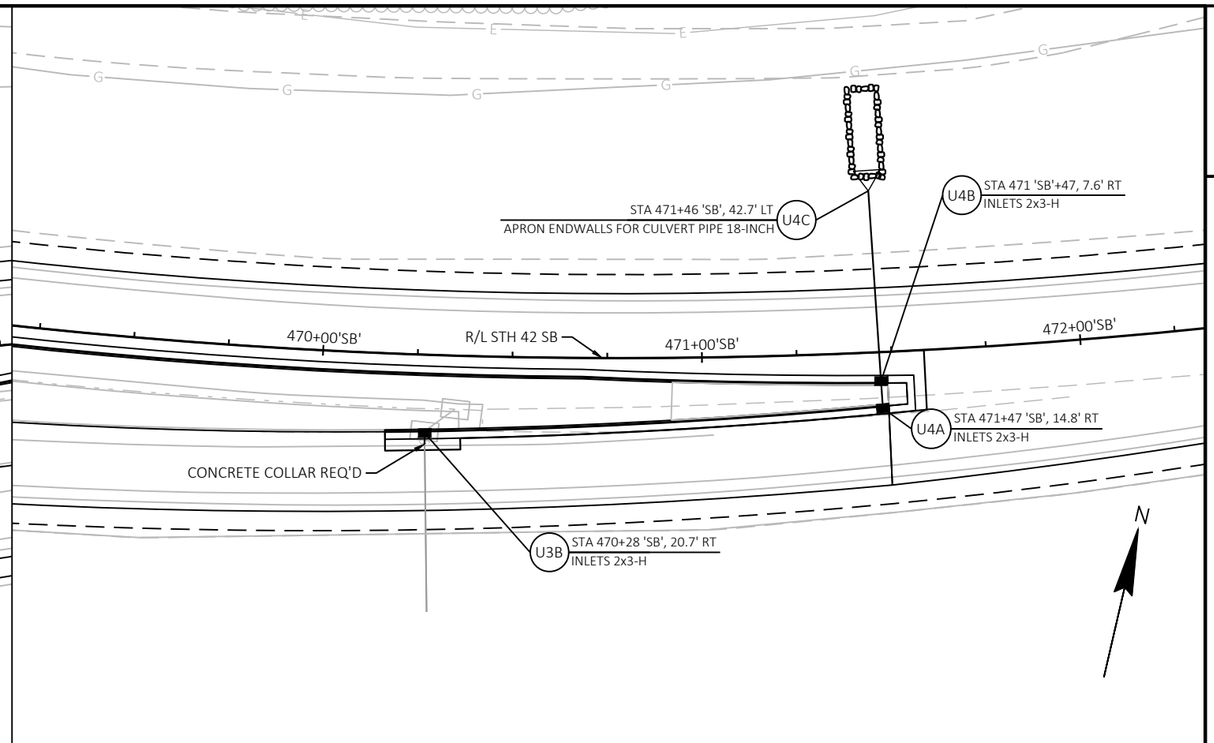
618 616 614 612 610 608 606 604 602 600

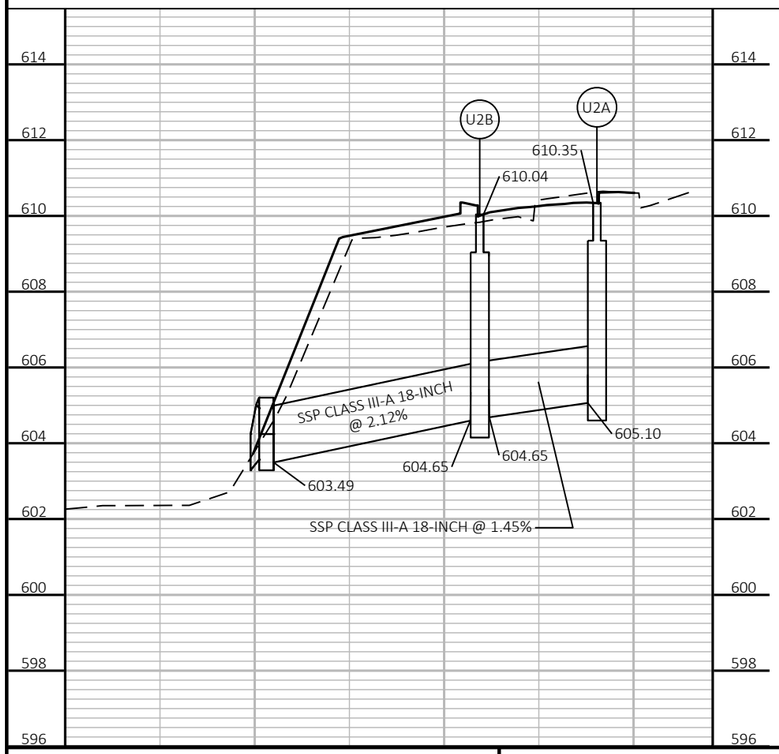
PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	STORM SEWER	SHEET 52	E

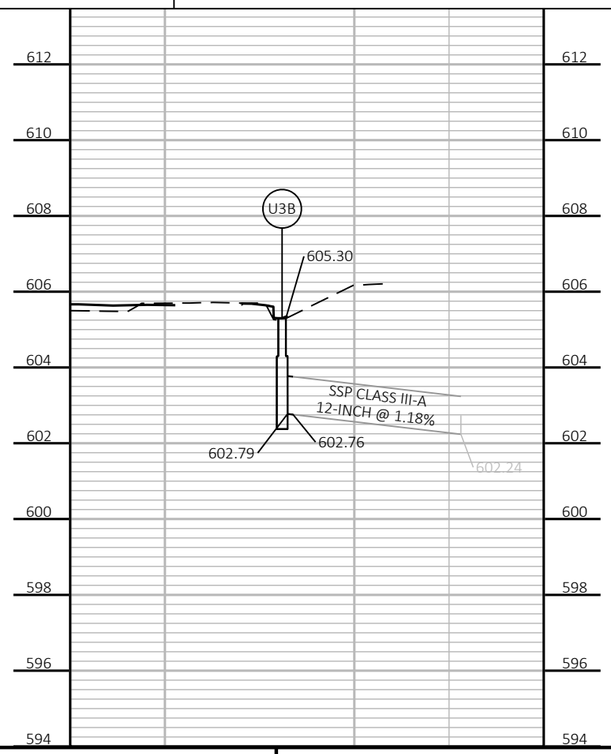
FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022504-ss

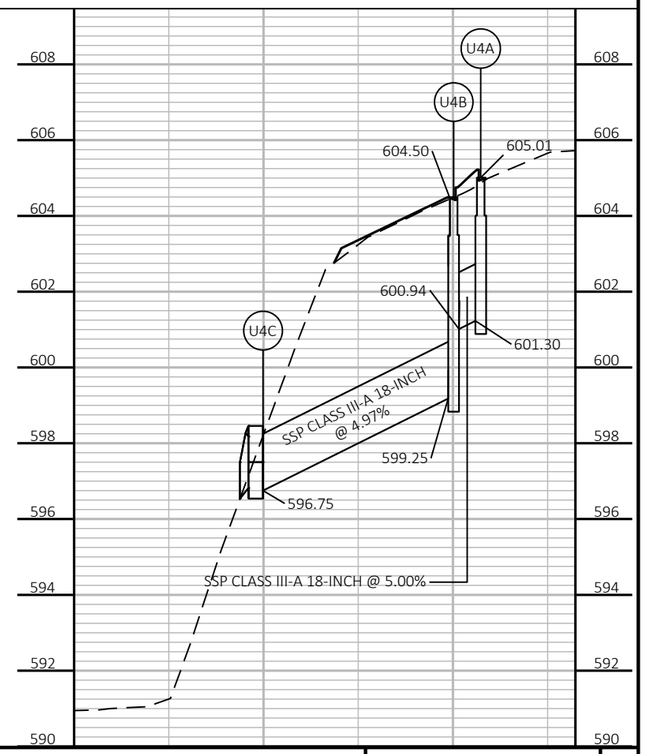
PLOT DATE : 4/30/2021 3:05 AM PLOT BY : KIRST, DOUGLAS P PLOT NAME : PLOT SCALE : 1 IN:40 FT











PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	STORM SEWER	SHEET 53	E

SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

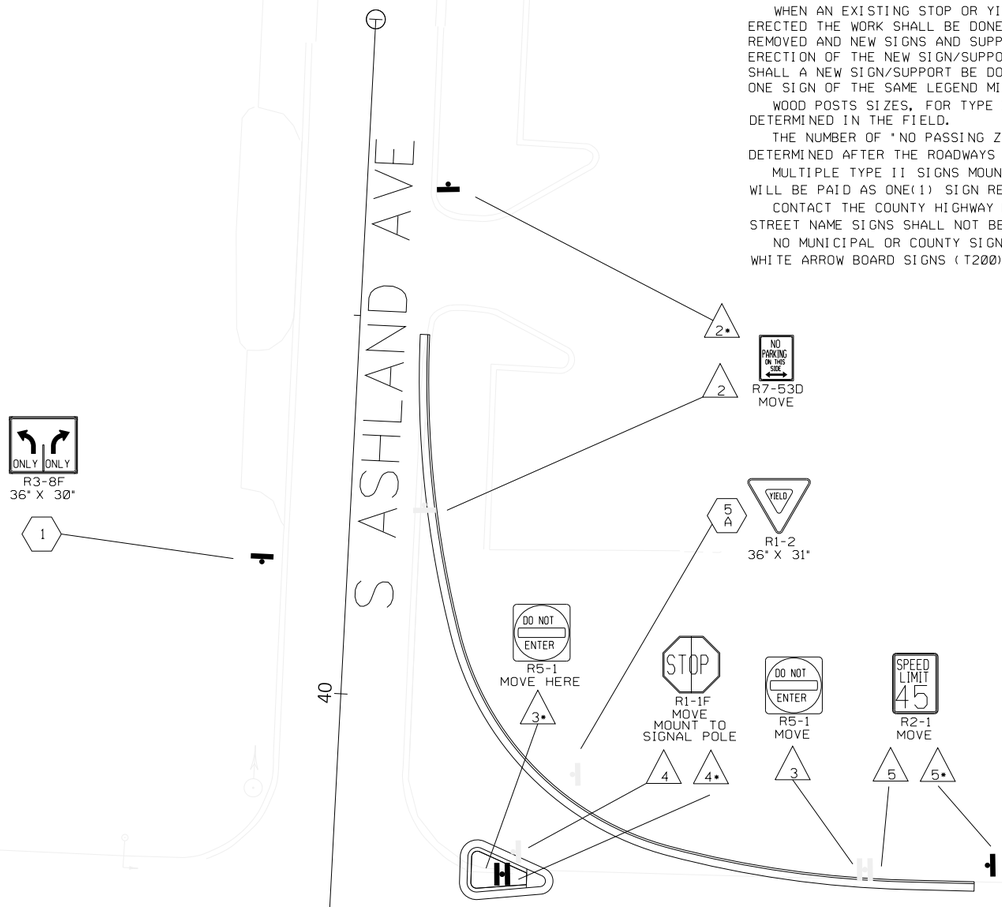
WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE(1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

NO MUNICIPAL OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS. WHITE ARROW BOARD SIGNS (T200) SIGNS SHALL REMAIN. CONTACT LOCAL COUNTY FOR REMOVAL/REINSTALLATION IF NEEDED.



360

360

STH 42/57

SIGN-REMOVE EXISTING

SIGN-PLACE NEW

1 SIGN-MOVE (EXISTING LOCATION)

1• SIGN-MOVE (NEW LOCATION)

PROJECT NO:4430-19-71	HWY:STH 42	COUNTY:DOOR	PERMANENT SIGNING	SHEET	E

SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

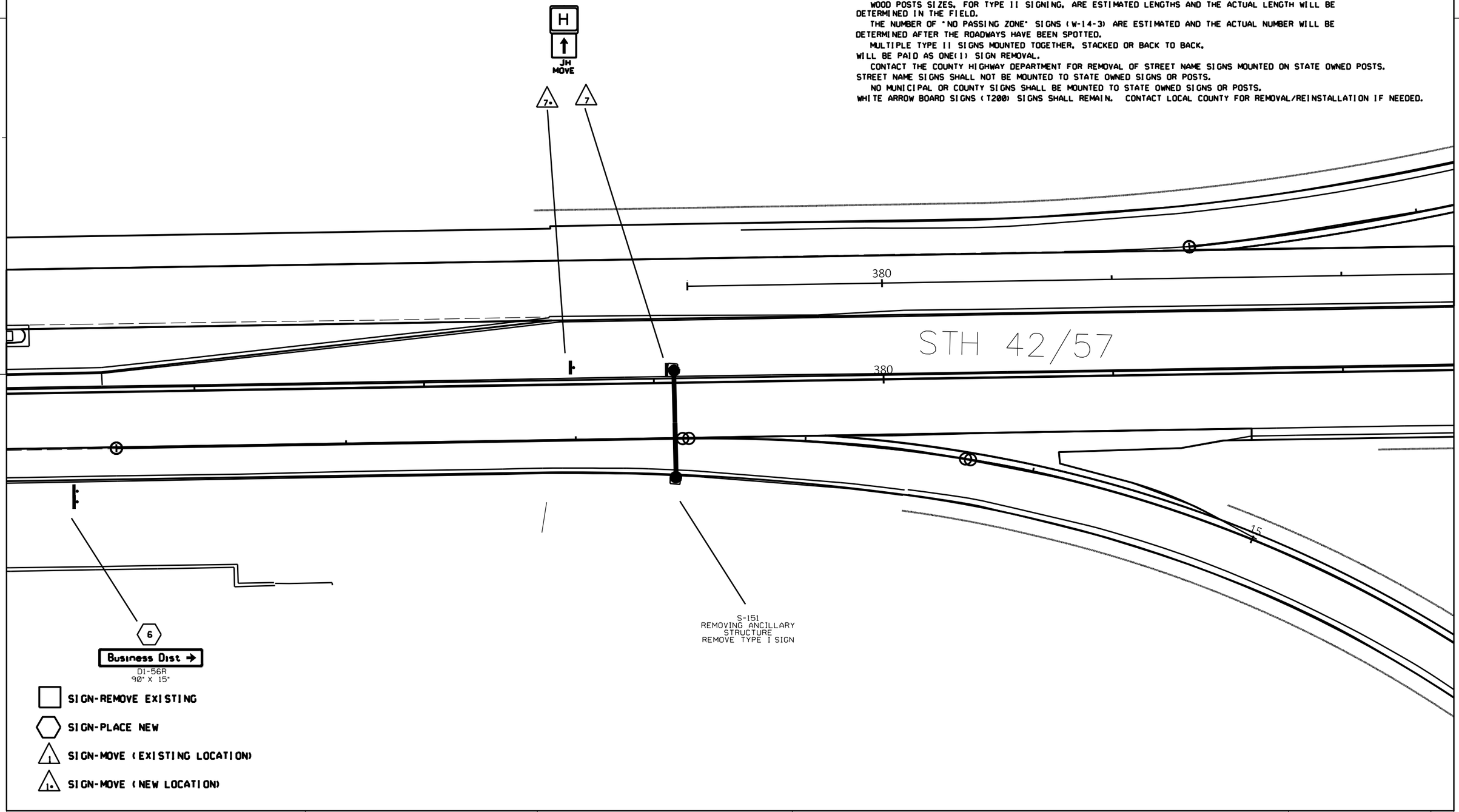
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PROJECT NO:4430-19-71	HWY:STH 42	COUNTY:DOOR	PERMANENT SIGNING	SHEET 55	E

SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

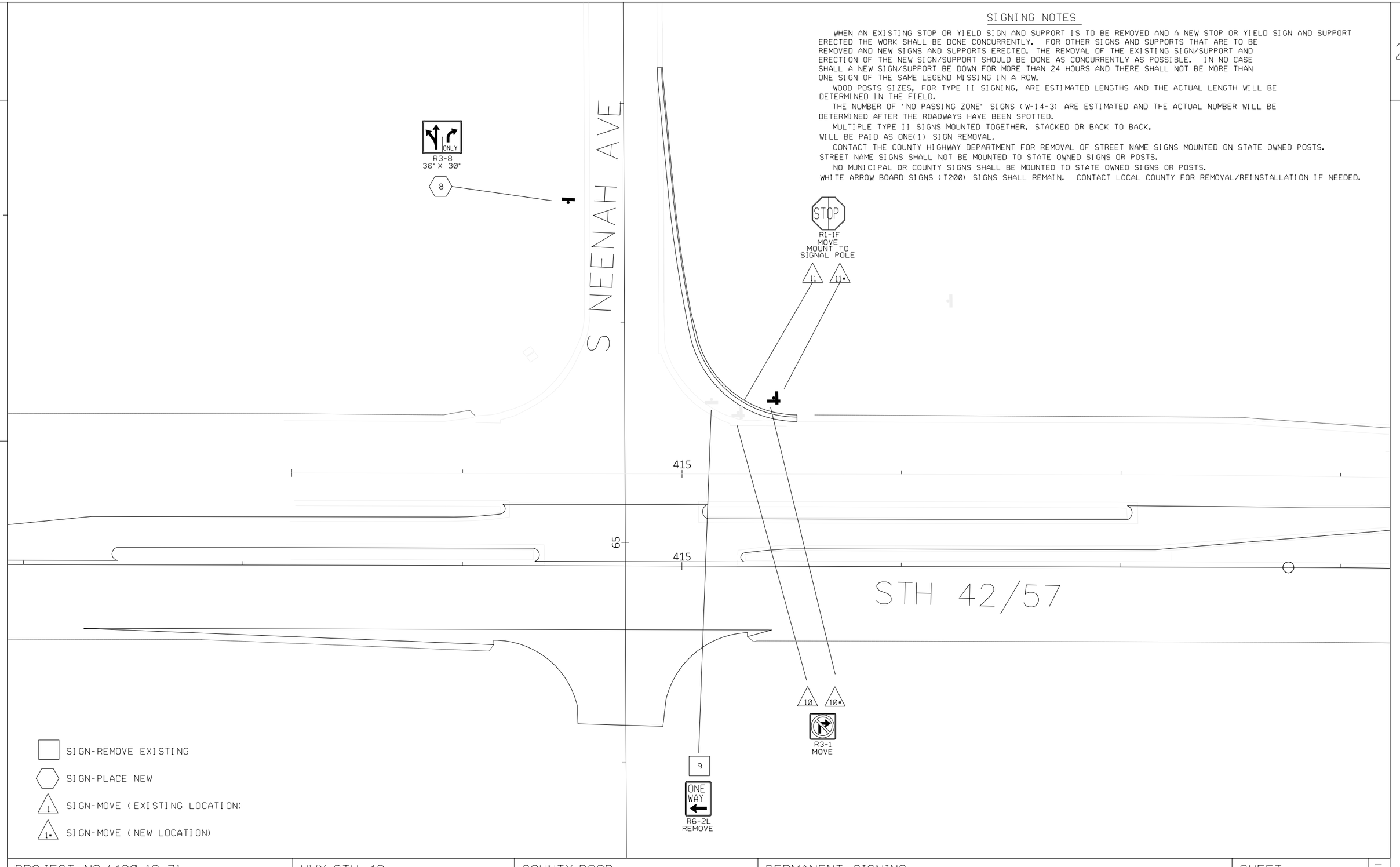
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PROJECT NO:4430-19-71	HWY:STH 42	COUNTY:DOOR	PERMANENT SIGNING	SHEET	E

FILE NAME :$$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

WISDOT/CADDS SHEET 42

2

460

460

80

465

STH 42/57

CTH U

H

12•

12

R5-1
MOVE

W4-2L
MOVE

13
A•

13
A

R4-7
MOVE

H

13

13•

R5-1
MOVE

COUNTY
U

J13-1
MOVE

14

STOP

R1-1
30" X 30"

15

W12-1D
24" X 24"

R3-1
MOVE

18

18•

DO NOT
ENTER

R5-1
30" X 30"

19

R4-7
MOVE

20

20•

16

16•

ONE WAY

R6-1R
MOVE

STOP

R1-1
MOVE

DIVIDED
HIGHWAY

R6-3
MOVE

17

17•

42

57

JV
MOVE

21

W12-1D
24" X 24"

SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

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SIGN-REMOVE EXISTING

SIGN-PLACE NEW

1 SIGN-MOVE (EXISTING LOCATION)

1• SIGN-MOVE (NEW LOCATION)

PROJECT NO:4430-19-71	HWY:STH 42	COUNTY:DOOR	PERMANENT SIGNING	SHEET	E

SIGNING NOTES

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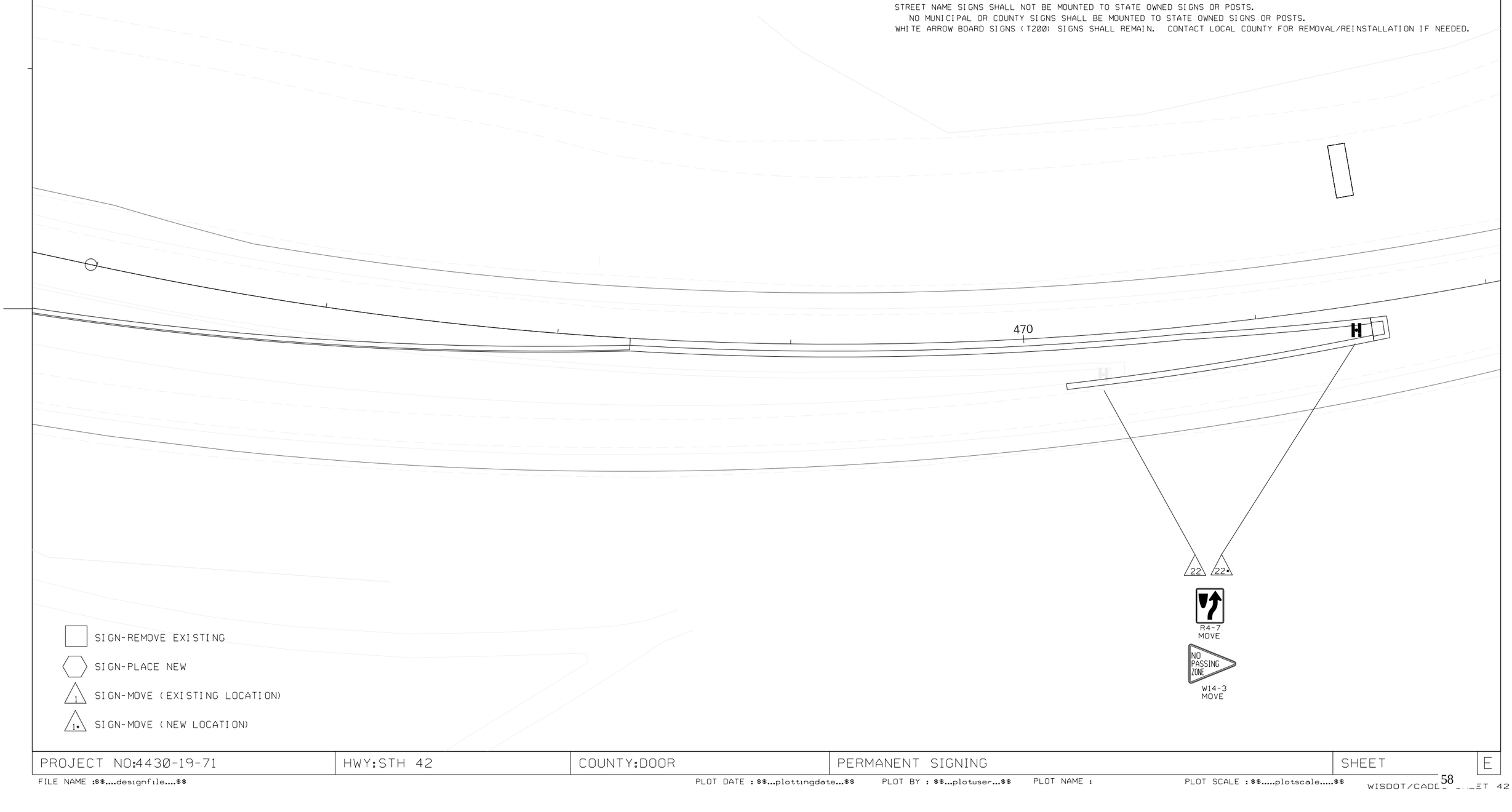
WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

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PROJECT NO:4430-19-71	HWY:STH 42	COUNTY:DOOR	PERMANENT SIGNING	SHEET	E

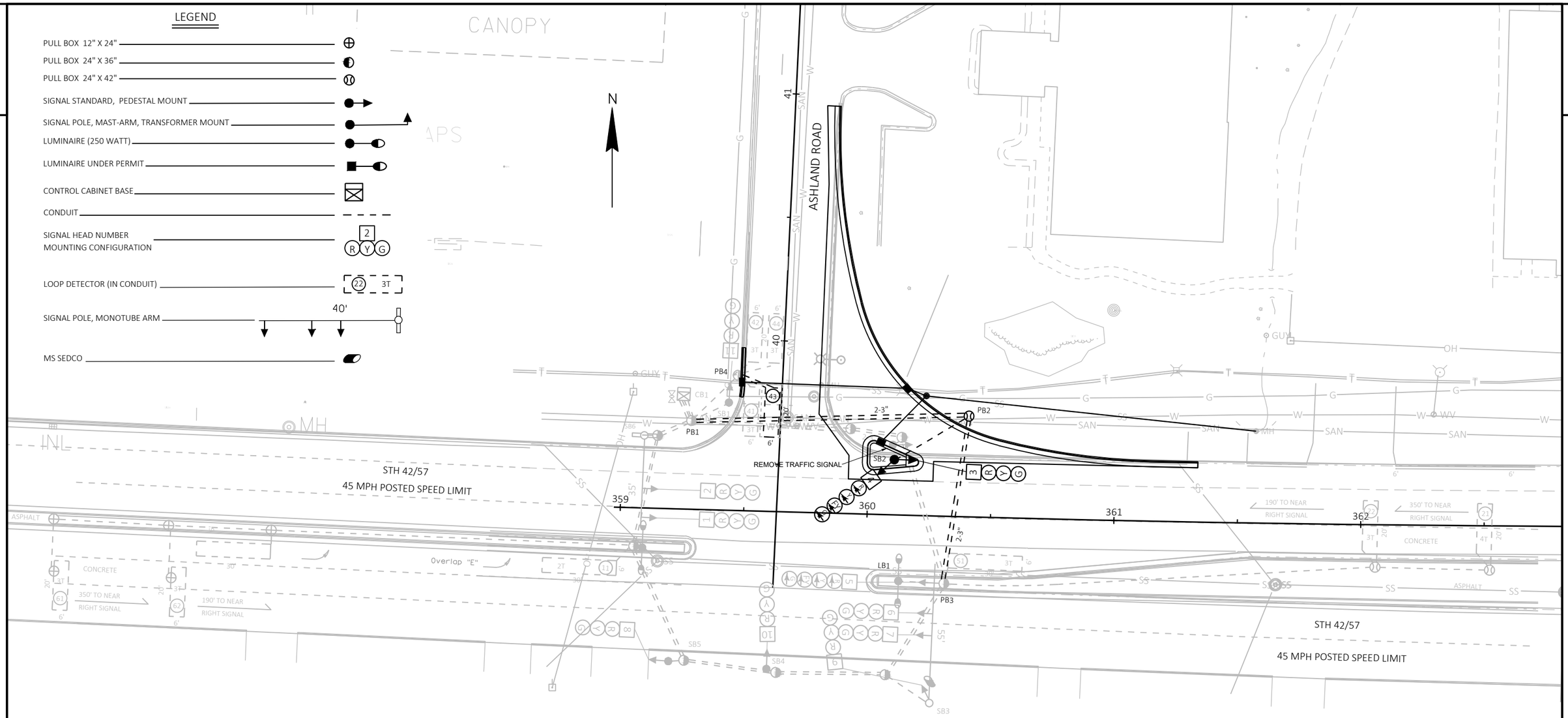
FILE NAME :$$....designfile....$$ PLOT DATE : $$...plottingdate...$$ PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : $$.....plotscale.....$$

2

2

LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 36"
- PULL BOX 24" X 42"
- SIGNAL STANDARD, PEDESTAL MOUNT
- SIGNAL POLE, MAST-ARM, TRANSFORMER MOUNT
- LUMINAIRE (250 WATT)
- LUMINAIRE UNDER PERMIT
- CONTROL CABINET BASE
- CONDUIT
- SIGNAL HEAD NUMBER MOUNTING CONFIGURATION (2 / R Y G)
- LOOP DETECTOR (IN CONDUIT) (22, 3T)
- SIGNAL POLE, MONOTUBE ARM (40')
- MS SEDCO



CONFIGURATION WITH HEAD NUMBERS	
3-V (R, Y, G)	1, 2, 3 6, 7, 8 9, 10, 11 15
4-VLFY (R, Y, FY, G)	4, 5

MONOTUBE STRUCTURE NUMBERS	
SB3	S-15-0023
SB6	S-15-0024

NOTE:

HEAD #4 REQUIRE A TUNNEL VISOR
SB3 - Rock at 2.5', Drilled shaft to 10',
No wingwalls (Approved by Central Office)
SB6 - Rock at 4', Drilled shaft to 12.5'

LOOP 43 WAS CUT SO TEMPORARILY REPLACE WITH MS SEDCO

GENERAL NOTE

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

REVISION				
Rev. No.	ADDED RIGHT TURN TRUCK RADIUS IN NE CORNER OF INTERSECTION			
	APPROVAL RECOMMENDED		APPROVED	
3	REGION		CENTRAL OFFICE	
	Date	By	Date	By
	02/18/21	RPA	02/18/21	JRI
8-9-19	ADDED MS SEDCO ON SB3 FOR LOOP 43			
8-15-17	NEW ECONOLITE TS 2 CABINET AND MONOTUBES AND ADD FYA			

TRAFFIC CONTROL SIGNAL

STH 42/57 & ASHLAND AVENUE
CITY OF STURGEON BAY
DOOR COUNTY

SIGNAL NO. 15-0831 CONTROLLER TYPE: Cobalt

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 10-19-2000 BRIAN S. BROCK, REGION TRAFFIC ENGINEER

APPROVED
Date 10-30-2000 WILLIAM C. GILDING, STATE TRAFFIC ENGINEER

REGION CONTACT: RJS
DESIGNED BY: RJS
REVISED BY: RJS

PROJECT NO: 4430-19-00	HWY: STH 42/57	COUNTY: DOOR	TRAFFIC CONTROL SIGNAL - S15-0831-UPDATE	SHEET 59	E

FILE NAME : F:\D3_TRAFFI\S15-0831 (42&57 & ASHLAND)\S15-0831-UPDATE.DWG
LAYOUT NAME - S15-0831-tcs-update
PLOT DATE : 3/18/2021 10:13 AM PLOT BY : TALCOTT, MATTHEW J PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

CONFIGURATION WITH HEAD NUMBERS		
3-V R Y G	3, 4, 5 8, 9, 10 11, 13, 14 16	3-H R Y G 12, 15	4-VLFY R Y FY G	1, 2 6, 7

N

NOTE:

HEAD #1 & 6 REQUIRE A TUNNEL VISOR
SB4 - Rock at 11', Drilled shaft to 13',
SB8 - Rock at 11.5', Drilled shaft to 13.5'

SOUTH NEENAH AVENUE

REMOVE TRAFFIC SIGNAL

REMOVE TRAFFIC SIGNAL

CONDUIT SPLICE

STH 42/57
45 MPH POSTED SPEED LIMIT

STH 42/57
45 MPH POSTED SPEED LIMIT

EAST WALNUT STREET

SOUTH NEENAH AVENUE

LEGEND

- PULL BOX 12" X 24"
- PULL BOX 24" X 36"
- PULL BOX 24" X 42"
- SIGNAL STANDARD, PEDESTAL MOUNT
- SIGNAL POLE, MAST-ARM, TRANSFORMER MOUNT
- LUMINAIRE (250 WATT)
- LUMINAIRE UNDER PERMIT
- CONTROL CABINET BASE
- CONDUIT
- SIGNAL HEAD NUMBER MOUNTING CONFIGURATION (2 / R Y G)
- LOOP DETECTOR (IN CONDUIT) (22 3T)
- SIGNAL POLE, MONOTUBE ARM 40'

MONOTUBE STRUCTURE NUMBERS	
SB4	S-15-0019
SB8	S-15-0020

GENERAL NOTE

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.

REVISION				
Rev. No.	ADDED RIGHT TURN TRUCK RADIUS IN NE CORNER OF INTERSECTION			
	APPROVAL RECOMMENDED		APPROVED	
2	REGION		CENTRAL OFFICE	
	Date	By	Date	By
	2/18/21	RJS	2/18/21	JRI
7-15-17	NEW ECONOLITE TS2 CABINET ADD MONOTUBES AND ADD FYA			

TRAFFIC CONTROL SIGNAL

STH 42/57 & SOUTH NEENAH AVE
CITY OF STURGEON BAY
DOOR COUNTY

SIGNAL NO. 15-0850 CONTROLLER TYPE: Cobalt

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
Date 5-7-2001 ROBERT J. SCHUURMANS, REGION TRAFFIC ENGINEER

APPROVED
Date 5-11-2001 WILLIAM C. GILDING, STATE TRAFFIC ENGINEER

REGION CONTACT: RJS
DESIGNED BY: RJS
REVISED BY: RJS

PROJECT NO: 4430-19-00	HWY: STH 42/57	COUNTY: DOOR	TRAFFIC CONTROL SIGNAL - S15-0850-UPDATE	SHEET 60 E

FILE NAME : F:\D3_TRAFFI\S15-0850 (42&57 & NEENAH)\S15-0850-UPDATE.DWG
LAYOUT NAME - S15-0850-tcs-update
PLOT DATE : 3/18/2021 10:06 AM PLOT BY : TALCOTT, MATTHEW J PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

N

40+95.86 'A'
16.02' RT

41+00 'A'

40+50.11 'A'
-6.03' LT

40+50.21 'A'
3.97' RT

40+31.56 'A'
18.74' RT

YELLOW MARKING 4-INCH

WHITE MARKING 4-INCH

40+00 'A'

15' (TYP.)

WHITE MARKING 12-INCH DIAGONAL

39+96.30 'A'
29.36' RT
ARC MIDPOINT

EXISTING R/W

EXISTING R/W

360+20.39 'SB'
-39.27' LT

4' MIN

WHITE MARKING 4-INCH

39+72.41 'A'
4.76' RT

14'

39+59.88 'A'
96.29' RT
ARC MIDPOINT

361+01.48 'SB'
-22.00' LT

361+15.55 'SB'
-22.00' LT

362+48.77 'SB'
-12.00' LT
BEGIN TAPER

R/L ASHLAND AVE

CHANNELIZING 8-INCH

361+01.48 'SB'
-12.26' LT

R/L STH 42 SB

359+00 'SB'

360+00 'SB'

361+00 'SB'

STH 42 SB

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PAVEMENT MARKING	SHEET 61	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024501-pm

PLOT DATE : 4/29/2021 6:08 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

62+00

S. LANSING AVE

R/L LANSING AVE

61+00

~R52'

DOUBLE YELLOW MARKING 4-INCH

STH 42 SB

R/L STH 42 NB

399+00 'NB'

400+00 'NB'

401+00 'NB'

60+00

402+00 'NB'

403+00 'NB'

404+00 'NB'

STH 42 NB

DOUBLE YELLOW MARKING 4-INCH

~R52'

R/L LANSING AVE

59+00

S. LANSING AVE

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PAVEMENT MARKING	SHEET 62	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024502-pm

PLOT DATE : 4/29/2021 6:08 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

CIRCLE RIDGE RD

R/L CIRCLE RIDGE RD

82+00 'CI'

R/L STH 42 SB

462+00 'SB'

463+00 'SB'

464+00 'SB'

465+00 'SB'

466+00 'SB'

467+00 'SB'

PC: 465+97.36

3-FT SKIPS

3-FT SKIPS

80+00 'U'

462+00 'NB'

463+00 'NB'

464+00 'NB'

R/L STH 42 NB

79+00 'U'

R/L CTH U

CTH U

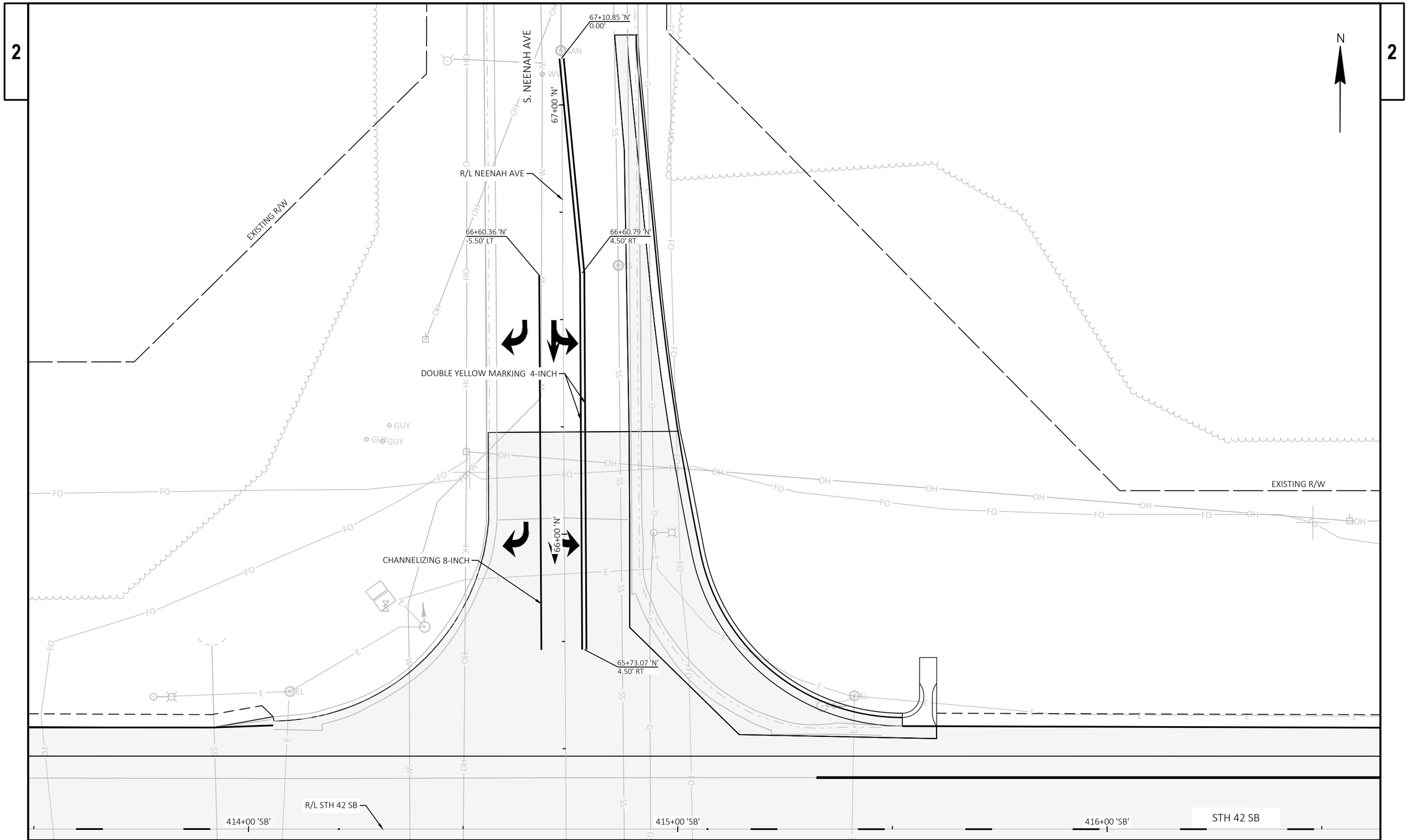
N

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PAVEMENT MARKING	SHEET 63	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024504-pm

PLOT DATE : 4/29/2021 6:09 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PAVEMENT MARKING	SHEET 64	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024503-pm

PLOT DATE : 4/29/2021 6:09 PM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL - PROJECT OVERVIEW

NOTES: REFER TO SPECIAL PROVISIONS FOR DETAILED INFORMATION.
IN GENERAL:

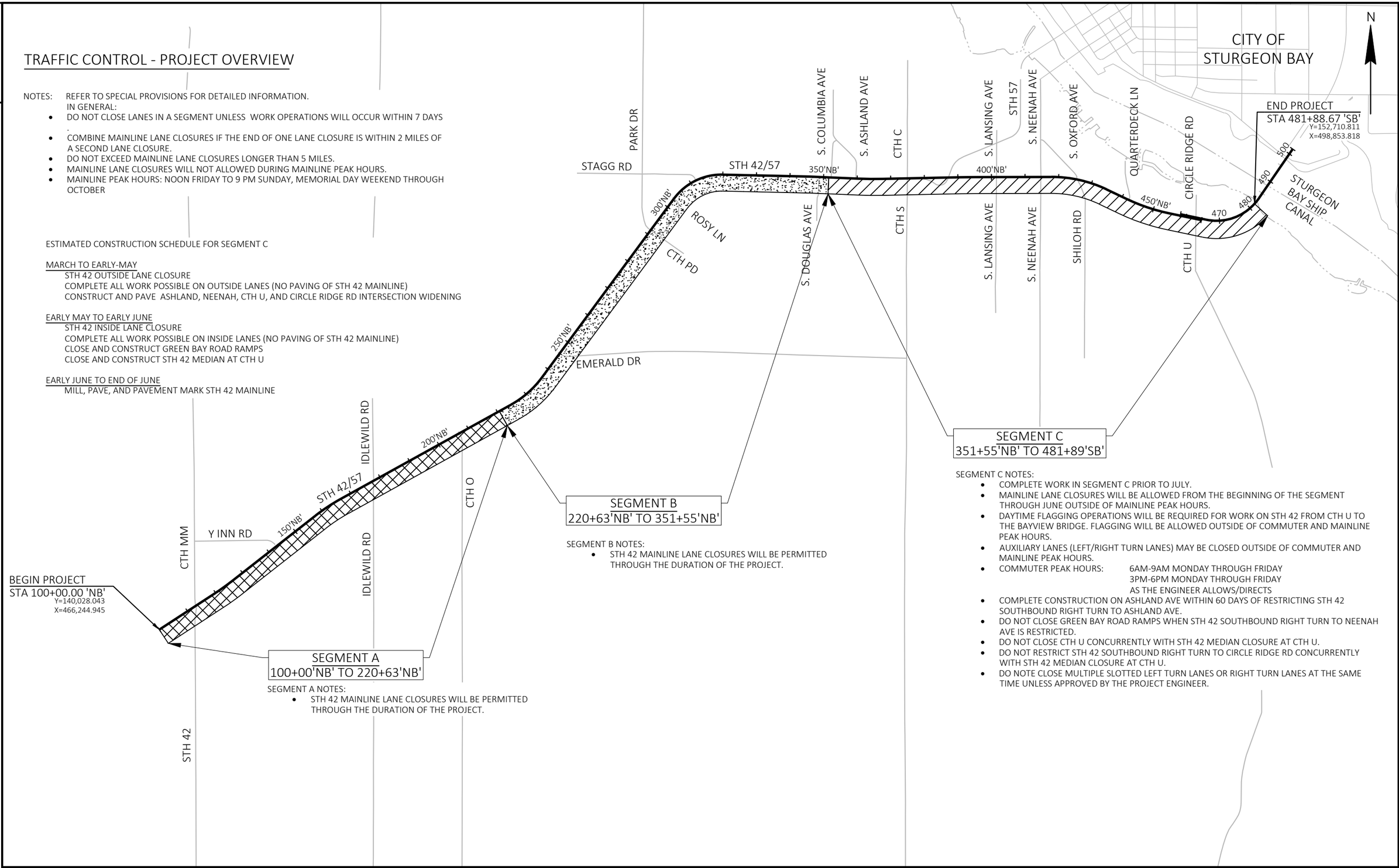
- DO NOT CLOSE LANES IN A SEGMENT UNLESS WORK OPERATIONS WILL OCCUR WITHIN 7 DAYS .
- COMBINE MAINLINE LANE CLOSURES IF THE END OF ONE LANE CLOSURE IS WITHIN 2 MILES OF A SECOND LANE CLOSURE.
- DO NOT EXCEED MAINLINE LANE CLOSURES LONGER THAN 5 MILES.
- MAINLINE LANE CLOSURES WILL NOT ALLOWED DURING MAINLINE PEAK HOURS.
- MAINLINE PEAK HOURS: NOON FRIDAY TO 9 PM SUNDAY, MEMORIAL DAY WEEKEND THROUGH OCTOBER

ESTIMATED CONSTRUCTION SCHEDULE FOR SEGMENT C

MARCH TO EARLY-MAY
STH 42 OUTSIDE LANE CLOSURE
COMPLETE ALL WORK POSSIBLE ON OUTSIDE LANES (NO PAVING OF STH 42 MAINLINE)
CONSTRUCT AND PAVE ASHLAND, NEENAH, CTH U, AND CIRCLE RIDGE RD INTERSECTION WIDENING

EARLY MAY TO EARLY JUNE
STH 42 INSIDE LANE CLOSURE
COMPLETE ALL WORK POSSIBLE ON INSIDE LANES (NO PAVING OF STH 42 MAINLINE)
CLOSE AND CONSTRUCT GREEN BAY ROAD RAMPS
CLOSE AND CONSTRUCT STH 42 MEDIAN AT CTH U

EARLY JUNE TO END OF JUNE
MILL, PAVE, AND PAVEMENT MARK STH 42 MAINLINE



SEGMENT A
100+00'NB' TO 220+63'NB'

SEGMENT A NOTES:

- STH 42 MAINLINE LANE CLOSURES WILL BE PERMITTED THROUGH THE DURATION OF THE PROJECT.

SEGMENT B
220+63'NB' TO 351+55'NB'

SEGMENT B NOTES:

- STH 42 MAINLINE LANE CLOSURES WILL BE PERMITTED THROUGH THE DURATION OF THE PROJECT.

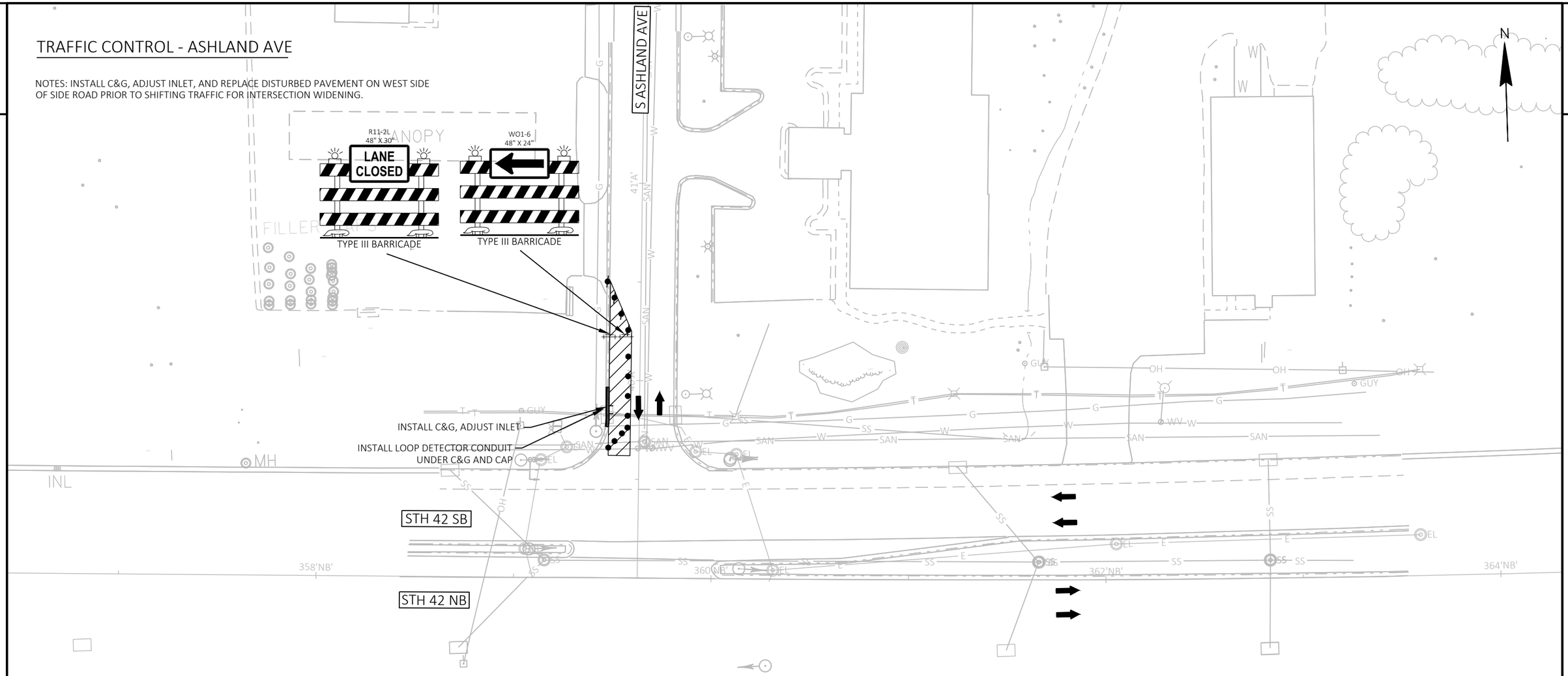
SEGMENT C
351+55'NB' TO 481+89'SB'

SEGMENT C NOTES:

- COMPLETE WORK IN SEGMENT C PRIOR TO JULY.
- MAINLINE LANE CLOSURES WILL BE ALLOWED FROM THE BEGINNING OF THE SEGMENT THROUGH JUNE OUTSIDE OF MAINLINE PEAK HOURS.
- DAYTIME FLAGGING OPERATIONS WILL BE REQUIRED FOR WORK ON STH 42 FROM CTH U TO THE BAYVIEW BRIDGE. FLAGGING WILL BE ALLOWED OUTSIDE OF COMMUTER AND MAINLINE PEAK HOURS.
- AUXILIARY LANES (LEFT/RIGHT TURN LANES) MAY BE CLOSED OUTSIDE OF COMMUTER AND MAINLINE PEAK HOURS.
- COMMUTER PEAK HOURS: 6AM-9AM MONDAY THROUGH FRIDAY
  3PM-6PM MONDAY THROUGH FRIDAY
  AS THE ENGINEER ALLOWS/DIRECTS
- COMPLETE CONSTRUCTION ON ASHLAND AVE WITHIN 60 DAYS OF RESTRICTING STH 42 SOUTHBOUND RIGHT TURN TO ASHLAND AVE.
- DO NOT CLOSE GREEN BAY ROAD RAMPS WHEN STH 42 SOUTHBOUND RIGHT TURN TO NEENAH AVE IS RESTRICTED.
- DO NOT CLOSE CTH U CONCURRENTLY WITH STH 42 MEDIAN CLOSURE AT CTH U.
- DO NOT RESTRICT STH 42 SOUTHBOUND RIGHT TURN TO CIRCLE RIDGE RD CONCURRENTLY WITH STH 42 MEDIAN CLOSURE AT CTH U.
- DO NOTE CLOSE MULTIPLE SLOTTED LEFT TURN LANES OR RIGHT TURN LANES AT THE SAME TIME UNLESS APPROVED BY THE PROJECT ENGINEER.

TRAFFIC CONTROL - ASHLAND AVE

NOTES: INSTALL C&G, ADJUST INLET, AND REPLACE DISTURBED PAVEMENT ON WEST SIDE OF SIDE ROAD PRIOR TO SHIFTING TRAFFIC FOR INTERSECTION WIDENING.



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- WORK AREA

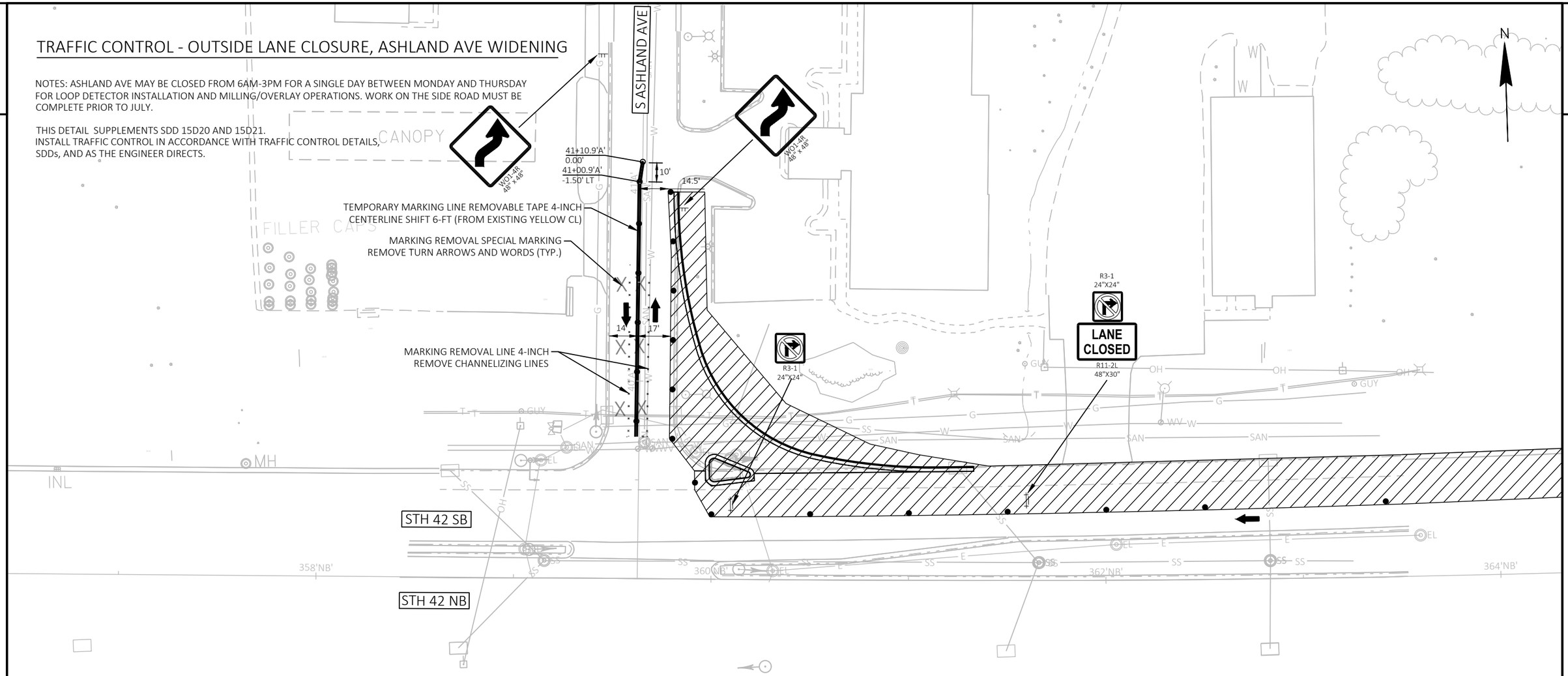
PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 66	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025002-TC.DWG
LAYOUT NAME - 025002-tc
PLOT DATE : 10/7/2021 12:16 PM
PLOT BY : MALUEG, RYAN P
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

TRAFFIC CONTROL - OUTSIDE LANE CLOSURE, ASHLAND AVE WIDENING

NOTES: ASHLAND AVE MAY BE CLOSED FROM 6AM-3PM FOR A SINGLE DAY BETWEEN MONDAY AND THURSDAY FOR LOOP DETECTOR INSTALLATION AND MILLING/OVERLAY OPERATIONS. WORK ON THE SIDE ROAD MUST BE COMPLETE PRIOR TO JULY.

THIS DETAIL SUPPLEMENTS SDD 15D20 AND 15D21.
INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH TRAFFIC CONTROL DETAILS, SDDs, AND AS THE ENGINEER DIRECTS.



LEGEND

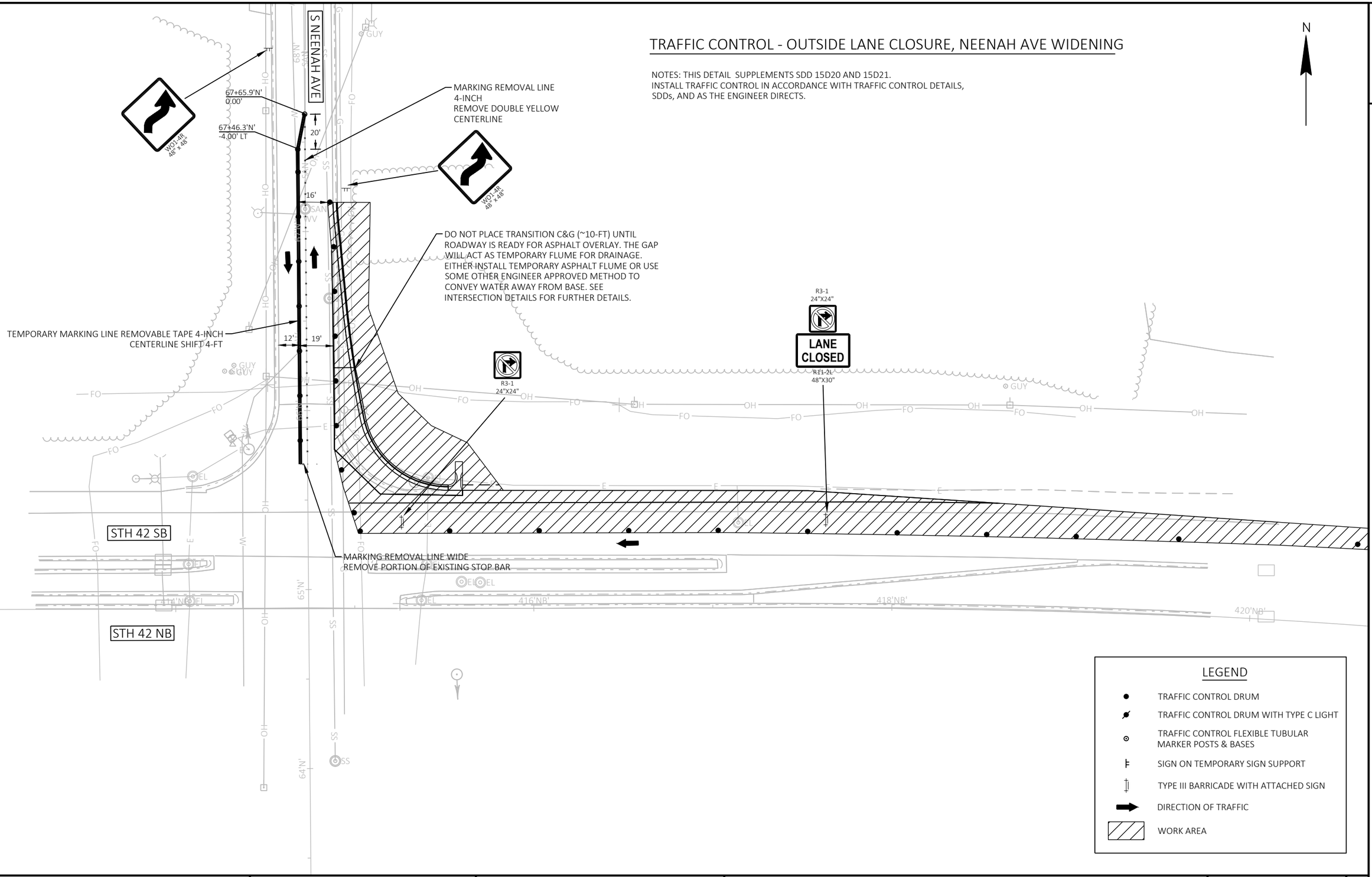
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES
- SIGN ON TEMPORARY SIGN SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 67	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025003-TC.DWG
LAYOUT NAME - 025003-tc
PLOT DATE : 10/7/2021 12:20 PM
PLOT BY : MALUEG, RYAN P
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

TRAFFIC CONTROL - OUTSIDE LANE CLOSURE, NEENAH AVE WIDENING

NOTES: THIS DETAIL SUPPLEMENTS SDD 15D20 AND 15D21.
INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH TRAFFIC CONTROL DETAILS, SDDs, AND AS THE ENGINEER DIRECTS.



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES
- SIGN ON TEMPORARY SIGN SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 68	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025003-TC.DWG
LAYOUT NAME - 025004-tc
PLOT DATE : 10/7/2021 12:21 PM PLOT BY : MALUEG, RYAN P PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

TRAFFIC CONTROL - OUTSIDE LANE CLOSURE, CIRCLE RIDGE RD AND CTH U WIDENING

NOTES: THIS DETAIL SUPPLEMENTS SDD 15C03, 15D20, AND 15D21.
INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH TRAFFIC CONTROL DETAILS, SDDs, AND AS THE ENGINEER DIRECTS.

CIRCLE RIDGE RD

82+41.8'CI'
0.00'
82+31.8'CI'
-2.00' LT

10'

WO1-4R
48"X48"

MARKING REMOVAL LINE 4-INCH
REMOVE DOUBLE YELLOW CENTERLINE

PAVE ASPHALTIC SURFACE TEMPORARY TOP LAYER ON TURN LANE
TO MATCH ADJACENT EXISTING ASPHALT OVERLAY
465+46'SB' - 467+65'SB', 12' LT
MILL/REMOVE TEMPORARY PAVEMENT WHEN PAVING STH 42 SB
MAINLINE UNDER FLAGGING

10' x 13'

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH
CENTERLINE SHIFT 2-FT

R3-1
24"X24"

R3-2
24"X24"

R11-2L
48"X30"

LANE
CLOSED

CIRCLE RIDGE RD R/L

460'SB'
462'SB'
464'SB'
466'SB'

STH 42 SB

STH 42 SB R/L

STH 42 NB R/L

460'NB'
462'NB'

ROAD
CLOSED

R11-2
48"X30"

R3-2
24"X24"

STA 465+33'SB'
STORM SEWER PLUG

R3-1
24"X24"

R11-2L
48"X30"

LANE
CLOSED

STH 42 NB

INSTALL AT FORK IN PEDESTRIAN PATH

SIDEWALK
CLOSED
R9-9
24"X12"

R3-1
24"X24"

R11-2L
48"X30"

LANE
CLOSED

R3-1
24"X24"

CTH U

DETOUR
M4-9AR
30"X24"

DETOUR
M4-9AL
30"X24"

INSTALL AT PEDESTRIAN PATH ACCESS
POINT ON TACOMA BEACH RD

ROAD
CLOSED
R11-2
48"X30"

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES
- SIGN ON TEMPORARY SIGN SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 69	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025003-TC.DWG
LAYOUT NAME - 025005-tc

PLOT DATE : 10/7/2021 12:22 PM PLOT BY : MALUEG, RYAN P PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

TRAFFIC CONTROL - OUTSIDE LANE CLOSURE

NOTES: THIS DETAIL SUPPLEMENTS SDD 15D20 AND 15D50.
INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH TRAFFIC CONTROL DETAILS, SDDs, AND AS THE ENGINEER DIRECTS.

2

N

465+97.36'SB'
-1509.30' LT
Y=153713.083
X=497722.846
TEMPORARY MARKING LINE PAINT 4-INCH

470+03.78'SB'
-1249.37' LT
Y=153453.636
X=497738.607
TEMPORARY MARKING LINE PAINT 4-INCH

LANE CLOSED
R11-2L
48"X30"

STA 471+47'SB'
STORM SEWER PLUG

WO1-6
48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH

469+92.4'SB'
12.00' RT

R1521'

471+42.2'SB'
12.08' RT

R1263'

474+50.0'SB'
0.00'

STH 42 SB R/L

MARKING REMOVAL LINE WIDE
REMOVE 12-INCH DIAGONALS

MARKING REMOVAL LINE 4-INCH
REMOVE DOUBLE YELLOW CENTERLINE

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH

LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES
- SIGN ON TEMPORARY SIGN SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- WORK AREA

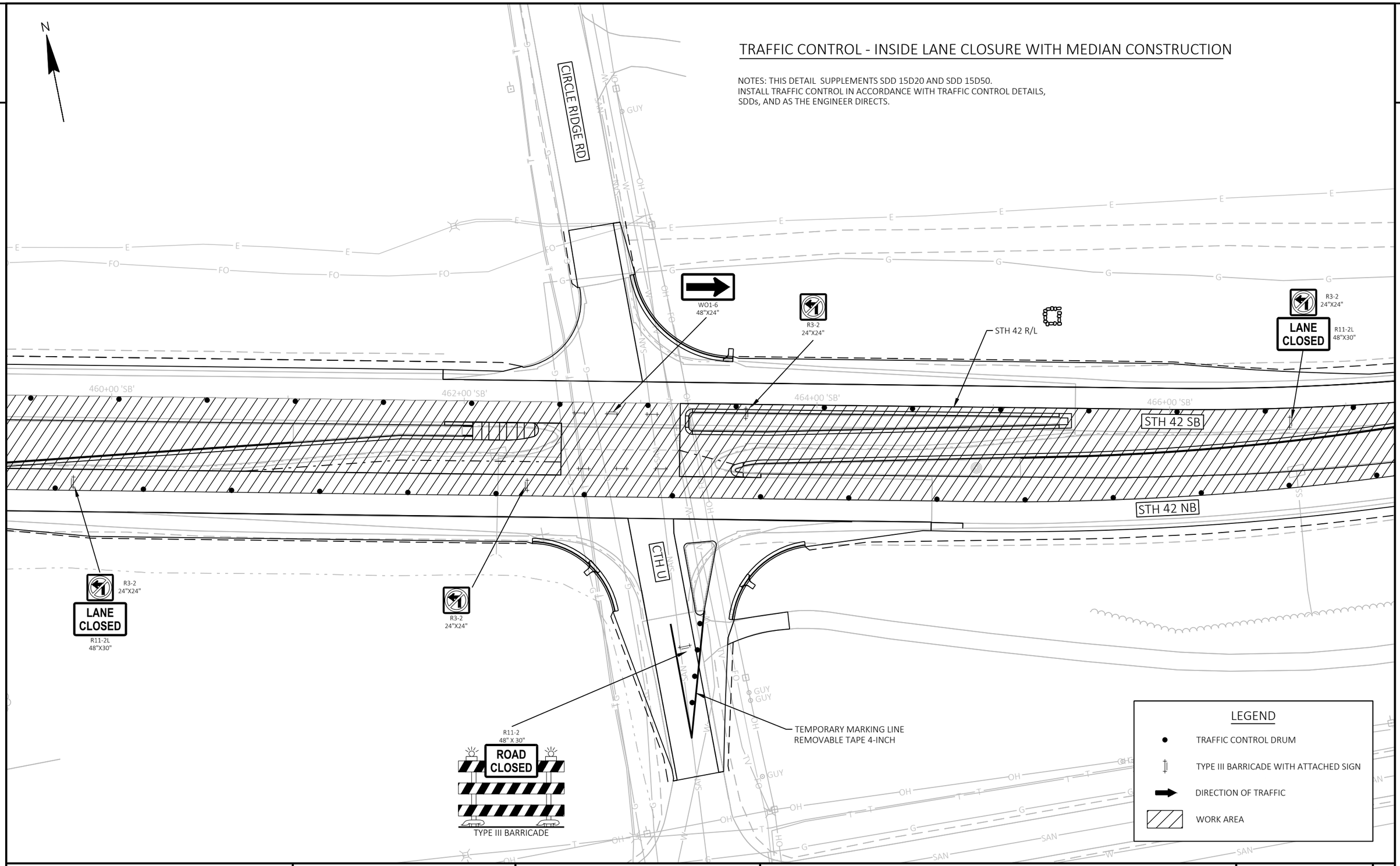
PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 70	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025003-TC.DWG
LAYOUT NAME - 025006-tc
PLOT DATE : 10/7/2021 12:22 PM
PLOT BY : MALUEG, RYAN P
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

2

TRAFFIC CONTROL - INSIDE LANE CLOSURE WITH MEDIAN CONSTRUCTION

NOTES: THIS DETAIL SUPPLEMENTS SDD 15D20 AND SDD 15D50.
INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH TRAFFIC CONTROL DETAILS,
SDDs, AND AS THE ENGINEER DIRECTS.



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 71	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025004-TC.DWG
LAYOUT NAME - 025007-tc
PLOT DATE : 10/7/2021 12:26 PM
PLOT BY : MALUEG, RYAN P
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

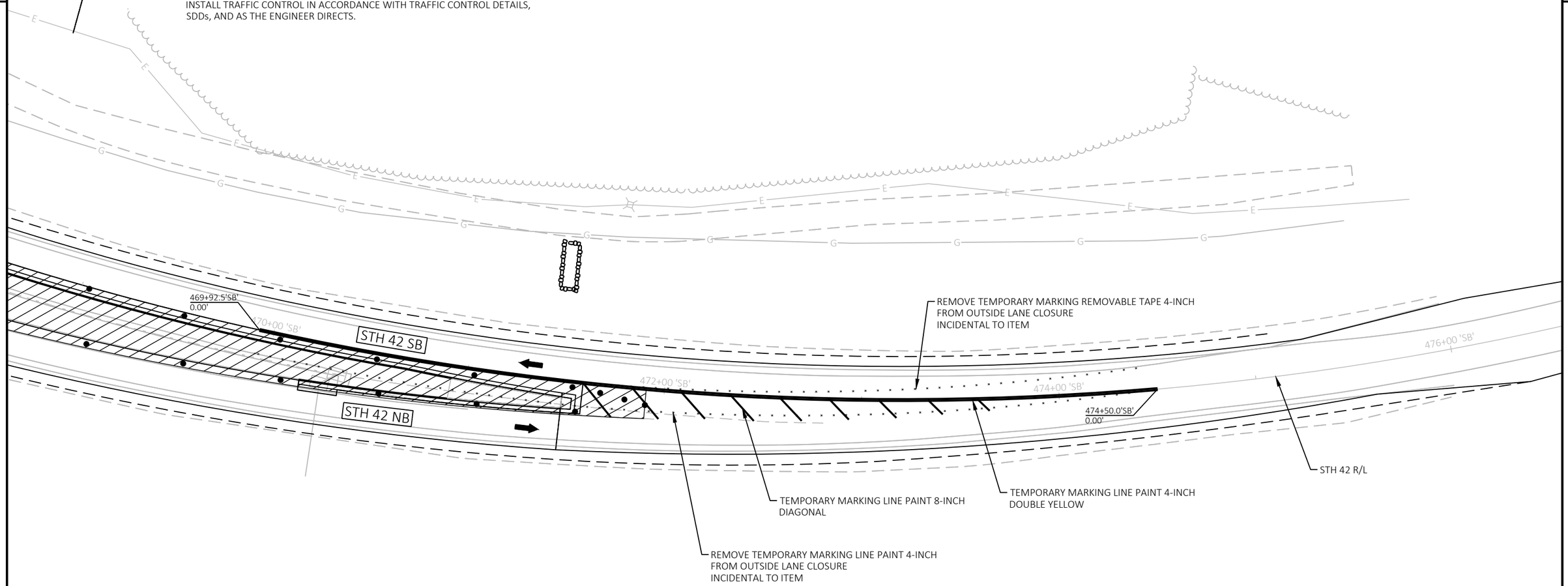
2

2

N

TRAFFIC CONTROL - INSIDE LANE CLOSURE WITH MEDIAN CONSTRUCTION

NOTES: THIS DETAIL SUPPLEMENTS SDD 15D20 AND 15D50.
INSTALL TRAFFIC CONTROL IN ACCORDANCE WITH TRAFFIC CONTROL DETAILS,
SDDs, AND AS THE ENGINEER DIRECTS.



LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 72	E

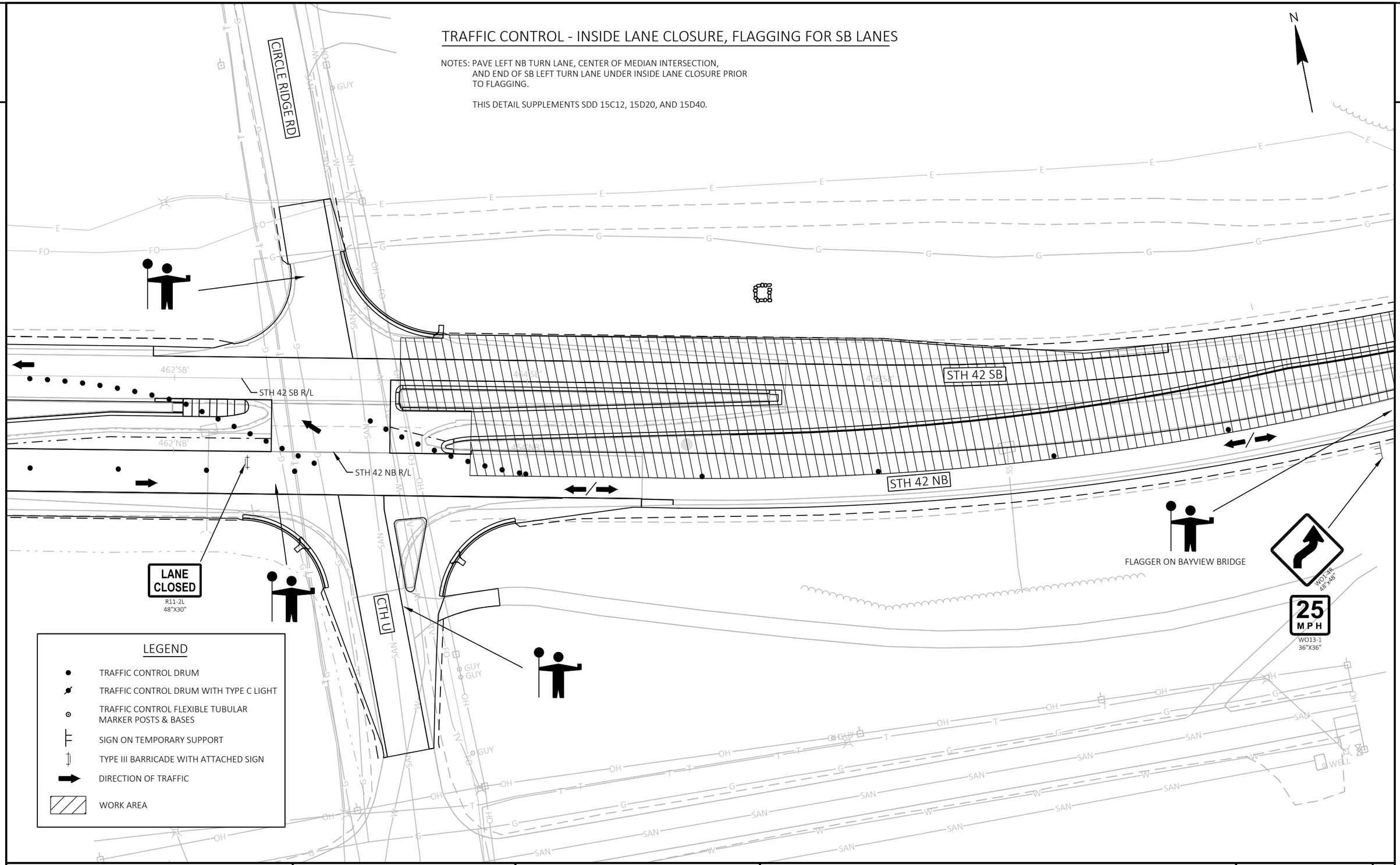
FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025004-TC.DWG
LAYOUT NAME - 025008-tc
PLOT DATE : 10/7/2021 12:26 PM PLOT BY : MALUEG, RYAN P PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL - INSIDE LANE CLOSURE, FLAGGING FOR SB LANES

NOTES: PAVE LEFT NB TURN LANE, CENTER OF MEDIAN INTERSECTION, AND END OF SB LEFT TURN LANE UNDER INSIDE LANE CLOSURE PRIOR TO FLAGGING.

THIS DETAIL SUPPLEMENTS SDD 15C12, 15D20, AND 15D40.



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 73	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025005-TC.DWG
LAYOUT NAME - 025009-tc

PLOT DATE : 10/7/2021 12:42 PM PLOT BY : MALUEG, RYAN P PLOT NAME : PLOT SCALE : 1 IN:50 FT

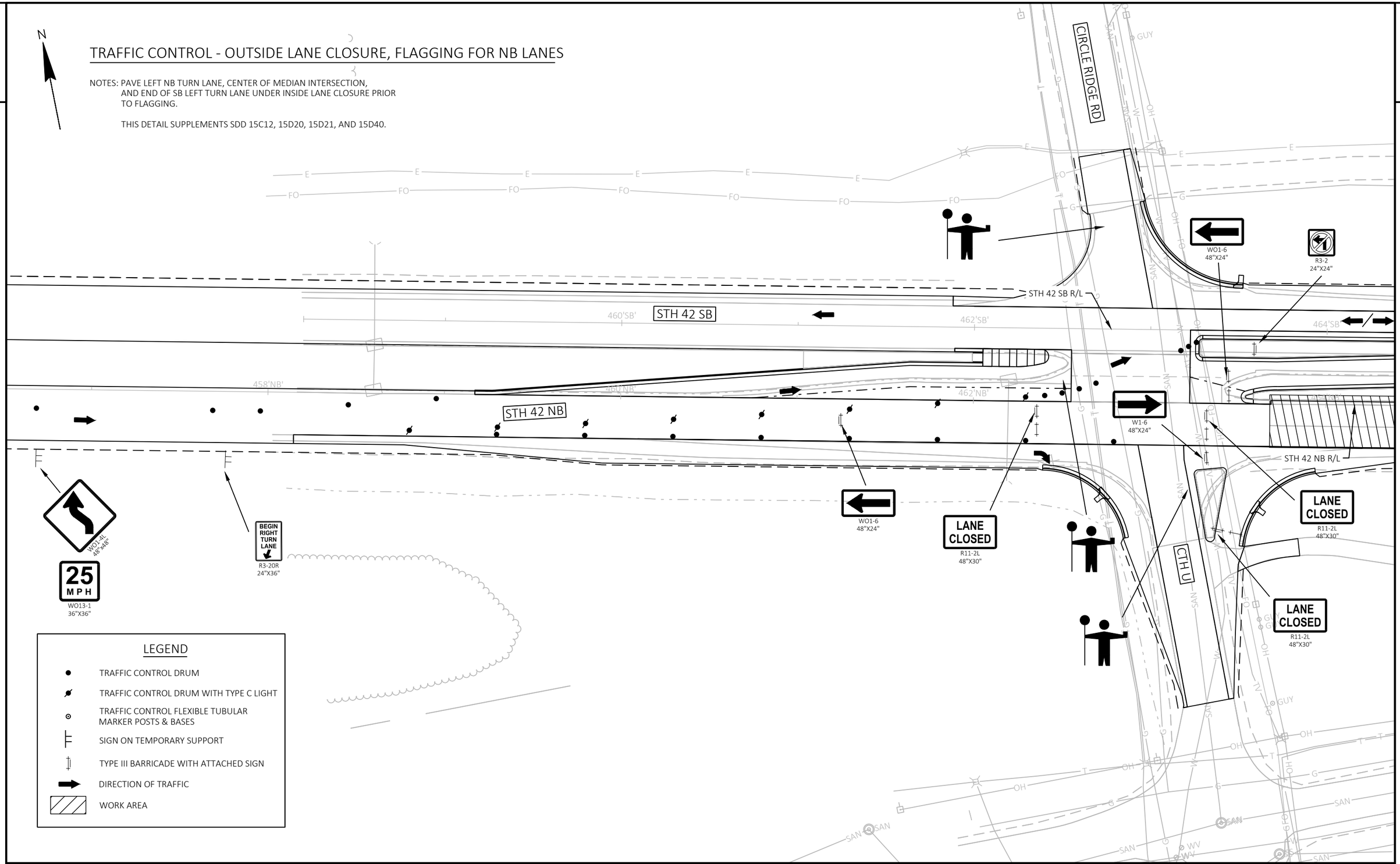
WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL - OUTSIDE LANE CLOSURE, FLAGGING FOR NB LANES

NOTES: PAVE LEFT NB TURN LANE, CENTER OF MEDIAN INTERSECTION, AND END OF SB LEFT TURN LANE UNDER INSIDE LANE CLOSURE PRIOR TO FLAGGING.

THIS DETAIL SUPPLEMENTS SDD 15C12, 15D20, 15D21, AND 15D40.



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 74	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025006-TC.DWG
LAYOUT NAME - 025010-tc

PLOT DATE : 10/7/2021 12:31 PM PLOT BY : MALUEG, RYAN P PLOT NAME : PLOT SCALE : 1 IN:50 FT

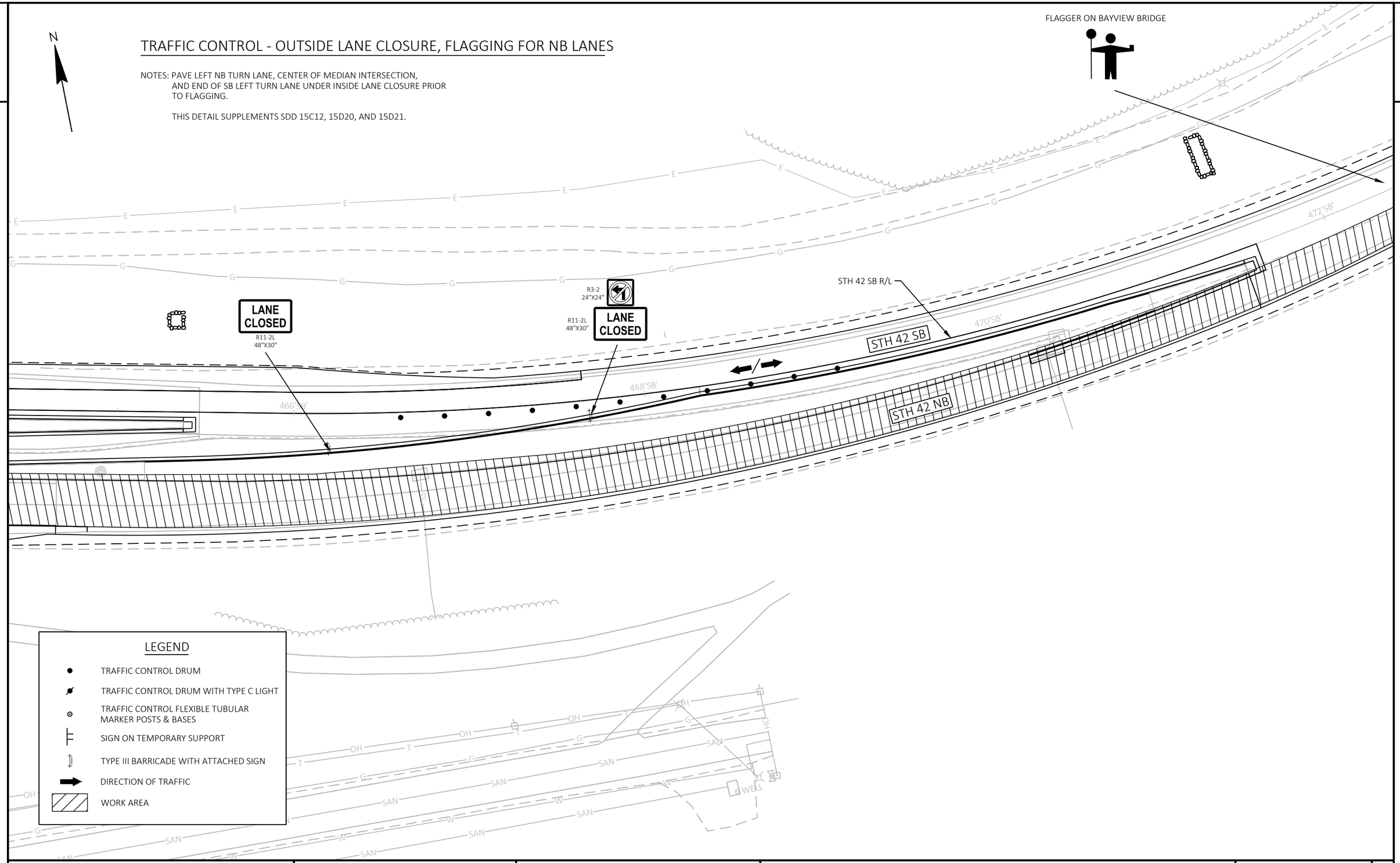
WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL - OUTSIDE LANE CLOSURE, FLAGGING FOR NB LANES

NOTES: PAVE LEFT NB TURN LANE, CENTER OF MEDIAN INTERSECTION, AND END OF SB LEFT TURN LANE UNDER INSIDE LANE CLOSURE PRIOR TO FLAGGING.

THIS DETAIL SUPPLEMENTS SDD 15C12, 15D20, AND 15D21.



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 75	E

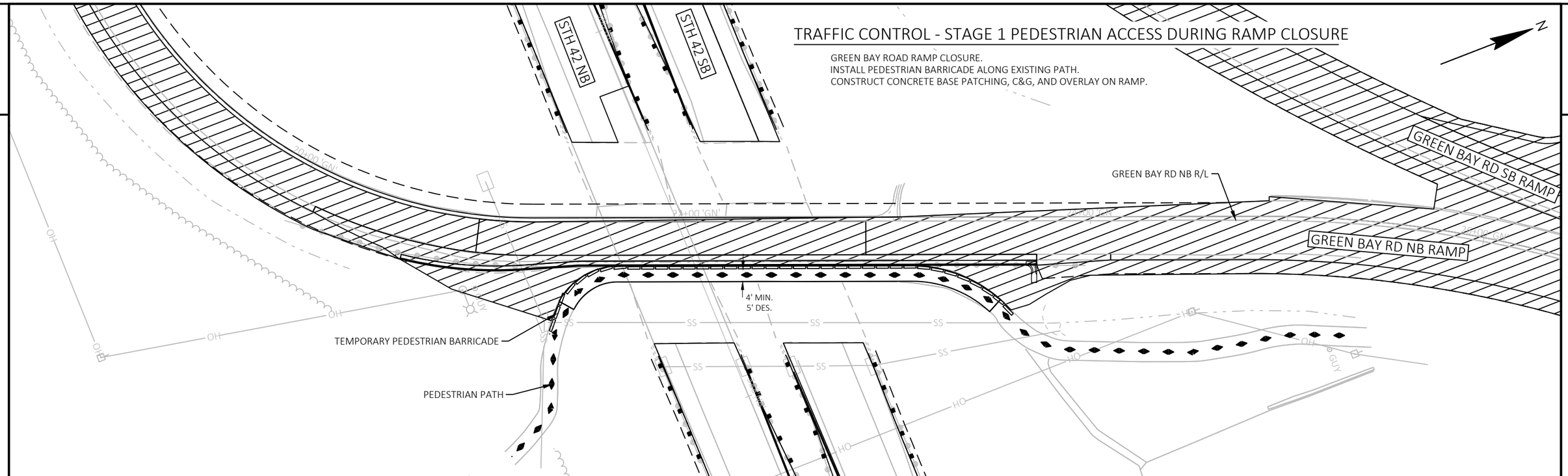
FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025006-TC.DWG
LAYOUT NAME - 025011-tc

PLOT DATE : 10/7/2021 12:31 PM PLOT BY : MALUEG, RYAN P PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

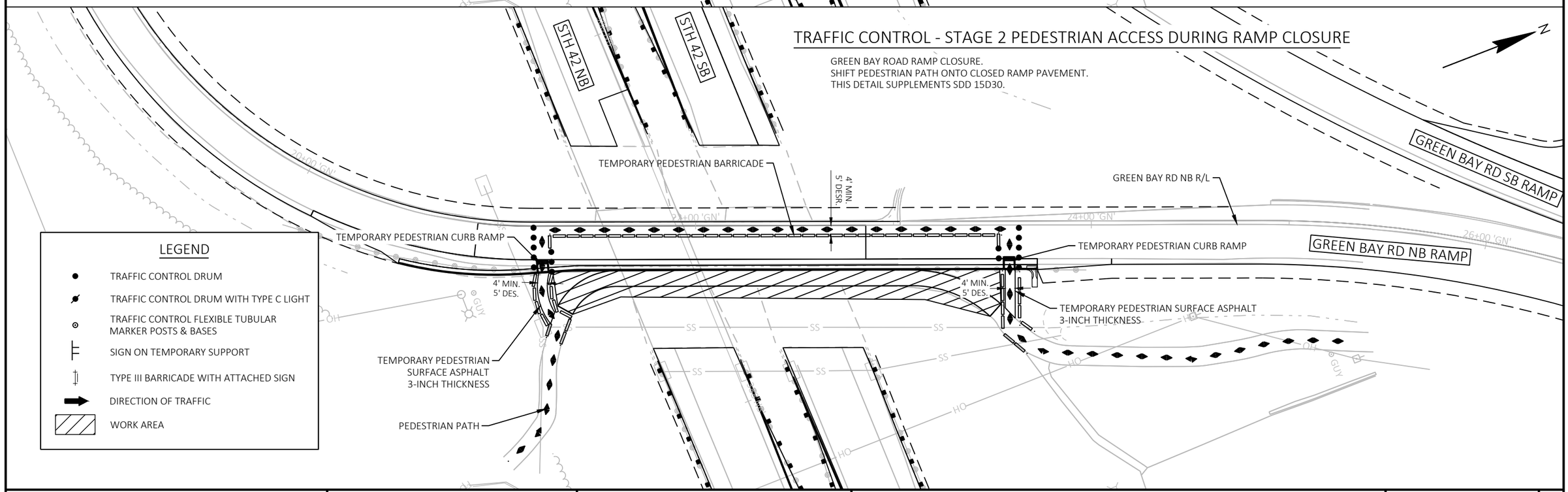
TRAFFIC CONTROL - STAGE 1 PEDESTRIAN ACCESS DURING RAMP CLOSURE

GREEN BAY ROAD RAMP CLOSURE.
INSTALL PEDESTRIAN BARRICADE ALONG EXISTING PATH.
CONSTRUCT CONCRETE BASE PATCHING, C&G, AND OVERLAY ON RAMP.



TRAFFIC CONTROL - STAGE 2 PEDESTRIAN ACCESS DURING RAMP CLOSURE

GREEN BAY ROAD RAMP CLOSURE.
SHIFT PEDESTRIAN PATH ONTO CLOSED RAMP PAVEMENT.
THIS DETAIL SUPPLEMENTS SDD 15D30.



LEGEND

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C LIGHT
- TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS & BASES
- SIGN ON TEMPORARY SUPPORT
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- WORK AREA

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	TRAFFIC CONTROL	SHEET 76	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\025006-TC.DWG
LAYOUT NAME - 025012-tc
PLOT DATE : 10/7/2021 12:33 PM
PLOT BY : MALUEG, RYAN P
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41

Estimate Of Quantities

4430-19-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0120	Clearing	ID	18.000	18.000
0004	201.0220	Grubbing	ID	18.000	18.000
0006	204.0100	Removing Concrete Pavement	SY	2,362.000	2,362.000
0008	204.0105	Removing Pavement Butt Joints	SY	1,620.000	1,620.000
0010	204.0110	Removing Asphaltic Surface	SY	30.000	30.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,433.000	1,433.000
0014	204.0120	Removing Asphaltic Surface Milling	SY	111,930.000	111,930.000
0016	204.0130	Removing Curb	LF	10.000	10.000
0018	204.0150	Removing Curb & Gutter	LF	1,659.000	1,659.000
0020	204.0155	Removing Concrete Sidewalk	SY	261.000	261.000
0022	204.0157	Removing Concrete Barrier	LF	186.000	186.000
0024	204.0165	Removing Guardrail	LF	2,158.000	2,158.000
0026	204.0195	Removing Concrete Bases	EACH	3.000	3.000
0028	204.0220	Removing Inlets	EACH	7.000	7.000
0030	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	95.000	95.000
0032	204.0246	Removing Ancillary Structure (structure) 01. S-151	EACH	1.000	1.000
0034	204.9060.S	Removing (item description) 01. Apron Endwall	EACH	17.000	17.000
0036	205.0100	Excavation Common	CY	2,536.000	2,536.000
0038	205.0200	Excavation Rock	CY	85.000	85.000
0040	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 4430-19-71	LS	1.000	1.000
0042	211.0300	Prepare Foundation for Concrete Base (project) 01. 4430-19-71	LS	1.000	1.000
0044	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	202.000	202.000
0046	213.0100	Finishing Roadway (project) 01. 4430-19-71	EACH	1.000	1.000
0048	305.0110	Base Aggregate Dense 3/4-Inch	TON	4,636.000	4,636.000
0050	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,954.000	2,954.000
0052	320.0145	Concrete Base 8-Inch	SY	517.000	517.000
0054	390.0303	Base Patching Concrete	SY	311.000	311.000
0056	416.0610	Drilled Tie Bars	EACH	5,299.000	5,299.000
0058	416.0620	Drilled Dowel Bars	EACH	7,261.000	7,261.000
0060	416.1710	Concrete Pavement Repair	SY	2,593.000	2,593.000
0062	416.1715	Concrete Pavement Repair SHES	SY	412.000	412.000
0064	416.1720	Concrete Pavement Replacement	SY	4,042.000	4,042.000
0066	416.1725	Concrete Pavement Replacement SHES	SY	438.000	438.000
0068	420.1000	Continuous Diamond Grinding Concrete Pavement	SY	117,800.000	117,800.000
0070	455.0605	Tack Coat	GAL	16,560.000	16,560.000
0072	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0074	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0076	460.2000	Incentive Density HMA Pavement	DOL	9,670.000	9,670.000
0078	460.2005	Incentive Density PWL HMA Pavement	DOL	5,560.000	5,560.000
0080	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	15,880.000	15,880.000
0082	460.2010	Incentive Air Voids HMA Pavement	DOL	15,150.000	15,150.000
0084	460.6223	HMA Pavement 3 MT 58-28 S	TON	260.000	260.000
0086	460.6224	HMA Pavement 4 MT 58-28 S	TON	30,250.000	30,250.000
0088	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	31.000	31.000
0090	465.0125	Asphaltic Surface Temporary	TON	35.000	35.000
0092	465.0305	Asphaltic Surface Safety Islands	TON	105.000	105.000
0094	465.0315	Asphaltic Flumes	SY	31.000	31.000
0096	465.0400	Asphaltic Shoulder Rumble Strips	LF	64,414.000	64,414.000
0098	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0100	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	2.000	2.000
0102	520.8000	Concrete Collars for Pipe	EACH	14.000	14.000
0104	520.8700	Cleaning Culvert Pipes	EACH	17.000	17.000
0106	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	10.000	10.000
0108	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0110	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	4.000	4.000
0112	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	1.000	1.000
0114	524.0172	Culvert Pipe Salvaged 72-Inch	LF	16.000	16.000
0116	524.0672	Apron Endwalls for Culvert Pipe Salvaged 72-Inch	EACH	1.000	1.000
0118	601.0110	Concrete Curb Type D	LF	10.000	10.000
0120	601.0120	Concrete Curb Type J	LF	103.000	103.000
0122	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	938.000	938.000
0124	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	2,084.000	2,084.000
0126	601.0413	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type G	LF	29.000	29.000
0128	601.0415	Concrete Curb & Gutter 6-Inch Sloped 30-Inch Type J	LF	25.000	25.000
0130	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	166.000	166.000
0132	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	264.000	264.000
0134	602.0405	Concrete Sidewalk 4-Inch	SF	2,464.000	2,464.000
0136	606.0300	Riprap Heavy	CY	26.000	26.000
0138	608.0005	Storm Sewer Rock Excavation	CY	20.000	20.000
0140	608.0112	Relaid Storm Sewer 12-Inch	LF	28.000	28.000
0142	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	170.000	170.000
0144	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	35.000	35.000
0146	608.3018	Storm Sewer Pipe Class III-A 18-Inch	LF	142.000	142.000
0148	611.0530	Manhole Covers Type J	EACH	2.000	2.000
0150	611.0600	Inlet Covers Type A	EACH	9.000	9.000
0152	611.0603	Inlet Covers Type A-S	EACH	1.000	1.000
0154	611.0624	Inlet Covers Type H	EACH	5.000	5.000
0156	611.0636	Inlet Covers Type HM-S	EACH	1.000	1.000
0158	611.0639	Inlet Covers Type H-S	EACH	2.000	2.000
0160	611.0642	Inlet Covers Type MS	EACH	1.000	1.000
0162	611.2033	Manholes 3x3-FT	EACH	2.000	2.000
0164	611.3004	Inlets 4-FT Diameter	EACH	3.000	3.000
0166	611.3220	Inlets 2x2-FT	EACH	2.000	2.000
0168	611.3230	Inlets 2x3-FT	EACH	5.000	5.000
0170	611.3901	Inlets Median 1 Grate	EACH	1.000	1.000
0172	611.8115	Adjusting Inlet Covers	EACH	4.000	4.000
0174	611.9710	Salvaged Inlet Covers	EACH	21.000	21.000
0176	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	2.000	2.000
0178	614.0230	Steel Thrie Beam	LF	102.000	102.000
0180	614.2300	MGS Guardrail 3	LF	1,116.000	1,116.000
0182	614.2330	MGS Guardrail 3 K	LF	63.000	63.000
0184	614.2500	MGS Thrie Beam Transition	LF	169.000	169.000
0186	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0188	614.2620	MGS Guardrail Terminal Type 2	EACH	4.000	4.000
0190	618.0100	Maintenance And Repair of Haul Roads (project) 01. 4430-19-71	EACH	1.000	1.000
0192	619.1000	Mobilization	EACH	1.000	1.000
0194	620.0100	Concrete Corrugated Median	SF	344.000	344.000
0196	620.0300	Concrete Median Sloped Nose	SF	229.000	229.000

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Line	Item	Item Description	Unit	Total	Qty
0198	624.0100	Water	MGAL	72.000	72.000
0200	625.0100	Topsoil	SY	662.000	662.000
0202	625.0500	Salvaged Topsoil	SY	3,923.000	3,923.000
0204	628.1504	Silt Fence	LF	5,259.000	5,259.000
0206	628.1520	Silt Fence Maintenance	LF	5,259.000	5,259.000
0208	628.1905	Mobilizations Erosion Control	EACH	14.000	14.000
0210	628.1910	Mobilizations Emergency Erosion Control	EACH	7.000	7.000
0212	628.2006	Erosion Mat Urban Class I Type A	SY	4,312.000	4,312.000
0214	628.7010	Inlet Protection Type B	EACH	19.000	19.000
0216	628.7015	Inlet Protection Type C	EACH	104.000	104.000
0218	628.7504	Temporary Ditch Checks	LF	290.000	290.000
0220	628.7555	Culvert Pipe Checks	EACH	26.000	26.000
0222	628.7570	Rock Bags	EACH	38.000	38.000
0224	629.0210	Fertilizer Type B	CWT	3.000	3.000
0226	630.0130	Seeding Mixture No. 30	LB	107.000	107.000
0228	630.0140	Seeding Mixture No. 40	LB	23.000	23.000
0230	630.0500	Seed Water	MGAL	97.000	97.000
0232	633.5200	Markers Culvert End	EACH	37.000	37.000
0234	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	13.000	13.000
0236	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	6.000	6.000
0238	637.2210	Signs Type II Reflective H	SF	39.690	39.690
0240	637.2230	Signs Type II Reflective F	SF	8.000	8.000
0242	638.2102	Moving Signs Type II	EACH	20.000	20.000
0244	638.2601	Removing Signs Type I	EACH	1.000	1.000
0246	638.2602	Removing Signs Type II	EACH	1.000	1.000
0248	638.3000	Removing Small Sign Supports	EACH	10.000	10.000
0250	642.5001	Field Office Type B	EACH	1.000	1.000
0252	643.0300	Traffic Control Drums	DAY	169,990.000	169,990.000
0254	643.0410	Traffic Control Barricades Type II	DAY	60.000	60.000
0256	643.0420	Traffic Control Barricades Type III	DAY	10,994.000	10,994.000
0258	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	30.000	30.000
0260	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	30.000	30.000
0262	643.0705	Traffic Control Warning Lights Type A	DAY	14,357.000	14,357.000
0264	643.0715	Traffic Control Warning Lights Type C	DAY	6,450.000	6,450.000
0266	643.0800	Traffic Control Arrow Boards	DAY	498.000	498.000
0268	643.0900	Traffic Control Signs	DAY	28,214.000	28,214.000
0270	643.0910	Traffic Control Covering Signs Type I	EACH	3.000	3.000
0272	643.0920	Traffic Control Covering Signs Type II	EACH	13.000	13.000
0274	643.1050	Traffic Control Signs PCMS	DAY	91.000	91.000
0276	643.5000	Traffic Control	EACH	1.000	1.000
0278	644.1410	Temporary Pedestrian Surface Asphalt	SF	300.000	300.000
0280	644.1601	Temporary Pedestrian Curb Ramp	DAY	30.000	30.000
0282	644.1810	Temporary Pedestrian Barricade	LF	700.000	700.000
0284	645.0120	Geotextile Type HR	SY	66.000	66.000
0286	646.1020	Marking Line Epoxy 4-Inch	LF	67,309.000	67,309.000
0288	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	78,247.000	78,247.000
0290	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	8,109.000	8,109.000
0292	646.1555	Marking Line Grooved Contrast Permanent Tape 4-Inch	LF	10,292.000	10,292.000
0294	646.3020	Marking Line Epoxy 8-Inch	LF	294.000	294.000

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Line	Item	Item Description	Unit	Total	Qty
0296	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	LF	6,590.000	6,590.000
0298	646.3555	Marking Line Grooved Contrast Permanent Tape 8-Inch	LF	3,431.000	3,431.000
0300	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	8,060.000	8,060.000
0302	646.5020	Marking Arrow Epoxy	EACH	64.000	64.000
0304	646.5120	Marking Word Epoxy	EACH	9.000	9.000
0306	646.7120	Marking Diagonal Epoxy 12-Inch	LF	170.000	170.000
0308	646.8020	Marking Corrugated Median Epoxy	SF	116.000	116.000
0310	646.8120	Marking Curb Epoxy	LF	189.000	189.000
0312	646.8220	Marking Island Nose Epoxy	EACH	10.000	10.000
0314	646.9000	Marking Removal Line 4-Inch	LF	3,350.000	3,350.000
0316	646.9200	Marking Removal Line Wide	LF	249.000	249.000
0318	646.9300	Marking Removal Special Marking	EACH	6.000	6.000
0320	649.0105	Temporary Marking Line Paint 4-Inch	LF	13,278.000	13,278.000
0322	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	26,987.000	26,987.000
0324	649.0205	Temporary Marking Line Paint 8-Inch	LF	142.000	142.000
0326	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	700.000	700.000
0328	650.4000	Construction Staking Storm Sewer	EACH	16.000	16.000
0330	650.4500	Construction Staking Subgrade	LF	1,446.000	1,446.000
0332	650.5000	Construction Staking Base	LF	1,446.000	1,446.000
0334	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,794.000	3,794.000
0336	650.7000	Construction Staking Concrete Pavement	LF	268.000	268.000
0338	650.8000	Construction Staking Resurfacing Reference	LF	78,925.000	78,925.000
0340	650.9910	Construction Staking Supplemental Control (project) 01. 4430-19-71	LS	1.000	1.000
0342	650.9920	Construction Staking Slope Stakes	LF	1,446.000	1,446.000
0344	652.0210	Conduit Rigid Nonmetallic Schedule 40 1-Inch	LF	17.000	17.000
0346	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	35.000	35.000
0348	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	65.000	65.000
0350	652.0615	Conduit Special 3-Inch	LF	598.000	598.000
0352	652.0800	Conduit Loop Detector	LF	68.000	68.000
0354	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	3.000	3.000
0356	654.0101	Concrete Bases Type 1	EACH	2.000	2.000
0358	654.0102	Concrete Bases Type 2	EACH	1.000	1.000
0360	655.0230	Cable Traffic Signal 5-14 AWG	LF	243.000	243.000
0362	655.0240	Cable Traffic Signal 7-14 AWG	LF	46.000	46.000
0364	655.0260	Cable Traffic Signal 12-14 AWG	LF	1,134.000	1,134.000
0366	655.0305	Cable Type UF 2-12 AWG Grounded	LF	422.000	422.000
0368	655.0610	Electrical Wire Lighting 12 AWG	LF	150.000	150.000
0370	655.0700	Loop Detector Lead In Cable	LF	2,792.000	2,792.000
0372	655.0800	Loop Detector Wire	LF	204.000	204.000
0374	657.0100	Pedestal Bases	EACH	2.000	2.000
0376	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	1.000	1.000
0378	657.0310	Poles Type 3	EACH	1.000	1.000
0380	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	2.000	2.000
0382	657.0595	Trombone Arms 25-FT	EACH	1.000	1.000
0384	657.0709	Luminaire Arms Truss Type 4-Inch Clamp 12-FT	EACH	1.000	1.000
0386	658.0173	Traffic Signal Face 3S 12-Inch	EACH	3.000	3.000
0388	658.0174	Traffic Signal Face 4S 12-Inch	EACH	2.000	2.000
0390	658.5069	Signal Mounting Hardware (location) 01. 42&57 & Neenah Ave	LS	1.000	1.000
0392	658.5069	Signal Mounting Hardware (location) 02. 42&57 & Ashland Ave	LS	1.000	1.000

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Line	Item	Item Description	Unit	Total	Qty
0394	690.0150	Sawing Asphalt	LF	5,701.000	5,701.000
0396	690.0250	Sawing Concrete	LF	36,094.000	36,094.000
0398	740.0440	Incentive IRI Ride	DOL	118,580.000	118,580.000
0400	SPV.0060	Special 01. Inlet Extension Rings	EACH	51.000	51.000
0402	SPV.0060	Special 02. Manhole Extension Rings	EACH	2.000	2.000
0404	SPV.0060	Special 03. Storm Sewer Plug	EACH	2.000	2.000
0406	SPV.0060	Special 04. Remove Traffic Signal (STH 42/57 & Ashland Ave)	EACH	1.000	1.000
0408	SPV.0060	Special 05. Remove Traffic Signal (STH 42/57 & Neenah Ave)	EACH	1.000	1.000
0410	SPV.0090	Special 01. Concrete Curb and Gutter 18-Inch Type D Special	LF	18.000	18.000
0412	SPV.0090	Special 02. Concrete Curb and Gutter 30-Inch Type D Special	LF	357.000	357.000
0414	SPV.0090	Special 03. Concrete Curb 8.5-Inch & Gutter 30-Inch Type D	LF	64.000	64.000
0416	SPV.0090	Special 04. Sawing Concrete Curb Head	LF	550.000	550.000
0418	SPV.0165	Special 01. Concrete Pipe Patching	SF	25.000	25.000
0420	SPV.0180	Special 01. Undoweled Base Patching Concrete	SY	3,443.000	3,443.000
0422	SPV.0180	Special 02. Undoweled Base Patching Concrete SHES	SY	817.000	817.000

BUTT JOINTS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0105 REMOVING PAVEMENT BUTT JOINTS SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
	SEGMENT A							
0010	NB OUTSIDE	100+00'NB'	-	100+02'NB'	32' RT	—	1	SHOULDER
0010	NB OUTSIDE	108+17'NB'	-	108+19'NB'	32' RT	—	1	SHOULDER
0010	NB OUTSIDE	117+34'NB'	-	117+36'NB'	32' RT	—	1	SHOULDER
0010	NB OUTSIDE	169+33'NB'	-	169+35'NB'	12' RT	—	3	LANE
0010	NB OUTSIDE	177+15'NB'			109' RT	—	7	IDLEWILD RD
0010	NB OUTSIDE	206+99'NB'			101' RT	—	7	CTH O
0010	NB OUTSIDE	220+61'NB'	-	220+63'NB'	12' RT	—	3	LANE
0010	SB OUTSIDE	100+00'NB'	-	102+00'NB'	-79' LT	—	1	SHOULDER
0010	SB OUTSIDE	113+70'NB'			-162' LT	—	6	CTH MM
0010	SB OUTSIDE	129+51'NB'	-	129+53'NB'	-62' LT	—	3	LANE
0010	SB OUTSIDE	142+76'NB'			-136' LT	—	6	Y INN RD
0010	SB OUTSIDE	150+81'NB'	-	150+83'NB'	-62' LT	—	3	LANE
0010	SB OUTSIDE	176+67'NB'	-	176+69'NB'	-76' LT	—	1	SHOULDER
0010	SB OUTSIDE	178+53'NB'			-136' LT	—	7	IDLEWILD RD
0010	SB OUTSIDE	180+97'NB'	-	180+99'NB'	-76' LT	—	1	SHOULDER
0010	NB INSIDE	100+00	-	100+02	0' LT	—	1	SHOULDER
0010	NB INSIDE	169+33	-	169+35	0' RT	—	3	LANE
0010	NB INSIDE	220+61	-	220+63	0' RT	—	3	LANE
0010	SB INSIDE	100+00'NB'	-	100+02'NB'	-50' LT	—	1	SHOULDER
0010	SB INSIDE	129+51'NB'	-	129+53'NB'	-50' LT	—	3	LANE
0010	SB INSIDE	150+79'NB'	-	150+81'NB'	-50' LT	—	3	LANE
				SUBTOTAL SEGMENT A		0	65	
	SEGMENT B							
0010	NB OUTSIDE	243+15'NB'	-	243+17'NB'	26' RT	—	1	SHOULDER
0010	NB OUTSIDE	245+87'NB'			86' RT	—	7	EMERALD DR
0010	NB OUTSIDE	247+37'NB'	-	247+39'NB'	26' RT	—	1	SHOULDER
0010	NB OUTSIDE	282+85'NB'	-	282+87'NB'	26' RT	—	1	SHOULDER
0010	NB OUTSIDE	283+85'NB'	-	283+87'NB'	34' RT	—	1	SHOULDER
0010	NB OUTSIDE	286+12'NB'	-	286+14'NB'	34' RT	—	1	SHOULDER
0010	NB OUTSIDE	286+87'NB'	-	286+89'NB'	26' RT	—	1	SHOULDER
0010	NB OUTSIDE	291+44'NB'			61' RT	—	8	CTH PD
0010	NB OUTSIDE	303+14'NB'			72' RT	—	9	ENTERPRISE RD
0010	NB OUTSIDE	334+66'NB'	-	334+68'NB'	26' RT	—	1	SHOULDER
0010	NB OUTSIDE	348+63'NB'			70' RT	—	7	S. DOUGLAS AVE
0010	SB OUTSIDE	238+82'NB'	-	238+84'NB'	-62' LT	—	3	LANE
0010	SB OUTSIDE	291+66'NB'			-161' LT	—	8	PARK DR
0010	SB OUTSIDE	299+35'NB'	-	299+37'NB'	-62' LT	—	3	LANE
0010	SB OUTSIDE	310+28'NB'	-	310+30'NB'	-45' LT	—	1	SHOULDER
0010	SB OUTSIDE	311+70'NB'			-99' LT	—	7	STAGG RD
0010	SB OUTSIDE	314+34'NB'	-	314+36'NB'	-44' LT	—	1	SHOULDER
0010	SB OUTSIDE	328+46'NB'			-105' LT	—	7	GRANT RD
0010	SB OUTSIDE	338+97'NB'	-	338+99'NB'	-44' LT	—	1	SHOULDER
0010	NB INSIDE	266+58'NB'	-	266+60'NB'	0' LT	—	1	SHOULDER
0010	NB INSIDE	268+74'NB'	-	268+76'NB'	0' LT	—	3	SHOULDER
0010	NB INSIDE	272+77'NB'	-	272+79'NB'	0' LT	—	1	SHOULDER
0010	NB INSIDE	274+77'NB'	-	274+79'NB'	0' LT	—	3	SHOULDER
0010	NB INSIDE	281+74'NB'	-	281+76'NB'	0' LT	—	1	SHOULDER
0010	NB INSIDE	283+87'NB'	-	283+89'NB'	0' LT	—	3	SHOULDER
0010	NB INSIDE	288+09'NB'	-	288+11'NB'	0' LT	—	1	SHOULDER
0010	NB INSIDE	292+81'NB'	-	292+83'NB'	0' LT	—	1	SHOULDER
0010	SB INSIDE	238+82'NB'	-	238+84'NB'	-50' LT	—	3	LANE
0010	SB INSIDE	299+37'NB'	-	299+39'NB'	-50' LT	—	3	LANE
				SUBTOTAL SEGMENT B		0	89	

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0105 REMOVING PAVEMENT BUTT JOINTS SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
	SEGMENT C							
0010	NB OUTSIDE	369+70'NB'		370+20'NB'	12' RT	130	—	CONCRETE OVERLAY
0010	NB OUTSIDE	370+04'NB'	-	370+29'NB'	37' RT	—	28	PRIVATE ENTRANCE
0010	NB OUTSIDE	370+84'NB'	-	371+18'NB'	37' RT	—	31	PRIVATE ENTRANCE
0010	NB OUTSIDE	372+63'NB'	-	373+04'NB'	37' RT	—	38	PRIVATE ENTRANCE
0010	NB OUTSIDE	373+16'NB'	-	373+52'NB'	37' RT	—	40	PRIVATE ENTRANCE
0010	NB OUTSIDE	374+96'NB'			70' RT	—	104	CTH S
0010	NB OUTSIDE	386+01'NB'	-	386+56'NB'	12' RT	70	50	OVERPASS
0010	NB OUTSIDE	387+57'NB'	-	388+15'NB'	12' RT	60	70	OVERPASS
0010	NB OUTSIDE	401+50'NB'			62' RT	90	—	S. LANSING AVE
0010	NB OUTSIDE	414+75'NB'			53' RT	90	—	S. NEENAH AVE
0010	NB OUTSIDE	426+49'NB'			92' RT	120	—	SHILOH RD
0010	NB OUTSIDE	463+31'NB'			150' RT	—	53	CTH U
0010	SB OUTSIDE	352+30'NB'			-83' LT	—	7	S. COLUMBIA AVE
0010	SB OUTSIDE	359+64'NB'			-194' LT	—	7	S. ASHLAND AVE
0010	SB OUTSIDE	369+68'NB'	-	370+20'NB'	-42' LT	130	6	LIMITS CONCRETE OVERLAY
0010	SB OUTSIDE	371+19'NB'	-	371+46'NB'	-67' LT	—	23	PRIVATE ENTRANCE
0010	SB OUTSIDE	375+00'NB'			-103' LT	—	106	CTH C
0010	SB OUTSIDE	386+28'NB'	-	386+86'NB'	-42' LT	60	70	OVERPASS
0010	SB OUTSIDE	387+97'NB'	-	388+47'NB'	-42' LT	80	50	OVERPASS
0010	SB OUTSIDE	401+51'NB'			-86' LT	110	—	S. LANSING AVE
0010	SB OUTSIDE	414+74'NB'			-115' LT	—	61	S. NEENAH AVE
0010	SB OUTSIDE	425+02'NB'			-122 LT	140	—	S. OXFORD AVE
0010	SB OUTSIDE	442+13'NB'			-71' LT	—	67	QUARTERDECK LN
0010	SB OUTSIDE	462+76'NB'			-122' LT	—	67	CIRCLE RIDGE RD
0010	NB INSIDE	369+70'NB'	-	370+20'NB'	0' RT	70	0	CONCRETE OVERLAY
0010	NB INSIDE	385+81'NB'	-	386+31'NB'	0' RT	80	0	OVERPASS
0010	NB INSIDE	387+66'NB'	-	388+21'NB'	0' RT	50	40	OVERPASS
0010	SB INSIDE	369+70'NB'	-	370+20'NB'	-30' LT	70	—	CONCRETE OVERLAY
0010	SB INSIDE	386+23'NB'	-	386+72'NB'	-30' LT	50	40	OVERPASS
0010	SB INSIDE	387+82'NB'	-	388+38'NB'	-30' LT	40	50	OVERPASS
0010	FLAGGING	481+37'SB'	-	481+39'SB'	STH 42 LT & RT	—	3	TRAVEL LANES
0010	FLAGGING	481+58'SB'	-	481+60'SB'	12' RT	—	1	SHOULDER
0010	FLAGGING	481+58'SB'	-	481+60'SB'	12' LT	—	1	SHOULDER
0010	GB RD RAMP	28+32'GS'	-	23+13'GS'	-42' LT	—	160	S. HUDSON AVE
0010	GB RD RAMP	28+53'GN'	-	29+56'GN'	-18' RT	—	85	PRIVATE ENTRANCE
0010	GB RD RAMP	29+56'GN'	-	30+06'GN'	LT & RT	180	21	RAMP ROADWAY
					SUBTOTAL SEGMENT C	1,620	1,279	
					CAT 0010 TOTAL	1,620	1,433	

CLEARING AND GRUBBING

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	201.0120 CLEARING ID	201.0220 GRUBBING ID	REMARKS
	SEGMENT C					
0010	SB OUTSIDE	390+00'NB'	-77' LT	6	6	
0010	NB/SB INSIDE	388+15'NB'	-15' LT	12	12	TREE WITHIN EXISTING EAST BULLNOSE
			SUBTOTAL SEGMENT C	18	18	
			CAT 0010 TOTAL	18	18	

3

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0120 SY	REMARKS
	SEGMENT A						
0010	NB OUTSIDE	100+02'NB'	-	169+33'NB'	26' RT	4,010	SHOULDER
0010	NB OUTSIDE	169+33'NB'	-	220+63'NB'	12' RT	11,390	LANE AND SHOULDER
0010	NB OUTSIDE	176+50'NB'	-	178+76'NB'	32' RT	470	IDLEWILD RD
0010	NB OUTSIDE	206+10'NB'	-	207+94'NB'	32' RT	400	CTH O
0010	SB OUTSIDE	100+02'NB'	-	129+51'NB'	-76' LT	1,630	SHOULDER
0010	SB OUTSIDE	111+98'NB'	-	116+89'NB'	-76' LT	1,000	CTH MM
0010	SB OUTSIDE	129+51'NB'	-	150+81'NB'	-62 LT	4,730	LANE AND SHOULDER
0010	SB OUTSIDE	141+75'NB'	-	143+96'NB'	-82' LT	340	Y INN RD
0010	SB OUTSIDE	150+81'NB'	-	220+63'NB'	-76' LT	4,390	SHOULDER
0010	SB OUTSIDE	177+69'NB'	-	178+95'NB'	-84' LT	310	IDLEWILD RD
0010	NB INSIDE	100+02'NB'		169+33'NB'	0' LT	1,720	SHOULDER
0010	NB INSIDE	169+33'NB'	-	220+63'NB'	LT &RT	8,540	LANE AND SHOULDER
0010	SB INSIDE	100+02'NB'		127+32'NB'	-47' LT	750	SHOULDER
0010	SB INSIDE	129+51'NB'		150+81'NB'	-47' LT	3,550	LANE AND SHOULDER
0010	SB INSIDE	150+81'NB'		220+63'NB'	-47' LT	1,910	SHOULDER
0010	NB & SB INSIDE	107+13'NB'		116+41'NB'	MEDIAN	2150	CTH MM/STH 42 MEDIAN CROSSING
0010	NB & SB INSIDE	125+79'NB'		130+73'NB'	MEDIAN	830	MEDIAN CROSSING
0010	NB & SB INSIDE	140+01'NB'		144+44'NB'	MEDIAN	790	Y INN RD MEDIAN CROSSING
0010	NB & SB INSIDE	163+85'NB'		168+81'NB'	MEDIAN	800	MEDIAN CROSSING
0010	NB & SB INSIDE	175+37'NB'		180+81'NB'	MEDIAN	520	IDLEWILD RD MEDIAN CROSSING
0010	NB & SB INSIDE	192+90'NB'		193+80'NB'	MEDIAN	260	MEDIAN CROSSING
0010	NB & SB INSIDE	205+69'NB'		209+82'NB'	MEDIAN	330	CTH O MEDIAN CROSSING
					SUBTOTAL SEGMENT A	50,820	
	SEGMENT B						
0010	NB OUTSIDE	220+63'NB'	-	334+66'NB'	26' RT	7,000	SHOULDER
0010	NB OUTSIDE	245+18'NB'		246+32'NB'	32' RT	280	EMERALD DR
0010	NB OUTSIDE	291+00'NB'		291+77'NB'	32' RT	200	CTH PD
0010	NB OUTSIDE	302+40'NB'	-	303+72'NB'	32' RT	380	ENTERPRISE RD
0010	NB OUTSIDE	348+23'NB'	-	349+00'NB'	32' RT	150	S. DOUGLAS AVE
0010	SB OUTSIDE	220+63'NB'	-	238+82'NB'	-76' LT	1,190	SHOULDER
0010	SB OUTSIDE	238+82'NB'		299+37'NB'	-62' LT	13,450	LANE AND SHOULDER
0010	SB OUTSIDE	290+45'NB'	-	292+71'NB'	-82' LT	480	PARK DR
0010	SB OUTSIDE	299+37'NB'		338+97'NB'	LT	2,280	SHOULDER
0010	SB OUTSIDE	311+27'NB'	-	312+39'NB'	-51' LT	270	STAGG RD
0010	SB OUTSIDE	327+65'NB'	-	329+44'NB'	-50' LT	460	GRANT RD
0010	SB OUTSIDE	351+97'NB'		352+64'NB'	-54' LT	140	S. COLUMBIA AVE
0010	NB INSIDE	220+63'NB'		305+84'NB'	0' LT	2,170	SHOULDER
0010	SB INSIDE	220+63'NB'	-	238+82'NB'	-47' LT	490	SHOULDER
0010	SB INSIDE	238+82'NB'	-	299+37'NB'	-47' LT	10,090	LANE AND SHOULDER
0010	SB INSIDE	299+37'NB'	-	305+84'NB'	-47' LT	160	SHOULDER
0010	NB & SB INSIDE	228+24'NB'	-	229+35'NB'	MEDIAN	390	MEDIAN CROSSING
0010	NB & SB INSIDE	244+76'NB'		246+91'NB'	MEDIAN	740	EMERALD DR MEDIAN CROSSING
0010	NB & SB INSIDE	256+35'NB'		261+29'NB'	MEDAIN	700	MEDIAN CROSSING
0010	NB & SB INSIDE	268+74'NB'		269+53'NB'	MEDIAN	260	MEDIAN CROSSING
0010	NB & SB INSIDE	274+79'NB'		275+68'NB'	MEDAIN	270	MEDIAN CROSSING
0010	NB & SB INSIDE	283+89'NB'		284+78'NB'	MEDIAN	270	MEDIAN CROSSING
0010	NB & SB INSIDE	290+42'NB'		292+43'NB'	MEDIAN	340	CTH PD/PARK DRIVE MEDIAN CROSSING
0010	NB & SB INSIDE	302+65'NB'		303+95'NB'	MEDIAN	320	ENTERPRISE RD MEDIAN CROSSING
0010	NB & SB INSIDE	305+84'NB'	-	351+55'NB'	MEDIAN	9,410	PAVED MEDIAN
					SUBTOTAL SEGMENT B	51,890	

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0120 SY	REMARKS
	SEGMENT C						
0010	NB OUTSIDE	78+27'U'	-	78+99'U'	CTH U	200	SIDE ROAD
0010	SB OUTSIDE	39+55'A'	-	39+80'A'	S. ASHLAND AVE	110	SIDE ROAD
0020	SB OUTSIDE	39+55'A'	-	40+94'A'	S. ASHLAND AVE	360	SIDE ROAD
0010	NB & SB INSIDE	364+73'NB'		369+68'SB'	MEDIAN	1,440	PAVED MEDIAN
0010	FLAGGING	464+66'SB'	-	481+58'SB'	STH 42	7,110	TRANSITION FROM 4 LANES TO 2
					SUBTOTAL SEGMENT C	9,220	
					CAT 0010 TOTAL	111,570	
					CAT 0020 TOTAL	360	

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REMOVING CONCRETE PAVEMENT

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0100 SY	REMARKS
	SEGMENT C						
0020	NB OUTSIDE	460+10'NB'	-	462+95'NB'	24' RT	220	CTH U TURN LANE AND WIDENING
0020	NB OUTSIDE	463+20'NB'	-	464+15'NB'	24' RT	100	CTH U WIDENING
0020	SB OUTSIDE	359+90'NB'	-	360+26'NB'	-46' LT	30	S. ASHLAND AVE WIDENING
0020	SB OUTSIDE	414+85'NB'	-	415+70'NB'	-64' LT	27	S. NEENAH AVE WIDENING
0020	SB OUTSIDE	463+00'SB'	-	465+46'SB'	-12' LT	210	CIRCLE RIDGE RD WIDENING
0010	NB INSIDE	414+32'NB'	-	414+38'NB'	0' LT	5	SLOPED NOSE
0010	SB INSIDE	417+03'NB'	-	417+08'NB'	-19' LT	5	STORM SEWER INLET
0010	SB INSIDE	441+75'NB'	-	441+88'NB'	-20' LT	5	ADJACENT TO C&G REPLACEMENT
0010	NB & SB INSIDE	460+58'NB'	-	462+55'NB'	0' LT	180	STH 42 NB MEDIAN TURN LANE
0020	NB & SB INSIDE	463+22'SB'	-	471+59'SB'	0' RT	1,460	STH 42 SB MEDIAN TURN LANE
0020	RAMP	21+23'GN'	-	23+03'GN	21' RT	120	ADJACENT TO C&G REPLACEMENT
					SUBTOTAL SEGMENT C	2,362	
					CAT 0010 TOTAL	195	
					CAT 0020 TOTAL	2,167	

REMOVING ASPHALTIC SURFACE

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0110 SY	REMARKS
	SEGMENT C						
0010	ASHLAND	39+61'A'	-	39+88'A'	ASHLAND	30	LEFT TURN LANE LOOP DETECTOR
					SUBTOTAL SEGMENT C	30	
					CAT 0010 TOTAL	30	

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REMOVING INLETS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	204.0220 EACH
	SEGMENT C			
0010	NB OUTSIDE	387+69'NB'	35' RT	1
0020	SB OUTSIDE	39+83'A'	18' RT	1
0010	NB INSIDE	387+85'NB'	-4' LT	1
0010	NB INSIDE	462+19'NB'	-14' LT	1
0020	NB INSIDE	470+28'SB'	21' RT	1
0010	SB INSIDE	400+79'NB'	-28' LT	1
0020	SB INSIDE	470+36'SB'	14' RT	1
			SUBTOTAL SEGMENT C	7
			CAT 0010 TOTAL	4
			CAT 0020 TOTAL	3

REMOVING STORM SEWER (SIZE) (01. 12 - INCH)

CATEGORY	FROM	-	TO	LOCATION OFFSET FROM	LOCATION OFFSET TO	204.0245.01 LF	REMARKS
	SEGMENT C						
0010	361+32'SB'	-	361+40'SB'	-15' LT	-6' LT	12	SPOT REPAIR
0010	372+20'NB'	-	372+19'NB'	26' RT	18' RT	8	SPOT REPAIR
0010	374+40'NB'	-	374+39'NB'	-23' LT	-31' LT	8	SPOT REPAIR
0010	462+20'NB'	-	462+20'NB'	-2' LT	-12' LT	10	
0020	470+28'SB'	-	470+35'SB'	24' RT	14' RT	14	EXISTING MEDIAN NORTH OF CTH U
0020	39+80'A'	-	39+83'A'	59 RT	16' RT	43	ASHLAND AVE INTERSECTION WIDENING
					SUBTOTAL SEGMENT C	95	
					CAT 0010 TOTAL	38	
					CAT 0020 TOTAL	57	

REMOVING SIGN & SIGN STRUCTURE (S-151)

CATEGORY	STATION	LOCATION	204.0246 REMOVING ANCILLARY STRUCTURE (01. S-151) EACH	638.2601 REMOVING SIGNS TYPE I EACH
	SEGMENT C			
0010	379+08'NB'	STH 42 NB LANES	1	1
		CAT 0010 TOTAL	1	1

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CURB AND GUTTER ITEMS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0130 REMOVING CURB LF	204.0150 REMOVING CURB & GUTTER LF	416.0610 DRILLED TIE BARS EACH	601.0110 CONCRETE CURB TYPE D LF	601.0120 CONCRETE CURB TYPE J LF	601.0409 CONCRETE CURB AND GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB AND GUTTER 30-INCH TYPE D LF	601.0413 CONCRETE CURB AND GUTTER 6-INCH SLOPED 30-INCH TYPE G LF	601.0415 CONCRETE CURB AND GUTTER 6-INCH SLOPED 30-INCH TYPE J LF	601.0555 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	SPV.0090.01 CONCRETE CURB AND GUTTER 18-INCH TYPE D SPECIAL LF	SPV.0090.02 CONCRETE CURB AND GUTTER 30-INCH TYPE D SPECIAL LF	SPV.0090.03 CONCRETE CURB 8.5-INCH & GUTTER 30-INCH LF	REMARKS
	SEGMENT B																			
0010	NB OUTSIDE	340+36'NB'	-	340+66'NB'	36' RT	—	8	10	—	—	30	—	—	—	—	—	—	—	—	
					SUBTOTAL SEGMENT B	—	8	10	—	—	30	—	—	—	—	—	—	—	—	
	SEGMENT C																			
0010	NB OUTSIDE	371+87'NB'	-	372+00'NB'	36' RT	—	13	4	—	—	13	—	—	—	—	—	—	—	—	
0010	NB OUTSIDE	372+50'NB'	-	372+70'NB'	36'RT	5	20	6	5	—	20	—	—	—	—	—	—	—	—	
0010	NB OUTSIDE	372+98'NB'	-	373+21'NB'	36'RT	5	23	7	5	—	23	—	—	—	—	—	—	—	—	
0010	NB OUTSIDE	373+87'NB'	-	373+99'NB'	36'RT	—	12	4	—	—	12	—	—	—	—	—	—	—	—	
0010	NB OUTSIDE	374+37'NB'	-	374+73'NB'	36' RT	—	54	18	—	—	—	—	29	25	—	—	—	—	—	SW QUAD CTH S
0010	NB OUTSIDE	375+30'NB'	-	375+66'NB'	49' RT	—	40	13	—	—	40	—	—	—	—	—	—	—	—	CTH S SE
0010	NB OUTSIDE	378+98'NB'	-	379+18'NB'	39' RT	—	20	6	—	—	20	—	—	—	—	—	—	—	—	REMOVAL OF SIGN STRUCTURE
0010	NB OUTSIDE	387+67'NB'	-	387+72'NB'	36'RT	—	5	1	—	—	5	—	—	—	—	—	—	—	—	INLET REPLACEMENT
0010	NB OUTSIDE	426+00'NB'	-	426+19'NB'	64' RT	—	29	9	—	—	—	—	—	—	29	—	—	—	—	SHILOH RD SW
0020	NB OUTSIDE	78+99'U'	-	79+57'U'	-14' LT	—	—	—	—	—	—	—	—	—	—	66	—	—	—	CTH U SW
0020	NB OUTSIDE	78+96'U'	-	79+38'U'	16' RT	—	—	—	—	103	—	—	—	—	—	—	—	—	—	CTH U PORKCHOP
0020	NB OUTSIDE	78+91'U'	-	79+25'U'	36'RT	—	—	—	—	—	—	—	—	—	—	64	—	—	—	CTH U SE
0010	SB OUTSIDE	400+89'NB'	-	401+18'NB'	-62' LT	—	34	11	—	—	—	—	—	—	34	—	—	—	—	LANSING AVE NW
0010	SB OUTSIDE	462+33'NB'	-	462+53'NB'	-61' LT	—	22	7	—	—	—	—	—	—	22	—	—	—	—	CIRCLE RIDGE RD NW
0020	SB OUTSIDE	39+50'A'	-	39+61'A'	36' RT	—	—	—	—	—	—	—	—	—	—	54	—	—	—	ASHLAND PORKCHOP, 26' WITH TIE BARS
0020	SB OUTSIDE	39+59'A'	-	40+96'A'	18' RT	—	281	—	—	—	—	—	—	—	—	—	—	244	—	S. ASHLAND AVE NE
0020	SB OUTSIDE	39+77'A'	-	39+97'A'	-17' LT	—	18	—	—	—	—	—	—	—	—	—	18	—	—	S. ASHLAND AVE, ADJUST INLET COVER
0020	SB OUTSIDE	65+55'N'	-	67+16'N'	17' RT	—	155	—	—	—	—	—	—	—	82	—	—	113	—	S. NEENAH AVE NE
0020	SB OUTSIDE	81+13'CI'	-	81+71'CI'	17' RT	—	25	—	—	—	—	—	—	—	—	80	—	—	—	CIRCLE RIDGE RD NE

SEGMENT C CONTINUED ON NEXT SHEET

CURB AND GUTTER ITEMS (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0130 REMOVING CURB LF	204.0150 REMOVING CURB & GUTTER LF	416.0610 DRILLED TIE BARS EACH	601.0110 CONCRETE CURB TYPE D LF	601.0120 CONCRETE CURB TYPE J LF	601.0409 CONCRETE CURB AND GUTTER 30-INCH TYPE A LF	601.0411 CONCRETE CURB AND GUTTER 30-INCH TYPE D LF	601.0413 CONCRETE CURB AND GUTTER 6-INCH SLOPED 30-INCH TYPE G LF	601.0415 CONCRETE CURB AND GUTTER 6-INCH SLOPED 30-INCH TYPE G LF	601.0555 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A LF	601.0557 CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	SPV.0090.01 CONCRETE CURB AND GUTTER 18-INCH TYPE D SPECIAL LF	SPV.0090.02 CONCRETE CURB AND GUTTER 30-INCH TYPE D SPECIAL LF	SPV.0090.03 CONCRETE CURB 8.5-INCH & GUTTER 30-INCH LF	REMARKS
	SEGMENT C (CONTINUED)																			
0010	NB INSIDE	354+13'NB'	-	354+33'NB'	-2' LT	—	20	6	—	—	20	—	—	—	—	—	—	—	—	
0010	NB INSIDE	360+47'NB'	-	360+53'NB'	-2' LT	—	6	1	—	—	6	—	—	—	—	—	—	—	—	
0010	NB INSIDE	364+60'NB'	-	364+69'NB'	-2' LT	—	10	3	—	—	10	—	—	—	—	—	—	—	—	
0010	NB INSIDE	373+36'NB'	-	373+42'NB'	-21' LT	—	6	2	—	—	6	—	—	—	—	—	—	—	—	
0010	NB INSIDE	378+98'NB'	-	379+18'NB'	-2' LT	—	20	6	—	—	20	—	—	—	—	—	—	—	—	REMOVAL OF SIGN STRUCTURE
0010	NB INSIDE	384+01'NB'	-	384+17'NB'	-2' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	NB INSIDE	387+82'NB'	-	387+91'NB'	-4' LT	—	8	2	—	—	8	—	—	—	—	—	—	—	—	
0010	NB INSIDE	392+02'NB'	-	392+18'NB'	-2' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	NB INSIDE	396+02'NB'	-	396+18'NB'	-2' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	NB INSIDE	401+45'NB'	-	401+52'NB'	-19' LT	—	8	2	—	—	8	—	—	—	—	—	—	—	—	
0010	NB INSIDE	402+05'NB'	-	402+11'NB'	-2' LT	—	6	1	—	—	6	—	—	—	—	—	—	—	—	
0010	NB INSIDE	402+50'NB'	-	402+56'NB'	-2' LT	—	6	2	—	—	6	—	—	—	—	—	—	—	—	
0010	NB INSIDE	403+47'NB'	-	403+60'NB'	-2' LT	—	13	4	—	—	13	—	—	—	—	—	—	—	—	
0010	NB INSIDE	406+85'NB'	-	406+98'NB'	-2' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	NB INSIDE	410+51'NB'	-	410+67'NB'	-4' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	NB INSIDE	413+83'NB'	-	414+06'NB'	-8' LT	—	23	7	—	—	23	—	—	—	—	—	—	—	—	
0010	NB INSIDE	414+16'NB'	-	414+32'NB'	-2' LT	—	16	5	—	—	16	—	—	—	—	—	—	—	—	
0010	NB INSIDE	425+49'NB'	-	425+69'NB'	-15' LT	—	22	7	—	—	22	—	—	—	—	—	—	—	—	
0010	NB INSIDE	425+71'NB'	-	425+75'NB'	-2' LT	—	4	1	—	—	4	—	—	—	—	—	—	—	—	
0010	NB INSIDE	436+52'NB'	-	436+68'NB'	-2' LT	---	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	NB INSIDE	441+32'NB'	-	441+48'NB'	-12' LT	—	16	—	—	—	—	—	—	—	—	—	—	—	16	
0010	NB INSIDE	443+06'NB'	-	443+23'NB'	-2' LT	—	16	—	—	—	—	—	—	—	—	—	—	—	16	
0010	NB INSIDE	446+52'NB'	-	446+68'NB'	-2' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	NB INSIDE	450+52'NB'	-	450+68'NB'	-2' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	NB INSIDE	458+52'NB'	-	458+68'NB'	-2' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	358+93'NB'	-	358+99'NB'	-16' LT	—	6	2	—	—	6	—	—	—	—	—	—	—	—	
0010	SB INSIDE	364+60'NB'	-	364+69'NB'	-23' LT	—	10	3	—	—	10	—	—	—	—	—	—	—	—	
0010	SB INSIDE	376+35'NB'	-	376+41'NB'	-9' LT	—	6	2	—	—	6	—	—	—	—	—	—	—	—	
0010	SB INSIDE	384+01'NB'	-	384+17'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	392+01'NB'	-	392+18'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	395+99'NB'		395+15'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	400+70'NB'	-	400+86'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	402+11'NB'	-	402+24'NB'	-22' LT	—	13	4	—	—	13	—	—	—	—	—	—	—	—	
0010	SB INSIDE	402+20'NB'	-	402+26'NB'	-8' LT	—	6	2	—	—	6	—	—	—	—	—	—	—	—	
0010	SB INSIDE	406+70'NB'	-	407+14'NB'	-28' LT	—	45	9	—	—	45	—	—	—	—	—	—	—	—	
0010	SB INSIDE	413+88'NB'		413+97'NB'	-28' LT		7	2	—	—	7	—	—	—	—	—	—	—	—	REPLACE INLET RING WORK
0010	SB INSIDE	416+99'NB'	-	417+03'NB'	-22' LT	—	4	1	—	—	4	—	—	—	—	—	—	—	—	
0010	SB INSIDE	419+22'NB'	-	419+32'NB'	-28' LT	—	10	3	—	—	10	—	—	—	—	—	—	—	—	
0010	SB INSIDE	419+99'NB'	-	420+15'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	431+47'NB'	-	431+62'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	432+39'NB'	-	432+49'NB'	-28' LT	—	9	3	—	—	9	—	—	—	—	—	—	—	—	
0010	SB INSIDE	436+52'NB'	-	436+68'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	441+64'NB'	-	441+85'NB'	-28' LT	—	25	3	—	—	9	—	—	—	—	—	—	—	16	
0010	SB INSIDE	443+10'NB'	-	443+26'NB'	-28' LT	—	16	—	—	—	—	—	—	—	—	—	—	—	16	
0010	SB INSIDE	446+52'NB'	-	446+68'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	450+52'NB'	-	450+68'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	454+52'NB'	-	454+68'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	SB INSIDE	458+52'NB'	-	458+68'NB'	-28' LT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	
0010	NB & SB INSIDE	459+17'NB'	-	462+05'NB'	-2' LT	—	67	3	—	—	10	290	—	—	—	—	—	—	—	STH 42 NB LEFT TURN LANE
0020	NB & SB INSIDE	463+26'SB'	-	471+56'SB'	5' RT	—	140	45	—	—	135	1470	—	—	—	—	—	—	—	STH 42 SB LEFT TURN LANE
0010	RAMP	13+28'GN'	-	13+44'GN'	17' RT	—	16	—	—	—	16	—	—	—	—	—	—	—	—	GREEN BAY RD NB RAMP
0020	RAMP	20+56'GN'	-	23+73'GN	22' RT	—	—	—	—	—	—	324	—	—	—	—	—	—	—	GREEN BAY RD NB RAMP
					SUBTOTAL SEGMENT C	10	1,651	217	10	103	908	2,084	29	25	166	264	18	357	64	
					CAT 0010 TOTAL	10	1040	(1)	10	0	803	290	29	25	84	0	0	0	64	
					CAT 0020 TOTAL	0	619	(1)	0	103	135	1794	0	0	82	264	18	357	0	

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SIDEWALK

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0155 REMOVING CONCRETE SIDEWALK SY	602.0405 CONCRETE SIDEWALK 4-INCH SF	REMARKS
	SEGMENT C							
0010	NB INSIDE	373+36'NB'	-	373+42'NB'	-22' LT	2	18	STH 42 NB MEDIAN TURN LANE
0010	NB INSIDE	400+73'NB'	-	400+83'NB'	-22' LT	6	54	STH 42 NB MEDIAN TURN LANE
0010	NB INSIDE	402+05'NB'	-	402+11'NB'	-5 LT	3	27	
0010	NB INSIDE	402+20'NB'	-	402+26'NB'	-5 LT	3	27	
0010	NB INSIDE	402+50'NB'	-	402+56'NB'	-5 LT	3	27	
0010	NB INSIDE	403+47'NB'	-	403+54'NB'	-5 LT	7	63	
0010	NB INSIDE	413+83'NB'	-	414+06'NB'	-5 LT	13	117	
0010	NB INSIDE	414+16'NB'	-	414+32'NB'	-5 LT	9	81	
0010	NB INSIDE	425+50'NB'	-	425+71'NB'	-15' LT	7	63	STH 42 NB MEDIAN TURN LANE
0010	NB INSIDE	425+71'NB'	-	425+75'NB'	-5 LT	1	9	
0010	SB INSIDE	376+35'NB'	-	376+41'NB'	-7' LT	2	18	STH 42 SB MEDIAN TURN LANE
0010	SB INSIDE	402+11'NB'	-	402+24'NB'	-25 LT	8	72	STH 42 SB MEDIAN TURN LANE
0010	SB INSIDE	413+88'NB'	-	413+97'NB'	-25 LT	5	45	REPLACE INLET RING WORK
0010	SB INSIDE	416+99'NB'	-	417+03'NB'	-25' LT	2	18	STH 42 SB MEDIAN TURN LANE
0020	RAMP	21+30'GN'	-	23+54'GN'	40' RT	190	1,825	
					SUBTOTAL SEGMENT C	261	2,464	
					CAT 0010 TOTAL	71	639	
					CAT 0020 TOTAL	190	1,825	

REMOVING BARRIER

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	204.0157 REMOVING CONCRETE BARRIER LF	204.0165 REMOVING GUARDRAIL LF	REMARKS
	SEGMENT B							
0010	NB OUTSIDE	283+13'NB'	-	286+25'NB'	37' RT	—	270	
					SUBTOTAL SEGMENT B	—	270	
	SEGMENT C							
0010	NB OUTSIDE	378+11'NB'	-	379+06'NB'	42' RT	—	101	
0010	NB OUTSIDE	384+44'NB'	-	386+35'NB'	36' RT	—	192	
0010	NB OUTSIDE	387+64'NB'	-	392+53'NB'	35' RT	—	490	
0010	SB OUTSIDE	384+65'NB'	-	386+81'NB'	-65' LT	—	215	
0010	SB OUTSIDE	383+03'NB'	-	390+00'NB'	-66' LT	—	197	
0010	NB INSIDE	377+98'NB'	-	379+06'NB'	-6' LT	—	113	
0010	NB INSIDE	385+74'NB'	-	386+64'NB'	-15' LT	—	178	EXISTING BULLNOSE TERMINAL
0010	SB INSIDE	387+79'NB'	-	388+70'NB'	-15' LT	—	178	EXISTING BULLNOSE TERMINAL
0020	RAMP	20+01'GN'	-	23+97'GN'	30' RT	186	224	
					SUBTOTAL SEGMENT C	186	1,888	
					CAT 0010 TOTAL	0	1,934	
					CAT 0020 TOTAL	186	224	

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COMMON EXCAVATION

CATEGORY	DESCRIPTION (ALL QUANTITIES IN SINGLE DIVISION)	FROM/TO STATION			LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	SALVAGED/UNUSABLE MATERIAL (4)	AVAILABLE MATERIAL (5)	205.0200 ROCK EXCAVATION (7)	EXPANDED ROCK (12) FACTOR 1.10	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE (15)	COMMENT
0010	BEAMGUARD	282+00'NB'	/	286+26'NB'	STH 42 NB	35	0	35	0	0	12	15	20	20	
0020	STH 42 NB AT CTH U OUTSIDE	457+52'NB'	/	464+35'NB'	STH 42 NB	276	70	206	0	0	37	46	160	160	
0020	STH 42 SB AT CTH U OUTSIDE	463+22'NB'	/	471+56'NB'	STH 42 SB	235	54	181	0	0	51	64	117	117	
0010	STH 42 NB AT CTH U - INSIDE	457+52'SB'	/	462+57'SB'	STH 42 NB	354	68	286	0	0	0	0	286	286	
0020	STH 42 SB AT CTH U INSIDE	463+22'SB'	/	471+56'SB'	STH 42 SB	815	263	552	0	0	117	146	406	406	
0020	ASHLAND AVE	0+00'A' NE FLAG	/	2+40'A' NE FLAG	ASHLAND AVE	239	102	137	85	94	1	-116	253	253	
0020	GREEN BAY RD NB	20+50'GN'	/	23+73'GN'	GREEN BAY RD NB	51	46	5	0	0	24	30	-25	0	
0020	NEENAH AVE	2+49'N' NE FLAG	/	4+41'N' NE FLAG	NEENAH AVE	140	14	126	0	0	56	70	56	56	
0020	CTH U	78+06'U'	/	79+02'U'	CTH U	104	17	87	0	0	3	4	83	83	
0020	CTH U SW FLAG	10+00'U' SW FLAG	/	10+69'U' SW FLAG	CTH U	80	23	57	0	0	20	25	32	32	
0020	CTH U SE FLAG	10+16'U' SE FLAG	/	10+82'U' SE FLAG	CTH U	100	30	70	0	0	16	20	50	50	
0020	CIRCLE RIDGE RD NE FLAG	10+00'CI' NE FLAG	/	10+83'CI' NE FLAG	CIRCLE RIDGE RD	97	45	52	0	0	4	5	47	47	
0020	CIRCLE RIDGE RD CL	81+73'CI'	/	82+11'CI'	CIRCLE RIDGE RD	10	2	8	0	0	0	0	8	8	
	GRAND TOTAL					2,536	664	1,596	85	94	304	263	1,333	1,358	
					CAT 0010 - TOTAL COMMON EXCAVATION	389									
					CAT 0020 - TOTAL COMMON EXCAVATION	2,147									

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT. ROCK EXCAVATION IS NOT INCULDED IN CUT.
(4) SALVAGED/UNUSABLE MATERIAL: INCLUDES PAVEMENT MATERIAL AND ROCK EXCAVATION
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE MATERIAL

(12) EXPANDED ROCK FACTOR = 1.1
(13) EXPANDED FILL FACTOR = 1.25
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

PREPARE FOUNDATION

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (01. 4430-19-71) LS	211.0300 PREPARE FOUNDATION FOR CONCRETE BASE (PROJECT) (01. 4430-19-71) LS	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	REMARKS
0010			-		PROJECT	1	—	—	
0010			-		PROJECT	—	1	—	GREEN BAY RD NB RAMP & NEENAH AVENUE
	SEGMENT C								
0010	NB OUTSIDE	381+60'NB'	-	481+89'SB'	27' RT	—	—	101	3' PAVED TO 5' PAVED ASPHALT SHOULDER
0010	SB OUTSIDE	381+60'NB'	-	481+89'SB'	-57' LT	—	—	101	3' PAVED TO 5' PAVED ASPHALT SHOULDER
					CAT 0010 TOTAL	1	1	202	

CONCRETE BASE

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	320.0145 CONCRETE BASE 8-INCH SY	416.0610 DRILLED TIE BARS	REMARKS
	SEGMENT C							
0020	SB OUTSIDE	65+53'N'	-	66+23'N'	15' RT	145	—	S. NEENAH AVE WIDENING, NON-DOWELED
0020	SB OUTSIDE	65+53'N'	-	66+23'N'	15' RT	—	42	S. NEENAH AVE WIDENING, NON-DOWELED
0010	RAMP	20+90'GN'	-	22+86'GN'	0' RT	372	157	GREEN BAY RD NB RAMP, NON-DOWELED
					SUBTOTAL SEGMENT C	517	199	
					CAT 0010 TOTAL	372	(NOTE)	
					CAT 0020 TOTAL	145	(NOTE)	

(NOTE) PROJECT TOTAL QUANTITY SHOWN IN "CONCRETE REPAIR & REPLACEMENT" TABLE

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CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	BASE MATERIAL 305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
	SEGMENT A								
0010	NB OUTSIDE	100+00'NB'	-	220+63'NB'	33' RT	298	—	3	
0010	SB OUTSIDE	100+00'NB'	-	220+63'NB'	-83' LT	309	—	3	
0010	NB INSIDE	100+00'NB'	-	220+63'NB'	-1.5' LT	458	—	5	
0010	SB INSIDE	100+00'NB'	-	220+63'NB'	-45.5' LT	458	—	5	
					SUBTOTAL SEGMENT A	1,523	0	15	
	SEGMENT B								
0010	NB OUTSIDE	220+63'NB'	-	281+26'NB'	33' RT	157	—	2	
0010	NB OUTSIDE	281+26'NB'	-	287+69'NB'	33' RT	86	—	—	MGS GUARDRAIL GRADING
0010	NB OUTSIDE	287+69'NB'	-	335+80'NB'	33' RT	125	—	1	
0010	SB OUTSIDE	220+63'NB'	-	338+97'NB'	-83' LT	304	—	3	
0010	NB INSIDE	220+63'NB'	-	305+84'NB'	-1.5' LT	326	—	3	
0010	SB INSIDE	220+63'NB'	-	305+84'NB'	-45.5' LT	313	—	3	
					SUBTOTAL SEGMENT B	1,311	0	12	
	SEGMENT C								
0010	NB OUTSIDE	381+60'NB'	-	393+02'NB'	36' RT	81	—	1	SHOULDER BEHIND MGS GUARDRAIL
0010	NB OUTSIDE	384+29'NB'	-	384+91'NB'	44' RT	3	—	—	NB ENERGY ABSORBING TERMINAL (EAT)
0010	NB OUTSIDE	393+02'NB'	-	458+15'NB'	31.5' RT	496	—	5	
0010	NB OUTSIDE	458+15'NB'	-	464+66'NB'	24' RT	39	—	—	RIGHT TURN LANE AND CTH U WIDENING
0020	NB OUTSIDE	458+15'NB'	-	464+66'NB'	24' RT	—	674	7	RIGHT TURN LANE AND CTH U WIDENING
0020	NB OUTSIDE	78+07'U'	-	78+99'U'	12' (LT/RT)	14	—	—	CTH U
0020	NB OUTSIDE	78+07'U'	-	78+99'U'	12' (LT/RT)	—	186	2	CTH U
0010	SB OUTSIDE	382+60'NB'	-	391+39'NB'	-66.5'LT	69	—	1	SHOULDER BEHIND MGS GUARDRAIL
0010	SB OUTSIDE	389+52'NB'	-	390+50'NB'	-71' LT	8	—	—	SB ENERGY ABSORBING TERMINAL (EAT)
0010	SB OUTSIDE	391+39'NB'	-	462+33'NB'	-59.5 LT	456	—	5	
0020	SB OUTSIDE	39+45'A'	-	40+96'A'	18' RT	—	308	3	S. ASHLAND AVE INTERSECTION WIDENING
0010	SB OUTSIDE	65+52'N'	-	67+16'N'	18' RT	—	—	—	
0020	SB OUTSIDE	65+52'N'	-	67+16'N'	18' RT	—	166	2	S. NEENAH AVE INTERSECTION WIDENING
0010	NB INSIDE	373+39'NB'	-	425+71'NB'	-5' LT	—	9	—	CURB AND GUTTER REPAIRS
0010	NB INSIDE	459+17'NB'	-	462+55'NB'	-9'LT	—	442	4	
0010	SB INSIDE	376+35'NB'	-	416+99'NB'	-25' LT	—	1	—	CURB AND GUTTER REPAIRS
0010	RAMP	13+45'GN'	-	28+87'GN'	22.5' RT	121	—	—	
0020	RAMP	13+45'GN'	-	28+87'GN'	22.5' RT	—	59	1	NB RAMP RIGHT SHOULDER
0010	RAMP	14+85'GN'	-	24+69'GN'	-4' LT	29	—	—	NB RAMP LEFT SHOULDER
0020	RAMP	21+30'GN'	-	23+54'GN'	26.5' RT	24	—	—	SIDEWALK BASE
0010	RAMP	25+79'GN'	-	30+06'GN'	VARIES (LT)	35	—	—	GREEN BAY ROAD INTERSECTION TO 30+06'GN'
0010	RAMP	20+00'GS'	-	31+47'GS'	-20.5 LT	112	—	1	SB RAMP LEFT SHOULDER
0010	RAMP	21+96'GS'	-	27+76'GS'	4' RT	102	—	1	SB RAMP RIGHT SHOULDER
0020	FLAGGING	463+23'SB'	-	471+56'SB'	0' RT	—	660	7	STH 42 MEDIAN CONSTRUCTION
0020	FLAGGING	463+23'SB'	-	471+56'SB'	0' RT	—	14	—	SHOULDER DROP OFF AT STH 42 MEDIAN 3H:1V SLOPE
0020	FLAGGING	463+52'SB'	-	471+56'SB'	-12'LT	—	435	4	RIGHT TURN LANE AND CIRCLE RIDGE RD WIDENING
0010	FLAGGING	463+52'SB'	-	471+56'SB'	-12'LT	102	—	1	RIGHT TURN LANE AND CIRCLE RIDGE RD WIDENING
0010	FLAGGING	464+66'SB'	-	476+36'NB'	VARIES (RT)	82	—	1	OUTSIDE SHOULDER
0010	FLAGGING	471+56'SB'	-	476+11'NB'	VARIES(LT)	29	—	—	OUTSIDE SHOULDER
					SUBTOTAL SEGMENT C	1,802	2,954	44	
					CAT 0010 TOTAL	4,598	452	47	
					CAT 0020 TOTAL	38	2,502	25	

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT A														
0010	NB OUTSIDE	103+10'NB'	-	104+37'NB'	12' RT	—	51	16	—		198		—	—	
0010	NB OUTSIDE	110+52'NB'	-	110+56'NB'	312' RT	—	2	16	23		—		—	—	
0010	NB OUTSIDE	112+10'NB'	-	112+18'NB'	116' RT	—	7	16	—		95		—	—	
0010	NB OUTSIDE	114+76'NB'	-	114+83'NB'	12' RT	—	3	16	11		—		—	—	
0010	NB OUTSIDE	119+70'NB'	-	120+01'NB'	12' RT	—	13	16	—		49		—	—	
0010	NB OUTSIDE	123+81'NB'	-	123+89'NB'	12' RT	—	3	16	12		—		—	—	
0010	NB OUTSIDE	124+62'NB'	-	124+72'NB'	12' RT	—	4	16	15		—		—	—	
0010	NB OUTSIDE	127+38'NB'	-	127+45'NB'	12' RT	—	3	16	10		—		—	—	
0010	NB OUTSIDE	132+14'NB'	-	132+67'NB'	12' RT	—	21	16	—		82		—	—	
0010	NB OUTSIDE	132+71'NB'	-	132+86'NB'	12' RT	—	6	16	23		—		—	—	
0010	NB OUTSIDE	145+16'NB'	-	145+70'NB'	12' RT	—	21	16	—		83		—	—	
0010	NB OUTSIDE	145+93'NB'	-	145+99'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	149+51'NB'	-	149+62'NB'	12' RT	—	4	16	17		—		—	—	
0010	NB OUTSIDE	149+82'NB'	-	149+88'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	152+28'NB'	-	152+34'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	157+82'NB'	-	157+88'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	164+64'NB'	-	164+70'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	181+36'NB'	-	181+43'NB'	12' RT	12	3	16	—		—		—	—	
0010	NB OUTSIDE	184+87'NB'	-	184+94'NB'	12' RT	11	3	16	—		—		—	—	
0010	NB OUTSIDE	193+69'NB'	-	193+76'NB'	12' RT	10	3	16	—		—		—	—	
0010	NB OUTSIDE	199+27'NB'	-	199+34'NB'	12' RT	10	2	16	—		—		—	—	
0010	SB OUTSIDE	102+23'NB'	-	102+29'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	130+08'NB'	-	130+15'NB'	-62' LT	22	6	16	—		—		—	—	
0010	SB OUTSIDE	130+93'NB'	-	130+99'NB'	-62' LT	9	2	16	—		—		—	—	
0010	SB OUTSIDE	135+64'NB'	-	135+70'NB'	-62' LT	9	2	16	—		—		—	—	
0010	SB OUTSIDE	152+37'NB'	-	152+51'NB'	-62' LT	—	6	16	22		—		—	—	
0010	SB OUTSIDE	153+21'NB'	-	153+27'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	153+97'NB'	-	154+04'NB'	-62' LT	—	3	16	11		—		—	—	
0010	SB OUTSIDE	154+32'NB'	-	154+38'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	154+70'NB'	-	154+77'NB'	-62' LT	—	3	16	11		—		—	—	
0010	SB OUTSIDE	159+26'NB'	-	159+67'NB'	-62' LT	—	16	16	—		64		—	—	
0010	SB OUTSIDE	161+26'NB'	-	161+44'NB'	-62' LT	—	8	16	—		30		—	—	
0010	SB OUTSIDE	163+64'NB'	-	163+79'NB'	-62' LT	—	6	16	22		—		—	—	
0010	SB OUTSIDE	164+14'NB'	-	165+67'NB'	-62' LT	—	62	16	—		241		—	—	
0010	SB OUTSIDE	171+03'NB'	-	171+09'NB'	-62' LT	—	3	16	10		—		—	—	
0010	SB OUTSIDE	171+79'NB'	-	171+85'NB'	-62' LT	—	2	16	10		—		—	—	
0010	SB OUTSIDE	174+91'NB'	-	174+96'NB'	-62' LT	—	2	16	8		—		—	—	
0010	SB OUTSIDE	176+45'NB'	-	176+85'NB'	-62' LT	—	16	16	—		62		—	—	
0010	SB OUTSIDE	178+18'NB'	-	178+32'NB'	-62' LT	—	5	16	21		—		—	—	
0010	SB OUTSIDE	178+48'NB'	-	178+71'NB'	-62' LT	—	9	16	—		35		—	—	
0010	SB OUTSIDE	179+95'NB'	-	180+02'NB'	-62' LT	—	3	16	11		—		—	—	
0010	SB OUTSIDE	181+04'NB'	-	181+10'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	182+88'NB'	-	182+94'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	185+62'NB'	-	185+68'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	185+87'NB'	-	185+92'NB'	-62' LT	—	2	16	8		—		—	—	
0010	SB OUTSIDE	192+89'NB'	-	192+96'NB'	-62' LT	—	3	16	11		—		—	—	
0010	SB OUTSIDE	193+48'NB'	-	193+56'NB'	-62' LT	—	3	16	13		—		—	—	
0010	SB OUTSIDE	197+21'NB'	-	197+60'NB'	-62' LT	—	16	16	—		61		—	—	
0010	SB OUTSIDE	197+68'NB'	-	197+77'NB'	-62' LT	—	4	16	14		—		—	—	
0010	SB OUTSIDE	202+30'NB'	-	202+41'NB'	-62' LT	—	5	16	18		—		—	—	
0010	SB OUTSIDE	203+42'NB'	-	203+54'NB'	-62' LT	—	5	16	18		—		—	—	
		PAGE SUBTOTAL FOR SEGMENT A				83	366	816	379	42	900	100	—	—	

SEGMENT A CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT A (CONTINUED)														
0010	SB OUTSIDE	205+01'NB'	-	205+25'NB'	-62' LT	—	10	16	—		38		—	—	
0010	SB OUTSIDE	205+55'NB'	-	205+65'NB'	-62' LT	—	4	16	15		—		—	—	
0010	SB OUTSIDE	208+01'NB'	-	208+21'NB'	-62' LT	—	8	16	—		31		—	—	
0010	SB OUTSIDE	208+99'NB'	-	209+05'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	210+00'NB'	-	210+17'NB'	-62' LT	—	7	16	—		27		—	—	
0010	SB OUTSIDE	211+79'NB'	-	211+86'NB'	-62' LT	—	3	16	11		—		—	—	
0010	SB OUTSIDE	213+19'NB'	-	213+27'NB'	-62' LT	—	3	16	12		—		—	—	
0010	SB OUTSIDE	219+76'NB'	-	219+84'NB'	-62' LT	—	3	16	12		—		—	—	
0010	SB OUTSIDE	220+09'NB'	-	220+19'NB'	-62' LT	—	4	16	14		—		—	—	
0010	NB INSDIE	114+76'NB'	-	114+83'NB'	0' LT	—	3	16	9		—		—	—	
0010	NB INSDIE	116+85'NB'	-	116+91'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	118+13'NB'	-	118+19'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	121+35'NB'	-	121+77'NB'	0' LT	—	17	16	—		57		—	—	
0010	NB INSDIE	122+37'NB'	-	122+43'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	123+81'NB'	-	123+89'NB'	0' LT	—	3	16	10		—		—	—	
0010	NB INSDIE	124+62'NB'	-	124+72'NB'	0' LT	—	4	16	13		—		—	—	
0010	NB INSDIE	127+38'NB'	-	127+45'NB'	0' LT	—	3	16	9		—		—	—	
0010	NB INSDIE	130+82'NB'	-	130+90'NB'	0' LT	—	3	16	11		—		—	—	
0010	NB INSDIE	132+71'NB'	-	132+86'NB'	0' LT	—	6	16	20		—		—	—	
0010	NB INSDIE	134+53'NB'	-	134+59'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	144+44'NB'	-	144+51'NB'	0' LT	—	3	16	9		—		—	—	
0010	NB INSDIE	148+22'NB'	-	148+28'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	149+51'NB'	-	149+62'NB'	0' LT	—	4	16	15		—		—	—	
0010	NB INSDIE	149+82'NB'	-	149+88'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	152+28'NB'	-	152+34'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	157+82'NB'	-	157+88'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	164+64'NB'	-	164+70'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSIDE	169+48'NB'	-	169+56'NB'	0' LT	11	3	16	—		—		—	—	
0010	NB INSIDE	187+78'NB'	-	187+84'NB'	0' LT	8	2	16	—		—		—	—	
0010	NB INSIDE	200+28'NB'	-	200+34'NB'	0' LT	8	2	16	—		—		—	—	
0010	NB INSIDE	208+33'NB'	-	208+39'NB'	0' LT	8	2	16	—		—		—	—	
0010	SB INSIDE	121+35'NB'	-	121+77'NB'	0' LT	—	17	16	—		57		—	—	
0010	SB INSIDE	139+54'NB'	-	139+60'NB'	-50' LT	8	2	16	—		—		—	—	
0010	SB INSIDE	152+37'NB'	-	152+51'NB'	-50' LT	—	6	16	19		—		—	—	
0010	SB INSIDE	153+84'NB'	-	153+93'NB'	-50' LT	—	4	16	12		—		—	—	
0010	SB INSIDE	154+70'NB'	-	154+77'NB'	-50' LT	—	3	16	9		—		—	—	
0010	SB INSIDE	163+64'NB'	-	163+79'NB'	-50' LT	—	6	16	19		—		—	—	
0010	SB INSIDE	164+36'NB'	-	164+57'NB'	-50' LT	—	9	16	—		29		—	—	
0010	SB INSIDE	171+03'NB'	-	171+09'NB'	-50' LT	—	3	16	8		—		—	—	
0010	SB INSIDE	171+79'NB'	-	171+85'NB'	-50' LT	—	2	16	8		—		—	—	
0010	SB INSIDE	174+91'NB'	-	174+96'NB'	-50' LT	—	2	16	7		—		—	—	
0010	SB INSIDE	178+16'NB'	-	178+22'NB'	-50' LT	—	2	16	8		—		—	—	
0010	SB INSIDE	179+25'NB'	-	179+31'NB'	-38' LT	—	2	16	8		—		—	—	
0010	SB INSIDE	179+26'NB'	-	179+34'NB'	-50' LT	—	3	16	12		—		—	—	
0010	SB INSIDE	179+95'NB'	-	180+02'NB'	-50' LT	—	3	16	10		—		—	—	
0010	SB INSIDE	179+95'NB'	-	180+02'NB'	-40' LT	—	3	16	8		—		—	—	
0010	SB INSIDE	181+04'NB'	-	181+10'NB'	-50' LT	—	2	16	8		—		—	—	
0010	SB INSIDE	182+88'NB'	-	182+94'NB'	-50' LT	—	2	16	8		—		—	—	
0010	SB INSIDE	185+62'NB'	-	185+68'NB'	-50' LT	—	2	16	8		—		—	—	
0010	SB INSIDE	185+81'NB'	-	185+87'NB'	-50' LT	—	3	16	9		—		—	—	
		PAGE SUBTOTAL FOR SEGMENT A				43	198	800	362	40	214	24	—	—	

SEGMENT A CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT A (CONTINUED)														
0010	SB INSIDE	186+46'NB'	-	186+55'NB'	-50' LT	—	3	16	11		—		—	—	
0010	SB INSIDE	192+89'NB'	-	192+96'NB'	-50' LT	—	3	16	9		—		—	—	
0010	SB INSIDE	193+48'NB'	-	193+56'NB'	-50' LT	—	3	16	11		—		—	—	
0010	SB INSIDE	197+68'NB'	-	197+77'NB'	-50' LT	—	4	16	12		—		—	—	
0010	SB INSIDE	198+24'NB'	-	198+40'NB'	-50' LT	—	6	16	—		21		—	—	
0010	SB INSIDE	202+30'NB'	-	202+41'NB'	-50' LT	—	5	16	15		—		—	—	
0010	SB INSIDE	203+42'NB'	-	203+54'NB'	-50' LT	—	5	16	15		—		—	—	
0010	SB INSIDE	204+59'NB'	-	204+66'NB'	-50' LT	—	3	16	9		—		—	—	
0010	SB INSIDE	205+55'NB'	-	205+65'NB'	-50' LT	—	4	16	13		—		—	—	
0010	SB INSIDE	208+01'NB'	-	208+21'NB'	-50' LT	—	8	16	—		27		—	—	
0010	SB INSIDE	208+01'NB'	-	208+21'NB'	-38' LT	—	8	16	—		26		—	—	
0010	SB INSIDE	208+99'NB'	-	209+05'NB'	-40' LT	—	2	16	6		—		—	—	
0010	SB INSIDE	208+99'NB'	-	209+05'NB'	-50' LT	—	2	16	8		—		—	—	
0010	SB INSIDE	210+00'NB'	-	210+17'NB'	-50' LT	—	7	16	—		23		—	—	
0010	SB INSIDE	211+79'NB'	-	211+86'NB'	-50' LT	—	3	16	9		—		—	—	
0010	SB INSIDE	219+33'NB'	-	219+43'NB'	-50' LT	—	4	16	14		—		—	—	
0010	SB INSIDE	219+51'NB'	-	219+62'NB'	-50' LT	—	4	16	15		—		—	—	
0010	SB INSIDE	219+86'NB'	-	219+92'NB'	-50' LT	—	2	16	8		—		—	—	
0010	SB INSIDE	220+09'NB'	-	220+19'NB'	-50' LT	—	4	16	12		—		—	—	
		UNDISTRIBUTED				7	60	275	50		75		—	—	
		SUBTOTAL FOR SEGMENT A				133	704	2,195	937	104	1,268	141	—	—	
	SEGMENT B														
0010	NB OUTSIDE	221+46'NB'	-	221+52'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	222+77'NB'	-	222+83'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	227+58'NB'	-	227+66'NB'	12' RT	—	3	16	13		—		—	—	
0010	NB OUTSIDE	228+10'NB'	-	228+16'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	228+43'NB'	-	228+49'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	228+82'NB'	-	228+88'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	229+54'NB'	-	229+60'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	230+44'NB'	-	230+50'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	231+17'NB'	-	231+23'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	243+35'NB'	-	243+44'NB'	12' RT	—	4	16	14		—		—	—	
0010	NB OUTSIDE	244+74'NB'	-	245+07'NB'	12' RT	—	13	16	—		52		—	—	
0010	NB OUTSIDE	246+80'NB'	-	246+94'NB'	12' RT	—	6	16	22		—		—	—	
0010	NB OUTSIDE	248+20'NB'	-	248+28'NB'	12' RT	—	4	16	14		—		—	—	
0010	NB OUTSIDE	248+95'NB'	-	250+07'NB'	12' RT	—	45	16	—		174		—	—	
0010	NB OUTSIDE	253+16'NB'	-	253+27'NB'	12' RT	—	4	16	17		—		—	—	
0010	NB OUTSIDE	256+57'NB'	-	256+63'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	256+91'NB'	-	256+97'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	257+30'NB'	-	257+36'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	260+76'NB'	-	260+92'NB'	12' RT	—	6	16	—		25		—	—	
0010	NB OUTSIDE	268+00'NB'	-	268+06'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	271+90'NB'	-	271+96'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	272+74'NB'	-	273+21'NB'	12' RT	—	19	16	—		73		—	—	
0010	NB OUTSIDE	277+89'NB'	-	277+98'NB'	12' RT	—	3	16	13		—		—	—	
0010	NB OUTSIDE	280+44'NB'	-	280+50'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	281+91'NB'	-	281+97'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	283+29'NB'	-	283+35'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	284+04'NB'	-	284+55'NB'	12' RT	—	20	16	—		78		—	—	
0010	NB OUTSIDE	285+62'NB'	-	285+72'NB'	12' RT	—	4	16	15		—		—	—	
0010	NB OUTSIDE	285+78'NB'	-	285+88'NB'	12' RT	—	4	16	15		—		—	—	
0010	NB OUTSIDE	287+11'NB'	-	287+20'NB'	12' RT	—	4	16	15		—		—	—	
0010	NB OUTSIDE	287+47'NB'	-	287+53'NB'	12' RT	—	2	16	9		—		—	—	
		PAGE SUBTOTAL FOR SEGMENT B				—	180	496	267	30	362	40	—	—	

SEGMENT B CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT B (CONTINUED)														
0010	NB OUTSIDE	290+66'NB'	-	290+73'NB'	12' RT	—	3	16	10		—		—	—	
0010	NB OUTSIDE	290+88'NB'	-	291+14'NB'	12' RT	—	10	16	—		40		—	—	
0010	NB OUTSIDE	292+59'NB'	-	292+65'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	293+58'NB'	-	293+64'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	298+79'NB'	-	298+85'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	299+10'NB'	-	299+21'NB'	12' RT	—	4	16	17		—		—	—	
0010	NB OUTSIDE	301+82'NB'	-	301+90'NB'	12' RT	—	3	16	12		—		—	—	
0010	NB OUTSIDE	304+28'NB'	-	304+37'NB'	12' RT	—	3	16	13		—		—	—	
0010	NB OUTSIDE	305+62'NB'	-	306+16'NB'	12' RT	—	22	16	—		84		—	—	
0010	NB OUTSIDE	307+00'NB'	-	307+06'NB'	12' RT	—	3	16	10		—		—	—	
0010	NB OUTSIDE	311+37'NB'	-	312+12'NB'	12' RT	—	30	16	—		114		—	—	
0010	NB OUTSIDE	313+24'NB'	-	313+44'NB'	12' RT	—	8	16	—		31		—	—	
0010	NB OUTSIDE	315+46'NB'	-	315+52'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	316+09'NB'	-	316+15'NB'	12' RT	—	3	16	10		—		—	—	
0010	NB OUTSIDE	318+55'NB'	-	318+61'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	321+62'NB'	-	322+40'NB'	12' RT	—	31	16	—		122		—	—	
0010	NB OUTSIDE	325+02'NB'	-	325+11'NB'	12' RT	—	3	16	13		—		—	—	
0010	NB OUTSIDE	327+36'NB'	-	327+43'NB'	12' RT	—	2	16	10		—		—	—	
0010	NB OUTSIDE	328+46'NB'	-	328+68'NB'	12' RT	—	9	16	—		34		—	—	
0010	NB OUTSIDE	331+02'NB'	-	331+08'NB'	12' RT	—	2	16	9		—		—	—	
0010	NB OUTSIDE	333+72'NB'	-	333+79'NB'	12' RT	—	6	16	12		—		—	—	
0010	NB OUTSIDE	337+26'NB'	-	337+32'NB'	12' RT	—	5	16	10		—		—	—	
0010	NB OUTSIDE	338+52'NB'	-	338+63'NB'	12' RT	—	8	16	16		—		—	—	
0010	NB OUTSIDE	338+83'NB'	-	338+96'NB'	12' RT	—	10	16	20		—		—	—	
0010	NB OUTSIDE	341+51'NB'	-	341+70'NB'	12' RT	—	15	16	—		30		—	—	
0010	NB OUTSIDE	342+28'NB'	-	342+34'NB'	12' RT	—	5	16	9		—		—	—	
0010	NB OUTSIDE	345+27'NB'	-	345+33'NB'	12' RT	—	5	16	9		—		—	—	
0010	NB OUTSIDE	346+34'NB'	-	346+41'NB'	12' RT	—	5	16	10		—		—	—	
0010	NB OUTSIDE	347+29'NB'	-	347+38'NB'	12' RT	—	7	16	14		—		—	—	
0010	NB OUTSIDE	348+02'NB'	-	348+08'NB'	12' RT	—	5	16	9		—		—	—	
0010	NB OUTSIDE	348+58'NB'	-	348+91'NB'	12' RT	—	27	16	—		52		—	—	
0010	NB OUTSIDE	349+51'NB'	-	349+58'NB'	12' RT	—	5	16	10		—		—	—	
0010	NB OUTSIDE	350+31'NB'	-	350+38'NB'	12' RT	—	5	16	9		—		—	—	
0010	NB OUTSIDE	350+92'NB'	-	350+98'NB'	12' RT	—	5	16	10		—		—	—	
0010	SB OUTSIDE	220+79'NB'	-	220+88'NB'	-62' LT	—	4	16	14		—		—	—	
0010	SB OUTSIDE	221+07'NB'	-	221+20'NB'	-62' LT	—	5	16	20		—		—	—	
0010	SB OUTSIDE	221+54'NB'	-	221+62'NB'	-62' LT	—	3	16	13		—		—	—	
0010	SB OUTSIDE	222+54'NB'	-	222+72'NB'	-62' LT	—	7	16	—		28		—	—	
0010	SB OUTSIDE	223+05'NB'	-	223+21'NB'	-62' LT	—	6	16	—		25		—	—	
0010	SB OUTSIDE	226+78'NB'	-	226+84'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	226+91'NB'	-	227+12'NB'	-62' LT	—	9	16	—		33		—	—	
0010	SB OUTSIDE	227+78'NB'	-	227+89'NB'	-62' LT	—	4	16	17		—		—	—	
0010	SB OUTSIDE	230+55'NB'	-	231+26'NB'	-62' LT	—	28	16	—		107		—	—	
0010	SB OUTSIDE	234+80'NB'	-	234+86'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	238+16'NB'	-	238+22'NB'	-62' LT	—	2	16	9		—		—	—	
0010	SB OUTSIDE	244+54'NB'	-	244+60'NB'	-62' LT	9	2	16	—		—		—	—	
0010	SB OUTSIDE	270+10'NB'	-	270+16'NB'	-62' LT	9	2	16	—		—		—	—	
0010	SB OUTSIDE	273+99'NB'	-	274+05'NB'	-62' LT	9	2	16	—		—		—	—	
0010	SB OUTSIDE	300+10'NB'	-	300+30'NB'	-62' LT	—	8	16	—		30		—	—	
0010	SB OUTSIDE	303+19'NB'	-	303+31'NB'	-58' LT	—	5	16	20		—		—	—	
0010	SB OUTSIDE	304+47'NB'	-	304+55'NB'	-50' LT	—	4	16	14		—		—	—	
		PAGE SUBTOTAL FOR SEGMENT B				27	359	816	374	42	657	73	—	—	

SEGMENT B CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT B (CONTINUED)														
0010	SB OUTSIDE	312+26'NB'	-	312+35'NB'	-30' LT	—	4	16	14		—		—	—	
0010	SB OUTSIDE	312+78'NB'	-	312+86'NB'	-30' LT	—	3	16	12		—		—	—	
0010	SB OUTSIDE	314+45'NB'	-	314+54'NB'	-30' LT	—	4	16	14		—		—	—	
0010	SB OUTSIDE	321+59'NB'	-	321+69'NB'	-30' LT	—	4	16	15		—		—	—	
0010	SB OUTSIDE	324+93'NB'	-	325+34'NB'	-30' LT	—	16	16	—		63		—	—	
0010	SB OUTSIDE	333+60'NB'	-	333+89'NB'	-30' LT	—	12	16	—		45		—	—	
0010	SB OUTSIDE	336+51'NB'	-	336+63'NB'	-30' LT	—	5	16	20		—		—	—	
0010	SB OUTSIDE	339+11'NB'	-	339+28'NB'	-30' LT	—	13	16	—		26		—	—	
0010	SB OUTSIDE	339+47'NB'	-	339+74'NB'	-30' LT	—	21	16	—		41		—	—	
0010	SB OUTSIDE	340+00'NB'	-	340+22'NB'	-30' LT	—	18	16	—		34		—	—	
0010	SB OUTSIDE	342+41'NB'	-	342+65'NB'	-30' LT	—	19	16	—		37		—	—	
0010	SB OUTSIDE	344+62'NB'	-	344+72'NB'	-30' LT	—	8	16	15		—		—	—	
0010	SB OUTSIDE	347+63'NB'	-	347+74'NB'	-30' LT	—	8	16	16		—		—	—	
0010	SB OUTSIDE	348+30'NB'	-	348+43'NB'	-30' LT	—	10	16	20		—		—	—	
0010	SB OUTSIDE	349+08'NB'	-	349+19'NB'	-30' LT	—	9	16	17		—		—	—	
0010	NB INSDIE	226+53'NB'	-	226+61'NB'	0' LT	—	3	16	11		—		—	—	
0010	NB INSDIE	229+54'NB'	-	229+60'NB'	0' RT	—	2	16	8		—		—	—	
0010	NB INSDIE	230+44'NB'	-	230+50'NB'	0' RT	—	2	16	8		—		—	—	
0010	NB INSDIE	231+17'NB'	-	231+23'NB'	0' RT	—	2	16	8		—		—	—	
0010	NB INSDIE	243+35'NB'	-	243+44'NB'	0' LT	—	4	16	12		—		—	—	
0010	NB INSDIE	243+64'NB'	-	243+72'NB'	0' LT	—	3	16	9		—		—	—	
0010	NB INSDIE	246+36'NB'	-	246+42'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	246+80'NB'	-	246+94'NB'	0' LT	—	6	16	19		—		—	—	
0010	NB INSDIE	253+16'NB'	-	253+27'NB'	0' LT	—	4	16	14		—		—	—	
0010	NB INSDIE	256+57'NB'	-	256+63'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	256+91'NB'	-	256+97'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	257+19'NB'	-	257+34'NB'	0' LT	—	6	16	20		—		—	—	
0010	NB INSDIE	258+01'NB'	-	258+07'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	260+83'NB'	-	260+89'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	262+15'NB'	-	262+21'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	268+00'NB'	-	268+06'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	277+89'NB'	-	277+98'NB'	0' LT	—	3	16	11		—		—	—	
0010	NB INSDIE	281+91'NB'	-	281+97'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	282+97'NB'	-	283+79'NB'	0' LT	—	33	16	—		110		—	—	
0010	NB INSDIE	284+50'NB'	-	284+56'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	285+62'NB'	-	285+72'NB'	0' LT	—	4	16	13		—		—	—	
0010	NB INSDIE	285+78'NB'	-	285+88'NB'	0' LT	—	4	16	13		—		—	—	
0010	NB INSDIE	287+11'NB'	-	287+20'NB'	0' LT	—	4	16	12		—		—	—	
0010	NB INSDIE	287+47'NB'	-	287+53'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	290+66'NB'	-	290+73'NB'	0' LT	—	3	16	9		—		—	—	
0010	NB INSDIE	290+99'NB'	-	291+05'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	296+62'NB'	-	296+68'NB'	0' LT	—	2	16	8		—		—	—	
0010	NB INSDIE	299+10'NB'	-	299+21'NB'	0' LT	—	4	16	14		—		—	—	
0010	NB INSDIE	301+82'NB'	-	301+90'NB'	0' LT	—	3	16	10		—		—	—	
0010	NB INSDIE	304+28'NB'	-	304+37'NB'	0' LT	—	7	16	12		—		—	—	
0010	NB INSDIE	307+00'NB'	-	307+06'NB'	0' LT	—	5	16	9		—		—	—	
0010	NB INSDIE	309+94'NB'	-	310+00'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	312+95'NB'	-	313+01'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	315+46'NB'	-	315+52'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	316+09'NB'	-	316+15'NB'	0' LT	—	5	16	9		—		—	—	
0010	NB INSDIE	316+30'NB'	-	316+48'NB'	0' LT	—	14	16	—		23		—	—	
		PAGE SUBTOTAL FOR SEGMENT B				—	318	816	435	48	341	38	—	—	

SEGMENT B CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT B (CONTINUED)														
0010	NB INSDIE	317+04'NB'	-	317+10'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	317+54'NB'	-	317+60'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	318+10'NB'	-	318+16'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	319+28'NB'	-	319+34'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	319+62'NB'	-	319+68'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	321+73'NB'	-	321+79'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	322+00'NB'	-	322+12'NB'	0' LT	—	10	16	17		—		—	—	
0010	NB INSDIE	325+02'NB'	-	325+11'NB'	0' LT	—	7	16	11		—		—	—	
0010	NB INSDIE	333+72'NB'	-	333+79'NB'	0' LT	—	6	16	10		—		—	—	
0010	NB INSDIE	339+59'NB'	-	339+68'NB'	0' LT	—	7	16	12		—		—	—	
0010	NB INSDIE	340+04'NB'	-	340+10'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	340+83'NB'	-	340+89'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	342+28'NB'	-	342+34'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	343+11'NB'	-	343+18'NB'	0' LT	—	6	16	10		—		—	—	
0010	NB INSDIE	343+76'NB'	-	343+83'NB'	0' LT	—	6	16	10		—		—	—	
0010	NB INSDIE	346+54'NB'	-	346+61'NB'	0' LT	—	5	16	9		—		—	—	
0010	NB INSDIE	349+77'NB'	-	349+83'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	349+89'NB'	-	349+99'NB'	0' LT	—	8	16	13		—		—	—	
0010	NB INSDIE	350+54'NB'	-	350+60'NB'	0' LT	—	5	16	8		—		—	—	
0010	NB INSDIE	351+11'NB'	-	351+17'NB'	0' LT	—	5	16	8		—		—	—	
0010	SB INSIDE	220+79'NB'	-	220+88'NB'	-50' LT	—	7	16	12		—		—	—	
0010	SB INSIDE	221+54'NB'	-	221+62'NB'	-50' LT	—	7	16	11		—		—	—	
0010	SB INSIDE	221+90'NB'	-	221+96'NB'	-50' LT	—	5	16	8		—		—	—	
0010	SB INSIDE	222+54'NB'	-	222+72'NB'	-50' LT	—	14	16	—		24		—	—	
0010	SB INSIDE	223+05'NB'	-	223+21'NB'	-50' LT	—	13	16	—		22		—	—	
0010	SB INSIDE	226+78'NB'	-	226+84'NB'	-50' LT	—	5	16	8		—		—	—	
0010	SB INSIDE	227+78'NB'	-	227+89'NB'	-50' LT	—	9	16	14		—		—	—	
0010	SB INSIDE	229+00'NB'	-	229+07'NB'	-50' LT	—	5	16	8		—		—	—	
0010	SB INSIDE	229+37'NB'	-	229+66'NB'	-50' LT	—	23	16	—		38		—	—	
0010	SB INSIDE	244+54'NB'	-	244+60'NB'	-50' LT	8	5	16	—		—		—	—	
0010	SB INSIDE	270+10'NB'	-	270+16'NB'	-50' LT	8	5	16	—		—		—	—	
0010	SB INSIDE	274+43'NB'	-	274+49'NB'	-50' LT	8	5	16	—		—		—	—	
0010	SB INSIDE	280+42'NB'	-	280+48'NB'	-50' LT	8	5	16	—		—		—	—	
0010	SB INSIDE	282+97'NB'	-	283+79'NB'	0' LT	110	66	16	—		—		—	—	
0010	SB INSIDE	300+80'NB'	-	300+93'NB'	-50' LT	—	10	16	17		—		—	—	
0010	SB INSIDE	303+18'NB'	-	303+31'NB'	-46' LT	—	10	16	17		—		—	—	
0010	SB INSIDE	304+46'NB'	-	304+55'NB'	-38' LT	—	7	16	12		—		—	—	
0010	SB INSIDE	306+93'NB'	-	307+01'NB'	-27' LT	—	6	16	10		—		—	—	
0010	SB INSIDE	308+38'NB'	-	308+44'NB'	-22' LT	—	5	16	8		—		—	—	
0010	SB INSIDE	310+01'NB'	-	310+09'NB'	-19' LT	—	7	16	11		—		—	—	
0010	SB INSIDE	310+82'NB'	-	310+98'NB'	-18' LT	—	13	16	—		22		—	—	
0010	SB INSIDE	311+37'NB'	-	311+52'NB'	-18' LT	—	13	16	—		21		—	—	
0010	SB INSIDE	313+85'NB'	-	314+10'NB'	-18' LT	—	21	16	—		35		—	—	
0010	SB INSIDE	316+30'NB'	-	316+48'NB'	0' LT	—	14	16	—		23		—	—	
0010	SB INSIDE	318+11'NB'	-	318+29'NB'	-18' LT	—	14	16	—		24		—	—	
0010	SB INSIDE	321+59'NB'	-	321+69'NB'	-18' LT	—	8	16	13		—		—	—	
0010	SB INSIDE	333+60'NB'	-	333+89'NB'	-18' LT	—	23	16	—		38		—	—	
0010	SB INSIDE	340+00'NB'	-	340+22'NB'	-18' LT	—	18	16	—		29		—	—	
0010	SB INSIDE	343+12'NB'	-	343+29'NB'	-18' LT	—	14	16	—		23		—	—	
0010	SB INSIDE	347+95'NB'	-	348+11'NB'	-18' LT	—	13	16	—		22		—	—	
0010	SB INSIDE	349+08'NB'	-	349+19'NB'	-18' LT	—	9	16	14		—		—	—	
0010	SB INSIDE	350+02'NB'	-	350+10'NB'	-18' LT	—	7	16	12		—		—	—	
0010	SB INSIDE	350+82'NB'	-	350+95'NB'	-18' LT	—	11	16	18		—		—	—	
		UNDISTRIBUTED				9	50	250	80		100		—	—	
		SUBTOTAL FOR SEGMENT B				178	1,411	3,226	1,490	166	1,738	193	—	—	

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT C														
0010	NB OUTSIDE	351+57'NB'	-	351+76'NB'	12' RT	—	16	16	—	—	31	—	—	—	
0010	NB OUTSIDE	352+27'NB'	-	353+47'NB'	12' RT	—	96	16	—	—	186	—	—	—	
0010	NB OUTSIDE	354+43'NB'	-	354+57'NB'	12' RT	—	11	16	21	—	—	—	—	—	
0010	NB OUTSIDE	354+94'NB'	-	355+14'NB'	12' RT	—	17	16	—	—	32	—	—	—	
0010	NB OUTSIDE	356+20'NB'	-	356+29'NB'	12' RT	—	7	16	14	—	—	—	—	—	
0010	NB OUTSIDE	356+89'NB'	-	356+95'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	357+45'NB'	-	357+51'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	357+83'NB'	-	357+89'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	358+00'NB'	-	358+06'NB'	12' RT	—	5	16	10	—	—	—	—	—	
0010	NB OUTSIDE	358+47'NB'	-	358+62'NB'	12' RT	—	12	16	—	—	23	—	—	—	
0010	NB OUTSIDE	358+93'NB'	-	358+99'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	360+20'NB'	-	360+35'NB'	12' RT	—	13	16	—	—	24	—	—	—	
0010	NB OUTSIDE	361+22'NB'	-	361+28'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	362+19'NB'	-	362+25'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	362+30'NB'	-	362+36'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	363+46'NB'	-	363+57'NB'	12' RT	—	9	16	17	—	—	—	—	—	
0010	NB OUTSIDE	363+71'NB'	-	363+76'NB'	12' RT	—	4	16	9	—	—	—	—	—	
0010	NB OUTSIDE	364+17'NB'	-	364+24'NB'	12' RT	—	6	16	12	—	—	—	—	—	
0010	NB OUTSIDE	365+00'NB'	-	365+06'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	366+27'NB'	-	366+33'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	366+85'NB'	-	366+91'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	369+35'NB'	-	369+41'NB'	12' RT	—	5	16	9	—	—	—	—	—	
0010	NB OUTSIDE	369+79'NB'	-	369+85'NB'	12' RT	—	5	—	—	—	—	—	8	—	
0010	NB OUTSIDE	371+99'NB'	-	372+26'NB'	12' RT	—	22	—	—	—	—	—	36	—	
0010	NB OUTSIDE	374+05'NB'	-	374+11'NB'	12' RT	—	5	—	—	—	—	—	—	8	
0010	NB OUTSIDE	374+76'NB'	-	374+88'NB'	28' RT	—	10	—	—	—	—	—	—	10	
0010	NB OUTSIDE	374+98'NB'	-	375+09'NB'	45' RT	—	9	—	—	—	—	—	—	11	
0010	NB OUTSIDE	375+09'NB'	-	375+33'NB'	37' RT	—	19	—	—	—	—	—	—	39	
0010	NB OUTSIDE	375+18'NB'	-	375+23'NB'	25' RT	—	4	—	—	—	—	—	—	7	
0010	NB OUTSIDE	375+39'NB'	-	375+46'NB'	24' RT	—	6	—	—	—	—	—	—	10	
0010	NB OUTSIDE	376+42'NB'	-	376+48'NB'	12' RT	—	5	—	—	—	—	—	—	8	
0010	NB OUTSIDE	376+88'NB'	-	376+94'NB'	12' RT	—	5	—	—	—	—	—	—	8	
0010	NB OUTSIDE	377+29'NB'	-	377+35'NB'	12' RT	—	5	—	—	—	—	—	—	8	
0010	NB OUTSIDE	377+75'NB'	-	377+88'NB'	12' RT	—	10	—	—	—	—	—	—	17	
0010	NB OUTSIDE	378+08'NB'	-	378+25'NB'	12' RT	—	14	—	—	—	—	—	—	23	
0010	NB OUTSIDE	378+51'NB'	-	378+57'NB'	12' RT	—	5	—	—	—	—	—	8	—	
0010	NB OUTSIDE	378+71'NB'	-	378+77'NB'	12' RT	—	5	—	—	—	—	—	8	—	
0010	NB OUTSIDE	379+10'NB'	-	379+16'NB'	12' RT	—	5	—	—	—	—	—	8	—	
0010	NB OUTSIDE	379+50'NB'	-	379+56'NB'	12' RT	—	5	—	—	—	—	—	8	—	
0010	NB OUTSIDE	381+21'NB'	-	381+27'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	382+05'NB'	-	382+18'NB'	12' RT	—	5	—	—	—	—	—	18	—	
0010	NB OUTSIDE	382+91'NB'	-	383+07'NB'	12' RT	—	6	—	—	—	—	—	20	—	
0010	NB OUTSIDE	384+11'NB'	-	384+24'NB'	12' RT	—	5	—	—	—	—	—	18	—	
0010	NB OUTSIDE	385+31'NB'	-	385+44'NB'	12' RT	—	5	—	—	—	—	—	18	—	
0010	NB OUTSIDE	386+10'NB'	-	386+20'NB'	12' RT	—	4	—	—	—	—	—	13	—	
0010	NB OUTSIDE	387+67'NB'	-	387+77'NB'	29' RT	—	4	—	—	—	—	—	6	—	
0010	NB OUTSIDE	389+27'NB'	-	389+33'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	389+57'NB'	-	389+72'NB'	12' RT	—	6	—	—	—	—	—	20	—	
0010	NB OUTSIDE	391+19'NB'	-	391+25'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	392+39'NB'	-	392+45'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	393+28'NB'	-	393+42'NB'	12' RT	—	6	—	—	—	—	—	19	—	
0010	NB OUTSIDE	395+17'NB'	-	395+23'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	395+97'NB'	-	396+03'NB'	12' RT	—	2	—	—	—	—	—	8	—	
		PAGE SUBTOTAL FOR SEGMENT C				—	441	352	186	—	297	—	256	149	

SEGMENT C CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT C														
0010	NB OUTSIDE	399+67'NB'	-	399+80'NB'	12' RT	—	5	—	—	—	—	—	—	17	
0010	NB OUTSIDE	406+76'NB'	-	406+82'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	407+27'NB'	-	407+39'NB'	12' RT	—	5	—	—	—	—	—	16	—	
0010	NB OUTSIDE	408+38'NB'	-	408+46'NB'	12' RT	—	3	—	—	—	—	—	10	—	
0010	NB OUTSIDE	414+54'NB'	-	414+60'NB'	12' RT	—	2	—	—	—	—	—	—	8	
0010	NB OUTSIDE	415+16'NB'	-	415+61'NB'	12' RT	—	18	—	—	—	—	—	—	61	
0010	NB OUTSIDE	415+99'NB'	-	416+05'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	417+13'NB'	-	417+26'NB'	12' RT	—	5	—	—	—	—	—	17	—	
0010	NB OUTSIDE	417+42'NB'	-	417+83'NB'	12' RT	—	16	—	—	—	—	—	55	—	
0010	NB OUTSIDE	418+42'NB'	-	418+65'NB'	12' RT	—	9	—	—	—	—	—	31	—	
0010	NB OUTSIDE	418+94'NB'	-	419+04'NB'	12' RT	—	4	—	—	—	—	—	13	—	
0010	NB OUTSIDE	419+14'NB'	-	419+75'NB'	12' RT	—	24	—	—	—	—	—	81	—	
0010	NB OUTSIDE	421+44'NB'	-	421+64'NB'	12' RT	—	8	—	—	—	—	—	27	—	
0010	NB OUTSIDE	422+00'NB'	-	422+06'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	422+57'NB'	-	422+63'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	422+80'NB'	-	422+86'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	423+00'NB'	-	423+06'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	423+86'NB'	-	424+04'NB'	12' RT	—	7	—	—	—	—	—	24	—	
0010	NB OUTSIDE	424+37'NB'	-	424+99'NB'	12' RT	—	25	—	—	—	—	—	—	82	
0010	NB OUTSIDE	425+67'NB'	-	425+80'NB'	12' RT	—	5	—	—	—	—	—	—	17	
0010	NB OUTSIDE	426+20'NB'	-	426+26'NB'	12' RT	—	2	—	—	—	—	—	—	8	
0010	NB OUTSIDE	426+52'NB'	-	426+66'NB'	12' RT	—	6	—	—	—	—	—	—	19	
0010	NB OUTSIDE	426+80'NB'	-	426+86'NB'	12' RT	—	2	—	—	—	—	—	—	8	
0010	NB OUTSIDE	427+00'NB'	-	427+06'NB'	12' RT	—	2	—	—	—	—	—	—	8	
0010	NB OUTSIDE	427+79'NB'	-	427+85'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	428+36'NB'	-	428+42'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	428+62'NB'	-	428+75'NB'	12' RT	—	5	—	—	—	—	—	17	—	
0010	NB OUTSIDE	429+00'NB'	-	429+06'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	429+18'NB'	-	429+24'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	431+21'NB'	-	431+27'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	433+20'NB'	-	433+26'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	443+12'NB'	-	443+22'NB'	12' RT	—	4	—	—	—	—	—	13	—	
0010	NB OUTSIDE	443+34'NB'	-	443+49'NB'	12' RT	—	6	—	—	—	—	—	20	—	
0010	NB OUTSIDE	444+39'NB'	-	444+55'NB'	12' RT	—	6	—	—	—	—	—	21	—	
0010	NB OUTSIDE	444+68'NB'	-	444+75'NB'	12' RT	—	3	—	—	—	—	—	10	—	
0010	NB OUTSIDE	444+97'NB'	-	445+03'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	445+20'NB'	-	445+34'NB'	12' RT	—	6	—	—	—	—	—	20	—	
0010	NB OUTSIDE	445+91'NB'	-	445+97'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	446+43'NB'	-	446+49'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	447+20'NB'	-	447+40'NB'	12' RT	—	8	—	—	—	—	—	28	—	
0010	NB OUTSIDE	447+53'NB'	-	447+67'NB'	12' RT	—	5	—	—	—	—	—	18	—	
0010	NB OUTSIDE	448+32'NB'	-	448+49'NB'	12' RT	—	7	—	—	—	—	—	22	—	
0010	NB OUTSIDE	448+76'NB'	-	448+82'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	450+93'NB'	-	450+99'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	NB OUTSIDE	451+52'NB'	-	451+67'NB'	12' RT	—	6	—	—	—	—	—	21	—	
0010	NB OUTSIDE	460+54'NB'	-	460+60'NB'	12' RT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	352+35'NB'	-	352+42'NB'	-30' LT	—	5	16	—	10	—	—	—	—	
0010	SB OUTSIDE	353+00'NB'	-	353+18'NB'	-30' LT	—	15	16	—	—	—	29	—	—	
0010	SB OUTSIDE	354+12'NB'	-	354+28'NB'	-30' LT	—	13	16	—	—	—	26	—	—	
0010	SB OUTSIDE	355+48'NB'	-	355+60'NB'	-30' LT	—	10	16	20	—	—	—	—	—	
0010	SB OUTSIDE	356+74'NB'	-	356+81'NB'	-30' LT	—	6	16	12	—	—	—	—	—	
0010	SB OUTSIDE	358+07'NB'	-	358+24'NB'	-30' LT	—	13	16	—	—	26	—	—	—	
0010	SB OUTSIDE	358+77'NB'	-	359+09'NB'	-30' LT	—	26	16	—	—	—	50	—	—	
		PAGE SUBTOTAL FOR SEGMENT C				—	339	112	31	10	26	104	607	228	

SEGMENT C CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT C														
0010	SB OUTSIDE	360+64'NB'	-	360+80'NB'	-32' LT	—	13	16	—	—	25	—	—	—	
0010	SB OUTSIDE	361+28'NB'	-	361+58'NB'	-34' LT	—	24	16	—	—	57	—	—	—	
0010	SB OUTSIDE	361+76'NB'	-	361+89'NB'	-34' LT	—	10	16	20	—	—	—	—	—	
0010	SB OUTSIDE	364+06'NB'	-	364+17'NB'	-38' LT	—	8	16	17	—	—	—	—	—	
0010	SB OUTSIDE	364+78'NB'	-	364+97'NB'	-39' LT	—	15	16	—	—	29	—	—	—	
0010	SB OUTSIDE	365+40'NB'	-	365+56'NB'	-40' LT	—	13	16	—	—	25	—	—	—	
0010	SB OUTSIDE	366+02'NB'	-	366+46'NB'	-41' LT	—	35	16	—	—	68	—	—	—	
0010	SB OUTSIDE	367+37'NB'	-	367+48'NB'	-42' LT	—	9	16	18	—	—	—	—	—	
0010	SB OUTSIDE	367+93'NB'	-	368+03'NB'	-42' LT	—	9	16	17	—	—	—	—	—	
0010	SB OUTSIDE	368+28'NB'	-	368+37'NB'	-43' LT	—	8	16	15	—	—	—	—	—	
0010	SB OUTSIDE	368+75'NB'	-	369+13'NB'	-43' LT	—	30	16	—	—	58	—	—	—	
0010	SB OUTSIDE	369+21'NB'	-	369+37'NB'	-43' LT	—	13	16	—	—	26	—	—	—	
0010	SB OUTSIDE	369+70'NB'	-	369+90'NB'	-42' LT	—	16	—	—	—	—	—	26	—	
0010	SB OUTSIDE	372+38'NB'	-	372+44'NB'	-42' LT	—	5	—	—	—	—	—	8	—	
0010	SB OUTSIDE	372+58'NB'	-	372+64'NB'	-42' LT	—	5	—	—	—	—	—	8	—	
0010	SB OUTSIDE	372+78'NB'	-	372+84'NB'	-42' LT	—	5	—	—	—	—	—	8	—	
0010	SB OUTSIDE	373+56'NB'	-	373+62'NB'	-42' LT	—	5	—	—	—	—	—	—	8	
0010	SB OUTSIDE	373+77'NB'	-	373+83'NB'	-42' LT	—	5	—	—	—	—	—	—	8	
0010	SB OUTSIDE	374+17'NB'	-	374+23'NB'	-42' LT	—	5	—	—	—	—	—	—	8	
0010	SB OUTSIDE	375+09'NB'	-	375+27'NB'	-66' LT	—	14	—	—	—	—	—	—	8	
0010	SB OUTSIDE	375+86'NB'	-	376+02'NB'	-42' LT	—	13	—	—	—	—	—	22	—	
0010	SB OUTSIDE	379+72'NB'	-	379+78'NB'	-42' LT	—	5	—	—	—	—	—	8	—	
0010	SB OUTSIDE	380+05'NB'	-	380+19'NB'	-42' LT	—	11	—	—	—	—	—	18	—	
0010	SB OUTSIDE	380+37'NB'	-	380+43'NB'	-42' LT	—	5	—	—	—	—	—	8	—	
0010	SB OUTSIDE	380+51'NB'	-	380+57'NB'	-42' LT	—	5	—	—	—	—	—	8	—	
0010	SB OUTSIDE	380+70'NB'	-	380+76'NB'	-42' LT	—	5	—	—	—	—	—	8	—	
0010	SB OUTSIDE	382+81'NB'	-	382+87'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	385+51'NB'	-	385+57'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	390+41'NB'	-	390+47'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	392+00'NB'	-	392+06'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	394+18'NB'	-	394+24'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	396+36'NB'	-	396+42'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	404+16'NB'	-	404+22'NB'	-42' LT	—	2	—	—	—	—	—	—	8	
0010	SB OUTSIDE	406+35'NB'	-	406+41'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	411+74'NB'	-	411+80'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	413+72'NB'	-	413+78'NB'	-42' LT	—	2	—	—	—	—	—	—	8	
0010	SB OUTSIDE	415+15'NB'	-	415+21'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	415+97'NB'	-	416+03'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	417+58'NB'	-	417+64'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	420+80'NB'	-	420+86'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	424+00'NB'	-	424+44'NB'	-42' LT	—	18	—	—	—	—	—	—	59	
0010	SB OUTSIDE	428+55'NB'	-	428+96'NB'	-42' LT	—	16	—	—	—	—	—	55	—	
0010	SB OUTSIDE	429+10'NB'	-	429+17'NB'	-42' LT	—	3	—	—	—	—	—	9	—	
0010	SB OUTSIDE	432+03'NB'	-	432+19'NB'	-42' LT	—	6	—	—	—	—	—	22	—	
0010	SB OUTSIDE	434+34'NB'	-	434+48'NB'	-42' LT	—	6	—	—	—	—	—	19	—	
0010	SB OUTSIDE	441+24'NB'	-	441+32'NB'	-42' LT	—	3	—	—	—	—	—	11	—	
0010	SB OUTSIDE	441+69'NB'	-	441+75'NB'	-42' LT	—	2	—	—	—	—	—	—	8	
0010	SB OUTSIDE	442+83'NB'	-	442+95'NB'	-42' LT	—	5	—	—	—	—	—	—	16	
0010	SB OUTSIDE	443+07'NB'	-	443+18'NB'	-42' LT	—	4	—	—	—	—	—	—	14	
0010	SB OUTSIDE	443+41'NB'	-	443+47'NB'	-42' LT	—	2	—	—	—	—	—	—	8	
0010	SB OUTSIDE	444+74'NB'	-	444+95'NB'	-42' LT	—	8	—	—	—	—	—	28	—	
0010	SB OUTSIDE	455+14'NB'	-	455+20'NB'	-42' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	463+43'SB'	-	463+49'SB'	0' LT	—	2	—	—	—	—	—	8	—	
		PAGE SUBTOTAL FOR SEGMENT C				—	403	192	86	—	288	—	378	154	

SEGMENT C CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT C														
0010	SB OUTSIDE	464+07'SB'	-	464+13'SB'	0' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	465+20'SB'	-	465+26'SB'	0' RT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	465+26'SB'	-	465+40'SB'	0' LT	—	6	—	—	—	—	—	19	—	
0010	SB OUTSIDE	466+41'SB'	-	466+55'SB'	0' LT	—	6	—	—	—	—	—	8	—	
0010	SB OUTSIDE	470+38'SB'	-	470+44'SB'	0' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	470+52'SB'	-	470+58'SB'	0' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	470+81'SB'	-	470+87'SB'	0' LT	—	2	—	—	—	—	—	8	—	
0010	SB OUTSIDE	471+31'SB'	-	471+54'SB'	0' LT	—	9	—	—	—	—	—	30	—	
0010	NB INSDIE	351+55'NB'	-	351+81'NB'	0' LT	—	21	16	—	—	35	—	—	—	
0010	NB INSDIE	354+13'NB'	-	354+33'NB'	0' LT	—	16	16	—	—	27	—	—	—	
0010	NB INSDIE	355+18'NB'	-	355+25'NB'	0' LT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	356+31'NB'	-	356+37'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	356+50'NB'	-	356+56'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	356+68'NB'	-	356+74'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	356+88'NB'	-	356+94'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	357+23'NB'	-	357+29'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	357+42'NB'	-	357+48'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	357+61'NB'	-	357+68'NB'	0' LT	—	5	16	—	8	—	—	—	—	
0010	NB INSDIE	357+79'NB'	-	357+85'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	358+33'NB'	-	358+39'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	358+55'NB'	-	358+61'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	358+87'NB'	-	358+93'NB'	0' LT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	358+88'NB'	-	358+94'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	359+03'NB'	-	359+12'NB'	0' LT	—	8	16	—	12	—	—	—	—	
0010	NB INSDIE	359+28'NB'	-	359+34'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	359+46'NB'	-	359+52'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	359+62'NB'	-	359+69'NB'	0' LT	—	6	16	—	9	—	—	—	—	
0010	NB INSDIE	359+65'NB'	-	359+71'NB'	0' LT	—	5	16	—	8	—	—	—	—	
0010	NB INSDIE	359+82'NB'	-	359+88'NB'	0' LT	—	5	16	—	7	—	—	—	—	
0010	NB INSDIE	359+85'NB'	-	359+91'NB'	0' LT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	362+30'NB'	-	362+36'NB'	0' RT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	362+67'NB'	-	362+73'NB'	0' RT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	363+46'NB'	-	363+57'NB'	0' LT	—	9	16	15	—	—	—	—	—	
0010	NB INSDIE	364+60'NB'	-	364+66'NB'	0' LT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	365+00'NB'	-	365+06'NB'	0' RT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	365+56'NB'	-	365+62'NB'	0' RT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	366+22'NB'	-	366+28'NB'	0' RT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	367+26'NB'	-	367+32'NB'	0' RT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	367+67'NB'	-	367+74'NB'	0' LT	—	6	16	9	—	—	—	—	—	
0010	NB INSDIE	367+81'NB'	-	367+87'NB'	0' LT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	368+02'NB'	-	368+08'NB'	0' LT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	368+19'NB'	-	368+25'NB'	0' LT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	368+42'NB'	-	368+48'NB'	0' LT	—	5	16	8	—	—	—	—	—	
0010	NB INSDIE	368+56'NB'	-	368+76'NB'	0' LT	—	16	16	—	—	27	—	—	—	
0010	NB INSDIE	369+12'NB'	-	369+18'NB'	0' LT	—	5	16	8	—	—	—	—	—	
0010	NB INSIDE	369+79'NB'	-	369+85'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	370+18'NB'	-	370+24'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	370+39'NB'	-	370+45'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	370+78'NB'	-	370+84'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	372+30'NB'	-	372+44'NB'	0' LT	—	11	—	—	—	—	—	—	18	
0010	NB INSIDE	375+39'NB'	-	375+42'NB'	0' LT	—	2	—	—	—	—	—	—	4	
0010	NB INSIDE	376+42'NB'	-	376+48'NB'	0' LT	—	5	—	—	—	—	—	8	—	
		PAGE SUBTOTAL FOR SEGMENT C				—	296	592	144	131	89	—	137	22	

SEGMENT C CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT C														
0010	NB INSIDE	376+88'NB'	-	376+94'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	377+05'NB'	-	377+11'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	378+51'NB'	-	378+57'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	378+71'NB'	-	378+77'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	379+10'NB'	-	379+16'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	379+50'NB'	-	379+56'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	381+21'NB'	-	381+27'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	381+49'NB'	-	381+55'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	381+65'NB'	-	381+71'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	382+15'NB'	-	382+30'NB'	0' LT	—	12	—	—	—	—	—	20	—	
0010	NB INSIDE	383+59'NB'	-	383+65'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	384+06'NB'	-	384+60'NB'	0' LT	—	44	—	—	—	—	—	73	—	
0010	NB INSIDE	385+38'NB'	-	385+60'NB'	0' LT	—	17	—	—	—	—	—	29	—	
0010	NB INSIDE	385+78'NB'	-	385+84'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	387+82'NB'	-	387+91'NB'	0' LT	—	7	—	—	—	—	—	2	—	
0010	NB INSIDE	392+39'NB'	-	392+45'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	400+45'NB'	-	400+51'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	401+19'NB'	-	401+32'NB'	0' LT	—	10	—	—	—	—	—	17	—	
0010	NB INSIDE	401+68'NB'	-	401+74'NB'	0' LT	—	5	—	—	—	—	—	—	8	
0010	NB INSIDE	404+16'NB'	-	404+22'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	406+76'NB'	-	406+82'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	411+34'NB'	-	411+40'NB'	0' LT	—	5	—	—	—	—	—	—	8	
0010	NB INSIDE	414+54'NB'	-	414+60'NB'	0' LT	—	5	—	—	—	—	—	—	8	
0010	NB INSIDE	415+16'NB'	-	415+22'NB'	0' LT	—	5	—	—	—	—	—	—	8	
0010	NB INSIDE	415+78'NB'	-	415+84'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	415+99'NB'	-	416+05'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	420+80'NB'	-	420+86'NB'	0' RT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	421+43'NB'	-	421+49'NB'	0' RT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	424+13'NB'	-	424+28'NB'	9' LT	—	4	—	—	—	—	—	—	17	
0010	NB INSIDE	424+45'NB'	-	424+75'NB'	9' LT	—	6	—	—	—	—	—	—	35	
0010	NB INSIDE	425+61'NB'	-	425+67'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	425+80'NB'	-	425+86'NB'	0' LT	—	5	—	—	—	—	—	—	8	
0010	NB INSIDE	426+40'NB'	-	426+46'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	426+60'NB'	-	426+66'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	426+80'NB'	-	426+86'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	427+00'NB'	-	427+06'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	427+79'NB'	-	427+92'NB'	0' LT	—	11	—	—	—	—	—	18	—	
0010	NB INSIDE	431+21'NB'	-	431+27'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	434+00'NB'	-	434+06'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	446+57'NB'	-	446+63'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	450+93'NB'	-	450+99'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	456+15'NB'	-	456+21'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	NB INSIDE	460+54'NB'	-	460+60'NB'	0' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	351+55'NB'	-	351+81'NB'	0' LT	—	21	16	—	—	35	—	—	—	
0010	SB INSIDE	353+00'NB'	-	353+18'NB'	-18' LT	—	15	16	—	—	25	—	—	—	
0010	SB INSIDE	354+13'NB'	-	354+33'NB'	0' LT	—	16	16	—	—	27	—	—	—	
0010	SB INSIDE	354+79'NB'	-	354+85'NB'	-18' LT	—	5	16	8	—	—	—	—	—	
0010	SB INSIDE	355+48'NB'	-	355+60'NB'	-18' LT	—	10	16	17	—	—	—	—	—	
0010	SB INSIDE	357+69'NB'	-	357+77'NB'	-18' LT	—	6	16	10	—	—	—	—	—	
0010	SB INSIDE	360+32'NB'	-	360+45'NB'	-10' LT	—	10	16	10	—	—	—	—	—	
0010	SB INSIDE	360+37'NB'	-	360+44'NB'	-20' LT	—	6	16	14	—	—	—	—	—	
0010	SB INSIDE	360+59'NB'	-	361+09'NB'	-10' LT	—	40	16	—	—	55	—	—	—	
0010	SB INSIDE	360+64'NB'	-	360+80'NB'	-20' LT	—	13	16	—	—	21	—	—	—	
0010	SB INSIDE	361+40'NB'	-	361+58'NB'	-22' LT	—	14	16	—	—	24	—	—	—	
0010	SB INSIDE	365+40'NB'	-	365+57'NB'	-28' LT	—	13	16	—	—	22	—	—	—	
		PAGE SUBTOTAL FOR SEGMENT C				—	447	192	59	—	208	—	398	92	

SEGMENT C CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT C														
0010	SB INSIDE	366+15'NB'	-	366+28'NB'	-29' LT	—	10	16	17	—	—	—	—	—	
0010	SB INSIDE	366+84'NB'	-	366+95'NB'	-29' LT	—	8	16	14	—	—	—	—	—	
0010	SB INSIDE	367+37'NB'	-	367+48'NB'	-30' LT	—	9	16	16	—	—	—	—	—	
0010	SB INSIDE	368+56'NB'	-	368+76'NB'	0' LT	—	16	16	—	—	27	—	—	—	
0010	SB INSIDE	368+57'NB'	-	368+65'NB'	-31' LT	—	6	16	10	—	—	—	—	—	
0010	SB INSIDE	369+70'NB'	-	369+76'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	370+19'NB'	-	370+25'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	371+39'NB'	-	371+45'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	372+58'NB'	-	372+64'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	372+78'NB'	-	372+84'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	372+97'NB'	-	373+03'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	373+17'NB'	-	373+23'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	373+77'NB'	-	373+83'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	379+34'NB'	-	379+40'NB'	-30' LT	—	5	—	—	—	—	—	9	—	
0010	SB INSIDE	380+51'NB'	-	380+57'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	380+70'NB'	-	380+76'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	380+99'NB'	-	381+05'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	381+13'NB'	-	381+35'NB'	-30' LT	—	17	—	—	—	—	—	29	—	
0010	SB INSIDE	384+41'NB'	-	384+55'NB'	-30' LT	—	11	—	—	—	—	—	18	—	
0010	SB INSIDE	384+64'NB'	-	384+70'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	385+10'NB'	-	385+16'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	388+31'NB'	-	388+37'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	388+84'NB'	-	388+90'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	392+00'NB'	-	392+06'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	392+26'NB'	-	392+32'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	400+70'NB'	-	400+86'NB'	-30' LT	—	13	—	—	—	—	—	21	—	
0010	SB INSIDE	401+18'NB'	-	401+40'NB'	-30' LT	—	17	—	—	—	—	—	—	29	
0010	SB INSIDE	402+96'NB'	-	403+06'NB'	-30' LT	—	8	—	—	—	—	—	14	—	
0010	SB INSIDE	403+76'NB'	-	403+82'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	406+95'NB'	-	407+01'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	407+14'NB'	-	407+20'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	407+35'NB'	-	407+41'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	411+54'NB'	-	411+60'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	411+74'NB'	-	411+80'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	412+33'NB'	-	412+39'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	413+14'NB'	-	413+20'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	413+54'NB'	-	413+60'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	413+88'NB'	-	413+97'NB'	-30' LT	—	7	—	—	—	—	—	12	—	REPLACE INLET RING WORK
0010	SB INSIDE	415+15'NB'	-	415+21'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	415+69'NB'	-	415+75'NB'	-10' LT	—	5	—	—	—	—	—	—	7	
0010	SB INSIDE	416+21'NB'	-	416+34'NB'	-30' LT	—	11	—	—	—	—	—	18	—	
0010	SB INSIDE	416+72'NB'	-	416+78'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	417+72'NB'	-	417+80'NB'	-15' LT	—	6	—	—	—	—	—	—	10	
0010	SB INSIDE	421+93'NB'	-	422+05'NB'	-30' LT	—	10	—	—	—	—	—	16	—	
0010	SB INSIDE	425+27'NB'	-	425+42'NB'	-30' LT	—	12	—	—	—	—	—	20	—	
0010	SB INSIDE	429+05'NB'	-	429+24'NB'	-30' LT	—	16	—	—	—	—	—	—	26	
0010	SB INSIDE	431+12'NB'	-	431+18'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	431+97'NB'	-	432+06'NB'	-30' LT	—	7	—	—	—	—	—	12	—	
0010	SB INSIDE	432+19'NB'	-	432+30'NB'	-30' LT	—	9	—	—	—	—	—	15	—	
0010	SB INSIDE	432+61'NB'	-	432+67'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	432+91'NB'	-	433+05'NB'	-30' LT	—	11	—	—	—	—	—	19	—	
0010	SB INSIDE	433+21'NB'	-	433+27'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	435+84'NB'	-	435+96'NB'	-30' LT	—	10	—	—	—	—	—	16	—	
0010	SB INSIDE	437+95'NB'	-	438+01'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
		PAGE SUBTOTAL FOR SEGMENT C				—	380	80	57	—	27	—	475	72	

SEGMENT C CONTINUED ON NEXT SHEET

CONCRETE BASE PATCHING, REPAIR & REPLACEMENT (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	390.0303 BASE PATCHING CONCRETE SY	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH	416.1710 CONCRETE PAVEMENT REPAIR SY	416.1715 CONCRETE PAVEMENT REPAIR SHES SY	416.1720 CONCRETE PAVEMENT REPLACEMENT SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY	SPV.0180.01 UNDOWELED BASE PATCHING CONCRETE SY	SPV.0180.02 UNDOWELED BASE PATCHING CONCRETE SHES SY	REMARKS
	SEGMENT C														
0010	SB INSIDE	440+36'NB'	-	440+42'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	440+88'NB'	-	440+94'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	446+59'NB'	-	446+66'NB'	-30' LT	—	6	—	—	—	—	—	10	—	
0010	SB INSIDE	455+54'NB'	-	455+60'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	SB INSIDE	459+34'NB'	-	459+40'NB'	-30' LT	—	5	—	—	—	—	—	8	—	
0010	RAMP	11+85'GN'	-	11+91'GN'	0' RT	—	5	—	—	—	—	—	8	—	
0010	RAMP	14+45'GN'	-	14+64'GN'	0' RT	—	—	—	—	—	—	—	35	—	
0010	RAMP	14+84'GN	-	15+03'GN'	0' RT	—	—	—	—	—	—	—	36	—	
0010	RAMP	16+84'GN'	-	17+00'GN'	0' RT	—	—	—	—	—	—	—	33	—	
0010	RAMP	20+90'GN'	-	22+86'GN'	0' RT	—	157	—	—	—	—	—	372	—	
0010	RAMP	21+22'GS'	-	21+40'GS'	0' LT	—	7	—	—	—	—	—	30	—	
0010	RAMP	27+08'GS'	-	27+29'GS'	0' LT	—	9	—	—	—	—	—	36	—	
		UNDISTRIBUTED				—	250	320	160	—	100	—	600	100	
0010		QUANTITY FROM CURB AND GUTTER TABLE				—	182	—	—	—	—	—	—	—	
0020		QUANTITY FROM CURB AND GUTTER TABLE				—	45	—	—	—	—	—	—	—	
0010		QUANTITY FROM CONCRETE BASE TABLE				—	157	—	—	—	—	—	—	—	
0020		QUANTITY FROM CONCRETE BASE TABLE					42								
		SUBTOTAL FOR SEGMENT C				0	3,185	1,840	724	142	1,036	104	3,443	817	
		CAT 0010 TOTAL				311	5,212	7,261	2,593	412	4,042	438	3,443	817	
		CAT 0020 TOTAL				0	87	0	0	0	0	0	0	0	

CONTINUOUS DIAMOND GRINDING CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	420.1000 SY
	SEGMENT A				
0010	100+00'NB'	-	220+63'NB'	STH 42 NB OUTSIDE LANE	10,800
0010	100+00'NB'	-	220+63'NB'	STH 42 SB OUTSIDE LANE	15,450
0010	100+00'NB'	-	220+63'NB'	STH 42 NB INSIDE LANE	9,250
0010	100+00'NB'	-	220+63'NB'	STH 42 SB INSIDE LANE	13,250
				SUBTOTAL SEGMENT A	48,750
	SEGMENT B				
0010	220+63'NB'	-	351+55'NB'	STH 42 NB OUTSIDE LANE	20,350
0010	220+63'NB'	-	351+55'NB'	STH 42 SB OUTSIDE LANE	11,000
0010	220+63'NB'	-	351+55'NB'	STH 42 NB INSIDE LANE	17,500
0010	220+63'NB'	-	351+55'NB'	STH 42 SB INSIDE LANE	9,500
				SUBTOTAL SEGMENT B	58,350
	SEGMENT C				
0010	351+55'NB'	-	369+90'NB'	STH 42 NB OUTSIDE LANE	2,850
0010	351+55'NB'	-	369+90'NB'	STH 42 SB OUTSIDE LANE	2,850
0010	351+55'NB'	-	369+90'NB'	STH 42 NB INSIDE LANE	2,500
0010	351+55'NB'	-	369+90'NB'	STH 42 SB INSIDE LANE	2,500
				SUBTOTAL SEGMENT C	10,700
				CAT 0010 TOTAL	117,800

CONCRETE MEDIANS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	620.0100 CONCRETE CORRUGATED MEDIAN SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	REMARKS
	SEGMENT C							
0020	NB OUTSIDE	78+97'U'	-	79+38'U'	16' RT	—	34	PORKCHOP ISLAND CTH U
0020	SB OUTSIDE	39+51'A'	-	39+60'A'	37' RT	—	34	PORKCHOP ISLAND ASHLAND AVE
0010	NB INSIDE	414+32'NB'	-	414+35'NB'	-5' LT	—	14	STH 42 NB & NEENAH AVE INTERSECTION
0010	NB INSIDE	462+05'NB'	-	462+40'NB'	-25' LT	344	—	STH 42 MEDIAN
0020	NB INSIDE	463+52'SB'	-	471+56 'SB'	38' RT	—	115	STH 42 MEDIAN
0020	SB INSIDE	463+25 'SB'	-	466+02'SB'	5' RT	—	32	STH 42 SB CHANNELIZING ISLAND
					SUBTOTAL SEGMENT C	344	229	
					CAT 0010 TOTAL	344	14	
					CAT 0020 TOTAL	0	215	

HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS AND DENSITY

CATEGORY		LOCATION	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH
0010	HMA 4 MT 58-28 S	STH 42 NB & SB	1	1
		CAT 0010 TOTAL	1	1

3

MAINLINE ASPHALT ITEMS

										HMA PAVEMENT 4 MT 58-28 S				
							455.0605	460.6223	460.6224					
CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	THICKNESS INCHES	TACK COAT GAL	TON	TON	PWL DENSITY INCENTIVE TON*	PWL AIR VOIDS TON**	QMP INCENTIVE DENSITY HMA PAVEMENT TON***	INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS LF	REMARKS
	SEGMENT A													
0010	NB OUTSIDE	100+00'NB'	-	169+33'NB'	26' RT	3.5	—	—	830	—	—	830	—	SHOULDER
0010	NB OUTSIDE	169+33'NB'	-	220+63'NB'	12' RT	2.0	800	—	1,390	—	—	1,390	—	TRAVEL LANE & SHOULDER
0010	NB OUTSIDE	176+50'NB'	-	207+94'NB'	26' RT	2.0	60	—	110	—	—	110	—	SIDE ROADS
0010	SB OUTSIDE	100+00'NB'	-	220+63'NB'	-76' LT	3.5	—	—	1,240	—	—	1,240	—	SHOULDER
0010	SB OUTSIDE	111+98'NB'	-	178+95'NB'	-82' LT	2.0	120	—	200	—	—	200	—	SIDE ROADS
0010	SB OUTSIDE	129+51'NB'	-	150+81'NB'	-62' LT	2.0	330	—	580	—	—	580	—	TRAVEL LANE & SHOULDER
0010	NB INSIDE	100+00'NB'	-	169+33'NB'	0' LT	3.5	—	—	350	—	—	350	—	SHOULDER
0010	NB INSIDE	169+33'NB'		220+63'NB'	0' RT	2.0	600	—	1,040	—	—	1,040	—	TRAVEL LANE & SHOULDER
0010	SB INSIDE	100+00'NB'	-	220+63'NB'	-47' LT	3.5	—	—	550	—	—	550	—	SHOULDER
0010	SB INSIDE	129+51'NB'		150+81'NB'	-47' LT	2.0	250	—	430	—	—	430	—	TRAVEL LANE & SHOULDER
0010	NB & SB INSIDE	107+13'NB'	-	207+98'NB'	0' LT	2.0	400	—	690	—	—	690	—	MEDIAN INTERSECTIONS/CROSSOVERS
				SUBTOTAL SEGMENT A			2,560	—	7,410	—	—	7,410	—	
	SEGMENT B													
0010	NB OUTSIDE	220+63'NB'	-	334+66'NB'	26' RT	3.5	—	—	1,470	—	—	1,470	—	SHOULDER
0010	NB OUTSIDE	245+18'NB'	-	349+00'NB'	26' RT	2.0	60	—	110	—	—	110	—	SIDE ROADS
0010	SB OUTSIDE	220+63'NB'	-	338+97'NB'	-44' LT	3.5	—	—	740	—	—	740	—	SHOULDER
0010	SB OUTSIDE	238+82'NB'	-	299+37'NB'	-62' LT	2.0	940	—	1,640	—	—	1,640	—	TRAVEL LANE & SHOULDER
0010	SB OUTSIDE	290+45'NB'	-	329+48'NB'	-44' LT	2.0	80	—	140	—	—	140	—	SIDE ROADS
0010	NB INSIDE	220+63'NB'	-	305+84'NB'	0' LT	3.5	—	—	450	—	—	450	—	SHOULDER
0010	SB INSIDE	220+63'NB'	-	305+84'NB'	-28' LT	3.5	—	—	140	—	—	140	—	SHOULDER
0010	SB INSIDE	238+82'NB'	-	299+37'NB'	-47' LT	2.0	710	—	1,230	—	—	1,230	—	TRAVEL LANE & SHOULDER
0010	NB & SB INSIDE	228+01'NB'	-	303+95'NB'	0' LT	2.0	240	—	430	—	—	430	—	MEDIAN INTERSECTIONS/CROSSOVERS
0010	NB & SB INSIDE	305+84'NB'	-	351+55'NB'	0' LT	2.0	660	—	1,150	—	—	1,150	—	PAVED MEDIAN TWLTL
				SUBTOTAL SEGMENT B			2,690	—	7,500	—	—	7,500	—	

SEGMENT C ON NEXT PAGE

* Tonnage is eligible for Incentive Density PWL 460.2005 and Incentive Air Voids 460.2010.

** Tonage is eligible for Incentive Air Voids 460.2010.

*** Tonnage is eligible for QMP Density Incentive 460.2000. Wedging & leveling layers are excluded from density testing and density incentive.

**** LF is eligible for Incentive Density HMA Pavement Longitudinal Joints 460.2007

3

MAINLINE ASPHALT ITEMS

										HMA PAVEMENT 4 MT 58-28 S				
							455.0605	460.6223	460.6224					
CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	THICKNESS INCHES	TACK COAT GAL	TON	TON	PWL DENSITY INCENTIVE TON*	PWL AIR VOIDS TON**	QMP INCENTIVE DENSITY HMA PAVEMENT TON***	INCENTIVE DENSITY HMA PAVEMENT LONGITUDINAL JOINTS LF	REMARKS
	SEGMENT C													
0010	NB OUTSIDE	369+70'NB'	-	464+66'NB'	12' RT	2.5	2,230	—	2,780	1,370	2,780	—	9,496	TRAVEL LANE & SHOULDER
0010	NB OUTSIDE	374+49'NB'	-	463+20'NB'	VARIES	2.5	260	—	330	—	330	—	—	NB SIDE ROADS
0020	NB OUTSIDE	458+15'NB'	-	463+23'NB'	24' RT	2.5	40	—	130	—	130	—	—	NB STH 42 RIGHT TURN TO CTH U
0010	NB OUTSIDE	458+15'NB'	-	463+23'NB'	24' RT	2.5	—	—	130	—	130	—	—	NB STH 42 RIGHT TURN TO CTH U
0010	NB OUTSIDE	458+15'NB'	-	463+04'NB'	24' RT	2.5	40	110	—	—	—	—	—	NB STH 42 RIGHT TURN TO CTH U
0020	NB OUTSIDE	463+47'NB'	-	464+66'NB'	24' RT	2.5	20	—	60	—	60	—	—	CTH U RIGHT TURN TO NB STH 42
0010	NB OUTSIDE	463+47'NB'	-	464+66'NB'	24' RT	2.5	—	—	60	—	60	—	—	CTH U RIGHT TURN TO NB STH 42
0010	NB OUTSIDE	463+30'NB'	-	464+66'NB'	24' RT	2.5	20	50	—	—	—	—	—	CTH U RIGHT TURN TO NB STH 42
0010	SB OUTSIDE	369+70'NB'	-	464+66'NB'	-42' LT	2.5	2,290	—	2,860	1,370	2,860	—	9,350	TRAVEL LANE & SHOULDER
0010	SB OUTSIDE	464+66'SB'	-	471+59'SB'	0'	2.5	140	—	170	100	170	—	—	TRAVEL LANE & SHOULDER
0010	SB OUTSIDE	351+55'SB'	-	369+70'SB'	VARIES	2	20	—	40	—	40	—	—	S. ASHLAND AVE/COLUMBIA AVE - SB SIDE ROADS
0010	SB OUTSIDE	369+70'SB'	-	463+52'SB'	VARIES	2.5	400	—	500	—	500	—	—	SB SIDE ROADS
0010	SB OUTSIDE	39+54'A'	-	40+96'A'	13 RT'	2	20	—	40	—	40	—	—	S ASHLAND AVE WIDENING - UPPER LAYER
0020	SB OUTSIDE	39+54'A'	-	40+96'A'	13 RT'	3	—	—	60	—	60	—	—	S. ASHLAND AVE WIDENING - LOWER LAYER
0020	SB OUTSIDE	39+96'A'	-	40+96'A'	0' LT/RT	2	20	—	40	—	40	—	—	S. ASHLAND AVE
0020	SB OUTSIDE	65+52'N'	-	67+16'N'	11' RT	5	10	—	30	—	30	—	—	S. NEENAH AVE WIDENING
0020	SB OUTSIDE	463+01'SB	-	467+65'SB'	-18' LT	2.5	30	—	100	—	100	—	—	SB STH 42 RIGHT TURN TO CIRCLE RIDGE
0010	SB OUTSIDE	463+01'SB	-	467+65'SB'	-18' LT	2.5	—	—	100	—	100	—	—	SB STH 42 RIGHT TURN TO CIRCLE RIDGE
0010	SB OUTSIDE	463+01'SB	-	467+65'SB'	-18' LT	2.5	30	100	—	—	—	—	—	SB STH 42 RIGHT TURN TO CIRCLE RIDGE
0010	NB INSIDE	369+70'NB'	-	464+66'NB'	0' RT	2.5	1,740	—	2,170	1,370	2,170	—	9,496	TRAVEL LANE & SHOULDER
0010	SB INSIDE	369+70'NB'	-	463+22'NB'	-28' LT	2.5	1,730	—	2,160	1,350	2,160	—	9,350	TRAVEL LANE & SHOULDER
0010	NB & SB INSIDE	364+73'NB'	-	369+70'NB'	-2.5' LT	2.0	110	—	190	—	—	190	—	PAVED MEDIAN TWLTL
0010	NB & SB INSIDE	369+70'NB'	-	463+23'NB'	0' LT	2.5	680	—	860	—	860	—	—	MEDIAN INTERSECTIONS/CROSSOVERS
0010	NB & SB INSIDE	459+17'NB'	-	462+55'NB'	0' LT	5.0	60	—	160	—	160	—	—	STH 42 NB LT TURN LANE TO CIRCLE RIDGE RD
0020	NB & SB INSIDE	463+23'SB'	-	471+59'SB'	0' LT	2.5	60	—	190	—	190	—	—	SB STH 42 LEFT TURN LANE TO CTH U
0010	NB & SB INSIDE	463+23'SB'	-	471+59'SB'	0' LT	2.5	—	—	190	—	190	—	—	SB STH 42 LEFT TURN LANE TO CTH U
0010	RAMP	12+00'GN'	-	30+06'GN'	0' RT	2.0	290	—	510	—	510	—	—	GREEN BAY RD RAMP NB
0020	RAMP	12+11'GN'	-	23+73'GN'	17' RT	2.5	10	—	30	—	30	—	—	GREEN BAY RD RAMP NB
0010	RAMP	20+00'GS'	-	32+16'GS'	0' LT	2.0	210	—	360	—	360	—	—	GREEN BAY RD RAMP SB
0010	RAMP	23+03'GN'	-	27+34'GN	LT	2.0	60	—	100	—	100	—	—	MEDIAN INTERSECTION AND SIDE ROAD
0010	FLAGGING	464+66'SB'	-	471+56'SB'	VARIES	2.5	230	—	290	—	290	—	—	STH 42 NB SINGLE LANE
0010	FLAGGING	471+56'SB'	-	481+60'SB'	0'	2.5	560	—	700	—	700	—	2,008	STH 42 UNDIVIDED TO BRIDGE
					SUBTOTAL SEGMENT C		11,310	260	15,340	5,560	15,150	190	39,700	
					CAT 0010 TOTAL		16,370	260	29,610	5,560	14,510	15,100	39,700	
					CAT 0020 TOTAL		190	0	640	0	640	0	0	

* Tonnage is eligible for Incentive Density PWL 460.2005 and Incentive Air Voids 460.2010.
** Tonage is eligible for Incentive Air Voids 460.2010.
*** Tonnage is eligible for QMP Density Incentive 460.2000. Wedging & leveling layers are excluded from density testing and density incentive.
**** LF is eligible for Incentive Density HMA Pavement Longitudinal Joints 460.2007

3

ASPHALTIC FLUMES

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	465.0315 ASPHALTIC FLUMES SY
	SEGMENT C			
0020	NB OUTSIDE	79+12'U'	46' RT	5
0020	NB OUTSIDE	79+35'U'	-35'LT	6
0020	SB OUTSIDE	65+55'N'	82' RT	9
0020	SB OUTSIDE	81+13'CI'	61' RT	5
0020	RAMP	23+70'GN'	21' RT	6
			SUBTOTAL SEGMENT C	31
			CAT 0020 TOTAL	31

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	465.0120 TON
	SEGMENT C					
0010	NB OUTSIDE	370+04'NB'	-	370+04'NB'	37' RT	5
0010	NB OUTSIDE	370+84'NB'	-	371+18'NB'	37' RT	6
0010	NB OUTSIDE	372+63'NB'	-	373+04'NB'	37' RT	7
0010	NB OUTSIDE	373+16'NB'	-	373+52'NB'	37' RT	8
0010	SB OUTSIDE	371+19'NB'	-	371+46'NB'	-67' LT	4
					CAT 0010 TOTAL	31

ASPHALTIC SURFACE SAFETY ISLANDS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	465.0305 TON	REMARKS
	SEGMENT C						
0020	NB OUTSIDE	78+97'U'	-	79+38'U'	17' RT	8	PORKCHOP ISLAND
0020	SB OUTSIDE	39+51'A'	-	39+60'A'	37' RT	2	PORKCHOP ISLAND
0020	NB & SB INSIDE	461+03'NB'	-	462+00'NB'	STH 42	15	MEDIAN ISLAND
0020	NB & SB INSIDE	463+28'SB'	-	466+52'SB'	STH 42 SB	60	CHANNELIZING ISLAND
0020	NB & SB INSIDE	463+60'SB'		471+48'SB'	STH 42	20	MEDIAN ISLAND
					SUBTOTAL SEGMENT C	105	
					CAT 0020 TOTAL	105	

NOTE: TYPICAL COMPACTED THICKNESS = 3-INCHES

3

ASPHALTIC SURFACE TEMPORARY

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	465.0125 TON	REMARKS
	SEGMENT C						
0010	SB OUTSIDE	370+04'NB'	-	370+04'NB'	37' RT	35	PAVE AS TOP LAYER OR RIGHT TURN LANE TO MATCH ADJACENT EXISTING HMA OVERLAY ASPHAT TO BE MILLED/REMOVED WHEN PAVING SB LANES UNDER FLAGGING
					CAT 0010 TOTAL	35	

ASPHALTIC SHOULDER RUMBLE STRIPS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	465.0400 LF
	SEGMENT A					
0010	NB OUTSIDE	100+00'NB'	-	220+63'NB'	25' RT	9,173
0010	SB OUTSIDE	100+00'NB'	-	220+63'NB'	-75' LT	8,981
0010	NB INSIDE	100+00'NB'	-	220+63'NB'	-1' LT	9,551
0010	SB INSIDE	100+00'NB'	-	220+63'NB'	-50' LT	9,646
					SUBTOTAL SEGMENT A	37,351
	SEGMENT B					
0010	NB OUTSIDE	220+63'NB'	-	305+84'NB'	25' RT	6,956
0010	SB OUTSIDE	220+63'NB'	-	305+84'NB'	-75' LT	6,784
0010	NB INSIDE	220+63'NB'	-	305+84'NB'	-1' LT	6,382
0010	SB INSIDE	220+63'NB'	-	305+84'NB'	-50' LT	6,941
					SUBTOTAL SEGMENT B	27,063
					CAT 0010 TOTAL	64,414

3

MANHOLE EXTENSION RINGS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	SPV.0060.02 EACH	REMARKS
	SEGMENT C				
0010	NB INSIDE	372+18'NB'	10' RT	1	
0010	NB INSIDE	374+40'NB'	16' LT	1	LEFT TURN LANE
			CAT 0010 TOTAL	2	

STORM SEWER PLUG

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	SPV.0060.03 EACH	REMARKS
	SEGMENT C				
0020	SB OUTSIDE	465+33'SB'	0' RT	1	INSTALL DURING SB OUTSIDE LANE CLOSURE
0020	SB OUTSIDE	471+47'SB'	0' RT	1	INSTALL DURING SB OUTSIDE LANE CLOSURE
			SUBTOTAL SEGMENT C	2	
			CAT 0020 TOTAL	2	

3

CULVERT PIPES

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	204.9060.S REMOVING APRON ENDWALLS EACH	520.8700 CLEANING CULVERT PIPES EACH	522.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE 30-INCH EACH	522.1048 APRON ENDWALLS FOR CULVERT PIPE 48-INCH EACH	524.0172 CULVERT PIPE SALVAGED 72-INCH LF	524.0672 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 72-INCH EACH	REMARKS
		SEGMENT A										
0010	NB OUTSIDE	141+54'NB'	69' RT	1	—	—	1	—	—	—	—	
0010	NB OUTSIDE	171+07'NB'	51' RT	1	1	—	—	1	—	—	—	
0010	NB OUTSIDE	214+15'NB'	59' RT	1	—	—	—	1	—	—	—	
0010	SB OUTSIDE	141+55'NB'	-113' LT	1	—	—	1	—	—	—	—	
0010	SB OUTSIDE	165+80'NB'	-99.5' LT	—	1	—	—	—	—	—	—	
0010	SB OUTSIDE	171+05'NB'	-90' LT	1	1	—	—	1	—	—	—	
0010	SB OUTSIDE	179+07'NB'	-107' LT	—	1	—	—	—	—	—	—	
0010	SB OUTSIDE	205+78'NB'	-95' LT	1	—	1	—	—	—	—	—	
0010	SB OUTSIDE	214+15'NB'	-114 LT	1	1	—	—	1	—	—	—	
0010	SB INSIDE	192+76'NB'	-36' LT	1	—	1	—	—	—	—	—	
0010	SB INSIDE	205+77'NB'	-35' LT	1	—	1	—	—	—	—	—	
			SUBTOTAL SEGMENT A	9	5	3	2	4	—	—	—	
		SEGMENT B										
0010	NB OUTSIDE	**240+88'NB'**	44' RT	1	1	1	—	—	—	—	—	
0010	NB OUTSIDE	287+85'NB'	45' RT	—	1	—	—	—	—	—	—	
0010	NB OUTSIDE	296+33'NB'	49' RT	—	1	—	—	—	—	—	—	
0010	SB OUTSIDE	**227+84'NB'**	-95.5' LT	1	—	1	—	—	—	—	—	
0010	SB OUTSIDE	**243+83'NB'**	-97.5 LT	1	—	—	—	—	1	—	—	
0010	SB OUTSIDE	**264+52'NB'**	-106 LT	—	—	—	—	—	—	16	1	*
0010	NB INSIDE	**240+87'NB'**	-16' LT	1	—	1	—	—	—	—	—	
0010	NB INSIDE	**260+87'NB'**	-15' LT	1	—	1	—	—	—	—	—	
0010	NB INSIDE	**269+87'NB'**	-17' LT	1	—	1	—	—	—	—	—	
0010	SB INSIDE	**227+84'NB'**	-27' LT	1	—	1	—	—	—	—	—	
0010	SB INSIDE	**234+80'NB'**	-25.5' LT	1	—	1	—	—	—	—	—	
			SUBTOTAL SEGMENT B	8	3	7	—	—	1	16	1	
		SEGMENT C										
0010	SB INSIDE	380+09'NB'	-28' LT	—	1	—	—	—	—	—	—	
0010	NB INSIDE	380+10'NB'	-2' LT	—	1	—	—	—	—	—	—	
0010	NB INSIDE	380+00'NB'	48' RT	—	1	—	—	—	—	—	—	
0010	NB INSIDE	387+84'NB'	LT	—	1	—	—	—	—	—	—	
0010	NB OUTSIDE	387+84'NB'	RT	—	1	—	—	—	—	—	—	
0010	SB INSIDE	413+92'NB'	-18' LT	—	1	—	—	—	—	—	—	
0010	NB INSIDE	413+93'NB'	-2' LT	—	1	—	—	—	—	—	—	
0010	SB INSIDE	431+59'NB'	-28' LT	—	1	—	—	—	—	—	—	
0010	NB INSIDE	431+59'NB'	-2' LT	—	1	—	—	—	—	—	—	
			SUBTOTAL SEGMENT C	—	9	—	—	—	—	—	—	
			CAT 0010 TOTAL	17	17	10	2	4	1	16	1	

* TIE AEW AND FIRST TWO PIPE SECTIONS USING JOINT TIES. DRILLING HOLES FOR JOINT TIES REQUIRED. JOINT TIES AND DRILLED HOLES ARE INCIDENTAL TO BID ITEM 524.0172 CULVERT PIPE SALVAGED 72-INCH.

STORM SEWER STRUCTURES

CATEGORY	STRUCTURE	STATION	OFFSET*	LOCATION	ELEVATION RIM	ELEVATION INVERT**	DEPTH*** FT	Depth Check	Cover+Casting	ADJUSTMENT RINGS INCHES	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	611.0530 MANHOLE COVERS TYPE J EACH	611.0600 INLET COVERS TYPE A EACH	611.0624 INLET COVERS TYPE H EACH	611.0636 INLET COVERS TYPE HM-S EACH	611.0639 INLET COVERS TYPE H-S EACH	611.0642 INLET COVERS TYPE MS EACH	611.2033 MANHOLES 3X3-FT EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3220 INLETS 2X2-FT EACH	611.3230 INLETS 2X3-FT EACH	611.3901 INLETS MEDIAN 1 GRATE EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	REMARKS
0010	O1	387+69'NB'	35.03' RT	STH 42	677.36	673.83	2.74	2.74	0.50	6.00	—	—	—	1	—	—	—	—	—	—	1	—	—	1	
0010	O2	387+85'NB'	3.64' LT	STH 42	677.42	674.92	1.71	1.71	0.50	6.00	—	—	—	1	—	—	—	—	—	—	1	—	—	1	
0010	L1	400+79'NB'	28.44' LT	STH 42	654.09	651.56	1.74	1.74	0.50	6.00	—	—	—	—	1	—	—	—	—	—	—	1	—	1	
0010	U1A	461+67'NB'	20.97' LT	STH 42	611.58	609.48	1.44	1.48	0.50	4.00	—	—	—	—	—	—	1	—	—	—	—	1	—	1	
0010	U1B	462+20'NB'	5.47' LT	STH 42	612.01	609.23	1.41	1.41	1.41	2.00	—	—	1	—	—	—	—	—	1	—	—	—	—	1	
0020	U1E	462+19'NB'	49.83' RT	STH 42	---	608.63	---	---	0.00	0.00	1	—	—	—	—	—	—	—	—	—	—	—	—	1	
0020	U2A	465+08'SB'	28.0'RT	STH 42	610.35	605.10	4.46	4.46	0.50	6.00	—	—	—	—	1	—	—	—	—	1	—	—	—	1	
0020	U2B	465+33'SB'	10.1'RT	STH 42	610.04	604.65	4.60	4.60	0.50	6.00	—	—	—	—	1	—	—	—	—	1	—	—	—	1	
0020	U2C	465+33'SB'	44.3'LT	STH 42	---	603.49	---	---	0.00	0.00	—	1	—	—	—	—	—	—	—	—	—	—	—	1	
0020	U3A	470+21'SB'	10.5 RT	STH 42	604.95	602.85	2.31			0.00	—	—	—	—	—	—	—	1	—	—	—	—	1	1	NOTE*
0020	U3B	470+28'SB'	20.68' RT	STH 42	605.30	602.79	1.72	1.72	0.50	6.00	—	—	—	—	1	—	—	—	—	—	—	1	—	1	
0020	U4A	471+47'SB'	14.79' RT	STH 42	604.95	601.30	2.86	2.86	0.50	6.00	—	—	—	—	1	—	—	—	—	—	—	1	—	1	
0020	U4B	471+46'SB'	40.80' LT	STH 42	---	596.93	---	---	0.00	0.00	—	1	—	—	—	—	—	—	—	—	—	—	—	1	
0020	A1B	39+83'A'	50.77' RT	ASHLAND AVE	705.64	703.51	1.51	1.51	0.50	4.00	—	—	—	—	—	—	1	—	—	1	—	—	—	1	
0020	A1C	39+61'A'	41.03' RT	ASHLAND AVE	706.00	703.61	1.60	1.60	0.50	6.00	—	—	—	—	—	1	—	—	—	—	—	1	—	1	
0020	A1D	39+80'A'	54.48' RT	ASHLAND AVE	706.16	703.50	1.46	1.46	1.41	0.00	—	—	1	—	—	—	—	—	1	—	—	—	—	1	
						CAT 0010 TOTAL					0	0	1	(NOTE)	1	0	1	0	1	0	2	2	0	5	
						CAT 0020 TOTAL					1	2	1	(NOTE)	4	1	1	1	1	3	0	3	1	11	

REMARKS INVERT STATION/ELEVATION OF APRON ENDWALLS = END/INVERT OF CONNECTING PIPE

* STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

***DEPTH = [RIM ELEV - COVER HEIGHT - ADJUSTMENT RING HEIGHT] - [LOWEST PIPE INVERT ELEV - 2.5-INCHES FOR PIPE THICKNESS]

(NOTE) PROJECT TOTAL QUANTITY SHOWN IN "ADJUSTING INLETS, REPLACING CASTINGS, INLET RISERS" TABLE

{NOTE*} INLET MEDIAN 1 GRATE RIM ELEVATION INTENTIALLY SET ~2-INCHES BELOW GRADE

STORM SEWER PIPES

CATEGORY	FROM	-	TO	SPOT REPAIR LOCATION OFFSET FROM	SPOT REPAIR LOCATION OFFSET TO	ROADWAY	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	520.8000 CONCRETE COLLARS FOR PIPE EACH	608.0005 STORM SEWER ROCK EXCAVATION CY	608.0112 RELAID STORM SEWER 12-INCH LF	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.3012 STORM SEWER PIPE CLASS III-A 12-INCH LF	608.3018 STORM SEWER PIPE CLASS III-A 18-INCH LF	SPV.0165.01 CONRETE PIPE PATCHING SF	* JOINT TIES EACH	REMARKS
0010	354+75'NB'	-	354+75'NB'	-53' LT	-81' LT	STH 42	EX INLET	EX DISCHARGE	EXISTING	---	---	28	—	—	—	—	6	SPOT REPAIR - EX INLET TO OUTFALL
0010	361+32'SB'	-	361+40'SB'	-15' LT	-6' LT	STH 42	EX PIPE	EX PIPE	EXISTING	2	—	—	12	—	—	—	—	SPOT REPAIR
0010	372+20'NB'	-	372+19'NB'	26' RT	18' RT	STH 42	EX PIPE	EX PIPE	EXISTING	2	—	—	8	—	—	—	—	SPOT REPAIR
0010		372+71'NB'		-68' LT		STH 42	---	---	---	—	—	—	—	—	—	25	—	PATCH PIPE OBVERT OF 29x45 RCHE
0010	374+40'NB'	-	374+39'NB'	-23' LT	-31' LT	STH 42	EX PIPE	EX PIPE	EXISTING	2	—	—	8	—	—	—	—	SPOT REPAIR
0010	O2	-	EX PIPE	—	—	STH 42	674.92	EX PIPE	0.0260	1	—	—	6	—	—	—	—	
0010	EX PIPE	-	O1	---	---	STH 42	EX PIPE	673.83	0.0260	1	—	—	6	—	—	—	—	
0010	O1	-	OUT EX PIPE	---	---	STH 42	673.83	EX PIPE	0.2500	1	—	—	—	6	—	—	—	
0010	L1	-	EX PIPE	---	---	STH 42	651.56	EX PIPE	0.0150	1	—	—	—	6	—	—	—	
0010	U1A	-	U1B	---	---	STH 42	609.48	609.23	0.0044	—	—	—	55	—	—	—	—	
0010	U1B	-	EX PIPE	---	---	STH 42	609.23	EX PIPE	0.0114	1	—	—	6	—	—	—	—	
0020	462+19'NB'	-	U1E	---	---	STH 42	608.65	608.63	0.0033	1	—	—	—	6	—	—	—	
0020	U2A	-	U2B	---	---	STH 42	605.10	604.65	0.0145	—	—	—	—	—	31	—	—	
0020	U2B	-	U2C	---	---	STH 42	604.65	603.49	0.0212	—	—	—	—	—	55	—	—	
0020	U3A	-	U3B	—	—	STH 42	602.85	602.79	0.0059	—	—	—	—	11	—	—	—	
0020	U3B	-	EX PIPE	---	---	STH 42	602.79	EX PIPE	0.0118	1	—	—	—	6	—	—	—	
0020	U4A	-	U4B	---	---	STH 42	599.80	596.93	0.0517	—	—	—	—	—	56	—	—	
0020	39+83'A'	-	A1B	16' RT	---	ASHLAND AVE	EX PIPE	703.52	0.0020	1	10	—	35	—	—	—	—	
0020	A1B	-	A1D	---	---	ASHLAND AVE	703.52	703.50	0.0020	—	3	—	8	—	—	—	—	
0020	A1C	-	A1D	---	---	ASHLAND AVE	703.61	703.50	0.0044	—	7	—	26	—	—	—	—	
									CAT 0010 TOTAL	11	0	28	101	12	0	25	0	
									CAT 0020 TOTAL	3	20	0	69	23	142	0	0	

* FOR INFORMATIONAL PURPOSES ONLY - NON BID ITEM

HOLES FOR JOINT TIES WILL NEED TO BE DRILLED IN RELAID PIPE

DRILLING HOLES AND PROVIDING JOINT TIES ARE INCIDENTAL TO ITEM 608.0112 RELAID STORM SEWER 12-INCH

ADJUSTING INLETS, SALVAGE COVERS, REPLACING CASTINGS, INLET RISERS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	* 611.8115 ADJUSTING INLET COVERS EACH	611.9710 SALVAGED INLET COVERS EACH	** SPV.0060.01 INLET EXTENSION RING EACH	611.0600 INLET COVERS TYPE A EACH	611.0603 INLET COVERS TYPE A-S EACH	REMARKS
	SEGMENT C								
0010	NB OUTSIDE	372+21'NB'	35' RT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB OUTSIDE	374+60'NB'	63' RT	—	1	—	—	—	
0010	NB OUTSIDE	375+33'NB'	43' RT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB OUTSIDE	380+00'NB'	48' RT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB OUTSIDE	39+83'A'	-15' LT	—	1	—	—	—	ASHLAND AVE
0010	SB OUTSIDE	361+25'NB'	-56' LT	—	1	—	—	—	WIDENING ASHLAND AVE
0010	SB OUTSIDE	372+70'NB'	-66' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB OUTSIDE	374+40'NB'	-69' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB INSIDE	372+11'NB'	-2' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE H
0010	NB INSIDE	374+44'NB'	-22' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE H
0010	NB INSIDE	374+44'NB'	-2' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE H
0010	NB INSIDE	380+10'NB'	-2' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB INSIDE	384+09'NB'	-2' LT	1	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A, REPLACE TOP 2-INCH RING
0010	NB INSIDE	392+10'NB'	-2' LT	—	1	1	1	—	
0010	NB INSIDE	396+10'NB'	-2' LT	—	—	1	1	—	
0010	NB INSIDE	400+79'NB'	-19' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE H
0010	NB INSIDE	400+86'NB'	-2' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE H
0010	NB INSIDE	406+92'NB'	-4' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB INSIDE	410+59'NB'	-4' LT	—	—	1	1	—	
0010	NB INSIDE	413+93'NB'	-19' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE H
0010	NB INSIDE	413+93'NB'	-2' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE H
0010	NB INSIDE	420+09'NB'	-2' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB INSIDE	424+53'NB'	-24' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB INSIDE	431+60'NB'	-2' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB INSIDE	436+60'NB'	-2' LT	—	—	1	1	—	
0010	NB INSIDE	441+39'NB'	-12' LT	—	—	1	—	1	
0010	NB INSIDE	443+14'NB'	-3' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB INSIDE	446+59'NB'	-2' LT	1	—	1	1	—	REPLACE TOP TWO 2-INCH RINGS
0010	NB INSIDE	450+60'NB'	-2' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB INSIDE	454+59'NB'	-2' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	NB INSIDE	458+60'NB'	-2' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	372+10'NB'	-29' LT	—	—	1	—	—	
0010	SB INSIDE	374+33'NB'	-30' LT	—	—	1	—	—	
0010	SB INSIDE	380+09'NB'	-28' LT	—	—	1	—	—	
0010	SB INSIDE	384+09'NB'	-30' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	392+10'NB'	-28' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	396+10'NB'	-28' LT	—	—	1	1	—	
0010	SB INSIDE	400+78'NB'	-30' LT	—	—	1	—	—	PROPOSED INLET TYPE H
0010	SB INSIDE	406+97'NB'	-30' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	410+59'NB'	-30' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	413+93'NB'	-31' LT	1	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A, REPLACE ALL RINGS (4 ESTIMATED)
0010	SB INSIDE	420+07'NB'	-28' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	424+52'NB'	-30' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	428+03'NB'	-12' LT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	428+04'NB'	-30' LT	1	—	—	—	—	
0010	SB INSIDE	431+59'NB'	-30' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	436+59'NB'	-30' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	441+70'NB'	-30' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	443+17'NB'	-30' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	446+59'NB'	-30' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	450+59'NB'	-30' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	454+59'NB'	-30' LT	—	1	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	SB INSIDE	458+60'NB'	-30' LT	—	—	1	1	—	
0010	SB INSIDE	466+71'SB'	36' RT	—	—	1	—	—	EXISTING CASTING SIMILAR TO TYPE A
0010	RAMP	30+61'GS'	0' LT	—	—	1	—	—	GREEN BAY RD SB RAMP
0010	QUANTITY FROM SS STRUCTURES TABLE			—	—	—	2	—	
			SUBTOTAL SEGMENT C	4	21	51	9	1	
			CAT 0010 TOTAL	4	21	51	9	1	

* USE 611.8115 ADJUSTING INLET COVERS TO REPLACE CONCRETE ADJUSTMENT RINGS AS NECESSARY. ADJUST INLET TO MATCH THE ADJACENT CURB AND GUTTER ELEVATION.

** USE SPV.0060.01 INLET EXTENSION RING TO RAISE THE INLET GRATE TO THE ELEVATION OF THE ASPHALT OVERLAY.

3

EROSION CONTROL

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	REMARKS
	SEGMENT A										
0010	NB OUTSIDE	100+00'NB'	-	220+63'NB'	253	253	220	40	3	—	
0010	SB OUTSIDE	100+00'NB'	-	220+63'NB'	43	43	186	30	6	—	
0010	NB INSIDE	100+00'NB'	-	220+63'NB'	—	—	—	—	—	—	
0010	SB INSIDE	100+00'NB'	-	220+63'NB'	—	—	41	—	4	—	
		UNDISTRIBUTED			74	74	—	20	3	—	25% UNDISTRIBUTED FOR TEMPORARY EC ITEMS
		SUBTOTAL SEGMENT A			370	370	447	90	16	0	
	SEGMENT B										
0010	NB OUTSIDE	220+63'NB'	-	351+55'NB'	339	339	79	40	—	—	
0010	SB OUTSIDE	246+66'NB'	-	351+55'NB'	207	207	140	40	—	—	
0010	NB INSIDE	260+65'NB'	-	351+55'NB'	—	—	74	20	4	—	
0010	SB INSIDE	269+65'NB'	-	351+55'NB'	—	—	79	—	4	—	
		UNDISTRIBUTED			137	137	—	30	2	—	25% UNDISTRIBUTED FOR TEMPORARY EC ITEMS
		SUBTOTAL SEGMENT B			683	683	372	130	10	0	
	SEGMENT C										
0010	NB OUTSIDE	371+87'NB'	-	375+66'NB'	—	—	31	—	—	—	
0010	NB OUTSIDE	378+98'NB'	-	379+18'NB'	—	—	7	—	—	—	
0010	NB OUTSIDE	383+14'NB'	-	393+33'NB'	930	930	—	—	—	—	42/GREEN BAY RD MEDIAN
0020	NB OUTSIDE	458+07'NB'	-	463+18'NB'	—	—	743	20	—	—	42 NB RIGHT TURN LANE TO CTH U
0020	NB OUTSIDE	77+67'U'	-	79+18'U'	262	262	143	—	—	—	CTH U RIGHT TURN LANE TO 42 NB
0010	NB OUTSIDE	426+00'NB'	-	426+18'NB'	—	—	10	—	—	—	
0010	SB OUTSIDE	354+70'NB'	-	354+80'NB'	81	81	29	—	—	30	
0010	SB OUTSIDE	39+77'A'	-	39+97'A'	—	—	7	—	—	—	S. ASHLAND AVE
0020	SB OUTSIDE	39+59'A'	-	41+03'A'	260	260	221	—	—	—	42 SB RIGHT TURN TO S. ASHLAND AVE
0010	SB OUTSIDE	383+25'NB'	-	392+00'NB'	773	773	—	—	—	—	42/GREEN BAY RD MEDIAN
0020	SB OUTSIDE	65+55'N'	-	67+36'N'	230	230	225	40	—	—	42 SB RIGHT TURN TO S. NEENAH AVE
0010	NB INSIDE	378+98'NB'	-	379+18'NB'	—	—	7	—	—	—	
0010	NB INSIDE	386+57'NB'	-	386+66'NB'	28	28	—	—	—	—	42/GREEN BAY RD MEDIAN
0010	NB INSIDE	387+75'NB'	-	387+85'NB'	26	26	—	—	—	—	42/GREEN BAY RD MEDIAN
0010	NB INSIDE	446+51'NB'	-	446+68'NB'	—	—	6	—	—	—	
0010	NB INSIDE	458+52'NB'	-	458+68'NB'	—	—	6	—	—	—	
0010	SB INSIDE	406+70'NB'	-	407+14'NB'	—	—	15	—	—	—	
0010	SB INSIDE	419+22'NB'	-	420+15'NB'	—	—	10	—	—	—	
0010	SB INSIDE	432+39'NB'	-	432+58'NB'	—	—	33	—	—	—	
0020	RAMP	19+83'GN'	-	24+49'GN'	260	260	182	—	—	—	GREEN BAY RD NB RAMP
0020	FLAGGING	462+87'SB'	-	466+88'SB'	460	460	513	—	—	—	42 SB RIGHT TURN TO CIRCLE RIDGE ROAD
0020	FLAGGING	465+16'SB'		470+92'SB'	—	—	1,127	—	—	—	42 MEDIAN NORTH OF CTH U
0020	FLAGGING	466+43'SB'	-	466+53'SB'	—	—	20	—	—	—	
0020	FLAGGING	471+25'SB'	-	471+71'SB'	55	55	19	—	—	—	
		UNDISTRIBUTED			841	841	—	10	—	8	25% UNDISTRIBUTED FOR TEMPORARY EC ITEMS
		SUBTOTAL SEGMENT C			4,206	4,206	3,354	70	0	38	
		CAT 0010 TOTAL			3,732	3,732	980	230	26	38	
		CAT 0020 TOTAL			1,527	1,527	3,193	60	0	0	

SEMI-RIGID BARRIER SYSTEMS AND END TREATMENTS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH	REMARKS
	SEGMENT B												
0010	NB OUTSIDE	281+99'NB'	-	286+26'NB'	32' RT	—	—	138	63	—	2	2	
					SUBTOTAL SEGMENT B	0	0	138	63	0	2	2	
	SEGMENT C												
0010	NB OUTSIDE	384+49'NB'	-	386+41'NB'	35' RT	—	—	589	—	39	1	1	
0010	SB OUTSIDE	384+16'NB'	-	390+20'NB'	-66' LT	—	—	389	—	39	1	1	
0010	NB/SB INSIDE	385+51'NB'	-	388+92'NB'	-15' LT	2	102	—	—	91	—	—	STH 42 NB/SB MEDIAN
					SUBTOTAL SEGMENT C	2	102	978	0	169	2	2	
					CAT 0010 TOTAL	2	102	1,116	63	169	4	4	

RIRPAP HEAVY AND GEOTEXTILE TYPE HR

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	606.0300 RIPRAP HEAVY CY	645.0120 GEOTEXTILE TYPE HR SY	REMARKS
	SEGMENT C							
0020	SB OUTSIDE	466+44'SB'	-	466+48'NB'	41' LT	7	20	APRON ENDWALL U2C
0020	SB OUTSIDE	471+42'SB'	-	471+50'NB'	42' LT	19	46	APRON ENDWALL U4C
					SUBTOTAL SEGMENT C	26	66	
					CAT 0020 TOTAL	26	66	

EROSION CONTROL MOBILIZATIONS

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
	SEGMENT A					
0010		100+00'NB'	-	220+63'NB'	4	2
					4	2
	SEGMENT B					
0010		220+63'NB'	-	351+55'NB'	5	2
					5	2
	SEGMENT C					
0010		351+55'NB'	-	481+89'NB'	5	3
					5	3
				CAT 0010 TOTAL	14	7

INLET PROTECTION

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	REMARKS
	SEGMENT A					
0010	NB OUTSIDE	112+74'NB'	94' RT	—	1	Porkchop Island on STH 42
0010	NB OUTSIDE	112+91'NB'	108' RT	—	1	Right Turn Lane on STH 42
0010	NB OUTSIDE	114+03'NB'	36' RT	1	—	
0010	NB INSIDE	111+47'NB'	35'LT	1	—	
0010	NB INSIDE	114+85'NB'	21'LT	1	—	
0010	NB INSIDE	140+20'NB'	22'LT	1	—	
0010	NB INSIDE	143+56'NB'	26'LT	1	—	
0010	NB INSIDE	165+78'NB'	31'LT	1	—	
0010	NB INSIDE	171+07'NB'	23'LT	1	—	
0010	NB INSIDE	179+06'NB'	23'LT	1	—	
0010	NB INSIDE	214+15'NB'	31'LT	1	—	
			SUBTOTAL SEGMENT A	9	2	
	SEGMENT B					
0010	NB OUTSIDE	338+68'NB'	36' RT	—	1	
0010	NB OUTSIDE	340+67'NB'	36' RT	—	1	
0010	NB OUTSIDE	343+68'NB'	59' RT	1	—	
0010	NB OUTSIDE	343+96'NB'	36' RT	—	1	
0010	NB OUTSIDE	346+58'NB'	36' RT	—	1	
0010	NB OUTSIDE	348+18'NB'	36' RT	—	1	
0010	NB OUTSIDE	348+47'NB'	64' RT	—	1	
0010	NB OUTSIDE	348+79'NB'	64' RT	—	1	
0010	NB OUTSIDE	350+27'NB'	36' RT	—	1	
0010	SB OUTSIDE	340+89'NB'	-53' LT	—	1	
0010	SB OUTSIDE	342+88'NB'	68' RT	1	—	
0010	SB OUTSIDE	343+97'NB'	-52' LT	—	1	
0010	SB OUTSIDE	346+13'NB'	-52' LT	—	1	
0010	SB OUTSIDE	348+22'NB'	-52' LT	—	1	
0010	SB OUTSIDE	350+02'NB'	-53' LT	—	1	
0010	NB INSIDE	243+82'NB'	23'LT	1	—	
			SUBTOTAL SEGMENT B	3	13	

INLET PROTECTION CONTINUED ON NEXT PAGE

INLET PROTECTION (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	REMARKS
	SEGMENT C					
0010	NB OUTSIDE	351+84'NB'	36' RT	—	1	
0010	NB OUTSIDE	353+48'NB'	35' RT	—	1	
0010	NB OUTSIDE	353+69'NB'	59' RT	1	—	
0010	NB OUTSIDE	354+94'NB'	35' RT	—	1	
0010	NB OUTSIDE	358+73'NB'	36' RT	—	1	
0010	NB OUTSIDE	361+49'NB'	36' RT	—	1	
0010	NB OUTSIDE	362+82'NB'	36' RT	—	1	
0010	NB OUTSIDE	364+78'NB'	35' RT	—	1	
0010	NB OUTSIDE	366+75'NB'	35' RT	—	1	
0010	NB OUTSIDE	368+57'NB'	35' RT	—	1	
0010	NB OUTSIDE	372+21'NB'	35' RT	—	1	
0010	NB OUTSIDE	375+31'NB'	40' RT	—	1	
0010	NB OUTSIDE	380+00'NB'	48' RT	—	1	
0010	NB OUTSIDE	387+69'NB'	35' RT	—	2	PROPOSED AND EXISTING
0010	SB OUTSIDE	351+84'NB'	-53' LT	—	1	
0010	SB OUTSIDE	354+77'NB'	-47' LT	—	1	
0010	SB OUTSIDE	356+69'NB'	-53' LT	—	1	
0010	SB OUTSIDE	358+68'NB'	-53' LT	—	1	
0010	SB OUTSIDE	359+52'NB'	-82' LT	—	1	
0010	SB OUTSIDE	359+82'NB'	-83' LT	—	1	
0010	SB OUTSIDE	360+04'NB'	-61' LT	—	1	
0010	SB OUTSIDE	360+10'NB'	-78' LT	—	1	
0010	SB OUTSIDE	361+25'NB'	-56' LT	—	1	
0010	SB OUTSIDE	362+83'NB'	-59' LT	—	1	
0010	SB OUTSIDE	364+69'NB'	-62' LT	—	1	
0010	SB OUTSIDE	366+65'NB'	-65' LT	—	1	
0010	SB OUTSIDE	368+68'NB'	-66' LT	—	1	
0010	SB OUTSIDE	372+70'NB'	-66' LT	—	1	
0010	SB OUTSIDE	374+40'NB'	-69' LT	—	1	
0010	SB OUTSIDE	388+09'NB'	-65' LT	—	1	
0010	NB INSIDE	368+66'NB'	-2' LT	1	—	
0010	NB INSIDE	372+11'NB'	-2' LT	—	1	
0010	NB INSIDE	374+35'NB'	-23' LT	—	1	
0010	NB INSIDE	374+44'NB'	-2' LT	—	1	
0010	NB INSIDE	380+09'NB'	-2' LT	—	1	
0010	NB INSIDE	384+09'NB'	-2' LT	—	1	
0010	NB INSIDE	387+85'NB'	-4' LT	—	2	PROPOSED AND EXISTING
0010	NB INSIDE	392+10'NB'	-2' LT	—	1	
0010	NB INSIDE	396+09'NB'	-2' LT	—	1	
0010	NB INSIDE	400+79'NB'	-19' LT	—	1	
0010	NB INSIDE	400+86'NB'	-2' LT	—	1	
0010	NB INSIDE	406+96'NB'	-4' LT	—	1	
0010	NB INSIDE	410+59'NB'	-4' LT	—	1	
0010	NB INSIDE	413+93'NB'	-19' LT	—	1	
0010	NB INSIDE	413+93'NB'	-2' LT	—	1	
0010	NB INSIDE	424+53'NB'	-19' LT	—	1	

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	REMARKS
	SEGMENT C (CONTINUED)					
0010	NB INSIDE	431+57'NB'	-2' LT	—	1	
0010	NB INSIDE	434+83'NB'	-2' LT	—	1	
0010	NB INSIDE	436+61'NB'	-2' LT	—	1	
0010	NB INSIDE	441+39'NB'	-12' LT	—	1	
0010	NB INSIDE	443+19'NB'	-2' LT	—	1	
0010	NB INSIDE	446+59'NB'	-2' LT	—	1	
0010	NB INSIDE	450+60'NB'	-2' LT	—	1	
0010	NB INSIDE	454+58'NB'	-2' LT	—	1	
0010	NB INSIDE	458+60'NB'	-2' LT	—	1	
0010	NB INSIDE	461+66'NB'	-22' LT	—	1	
0010	NB INSIDE	462+19'NB'	-14' LT	—	1	
0010	SB INSIDE	368+66'NB'	-29' LT	1	—	
0010	SB INSIDE	372+10'NB'	-29' LT	—	1	
0010	SB INSIDE	374+19'NB'	-28' LT	—	1	
0010	SB INSIDE	380+10'NB'	-28' LT	—	1	
0010	SB INSIDE	384+09'NB'	-28' LT	—	1	
0010	SB INSIDE	387+94'NB'	-26' LT	—	1	
0010	SB INSIDE	392+10'NB'	-28' LT	—	1	
0010	SB INSIDE	396+09'NB'	-27' LT	—	1	
0010	SB INSIDE	400+79'NB'	-28' LT	—	2	PROPOSED AND EXISTING
0010	SB INSIDE	406+97'NB'	-33' LT	—	1	
0010	SB INSIDE	410+59'NB'	-27' LT	—	1	
0010	SB INSIDE	413+93'NB'	-31' LT	—	1	
0010	SB INSIDE	420+08'NB'	-34' LT	—	1	
0010	SB INSIDE	423+23'NB'	-26' LT	—	1	
0010	SB INSIDE	424+52'NB'	-33' LT	—	1	
0010	SB INSIDE	428+06'NB'	-12' LT	—	1	
0010	SB INSIDE	428+09'NB'	-29' LT	1	—	
0010	SB INSIDE	431+58'NB'	-30' LT	—	1	
0010	SB INSIDE	436+59'NB'	-30' LT	—	1	
0010	SB INSIDE	441+70'NB'	-30' LT	—	1	
0010	SB INSIDE	443+15'NB'	-35' LT	—	1	
0010	SB INSIDE	446+59'NB'	-34' LT	—	1	
0010	SB INSIDE	450+60'NB'	-30' LT	—	1	
0010	SB INSIDE	454+60'NB'	-33' LT	—	1	
0010	SB INSIDE	458+60'NB'	-36' LT	—	1	
0010	RAMP	20+91'GN'	-19' LT	1	—	
0010	RAMP	21+23'GN'	21' RT	1	—	
0020	FLAGGING	465+08'SB'	28' RT	—	1	
0020	FLAGGING	465+33'SB'	10' RT	—	1	
0020	FLAGGING	466+71'SB'	38' RT	—	1	
0020	FLAGGING	470+28'SB'	10.5' RT	1	—	
0020	FLAGGING	470+28'SB'	21' RT	—	2	PROPOSED AND EXISTING
0020	FLAGGING	470+36'SB'	14' RT	—	1	
0020	FLAGGING	471+47'SB'	7' RT	—	1	PROPOSED AND EXISTING
0020	FLAGGING	471+47'SB'	15' RT	—	1	
			SUBTOTAL SEGMENT C	7	89	
			CAT 0010 TOTAL	18	96	
			CAT 0020 TOTAL	1	8	

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RESTORATION

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0500 SEED WATER MGAL	REMARKS
	SEGMENT A											
0010	NB OUTSIDE	141+44'NB'	-	141+64'NB'	42' RT	—	85	0.054	2	—	1.4	
0010	NB OUTSIDE	170+97'NB'	-	171+17'NB'	37' RT	—	55	0.035	1	—	.9	
0010	NB OUTSIDE	214+05'NB'	-	214+25'NB'	37' RT	—	74	0.047	1	—	1.2	
0010	SB OUTSIDE	141+45'NB'	-	141+65'NB'	87' LT	—	82	0.052	1	—	1.4	
0010	SB OUTSIDE	170+96'NB'	-	171+15'NB'	94' LT	—	16	0.010	1	—	.3	
0010	SB OUTSIDE	205+68'NB'	-	205+88'NB'	-94' LT	27	—	0.017	—	1	.5	
0010	SB OUTSIDE	214+05'NB'	-	215+25'NB'	-94' LT	68	—	0.043	—	1	1.1	
0010	SB INSIDE	192+66'NB'	-	192+86'NB'	34' LT	—	20	0.013	1	—	.3	
0010	SB INSIDE	205+67'NB'	-	205+87'NB'	33' LT	—	21	0.013	1	—	.4	
		UNDISTRIBUTED				5	18	0.014	2	1	.4	5% UNDISTRIBUTED
					SUBTOTAL SEGMENT A	100	371	0.296	10	3	8	
	SEGMENT B											
0010	NB OUTSIDE	240+78'NB'	-	240+98'NB'	44' RT	—	24	0.015	1	—	.4	
0010	NB OUTSIDE	281+99'NB'	-	283+00'NB'	45' RT	21	—	0.013	—	1	.4	SUBGRADE SHOULDER POINT TO DAYLIGHT
0010	NB OUTSIDE	283+89'NB'	-	286+10'NB'	36' RT	34	—	0.021	—	1	.6	SUBGRADE SHOULDER POINT TO DAYLIGHT
0010	SB OUTSIDE	227+74'NB'	-	227+94'NB'	94' LT	—	10	0.007	1	—	.2	
0010	SB OUTSIDE	243+73'NB'	-	243+93'NB'	87' LT	—	52	0.033	1	—	.9	
0010	SB OUTSIDE	264+43'NB'	-	264+62'NB'	87' LT	—	71	0.045	1	—	1.2	
0010	NB INSIDE	240+77'NB'	-	240+97'NB'	16' LT	—	25	0.016	1	—	.4	
0010	NB INSIDE	260+78'NB'	-	260+97'NB'	16' LT	—	23	0.014	1	—	.4	
0010	NB INSIDE	269+77'NB'	-	269+97'NB'	16' LT	—	26	0.017	1	—	.4	
0010	SB INSIDE	227+73'NB'	-	227+94'NB'	34' LT	—	39	0.025	1	—	.7	
0010	SB INSIDE	234+70'NB'	-	234+90'NB'	32' LT	—	39	0.025	1	—	.7	
		UNDISTRIBUTED				3	16	0.012	2		.3	5% UNDISTRIBUTED
					SUBTOTAL SEGMENT B	58	326	0.242	11	2	6.4	

SEGMENT C ON NEXT PAGE

RESTORATION (CONTINUED)

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0500 SEED WATER MGAL	REMARKS
	SEGMENT C											
0010	NB OUTSIDE	371+87'NB'	-	372+00'NB'	36' RT	4	—	0.003	—	1	.1	
0010	NB OUTSIDE	372+50'NB'	-	372+70'NB'	36'RT	5	—	0.003	—	1	.1	
0010	NB OUTSIDE	372+98'NB'	-	373+21'NB'	36'RT	5	—	0.003	—	1	.1	
0010	NB OUTSIDE	373+87'NB'	-	373+99'NB'	36'RT	4	—	0.003	—	1	.1	
0010	NB OUTSIDE	375+30'NB'	-	375+66'NB'	49' RT	13	—	0.01	—	1	.3	
0010	NB OUTSIDE	378+98'NB'	-	379+18'NB'	39' RT	7	—	0.004	—	1	.2	
0010	NB OUTSIDE	426+00'NB'	-	426+18'NB'	VARIES	—	10	0.01	1	—	.2	SHILOH RD
0020	NB OUTSIDE	458+07'NB'	-	463+18'NB'	VARIES	—	743	0.47	13	—	17	CTH U
0020	NB OUTSIDE	463+53'NB'	-	464+37'NB'	VARIES	—	143	0.09	3	—	3.2	CTH U
0010	SB OUTSIDE	354+70'NB'	-	354+80'NB'	55' LT	—	29	0.02	1	—	.6	
0020	SB OUTSIDE	39+77'A'	-	39+97'A'	-17' LT	7	—	0.004	—	1	.2	S. ASHLAND AVE
0020	SB OUTSIDE	359+82'NB'	-	361+33'NB'	VARIES	318	—	0.200	—	6	7.1	S. ASHLAND AVE
0020	SB OUTSIDE	414+91'NB'	-	415+64'NB'	VARIES	—	225	0.142	4	—	5.0	NEENAH AVE
0020	SB OUTSIDE	462+87'NB'	-	462+87'NB'	VARIES	—	513	0.323	9	—	11	CIRCLE RIDGE RD
0010	NB INSIDE	378+98'NB'	-	379+18'NB'	3' LT	—	7	0.004	1	—	.2	
0010	NB INSIDE	446+52'NB'	-	446+68'NB'	3' LT	—	6	0.004	1	—	.1	
0010	NB INSIDE	458+52'NB'	-	458+68'NB'	3' LT	—	6	0.004	1	—	.1	
0010	SB INSIDE	406+70'NB'	-	407+14'NB'	28' LT	—	15	0.009	1	—	.3	
0010	SB INSIDE	419+22'NB'	-	419+32'NB'	26' LT	—	4	0.003	1	—	.1	
0010	SB INSIDE	419+99'NB'	-	420+15'NB'	27' LT	—	6	0.004	1	—	.1	
0010	SB INSIDE	432+39'NB'	-	432+48'NB'	28' LT	—	4	0.003	1	—	.1	
0010	SB INSIDE	443+10'NB'	-	443+26'NB'	28' LT	—	6	0.004	1	—	.1	
0010	SB INSIDE	446+52'NB'	-	446+68'NB'	28' LT	—	6	0.004	1	—	.1	
0010	SB INSIDE	450+52'NB'	-	450+68'NB'	28' LT	—	6	0.004	1	—	.1	
0010	SB INSIDE	454+52'NB'	-	454+68'NB'	28' LT	—	6	0.004	1	—	.1	
0010	SB INSIDE	458+52'NB'	-	458+68'NB'	28' LT	—	6	0.004	1	—	.1	
0020	RAMP	20+56'GN'	-	21+49'GN'	29' RT	—	84	0.05	2	—	1.9	
0020	RAMP	21+38'GN'	-	21+66'GN'	VARIES	—	14	0.01	1	—	.3	
0020	RAMP	22+74'GN'	-	23+49'GN'	VARIES	—	38	0.02	1	—	.9	
0020	RAMP	23+25'GN'	-	23+73'GN'	25' RT	—	46	0.03	1	—	1.0	
0020	FLAGGING	463+25'SB'	-	471+56'NB'	VARIES	—	1,107	0.70	20	—	25	STH 42 MEDIAN NORTH OF CTH U
0020	FLAGGING	466+43'SB'	-	466+53'SB'	-29' LT	—	20	0.01	1	—	.4	
0020	FLAGGING	471+41'SB'	-	471+51'SB'	-27' LT	—	20	0.01	1	—	.4	
		UNDISTRIBUTED				18	154	0.10	17	3	4	5% UNDISTRIBUTED
					SUBTOTAL SEGMENT C	381	3,226	2.26	86	16	80.8	
					CAT 0010 TOTAL	214	971	0.7	52	14	22	
					CAT 0020 TOTAL	325	2,952	2.1	55	7	73	

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 EACH
	SEGMENT A		
0010	141+54'NB'	69' RT	1
0010	141+55'NB'	-113' LT	1
0010	143+54'NB'	62' RT	1
0010	165+80'NB'	-100' LT	1
0010	171+05'NB'	-90' LT	1
0010	171+07'NB'	51' RT	1
0010	179+07'NB'	-107' LT	1
0010	192+76'NB'	-36' LT	1
0010	192+77'NB'	-96' LT	1
0010	205+77'NB'	-35' LT	1
0010	205+78'NB'	-'95' LT	1
0010	214+15'NB'	-114' LT	1
0010	214+15'NB'	59.4' RT	1
		SUBTOTAL SEGMENT A	13
	SEGMENT B		
0010	227+84'NB'	-27' LT	1
0010	227+84'NB'	-88' LT	1
0010	234+78'NB'	-97' LT	1
0010	234+80'NB'	-26' LT	1
0010	240+87'NB'	-16' LT	1
0010	240+88'NB'	44' RT	1
0010	243+33'NB'	42' RT	1
0010	243+83'NB'	-98 LT	1
0010	246+86'NB'	44' RT	1
0010	246+87'NB'	16' LT	1
0010	260+87'NB'	45' RT	1
0010	260+88'NB'	-15' LT	1
0010	264+52'NB'	-106' LT	1
0010	269+86'NB'	47' RT	1
0010	269+87'NB'	-17 LT	1
0010	287+85'NB'	45' RT	1
0010	287+86'NB'	-16' LT	1
0010	296+33'NB'	49' RT	1
0010	296+35'NB'	-104' LT	1
0010	335+24'NB'	70' RT	1
0010	335+25'NB'	-92' LT	1
		SUBTOTAL SEGMENT B	21
	SEGMENT C		
0020	462+19'NB'	55' RT	1
0020	465+33'SB'	-50' LT	1
0020	471+46'SB'	-49' LT	1
		SUBTOTAL SEGMENT C	3
		CAT 0010 TOTAL	34
		CAT 0020 TOTAL	3

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ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637.2210 SIGNS TYPE II REFLECTIVE TYPE H S.F.	637.2230 SIGNS TYPE II REFLECTIVE TYPE F S.F.	634.0614 POSTS WOOD 4x6x14 EACH	634.0616 POSTS WOOD 4x6x16 EACH	638.2102 MOVING SIGNS TYPE II EACH	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
1	ASHLAND AVE	R3-8F	36" X 30"	7.50	---	1	---	---	---	---	
2	"	R7-53D	---	---	---	---	---	1	---	---	
3	STH 42 @ ASHLAND AVE	R5-1	---	---	---	---	---	1	---	---	MOUNT TO SIGNAL POLE
4	"	R1-1F	---	---	---	---	---	1	---	---	MOUNT TO SIGNAL POLE
5	"	R2-1	---	---	---	1	---	1	---	1	REPLACE POST IF NECESSARY
5A	"	R1-2	36" X 31"	3.88	---	1	---	---	---	---	
6	STH 42 @ BUS 42 EXIT	D1-56R	90" X 15"	9.38	---	2	---	---	---	---	
7	"	JH	---	---	---	1	---	1	---	---	
8	S. NEENAH AVE	R3-8	36" X 30"	7.50	---	1	---	---	---	---	
9	STH 42 @ NEENAH AVE	R6-2L	---	---	---	---	---	---	1	1	
10	"	R3-1	---	---	---	---	---	1	---	---	MOUNT TO SIGNAL POLE
11	"	R1-1F	---	---	---	---	---	1	---	---	MOUNT TO SIGNAL POLE
12	STH 42, W. OF CTH U	R5-1	---	---	---	---	1	2	---	1	INCLUDES MOVING W4-2L, REPLACE POST IF NECESSARY
13	"	R5-1	---	---	---	---	1	2	---	1	INCLUDES MOVING J13-1, REPLACE POST IF NECESSARY
13A	"	R4-7	---	---	---	1	---	1	---	1	REPLACE POST IF NECESSARY
14	STH 42 @ CTH U	R1-1	30" X 30"	5.18	---	---	1	---	---	---	
15	"	W12-1D	24" X 24"	---	4.00	1	---	---	---	---	
16	"	R1-1	---	---	---	---	1	3	---	1	INCLUDES MOVING R6-1R/R6-3, REPLACE POST IF NECESSARY
17	"	JV	---	---	---	---	1	1	---	1	REPLACE POST IF NECESSARY
18	"	R3-1	---	---	---	1	---	1	---	1	REPLACE POST IF NECESSARY
19	"	R5-1	30" X 30"	6.25	---	1	---	---	---	---	
20	"	R4-7	---	---	---	1	---	1	---	1	REPLACE POST IF NECESSARY
21	"	W12-1D	24" X 24"	---	4.00	1	---	---	---	---	
22	"	R4-7	---	---	---	---	1	2	---	1	INCLUDES MOVING W14-3, REPLACE POST IF NECESSARY
	TOTALS			**39.69**	**8.00**	**13**	**6**	**20**	**1**	**10**	

ALL ITEMS ON THIS SHEET ARE CAT 0010

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ PLOT SCALE : 1:1

TRAFFIC CONTROL

CATEGORY	CLOSURE	DAYS	643.0300 DRUMS DAY	643.0410 BARRICADES TYPE II DAY	643.0420 BARRICADES TYPE III DAY	643.0705 WARNING LIGHTS TYPE A DAY	643.0715 WARNING LIGHTS TYPE C DAY	643.0800 ARROW BOARDS DAY	643.0900 SIGNS DAY	643.0910 COVERING SIGNS TYPE I * # OF CYCLES	643.0910 COVERING SIGNS TYPE I * # OF SIGNS	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II * # OF CYCLES	643.0920 COVERING SIGNS TYPE II * # OF SIGNS	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
	SEGMENTS A & B															
0010	OUTSIDE LANE CLOSURE	46	36,851	—	2,351	3,506	2,576	184	5,111	—	—	—	—	—	—	SDD 15C2, 15D12 & 15D21
0010	INSIDE LANE CLOSURE	46	64,543	—	3,041	3,506	2,576	184	7,181	—	—	—	—	—	—	SDD 15C2, 15D12, & 15D21
0010	WEEKEND SHOULDER CLOSURES	32	17,059	—	—	—	—	64	3,200	—	—	—	—	—	—	SDD 15D27
	SUBTOTAL SEGMENTS A & B		101,393	—	5,392	7,013	5,152	368	15,492			0			0	
	SEGMENT C															
0010	OUTSIDE LANE CLOSURE	78	43,655	—	2,969	4,379	858	78	7,493	—	—	—	—	—	—	SDD 15C2, 15D20, & 15D21
0010	INSIDE LANE CLOSURE	40	19,987	—	1,523	2,245	440	40	3,843	—	—	—	—	—	—	SDD 15C2, 15D20, & 15D21
0010	WEEKEND SHOULDER CLOSURE	6	1,744	—	—	—	—	12	276	—	—	—	—	—	—	SDD 15D27
0010	ASHALND AVE	30	450	—	60	120	—	—	120	—	—	—	1	1	1	
0010	GREEN BAY RD RAMPS	30	960	—	570	240	—	—	300	1	1	1	1	1	1	MODIFIED SDD 15D16
0010	NEENAH AVE	30	450	—	30	60	—	—	120	—	—	—	1	3	3	
0010	CTH U	30	900	60	420	240	—	—	210	1	2	2	1	7	7	
0010	CIRCLE RIDGE RD	30	450	—	30	60	—	—	120	—	—	—	1	1	1	
0010	STH 42 MEDIAN AT CTH U	30	600	—	450	900	—	—	240	—	—	—	1	3	3	
	SUBTOTAL SEGMENT C		68,596	60	5,602	7,344	1,298	130	12,722			3			13	
	CAT 0010 TOTAL		169,990	60	10,994	14,357	6,450	498	28,214			3			13	

* FOR INFORMATIONAL PURPOSES ONLY - NON BID ITEM

TRAFFIC CONTROL SIGNS PCMS

CATEGORY	LOCATION	# OF SIGNS	DAYS	643.1050 DAY
0010	BEGINNING OF PROJECT/SEGMENT C	2	7	14
0010	SEGMENT A	2	7	14
0010	SEGMENT B	2	7	14
0010	ASHLAND AVE	1	7	7
0010	PRIOR TO RAMP CLOSURES	2	7	14
0010	NEENAH AVE	1	7	7
0010	CTH U CLOSURE & CIRCLE RIDGE RD	2	7	14
0010	STH 42 NB LEFT TURN TO CIRCLE RIDGE RD	1	7	7
	CAT 0010 TOTAL			91

FLEXIBLE TUBULAR MARKER POSTS

CATEGORY	STATION	TO	STATION	LOCATION	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	REMARKS
	SEGMENT C						
0010	470+00'SB'	-	474+50'SB'	STH 42	10	10	SB LANE SHIFT
0010	ASHLAND AVE				7	7	
0010	NEENAH AVE				9	9	
0010	CIRCLE RIDGE DRD				4	4	
				CAT 0010 TOTAL	30	30	

TEMPORARY PEDESTRIAN ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	644.1410 TEMPORARY PEDESTRIAN SURFACE ASPHALT SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	REMARKS
	SEGMENT C							
0010	21+15'GN'	-	23+65'GN'	GREEN BAY RD NB RAMP	—	—	250	STAGE 1 PED ACCESS
0010	21+15'GN'	-	23+65'GN'	GREEN BAY RD NB RAMP	300	30	450	STAGE 2 PED ACCESS DURING RAMP CLOSURE
				CAT 0010 TOTAL	300	30	700	

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PAVEMENT MARKING-EDGELINES AND CENTERLINES

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH YELLOW LF	646.1040 MARKING LINE WHITE LF	646.1040 MARKING LINE YELLOW LF	646.4520 MARKING LINE WHITE LF	646.4520 MARKING LINE YELLOW LF	REMARKS
	SEGMENT A										
0010	100+00'NB'	-	220+63'NB'	STH 42 NB LANES	—	—	11,589	11,377	—	—	MAINLINE
0010	100+00'NB'	-	220+63'NB'	STH 42 NB LANES	—	150	—	—	—	—	SIDE ROADS DOUBLE YELLOW
0010	100+00'NB'	-	220+63'NB'	STH 42 SB LANES	—	—	11,674	11,604	—	—	MAINLINE
0010	100+00'NB'	-	220+63'NB'	STH 42 SB LANES	250	—	—	—	—	—	SIDE ROADS DOUBLE YELLOW
				SUBTOTAL SEGMENT A	250	150	23,263	22,981	0	0	
	SEGMENT B										
0010	220+63'NB'	-	305+80'NB'	STH 42 NB LANES	—	—	8,188	7,789	—	—	MAINLINE
0010	305+80'NB'	-	351+55'NB'	STH 42 NB LANES	4,552	4,427	—	—	—	—	MAINLINE
0010	220+63'NB'	-	351+55'NB'	STH 42 NB LANES	—	100	—	—	—	—	SIDE ROADS DOUBLE YELLOW
0010	220+63'NB'	-	305+80'NB'	STH 42 SB LANES	—	—	8,364	7,662	—	—	MAINLINE
0010	305+80'NB'	-	351+55'NB'	STH 42 SB LANES	4,313	4,442	—	—	—	—	MAINLINE
0010	220+63'NB'	-	351+55'NB'	STH 42 SB LANES	—	170	—	—	—	—	SIDE ROADS DOUBLE YELLOW
0010	305+80'NB'	-	351+55'NB'	STH 42 MEDIAN	—	2,230	—	—	—	—	TWLTL 12.5' SKIPS
				SUBTOTAL SEGMENT B	8,865	11,369	16,552	15,451	0	0	
	SEGMENT C										
0010	351+55'NB'	-	463+25'NB'	STH 42 NB LANES	10,011	9,124	—	—	—	—	MAINLINE
0010	351+55'NB'	-	463+25'NB'	STH 42 NB LANES	—	2,000	—	—	—	—	SIDE ROADS
0010	351+55'NB'	-	463+25'NB'	STH 42 SB LANES	9,707	9,250	—	—	—	—	MAINLINE
0010	351+55'NB'	-	463+25'NB'	STH 42 SB LANES	255	664	—	—	—	—	SIDE ROADS
0010	364+75'NB'	-	371+62'SB'	STH 42 MEDIAN	—	345	—	—	—	—	TWLTL 12.5' SKIPS
0010	463+25'NB'	-	481+89'NB'	STH 42 NB & SB LANES	—	—	—	—	3,910	4,150	MAINLINE/FLAGGING
0010	12+00'GN'	-	30+06'GN'	NB RAMP	1,819	1,404	—	—	—	—	
0010	20+00'GS'	-	31+47'GS'	SB RAMP	1,123	973	—	—	—	—	
				SUBTOTAL SEGMENT C	22,915	23,760	0	0	3,910	4,150	
				CAT 0010 TOTAL	67,309		78,247		8,060		

PAVEMENT MARKING-LANE LINES

CATEGORY	STATION	TO	STATION	LOCATION	646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY YELLOW LF	646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY WHITE LF	646.1555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 4-INCH WHITE LF	REMARKS
	SEGMENT A							
0010	100+00'NB'	-	220+63'NB'	STH 42 NB LANES	—	—	3,016	12.5' SKIPS
0010	100+00'NB'	-	220+63'NB'	STH 42 SB LANES	—	—	3,016	12.5' SKIPS
				SUBTOTAL SEGMENT A	0	0	6,032	
	SEGMENT B							
0010	220+63'NB'	-	305+84'NB'	STH 42 NB LANES	—	—	2,130	12.5' SKIPS
0010	305+84'NB'	-	351+55'NB'	STH 42 NB LANES	—	1,140	—	12.5' SKIPS
0010	220+63'NB'	-	305+84'NB'	STH 42 SB LANES	—	—	2,130	12.5' SKIPS
0010	305+84'NB'	-	351+55'NB'	STH 42 SB LANES	—	1,150	—	12.5' SKIPS
				SUBTOTAL SEGMENT B	0	2,290	4,260	
	SEGMENT C							
0010	351+55'NB'	-	481+89'SB'	STH 42 NB	—	2,921	—	12.5' SKIPS
0010	351+55'NB'	-	481+89'SB'	STH 42 SB	—	2,898	—	12.5' SKIPS
				SUBTOTAL SEGMENT C	0	5,819	0	
				CAT 0010 TOTAL	8,109		10,292	

PAVEMENT MARKING-CHANNELIZING LINES

CATEGORY	STATION	TO	STATION	LOCATION	646.3020 MARKING LINE EPOXY 8-INCH LF	646.3545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH LF	646.3555 MARKING LINE GROOVED CONTRAST PERMANENT TAPE 8-INCH LF	REMARKS
	SEGMENT A							
0010	100+00'NB'	-	220+63'NB'	STH 42 NB LANES	—	—	224	STH 42 NB RIGHT TURN LANES
0010	100+00'NB'	-	220+63'NB'	STH 42 NB LANES	—	—	1,081	STH 42 NB LEFT TURN LANES
0010	100+00'NB'	-	220+63'NB'	STH 42 SB LANES	—	—	192	STH 42 SB RIGHT TURN LANES
0010	100+00'NB'	-	220+63'NB'	STH 42 SB LANES	—	—	897	STH 42 SB LEFT TURN LANES
				SUBTOTAL SEGMENT A	0	0	2,394	
	SEGMENT B							
0010	220+63'NB'	-	305+84'NB'	STH 42 NB LANES	—	—	639	STH 42 NB LEFT TURN LANES
0010	305+84'NB'	-	351+55'NB'	STH 42 NB LANES	—	207	—	STH 42 NB LEFT TURN LANES
0010	220+63'NB'	-	305+84'NB'	STH 42 SB LANES	—	—	398	STH 42 SB LEFT TURN LANES
0010	305+84'NB'	-	351+55'NB'	STH 42 SB LANES	—	120	—	STH 42 SB RIGHT TURN LANES
				SUBTOTAL SEGMENT B	0	327	1,037	
	SEGMENT C							
0010	351+55'NB'	-	481+89'SB'	STH 42 NB LANES	—	460	—	STH 42 NB RIGHT TURN LANES
0010	351+55'NB'	-	481+89'SB'	STH 42 NB LANES	—	1,861	—	STH 42 NB LEFT TURN LANES
0010	351+55'NB'	-	481+89'SB'	STH 42 SB LANES	—	1,150	—	STH 42 SB RIGHT TURN LANES
0010	351+55'NB'	-	481+89'SB'	STH 42 SB LANES	—	1,848	—	STH 42 SB LEFT TURN LANES
0010	466+02'SB'	-	467+52'SB'	STH 42 SB LANES	—	36		3' SKIPS RIGHT TURN TO CIRCLE RIDGE RD
0010	466+86'SB'	-	468+31'SB'	STH 42 SB LANES	—	43	—	3' SKIPS LEFT TURN TO CTH U
0010	351+55'NB'	-	481+89'SB'	STH 42 SB LANES	44	—	—	CTH C LEFT TURN LANE TO STH 42 NB
0010	12+58'GN'	-	30+08'GN'	NB RAMP	150	—	—	LEFT TURN LANE
0010	12+58'GN'	-	30+08'GN'	NB RAMP	—	525	—	3' SKIPS AT GORE
0010	20+00'GS'	-	21+22'GS'	SB RAMP	—	340	—	GORE
0010	78+07'U'	-	79+53'U'	CTH U	100	—	—	CTH U PORKCHOP
				SUBTOTAL SEGMENT C	294	6,263	0	
				CAT 0010 TOTAL	294	6,590	3,431	

PAVEMENT MARKING-ARROWS AND WORDS

CATEGORY	STATION	TO	STATION	LOCATION	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORD EPOXY EACH	REMARKS
	SEGMENT A						
0010	114+75'NB'	-	115+80'NB'	STH 42 SB	1	1	STH 57/42 SB LEFT TURN LANE TO STH 42
				SUBTOTAL SEGMENT A	1	1	
	SEGMENT B						
0010	306+00'NB'	-	351+55'NB'	STH 42 MEDIAN	32	—	TWLTL
				SUBTOTAL SEGMENT B	32	0	
	SEGMENT C						
0010	355+00'NB'	-	361+50'NB'	STH 42 NB/SB LANES	8	4	STH 42 & ASHLAND AVE INTERSECTION
0010	364+75'NB'	-	371+62'NB'	STH 42 MEDIAN	8	—	TWLTL
0010	371+62'NB'	-	378+55'NB'	STH 42 NB/SB LANES	8	4	STH 42 & CTH C/S INTERSECTION
0010	464+00'NB'			STH 42 NB LANES	1	—	LANE DROP ARROW
0010	39+95'A'	-	40+35'A'	ASHLAND AVE	2	—	
0010	65+52'N'	-	67+16'N'	NEENAH AVE	4	—	RIGHT & LEFT TURN LANE TO STH 42
				SUBTOTAL SEGMENT C	31	8	
				CAT 0010 TOTAL	64	9	

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MARKING DIAGONAL EPOXY 12-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.7120 LF	REMARKS
	SEGMENT C					
0010	471+56'SB'	-	474+62'SB'	STH 42	130	TRANSITION FROM 4 TO 2 LANES
0010	39+80'A'	-	40+33'A'	ASHLAND AVE	40	WIDENING ON ASHLAND AVE
				SUBTOTAL SEGMENT C	170	
				CAT 0010 TOTAL	170	

MARKING CORRUGATED MEDIAN EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.8020 SF	REMARKS
	SEGMENT C					
0010	351+55'NB'	-	481+89'SB'	STH 42 MEDIAN	116	LEFT TURN LANE TO CIRCLE RIDGE RD
				SUBTOTAL SEGMENT C	116	
				CAT 0010 TOTAL	116	

MARKING CURB EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.8120 LF	REMARKS
	SEGMENT C					
0010	351+55'NB'	-	481+89'SB'	STH 42 MEDIAN	100	MARKING ISLAND NOSES
0010	351+55'NB'	-	481+89'SB'	CURB REPAIRS	89	
				SUBTOTAL SEGMENT C	189	
				CAT 0010 TOTAL	189	

PAVEMENT MARKING-REMOVALS

CATEGORY	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF	646.9300 MARKING REMOVAL SPECIAL MARKING EACH	REMARKS
	SEGMENT A							
0010	100+00'NB'	-	220+63'NB'	STH 42 CL SKIPS	350	—	—	FOR LANE CLOSURES
0010	100+00'NB'	-	220+63'NB'	STH 42 NB	—	—	—	STH 57 AND STH 42 INTERSECTION
				SUBTOTAL SEGMENT A	350	0	0	
	SEGMENT B							
0010	220+63'NB'	-	351+55'NB'	STH 42 CL SKIPS	350	—	—	FOR LANE CLOSURES
0010	300+50'NB'	-	304+75'NB'	STH 42 NB	425			OUTSIDE EDGLINE AT ENTERPRISE RD
0010	220+63'NB'	-	351+55'NB'	STH 42 NB	—	—	—	REMOVE OUTSIDE EDGLINE AT WANEK RD
0010	326+75'NB'	-	331+00'NB'	STH 42 SB	425	—	—	REMOVE OUTSIDE EDGLINE AT GRANT RD
				SUBTOTAL SEGMENT B	1,200	0	0	
	SEGMENT C							
0010	351+55'NB'	-	481+89'SB'	STH 42 NB	135	—	—	FOR NB LANE CLOSURE
0010	351+55'NB'	-	481+89'SB'	STH 42 SB	880	230	—	TAPER FOR SB LANE CLOSURE - MEDIAN MARKING
0010	39+72'A'	-	41+11'A'	ASHLAND AVE	—	10	6	S. ASHLAND AVENUE INTERSECTION WIDENING
0020	39+72'A'	-	41+11'A'	ASHLAND AVE	175	—	—	S. ASHLAND AVENUE INTERSECTION WIDENING
0010	65+70'N'	-	67+66'N'	NEENAH AVE	—	9	—	S. NEENAH AVENUE INTERSECTION WIDENING
0020	65+70'N'	-	67+66'N'	NEENAH AVE	400	—	—	S. NEENAH AVENUE INTERSECTION WIDENING
0020	81+36'CI'	-	82+42'CI'	CIRCLE RIDGE RD	210	—	—	CIRCLE RIDGE ROAD INTERSECTION WIDENING
				SUBTOTAL SEGMENT C	1,800	249	6	
				CAT 0010 TOTAL	2,565	249	6	
				CAT 0020 TOTAL	785	0	0	

MARKING ISLAND NOSE EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.8220 EACH	REMARKS
	SEGMENT C					
0020	457+28'NB'	-	481+89'SB'	STH 42 MEDIAN	5	STH 42 & CTH U INTERSECTION
0010	414+32'NB'	-	414+35'NB'	STH 42 MEDIAN	1	STH 42 NB & NEENAH AVE INTERSECTION
0010	39+48'A'	-	39+63'A'	ASHLAND AVE	2	PORKCHOP ISLAND
0010	78+97'U'	-	79+38	CTH U	2	PORKCHOP ISLAND
				SUBTOTAL SEGMENT C	10	
				CAT 0010 TOTAL	5	
				CAT 0020 TOTAL	5	

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PAVEMENT MARKING-TEMPORARY

CATEGORY	STATION	TO	STATION	LOCATION	649.0105 PAINT 4-INCH LF	649.0150 REMOVABLE TAPE 4-INCH LF	649.0205 PAINT 8-INCH LF	649.0250 REMOVABLE TAPE 8-INCH LF	REMARKS
					TEMPORARY MARKING LINE				
	SEGMENT A								
0010	100+00'NB'			STH 42 NB	—	11,000	—	—	LANE CLOSURE TAPERS
0010	100+00'NB'	-	220+63'NB'	STH 42 NB LANES	1,410	—	—	—	INSIDE LANE SKIPS
0010	100+00'NB'	-	220+63'NB'	STH 42 SB LANES	1,170	—	—	—	INSIDE LANE SKIPS
				SUBTOTAL SEGMENT A	2,580	11,000	0	0	
	SEGMENT B								
0010	220+63'NB'	-	351+55'NB'	STH 42 NB	1,050	—	—	—	INSIDE LANE SKIPS
0010	220+63'NB'	-	351+55'NB'	STH 42 SB	1,534				INSIDE LANE SKIPS
0010	351+55'NB'			STH 42 SB	—	11,000	—	—	LANE CLOSURE TAPERS
				SUBTOTAL SEGMENT B	2,584	11,000	0	0	
	SEGMENT C								
0010	351+55'NB'			STH 42 NB	—	2,200	—	—	LANE CLOSURE TAPER
0010	351+55'NB'	-	463+25'NB'	STH 42 NB	3,600	—	—	—	INSIDE LANE SKIPS
0010	351+55'NB'	-	463+25'NB'	STH 42 SB	3,600	—	—	—	INSIDE LANE SKIPS
0010	380+00'NB'			STH 42 NB EXIT RAMP	—	200	—	600	
0010	381+34'NB'			STH 42 SB ENTRANCE RAMP	—	700	—	100	
0010	469+92'SB'	-	474+50'SB'	STH 42 SB	—	917	—	—	CTH U - BAYVIEW BRIDGE (OUTSIDE LANE CLOSURE)
0010	469+92'SB'	-	474+50'SB'	STH 42 SB	914	—	142	—	CTH U - BAYVIEW BRIDGE (INSIDE LANE CLOSURE)
0020	39+71'A'	-	41+11'A'	ASHLAND AVE	—	280	—	—	ASHLAND AVENUE INTERSECTION WIDENING
0020	65+70'N'	-	67+66'N'	NEENAH AVE	—	340	—	—	NEENAH AVENUE INTERSECTION WIDENING
0010	78+25'U'		79+00'U'	CTH U	—	140	—	—	LEFT TURN TO STH 42 SB RESTRICTION
0020	81+35'CI'	-	82+42'CI'	CIRCLE RIDGE RD	—	210	—	—	CIRCLE RIDGE ROAD INTERSECTION WIDENING
				SUBTOTAL SEGMENT C	8,114	4,987	142	700	
				CAT 0010 TOTAL	13,278	26,157	142	700	
				CAT 0020 TOTAL	0	830	0	0	

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CONSTRUCTION STAKING SUBGRADE, BASE, AND SLOPE STAKES

CATEGORY	STATION	TO	STATION	LOCATION	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5000 CONSTRUCTION STAKING BASE LF	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	REMARKS
	SEGMENT C							
0010	457+28'NB'	-	462+55'NB'	LT/RT	527	527	527	LEFT/RIGHT TURN LANES
0020	463+22'SB'	-	471+59'SB'	LT/RT	413	413	413	LEFT/RIGHT TURN LANES
0020	39+45'A'	-	40+96'A'	13' RT	151	151	151	S ASHLAND AVE INTERSECTION WIDENING
0020	66+24'N'	-	67+16'N'	12' RT	92	92	92	S NEENAH AVE INTERSECTION WIDENING
0020	78+07'U'	-	79+69'U'	12' LT/RT	162	162	162	CTH U
0020	81+00'CI'	-	82+01'CI'	11' RT	101	101	101	CIRCLE RIDGE RD
				SUBTOTAL SEGMENT C	1,446	1,446	1,446	
				CAT 0010 TOTAL	527	527	527	
				CAT 0020 TOTAL	919	919	919	

CONSTRUCTION STAKING CONCRETE PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	650.7000 LF	REMARKS
	SEGMENT C					
0010	20+90'GN'	-	22+86'GN'	0' RT	196	NB RAMP
0020	65+52'N'	-	66+24'N'	15' RT	72	S. NEENAH AVE
				SUBTOTAL SEGMENT C	268	
				CAT 0010 TOTAL	196	
				CAT 0020 TOTAL	72	

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CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	650.5500 LF
	SEGMENT B					
0010	NB OUTSIDE	340+36'NB'	-	340+66'NB'	36' RT	38
					SUBTOTAL SEGMENT B	38
	SEGMENT C					
0010	NB OUTSIDE	371+87'NB'	-	372+00'NB'	36' RT	13
0010	NB OUTSIDE	372+50'NB'	-	372+70'NB'	36'RT	25
0010	NB OUTSIDE	372+98'NB'	-	373+21'NB'	36'RT	28
0010	NB OUTSIDE	373+87'NB'	-	373+99'NB'	36'RT	12
0010	NB OUTSIDE	375+30'NB'	-	375+66'NB'	49' RT	40
0010	NB OUTSIDE	378+98'NB'	-	379+18'NB'	39' RT	20
0010	NB OUTSIDE	387+67'NB'	-	387+72'NB'	36'RT	5
0010	NB OUTSIDE	426+00'NB'	-	426+19'NB'	64' RT	29
0010	NB OUTSIDE	78+99'U'	-	79+57'U'	-14' LT	66
0010	NB OUTSIDE	78+96'U'	-	79+38'U'	16' RT	103
0010	NB OUTSIDE	78+91'U'	-	79+25'U'	36'RT	64
0010	SB OUTSIDE	400+89'NB'	-	401+18'NB'	62' LT	34
0010	SB OUTSIDE	462+33'NB'	-	462+53'NB'	61' LT	22
0020	SB OUTSIDE	39+50'A'	-	39+61'A'	36' RT	54
0020	SB OUTSIDE	39+59'A'	-	40+96'A'	18' RT	244
0020	SB OUTSIDE	65+55'N'	-	67+16'N'	17' RT	195
0020	SB OUTSIDE	81+13'CI'	-	81+71'CI'	17' RT	80
0010	NB INSIDE	354+13'NB'	-	354+33'NB'	-2' LT	20
0010	NB INSIDE	360+47'NB'	-	360+53'NB'	-2' LT	6
0010	NB INSIDE	364+60'NB'	-	364+69'NB'	-2' LT	10
0010	NB INSIDE	373+36'NB'	-	373+42'NB'	-21' LT	6
0010	NB INSIDE	378+98'NB'	-	379+18'NB'	-2' LT	20
0010	NB INSIDE	384+04'NB'	-	384+14'NB'	-2' LT	10
0010	NB INSIDE	387+82'NB'	-	387+91'NB'	-4' LT	8
0010	NB INSIDE	401+45'NB'	-	401+52'NB'	-19' LT	8

SEGMENT C CONTINUED IN NEXT COLUMN

CATEGORY	ESTIMATED LANE CLOSURE	STATION	TO	STATION	LOCATION	650.5500 LF
	SEGMENT C (CONTINUED)					
0010	NB INSIDE	402+05'NB'	-	402+11'NB'	-2' LT	6
0010	NB INSIDE	402+50'NB'	-	402+56'NB'	-2' LT	6
0010	NB INSIDE	403+47'NB'	-	403+60'NB'	-2' LT	13
0010	NB INSIDE	410+51'NB'	-	410+67'NB'	-4' LT	16
0010	NB INSIDE	413+83'NB'	-	414+06'NB'	-8' LT	23
0010	NB INSIDE	414+16'NB'	-	414+32'NB'	-2' LT	16
0010	NB INSIDE	425+49'NB'	-	425+69'NB'	-15' LT	22
0010	NB INSIDE	425+71'NB'	-	425+75'NB'	-2' LT	4
0010	NB INSIDE	441+32'NB'	-	441+48'NB'	-12' LT	16
0010	NB INSIDE	446+52'NB'	-	446+68'NB'	-2' LT	16
0010	NB INSIDE	458+52'NB'	-	458+68'NB'	-2' LT	16
0010	SB INSIDE	358+93'NB'	-	358+99'NB'	-16' LT	6
0010	SB INSIDE	364+60'NB'	-	364+69'NB'	-23' LT	10
0010	SB INSIDE	376+35'NB'	-	376+41'NB'	-9' LT	6
0010	SB INSIDE	400+70'NB'	-	400+86'NB'	-28' LT	16
0010	SB INSIDE	402+11'NB'	-	402+24'NB'	-22' LT	13
0010	SB INSIDE	402+20'NB'	-	402+26'NB'	-8' LT	6
0010	SB INSIDE	406+70'NB'	-	407+14'NB'	-28' LT	45
0010	SB INSIDE	416+99'NB'	-	417+03'NB'	-22' LT	4
0010	SB INSIDE	419+22'NB'	-	419+32'NB'	-28' LT	10
0010	SB INSIDE	419+99'NB'	-	420+15'NB'	-28' LT	16
0010	SB INSIDE	432+39'NB'	-	432+49'NB'	-28' LT	9
0010	SB INSIDE	441+64'NB'	-	441+85'NB'	-28' LT	25
0010	SB INSIDE	443+10'NB'	-	443+26'NB'	-28' LT	16
0010	SB INSIDE	446+52'NB'	-	446+68'NB'	-28' LT	16
0010	SB INSIDE	450+52'NB'	-	450+68'NB'	-28' LT	16
0010	SB INSIDE	454+52'NB'	-	454+68'NB'	-28' LT	16
0010	SB INSIDE	458+52'NB'	-	458+68'NB'	-28' LT	16
0010	NB & SB INSIDE	459+17'NB'	-	462+05'NB'	-2' LT	300
0020	NB & SB INSIDE	463+26'SB'	-	471+56'SB'	5' RT	1610
0020	RAMP CLOSURE	20+56'GN'	-	23+73'GN	22' RT	324
					SUBTOTAL SEGMENT C	3,756
					CAT 0010 TOTAL	1,287
					CAT 0020 TOTAL	2,507

CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 LF	REMARKS
	SEGMENT A					
0010	100+00'NB'	-	220+63'NB'	12' RT	12,063	
0010	100+00'NB'	-	220+63'NB'	-65' LT	12,063	TRANSFER NB STATIONING TO SB ROADWAY
				SUBTOTAL SEGMENT A	24,126	
	SEGMENT B					
0010	220+63'NB'	-	351+55'NB'	12' RT	13,092	
0010	220+63'NB'	-	351+55'NB'	-62' LT	13,092	TRANSFER NB STATIONING TO SB ROADWAY
				SUBTOTAL SEGMENT B	26,184	
	SEGMENT C					
0010	351+55'NB'	-	464+66'NB'	12' RT	11,311	
0010	351+55'NB'	-	464+66'NB'	-30' LT	11,311	TRANSFER NB STATIONING TO SB ROADWAY
0010	464+66'SB'	-	481+89'SB'	VARIES	1,723	TRANSFER SB STATIONING TO NB ROADWAY
0010	464+66'SB'	-	481+89'SB'	0' RT	1,723	
0010	14+10'GN'	-	20+90'GN'	0' RT	680	
0010	22+86'GN'	-	30+06'GN'	0' RT	720	
0010	20+00'GS'	-	31+47'GS'	0' RT	1,147	
				SUBTOTAL SEGMENT C	28,615	
				CAT 0010 TOTAL	78,925	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. TBD)

CATEGORY	STATION	TO	STATION	LOCATION	650.9910.01 LS
0010	PROJECT LENGTH			STH 42 NB & SB	1
				CAT 0010 TOTAL	1

3

CONDUIT RIGID NONMETALLIC SCHEDULE 40

CATEGORY	ESTIMATED LANE CLOSURE	LOCATION FROM	-	TO	652.0210 1-INCH LF	652.0225 2-INCH LF	652.0235 3-INCH LF	652.0615 3-INCH SPECIAL LF	REMARKS
	SEGMENT C								
0020	SB OUTSIDE	PB1	-	PB2	—	—	—	113	42&57 & ASHLAND AVE
0020	SB OUTSIDE	PB1	-	PB2	—	—	—	113	42&57 & ASHLAND AVE
0020	SB OUTSIDE	PB2	-	SB2	—	35	—	—	42&57 & ASHLAND AVE
0020	SB OUTSIDE	PB2	-	PB3	—	—	—	69	42&57 & ASHLAND AVE
0020	SB OUTSIDE	PB2	-	PB3	—	—	—	69	42&57 & ASHLAND AVE
0020	SB OUTSIDE	PB1	-	PB2	—	—	—	64	42&57 & NEENAH AVE
0020	SB OUTSIDE	PB1	-	PB2	—	—	—	64	42&57 & NEENAH AVE
0020	SB OUTSIDE	PB2	-	PB3	—	—	46	—	42&57 & NEENAH AVE
0020	SB OUTSIDE	PB2	-	SB2	—	—	10	—	42&57 & NEENAH AVE
0020	SB OUTSIDE	PB3	-	SB3	—	—	9	—	42&57 & NEENAH AVE
0020	SB OUTSIDE	PB3	-	Splice	17	—	—	—	42&57 & NEENAH AVE
0020	SB OUTSIDE	PB3	-	PB4	—	—	—	53	42&57 & NEENAH AVE
0020	SB OUTSIDE	PB3	-	PB4	—	—	—	53	42&57 & NEENAH AVE
		SUBTOTAL SEGMENT C			17	35	65	598	
		CAT 0020 TOTAL			17	35	65	598	

PULL BOXES

CATEGORY	ESTIMATED LANE CLOSURE	LOCATION	653.0164 NON-CONDUCTIVE 24X42-INCH EACH
	SEGMENT C		
0020	SB OUTSIDE	42&57 & ASHLAND	1
0020	SB OUTSIDE	42&57 & NEENAH	2
		SUBTOTAL SEGMENT C	3
		CAT 0020 TOTAL	3

3

LOOP DETECTORS

CATEGORY	ESTIMATED LANE CLOSURE	LOCATION	* LOOP NO.	* # OF TURNS	652.0800 CONDUIT LF	655.0700 LEAD IN CABLE LF	655.0800 WIRE EACH
	SEGMENT C						
0010	SB OUTSIDE	42&57 & ASHLAND	51	—	—	211	—
0010	SB OUTSIDE	42&57 & ASHLAND	21	—	—	561	—
0010	SB OUTSIDE	42&57 & ASHLAND	22	—	—	407	—
0010	SB OUTSIDE	42&57 & ASHLAND	43	3	68	59	204
0010	SB OUTSIDE	42&57 & NEENAH	21	—	—	389	—
0010	SB OUTSIDE	42&57 & NEENAH	22	—	—	575	—
0010	SB OUTSIDE	42&57 & NEENAH	51	—	—	300	—
0010	SB OUTSIDE	42&57 & NEENAH	52	—	—	290	—
		SUBTOTAL SEGMENT C	283	3	68	2,792	204
		CAT 0010 TOTAL	283	3	68	2,792	204

* FOR INFORMATIONAL PURPOSES ONLY - NON BID ITEM

CONCRETE BASES

CATEGORY	ESTIMATED LANE CLOSURE	STATION	LOCATION	204.0195 REMOVING CONCRETE BASES EACH	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	REMARKS
	SEGMENT C						
0020	SB OUTSIDE	39+54'A'	47' RT	—	1	—	ASHLAND AVE - S15-0831
0020	SB OUTSIDE	39+61'A'	47' RT	1	—	—	ASHLAND AVE - S15-0831
0020	SB OUTSIDE	65+60'N'	60' RT	1	—	—	NEENAH AVE - S15-0850
0020	SB OUTSIDE	65+64'N'	67' RT	—	1	—	NEENAH AVE - S15-0850
0020	SB OUTSIDE	66+01'N'	21' RT	1	—	—	NEENAH AVE - S15-0850
0020	SB OUTSIDE	66+01'N'	35' RT	—	—	1	NEENAH AVE - S15-0850
		SUBTOTAL SEGMENT C		3	2	1	
		CAT 0020 TOTAL		3	2	1	

TRAFFIC SIGNALS

CATEGORY	ESTIMATED LANE CLOSURE	LOCATION	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310 POLES TYPE 3 EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0595 TROMBONE ARM 25-FT EACH	658.0173 TRAFFIC SIGNAL FACE 3S-12 INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S-12 INCH EACH	658.5069 SIGNAL MOUNTING HARDWARE LS	SPV.0060.04 REMOVE TRAFFIC SIGNAL EACH	SPV.0060.05 REMOVE TRAFFIC SIGNAL EACH	REMARKS
	SEGMENT C												
0020	SB OUTSIDE	42&57 & ASHLAND	1	—	—	1	—	1	1	1	1	—	(NOTE)
0020	SB OUTSIDE	42&57 & NEENAH	1	1	1	1	1	2	1	1	—	1	(NOTE)
		SUBTOTAL SEGMENT C	2	1	1	2	1	3	2	2	1	1	
		CAT 0020 TOTAL	2	1	1	2	1	3	2	2	1	1	

(NOTE) ONE TRAFFIC SIGNAL TO BE REMOVED AT ASHLAND AVE AND TWO TRAFFIC SIGNALS TO BE REMOVED AT NEENAH AVE. SEE SIGNAL PLAN FOR MORE INFORMATION.

3

TRAFFIC SIGNAL CABLE

CATEGORY	ESTIMATED LANE CLOSURE	LOCATION FROM	-	TO	655.0230 5-14 AWG LF	655.0240 7-14 AWG LF	655.0260 12-14 AWG LF	* HEAD NO. LF	655.0230 BASE TO HEAD 5-14 AWG LF	655.0240 BASE TO HEAD 7-14 AWG LF	REMARKS
	SEGMENT C										
0020	SB OUTSIDE	CB	-	SB2	—	—	210	3	23	—	42&57 & ASHLAND AVE
0020	SB OUTSIDE				—	—	—	4	—	23	42&57 & ASHLAND AVE
0020	SB OUTSIDE	CB	-	SB3	—	—	336	5	—	Exisiting	42&57 & ASHLAND AVE
0020	SB OUTSIDE				—	—	—	6	Exisiting	—	42&57 & ASHLAND AVE
0020	SB OUTSIDE				—	—	—	7	Exisiting	—	42&57 & ASHLAND AVE
0020	SB OUTSIDE	CB1	-	SB2	147	—	—	15	50	—	42&57 & NEENAH AVE
0020	SB OUTSIDE	CB1	-	SB3	—	—	208	5	23	—	42&57 & NEENAH AVE
0020	SB OUTSIDE				—	—	—	6	—	23	42&57 & NEENAH AVE
0020	SB OUTSIDE	CB1	-	SB4	—	—	380	7	—	Exisiting	42&57 & NEENAH AVE
0020	SB OUTSIDE				—	—	—	8	Exisiting	—	42&57 & NEENAH AVE
0020	SB OUTSIDE				—	—	—	9	Exisiting	—	42&57 & NEENAH AVE
		SUBTOTAL SEGMENT C			147	—	1,134		96	46	
		CAT 0020 TOTAL			243	46	1,134				

* FOR INFORMATIONAL PURPOSES ONLY - NON BID ITEM

Signal Indication		Conductor Color
Red	=	Red
Yellow	=	Orange
Green	=	Green
Red Arrow	=	Red w/Black Tracer
Yellow Arrow	=	Black w/White
Yellow Flashing Arrow	=	White w/Black
Green Arrow	=	Blue w/Black

PEDS

Walk	=	Green
Don't Walk	=	Red
Button	=	Black & Orange

NOTE: For back to back 3 section heads with ball indications, use solid colored conductors for NB & EB, and tracer conductors for SB & WB.

NOTE: Lead-in Cable shall be pulled in separately from other cables/wires and enter the Control Cabinet in a separate conduit if provided.

SIGNAL LIGHTING CABLE

CATEGORY	ESTIMATED LANE CLOSURE	LOCATION FROM	-	TO	655.0305 TYPE UF 2-12 AWG GROUNDED LF	REMARKS
	SEGMENT C					
0020	SB OUTSIDE	CB1	-	LB1	275	42&57 & ASHLAND AVE
0020	SB OUTSIDE	CB1	-	SB2	147	42&57 & NEENAH AVE
0020	SB OUTSIDE	CB1	-	SB4	380	42&57 & NEENAH AVE
		SUBTOTAL SEGMENT C			422	
		CAT 0020 TOTAL			422	

ELECTRICAL WIRE LIGHTING 12 AWG

CATEGORY	ESTIMATED LANE CLOSURE	LOCATION FROM	-	TO	655.0610 LF	REMARKS
	SEGMENT C					
0020	SB OUTSIDE	SB2	-	LUMINAIRE	150	120 VOLT SYSTEM / 42&57 & NEENAH
		SUBTOTAL SEGMENT C			150	
		CAT 0020 TOTAL			150	

LUMINAIRE ARMS TRUSS TYPE 4-INCH CLAMP 12-FT

CATEGORY	ESTIMATED LANE CLOSURE	LOCATION	657.0709 EACH
	SEGMENT C		
0020	SB OUTSIDE	42&57 & NEENAH	1
		SUBTOTAL SEGMENT C	1
		CAT 0020 TOTAL	1

3

					SAWING			
					690.0150 SAWING ASPHALT	690.0250 SAWING CONCRETE	SPV.0090.04 SAWING CONCRETE CURB HEAD	
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	LF	REMARKS
	SEGMENT A							
0010	100+00'NB'	-	220+63'NB'	NB OUTSIDE	401	1,605	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	100+00'NB'	-	220+63'NB'	SB OUTSIDE	607	2,567	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	100+00'NB'	-	220+63'NB'	NB INSIDE	194	878	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	100+00'NB'	-	220+63'NB'	SB INSIDE	392	1,712	—	CONCRETE REPAIR/REPLACEMENT AREAS
				SUBTOTAL SEGMENT A	1,594	6,762	0	
	SEGMENT B							
0010	220+63'NB'	-	351+55'NB'	NB OUTSIDE	828	4,098	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	284+44'NB'	-	284+64'NB'	NB OUTSIDE / 36' RT	—	—	20	SAW CURB HEAD TO POST #3 OF MGS EAT
0010	220+63'NB'	-	351+55'NB'	SB OUTSIDE	361	2,131	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	220+63'NB'	-	351+55'NB'	NB INSIDE	495	2,259	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	220+63'NB'	-	351+55'NB'	SB INSIDE	491	1,919	—	CONCRETE REPAIR/REPLACEMENT AREAS
				SUBTOTAL SEGMENT B	2,175	10,407	20	
	SEGMENT C							
0010	351+55'NB'	-	481+89'SB'	NB OUTSIDE	773	5,340	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	351+55'NB'	-	481+89'SB'	SB OUTSIDE	362	3,630	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	351+55'NB'	-	481+89'SB'	NB INSIDE	49	3,011	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	384+88'NB'	-	388+92'SB'	NB INSIDE / -2' LT	—	—	265	SAWING CURB HEAD ADJACENT TO MGS BULLNOSE
0010	459+17'NB'	-	462+55'SB'	NB INSIDE	—	439	—	MEDIAN ISLAND
0010	351+55'NB'	-	481+89'SB'	SB INSIDE	51	3,016	—	CONCRETE REPAIR/REPLACEMENT AREAS
0010	385+54'NB'	-	389+55'SB'	SB INSIDE / -27' LT	—	—	265	SAWING CURB HEAD ADJACENT TO MGS BULLNOSE
0020	463+23'SB'	-	471+59'SB'	SB INSIDE	—	1,094	—	MEDIAN ISLAND
0010	11+85'GN'	-	23+02'GN'	NB RAMP	111	950	—	CONCRETE REPAIR/REPLACEMENT AREAS
0020	21+30'GN'	-	23+54'GN'	NB RAMP	—	16	—	SIDEWALK
0010	21+22'GS'	-	27+29'GS'	SB RAMP	—	135	—	CONCRETE REPAIR/REPLACEMENT AREAS
0020	39+45'A'	-	40+96'A'	NE QUADRANT	147	158	—	S. ASHLAND AVE INTERSECTION WIDENING
0010	39+62'A'	-	39+97'A'	NW QUADRANT	88	—	—	LOOP DETECTOR
0010	39+77'A'	-	39+97'A'	NW QUADRANT	17	—	—	ADJACENT TO CURB AND GUTTER
0020	65+52'N'	-	67+16'N'	NE QUADRANT	118	110	—	S. NEENAH AVE INTERSECTION WIDENING
0010	78+07'U'	-	79+53'U'	SE QUADRANT	—	156	—	CTH U INTERSECTION WIDENING
0020	78+07'U'	-	79+53'U'	SE QUADRANT	92	—	—	CTH U INTERSECTION WIDENING
0020	78+07'U'	-	80+14'U'	SW QUADRANT	—	344	—	CTH U INTERSECTION WIDENING
0020	78+07'U'	-	80+14'U'	SW QUADRANT	92	—	—	CTH U INTERSECTION WIDENING
0020	81+00'CI'	-	82+01'CI'	NE QUADRANT	32	526	—	CIRCLE RIDGE RD INTERSECTION WIDENING
				SUBTOTAL SEGMENT C	1,932	18,925	530	
				CAT 0010 TOTAL	5,220	33,846	550	
				CAT 0020 TOTAL	481	2,248	0	

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
4430-19-21	4.01	1
FEDERAL PROJECT NUMBER ----------		

PLAT OF RIGHT OF WAY REQUIRED FOR
CITY OF STURGEON BAY
S. JUNCTION STH 57 - BAYVIEW BRIDGE
STH 42/57 DOOR COUNTY

4

CONVENTIONAL ABBREVIATIONS AND SYMBOLS

ACCESS POINT	AP	SECTION CORNER (MATERIAL AS NOTED)	
ACCESS RIGHTS	AR	SET R/W MONUMENT W/CAP (1-3/4" OUTSIDE DIA.x18" IRON PIPE 1.13 LBS/FT)	
ACRES	AC		
CHORD BEARING	CH BRG		
CHORD DISTANCE	CH DIS		
DEED	(D)	FOUND TYPE 2 MON.	
DOCUMENT	DOC		
EAST BOUND	EB	FOUND 3/4" REBAR	
GAS VALVE	GV		
INLET	IL	SET P.K. NAIL	
LENGTH OF CURVE	L		
MANHOLE	MH	PROPOSED R/W	PR#000
MONUMENT	MON	BOUNDARY POINT	
NORTH BOUND	NB		
PAGE	PG	CORPORATE LIMITS	
PERMANENT	PERM	EXISTING R/W	
PERMANENT LIMITED EASEMENT	PLE	SECTION LINE	
PRIVATE DRIVEWAY	PD	QUARTER LINE	
PROPERTY LINE	PL	SIXTEENTH LINE	
RADIUS	RAD	PROPOSED OR NEW R/W LINE	
REFERENCE LINE	R	PROPOSED EASEMENT LINE	
REMAINING	REM		
RIGHT OF WAY	R/W	CSM, SUBDIVISION, OR PLAT OF SURVEY LINE	
SECTION	SEC	PARCEL NUMBER	00
SECTION LINE	S		
FOUND IRON PIPE	IP	UTILITY NUMBER	000
STATION	STA	SIGN NUMBER	0-0
TEMPORARY LIMITED EASEMENT	TLE		
TIE POINT	DBI	PROPERTY LINE	PL
VOLUME	VOL	LOT, TIE AND OTHER MINOR DASHED LINES	
ADJOINING LANDS WITH SAME OWNER		ACCESS RESTRICTED (By Previous Project/ Control)	
PARALLEL TO LINE	00°	ACCESS RESTRICTED (By Acquisition)	
BUILDING TO BE RAZED		NO ACCESS (By Statutory Authority)	
FEE ACQUISITION	VARIOUS HATCHING	LIMITED EASEMENT (Temporary)	
BEGIN POINT	BP	LIMITED EASEMENT (Permanent)	
END POINT	EP		

SHEET LOCATION
PROJECT 9190-24-21

TOWN

CONVENTIONAL UTILITY SYMBOLS

WATER	W	
GAS	G	
TELEPHONE	T	
OVERHEAD TRANSMISSION LINES	OH	
ELECTRIC	E	
CABLE TELEVISION	TV	
FIBER OPTIC	FO	
SANITARY SEWER	SAN	
STORM SEWER	SS	
	NON-COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		
ELECTRIC TOWER		

SCHEDULE OF UTILITIES & INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
100	CHARTER COMMUNICATION	RELEASE OF RIGHTS

SE 1/4 - NW 1/4

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER	INTEREST REQUIRED	FEE R/W ACRE(S) OR (S.F.) REQUIRED			T.L.E. AREA
			NEW	EXISTING	TOTAL	
1	JOHN L. YOST & ELAINE G. YOST	TLE	-	-	-	0.059

NOTES:

RIGHT OF WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS AND ARE REFERENCED TO THE US PUBLIC LAND SURVEY OR OTHER SURVEYS OF PUBLIC RECORD.

RIGHT OF WAY MONUMENTS ARE TYPE 2 MONUMENTS (TYPICALLY 1" X 24" IRON PIPE) AND WILL BE PLACED PRIOR TO COMPLETION OF PROJECT.

AREAS SHOWN IN THE TOTAL ACRES COLUMN OF THE SCHEDULE OF LANDS & INTEREST TABLE MAY BE APPROXIMATE AND ARE DERIVED FROM TAX ROLLS OR OTHER AVAILABLE SOURCES AND MAY NOT INCLUDE LANDS OF THE OWNER WHICH ARE NOT CONTIGUOUS TO THE AREA TO BE ACQUIRED.

COORDINATES AS SHOWN ARE NOT INTENDED TO BE USED FOR RETRACEMENT PURPOSES AND MUST BE VERIFIED WITH THE COUNTY SURVEY DEPARTMENT.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, DOOR COUNTY, NAD 83 (1991) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

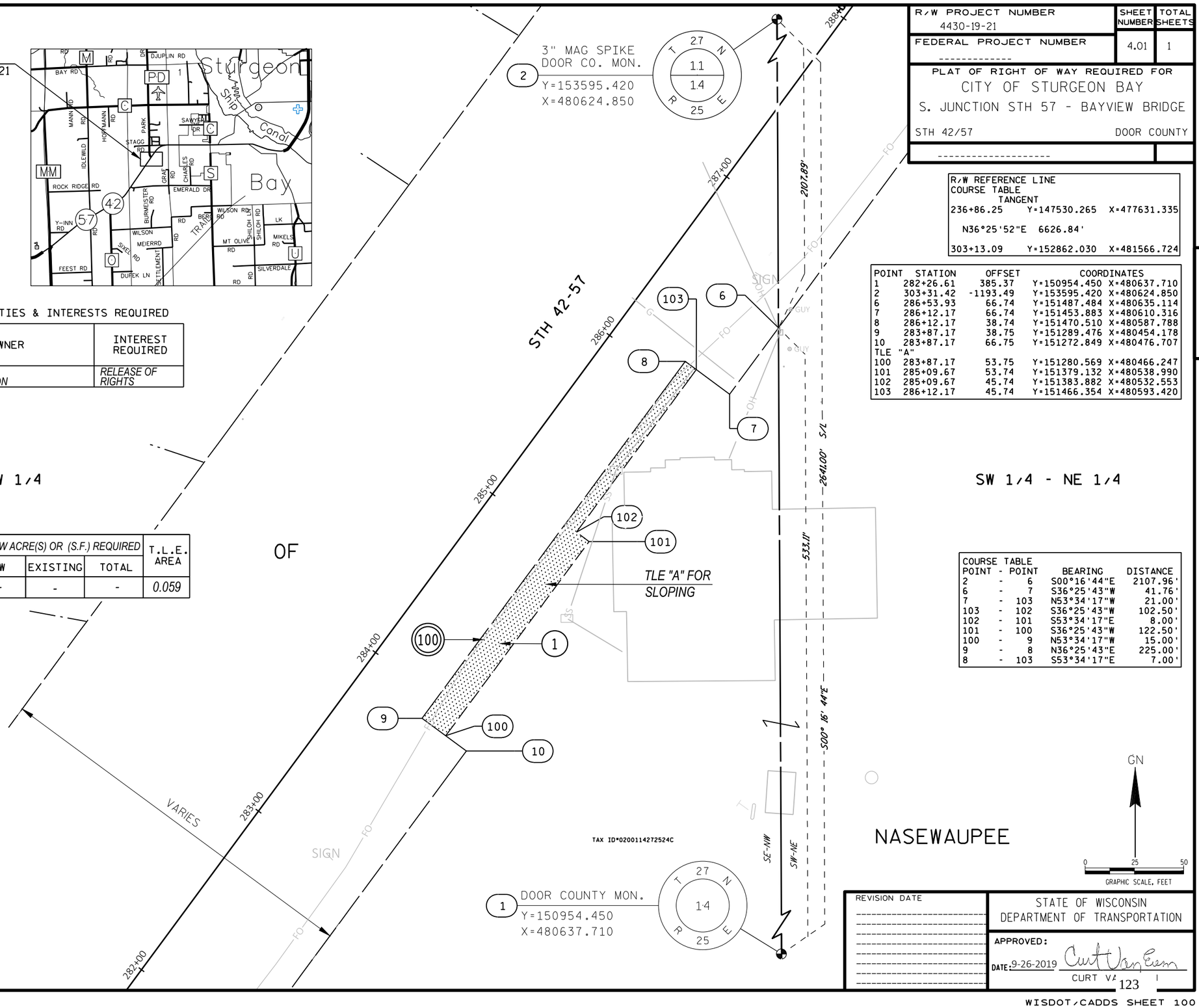
EXISTING RIGHT OF WAY WAS ACQUIRED FROM PROJECT(S): 4430-12-00-4.07 & 4.08

FOR ACCESS/DRIVEWAY INFORMATION, CONTRACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGIONAL OFFICE IN GREEN BAY.

RIGHT OF WAY REFERENCE LINE MAY NOT BE THE SAME AS THE CONSTRUCTION REFERENCE LINE.

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

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



R/W REFERENCE LINE
COURSE TABLE
TANGENT

236+86.25	Y=147530.265	X=477631.335	
N36°25'52"E 6626.84'			
303+13.09	Y=152862.030	X=481566.724	

POINT	STATION	OFFSET	COORDINATES
1	282+26.61	385.37	Y=150954.450 X=480637.710
2	303+31.42	-1193.49	Y=153595.420 X=480624.850
6	286+53.93	66.74	Y=151487.484 X=480635.114
7	286+12.17	66.74	Y=151453.883 X=480610.316
8	286+12.17	38.74	Y=151470.510 X=480587.788
9	283+87.17	38.75	Y=151289.476 X=480454.178
10	283+87.17	66.75	Y=151272.849 X=480476.707
TLE "A"			
100	283+87.17	53.75	Y=151280.569 X=480466.247
101	285+09.67	53.74	Y=151379.132 X=480538.990
102	285+09.67	45.74	Y=151383.882 X=480532.553
103	286+12.17	45.74	Y=151466.354 X=480593.420

COURSE TABLE

POINT	-	POINT	BEARING	DISTANCE
2	-	6	S00°16'44"E	2107.96'
6	-	7	S36°25'43"W	41.76'
7	-	103	N53°34'17"W	21.00'
103	-	102	S36°25'43"W	102.50'
102	-	101	S53°34'17"E	8.00'
101	-	100	S36°25'43"W	122.50'
100	-	9	N53°34'17"W	15.00'
9	-	8	N36°25'43"E	225.00'
8	-	103	S53°34'17"E	7.00'

REVISION DATE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED:
DATE: 9-26-2019 Curt VanEem
CURT VA

WISDOT/CADDS SHEET 100

5

5

LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

BEGIN PROJECT
STA 100+00.00
Y=140,028.043
X=466,244.945

BEGIN DIAMOND GRINDING CONCRETE TRAVEL LANES

SHOULDERS MILL 3 1/2" PAVE 3 1/2"

EXISTING R/W

DIAMOND GRIND SB TRAVEL LANES

STH 42/57 SB

N56°51'59"E

105+00'NB'

110+00'NB'

115+00'NB'

STH 42/57 NB

DIAMOND GRIND NB TRAVEL LANES

INTERSECTION MILL 2" PAVE 2"

PT: 1023+56.77

CTH MM

R/L STH 42/CTH MM

PC: 1022+04.58

PT: 1021+61.85

STA 112+99.42 R/L 42 NB RL =
STA 1021+49.92 R/L STH 42 - CTH MM
Y=140,738.300
X=467,333.079

STH 42

PC: 1019+54.18

PT: 1018+86.82

MATCH LINE 115+25.00

MATCH LINE 130+50.00

ROADWAY MILL 2" PAVE 2"

END DIAMOND GRINDING SB TRAVEL LANES
BEGIN SB MILL AND OVERLAY

R/L STH 42 NB

PT: 125+50.09

120+00'NB'

125+00'NB'

130+00'NB'

N51°54'44"E

PC: 120+05.03

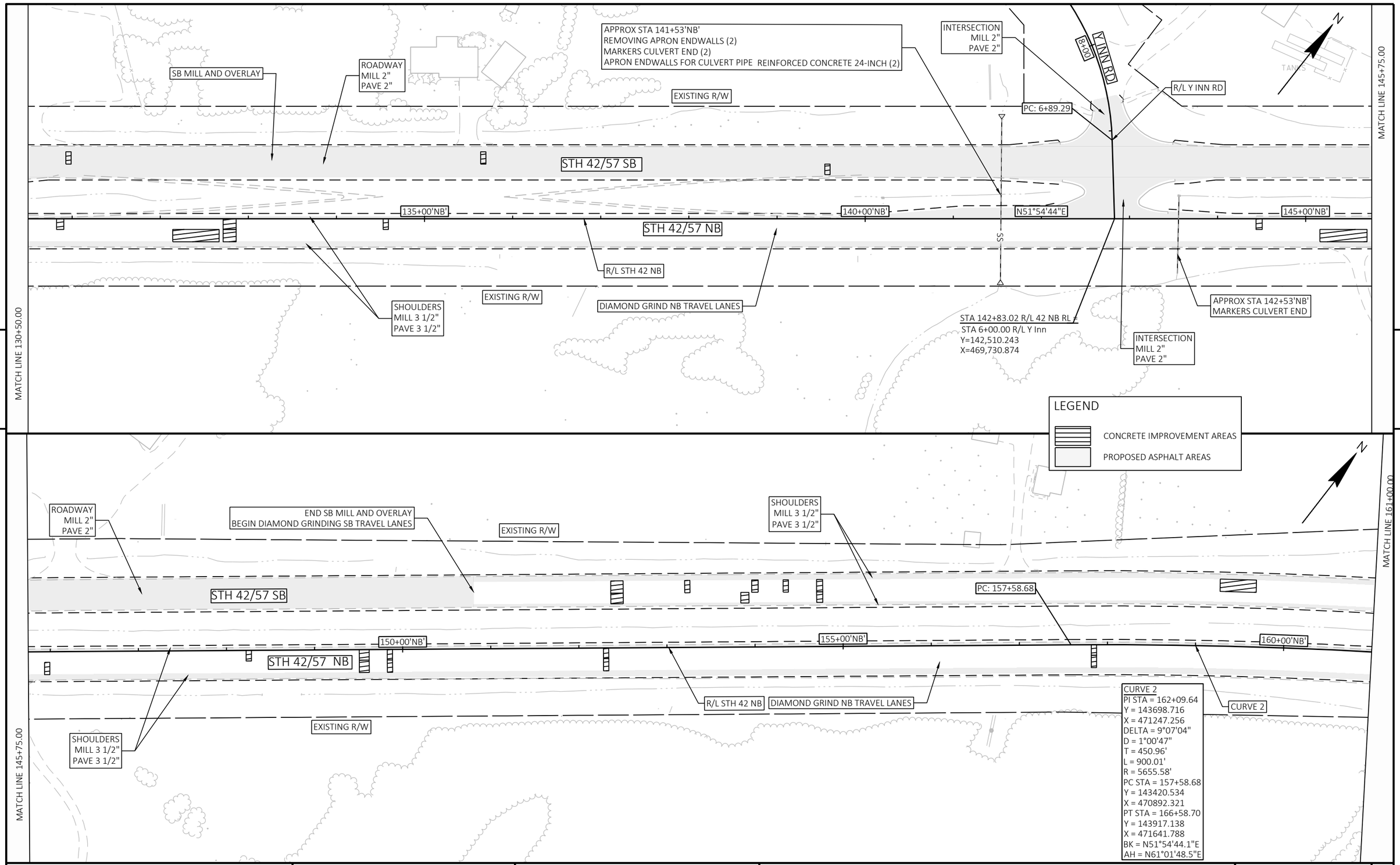
CURVE 1

RIPRAP

FILLER CAPS

CURVE 1
PI STA = 122+77.73
Y = 141273.036
X = 468152.310
DELTA = 4°57'15"
D = 0°54'32"
T = 272.70'
L = 545.06'
R = 6303.77'
PC STA = 120+05.03
Y = 141123.980
X = 467923.953
PT STA = 125+50.09
Y = 141441.255
X = 468366.942
BK = N56°51'58.8"E
AH = N51°54'44.1"E

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 124	E



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 125	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050202-pn

PLOT DATE : 10/29/2021 8:10 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

APPROX STA 171+05'NB'
CLEANING CULVERT PIPES (2)
REMOVING APRON ENDWALLS (2)
MARKERS CULVERT END (2)
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH (2)

APPROX STA 165+78'NB'
MARKERS CULVERT END
CLEANING CULVERT PIPES

DIAMOND GRIND SB TRAVEL LANES

EXISTING R/W

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

PT: 166+58.70

STH 42/57 SB

MATCH LINE 176+25.00

165+00'NB'

170+00'NB'

175+00'NB'

R/L STH 42 NB

N61°01'48"E

STH 42/57 NB

CURVE 2

CURVE 2
PI STA = 162+09.64
Y = 143698.716
X = 471247.256
DELTA = 9°07'04"
D = 1°00'47"
T = 450.96'
L = 900.01'
R = 5655.58'
PC STA = 157+58.68
Y = 143420.534
X = 470892.321
PT STA = 166+58.70
Y = 143917.138
X = 471641.788
BK = N51°54'44.1"E
AH = N61°01'48.5"E

DIAMOND GRIND NB TRAVEL LANES

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

INTERSECTION
MILL 2"
PAVE 2"

END NB TRAVEL LANES DIAMOND GRINDING
BEGIN NB MILL AND OVERLAY

ROADWAY
MILL 2"
PAVE 2"

EXISTING R/W

MATCH LINE 161+00.00

5

5

LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

INTERSECTION
MILL 2"
PAVE 2"

R/L IDLEWILD RD

14+00

IDLEWILD RD

APPROX STA 179+06'NB; LT
MARKERS CULVERT END
CLEANING CULVERT PIPES

SEPTIC

SEPV

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

DIAMOND GRIND SB TRAVEL LANES

EXISTING R/W

STH 42/57 SB

MATCH LINE 191+50.00

180+00'NB'

185+00'NB'

190+00'NB'

12+00

N61°01'48"E

STH 42/57 NB

IDLEWILD RD

STA 177+77.99 R/L 42 NB RL =
STA 12+00.00 R/L IDELWILD RD
Y=144,459.268
X=472,621.032

NB MILL AND OVERLAY

ROADWAY
MILL 2"
PAVE 2"

R/L STH 42 NB

EXISTING R/W

INTERSECTION
MILL 2"
PAVE 2"

MATCH LINE 176+25.00

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 126	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050203-pn

PLOT DATE : 10/29/2021 8:10 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

APPROX STA 192+76'NB'
MARKERS CULVERT END

DIAMOND GRIND SB TRAVEL LANES

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

APPROX STA 205+78'NB'
REMOVING APRON ENDWALLS (2)
MARKERS CULVERT END (2)
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH (2)

EXISTING R/W

STH 42/57 SB

195+00'NB'

200+00'NB'

205+00'NB'

N61°01'48"E

STH 42/57 NB

R/L STH 42 NB

EXISTING R/W

INTERSECTION
MILL 2"
PAVE 2"

SB MILL AND OVERLAY

ROADWAY
MILL 2"
PAVE 2"

APPROX STA 192+76'NB'
REMOVING APRON ENDWALLS
MARKERS CULVERT END (2)
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH

MATCH LINE 191+50.00

MATCH LINE 206+75.00

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LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

APPROX STA 214+15'NB'
CLEANING CULVERT PIPES (SB LANES ONLY)
REMOVING APRON ENDWALLS (2)
MARKERS CULVERT END (2)
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH (2)

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

EXISTING R/W

DIAMOND GRIND SB TRAVEL LANES

STA 207+02.10 R/L 42 NB RL =
STA 16+96.58 R/L CTH O
Y=145,875.559
X=475,179.260

STH 42/57 SB

210+00'NB'

215+00'NB'

220+00'NB'

N61°01'48"E

STH 42/57 NB

R/L STH 42 NB

INTERSECTION
MILL 2"
PAVE 2"

PT: 16+36.38

16+00

CTH O

SB MILL AND OVERLAY

ROADWAY
MILL 2"
PAVE 2"

EXISTING R/W

END SB MILL AND OVERLAY
BEGIN NB TRAVEL LANES DIAMOND GRINDING

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

SEPV

SEPTIC

MATCH LINE 206+75.00

MATCH LINE 222+00.00

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 127	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050204-pn

PLOT DATE : 10/29/2021 8:11 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

APPROX STA 227+84'NB'
REMOVING APRON ENDWALLS (2)
MARKERS CULVERT END (2)
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH (2)

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

EXISTING R/W

APPROX STA 234+80'NB'
REMOVING APRON ENDWALLS
MARKERS CULVERT END (2)
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH

DIAMOND GRIND SB TRAVEL LANES

MATCH LINE 237+25.00

STH 42/57 SB

N61°01'48"E

225+00'NB'

CURVE 3

235+00'NB'

STH 42/57 NB

PC: 224+56.30

230+00'NB'

PT: 236+86.25

R/L STH 42 NB

DIAMOND GRIND NB TRAVEL LANES

CURVE 3
PI STA = 230+80.90
Y = 147027.730
X = 477260.413
DELTA = 24°35'56"
D = 2°00'00"
T = 624.60'
L = 1229.95'
R = 2864.79'
PC STA = 224+56.30
Y = 146725.206
X = 476713.967
PT STA = 236+86.25
Y = 147530.265
X = 477631.335
BK = N61°01'48.5"E
AH = N36°25'52.1"E

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

EXISTING R/W

INTERSECTION
MILL 2"
PAVE 2"

LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

END DIAMOND GRINDING SB TRAVEL LANES
BEGIN SB MILL AND OVERLAY

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

ROADWAY
MILL 2"
PAVE 2"

APPROX STA 243+83'NB'
REMOVING APRON ENDWALLS
MARKERS CULVERT END
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 48-INCH

INTERSECTION
MILL 2"
PAVE 2"

CANOPY

SB MILL AND OVERLAY

MATCH LINE 252+50.00

STA 245+85.14 R/L 42 NB RL =
STA 19+61.22 R/L EMERALD DR
Y=148,253.479
X=478,165.141

STH 42/57 SB

R/L STH 42 NB

240+00'NB'

N36°25'52"E

245+00'NB'

250+00'NB'

STH 42/57 NB

PT: 19+26.90

R/L EMERALD DR

DIAMOND GRIND NB TRVEL LANES

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

MATCH LINE 237+25.00

APPROX STA 240+87'NB'
CLEANING CULVERT PIPES
REMOVING APRON ENDWALLS (2)
MARKERS CULVERT END (2)
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH (2)

APPROX STA 243+33'NB'
MARKERS CULVERT END

INTERSECTION
MILL 2"
PAVE 2"

EMERALD DR

18+00

APPROX STA 246+86'NB' LT&RT
MARKERS CULVERT END (2)

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 128	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050205-pn

PLOT DATE : 10/29/2021 8:12 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

MATCH LINE 252+50.00

MATCH LINE 267+75.00

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ROADWAY
MILL 2"
PAVE 2"

INTERSECTION
MILL 2"
PAVE 2"

APPROX STA 264+52'NB'
MARKERS CULVERT END
CULVERT PIPE SALVAGED 72-INCH
APRON ENDWALLS FOR CULVERT PIPE SALVAGED 72-INCH

SB MILL AND OVERLAY

EXISTING R/W

STH 42/57 SB

R/L STH 42 NB

255+00'NB'

260+00'NB'

265+00'NB'

N36°25'52"E

STH 42/57 NB

DIAMOND GRIND NB TRAVEL LANES

EXISTING R/W

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

APPROX STA 260+87'NB'
REMOVING APRON ENDWALLS
MARKERS CULVERT END (2)
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH

LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

ROADWAY
MILL 2"
PAVE 2"

INTERSECTION
MILL 2"
PAVE 2"

INTERSECTION
MILL 2"
PAVE 2"

SB MILL AND OVERLAY

EXISTING R/W

STH 42/57 SB

R/L STH 42 NB

270+00'NB'

275+00'NB'

280+00'NB'

N36°25'52"E

STH 42/57 NB

EXISTING R/W

APPROX STA 269+86'NB'
REMOVING APRON ENDWALLS
CLEANING CULVERT PIPES
MARKERS CULVERT END (2)
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH (2)

DIAMOND GRIND NB TRAVEL LANES

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

SLOPE INTERCEPT

MATCH LINE 283+00.00

MATCH LINE 267+75.00

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 129	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050206-pn

PLOT DATE : 10/29/2021 8:13 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

MATCH LINE 283+00.00

MATCH LINE 298+25.00

INTERSECTION MILL 2" PAVE 2"

ROADWAY MILL 2" PAVE 2"

SB MILL AND OVERLAY

INTERSECTION MILL 2" PAVE 2"

PARK DR 24+00

R/L CTH PD

EXISTING R/W

STH 42/57 SB

R/L STH 42 NB

PC: 22+12.38

285+00'NB'

290+00'NB'

N36°25'52"E

22+00

295+00'NB'

STH 42/57 NB

SS

TLE

EXIST R/W

STA 291+42.98 R/L 42 NB RL =
STA 22+00.00 R/L CTH PD
Y=151,920.593
X=480,871.847

CTH PD

SLOPE INTERCEPT

REPLACE GUARDRAIL SEE PLAN DETAIL

APPROX STA 287+85'NB' MARKERS CULVERT END (2) CLEANING CULVERT PIPES

SHOULDERS MILL 3 1/2" PAVE 3 1/2"

DIAMOND GRIND NB TRAVEL LANES

EXISTING R/W

APPROX STA 296+33'NB' MARKERS CULVERT END (2) CLEANING CULVERT PIPES

INTERSECTION MILL 2" PAVE 2"

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LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

END SB MILL AND OVERLAY
BEGIN DIAMOND GRINDING SB TRAVEL LANES

SHOULDERS MILL 3 1/2" PAVE 3 1/2"

PC: 303+13.09

STA 303+15.59 R/L 42 NB RL =
STA 28+34.70 R/L ENTERPRISE RD
Y=152,864.041
X=481,568.210

SHOULDERS MILL 3 1/2" PAVE 3 1/2"

EXISTING R/W

DIAMOND GRIND SB TRAVEL LANES

R/L STAGG RD

STAGG RD

ROADWAY MILL 2" PAVE 2"

STH 42/57 SB

R/L STH 42 NB

INTERSECTION MILL 2" PAVE 2"

30+00

PC: 29+98.92

CURVE 4

305+00'NB'

310+00'NB'

STH 42/57 NB

300+00'NB'

N36°25'52"E

28+00

PT: 28+02.21

MEDIAN MILL 2" PAVE 2"

EXISTING R/W

CURVE 4
PI STA = 312+28.22
Y = 153598.316
X = 482110.178
DELTA = 54°52'00"
D = 3°15'00"
T = 915.13'
L = 1688.21'
R = 1762.95'
PC STA = 303+13.09
Y = 152862.030
X = 481566.724
PT STA = 320+01.30
Y = 153577.589
X = 483025.072
BK = N36°25'52.1"E
AH = S88°42'07.9"E

DIAMOND GRIND NB TRAVEL LANES

STA 311+85.60 R/L 42 NB RL =
STA 29+00.00 R/L STAGG RD
Y=153,410.093
X=482,234.170

INTERSECTION MILL 2" PAVE 2"

ENTERPRISE RD

SHOULDERS MILL 3 1/2" PAVE 3 1/2"

SHOULDERS MILL 3 1/2" PAVE 3 1/2"

MATCH LINE 313+50.00

MATCH LINE 298+25.00

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 130	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050207-pn

PLOT DATE : 10/29/2021 8:14 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

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DIAMOND GRIND SB TRAVEL LANES

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

MEDIAN
MILL 2"
PAVE 2"

CURVE 4

EXISTING R/W

STH 42/57 SB

320+00'NB'

STH 42/57 NB

S88°42'08"E

325+00'NB'

315+00'NB'

PT: 320+01.30

DIAMOND GRIND NB TRAVEL LANES

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

EXISTING R/W

R/L STH 42 NB

R/L GRANT RD

INTERSECTION
MILL 2"
PAVE 2"

GRANT RD

34+00

MATCH LINE 328+75.00

MATCH LINE 313+50.00

CURVE 4
PI STA = 312+28.22
Y = 153598.316
X = 482110.178
DELTA = 54°52'00"
D = 3°15'00"
T = 915.13'
L = 1688.21'
R = 1762.95'
PC STA = 303+13.09
Y = 152862.030
X = 481566.724
PT STA = 320+01.30
Y = 153577.589
X = 483025.072
BK = N36°25'52.1"E
AH = S88°42'07.9"E

STA 328+45.96 R/L 42 NB RL =
STA 32+00.00 R/L GRANT RD
Y=153,558.458
X=483,869.510

LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

ROADWAY
MILL 2"
PAVE 2"

DIAMOND GRIND SB TRAVEL LANES

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

EXISTING R/W

330+00'NB'

S88°42'08"E

335+00'NB'

STH 42/57 SB

R/L STH 42 NB

340+00'NB'

STH 42/57 NB

APPROX STA 335+25'NB'
MARKERS CULVERT END (2)

EXISTING R/W

SHOULDERS
MILL 3 1/2"
PAVE 3 1/2"

DIAMOND GRIND NB TRAVEL LANES

MATCH LINE 328+75.00

MATCH LINE 344+00.00

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 131	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050208-pn

PLOT DATE : 10/29/2021 8:15 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE 344+00.00

MATCH LINE 359+25.00

5

5

DIAMOND GRIND SB TRAVEL LANES

MEDIAN
MILL 2"
PAVE 2"

INTERSECTION
MILL 2"
PAVE 2"

37+00

S. COLUMBIA AVE

STA 348+62.89 R/L 42 NB RL =
STA 37+00.00 R/L S. DOUGLAS AVE
Y=153,507.580
X=485,885.757

R/L S. COLUMBIA AVE

EXISTING R/W

STH 42/57 SB

PI: 345+93.15

345+00'NB'

S88°42'08"E

STH 42/57 NB

S87°35'53"E

350+00'NB'

355+00'NB'

INTERSECTION
MILL 2"
PAVE 2"

DIAMOND GRIND NB TRAVEL LANES

36+00

S. DOUGLAS AVE

R/L STH 42 NB

EXISTING R/W

STA 352+28.49 R/L 42 NB RL =
STA 36+00.00 R/L S. COLUMBIA AVE
Y=153,492.258
X=486,251.037

FILLER CAP

CANOPY

FILLER CAPS

N

LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

R/L S. ASHLAND AVE

PROPOSED R/W

TEMPORARY LIMITED EASEMENT

S. ASHLAND AVE INTERSECTION WIDENING
SEE PLAN DETAILS

SLOPE INTERCEPT, TYP.

S. ASHLAND AVE

40+00'A

DIAMOND GRIND SB TRAVEL LANES

EXISTING R/W

R/L STH 42 SB

360+00'SB'

STH 42/57 SB

360+00'NB'

PC: 360+38.97

S87°35'53"E

CURVE 5

365+00'NB'

END DIAMOND GRINDING NB & SB TRAVEL LANES
BEGIN CONCRETE OVERLAY

PT: 367+58.65

370+00'NB'

N88°48'13"E

STH 42/57 NB

ROADWAY
OVERLAY 2 1/2"

STA 359+62.67 R/L 42 NB RL =
STA 39+00.00 R/L S. ASHLAND AVE
Y=153,461.489
X=486,984.568

R/L STH 42 NB

DIAMOND GRIND NB TRAVEL LANES

MEDIAN
MILL 2"
PAVE 2"

ROADWAY
OVERLAY 2 1/2"

EXISTING R/W

INTERSECTION
MILL 2"
PAVE 2"

CURVE 5
PI STA = 363+98.93
Y = 153443.205
X = 487420.445
DELTA = 3°35'54"
D = 0°30'00"
T = 359.96'
L = 719.68'
R = 11459.16'
PC STA = 360+38.97
Y = 153458.291
X = 487060.804
PT STA = 367+58.65
Y = 153450.721
X = 487780.323
BK = S87°35'52.9"E
AH = N88°48'12.9"E

MATCH LINE 359+25.00

MATCH LINE 374+50.00

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 132	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050209-pn

PLOT DATE : 10/29/2021 8:16 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

CAUTION: UNDERGROUND TRAFFIC SIGNAL CONDUIT EXISTS IN AREA FOR CTH S TRAFFIC SIGNALS. ≈373+00'NB'-377+00'NB'

INTERSECTION OVERLAY 2 1/2"

ROADWAY OVERLAY 2 1/2"

EXISTING R/W

RAMP OVERLAY 2"

R/L GREEN BAY RD SB RAMP

24+00'GS'

22+00'GS'

STRUCTURE B-15-005 (TO REMAIN)

REPLACE GUARDRAIL SEE PLAN DETAILS

GREEN BAY RD

24+00'GN'

N

MATCH LINE 389+75.00

46+00

CTH C

R/L CTH C/S

STH 42/57 SB

375+00'NB'

380+00'SB'

R/L STH 42 SB

385+00'SB'

44+00

STH 42/57 NB

N88°48'13"E

12+00'GN'

380+00'NB'

R/L STH 42 NB

385+00'NB'

22+00'GN'

14+00'GN'

STA 374+97.87 R/L 42 NB RL =
STA 44+00.00 R/L CTH C S
Y=153,466.155
X=488,519.382

CTH S

SLOPE INTERCEPT, TYP.

REPLACE GUARDRAIL SEE PLAN DETAILS

STRUCTURE B-15-006 (TO REMAIN)

16+00'GN'

20+00'GN'

INTERSECTION OVERLAY 2 1/2"

ROADWAY OVERLAY 2 1/2"

REMOVE GUARDRAIL
REMOVING ANCILLARY STRUCTURES (S-151)

R/L GREEN BAY RD NB RAMP

RAMP OVERLAY 2"

APPROX STA 387+80'NB'
CLEANING CULVERT PIPES (2)

REPLACE GUARDRAIL SEE PLAN DETAILS

APPROX STA 380+10'NB'
CLEANING CULVERT PIPES (3)

EXISTING R/W

18+00'GN'

LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

5

MATCH LINE 374+50.00

5

N

MATCH LINE 405+00.00

INTERSECTION OVERLAY 2 1/2"

62+00

S. LANSING AVE

EXISTING R/W

ROADWAY OVERLAY 2 1/2"

STA 401+50.81 R/L 42 NB RL =
STA 60+00.00 R/L S. LANSING AVE
Y=153,505.616
X=491,171.939

61+00

NB'+99.94
-66.58'L

390+00'SB'

395+00'SB'

R/L STH 42 NB

STH 42/57 SB

PC: 390+83.51

390+00'NB'

395+00'NB'

400+00'NB'

60+00

405+0

N89°52'24"E

N88°48'13"E

STH 42/57 NB

CURVE 6

PT: 395+11.43

CURVE 6
PI STA = 392+97.48
Y = 153503.731
X = 490318.599
DELTA = 1°04'11"
D = 0°15'00"
T = 213.96'
L = 427.92'
R = 22918.31'
PC STA = 390+83.51
Y = 153499.263
X = 490104.681
PT STA = 395+11.43
Y = 153504.203
X = 490532.563
BK = N88°48'12.9"E
AH = N89°52'24.2"E

ROADWAY OVERLAY 2 1/2"

INTERSECTION OVERLAY 2 1/2"

59+00

S. LANSING AVE

W. WALNUT ST

EXISTING R/W

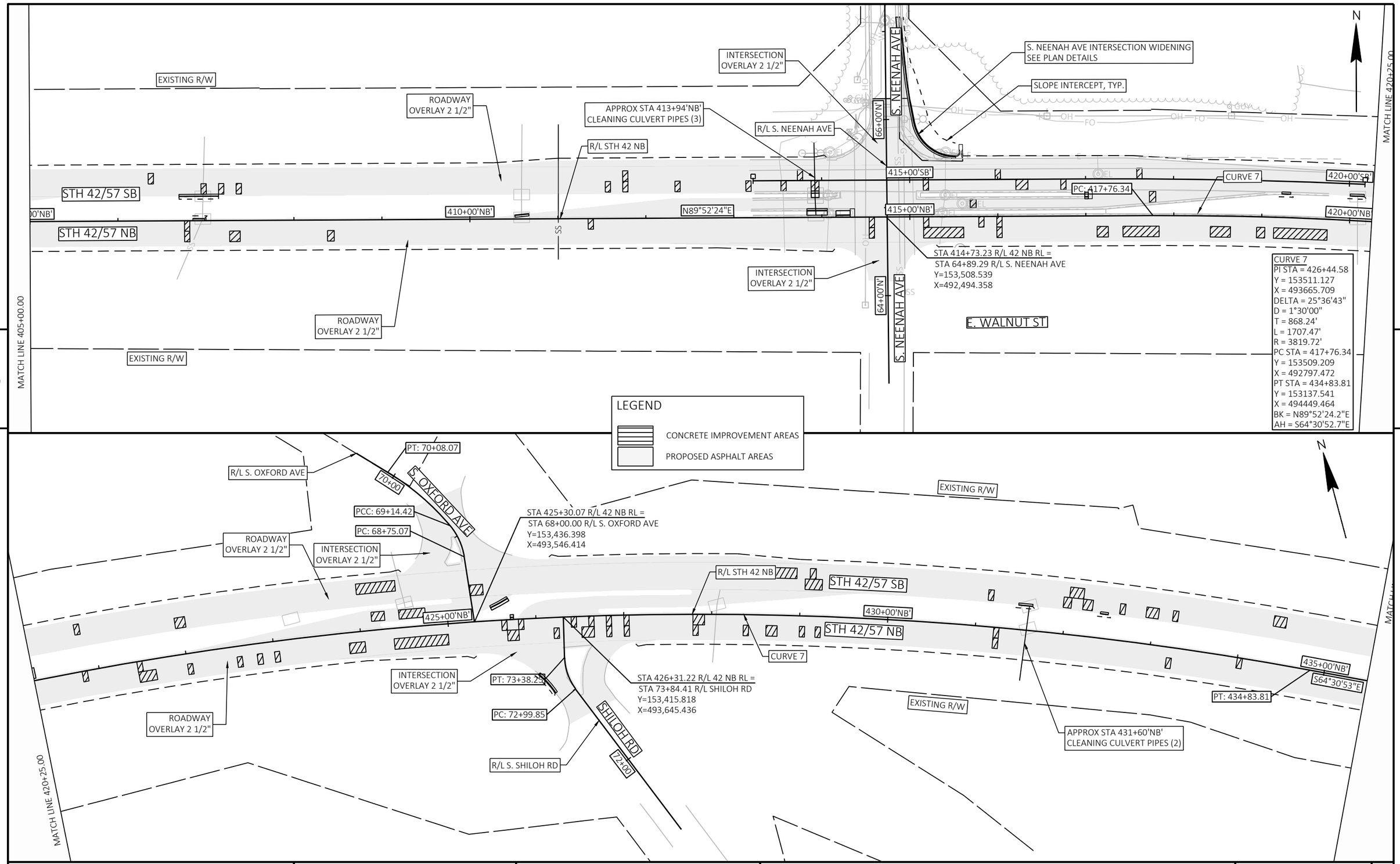
MATCH LINE 389+75.00

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 133	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050210-pn

PLOT DATE : 12/17/2021 10:28 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

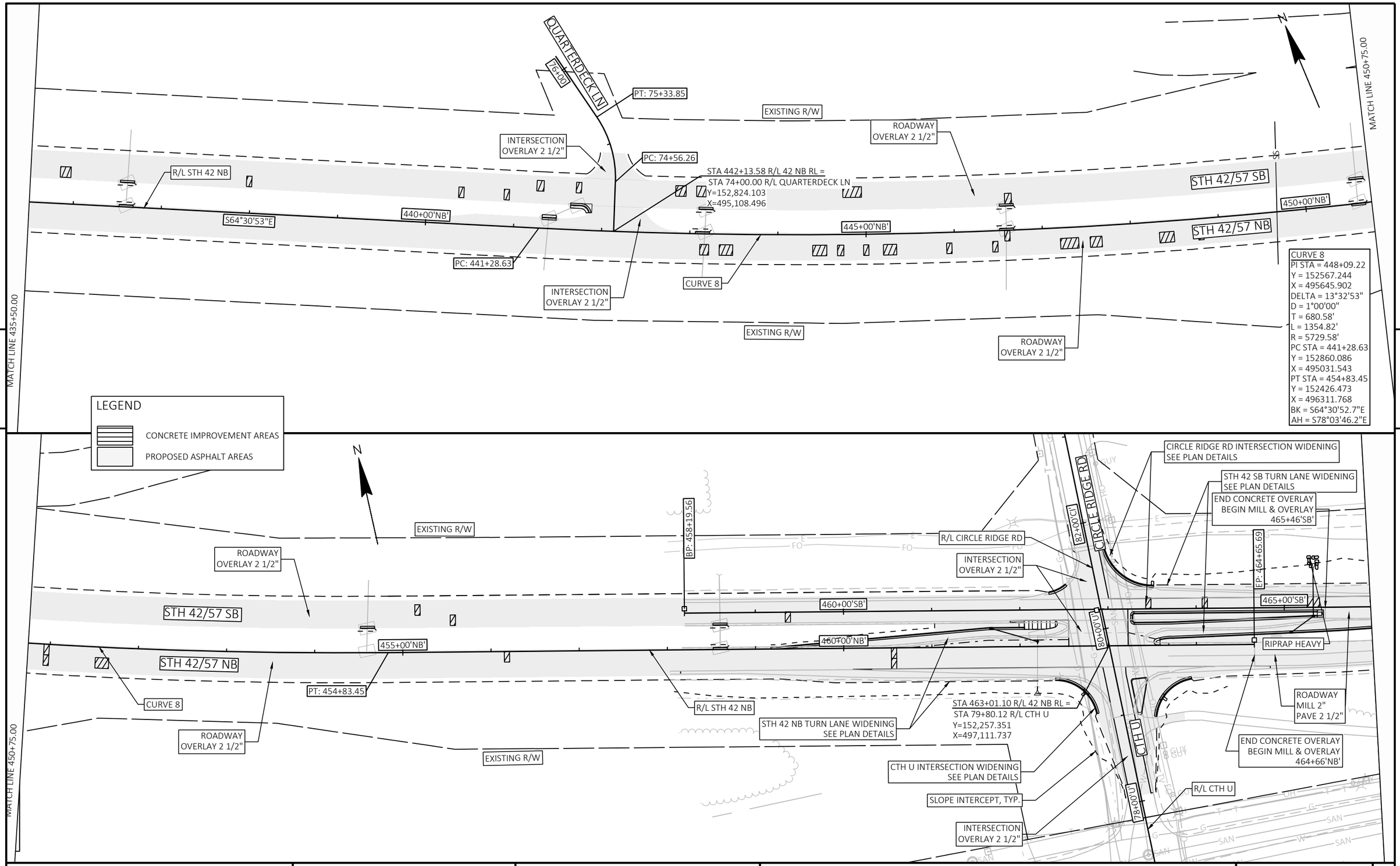


PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 134	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050211-pn

PLOT DATE : 12/17/2021 10:29 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 135	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050212-pn

PLOT DATE : 10/29/2021 8:19 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

CURVE 9
PI STA = 473+17.79
Y = 152087.303
X = 498115.089
DELTA = 51°02'00"
D = 3°47'46"
T = 720.44'
L = 1344.33'
R = 1509.30'
PC STA = 465+97.36
Y = 152236.505
X = 497410.272
PT STA = 479+41.69
Y = 152541.478
X = 498674.333
BK = S78°02'51.4"E
AH = N50°55'09.0"E

N

PC: 479+41.69

480+00'SB'

MATCH LINE 481+00

EXISTING R/W

STH 42 SB TURN LANE WIDENING
SEE PLAN DETAILS

PC: 465+97.36

EXISTING GUARDRAIL
(TO REMAIN)

STH 42/57

STH 42/57 SB

RIPRAP HEAVY

R/L STH 42 SB

475+00'SB'

470+00'SB'

STH 42/57 NB

EXISTING GUARDRAIL
(TO REMAIN)

ROADWAY
MILL 2"
PAVE 2 1/2"

CURVE 9

ROADWAY
MILL 2"
PAVE 2 1/2"

EXISTING R/W

STH 42 SB TURN LANE WIDENING
SEE PLAN DETAILS

LEGEND

CONCRETE IMPROVEMENT AREAS

PROPOSED ASPHALT AREAS

N

CAUTION: UNDERGROUND
TRAFFIC SIGNAL CONDUIT
EXISTS IN AREA FOR BRIDGE
SIGNALS AND LIGHTING

END PROJECT
STA 481+88.67

PT: 484+19.86

B-15-04
BAYVIEW BRIDGE
(TO REMAIN)

MATCH LINE 481+00

R/L STH 42

485+00'SB'

490+00'SB'

495+00'SB'

STH 42/57

N34°27'17"E

CURVE 10

ROADWAY
MILL 2"
PAVE 2 1/2"

CURVE 10
PI STA = 481+82.43
Y = 152693.246
X = 498861.212
DELTA = 16°27'52"
D = 3°26'36"
T = 240.74'
L = 478.17'
R = 1664.01'
PC STA = 479+41.69
Y = 152541.478
X = 498674.333
PT STA = 484+19.86
Y = 152891.756
X = 498997.413
BK = N50°55'09.0"E
AH = N34°27'16.9"E

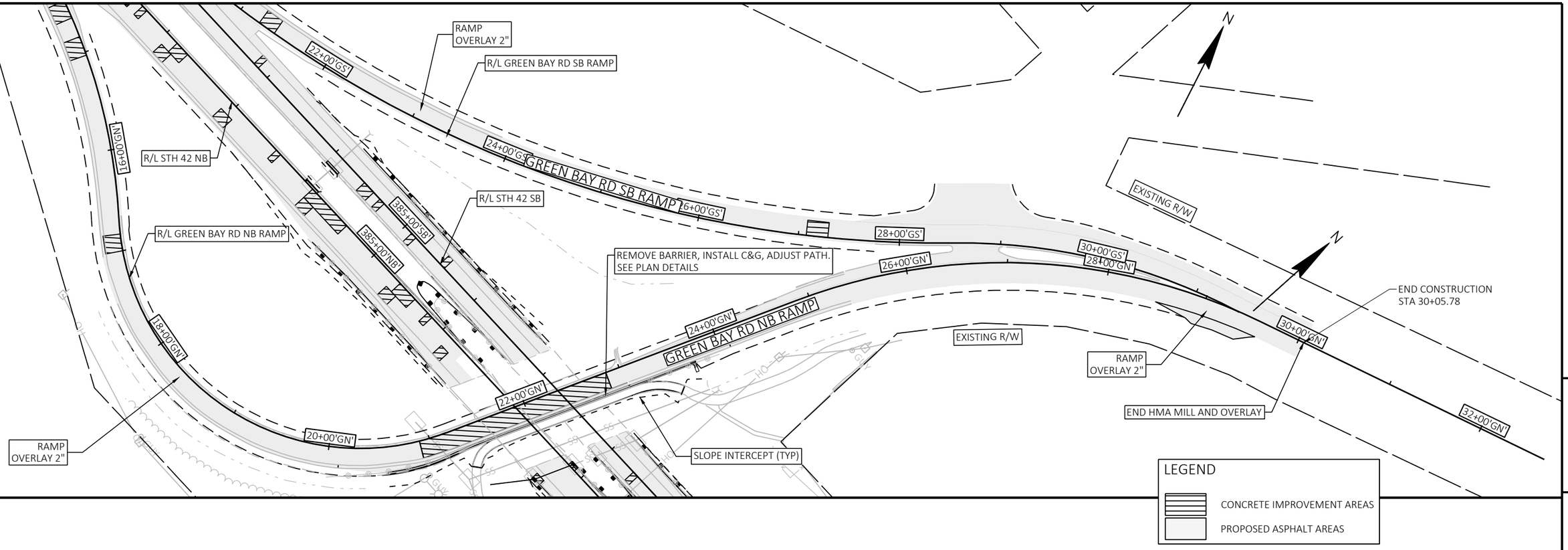
EXISTING R/W

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 136	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050213-pn

PLOT DATE : 10/29/2021 8:20 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



5

5

PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	PLAN SHEETS	SHEET 137	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 050214-pn

PLOT DATE : 10/29/2021 8:21 AM PLOT BY : SCHROEDER, DEREK W PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

Standard Detail Drawing List

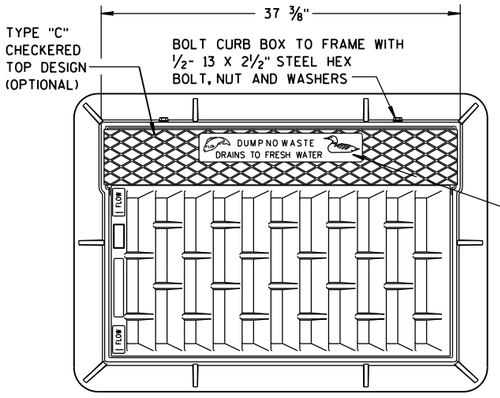
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08B10-02	MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
09B02-10	CONDUIT
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
11B01-05	CONCRETE CORRUGATED MEDIAN
11B02-02	CONCRETE MEDIAN NOSE
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-15A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
13C15-06A	CONCRETE BASE
13C15-06B	CONCRETE BASE
13C16-02A	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONRETE ROADWAY
13C16-02B	DETAIL FOR RIGHT TURN LANE/TEE INTERSECTION BYPASS LANE ON A CONRETE ROADWAY
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C19-03	HMA LONGITUDINAL JOINTS
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
14B26-04H	STEEL THRIE BEAM BULLNOSE TERMINAL
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)

6

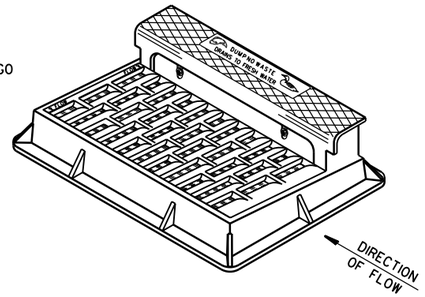
Standard Detail Drawing List

14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B47-03A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-03G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
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
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-08D	ON RAMP LANE CLOSURE
15C02-08E	OFF RAMP LANE CLOSURE
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C07-15E	PAVEMENT MARKING FOR BIKE LANES
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-05A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-05B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-05C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-06B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C19-06C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C21-10	SIGNING AND MARKING FOR TWO LANE TO FOUR LANE DIVIDED TRANSITIONS
15C31-04A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-04B	PAVEMENT MARKING MAJOR SPLIT FREEWAY TO FREEWAY
15C31-04C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C31-04D	PAVEMENT MARKING SERVICE INTERCHANGE LANE DROP AND LANE REDUCTION MARKING
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D15-05A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D22-04	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-07A	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D23-07B	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D30-06A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-06B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-06C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D40-02A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D40-02B	TRAFFIC CONTROL, FULL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER
15D43-02	TRAFFIC CONTROL, SHORT DURATION MOBILE OPERATIONS
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D46-01	TRAFFIC CONTROL, ONE - WAY SIGNING
15D50-01A	TRAFFIC CONTROL, ADDED LANE CLOSURE WITHOUT LANE SHIFT
15D50-01B	TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

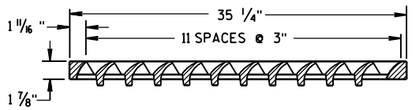
6

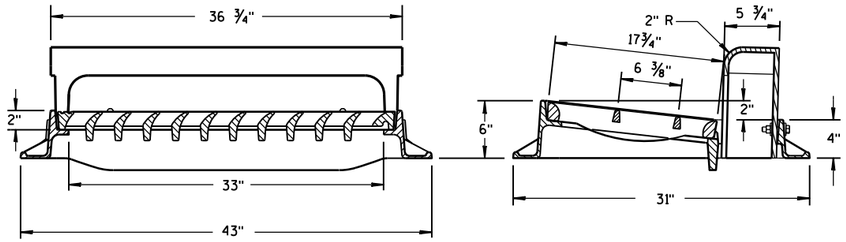


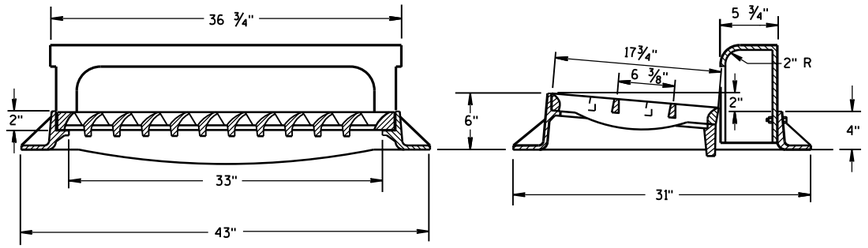
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

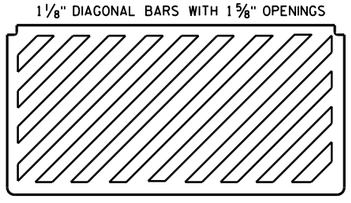






TYPE "H"

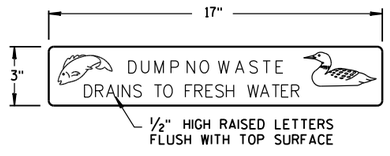
NOTE: EITHER CASTING IS ACCEPTABLE



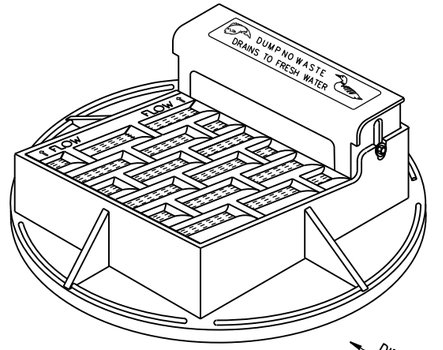
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)



LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

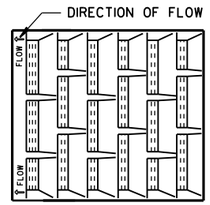
NOTE:
GRATE IS REVERSIBLE.

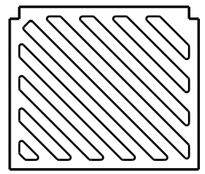
GENERAL NOTES

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

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

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

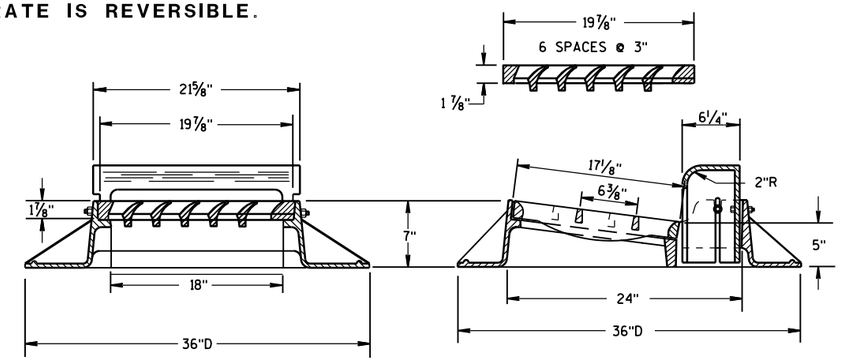




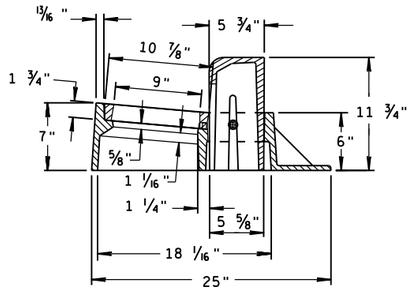
SPECIAL GRATE FOR TYPE "A" COVER

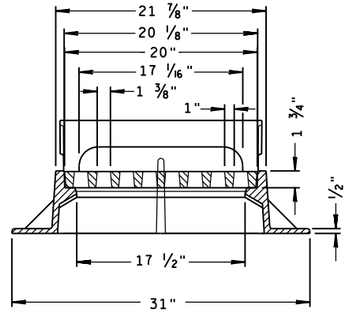
(MEASURES 19 3/4" X 17" X 1 7/8")

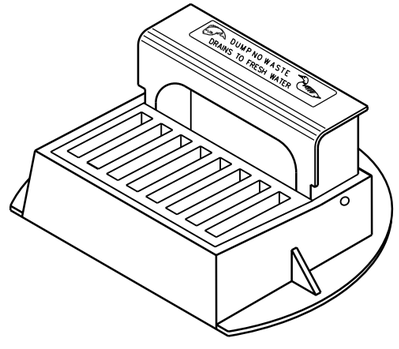
(NOTED AS TYPE A-S ON DRAINAGE TABLE)



TYPE "A"







TYPE "Z"

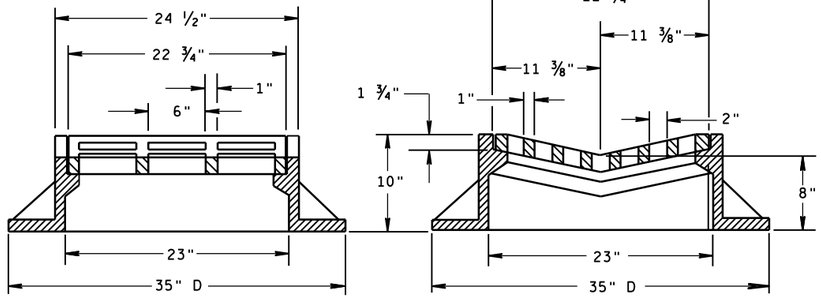
INLET COVERS
TYPE A, H, A-S, H-S & Z

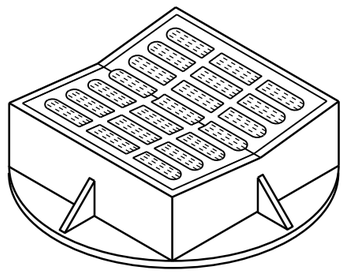
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

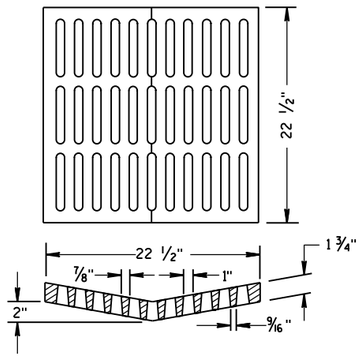
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S.D.D. 8 A 5-19a



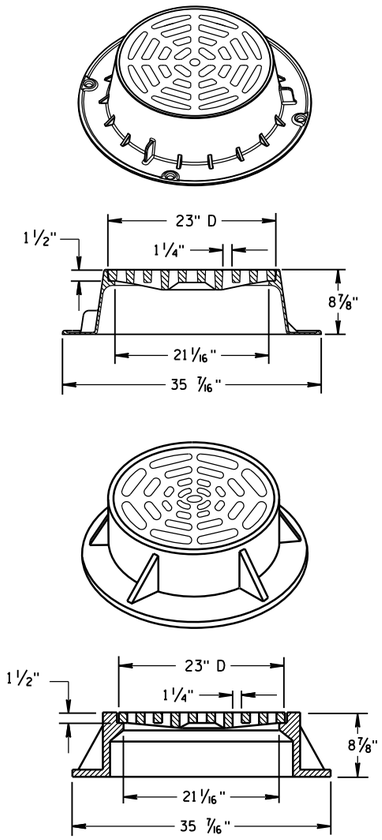


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

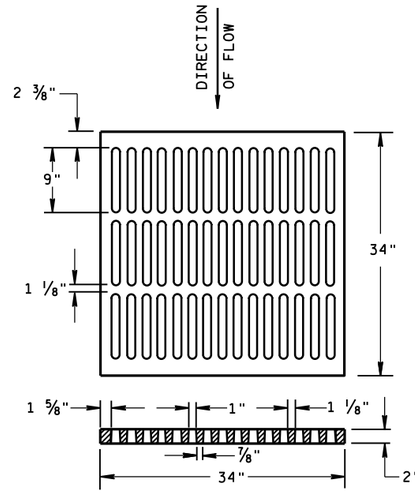
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

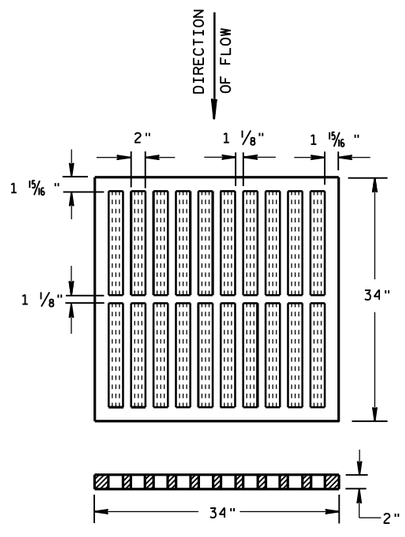
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



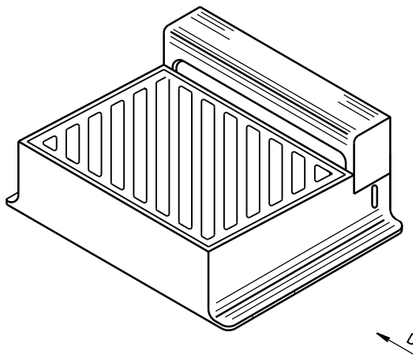
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

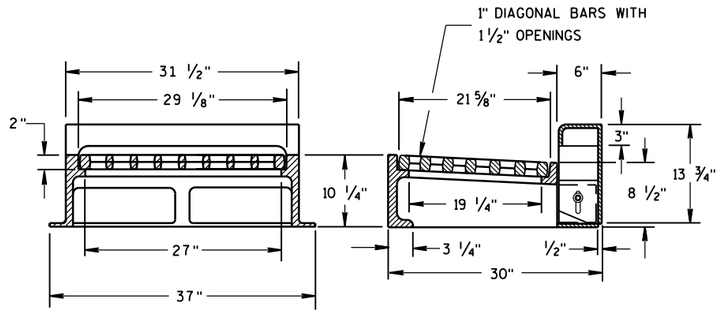


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

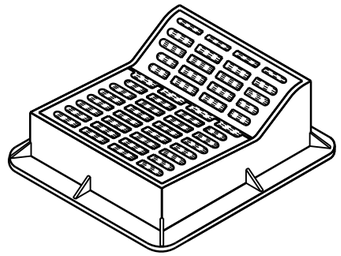
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

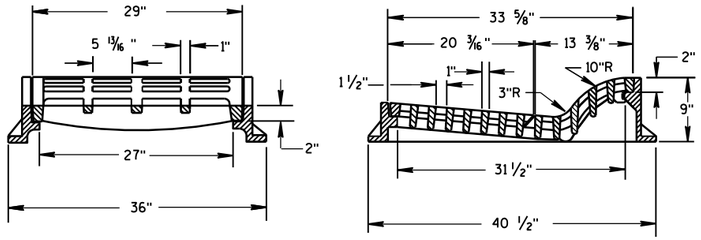
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

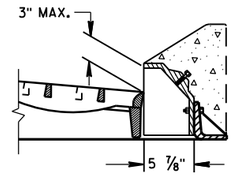
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

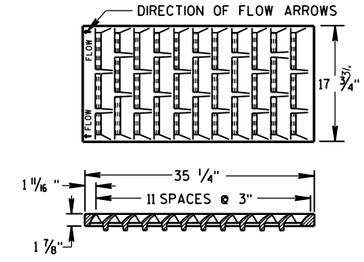
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

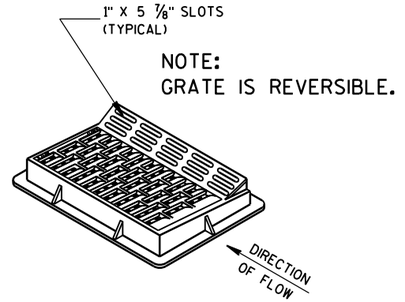
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

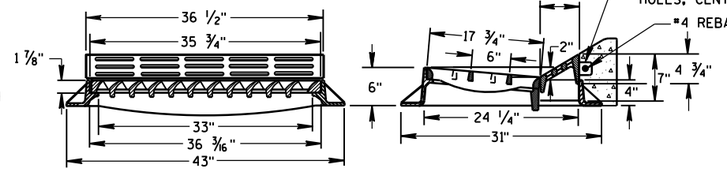
GENERAL NOTES

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.



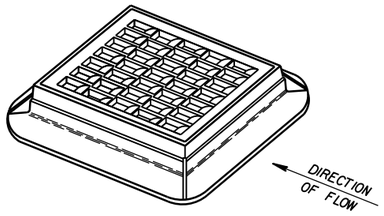


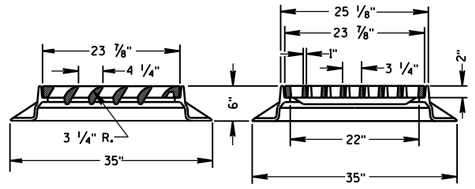


TYPE "HM"

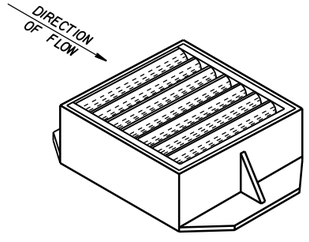
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

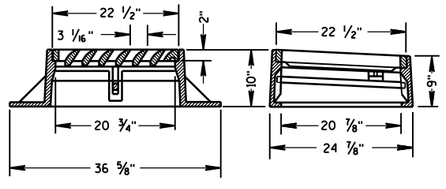
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



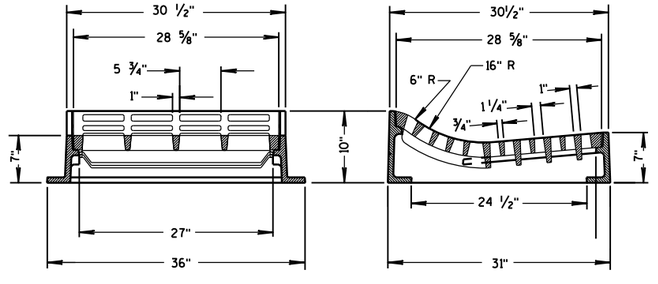


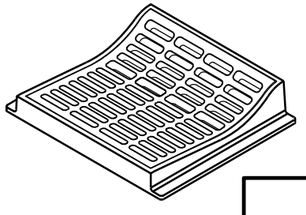
TYPE "S"





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

142

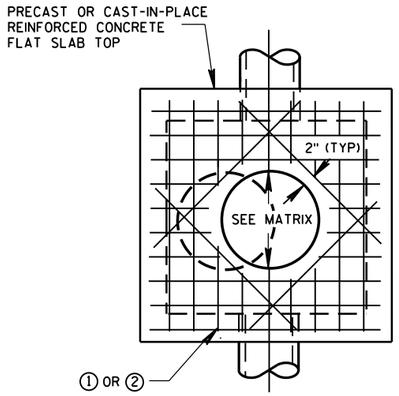
FHWA

6

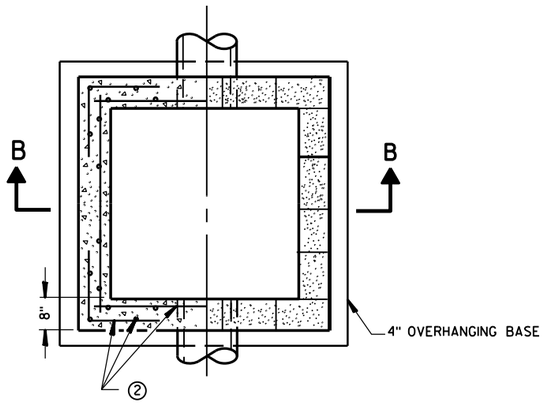
S.D.D. 8 A 5-19c

6

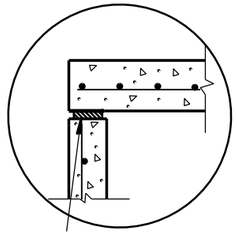
S.D.D. 8 A 5-19c



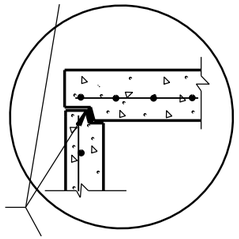
PLAN VIEW
CIRCULAR OPENING



SECTION A-A
PLAN VIEW

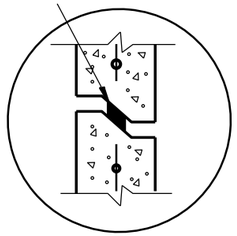


TOP WITH PLAIN END JOINT



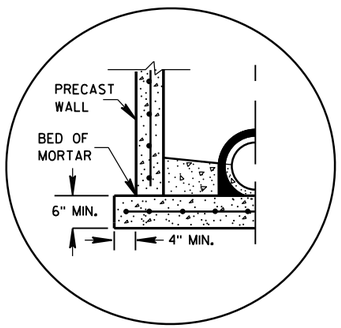
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

SECTION B-B

PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE

CAST-IN-PLACE REINFORCED CONCRETE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE

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 FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

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 INCH 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 WIDTH.

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 ASTM C 913.

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.

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

① FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

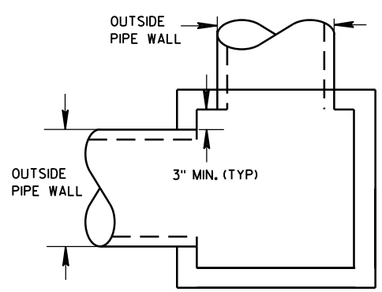
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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	
	WIDTH (W) (IN)	LENGTH (L) (IN)
3X3-FT	24	24
4X4-FT	30	30
5X5-FT	42	42
6X6-FT	54	54



DETAIL "C"

SQUARE MANHOLES W/ FLAT TOP

MANHOLES 3X3-FT, 4X4-FT, 5X5-FT AND 6X6-FT

MANHOLES 3X3-FT, 4X4-FT
5X5-FT AND 6X6-FT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016
DATE
FHWA

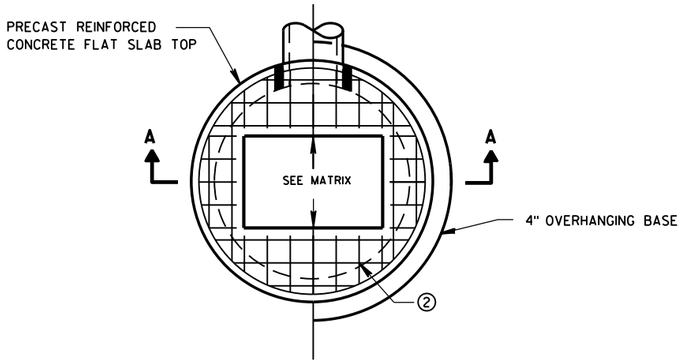
/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV

6

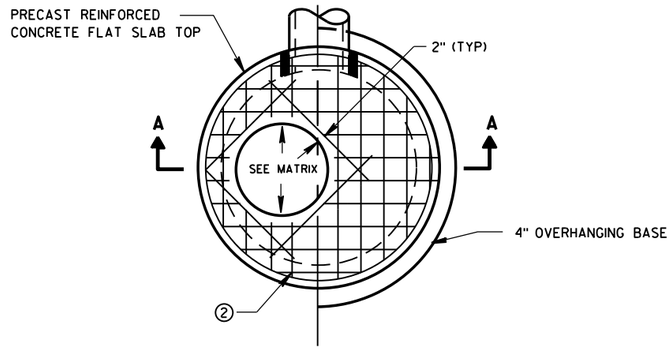
S.D.D. 8 B 10-2

6

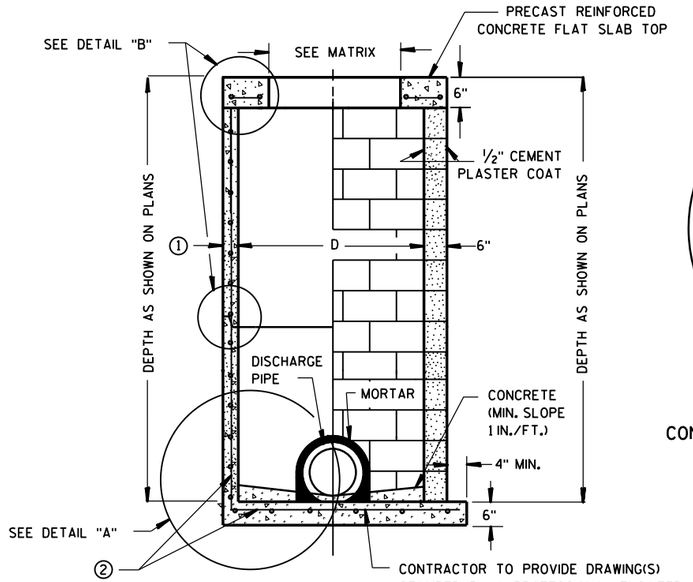
S.D.D. 8 B 10-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

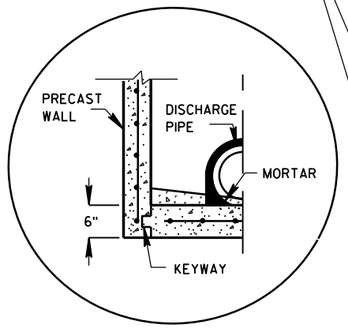


SECTION A-A

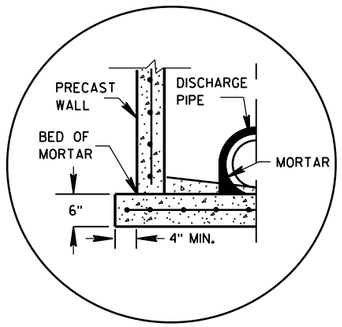
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

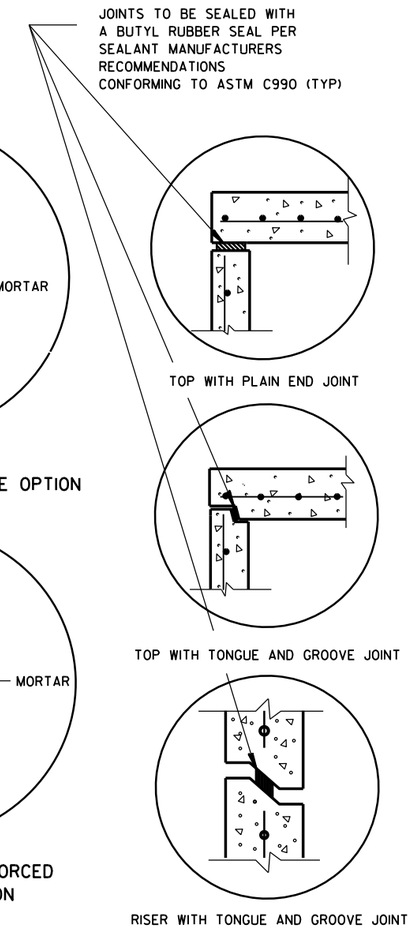


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



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.

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

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

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

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

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

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

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

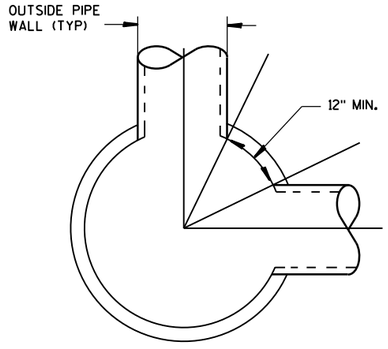
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

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

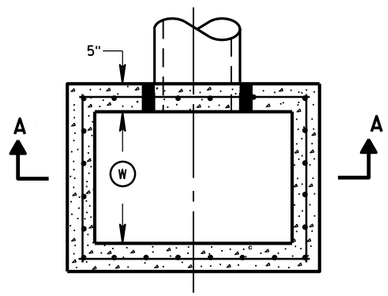
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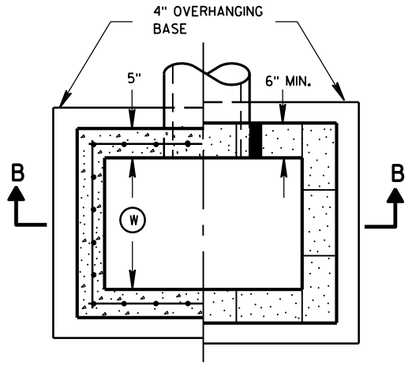
INLETS 3-FT AND 4-FT DIAMETER

6

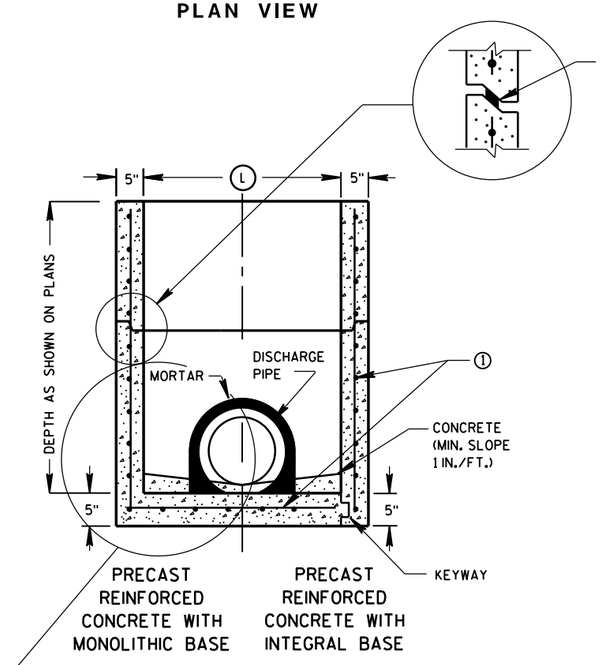
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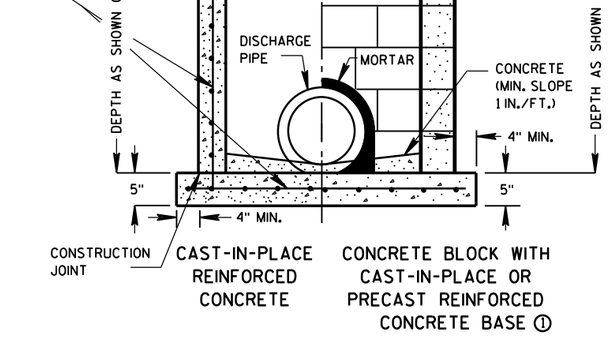
PLAN VIEW



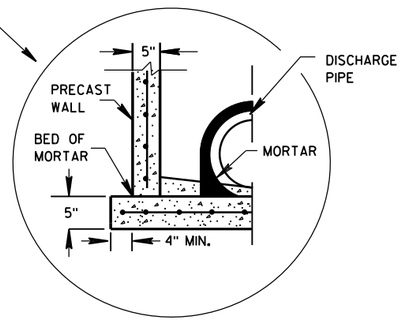
PLAN VIEW



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.

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

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

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

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

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

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

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

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

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 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.

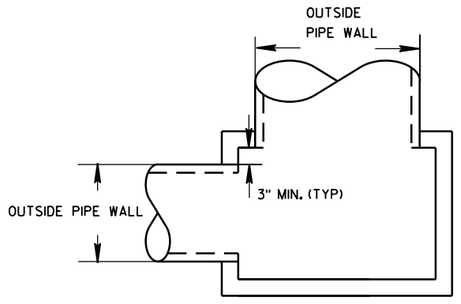
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

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



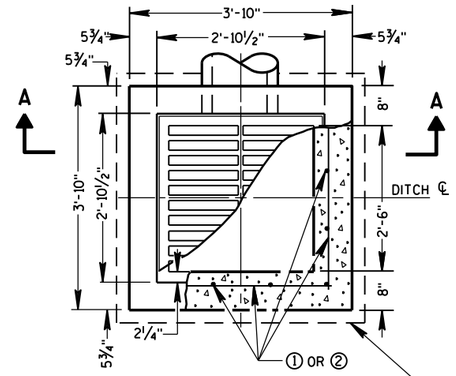
DETAIL "A"

INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

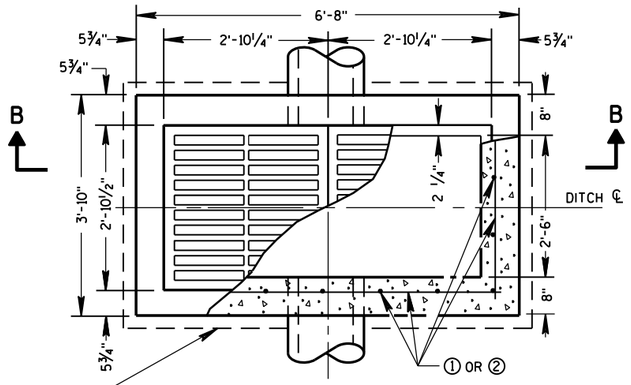
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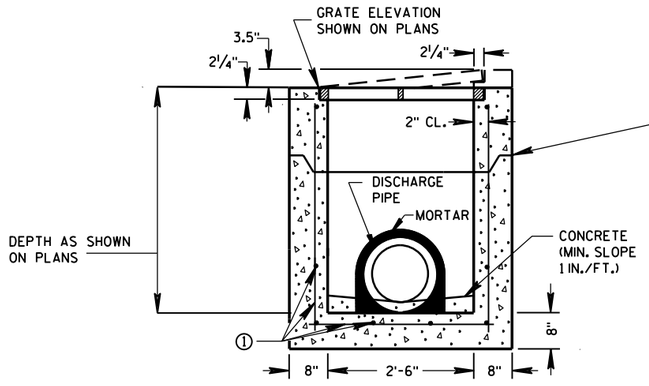


PLAN VIEW

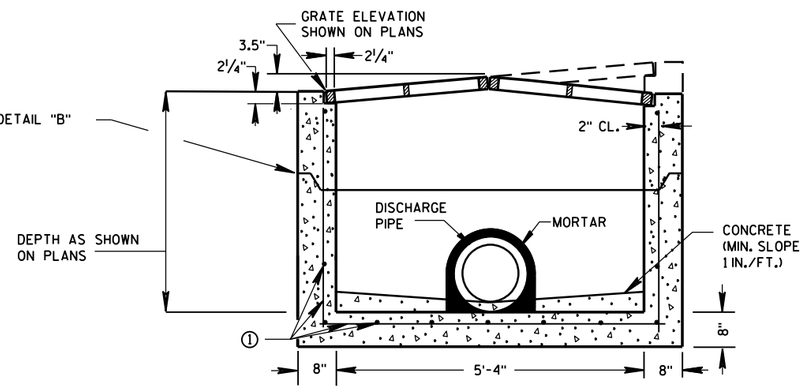


PLAN VIEW

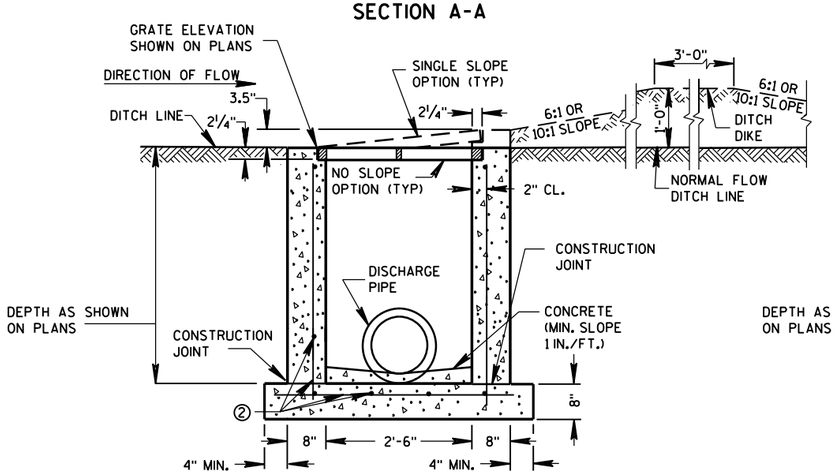
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



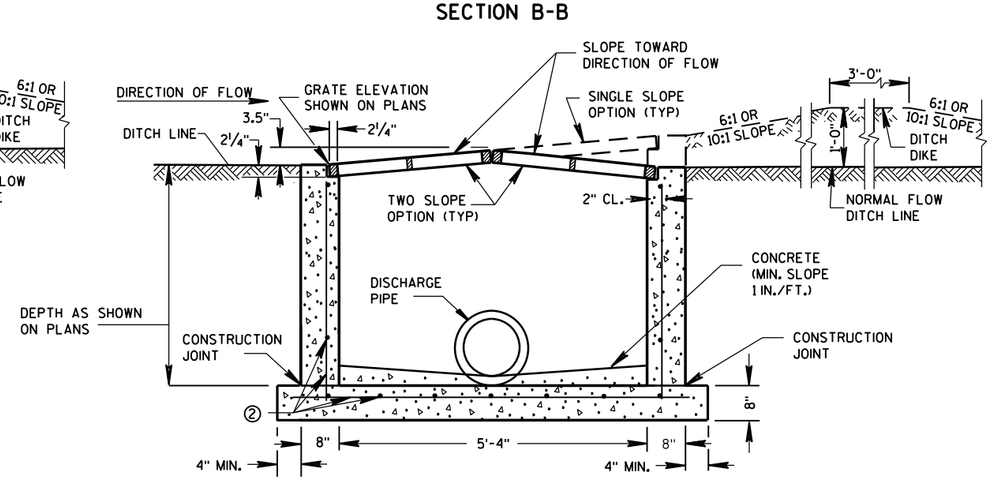
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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

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

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

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

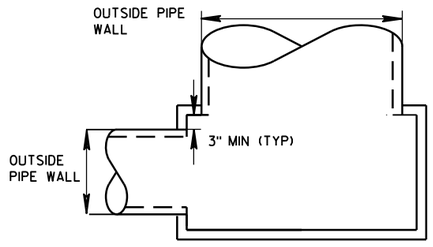
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS 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.

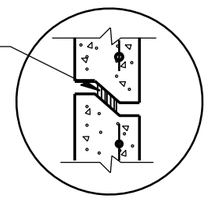
PIPE MATRIX

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



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



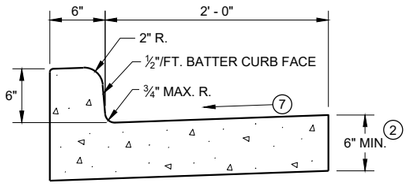
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

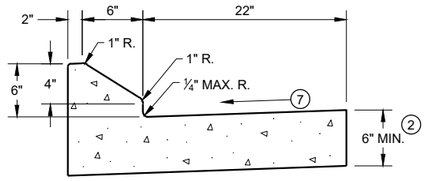
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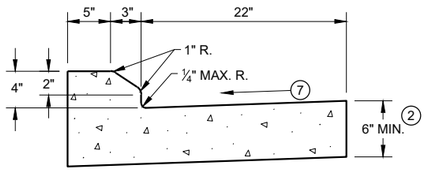
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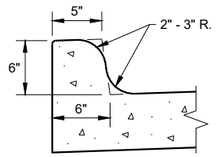
TYPES A (1) & D



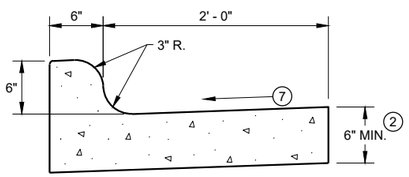
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

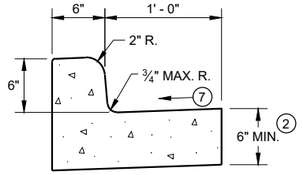


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



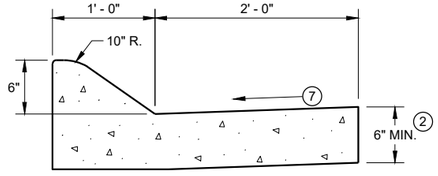
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"



TYPES A (1) & D

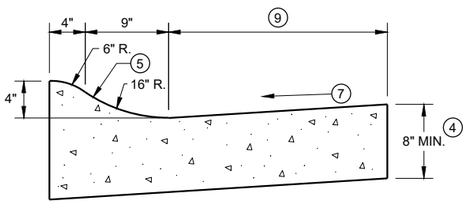
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A (1) & D

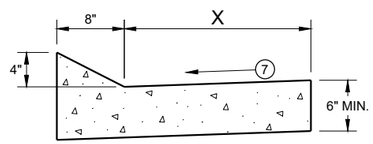
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

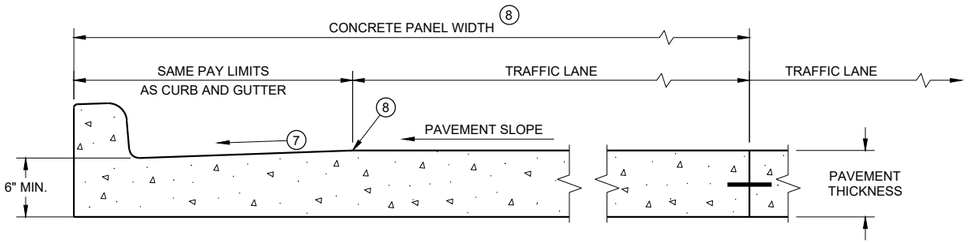


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

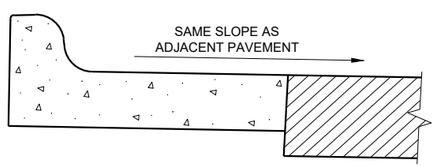
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

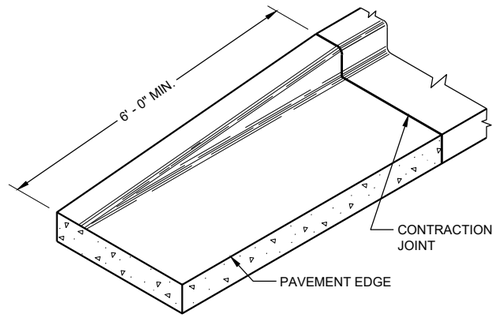
(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

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

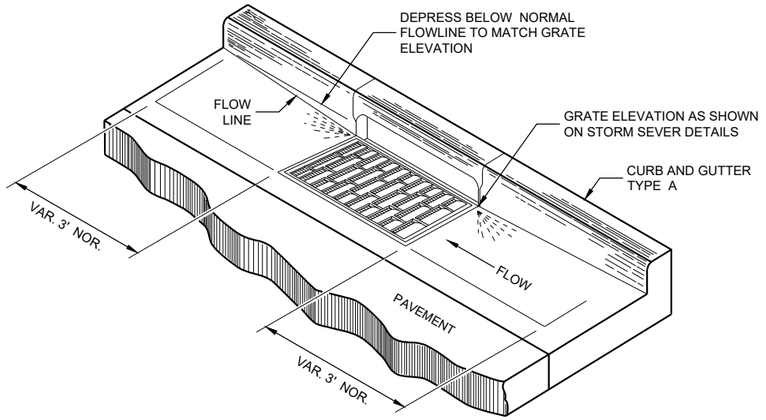
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

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

CONCRETE CURB AND GUTTER



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.

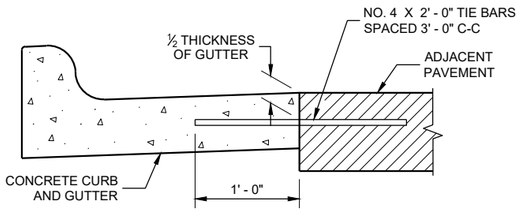
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

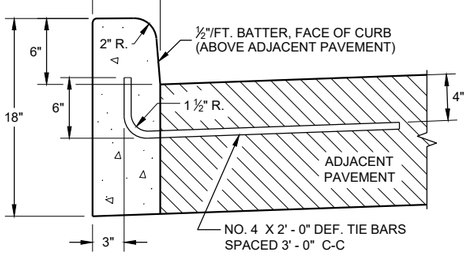
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

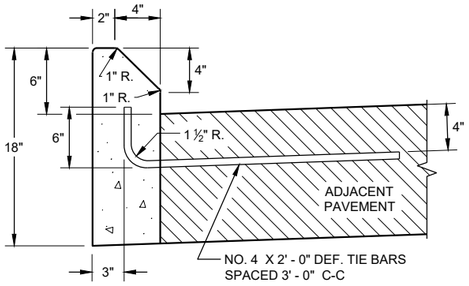
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

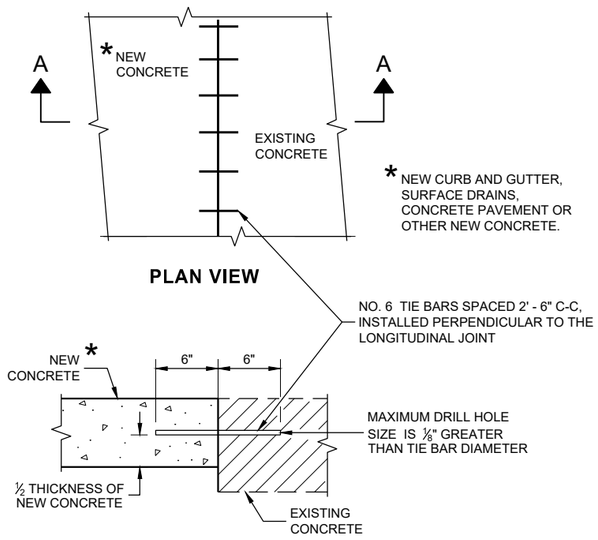


TYPES A (1) & D

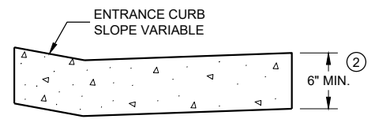


TYPES G (1) & J

CONCRETE CURB



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

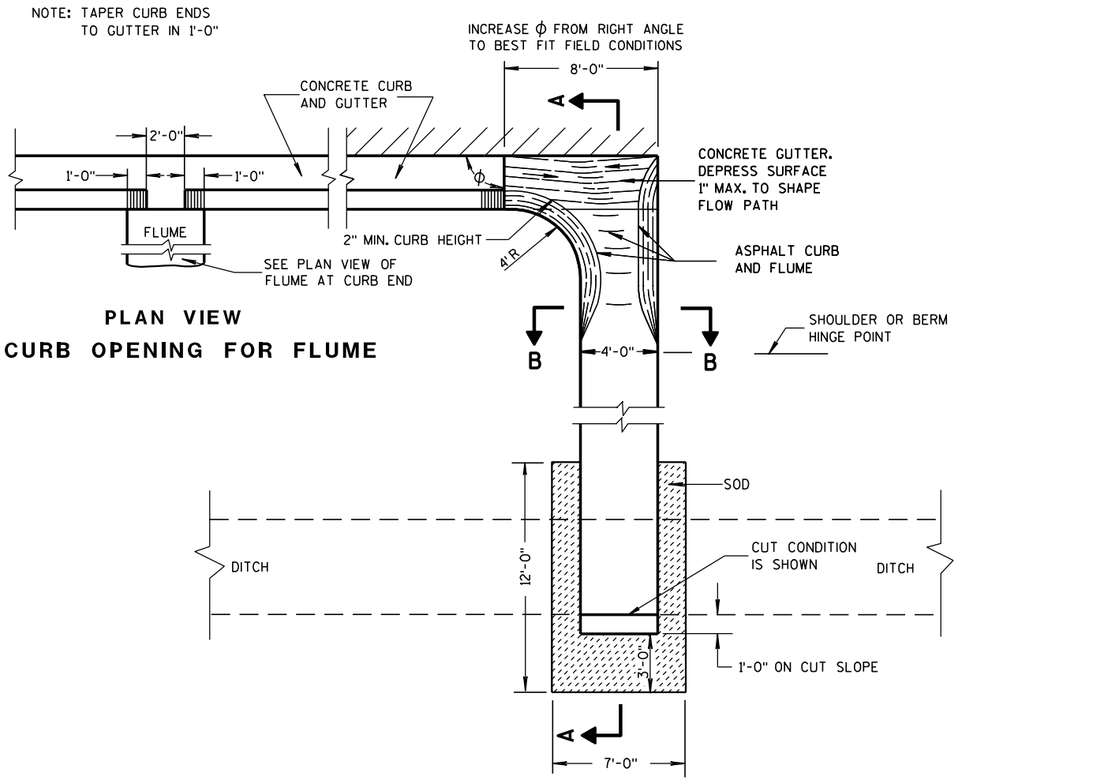
APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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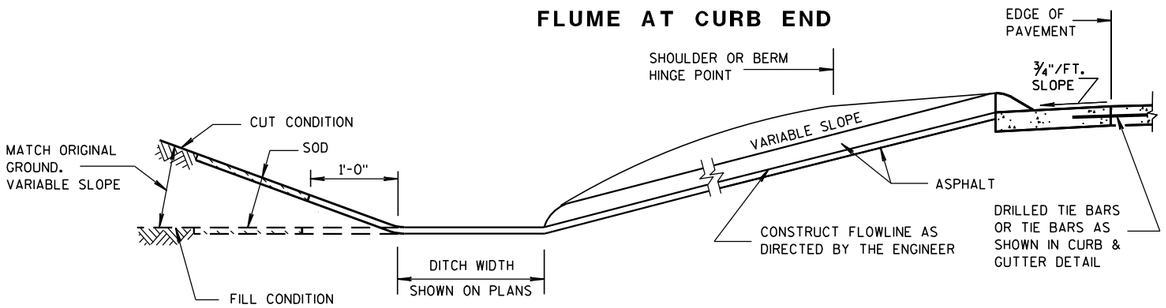
SDD08D01 - 22b

ASPHALTIC FLUME

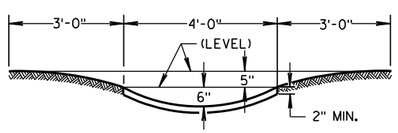


PLAN VIEW
CURB OPENING FOR FLUME

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.

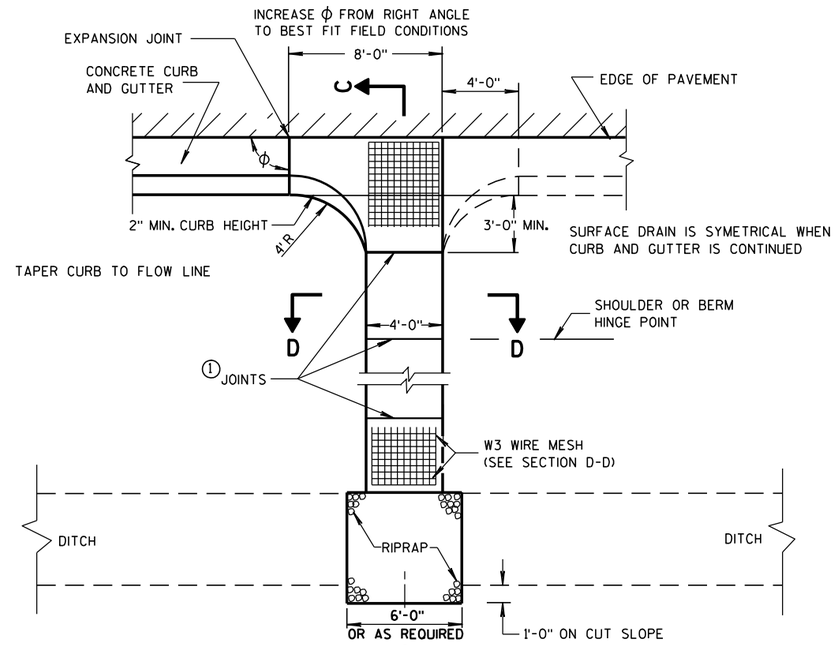
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

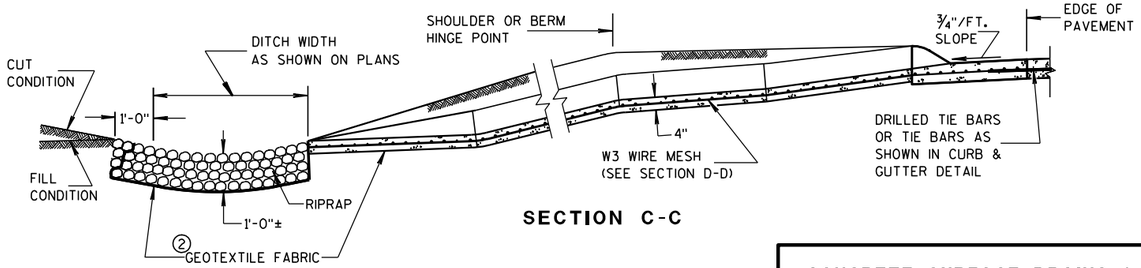
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

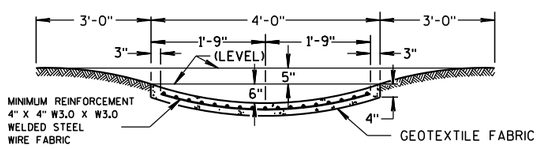
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

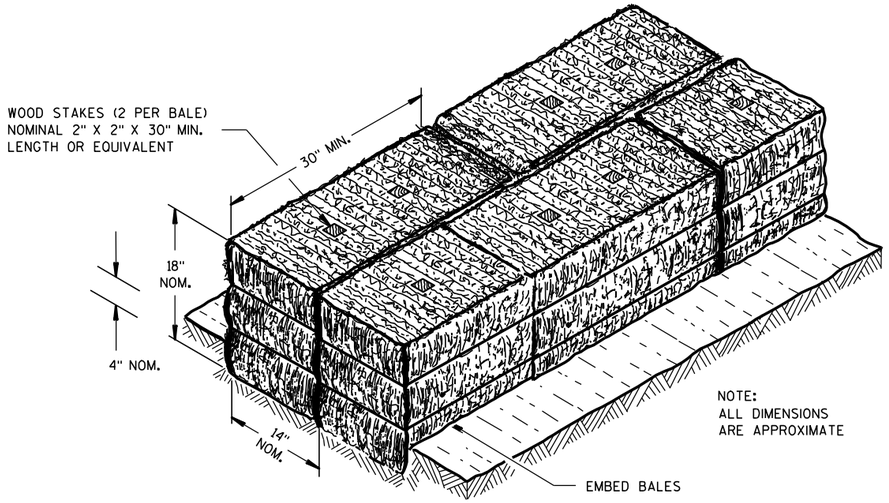
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT
FHWA

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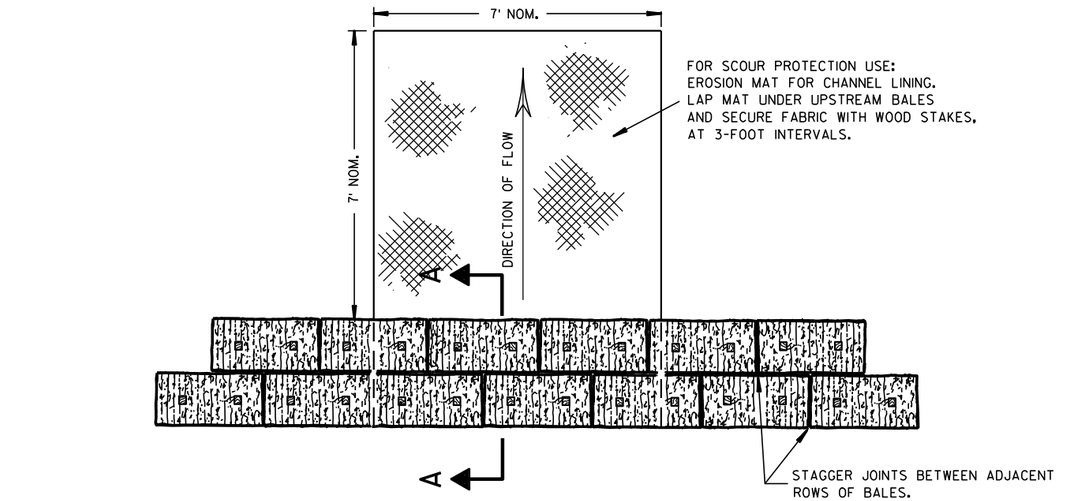
S.D.D. 8 D 4-5

6

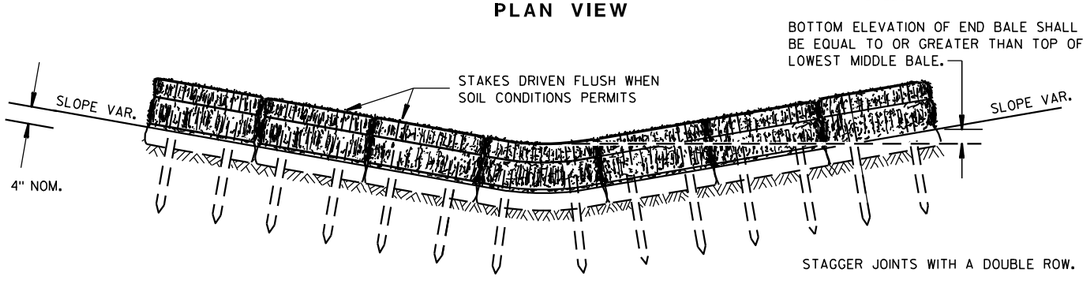
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



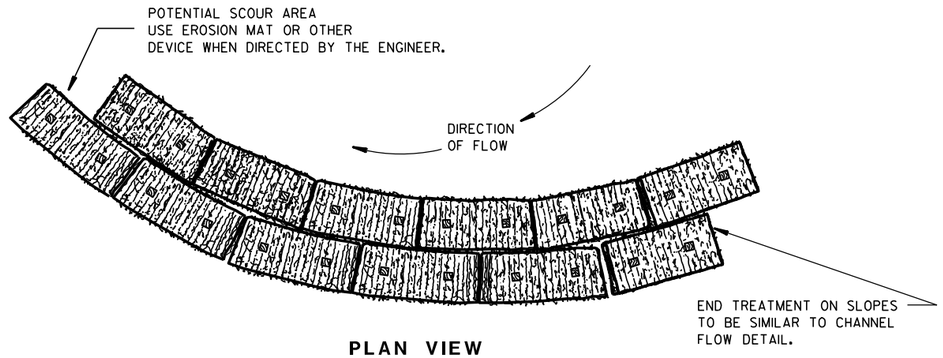
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

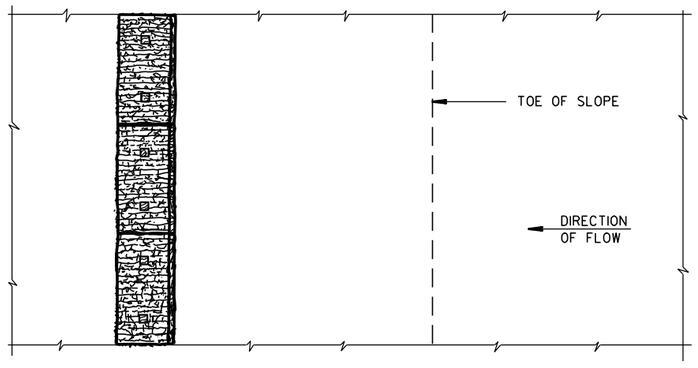
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

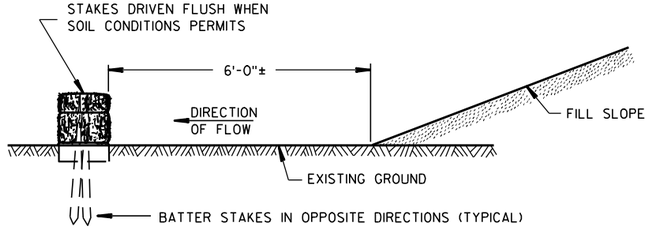


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

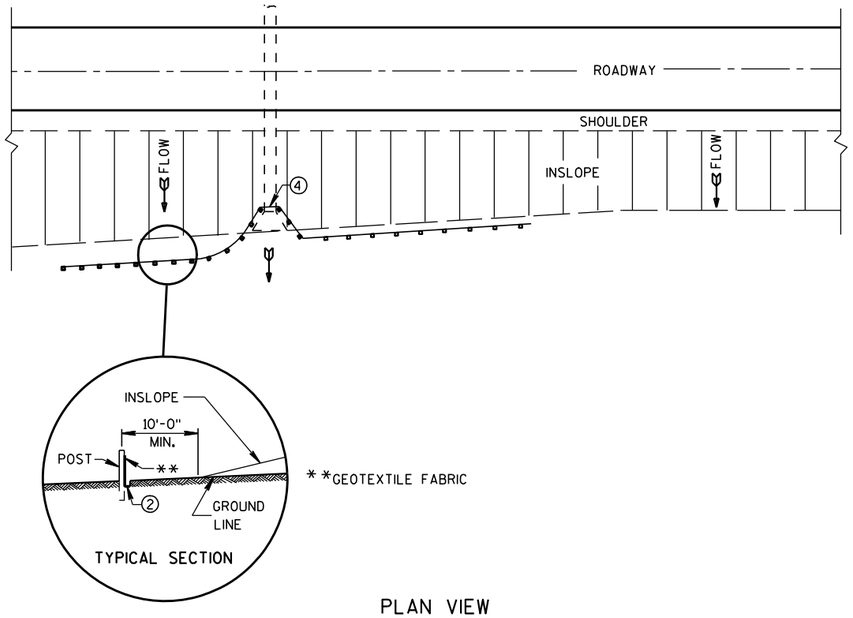
EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

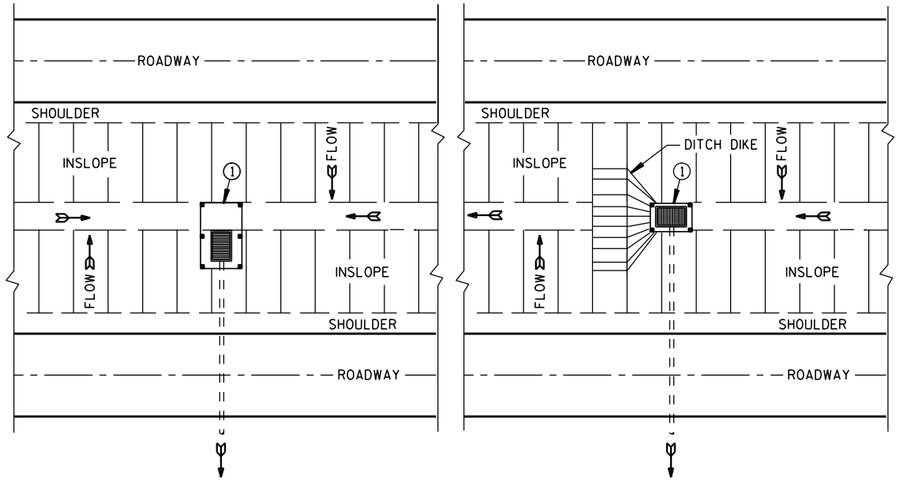
APPROVED
6/04/02 — DATE
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



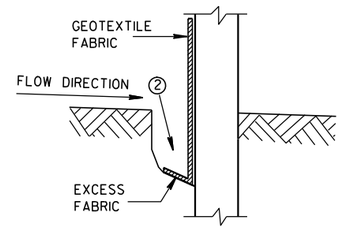
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

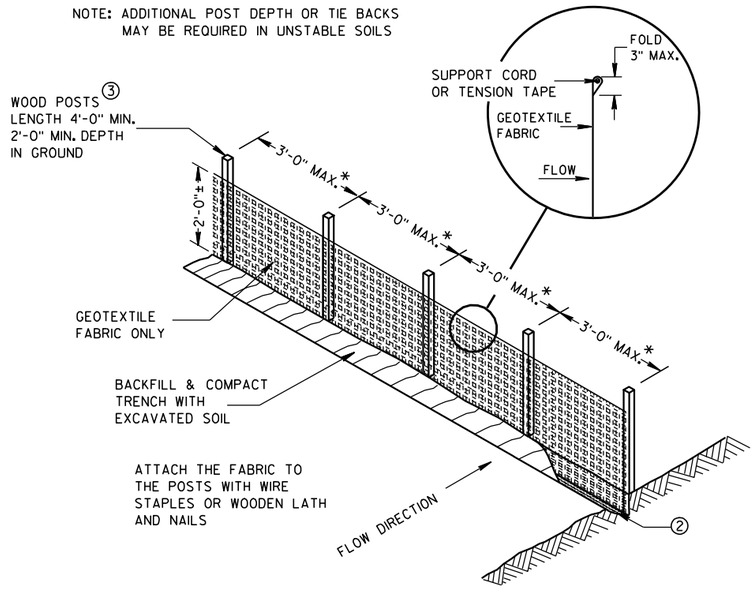
GENERAL NOTES

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

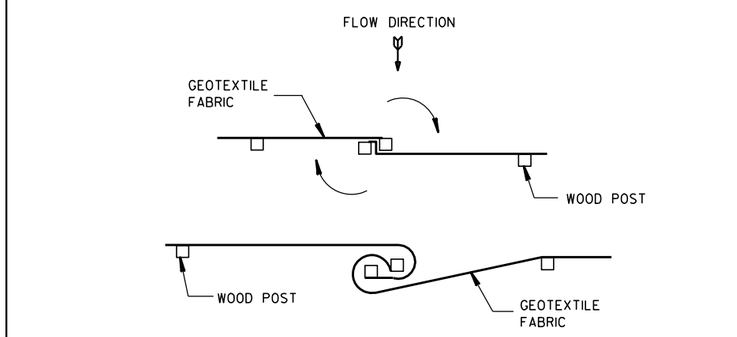
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



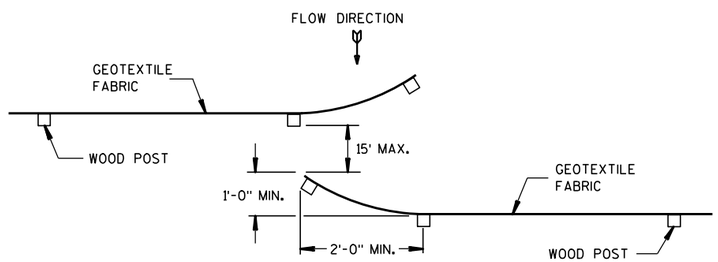
TRENCH DETAIL



SILT FENCE

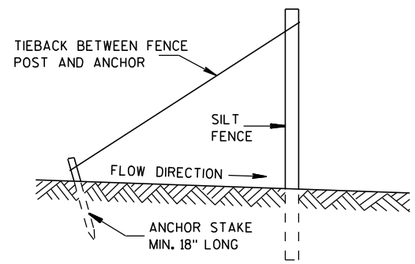


TWIST METHOD



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

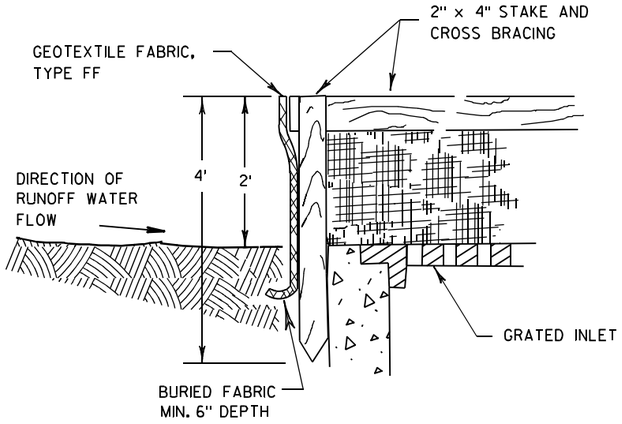
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

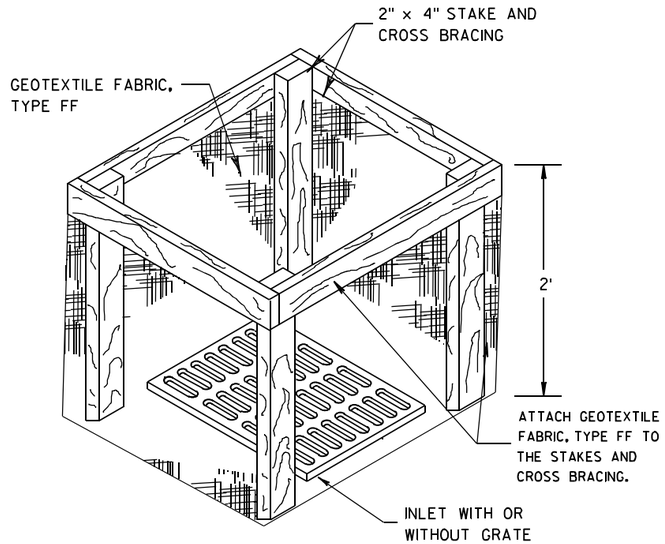
6

S.D.D. 8 E 9-6

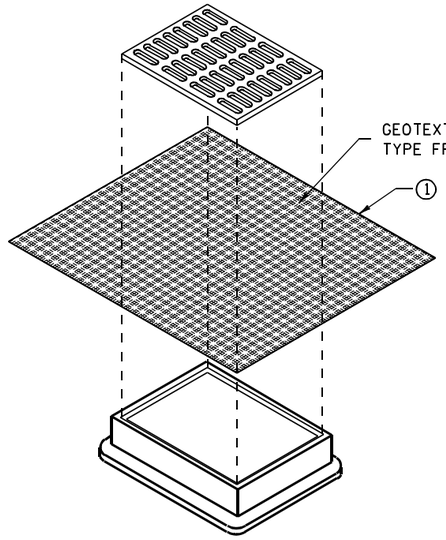
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S.D.D. 8 E 9-6



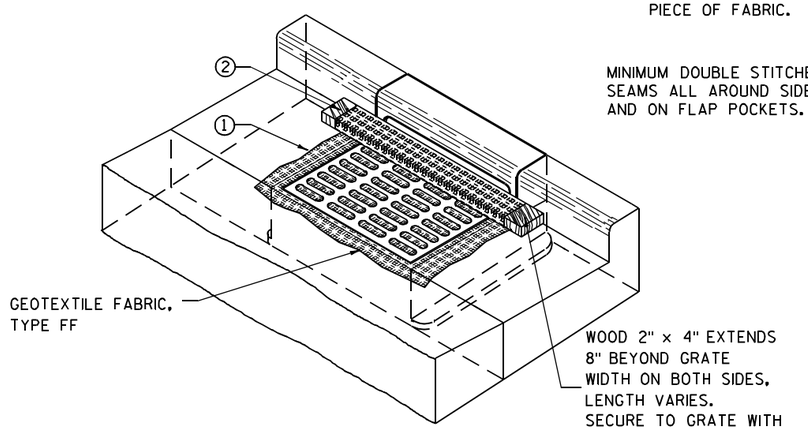


INLET PROTECTION, TYPE A

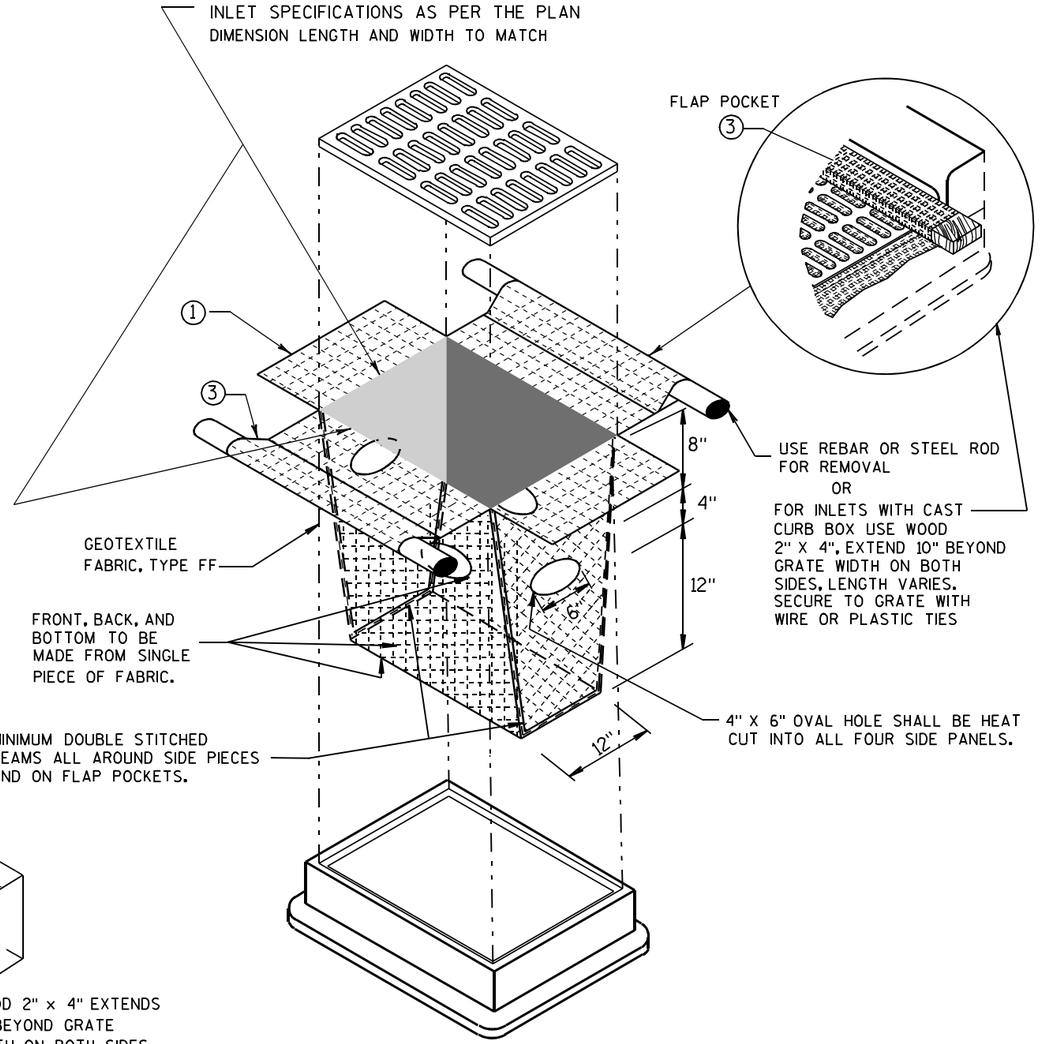


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE 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.

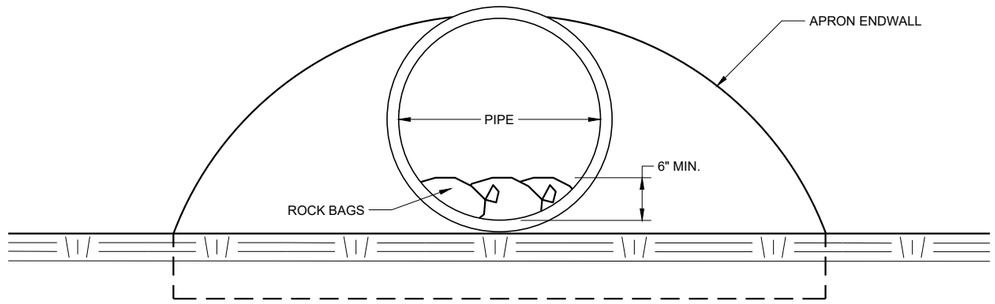
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

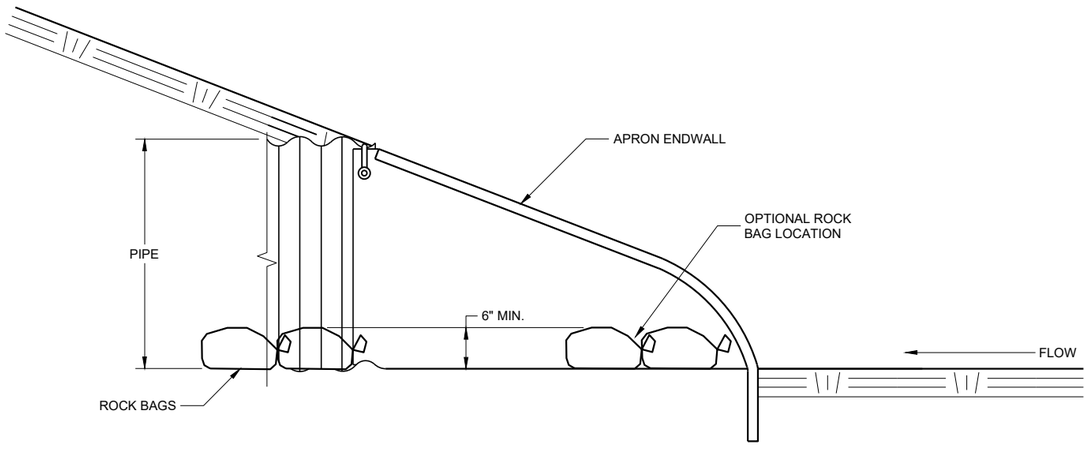
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

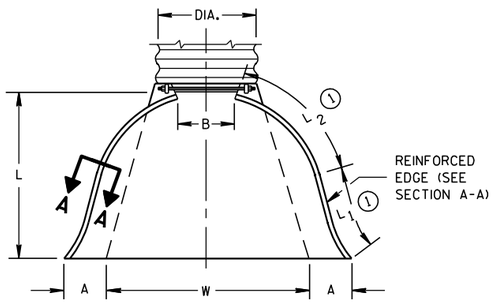
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

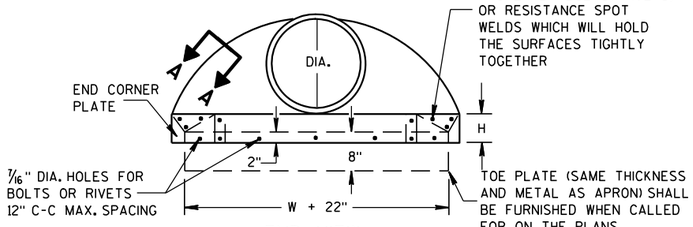
REINFORCED CONCRETE APRON ENDWALLS

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

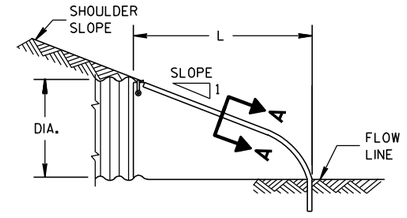
*MINIMUM
**MAXIMUM



PLAN VIEW

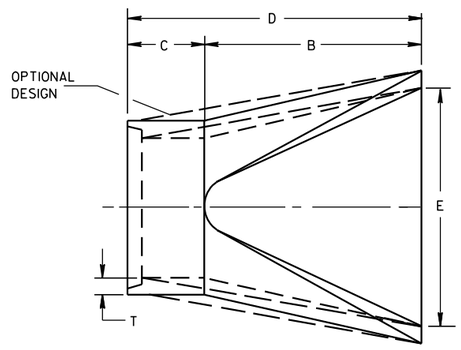


END VIEW

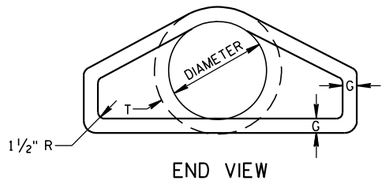


SIDE ELEVATION

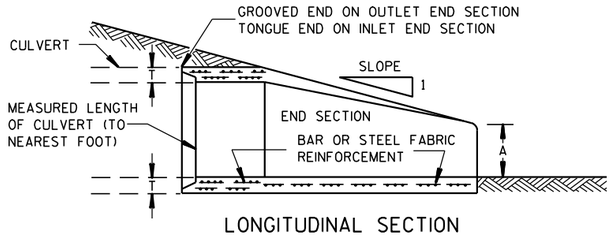
METAL ENDWALLS



PLAN

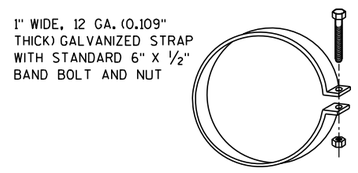


END VIEW



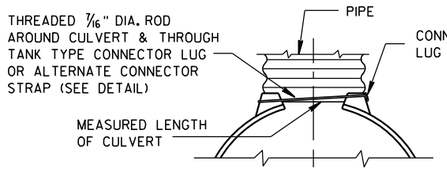
LONGITUDINAL SECTION

CONCRETE ENDWALLS

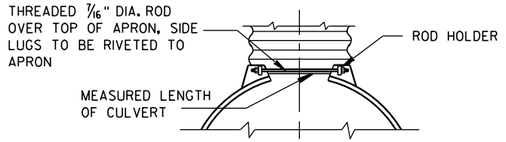


ALTERNATE FOR TYPE 1 CONNECTION

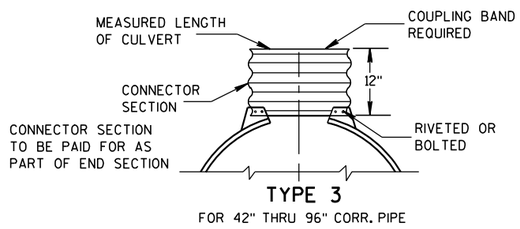
END SECTION CONNECTOR STRAP



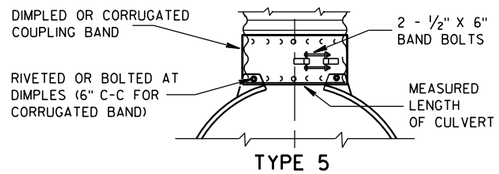
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

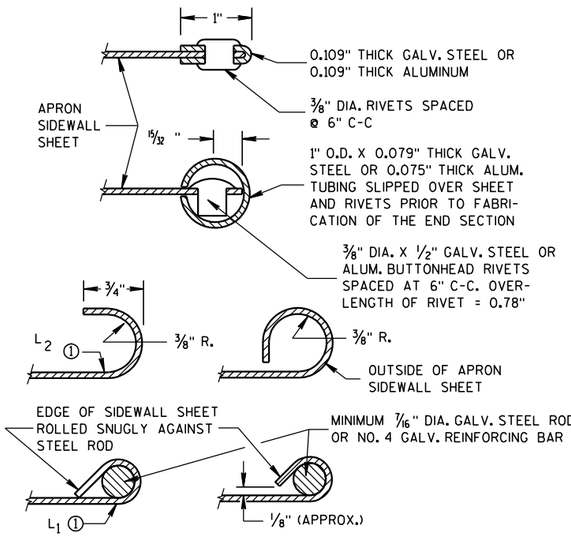
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

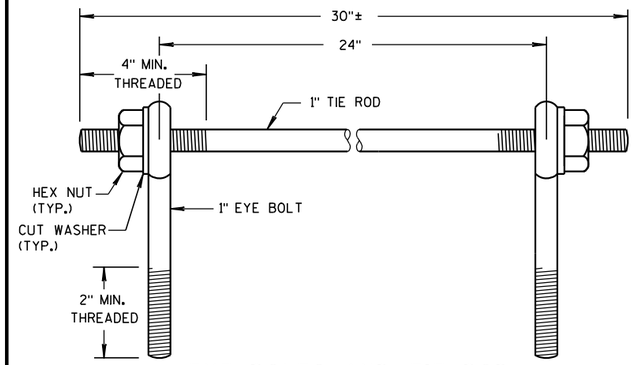
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

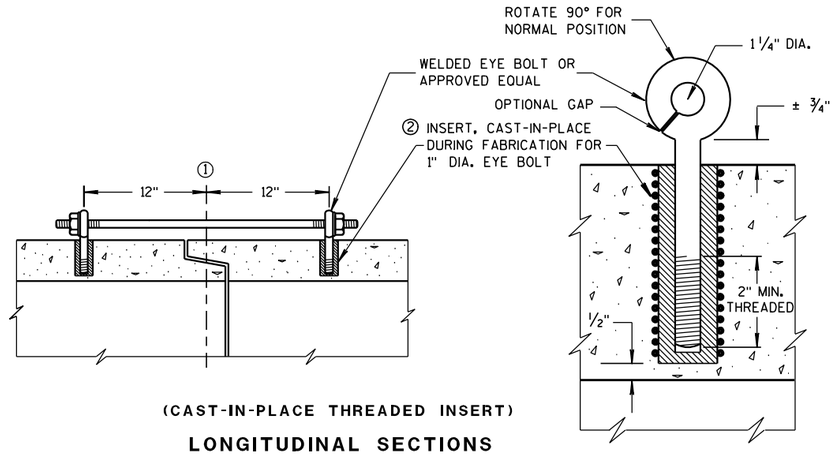
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 8 F 1-11



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.

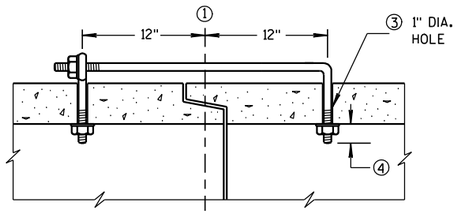
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

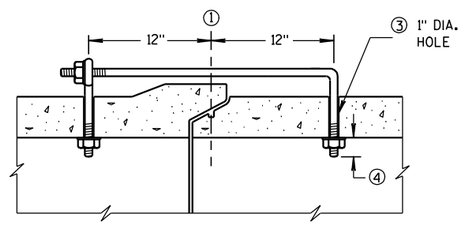
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

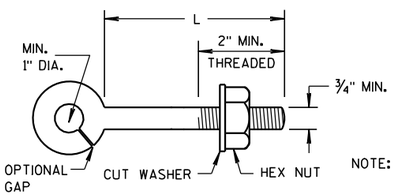


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

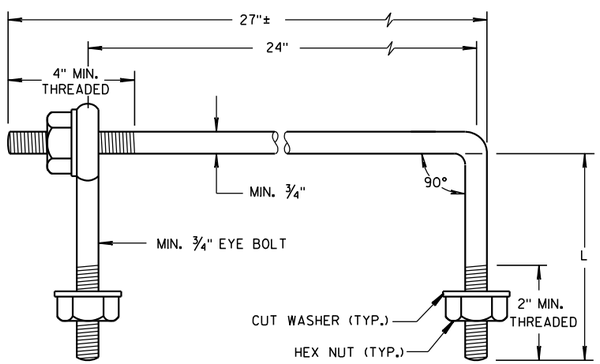
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

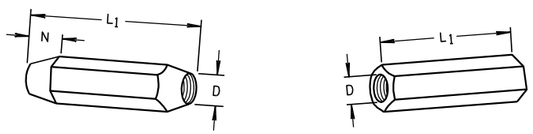
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

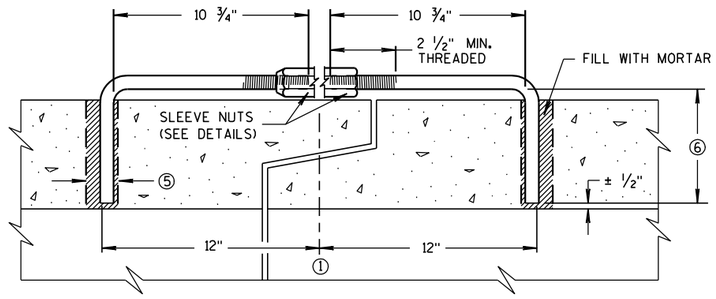
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

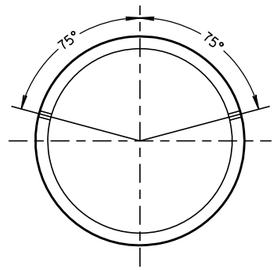
SLEEVE NUTS



LONGITUDINAL SECTION

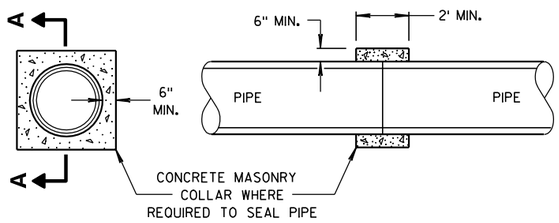
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

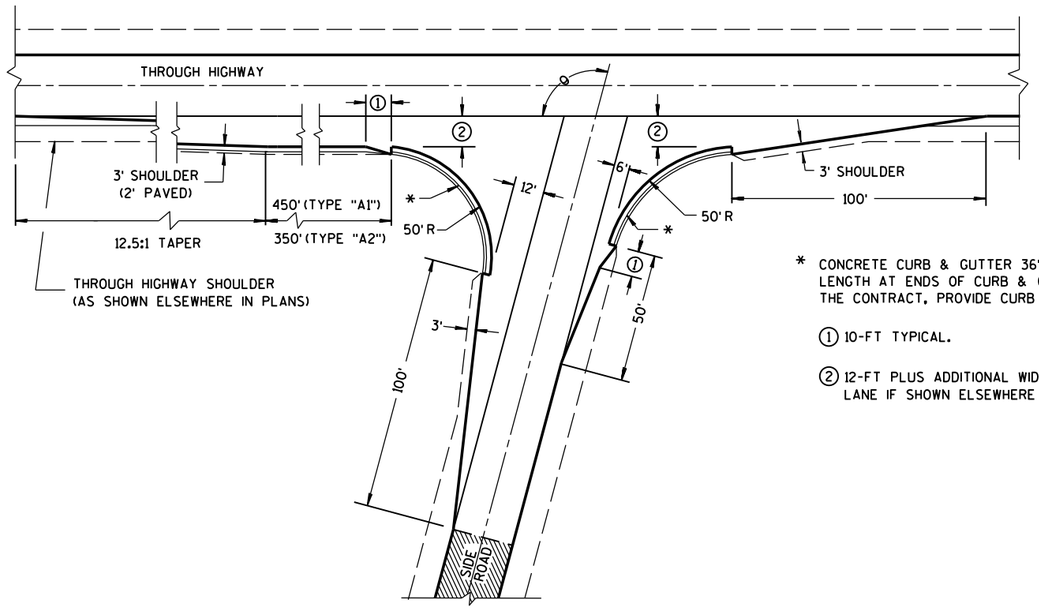
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
155
FHWA

6

S.D.D. 8 F 4-7

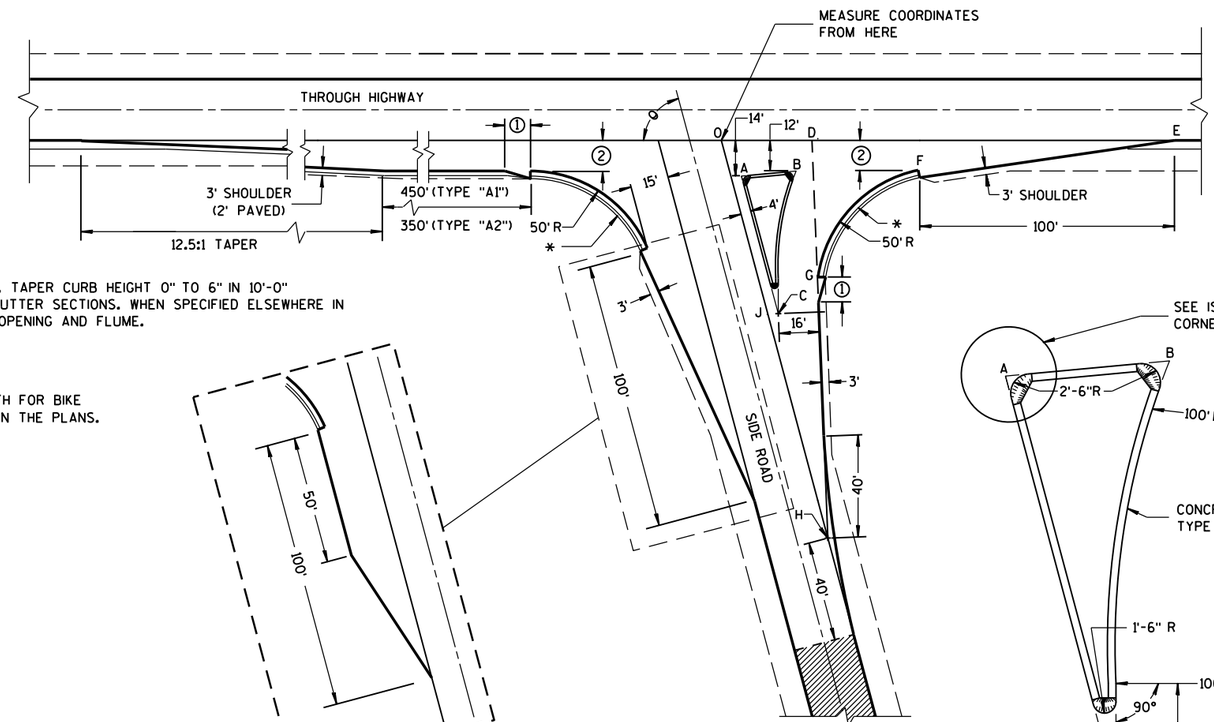


θ = MORE THAN 80°

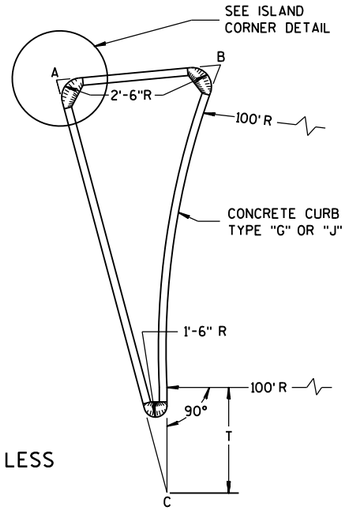
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

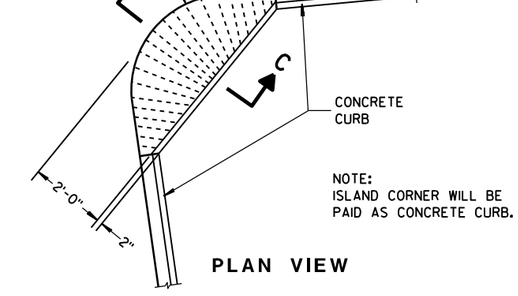
② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.



θ = ACUTE ANGLES 80° OR LESS

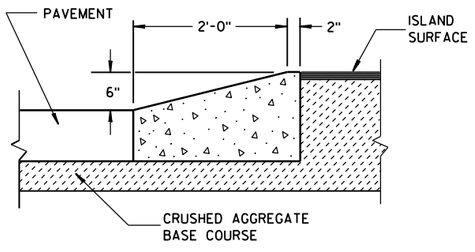


SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
θ = ACUTE ANGLES 70° OR LESS



NOTE:
ISLAND CORNER WILL BE PAID AS CONCRETE CURB.

PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)

TABLE OF DIMENSIONS FOR
VARIABLE SIDE ROAD INTERSECTION ANGLES
(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O") X / Y								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7 / -14.0	44.9 / -12.0	46.4 / -72.4	41.9 / 0.0	205.0 / 0.0	104.6 / -12.0	64.0 / -75.5	85.0 / -147.1	32.3	67.4	4.9	85.9	169.9
65	10.9 / -14.0	39.0 / -12.0	37.8 / -71.6	39.4 / 0.0	196.1 / 0.0	95.7 / -12.0	54.1 / -71.5	70.5 / -151.3	28.2	63.6	8.5	80.9	166.9
70	9.4 / -14.0	33.9 / -12.0	29.8 / -70.1	37.4 / 0.0	188.3 / 0.0	87.8 / -12.0	45.6 / -67.5	56.1 / -154.2	24.6	59.7	11.5	76.1	164.1
75	7.9 / -14.0	29.3 / -12.0	22.3 / -67.9	35.7 / 0.0	181.2 / 0.0	80.7 / -12.0	38.2 / -63.4	41.8 / -155.9	21.5	55.8	13.8	71.4	161.4
80	6.5 / -14.0	25.4 / -12.0	15.6 / -65.2	34.4 / 0.0	174.8 / 0.0	74.4 / -12.0	31.8 / -59.3	27.6 / -156.5	18.9	52.0	15.6	66.9	158.9

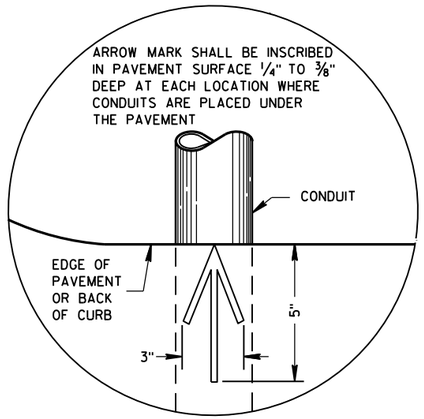
TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD
INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

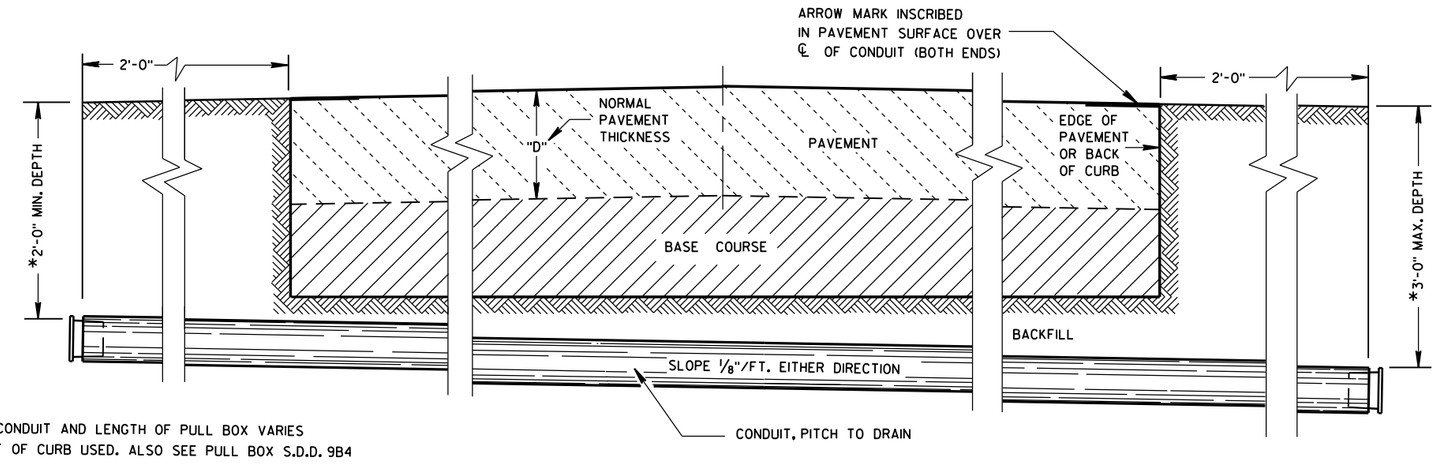
APPROVED
12/18/12 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 9 A 1-13b



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
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".

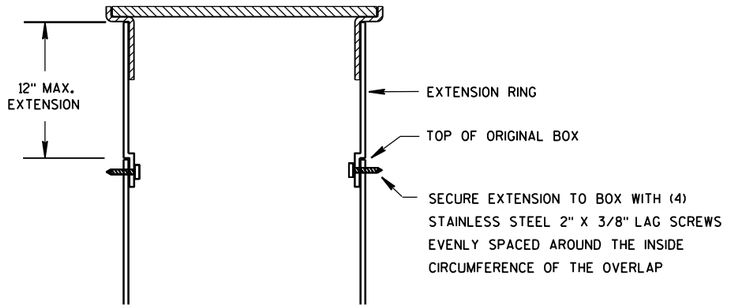
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

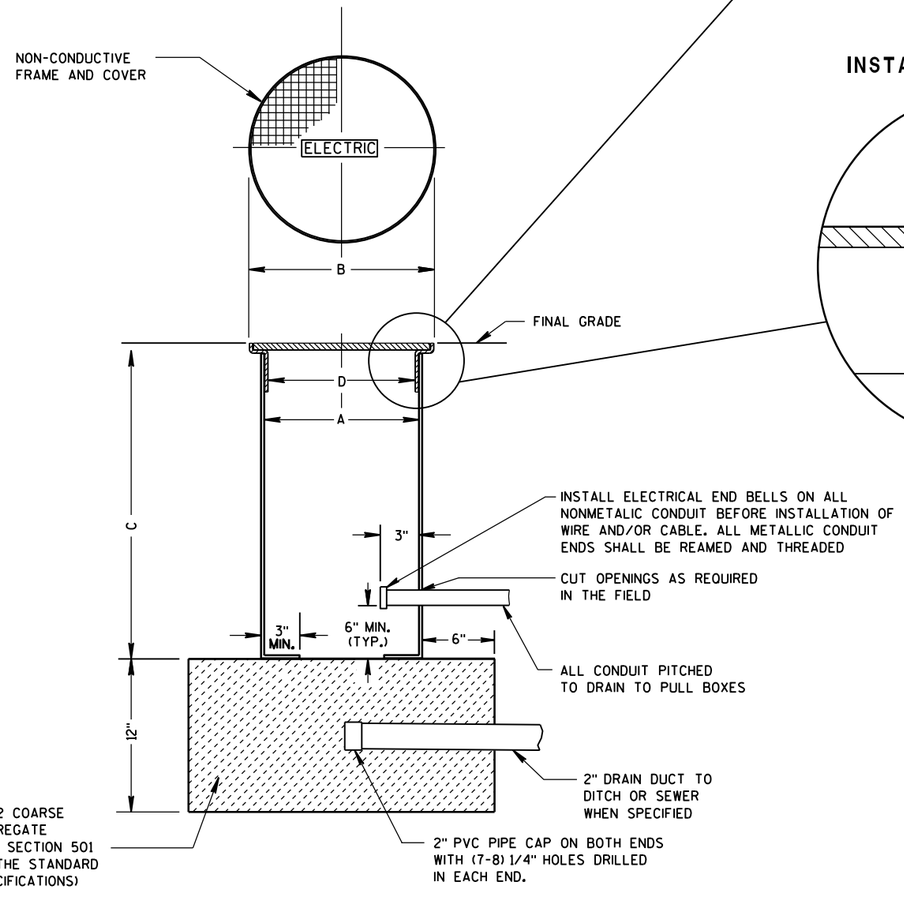
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

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.

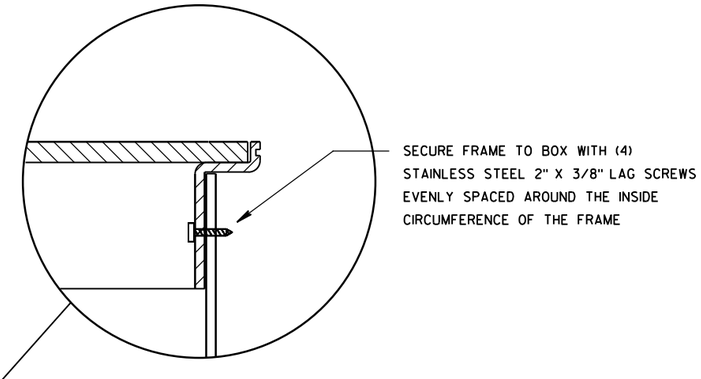


BOX EXTENSION

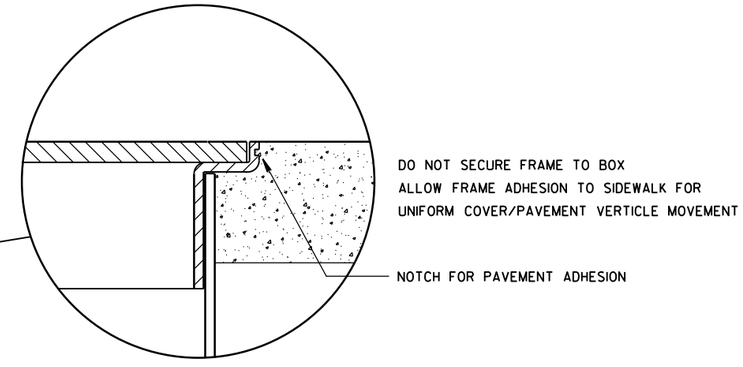


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



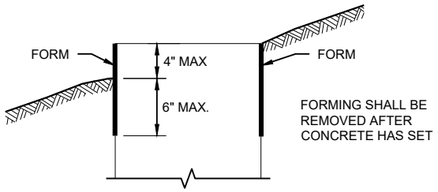
PULL BOX NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6
S.D.D. 9 B 16-1

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.

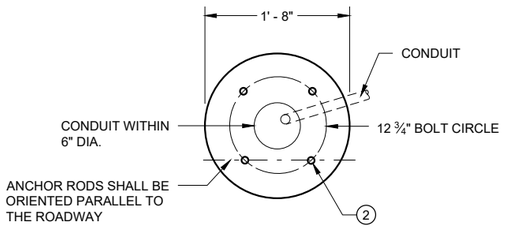
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

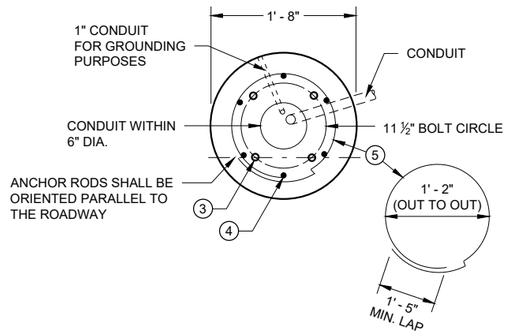
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

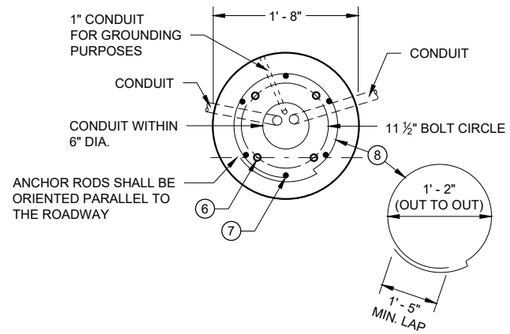
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

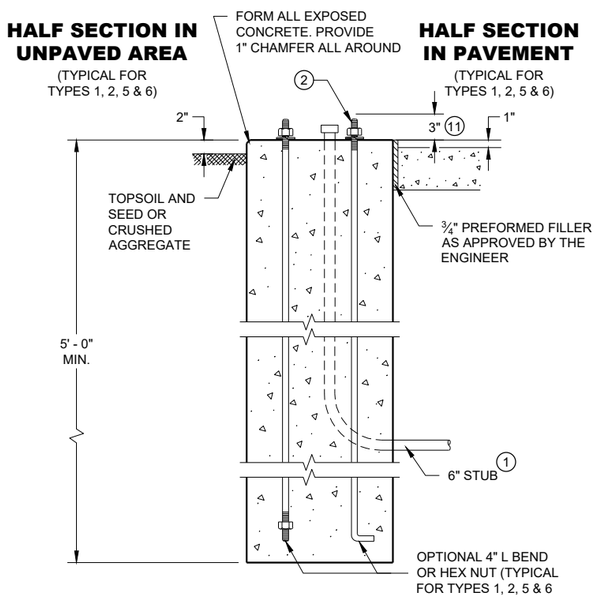
WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

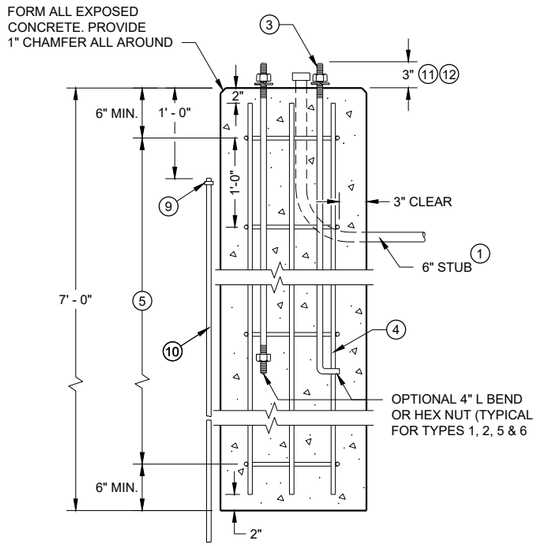




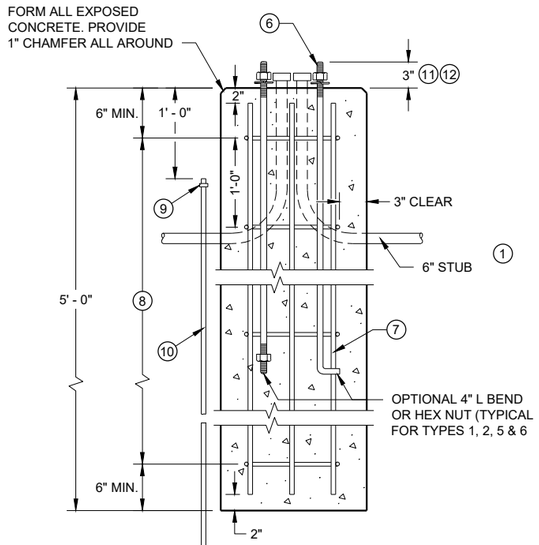




TYPE 1



TYPE 2



TYPE 5 & 6

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.

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

FHWA

6
SDD 09C02 - 09

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

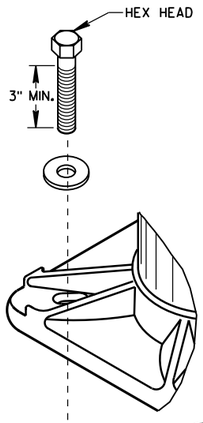
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

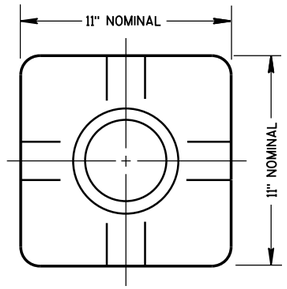
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

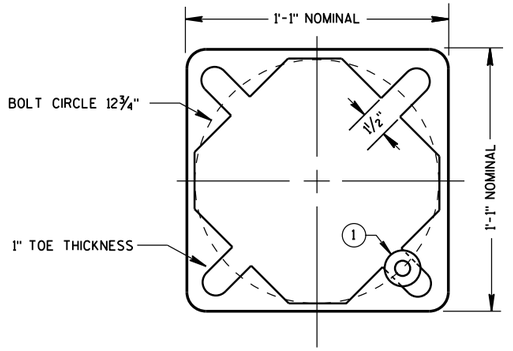
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

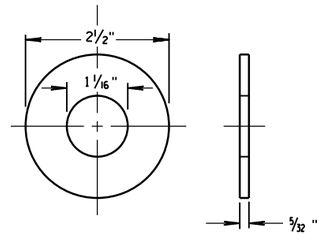




TOP VIEW
(PEDESTAL BASE)

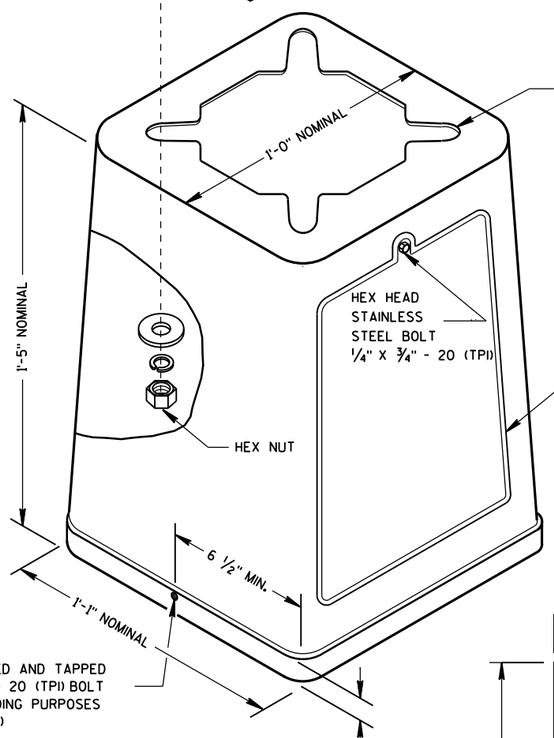


BOTTOM VIEW
(PEDESTAL BASE)

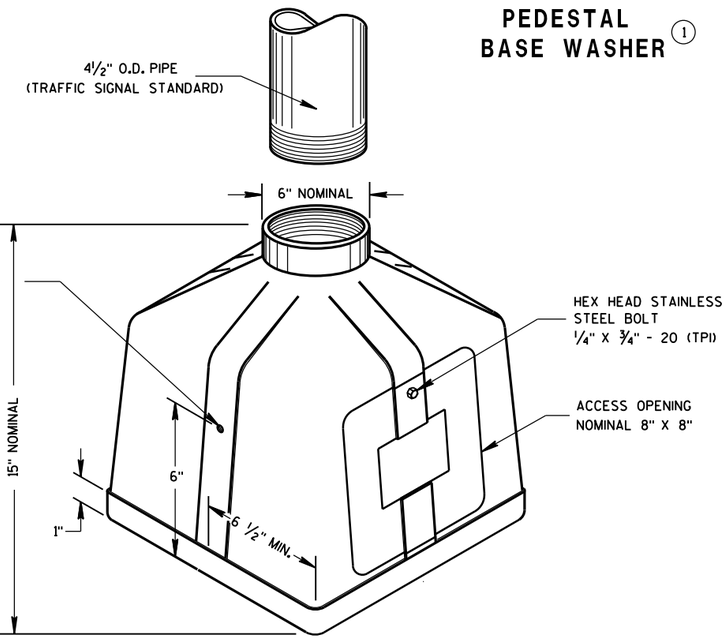


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

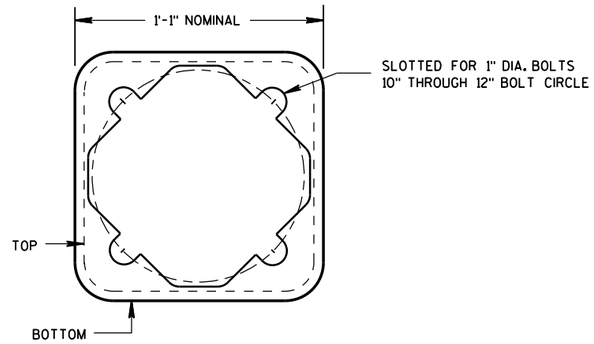
PEDESTAL BASE WASHER (1)



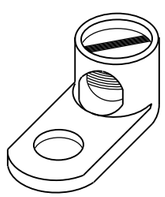
ISOMETRIC VIEW



ISOMETRIC VIEW
PEDESTAL BASE

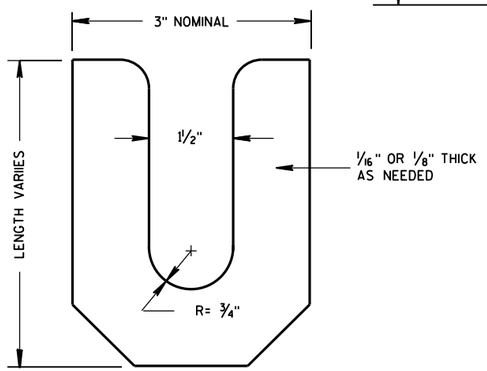


BOTTOM VIEW
(TRANSFORMER BASE)



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

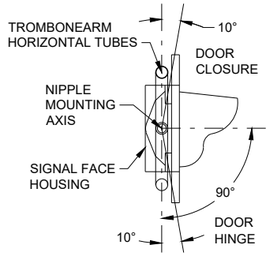
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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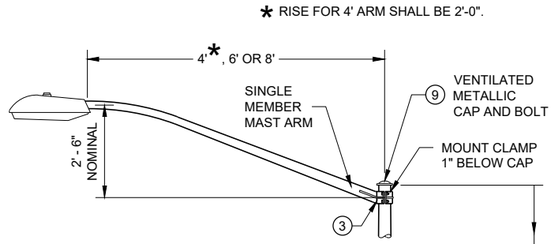
S.D.D. 9 C 3-4

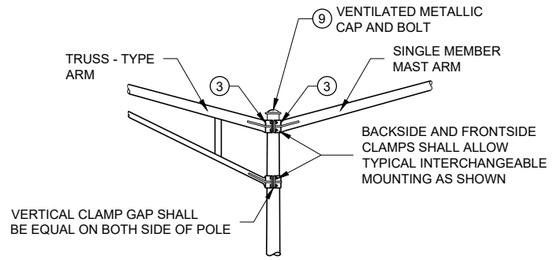
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S.D.D. 9 C 3-4

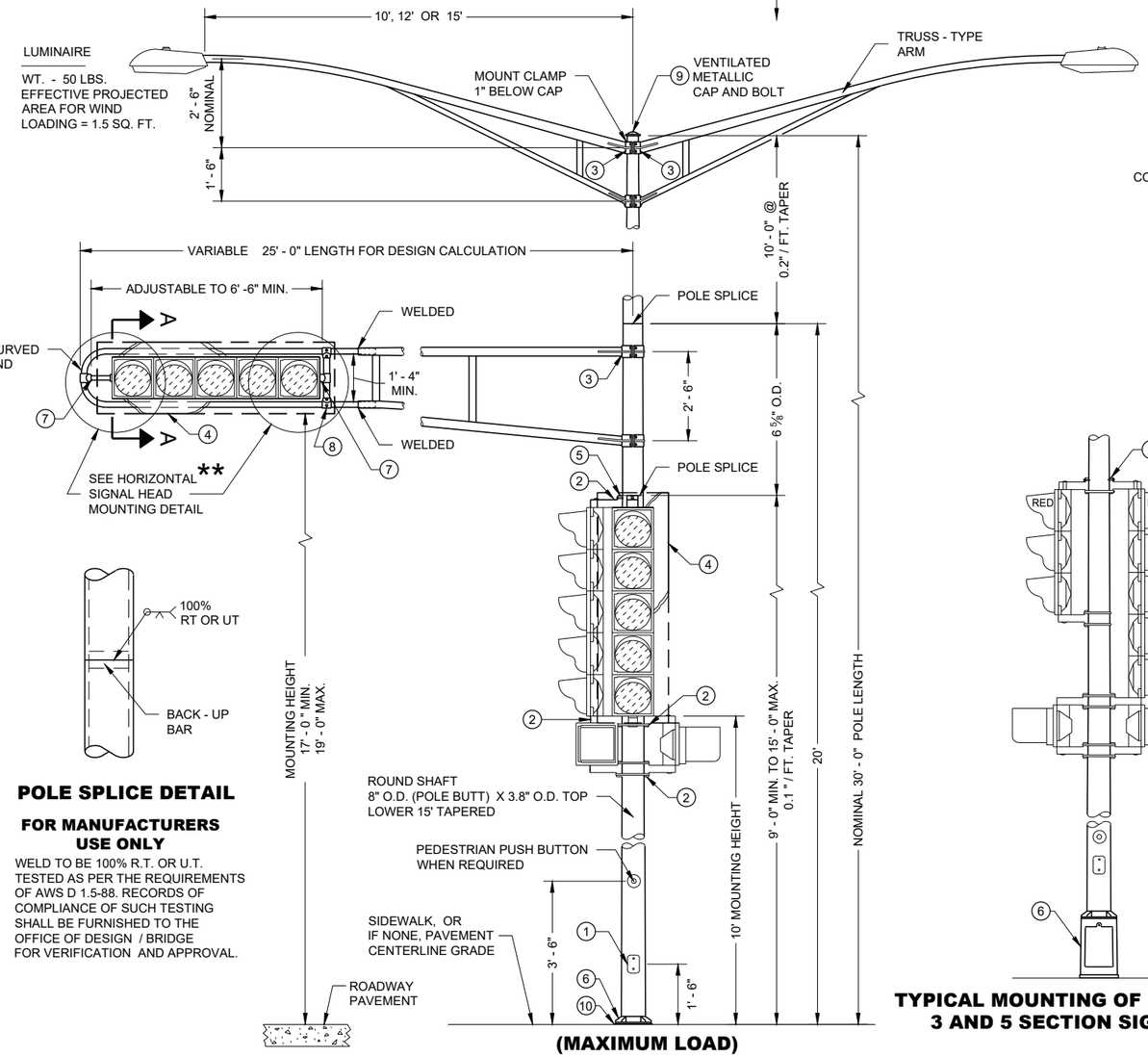


SECTION A-A

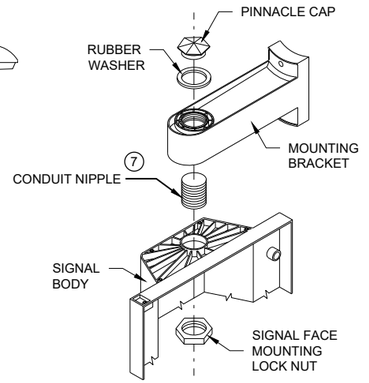




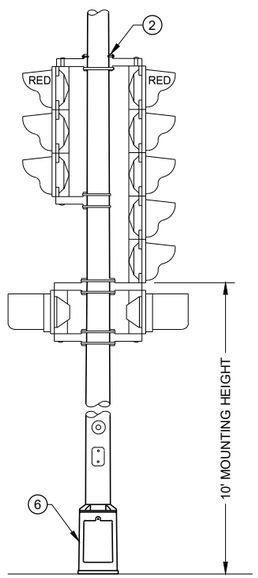
INTERCHANGEABLE MOUNTING DETAIL



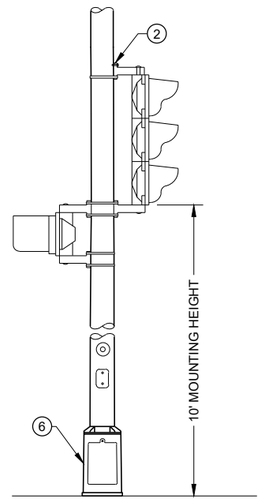
(MAXIMUM LOAD)



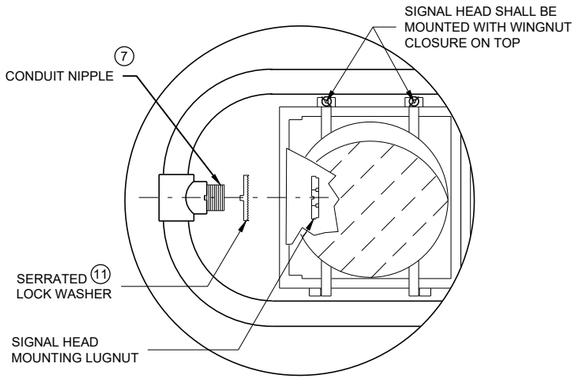
SIGNAL FACE MOUNTING DETAIL
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

POLE SPLICE DETAIL

FOR MANUFACTURERS USE ONLY

WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

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) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.

(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

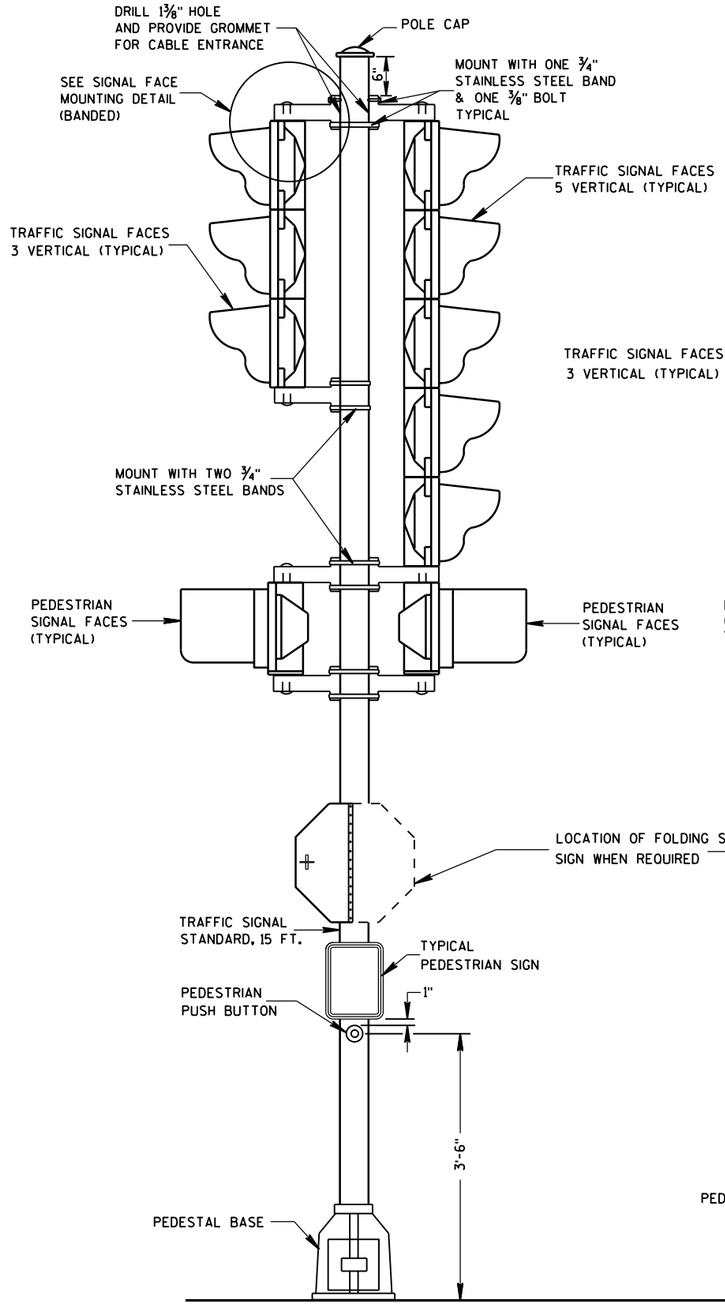
(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

TYPE 3 POLE MOUNTING CONFIGURATION

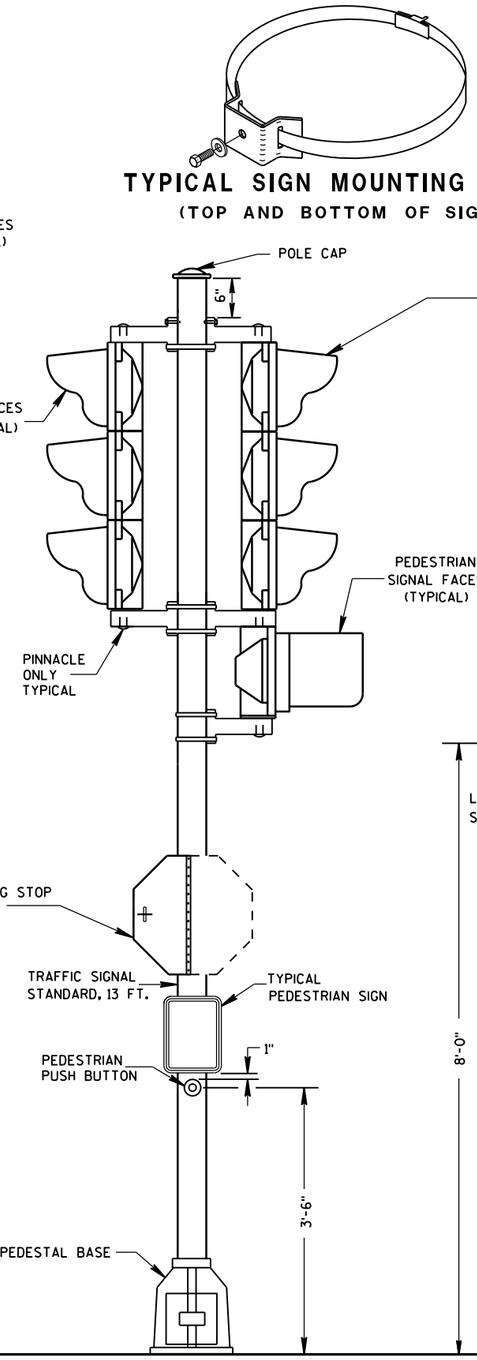
POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 09E01 - 15b

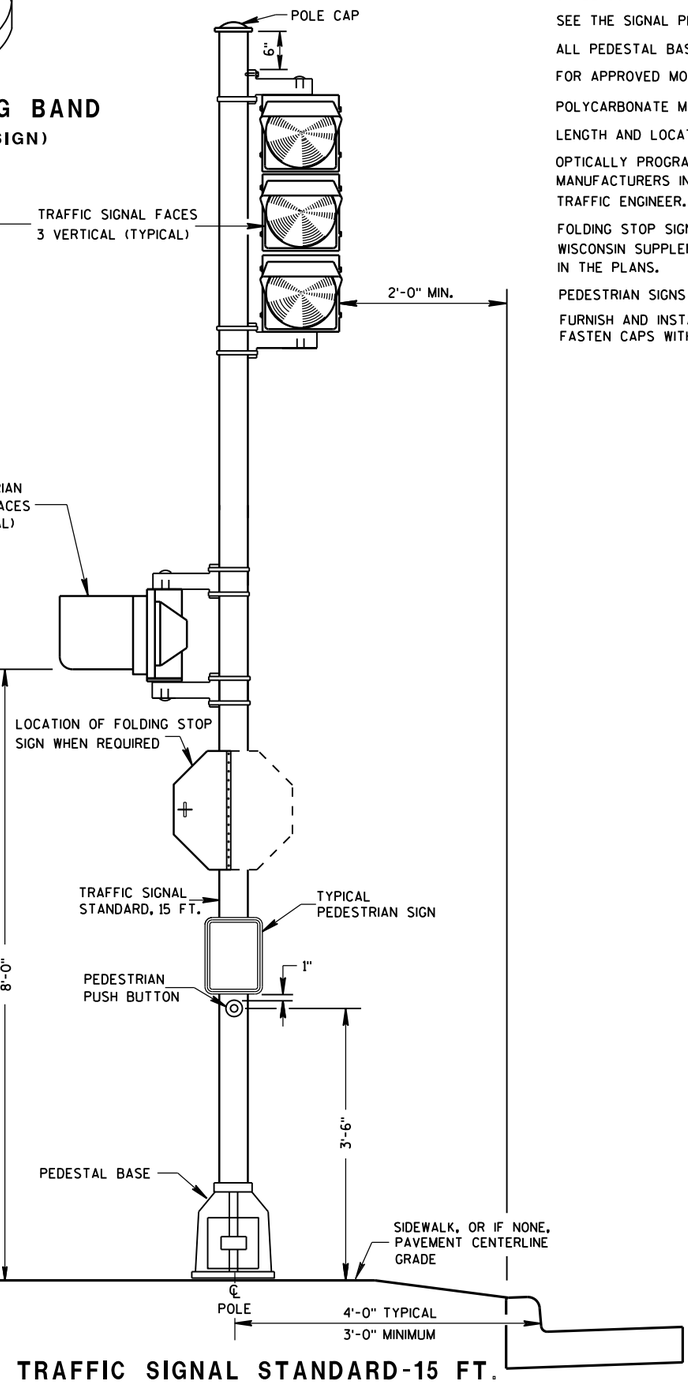


TRAFFIC SIGNAL STANDARD-15 FT.



TRAFFIC SIGNAL STANDARD-13 FT.

TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



TRAFFIC SIGNAL STANDARD-15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

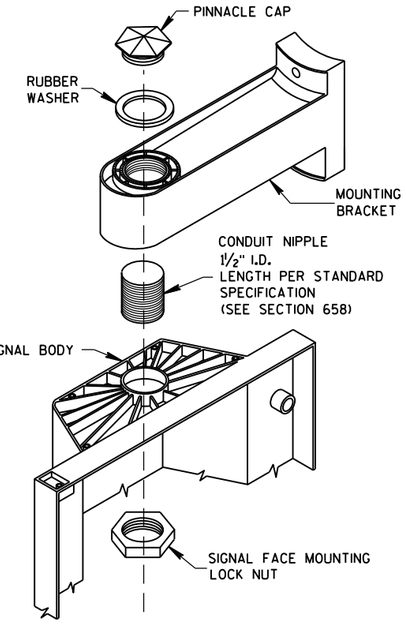
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



SIGNAL FACE MOUNTING DETAIL
(BANDED)

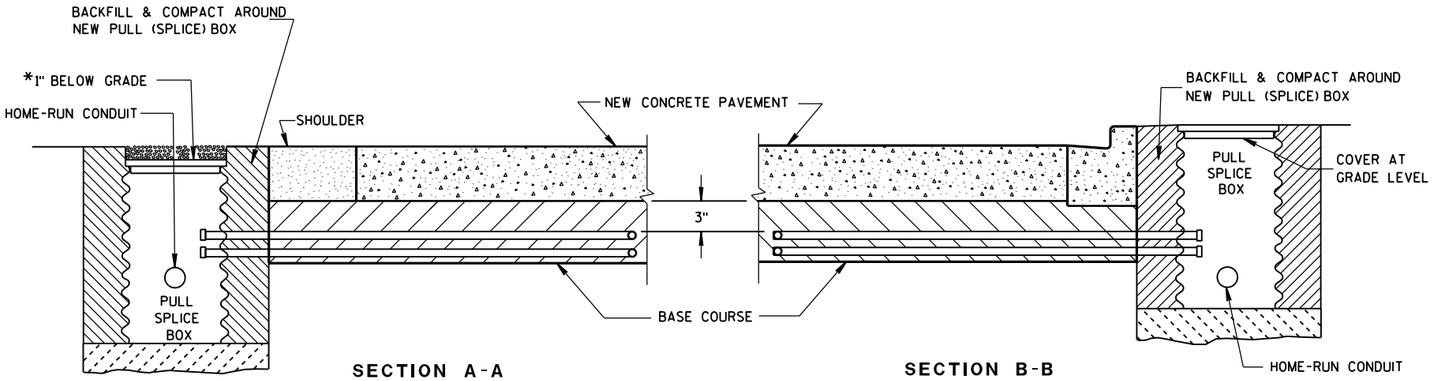
TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL
FHWA

6

S.D.D. 9 E 6-5



SECTION A-A
NO CURB & GUTTER

SECTION B-B
CURB & GUTTER

*RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

LOOP SIZE, CONFIGURATION LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READINGS TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

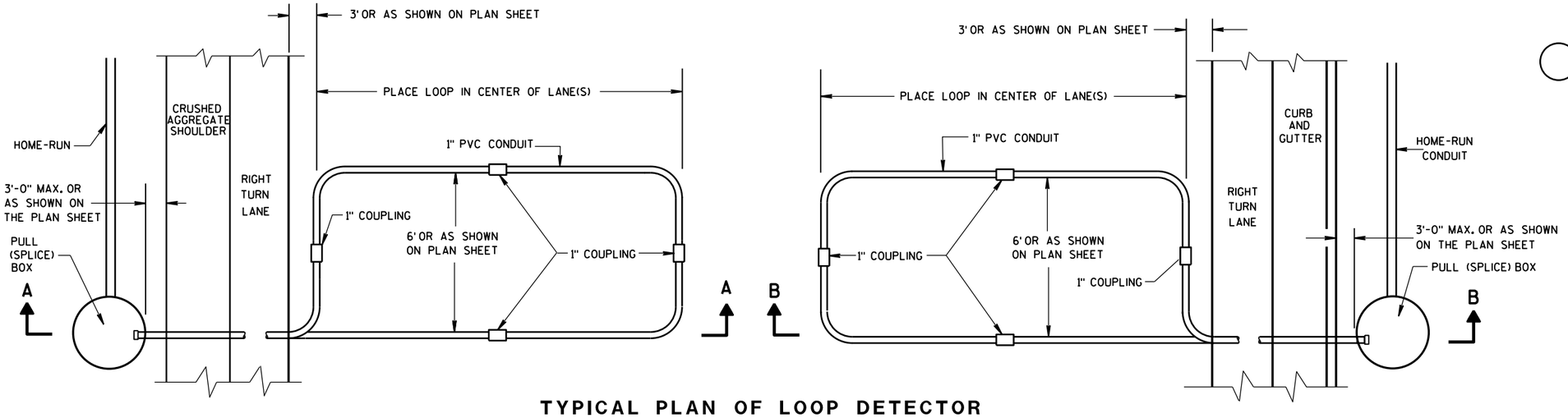
THE #12 AWG. LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

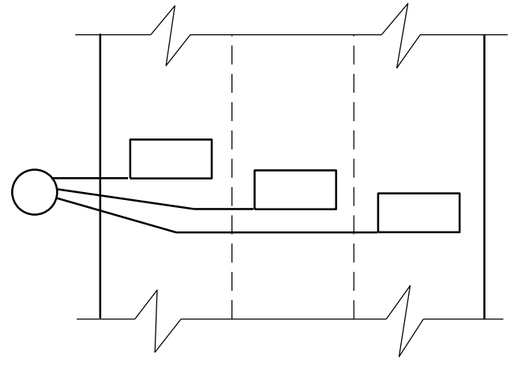
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE, NON-SPLICED CONTINUOUS LENGTH.

PROTECTION OF THE CONDUITS IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.

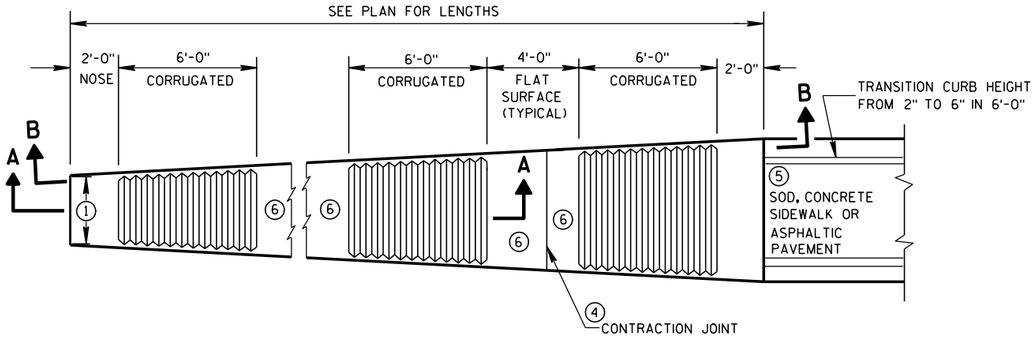


TYPICAL PLAN OF LOOP DETECTOR WITH 24" PULL (SPLICE) BOX



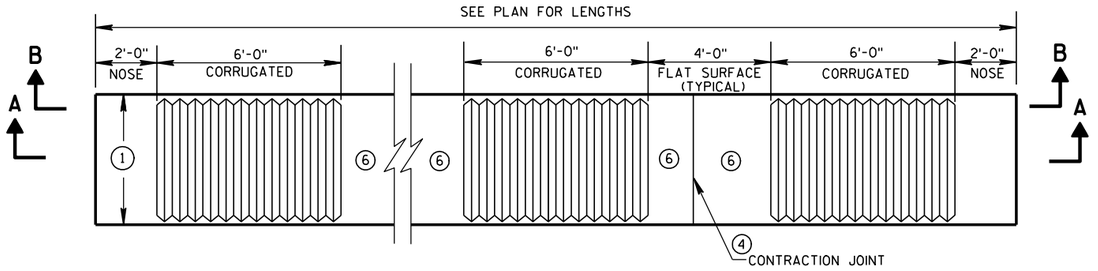
MULTI-LANE INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION
APPROVED Sept. 2014 — DATE /S/ Ahmet Demirbilek — STATE ELECTRICAL FHWA



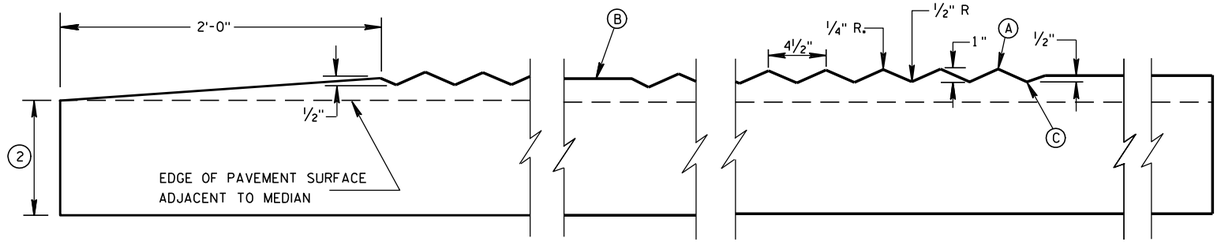
PLAN VIEW

VARIABLE WIDTH CONCRETE CORRUGATED MEDIAN



PLAN VIEW

UNIFORM WIDTH CONCRETE CORRUGATED MEDIAN



SECTION A-A

LONGITUDINAL SECTION

GENERAL NOTES

(1) SEE PLANS FOR CONSTANT OR VARIABLE WIDTH.

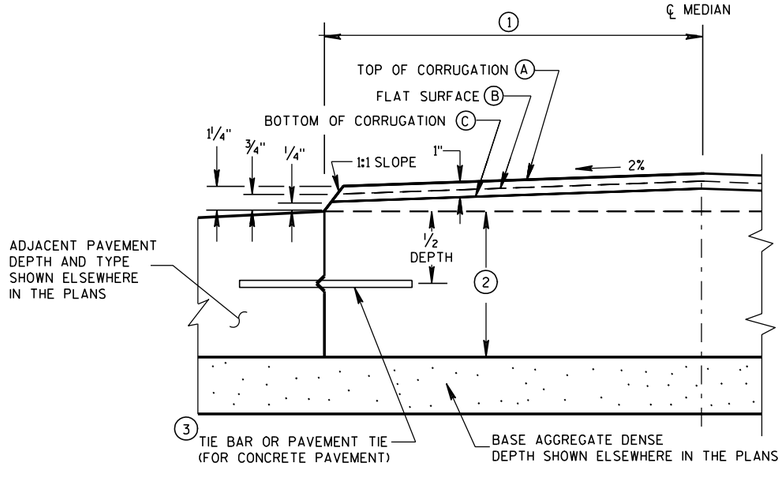
(2) THE DEPTH OF THE CONCRETE CORRUGATED MEDIAN SHALL BE 9-INCHES UNLESS SHOWN OTHERWISE IN THE PLAN.
ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN IN THE PLAN. TYPICAL OPTIONS ARE:
(1) NEW OR EXISTING CONCRETE PAVEMENT.
(2) ASPHALTIC CONCRETE OVER NEW OR EXISTING CONCRETE BASE COURSE, OR PAVEMENT.
(3) ASPHALTIC PAVEMENT OVER BASE AGGREGATE DENSE.

(3) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.
INSTALL TIE BARS TO MAINTAIN A MINIMUM OF 3-INCHES OF COVER BETWEEN THE TIE BAR AND THE CONCRETE SURFACE (BOTTOM AND TOP).
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE PAVEMENT OR CONCRETE BASE COURSE, PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(4) CONCRETE CORRUGATED MEDIAN CONTRACTION JOINTS SHALL BE CONSTRUCTED TO MATCH THE JOINTS IN ADJACENT CONCRETE PAVEMENT. WHERE ADJACENT PAVEMENT IS ASPHALT WITH BASE AGGREGATE DENSE. TRANSVERSE CONTRACTION JOINTS SHALL BE PROVIDED AT 20 FOOT INTERVALS.

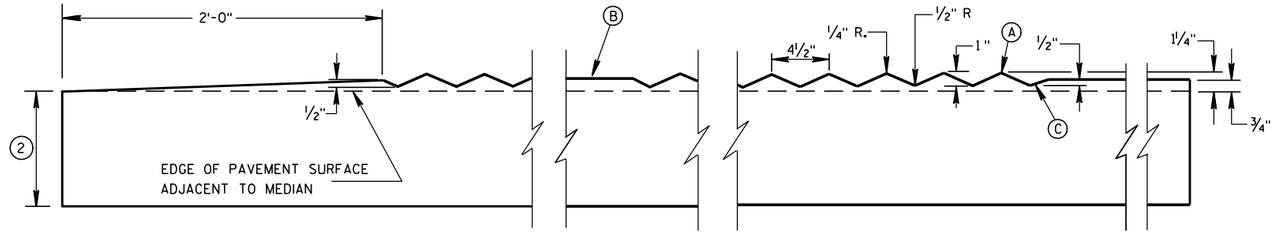
(5) SURFACE TYPE AND DETAILS ARE DEFINED ELSEWHERE IN THE PLAN.

(6) YELLOW MARKING ON FLAT SURFACE WHEN MEDIAN SEPARATES OPPOSING TRAFFIC.



HALF CROSS SECTION

(2) CONCRETE CORRUGATED MEDIAN AND ADJACENT PAVEMENT



SECTION B-B

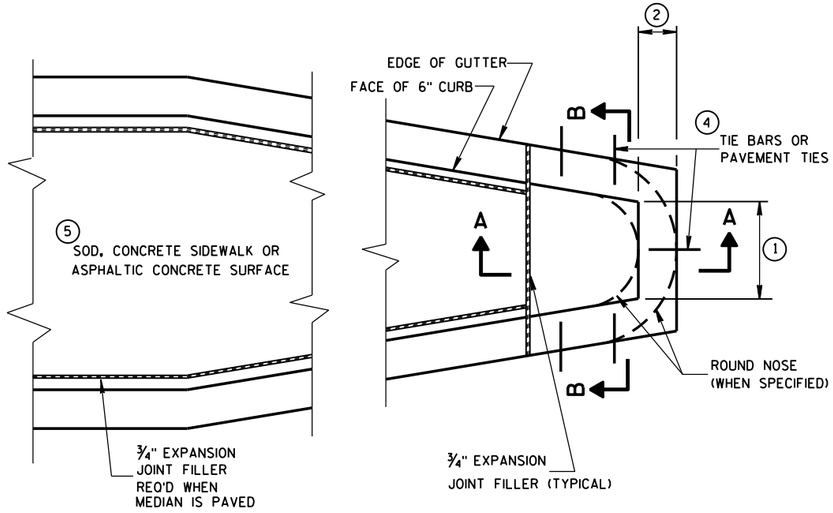
LONGITUDINAL SECTION

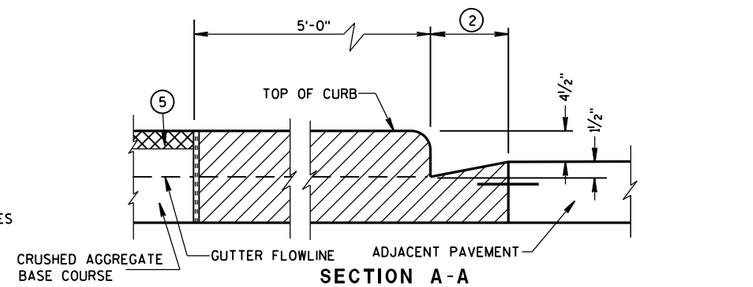
CONCRETE CORRUGATED MEDIAN

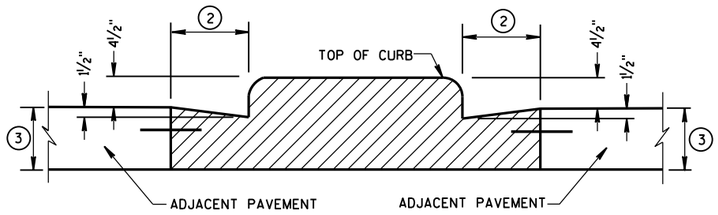
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/07 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6
S.D.D. 11 B 1-5







CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

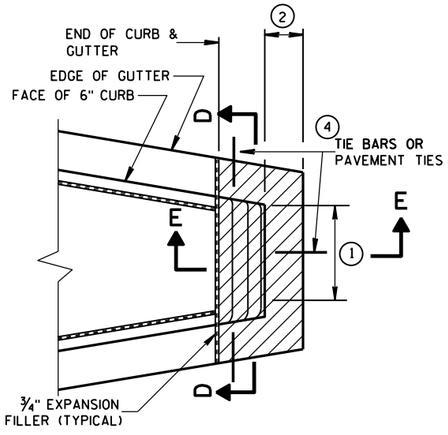
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

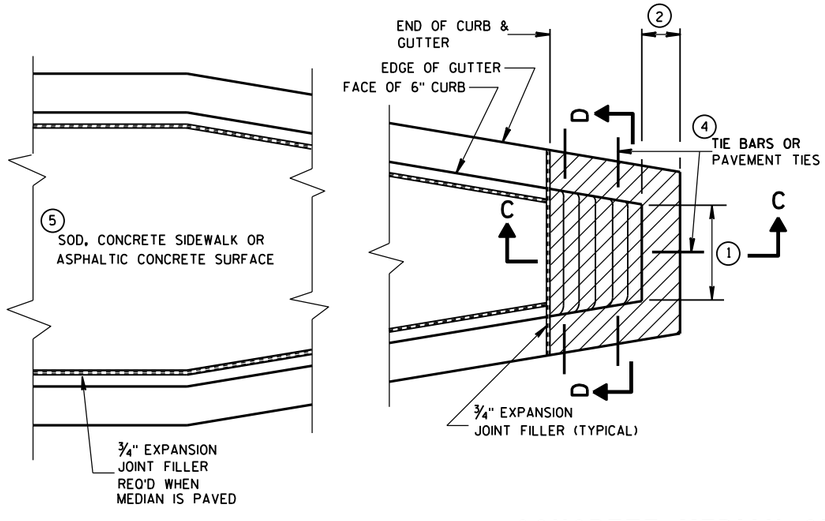
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

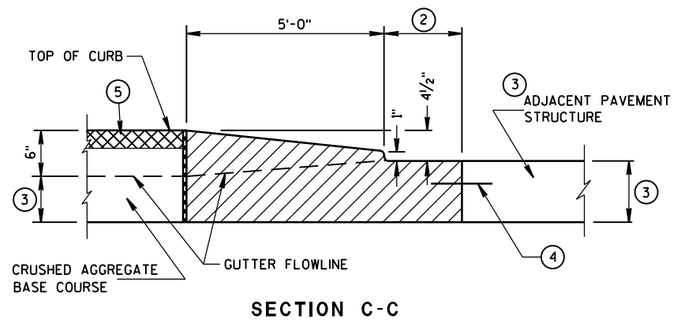
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

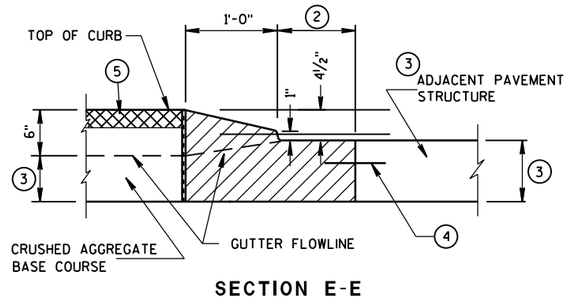
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



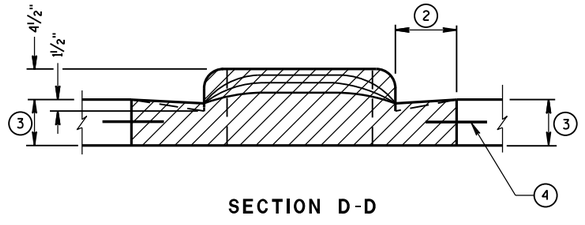






CONCRETE MEDIAN SLOPED NOSE TYPE 2

CONCRETE MEDIAN SLOPED NOSE TYPE 1



CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

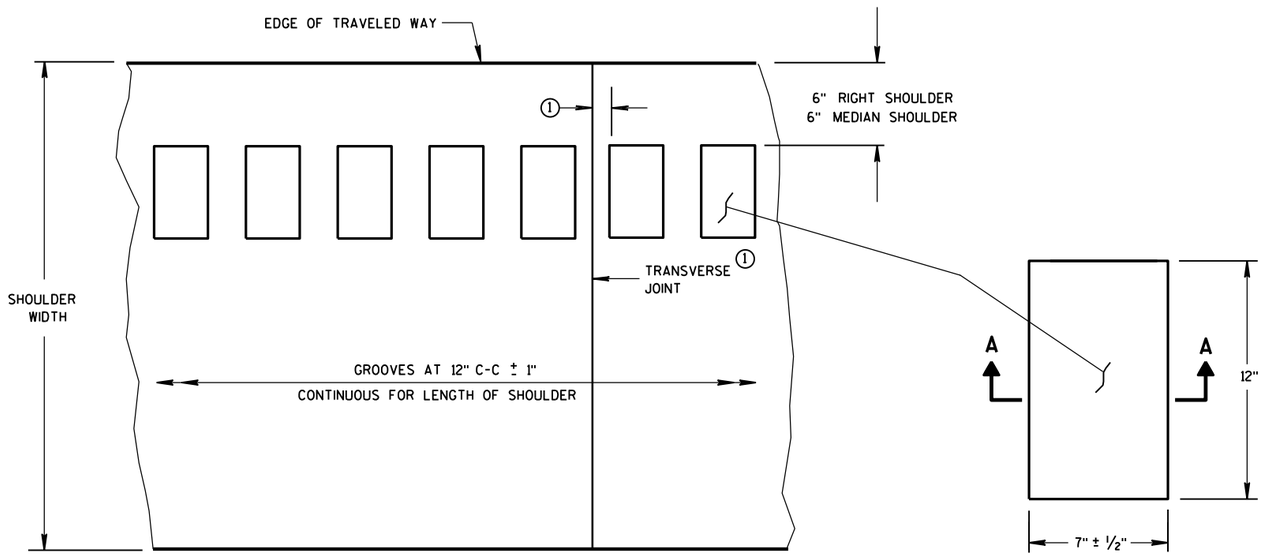
APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

6

S.D.D. 11 B 2-2

6

S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

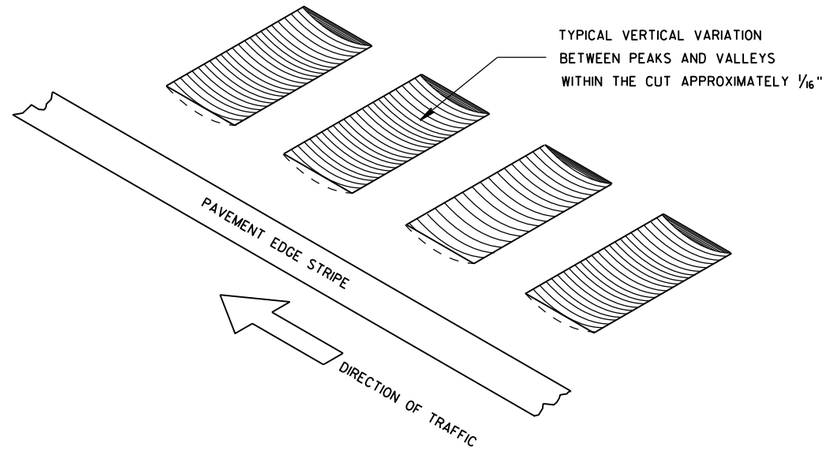
GENERAL NOTES

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

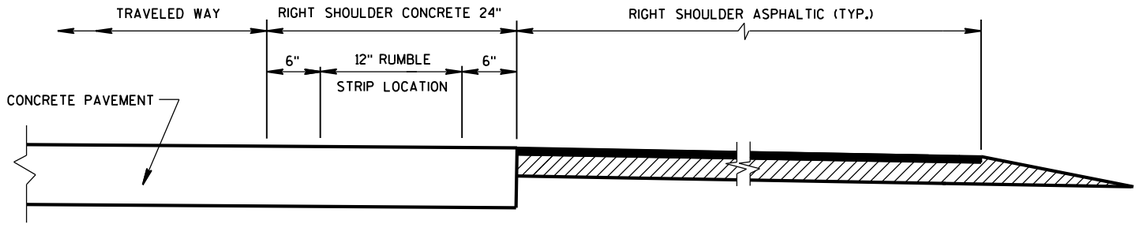
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

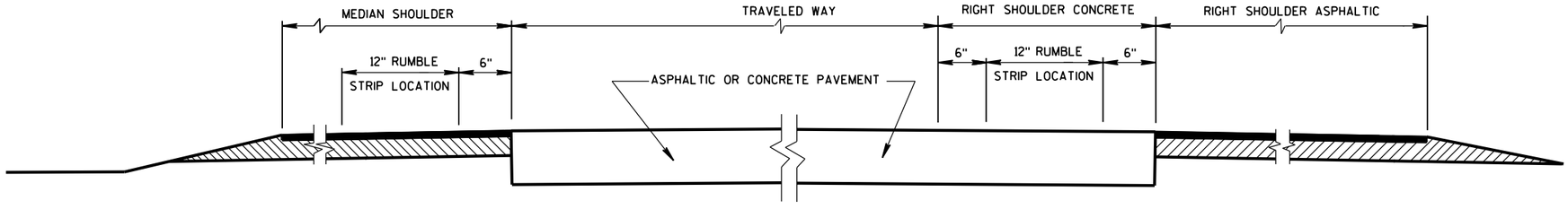
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



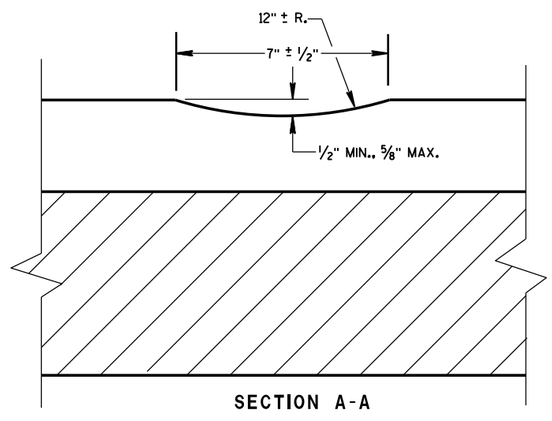
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

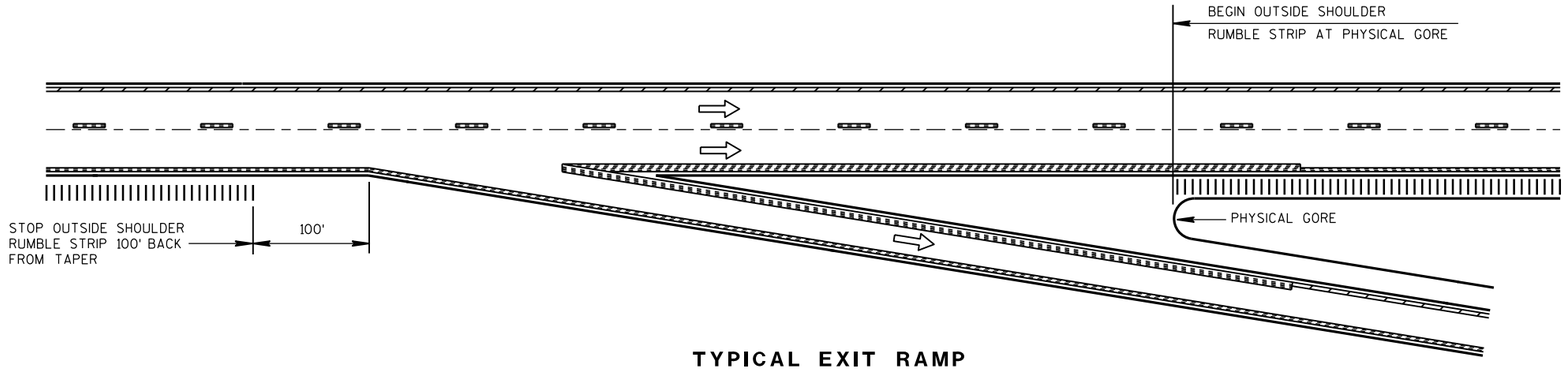
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 A 5-5a



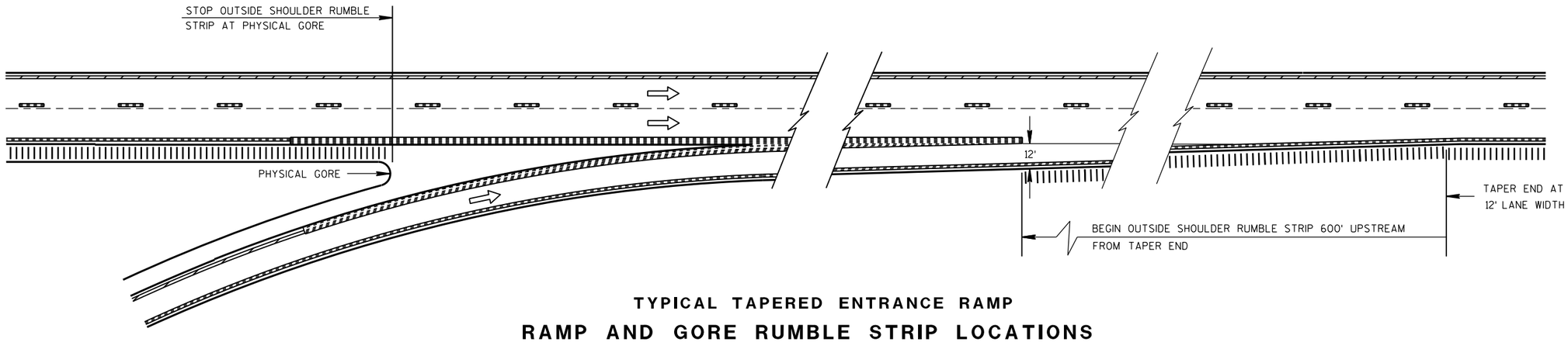
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

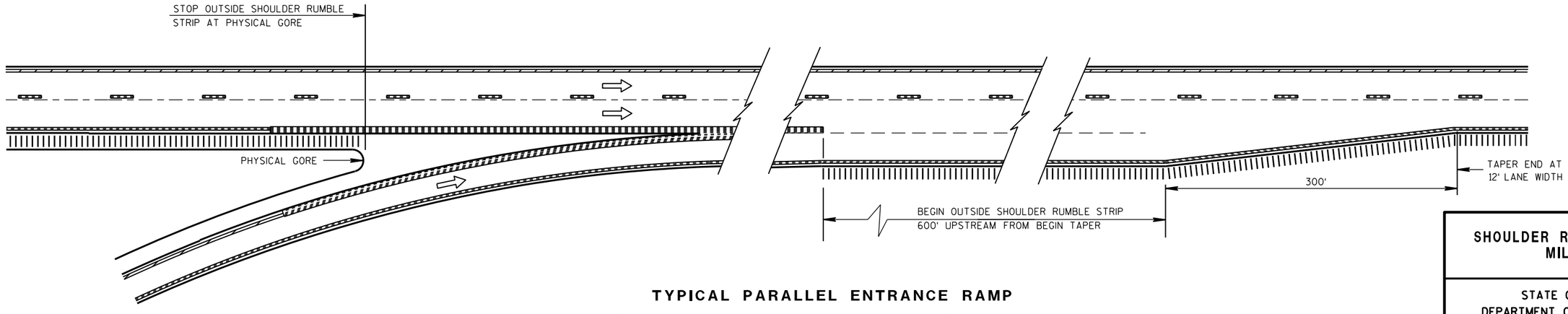
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

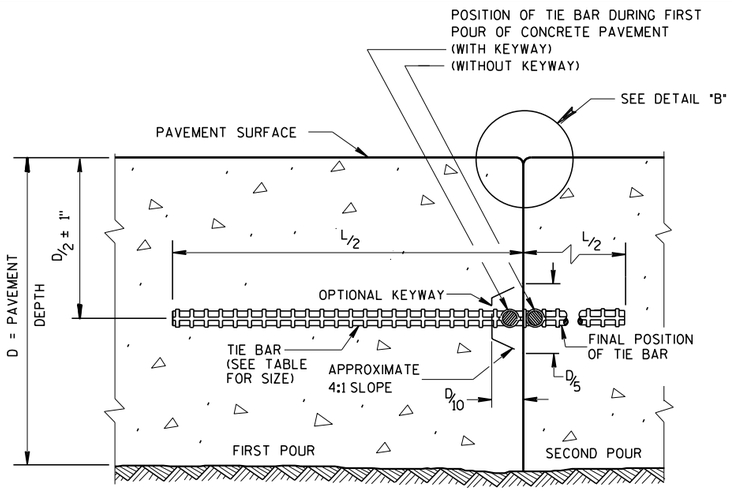
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

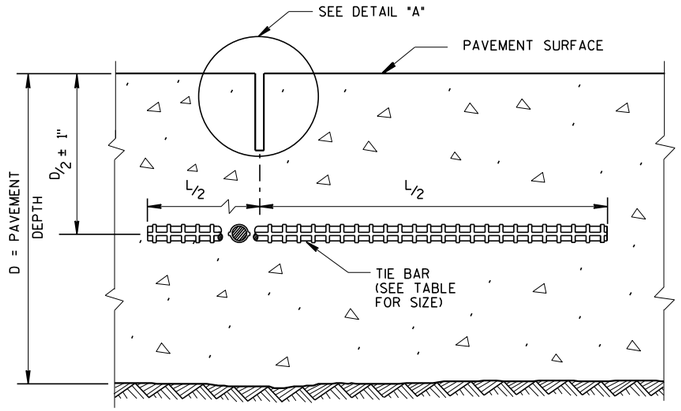
APPROVED
12/17/2012 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS ENGINEER
FHWA

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S.D.D. 13 A 5-5b



CONSTRUCTION JOINT



SAWED JOINT

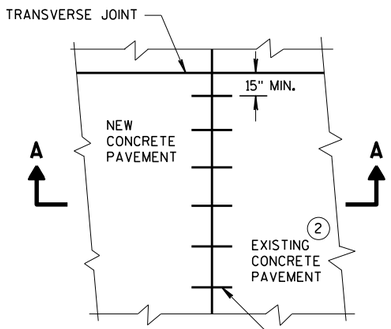
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

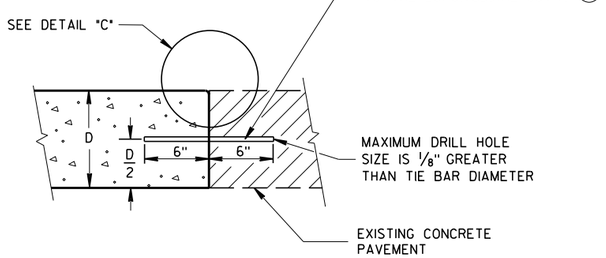
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

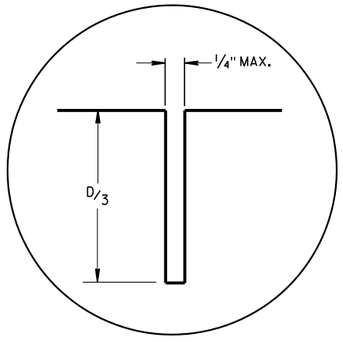
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



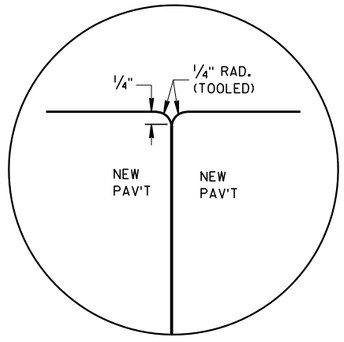
PLAN VIEW



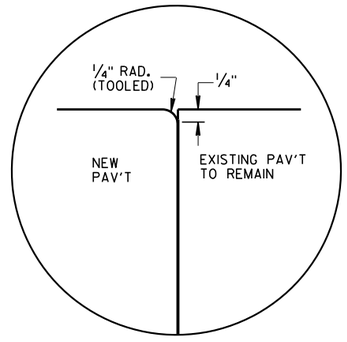
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



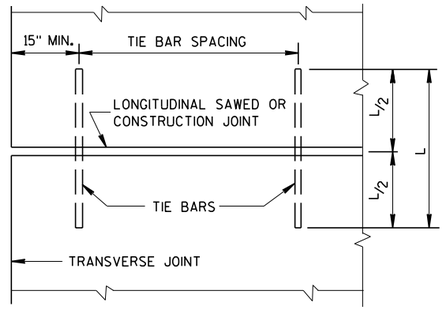
DETAIL "C"

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 — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

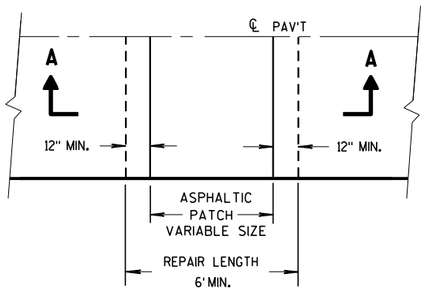
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

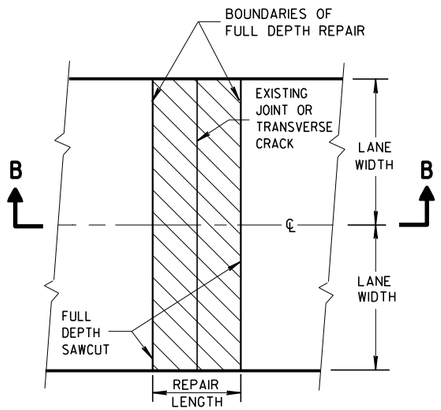
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

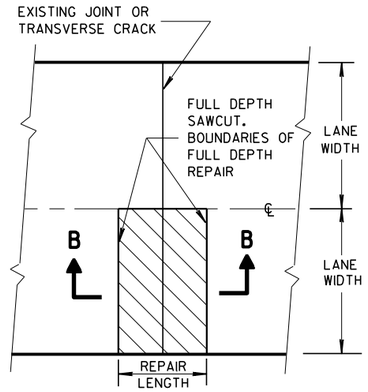
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

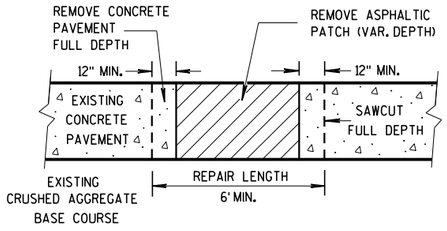


PLAN VIEW
(DOUBLE LANE REPAIR)



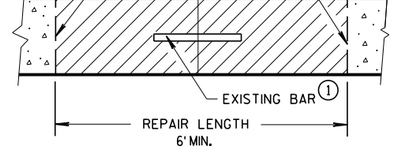
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



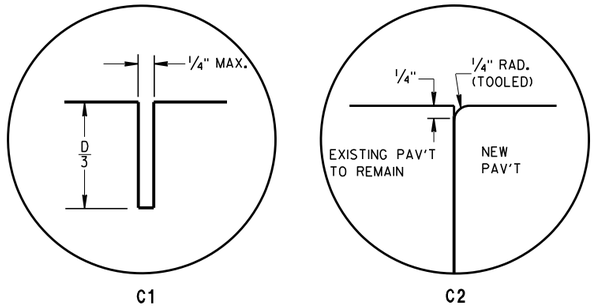
SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 13 C 9-15a



C1 C2

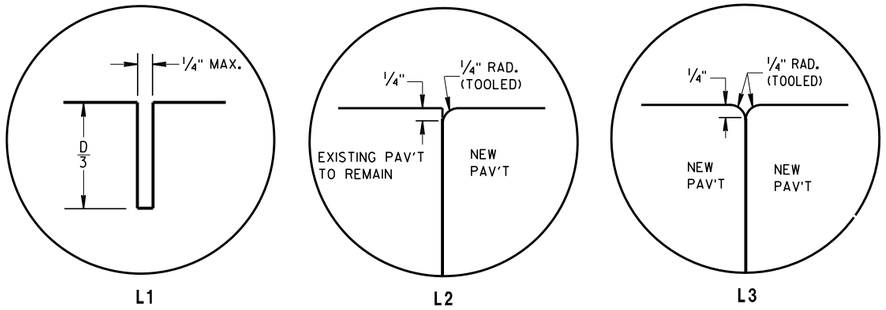
TRANSVERSE JOINTS

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" **

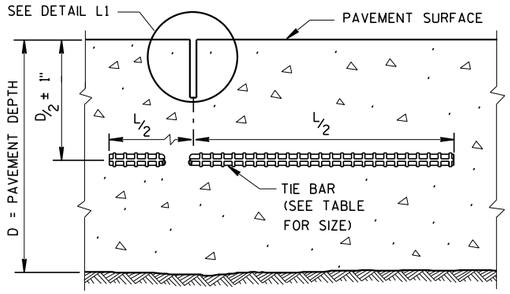
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

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



L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

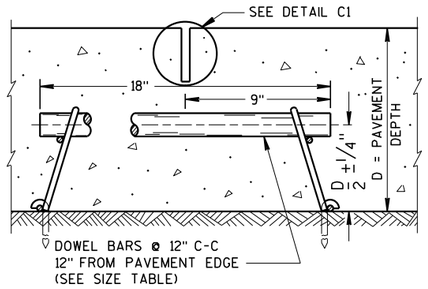
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

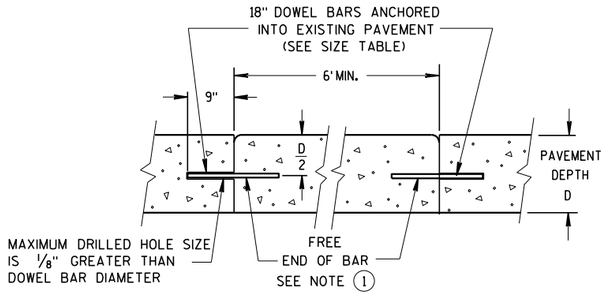
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

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

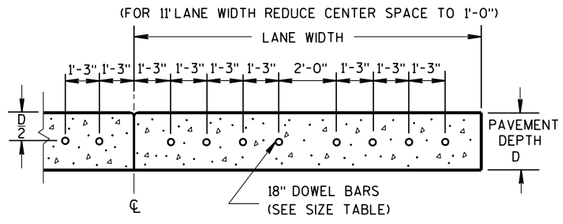


SECTION F-F

CONTRACTION JOINT



SECTION D-D

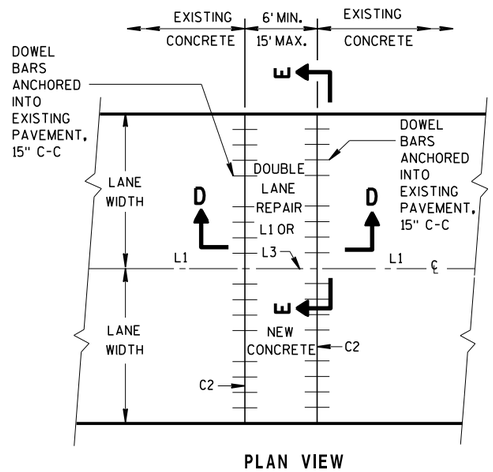


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

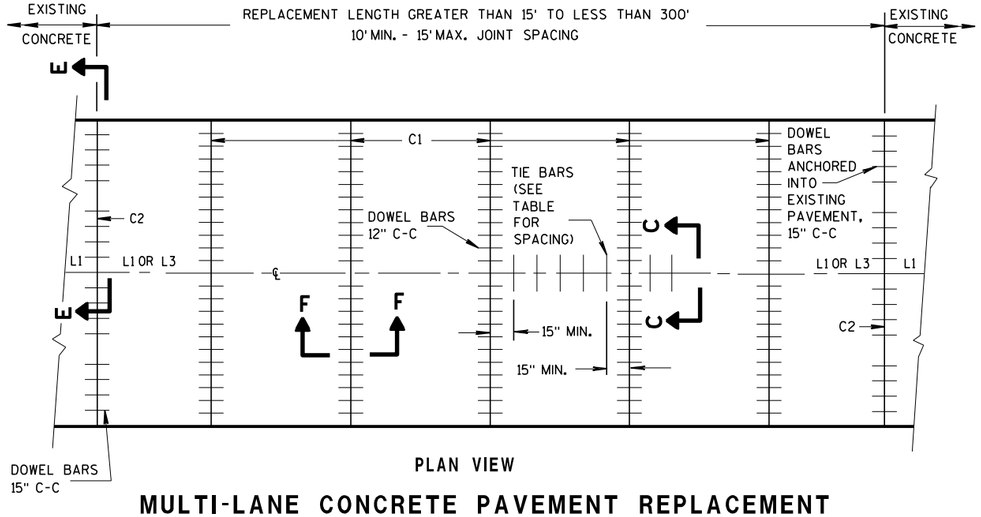
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



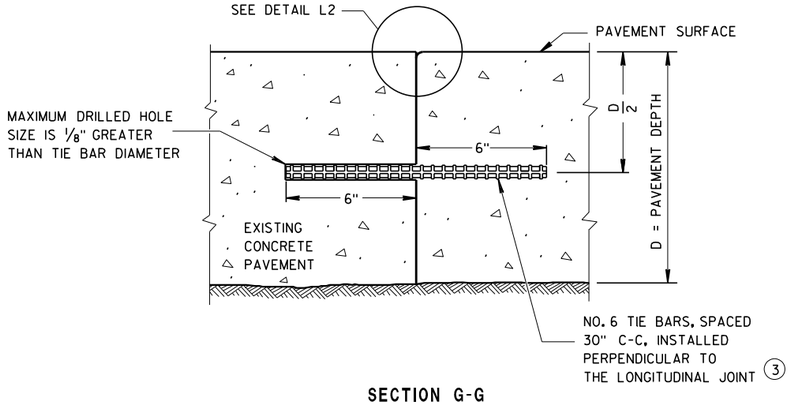
PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

6

S.D.D. 13 C 9-15b



SECTION G-G

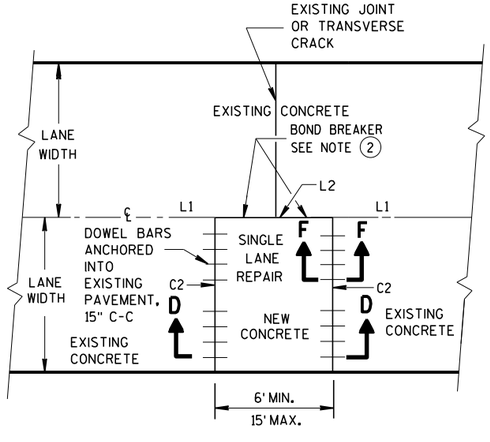
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

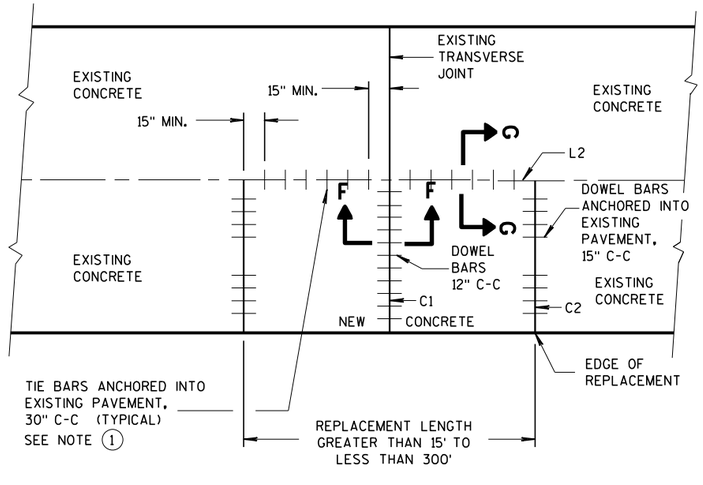
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Ken... — PAVEMENT SUPE...
FHWA

S.D.D. 13 C 9-15c

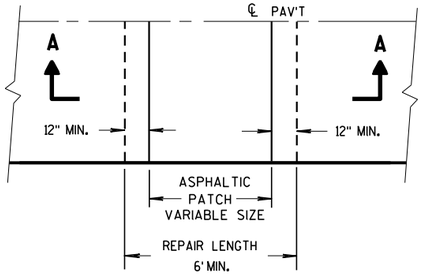
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

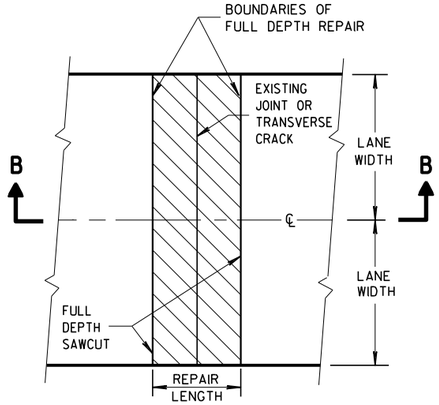
PROVIDE 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

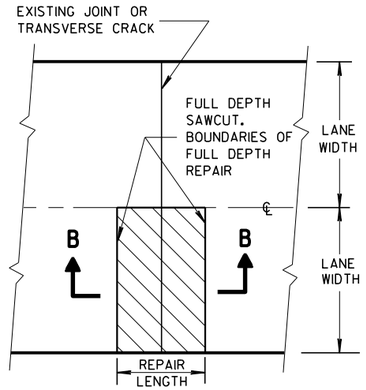
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

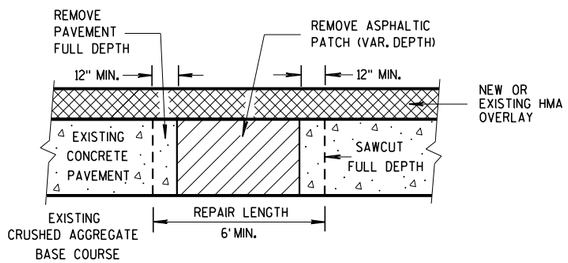


PLAN VIEW
(DOUBLE LANE REPAIR)



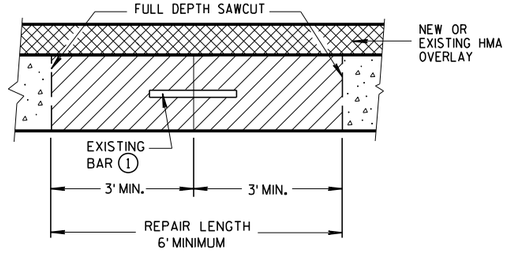
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

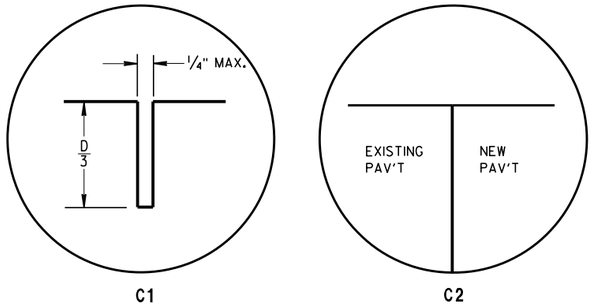
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6

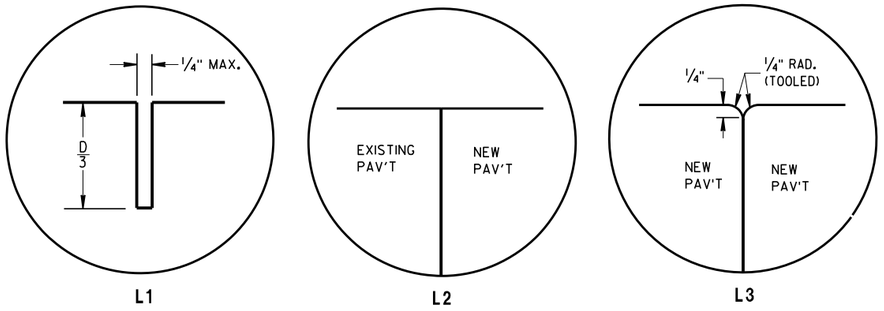
S.D.D. 13 C 14-7a

S.D.D. 13 C 14-7a

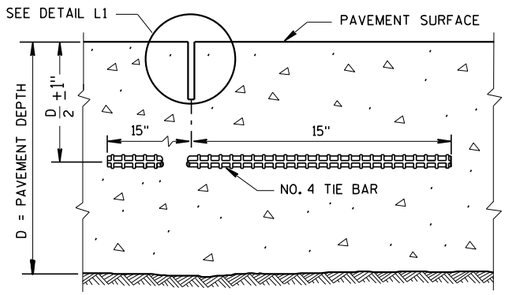
BASE PATCHING CONCRETE



TRANSVERSE JOINTS

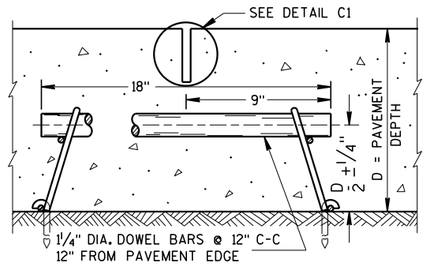


LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT



SECTION F-F

CONTRACTION JOINT

GENERAL NOTES

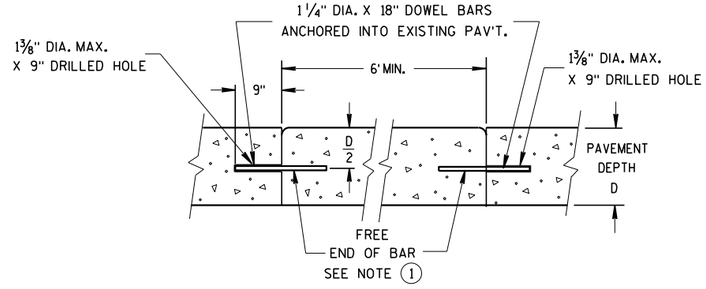
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE BASE PATCHES OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

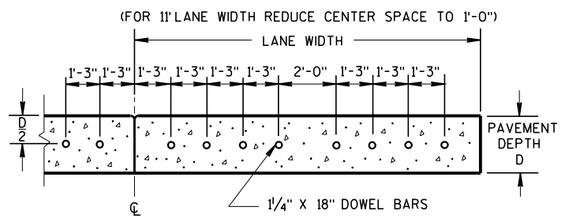
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

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

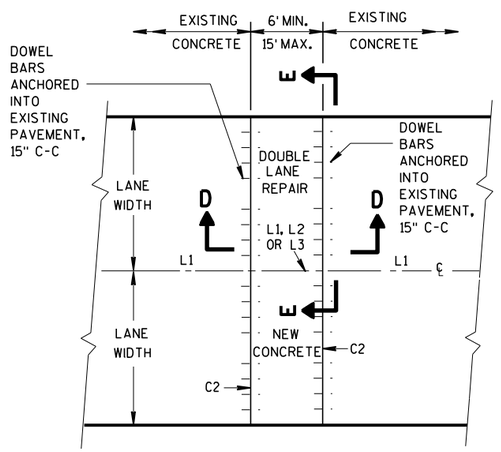


SECTION D-D



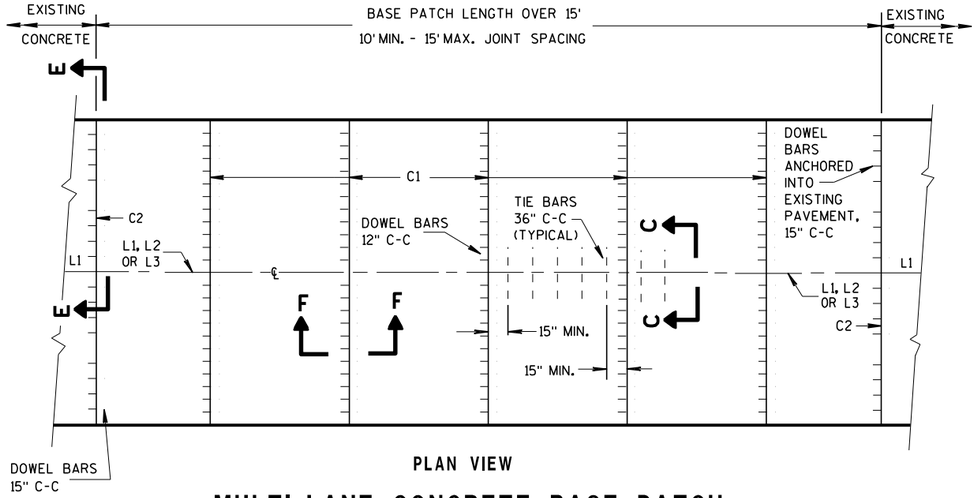
SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

MULTI-LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

S.D.D. 13 C 14-7b

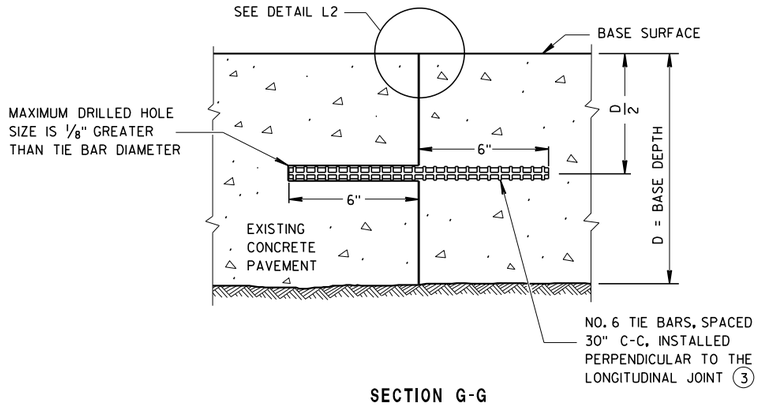
6

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE BASE PATCHES UP TO 15 FEET IN LENGTH.

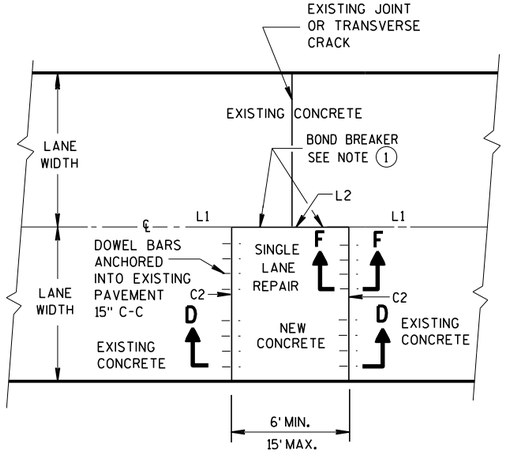
(2) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, DRILLED TIE BARS MAY BE INSTALLED ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



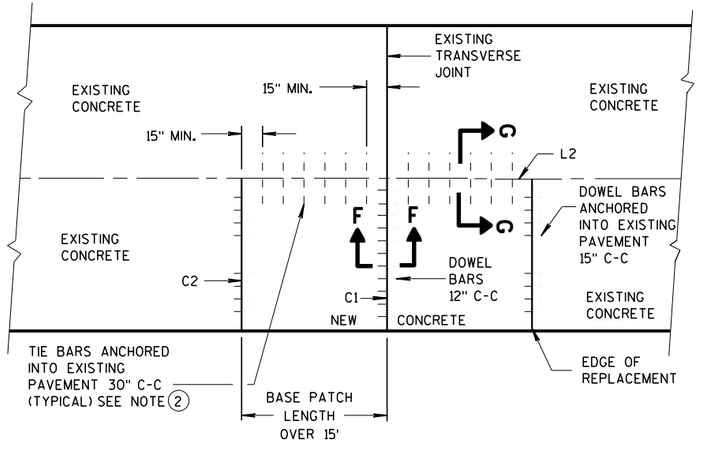
SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH 15' MAXIMUM LENGTH



PLAN VIEW

SINGLE LANE CONCRETE BASE PATCH GREATER THAN 15' IN LENGTH

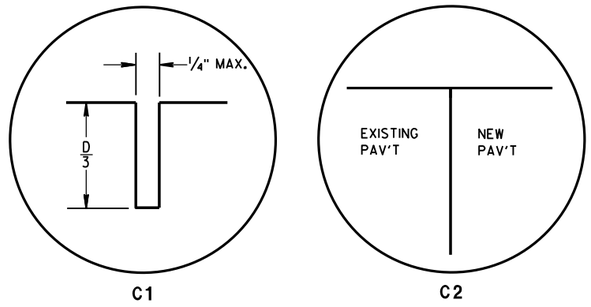
BASE PATCHING CONCRETE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPERVISOR
FHWA

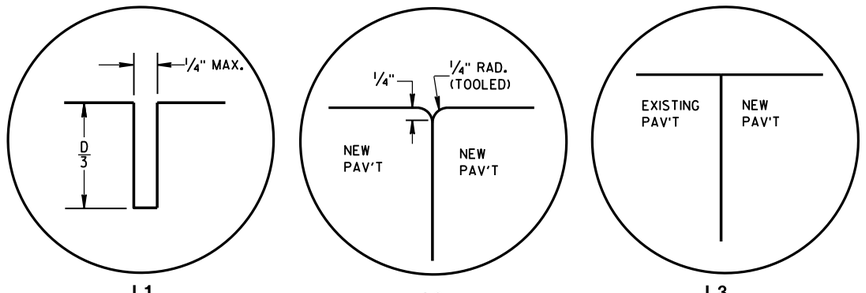
6

S.D.D. 13 C 14-7c



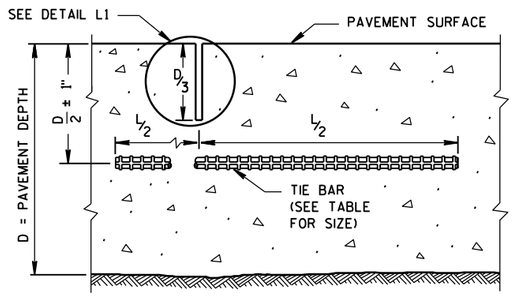
C1 C2

TRANSVERSE JOINTS



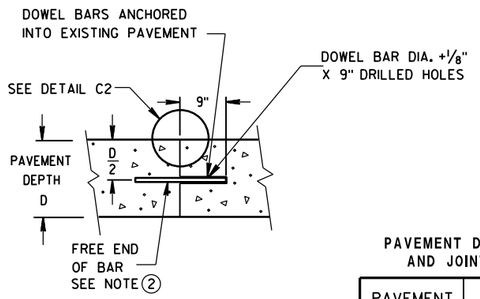
L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED JOINT



SECTION D-D

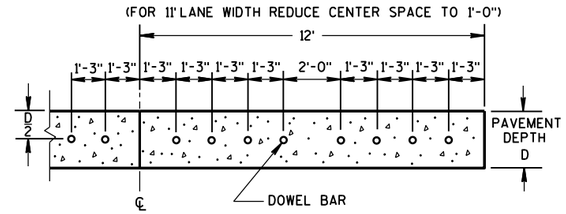
GENERAL NOTES

ANCHOR TIE BARS AND DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY.

PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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



SECTION E-E

SPACING OF DOWEL BARS ANCHORED INTO EXISTING PAVEMENT

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

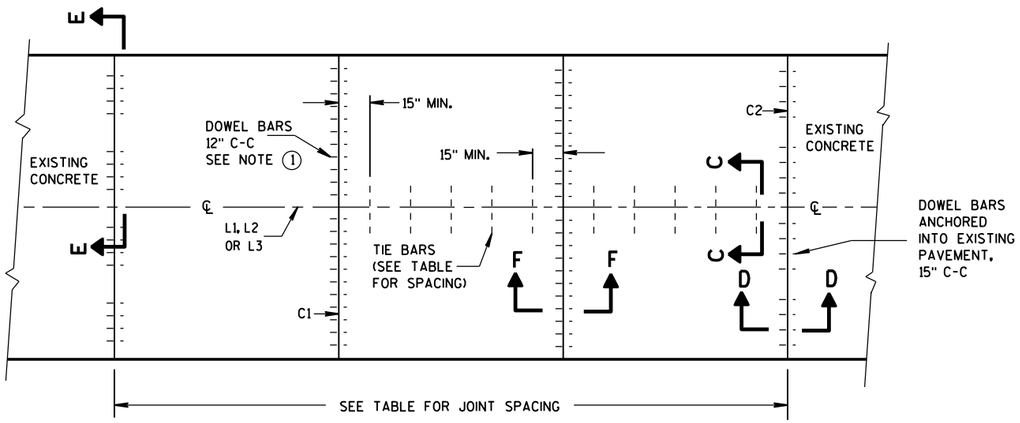
PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5½", 6, 6 ½"	NONE	12'
7, 7 ½"	1"	14'
8, 8 ½"	1 ¼"	15'
9, 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'

TIE BAR TABLE

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

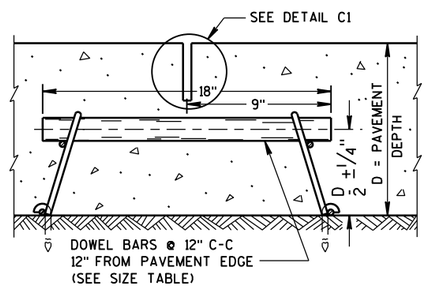
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

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



PLAN VIEW

CONCRETE BASE CONTRACTION JOINT LOCATIONS



SECTION F-F

CONTRACTION JOINT

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 13 C 15-6a

6

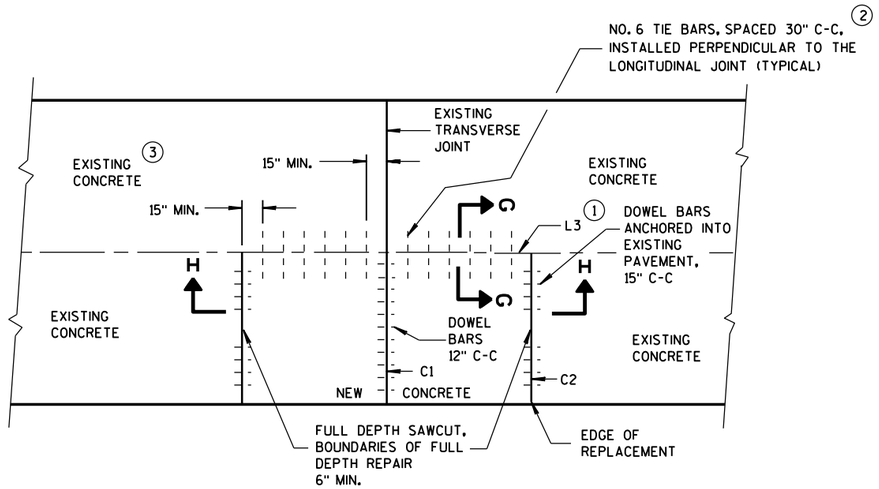
S.D.D. 13 C 15-6a

GENERAL NOTES

(1) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.

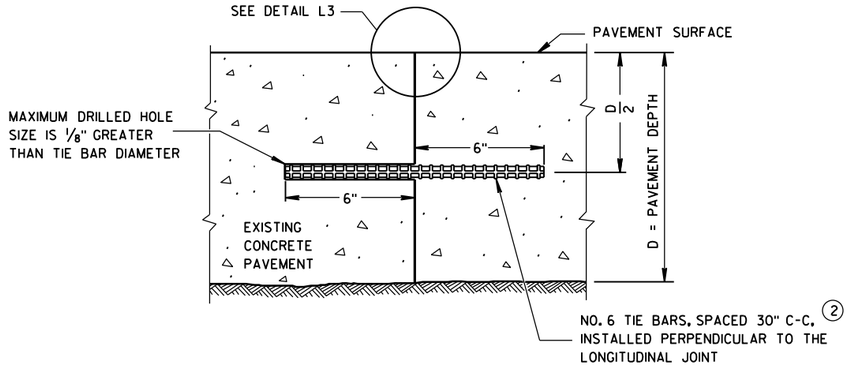
(2) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(3) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



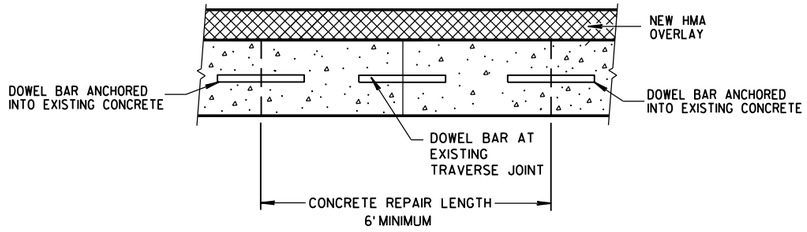
PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR



SECTION G-G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



SECTION H-H

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015 — DATE
/S/ Peter Kemp, P.E. — PAVEMENT SUPEI
FHWA

6

S.D.D. 13 C 15-6b

6

S.D.D. 13 C 15-6b

GENERAL NOTES

PCCP = PORTLAND CEMENT CONCRETE PAVEMENT.

SHLDR = SHOULDER.

CONTINUE SAW CUT CONTRACTION JOINT ACROSS TURN LANE, EXIT TAPER AND PASSING LANE.

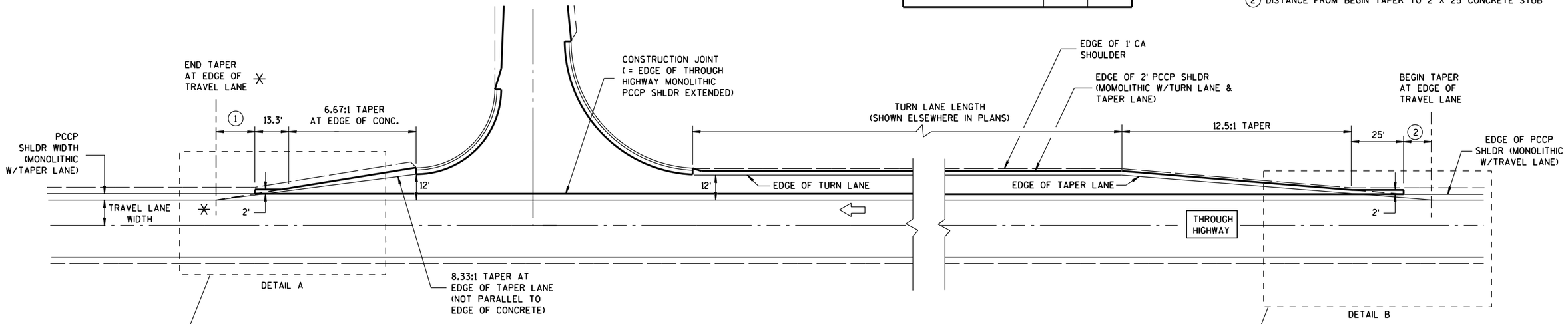
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

THROUGH HIGHWAY LANE WIDTH AND PCCP SHOULDER WIDTH ARE SHOWN ELSEWHERE IN PLANS

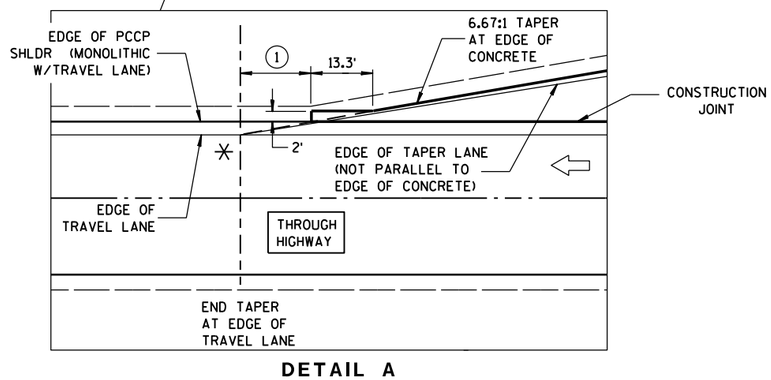
(1) DISTANCE FROM END TAPER TO 2' X 13.3' CONCRETE STUB

(2) DISTANCE FROM BEGIN TAPER TO 2' X 25' CONCRETE STUB

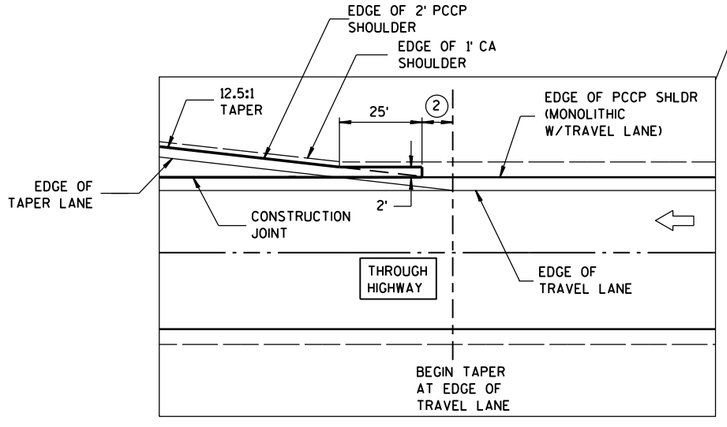
THROUGH HIGHWAY MONOLITHIC PCCP SHOULDER WIDTH (FEET)	DISTANCE (FEET) (1)	DISTANCE (FEET) (2)
2	13.3	0.0
3	20.0	12.5
TAPER RATE : 1	6.67	12.5



✳ NOTE: EDGE OF CONCRETE TAPER (EXTENDED) & EDGE OF TAPER LANE CONVERGE



DETAIL A



DETAIL B

RIGHT TURN LANE AND EXIT TAPER

DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY

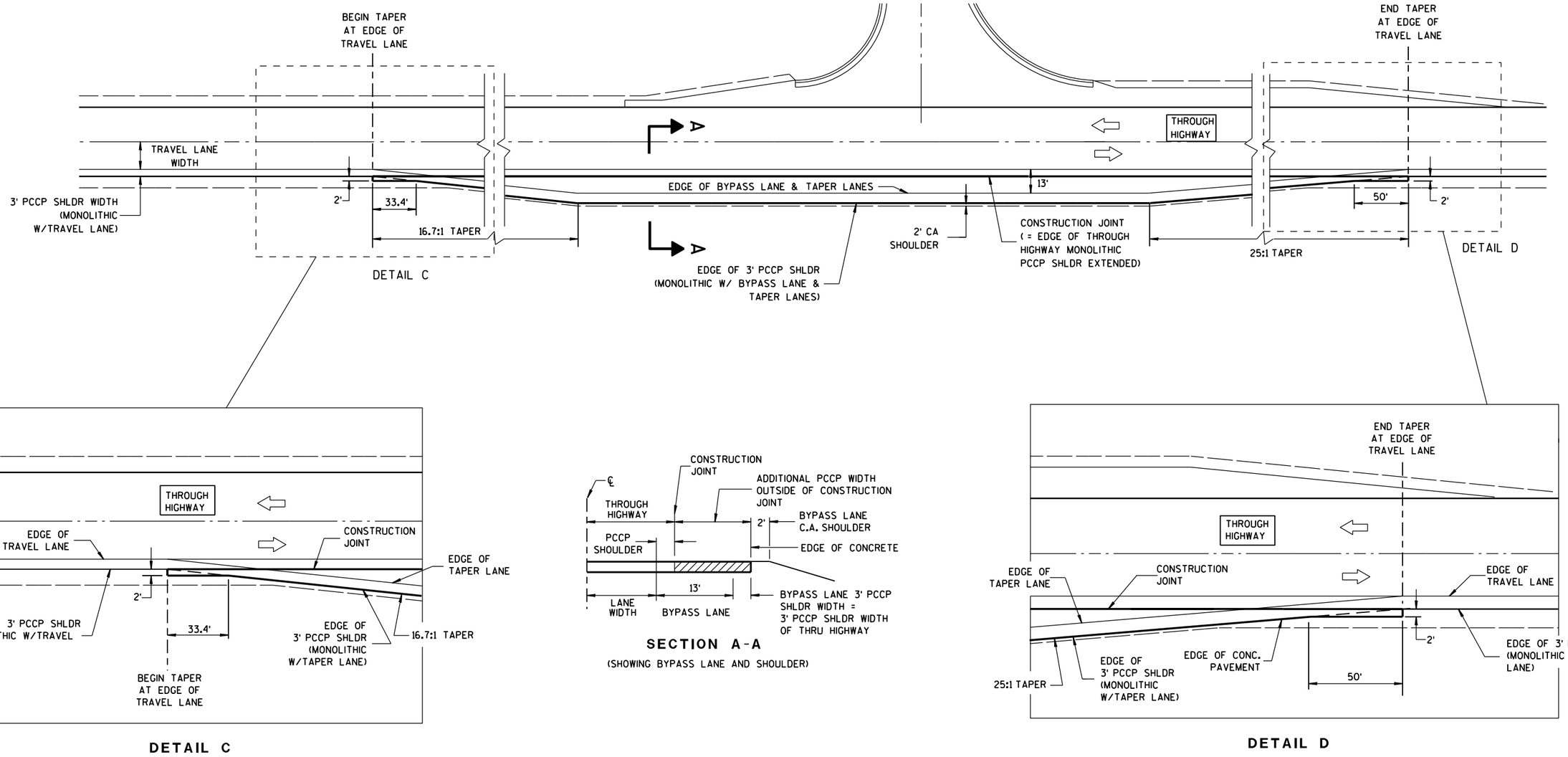
STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 13 C 16-2a

6

S.D.D. 13 C 16-2a

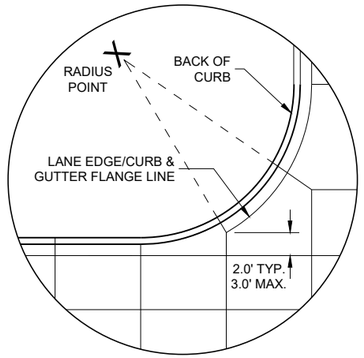


TWO LANE UNDIVIDED HIGHWAY TEE INTERSECTION BYPASS LANE

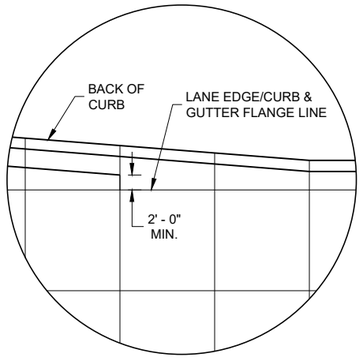
DETAIL FOR RIGHT TURN LANE/ TEE INTERSECTION BYPASS LANE ON A CONCRETE ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
12/18/12 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER
FHWA	

6

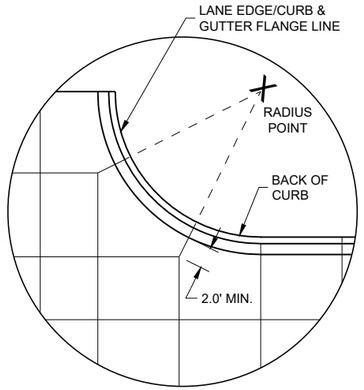
S.D.D. 13 C 16-2b



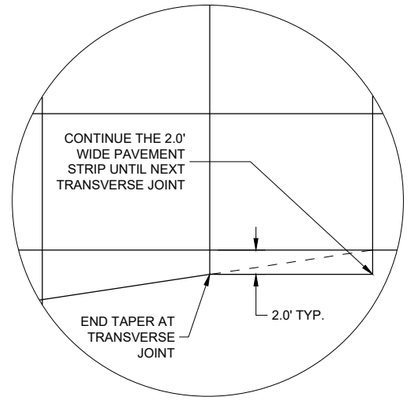
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

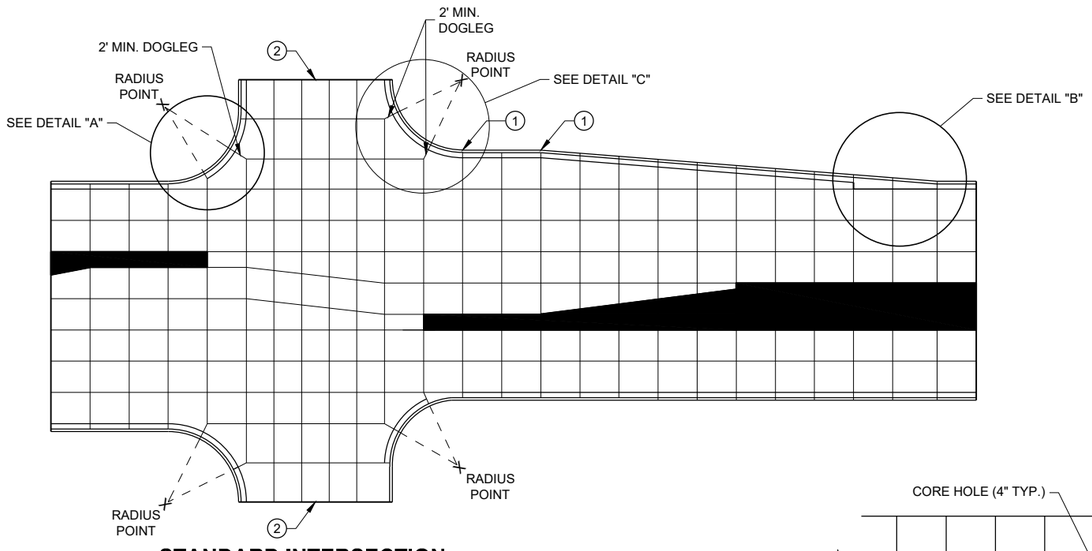
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

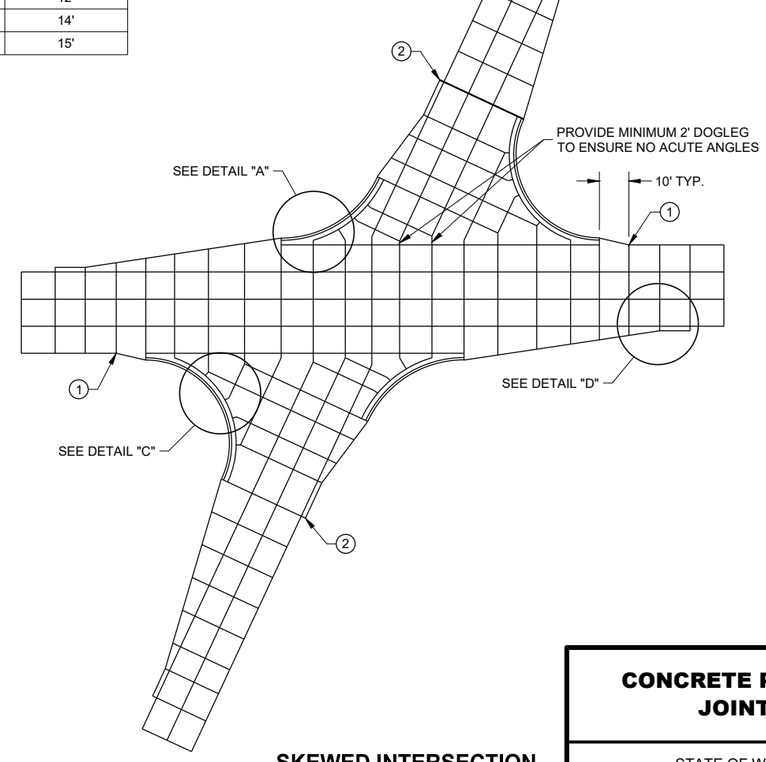
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



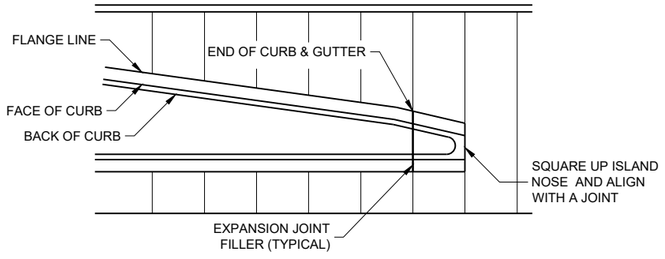
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

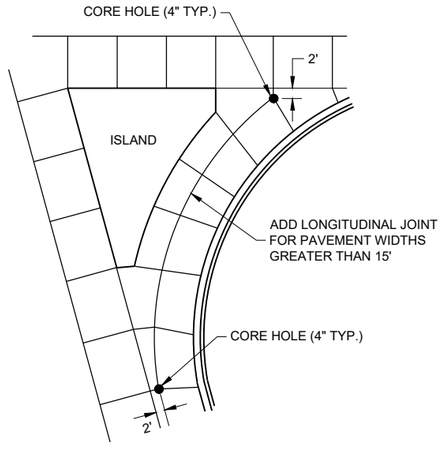
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

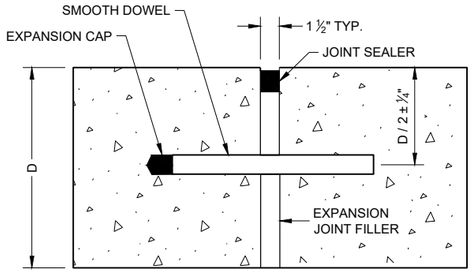
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

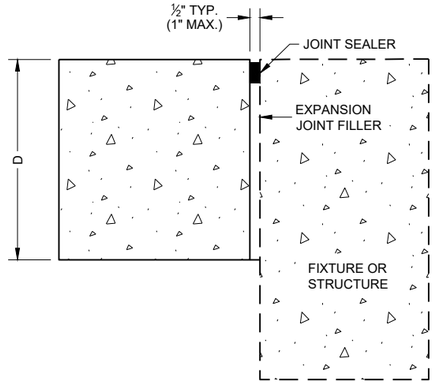
SDD 13C18 - 07a

6

SDD 13C18 - 07a



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

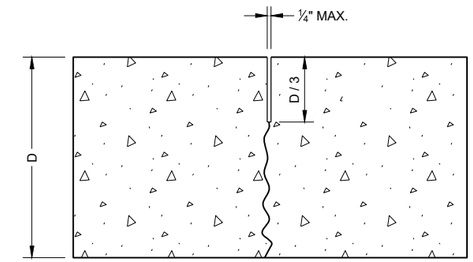
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

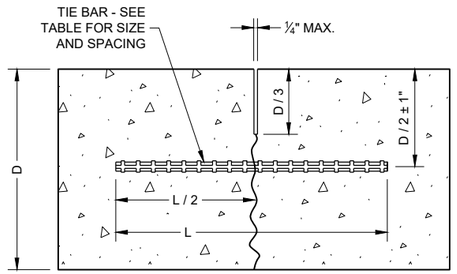
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

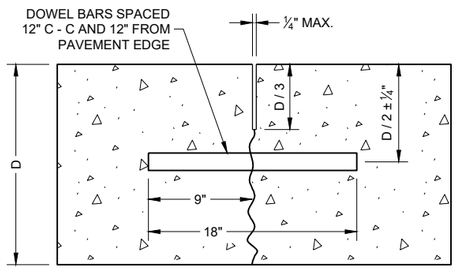
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

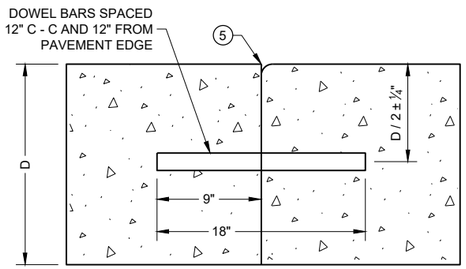


TIED LONGITUDINAL

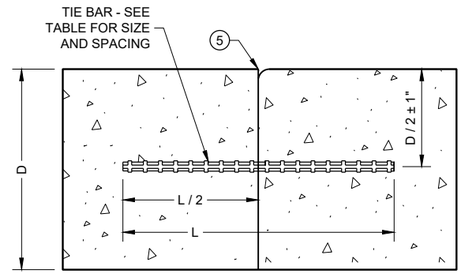


DOWELED TRANSVERSE

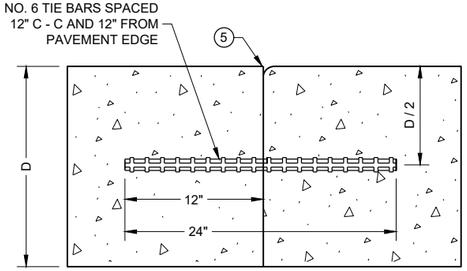
CONTRACTION JOINTS (2)



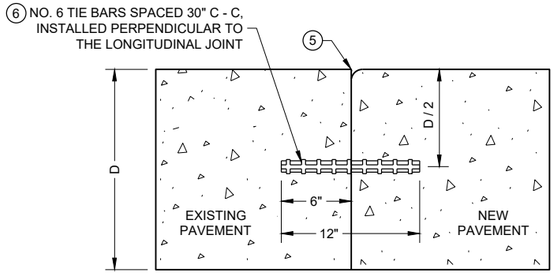
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



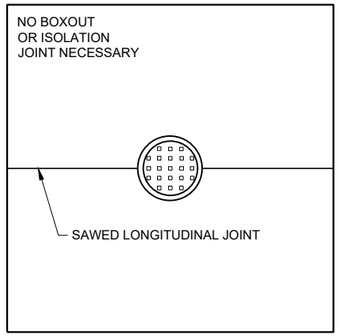
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS (4)

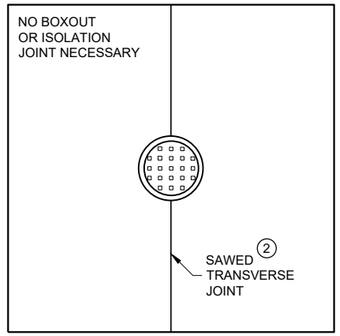
CONCRETE PAVEMENT JOINT TYPES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

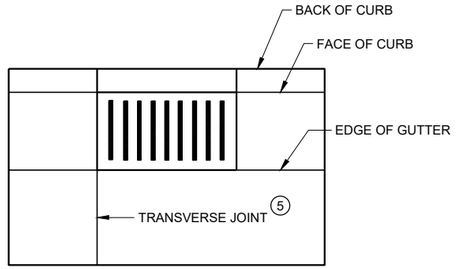
6
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



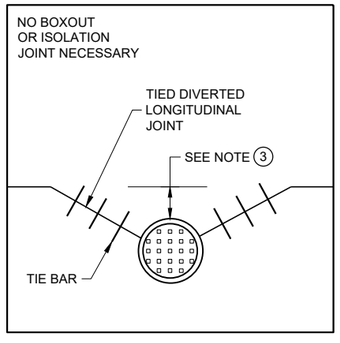
MANHOLE WITH TRANSVERSE JOINT



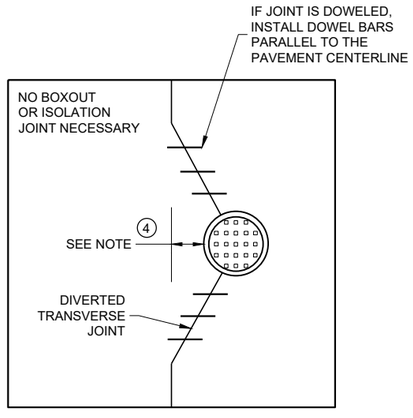
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

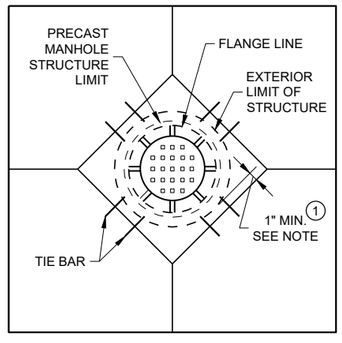
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

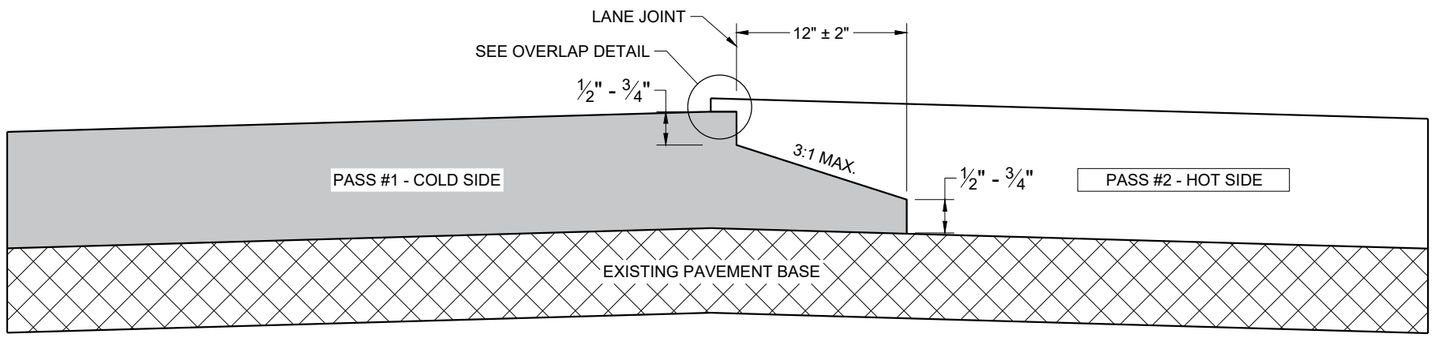
FHWA

6

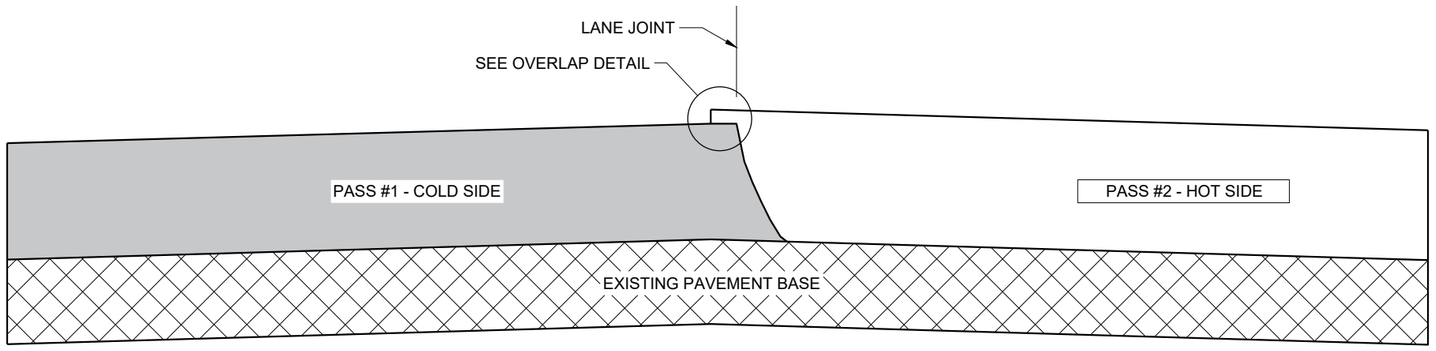
SDD13C18 - 07d

6

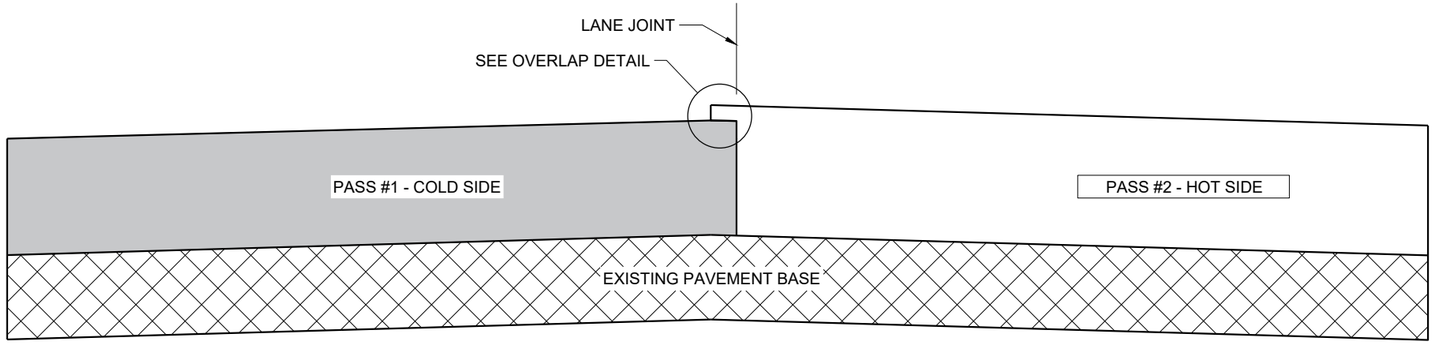
SDD13C18 - 07d



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

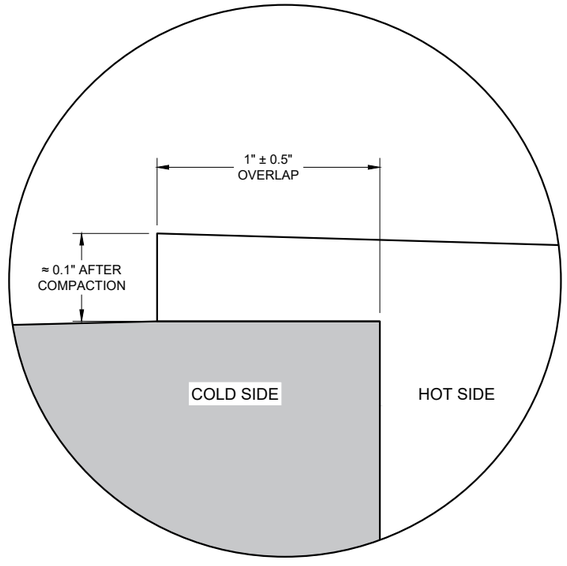
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

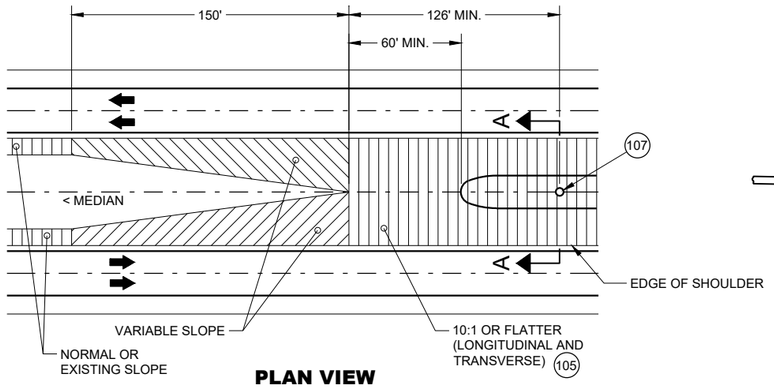
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

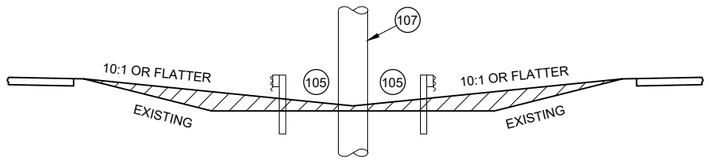
APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)



SECTION A -A
MEDIAN GRADING
(ALL INSTALLATIONS)

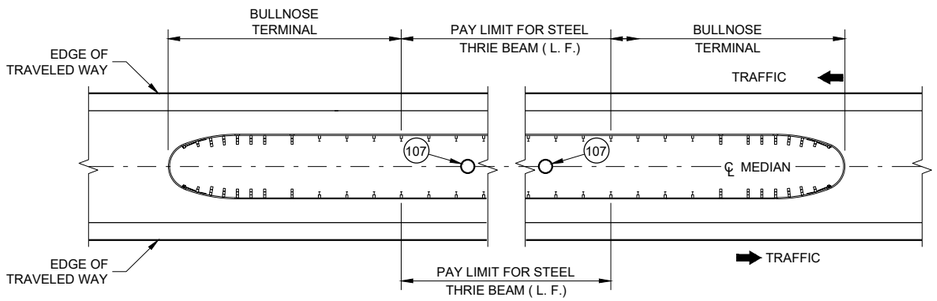
GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

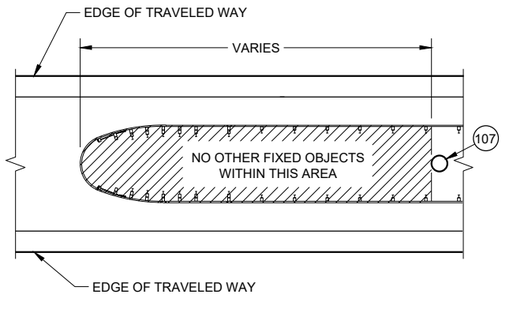
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

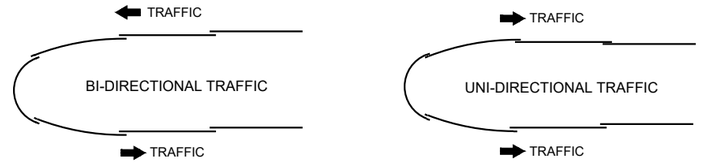
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD 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.



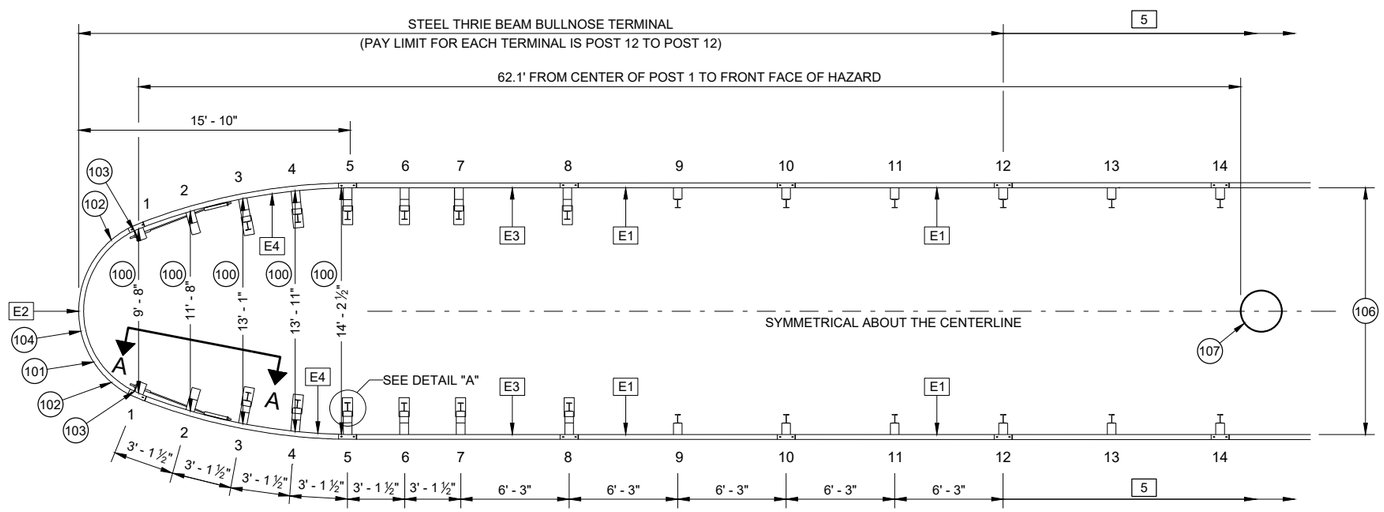
MEDIAN HAZARD PROTECTION PAY LIMITS



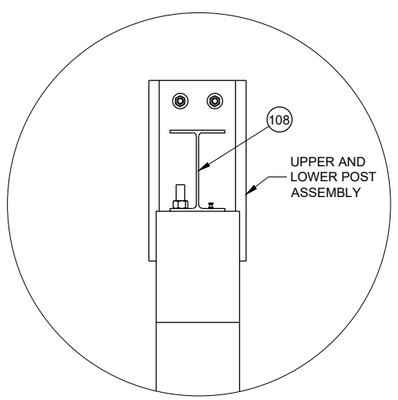
HAZARD FREE AREA
INSIDE BULLNOSE



LAPPING DETAIL



PLAN VIEW
TYPICAL BULLNOSE LAYOUT



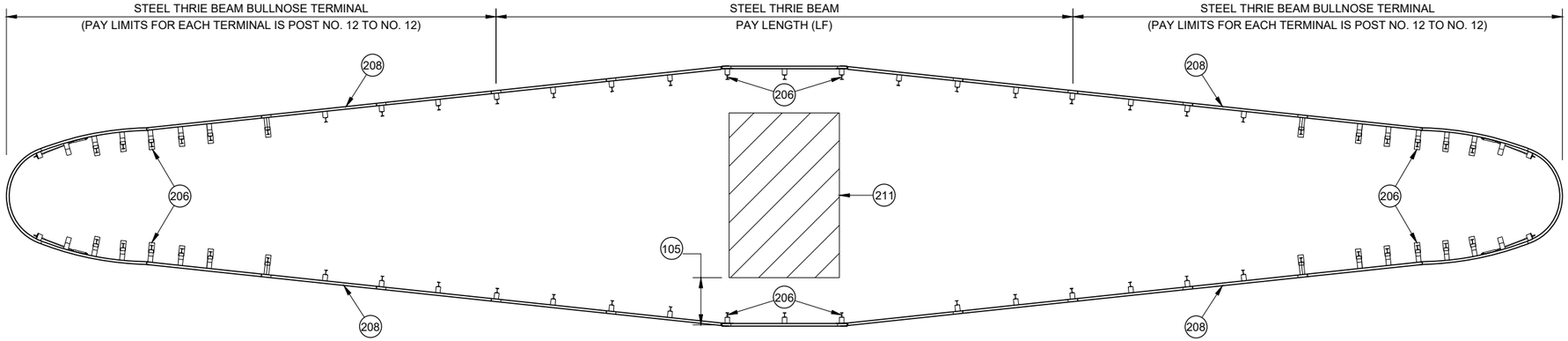
DETAIL "A"

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.

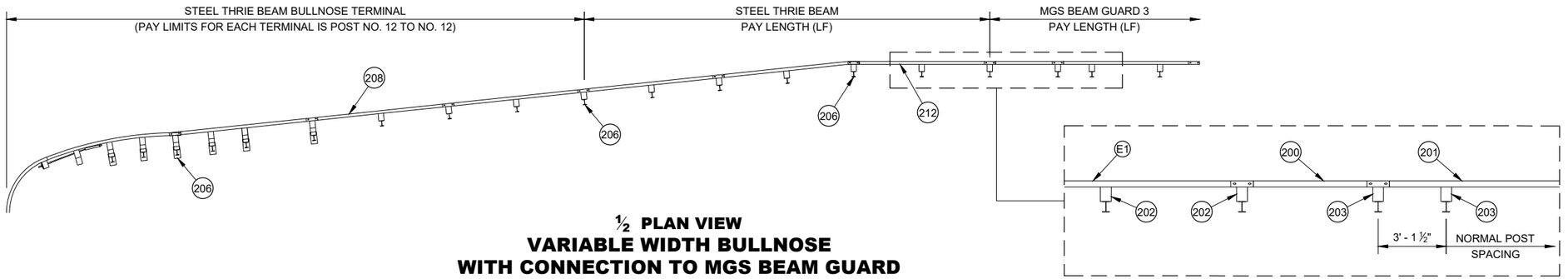
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

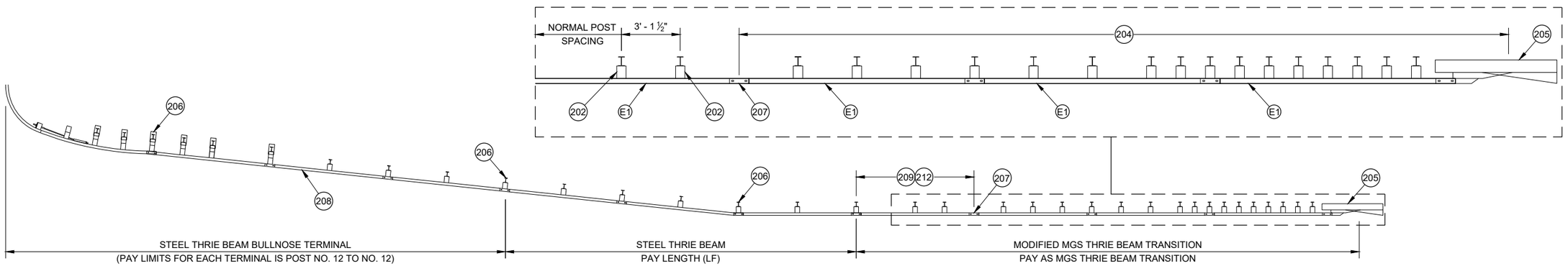
210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

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



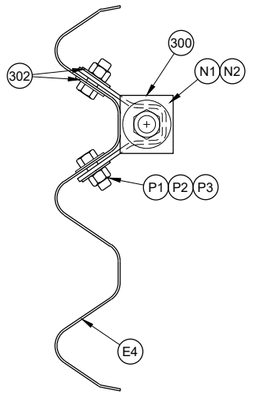
½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO RIGID BARRIER

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

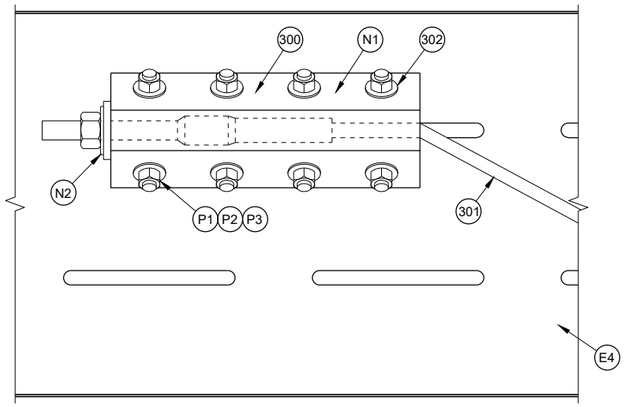
6

SDD 14B26 - 04b

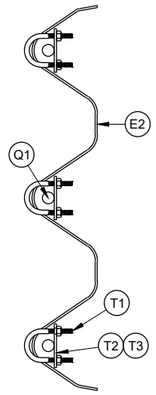


PROFILE VIEW

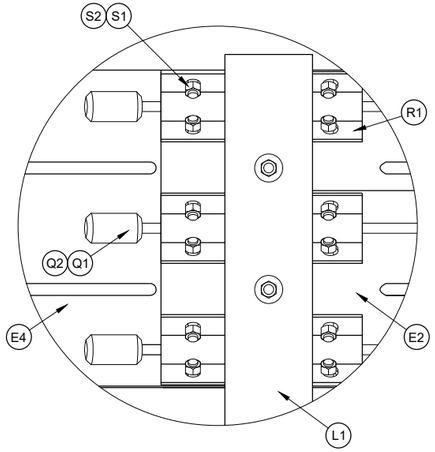
CABLE ANCHOR ASSEMBLY CONNECTION



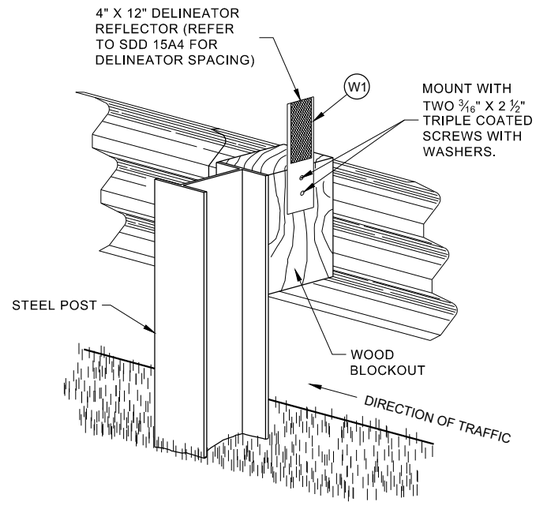
CABLE ANCHOR ASSEMBLY



NOSE CABLE RETAINING CLIP

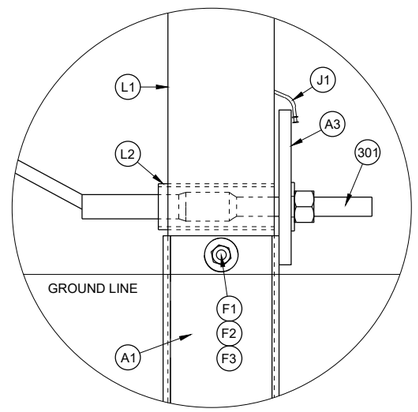


DETAIL "A"

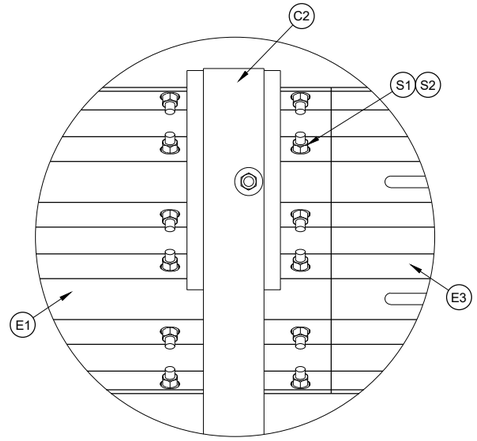


ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

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.

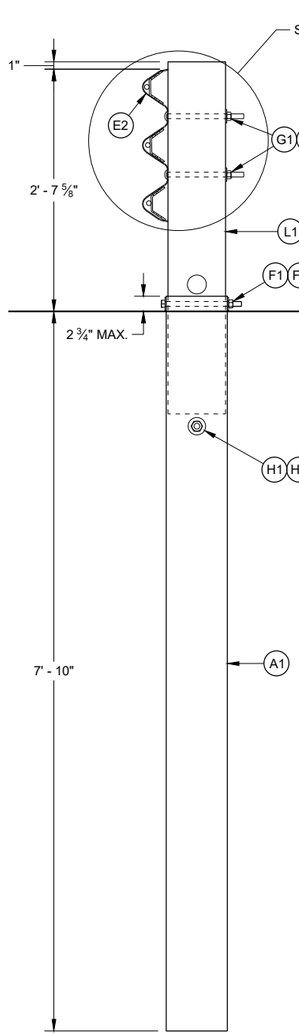
(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

STEEL THRIE BEAM BULLNOSE TERMINAL

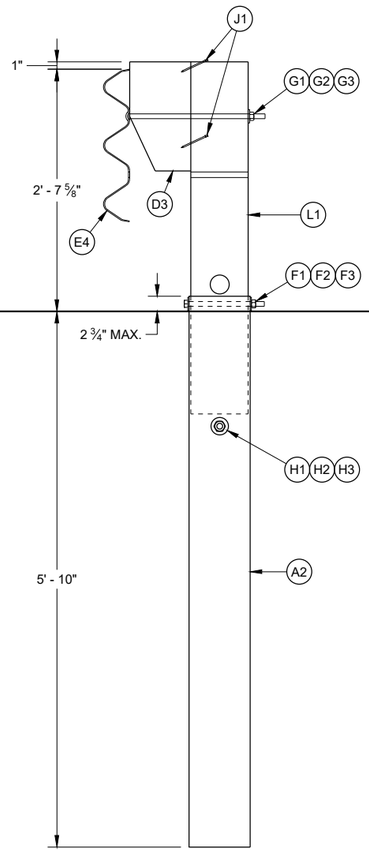
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

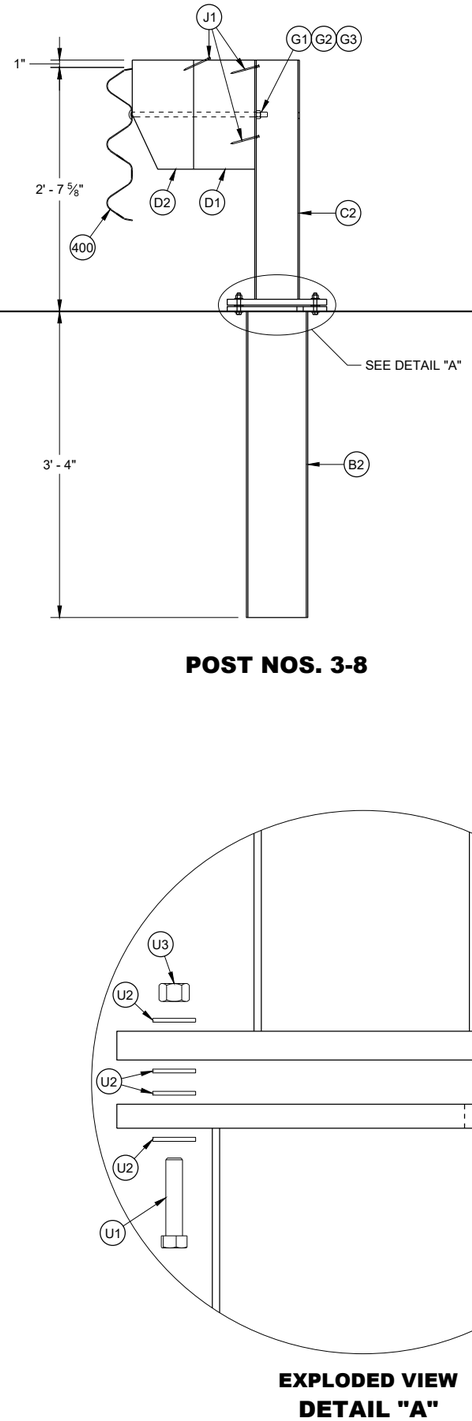
SDD 14B26 - 04c



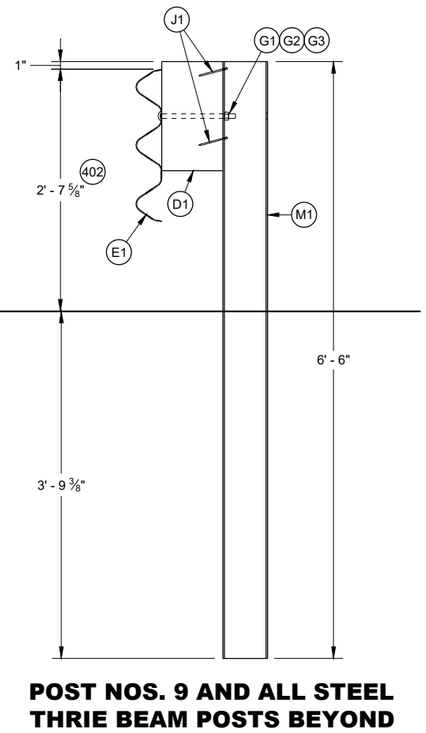
POST NO. 1



POST NO. 2



POST NOS. 3-8



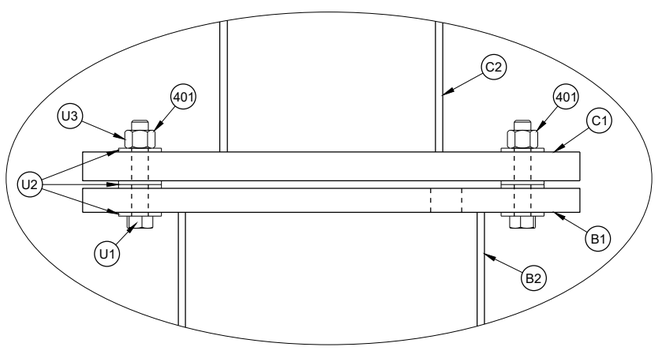
POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND

GENERAL NOTES

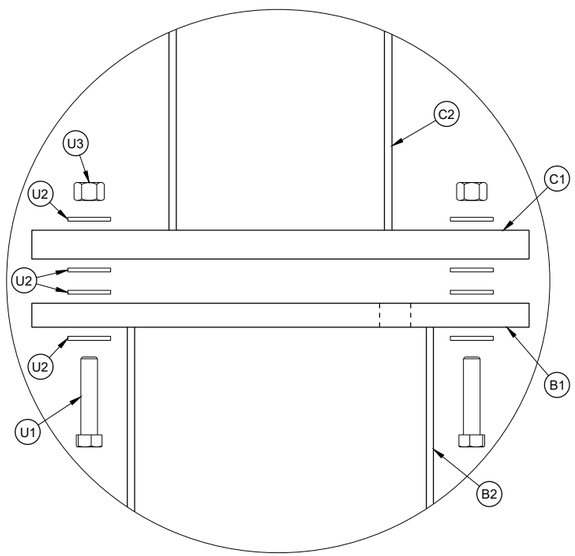
400 RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

401 TORQUE BOLD BETWEEN 60-75 FT-LB

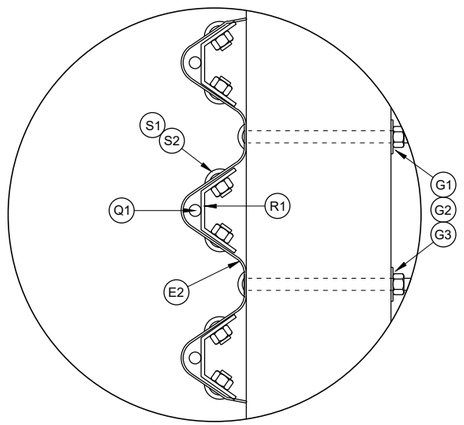
402 HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".



DETAIL "A"



EXPLODED VIEW
DETAIL "A"



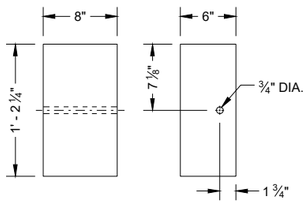
DETAIL "B"

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

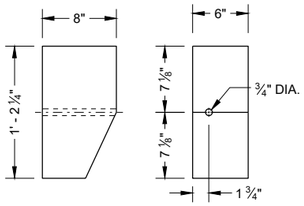
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SDD 14B26 - 04d



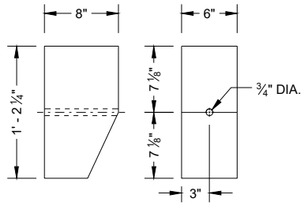
ELEVATION PROFILE

BLOCKOUT (D1)



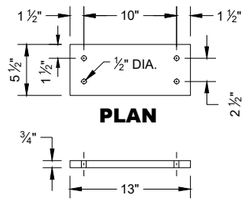
ELEVATION PROFILE

BLOCKOUT (D2)



ELEVATION PROFILE

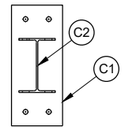
BLOCKOUT (D3)



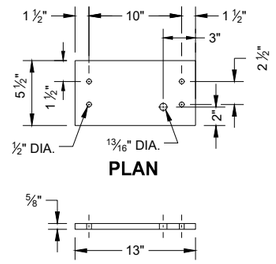
PLAN

PROFILE

UPPER SHEAR PLATE (C1)



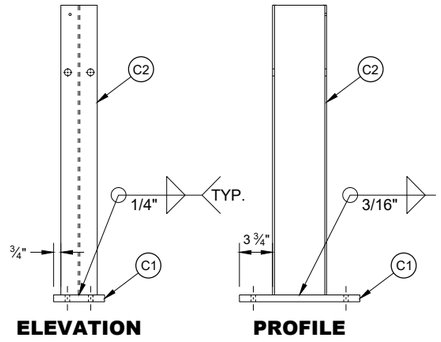
PLAN



PLAN

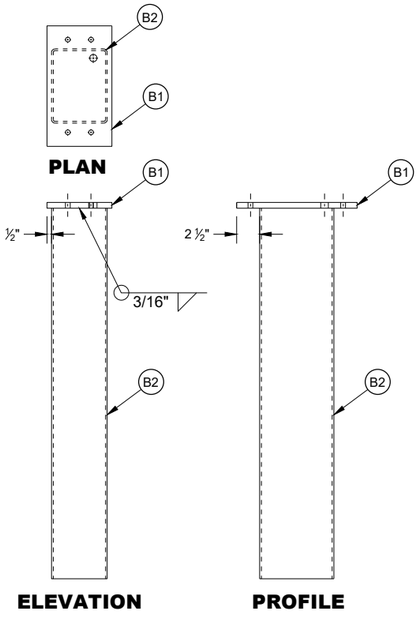
PROFILE

LOWER SHEAR PLATE (B1)



ELEVATION PROFILE

UPPER POST ASSEMBLY



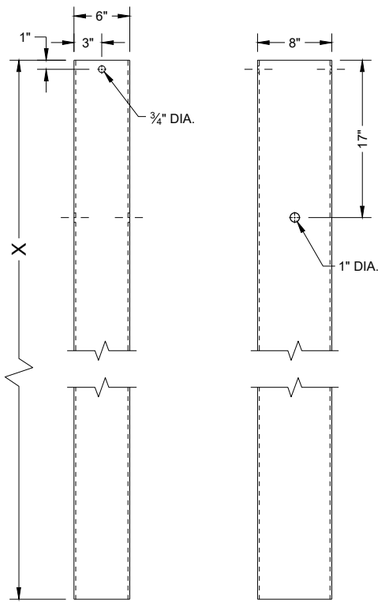
PLAN

ELEVATION PROFILE

LOWER POST ASSEMBLY

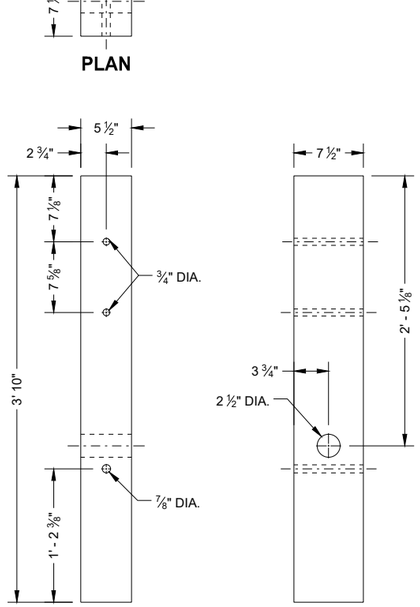
PLAN

PART	LENGTH "X"
A1	8' - 0"
A2	6' - 0"
B2	3' - 6"



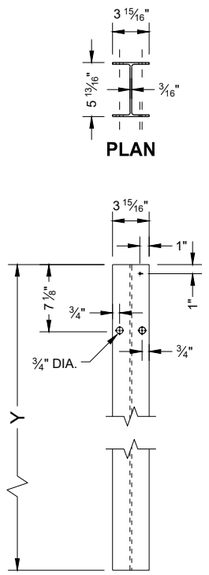
ELEVATION PROFILE

FOUNDATION TUBE



ELEVATION PROFILE

BCT POST (L1)



PLAN

ELEVATION

POST

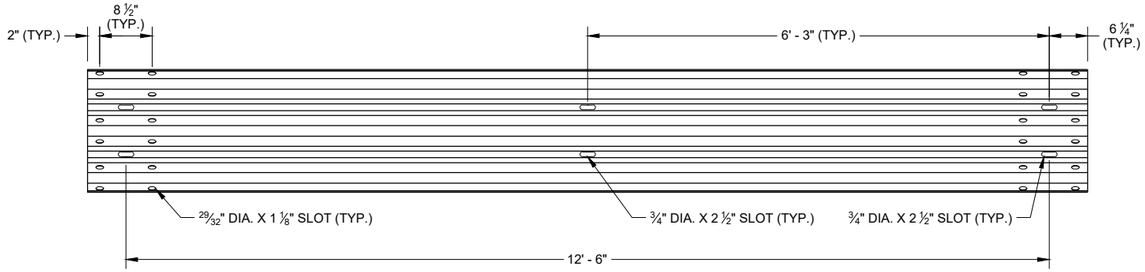
PART	LENGTH "Y"
M1	6' - 6"
M2	5' - 8 5/8"
C2	2' - 8 5/8"

STEEL THRIE BEAM BULLNOSE TERMINAL

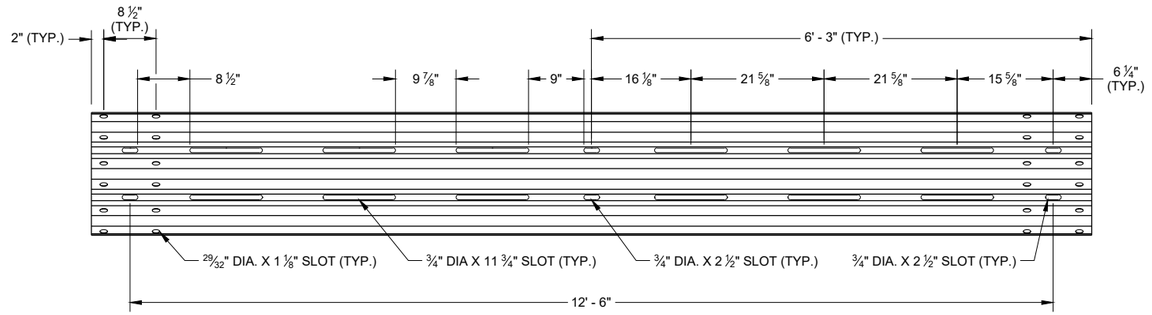
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

SDD 14B26 - 04e

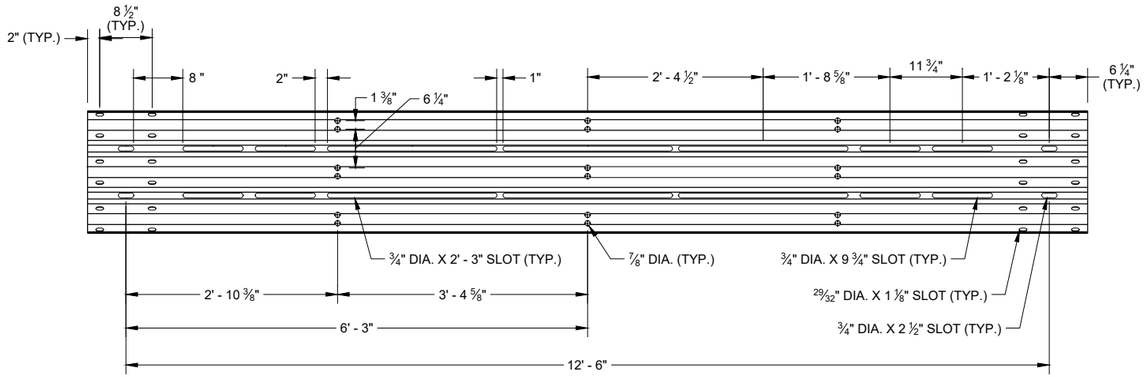
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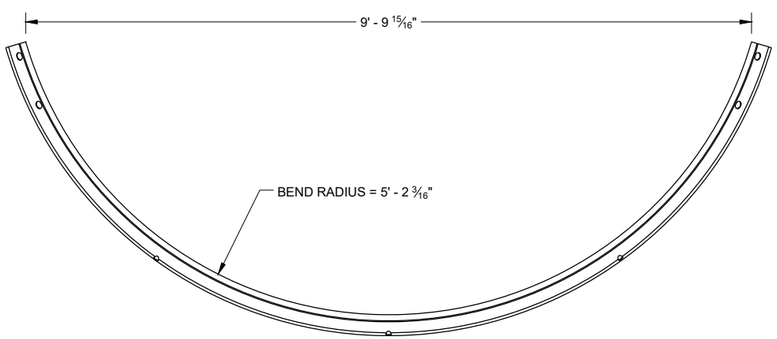
SLOTTED THRIE BEAM RAIL E1



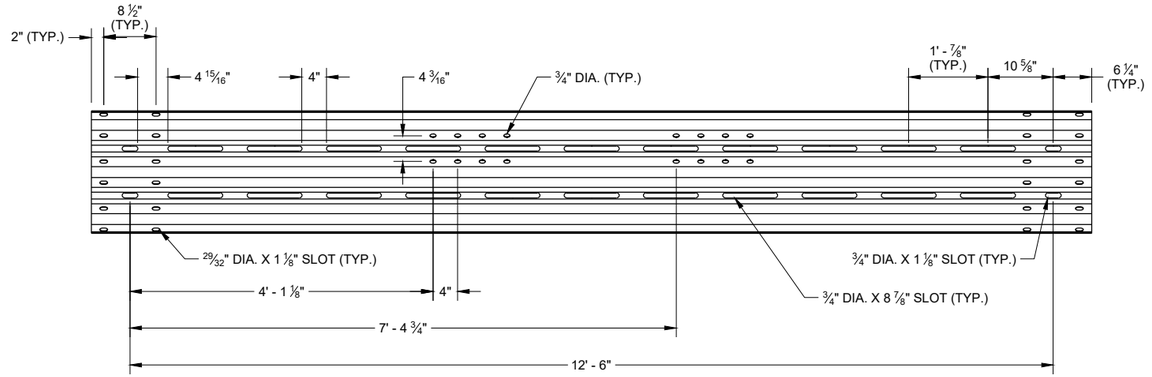
SLOTTED THRIE BEAM RAIL E3



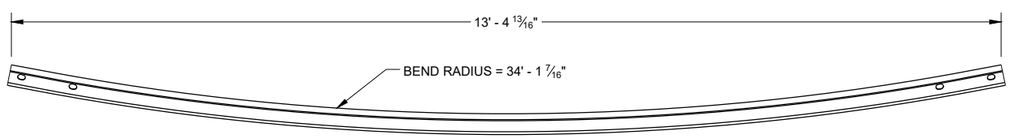
ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E2



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

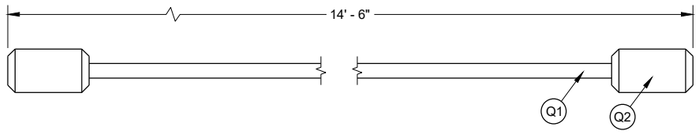
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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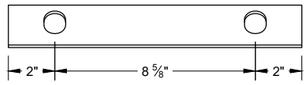
SDD 14B26 - 04f

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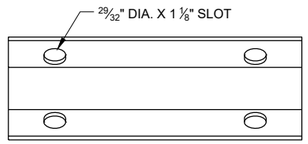
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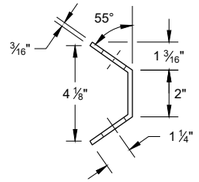
NOSE CABLE AND SWAGE BUTTON



PLAN VIEW

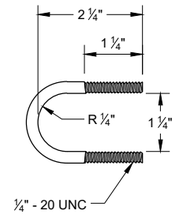


ELEVATION VIEW

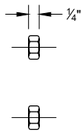


PROFILE VIEW

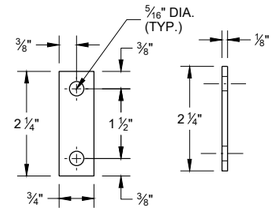
NOSE CABLE ANCHOR (R1)



U - BOLT (T1)

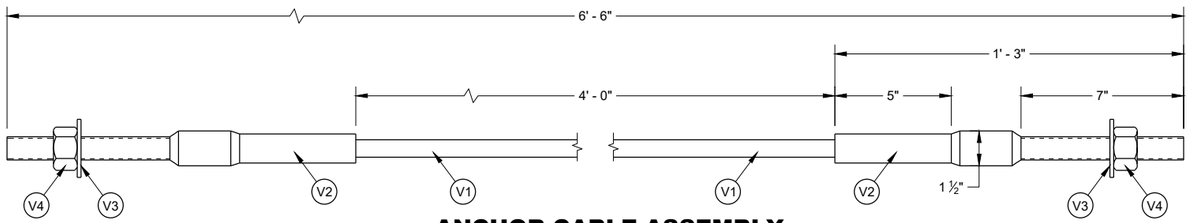


U - BOLT NUT (T3)

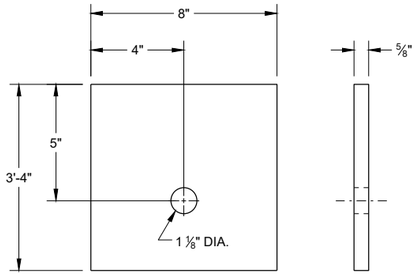


ELEVATION VIEW **PROFILE VIEW**

U - BOLT PLATE WASHER (T2)

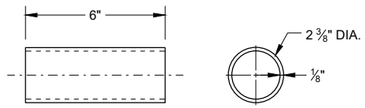


ANCHOR CABLE ASSEMBLY



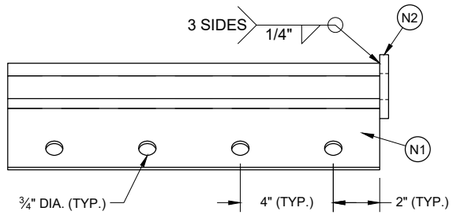
ELEVATION VIEW **PROFILE VIEW**

BCT BEARING PLATE (A3)

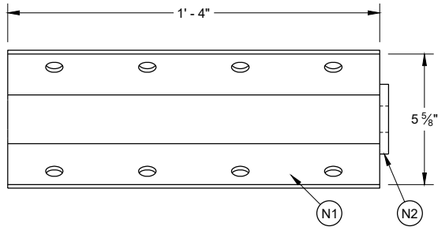


ELEVATION VIEW **PROFILE VIEW**

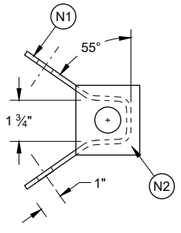
BCT POST SLEEVE (L2)



PLAN VIEW

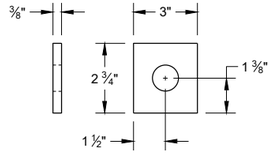


ELEVATION VIEW



PROFILE VIEW

ANCHOR BRACKET ASSEMBLY (N1)



ANCHOR BRACKET END PLATE (N2)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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BILL OF MATERIALS LIST

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
A1	LONG FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A2	FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A3	BEARING PLATE AT POST	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B1	LOWER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B2	LOWER SLIP POST ASSEMBLY - TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
C1	UPPER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
C2	UPPER SLIP POST ASSEMBLY - POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
D1	BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D2	TAPERED BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D3	TAPERED BLOCK FOR BCT POST - WOOD	WISDOT SPEC. 614
E1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E2	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
E3	THRIE BEAM RAIL - PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E4	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
F1	5/8" DIA. HEX HEAD GROUND STRUT AND YOKE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
F2	5/8" DIA. GROUND STRUT AND YOKE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
F3	GROUND STRUT AND YOKE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
G1	5/8 " DIA. POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G2	POST BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G3	POST BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
H1	7/8" DIA. SOIL TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
H2	SOIL TUBE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDEN WASHER ONLY)
H3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
J1	16D DOUBLE HEAD NAIL	ASTM A153 HOT DIPPED CLASS D DOUBLE HEAD ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)
L1	BCT TIMBER POST	WISDOT SPEC. 614 S4S FINISH ON 4 SIDE
L2	BCT POST SLEEVE	AASHTO M111/ASTM A123 2 3/8" OD ASTM 53 GRADE B
M1	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
M2	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N1	ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N2	ANCHOR BRACKET - BEARING PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
P1	5/8" DIA. ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
P2	ANCHOR BRACKET BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
P3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
Q1	5/8" DIA. NOSE CABLE	6X19 AASTHO M30 / ASTM A741 XIPS INDEPENDENT WIRE CORE (IWRC) PR 6X25 XIPS, IWRC NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
Q2	NOSE CABLE-SWAGE BUTTON	COLD TUFF BUTTON, S-409 SIZE NO. 12 STOCK NUMBER 1040395 OR ANY OTHER SIMILAR SIZED WAGED-GRIP-BUTTON FERRULES. ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FIELD SWAGED PER MANUFACTURERS RECOMMENDATION. NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
R1	NOSE CABLE ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
S1	5/8" DIA. SPLICE BOLT - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
S2	SPLICE - BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD 5/8" ASTM A563DH OR SAE J995 GRADE 5
T1	1/4" DIA. NOSE CABLE - U BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
T2	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
T3	U-BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
U1	7/16" DIA. SLIP POST ASSEMBLY - BREAKAWAY BOLT	ASTM A153 OR B695 CLASS 55 OR F2329 UNC FULLY THREADED HEX HEAD TAP BOLT ASTM A449 OR SAE J429 GRADE 5
U2	7/16" DIA. SLIP POST ASSEBLY - BREAKAWAY BOLT - WASHER	ASTM F436 TYPE I (HARDEN TYPICALLY USED WITH STEEL) GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO POST BOLT CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 55, F2329
U3	SLIP POST ASSEBLY - BREAKAWAY BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / STM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
V1	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V2	ANCHOR CABLE-SWAGE FITTING	UNC ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FACTORY SWAGED. MIN. BREAKING STRENGTH OF 42.7 KIPS. ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."
V3	1" DIA. ANCHOR CABLE-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V4	1" DIA. ANCHOR CABLE-NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
W1	REFLECTOR	SEE SDD 15A4

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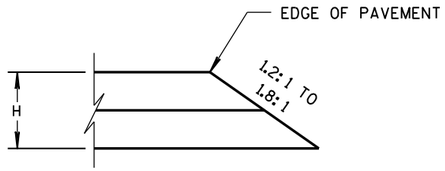
STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

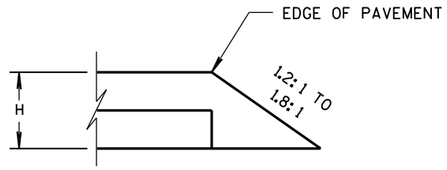
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



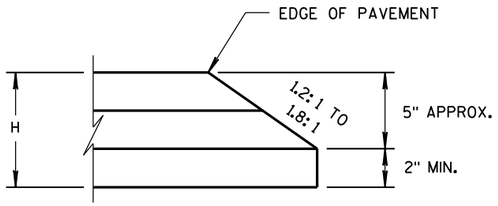
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



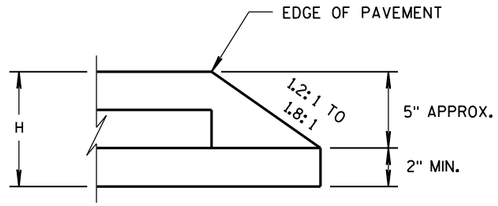
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

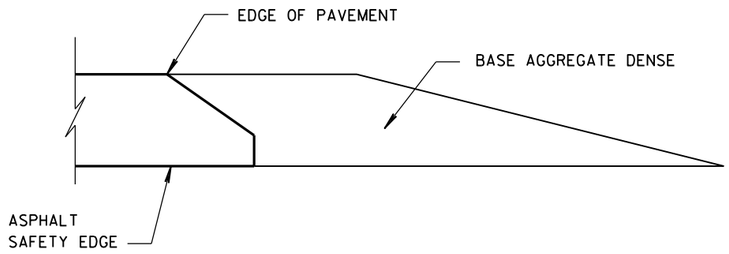
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

6

S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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

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

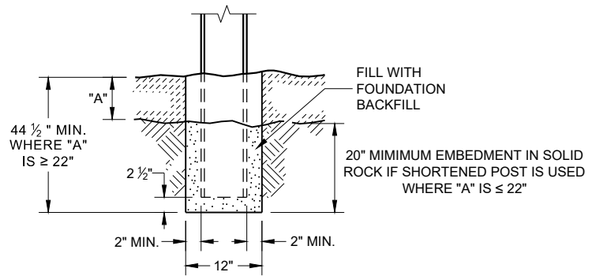
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

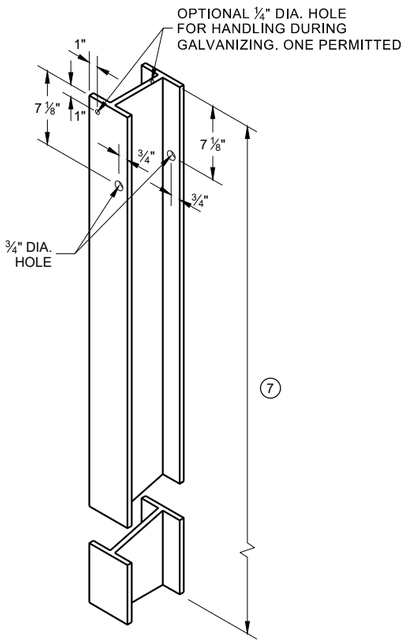
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

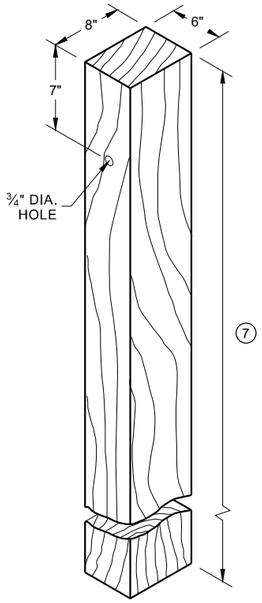
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



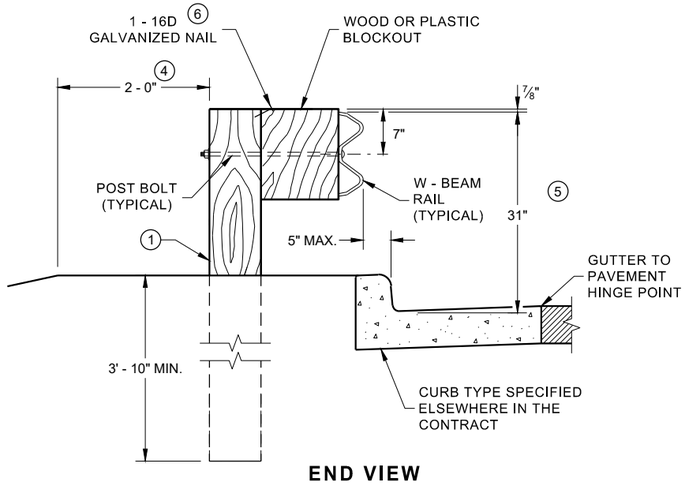
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



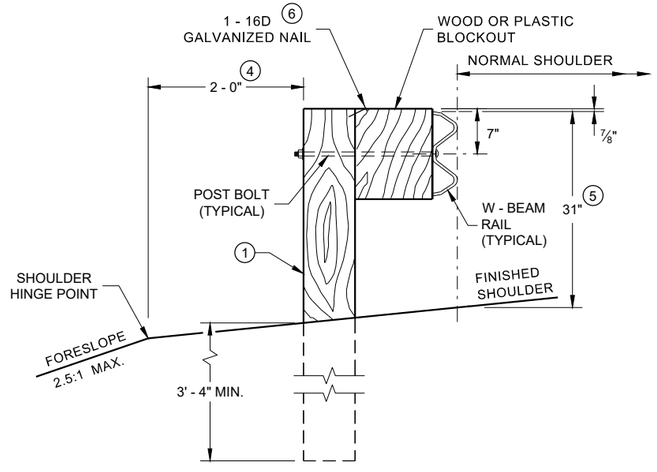
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



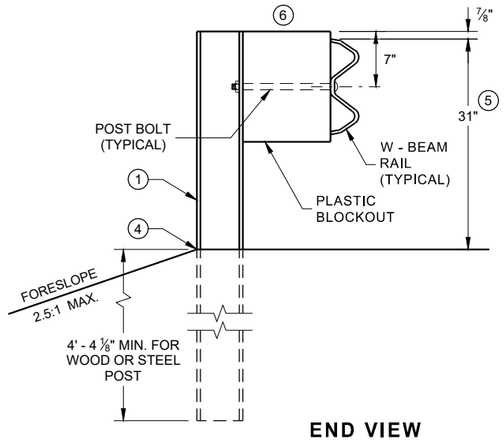
WOOD POST (6" X 8") NOMINAL (1)



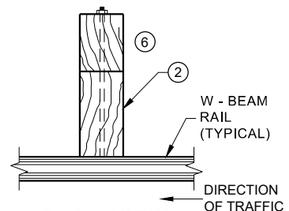
END VIEW
LOCATED ALONG A CURBED ROADWAY



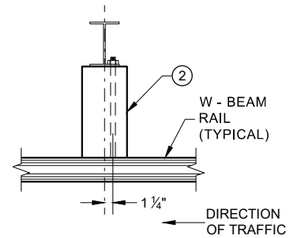
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



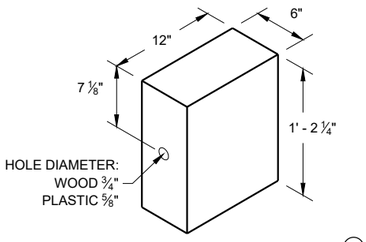
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



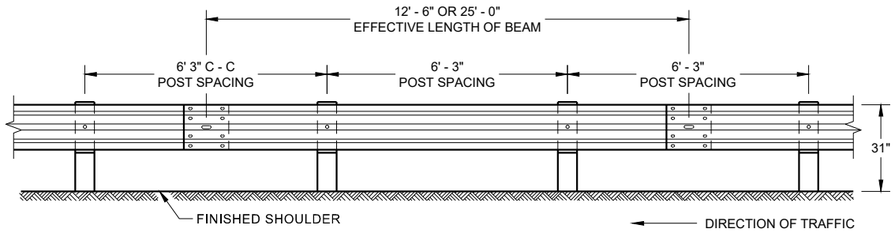
WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

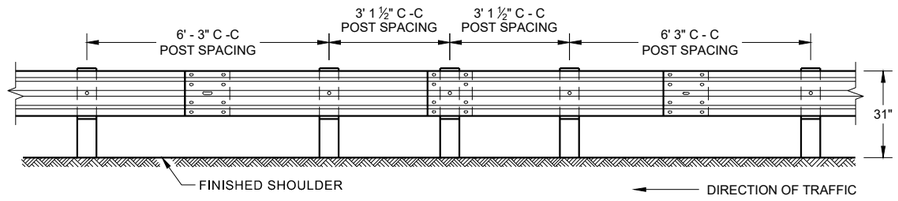
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

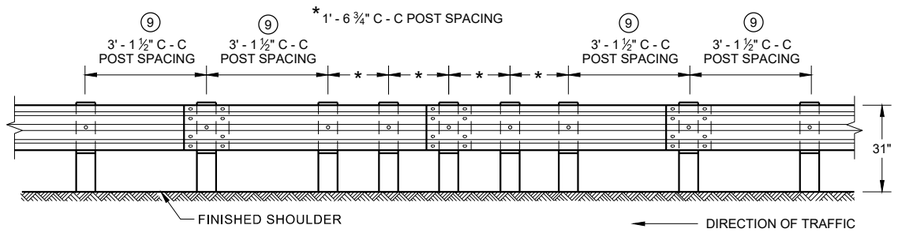
SDD 14B42 - 07a
SDD 14B42 - 07a



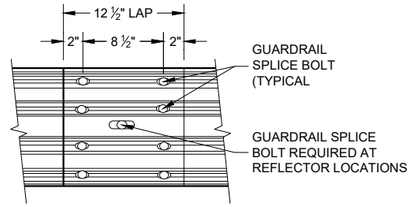
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

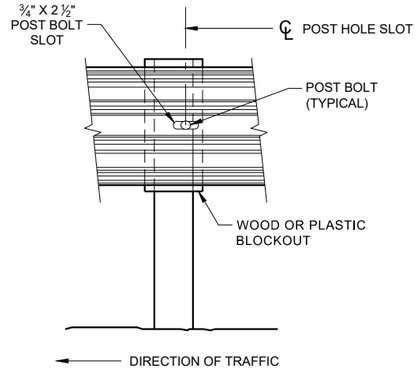
GENERAL NOTES

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

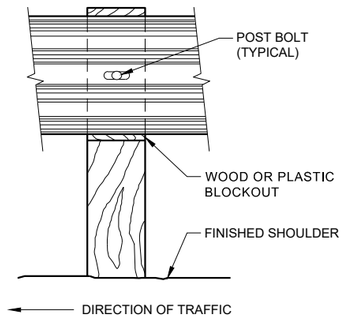
(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

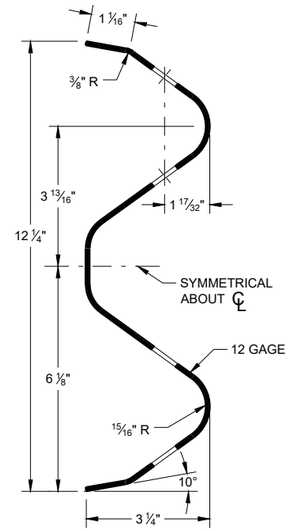
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



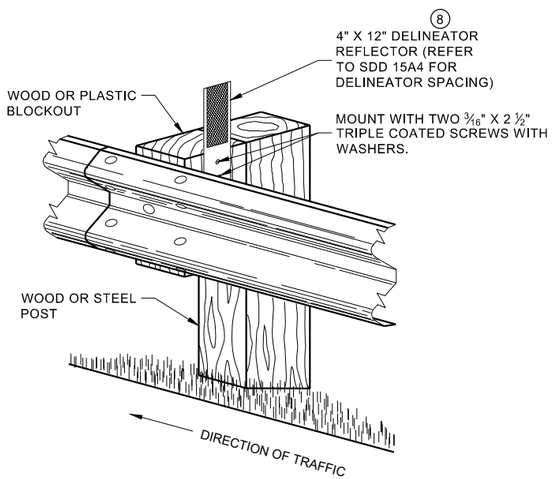
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL

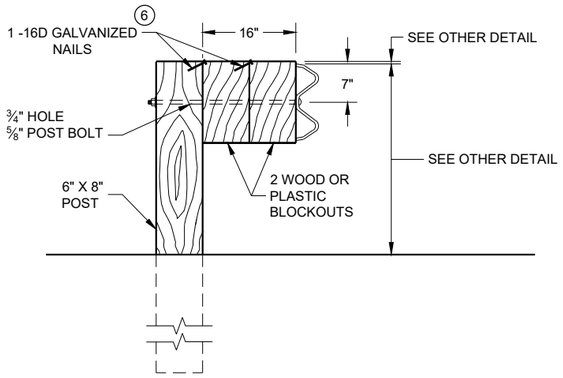


ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B42 - 07b

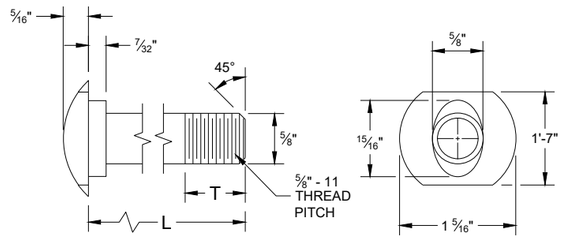


DETAIL FOR 16" BLOCKOUT DEPTH

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

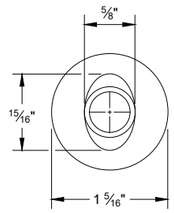
NOTE:

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

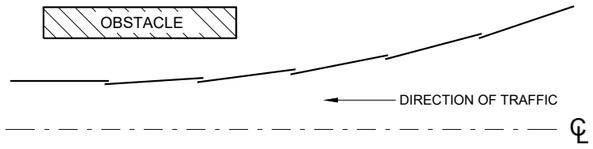


POST BOLT TABLE

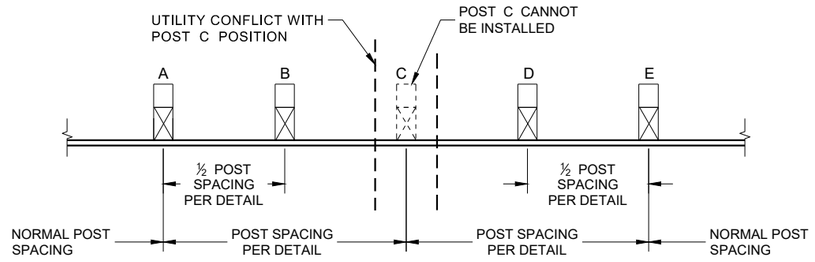
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



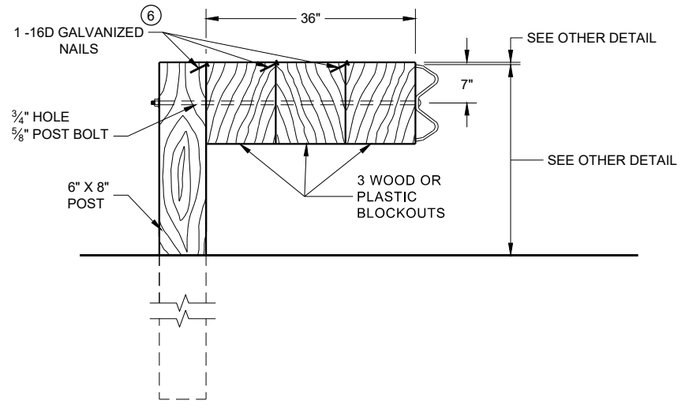
ALTERNATE BOLT HEAD



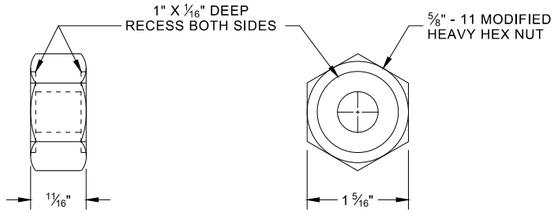
PLAN VIEW
BEAM LAPPING DETAIL



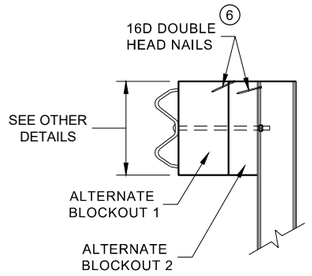
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



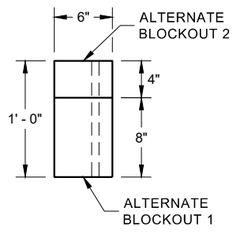
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

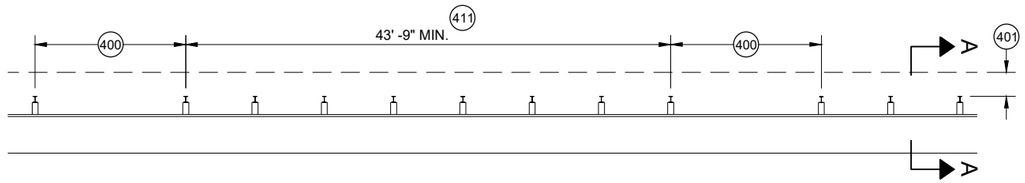
ALTERNATE WOOD BLOCKOUT DETAIL

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

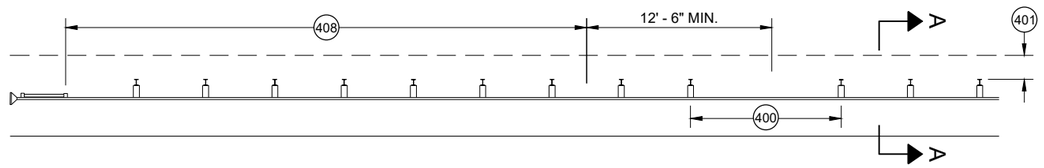
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

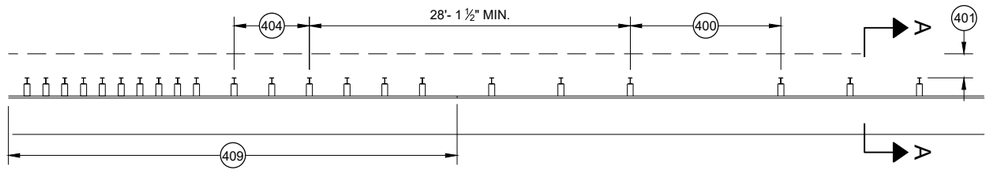
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL



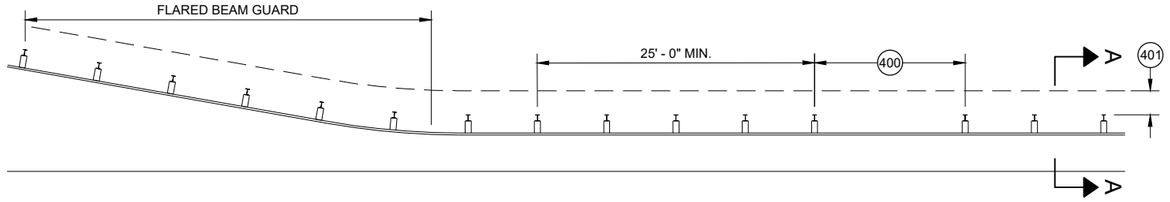
MISSING POST IN MGS GUARDRAIL



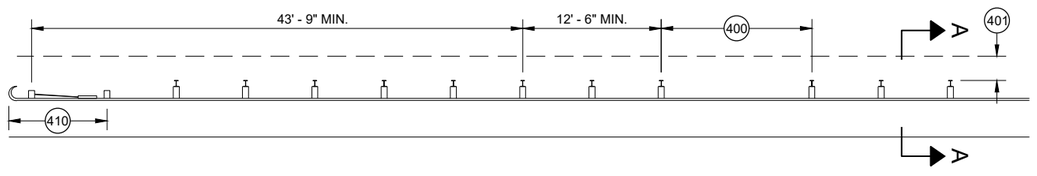
MISSING POST IN MGS GUARDRAIL NEAR EAT



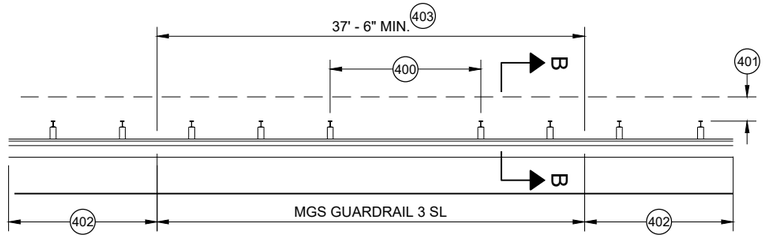
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

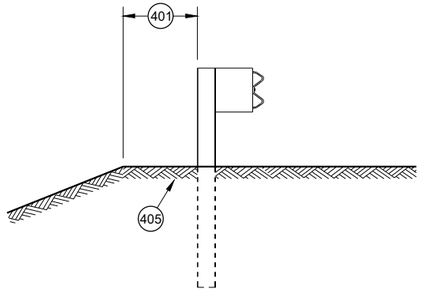


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

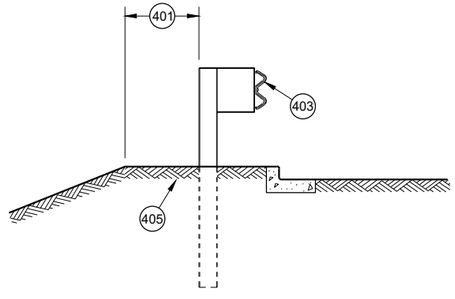


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

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



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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SDD 14B42 - 07d

GENERAL NOTES

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

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

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

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

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

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

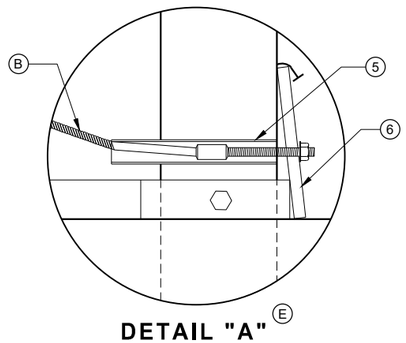
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

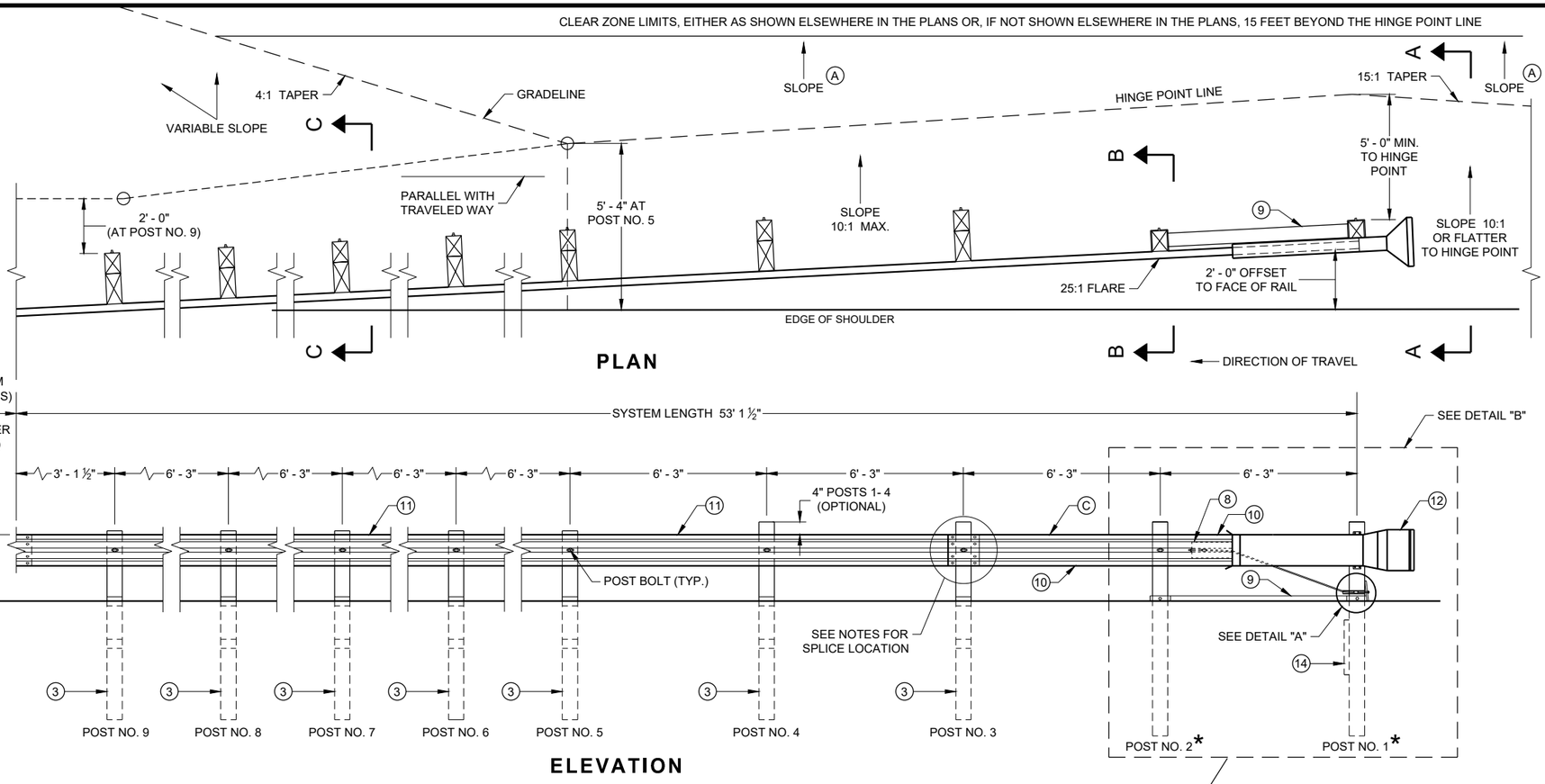
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

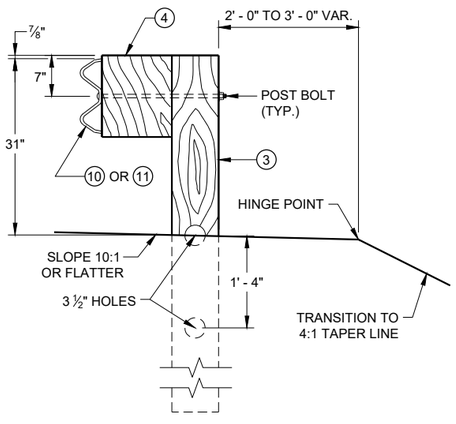
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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

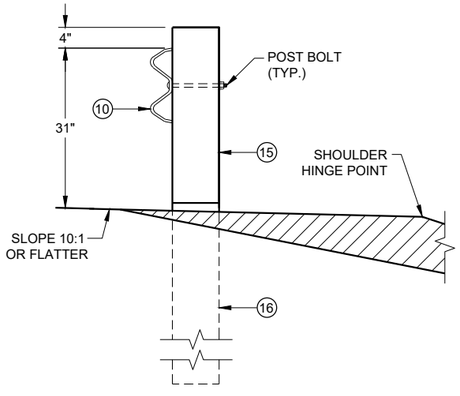


DETAIL "A" (E)

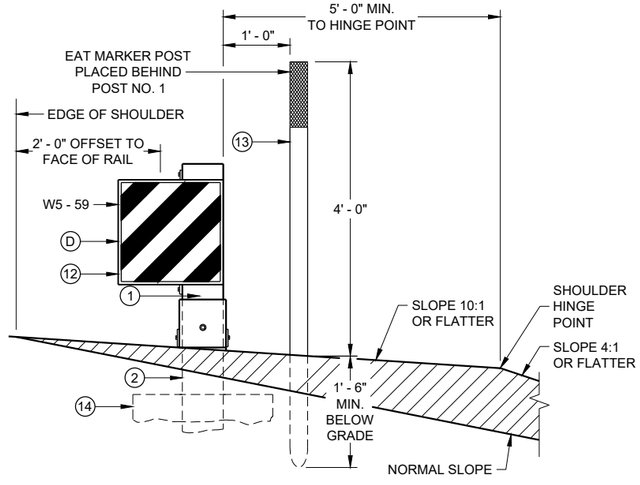




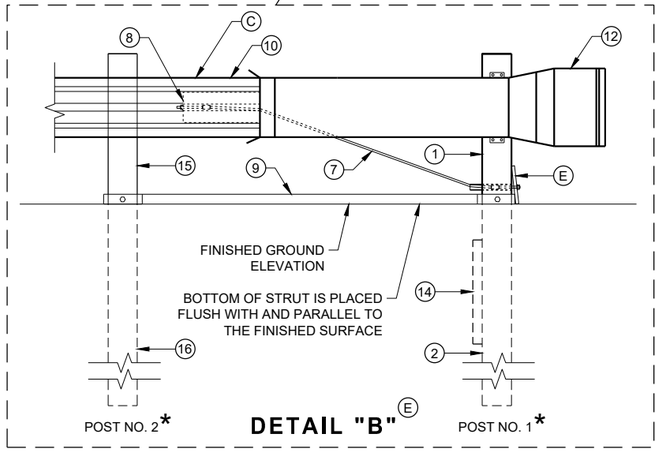
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*

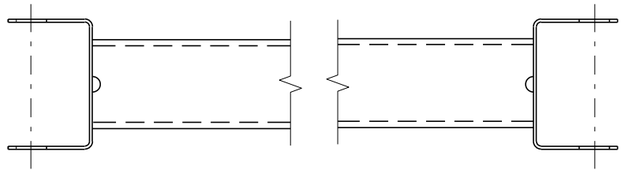


MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

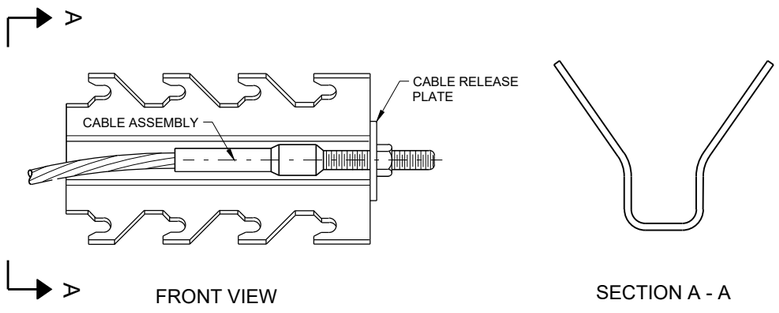
SDD 14B44 - 04a



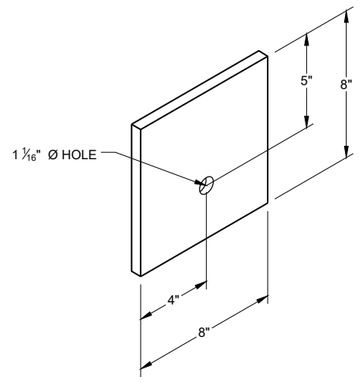
GENERIC GROUND STRUT ⑨ Ⓔ

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 ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

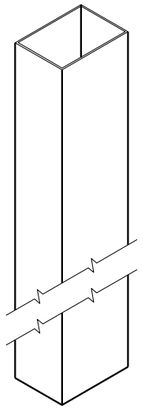
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SDD 14B44 - 04b

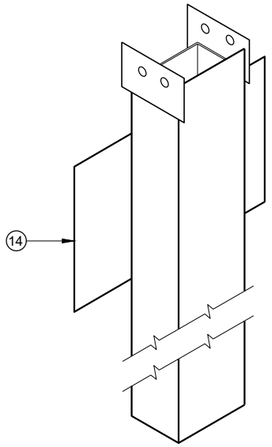
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

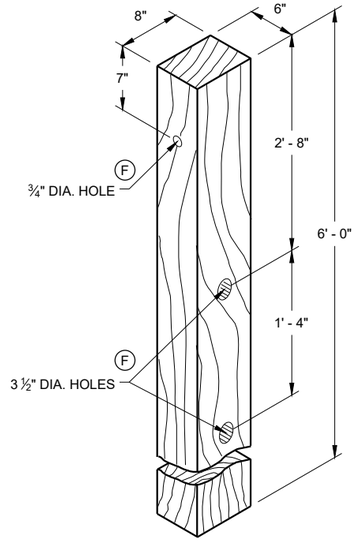
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



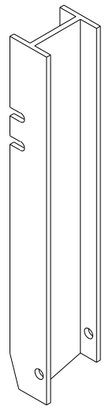
UPPER POST NO. 1 (1) (E)



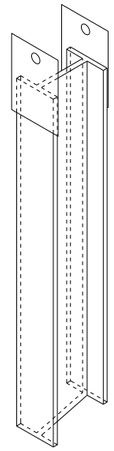
LOWER POST NO. 1 (2) (E)



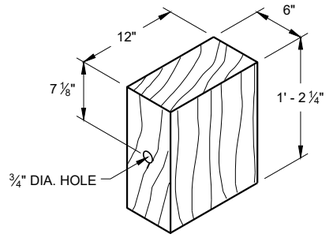
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



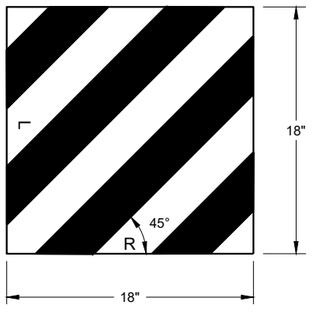
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

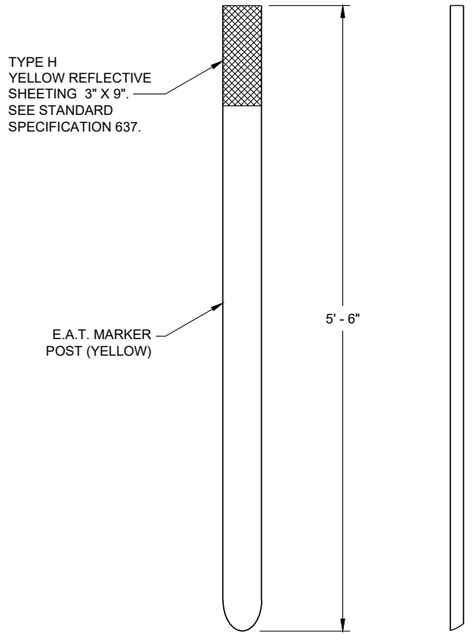


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



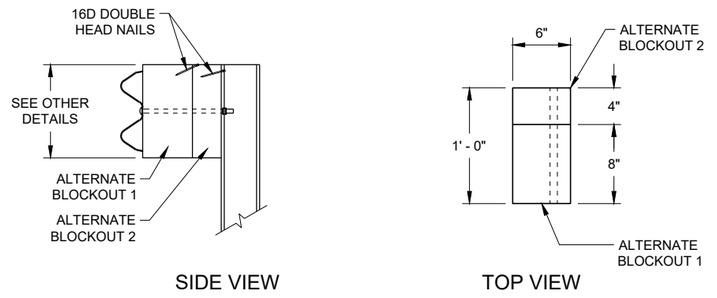
W5 - 59

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)

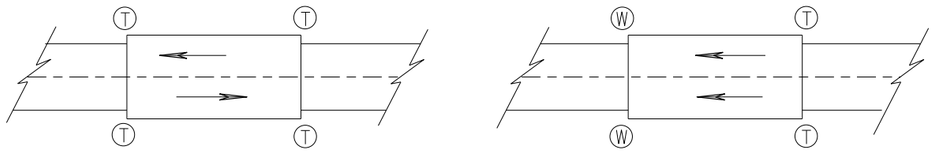
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

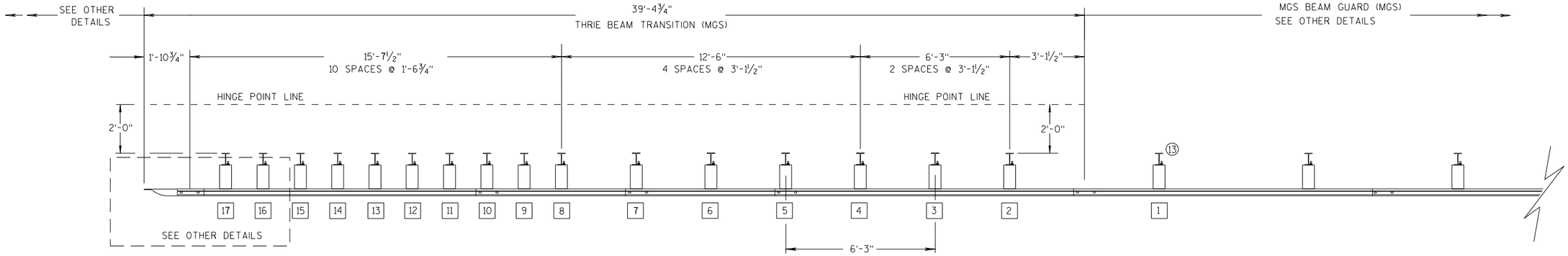
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

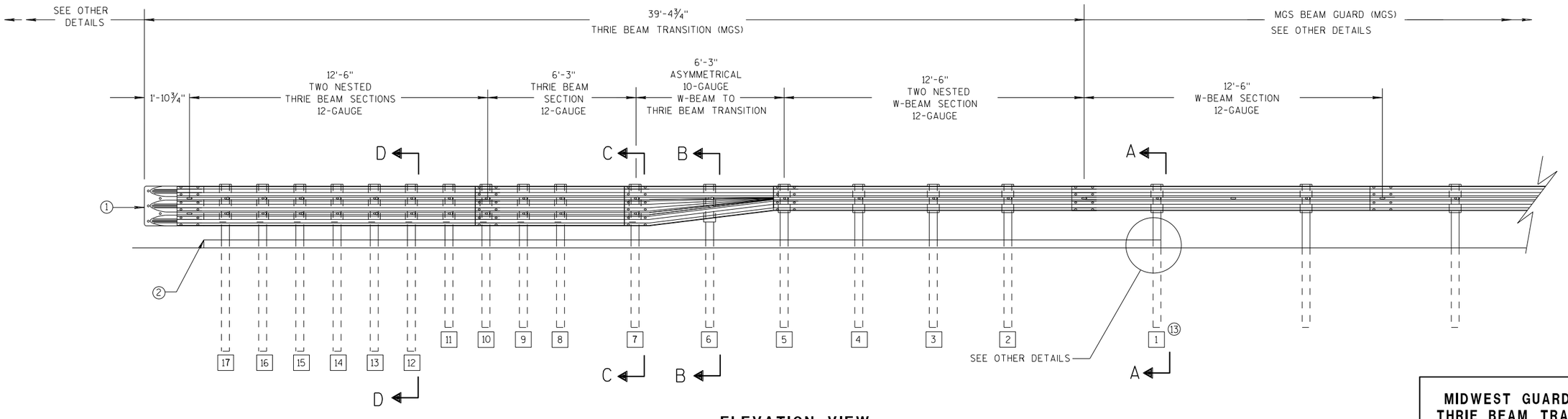
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(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 199

6

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

6

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

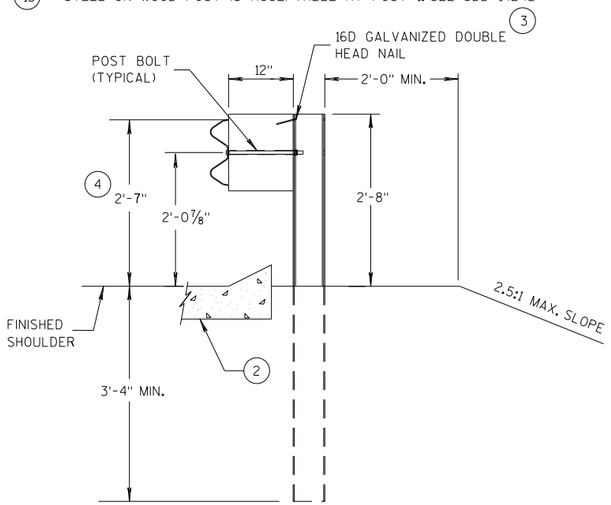
GENERAL NOTES

(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.

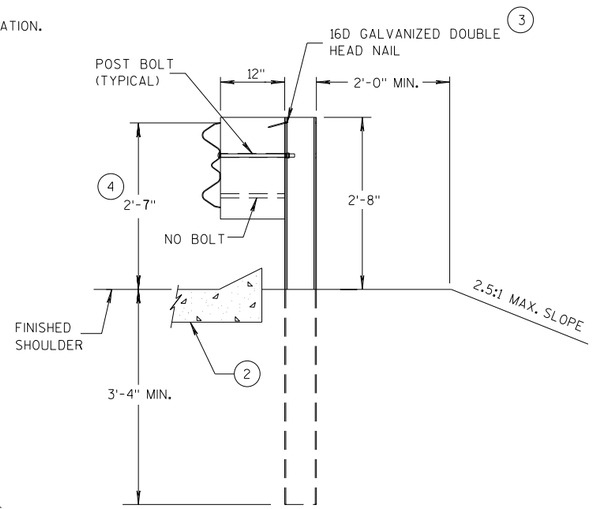
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



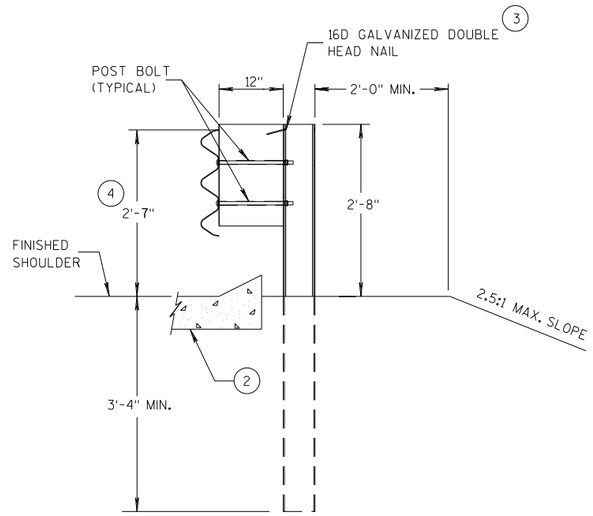
SECTION A-A (13)

POSTS 1-5



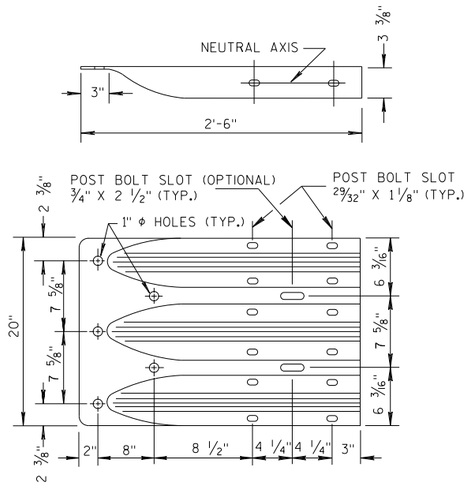
SECTION B-B

POST 6

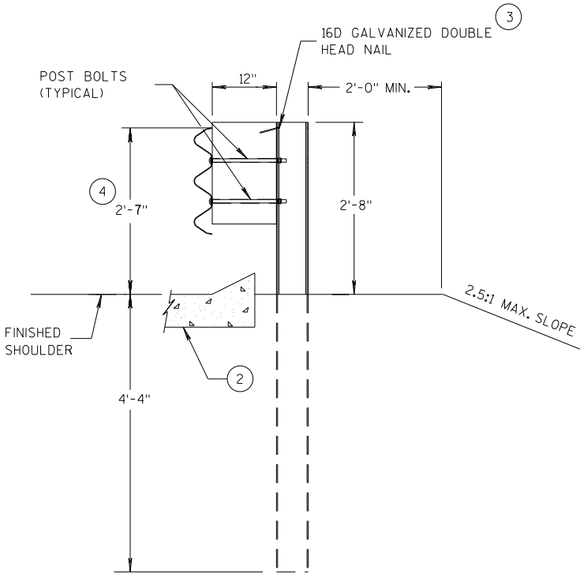


SECTION C-C

POSTS 7-11

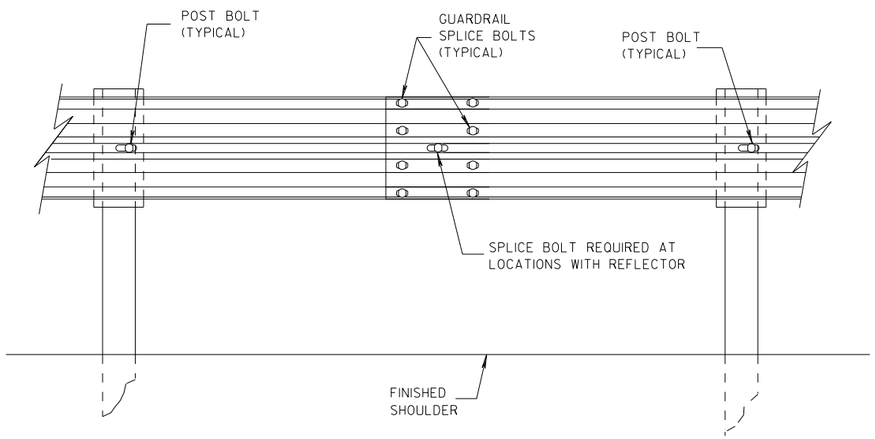


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

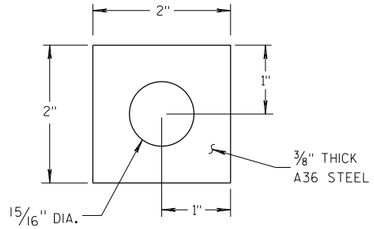
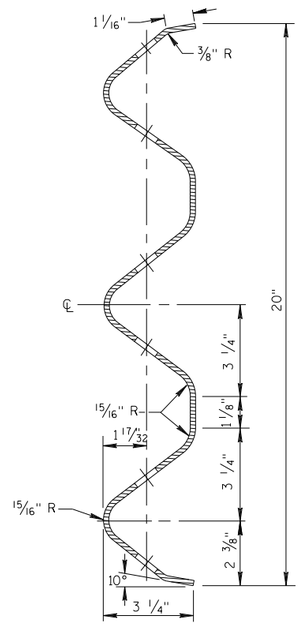


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

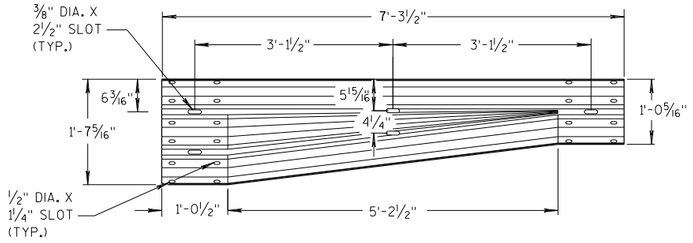
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF 200

6

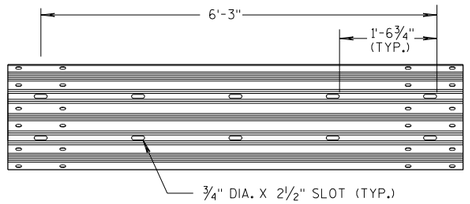
S.D.D. 14 B 45-5b

6

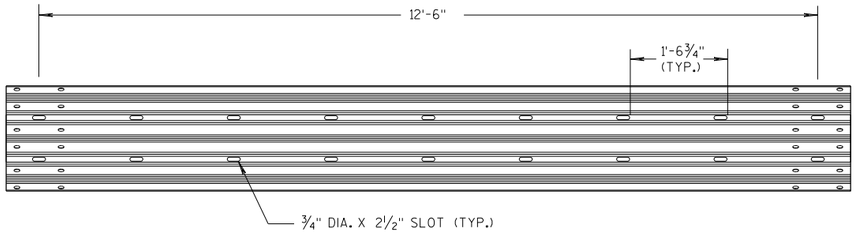
S.D.D. 14 B 45-5b



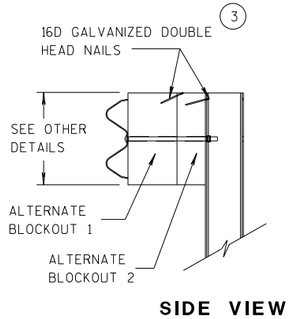
W-BEAM TO THRIE BEAM TRANSITION SECTION



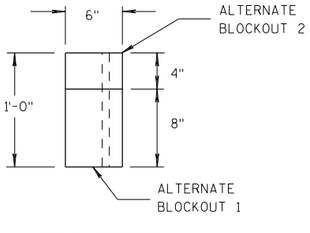
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

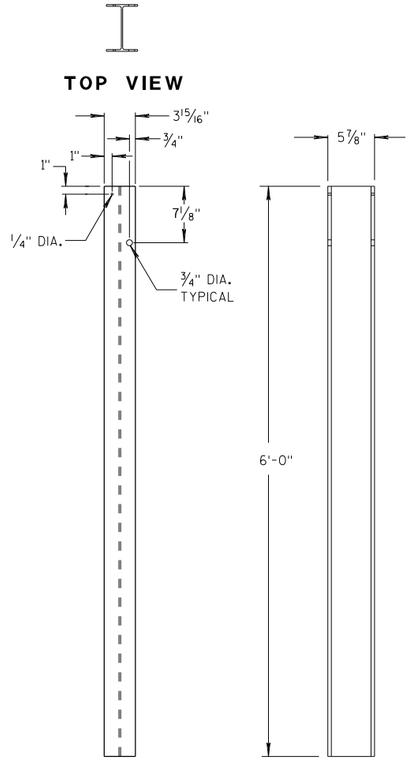


SIDE VIEW



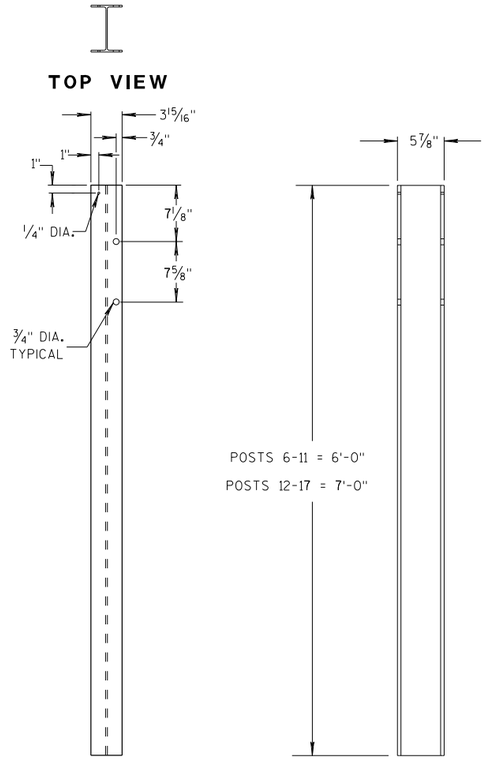
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



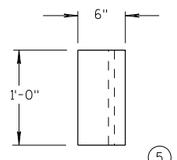
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

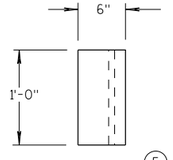


FRONT VIEW SIDE VIEW

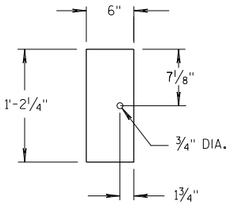
STEEL POSTS 6-17



TOP VIEW (5)

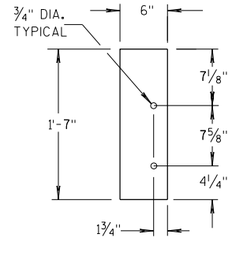


TOP VIEW (5)



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.

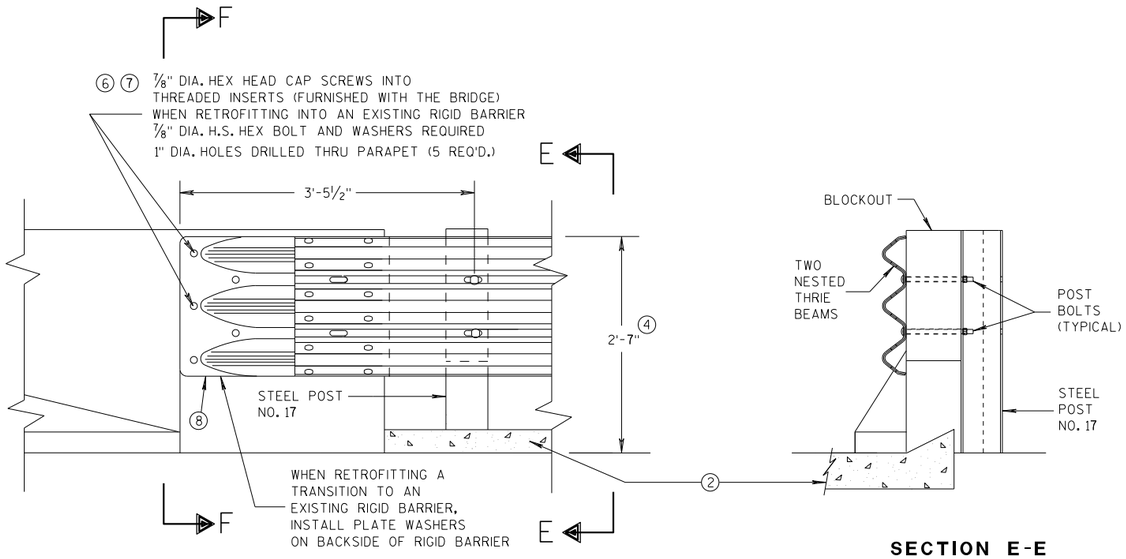
(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

(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 201

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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.

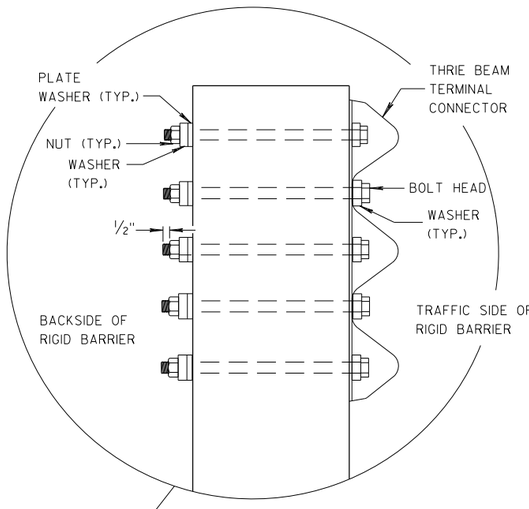
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

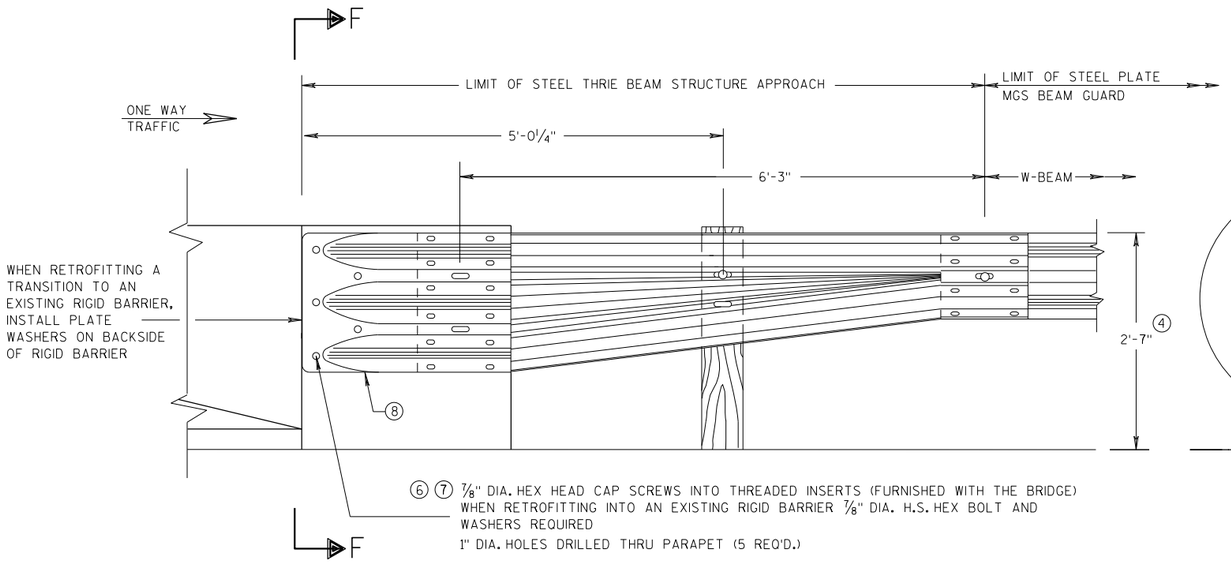
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

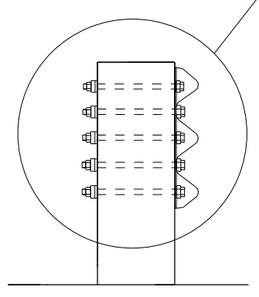
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE.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

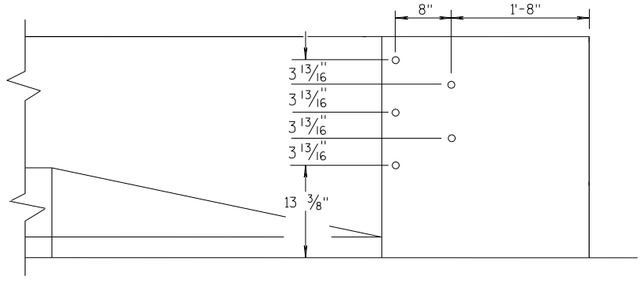




FRONT VIEW



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 UNIT SUPERVIS NT
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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.

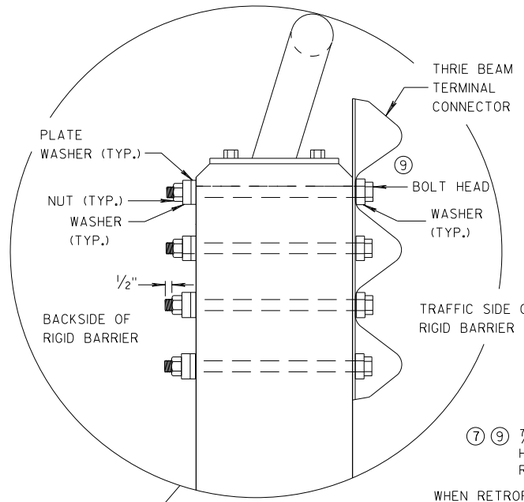
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

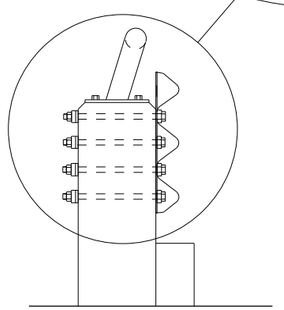
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(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.

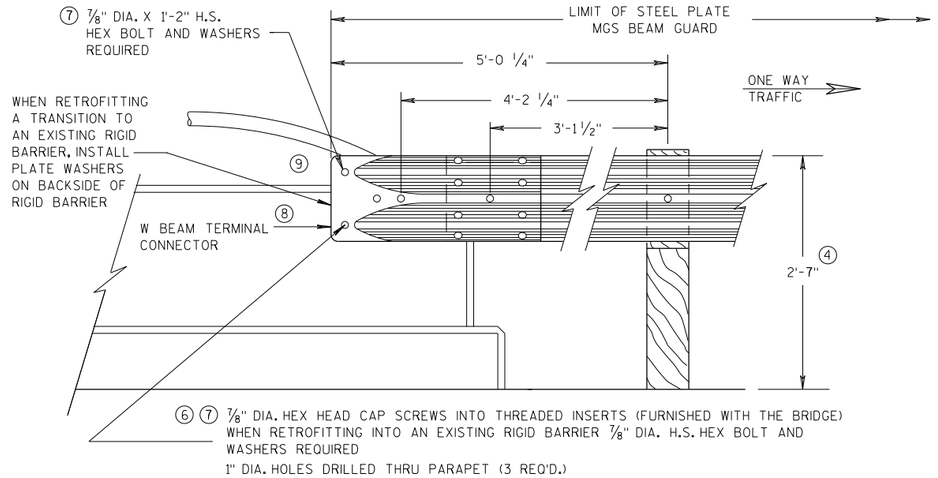
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(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.





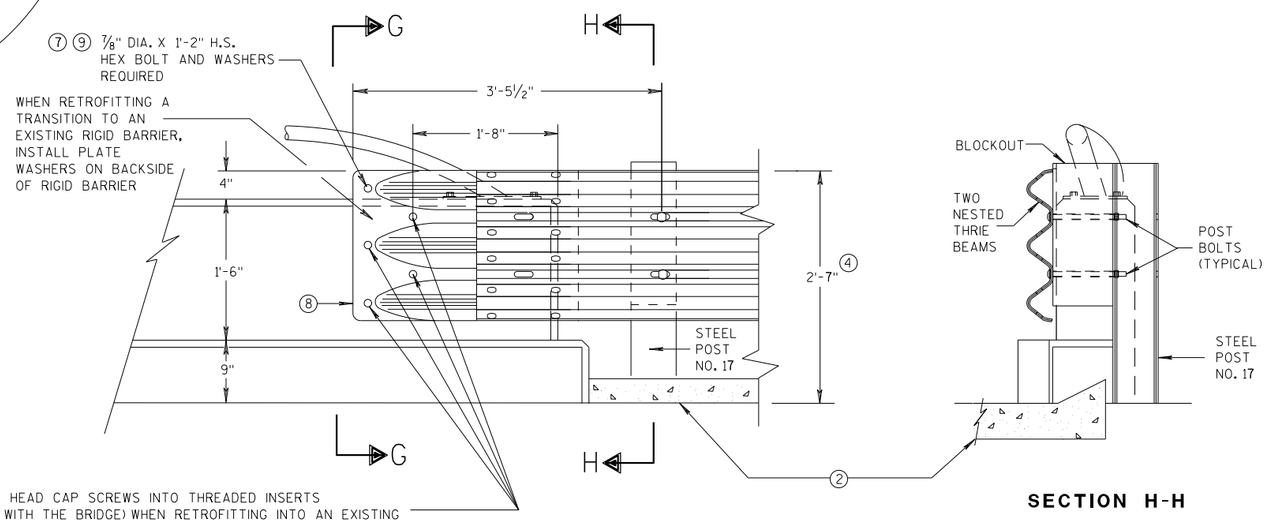
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

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



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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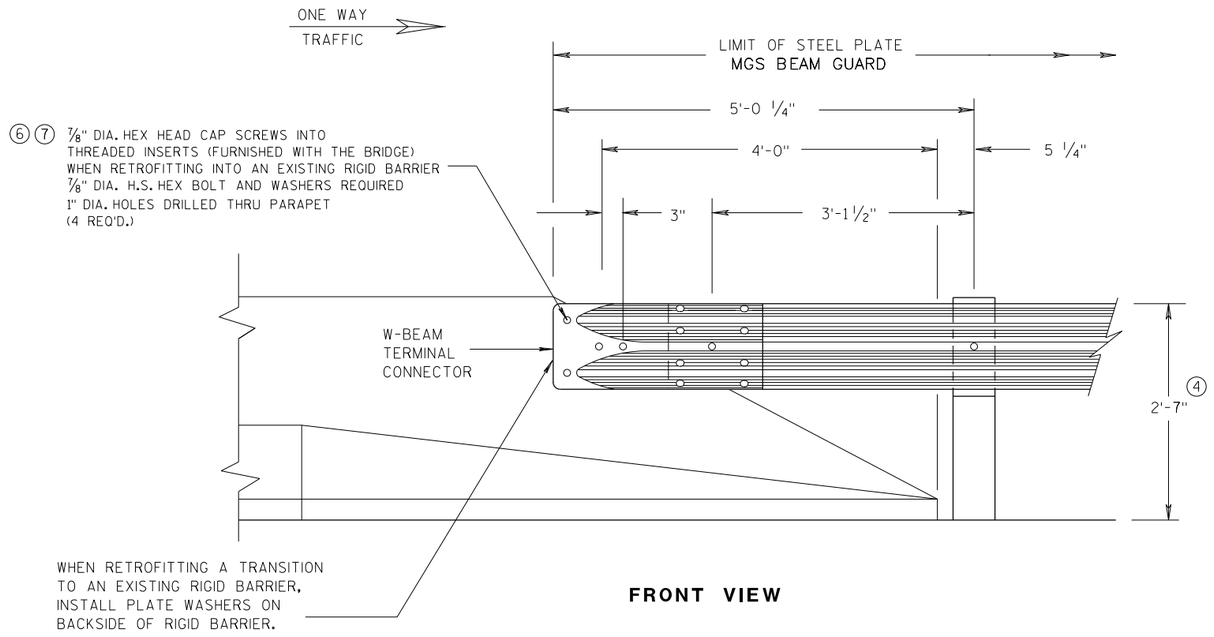
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S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

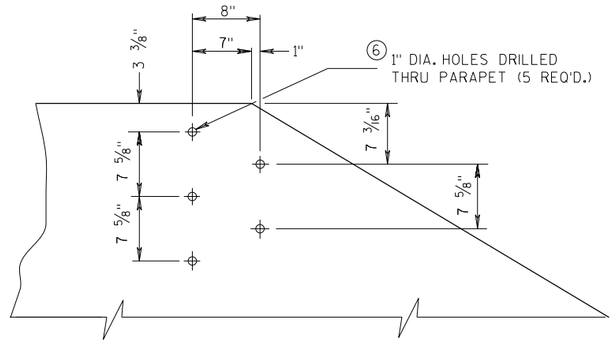
GENERAL NOTES

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

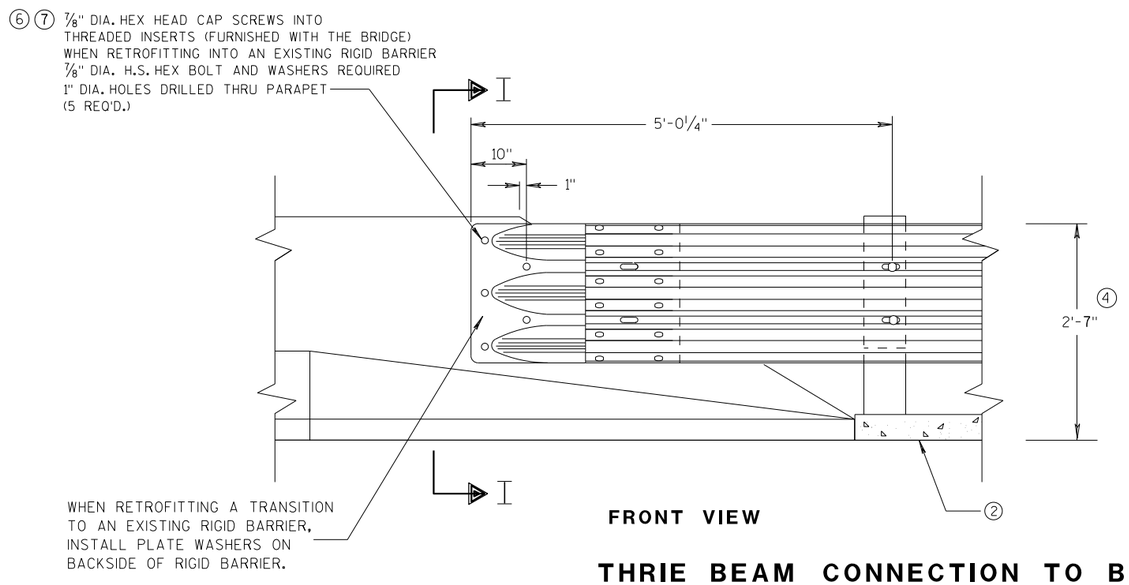
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

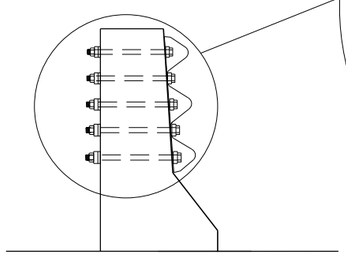
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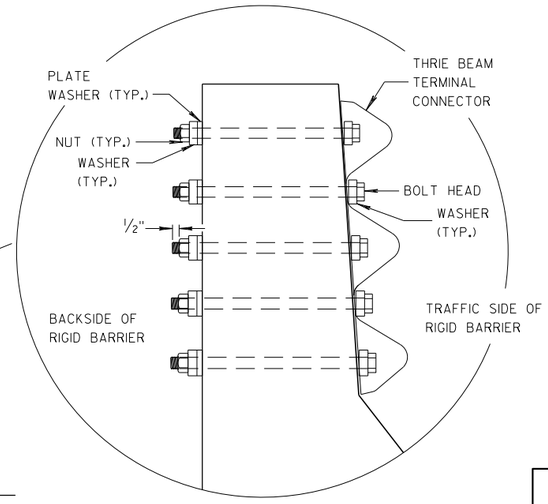
DRILL HOLE LOCATION AND PATTERN
FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

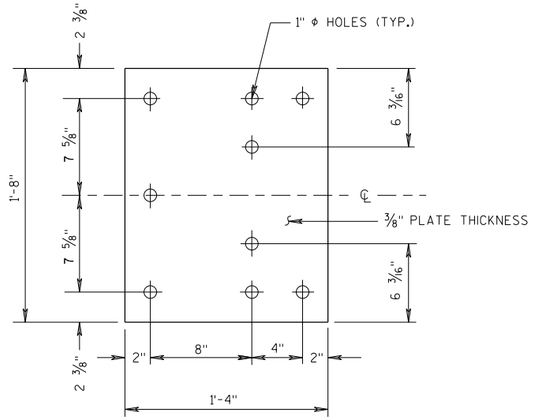
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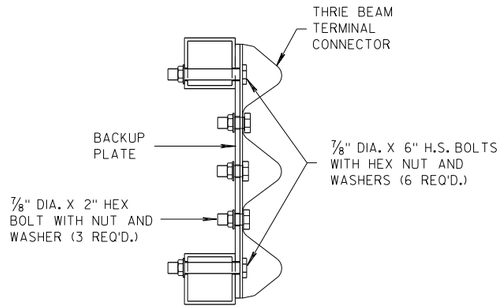
S.D.D. 14 B 45-5f

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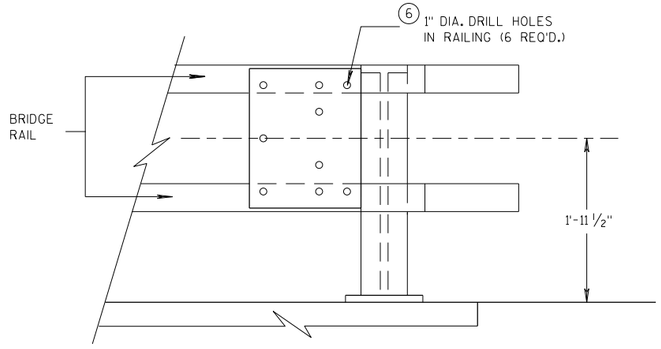
S.D.D. 14 B 45-5f



BACK-UP PLATE DETAIL



SECTION J-J

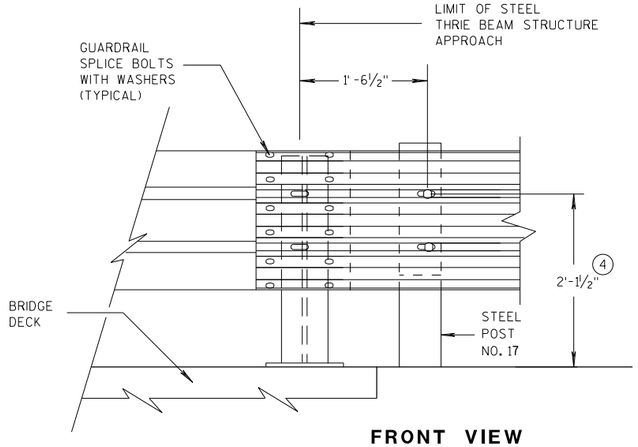


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

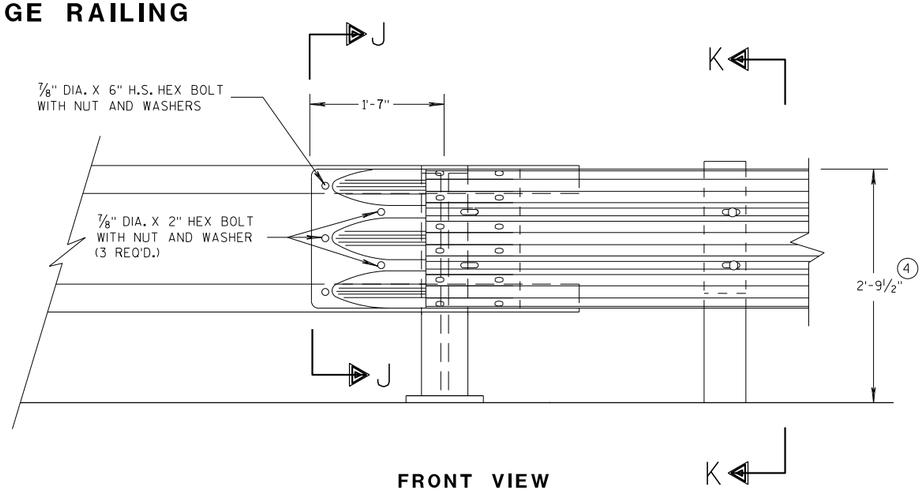
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

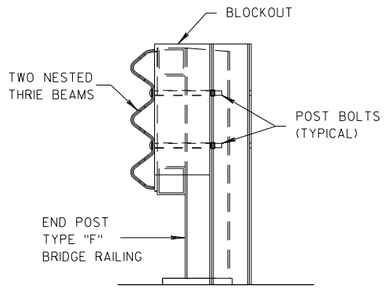


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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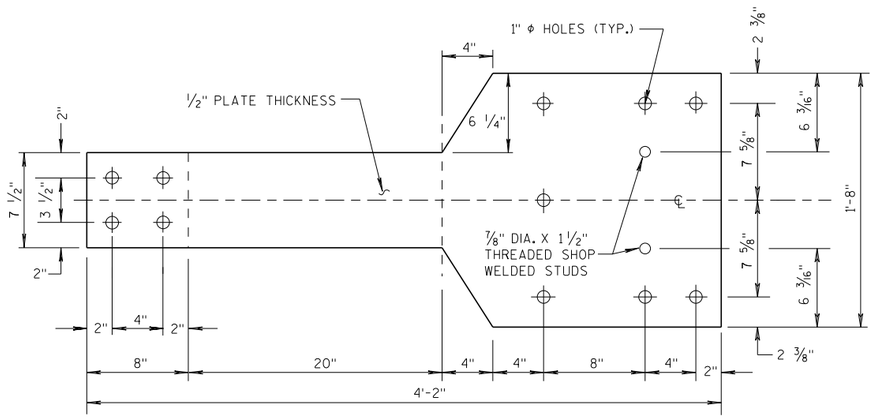
S.D.D. 14 B 45-5g

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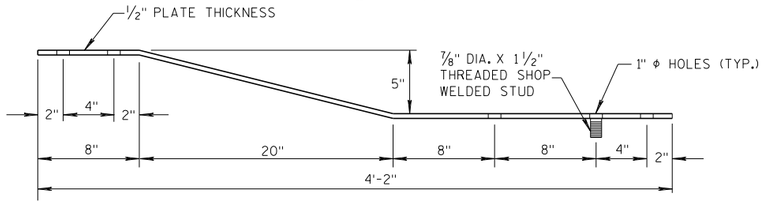
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GENERAL NOTES

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

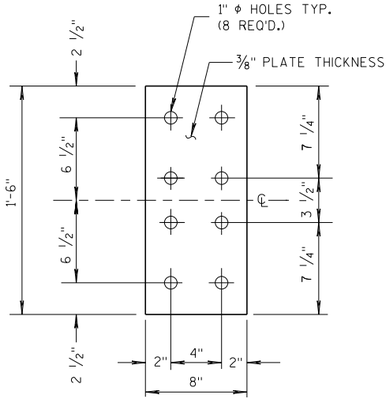


FRONT VIEW



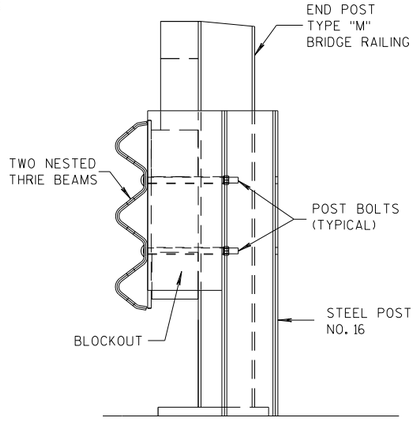
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

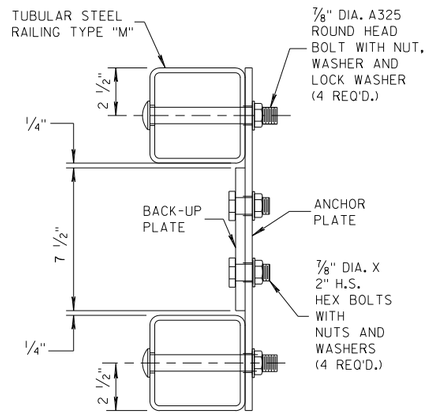


FRONT VIEW

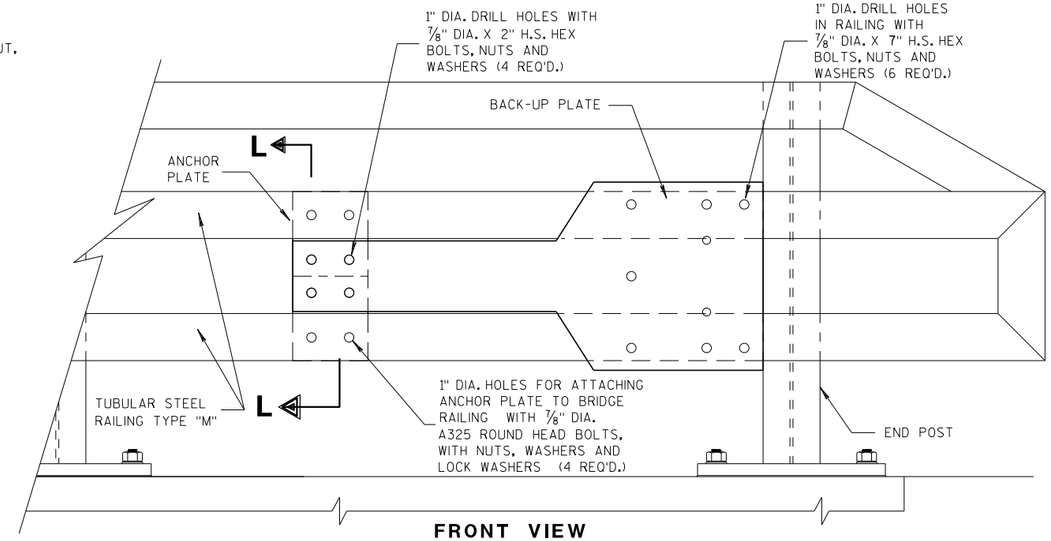
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

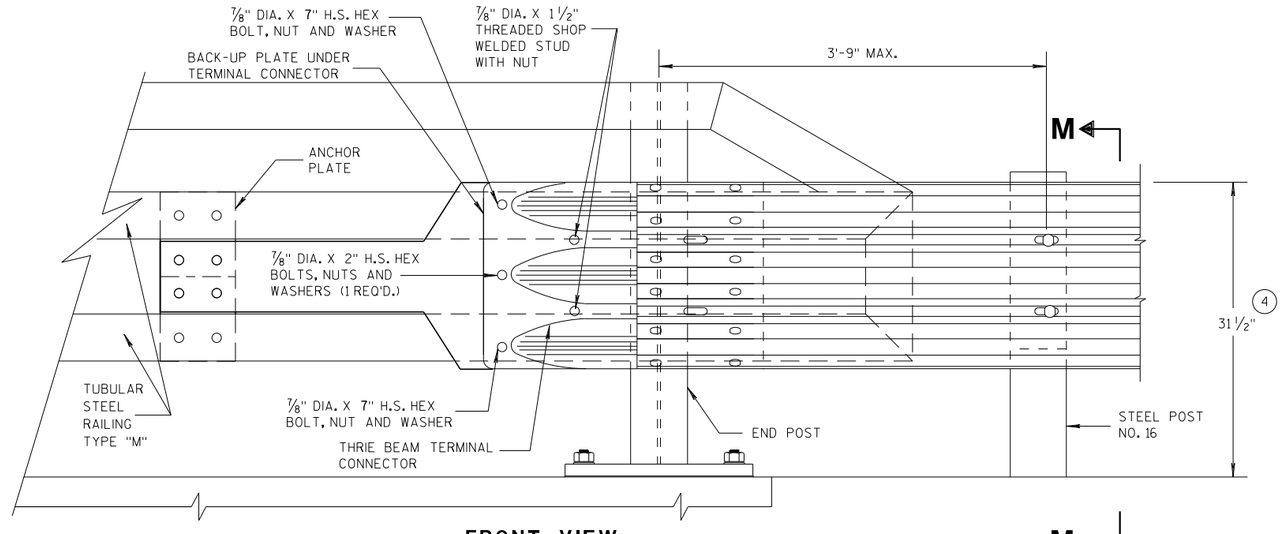


SECTION L-L

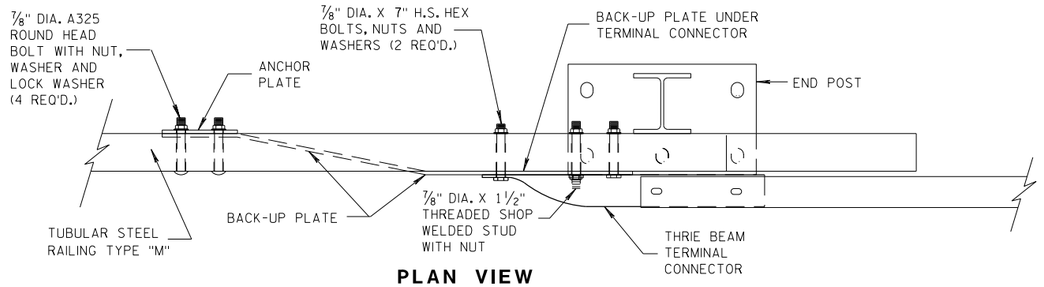


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

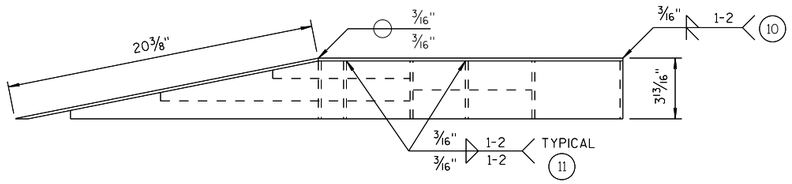
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07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

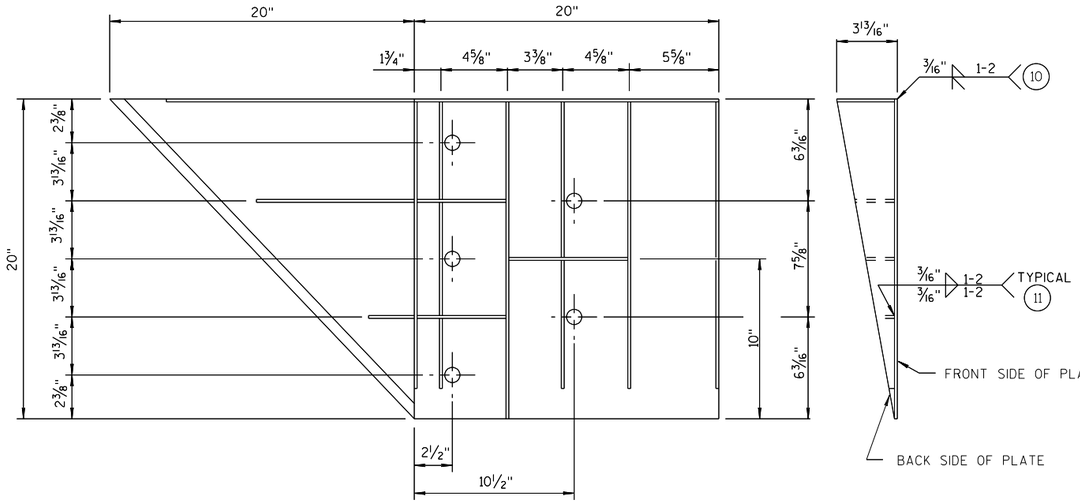
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S.D.D. 14 B 45-5h





WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

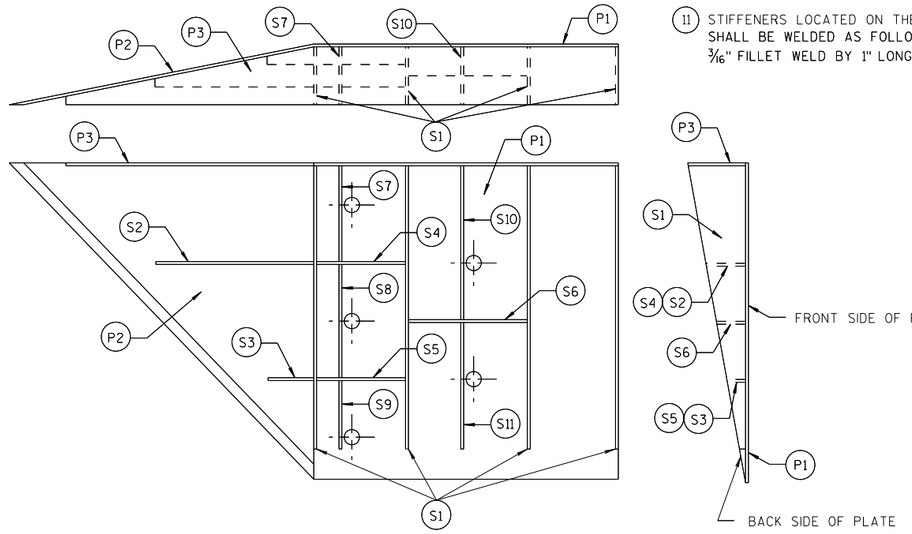


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

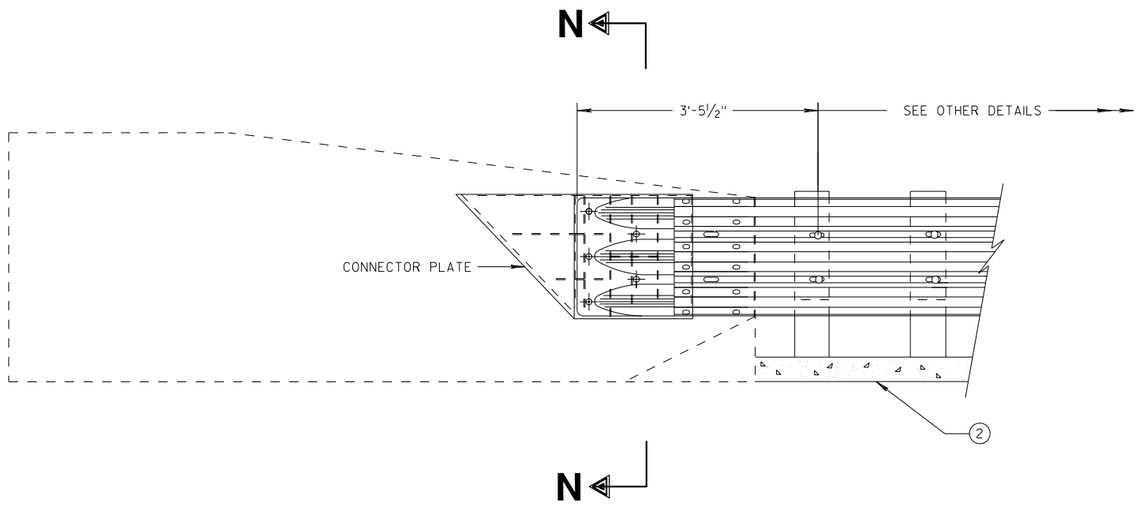
MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

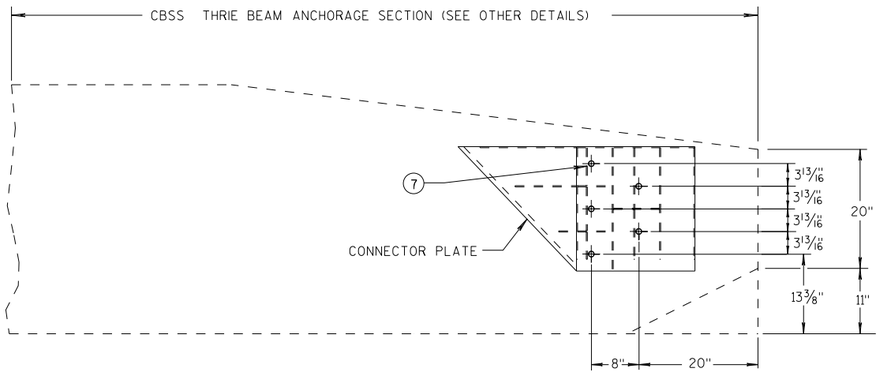
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THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



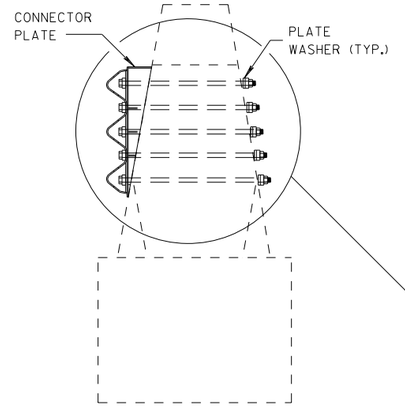
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

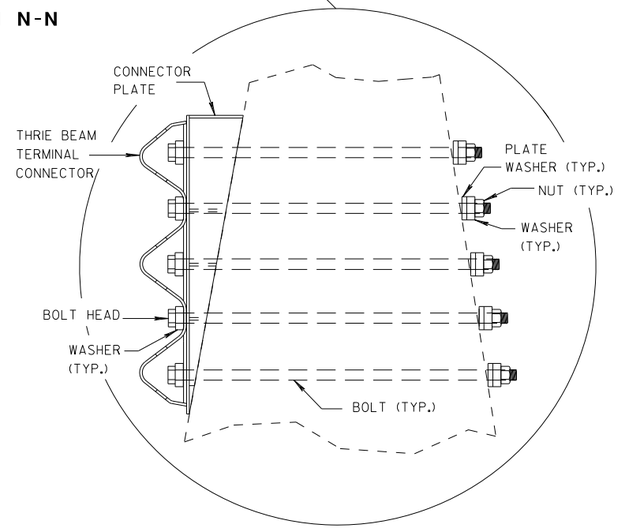
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SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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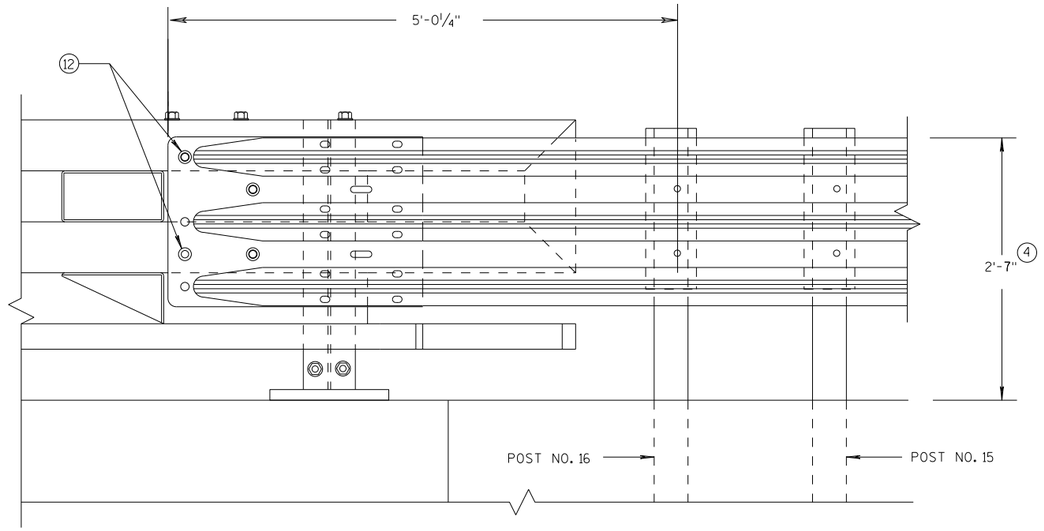
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S.D.D. 14 B 45-5j

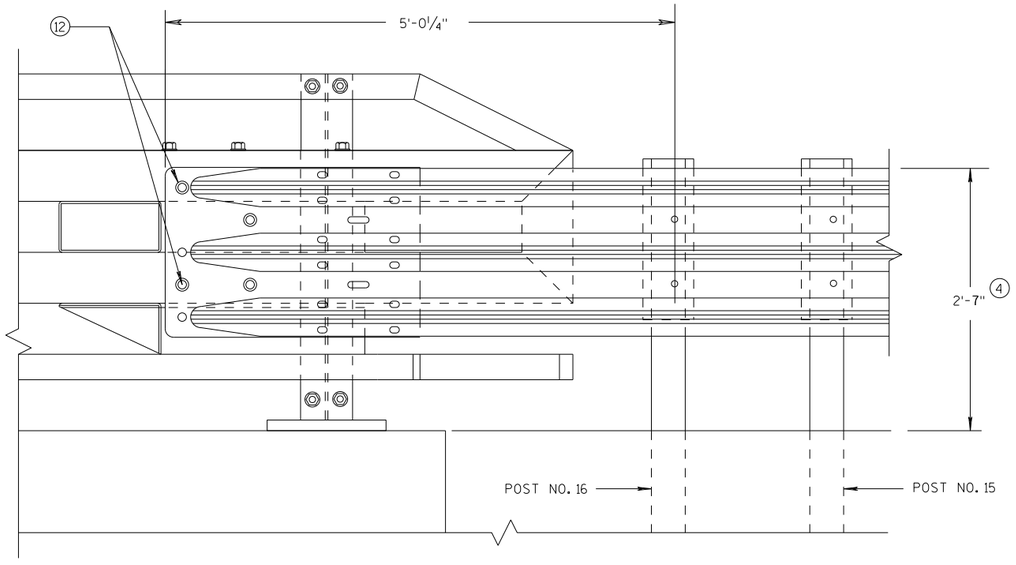
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S.D.D. 14 B 45-5j



ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

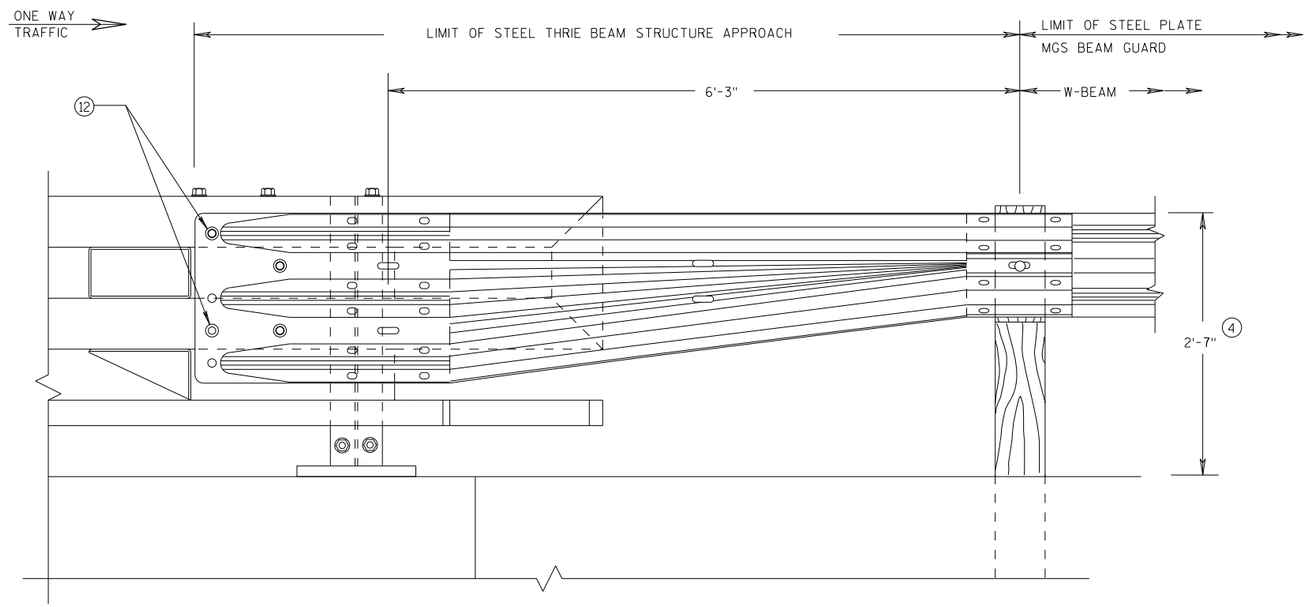
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS
FHWA

6

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

6

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



FRONT VIEW

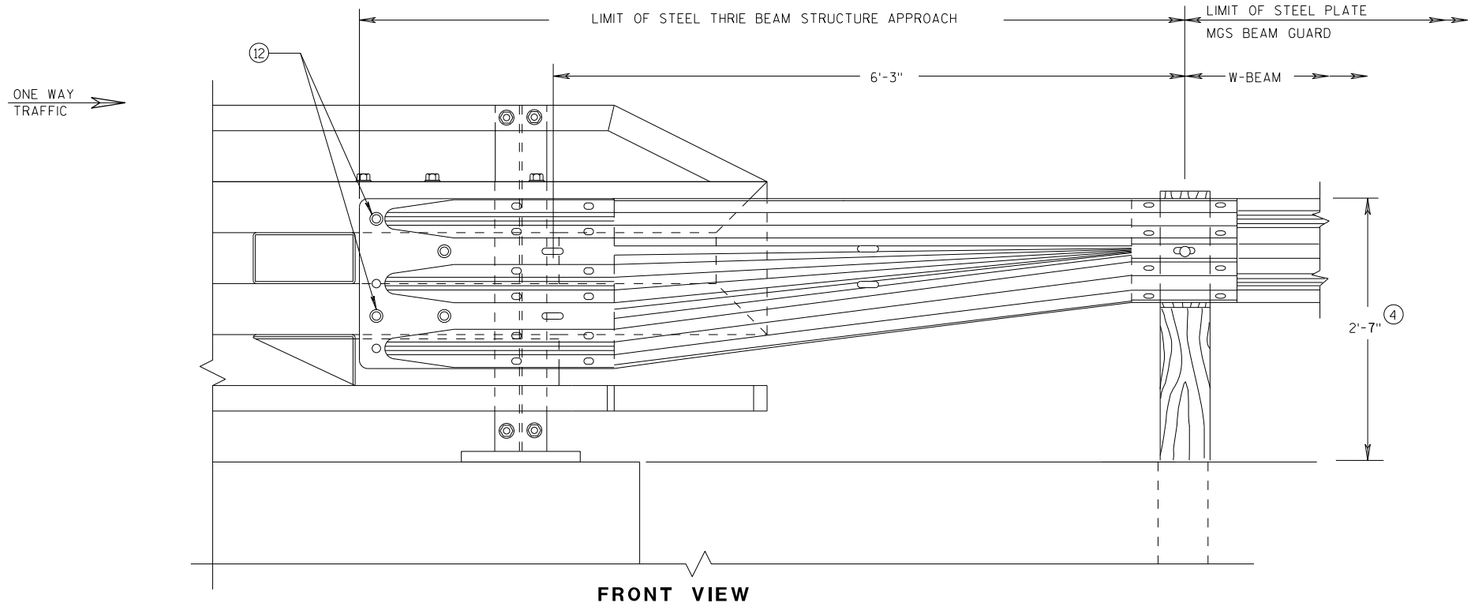
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

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

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

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

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS

210

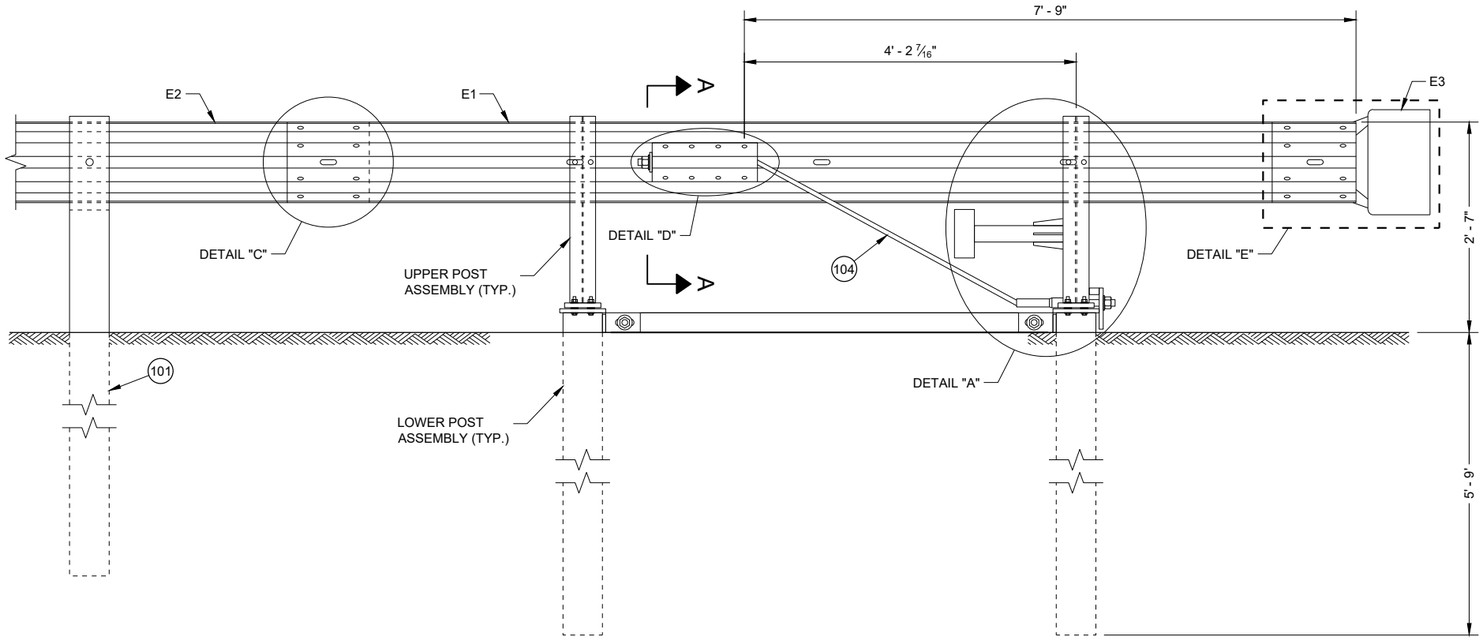
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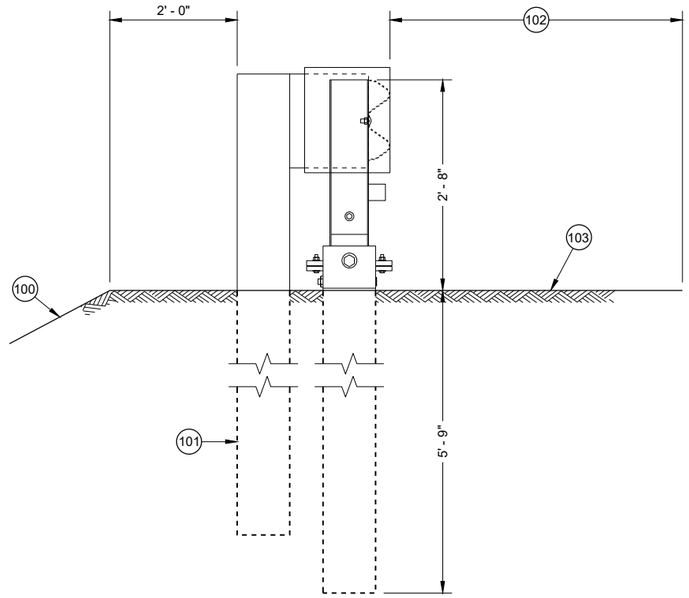
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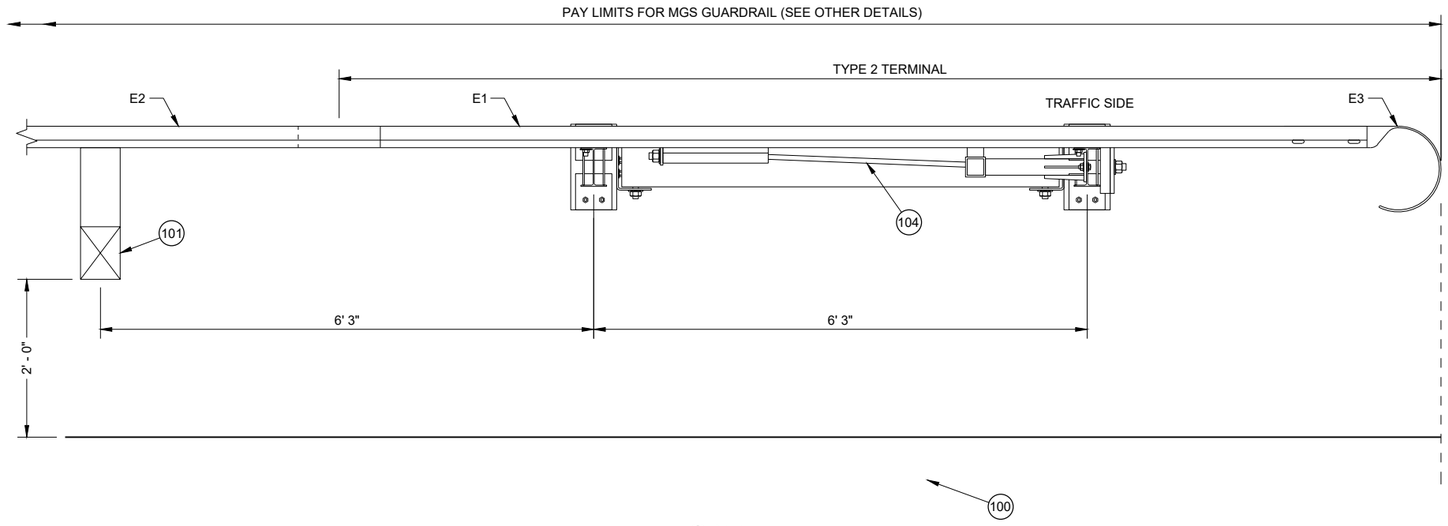
S.D.D. 14 B 45-5L



BACK VIEW
TYPE 2 TERMINAL



SIDE VIEW
TYPE 2 TERMINAL



TOP VIEW
TYPE 2 TERMINAL

GENERAL NOTES

100 MAXIMUM SLOPE IS 2.5:1.

101 SEE SDD 14B42 FOR MORE INFORMATION.

102 SHOULDER

103 MAXIMUM SLOPE IS 10:1.

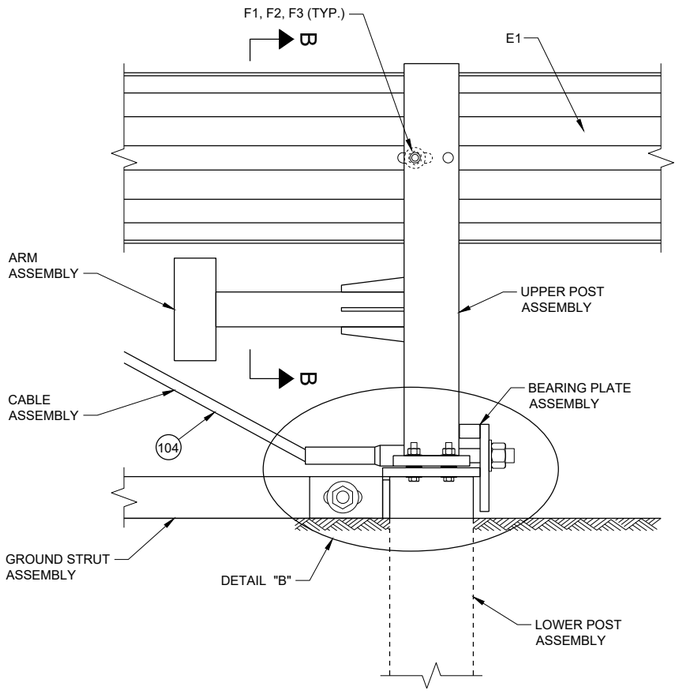
104 AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

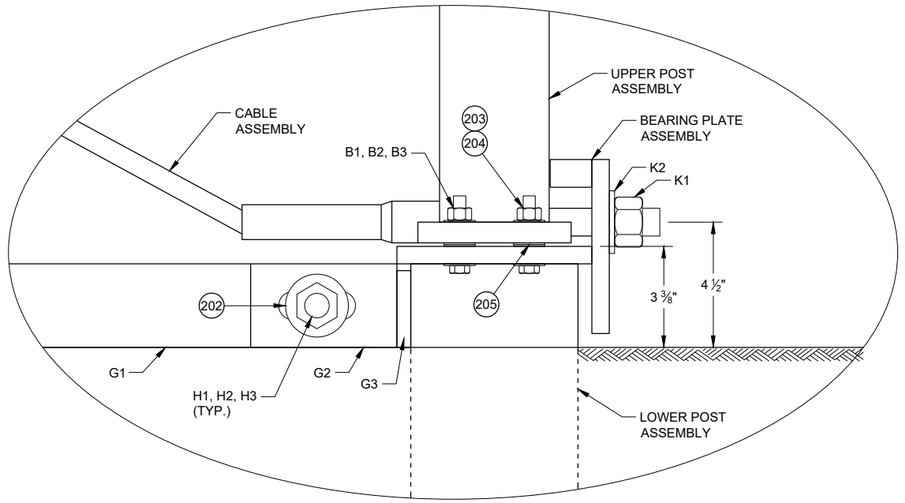
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

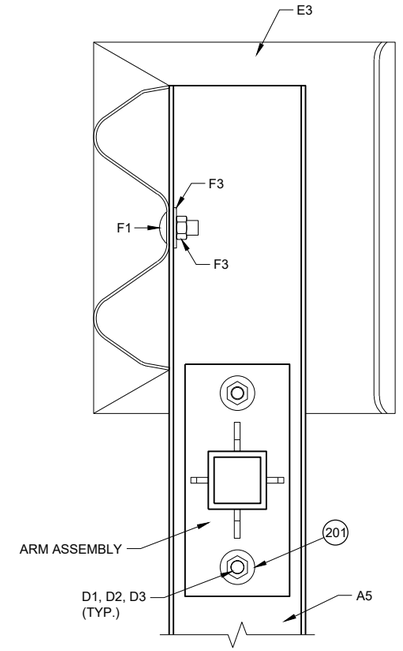
SDD 14B47 - 03a



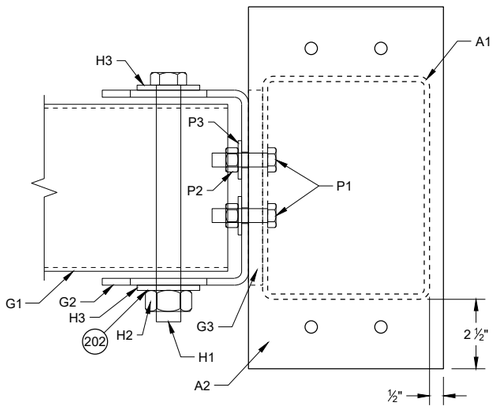
DETAIL "A"



DETAIL "B"

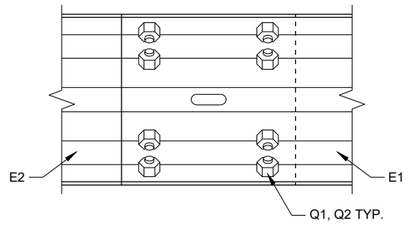


SECTION B - B



TOP VIEW

GROUND STRUT CONNECTION DETAIL



DETAIL "C"

GENERAL NOTES

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

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

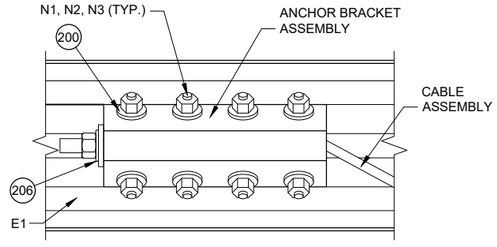
202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.

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

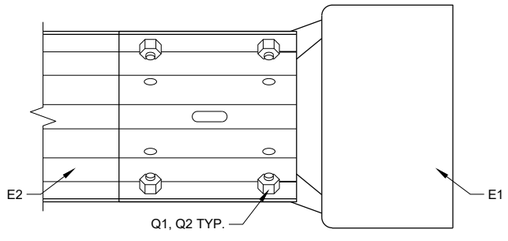
204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.

205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.

206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.



DETAIL "D"



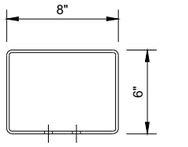
DETAIL "E"

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

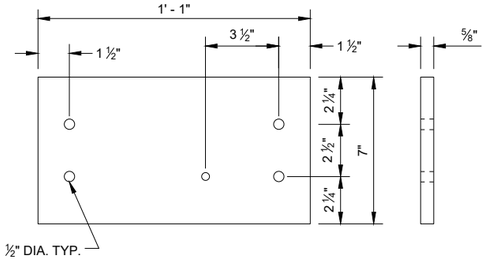
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

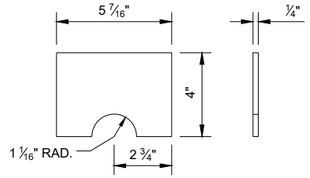
SDD 14B47 - 03b



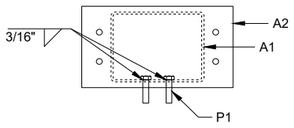
TOP VIEW



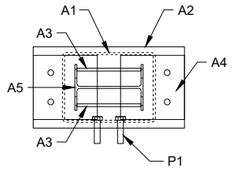
LOWER PLATE (A2)

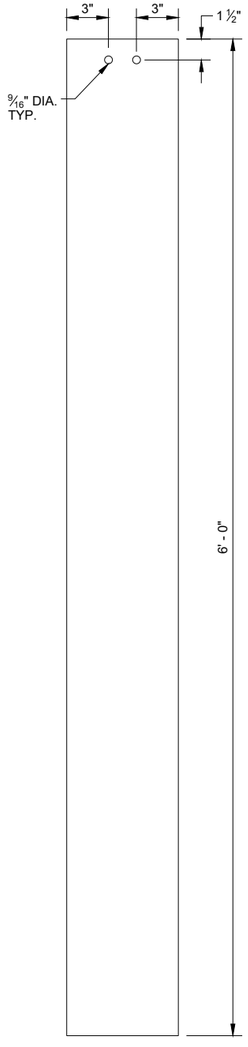


POST GUSSET (A3)



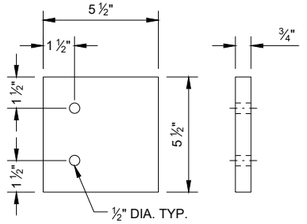
PLAN VIEW



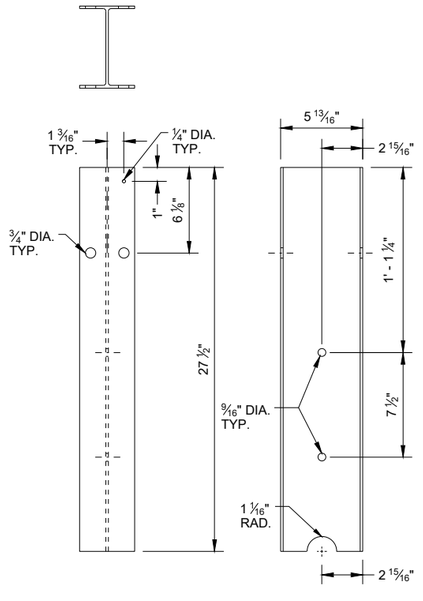


SIDE VIEW

FOUNDATION TUBE (A1)

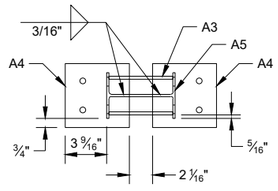


UPPER PLATE (A4)

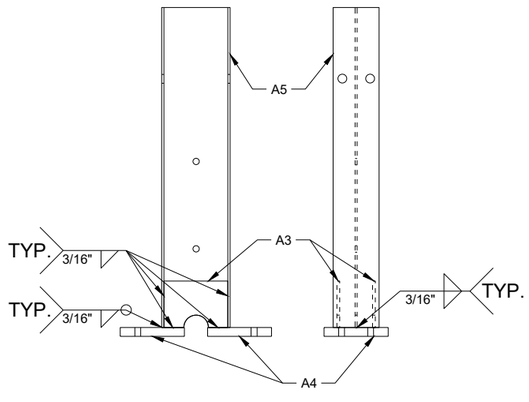


FRONT VIEW SIDE VIEW

TYPE 2 POST (A5)

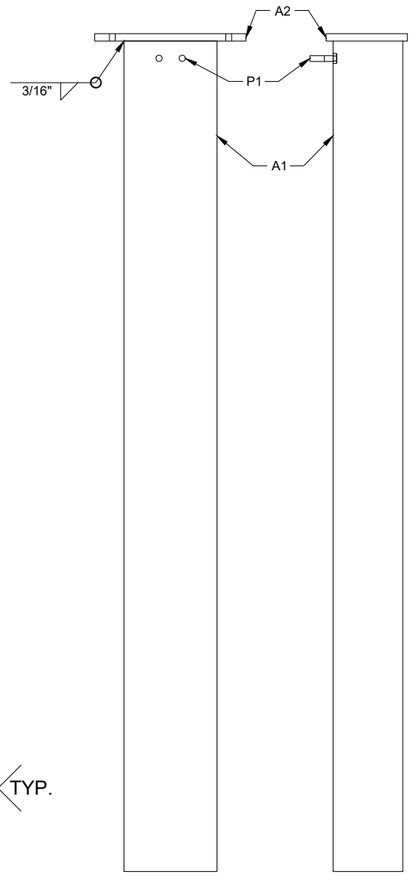


PLAN VIEW



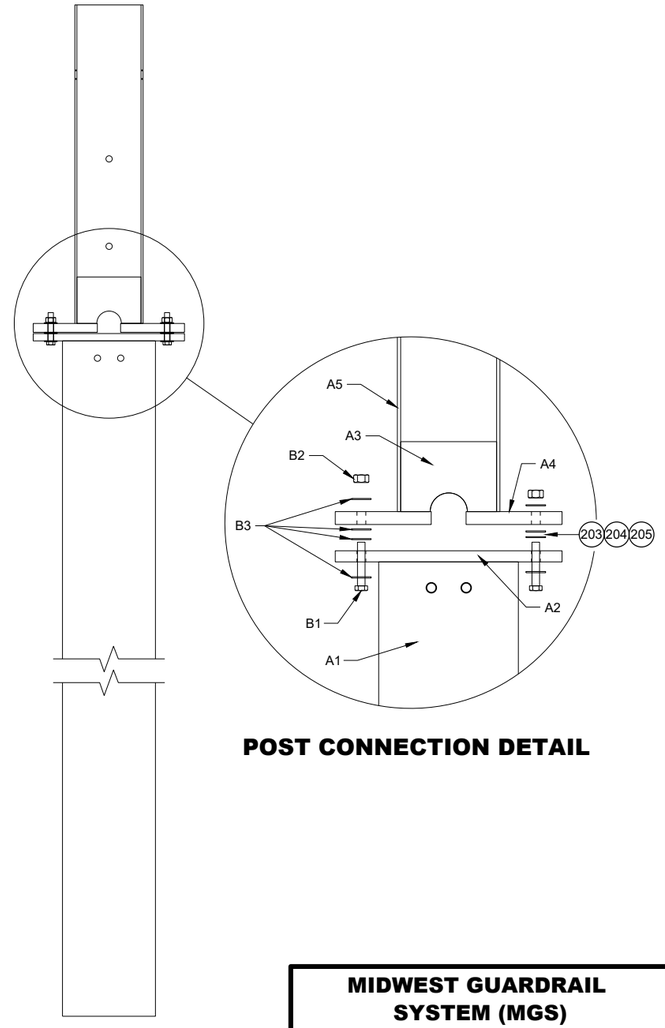
SIDE VIEW FRONT VIEW

UPPER POST ASSEMBLY



FRONT VIEW SIDE VIEW

LOWER POST ASSEMBLY



POST CONNECTION DETAIL

ASSEMBLED POST

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

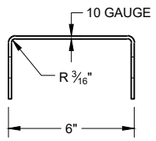
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

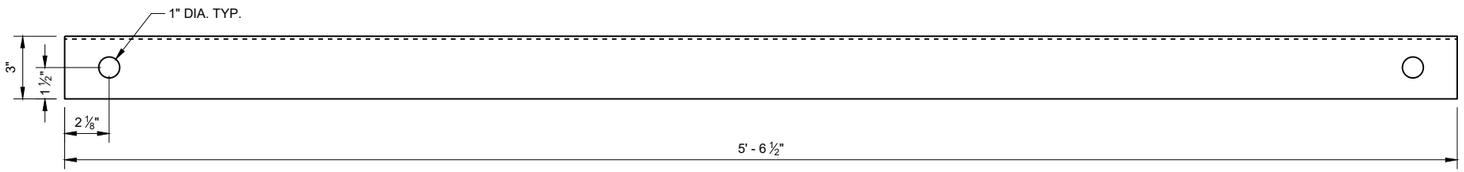
SDD14B47 - 03c

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SDD14B47 - 03c

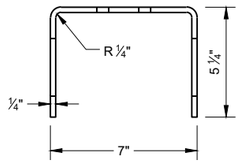


SIDE VIEW

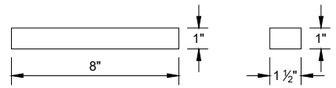


FRONT VIEW

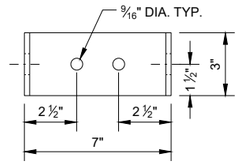
GROUND STRUT CHANNEL (G1)



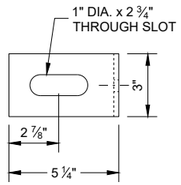
TOP VIEW



BEARING PLATE FLANGE (L2)

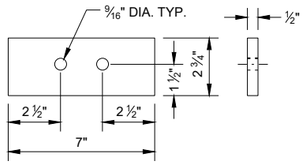


FRONT VIEW

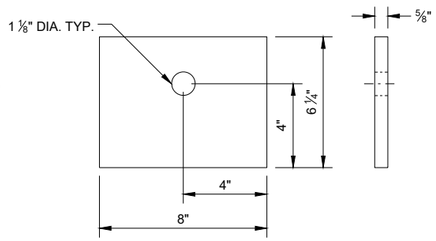


SIDE VIEW

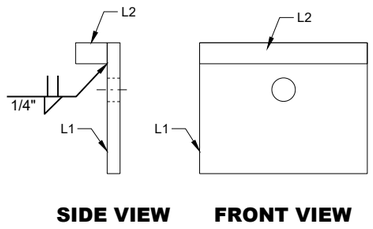
GROUND STRUT CONNECTOR (G2)



GROUND STRUT PLATE (G3)

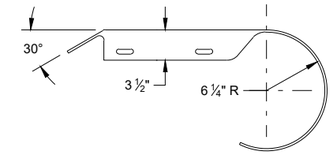


BEARING PLATE (L1)

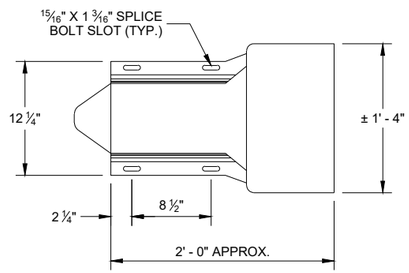


SIDE VIEW FRONT VIEW

BEARING PLATE ASSEMBLY

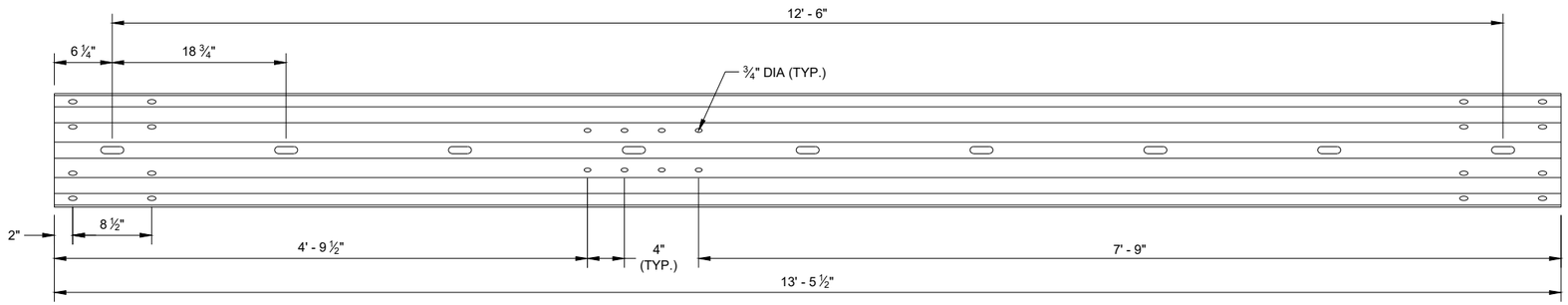


PLAN VIEW

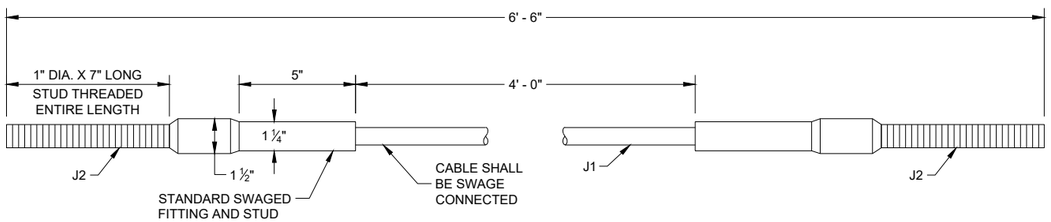


ELEVATION VIEW

ROUNDED BUFFER END (E3)



TYPE 2 GUARDRAIL (E1)



CABLE ASSEMBLY

6

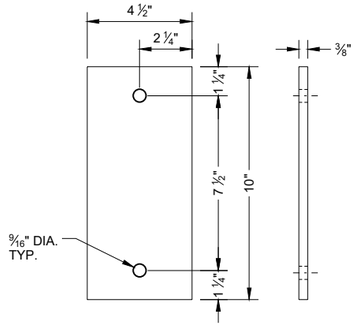
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SDD 14B47 - 03d

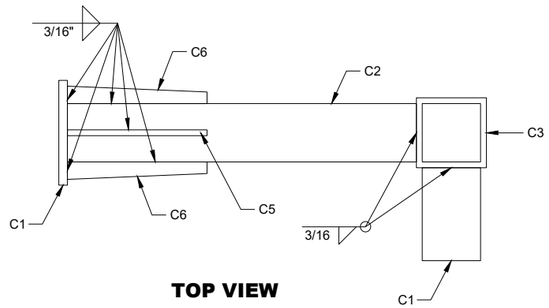
SDD 14B47 - 03d

MIDWEST GUARDRAIL SYSTEM (MGS)
TYPE 2 TERMINAL

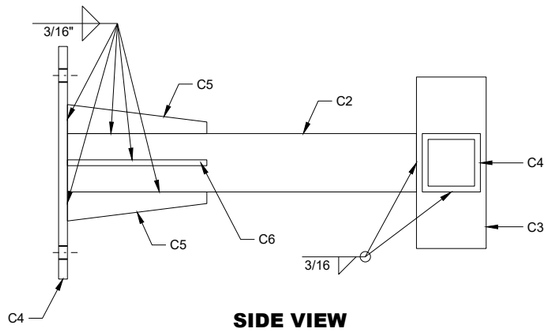
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



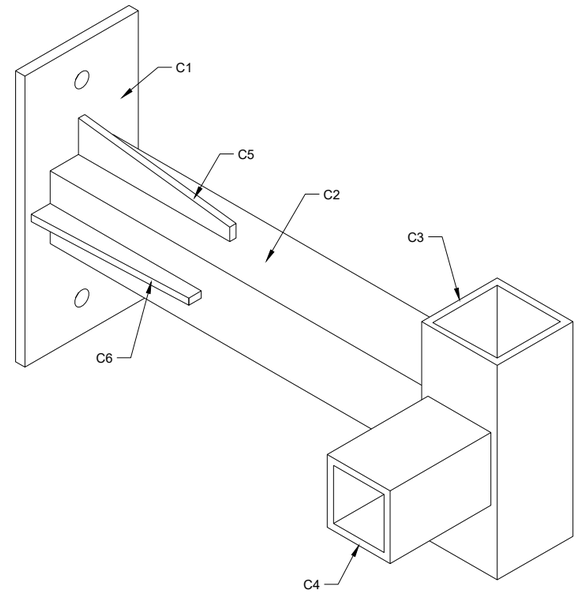
ARM PLATE (C1)



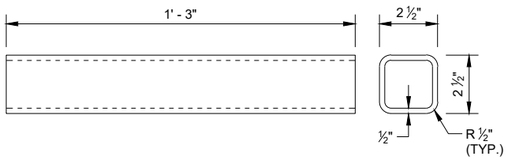
TOP VIEW
ARM ASSEMBLY



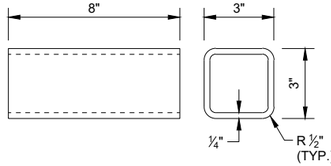
SIDE VIEW
ARM ASSEMBLY



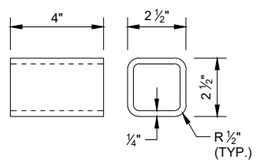
ISOMETRIC VIEW
ARM ASSEMBLY



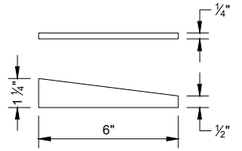
ARM TUBE 1 (C2)



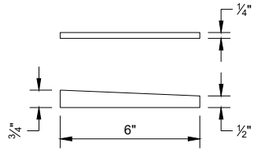
ARM TUBE 2 (C3)



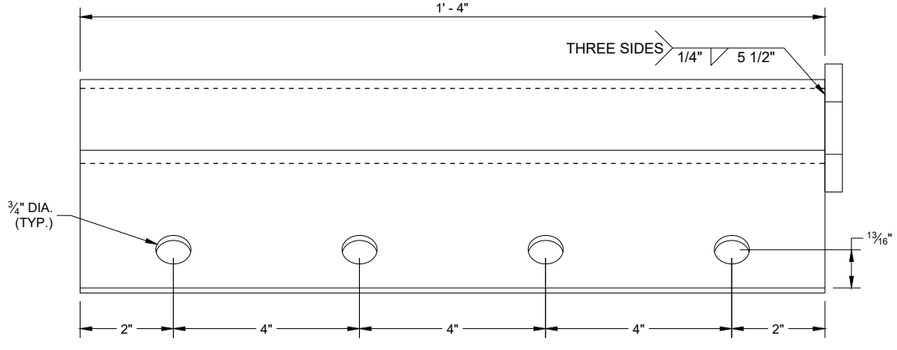
ARM TUBE 3 (C4)

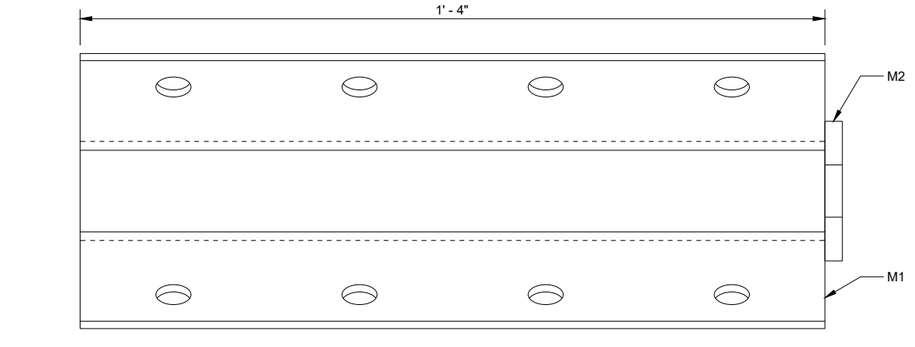


ARM GUSSET PLATE 1 (C5)

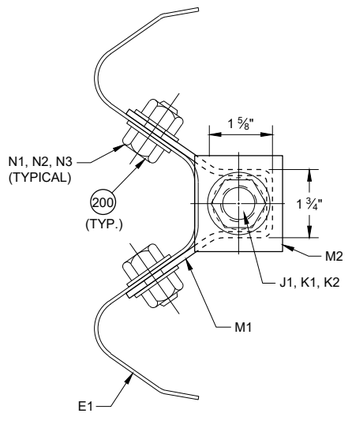


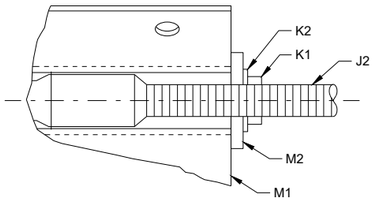
ARM GUSSET PLATE 2 (C6)



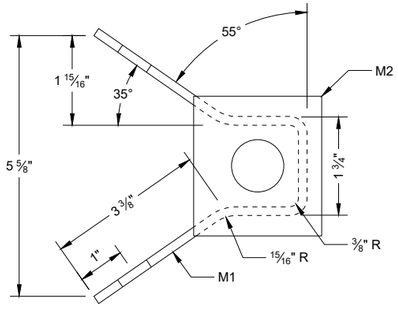


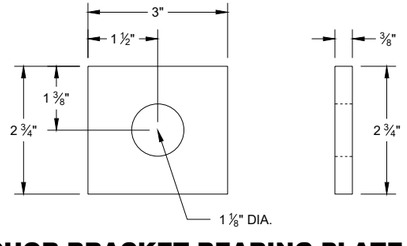
ANCHOR BRACKET (M1, M2)





SECTION A - A





ANCHOR BRACKET BEARING PLATE (M2)

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47 - 03e

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

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

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B47 - 03f

BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	7/8" DIA.
H2	GROUND STRUT BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/8" DIA.
H3	GROUND STRUT BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	**3/4" DIA.**
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. MIN BREAKING STRENGTH OF 42.7 KIPS ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."	
K1	CABLE ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	BEARING PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
L2	BEARING PLATE FLANGE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1" THICKNESS
M1	BEAM GUARD ANCHOR BRACKET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	
M2	BEAM GUARD ANCHOR END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
N1	ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	ANCHOR BRACKET BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
N3	ANCHOR BRACKET BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 /ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
P1	FOUNDATION TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 /ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
P2	FOUNDATION TUBE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDENED WASHER ONLY)	1/2" DIA.
P3	FOUNDATION TUBE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
Q1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
Q2	SPLICE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	5/8" DIA.

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SDD 14B47 - 03g

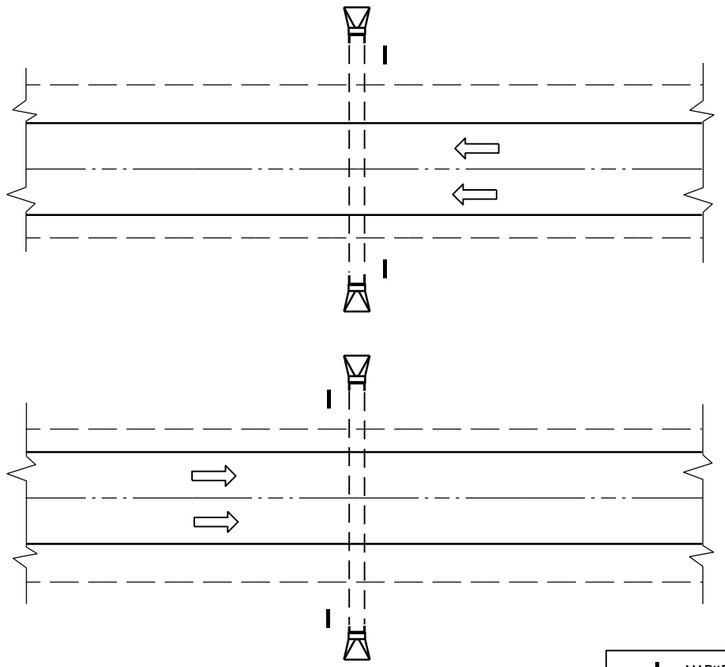
SDD 14B47 - 03g

MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

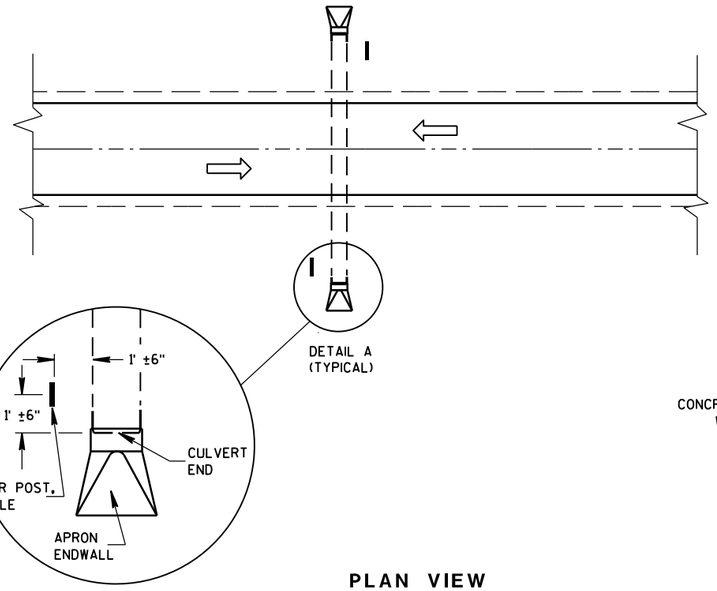
APPROVED
August 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

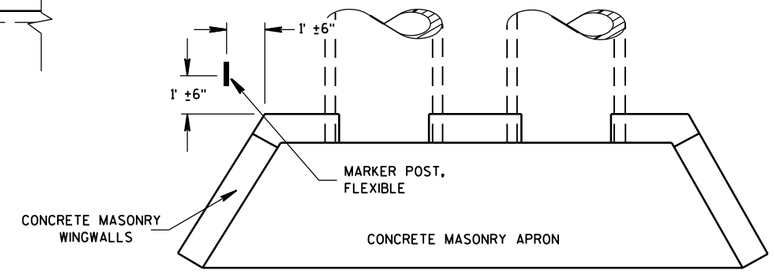
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

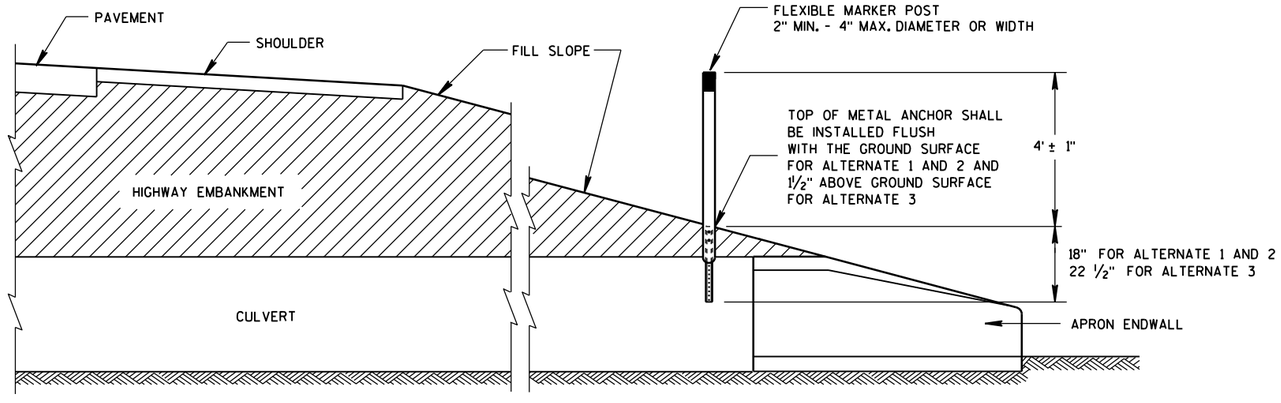
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

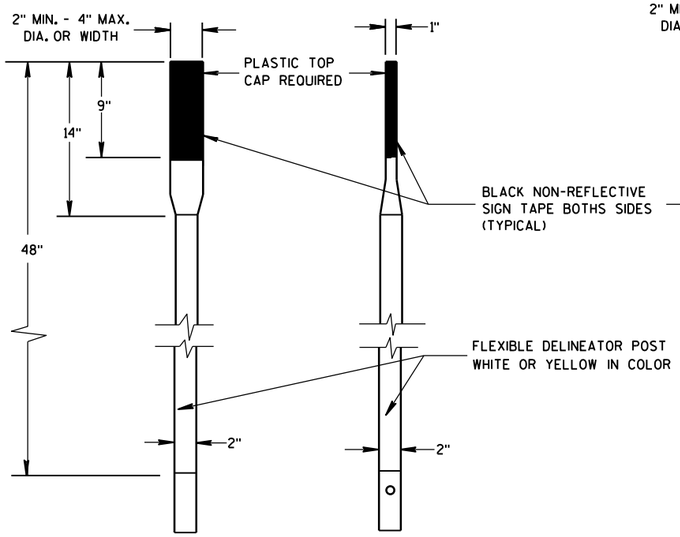
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

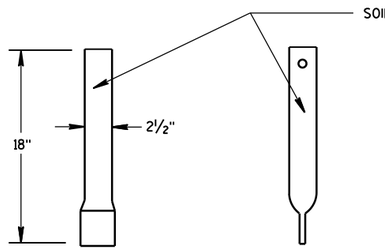
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S.D.D. 15 A 3-2a

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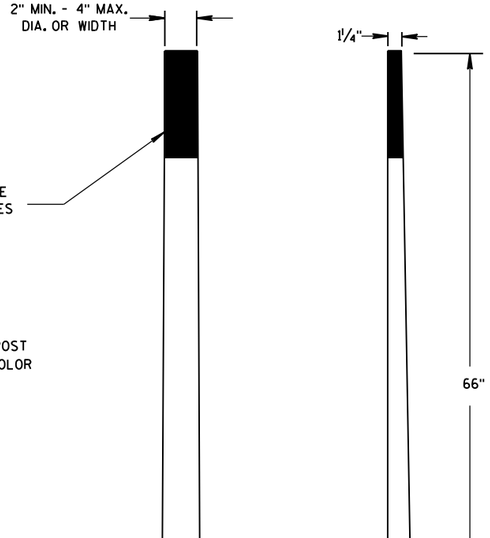
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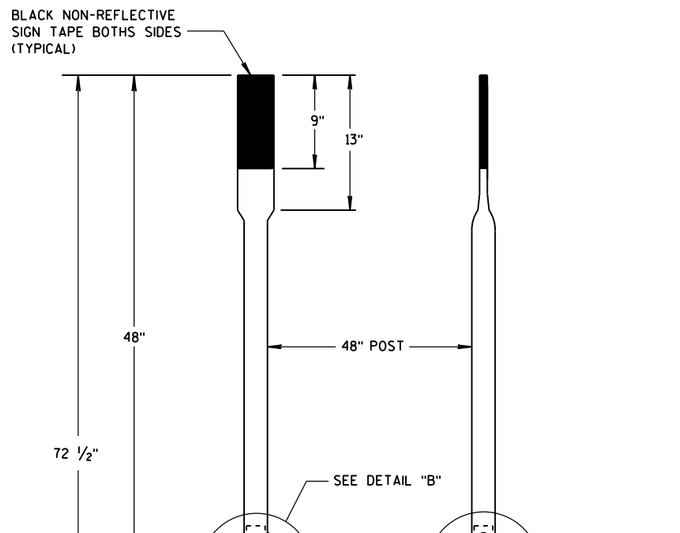
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

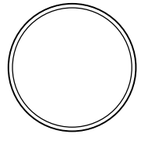
ALTERNATE 2



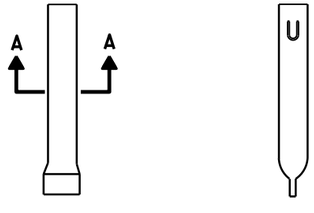
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

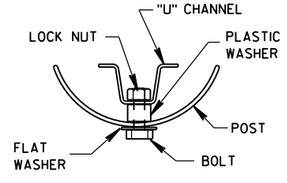


SECTION A-A

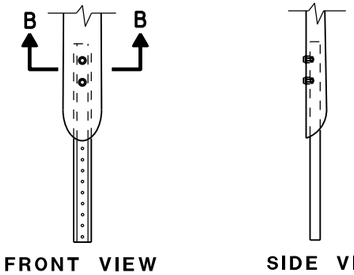


FRONT VIEW SIDE VIEW

ALTERNATE 1

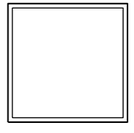


SECTION B-B

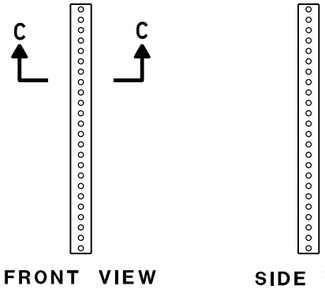


FRONT VIEW SIDE VIEW

ALTERNATE 2



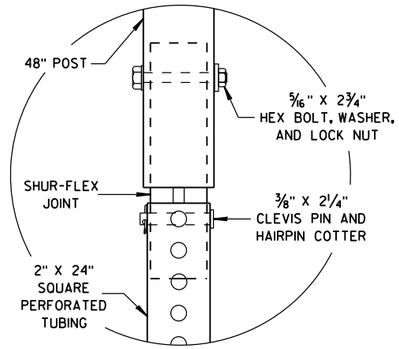
SECTION C-C



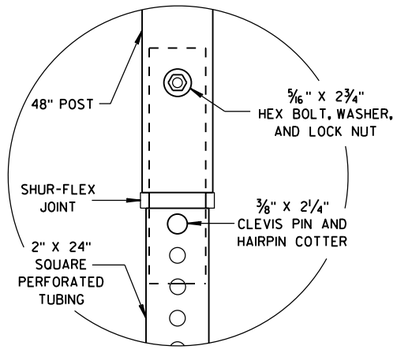
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

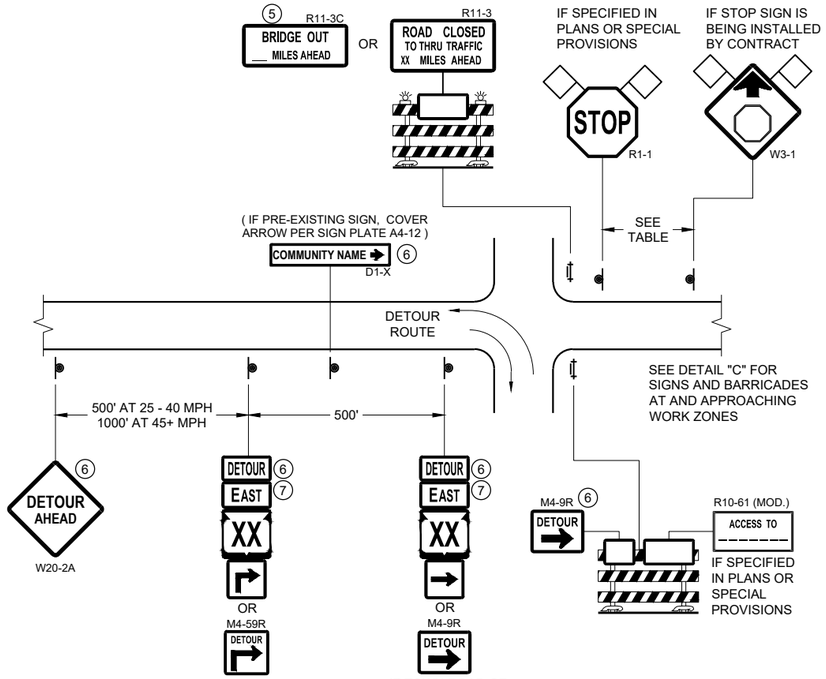
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
IGN
FHWA

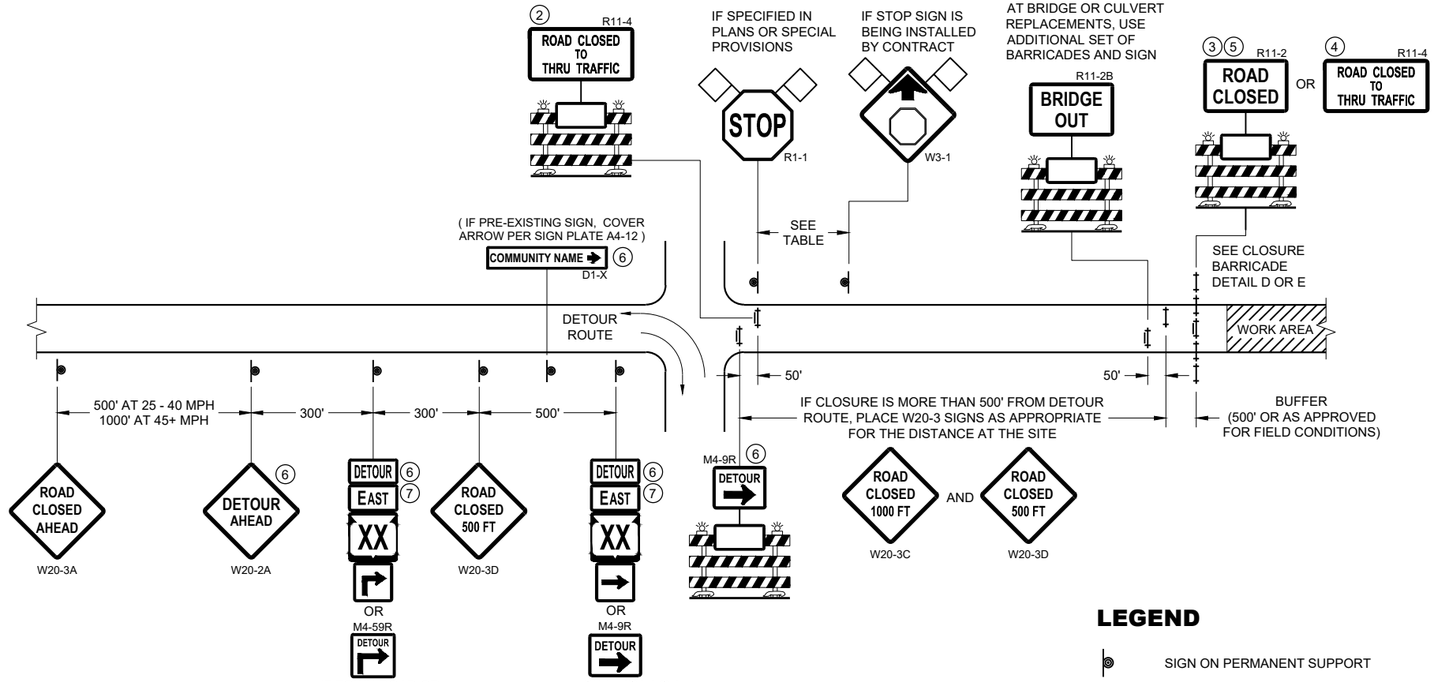
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S.D.D. 15 A 3-2b

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



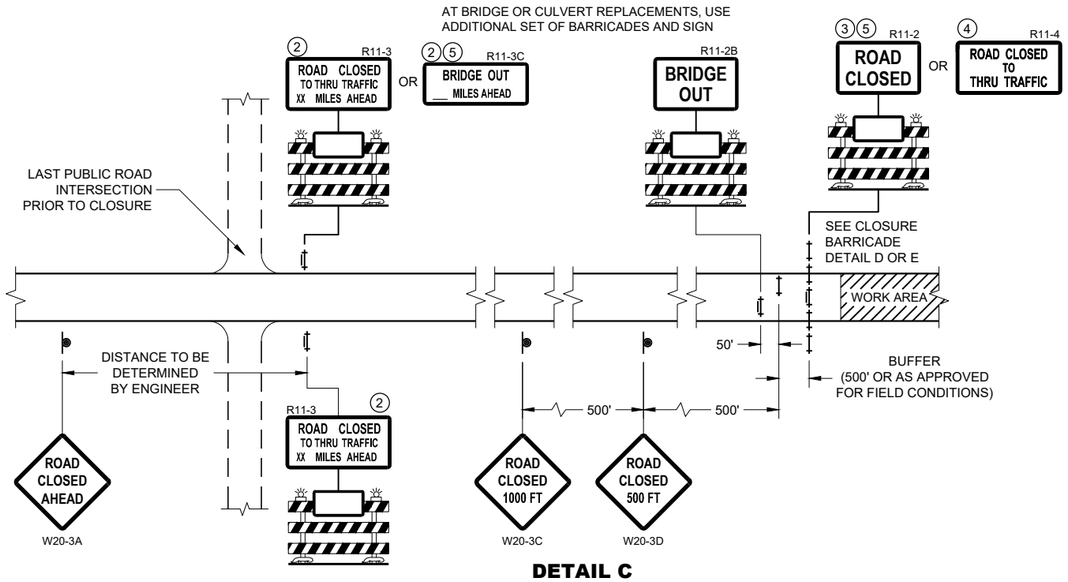


DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

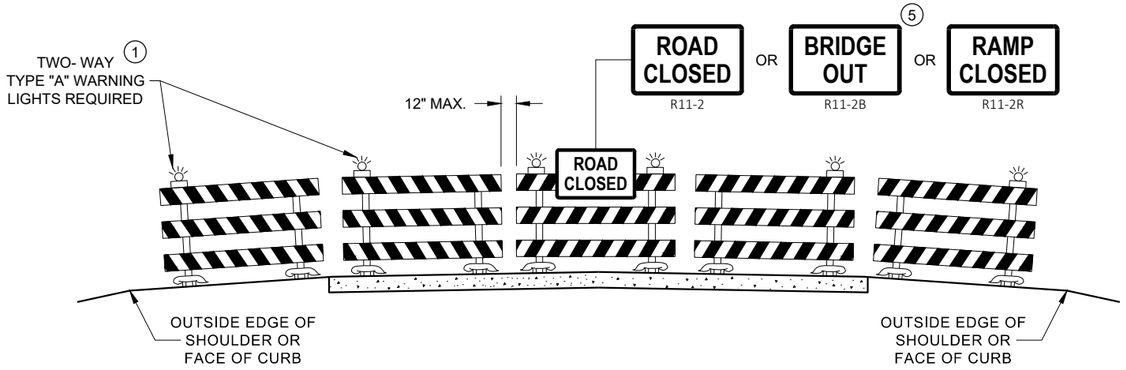
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

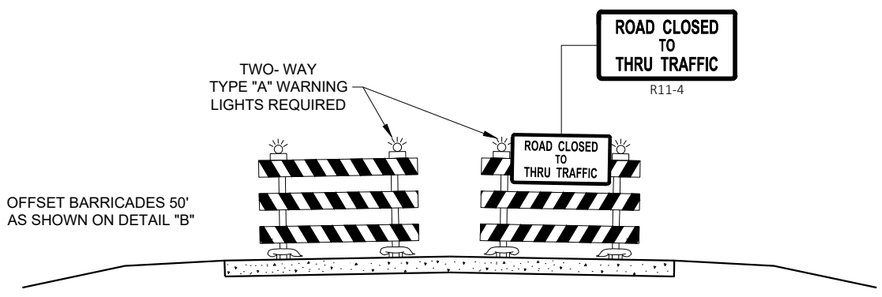
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SDD 15C02 - 08a

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

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SDD 15C02 - 08b

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4 - 8, M3 - X
- XX — M1 - 4
- XX — M1 - 6
- COUNTY X — M1 - 5A
- M05 - 1
- M06 - 1
- M06 - 1

GENERAL NOTES

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

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

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

500' AT 25-40 MPH
1000' AT 45+ MPH

500'

M4-8a *
END DETOUR WEST XX

DETOUR EAST XX *

D1-X *
COMMUNITY NAME
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR EAST WEST XX XX

DETOUR ROUTE

WORK AREA

DETOUR EAST XX

WEST XX OR M4-9L DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR NEXT X MILES *
G20-51

DETOUR WEST XX * OR M4-59L DETOUR * ** IF TOWN ROAD OR LOCAL STREET

MATCH POINT

* M4-59L DETOUR ** OR DETOUR EAST XX *
IF TOWN ROAD OR LOCAL STREET

D1-X *
COMMUNITY NAME
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

M4-9L DETOUR ** OR DETOUR EAST XX
IF TOWN ROAD OR LOCAL STREET

500'

500' AT 25 - 40 MPH
1000' AT 45+ MPH

500'

M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

DETOUR EAST XX *

DETOUR EAST XX

D1-X *
COMMUNITY NAME
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

DETOUR WEST XX

DETOUR WEST XX OR M4-9R DETOUR ** IF TOWN ROAD OR LOCAL STREET

DETOUR WEST XX * OR M4-59R * DETOUR ** IF TOWN ROAD OR LOCAL STREET

500'

DETOUR ROUTE

500'

DETOUR EAST XX

DETOUR EAST XX

DETOUR EAST XX *

D1-X *
COMMUNITY NAME
(IF PRE-EXISTING SIGN, COVER ARROW PER SIGN PLATE A4-12)

PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

500' AT 25 - 40 MPH
1000' AT 45+ MPH

DETOUR EAST XX *

EAST XX
M3-X 24" X 12"
M1-X 24" X 24"
DETOUR AHEAD
W20-2A
USE ON STATE TRUNK, U.S. OR INTERSTATE HIGHWAYS, OR AS SPECIFIED IN THE CONTRACT

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

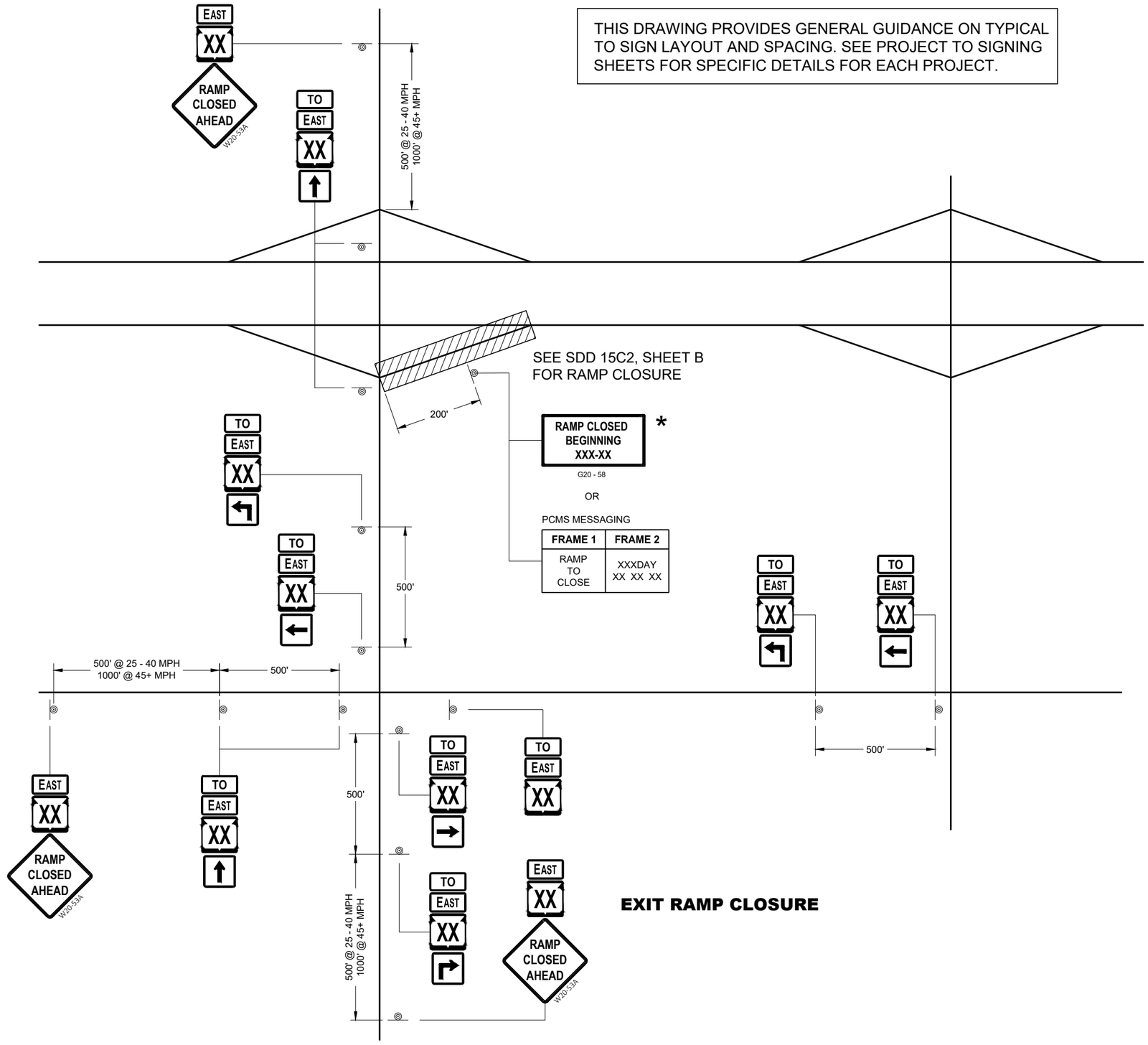
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

SDD 15C02 - 08c

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EXIT RAMP CLOSURE

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

◎ SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

ON RAMP LANE CLOSURE

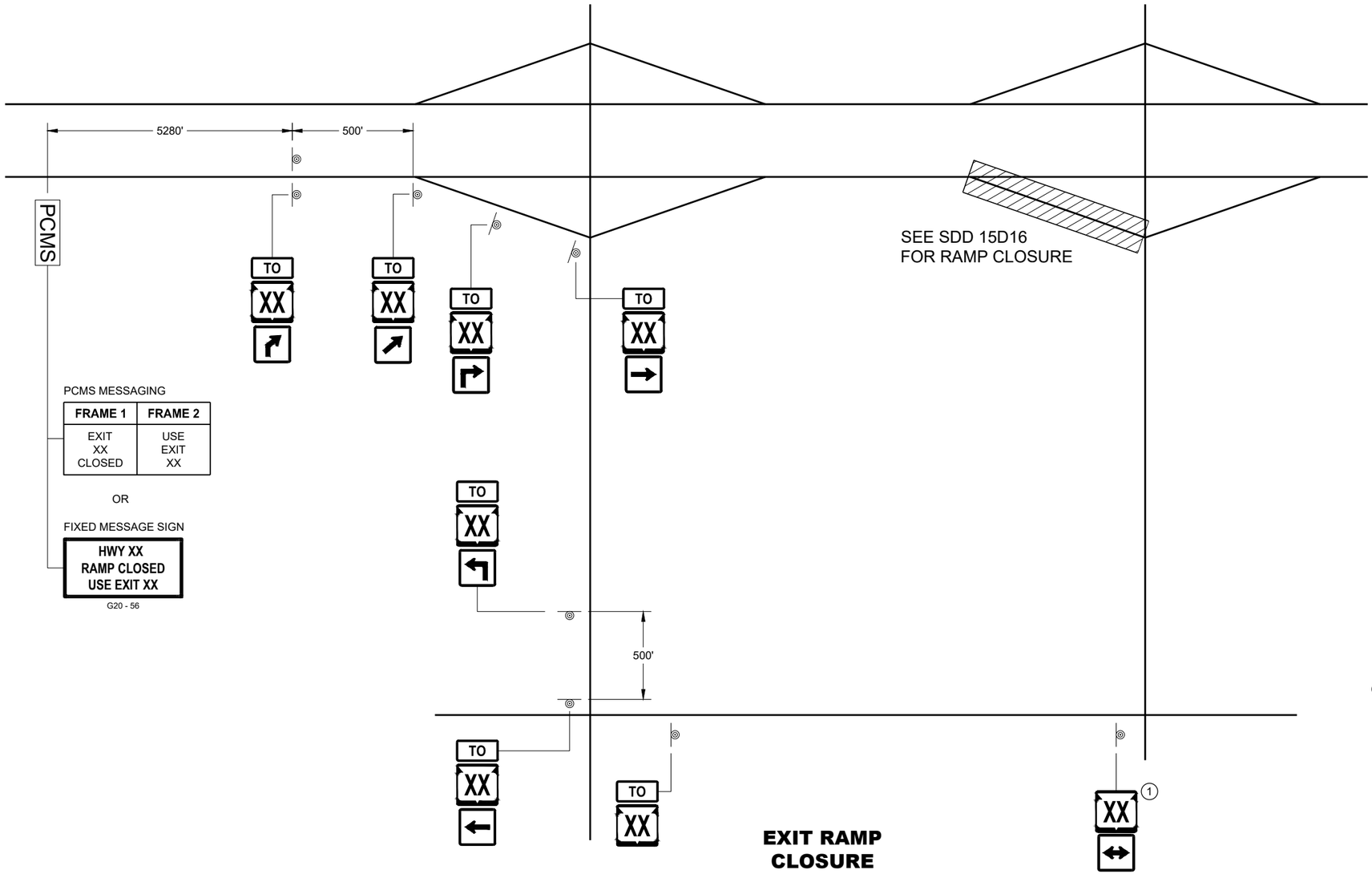
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEER

FHWA

6
SDD 15C02 - 08d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

EXIT RAMP CLOSURE

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 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, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

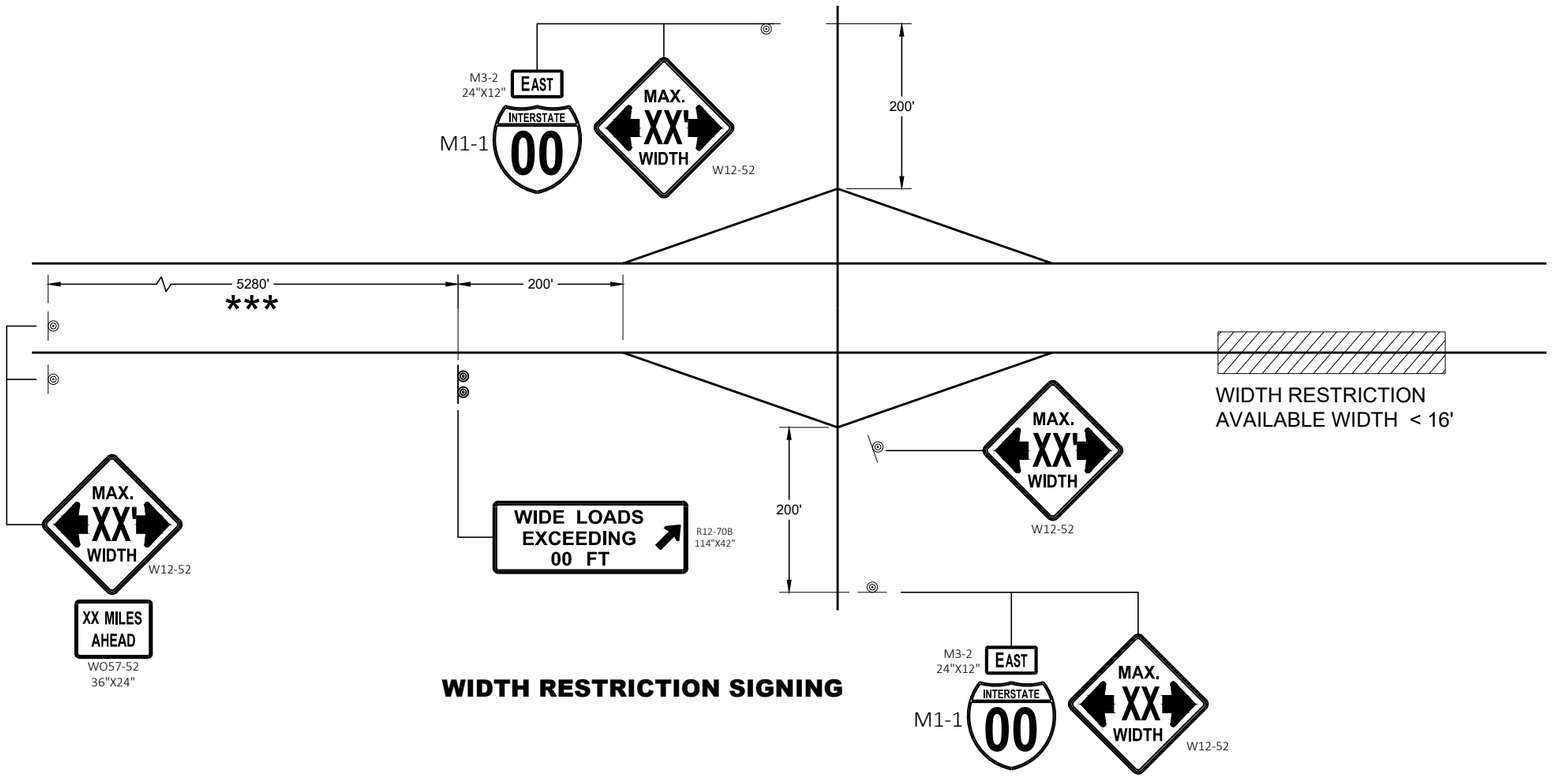
OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 08e



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.

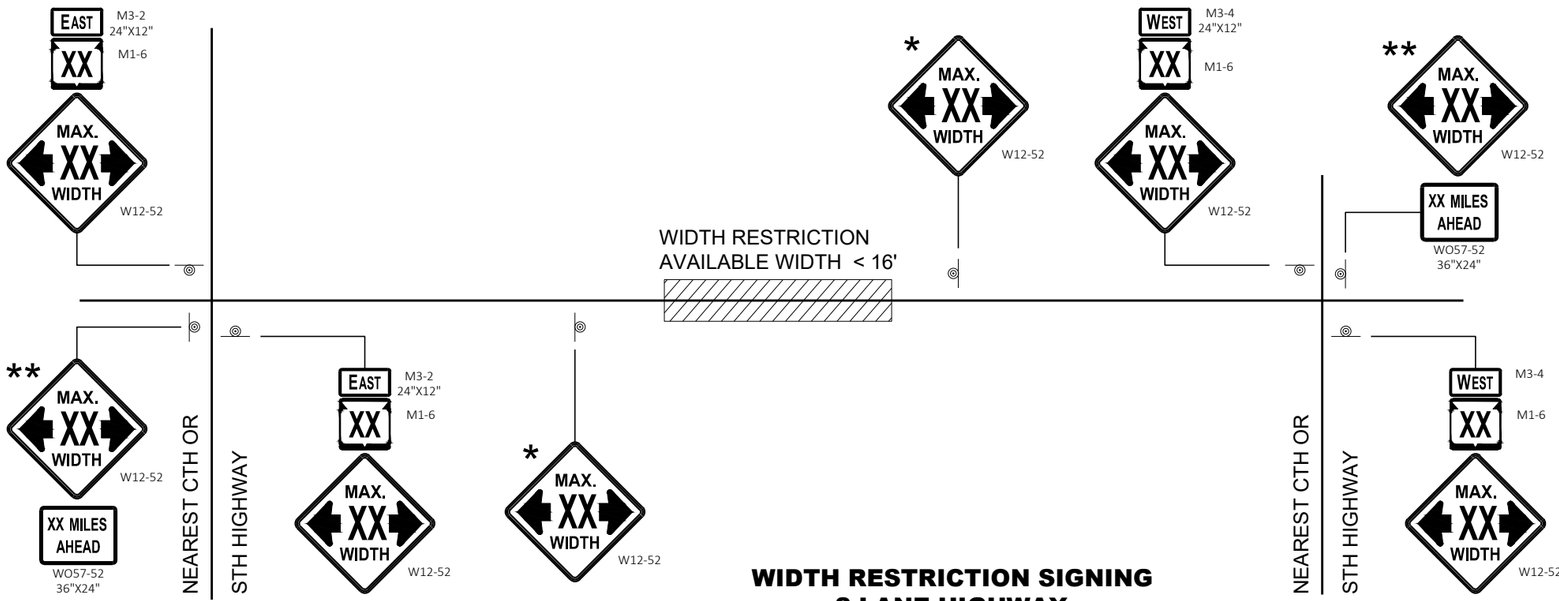
* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** 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

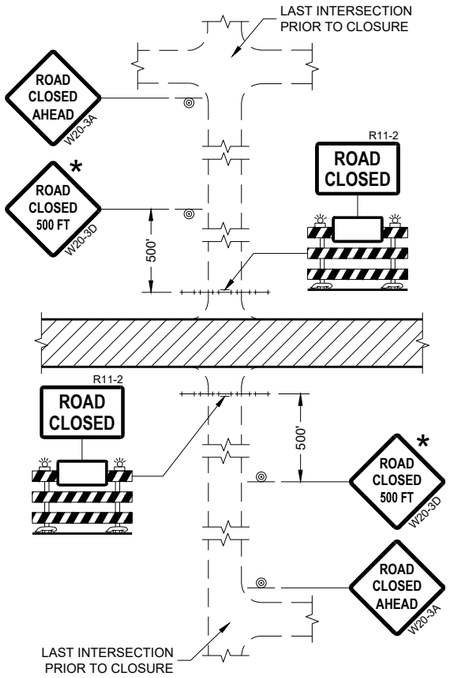
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February 2020
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/S/ Andrew Heidtke
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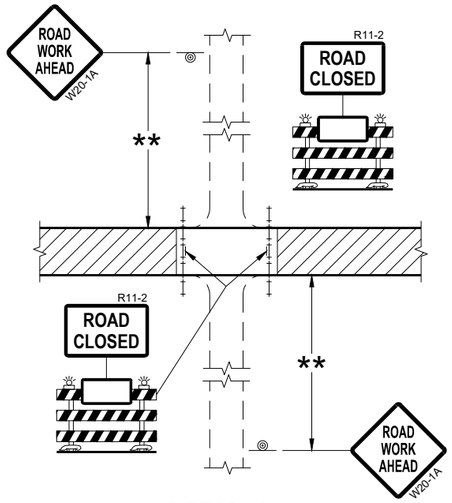
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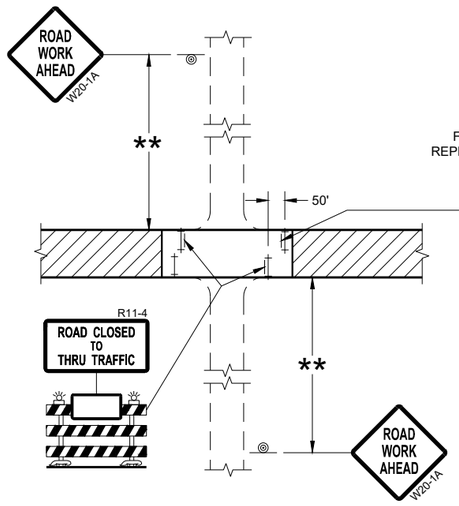
SDD 15C02 - 08f



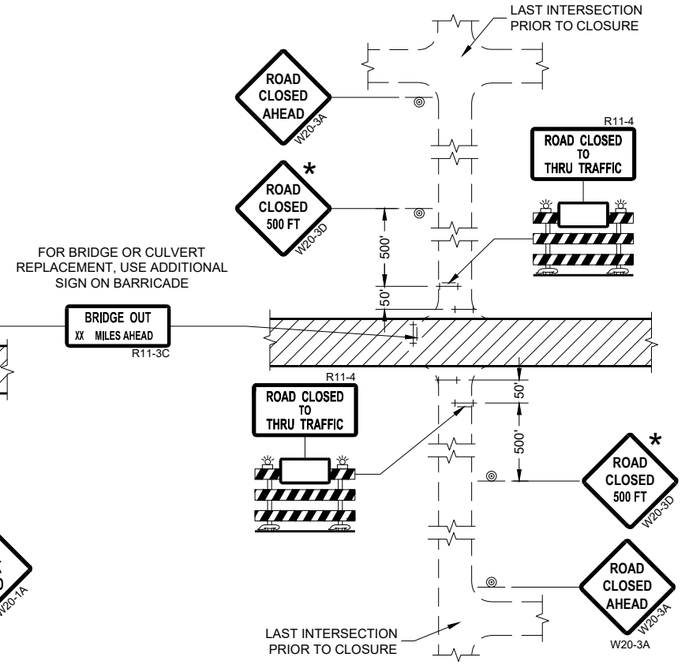
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

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

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

GENERAL NOTES

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

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

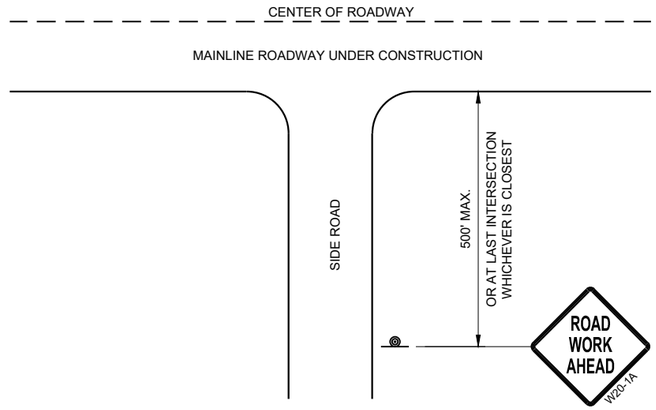
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

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

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



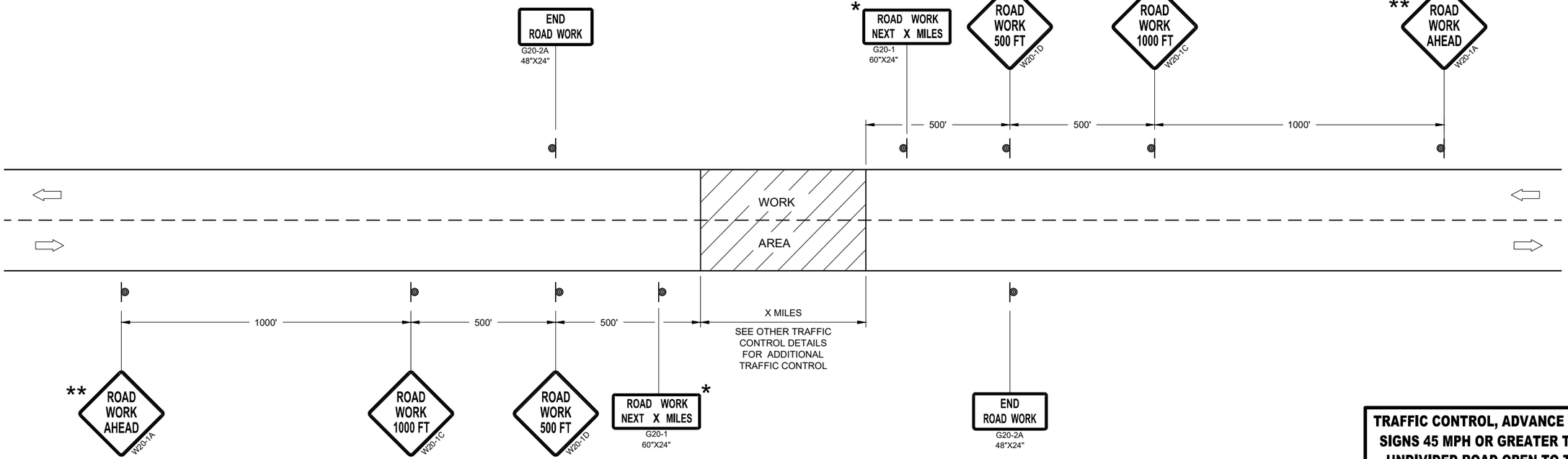
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

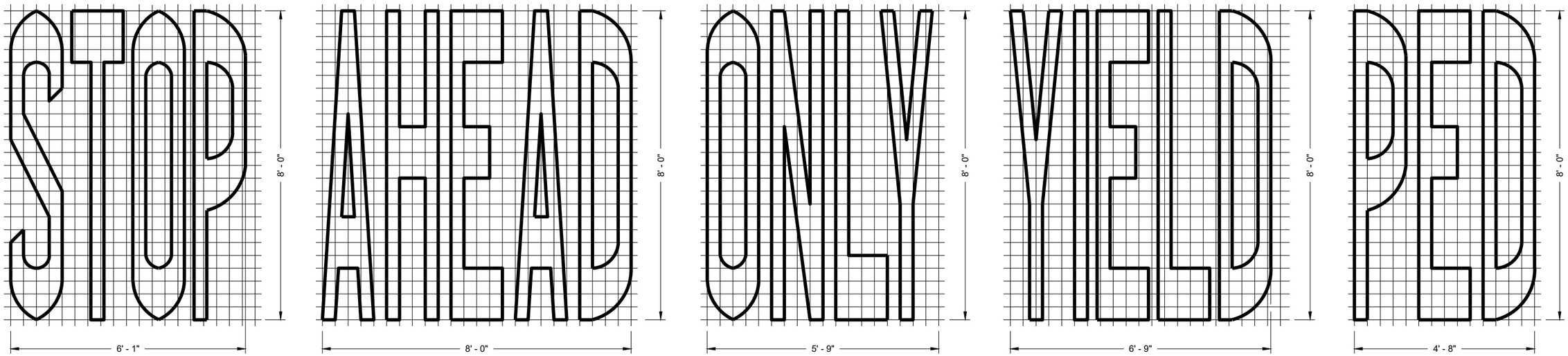
APPROVED
July 2018
DATE

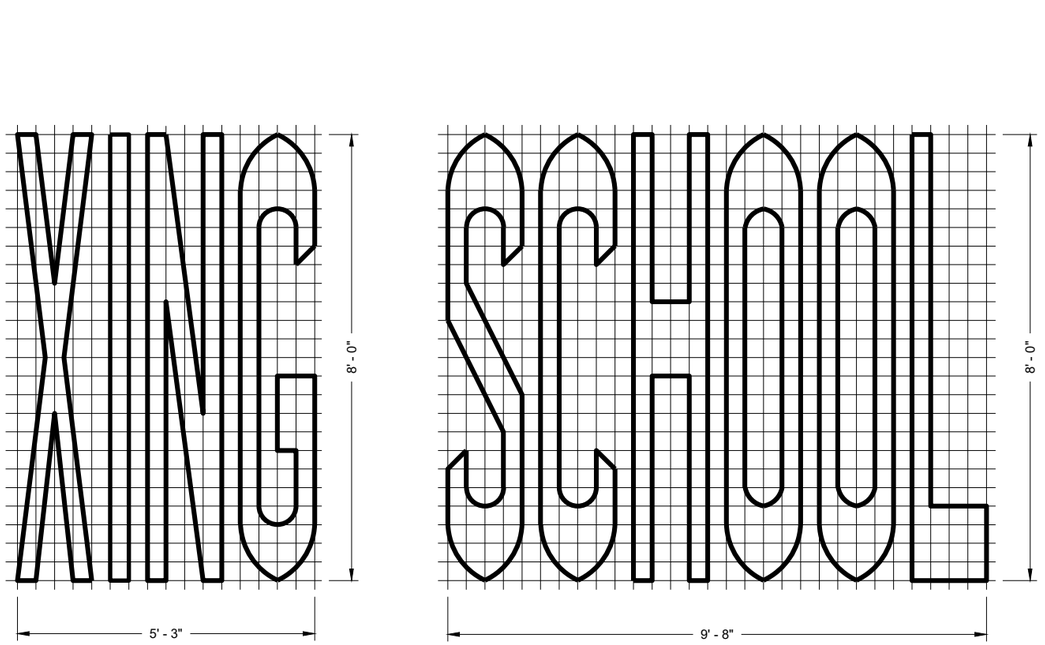
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

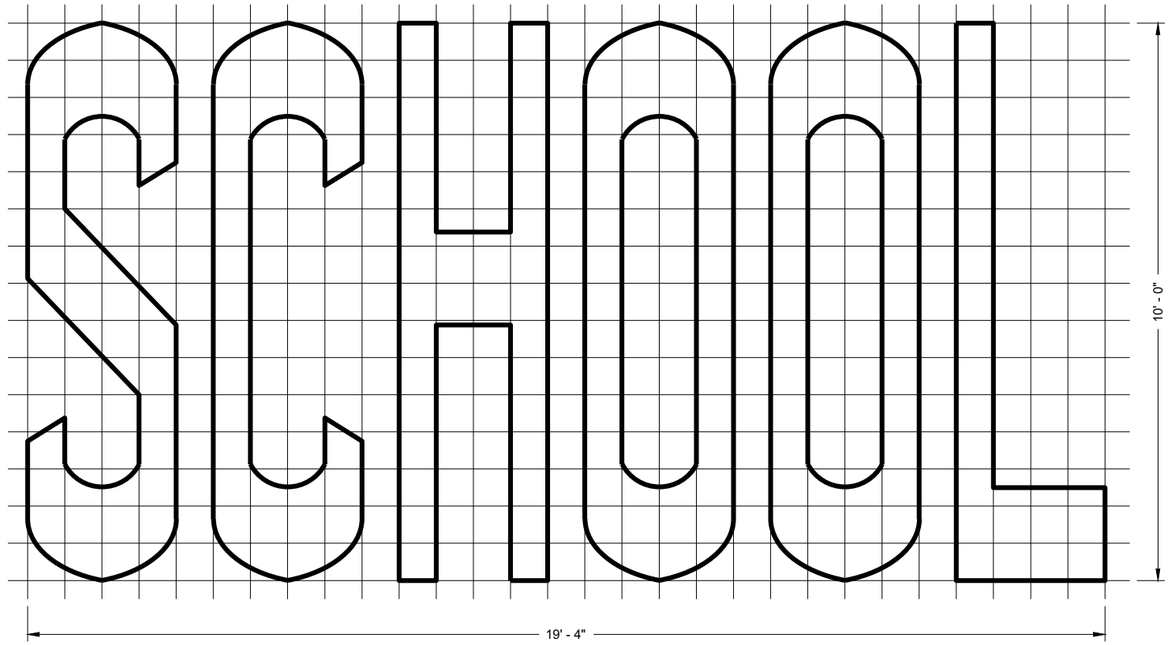
6

SDD 15C04 - 05





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

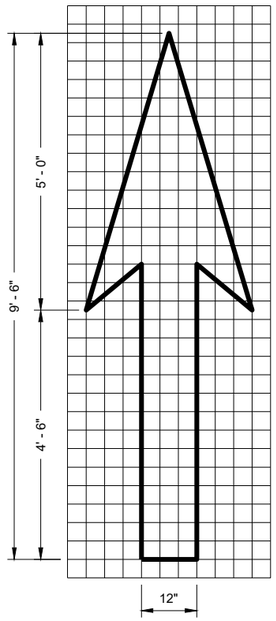
/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

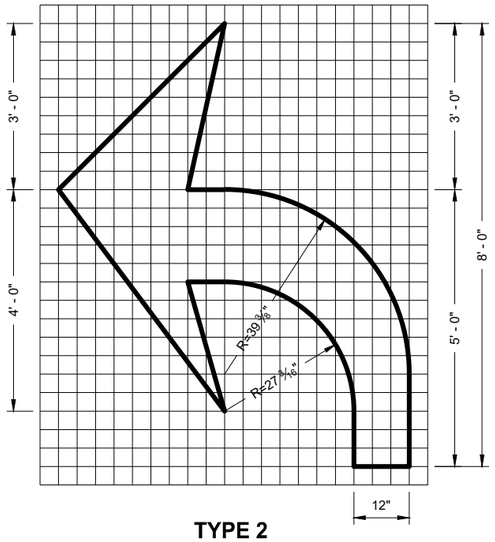
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SDD 15C07 - 15b

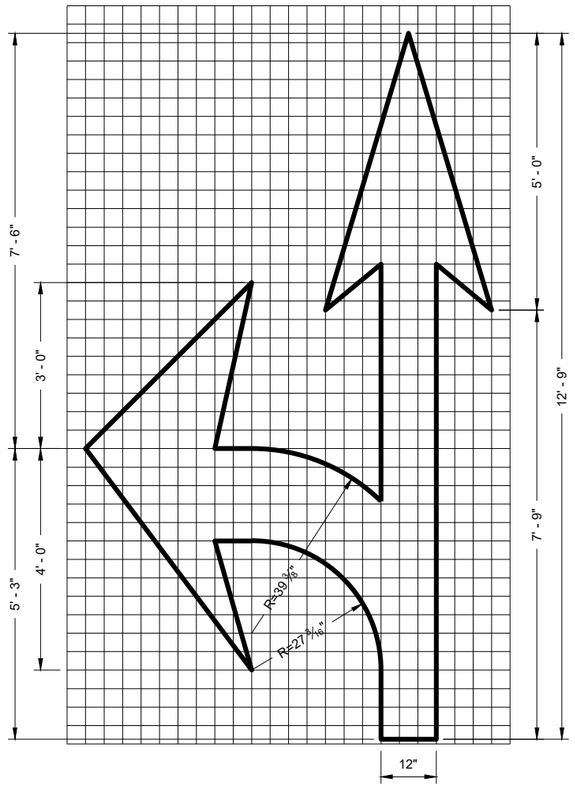
SDD 15C07 - 15b



TYPE 1



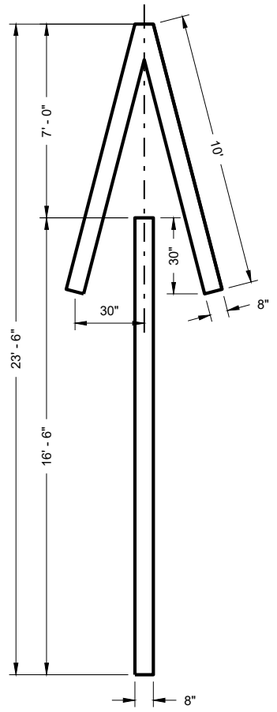
TYPE 2



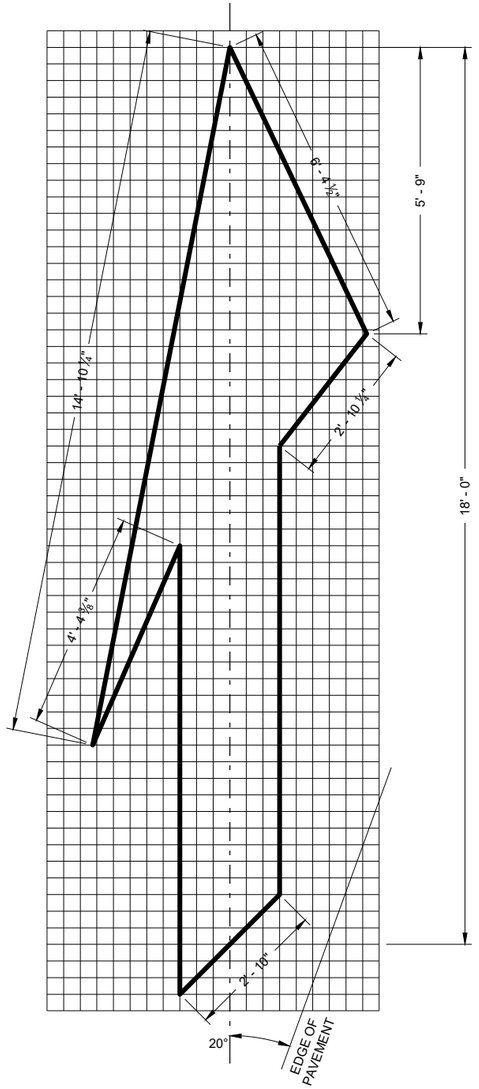
TYPE 3

GENERAL NOTES

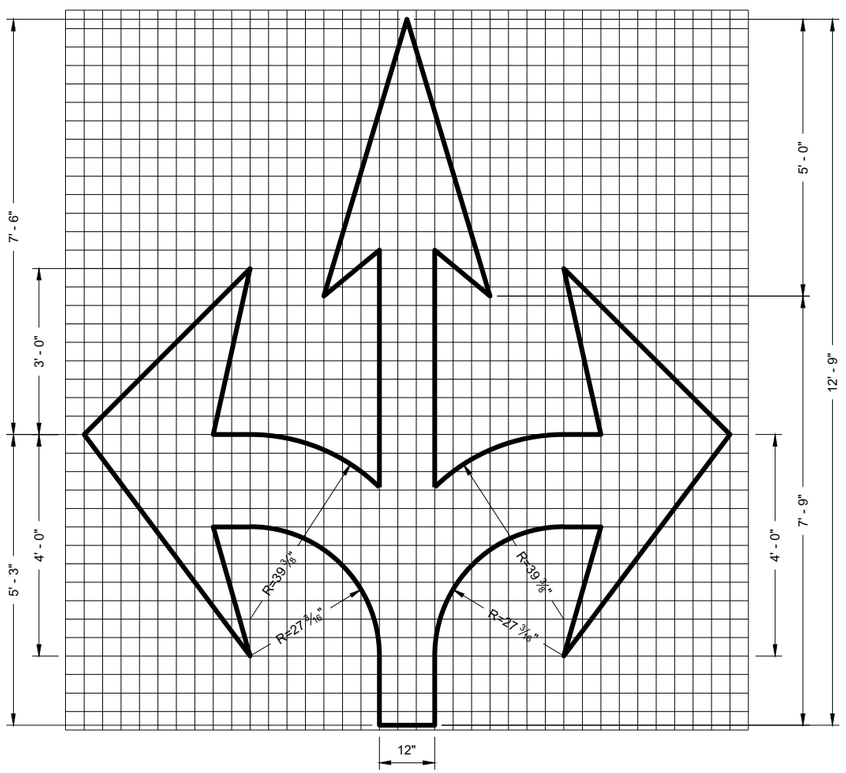
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



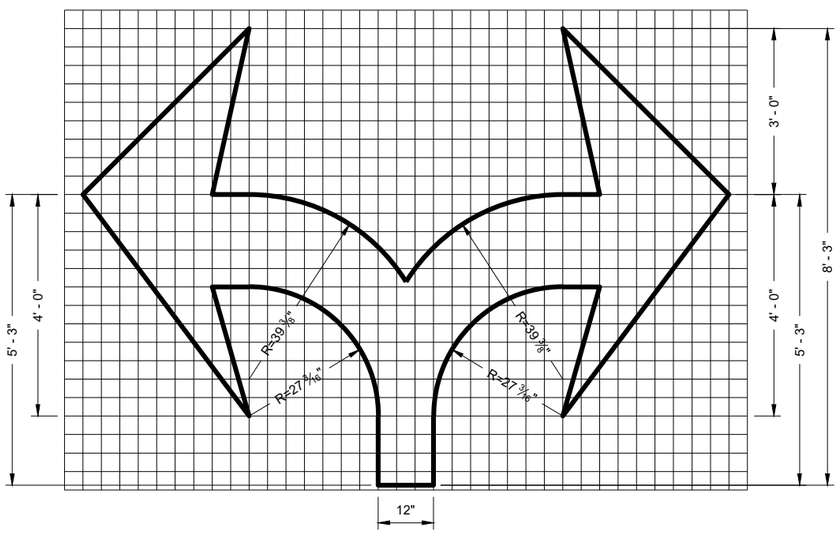
TYPE 4



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

229

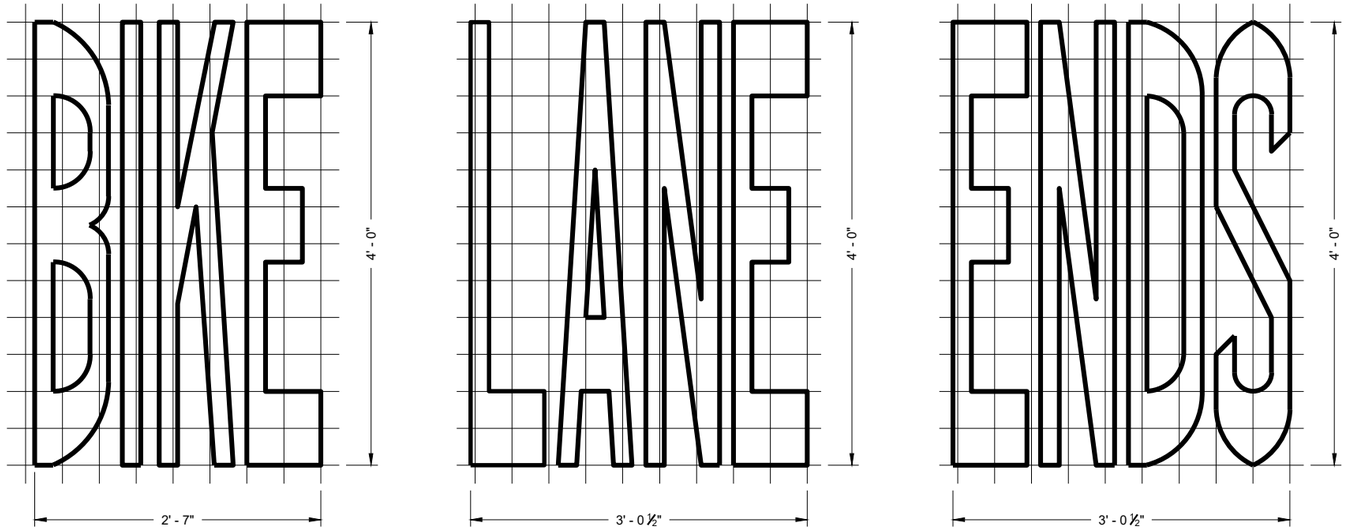
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SDD 15C07 - 15c

6

SDD 15C07 - 15c

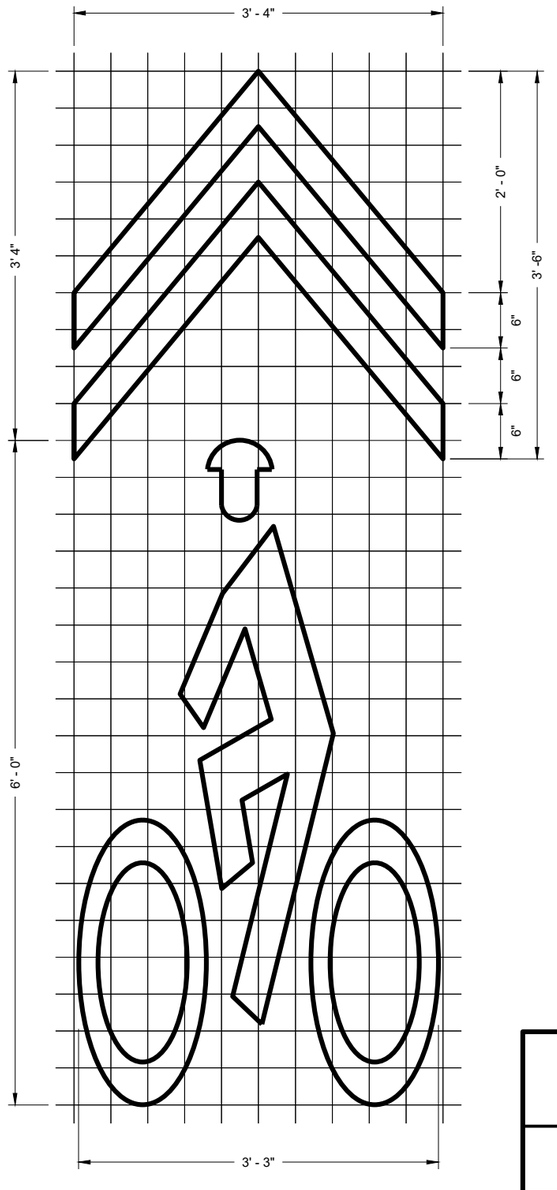
SDD 15C7-e Pavement Marking For Bike Lanes

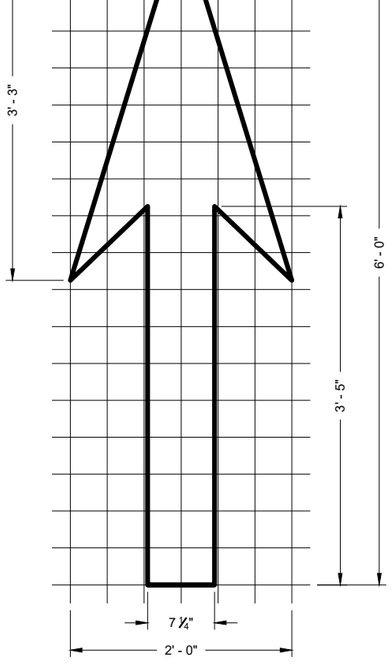


BIKE LANE WORDS

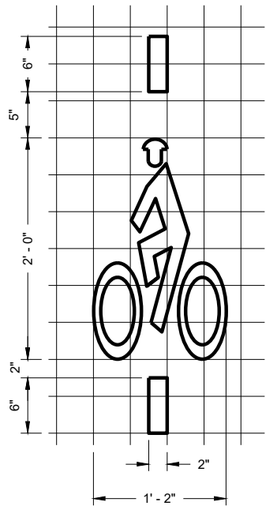
GENERAL NOTES

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.

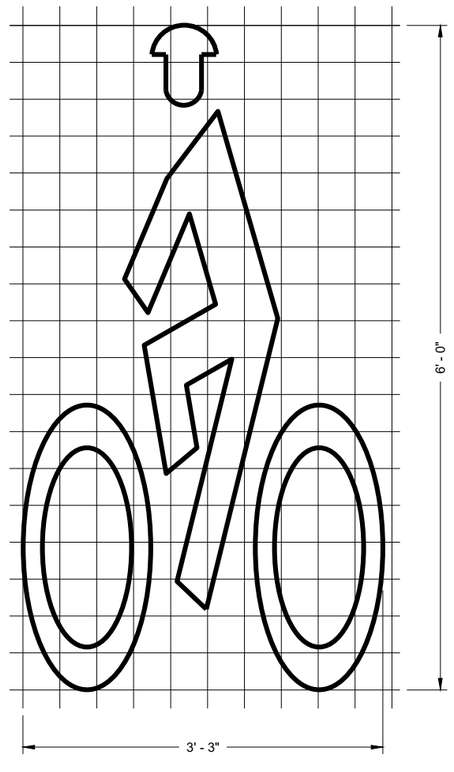




BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL

BIKE LANE SYMBOL FOR SHARED LANE

PAVEMENT MARKING FOR BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

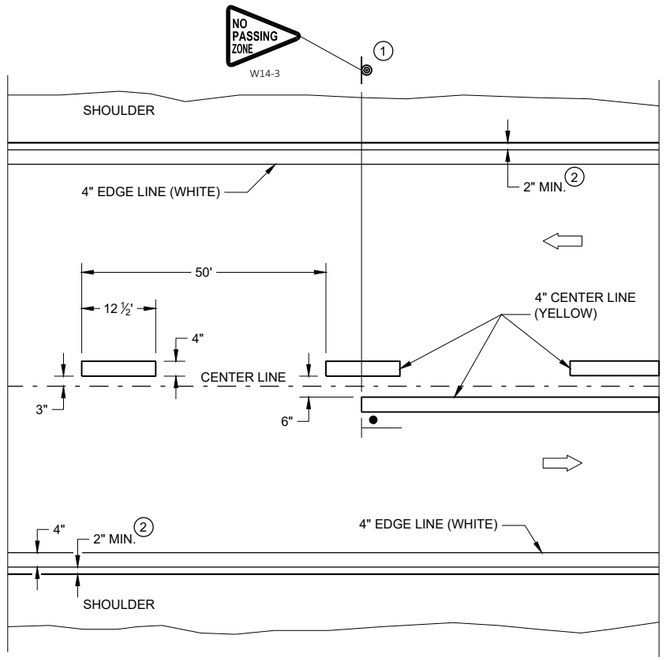
FHWA

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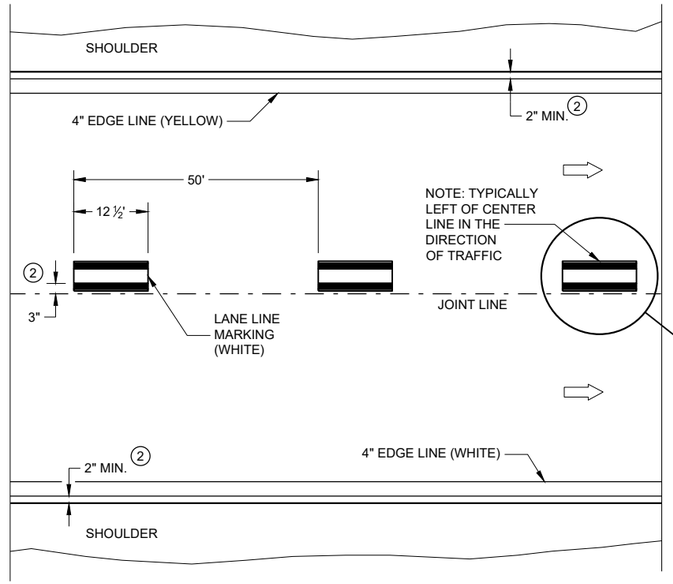
SDD 15C07 - 15e

6

SDD15C07 - 15e

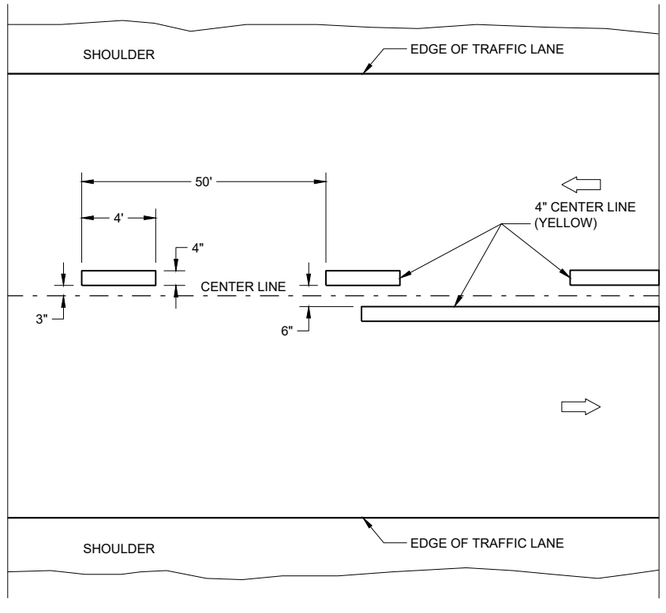


TWO WAY TRAFFIC

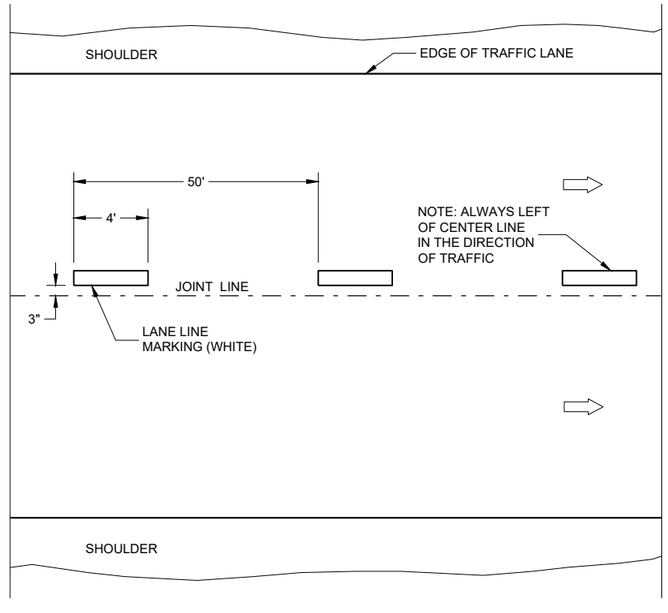


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

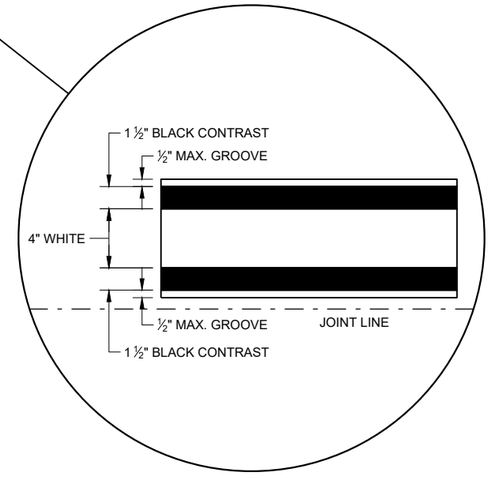
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Matthew Rauch — STATEWIDE SIGNING AND M ENGINEER

FHWA

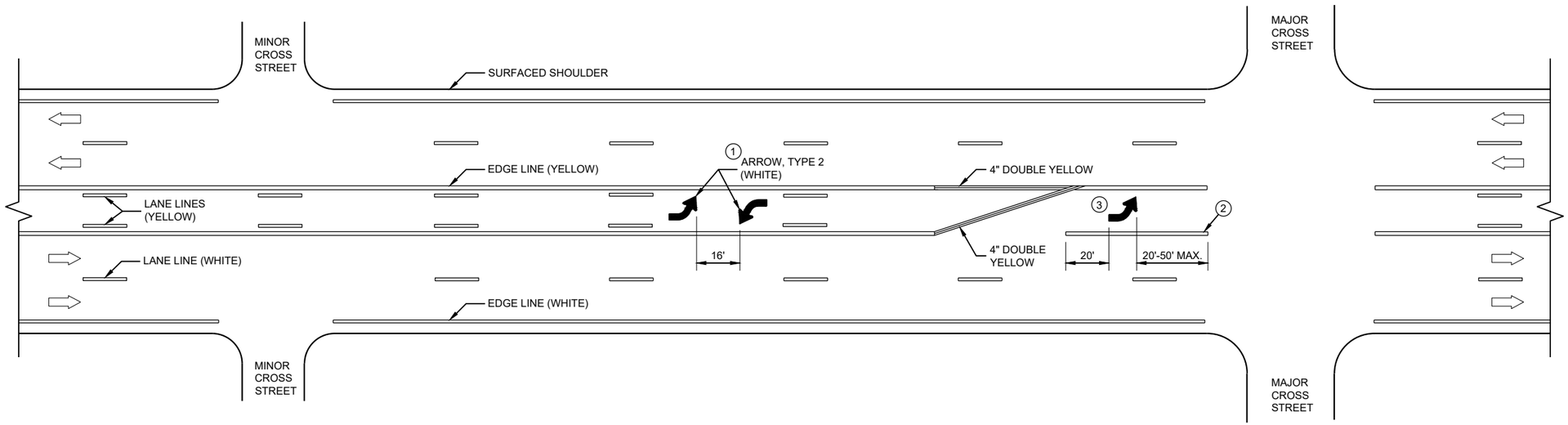
SDD 15C08 - 20a

6

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

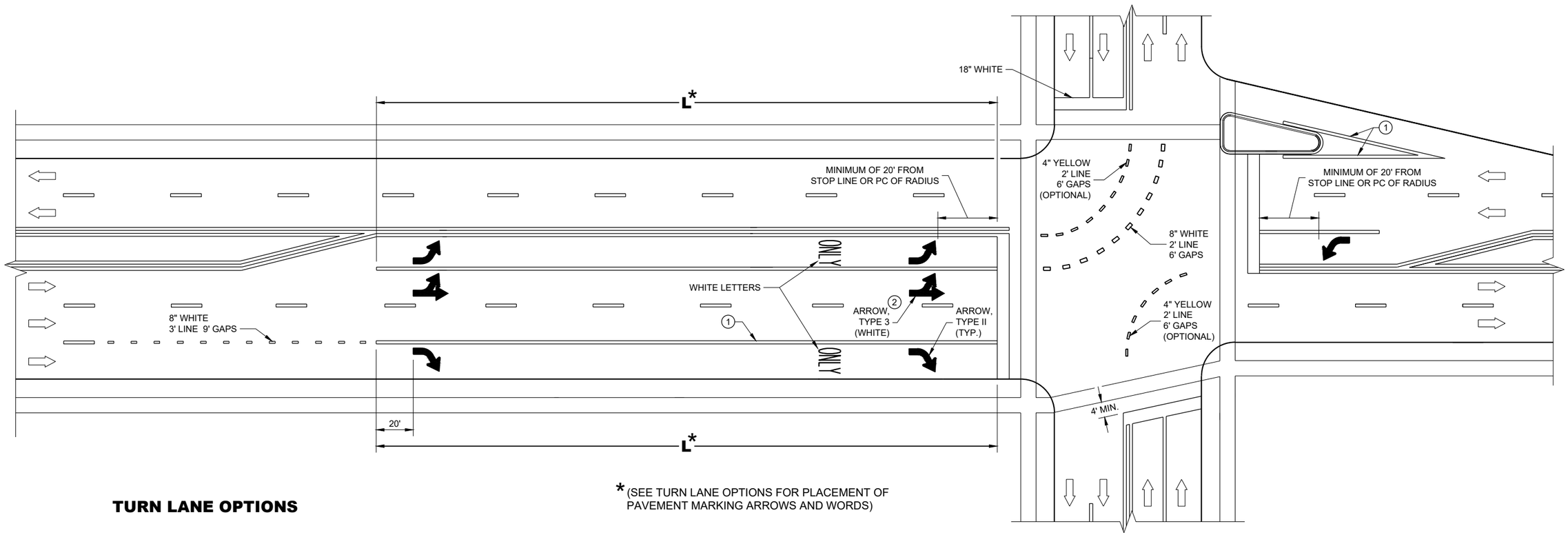
SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

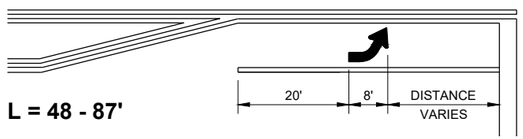
SDD 15C08 - 20b

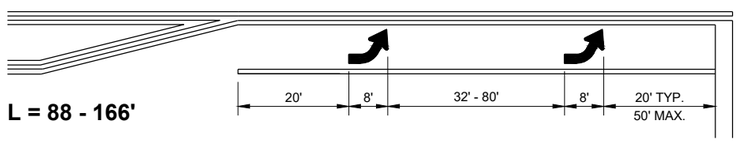


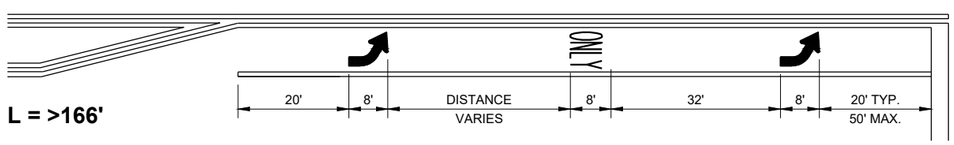
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS







GENERAL NOTES

(1) 8" WHITE

(2) QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

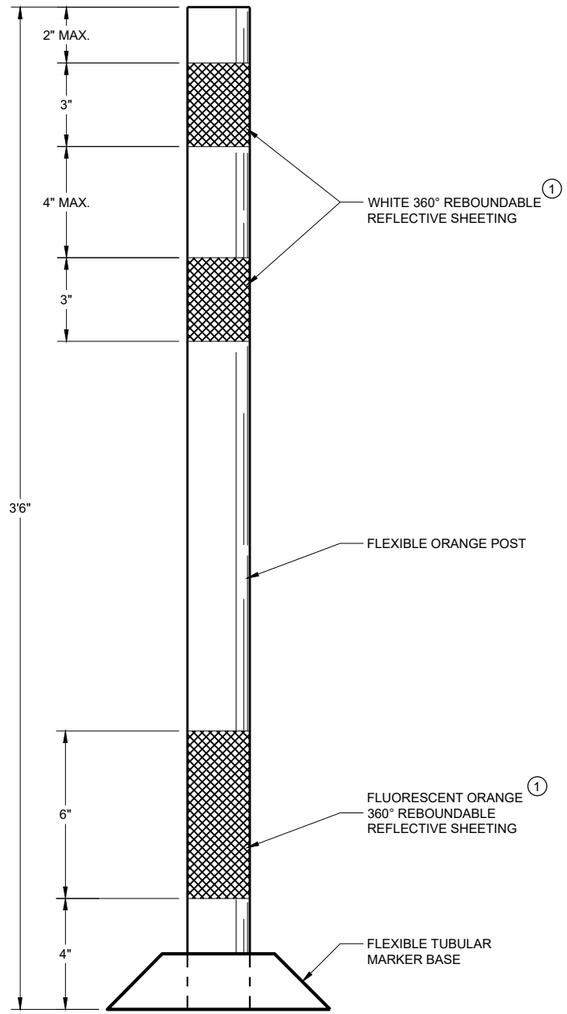
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 20c



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

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

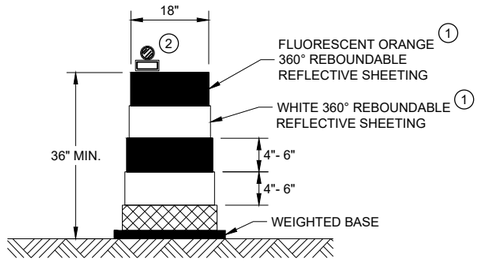
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

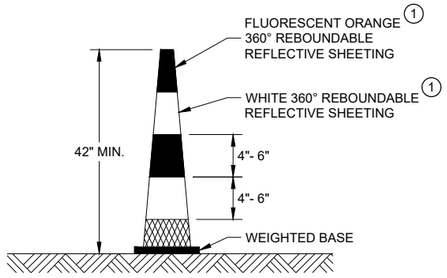
SDD 15C11 - 09a

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.

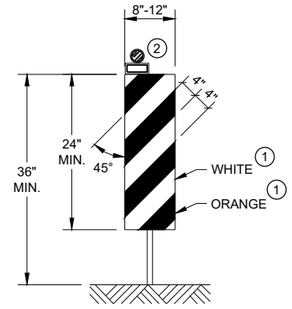


DRUM



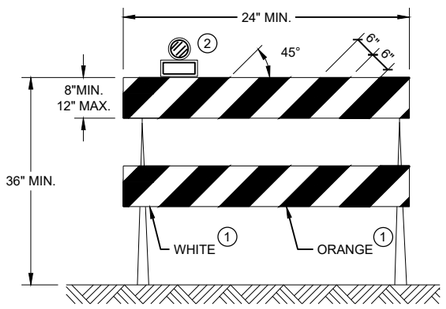
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



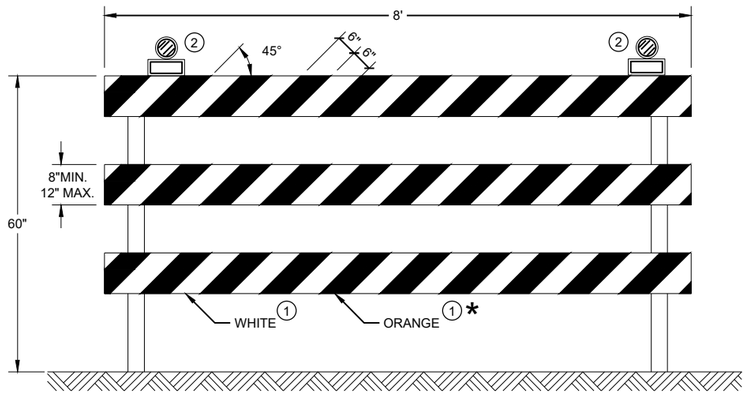
VERTICAL PANEL

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
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

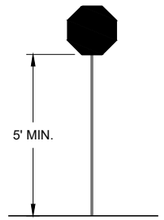
SIGN ON PORTABLE OR PERMANENT SUPPORT

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.

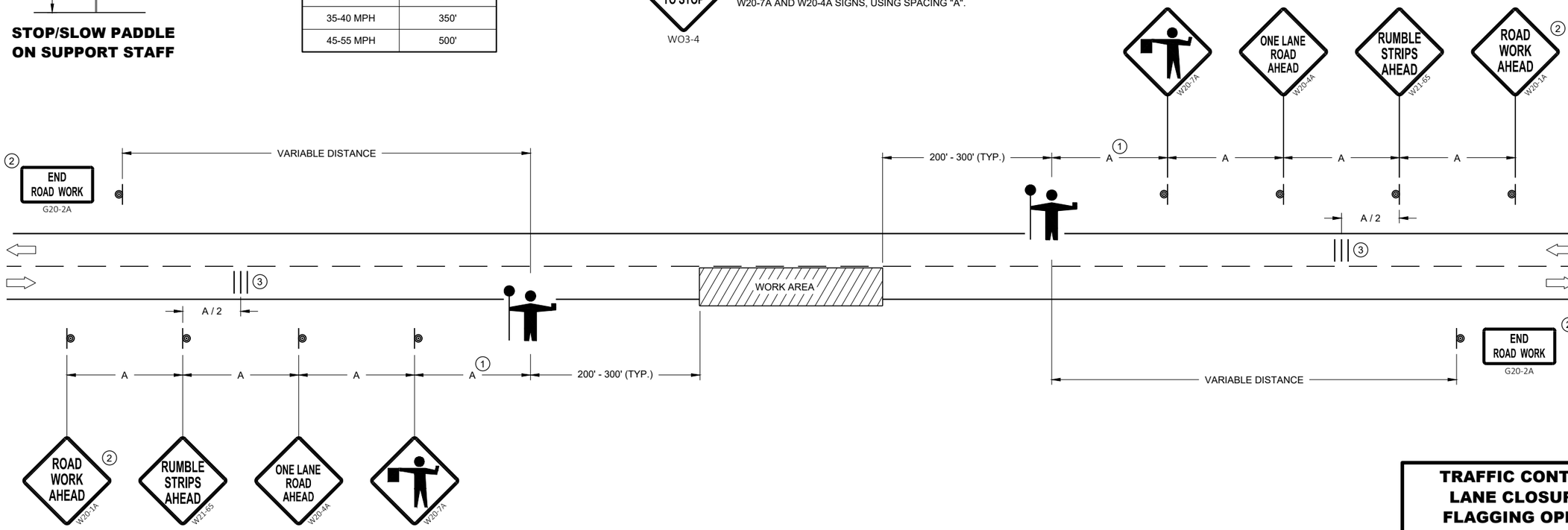
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

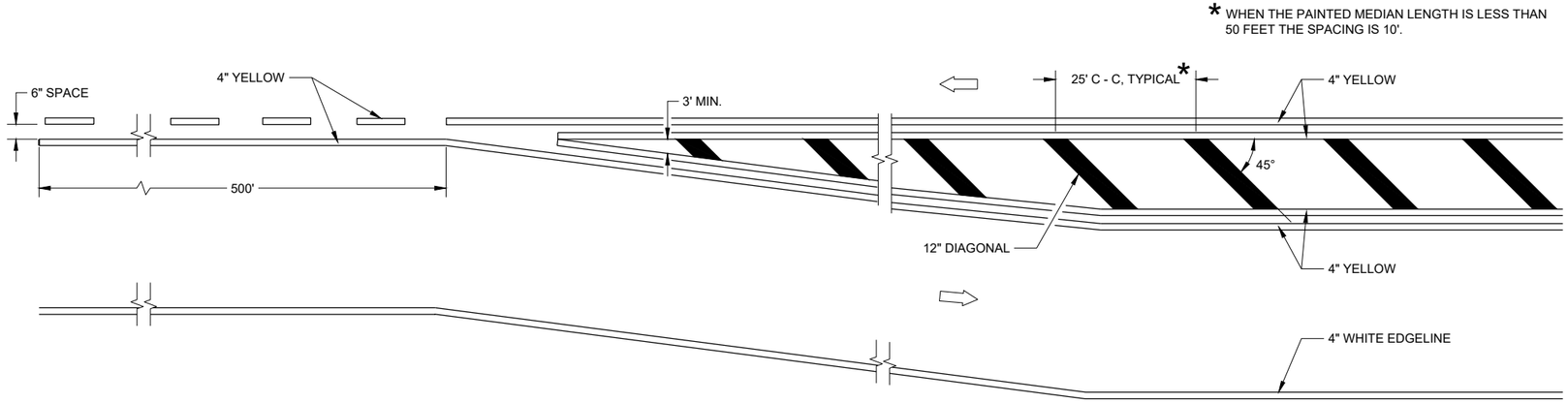
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May 2019
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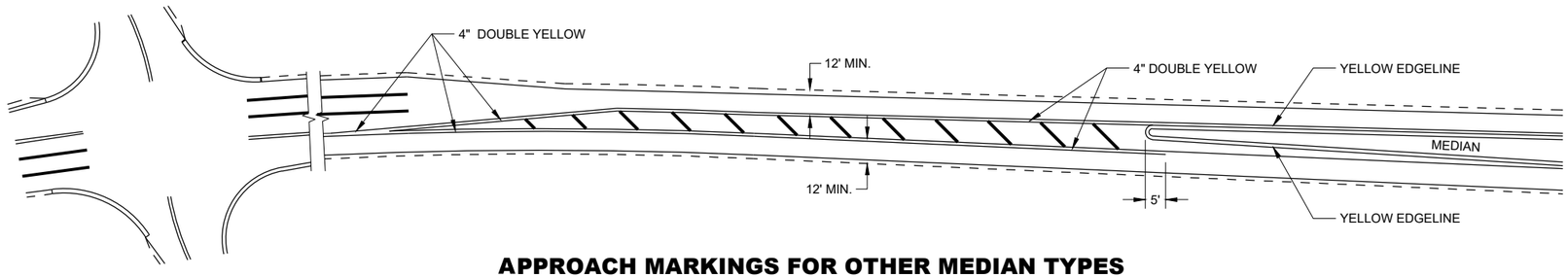


MEDIAN ISLAND DETAIL

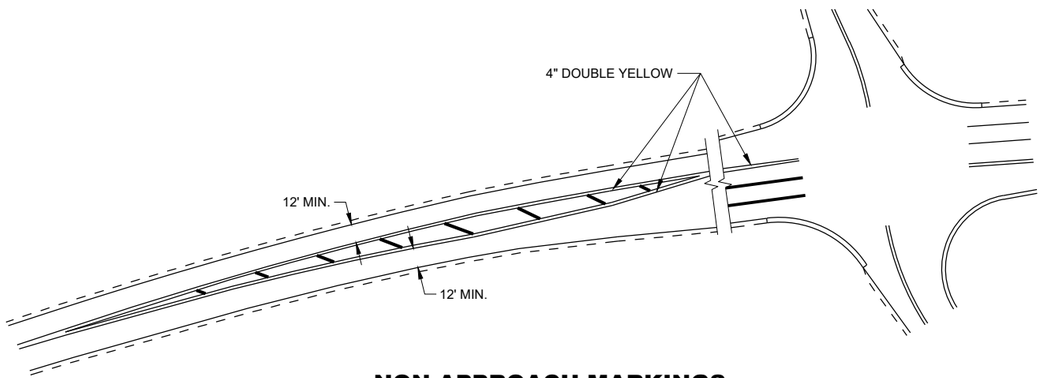
GENERAL NOTES

DIAGONALS ARE OPTIONAL WHEN PAINED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

6

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SDD 15C18 - 05a

SDD 15C18 - 05a

MEDIAN ISLAND PAVEMENT MARKINGS

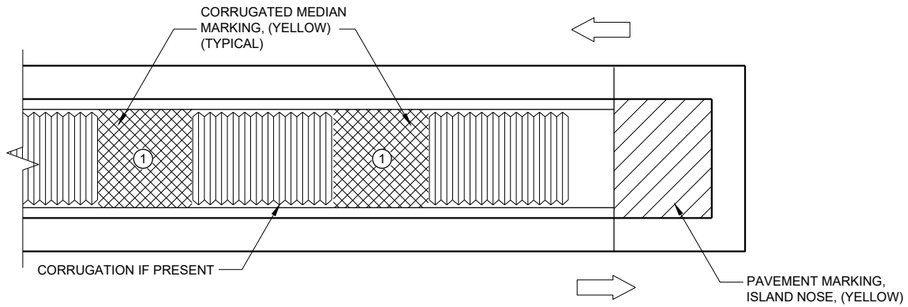
STATE OF WISCONSIN
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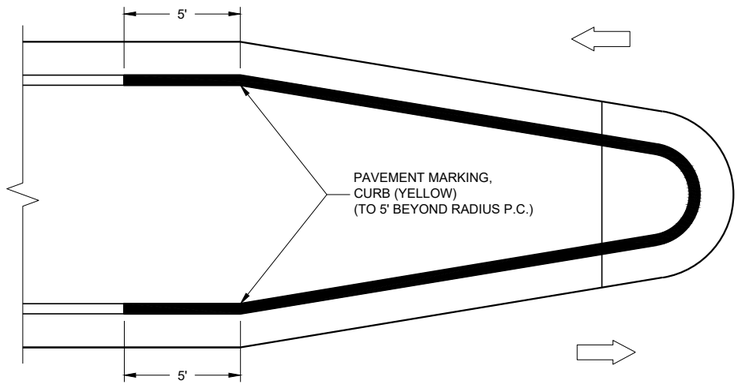
February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

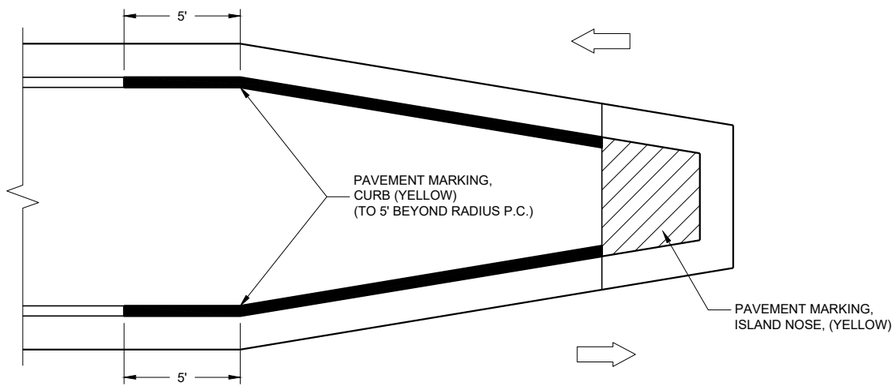
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MEDIAN ISLAND WITH SQUARE BLUNT NOSE



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, MEDIAN ISLAND NOSE

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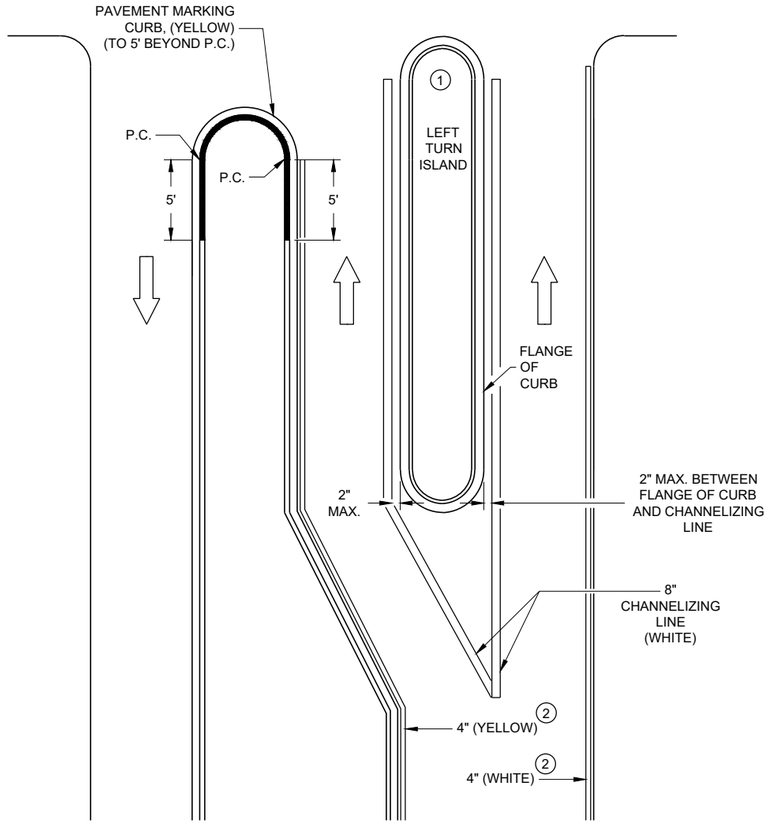
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SDD15C18 - 05b

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

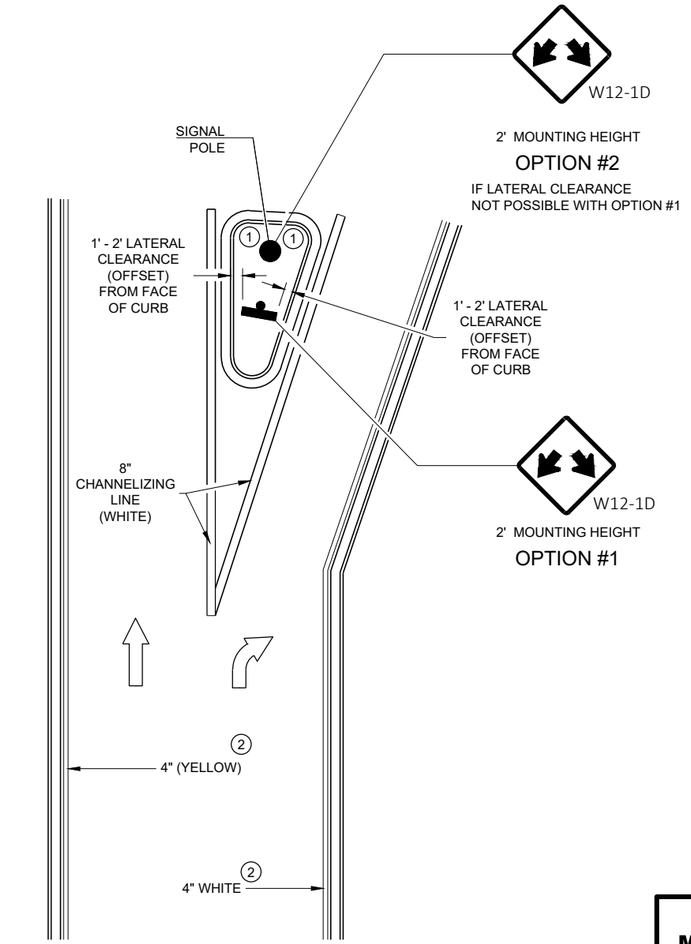
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

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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.

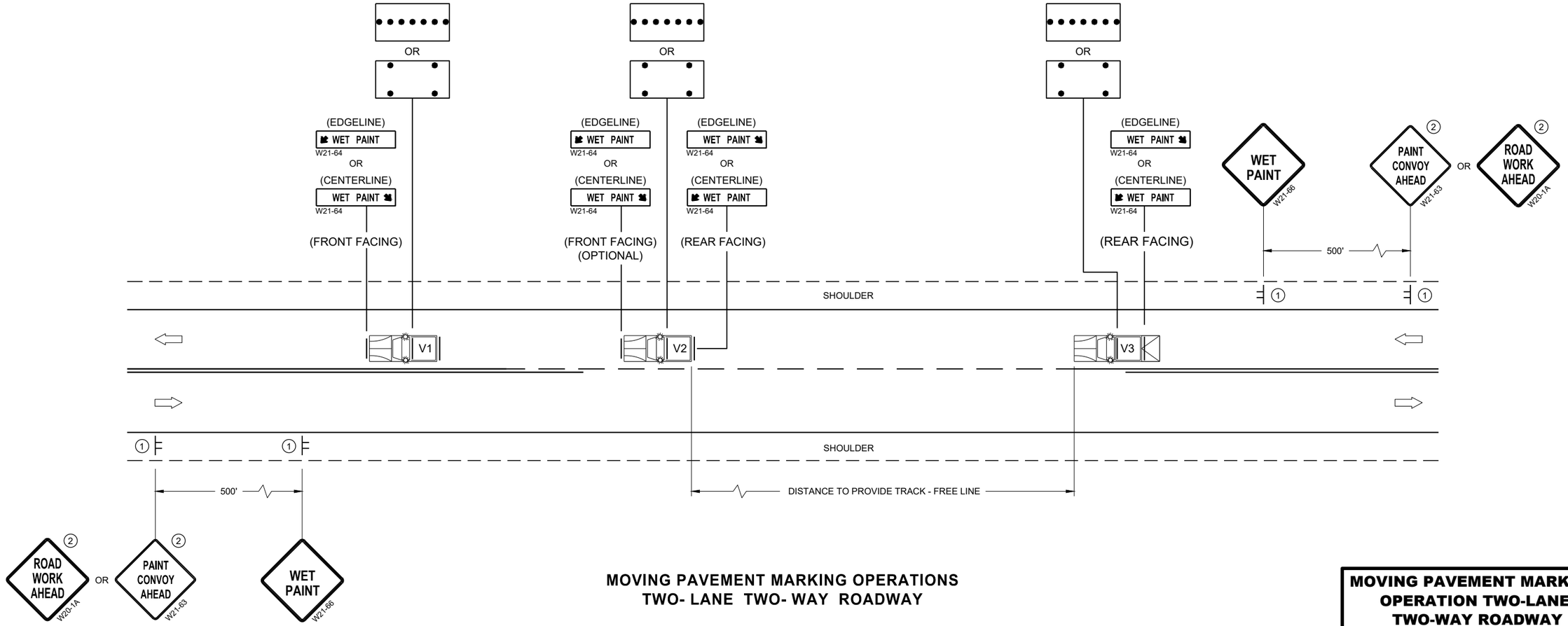
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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 28" 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
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APPROVED
November 2019
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/S/ Andrew Heidtke
WORK ZONE ENGINEE

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SDD 15C19 - 06a

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SDD 15C19 - 06a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW 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.

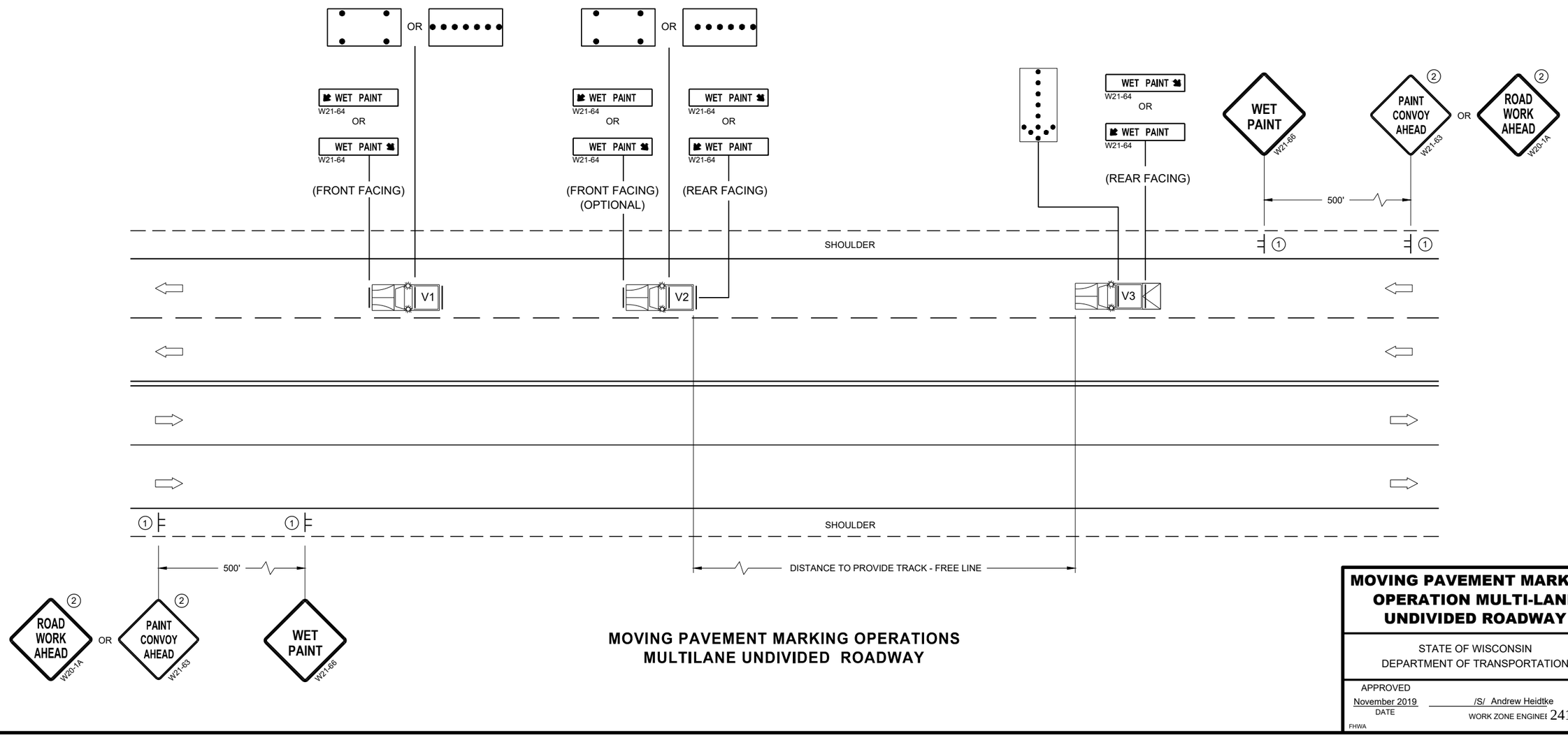
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLES 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 HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

(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 MULTILANE UNDIVIDED ROADWAY

MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

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SDD 15C19 - 06b

LEGEND

V1 MARKING VEHICLE

V2 SHADOW VEHICLE

V3 TRAIL VEHICLE

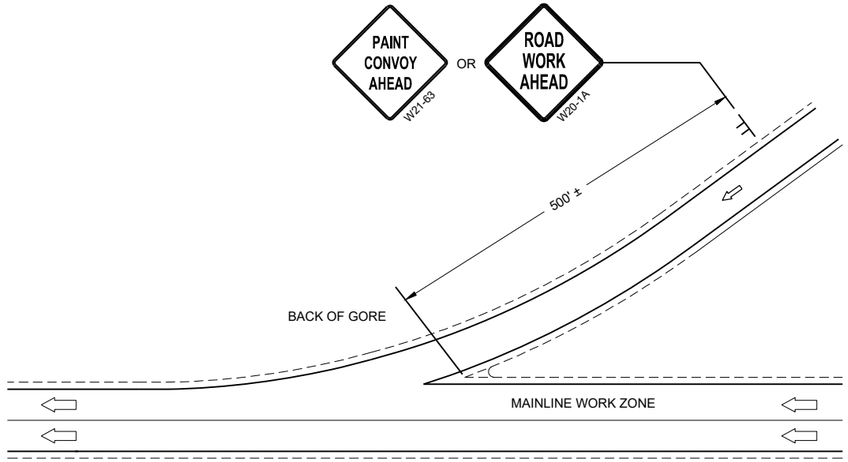
TRUCK MOUNTED ATTENUATOR (TMA)

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.

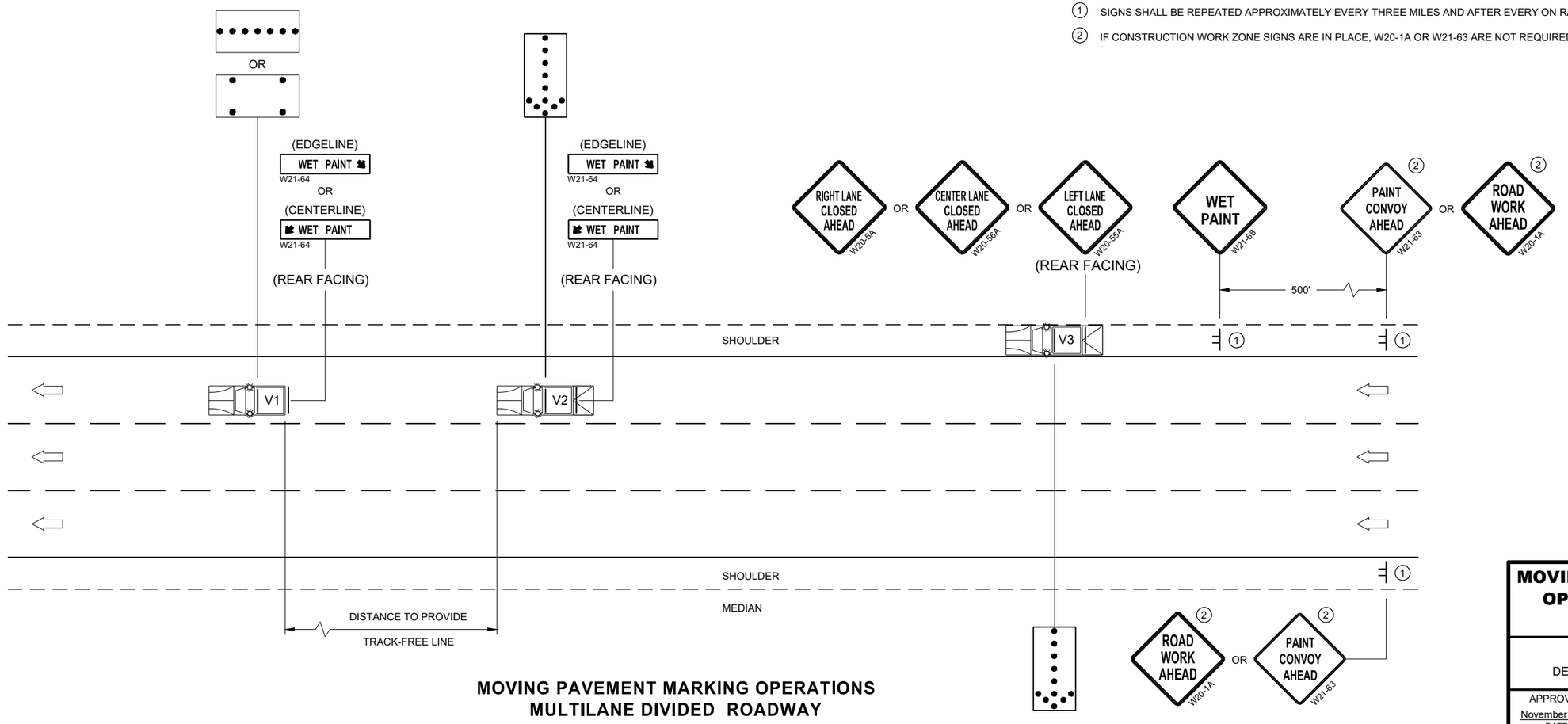
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC

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
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APPROVED
November 2019
DATE

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SDD 15C19 - 06c

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GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT. FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

(1) USED ONLY WHEN APPROVED BY REGION TRAFFIC ENGINEER.

* SIGNS MAY BE OMITTED IF SPACE DOES NOT PERMIT PLACEMENT.

** IF POSTED SPEED IS 45 MPH OR GREATER, PLACE W5-54 SIGN UNDER R4-7 SIGN. MOUNT W5-54 SIGN AT 4' MOUNTING HEIGHT (TOP OF ROADWAY TO BOTTOM OF SIGN).

LEGEND

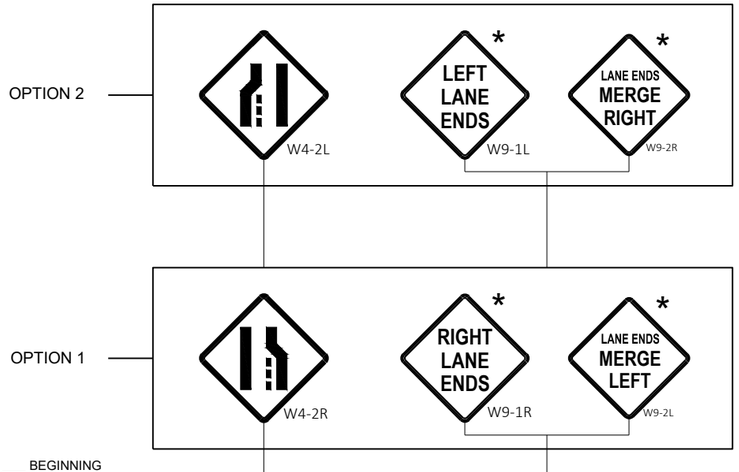
A DISTANCE DEPENDENT ON SPEED (SEE TABLE)

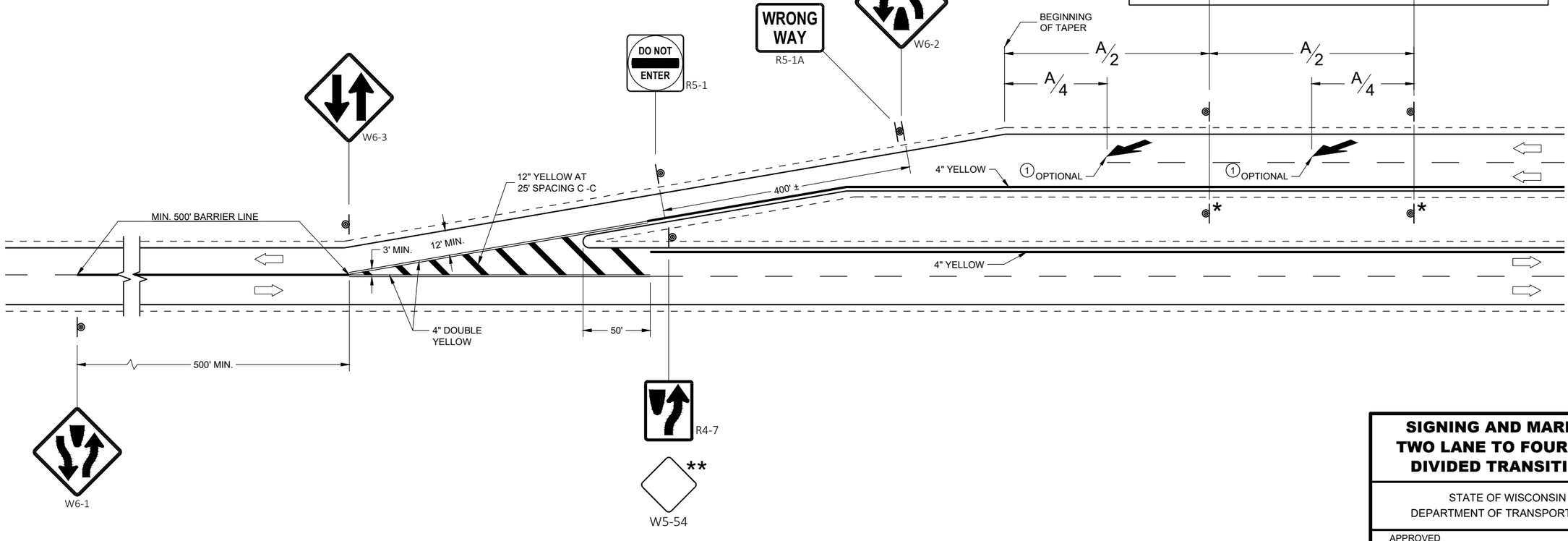
SIGN MOUNTED ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
25	325'
30	460'
35	565'
40	670'
45	775'
50	885'
55	990'
65	1200'
70	1250'





SIGNING AND MARKING TWO LANE TO FOUR LANE DIVIDED TRANSITIONS

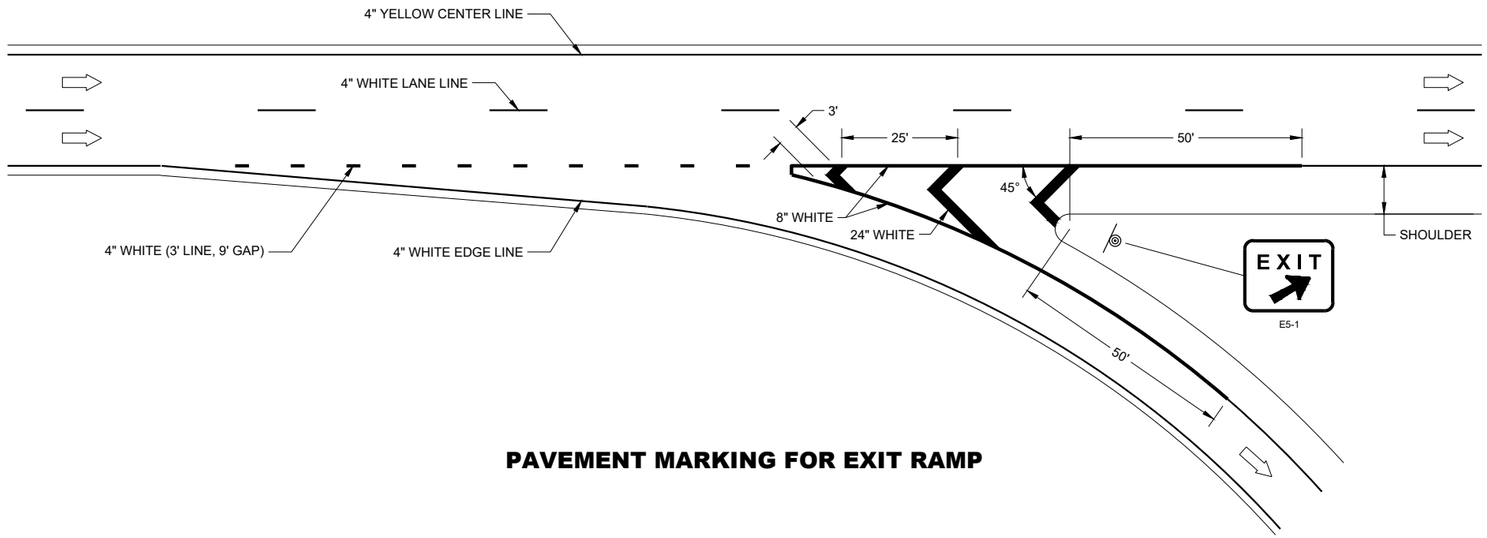
STATE OF WISCONSIN
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May 2020 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAR ENGINEER

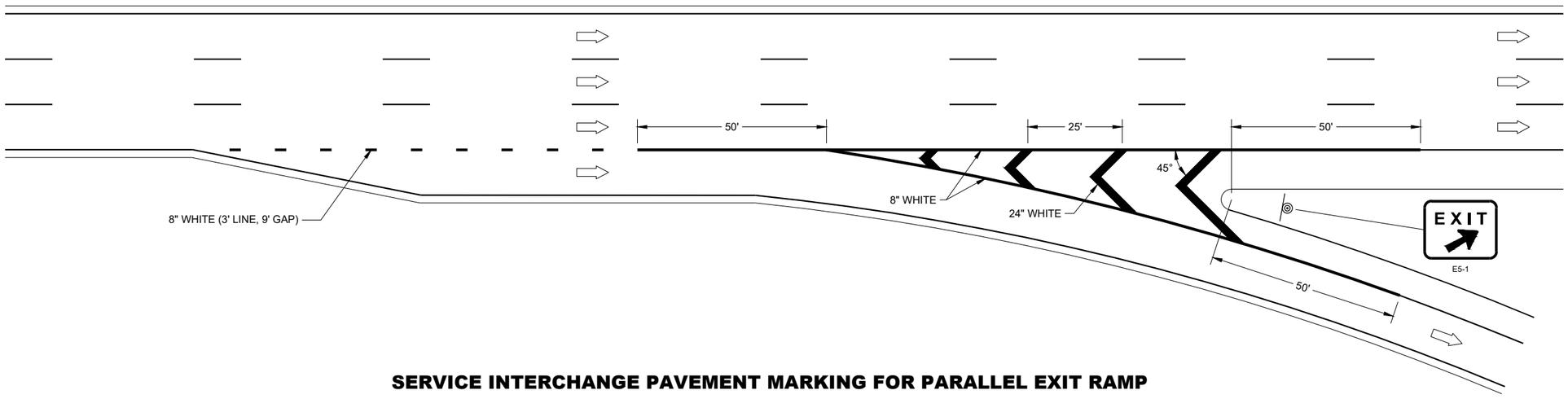
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SDD 15C21 - 10



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

6

SDD 15C31 - 04a

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C31 - 04a

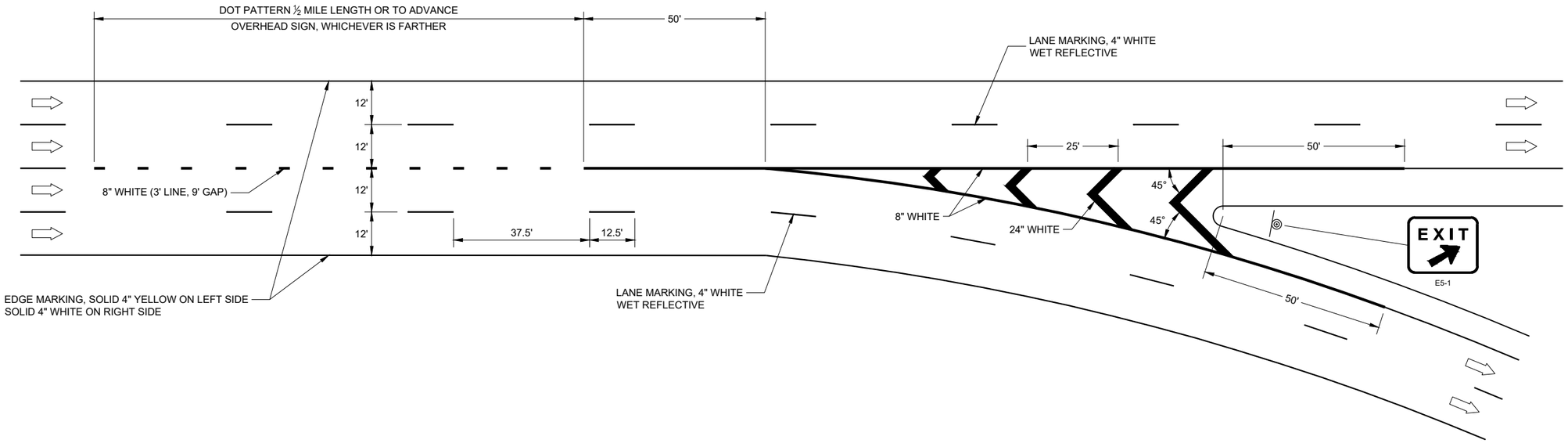
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL



6

6

SDD 15C31 - 04b

SDD 15C31 - 04b

PAVEMENT MARKING, MAJOR SPLIT FREEWAY TO FREEWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

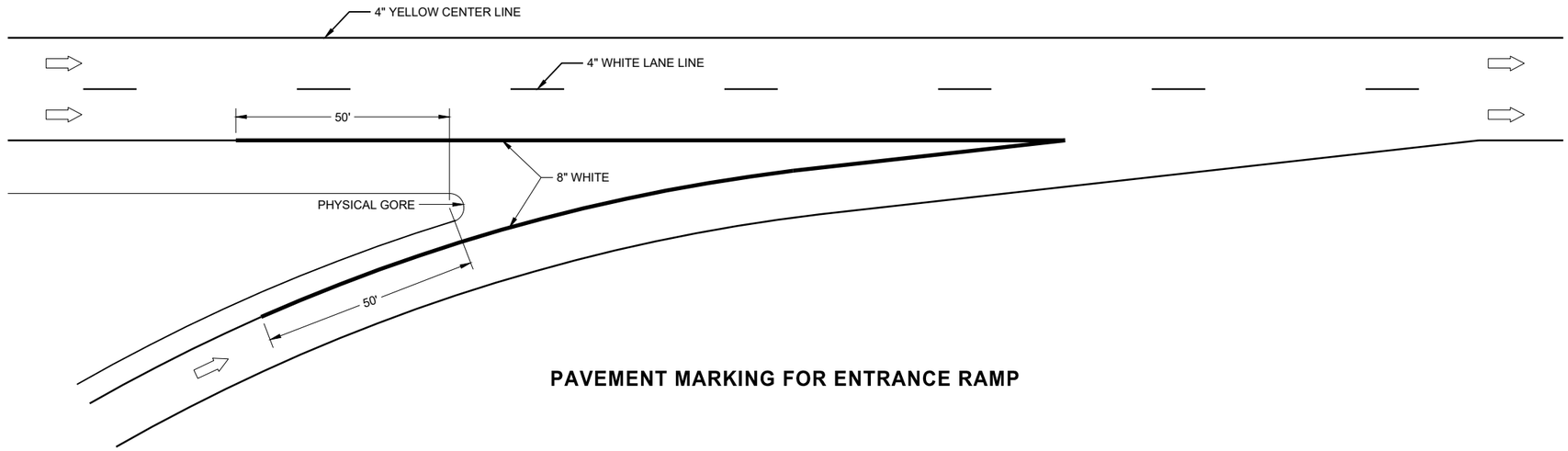
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

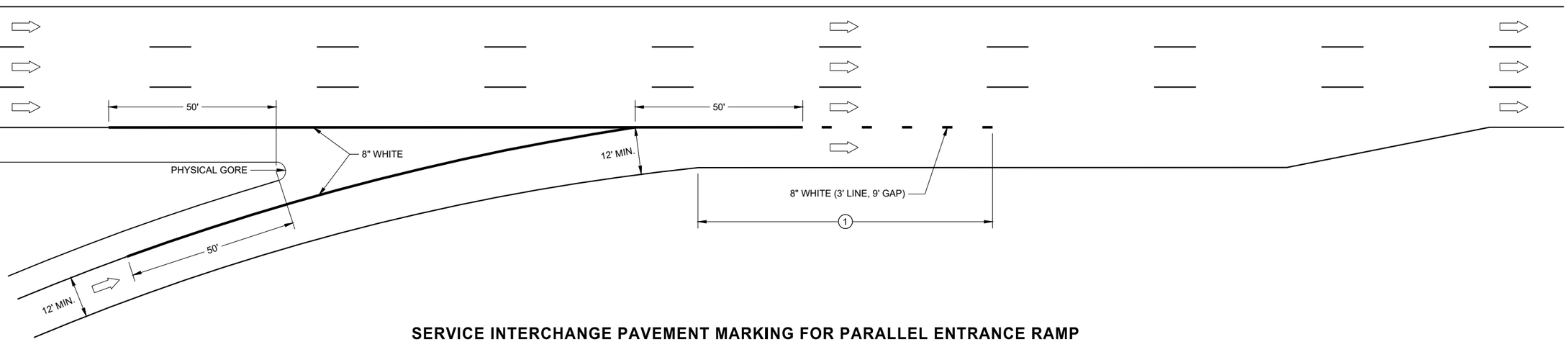
(1) ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

DIRECTION OF TRAVEL



PAVEMENT MARKING FOR ENTRANCE RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

6

6

SDD 14C31 - 04c

SDD 14C31 - 04c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

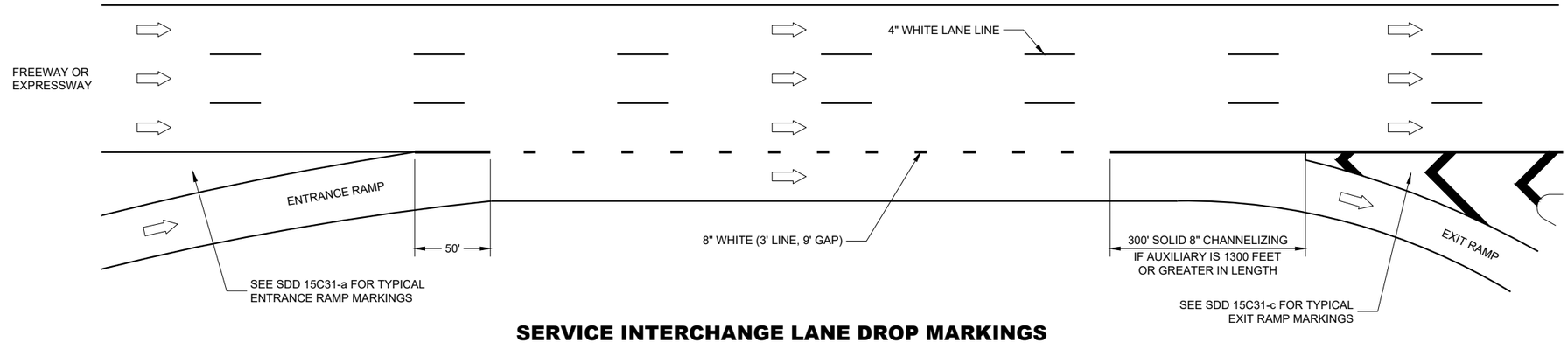
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

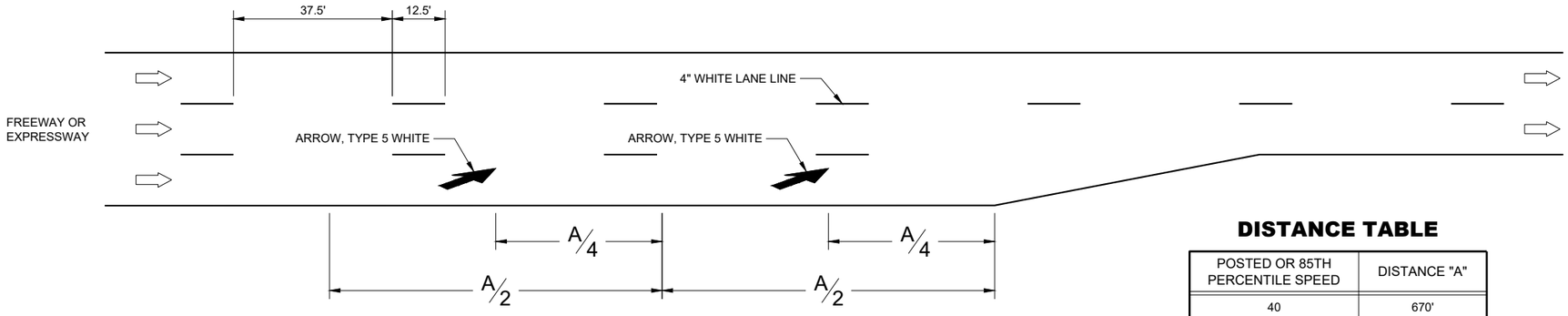
DIRECTION OF TRAVEL

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.



SERVICE INTERCHANGE LANE DROP MARKINGS



LANE REDUCTION MARKINGS

DISTANCE TABLE

POSTED OR 85TH PERCENTILE SPEED	DISTANCE "A"
40	670'
45	775'
50	885'
55	990'
60	1100'
65	1200'
70	1250'

PAVEMENT MARKING, LANE DROP AND LANE REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2021
DATE

/S/ Matthew Rauch
STATE MARKING AND SIG ENGINEER

FHWA

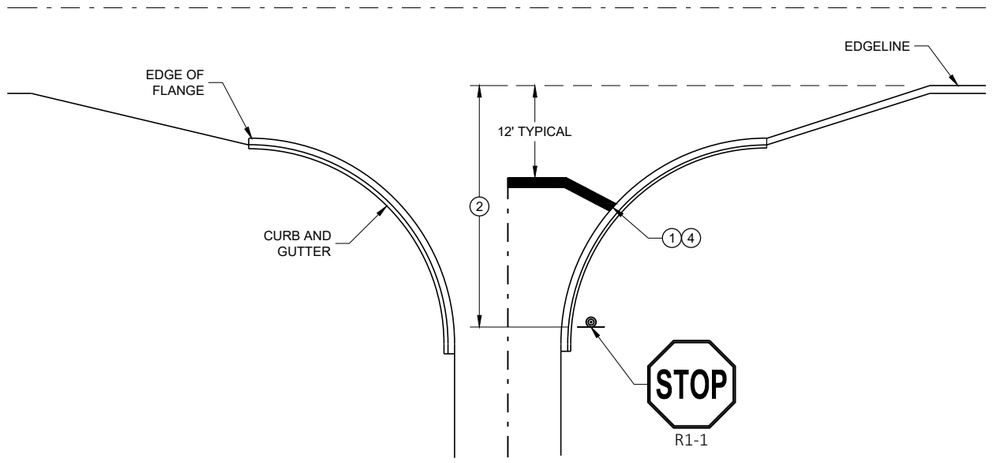
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SDD 15C31 - 04d

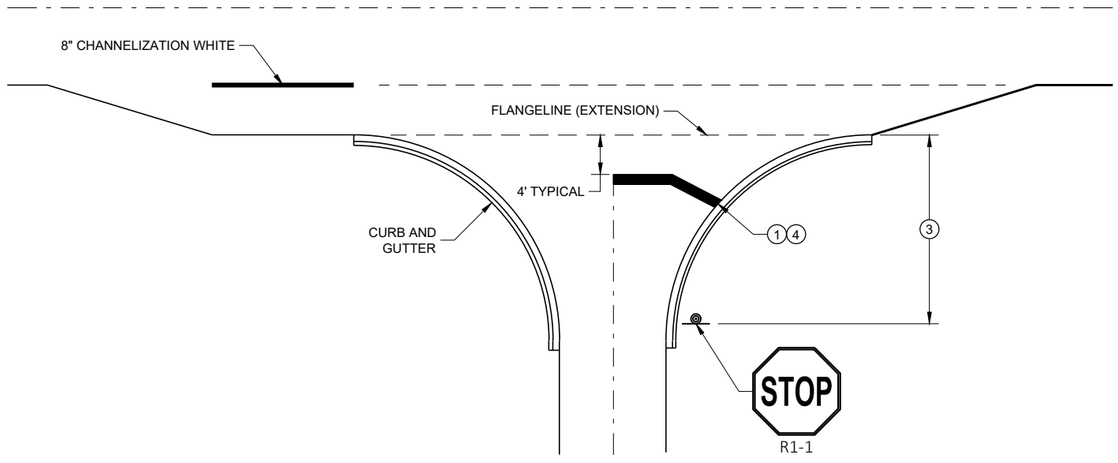
GENERAL NOTES

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

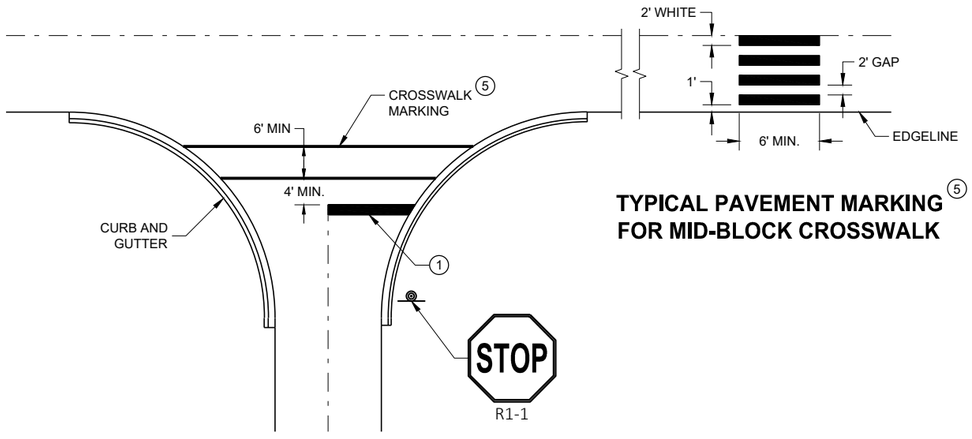
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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

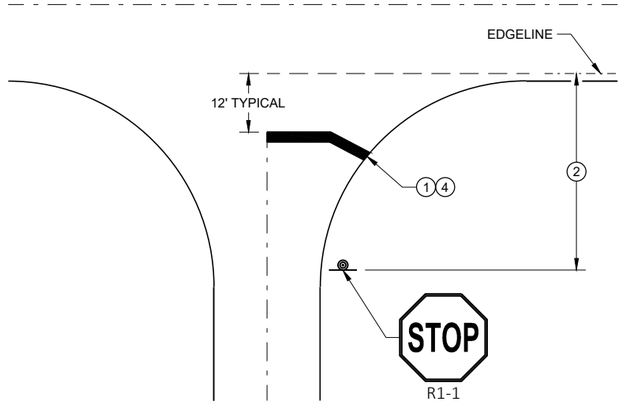


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



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

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SDD 15C33 - 04

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.

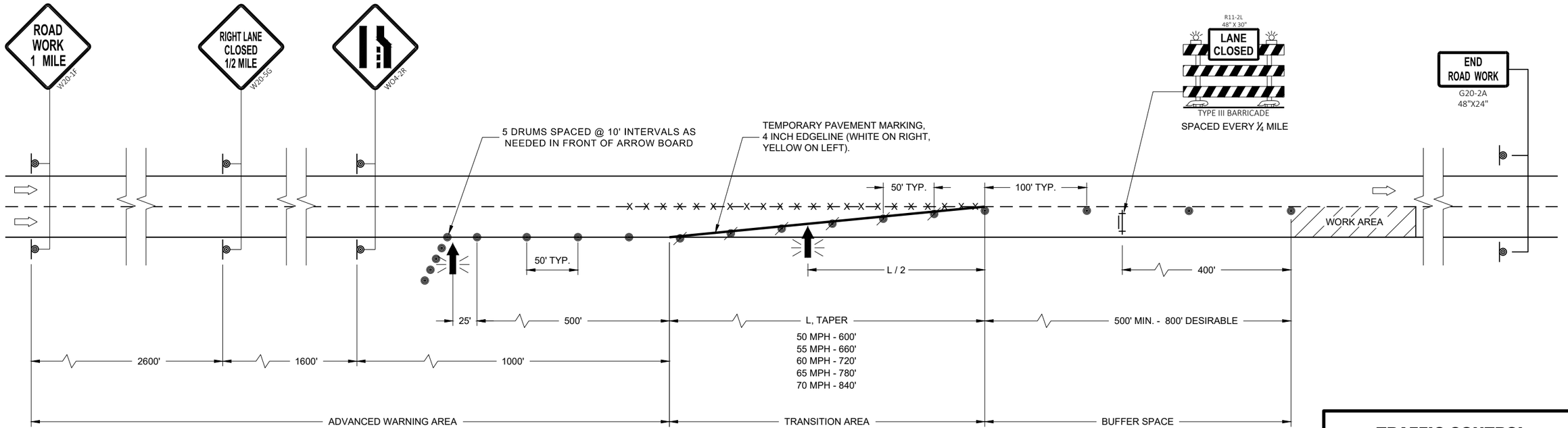
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D12 - 09a

6

SDD 15D12 - 09a

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. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE 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.

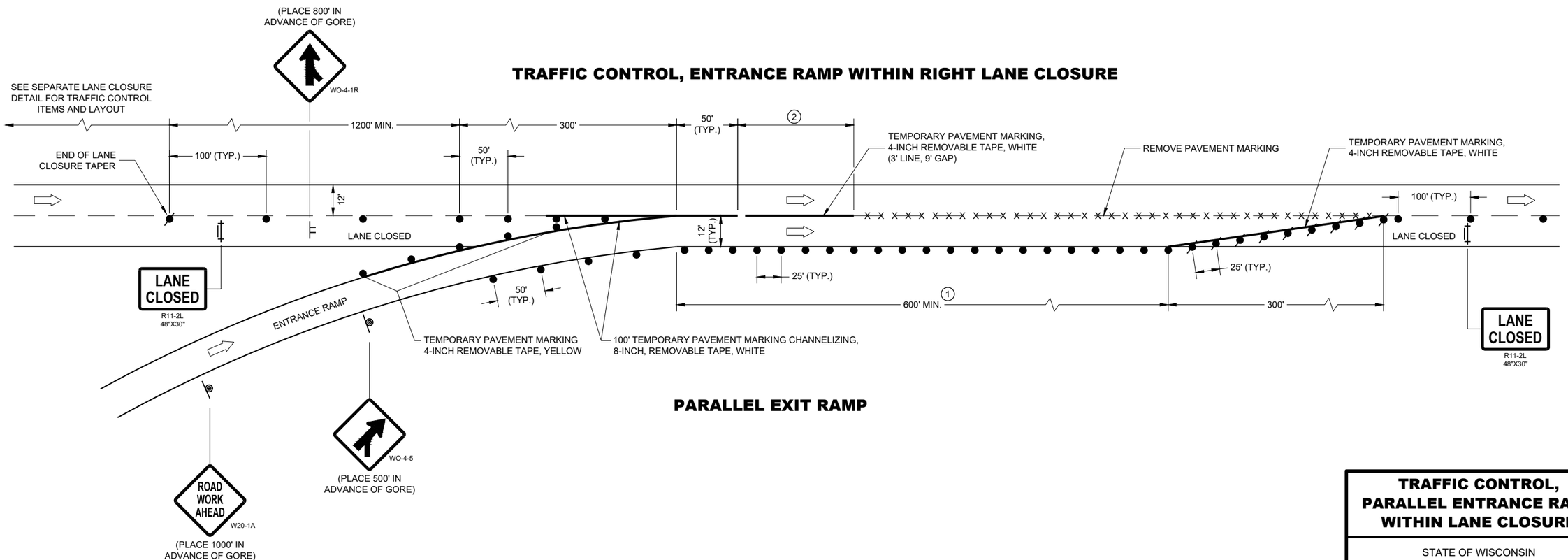
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

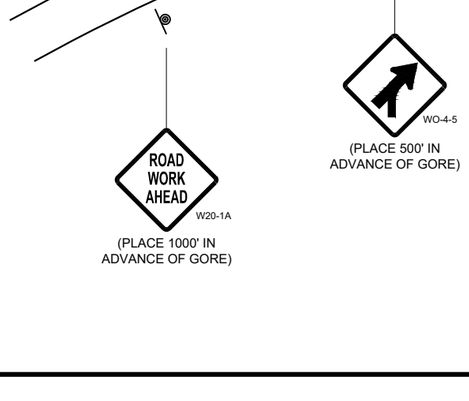
(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY MARKING AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



PARALLEL EXIT RAMP



TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15D15 - 05a

SDD 15D15 - 05a

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.

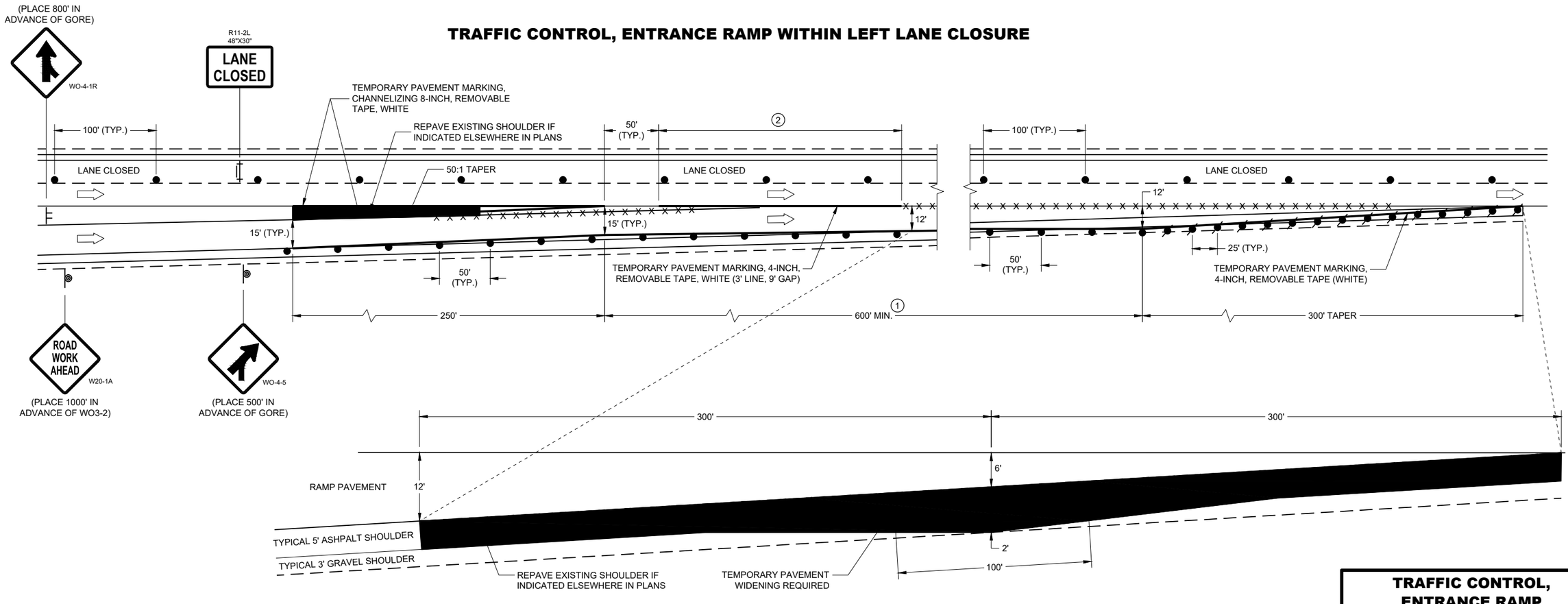
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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 ENGINEE

FHWA

6

SDD 15D15 - 05b

6

SDD15D15 - 05b

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

FLAGS, 16" X 16" MIN., ORANGE

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.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

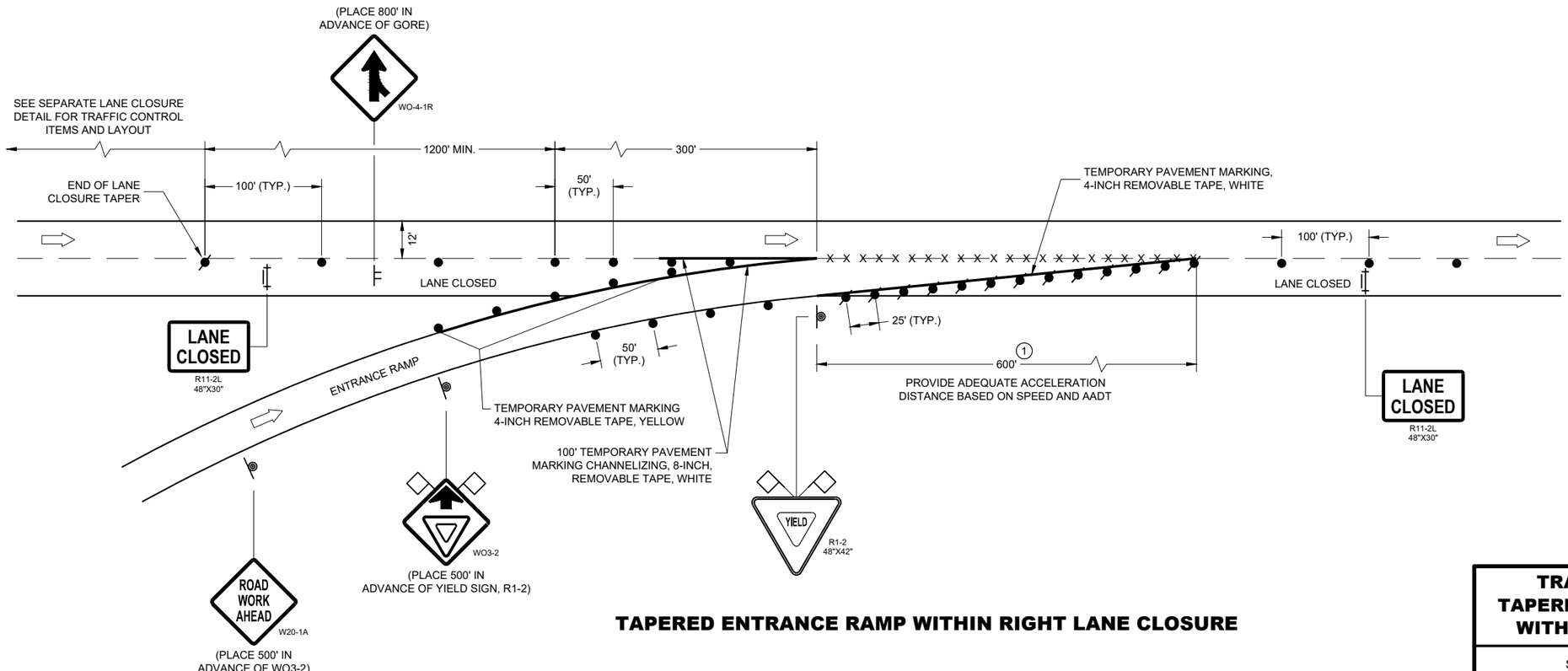
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ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D15 - 05c

6

SDD 15D15 - 05c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

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.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

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. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

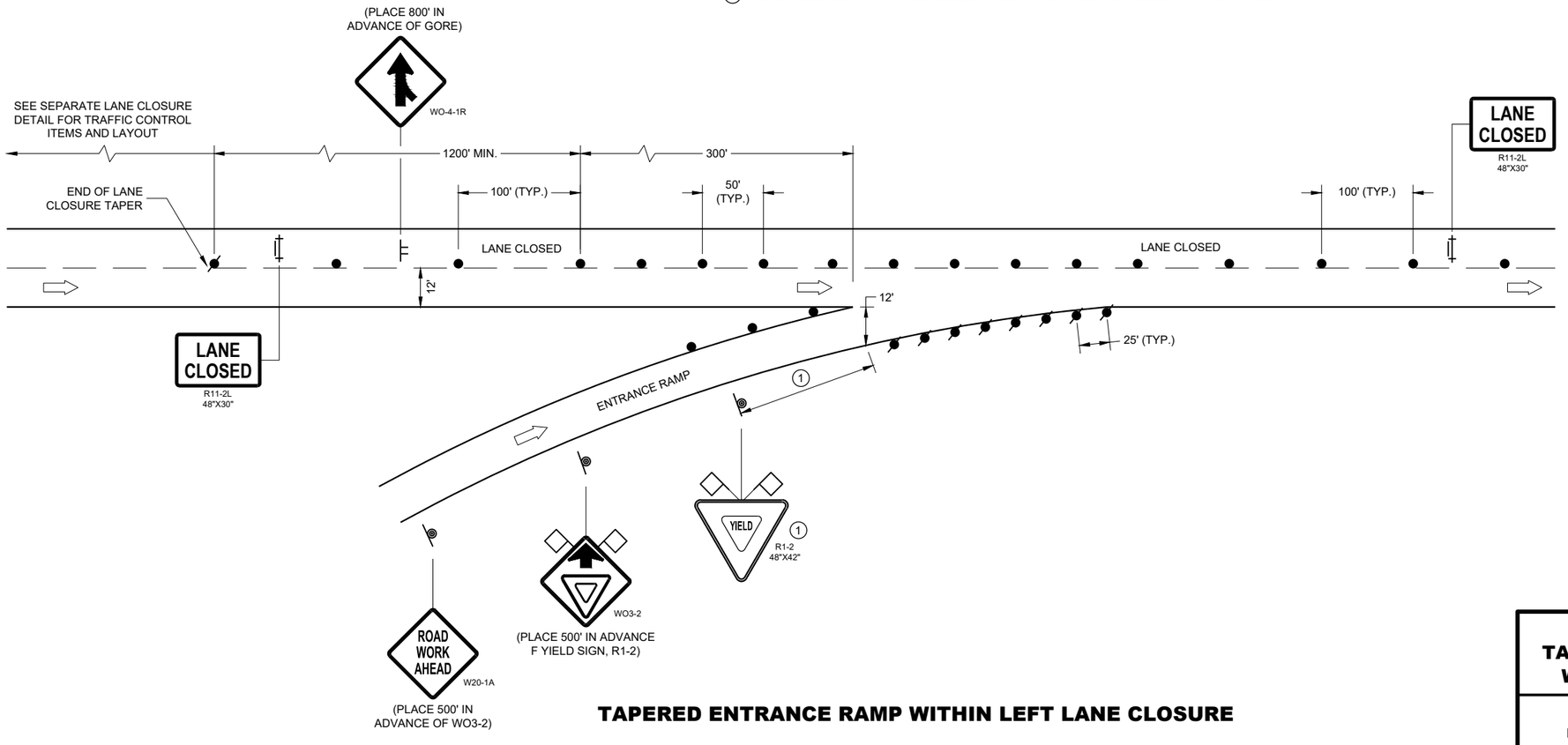
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ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05d

6

SDD 15D15 - 05d

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.

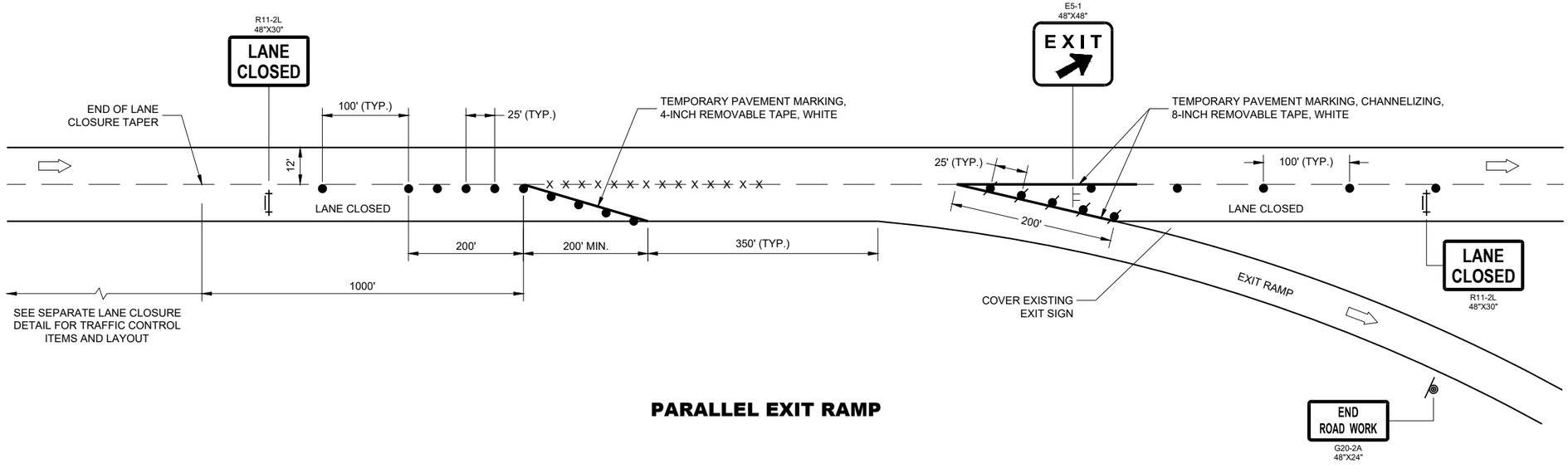
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR 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.



PARALLEL EXIT RAMP

TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05e

6

SDD15D15 - 05e

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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.

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

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.

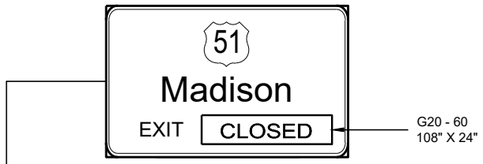
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

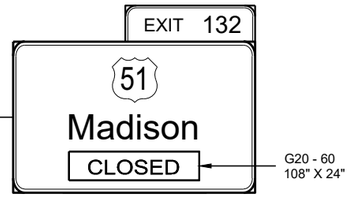
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

* W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

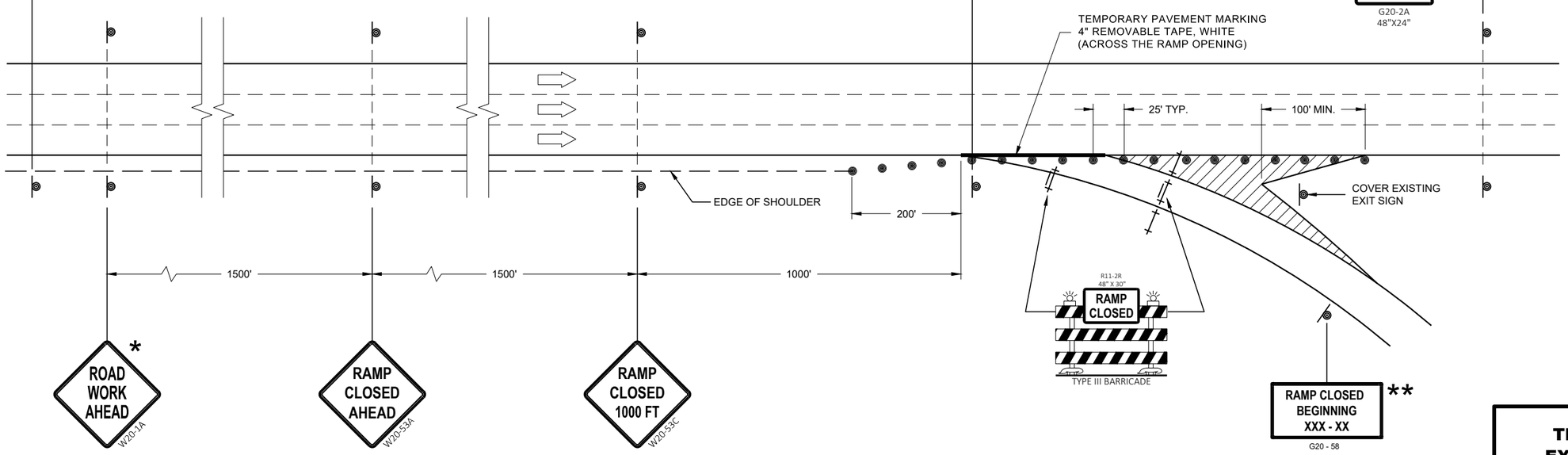


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D16 - 04

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.

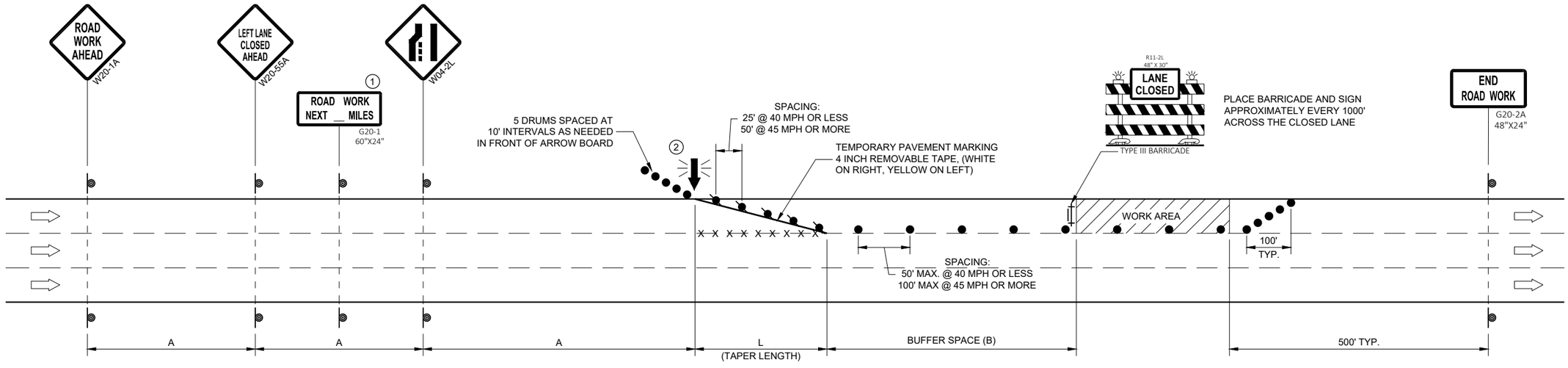
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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'

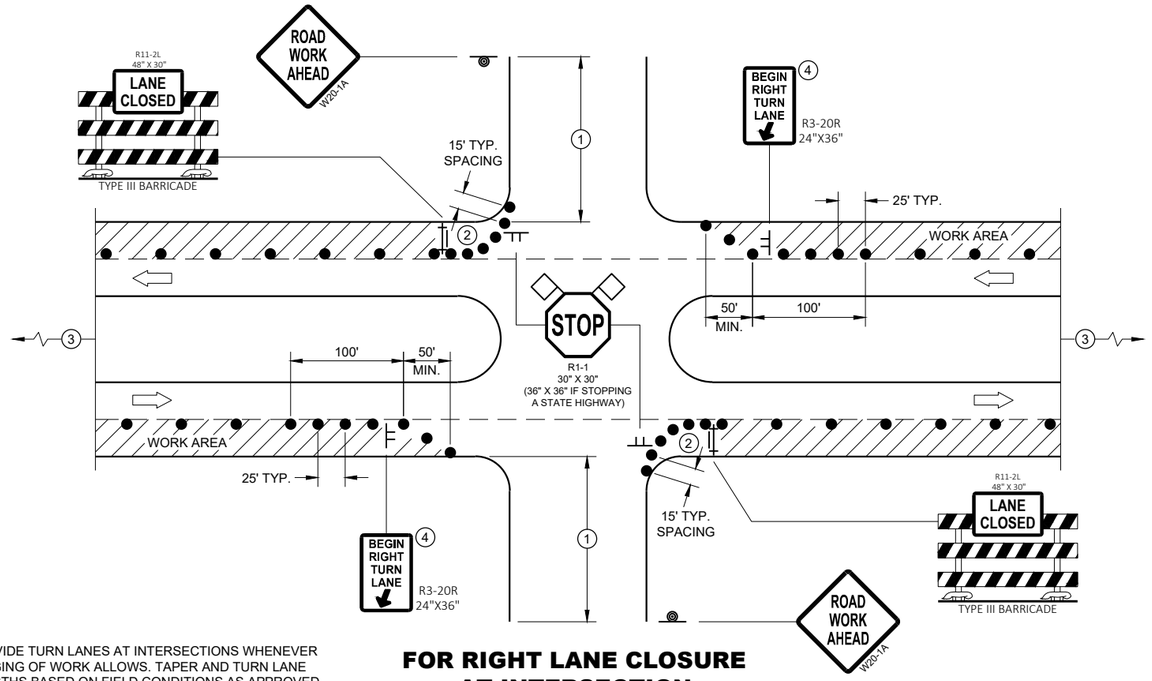
TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

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



FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT 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.

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

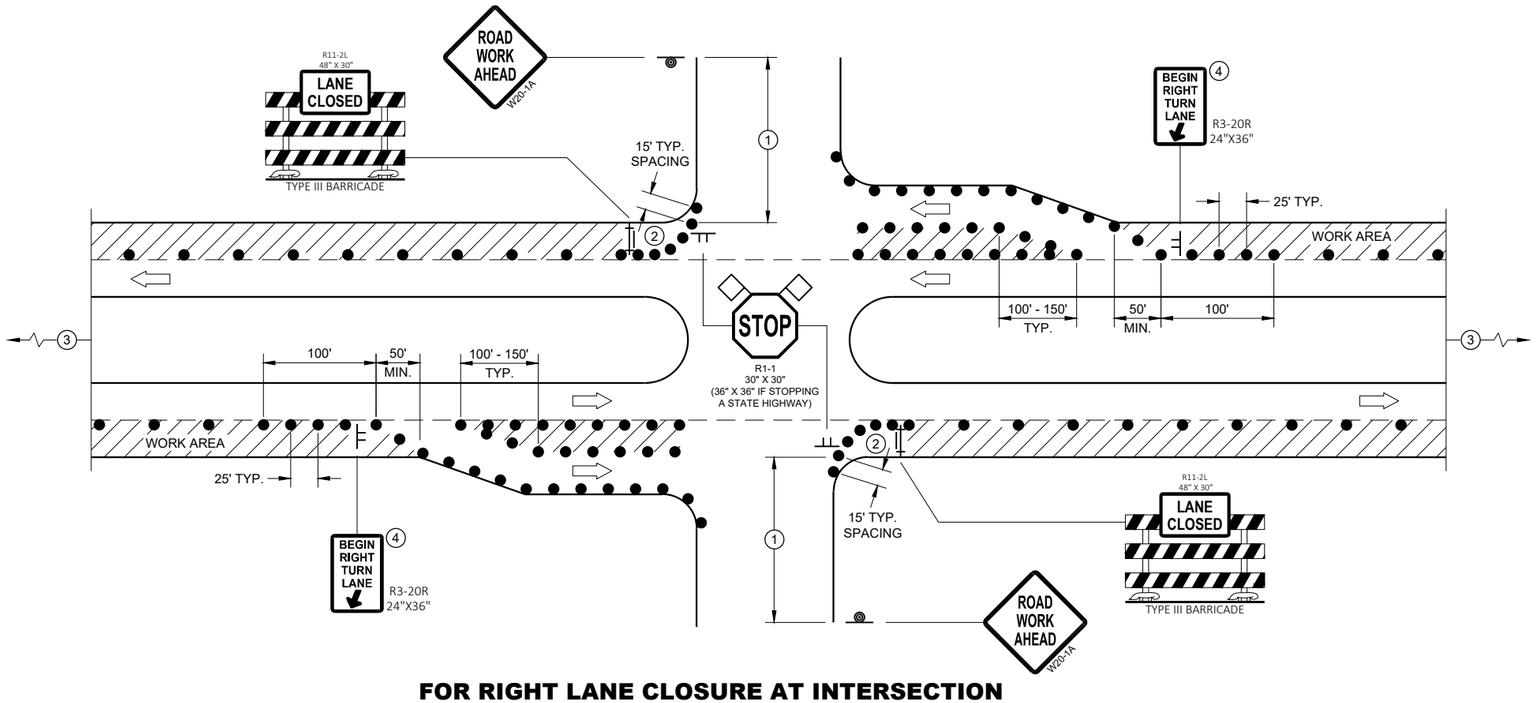
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

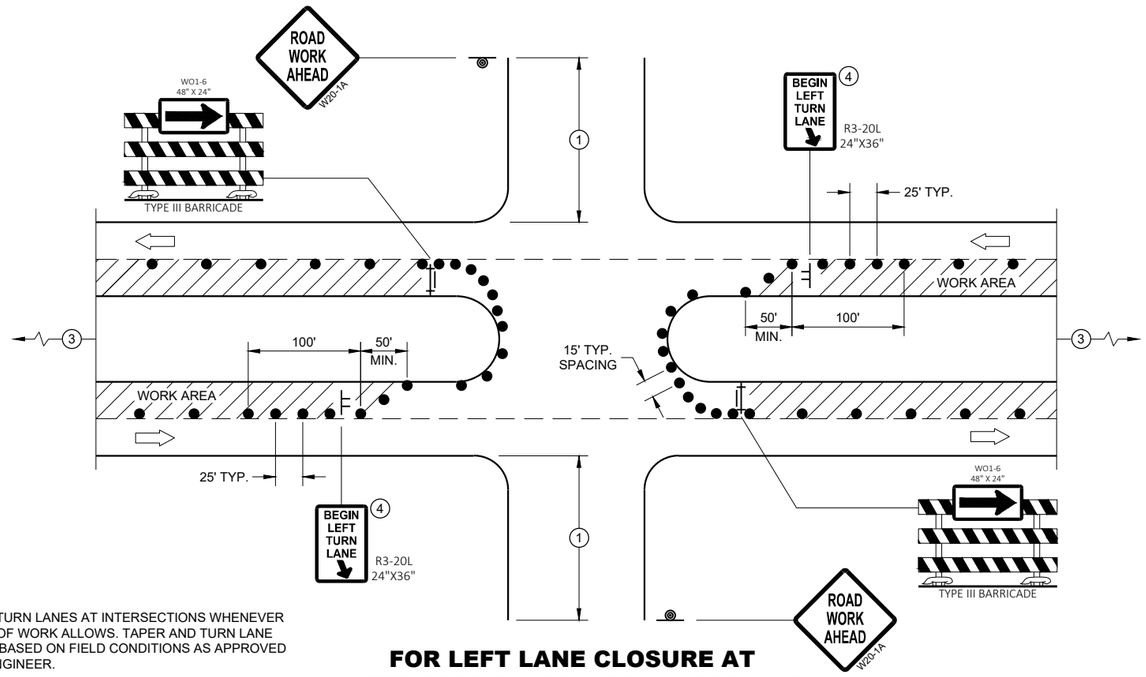
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a

6

SDD 15D21 - 07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT 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.

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

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SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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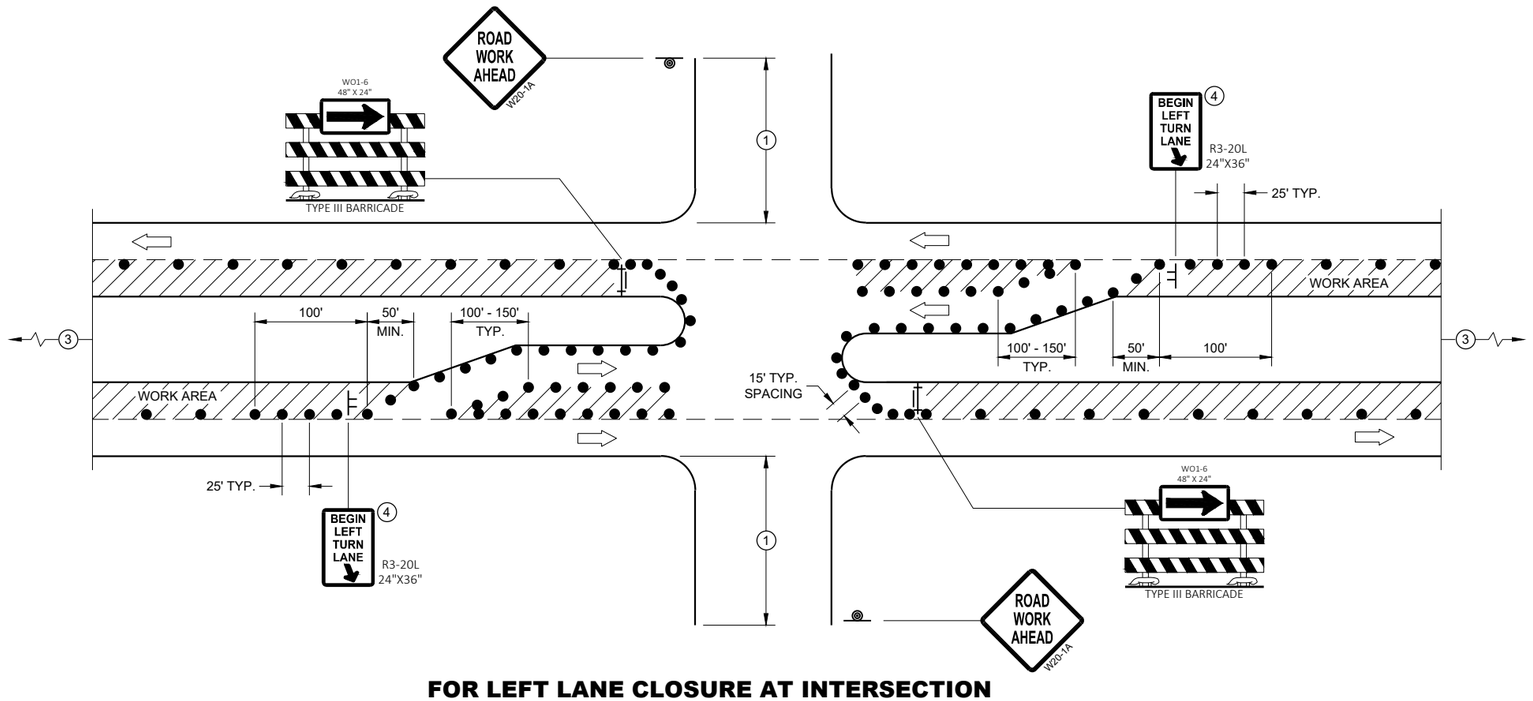
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350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- 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 45 MPH, USE SDD 15D14.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES.
FOR CLOSING LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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.

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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.

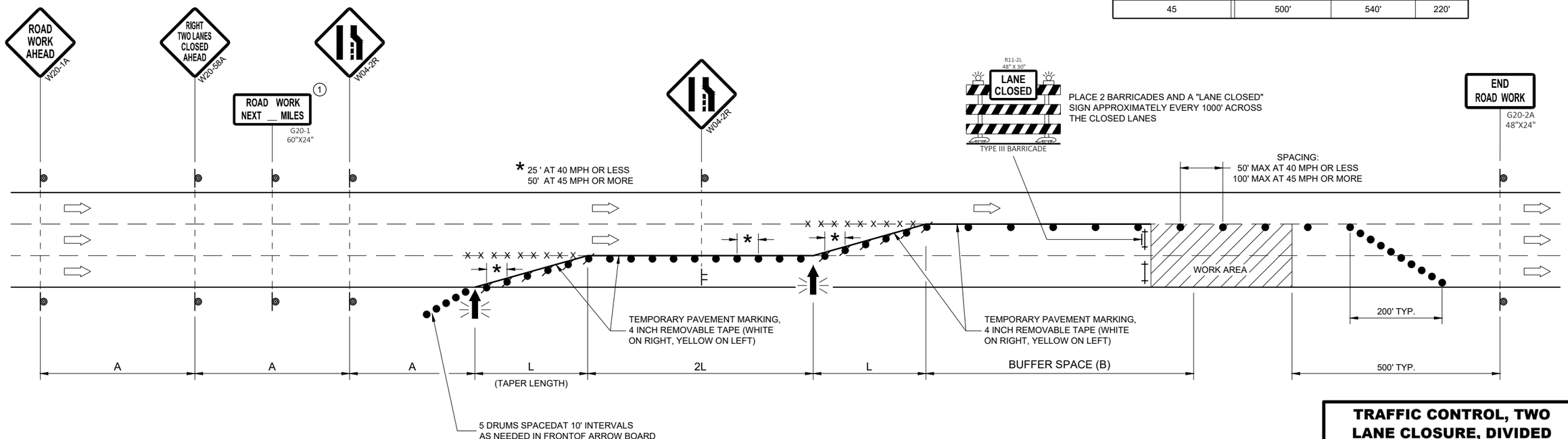
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(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

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TRAFFIC CONTROL, TWO LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

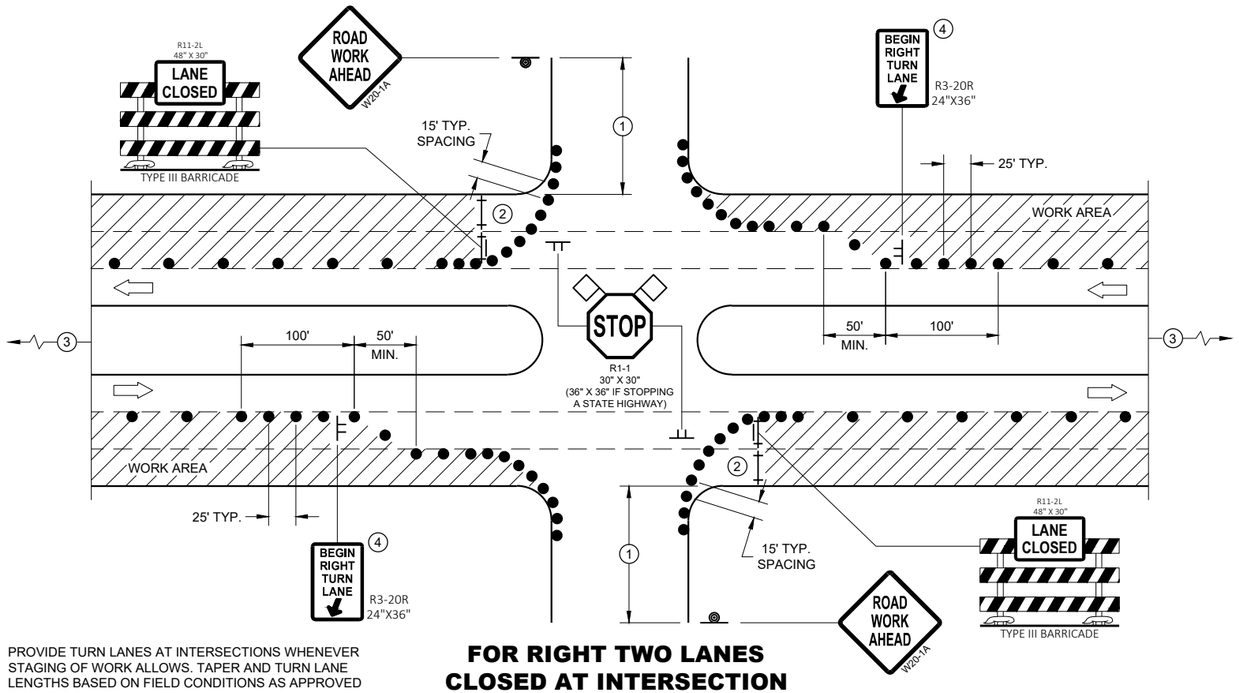
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

6

SDD 15D22 - 04



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT TWO LANES CLOSED AT INTERSECTION

GENERAL NOTES

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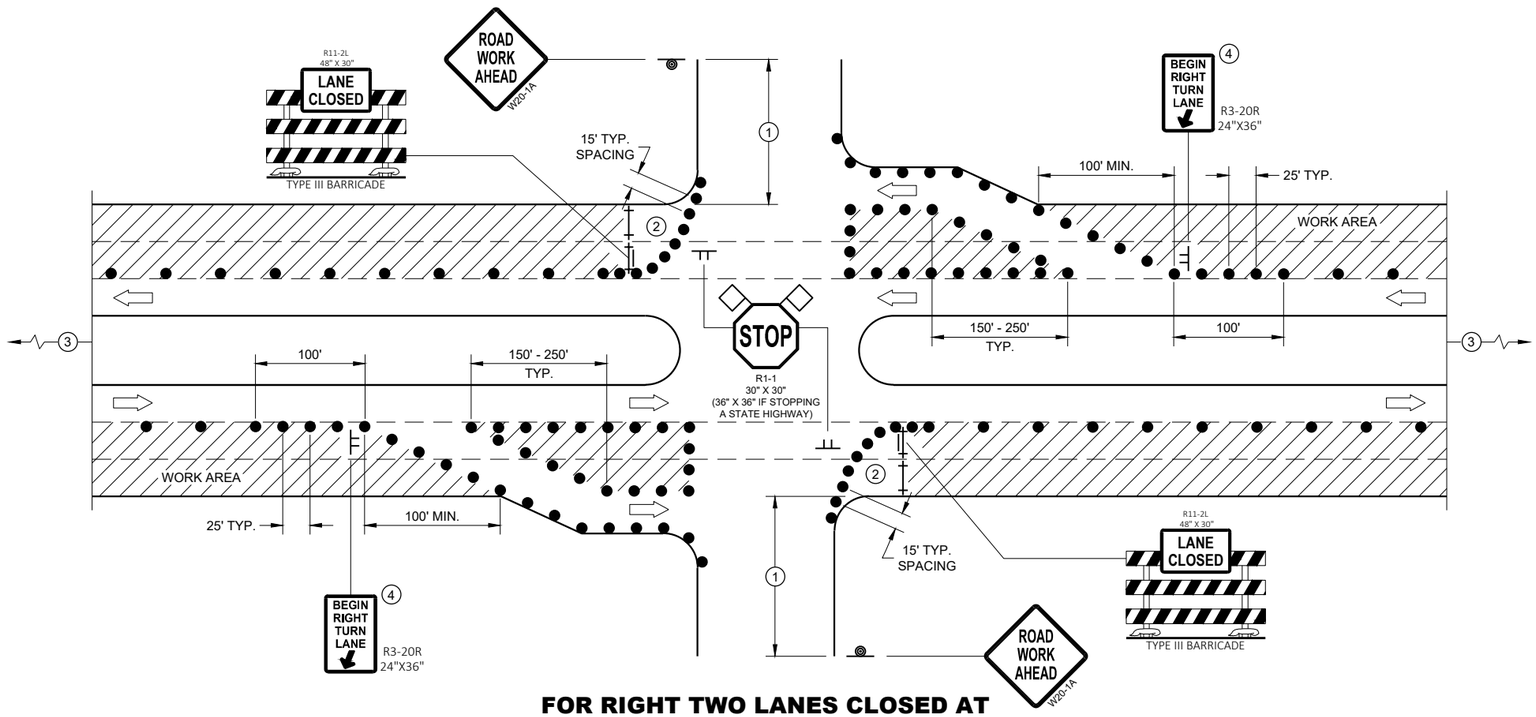
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(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR RIGHT TWO LANES CLOSED AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO RIGHT LANE CLOSURE

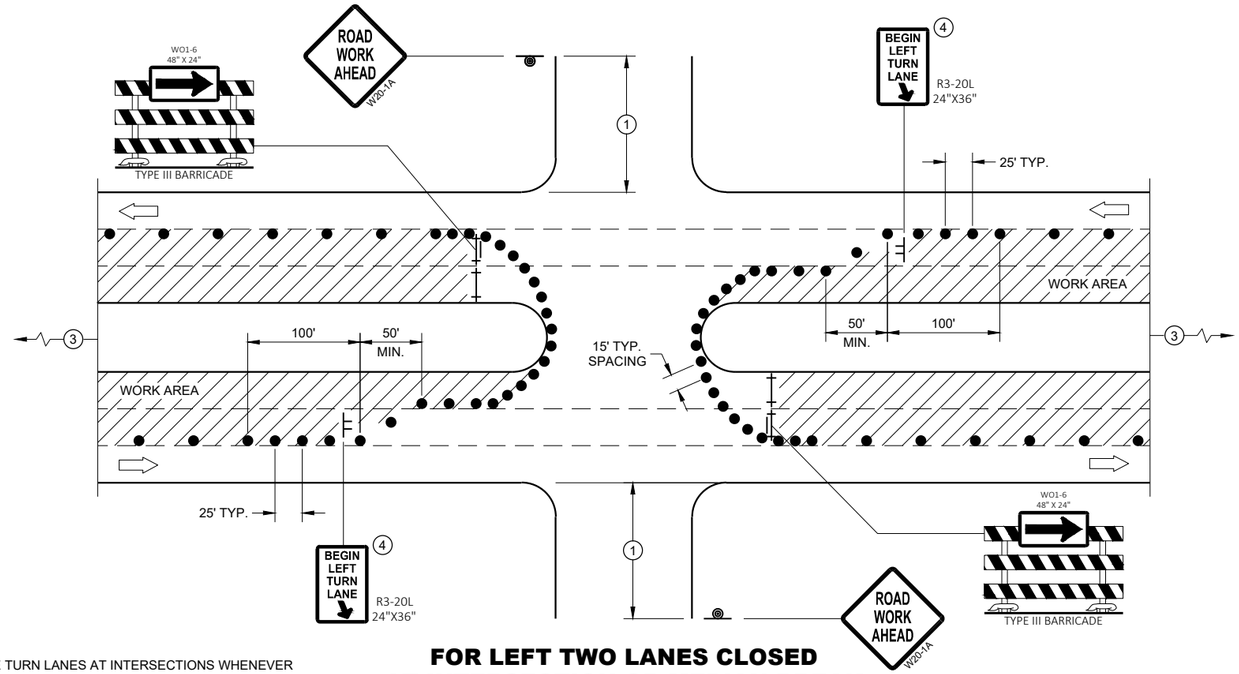
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D23 - 07a

6

SDD 15D23 - 07a



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

GENERAL NOTES

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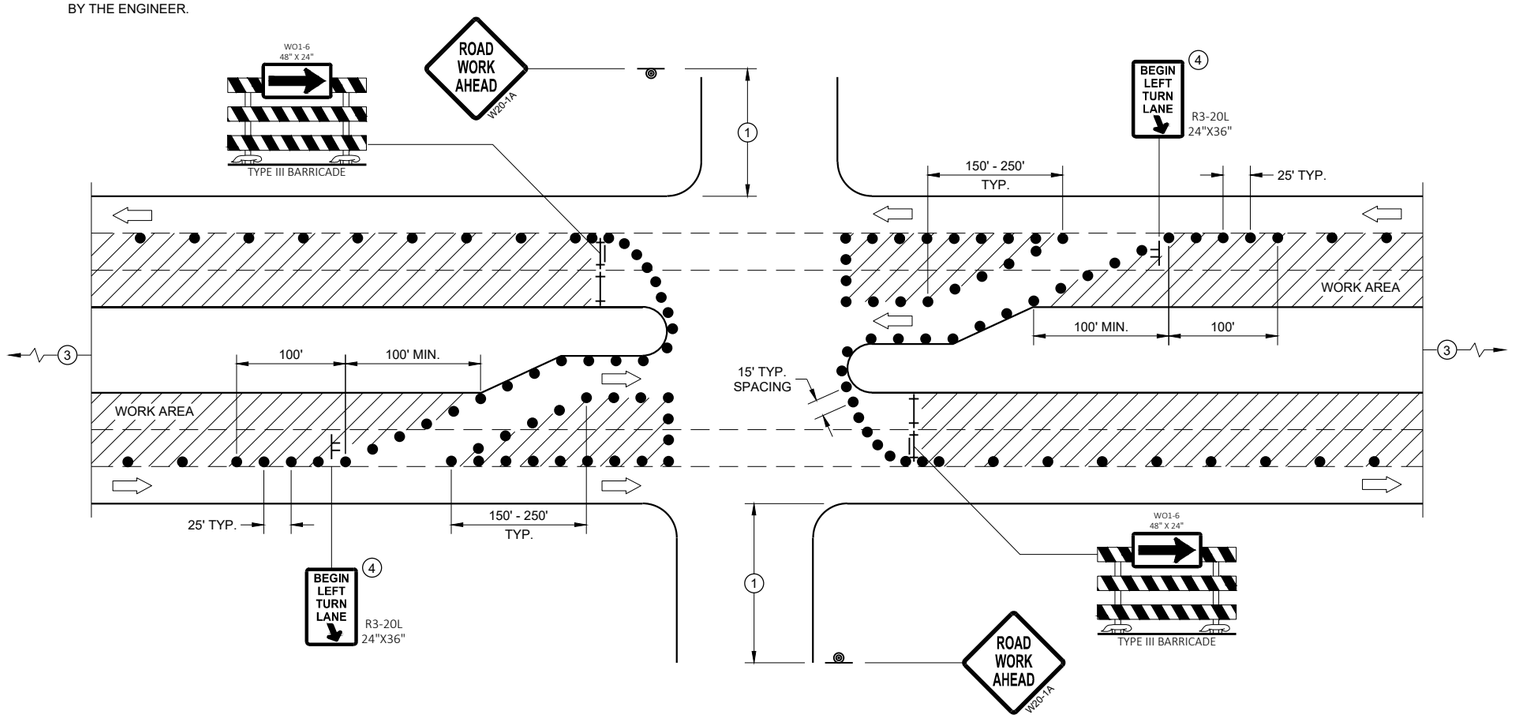
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350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D23 - 07b

6

SDD15D23 - 07b

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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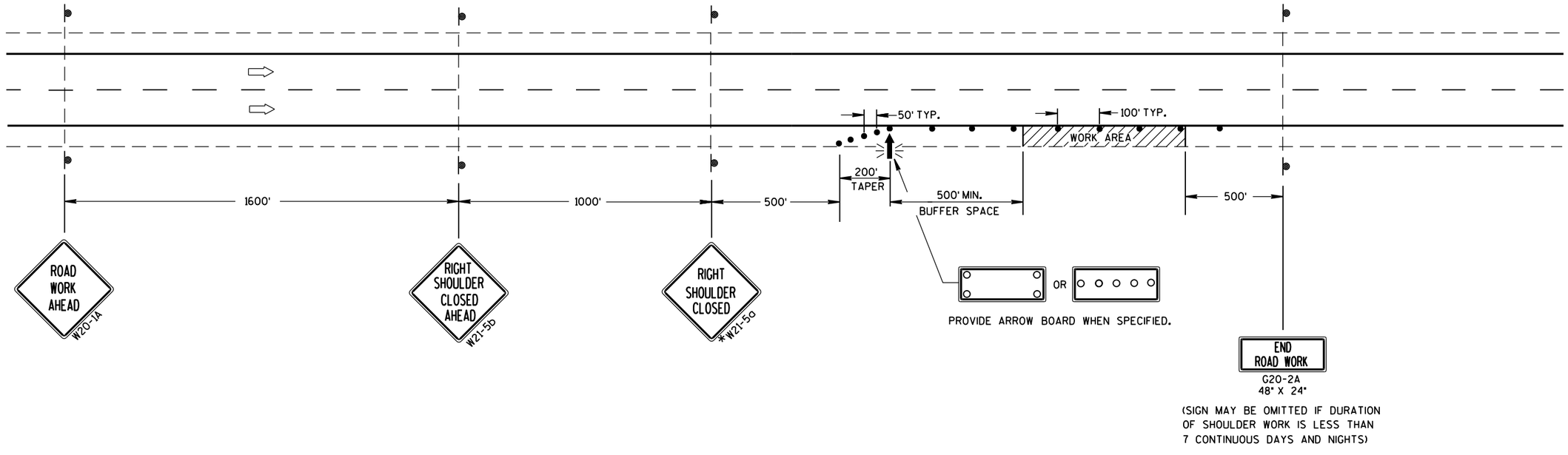
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CHANNELIZING DEVICES PLACED ADJACENT TO THE WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016 — DATE

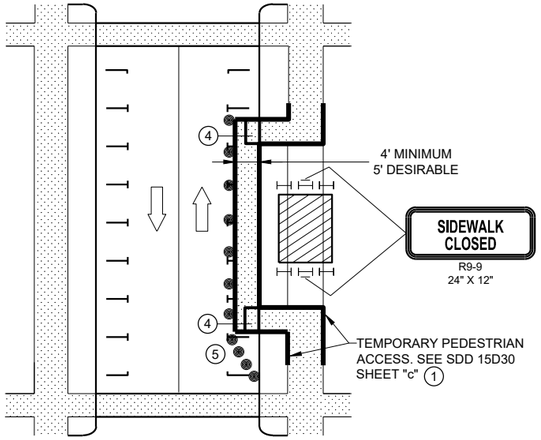
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

FHWA

6

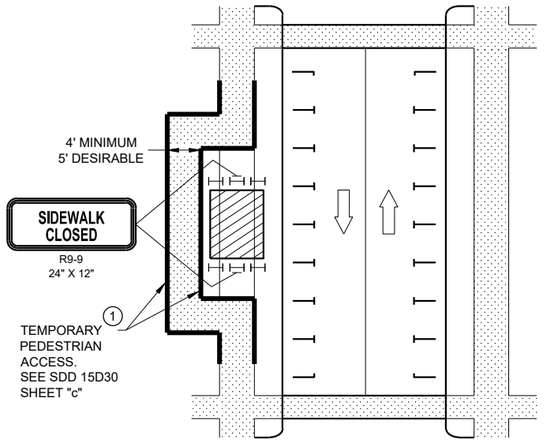
S.D.D. 15 D 27-3

NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.

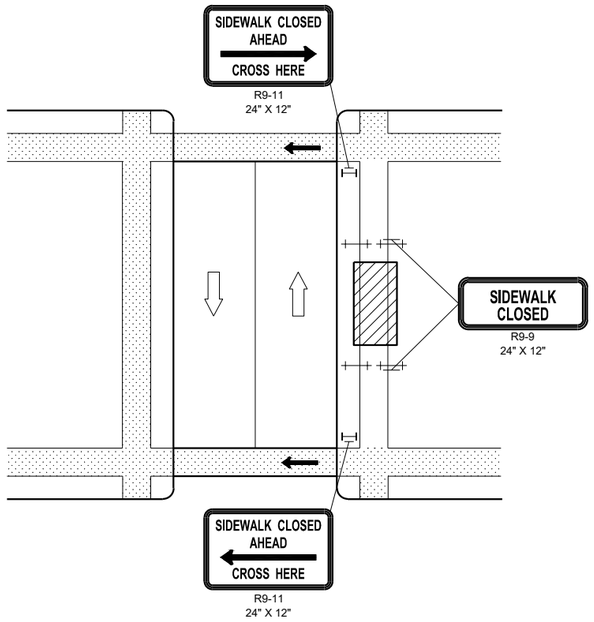


MID-BLOCK SIDEWALK CLOSURE IN PARKING LANE

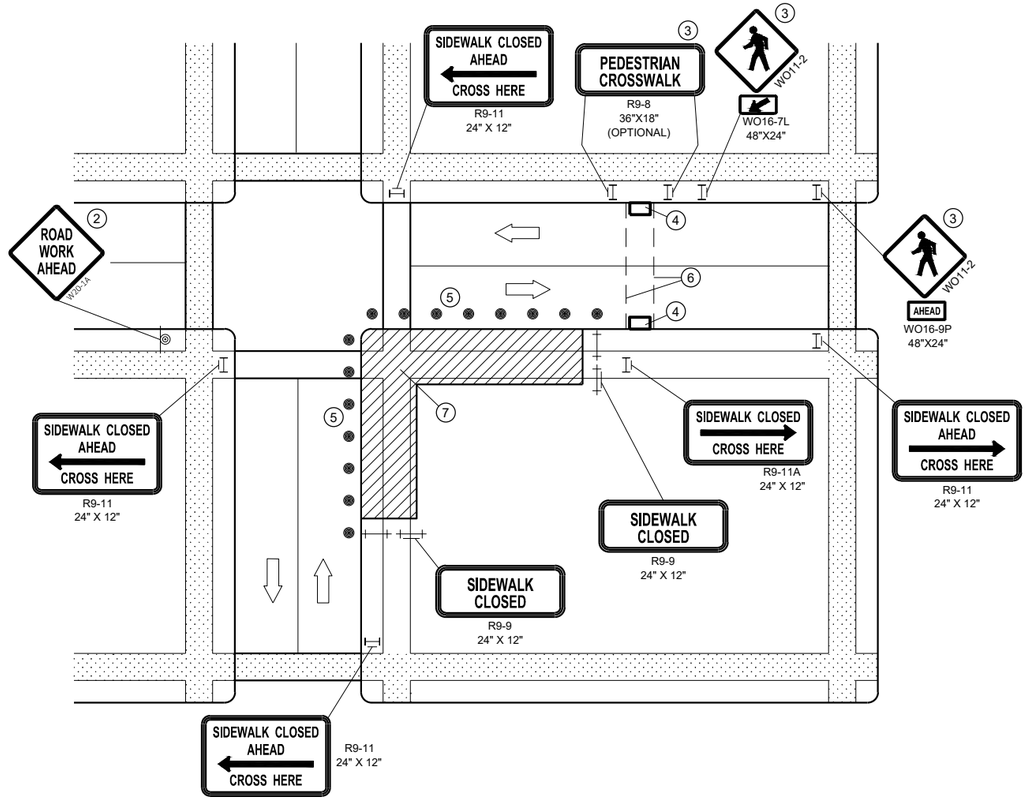
NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION



MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTIME CLOSURE, USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

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

(1) IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE

(2) "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.

(3) IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND WO11-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.

(4) TEMPORARY CURB RAMPS. SEE SDD 15D30 SHEET "b'.

(5) DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.

(6) TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.

(7) LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

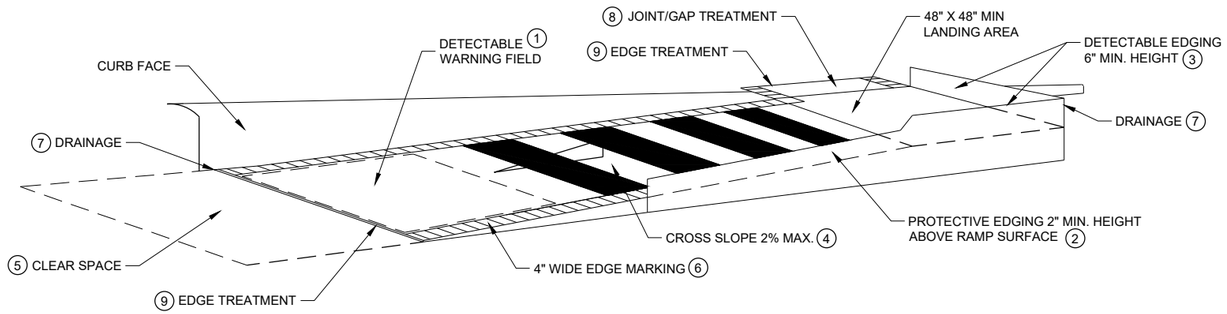
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW INTENSITY FLASHING)
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

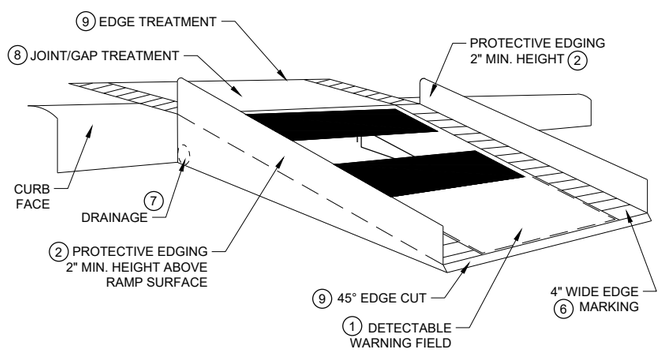
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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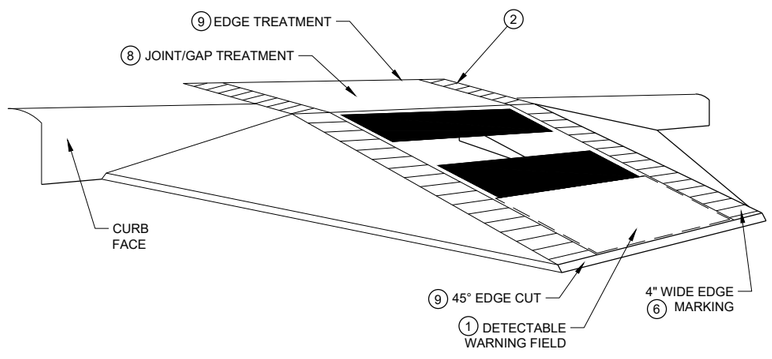
SDD15D30 - 06a



TEMPORARY CURB RAMP PARALLEL TO CURB



WITH PROTECTIVE EDGE



WITH SIDE APRON

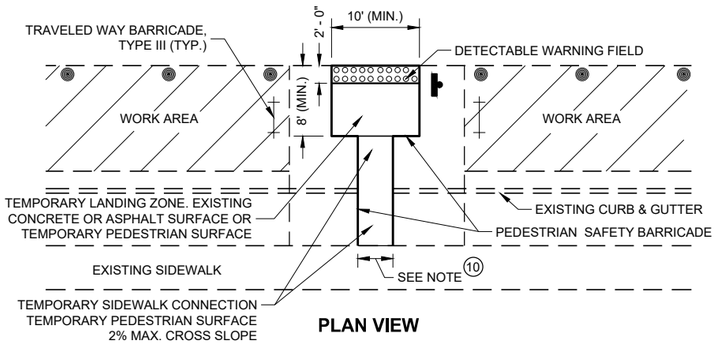
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

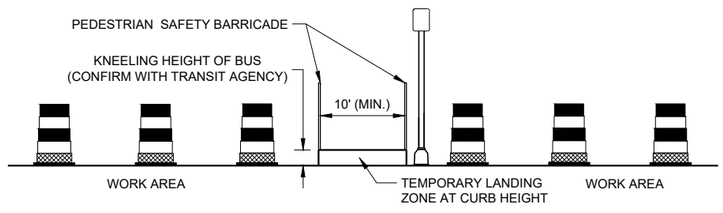
NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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

1. CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 08D05, SHEET "e".
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
5. CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
6. THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
7. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
8. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.
9. CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES SHALL BE VERTICAL UP TO ¼" HIGH AND BEVELED AT 1:2 BETWEEN ¼" AND ½".
10. 5" WIDE MIN. WITH PEDESTRIAN SAFETY BARRICADE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY BARRICADE.



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

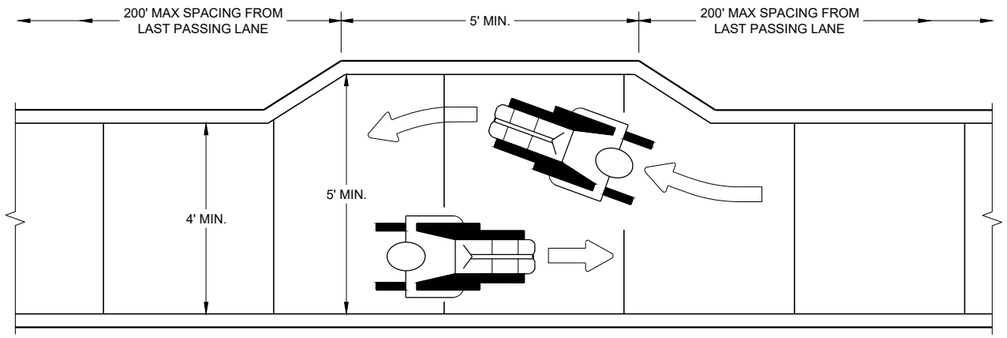
LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- WORK AREA

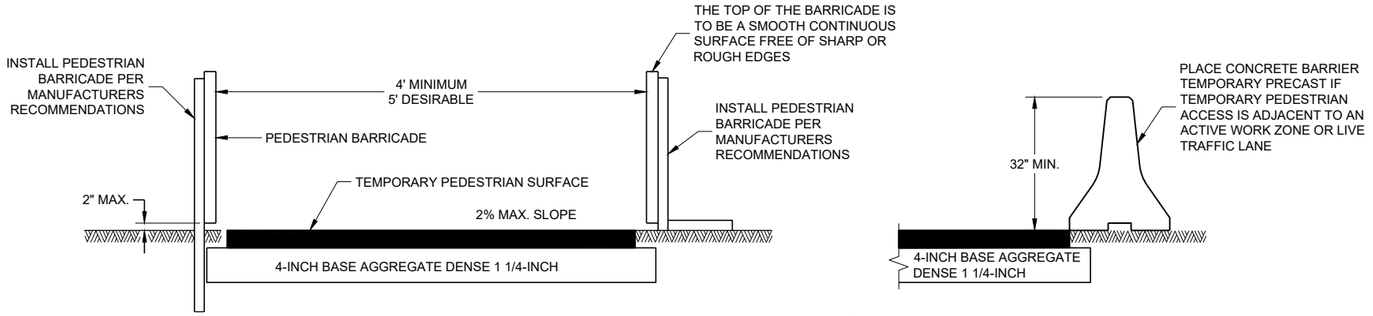
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

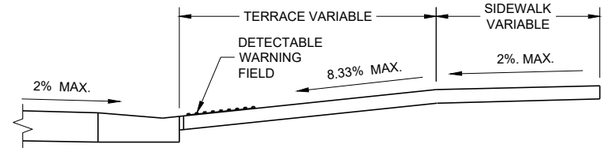
SDD 15D30 - 06b



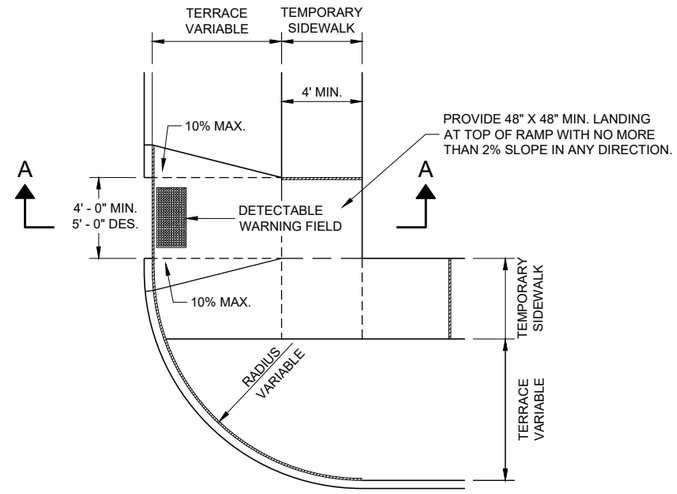
NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN ACCESS



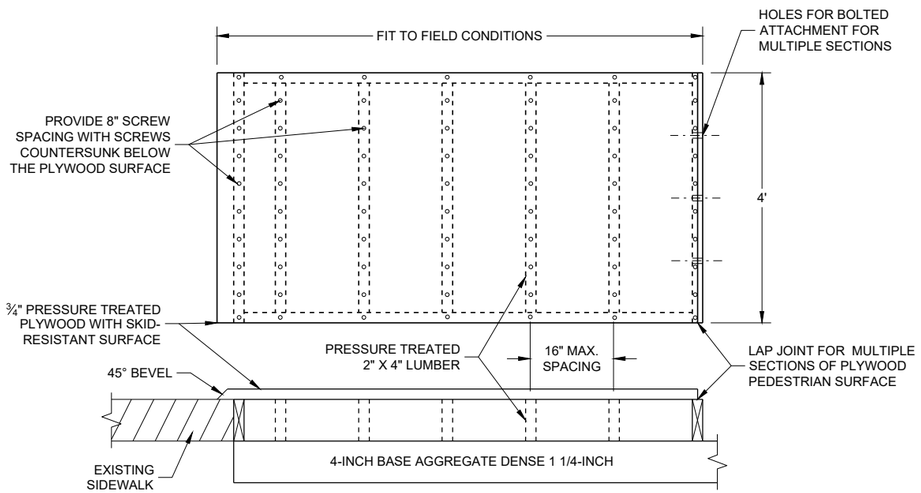
SECTION A - A



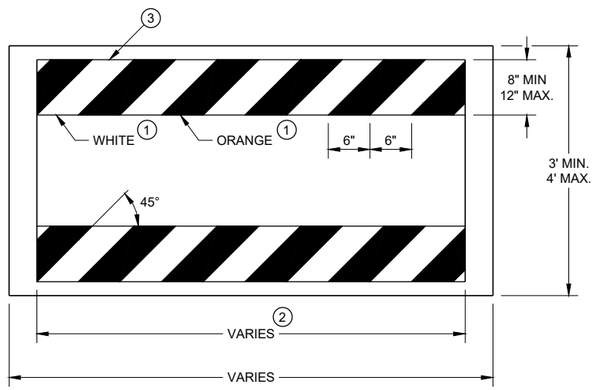
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



TEMPORARY PEDESTRIAN BARRICADE *

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

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

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

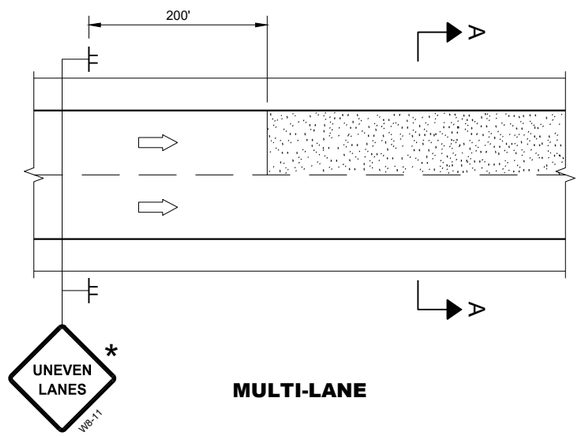
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

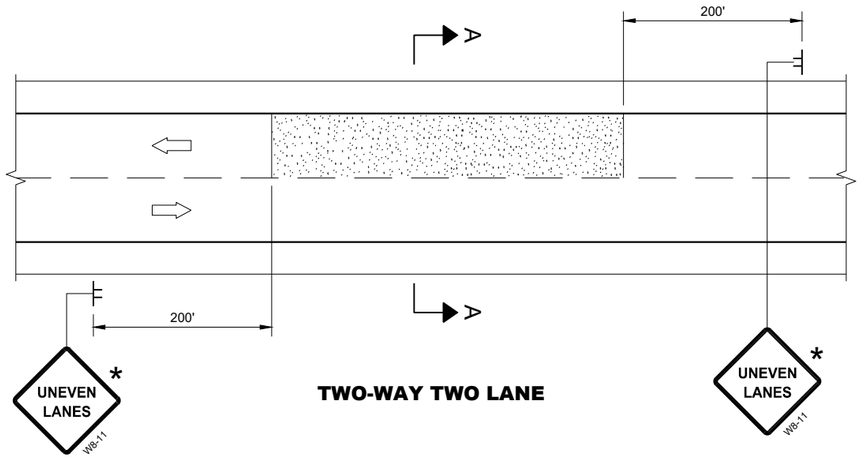
SDD 15D30 - 06c

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SDD 15D30 - 06c



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

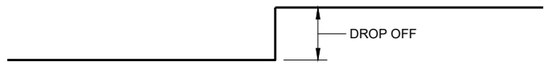
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

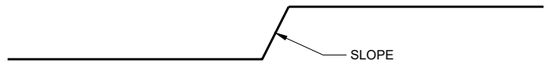
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

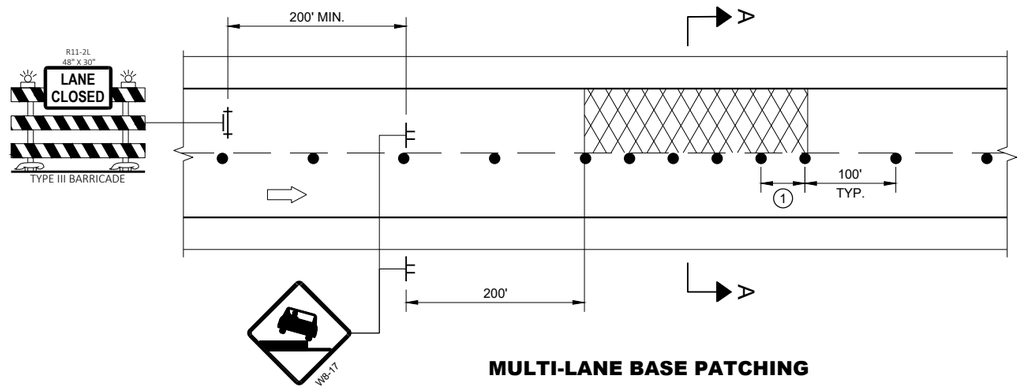


SECTION A - A

OR

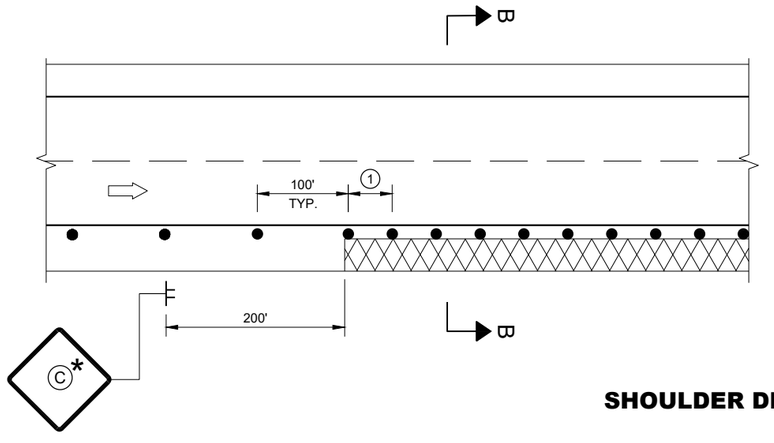


SECTION A - A

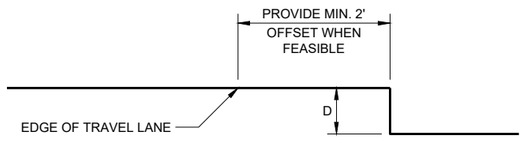


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D39 - 02

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" 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 AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF 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.

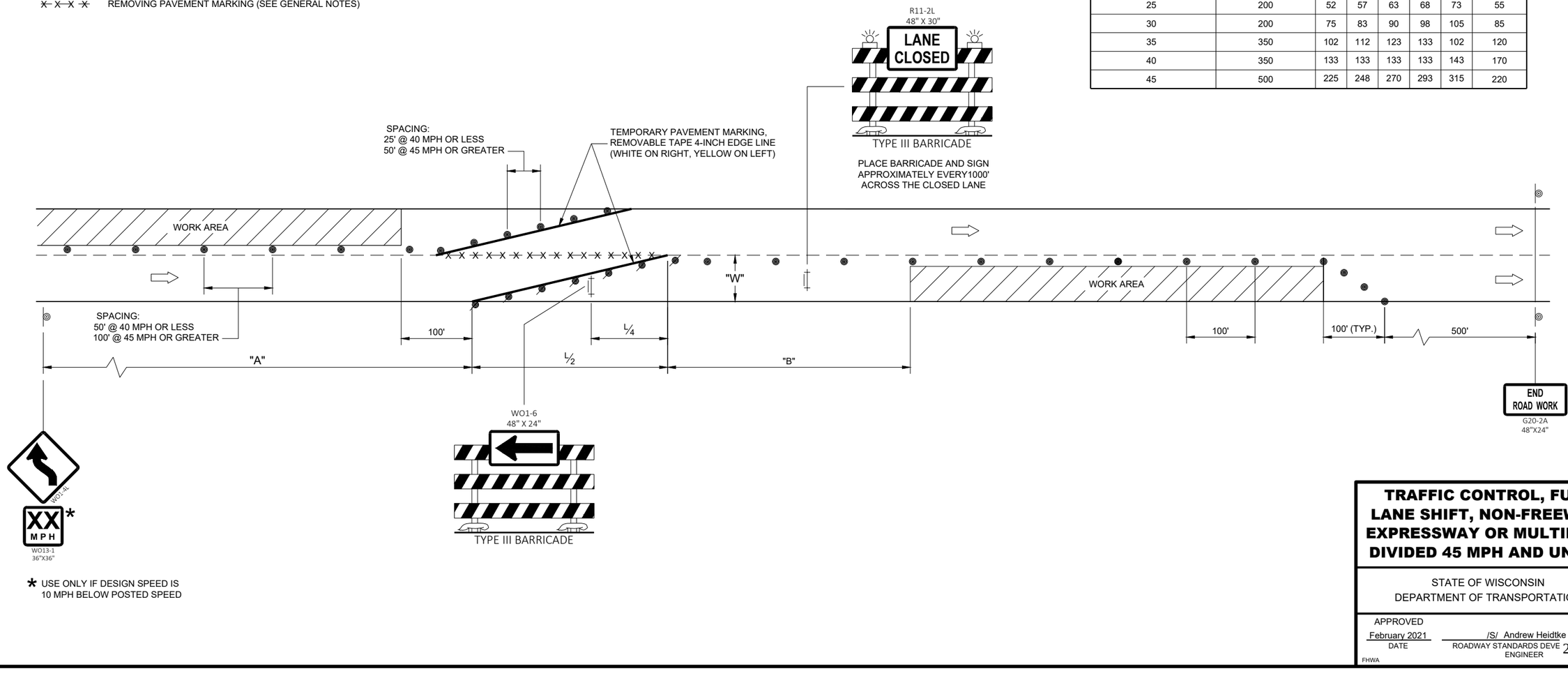
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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 SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT 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 1/2 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.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L ½ W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
		10	11	12	13	14	
25	200	52	57	63	68	73	55
30	200	75	83	90	98	105	85
35	350	102	112	123	133	102	120
40	350	133	133	133	133	143	170
45	500	225	248	270	293	315	220



* USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED

TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 15D40 - 02a

6

SDD 15D40 - 02a

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE "A" WARNING LIGHT (FLASHING)

DIRECTION OF TRAFFIC

WORK AREA

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

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 DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF 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.

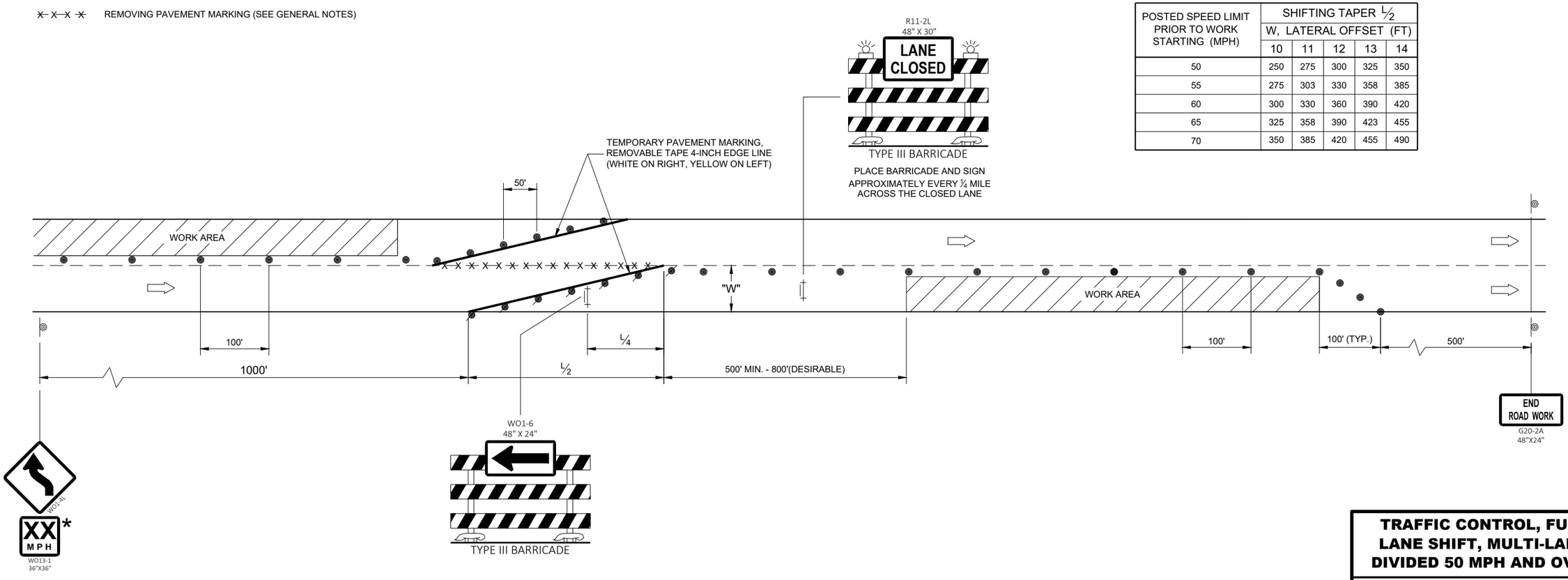
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER L½ W, LATERAL OFFSET (FT)				
	10	11	12	13	14
50	250	275	300	325	350
55	275	303	330	358	385
60	300	330	360	390	420
65	325	358	390	423	455
70	350	385	420	455	490



* USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED

TRAFFIC CONTROL, FULL LANE SHIFT, MULTI-LANE DIVIDED 50 MPH AND OVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

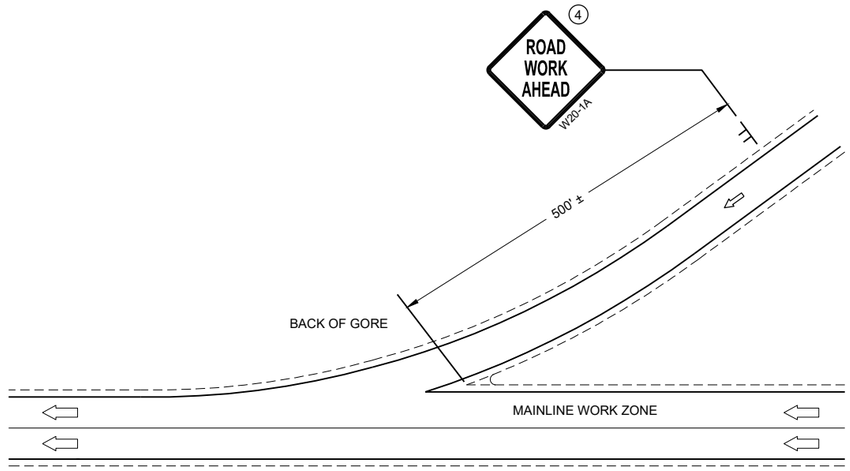
FHWA

SDD 15D40 - 02b

SDD 15D40 - 02b

LEGEND

- V1 SHADOW VEHICLE 1
- V2 SHADOW VEHICLE 2
- V3 ADVANCE WARNING TRUCK
- ● TRAFFIC CONTROL DRUM
- TRUCK MOUNTED ATTENUATOR (TMA)
- SIGN ON TEMPORARY SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW PANEL (MERGE)
- FLASHING ARROW PANEL (CAUTION)
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- WORK AREA



GENERAL NOTES

SHORT DURATION IS WORK THAT OCCUPIES A LOCATION UP TO 1 HOUR.

MOBILE IS WORK THAT MOVES INTERMITTENTLY OR CONTINUOUSLY.

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.

WHEN WORK ACTIVITY BLOCKS THE RIGHT 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 DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

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

(1) DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) DRUMS ARE TO BE USED FOR BRIDGE DECK SEALING AND OTHER PROJECTS THAT REQUIRE DELINEATION.

(3) WITHIN 5 MILES, RELOCATE SIGNS AS WORK PROGRESSES AND NECESSARY OR AS DIRECTED BY THE ENGINEER.

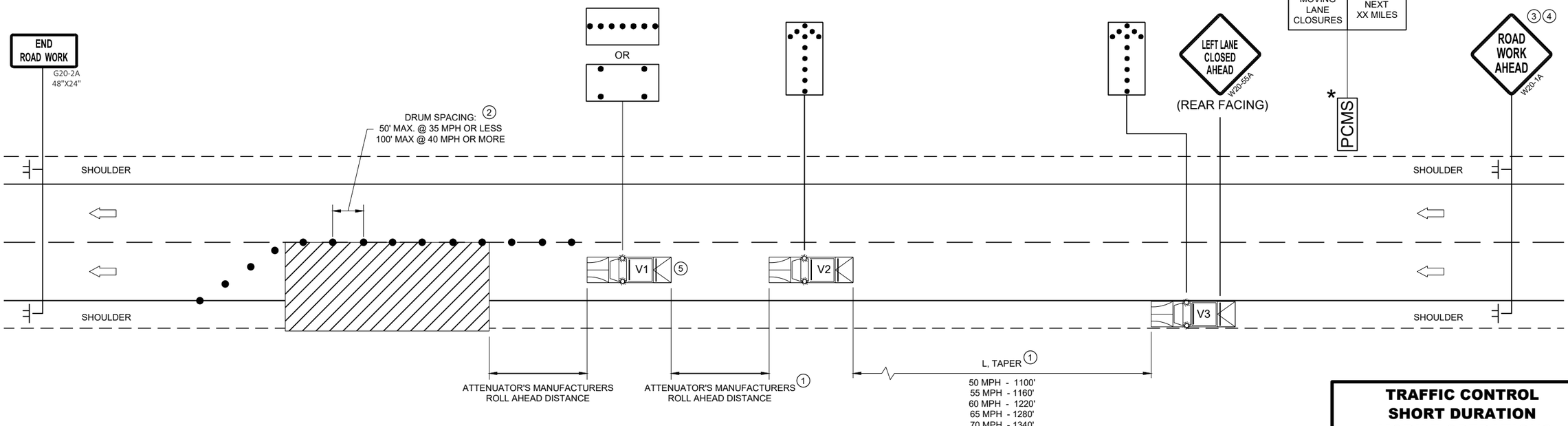
(4) SIGN NOT REQUIRED IF MOVING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(5) SHADOW VEHICLE 1 (V1) IS OPTIONAL

* PCMS OPTIONAL

PCMS MESSAGING

FRAME 1	FRAME 2
MOVING LANE CLOSURES	NEXT XX MILES



TRAFFIC CONTROL SHORT DURATION MOBILE OPERATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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SDD 15D43 - 02

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SDD 15D43 - 02

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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

ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

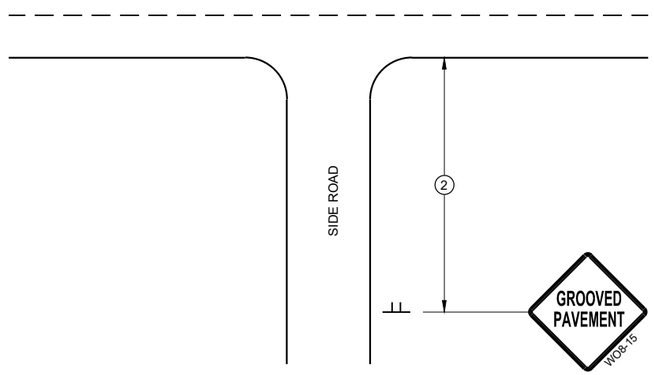
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

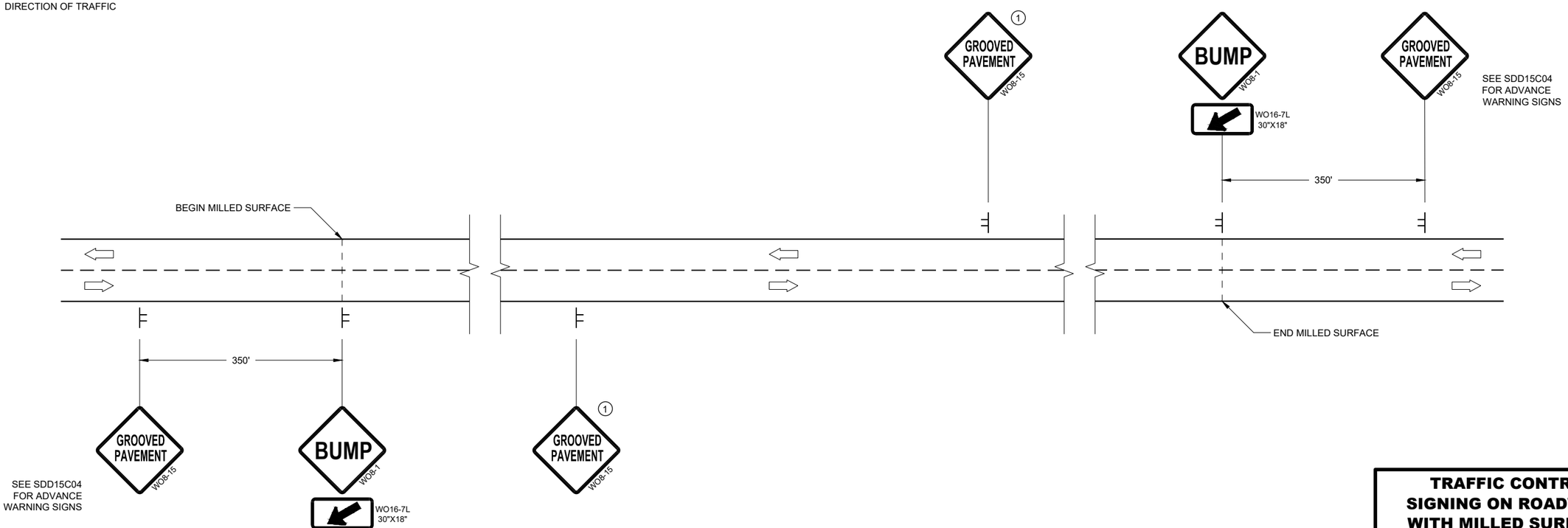
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D44 - 02

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- NEW SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

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

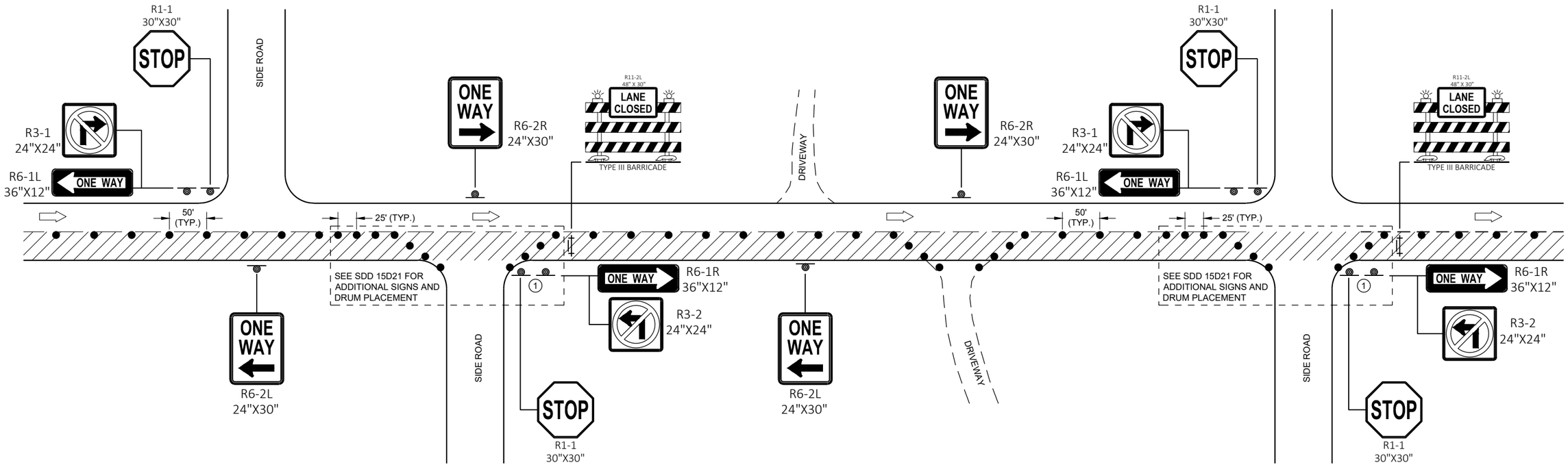
ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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.

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.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

(1) IF WORK OPERATIONS ALLOWS, MOVE R1-1, R6-1R, AND R3-2 CLOSER TO INTERSECTION.



TRAFFIC CONTROL
ONE - WAY SIGNING

TRAFFIC CONTROL
ONE-WAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D46 - 01

SDD 15D46 - 01

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					
		3	4	5	6	7	8
25	200	10	14	17	21	24	28
30	200	15	20	25	30	35	40
35	350	20	27	34	40	47	54
40	350	26	35	44	53	62	70
45	500	45	59	74	89	104	119
50	500	50	66	83	99	116	132
55	500	54	73	91	109	127	145

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

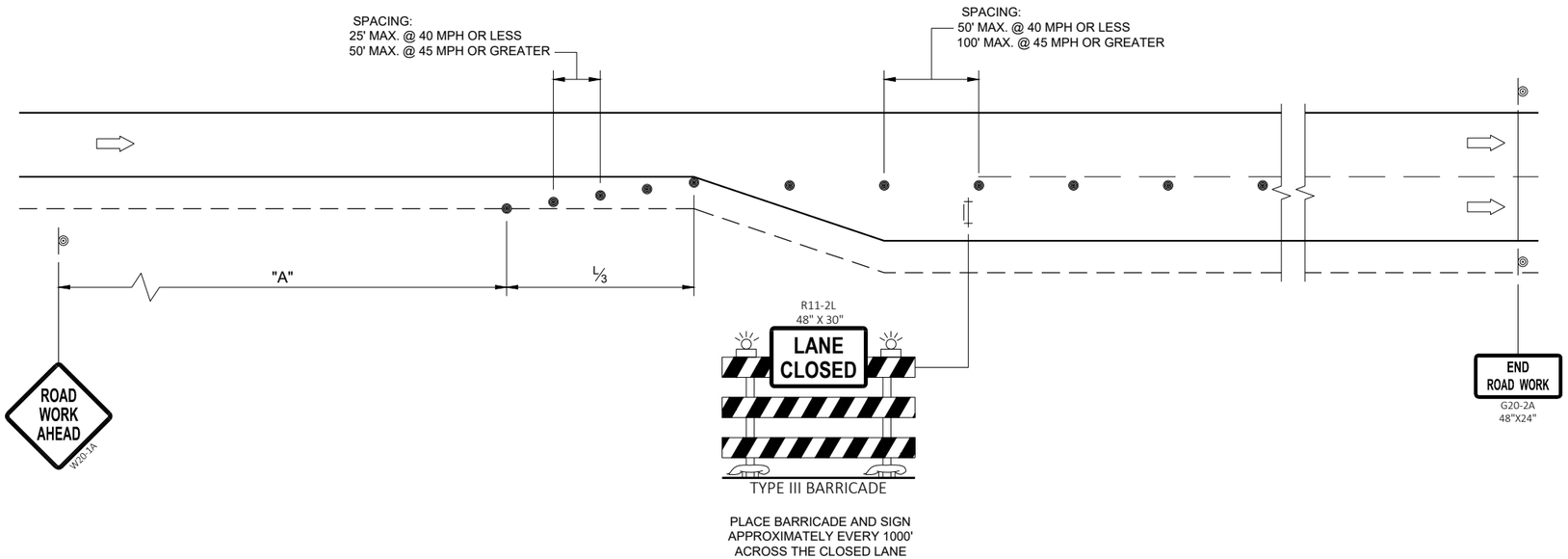
"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

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

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.



PLACE BARRICADE AND SIGN APPROXIMATELY EVERY 1000' ACROSS THE CLOSED LANE

ADDED LANE CLOSURE WITHOUT LANE SHIFT

TRAFFIC CONTROL
ADDED LANE CLOSURE
WITHOUT LANE SHIFT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D50 - 01a

6

SDD15D50 - 01a

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER (L/2) FEET
25	200	60
30	200	90
35	350	120
40	350	160
45	500	270
50	500	300
55	500	330

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.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"x36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

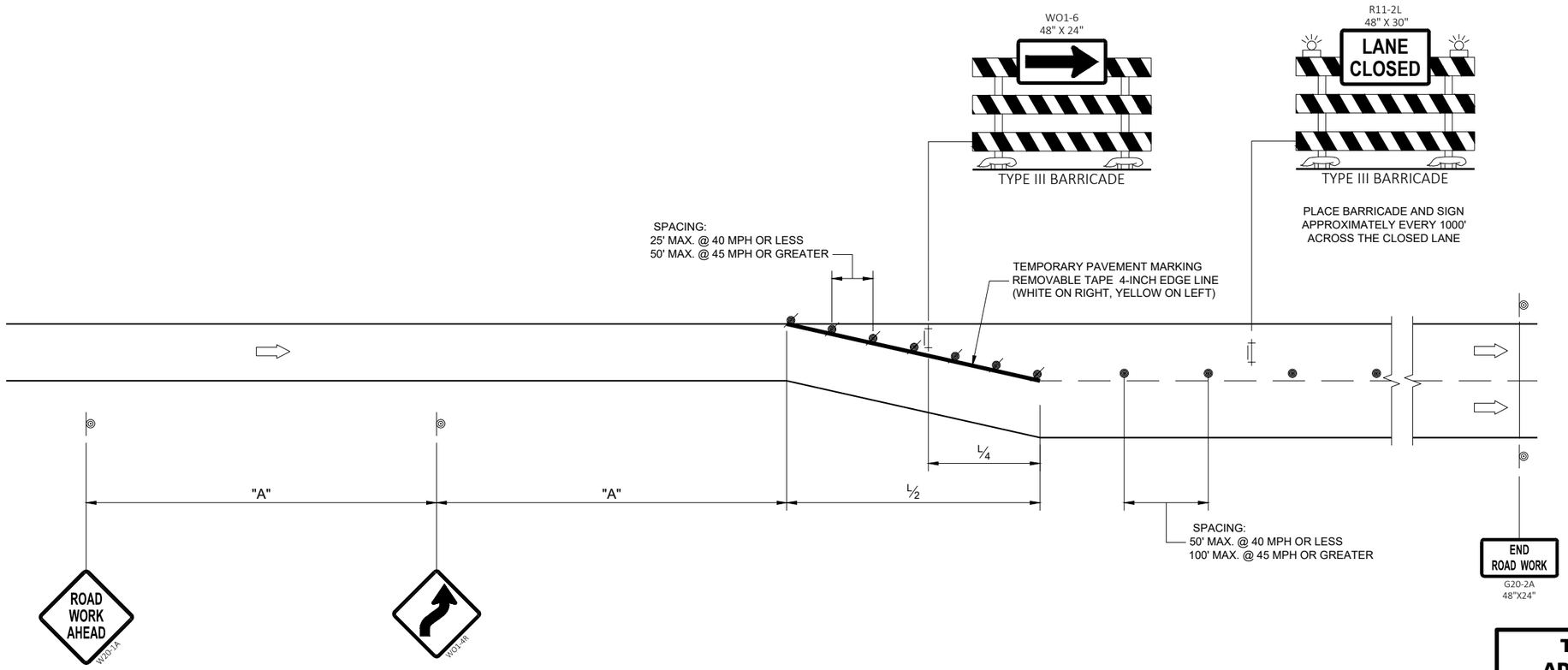
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

W20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION WORK IS LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS.

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR FOUR CONTINUOUS DAYS AND NIGHTS.



ADDED LANE CLOSURE WITH LANE SHIFT

TRAFFIC CONTROL, ADDED LANE CLOSURE WITH LANE SHIFT

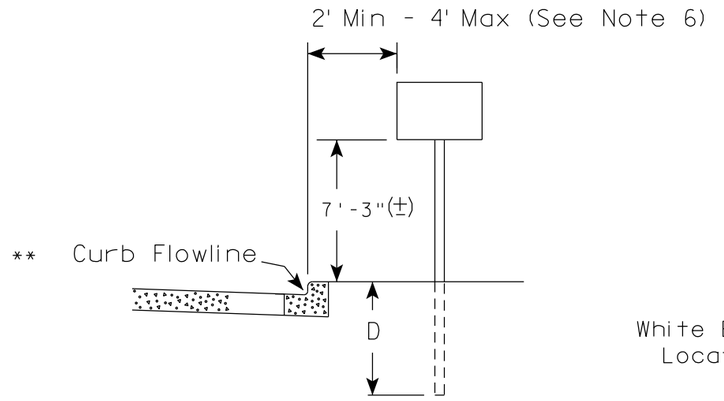
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

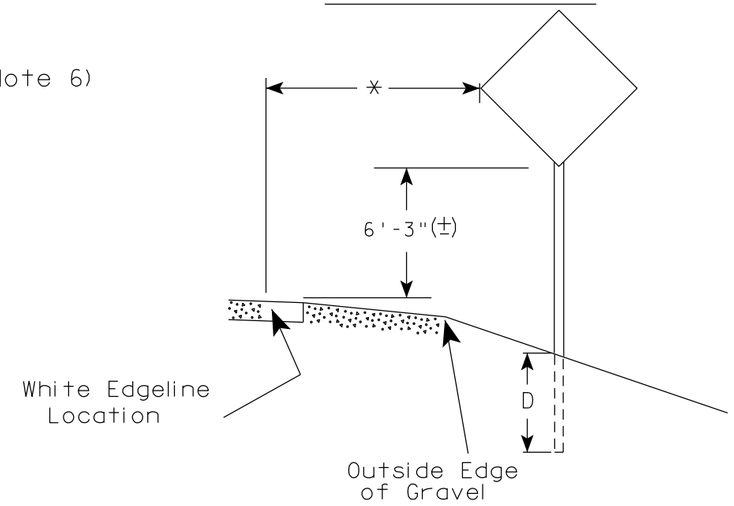
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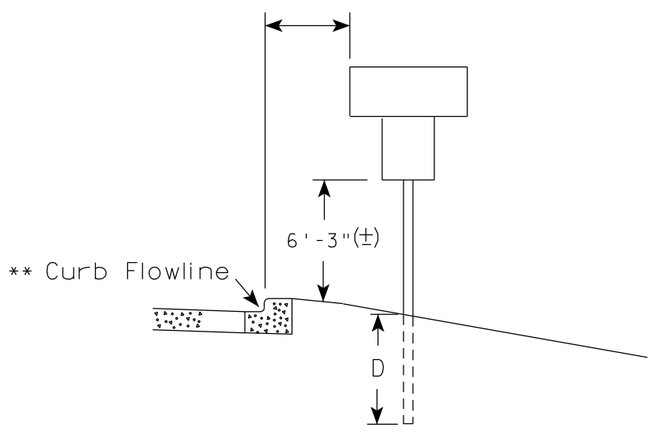
SDD 15D50 - 01b

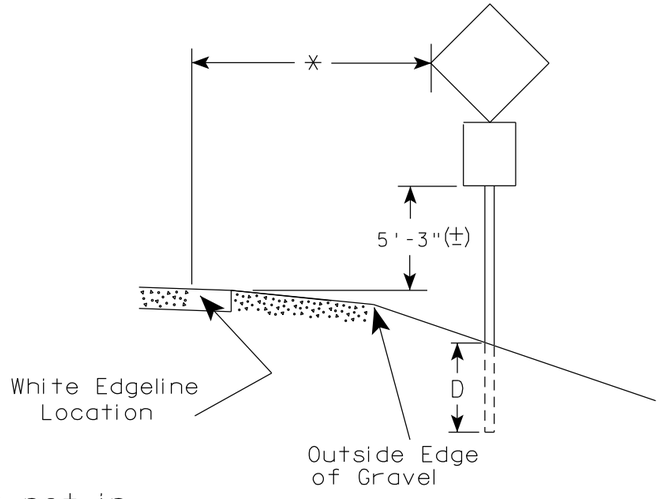
URBAN AREA



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.

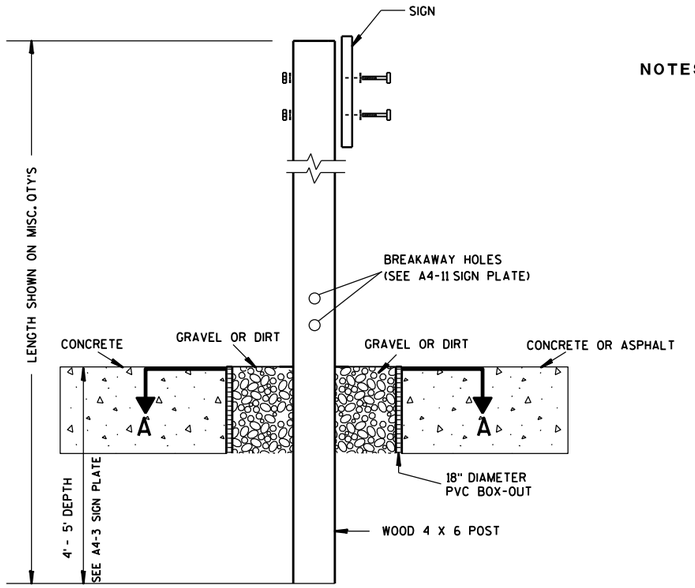
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

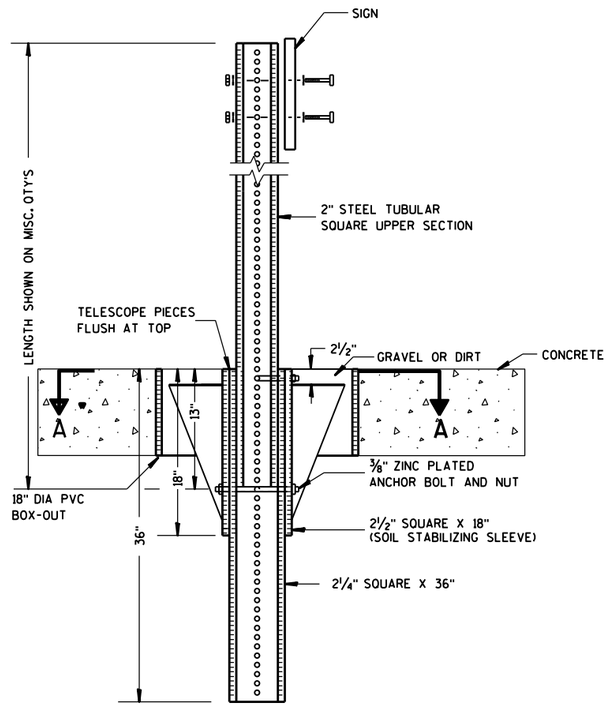
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 274	E



ELEVATION VIEW

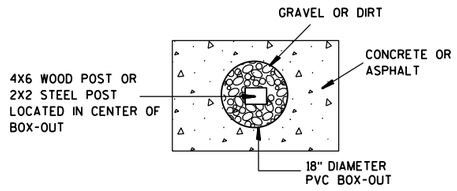
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

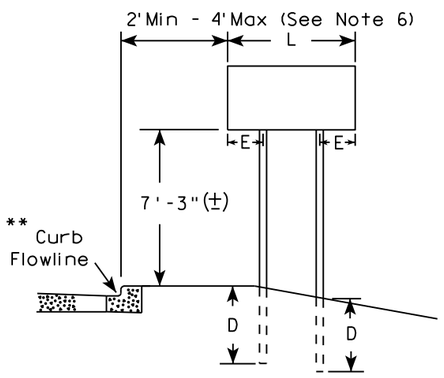
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

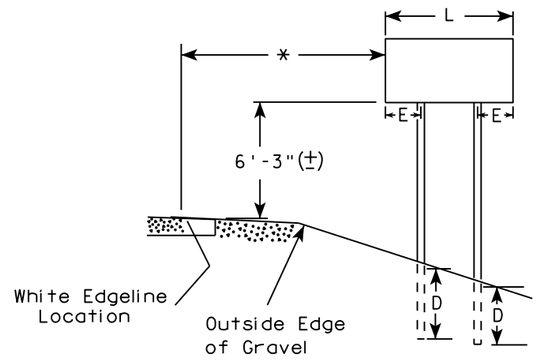
DATE 1/27/14 PLATE NO. A4-3B.1

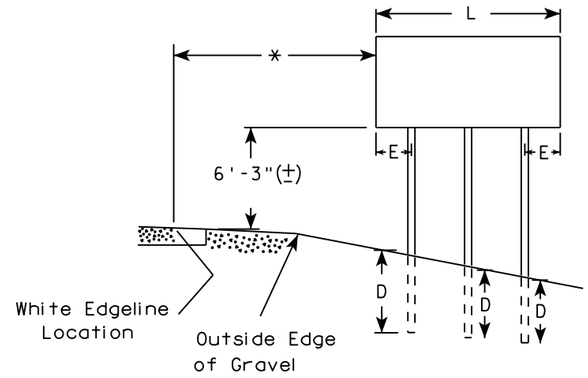
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

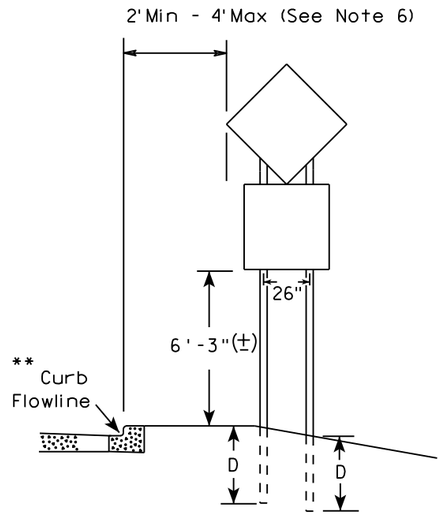
URBAN AREA



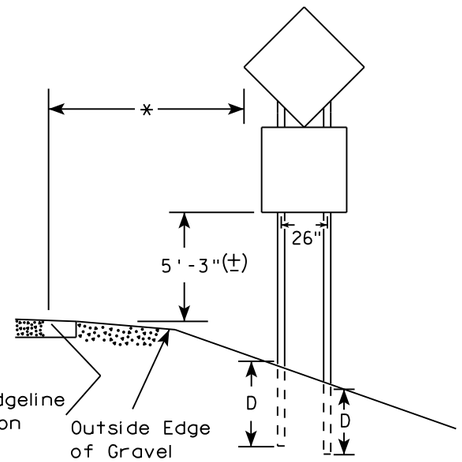
RURAL AREA (See Note 3)







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

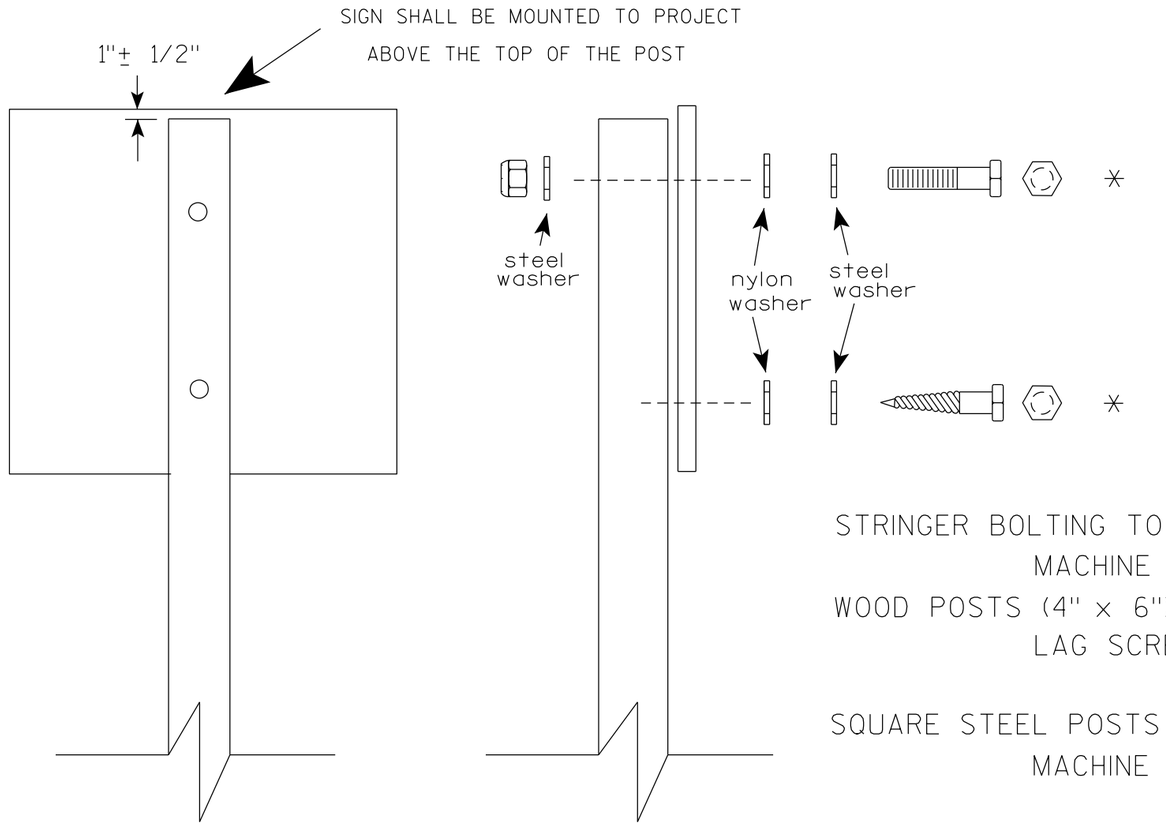
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

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



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: 277 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 01-APRIL-2020 PLOT BY : dotc4c

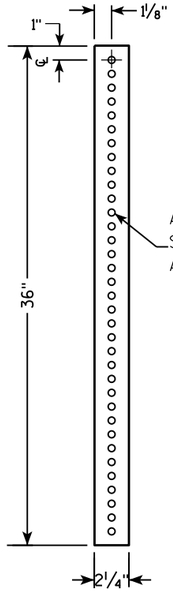
WISDOT/CADDS SHEET 42

7

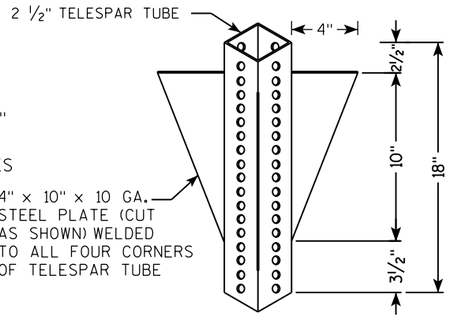
7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

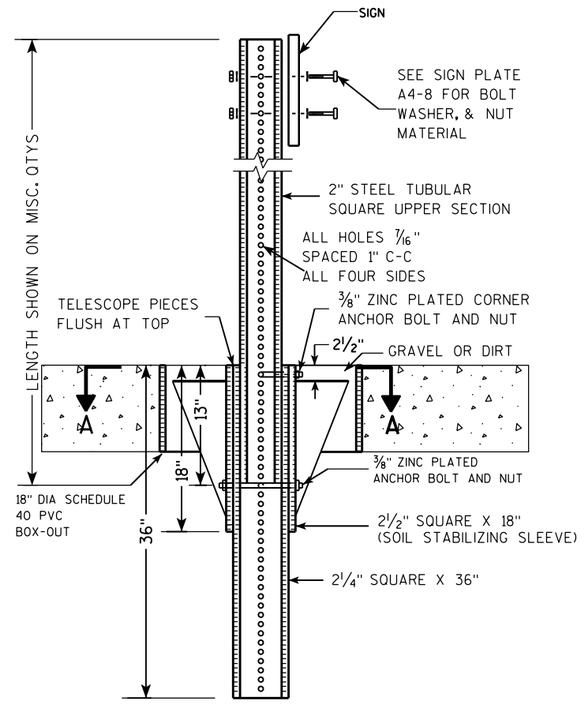
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



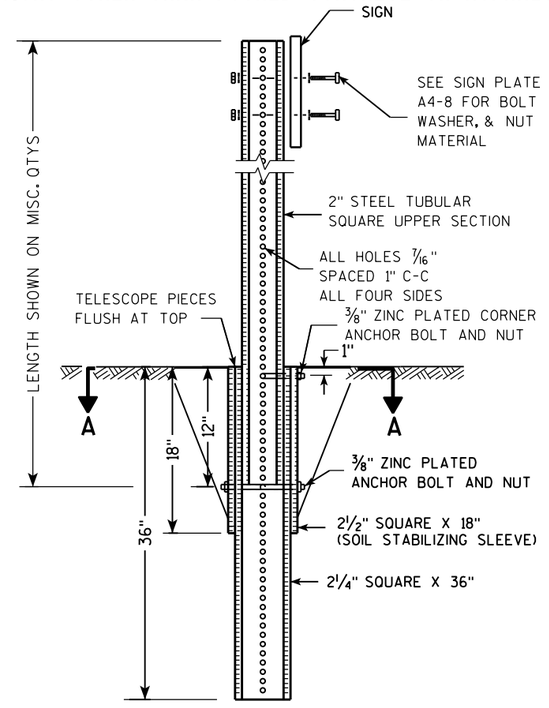
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

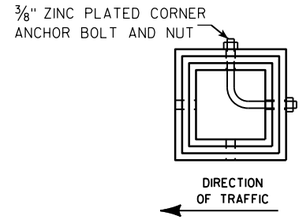


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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).

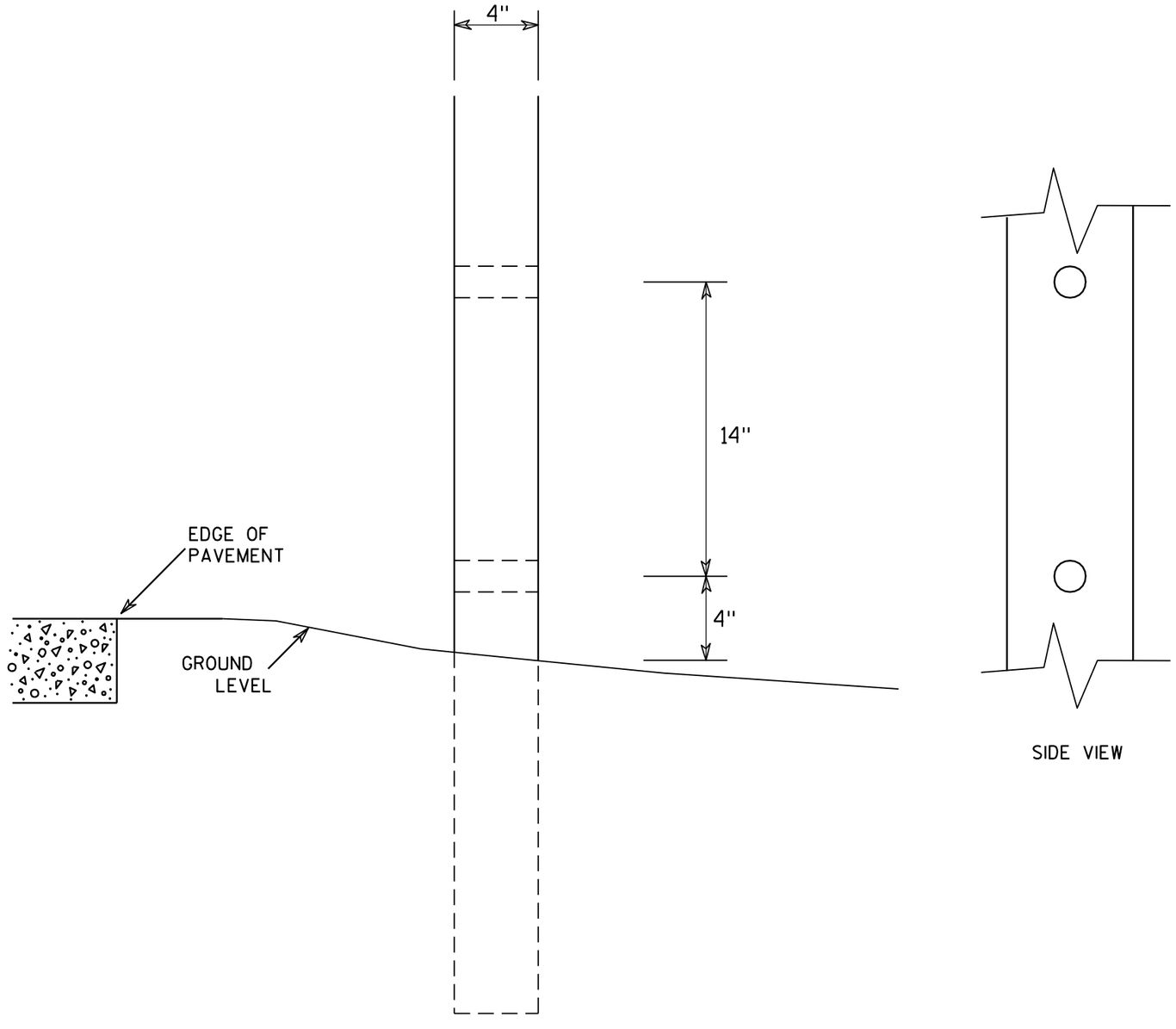
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 278 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.

7

7

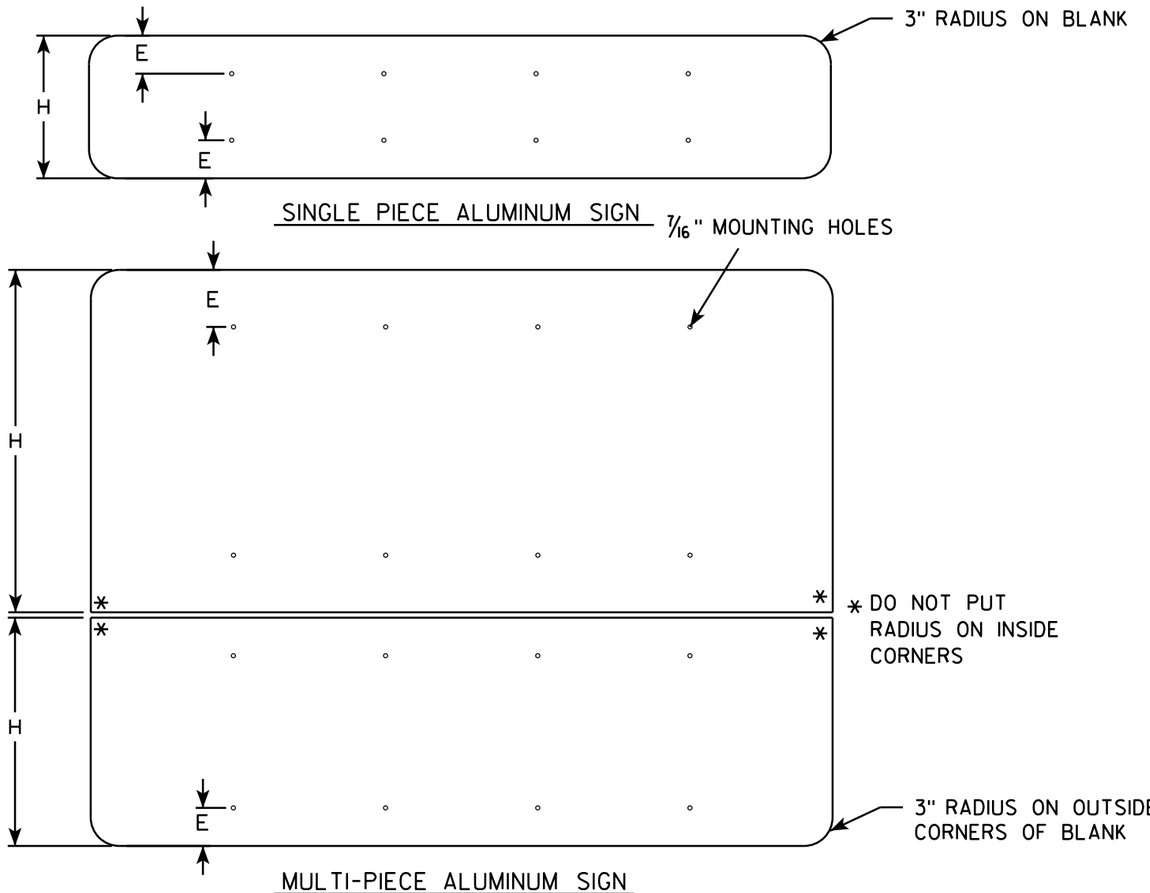
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang
for State Traffic Engineer

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

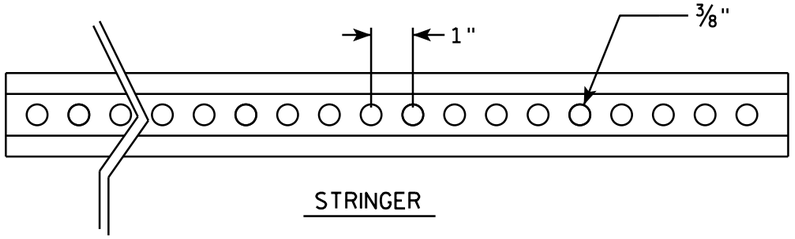
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 279	E



GENERAL NOTES

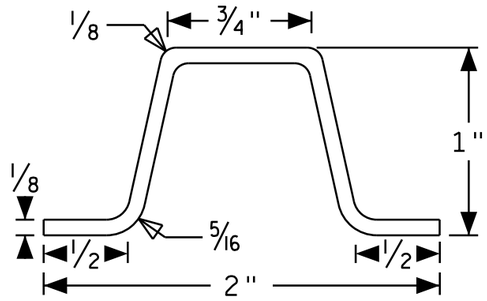
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 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"

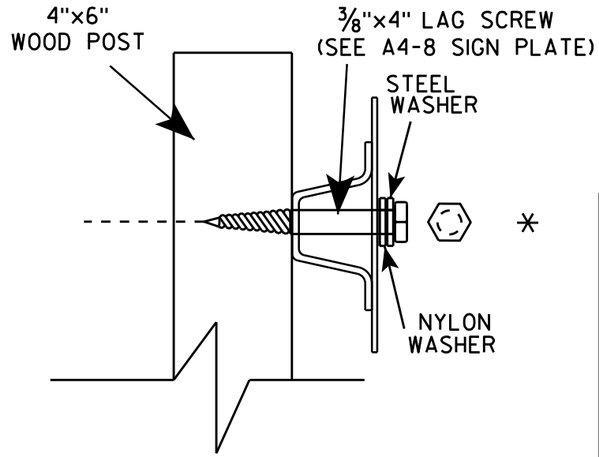


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

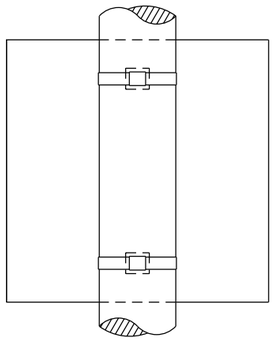
DATE 4/26/16 PLATE NO A4-18.1

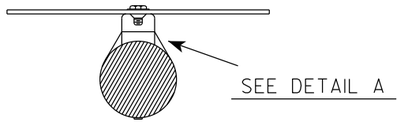
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

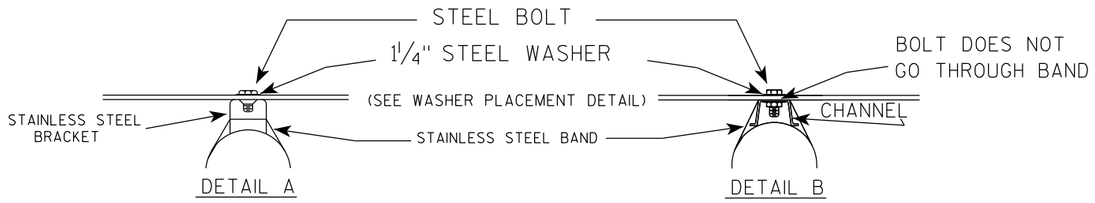
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

BANDING

SINGLE SIGN



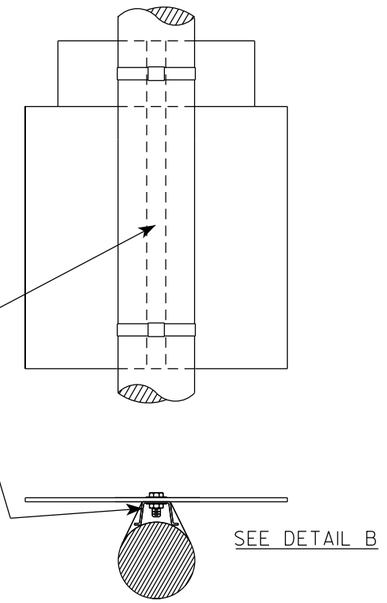




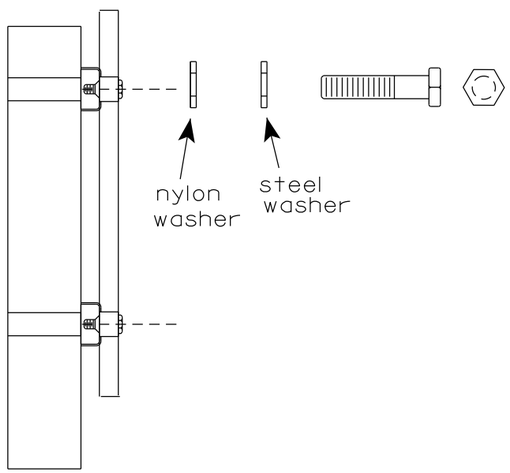
GENERAL NOTES

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

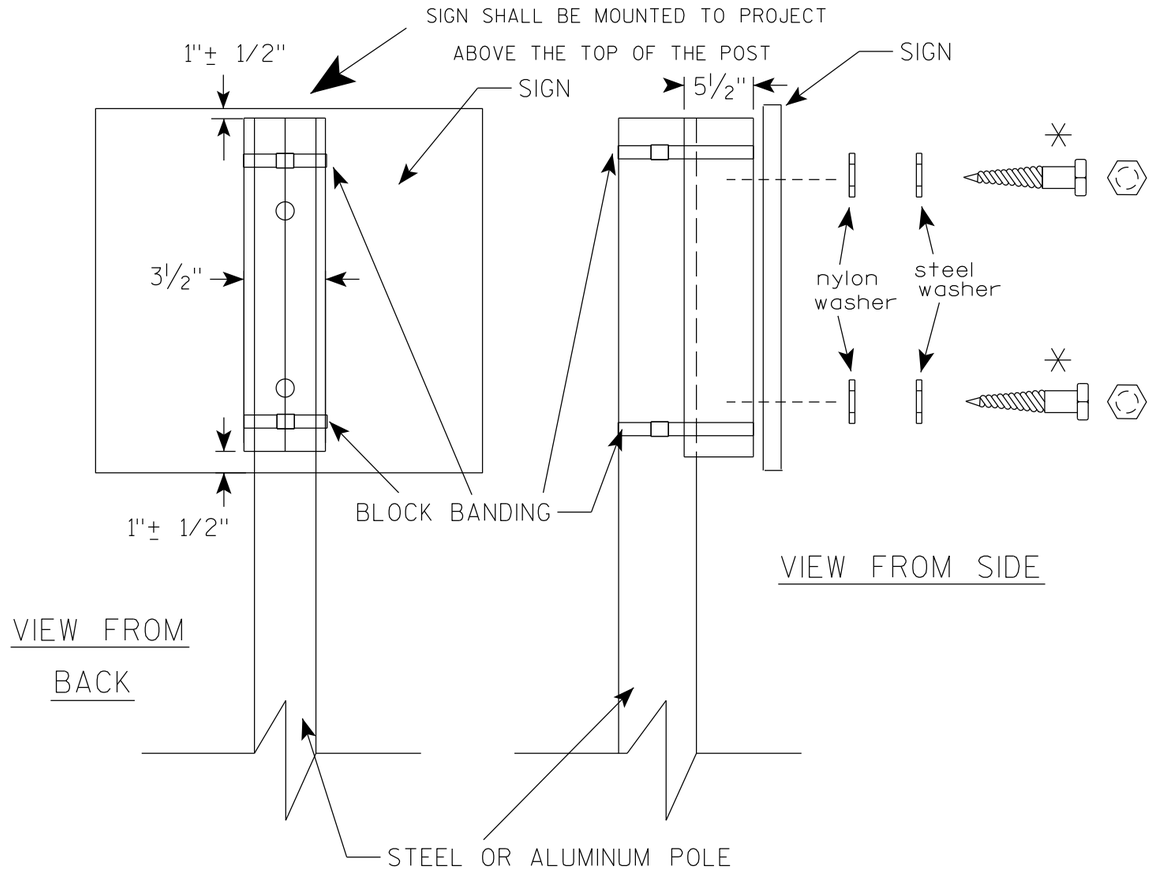
DATE 6/10/19 PLATE NO. A5-9.4

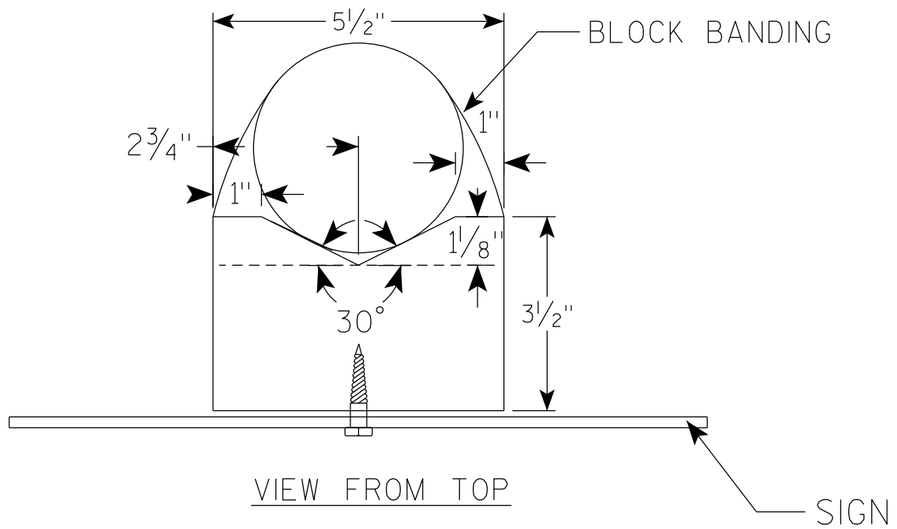
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 281	E

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)

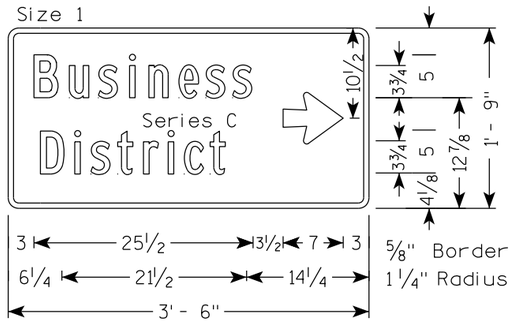
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

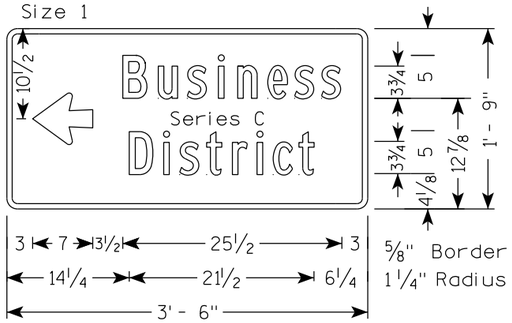
PROJECT NO:				SHEET NO: 282	E

Size 1



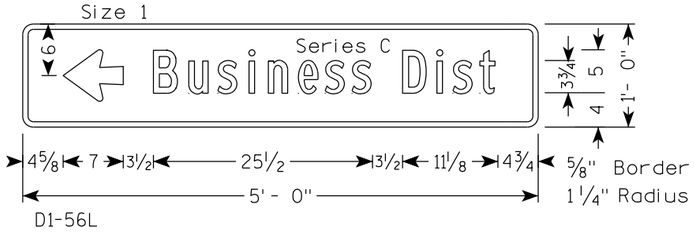
D1-56SR

Size 1



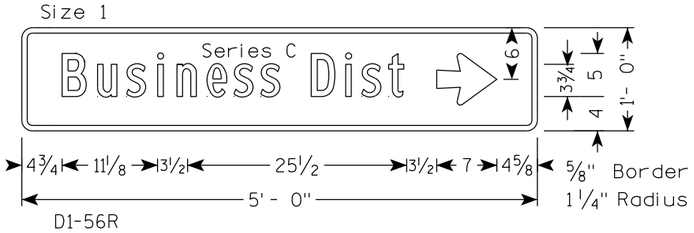
D1-56SL

Size 1



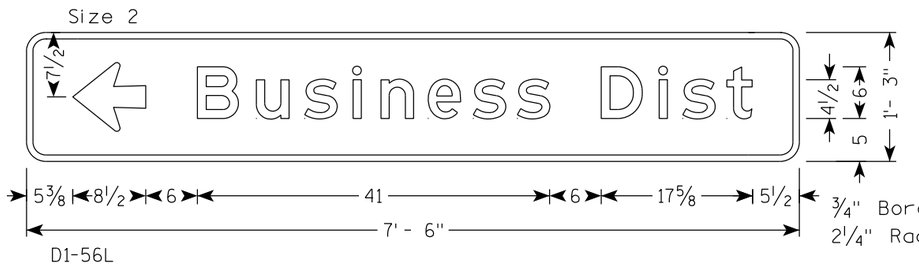
D1-56L

Size 1



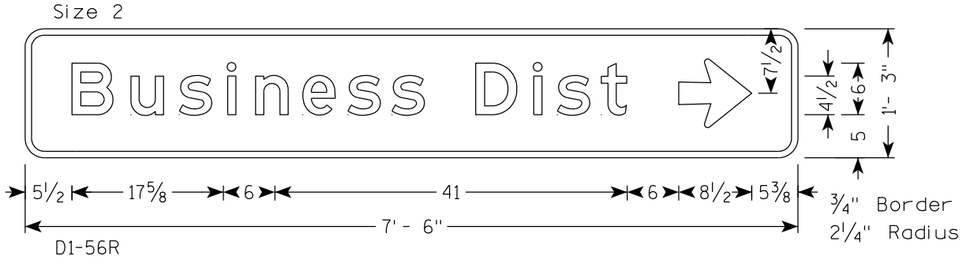
D1-56R

Size 2



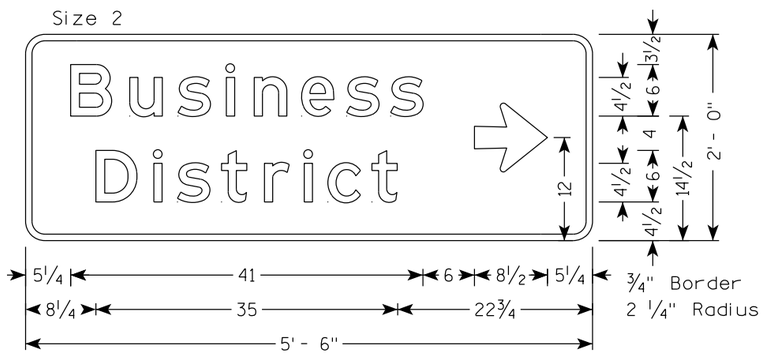
D1-56L

Size 2



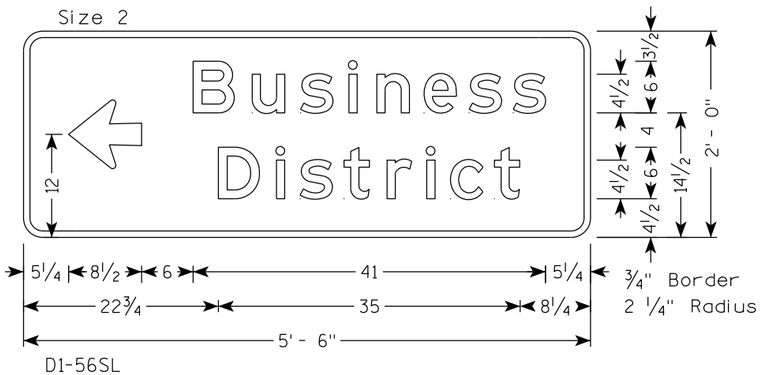
D1-56R

Size 2



D1-56SR

Size 2



D1-56SL

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted

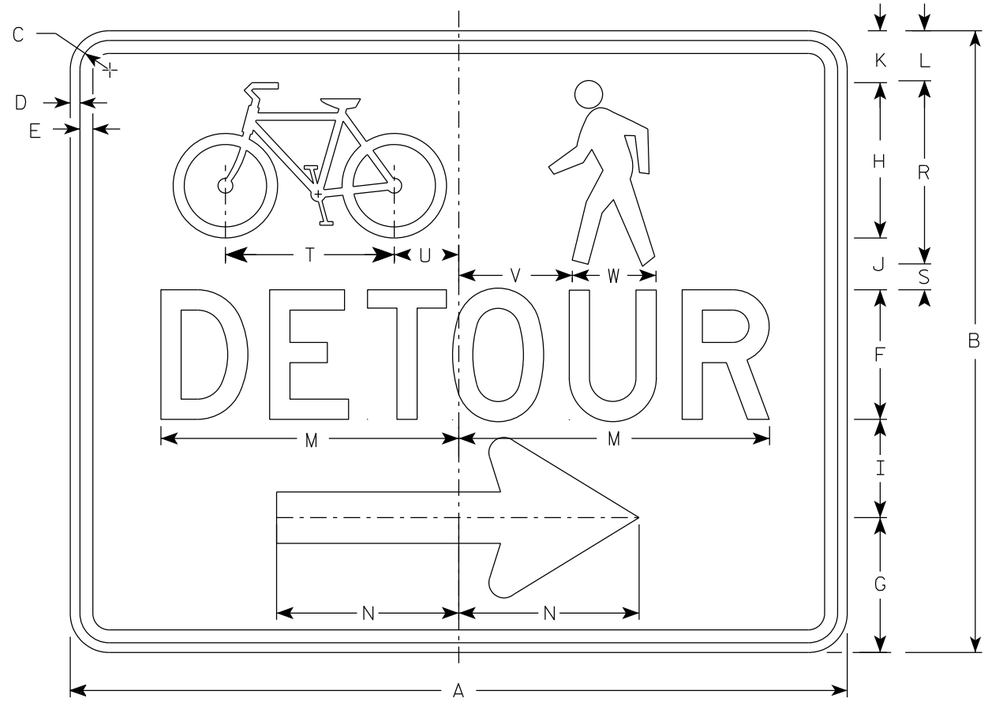
TYPICAL STANDARD
D1-56L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/14/21 PLATE NO. D1-56.2

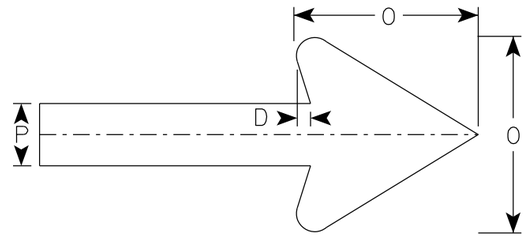
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 283	E



M4-9AR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9AL is the same as M4-9AR except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	5 1/4	6	3 3/4	2	2	1 7/8	11 3/4	7	6	2		7 1/8	1	6 1/2	2 1/2	4 3/8	3 1/4				5.00
3																											
4																											
5																											

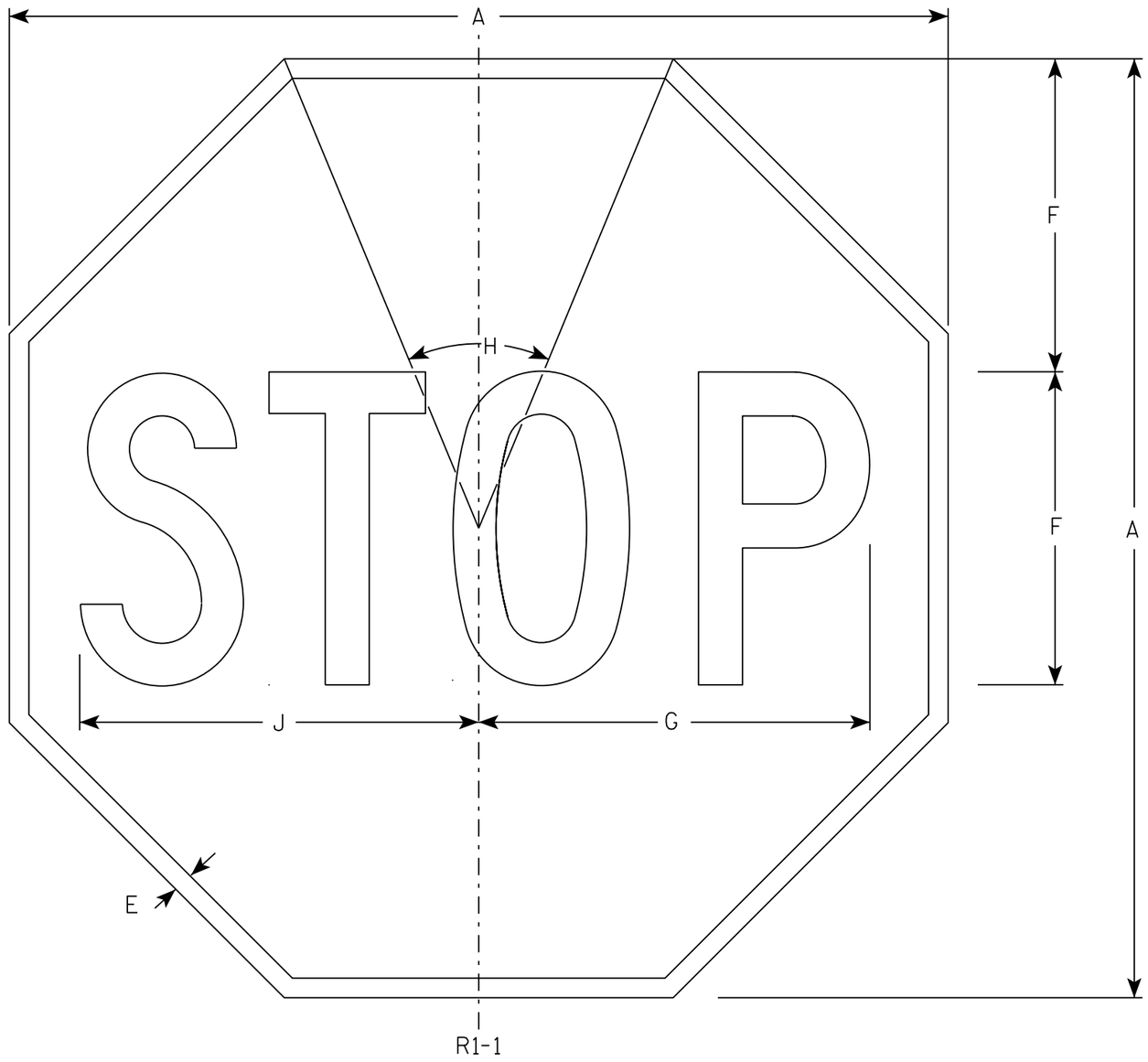
STANDARD SIGN
M4-9A L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/2/19 PLATE NO. M4-9A.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 284 | 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 - 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

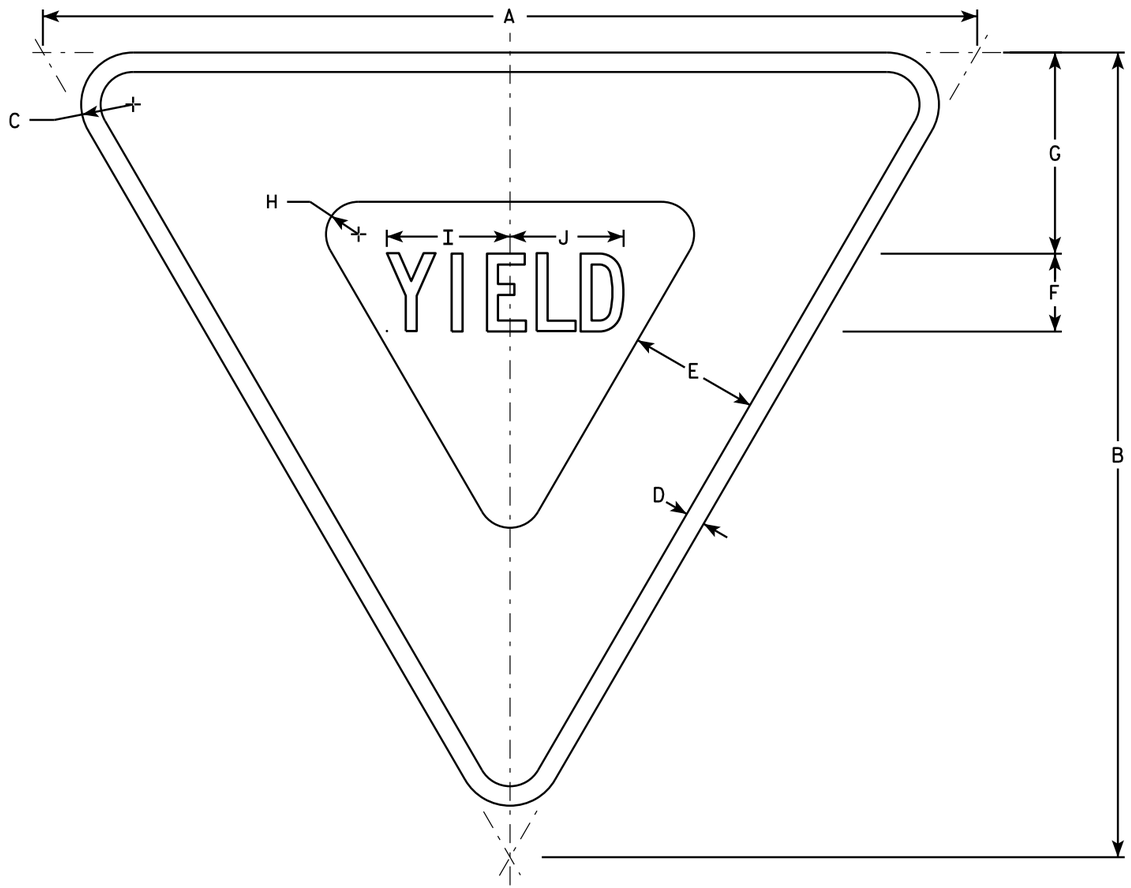
STANDARD SIGN
R1-1

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: 285	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

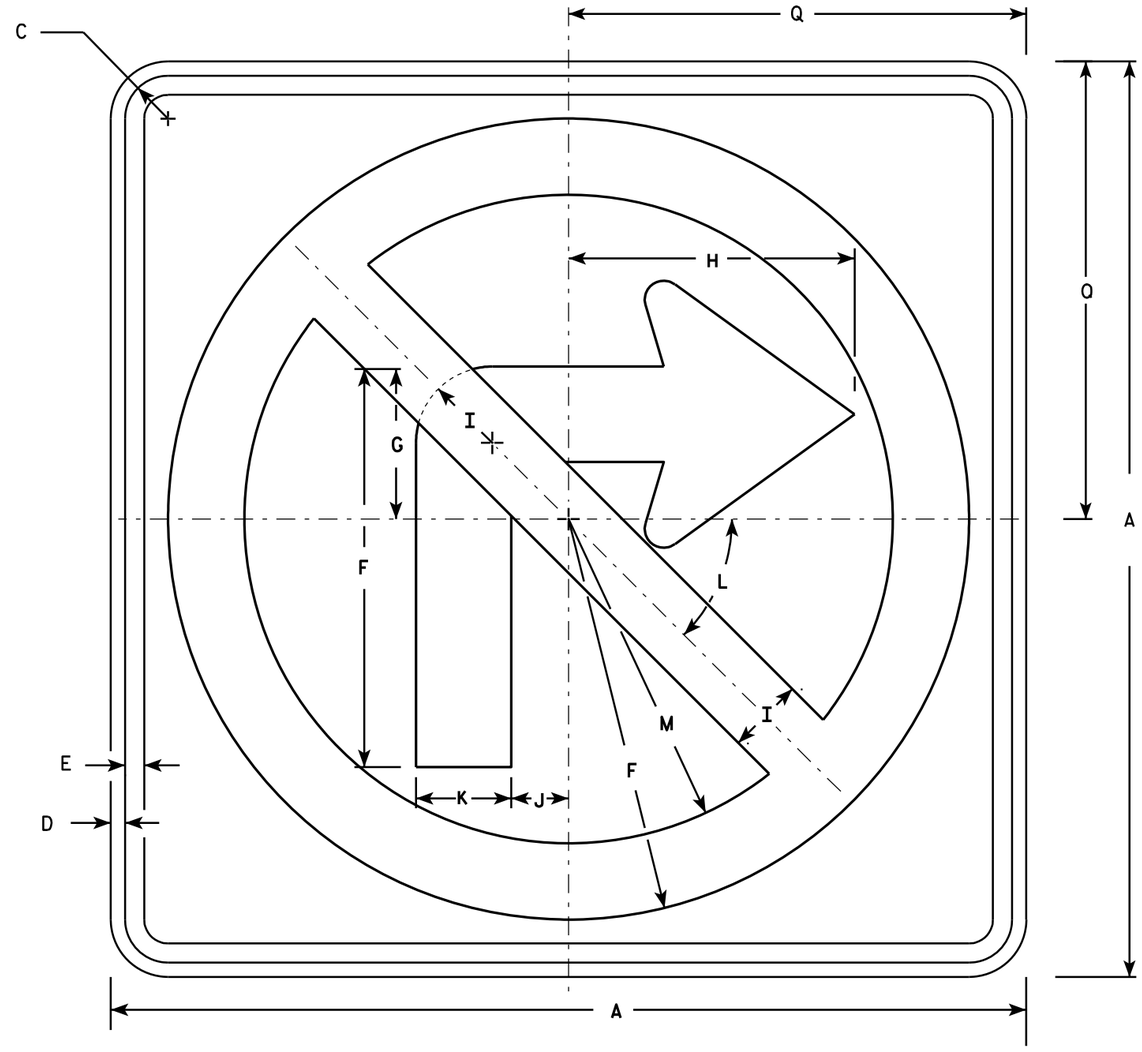
APPROVED Matthew R Rauch
for State Traffic Engineer

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

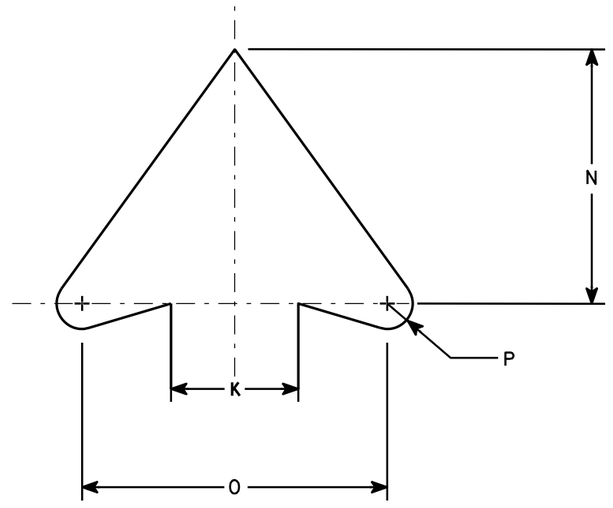
WISDOT/CADDS SHEET 42



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

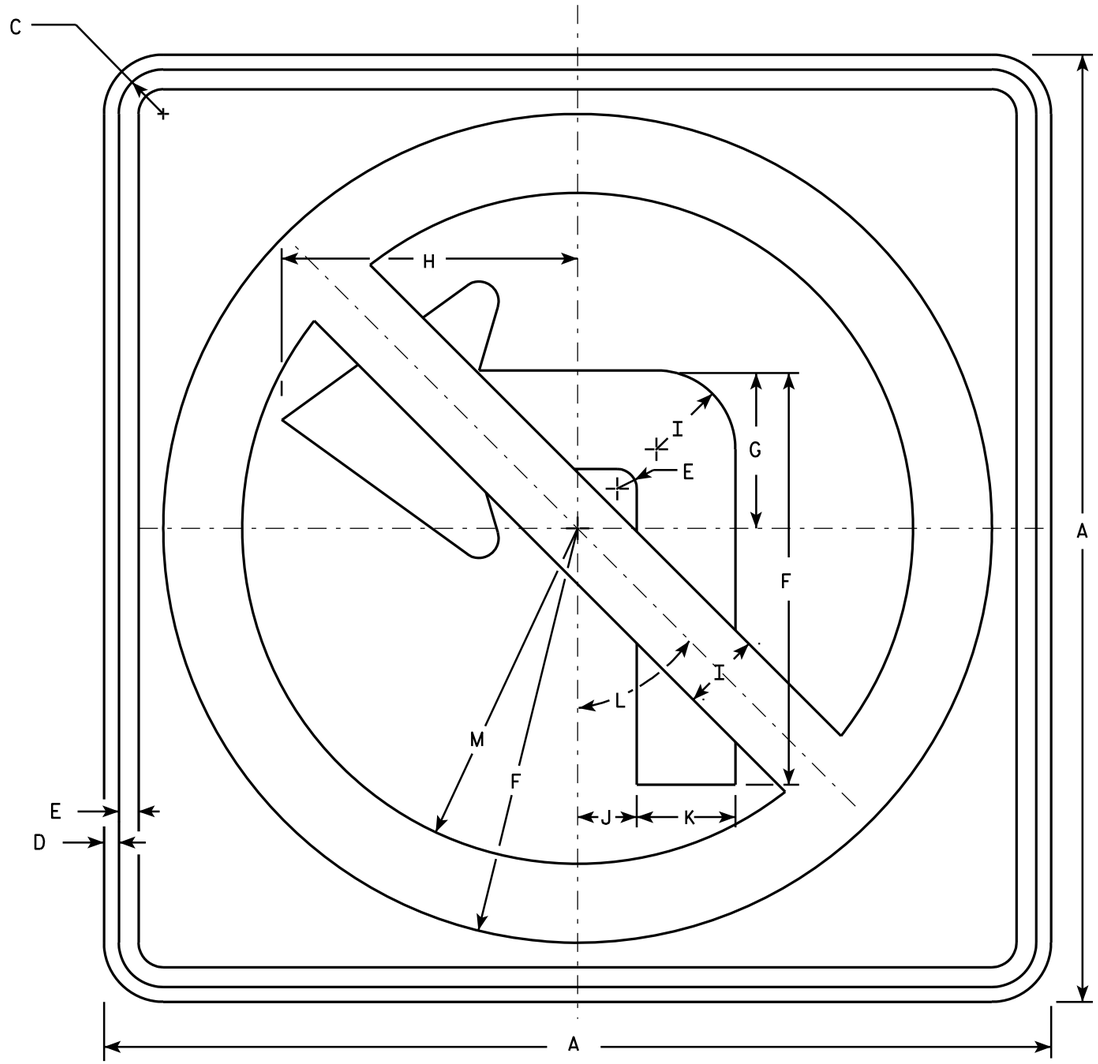
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

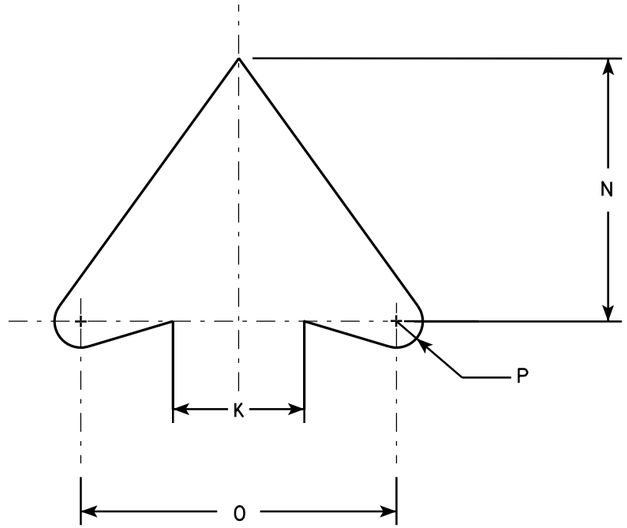
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 287	E



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

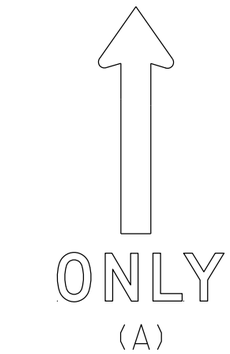
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

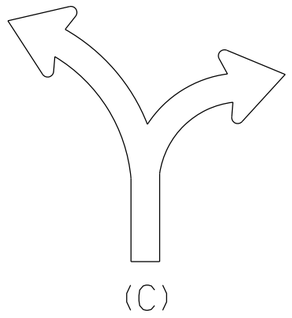
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 288	E

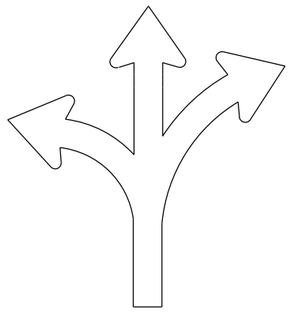


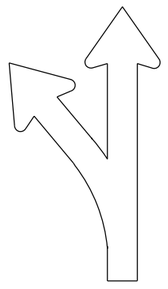
(A)

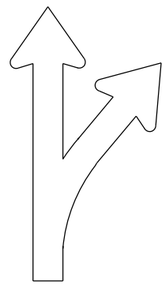


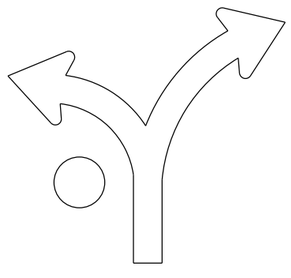
(B)

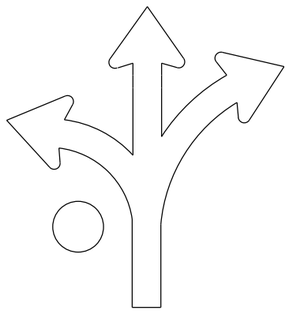

(C)

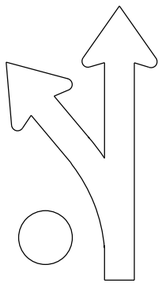

(D)

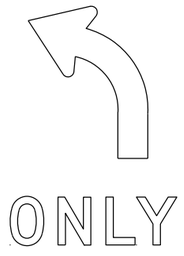

(E)


(F)

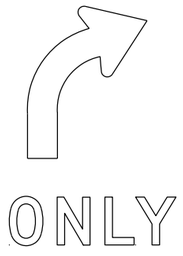

(G)


(H)

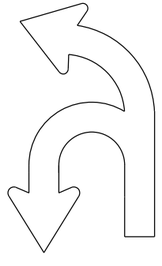

(I)



(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

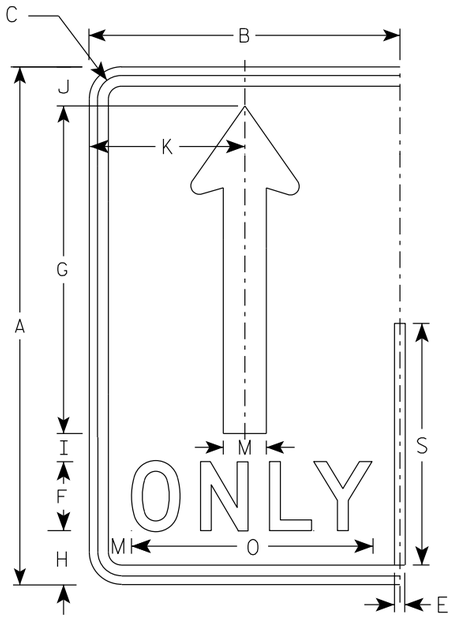
7

PROJECT NO:

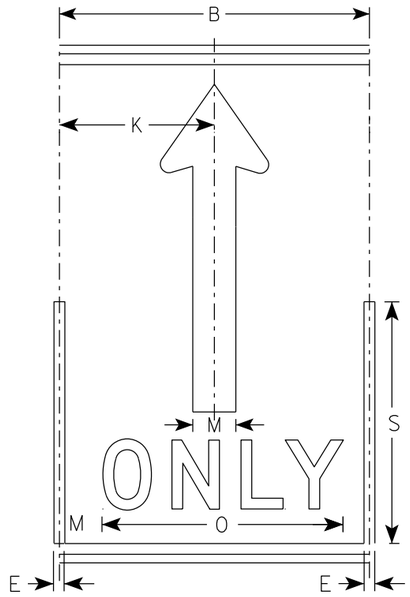
SHEET NO: 289 E

NOTES

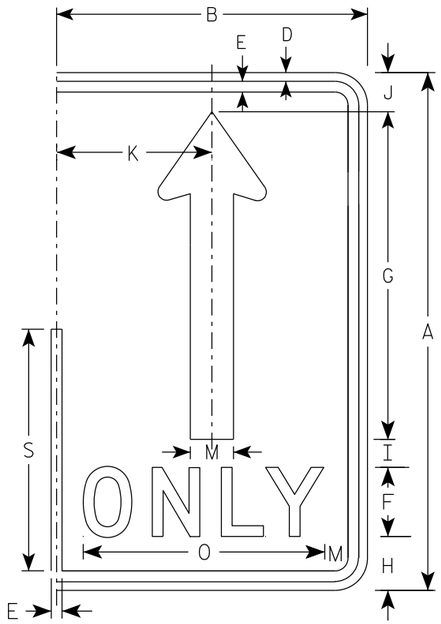
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



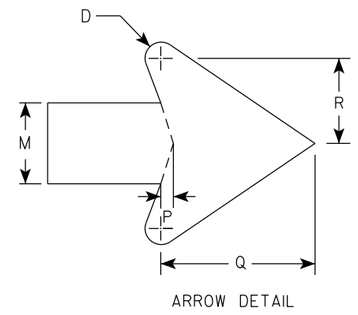
(A)



(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

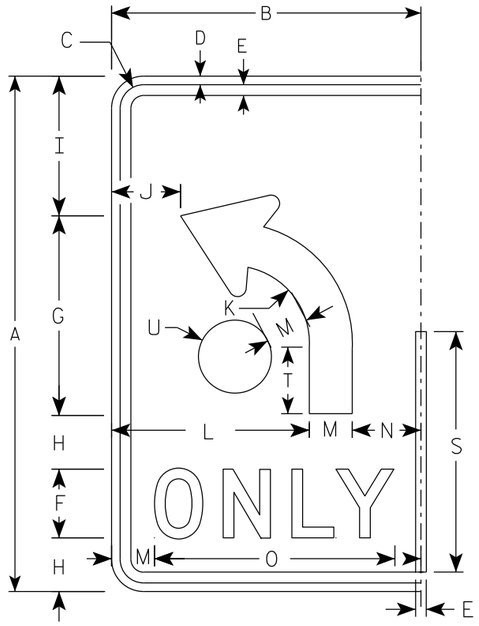
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

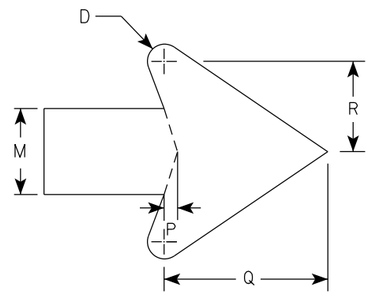
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 290 | E

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: 291 E

FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 21-MAY 2019 4:38 PLOT BY : mscj9h PLOT NAME :

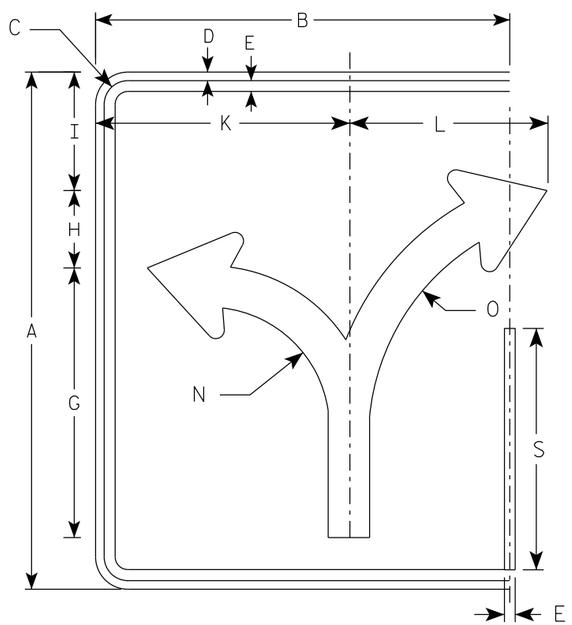
WISDOT/CADDS SHEET 42

7

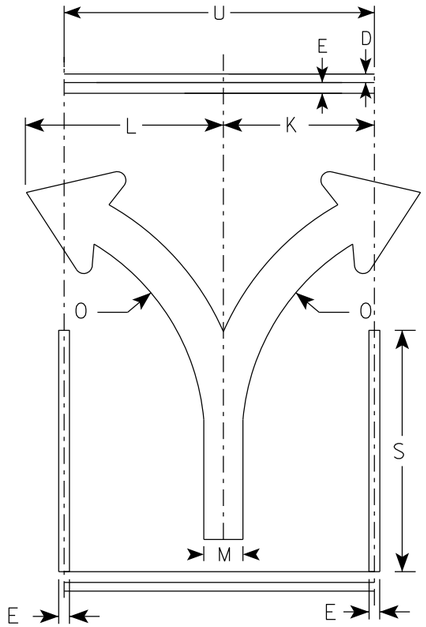
7

NOTES

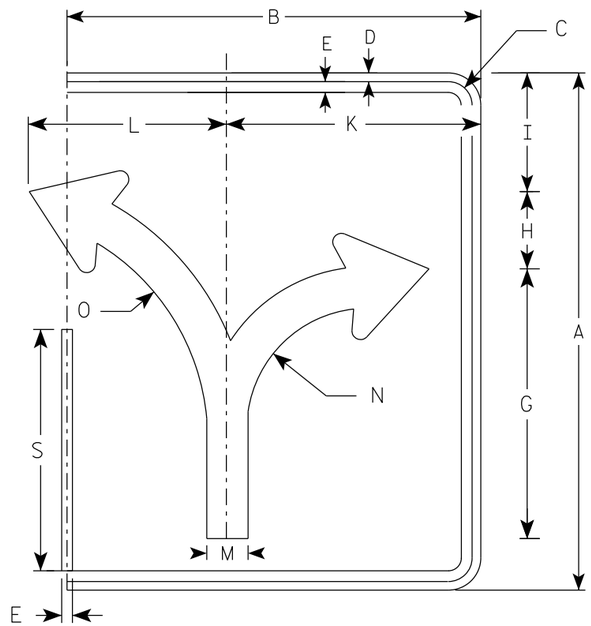
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



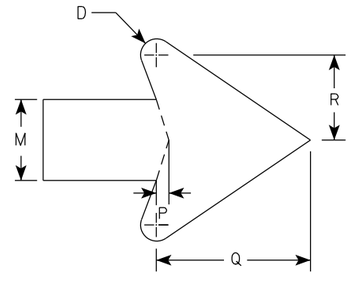
(C)



(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

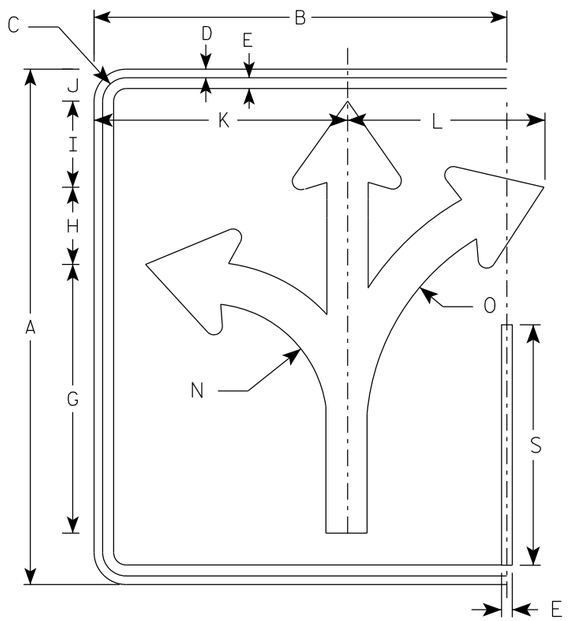
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

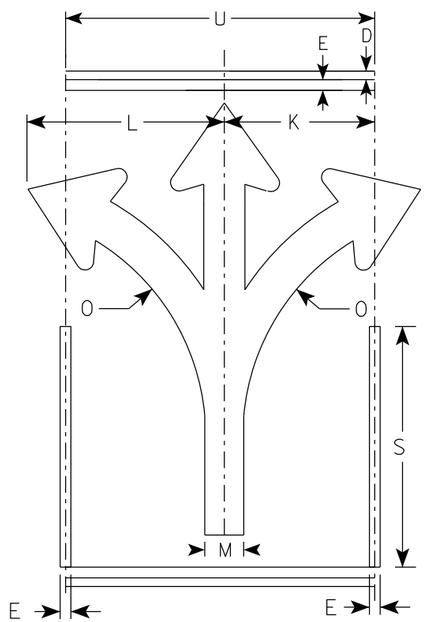
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 292 | E

NOTES

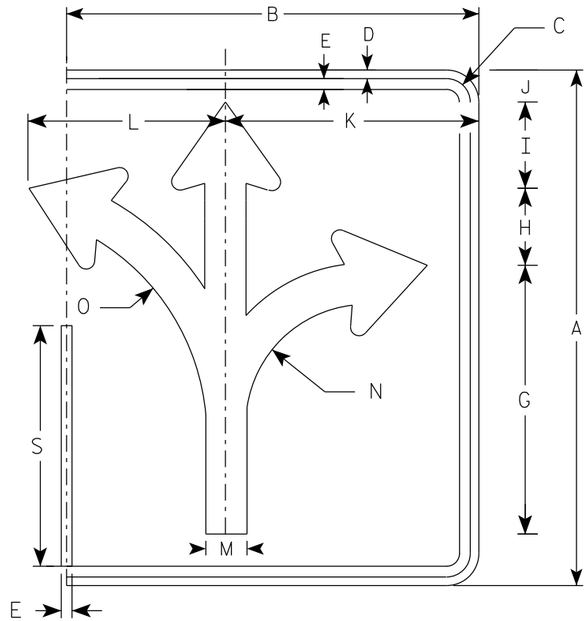
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



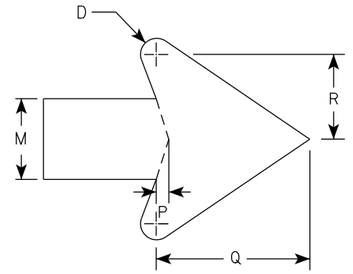
(D)



(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

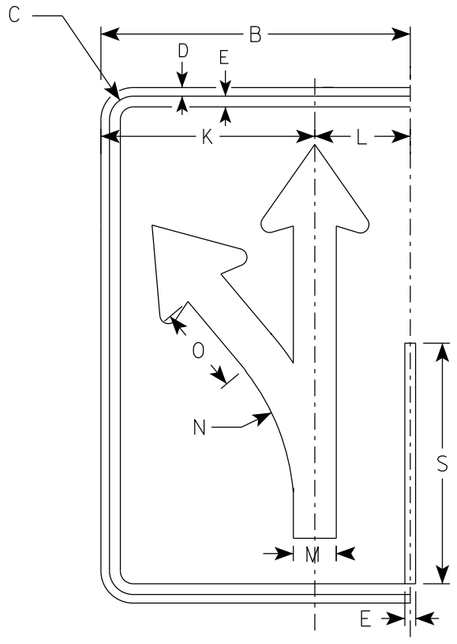
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

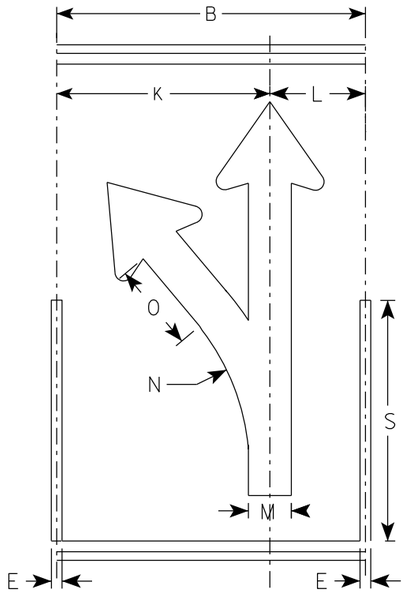
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 293 | E

NOTES

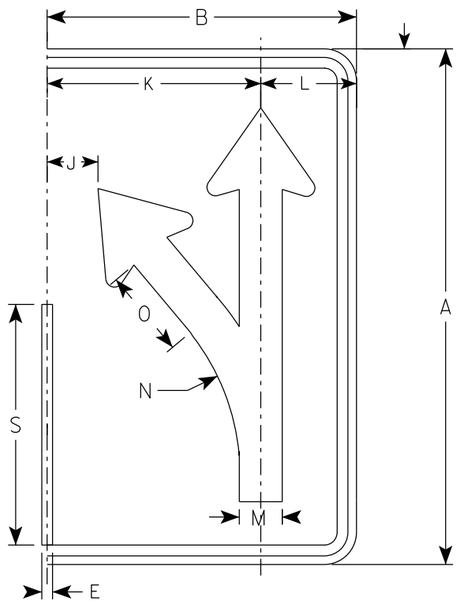
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



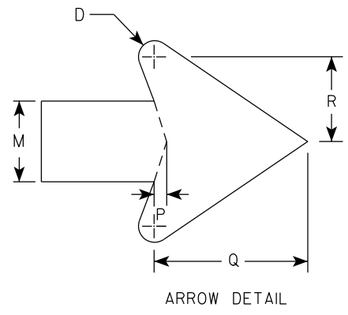
(E)



(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

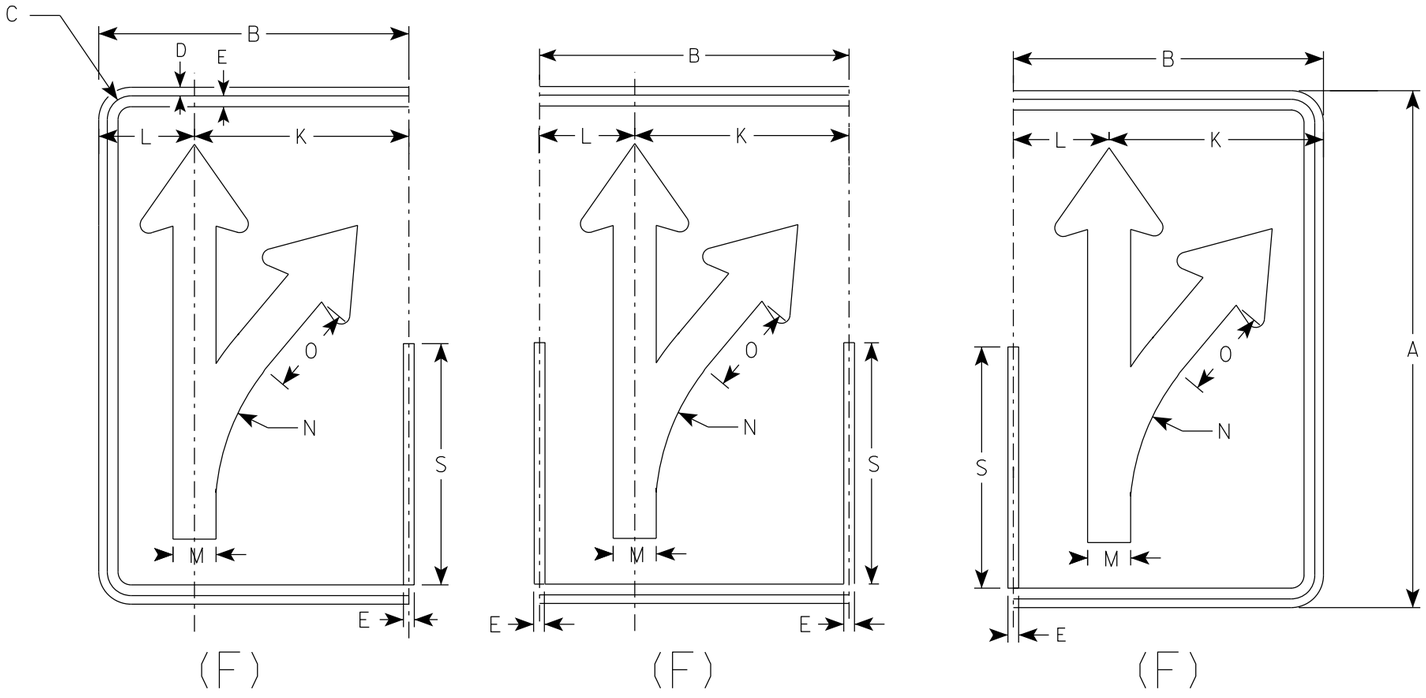
APPROVED Matthew R Rauch
For State Traffic Engineer

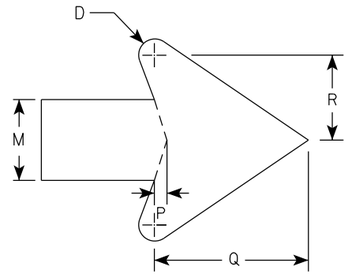
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 294 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None





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

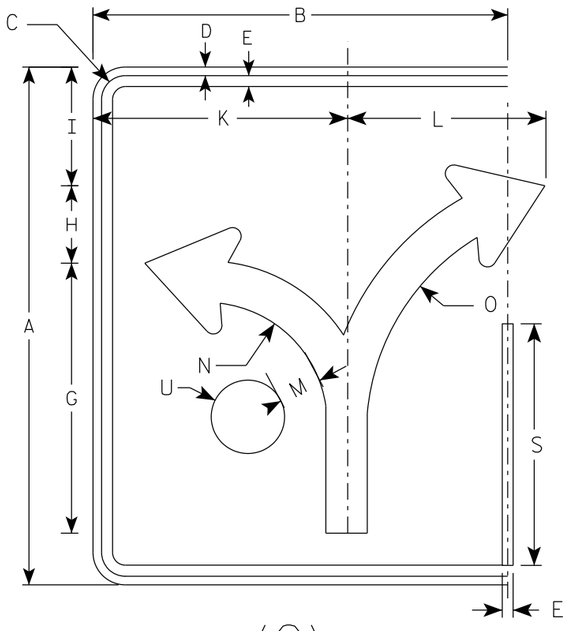
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

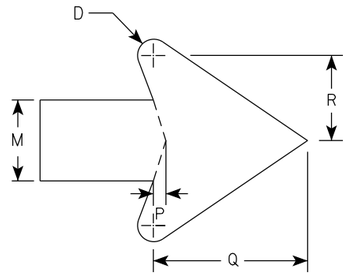
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 295 | E

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

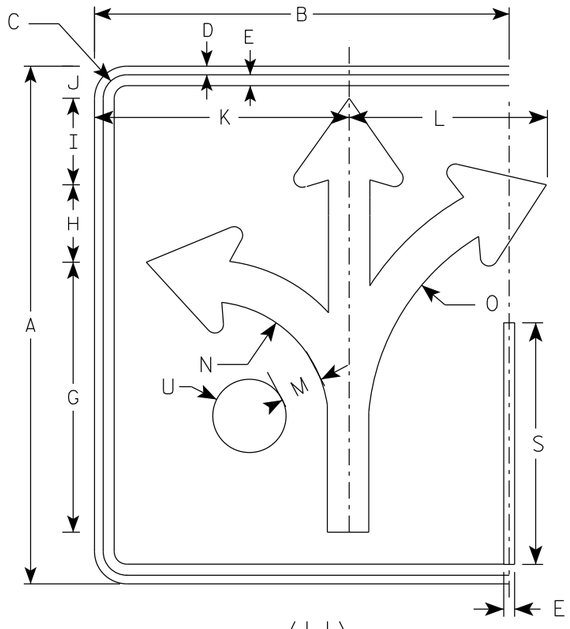
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

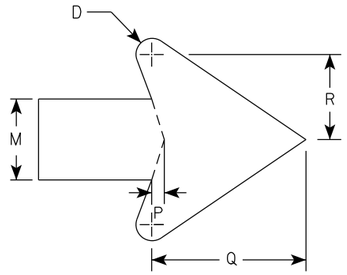
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 296 | E

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

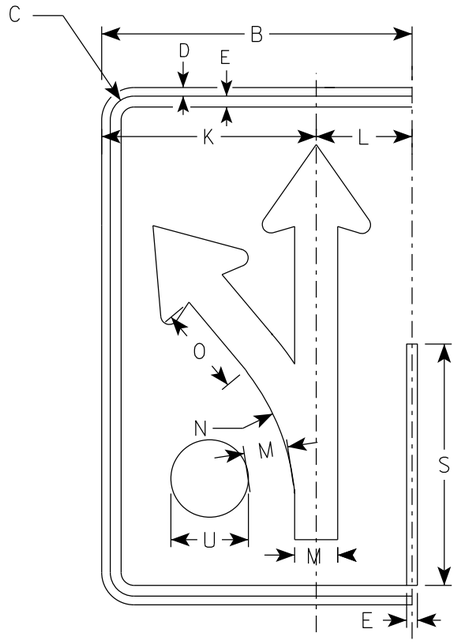
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

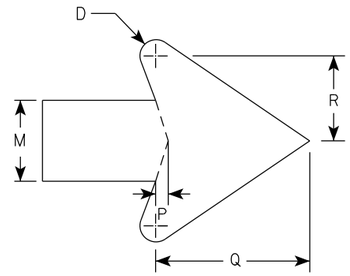
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 297	E

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

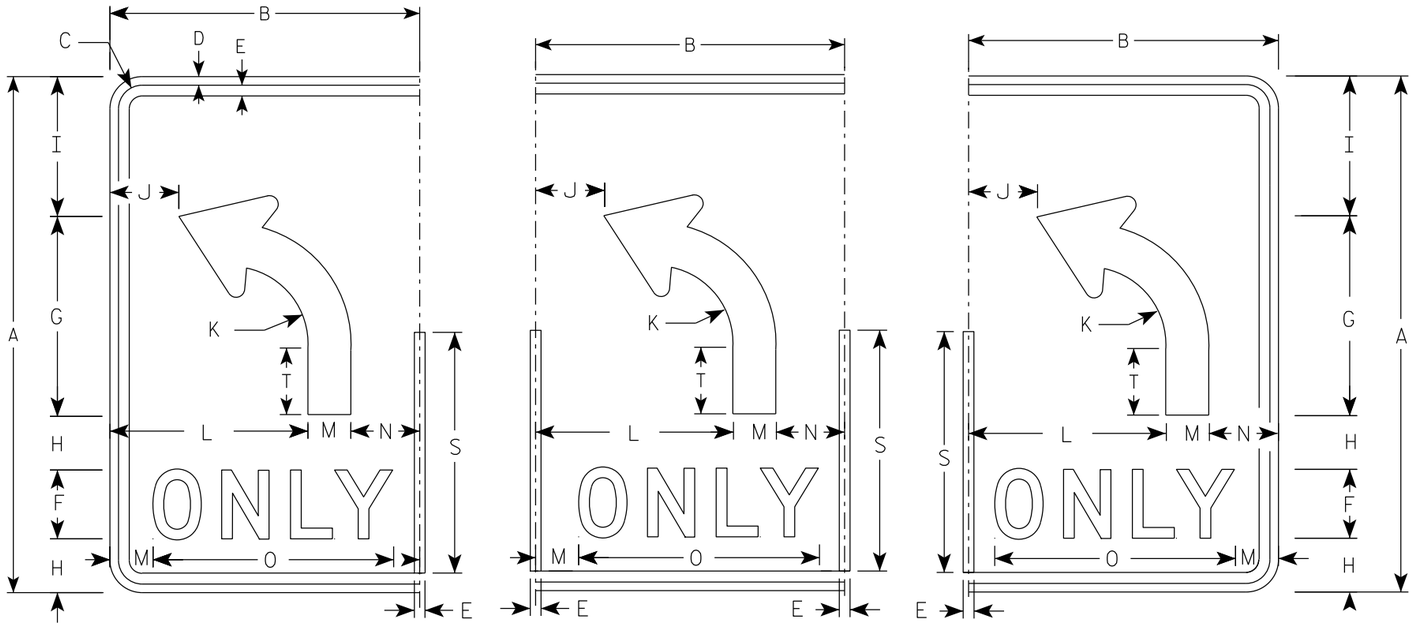
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

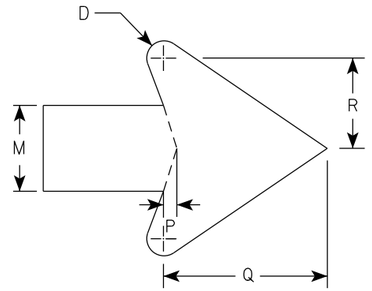
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 298 | E

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

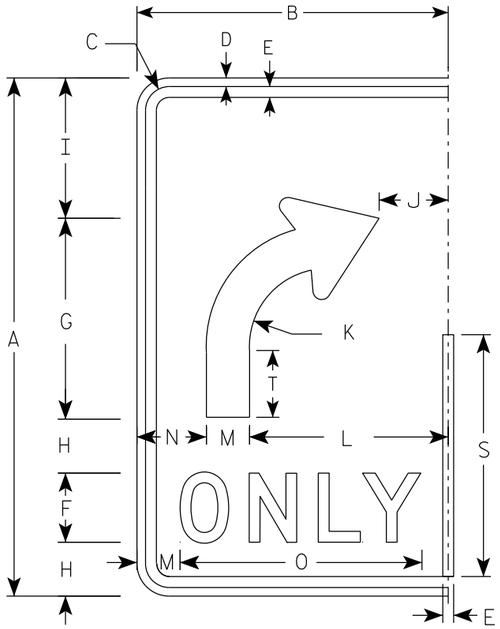
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

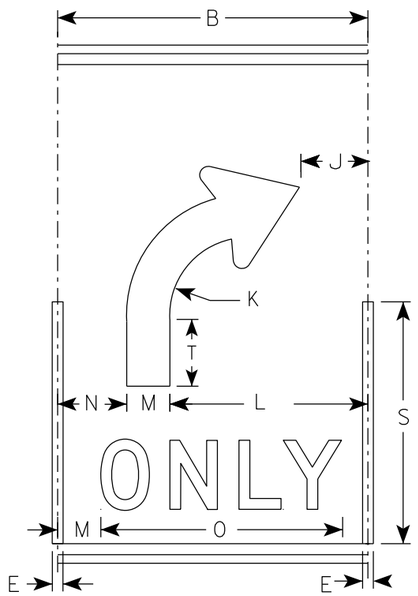
SHEET NO: 299 E

NOTES

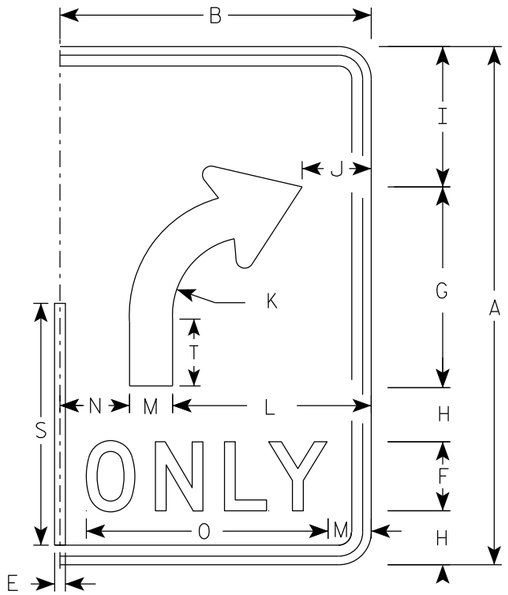
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



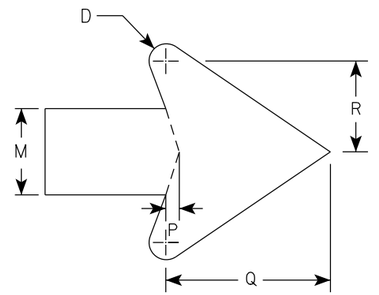
(R)



(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

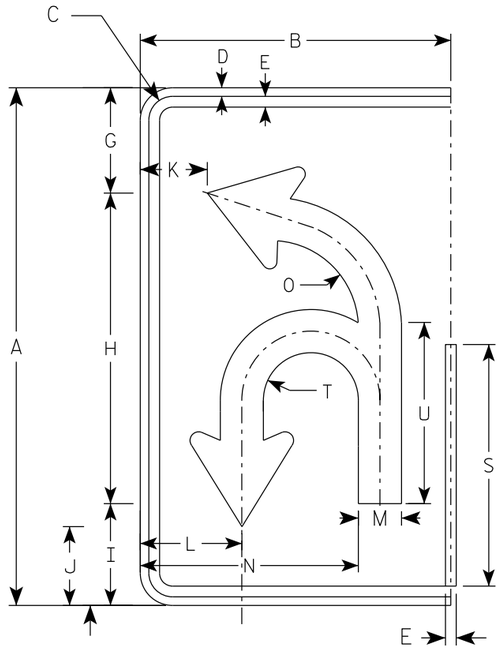
DATE 5/21/19 PLATE NO. R3-8.1

PROJECT NO:

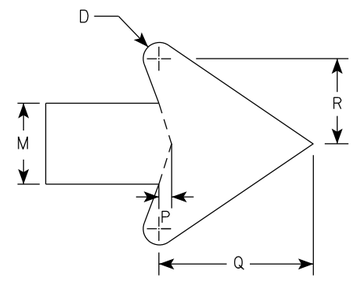
SHEET NO: 300 **E**

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

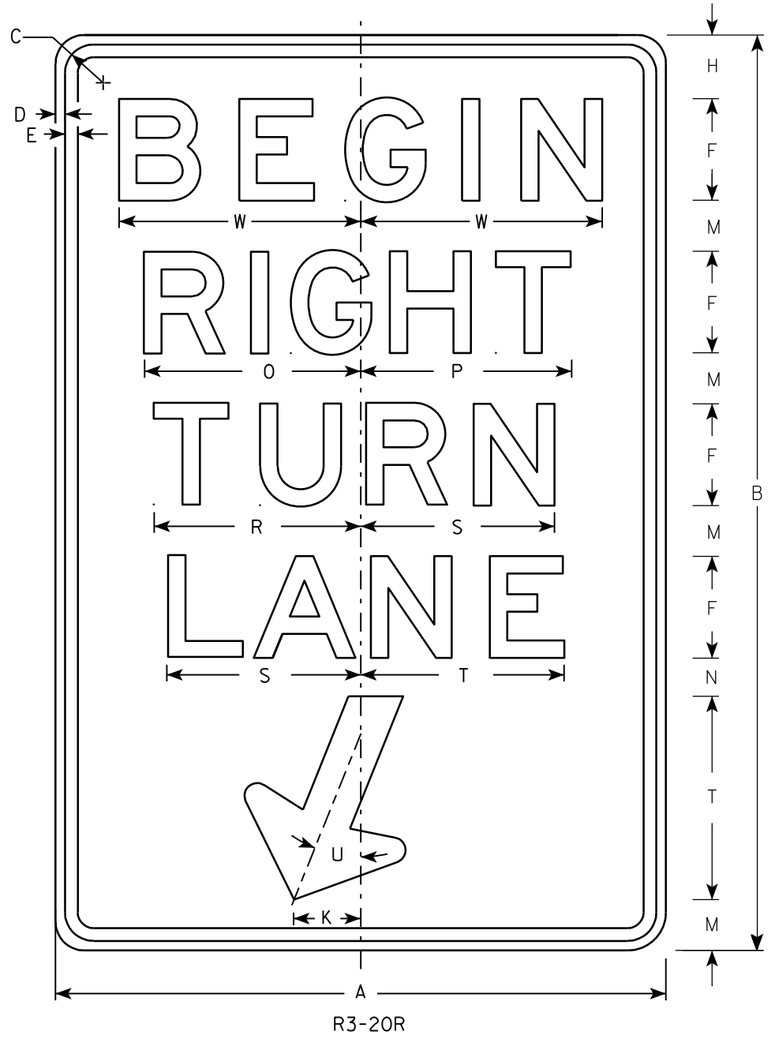
STANDARD SIGN
R3-8 (U) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. R3-8.1

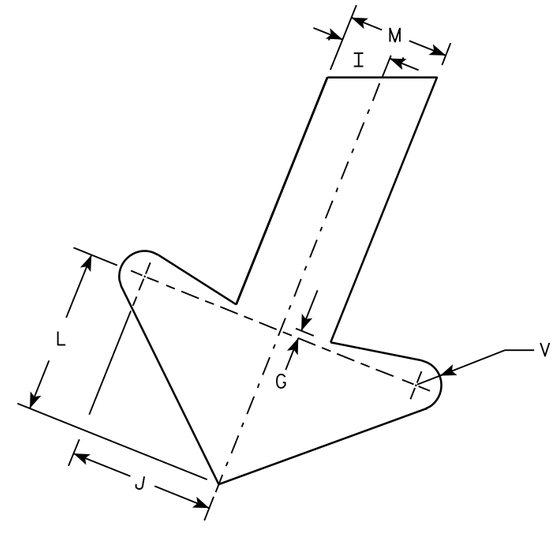
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 301 | E



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																											

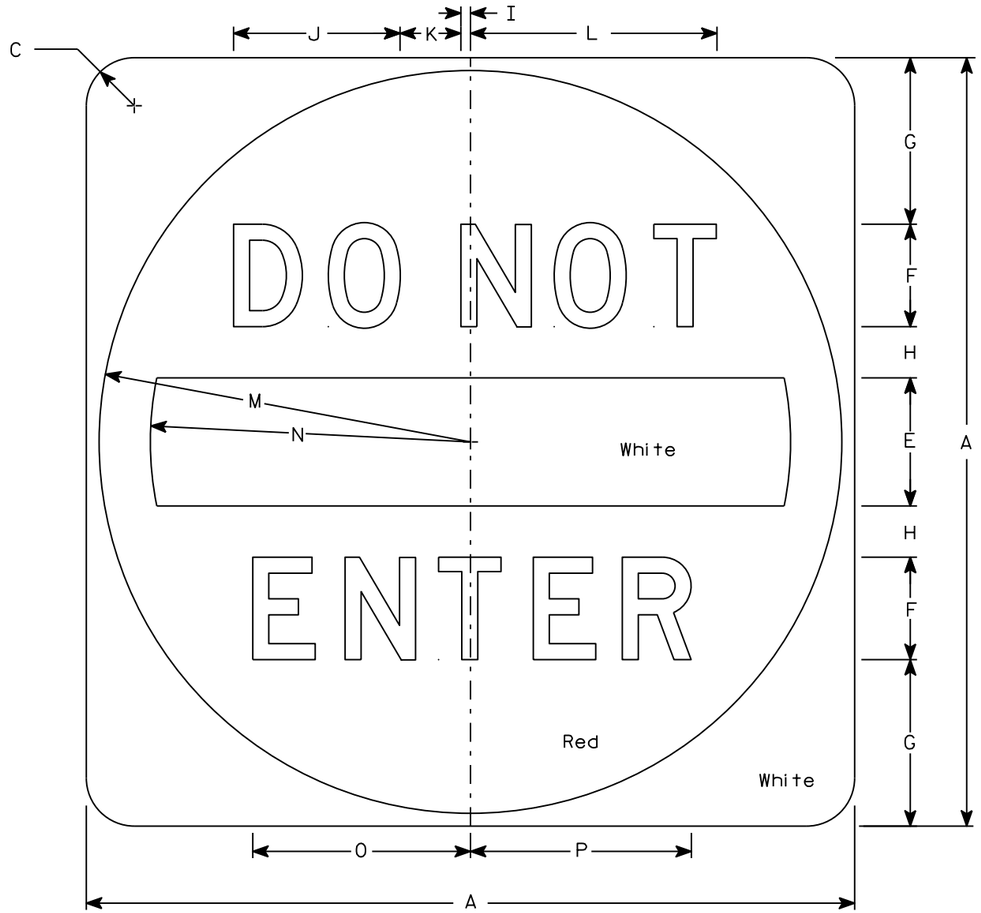
STANDARD SIGN
R3-20R

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: 302 | 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

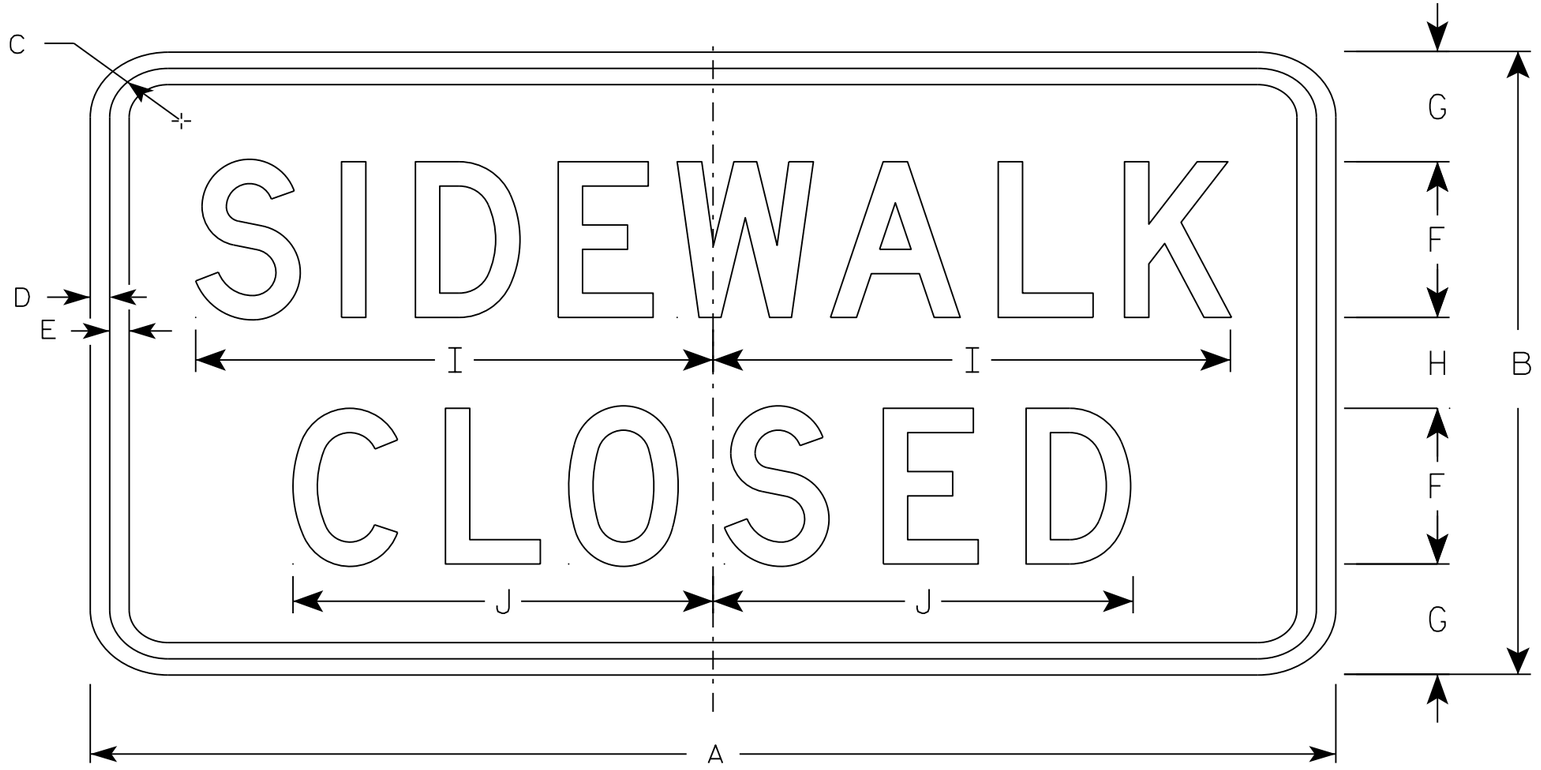
STANDARD SIGN
R5-1

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: 303 | E



R9-9

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 - 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

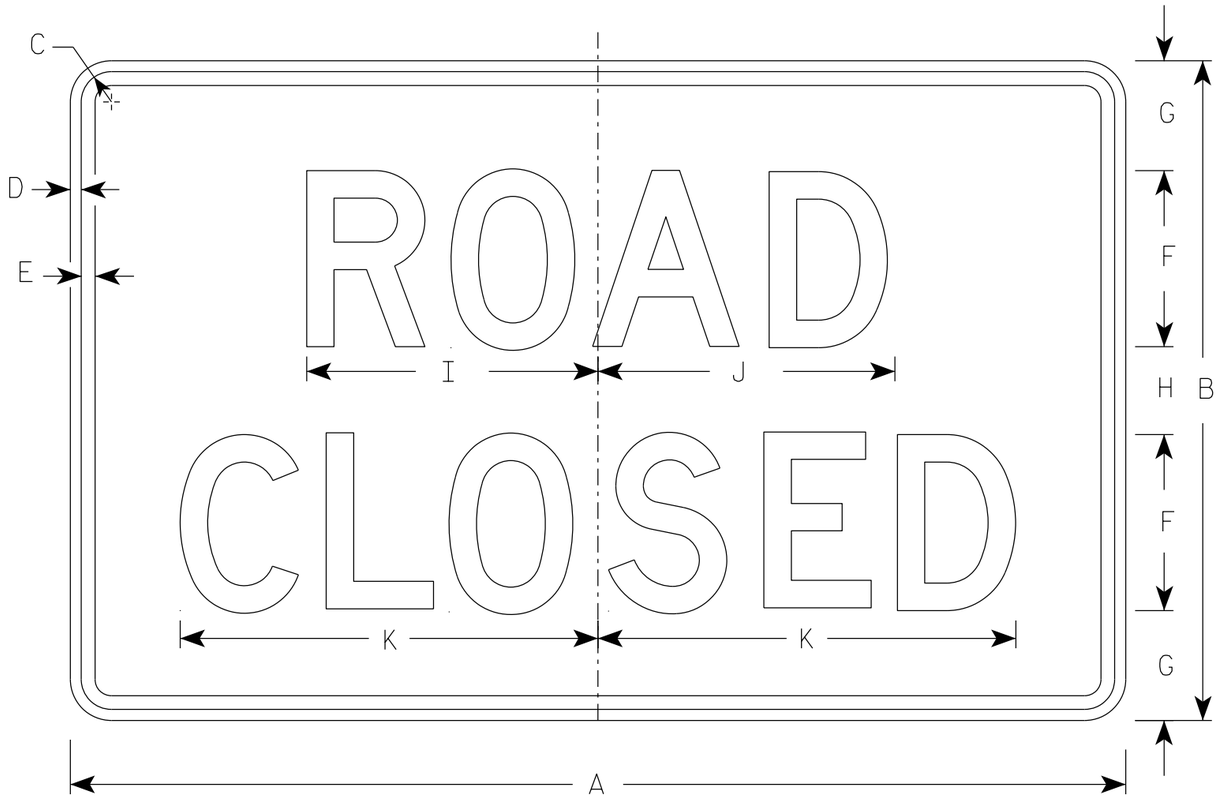
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/11/16 PLATE 304 R9-9.6

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

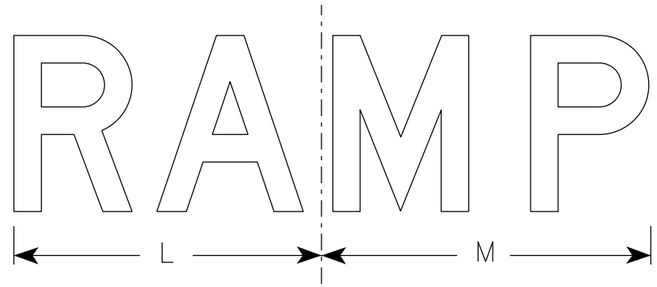
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



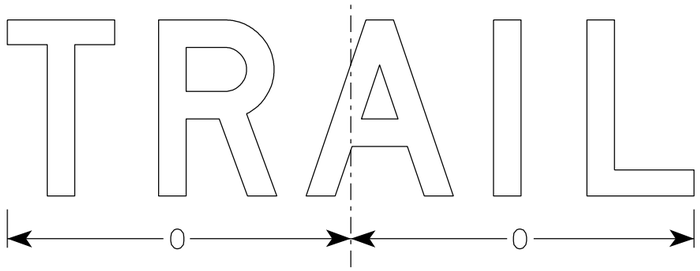
R11-2

NOTES

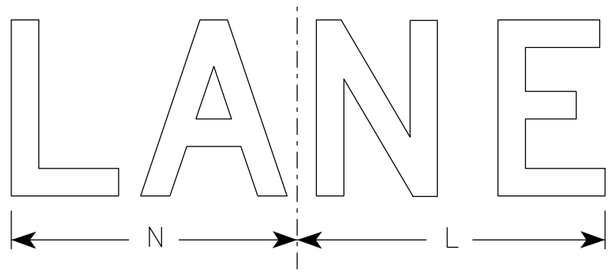
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												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	15 5/8												10.0

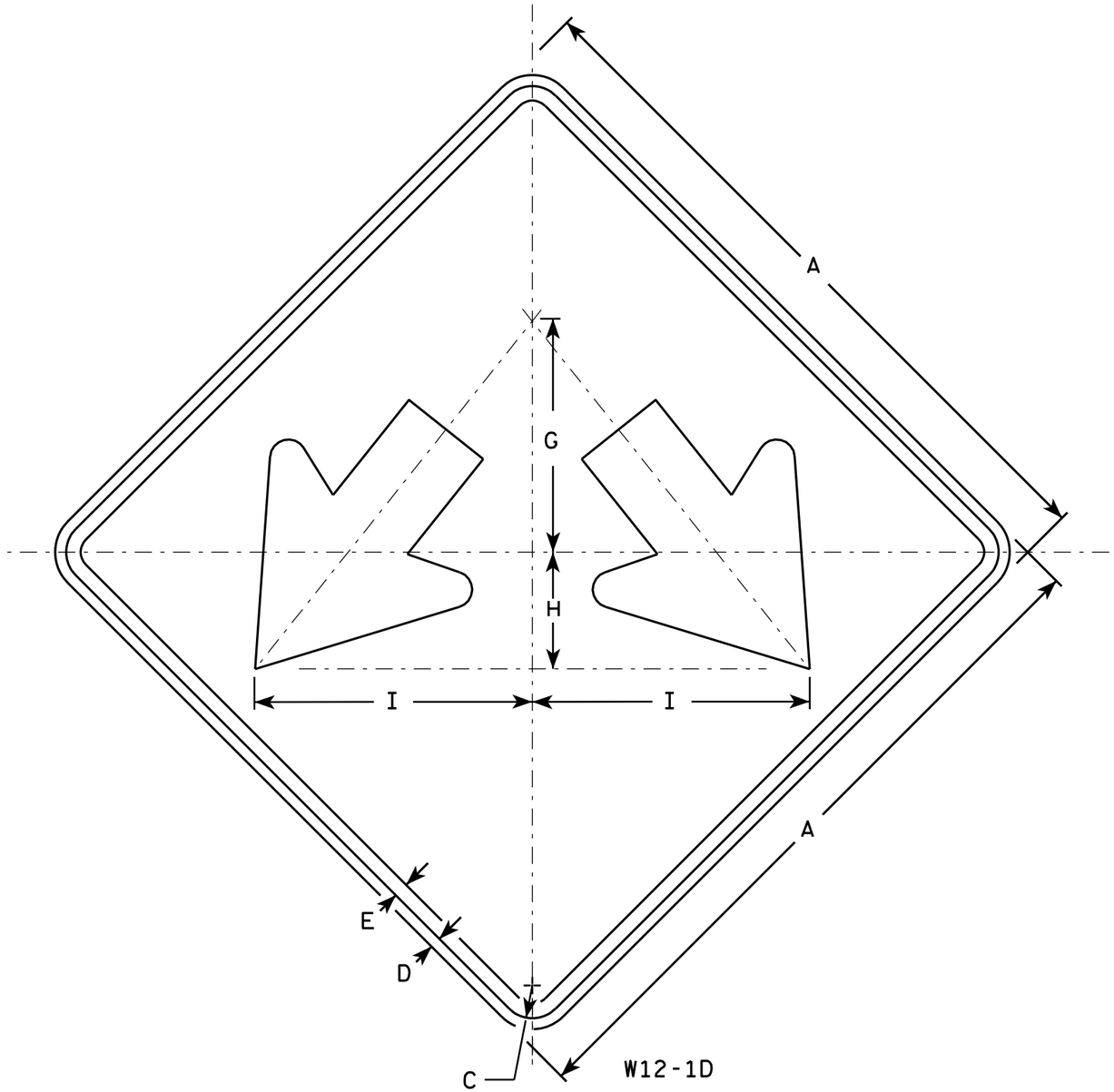
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

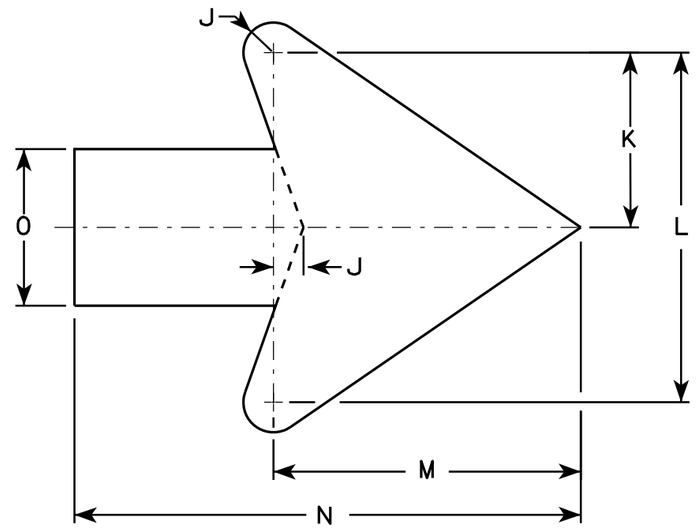
DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 305	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.



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

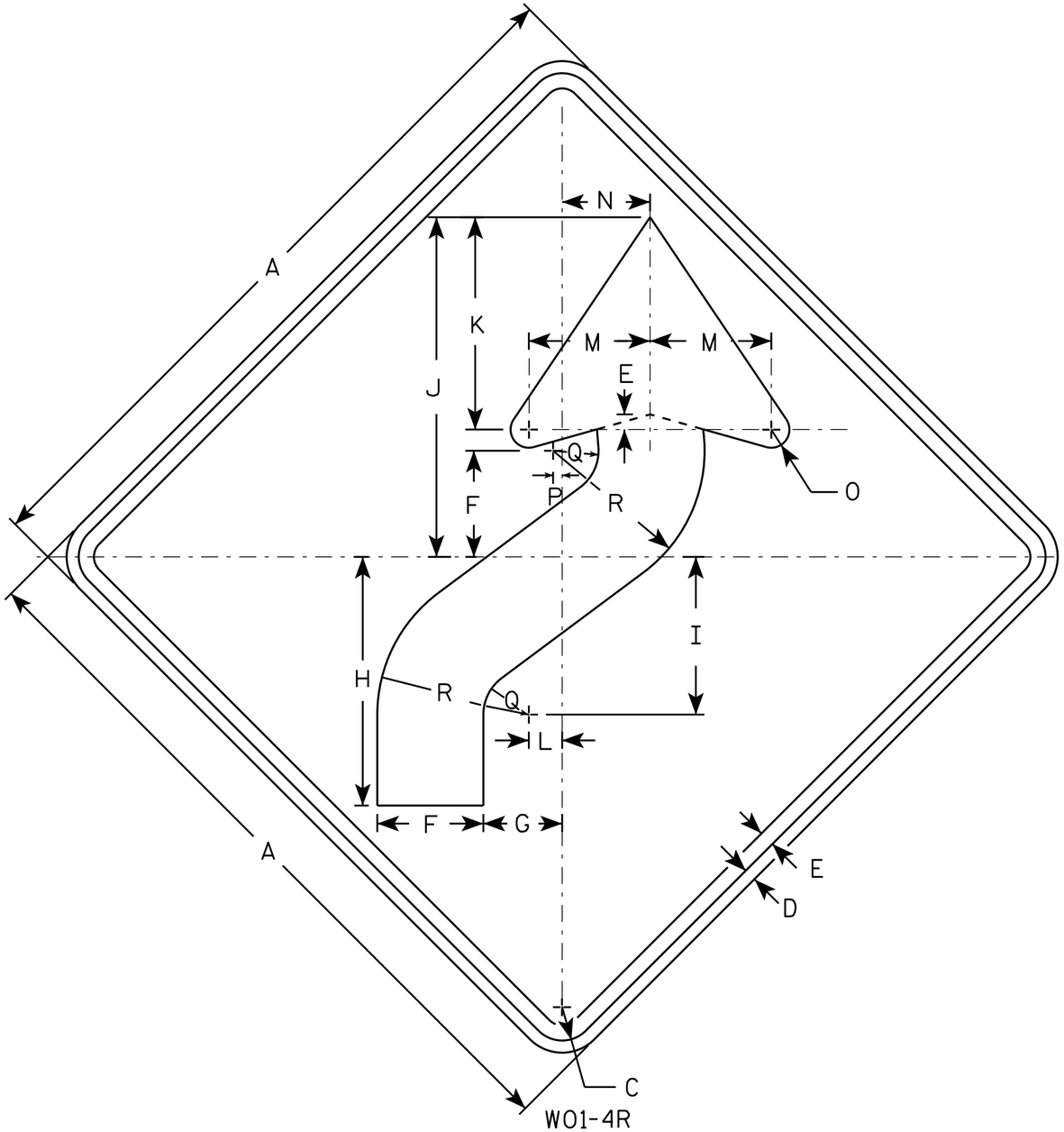
STANDARD SIGN
W12-1D

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: 306	E



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

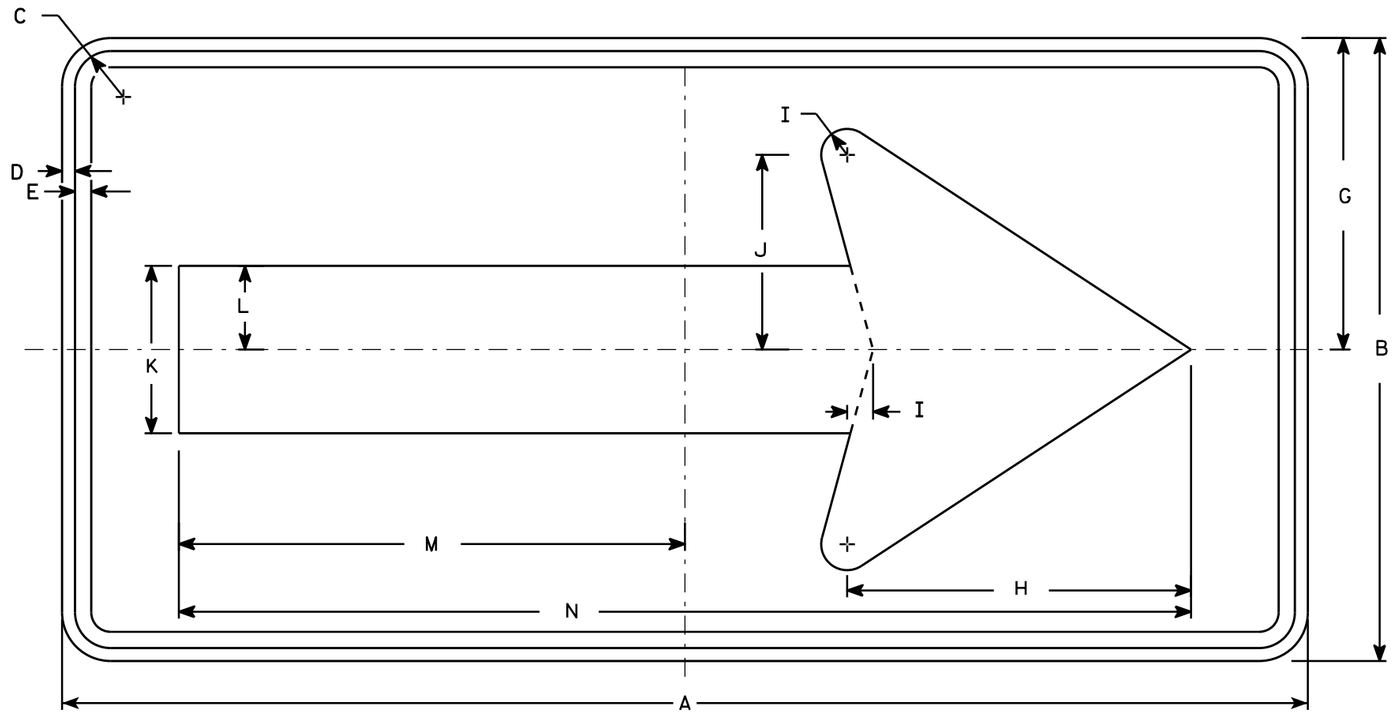
APPROVED Matthew R Rauch
for State Traffic Engineer

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

7



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

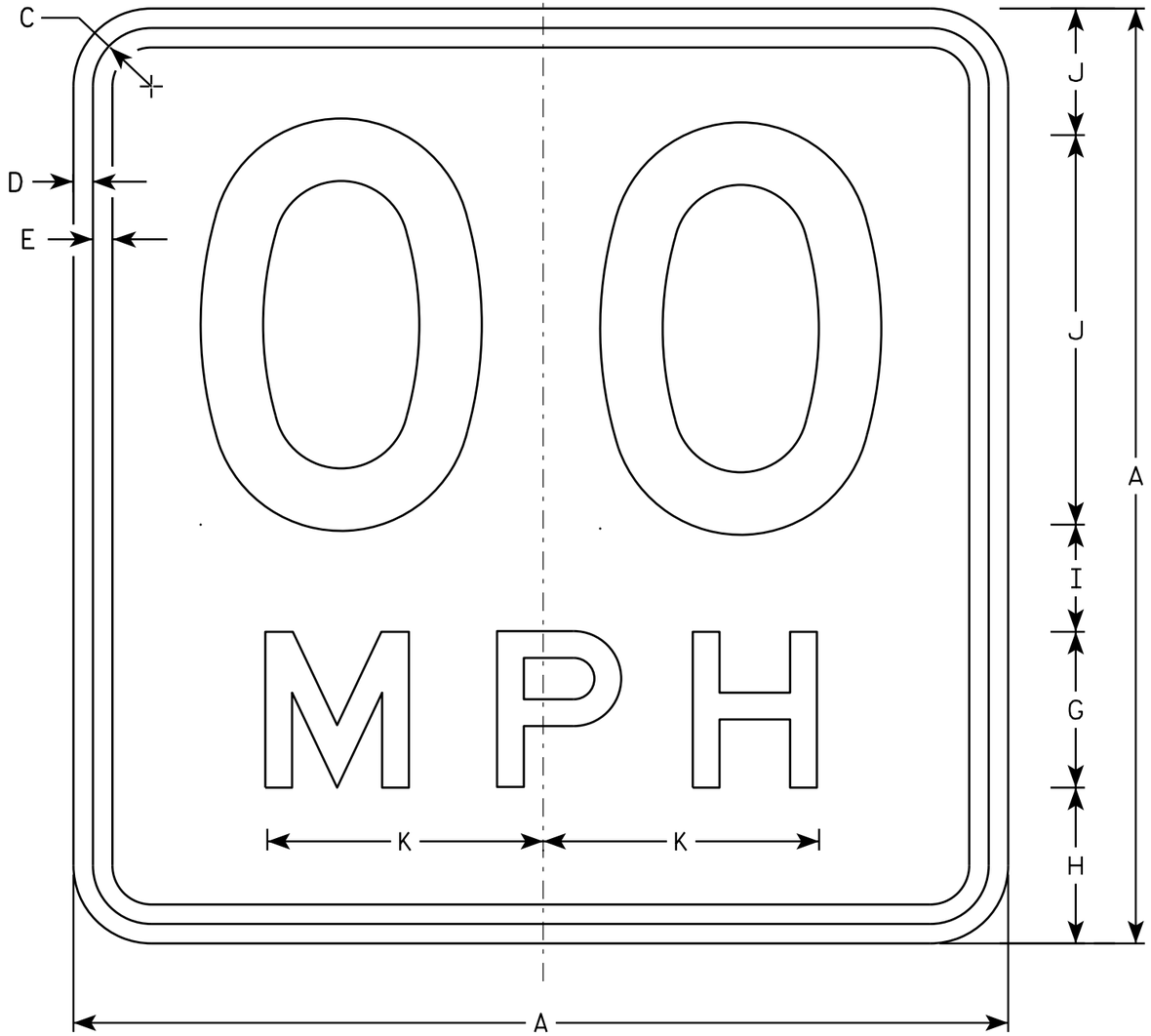
WISCONSIN DEPT OF TRANSPORTATION

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



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 309 W013-1.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

BEAMGUARD

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
281+99 'NB'	28199.76	0.00	0.00	0.00	0.00	0	0	0	0	0	0
282+00 'NB'	28200.00	0.24	10.46	0.00	0.00	0	0	0	0	0	0
282+35 'NB'	28234.68	34.68	7.66	0.00	0.24	12	0	0	12	0	12
282+45 'NB'	28244.75	10.07	6.56	0.00	0.80	3	0	0	15	0	15
282+75 'NB'	28274.67	29.92	3.80	0.00	0.91	6	0	1	21	1	20
283+00 'NB'	28299.67	25.00	7.70	0.00	0.00	5	0	0	26	1	25
283+25 'NB'	28324.67	25.00	0.00	0.00	0.00	4	0	0	30	1	29
283+89 'NB'	28389.00	64.33	0.00	0.00	0.99	0	0	1	30	3	28
283+97 'NB'	28397.00	8.00	6.08	0.00	0.46	1	0	0	31	3	29
284+03 'NB'	28402.80	5.80	0.82	0.00	0.04	1	0	0	32	3	30
284+45 'NB	28445.00	42.20	1.64	0.00	0.00	2	0	0	34	3	32
284+48 'NB'	28448.00	3.00	1.54	0.00	0.00	0	0	0	34	3	32
284+60 'NB'	28460.49	12.49	1.09	0.00	1.46	1	0	0	35	3	33
284+73 'NB'	28473.00	12.51	0.00	0.00	3.67	0	0	1	35	4	31
284+98 'NB'	28498.00	25.00	0.00	0.00	2.07	0	0	3	35	8	28
285+50 'NB'	28550.00	52.00	0.00	0.00	3.12	0	0	5	35	14	21
285+64 'NB'	28563.63	13.63	0.00	0.00	0.66	0	0	1	35	15	20
285+74 'NB'	28573.63	10.00	0.00	0.00	0.17	0	0	0	35	15	20
286+00 'NB'	28600.00	26.37	0.00	0.00	0.18	0	0	0	35	15	20
286+10 'NB'	28609.63	9.63	0.41	0.00	0.00	0	0	0	35	15	20
286+26 'NB'	28626.13	16.50	0.00	0.00	0.00	0	0	0	35	15	20
286+26 'NB'	28626.43	0.31	0.00	0.00	0.00	0	0	0	35	15	20

STH 42 NB AT CTH U - OUTSIDE LANE CLOSURE

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
459+16'NB'	45916.35	0.00	0.00	0.00	0.00	0	0	0	0	0	0
459+17'NB'	45917.32	0.97	18.39	1.73	0.00	0	0	0	0	0	0
459+27'NB'	45927.32	10.00	17.58	2.03	0.00	7	1	0	7	0	6
460+00'NB'	46000.00	72.68	18.51	3.73	4.53	49	8	6	56	8	40
460+50'NB'	46050.00	50.00	19.72	5.08	2.24	35	8	6	91	15	59
460+74'NB'	46074.31	24.31	19.94	5.38	5.43	18	5	3	109	19	68
461+00'NB'	46100.00	25.69	19.98	5.70	2.96	19	5	4	128	24	77
461+64'NB'	46163.93	63.93	20.34	6.50	1.17	48	14	5	176	30	105
462+00'NB'	46200.00	36.07	20.42	6.94	2.29	27	9	2	203	33	121
462+20'NB'	46219.60	19.60	19.02	7.19	7.04	14	5	3	217	36	126
462+36'NB'	46236.43	16.82	19.22	7.38	5.37	12	5	4	229	41	128
462+55'NB'	46255.37	18.94	26.10	9.07	6.45	16	6	4	245	46	133
462+57'NB'	46256.77	1.40	26.89	9.11	6.86	1	0	0	246	46	134
462+57'NB'	46256.77	0.00	0.00	0.00	0.00	0	0	0	246	46	134
463+99'NB'	46399.33	142.56	0.00	0.00	0.00	0	0	0	246	46	134
464+00'NB'	46400.00	0.67	22.50	3.23	0.81	0	0	0	246	46	134
464+16'NB'	46416.05	16.05	23.46	2.67	0.30	14	2	0	260	46	146
464+35'NB'	46434.89	18.84	22.13	2.32	0.00	16	2	0	276	46	160
464+35'NB'	46435.21	0.32	0.00	0.00	0.00	0	0	0	276	46	160

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	[(CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)]

STH 42 NB AT CTH U - INSIDE LANE CLOSURE

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
457+52'NB'	45751.58	0.00	0.00	0.00	0.00	0	0	0	0	0	0
457+53'NB'	45752.51	0.93	0.00	0.00	0.00	0	0	0	0	0	0
458+00'NB'	45800.00	47.49	0.00	0.00	0.00	0	0	0	0	0	0
458+50'NB'	45849.98	49.98	0.00	0.00	0.00	0	0	0	0	0	0
458+90'NB'	45889.76	39.78	0.00	0.00	0.00	0	0	0	0	0	0
459+17'NB'	45917.32	27.56	6.69	1.67	0.00	3	1	0	3	0	2
459+27'NB'	45927.32	10.00	6.57	1.66	0.00	2	1	0	5	0	3
460+00'NB'	46000.00	72.68	17.26	1.65	0.00	32	4	0	37	0	31
460+50'NB'	46050.00	50.00	26.68	1.86	0.00	41	3	0	78	0	69
460+74'NB'	46074.31	24.31	30.49	2.88	0.00	26	2	0	104	0	93
461+00'NB'	46100.00	25.69	34.14	4.52	0.00	31	4	0	135	0	120
461+64'NB'	46163.93	63.93	40.14	8.49	0.00	88	15	0	223	0	193
462+00'NB'	46200.00	36.07	35.84	10.08	0.00	51	12	0	274	0	232
462+20'NB'	46219.60	19.60	40.91	10.02	0.00	28	7	0	302	0	253
462+36'NB'	46236.43	16.82	40.24	11.44	0.00	25	7	0	327	0	271
462+55'NB'	46255.37	18.94	34.81	19.64	0.00	26	11	0	353	0	286
462+57'NB'	46256.77	1.40	0.00	0.00	0.00	1	1	0	354	0	286

STH 42 SB AT CTH U - OUTSIDE LANE CLOSURE

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.25	NOTE 8
463+22'SB'	46321.84	0.00	0.00	0.00	1.11	0	0	0	0	0	0
463+23'SB'	46322.81	0.97	27.07	10.88	1.13	0	0	0	0	0	0
463+30'SB'	46329.50	6.69	21.49	8.98	1.44	6	2	0	6	0	4
463+63'SB'	46363.03	33.53	21.58	7.44	0.25	27	10	1	33	1	20
463+72'SB'	46372.28	9.25	20.25	7.20	0.82	7	3	0	40	1	24
464+00'SB'	46400.00	27.72	19.08	6.49	1.77	20	7	1	60	3	36
464+05'SB'	46405.00	5.00	19.16	6.36	1.95	4	1	0	64	3	39
464+22'SB'	46422.28	17.29	19.04	6.06	2.63	12	4	1	76	4	45
464+40'SB'	46439.55	17.26	18.95	5.60	3.36	12	4	2	88	6	51
464+77'SB'	46477.24	37.69	18.76	4.51	5.43	26	7	6	114	14	62
465+00'SB'	46500.00	22.76	18.42	3.92	7.42	16	4	5	130	20	68
465+15'SB'	46514.81	14.81	18.48	3.54	8.37	10	2	4	140	25	71
465+22'SB'	46521.69	6.88	18.42	3.37	8.88	5	1	2	145	28	73
465+50'SB'	46550.00	28.31	19.04	2.22	10.83	20	3	10	165	40	77
465+66'SB'	46566.13	16.13	17.90	1.85	12.46	11	1	7	176	49	78
465+97'SB'	46597.18	31.05	22.74	1.76	4.23	23	2	10	199	61	87
466+22'SB'	46621.69	24.51	26.54	2.22	0.00	22	2	2	221	64	104
466+50'SB'	46650.00	28.31	0.00	0.00	0.00	14	1	0	235	64	117
467+01'SB'	46701.48	51.48	0.00	0.00	0.00	0	0	0	235	64	117
467+50'SB'	46750.00	48.52	0.00	0.00	0.00	0	0	0	235	64	117
467+69'SB'	46769.29	19.29	0.00	0.00	0.00	0	0	0	235	64	117
467+94'SB'	46794.08	24.79	0.00	0.00	0.00	0	0	0	235	64	117
468+50'SB'	46850.00	55.92	0.00	0.00	0.00	0	0	0	235	64	117
469+06'SB'	46906.18	56.18	0.00	0.00	0.00	0	0	0	235	64	117
469+50'SB'	46950.00	43.82	0.00	0.00	0.00	0	0	0	235	64	117
470+00'SB'	47000.00	50.00	0.00	0.00	0.00	0	0	0	235	64	117
470+50'SB'	47050.00	50.00	0.00	0.00	0.00	0	0	0	235	64	117
470+68'SB'	47068.36	18.36	0.00	0.00	0.00	0	0	0	235	64	117
471+00'SB'	47100.00	31.64	0.00	0.00	0.00	0	0	0	235	64	117
471+56'SB'	47155.62	55.62	0.00	0.00	0.00	0	0	0	235	64	117
471+56'SB'	47155.92	0.30	0.00	0.00	0.00	0	0	0	235	64	117

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	[(CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)]

STH 42 SB AT CTH U - INSIDE LANE CLOSURE

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
46321.84	46321.84	0.00	0.00	0.00	0.00	0	0	0	0	0	0
46322.81	46322.81	0.97	53.29	24.07	0.00	1	0	0	1	0	1
46329.51	46329.50	6.69	45.57	20.08	9.94	12	5	1	13	1	7
46363.03	46363.03	33.53	53.49	13.51	9.94	61	21	12	74	13	35
46372.28	46372.28	9.25	52.27	12.54	9.85	18	4	3	92	16	46
46397.28	46397.28	24.99	39.67	8.09	8.30	43	10	8	135	24	71
46422.28	46422.28	25.01	51.20	12.27	6.63	42	9	7	177	31	97
46442.49	46442.49	20.21	40.00	9.20	5.19	34	8	4	211	35	119
46471.62	46471.62	29.13	40.16	9.16	3.20	43	10	5	254	40	147
46500.00	46500.00	28.38	41.83	9.46	1.18	43	10	2	297	42	178
46521.69	46521.69	21.69	40.93	9.39	0.00	33	8	0	330	42	203
46537.84	46537.84	16.15	41.14	8.85	0.07	25	5	0	355	42	223
46550.00	46550.00	12.16	42.15	8.73	0.23	19	4	0	374	42	238
46566.13	46566.13	16.13	39.97	8.32	0.48	25	5	0	399	42	258
46601.96	46601.96	35.83	37.36	10.25	0.70	51	12	1	450	43	296
46621.69	46621.69	19.73	33.80	10.07	1.21	26	7	1	476	44	314
46650.00	46650.00	28.31	30.73	9.93	1.20	34	10	1	510	45	337
46700.00	46700.00	50.00	24.82	9.71	0.46	51	18	2	561	47	368
46723.49	46723.49	23.49	22.64	9.50	0.08	21	8	0	582	47	381
46750.00	46750.00	26.51	20.09	9.52	0.15	21	9	0	603	47	393
46794.08	46794.08	44.08	15.73	7.27	2.88	29	14	2	632	49	406
46831.00	46831.00	36.92	11.46	5.20	4.69	19	9	5	651	54	411
46850.00	46850.00	19.00	11.25	5.22	4.85	8	4	3	659	57	412
46900.83	46900.83	50.83	10.84	5.14	3.89	21	10	8	680	65	415
46950.00	46950.00	49.17	10.50	4.99	3.97	19	9	7	699	72	418
47000.00	47000.00	50.00	10.75	5.07	4.66	20	9	8	719	80	421
47050.00	47050.00	50.00	16.24	7.92	10.95	25	12	14	744	94	420
47068.36	47068.36	18.36	16.31	7.66	9.68	11	5	7	755	101	419
47100.00	47100.00	31.64	17.95	8.26	6.44	20	9	9	775	110	421
47155.62	47155.62	55.62	20.70	10.28	0.51	40	19	7	815	117	435
47155.92	47155.92	0.30	0.00	0.00	0.00	0	0	0	815	117	435

ASHLAND AVE

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)			
			CUT	SALVAGED/UNUSABLE MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE 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 8
0+00'A' NE FLAG	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0
0+00'A' NE FLAG	0.08	0.08	7.78	1.25	0.43	0.00	0.00	0.00	0	0	0	0	0	0	0	0
+10'A' NE FLAG	10.08	10.00	6.76	2.12	1.15	0.00	0.88	0.00	3	1	0	0	3	0	0	2
+50'A' NE FLAG	50.00	39.92	10.92	3.38	0.00	0.00	2.14	0.00	13	4	1	2	16	-2	2	10
+74'A' NE FLAG	73.64	23.64	17.91	6.50	0.00	0.00	5.25	0.00	13	4	0	3	29	-6	6	19
1+00'A' NE FLAG	100.00	26.36	51.20	21.36	0.00	0.00	15.26	0.00	34	14	0	10	63	-19	17	39
1+11'A' NE FLAG	111.48	11.48	67.00	32.68	0.00	0.00	25.16	0.00	25	11	0	9	88	-32	26	53
1+18'A' NE FLAG	117.93	6.45	63.51	34.69	0.04	0.00	31.61	0.00	16	8	0	7	104	-41	34	61
1+59'A' NE FLAG	158.82	40.89	33.13	17.20	0.00	0.00	15.33	0.00	73	39	0	36	177	-91	74	95
2+00'A' NE FLAG	200.00	41.18	19.10	5.73	0.00	0.00	3.95	0.00	40	17	0	15	217	-112	90	118
2+40'A' NE FLAG	239.51	39.51	11.38	0.25	0.01	0.00	0.00	0.00	22	4	0	3	239	-116	94	136
2+40'A' NE FLAG	240.45	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	239	-116	94	136

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	[(CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)]

ASHLAND AVE ONLY	
Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL. ROCK EXCAVATION IS NOT INCLUDED IN CUT
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE SALVAGED/UNUSABLE MATERIAL EXC VOLUME
8 - MASS ORDINATE	[(CUT - UNUSABLE MATERIAL) - (FILL * FILL FACTOR)]

GREEN BAY RD NB RAMP

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
20+50'GN'	2050.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
20+56'GN'	2056.00	6.00	3.65	0.75	5.22	0	0	1	0	1	-1
21+00'GN'	2100.00	44.00	4.41	0.75	1.89	7	1	6	7	9	-3
21+17'GN'	2117.42	17.42	3.66	0.75	1.80	3	0	1	10	10	-1
21+60'GN'	2160.50	43.08	3.48	5.67	2.09	6	5	3	16	14	-4
22+00'GN'	2200.00	39.50	3.68	5.67	0.99	5	8	2	21	16	-9
22+50'GN'	2250.00	50.00	3.78	5.67	0.94	7	11	2	28	19	-16
23+00'GN'	2300.00	50.00	3.94	5.67	1.62	7	11	2	35	21	-22
23+50'GN'	2350.09	50.09	7.66	2.75	3.73	11	8	5	46	28	-26
23+73'GN'	2372.67	22.58	3.68	2.75	1.53	5	2	2	51	30	-25
23+73'GN'	2373.32	0.65	0.00	0.00	0.00	0	0	0	51	30	-25

NEENAH AVE

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
2+49'N' NE FLAG	249.04	0.00	0.00	0.00	0.00	0	0	0	0	0	0
2+50'N' NE FLAG	250.00	0.96	8.51	1.50	7.85	0	0	0	0	0	0
2+75'N' NE FLAG	275.00	25.00	18.03	2.70	12.15	12	2	9	12	11	-1
2+98'N' NE FLAG	298.16	23.16	37.84	2.32	17.83	24	2	13	36	28	5
3+18'N' NE FLAG	318.22	20.06	21.36	2.23	15.06	22	2	12	58	43	10
3+50'N' NE FLAG	350.00	31.78	21.02	1.61	9.53	25	2	14	83	60	15
3+86'N' NE FLAG	385.61	35.61	18.96	1.67	1.31	26	2	7	109	69	30
4+18'N' NE FLAG	418.00	32.39	14.85	1.89	0.11	20	2	1	129	70	47
4+41'N' NE FLAG	440.53	22.53	11.99	2.75	0.02	11	2	0	140	70	56
4+41'N' NE FLAG	441.00	0.47	0.00	0.00	0.00	0	0	0	140	70	56

CTH U

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
78+06'U'	7806.07	0.00	0.00	0.00	0.00	0	0	0	0	0	0
78+07'U'	7806.93	0.86	14.98	2.56	0.01	0	0	0	0	0	0
78+50'U'	7850.00	43.07	29.89	2.82	1.03	36	4	1	36	1	31
78+64'U'	7864.44	14.44	34.73	2.91	0.90	17	2	1	53	3	45
78+75'U'	7875.00	10.56	38.26	7.35	0.78	14	2	0	67	3	57
78+88'U'	7888.10	13.10	43.10	14.55	0.29	20	5	0	87	3	72
79+02'U'	7902.23	14.14	21.55	1.95	3.78	17	4	1	104	4	83

Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	[(CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)]

CTH U SW FLAG

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
10+00'U' SW FLAG	1000.00	0.00	18.80	7.02	7.90	0	0	0	0	0	0
10+25'U' SW FLAG	1025.00	25.00	34.48	10.63	6.70	25	8	7	25	9	8
10+40'U' SW FLAG	1040.00	15.00	44.34	13.11	6.70	22	7	4	47	14	18
10+69'U' SW FLAG	1068.94	28.94	18.16	2.35	9.40	33	8	9	80	25	32

CTH U SE FLAG

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
10+16'U' SE FLAG	1015.95	0.00	23.22	18.64	3.15	0	0	0	0	0	0
10+40'U' SE FLAG	1040.00	24.05	63.11	16.87	7.48	38	16	5	38	6	16
10+50'U' SE FLAG	1050.00	10.00	48.36	12.12	9.01	21	5	3	59	10	28
10+82'U' SE FLAG	1082.13	32.13	20.08	3.52	4.77	41	9	8	100	20	50

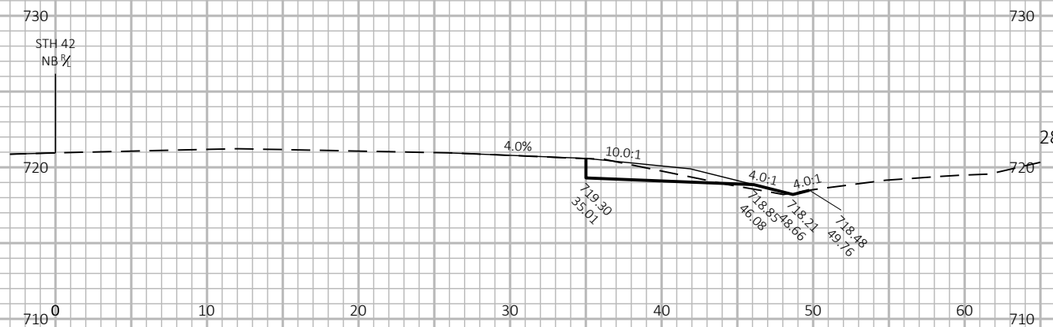
CIRCLE RIDGE NE FLAG

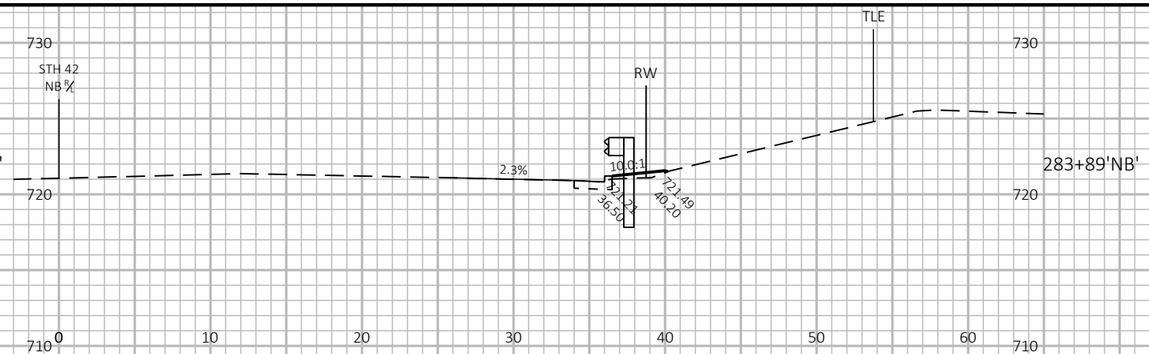
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
10+00'CI' NE FLAG	1000.01	0.00	50.44	30.14	2.61	0	0	0	0	0	0
10+37'CI' NE FLAG	1037.49	37.48	36.41	15.54	0.94	60	32	2	60	3	26
10+75'CI' NE FLAG	1075.00	37.51	12.59	1.48	1.26	34	12	2	94	5	45
10+83'CI' NE FLAG	1082.52	7.52	10.42	2.27	1.63	3	1	0	97	5	47

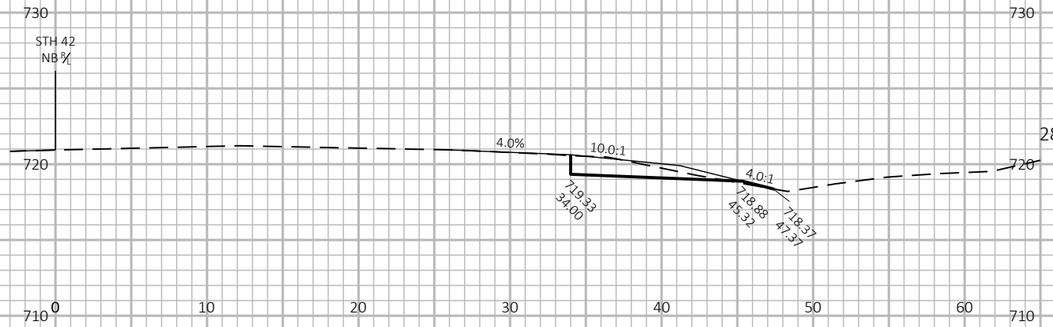
CIRCLE RIDGE RD CL

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT 1.00	EXPANDED FILL 1.25	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
81+73'CI'	8173.41	0.00	9.75	2.27	0.48	0	0	0	0	0	0
81+90'CI'	8189.99	16.59	8.33	2.04	0.30	6	1	0	6	0	5
82+01'CI'	8201.39	11.39	8.01	2.10	0.08	3	1	0	9	0	7
82+11'CI'	8211.00	9.61	0.00	0.00	0.00	1	0	0	10	0	8

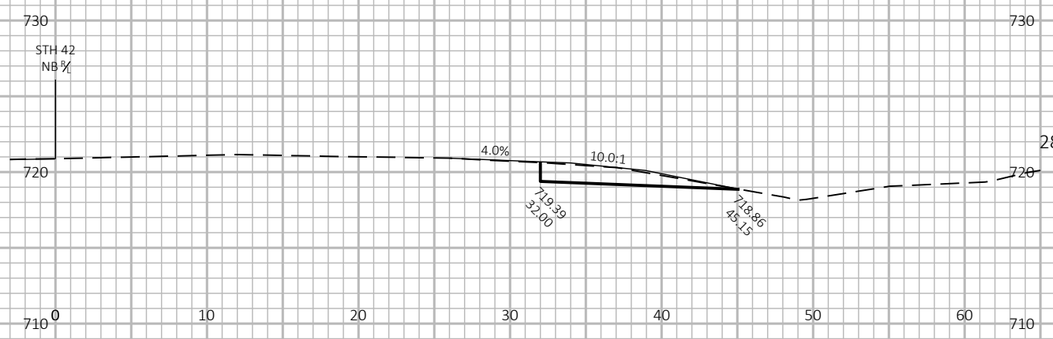
Notes:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
8 - MASS ORDINATE	[(CUT - SALVAGED PAVT) - (FILL * FILL FACTOR)]

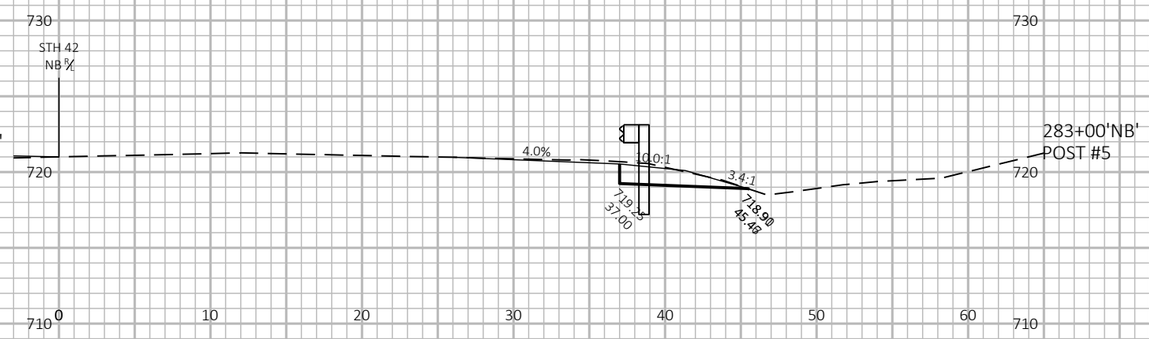


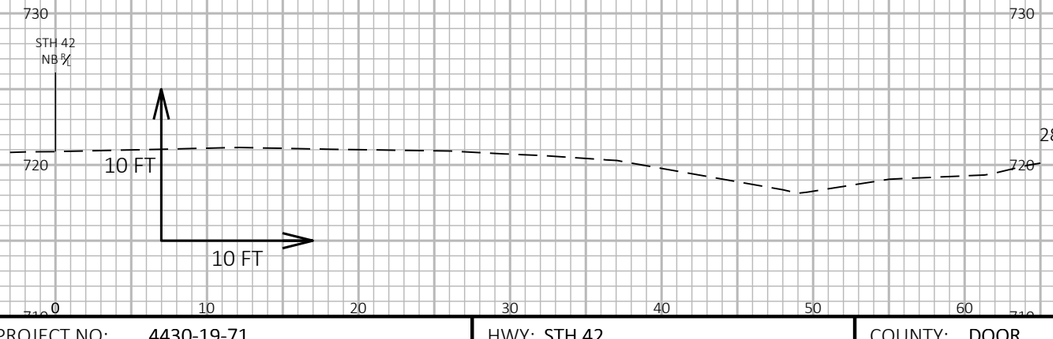


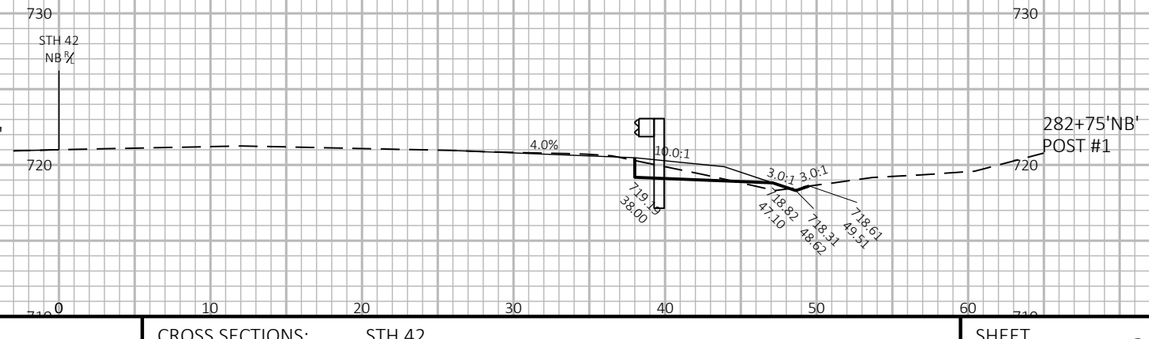












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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 315	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090201-xs

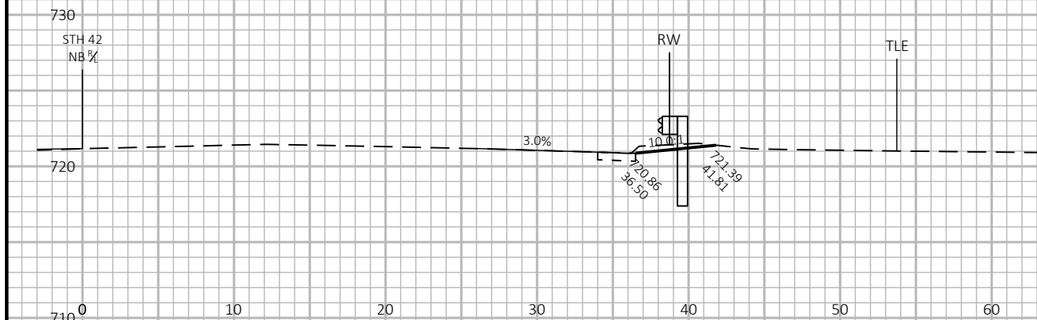
PLOT DATE : 5/11/2021 3:47 PM

PLOT BY : KIRST, DOUGLAS P

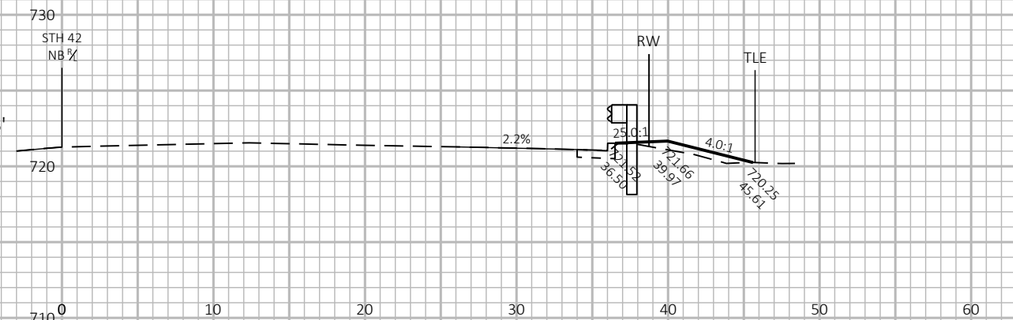
PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

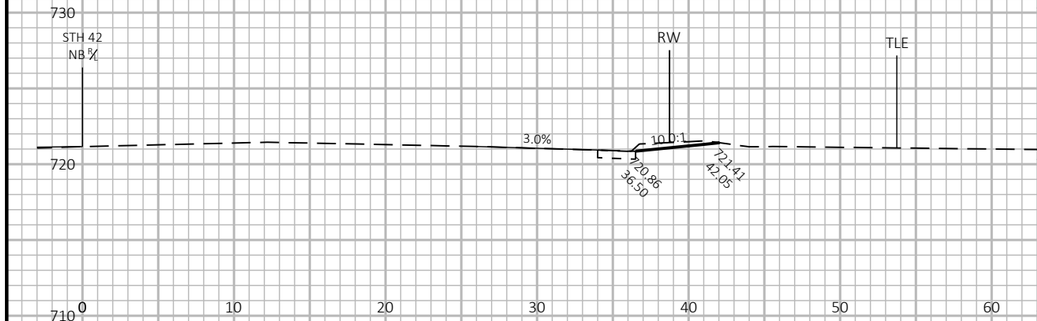
WISDOT/CADDS SHEET 49



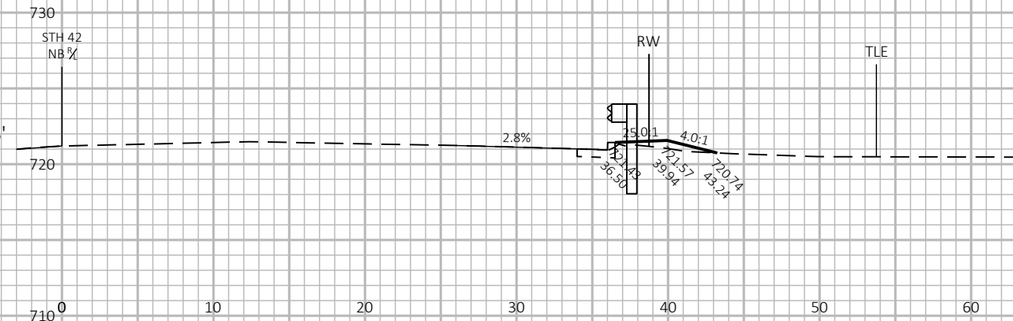
284+48'NB'
POST #1



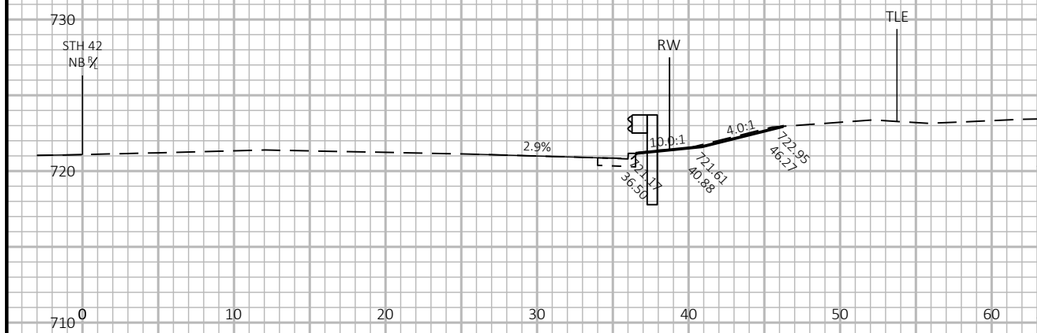
285+50'NB'



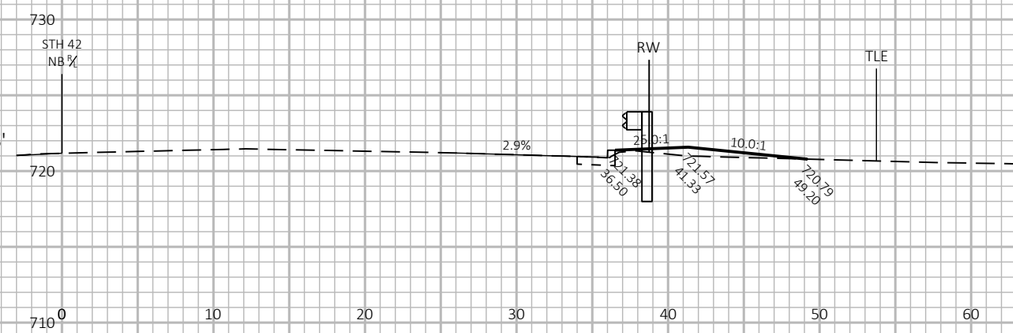
284+45'NB'



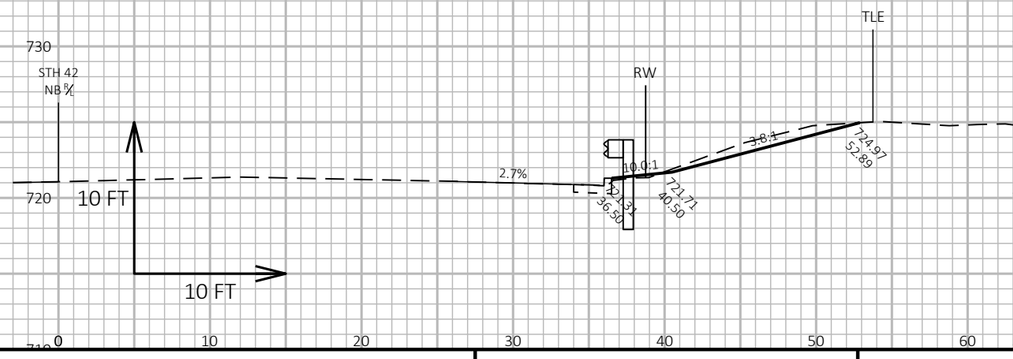
284+98'NB'
POST #9



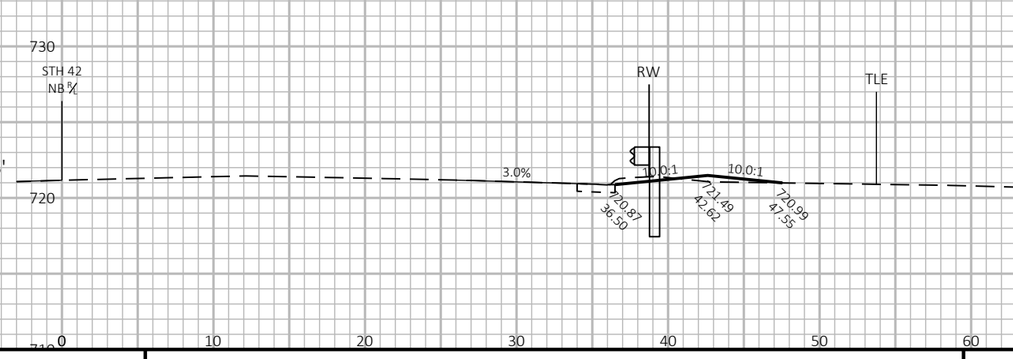
284+03'NB'



284+73'NB'
POST #5



283+97'NB'



284+60'NB'

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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 316	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090202-xs

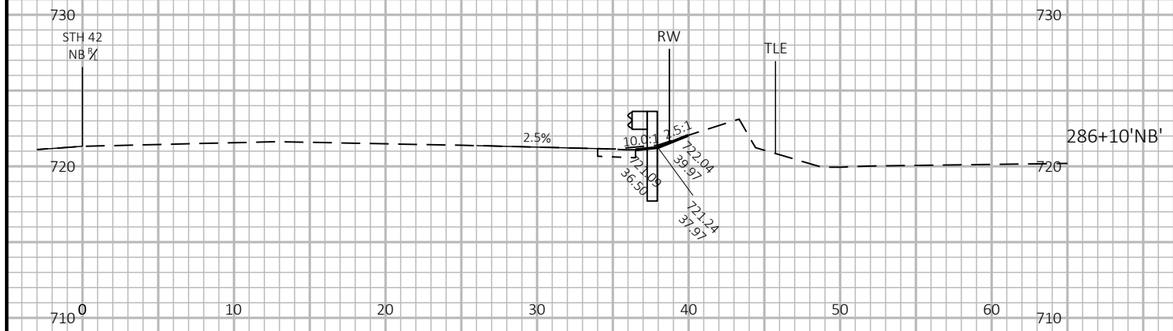
PLOT DATE : 5/11/2021 3:47 PM

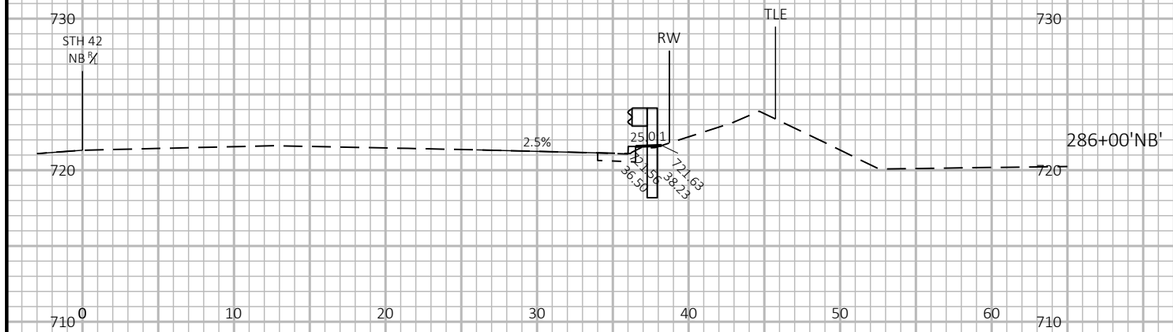
PLOT BY : KIRST, DOUGLAS P

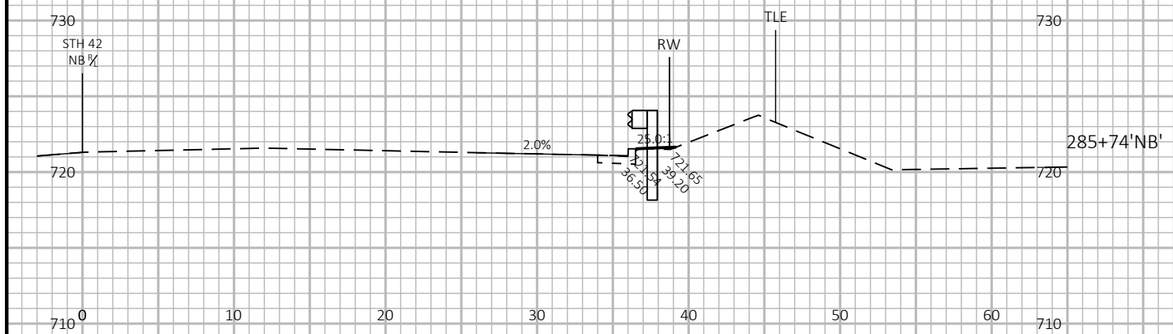
PLOT NAME :

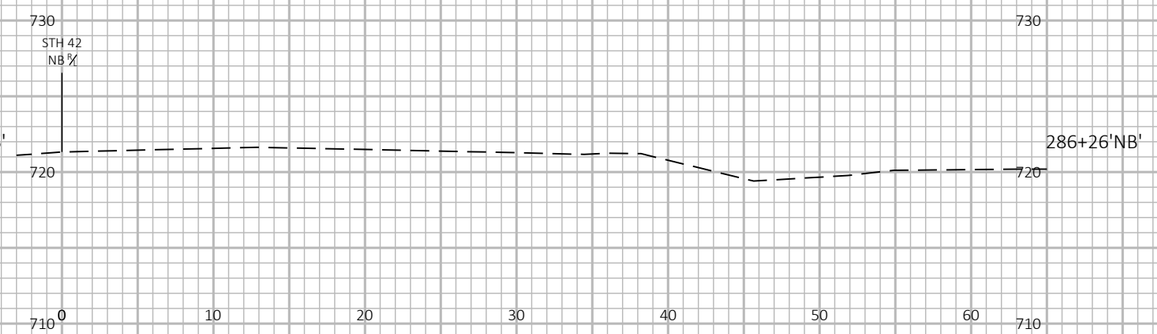
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

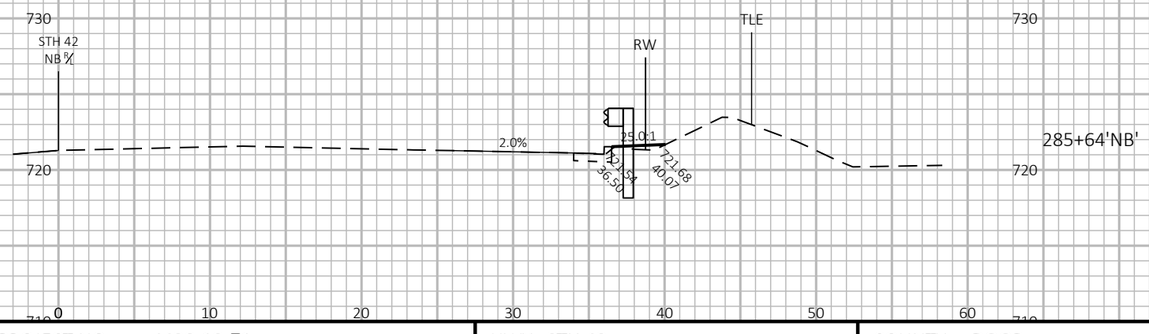
WISDOT/CADDS SHEET 49











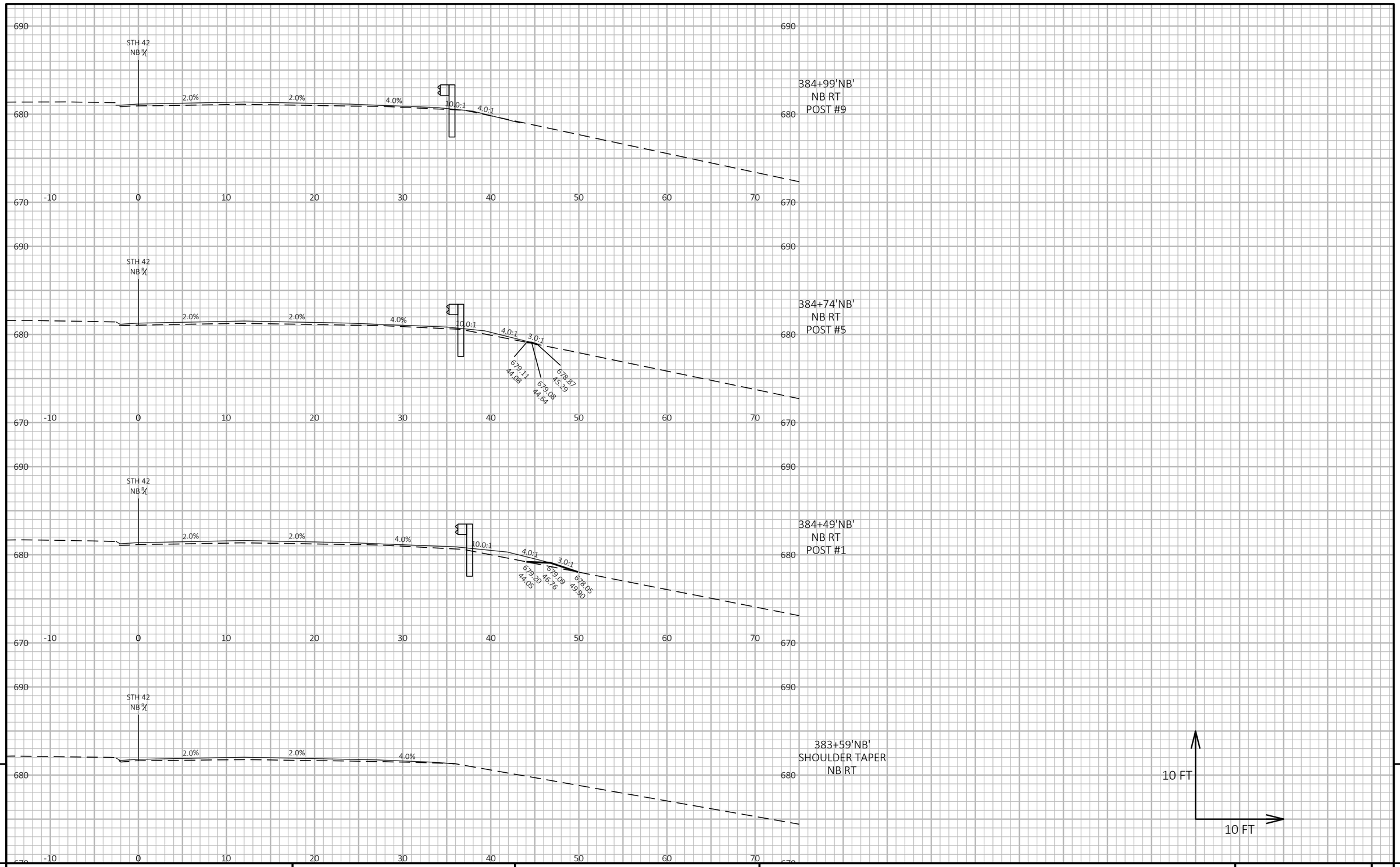


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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 317	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 090203-xs

PLOT DATE : 5/11/2021 3:47 PM PLOT BY : KIRST, DOUGLAS P PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 318	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090207-XS.DWG
LAYOUT NAME - 090204-xs

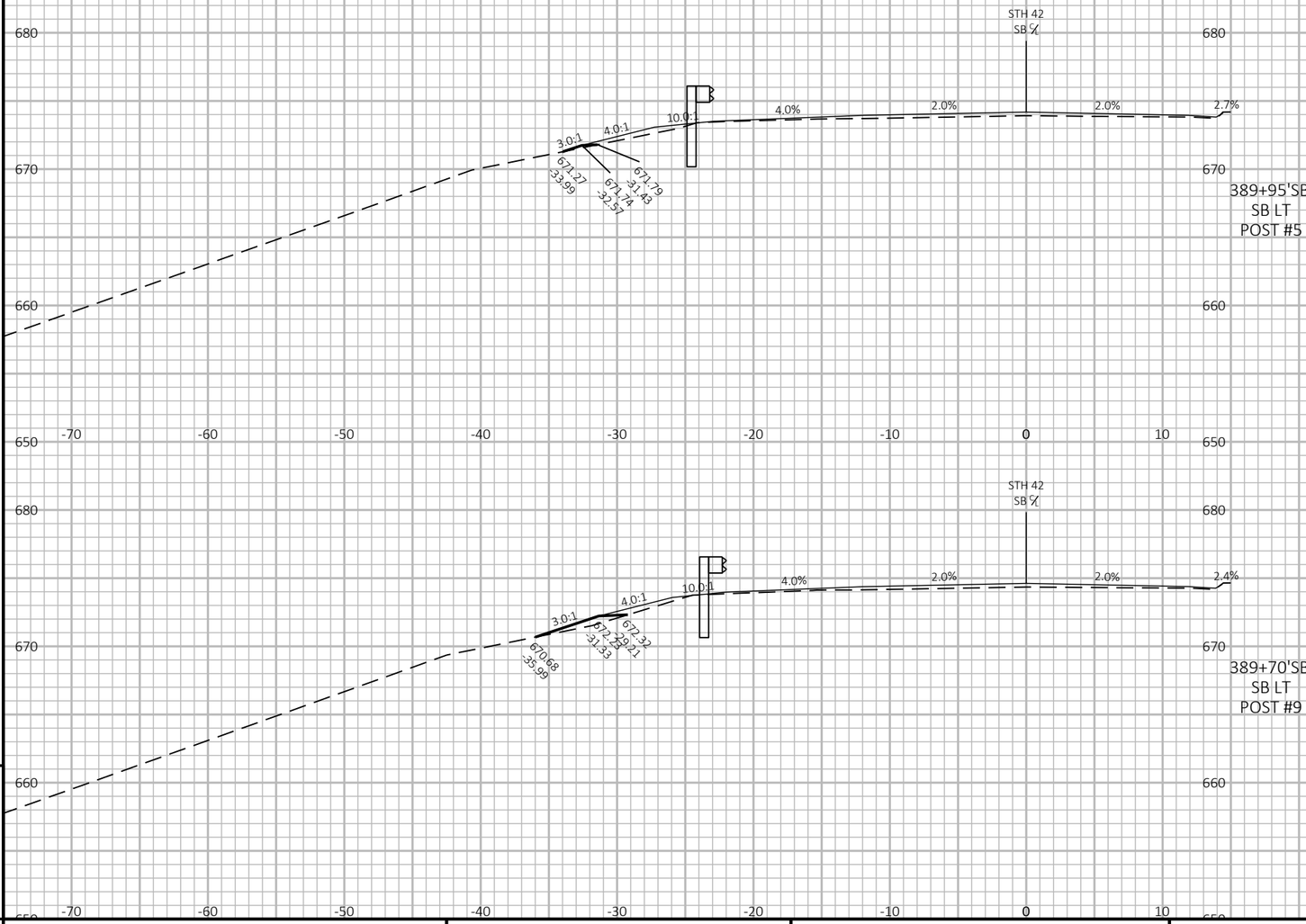
PLOT DATE : 5/11/2021 3:48 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 319	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090207-XS.DWG
LAYOUT NAME - 090205-xs

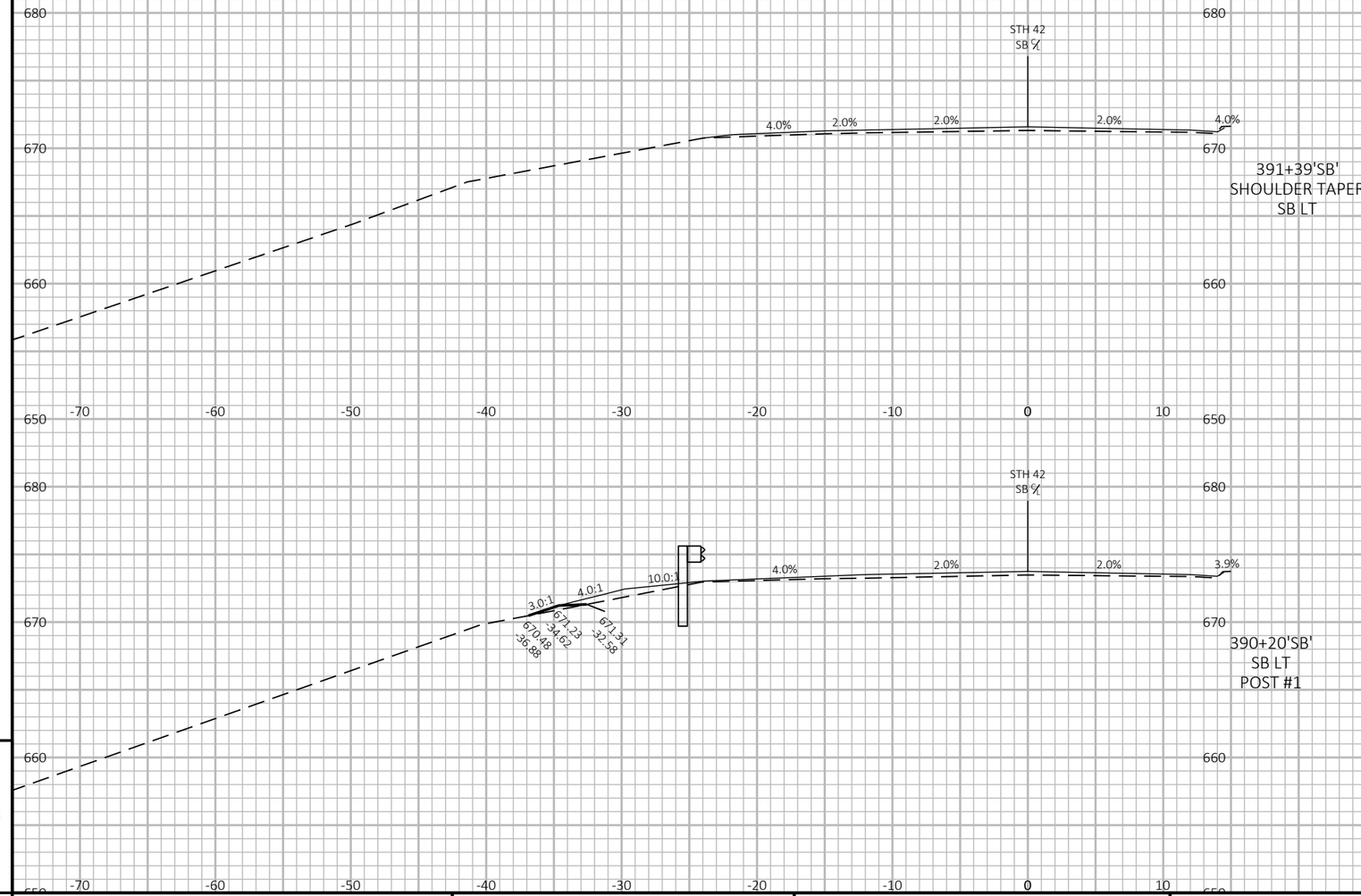
PLOT DATE : 5/11/2021 3:48 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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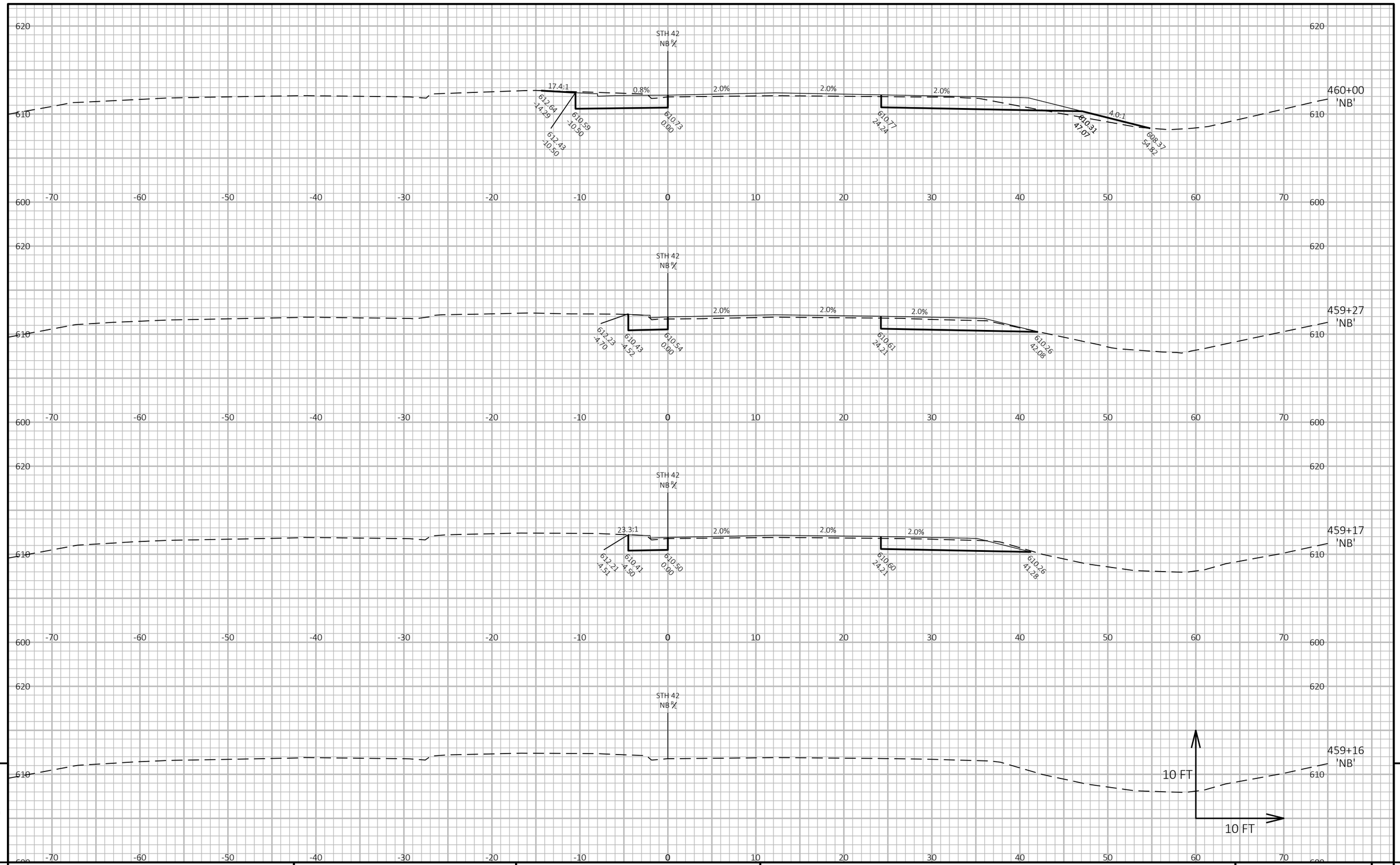
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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 320	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090207-XS.DWG
LAYOUT NAME - 090206-xs

PLOT DATE : 5/11/2021 3:48 PM PLOT BY : KIRST, DOUGLAS P PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 321	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090205-XS.DWG
LAYOUT NAME - 090210-xs

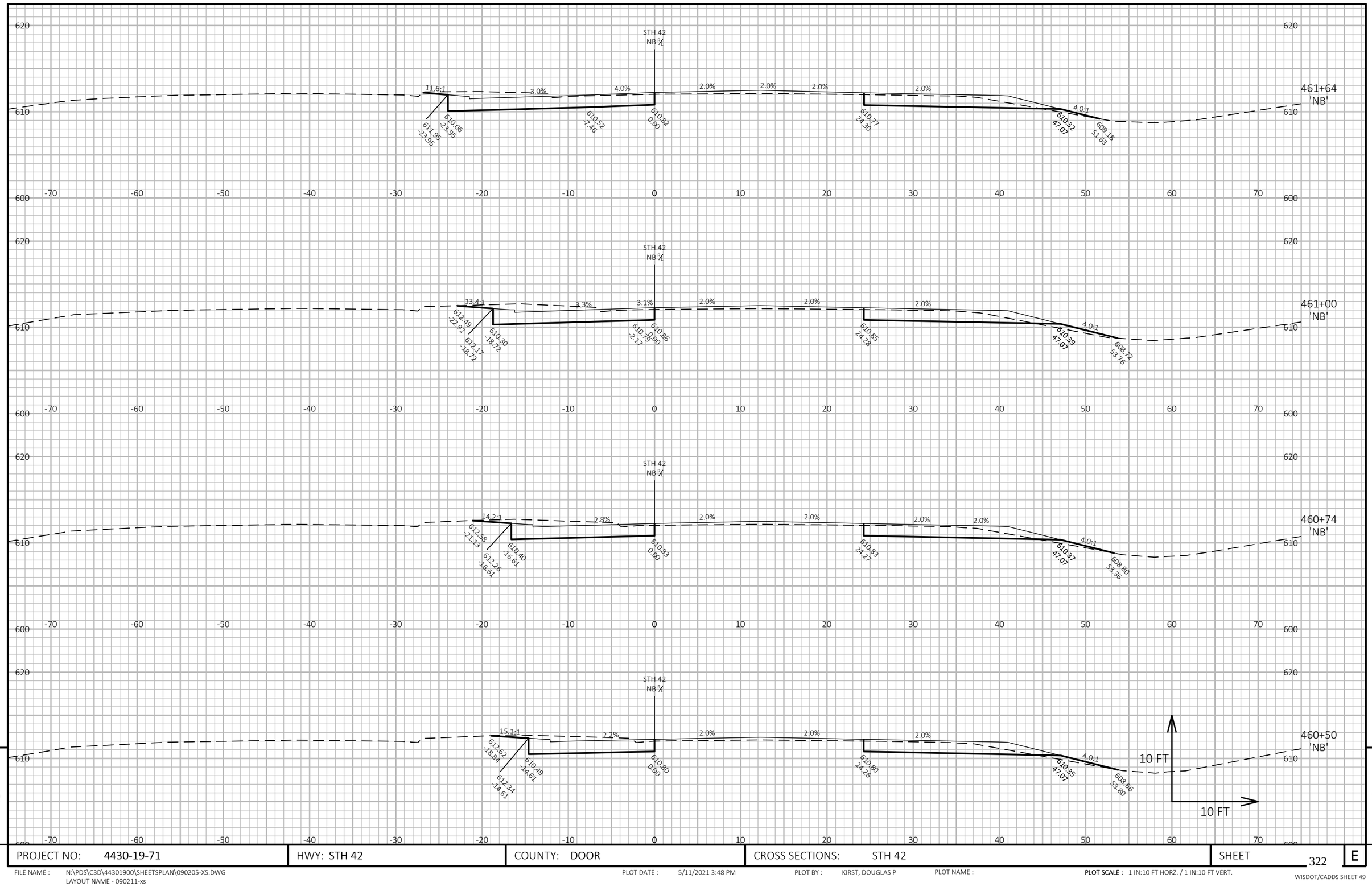
PLOT DATE : 5/11/2021 3:48 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 322	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090205-XS.DWG
LAYOUT NAME - 090211-xs

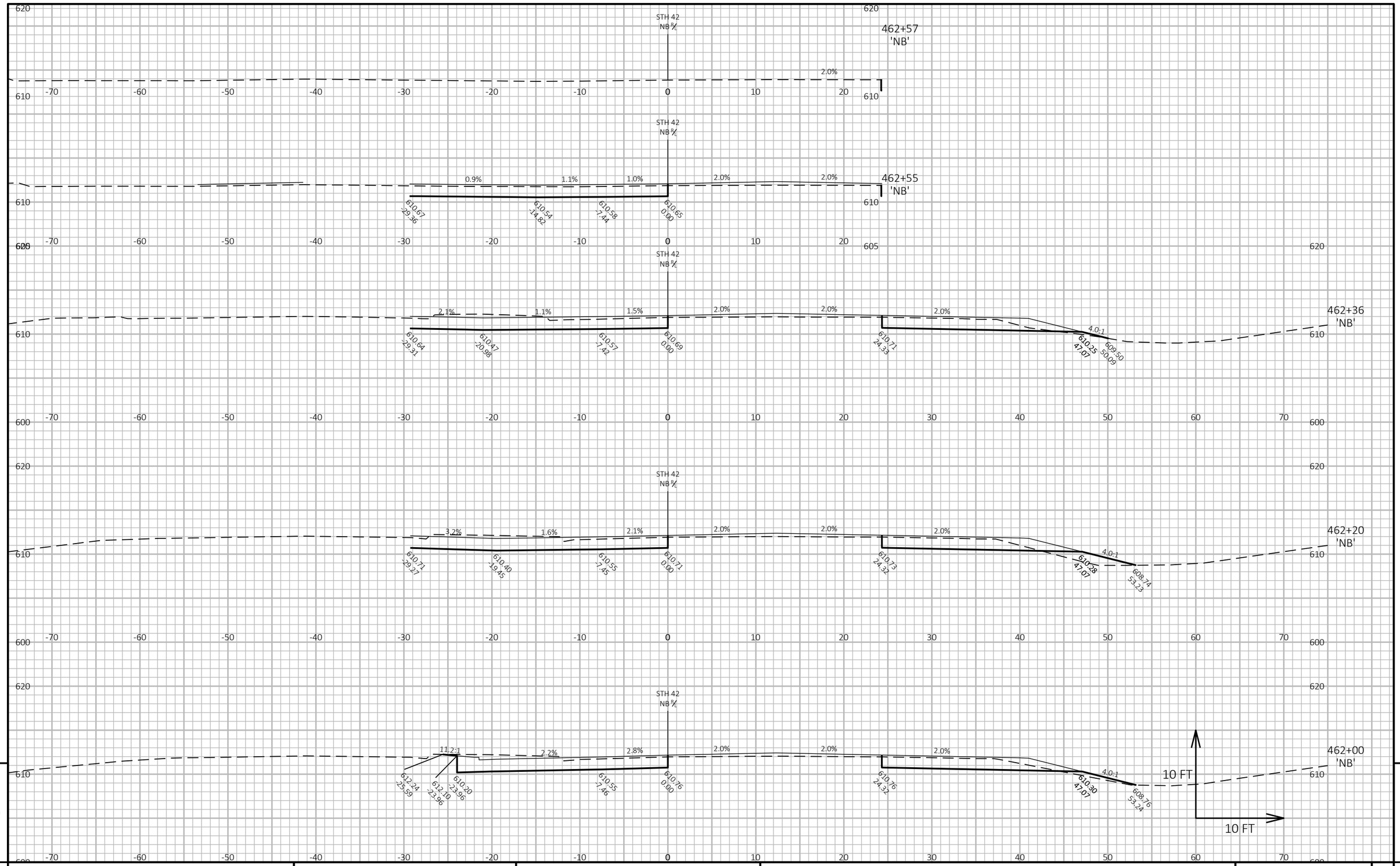
PLOT DATE : 5/11/2021 3:48 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 323	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090205-XS.DWG
LAYOUT NAME - 090212-xs

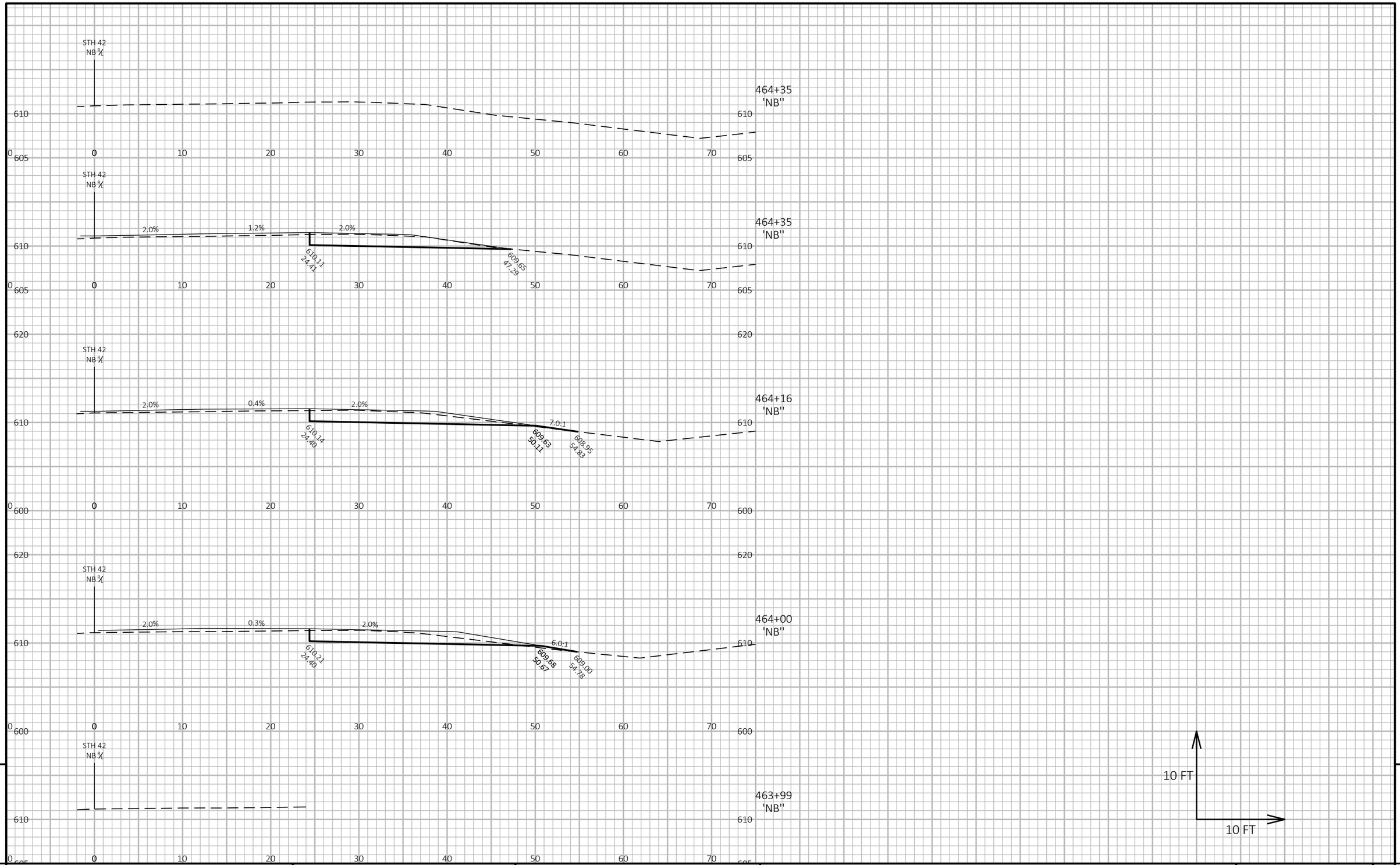
PLOT DATE : 5/11/2021 3:48 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 324	E

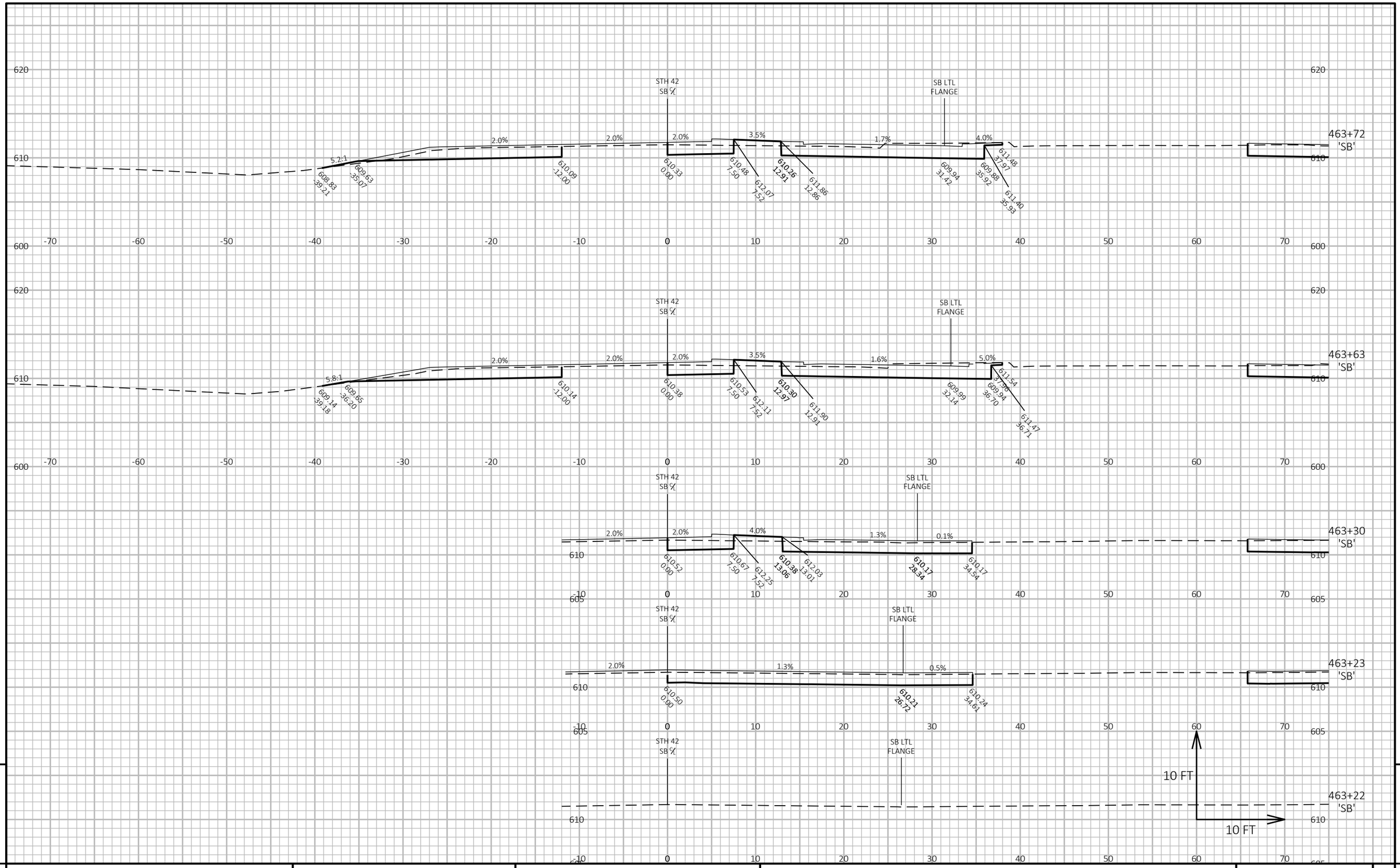
FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090205-XS.DWG
LAYOUT NAME - 090235-xs

PLOT DATE : 5/11/2021 3:48 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

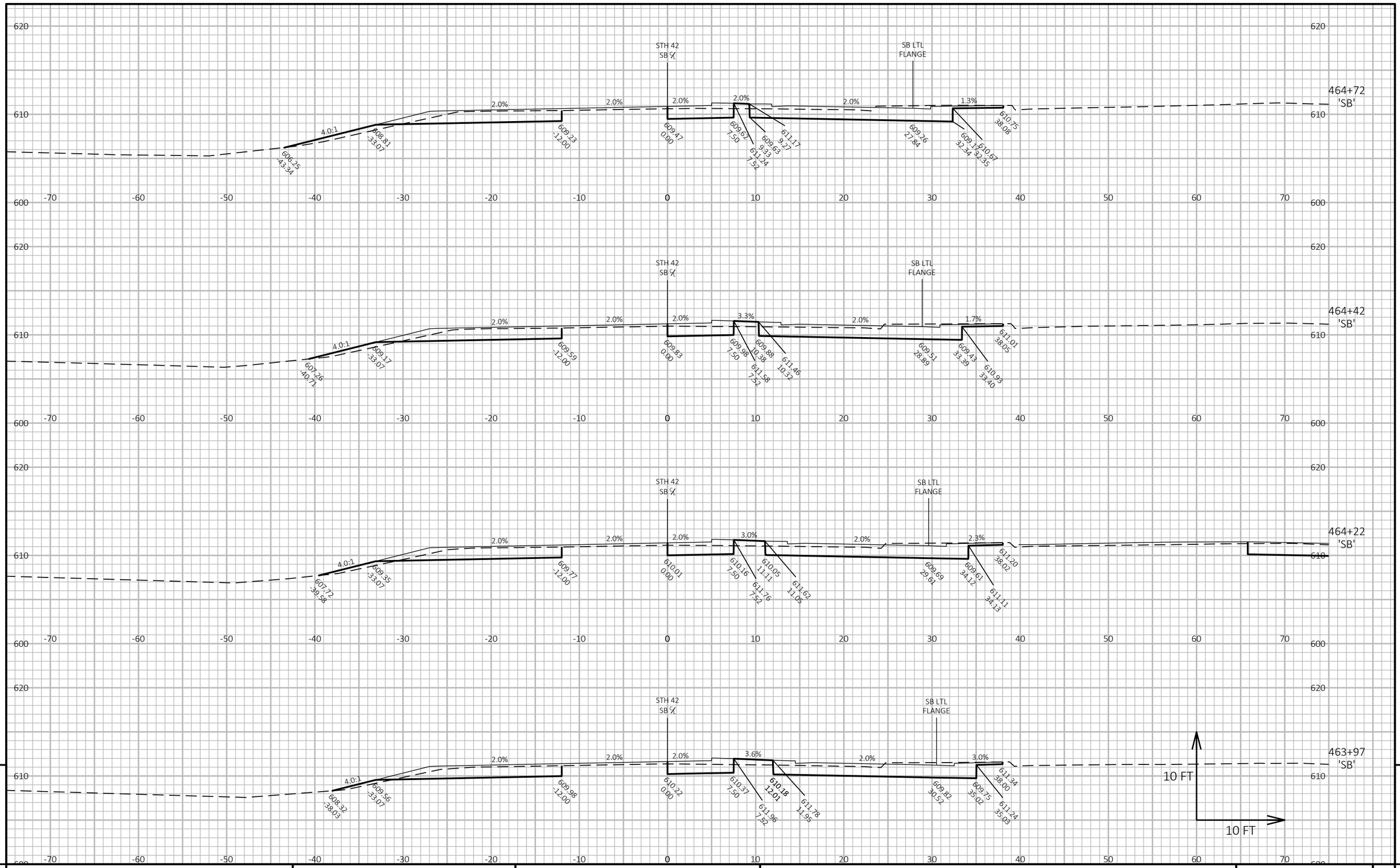


PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 325	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090214-xs

PLOT DATE : 5/11/2021 3:50 PM PLOT BY : KIRST, DOUGLAS P PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 326	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090215-xs

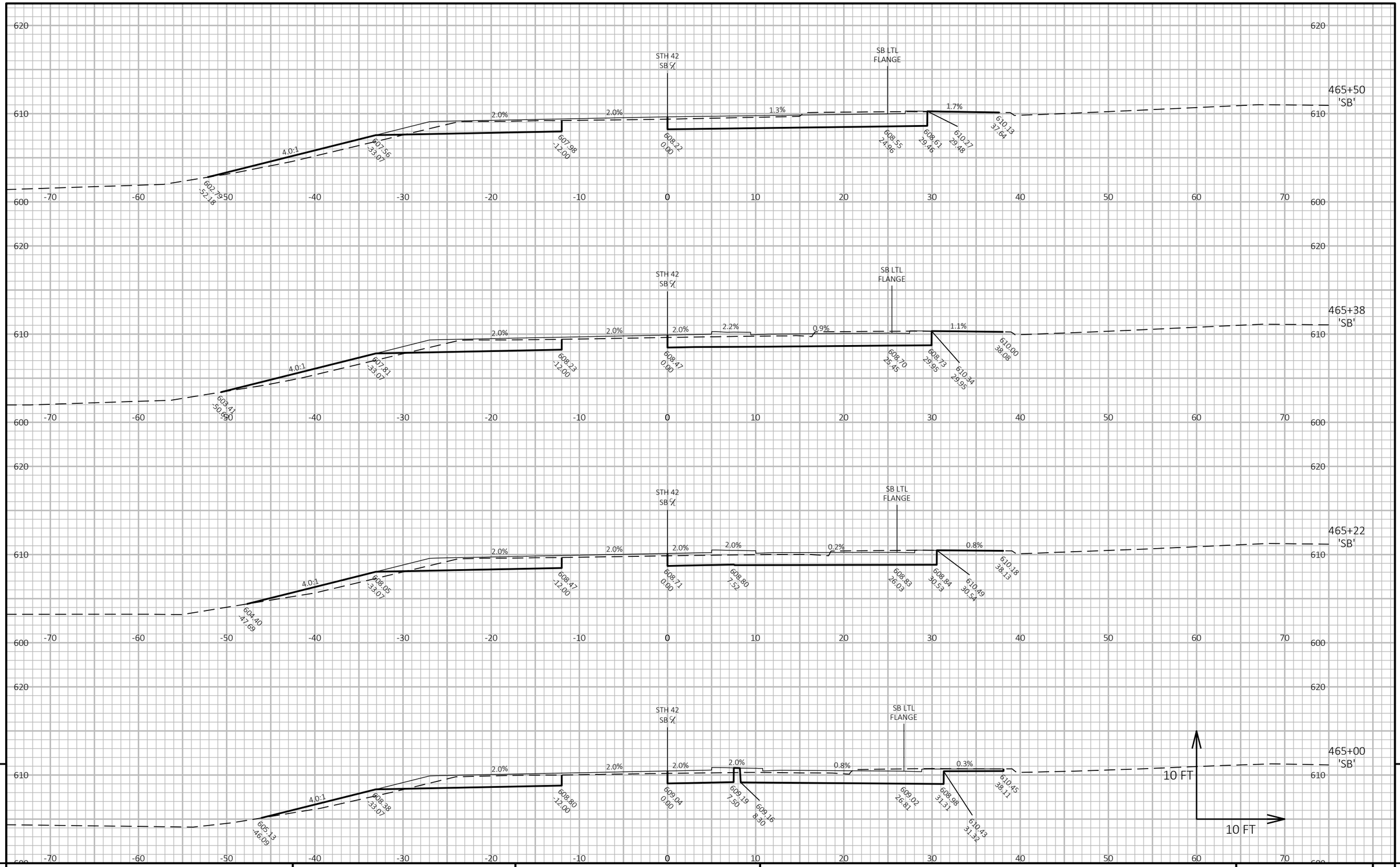
PLOT DATE : 5/11/2021 3:50 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 327	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090216-xs

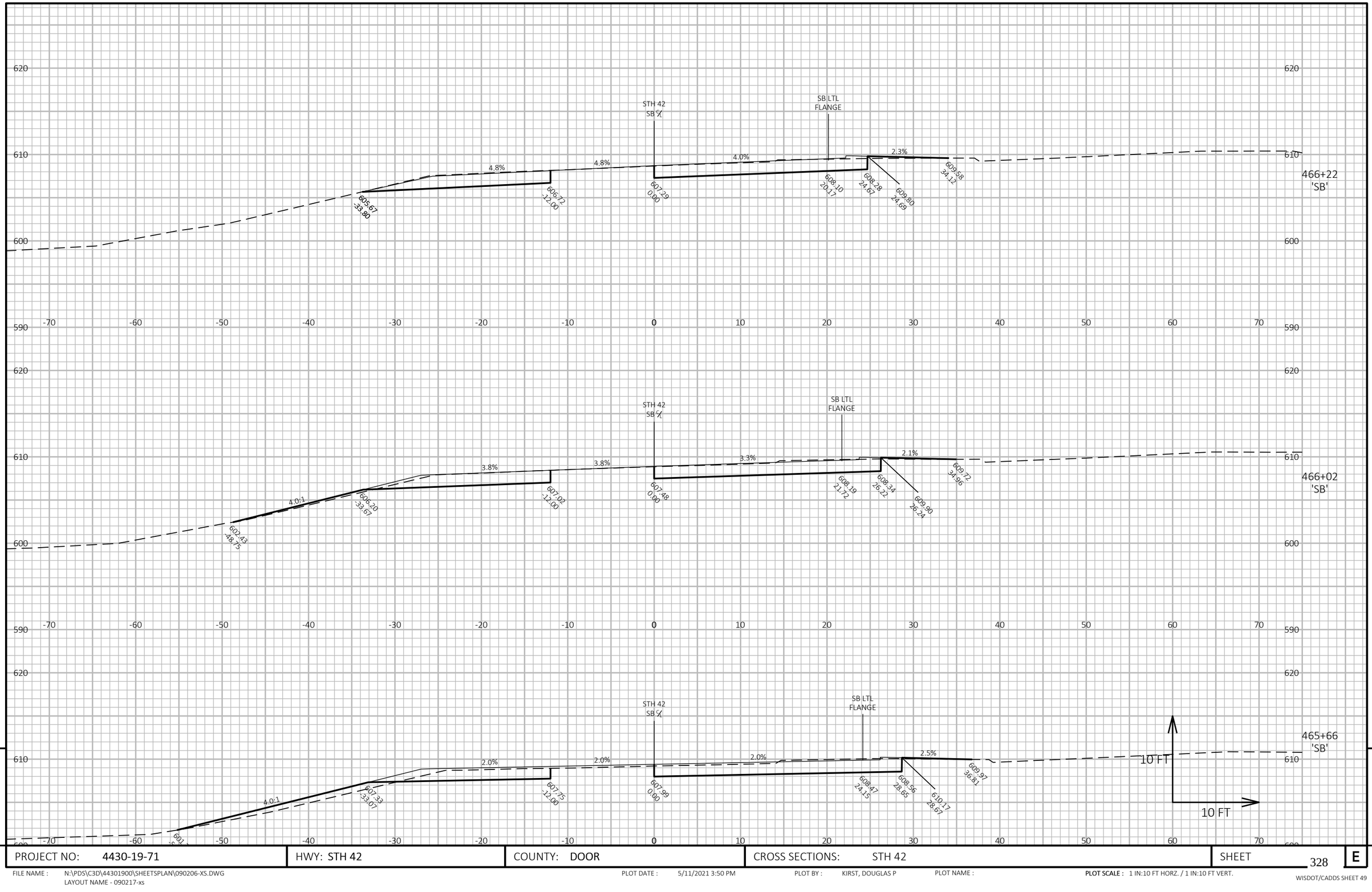
PLOT DATE : 5/11/2021 3:50 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 328	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090217-xs

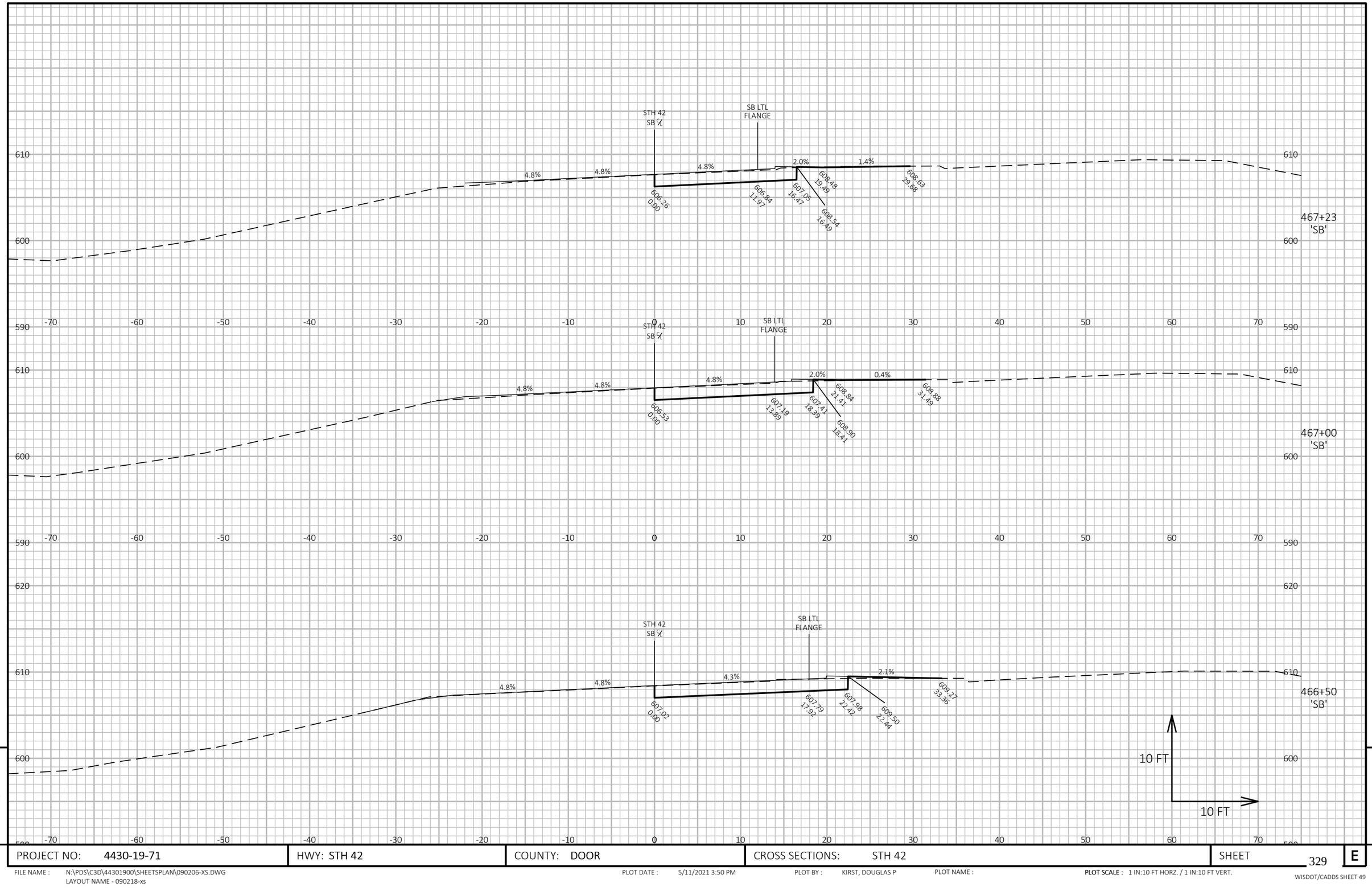
PLOT DATE : 5/11/2021 3:50 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 329	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090218-xs

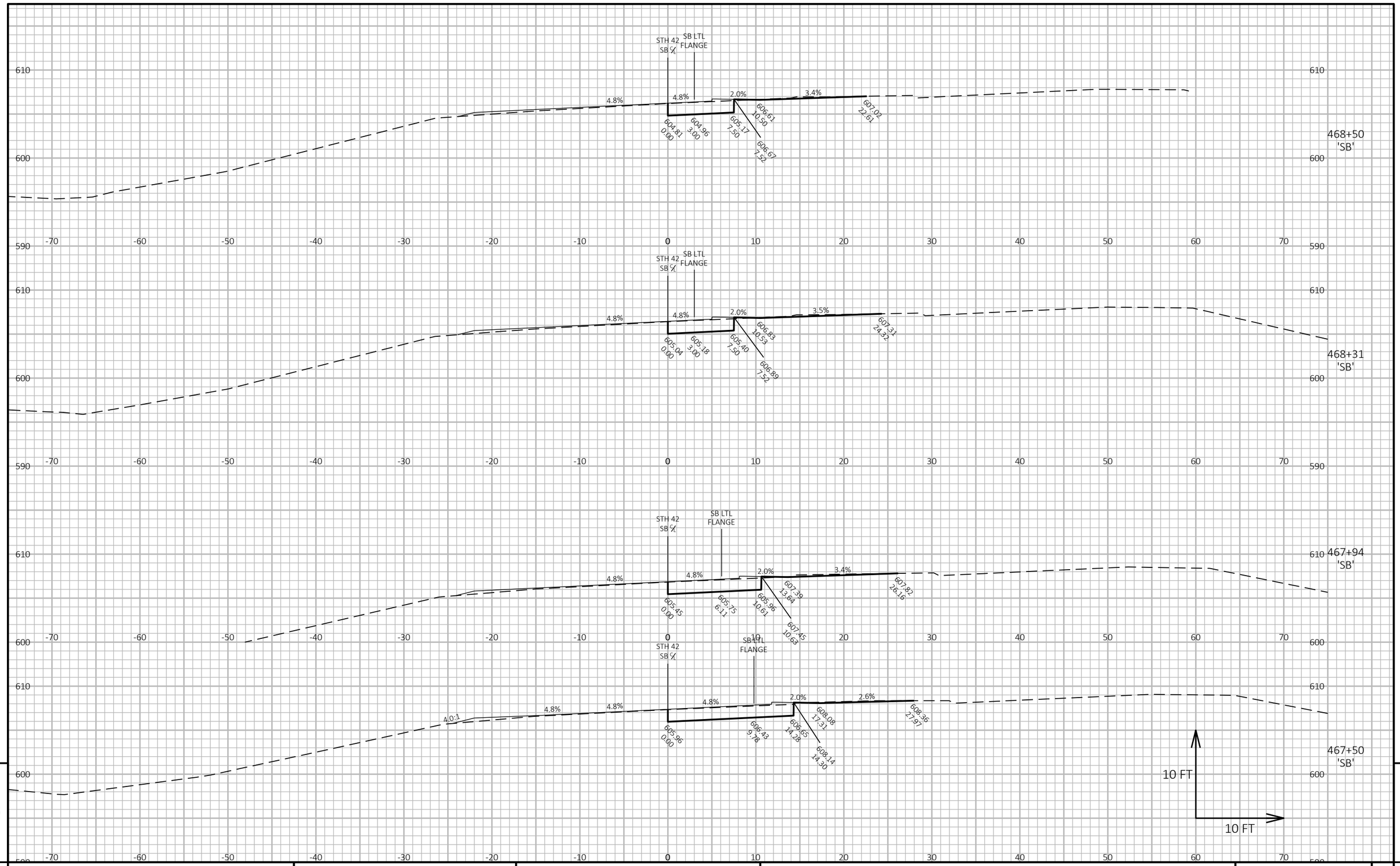
PLOT DATE : 5/11/2021 3:50 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 330	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090219-xs

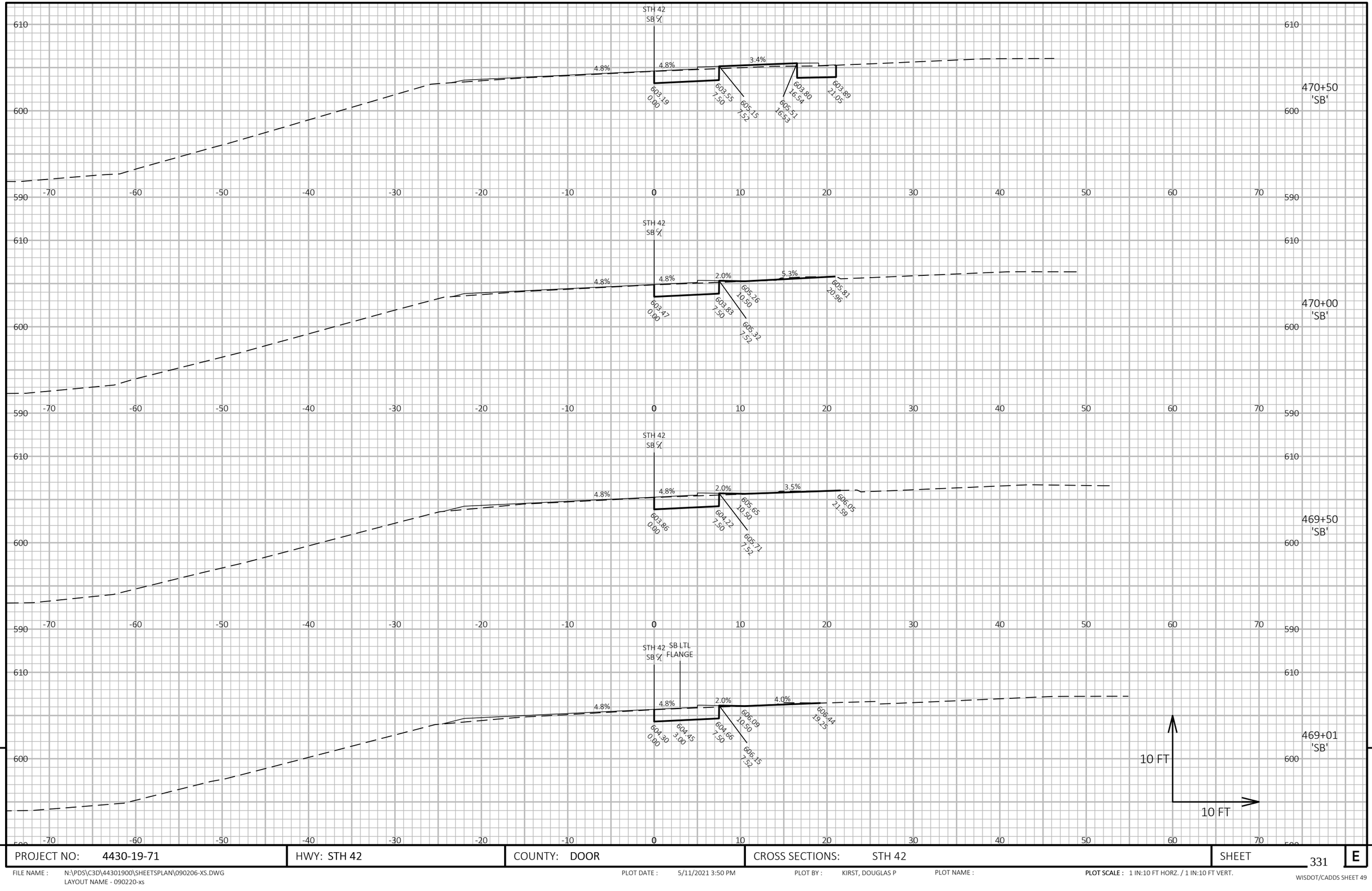
PLOT DATE : 5/11/2021 3:50 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 331	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090220-xs

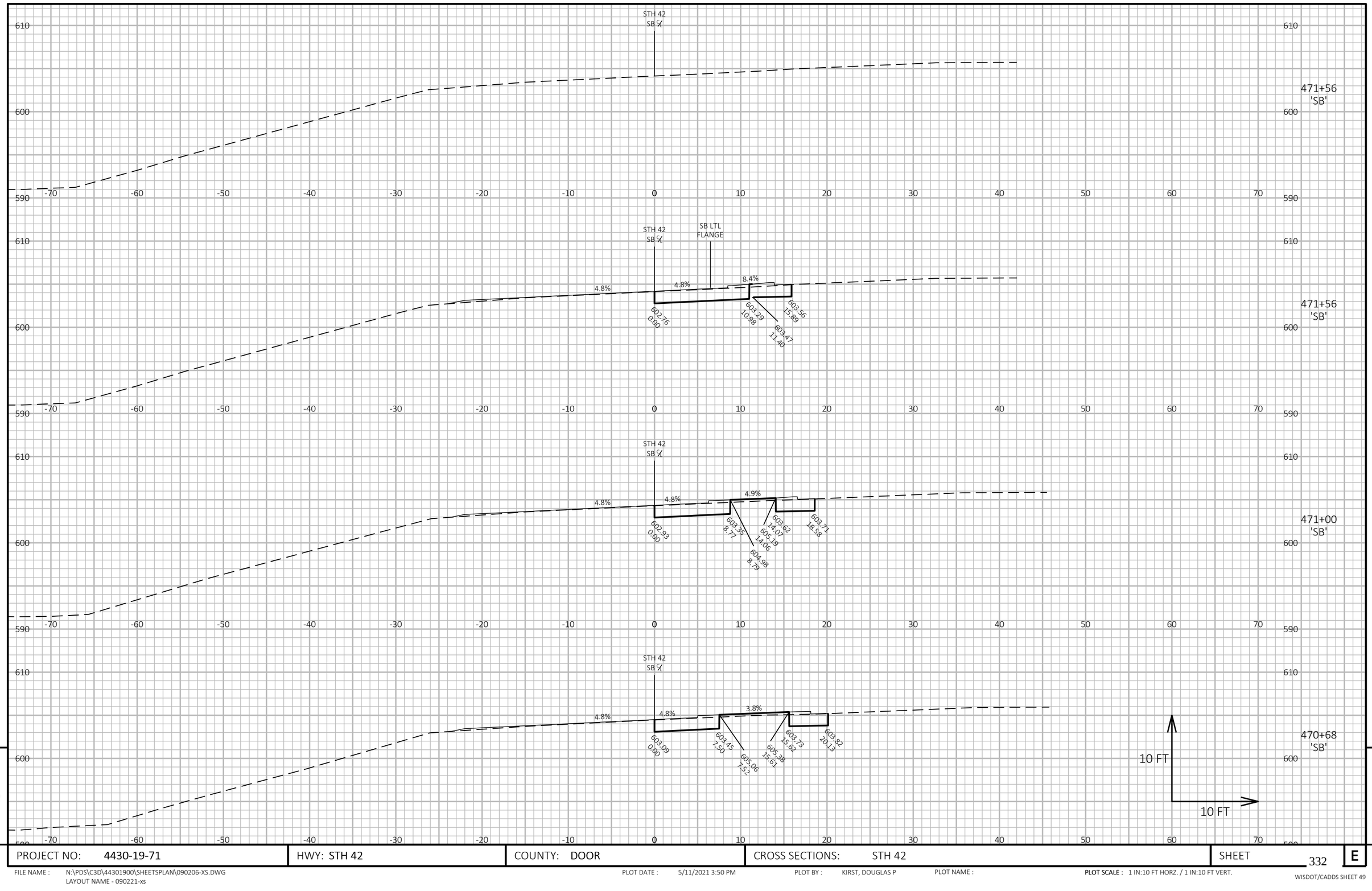
PLOT DATE : 5/11/2021 3:50 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET 332	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090221-xs

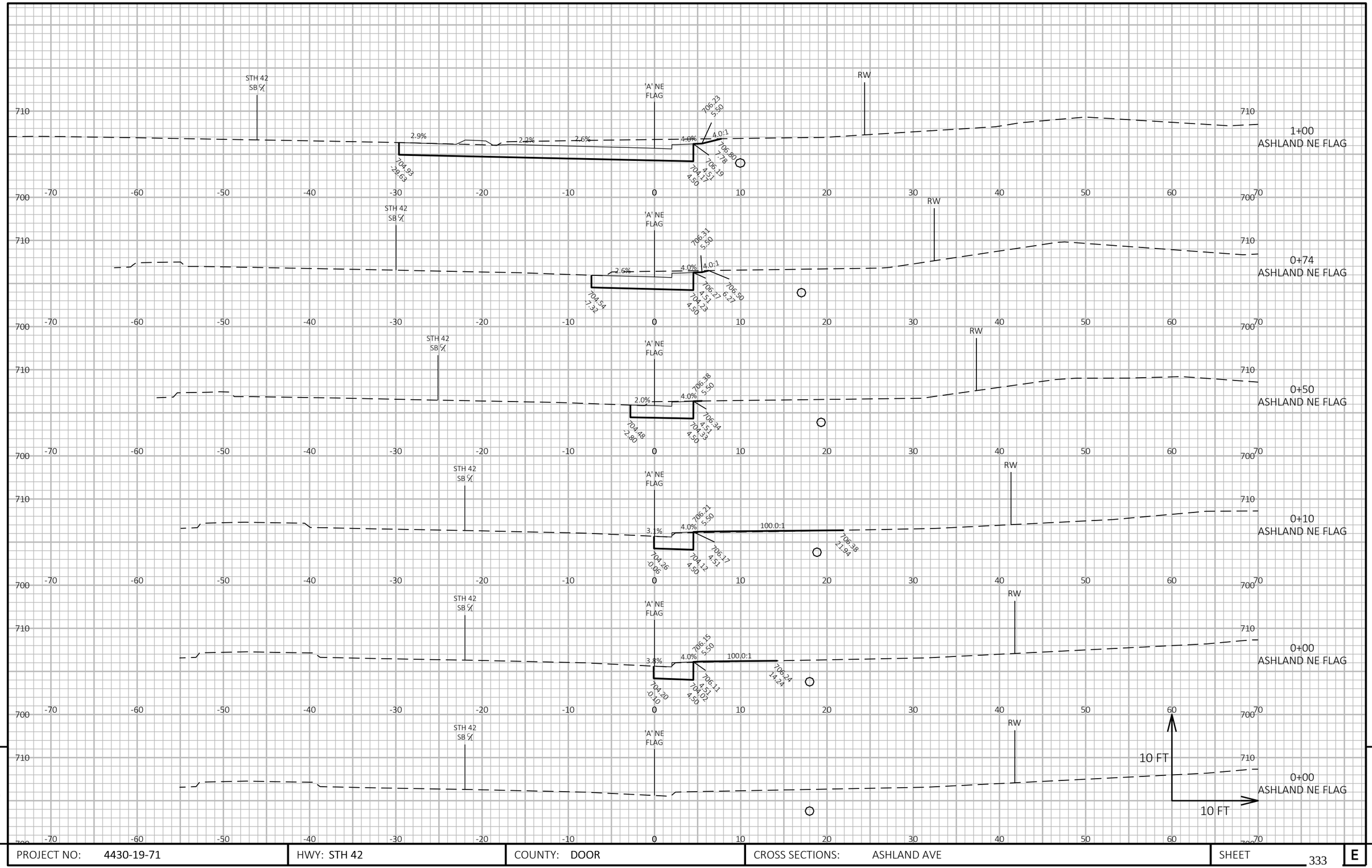
PLOT DATE : 5/11/2021 3:50 PM

PLOT BY : KIRST, DOUGLAS P

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: ASHLAND AVE	SHEET 333	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 090222-xs

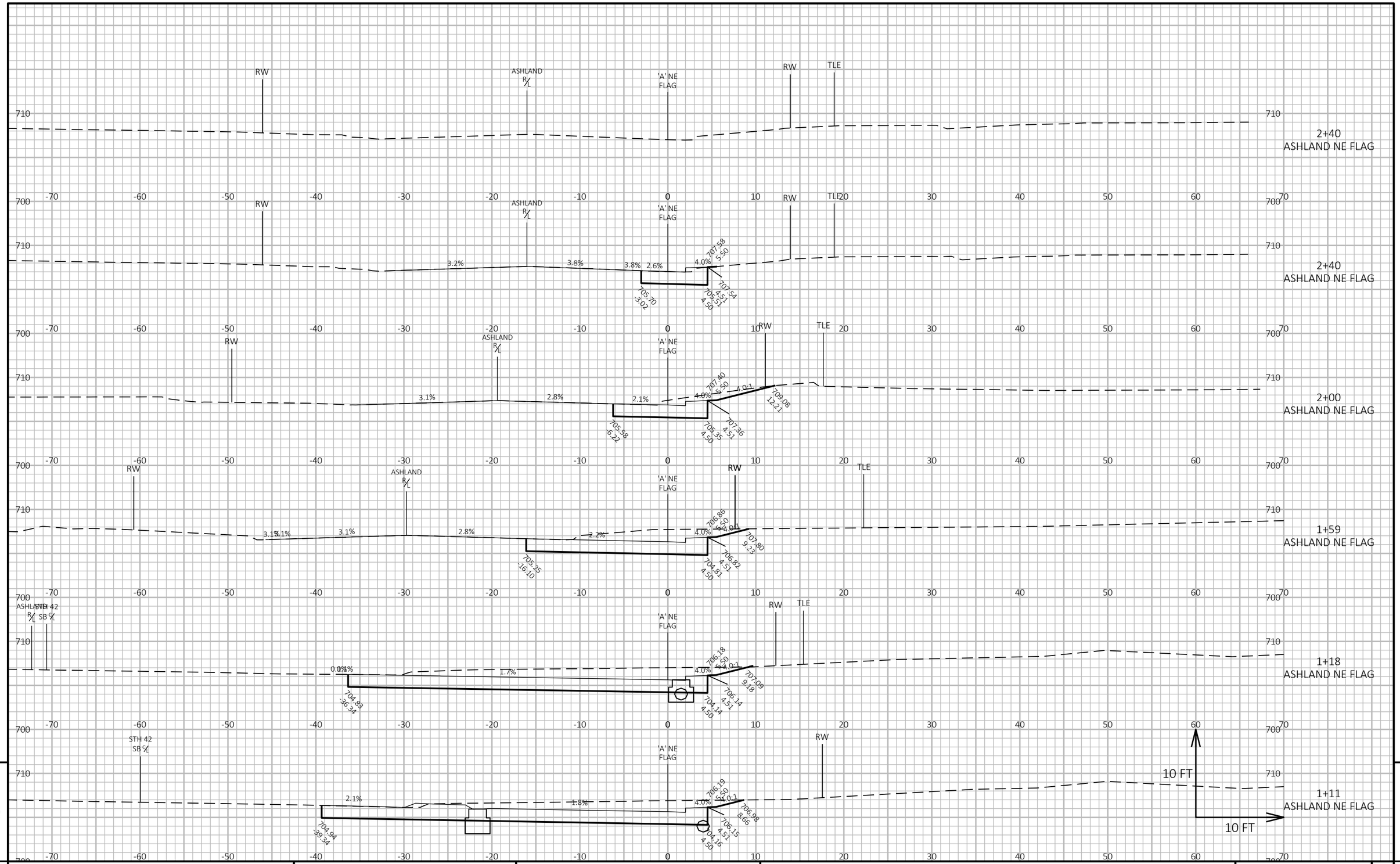
PLOT DATE : 4/29/2021 3:38 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: ASHLAND AVE	SHEET 334	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090202-XS.DWG
LAYOUT NAME - 090223-xs

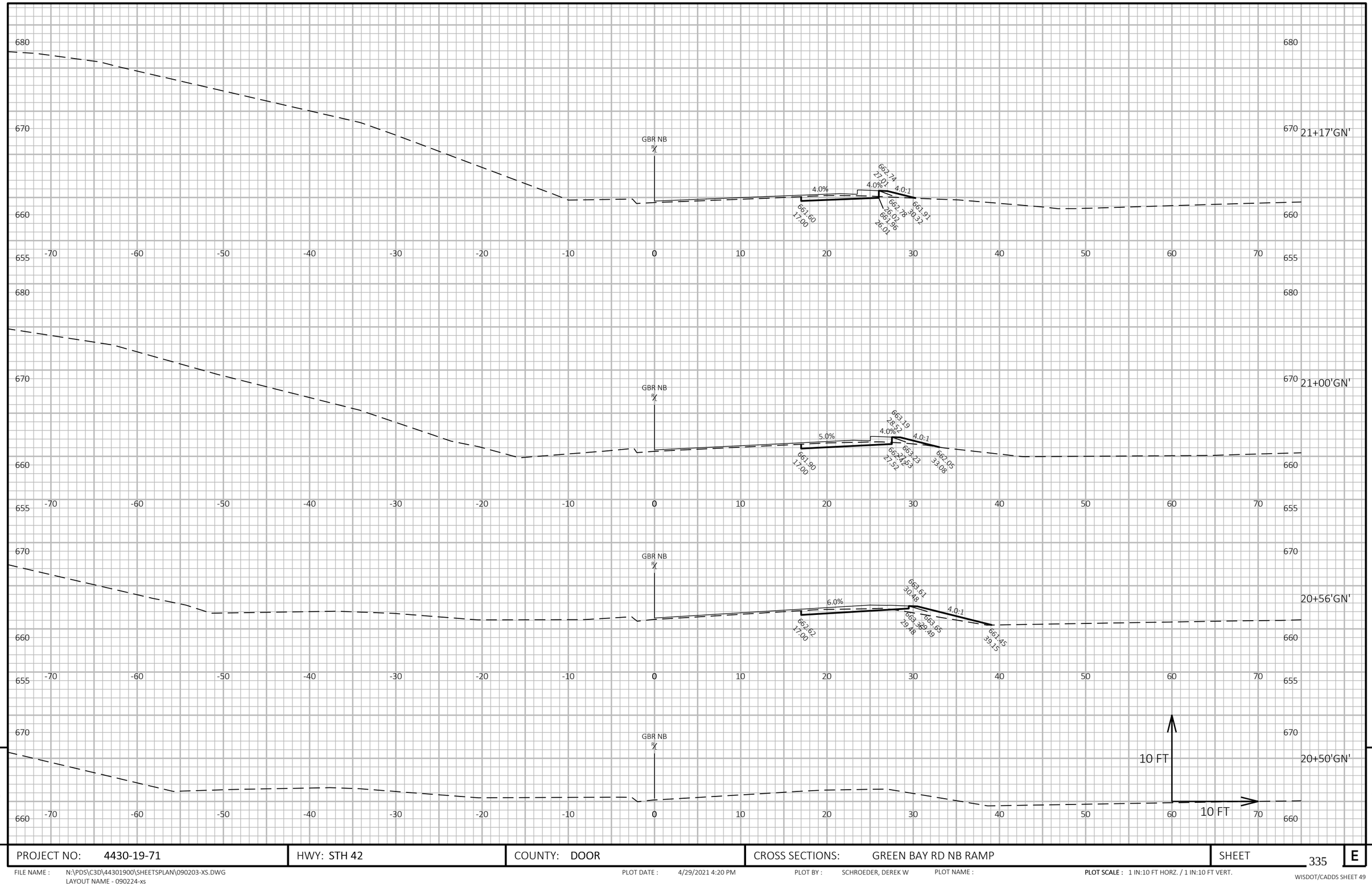
PLOT DATE : 4/29/2021 3:38 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: GREEN BAY RD NB RAMP	SHEET 335	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 090224-xs

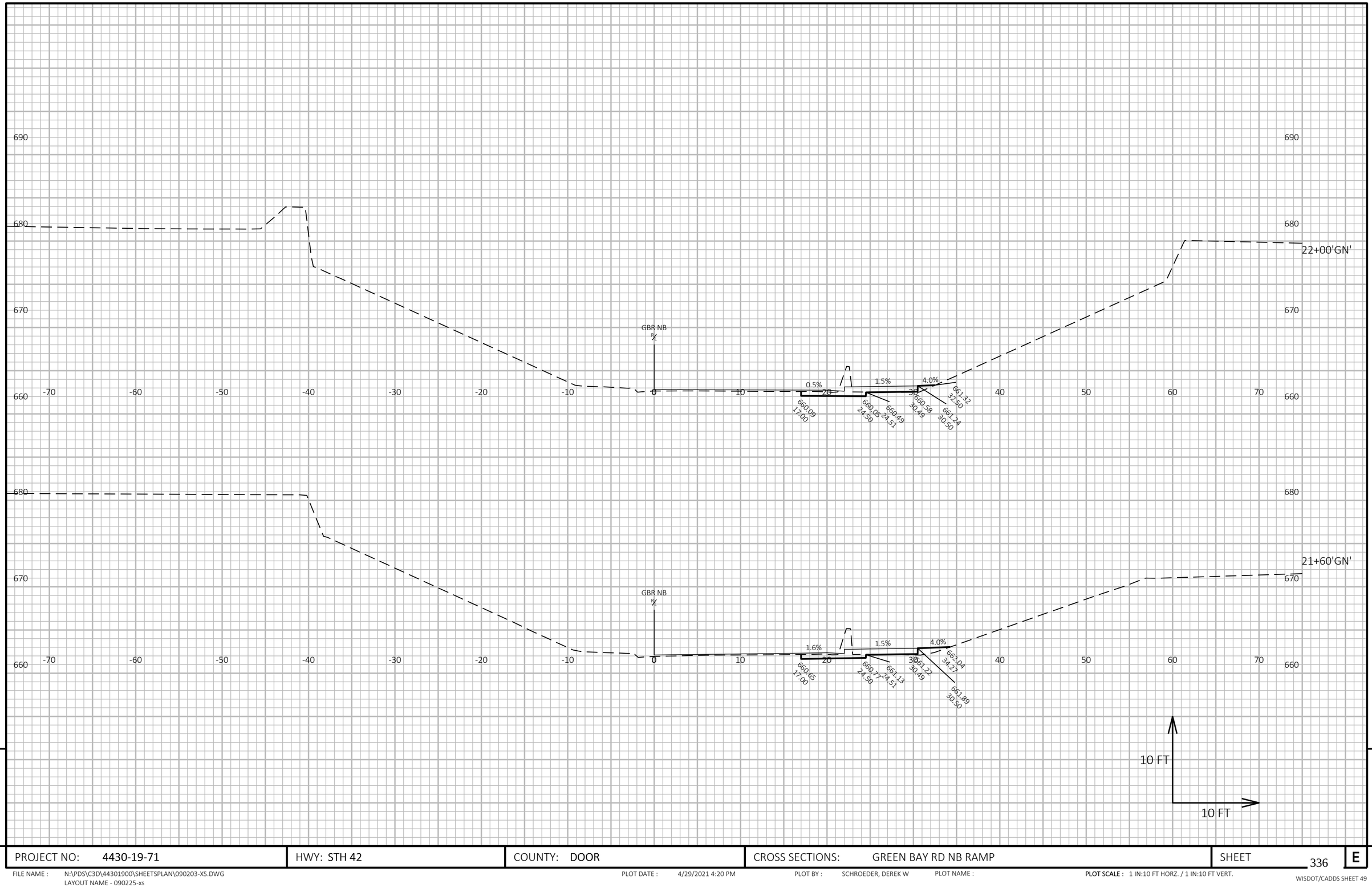
PLOT DATE : 4/29/2021 4:20 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: GREEN BAY RD NB RAMP	SHEET 336	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 090225-xs

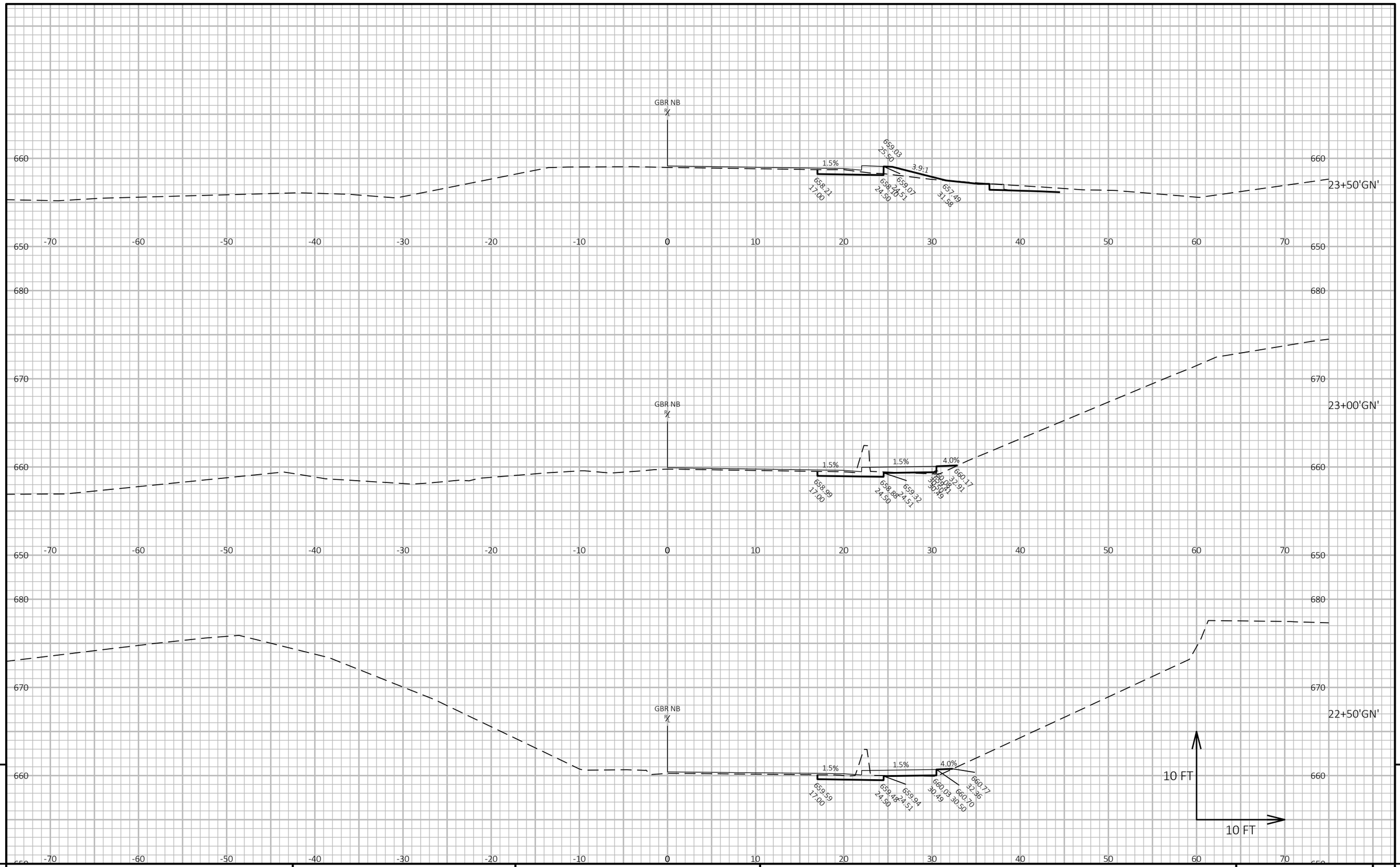
PLOT DATE : 4/29/2021 4:20 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: GREEN BAY RD NB RAMP	SHEET 337	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 090226-xs

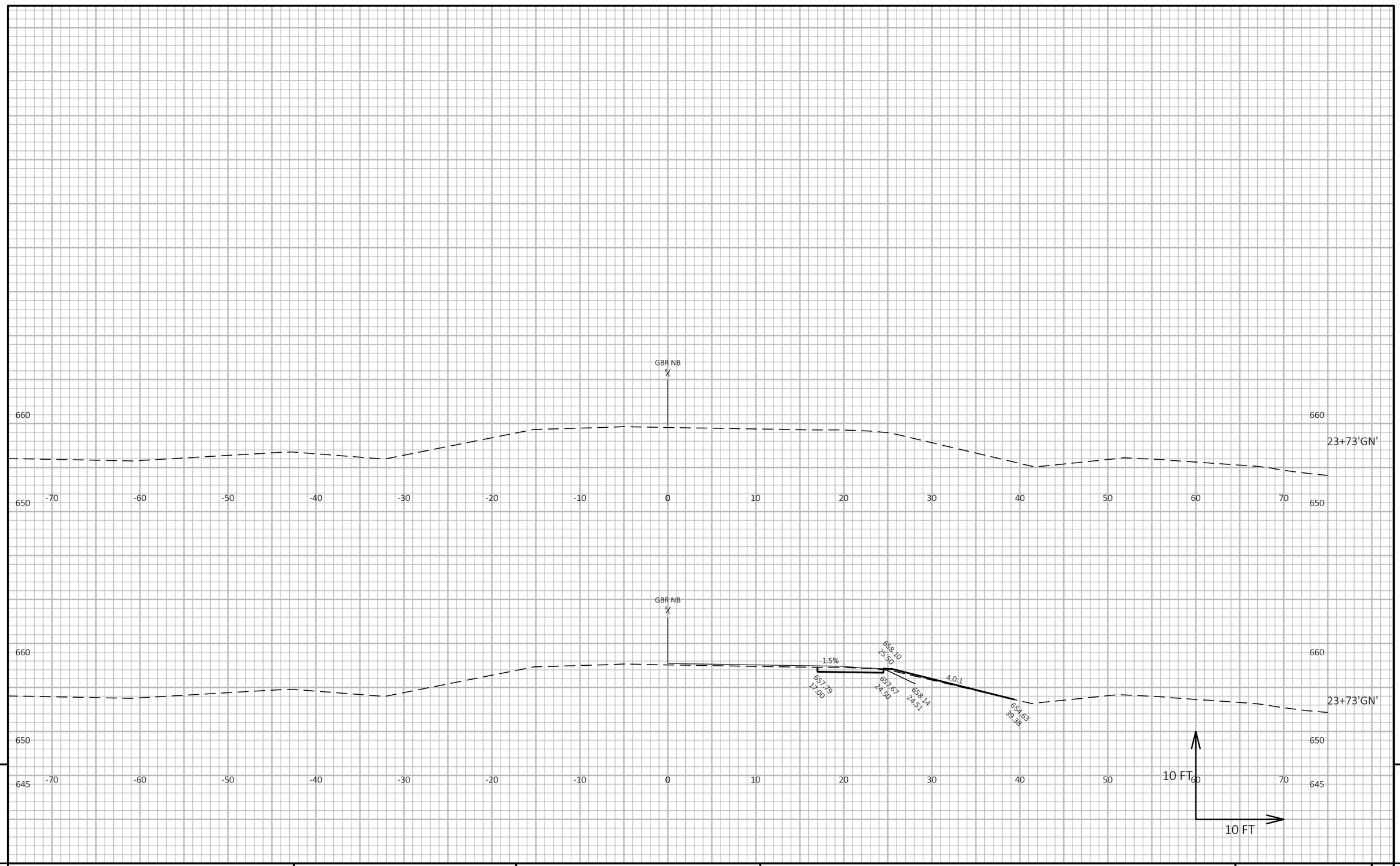
PLOT DATE : 4/29/2021 4:20 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: GREEN BAY RD NB RAMP	SHEET 338	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 090227-xs

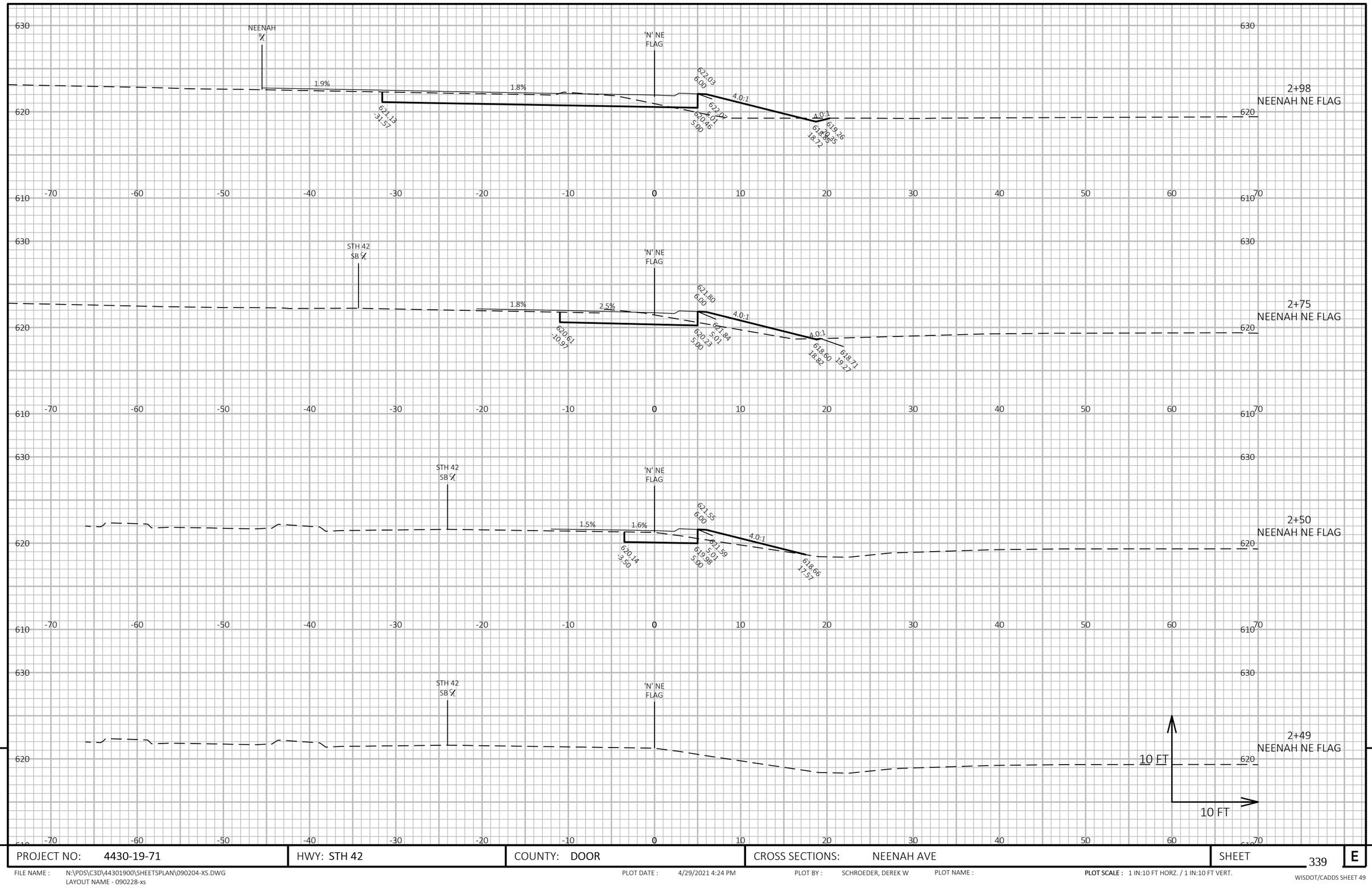
PLOT DATE : 4/29/2021 4:20 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: NEENAH AVE	SHEET 339	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 090228-xs

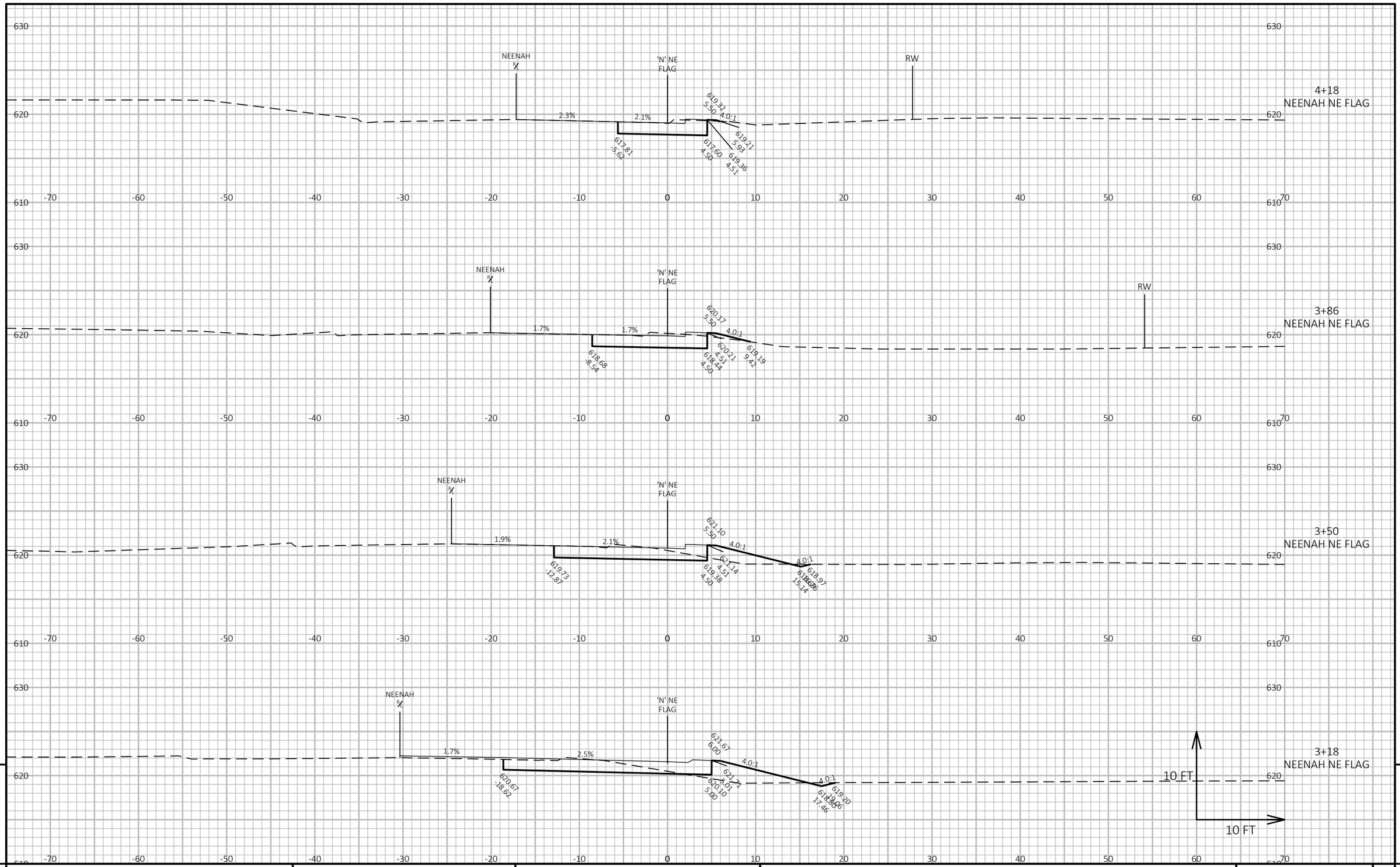
PLOT DATE : 4/29/2021 4:24 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: NEENAH AVE	SHEET 340	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 090229-xs

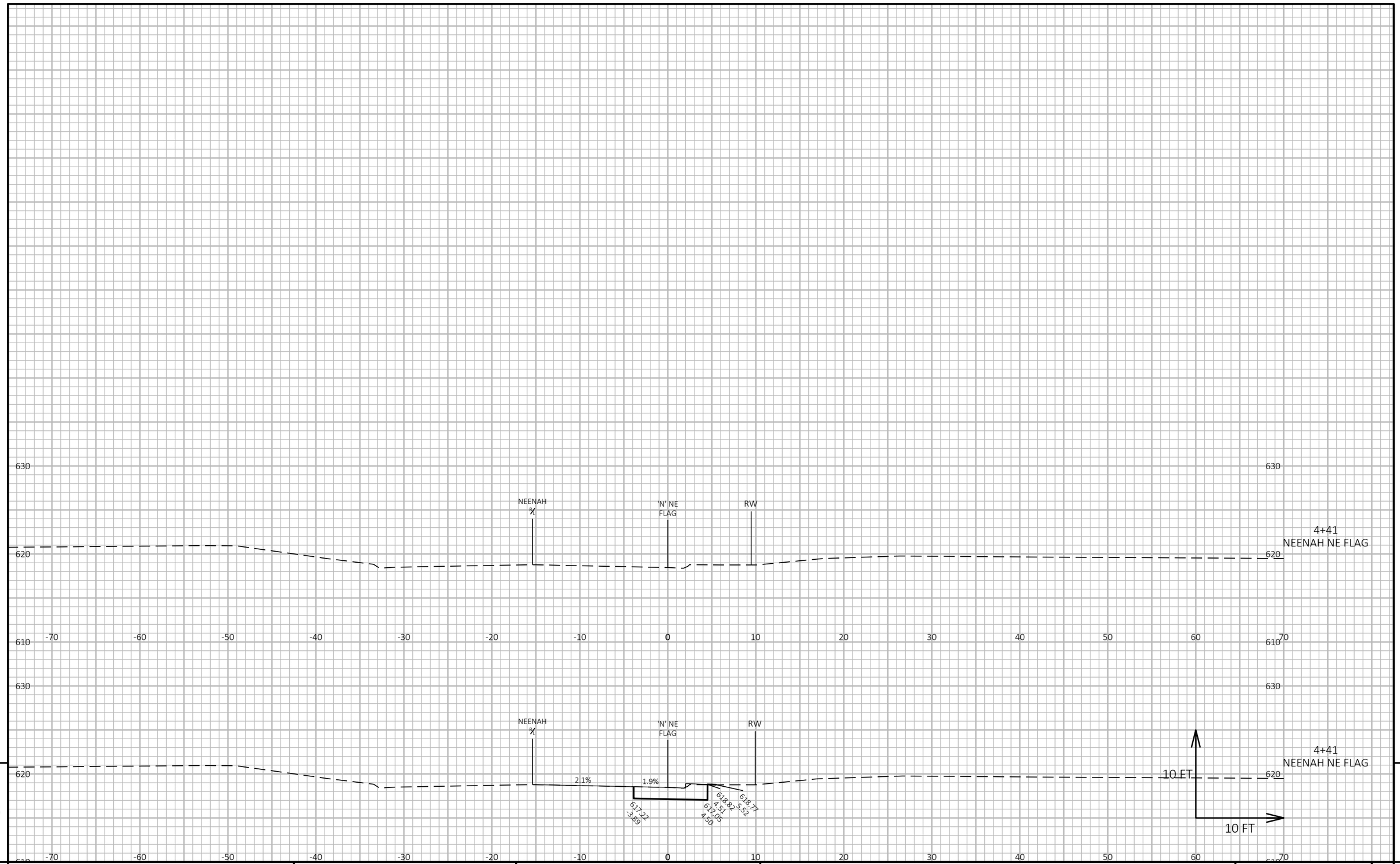
PLOT DATE : 4/29/2021 4:24 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: NEENAH AVE	SHEET 341	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 090230-xs

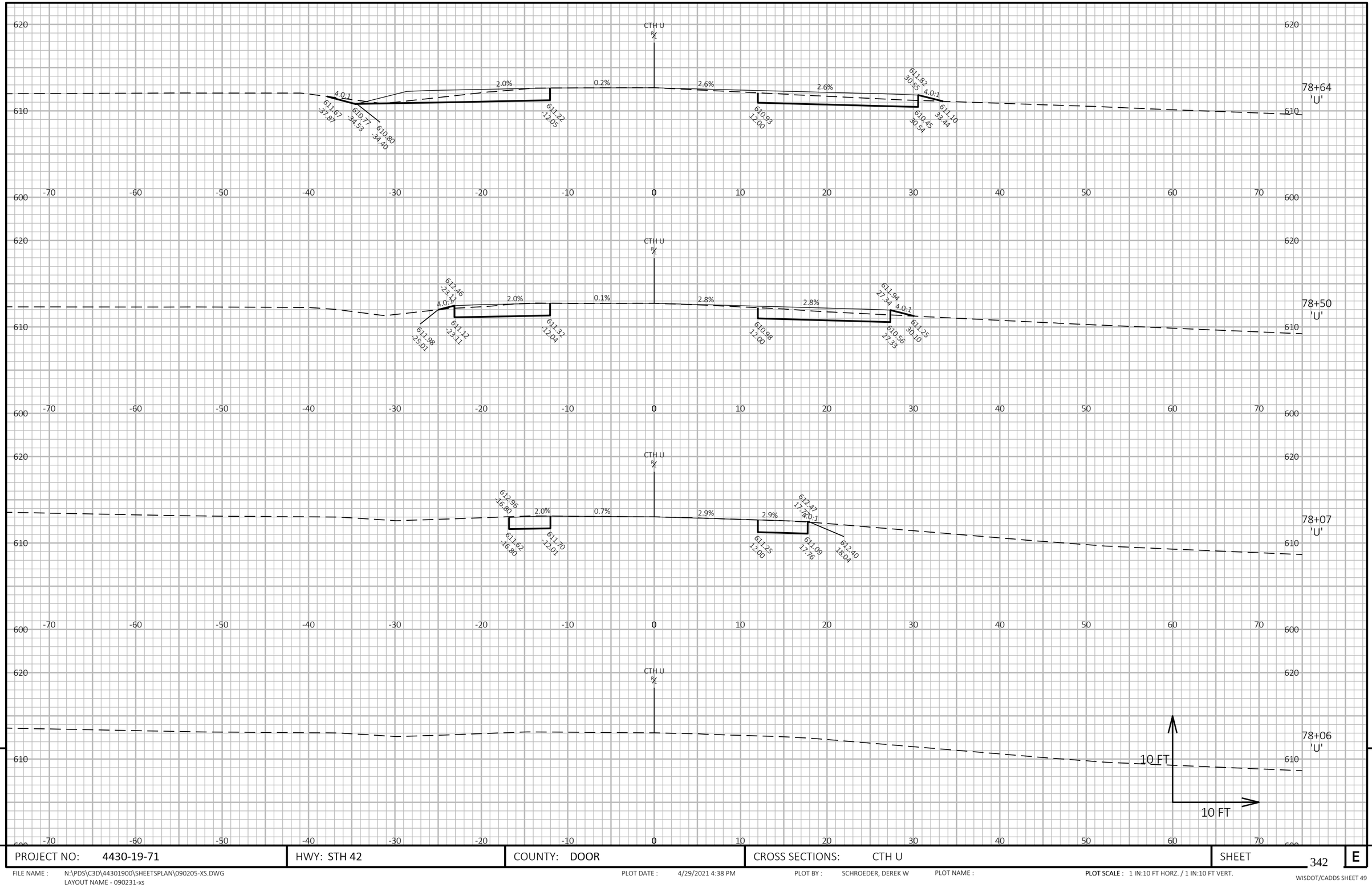
PLOT DATE : 4/29/2021 4:24 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: CTH U	SHEET 342	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090205-XS.DWG
LAYOUT NAME - 090231-xs

PLOT DATE : 4/29/2021 4:38 PM

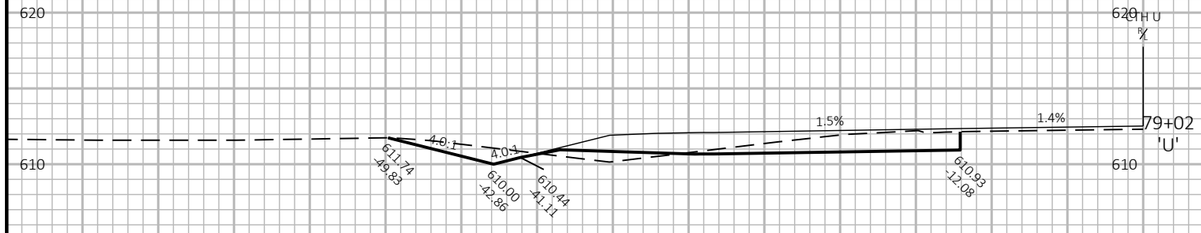
PLOT BY : SCHROEDER, DEREK W

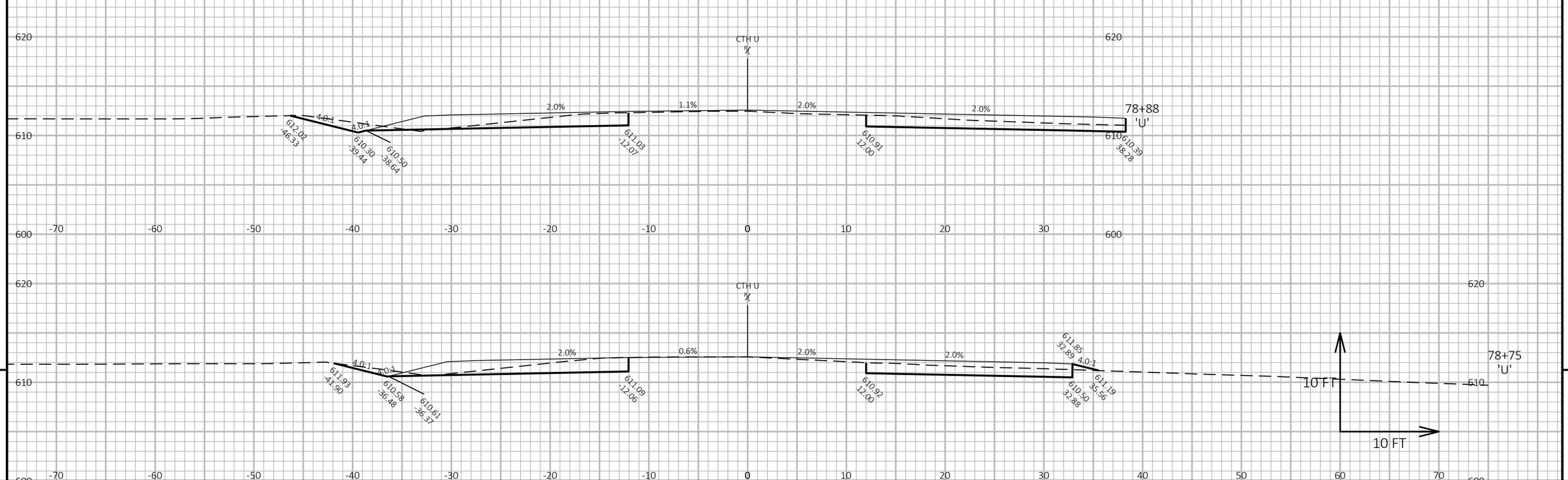
PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: CTH U	SHEET 343	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090205-XS.DWG
LAYOUT NAME - 090232-xs

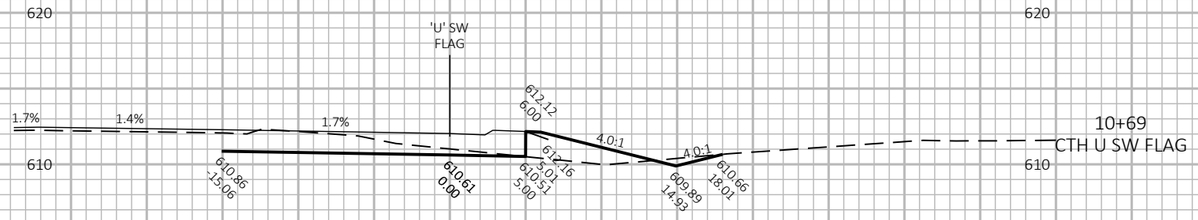
PLOT DATE : 4/29/2021 4:38 PM

PLOT BY : SCHROEDER, DEREK W

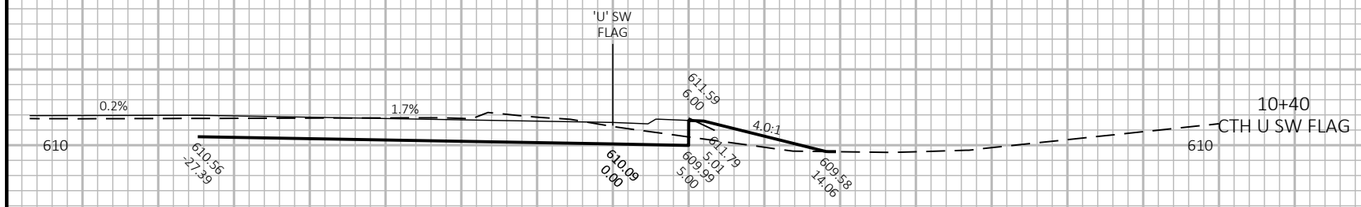
PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

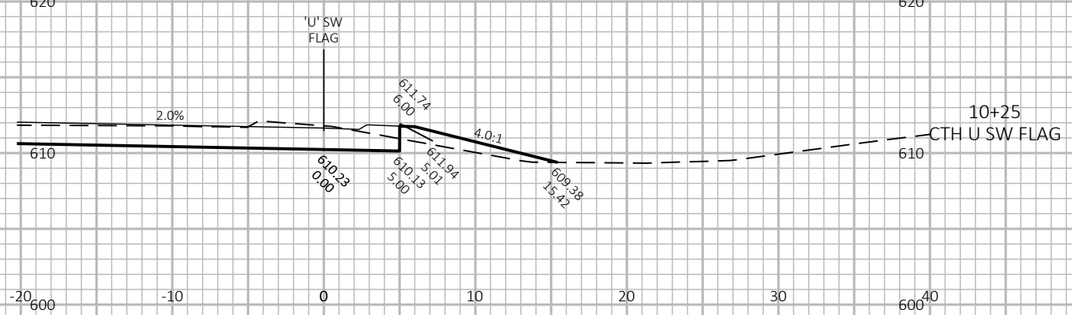
WISDOT/CADDS SHEET 49



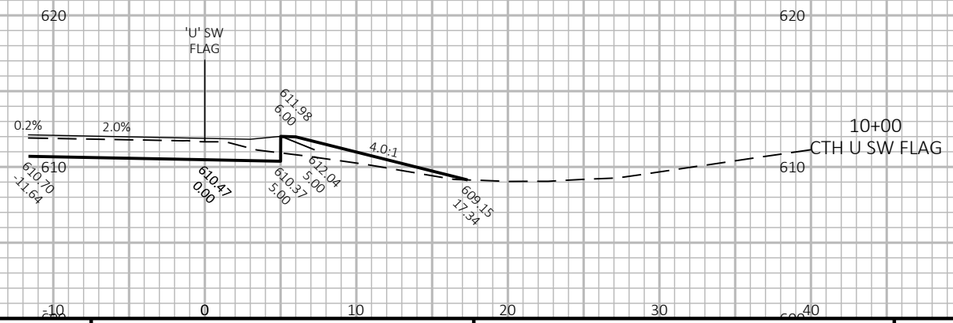
10+69
CTH U SW FLAG



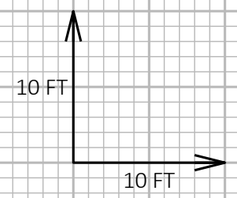
10+40
CTH U SW FLAG



10+25
CTH U SW FLAG



10+00
CTH U SW FLAG



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: CTH U	SHEET 344	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090205-XS.DWG
LAYOUT NAME - 090233-xs

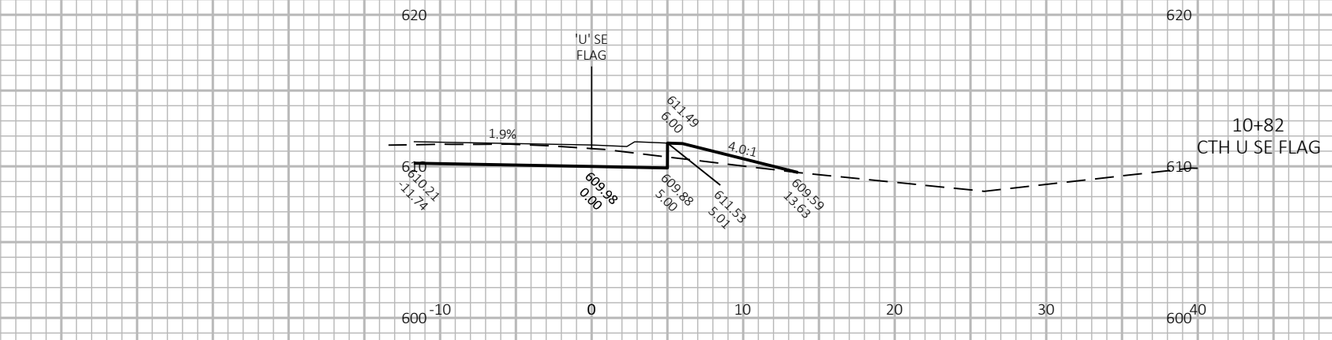
PLOT DATE : 4/29/2021 4:38 PM

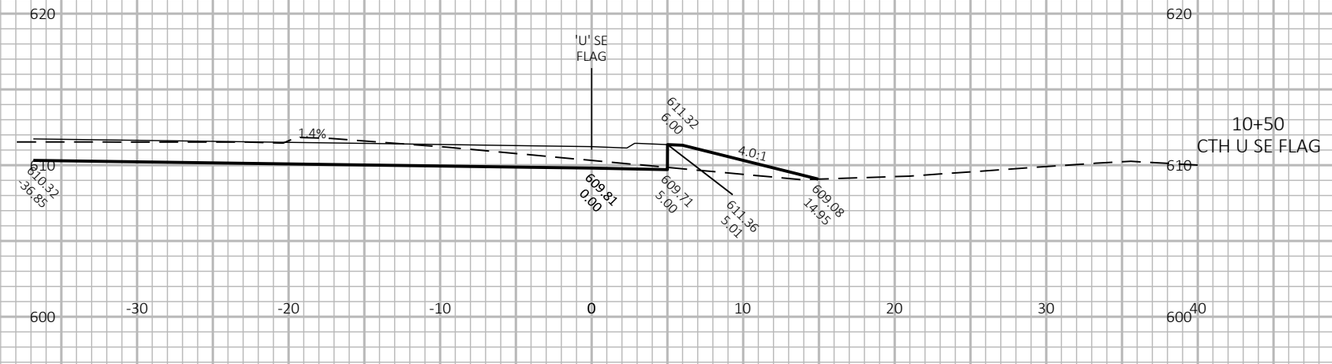
PLOT BY : SCHROEDER, DEREK W

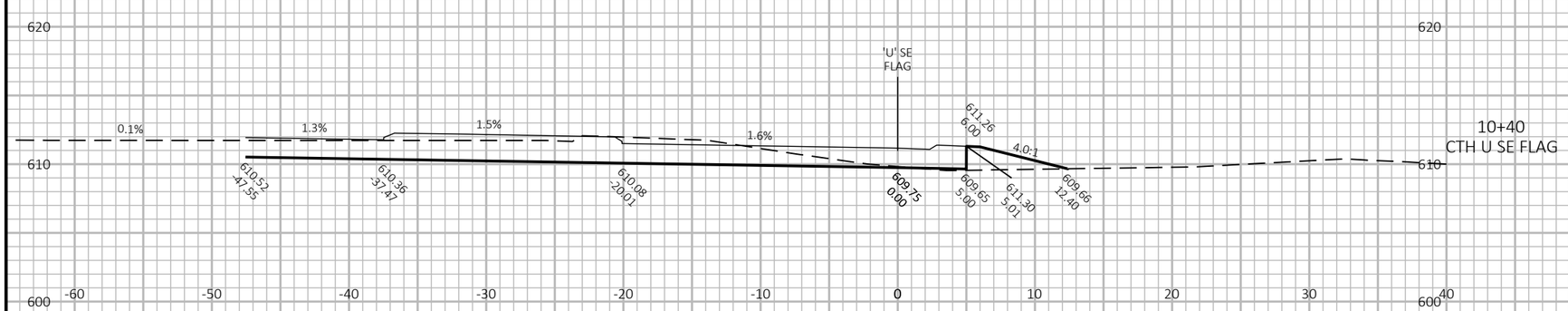
PLOT NAME :

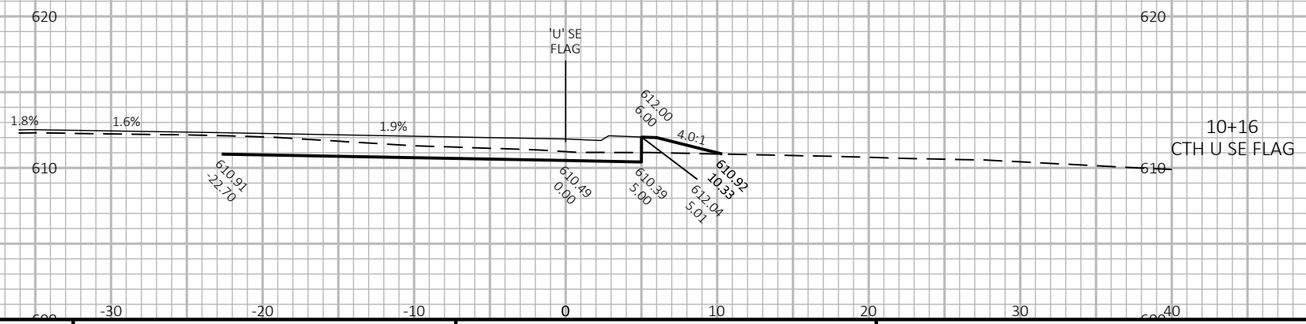
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

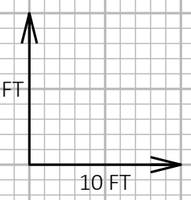
WISDOT/CADDS SHEET 49











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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: CTH U	SHEET 345	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090205-XS.DWG
LAYOUT NAME - 090234-xs

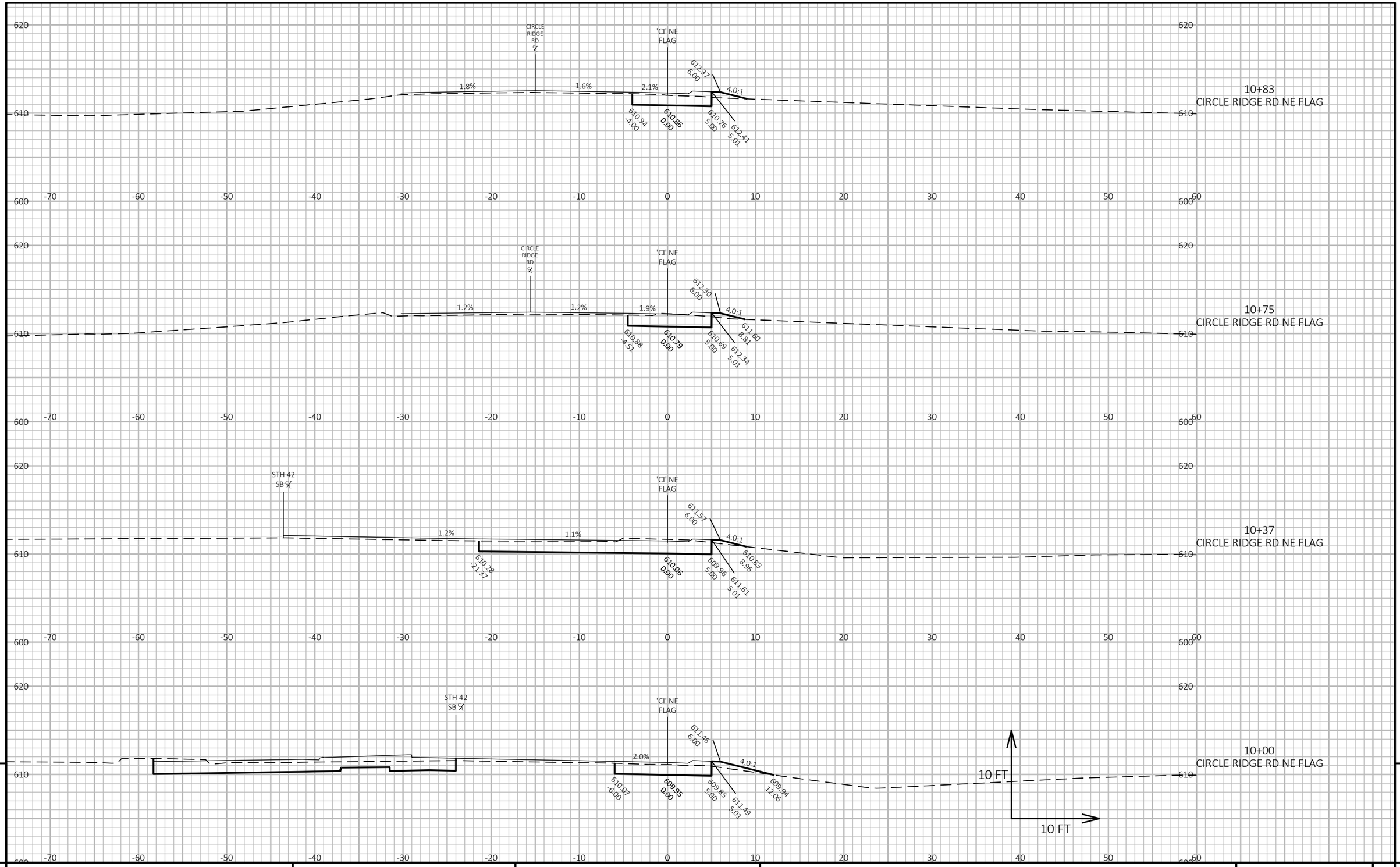
PLOT DATE : 4/29/2021 4:38 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: CIRCLE RIDGE RD	SHEET 346	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090236-xs

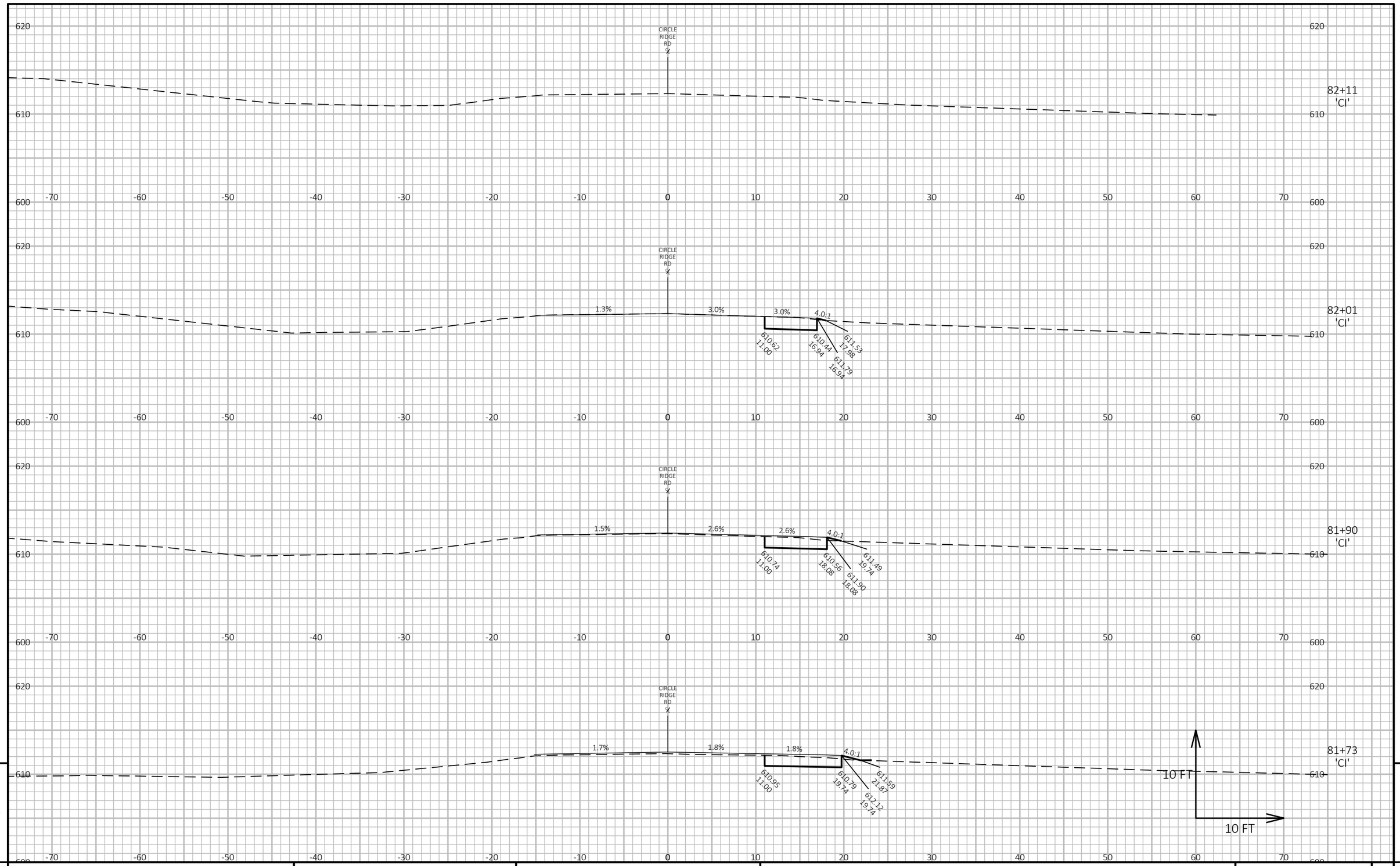
PLOT DATE : 4/29/2021 4:52 PM

PLOT BY : SCHROEDER, DEREK W

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 4430-19-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: CIRCLE RIDGE RD	SHEET 347	E

FILE NAME : N:\PDS\C3D\44301900\SHEETSPLAN\090206-XS.DWG
LAYOUT NAME - 090237-xs

PLOT DATE : 4/29/2021 4:52 PM

PLOT BY : SCHROEDER, DEREK W

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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