LAX

Apr 12, 2022

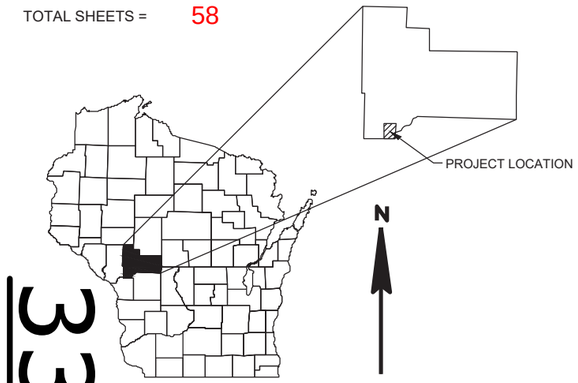
PROJECT ID: 7710-00-71

WITH: 7930-00-71

COUNTY: JACKSON

ORDER OF SHEETS

TOTAL SHEETS = 58



33

DESIGN DESIGNATION

A.A.D.T.	(2022)	=	2,510
A.A.D.T.	(2042)	=	2,510
D.H.V.		=	306
D.D.		=	60/40
T.		=	11.5%
DESIGN SPEED		=	55 MPH
ESALS		=	450,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MELROSE - SPARTA

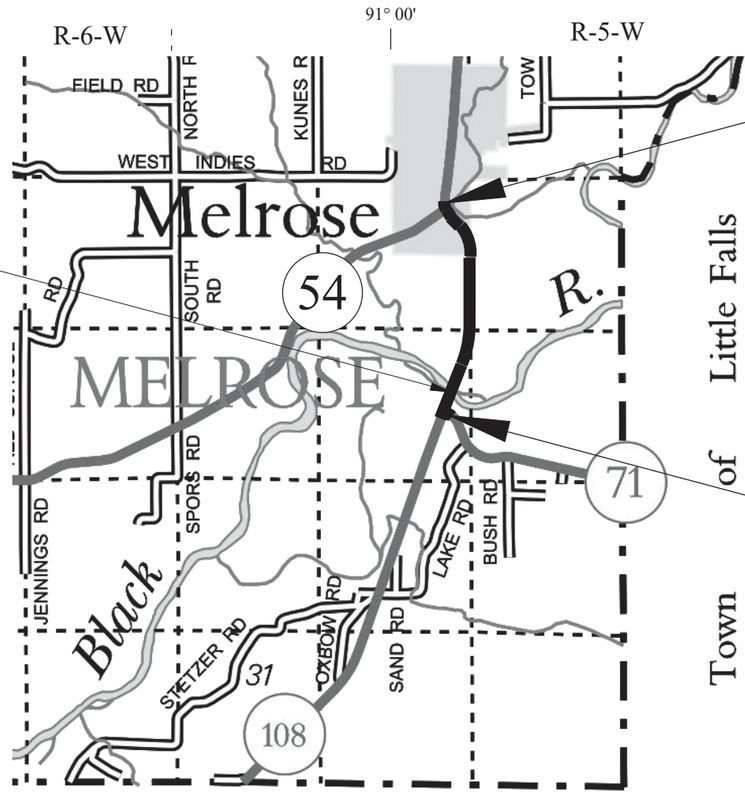
STH 54 TO STH 108

STH 71

JACKSON COUNTY

STATE PROJECT NUMBER
7710-00-71

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7710-00-71	WISC 2022308	1



BEGIN PROJECT
STA 4+04
Y = 35,945.143
X = 48,505.840

NET EXCEPTION TO CL LENGTH
BRIDGE B-27-0074
STA. 68+98 - STA. 75+69

END PROJECT
STA 82+54
Y = 28,580.754
X = 48,536.228

LAYOUT

SCALE 0 1.0 MI

TOTAL NET LENGTH OF CENTERLINE = 1.360 MI

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

ORIGINAL PLANS PREPARED BY

KNIGHT Engineers & Architects
831 Critter Court
Suite 400
Onalaska, WI 54650
Phone: (608) 519-1455

WISCONSIN
RYAN B. McKANE
E-37669
HOLMEN WI.
PROFESSIONAL ENGINEER

Ryan B McKane

9/30/2021 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KNIGHT E/A
Designer	KNIGHT E/A
Project Manager	BRIAN MEYER
Regional Examiner	SW REGION
Regional Supervisor	JIM SAVOLDELLI

APPROVED FOR THE DEPARTMENT

DATE: 10/01/21 (Signature)

E

GENERAL NOTES

- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESGINATED FOR REMOVAL BY THE ENGINEER.
- DISTURBED AREAS WITHING THE RIGHT OF WAY ARE TO BE SALVAGED TOPSOILED, FERTILIZED, SEEDED, AND MULCHED OR SODDED AS DIRECTED BY THE ENGINEER.
- MATCH EXISTING DRIVEWAYS WITH IN-KIND MATERIALS.
- PAVING LIMITS ARE TO BE DETERMINED BY THE ENGINEER.
- TACK COAT IS REQUIRED BETWEEN THE MILLED PAVEMENT AND HMA PAVEMENT. APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED SURFACES AND 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- HMA PAVEMENT TO BE PLACED IN 1.75-INCH LOWER LIFT AND 1.5-INCH UPPER LIFT.
- SURFACE WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- WHEN THE QUANTITIY OF BASE AGGREGATE IS MEASURED FOR PAVEMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- RIGHT OF WAY DEPICTED ON THE PLANS ARE BASED OFF OF PREVIOUS AS BUILTS. IF CONFLICTS ARE ANTICIPATED, THE CONTRACTOR SHALL FIELD VERIFY EXACT LIMITS AND NOTIFY THE ENGINEER.
- AERIAL IMAGERY SHOWN ON THIS PLAN IS FROM 2015 AND IS FOR INFORMATIONAL PURPOSES ONLY.
- CONTRACTOR TO PROTECT DJ4918 GPS AND KEEP CONSTRUCTION EQUIPMENT AT LEAST 10 FEET AWAY FROM DJ4918 GPS. ENSURE THAT DJ4918 GPS IS/ARE NOT DISTURBED, BUMPED OR MOVED DURING THE DURATION OF THE PROJECT. NOTIFY JACOB ROCKWEILER IMMEDIATELY IF DJ4918 GPS IS/ARE DISTURBED, BUMPED OR MOVED DURING CONSTRUCTION OPERATIONS. JACOB ROCKWEILER, P.E., WISCONSIN HEIGHT MODERNIZATION PROGRAM MANAGER WITH THE WISCONSIN DEPARTMENT OF TRANSPORTATION WHOSE PHONE NUMBER IS (608) 516-6362 AND EMAIL IS JACOB.ROCKWEILER@DOT.WI.GOV
- MILL AND PAVE ADJACENT TO MONUMENT WITHOUT DAMAGING THE MONUMENT

STANDARD ABBREVIATIONS

AC	ACRE	INL	INLET
AGG	AGGREGATE	INV	INVERT
AH	AHEAD	JCT	JUNCTION
AADT	ANNUAL AVERAGE DAILY TRAFFIC	LT	LEFT
ASPH	ASPHALTIC	L	LENGTH OF CURVE
AVG	AVERAGE	LIN FT or LF	LINEAR FOOT
BK	BACK	LS	LUMP SUM
BAD	BASE AGGREGATE DENSE	NC	NORMAL CROWN
BM	BENCH MARK	N	NORTH
BR	BRIDGE	NB	NORTHBOUND
CL or C/L	CENTER LINE	NO	NUMBER
CE	COMMERCIAL ENTRANCE	PT	POINT
CONC	CONCRETE	PC	POINT OF CURVATURE
CO	COUNTY	PI	POINT OF INTERSECTION
CTH	COUNTY TRUNK HIGHWAY	PT	POINT OF TANGENCY
CR	CREEK	PCC	PORTLAND CEMENT CONCRETE
CABC	CRUSHED AGGREGATE BASE COURSE	LB	POUND
CSD	COMMUNITY SENSITIVE DESIGN	PE	PRIVATE ENTRANCE
CY or CUYD	CUBIC YARD	R	RADIUS
CULV	CULVERT	RL or R/L	REFERENCE LINE
CP	CULVERT PIPE	RT	RIGHT
C & G	CURB AND GUTTER	R/W	RIGHT-OF-WAY
D	DEGREE OF CURVE	RD	ROAD
DIA	DIAMETER	SHLDR	SHOULDER
DISCH	DISCHARGE	SB	SOUTHBOUND
E	EAST	SF or SQ FT	SQUARE FEET
EB	EASTBOUND	SY or SQ YD	SQUARE YARD
EL or ELEV	ELEVATION	SDD	STANDARD DETAIL DRAWINGS
EW	ENDWALL	STH	STATE TRUNK HIGHWAYS
ENT	ENTRANCE	SE	SUPERELEVATION
EXC	EXCAVATION	T	TANGENT
EX	EXISTING	TEMP	TEMPORARY
FERT	FERTILIZER	TWLTL	TWO-WAY LEFT-TURN LANE
FE	FIELD ENTRANCE	UG	UNDERGROUND
FL or F/L	FLOW LINE	USH	UNITED STATES HIGHWAY
FT	FOOT	V	VELOCITY OR DESIGN SPEED
HE	HIGHWAY EASEMENT	VC	VERTICAL CURVE
HMA	HOT MIX ASPHALT	WB	WESTBOUND
CWT	HUNDREDWEIGHT	YD	YARD

AREA CONTACTS

WISDOT PROJECT MANAGER
BRIAN MEYER, PE
3550 MORMON COULEE RD
LA CROSSE, WI 54601
(608) 789-5676
BRIAN.MEYER@DOT.WI.GOV

DESIGN CONTACT
KNIGHT E/A, INC.
RYAN MCKANE, PE
831 CRITTER CT, STE 400
ONALASKA, WI 54650
(608) 713-9274
RMCKANE@KNIGHTEA.COM

WISDNR: JACKSON COUNTY
BRADLEY BETTHAUSER
910 HIGHWAY 54 EAST
BLACK RIVER FALLS WI 54615
(715) 213-9064
BRADLEY.BETTHAUSER@WISCONSIN.GOV

UTILITY CONTACTS

CENTURYLINK - COMMUNICATION LINE
BRIAN STELPLUGH
333 NORTH FRONT ST
LA CROSSE, WI 54601
(608) 615-4136
BRIAN.STELPLUGH@LUMEN.COM

CHARTER COMMUNICATIONS - COMMUNICATION LINE
PERRY McCLELLAN
1228 12TH AVE S
ONALASKA, WI 54650
(608) 317-6213
PERRY.MCCLELLAN@CHARTER.COM

VILLAGE OF MELROSE - SEWER
RAMON KNUDTSON
112 N WASHINGTON ST
P.O. BOX 117
MELROSE, WI 54642-0117
(608) 488-4007
UTILITIES@MELROSEWI.COM

VILLAGE OF MELROSE - WATER
RAMON KNUDTSON
112 N WASHINGTON ST
P.O. BOX 117
MELROSE, WI 54642-0117
(608) 488-4007
UTILITIES@MELROSEWI.COM

XCEL ENERGY - ELECTRICITY
JASON McROBERTS
3315 COMMERCE ST
LA CROSSE, WI 54603
(715) 577-1132
JASON.L.MCROBERTS@XCELENERGY.COM

ORDER OF TYPICAL SECTION & DETAIL SHEETS

1. GENERAL NOTES
2. PROJECT OVERVIEW
3. TYPICAL SECTIONS
4. CONSTRUCTION DETAILS
5. ALIGNMENT DETAIL & TIES

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

RUNOFF COEFFICIENT TABLE

A	HYDROLOGIC SOIL GROUP											
	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 = 10.88 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.00 ACRES

2

2

JACKSON COUNTY

LA CROSSE COUNTY

ARNOLD RD

170+00

180+00

190+00

STH 108

200+00

210+00

OXBOW RD

220+00

230+00

240+00

250+00

STETZER RD

ROD & GUN CLUB RD

LAKE RD

260+00

270+00

SAND RD

SAND CREEK

BRIDGE B-27-10

280+00

290+00

300+00

STH 108

310+00

N

BEGIN PROJECT
7930-00-71
STA 168+40
Y = 15,675.021
X = 41,471.122

SCALE, FEET 0 500 1000

END PROJECT
7930-00-71
STA 317+68
Y = 28,541.304
X = 48,428.683

300+00

STH 108

310+00

BLACK RIVER

BRIDGE B-27-74

80+00

STH 71

70+00

60+00

50+00

40+00

STH 71

30+00

ENVIRONMENTALLY SENSITIVE AREA

20+00

10+00

STH 54

VILLAGE OF MELROSE

LOVELL ST

END PROJECT
7710-00-71
STA 82+54
Y = 28,580.754
X = 48,536.228

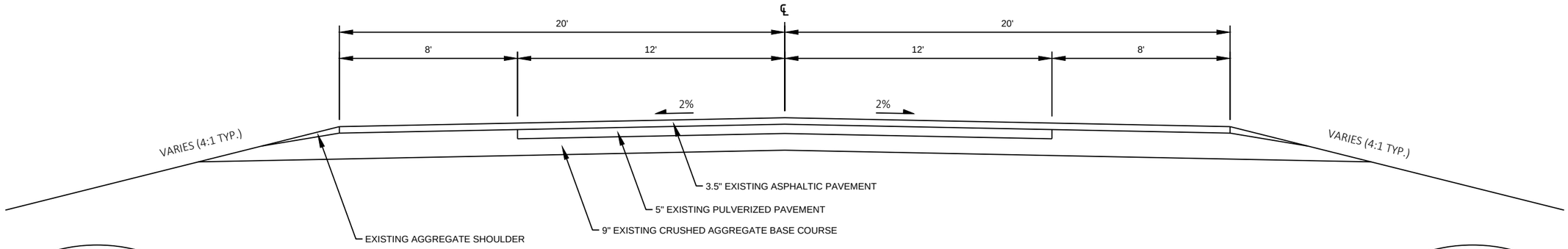
BEGIN PROJECT
7710-00-71
STA 4+04
Y = 35,945.143
X = 48,505.840

N

SCALE, FEET 0 500 1000

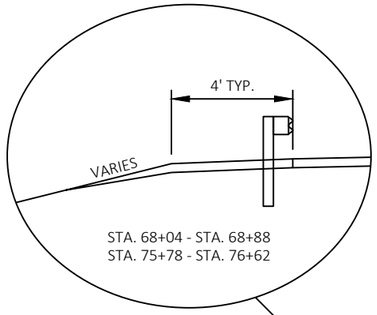
PROJECT NO: 7710-00-71	HWY: STH 71	COUNTY: JACKSON	PROJECT OVERVIEW	SHEET 4	E

2

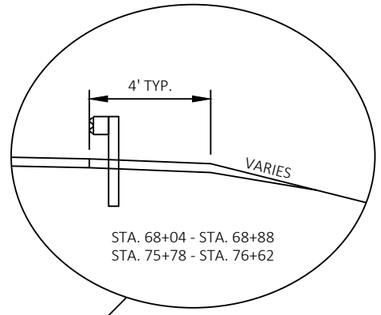


TYPICAL EXISTING SECTION - STH 71

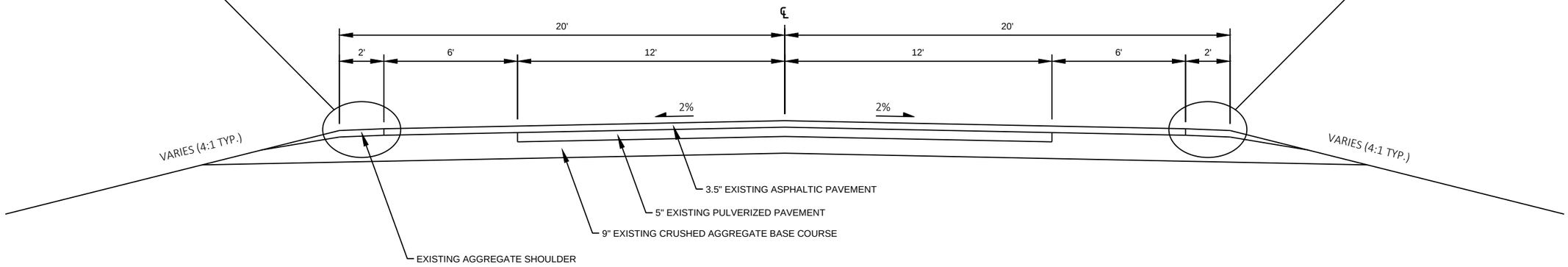
STA. 4+04 - STA. 25+00



STA. 68+04 - STA. 68+88
STA. 75+78 - STA. 76+62



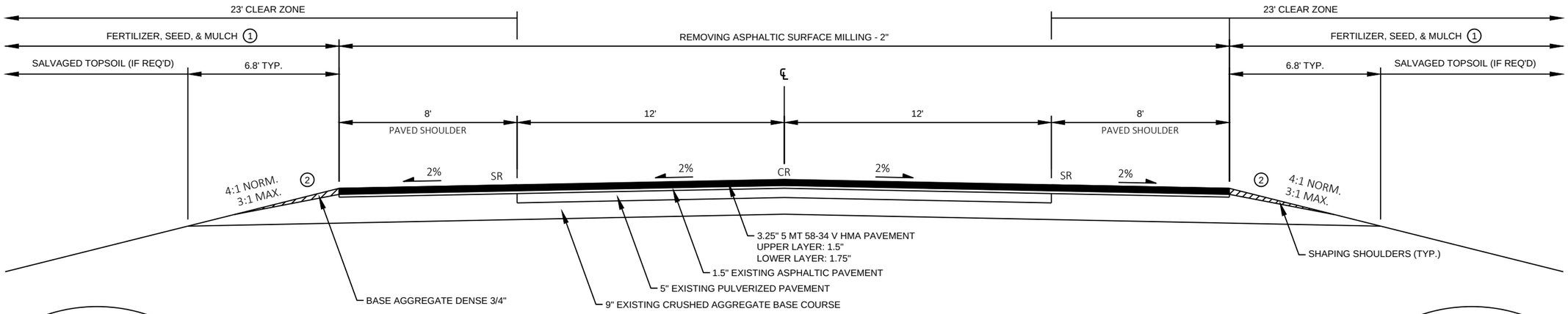
STA. 68+04 - STA. 68+88
STA. 75+78 - STA. 76+62



TYPICAL EXISTING SECTION - STH 71

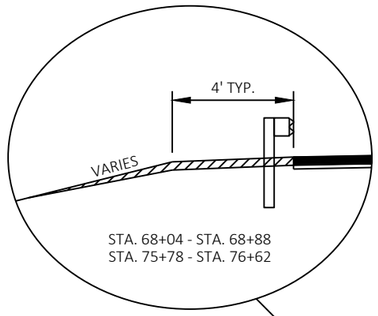
STA. 25+00 - STA. 68+98
STA. 75+68 - STA. 82+54

PROJECT NO: 7710-00-71	HWY: STH 71	COUNTY: JACKSON	TYPICAL SECTIONS	SHEET 5	E

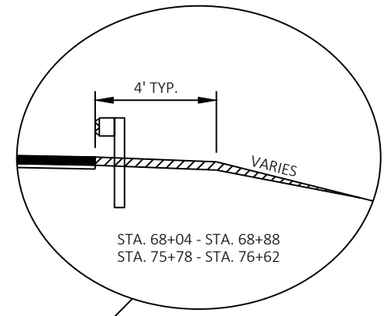


TYPICAL PROPOSED SECTION - STH 71

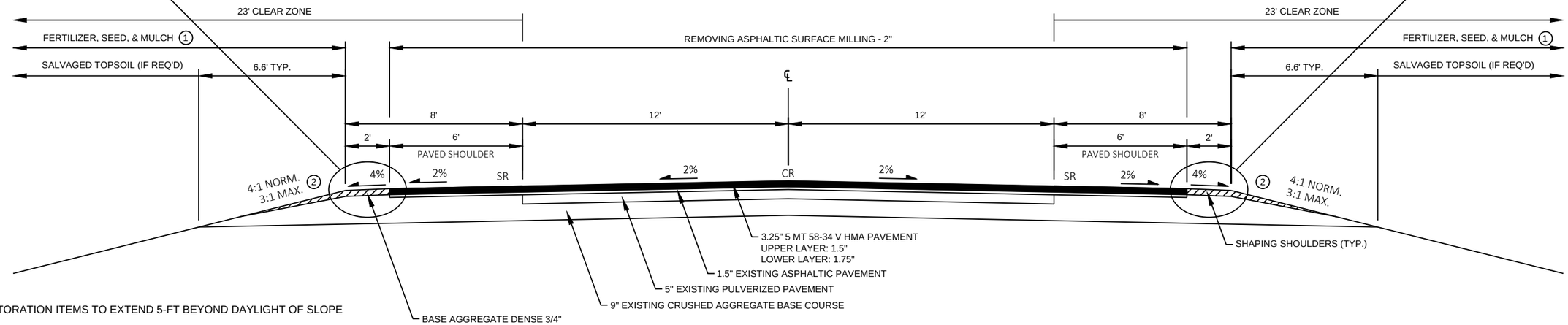
STA. 4+04 - STA. 25+00



STA. 68+04 - STA. 68+88
STA. 75+78 - STA. 76+62



STA. 68+04 - STA. 68+88
STA. 75+78 - STA. 76+62



TYPICAL PROPOSED SECTION - STH 71

STA. 25+00 - STA. 68+98
STA. 75+68 - STA. 82+54

(1) RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE

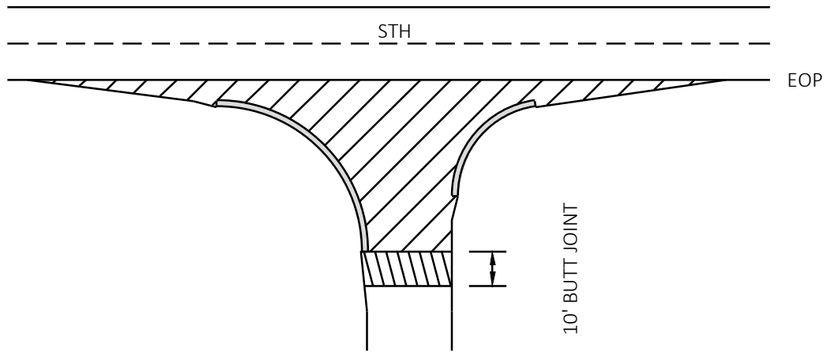
(2) ROUND SHOULDERS TO MATCH EXISTING SLOPES

CR = CENTERLINE RUMBLE STRIPS
SR = TYPE I SHOULDER RUMBLE STRIPS

NOTES:

- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS

PROJECT NO: 7710-00-71	HWY: STH 71	COUNTY: JACKSON	TYPICAL SECTIONS	SHEET 6	E

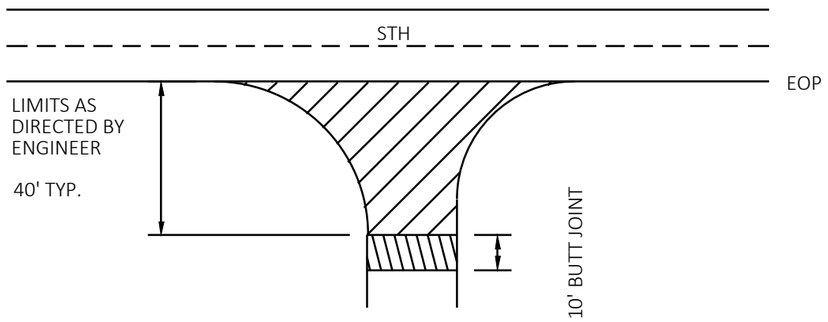


REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

SIDE ROADS
WITH CURB AND GUTTER

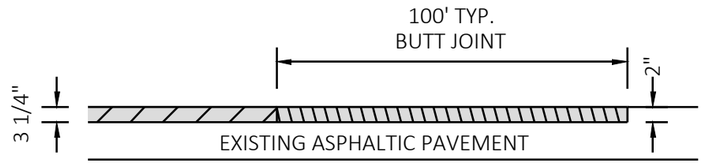


REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

SIDE ROADS
WITHOUT CURB AND GUTTER



HMA PAVEMENT

REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS

BUTT JOINT
MAINLINE AND BRIDGES

2

CURVE 1
PI STA = 6+80.81
Y = 35672.150
X = 48443.530
DELTA = 55°02'15"
D = 5°58'06"
T = 500.14'
L = 922.16'
R = 960.00'
PC STA = 1+80.66
Y = 36167.948
X = 48509.315
PT STA = 11+02.83
Y = 35334.125
X = 48812.151
SE = 6.0%

BP: 1+00.00
Y=36247.9121
X=48519.9254

PC: 1+80.66

PT: 11+02.83

PC: 12+67.88

LOVELL ST

BP: 0+00.00
Y=35681.9771
X=48570.9090

EP: 3+20.00
Y=35498.6296
X=48308.6425

S7° 33' 30"W

CP 1

S47° 28' 45"E

S55° 02' 35"W

STH 54

BEGIN PROJECT
STA 4+04
Y =35,945.143
X = 48,505.840

CURVE 2
PI STA = 19+15.73
Y = 34784.716
X = 49411.290
DELTA = 48°18'51"
D = 3°58'00"
T = 647.85'
L = 1218.00'
R = 1444.43'
PC STA = 12+67.88
Y = 35222.572
X = 48933.801
PT STA = 24+85.88
Y = 34136.932
X = 49401.850
SE = 5.8%

PT: 24+85.88

SECTION 1/4 CORNER

PC: 52+10.80

SECTION CORNER

S0° 50' 06"W

STH 71 C/L

CURVE 3
PI STA = 57+33.55
Y = 30889.607
X = 49354.527
DELTA = 20°40'57"
D = 2°00'00"
T = 522.75'
L = 1034.12'
R = 2864.79'
PC STA = 52+10.80
Y = 31412.301
X = 49362.144
PT STA = 62+44.93
Y = 30403.289
X = 49162.791
SE = 4.0%

PT: 62+44.93

NGS MARK
(DJ4918)

CP 2

S21° 31' 03"W

PC: 82+54.00

PT: 88+96.00

EP: 89+40.00
Y=28095.8652
X=48993.5703

S22° 18' 04"E

S67° 14' 28"E

STH 71

END PROJECT
STA 82+54
Y = 28,580.754
X = 48,536.228

CURVE 4
PI STA = 85+92.54
Y = 28449.790
X = 48848.407
DELTA = 44°56'24"
D = 7°00'00"
T = 338.54'
L = 642.00'
R = 818.51'
PC STA = 82+54.00
Y = 28580.754
X = 48536.228
PT STA = 88+96.00
Y = 28136.574
X = 48976.873
SE = 6.0%

EP: 318+46.00
PI: 81+68.40
Y=28613.8687
X=48457.2925

5+00 10+00 15+00 20+00 25+00 30+00 35+00 40+00 45+00 50+00 55+00 60+00 65+00 70+00 75+00 80+00 305+00 310+00 315+00

N

SCALE, FEET 0 300 600

CP 1
STA: 5+03.17
OFF: 59.10 RT
X: 48463.017
Y: 35835.193
Z: 741.157

OH

REASSURANCE MARKER

5+00

90.8'

23.8'

64.7'

BEAM GUARD

PK NAIL IN ASPHALTIC DRIVEWAY

LIGHT POLE

CP 2
STA: 65+35.68
OFF: 21.87 RT
X: 49035.806
Y: 30140.822
Z: 726.139

65+00

SGN

ADDRESS SIGN

37.7'

73.3'

80.4'

PK NAIL IN ASPHALTIC DRIVEWAY

GUY WIRE
ANCHOR POLE

UTILITY POLE

PROJECT NO: 7710-00-71	HWY: STH 71	COUNTY: JACKSON	ALIGNMENT DETAIL	SHEET 8	E

FILE NAME : W:\7701_02\CAD\! 7710-00-01\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 1
PLOT DATE : 7/28/2021 8:34 AM
PLOT BY : METRY, ALEXANDER
PLOT NAME :
PLOT SCALE : 1 IN:600 FT
WISDOT/CADDS SHEET 44

7710-00-71

Line	Item	Item Description	Unit	Total	Qty
0002	204.0110	Removing Asphaltic Surface	SY	303.000	303.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,432.000	1,432.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	29,667.000	29,667.000
0008	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 7710-00-71	LS	1.000	1.000
0014	213.0100	Finishing Roadway (project) 01. 7710-00-71	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,146.000	1,146.000
0020	305.0500	Shaping Shoulders	STA	144.000	144.000
0022	455.0605	Tack Coat	GAL	3,786.000	3,786.000
0024	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0026	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0028	460.2000	Incentive Density HMA Pavement	DOL	1,500.000	1,500.000
0030	460.2005	Incentive Density PWL HMA Pavement	DOL	3,480.000	3,480.000
0032	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	3,140.000	3,140.000
0034	460.2010	Incentive Air Voids HMA Pavement	DOL	3,480.000	3,480.000
0036	460.6645	HMA Pavement 5 MT 58-34 V	TON	5,738.000	5,738.000
0038	460.9000.S	Material Transfer Vehicle (project) 01. 7710-00-71	EACH	1.000	1.000
0042	465.0105	Asphaltic Surface	TON	500.000	500.000
0044	465.0110	Asphaltic Surface Patching	TON	300.000	300.000
0046	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	53.000	53.000
0048	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	10,673.000	10,673.000
0050	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	4,485.000	4,485.000
0052	614.0400	Adjusting Steel Plate Beam Guard	LF	200.000	200.000
0058	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7710-00-71	EACH	1.000	1.000
0062	619.1000	Mobilization	EACH	0.400	0.400
0064	624.0100	Water	MGAL	18.000	18.000
0066	625.0500	Salvaged Topsoil	SY	1,000.000	1,000.000
0068	627.0200	Mulching	SY	1,000.000	1,000.000
0070	628.1504	Silt Fence	LF	250.000	250.000
0072	628.1520	Silt Fence Maintenance	LF	250.000	250.000
0074	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0076	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0078	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0080	629.0210	Fertilizer Type B	CWT	0.630	0.630
0082	630.0130	Seeding Mixture No. 30	LB	18.000	18.000
0084	630.0500	Seed Water	MGAL	12.000	12.000
0086	638.2102	Moving Signs Type II	EACH	4.000	4.000
0088	638.4000	Moving Small Sign Supports	EACH	4.000	4.000
0090	642.5001	Field Office Type B	EACH	0.500	0.500
0092	643.0300	Traffic Control Drums	DAY	38.000	38.000
0094	643.0900	Traffic Control Signs	DAY	10.000	10.000
0096	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0098	643.5000	Traffic Control	EACH	0.500	0.500
0100	646.1020	Marking Line Epoxy 4-Inch	LF	9,822.000	9,822.000
0102	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	15,474.000	15,474.000
0104	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	LF	164.000	164.000
0106	646.6120	Marking Stop Line Epoxy 18-Inch	LF	56.000	56.000
0108	648.0100	Locating No-Passing Zones	MI	1.480	1.480
0110	649.0105	Temporary Marking Line Paint 4-Inch	LF	17,603.000	17,603.000
0112	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	8,802.000	8,802.000

7710-00-71

Line	Item	Item Description	Unit	Total	Qty
0114	650.8000	Construction Staking Resurfacing Reference	LF	7,850.000	7,850.000
0116	650.9910	Construction Staking Supplemental Control (project) 01. 7710-00-71	LS	1.000	1.000
0120	690.0150	Sawing Asphalt	LF	166.000	166.000
0122	740.0440	Incentive IRI Ride	DOL	5,947.000	5,947.000
0124	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0126	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000
0128	SPV.0060	Special 01. LANDMARK REFERENCE MONUMENTS SPECIAL	EACH	1.000	1.000

ASPHALT REMOVAL SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	REMOVING ASPHALTIC SURFACE 204.0110 SY	REMOVING ASPHALTIC SURFACE BUTT JOINTS 204.0115 SY	REMOVING ASPHALTIC SURFACE MILLING 204.0120 SY	REMARKS
0010	5+04	-	67+98	STH 71	-	-	26,842	STH 54 TO BRIDGE
0010	76+69	-	82+44	STH 71	-	-	2,825	BRIDGE TO STH 71
0010	4+04	-	5+04	STH 71	-	443	-	STH 54 NORTH
0010	1+70	-	1+80	STH 54	-	34	-	STH 54 WEST
0010	14+68	-	19+24	STH 71	-	64	-	LOVELL ST
0010	67+98	-	68+98	STH 71	-	404	-	BRIDGE B-27-74
0010	75+69	-	76+69	STH 71	-	412	-	BRIDGE B-27-74
0010	81+56	-	82+54	STH 71 & BOAT LAUNCH	-	75	-	STH 71 EAST
0010	4+60	-	65+52	DRIVEWAYS	303	-	-	DRIVEWAYS
				PROJECT TOTALS =	**303**	**1,432**	**29,667**	

PREPARE FOUNDATION

CATEGORY	STATION	TO	STATION	LOCATION	PREPARE FOUNDATION FOR ASPHALTIC PAVING 211.0100 LS
0010	4+04	-	82+54	STH 71	1
				PROJECT TOTALS =	**1**

BASE AGGREGATE DENSE 3/4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 TON
0010	4+04	-	25+00	STH 71	210
0010	25+00	-	68+98	STH 71	810
0010	75+68	-	82+54	STH 71	126
0010	0+50	-	1+80	STH 54	24
				PROJECT TOTAL =	**1,146**

SHAPING SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	SHAPING SHOULDERS 305.0500 STA
0010	4+04	-	68+98	STH 71	130
0010	75+78	-	82+54	STH 71	14
				PROJECT TOTALS =	**144**

3

ASPHALT ITEMS SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	HMA PAVEMENT 5 MT 58-34 V 460.6645 TON	TACK COAT 455.0605 GAL	ASPHALTIC SURFACE 465.0105 TON	ASPHALTIC SURFACE PATCHING 465.0110 TON	ASPHALTIC SURFACE DRIVEWAY AND FIELD ENTRANCES 465.0120 TON	REMARKS
0010	4+04	-	68+98	STH 71 ML	2672	1909	-	-	-	BINDER LAYER
0010	4+04	-	68+98	STH 71 ML	2291	1364	-	-	-	SURFACE LAYER
0010	75+69	-	82+54	STH 71	328	235	-	-	-	BINDER LAYER
0010	75+69	-	82+54	STH 71	282	168	-	-	-	SURFACE LAYER
0010	6+26	-	8+26	STH 71 & STH 54	89	64	-	-	-	BINDER LAYER
0010	6+26	-	8+26	STH 71 & STH 54	76	46	-	-	-	SURFACE LAYER
0010	4+60	-	65+52	STH 71	-	-	-	-	53	DRIVEWAYS
0010	4+04	-	82+54	BOP TO EOP	-	-	500	300	-	UNDISTRIBUTED
				PROJECT TOTALS =	**5,738**	**3,786**	**500**	**300**	**53**	

3

FOR INFORMATIONAL PURPOSES ONLY

STATION	TO	STATION	LOCATION	MIXTURE	UNDERLYING SURFACE	TONS	THICKNESS	QUALITY MANAGEMENT PR MIXTURE ACCEPTANCE
0+20	-	1+80	STH 54 LOWER LAYER MAINLINE AND SHOULDER	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	48.782	1.75	QMP AS PER SS 460
0+20	-	1+80	STH 54 UPPER LAYER MAINLINE AND SHOULDER	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	41.813	1.5	QMP AS PER SS 460
0+33	-	1+15	STH 54 LOWER LAYER TURN LANE	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	30.990	1.75	QMP AS PER SS 460
0+33	-	1+15	STH 54,UPPER LAYER TURN LANE	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	26.563	1.5	QMP AS PER SS 460
4+04	-	26+40	STH 71 LOWER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	584.341	1.75	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010
4+04	-	26+40	STH 71 LOWER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	612.167	2.75	QMP AS PER SS 460
4+04	-	26+40	STH 71 UPPER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	500.864	1.5	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010
4+04	-	26+40	STH 71 UPPER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	333.909	1.5	QMP AS PER SS 460
26+40	-	68+98	STH 71 LOWER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	1112.757	1.75	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010
26+40	-	68+98	STH 71 LOWER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	556.379	1.75	QMP AS PER SS 460
26+40	-	68+98	STH 71 UPPER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	953.792	1.5	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010
26+40	-	68+98	STH 71 UPPER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	476.896	1.5	QMP AS PER SS 460
75+69	-	82+40	STH 71 LOWER LAYER MAINLINE, BRIDGE TO 108	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	175.355	1.75	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010
75+69	-	82+40	STH 71 LOWER LAYER SHOULDER, BRIDGE TO 108	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	87.677	1.75	QMP AS PER SS 460
75+69	-	82+40	STH 71 UPPER LAYER MAINLINE, BRIDGE TO 108	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	150.304	1.5	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010
75+69	-	82+40	STH 71 UPPER LAYER SHOULDER, BRIDGE TO 108	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	75.152	1.5	QMP AS PER SS 460
81+86	-	82+54	STH 71 LOWER LAYER MAINLINE AND SHOULDER	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	23.694	1.75	QMP AS PER SS 460
81+86	-	82+54	STH 71 UPPER LAYER MAINLINE AND SHOULDER	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	20.309	1.5	QMP AS PER SS 460

3

HMA ADDITIONAL ITEMS SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS 460.0105.S EACH	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY 460.0110.S EACH	MATERIAL TRANSFER VEHICLE (7710-00-71) 460.9000.S EACH
0010	4+04	-	82+54	STH 71	2	2	1
PROJECT TOTALS =					**2**	**2**	**1**

3

RUMBLE STRIP SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL 465.0425 LF	ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL 465.0475 LF
0010	10+00	-	68+72	STH 71	9,799	-
0010	75+93	-	80+35	STH 71	874	-
0010	10+00	-	68+72	STH 71	-	4,110
0010	75+93	-	79+68	STH 71	-	375
PROJECT TOTALS =					**10,673**	**4,485**

BEAM GUARD SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	ADJUSTING STEEL PLATE BEAM GUARD 614.0400 LF	REMARKS
0010	68+04	-	68+54	NW OF BRIDGE	50	RT EAT
0010	68+04	-	68+54	NE OF BRIDGE	50	LT EAT
0010	76+12	-	76+62	SW OF BRIDGE	50	RT EAT
0010	76+12	-	76+62	SE OF BRIDGE	50	LT EAT
PROJECT TOTALS =					**200**	

WATER

CATEGORY	LOCATION	624.0100 MGAL	REMARKS
0010	STH 71	18	3/4-IN
PROJECT TOTAL =		**18**	

EROSION CONTROL SUMMARY

CATEGORY	LOCATION	SALVAGED TOPSOIL 625.0500 SY	MULCHING 627.0200 SY	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	TEMPORARY DITCH CHECKS 628.7504 LF	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 30 630.0130 LB	SEED WATER 630.0500 MGAL	REMARKS
0010	UNDISTRIBUTED	1,000	1,000	250	250	50	0.63	18	12	
PROJECT TOTALS =		**1,000**	**1,000**	**250**	**250**	**50**	**0.63**	**18**	**12**	

PAVEMENT MARKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	MARKING LINE EPOXY 4-INCH 646.1005 LF	MARKING LINE GROOVED WET REF EPOXY 4-INCH 646.1040 LF	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH 646.3545 LF	MARKING STOP LINE EPOXY 18-INCH 646.6120 LF	TEMPORARY MARKING LINE PAINT 4-INCH 649.0105 LF	TEMPORARY MARKING LINE EPOXY 4-INCH 649.0120 LF	REMARKS
0010	4+04	-	6+56	STH 71 CL	504	-	-	-	1,008	504	CENTERLINE SOLID - DOUBLE YELLOW
0010	6+99	-	7+16	STH 71 CL	34	-	-	-	68	34	CENTERLINE SOLID - DOUBLE YELLOW
0010	7+49	-	22+14	STH 71 CL	2,930	-	-	-	5,860	2,930	CENTERLINE SOLID - DOUBLE YELLOW
0010	22+14	-	33+20	STH 71 CL	1,106	-	-	-	2,212	1,106	CENTERLINE SOLID - YELLOW
0010	22+14	-	33+20	STH 71 CL	277	-	-	-	177	88	CENTERLINE DASHED - YELLOW
0010	33+20	-	44+50	STH 71 CL	283	-	-	-	181	90	CENTERLINE DASHED - YELLOW
0010	44+50	-	55+90	STH 71 CL	285	-	-	-	182	91	CENTERLINE DASHED - YELLOW
0010	44+50	-	55+90	STH 71 CL	1,140	-	-	-	2,280	1,140	CENTERLINE SOLID - YELLOW
0010	55+90	-	58+80	STH 71 CL	580	-	-	-	1,160	580	CENTERLINE SOLID - DOUBLE YELLOW
0010	58+80	-	69+72	STH 71 CL	273	-	-	-	175	87	CENTERLINE DASHED - YELLOW
0010	58+80	-	69+72	STH 71 CL	1,092	-	-	-	2,184	1,092	CENTERLINE SOLID - YELLOW
0010	69+72	-	75+69	BRIDGE B-27-74 CL	149	-	-	-	-	-	CENTERLINE DASHED - YELLOW
0010	75+69	-	81+51	STH 71 CL	582	-	-	-	1,164	582	CENTERLINE SOLID - YELLOW
0010	75+69	-	81+51	STH 71 CL	146	-	-	-	93	47	CENTERLINE DASHED - YELLOW
0010	82+20	-	82+54	STH 71 CL	68	-	-	-	136	68	CENTERLINE SOLID - DOUBLE YELLOW
0010	317+68	-	318+34	STH 108 CL	17	-	-	-	11	5	CENTERLINE DASHED - YELLOW
0010	317+68	-	318+34	STH 108 CL	66	-	-	-	132	66	CENTERLINE SOLID - YELLOW
0010	4+04	-	6+28	STH 71 EL RT	-	229	-	-	-	-	EDGELINES SOLID - WHITE
0010	7+48	-	68+98	STH 71 EL RT	-	6,142	-	-	-	-	EDGELINES SOLID - WHITE
0010	68+98	-	75+69	BRIDGE B-27-74 EL RT	-	671	-	-	-	-	EDGELINES SOLID - WHITE
0010	75+69	-	81+25	STH 71 EL RT	-	556	-	-	-	-	EDGELINES SOLID - WHITE
0010	4+04	-	14+40	STH 71 EL LT	-	1,029	-	-	-	-	EDGELINES SOLID - WHITE
0010	15+29	-	18+70	STH 71 EL LT	-	349	-	-	-	-	EDGELINES SOLID - WHITE
0010	19+48	-	68+98	STH 71 EL LT	-	4,959	-	-	-	-	EDGELINES SOLID - WHITE
0010	68+98	-	75+69	BRIDGE B-27-74 EL LT	-	671	-	-	-	-	EDGELINES SOLID - WHITE
0010	75+69	-	81+14	STH 71 EL LT	-	546	-	-	-	-	EDGELINES SOLID - WHITE
0010	82+29	-	82+54	STH 71 EL LT	-	28	-	-	-	-	EDGELINES SOLID - WHITE
0010	317+68	-	317+86	STH 108 EL LT	-	18	-	-	-	-	EDGELINES SOLID - WHITE
0010	0+35	-	1+80	STH 54 CL	290	-	-	-	580	290	CENTERLINE SOLID - DOUBLE YELLOW
0010	0+45	-	1+80	STH 54 EL	-	136	-	-	-	-	EDGELINES SOLID - WHITE
0010	0+46	-	1+80	STH 54 EL	-	140	-	-	-	-	EDGELINES SOLID - WHITE
0010	5+44	-	6+27	STH 54/71 INT.	-	-	84	-	-	-	CHANNELIZING RT TURN LANE LINE - WHITE
0010	6+83	-	6+98	STH 54/71 INT.	-	-	-	15	-	-	STOP LINE - WHITE
0010	7+12	-	7+36	STH 54/71 INT.	-	-	-	25	-	-	STOP LINE - WHITE
0010	0+56	-	0+96	STH 54/71 INT.	-	-	80	-	-	-	CHANNELIZING ISLAND - WHITE
0010	81+55	-	81+68	STH 71/180 INT.	-	-	-	16	-	-	STOP LINE - WHITE
				PROJECT TOTALS =	**9,822**	**15,474**	**164**	**56**	**17,603**	**8,802**	

NOTES: TEMPORARY MARKING PAINT PLACED IN TWO APPLICATIONS (MILLED & BINDER SURFACE)
TEMPORARY MARKING EPOXY PLACED IN ONE APPLICATIONS (FINAL SURFACE)

MOBILIZATION EROSION CONTROL

CATEGORY	LOCATION	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH	REMARKS
0010	UNDISTRIBUTED	2	2	
PROJECT TOTALS =		**2**	**2**	

MOVING SIGN SUMMARY

CATEGORY	LOCATION	MOVING SIGNS TYPE II 638.2102 EACH	MOVING SMALL SIGN SUPPORTS 638.4000 EACH	REMARKS
0010	UNDISTRIBUTED	4	4	NO PASSING ZONE
PROJECT TOTALS =		**4**	**4**	

TRAFFIC CONTROL SUMMARY

CATEGORY	STATION TO STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL SIGNS 643.0900 DAY	TRAFFIC CONTROL 643.5000 EACH	*** TRAFFIC CONTROL SIGNS PCMS 643.1050 DAY	REMARKS
0010	4+04 - 82+54	STH 71	-	-	0.5	14	SEE SDD FOR TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
0010	63+60 - 81+06	STH 71	38	10	-	-	SEE SDD FOR TRAFFIC CONTROL FOR WORK ON SHOULDER, UNDIVIDED ROADWAY
PROJECT TOTAL =			**38**	**10**	**0.5**	**14**	

*** PLACE ONE WEEK PRIOR TO CONSTRUCTION

LOCATING NO-PASSING ZONES

CATEGORY	STATION	TO	STATION	LOCATION	648.0100 MI
0010	4+04		82+40	STH 71	1.48
PROJECT TOTAL =					**1.48**

SAWING ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 LF
0010	4+93	-	5+32	RT CE	42
0010	12+80	-	13+01	RT PE	21
0010	26+99	-	27+21	RT PE	22
0010	28+06	-	28+25	RT PE	18
0010	32+75	-	33+00	LT PE	26
0010	65+03	-	65+40	RT PE	37
PROJECT TOTAL =					**166**

SAWING IS INCIDENTAL TO BUTT JOINTS

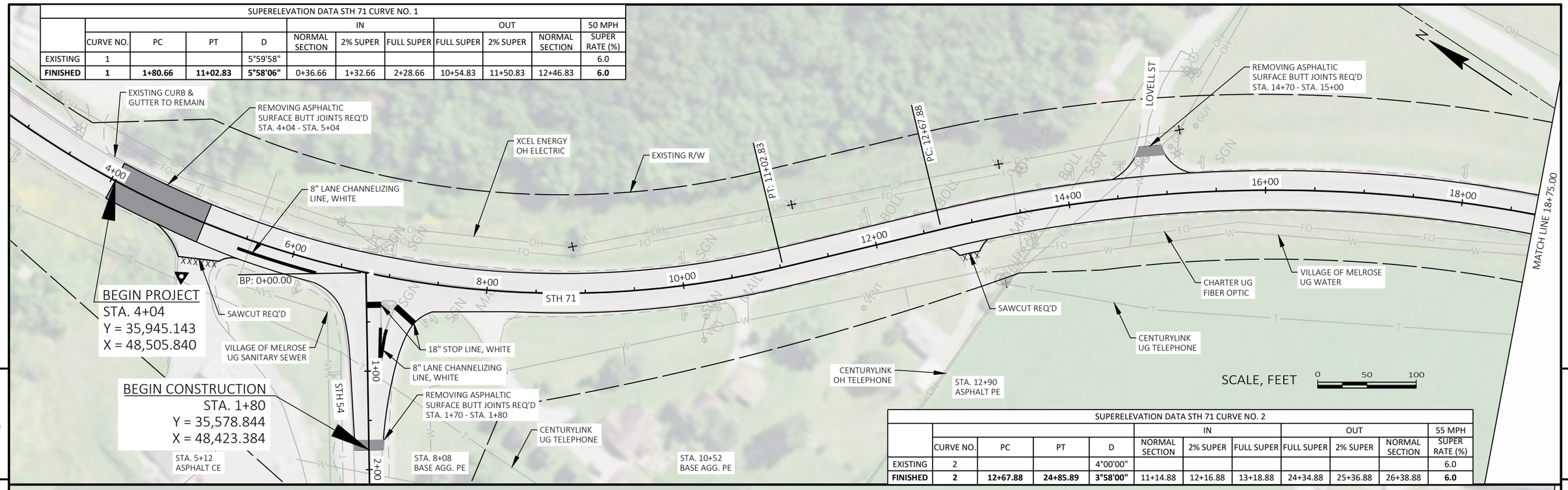
CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION TO STATION	LOCATION	CONSTRUCTION STAKING RESURFACING REFERENCE 650.8000 LF	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 650.9910 LS
0010	4+04 - 82+54	STH 71	7,850	1
PROJECT TOTAL =			**7,850**	**1**

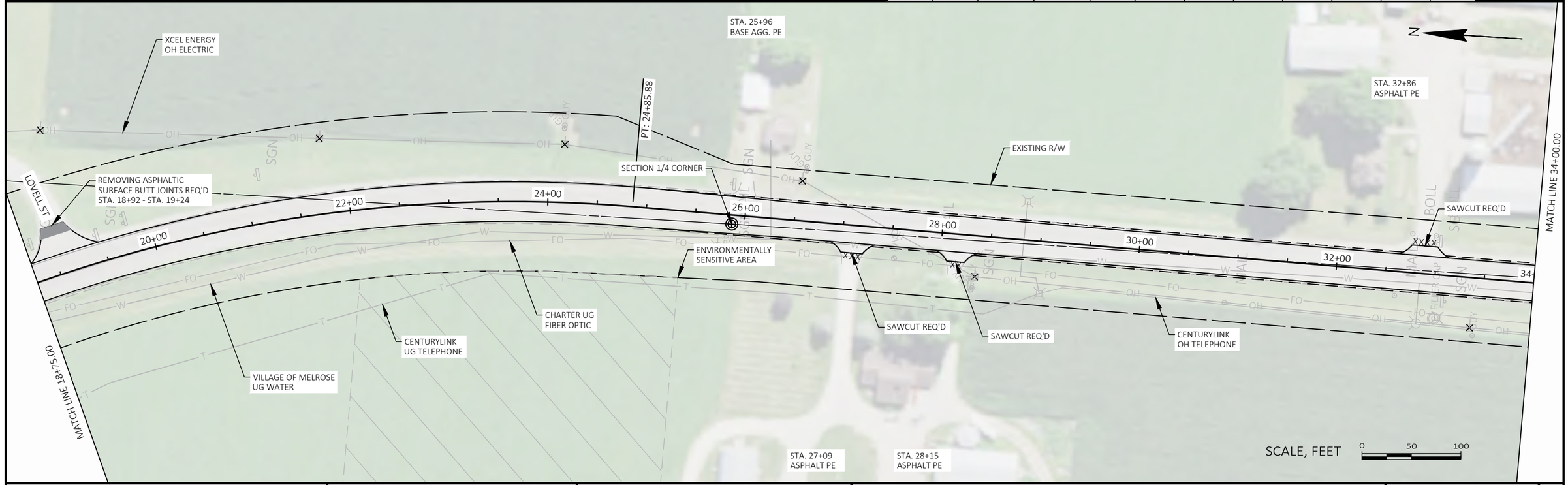
LANDMARK REFERENCE MONUMENTS SPECIAL

CATEGORY	STATION	LOCATION	SPV.0060.01 EACH
0010	25+87.27	9.14 RT	1
PROJECT TOTAL =			**1**

SUPERELEVATION DATA STH 71 CURVE NO. 1											
					IN			OUT			50 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	1			5°59'58"							6.0
FINISHED	**1**	**1+80.66**	**11+02.83**	**5°58'06"**	0+36.66	1+32.66	2+28.66	10+54.83	11+50.83	12+46.83	**6.0**



SUPERELEVATION DATA STH 71 CURVE NO. 2											
					IN			OUT			55 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	2			4°00'00"							6.0
FINISHED	**2**	**12+67.88**	**24+85.89**	**3°58'00"**	11+14.88	12+16.88	13+18.88	24+34.88	25+36.88	26+38.88	**6.0**



PROJECT NO: 7710-00-71	HWY: STH 71	COUNTY: JACKSON	PLAN SHEETS	SHEET 16	E

FILE NAME : W:\7701_02\CAD\! 7710-00-01\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 1

PLOT DATE : 9/30/2021 11:41 AM PLOT BY : METRY, ALEXANDER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

STA. 35+30
BASE AGG. FE

STA. 44+42
BASE AGG. CE

N

EXISTING R/W

XCEL ENERGY
UG ELECTRIC

MATCH LINE 34+00.00

MATCH LINE 49+25.00

00 | 36+00 | 38+00 | 40+00 | 42+00 | 44+00 | 46+00 | 48+00

STH 71

VILLAGE OF MELROSE
UG WATER

CENTURYLINK
OH TELEPHONE

XCEL ENERGY
OH ELECTRIC

CHARTER UG
FIBER OPTIC

SCALE, FEET 0 50 100

5

5

SUPERELEVATION DATA STH 71 CURVE NO. 3

					IN			OUT			55 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	3	52+10.74	62+45.00	2°00'00"							4.0
FINISHED	**3**	**52+10.80**	**62+44.93**	**2°00'00"**	50+91.80	51+93.80	52+44.80	62+10.92	62+61.92	63+63.92	**4.0**

STA. 49+70
BASE AGG. FE

STA. 50+50
BASE AGG. PE

STA. 60+56
BASE AGG. FE

N

EXISTING R/W

SECTION CORNER

PC: 52+10.80

PT: 62+44.93

50+00 | 52+00 | 54+00 | 56+00 | 58+00 | 60+00 | 62+00 | 64+00

MATCH LINE 49+25.00

MATCH LINE 64+50.00

CENTURYLINK
OH TELEPHONE

XCEL ENERGY
OH ELECTRIC

CHARTER UG
FIBER OPTIC

STA. 55+20
BASE AGG. FE

STA. 57+70
BASE AGG. PE

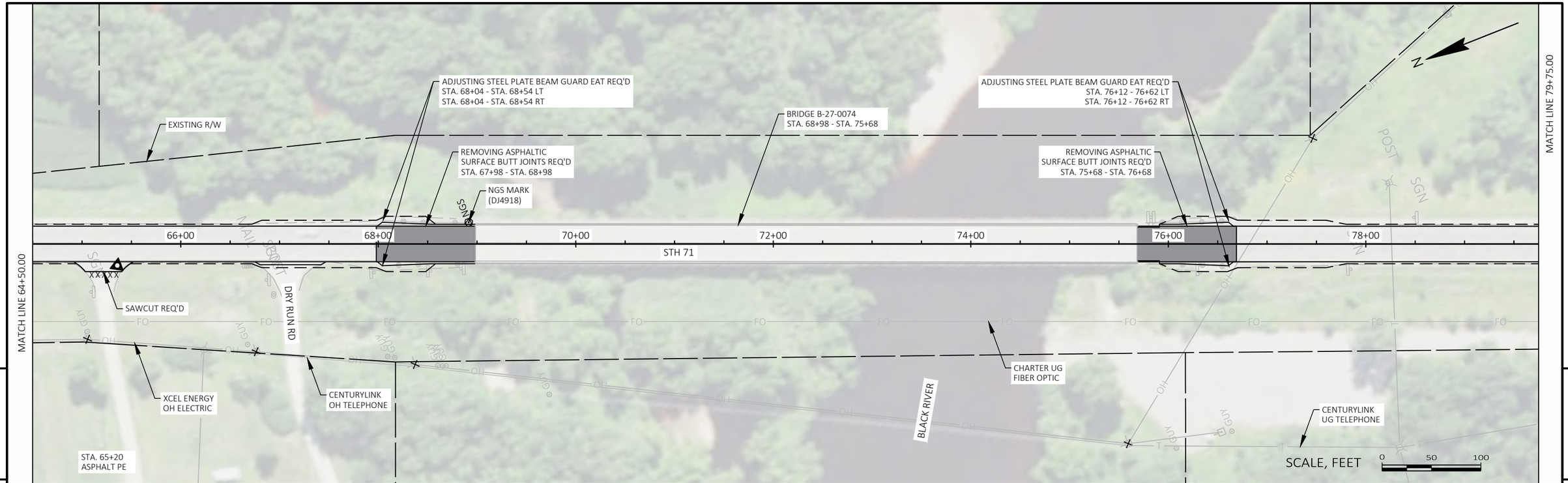
SCALE, FEET 0 50 100

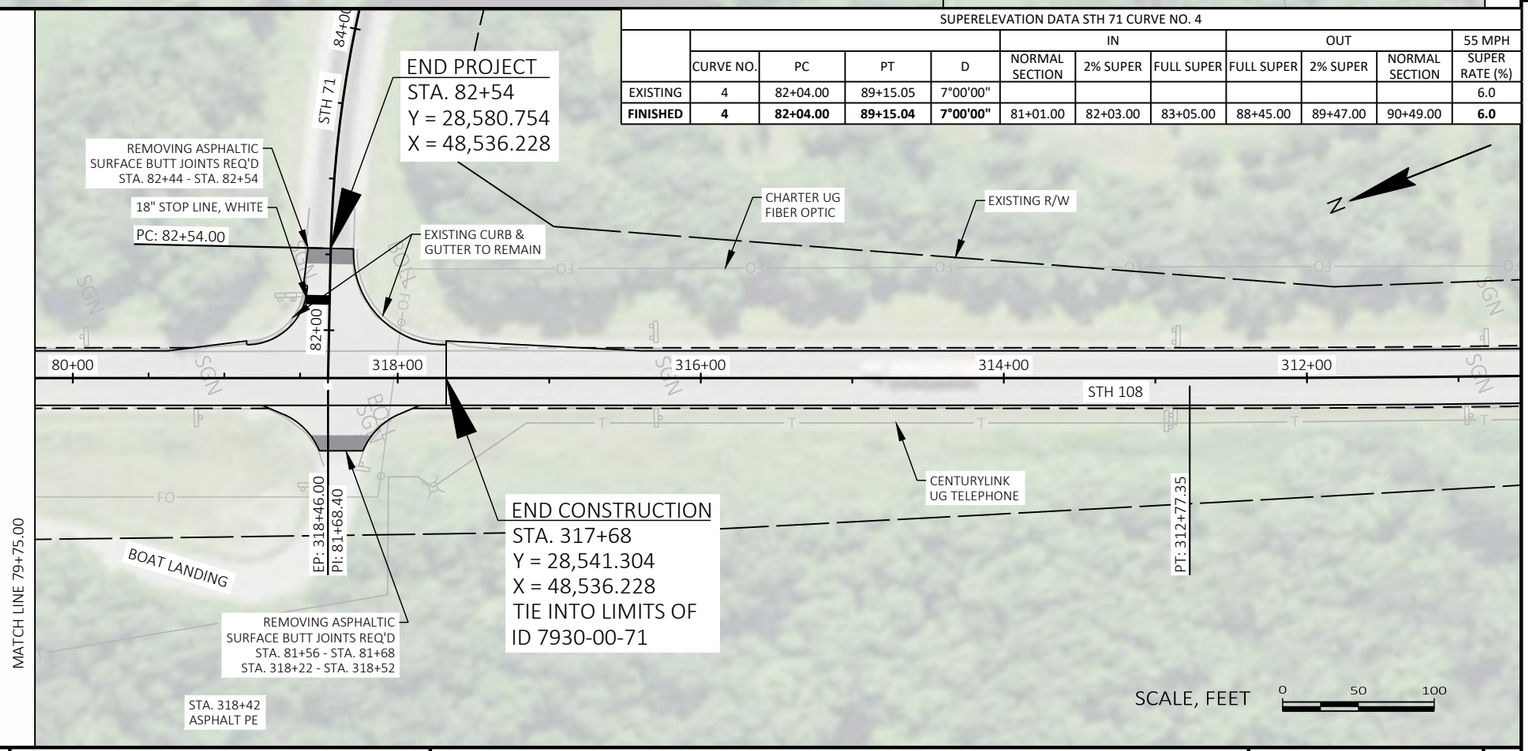
PROJECT NO: 7710-00-71	HWY: STH 71	COUNTY: JACKSON	PLAN SHEETS	SHEET 17	E

FILE NAME : W:\7701_02\CAD\! 7710-00-01\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 2

PLOT DATE : 9/30/2021 11:41 AM PLOT BY : METRY, ALEXANDER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44





SUPERELEVATION DATA STH 71 CURVE NO. 4

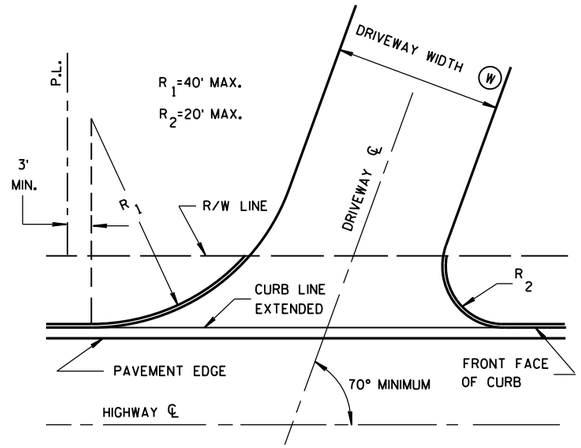
					IN			OUT			55 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	4	82+04.00	89+15.05	7°00'00"							6.0
FINISHED	**4**	**82+04.00**	**89+15.04**	**7°00'00"**	81+01.00	82+03.00	83+05.00	88+45.00	89+47.00	90+49.00	**6.0**

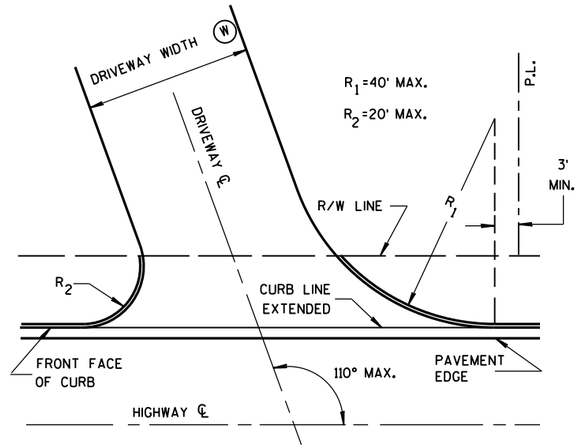
PROJECT NO: 7710-00-71	HWY: STH 71	COUNTY: JACKSON	PLAN SHEETS	SHEET 18	E

FILE NAME : W:\7701_02\CAD\! 7710-00-01\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 3
PLOT DATE : 9/30/2021 11:41 AM
PLOT BY : METRY, ALEXANDER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

Standard Detail Drawing List

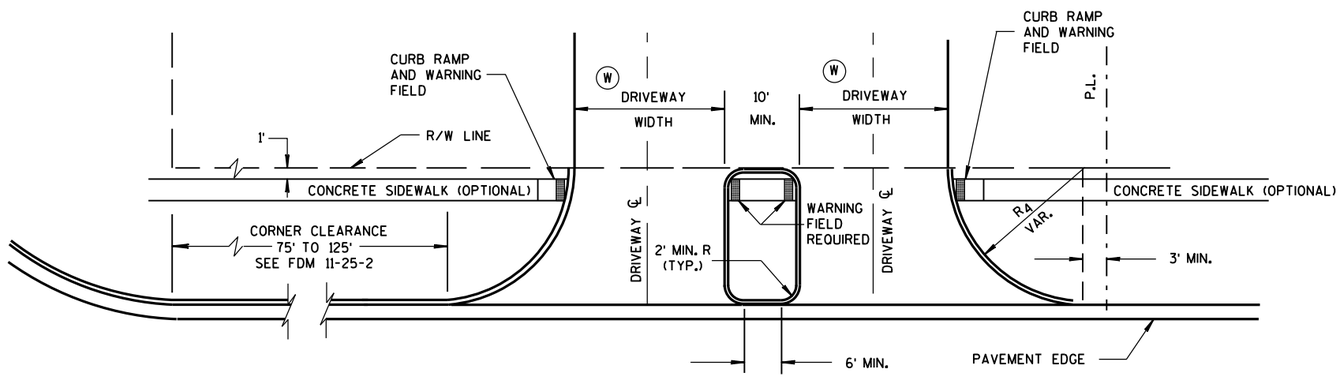
08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS





SKEWED DRIVEWAY DETAILS
(COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

Ⓦ DRIVEWAY WIDTHS:

COMMERCIAL - 35' MAX., 16' MIN.

RESIDENTIAL AND NON-COMMERCIAL - 24' MAX., 12' MIN.

DRIVEWAYS WITH CURB & GUTTER RETURNS

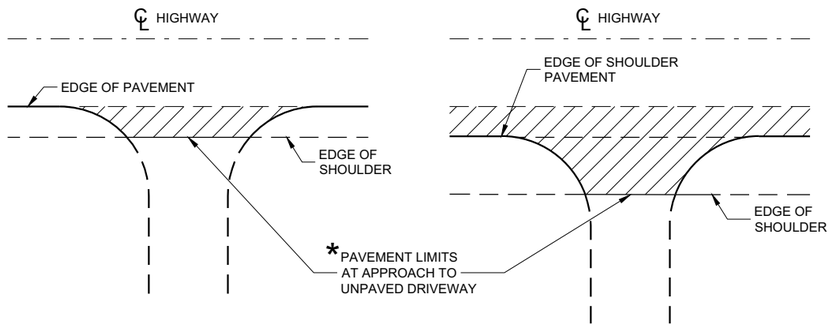
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

6

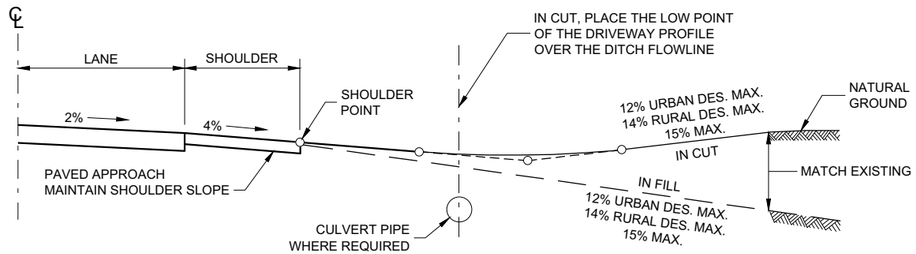
S.D.D. 8 D 20-1



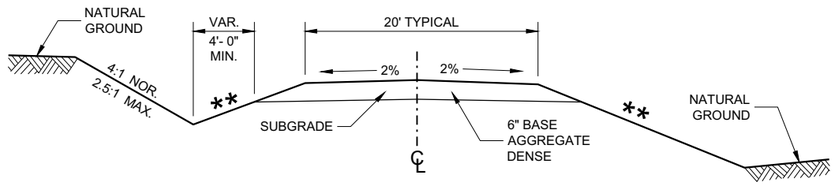
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

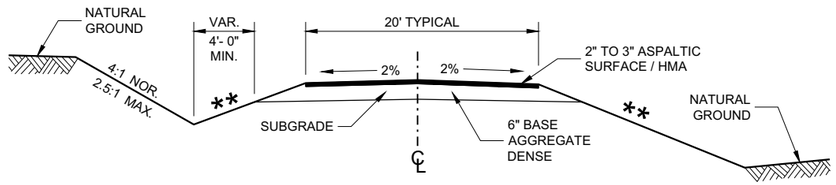


IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

6

SDD 08D21 - 01

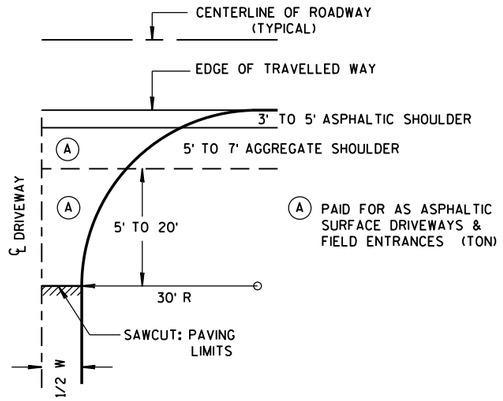
SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

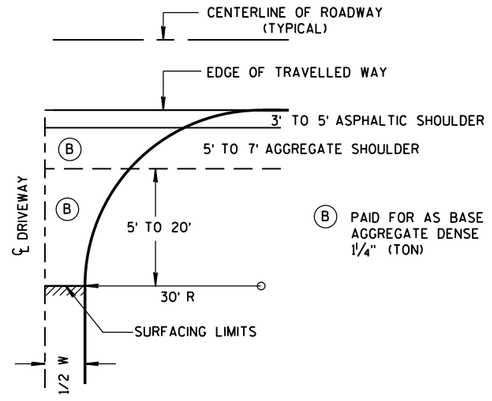
APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA



PLAN VIEW
HALF SECTION

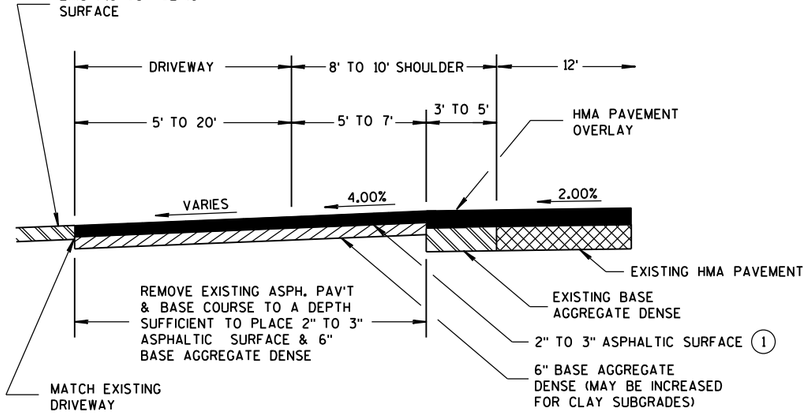
W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION

GENERAL NOTES

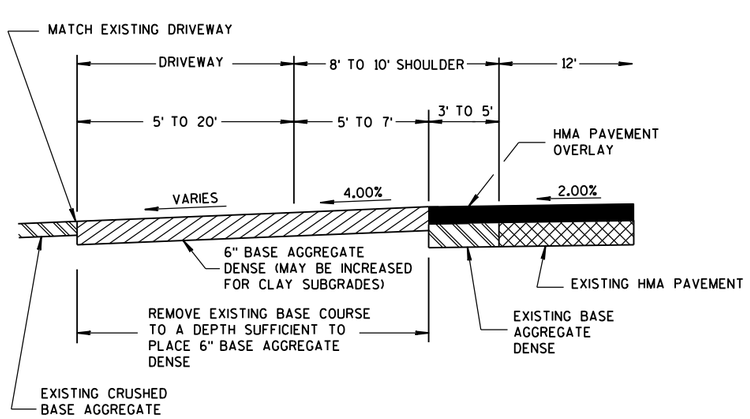
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

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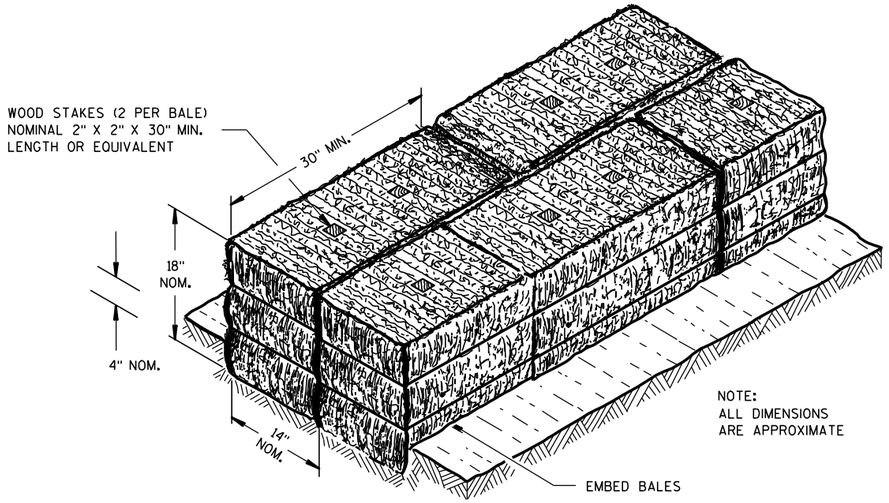
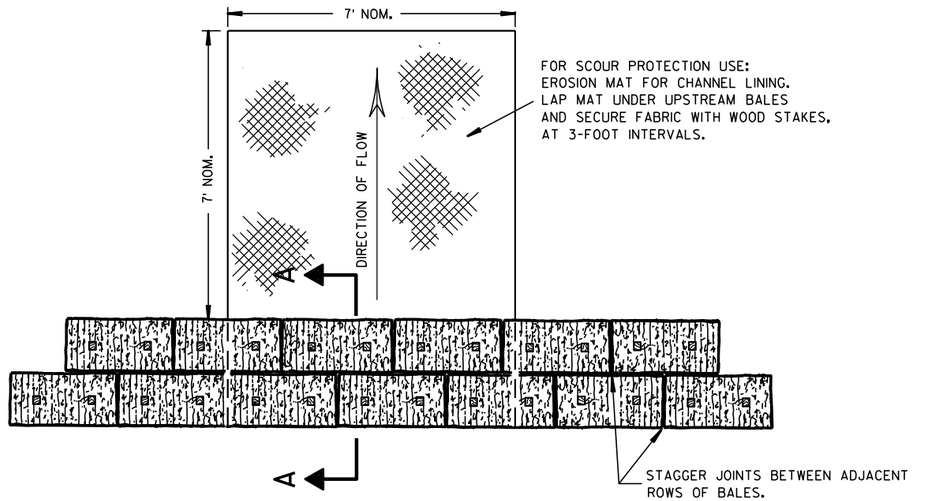
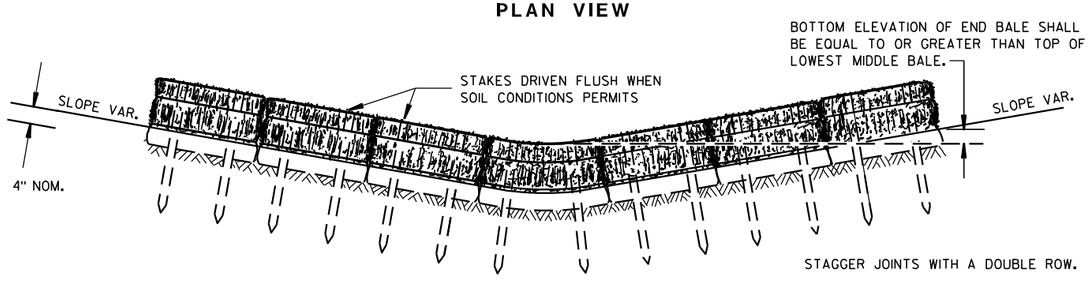
S.D.D. 8 D 22-1



SECTION A-A



PLAN VIEW



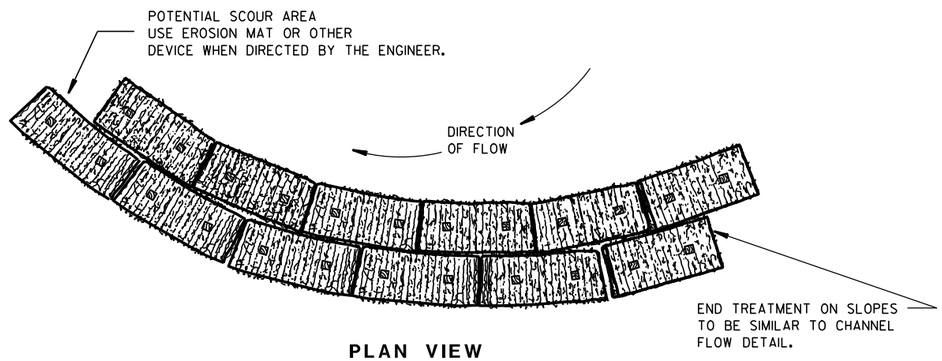
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

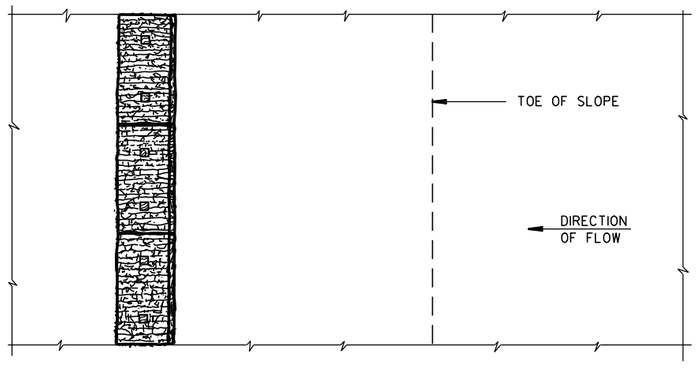
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

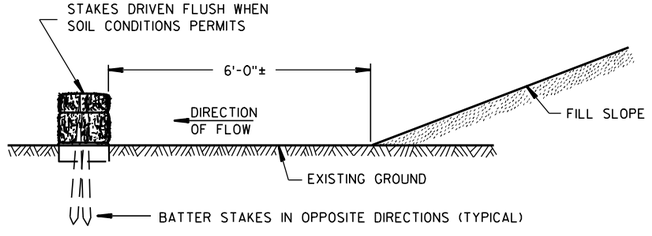


PLAN VIEW

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

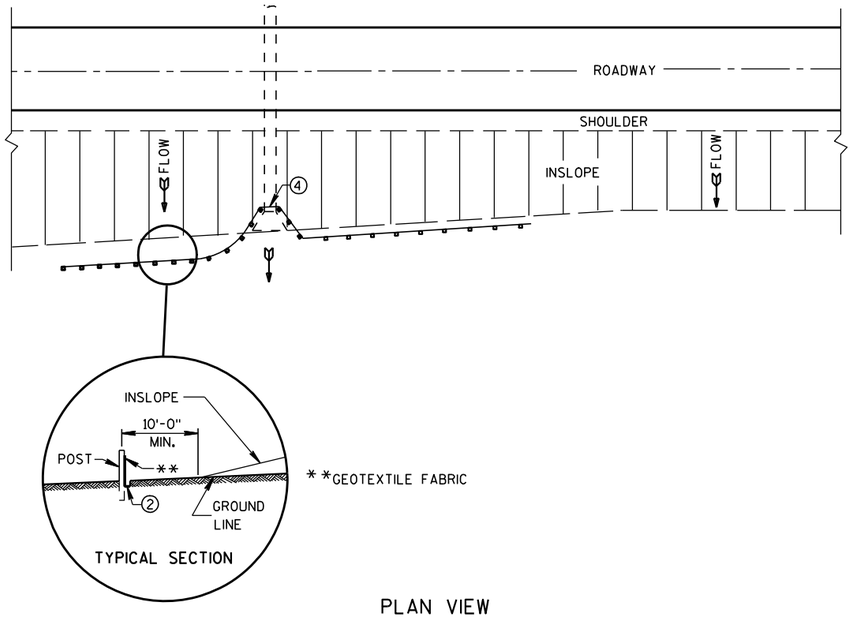
APPROVED

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

FHWA

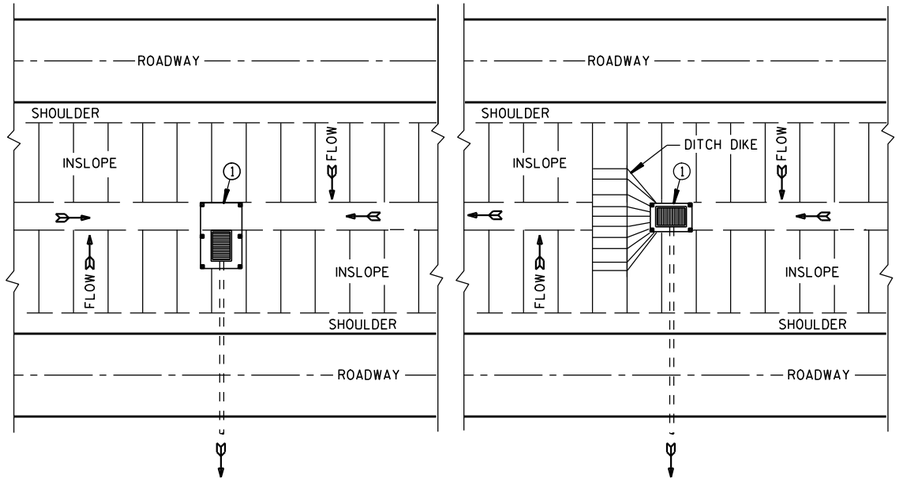
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



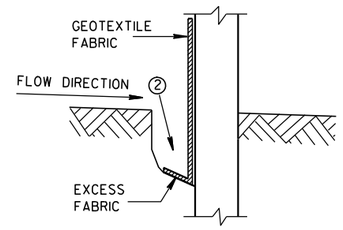
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

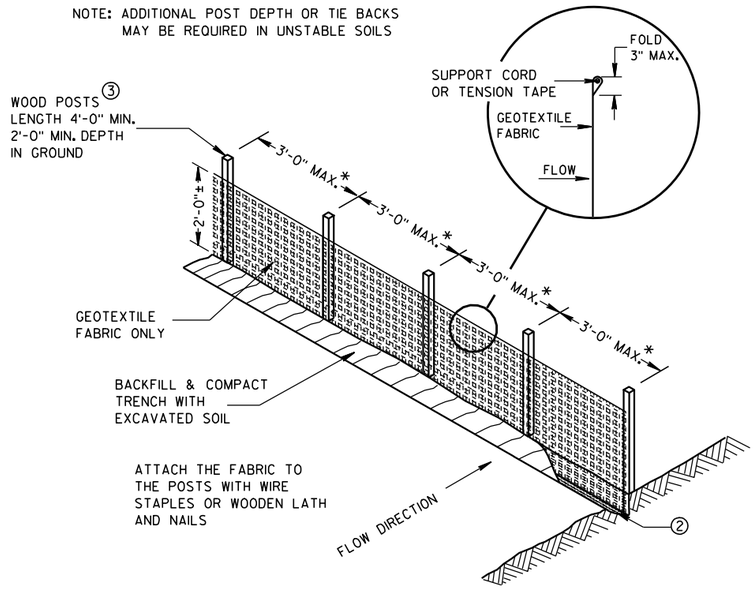
GENERAL NOTES

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.

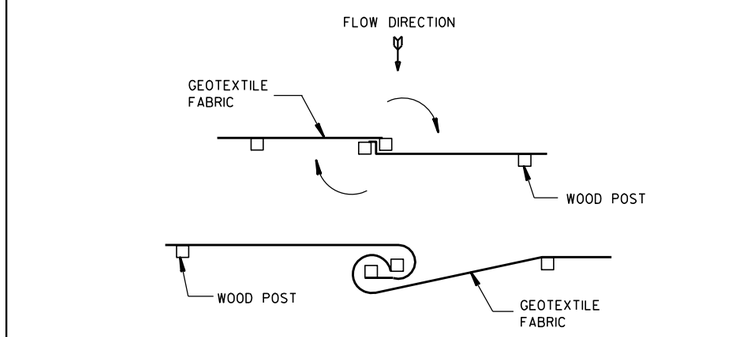


TRENCH DETAIL

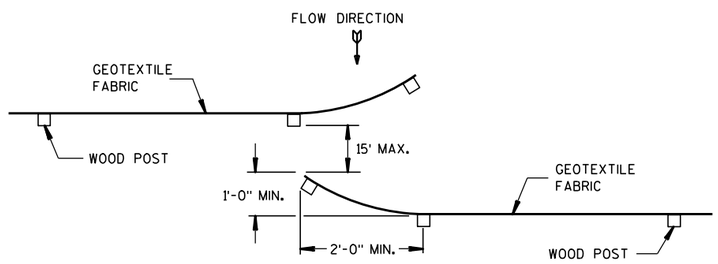


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

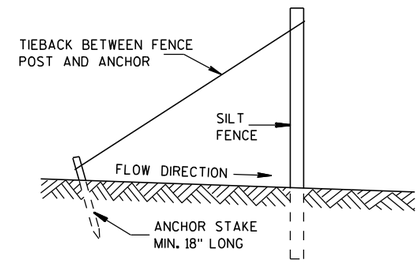


TWIST METHOD



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

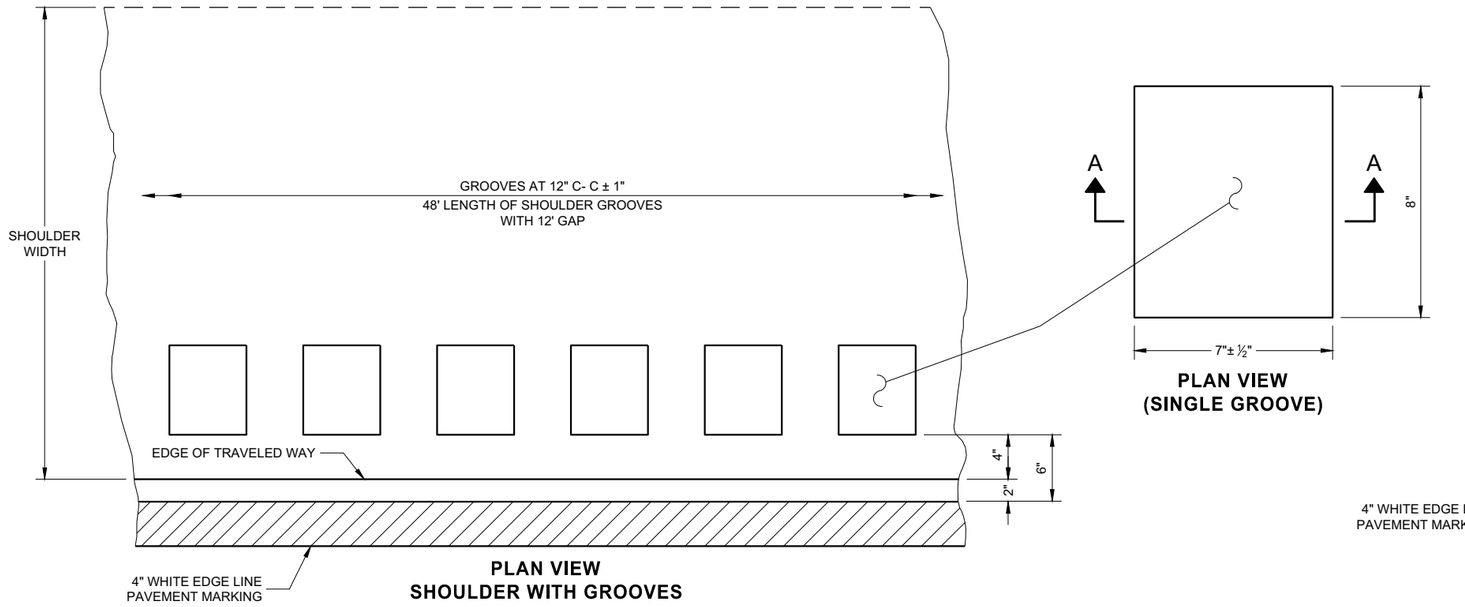
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

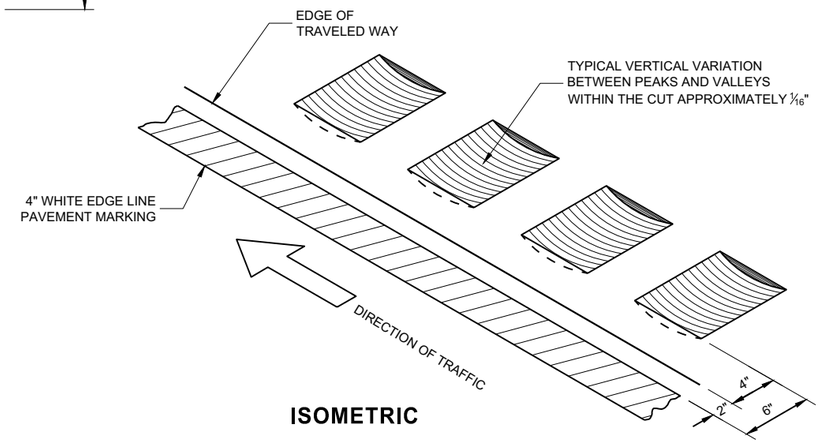
PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

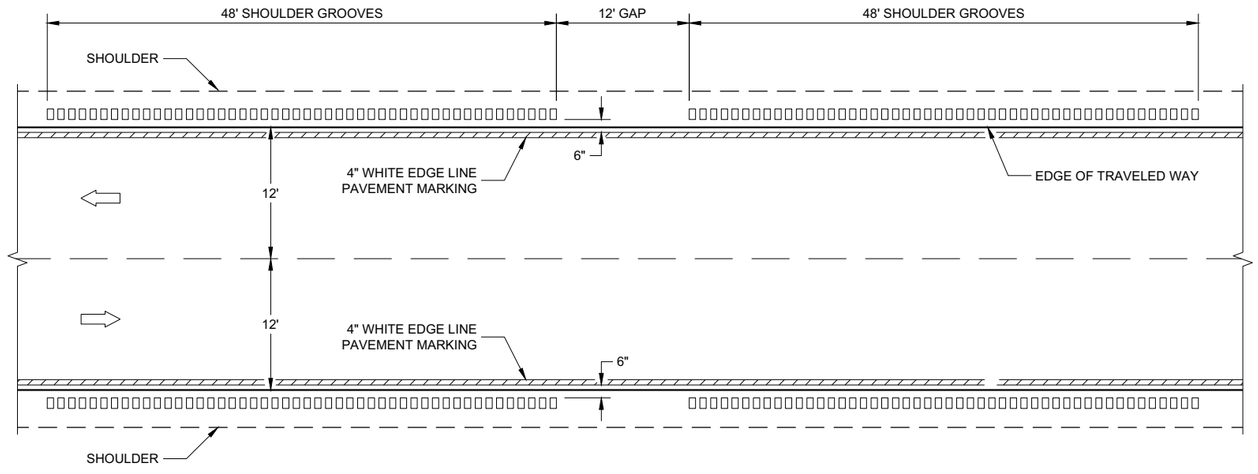
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

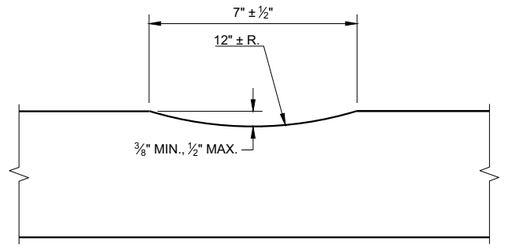
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



ISOMETRIC

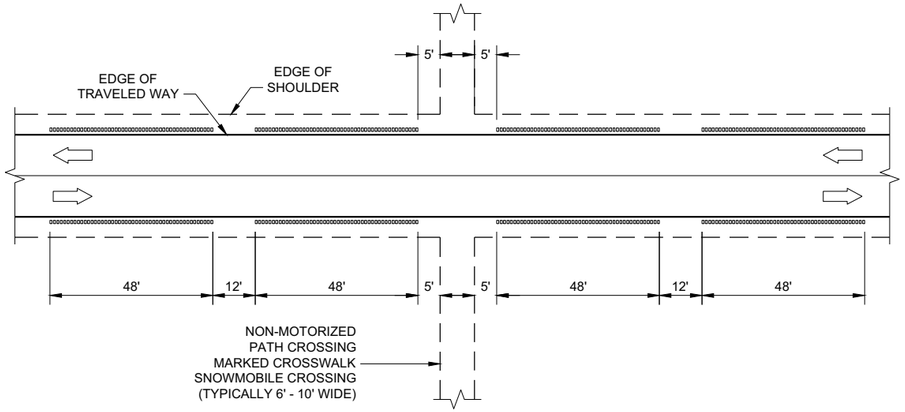


TYPE 1
2 - LANE SHOULDER RUMBLE STRIP

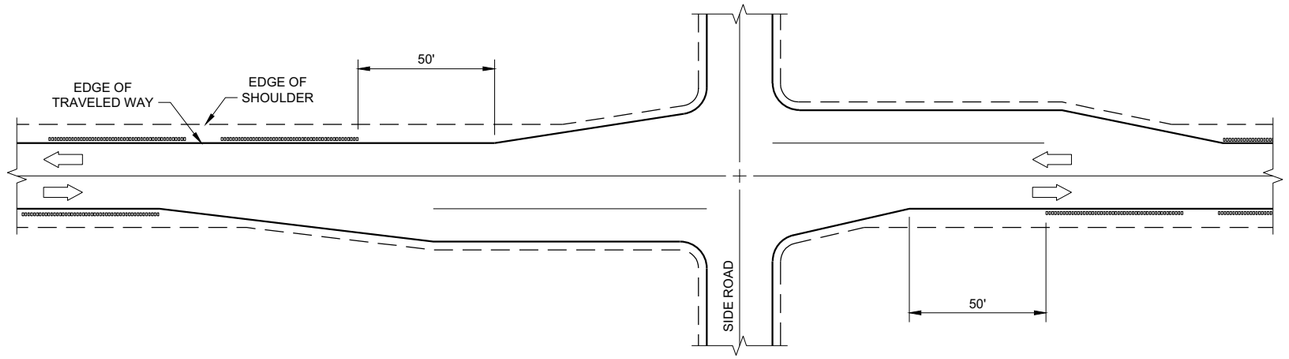


SECTION A - A

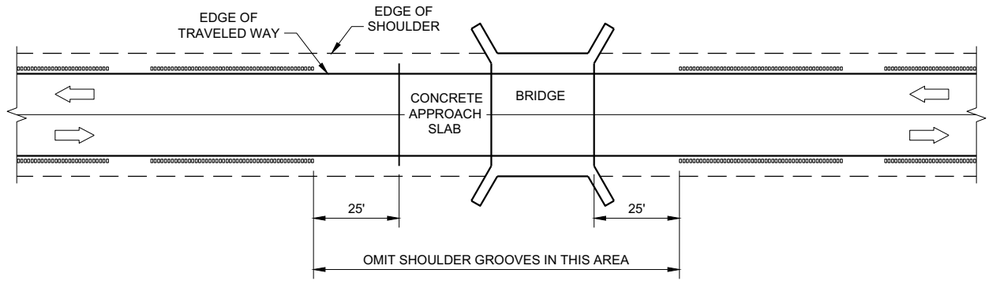
2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING



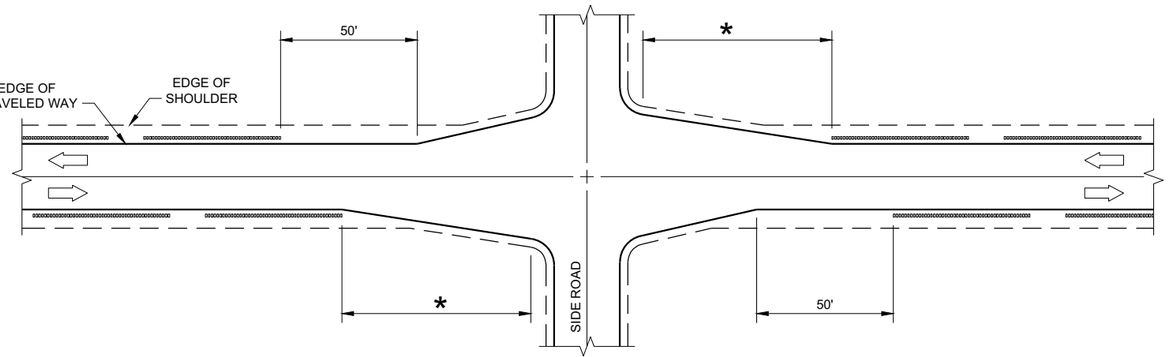
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

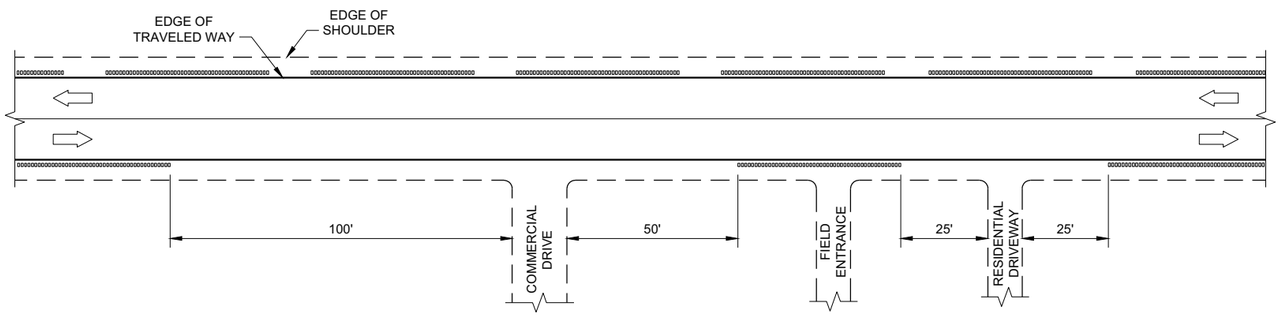


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

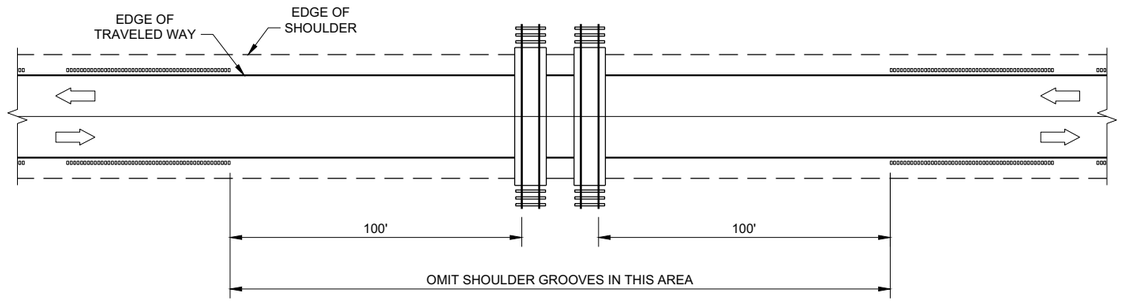
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

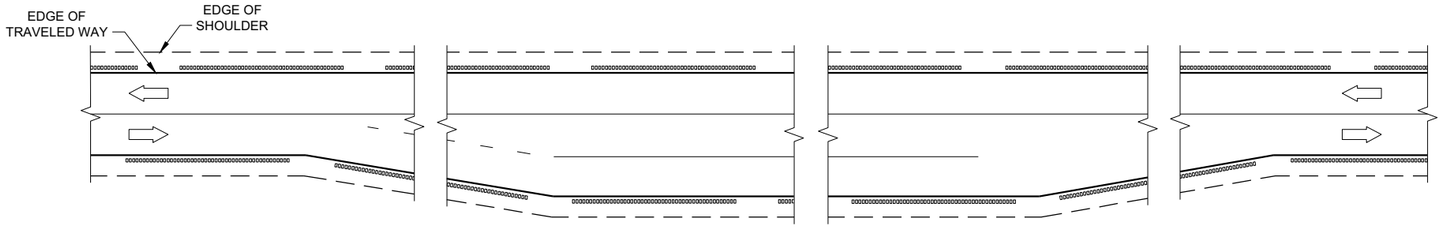
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

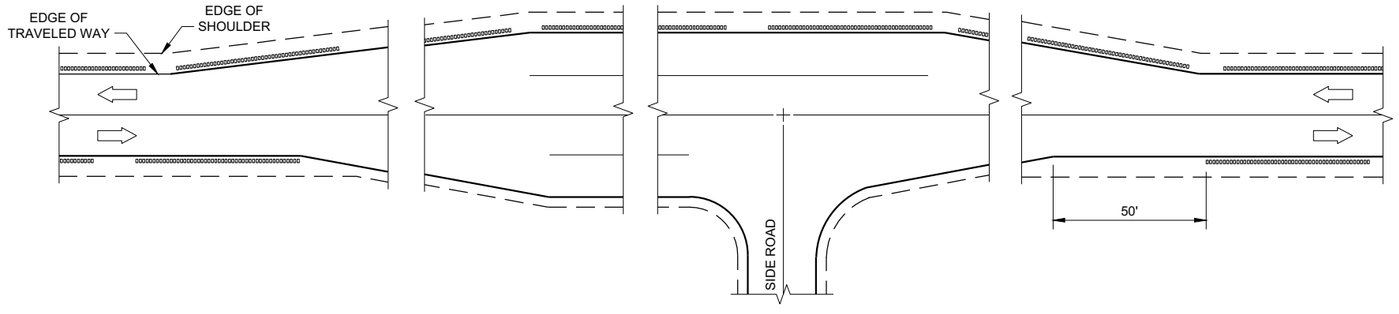
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

SDD 13A10 - 02d

SDD13A10 - 02d

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

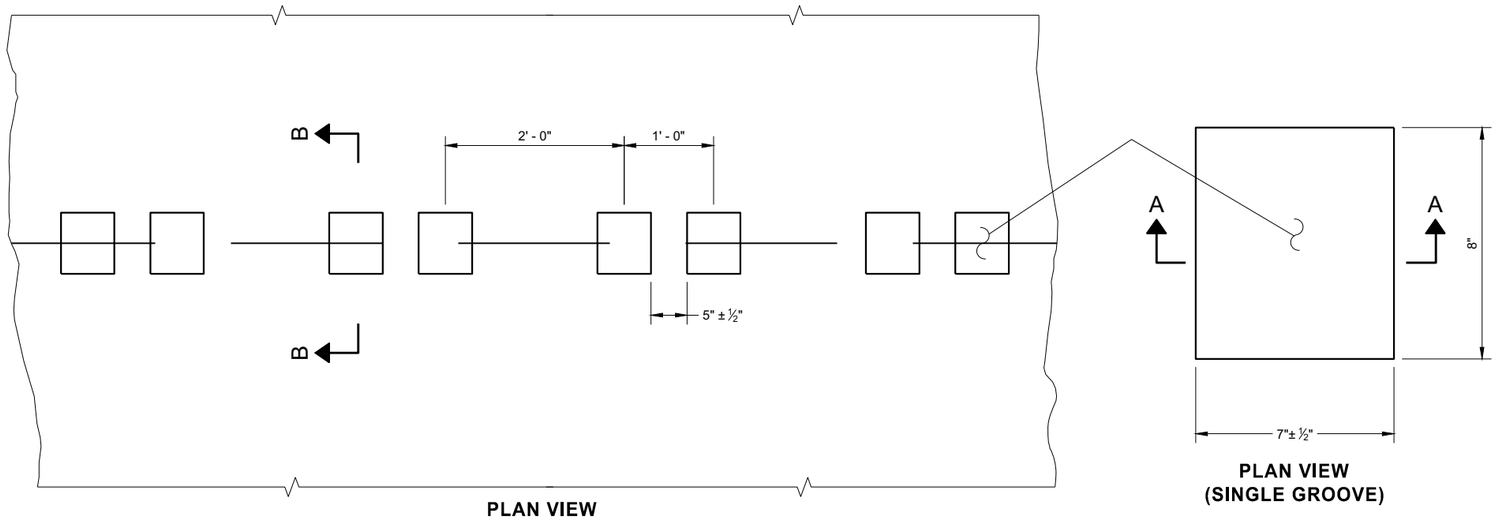
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

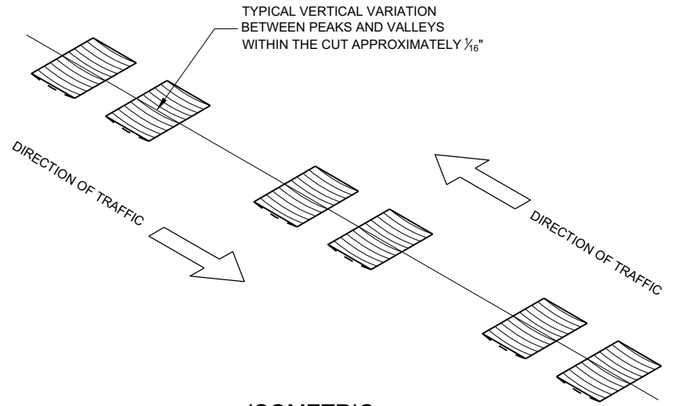
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

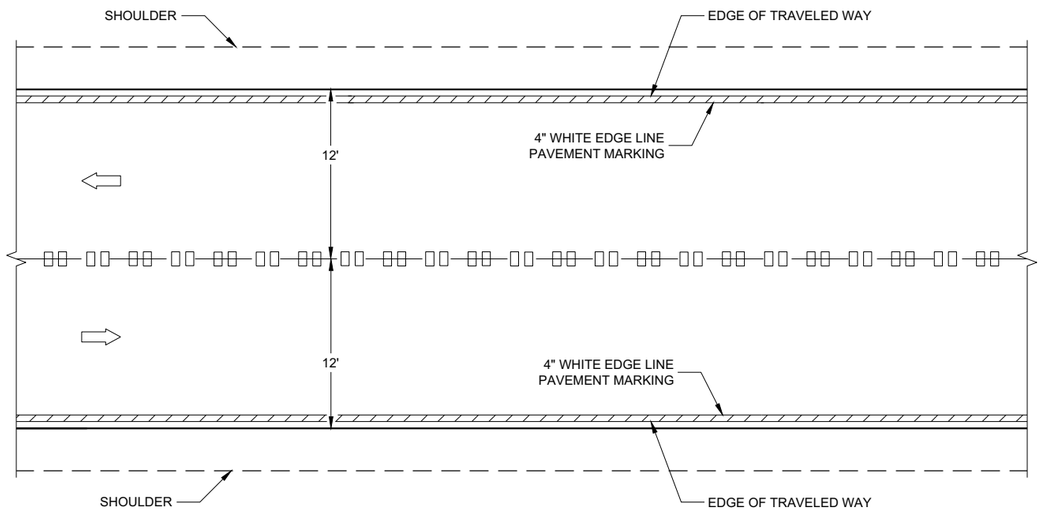
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

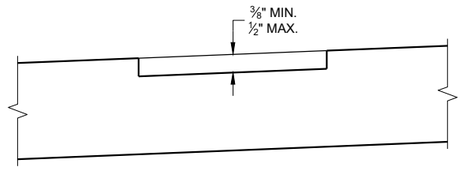
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



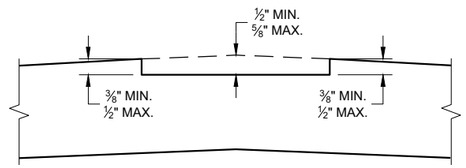
ISOMETRIC



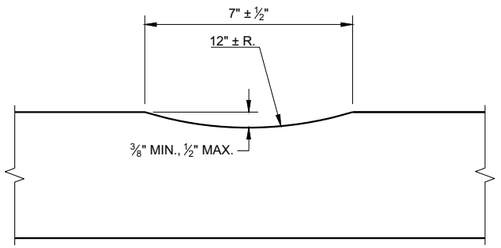
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

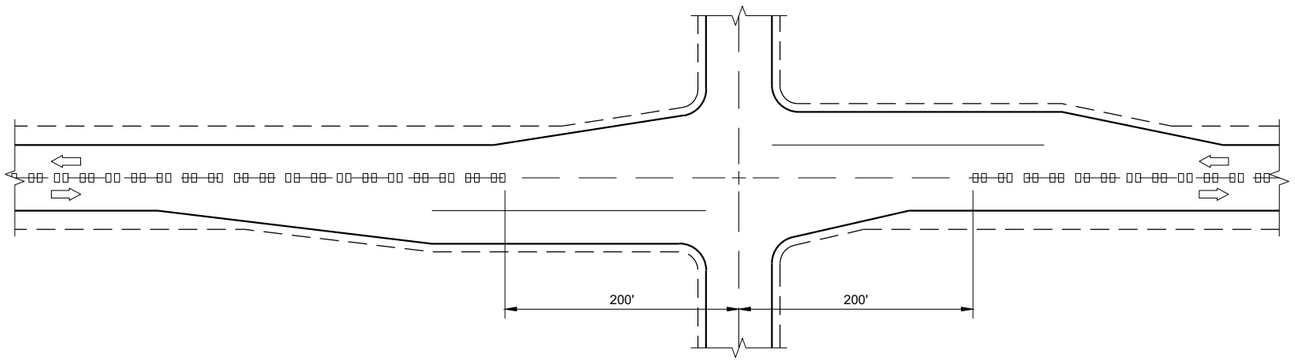
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

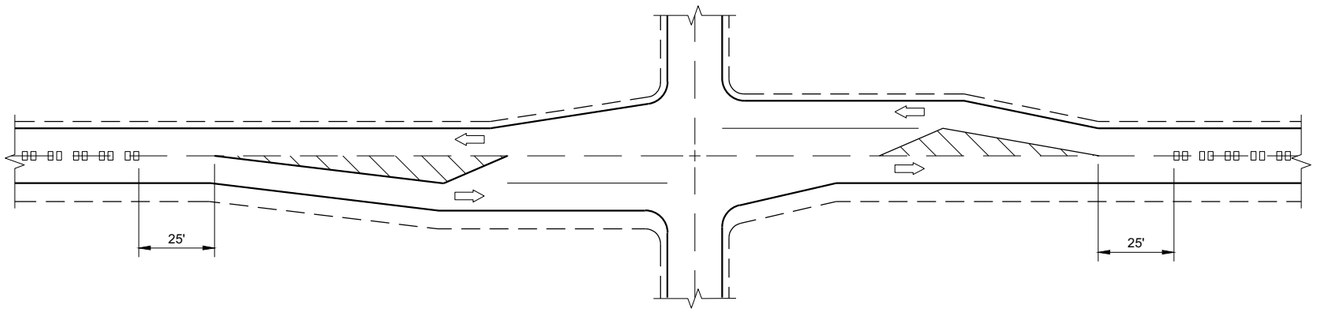
SDD 13A11 - 03a

6

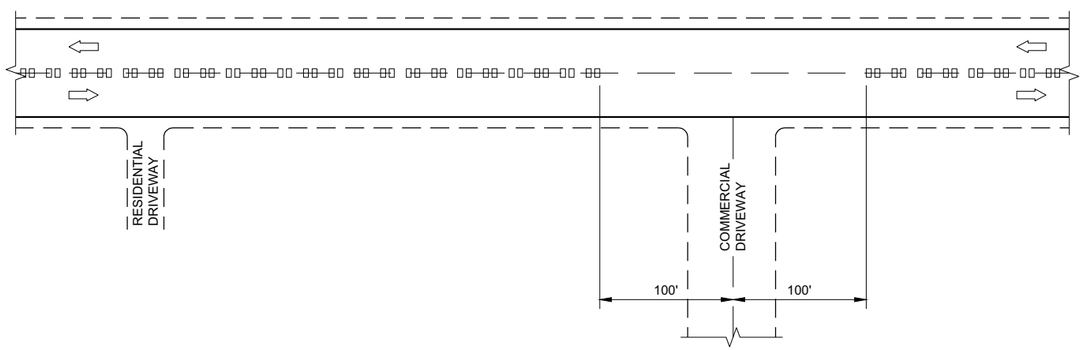
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



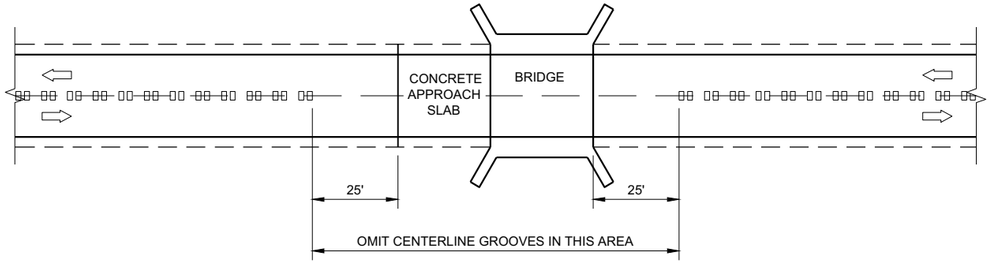
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



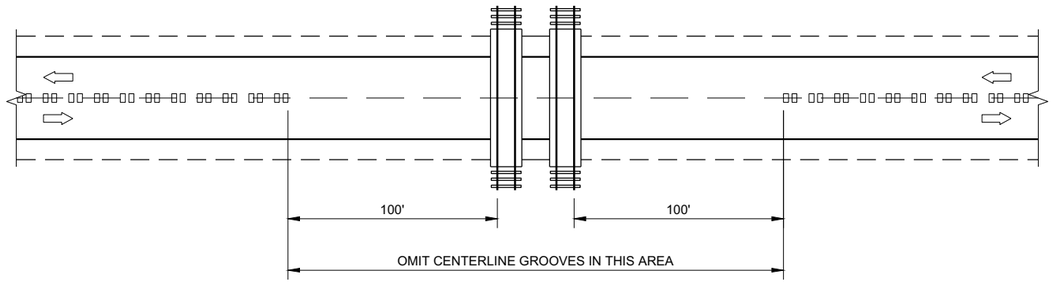
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

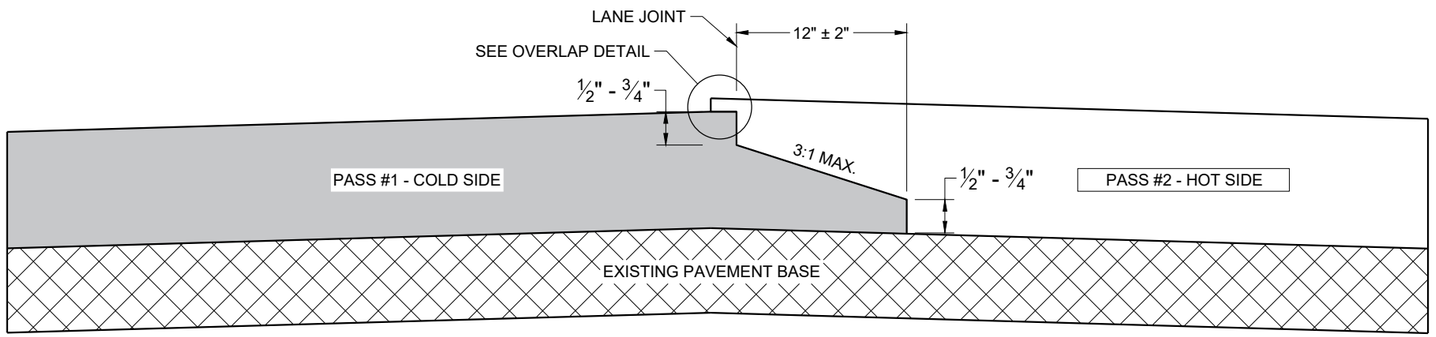
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

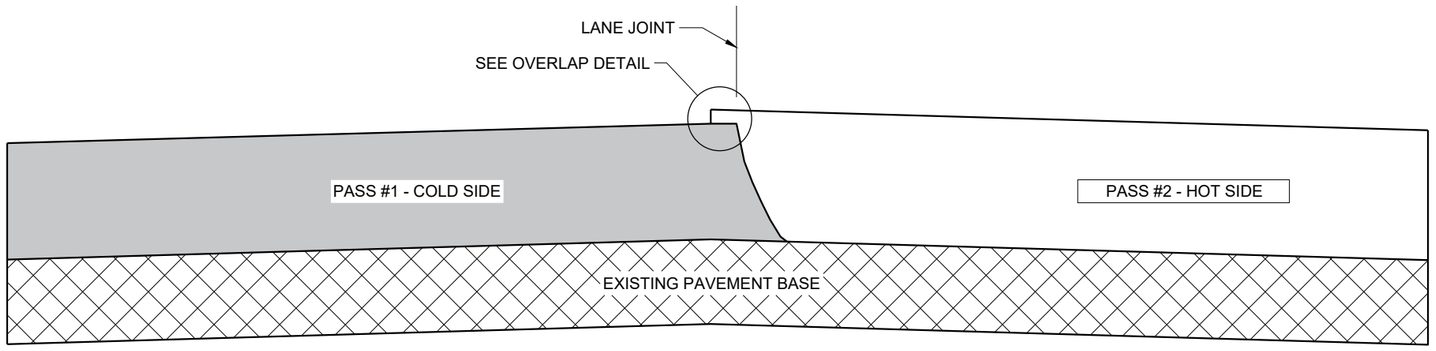
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

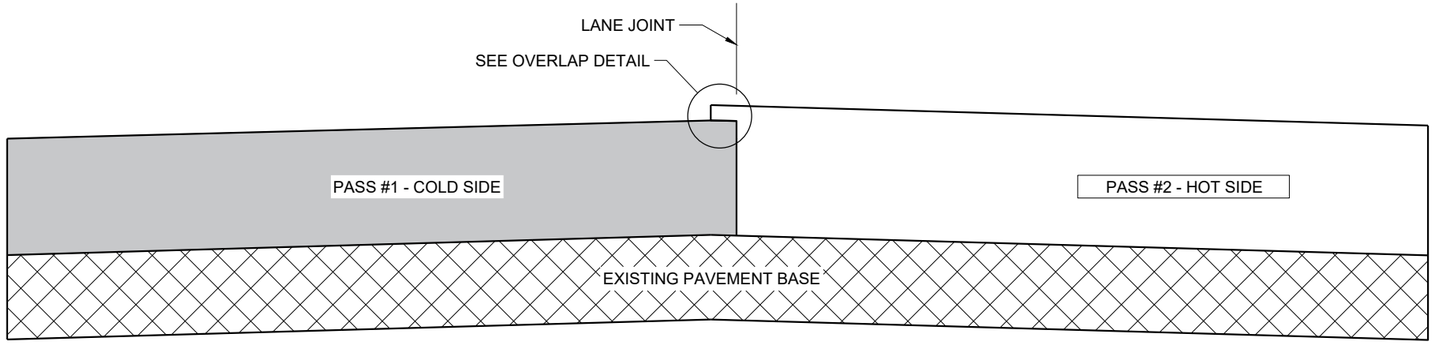
6
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

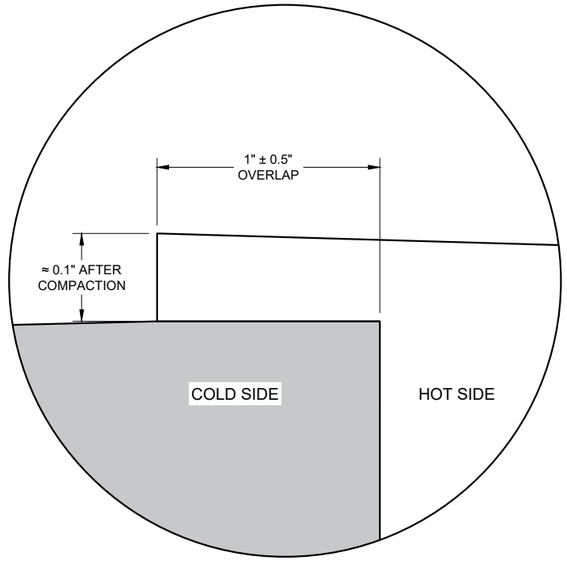
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

GENERAL NOTES

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

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

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

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

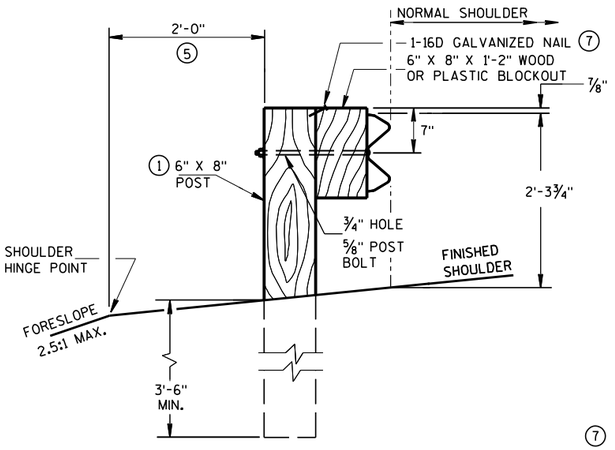
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

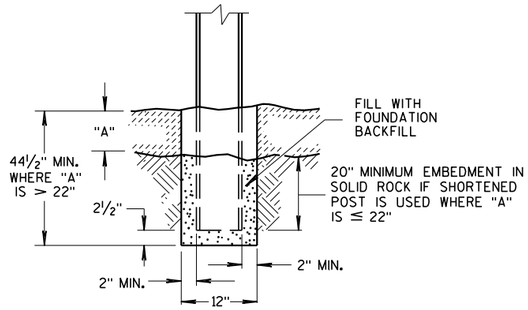
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

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

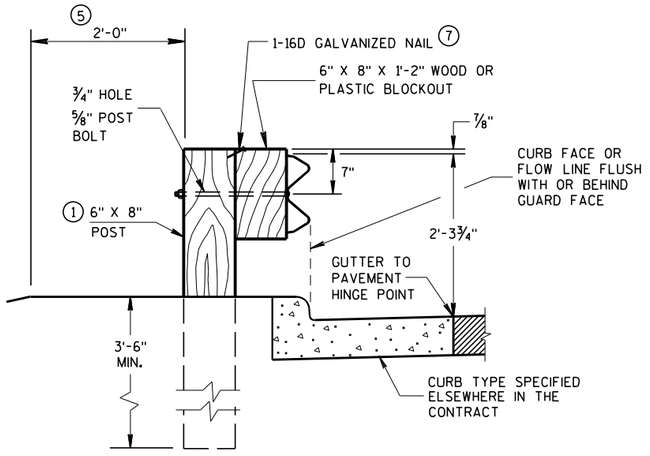
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



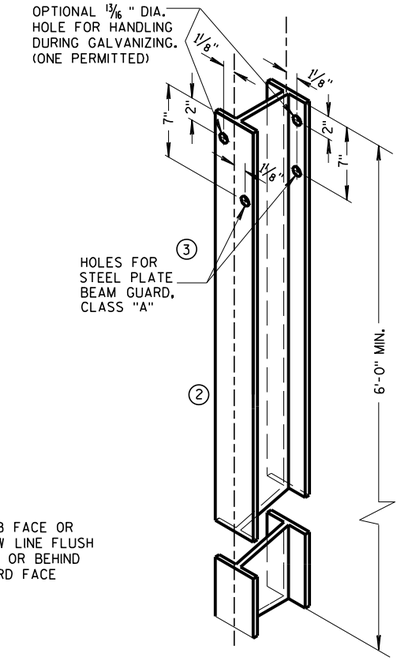
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



END VIEW
SETTING STEEL OR WOOD POST IN ROCK ⑥

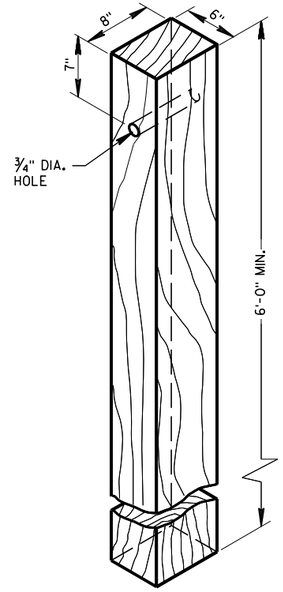


END VIEW
LOCATED ALONG A CURBED ROADWAY

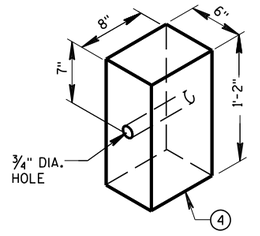


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①

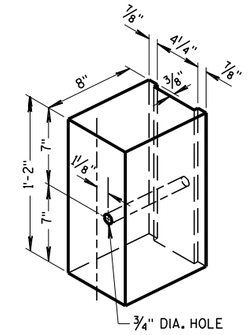
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



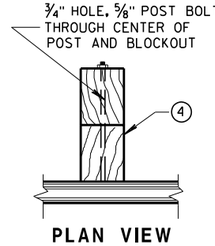
WOOD POST
(6"X8") NOMINAL



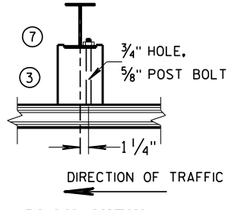
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



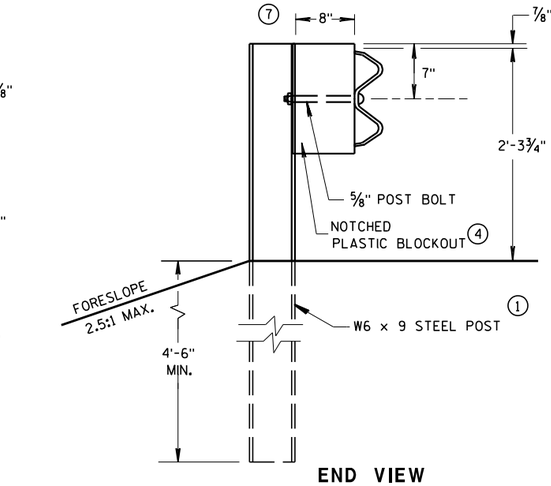
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS ①



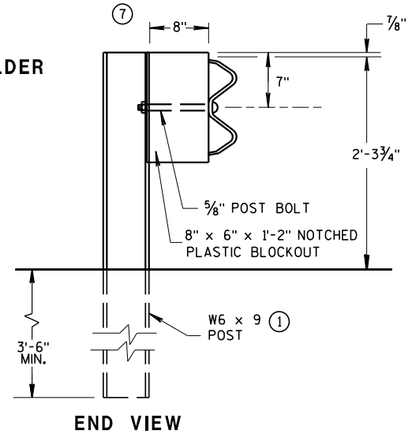
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



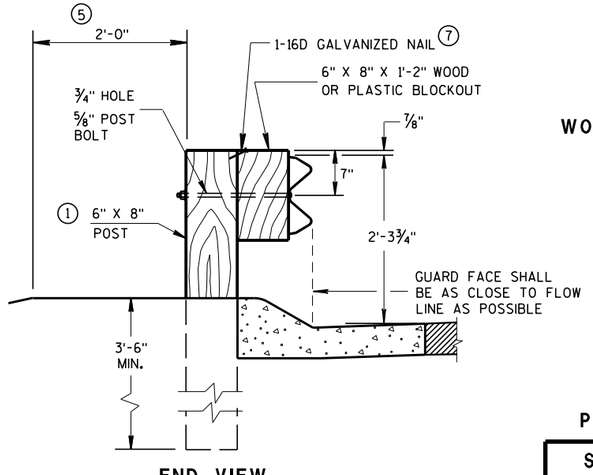
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



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



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

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

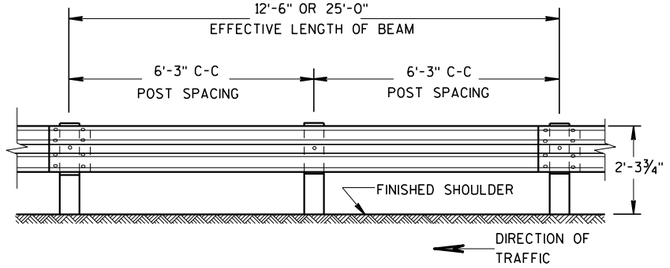
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

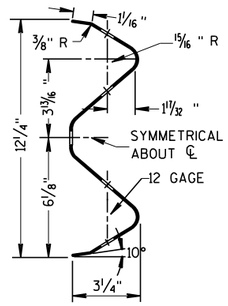
6

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

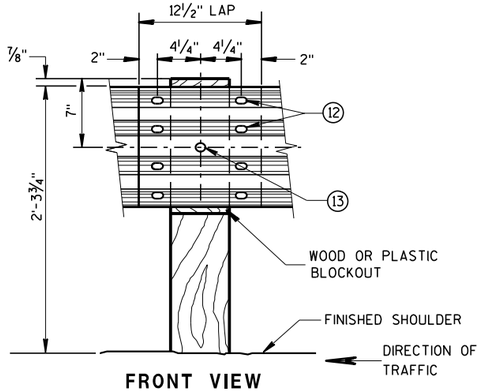


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

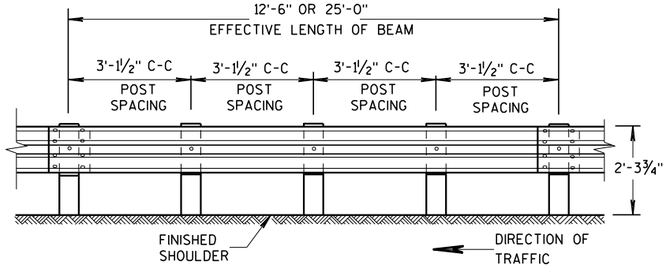
GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

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

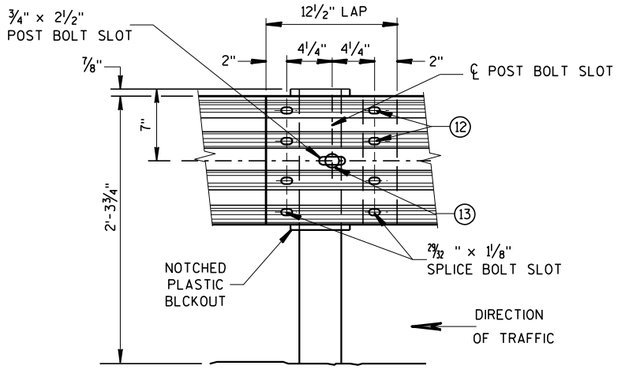
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

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



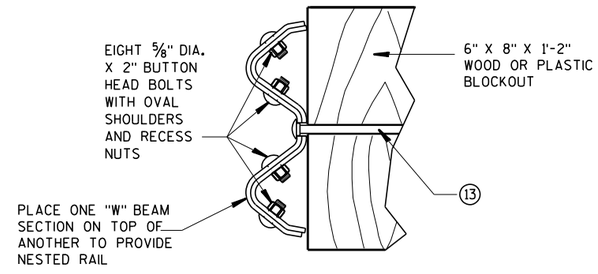
FRONT VIEW

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



FRONT VIEW

BEAM SPLICE AT STEEL POST

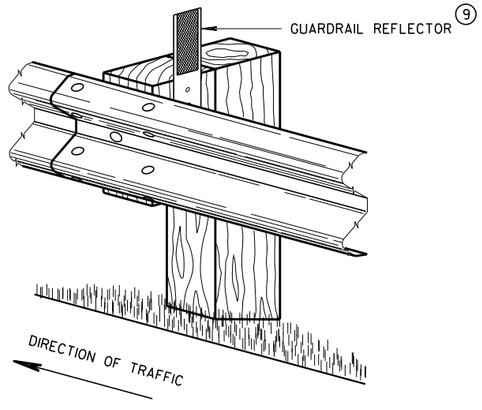


NESTED W BEAM (NW)

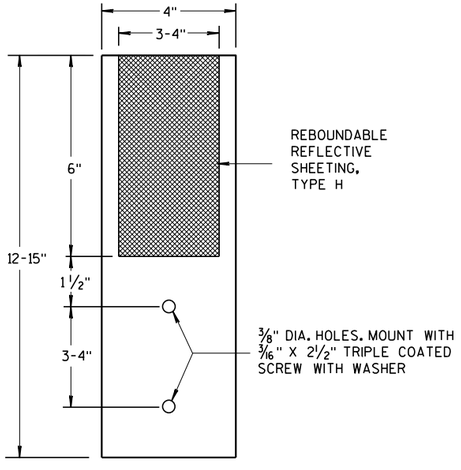
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

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



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



4"x 12" GUARDRAIL REFLECTOR

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

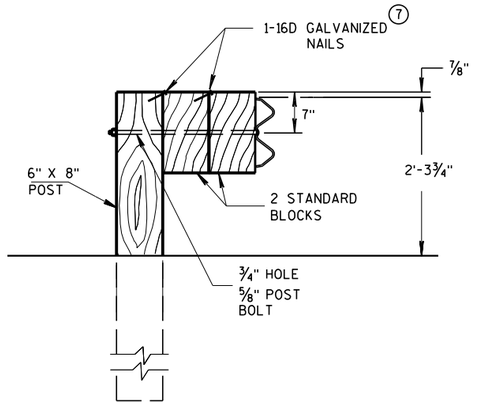
STATE OF WISCO 32
DEPARTMENT OF TRANSPORTATION

6

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

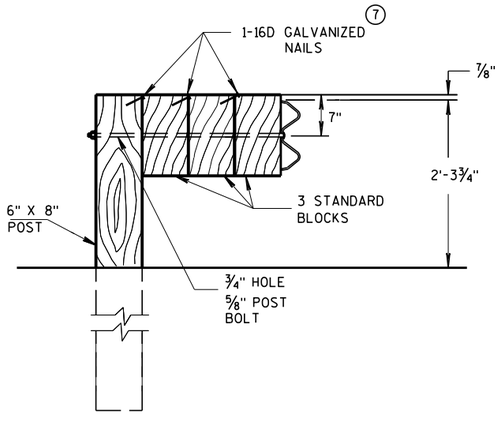
6

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



DETAIL FOR DOUBLE BLOCKS

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

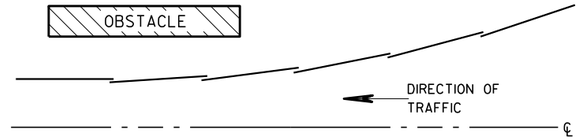


DETAIL FOR TRIPLE BLOCKS

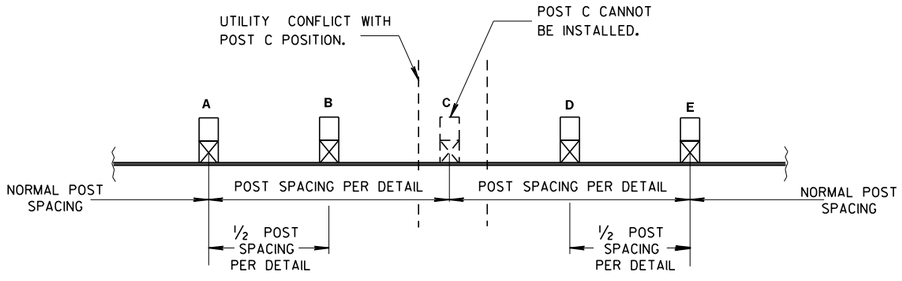
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

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

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



PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 — DATE
/S/ Rodney Taylor
ROADWAY STANDARDS 33 — UNIT SUPERVISOR
FHWA

6
S.D.D. 14 B 15-11c

BILL OF MATERIALS

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

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

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

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

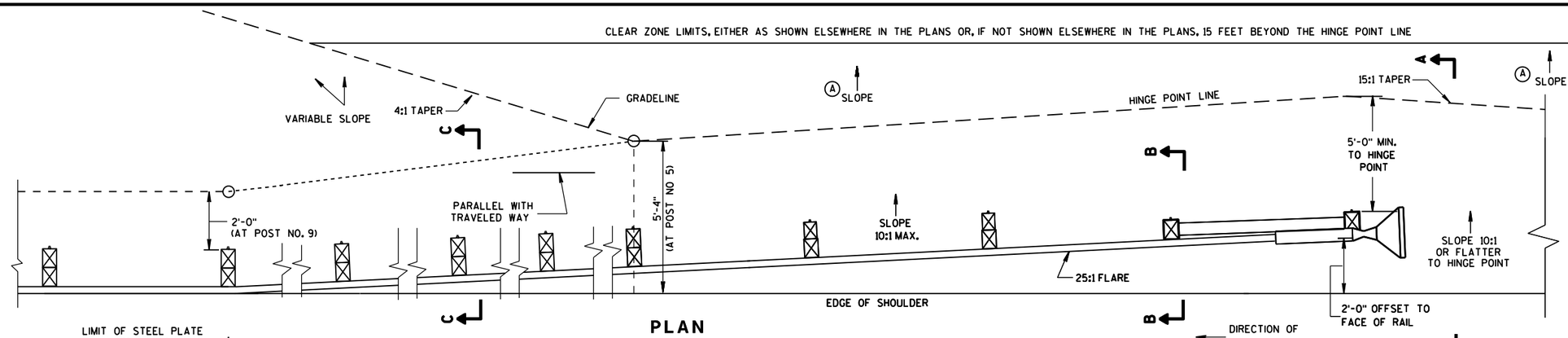
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

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

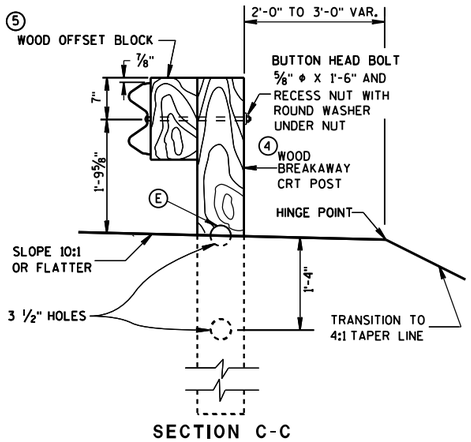
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

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

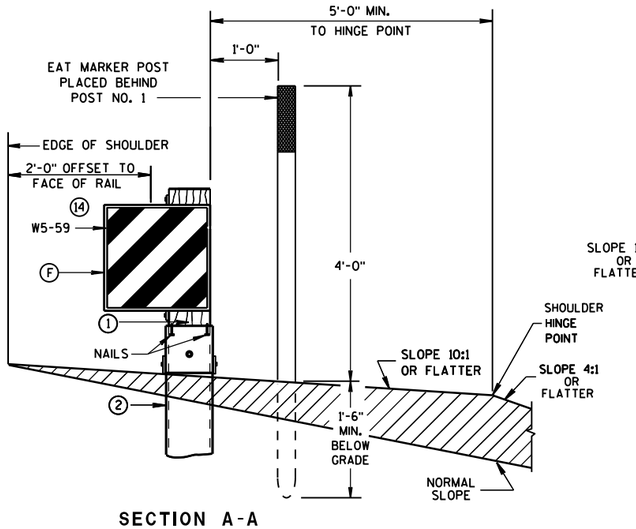
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.



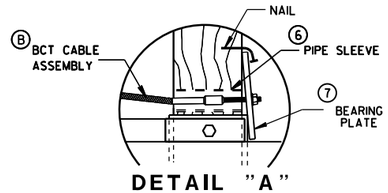
ELEVATION



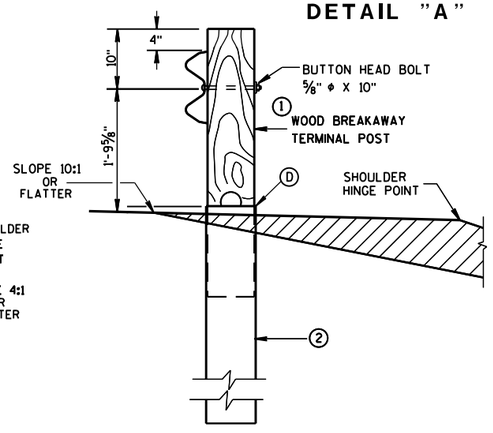
SECTION C-C
TYPICAL AT POST NOS. 6, 8



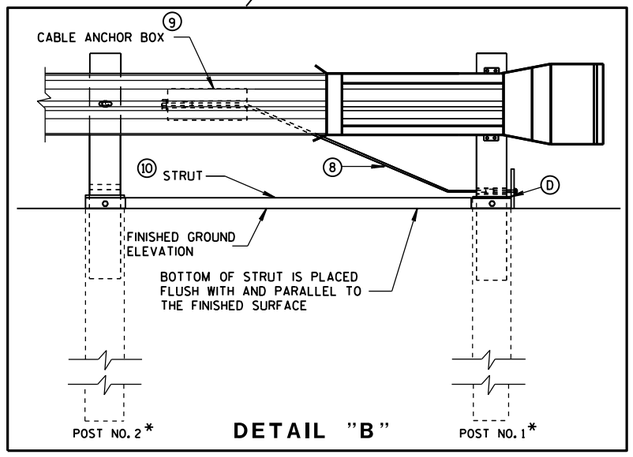
SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



SECTION B-B
TYPICAL AT POST NO. 2*



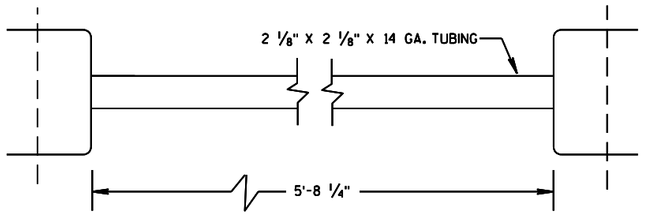
DETAIL "B"

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

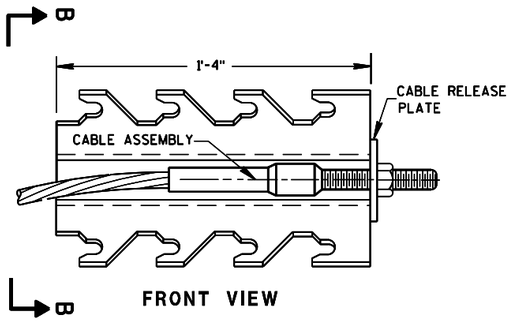
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

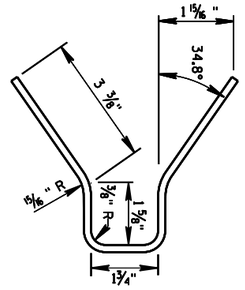
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL

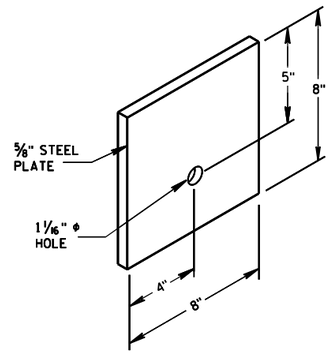


FRONT VIEW



SECTION B-B

⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

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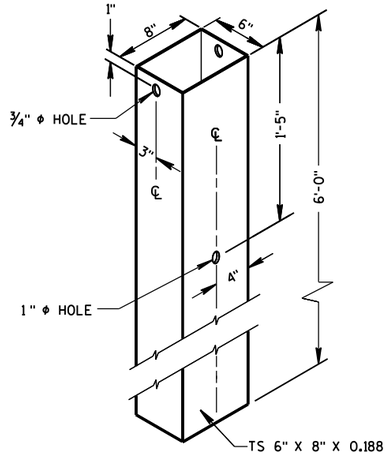
S.D.D. 14 B 24-9b

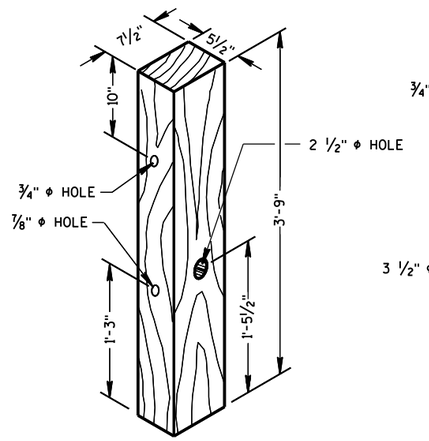
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

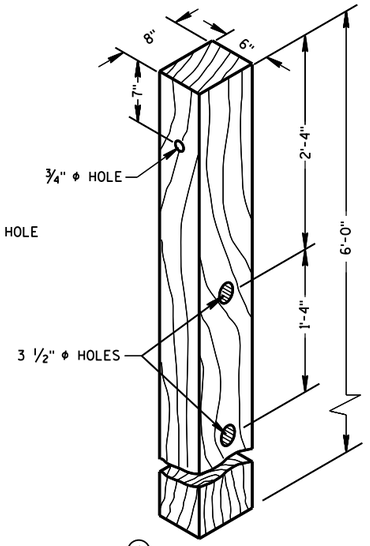
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

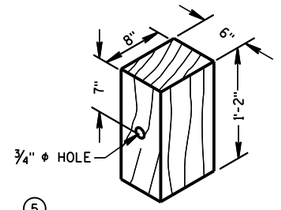


④ CRT POST
(POSTS NO'S 5-8

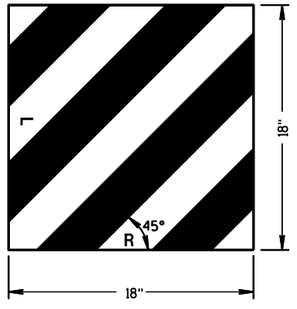
WOOD BREAKAWAY POSTS

GENERAL NOTES

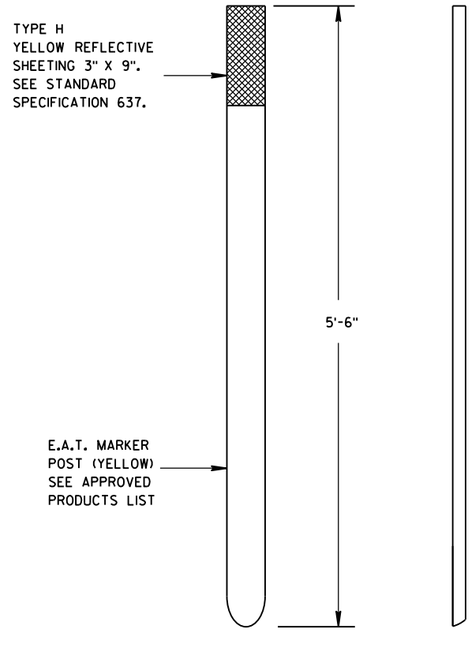
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV...

36

ENT

6

S.D.D. 14 B 24-9c

6

S.D.D. 14 B 24-9c

GENERAL NOTES

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

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

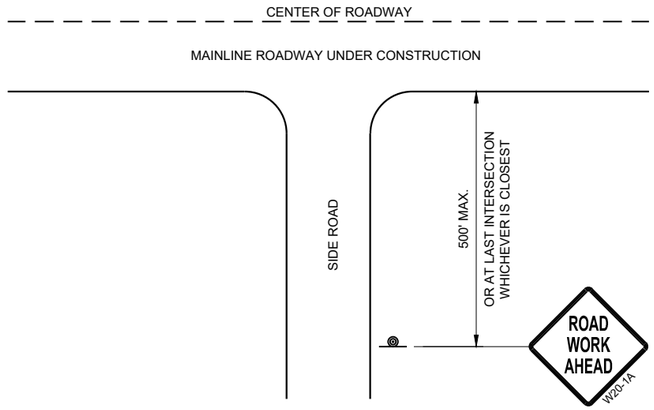
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

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

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



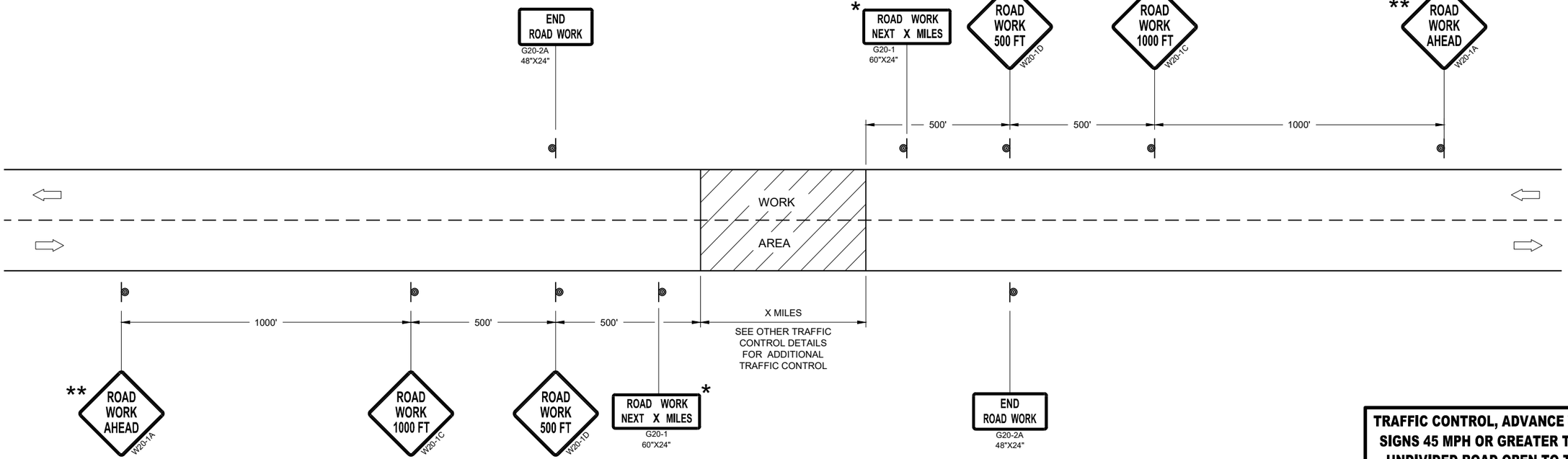
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

GENERAL NOTES

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

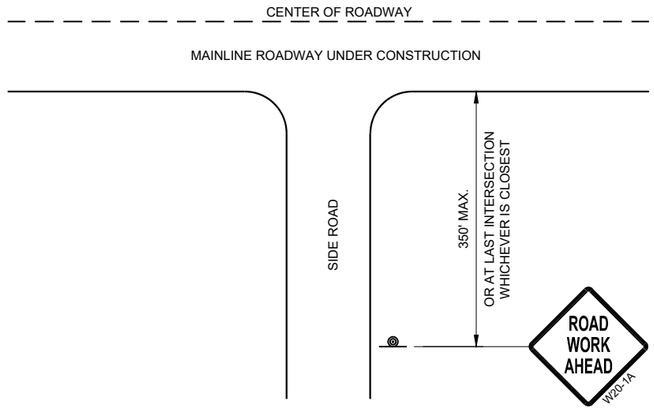
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

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



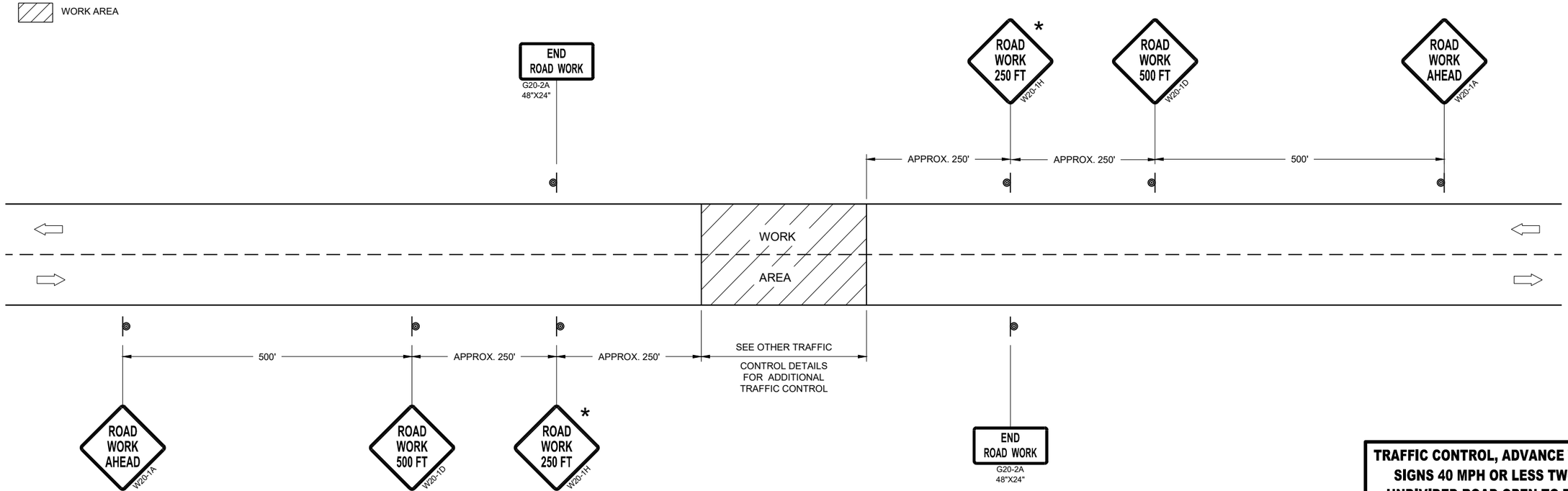
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

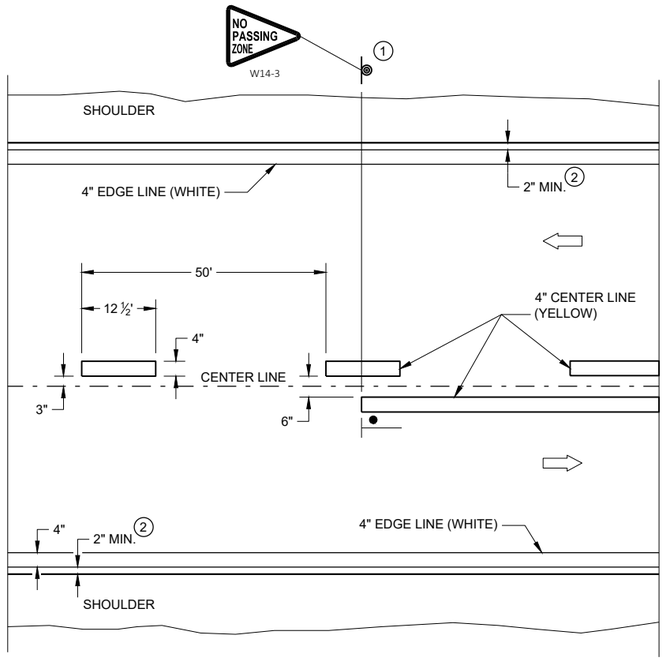
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

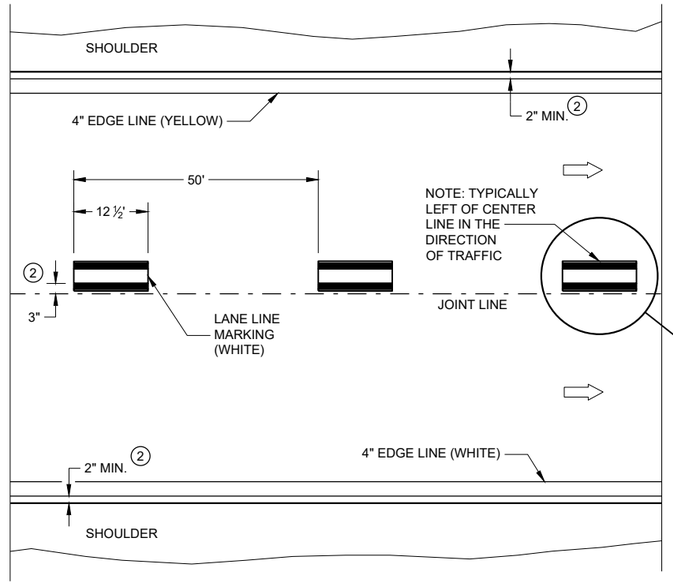
FHWA

6

SDD 15C05 - 05

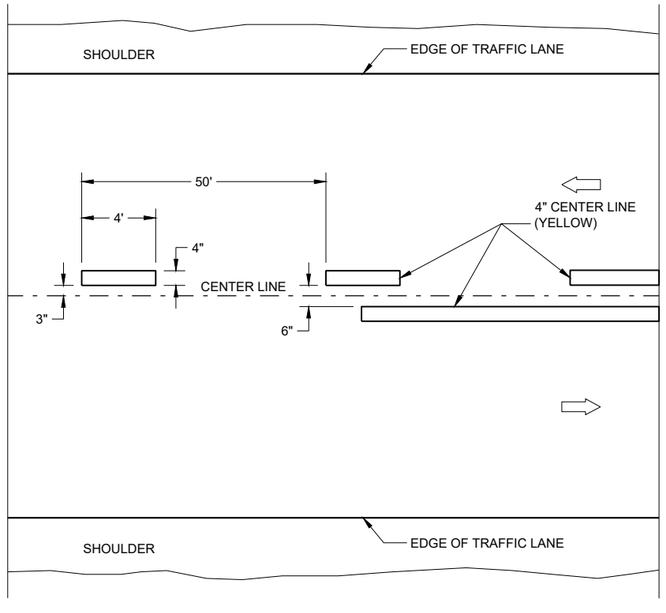


TWO WAY TRAFFIC

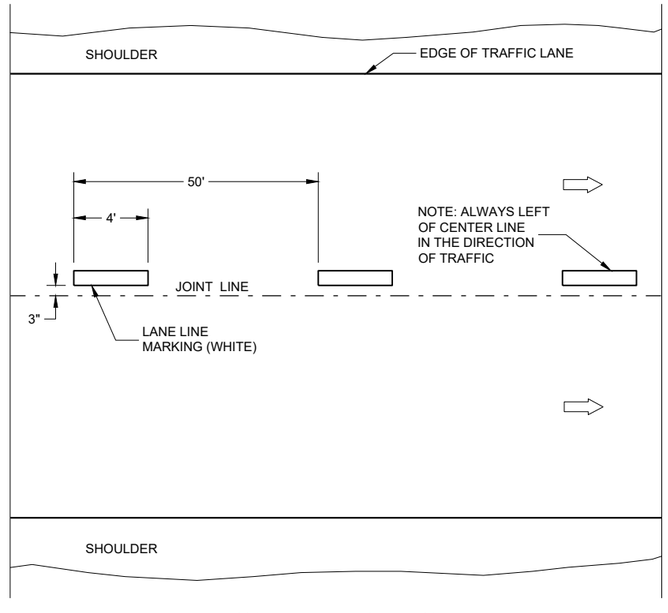


ONE WAY TRAFFIC

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.

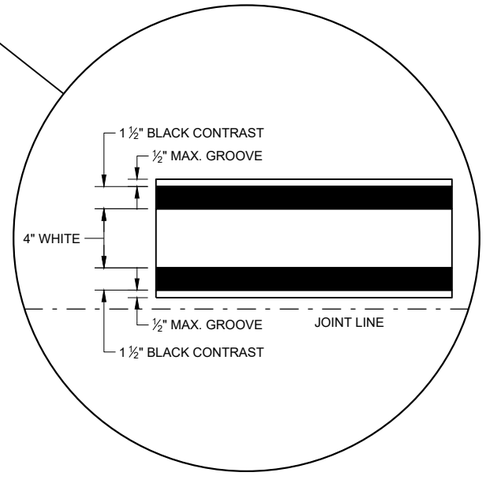
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

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

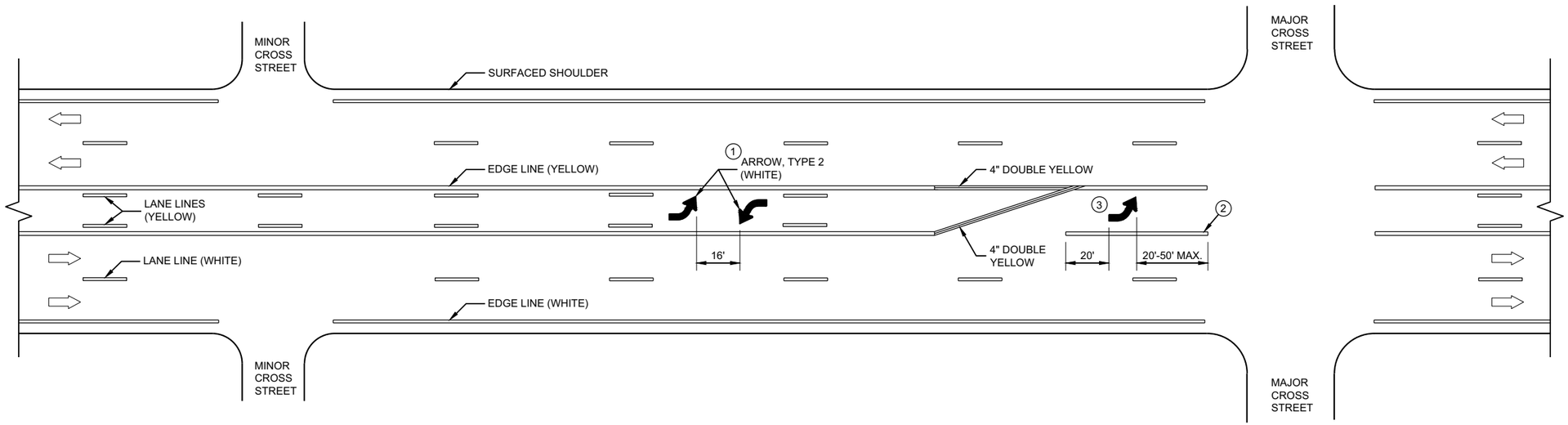
SDD 15C08 - 20a

SDD 15C08 - 20a

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

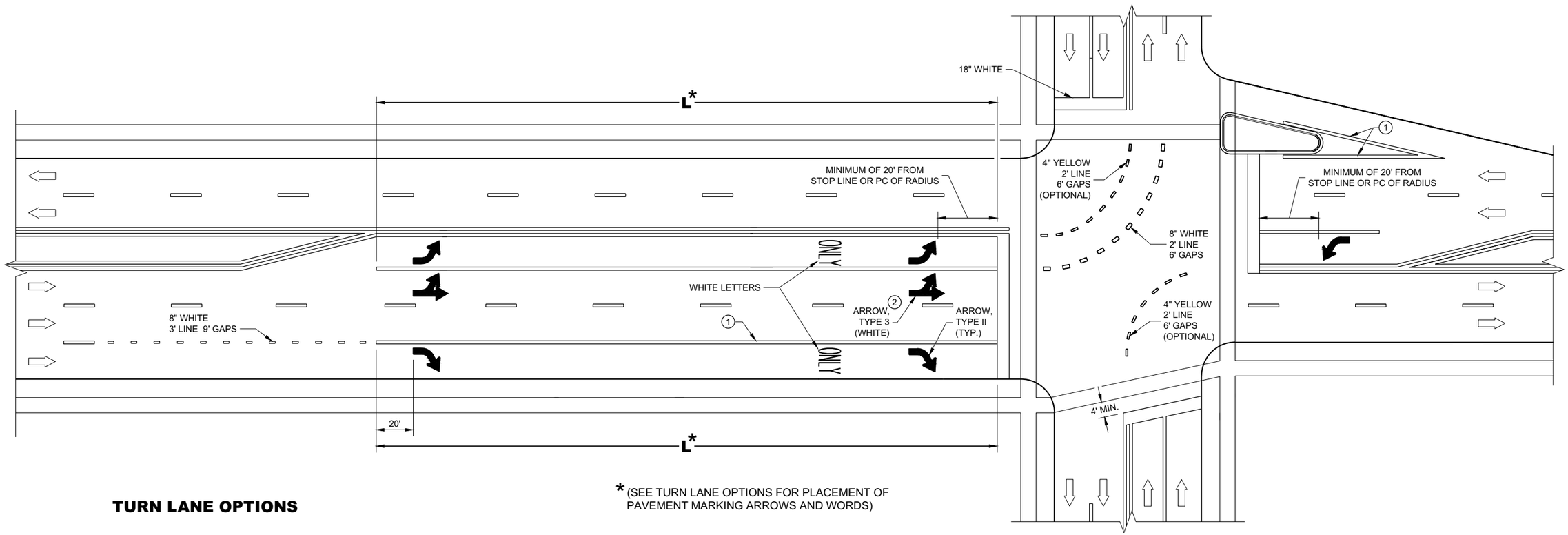
6

SDD 15C08 - 20b

SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

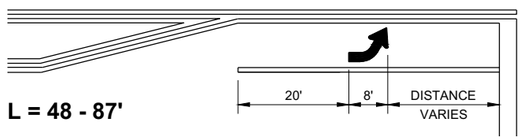
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



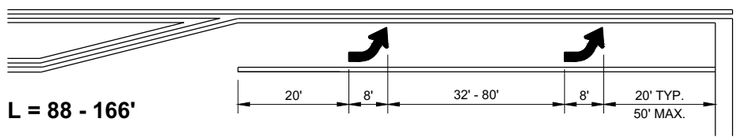
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

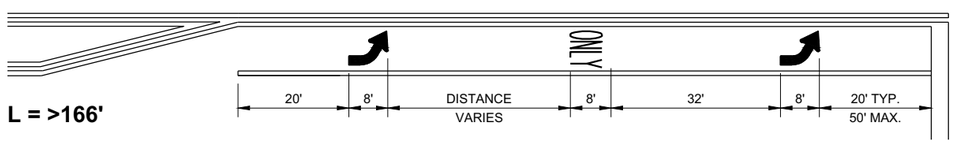
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

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)

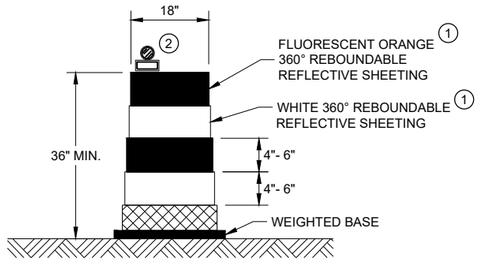
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

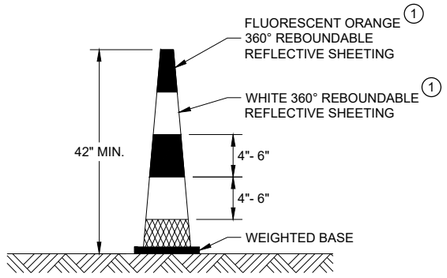
SDD 15C08 - 20c

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.

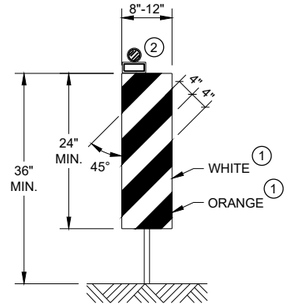


DRUM



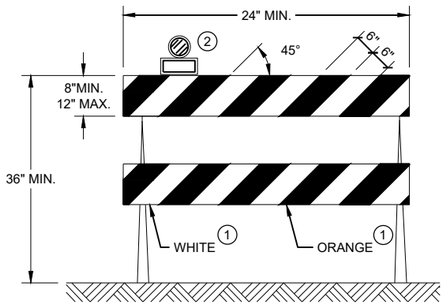
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



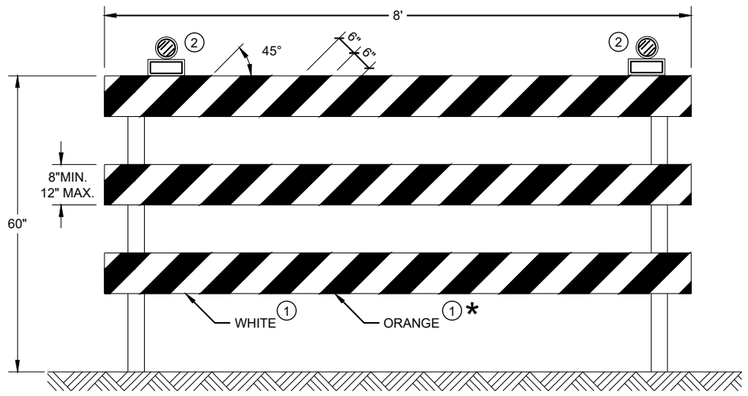
VERTICAL PANEL

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 ENGINEE

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

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.

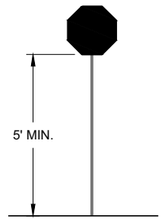
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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.



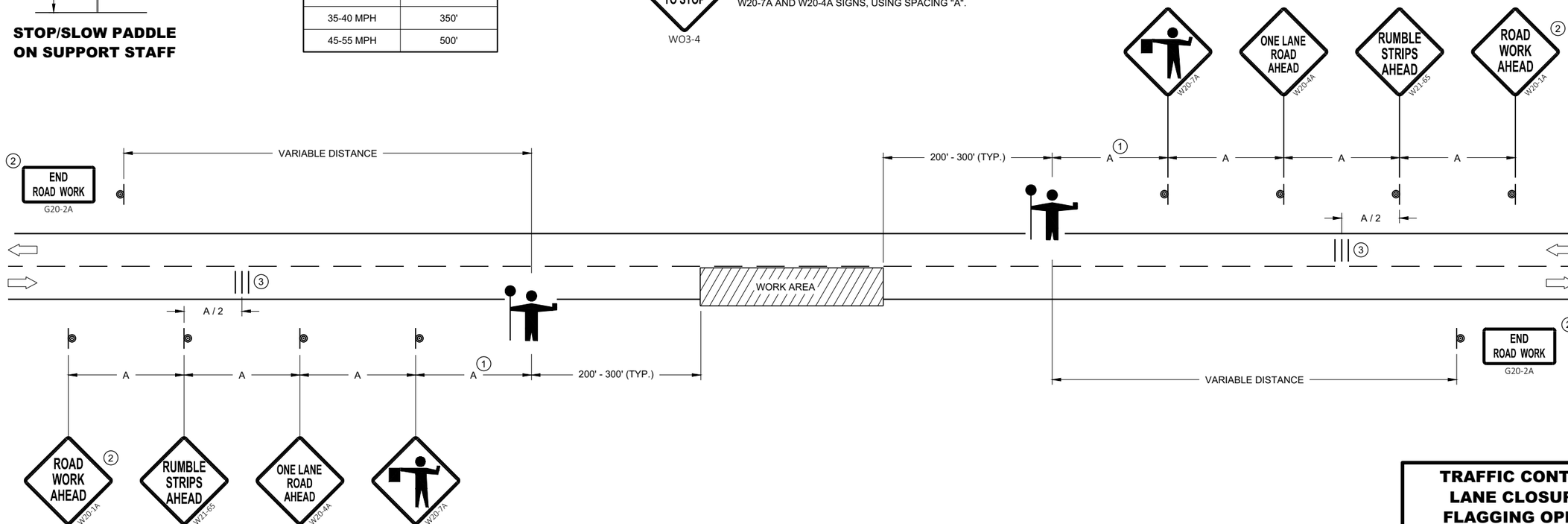
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15C12 - 07

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.

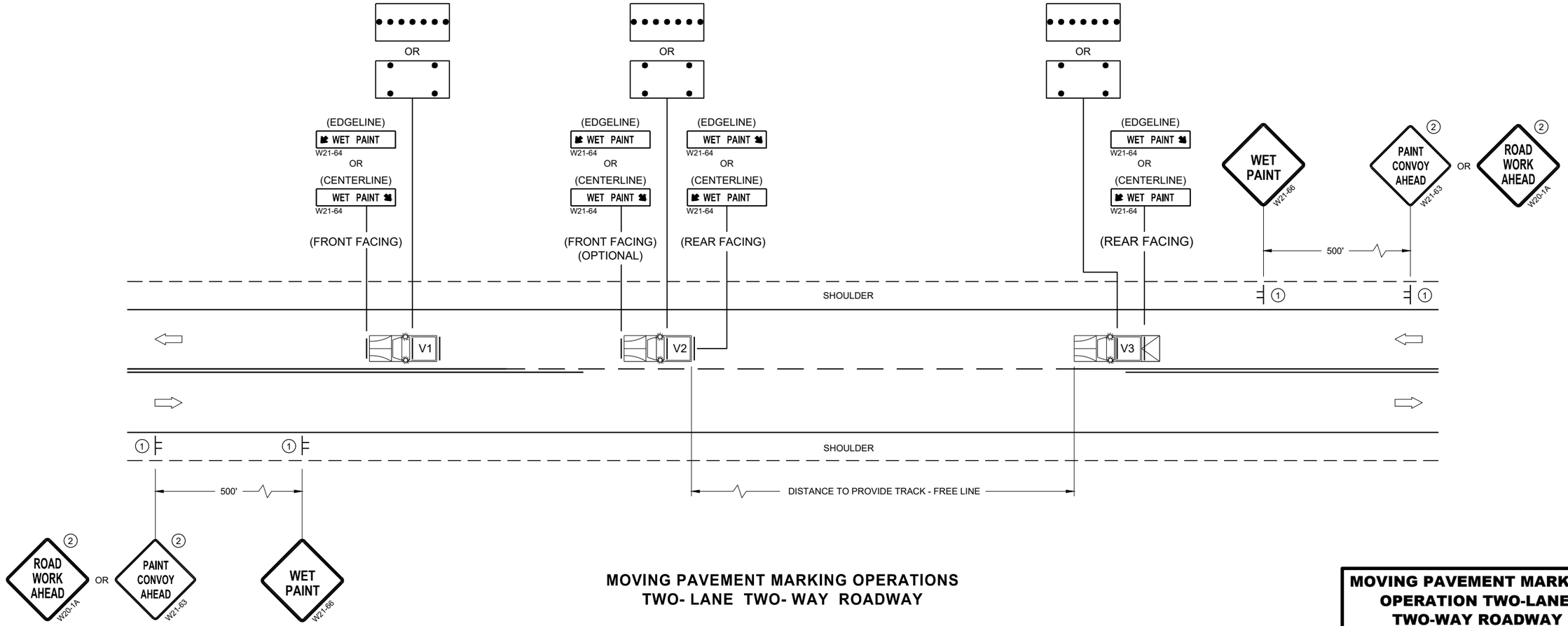
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

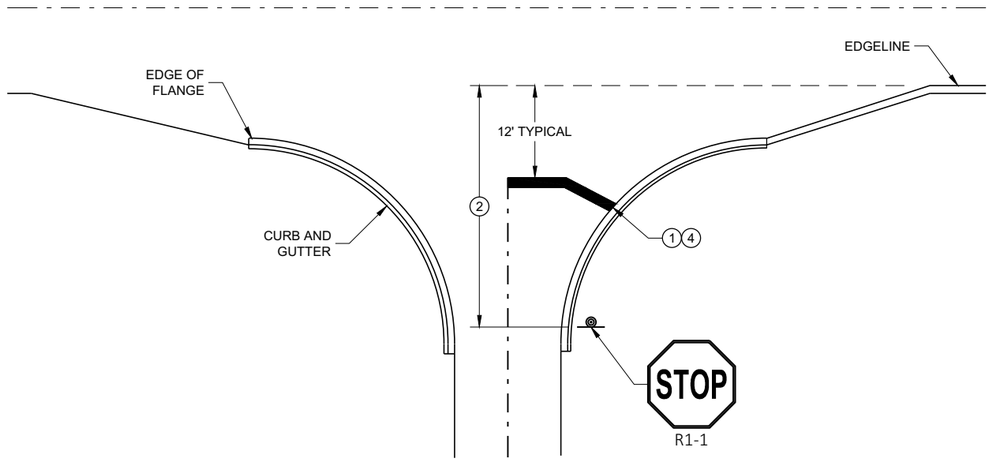
SDD 15C19 - 06a

SDD 15C19 - 06a

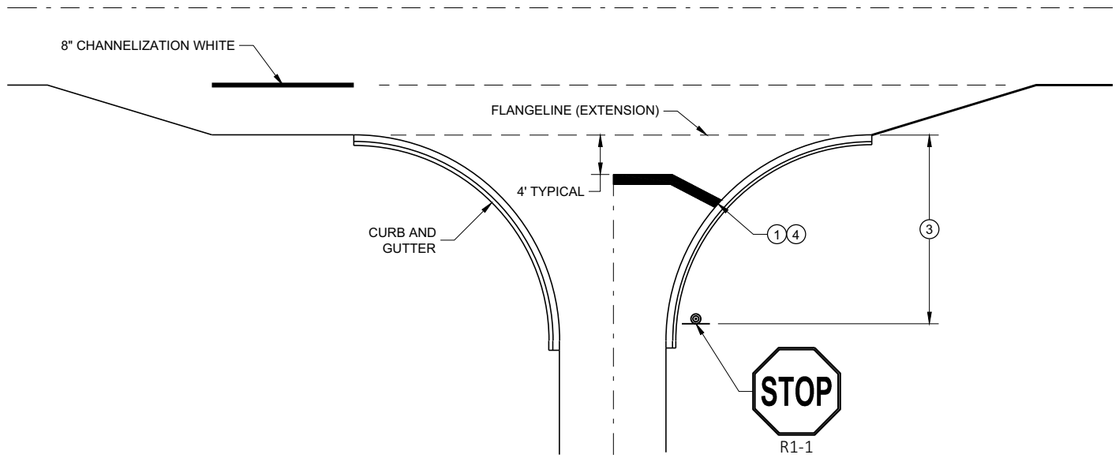
GENERAL NOTES

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

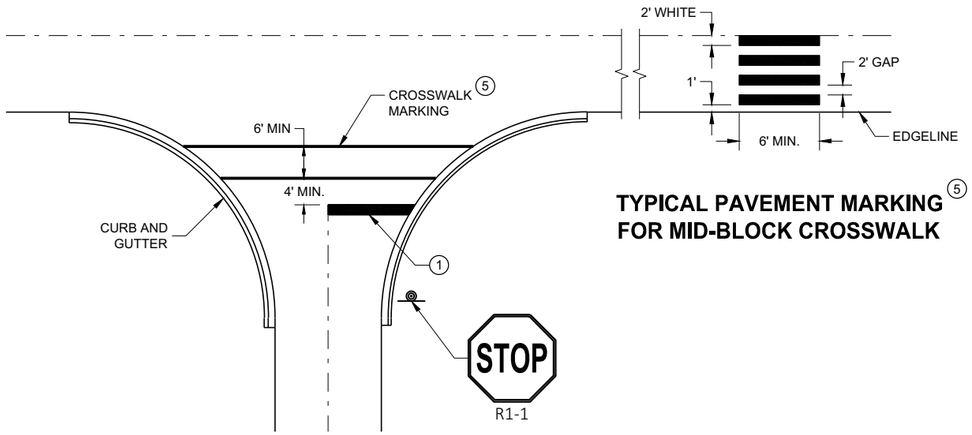
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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

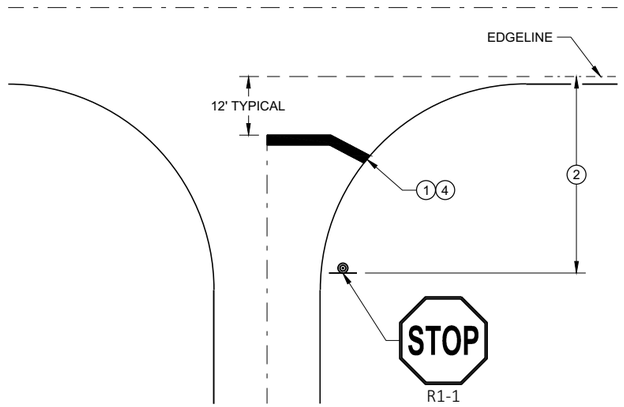


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



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 MAF ENGINEER

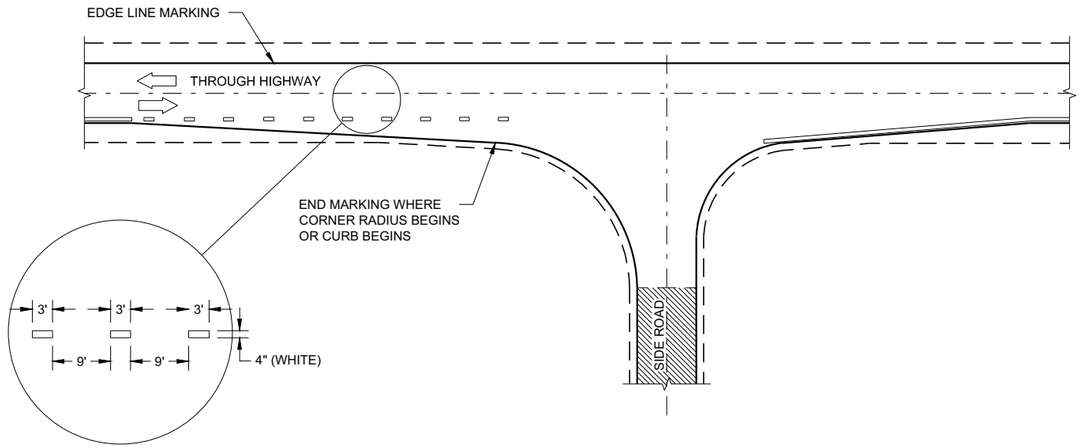
FHWA

6

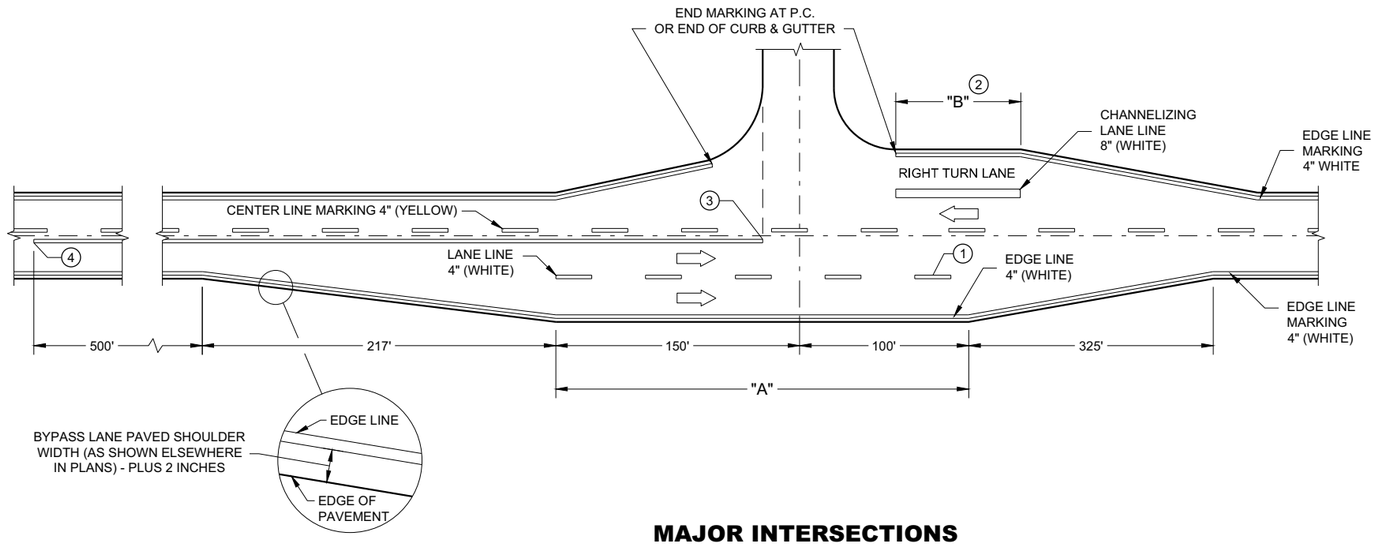
SDD 15C33 - 04

6

SDD 15C33 - 04



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

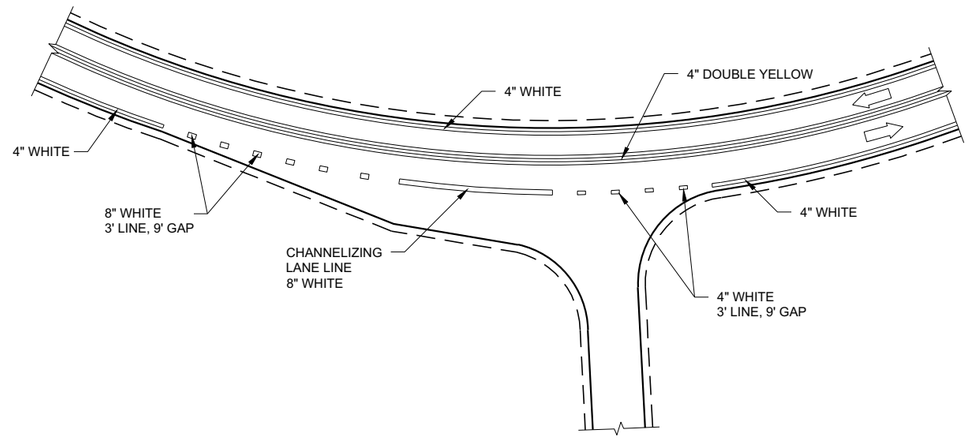
GENERAL NOTES

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

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 04a

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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 THE REGIONAL TRAFFIC UNIT.

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

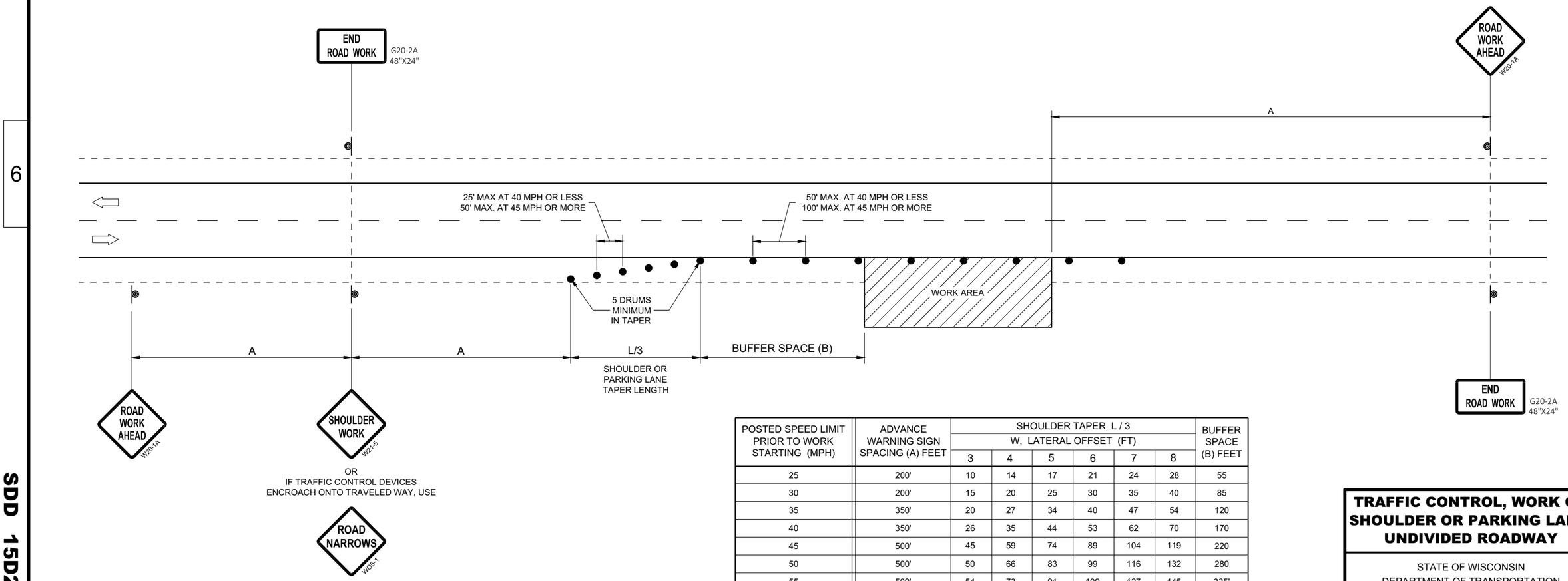
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS 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 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A 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 OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

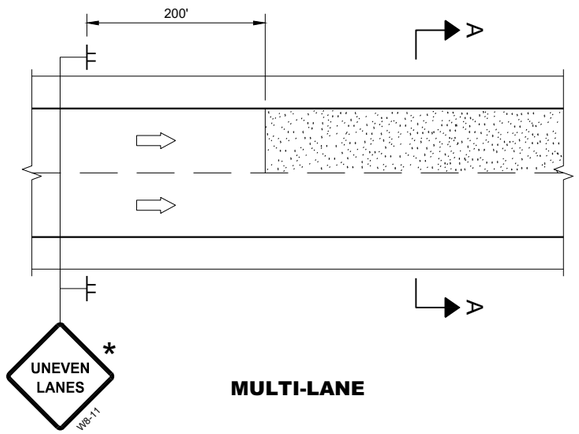
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

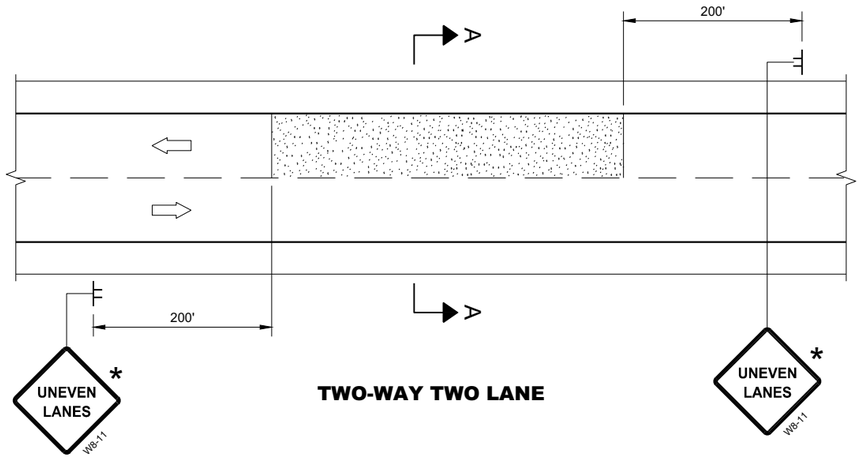
FHWA

6

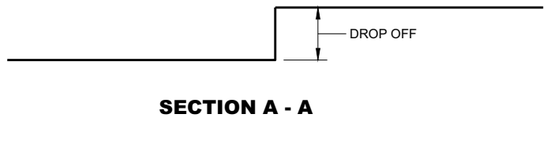
SDD 15D28 - 04



MULTI-LANE

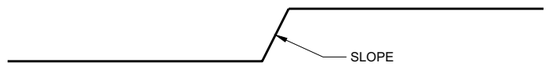


TWO-WAY TWO LANE

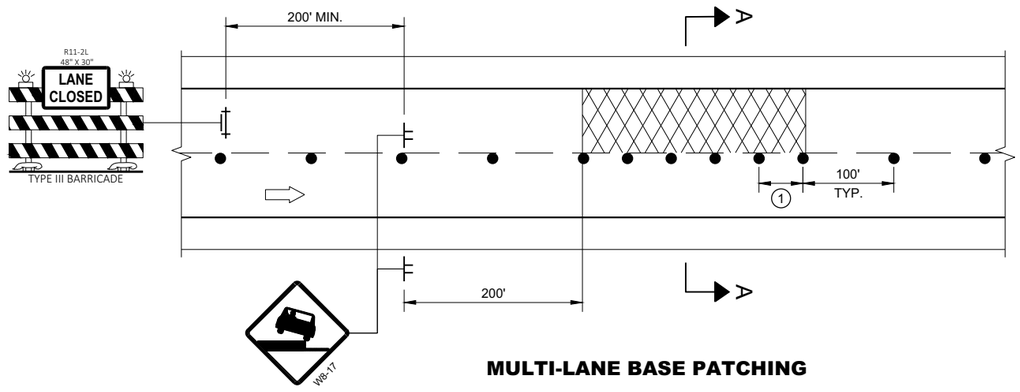


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

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.

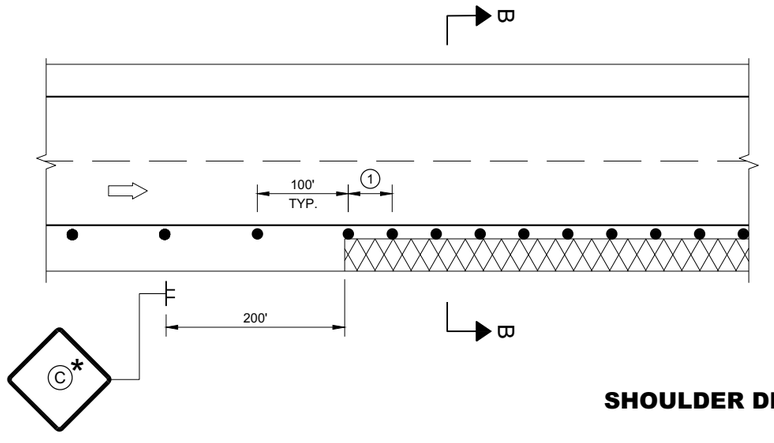
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

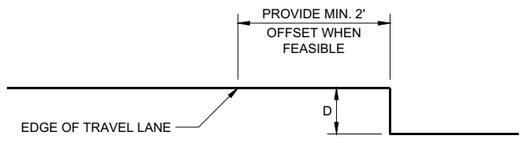
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

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



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

6
SDD 15D39 - 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.

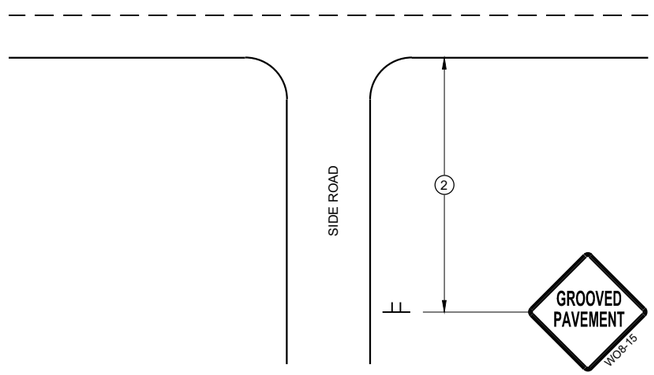
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

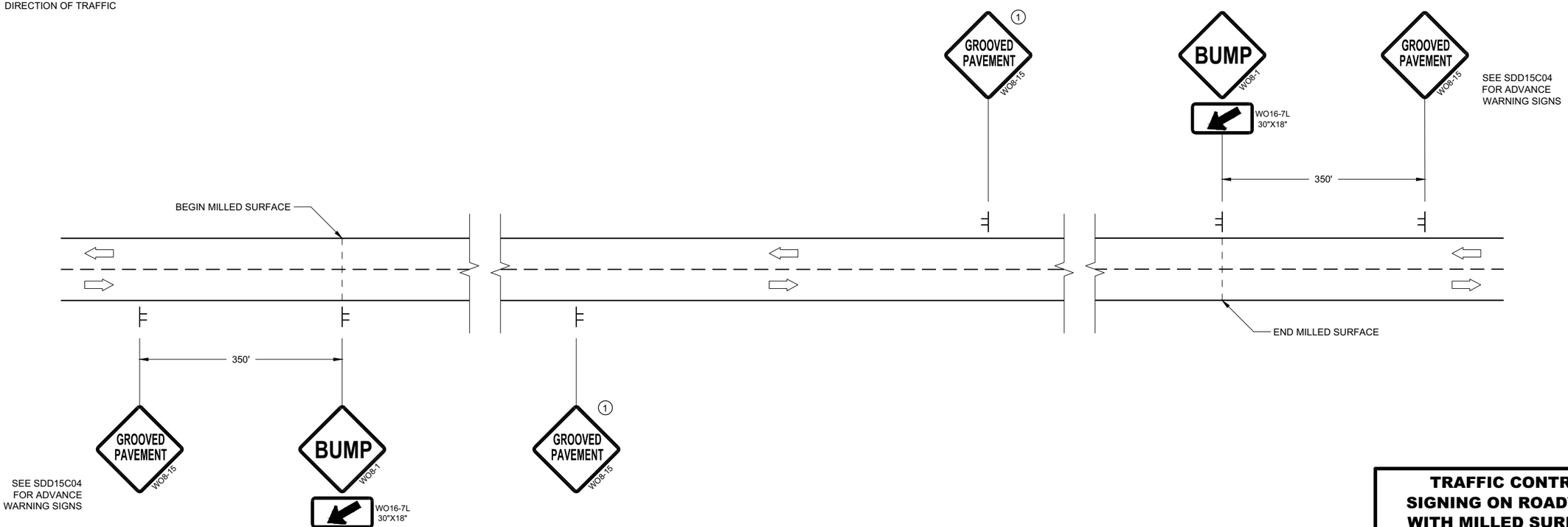
LEGEND

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

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 CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

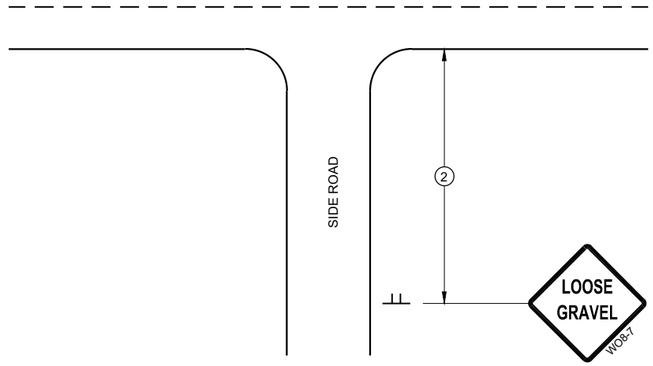
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

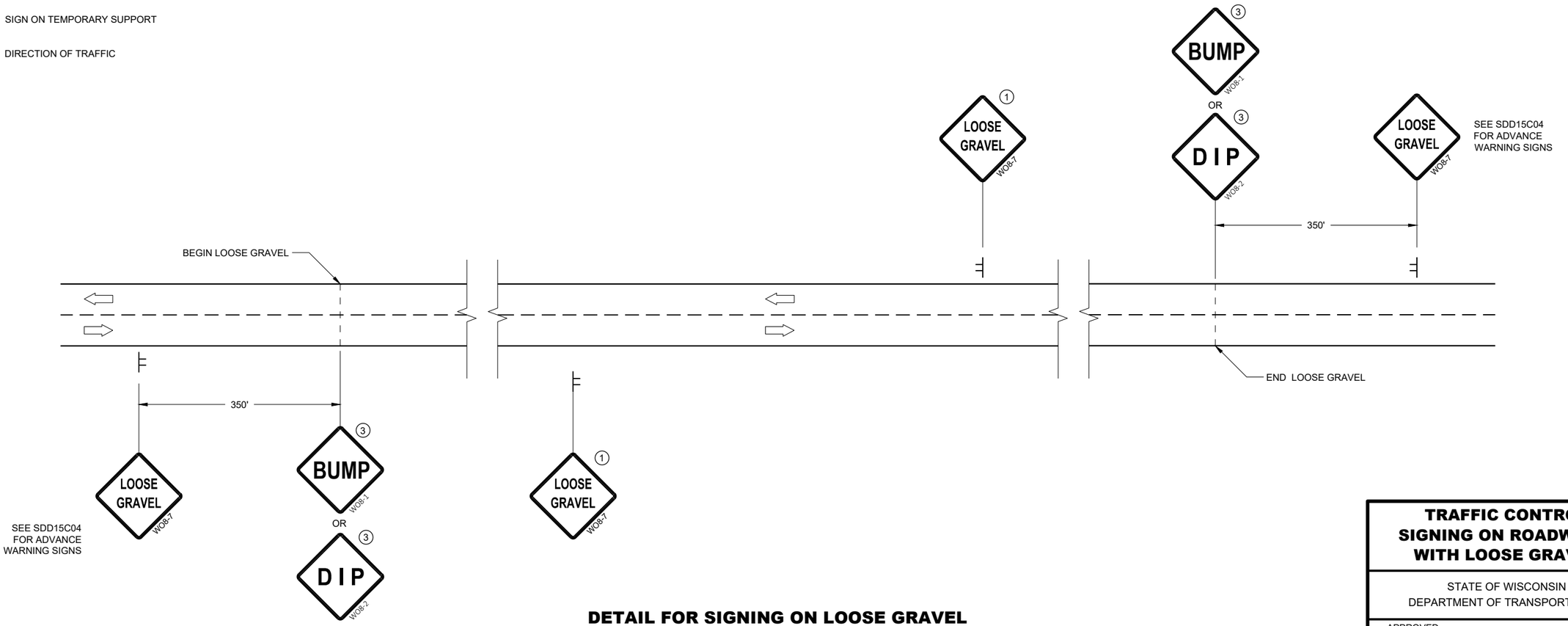
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

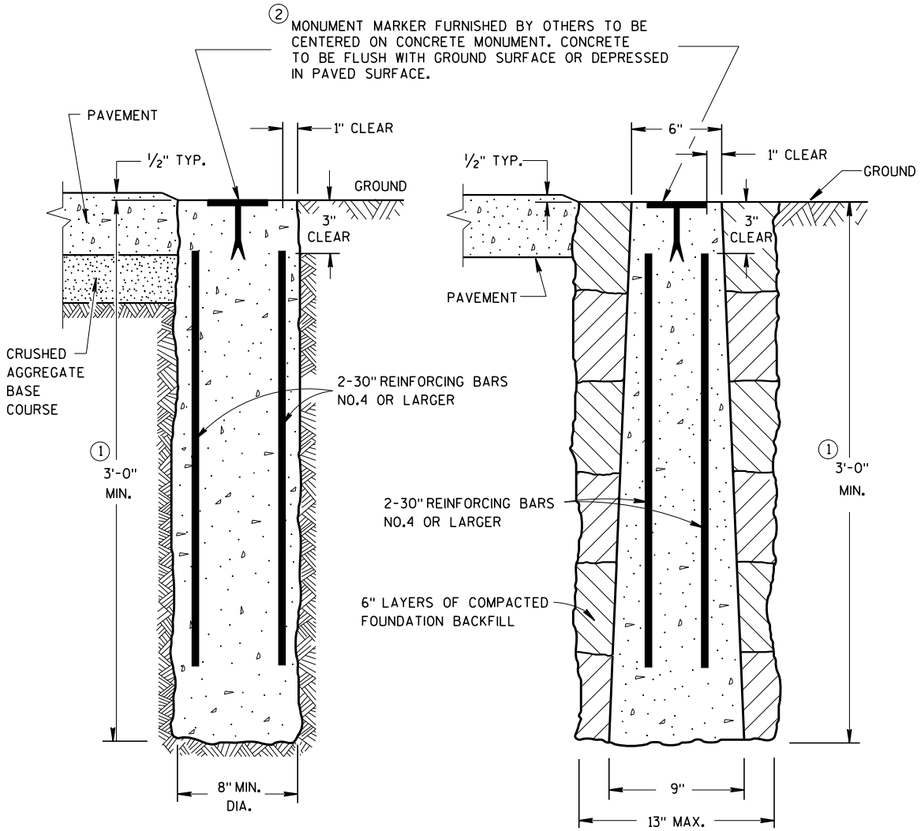
APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D45 - 03

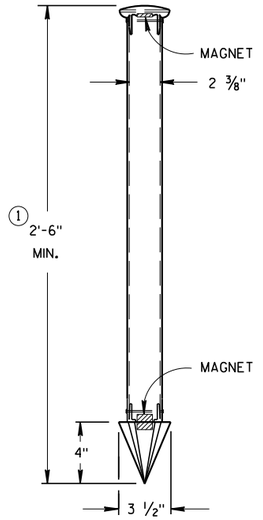


CAST-IN-PLACE

PRECAST

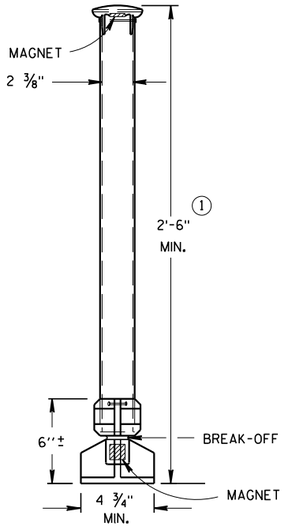
CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

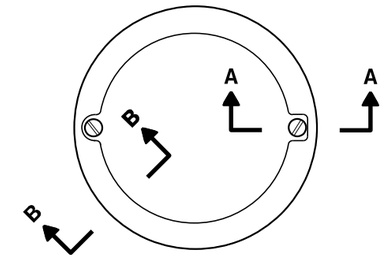
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

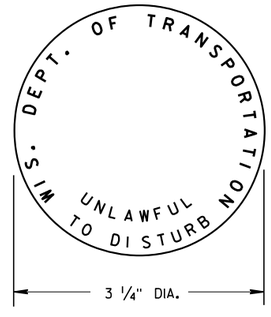
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

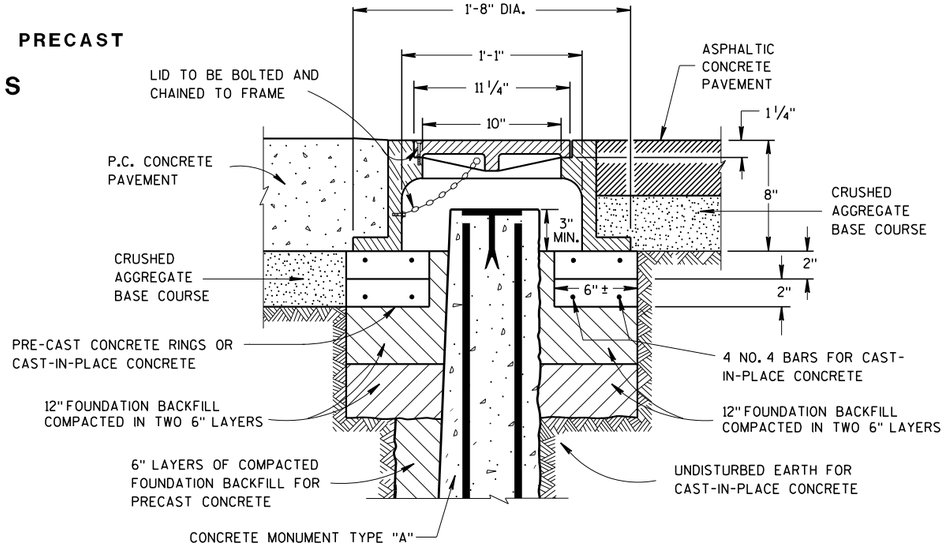


TOP VIEW



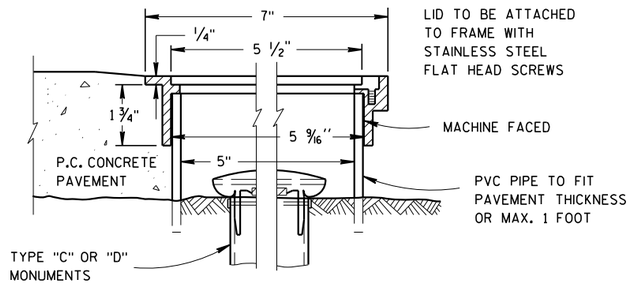
② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C", & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

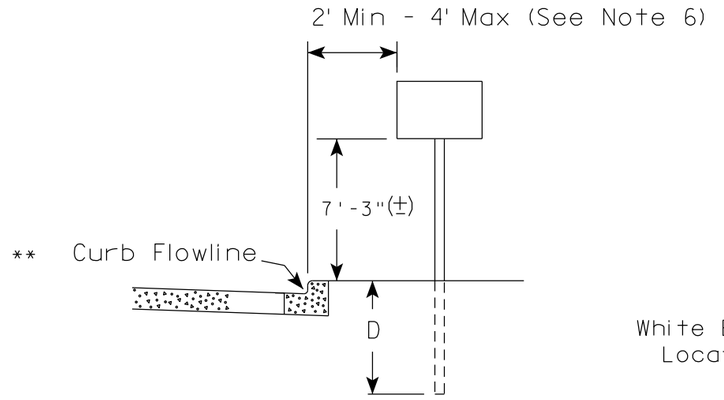
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Raymond A. Kumagai — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

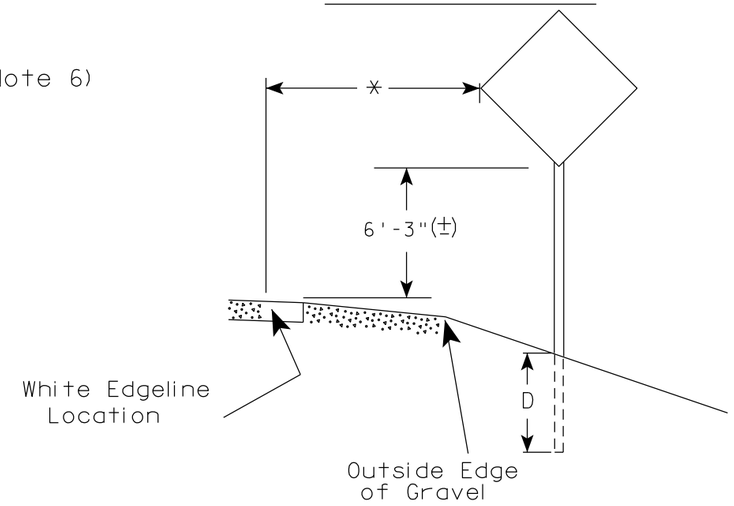
6

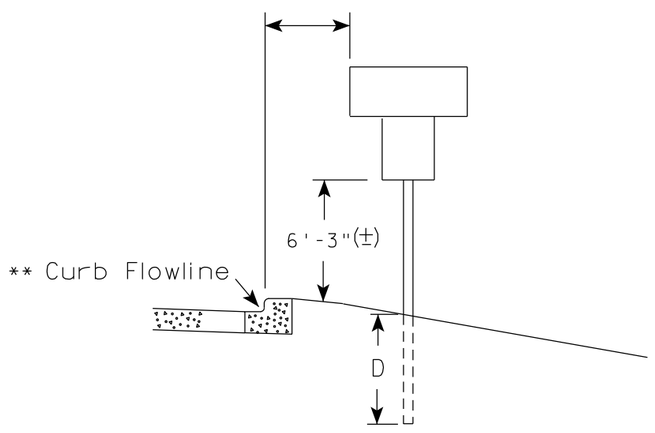
S.D.D. 16 A 1-7

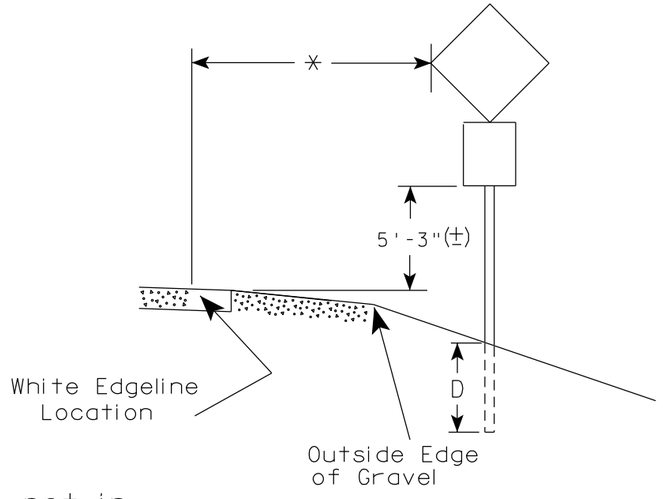
URBAN AREA



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.

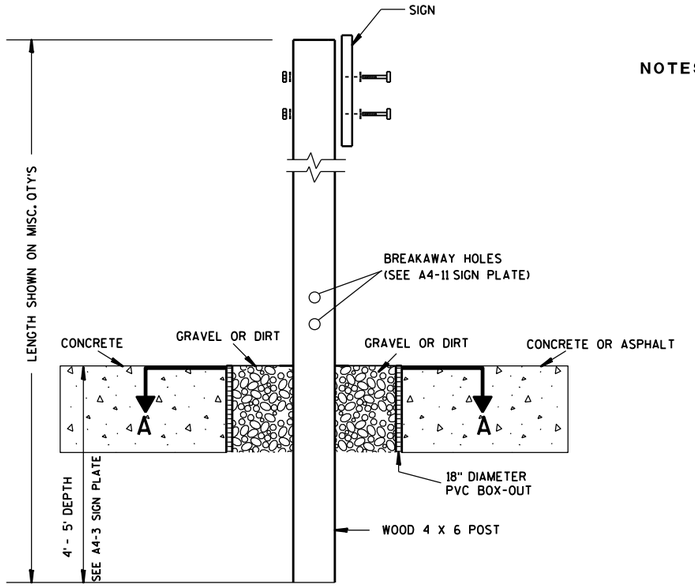
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

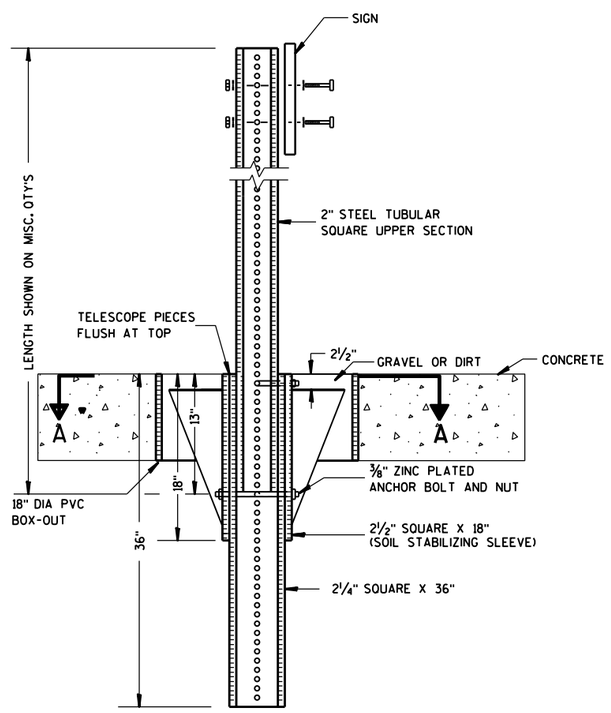
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 52	E



ELEVATION VIEW

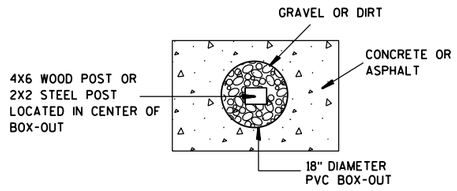
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

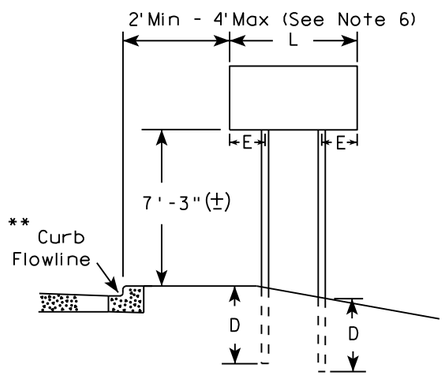
APPROVED Matthew R Rauch
for State Traffic Engineer

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

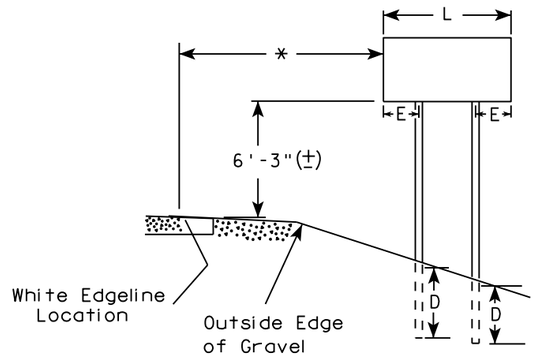
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

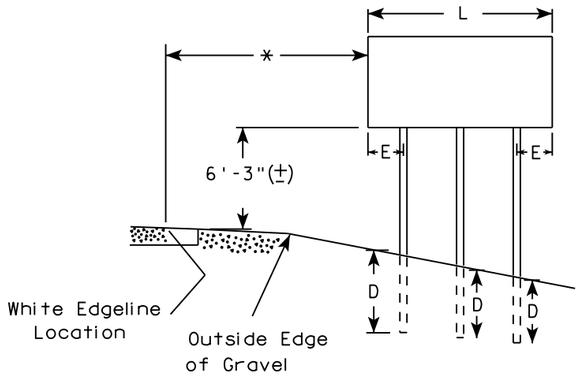
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

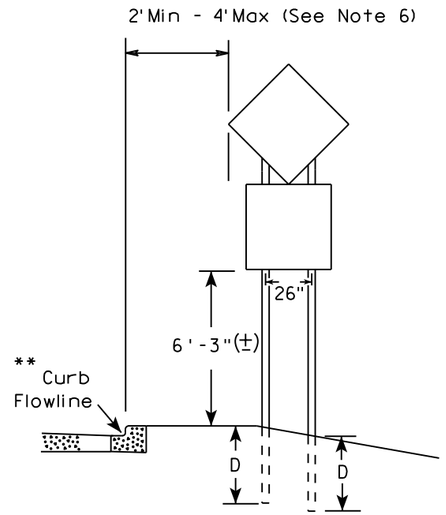
URBAN AREA



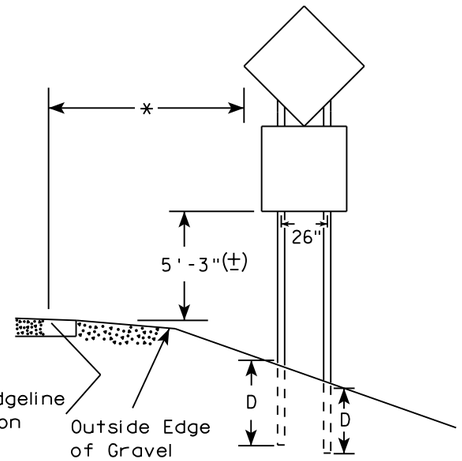
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

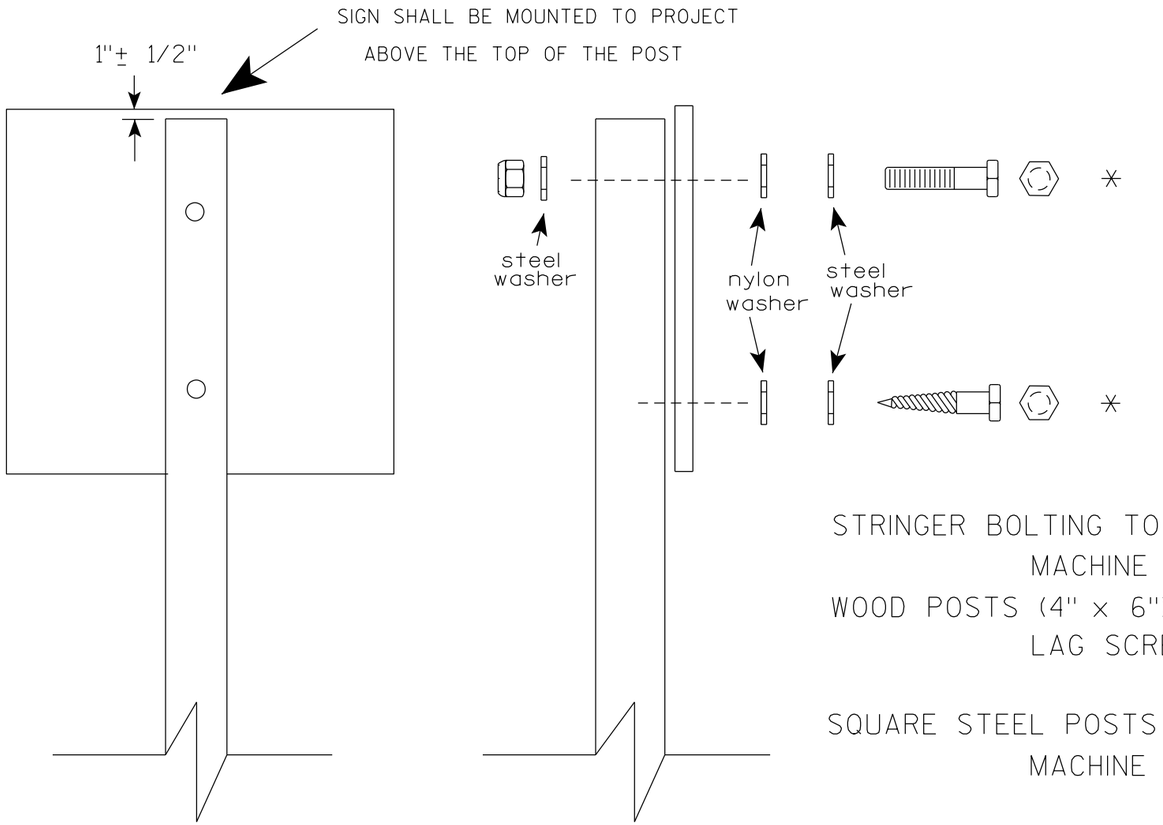
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 54	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

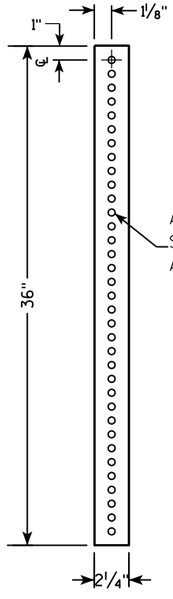
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

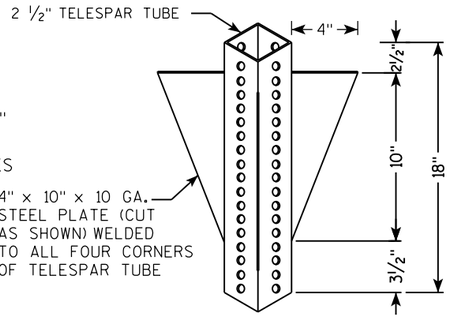
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

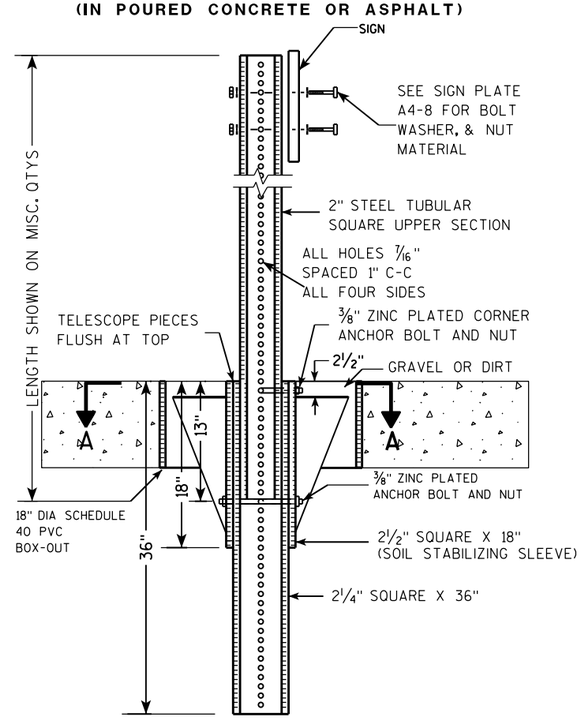
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



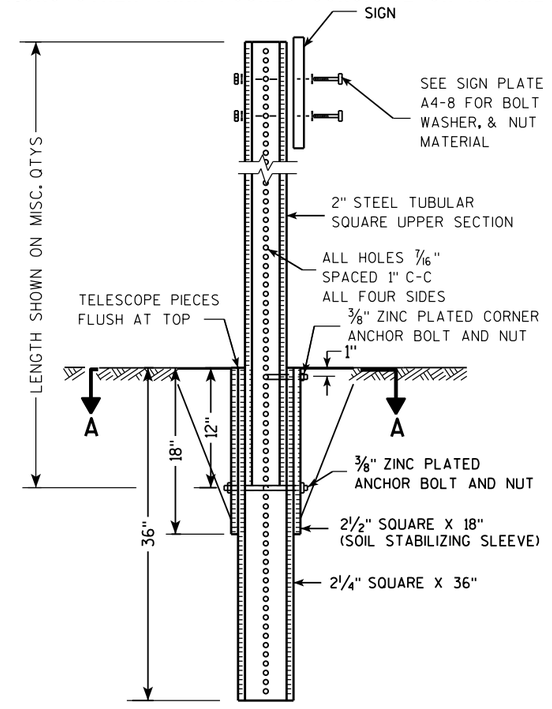
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

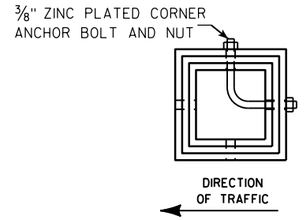


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

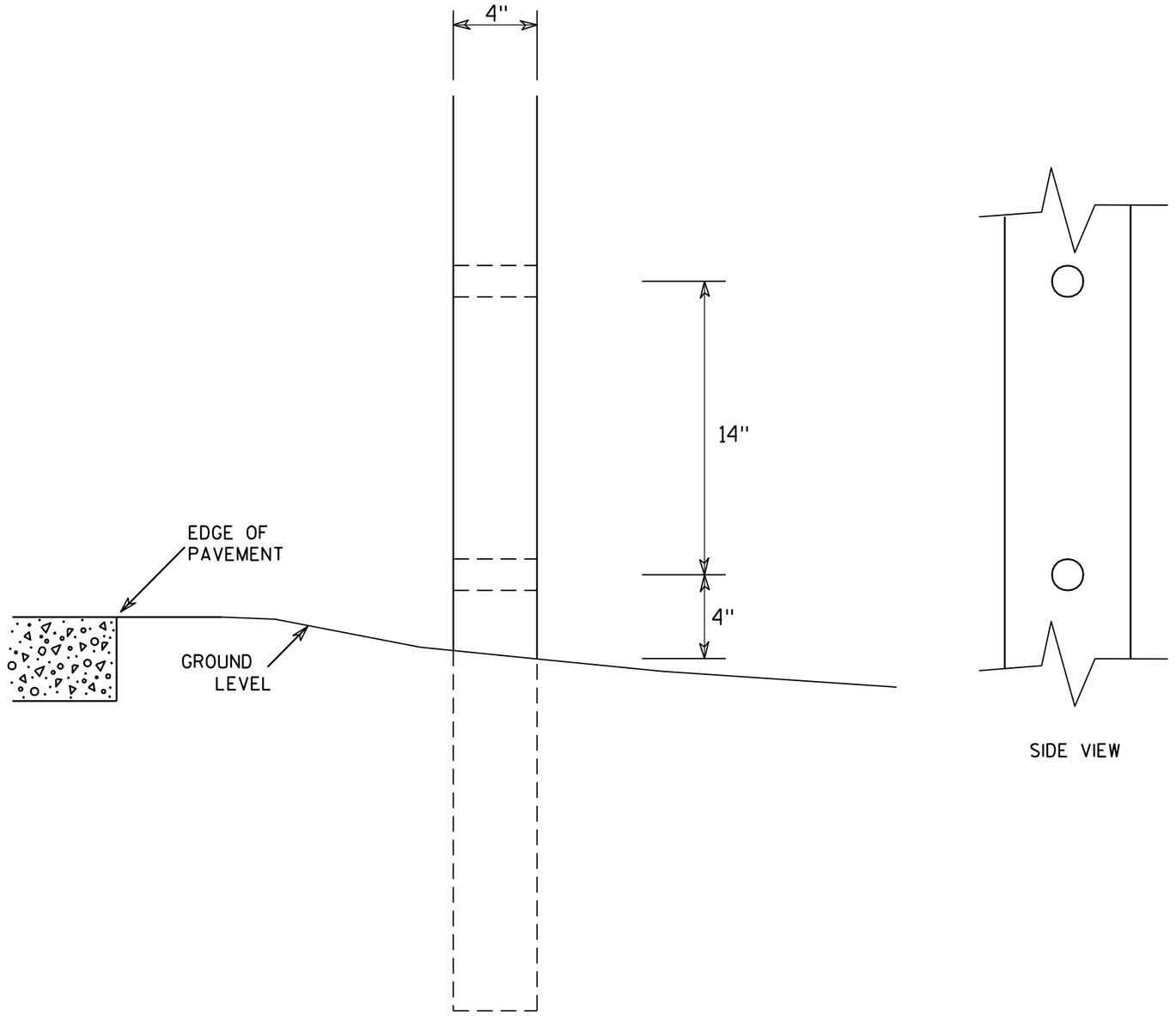
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

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: 57	E

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

LAX

Apr 12, 2022

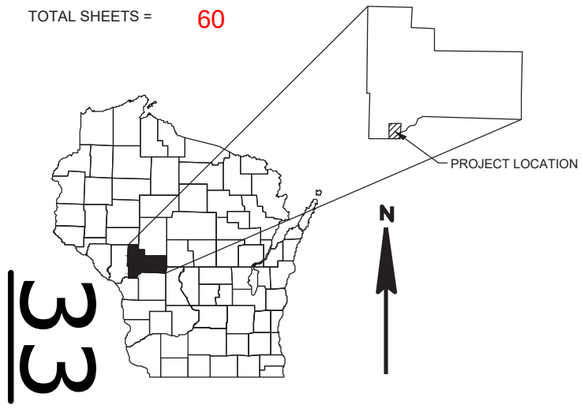
PROJECT ID: 7930-00-71

WITH: 7710-00-71

COUNTY: JACKSON

ORDER OF SHEETS

TOTAL SHEETS = 60



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DESIGN DESIGNATION

A.A.D.T.	(2022)	=	2,120
A.A.D.T.	(2042)	=	2,360
D.H.V.		=	293
D.D.		=	60/40
T.		=	11.5%
DESIGN SPEED		=	55 MPH
ESALS		=	450,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

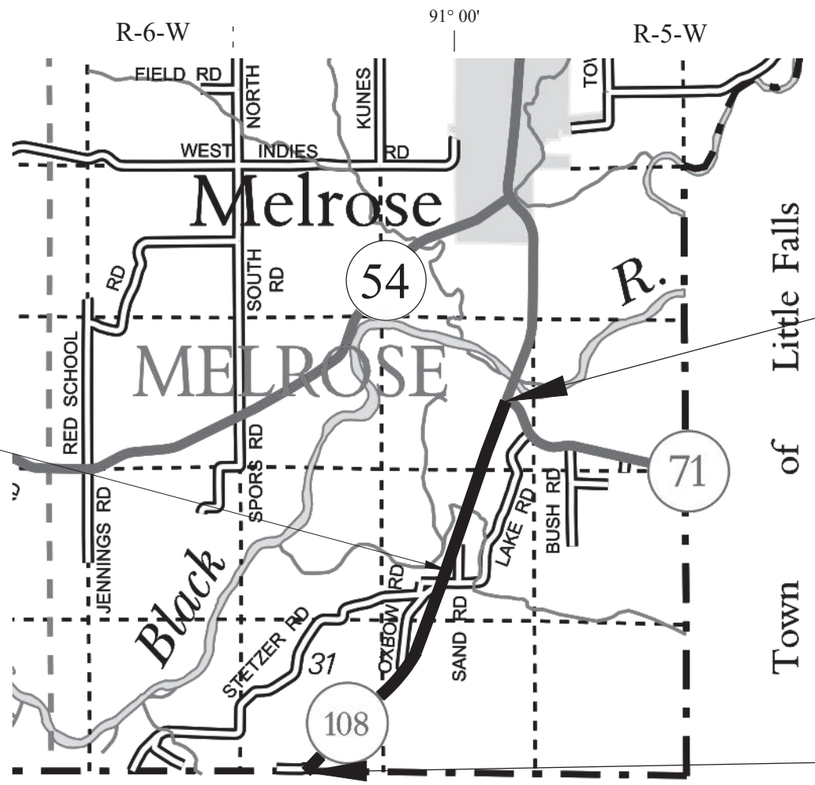
WEST SALEM - MELROSE

LA CROSSE/JACKSON COUNTY LINE TO STH 71 N

STH 108

JACKSON COUNTY

STATE PROJECT NUMBER
7930-00-71



END PROJECT
STA 317+68
Y = 28,541.304
X = 48,428.683

NET EXCEPTION TO CL LENGTH
BRIDGE B-27-0010
STA. 276+92 - STA. 277+64

BEGIN PROJECT
STA 168+40
Y = 15,675.021
X = 41,471.122

LAYOUT

SCALE 0 1.0 MI

TOTAL NET LENGTH OF CENTERLINE = 2.662 MI

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

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7930-00-71	WISC 2022310	1

ORIGINAL PLANS PREPARED BY

KNIGHT Engineers & Architects

831 Critter Court
Suite 400
Onalaska, WI 54650
Phone: (608) 519-1455

WISCONSIN RYAN B. McKANE E-37669 HOLMEN WI. PROFESSIONAL ENGINEER

Ryan B McKane

9/30/2021 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	KNIGHT E/A
Designer	KNIGHT E/A
Project Manager	BRIAN MEYER
Regional Examiner	SW REGION
Regional Supervisor	JIM SAVOLDELLI

APPROVED FOR THE DEPARTMENT

DATE: 10/01/21 (Signature)

E

GENERAL NOTES

- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESGINATED FOR REMOVAL BY THE ENGINEER.
- DISTURBED AREAS WITHING THE RIGHT OF WAY ARE TO BE SALVAGED TOPSOILED, FERTILIZED, SEEDED, AND MULCHED AS DIRECTED BY THE ENGINEER.
- MATCH EXISTING DRIVEWAYS WITH IN-KIND MATERIALS.
- PAVING LIMITS ARE TO BE DETERMINED BY THE ENGINEER.
- TACK COAT IS REQUIRED BETWEEN THE MILLED PAVEMENT AND HMA PAVEMENT. APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED SURFACES AND 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- HMA PAVEMENT TO BE PLACED IN 1.75-INCH LOWER LIFT AND 1.5-INCH UPPER LIFT.
- SURFACE WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- WHEN THE QUANTITIY OF BASE AGGREGATE IS MEASURED FOR PAVEMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- RIGHT OF WAY DEPICTED ON THE PLANS ARE BASED OFF OF PREVIOUS AS BUILTS. IF CONFLICTS ARE ANTICIPATED, THE CONTRACTOR SHALL FIELD VERIFY EXACT LIMITS AND NOTIFY THE ENGINEER.
- AERIAL IMAGERY SHOWN ON THIS PLAN IS FROM 2015 AND IS FOR INFORMATIONAL PURPOSES ONLY.

STANDARD ABBREVIATIONS

AC	ACRE	INL	INLET
AGG	AGGREGATE	INV	INVERT
AH	AHEAD	JCT	JUNCTION
AADT	ANNUAL AVERAGE DAILY TRAFFIC	LT	LEFT
ASPH	ASPHALTIC	L	LENGTH OF CURVE
AVG	AVERAGE	LIN FT or LF	LINEAR FOOT
BK	BACK	LS	LUMP SUM
BAD	BASE AGGREGATE DENSE	NC	NORMAL CROWN
BM	BENCH MARK	N	NORTH
BR	BRIDGE	NB	NORTHBOUND
CL or C/L	CENTER LINE	NO	NUMBER
CE	COMMERCIAL ENTRANCE	PT	POINT
CONC	CONCRETE	PC	POINT OF CURVATURE
CO	COUNTY	PI	POINT OF INTERSECTION
CTH	COUNTY TRUNK HIGHWAY	PT	POINT OF TANGENCY
CR	CREEK	PCC	PORTLAND CEMENT CONCRETE
CABC	CRUSHED AGGREGATE BASE COURSE	LB	POUND
CSD	COMMUNITY SENSITIVE DESIGN	PE	PRIVATE ENTRANCE
CY or CUYD	CUBIC YARD	R	RADIUS
CULV	CULVERT	RL or R/L	REFERENCE LINE
CP	CULVERT PIPE	RT	RIGHT
C & G	CURB AND GUTTER	R/W	RIGHT-OF-WAY
D	DEGREE OF CURVE	RD	ROAD
DIA	DIAMETER	SHLDR	SHOULDER
DISCH	DISCHARGE	SB	SOUTHBOUND
E	EAST	SF or SQ FT	SQUARE FEET
EB	EASTBOUND	SY or SQ YD	SQUARE YARD
EL or ELEV	ELEVATION	SDD	STANDARD DETAIL DRAWINGS
EW	ENDWALL	STH	STATE TRUNK HIGHWAYS
ENT	ENTRANCE	SE	SUPERELEVATION
EXC	EXCAVATION	T	TANGENT
EX	EXISTING	TEMP	TEMPORARY
FERT	FERTILIZER	TWLTL	TWO-WAY LEFT-TURN LANE
FE	FIELD ENTRANCE	UG	UNDERGROUND
FL or F/L	FLOW LINE	USH	UNITED STATES HIGHWAY
FT	FOOT	V	VELOCITY OR DESIGN SPEED
HE	HIGHWAY EASEMENT	VC	VERTICAL CURVE
HMA	HOT MIX ASPHALT	WB	WESTBOUND
CWT	HUNDREDWEIGHT	YD	YARD

AREA CONTACTS

WISDOT PROJECT MANAGER
BRIAN MEYER, PE
3550 MORMON COULEE RD
LA CROSSE, WI 54601
(608) 789-5676
BRIAN.MEYER@DOT.WI.GOV

DESIGN CONTACT
KNIGHT E/A, INC.
RYAN MCKANE, PE
831 CRITTER CT, STE 400
ONALASKA, WI 54650
(608) 713-9274
RMCKANE@KNIGHTEA.COM

WISDNR: JACKSON COUNTY
BRADLEY BETTHAUSER
910 HIGHWAY 54 EAST
BLACK RIVER FALLS WI 54615
(715) 213-9064
BRADLEY.BETTHAUSER@WISCONSIN.GOV

UTILITY CONTACTS

CENTURYLINK - COMMUNICATION LINE
BRIAN STELPLUGH
333 NORTH FRONT ST
LA CROSSE, WI 54601
(608) 615-4136
BRIAN.STELPLUGH@LUMEN.COM

CHARTER COMMUNICATIONS - COMMUNICATION LINE
PERRY McCLELLAN
1228 12TH AVE S
ONALASKA, WI 54650
(608) 317-6213
PERRY.MCCLELLAN@CHARTER.COM

JACKSON ELECTRIC COOPERATIVE - ELECTRICITY
ERIC STEIEN
N6868 CO HWY F
P.O. BOX 546
BLACK RIVER FALLS, WI 54615
(715) 284-5385
ESTEIEN@JACKELEC.COM

ORDER OF TYPICAL SECTION & DETAIL SHEETS

1. GENERAL NOTES
2. PROJECT OVERVIEW
3. TYPICAL SECTIONS
4. CONSTRUCTION DETAILS
5. ALIGNMENT DETAIL & TIES

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

RUNOFF COEFFICIENT TABLE

A	HYDROLOGIC SOIL GROUP											
	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 = 22.64 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.00 ACRES

2

2

JACKSON COUNTY

LA CROSSE COUNTY

ARNOLD RD

170+00

180+00

190+00

STH 108

200+00

210+00

OXBOW RD

220+00

230+00

240+00

ROD & GUN CLUB RD

STETZER RD

250+00

LAKE RD

260+00

270+00

SAND RD

BRIDGE B-27-10

280+00

290+00

300+00

STH 108

310+00

SAND CREEK

N

SCALE, FEET 0 500 1000

BEGIN PROJECT
7930-00-71
STA 168+40
Y = 15,675.021
X = 41,471.122

END PROJECT
7930-00-71
STA 317+68
Y = 28,541.304
X = 48,428.683

300+00

STH 108

310+00

BLACK RIVER

BRIDGE B-27-74

80+00

STH 71

70+00

60+00

50+00

40+00

STH 71

30+00

ENVIRONMENTALLY SENSITIVE AREA

20+00

LOVELL ST

10+00

STH 54

VILLAGE OF MELROSE

N

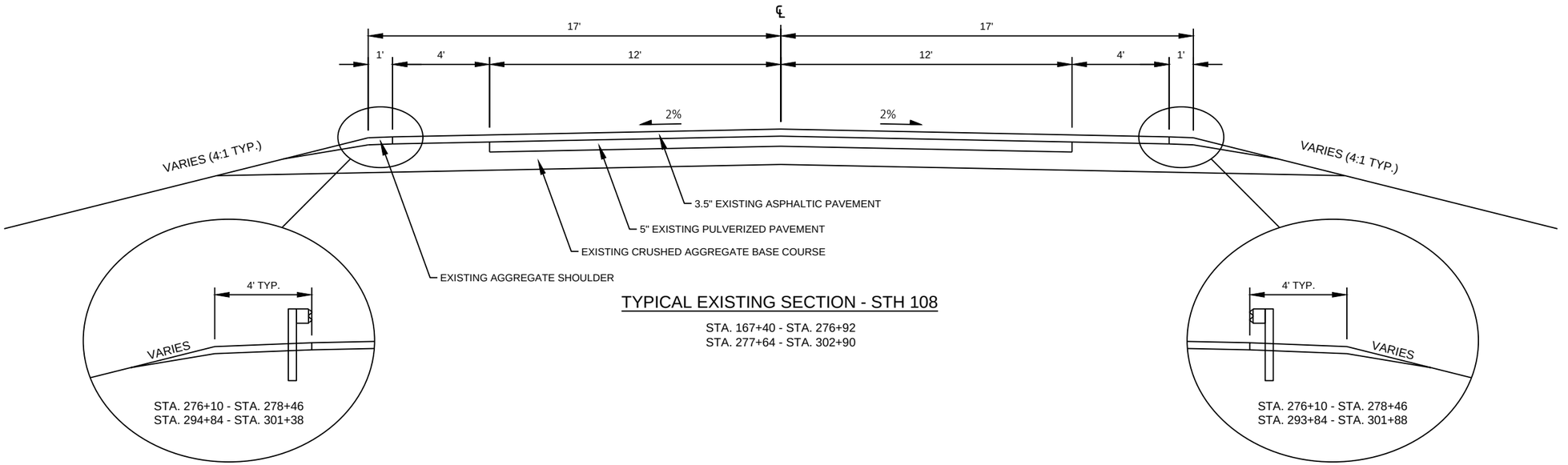
SCALE, FEET 0 500 1000

END PROJECT
7710-00-71
STA 82+54
Y = 28,580.754
X = 48,536.228

BEGIN PROJECT
7710-00-71
STA 4+04
Y = 35,945.143
X = 48,505.840

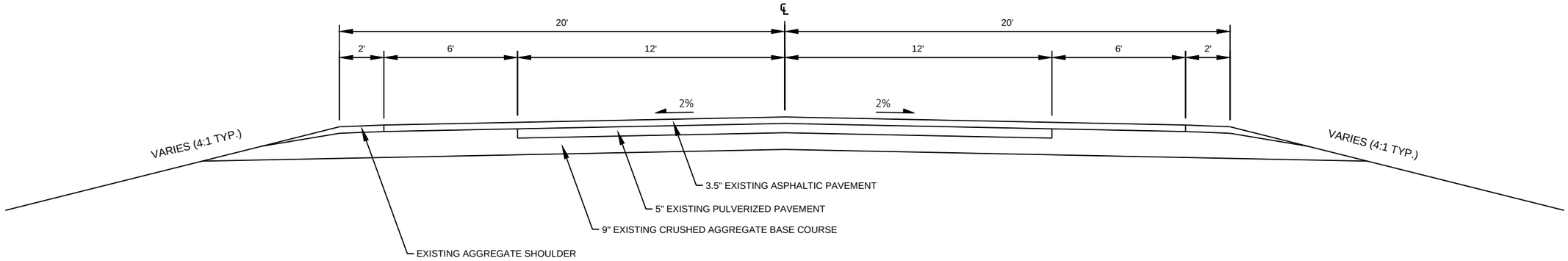
PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	PROJECT OVERVIEW	SHEET 4	E

2



TYPICAL EXISTING SECTION - STH 108

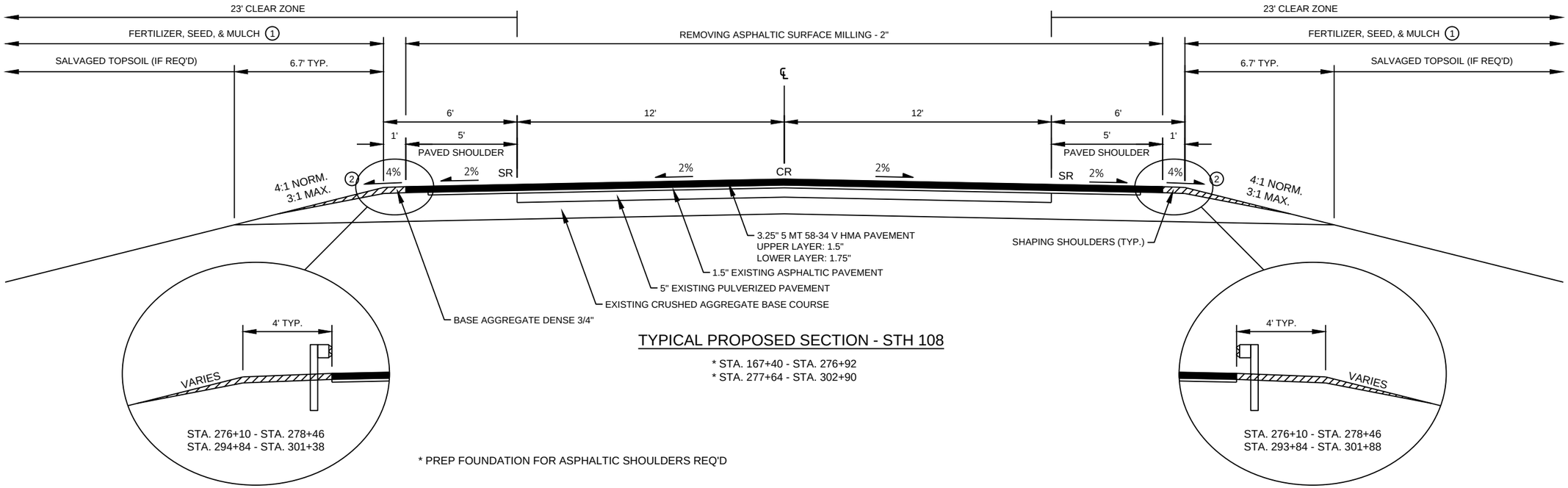
STA. 167+40 - STA. 276+92
STA. 277+64 - STA. 302+90



TYPICAL EXISTING SECTION - STH 108

STA. 302+90 - STA. 317+68

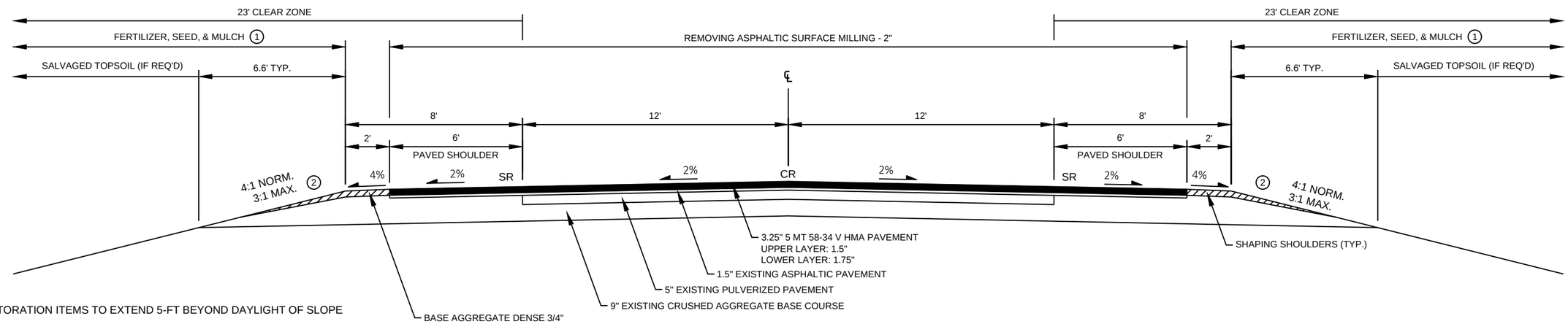
PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	TYPICAL SECTIONS	SHEET 5	E



TYPICAL PROPOSED SECTION - STH 108

* STA. 167+40 - STA. 276+92
* STA. 277+64 - STA. 302+90

* PREP FOUNDATION FOR ASPHALTIC SHOULDERS REQ'D



TYPICAL PROPOSED SECTION - STH 108

STA. 302+90 - STA. 317+68

(1) RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE

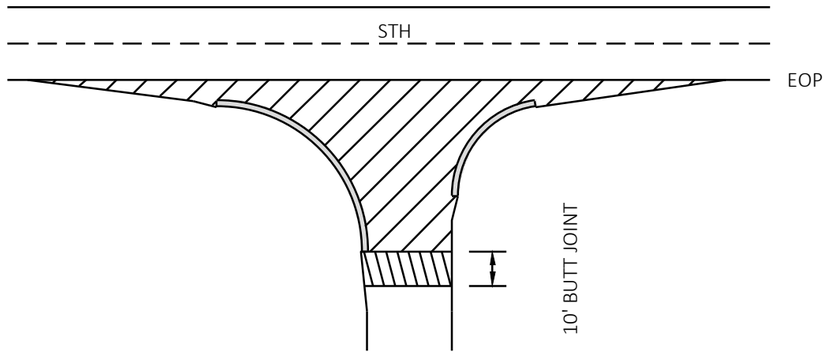
(2) ROUND SHOULDERS TO MATCH EXISTING SLOPES

CR = CENTERLINE RUMBLE STRIPS
SR = TYPE I SHOULDER RUMBLE STRIPS

NOTES:

- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS

PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	TYPICAL SECTIONS	SHEET 6	E

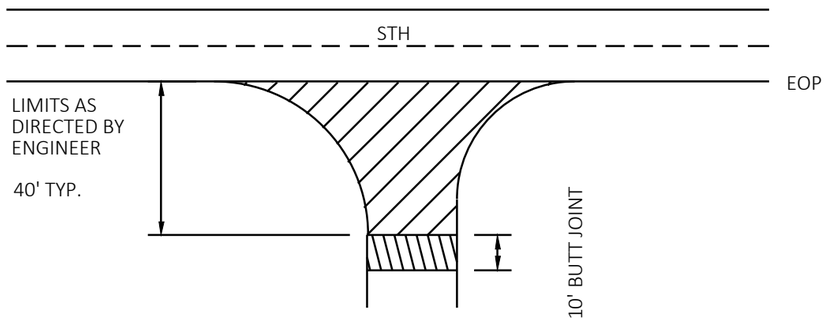


REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

SIDE ROADS
WITH CURB AND GUTTER

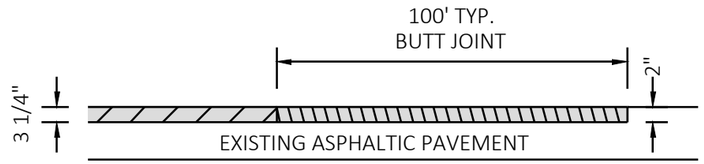


REMOVING ASPHALTIC SURFACE MILLING

REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED

SIDE ROADS
WITHOUT CURB AND GUTTER



HMA PAVEMENT

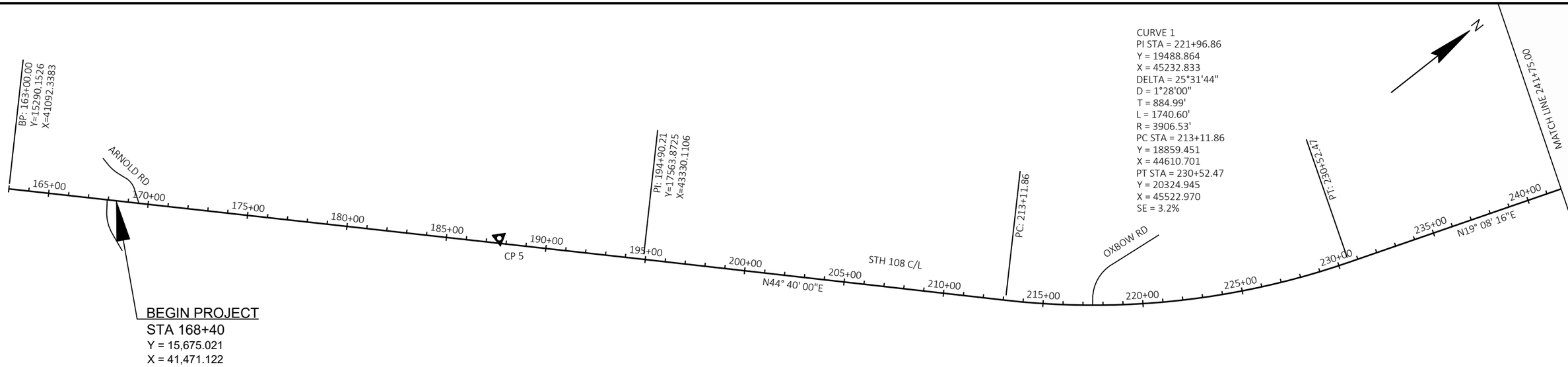
REMOVING ASPHALTIC SURFACE MILLING

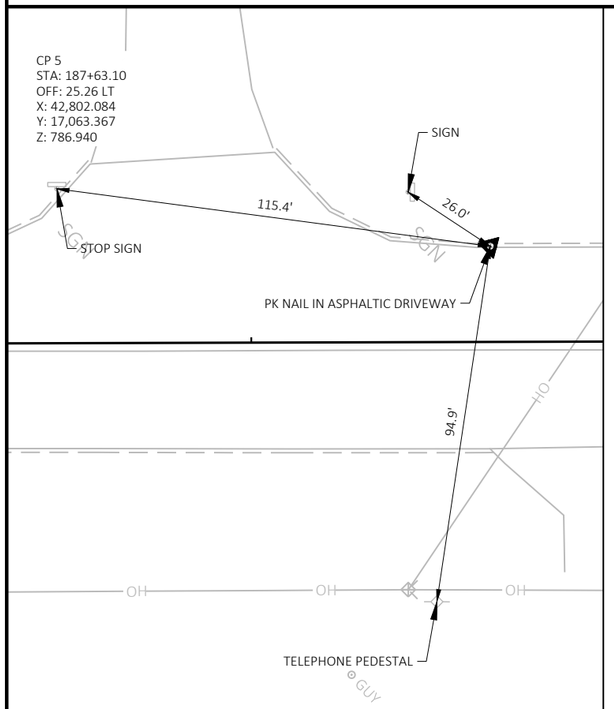
REMOVING ASPHALTIC SURFACE BUTT JOINTS

BUTT JOINT
MAINLINE AND BRIDGES

2

PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	CONSTRUCTION DETAILS	SHEET 7	E

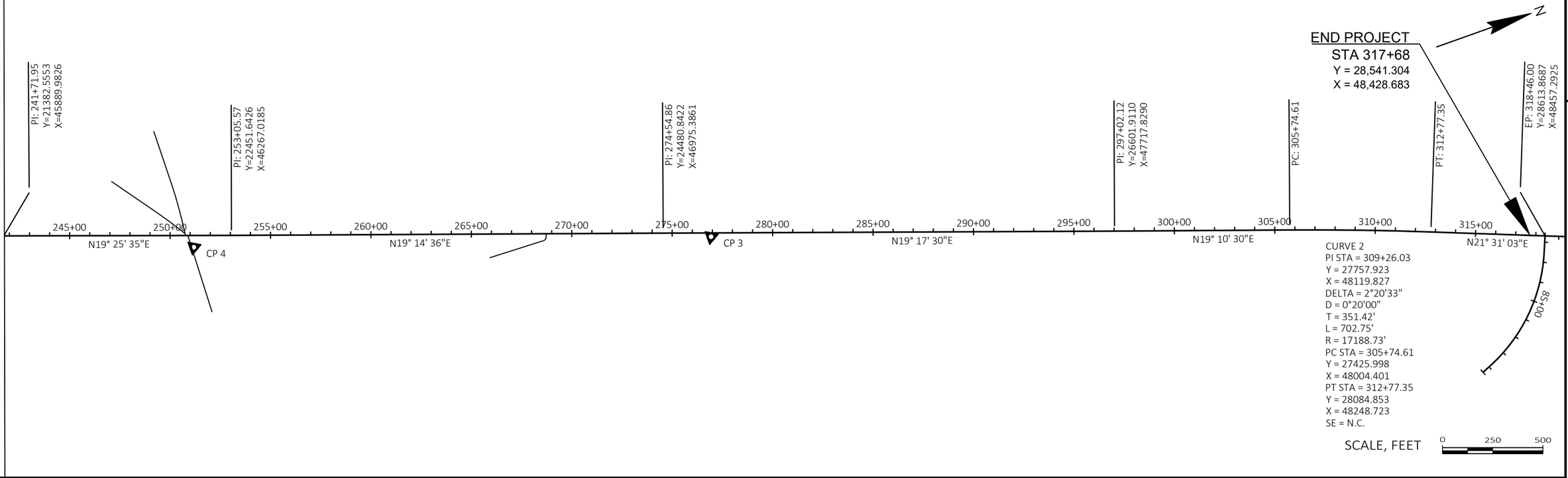


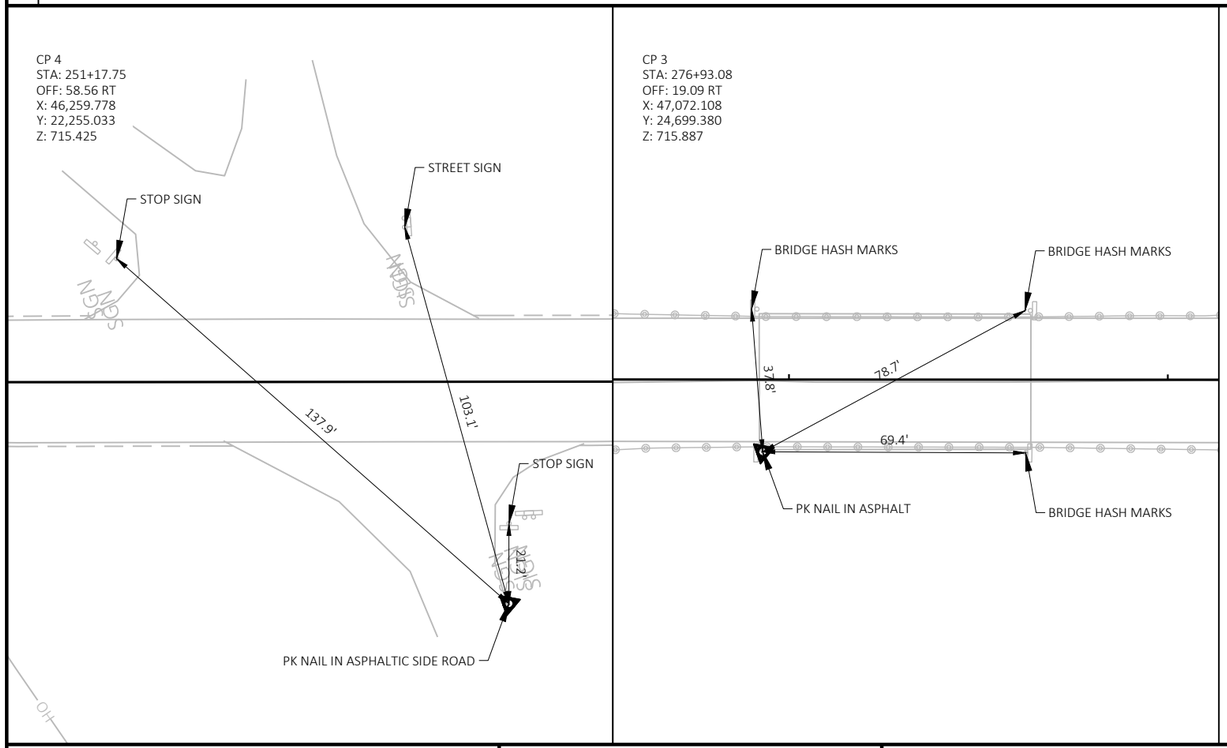


PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	ALIGNMENT DETAIL	SHEET 8	E

FILE NAME : W:\7701_03\CAD\! 7930-00-01\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 1

PLOT DATE : 7/28/2021 8:58 AM PLOT BY : METRY, ALEXANDER PLOT NAME : PLOT SCALE : ##########





PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	ALIGNMENT DETAIL	SHEET 9	E

7930-00-71

Line	Item	Item Description	Unit	Total	Qty
0002	204.0110	Removing Asphaltic Surface	SY	693.000	693.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,803.000	1,803.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	55,246.000	55,246.000
0010	211.0100	Prepare Foundation for Asphaltic Paving (project) 02. 7930-00-71	LS	1.000	1.000
0012	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	237.000	237.000
0016	213.0100	Finishing Roadway (project) 02. 7930-00-71	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,174.000	2,174.000
0020	305.0500	Shaping Shoulders	STA	28.000	28.000
0022	455.0605	Tack Coat	GAL	7,168.000	7,168.000
0024	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0026	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0028	460.2000	Incentive Density HMA Pavement	DOL	1,970.000	1,970.000
0030	460.2005	Incentive Density PWL HMA Pavement	DOL	7,220.000	7,220.000
0032	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	5,970.000	5,970.000
0034	460.2010	Incentive Air Voids HMA Pavement	DOL	7,220.000	7,220.000
0036	460.6645	HMA Pavement 5 MT 58-34 V	TON	10,867.000	10,867.000
0040	460.9000.S	Material Transfer Vehicle (project) 02. 7930-00-71	EACH	1.000	1.000
0042	465.0105	Asphaltic Surface	TON	500.000	500.000
0044	465.0110	Asphaltic Surface Patching	TON	300.000	300.000
0046	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	124.000	124.000
0048	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	26,360.000	26,360.000
0050	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	12,030.000	12,030.000
0052	614.0400	Adjusting Steel Plate Beam Guard	LF	1,054.000	1,054.000
0054	614.0950	Replacing Guardrail Posts and Blocks	EACH	4.000	4.000
0056	614.0951	Replacing Guardrail Rail and Hardware	LF	475.000	475.000
0060	618.0100	Maintenance And Repair of Haul Roads (project) 02. 7930-00-71	EACH	1.000	1.000
0062	619.1000	Mobilization	EACH	0.600	0.600
0064	624.0100	Water	MGAL	33.000	33.000
0066	625.0500	Salvaged Topsoil	SY	1,000.000	1,000.000
0068	627.0200	Mulching	SY	1,000.000	1,000.000
0070	628.1504	Silt Fence	LF	250.000	250.000
0072	628.1520	Silt Fence Maintenance	LF	250.000	250.000
0074	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0076	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0078	628.7504	Temporary Ditch Checks	LF	50.000	50.000
0080	629.0210	Fertilizer Type B	CWT	0.630	0.630
0082	630.0130	Seeding Mixture No. 30	LB	18.000	18.000
0084	630.0500	Seed Water	MGAL	12.000	12.000
0086	638.2102	Moving Signs Type II	EACH	4.000	4.000
0088	638.4000	Moving Small Sign Supports	EACH	4.000	4.000
0090	642.5001	Field Office Type B	EACH	0.500	0.500
0092	643.0300	Traffic Control Drums	DAY	104.000	104.000
0094	643.0900	Traffic Control Signs	DAY	20.000	20.000
0096	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0098	643.5000	Traffic Control	EACH	0.500	0.500
0100	646.1020	Marking Line Epoxy 4-Inch	LF	8,644.000	8,644.000
0102	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	29,501.000	29,501.000
0108	648.0100	Locating No-Passing Zones	MI	2.830	2.830
0110	649.0105	Temporary Marking Line Paint 4-Inch	LF	12,678.000	12,678.000

7930-00-71

Line	Item	Item Description	Unit	Total	Qty
0112	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	6,337.000	6,337.000
0114	650.8000	Construction Staking Resurfacing Reference	LF	14,928.000	14,928.000
0118	650.9910	Construction Staking Supplemental Control (project) 02. 7930-00-71	LS	1.000	1.000
0120	690.0150	Sawing Asphalt	LF	211.000	211.000
0122	740.0440	Incentive IRI Ride	DOL	11,310.000	11,310.000
0124	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000	1,200.000
0126	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000

ASPHALT REMOVAL SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	REMOVING ASPHALTIC SURFACE 204.0110 SY	REMOVING ASPHALTIC SURFACE BUTT JOINTS 204.0115 SY	REMOVING ASPHALTIC SURFACE MILLING 204.0120 SY	REMARKS
0010	168+40	-	170+00	STH 108	-	920	-	BOP
0010	170+00	-	275+92	STH 108	-	-	40,678	BOP TO BRIDGE
0010	217+38	-	217+65	STH 108	-	26	-	OXBOW RD
0010	250+16	-	250+80	STH 108	-	73	-	ROD & GUN CLUB RD/STETZER RD
0010	250+97	-	251+17	STH 108	-	23	-	LAKE RD
0010	275+92	-	276+92	STH 108	-	388	-	BRIDGE B-27-10
0010	277+64	-	278+64	STH 108	-	373	-	BRIDGE B-27-10
0010	278+64	-	317+68	STH 108	-	-	14,568	BRIDGE TO EOP
0010	178+82	-	255+00	DRIVEWAYS	693	-	-	DRIVEWAYS
				PROJECT TOTALS =	**693**	**1,803**	**55,246**	

PREPARE FOUNDATION

CATEGORY	STATION	TO	STATION	LOCATION	PREPARE FOUNDATION FOR ASPHALTIC PAVING 211.0100 LS	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS 211.0400 STA	REMARKS
0010	168+40	-	317+68	STH 108	1	-	BOP TO EOP
0020	168+40	-	174+89	LT SHLD	-	7	COUNTY LINE TO MEL-MIN SCHOOL
0020	168+40	-	176+40	RT SHLD	-	8	COUNTY LINE TO MEL-MIN SCHOOL
0020	191+10	-	276+06	LT & RT SHLD	-	170	MEL-MIN SCHOOL TO BRIDGE
0020	278+50	-	303+60	LT & RT SHLD	-	52	BRIDGE TO 5-FT SHLD
				PROJECT TOTALS =	**1**	**237**	

BASE AGGREGATE DENSE 3/4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 TON
0010	168+40	-	276+92	STH 71	1,543
0010	277+64	-	302+90	STH 71	359
0010	302+90	-	317+68	STH 71	272
				PROJECT TOTAL =	**2,174**

SHAPING SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	305.0500 STA
0010	303+60	-	317+68	STH 108	28
				PROJECT TOTAL =	**28**

RUMBLE STRIP SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL 465.0425 LF	ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL 465.0475 LF
0010	168+40	-	276+92	STH 108	-	8,142
0010	277+64	-	317+68	STH 108	-	3,888
0010	302+90	-	317+68	STH 108	2856	-
				CAT 0010 SUBTOTALS =	**2,856**	**12,030**
0020	168+40	-	276+92	STH 108	18,452	-
0020	277+64	-	302+90	STH 108	5,052	-
				CAT 0020 SUBTOTALS =	**23,504**	**0**
				PROJECT TOTALS =	**26,360**	**12,030**

ASPHALT ITEMS SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	HMA PAVEMENT 5 MT 58-34 V 460.6645 TON	TACK COAT 455.0605 GAL	ASPHALTIC SURFACE 465.0105 TON	ASPHALTIC SURFACE PATCHING 465.0110 TON	ASPHALTIC SURFACE DRIVEWAY AND FIELD ENTRANCES 465.0120 TON	REMARKS
0010	168+40	-	276+92	BOP TO BRIDGE	4035	2882	-	-	-	BINDER LAYER
0010	168+40	-	276+92	BOP TO BRIDGE	3458	2059	-	-	-	SURFACE LAYER
0010	277+64	-	317+68	BRIDGE TO EOP	1463	1045	-	-	-	BINDER LAYER
0010	277+64	-	317+68	BRIDGE TO EOP	1254	746	-	-	-	SURFACE LAYER
0010	168+92	-	169+95	ARNOLD RD	35	25	-	-	-	BINDER LAYER
0010	168+92	-	169+95	ARNOLD RD	30	18	-	-	-	SURFACE LAYER
0010	217+34	-	217+80	OXBOW RD	9	6	-	-	-	BINDER LAYER
0010	217+34	-	217+80	OXBOW RD	7	5	-	-	-	SURFACE LAYER
0010	250+04	-	251+12	ROD & GUN CLUB RD/STETZER RD	31	22	-	-	-	BINDER LAYER
0010	250+04	-	251+12	ROD & GUN CLUB RD/STETZER RD	26	16	-	-	-	SURFACE LAYER
0010	250+44	-	251+38	LAKE RD	20	14	-	-	-	BINDER LAYER
0010	250+44	-	251+38	LAKE RD	17	10	-	-	-	SURFACE LAYER
0010	11+32	-	318+52	STH 108	-	-	-	-	124	DRIVEWAYS
0010	167+40	-	317+68	BOP TO EOP	-	-	500	300	-	UNDISTRIBUTED
				CAT 0010 SUBTOTALS =	**10,385**	**6,848**	**500**	**300**	**124**	
0020	168+40	-	176+40	EXTENDED SHLD RT	9	7	-	-	-	BINDER LAYER
0020	168+40	-	176+40	EXTENDED SHLD RT	8	5	-	-	-	SURFACE LAYER
0020	168+40	-	174+89	EXTENDED SHLD LT	8	6	-	-	-	BINDER LAYER
0020	168+40	-	174+89	EXTENDED SHLD LT	7	4	-	-	-	SURFACE LAYER
0020	191+10	-	276+06	EXTENDED SHLD RT	93	67	-	-	-	BINDER LAYER
0020	191+10	-	276+06	EXTENDED SHLD RT	80	48	-	-	-	SURFACE LAYER
0020	191+10	-	276+06	EXTENDED SHLD LT	93	67	-	-	-	BINDER LAYER
0020	191+10	-	276+06	EXTENDED SHLD LT	80	48	-	-	-	SURFACE LAYER
0020	278+50	-	303+60	EXTENDED SHLD RT	28	20	-	-	-	BINDER LAYER
0020	278+50	-	303+60	EXTENDED SHLD RT	24	14	-	-	-	SURFACE LAYER
0020	278+50	-	303+60	EXTENDED SHLD LT	28	20	-	-	-	BINDER LAYER
0020	278+50	-	303+60	EXTENDED SHLD LT	24	14	-	-	-	SURFACE LAYER
				CAT 0020 SUBTOTALS =	**482**	**320**	**0**	**0**	**0**	
				PROJECT TOTALS =	**10,867**	**7,168**	**500**	**300**	**124**	

HMA ADDITIONAL ITEMS SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS 460.0105.S EACH	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY 460.0110.S EACH	MATERIAL TRANSFER VEHICLE (7930-00-71) 460.9000.S EACH
0010	168+40	-	317+68	STH 108	2	2	1
				PROJECT TOTALS =	**2**	**2**	**1**

FOR INFORMATIONAL PURPOSES ONLY

STATION	TO	STATION	LOCATION	MIXTURE	UNDERLYING SURFACE	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: MIXTURE ACCEPTANCE	QUALITY MANAGEMENT PROGRAM TO BE USED FOR: DENSITY ACCEPTANCE
168+40	-	276+92	STH 108 LOWER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	2835.989	1.75	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
168+40	-	276+92	STH 108 UPPER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	2430.848	1.5	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2011	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2006
168+40	-	276+92	STH 108 LOWER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	1181.662	1.75	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
168+40	-	276+92	STH 108 UPPER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	1012.853	1.5	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
277+64	-	302+90	STH 108 LOWER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	660.128	1.75	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
277+64	-	302+90	STH 108 UPPER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	565.824	1.5	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2011	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2006
277+64	-	302+90	STH 108 LOWER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	275.053	1.75	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
277+64	-	302+90	STH 108 UPPER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	235.760	1.5	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
302+90	-	317+68	STH 108 LOWER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	386.251	1.75	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
302+90	-	317+68	STH 108 UPPER LAYER MAINLINE	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	331.072	1.5	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2011	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2006
302+90	-	317+68	STH 108 LOWER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	MILLED SURFACE	193.125	1.75	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000
302+90	-	317+68	STH 108 UPPER LAYER SHOULDER	HMA PAVEMENT 5 MT 58-34 V	HMA PAVEMENT 5 MT 58-34 V	165.536	1.5	QMP AS PER SS 460	INCENTIVE DENSITY HMA PAVEMENT 460.2000

BEAM GUARD SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	ADJUSTING STEEL PLATE BEAM GUARD 614.0400 LF	REPLACING GUARDRAIL POSTS AND BLOCKS 614.0950 EACH	REPLACING GUARDRAIL RAIL AND HARDWARE 614.0951 LF	REMARKS
0010	276+10	-	276+60	SE OF BRIDGE	50	-	-	RT EAT
0010	276+10	-	276+60	SW OF BRIDGE	50	-	-	LT EAT
0010	276+80	-	276+80	STH 108 LT	-	1	-	THRIE BEAM BLOCK
0010	277+96	-	278+46	NE OF BRIDGE	50	-	-	RT EAT
0010	277+96	-	278+46	NW OF BRIDGE	50	-	-	LT EAT
0010	293+84	-	301+88	STH 108 RT	804	-	-	-
0010	300+86	-	301+36	STH 108 LT	50	-	-	NW EAT
0010	294+78	-	296+78	STH 108 RT	-	-	200	-
0010	298+40	-	298+90	STH 108 RT	-	-	50	-
0010	300+65	-	301+15	STH 108 RT	-	-	50	-
0010	298+34	-	300+09	STH 108 LT	-	-	175	-
0010	300+72	-	300+72	STH 108 RT	-	1	-	POST & BLOCK
0010	293+84	-	301+88	STH 108 RT	-	2	-	BLOCKS
				PROJECT TOTAL =	**1,054**	**4**	**475**	

WATER

CATEGORY	LOCATION	624.0100 MGAL	REMARKS
0010	STH 108	33	3/4-IN
	PROJECT TOTAL =	**33**	

EROSION CONTROL SUMMARY

CATEGORY	LOCATION	SALVAGED TOPSOIL 625.0500 SY	MULCHING 627.0200 SY	SILT FENCE 628.1504 LF	SILT FENCE MAINTENANCE 628.1520 LF	TEMPORARY DITCH CHECKS 628.7504 LF	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 30 630.0130 LB	SEED WATER 630.0500 MGAL
0010	UNDISTRIBUTED	1,000	1,000	250	250	50	0.63	18	12
PROJECT TOTAL =		**1,000**	**1,000**	**250**	**250**	**50**	**0.63**	**18**	**12**

3

MOBILIZATION EROSION CONTROL

CATEGORY	LOCATION	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH
0010	UNDISTRIBUTED	2	2
PROJECT TOTALS =		**2**	**2**

MOVING SIGN SUMMARY

CATEGORY	LOCATION	MOVING SIGNS TYPE II 638.2102 EACH	MOVING SMALL SIGN SUPPORTS 638.4000 EACH	REMARKS
0010	UNDISTRIBUTED	4	4	NO PASSING ZONE
PROJECT TOTAL =		**4**	**4**	

TRAFFIC CONTROL SUMMARY

CATEGORY	STATION TO STATION	LOCATION	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL SIGNS 643.0900 DAY	TRAFFIC CONTROL 643.5000 EACH	*** TRAFFIC CONTROL SIGNS PCMS 643.1050 DAY	REMARKS
0010	168+40 - 317+68	STH 108	-	-	0.5	14	SEE SDD FOR TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
0010	271+84 - 306+15	STH 108	104	20	-	-	SEE SDD FOR TRAFFIC CONTROL FOR WORK ON SHOULDER, UNDIVIDED ROADWAY
PROJECT TOTAL =			**104**	**20**	**0.5**	**14**	

*** PLACE ONE WEEK PRIOR TO CONSTRUCTION

LOCATING NO-PASSING ZONES

CATEGORY	STATION	TO	STATION	LOCATION	648.0100 MI
0010	168+40	-	317+68	STH 108	2.83
PROJECT TOTAL =					**2.83**

3

PAVEMENT MARKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	MARKING LINE EPOXY 4-INCH 646.1020 LF	MARKING LINE GROOVED WET REF EPOXY 4-INCH 646.1040 LF	TEMPORARY MARKING LINE PAINT 4-INCH 649.0105 LF	TEMPORARY MARKING LINE EPOXY 4-INCH 649.0120 LF	REMARKS
0010	168+40	-	208+07	STH 108 CL	992	-	635	317	CENTERLINE DASHED - YELLOW
0010	208+07	-	216+88	STH 108 CL	220	-	141	70	CENTERLINE DASHED - YELLOW
0010	208+07	-	216+88	STH 108 CL	881	-	1,762	881	CENTERLINE SOLID - YELLOW
0010	216+88	-	230+86	STH 108 CL	2,796	-	5,592	2,796	CENTERLINE SOLID - DOUBLE YELLOW
0010	230+86	-	241+91	STH 108 CL	1,105	-	2,210	1,105	CENTERLINE SOLID - YELLOW
0010	230+86	-	241+91	STH 108 CL	276	-	177	88	CENTERLINE DASHED - YELLOW
0010	241+91	-	276+92	STH 108 CL	875	-	560	280	CENTERLINE DASHED - YELLOW
0010	276+92	-	277+64	STRUCTURE CL	18	-	-	-	CENTERLINE DASHED - YELLOW
0010	277+64	-	312+88	STH 108 CL	881	-	564	282	CENTERLINE DASHED - YELLOW
0010	312+88	-	317+68	STH 108 CL	120	-	77	38	CENTERLINE DASHED - YELLOW
0010	312+88	-	317+68	STH 108 CL	480	-	960	480	CENTERLINE SOLID - YELLOW
0010	168+40	-	169+00	STH 108 EL LT	-	160	-	-	EDGELINE SOLID - WHITE
0010	168+40	-	250+52	STH 108 EL RT	-	8,317	-	-	EDGELINE SOLID - WHITE
0010	170+00	-	178+90	STH 108 EL LT	-	880	-	-	EDGELINE SOLID - WHITE
0010	179+50	-	186+55	STH 108 EL LT	-	646	-	-	EDGELINE SOLID - WHITE
0010	187+10	-	217+24	STH 108 EL LT	-	2,969	-	-	EDGELINE SOLID - WHITE
0010	217+84	-	250+12	STH 108 EL LT	-	3,224	-	-	EDGELINE SOLID - WHITE
0010	251+15	-	276+92	STH 108 EL LT	-	2,581	-	-	EDGELINE SOLID - WHITE
0010	251+40	-	276+92	STH 108 EL RT	-	2,556	-	-	EDGELINE SOLID - WHITE
0010	276+92	-	277+64	STRUCTURE EL LT	-	72	-	-	EDGELINE SOLID - WHITE
0010	276+92	-	277+64	STRUCTURE EL RT	-	72	-	-	EDGELINE SOLID - WHITE
0010	277+64	-	317+68	STH 108 EL LT	-	4,012	-	-	EDGELINE SOLID - WHITE
0010	277+64	-	317+68	STH 108 EL RT	-	4,012	-	-	EDGELINE SOLID - WHITE
				PROJECT TOTALS =	**8,644**	**29,501**	**12,678**	**6,337**	

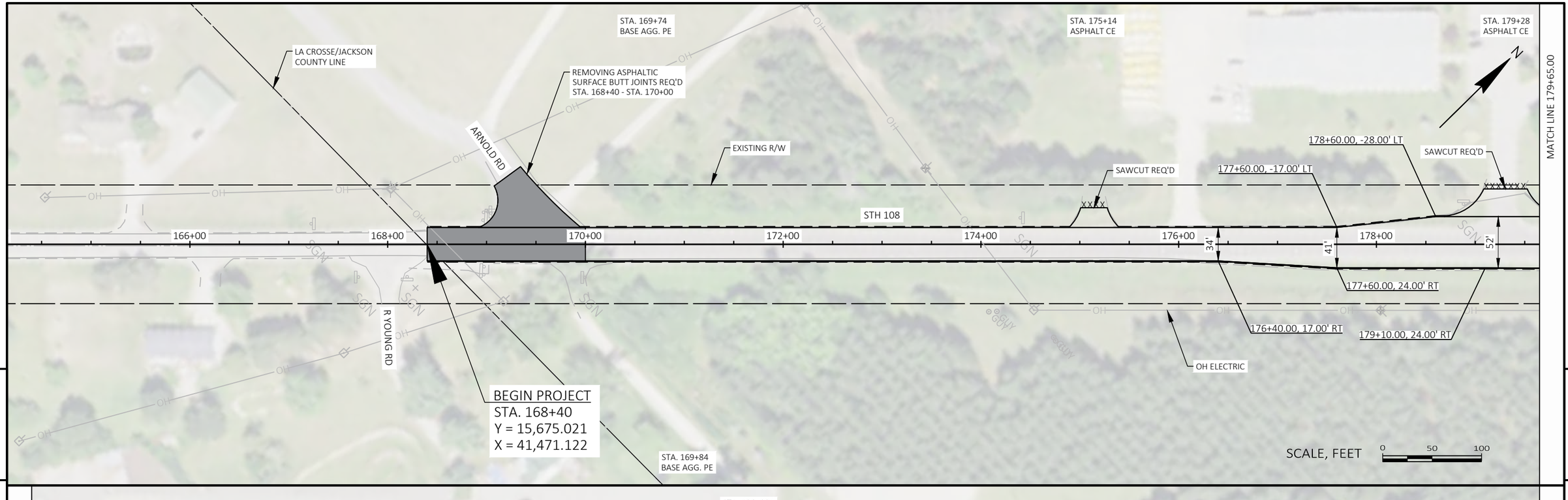
NOTES: TEMPORARY MARKING PAINT PLACED IN TWO APPLICATIONS (MILLED & BINDER SURFACE)
TEMPORARY MARKING EPOXY PLACED IN ONE APPLICATIONS (FINAL SURFACE)

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	CONSTRUCTION STAKING RESURFACING REFERENCE 650.8000 LF	CONSTRUCTION STAKING SUPPPLEMENTAL CONTROL 650.9910 LS
0010	168+40	-	317+68	STH 71	14,928	1
				PROJECT TOTALS =	**14,928**	**1**

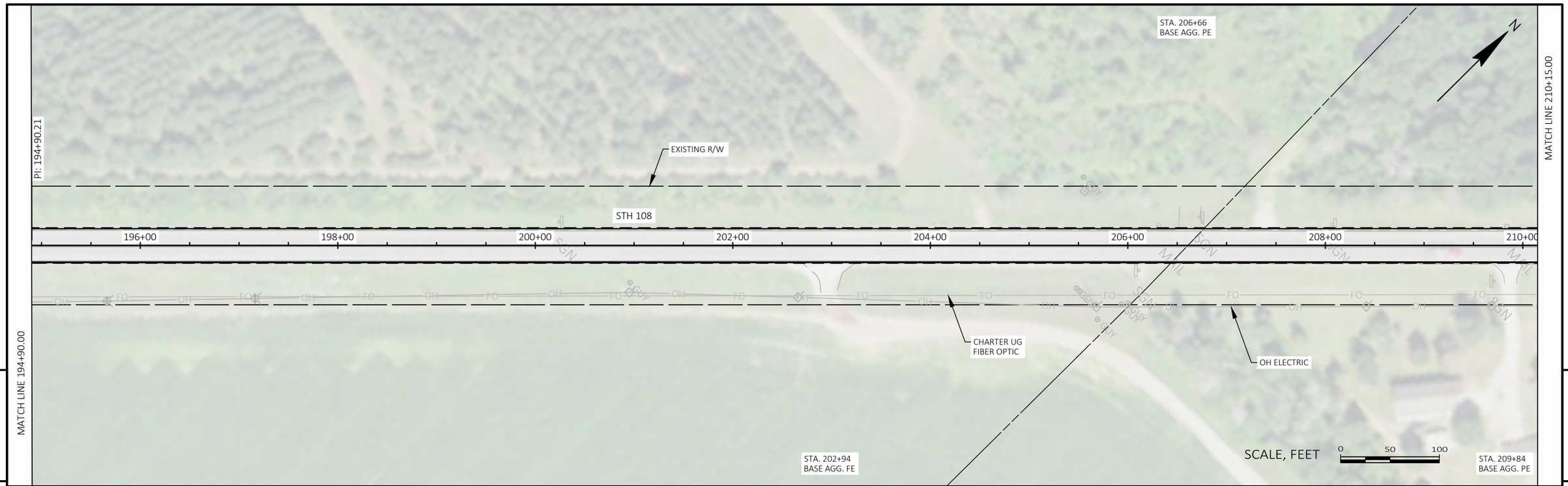
SAWING ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 LF
0010	175+00	-	175+29	LT CE	28
0010	179+08	-	179+52	LT CE	44
0010	186+64	-	187+09	LT CE	45
0010	213+19	-	213+48	RT CE	29
0010	214+59	-	214+89	RT CE	29
0010	219+71	-	219+87	RT PE	17
0010	254+71	-	254+90	RT PE	19
				PROJECT TOTAL =	**211**



PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	PLAN SHEETS	SHEET 17	E

FILE NAME : W:\7701_03\CAD\! 7930-00-01\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 1
PLOT DATE : 9/30/2021 11:44 AM
PLOT BY : METRY, ALEXANDER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



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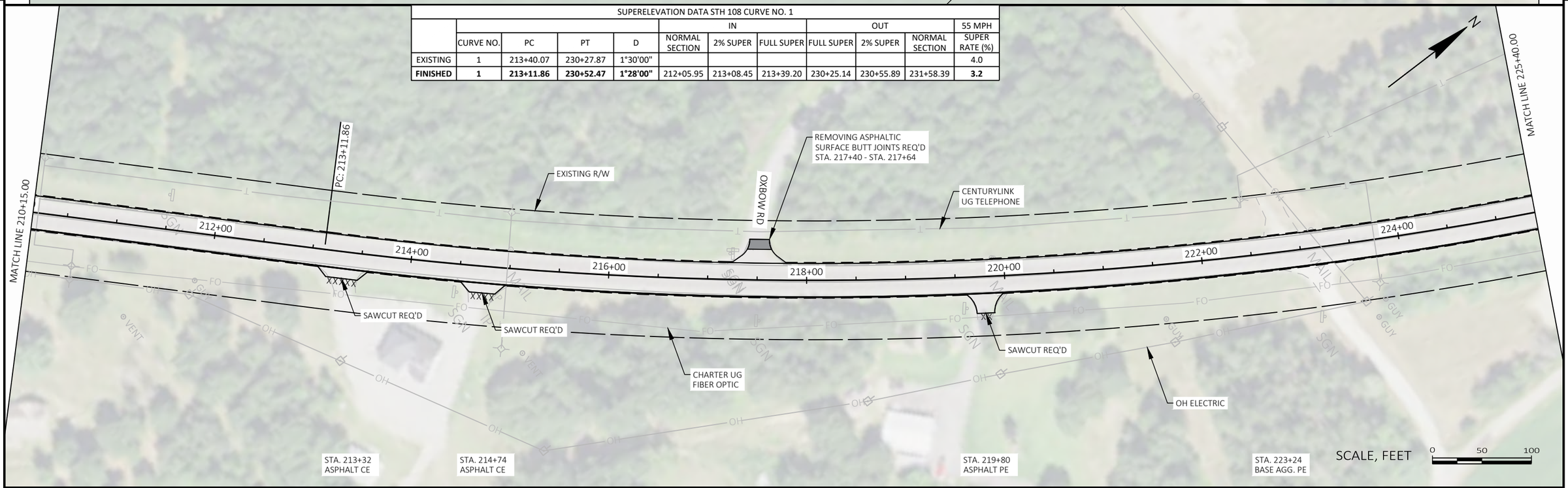
5

SUPERELEVATION DATA STH 108 CURVE NO. 1

					IN			OUT			55 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	1	213+40.07	230+27.87	1°30'00"							4.0
FINISHED	**1**	**213+11.86**	**230+52.47**	**1°28'00"**	212+05.95	213+08.45	213+39.20	230+25.14	230+55.89	231+58.39	**3.2**

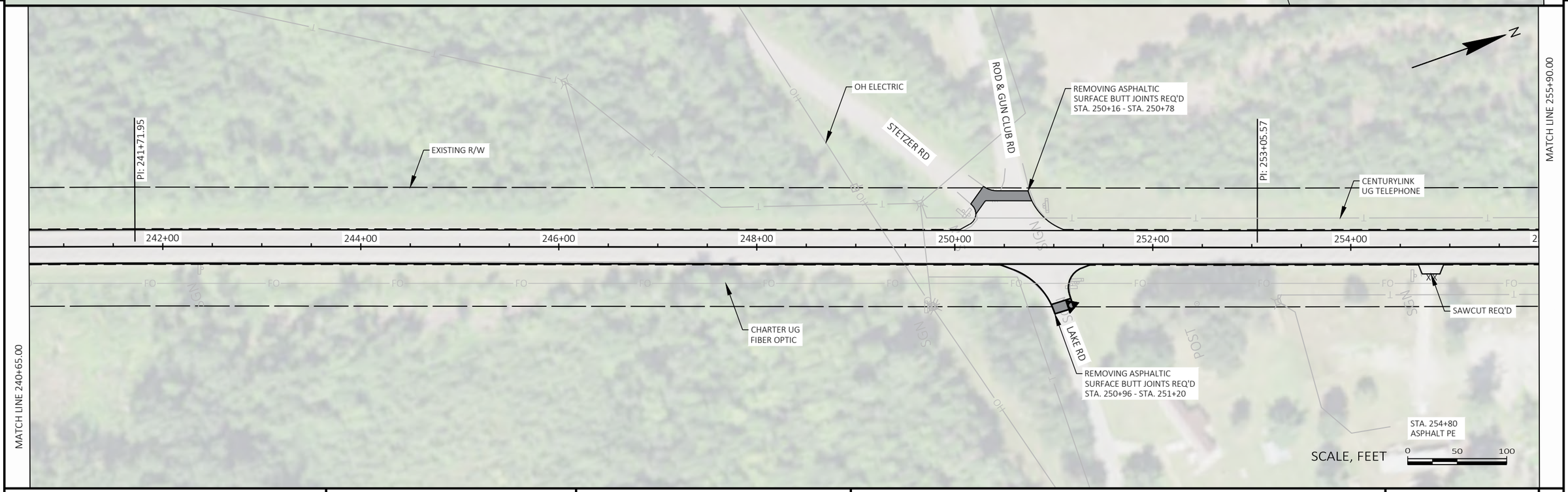


PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	PLAN SHEETS	SHEET 18	E

FILE NAME : W:\7701_03\CAD\! 7930-00-01\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 2

PLOT DATE : 9/30/2021 11:44 AM PLOT BY : METRY, ALEXANDER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	PLAN SHEETS	SHEET 19	E

FILE NAME : W:\7701_03\CAD\! 7930-00-01\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 3

PLOT DATE : 9/30/2021 11:44 AM PLOT BY : METRY, ALEXANDER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE 255+90.00

MATCH LINE 271+15.00

STA. 268+66
BASE AGG. PE

N

EXISTING R/W

CENTURYLINK
UG TELEPHONE

STH 108

256+00 258+00 260+00 262+00 264+00 266+00 268+00 270+00

CHARTER UG
FIBER OPTIC

OH ELECTRIC

SAND RD

STA. 259+45
BASE AGG. PE

STA. 268+78
BASE AGG. PE

SCALE, FEET 0 50 100

MATCH LINE 271+15.00

MATCH LINE 286+40.00

ADJUSTING STEEL PLATE BEAM GUARD EAT REQ'D
STA. 276+10 - STA. 276+60 LT
STA. 276+10 - STA. 276+60 RT

REPLACE THRIE BEAM BLOCK
STA. 276+80

BRIDGE B-27-0010
STA. 276+92 - STA. 277+64

ADJUSTING STEEL PLATE BEAM GUARD EAT REQ'D
STA. 277+96 - STA. 278+46 LT
STA. 277+96 - STA. 278+46 RT

REMOVING ASPHALTIC
SURFACE BUTT JOINTS REQ'D
STA. 277+64 - STA. 278+64

PI: 274+54.86

EXISTING R/W

CENTURYLINK
UG TELEPHONE

272+00 274+00 276+00 278+00 280+00 282+00 284+00 286+00

OH ELECTRIC

CHARTER UG
FIBER OPTIC

REMOVING ASPHALTIC
SURFACE BUTT JOINTS REQ'D
STA. 275+92 - STA. 276+92

SAND CREEK

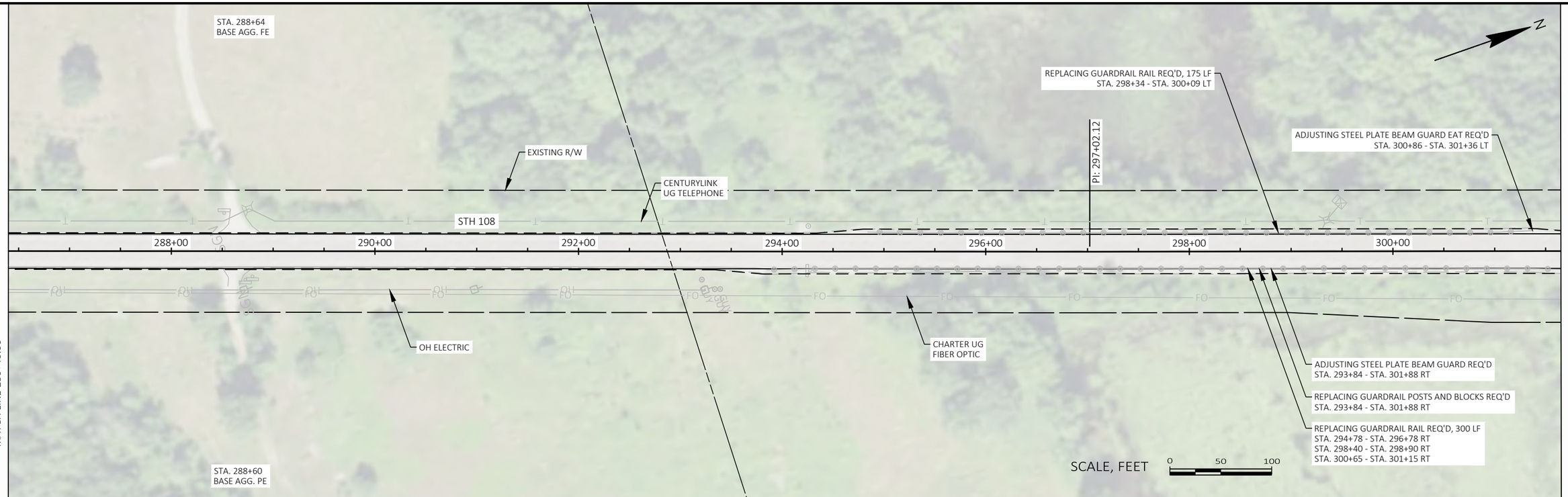
SCALE, FEET 0 50 100

PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	PLAN SHEETS	SHEET 20	E

FILE NAME : W:\7701_03\CAD\! 7930-00-01\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 4

PLOT DATE : 9/30/2021 11:44 AM PLOT BY : METRY, ALEXANDER PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



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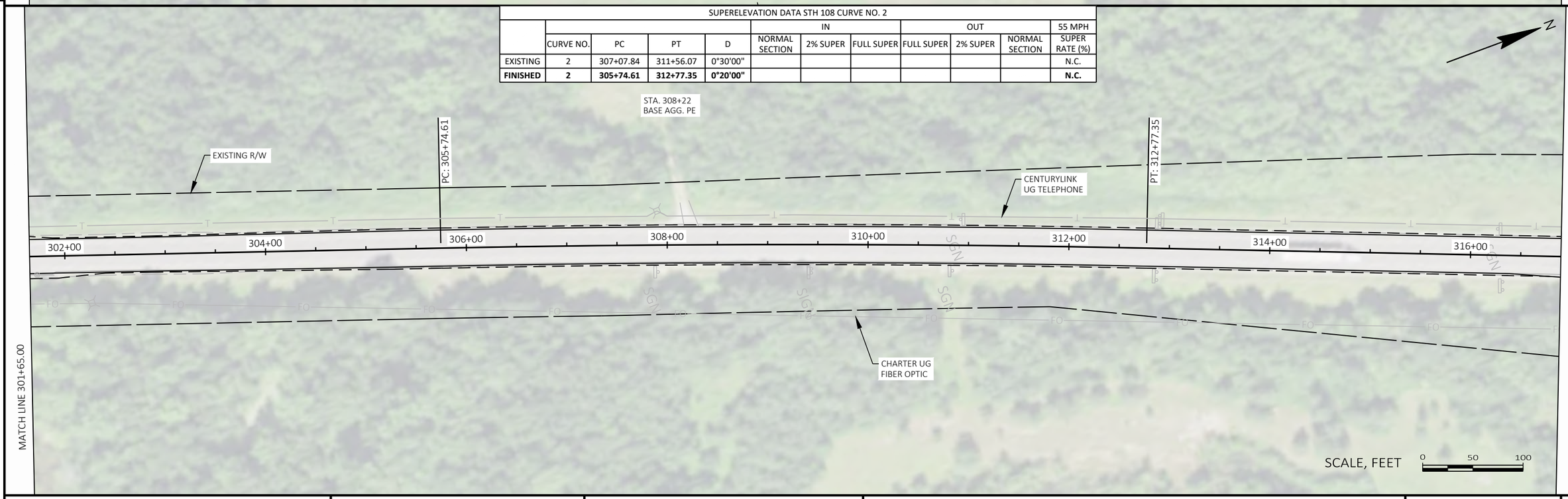
5

SUPERELEVATION DATA STH 108 CURVE NO. 2

					IN			OUT			55 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	2	307+07.84	311+56.07	0°30'00"							N.C.
FINISHED	**2**	**305+74.61**	**312+77.35**	**0°20'00"**							**N.C.**



PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	PLAN SHEETS	SHEET 21	E

FILE NAME : W:\7701_03\CAD\! 7930-00-01\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 5
PLOT DATE : 9/30/2021 11:44 AM
PLOT BY : METRY, ALEXANDER
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

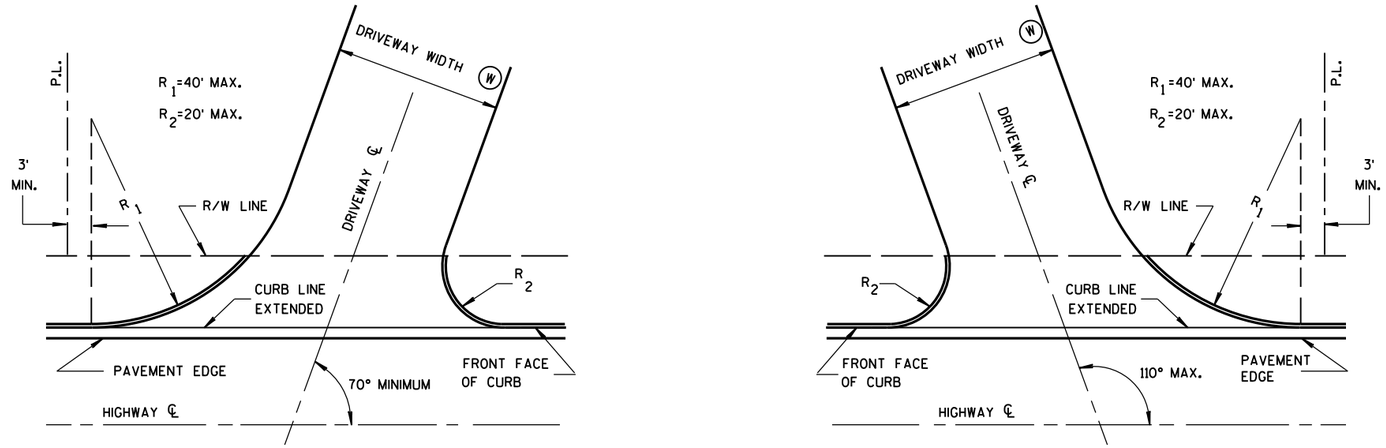
5

5

PROJECT NO: 7930-00-71	HWY: STH 108	COUNTY: JACKSON	PLAN SHEETS	SHEET 22	E

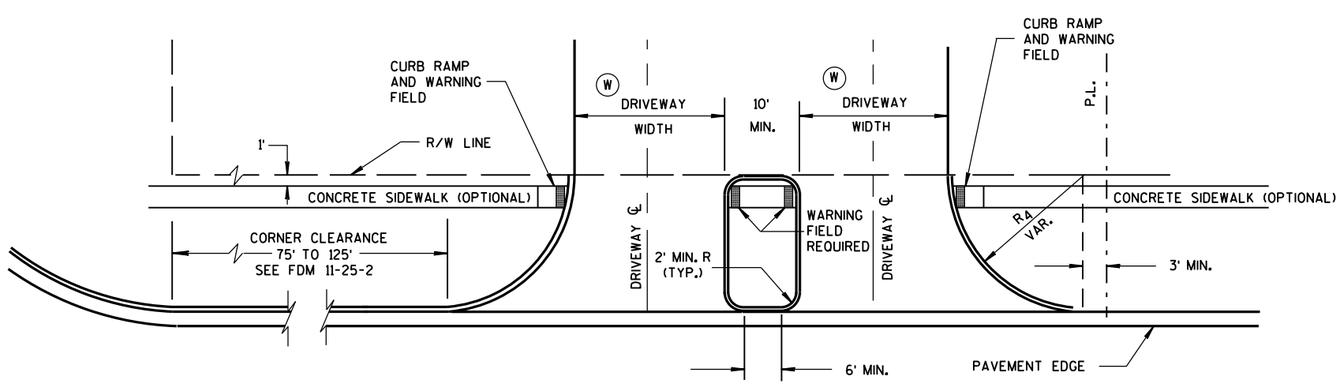
Standard Detail Drawing List

08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL



SKEWED DRIVEWAY DETAILS
(COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

NOTES

A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

ALL CURVILINEAR PRIVATE ENTRANCE OUTLINES SHALL BE CONTAINED WITHIN THE HIGHWAY R/W.

NO DRIVEWAY SHALL BE BUILT WITHIN 3 FEET OF THE PROPERTY LINE EXCEPT FOR EXISTING JOINT DRIVEWAY SHARED BY TWO OWNERS.

Ⓦ DRIVEWAY WIDTHS:

COMMERCIAL - 35' MAX., 16' MIN.

RESIDENTIAL AND NON-COMMERCIAL - 24' MAX., 12' MIN.

DRIVEWAYS WITH CURB & GUTTER RETURNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

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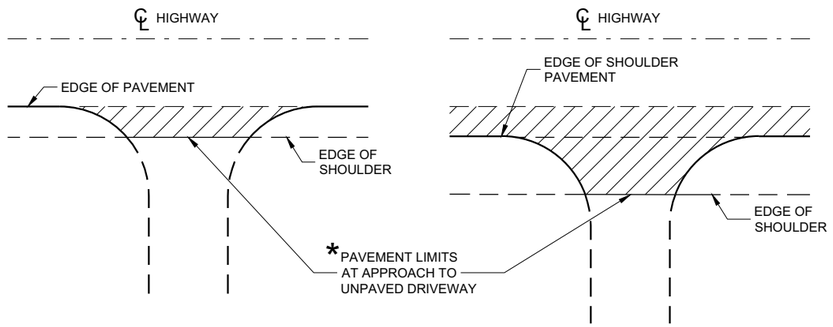
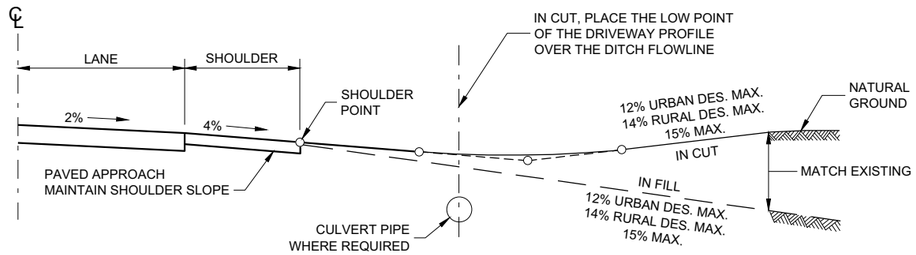
S.D.D. 8 D 20-1



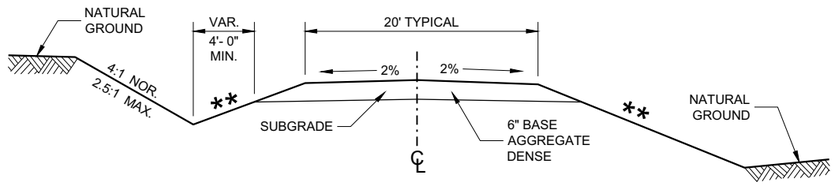
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

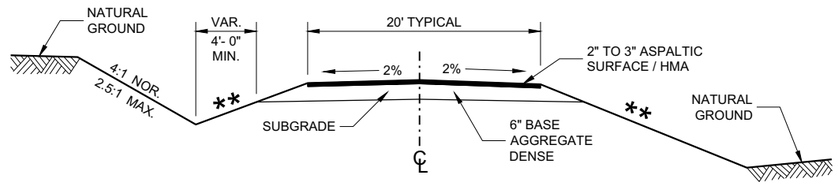


IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT IN FILL

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

6

SDD 08D21 - 01

DRIVEWAYS WITHOUT CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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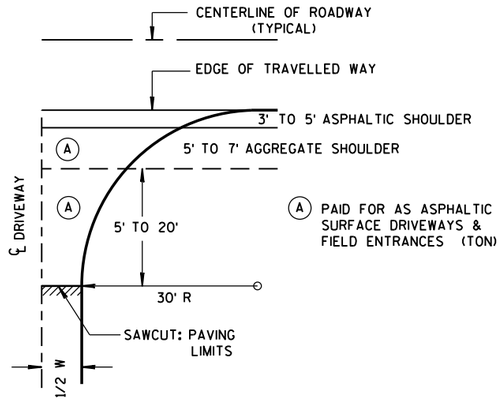
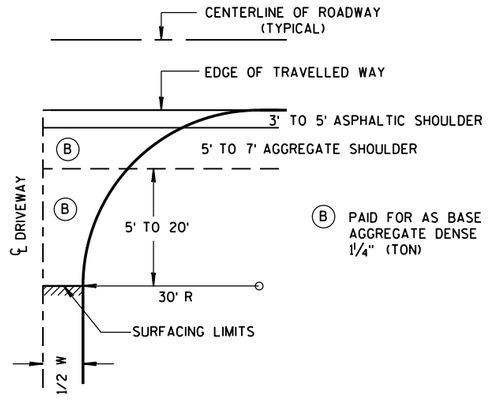
SDD 08D21 - 01



PLAN VIEW
HALF SECTION

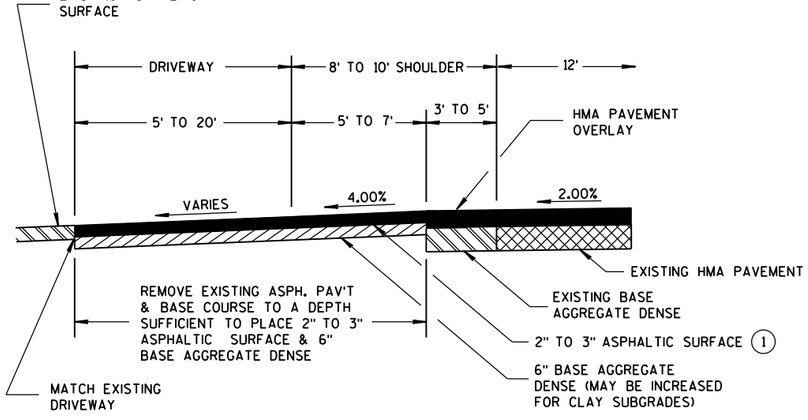
W MIN. = 16'
W MAX. = 24'



PLAN VIEW
HALF SECTION

GENERAL NOTES

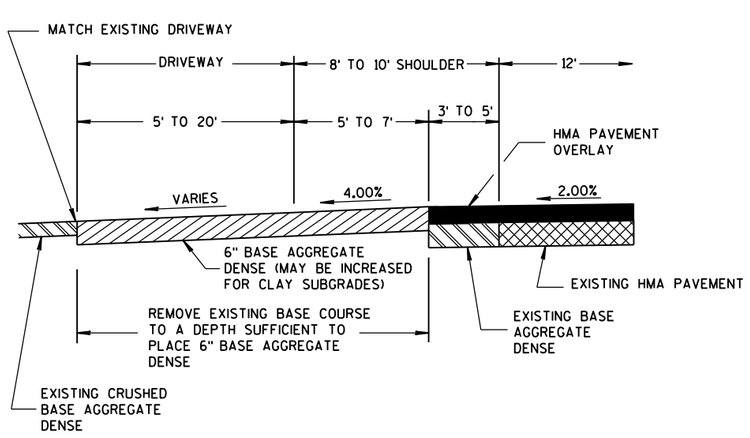
(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PROFILE VIEW

RURAL ENTRANCE WITH ASPHALTIC SURFACE

RESURFACING PROJECTS



PROFILE VIEW

RURAL ENTRANCE WITH AGGREGATE SURFACE

6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERV
ENT
FHWA

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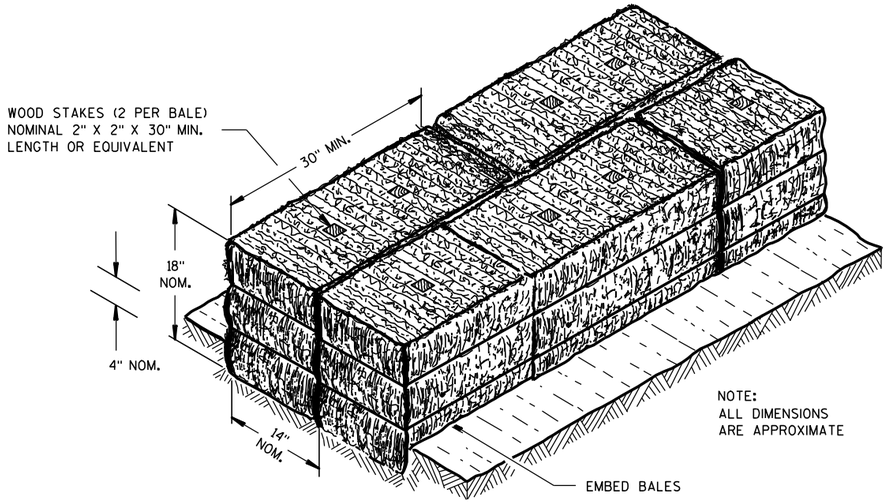
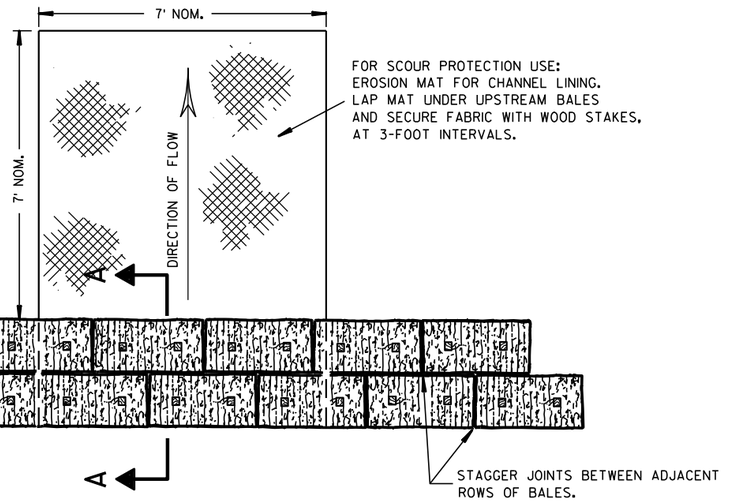
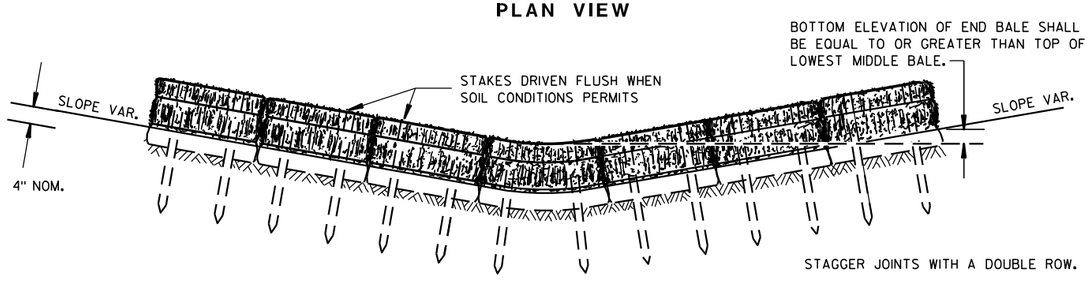
S.D.D. 8 D 22-1



SECTION A-A



PLAN VIEW



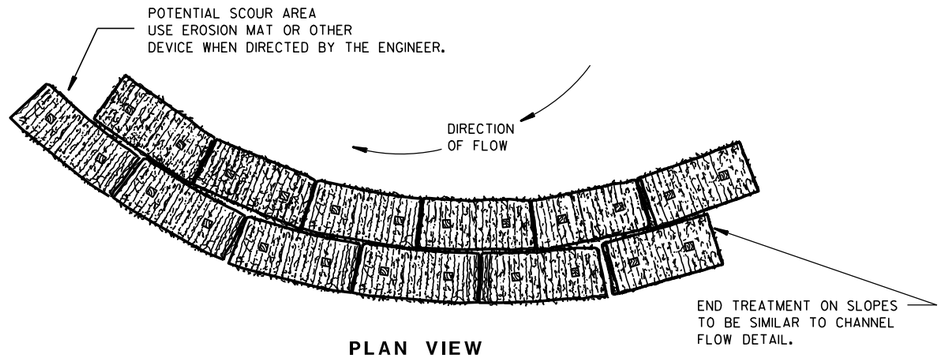
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

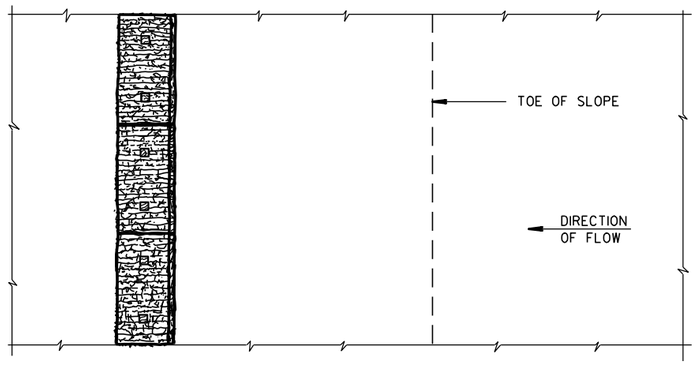
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

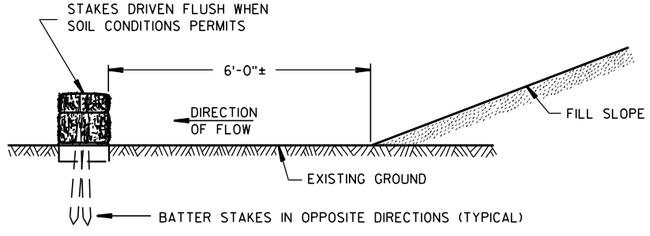


PLAN VIEW

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

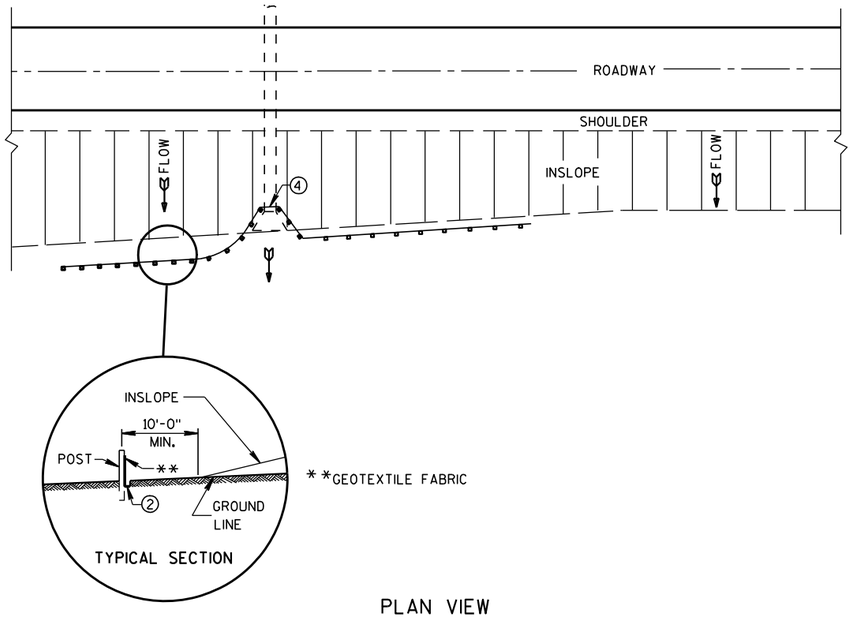
APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

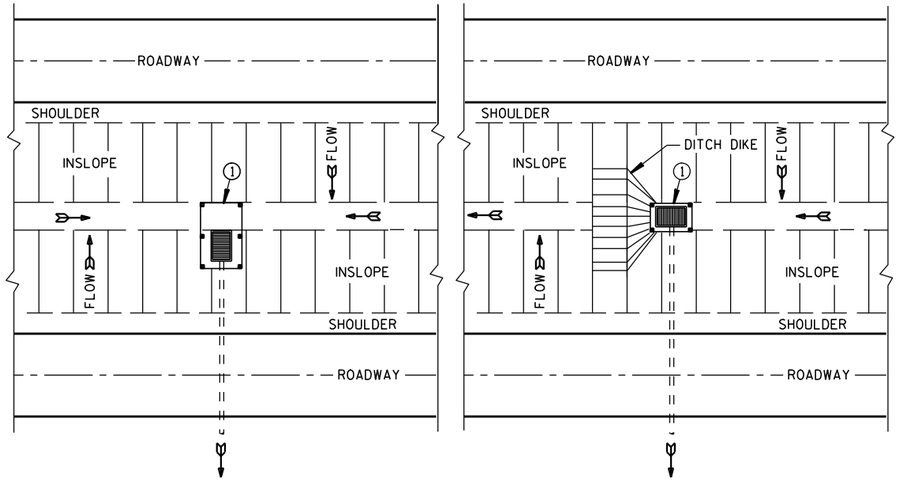
FHWA

6
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



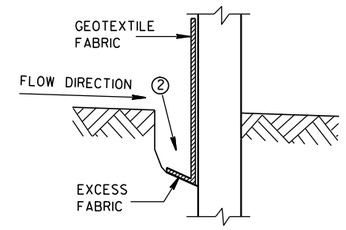
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

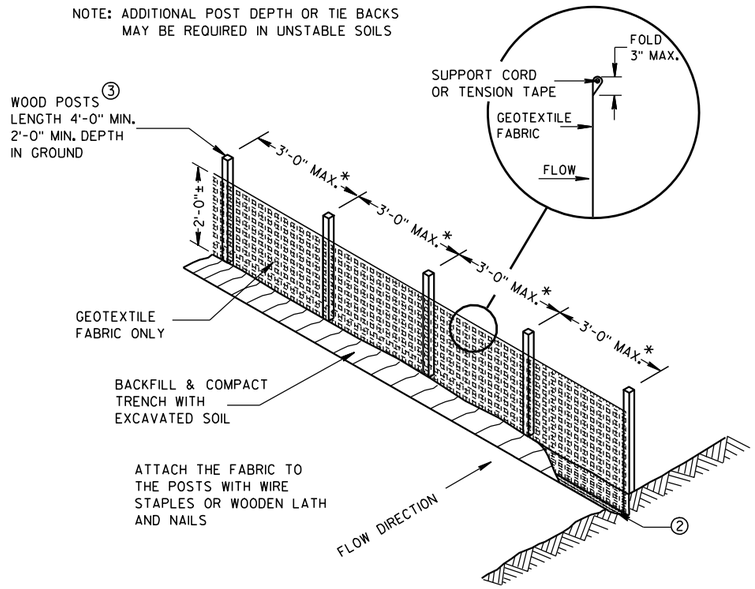
GENERAL NOTES

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

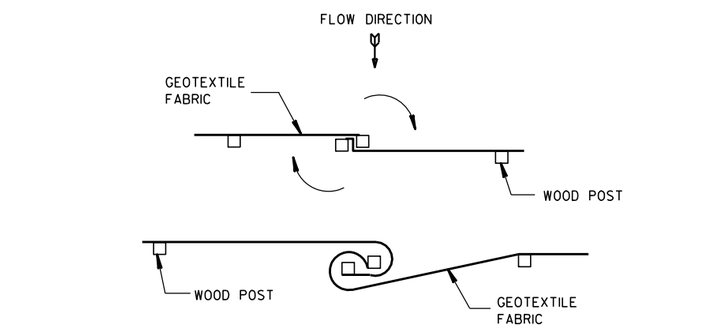
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



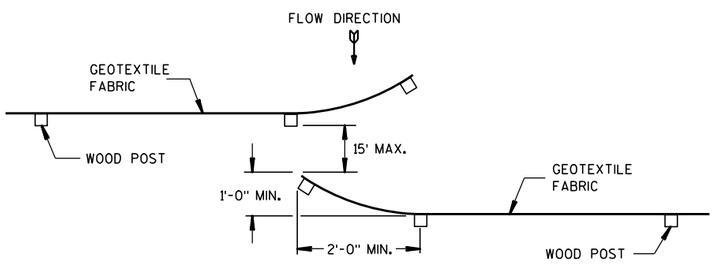
TRENCH DETAIL



SILT FENCE

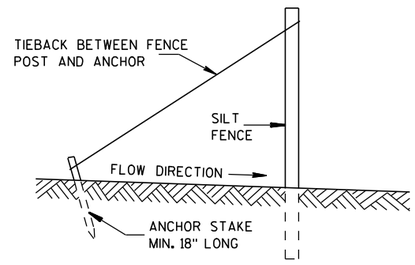


TWIST METHOD



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

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S.D.D. 8 E 9-6

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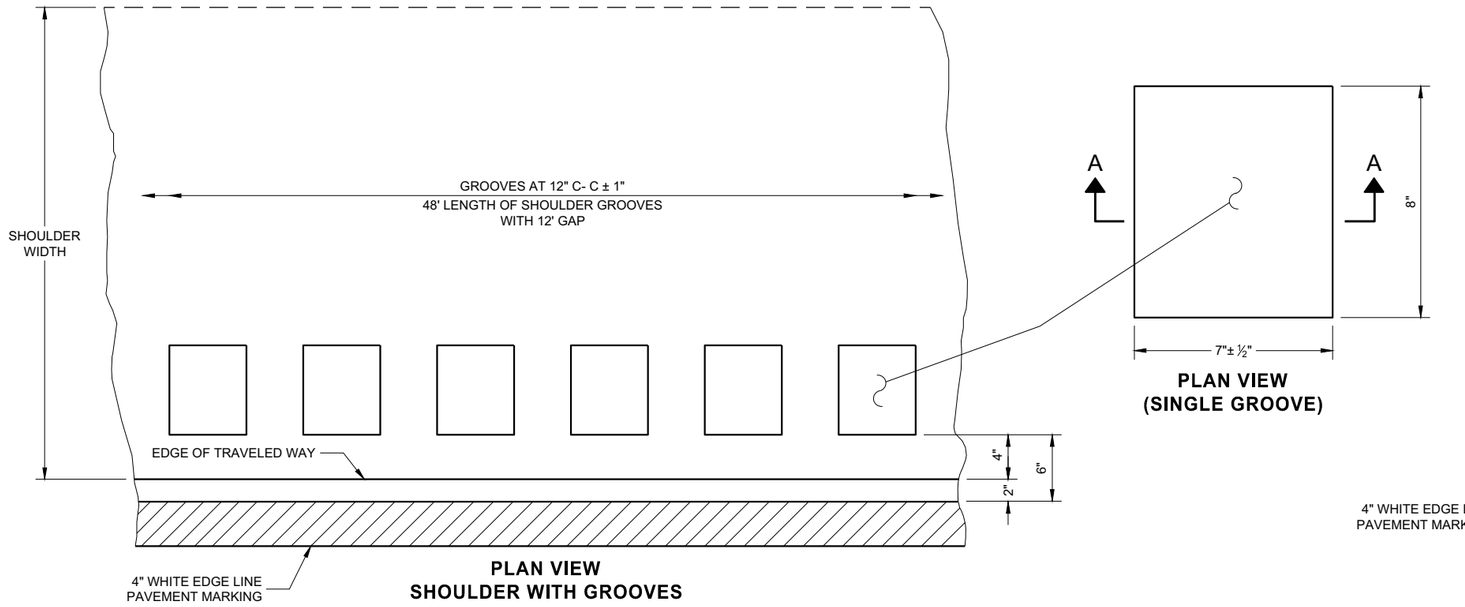
S.D.D. 8 E 9-6



PLAN VIEW
SHOULDER WITH GROOVES

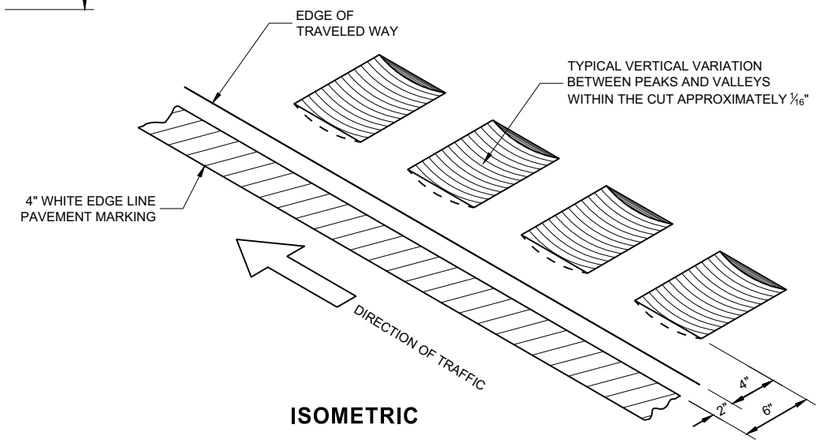
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

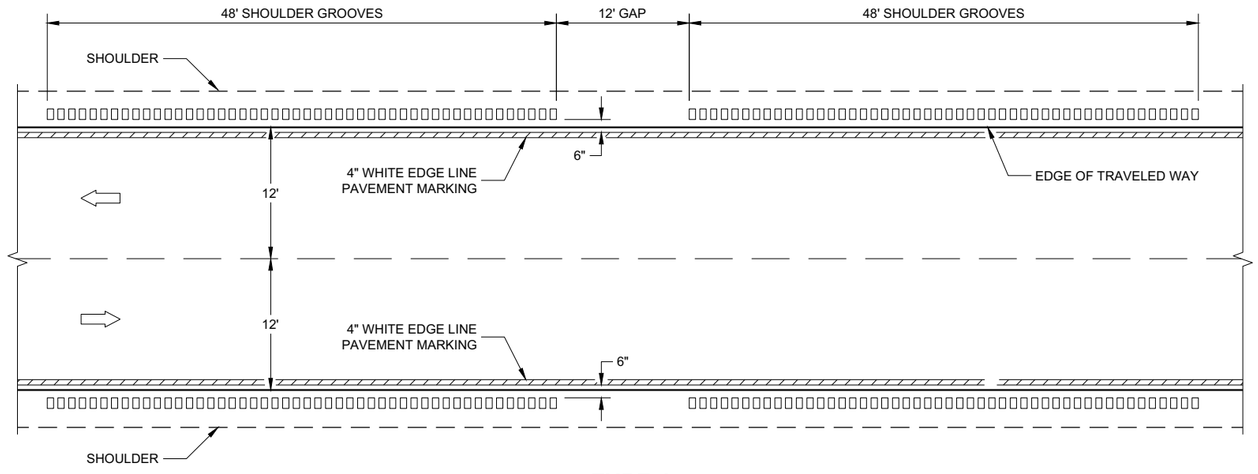
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

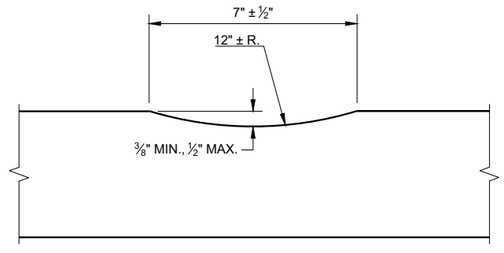


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

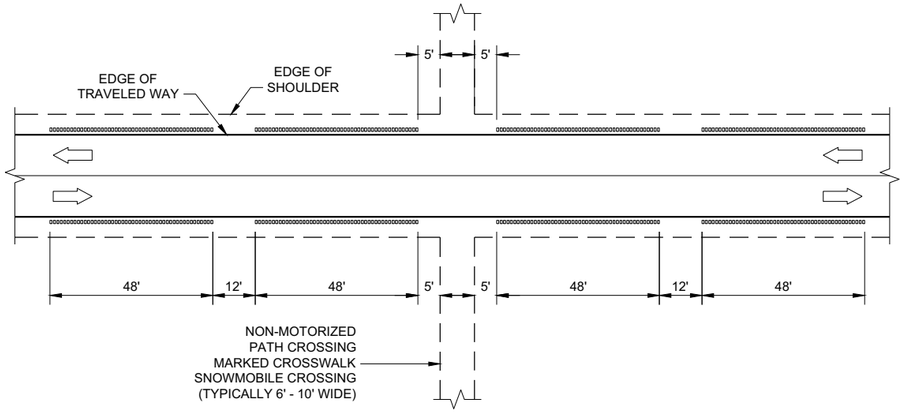
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

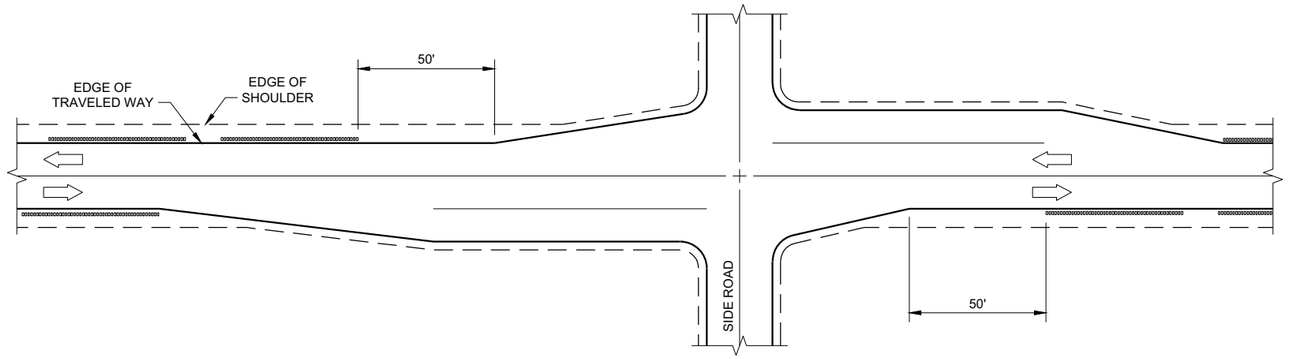
SDD 13A10 - 02a

6

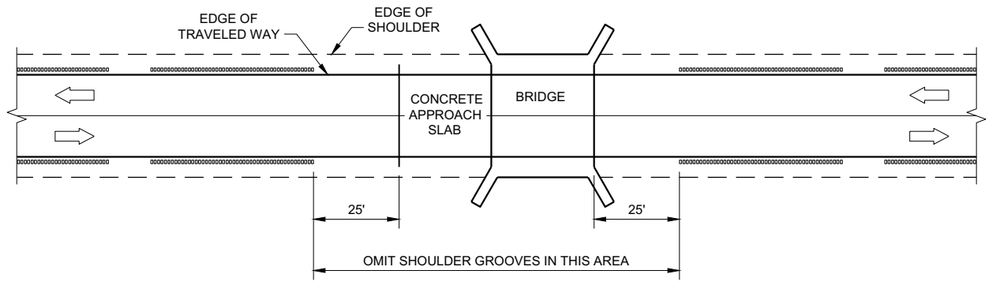
SDD 13A10 - 02a



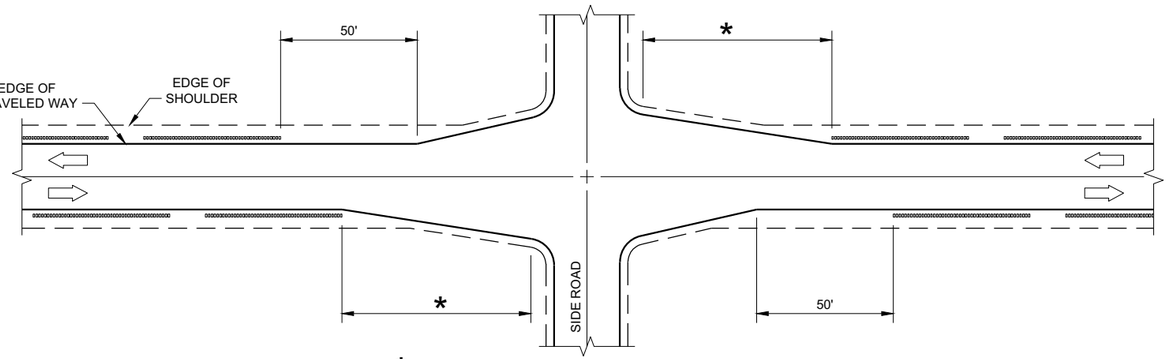
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

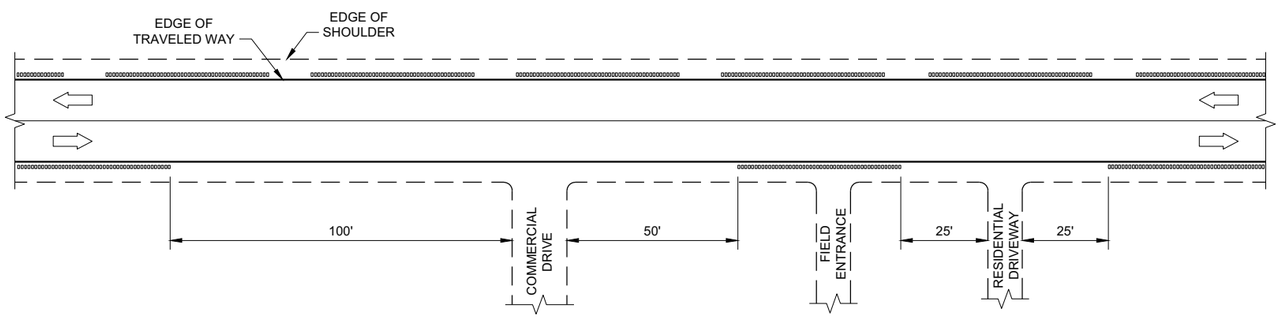


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

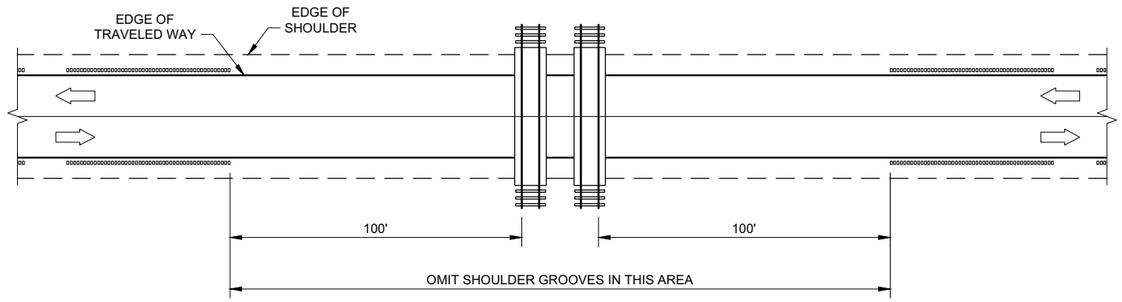
(1) SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

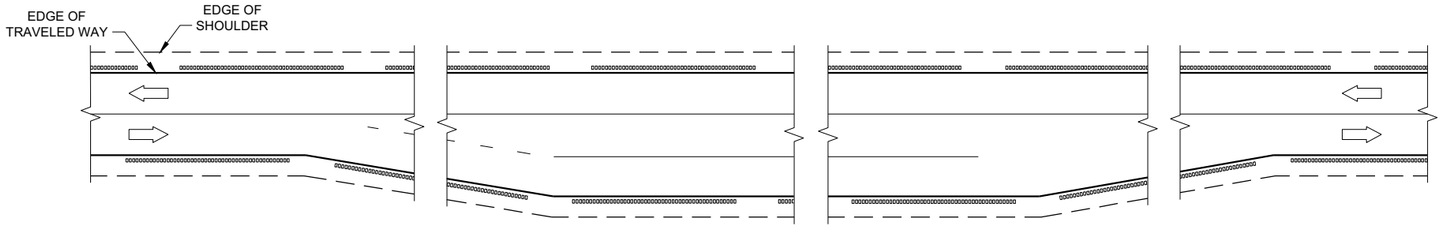
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

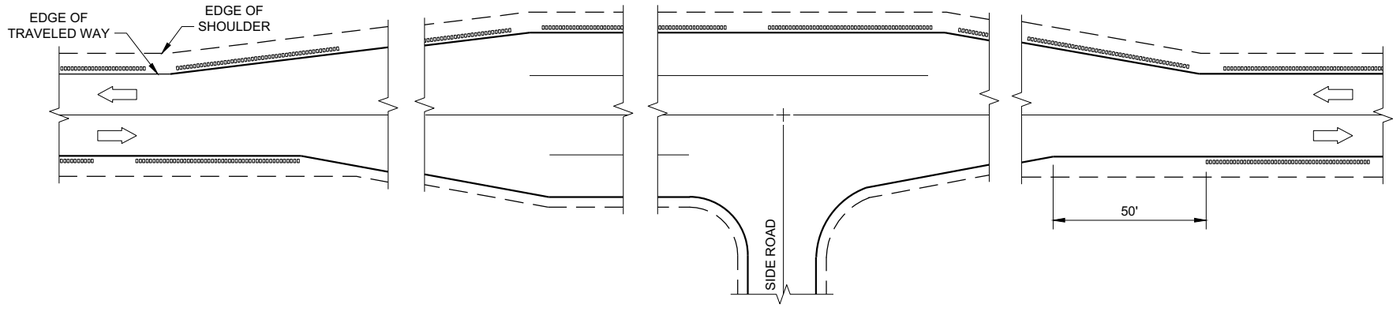
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

6

SDD 13A10 - 02d

SDD13A10 - 02d

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

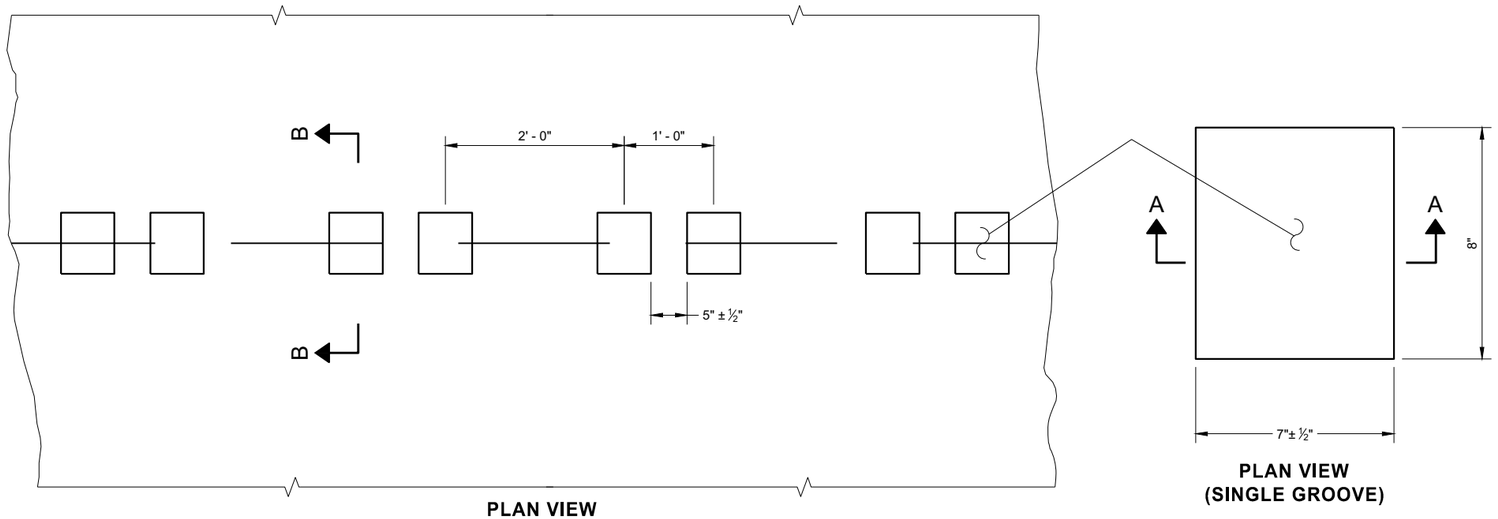
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

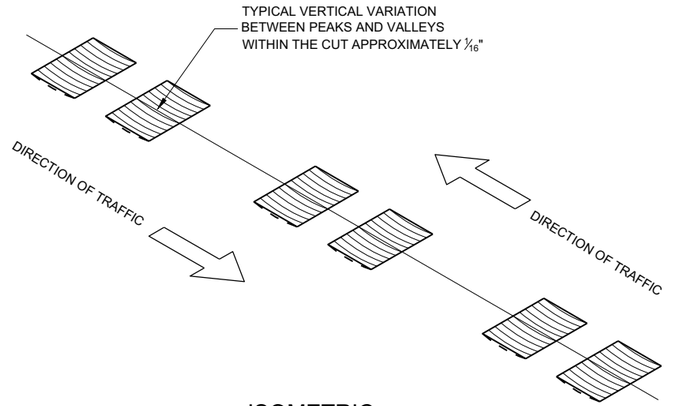
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

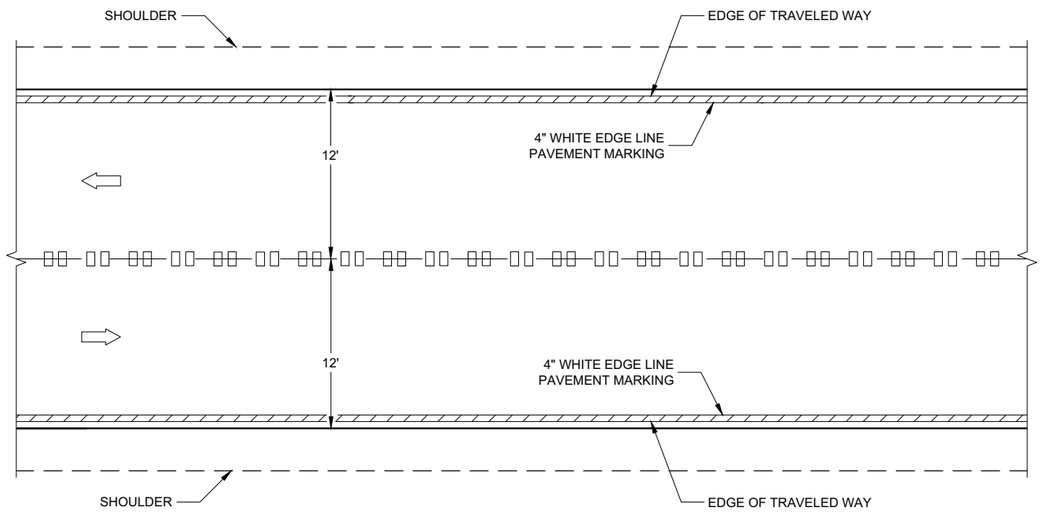
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

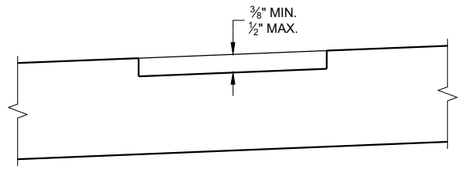
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



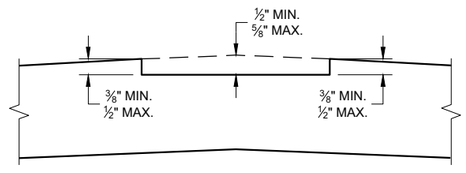
ISOMETRIC



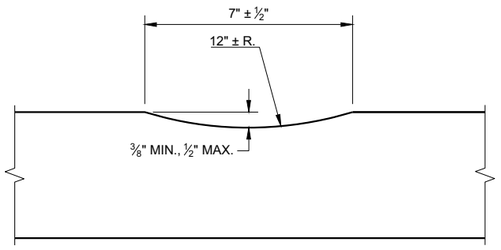
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

6

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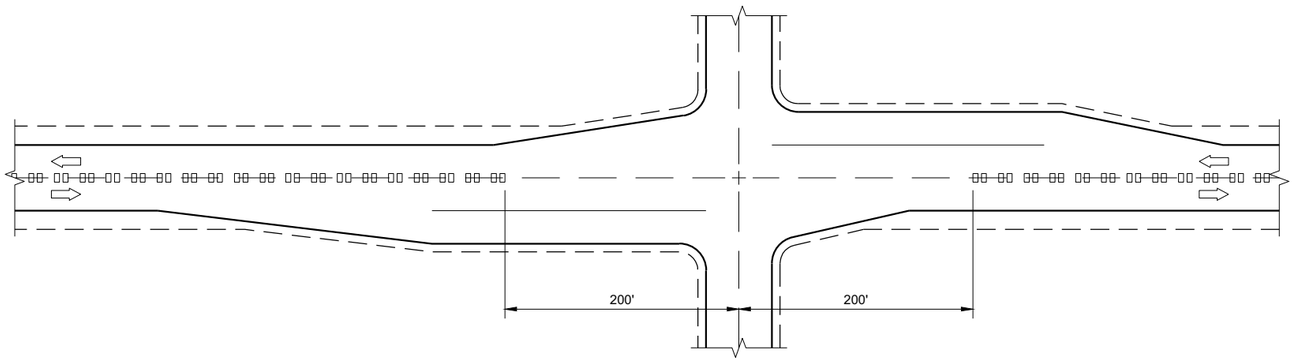
SDD 13A11 - 03a

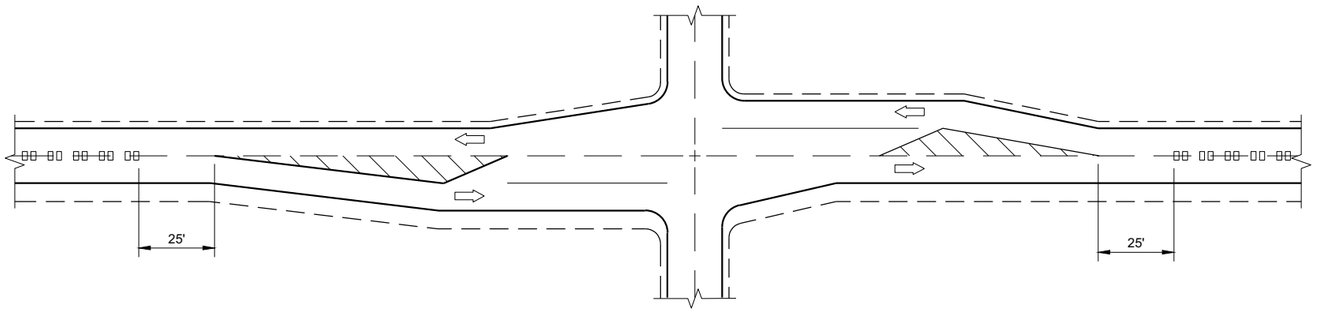
SDD 13A11 - 03a

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

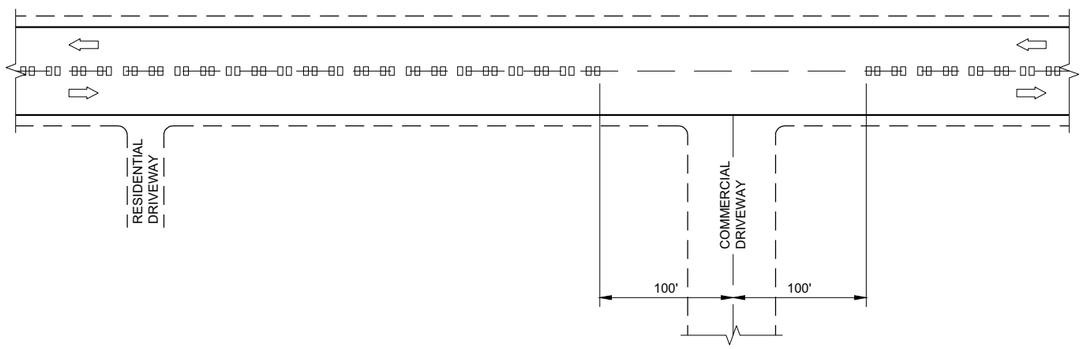
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



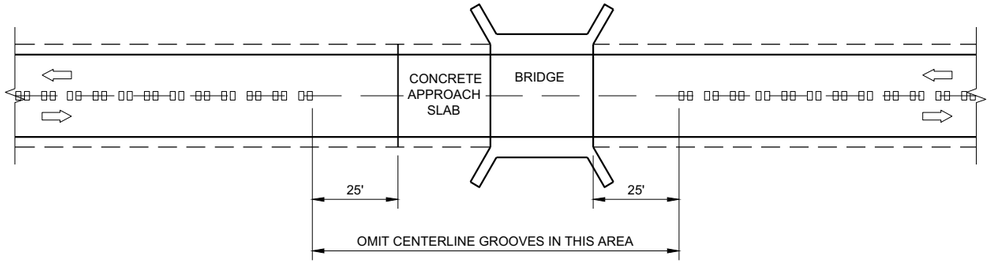
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



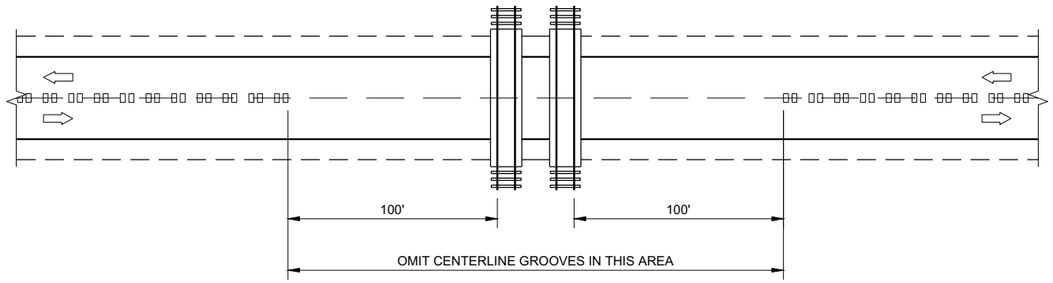
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

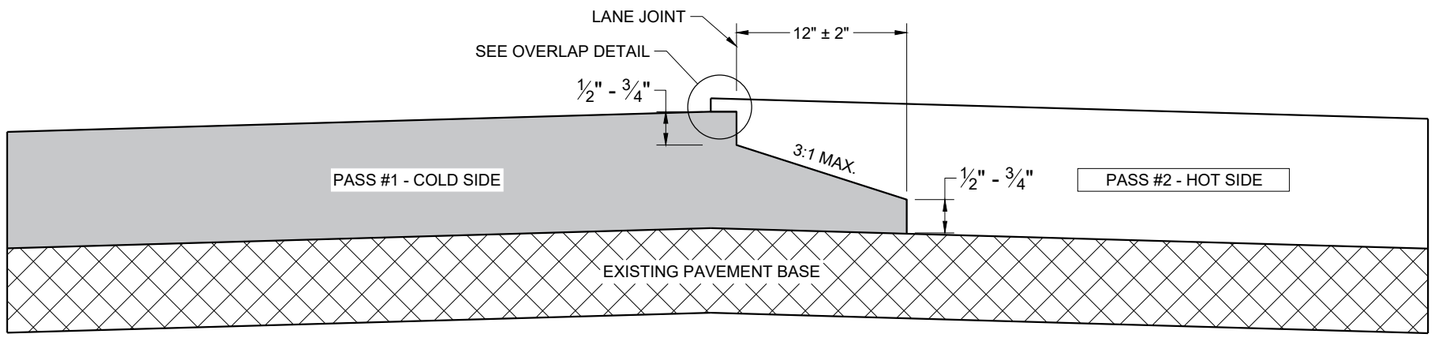
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

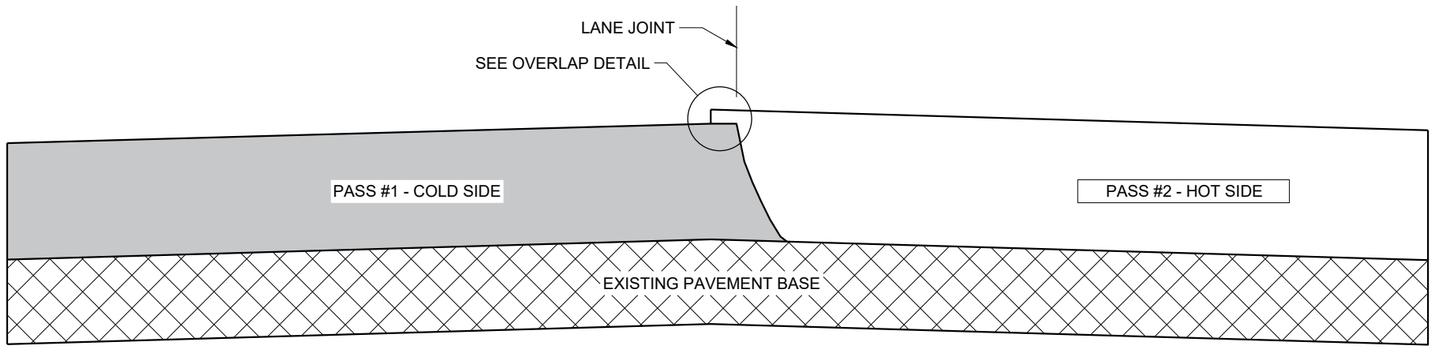
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

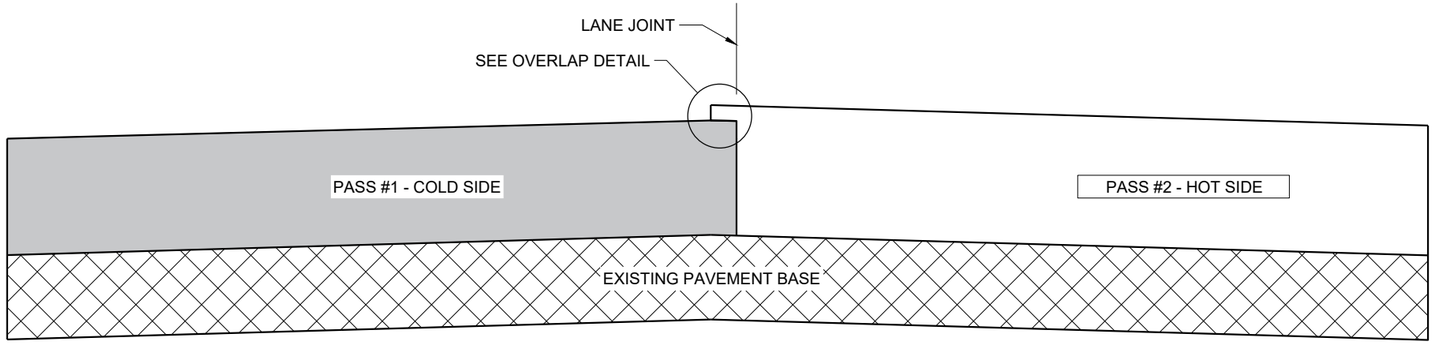
6
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

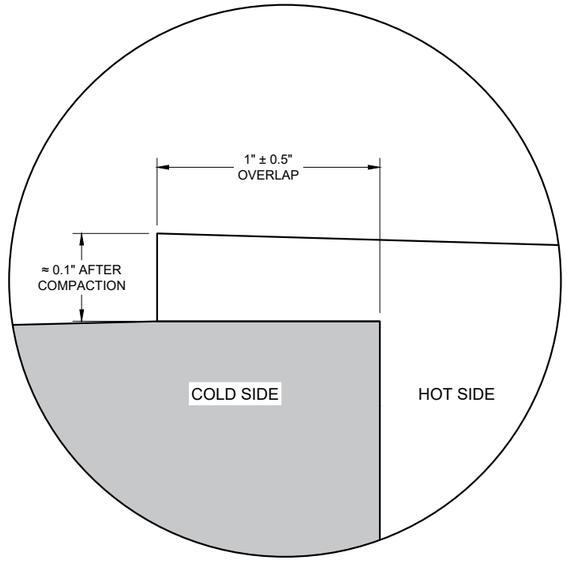
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

GENERAL NOTES

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

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

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

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

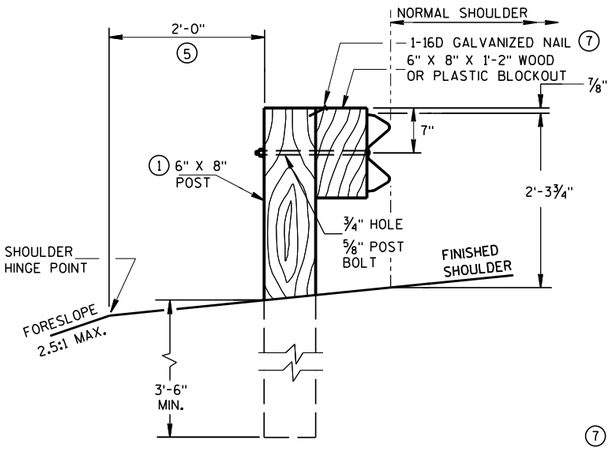
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

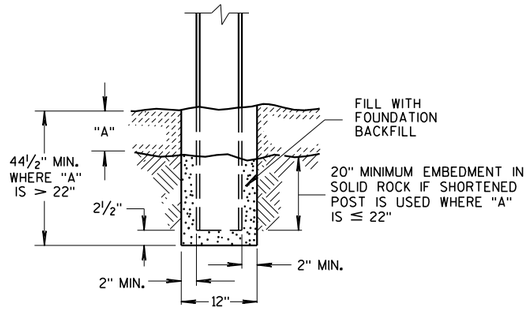
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

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

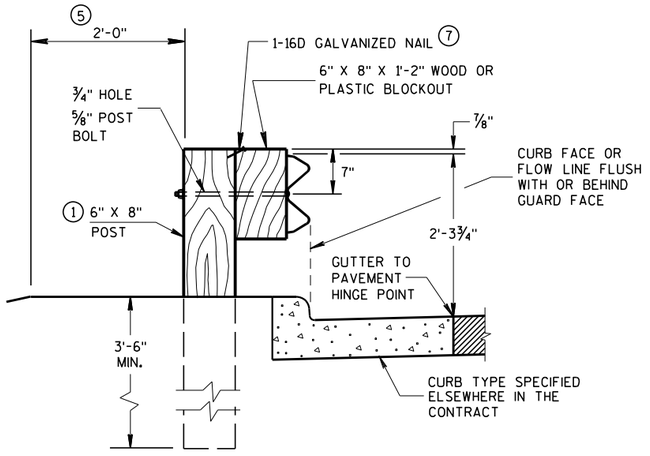
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



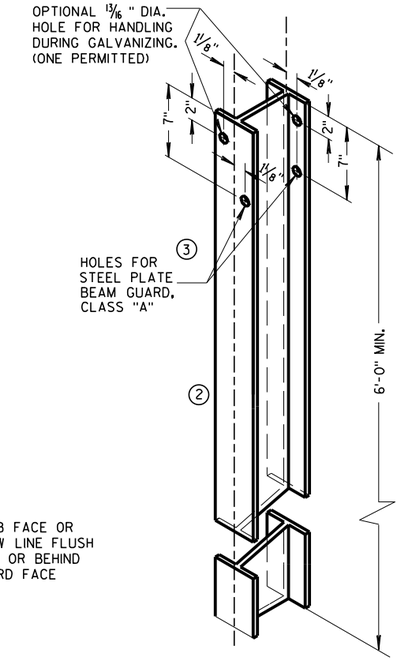
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



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

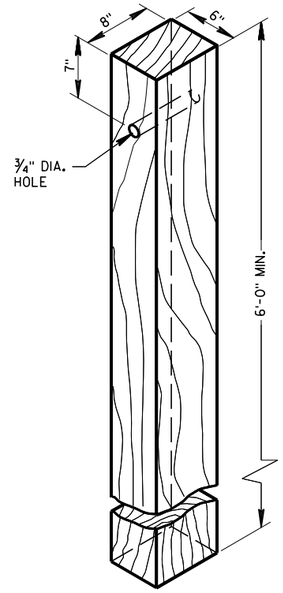


END VIEW
LOCATED ALONG A CURBED ROADWAY

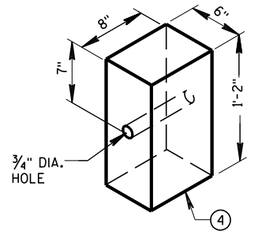


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

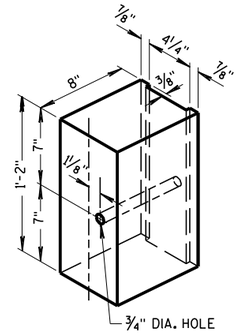
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



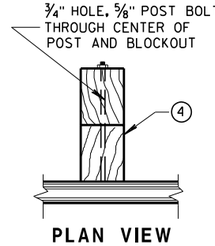
WOOD POST
(6"X8") NOMINAL



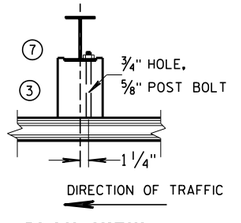
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



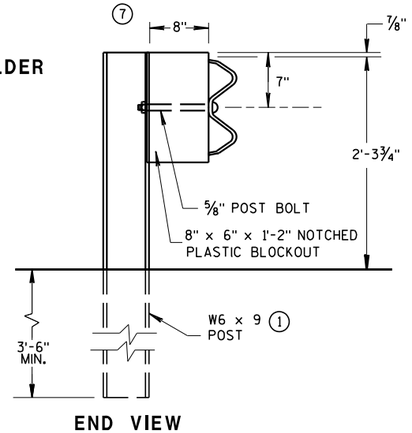
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



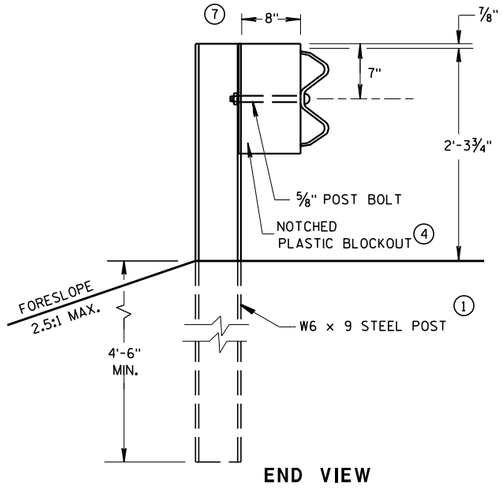
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



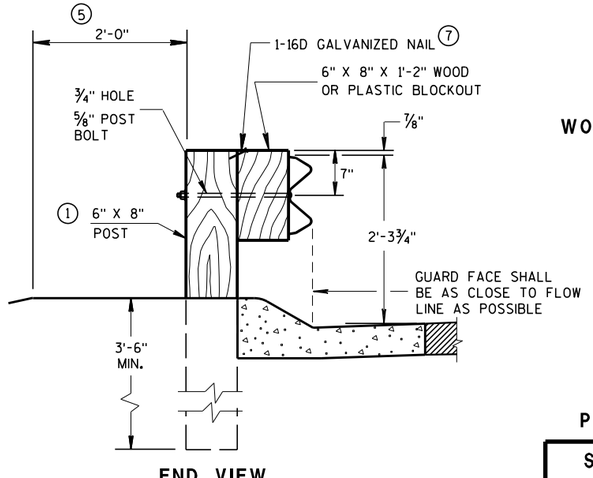
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



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



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

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

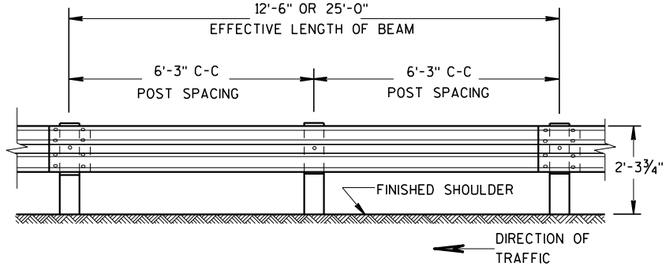
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

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

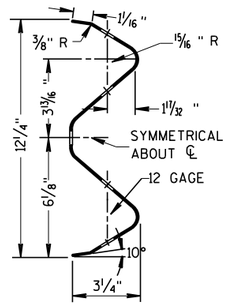
6

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

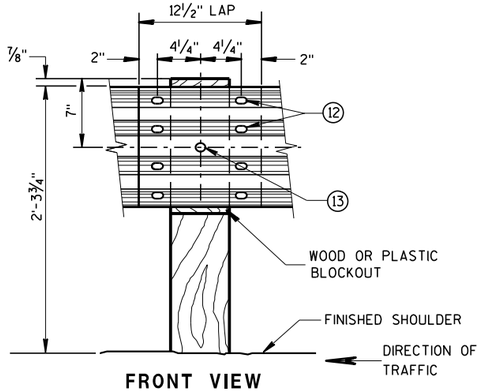


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

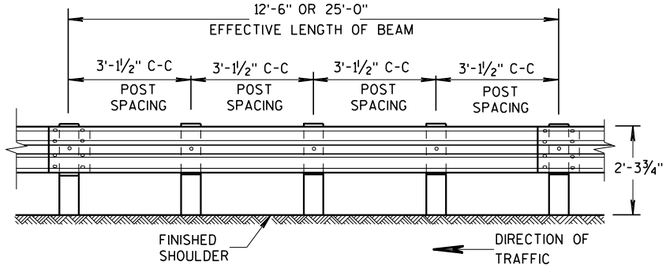
GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

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

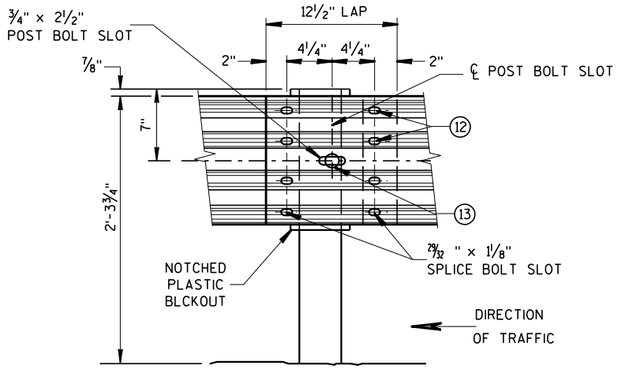
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

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



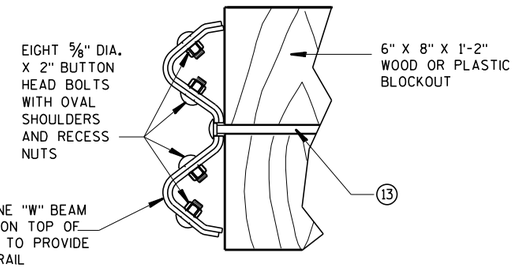
FRONT VIEW

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



FRONT VIEW

BEAM SPLICE AT STEEL POST

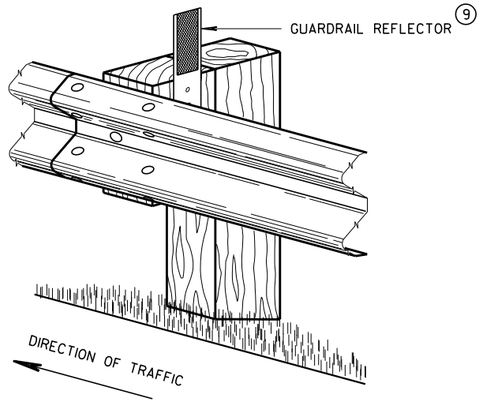


NESTED W BEAM (NW)

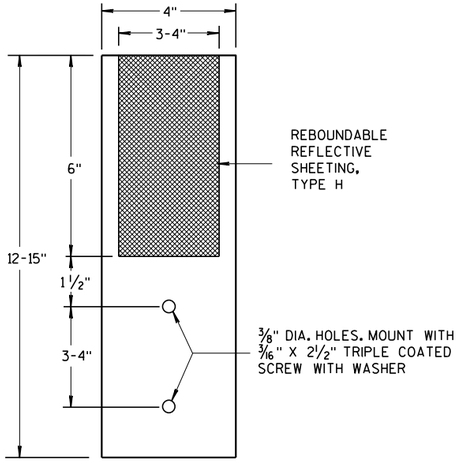
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

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



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



4"x 12" GUARDRAIL REFLECTOR

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

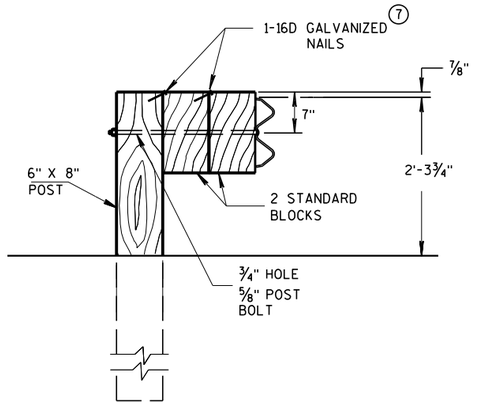
STATE OF WISCO 36
DEPARTMENT OF TRANSPORTATION

6

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

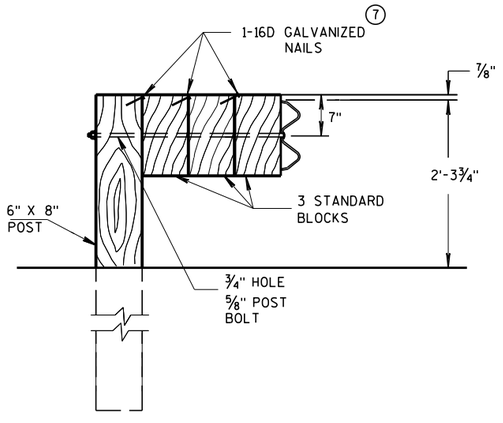
6

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



DETAIL FOR DOUBLE BLOCKS

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

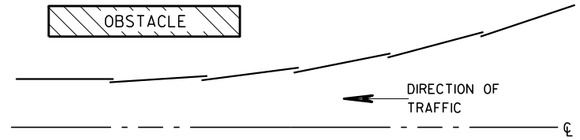


DETAIL FOR TRIPLE BLOCKS

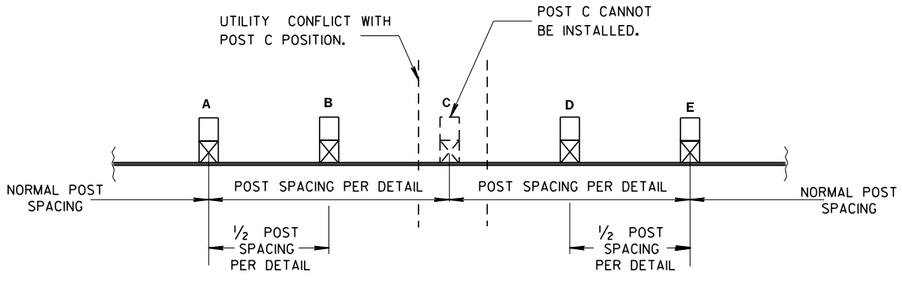
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

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

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



PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

BILL OF MATERIALS

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

Ⓐ 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.

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

Ⓓ THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

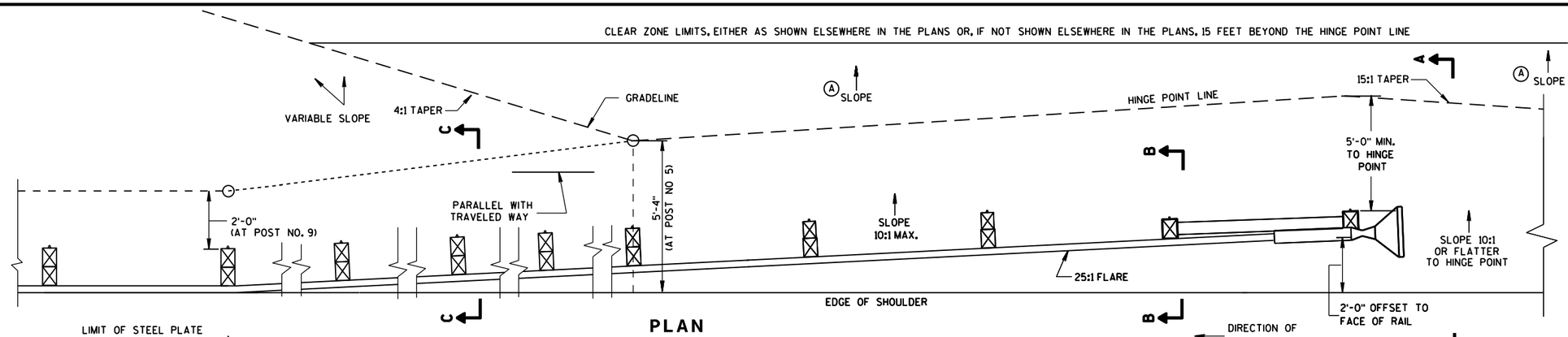
Ⓔ THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

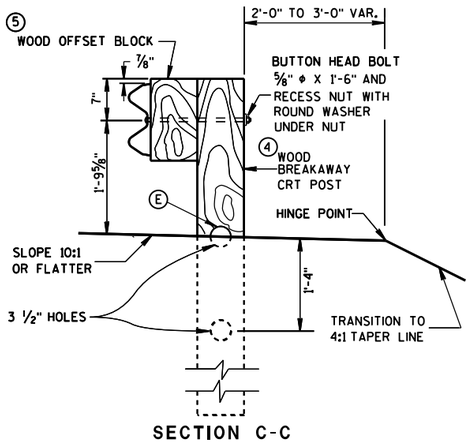
Ⓕ ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

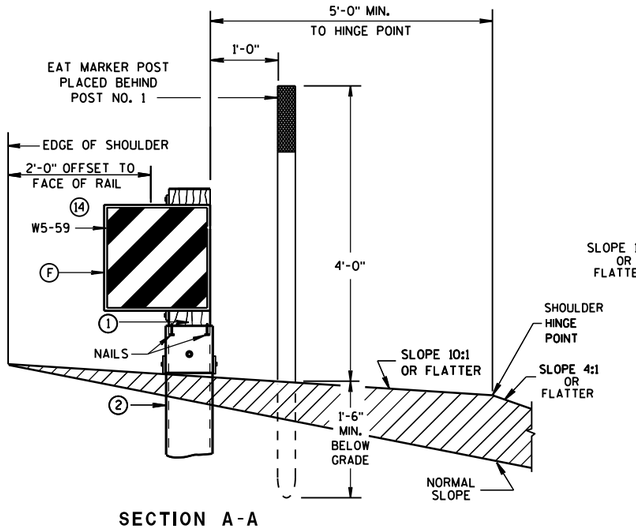
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

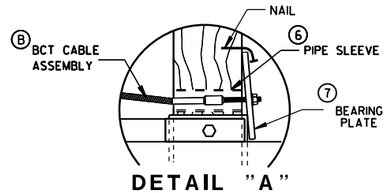
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

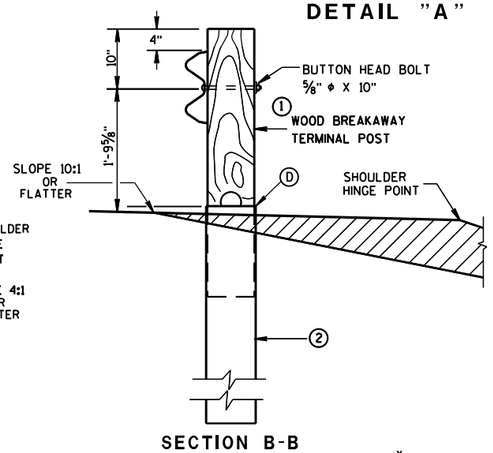
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

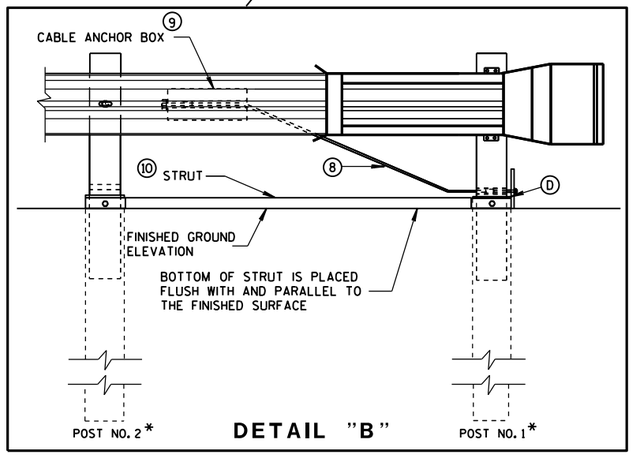










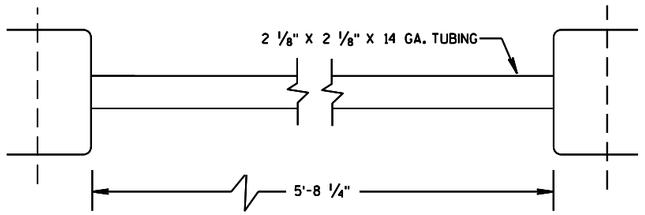


STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

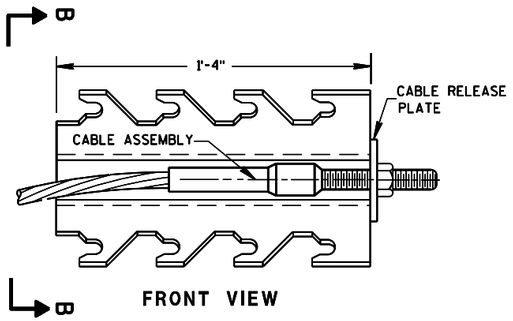
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

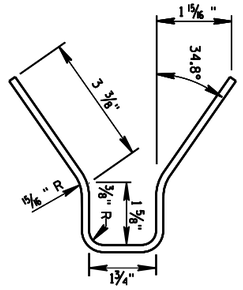
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL

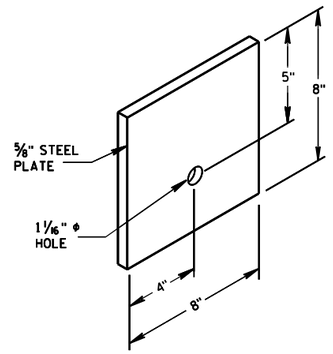


FRONT VIEW



SECTION B-B

⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

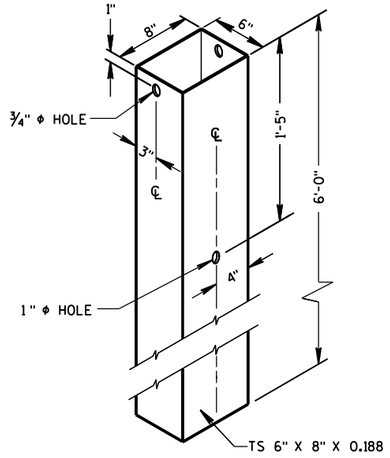
6

S.D.D. 14 B 24-9b

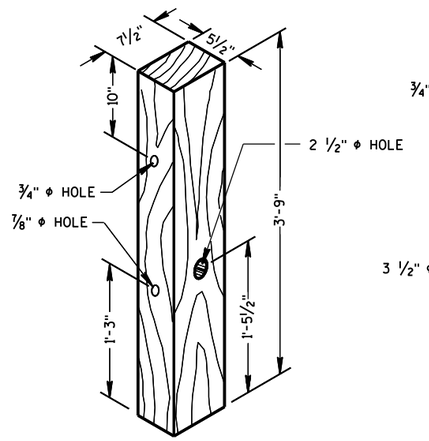
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

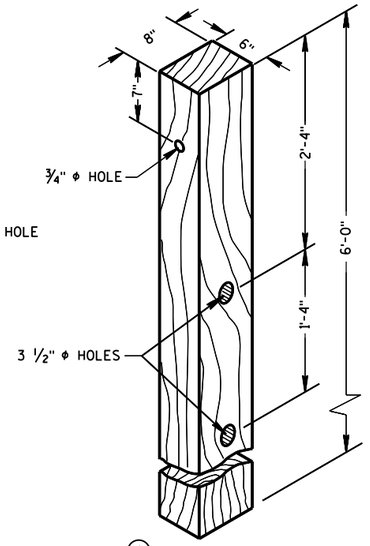
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

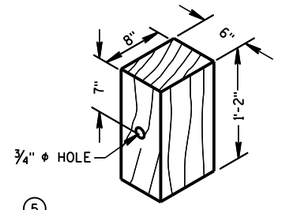


④ CRT POST
(POSTS NO'S 5-8

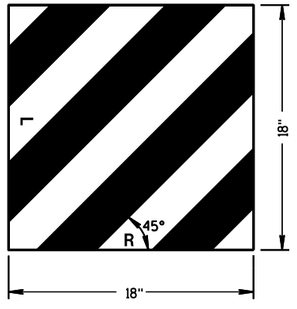
WOOD BREAKAWAY POSTS

GENERAL NOTES

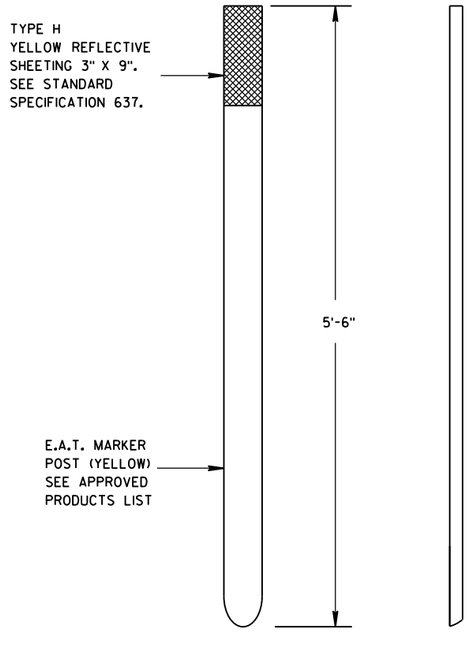
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS 40 ENT
UNIT SUPERV

6

S.D.D. 14 B 24-9c

6

S.D.D. 14 B 24-9c

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.

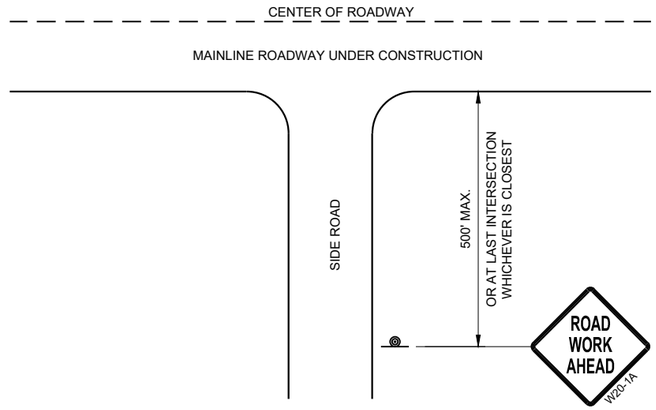
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

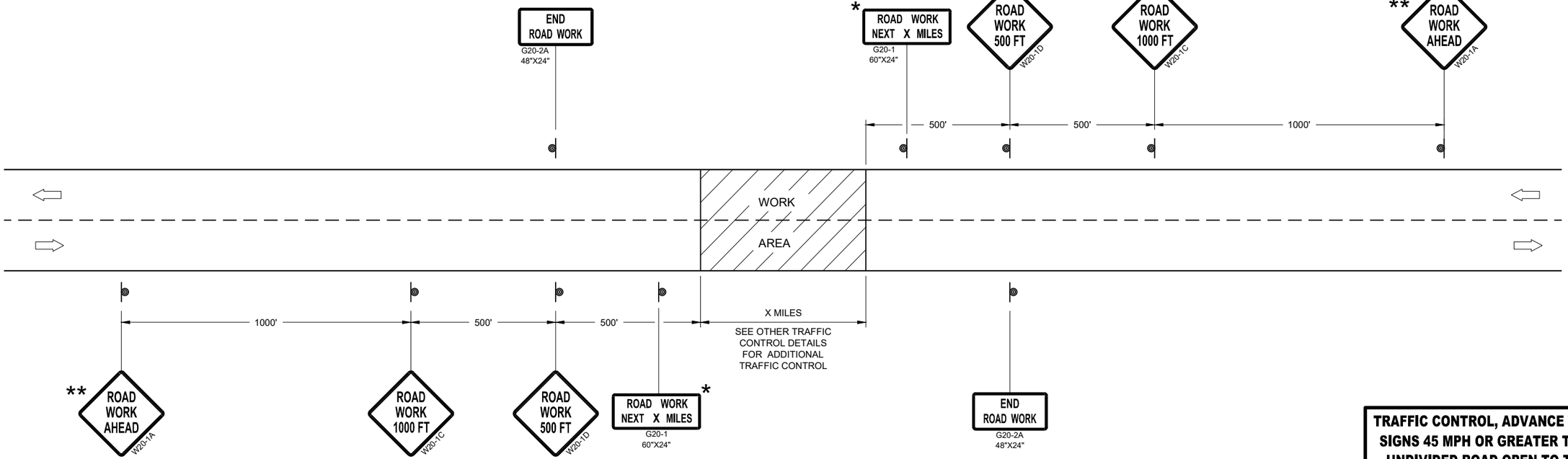
** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



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

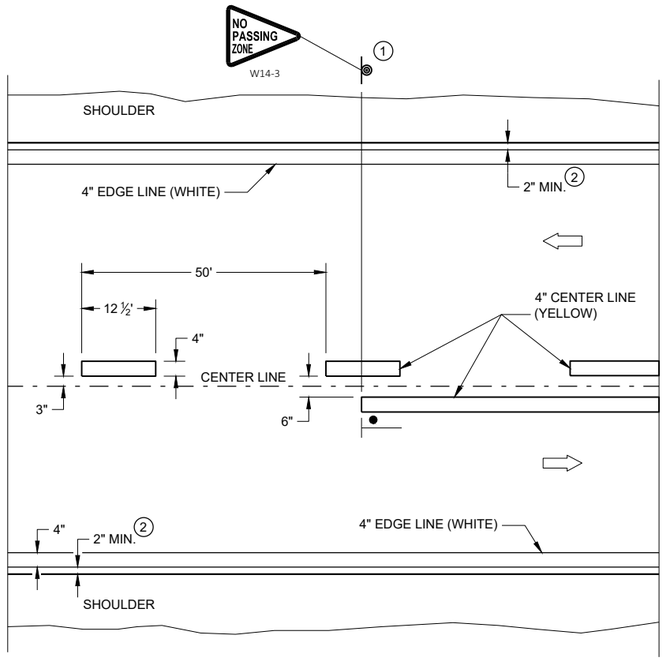
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

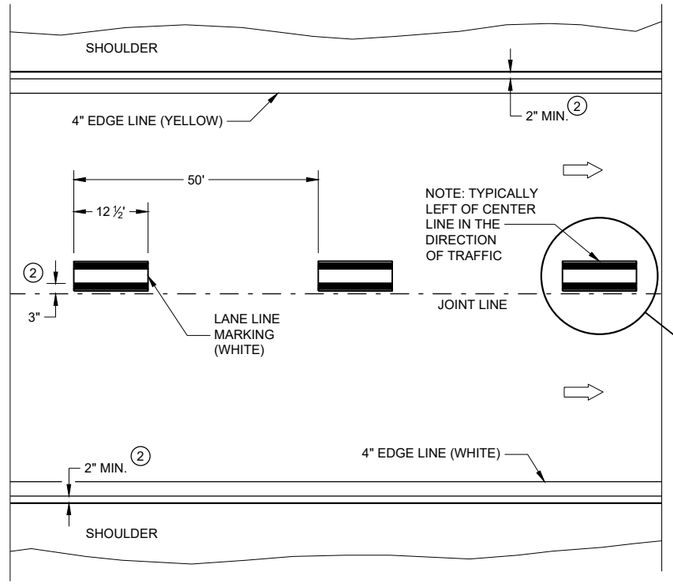
FHWA

6

SDD 15C04 - 05

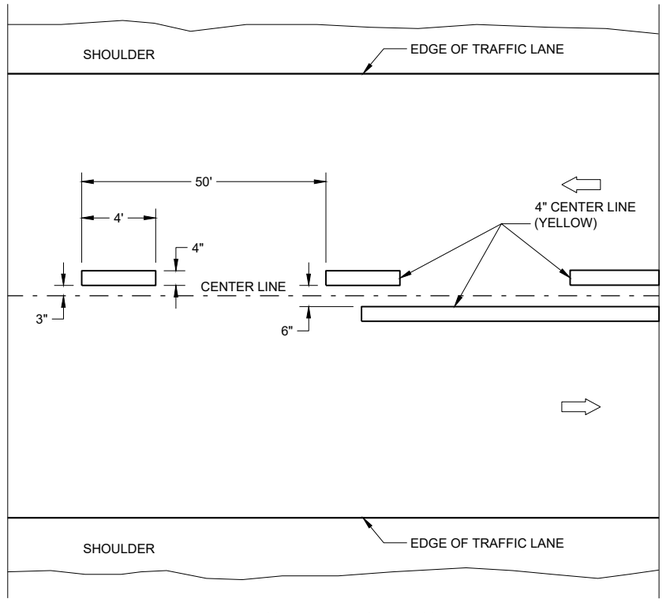


TWO WAY TRAFFIC

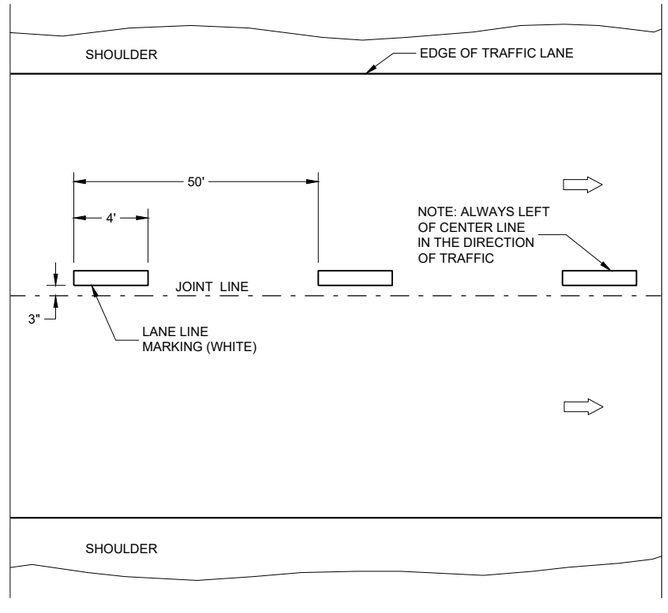


ONE WAY TRAFFIC

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.

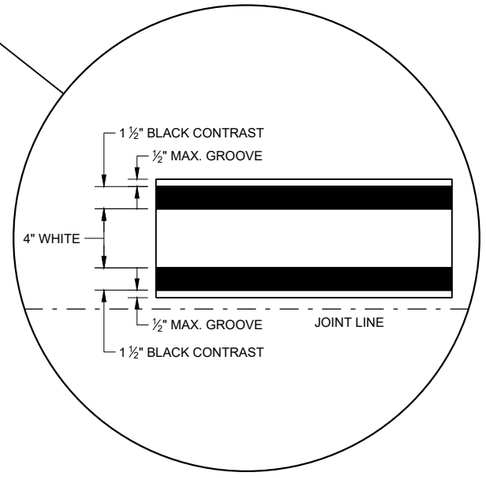
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

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

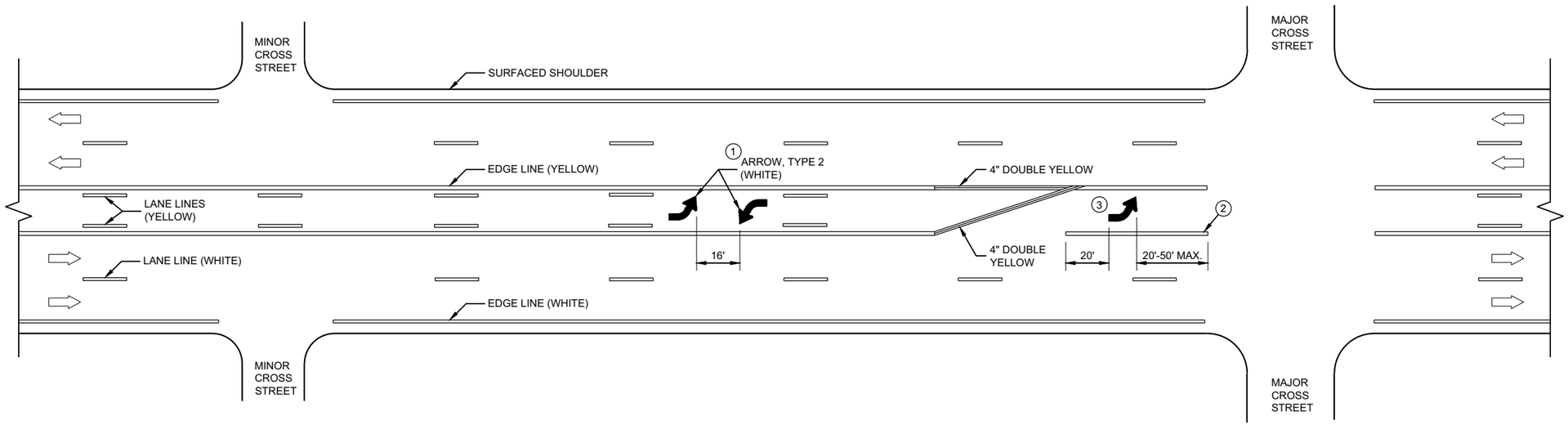
SDD 15C08 - 20a

SDD 15C08 - 20a

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

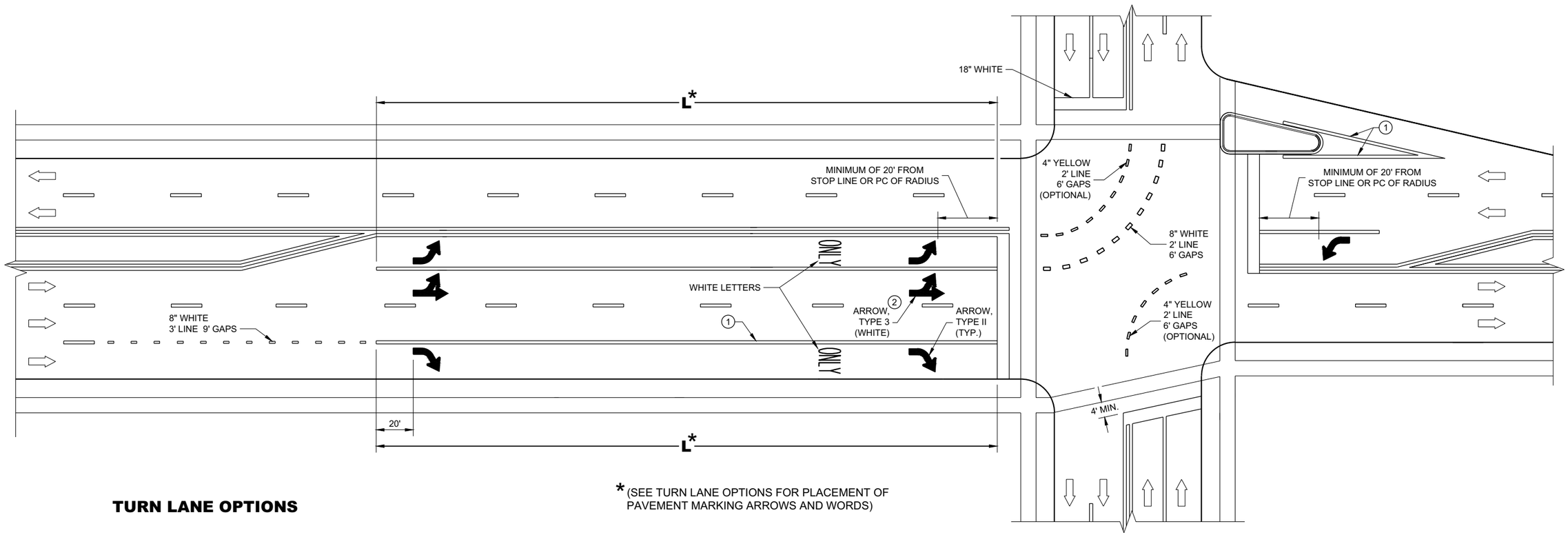
6

SDD 15C08 - 20b

SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

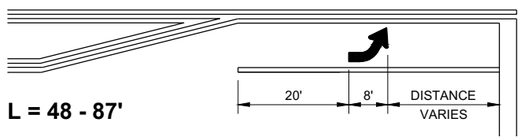
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



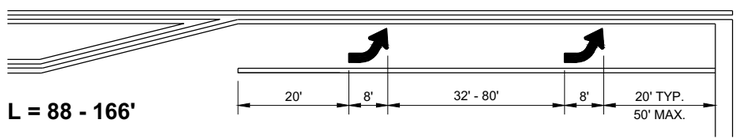
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

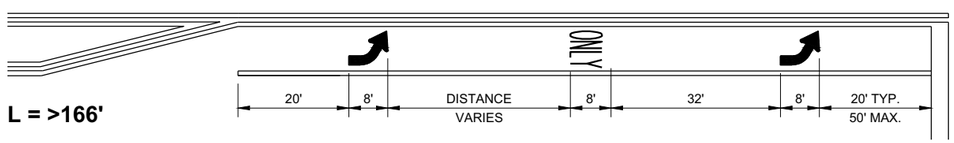
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

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)

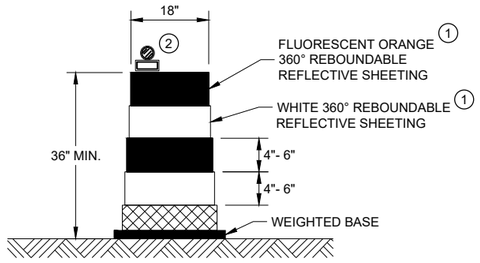
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

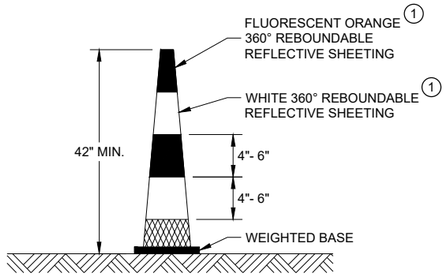
SDD 15C08 - 20c

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.

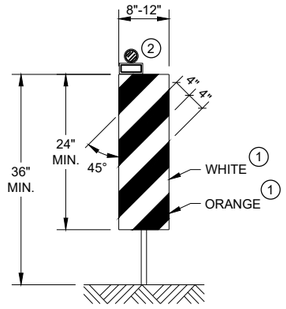


DRUM



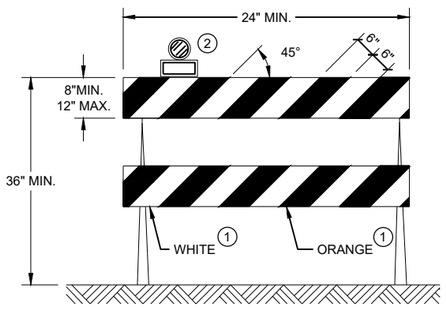
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



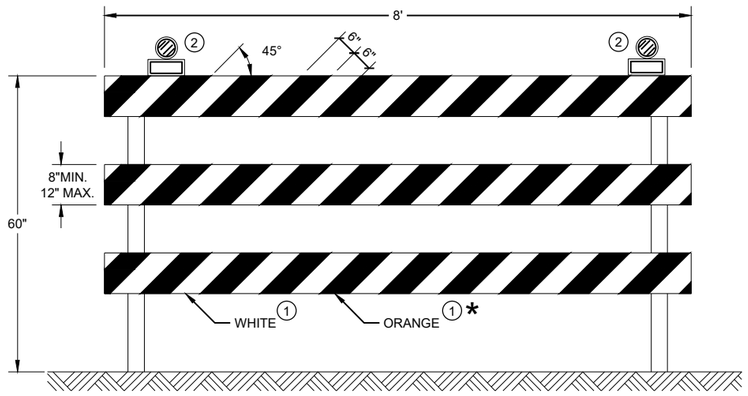
VERTICAL PANEL

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 ENGINEE

FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

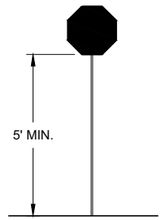
SIGN ON PORTABLE OR PERMANENT SUPPORT

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.

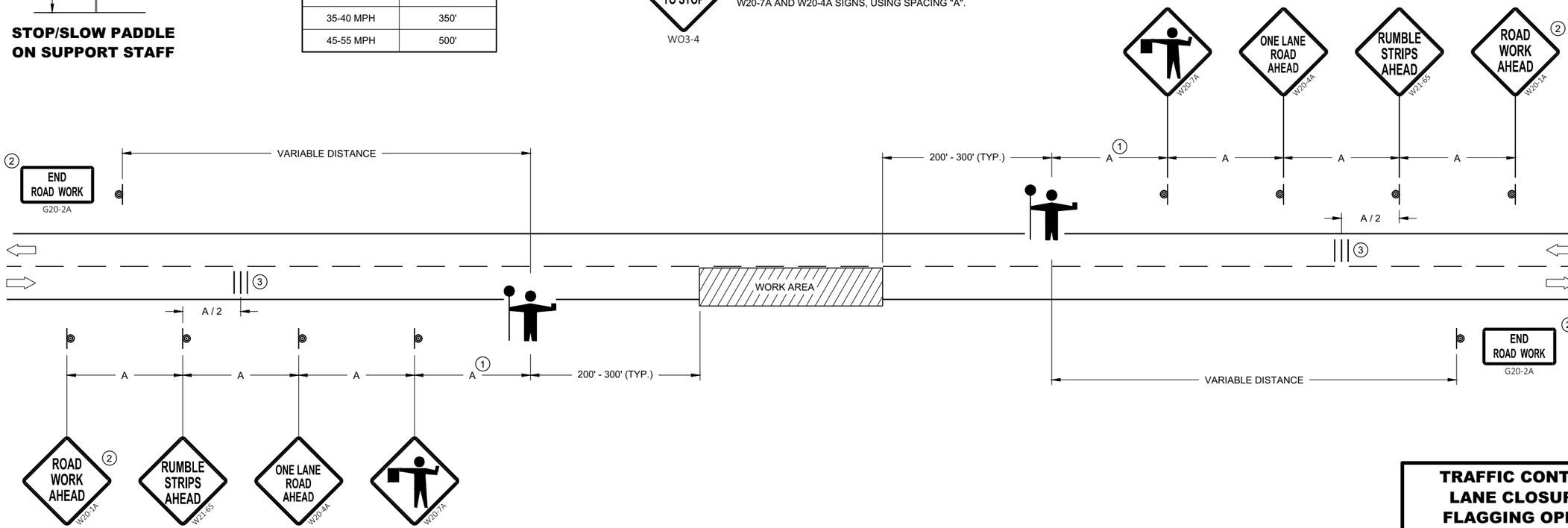
DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

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

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 07

SDD 15C12 - 07

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.

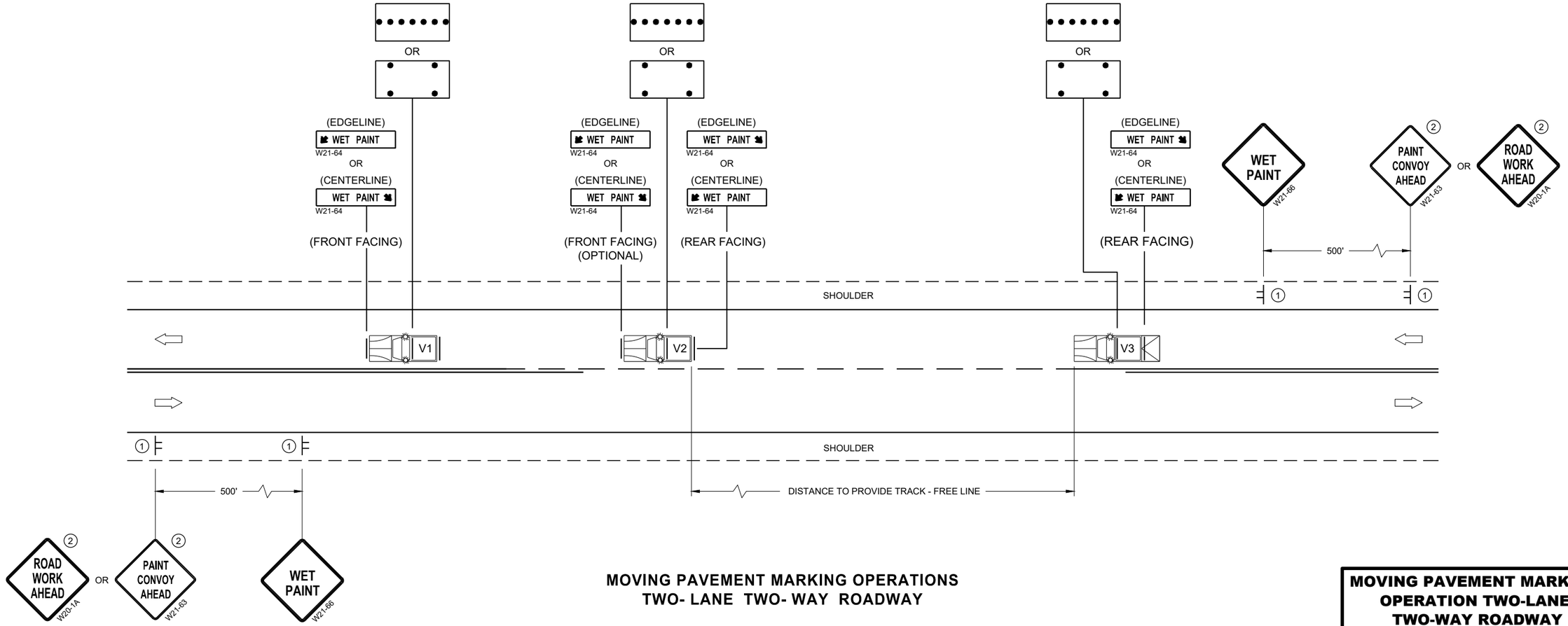
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

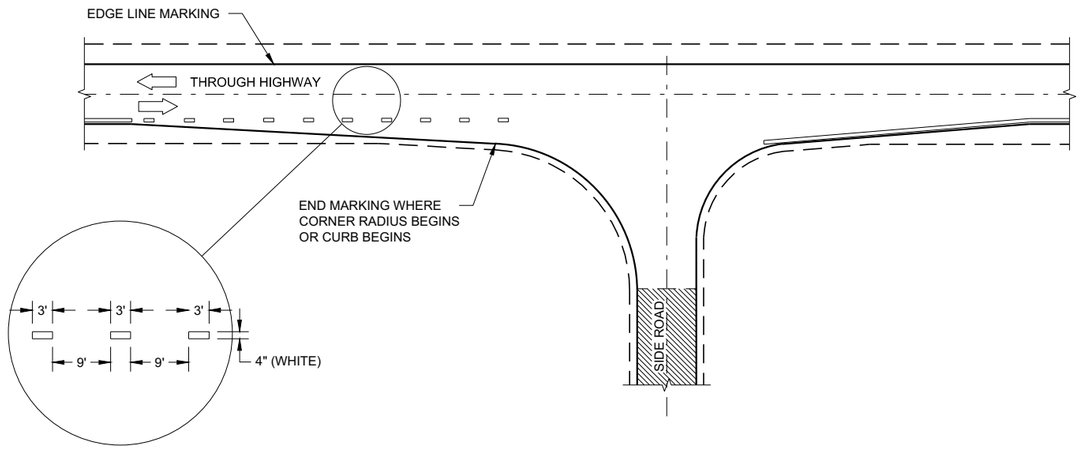
FHWA

6

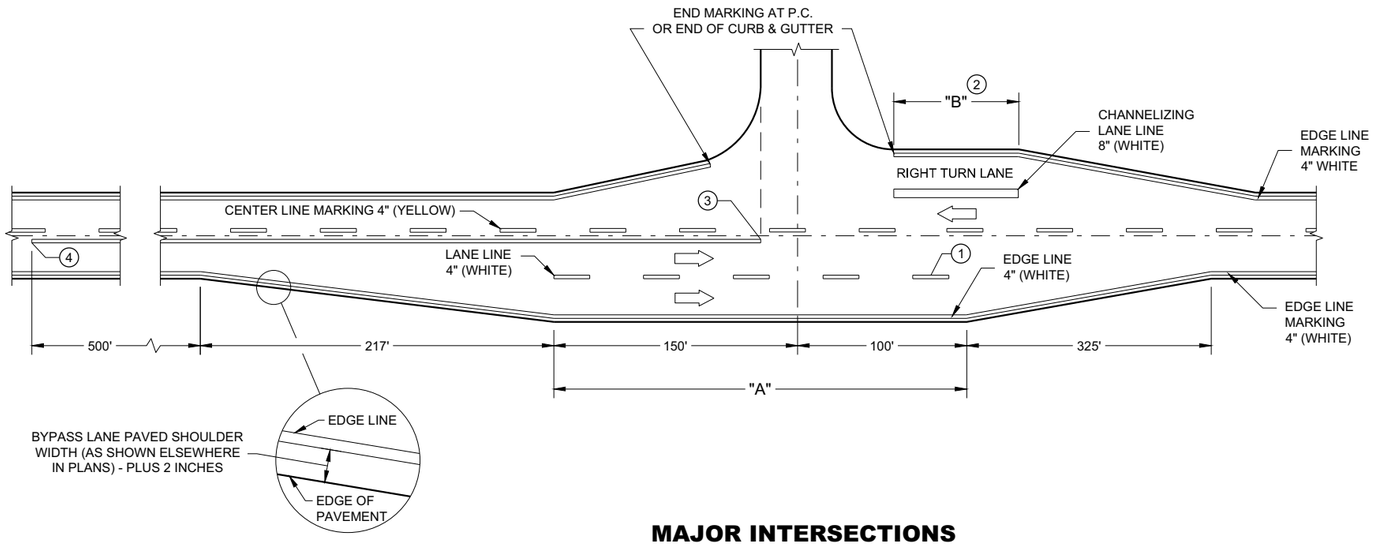
SDD 15C19 - 06a

6

SDD 15C19 - 06a



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

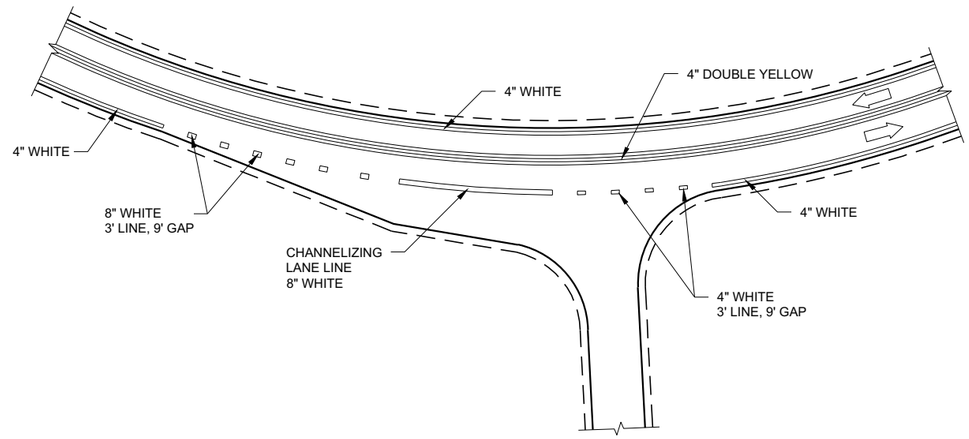
GENERAL NOTES

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

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 04a

6

SDD 15C35 - 04a

LEGEND

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

WORK ZONE

GENERAL NOTES

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 THE REGIONAL TRAFFIC UNIT.

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

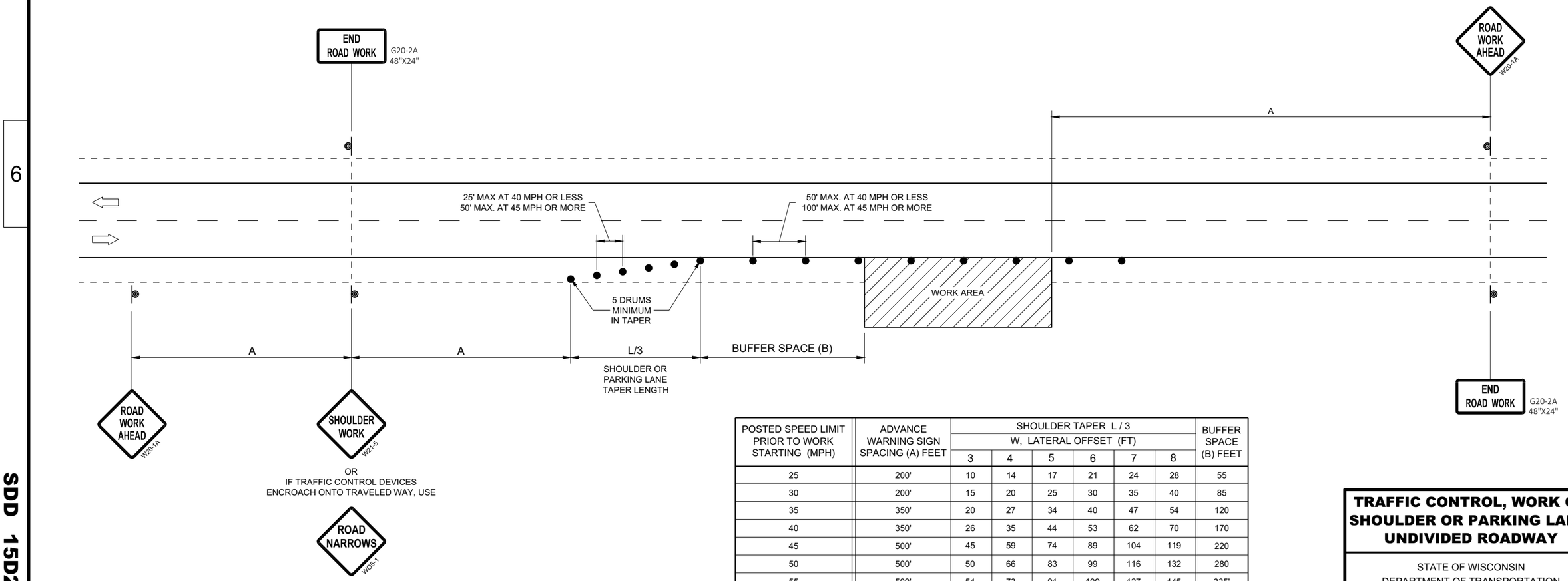
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS 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 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A 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 OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

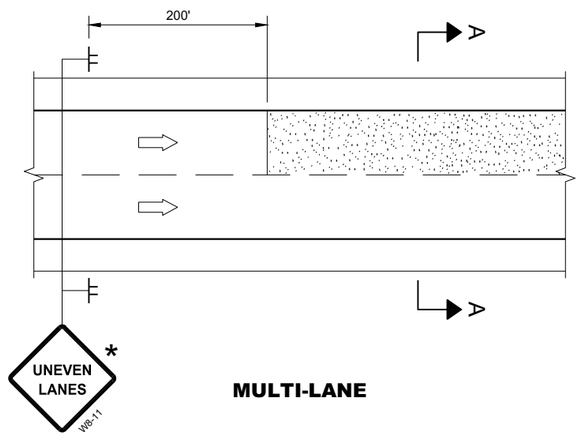
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

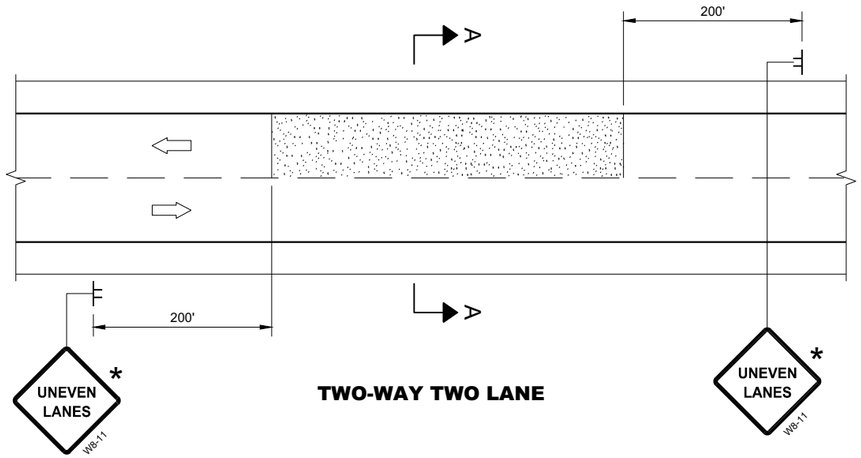
FHWA

SDD 15D28 - 04

SDD 15D28 - 04



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.

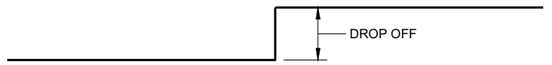
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* 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.

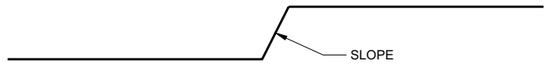
LEGEND

- 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

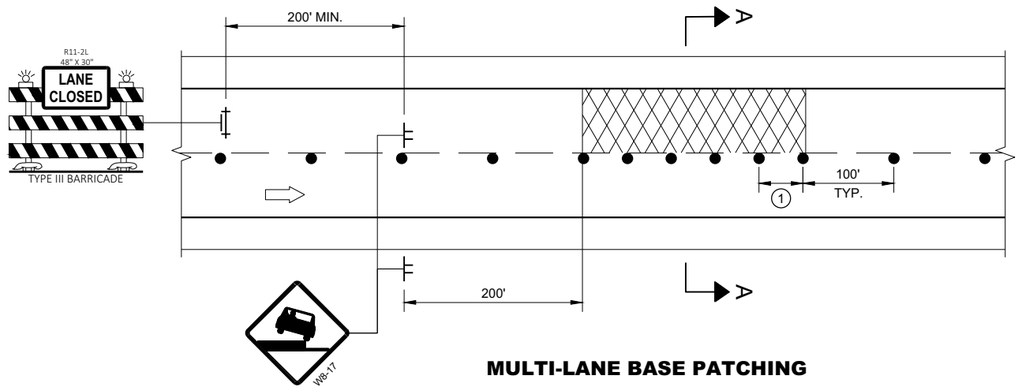


SECTION A - A

OR

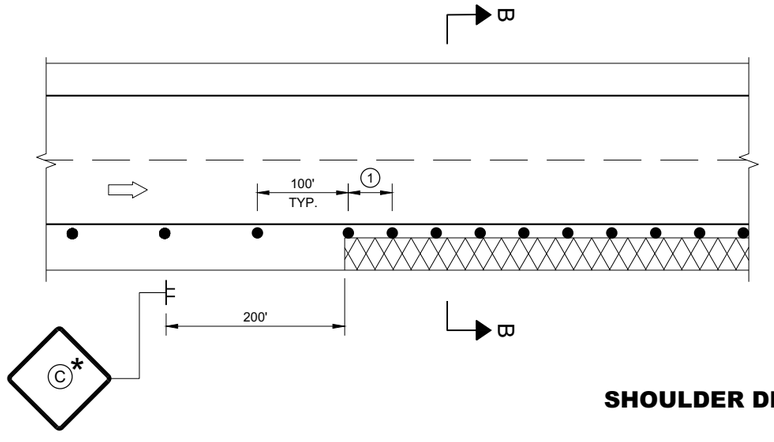


SECTION A - A

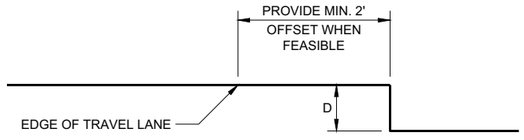


MULTI-LANE BASE PATCHING

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

6

SDD 15D39 - 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.

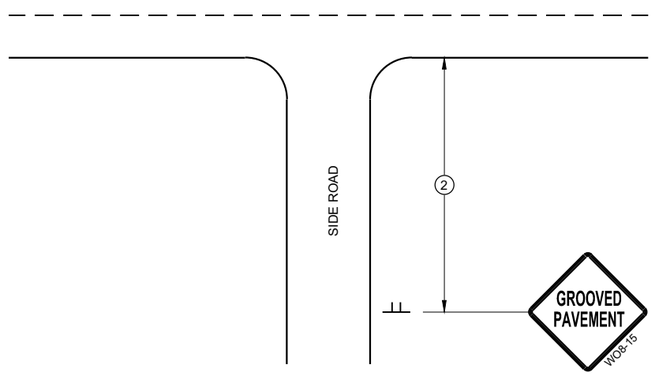
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

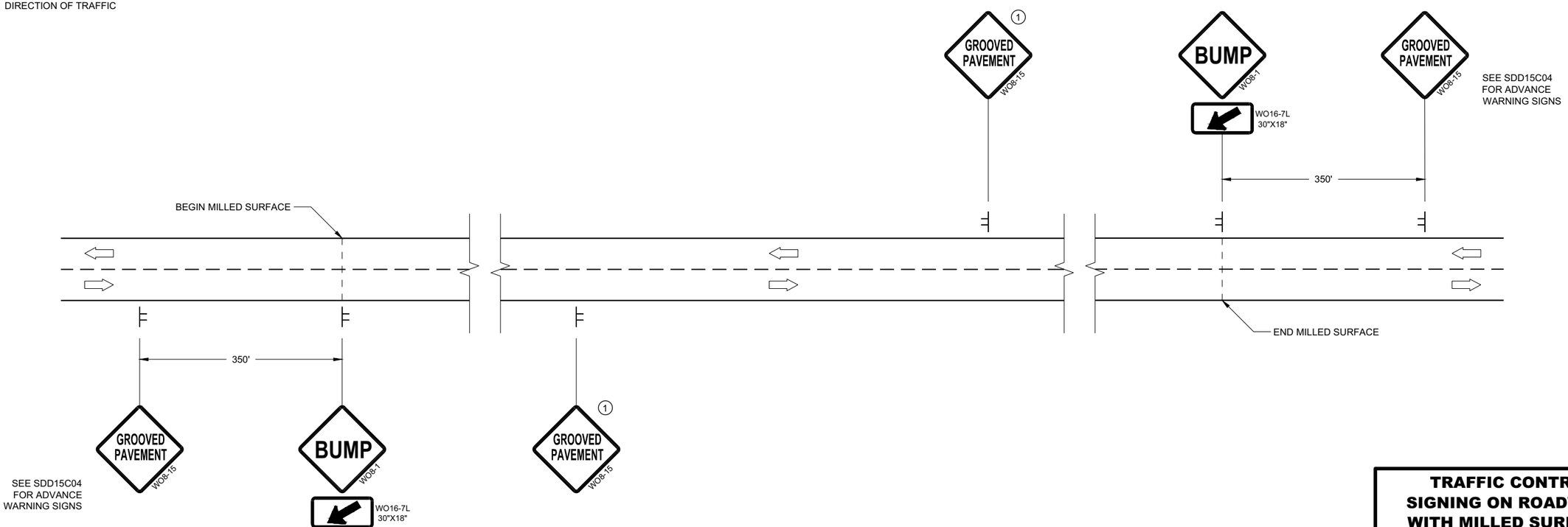
LEGEND

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

SDD 15D44 - 02

SDD 15D44 - 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 CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

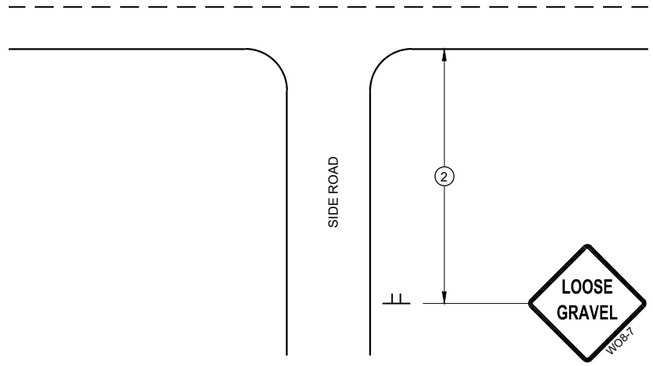
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

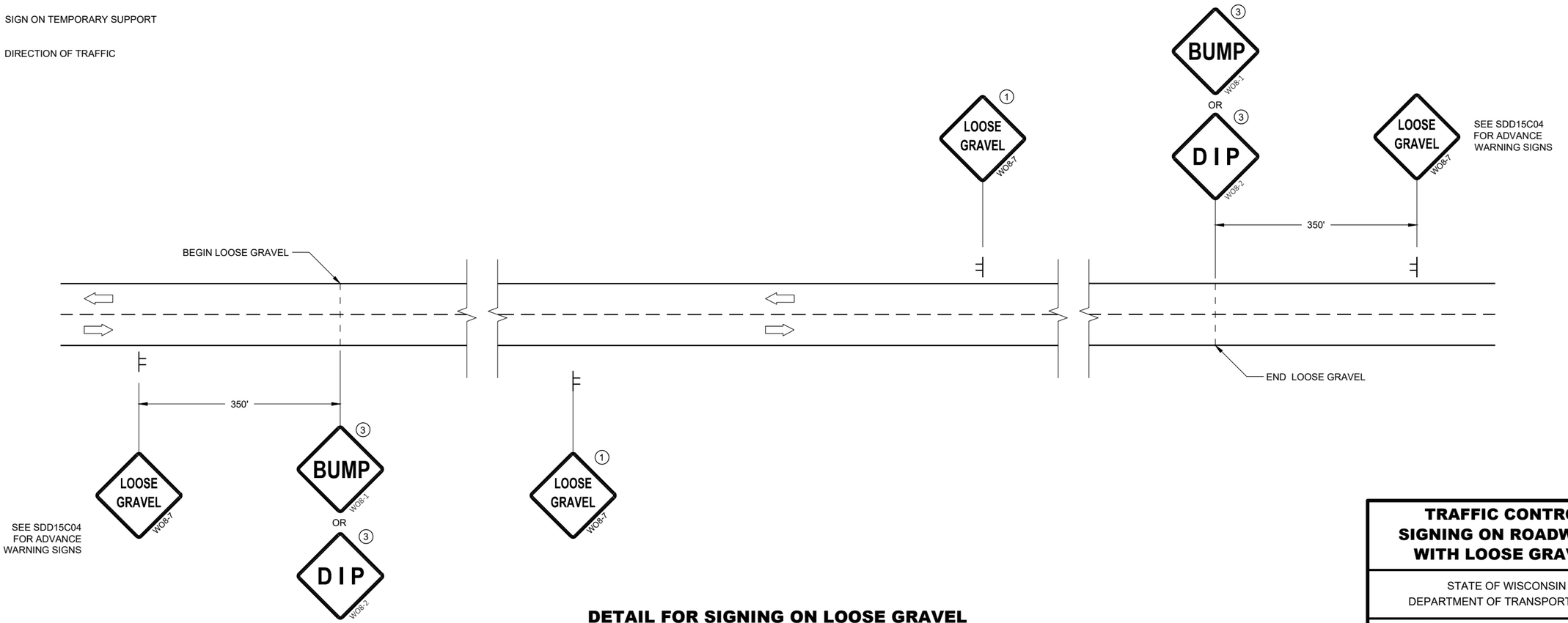
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

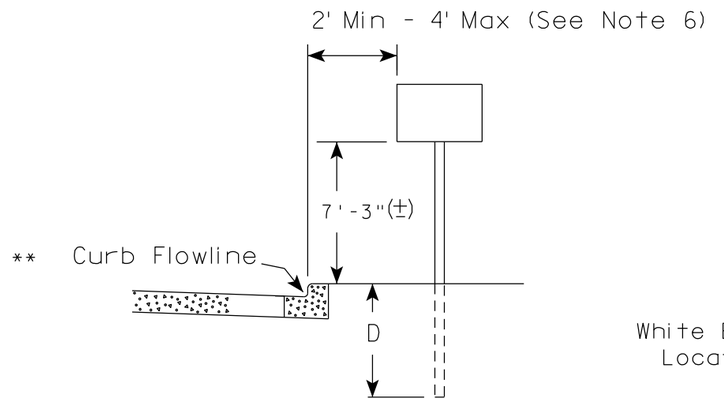
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

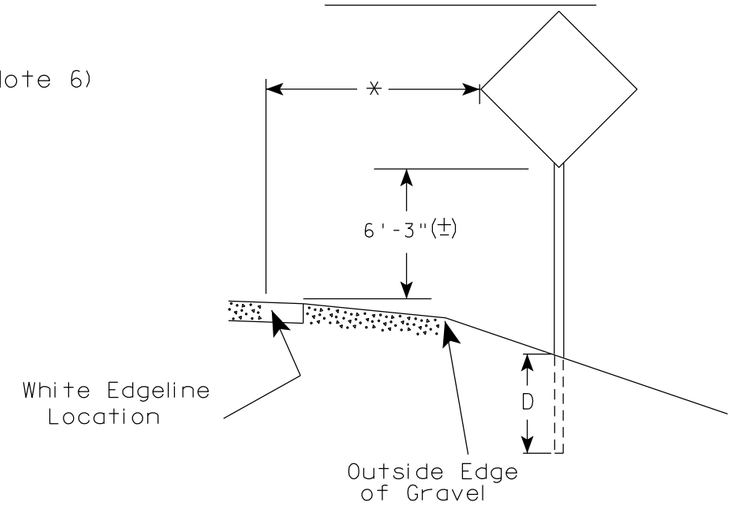
6

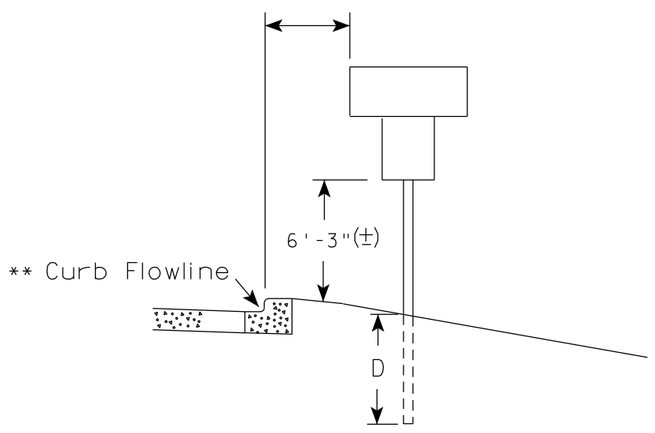
SDD 15D45 - 03

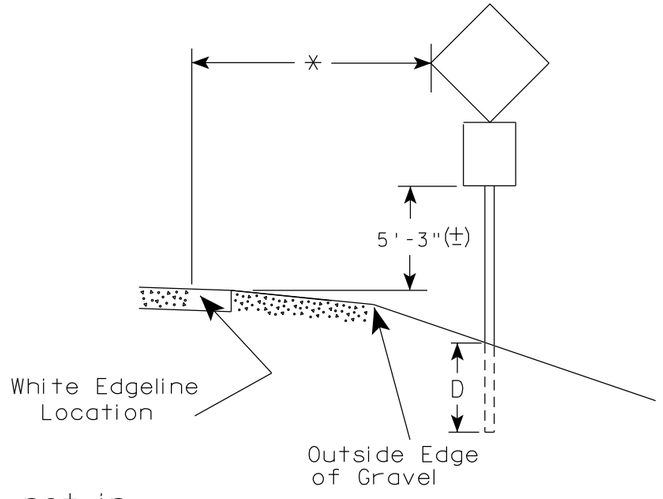
URBAN AREA



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.

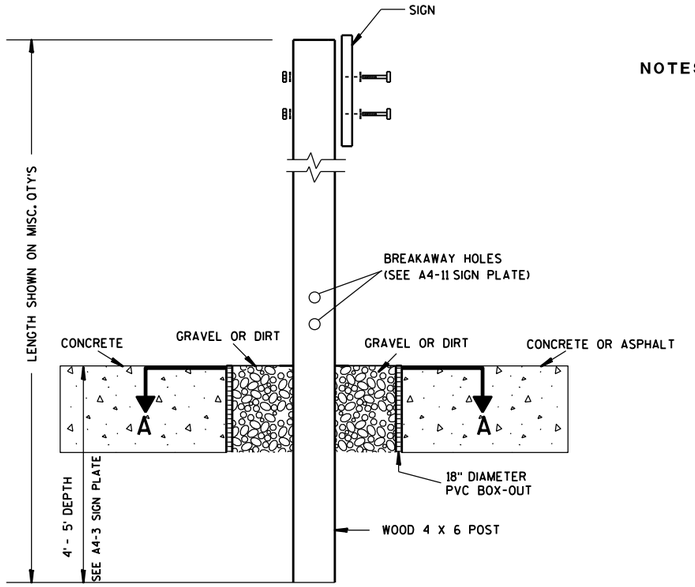
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

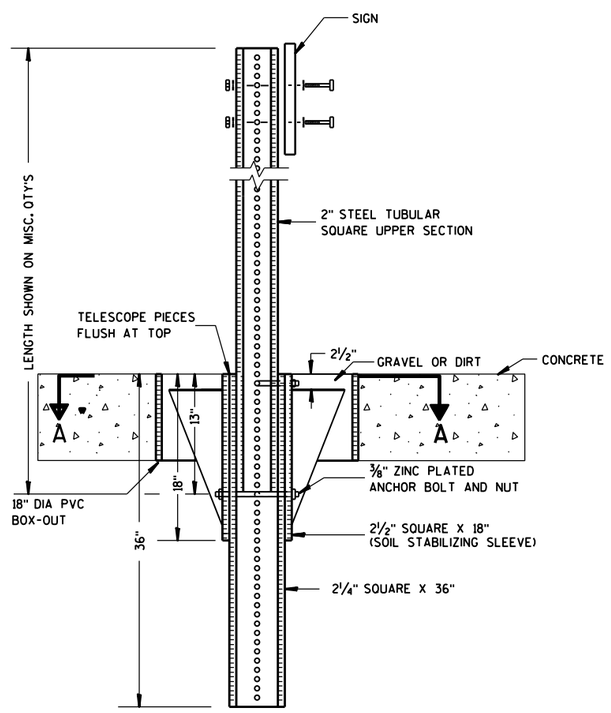
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 53	E



ELEVATION VIEW

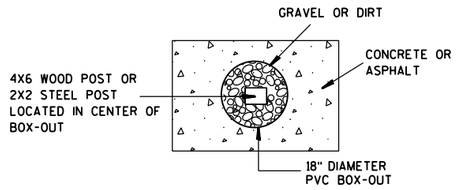
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

NOTES:
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

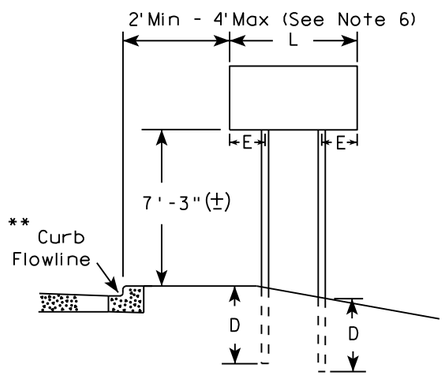
APPROVED Matthew R Rauch
for State Traffic Engineer

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

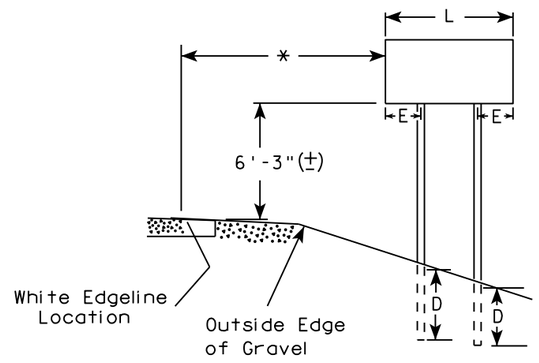
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

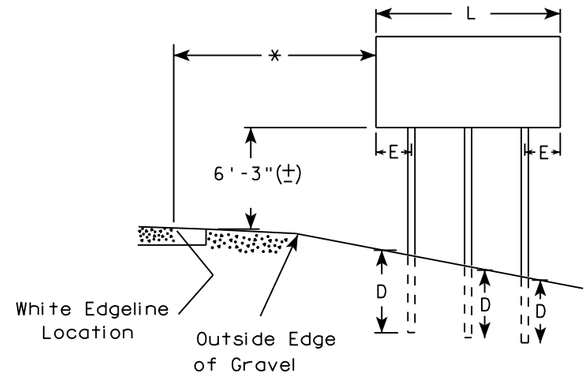
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

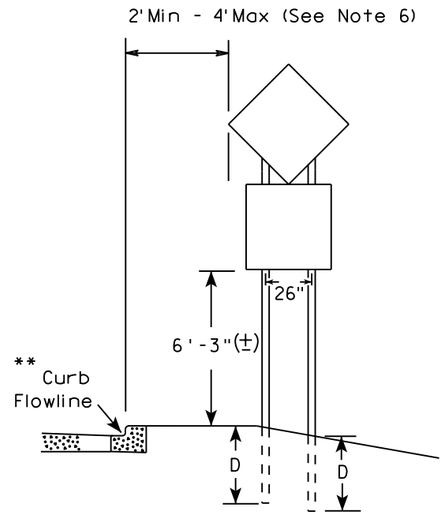
URBAN AREA



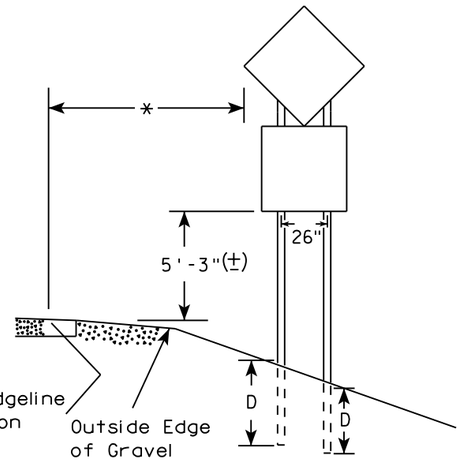
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

***	SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
	L	E
	Greater than 48" Less than 60"	12"
	60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. J-Assemblies are considered to be one sign for mounting height.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

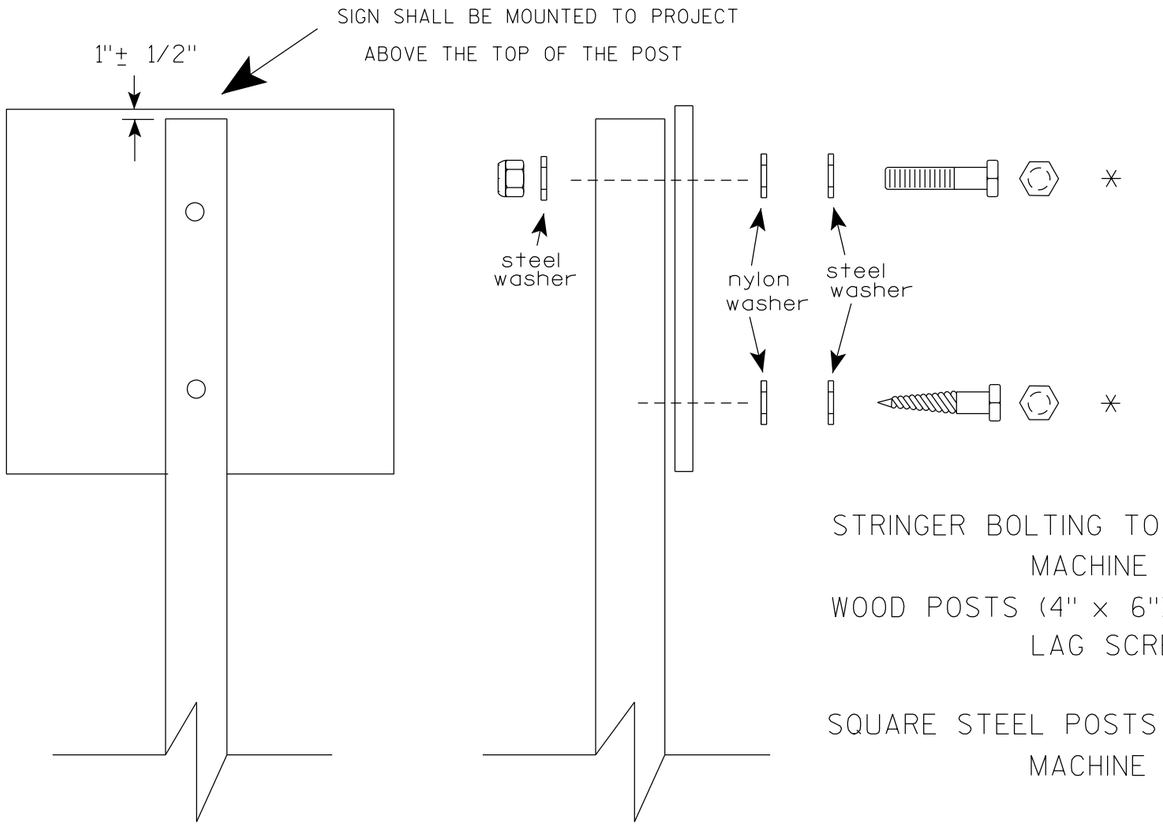
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 55	E



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS

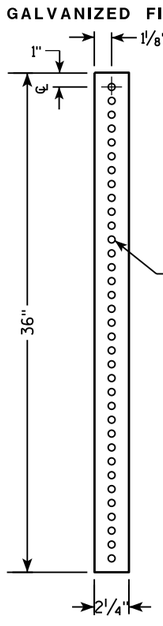
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

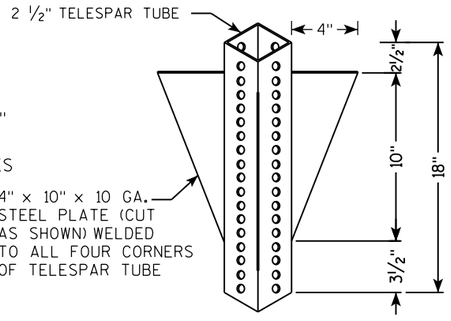
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

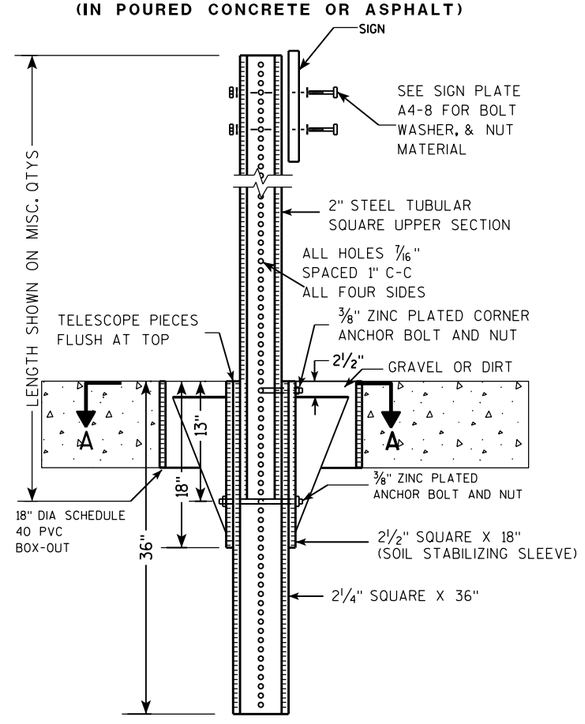
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



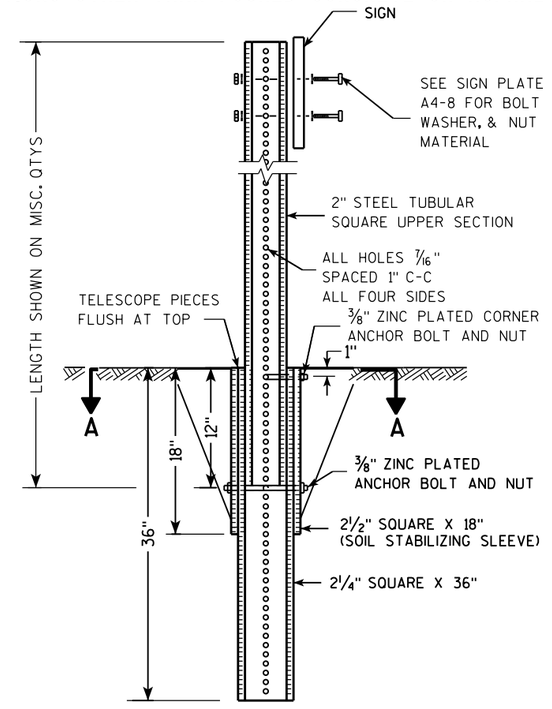
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

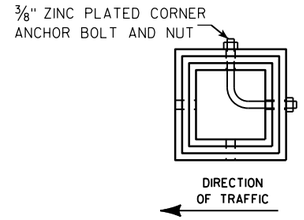


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

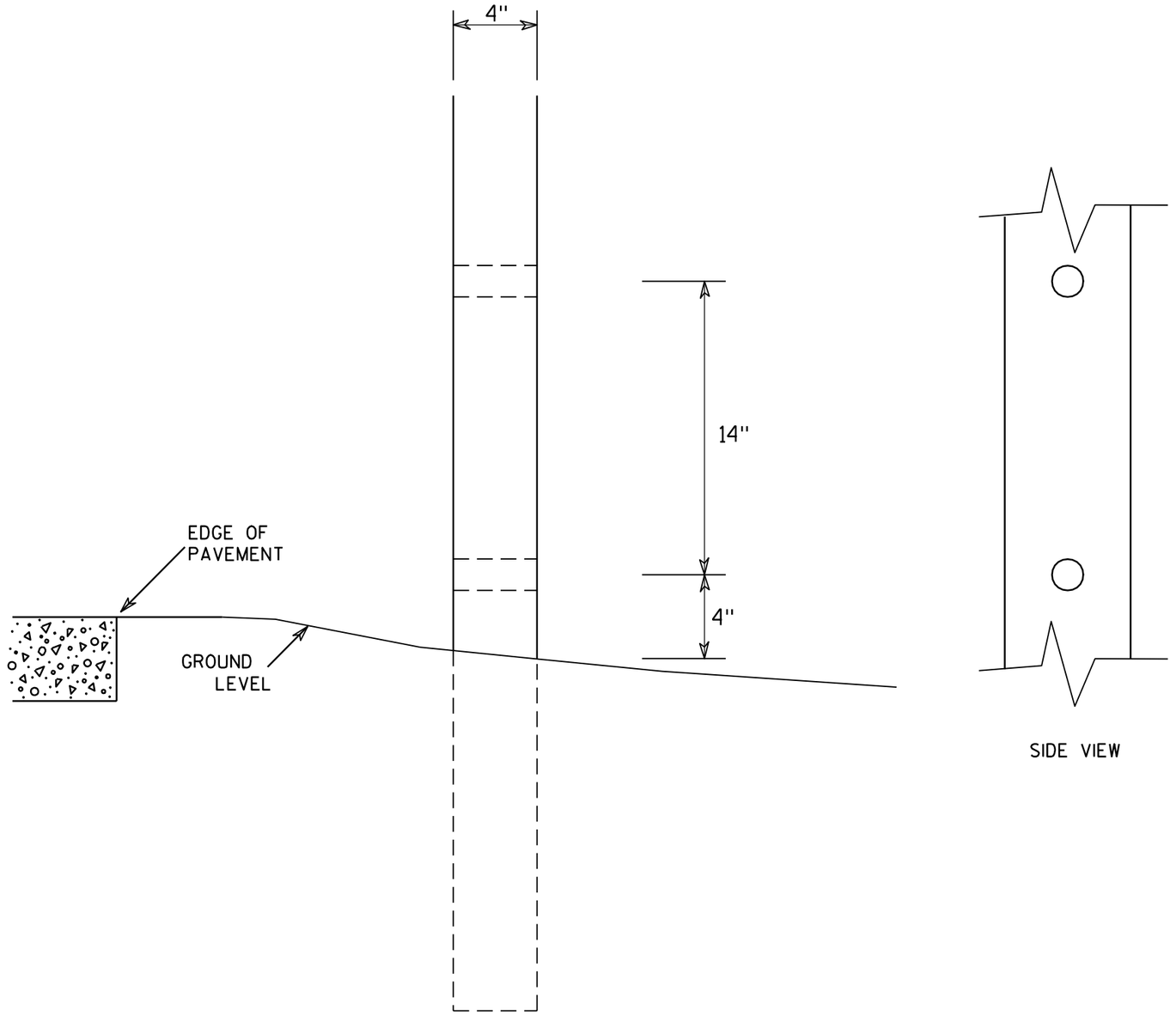
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 57 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: 58	E

Notes

Wisconsin Department of Transportation

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