LAX

FEBRUARY 2023

PROJECT ID: 5130-05-63

WITH: N/A

COUNTY: MONROE

ORDER OF SHEETS

TOTAL SHEETS = 86

07

N

DESIGN DESIGNATION

A.A.D.T.	2027	=	3070
A.A.D.T.	2047	=	3410
D.H.V.		=	N/A
D.D.		=	N/A
T.		=	20.7%
DESIGN SPEED		=	55 MPH
ESALS		=	1,200,000

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

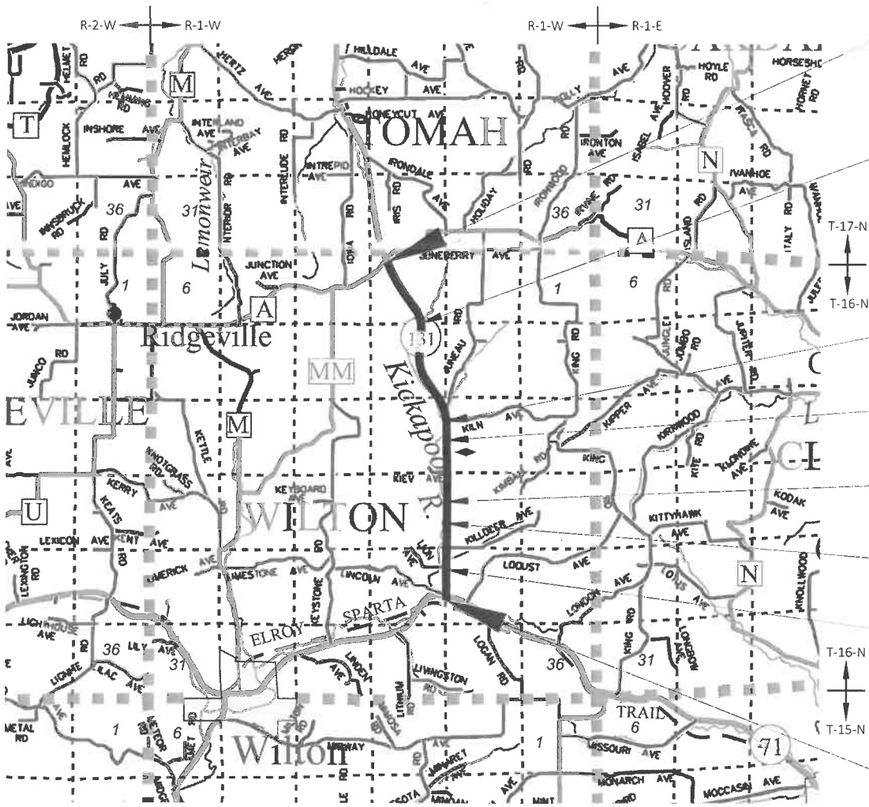
ONTARIO - TOMAH

(STH 71 TO CTH A/B-41-21,-136,-137)

STH 131
MONROE COUNTY

STATE PROJECT NUMBER
5130-05-63

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5130-05-63	WISC 2023238	1



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 4.622 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), MONROE 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. GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ORIGINAL PLANS PREPARED BY

ISG

WISCONSIN
CORONA V. WOYCHIK
E-47688
ONALASKA, WISC.
PROFESSIONAL ENGINEER

DATE: 10/25/2022 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	I&S GROUP, INC.
Designer	I&S GROUP, INC.
Project Manager	BRIAN MEYER, PE
Regional Examiner	SW REGION
Regional Supervisor	JAMES SAVOLDELLI, PE

APPROVED FOR THE DEPARTMENT

DATE: 11/15/22 (Signature)

E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\010101-TI.DWG PLOT DATE : 10/25/2022 4:42 PM PLOT BY : CORONA WOYCHIK PLOT NAME :

GENERAL NOTES

- THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.
- APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED PAVEMENT SURFACES.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, OR PASSING LANE.
- 2-INCH HMA PAVEMENT TYPE 4 MT 58-28 S. MILL AND REMOVE 1-INCH AND PAVE 2-INCHES
- PWL DENSITY WILL APPLY TO HMA LAYER, REFER TO MISCELLANEOUS QUANTITIES.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED (SALVAGED, 4 INCHES MINIMUM) SEEDED, FERTILIZED, AND EROSION MATTED AS DIRECTED BY THE ENGINEER. ALL OTHER DISTURBED AREAS ARE TO BE TOPSOILED (SALVAGED, 4 INCHES MINIMUM) SEEDED, FERTILIZED, AND EROSION MATTED AT THE CONTRACTORS EXPENSE.
- NO TREES, SHRUBS, OR PRIVATE PLANTINGS ARE TO BE REMOVED WITHOUT PRIOR APPROVAL OF THE ENGINEER.
- MISCELLANEOUS REMOVAL ITEMS REQUIRING RESTORATION OF CONCRETE OR ASPHALT DRIVEWAYS, OR SIDE STREETS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWED AS DETERMINED BY THE ENGINEER.
- EXISTING BEAMGUARD WITH A TOP OF RAIL HEIGHT LESS THAN 27 3/4" OR GREATER THAN 29" REQUIRES ADJUSTING STEEL PLATE BEAM GUARD.

STANDARD ABBREVIATIONS

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

ORDER OF SECTION 2 SHEETS

DESIGN CONTACTS

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DNR LIAISON

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GAS/PETROLEUM

MADISON GAS AND ELEC
MIKE SAVAGE
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VIROQUA, WI 54665
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EMAIL: MSAVAGE@MGE.COM

ELECTRICITY

OAKDALE ELEC COOP
MATT RIGGS
P.O. BOX 40
OAKDALE, WI 54649
PHONE: (608) 372-8828
EMAIL: MRIGGS@OAKDALEREC.COM

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

2

2

N

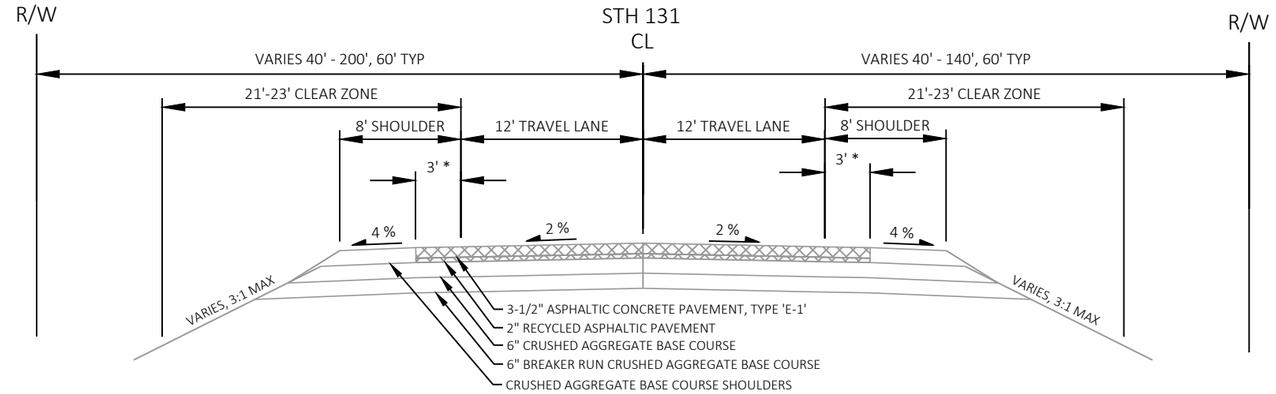
BEGIN PROJECT
STA 100+06
Y = 339,110.608
X = 715,258.466

END PROJECT
STA 346+29

LIMESTONE AVE
KEYSTONE RD
KEYSTONE RD
CTH MM
CTH A
TOWN OF WILTON
TOWN OF TOMAH
IOWA RD
CTH A
PRIVATE ROAD
STH 131
340
320
JOURDAIN RD
300
PRIVATE ROAD
280
260
PRIVATE ROAD
C-41-038
STA 298+30
STH 131
240
CTH A
IRONDALE AVE
TOWN OF WILTON
TOWN OF TOMAH
HOLIDAY RD
JUNEAU RD
CTH A
JUNEAU RD
KILN AVE
C-41-037
STA 225+03
PRIVATE ROAD
220
200
KIEV AVE
180
160
B-41-137
STA 212+02 - STA 212+80
PRIVATE ROAD
140
B-41-136
STA 154+15 - STA 154+94
B-41-021
STA 169+43 - STA 170+05
KILLDEER AVE
120
LION AVE
C-041-046
STA 121+66
STH 131
SENSITIVE AREA ARCHAEOLOGICAL
PROTECTION PRECAUTION REQ'D
STA 124+20 - STA 126+20
LINCOLN AVE
STH 71
LOCUST AVE
STH 71

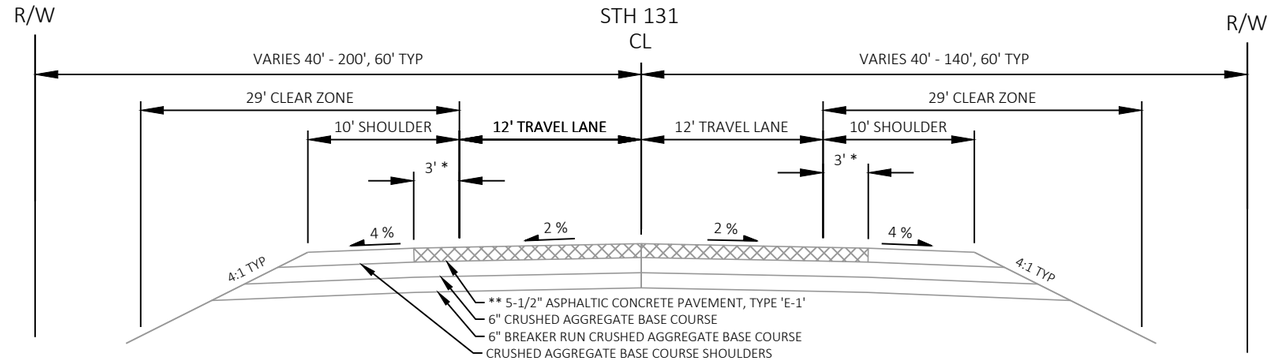
PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - 01-po
PLOT DATE : 10/19/2022 4:35 PM
PLOT BY : CORONA WOYCHIK
PLOT NAME :
PLOT SCALE : 1 IN:2000 FT



EXISTING TYPICAL SECTION

STA 100+06 - 226+15



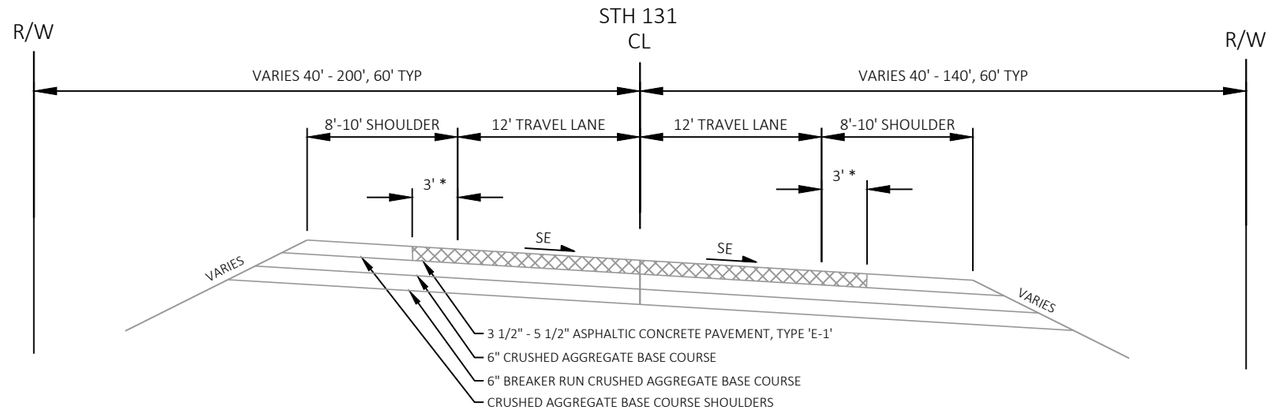
EXISTING TYPICAL SECTION

STA 226+15 - 267+86
STA 267+86 - 334+61 LT

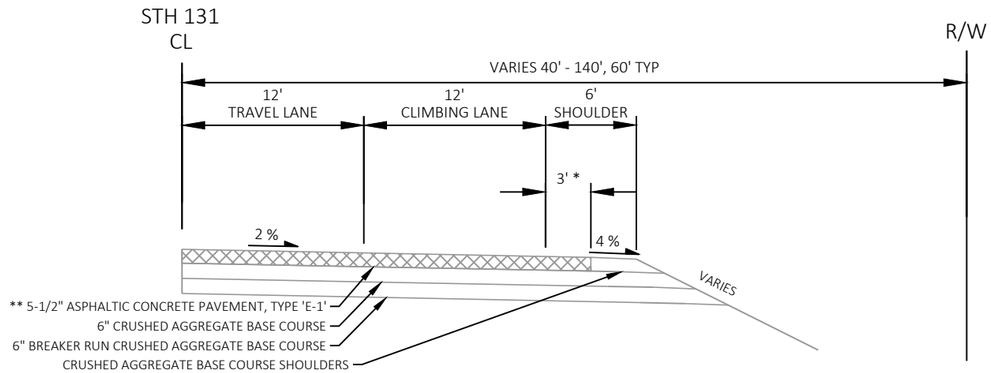
NOTE:

* VARIES IN BEAM GUARD AREA
** PAVEMENT STRUCTURE NOT VERIFIED DUE TO MISSING AS-BUILT

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 4	E



EXISTING SUPERELVATED SECTION



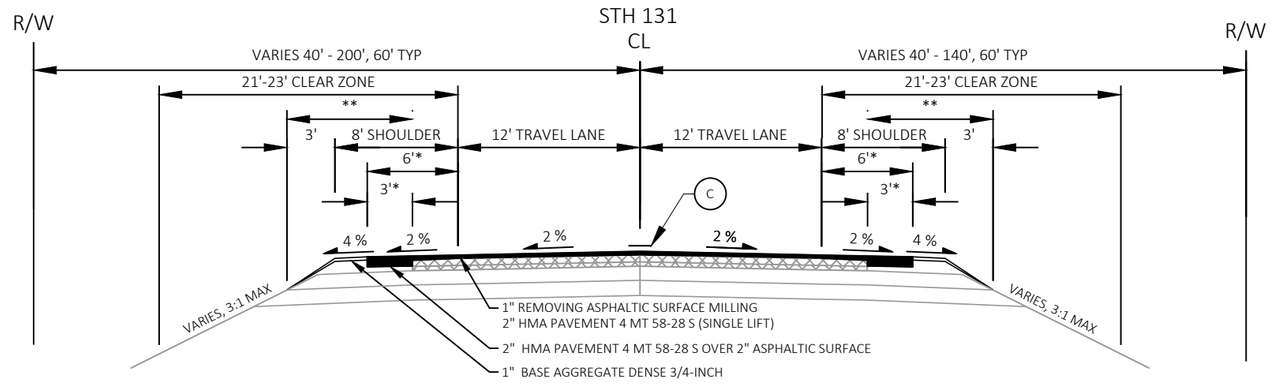
EXISTING CLIMBING LANE HALF SECTION

STA 267+86 - 346+29 RT
STA 334+61 - 346+29 LT

NOTE:

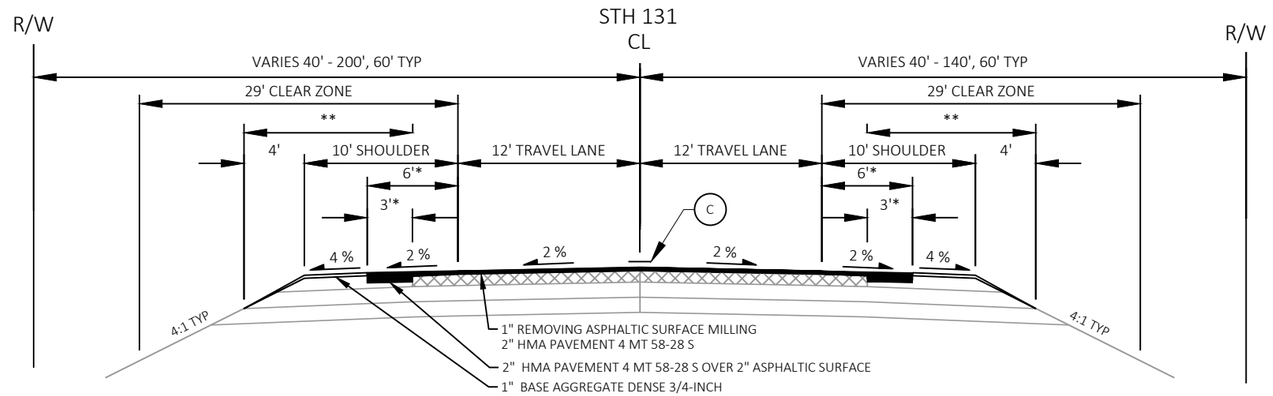
* VARIES IN BEAM GUARD AREA
** PAVEMENT STRUCTURE NOT VERIFIED DUE TO MISSING AS-BUILT

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 5	E



TYPICAL FINISHED SECTION

STA 100+06 - 226+15



TYPICAL FINISHED SECTION

STA 226+15 - 267+86
STA 267+86 - 334+61 LT

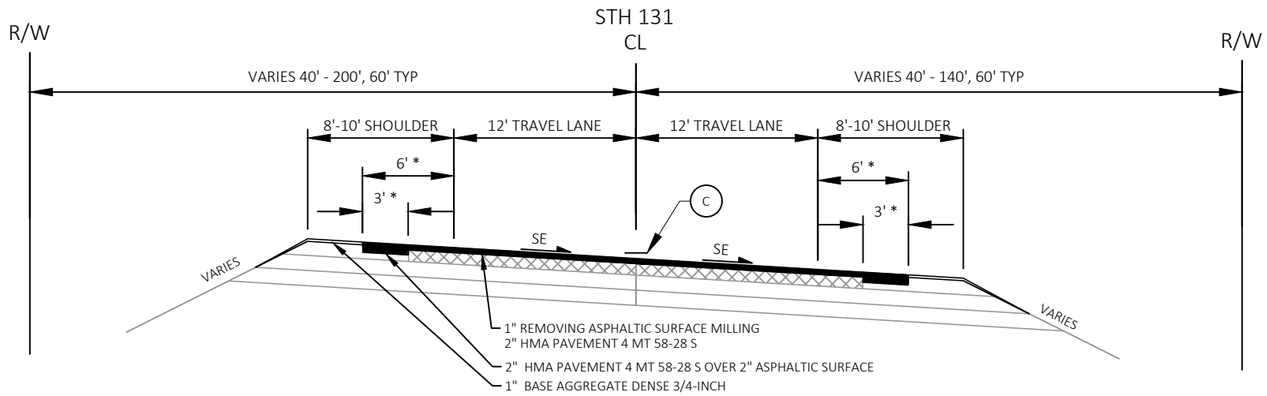
NOTE:

- IN AREAS WITH PAVED SHOULDERS OR GUARDRAIL, CONTRACTOR TO MATCH EXISTING PAVING WIDTHS
- GUARDRAIL THAT IS REMAINING IN PLACE MILL/PAVE WITHIN 6" OF GUARDRAIL FACE IN EACH LANE
- (C) = ASPHALTIC SURFACE CENTERLINE RUMBLE STRIPS 2 LANE RURAL

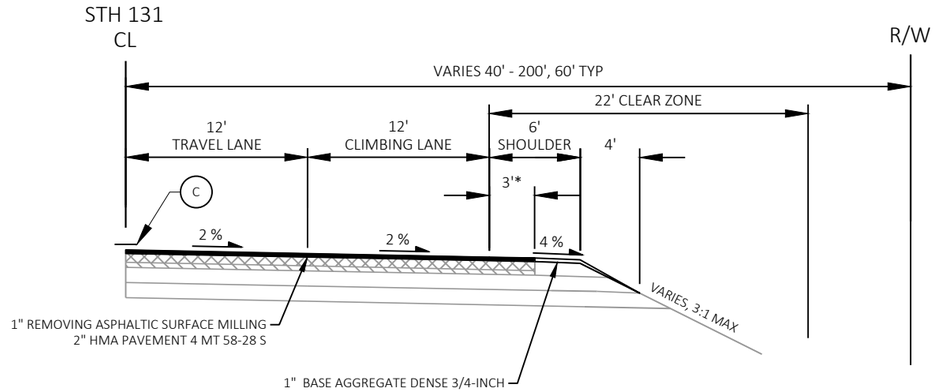
* VARIES IN BEAM GUARD AREA
** LIMIT OF PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 6	E

SUPERELEVATION REPORT FOR '131'					
TRANSITION EVENT POINTS		RATE (FT/FT)			
		LEFT OF CROWNLINE		RIGHT OF CROWNLINE	
LOCATION	STATION	LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER
CURVE 1					
CURVE 2					
CURVE 3					
EndNormalShoulder	138+77.43	-0.02	-0.02	-0.02	-0.02
EndNormalCrown	138+77.43	0.02	0.02	0.02	0.02
LevelCrown	139+57.43	-0.02	-0.02	0	0
BeginFullSuper	140+37.43	-0.02	-0.02	0.02	0.02
ReverseCrown	140+37.43	-0.02	-0.02	0.02	0.02
EndFullSuper	142+75.26	-0.02	-0.02	0.02	0.02
ReverseCrown	142+75.26	-0.02	-0.02	0.02	0.02
LevelCrown	143+55.26	-0.02	-0.02	0	0
BeginNormalCrown	144+35.26	-0.02	-0.02	-0.02	-0.02
BeginNormalShoulder	144+35.26	-0.02	-0.02	-0.02	-0.02
CURVE 4					
CURVE 5					
CURVE 6					
CURVE 7					
EndNormalShoulder	220+22.49	-0.02	-0.02	-0.02	-0.02
EndNormalCrown	220+22.49	0.02	0.02	0.02	0.02
LevelCrown	221+02.49	-0.02	-0.02	0	0
LowShoulderMatch	221+82.49	-0.02	-0.02	0.02	0.02
ReverseCrown	221+82.49	-0.02	-0.02	0.02	0.02
BeginFullSuper	222+18.49	-0.029	-0.029	0.029	0.029
EndFullSuper	244+58.03	-0.029	-0.029	0.029	0.029
LowShoulderMatch	244+94.03	-0.02	-0.02	0.02	0.02
ReverseCrown	244+94.03	-0.02	-0.02	0.02	0.02
LevelCrown	245+74.03	-0.02	-0.02	0	0
BeginNormalCrown	246+54.03	-0.02	-0.02	-0.02	-0.02
BeginNormalShoulder	246+54.03	-0.02	-0.02	-0.02	-0.02
CURVE 8					
EndNormalShoulder	254+52.86	-0.02	-0.02	-0.02	-0.02
EndNormalCrown	254+52.86	-0.02	-0.02	-0.02	-0.02
LevelCrown	255+32.86	0	0	0.02	0.02
LowShoulderMatch	256+12.86	0.02	0.02	-0.02	-0.02
ReverseCrown	256+12.86	0.02	0.02	-0.02	-0.02
BeginFullSuper	256+68.86	0.034	0.034	0.034	0.034
EndFullSuper	275+93.16	0.034	0.034	-0.034	-0.034
LowShoulderMatch	276+49.16	0.02	0.02	-0.02	-0.02
ReverseCrown	276+49.16	0.02	0.02	-0.02	-0.02
LevelCrown	277+29.16	0	0	-0.02	-0.02
BeginNormalCrown	278+09.16	-0.02	-0.02	-0.02	-0.02
BeginNormalShoulder	278+09.16	-0.02	-0.02	-0.02	-0.02
CURVE 9					
EndNormalShoulder	290+60.79	-0.02	-0.02	-0.02	-0.02
EndNormalCrown	290+60.79	-0.02	-0.02	-0.02	-0.02
LevelCrown	291+40.79	-0.02	-0.02	0	0
LowShoulderMatch	292+20.79	0.02	0.02	0.02	0.02
ReverseCrown	292+20.79	-0.02	-0.02	0.02	0.02
BeginFullSuper	292+80.79	-0.035	-0.035	0.035	0.035
EndFullSuper	310+92.27	0.035	0.035	0.035	0.035
LowShoulderMatch	311+52.27	-0.02	-0.02	0.02	0.02
ReverseCrown	311+52.27	-0.02	-0.02	0.02	0.02
LevelCrown	312+32.27	-0.02	-0.02	0	0
BeginNormalCrown	313+12.27	-0.02	-0.02	-0.02	-0.02
BeginNormalShoulder	313+12.27	-0.02	-0.02	-0.02	-0.02
CURVE 10					



FINISHED SUPERELVATED SECTION



FINISHED CLIMBING LANE HALF SECTION

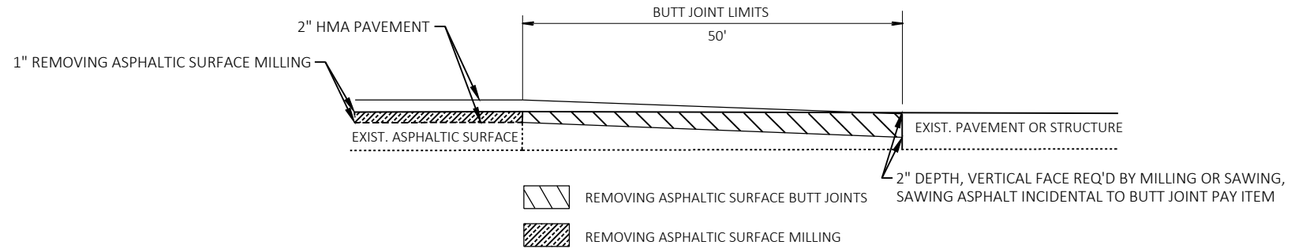
STA 267+86 - 346+29 RT
STA 334+61 - 346+29 LT

NOTE:

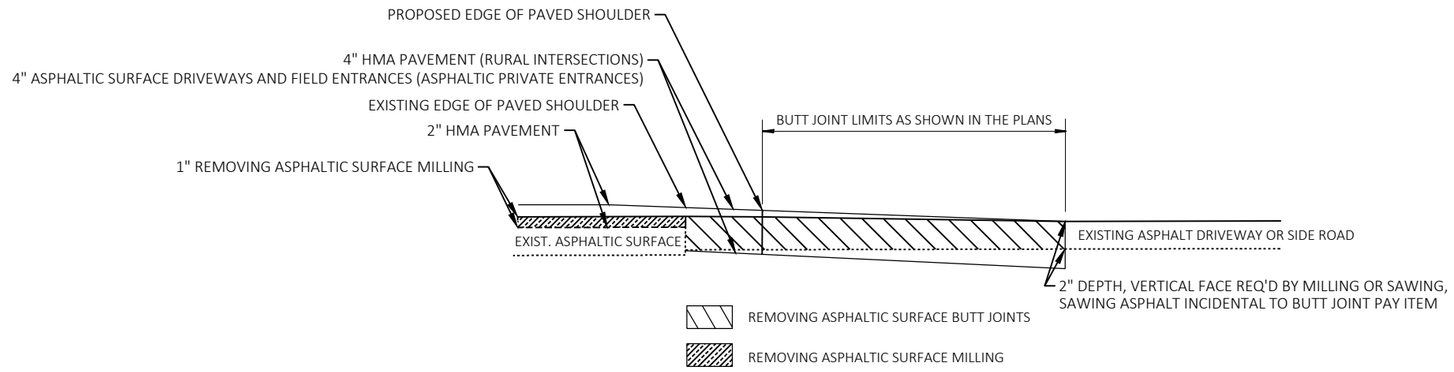
- IN AREAS WITH PAVED SHOULDERS OR GUARDRAIL, CONTRACTOR TO MATCH EXISTING PAVING WIDTHS
- GUARDRAIL THAT IS REMAINING IN PLACE MILL/PAVE WITHIN 6" OF GUARDRAIL FACE IN EACH LANE
- (C) = ASPHALTIC SURFACE CENTERLINE RUMBLE STRIPS 2 LANE RURAL

* VARIES IN BEAM GUARD AREA

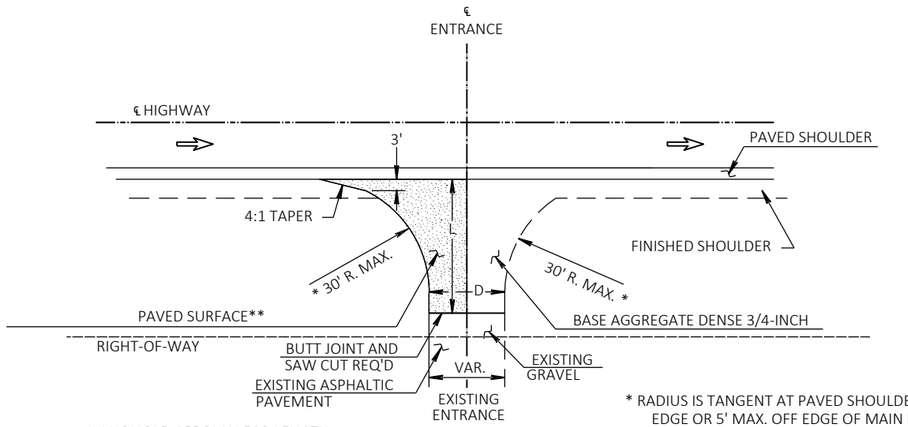
2



REMOVING ASPHALTIC SURFACE BUTT JOINTS DETAIL
MAINLINE



REMOVING ASPHALTIC SURFACE BUTT JOINTS DETAIL
DRIVEWAYS AND SIDE ROADS



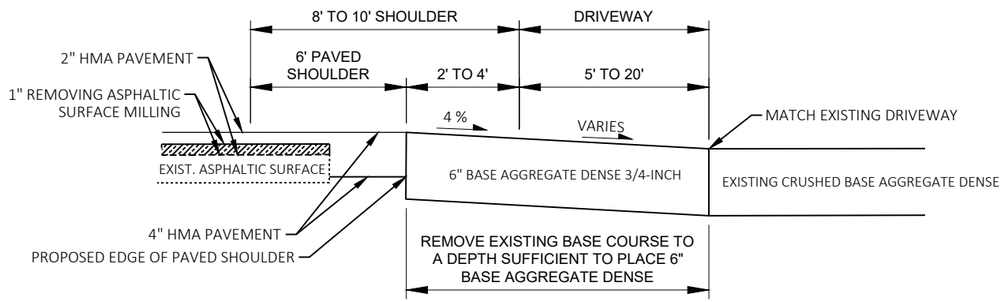
L=VARIABLE, SEE PLAN FOR LENGTH
BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

D=WIDTH
D=20'TYP.(PE's & FE's) (16'MIN.-24'MAX.)
D=28'TYP.(CE's & FARM ENT.) (24'MIN.-35'MAX.)
D=MATCH EXISTING (INTERSECTIONS)

* RADIUS IS TANGENT AT PAVED SHOULDER EDGE EDGE OR 5' MAX. OFF EDGE OF MAIN LINE PAVEMENT WHICH EVER IS LESS.

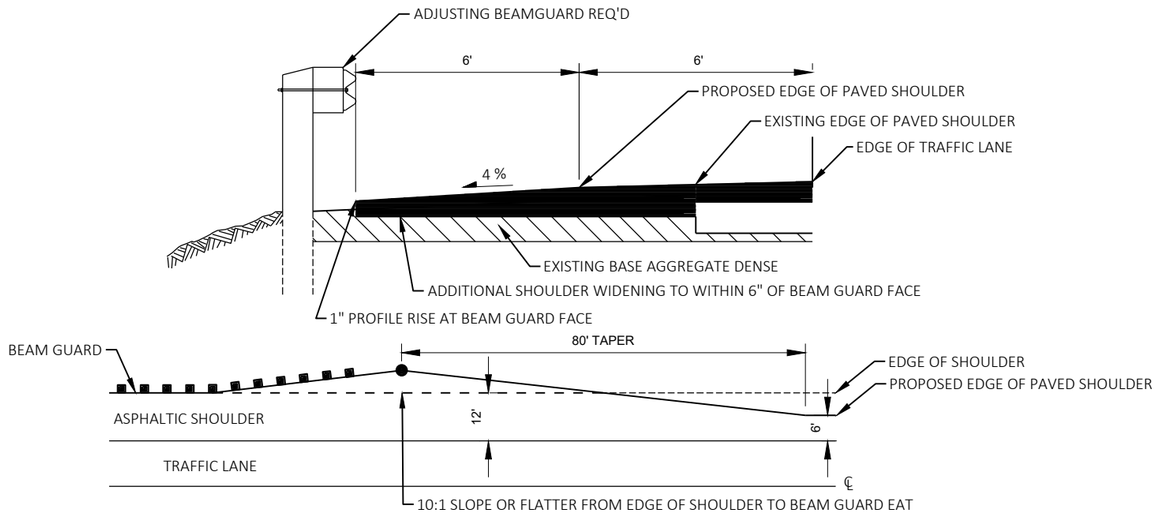
** ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES (DRIVEWAYS) HMA PAVEMENT (INTERSECTIONS)

RURAL INTERSECTION AND ASPHALT PRIVATE ENTRANCE
PLAN VIEW

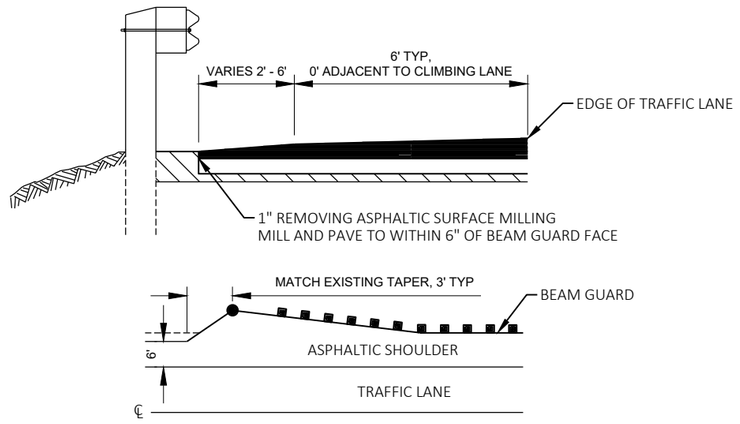


BASE AGGREGATE DENSE FIELD OR PRIVATE ENTRANCE
PROFILE VIEW

2

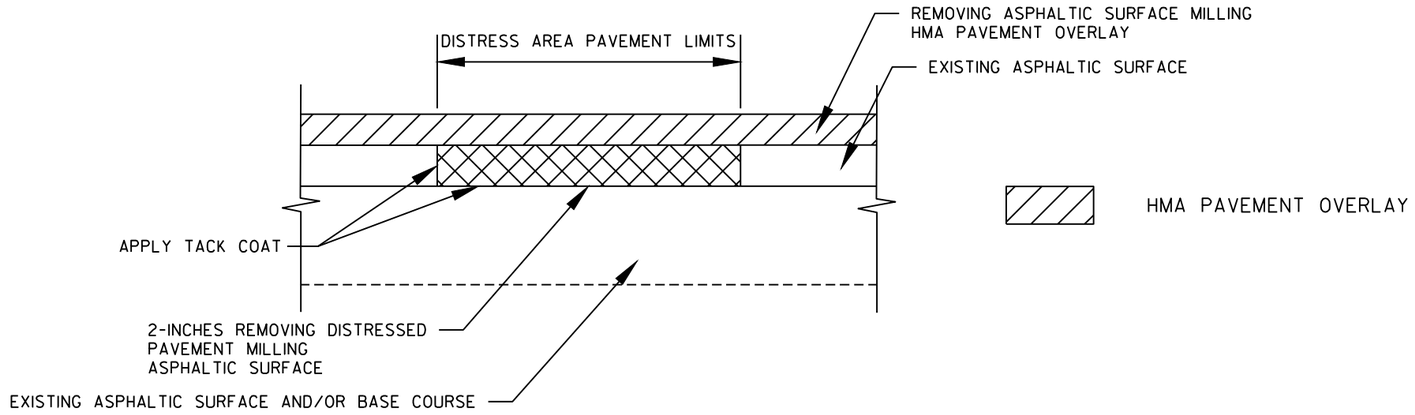


DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD, TYPE A
STRUCTURE C-41-037

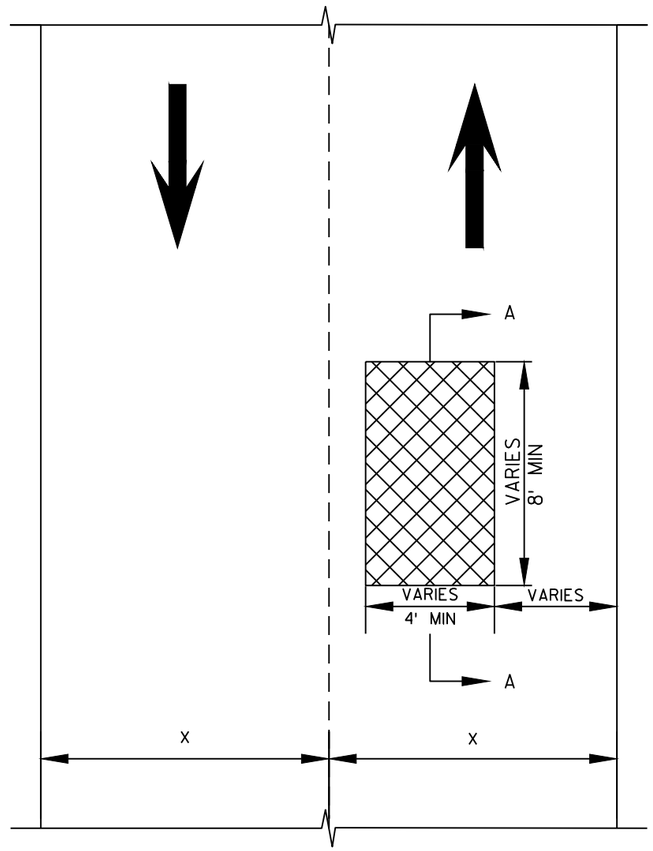


DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD, TYPE B
ALL LOCATIONS EXCEPT STRUCTURE C-41-037

2



REMOVING DISTRESS PAVEMENT MILLING
SECTION A-A



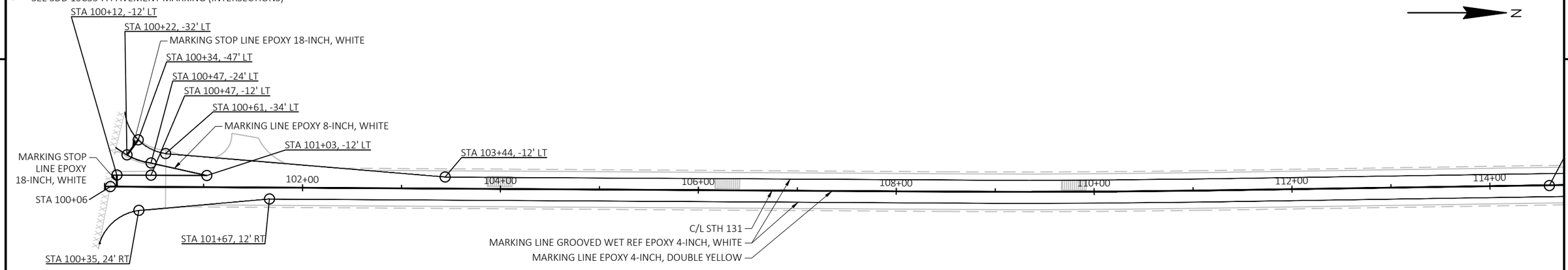
PLAN VIEW

EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD

2

NOTES

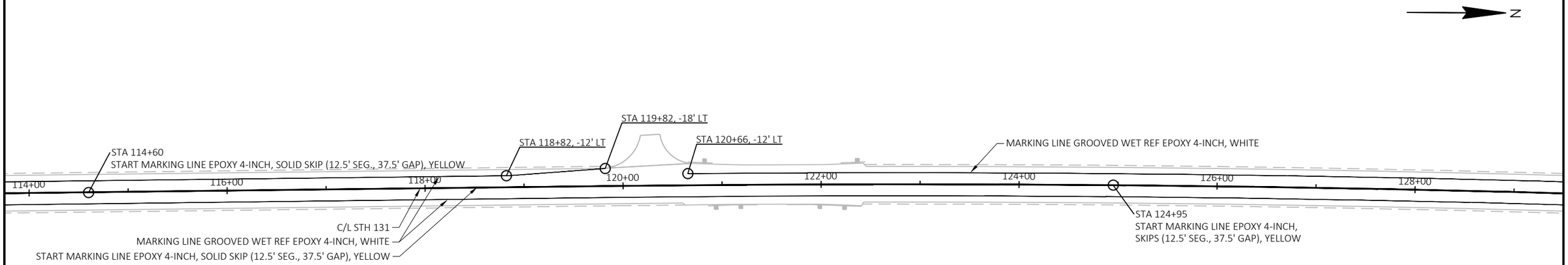
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C18-C MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
- SEE SDD 15C35-A PAVEMENT MARKING (INTERSECTIONS)



2

NOTES

- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-A PAVEMENT MARKING (INTERSECTIONS)

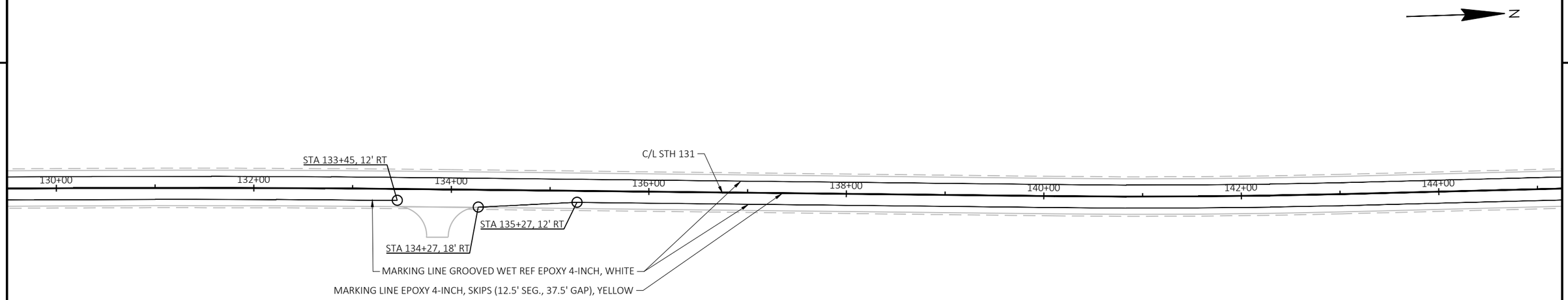


PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PAVEMENT MARKING DETAILS	SHEET 11	E

2

NOTES

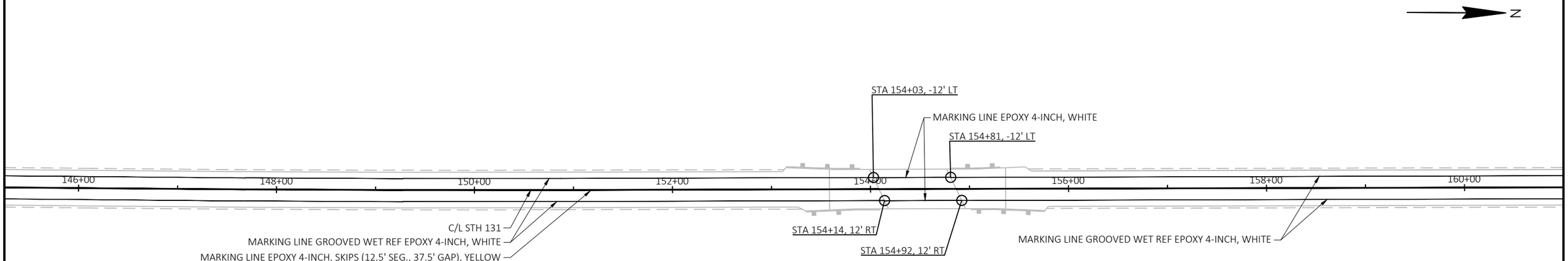
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-A PAVEMENT MARKING (INTERSECTIONS)



2

NOTES

- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)

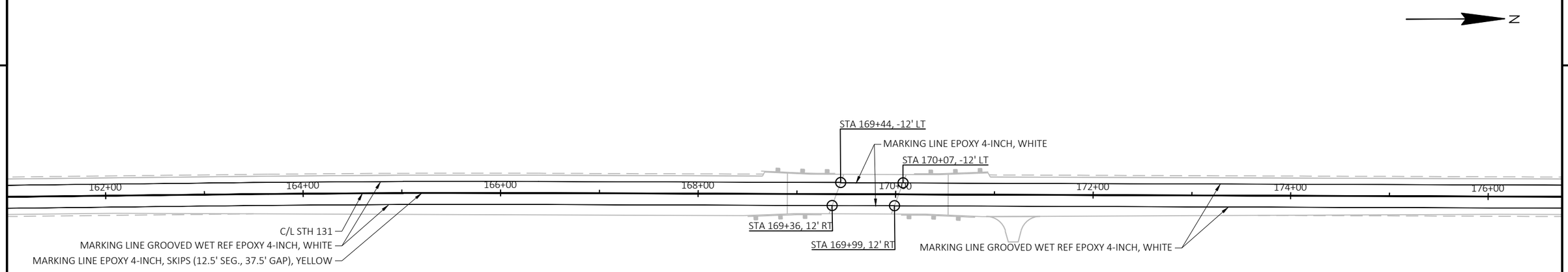


PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PAVEMENT MARKING DETAILS	SHEET 12	E

2

NOTES

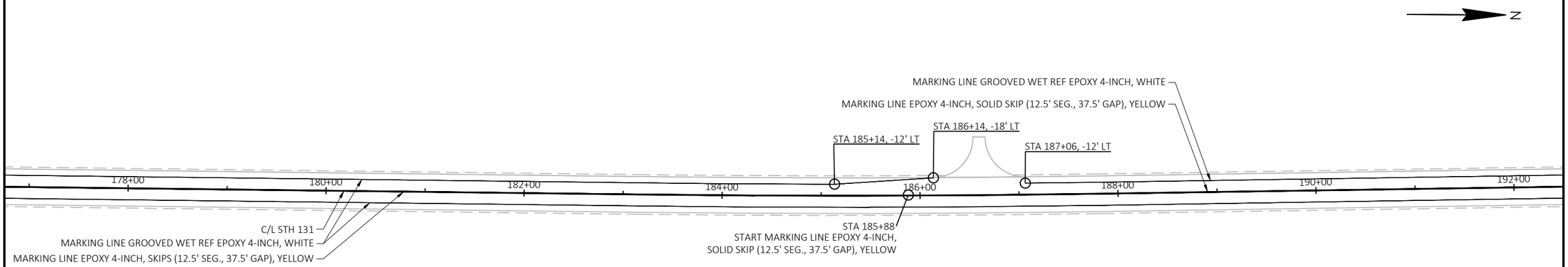
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)



2

NOTES

- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-A PAVEMENT MARKING (INTERSECTIONS)

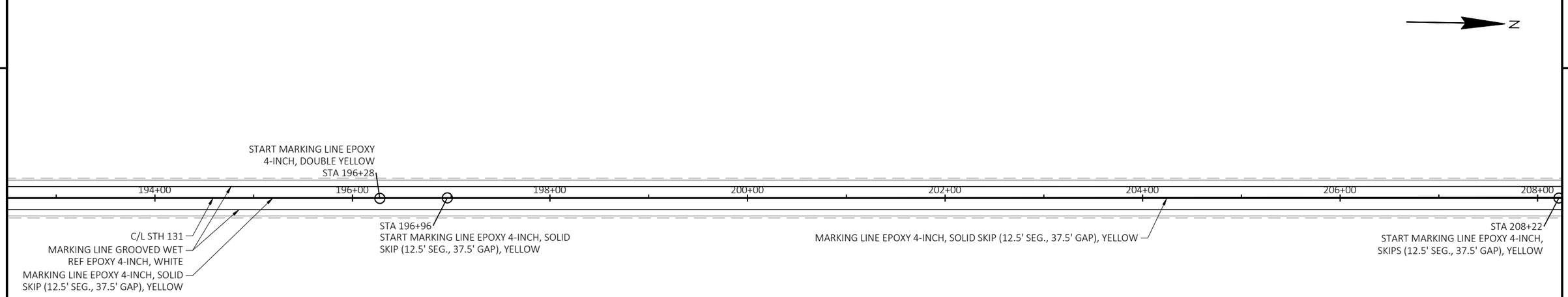


PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PAVEMENT MARKING DETAILS	SHEET 13	E

2

NOTES

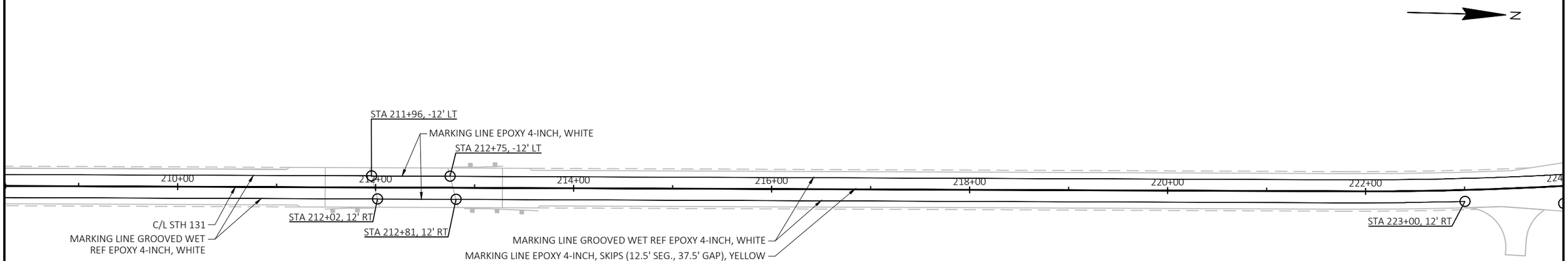
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)



2

NOTES

- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-A PAVEMENT MARKING (INTERSECTIONS)

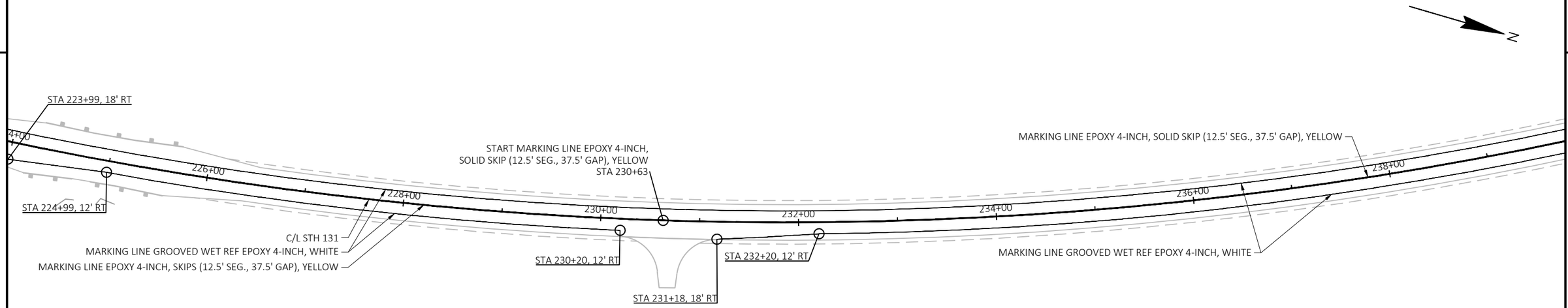


PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PAVEMENT MARKING DETAILS	SHEET 14	E

2

NOTES

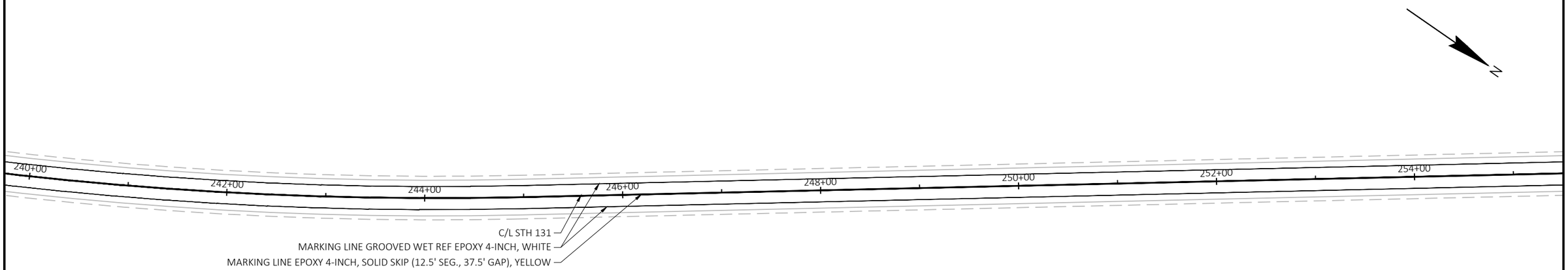
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-A PAVEMENT MARKING (INTERSECTIONS)



2

NOTES

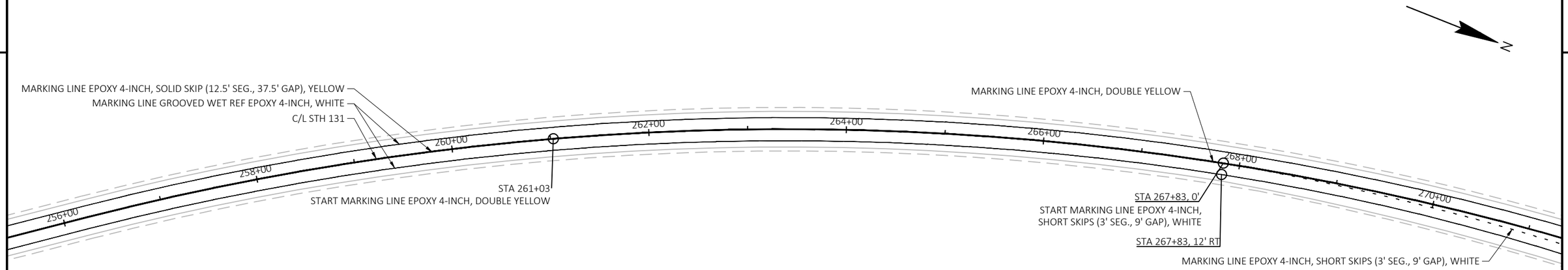
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)



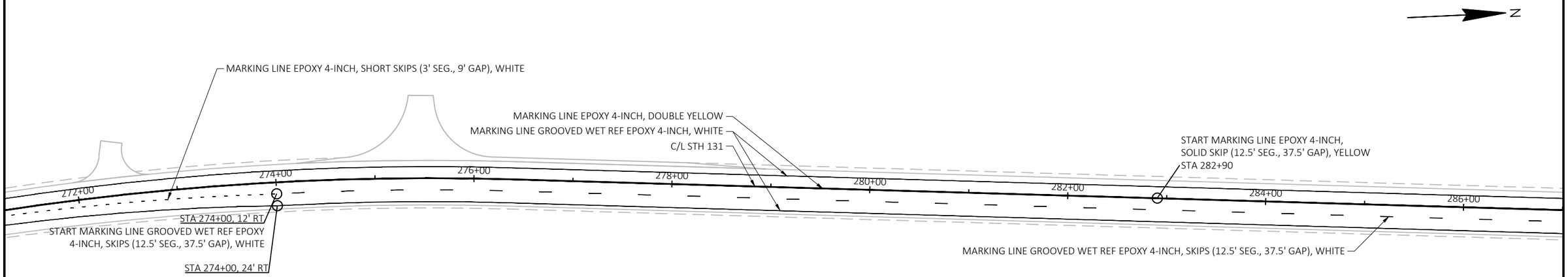
PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PAVEMENT MARKING DETAILS	SHEET 15	E

2

NOTES
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-C PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)



NOTES
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-C PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)

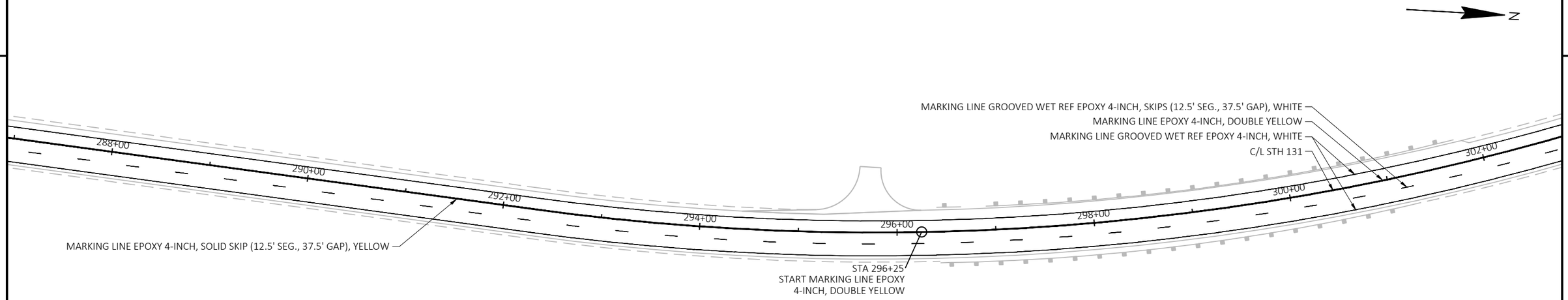


PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PAVEMENT MARKING DETAILS	SHEET 16	E

2

NOTES

- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-B PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)

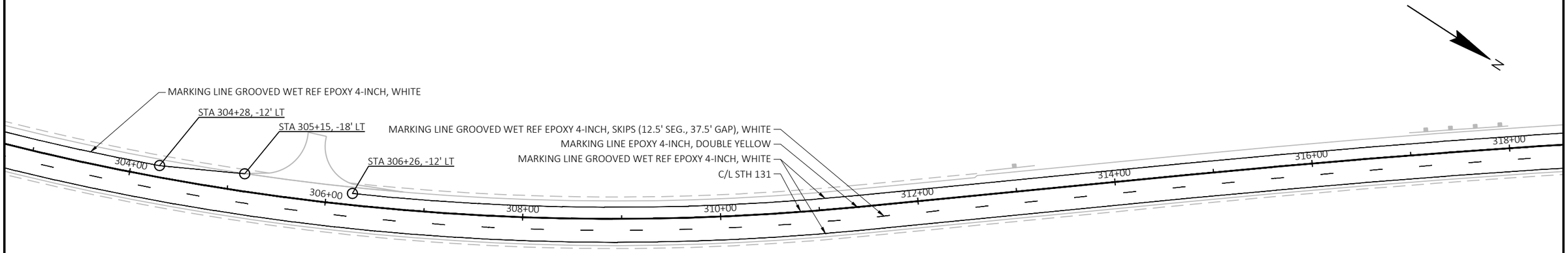


2

NOTES

- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-B PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)

- SEE SDD 15C35-A PAVEMENT MARKING (INTERSECTIONS)

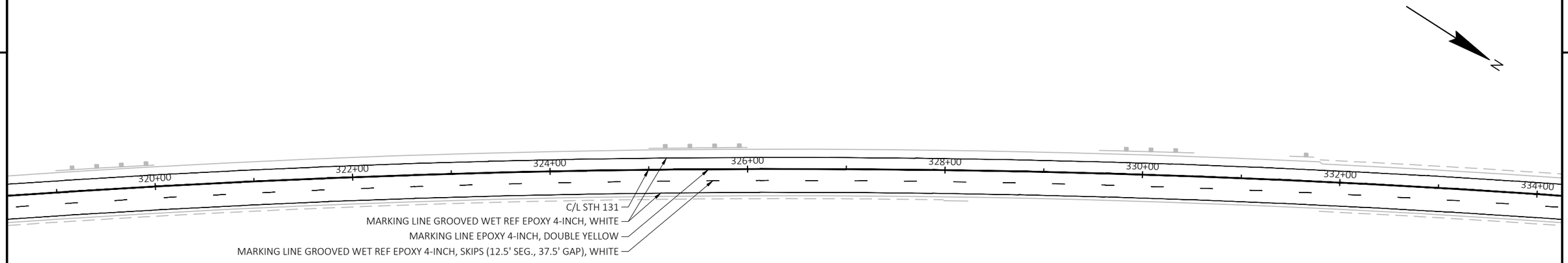


PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PAVEMENT MARKING DETAILS	SHEET 17	E

2

NOTES

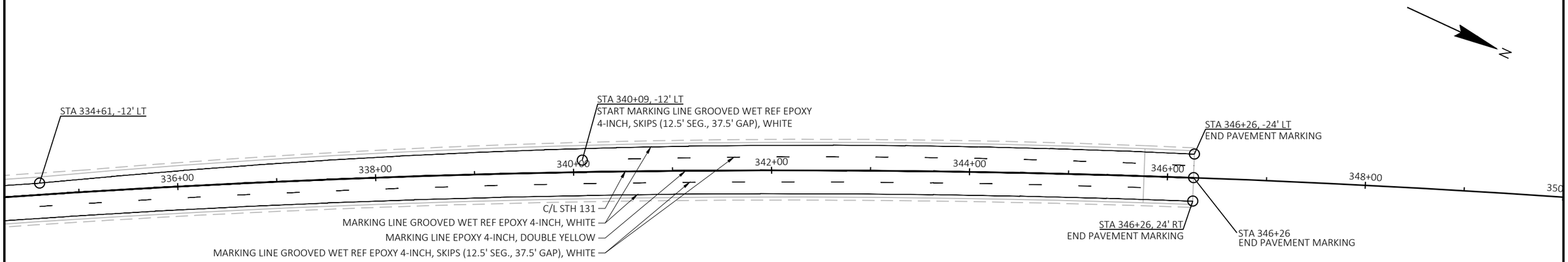
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-B PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)



2

NOTES

- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE)
- SEE SDD 15C35-B PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)



PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PAVEMENT MARKING DETAILS	SHEET 18	E

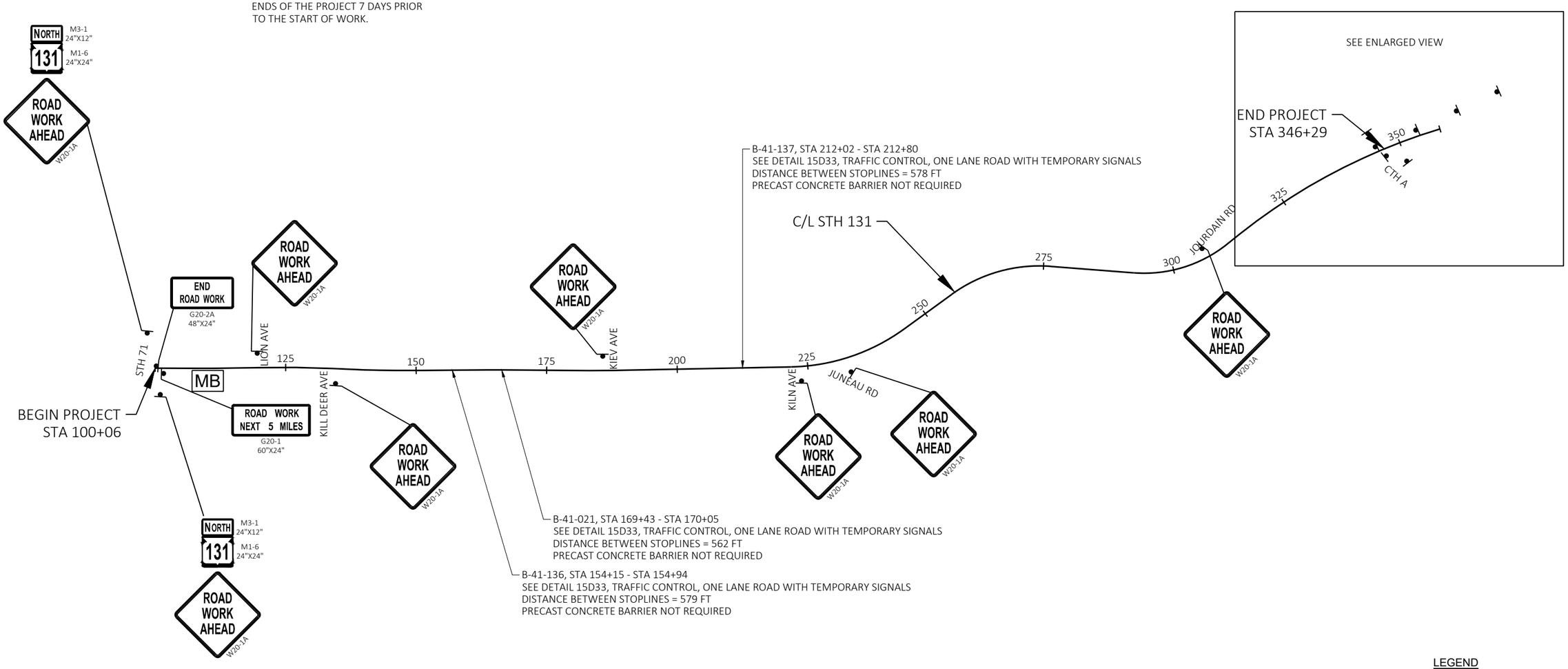
NOTES

- PLACE ROAD WORK AHEAD (W20-1A) SIGNS ALONG SIDE ROADS AT 500' TO STH 131 MAX OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST

N

PORTABLE CHANGEABLE MESSAGE BOARD
PHASE 1
ROADWORK BEGINS X/XX/XX

* PCMS ARE TO BE PLACED AT BOTH ENDS OF THE PROJECT 7 DAYS PRIOR TO THE START OF WORK.



LEGEND

- SIGN ON PERMANENT SUPPORT
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	ADVANCED WARNING SIGNING	SHEET 19	E

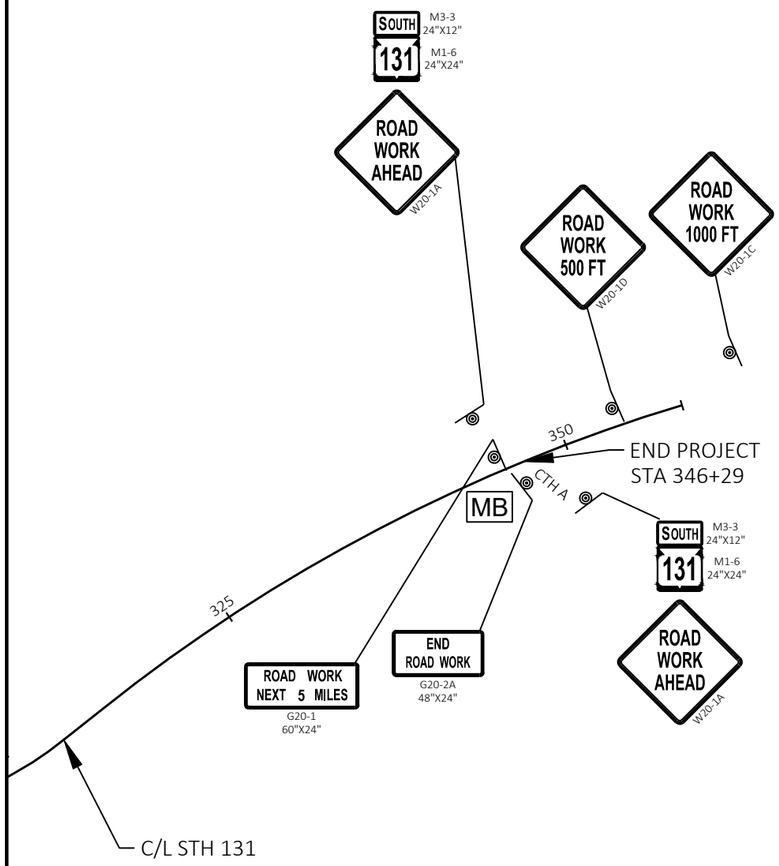
NOTES

- PLACE ROAD WORK AHEAD (W20-1A) SIGNS ALONG SIDE ROADS AT 500' TO STH 131 MAX OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST

PORTABLE CHANGEABLE MESSAGE BOARD
PHASE 1
ROADWORK BEGINS X/XX/XX

N

* PCMS ARE TO BE PLACED AT BOTH ENDS OF THE PROJECT 7 DAYS PRIOR TO THE START OF WORK.

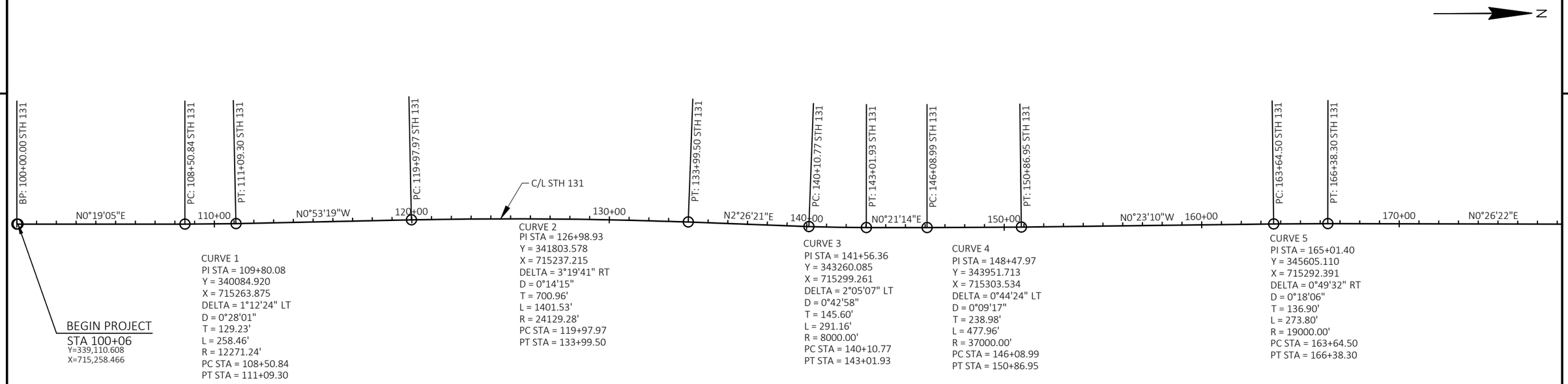


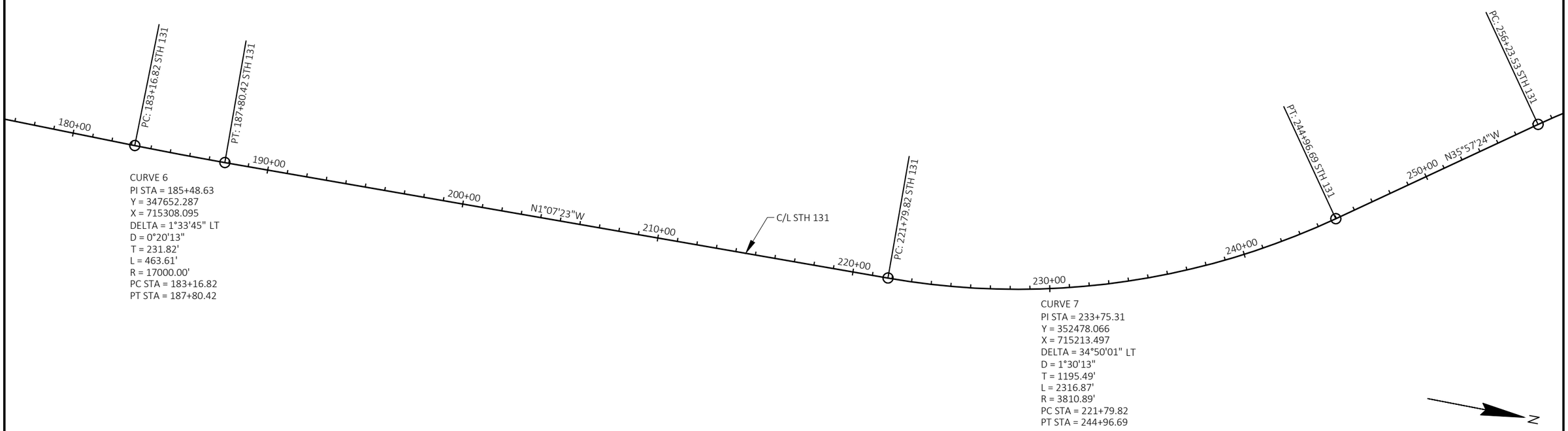
LEGEND

- SIGN ON PERMANENT SUPPORT
- MB — PORTABLE CHANGEABLE MESSAGE BOARD

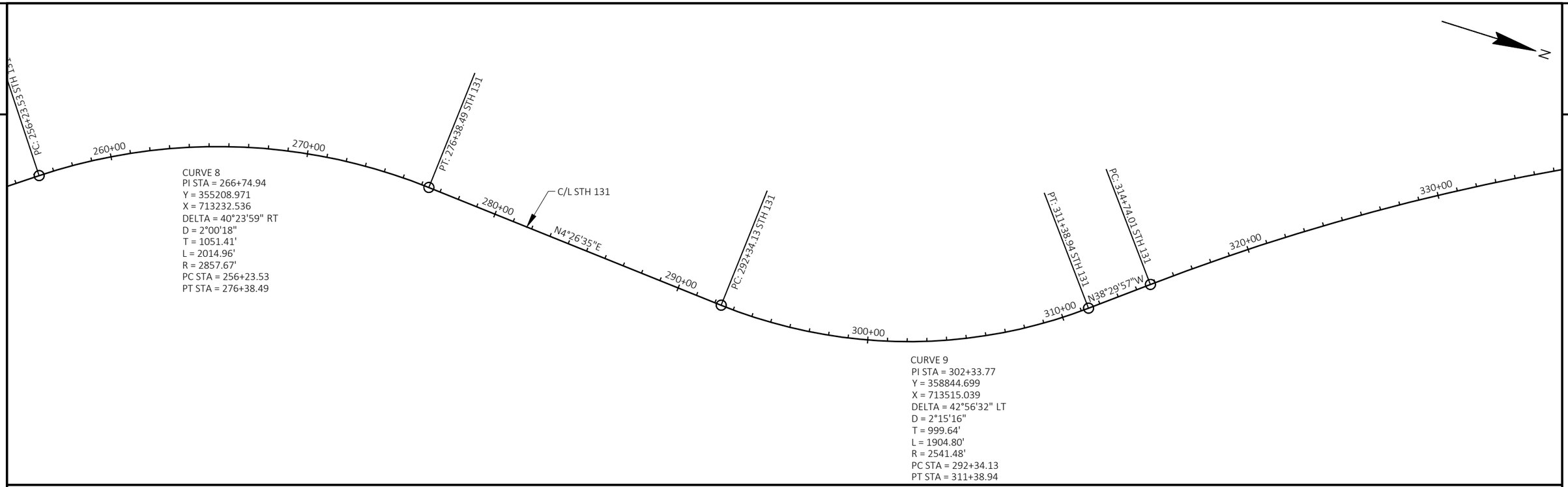
PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	ADVANCED WARNING SIGNING	SHEET 20	E

2





PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	ALIGNMENT DATA	SHEET 21	E



PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	ALIGNMENT DATA	SHEET 22	E

Estimate Of Quantities

5130-05-63

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0004	203.0211.S	Abatement of Asbestos Containing Material (structure) 01. B-41-136	EACH	1.000	1.000
0006	203.0211.S	Abatement of Asbestos Containing Material (structure) 02. B-41-21	EACH	1.000	1.000
0008	203.0220	Removing Structure (structure) 01. C-41-46	EACH	1.000	1.000
0010	203.0220	Removing Structure (structure) 02. C-41-37	EACH	1.000	1.000
0012	203.0220	Removing Structure (structure) 03. C-41-38	EACH	1.000	1.000
0014	203.0335	Debris Containment Over Waterway (structure) 01. B-41-136	EACH	1.000	1.000
0016	203.0335	Debris Containment Over Waterway (structure) 02. B-41-21	EACH	1.000	1.000
0018	203.0335	Debris Containment Over Waterway (structure) 03. B-41-137	EACH	1.000	1.000
0020	204.0115	Removing Asphaltic Surface Butt Joints	SY	3,900.000	3,900.000
0022	204.0120	Removing Asphaltic Surface Milling	SY	91,500.000	91,500.000
0024	204.0170	Removing Fence	LF	48.000	48.000
0026	204.0180	Removing Delineators and Markers	EACH	6.000	6.000
0028	206.2001	Excavation for Structures Culverts (structure) 01. C-41-46	EACH	1.000	1.000
0030	206.2001	Excavation for Structures Culverts (structure) 02. C-41-37	EACH	1.000	1.000
0032	206.2001	Excavation for Structures Culverts (structure) 03. C-41-38	EACH	1.000	1.000
0034	206.5001	Cofferdams (structure) 01. C-41-46	EACH	4.000	4.000
0036	206.5001	Cofferdams (structure) 02. C-41-37	EACH	4.000	4.000
0038	206.5001	Cofferdams (structure) 03. C-41-38	EACH	4.000	4.000
0040	210.2500	Backfill Structure Type B	TON	559.000	559.000
0042	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 5130-05-63	EACH	1.000	1.000
0044	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	351.000	351.000
0046	213.0100	Finishing Roadway (project) 01. 5130-05-63	EACH	1.000	1.000
0048	305.0110	Base Aggregate Dense 3/4-Inch	TON	964.000	964.000
0050	311.0110	Breaker Run	TON	51.000	51.000
0052	455.0605	Tack Coat	GAL	8,572.000	8,572.000
0054	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0056	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0058	460.2005	Incentive Density PWL HMA Pavement	DOL	8,412.000	8,412.000
0060	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	12,210.000	12,210.000
0062	460.2010	Incentive Air Voids HMA Pavement	DOL	12,230.000	12,230.000
0064	460.6224	HMA Pavement 4 MT 58-28 S	TON	12,230.000	12,230.000
0066	465.0105	Asphaltic Surface	TON	1,890.000	1,890.000
0068	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	88.000	88.000
0070	465.0450	Asphaltic Intersection Rumble Strips	SY	75.000	75.000
0072	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	9,096.000	9,096.000
0074	502.3200	Protective Surface Treatment	SY	370.000	370.000
0076	502.4204	Adhesive Anchors No. 4 Bar	EACH	182.000	182.000
0078	504.0100	Concrete Masonry Culverts	CY	74.000	74.000
0080	505.0400	Bar Steel Reinforcement HS Structures	LB	305.000	305.000
0082	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	7,180.000	7,180.000
0084	509.1500	Concrete Surface Repair	SF	1,018.000	1,018.000
0086	509.9020.S	Epoxy Crack Sealing	LF	69.000	69.000
0088	511.1200	Temporary Shoring (structure) 01. C-41-46	SF	410.000	410.000
0090	511.1200	Temporary Shoring (structure) 02. C-41-37	SF	284.000	284.000
0092	511.1200	Temporary Shoring (structure) 03. C-41-38	SF	412.000	412.000
0094	516.0500	Rubberized Membrane Waterproofing	SY	43.000	43.000
0096	521.3136	Culvert Pipe Corrugated Steel 36-Inch	LF	8.000	8.000
0098	612.0406	Pipe Underdrain Wrapped 6-Inch	LF	193.000	193.000

5130-05-63

Line	Item	Item Description	Unit	Total	Qty
0100	614.0400	Adjusting Steel Plate Beam Guard	LF	2,725.000	2,725.000
0102	614.0950	Replacing Guardrail Posts and Blocks	EACH	94.000	94.000
0104	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5130-05-63	EACH	1.000	1.000
0106	619.1000	Mobilization	EACH	1.000	1.000
0108	624.0100	Water	MGAL	14.000	14.000
0110	625.0500	Salvaged Topsoil	SY	500.000	500.000
0112	628.1504	Silt Fence	LF	600.000	600.000
0114	628.1520	Silt Fence Maintenance	LF	600.000	600.000
0116	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0118	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0120	628.2008	Erosion Mat Urban Class I Type B	SY	500.000	500.000
0122	629.0210	Fertilizer Type B	CWT	0.300	0.300
0124	630.0120	Seeding Mixture No. 20	LB	13.000	13.000
0126	630.0200	Seeding Temporary	LB	13.000	13.000
0128	630.0500	Seed Water	MGAL	10.000	10.000
0130	633.5200	Markers Culvert End	EACH	6.000	6.000
0132	642.5001	Field Office Type B	EACH	1.000	1.000
0134	643.0300	Traffic Control Drums	DAY	1,970.000	1,970.000
0136	643.0420	Traffic Control Barricades Type III	DAY	30.000	30.000
0138	643.0715	Traffic Control Warning Lights Type C	DAY	240.000	240.000
0140	643.0900	Traffic Control Signs	DAY	2,880.000	2,880.000
0142	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0144	643.3105	Temporary Marking Line Paint 4-Inch	LF	27,730.000	27,730.000
0146	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	9,519.000	9,519.000
0148	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	72.000	72.000
0150	643.5000	Traffic Control	EACH	1.000	1.000
0152	646.1020	Marking Line Epoxy 4-Inch	LF	29,379.000	29,379.000
0154	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	50,083.000	50,083.000
0156	646.3020	Marking Line Epoxy 8-Inch	LF	192.000	192.000
0158	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	28,884.000	28,884.000
0160	646.6120	Marking Stop Line Epoxy 18-Inch	LF	30.000	30.000
0162	646.9000	Marking Removal Line 4-Inch	LF	225.000	225.000
0164	650.8000	Construction Staking Resurfacing Reference	LF	24,404.000	24,404.000
0166	650.9911	Construction Staking Supplemental Control (project) 01. 5130-05-63	EACH	1.000	1.000
0168	661.0101	Temporary Traffic Signals for Bridges (structure) 01. B-41-136	EACH	1.000	1.000
0170	661.0101	Temporary Traffic Signals for Bridges (structure) 02. B-41-021	EACH	1.000	1.000
0172	661.0101	Temporary Traffic Signals for Bridges (structure) 03. B-41-137	EACH	1.000	1.000
0174	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000
0176	740.0440	Incentive IRI Ride	DOL	18,488.000	18,488.000
0178	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 01. 121+66	EACH	1.000	1.000
0180	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 02. 154+54	EACH	1.000	1.000
0182	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 03. 170+36	EACH	1.000	1.000
0184	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 04. 212+41	EACH	1.000	1.000
0186	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 05. 225+03	EACH	1.000	1.000
0188	999.2000.S	Installing and Maintaining Bird Deterrent System (station) 06. 298+30	EACH	1.000	1.000
0190	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	800.000	800.000
0192	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	400.000	400.000
0194	SPV.0060	Special 01. Reseal Railing Post Connections	EACH	74.000	74.000
0196	SPV.0060	Special 02. Cleaning Box Culvert C-41-046	EACH	1.000	1.000

Estimate Of Quantities

5130-05-63

Line	Item	Item Description	Unit	Total	Qty
0198	SPV.0060	Special 03. Cleaning Box Culvert C-41-037	EACH	1.000	1.000
0200	SPV.0060	Special 04. Cleaning Box Culvert C-41-038	EACH	1.000	1.000
0202	SPV.0090	Special 01. Flashing Stainless Steel	LF	462.000	462.000
0204	SPV.0090	Special 02. Reseal Abutment Diaphragm Joints	LF	116.000	116.000
0206	SPV.0090	Special 03. Shoulder Existing Beamguard	LF	4,925.000	4,925.000
0208	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	615.000	615.000

3

CATEGORY	STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
0010	100+06	-	100+62	RT/LT	416	PROJECT START
0010	101+45	-		LT	111	LINCOLN AVE
0010	120+28	-		LT	128	LION AVE
0010	133+86	-		RT	118	KILLDEER AVE
0010	153+58	-	154+08	RT/LT	224	B-41-136 SOUTH
0010	154+86	-	155+36	RT/LT	224	B-41-136 NORTH
0010	168+90	-	169+40	RT/LT	222	B-41-021 SOUTH
0010	170+03	-	170+53	RT/LT	224	B-41-021 NORTH
0010	171+19	-		RT	66	DRIVEWAY
0010	186+60	-		LT	133	KIEV AVE
0010	211+49	-	211+99	RT/LT	222	B-41-137 SOUTH
0010	212+78	-	213+28	RT/LT	222	B-41-137 NORTH
0010	223+49	-		RT	188	KILN AVE
0010	230+69	-		RT	179	JUNEAU RD
0010	272+39	-		LT	126	DRIVEWAY
0010	275+46	-		LT	381	DRIVEWAY
0010	295+73	-		LT	189	DRIVEWAY
0010	305+84	-		LT	220	JOURDAIN RD
0010	345+76	-	346+26	RT/LT	302	PROJECT END
				TOTAL	3,900	

CULVERT MARKER SUMMARY

CATEGORY	STATION	LOCATION	204.0180 REMOVING DELINEATORS AND MARKERS EACH	633.5200 MARKERS CULVERT END EACH	REMARKS
0010	121+66	RT/LT	2	2	C-41-046
0010	225+03	RT/LT	2	2	C-41-037
0010	298+30	RT/LT	2	2	C-41-038
		TOTAL	6	6	

CULVERT PIPE SUMMARY

CATEGORY	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	521.3136 CULVERT PIPE CORRUGATED STEEL 36-INCH EACH	REMARKS
0010	121+66	RT	1	8	REMOVE 8 LF OR AS NEEDED TO REMOVE AND BACKFILL WINGWALL
		TOTAL	1	8	

CATEGORY	STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	SPV.0180.01 SPECIAL (REMOVING DISTRESSED PAVEMENT MILLING) SY	REMARKS
0010	100+45	-	154+15	LT/RT	17,900	-	START to B-41-136
0010	159+94	-	169+43	LT/RT	4,830	-	B-41-136 to B-41-021
0010	170+06	-	212+02	LT/RT	13,987	-	B-41-021 to B-41-137
0010	212+80	-	271+00	LT/RT	19,629	-	B-41-137 to PASSING LANE
0010	271+00	-	346+29	LT/RT	35,135	-	PASSING LANE to END
				UNDISTRIBUTED	-	615	
				TOTAL	91,500	615	

CATEGORY	STATION	LOCATION	204.0170 REMOVING FENCE LF	REMARKS
0010	224+70	60' RT	24	
0010	225+00	60' RT	24	
		TOTAL	48	

BASE AGGREGATE DENSE SHOULDER SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0100 BASE AGGREGATE DENSE 3/4-INCH TON	REMARKS
0080	101+04	-	120+62	RT	20	22.3	
0080	102+67	-	119+91	LT	18	19.6	
0080	122+42	-	133+56	RT	12	12.7	
0080	122+44	-	153+13	LT	31	34.9	
0080	134+17	-	153+31	RT	20	21.8	
0080	155+59	-	168+66	LT	14	14.9	
0080	155+78	-	163+50	RT	8	8.8	
0080	170+95	-	186+26	LT	16	17.4	
0080	173+67	-	211+24	RT	38	42.7	
0080	186+94	-	211+13	LT	25	27.5	
0080	213+56	-	223+67	LT	11	11.5	
0080	213+64	-	223+12	RT	10	10.8	
0080	223+79	-	225+90	RT	3	-	C-41-037
0080	223+67	-	226+17	LT	3	-	C-41-037
0080	225+90	-	230+37	RT	5	10.2	
0080	226+17	-	272+11	LT	46	104.5	
0080	231+00	-	267+86	RT	37	83.8	
0010	267+86	-	296+43	RT	-	48.7	CLIMBING LANE, NO SHOULDER WIDENING
0080	272+59	-	274+66	LT	3	4.7	
0080	278+15	-	295+09	LT	17	38.5	
0010	301+19	-	327+99	RT	-	45.7	CLIMBING LANE, NO SHOULDER WIDENING
0080	301+82	-	305+40	LT	4	8.1	
0080	306+22	-	312+62	LT	7	14.6	
0080	331+79	-	334+61	LT	3	6.4	
0010	334+61	-	346+26	LT	-	19.9	CLIMBING LANE, NO SHOULDER WIDENING
0010	331+80	-	346+26	RT	-	24.7	CLIMBING LANE, NO SHOULDER WIDENING
0010	DRIVEWAYS			LT/RT	-	100	
0010	SHOULDER EXISTING BEAMGUARD			LT/RT	-	108	
0010	MISCELLANEOUS LOW SPOTS			LT/RT	-	100	
				CATEGORY 0010 SUBTOTAL	0	448	
				CATEGORY 0080 SUBTOTAL	351	516	
				ITEM TOTAL	351	964	

HMA SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	REMARKS
0010	100+09	-	154+08	LT/RT	1,299	2,078	-	
0080	100+09	-	154+08	LT/RT	252	403		
0010	154+86	-	169+40	LT/RT	429	578	-	
0080	154+86	-	169+40	LT/RT	68	109		
0010	170+03	-	211+99	LT/RT	1,190	1,590	-	
0080	170+03	-	211+99	LT/RT	196	313		
0010	212+78	-	274+09	LT/RT	1,773	2,378	-	
0080	212+78	-	274+09	LT/RT	286	458		
0010	274+09	-	346+26	LT/RT	2,624	3,660	-	
0080	274+09	-	346+26	LT/RT	337	539		
0080	100+45	-	274+09	LT/RT	-	-	1,820	SHOULDER WIDENING LOWER LIFT
0010	101+41			LT	8	13	-	LINCOLN AVE
0010	120+28			LT	9	15	-	LION AVE
0010	133+86			RT	8	14	-	KILLDEER AVE
0010	186+60			LT	9	15	-	KIEV AVE
0010	223+49			RT	13	22	-	KILN AVE
0010	230+69			RT	13	21	-	JUNEAU RD
0010	305+84			LT	15	25	-	JOURDAIN RD
0010	100+45	-	274+09	LT/RT	43	-	70	DISTRESSED PAVEMENT AREAS
				CATEGORY 0010 SUBTOTAL	7,433	10,410	70	
				CATEGORY 0080 SUBTOTAL	1,139	1,820	1,820	
				TOTAL	8,572	12,230	1,890	

ASPHALT ACCEPTANCE TABLE

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12' DRIVING LANE	100+06 TO 154+15 154+94 TO 169+43 170+05 TO 212+02 212+80 TO 346+29	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	7,332	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010/PWL TEST STRIP VOLUMETRICS 460.0105.S	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005/PWL TEST STRIP DENSITY 460.0110.S
EXISTING 3' OF PAVED SHOULDER / SIDE ROADS	100+06 TO 154+15 154+94 TO 169+43 170+05 TO 212+02 212+80 TO 346+29	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	1,865	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010/PWL TEST STRIP VOLUMETRICS 460.0105.S	ACCEPTANCE TESTING BY THE DEPARTMENT, NOT ELIGIBLE FOR INCENTIVE
WIDENED 3' OF PAVED SHOULDER	100+06 TO 154+15 154+94 TO 169+43 170+05 TO 212+02 212+80 TO 346+29	UPPER LAYER	ASPHALTIC SURFACE	4 MT 58-28 S	1,820	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010/PWL TEST STRIP VOLUMETRICS 460.0105.S	ACCEPTANCE TESTING BY THE DEPARTMENT, NOT ELIGIBLE FOR INCENTIVE
WIDENED 3' OF PAVED SHOULDER	100+06 TO 154+15 154+94 TO 169+43 170+05 TO 212+02 212+80 TO 346+29	LOWER LAYER	BASE AGGREGATE	ASPHALTIC SURFACE	1,820	2"	QMP PER SS 465	ACCEPTANCE TESTING BY THE DEPARTMENT, NOT ELIGIBLE FOR INCENTIVE
VARIOUS	100+06 TO 154+15 154+94 TO 169+43 170+05 TO 212+02 212+80 TO 346+29	DISTRESSED PAVEMENT PATCHES	BASE AGGREGATE	ASPHALTIC SURFACE	70	2"	QMP PER SS 465	ACCEPTANCE BY ORDINARY COMPACTION PER 460.3.3
12' CLIMBING LANE	274+00 TO 346+29 RT	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	1,080	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010/PWL TEST STRIP VOLUMETRICS 460.0105.S	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005/PWL TEST STRIP DENSITY 460.0110.S
12' CLIMBING LANE	334+61 TO 346+29 LT	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	94	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010/PWL TEST STRIP VOLUMETRICS 460.0105.S	ACCEPTANCE TESTING BY THE DEPARTMENT, NOT ELIGIBLE FOR INCENTIVE

CATEGORY	STATION	LOCATION	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	REMARKS
0010	171+20	RT	8	
0010	272+36	LT	15	
0010	275+51	LT	43	ABANDON EXISTING RIGHT-TURN LANE
0010	295+65	LT	22	
		TOTAL	88	

CATEGORY	STATION	TO	STATION	LOCATION	465.0450 ASPHALTIC INTERSECTION RUMBLE STRIPS SY	REMARKS
0010	103+87	-	104+12	LT	25	
0010	106+17	-	106+42	LT	25	
0010	109+67	-	109+92	LT	25	
				TOTAL	75	

CATEGORY	STATION	TO	STATION	LOCATION	465.0475 ASPHALT CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF	REMARKS
0010	103+45	-	118+28	CL	1,483	
0010	122+28	-	131+86	CL	958	
0010	135+86	-	153+83	CL	1,797	
0010	155+11	-	167+40	CL	1,229	
0010	171+44	-	184+60	CL	1,316	
0010	188+60	-	211+73	CL	2,313	
0010	213+02	-	221+49	CL	847	
0010	225+49	-	228+69	CL	320	
0010	232+69	-	264+73	CL	3,204	
0010	266+73	-	303+84	CL	3,711	
0010	307+84	-	345+12	CL	3,728	
				TOTAL	9,096	

BEAM GUARD SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF	614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS EACH	SPV.0090.03 SPECIAL (SHOULDER EXISTING BEAMGUARD) LF	REMARKS
0010	120+61	-	122+41	RT	125	2	180	C-41-046
0010	120+66	-	122+45	LT	50	4	179	C-41-046
0010	153+15	-	154+15	LT	75	2	100	B-41-136
0010	154+94	-	155+56	LT	50	-	62	B-41-136
0010	153+35	-	154+15	RT	75	2	80	B-41-136
0010	154+94	-	155+76	RT	75	2	82	B-41-136
0010	168+50	-	169+43	RT	75	2	93	B-41-021
0010	170+05	-	170+80	RT	75	2	75	B-41-021
0010	168+64	-	169+43	LT	75	2	79	B-41-021
0010	170+05	-	170+94	LT	75	2	89	B-41-021
0010	211+12	-	212+02	LT	-	-	90	B-41-137
0010	212+80	-	213+54	LT	50	-	74	B-41-137
0010	211+24	-	212+02	RT	50	-	78	B-41-137
0010	212+80	-	213+65	RT	75	2	85	B-41-137
0010	224+17	-	225+59	RT	125	13	142	C-41-037
0010	224+29	-	225+72	LT	150	4	143	C-41-037
0010	296+40	-	301+75	LT	500	36	535	C-41-038
0010	296+43	-	301+19	RT	475	4	476	C-41-038
0010	312+71	-	331+73	LT	475	4	1,902	
0010	327+99	-	331+80	RT	25	2	381	
0010	100+06	-	346+26	UNDISTRIBUTED	50	9	-	
				TOTAL	2,725	94	4,925	

CATEGORY	STATION	TO	STATION	LOCATION	624.0100 WATER MGAL	REMARKS
0010	101+04	-	334+61	UNDISTRIBUTED	6	FOR BASE AGGREGATE DENSE 3/4-INCH
0080	101+04	-	334+61	UNDISTRIBUTED	8	FOR BASE AGGREGATE DENSE 3/4-INCH
				TOTAL	14	

EROSION CONTROL MOBILIZATION SUMMARY

CATEGORY	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	REMARKS
0010	PROJECT 5130-05-63	5	3	
	TOTAL	5	3	

EROSION CONTROL SUMMARY

CATEGORY	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.2008 EROSION MAT URBAN CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL	REMARKS
0010	121+66	LT/RT	195	200	200	195	0.1	5	5	4	C-41-0046 WINGWALL REPLACEMENT ONLY, INCLUDES 25% UNDISTRIBUTED
0010	225+03	LT/RT	153	200	200	153	0.1	4	4	3	C-41-0037 WINGWALL REPLACEMENT ONLY, INCLUDES 25% UNDISTRIBUTED
0010	298+30	LT/RT	153	200	200	153	0.1	4	4	3	C-41-0038 WINGWALL REPLACEMENT ONLY, INCLUDES 25% UNDISTRIBUTED
		TOTAL	500	600	600	500	0.3	13	13	10	

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TRAFFIC CONTROL SUMMARY

CATEGORY	LOCATION	EACH	DAYS	643.0300 TRAFFIC CONTROL DRUMS DAY	EACH	DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	EACH	DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	EACH	DAYS	643.0900 TRAFFIC CONTROL SIGNS DAY	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	C-41-46	10	30	300	-	-	-	-	-	-	5	30	150	-	SHOULDER CLOSURE
0010	C-41-37	10	30	300	-	-	-	-	-	-	5	30	150	-	SHOULDER CLOSURE
0010	C-41-38	10	30	300	-	-	-	-	-	-	5	30	150	-	SHOULDER CLOSURE
0010	B-41-136	36	10	360	1	10	10	8	10	80	16	10	160	-	TEMPORARY TRAFFIC SIGNALS
0010	B-41-021	35	10	350	1	10	10	8	10	80	16	10	160	-	TEMPORARY TRAFFIC SIGNALS
0010	B-41-137	36	10	360	1	10	10	8	10	80	16	10	160	-	TEMPORARY TRAFFIC SIGNALS
0010	ROADWAY	-		-	-		-	-		-	-	-	200	1	CONSTRUCTION OPERATIONS
0010	ROADWAY	-		-	-		-	-		-	25	70	1,750	-	ADVANCED WARNING
TOTAL				1,970			30			240			2,880	1	

CATEGORY	LOCATION	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	REMARKS
0010	BEGIN OF PROJECT	7	
0010	END OF PROJECT	7	
TOTAL		14	

LOCATION / STAGE	PAVEMENT MARKING TYPE
CENTERLINE, ON MILLED SURFACES (ROADWAY)	TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW
CENTERLINE, ON MILLED SURFACES (BRIDGES)	EXISTING MARKINGS
EDGELINE, ON MILLED SURFACES (ROADWAY)	NONE
EDGELINE, ON MILLED SURFACES (BRIDGES)	EXISTING MARKINGS
CENTERLINE, NB PASS (ROADWAY)	NONE, TEMPORARY MARKINGS ARE VISIBLE
CENTERLINE, NB PASS (BRIDGES)	EXISTING MARKINGS
EDGELINE, NB PASS (ROADWAY)	MARKING LINE WET REF GROOVED EPOXY 4-INCH, WHITE
EDGELINE, NB PASS (BRIDGES)	MARKING LINE EPOXY 4-INCH, WHITE
CLIMBING LANE SKIPS, NB PASS	MARKING LINE WET REF GROOVED EPOXY 4-INCH, WHITE
CENTERLINE, SB PASS (ROADWAY)	MARKING LINE SAME DAY EPOXY 4-INCH, YELLOW
CENTERLINE, SB PASS (BRIDGES)	EXISTING MARKINGS
EDGELINE, SB PASS (ROADWAY)	MARKING LINE WET REF GROOVED EPOXY 4-INCH, WHITE
EDGELINE, SB PASS (BRIDGES)	MARKING LINE EPOXY 4-INCH, WHITE
CLIMBING LANE SKIPS, SB PASS	MARKING LINE WET REF GROOVED EPOXY 4-INCH, WHITE
CENTERLINE, AFTER RUMBLE STRIPS (ROADWAY AND BRIDGES)	MARKING LINE EPOXY 4-INCH, YELLOW

PAVEMENT MARKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	STYLE	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH, YELLOW LF	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, YELLOW LF	643.3850 TEMPORARY MARKING LINE REMOVABLE TAPE 18-INCH, WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH, WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH, YELLOW LF	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH, WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH, WHITE LF	646.4520 MARKING LINE SAME DAY EPOXY 4-INCH, YELLOW LF	646.6120 MARKING STOP LINE EPOXY 18-INCH, WHITE LF	646.9000 MARKING REMOVAL LINE 4-INCH LF	REMARKS
0010	100+45	-	100+86	CL		-	-	-	-	-	-	192	-	30	-	RIGHT TURN ISLAND AT STH 71
0010	100+06	-	114+60	CL	DOUBLE YELLOW	2,908	-	-	-	2,908	-	-	2,908	-	-	
0010	100+42	-	133+45	RT	EDGELINE	-	-	-	-	-	3,303	-	-	-	-	
0010	100+62	-	101+11	LT	EDGELINE	-	-	-	-	-	49	-	-	-	-	
0010	101+82	-	119+82	LT	EDGELINE	-	-	-	-	-	1,800	-	-	-	-	
0010	114+60	-	124+68	CL	SOLID-SKIP	1,260	-	-	-	1,260	-	-	1,260	-	-	
0010	120+63	-	154+03	LT	EDGELINE	-	-	-	-	-	3,340	-	-	-	-	
0010	154+03	-	154+81	LT	EDGELINE	-	-	-	78	-	-	-	-	-	-	B-41-136
0010	154+81	-	169+44	LT	EDGELINE	-	-	-	-	-	1,463	-	-	-	-	
0010	169+44	-	170+07	LT	EDGELINE	-	-	-	63	-	-	-	-	-	-	B-41-021
0010	170+07	-	186+14	LT	EDGELINE	-	-	-	-	-	1,607	-	-	-	-	
0010	124+98	-	154+08	CL	SKIPS	233	-	-	-	728	-	-	728	-	-	
0010	154+08		154+86	CL	SKIPS	-	-	-	-	20	-	-	-	-	-	B-41-136
0010	154+86	-	169+40	CL	SKIPS	116	-	-	-	364	-	-	364	-	-	
0010	169+40		170+03	CL	SKIPS	-	-	-	-	16	-	-	-	-	-	B-41-021
0010	170+03	-	185+88	CL	SKIPS	127	-	-	-	396	-	-	396	-	-	
0010	134+27	-	154+14	RT	EDGELINE	-	-	-	-	-	1,987	-	-	-	-	
0010	154+14	-	154+92	RT	EDGELINE	-	-	-	78	-	-	-	-	-	-	B-41-136
0010	154+92	-	169+36	RT	EDGELINE	-	-	-	-	-	1,444	-	-	-	-	
0010	169+36	-	169+99	RT	EDGELINE	-	-	-	63	-	-	-	-	-	-	B-41-021
0010	169+99	-	212+02	RT	EDGELINE	-	-	-	-	-	4,203	-	-	-	-	
0010	212+02	-	212+81	RT	EDGELINE	-	-	-	79	-	-	-	-	-	-	B-41-137
0010	212+81	-	223+00	RT	EDGELINE	-	-	-	-	-	1,019	-	-	-	-	
0010	185+88	-	196+28	CL	SOLID-SKIP	1,300	-	-	-	1,300	-	-	1,300	-	-	
0010	186+93	-	211+96	LT	EDGELINE	-	-	-	-	-	2,503	-	-	-	-	
0010	211+96	-	212+75	LT	EDGELINE	-	-	-	79	-	-	-	-	-	-	B-41-137
0010	212+75	-	295+18	LT	EDGELINE	-	-	-	-	-	8,243	-	-	-	-	
0010	196+28	-	196+96	CL	DOUBLE YELLOW	136	-	-	-	136	-	-	136	-	-	
0010	196+96	-	208+22	CL	SOLID-SKIP	1,408	-	-	-	1,408	-	-	1,408	-	-	
0010	208+22	-	211+99	CL	SKIPS	30	-	-	-	94	-	-	94	-	-	
0010	211+99	-	212+78	CL	SKIPS	-	-	-	-	20	-	-	-	-	-	B-41-137
0010	212+78	-	230+63	CL	SKIPS	143	-	-	-	446	-	-	446	-	-	
0010	223+96	-	230+27	RT	EDGELINE	-	-	-	-	-	631	-	-	-	-	
0010	230+63	-	261+03	CL	SOLID-SKIP	3,800	-	-	-	3,800	-	-	3,800	-	-	
0010	231+12	-	346+26	RT	EDGELINE	-	-	-	-	-	11,514	-	-	-	-	
0010	261+03	-	282+90	CL	DOUBLE YELLOW	4,374	-	-	-	4,374	-	-	4,374	-	-	
0010	282+90	-	296+25	CL	SOLID-SKIP	1,669	-	-	-	1,669	-	-	1,669	-	-	
0010	296+25	-	346+26	CL	DOUBLE YELLOW	10,002	-	-	-	10,002	-	-	10,002	-	-	
0010	267+85	-	274+09	RT	SHORT SKIPS	-	-	-	-	-	156	-	-	-	-	
0010	274+09	-	346+26	RT	SKIPS	-	-	-	-	-	1,804	-	-	-	-	
0010	296+02	-	305+08	LT	EDGELINE	-	-	-	-	-	906	-	-	-	-	
0010	306+15	-	346+26	LT	EDGELINE	-	-	-	-	-	4,011	-	-	-	-	
0010	342+26	-	346+26	LT	SKIPS	-	-	-	-	-	100	-	-	-	-	
0010	B-41-136			CL	SKIPS	75	3,179	24	-	-	-	-	-	-	75	FOR TEMPORARY TRAFFIC SIGNALS
0010	B-41-021			CL	SKIPS	75	3,162	24	-	-	-	-	-	-	75	FOR TEMPORARY TRAFFIC SIGNALS
0010	B-41-137			CL	SKIPS	75	3,178	24	-	-	-	-	-	-	75	FOR TEMPORARY TRAFFIC SIGNALS
					SUBTOTAL	27,730	9,519	72	440	28,939	50,083	192	28,884	30	225	
					ITEM TOTAL	27,730	9,519	72	29,379		50,083	192	28,884	30	225	

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	REMARKS
0010	100+06	-	154+15	LT/RT	5,409	MAINLINE
0010	154+94	-	169+43	LT/RT	1,449	MAINLINE
0010	170+05	-	212+02	LT/RT	4,197	MAINLINE
0010	212+80	-	346+29	LT/RT	13,349	MAINLINE
				TOTAL	24,404	

CATEGORY	STATION	TO	STATION	LOCATION	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (5130-05-63) EACH	REMARKS
0010	100+06	-	346+29	PROJECT 5130-05-63	1	
				TOTAL 0010	1	

TEMPORARY TRAFFIC SIGNALS FOR BRIDGES

CATEGORY	LOCATION	661.0101.01 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) 01. B-41-136 EACH	661.0101.02 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) 02. B-41-021 EACH	661.0101.03 TEMPORARY TRAFFIC SIGNALS FOR BRIDGES (STRUCTURE) 03. B-41-137 EACH	REMARKS
0010	LT/RT	1	1	1	TRAILER MOUNTED TRAFFIC SIGNALS WITH BARRELS
	TOTAL	1	1	1	

CLEANING BOX CULVERT SUMMARY

CATEGORY	LOCATION	SPV.0060.02 SPECIAL (CLEANING BOX CULVERTS C-41-046) EACH	SPV.0060.03 SPECIAL (CLEANING BOX CULVERTS C-41-037) EACH	SPV.0060.04 SPECIAL (CLEANING BOX CULVERTS C-41-038) EACH	REMARKS
0010	LT/RT	1	1	1	CLEANING DEBRIS AND SEDIMENT
	TOTAL	1	1	1	

INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM

CATEGORY	LOCATION	999.2000.S.01 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM STATION 121+66 EACH	999.2000.S.02 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM STATION 154+54 EACH	999.2000.S.03 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM STATION 170+36 EACH	999.2000.S.04 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM STATION 212+41 EACH	999.2000.S.05 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM STATION 225+03 EACH	999.2000.S.06 INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM STATION 298+30 EACH	REMARKS
0010	C-41-046	1	-	-	-	-	-	
0010	B-41-136	-	1	-	-	-	-	
0010	B-41-021	-	-	1	-	-	-	
0010	B-41-137	-	-	-	1	-	-	
0010	C-41-037	-	-	-	-	1	-	
0010	C-41-038	-	-	-	-	-	1	
	TOTAL	1	1	1	1	1	1	

2

2

N

MATCH LINE 113+75

LINCOLN AVE

R/W

REMOVING ASPHALTIC SURFACE BUTT JOINTS

END TAPER
STA 102+67, OFF 18' LT

50'

24'

ASPHALTIC INTERSECTION
RUMBLE STRIP

102+00

104+00

106+00

108+00

110+00

112+00

STA: 103+87 TO 104+12

STA: 106+17 TO 106+42

C/L STH 131

STA: 109+67 TO 109+92

END TAPER
STA 101+04, OFF 18' RT

BEGIN PROJECT
STA 100+06
Y = 399,110.608
X = 715,258.466
MATCH EXISTING
REMOVING ASPHALTIC
SURFACE BUTT JOINTS

R/W

LEGEND

EROSION MAT URBAN CLASS I, TYPE B

SILT FENCE

SURFACE WATER FLOW

N

MATCH LINE 128+50.07

BRANCH OF HICKAPOO RIVER

LION AVE

ADJUSTING STEEL PLATE BEAM GUARD,
POST 1 TO 5, 25 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

R/W

ALLIANT ENERGY

ADJUSTING STEEL PLATE BEAM GUARD,
POST 5 TO 1, 25 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

ALLIANT ENERGY

REMOVING ASPHALTIC SURFACE BUTT JOINTS

31'

114+00

116+00

118+00

120+00

122+00

124+00

126+00

128+00

C/L STH 131

BAD. FE

ADJUSTING STEEL PLATE BEAM GUARD,
POST 9, 50 LF

BAD. PE

ADJUSTING STEEL PLATE BEAM GUARD,
POST 9 TO 1, 75 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

REMOVING SMALL PIPE CULVERTS, 8 LF
CULVERT PIPE CORRUGATED STEEL 36-INCH, 8 LF
INVERT AT TOP OF WINGWALL

C-41-046, REMOVE AND REPLACE ALL WINGWALLS, SEE STRUCTURE PLANS
REMOVING DELINEATORS AND MARKERS
MARKERS CULVERT END
CLEANING BOX CULVERTS C-41-046
INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM

R/W

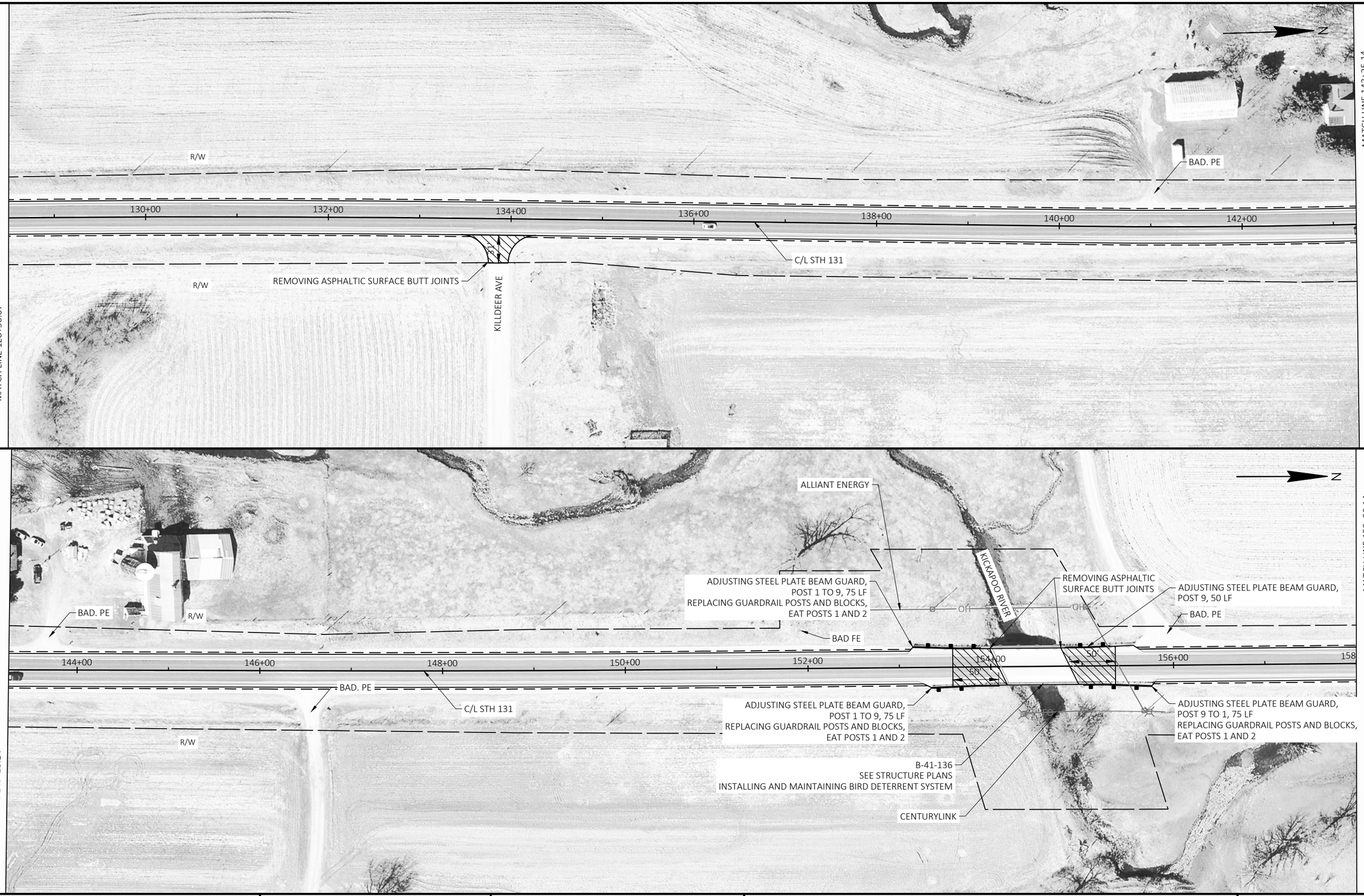
MATCH LINE 113+75

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PLAN	SHEET 32	E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 01-pn

PLOT DATE : 11/10/2022 8:58 AM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:100 FT

2



PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PLAN	SHEET 33	E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 02-pn

PLOT DATE : 10/19/2022 4:39 PM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

MATCH LINE 158+00.14

CH LINE 172+75.18

N

R/W

ADJUSTING STEEL PLATE BEAM GUARD,
POST 1 TO 9, 75 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

REMOVING ASPHALTIC
SURFACE BUTT JOINTS

ADJUSTING STEEL PLATE BEAM GUARD,
POST 9 TO 1, 75 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

+00 160+00 162+00 164+00 166+00 168+00 170+00 172+00

50' 50'

START SHOULDER TAPER
STA 162+09, OFF 18' RT

C/L STH 131

END SHOULDER TAPER
STA 168+46, OFF 22' RT

36'

ASPH. PE

OH OH

KICKAPOO RIVER

R/W

ALLIANT ENERGY

ADJUSTING STEEL PLATE BEAM GUARD,
POST 1 TO 9, 75 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

ADJUSTING STEEL PLATE BEAM GUARD,
POST 9 TO 1, 75 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

B-41-021
SEE STRUCTURE PLANS
INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM

START SHOULDER TAPER
STA 170+88, OFF 22' RT

REMOVING ASPHALTIC SURFACE BUTT JOINTS

N

MATCH LINE 187+50.20

KIEV AVE

REMOVING ASPHALTIC SURFACE BUTT JOINTS

R/W

36'

174+00 176+00 178+00 180+00 182+00 184+00 186+00

BAD. PE

END SHOULDER TAPER
STA 176+11, OFF 18' RT

C/L STH 131

R/W

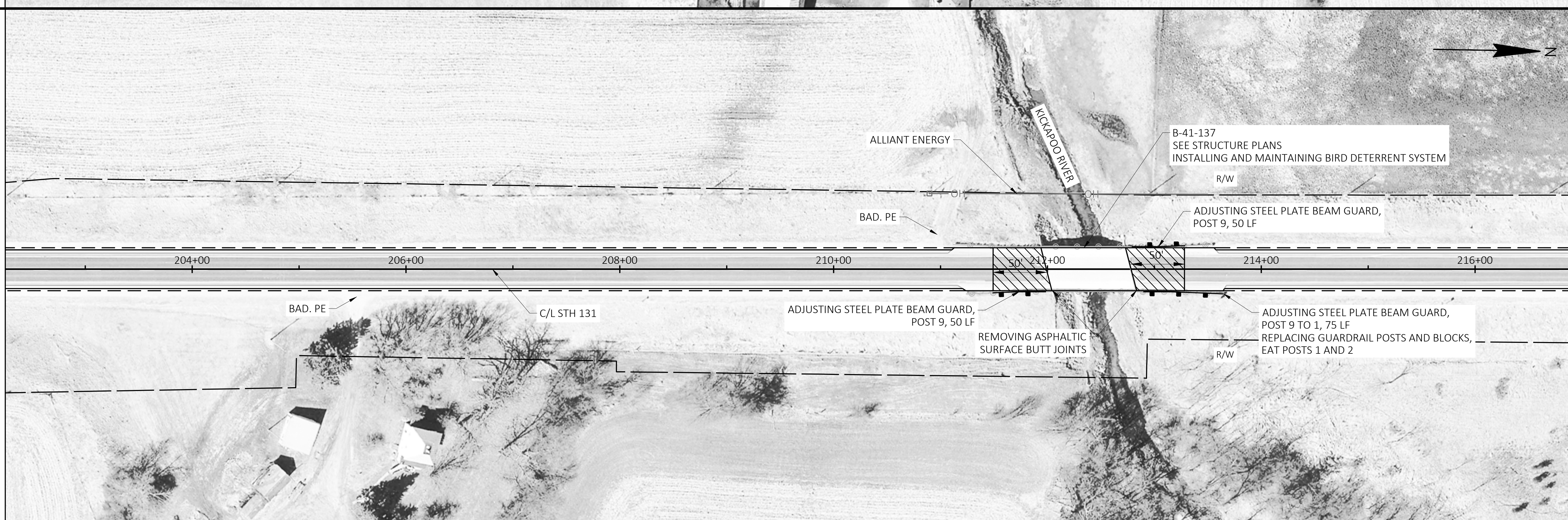
MATCH LINE 172+75.18

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PLAN	SHEET 34	E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 03-pn

PLOT DATE : 10/19/2022 4:39 PM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44


MATCH LINE 202+25.20
MATCH LINE 217+00.20
N
KICKAPOO RIVER
ALLIANT ENERGY
B-41-137
SEE STRUCTURE PLANS
INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM
R/W
OH
BAD. PE
ADJUSTING STEEL PLATE BEAM GUARD,
POST 9, 50 LF
204+00
206+00
208+00
210+00
212+00
214+00
216+00
50'
50'
BAD. PE
C/L STH 131
ADJUSTING STEEL PLATE BEAM GUARD,
POST 9, 50 LF
REMOVING ASPHALTIC
SURFACE BUTT JOINTS
ADJUSTING STEEL PLATE BEAM GUARD,
POST 9 TO 1, 75 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2
R/W

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PLAN	SHEET 35	E

2

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- SURFACE WATER FLOW

BRANCH OF KICKAPOO RIVER

ALLIANT ENERGY

R/W

BAD. PE

ADJUSTING STEEL PLATE BEAM GUARD,
ENTIRE LENGTH
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2, BOTH ENDS

OH

BAD. PE

BAD. FE

218+00 220+00 222+00 224+00 226+00 228+00 230+00

MATCH LINE 231+75.20

C/L STH 131

ADJUSTING STEEL PLATE BEAM GUARD, POST 9 TO 1, 75 LF
REPLACING GUARDRAIL POSTS AND BLOCKS

REMOVING FENCE

REMOVING ASPHALTIC SURFACE BUTT JOINTS

REMOVING ASPHALTIC SURFACE BUTT JOINTS

R/W

MATCH LINE 217+00.20

ADJUSTING STEEL PLATE BEAM GUARD,
POST 1 TO 5, 50 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

KILN AVE

JUNEAU RD

C-41-037, REMOVE AND REPLACE ALL WINGWALLS, SEE STRUCTURE PLANS
REMOVING DELINEATORS AND MARKERS
MARKERS CULVERT END
CLEANING BOX CULVERTS C-41-037
INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM

MATCH LINE 246+50.20

R/W

232+00 234+00 236+00 238+00 240+00 242+00 244+00 246+00

BAD. FE

C/L STH 131

BAD. PE

BAD. PE

R/W

2

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PLAN	SHEET 36	E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 05-pn

PLOT DATE : 11/10/2022 8:58 AM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

MATCH LINE 246+50.20

MATCH LINE 261+25.20

R/W

BAD. PE

248+00

250+00

252+00

254+00

256+00

258+00

260+00

C/L STH 131

BAD. PE

BAD. PE

OAKDALE ELECTRIC COOP

R/W

N

MATCH LINE 261+25.20

MATCH LINE 276+00.20

R/W

ASPH. PE

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ASPH. PE

2.5'

2.5'

262+00

264+00

266+00

268+00

270+00

272+00

274+00

276

C/L STH 131

BAD. PE

START WIDENING FOR EXISTING CLIMBING LANE
STA 267+83, OFF 18' RT

END WIDENING FOR EXISTING CLIMBING LANE
STA 274+00, OFF 27' RT

R/W

N

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PLAN	SHEET 37	E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 06-pn

PLOT DATE : 10/19/2022 4:39 PM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

LEGEND

EROSION MAT URBAN CLASS I, TYPE B

SILT FENCE

SURFACE WATER FLOW

N

MATCH LINE 276+00.20

MATCH LINE 290+75.20

MATCH LINE 290+75.20

MATCH LINE 305+50.20

R/W

R/W

R/W

R/W

+00

278+00

280+00

282+00

284+00

286+00

288+00

290+00

C/L STH 131

UNNAMED STREAM

ADJUSTING STEEL PLATE BEAM GUARD,
POST 1, 25 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

ADJUSTING STEEL PLATE BEAM GUARD, 475 LF
REPLACING GUARDRAIL POSTS AND BLOCKS, 32 EACH

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ASPH. PE

45°

REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

292+00

294+00

296+00

298+00

300+00

302+00

304+00

C/L STH 131

BAD. FE

BAD. FE

ADJUSTING STEEL PLATE BEAM GUARD,
ENTIRE LENGTH
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2, BOTH ENDS

C-41-038, REMOVE AND REPLACE ALL WINGWALLS, SEE STRUCTURE PLANS
REMOVING DELINEATORS AND MARKERS
MARKERS CULVERT END
CLEANING BOX CULVERTS C-41-038
INSTALLING AND MAINTAINING BIRD DETERRENT SYSTEM

EXISTING BARBED WIRE FENCE

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PLAN	SHEET 38	E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 07-pn

PLOT DATE : 11/10/2022 8:58 AM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

JOURDAIN RD

R/W

ADJUSTING STEEL PLATE BEAM GUARD,
POST 1 TO 5, 50 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

ADJUSTING STEEL PLATE BEAM GUARD, 100 LF

ADJUSTING STEEL PLATE BEAM GUARD, 100 LF

45°

REMOVING ASPHALTIC SURFACE BUTT JOINTS

306+00 308+00 310+00 312+00 314+00 316+00 318+00 320+00

BAD. PE

C/L STH 131

MATCH LINE 320+25.20

MATCH LINE 305+50.20

R/W

2

R/W

ADJUSTING STEEL PLATE BEAM GUARD,
POST 1, 25 LF
REPLACING GUARDRAIL POSTS AND BLOCKS,
EAT POSTS 1 AND 2

MATCH LINE 335+00.20

ADJUSTING STEEL PLATE BEAM GUARD, 100 LF

ADJUSTING STEEL PLATE BEAM GUARD, 100 LF

START WIDENING FOR CLIMBING LANE
STA 334+61, OFF 18' LT

322+00 324+00 326+00 328+00 330+00 332+00 334+00

C/L STH 131

BAD. FE

ADJUSTING STEEL PLATE BEAM GUARD,
POST 1, 25 LF

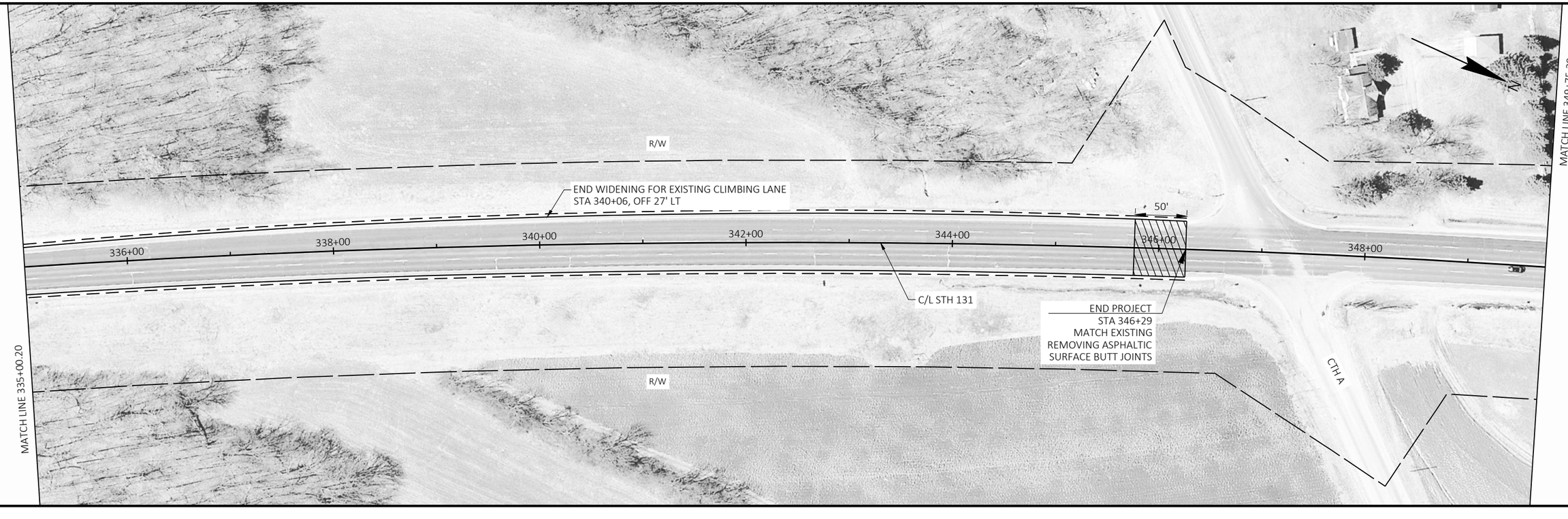
MATCH LINE 320+25.20

R/W

PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PLAN	SHEET 39	E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 08-pn

PLOT DATE : 10/19/2022 4:40 PM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:100 FT



2

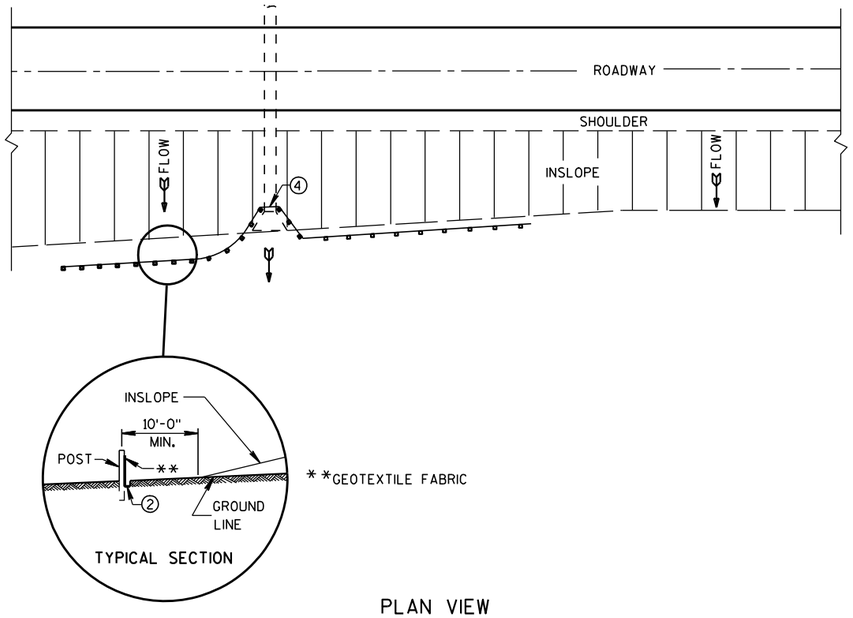
PROJECT NO: 5130-05-63	HWY: STH 131	COUNTY: MONROE	PLAN	SHEET 40	E

FILE NAME : W:\51300563\C3D\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - 09-pn
PLOT DATE : 10/19/2022 4:40 PM
PLOT BY : CORONA WOYCHIK
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

Standard Detail Drawing List

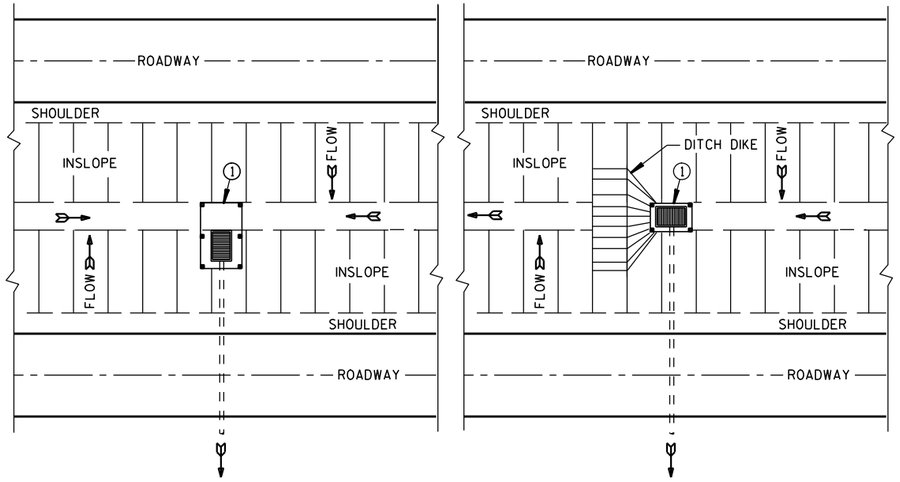
08E09-06	SILT FENCE
09G02-05A	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05B	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
09G02-05C	BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION
12A03-10	NAME PLATE (STRUCTURES)
13A08-01	ASPHALTIC RUMBLE STRIPS AT INTERSECTION
13A11-03A	2-LANE RURAL CENTER LINE 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
14B18-06A	STEEL PLATE BEAM GUARD, CLASS "A" (AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS)
14B20-11A	STEEL THRIE BEAM STRUCTURE APPROACH
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
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C08-22B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C12-09B	TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE
15C18-06C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-07A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-05A	PAVEMENT MARKING (INTERSECTIONS)
15C35-05B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-05C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D33-07	TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

6



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



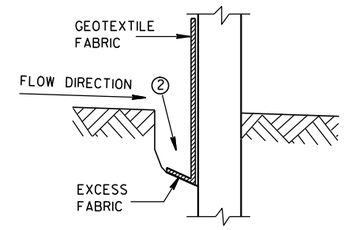
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

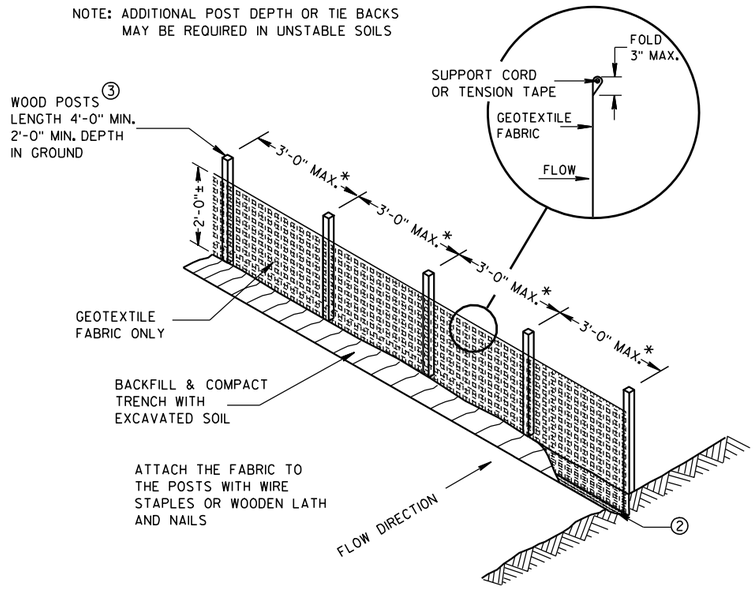
GENERAL NOTES

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

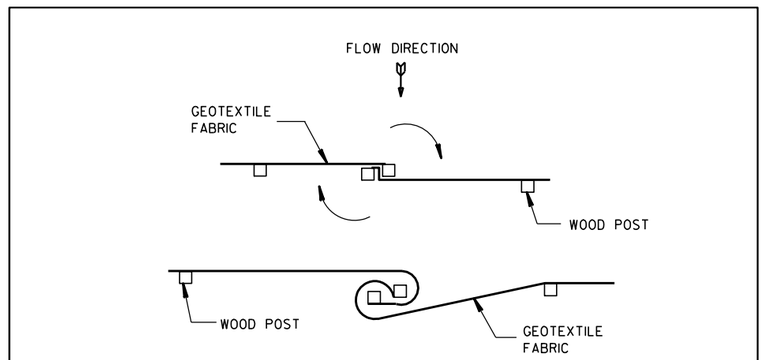
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



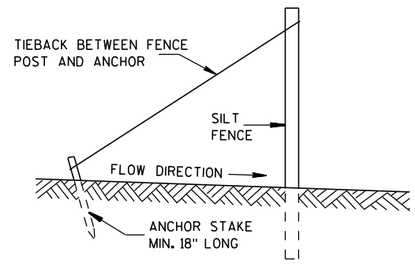
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

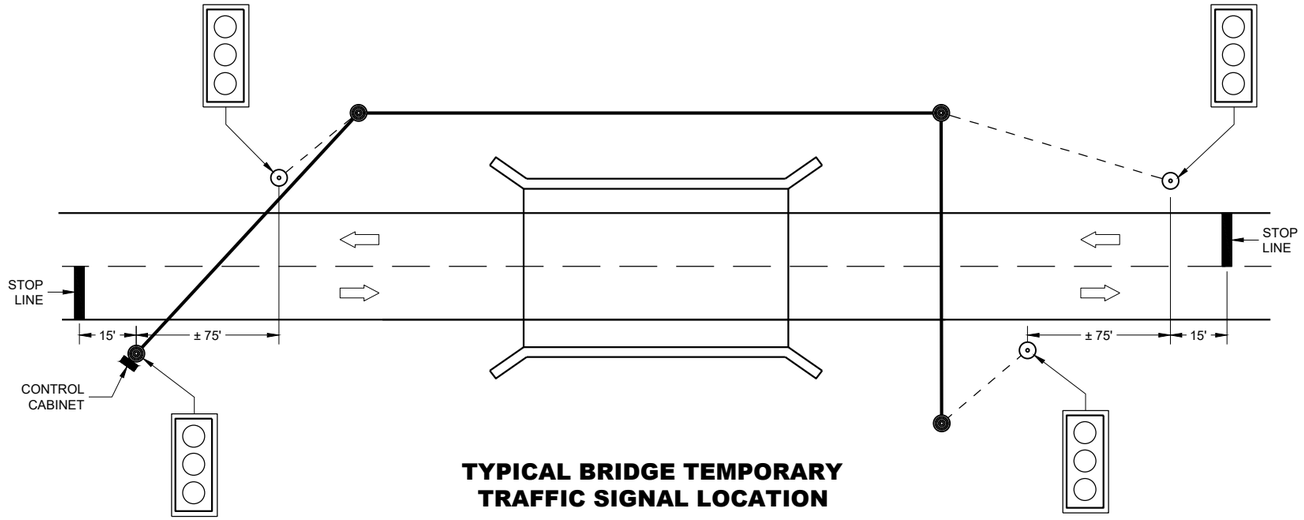
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

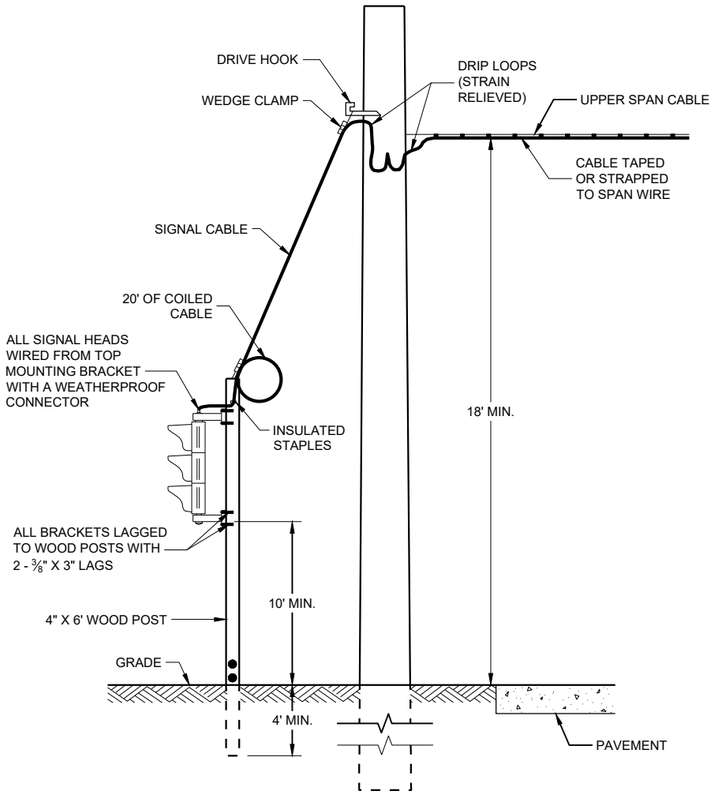
S.D.D. 8 E 9-6

6

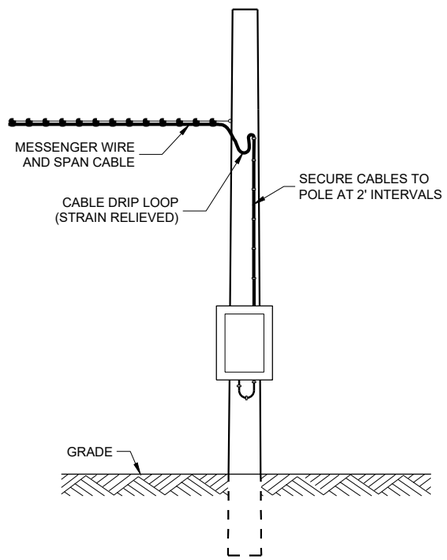
S.D.D. 8 E 9-6



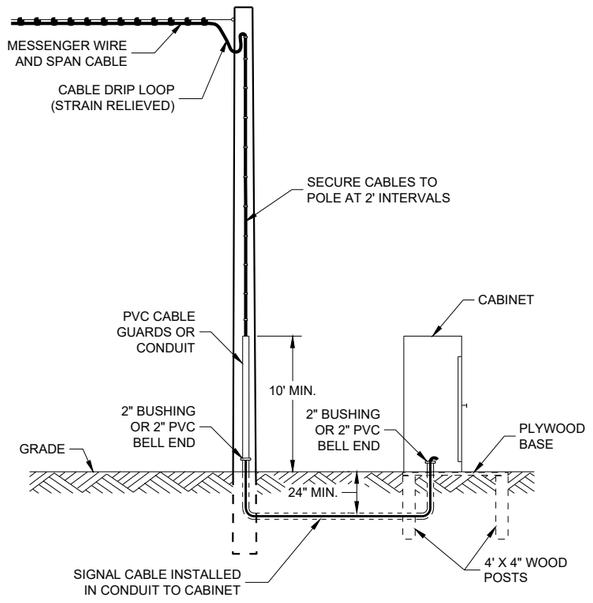
TYPICAL BRIDGE TEMPORARY TRAFFIC SIGNAL LOCATION



TYPICAL DROP TO TRAFFIC SIGNAL FACE



POLE MOUNT CABINET INSTALLATION



GROUND MOUNT CABINET INSTALLATION

LEGEND

- WOOD POLE (NON-BREAKAWAY)
- WOOD POST (BREADAWAY)
- SIGNAL CABLE
- SIGNAL CABLE W/MESSENGER
- DIRECTION OF TRAFFIC
- LED TRAFFIC SIGNAL WITH BACKPLATE (3-12")

GENERAL NOTES

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

POLE MOUNTED TRAFFIC SIGNAL CONTROL CABINET MAY BE MOUNTED ON THE SERVICE POLE IF THE ELECTRICAL UTILITY ALLOWS THE INSTALLATION.

WHEN UTILITY POLES ARE USED TO SPAN THE TEMPORARY OVERHEAD CABLE, WRITTEN PERMISSION MUST BE OBTAINED FROM THE OWNER OF THE POLES AND GIVEN TO THE PROJECT MANAGER. ALL PERTINENT UTILITY AND CODE CLEARANCES SHALL BE MAINTAINED.

WOOD POLES (NON-BREAKAWAY) SHALL BE NO CLOSER TO EDGE OF PAVEMENT THAN OFFSET DISTANCE CHART ALLOWS OR 4 FEET BEHIND PROTECTIVE BARRIER (BEAM GUARD, ETC.).

WOOD POSTS (BREAKAWAY) SHALL BE NO CLOSER THAN 2 FEET OUTSIDE OF SHOULDER.

VERTICAL CLEARANCE ETC. PER NEC.

TRAFFIC SIGNAL FACES SHALL BE TYPICALLY PLACED 12 FEET FROM EDGE OF PAVEMENT.

EACH TRAFFIC SIGNAL SHALL HAVE A BACKPLATE.

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.

MINIMUM POLE LENGTHS	CLASS	POLE BURIAL DEPTHS
25'	V	5'
30'	V	6'
35'	IV	7'
40'	IV	8'
45'	IV	9'

OFFSET DISTANCES FOR TEMPORARY NON-BREAKAWAY POLES	
SPEED LIMIT	OFFSET DISTANCE*
GREATER THAN 45 MPH	18 FT
45 MPH OR LESS	12 FT
45 MPH OR LESS W/CURBS	2 FT

* NOTE: OFFSET MEASURED FROM OUTER EDGE OF OUTSIDE THRU LANE.

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Ahmet Demirbilek — ROADWAY STANDARDS DEVE ENGINEER

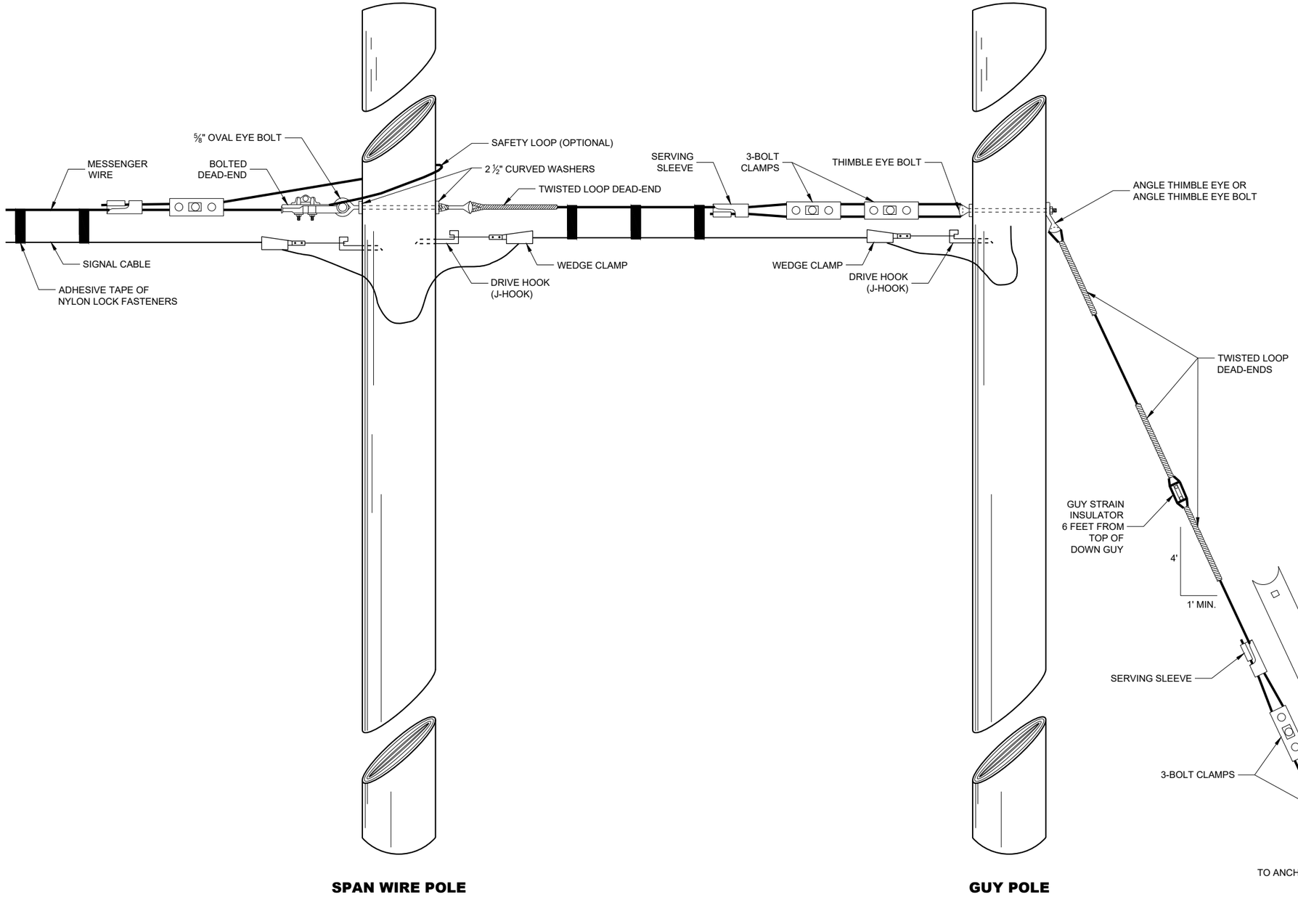
FHWA

6

SDD09G02 - 05a
SDD09G02 - 05a

GENERAL NOTES

USE ¾" DRILL IN WOOD POLE TO PROVIDE FOR ⅝" BOLTS.



SPAN WIRE POLE

GUY POLE

TYPICAL DEAD-ENDINGS OR GUYING

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015 — DATE
/S/ Ahmet Demerbilek — ROADWAY STANDARDS DEVE ENGINEER

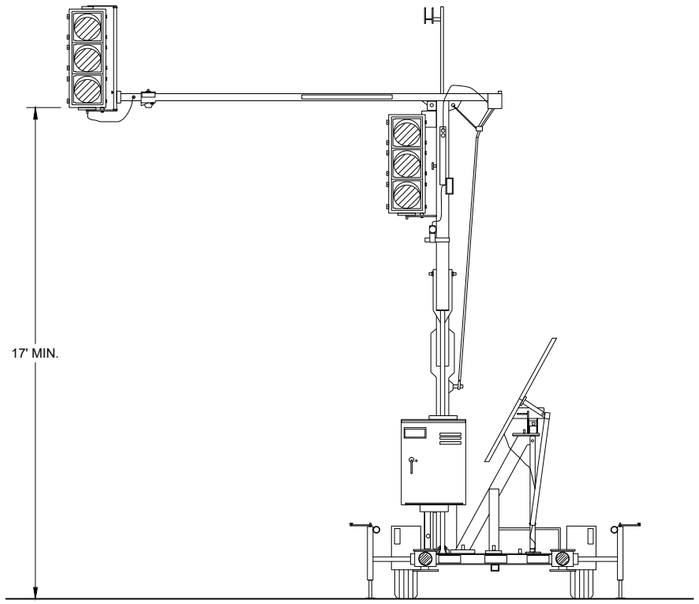
FHWA

6

SDD09G02 - 05b

6

SDD09G02 - 05b

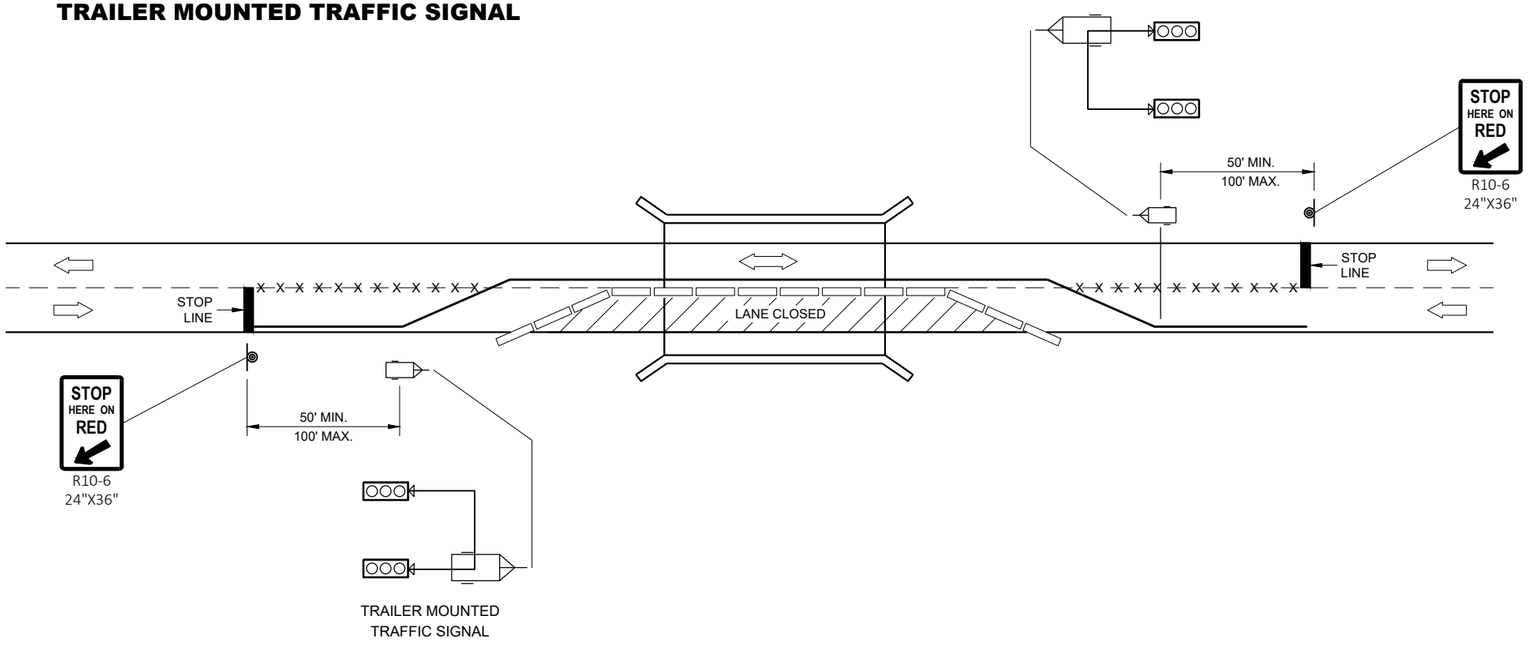


TRAILER MOUNTED TRAFFIC SIGNAL

GENERAL NOTES

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

SIGNING, PAVEMENT MARKING AND LANE CONTROL REQUIREMENTS SHALL CONFORM TO STANDARD DETAIL DRAWING 15D33.



TYPICAL TRAILER MOUNTED TRAFFIC SIGNAL LOCATION

LEGEND

- POST MOUNTED SIGN
- TEMPORARY PRECAST CONCRETE BARRIER
- TRAILER MOUNTED TRAFFIC SIGNAL
- REMOVE PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC

BRIDGE TEMPORARY TRAFFIC SIGNAL INSTALLATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2015
DATE

/S/ Ahmet Demerbilek
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD09G02 - 05c

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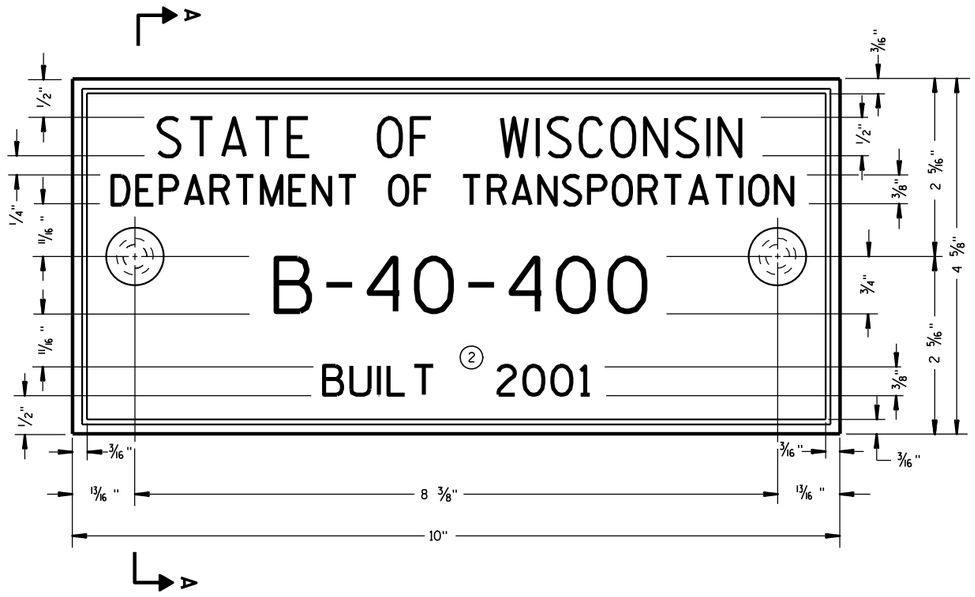
SDD09G02 - 05c



TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)

NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

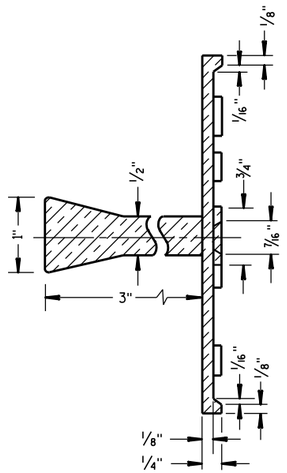
GENERAL NOTES

NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

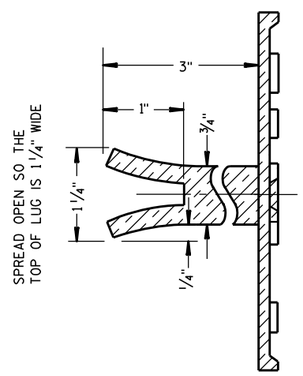
THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

(1) EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

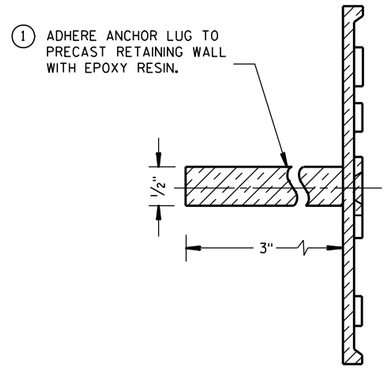
(2) REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.



SECTION A-A



ALTERNATE LUG



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

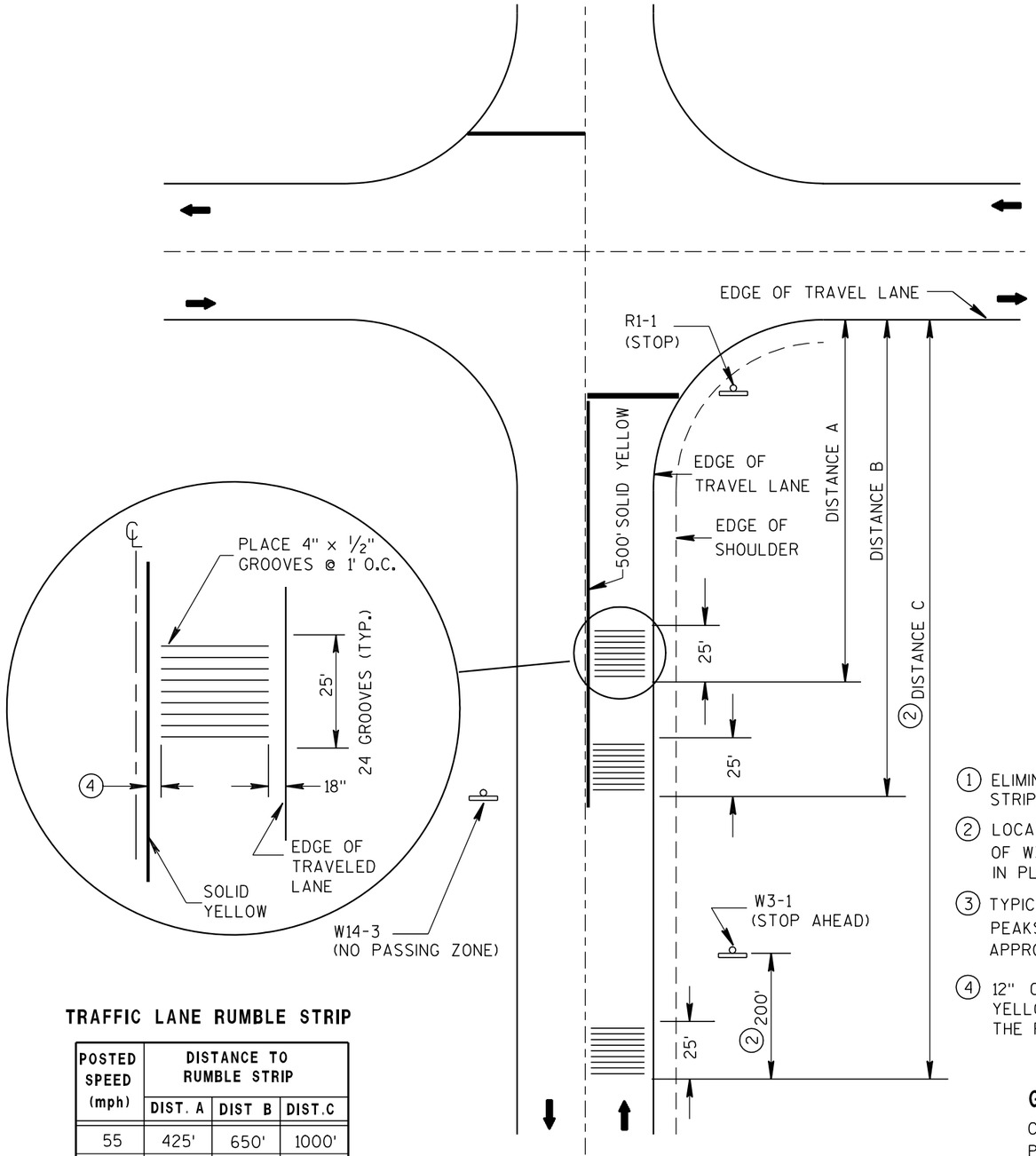
3/26/10 DATE

/S/ Scot Beck -- CHIEF STRUCTURAL DEVELOP ENGINEER

FHWA

6

S.D.D. 12 A 3-10



ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

PLAN VIEW

RUMBLE STRIP LOCATION

TRAFFIC LANE RUMBLE STRIP

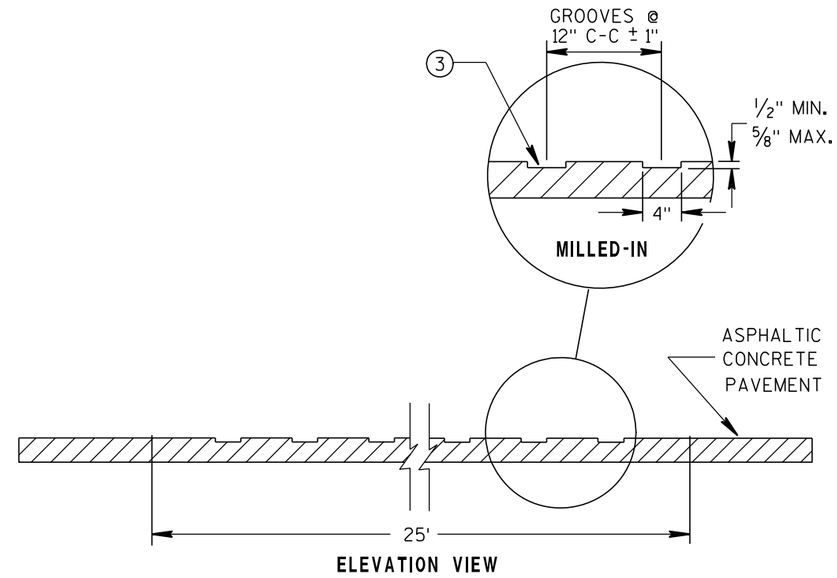
POSTED SPEED (mph)	DISTANCE TO RUMBLE STRIP		
	DIST. A	DIST B	DIST.C
55	425'	650'	1000'
50	325'	450'	800'
45	275'	400'	650'
40	225'	(1)	550'
35	175'	(1)	475'
≤ 30	125'	(1)	425'

(1) ELIMINATE THE MIDDLE SET OF RUMBLE STRIPS.

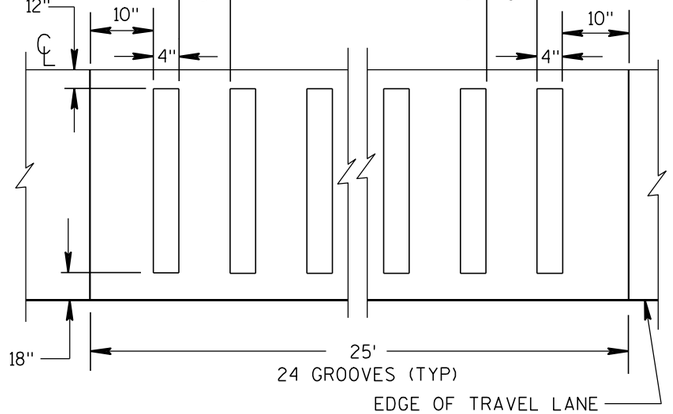
(2) LOCATE RUMBLE STRIP 200' IN ADVANCE OF W3-1 SIGN AS SHOWN. IF W3-1 IS NOT IN PLACE, USE DISTANCE C.

(3) TYPICAL VERTICAL VARIATION BETWEEN PEAKS AND VALLEYS WITHIN THE CUT APPROXIMATELY 1/16"

(4) 12" CLEAR BETWEEN THE SOLID YELLOW LINE AND THE EDGE OF THE RUMBLE.



ELEVATION VIEW



PLAN VIEW

ASPHALTIC PAVEMENT MILLED-IN

GENERAL NOTES

CONTRACTOR SHALL CONFIRM RUMBLE STRIP LOCATION WITH THE ENGINEER PRIOR TO INSTALLATION. THE ENGINEER MAY MODIFY THE RUMBLE STRIP LOCATION AS FIELD CONDITIONS DICTATE.

WHEN ASPHALTIC PAVEMENT IS NEW IN THE RUMBLE AREA THE CONTRACTOR SHALL ALLOW THE PAVEMENT TO CURE A MINIMUM OF 7 DAYS PRIOR TO RUMBLE INSTALLATION.

PAVEMENT MARKING AND SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

ASPHALTIC RUMBLE STRIPS AT INTERSECTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/17/2011
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS I 47
ENGINEER

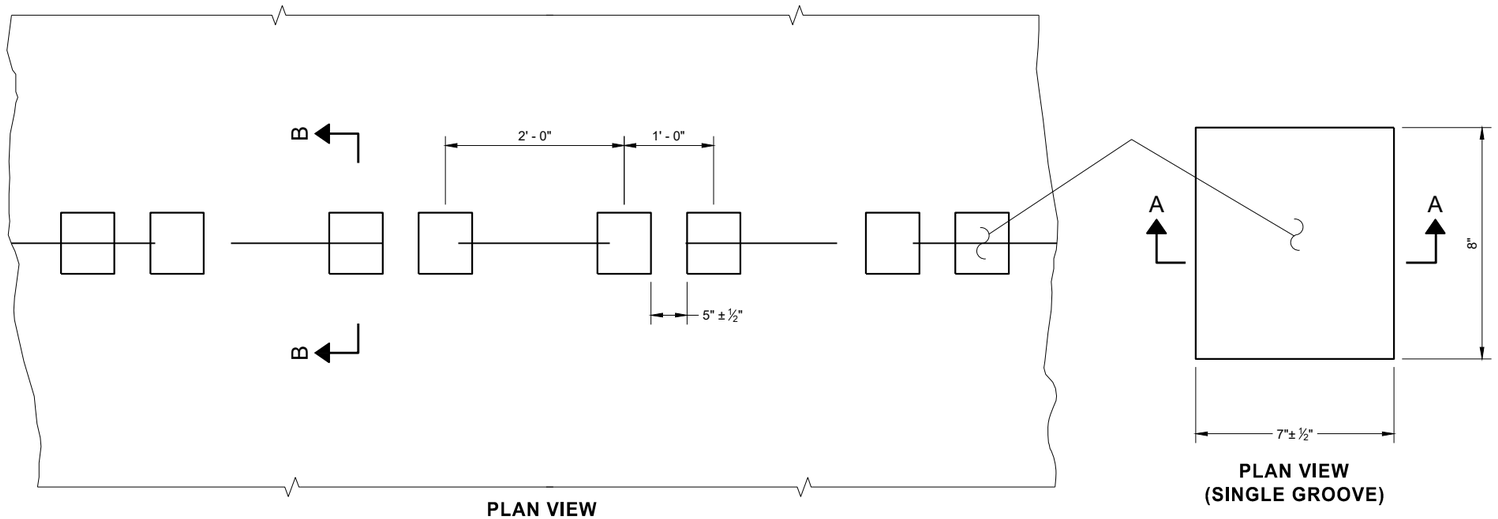
FHWA

6

S.D.D. 13 A 8-1

6

S.D.D. 13 A 8-1



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

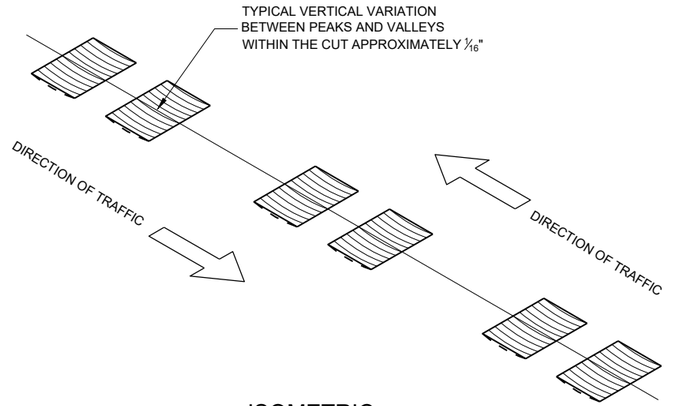
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

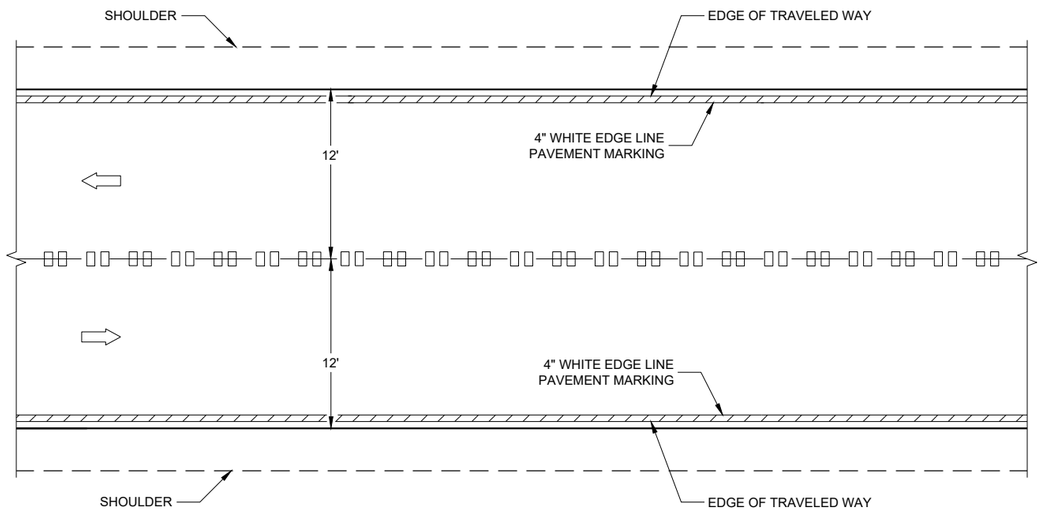
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

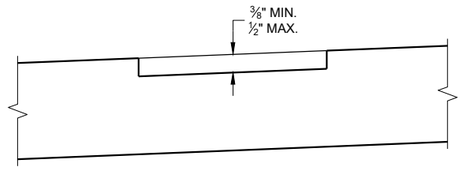
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



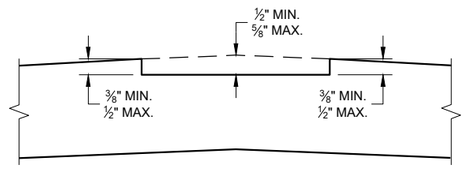
ISOMETRIC



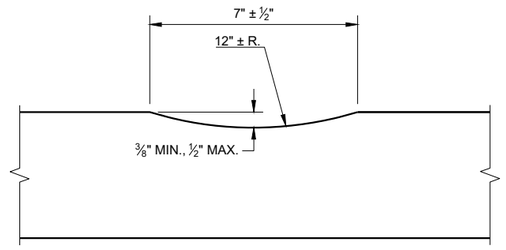
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

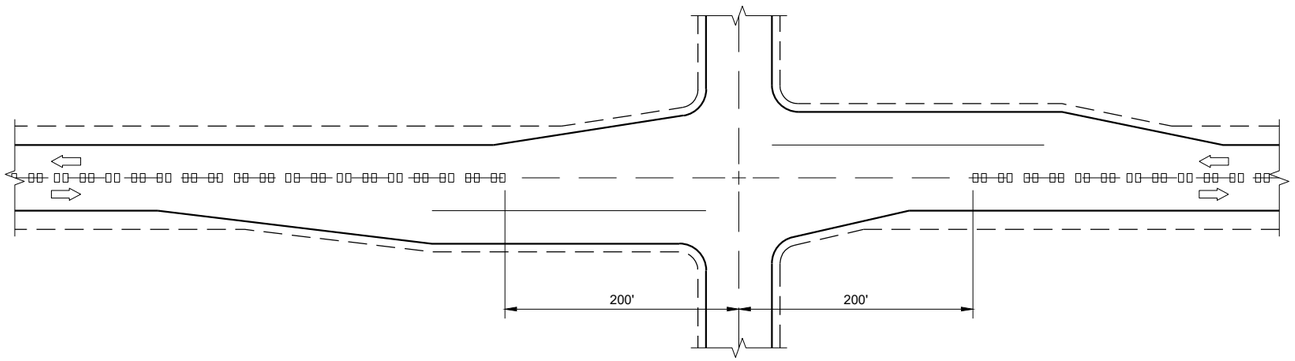
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

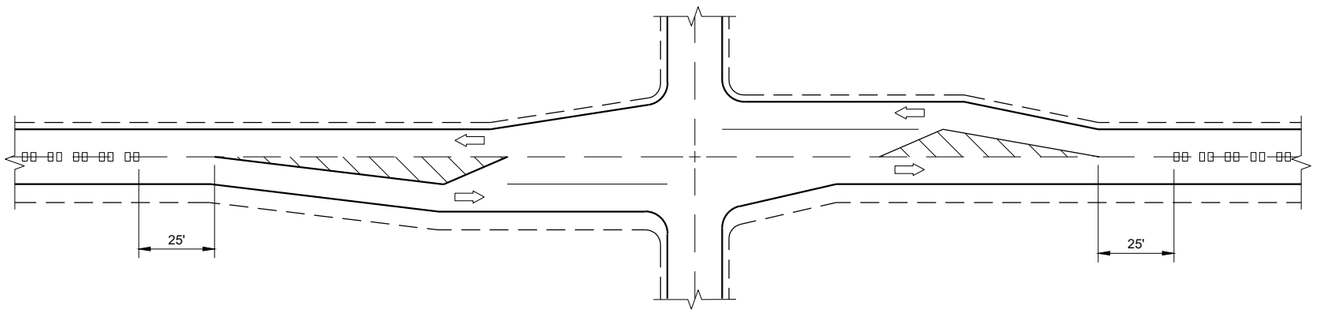
SDD 13A11 - 03a

6

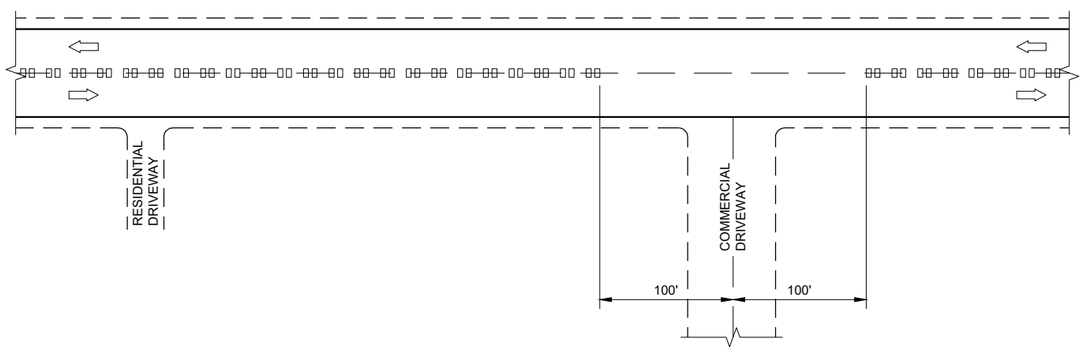
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



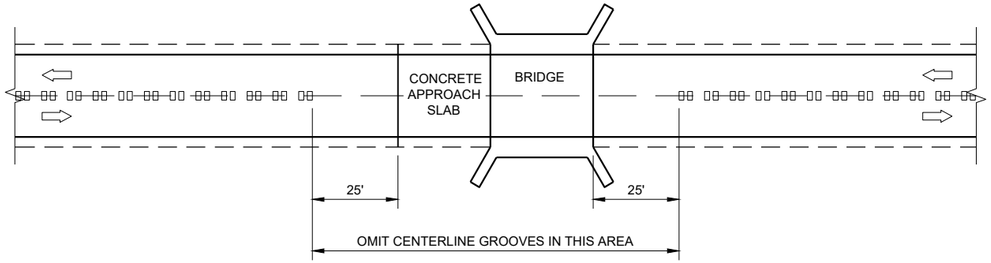
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



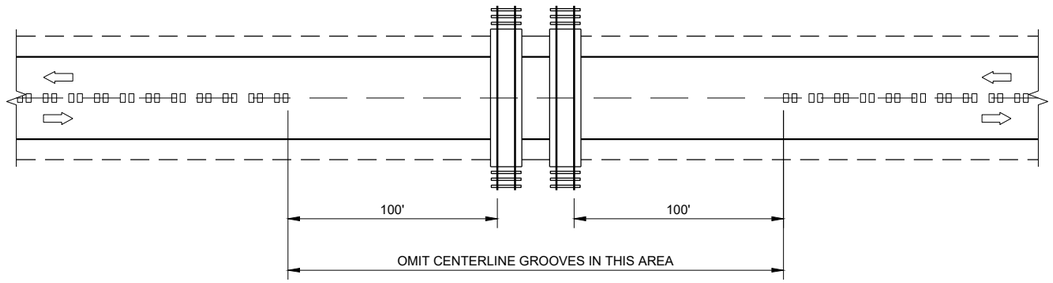
CENTERLINE GROOVES AT DRIVEWAYS (1)

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

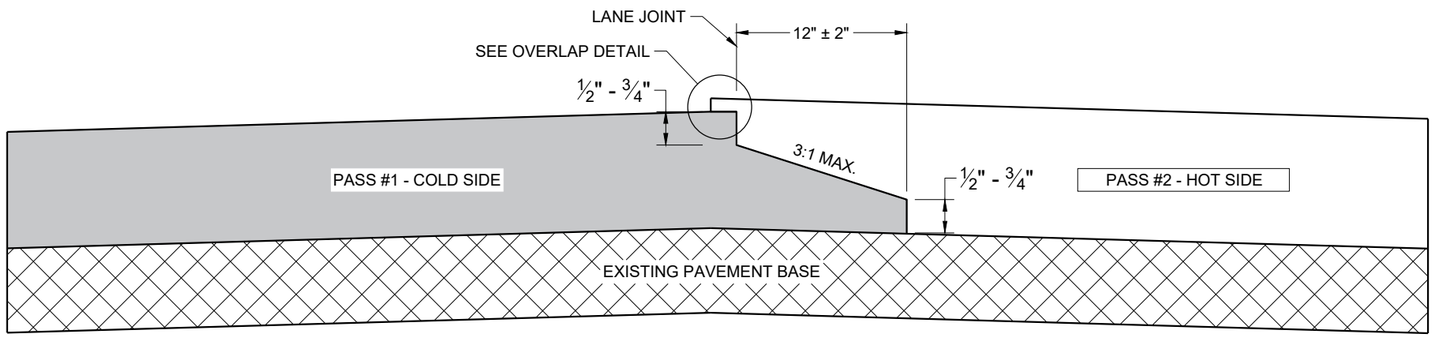
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE

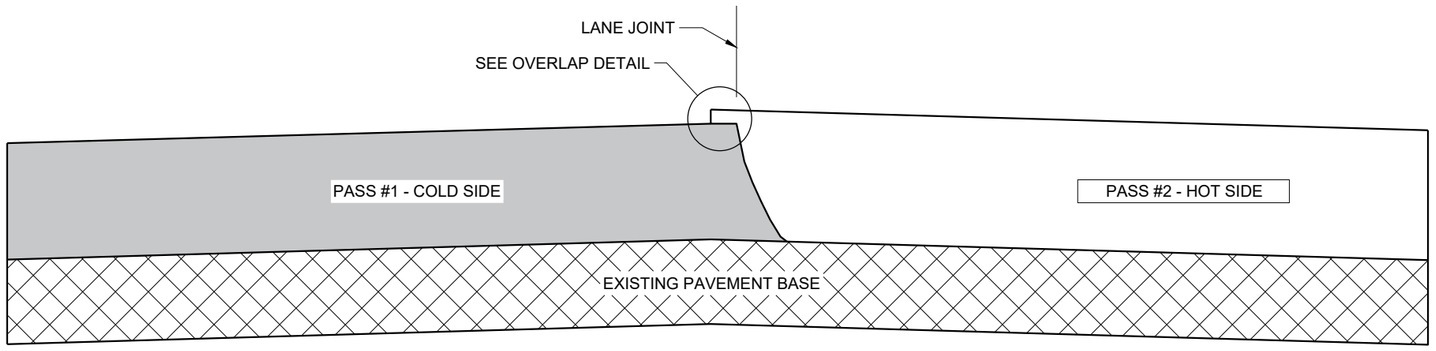
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

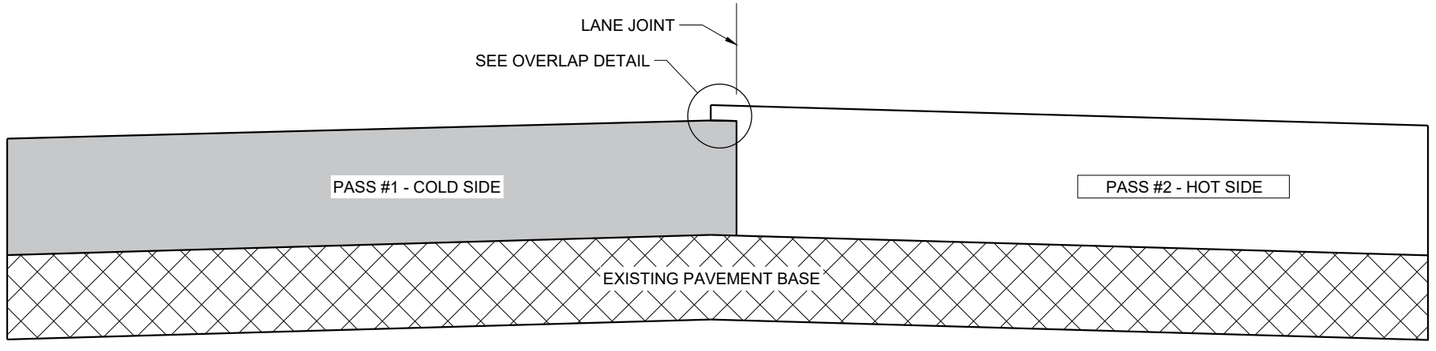
6
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

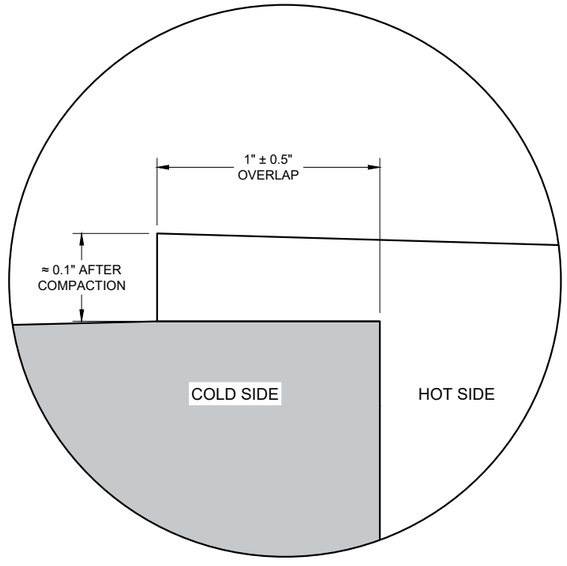
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

HMA LONGITUDINAL JOINTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGIN

FHWA

6

SDD 13C19 - 03

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SDD 13C19 - 03

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.

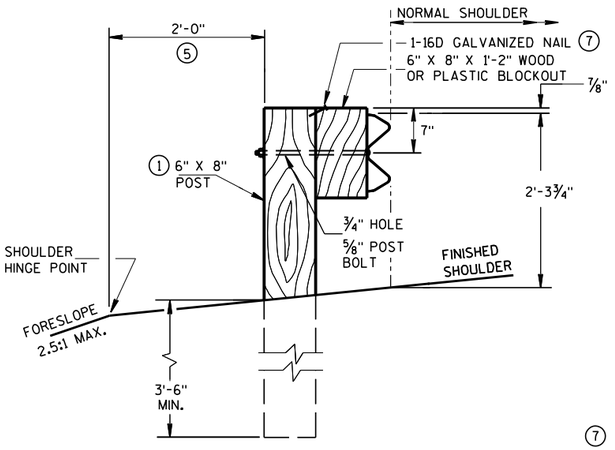
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(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.

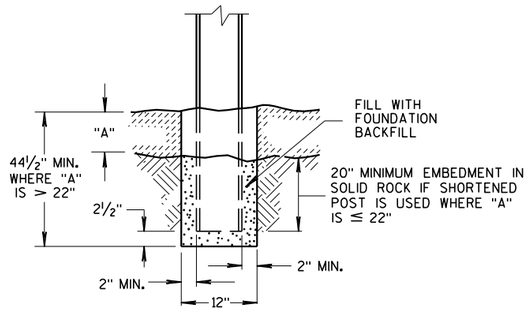
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

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

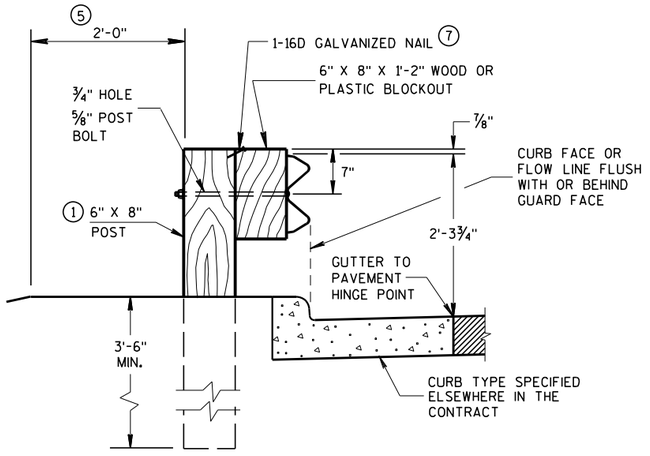
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



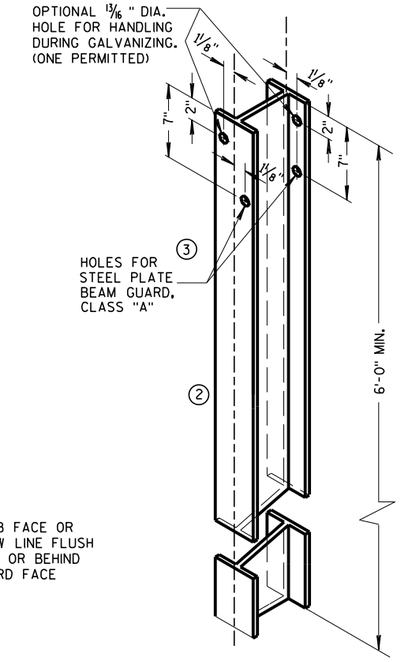
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



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

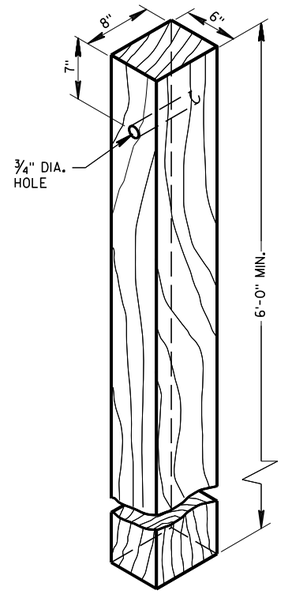


END VIEW
LOCATED ALONG A CURBED ROADWAY

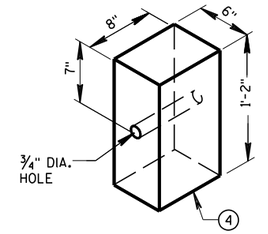


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

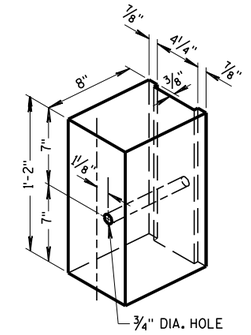
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



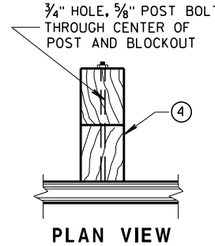
WOOD POST
(6"X8") NOMINAL



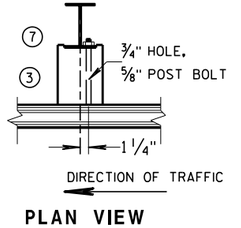
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



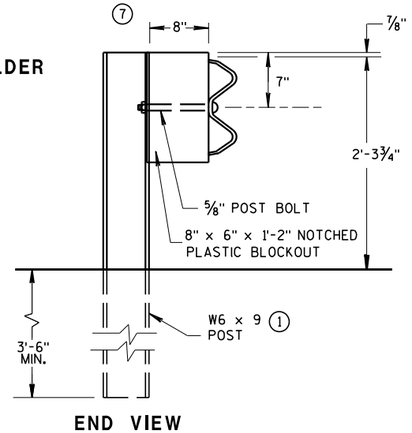
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



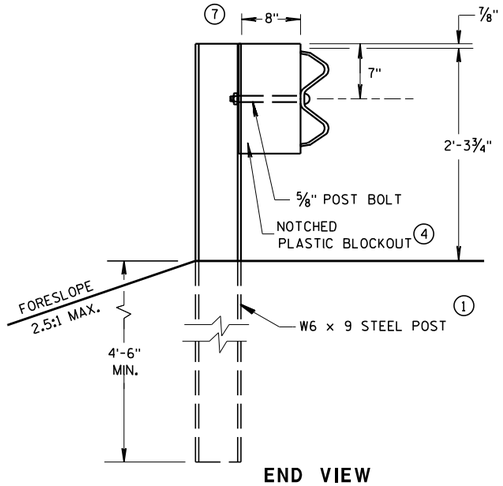
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



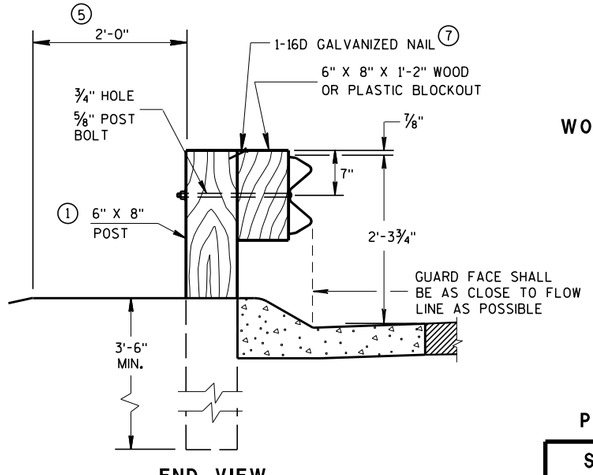
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



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

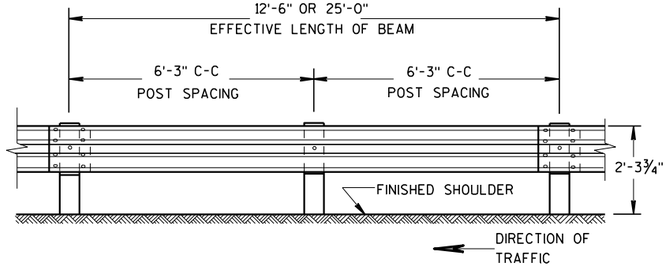
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

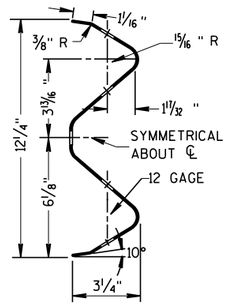
S.D.D. 14 B 15-11a

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

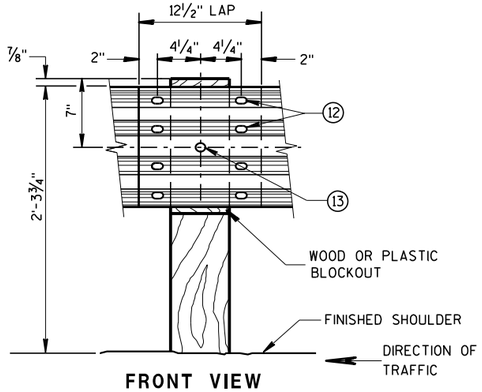


FRONT VIEW

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.

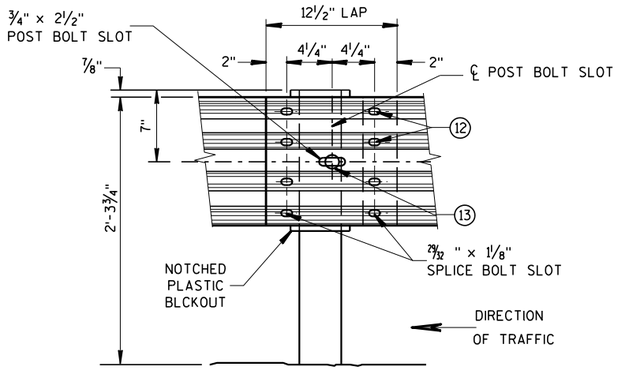
(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINA. START REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 100 FEET (MAX.) TO THE END OF GUARDRAIL RUN, USING A MINIMUM OF 3 REFLECTORS.

(12) 8 -5/8" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.

FRONT VIEW

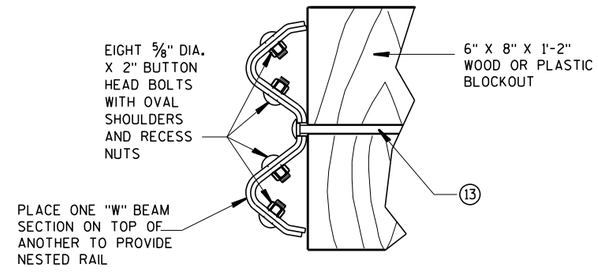
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

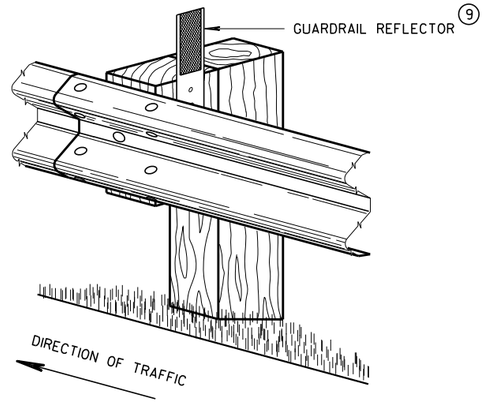
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD



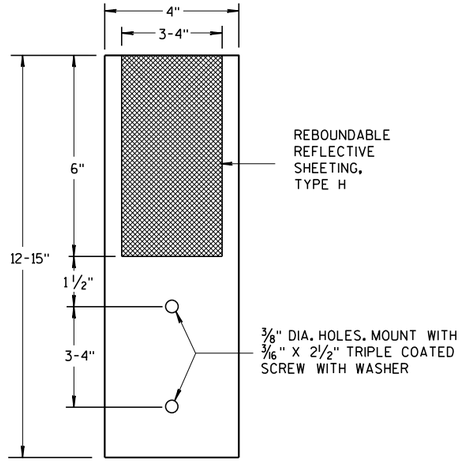
NESTED W BEAM (NW)

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

* 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 52
DEPARTMENT OF TRANSPORTATION

6

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

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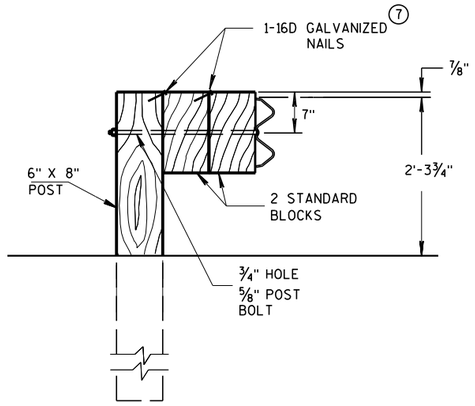
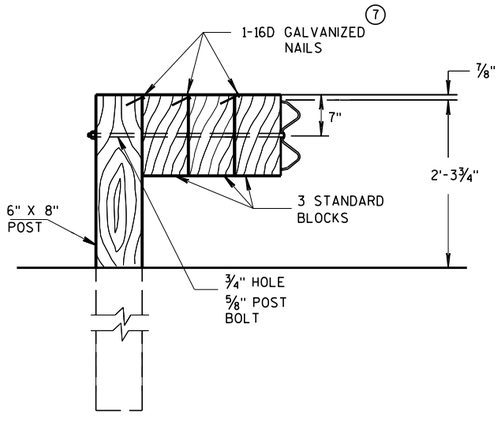
S.D.D. 14 B 15-11b



DETAIL FOR DOUBLE BLOCKS

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

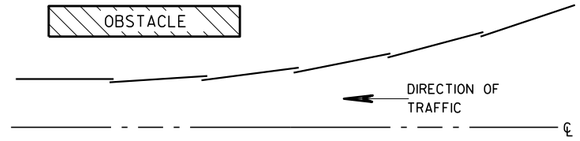


DETAIL FOR TRIPLE BLOCKS

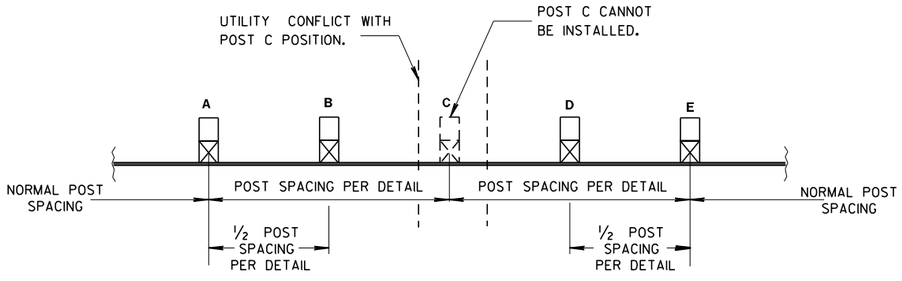
TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.

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



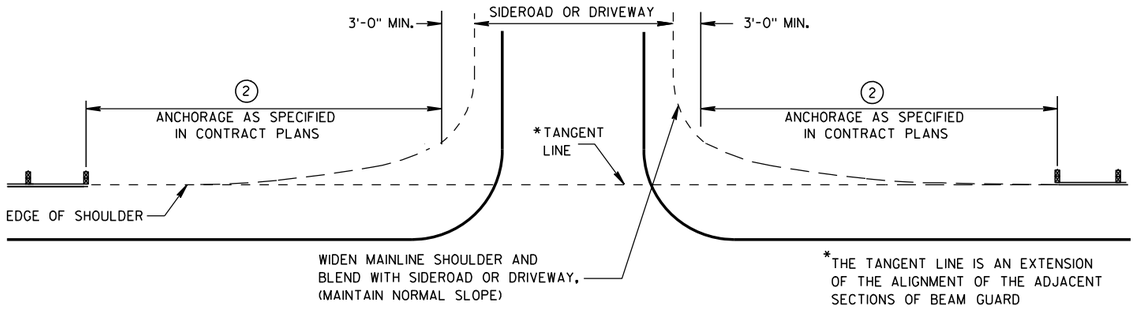
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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

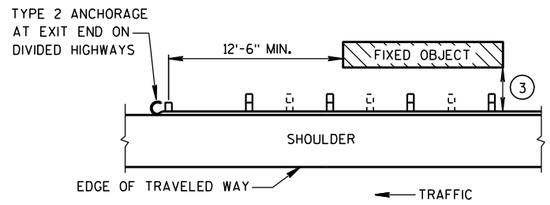
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



BEAM GUARD AT SIDEROADS OR DRIVEWAYS



BEAM GUARD AT OBSTACLES EXIT END - ONE WAY TRAFFIC

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE PERTINENT STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

W6 X 9 OR W6 X 8.5 STEEL POSTS WITH 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.

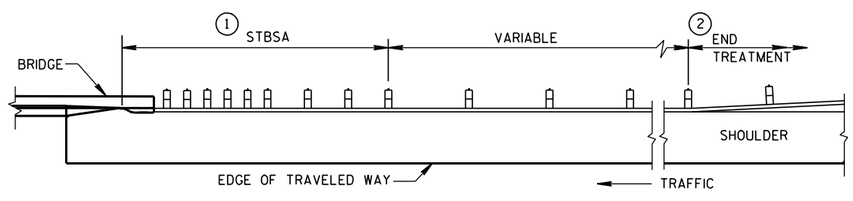
THE LOCATIONS AND LENGTHS OF BEAM GUARD ARE SHOWN ELSEWHERE IN THE PLAN.

(1) STEEL THRIE BEAM STRUCTURAL APPROACH (STBSA) - SEE CURRENT SDD 14B20.

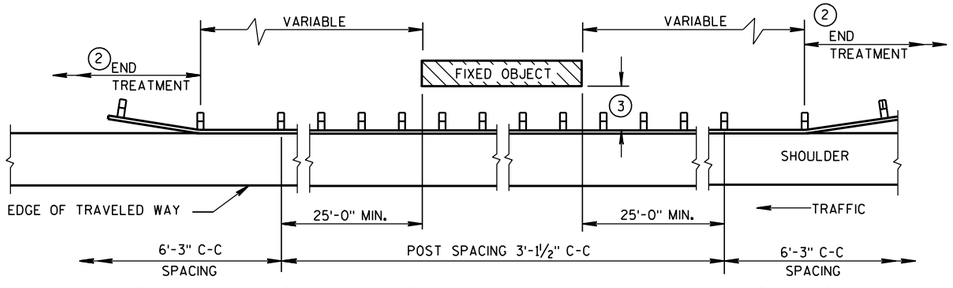
(2) USE AN APPROVED END TREATMENT FOR THE TRAFFIC APPROACH SIDE OF BRIDGE/OBSTACLES. USE TYPE 2 ANCHORAGE ONLY AT THE DOWNSTREAM ENDS OF BEAM GUARD LOCATED ALONG ROADWAYS WITH ONE WAY TRAFFIC.

(3)

MINIMUM LATERAL DISTANCE FROM FACE OF BEAM GUARD TO FIXED OBJECT	POST SPACING
3'-6"	3' - 1½"
4'-6"	6' - 3"

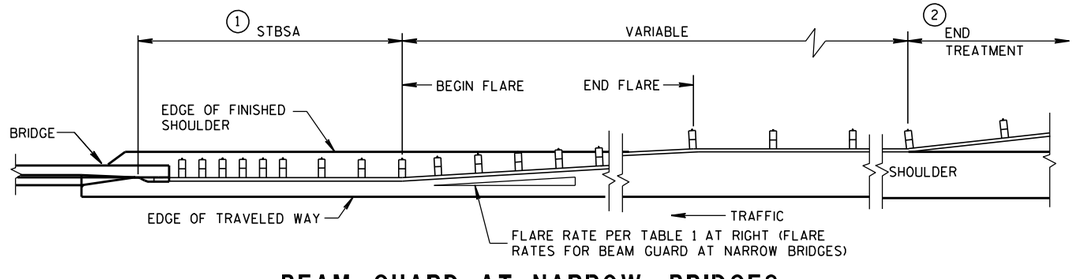


BEAM GUARD AT FULL WIDTH BRIDGES



BEAM GUARD AT OBSTACLES - TWO WAY TRAFFIC

(RAIL TO OBSTACLE CLEARANCE 3'-6" TO 4'-6")



BEAM GUARD AT NARROW BRIDGES
(FLARED TO SHOULDER EDGE, THEN PARALLEL TO ROADWAY)

TABLE 1
FLARE RATES FOR BEAM GUARD AT NARROW BRIDGES

POSTED SPEED (MPH)	FLARE RATE
25	13:1
30	15:1
35	16:1
40	18:1
45	21:1
50	24:1
55	26:1
65	30:1

STEEL PLATE BEAM GUARD CLASS "A" AT BRIDGES, OBSTACLES AND SIDEROADS/DRIVEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

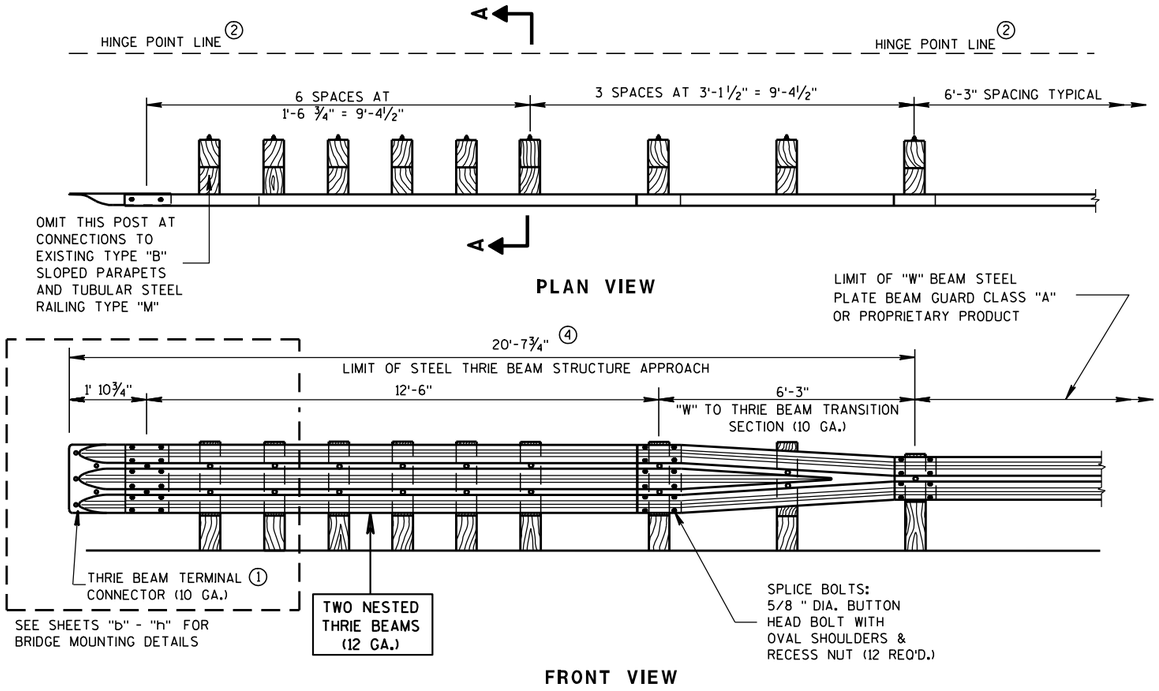
8-21-07
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

6

S.D.D. 14 B 18-6a



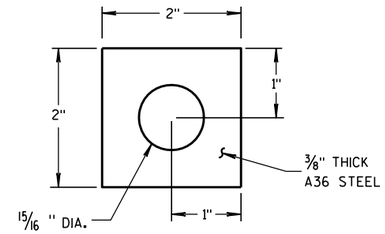


PLATE WASHER DETAIL

GENERAL NOTES

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

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

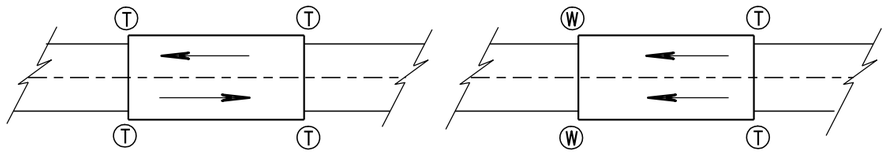
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 1/2" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

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

② MINIMUM EMBEDMENT SHALL BE 4'-0". WHERE EXISTING CONDITIONS DO NOT PERMIT THE APPROPRIATE EARTHWORK SHOWN ON THE PLAN TYPICAL SECTIONS OR DETAILS, THE ENGINEER MAY ALLOW THE REDUCTION OR ELIMINATION OF THE 2 FOOT DISTANCE TO THE HINGE POINT. OTHERWISE BUILD AS THE PLAN SHOWS OR AS THE ENGINEER DIRECTS. IF THE 2 FOOT DISTANCE TO THE HINGE POINT IS REDUCED OR ELIMINATED, INCREASE THE POST EMBEDMENT DEPTH TO 4'-6" OR MORE.

③ POST BOLTS ARE 5/8" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A 5/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A 5/8" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.

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



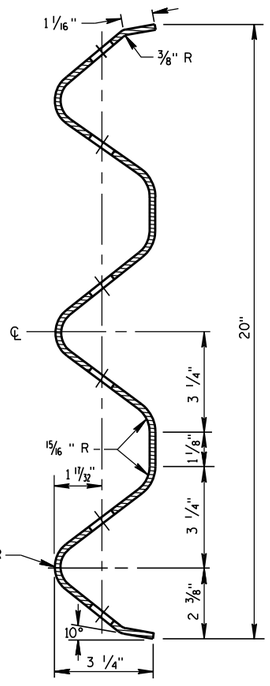
TWO WAY TRAFFIC

ONE WAY TRAFFIC

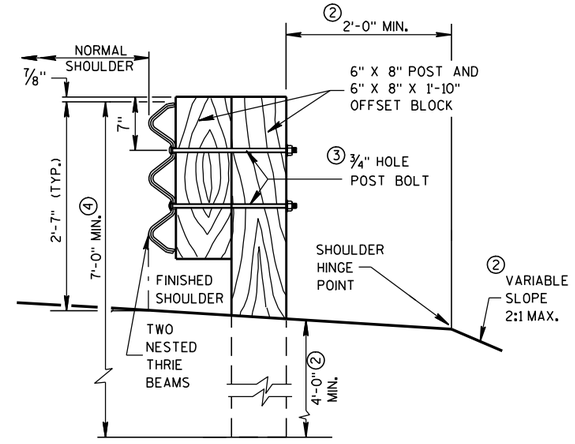
(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

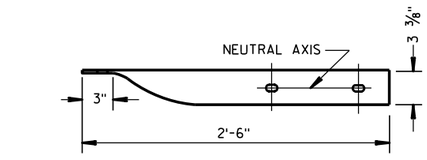
TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

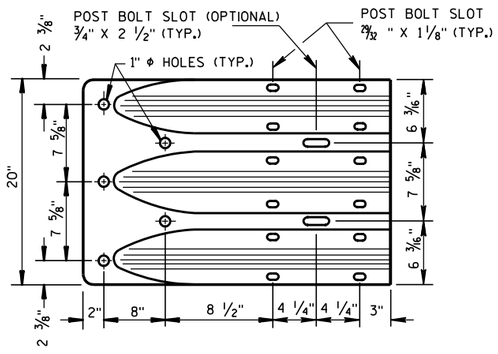


SECTION THRU THRIE BEAM RAIL ELEMENT

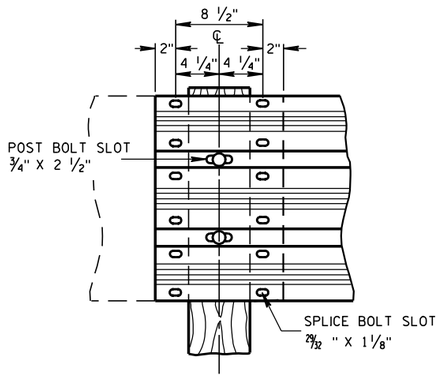


SECTION A-A





THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE

STEEL THRIE BEAM STRUCTURE APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

8/31/2012 — DATE

/S/ Jerry H. Zoss — ROADWAY STANDARDS ENGINEER

FHWA

BILL OF MATERIALS

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

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

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

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

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

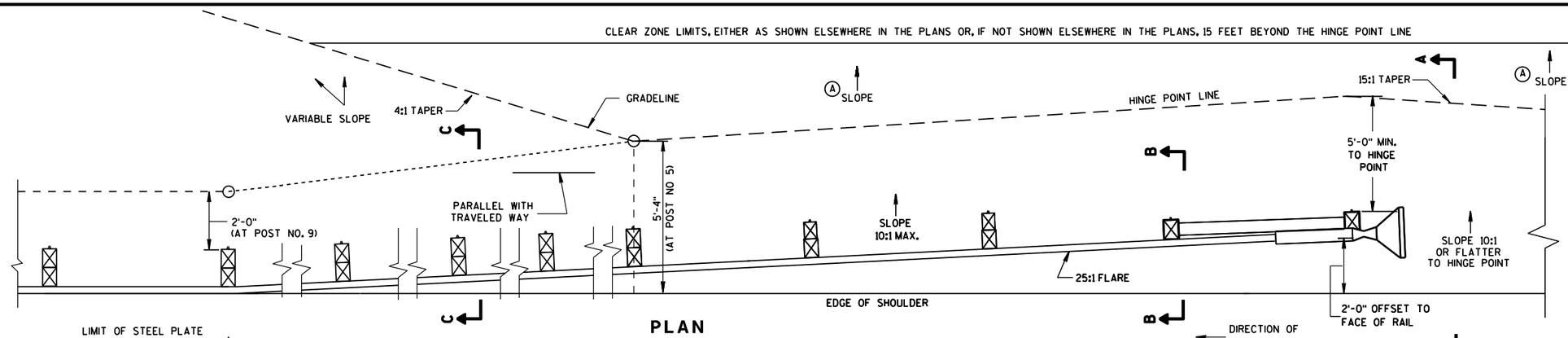
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

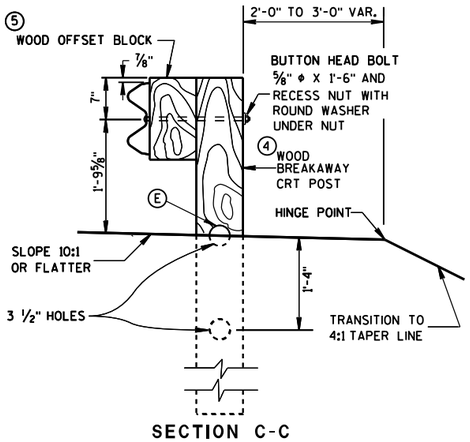
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

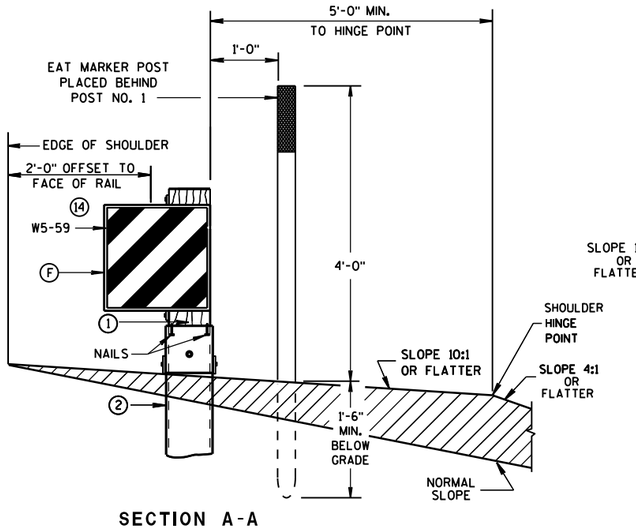
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

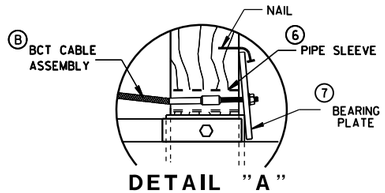
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

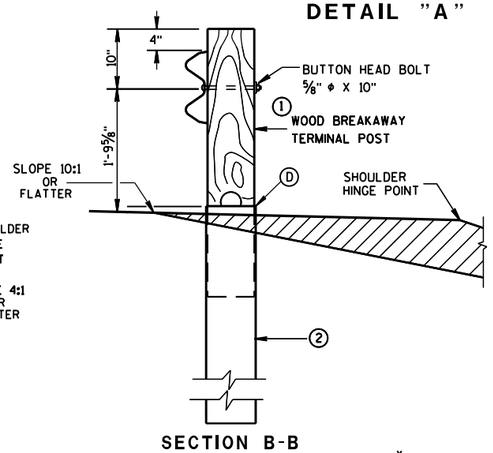
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

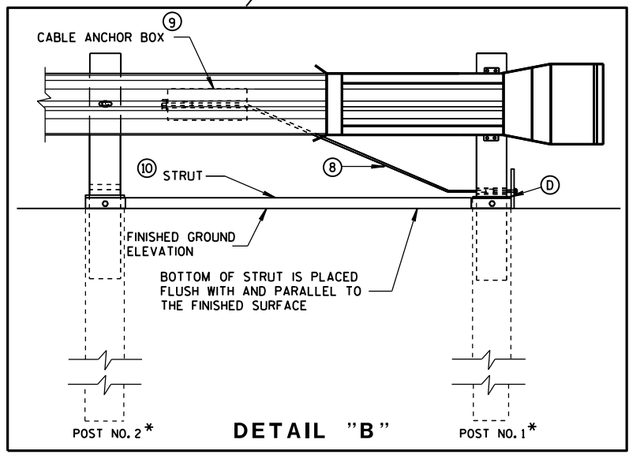












STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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

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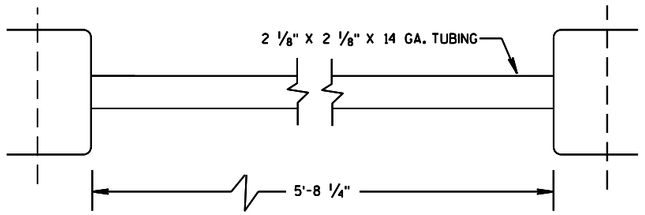
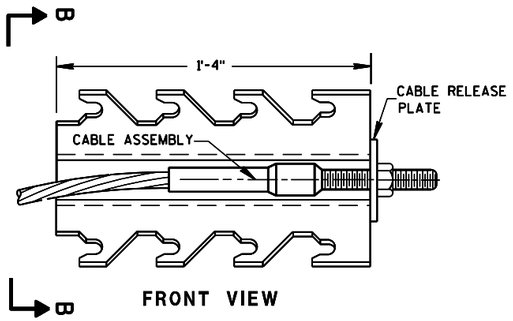
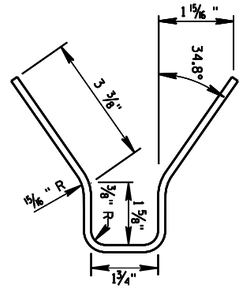
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL

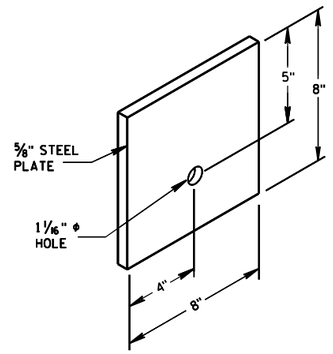


FRONT VIEW



SECTION B-B

⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

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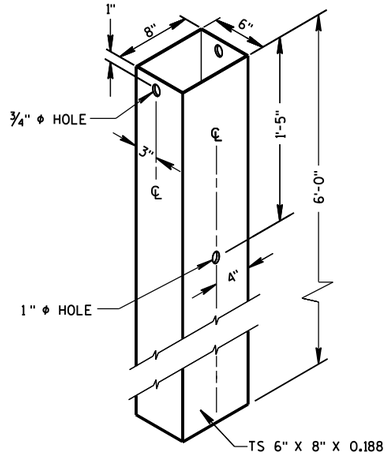
S.D.D. 14 B 24-9b

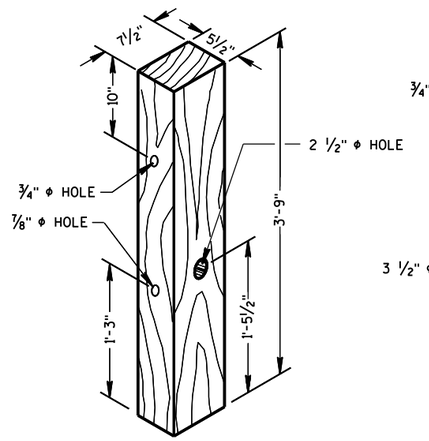
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

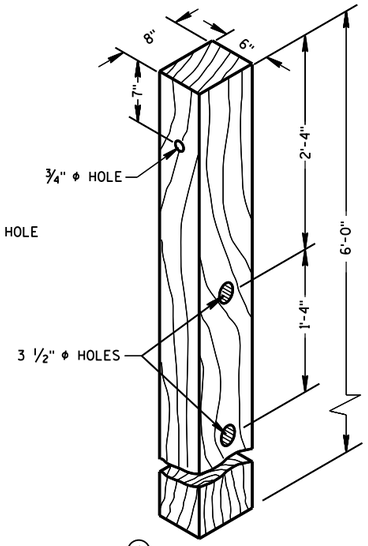
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

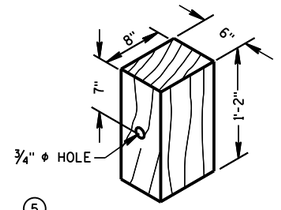


④ CRT POST
(POSTS NO'S 5-8

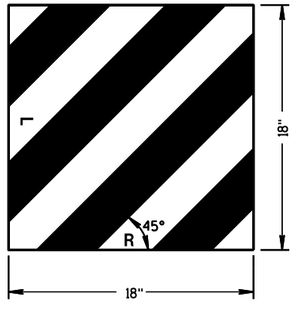
WOOD BREAKAWAY POSTS

GENERAL NOTES

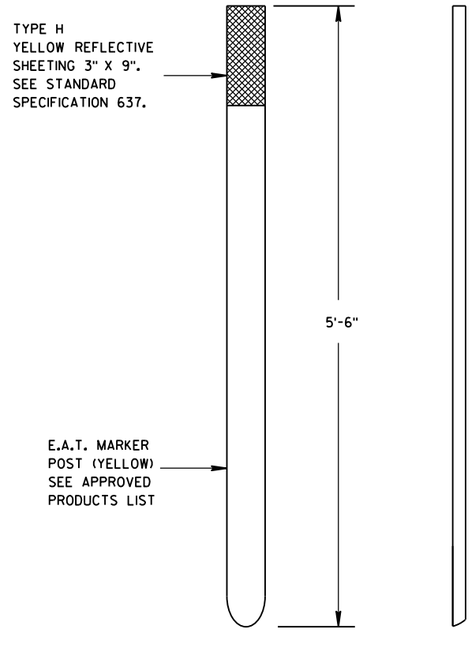
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, 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...

58

ENT

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

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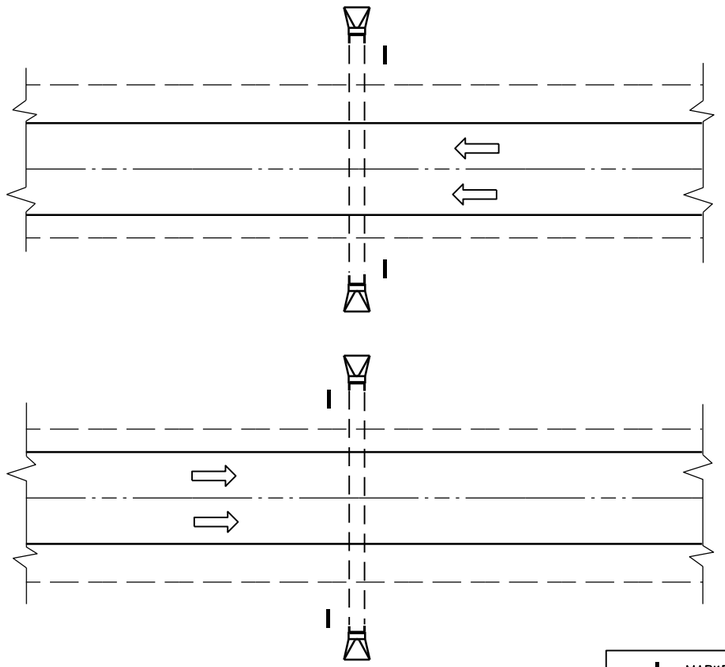
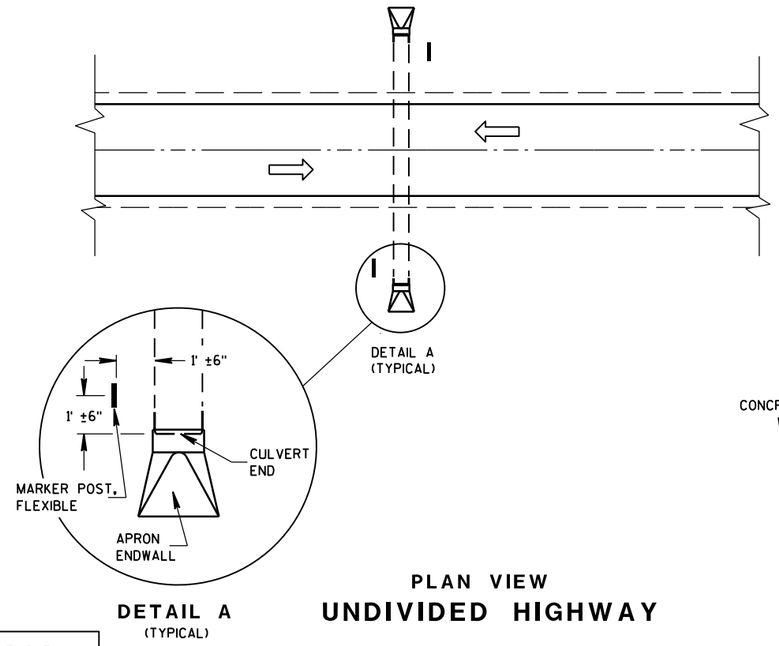
S.D.D. 14 B 24-9c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

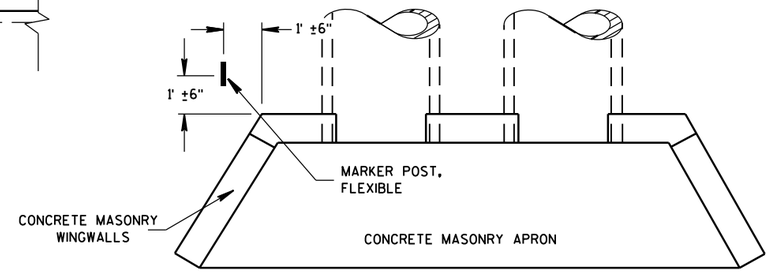
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

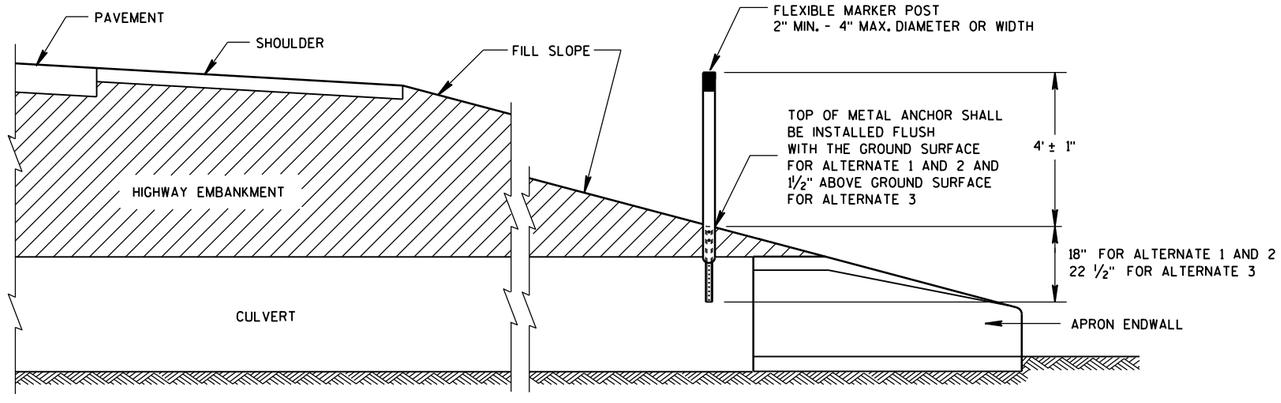
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

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

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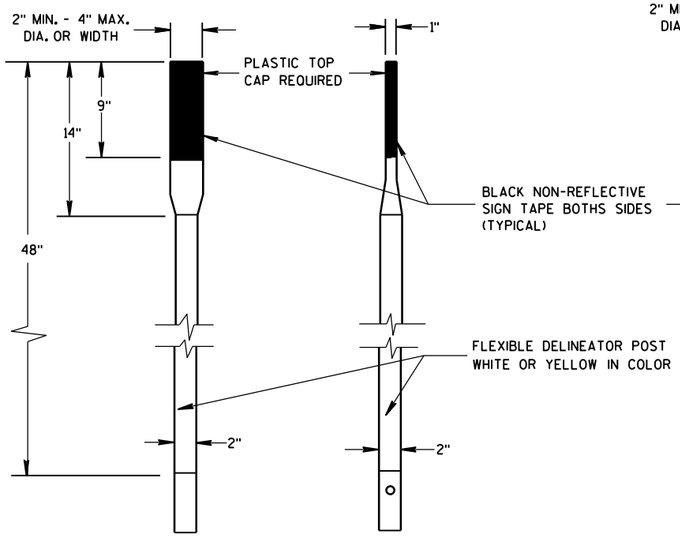
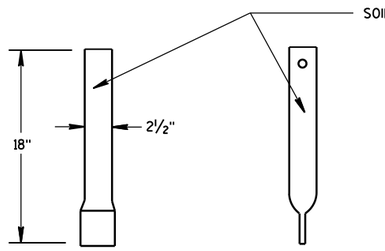
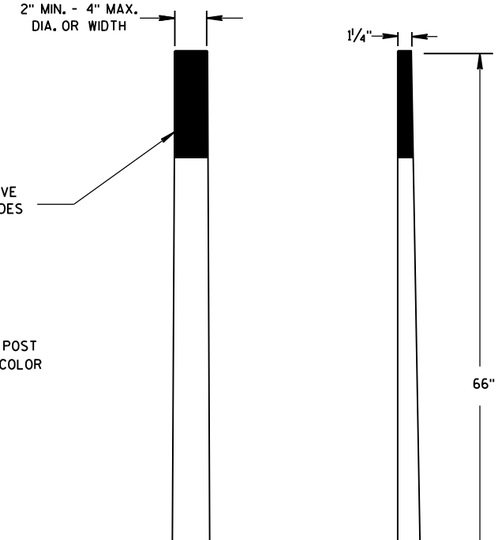
S.D.D. 15 A 3-2a





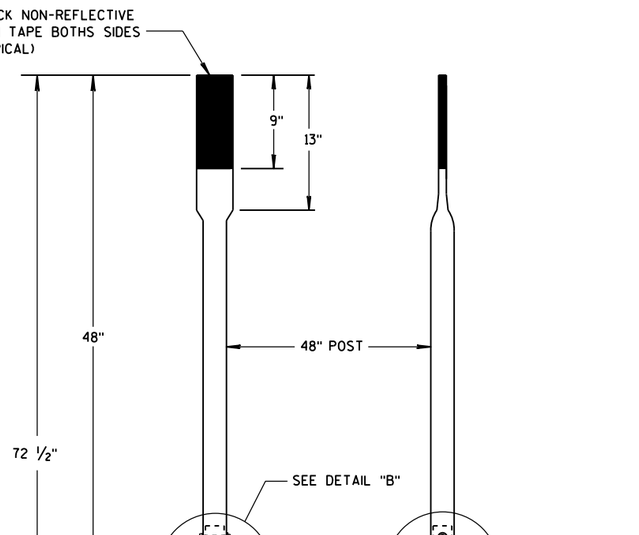
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

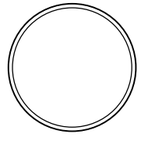
ALTERNATE 2



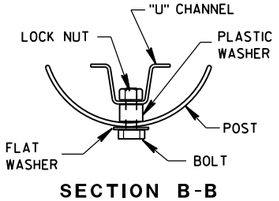
FRONT VIEW SIDE VIEW

ALTERNATE 3

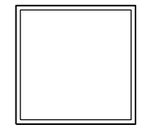
FLEXIBLE MARKER POSTS



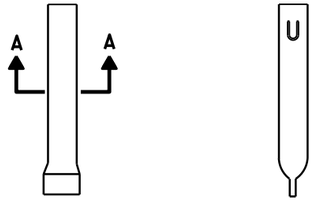
SECTION A-A



SECTION B-B

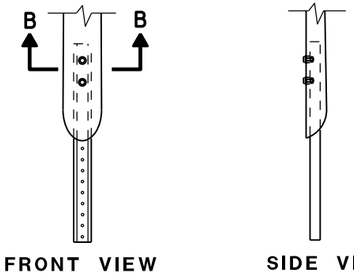


SECTION C-C



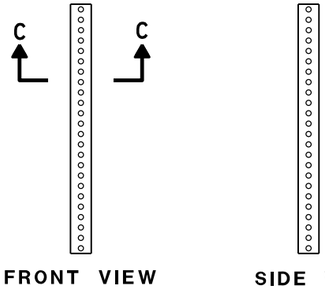
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

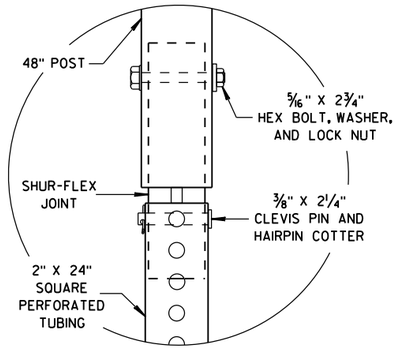
ALTERNATE 2



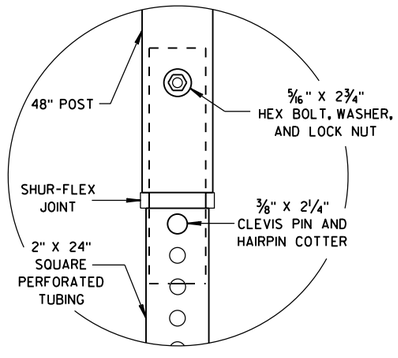
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 15 A 3-2b

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.

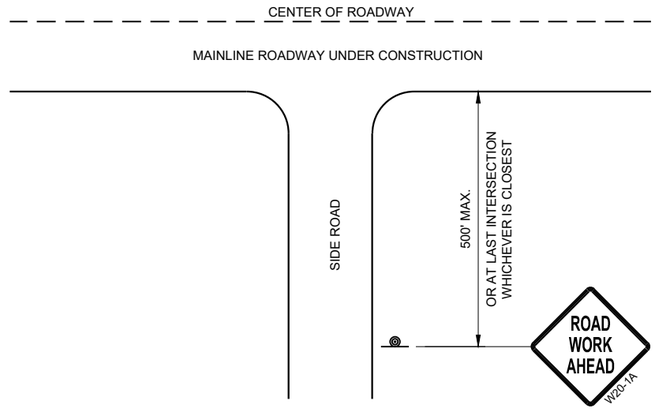
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

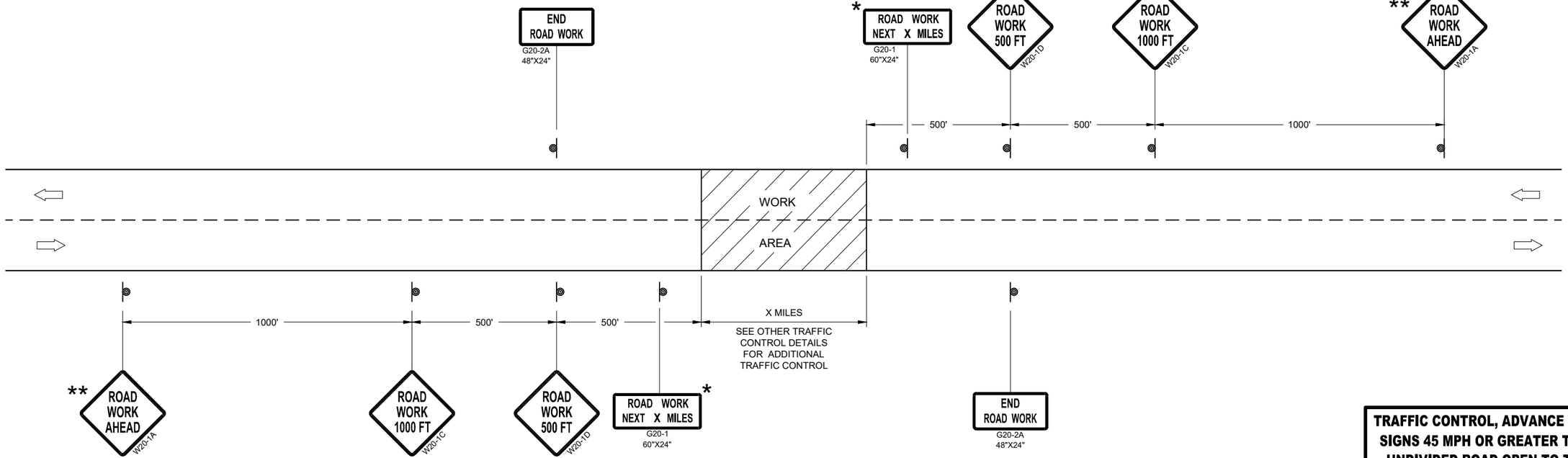
** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



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

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

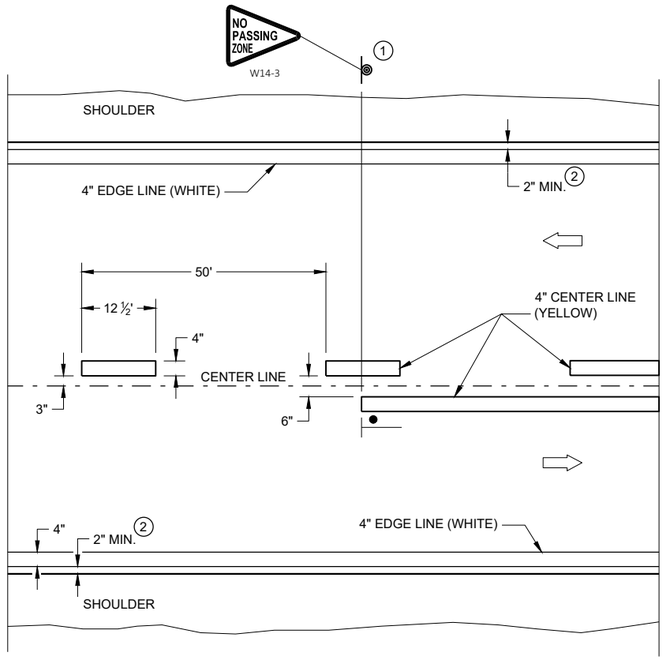
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

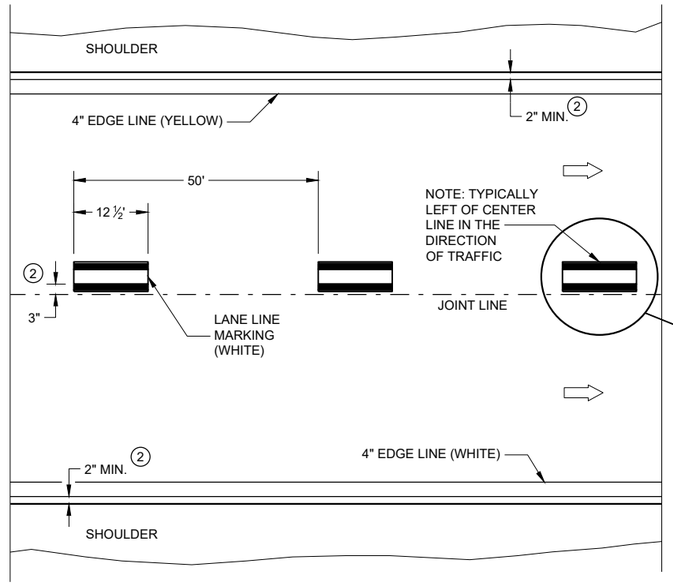
"T" MARKING

SIGN ON PERMANENT SUPPORT

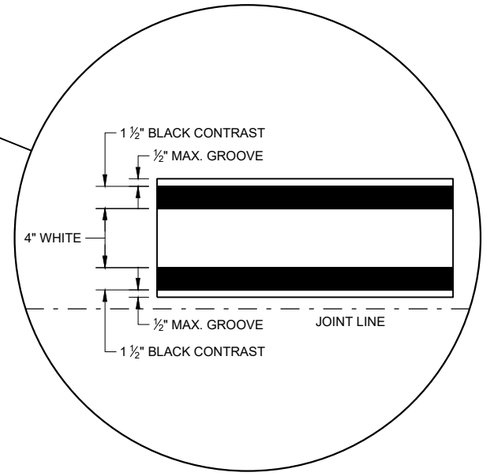
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

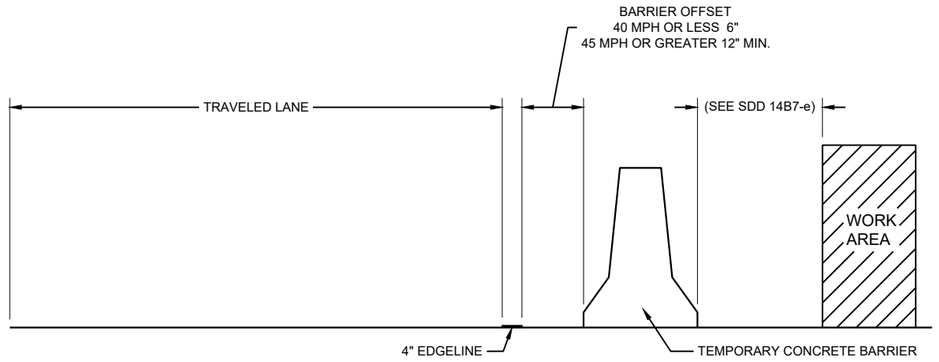
FHWA

6

SDD 15C08 - 22a

6

SDD 15C08 - 22a



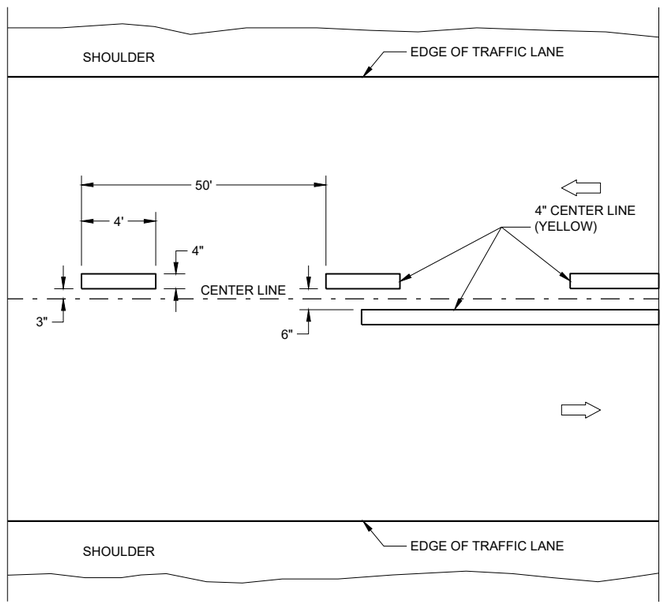
TEMPORARY BARRIER OFFSET FROM EDGELINE

GENERAL NOTES

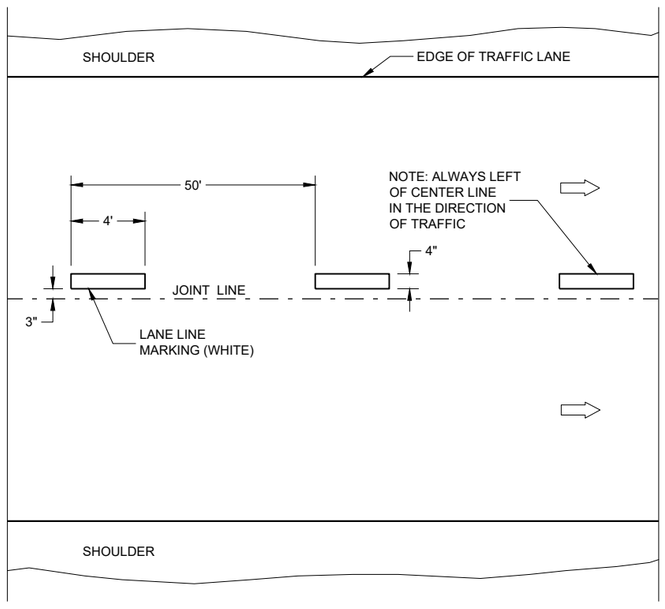
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

LEGEND

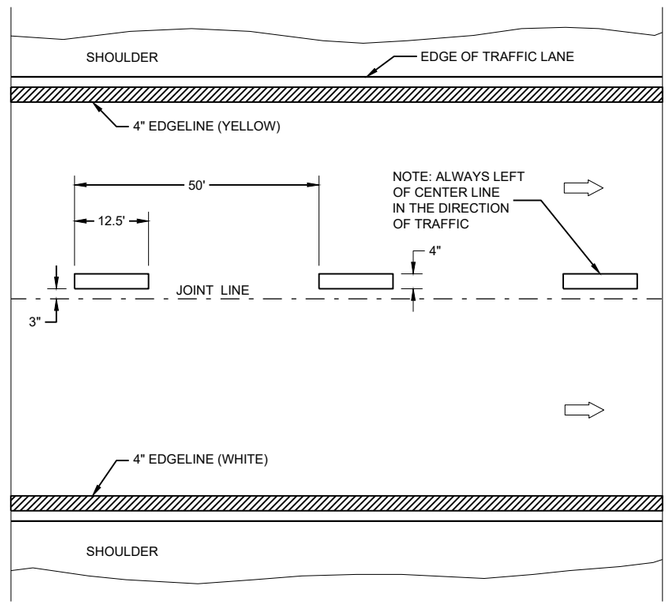
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022
DATE

/S/ Jeannie Silver
STATEWIDE SIGNING AND M
ENGINEER

FHWA

6

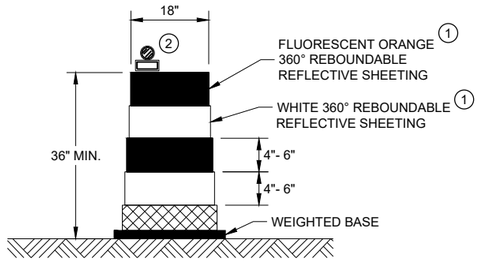
SDD 15C08 - 22b

6

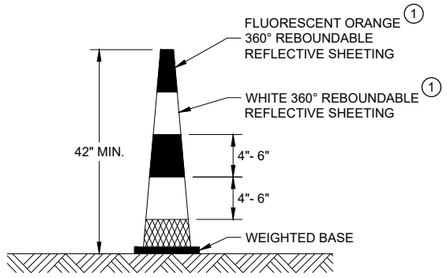
SDD 15C08 - 22b

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.

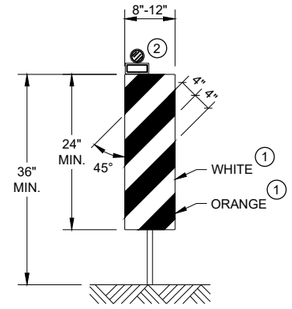


DRUM



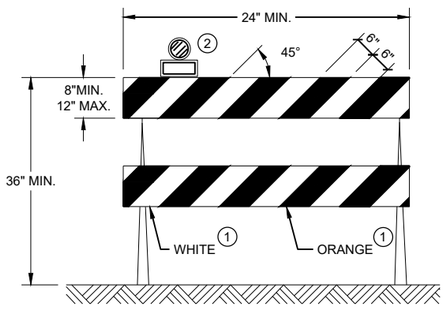
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



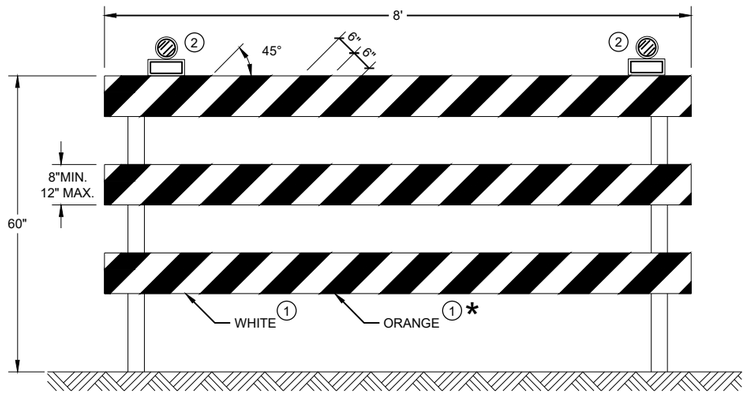
VERTICAL PANEL

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

SDD15C11 - 09b

6

SDD15C11 - 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.

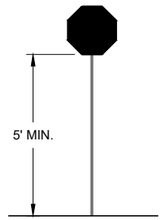
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM 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.



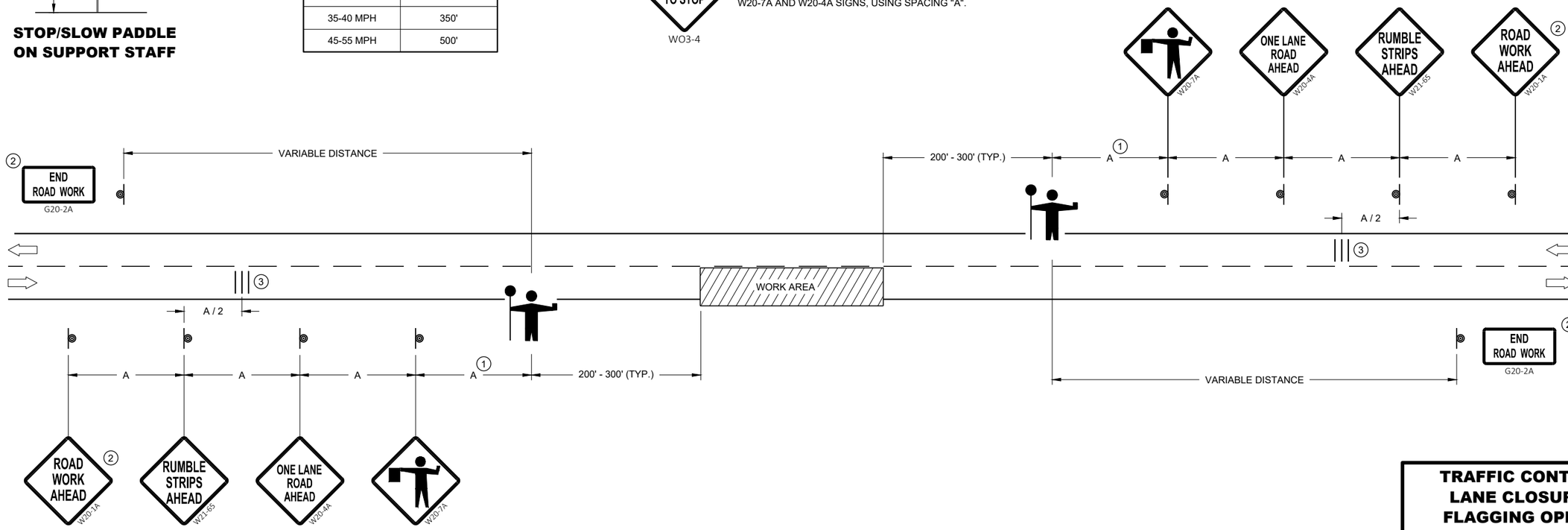
STOP/SLOW PADDLE ON SUPPORT STAFF

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 09a

6

SDD 15C12 - 09a

GENERAL NOTES

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL CONE 42-INCH
- TRAFFIC CONTROL DRUM
- TEMPORARY PORTABLE RUMBLE STRIP ARRAY
- DIRECTION OF TRAFFIC
- WORK AREA
- AFAD — AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD)

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

IF THE AUTOMATED FLAGGER ASSISTANCE DEVICE (AFAD) STOPS WORKING, 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.

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.

(1) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

(2) IF FLAGGERS ARE PHYSICALLY NEEDED TO FLAG, REPLACE WO3-4 SIGNS WITH W20-7A SIGNS.

TEMPORARY PORTABLE RUMBLE STRIPS

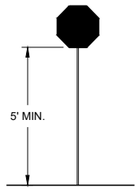
UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

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.

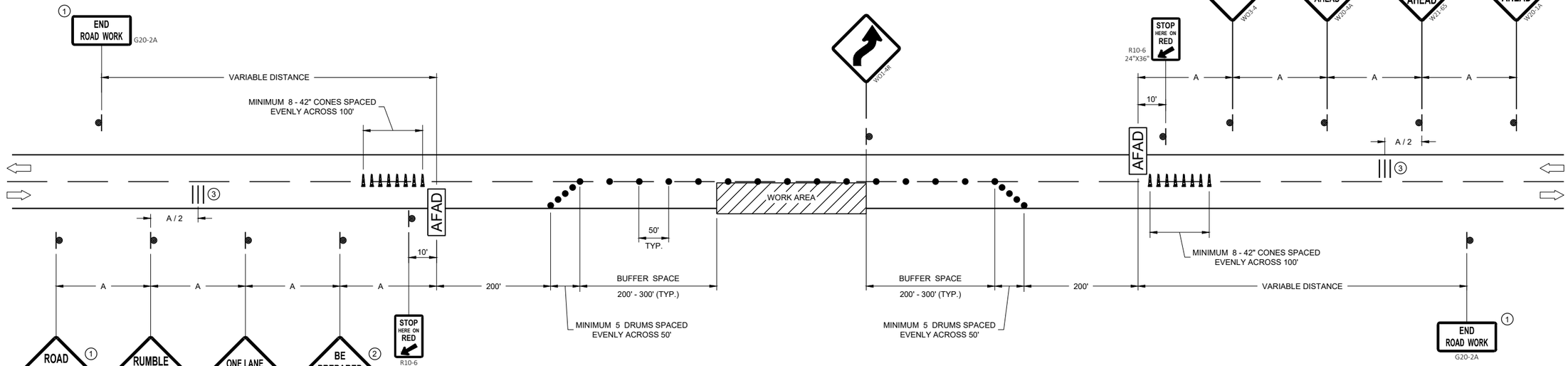
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSELY AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER.



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'



TRAFFIC CONTROL, LANE CLOSURE WITH AUTOMATED FLAGGER ASSISTANCE DEVICE

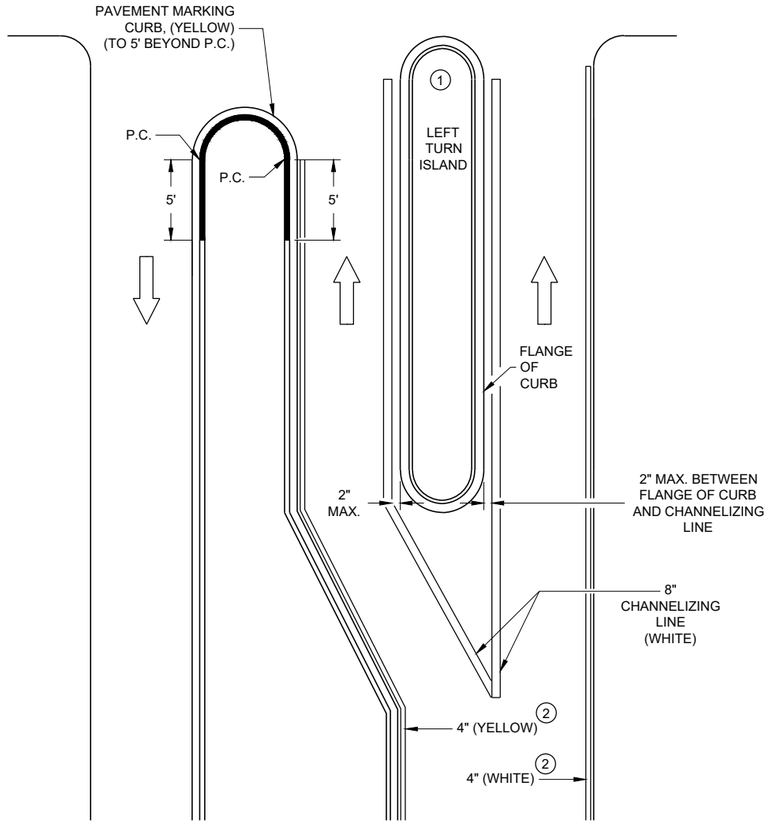
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15D12 - 09b

6
SDD 15D12 - 09b

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

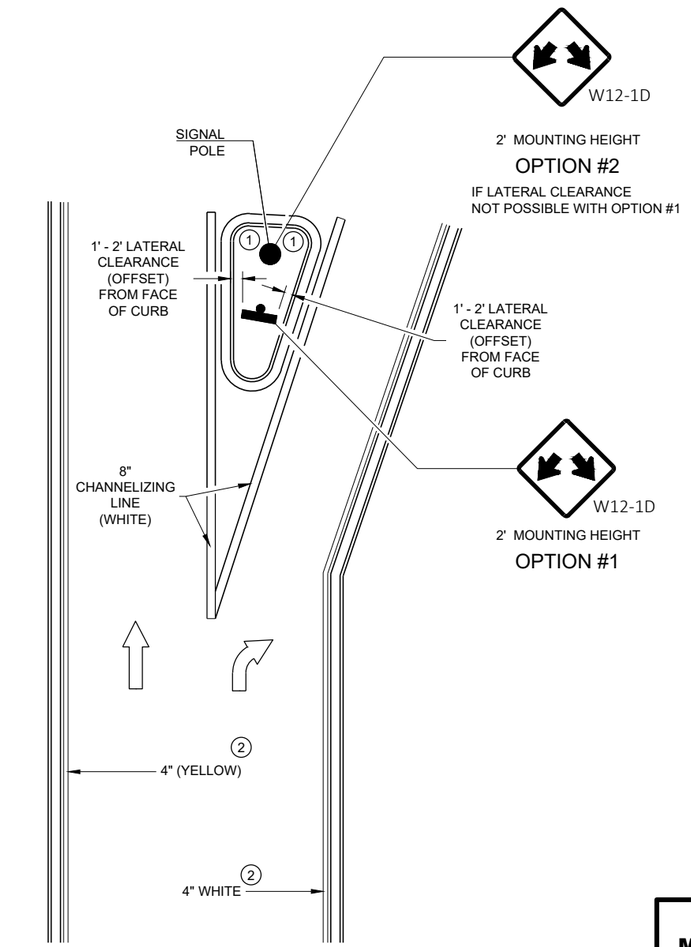
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022 — DATE

/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C18 - 06c

6

SDD 15C18 - 06c

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.

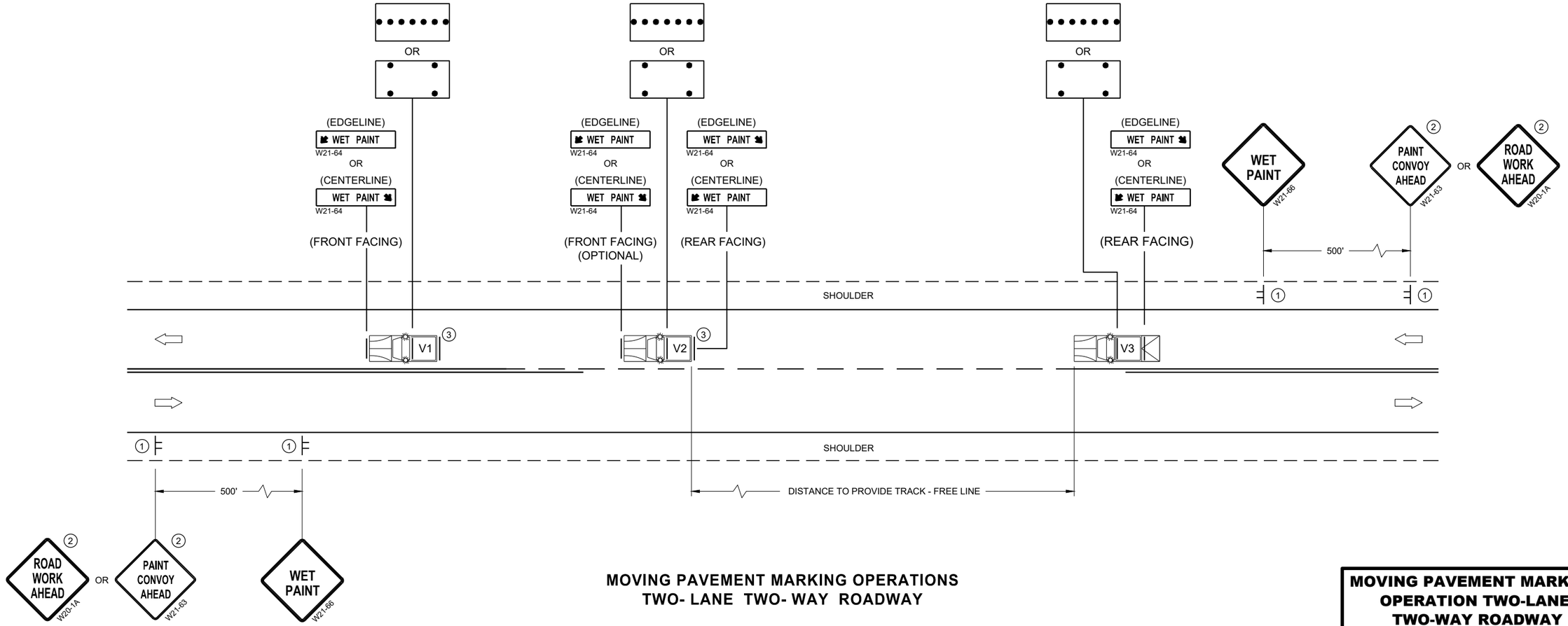
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



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
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

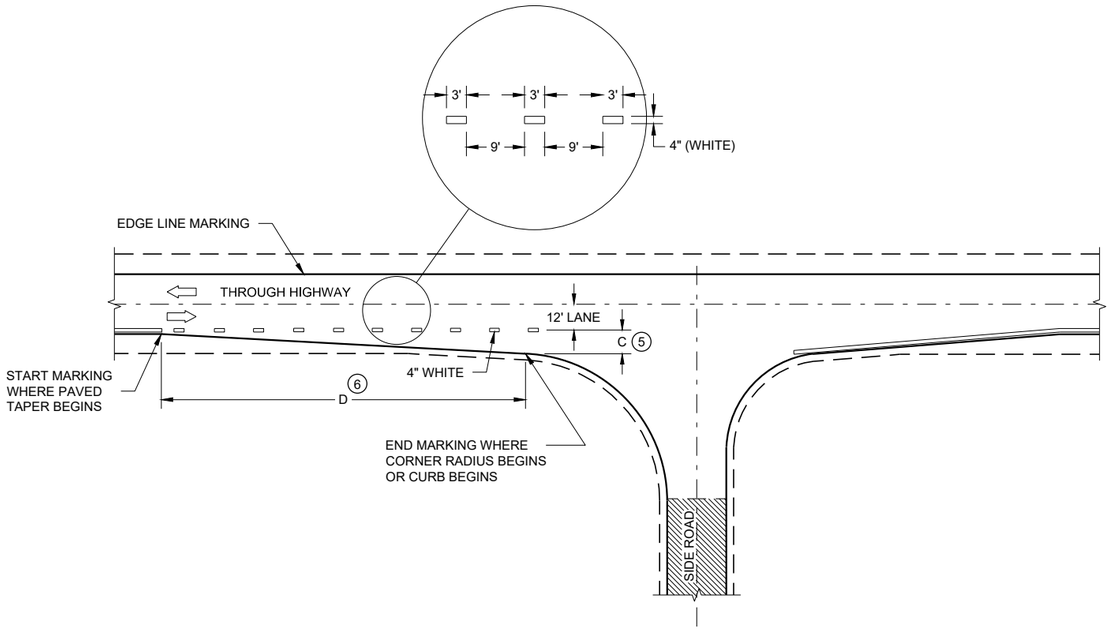
FHWA

6

SDD 15C19 - 07a

6

SDD 15C19 - 07a



MINOR INTERSECTION

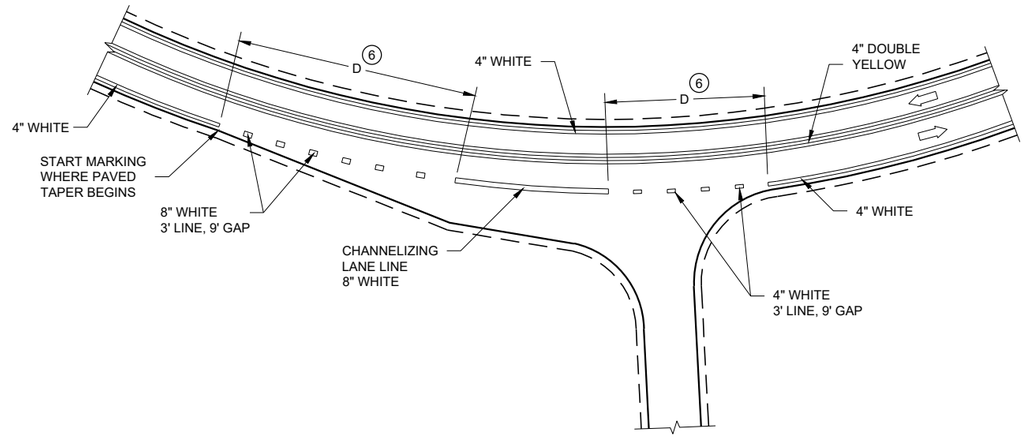
GENERAL NOTES

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

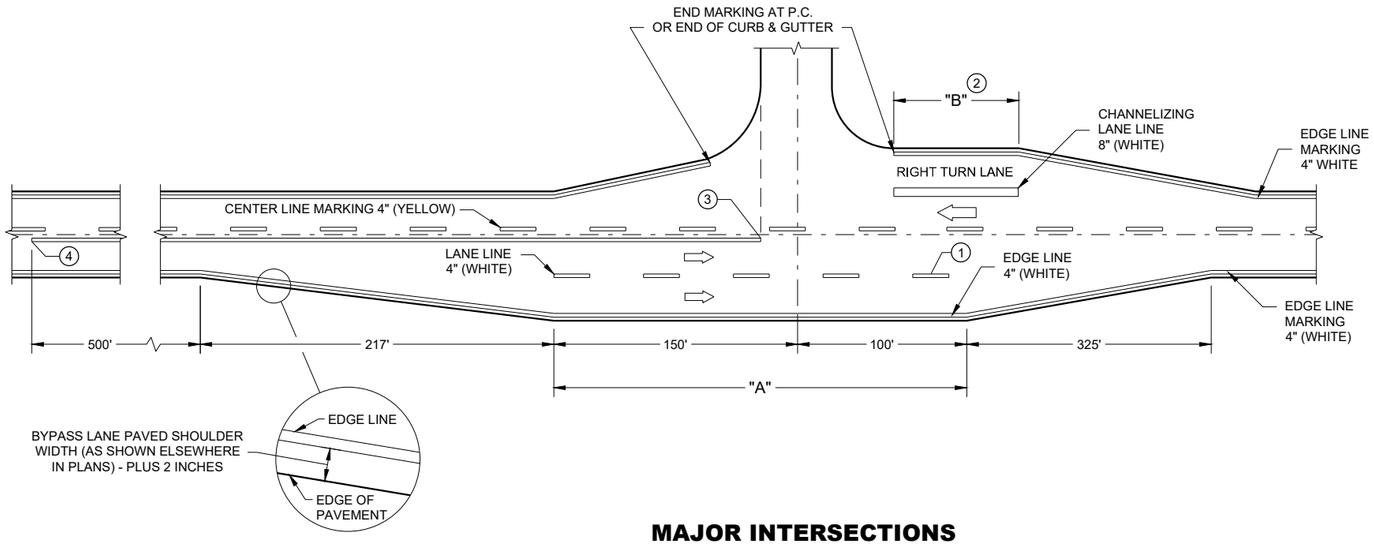
1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET,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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

PAVEMENT MARKING (INTERSECTIONS)

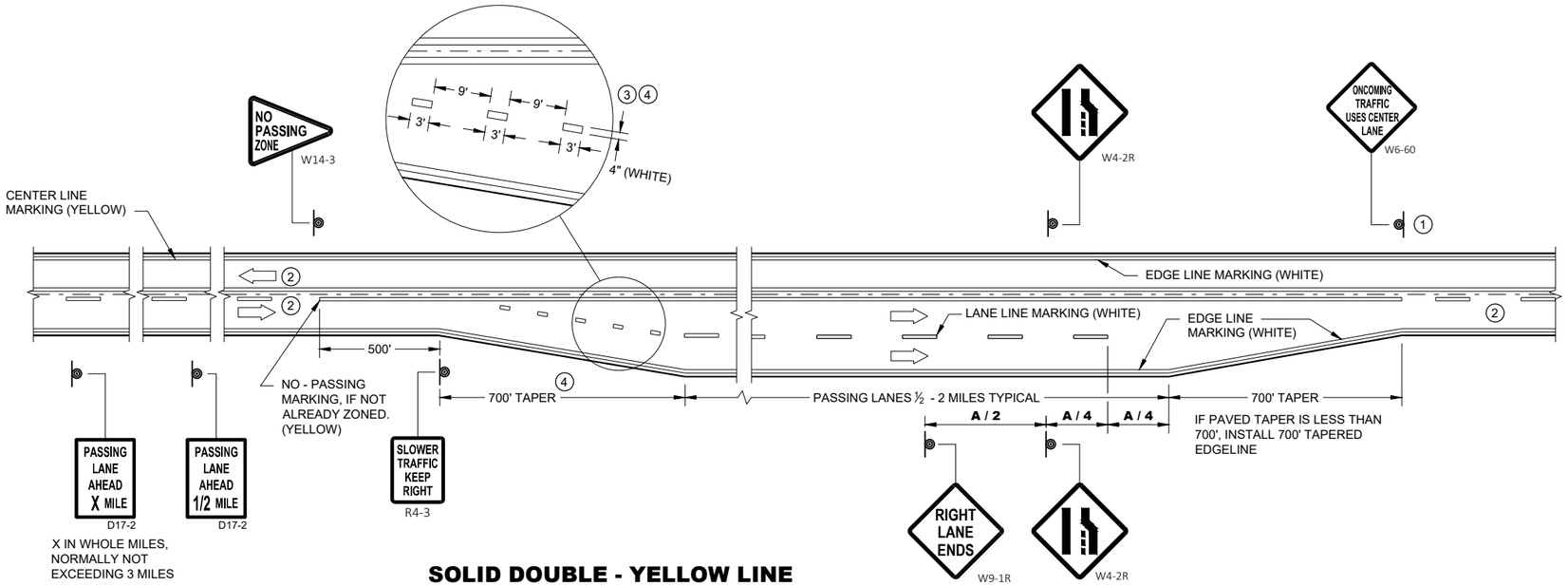
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

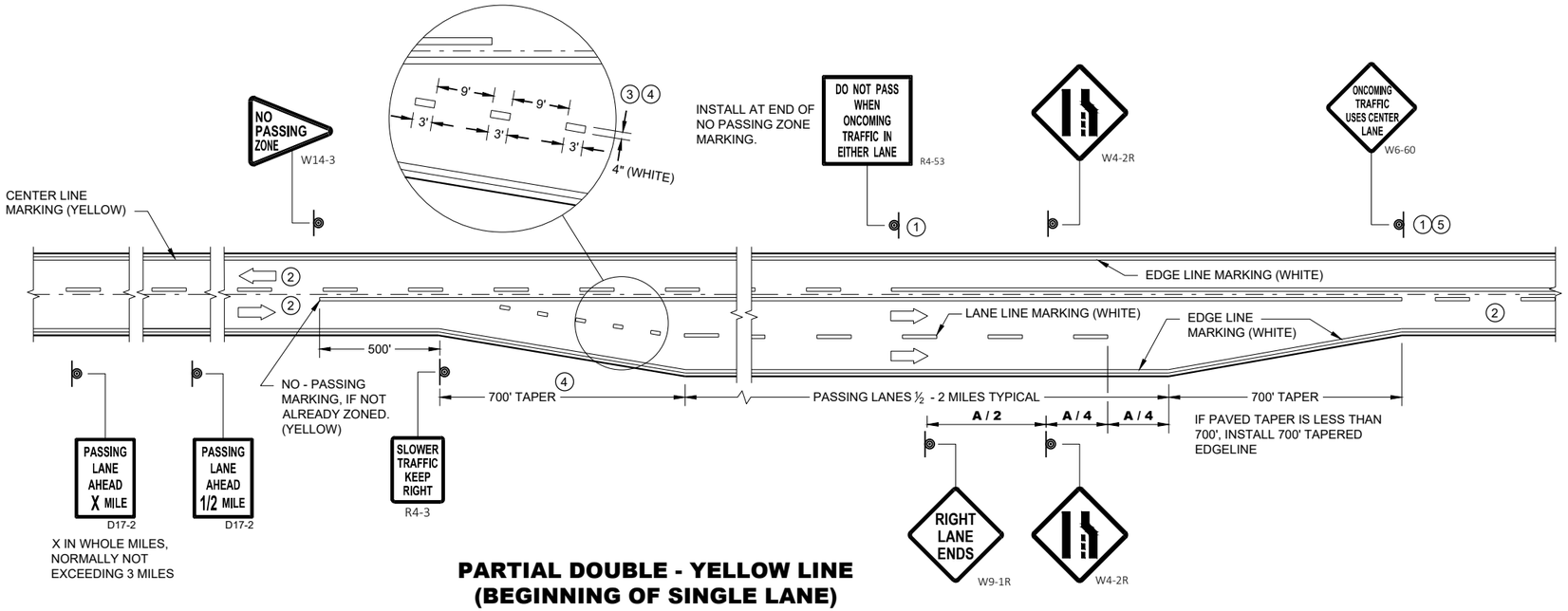
SDD 15C35 - 05a

6

SDD 15C35 - 05a



SOLID DOUBLE - YELLOW LINE
(THROUGHOUT ENTIRE PASSING / CLIMBING LANE)



PARTIAL DOUBLE - YELLOW LINE
(BEGINNING OF SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

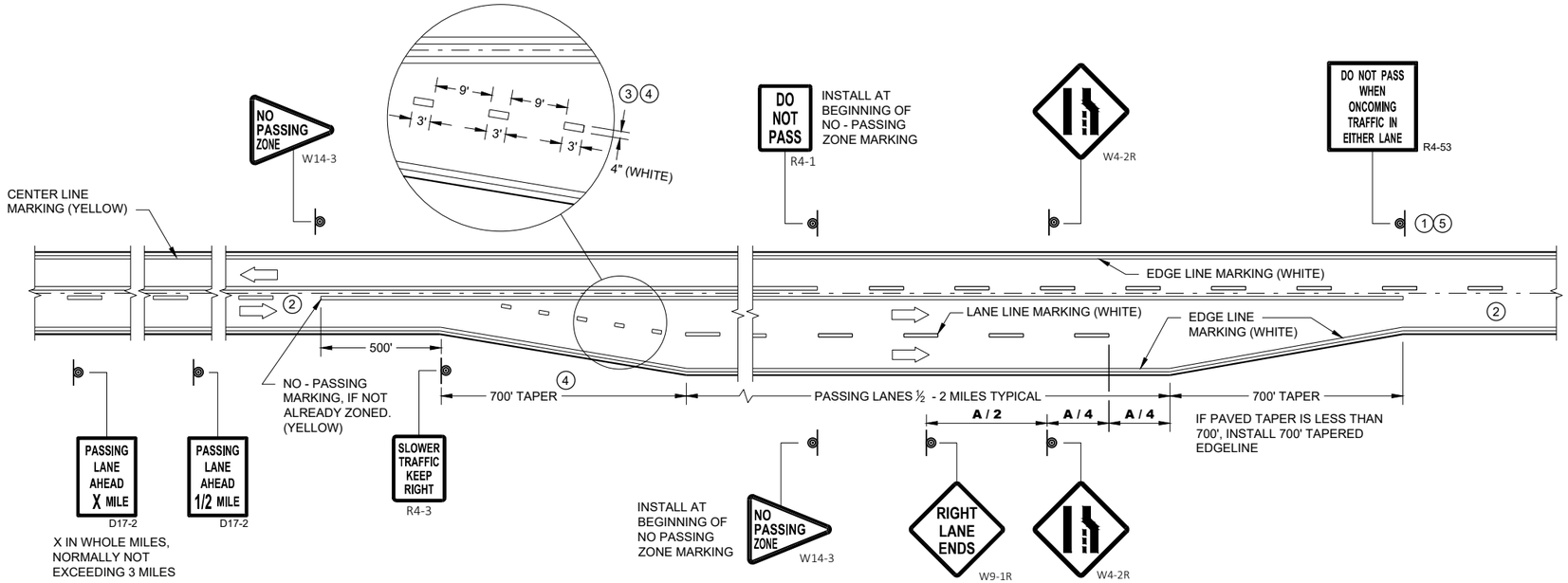
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

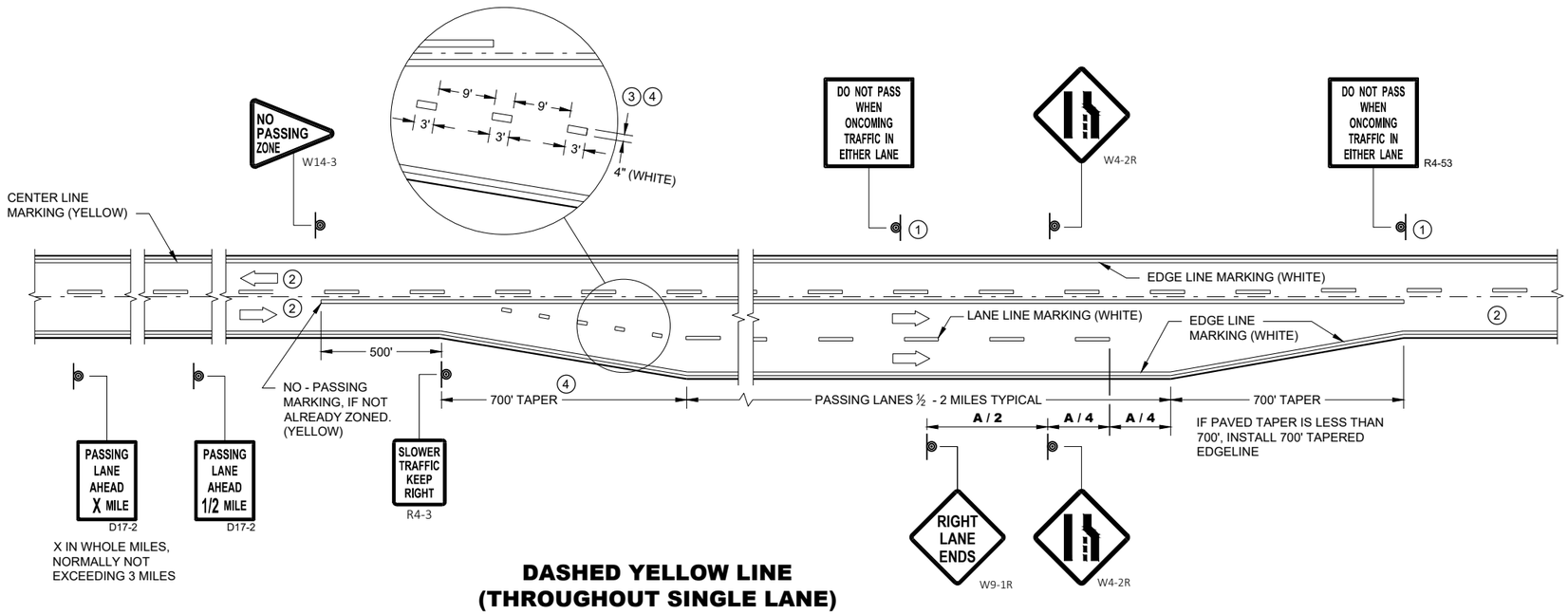
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 15C35 - 05b

SDD 15C35 - 05b



SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)



DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)

GENERAL NOTES

1. SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
2. THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
3. THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
4. WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
5. REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (⇨) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE

POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

PAVEMNET MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER
FHWA

SDD 15C35 - 05c

SDD 15C35 - 05c

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.

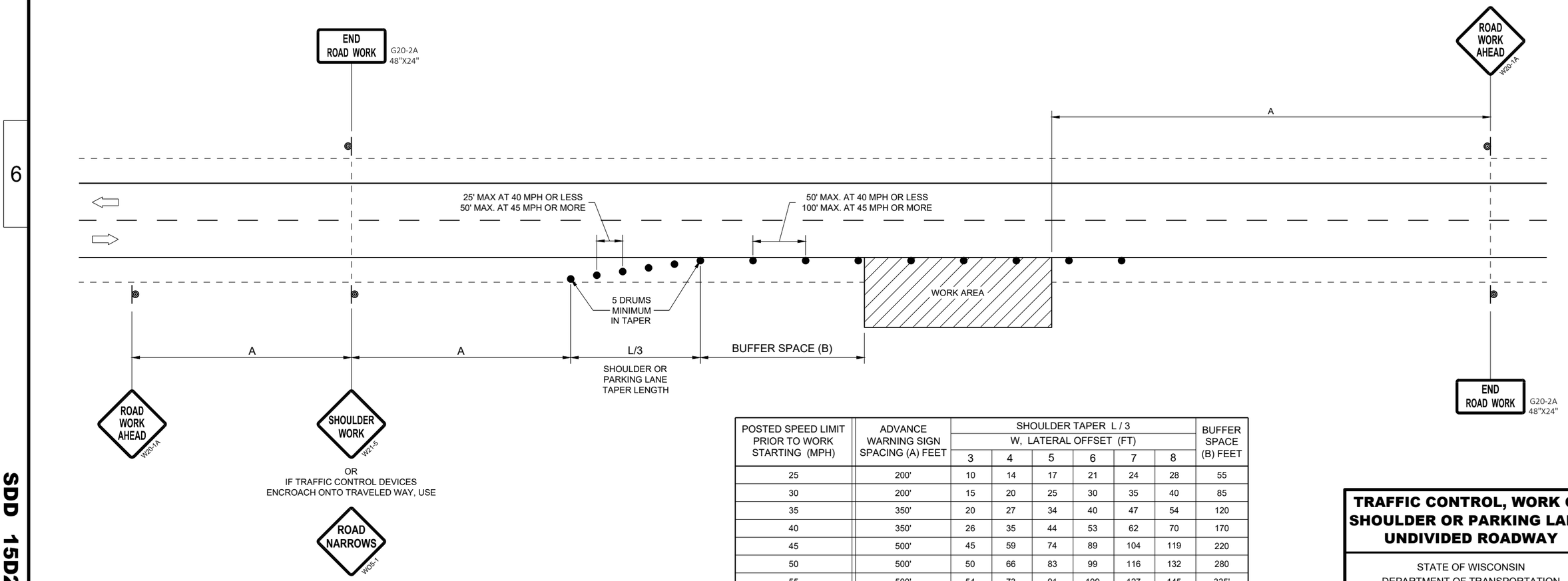
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TRAFFIC CONTROL DRUM

FLAGS, 16" X 16" MIN. (ORANGE)

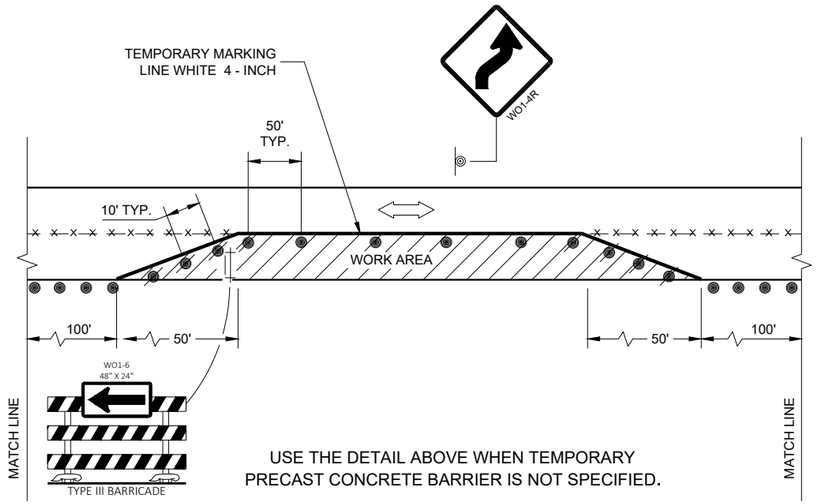
REMOVING PAVEMENT MARKING

DIRECTION OF TRAFFIC

ASPHALTIC PAVEMENT WIDENING

CONCRETE BARRIER TEMPORARY PRECAST

TEMPORARY SIGNAL. SEE SDD 09G02 FOR EXACT PLACEMENT



USE THE DETAIL ABOVE WHEN TEMPORARY PRECAST CONCRETE BARRIER IS NOT SPECIFIED.

GENERAL NOTES

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

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

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

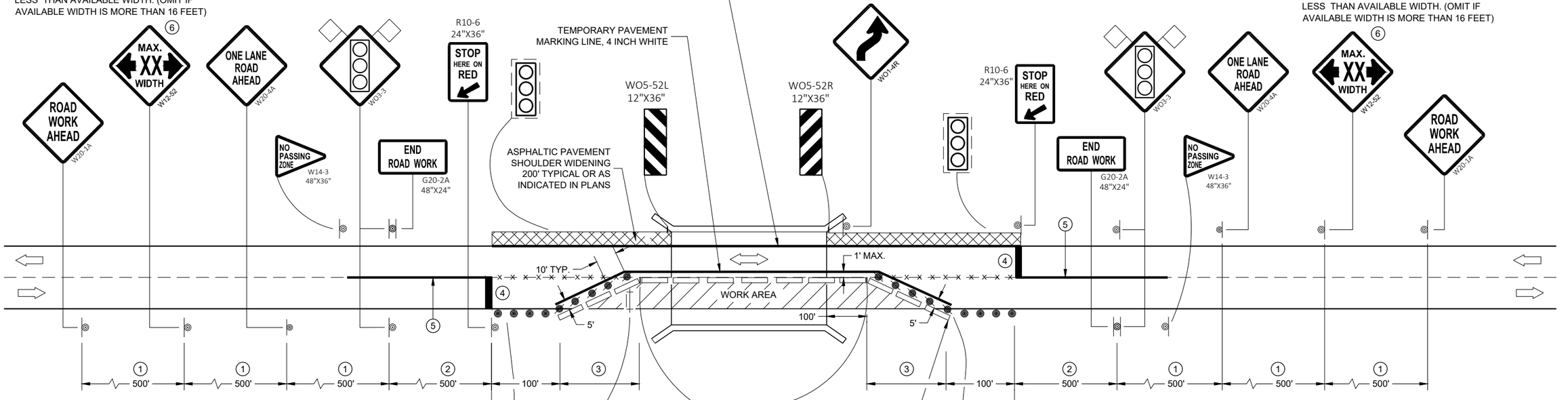
ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED.

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

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

REMOVE PAVEMENT MARKING AND PLACE TEMPORARY PAVEMENT MARKING LINES IF THE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

1. 500 FOOT SPACING SHOWN IS FOR ROADWAYS WITH A PRE-CONSTRUCTION REGULATORY SPEED LIMIT OF 45 MPH OR MORE. FOR 35 - 40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25 - 30 MPH, USE 200 FOOT TYPICAL SPACING.
2. USE 300 FOOT SPACING IF THE PRE - CONSTRUCTION REGULATORY SPEED IS 35 MPH OR LESS.
3. DIMENSION DETERMINED BY CBTP TAPER FROM EDGE LINE TO TANGENT SECTION OF THE ROAD.
4. TEMPORARY PAVEMENT MARKING LINE, 18 INCH WHITE STOP LINE.
5. 700 FOOT TEMPORARY PAVEMENT MARKING LINE, 4 INCH DOUBLE YELLOW . WHEN THE DISTANCE FOR THE PRECEDING NO - PASSING ZONE IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES AS INDICATED IN THE SPECIFICATIONS, THE TWO ZONES SHALL BE CONNECTED.
6. SEE SDD 15C02 - SHEET "F" FOR ADVANCED WIDTH RESTRICTION SIGNING.



TRAFFIC CONTROL, ONE LANE ROAD WITH TEMPORARY SIGNALS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

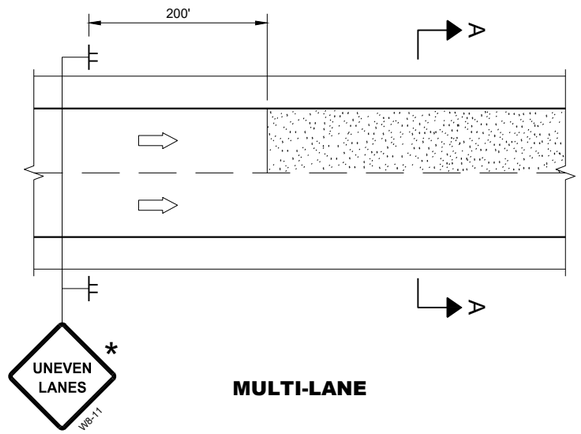
APPROVED
February 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

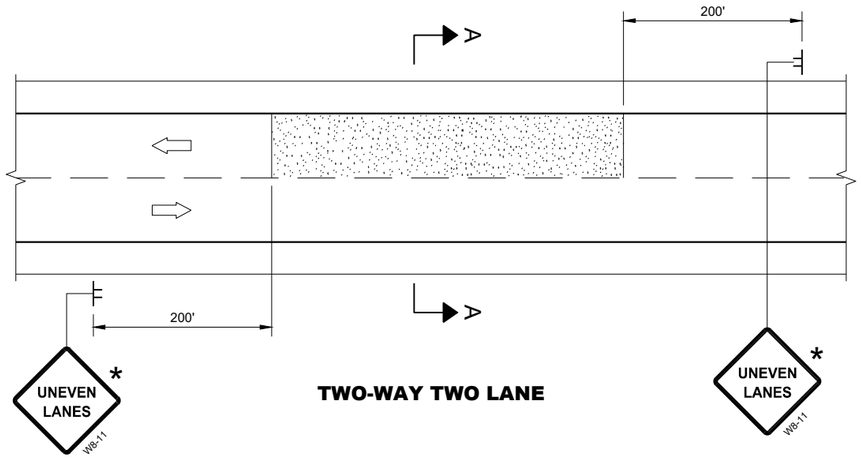
FHWA

SDD 15D33 - 07

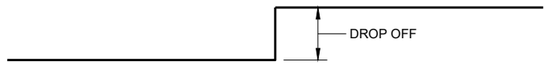
SDD 15D33 - 07



MULTI-LANE

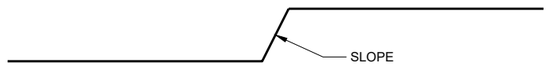


TWO-WAY TWO LANE

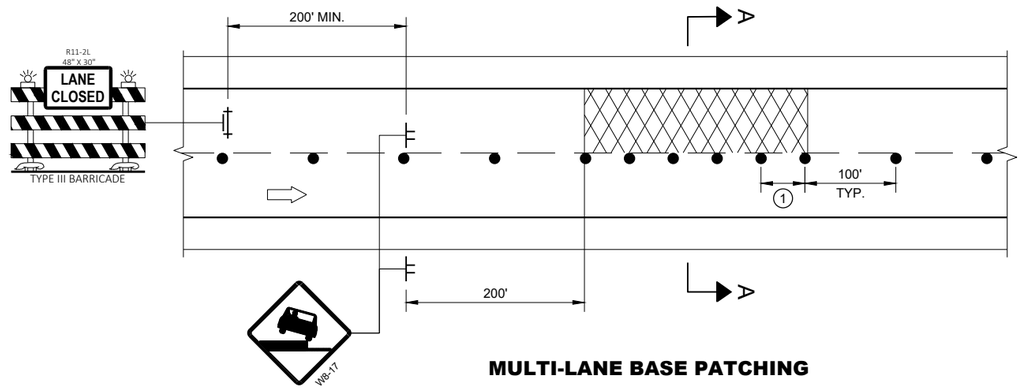


SECTION A - A

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.

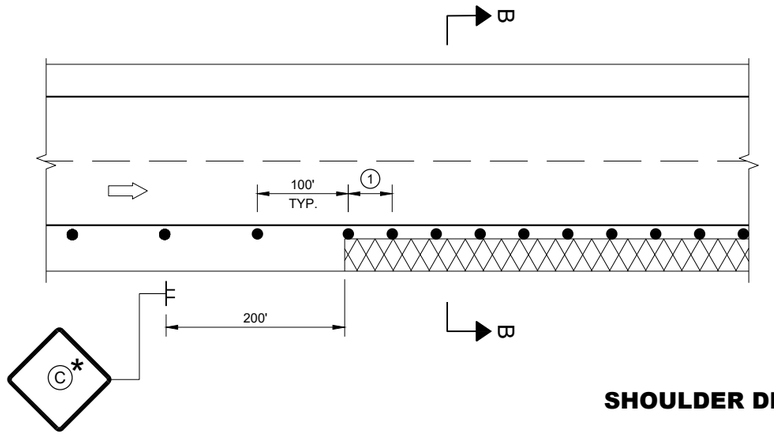
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

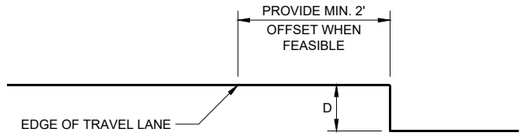
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

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

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.

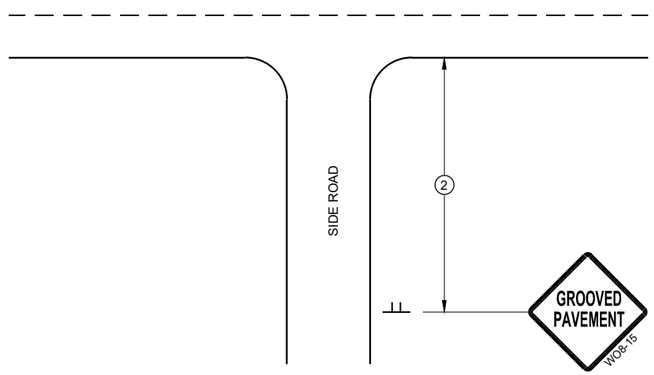
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

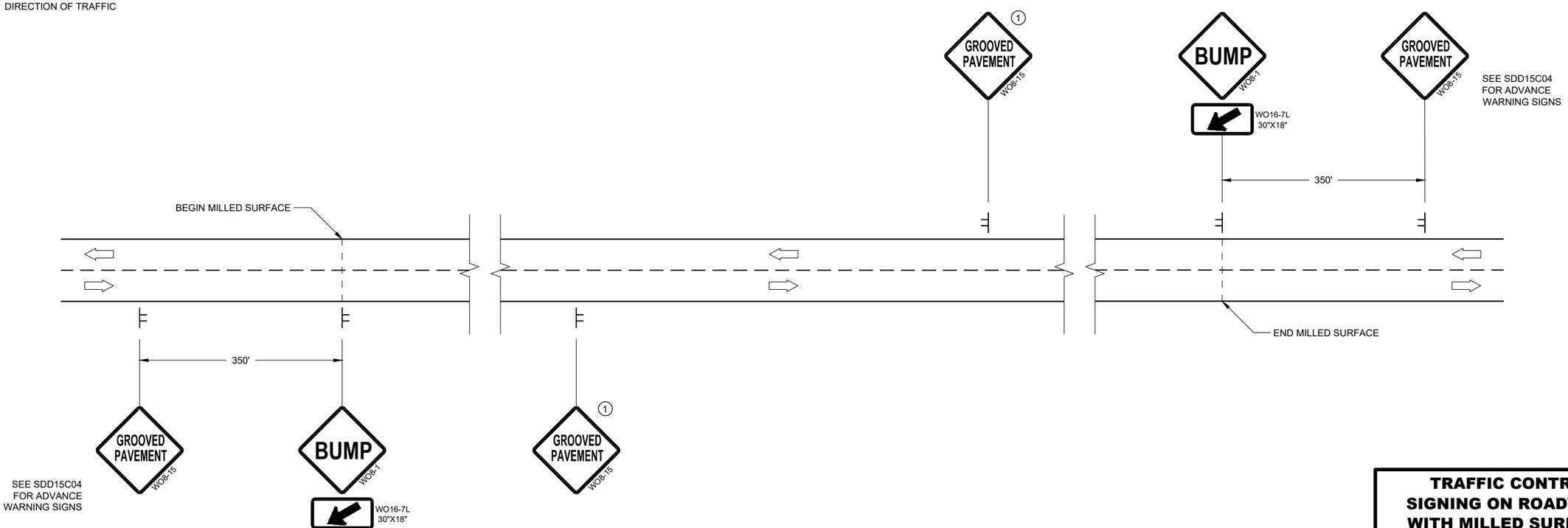
LEGEND

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

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

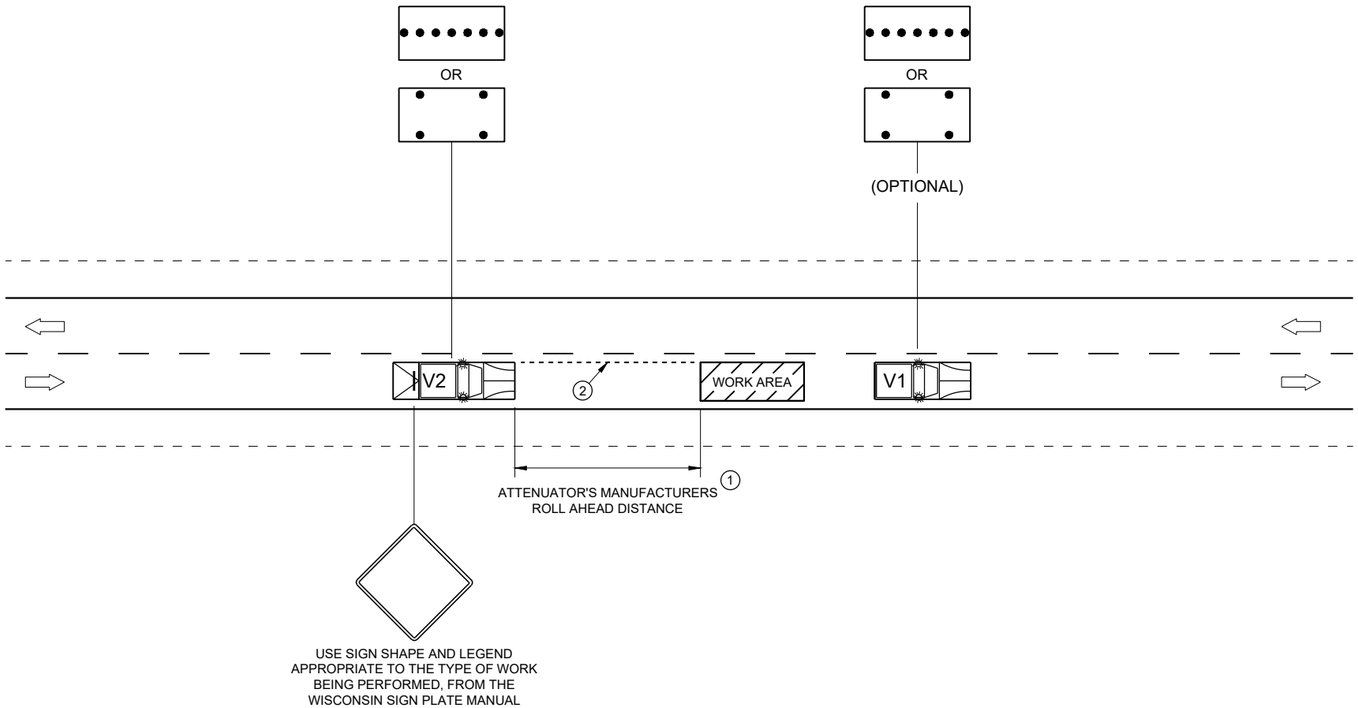
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



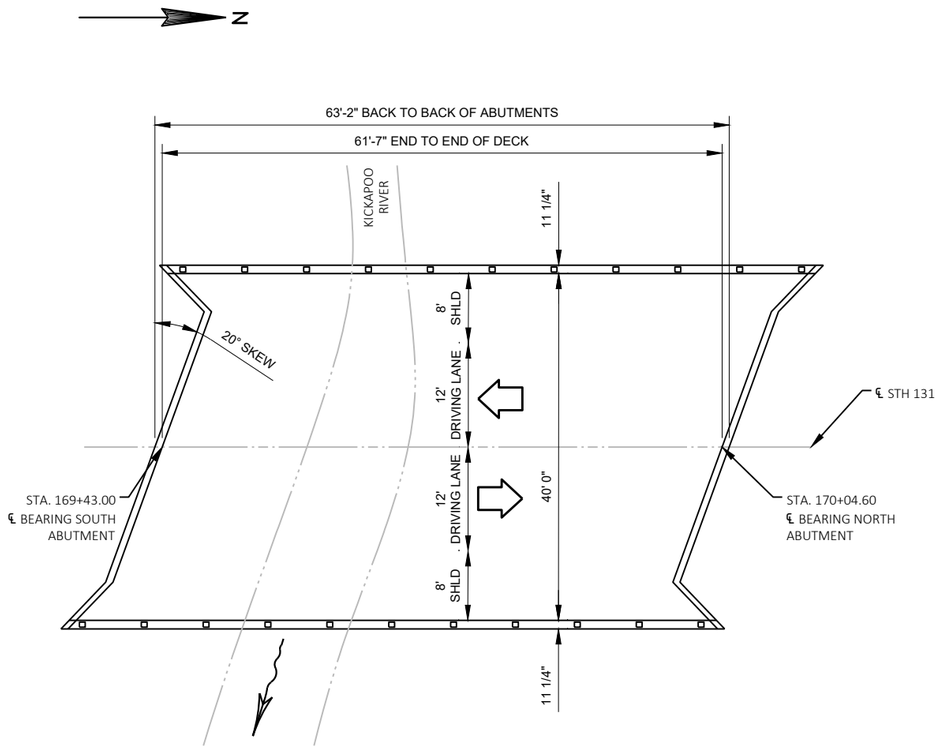
TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD 15D51 - 01



PLAN

SINGLE SPAN STEEL GIRDER

LIST OF DRAWINGS

1. GENERAL PLAN

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
(608) 261-0261

CONSULTANT CONTACT
DYLAN MUSGJERD, P.E.
(608) 789-2034

STATE PROJECT NUMBER

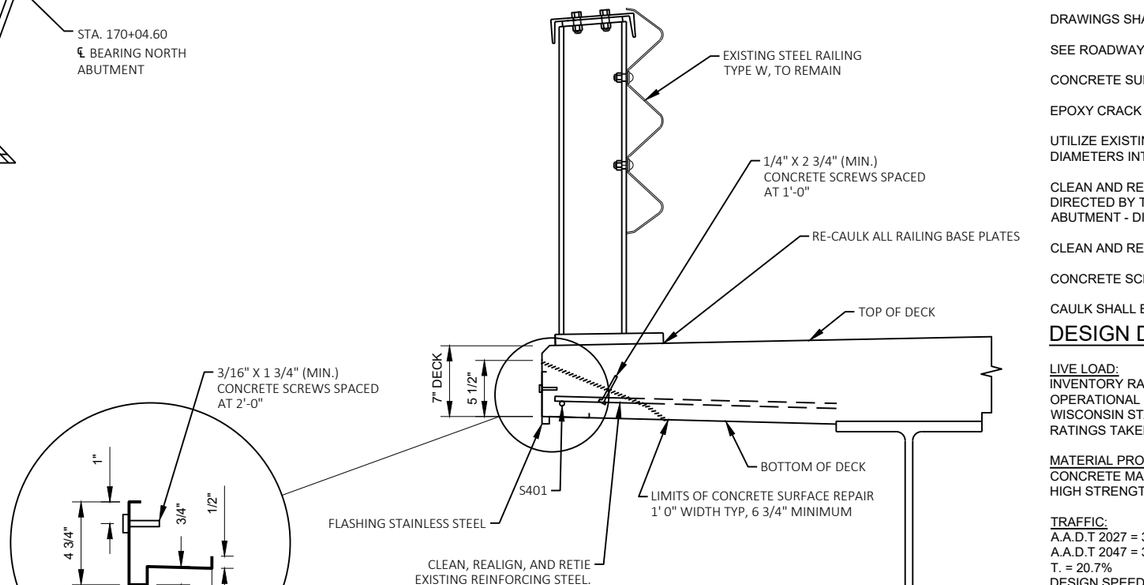
5130-05-63

BILL OF BARS 85 LBS.

MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
S401	4	35-8		DRIP EDGE REPAIR LONGIT.

TOTAL ESTIMATED QUANTITIES B-41-21

BID ITEM NO.	BID ITEMS	UNIT	S. ABUT.	N. ABUT.	SUPER.	TOTALS
203.0211.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-41-21	EA	---	---	---	1
203.0335	DEBRIS CONTAINMENT OVER WATERWAY B-41-21	EA	---	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	106	106
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	---	85	85
509.1500	CONCRETE SURFACE REPAIR	SF	---	4	305	309
509.9020.S	EPOXY CRACK SEALING	LF	29	40	---	69
SPV.0060.01	RESEAL RAILING POST CONNECTIONS	EA	---	---	22	22
SPV.0090.01	FLASHING STAINLESS STEEL	LF	---	---	146	146
SPV.0090.02	RESEAL ABUTMENT - DIAPHRAGM JOINTS	LF	18	18	---	36



GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DRAWINGS SHALL NOT BE SCALED.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL INFORMATION.

CONCRETE SURFACE REPAIR LOCATIONS AS DIRECTED BY ENGINEER.

EPOXY CRACK SEALING LOCATIONS AS DIRECTED BY THE ENGINEER.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

CLEAN AND RE-SEAL ABUTMENT DIAPHRAGM JOINTS ON ALL CORNERS, LOCATIONS AS DIRECTED BY THE ENGINEER. THESE ACTIONS WILL BE PART OF THE RESEAL ABUTMENT - DIAPHRAGM JOINTS BID ITEM (SPV.0090.02).

CLEAN AND RE-CAULK ALL RAILING BASE PLATES.

CONCRETE SCREWS SHALL BE 410 STAINLESS STEEL.

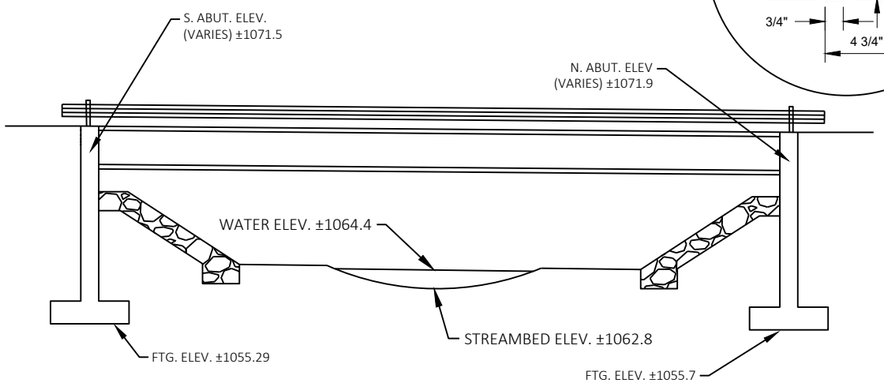
CAULK SHALL BE NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER.

DESIGN DATA

LIVE LOAD:
INVENTORY RATING: HS16
OPERATIONAL RATING: HS27
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 220 KIPS
RATINGS TAKEN FROM HSIS 02/09/2022

MATERIAL PROPERTIES:
CONCRETE MASONRY SUPERSTRUCTURE: f'c = 4,000 PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60: Fy = 60,000 PSI

TRAFFIC:
A.A.D.T 2027 = 3070
A.A.D.T 2047 = 3410
T. = 20.7%
DESIGN SPEED = 55 MPH



ELEVATION

REHABILITATION FLASHING DETAIL

TYPICAL BOTH EDGES OF DECK.

EXTEND FLASHING TO B.F. OF ABUTMENT DIAPHRAGM.

THE BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING AND 3/16" AND 1/4" CONCRETE SCREWS, SILICONE CAULK, AND CLEANING THE EDGE OF DECK PRIOR TO PLACEMENT.

CONCRETE SURFACE REPAIR ALONG BOTH EDGES OF DECK, ALONG BOTTOM OF DECK FACE.

FLASHING TO BE INSTALLED AFTER PROTECTIVE SURFACE TREATMENT APPLICATION.

THE FLASHING IS TO BE A CONSTANT HEIGHT BASED ON THE THINNEST SLAB DEPTH OVER THE BRIDGE LENGTH.

PROVIDE 2" MINIMUM FLASHING OVERLAP, FASTEN WITH 3/16" X 1 3/4" (MIN.) CONCRETE SCREWS.

EXISTING GIRDER

WISCONSIN
DYLAN C MUSGJERD
E-48208
GALESVILLE
WISC.
PROFESSIONAL ENGINEER
8/30/2022

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

LA CROSSE OFFICE
201 MAIN STREET
SUITE 1020
LA CROSSE, WI 54601

ISG

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/21/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-41-21

STH 131 OVER KICKAPOO RIVER

COUNTY: MONROE | TOWN: WILTON

DESIGN SPEC.: REHABILITATION N/A

DESIGNED BY	JRM	DESIGNED CK'D	DCM	DRAWN BY	RJB	PLANS CK'D	ASN

GENERAL PLAN

SHEET 1 OF 1
77

SCALE =

I.D. 5130-05-33

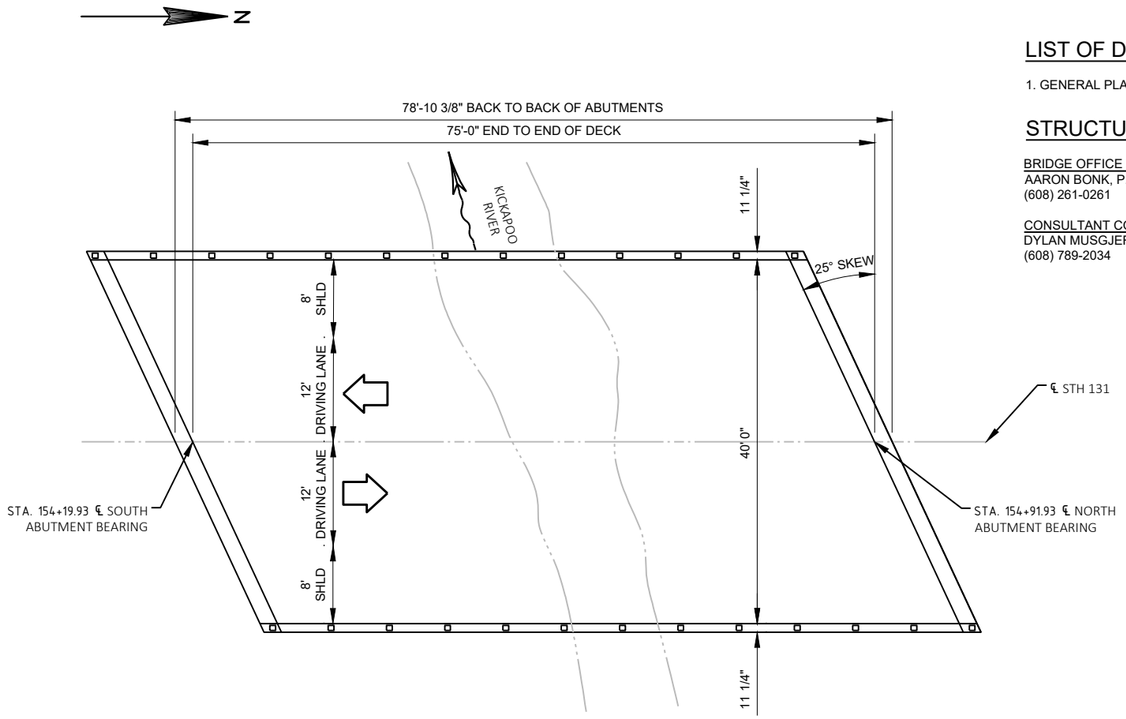
DATE: 09/24/2021

8

8

STATE PROJECT NUMBER

5130-05-63



PLAN

SINGLE SPAN CONCRETE GIRDER

LIST OF DRAWINGS

1. GENERAL PLAN

STRUCTURE DESIGN CONTACTS

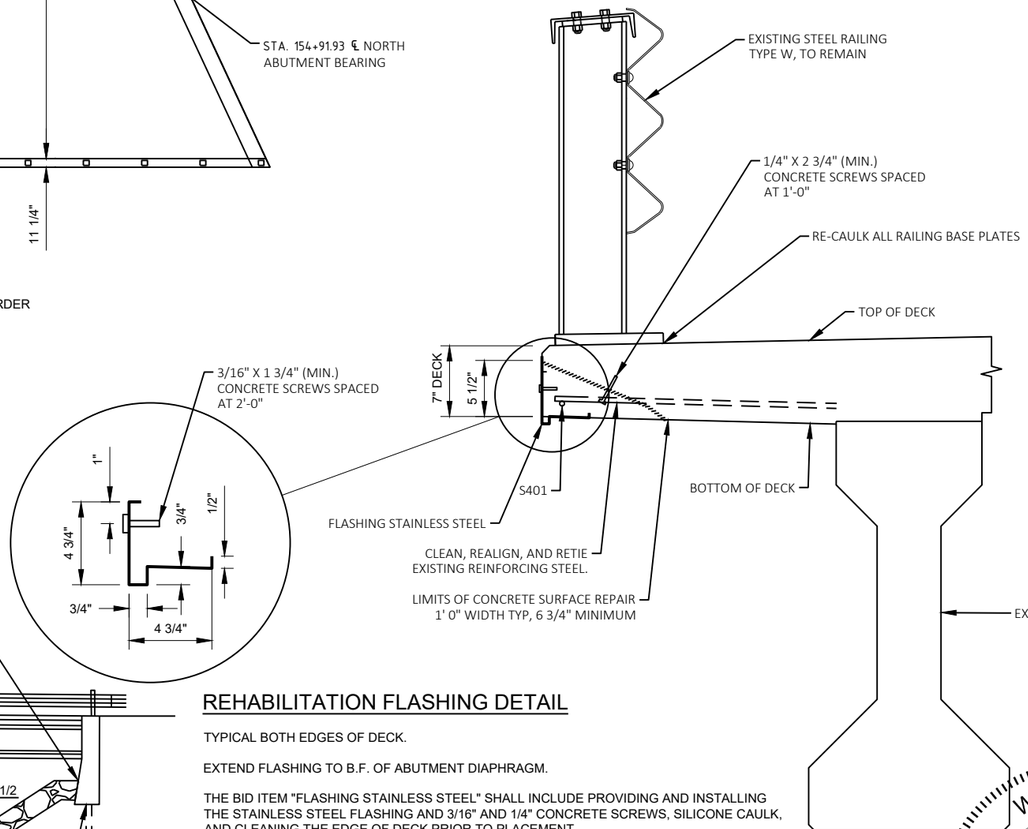
BRIDGE OFFICE CONTACT
AARON BONK, P.E.
(608) 261-0261

CONSULTANT CONTACT
DYLAN MUSGJERD, P.E.
(608) 789-2034

BILL OF BARS			110 LBS.	
MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
S401	4	40-0		DRIP EDGE REPAIR LONGIT.

TOTAL ESTIMATED QUANTITIES B-41-136

BID ITEM NO.	BID ITEMS	UNIT	S. ABUT.	N. ABUT.	SUPER.	TOTALS
203.0211.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-41-136	EA	---	---	---	1
203.0335	DEBRIS CONTAINMENT OVER WATERWAY B-41-136	EA	---	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	132	132
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	---	110	110
509.1500	CONCRETE SURFACE REPAIR	SF	---	12	329	341
SPV.0060.01	RESEAL RAILING POST CONNECTIONS	EA	---	---	26	26
SPV.0090.01	FLASHING STAINLESS STEEL	LF	---	---	158	158
SPV.0090.02	RESEAL ABUTMENT - DIAPHRAGM JOINTS	LF	20	20	---	40



GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DRAWINGS SHALL NOT BE SCALED.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL INFORMATION.

CONCRETE SURFACE REPAIR LOCATIONS AS DIRECTED BY ENGINEER.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

CLEAN AND RE-SEAL ABUTMENT DIAPHRAGM JOINTS ON ALL CORNERS, LOCATIONS AS DIRECTED BY THE ENGINEER. THESE ACTIONS WILL BE PART OF THE RESEAL ABUTMENT - DIAPHRAGM JOINTS BID ITEM (SPV.0090.02).

RE-CAULK ALL RAILING BASE PLATES.

CONCRETE SCREWS SHALL BE 410 STAINLESS STEEL.

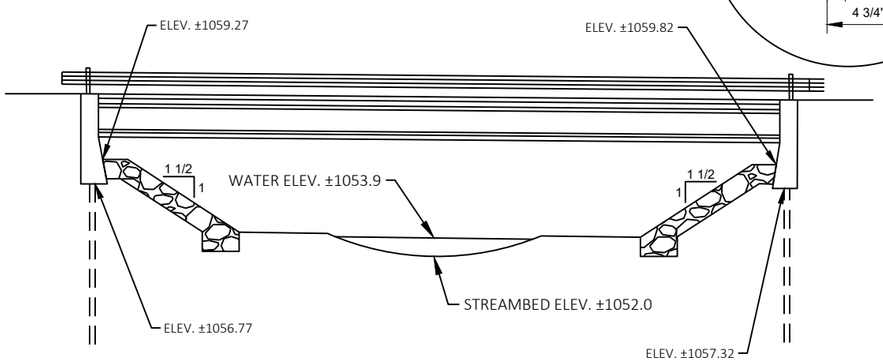
CAULK SHALL BE NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER.

DESIGN DATA

LIVE LOAD:
INVENTORY RATING: HS22
OPERATIONAL RATING: HS45
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS
RATINGS TAKEN FROM HSIS 02/09/2022

MATERIAL PROPERTIES:
CONCRETE MASONRY SUPERSTRUCTURE: f'c = 4,000 PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60: Fy = 60,000 PSI

TRAFFIC:
A.A.D.T 2027 = 3070
A.A.D.T 2047 = 3410
T. = 20.7%
DESIGN SPEED = 55 MPH



ELEVATION

REHABILITATION FLASHING DETAIL

TYPICAL BOTH EDGES OF DECK.

EXTEND FLASHING TO B.F. OF ABUTMENT DIAPHRAGM.

THE BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING AND 3/16" AND 1/4" CONCRETE SCREWS, SILICONE CAULK, AND CLEANING THE EDGE OF DECK PRIOR TO PLACEMENT.

CONCRETE SURFACE REPAIR ALONG BOTH EDGES OF DECK, ALONG BOTTOM OF DECK FACE.

FLASHING TO BE INSTALLED AFTER PROTECTIVE SURFACE TREATMENT APPLICATION.

THE FLASHING IS TO BE A CONSTANT HEIGHT BASED ON THE THINNEST SLAB DEPTH OVER THE BRIDGE LENGTH.

PROVIDE 2" MINIMUM FLASHING OVERLAP, FASTEN WITH 3/16" X 1 3/4" (MIN.) CONCRETE SCREWS.

WISCONSIN
DYLAN C MUSGJERD
E-48208
GALESVILLE, WISC.
PROFESSIONAL ENGINEER
8/30/2022

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
LA CROSSE OFFICE
201 MAIN STREET
SUITE 1020
LA CROSSE, WI 54601

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
ACCEPTED SDR 11/21/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-41-136

STH 131 OVER KICKAPOO RIVER

COUNTY: MONROE | TOWN: WILTON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	JRM	DESIGNED CK'D	DCM	DRAWN BY	RJB	PLANS CK'D	ASN

GENERAL PLAN

SHEET 1 OF 1
78

SCALE =

I.D. 5130-05-33

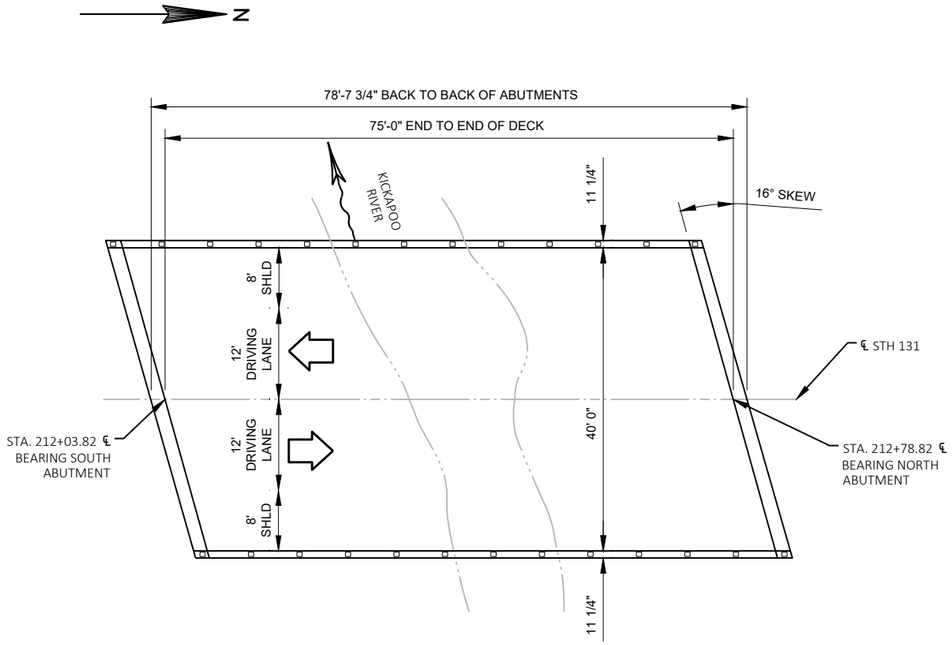
DATE: 09/24/2021

8

8

STATE PROJECT NUMBER

5130-05-63



PLAN

SINGLE SPAN CONCRETE GIRDER

LIST OF DRAWINGS

1. GENERAL PLAN

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
(608) 261-0261

CONSULTANT CONTACT
DYLAN MUSGJERD, P.E.
(608) 789-2034

BILL OF BARS				110 LBS.
MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
S401	4	39-10		DRIP EDGE REPAIR LONGIT.

TOTAL ESTIMATED QUANTITIES B-41-137

BID ITEM NO.	BID ITEMS	UNIT	S. ABUT.	N. ABUT.	SUPER.	TOTALS
203.0335	DEBRIS CONTAINMENT OVER WATERWAY B-41-137	EA	---	---	---	1
502.3200	PROTECTIVE SURFACE TREATMENT	SY	---	---	132	132
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	LB	---	---	110	110
509.1500	CONCRETE SURFACE REPAIR	SF	---	---	328	328
SPV.0060.01	RESEAL RAILING POST CONNECTIONS	EA	---	---	26	26
SPV.0090.01	FLASHING STAINLESS STEEL	LF	---	---	158	158
SPV.0090.02	RESEAL ABUTMENT - DIAPHRAGM JOINTS	LF	20	20	---	40

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DRAWINGS SHALL NOT BE SCALED.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL INFORMATION.

CONCRETE SURFACE REPAIR LOCATIONS AS DIRECTED BY ENGINEER.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

CLEAN AND RE-SEAL ABUTMENT DIAPHRAGM JOINTS ON ALL CORNERS, LOCATIONS AS DIRECTED BY THE ENGINEER. THESE ACTIONS WILL BE PART OF THE RESEAL ABUTMENT - DIAPHRAGM JOINTS BID ITEM (SPV.0090.02).

RE-CAULK ALL RAILING BASE PLATES.

CONCRETE SCREWS SHALL BE 410 STAINLESS STEEL.

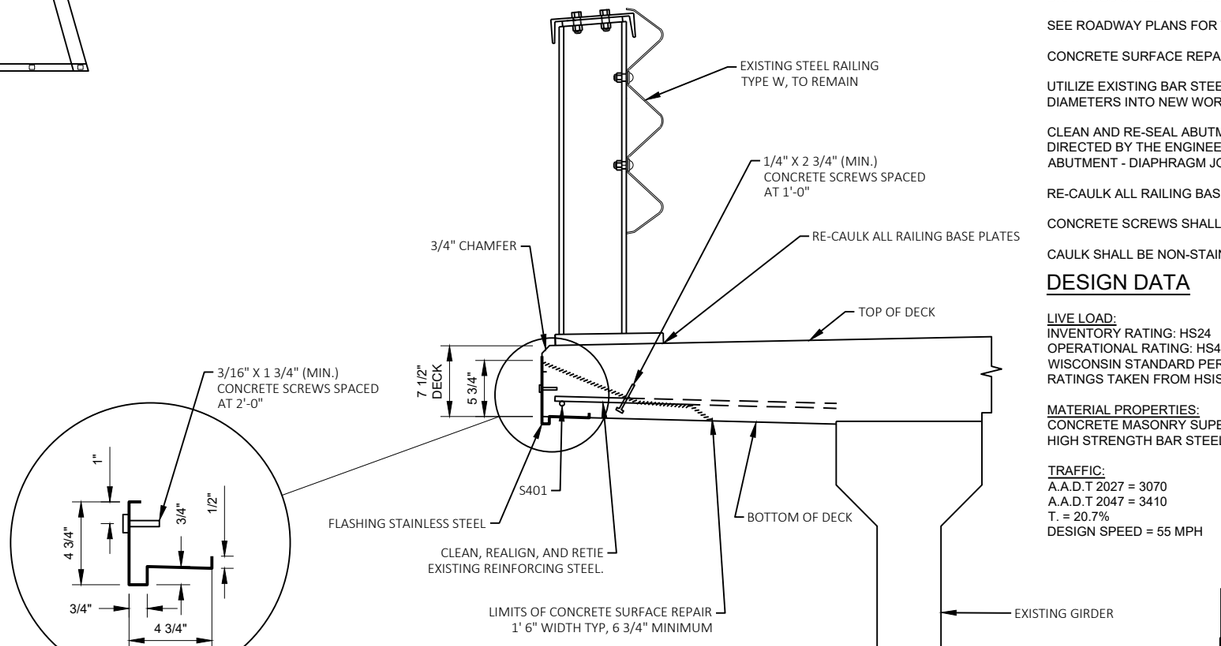
CAULK SHALL BE NON-STAINING, GRAY NON-BITUMINOUS JOINT SEALER.

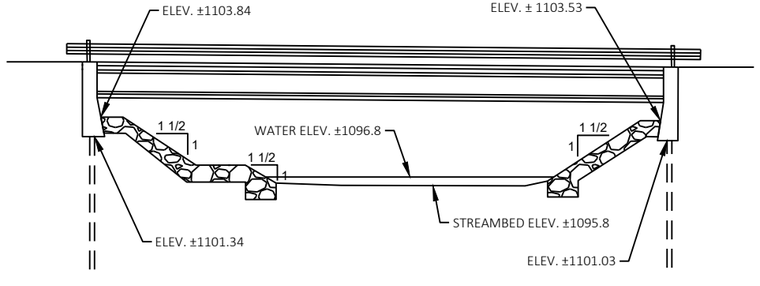
DESIGN DATA

LIVE LOAD:
INVENTORY RATING: HS24
OPERATIONAL RATING: HS48
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS
RATINGS TAKEN FROM HSIS 02/09/2022

MATERIAL PROPERTIES:
CONCRETE MASONRY SUPERSTRUCTURE: f'c = 4,000 PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60: Fy = 60,000 PSI

TRAFFIC:
A.A.D.T 2027 = 3070
A.A.D.T 2047 = 3410
T. = 20.7%
DESIGN SPEED = 55 MPH





ELEVATION

REHABILITATION FLASHING DETAIL

TYPICAL BOTH EDGES OF DECK.

EXTEND FLASHING TO B.F. OF ABUTMENT DIAPHRAGM.

THE BID ITEM "FLASHING STAINLESS STEEL" SHALL INCLUDE PROVIDING AND INSTALLING THE STAINLESS STEEL FLASHING AND 3/16" AND 1/4" CONCRETE SCREWS, SILICONE CAULK, AND CLEANING THE EDGE OF DECK PRIOR TO PLACEMENT.

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THE FLASHING IS TO BE A CONSTANT HEIGHT BASED ON THE THINNEST SLAB DEPTH OVER THE BRIDGE LENGTH.

PROVIDE 2" MINIMUM FLASHING OVERLAP, FASTEN WITH 3/16" X 1 3/4" (MIN.) CONCRETE SCREWS.

WISCONSIN
DYLAN C MUSGJERD
E-48208
GALESVILLE, WISC.
PROFESSIONAL ENGINEER
11/11/2022

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
LA CROSSE OFFICE
201 MAIN STREET
SUITE 1020
LA CROSSE, WI 54601

ISG

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/21/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-41-137

STH 131 OVER KICKAPOO RIVER

COUNTY	TOWN
MONROE	WILTON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JRM	DCM	RJB	ASN

GENERAL PLAN

SHEET 1 OF 1
79

SCALE =

I.D. 5130-05-33

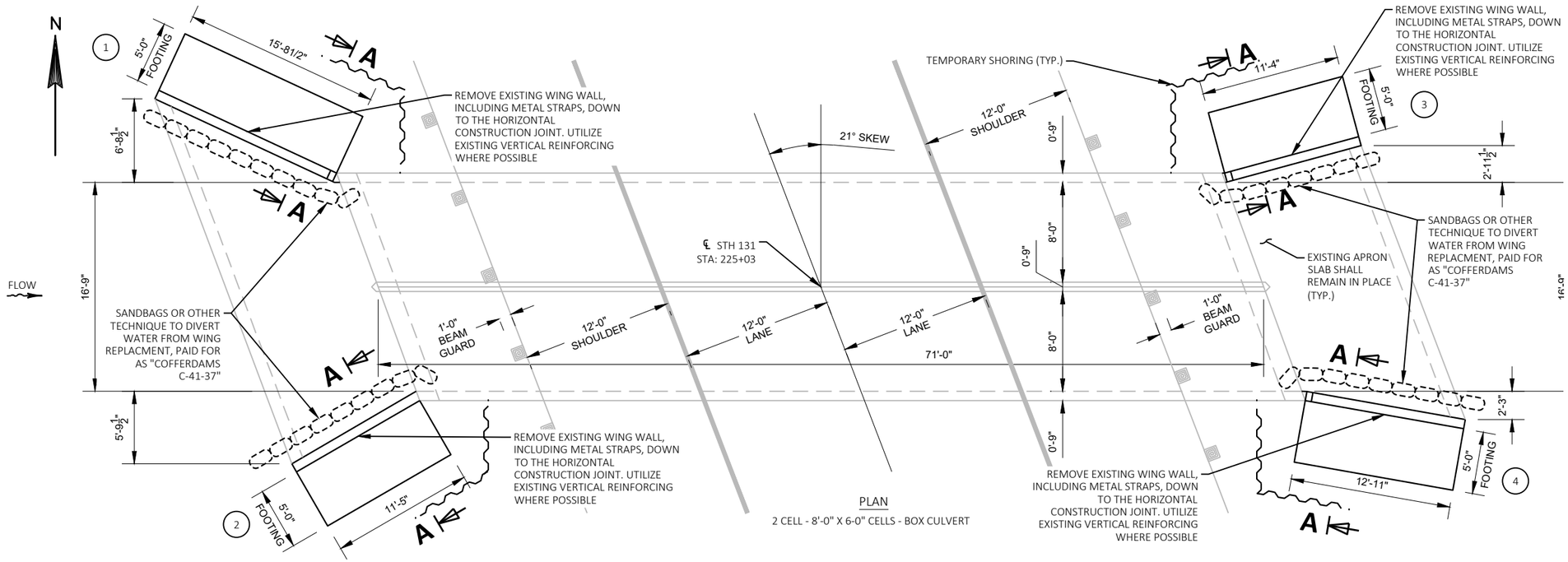
DATE: 11/8/2022

8

8

STATE PROJECT NUMBER

5130-05-63

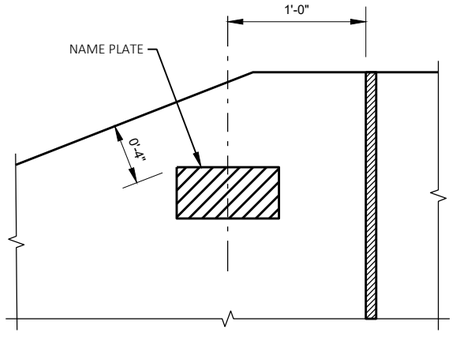


PLAN

2 CELL - 8'-0" X 6-0" CELLS - BOX CULVERT

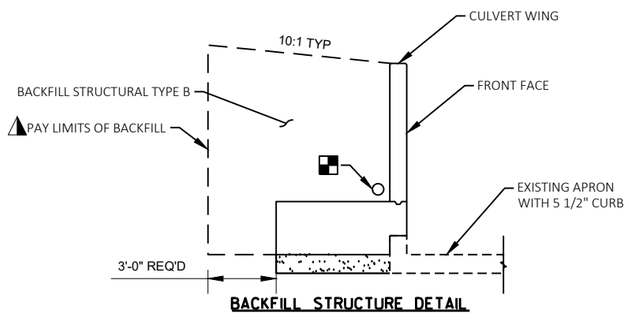
LEGEND

INDICATES WING NUMBER



NAME PLATE DETAIL

WING 4

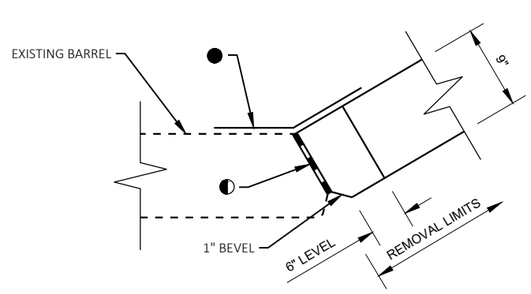


BACKFILL STRUCTURE DETAIL

LEGEND

BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



● 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

◐ ¾" FILLER EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WALL.

CORNER DETAIL

WING 3 SHOWN, OTHERS SIMILAR

TOTAL ESTIMATED QUANTITIES C-41-37

BID ITEM NO.	BID ITEMS	UNIT	TOTALS
203.0220	REMOVING STRUCTURE C-41-37	EACH	1
206.2001.02	EXCAVATION FOR STRUCTURES CULVERTS C-41-37	EACH	1
206.5001.02	COFFERDAMS C-41-37	EACH	4
210.2500	BACKFILL STRUCTURE TYPE B	TON	153
311.0110	BREAKER RUN	TON	15
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	51
504.0100	CONCRETE MASONRY CULVERTS	CY	21
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2000
509.1500	CONCRETE SURFACE REPAIR	SF	20
311.1200.02	TEMPORARY SHORING C-41-37	SF	284
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	13
612.0406	PIPE UNDERDRAIN WRAPPED	LF	57
	NON-BID ITEMS		
	FILLER	SIZE	3/4"
	NAMEPLATE	EA	1

WISCONSIN
DYLAN C MUSGJERD
E-48208
GALESVILLE, WISC
PROFESSIONAL ENGINEER
10/31/2022

DESIGN DATA

MATERIAL PROPERTIES:

CONCRETE MASONRY ——— f'_c = 3,500 P.S.I.

HIGH STRENGTH BAR STEEL REINFORCEMENT ——— f_y = 60,000 P.S.I.

LIVE LOAD:

ORIGINAL DESIGN LOADING: H-20 (FROM 1967 AS-BUILT)

ORIGINAL DESIGN EARTH LOAD: 2.5 FEET OF FILL (FROM 1967 AS-BUILT)

TRAFFIC DATA:

AADT (2027) ——— 3070

AADT (2047) ——— 3410

ROADWAY DESIGN SPEED ——— 55 MPH

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DRAWINGS SHALL NOT BE SCALED.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL INFORMATION.

LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE NOT SHOWN.

THIS PROJECT WILL REHABILITATE THE EXISTING STRUCTURE, C-41-37, A 2 CELL, 71'-0" LONG BOX CULVERT WITH 8'-0" WIDE AND 6'-0" HIGH CELLS.

IMPROVEMENTS INCLUDE THE REPLACEMENT OF THE INLET AND OUTLET WINGS.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

CONCRETE SURFACE REPAIR LOCATIONS AS DIRECTED BY THE ENGINEER.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES SHALL BE THE EXISTING GROUND LINE.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE TOP OF THE WING WITHIN THE LENGTH OF THE WING WALL.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWING. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR. WORK SHALL BE INCLUDED IN THE BID ITEM "CONCRETE MASONRY CULVERTS".

LIST OF DRAWINGS

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
(608) 261-0261

CONSULTANT CONTACT
DYLAN MUSGJERD, P.E.
(608) 789-2034

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

LA CROSSE OFFICE
201 MAIN STREET
SUITE 1020
LA CROSSE, WI 54601

ISG

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/21/22

CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-41-37

STH 131 OVER BR KICKAPOO

COUNTY	TOWN
MONROE	WILTON

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JRM	DCM	RJB	ASN

GENERAL PLAN

SHEET 1 OF 2
80

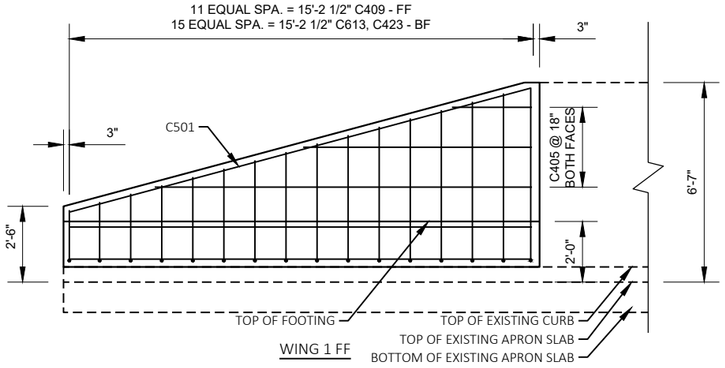
SCALE =1" = 10'

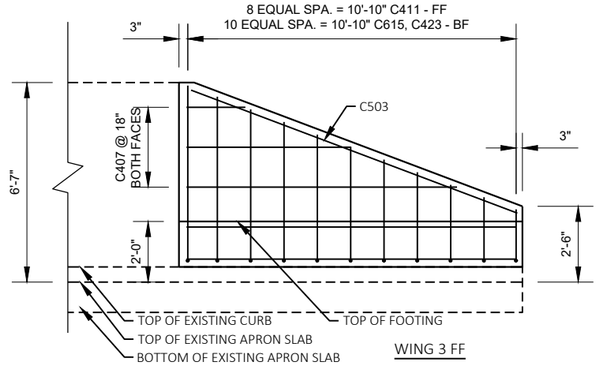
I.D. 5130-05-63

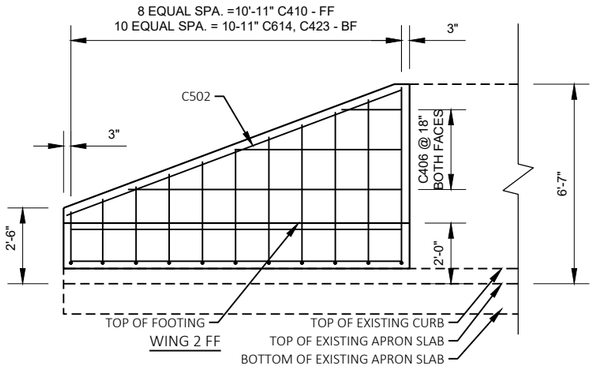
DATE: 09/24/2021

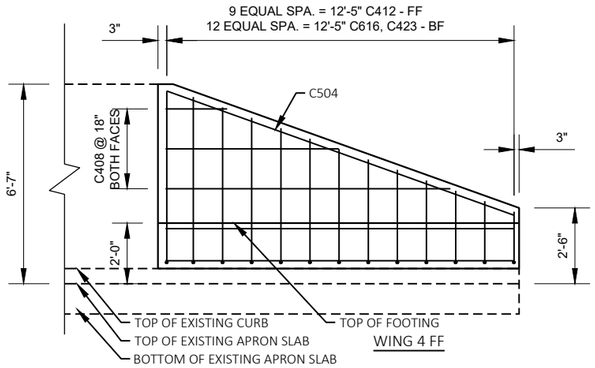
STATE PROJECT NUMBER

5130-05-63

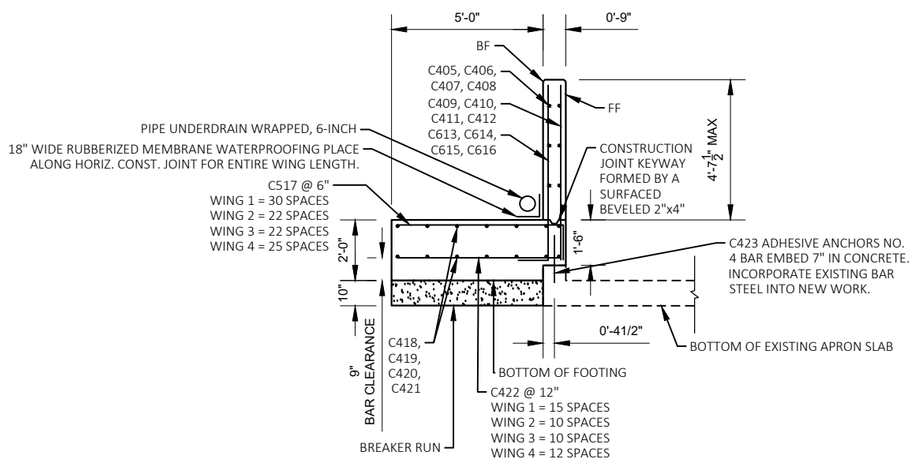








BAR SERIES TABLE		
BAR MARK	NO. REQ'D.	LENGTH
C405	2 SERIES OF 3	0'-4" TO 11'-6"
C406	2 SERIES OF 3	0'-3" TO 8'-3"
C407	2 SERIES OF 3	0'-3" TO 8'-3"
C408	2 SERIES OF 3	0'-3" TO 9'-5"
C409	1 SERIES OF 12	1'-7" TO 5'-8"
C410	1 SERIES OF 9	1'-7" TO 5'-8"
C411	1 SERIES OF 9	1'-7" TO 5'-8"
C412	1 SERIES OF 10	1'-7" TO 5'-8"
C613	1 SERIES OF 16	2'-6" TO 6'-7"
C614	1 SERIES OF 11	2'-6" TO 6'-7"
C615	1 SERIES OF 11	2'-6" TO 6'-7"
C616	1 SERIES OF 13	2'-6" TO 6'-7"



SECTION A-A THRU WING

BILL OF BARS (COATED) 2,000 LBS.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
C501	2	15'-10"			WING 1 HORIZ. BOTH FACES
C502	2	11'-9"			WING 2 HORIZ. BOTH FACES
C503	2	11'-8"			WING 3 HORIZ. BOTH FACES
C504	2	13'-2"			WING 4 HORIZ. BOTH FACES
C405	6	5'-11"		▲	WING 1 HORIZ. BOTH FACES
C406	6	4'-4"		▲	WING 2 HORIZ. BOTH FACES
C407	6	4'-4"		▲	WING 3 HORIZ. BOTH FACES
C408	6	4'-11"		▲	WING 4 HORIZ. BOTH FACES
C409	12	3'-8"		▲	WING 1 VERT. FRONT FACE
C410	9	3'-8"		▲	WING 2 VERT. FRONT FACE
C411	9	3'-8"		▲	WING 3 VERT. FRONT FACE
C412	10	3'-8"		▲	WING 4 VERT. FRONT FACE
C613	16	4'-7"	1'-0"	▲	WING 1 VERT. BACK FACE
C614	11	4'-7"	1'-0"	▲	WING 2 VERT. BACK FACE
C615	11	4'-7"	1'-0"	▲	WING 3 VERT. BACK FACE
C616	13	4'-7"	1'-0"	▲	WING 4 VERT. BACK FACE
C517	103	6'-3"	1'-1"		WING FOOTING
C418	14	15'-2"			WING 1 FOOTING
C419	14	10'-11"			WING 2 FOOTING
C420	14	10'-10"			WING 3 FOOTING
C421	14	12'-5"			WING 4 FOOTING
C422	51	5'-5"			WING FOOTING
C423	51	1'-4"			HORZ. CONST. JOINT DOWEL

- EPOXY COAT ALL BAR STEEL REINFORCEMENT.
- THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A "L" SHAPED BAR
- ▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-41-37

DRAWN BY RJB | PLANS CK'D ASN

WING DETAILS

SHEET 2 OF 2
81

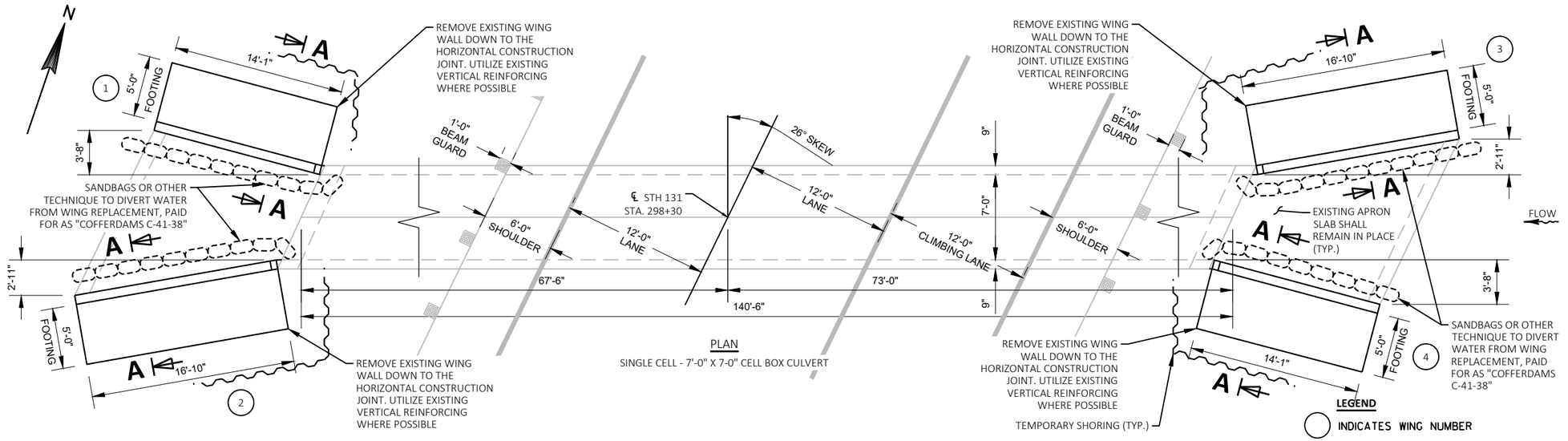
SCALE =1" = 5'

8

8

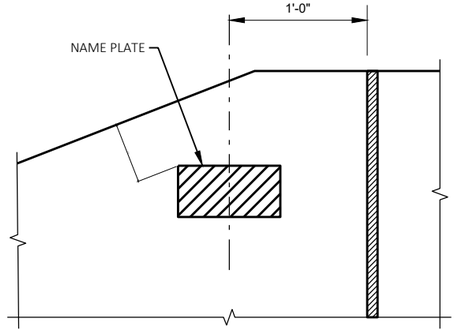
STATE PROJECT NUMBER

5130-05-63



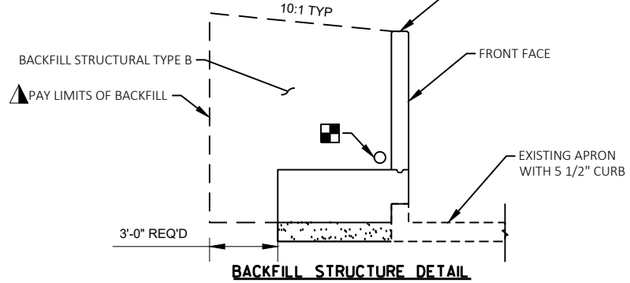
PLAN

SINGLE CELL - 7'-0" X 7-0" CELL BOX CULVERT



NAME PLATE DETAIL

WING 4

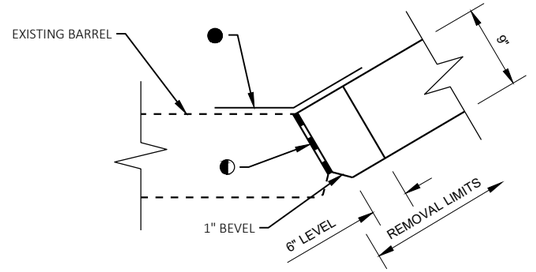


BACKFILL STRUCTURE DETAIL

LEGEND

BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



● 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

◐ ¾" FILLER EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WALL.

CORNER DETAIL

WING 3 SHOWN, OTHERS SIMILAR

GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DRAWINGS SHALL NOT BE SCALED.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL INFORMATION.

LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE NOT SHOWN.

THIS PROJECT WILL REHABILITATE THE EXISTING STRUCTURE, C-41-38, A SINGLE CELL, 140'-6" LONG BOX CULVERT WITH A 7'-0" WIDE AND 7'-0" HIGH CELL.

IMPROVEMENTS INCLUDE THE REPLACEMENT OF THE INLET AND OUTLET WINGS.

CONCRETE SURFACE REPAIR LOCATIONS AS DIRECTED BY THE ENGINEER.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES SHALL BE THE EXISTING GROUND LINE.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE TOP OF THE WING WITHIN THE LENGTH OF THE WING WALL.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR. WORK SHALL BE INCLUDED IN THE BID ITEM "CONCRETE MASONRY CULVERTS".

LIST OF DRAWINGS

STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
(608) 261-0261

CONSULTANT CONTACT
DYLAN MUSGJERD, P.E.
(608) 789-2034

TOTAL ESTIMATED QUANTITIES C-41-38

BID ITEM NO.	BID ITEMS	UNIT	TOTALS
203.0220	REMOVING STRUCTURE C-41-38	EACH	1
206.2001.03	EXCAVATION FOR STRUCTURES CULVERTS C-41-38	EACH	1
206.5001.03	COFFERDAMS C-41-38	EACH	4
210.2500	BACKFILL STRUCTURE TYPE B	TON	205
311.0110	BREAKER RUN	TON	18
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	66
504.0100	CONCRETE MASONRY CULVERTS	CY	27
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2614
509.1500	CONCRETE SURFACE REPAIR	SF	10
511.1200.03	TEMPORARY SHORING C-41-38	SF	412
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	15
612.0406	PIPE UNDERDRAIN WRAPPED	LF	68
	NON-BID ITEMS		
	FILLER	SIZE	3/4"
	NAMEPLATE	EA	1

WISCONSIN
DYLAN C MUSGJERD
E-48208
GALESVILLE, WISC.
PROFESSIONAL ENGINEER
10/31/2022

DESIGN DATA

MATERIAL PROPERTIES:

CONCRETE MASONRY ——— f'_c = 3,500 P.S.I.

HIGH STRENGTH BAR STEEL REINFORCEMENT ——— f_y = 60,000 P.S.I.

LIVE LOAD:

ORIGINAL DESIGN LOADING: H-20 (FROM 1967 AS-BUILT)

ORIGINAL DESIGN EARTH LOAD: 15 FEET (FROM 1967 AS-BUILT)

TRAFFIC DATA:

AADT (2027) ——— 3070

AADT (2047) ——— 3410

ROADWAY DESIGN SPEED ——— 55 MPH

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

LA CROSSE OFFICE
201 MAIN STREET
SUITE 1020
LA CROSSE, WI 54601

ISG

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 11/21/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-41-38

STH 131 OVER BR KICKAPOO

COUNTY	TOWN
MONROE	WILTON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	JRM	DESIGNED CK'D	DCM	DRAWN BY	RJB	PLANS CK'D	ASN

GENERAL PLAN

SHEET 1 OF 2
82

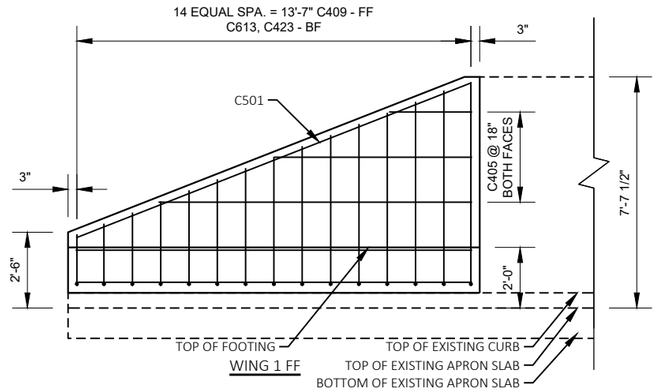
SCALE =1" = 10'

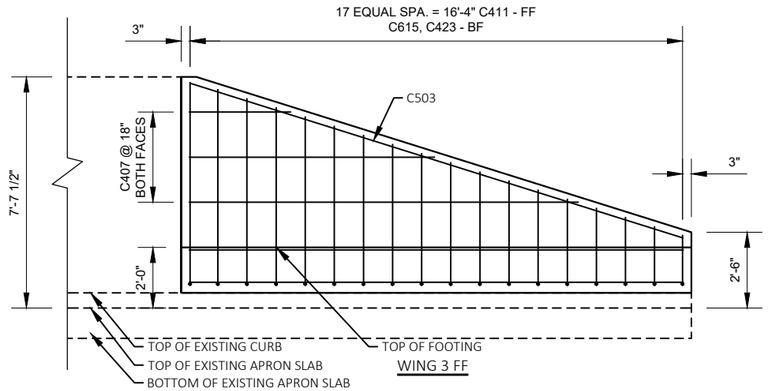
I.D. 5130-05-63

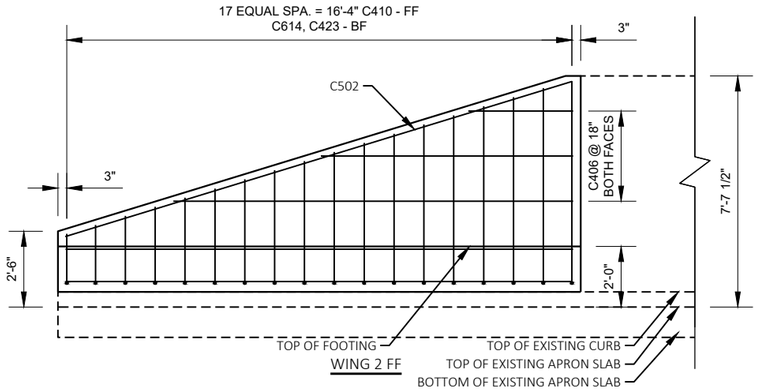
DATE: 10/25/2022

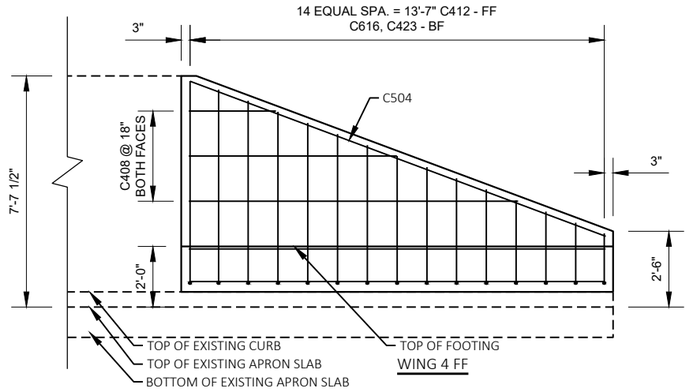
STATE PROJECT NUMBER

5130-05-63

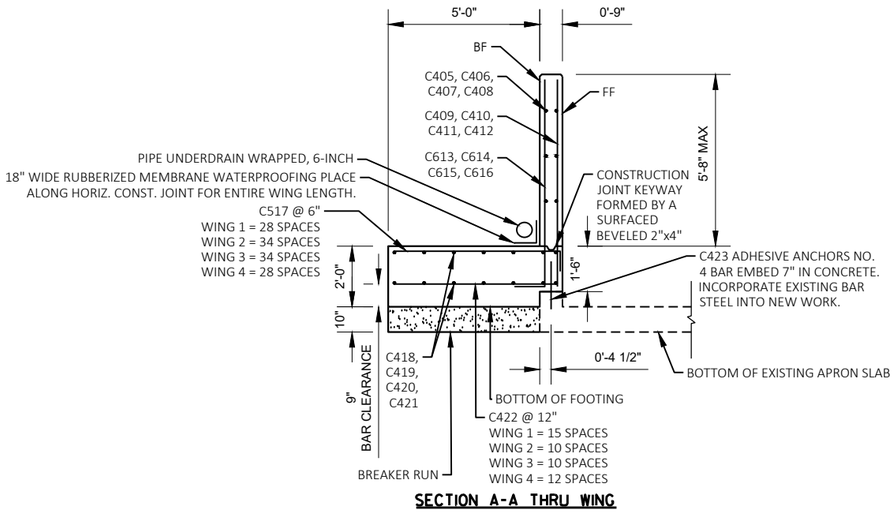








BAR SERIES TABLE		
BAR MARK	NO. REQ'D.	LENGTH
C405	2 SERIES OF 3	2'-11" TO 10'-11"
C406	2 SERIES OF 3	3'-7" TO 13'-2"
C407	2 SERIES OF 3	3'-7" TO 13'-2"
C408	2 SERIES OF 3	2'-11" TO 10'-11"
C409	1 SERIES OF 15	1'-7" TO 6'-8"
C410	1 SERIES OF 18	1'-7" TO 6'-8"
C411	1 SERIES OF 18	1'-7" TO 6'-8"
C412	1 SERIES OF 15	1'-7" TO 6'-8"
C613	1 SERIES OF 15	2'-6" TO 7'-7"
C614	1 SERIES OF 18	2'-6" TO 7'-7"
C615	1 SERIES OF 18	2'-6" TO 7'-7"
C616	1 SERIES OF 15	2'-6" TO 7'-7"



SECTION A-A THRU WING

BILL OF BARS (COATED) 2,614 LBS.					
MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
C501	2	14'-7"			WING 1 HORIZ. BOTH FACES
C502	2	17'-2"			WING 2 HORIZ. BOTH FACES
C503	2	17'-2"			WING 3 HORIZ. BOTH FACES
C504	2	14'-7"			WING 4 HORIZ. BOTH FACES
C405	6	6'-11"		▲	WING 1 HORIZ. BOTH FACES
C406	6	8'-5"		▲	WING 2 HORIZ. BOTH FACES
C407	6	8'-5"		▲	WING 3 HORIZ. BOTH FACES
C408	6	6'-11"		▲	WING 4 HORIZ. BOTH FACES
C409	15	4'-2"		▲	WING 1 VERT. FRONT FACE
C410	18	4'-2"		▲	WING 2 VERT. FRONT FACE
C411	18	4'-2"		▲	WING 3 VERT. FRONT FACE
C412	15	4'-2"		▲	WING 4 VERT. FRONT FACE
C613	15	5'-1"	1'-0"	▲	WING 1 VERT. BACK FACE
C614	18	5'-1"	1'-0"	▲	WING 2 VERT. BACK FACE
C615	18	5'-1"	1'-0"	▲	WING 3 VERT. BACK FACE
C616	15	5'-1"	1'-0"	▲	WING 4 VERT. BACK FACE
C517	124	6'-3"	1'-1"		WING FOOTING
C418	14	13'-6"			WING 1 FOOTING
C419	14	16'-9"			WING 2 FOOTING
C420	14	16'-4"			WING 3 FOOTING
C421	14	13'-9"			WING 4 FOOTING
C422	66	5'-5"			WING FOOTING
C423	66	1'-4"			HORZ. CONST. JOINT DOWEL

- EPOXY COAT ALL BAR STEEL REINFORCEMENT.
- THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A "L" SHAPED BAR
- ▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-41-38

DRAWN BY RJB | PLANS CK'D ASN

WING DETAILS

SHEET 2 OF 2
83

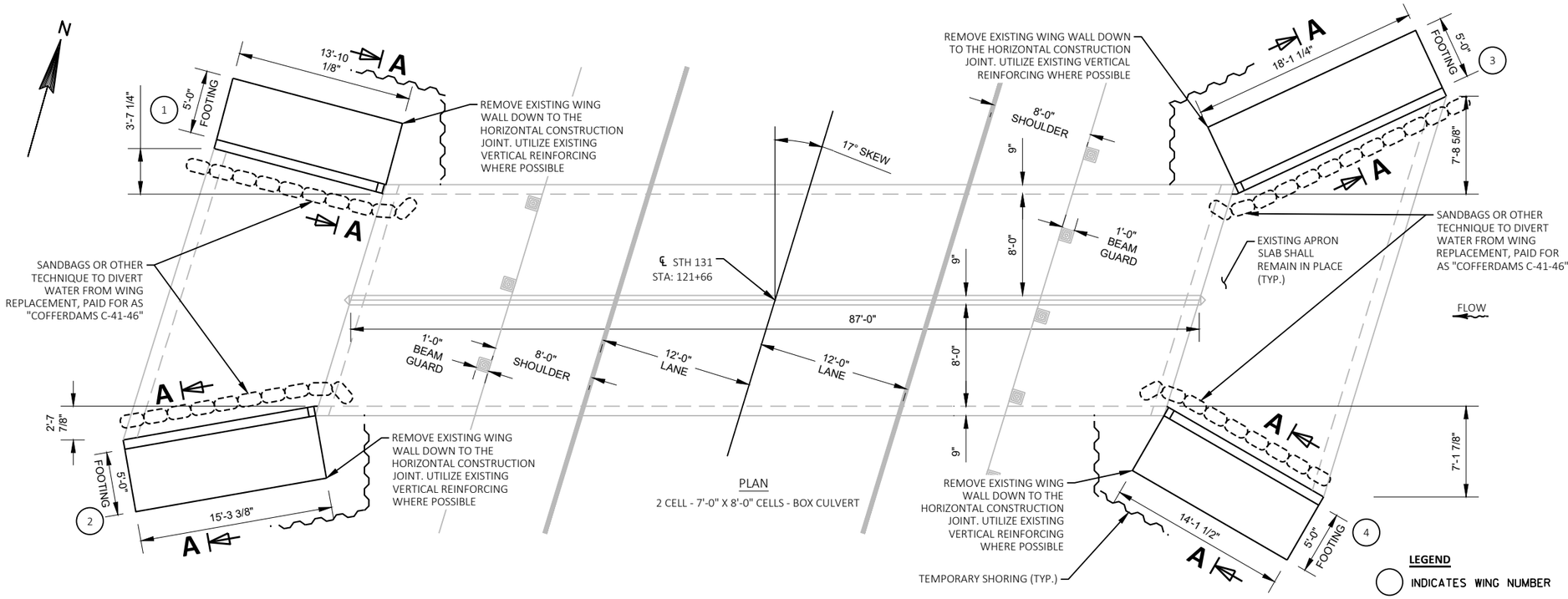
SCALE =1" = 5'

8

8

STATE PROJECT NUMBER

5130-05-63



GENERAL NOTES

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DRAWINGS SHALL NOT BE SCALED.

SEE ROADWAY PLANS FOR TRAFFIC CONTROL INFORMATION.

LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE NOT SHOWN.

THIS PROJECT WILL REHABILITATE THE EXISTING STRUCTURE, C-41-46, A 2 CELL, 87'-0" LONG BOX CULVERT WITH 8'-0" WIDE AND 7'-0" HIGH CELLS.

IMPROVEMENTS INCLUDE THE REPLACEMENT OF THE INLET AND OUTLET WINGS.

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

THE FIRST DIGIT OF A THREE DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

CONCRETE SURFACE REPAIR LOCATIONS AS DIRECTED BY THE ENGINEER.

ALL CONCRETE REMOVAL SHALL BE DEFINED BY A 1 INCH DEEP SAW CUT.

THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES SHALL BE THE EXISTING GROUND LINE.

ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE TOP OF THE WING WITHIN THE LENGTH OF THE WING WALL.

UTILIZE EXISTING BAR STEEL REINFORCEMENT WHERE SHOWN AND EXTEND 24 BAR DIAMETERS INTO NEW WORK, UNLESS SPECIFIED OTHERWISE.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWING. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR. WORK SHALL BE INCLUDED IN THE BID ITEM "CONCRETE MASONRY CULVERTS".

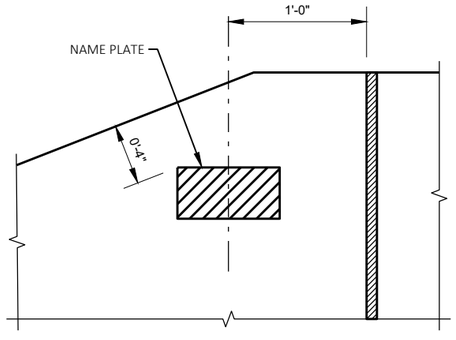
LIST OF DRAWINGS

1. GENERAL PLAN
2. WING DETAILS

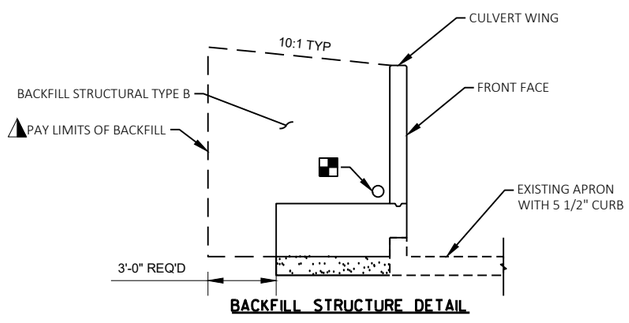
STRUCTURE DESIGN CONTACTS

BRIDGE OFFICE CONTACT
AARON BONK, P.E.
(608) 261-0261

CONSULTANT CONTACT
DYLAN MUSGJERD, P.E.
(608) 789-2034



NAME PLATE DETAIL
WING 4

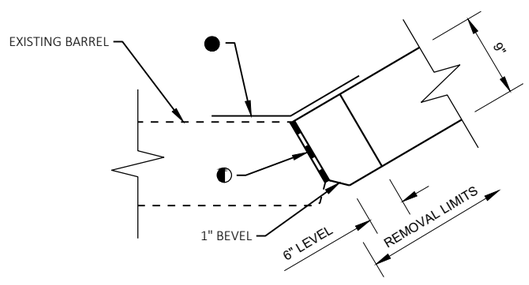


BACKFILL STRUCTURE DETAIL

LEGEND

BACKFILL PAY LIMITS. BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES. LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

PIPE UNDERDRAIN WRAPPED (6-INCH). SLOPE 0.5% MIN. TO SUITABLE DRAINAGE. ATTACH RODENT SHIELD AT ENDS OF PIPE UNDERDRAIN.



● 18" WIDE RUBBERIZED MEMBRANE WATERPROOFING EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

◐ ¾" FILLER EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WALL.

CORNER DETAIL
WING 3 SHOWN, OTHERS SIMILAR

TOTAL ESTIMATED QUANTITIES C-41-46

BID ITEM NO.	BID ITEMS	UNIT	TOTALS
203.0220	REMOVING STRUCTURE C-41-46	EACH	1
206.2001.01	EXCAVATION FOR STRUCTURES CULVERTS C-41-46	EACH	1
206.5001.01	COFFERDAMS C-41-46	EACH	4
210.2500	BACKFILL STRUCTURE TYPE B	TON	201
311.0110	BREAKER RUN	TON	18
502.4204	ADHESIVE ANCHORS NO. 4 BAR	EACH	65
504.0100	CONCRETE MASONRY CULVERTS	CY	25
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	LB	2566
509.1500	CONCRETE SURFACE REPAIR	SF	10
511.1200.01	TEMPORARY SHORING C-41-46	SF	410
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	15
612.0406	PIPE UNDERDRAIN WRAPPED	LF	68
	NON-BID ITEMS		
	FILLER	SIZE	3/4"
	NAMEPLATE	EA	1

WISCONSIN
DYLAN C MUSGJERD
E-48208
GALESVILLE, WISC
PROFESSIONAL ENGINEER
10/31/2022

DESIGN DATA

MATERIAL PROPERTIES:
CONCRETE MASONRY ——— f'_c = 3,500 P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT ——— f_y = 60,000 P.S.I.

LIVE LOAD:
ORIGINAL DESIGN LOADING: H-20 (FROM 1984 AS-BUILT)
ORIGINAL DESIGN EARTH LOAD: 8.8 FEET (FROM 1984 AS-BUILT)

TRAFFIC DATA:
AADT (2027) ——— 3070
AADT (2047) ——— 3410
ROADWAY DESIGN SPEED ——— 55 MPH

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY
LA CROSSE OFFICE
201 MAIN STREET
SUITE 1020
LA CROSSE, WI 54601

ISG

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED _____ SDR 11/21/22
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-41-46

STH 131 OVER BR KICKAPOO

COUNTY	TOWN
MONROE	WILTON

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
JRM	DCM	RJB	ASN

GENERAL PLAN

SHEET 1 OF 2
84

SCALE =

I.D. 5130-05-63

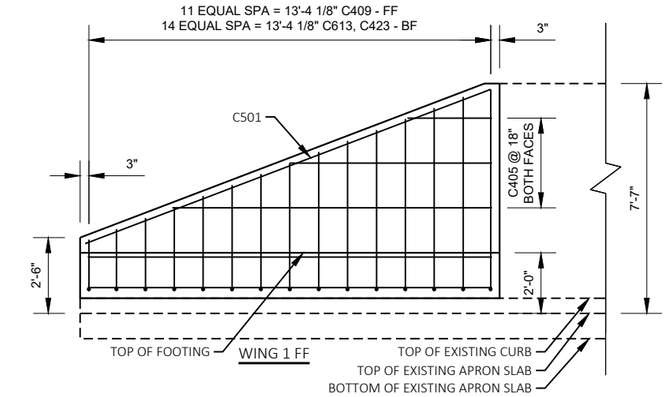
DATE: 10/24/2022

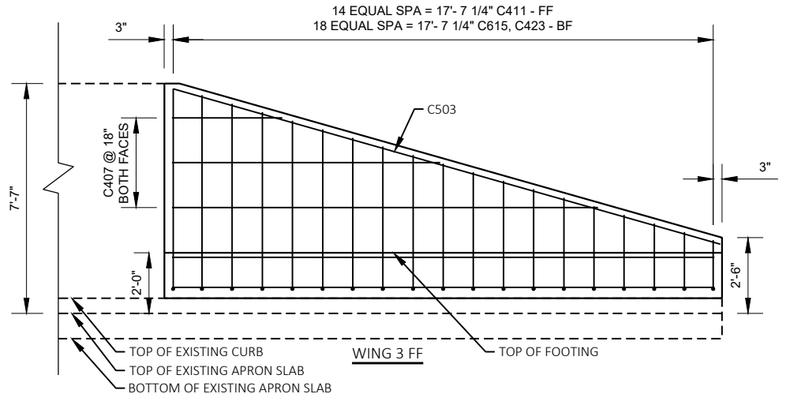
8

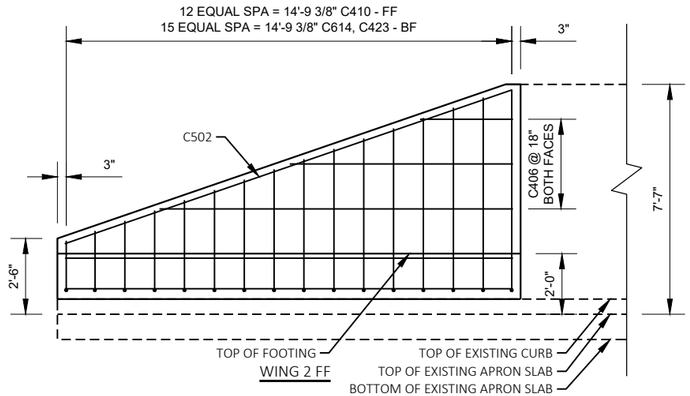
8

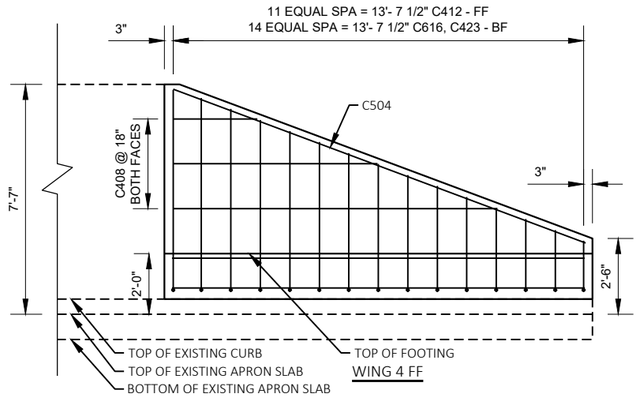
STATE PROJECT NUMBER

5130-05-63

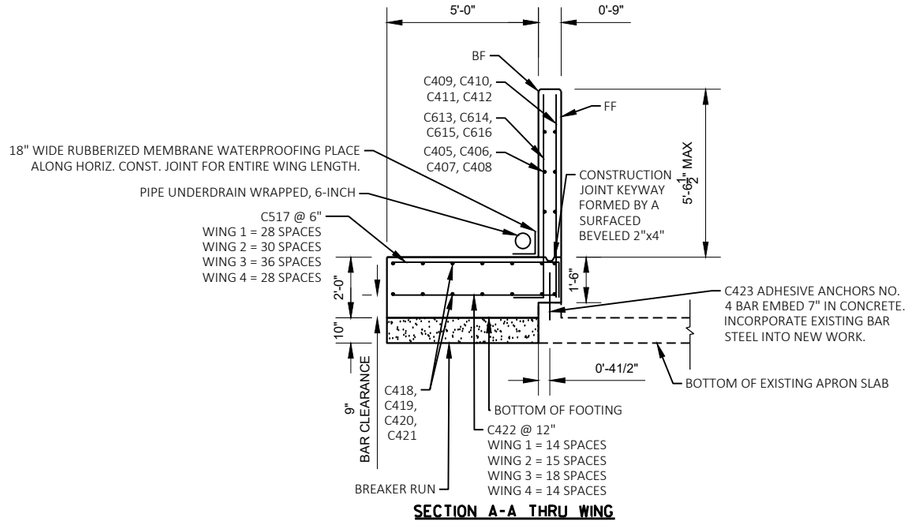








BAR SERIES TABLE		
BAR MARK	NO. REQ'D.	LENGTH
C405	2 SERIES OF 3	2'-10" TO 10'-9"
C406	2 SERIES OF 3	3'-2" TO 11'-11"
C407	2 SERIES OF 3	3'-9" TO 14'-2"
C408	2 SERIES OF 3	2'-11" TO 10'-11"
C409	1 SERIES OF 12	1'-7" TO 6'-8"
C410	1 SERIES OF 13	1'-7" TO 6'-8"
C411	1 SERIES OF 15	1'-7" TO 6'-8"
C412	1 SERIES OF 12	1'-7" TO 6'-8"
C613	1 SERIES OF 15	2'-6" TO 7'-7"
C614	1 SERIES OF 16	2'-6" TO 7'-7"
C615	1 SERIES OF 19	2'-6" TO 7'-7"
C616	1 SERIES OF 15	2'-6" TO 7'-7"



SECTION A-A THRU WING

BILL OF BARS (COATED) 2,566 LBS.

MARK	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
C501	2	14'-4"			WING 1 HORIZ. BOTH FACES
C502	2	15'-8"			WING 2 HORIZ. BOTH FACES
C503	2	18'-4"			WING 3 HORIZ. BOTH FACES
C504	2	14'-8"			WING 4 HORIZ. BOTH FACES
C405	6	6'-10"		▲	WING 1 HORIZ. BOTH FACES
C406	6	7'-7"		▲	WING 2 HORIZ. BOTH FACES
C407	6	9'-0"		▲	WING 3 HORIZ. BOTH FACES
C408	6	6'-11"		▲	WING 4 HORIZ. BOTH FACES
C409	12	4'-2"		▲	WING 1 VERT. FRONT FACE
C410	13	4'-2"		▲	WING 2 VERT. FRONT FACE
C411	15	4'-2"		▲	WING 3 VERT. FRONT FACE
C412	12	4'-2"		▲	WING 4 VERT. FRONT FACE
C613	15	5'-1"	1'-0"	▲	WING 1 VERT. BACK FACE
C614	16	5'-1"	1'-0"	▲	WING 2 VERT. BACK FACE
C615	19	5'-1"	1'-0"	▲	WING 3 VERT. BACK FACE
C616	15	5'-1"	1'-0"	▲	WING 4 VERT. BACK FACE
C517	126	6'-3"	1'-1"		WING FOOTING
C418	14	13'-8"			WING 1 FOOTING
C419	14	14'-9"			WING 2 FOOTING
C420	14	17'-7"			WING 3 FOOTING
C421	14	13'-7"			WING 4 FOOTING
C422	65	5'-5"			WING FOOTING
C423	65	1'-4"			HORZ. CONST. JOINT DOWEL

- EPOXY COAT ALL BAR STEEL REINFORCEMENT.
- THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A "L" SHAPED BAR
- ▲ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-41-46

DRAWN BY RJB | PLANS CK'D ASN

WING DETAILS

SHEET 2 OF 2
85

SCALE =1" = 5'

8

8

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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