EAU

NOVEMBER 2021

PROJECT ID: 1023-00-79

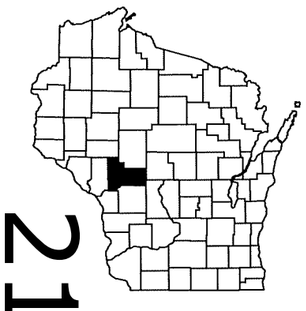
WITH: 1024-01-75

COUNTY: JACKSON

ORDER OF SHEETS

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

TOTAL SHEETS = 274



21

N

DESIGN DESIGNATION

A.A.D.T.	2024	=	28,300
A.A.D.T.	2044	=	33,500
D.H.V.		=	4,724
D.D.		=	S8/42
T.		=	25.4%
DESIGN SPEED		=	70 MPH
ESALS		=	35,000,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

BLACK RIVER FALLS - TOMAH

BLACK RIVER TO PERRY CREEK

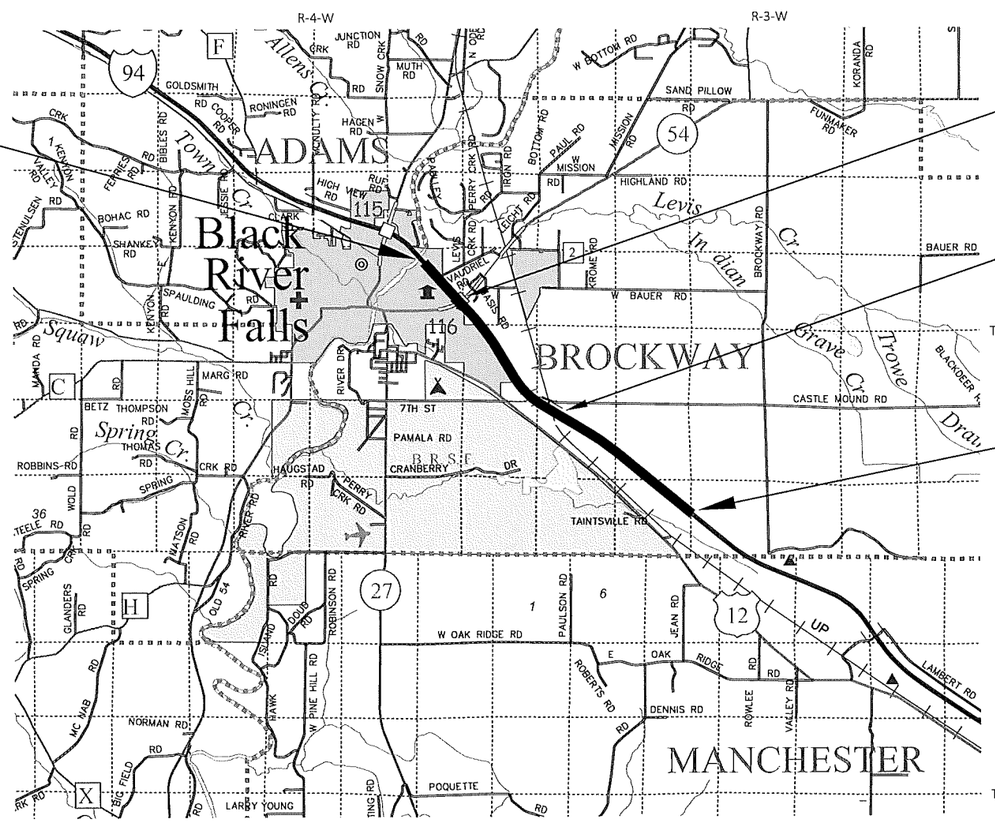
IH 94

JACKSON COUNTY

STATE PROJECT NUMBER
1023-00-79

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1023-00-79	WISC 2022016	1

BEGIN PROJECT
STA 1503+82'EB'
Y=100448.05
X= 91476.93
STA 1503+42'WB'
Y=100536.32
X= 91526.19



EXCEPTION TO NET C/L LENGTH
STA 1519+52'EB' - STA 1521+95'EB', B-27-41
STA 1519+90'WB' - STA 1521+80'WB', B-27-42

EXCEPTION TO NET C/L LENGTH
STA 1641+89'EB' - STA 1645+01'EB', B-27-43
STA 1641+20'WB' - STA 1644+34'WB', B-27-44

END PROJECT
STA 1765+00'EB'
STA 1765+00'WB'

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 4.841 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), JACKSON COUNTY, NAD 83 (1991), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (1991). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12B.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CHRISTINA MARTIN
Designer	TOM ANDERSON
Project Manager	JESSE LARSON
Regional Examiner	NW REGION
Regional Supervisor	NICOLE PASSUELLO

APPROVED FOR THE DEPARTMENT
DATE: 7/27/21 Nicole Passuello (Signature)

E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\010101_TI.DWG PLOT DATE : 7/19/2021 1:52 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME :

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE

UTILITIES

COMMUNICATIONS

AT&T LEGACY (COMMUNICATION LINE)
KENNETH M. NINE
110 N MAIN ST
CULVER, IN 46511
PHONE: 574-904-6336
EMAIL: KNINE@JMCEAINC.COM

CENTURYLINK (COMMUNICATION LINE)
JASON BUSSE
3235 INTERTECH DR SUITE 600
BROOKFIELD, WI 53045
PHONE: 715-415-3214
EMAIL: JASON.BUSSE@LUMEN.COM

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

MCI (COMMUNICATION LINE)
RJ CICATELLO
15725 W RYERSON RD
NEW BERLIN, WI 53151
PHONE: 262-232-1323
EMAIL: RANDY.CICATELLO@VERIZON.COM

SPRINT COMMUNICATIONS CO LP (COMMUNICATION LINE)
DAN HILLIARD
849 EARL STREET
ST. PAUL, MN 55106
PHONE: 612-217-3526
EMAIL: DAN.J.HILLIARD@T-MOBILE.NET

GAS & PETROLEUM

WE ENERGIES (GAS/PETROLEUM)
JEREMY SLOWINSKI
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
PHONE: 715-418-1831
EMAIL: JEREMY.SLOWINSKI@WE-ENERGIES.COM

ELECTRICITY

BLACK RIVER FALLS UTILITIES (ELECTRICITY)
KEVIN LAVALLEY
119 N WATER STREET
BLACK RIVER FALLS, WI 54615
PHONE: 715-896-0511
EMAIL: KLAVALLEY@WPPIENERGY.ORG

JACKSON ELECTRIC COOPERATIVE (ELECTRICITY)
KEVIN BABCOCK
N6868 CO HWY F
PO BOX 546
BLACK RIVER FALLS, WI 54615
PHONE: 715-284-5385
EMAIL: KEVINB@JACKELEC.COM

ELECTRICITY - TRANSMISSION

ATC MANAGEMENT INC (ELECTRICITY - TRANSMISSION)
DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PHONE: 608-877-7650
EMAIL: DVOSBERG@ATCLLC.COM

XCEL ENERGY (ELECTRICITY - TRANSMISSION)
MITCHELL DIENGER
414 NICOLLET MALL 5TH FLOOR
MINNEAPOLIS, MN 55401
PHONE: 608-386-2233
EMAIL: MITCHELL.A.DIENGER@XCELENERGY.COM
COPY ALL XCEL ENERGY CORRESPONDENCE TO:
CORISSA SEELY
1414 WEST HAMILTON AVENUE
PO BOX 0008
EAU CLAIRE, WI 54702-0008
PHONE: 715-737-4097
EMAIL: CORISSA.E.SEELY@XCELENERGY.COM

SEWER & WATER

BROCKWAY SANITARY DISTRICT #1 (SEWER/WATER)
MARK HILL
236 GEBHARDT RD
PO BOX 484
BLACK RIVER FALLS, WI 54615
PHONE: 715-299-3649
EMAIL: MARKHILLBILLY75@GMAIL.COM

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

WISCONSIN DNR CONTACT

BRAD BETTHAUSER
DEPARTMENT OF NATURAL RESOURCES
WISCONSIN RAPIDS SERVICE CENTER
473 GRIFFITH DRIVE
WISCONSIN RAPIDS, WI 54494
715-421-7851

GENERAL NOTES

HORIZONTAL CONTROL POINTS AND ANY OTHER SURVEY INFORMATION WILL BE PROVIDED BY THE NORTHWEST REGION TECHNICAL SERVICES UPON REQUEST.

CURVE DATA IS BASED ON THE ARC DEFINITION.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL DIGGERS HOTLINE PRIOR TO BEGINNING WORK OPERATIONS.

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

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

WETLANDS MAY EXIST IN LOCATIONS THAT ARE NOT SHOWN ON THE PLANS. DO NOT STAGE IN OR DISTURB WETLAND AREAS.

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

WISDOT REGION ENVIR COORD

HANNAH FREDERICKSON
WISDOT NW REGION
718 W CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
715-817-0407

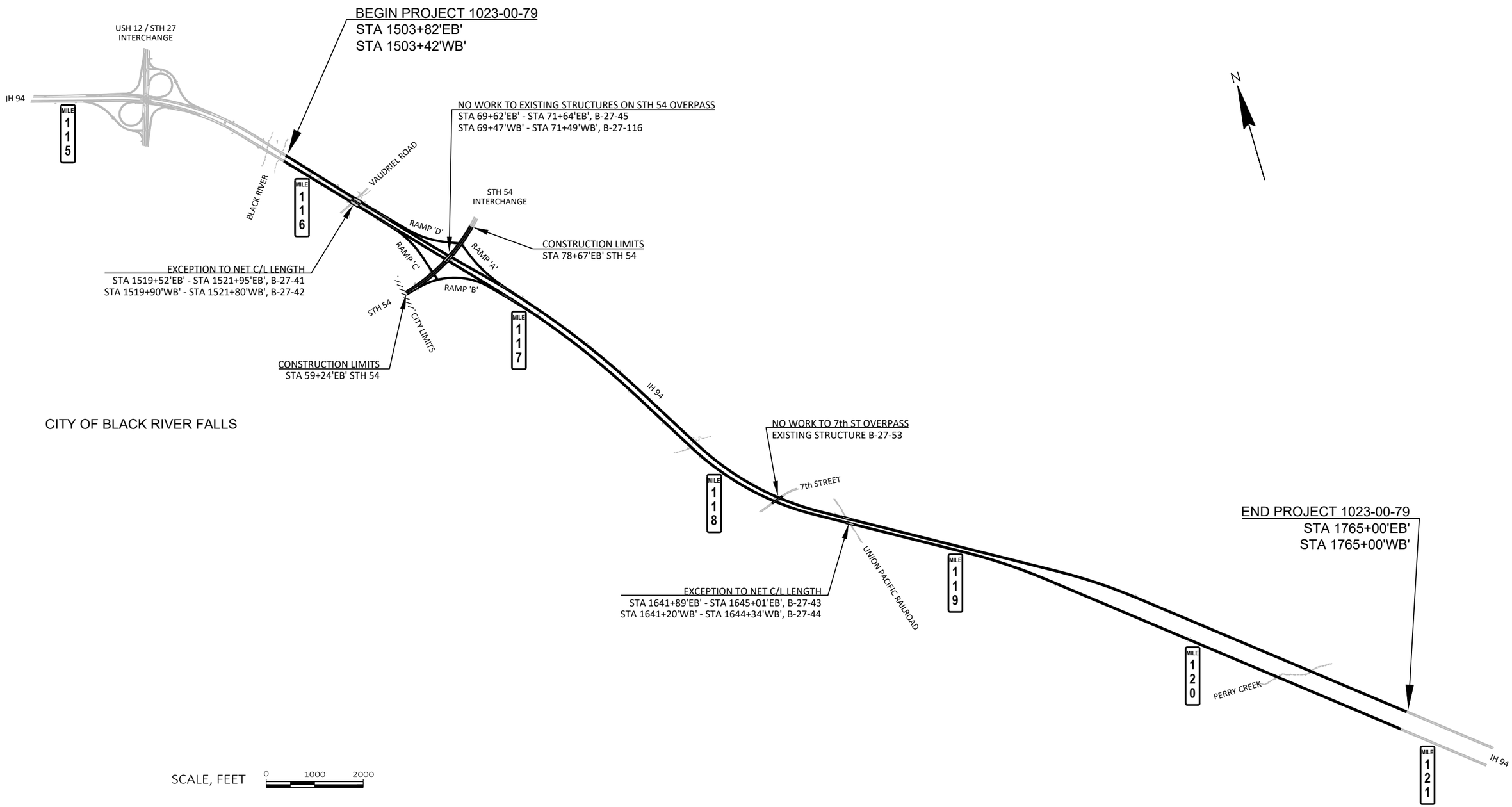
WISDOT STORMWATER ENGR & EC

DAVID LARSON
WISDOT NW REGION
718 W CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
715-836-2067

ORDER OF SECTION 2 SHEETS

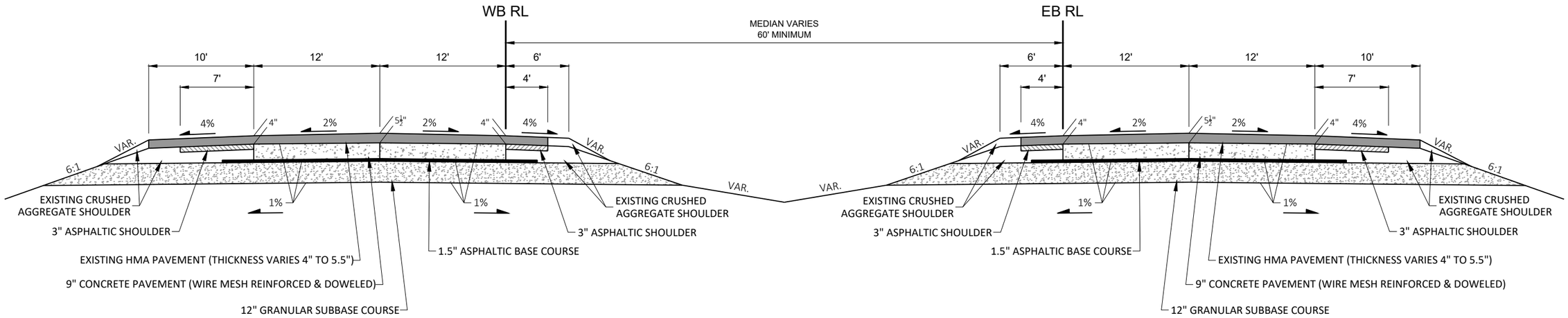
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
EROSION CONTROL
PERMANENT SIGNING
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT DATA
SUPERELEVATION DATA

2



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PROJECT OVERVIEW	SHEET 3	E

2



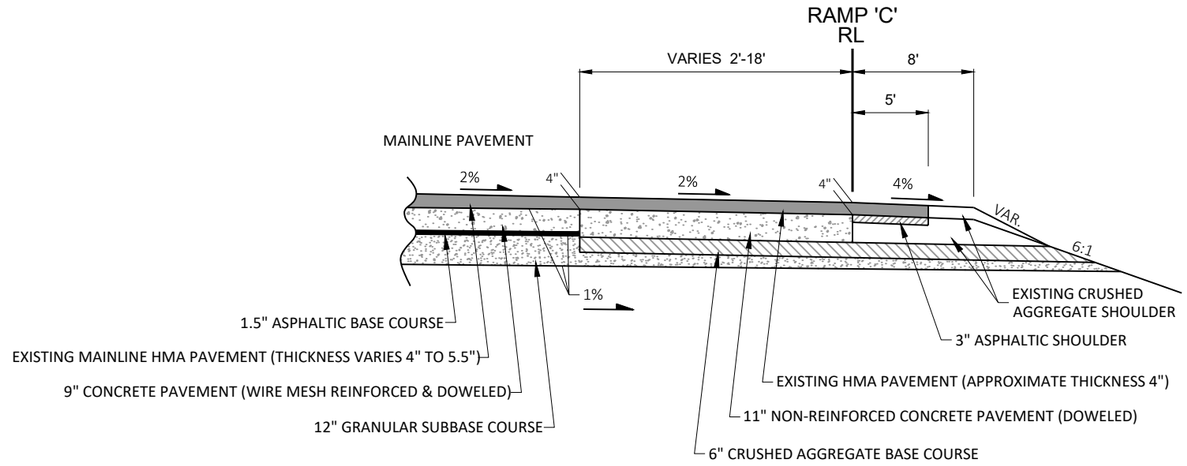
EXISTING TYPICAL SECTION
IH 94 MAINLINE

STA 1503+82'EB' - STA 1765+00'EB'
STA 1503+42'WB' - STA 1765+00'WB'

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	EXISTING TYPICAL SECTIONS	SHEET 4	E

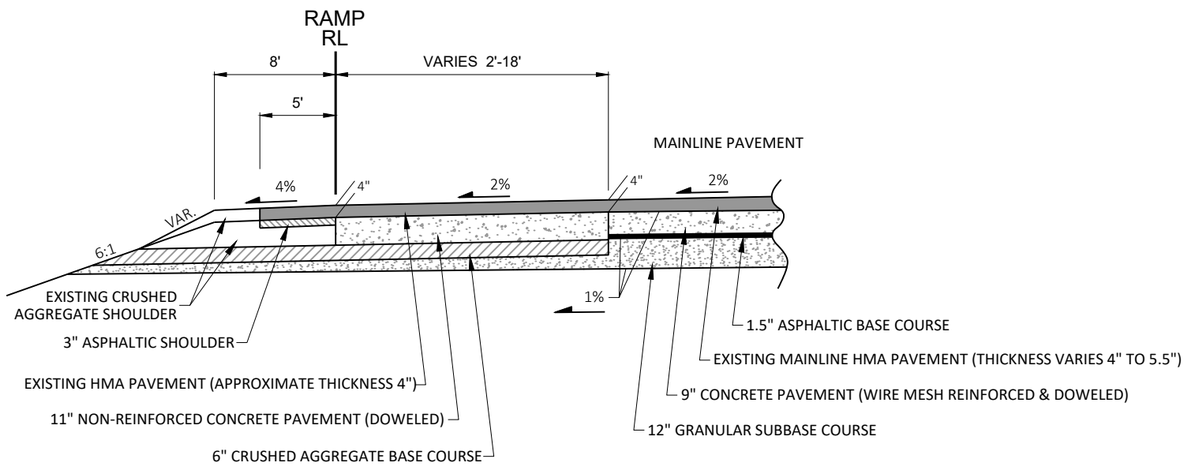
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LAYOUT NAME - 01
PLOT DATE : 7/19/2021 1:56 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



EXISTING TYPICAL SECTION
EB IH 94 RAMP 'C' TAPER - STH 54 INTERCHANGE

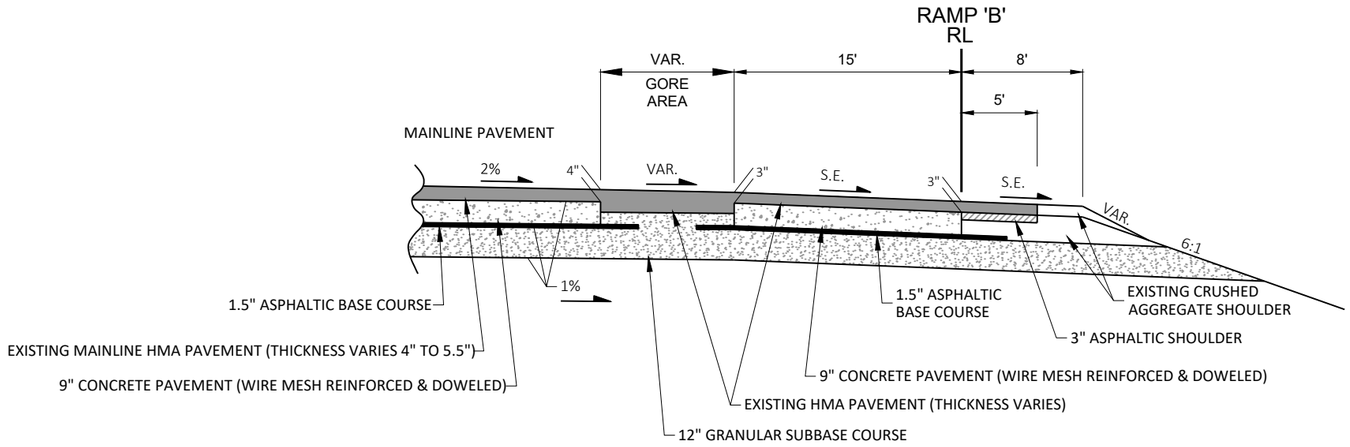
STA 1524+43.56'EB' - STA 1531+45.25'EB'



EXISTING TYPICAL SECTION
WB IH 94 RAMP TAPERS - STH 54 INTERCHANGE

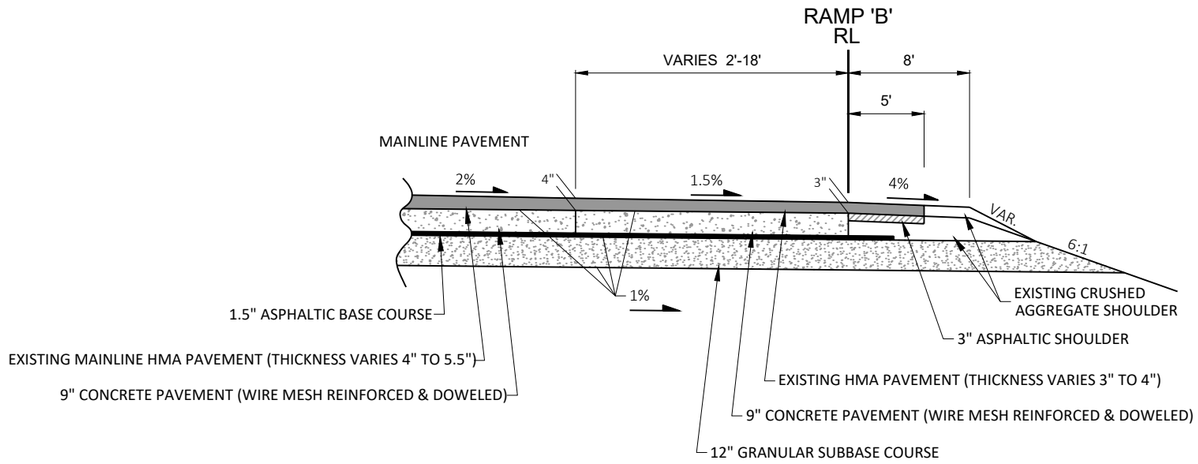
STA 1521+96.95'WB' - STA 1529+72.62'WB' (RAMP 'D')
STA 1554+70.88'WB' - STA 1561+64.90'WB' (RAMP 'A')

2



EXISTING TYPICAL SECTION
EB IH 94 RAMP 'B' TAPER - STH 54 INTERCHANGE

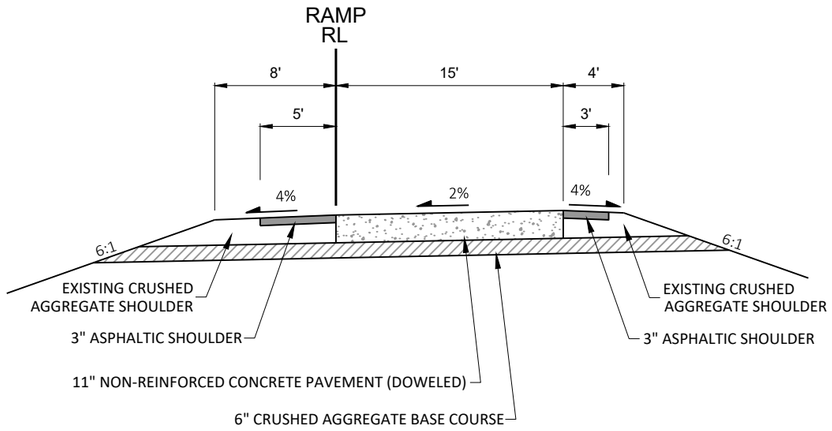
STA 1551+37.21'EB' - STA 1554+98.70'EB'



EXISTING TYPICAL SECTION
EB IH 94 RAMP 'B' TAPER - STH 54 INTERCHANGE

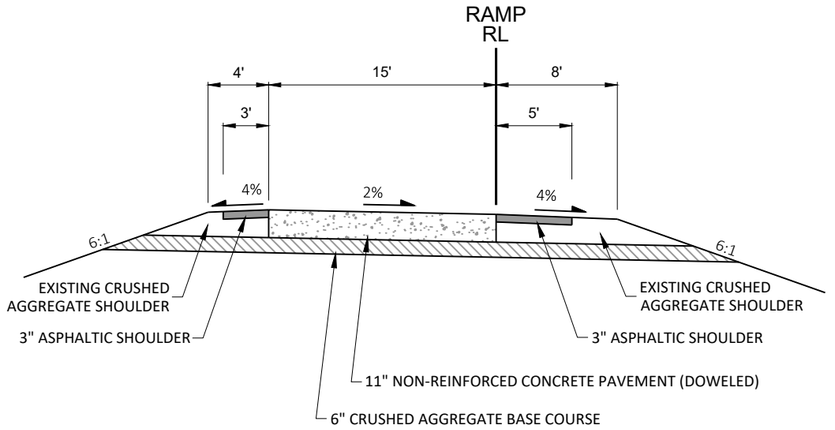
STA 1554+98.70'EB' - STA 1563+97.05'EB'

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	EXISTING TYPICAL SECTIONS	SHEET 6	E



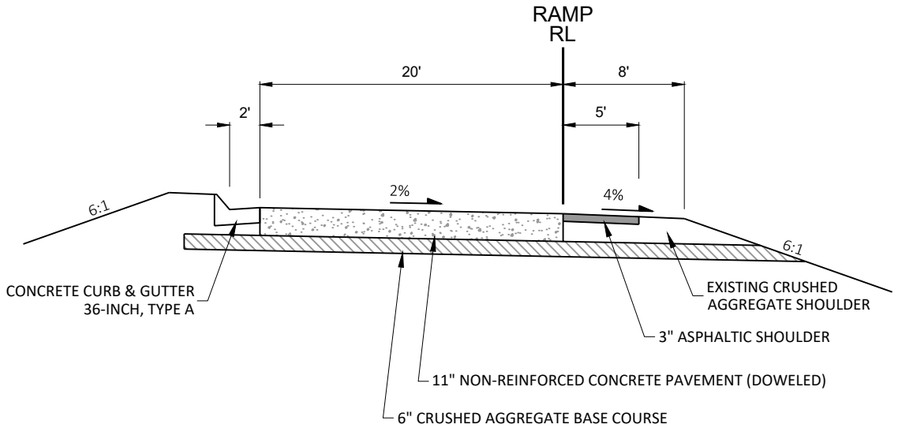
EXISTING TYPICAL SECTION
WB IH 94 RAMPS - STH 54 INTERCHANGE

STA 60+09.30'D' - STA 74+10.60'D'
STA 75+01.92'A' - STA 86+23.88'A'



EXISTING TYPICAL SECTION
EB IH 94 RAMPS - STH 54 INTERCHANGE

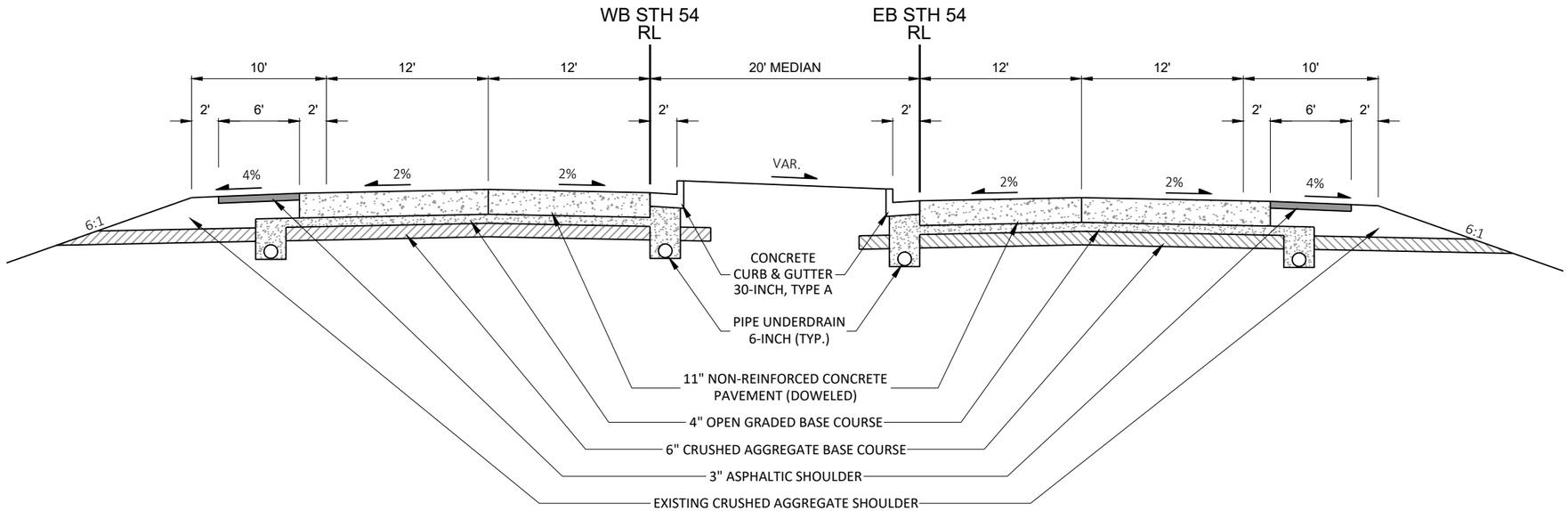
STA 54+65.20'C' - STA 65+63.08'C'
STA 60+00.00'B' - STA 75+12.42'B'



EXISTING TYPICAL SECTION
RAMP 'C' EXTENSION - STH 54 INTERCHANGE

STA 66+35.73'C' - STA 67+47.02'C'

2



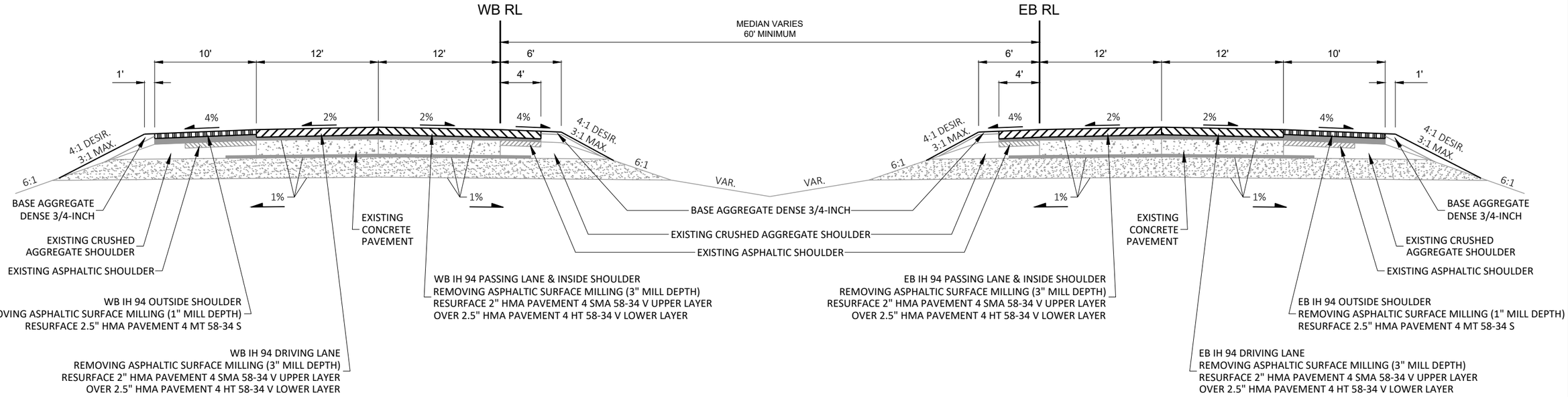
EXISTING TYPICAL SECTION
STH 54

STA 59+24'EB' - STA 78+67'EB'
STA 59+19'WB' - STA 78+51'WB'

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	EXISTING TYPICAL SECTIONS	SHEET 8	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\020311_TS_EXISTING_TYPICALS.DWG
LAYOUT NAME - 05
PLOT DATE : 7/19/2021 1:56 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

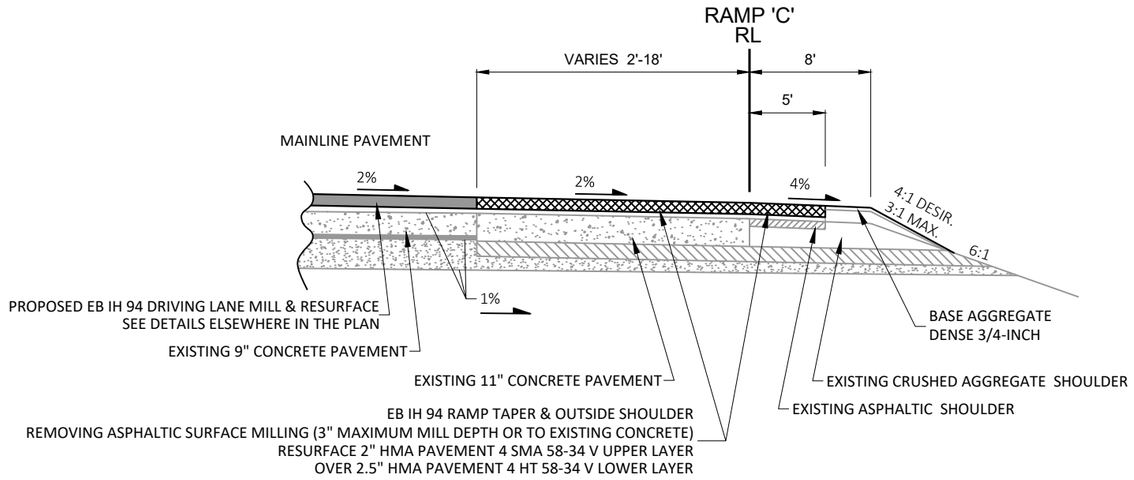
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FINISHED TYPICAL SECTION
IH 94 MAINLINE

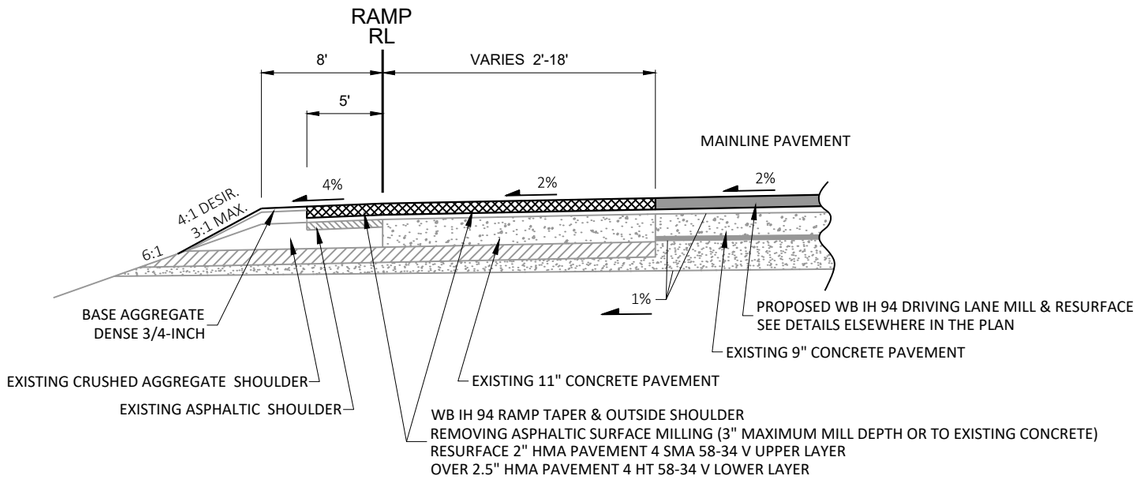
STA 1503+82'EB' - STA 1765+00'EB'
STA 1503+42'WB' - STA 1765+00'WB'

2



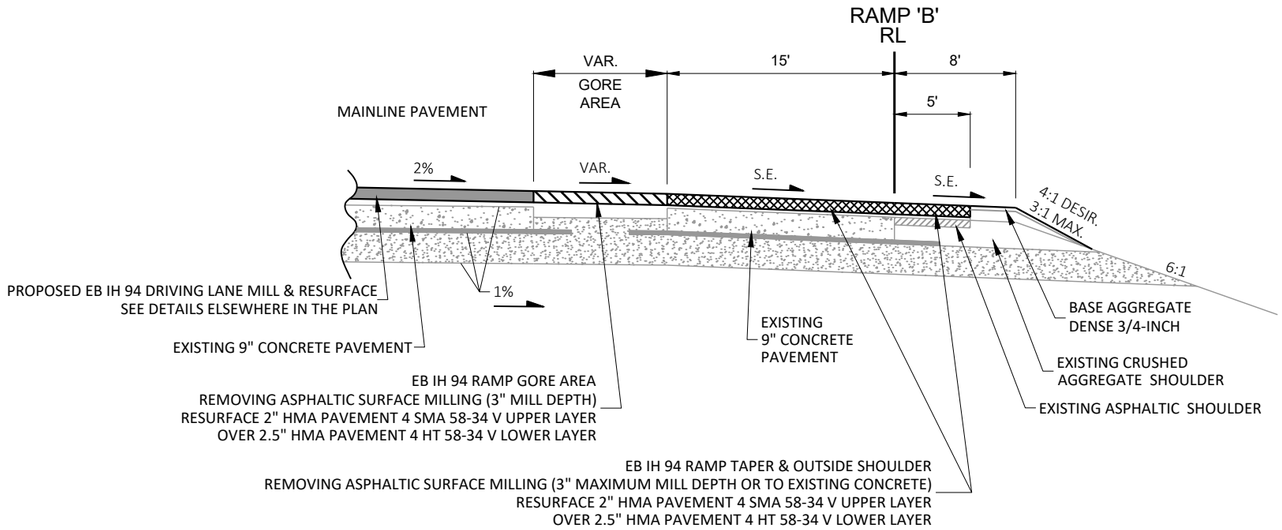
FINISHED TYPICAL SECTION
EB IH 94 RAMP 'C' TAPER - STH 54 INTERCHANGE

STA 1524+43.56'EB' - STA 1531+45.25'EB'



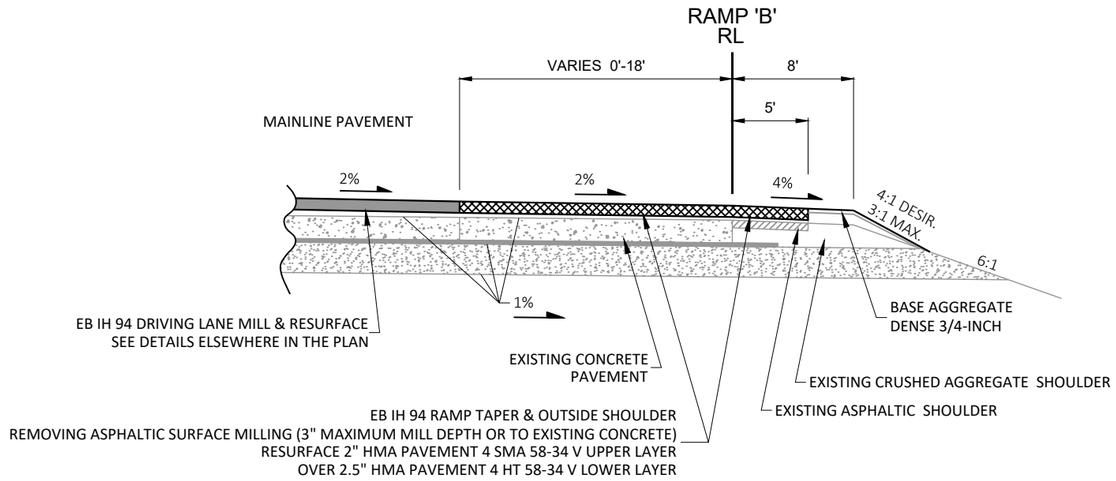
FINISHED TYPICAL SECTION
WB IH 94 RAMP TAPERS - STH 54 INTERCHANGE

STA 1521+96.95'WB' - STA 1529+72.62'WB' (RAMP 'D')
STA 1554+70.88'WB' - STA 1561+64.90'WB' (RAMP 'A')



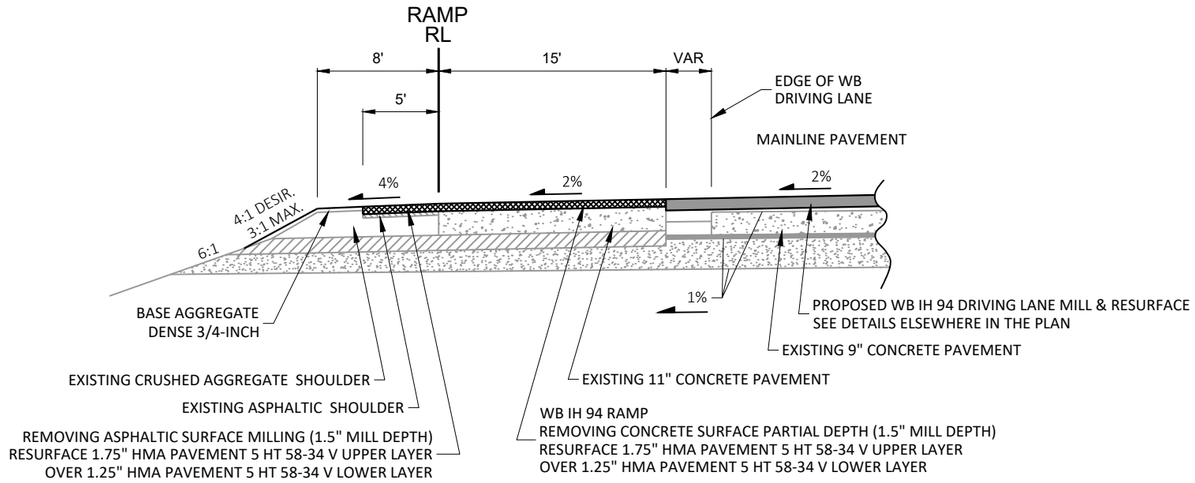
FINISHED TYPICAL SECTION
EB IH 94 RAMP 'B' TAPER - STH 54 INTERCHANGE

STA 1551+37.21'EB' - STA 1554+98.70'EB'



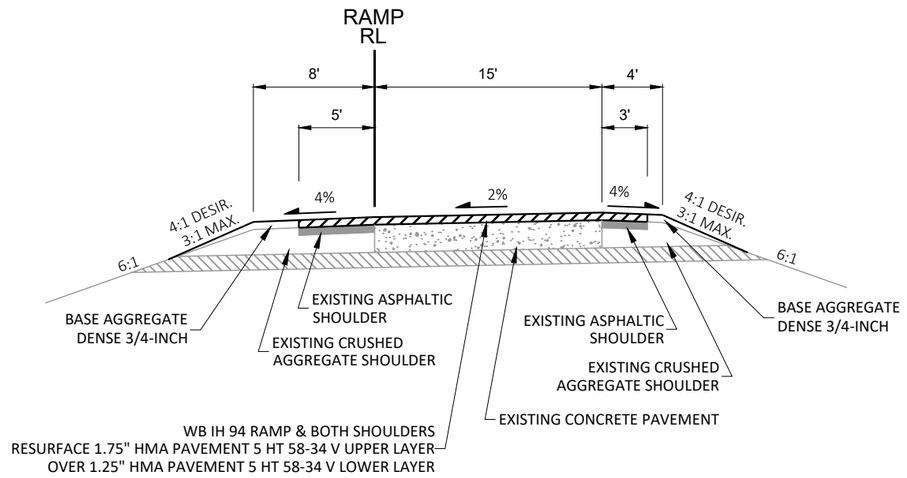
FINISHED TYPICAL SECTION
EB IH 94 RAMP 'B' TAPER - STH 54 INTERCHANGE

STA 1554+98.70'EB' - STA 1563+97.05'EB'



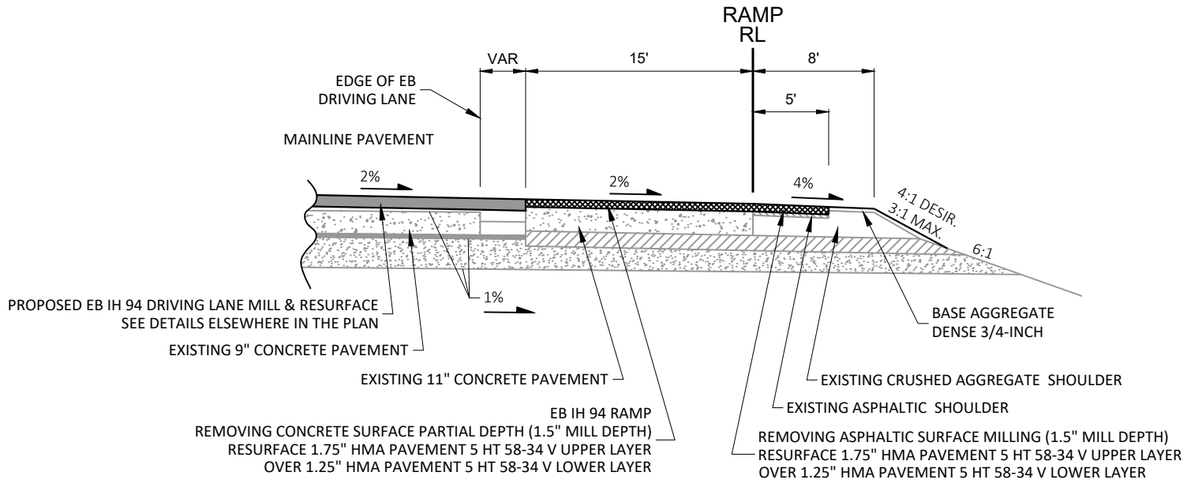
FINISHED TYPICAL SECTION
WB IH 94 RAMPS - STH 54 INTERCHANGE

STA 60+09.30'D' - STA 65+00.00'D'
STA 84+00.00'A' - STA 86+23.88'A'



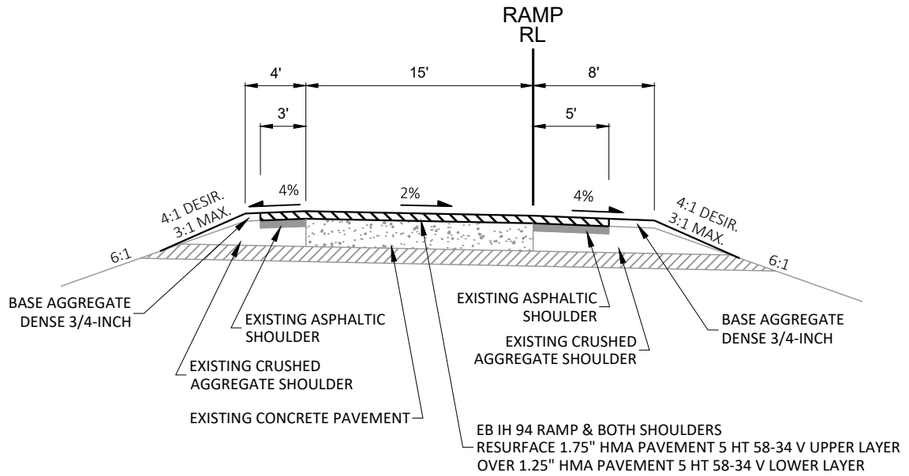
FINISHED TYPICAL SECTION
WB IH 94 RAMPS - STH 54 INTERCHANGE

STA 65+00.00'D' - STA 74+10.60'D'
STA 75+01.92'A' - STA 84+00.00'A'



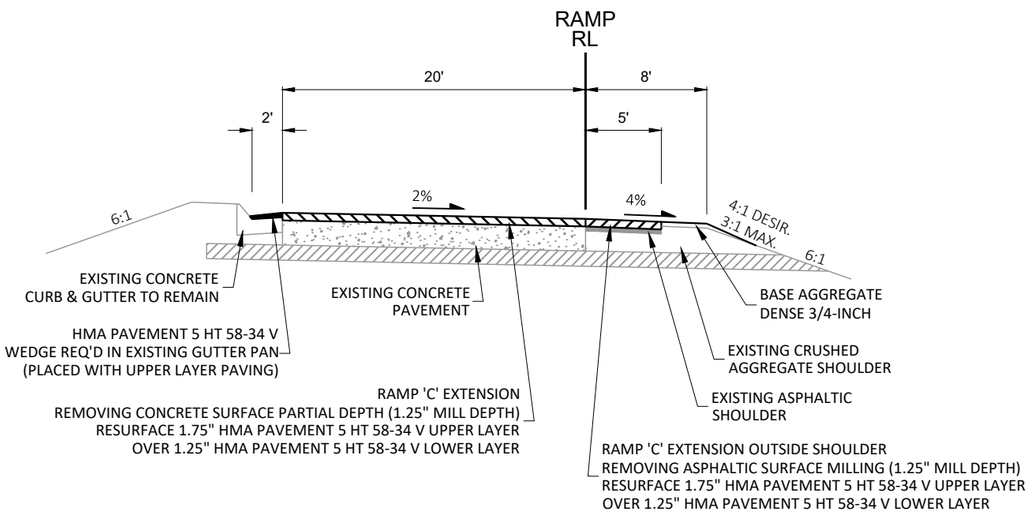
FINISHED TYPICAL SECTION
EB IH 94 RAMPS - STH 54 INTERCHANGE

STA 54+65.20'C' - STA 57+00.00'C'



FINISHED TYPICAL SECTION
EB IH 94 RAMPS - STH 54 INTERCHANGE

STA 57+00.00'C' - STA 65+63.08'C'
STA 60+00.00'B' - STA 75+12.42'B'

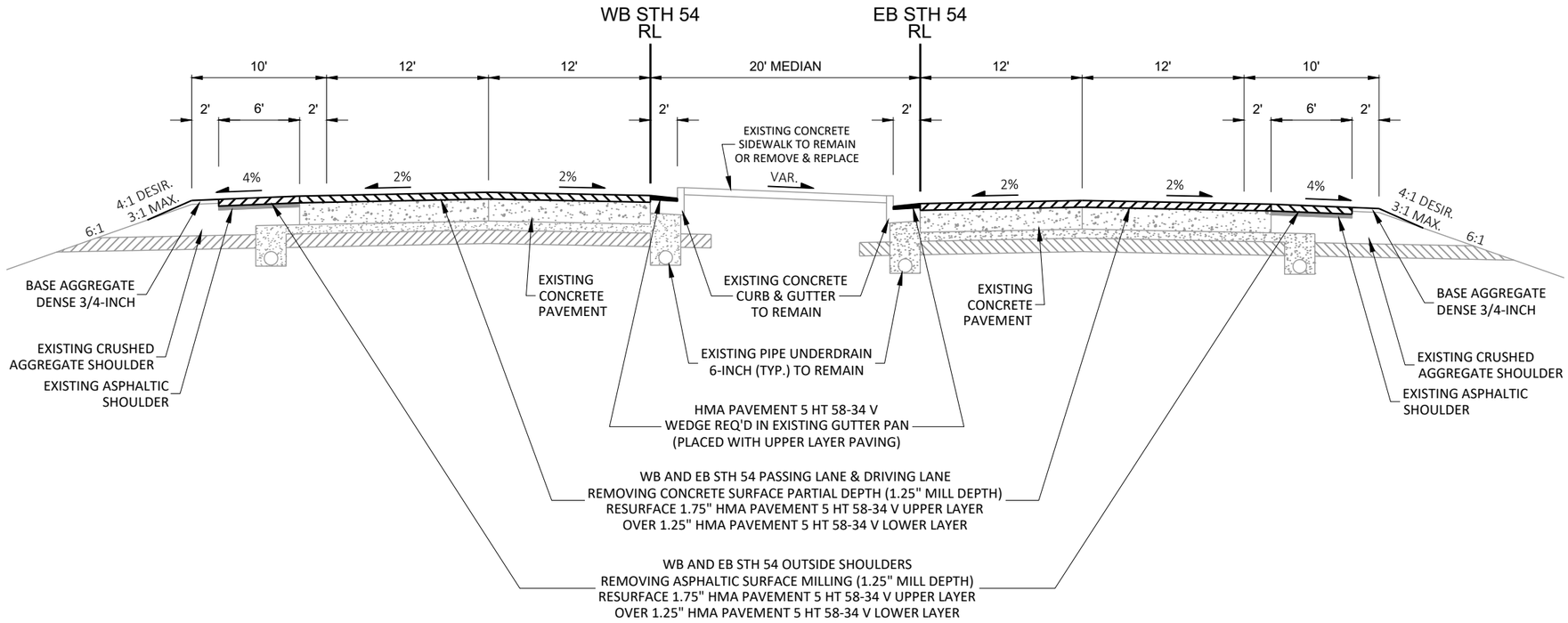


FINISHED TYPICAL SECTION
RAMP 'C' EXTENSION - STH 54 INTERCHANGE

STA 66+35.73'C' - STA 67+47.02'C'

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	FINISHED TYPICAL SECTIONS	SHEET 13	E

2



FINISHED TYPICAL SECTION
STH 54

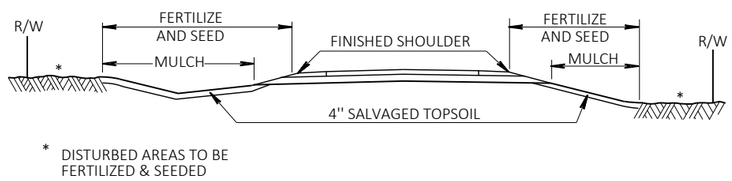
STA 59+24'EB' - STA 78+67'EB'
STA 59+19'WB' - STA 78+51'WB'

2

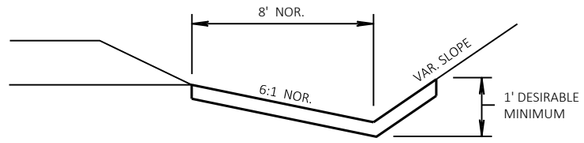
RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 240 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 60 ACRES

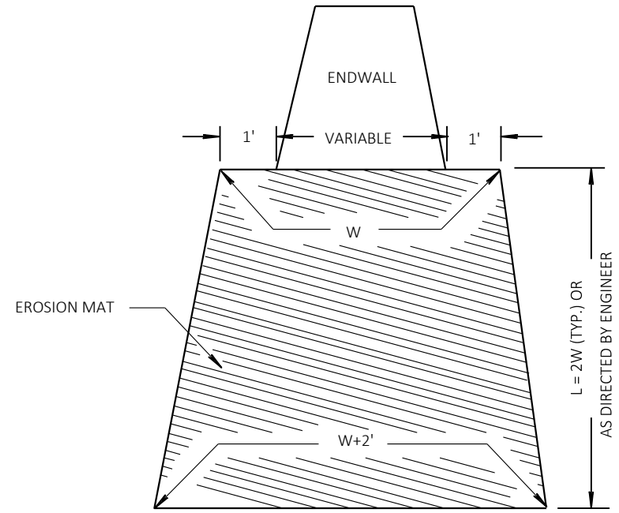


DETAIL FOR FINISHING ITEMS

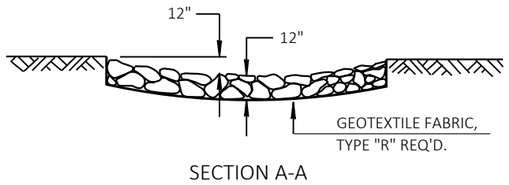


EROSION MAT DETAIL FOR DITCHES

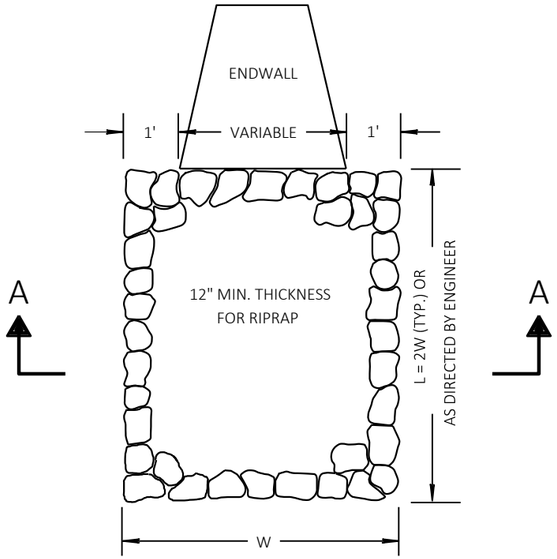
PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CONSTRUCTION DETAILS	SHEET 15	E



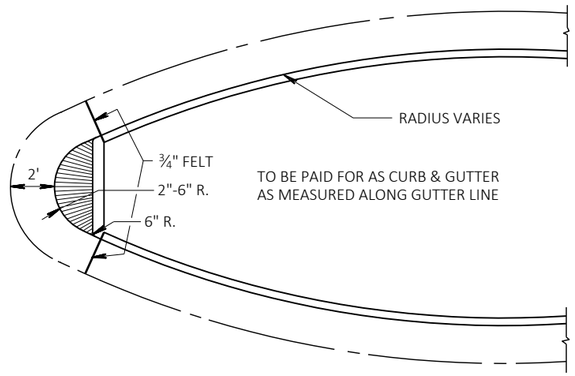
EROSION MAT TREATMENT AT CULVERTS

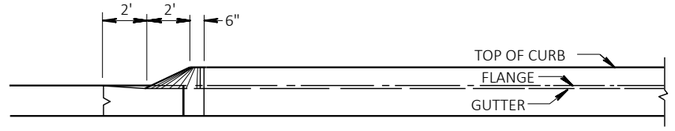


SECTION A-A

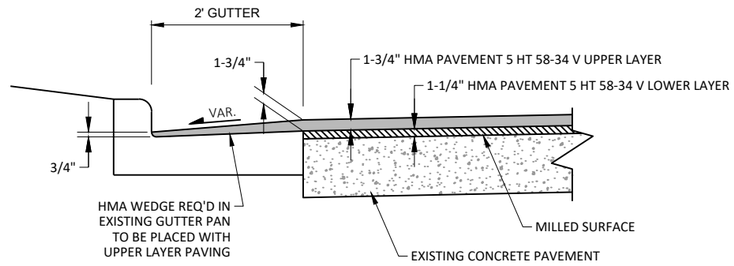


RIPRAP TREATMENT AT CULVERTS



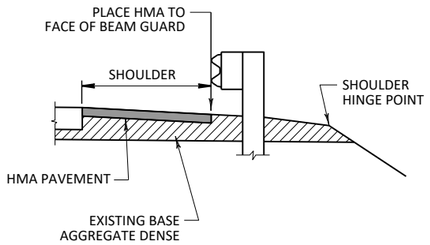


DETAIL OF ISLAND NOSE
(TO BE USED FOR ALL ISLAND NOSE RADII)

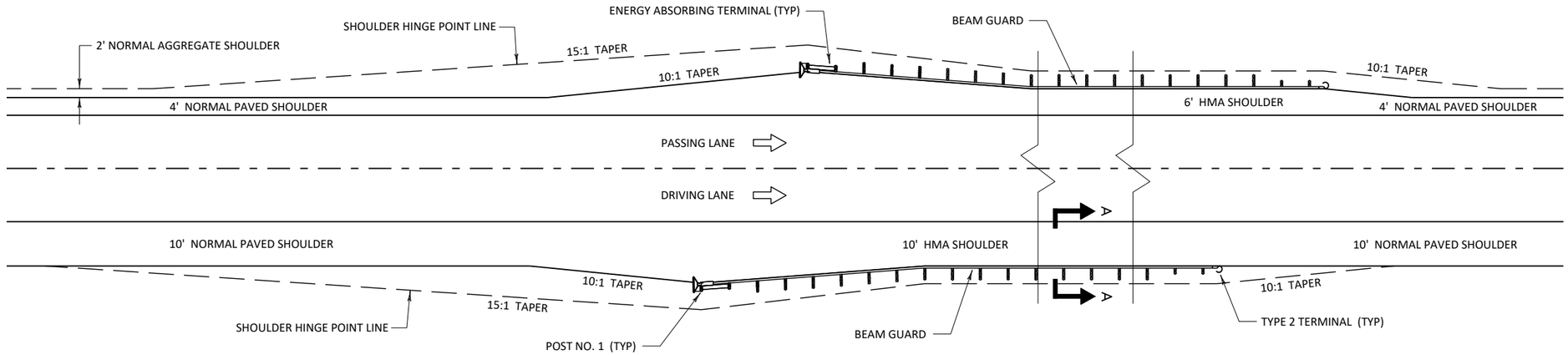


DETAIL FOR HMA EDGE JOINT
STH 54 MEDIAN CURB & GUTTER

2

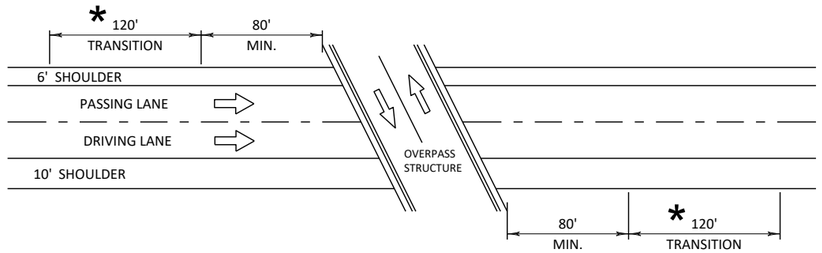


SECTION A-A



PLAN VIEW

HMA SHOULDER AT BEAM GUARD DETAIL



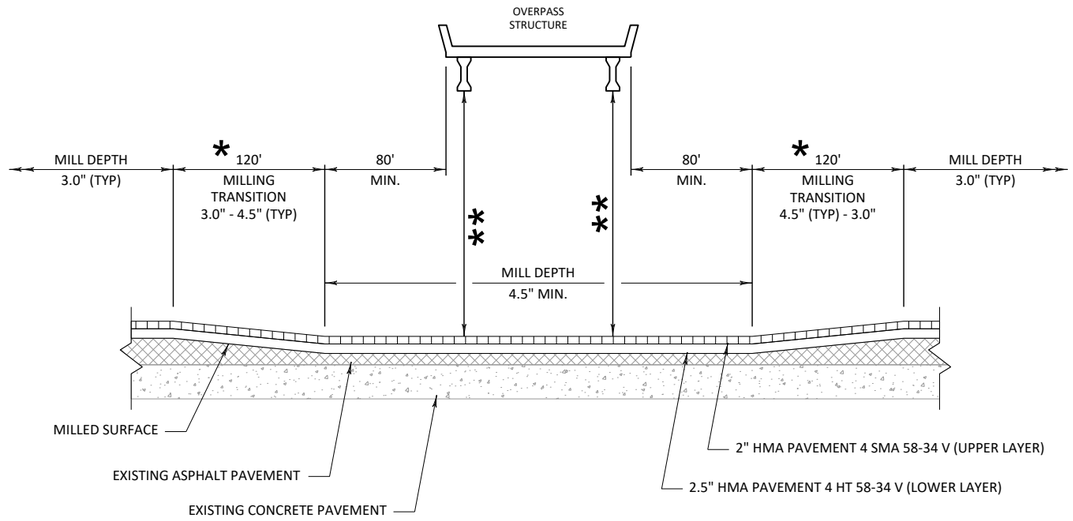
PLAN VIEW

NOTES:

ADJUST THE MILLING DEPTH AND CROSS SLOPE TO ACHIEVE THE REQUIRED VERTICAL CLEARANCE FOR THE TRAVELED WAY AND FULL WIDTH OF SHOULDERS.

* 120' LENGTH OF MILLING TRANSITION IS ADEQUATE FOR A 1.5-INCH CHANGE IN MILL DEPTH. ADJUST LENGTH OF TRANSITION AS NECESSARY TO REFLECT THE ACTUAL CHANGE IN MILLING DEPTH REQUIRED IN THE FIELD.

** PROVIDE MINIMUM VERTICAL CLEARANCE OF 16'-0" OR MATCH EXISTING, WHICHEVER IS GREATER.

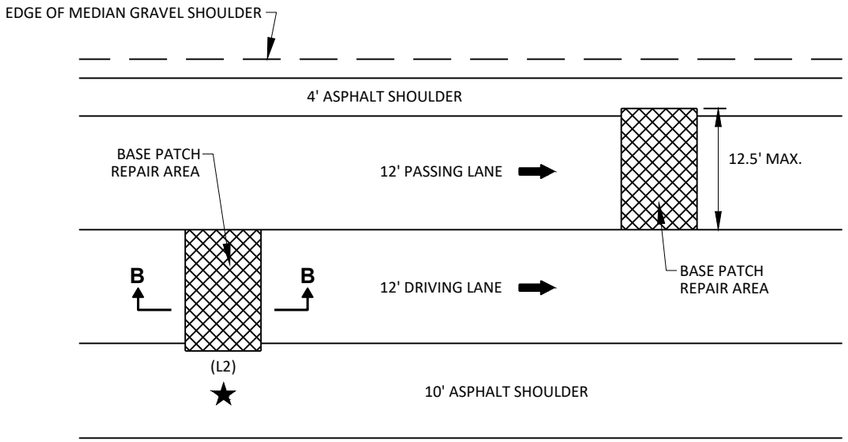


PROFILE VIEW

STRUCTURE VERTICAL CLEARANCE DETAIL

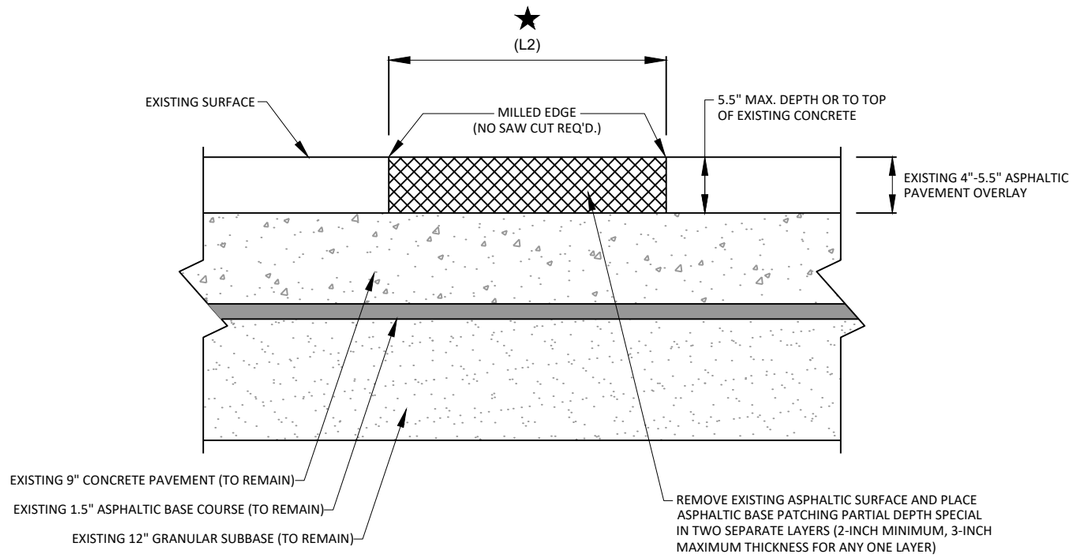
PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CONSTRUCTION DETAILS	SHEET 17	E

2



PLAN VIEW

★ (L2) = 10' NORMAL OR AS DIRECTED BY THE ENGINEER.



SECTION B-B

NOTES:

CONSTRUCT ASPHALTIC BASE PATCHING PARTIAL DEPTH PRIOR TO HMA MILL & OVERLAY.

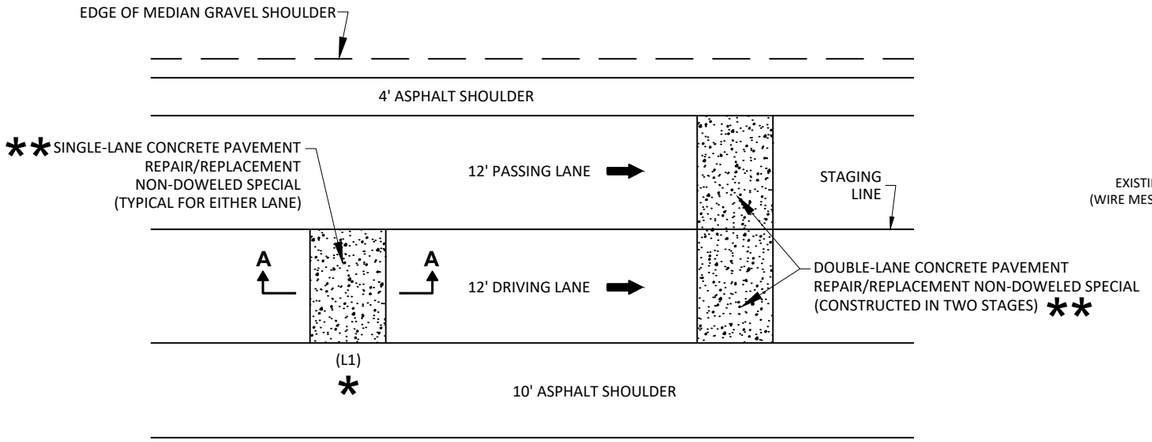
THE EXISTING ASPHALT PAVEMENT SHALL BE REMOVED TO THE DESIGNATED DEPTH BY A MILLING MACHINE. NO SAW CUT WILL BE REQUIRED AT THE BASE PATCH EDGES.

DAMAGE TO EITHER EXISTING PAVEMENTS OR EXISTING SHOULDERS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AND WILL BE INCIDENTAL TO THE ITEM OF "ASPHALTIC BASE PATCHING PARTIAL DEPTH SPECIAL".

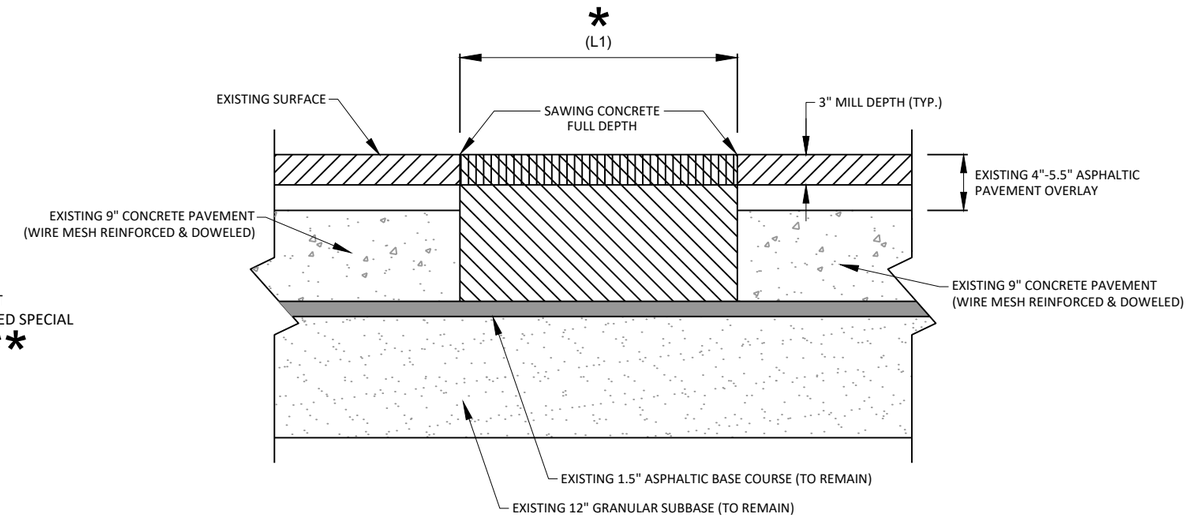
ASPHALTIC BASE PATCHING PARTIAL DEPTH SPECIAL DETAIL

IH 94 MAINLINE & RAMP TAPERS

(LOCATIONS DETERMINED IN THE FIELD BY THE ENGINEER)



PLAN VIEW



SECTION A-A

* (L1) = 6' MINIMUM TO 15' MAXIMUM FOR CONCRETE REPAIR, AS DIRECTED BY THE ENGINEER. CONCRETE REPLACEMENT IS FOR LENGTHS RANGING FROM 15' UP TO 300' MAXIMUM.

** FULL DEPTH SAW CUTS REQUIRED ON ALL SIDES OF CONCRETE PAVEMENT REPAIR/REPLACEMENT, INCLUDING STAGING LINE, TO BE PAID FOR AS "SAWING CONCRETE" OR "SAWING ASPHALT".

REMOVING ASPHALTIC SURFACE MILLING

CONCRETE PAVEMENT REPAIR/REPLACEMENT NON-DOWELED SPECIAL

REMOVING CONCRETE SURFACE PARTIAL DEPTH

NOTES:

CONSTRUCT CONCRETE PAVEMENT REPAIR/REPLACEMENT PRIOR TO HMA MILL & OVERLAY.

THICKNESS OF CONCRETE PAVEMENT REPAIR/REPLACEMENT MAY VARY. AVERAGE THICKNESS OF 14" IS EXPECTED.

DAMAGE TO EITHER EXISTING PAVEMENTS OR EXISTING SHOULDERS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AND WILL BE INCIDENTAL TO THE ITEMS OF "CONCRETE PAVEMENT REPAIR NON-DOWELED SPECIAL" AND "CONCRETE PAVEMENT REPLACEMENT NON-DOWELED SPECIAL".

FULL DEPTH TRANSVERSE SAW CUTS, AS WELL AS THE LONGITUDINAL CUT ON THE STAGING LINE, TO BE PAID FOR AS "SAWING CONCRETE". SAWING THROUGH EXISTING ASPHALTIC PAVEMENT OVERLAY WILL BE INCIDENTAL TO THE ITEM OF "SAWING CONCRETE".

SAWING THE EDGE LINE BETWEEN A TRAVEL LANE AND PAVED SHOULDER IS REQUIRED FOR PAVEMENTS WITH AN ASPHALTIC OVERLAY, AND WILL BE PAID FOR AS "SAWING ASPHALT".

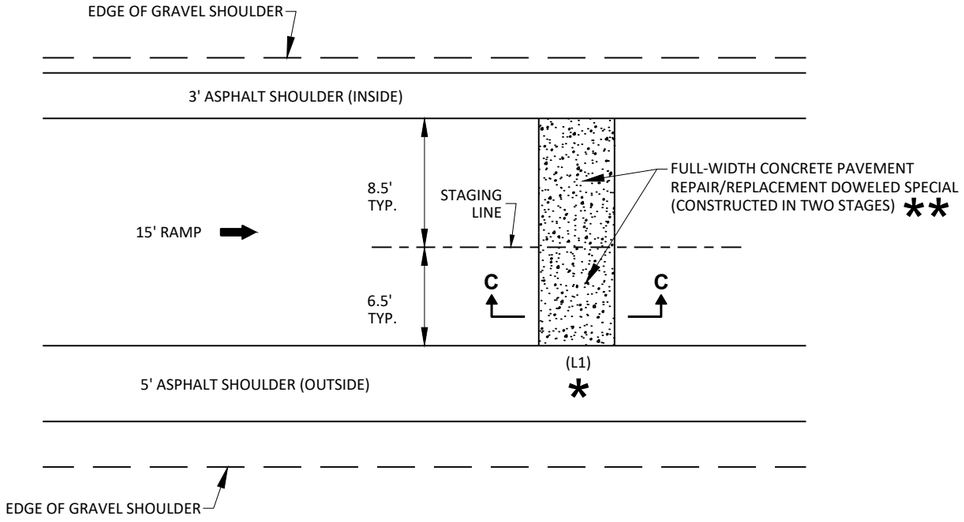
SEE SDD 13-C-9, "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR ADDITIONAL INFORMATION.

CONCRETE PAVEMENT REPAIR/REPLACEMENT NON-DOWELED SPECIAL DETAIL

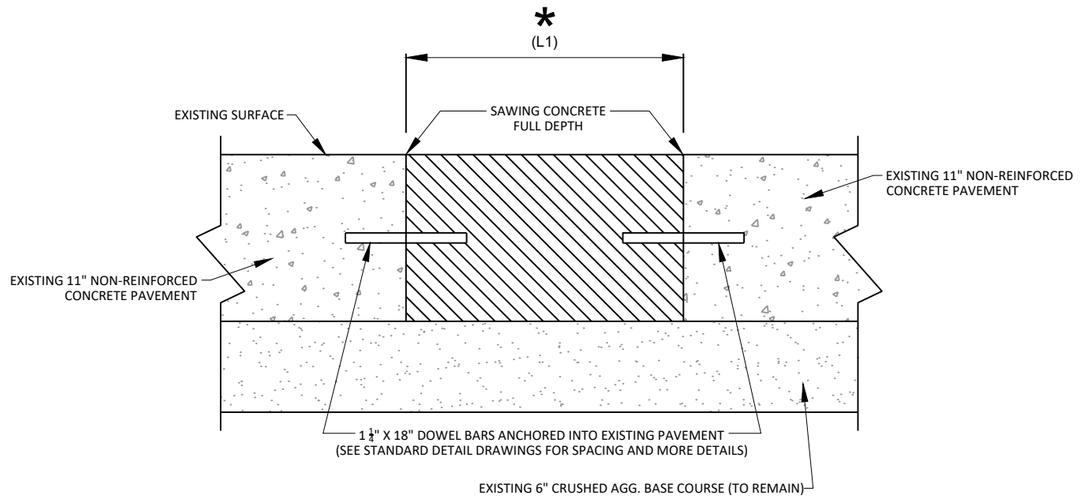
IH 94 MAINLINE & RAMP TAPERS

(LOCATIONS DETERMINED IN THE FIELD BY THE ENGINEER)

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CONSTRUCTION DETAILS	SHEET 19	E



PLAN VIEW



SECTION C-C

* (L1) = 6' MINIMUM TO 15' MAXIMUM FOR CONCRETE REPAIR, AS DIRECTED BY THE ENGINEER.
CONCRETE REPLACEMENT IS FOR LENGTHS RANGING FROM 15' UP TO 300' MAXIMUM.

** FULL DEPTH SAW CUTS REQUIRED ON ALL SIDES OF CONCRETE PAVEMENT REPAIR/REPLACEMENT, INCLUDING STAGING LINE, TO BE PAID FOR AS "SAWING CONCRETE" OR "SAWING ASPHALT".
EDGE LINE JOINTS BETWEEN CONCRETE SURFACE AND ASPHALT SHOULDERS DO NOT REQUIRE SAWING.

CONCRETE PAVEMENT REPAIR/REPLACEMENT DOWELED SPECIAL

NOTES:

CONSTRUCT CONCRETE PAVEMENT REPAIR/REPLACEMENT PRIOR TO HMA OVERLAY.

THICKNESS OF CONCRETE PAVEMENT REPAIR/REPLACEMENT MAY VARY. AVERAGE THICKNESS OF 11" IS EXPECTED.

DAMAGE TO EITHER EXISTING PAVEMENTS OR EXISTING SHOULDERS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AND WILL BE INCIDENTAL TO THE ITEMS OF "CONCRETE PAVEMENT REPAIR DOWELED SPECIAL" AND "CONCRETE PAVEMENT REPLACEMENT DOWELED SPECIAL".

FULL DEPTH TRANSVERSE SAW CUTS, AS WELL AS THE LONGITUDINAL CUT ON THE STAGING LINE, TO BE PAID FOR AS "SAWING CONCRETE".

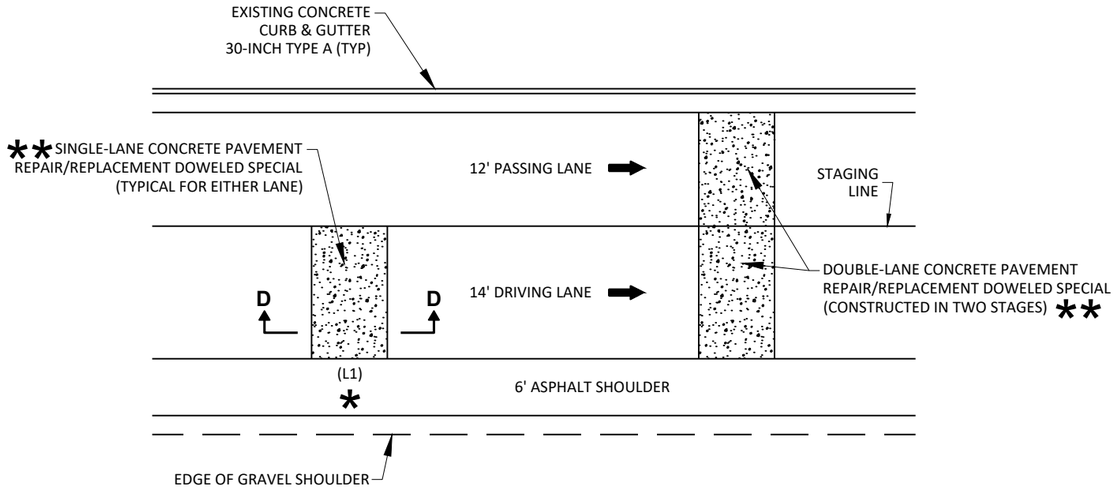
SAWING THE EDGE LINE BETWEEN A TRAVEL LANE AND PAVED SHOULDER IS REQUIRED ONLY FOR PAVEMENTS WITH AN ASPHALTIC OVERLAY, AND WILL BE PAID FOR AS "SAWING ASPHALT".

SEE SDD 13-C-9, "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR ADDITIONAL INFORMATION.

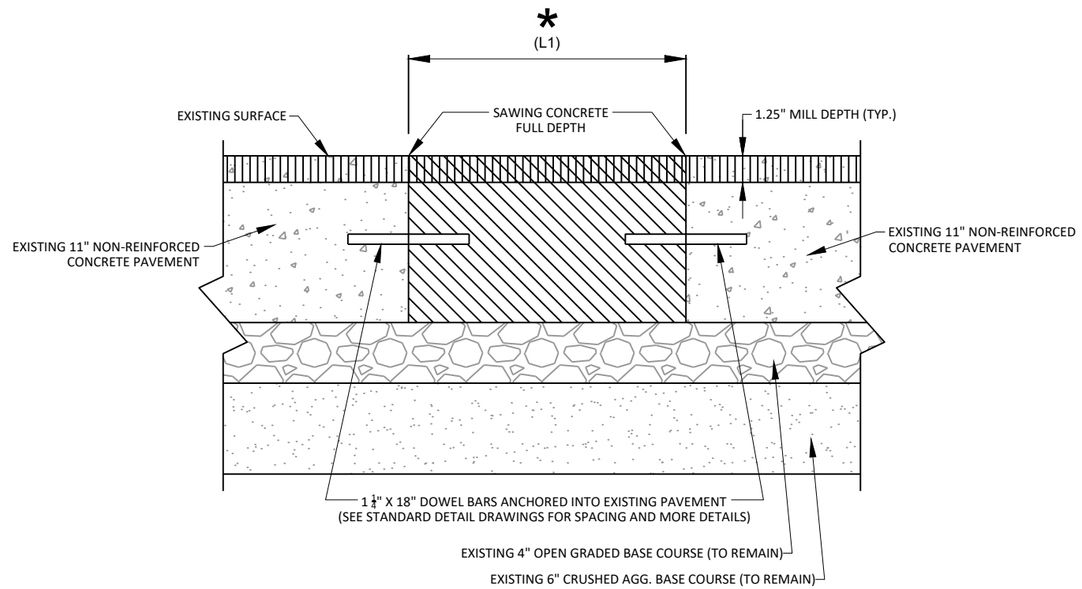
CONCRETE PAVEMENT REPAIR/REPLACEMENT DOWELED SPECIAL DETAIL

STH 54 INTERCHANGE RAMPS

(LOCATIONS DETERMINED IN THE FIELD BY THE ENGINEER)



PLAN VIEW



SECTION D-D

* (L1) = 6' MINIMUM TO 15' MAXIMUM FOR CONCRETE REPAIR, AS DIRECTED BY THE ENGINEER.
CONCRETE REPLACEMENT IS FOR LENGTHS RANGING FROM 15' UP TO 300' MAXIMUM.

** FULL DEPTH SAW CUTS REQUIRED ON ALL SIDES OF CONCRETE PAVEMENT REPAIR/REPLACEMENT, INCLUDING STAGING LINE, TO BE PAID FOR AS "SAWING CONCRETE" OR "SAWING ASPHALT".
EDGE LINE JOINTS BETWEEN CONCRETE SURFACE AND ASPHALT SHOULDERS DO NOT REQUIRE SAWING.

CONCRETE PAVEMENT REPAIR/REPLACEMENT DOWELED SPECIAL

REMOVING CONCRETE SURFACE PARTIAL DEPTH

NOTES:

CONSTRUCT CONCRETE PAVEMENT REPAIR/REPLACEMENT PRIOR TO CONCRETE SURFACE REMOVAL & HMA OVERLAY.

THICKNESS OF CONCRETE PAVEMENT REPAIR/REPLACEMENT MAY VARY. AVERAGE THICKNESS OF 11" IS EXPECTED.

DAMAGE TO EXISTING PAVEMENTS, EXISTING SHOULDERS, OR EXISTING CURB & GUTTER SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AND WILL BE INCIDENTAL TO THE ITEMS OF "CONCRETE PAVEMENT REPAIR DOWELED SPECIAL" AND "CONCRETE PAVEMENT REPLACEMENT DOWELED SPECIAL".

FULL DEPTH TRANSVERSE SAW CUTS, AS WELL AS THE LONGITUDINAL CUT ON THE STAGING LINE, TO BE PAID FOR AS "SAWING CONCRETE".

SAWING THE EDGE LINE BETWEEN A TRAVEL LANE AND PAVED SHOULDER IS REQUIRED ONLY FOR PAVEMENTS WITH AN ASPHALTIC OVERLAY, AND WILL BE PAID FOR AS "SAWING ASPHALT".

SEE SDD 13-C-9, "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR ADDITIONAL INFORMATION.

CONCRETE PAVEMENT REPAIR/REPLACEMENT DOWELED SPECIAL DETAIL

STH 54

(LOCATIONS DETERMINED IN THE FIELD BY THE ENGINEER)

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CONSTRUCTION DETAILS	SHEET 21	E

2

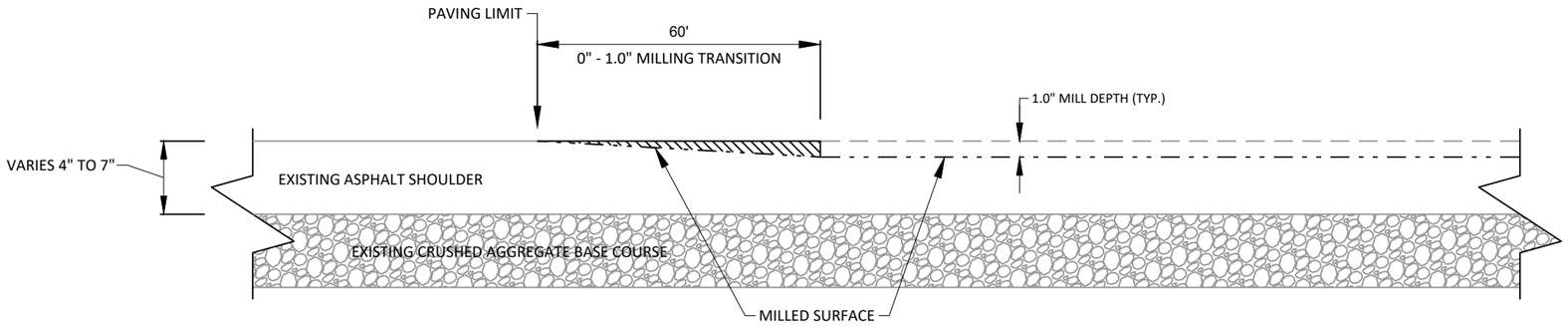
NOTES:

MILL AND REMOVE 0" TO 1.0" OF EXISTING ASPHALTIC SURFACE IN 60-FT TRANSITION AREA.

MILL AND REMOVE 1.0" (TYP.) OF EXISTING ASPHALTIC SURFACE FOR REMAINDER OF IH 94 DRIVING LANE SHOULDER.

TYPICAL WIDTH OF JOINT EXTENDS ACROSS 10-FT DRIVING LANE SHOULDER.

PAID FOR AS "REMOVING ASPHALTIC SURFACE MILLING"



MILLING TRANSITION DETAIL - IH 94 DRIVING LANE SHOULDER

REQUIRED AT BEGIN & END PROJECT LIMITS AND ALSO AT EXISTING BRIDGE DECKS/APPROACHES

NOTES:

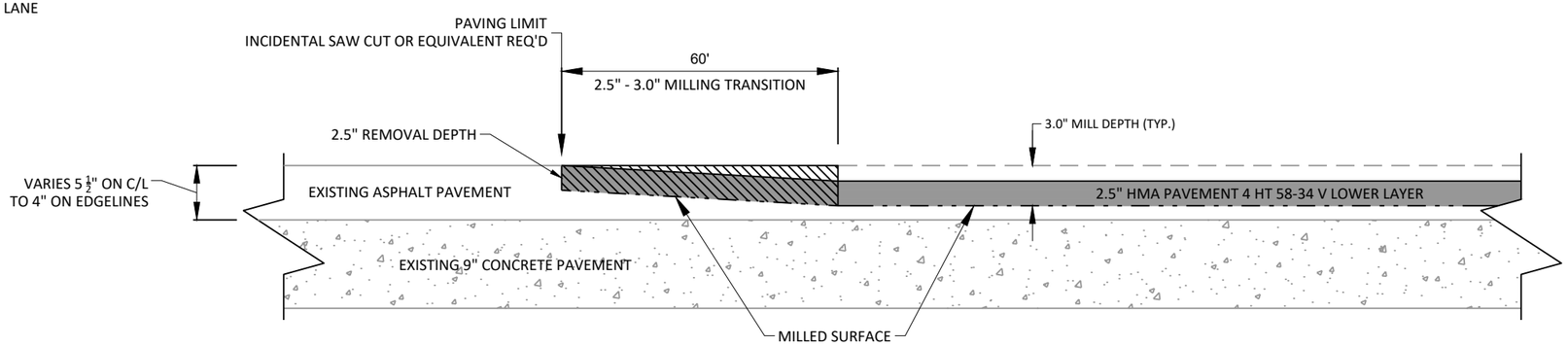
MILL AND REMOVE 2.5" TO 3.0" OF EXISTING ASPHALTIC SURFACE WITHIN 60-FT TRANSITION AREA.

MILL AND REMOVE 3.0" (TYP.) OF EXISTING ASPHALTIC SURFACE FOR REMAINDER OF IH 94 DRIVING LANES.

OVERLAY 2.5" HMA PAVEMENT 4 HT 58-34 V (LOWER LAYER).

FOR IH 94 MAINLINE, TYPICAL WIDTH OF JOINT EXTENDS ACROSS 12-FT DRIVING LANE AND ACROSS 16-FT PASSING LANE & PAVED SHOULDER.

PAID FOR AS "REMOVING ASPHALTIC SURFACE MILLING"



TEMPORARY BUTT JOINT DETAIL - IH 94 MAINLINE LOWER LAYER

REQUIRED AT BEGIN & END PROJECT LIMITS AND ALSO AT EXISTING BRIDGE DECKS/APPROACHES

2

NOTES:

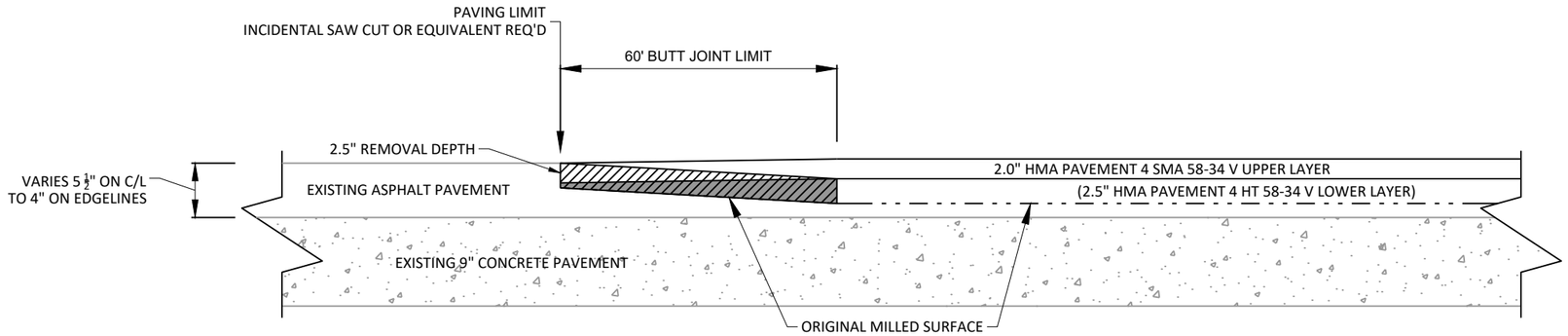
REMOVE 2.5" (TYP.) OF NEW HMA PAVEMENT 4 HT 58-43 V LOWER LAYER WITHIN 60-FT BUTT JOINT LIMITS.

OVERLAY 2.0" HMA PAVEMENT 4 SMA 58-34 V (UPPER LAYER).

FOR IH 94 MAINLINE, TYPICAL WIDTH OF JOINT EXTENDS ACROSS 12-FT DRIVING LANE AND ACROSS 16-FT PASSING LANE & PAVED SHOULDER.

PAID FOR AS "REMOVING ASPHALTIC SURFACE BUTT JOINTS"

AFTER REMOVING ASPHALTIC SURFACE BUTT JOINT, WEDGE WITH SURFACE MATERIAL PRIOR TO PLACING SURFACE COURSE



REMOVING ASPHALTIC SURFACE BUTT JOINT DETAIL - IH 94 MAINLINE UPPER LAYER

REQUIRED AT BEGIN & END PROJECT LIMITS AND ALSO AT EXISTING BRIDGE DECKS/APPROACHES

2

NOTES:

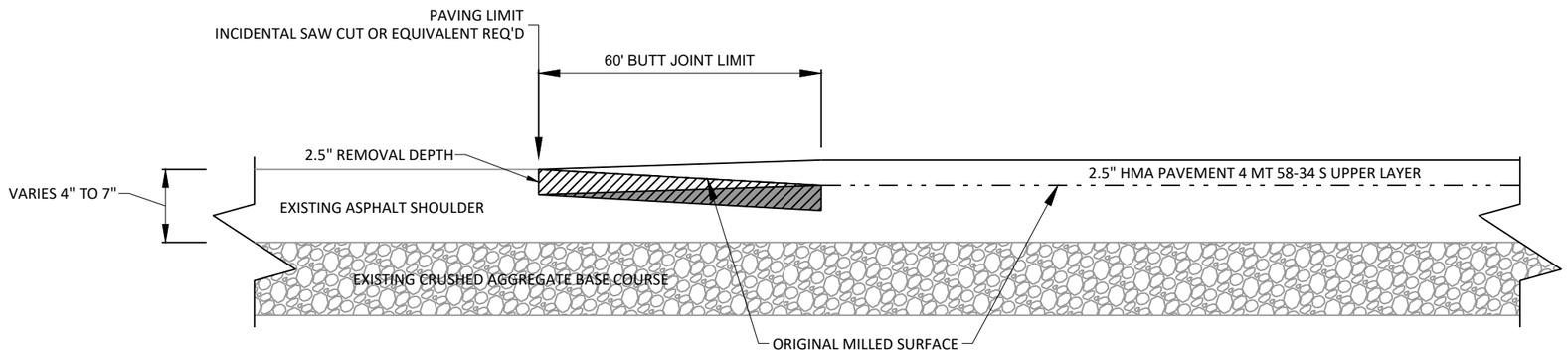
REMOVE 2.5" (TYP.) OF EXISTING ASPHALTIC SURFACE WITHIN 60-FT BUTT JOINT LIMITS.

OVERLAY 2.5" HMA PAVEMENT 4 MT 58-34 S (UPPER LAYER).

TYPICAL WIDTH OF JOINT EXTENDS ACROSS 10-FT DRIVING LANE SHOULDER.

PAID FOR AS "REMOVING ASPHALTIC SURFACE BUTT JOINTS"

AFTER REMOVING ASPHALTIC SURFACE BUTT JOINT, WEDGE WITH SURFACE MATERIAL PRIOR TO PLACING SURFACE COURSE



REMOVING ASPHALTIC SURFACE BUTT JOINT DETAIL - IH 94 DRIVING LANE SHOULDER

REQUIRED AT BEGIN & END PROJECT LIMITS AND ALSO AT EXISTING BRIDGE DECKS/APPROACHES

NOTES:

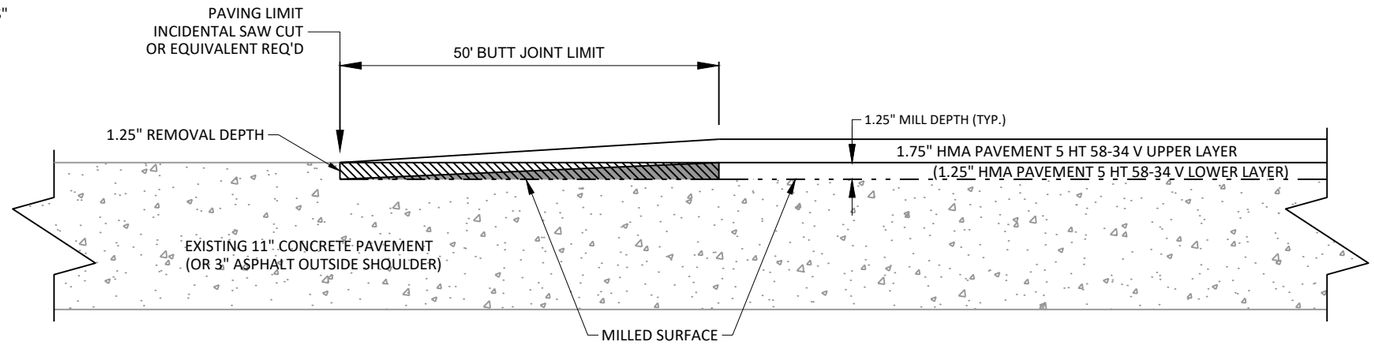
REMOVE 1.25" (TYP.) CONCRETE OR ASPHALT SURFACE WITHIN 50-FT BUTT JOINT LIMITS AND REMAINDER OF STH 54 TRAVEL LANES & OUTSIDE SHOULDER.

OVERLAY 3.0" HMA PAVEMENT 5 HT 58-34 V (1.75" UPPER LAYER OVER 1.25" LOWER LAYER).

FOR STH 54, TYPICAL WIDTH OF BUTT JOINT EXTENDS ACROSS 12-FT INSIDE LANE, 14-FT OUTSIDE LANE, AND 6-FT PAVED SHOULDER.

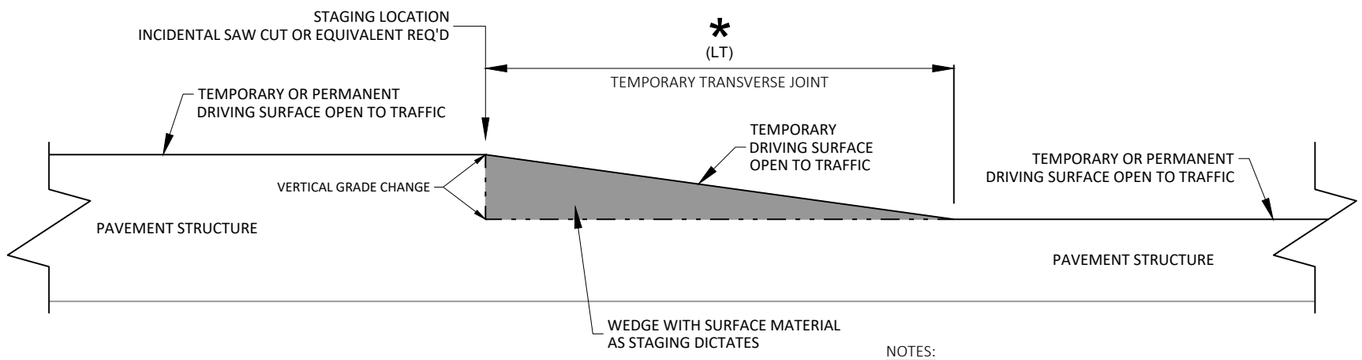
INITIAL REMOVAL PAID FOR AS "REMOVING CONCRETE SURFACE PARTIAL DEPTH" OR "REMOVING ASPHALTIC SURFACE MILLING" (FOR PAVED SHOULDERS), AND SUBSEQUENT REMOVAL PAID FOR AS "REMOVING ASPHALTIC SURFACE BUTT JOINTS"

AFTER REMOVING ASPHALTIC SURFACE BUTT JOINT, WEDGE WITH SURFACE MATERIAL PRIOR TO PLACING SURFACE COURSE



BUTT JOINT DETAIL - STH 54

REQUIRED AT BEGIN & END CONSTRUCTION LIMITS
AND ALSO AT EXISTING BRIDGE DECKS/APPROACHES



* (LT) = 25 FT PER INCH OF VERTICAL GRADE CHANGE FOR IH 94 TRAFFIC, OR AS DIRECTED BY THE ENGINEER.
(LT) = 15 FT PER INCH OF VERTICAL GRADE CHANGE FOR STH 54 TRAFFIC, OR AS DIRECTED BY THE ENGINEER.

NOTES:

THE LOCATION AND FREQUENCY OF TEMPORARY TRANSVERSE JOINTS WILL BE DICTATED BY THE CONTRACTOR'S OPERATIONS.

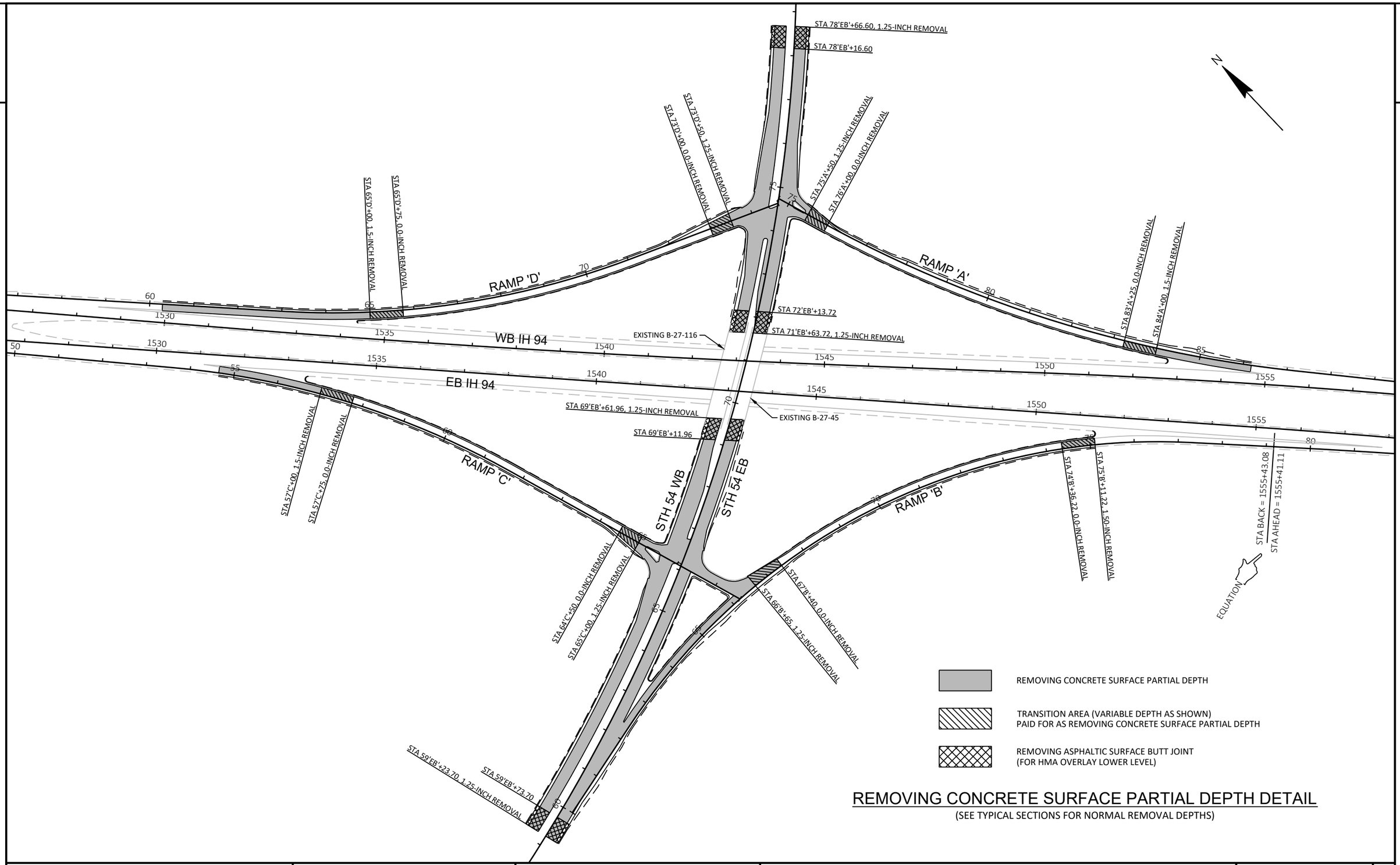
DO NOT OPEN TO TRAFFIC ANY TRAVEL LANE THAT HAS A MILLED SURFACE.

PRIOR TO SUBSEQUENT MILLING/PAVING OPERATIONS, MILL AND REMOVE THE TEMPORARY TRANSVERSE JOINT TO A TRUE LINE WITH A VERTICAL FACE PERPENDICULAR TO THE REMAINING PAVEMENT SURFACE, PAID FOR UNDER THE ITEM "MILLING AND REMOVING TEMPORARY TRANSVERSE JOINTS (PROJECT)".

TEMPORARY TRANSVERSE JOINT DETAIL

REQUIRED FOR INTERMEDIATE STAGING LIMITS

2



REMOVING CONCRETE SURFACE PARTIAL DEPTH DETAIL

(SEE TYPICAL SECTIONS FOR NORMAL REMOVAL DEPTHS)

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN DETAILS - STH 54 INTERCHANGE	SHEET 25	E

2

2

STA 71'WB'+60.4 TO STA 72'WB'+32.4, LT
REMOVE EXISTING GUARDRAIL

STA 71'WB'+60.4 TO STA 73'WB'+02.92, LT
39.4 LF MGS THRIE BEAM TRANSITION REQ'D
50 LF MGS GUARDRAIL 3 REQ'D
1-MGS GUARDRAIL TERMINAL EAT REQ'D

ATC MANAGEMENT

CAUTION

WE ENERGIES

RAMP 'D'

CAUTION

N

WISDOT

SLOPE INTERCEPT

STA 71'WB'+60.4, 10' LT
MAKE CONNECTION TO
EXISTING B-27-116 PARAPET

PROPOSED
HINGE POINT LINE

'WB'+52.92
-38.00'LT

'WB'+77.92
-39.33'LT

'WB'+02.92
-42.00'LT

'WB'+55.00
-38.96'LT

EXISTING B-27-116

74'D'

WISDOT

WB STH 54

72'WB'

74'WB'

72'EB'

74'EB'

EB STH 54

EXISTING B-27-45

WISDOT

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN DETAILS - GUARDRAIL - WB STH 54	SHEET 26	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\021041_CD_GUARDRAIL.DWG
LAYOUT NAME - Sheet - (101)

PLOT DATE : 7/19/2021 2:02 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

STA 83'A'+87.5 TO STA 84'A'+76.5, LT
REMOVE EXISTING GUARDRAIL

STA 83'A'+87.5 TO STA 85'A'+87.5, LT
150 LF STEEL PLATE BEAM GUARD CLASS A REQ'D
1-STEEL PLATE BEAM GUARD EAT REQ'D

N

STA 83'A'+87.5, 8' LT
MAKE CONNECTION TO
EXISTING GUARDRAIL

ATC MANAGEMENT

JACKSON ELECTRIC COOP.

AT&T LEGACY

EXISTING R/W

SLOPE INTERCEPT

PROPOSED
HINGE POINT LINE

'A'+37.50
-12.00'LT

'A'+62.50
-13.33'LT

'A'+87.50
-16.00'LT

'A'+07.50
-8.00'LT

PT: 87+16.51'A'

84'A'

86'A'

RAMP 'A'

WB IH 94

IH 94

1554'WB'

1552'WB'

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN DETAILS - GUARDRAIL - RAMP 'A'	SHEET 27	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\021041_CD_GUARDRAIL.DWG
LAYOUT NAME - Sheet - (201)

PLOT DATE : 7/19/2021 2:02 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:25 FT

WISDOT/CADDS SHEET 42

2

STA 65'B'+58.9 TO STA 66'B'+22.9, RT
REMOVE EXISTING GUARDRAIL

STA 65'B'+47.9 TO STA 66'B'+22.9, RT
25 LF STEEL PLATE BEAM GUARD CLASS A REQ'D
1-STEEL PLATE BEAM GUARD EAT REQ'D

INL

RAMP 'C' EXTENSION

WISDOT

N

RAMP 'B'

66'B'

EP: 67+62.94'C'

'B'+27.90
8.00' RT

PROPOSED
HINGE POINT LINE

'B'+47.90
16.00' RT

'B'+72.90
13.33' RT

'B'+97.90
12.00' RT

STA 66'B'+22.9, 8' RT
MAKE CONNECTION TO
EXISTING GUARDRAIL

SLOPE INTERCEPT

BLACK RIVER FALLS UTILITIES

CAUTION

CAUTION

WE ENERGIES

EXISTING R/W

COMMERCE DR.

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN DETAILS - GUARDRAIL - RAMP 'B'	SHEET 28	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\021041_CD_GUARDRAIL.DWG
LAYOUT NAME - Sheet - (301)

PLOT DATE : 7/19/2021 2:02 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT CLASS I TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EB IH 94

WB IH 94

RAMP 'D'

RAMP 'A'

WB STH 54

EB STH 54

STH 54

541+00'EB'

1541+00'WB'

1542+00'EB'

1542+00'WB'

1543+00'EB'

1543+00'WB'

1544+00'EB'

1544+00'WB'

70+00'WB'

71+00'WB'

72+00'WB'

73+00'WB'

74+00'WB'

75+00'WB'

70+00'EB'

71+00'EB'

72+00'EB'

73+00'EB'

74+00'EB'

75+00'EB'

72+00'D'

73+00'D'

74+00'D'

75+00'A'

76+00'A'

SLOPE INTERCEPT

EXISTING B-27-116

EXISTING B-27-45

PROPOSED MGS GUARDRAIL

EXISTING R/W

EP: 74+63.43'D'

BP: 74+74.18'A'

PC: 75+80.10'A'

EXISTING R/W

INL

MH

SIGN

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	EROSION CONTROL	SHEET 29	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\022031_EC_EROSION_CONTROL.DWG
LAYOUT NAME - Sheet - (101)

PLOT DATE : 8/16/2021 2:45 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

- EROSION MAT CLASS I TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

STATUE

OASIS RD

OASIS RD

EXISTING R/W

EXISTING R/W

SLOPE INTERCEPT

PT: 87+16.51'A'

83+00'A'

84+00'A'

85+00'A'

86+00'A'

87+00'A'

88+00'A'

RAMP 'A'

PROPOSED STEEL PLATE BEAM GUARD

SIGN I

IH 94

WB IH 94

1551+00'WB'

1552+00'WB'

1553+00'WB'

1554+00'WB'

1555+00'WB'

1556+00'WB'

PC: 1555+41.11'EB'

1554+00'EB'

1555+00'EB'

1556+00'EB'

EB IH 94

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	EROSION CONTROL	SHEET 30	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\022031_EC_EROSION_CONTROL.DWG
LAYOUT NAME - Sheet - (201)

PLOT DATE : 8/16/2021 2:45 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

EXISTING R/W

WB STH 54

EB STH 54

RAMP 'C' EXTENSION

RAMP 'B'

PROPOSED STEEL PLATE BEAM GUARD

SLOPE INTERCEPT

EXISTING R/W

COMMERCE DR.

COMMERCE DR.

63+00'WB'
63+00'EB'
64+00'WB'
64+00'EB'
65+00'WB'
65+00'EB'
66+00'WB'
66+00'EB'
66+00'C'
67+00'C'
PC: 62+37.66'B'
63+00'B'
64+00'B'
65+00'B'
66+00'B'
67+00'B'
68+00'B'
EP: 67+62.94'C'
52+00'B'

MH
INL
SIGN

N

LEGEND

- EROSION MAT CLASS I TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	EROSION CONTROL	SHEET 31	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\022031_EC_EROSION_CONTROL.DWG
LAYOUT NAME - Sheet - (301)

PLOT DATE : 8/16/2021 2:46 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

BEGIN PROJECT
STA 1503+42'WB'

EXIT 115
12 27
Merrillan
Black River Falls
2/3 MILE
NEXT EXIT 10 MILES
REMOVE

1-2
E1-5P
108"X30"

EXIT 115
12 27
Merrillan
Black River Falls
2/3 MILE
NEXT EXIT 10 MILES
PROPOSED

1-3
E1-1A
312"X162"

E2-1
156"X24"

1-4

HOSPITAL
EXIT 115
REMOVE

HOSPITAL
EXIT 115
PROPOSED

1-1
E10-61
144"X54"

MILE 116
EXISTING

15'-11"
1/2 MILE AHEAD
EXISTING (2)

Black River
EXISTING

EXISTING

EXISTING

EXISTING

1500'WB' 1505'WB' 1510'WB' 1515'WB' 1520'WB' 1525'WB'

1500'EB' 1505'EB' 1510'EB' 1515'EB' 1520'EB' 1525'EB'

IH 94

55'D'

50'C'

BLACK R

BLACK RIVER

VAUDRIEL RD

SPEED LIMIT 70
EXISTING

MILE 116
EXISTING

EXISTING

EXISTING

BEGIN PROJECT
STA 1503+82'EB'

EXIT 116
54
Wis Rapids
Black River Falls
REMOVE

1-5
E1-5P
108"X30"

EXIT 116
54
Wis Rapids
Black River Falls
PROPOSED

1-6
E4-1A
312"X132"

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 32	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 7/19/2021 2:24 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING TYPE II SIGN MOUNTED ON POST(S)
- PROPOSED TYPE II SIGN MOUNTED ON POST(S)
- EXISTING/PROPOSED TYPE I SIGN
- (X-X) DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

N

Ho-Chunk Nation
PROPOSED
2-2
D1-2
72"X24"

EXIT 116
EXISTING

ALTERNATE 94
EXISTING

Black River Falls
Wis Rapids
Ho Chunk Casino
EXISTING

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
EXISTING

EXISTING

EXISTING

RAMP 'A'

RAMP 'B'

RAMP 'C'

RAMP 'D'

STH 54

IH 94

80'WB' 80'EB'
78'WB' 78'EB'
76'WB' 76'EB'
74'WB' 74'EB'
72'WB' 72'EB'
70'WB' 70'EB'
68'WB' 68'EB'
66'WB' 66'EB'
64'WB' 64'EB'
62'WB' 62'EB'

75'A'
80'A'
85'A'
90'A'
70'B'
75'B'
80'B'
65'C'
60'C'
55'C'
70'D'
65'D'
60'D'

1530'WB' 1535'WB' 1540'WB' 1545'WB' 1550'WB' 1555'WB'
1530'EB' 1535'EB' 1540'EB' 1545'EB' 1550'EB' 1555'EB'

EXIT 116
EXISTING

ALTERNATE 94
EXISTING

Wis Rapids
Ho Chunk Casino
Black River Falls
EXISTING

NO PARKING ON RAMP
EXCEPT MAINTENANCE AND POLICE AUTHORIZED VEHICLES
EXISTING

EXISTING

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
EXISTING

Ho-Chunk Nation
PROPOSED
2-1
D1-2
72"X24"

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 33	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (2)

PLOT DATE : 7/19/2021 2:24 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

EXIT 116

54

Wis Rapids
Black River Falls

EXISTING

EXIT 116

54

Wis Rapids
Black River Falls

3-1
E1-5P
108"X30"

3-2
E4-1A
312"X132"

PROPOSED

LEGEND

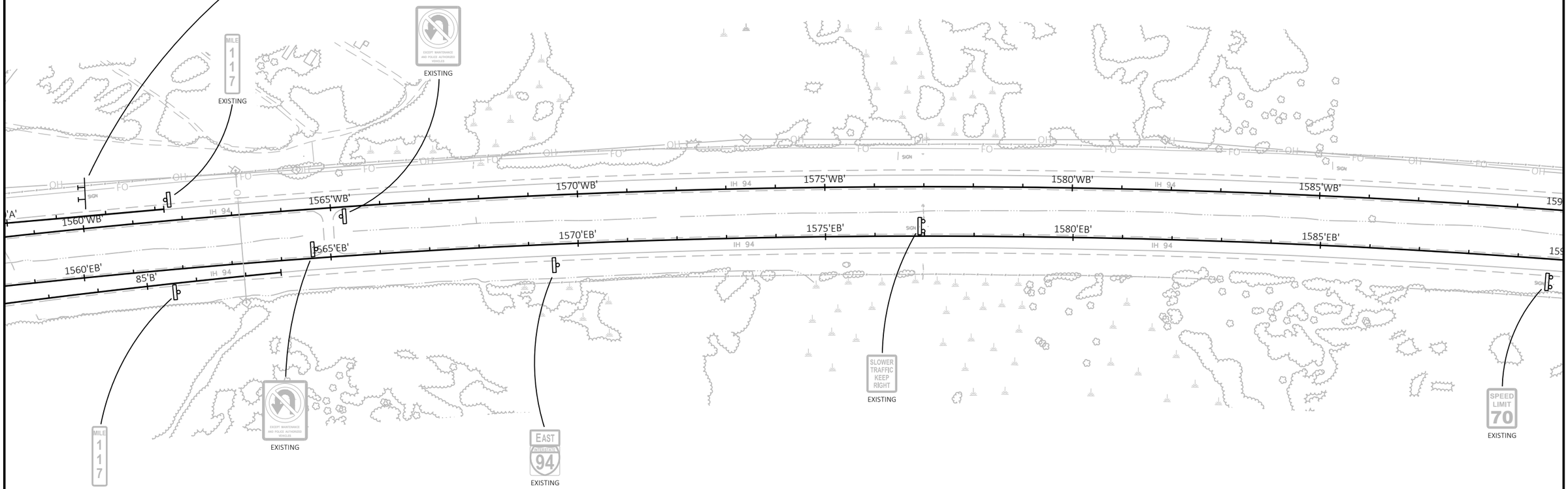
EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 34	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (3)

PLOT DATE : 7/19/2021 2:25 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

LEGEND

- EXISTING TYPE II SIGN MOUNTED ON POST(S)
- PROPOSED TYPE II SIGN MOUNTED ON POST(S)
- EXISTING/PROPOSED TYPE I SIGN
- (X-X) DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

N

Ho Chunk Casino
EXIT 116
REMOVE

Ho-Chunk Nation and Casino
EXIT 116
PROPOSED

4-2
E3-1
204"X84"

MILE 118
EXISTING

0'WB' 1595'WB' 1600'WB' 1605'WB' 1610'WB' 1615'WB' 1620'WB'
IH 94
90'EB' 1595'EB' 1600'EB' 1605'EB' 1610'EB' 1615'EB' 1620'EB'
IH 94

Millston	11
Tomah	26
Madison	125

REMOVE

Millston	11
Tomah	26
Madison	125

PROPOSED

4-1
D2-3
168"X84"

MILE 118
EXISTING

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 35	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (4)
PLOT DATE : 7/19/2021 2:25 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

EXIT 116

54

Wis Rapids

Black River Falls

1 1/2 MILES

REMOVE

EXIT 116

54

Wis Rapids

Black River Falls

1 1/2 MILES

PROPOSED

5-1

E1-5P

108"X30"

5-2

E1-1A

312"X162"

N

EXISTING DMS

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING DMS

AVAILABLE
TRUCK PARKING

REST AREA 6 MILES XX

REST AREA 58 MILES YY

1625'WB'

1625'EB'

1630'WB'

1630'EB'

1635'WB'

1635'EB'

1640'WB'

1640'EB'

1645'WB'

1645'EB'

1650'WB'

1650'EB'

IH 94

7th ST

UNION PACIFIC RAILROAD

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 36	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (5)
PLOT DATE : 7/19/2021 2:25 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

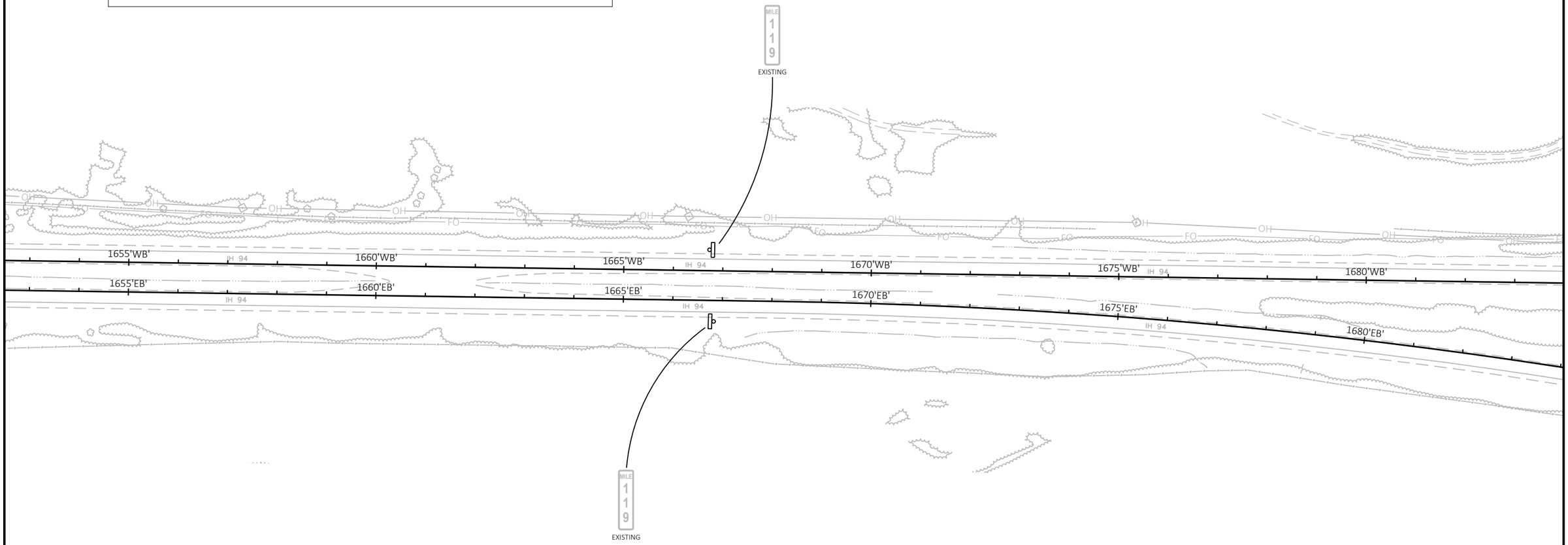
PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

(X-X) DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

N



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 37	E

2

2

LEGEND

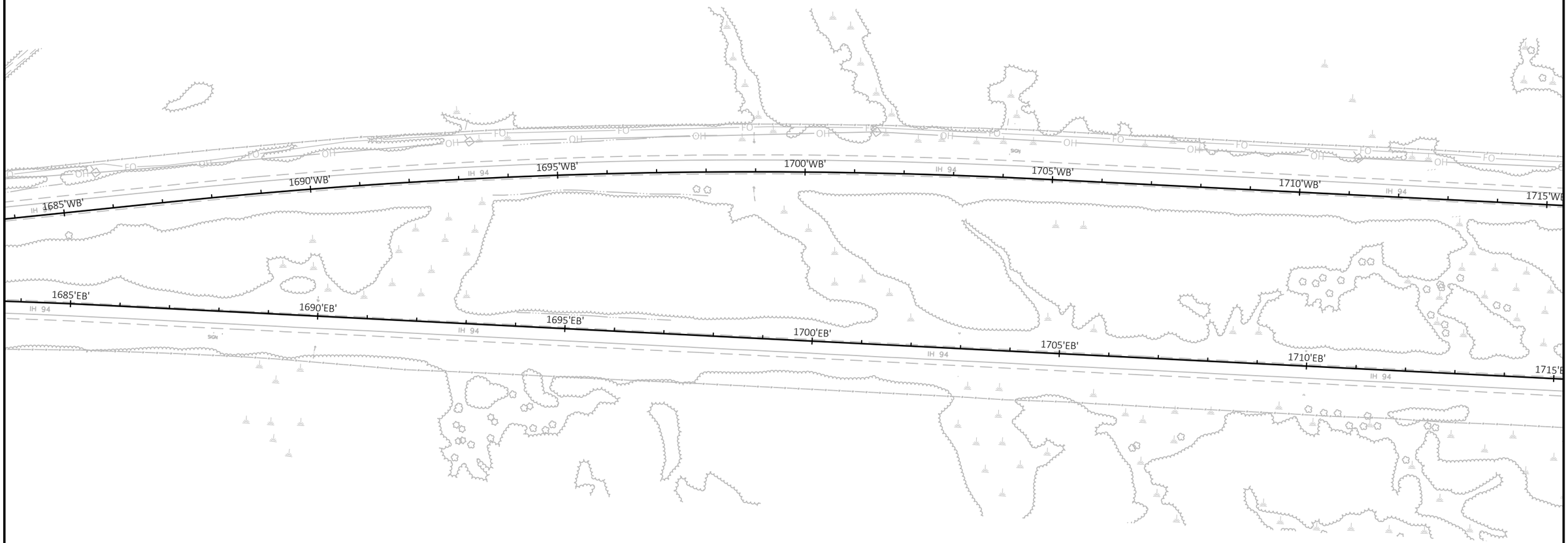
EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

(X-X) DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 38	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (7)

PLOT DATE : 7/19/2021 2:26 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

N

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

MILE 120 EXISTING

1715'WB' 1720'WB' IH 94 1725'WB' 1730'WB' 1735'WB' IH 94 1740'WB' 1745'WB'

PERRY CREEK

1715'EB' 1720'EB' IH 94 1725'EB' IH 94 1730'EB' 1735'EB' IH 94 1740'EB' 1745'EB'

MILE 120 EXISTING

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 39	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (8)

PLOT DATE : 7/19/2021 2:27 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

N

END PROJECT
STA 1765+00'WB'

FO OH FO OH FO OH FO OH FO OH FO OH FO OH FO OH FO OH FO OH FO

IH 94

1750'WB' 1755'WB' 1760'WB' 1765'WB' 1770'WB' 1775'WB'

1750'EB' 1755'EB' 1760'EB' 1765'EB' 1770'EB' 1775'EB'

IH 94

EMERGENCY
STOPPING
ONLY

EXISTING

END PROJECT
STA 1765+00'EB'

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 40	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (9)
PLOT DATE : 7/19/2021 2:27 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

BEGIN CONSTRUCTION
STA 59+19'WB'

SIGN

CAUTION

Black River Falls
POPULATION 3622
EXISTING

WEST
54
EXISTING

WB STH 54

60'WB'

62'WB'

64'WB'

60'EB'

62'EB'

64'EB'

INL

INL

EB STH 54

RAMP 'B'

RAMP CLOSED
USE
ALT ROUTE
EXISTING

EAST
94
EXISTING

CAUTION

RAMP CLOSED
USE
ALT ROUTE
EXISTING

EAST
94
EXISTING

BEGIN CONSTRUCTION
STA 59+24'EB'

SIGN

MH

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 41	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (11)

PLOT DATE : 7/19/2021 2:27 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

RAMP 'C'

RAMP 'B'

WB STH 54

EB STH 54

66'WB'

66'EB'

68'WB'

68'EB'

70'WB'

70'EB'

65'C'

65'B'

ALTERNATE 94 EAST WEST 54 54 EXISTING

ALTERNATE 94 EXISTING

WRONG WAY EXISTING

WRONG WAY EXISTING

STOP EXISTING

STOP DIVIDED HIGHWAY EXISTING

STOP EXISTING

SPEED LIMIT 40 EXISTING

EXISTING

EXISTING

EXISTING

ONE WAY EXISTING

ONE WAY EXISTING

DO NOT ENTER EXISTING (2)

CAUTION

Madison EXISTING

EAST ALTERNATE 94 EXISTING

EXISTING

ONE WAY EXISTING

EXISTING

EXISTING

DO NOT ENTER EXISTING

YIELD EXISTING

RAMP CLOSED USE ALT ROUTE EXISTING

WEST ALTERNATE 94 EXISTING

RAMP 10 MPH EXISTING

EXISTING

EXISTING

EXISTING

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 42	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023201_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (12)

PLOT DATE : 7/19/2021 2:28 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

STH 54

STH 54

IH 94

IH 94

WB STH 54

EB STH 54

72'WB'

72'EB'

74'WB'

74'EB'

76'WB'

76'EB'

75'A'

154'EB'

154'WB'

RAMP 'D'

RAMP 'A'

CAPTION

SIGN

SIGN

INL

INL

INL

MH

MH

MH

MH

RAMP CLOSED USE ALT ROUTE
EXISTING

EAST INTERSTATE 94
EXISTING

SPEED LIMIT 40
EXISTING

EXISTING

EXISTING

NO PARKING ON RAMP
EXISTING

RAMP CLOSED USE ALT ROUTE
EXISTING

DO NOT ENTER
EXISTING

WEST INTERSTATE 94
EXISTING

ONE WAY
EXISTING

EXISTING

WEST INTERSTATE 94
EXISTING

EXISTING

EXISTING (2)
DO NOT ENTER

EXISTING

ONE WAY
EXISTING

WEST INTERSTATE 94
EXISTING

Eau Claire
EXISTING

EXISTING

STOP
EXISTING

EXISTING

STOP
EXISTING

SPEED LIMIT 40
EXISTING

EAST 54
EXISTING

STOP
DIVIDED HIGHWAY
EXISTING

WRONG WAY
EXISTING

WRONG WAY
EXISTING

ALTERNATE INTERSTATE 94
WEST 54 EAST 54
EXISTING

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 43	E

2

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

END CONSTRUCTION
STA 78+51'WB'

CAUTION

Black River Falls
Madison
Eau Claire
EXISTING
SIGN

RAMP CLOSED
USE
ALT ROUTE
EXISTING

EAST WEST WEST
INTERSTATE INTERSTATE
94 54 94
EXISTING

EXISTING

'WB'

WB STH 54

78'WB'

80'WB'

82'WB'

78'EB'

80'EB'

82'EB'

INL

INL

EB STH 54

Black River
Rec Area
Information
D7-77R MOD.
VARIES

CAUTION

END CONSTRUCTION
STA 78+67'EB'

N

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 44	E

2

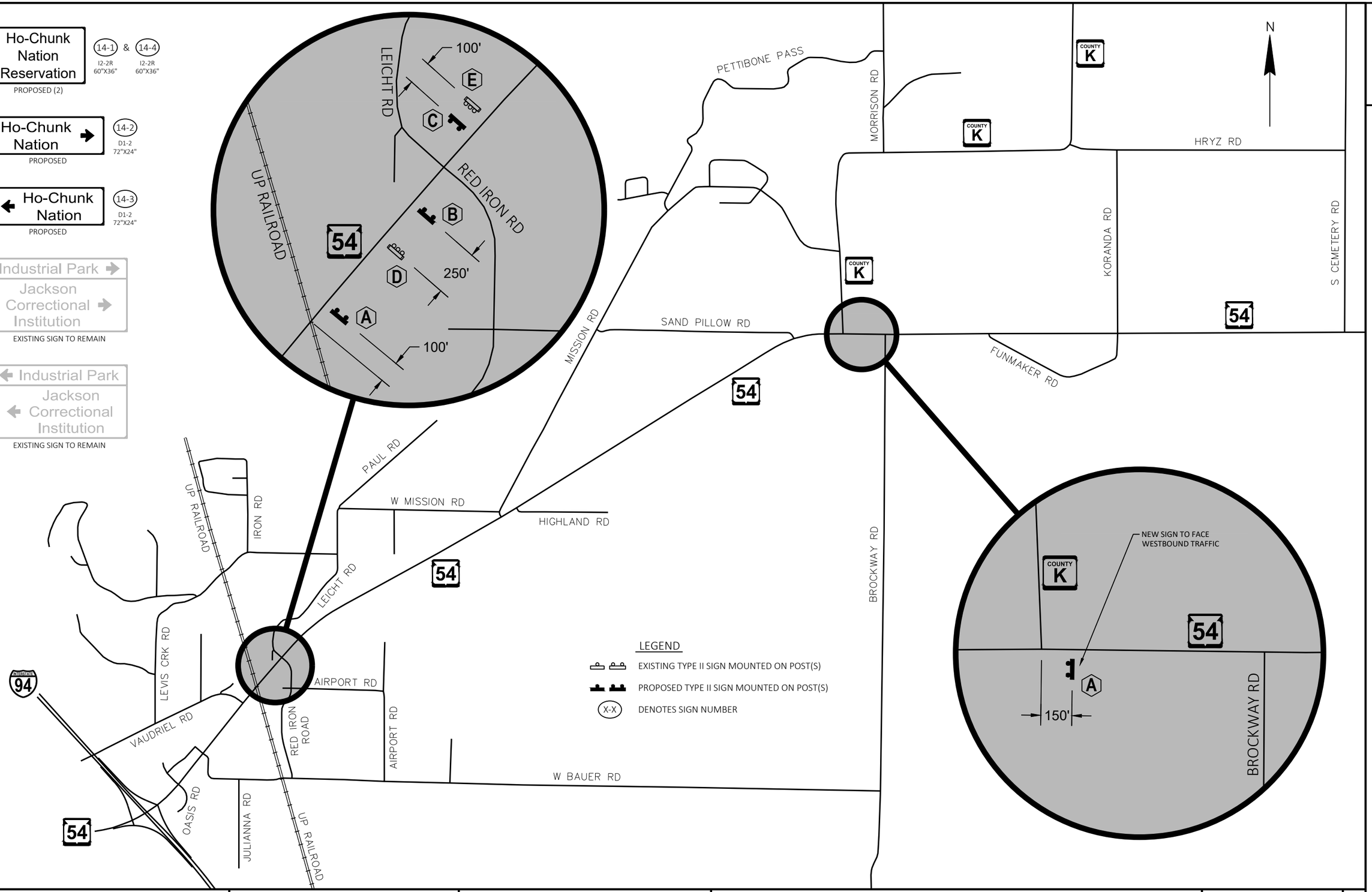
A — Ho-Chunk Nation Reservation — PROPOSED (2) — 14-1 I2-2R 60"X36" & 14-4 I2-2R 60"X36"

B — Ho-Chunk Nation → — PROPOSED — 14-2 D1-2 72"X24"

C — ← Ho-Chunk Nation — PROPOSED — 14-3 D1-2 72"X24"

D — Industrial Park → / Jackson Correctional Institution → — EXISTING SIGN TO REMAIN

E — ← Industrial Park / ← Jackson Correctional Institution — EXISTING SIGN TO REMAIN



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 45	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\023211_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Plan 1 IN 0.5 MI
PLOT DATE : 7/19/2021 2:30 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:0.5 MI
WISDOT/CADDS SHEET 42

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

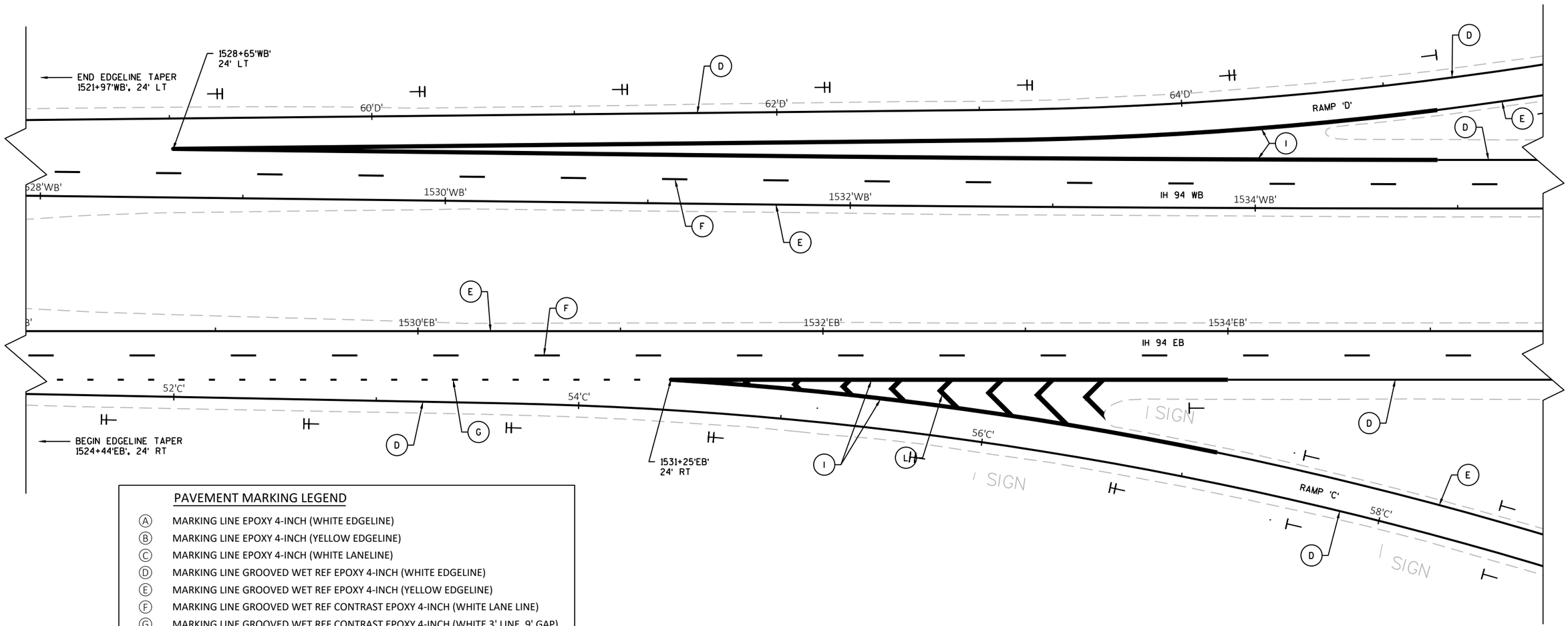
FOR STH 54 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".

LEGEND

DELINEATOR

DOUBLE DELINEATOR

WHITE/RIGHT YELLOW/LEFT



PAVEMENT MARKING LEGEND

(A)	MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
(B)	MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
(C)	MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
(D)	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
(E)	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
(F)	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
(G)	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
(H)	MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
(I)	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
(J)	MARKING ARROW EPOXY (WHITE)
(K)	MARKING STOP LINE EPOXY 18-INCH (WHITE)
(L)	MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
(M)	MARKING CURB EPOXY (YELLOW)
(N)	MARKING ISLAND NOSE EPOXY (YELLOW)

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKINIG - IH 94	SHEET 46	E

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

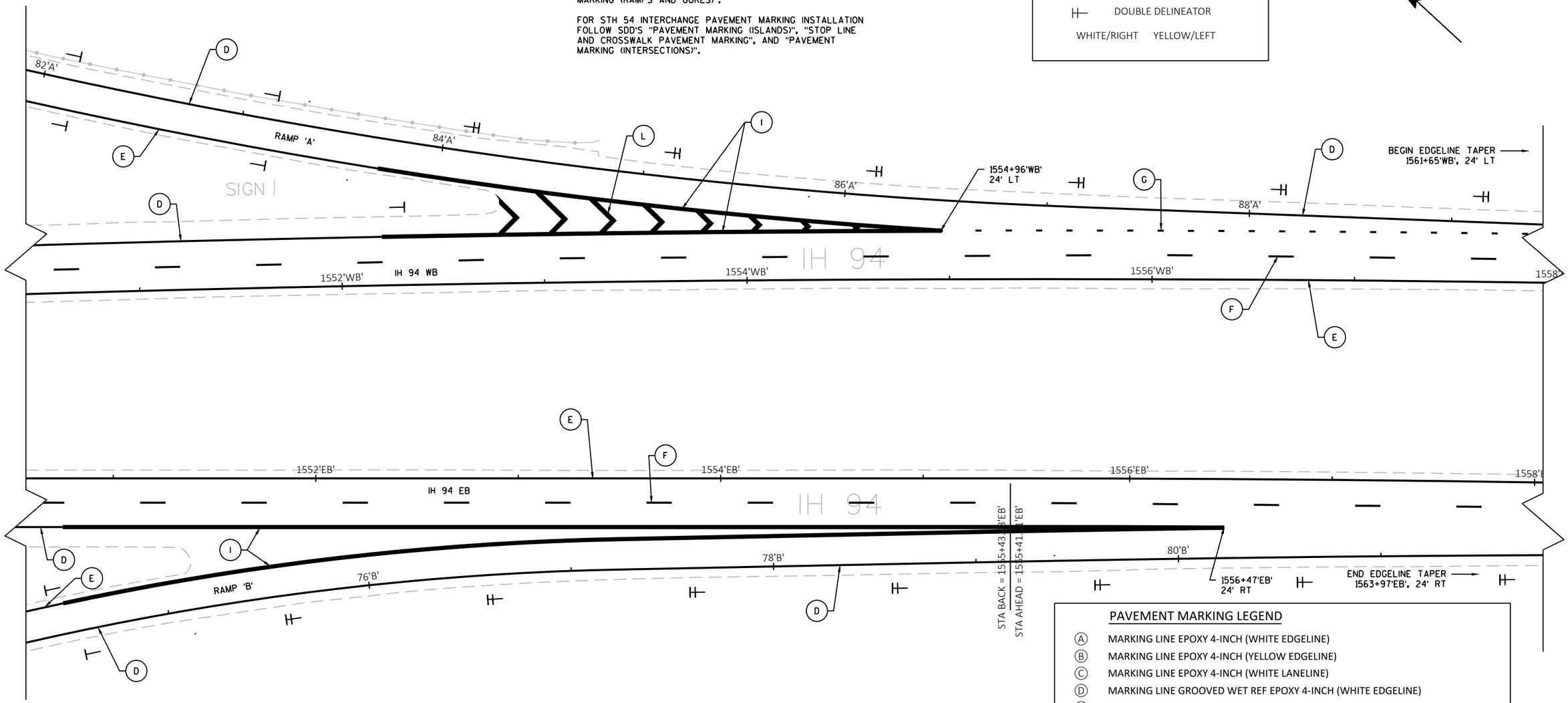
FOR STH 54 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".

LEGEND

DELINEATOR

DOUBLE DELINEATOR

WHITE/RIGHT YELLOW/LEFT



PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING ARROW EPOXY (WHITE)
- (K) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (L) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (M) MARKING CURB EPOXY (YELLOW)
- (N) MARKING ISLAND NOSE EPOXY (YELLOW)

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING - IH 94	SHEET 47	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\024501_PM_PAVT_MARKING.DWG
LAYOUT NAME - Sheet - (2)

PLOT DATE : 7/19/2021 2:31 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

FOR STH 54 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".

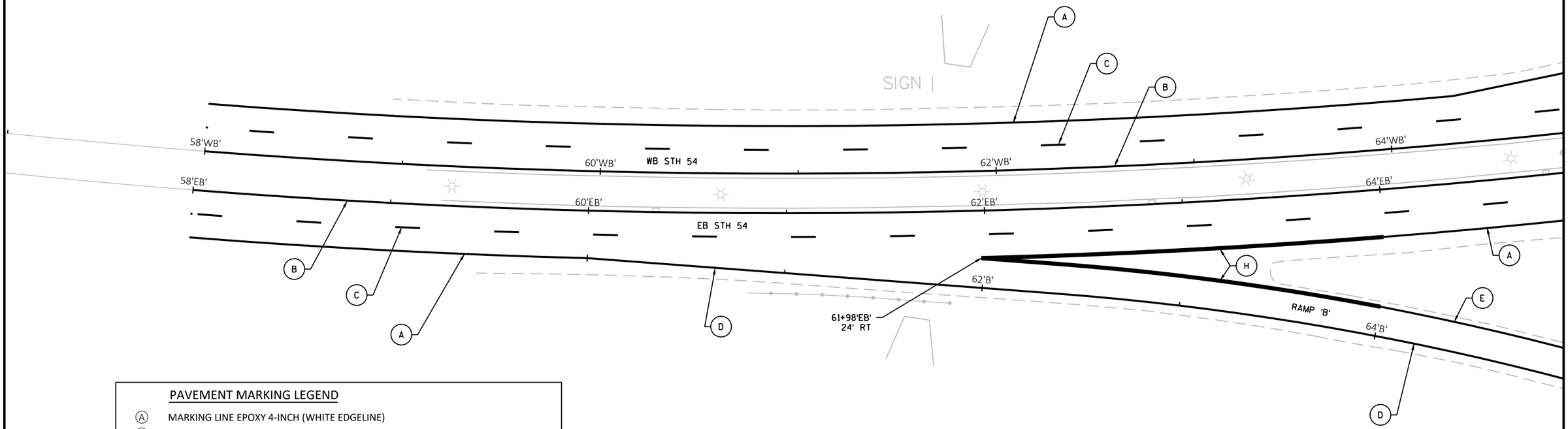
LEGEND

DELINEATOR

DOUBLE DELINEATOR

WHITE/RIGHT YELLOW/LEFT

N



PAVEMENT MARKING LEGEND

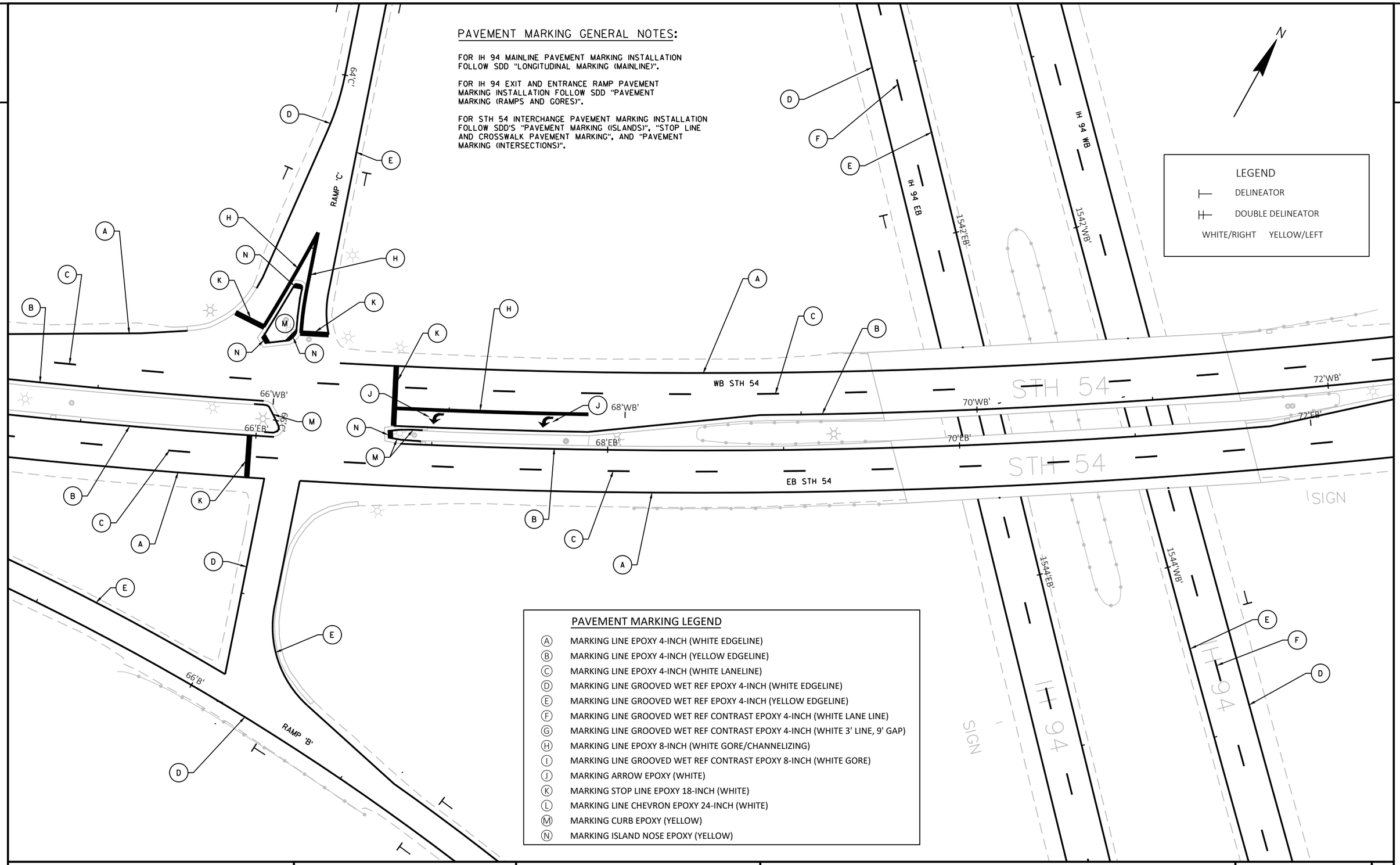
- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING ARROW EPOXY (WHITE)
- (K) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (L) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (M) MARKING CURB EPOXY (YELLOW)
- (N) MARKING ISLAND NOSE EPOXY (YELLOW)

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

FOR STH 54 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".



PAVEMENT MARKING LEGEND

(A)	MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
(B)	MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
(C)	MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
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(F)	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
(G)	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
(H)	MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
(I)	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
(J)	MARKING ARROW EPOXY (WHITE)
(K)	MARKING STOP LINE EPOXY 18-INCH (WHITE)
(L)	MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
(M)	MARKING CURB EPOXY (YELLOW)
(N)	MARKING ISLAND NOSE EPOXY (YELLOW)

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING - STH 54	SHEET 49	E

2

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

FOR STH 54 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".

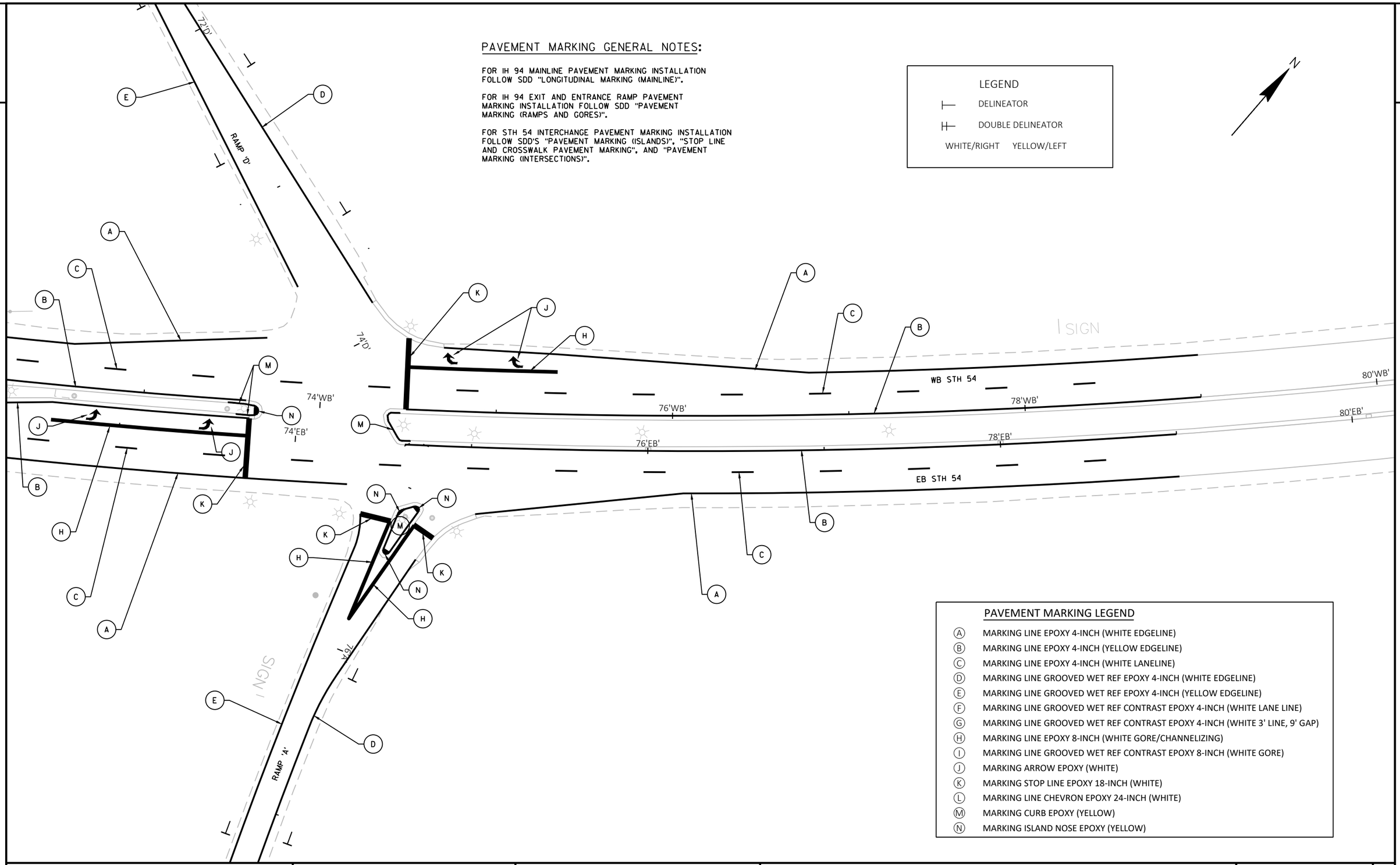
LEGEND

DELINEATOR

DOUBLE DELINEATOR

WHITE/RIGHT YELLOW/LEFT

N



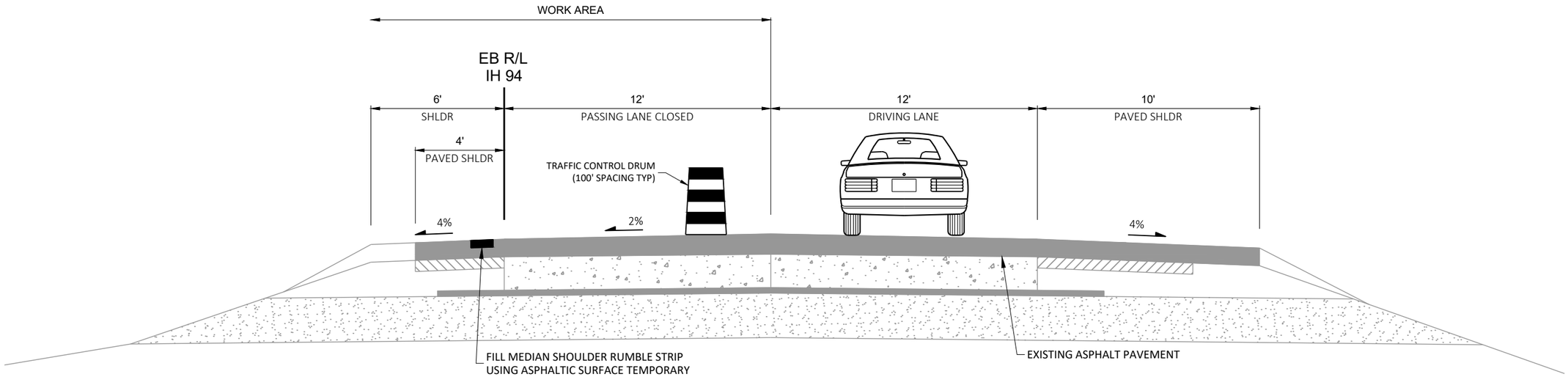
PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING ARROW EPOXY (WHITE)
- (K) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (L) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (M) MARKING CURB EPOXY (YELLOW)
- (N) MARKING ISLAND NOSE EPOXY (YELLOW)

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING - STH 54	SHEET 50	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\024501_PM_PAVT_MARKING.DWG
LAYOUT NAME - Sheet - (5)
PLOT DATE : 7/19/2021 2:31 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

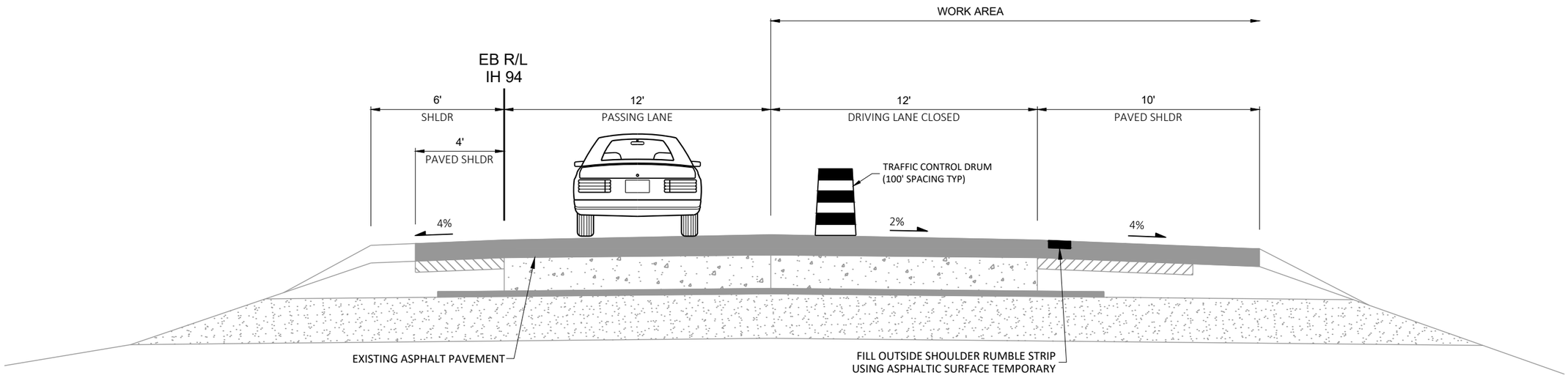
2



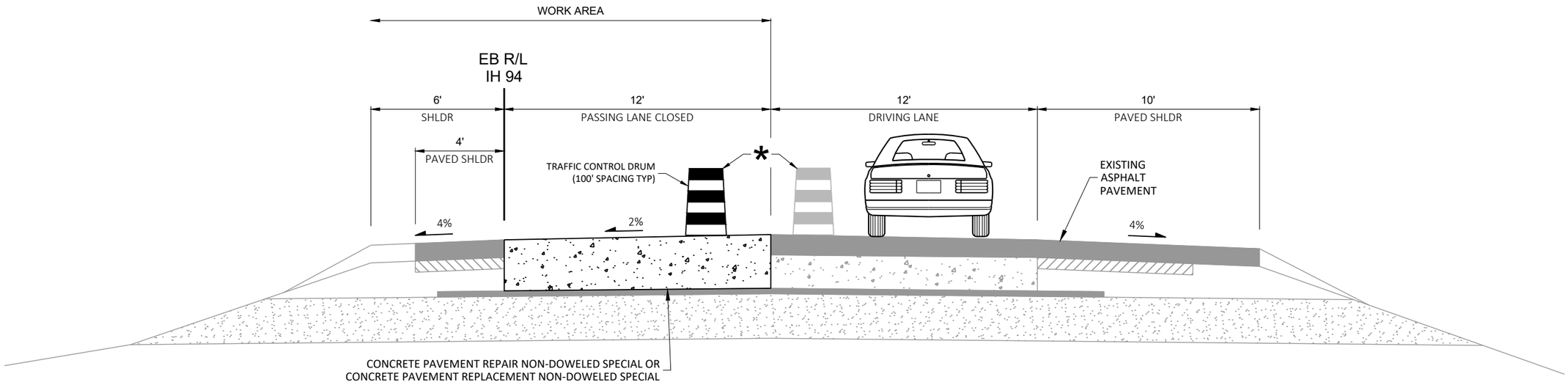
STAGE 1A
FILL MEDIAN SHOULDER RUMBLE STRIP

NOTES:

EB LANES SHOWN, MIRROR STAGING FOR WB LANES.



STAGE 1B
FILL OUTSIDE SHOULDER RUMBLE STRIP



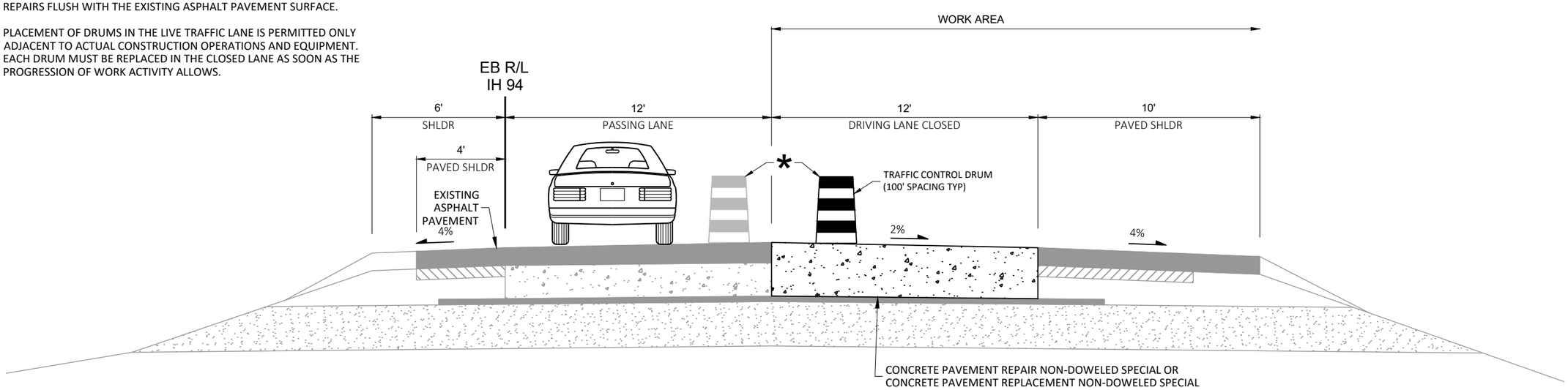
STAGE 2A
CONCRETE REPAIRS IN PASSING LANE

NOTES:

EB LANES SHOWN, MIRROR STAGING FOR WB LANES.

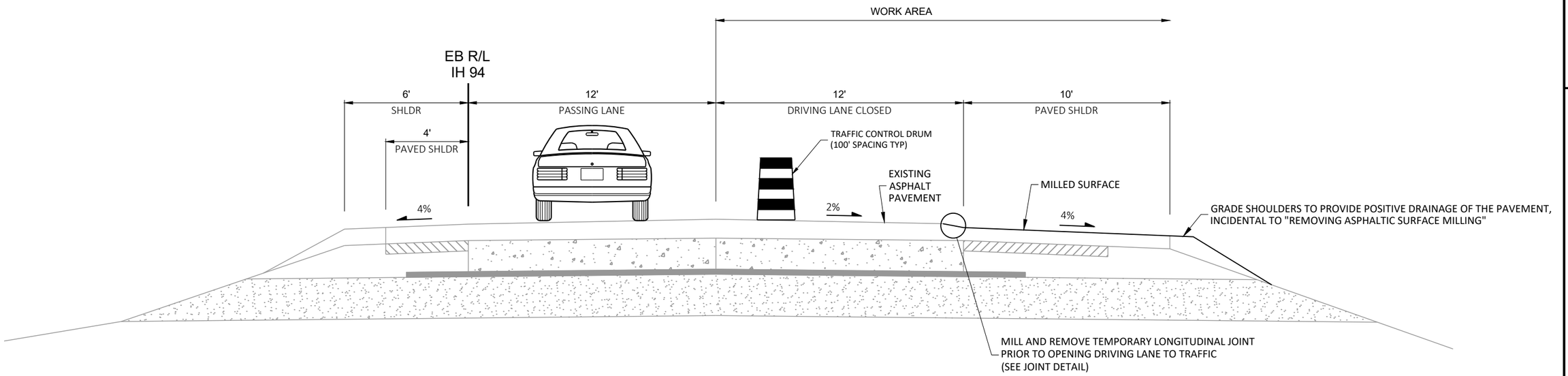
PRIOR TO MILLING OPERATIONS, CONSTRUCT CONCRETE PAVEMENT REPAIRS FLUSH WITH THE EXISTING ASPHALT PAVEMENT SURFACE.

* PLACEMENT OF DRUMS IN THE LIVE TRAFFIC LANE IS PERMITTED ONLY ADJACENT TO ACTUAL CONSTRUCTION OPERATIONS AND EQUIPMENT. EACH DRUM MUST BE REPLACED IN THE CLOSED LANE AS SOON AS THE PROGRESSION OF WORK ACTIVITY ALLOWS.



STAGE 2B
CONCRETE REPAIRS IN DRIVING LANE

2

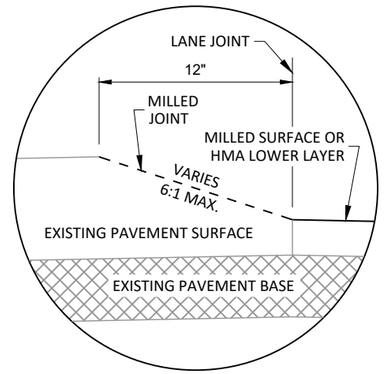


STAGE 3A
MILL OUTSIDE SHOULDER, 1" MILL DEPTH

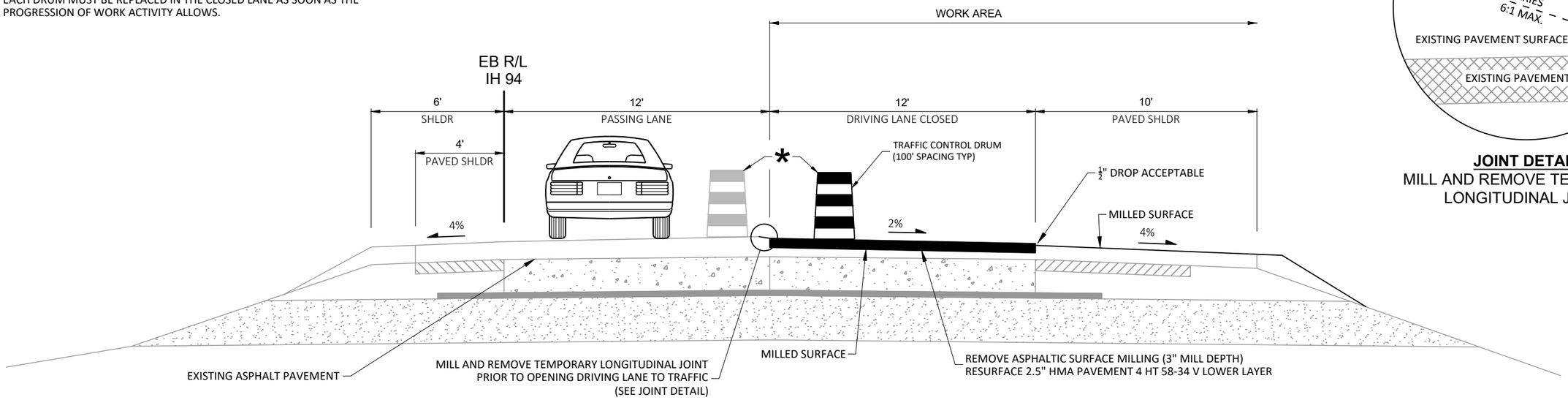
NOTES:

EB LANES SHOWN, MIRROR STAGING FOR WB LANES.

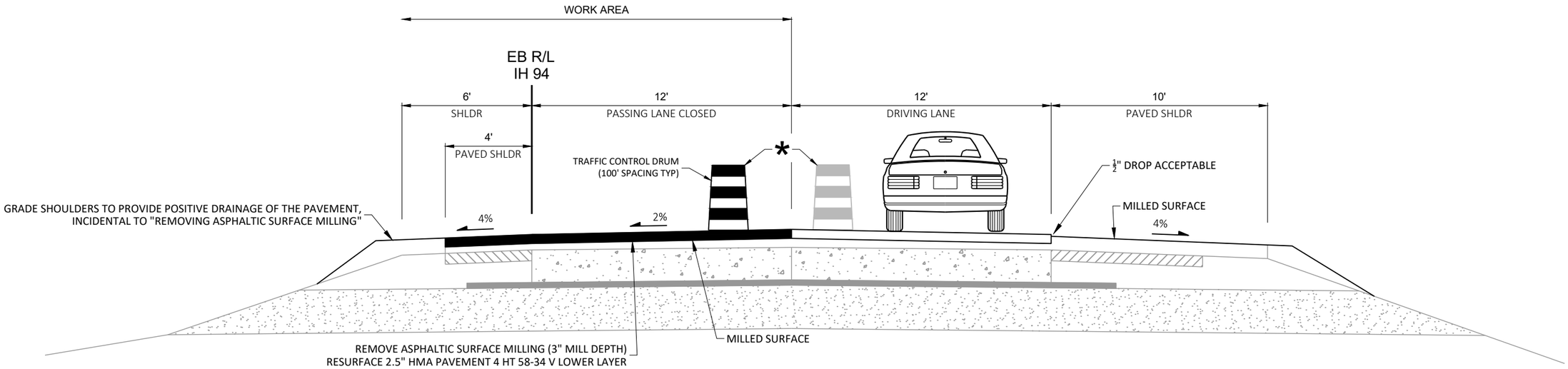
* PLACEMENT OF DRUMS IN THE LIVE TRAFFIC LANE IS PERMITTED ONLY ADJACENT TO ACTUAL CONSTRUCTION OPERATIONS AND EQUIPMENT. EACH DRUM MUST BE REPLACED IN THE CLOSED LANE AS SOON AS THE PROGRESSION OF WORK ACTIVITY ALLOWS.



JOINT DETAIL
MILL AND REMOVE TEMPORARY
LONGITUDINAL JOINT



STAGE 3B
MILL 3" AND OVERLAY 2.5" DRIVING LANE



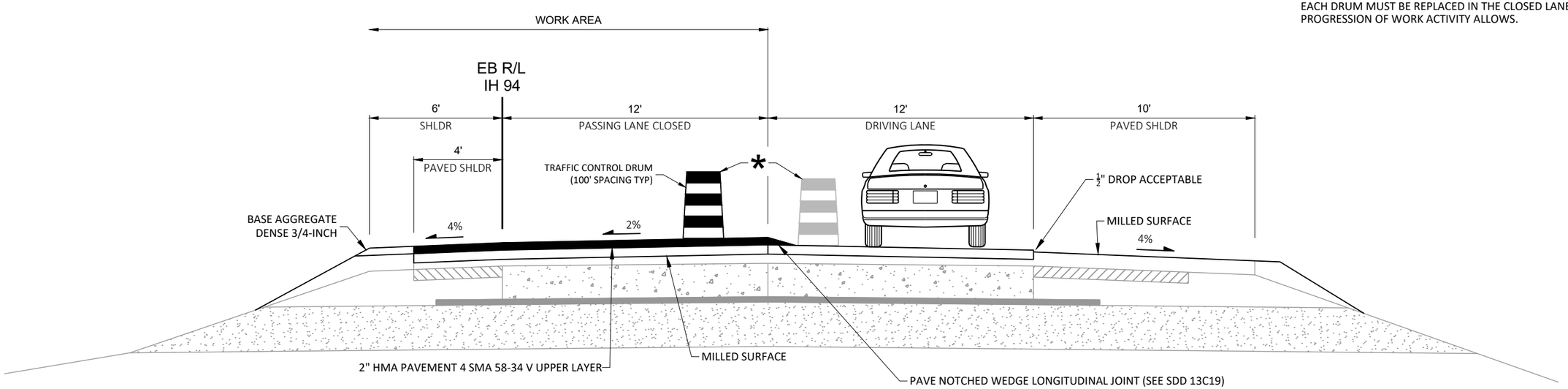
STAGE 3C

MILL 3" AND OVERLAY 2.5"
PASSING LANE & MEDIAN SHOULDER

NOTES:

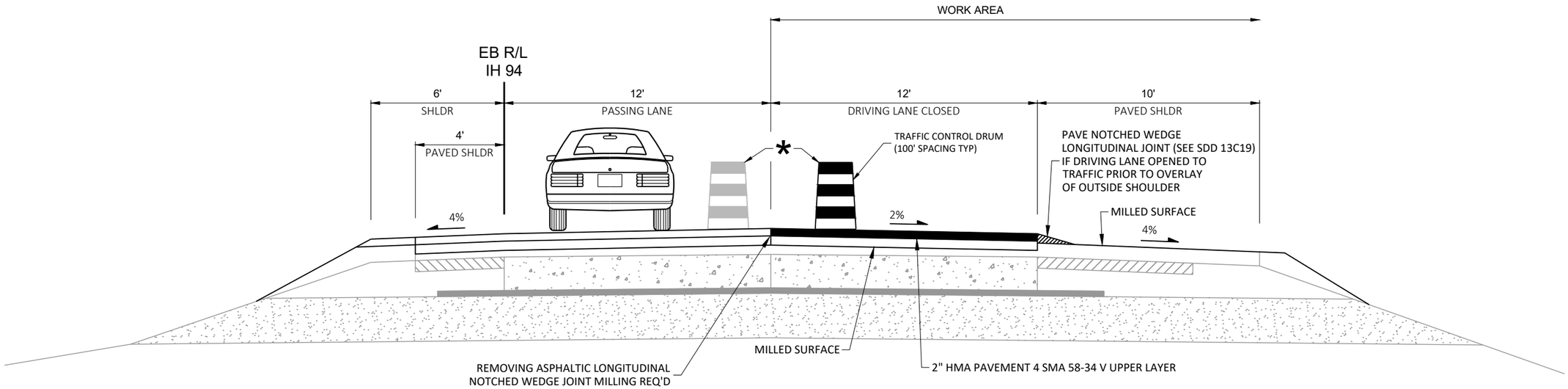
EB LANES SHOWN, MIRROR STAGING FOR WB LANES.

* PLACEMENT OF DRUMS IN THE LIVE TRAFFIC LANE IS PERMITTED ONLY ADJACENT TO ACTUAL CONSTRUCTION OPERATIONS AND EQUIPMENT. EACH DRUM MUST BE REPLACED IN THE CLOSED LANE AS SOON AS THE PROGRESSION OF WORK ACTIVITY ALLOWS.



STAGE 4A

2" OVERLAY PASSING LANE & MEDIAN SHOULDER

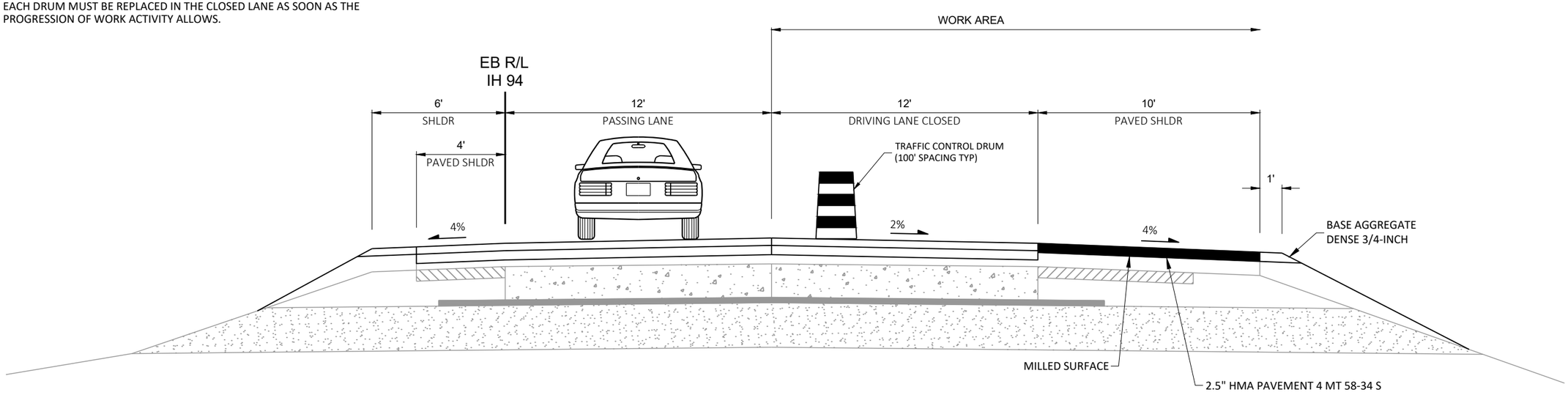


STAGE 4B
2" OVERLAY DRIVING LANE

NOTES:

EB LANES SHOWN, MIRROR STAGING FOR WB LANES.

* PLACEMENT OF DRUMS IN THE LIVE TRAFFIC LANE IS PERMITTED ONLY ADJACENT TO ACTUAL CONSTRUCTION OPERATIONS AND EQUIPMENT. EACH DRUM MUST BE REPLACED IN THE CLOSED LANE AS SOON AS THE PROGRESSION OF WORK ACTIVITY ALLOWS.



STAGE 4C
2.5" OVERLAY OUTSIDE SHOULDER

2

PCMS MESSAGING

1 WEEK PRIOR TO CLOSURE:

	FRAME 1	FRAME 2
(A)	RAMP WILL BE CLOSED	STARTING XXXDAY XX-XX-XX

DURING CLOSURE:

	FRAME 1	FRAME 2
(A)	EXIT RAMP CLOSED	NEXT EXIT 12 MILES

N

EXIT 115

12 27

Merrillan
Black River Falls

EXISTING

95

EXIT 115

WESTBOUND

EASTBOUND

94

1000 FT

1/2 MILE

1/4 MILE

DMS

MB

EXIT 105

1-1/2 MILE

HWY 54
RAMP CLOSED
USE EXIT 115

G20-56
120"X54"

EXISTING DYNAMIC
MESSAGE SIGN

EXIT
115
EXISTING

TO 54
MO4-5
36"X18"
M1-6
36"X36"
MO6-2
30"X30"

TO 54
MO4-5
36"X18"
M1-6
36"X36"
MO6-1
30"X30"

12 27

SEE NEXT SHEET

MATCH LINE

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

(A) --------

EXIT 115

12 27

Merrillan
Black River Falls
1 MILE

EXISTING

EXIT 115

12 27

Merrillan
Black River Falls

EXISTING

DETOUR 54
M4-8
36"X18"
M1-6
36"X36"

EXIT 116

54

Wisconsin Rapids
Black River Falls
CLOSED

G20-60
108"X24"

NEXT EXIT 12 MILES

EXISTING

PORTABLE CHANGEABLE MESSAGE SIGNS
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

PCMS MESSAGING:

EXIT 116
WIS RAPIDS
CLOSED

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - EB RAMPS CLOSED	SHEET 56	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025201_TC_EB_RAMPS_CLOSED.DWG
LAYOUT NAME - 26

PLOT DATE : 7/19/2021 2:34 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:5 FT

WISDOT/CADDS SHEET 42

2

EXIT 115

12 27

Merrillan
Black River Falls
2/3 MILE

NEXT EXIT 10 MILES

EXISTING

SEE PREVIOUS SHEET

MATCH LINE

11

MB

54

INSTALL ON WB STH 54
1000' EAST OF IH 94

B

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

643.0910 TRAFFIC CONTROL
COVERING SIGNS TYPE I

N

EXIT 116

54

Wis Rapids
Black River Falls

EXISTING

EXIT 116

54

Wis Rapids
Black River Falls

CLOSED

G20-61
120"X30"

EXISTING

EXIT 116

54

Wis Rapids
Black River Falls
1 1/2 MILES

EXISTING

EXIT 116

MB

MB

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

PCMS MESSAGING 1 WEEK PRIOR TO CLOSURE:

FRAME 1	FRAME 2
RAMP WILL BE CLOSED	STARTING XXXDAY XX-XX-XX

WESTBOUND

EASTBOUND

94

EXISTING DYNAMIC
MESSAGE SIGN

DMS

1100 FT

11

54

SEE SDD 15D16 TRAFFIC CONTROL,
EXIT RAMP CLOSURE

MB

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

B

INSTALL ON EB STH 54
1250' WEST OF IH 94

0

EXIT 128

0

PCMS MESSAGING

1 WEEK PRIOR TO CLOSURE:

	FRAME 1	FRAME 2
B	EB I-94 ON RAMP CLOSED	STARTING XXXDAY XX-XX-XX

DURING CLOSURE:

	FRAME 1	FRAME 2
B	EB I-94 ON RAMP CLOSED	USE ALT ROUTE

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - EB RAMPS CLOSED	SHEET 57	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025201_TC_EB_RAMPS_CLOSED.DWG
LAYOUT NAME - 27

PLOT DATE : 7/19/2021 2:34 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:5 FT

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II

N

SIGN I

55+00'WB' 56+00'WB' 57+00'WB' 58+00'WB' 59+00'WB' 60+00'WB' 61+00'WB' 62+00'WB'

55+00'EB' 56+00'EB' 57+00'EB' 58+00'EB' 59+00'EB' 60+00'EB' 61+00'EB' 62+00'EB'

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, WHITE

25' TYP

EXISTING

WEST EAST INTERSTATE 94 54

EXISTING

RAMP CLOSED
USE
ALT ROUTE

EXISTING

EXISTING

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

62+00'WB' 63+00'WB' 64+00'WB' 65+00'WB' 66+00'WB' 67+00'WB' 68+00'WB' 69+00'WB'

62+00'EB' 63+00'EB' 64+00'EB' 65+00'EB' 66+00'EB' 67+00'EB' 68+00'EB' 69+00'EB'

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

(RAMP CLOSED)

EXISTING

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

EXISTING

EXISTING

25' TYP

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, YELLOW

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, WHITE

25' TYP

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

RAMP CLOSED
USE
ALT ROUTE
EXISTING

(RAMP CLOSED)

WEST INTERSTATE 94
EXISTING

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - EB RAMPS CLOSED	SHEET 58	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025205_TC_EB_RAMPS_CLOSED_DETAILS.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 7/19/2021 2:36 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

RAMP CLOSED
USE
ALT ROUTE
EXISTING

EXISTING

SPEED LIMIT 40
EXISTING

EXISTING R11-54F
(FOLDED)

WEST INTERSTATE 94
EXISTING

STH 54

70+00'WB'
71+00'WB'
72+00'WB'
73+00'WB'
74+00'WB'
75+00'WB'
76+00'WB'
77+00'WB'

70+00'EB'
71+00'EB'
72+00'EB'
73+00'EB'
74+00'EB'
75+00'EB'
76+00'EB'
77+00'EB'

STH 54

SIGN

Eau Claire
EXISTING

WEST INTERSTATE 94
EXISTING

WEST INTERSTATE 94
EXISTING

Black River Falls
Eau Claire
EXISTING

SIGN

EXISTING R11-54F
(FOLDED)

WEST INTERSTATE 54 | WEST INTERSTATE 94
EXISTING

EXISTING

EP: 82+74.91'WB'

EP: 82+92.39'EB'

77+00'WB'
78+00'WB'
79+00'WB'
80+00'WB'
81+00'WB'
82+00'WB'

77+00'EB'
78+00'EB'
79+00'EB'
80+00'EB'
81+00'EB'
82+00'EB'

643.0920 TRAFFIC CONTROL
COVERING SIGNS TYPE II

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - EB RAMPS CLOSED	SHEET 59	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025205_TC_EB_RAMPS_CLOSED_DETAILS.DWG
LAYOUT NAME - Sheet - (2)
PLOT DATE : 7/19/2021 2:36 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

2

N

TO MO4-5 36"X18"
54 M1-6 36"X36"
MO6-1 30"X30"

12 27

EXIT 115
12 27
Merrillan
Black River Falls
EXISTING

DETOUR M4-8 36"X18"
54 M1-6 36"X36"

TO MO4-5 36"X18"
54 M1-6 36"X36"
MO6-2 30"X30"

EXIT 115
EXISTING

EXIT 115

95

WESTBOUND
EASTBOUND
94

1/2 MILE

DMS

EXIT 105

EXISTING DYNAMIC MESSAGE SIGN

SEE NEXT SHEET
MATCH LINE

12 27

EXIT 115
12 27
Merrillan
Black River Falls
1 MILE
EXISTING

EXIT 115
12 27
Merrillan
Black River Falls
EXISTING

EXIT 116
54
Wisconsin Rapids
Black River Falls
2/3 MILE
NEXT EXIT 12 MILES
EXISTING

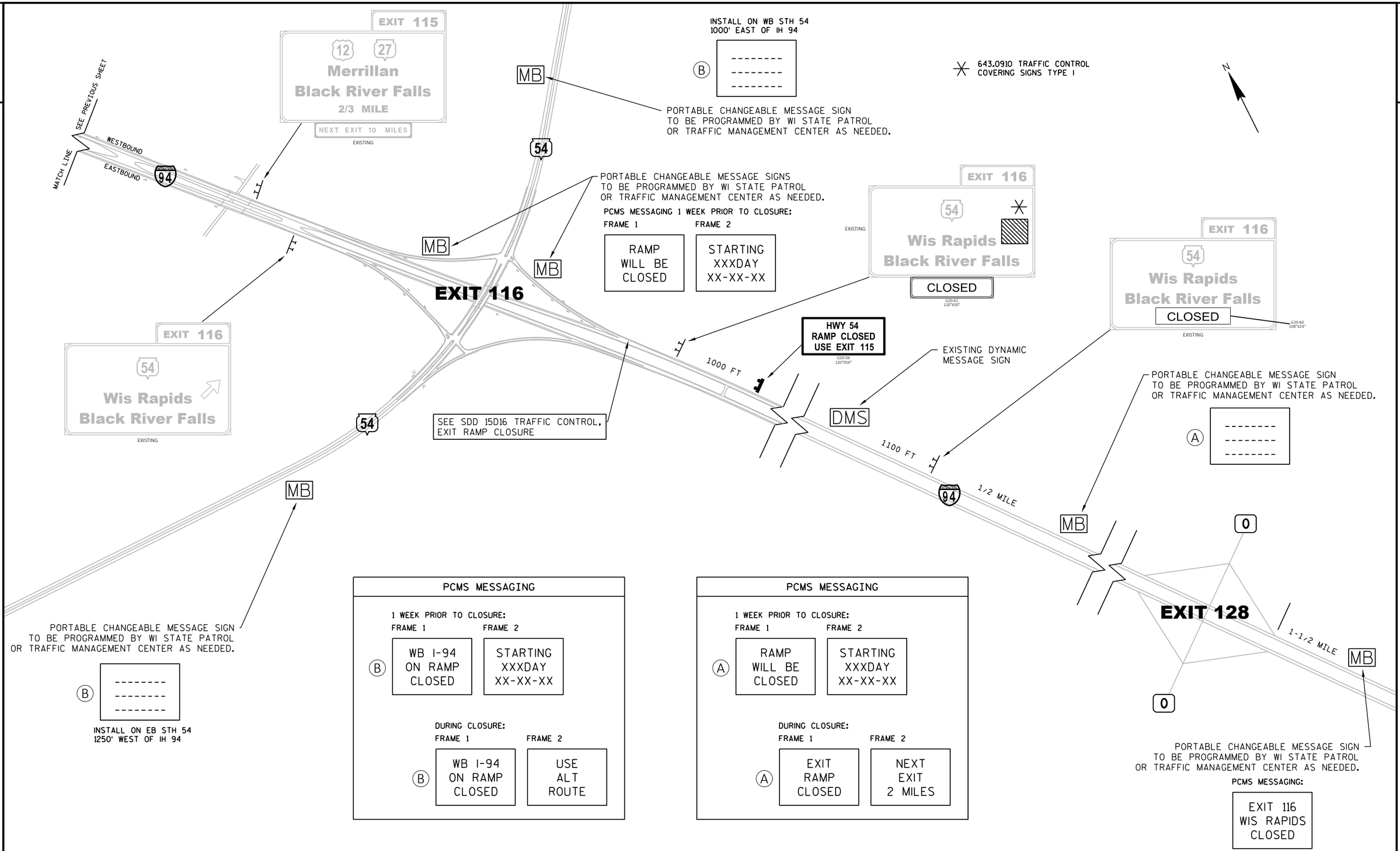
95

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - WB RAMPS CLOSED	SHEET 60	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025251_TC_WB_RAMPS_CLOSED.DWG
LAYOUT NAME - 36

PLOT DATE : 7/19/2021 2:37 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:5 FT

2



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - WB RAMPS CLOSED	SHEET 61	E

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II

N

SIGN I

55+00'WB' 56+00'WB' 57+00'WB' 58+00'WB' 59+00'WB' 60+00'WB' 61+00'WB' 62+00'WB'

55+00'EB' 56+00'EB' 57+00'EB' 58+00'EB' 59+00'EB' 60+00'EB' 61+00'EB' 62+00'EB'

EXISTING

EAST 54 EAST 94 CROSSTOWN

EXISTING

EXISTING R11-54F (FOLDED)

EAST INTERSTATE 94

EXISTING

62+00'WB' 63+00'WB' 64+00'WB' 65+00'WB' 66+00'WB'

62+00'EB' 63+00'EB' 64+00'EB' 65+00'EB' 66+00'EB'

EAST INTERSTATE 94

EXISTING

EXISTING R11-54F (FOLDED)

EAST INTERSTATE 94

EXISTING

67+00'WB' 68+00'WB' 69+00'WB'

67+00'EB' 68+00'EB' 69+00'EB'

Madison

EXISTING

EXISTING R11-54F (FOLDED)

EAST 54 EAST 94 CROSSTOWN

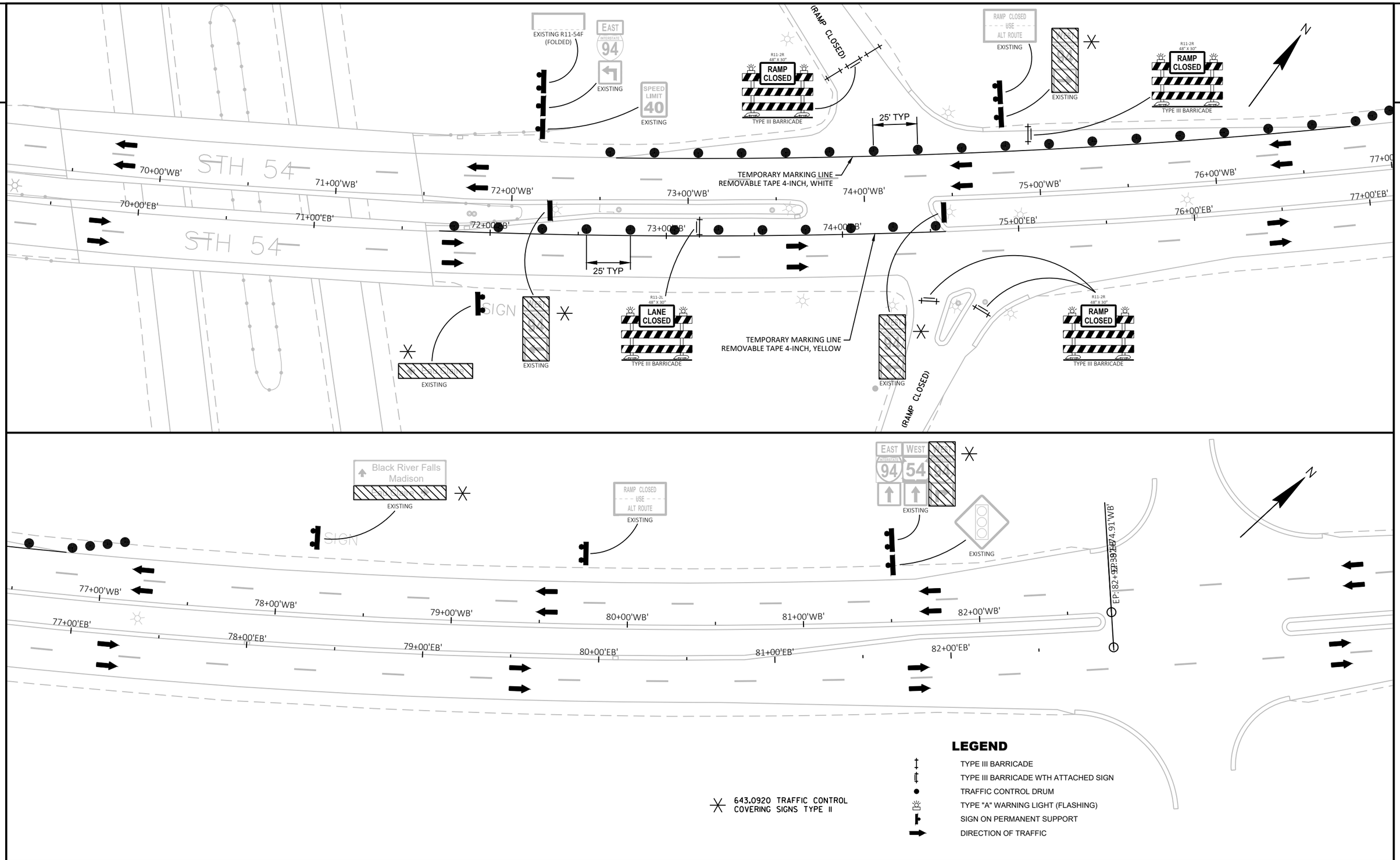
EXISTING

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - WB RAMPS CLOSED	SHEET 62	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025255_TC_WB_RAMPS_CLOSED_DETAILS.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 7/19/2021 2:38 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

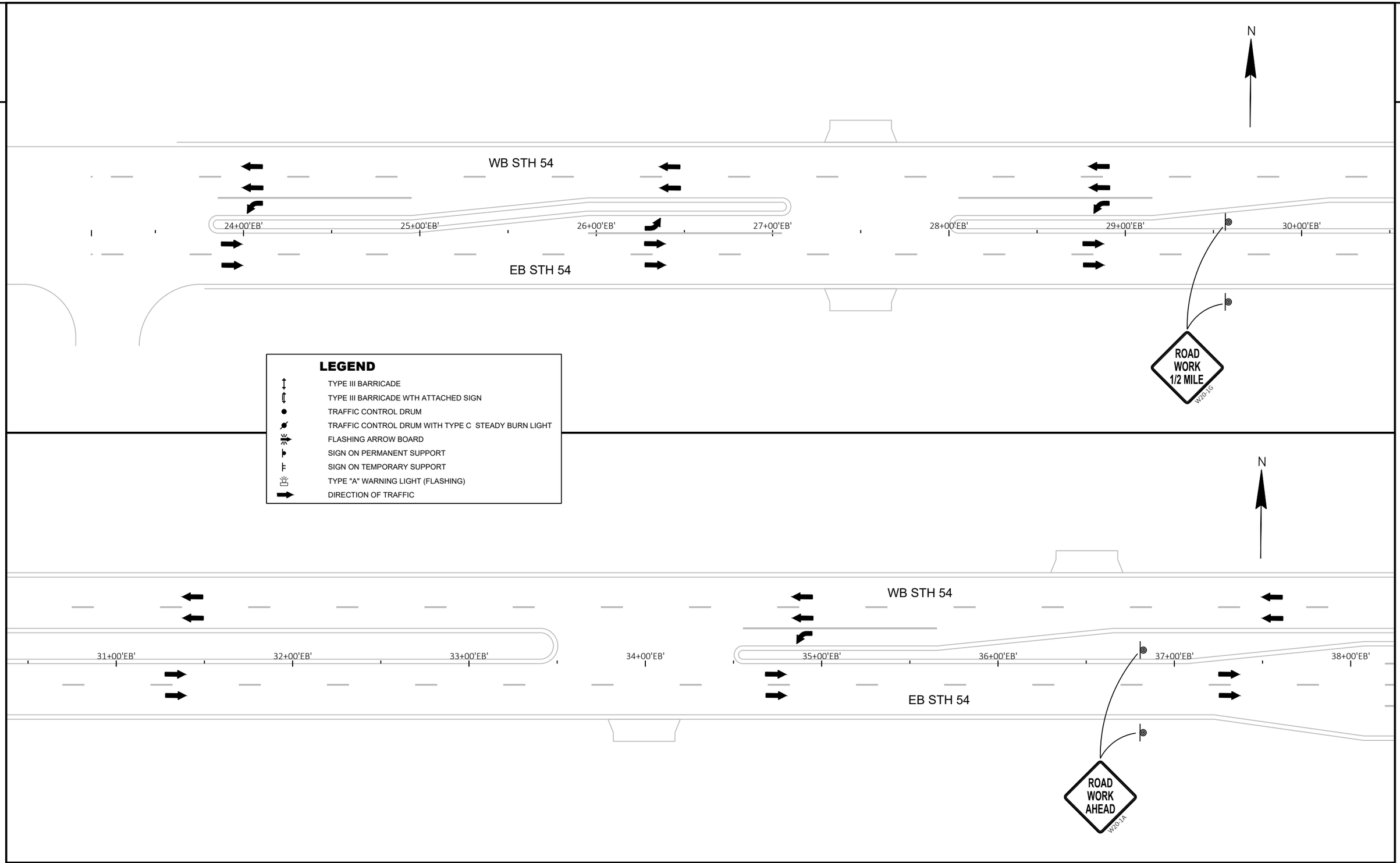


PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - WB RAMPS CLOSED	SHEET 63	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025255_TC_WB_RAMPS_CLOSED_DETAILS.DWG
LAYOUT NAME - Sheet - (2)

PLOT DATE : 7/19/2021 2:38 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

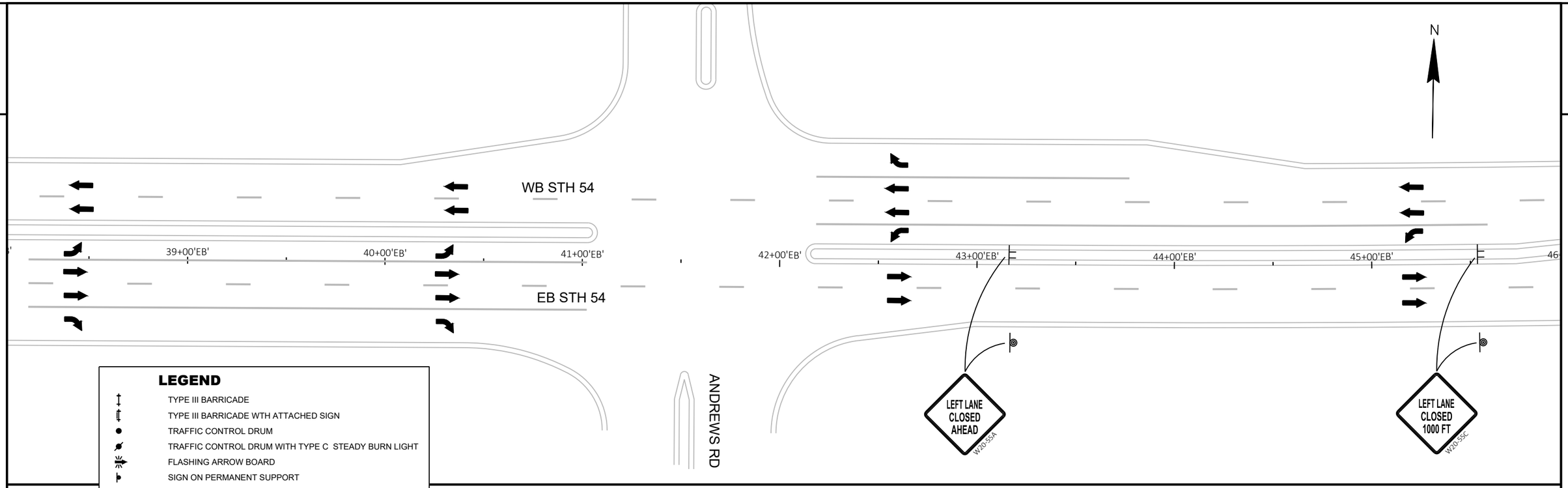


PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 PASSING LANE CLOSED	SHEET 64	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025301_TC_STH54_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (1)

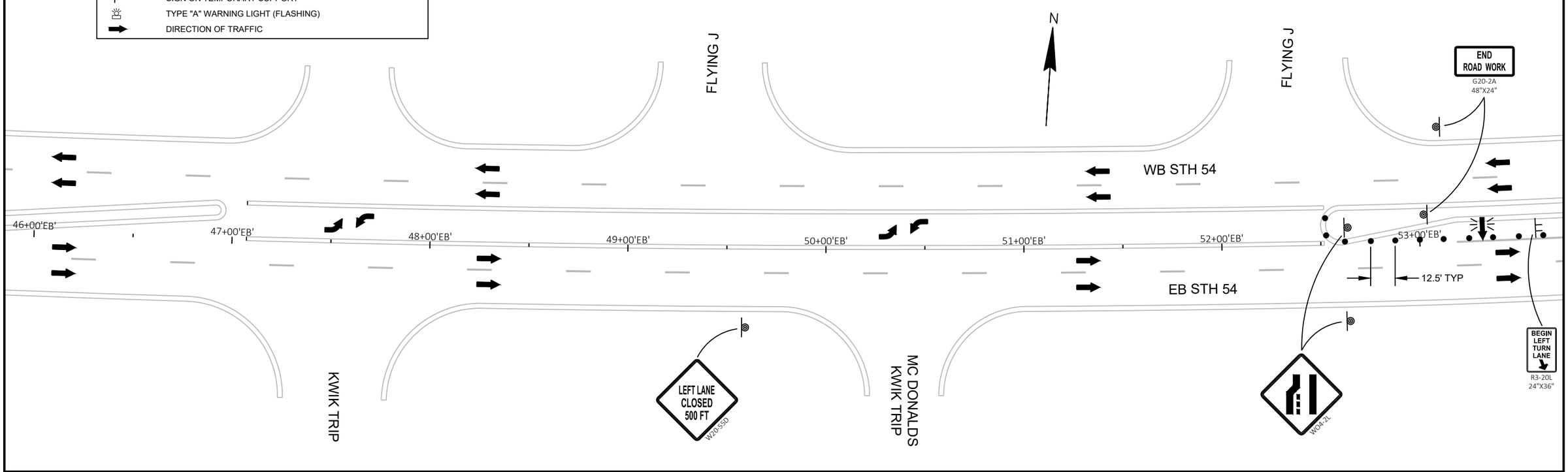
PLOT DATE : 7/19/2021 2:40 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 PASSING LANE CLOSED	SHEET 65	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025301_TC_STH54_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (2)

PLOT DATE : 7/19/2021 2:40 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

ROAD WORK AHEAD
W20-1A

BEGIN LEFT TURN LANE
R3-20L
24"X36"

BEGIN CONSTRUCTION
STA 59+19'WB'

WB STH 54

12.5' TYP

54+00'EB'

55+00'EB'

56+00'EB'

25' TYP

57+00'EB'

25' TYP

58+00'EB'

59+00'EB'

50' TYP

60+00'EB'

61+00'EB'

EB STH 54

MC DONALD RD

REMOVE PAVEMENT MARKING

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, YELLOW

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

BEGIN CONSTRUCTION
STA 59+24'EB'

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

SIGN

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

WO1-6
48" X 24"
TYPE III BARRICADE

RAMP 'C'

WB STH 54

62+00'EB'

63+00'EB'

64+00'EB'

65+00'EB'

50' TYP

66+00'EB'

EB STH 54

RAMP 'B'

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

25' TYP

67+00'EB'

68+00'EB'

69+00'EB

WO1-6
48" X 24"
TYPE III BARRICADE

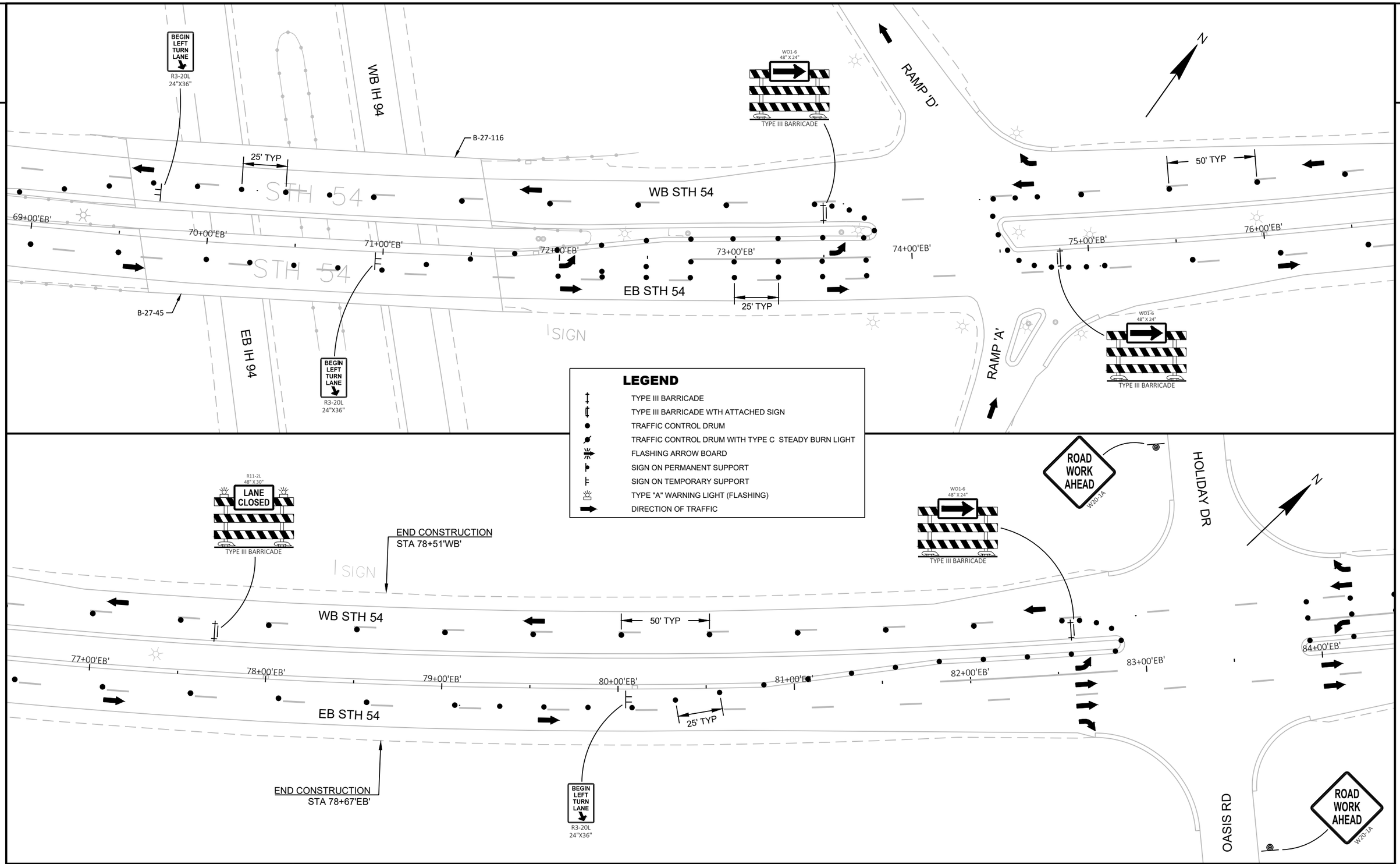
N

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 PASSING LANE CLOSED	SHEET 66	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025301_TC_STH54_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (3)

PLOT DATE : 7/19/2021 2:40 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

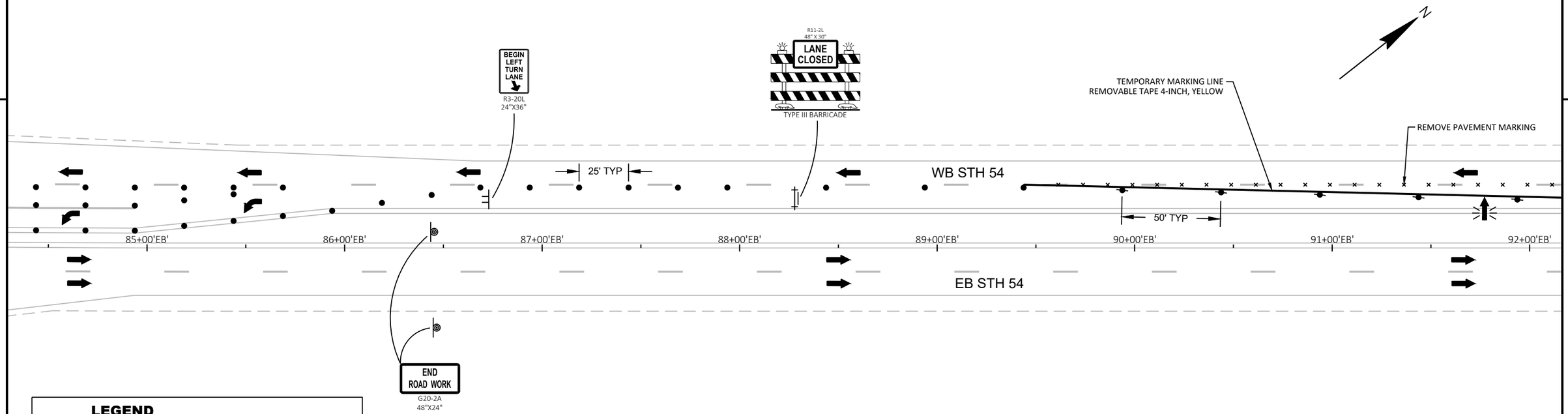


PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 PASSING LANE CLOSED	SHEET 67	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025301_TC_STH54_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (4)

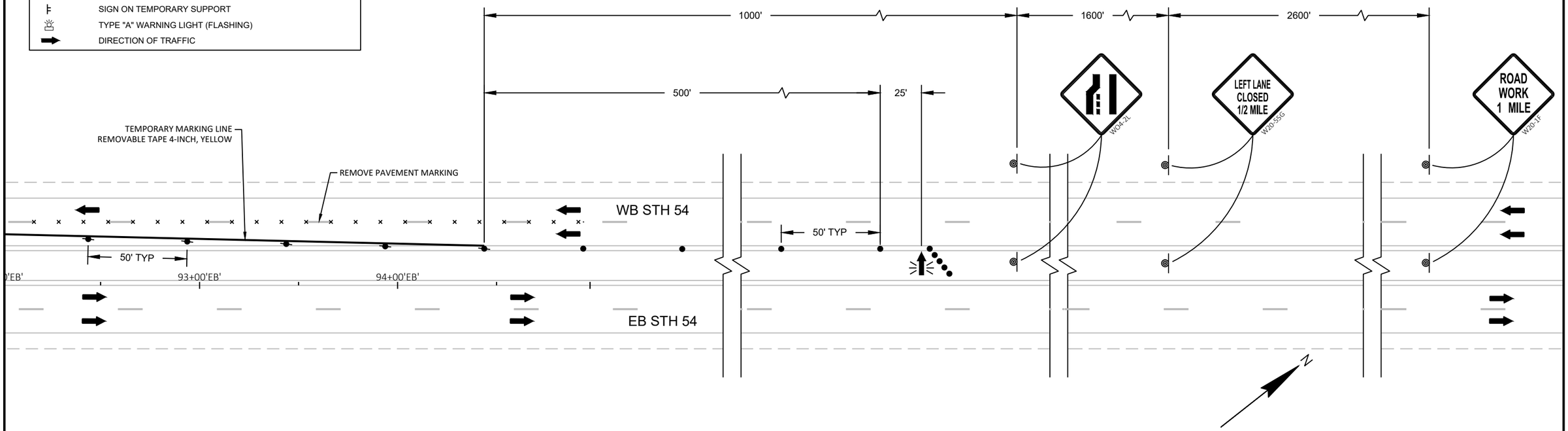
PLOT DATE : 7/19/2021 2:40 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



LEGEND

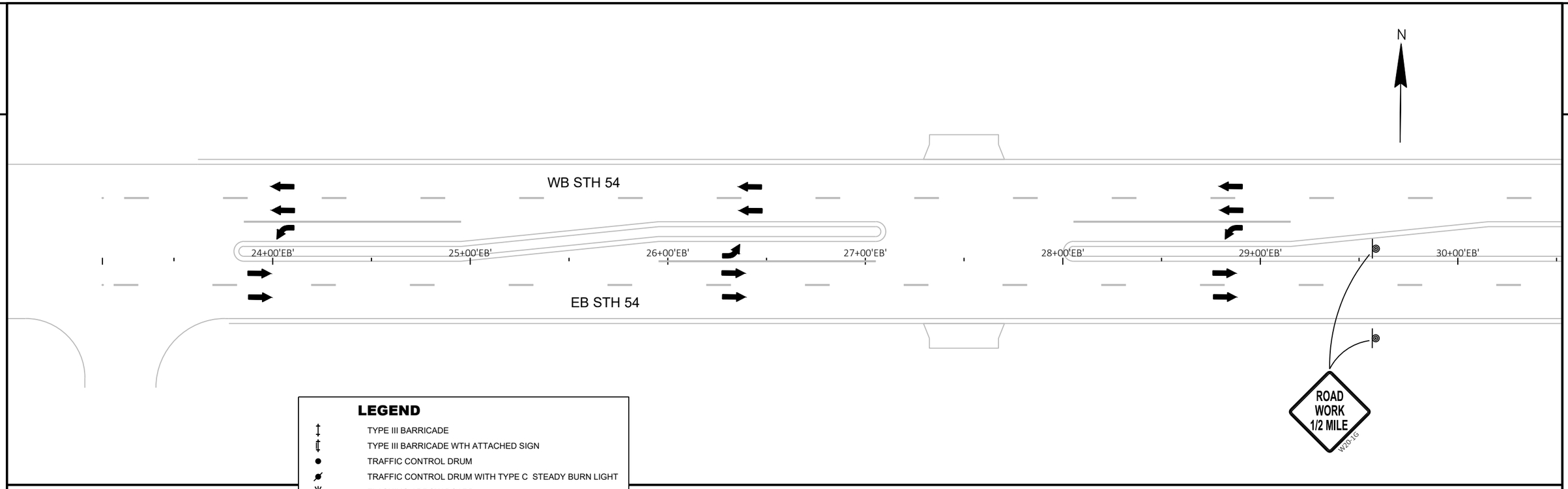
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 PASSING LANE CLOSED	SHEET 68	E

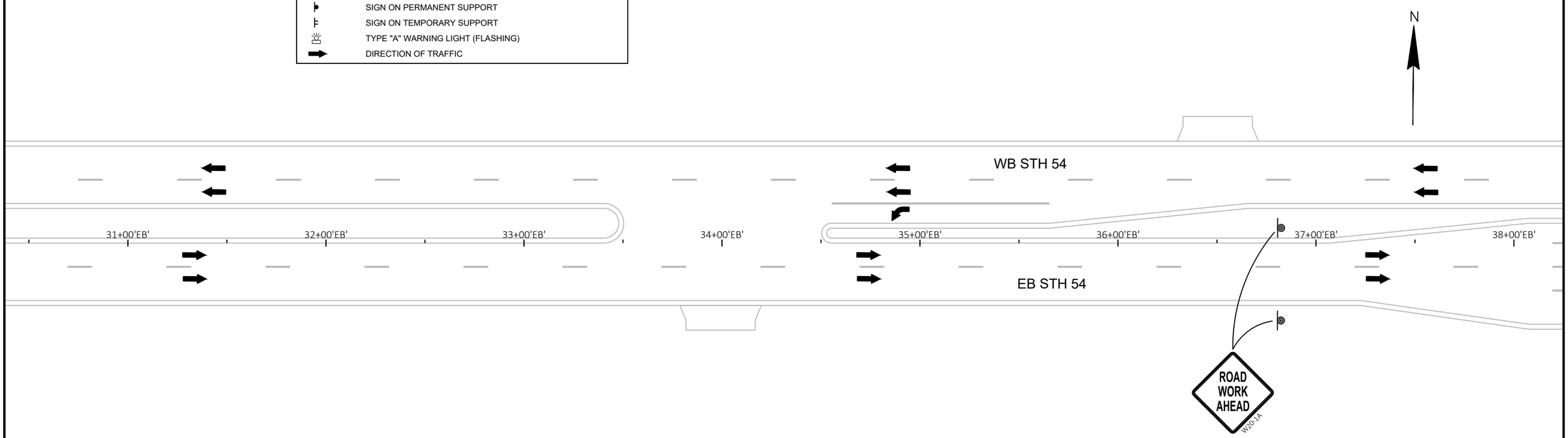
FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025301_TC_STH54_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (5)
PLOT DATE : 7/19/2021 2:40 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

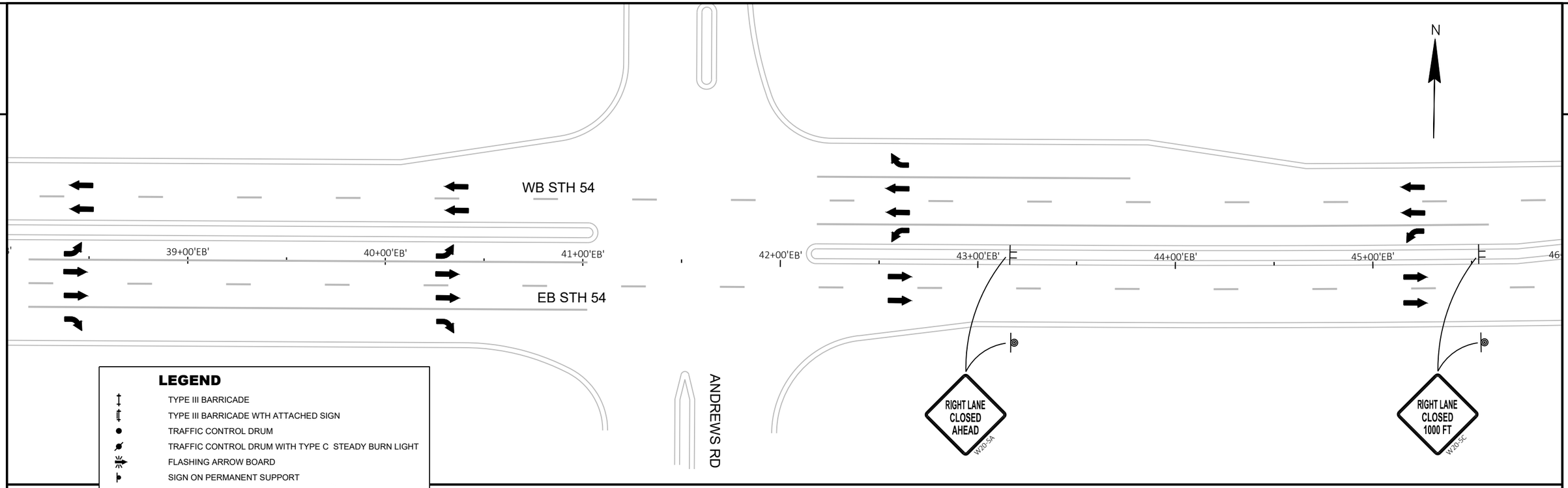


PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 DRIVING LANE CLOSED	SHEET 69	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025351_TC_STH54_DRIVING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (1)

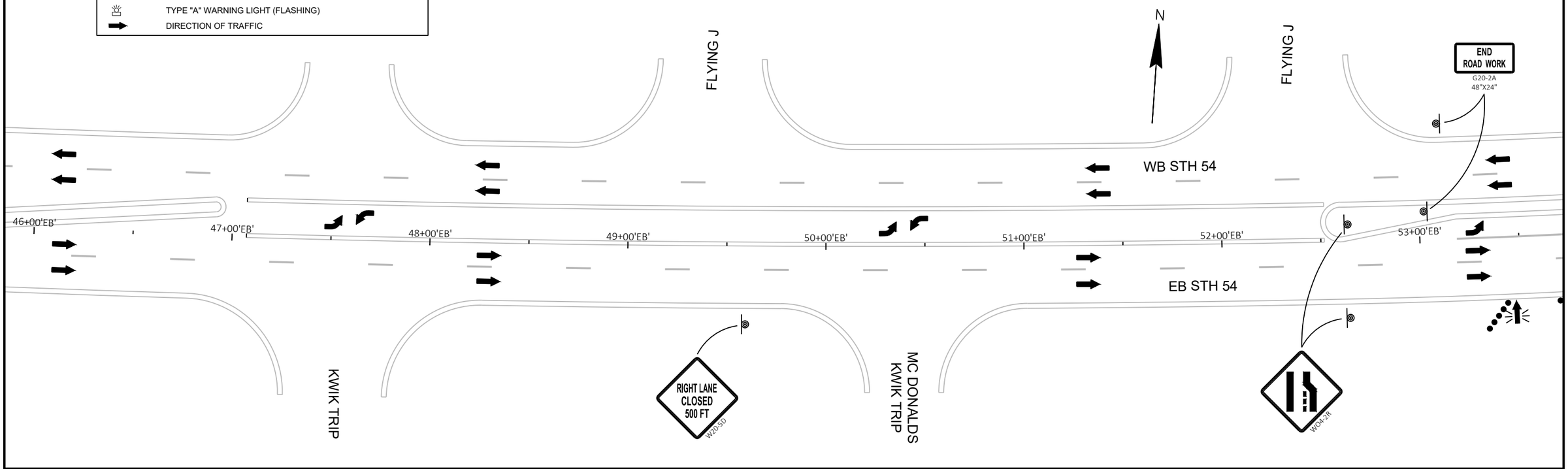
PLOT DATE : 7/19/2021 2:42 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 DRIVING LANE CLOSED	SHEET 70	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025351_TC_STH54_DRIVING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (2)

PLOT DATE : 7/19/2021 2:42 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

2

ROAD WORK AHEAD
W20-1A

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

25' TYP

BEGIN CONSTRUCTION
STA 59+19'WB'

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

50' TYP

WB STH 54

54+00'EB'

55+00'EB'

56+00'EB'

57+00'EB'

58+00'EB'

59+00'EB'

60+00'EB'

61+00'EB'

EB STH 54

REMOVE PAVEMENT MARKING

25' TYP

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, WHITE

MC DONALD RD

BEGIN CONSTRUCTION
STA 59+24'EB'

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

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

SIGN

RAMP 'C'

RAMP 'B'

62+00'EB'

63+00'EB'

64+00'EB'

65+00'EB'

66+00'EB'

67+00'EB'

68+00'EB'

69+00'EB

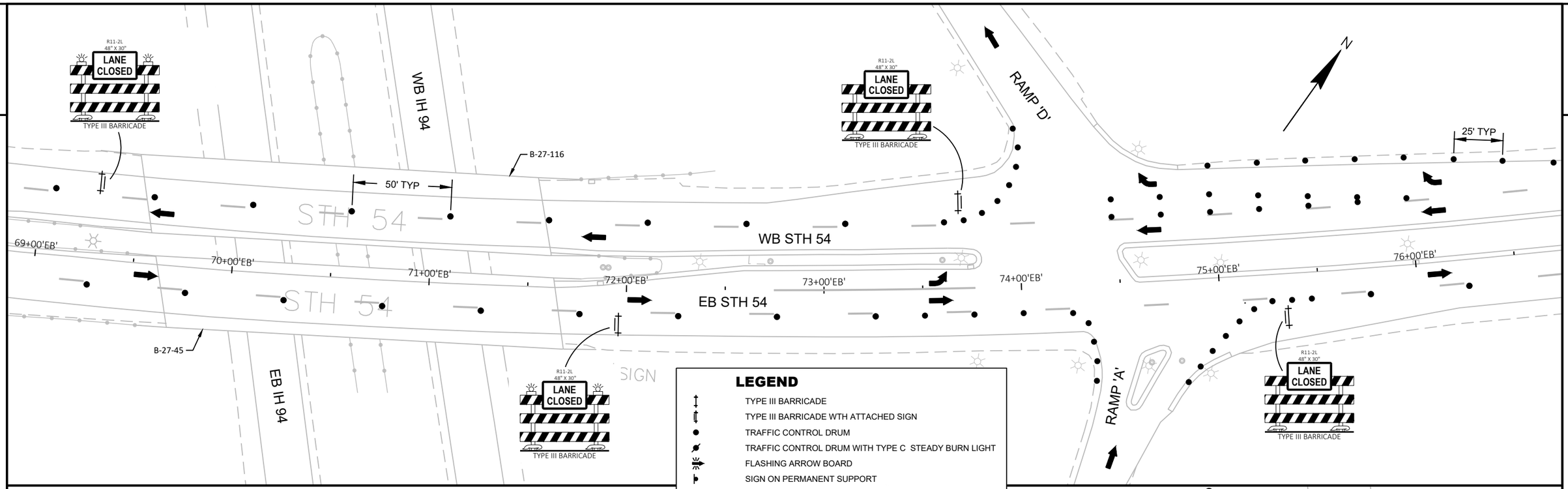
EAST
INTERSTATE
94
J2-1

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 DRIVING LANE CLOSED	SHEET 71	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025351_TC_STH54_DRIVING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (3)

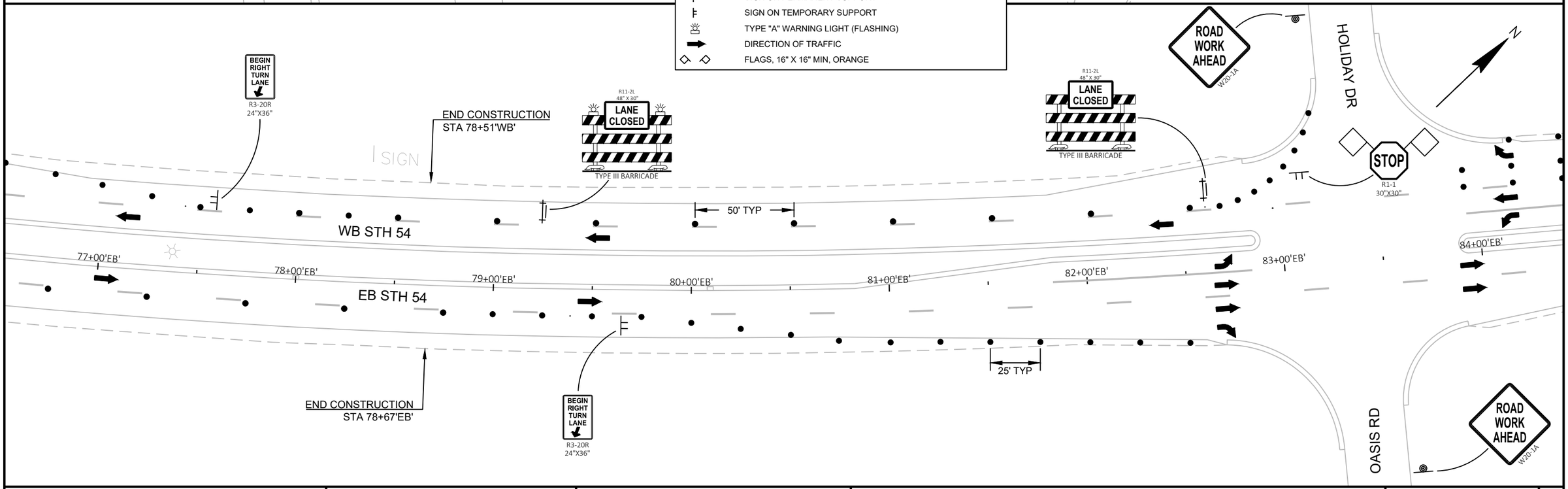
PLOT DATE : 7/19/2021 2:42 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN, ORANGE



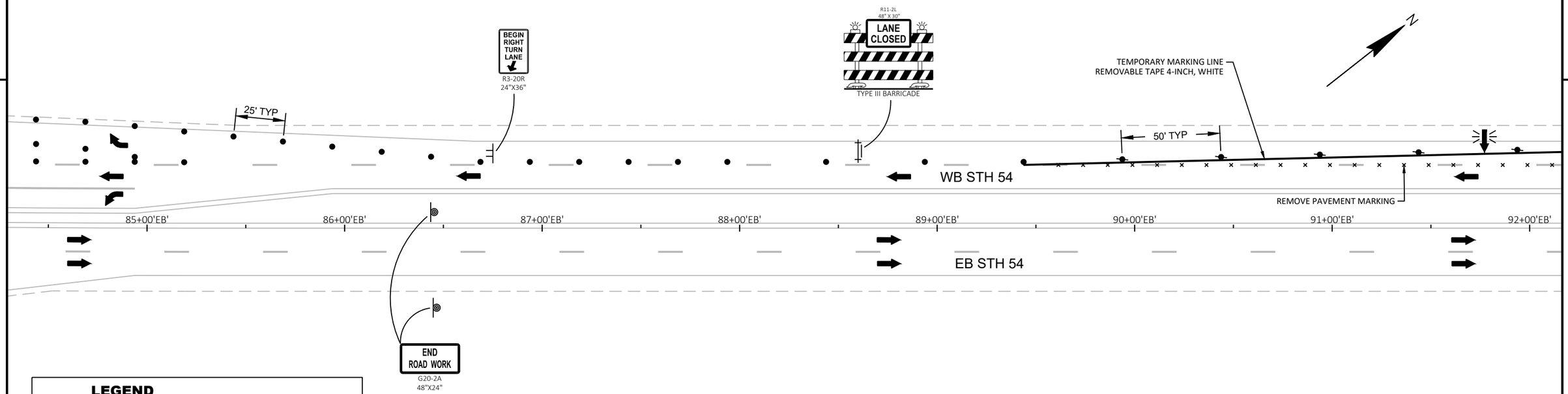
PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 DRIVING LANE CLOSED	SHEET 72	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025351_TC_STH54_DRIVING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (4)

PLOT DATE : 7/19/2021 2:42 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

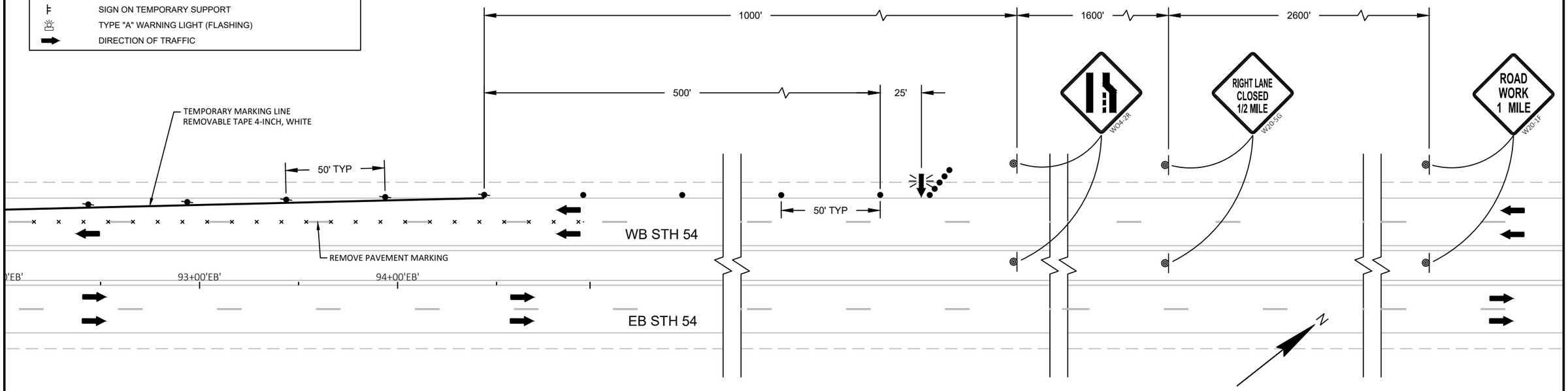
WISDOT/CADDS SHEET 44

2



LEGEND

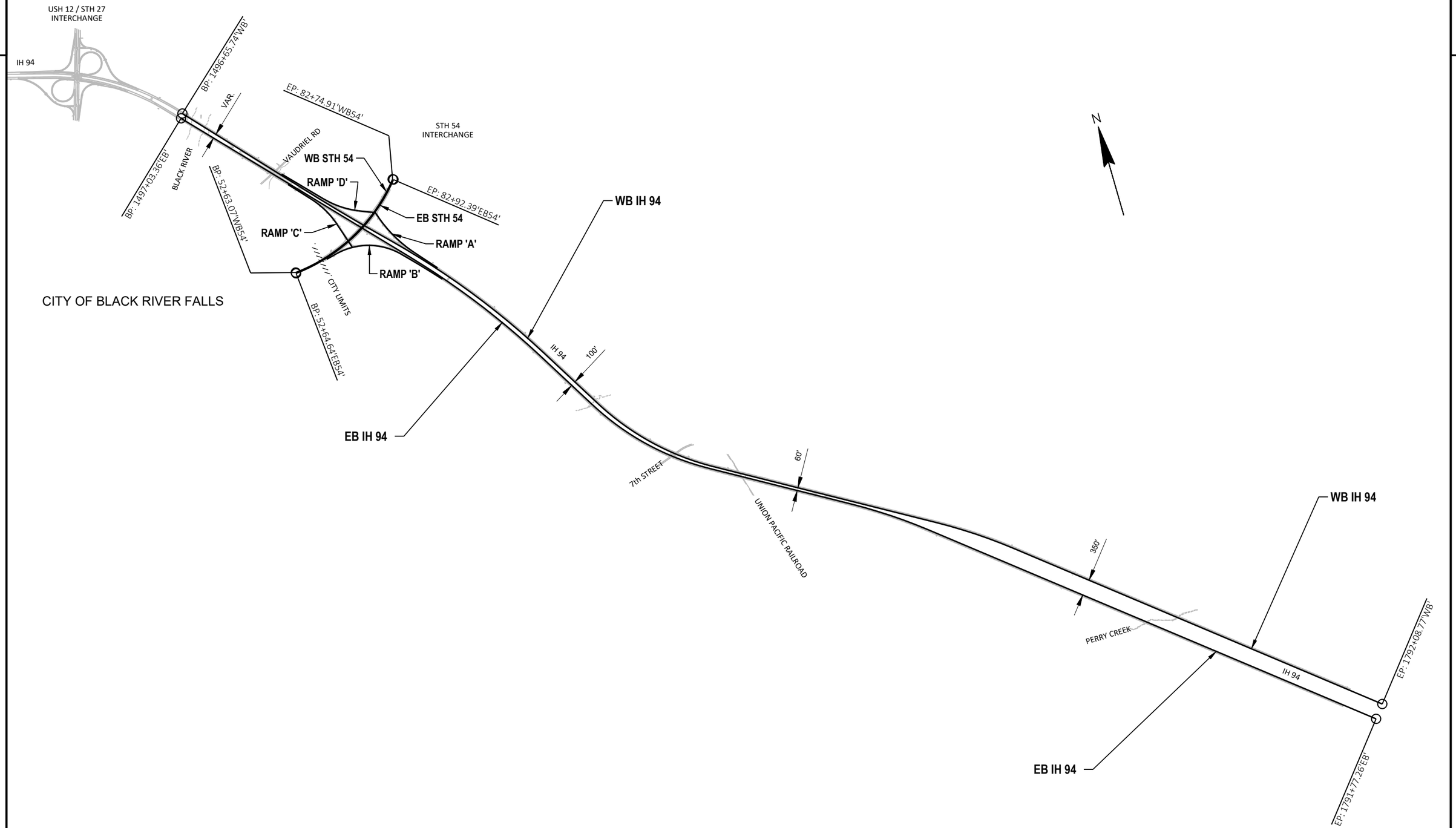
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STH 54 DRIVING LANE CLOSED	SHEET 73	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\025351_TC_STH54_DRIVING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (5)
PLOT DATE : 7/19/2021 2:42 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	ALIGNMENT PLAN	SHEET 74	E

****
Alignment Name: IH 94 EB Ref Line
Station Range: Start: 1497+03.36, End: 1791+77.27
Description: 'EB'
****

Begin IH 94 EB Ref Line
N 100,946.4415 E 91,016.3270 1497+03.36

Line (1)

Station Equation Station Back: 1509+84.05 Station Ahead: 1509+84.90

S42° 44' 35.36"E 5,838.869'
N 96,658.3549 E 94,979.2435 1555+41.11

Station Equation Station Back: 1555+43.08 Station Ahead: 1555+41.11

Line (1)

Curve (2)
BC N 96,658.3549 E 94,979.2435 1555+41.11
CTR N 84,992.1333 E 82,355.7711
PI N 95,342.7900 E 96,195.0478

Direction Back S42° 44' 35.36"E
Radius 17,188.740'
Delta 11°53'57"(RT)
Length 3,569.789'
Tangent 1,791.338'
Chord Direction S36° 47' 36.63"E Distance 3,563.377'
Direction Ahead S30° 50' 37.90"E

Station Equation Station Back: 1591+10.90 Station Ahead: 1591+15.38

EC N 93,804.8053 E 97,113.4672 1591+15.38
Curve (2)

Line (3)
S30° 50' 37.90"E 1,573.279'
N 92,454.0384 E 97,920.0881 1606+88.66
Line (3)

(Continued)

Curve (4)
BC N 92,454.0384 E 97,920.0881 1606+88.66
CTR N 95,391.5957 E 102,839.3201
PI N 91,181.0987 E 98,680.2338

Direction Back S30° 50' 37.90"E
Radius 5,729.580'
Delta 29°00'58"(LT)
Length 2,901.616'
Tangent 1,482.632'
Chord Direction S45° 21' 06.98"E Distance 2,870.708'
Direction Ahead S59° 51' 36.05"E

Station Equation Station Back: 1635+90.28 Station Ahead: 1635+93.24

EC N 90,436.6479 E 99,962.4156 1635+93.24
Curve (4)

Line (5)
S59° 51' 36.05"E 3,220.840'
N 88,819.4178 E 102,747.8022 1668+14.08
Line (5)

Curve (6)
BC N 88,819.4178 E 102,747.8022 1668+14.08
CTR N 78,909.5222 E 96,993.9932
PI N 88,377.3190 E 103,509.2373

Direction Back S59° 51' 36.05"E
Radius 11,459.160'
Delta 8°47'15"(RT)
Length 1,757.495'
Tangent 880.474'
Chord Direction S55° 27' 58.60"E Distance 1,755.773'
Direction Ahead S51° 04' 21.15"E

EC N 87,824.0855 E 104,194.1952 1685+71.58
Curve (6)

Line (7)
S51° 04' 21.15"E 10,605.688'
N 81,160.1507 E 112,444.8067 1791+77.26
Line (7)

N 81,160.1507 E 112,444.8067 1791+77.26
End IH 94 EB Ref Line

****
Alignment Length: 29,467.577'
****

****
Alignment Name: IH 94 WB Ref Line
Station Range: Start: 1496+65.74, End: 1792+08.77
Description: 'WB'
****

Begin IH 94 WB Ref Line
N 101,038.4038 E 91,073.1548 1496+65.74

Line (1)

Station Equation Station Back: 1510+61.85 Station Ahead: 1510+57.60

S42° 03' 37.21"E 3,457.610'
N 98,471.3366 E 93,389.4521 1531+19.10
Line (1)

Curve (2)
BC N 98,471.3366 E 93,389.4521 1531+19.10
CTR N 121,501.2445 E 118,912.6530
PI N 97,921.2572 E 93,885.7957

Direction Back S42° 03' 37.21"E
Radius 34,377.470'
Delta 2°28'10"(LT)
Length 1,481.586'
Tangent 740.908'
Chord Direction S43° 17' 41.97"E Distance 1,481.471'
Direction Ahead S44° 31' 46.73"E

EC N 97,393.0732 E 94,405.3782 1546+00.69
Curve (2)

Line (3)
S44° 31' 46.73"E 411.444'
N 97,099.7600 E 94,693.9147 1550+12.13
Line (3)

Curve (4)
BC N 97,099.7600 E 94,693.9147 1550+12.13
CTR N 85,045.6709 E 82,440.2738
PI N 95,629.2974 E 96,140.4308

Direction Back S44° 31' 46.73"E
Radius 17,188.740'
Delta 13°41'09"(RT)
Length 4,105.737'
Tangent 2,062.685'
Chord Direction S37° 41' 12.32"E Distance 4,095.983'
Direction Ahead S30° 50' 37.90"E

Station Equation Station Back: 1591+17.87 Station Ahead: 1591+12.74

EC N 93,858.3428 E 97,197.9699 1591+12.74
Curve (4)

(Continued)

Line (5)
S30° 50' 37.90"E 1,632.508'
N 92,456.7239 E 98,034.9574 1607+45.25
Line (5)

Curve (6)
BC N 92,456.7239 E 98,034.9574 1607+45.25
CTR N 95,394.2812 E 102,954.1895
PI N 91,183.7842 E 98,795.1032

Direction Back S30° 50' 37.90"E
Radius 5,729.580'
Delta 29°00'58"(LT)
Length 2,901.616'
Tangent 1,482.632'
Chord Direction S45° 21' 06.98"E Distance 2,870.708'
Direction Ahead S59° 51' 36.05"E

Station Equation Station Back: 1636+46.86 Station Ahead: 1636+91.23

EC N 90,439.3334 E 100,077.2850 1636+91.23
Curve (6)

Line (7)
S59° 51' 36.05"E 5,025.741'
N 87,915.8366 E 104,423.5520 1687+16.97
Line (7)

Curve (8)
BC N 87,915.8366 E 104,423.5520 1687+16.97
CTR N 78,005.9410 E 98,669.7431
PI N 87,473.7379 E 105,184.9871

Direction Back S59° 51' 36.05"E
Radius 11,459.160'
Delta 8°47'15"(RT)
Length 1,757.495'
Tangent 880.474'
Chord Direction S55° 27' 58.60"E Distance 1,755.773'
Direction Ahead S51° 04' 21.15"E

EC N 86,920.5043 E 105,869.9451 1704+74.47
Curve (8)

Line (9)
S51° 04' 21.15"E 8,734.299'
N 81,432.4304 E 112,664.7242 1792+08.77
Line (9)

N 81,432.4304 E 112,664.7242 1792+08.77
End IH 94 WB Ref Line

****
Alignment Length: 29,508.037'
****

****
Alignment Name: Ramp A Ref Line
Station Range: Start: 74+74.18, End: 93+17.95
Description: 'A'
****

Begin Ramp A Ref Line
N 97,809.9430 E 94,517.3571 74+74.18

Line (1)
S17° 51' 39.60"E 105.921'
N 97,709.1267 E 94,549.8441 75+80.10
Line (1)

Curve (2)
BC N 97,709.1267 E 94,549.8441 75+80.10
CTR N 98,587.7831 E 97,276.5610
PI N 97,161.1047 E 94,726.4386

Direction Back S17° 51' 39.60"E
Radius 2,864.790'
Delta 22°43'41"(LT)
Length 1,136.405'
Tangent 575.772'
Chord Direction S29° 13' 30.15"E Distance 1,128.968'
Direction Ahead S40° 35' 20.70"E

EC N 96,723.8660 E 95,101.0530 87+16.51
Curve (2)

Line (3)
S40° 35' 20.70"E 601.449'
N 96,267.1286 E 95,492.3734 93+17.95
Line (3)

N 96,267.1286 E 95,492.3734 93+17.95
End Ramp A Ref Line

****
Alignment Length: 1,843.775'
****

****
Alignment Name: Ramp B Ref Line
Station Range: Start: 60+00.00, End: 87+71.49
Description: 'B'
****

Begin Ramp B Ref Line
N 97,116.5805 E 93,221.3944 60+00.00

Line (1)
N76° 42' 00.01"E 237.665'
N 97,171.2554 E 93,452.6854 62+37.67
Line (1)

Curve (2)
BC N 97,171.2554 E 93,452.6854 62+37.67
CTR N 95,777.2837 E 93,782.2063
PI N 97,359.2481 E 94,247.9508

Direction Back N76° 42' 00.01"E
Radius 1,432.390'
Delta 59°24'35"(RT)
Length 1,485.240'
Tangent 817.183'
Chord Direction S73° 35' 42.36"E Distance 1,419.593'
Direction Ahead S43° 53' 24.73"E

EC N 96,770.3290 E 94,814.4863 77+22.91
Curve (2)

Line (3)
S43° 53' 24.73"E 194.096'
N 96,630.4500 E 94,949.0489 79+17.00
Line (3)

Non-Tangent Radial Bearing N46° 06' 35.02"E
Curve (4)
BC N 96,630.4500 E 94,949.0489 79+17.00
CTR N 84,731.5750 E 82,580.0857
PI N 96,322.4842 E 95,245.3103

Direction Back S43° 53' 24.98"E
Radius 17,163.172'
Delta 2°51'09"(RT)
Length 854.490'
Tangent 427.333'
Chord Direction S42° 27' 50.40"E Distance 854.402'
Direction Ahead S41° 02' 15.83"E

EC N 96,000.1563 E 95,525.8785 87+71.49
Curve (4)

N 96,000.1563 E 95,525.8785 87+71.49
End Ramp B Ref Line
****
Alignment Length: 2,771.492'
****

****
Alignment Name: Ramp C Ref Line
Station Range: Start: 47+64.05, End: 67+62.94
Description: 'C'
****

Begin Ramp C Ref Line
N 98,918.3639 E 92,857.9338 47+64.05

Line (1)
S41° 37' 33.94"E 599.996'
N 98,469.8691 E 93,256.4915 53+64.05
Line (1)

Curve (2)
BC N 98,469.8691 E 93,256.4915 53+64.05
CTR N 97,201.2127 E 91,828.8795
PI N 98,166.8275 E 93,525.7914

Direction Back S41° 37' 33.94"E
Radius 1,909.860'
Delta 23°58'08"(RT)
Length 798.959'
Tangent 405.409'
Chord Direction S29° 38' 30.16"E Distance 793.146'
Direction Ahead S17° 39' 26.37"E

EC N 97,780.5179 E 93,648.7615 61+63.01
Curve (2)

Line (3)
S17° 39' 26.37"E 599.931'
N 97,208.8514 E 93,830.7345 67+62.94
Line (3)

N 97,208.8514 E 93,830.7345 67+62.94
End Ramp C Ref Line

****
Alignment Length: 1,998.886'
****

****
Alignment Name: Ramp D Ref Line
Station Range: Start: 52+33.55, End: 74+63.43
Description: 'D'
****

Begin Ramp D Ref Line
N 99,172.0554 E 92,789.5105 52+33.55

Line (1)
S43° 20' 46.94"E 1,072.667'
N 98,391.9932 E 93,525.7968 63+06.22
Line (1)

Curve (2)
BC N 98,391.9932 E 93,525.7968 63+06.22
CTR N 99,702.9347 E 94,914.6804
PI N 98,095.7748 E 93,805.3919

Direction Back S43° 20' 46.94"E
Radius 1,909.860'
Delta 24°04'45"(LT)
Length 802.637'
Tangent 407.331'
Chord Direction S55° 23' 09.30"E Distance 796.743'
Direction Ahead S67° 25' 31.67"E

EC N 97,939.4065 E 94,181.5138 71+08.85
Curve (2)

Line (3)
S67° 25' 31.67"E 354.572'
N 97,803.2918 E 94,508.9184 74+63.43
Line (3)

N 97,803.2918 E 94,508.9184 74+63.43
End Ramp D Ref Line

****
Alignment Length: 2,229.875'
****

****
Alignment Name: STH 54 EB Ref Line
Station Range: Start: 52+64.64, End: 82+92.39
Description: 'EB54'
****

Begin STH 54 EB Ref Line
N 97,004.5860 E 92,493.0355 52+64.64

Curve (1)
BC N 97,004.5860 E 92,493.0355 52+64.64
CTR N 100,795.9470 E 92,157.0414
PI N 97,145.7466 E 94,085.8939

Direction Back N84° 56' 08.24"E
Radius 3,806.220'
Delta 45°34'38"(LT)
Length 3,027.750'
Tangent 1,599.101'
Chord Direction N62° 08' 49.07"E Distance 2,948.550'
Direction Ahead N39° 21' 29.90"E

EC N 98,382.1640 E 95,099.9927 82+92.39
Curve (1)

N 98,382.1640 E 95,099.9927 82+92.39
End STH 54 EB Ref Line

****
Alignment Length: 3,027.750'
****

****
Alignment Name: STH 54 WB Ref Line
Station Range: Start: 52+63.07, End: 82+74.91
Description: 'WB54'
****

Begin STH 54 WB Ref Line
N 97,024.5079 E 92,491.2700 52+63.07

Curve (1)
BC N 97,024.5079 E 92,491.2700 52+63.07
CTR N 100,795.9470 E 92,157.0414
PI N 97,164.9268 E 94,075.7587

Direction Back N84° 56' 08.24"E
Radius 3,786.220'
Delta 45°34'38"(LT)
Length 3,011.841'
Tangent 1,590.699'
Chord Direction N62° 08' 49.07"E Distance 2,933.057'
Direction Ahead N39° 21' 29.90"E

EC N 98,394.8474 E 95,084.5288 82+74.91
Curve (1)

N 98,394.8474 E 95,084.5288 82+74.91
End STH 54 WB Ref Line

****
Alignment Length: 3,011.841'
****

2

EB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1573+32.45'EB'		**RAD = 17188.74'**				**90**	**90**	**180**
END NORMAL CROWN	1553+93.08'EB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	1554+83.08'EB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN CURVE PC	1555+41.11'EB'	1.33%	1.33%	-2.00%	-4.00%	STA EQUATION 1555+43.08 BK = 1555+41.11 AH		
REMOVE ADVERSE CROWN	1555+71.11'EB'	2.00%	2.00%	-2.00%	-4.00%			
BEGIN FULL SUPER	1555+71.11'EB'	2.00%	2.00%	-2.00%	-4.00%			
END FULL SUPER	1590+80.90'EB'	2.00%	2.00%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	1590+80.90'EB'	2.00%	2.00%	-2.00%	-4.00%			
END CURVE PT	1591+15.38'EB'	1.33%	1.33%	-2.00%	-4.00%	STA EQUATION 1591+10.90 BK = 1591+15.38 AH		
LEVEL CROWN	1591+75.38'EB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN NORMAL CROWN	1592+65.38'EB'	-4.00%	-2.00%	-2.00%	-4.00%			

EB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1621+71.29'EB'		**RAD = 5729.58'**				**149**	**90**	**239**
END NORMAL CROWN	1604+99.33'EB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	1605+89.33'EB'	-4.00%	-2.00%	0.00%	0.00%			
REMOVE ADVERSE CROWN	1606+79.33'EB'	-4.00%	-2.00%	2.00%	2.00%			
BEGIN CURVE PC	1606+88.66'EB'	-4.00%	-2.20%	2.20%	2.20%			
BEGIN FULL SUPER	1607+38.33'EB'	-4.00%	-3.30%	3.30%	3.30%			
END FULL SUPER	1635+40.61'EB'	-4.00%	-3.30%	3.30%	3.30%			
END CURVE PT	1635+93.24'EB'	-4.00%	-2.20%	2.20%	2.20%	STA EQUATION 1635+90.28 BK = 1635+93.24 AH		
REMOVE ADVERSE CROWN	1636+02.57'EB'	-4.00%	-2.00%	2.00%	2.00%			
LEVEL CROWN	1636+92.57'EB'	-4.00%	-2.00%	0.00%	0.00%			
BEGIN NORMAL CROWN	1637+82.57'EB'	-4.00%	-2.00%	-2.00%	-4.00%			

2

EB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1676+94.55'EB'		**RAD = 11459.16'**				**90**	**90**	**180**
END NORMAL CROWN	1666+64.08'EB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	1667+54.08'EB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN CURVE PC	1668+14.08'EB'	1.33%	1.33%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	1668+44.08'EB'	2.00%	2.00%	-2.00%	-4.00%			
BEGIN FULL SUPER	1668+44.08'EB'	2.00%	2.00%	-2.00%	-4.00%			
END FULL SUPER	1685+41.58'EB'	2.00%	2.00%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	1685+41.58'EB'	2.00%	2.00%	-2.00%	-4.00%			
END CURVE PT	1685+71.58'EB'	1.33%	1.33%	-2.00%	-4.00%			
LEVEL CROWN	1686+31.58'EB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN NORMAL CROWN	1687+21.58'EB'	-4.00%	-2.00%	-2.00%	-4.00%			

2

WB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA =1538+60.01'WB'		**RAD = 34377.47'**				**90**	**90**	**180**
END NORMAL CROWN	1529+69.10'WB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	1530+59.10'WB'	-4.00%	-2.00%	0.00%	0.00%			
BEGIN CURVE PC	1531+19.10'WB'	-4.00%	-2.00%	1.33%	1.33%			
REMOVE ADVERSE CROWN	1531+49.10'WB'	-4.00%	-2.00%	2.00%	2.00%			
BEGIN FULL SUPER	1531+49.10'WB'	-4.00%	-2.00%	2.00%	2.00%			
END FULL SUPER	1545+70.69'WB'	-4.00%	-2.00%	2.00%	2.00%			
REMOVE ADVERSE CROWN	1545+70.69'WB'	-4.00%	-2.00%	2.00%	2.00%			
END CURVE PT	1546+00.69'WB'	-4.00%	-2.00%	1.33%	1.33%			
LEVEL CROWN	1546+60.69'WB'	-4.00%	-2.00%	0.00%	0.00%			
BEGIN NORMAL CROWN	1547+50.69'WB'	-4.00%	-2.00%	-2.00%	-4.00%			

WB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1570+74.81'WB'		**RAD = 17188.74'**				**90**	**90**	**180**
END NORMAL CROWN	1548+62.13'WB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	1549+52.13'WB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN CURVE PC	1550+12.13'WB'	1.33%	1.33%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	1550+42.13'WB'	2.00%	2.00%	-2.00%	-4.00%			
BEGIN FULL SUPER	1550+42.13'WB'	2.00%	2.00%	-2.00%	-4.00%			
END FULL SUPER	1590+87.87'WB'	2.00%	2.00%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	1590+87.87'WB'	2.00%	2.00%	-2.00%	-4.00%			
END CURVE PT	1591+12.74'WB'	1.33%	1.33%	-2.00%	-4.00%	STA EQUATION 1591+17.87 BK = 1591+12.74 AH		
LEVEL CROWN	1591+72.74'WB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN NORMAL CROWN	1592+62.74'WB'	-4.00%	-2.00%	-2.00%	-4.00%			

WB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1622+27.88'WB'		**RAD = 5729.58'**				**149**	**90**	**239**
END NORMAL CROWN	1605+55.92'WB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	1606+45.92'WB'	-4.00%	-2.00%	0.00%	0.00%			
REMOVE ADVERSE CROWN	1607+35.92'WB'	-4.00%	-2.00%	2.00%	2.00%			
BEGIN CURVE PC	1607+45.25'WB'	-4.00%	-2.20%	2.20%	2.20%			
BEGIN FULL SUPER	1607+94.92'WB'	-4.00%	-3.30%	3.30%	3.30%			
END FULL SUPER	1635+97.19'WB'	-4.00%	-3.30%	3.30%	3.30%			
END CURVE PT	1636+91.23'WB'	-4.00%	-2.20%	2.20%	2.20%	STA EQUATION 1636+46.86 BK = 1636+91.23 AH		
REMOVE ADVERSE CROWN	1637+00.56'WB'	-4.00%	-2.00%	2.00%	2.00%			
LEVEL CROWN	1637+90.56'WB'	-4.00%	-2.00%	0.00%	0.00%			
BEGIN NORMAL CROWN	1638+80.56'WB'	-4.00%	-2.00%	-2.00%	-4.00%			

WB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1695+97.45'WB'		**RAD = 11459.16'**				**90**	**90**	**180**
END NORMAL CROWN	1685+66.97'WB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	1686+56.97'WB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN CURVE PC	1687+16.97'WB'	1.33%	1.33%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	1687+46.97'WB'	2.00%	2.00%	-2.00%	-4.00%			
BEGIN FULL SUPER	1687+46.97'WB'	2.00%	2.00%	-2.00%	-4.00%			
END FULL SUPER	1704+44.47'WB'	2.00%	2.00%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	1704+44.47'WB'	2.00%	2.00%	-2.00%	-4.00%			
END CURVE PT	1704+74.47'WB'	1.33%	1.33%	-2.00%	-4.00%			
LEVEL CROWN	1705+34.47'WB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN NORMAL CROWN	1706+24.47'WB'	-4.00%	-2.00%	-2.00%	-4.00%			

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RAMP 'A'								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 81+55.87'A'		**RAD = 2864.79'**				**102**	**51**	**153**
END NORMAL CROWN	74+61.10'A'	-4.00%	N/A	2.00%	-4.00%			
LEVEL CROWN	75+12.10'A'	-4.00%	N/A	2.00%	0.00%			
REMOVE ADVERSE CROWN	75+63.10'A'	-4.00%	N/A	2.00%	2.00%			
BEGIN CURVE PC	75+80.10'A'	-4.00%	N/A	2.67%	2.67%			
BEGIN FULL SUPER	76+14.10'A'	-4.00%	N/A	4.00%	4.00%			
END FULL SUPER	86+82.51'A'	-4.00%	N/A	4.00%	4.00%	RAMP TAPER RIGHT		
END CURVE PT	87+16.51'A'	-4.00%	N/A	2.67%	N/A	RAMP TAPER RIGHT		
REMOVE ADVERSE CROWN	87+33.51'A'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
LEVEL CROWN	87+84.51'A'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
BEGIN NORMAL CROWN	88+35.51'A'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		

RAMP 'B'								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 70+54.85'B'		**RAD = 1432.39'**				**146**	**51**	**197**
END NORMAL CROWN	60+89.34'B'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
LEVEL CROWN	61+40.34'B'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
REMOVE ADVERSE CROWN	61+91.34'B'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN CURVE PC	62+37.67'B'	N/A	3.80%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN FULL SUPER	62+86.34'B'	5.70%	5.70%	N/A	-5.70%	RAMP TAPER LEFT		
END FULL SUPER	76+74.24'B'	5.70%	5.70%	N/A	-5.70%	RAMP TAPER LEFT		
END CURVE PT	77+22.91'B'	N/A	3.80%	N/A	-4.00%	RAMP TAPER LEFT		
REMOVE ADVERSE CROWN	77+69.24'B'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
LEVEL CROWN	78+20.24'B'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN NORMAL CROWN	78+71.24'B'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		

RAMP 'C'								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 57+69.46'C'		**RAD = 1909.86'**				**128**	**51**	**179**
END NORMAL CROWN	52+27.72'C'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
LEVEL CROWN	52+78.72'C'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
REMOVE ADVERSE CROWN	53+29.72'C'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN CURVE PC	53+64.05'C'	N/A	3.33%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN FULL SUPER	54+06.72'C'	5.00%	5.00%	N/A	-5.00%	RAMP TAPER LEFT		
END FULL SUPER	61+20.34'C'	5.00%	5.00%	N/A	-5.00%			
END CURVE PT	61+63.01'C'	3.33%	3.33%	N/A	-4.00%			
REMOVE ADVERSE CROWN	61+97.34'C'	2.00%	2.00%	N/A	-4.00%			
LEVEL CROWN	62+48.34'C'	0.00%	2.00%	N/A	-4.00%			
BEGIN NORMAL CROWN	62+99.34'C'	-4.00%	2.00%	N/A	-4.00%			

RAMP 'D'								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 67+13.55'D'		**RAD = 1909.86'**				**128**	**51**	**179**
END NORMAL CROWN	61+69.89'D'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
LEVEL CROWN	62+20.89'D'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
REMOVE ADVERSE CROWN	62+71.89'D'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
BEGIN CURVE PC	63+06.22'D'	-4.00%	N/A	3.33%	N/A	RAMP TAPER RIGHT		
BEGIN FULL SUPER	63+48.89'D'	-5.00%	N/A	5.00%	5.00%	RAMP TAPER RIGHT		
END FULL SUPER	70+66.18'D'	-5.00%	N/A	5.00%	5.00%			
END CURVE PT	71+08.85'D'	-4.00%	N/A	3.33%	3.33%			
REMOVE ADVERSE CROWN	71+43.18'D'	-4.00%	N/A	2.00%	2.00%			
LEVEL CROWN	71+94.18'D'	-4.00%	N/A	2.00%	0.00%			
BEGIN NORMAL CROWN	72+45.18'D'	-4.00%	N/A	2.00%	-4.00%			

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Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0004	204.0109.S	Removing Concrete Surface Partial Depth	SF	205,874.000	205,874.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	5,043.000	5,043.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	227,735.000	227,735.000
0012	204.0126.S	Removing Asphaltic Longitudinal Notched Wedge Joint Milling	LF	51,174.000	51,174.000
0014	204.0165	Removing Guardrail	LF	1,033.000	1,033.000
0016	204.0180	Removing Delineators and Markers	EACH	233.000	233.000
0018	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1023-00-79	LS	1.000	1.000
0024	213.0100	Finishing Roadway (project) 01. 1023-00-79	EACH	1.000	1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	8,015.000	8,015.000
0032	416.0610	Drilled Tie Bars	EACH	1,320.000	1,320.000
0034	416.0620	Drilled Dowel Bars	EACH	1,440.000	1,440.000
0036	455.0605	Tack Coat	GAL	27,720.000	27,720.000
0038	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0040	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0042	460.0115.S	HMA Pavement Test Strips Volumetrics	EACH	1.000	1.000
0044	460.0120.S	HMA Pavement Test Strips Density	EACH	1.000	1.000
0046	460.2000	Incentive Density HMA Pavement	DOL	20,630.000	20,630.000
0048	460.2005	Incentive Density PWL HMA Pavement	DOL	23,170.000	23,170.000
0050	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	40,960.000	40,960.000
0052	460.2010	Incentive Air Voids HMA Pavement	DOL	23,170.000	23,170.000
0054	460.6244	HMA Pavement 4 MT 58-34 S	TON	8,805.000	8,805.000
0058	460.7644	HMA Pavement 4 HT 58-34 V	TON	23,170.000	23,170.000
0060	460.7645	HMA Pavement 5 HT 58-34 V	TON	4,785.000	4,785.000
0062	460.8644	HMA Pavement 4 SMA 58-34 V	TON	18,630.000	18,630.000
0064	460.9000.S	Material Transfer Vehicle 01. 1023-00-79	EACH	1.000	1.000
0068	465.0105	Asphaltic Surface	TON	50.000	50.000
0070	465.0110	Asphaltic Surface Patching	TON	75.000	75.000
0072	465.0125	Asphaltic Surface Temporary	TON	391.000	391.000
0074	465.0400	Asphaltic Shoulder Rumble Strips	LF	99,488.000	99,488.000
0076	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000
0078	520.8700	Cleaning Culvert Pipes	EACH	9.000	9.000
0080	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	8.000	8.000
0084	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0088	524.0618	Apron Endwalls for Culvert Pipe Salvaged 18-Inch	EACH	2.000	2.000
0090	524.0624	Apron Endwalls for Culvert Pipe Salvaged 24-Inch	EACH	2.000	2.000
0094	524.0636	Apron Endwalls for Culvert Pipe Salvaged 36-Inch	EACH	1.000	1.000
0096	524.0642	Apron Endwalls for Culvert Pipe Salvaged 42-Inch	EACH	1.000	1.000
0098	531.1100	Concrete Masonry Ancillary Structures Type NS	CY	16.800	16.800
0100	531.1140	Steel Reinforcement HS Ancillary Structures Type NS	LB	2,520.000	2,520.000
0102	606.0100	Riprap Light	CY	15.000	15.000
0104	614.0010	Barrier System Grading Shaping Finishing	EACH	3.000	3.000
0106	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	4.000	4.000
0108	614.0230	Steel Thrie Beam	LF	450.000	450.000
0110	614.0305	Steel Plate Beam Guard Class A	LF	175.000	175.000
0112	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	2.000	2.000
0114	614.0400	Adjusting Steel Plate Beam Guard	LF	7,592.000	7,592.000
0116	614.0950	Replacing Guardrail Posts and Blocks	EACH	120.000	120.000
0118	614.0951	Replacing Guardrail Rail and Hardware	LF	750.000	750.000

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Line	Item	Item Description	Unit	Total	Qty
0120	614.0952	Replacing Guardrail Reflectors	EACH	200.000	200.000
0122	614.2300	MGS Guardrail 3	LF	50.000	50.000
0124	614.2500	MGS Thrie Beam Transition	LF	39.400	39.400
0126	614.2610	MGS Guardrail Terminal EAT	EACH	1.000	1.000
0128	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1023-00-79	EACH	1.000	1.000
0132	619.1000	Mobilization	EACH	0.600	0.600
0134	624.0100	Water	MGAL	160.000	160.000
0136	625.0500	Salvaged Topsoil	SY	1,000.000	1,000.000
0138	627.0200	Mulching	SY	1,000.000	1,000.000
0140	628.1504	Silt Fence	LF	1,210.000	1,210.000
0142	628.1520	Silt Fence Maintenance	LF	1,210.000	1,210.000
0144	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0146	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0148	628.2004	Erosion Mat Class I Type B	SY	2,530.000	2,530.000
0150	628.7504	Temporary Ditch Checks	LF	244.000	244.000
0152	628.7555	Culvert Pipe Checks	EACH	38.000	38.000
0154	629.0210	Fertilizer Type B	CWT	1.000	1.000
0156	630.0130	Seeding Mixture No. 30	LB	20.000	20.000
0158	630.0200	Seeding Temporary	LB	30.000	30.000
0160	633.0100	Delineator Posts Steel	EACH	233.000	233.000
0162	633.0500	Delineator Reflectors	EACH	279.000	279.000
0164	633.5200	Markers Culvert End	EACH	23.000	23.000
0166	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	2.000	2.000
0168	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	6.000	6.000
0170	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	4.000	4.000
0172	635.0200	Sign Supports Structural Steel HS	LB	10,268.000	10,268.000
0174	635.0300	Sign Supports Replacing Base Connection Bolts	EACH	2.000	2.000
0176	637.1220	Signs Type I Reflective SH	SF	1,661.000	1,661.000
0178	637.2210	Signs Type II Reflective H	SF	78.000	78.000
0180	638.2601	Removing Signs Type I	EACH	7.000	7.000
0182	638.3100	Removing Structural Steel Sign Supports	EACH	5.000	5.000
0184	642.5201	Field Office Type C	EACH	0.600	0.600
0186	643.0300	Traffic Control Drums	DAY	70,020.000	70,020.000
0188	643.0420	Traffic Control Barricades Type III	DAY	4,565.000	4,565.000
0190	643.0705	Traffic Control Warning Lights Type A	DAY	8,730.000	8,730.000
0192	643.0715	Traffic Control Warning Lights Type C	DAY	8,140.000	8,140.000
0194	643.0800	Traffic Control Arrow Boards	DAY	480.000	480.000
0196	643.0900	Traffic Control Signs	DAY	10,205.000	10,205.000
0198	643.0910	Traffic Control Covering Signs Type I	EACH	2.000	2.000
0200	643.0920	Traffic Control Covering Signs Type II	EACH	19.000	19.000
0202	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	156.000	156.000
0204	643.1205.S	Basic Traffic Queue Warning System	DAY	160.000	160.000
0206	643.4100.S	Traffic Control Interim Lane Closure	EACH	160.000	160.000
0208	643.5000	Traffic Control	EACH	0.600	0.600
0210	645.0130	Geotextile Type R	SY	60.000	60.000
0212	646.1020	Marking Line Epoxy 4-Inch	LF	8,442.000	8,442.000
0214	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	117,059.000	117,059.000
0216	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	13,983.000	13,983.000
0218	646.3020	Marking Line Epoxy 8-Inch	LF	958.000	958.000

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Line	Item	Item Description	Unit	Total	Qty
0220	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	LF	3,504.000	3,504.000
0222	646.5020	Marking Arrow Epoxy	EACH	6.000	6.000
0224	646.5420	Marking Aerial Enforcement Bar Epoxy	EACH	20.000	20.000
0226	646.6120	Marking Stop Line Epoxy 18-Inch	LF	198.000	198.000
0228	646.7220	Marking Chevron Epoxy 24-Inch	LF	277.000	277.000
0230	646.8120	Marking Curb Epoxy	LF	234.000	234.000
0232	646.8220	Marking Island Nose Epoxy	EACH	8.000	8.000
0234	646.9000	Marking Removal Line 4-Inch	LF	250.000	250.000
0236	649.0105	Temporary Marking Line Paint 4-Inch	LF	152,420.000	152,420.000
0238	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	4,396.000	4,396.000
0240	649.0205	Temporary Marking Line Paint 8-Inch	LF	4,462.000	4,462.000
0242	650.8000	Construction Staking Resurfacing Reference	LF	65,404.000	65,404.000
0244	650.9910	Construction Staking Supplemental Control (project) 01. 1023-00-79	LS	1.000	1.000
0248	690.0150	Sawing Asphalt	LF	5,000.000	5,000.000
0250	690.0250	Sawing Concrete	LF	38,800.000	38,800.000
0252	740.0440	Incentive IRI Ride	DOL	38,768.000	38,768.000
0254	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	2,400.000
0256	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,900.000	1,900.000
0258	SPV.0060	Special 01. Cleaning Ditch	EACH	4.000	4.000
0260	SPV.0060	Special 02. Milling and Removing Temporary Transverse Joints (02. 1023-00-79)	EACH	1.000	1.000
0264	SPV.0090	Special 01. Mill and Remove Temporary Longitudinal Joint	LF	102,345.000	102,345.000
0266	SPV.0180	Special 02. Concrete Pavement Repair Non-Doweled Special	SY	5,000.000	5,000.000
0268	SPV.0180	Special 03. Concrete Pavement Replacement Non-Doweled Special	SY	400.000	400.000
0270	SPV.0180	Special 04. Concrete Pavement Repair Doweled Special	SY	700.000	700.000
0272	SPV.0180	Special 05. Concrete Pavement Replacement Doweled Special	SY	280.000	280.000
0278	SPV.0195	Special 01. Asphaltic Base Patching Partial Depth Special	TON	170.000	170.000

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	REMARKS
0010	1745+00	EB IH 94, LT	1	1 PIPE SECTION AND 1 AEW RCCP 24-INCH
		TOTAL 0010	1	

REMOVING CONCRETE SURFACE PARTIAL DEPTH

CATEGORY	STATION	TO	STATION	LOCATION	204.0109.S REMOVING CONCRETE SURFACE PARTIAL DEPTH SF	REMARKS
0010	1503+82	-	1765+00	EB IH 94	31,500	UNDISTRIBUTED CONCRETE PAVEMENT REPAIR
0010	1503+42	-	1765+00	WB IH 94	31,500	UNDISTRIBUTED CONCRETE PAVEMENT REPAIR
0010	75+02	-	76+00	RAMP 'A'	3,811	VAR. WIDTH
0010	83+25	-	86+18	RAMP 'A'	4,408	15' LANE
0010	62+36	-	67+40	RAMP 'B'	8,460	VAR. WIDTH
0010	74+36	-	75+11	RAMP 'B'	1,131	15' LANE
0010	54+65	-	57+75	RAMP 'C'	4,671	15' LANE
0010	64+50	-	65+63	RAMP 'C'	4,768	VAR. WIDTH
0010	66+36	-	67+47	RAMP 'C' EXTENSION	3,488	VAR. WIDTH
0010	60+29	-	65+75	RAMP 'D'	8,205	15' LANE
0010	73+00	-	74+11	RAMP 'D'	6,265	VAR. WIDTH
0010	59+24	-	69+62	EB STH 54	29,056	VAR. WIDTH
0010	71+64	-	78+67	EB STH 54	20,877	VAR. WIDTH
0010	59+19	-	69+47	WB STH 54	28,990	VAR. WIDTH
0010	71+49	-	778+51	WB STH 54	18,744	VAR. WIDTH
				TOTAL 0010	205,874	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
0010	4A	1503+82	-	1504+42	EB IH 94, PASSING LANE & INSIDE SHOULDER	120	18-FT WIDTH
0010	4A	1518+91	-	1519+51	EB IH 94, PASSING LANE & INSIDE SHOULDER	227	34-FT WIDTH
0010	4A	1521+95	-	1522+55	EB IH 94, PASSING LANE & INSIDE SHOULDER	227	34-FT WIDTH
0010	4A	1641+29	-	1641+89	EB IH 94, PASSING LANE & INSIDE SHOULDER	120	18-FT WIDTH
0010	4A	1645+01	-	1645+61	EB IH 94, PASSING LANE & INSIDE SHOULDER	107	16-FT WIDTH
0010	4A	1764+40	-	1765+00	EB IH 94, PASSING LANE & INSIDE SHOULDER	107	16-FT WIDTH
0010	4B	1503+82	-	1504+42	EB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4B	1518+91	-	1519+51	EB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4B	1521+95	-	1522+55	EB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4B	1641+29	-	1641+89	EB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4B	1645+01	-	1645+61	EB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4B	1764+40	-	1765+00	EB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4C	1503+82	-	1504+42	EB IH 94, OUTSIDE SHOULDER	42	VAR. WIDTH
0010	4C	1518+91	-	1519+51	EB IH 94, OUTSIDE SHOULDER	67	10-FT WIDTH
0010	4C	1521+95	-	1522+55	EB IH 94, OUTSIDE SHOULDER	67	10-FT WIDTH
0010	4C	1641+29	-	1641+89	EB IH 94, OUTSIDE SHOULDER	67	10-FT WIDTH
0010	4C	1645+01	-	1645+61	EB IH 94, OUTSIDE SHOULDER	67	10-FT WIDTH
0010	4C	1764+40	-	1765+00	EB IH 94, OUTSIDE SHOULDER	67	10-FT WIDTH
0010	4A	1503+82	-	1504+42	WB IH 94, PASSING LANE & INSIDE SHOULDER	120	18-FT WIDTH
0010	4A	1518+91	-	1519+51	WB IH 94, PASSING LANE & INSIDE SHOULDER	245	34-FT WIDTH
0010	4A	1521+95	-	1522+55	WB IH 94, PASSING LANE & INSIDE SHOULDER	267	34-FT WIDTH
0010	4A	1641+29	-	1641+89	WB IH 94, PASSING LANE & INSIDE SHOULDER	107	16-FT WIDTH
0010	4A	1645+01	-	1645+61	WB IH 94, PASSING LANE & INSIDE SHOULDER	120	18-FT WIDTH
0010	4A	1764+40	-	1765+00	WB IH 94, PASSING LANE & INSIDE SHOULDER	107	16-FT WIDTH
0010	4B	1503+82	-	1504+42	WB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4B	1518+91	-	1519+51	WB IH 94, DRIVING LANE	95	12-FT WIDTH
0010	4B	1521+95	-	1522+55	WB IH 94, DRIVING LANE	90	12-FT WIDTH
0010	4B	1641+29	-	1641+89	WB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4B	1645+01	-	1645+61	WB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4B	1764+40	-	1765+00	WB IH 94, DRIVING LANE	80	12-FT WIDTH
0010	4C	1503+82	-	1504+42	WB IH 94, OUTSIDE SHOULDER	34	VAR. WIDTH
0010	4C	1518+91	-	1519+51	WB IH 94, OUTSIDE SHOULDER	76	10-FT WIDTH
0010	4C	1521+95	-	1522+55	WB IH 94, OUTSIDE SHOULDER	65	10-FT WIDTH
0010	4C	1641+29	-	1641+89	WB IH 94, OUTSIDE SHOULDER	67	10-FT WIDTH
0010	4C	1645+01	-	1645+61	WB IH 94, OUTSIDE SHOULDER	67	10-FT WIDTH
0010	4C	1764+40	-	1765+00	WB IH 94, OUTSIDE SHOULDER	67	10-FT WIDTH
0010	---	59+24	-	59+74	STH 54 EB	178	32-FT WIDTH
0010	---	69+12	-	69+62	STH 54 EB	178	32-FT WIDTH
0010	---	71+64	-	72+14	STH 54 EB	185	VAR. WIDTH
0010	---	78+17	-	78+67	STH 54 EB	178	32-FT WIDTH
0010	---	59+19	-	59+69	STH 54 WB	178	32-FT WIDTH
0010	---	68+97	-	69+47	STH 54 WB	178	32-FT WIDTH
0010	---	71+49	-	71+99	STH 54 WB	178	32-FT WIDTH
0010	---	78+01	-	78+51	STH 54 WB	178	32-FT WIDTH
					TOTAL 0010	5,043	

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
0010	3A	1503+82	-	1519+51	EB IH 94	1,720	OUTSIDE SHOULDER
0010	3A	1521+95	-	1531+45	EB IH 94	740	OUTSIDE SHOULDER
0010	3A	1531+45	-	1554+99	EB IH 94	2,645	OUTSIDE SHOULDER
0010	3A	1554+99	-	1563+97	EB IH 94	570	OUTSIDE SHOULDER
0010	3A	1563+97	-	1641+89	EB IH 94	8,660	OUTSIDE SHOULDER
0010	3A	1645+01	-	1765+00	EB IH 94	13,330	OUTSIDE SHOULDER
0010	3B	1503+82	-	1519+51	EB IH 94	2,095	DRIVING LANE
0010	3B	1521+95	-	1531+45	EB IH 94	1,810	DRIVING LANE
0010	3B	1531+45	-	1554+99	EB IH 94	3,140	DRIVING LANE
0010	3B	1554+99	-	1563+97	EB IH 94	2,100	DRIVING LANE
0010	3B	1563+97	-	1641+89	EB IH 94	10,390	DRIVING LANE
0010	3B	1645+01	-	1765+00	EB IH 94	15,995	DRIVING LANE
0010	3C	1503+82	-	1519+51	EB IH 94	3,800	PASSING LANE & INSIDE SHOULDER
0010	3C	1521+95	-	1531+45	EB IH 94	2,170	PASSING LANE & INSIDE SHOULDER
0010	3C	1531+45	-	1554+99	EB IH 94	4,185	PASSING LANE & INSIDE SHOULDER
0010	3C	1554+99	-	1563+97	EB IH 94	1,600	PASSING LANE & INSIDE SHOULDER
0010	3C	1563+97	-	1641+89	EB IH 94	13,895	PASSING LANE & INSIDE SHOULDER
0010	3C	1645+01	-	1765+00	EB IH 94	21,435	PASSING LANE & INSIDE SHOULDER
0010	3A	1503+42	-	1519+90	WB IH 94	1,775	OUTSIDE SHOULDER
0010	3A	1521+80	-	1529+93	WB IH 94	625	OUTSIDE SHOULDER
0010	3A	1529+93	-	1554+65	WB IH 94	2,710	OUTSIDE SHOULDER
0010	3A	1554+65	-	1561+95	WB IH 94	530	OUTSIDE SHOULDER
0010	3A	1561+95	-	1641+19	WB IH 94	8,785	OUTSIDE SHOULDER
0010	3A	1644+35	-	1765+00	WB IH 94	13,410	OUTSIDE SHOULDER
0010	3B	1503+42	-	1519+90	WB IH 94	2,210	DRIVING LANE
0010	3B	1521+80	-	1529+93	WB IH 94	1,865	DRIVING LANE
0010	3B	1529+93	-	1554+65	WB IH 94	3,300	DRIVING LANE
0010	3B	1554+65	-	1561+95	WB IH 94	1,355	DRIVING LANE
0010	3B	1561+95	-	1641+19	WB IH 94	10,545	DRIVING LANE
0010	3B	1644+35	-	1765+00	WB IH 94	16,090	DRIVING LANE
0010	3C	1503+42	-	1519+90	WB IH 94	4,100	PASSING LANE & INSIDE SHOULDER
0010	3C	1521+80	-	1529+93	WB IH 94	1,930	PASSING LANE & INSIDE SHOULDER
0010	3C	1529+93	-	1554+65	WB IH 94	4,400	PASSING LANE & INSIDE SHOULDER
0010	3C	1554+65	-	1561+95	WB IH 94	1,245	PASSING LANE & INSIDE SHOULDER
0010	3C	1561+95	-	1641+19	WB IH 94	14,070	PASSING LANE & INSIDE SHOULDER
0010	3C	1644+35	-	1765+00	WB IH 94	21,600	PASSING LANE & INSIDE SHOULDER
0010	---	75+36	-	86+18	RAMP 'A'	580	OUTSIDE SHOULDER
0010	---	75+22	-	84+26	RAMP 'A'	305	INSIDE SHOULDER
0010	---	59+24	-	75+11	RAMP 'B'	1,020	OUTSIDE SHOULDER
0010	---	66+64	-	75+11	RAMP 'B'	270	INSIDE SHOULDER
0010	---	75+11	-	78+73	RAMP 'B'	605	15-FT LANE
0010	---	75+11	-	78+73	RAMP 'B'	200	OUTSIDE SHOULDER
0010	---	54+65	-	65+28	RAMP 'C'	590	OUTSIDE SHOULDER
0010	---	56+65	-	65+38	RAMP 'C'	295	INSIDE SHOULDER
0010	---	60+29	-	73+82	RAMP 'D'	765	OUTSIDE SHOULDER
0010	---	64+73	-	73+71	RAMP 'D'	305	INSIDE SHOULDER
0010	---	62+35	-	66+06	EB STH 54	450	GORE SHOULDERS
0010	---	66+60	-	69+43	EB STH 54	180	OUTSIDE SHOULDER
0010	---	71+95	-	74+39	EB STH 54	170	OUTSIDE SHOULDER
0010	---	75+03	-	78+67	EB STH 54	230	OUTSIDE SHOULDER
0010	---	59+19	-	65+39	WB STH 54	385	OUTSIDE SHOULDER
0010	---	66+27	-	69+18	WB STH 54	200	OUTSIDE SHOULDER
0010	---	71+76	-	73+85	WB STH 54	145	OUTSIDE SHOULDER
0010	---	74+69	-	78+51	WB STH 54	215	OUTSIDE SHOULDER
					TOTAL 0010	227,735	

REMOVING ASPHALTIC LONGITUDINAL NOTCHED WEDGE JOINT MILLING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0126.S REMOVING ASPHALTIC LONGITUDINAL NOTCHED WEDGE JOINT MILLING LF	REMARKS
0010	4B	1503+82	-	1519+51	EB IH 94, 12' RT	1,569	SMA SURFACE LAYER
0010	4B	1521+95	-	1641+89	EB IH 94, 12' RT	11,992	SMA SURFACE LAYER
0010	4B	1645+01	-	1765+00	EB IH 94, 12' RT	11,997	SMA SURFACE LAYER
0010	4B	1503+42	-	1519+94	WB IH 94, 12' LT	1,656	SMA SURFACE LAYER
0010	4B	1521+84	-	1641+19	WB IH 94, 12' LT	11,893	SMA SURFACE LAYER
0010	4B	1644+35	-	1765+00	WB IH 94, 12' LT	12,067	SMA SURFACE LAYER
					TOTAL 0010	51,174	

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	REMARKS
0010	1542+06	-	1544+27	EB IH 94, LT	454	MEDIAN BULLNOSE
0010	1626+86	-	1628+57	EB IH 94, LT	354	MEDIAN BULLNOSE
0010	83+87.5	-	84+76.5	RAMP 'A', LT	89	
0010	65+58.9	-	66+22.9	RAMP 'B', RT	64	
0010	71+60.4	-	72+32.4	WB STH 54, LT	72	B-27-116 NE WING
				TOTAL 0010	1,033	

REMOVING DELINEATORS AND MARKERS

CATEGORY	STATION	TO	STATION	LOCATION	204.0180 REMOVING DELINEATORS AND MARKERS EACH	REMARKS
0010	1503+82	-	1765+00	EB IH 94	117	DELINEATORS
0010	1503+42	-	1765+00	WB IH 94	116	DELINEATORS
				TOTAL 0010	233	

PREPARE FOUNDATION FOR ASPHALTIC PAVING (01. 1023-00-79)

CATEGORY	STATION	TO	STATION	LOCATION	211.0100.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (01. 1023-00-79) LS	REMARKS
0010	1503+82	-	1765+00	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

FINISHING ROADWAY (01. 1023-00-79)

CATEGORY	STATION	TO	STATION	LOCATION	213.0100.01 FINISHING ROADWAY (01. 1023-00-79) EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

BASE AGGREGATE DENSE 3/4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	REMARKS
0010	1503+94	-	519+51	EB IH 94, 35' RT	120	OUTSIDE SHOULDER
0010	1521+73	-	1527+00	EB IH 94, 35' RT	40	OUTSIDE SHOULDER
0010	1527+00	-	1531+44	EB IH 94, EXIT TAPER RT	25	OUTSIDE SHOULDER
0010	1533+48	-	1551+31	EB IH 94, 35' RT	135	OUTSIDE SHOULDER
0010	1551+39	-	1561+47	EB IH 94, ENTR. TAPER RT	50	OUTSIDE SHOULDER
0010	1561+47	-	1642+66	EB IH 94, 35' RT	615	OUTSIDE SHOULDER
0010	1644+81	-	1765+00	EB IH 94, 35' RT	905	OUTSIDE SHOULDER
0010	1503+94	-	1507+90	EB IH 94, 6' LT	15	INSIDE SHOULDER
0010	1513+33	-	1519+65	EB IH 94, 13'-22" LT	25	INSIDE SHOULDER
0010	1521+89	-	1524+52	EB IH 94, 22' LT	10	INSIDE SHOULDER
0010	1529+53	-	1642+37	EB IH 94, 6' LT	440	INSIDE SHOULDER
0010	1644+40	-	1658+54	EB IH 94, 6' LT	55	INSIDE SHOULDER
0010	1666+72	-	1765+00	EB IH 94, 6' LT	385	INSIDE SHOULDER
0010	1503+53	-	1519+78	WB IH 94, 35' LT	125	OUTSIDE SHOULDER
0010	1522+00	-	1522+86	WB IH 94, 35' LT	10	OUTSIDE SHOULDER
0010	1522+86	-	1529+92	WB IH 94, ENTR. TAPER LT	35	OUTSIDE SHOULDER
0010	1534+38	-	1552+73	WB IH 94, 35' LT	140	OUTSIDE SHOULDER
0010	1554+67	-	1557+79	WB IH 94, EXIT TAPER LT	15	OUTSIDE SHOULDER
0010	1557+79	-	1641+34	WB IH 94, 35' LT	625	OUTSIDE SHOULDER
0010	1643+50	-	1765+00	WB IH 94, 35' LT	915	OUTSIDE SHOULDER
0010	1503+53	-	1508+19	WB IH 94, 6' RT	20	INSIDE SHOULDER
0010	1513+28	-	1519+62	WB IH 94, 13'-22' RT	25	INSIDE SHOULDER
0010	1521+85	-	1524+33	WB IH 94, 22' RT	10	INSIDE SHOULDER
0010	1529+27	-	1641+82	WB IH 94, 6' RT	440	INSIDE SHOULDER
0010	1643+89	-	1658+49	WB IH 94, 6' RT	60	INSIDE SHOULDER
0010	1666+76	-	1765+00	WB IH 94, 6' RT	385	INSIDE SHOULDER
0010	75+22	-	84+26	RAMP 'A', 19' RT	50	INSIDE SHOULDER
0010	75+37	-	86+18	RAMP 'A', 8' LT	455	OUTSIDE SHOULDER
0010	60+32	-	75+11	RAMP 'B', 8' RT	400	OUTSIDE SHOULDER
0010	63+50	-	65+99	RAMP 'B', 19' LT	15	INSIDE SHOULDER
0010	66+64	-	75+11	RAMP 'B', 19' LT	45	INSIDE SHOULDER
0010	54+65	-	65+27	RAMP 'C', 8' RT	100	OUTSIDE SHOULDER
0010	56+65	-	65+49	RAMP 'C', 19' LT	50	INSIDE SHOULDER
0010	66+49	-	67+34	RAMP 'C EXTENSION', 8' RT	10	OUTSIDE SHOULDER
0010	60+29	-	73+82	RAMP 'D', 8' LT	130	OUTSIDE SHOULDER
0010	64+73	-	73+70	RAMP 'D', 19' RT	50	INSIDE SHOULDER
0010	59+24	-	60+32	STH 54 EB, 34' RT	10	OUTSIDE SHOULDER
0010	63+49	-	65+94	STH 54 EB, 34' RT	15	OUTSIDE SHOULDER
0010	66+60	-	69+42	STH 54 EB, 34' RT	15	OUTSIDE SHOULDER
0010	71+96	-	74+33	STH 54 EB, 34' RT	15	OUTSIDE SHOULDER
0010	75+05	-	78+67	STH 54 EB, 34' RT	20	OUTSIDE SHOULDER
0010	59+18	-	65+47	STH 54 WB, 34' LT	30	OUTSIDE SHOULDER
0010	66+34	-	69+18	STH 54 WB, 34' LT	15	OUTSIDE SHOULDER
0010	71+76	-	73+81	STH 54 WB, 34' LT	295	OUTSIDE SHOULDER
0010	74+69	-	78+52	STH 54 WB, 34' LT	20	OUTSIDE SHOULDER
0010	1503+82	-	1765+00	EB IH 94	650	UNDISTRIBUTED
				TOTAL 0010	8,015	

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DRILLED TIE BARS

CATEGORY	STATION	TO	STATION	LOCATION	416.0610 DRILLED TIE BARS EACH	REMARKS
0010	1503+82	-	1765+00	EB IH 94	300	PASSING LANE
0010	1503+82	-	1765+00	EB IH 94	300	DRIVING LANE
0010	1503+42	-	1765+00	WB IH 94	300	PASSING LANE
0010	1503+42	-	1765+00	WB IH 94	300	DRIVING LANE
0010	59+24	-	78+67	EB STH 54	60	EB LANES
0010	59+19	-	78+51	WB STH 54	60	WB LANES
				TOTAL 0010	1,320	

DRILLED DOWEL BARS

CATEGORY	STATION	TO	STATION	LOCATION	416.0620 DRILLED DOWEL BARS EACH	REMARKS
0010	75+02	-	86+18	RAMP 'A'	200	
0010	62+36	-	75+11	RAMP 'B'	200	
0010	54+65	-	65+63	RAMP 'C'	200	
0010	60+29	-	74+11	RAMP 'D'	200	
0010	59+24	-	78+67	EB STH 54	320	EB LANES
0010	59+19	-	78+51	WB STH 54	320	WB LANES
				TOTAL 0010	1,440	

TACK COAT

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	REMARKS	HMA LIFT
0010	1503+82	-	1519+51	EB IH 94	120	OUTSIDE SHOULDER	LOWER LAYER
0010	1521+95	-	1531+45	EB IH 94	52	OUTSIDE SHOULDER	LOWER LAYER
0010	1531+45	-	1554+99	EB IH 94	186	OUTSIDE SHOULDER	LOWER LAYER
0010	1554+99	-	1563+97	EB IH 94	40	OUTSIDE SHOULDER	LOWER LAYER
0010	1563+97	-	1641+89	EB IH 94	608	OUTSIDE SHOULDER	LOWER LAYER
0010	1645+01	-	1765+00	EB IH 94	936	OUTSIDE SHOULDER	LOWER LAYER
0010	1503+82	-	1519+51	EB IH 94	147	DRIVING LANE	LOWER LAYER
0010	1521+95	-	1531+45	EB IH 94	127	DRIVING LANE	LOWER LAYER
0010	1531+45	-	1554+99	EB IH 94	220	DRIVING LANE	LOWER LAYER
0010	1554+99	-	1563+97	EB IH 94	147	DRIVING LANE	LOWER LAYER
0010	1563+97	-	1641+89	EB IH 94	730	DRIVING LANE	LOWER LAYER
0010	1645+01	-	1765+00	EB IH 94	1,123	DRIVING LANE	LOWER LAYER
0010	1503+82	-	1519+51	EB IH 94	267	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1521+95	-	1531+45	EB IH 94	152	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1531+45	-	1554+99	EB IH 94	294	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1554+99	-	1563+97	EB IH 94	112	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1563+97	-	1641+89	EB IH 94	975	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1645+01	-	1765+00	EB IH 94	1,505	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1503+42	-	1519+90	WB IH 94	125	OUTSIDE SHOULDER	LOWER LAYER
0010	1521+80	-	1529+93	WB IH 94	44	OUTSIDE SHOULDER	LOWER LAYER
0010	1529+93	-	1554+65	WB IH 94	190	OUTSIDE SHOULDER	LOWER LAYER
0010	1554+65	-	1561+95	WB IH 94	37	OUTSIDE SHOULDER	LOWER LAYER
0010	1561+95	-	1641+19	WB IH 94	617	OUTSIDE SHOULDER	LOWER LAYER
0010	1644+35	-	1765+00	WB IH 94	942	OUTSIDE SHOULDER	LOWER LAYER
0010	1503+42	-	1519+90	WB IH 94	155	DRIVING LANE	LOWER LAYER
0010	1521+80	-	1529+93	WB IH 94	131	DRIVING LANE	LOWER LAYER
0010	1529+93	-	1554+65	WB IH 94	232	DRIVING LANE	LOWER LAYER
0010	1554+65	-	1561+95	WB IH 94	95	DRIVING LANE	LOWER LAYER
0010	1561+95	-	1641+19	WB IH 94	740	DRIVING LANE	LOWER LAYER
0010	1644+35	-	1765+00	WB IH 94	1,130	DRIVING LANE	LOWER LAYER
0010	1503+42	-	1519+90	WB IH 94	288	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1521+80	-	1529+93	WB IH 94	135	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1529+93	-	1554+65	WB IH 94	309	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1554+65	-	1561+95	WB IH 94	87	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1561+95	-	1641+19	WB IH 94	988	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1644+35	-	1765+00	WB IH 94	1,517	PASSING LANE & INSIDE SHOULDER	LOWER LAYER
0010	1503+82	-	1519+51	EB IH 94	105	DRIVING LANE	UPPER LAYER
0010	1521+95	-	1531+45	EB IH 94	91	DRIVING LANE	UPPER LAYER
0010	1531+45	-	1554+99	EB IH 94	158	DRIVING LANE	UPPER LAYER
0010	1554+99	-	1563+97	EB IH 94	106	DRIVING LANE	UPPER LAYER
0010	1563+97	-	1641+89	EB IH 94	524	DRIVING LANE	UPPER LAYER
0010	1645+01	-	1765+00	EB IH 94	806	DRIVING LANE	UPPER LAYER
0010	1503+82	-	1519+51	EB IH 94	192	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1521+95	-	1531+45	EB IH 94	110	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1531+45	-	1554+99	EB IH 94	211	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1554+99	-	1563+97	EB IH 94	81	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1563+97	-	1641+89	EB IH 94	700	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1645+01	-	1765+00	EB IH 94	1,080	PASSING LANE & INSIDE SHOULDER	UPPER LAYER

TACK COAT (CONT'D.)

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	REMARKS	HMA LIFT
0010	1503+42	-	1519+90	WB IH 94	112	DRIVING LANE	UPPER LAYER
0010	1521+80	-	1529+93	WB IH 94	94	DRIVING LANE	UPPER LAYER
0010	1529+93	-	1554+65	WB IH 94	166	DRIVING LANE	UPPER LAYER
0010	1554+65	-	1561+95	WB IH 94	69	DRIVING LANE	UPPER LAYER
0010	1561+95	-	1641+19	WB IH 94	532	DRIVING LANE	UPPER LAYER
0010	1644+35	-	1765+00	WB IH 94	811	DRIVING LANE	UPPER LAYER
0010	1503+42	-	1519+90	WB IH 94	207	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1521+80	-	1529+93	WB IH 94	97	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1529+93	-	1554+65	WB IH 94	222	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1554+65	-	1561+95	WB IH 94	63	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1561+95	-	1641+19	WB IH 94	709	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1644+35	-	1765+00	WB IH 94	1,089	PASSING LANE & INSIDE SHOULDER	UPPER LAYER
0010	1507+73	-	1513+34	EB IH 94, LT	195	EXISTING CROSSOVER	-----
0010	1524+52	-	1530+18	EB IH 94, LT	140	EXISTING CROSSOVER	-----
0010	1564+98	-		EB IH 94, LT	20	MAINTENANCE CROSSOVER	-----
0010	1658+29	-	1668+08	EB IH 94, LT	150	EXISTING CROSSOVER	-----
0010	54+65	-	65+63	RAMP 'C'	216	-----	LOWER LAYER
0010	66+36	-	67+47	RAMP 'C' EXTENSION	36	-----	LOWER LAYER
0010	59+24	-	75+11	RAMP 'B'	251	-----	LOWER LAYER
0010	75+11	-	78+73	RAMP 'B'	57	-----	LOWER LAYER
0010	60+29	-	74+11	RAMP 'D'	278	-----	LOWER LAYER
0010	75+02	-	86+18	RAMP 'A'	212	-----	LOWER LAYER
0010	59+24	-	69+62	EB STH 54	216	LANES	LOWER LAYER
0010	71+64	-	78+67	EB STH 54	163	LANES	LOWER LAYER
0010	62+35	-	66+06	EB STH 54	32	RT / GORE SHLDRS	LOWER LAYER
0010	66+60	-	69+43	EB STH 54	13	OUTSIDE SHOULDER	LOWER LAYER
0010	71+95	-	74+35	EB STH 54	12	OUTSIDE SHOULDER	LOWER LAYER
0010	75+03	-	78+67	EB STH 54	16	OUTSIDE SHOULDER	LOWER LAYER
0010	59+19	-	69+47	WB STH 54	226	LANES	LOWER LAYER
0010	71+49	-	78+51	WB STH 54	146	LANES	LOWER LAYER
0010	59+19	-	65+39	WB STH 54	27	OUTSIDE SHOULDER	LOWER LAYER
0010	66+35	-	69+18	WB STH 54	14	OUTSIDE SHOULDER	LOWER LAYER
0010	71+76	-	73+85	WB STH 54	10	OUTSIDE SHOULDER	LOWER LAYER
0010	74+69	-	78+51	WB STH 54	15	OUTSIDE SHOULDER	LOWER LAYER
0010	54+65	-	65+63	RAMP 'C'	157	-----	UPPER LAYER
0010	66+36	-	67+47	RAMP 'C' EXTENSION	27	-----	UPPER LAYER
0010	59+24	-	75+11	RAMP 'B'	180	-----	UPPER LAYER
0010	75+11	-	78+73	RAMP 'B'	41	-----	UPPER LAYER
0010	60+29	-	74+11	RAMP 'D'	201	-----	UPPER LAYER
0010	75+02	-	86+18	RAMP 'A'	154	-----	UPPER LAYER
0010	59+24	-	69+62	EB STH 54	166	LANES	UPPER LAYER
0010	71+64	-	78+67	EB STH 54	124	LANES	UPPER LAYER
0010	62+35	-	66+06	EB STH 54	23	RT / GORE SHLDRS	UPPER LAYER
0010	66+60	-	69+43	EB STH 54	9	OUTSIDE SHOULDER	UPPER LAYER
0010	71+95	-	74+35	EB STH 54	9	OUTSIDE SHOULDER	UPPER LAYER
0010	75+03	-	78+67	EB STH 54	12	OUTSIDE SHOULDER	UPPER LAYER
0010	59+19	-	69+47	WB STH 54	173	LANES	UPPER LAYER
0010	71+49	-	78+51	WB STH 54	112	LANES	UPPER LAYER
0010	59+19	-	65+39	WB STH 54	20	OUTSIDE SHOULDER	UPPER LAYER
0010	66+35	-	69+18	WB STH 54	10	OUTSIDE SHOULDER	UPPER LAYER
0010	71+76	-	73+85	WB STH 54	8	OUTSIDE SHOULDER	UPPER LAYER
0010	74+69	-	78+51	WB STH 54	11	OUTSIDE SHOULDER	UPPER LAYER
				TOTAL 0010	27,720		

HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS

CATEGORY	STATION	TO	STATION	LOCATION	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	1	LOWER LAYER
				TOTAL 0010	1	

HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY

CATEGORY	STATION	TO	STATION	LOCATION	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	1	LOWER LAYER
				TOTAL 0010	1	

HMA PAVEMENT TEST STRIPS VOLUMETRICS

CATEGORY	STATION	TO	STATION	LOCATION	460.0115.S HMA PAVEMENT TEST STRIPS VOLUMETRICS EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	1	UPPER LAYER
				TOTAL 0010	1	

HMA PAVEMENT TEST STRIPS DENSITY

CATEGORY	STATION	TO	STATION	LOCATION	460.0120.S HMA PAVEMENT TEST STRIPS DENSITY EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	1	UPPER LAYER
				TOTAL 0010	1	

HMA PAVEMENT 4 MT 58-34 S

CATEGORY	STATION	TO	STATION	LOCATION	460.6244 HMA PAVEMENT 4 MT 58-34 S TON	REMARKS	HMA LIFT
0010	1503+82	-	1519+51	EB IH 94	240	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1521+95	-	1531+45	EB IH 94	105	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1531+45	-	1554+99	EB IH 94	375	OUTSIDE SHOULDER INCL. GORES	2.5-IN. SURFACE LAYER
0010	1554+99	-	1563+97	EB IH 94	80	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1563+97	-	1641+89	EB IH 94	1,215	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1645+01	-	1765+00	EB IH 94	1,870	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1503+42	-	1519+90	WB IH 94	250	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1521+80	-	1529+93	WB IH 94	90	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1529+93	-	1554+65	WB IH 94	380	OUTSIDE SHOULDER INCL. GORES	2.5-IN. SURFACE LAYER
0010	1554+65	-	1561+95	WB IH 94	75	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1561+95	-	1641+19	WB IH 94	1,235	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1644+35	-	1765+00	WB IH 94	1,885	OUTSIDE SHOULDER	2.5-IN. SURFACE LAYER
0010	1507+73	-	1513+34	EB IH 94, LT	390	EXISTING CROSSOVER	2.5-IN. SURFACE LAYER
0010	1524+52	-	1530+18	EB IH 94, LT	280	EXISTING CROSSOVER	2.5-IN. SURFACE LAYER
0010	1564+98	-		EB IH 94, LT	40	MAINTENANCE CROSSOVER	2.5-IN. SURFACE LAYER
0010	1658+29	-	1668+08	EB IH 94, LT	295	EXISTING CROSSOVER	2.5-IN. SURFACE LAYER
				TOTAL 0010	8,805		

HMA PAVEMENT 4 HT 58-34 V

CATEGORY	STATION	TO	STATION	LOCATION	460.7644 HMA PAVEMENT 4 HT 58-34 V TON	REMARKS	HMA LIFT
0010	1503+82	-	1519+51	EB IH 94	295	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1521+95	-	1531+45	EB IH 94	255	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1531+45	-	1554+99	EB IH 94	440	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1554+99	-	1563+97	EB IH 94	295	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1563+97	-	1641+89	EB IH 94	1,455	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1645+01	-	1765+00	EB IH 94	2,240	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1503+82	-	1519+51	EB IH 94	535	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1521+95	-	1531+45	EB IH 94	305	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1531+45	-	1554+99	EB IH 94	585	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1554+99	-	1563+97	EB IH 94	225	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1563+97	-	1641+89	EB IH 94	1,945	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1645+01	-	1765+00	EB IH 94	3,000	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1503+42	-	1519+90	WB IH 94	310	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1521+80	-	1529+93	WB IH 94	265	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1529+93	-	1554+65	WB IH 94	465	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1554+65	-	1561+95	WB IH 94	190	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1561+95	-	1641+19	WB IH 94	1,480	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1644+35	-	1765+00	WB IH 94	2,255	DRIVING LANE	2.5-IN. LOWER LAYER
0010	1503+42	-	1519+90	WB IH 94	575	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1521+80	-	1529+93	WB IH 94	270	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1529+93	-	1554+65	WB IH 94	615	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1554+65	-	1561+95	WB IH 94	175	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1561+95	-	1641+19	WB IH 94	1,970	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
0010	1644+35	-	1765+00	WB IH 94	3,025	PASSING LANE & INSIDE SHOULDER	2.5-IN. LOWER LAYER
				TOTAL 0010	23,170		

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HMA PAVEMENT 5 HT 58-34 V

CATEGORY	STATION	TO	STATION	LOCATION	460.7645 HMA PAVEMENT 5 HT 58-34 V TON	REMARKS	HMA LIFT
0010	54+65	-	65+63	RAMP 'C'	215	-----	1.25-IN. LOWER LAYER
0010	66+36	-	67+47	RAMP 'C' EXTENSION	35	-----	1.25-IN. LOWER LAYER
0010	59+24	-	75+11	RAMP 'B'	250	-----	1.25-IN. LOWER LAYER
0010	75+11	-	78+73	RAMP 'B'	60	-----	1.25-IN. LOWER LAYER
0010	60+29	-	74+11	RAMP 'D'	280	-----	1.25-IN. LOWER LAYER
0010	75+02	-	86+18	RAMP 'A'	215	-----	1.25-IN. LOWER LAYER
0010	59+24	-	69+62	EB STH 54	215	LANES	1.25-IN. LOWER LAYER
0010	71+64	-	78+67	EB STH 54	165	LANES	1.25-IN. LOWER LAYER
0010	62+35	-	66+06	EB STH 54	35	RT / GORE SHLDRS	1.25-IN. LOWER LAYER
0010	66+60	-	69+43	EB STH 54	15	OUTSIDE SHOULDER	1.25-IN. LOWER LAYER
0010	71+95	-	74+35	EB STH 54	15	OUTSIDE SHOULDER	1.25-IN. LOWER LAYER
0010	75+03	-	78+67	EB STH 54	20	OUTSIDE SHOULDER	1.25-IN. LOWER LAYER
0010	59+19	-	69+47	WB STH 54	225	LANES	1.25-IN. LOWER LAYER
0010	71+49	-	78+51	WB STH 54	150	LANES	1.25-IN. LOWER LAYER
0010	59+19	-	65+39	WB STH 54	30	OUTSIDE SHOULDER	1.25-IN. LOWER LAYER
0010	66+35	-	69+18	WB STH 54	15	OUTSIDE SHOULDER	1.25-IN. LOWER LAYER
0010	71+76	-	73+85	WB STH 54	10	OUTSIDE SHOULDER	1.25-IN. LOWER LAYER
0010	74+69	-	78+51	WB STH 54	15	OUTSIDE SHOULDER	1.25-IN. LOWER LAYER
0010	54+65	-	65+63	RAMP 'C'	305	-----	1.75-IN. UPPER LAYER
0010	66+36	-	67+47	RAMP 'C' EXTENSION	55	-----	1.75-IN. UPPER LAYER
0010	59+24	-	75+11	RAMP 'B'	350	-----	1.75-IN. UPPER LAYER
0010	75+11	-	78+73	RAMP 'B'	80	-----	1.75-IN. UPPER LAYER
0010	60+29	-	74+11	RAMP 'D'	390	-----	1.75-IN. UPPER LAYER
0010	75+02	-	86+18	RAMP 'A'	300	-----	1.75-IN. UPPER LAYER
0010	59+24	-	69+62	EB STH 54	325	LANES	1.75-IN. UPPER LAYER
0010	71+64	-	78+67	EB STH 54	245	LANES	1.75-IN. UPPER LAYER
0010	62+35	-	66+06	EB STH 54	45	RT / GORE SHLDRS	1.75-IN. UPPER LAYER
0010	66+60	-	69+43	EB STH 54	20	OUTSIDE SHOULDER	1.75-IN. UPPER LAYER
0010	71+95	-	74+35	EB STH 54	20	OUTSIDE SHOULDER	1.75-IN. UPPER LAYER
0010	75+03	-	78+67	EB STH 54	25	OUTSIDE SHOULDER	1.75-IN. UPPER LAYER
0010	59+19	-	69+47	WB STH 54	340	LANES	1.75-IN. UPPER LAYER
0010	71+49	-	78+51	WB STH 54	220	LANES	1.75-IN. UPPER LAYER
0010	59+19	-	65+39	WB STH 54	40	OUTSIDE SHOULDER	1.75-IN. UPPER LAYER
0010	66+35	-	69+18	WB STH 54	20	OUTSIDE SHOULDER	1.75-IN. UPPER LAYER
0010	71+76	-	73+85	WB STH 54	15	OUTSIDE SHOULDER	1.75-IN. UPPER LAYER
0010	74+69	-	78+51	WB STH 54	25	OUTSIDE SHOULDER	1.75-IN. UPPER LAYER
				TOTAL 0010	4,785		

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HMA PAVEMENT 4 SMA 58-34 V

CATEGORY	STATION	TO	STATION	LOCATION	460.8644 HMA PAVEMENT 4 SMA 58-34 V TON	REMARKS	HMA LIFT
0010	1503+82	-	1519+51	EB IH 94	235	DRIVING LANE	2-IN. UPPER LAYER
0010	1521+95	-	1531+45	EB IH 94	205	DRIVING LANE	2-IN. UPPER LAYER
0010	1531+45	-	1554+99	EB IH 94	355	DRIVING LANE	2-IN. UPPER LAYER
0010	1554+99	-	1563+97	EB IH 94	240	DRIVING LANE	2-IN. UPPER LAYER
0010	1563+97	-	1641+89	EB IH 94	1,170	DRIVING LANE	2-IN. UPPER LAYER
0010	1645+01	-	1765+00	EB IH 94	1,800	DRIVING LANE	2-IN. UPPER LAYER
0010	1503+82	-	1519+51	EB IH 94	430	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1521+95	-	1531+45	EB IH 94	245	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1531+45	-	1554+99	EB IH 94	470	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1554+99	-	1563+97	EB IH 94	180	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1563+97	-	1641+89	EB IH 94	1,565	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1645+01	-	1765+00	EB IH 94	2,415	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1503+42	-	1519+90	WB IH 94	250	DRIVING LANE	2-IN. UPPER LAYER
0010	1521+80	-	1529+93	WB IH 94	210	DRIVING LANE	2-IN. UPPER LAYER
0010	1529+93	-	1554+65	WB IH 94	370	DRIVING LANE	2-IN. UPPER LAYER
0010	1554+65	-	1561+95	WB IH 94	155	DRIVING LANE	2-IN. UPPER LAYER
0010	1561+95	-	1641+19	WB IH 94	1,190	DRIVING LANE	2-IN. UPPER LAYER
0010	1644+35	-	1765+00	WB IH 94	1,810	DRIVING LANE	2-IN. UPPER LAYER
0010	1503+42	-	1519+90	WB IH 94	465	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1521+80	-	1529+93	WB IH 94	220	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1529+93	-	1554+65	WB IH 94	495	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1554+65	-	1561+95	WB IH 94	140	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1561+95	-	1641+19	WB IH 94	1,585	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	1644+35	-	1765+00	WB IH 94	2,430	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
				TOTAL 0010	18,630		

ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	465.0105 ASPHALTIC SURFACE TON	REMARKS
0010	1503+82	-	1765+00	UNDISTRIBUTED	50	PREPARE FOUNDATION FOR ASPHALTIC PAVING
				TOTAL 0010	50	

ASPHALTIC SURFACE PATCHING

CATEGORY	STATION	TO	STATION	LOCATION	465.0110 ASPHALTIC SURFACE PATCHING TON	REMARKS
0010	1503+82	-	1765+00	UNDISTRIBUTED	75	REPAIRING/FILLING POTHOLES
				TOTAL 0010	75	

ASPHALTIC SURFACE TEMPORARY

CATEGORY	STATION	TO	STATION	LOCATION	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
0010	1503+82	-	1519+51	EB IH 94, 1'LT	5	FILL RUMBLE STRIP
0010	1503+82	-	1519+51	EB IH 94, 25'RT	5	FILL RUMBLE STRIP
0010	1521+65	-	1530+43	EB IH 94, 25'RT	3	FILL RUMBLE STRIP
0010	1521+95	-	1642+36	EB IH 94, 1'LT	40	FILL RUMBLE STRIP
0010	1533+40	-	1551+38	EB IH 94, 25'RT	6	FILL RUMBLE STRIP
0010	1555+41	-	1642+66	EB IH 94, 25'RT	30	FILL RUMBLE STRIP
0010	1644+40	-	1765+00	EB IH 94, 1'LT	40	FILL RUMBLE STRIP
0010	1644+81	-	1765+00	EB IH 94, 25'RT	40	FILL RUMBLE STRIP
0010	1503+53	-	1519+90	WB IH 94, 1'RT	6	FILL RUMBLE STRIP
0010	1503+53	-	1519+97	WB IH 94, 25'LT	6	FILL RUMBLE STRIP
0010	1521+80	-	1641+82	WB IH 94, 1'RT	40	FILL RUMBLE STRIP
0010	1521+87	-	1532+70	WB IH 94, 25'LT	4	FILL RUMBLE STRIP
0010	1534+35	-	1552+78	WB IH 94, 25'LT	6	FILL RUMBLE STRIP
0010	1555+65	-	1641+34	WB IH 94, 25'LT	30	FILL RUMBLE STRIP
0010	1643+51	-	1765+00	WB IH 94, 25'LT	40	FILL RUMBLE STRIP
0010	1643+89	-	1765+00	WB IH 94, 1'RT	40	FILL RUMBLE STRIP
0010	1503+82	-	1765+00	UNDISTRIBUTED	50	AS DIRECTED BY THE ENGINEER
				TOTAL 0010	391	

ASPHALTIC SHOULDER RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	REMARKS
0010	1503+82	-	1519+51	EB IH 94	1,569	25'RT
0010	1521+65	-	1523+44	EB IH 94	179	25'RT
0010	1533+40	-	1551+38	EB IH 94	1,797	25'RT
0010	1557+96	-	1642+66	EB IH 94	8,471	25'RT
0010	1644+81	-	1765+00	EB IH 94	12,015	25'RT
0010	1503+82	-	1519+51	EB IH 94	1,569	1'LT
0010	1521+95	-	1642+37	EB IH 94	12,036	1'LT
0010	1644+40	-	1765+00	EB IH 94	12,060	1'LT
0010	1503+53	-	1519+90	WB IH 94	1,642	1'RT
0010	1521+80	-	1641+82	WB IH 94	11,963	1'RT
0010	1643+89	-	1765+00	WB IH 94	12,111	1'RT
0010	1503+53	-	1519+97	WB IH 94	1,649	25'LT
0010	1521+87	-	1527+97	WB IH 94	610	25'LT
0010	1534+35	-	1552+78	WB IH 94	1,843	25'LT
0010	1562+65	-	1641+34	WB IH 94	7,821	25'LT
0010	1643+51	-	1765+00	WB IH 94	12,153	25'LT
				TOTAL 0010	99,488	

PWL Mixture Use Table

The following acceptance criteria are applicable for this project:

Station	to	Station	Location	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness (inches)	Quality Management Program to be used for: Mixture Acceptance	Density Acceptance
1503+82	-	1765+00	EB IH 94 Outside Shoulder	Surface Layer	Milled Existing HMA Surface	4 MT 58-34 S	3885	2.5	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
1503+42	-	1765+00	WB IH 94 Outside Shoulder	Surface Layer	Milled Existing HMA Surface	4 MT 58-34 S	3915	2.5	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
1503+82	-	1765+00	Various Median Crossovers	Surface Layer	Existing HMA Surface	4 MT 58-34 S	1005	2.5	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
1503+82	-	1765+00	EB IH 94 Driving Lane	Lower Layer	Milled Existing HMA Surface	4 HT 58-34 V	4980	2.5	PWL Incentive Air Voids HMA Pavement, Item 460.2010	Incentive Density PWL HMA Pavement, Item 460.2005
1503+82	-	1765+00	EB IH 94 Passing Lane and Inside Shoulder	Lower Layer	Milled Existing HMA Surface	4 HT 58-34 V	6595	2.5	PWL Incentive Air Voids HMA Pavement, Item 460.2010	Incentive Density PWL HMA Pavement, Item 460.2005
1503+42	-	1765+00	WB IH 94 Driving Lane	Lower Layer	Milled Existing HMA Surface	4 HT 58-34 V	4965	2.5	PWL Incentive Air Voids HMA Pavement, Item 460.2010	Incentive Density PWL HMA Pavement, Item 460.2005
1503+42	-	1765+00	WB IH 94 Passing Lane and Inside Shoulder	Lower Layer	Milled Existing HMA Surface	4 HT 58-34 V	6630	2.5	PWL Incentive Air Voids HMA Pavement, Item 460.2010	Incentive Density PWL HMA Pavement, Item 460.2005
Various			Interchange Ramps	Lower Layer	Existing Concrete Pavement	5 HT 58-34 V	1055	1.25	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
59+24	-	78+67	EB STH 54 Lanes and Outside Shoulder	Lower Layer	Milled Existing Concrete Pavement	5 HT 58-34 V	465	1.25	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
59+19	-	78+51	WB STH 54 Lanes and Outside Shoulder	Lower Layer	Milled Existing Concrete Pavement	5 HT 58-34 V	445	1.25	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
Various			Interchange Ramps	Upper Layer	5 HT 58-34 V	5 HT 58-34 V	1480	1.75	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
59+24	-	78+67	EB STH 54 Lanes and Outside Shoulder	Upper Layer	5 HT 58-34 V	5 HT 58-34 V	680	1.75	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
59+19	-	78+51	WB STH 54 Lanes and Outside Shoulder	Upper Layer	5 HT 58-34 V	5 HT 58-34 V	660	1.75	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
1503+82	-	1765+00	EB IH 94 Driving Lane	Upper Layer	4 HT 58-34 V	4 SMA 58-34 V	4005	2	QMP as per Standard Spec 460 and Special Provisions	Incentive Density HMA Pavement, Item 460.2000
1503+82	-	1765+00	EB IH 94 Passing Lane and Inside Shoulder	Upper Layer	4 HT 58-34 V	4 SMA 58-34 V	5305	2	QMP as per Standard Spec 460 and Special Provisions	Incentive Density HMA Pavement, Item 460.2000
1503+42	-	1765+00	WB IH 94 Driving Lane	Upper Layer	4 HT 58-34 V	4 SMA 58-34 V	3985	2	QMP as per Standard Spec 460 and Special Provisions	Incentive Density HMA Pavement, Item 460.2000
1503+42	-	1765+00	WB IH 94 Passing Lane and Inside Shoulder	Upper Layer	4 HT 58-34 V	4 SMA 58-34 V	5335	2	QMP as per Standard Spec 460 and Special Provisions	Incentive Density HMA Pavement, Item 460.2000
Various			IH 94 Lanes and Ramp Tapers	Base Patching	Existing HMA Surface	Asphaltic Base Patching Partial Depth Special	170	Var.	QMP as per Standard Spec 465	Acceptance by ordinary compaction
Various			Interchange Ramps and STH 54 Lanes	Prepare Foundation for Asphaltic Paving	Existing Concrete Pavement	Asphaltic Surface	50	Var.	QMP as per Standard Spec 465	Acceptance by ordinary compaction
Various			IH 94 Lanes and Ramp Tapers	Repairing/Filling Potholes	Milled Existing HMA Surface	Asphaltic Surface Patching	75	Var.	QMP as per Standard Spec 465	Acceptance by ordinary compaction
Various			IH 94 Lanes and Ramps	Fill Existing Rumble Strips	Existing HMA Surface	Asphaltic Surface Temporary	391	Var.	QMP as per Standard Spec 465	Acceptance by ordinary compaction

CONCRETE COLLARS FOR PIPE

CATEGORY	STATION	LOCATION	520.8000 CONCRETE COLLARS FOR PIPE EACH	REMARKS
0010	1745+00	EB IH 94, LT	1	RCCP 24-INCH
		TOTAL 0010	1	

CULVERT PIPE REINFORCED CONCRETE

CATEGORY	STATION	LOCATION	522.0124 CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	REMARKS	INCIDENTAL JOINT TIES EACH
0010	1745+00	EB IH 94, LT	8	1	CONCRETE COLLAR REQ'D	2
		TOTAL 0010	8	1		

RIPRAP

CATEGORY	STATION	LOCATION	606.0100 RIPRAP LIGHT CY	645.0130 GEOTEXTILE TYPE R SY	REMARKS
0010	65+24	RAMP 'B', 54' RT	5	20	
0010	71+45	WB STH 54, 73' LT	5	20	
0010	73+15	WB STH 54, 78' LT	5	20	
		TOTAL 0010	15	60	

CLEANING CULVERT PIPES

CATEGORY	STATION	LOCATION	520.8700 CLEANING CULVERT PIPES EACH	REMARKS
0010	1536+50	EB IH 94	1	30-INCH RCCP
0010	1595+00	EB IH 94	1	18-INCH RCCP
0010	1710+00	EB IH 94	1	24-INCH RCCP
0010	1752+00	EB IH 94	1	24-INCH RCCP
0010	1762+00	EB IH 94	1	24-INCH RCCP
0010	1536+20	WB IH 94	1	30-INCH RCCP
0010	1558+22	WB IH 94	1	42-INCH RCCP
0010	1567+90	WB IH 94	1	18-INCH RCCP
0010	1658+00	WB IH 94	1	18-INCH RCCP
		TOTAL 0010	9	

SALVAGED APRON ENDWALLS

CATEGORY	STATION	LOCATION	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH	524.0624 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 24-INCH EACH	524.0636 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 36-INCH EACH	524.0642 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 42-INCH EACH	REMARKS	INCIDENTAL DRILLED JOINT TIES EACH
0010	1529+00	EB IH 94, LT	1	---	---	---	SALVAGE & RELAY	2
0010	1552+50	EB IH 94, LT	---	---	1	---	SALVAGE & RELAY	2
0010	1558+75	EB IH 94, RT	---	---	---	1	SALVAGE & RELAY	2
0010	1629+00	EB IH 94, RT	1	---	---	---	SALVAGE & RELAY	2
0010	1710+00	EB IH 94, LT & RT	---	2	---	---	SALVAGE & RELAY	4
		TOTAL 0010	2	2	1	1		

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BARRIER SYSTEM GRADING SHAPING FINISHING

CATEGORY	STATION	TO	STATION	LOCATION	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	REMARKS	* EXC. COMMON CY	* 1.33 EXP. FILL CY	* BORROW CY	* SALV. TOPSOIL SY	* FERTILIZER TYPE B CWT	* SEEDING LB	* MULCHING SY
0010	83+84	-	87+08	RAMP 'A', LT	1		96	108	12	852	0.7	20	852
0010	64+28	-	66+23	RAMP 'B', RT	1		137	27	---	662	0.5	15	662
0010	71+60	-	73+55	STH 54 WB, LT	1	B-27-116, NE WING	100	124	24	731	0.6	16	731
				TOTAL 0010	3								

* ITEMS AND QUANTITIES SHOWN FOR BID INFORMATION ONLY.

STEEL THRIE BEAM

CATEGORY	STATION	TO	STATION	LOCATION	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF	REMARKS
0010	1542+06	-	1544+27	EB IH 94, LT	2	275	MEDIAN PIER PROTECTION B-27-45 & 116
0010	1626+86	-	1628+57	EB IH 94, LT	2	175	MEDIAN PIER PROTECTION B-27-53
				TOTAL 0010	4	450	

BEAM GUARD AND GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL EACH	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	REMARKS
0010	83+87.5	-	85+87.5	RAMP 'A', LT	150.0	1	---	---	---	
0010	65+47.9	-	66+22.9	RAMP 'B', RT	25.0	1	---	---	---	
0010	71+60.4	-	73+02.9	WB STH 54, LT	---	---	50.0	39.4	1	B-27-116, NE WIGN
				TOTAL 0010	175.0	2	50.0	39.4	1	

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ADJUSTING STEEL PLATE BEAM GUARD

CATEGORY	STATION	TO	STATION	LOCATION	614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF	REMARKS
0010	1503+91	-	1506+97	EB IH 94, RT	306	
0010	1516+93	-	1519+76	EB IH 94, LT	283	
0010	1517+54	-	1519+62	EB IH 94, RT	208	
0010	1521+73	-	1523+53	EB IH 94, RT	180	
0010	1637+67	-	1642+74	EB IH 94, RT	507	
0010	1639+77	-	1642+34	EB IH 94, LT	257	
0010	1644+81	-	1649+99	EB IH 94, RT	518	
0010	1735+21	-	1738+26	EB IH 94, RT	305	
0010	1735+65	-	1739+95	EB IH 94, LT	430	
0010	1503+52	-	1507+36	WB IH 94, RT	384	
0010	1503+52	-	1508+45	WB IH 94, LT	493	
0010	1517+28	-	1519+74	WB IH 94, RT	246	
0010	1518+32	-	1519+90	WB IH 94, LT	158	
0010	1521+84	-	1523+04	WB IH 94, RT	120	
0010	1522+00	-	1526+70	WB IH 94, LT	470	
0010	1638+46	-	1641+42	WB IH 94, LT	296	
0010	1643+47	-	1648+54	WB IH 94, LT	507	
0010	1643+90	-	1646+57	WB IH 94, RT	267	
0010	1741+01	-	1745+31	WB IH 94, RT	430	
0010	1742+85	-	1745+77	WB IH 94, LT	292	
0010	77+99	-	83+87	RAMP 'A', LT	588	
0010	60+82	-	61+85	RAMP 'B', RT	103	
0010	66+23	-	67+24	RAMP 'B', RT	101	
0010	68+14	-	69+55	EB STH 54, RT	143	
				TOTAL 0010	7,592	

REPLACING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS EACH	614.0951 REPLACING GUARDRAIL RAIL AND HARDWARE LF	614.0952 REPLACING GUARDRAIL REFLECTORS EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	120	750	200	UNDISTRIBUTED
				TOTAL 0010	120	750	200	

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MOBILIZATION

CATEGORY	STATION	TO	STATION	LOCATION	619.1000 MOBILIZATION EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	0.6	UNDISTRIBUTED
				TOTAL 0010	0.6	

MAINTENANCE AND REPAIR OF HAUL ROADS (01. 1023-00-79)

CATEGORY	STATION	TO	STATION	LOCATION	618.0100.01 MAINTENANCE AND REPAIR OF HAUL ROADS (01. 1023-00-79) EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

WATER

CATEGORY	STATION	TO	STATION	LOCATION	624.0100 WATER MGAL	REMARKS
0010	1503+82	-	1765+00	IH 94	160	UNDISTRIBUTED
				TOTAL 0010	160	

SILT TENCE

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	REMARKS
0010	83+75	-	87+25	RAMP 'A', LT	360	360	
0010	64+20	-	66+70	RAMP 'B', RT	270	270	
0010	71+40	-	73+65	WB STH 54, LT	280	280	
0010	1503+82	-	1765+00	IH 94	300	300	UNDISTRIBUTED
				TOTAL 0010	1,210	1,210	

MOBILIZATIONS EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	4	2	UNDISTRIBUTED
				TOTAL 0010	4	2	

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EROSION MAT

CATEGORY	STATION	TO	STATION	LOCATION	628.2004 EROSION MAT CLASS I TYPE B SY	REMARKS
0010	1552+50	-	-----	EB IH 94, LT	10	CULVERT DISCHARGE
0010	1558+75	-	-----	EB IH 94, RT	130	CLEAN DITCH
0010	1629+00	-	-----	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1629+00	-	-----	EB IH 94, RT	130	CLEAN DITCH
0010	1699+00	-	-----	WB IH 94, RT	10	CULVERT DISCHARGE
0010	1710+00	-	-----	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1745+00	-	-----	EB IH 94, RT	130	CLEAN DITCH
0010	1576+96	-	-----	WB IH 94, LT	130	CLEAN DITCH
0010	83+80	-	87+10	RAMP 'A', LT	725	BARRIER SYSTEM
0010	64+25	-	66+25	RAMP 'B', RT	580	BARRIER SYSTEM
0010	71+60	-	73+55	WB STH 54, LT	565	BARRIER SYSTEM
0010	1503+82	-	1765+00	IH 94	100	UNDISTRIBUTED
				TOTAL 0010	2,530	

TEMPORARY DITCH CHECKS

CATEGORY	STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF	REMARKS
0010	1541+00	WB IH 94, 55' LT	12	
0010	1542+00	WB IH 94, 52' LT	12	
0010	71+60	RAMP 'D', 68' RT	10	
0010	72+60	RAMP 'D', 80' RT	10	
0010	-----	IH 94	200	UNDISTRIBUTED
		TOTAL 0010	244	

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CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 CULVERT PIPE CHECKS EACH	REMARKS
0010	1529+00	EB IH 94, LT	4	18-INCH CULVERT PIPE
0010	1552+36	WB IH 94, RT	6	36-INCH CULVERT PIPE
0010	1558+75	EB IH 94, RT	6	42-INCH CULVERT PIPE
0010	1699+00	WB IH 94, LT	4	30-INCH CULVERT PIPE
0010	1710+00	EB IH 94, LT	4	24-INCH CULVERT PIPE
0010	1745+00	EB IH 94, LT	4	24-INCH CULVERT PIPE
0010	-----	IH 94	10	UNDISTRIBUTED
		TOTAL 0010	38	

FINISHING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	REMARKS
0010	1503+82	-	1765+00	IH 94	1,000	1,000	1	20	30	UNDISTRIBUTED
				TOTAL 0010	1,000	1,000	1	20	30	

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DELINEATORS

CATEGORY	STATION	TO	STATION	LOCATION	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATOR REFLECTORS EACH	REMARKS
0010	1503+82	-	1524+43	EB IH 94, RT	5	5	WHITE
0010	1524+43	-	1533+40	EB IH 94, RT	10	20	DOUBLE WHITE
0010	1533+40	-	1551+40	EB IH 94, RT	5	5	WHITE
0010	1551+40	-	1563+97	EB IH 94, RT	13	26	DOUBLE WHITE
0010	1563+97	-	1765+00	EB IH 94, RT	51	51	WHITE
0010	1503+42	-	1521+90	WB IH 94, LT	5	5	WHITE
0010	1521+90	-	1534+35	WB IH 94, LT	13	26	DOUBLE WHITE
0010	1534+35	-	1552+65	WB IH 94, LT	5	5	WHITE
0010	1552+65	-	1561+65	WB IH 94, LT	10	20	DOUBLE WHITE
0010	1561+65	-	1765+00	WB IH 94, LT	51	51	WHITE
0010	76+10	-	83+20	RAMP 'A', LT	8	8	WHITE
0010	77+10	-	83+20	RAMP 'A', RT	7	7	YELLOW
0010	66+35	-	75+10	RAMP 'B', RT	9	9	WHITE
0010	67+35	-	75+10	RAMP 'B', LT	8	8	YELLOW
0010	57+35	-	64+75	RAMP 'C', RT	8	8	WHITE
0010	57+35	-	64+75	RAMP 'C', LT	8	8	YELLOW
0010	64+80	-	73+40	RAMP 'D', LT	9	9	WHITE
0010	65+80	-	73+40	RAMP 'D', RT	8	8	YELLOW
				TOTAL 0010	233	279	

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 MARKERS CULVERT END EACH	REMARKS
0010	1522+20	EB 94, LT & RT	2	
0010	1529+00	EB 94, LT	1	
0010	1536+50	EB 94, LT	1	
0010	1552+50	EB 94, LT	1	
0010	1558+75	EB 94, RT	1	
0010	1595+00	EB 94, LT	1	
0010	1606+50	EB 94, LT	1	
0010	1629+00	EB 94, RT	1	
0010	1710+00	EB 94, LT & RT	2	
0010	1737+54	EB 94, LT	1	
0010	1745+00	EB 94, LT & RT	2	
0010	1752+00	EB 94, LT & RT	2	
0010	1552+36	WB 94, LT & RT	2	
0010	1558+22	WB 94, RT	1	
0010	1658+00	WB 94, LT & RT	2	
0010	1699+00	WB 94, LT & RT	2	
		TOTAL 0010	23	

SIGNS TYPE II

CATEGORY	SIGN NO.	STATION	LOCATION	SIGN CODE	SIGN SIZE (INCHES)	SIGN DESCRIPTION	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	REMARKS
0010	2-1	63+80	RAMP 'C', LT	D1-2	72X24	(LA) HO-CHUNK NATION	---	---	2	12	
0010	2-2	79+20	RAMP 'A', RT	D1-2	72X24	HO-CHUNK NATION (RA)	---	---	2	12	
0010	14-1	---	STH 54/RED IRON RD	I2-2R	60X36	HO-CHUNK NATION RESERVATION	---	2	---	15	WEST OF PROJECT LIMITS
0010	14-2	---	STH 54/RED IRON RD	D1-2	72X24	HO-CHUNK NATION (RA)	---	2	---	12	WEST OF PROJECT LIMITS
0010	14-3	---	STH 54/RED IRON RD	D1-2	72X24	(LA) HO-CHUNK NATION	2	---	---	12	WEST OF PROJECT LIMITS
0010	14-4	---	STH 54/CTH K	I2-2R	60X36	HO-CHUNK NATION RESERVATION	---	2	---	15	WEST OF PROJECT LIMITS
			TOTAL 0010				2	6	4	78	

SIGNS TYPE I

CATEGORY	SIGN NO.	APPROX. STATION	LOCATION	SIGN CODE	SIGN SIZE (INCHES)	POST NO.- SIZE	POST LENGTH INSIDE/MIDDLE/OUTSIDE	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS CY	531.1140 STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS LB	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS LB	635.0300 SIGN SUPPORTS REPLACING BASE CONNECTION BOLTS EACH	637.1220 SIGNS TYPE I REFLECTIVE SH SF	638.2601 REMOVING SIGNS TYPE I EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	SIGN MOUNTED ON SAME POST AS	REMARKS
0010	1-1	1508+00	WB IH 94, LT	E10-61	144X54	EXIST	EXIST	---	---	---	1	54.00	1	---	---	
0010	1-2	1522+23	WB IH 94, LT	E1-5P	108X30	---	---	---	---	---	---	22.50	---	---	1-3	
0010	1-3	1522+23	WB IH 94, LT	E1-1A	312X162	3 - W12X26	22.1'/22.8'/23.5'	3.6	540	2,235	---	351.00	1	1	1-2/1-4	
0010	1-4	1522+23	WB IH 94, LT	E2-1	156X24	---	---	---	---	---	---	26.00	---	---	1-3	
0010	1-5	1526+40	EB IH 94, RT	E1-5P	108X30	---	---	---	---	---	---	22.50	---	---	1-6	
0010	1-6	1526+40	EB IH 94, RT	E4-1A	312X132	3 - W12X26	20.7'/22.4'/24.0'	3.6	540	2,201	---	286.00	1	1	1-5	
0010	3-1	1560+10	WB IH 94, LT	E1-5P	108X30	---	---	---	---	---	---	22.50	---	---	3-2	
0010	3-2	1560+10	WB IH 94, LT	E4-1A	312X132	3 - W12X26	20.7'/22.4'/24.0'	3.6	540	2,201	---	286.00	1	1	3-1	
0010	4-1	1599+02	EB IH 94, RT	D2-3	168X84	EXIST	EXIST	---	---	---	1	98.00	1	---	---	
0010	4-2	1605+64	WB IH 94, LT	E3-1	204X84	2 - W12X26	19.0'/-----/23.0'	2.4	360	1,396	---	119.00	1	1	---	
0010	5-1	1639+94	WB IH 94, LT	E1-5P	108X30	---	---	---	---	---	---	22.50	---	---	5-2	
0010	5-2	1639+94	WB IH 94, LT	E1-1A	312X162	3 - W12X26	22.1'/22.8'/23.5'	3.6	540	2,235	---	351.00	1	1	5-1	
			TOTAL 0010					16.8	2,520	10,268	2	1,661.00	7	5		

FIELD OFFICE TYPE C

CATEGORY	STATION	TO	STATION	LOCATION	642.5201 FIELD OFFICE TYPE C EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	0.6	UNDISTRIBUTED
				TOTAL 0010	0.6	

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TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	STAGE	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1051 TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS DAY	643.1205.S BASIC TRAFFIC QUEUE WARNING SYSTEM DAY	643.4100.S TRAFFIC CONTROL INTERIM LANE CLOSURE EACH
0010	EB IH 94	MAINLINE LANE CLOSURES	28,800	2,000	4,000	3,600	160	4,000	---	80	80
0010	WB IH 94	MAINLINE LANE CLOSURES	28,800	2,000	4,000	3,600	160	4,000	---	80	80
0010	IH 94 & STH 54	EB RAMPS CLOSED	415	70	140	---	---	105	84	---	---
0010	IH 94 & STH 54	WB RAMPS CLOSED	365	55	110	---	---	100	72	---	---
0010	STH 54	PASSING LANE CLOSED	5,740	200	200	480	80	1,000	---	---	---
0010	STH 54	DRIVING LANE CLOSED	5,900	240	280	460	80	1,000	---	---	---
	TOTAL 0010		70,020	4,565	8,730	8,140	480	10,205	156	160	160

TRAFFIC CONTROL COVERING SIGNS

CATEGORY	STATION	TO	STATION	LOCATION	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	REMARKS
0010	1526+40	-	---	EB IH 94, RT	1	---	EB RAMPS CLOSED
0010	1533+60	-	---	EB IH 94, RT	---	1	EB RAMPS CLOSED
0010	57+00	-	82+00	STH 54	---	9	EB RAMPS CLOSED
0010	1551+67	-	---	WB IH 94, LT	---	1	WB RAMPS CLOSED
0010	1560+10	-	---	WB IH 94, LT	1	---	WB RAMPS CLOSED
0010	57+00	-	82+00	STH 54	---	8	WB RAMPS CLOSED
				TOTAL 0010	2	19	

NOTE: 1 CYCLE / 1 SIGN FOR EACH DIRECTION OF RAMP CLOSURES.

TRAFFIC CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	0.6	UNDISTRIBUTED
				TOTAL 0010	0.6	

MARKING LINE EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	REMARKS
0010	58+00	-	66+10	EB STH 54, R/L	810	YELLOW EDGELINE
0010	66+82	-	73+73	EB STH 54, 0'-10' LT	691	YELLOW EDGELINE
0010	74+62	-	79+00	EB STH 54, R/L	438	YELLOW EDGELINE
0010	58+00	-	79+00	EB STH 54, 12' RT	525	WHITE LANE LINE SKIP
0010	58+00	-	60+00	EB STH 54, 24' RT	201	WHITE EDGELINE
0010	64+00	-	66+06	EB STH 54, 24' RT	208	WHITE EDGELINE
0010	66+26	-	74+31	EB STH 54, 24' RT	809	WHITE EDGELINE
0010	75+03	-	79+00	EB STH 54, 24' RT	400	WHITE EDGELINE
0010	58+00	-	65+95	WB STH 54, R/L	795	YELLOW EDGELINE
0010	66+69	-	73+58	WB STH 54, 0'-10' RT	690	YELLOW EDGELINE
0010	74+49	-	79+00	WB STH 54, R/L	451	YELLOW EDGELINE
0010	58+00	-	79+00	WB STH 54, 12' LT	525	WHITE LANE LINE SKIP
0010	58+00	-	65+48	WB STH 54, 24' LT	744	WHITE EDGELINE
0010	66+37	-	73+68	WB STH 54, 24' LT	727	WHITE EDGELINE
0010	74+69	-	79+00	WB STH 54, 24' LT	428	WHITE EDGELINE
				TOTAL 0010	8,442	

MARKING LINE GROOVED WET REF EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH LF	REMARKS
0010	1498+00	-	1771+00	EB IH 94, R/L	27,295	YELLOW EDGELINE
0010	1498+00	-	1524+44	EB IH 94, 24' RT	2,643	WHITE EDGELINE
0010	1534+00	-	1550+75	EB IH 94, 24' RT	1,675	WHITE EDGELINE
0010	1563+97	-	1771+00	EB IH 94, 24' RT	20,700	WHITE EDGELINE
0010	1498+00	-	1771+00	WB IH 94, R/L	27,265	YELLOW EDGELINE
0010	1498+00	-	1521+97	WB IH 94, 24' LT	2,401	WHITE EDGELINE
0010	1534+90	-	1552+20	WB IH 94, 24' LT	1,730	WHITE EDGELINE
0010	1561+65	-	1771+00	WB IH 94, 24' LT	20,892	WHITE EDGELINE
0010	47+64	-	65+29	RAMP 'C', R/L	1,767	WHITE EDGELINE
0010	57+15	-	65+46	RAMP 'C', 15' LT	836	YELLOW EDGELINE
0010	66+31	-	67+47	RAMP 'C', LT	201	YELLOW EDGELINE
0010	66+34	-	67+47	RAMP 'C', R/L	113	WHITE EDGELINE
0010	60+00	-	87+71	RAMP 'B', R/L	2,772	WHITE EDGELINE
0010	61+98	-	64+00	RAMP 'B', 15' LT	203	WHITE EDGELINE GORE
0010	64+00	-	66+13	RAMP 'B', 15' LT	216	YELLOW EDGELINE
0010	67+27	-	74+50	RAMP 'B', 15' LT	731	YELLOW EDGELINE
0010	52+34	-	73+83	RAMP 'D', R/L	2,150	WHITE EDGELINE
0010	65+25	-	73+56	RAMP 'D', 15' RT	835	YELLOW EDGELINE
0010	75+24	-	83+70	RAMP 'A', 15' RT	850	YELLOW EDGELINE
0010	75+36	-	93+18	RAMP 'A', R/L	1,784	WHITE EDGELINE
				TOTAL 0010	117,059	

MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH LF	REMARKS
0010	1498+00	-	1771+00	EB IH 94, 12' RT	6,825	WHITE LANE LINE
0010	1524+44	-	1531+25	EB IH 94, 24' RT	168	WHITE 3' LINE, 9' GAP
0010	1498+00	-	1771+00	WB IH 94, 12' LT	6,825	WHITE LANE LINE
0010	1554+96	-	1561+65	WB IH 94, 24' LT	165	WHITE 3' LINE, 9' GAP
				TOTAL 0010	13,983	

MARKING LINE EPOXY 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.3020 MARKING LINE EPOXY 8-INCH LF	REMARKS
0010	64+90	-	65+48	RAMP 'C'	120	RT-TURN ISLAND GORE
0010	75+22	-	75+82	RAMP 'A'	125	RT-TURN ISLAND GORE
0010	61+98	-	64+00	RAMP 'B', 15' LT	203	EB STH 54 GORE
0010	61+98	-	64+00	EB STH 54, 24' RT	203	EB STH 54 GORE
0010	66+69	-	67+79	WB WTH 54, R/L	110	WB LT-TURN CHANNEL
0010	72+61	-	73+73	EB STH 54, R/L	112	EB LT-TURN CHANNEL
0010	74+49	-	75+34	WB STH 54, 24' LT	85	WB RT-TURN CHANNEL
				TOTAL 0010	958	

MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.3545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH LF	REMARKS
0010	1531+25	-	1534+00	EB IH 94, 24' RT	275	EB EXIT RAMP GORE
0010	1550+75	-	1556+47	EB IH 94, 24' RT	574	EB ENTRANCE RAMP GORE
0010	1528+65	-	1534+90	WB IH 94, 24' LT	625	WB ENTRANCE RAMP GORE
0010	1552+20	-	1554+96	WB IH 94, 24' LT	276	WB EXIT RAMP GORE
0010	54+45	-	57+15	RAMP 'C', 15' LT	273	EB EXIT RAMP GORE
0010	74+50	-	80+22	RAMP 'B', 15' LT	576	EB ENTRANCE RAMP GORE
0010	59+02	-	65+25	RAMP 'D', 15' RT	625	WB ENTRANCE RAMP GORE
0010	83+70	-	86+48	RAMP 'A', 15' RT	280	WB EXIT RAMP GORE
				TOTAL 0010	3,504	

MARKING ARROW EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.5020 MARKING ARROW EPOXY EACH	REMARKS
0010	66+89	-	66+97	WB STH 54, RT	1	LEFT-TURN LANE
0010	67+51	-	67+59	WB STH 54, RT	1	LEFT-TURN LANE
0010	72+81	-	72+89	EB STH 54, LT	1	LEFT-TURN LANE
0010	73+45	-	73+53	EB STH 54, LT	1	LEFT-TURN LANE
0010	74+69	-	74+77	WB STH 54, LT	1	RIGHT-TURN LANE
0010	75+06	-	75+14	WB STH 54, LT	1	RIGHT-TURN LANE
				TOTAL 0010	6	

MARKING AERIAL ENFORCEMENT BAR EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.5420 MARKING AERIAL ENFORCEMENT BAR EPOXY EACH	REMARKS
0010	1503+82	-	1765+00	EB IH 94	10	UNDISTRIBUTED
0010	1503+42	-	1765+00	WB IH 94	10	UNDISTRIBUTED
				TOTAL 0010	20	

MARKING STOP LINE EPOXY 18-INCH

CATEGORY	STATION	LOCATION	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	REMARKS
0010	65+96	EB STH 54, RT	24	THRU LANES
0010	73+73	EB STH 54, LT & RT	34	LEFT-TURN & THRU LANES
0010	66+69	WB STH 54, LT & RT	34	THRU LANES & LEFT-TURN
0010	74+49	WB STH 54, LT	40	RIGH-TURN & THRU LANES
0010	65+47	RAMP 'C', 26' RT	18	RIGHT-TURN LANE
0010	65+48	RAMP 'C', LT	16	THRU LANES & LEFT-TURN
0010	75+23	RAMP 'A', RT	18	THRU LANES & LEFT-TURN
0010	75+20	RAMP 'A', 18' LT	14	RIGHT-TURN LANE
		TOTAL 0010	198	

MARKING CHEVRON EPOXY 24-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.7220 MARKING CHEVRON EPOXY 24-INCH LF	REMARKS
0010	1531+60	-	1533+40	EB IH 94, RT	140	EB EXIT RAMP GORE, WHITE
0010	1552+76	-	1554+56	WB IH 94, LT	137	WB EXIT RAMP GORE, WHITE
				TOTAL 0010	277	

MARKING CURB EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.8120 MARKING CURB EPOXY LF	REMARKS
0010	65+21	-	65+59	RAMP 'C', RT	63	RIGHT-TURN ISLAND
0010	75+08	-	75+40	RAMP'A', LT	53	RIGHT-TURN ISLAND
0010	65+98	-	66+13	EB STH 54, LT	31	MEDIAN ISLAND NOSE
0010	66+68	-	66+85	WB STH 54, 12.5' RT	17	MEDIAN CURB
0010	66+78	-	66+94	EB STH 54, 2.5' LT	16	MEDIAN CURB
0010	73+48	-	73+63	WB STH 54, 2.5' RT	15	MEDIAN CURB
0010	73+65	-	73+76	EB STH 54, 12.5' LT	10	MEDIAN CURB
0010	74+52	-	74+65	EB STH 54, LT	29	MEDIAN ISLAND NOSE
				TOTAL 0010	234	

MARKING ISLAND NOSE EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.8220 MARKING ISLAND NOSE EPOXY EACH	REMARKS
0010	65+21	-	65+59	RAMP 'C', RT	3	RIGHT-TURN ISLAND
0010	75+08	-	75+40	RAMP 'A', LT	3	RIGHT-TURN ISLAND
0010	66+76			EB STH 54, 5' LT	1	MEDIAN ISLAND
0010	73+77			EB STH 54, 15' LT	1	MEDIAN ISLAND
				TOTAL 0010	8	

MARKING REMOVAL LINE 4-INCH

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	REMARKS
0010	PASSING LANE CLOSED	55+00	-	58+50	EB STH 54, 12' RT	100	LANE LINE SKIPS
0010	DRIVING LANE CLOSED	89+50	-	95+00	WB STH 54, 12' LT	150	LANE LINE SKIPS
					TOTAL 0010	250	

TEMPORARY MARKING LINE PAINT 4-INCH

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH LF	REMARKS
0010	LOWER LAYER	1498+00	-	1771+00	EB IH 94, R/L	27,295	YELLOW EDGELINE
0010	LOWER LAYER	1498+00	-	1771+00	EB IH 94, 12' RT	6,825	WHITE 12.5' LANE LINE
0010	LOWER LAYER	1498+00	-	1524+44	EB IH 94, 24' RT	2,643	WHITE EDGELINE
0010	LOWER LAYER	1524+44	-	1531+25	EB IH 94, 24' RT	168	WHITE 3' LINE, 9' GAP
0010	LOWER LAYER	1534+00	-	1550+75	EB IH 94, 24' RT	1,675	WHITE EDGELINE
0010	LOWER LAYER	1563+97	-	1771+00	EB IH 94, 24' RT	20,700	WHITE EDGELINE
0010	UPPER LAYER	1498+00	-	1771+00	EB IH 94, 12' RT	6,825	WHITE 12.5' LANE LINE
0010	LOWER LAYER	1498+00	-	1771+00	WB IH 94, R/L	27,265	YELLOW EDGELINE
0010	LOWER LAYER	1498+00	-	1771+00	WB IH 94, 12' LT	6,825	WHITE 12.5' LANE LINE
0010	LOWER LAYER	1498+00	-	1521+97	WB IH 94, 24' LT	2,401	WHITE EDGELINE
0010	LOWER LAYER	1534+90	-	1552+20	WB IH 94, 24' LT	1,730	WHITE EDGELINE
0010	LOWER LAYER	1554+96	-	1561+65	WB IH 94, 24' LT	165	WHITE 3' LINE, 9' GAP
0010	LOWER LAYER	1561+65	-	1771+00	WB IH 94, 24' LT	20,892	WHITE EDGELINE
0010	UPPER LAYER	1498+00	-	1771+00	WB IH 94, 12' LT	6,825	WHITE 12.5' LANE LINE
0010	-----	47+64	-	65+29	RAMP 'C', R/L	1,767	WHITE EDGELINE
0010	-----	57+15	-	65+46	RAMP 'C', 15' LT	836	YELLOW EDGELINE
0010	-----	66+31	-	67+47	RAMP 'C', LT	201	YELLOW EDGELINE
0010	-----	66+34	-	67+47	RAMP 'C', R/L	113	WHITE EDGELINE
0010	-----	60+00	-	87+71	RAMP 'B', R/L	2,772	WHITE EDGELINE
0010	-----	61+98	-	64+00	RAMP 'B', 15' LT	203	WHITE EDGELINE GORE
0010	-----	64+00	-	66+13	RAMP 'B', 15' LT	216	YELLOW EDGELINE
0010	-----	67+27	-	74+50	RAMP 'B', 15' LT	731	YELLOW EDGELINE
0010	-----	52+34	-	73+83	RAMP 'D', R/L	2,150	WHITE EDGELINE
0010	-----	65+25	-	73+56	RAMP 'D', 15' RT	835	YELLOW EDGELINE
0010	-----	75+24	-	83+70	RAMP 'A', 15' RT	850	YELLOW EDGELINE
0010	-----	75+36	-	93+18	RAMP 'A', R/L	1,784	WHITE EDGELINE
0010	-----	58+00	-	66+10	EB STH 54, R/L	810	YELLOW EDGELINE
0010	-----	66+82	-	73+73	EB STH 54, 0'-10' LT	691	YELLOW EDGELINE
0010	-----	74+62	-	79+00	EB STH 54, R/L	438	YELLOW EDGELINE
0010	-----	58+00	-	79+00	EB STH 54, 12' RT	168	WHITE 4' LANE LINE
0010	-----	58+00	-	60+00	EB STH 54, 24' RT	201	WHITE EDGELINE
0010	-----	64+00	-	66+06	EB STH 54, 24' RT	208	WHITE EDGELINE
0010	-----	66+26	-	74+31	EB STH 54, 24' RT	809	WHITE EDGELINE
0010	-----	75+03	-	79+00	EB STH 54, 24' RT	400	WHITE EDGELINE
0010	-----	58+00	-	65+95	WB STH 54, R/L	795	YELLOW EDGELINE
0010	-----	66+69	-	73+58	WB STH 54, 0'-10' RT	690	YELLOW EDGELINE
0010	-----	74+49	-	79+00	WB STH 54, R/L	451	YELLOW EDGELINE
0010	-----	58+00	-	79+00	WB STH 54, 12' LT	168	WHITE 4' LANE LINE
0010	-----	58+00	-	65+48	WB STH 54, 24' LT	744	WHITE EDGELINE
0010	-----	66+37	-	73+68	WB STH 54, 24' LT	727	WHITE EDGELINE
0010	-----	74+69	-	79+00	WB STH 54, 24' LT	428	WHITE EDGELINE
					TOTAL 0010	152,420	

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF	REMARKS
0010	EB RAMPS CLOSED	1524+44	-	1531+25	EB IH 94, 24' RT	681	WHITE EDGELINE
0010	EB RAMPS CLOSED	59+40	-	62+00	EB STH 54, 24' RT	260	WHITE EDGELINE
0010	EB RAMPS CLOSED	66+07	-	67+20	EB STH 54, 24' RT	113	WHITE EDGELINE
0010	EB RAMPS CLOSED	65+95	-	68+82	WB STH 54, 0' LT	287	YELLOW EDGELINE
0010	WB RAMPS CLOSED	1554+96	-	1561+65	WB IH 94, 24' LT	670	WHITE EDGELINE
0010	WB RAMPS CLOSED	71+70	-	74+60	EB STH 54, 0' RT	290	YELLOW EDGELINE
0010	WB RAMPS CLOSED	72+60	-	76+80	WB STH 54, 24' LT	420	WHITE EDGELINE
0010	PASSING LANE CLOSED	55+25	-	58+50	EB STH 54	325	YELLOW EDGELINE TAPER
0010	PASSING LANE CLOSED	89+50	-	94+50	WB STH 54	500	YELLOW EDGELINE TAPER
0010	DRIVING LANE CLOSED	55+00	-	58+50	EB STH 54	350	WHITE EDGELINE TAPER
0010	DRIVING LANE CLOSED	89+50	-	94+50	WB STH 54	500	WHITE EDGELINE TAPER
					TOTAL 0010	4,396	

TEMPORARY MARKING LINE PAINT 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	649.0205 TEMPORARY MARKING LINE PAINT 8-INCH LF	REMARKS
0010	1531+25	-	1534+00	EB IH 94, 24' RT	275	EB EXIT RAMP GORE
0010	1550+75	-	1556+47	EB IH 94, 24' RT	574	EB ENTRANCE RAMP GORE
0010	1528+65	-	1534+90	WB IH 94, 24' LT	625	WB ENTRANCE RAMP GORE
0010	1552+20	-	1554+96	WB IH 94, 24' LT	276	WB EXIT RAMP GORE
0010	54+45	-	57+15	RAMP 'C', 15' LT	273	EB EXIT RAMP GORE
0010	74+50	-	80+22	RAMP 'B', 15' LT	576	EB ENTRANCE RAMP GORE
0010	59+02	-	65+25	RAMP 'D', 15' RT	625	WB ENTRANCE RAMP GORE
0010	83+70	-	86+48	RAMP 'A', 15' RT	280	WB EXIT RAMP GORE
0010	64+90	-	65+48	RAMP 'C'	120	RT-TURN ISLAND GORE
0010	75+22	-	75+82	RAMP 'A'	125	RT-TURN ISLAND GORE
0010	61+98	-	64+00	RAMP 'B', 15' LT	203	EB STH 54 GORE
0010	61+98	-	64+00	EB STH 54, 24' RT	203	EB STH 54 GORE
0010	66+69	-	67+79	WB WTH 54, R/L	110	WB LT-TURN CHANNEL
0010	72+61	-	73+73	EB STH 54, R/L	112	EB LT-TURN CHANNEL
0010	74+49	-	75+34	WB STH 54, 24' LT	85	WB RT-TURN CHANNEL
				TOTAL 0010	4,462	

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CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	REMARKS
0010	1503+00	-	1766+00	EB IH 94 R/L	26,294	INSIDE EOP
0010	1503+00	-	1766+00	WB IH 94 R/L	26,265	INSIDE EOP
0010	74+74.18	-	93+17.95	RAMP 'A' R/L	1,844	OUTSIDE EOP
0010	60+00.00	-	87+71.49	RAMP 'B' R/L	2,772	OUTSIDE EOP
0010	47+64.05	-	67+62.94	RAMP 'C' R/L	1,999	OUTSIDE EOP
0010	52+33.55	-	74+63.43	RAMP 'D' R/L	2,230	OUTSIDE EOP
0010	59+00	-	79+00	EB STH 54 R/L	2,000	INSIDE EOP
0010	59+00	-	79+00	WB STH 54 R/L	2,000	INSIDE EOP
				TOTAL 0010	65,404	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (01. 1023-00-79)

CATEGORY	STATION	TO	STATION	LOCATION	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (01. 1023-00-79) LS	REMARKS
0010	1503+82	-	1765+00	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

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SAWING ASPHALT

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
0010	2A	1503+82	-	1765+00	EB IH 94, 0' LT	1,000	PASSING LANE
0010	2B	1503+82	-	1765+00	EB IH 94, 24' RT	1,500	DRIVING LANE
0010	2A	1503+42	-	1765+00	WB IH 94, 0' RT	1,000	PASSING LANE
0010	2B	1503+42	-	1765+00	WB IH 94, 24' LT	1,500	DRIVING LANE
					TOTAL 0010	5,000	

SAWING CONCRETE

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	690.0250 SAWING CONCRETE LF	REMARKS
0010	2A	1503+82	-	1765+00	EB IH 94	7,200	PASSING LANE
0010	2B	1503+82	-	1765+00	EB IH 94	10,800	DRIVING LANE
0010	2A	1503+42	-	1765+00	WB IH 94	7,200	PASSING LANE
0010	2B	1503+42	-	1765+00	WB IH 94	10,800	DRIVING LANE
0010		75+02	-	86+18	RAMP 'A'	400	
0010		62+36	-	75+11	RAMP 'B'	400	
0010		54+65	-	65+63	RAMP 'C'	400	
0010		60+29	-	74+11	RAMP 'D'	400	
0010		59+24	-	78+67	EB STH 54	600	
0010		59+19	-	78+51	WB STH 54	600	
					TOTAL 0010	38,800	

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CLEANING DITCH

CATEGORY	STATION	LOCATION	SPV.0060.01 SPECIAL (01. CLEANING DITCH) EACH	REMARKS
0010	1558+75	EB IH 94, RT	1	
0010	1629+00	EB IH 94, RT	1	
0010	1745+00	EB IH 94, RT	1	
0010	1576+96	WB IH 94, LT	1	
		TOTAL 0010	4	

MILLING AND REMOVING TEMPORARY TRANSVERSE JOINTS (02. 1023-00-79)

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0060.02 SPECIAL (02. MILLING AND REMOVING TEMPORARY TRANSVERSE JOINTS (02. 1023-00-79)) EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

MATERIAL TRANSFER VEHICLE (04. 1023-00-79)

CATEGORY	STATION	TO	STATION	LOCATION	460.9000.S.01 MATERIAL TRANSFER VEHICLE (1023-00-79) EACH	REMARKS
0010	1503+82	-	1765+00	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

3

MILL AND REMOVE TEMPORARY LONGITUDINAL JOINT

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	SPV.0090.01 SPECIAL (01. MILL AND REMOVE TEMPORARY LONGITUDINAL JOINT) LF	REMARKS
0010	3A	1503+82	-	1519+51	EB IH 94	1,569	24' RT
0010	3A	1521+95	-	1524+44	EB IH 94	249	24' RT
0010	3A	1524+44	-	1531+44	EB IH 94	701	VAR. RT
0010	3A	1531+44	-	1554+99	EB IH 94	2,353	24' RT
0010	3A	1554+99	-	1563+97	EB IH 94	899	VAR. RT
0010	3A	1563+97	-	1641+89	EB IH 94	7,793	24' RT
0010	3A	1645+01	-	1765+00	EB IH 94	11,995	24' RT
0010	3A	1503+42	-	1519+97	WB IH 94	1,659	24' LT
0010	3A	1521+87	-	1529+92	WB IH 94	805	VAR. LT
0010	3A	1529+92	-	1554+66	WB IH 94	2,472	24' LT
0010	3A	1554+66	-	1561+65	WB IH 94	700	VAR. LT
0010	3A	1561+65	-	1641+19	WB IH 94	7,907	24' LT
0010	3A	1644+35	-	1765+00	WB IH 94	12,069	24' LT
0010	3B	1503+82	-	1519+51	EB IH 94	1,569	12' RT
0010	3B	1521+95	-	1641+89	EB IH 94	11,992	12' RT
0010	3B	1645+01	-	1765+00	EB IH 94	11,997	12' RT
0010	3B	1503+42	-	1519+97	WB IH 94	1,656	12' LT
0010	3B	1521+84	-	1641+19	WB IH 94	11,893	12' LT
0010	3B	1644+35	-	1765+00	WB IH 94	12,067	12' LT
					TOTAL 0010	102,345	

CONCRETE PAVEMENT REPAIR/REPLACEMENT NON-DOWELED SPECIAL

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	SPV.0180.02 SPECIAL (02. CONCRETE PAVEMENT REPAIR NON-DOWELED SPECIAL) SY	SPV.0180.03 SPECIAL (03. CONCRETE PAVEMENT REPLACEMENT NON-DOWELED SPECIAL) SY	REMARKS
0010	2A	1503+82	-	1765+00	EB IH 94	1,000	100	PASSING LANE
0010	2B	1503+82	-	1765+00	EB IH 94	1,500	100	DRIVING LANE
0010	2A	1503+42	-	1765+00	WB IH 94	1,000	100	PASSING LANE
0010	2B	1503+42	-	1765+00	WB IH 94	1,500	100	DRIVING LANE
					TOTAL 0010	5,000	400	

CONCRETE PAVEMENT REPAIR/REPLACEMENT DOWELED SPECIAL

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0180.04 SPECIAL (04. CONCRETE PAVEMENT REPAIR DOWELED SPECIAL) SY	SPV.0180.05 SPECIAL (05. CONCRETE PAVEMENT REPLACEMENT DOWELED SPECIAL) SY	REMARKS
0010	75+02	-	86+18	RAMP 'A'	100	40	
0010	62+36	-	75+11	RAMP 'B'	100	40	
0010	54+65	-	65+63	RAMP 'C'	100	40	
0010	60+29	-	74+11	RAMP 'D'	100	40	
0010	59+24	-	78+67	EB STH 54	150	60	
0010	59+19	-	78+51	WB STH 54	150	60	
				TOTAL 0010	700	280	

ASPHALTIC BASE PATCHING PARTIAL DEPTH SPECIAL

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0195.01 SPECIAL (01. ASPHALTIC BASE PATCHING PARTIAL DEPTH SPECIAL) TON	REMARKS
0010	1503+82	-	1765+00	EB IH 94	85	UNDISTRIBUTED
0010	1503+42	-	1765+00	WB IH 94	85	UNDISTRIBUTED
				TOTAL 0010	170	

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1503'WB'+52 TO STA 1507'WB'+36, RT
STA 1503'WB'+52 TO STA 1508'WB'+45, LT
STA 1517'WB'+28 TO STA 1519'WB'+74, RT
STA 1518'WB'+32 TO STA 1519'WB'+90, LT
STA 1521'WB'+84 TO STA 1523'WB'+04, RT
STA 1522'WB'+00 TO STA 1526'WB'+70, LT

N

BEGIN PROJECT
STA 1503+42'WB'
Y=100536.32
X= 91526.19
MATCH EXISTING BRIDGE DECK
BUTT JOINT REQ'D.

OVERLAY EXISTING MEDIAN CROSSOVER
1.5" HMA PAVEMENT 4 MT 58-34 S

EXCEPTION TO NET C/L LENGTH
STA 1519'WB'+90 - STA 1521'WB'+80
EXISTING B-27-42
BUTT JOINTS REQD.

EQUATION
STA BACK = 1510+61.85'WB'
STA AHEAD = 1510+57.60'WB'

BP: 1496+65.74'WB'

EXISTING R/W

CENTURYLINK

AT&T LEGACY

ATC MANAGEMENT

BP: 52+33.55'D'

EXISTING B-27-40

1500'WB' 1505'WB' 1510'WB' S42° 03' 37"E 1515'WB' 1520'WB' 55'D' 1525'WB'

EXISTING CONST. CROSSOVER

VAR

1500'EB' 1505'EB' 1510'EB' 1515'EB' S42° 44' 35"E 1520'EB' 1525'EB'

IH 94

EXISTING B-27-39

BP: 1497+03.36'EB'

BLACK RIVER

STA BACK = 1509+84.05'EB'
STA AHEAD = 1509+84.90'EB'

EQUATION

BLACK RIVER FALLS UTILITIES

EXISTING R/W

VAUDRIEL RD

BP: 47+64.05'C'

EXCEPTION TO NET C/L LENGTH
STA 1519'EB'+52 - STA 1521'EB'+95
EXISTING B-27-41
BUTT JOINTS REQD.

BEGIN PROJECT
STA 1503+82'EB'
Y=100448.05
X= 91476.93
MATCH EXISTING BRIDGE DECK
BUTT JOINT REQ'D.

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1503'EB'+91 TO STA 1506'EB'+97, RT
STA 1516'EB'+93 TO STA 1519'EB'+76, LT
STA 1517'EB'+54 TO STA 1519'EB'+62, RT
STA 1521'EB'+73 TO STA 1523'EB'+53, RT

STA 1522'EB'+20, LT & RT
2-CULVERT END MARKERS REQ'D

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 116	E

NOTES:

NOTIFY THE NORTHWEST REGION ELECTRICAL FIELD UNIT (PH. 715-225-0360) A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO MILLING OPERATIONS AT THE SIGNALIZED RAMP TERMINAL INTERSECTIONS ON STH 54.

EXISTING VEHICLE DETECTION LOOPS AND PULL BOXES IN THE PAVEMENT SHALL BE LOCATED AND MARKED IN THE FIELD BEFORE ANY MILLING OCCURS.

AVOID OR PROTECT ALL EXISTING PULL BOXES AND LOOP DETECTORS WITHIN CONSTRUCTION LIMITS DURING MILLING OPERATIONS.

NO ADJUSTMENTS TO EXISTING PULL BOXES OR LOOP DETECTORS ARE ANTICIPATED. PROPOSED ASPHALT OVERLAYS MAY COVER THESE EXISTING INSTALLATIONS.

PI STA = 1538+60.01'WB'
DELTA = 2°28'10"
D = 0°10'00"
T = 740.91'
L = 1481.59'
R = 34377.47'
PC STA = 1531+19.10'WB'
PT STA = 1546+00.69'WB'
SE = MATCH EXISTING RC (2.0%)

STA 1536'WB'+20
CLEAN EXISTING 30" RCCP

STA 1552'WB'+36, LT & RT
2-CULVERT END MARKERS REQ'D

OVERLAY EXISTING MEDIAN CROSSOVER
1.5" HMA PAVEMENT 4 MT 58-34 S

ATC MANAGEMENT
AT&T LEGACY
WETLAND
EXISTING R/W
EXISTING CONST. CROSSOVER
EXISTING B-27-116
EXISTING B-27-45
EXISTING 12-INCH PULL BOX FOR VEHICLE DETECTION LOOPS
WISDOT
WE ENERGIES
BLACK RIVER FALLS UTILITIES
JACKSON ELECTRIC COOP.
CAUTION
STH 54
IH 94
RAMP 'A'
RAMP 'B'
RAMP 'C'
RAMP 'D'
PC: 63+06.22'D'
PT: 71+08.85'D'
PC: 153+19.10'WB'
PC: 1546+00.69'WB'
PT: 1550+12.13'WB'
PI: 1538+60.01'WB'
BP: 74+74.18'A'
PC: 75+80.10'A'
EP: 74+63.48'D'
PT: 87+16.51'A'
PC: 53+64.05'C'
PT: 61+63.01'C'
EP: 67+62.94'C'
PC: 62+37.67'B'
PT: 77+22.91'B'
STA BACK = 1555+43.08'EB'
STA AHEAD = 1555+41.11'EB'
PC: 79+17.00'B'
PC: 1555+41.11'EB'
EQUATION

STA 1529'EB'+00, LT
SALVAGE AND RELAY 18" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

STA 1536'EB'+50
CLEAN EXISTING 30" RCCP
1-CULVERT END MARKER REQ'D, LT

STA 1542'EB'+06 TO STA 1544'EB'+27, LT
REMOVE EXISTING GUARDRAIL

STA 1542'EB'+06 TO STA 1544'EB'+27, LT
275 LF STEEL THRIE BEAM REQ'D
2-STEEL THRIE BEAM BULLNOSE TERMINAL REQ'D

STA 1552'EB'+50, LT
SALVAGE AND RELAY 36" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 117	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\050111_PL_MAINLINE.DWG
LAYOUT NAME - Sheet 102
PLOT DATE : 7/19/2021 3:04 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

STA 1558'WB'+22
CLEAN EXISTING 42" RCCP
1-CULVERT END MARKER REQ'D, RT

STA 1567'WB'+90
CLEAN EXISTING 18" RCCP

PI STA = 1570+74.81'WB'
DELTA = 13°41'09"
D = 0°20'00"
T = 2062.68'
L = 4105.74'
R = 17188.74'
PC STA = 1550+12.13'WB'
PT STA = 1591+12.74'WB'
SE = MATCH EXISTING RC (2.0%)

STA 1576'WB'+96, LT
CLEAN DITCH

N

OVERLAY EXISTING MEDIAN CROSSOVER
1.5" HMA PAVEMENT 4 MT 58-34 S

JACKSON ELECTRIC COOP.

PT: 87+16.51'A'

ATC MANAGEMENT

AT&T LEGACY

EP: 93+17.95'A'

PI: 1570+74.81'WB'

WETLAND

PI: 1573+32.45'EB'

EXISTING R/W

5

5

90'A'

1555'WB'

1560'WB'

1565'WB'

1570'WB'

1575'WB'

1580'WB'

1585'WB'

EXISTING MAINT. CROSSOVER

WETLAND

VAR

WETLAND

1555'EB'

1560'EB'

1565'EB'

1570'EB'

1575'EB'

1580'EB'

1585'EB'

85'B'

80'B'

WETLAND

EXISTING R/W

EP: 87+71.49'B'

STA BACK = 1555+43.08'EB'

STA AHEAD = 1555+41.11'EB'

PC: 79+17.00'B'

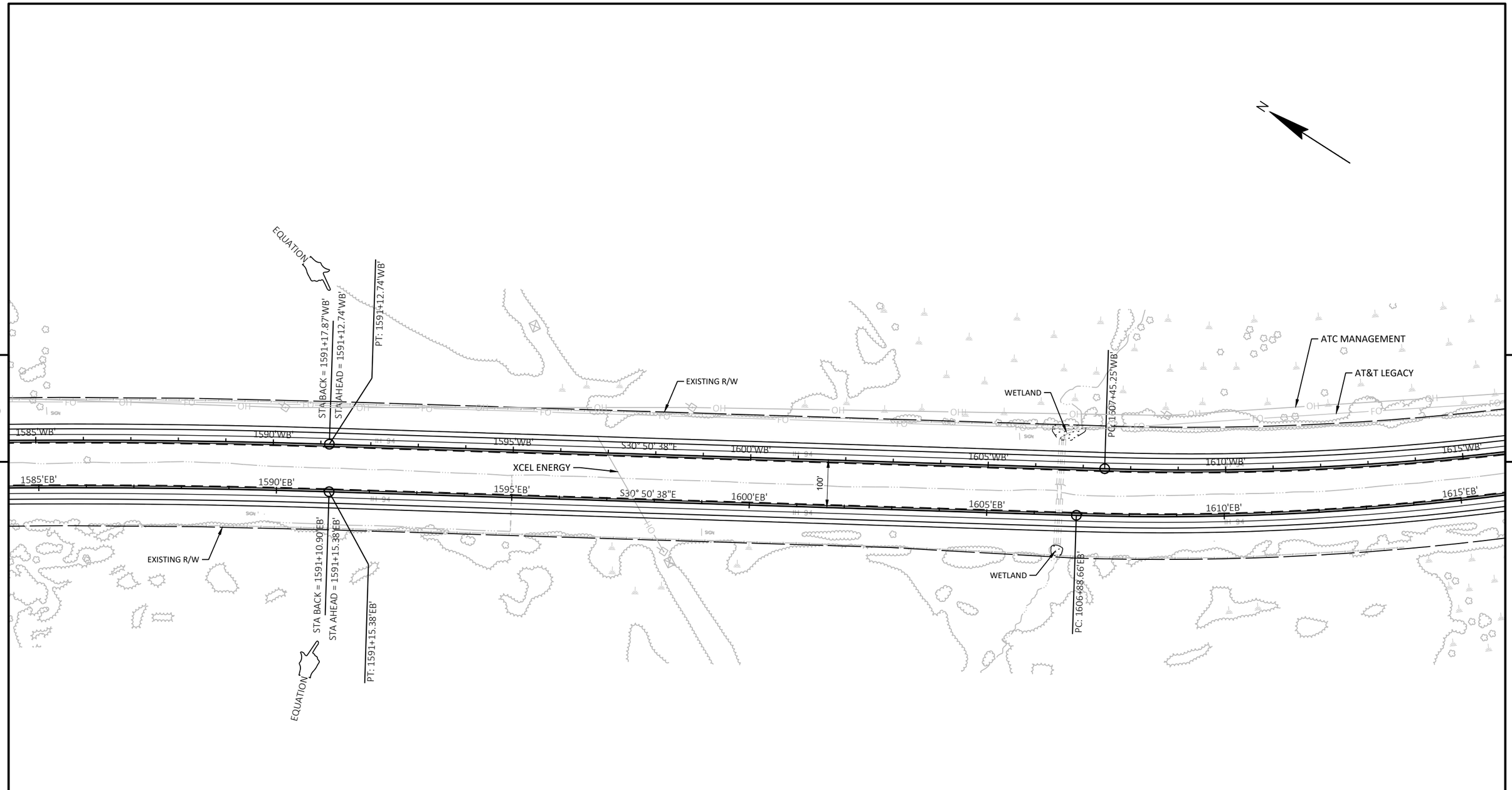
PC: 1555+41.11'EB'

EQUATION

STA 1558'EB'+75, RT
CLEAN DITCH
SALVAGE AND RELAY 42" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

PI STA = 1573+32.45'EB'
DELTA = 11°53'57"
D = 0°20'00"
T = 1791.34'
L = 3569.79'
R = 17188.74'
PC STA = 1555+41.11'EB'
PT STA = 1591+15.38'EB'
SE = MATCH EXISTING RC (2.0%)

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 118	E



STA 1595'EB'+00
CLEAN EXISTING 18" RCCP
1-CULVERT END MARKER REQ'D, LT

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 119 E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\050111_PL_MAINLINE.DWG
LAYOUT NAME - Sheet 104

PLOT DATE : 7/19/2021 3:05 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : ##########

PI STA = 1622+27.88'WB'
DELTA = 29°00'58"
D = 1°00'00"
T = 1482.63'
L = 2901.62'
R = 5729.58'
PC STA = 1607+45.25'WB'
PT STA = 1636+91.23'WB'
SE = MATCH EXISTING (3.3%)

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1638'WB'+46 TO STA 1641'WB'+42, LT
STA 1643'WB'+47 TO STA 1648'WB'+54, LT
STA 1643'WB'+90 TO STA 1646'WB'+57, RT

N

EXCEPTION TO NET C/L LENGTH
STA 1641'WB'+20 - STA 1644'WB'+34
EXISTING B-27-44
BUTT JOINTS REQD.

EQUATION
STA BACK = 1636+46.86'WB'
STA AHEAD = 1636+91.23'WB'
PT: 1636+91.23'WB'

UNION PACIFIC RAILROAD

ATC MANAGEMENT
EXISTING R/W
AT&T LEGACY
EXISTING B-27-53
SPRINT
T-MOBILE
60'

1615'WB'
1615'EB'
1620'WB'
1620'EB'
1625'WB'
1625'EB'
1630'WB'
1630'EB'
1635'WB'
1635'EB'
1640'WB'
1640'EB'
1645'WB'
1645'EB'

IH 94

7th ST
CENTURYLINK
JACKSON ELECTRIC COOP.
EXISTING R/W

PI: 1621+71.29'EB'
PI: 1622+27.88'WB'

EQUATION
STA BACK = 1635+90.28'EB'
STA AHEAD = 1635+93.24'EB'
PT: 1635+93.24'EB'

EXCEPTION TO NET C/L LENGTH
STA 1641'EB'+89 - STA 1645'EB'+01
EXISTING B-27-43
BUTT JOINTS REQD.

STA 1626'EB'+86 TO STA 1628'EB'+57, LT
REMOVE EXISTING GUARDRAIL

STA 1626'EB'+86 TO STA 1628'EB'+57, LT
175 LF STEEL THRIE BEAM REQ'D
2-STEEL THRIE BEAM BULLNOSE TERMINAL REQ'D

PI STA = 1621+71.29'EB'
DELTA = 29°00'58"
D = 1°00'00"
T = 1482.63'
L = 2901.62'
R = 5729.58'
PC STA = 1606+88.66'EB'
PT STA = 1635+93.24'EB'
SE = MATCH EXISTING (3.3%)

STA 1629'EB'+00, RT
CLEAN DITCH
SALVAGE AND RELAY 18" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1637'EB'+67 TO STA 1642'EB'+74, RT
STA 1639'EB'+77 TO STA 1642'EB'+34, LT
STA 1644'EB'+81 TO STA 1649'EB'+99, RT

5

5

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 120	E

STA 1658'WB'+00
CLEAN EXISTING 18" RCCP
2-CULVERT END MARKERS REQ'D, LT & RT

OVERLAY EXISTING CROSSOVER
1.5" HMA PAVEMENT 4 MT 58-34 S

N

ATC MANAGEMENT

AT&T LEGACY

EXISTING R/W

1650'WB' 1655'WB' 1660'WB' S59° 51' 36"E 1665'WB' 1670'WB' 1675'WB'

1650'EB' S59° 51' 36"E 1655'EB' 1660'EB' 1665'EB' 1670'EB' 1675'EB'

EXISTING CONST. CROSSOVER

60'

EXISTING R/W

PC: 1668+14.08'EB'

WETLAND

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 121	E

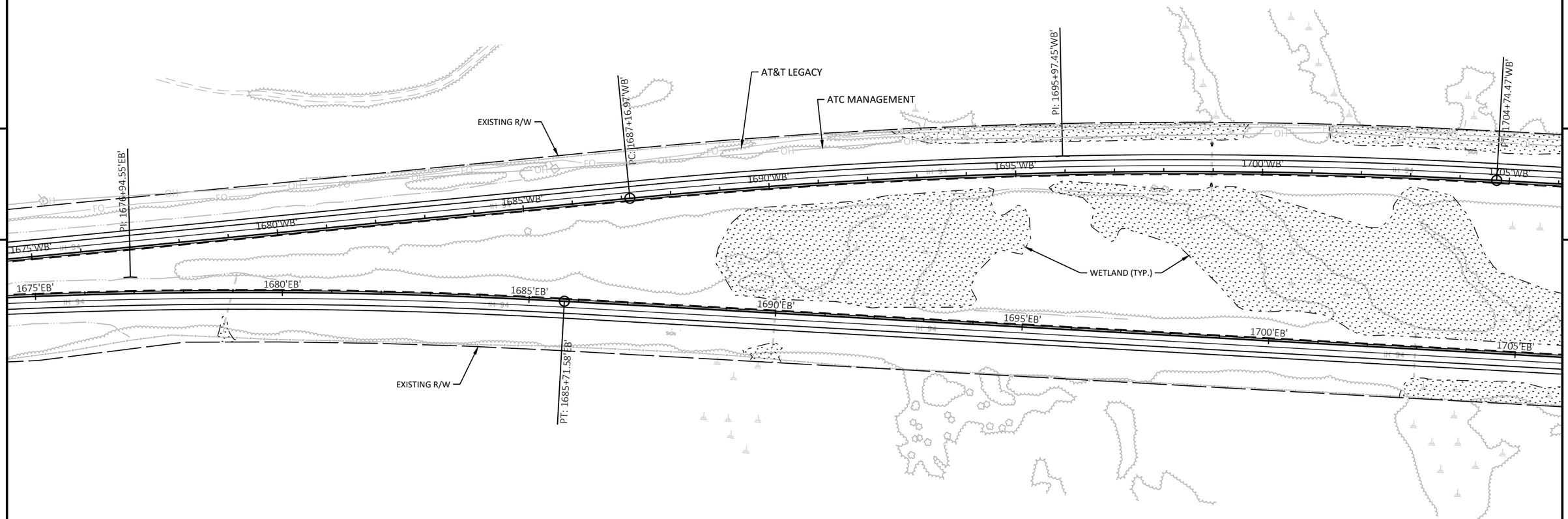
FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\050111_PL_MAINLINE.DWG
LAYOUT NAME - Sheet 106

PLOT DATE : 7/19/2021 3:06 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

PI STA = 1695+97.45'WB'
DELTA = 8°47'15"
D = 0°30'00"
T = 880.47'
L = 1757.50'
R = 11459.16'
PC STA = 1687+16.97'WB'
PT STA = 1704+74.47'WB'
SE = MATCH EXISTING RC (2.0%)

STA 1699'WB'+00, LT & RT
SALVAGE AND RELAY 2-30" REINF CONC AEW
4-DRILLED JOINT TIES REQ'D (INCIDENTAL)
2-CULVERT END MARKER REQ'D



PI STA = 1676+94.55'EB'
DELTA = 8°47'15"
D = 0°30'00"
T = 880.47'
L = 1757.50'
R = 11459.16'
PC STA = 1668+14.08'EB'
PT STA = 1685+71.58'EB'
SE = MATCH EXISTING RC (2.0%)

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 122	E

N

EXISTING R/W

ATC MANAGEMENT

AT&T LEGACY

PT: 1704+74.47'WB'

1705'WB' 1710'WB' 1715'WB' 1720'WB' 1725'WB' 1730'WB'

WETLAND (TYP.)

350'

1705'EB' 1710'EB' 1715'EB' 1720'EB' 1725'EB' 1730'EB'

IH 94

EXISTING R/W

STA 1710'EB'+00, LT & RT
CLEAN EXISTING 24" RCCP
SALVAGE AND RELAY 2-24" REINF CONC AEW
4-DRILLED JOINT TIES REQ'D (INCIDENTAL)
2-CULVERT END MARKER REQ'D

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 123	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\050111_PL_MAINLINE.DWG
LAYOUT NAME - Sheet 108

PLOT DATE : 7/19/2021 3:07 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1741'WB'+01 TO STA 1745'WB'+31, RT
STA 1742'WB'+85 TO STA 1745'WB'+77, LT

N

EXISTING R/W

EXISTING C-27-39
TWIN CELL 7' X 6'
R.C. BOX CULVERT

ATC MANAGEMENT

AT&T LEGACY

1735'WB' IH 94 1740'WB' 1745'WB' S51° 04' 21"E 1750'WB' 1755'WB' IH 94 1760'WB'

PERRY CREEK

WETLAND (TYP.)

350'

1735'EB' 1740'EB' S51° 04' 21"E 1745'EB' 1750'EB' 1755'EB' 1760'EB'

IH 94 IH 94 IH 94

EXISTING C-27-38
TWIN CELL 7' X 6'
R.C. BOX CULVERT

EXISTING R/W

STA 1737'EB'+54, LT
1-CULVERT END MARKER REQ'D

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1735'EB'+21 TO STA 1738'EB'+26, RT
STA 1735'EB'+65 TO STA 1739'EB'+95, LT

STA 1745'EB'+00, LT
REMOVE 14' EXISTING 24" RCCP (MEDIAN SIDE)
1-CONCRETE COLLAR REQ'D
1-24" X 8' CPRC CLASS III REQ'D
1-24" AEW REQ'D
1-CULVERT END MARKER REQ'D

STA 1745'EB'+00, RT
CLEAN DITCH
1-CULVERT END MARKER REQ'D

STA 1752'EB'+00
CLEAN EXISTING 24" RCCP
2-CULVERT END MARKERS REQ'D, LT & RT

STA 1762'EB'+00
CLEAN EXISTING 24" RCCP

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 124	E

END PROJECT
STA 1765+00'WB'
MATCH EXISTING
BUTT JOINT REQ'D

ATC MANAGEMENT

AT&T LEGACY

EXISTING R/W

1765'WB' | 1770'WB' | 1775'WB' | 1780'WB' | 1785'WB' | 1790'WB' | EP: 1792+08.77'WB'

IH 94

5

WETLAND (TYP.)

350'

1765'EB' | 1770'EB' | 1775'EB' | 1780'EB' | 1785'EB' | 1790'EB' | 1791'EB'

IH 94

EXISTING R/W

EP: 1791+77.26'EB'

END PROJECT
STA 1765+00'EB'
MATCH EXISTING
BUTT JOINT REQ'D

STA 1762'EB'+00
CLEAN EXISTING 24" RCCP

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 125	E

PI STA = 81+55.87'A'
DELTA = 22°43'41"
D = 2°00'00"
T = 575.77'
L = 1136.40'
R = 2864.79'
PC STA = 75+80.10'A'
PT STA = 87+16.51'A'
SE = MATCH EXISTING (4.0%)

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 77'A'+99 TO STA 83'A'+87, LT

STA 83'A'+87.5 TO STA 84'A'+76.5, LT
REMOVE EXISTING GUARDRAIL

STA 83'A'+87.5 TO STA 85'A'+87.5, LT
150 LF STEEL PLATE BEAM GUARD CLASS A REQ'D
1-STEEL PLATE BEAM GUARD EAT REQ'D

NOTES:

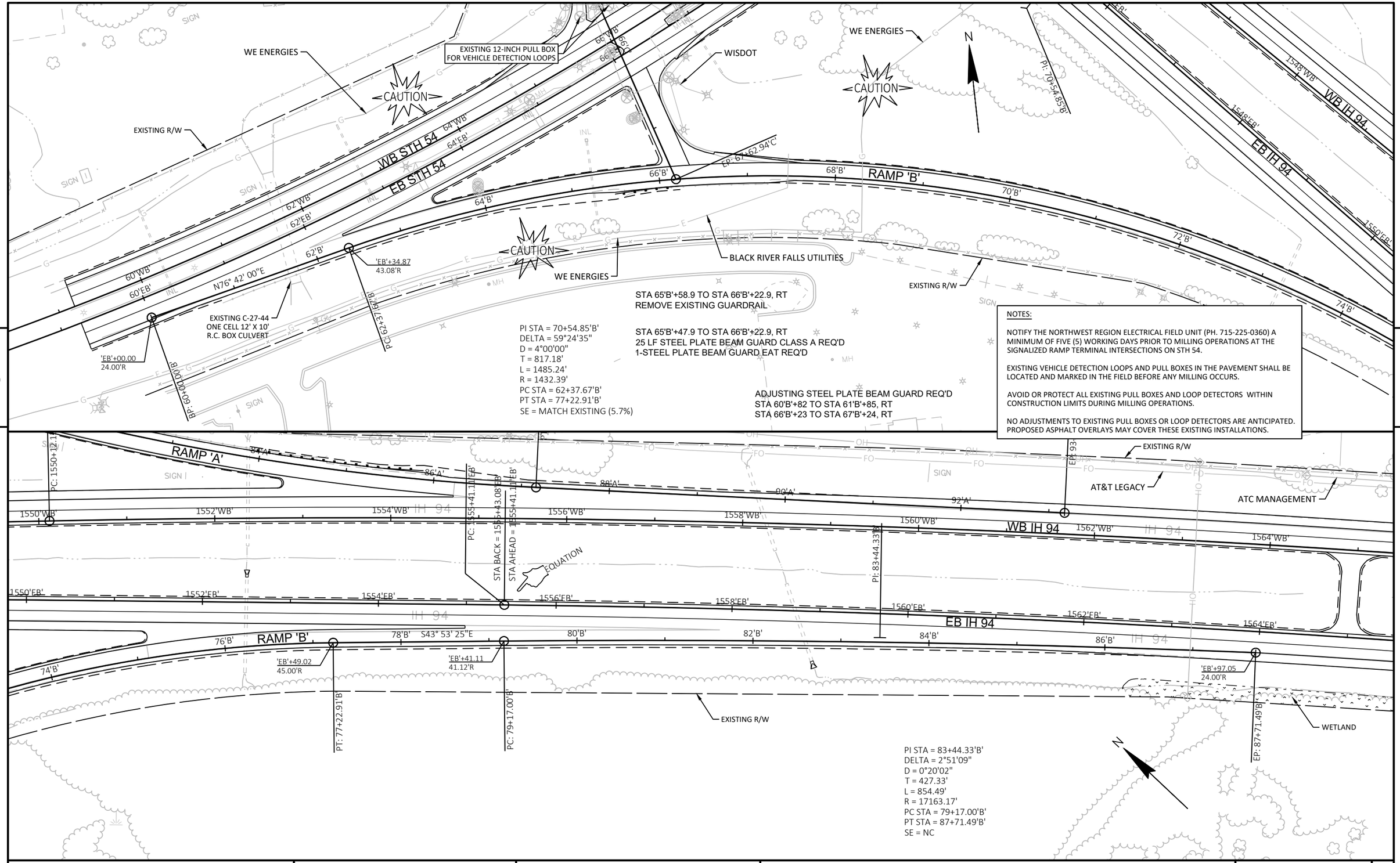
NOTIFY THE NORTHWEST REGION ELECTRICAL FIELD UNIT (PH. 715-225-0360) A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO MILLING OPERATIONS AT THE SIGNALIZED RAMP TERMINAL INTERSECTIONS ON STH 54.

EXISTING VEHICLE DETECTION LOOPS AND PULL BOXES IN THE PAVEMENT SHALL BE LOCATED AND MARKED IN THE FIELD BEFORE ANY MILLING OCCURS.

AVOID OR PROTECT ALL EXISTING PULL BOXES AND LOOP DETECTORS WITHIN CONSTRUCTION LIMITS DURING MILLING OPERATIONS.

NO ADJUSTMENTS TO EXISTING PULL BOXES OR LOOP DETECTORS ARE ANTICIPATED. PROPOSED ASPHALT OVERLAYS MAY COVER THESE EXISTING INSTALLATIONS.

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMP 'A' - WB EXIT AT STH 54 INTERCHANGE	SHEET 126 E



STA 65'B'+58.9 TO STA 66'B'+22.9, RT
REMOVE EXISTING GUARDRAIL

STA 65'B'+47.9 TO STA 66'B'+22.9, RT
25 LF STEEL PLATE BEAM GUARD CLASS A REQ'D
1-STEEL PLATE BEAM GUARD EAT REQ'D

PI STA = 70+54.85'B'
DELTA = 59°24'35"
D = 4°00'00"
T = 817.18'
L = 1485.24'
R = 1432.39'
PC STA = 62+37.67'B'
PT STA = 77+22.91'B'
SE = MATCH EXISTING (5.7%)

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 60'B'+82 TO STA 61'B'+85, RT
STA 66'B'+23 TO STA 67'B'+24, RT

NOTES:

NOTIFY THE NORTHWEST REGION ELECTRICAL FIELD UNIT (PH. 715-225-0360) A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO MILLING OPERATIONS AT THE SIGNALIZED RAMP TERMINAL INTERSECTIONS ON STH 54.

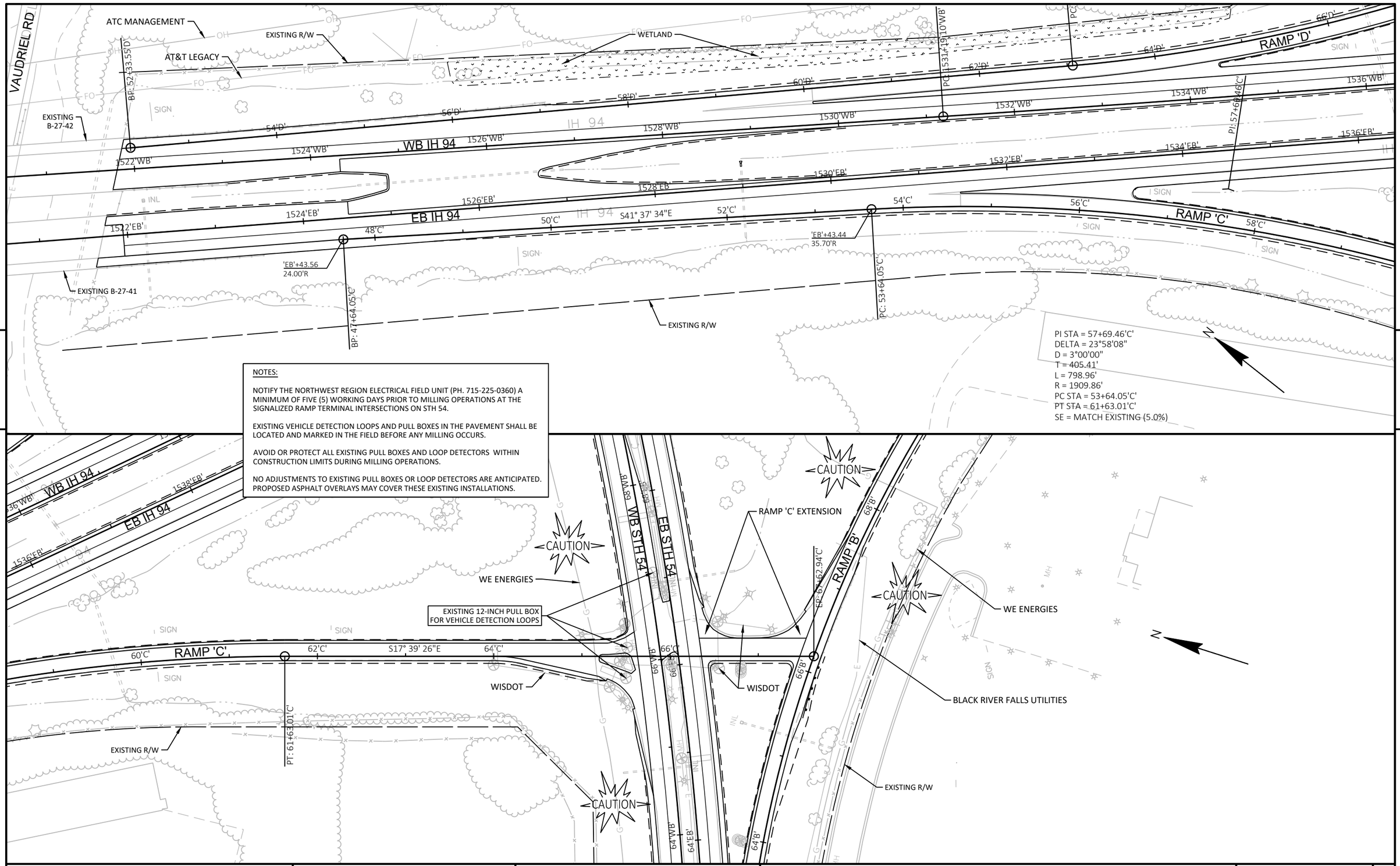
EXISTING VEHICLE DETECTION LOOPS AND PULL BOXES IN THE PAVEMENT SHALL BE LOCATED AND MARKED IN THE FIELD BEFORE ANY MILLING OCCURS.

AVOID OR PROTECT ALL EXISTING PULL BOXES AND LOOP DETECTORS WITHIN CONSTRUCTION LIMITS DURING MILLING OPERATIONS.

NO ADJUSTMENTS TO EXISTING PULL BOXES OR LOOP DETECTORS ARE ANTICIPATED. PROPOSED ASPHALT OVERLAYS MAY COVER THESE EXISTING INSTALLATIONS.

PI STA = 83+44.33'B'
DELTA = 2°51'09"
D = 0°20'02"
T = 427.33'
L = 854.49'
R = 17163.17'
PC STA = 79+17.00'B'
PT STA = 87+71.49'B'
SE = NC

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMP 'B' - EB ENTRANCE AT STH 54 INTERCHANGE	SHEET 127	E



NOTES:

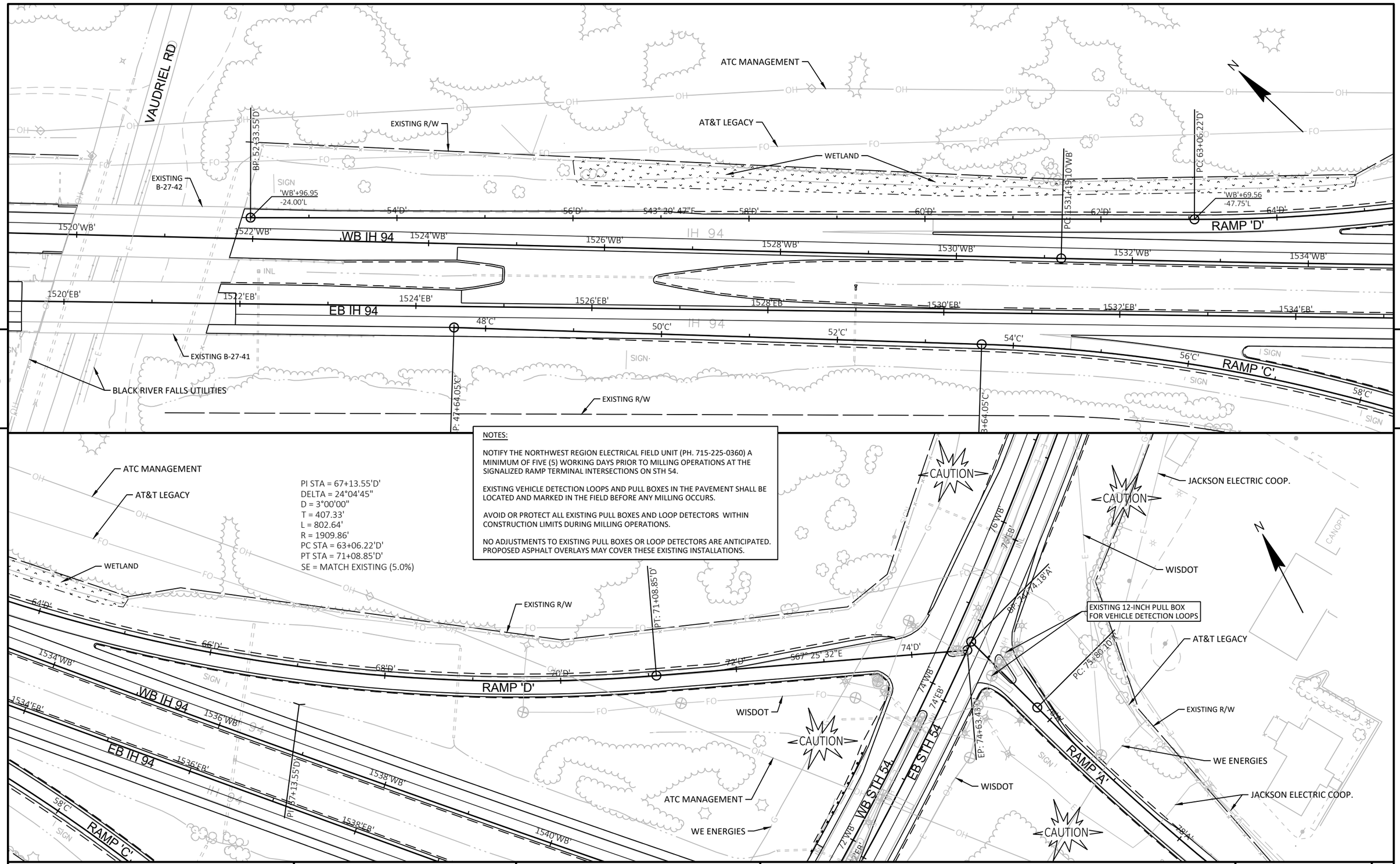
NOTIFY THE NORTHWEST REGION ELECTRICAL FIELD UNIT (PH. 715-225-0360) A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO MILLING OPERATIONS AT THE SIGNALIZED RAMP TERMINAL INTERSECTIONS ON STH 54.

EXISTING VEHICLE DETECTION LOOPS AND PULL BOXES IN THE PAVEMENT SHALL BE LOCATED AND MARKED IN THE FIELD BEFORE ANY MILLING OCCURS.

AVOID OR PROTECT ALL EXISTING PULL BOXES AND LOOP DETECTORS WITHIN CONSTRUCTION LIMITS DURING MILLING OPERATIONS.

NO ADJUSTMENTS TO EXISTING PULL BOXES OR LOOP DETECTORS ARE ANTICIPATED. PROPOSED ASPHALT OVERLAYS MAY COVER THESE EXISTING INSTALLATIONS.

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMP 'C' - EB EXIT AT STH 54 INTERCHANGE	SHEET 128	E



PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMP 'D' - WB ENTRANCE AT STH 54 INTERCHANGE	SHEET 129	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\050444_PL_RAMPD_WB_ENTR.DWG
LAYOUT NAME - Plan Dbl 1 IN 100 FT

PLOT DATE : 7/19/2021 5:02 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

NOTES:

NOTIFY THE NORTHWEST REGION ELECTRICAL FIELD UNIT (PH. 715-225-0360) A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO MILLING OPERATIONS AT THE SIGNALIZED RAMP TERMINAL INTERSECTIONS ON STH 54.

EXISTING VEHICLE DETECTION LOOPS AND PULL BOXES IN THE PAVEMENT SHALL BE LOCATED AND MARKED IN THE FIELD BEFORE ANY MILLING OCCURS.

AVOID OR PROTECT ALL EXISTING PULL BOXES AND LOOP DETECTORS WITHIN CONSTRUCTION LIMITS DURING MILLING OPERATIONS.

NO ADJUSTMENTS TO EXISTING PULL BOXES OR LOOP DETECTORS ARE ANTICIPATED. PROPOSED ASPHALT OVERLAYS MAY COVER THESE EXISTING INSTALLATIONS.

BP: 52+63.07'WB'

BP: 52+64.64'EB'

BEGIN CONSTRUCTION
STA 59+19'WB'
MATCH EXISTING
BUTT JOINT REQ'D

BEGIN CONSTRUCTION
STA 59+24'EB'
MATCH EXISTING
BUTT JOINT REQ'D

WB STH 54

EB STH 54

20'

PI STA = 68+53.77'WB'
DELTA = 45°34'38"
D = 1°30'48"
T = 1590.70'
L = 3011.84'
R = 3786.22'
PC STA = 52+63.07'WB'
PT STA = 82+74.91'WB'
SE = MATCH EXISTING (3.5%)

EXISTING R/W

WE ENERGIES

EXISTING 12-INCH PULL BOX
FOR VEHICLE DETECTION LOOPS

RAMP 'C'

WISDOT

RAMP 'B'

EXISTING C-27-44
ONE CELL 12' X 10'
R.C. BOX CULVERT

BP: 60+01.00'B'

PC: 62+37.67'B'

BLACK RIVER FALLS UTILITIES

EP: 67+62.94'C'

STA 71'WB'+60.4 TO STA 72'WB'+32.4, LT
REMOVE EXISTING GUARDRAIL

STA 71'WB'+60.4 TO STA 73'WB'+02.92, LT
39.4 LF MGS THRIE BEAM TRANSITION REQ'D
50 LF MGS GUARDRAIL 3 REQ'D
1-MGS GUARDRAIL TERMINAL EAT REQ'D

ATC MANAGEMENT

RAMP 'D'

END CONSTRUCTION
STA 78+51'WB'
MATCH EXISTING
BUTT JOINT REQ'D

EP: 82+74.91'WB'

EXISTING B-27-116

EXISTING B-27-45

AT&T LEGACY

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 68'EB'+14 TO STA 69'EB'+55, RT

PI STA = 68+63.74'EB'
DELTA = 45°34'38"
D = 1°30'19"
T = 1599.10'
L = 3027.75'
R = 3806.22'
PC STA = 52+64.64'EB'
PT STA = 82+92.39'EB'
SE = MATCH EXISTING (3.5%)

EB IH 94

WB IH 94

EP: 74+63.45'A'

BP: 74+74.18'A'

EXISTING 12-INCH PULL BOX
FOR VEHICLE DETECTION LOOPS

JACKSON ELECTRIC COOP.

PC: 75+80.10'A'

RAMP 'A'

END CONSTRUCTION
STA 78+67'EB'
MATCH EXISTING
BUTT JOINT REQ'D

EP: 82+92.39'EB'

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PLAN: STH 54	SHEET 130	E

Standard Detail Drawing List

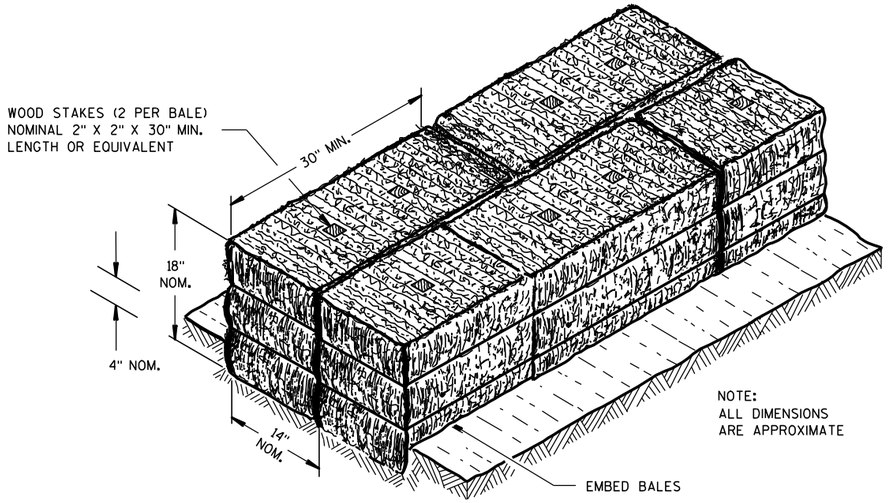
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
11A01-06	MAINTENANCE CROSSOVER FOR FREEWAYS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13A07-02	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-15A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C11-12A	RURAL DOWELED CONCRETE PAVEMENT
13C11-12B	RURAL DOWELED CONCRETE PAVEMENT
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B26-04A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04F	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04G	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04H	STEEL THRIE BEAM BULLNOSE TERMINAL
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-06A	PERMANENT FLEXIBLE DELINEATOR POST
15A04-06B	DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A04-06C	DELINEATOR POST WITH REFLECTIVE SHEETING
15A04-06D	DELINEATOR POST WITH REFLECTIVE SHEETING
15C02-08D	ON RAMP LANE CLOSURE
15C02-08E	OFF RAMP LANE CLOSURE
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C14-04	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS

6

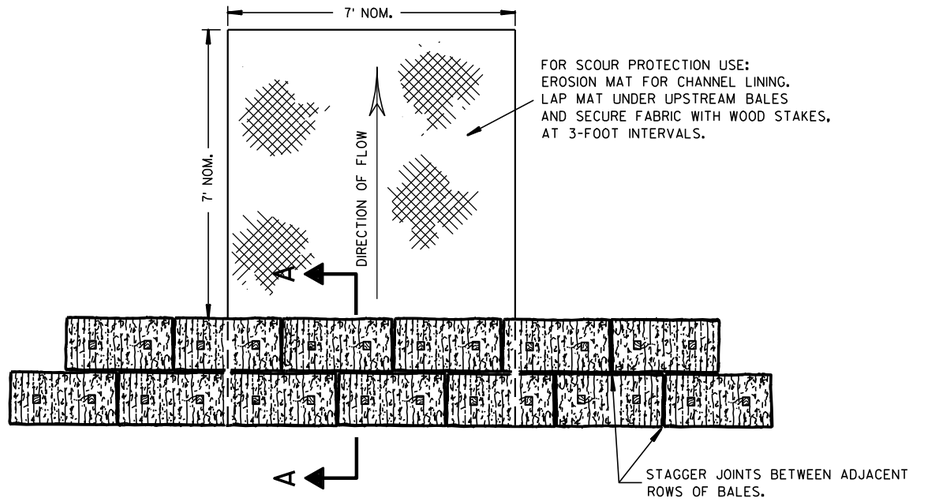
Standard Detail Drawing List

15C18-05A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-05B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-05C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C31-04A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-04C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D12-09D	TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
15D15-05A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D20-05B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-05C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING

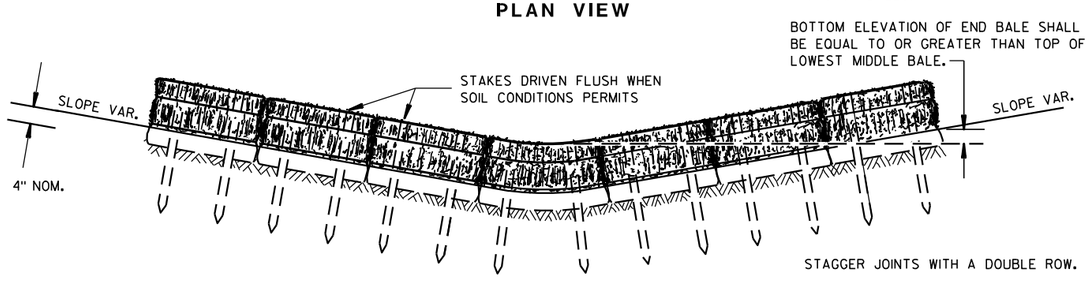
6



SECTION A-A



PLAN VIEW



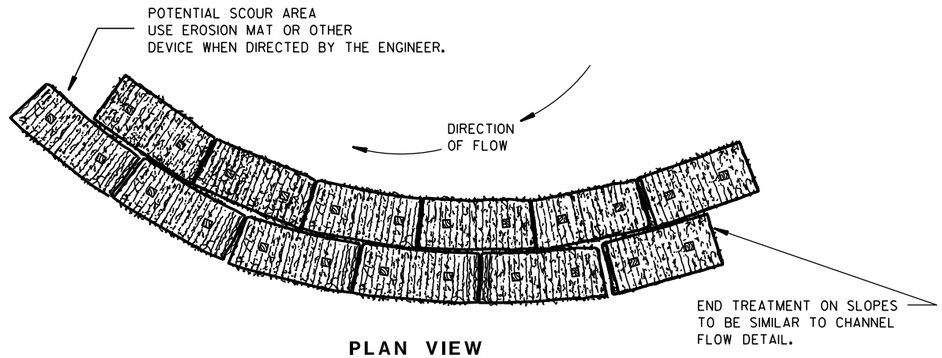
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

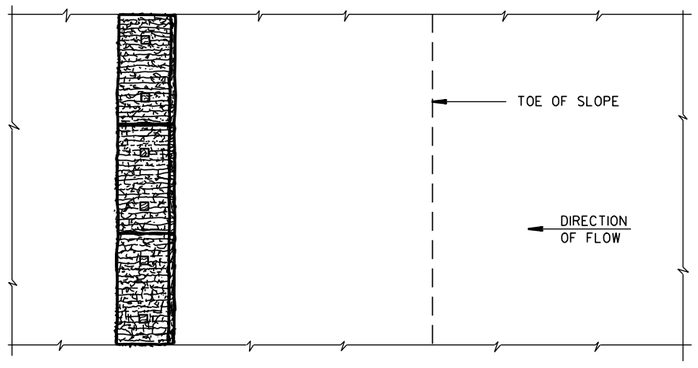
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

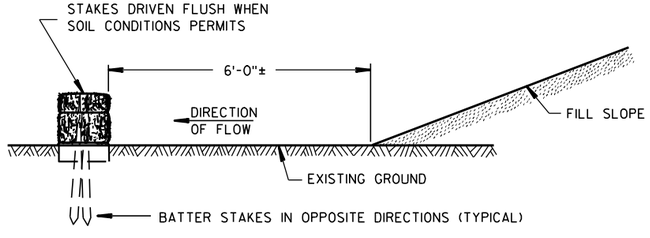


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

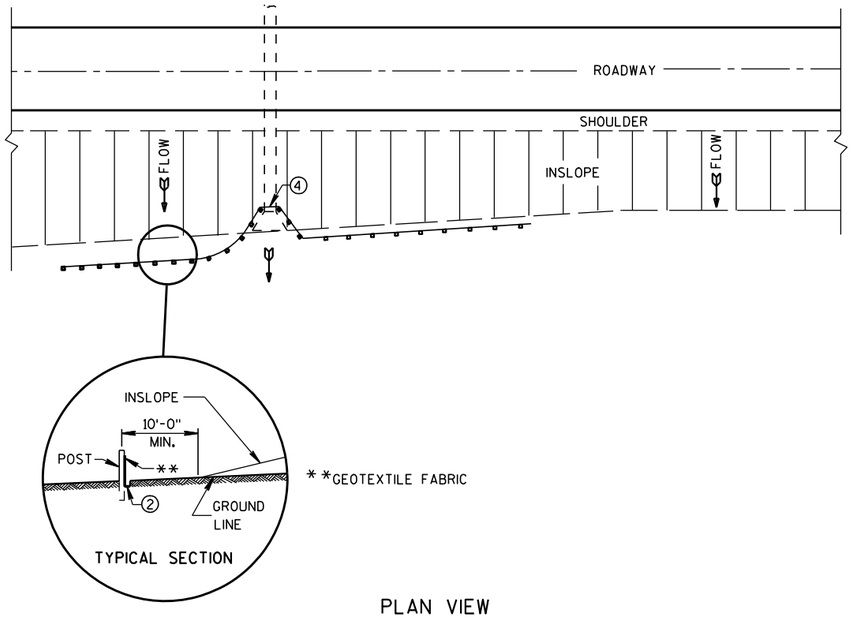
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

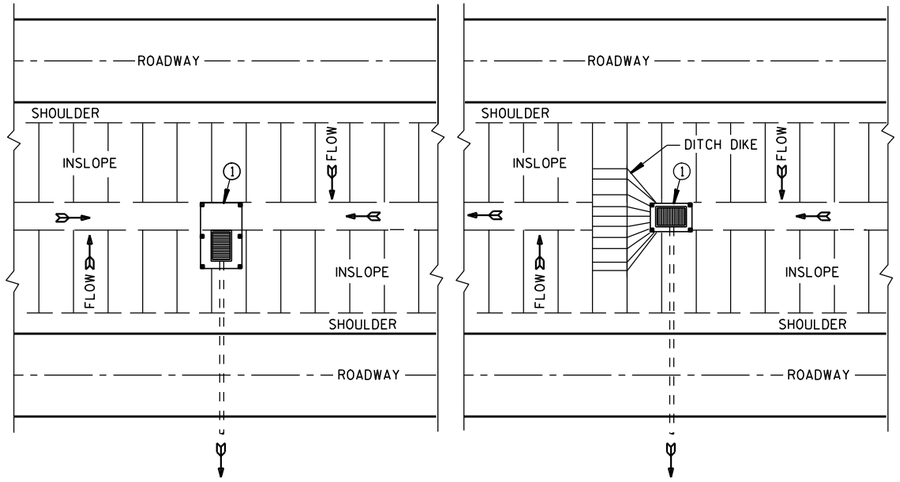
/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



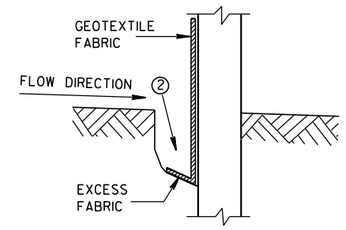
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

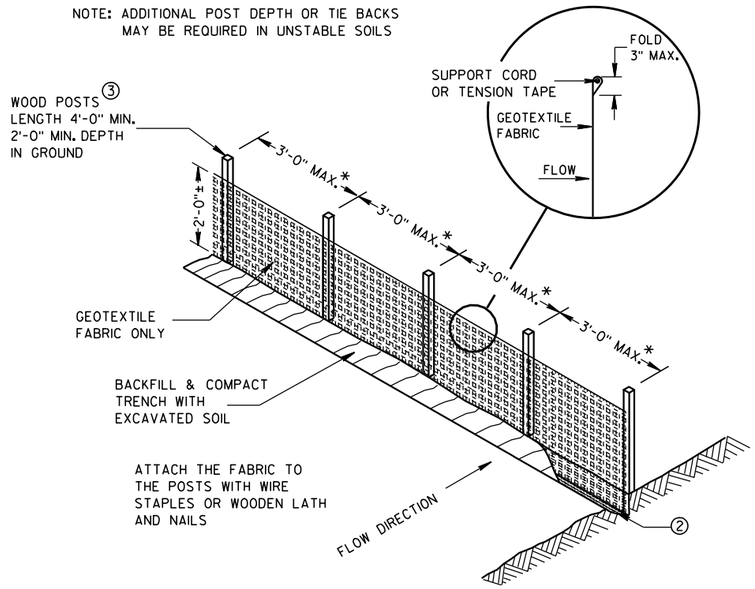
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

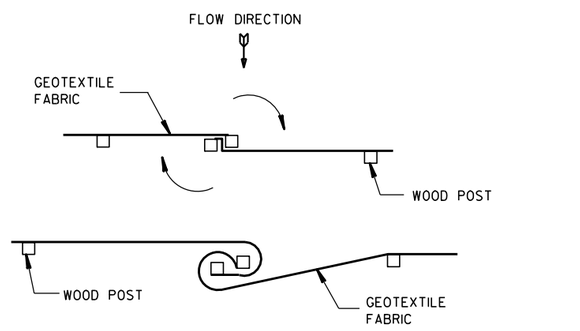


TRENCH DETAIL

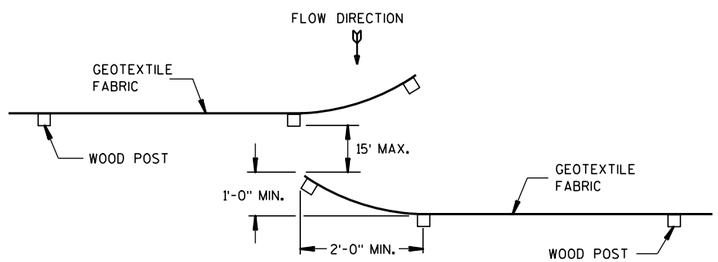


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

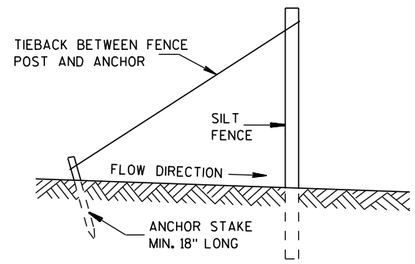


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

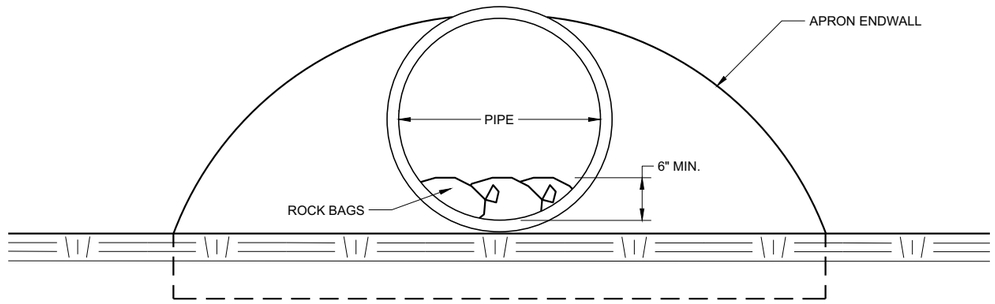
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

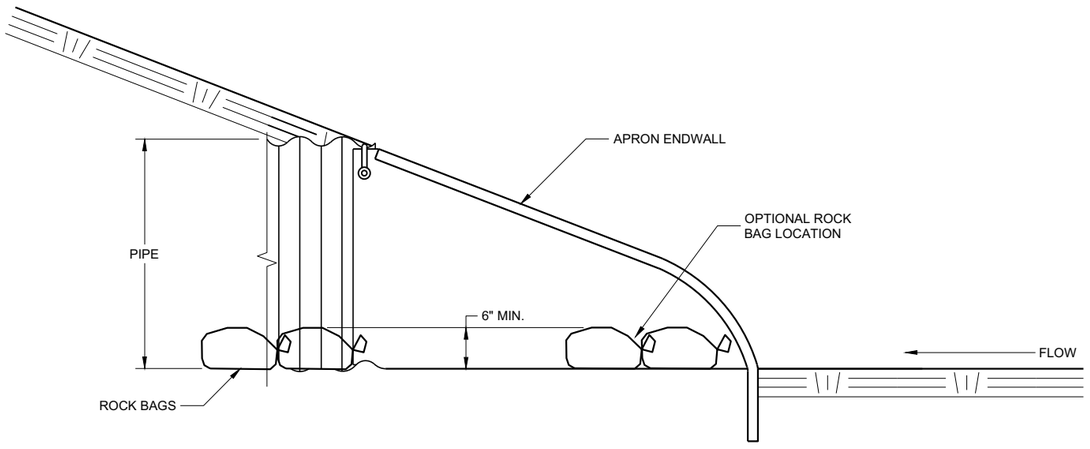
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

6

SDD 08E15 - 01

METAL APRON ENDWALLS

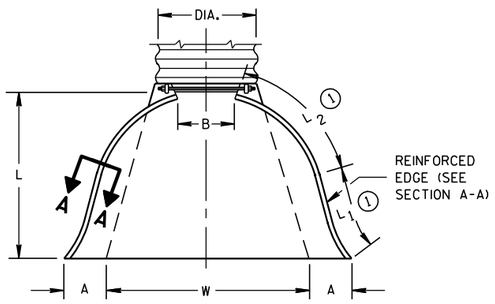
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

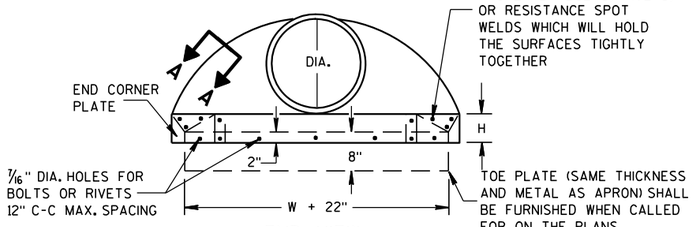
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

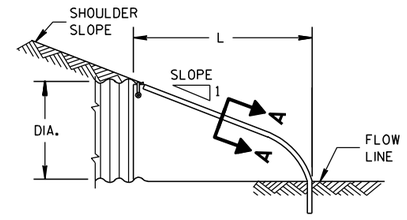
*MINIMUM
**MAXIMUM



PLAN VIEW

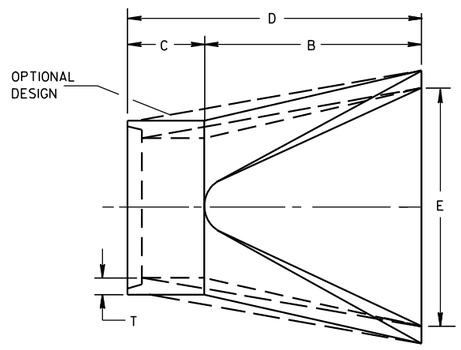


END VIEW

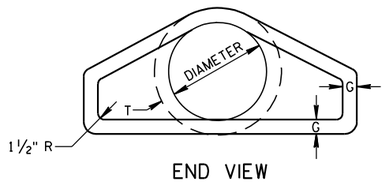


SIDE ELEVATION

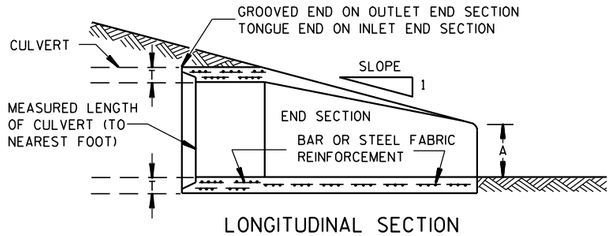
METAL ENDWALLS



PLAN

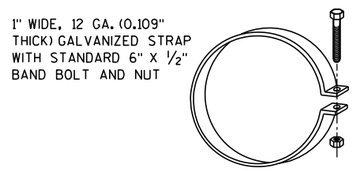


END VIEW



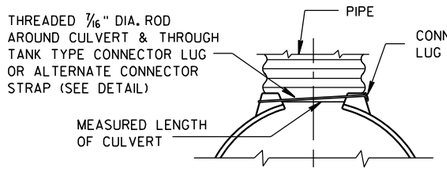
LONGITUDINAL SECTION

CONCRETE ENDWALLS

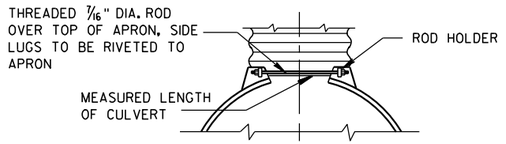


ALTERNATE FOR TYPE 1 CONNECTION

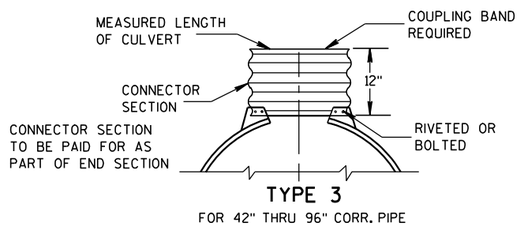
END SECTION CONNECTOR STRAP



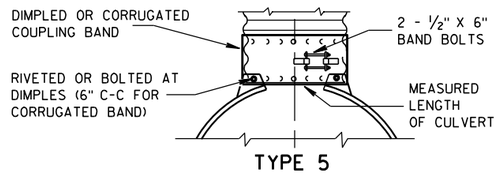
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

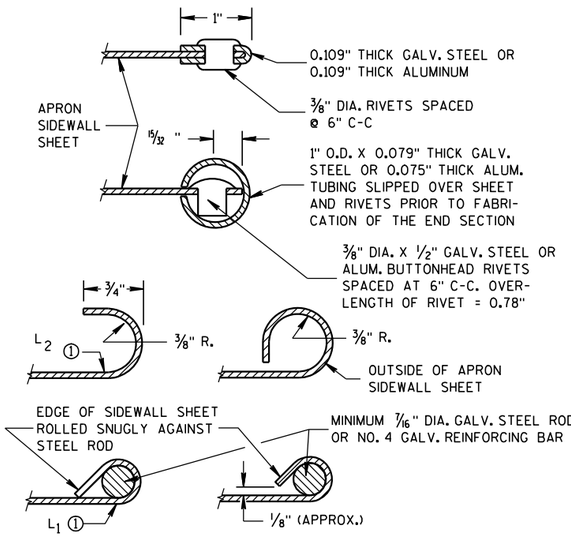
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

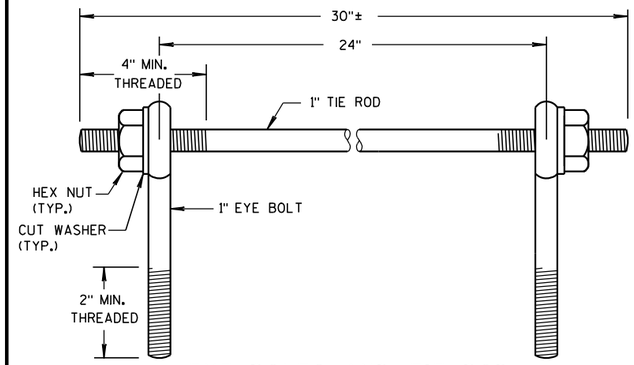
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

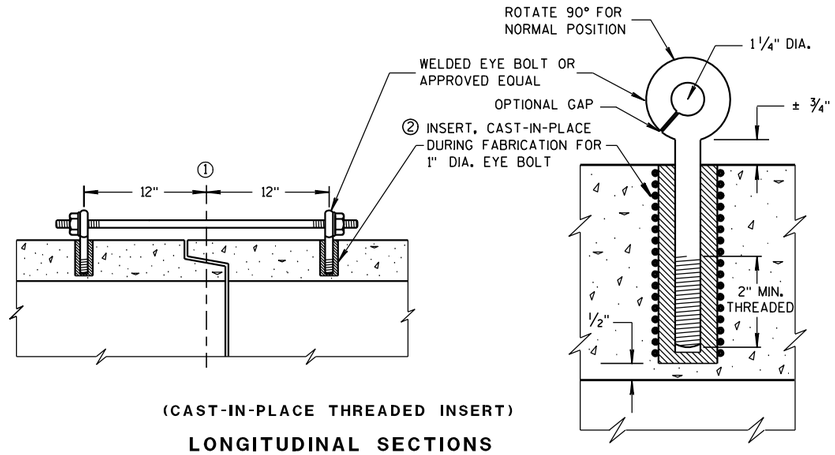
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

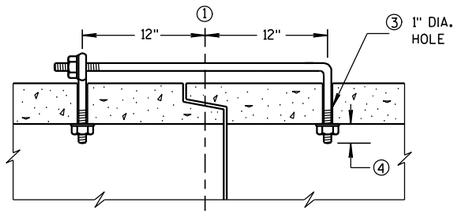
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

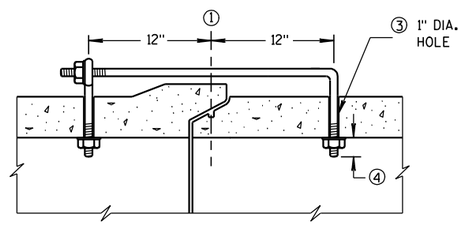
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

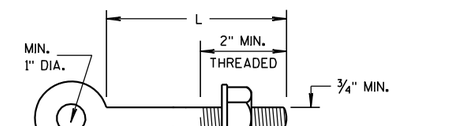


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

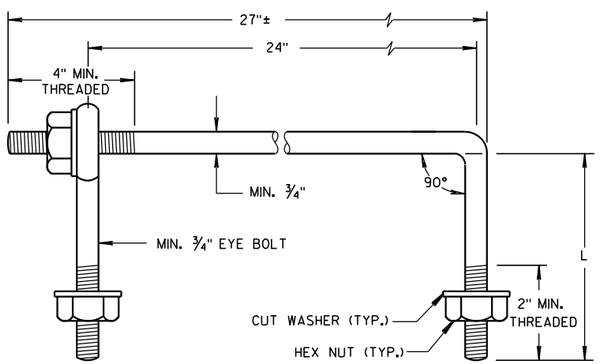
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

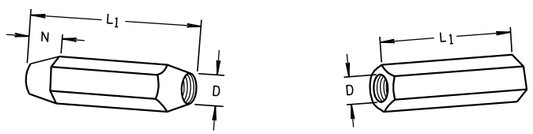
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

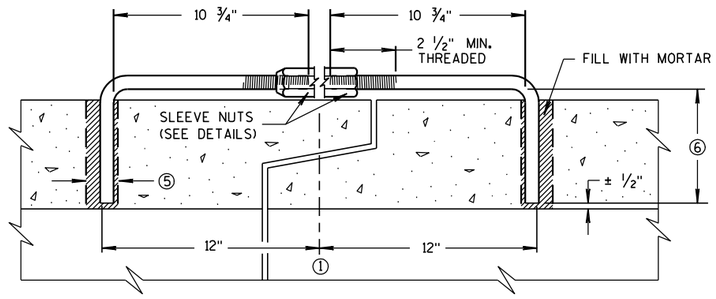
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

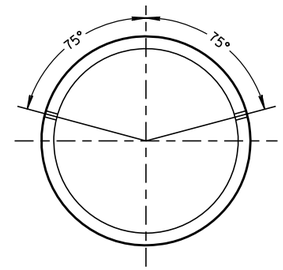
SLEEVE NUTS



LONGITUDINAL SECTION

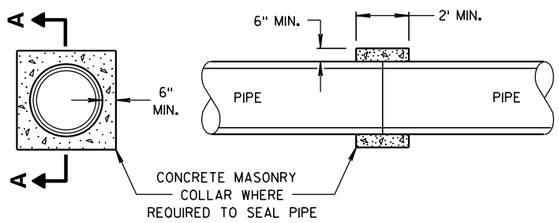
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

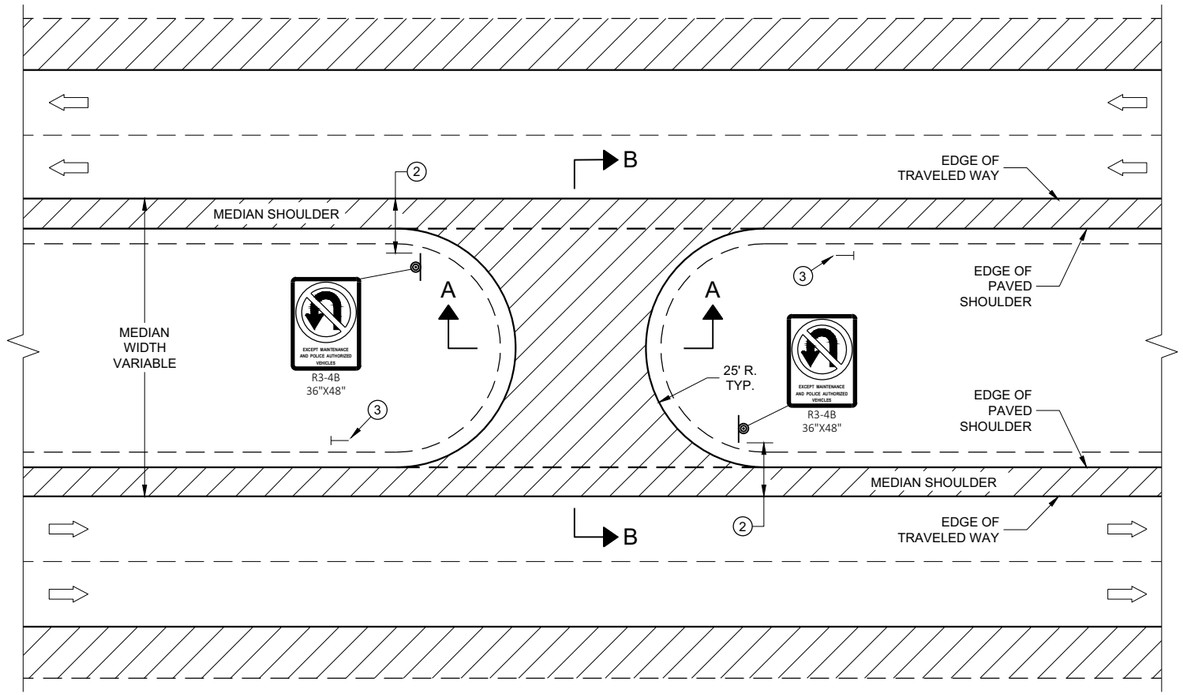
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

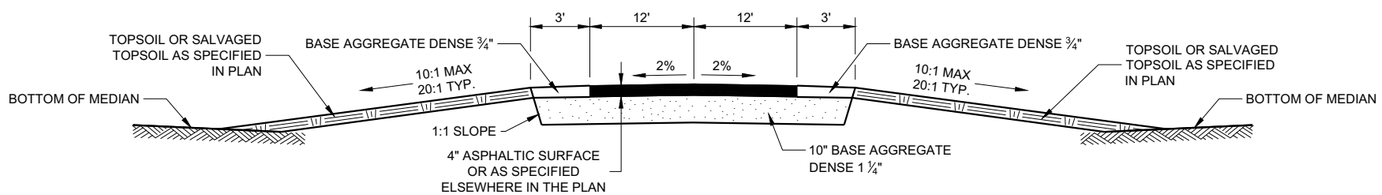
APPROVED
6/5/2012 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
137
FHWA

6

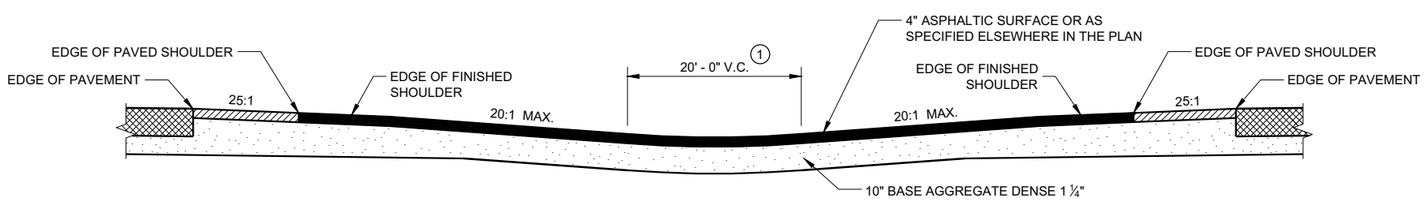
S.D.D. 8 F 4-7



PLAN VIEW



SECTION A-A



SECTION B-B

GENERAL NOTES

1. ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.
2. SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.
3. INSTALL DELINEATOR. SEE STANDARD DETAIL DRAWING 15A4.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR
- DIRECTION OF TRAFFIC

MAINTENANCE CROSSOVER FOR FREEWAYS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

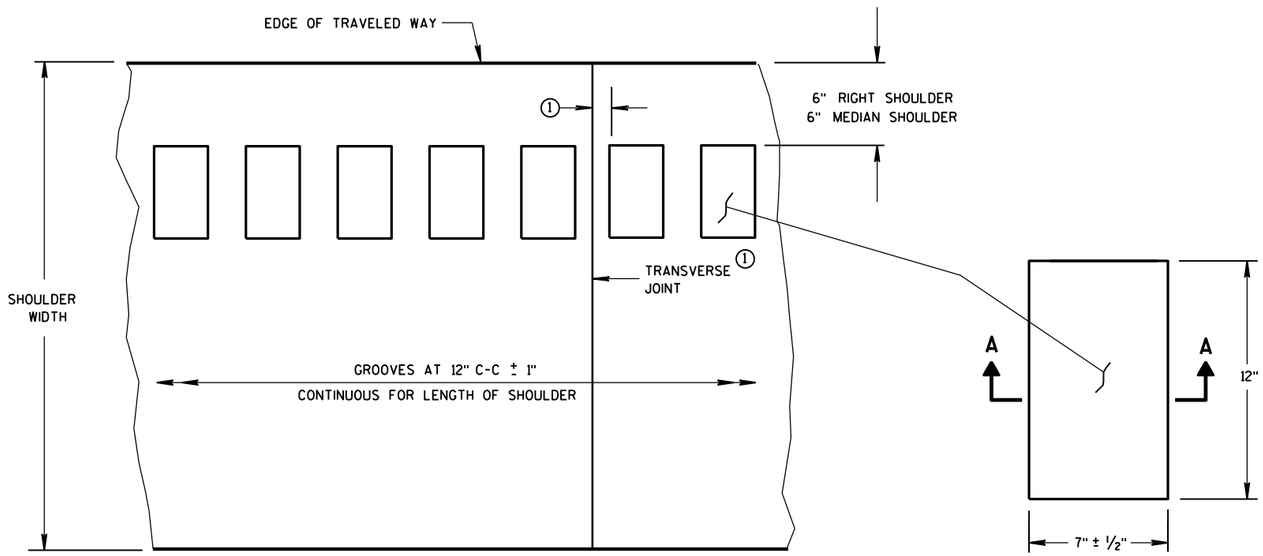
APPROVED
November 2019
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 11A01 - 06
SDD 11A01 - 06



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

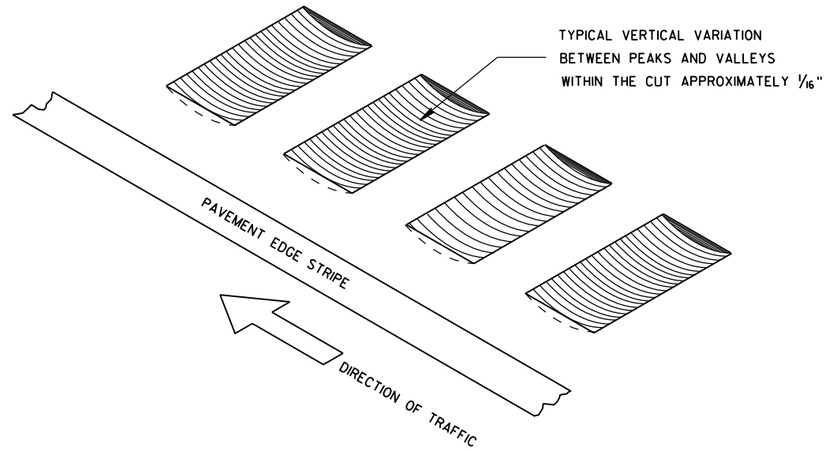
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

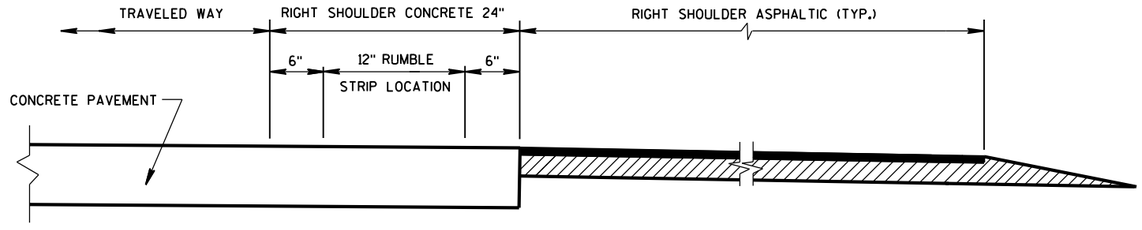
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

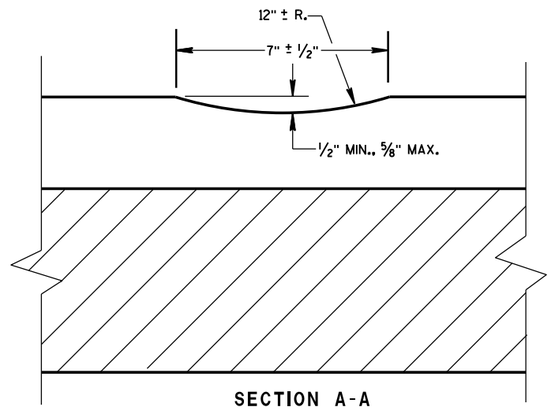
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



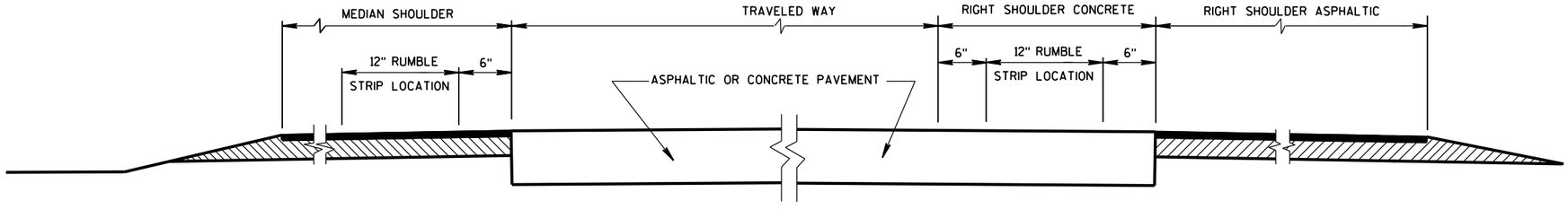
ISOMETRIC



SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION A-A



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIP, MILLING

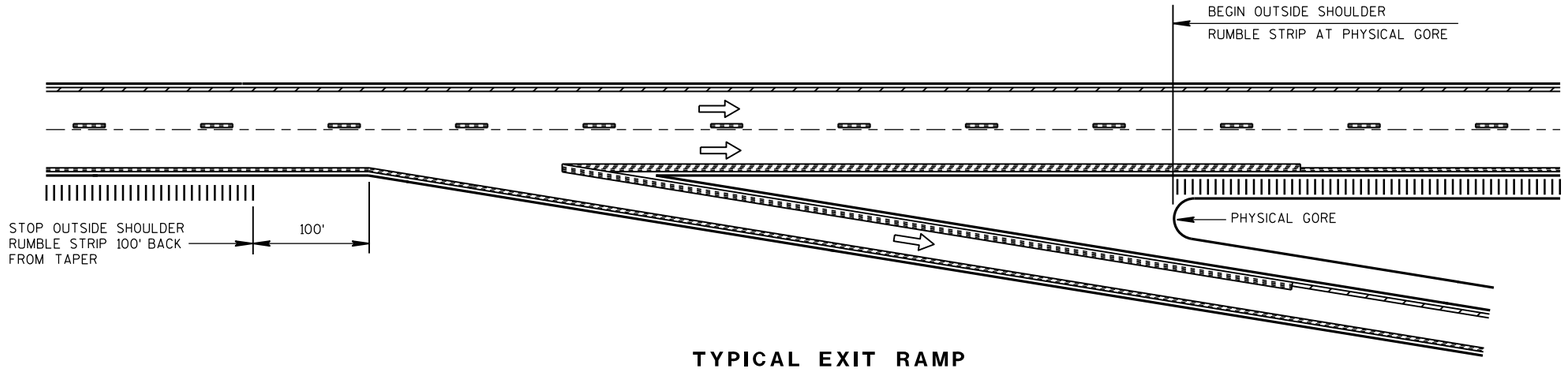
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



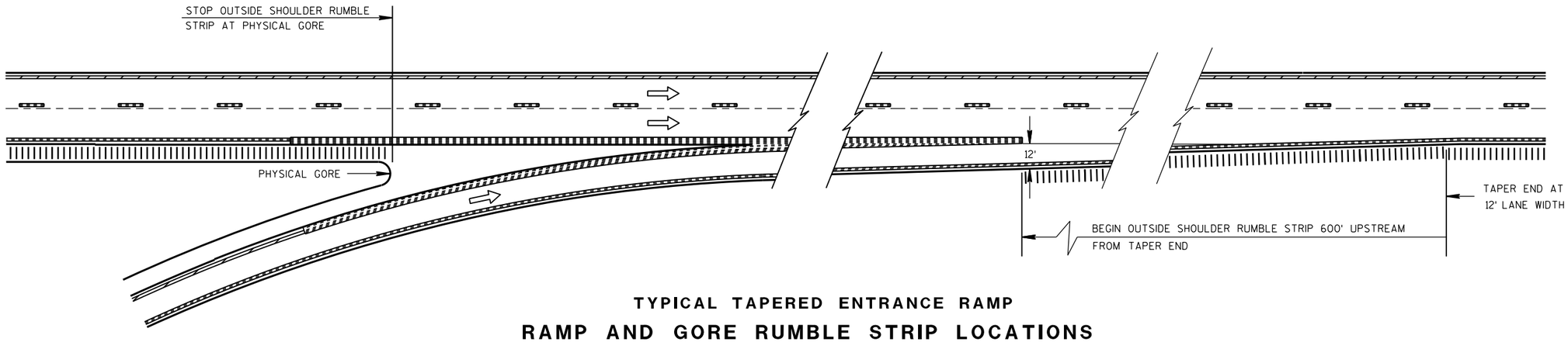
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

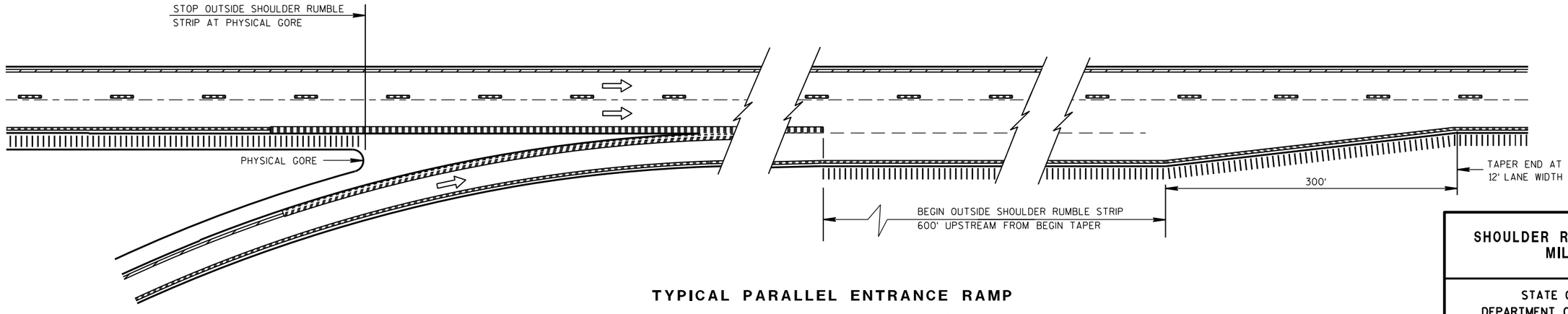
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

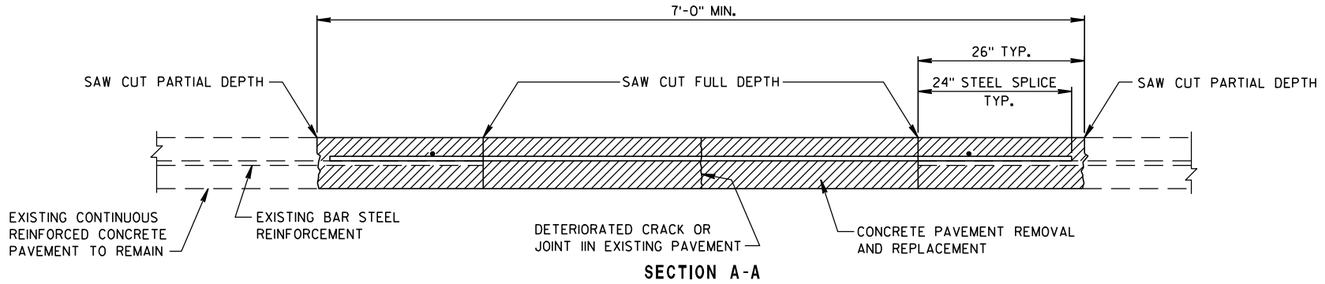
SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

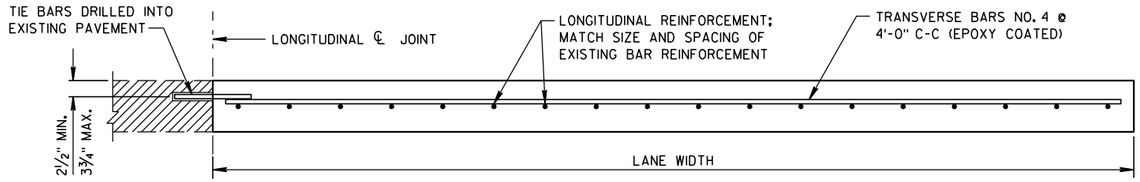
APPROVED
12/17/2012 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS ENGINEER
FHWA

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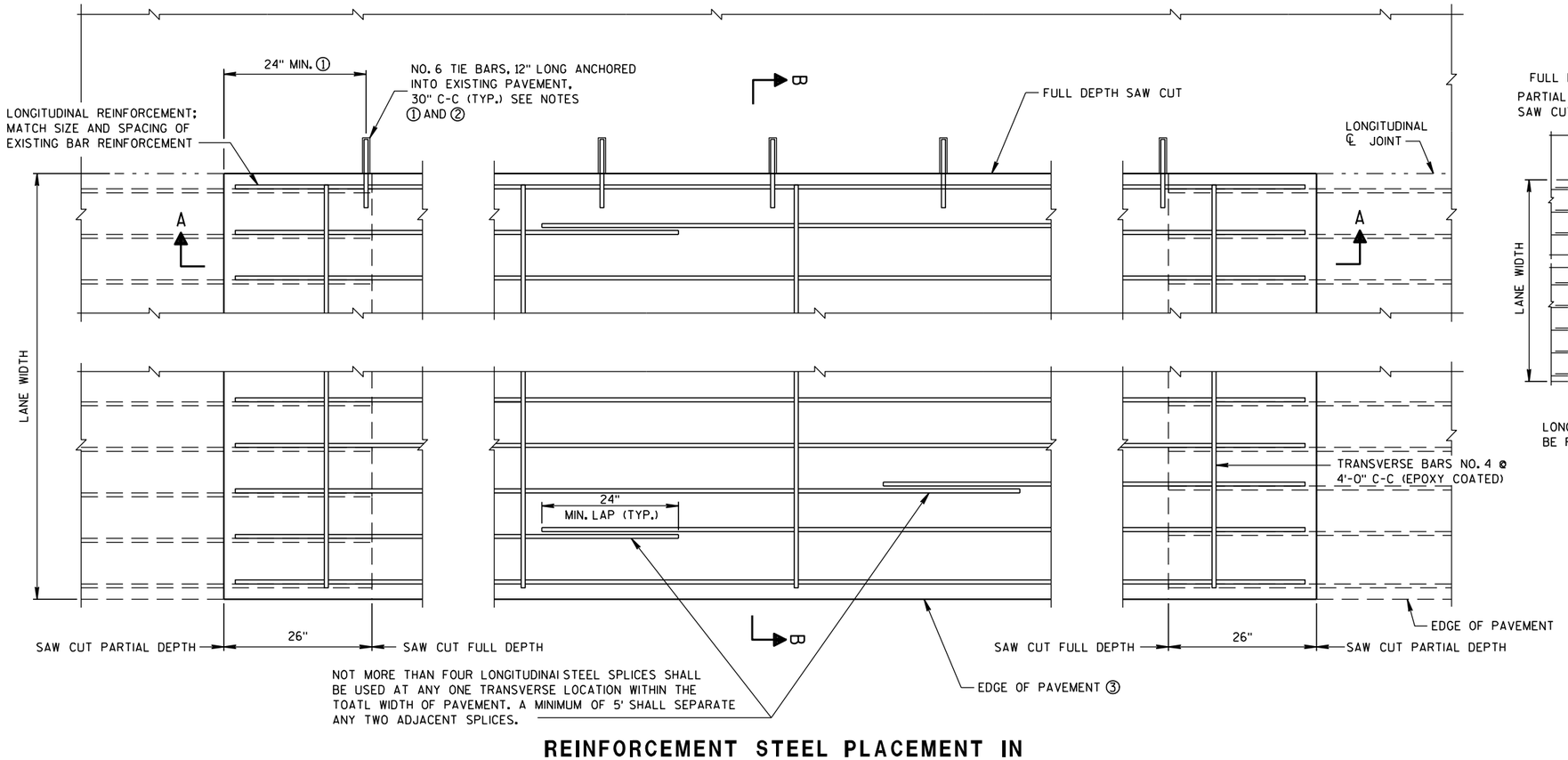
S.D.D. 13 A 5-5b



SECTION A-A



SECTION B-B



REINFORCEMENT STEEL PLACEMENT IN CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPLACEMENT

GENERAL NOTES

PLACE ALL BAR STEEL REINFORCEMENT AT MID PAVEMENT DEPTH UNLESS OTHERWISE NOTED.

PAY FOR THE TRANSVERSE AND LONGITUDINAL JOINT SAW CUT AS LINEAR FEET OF "SAWING CONCRETE".

WHEN THE PASSING AND TRAVELING LANES ARE TO BE REPLACED, REPLACE THE PASSING LANE FIRST.

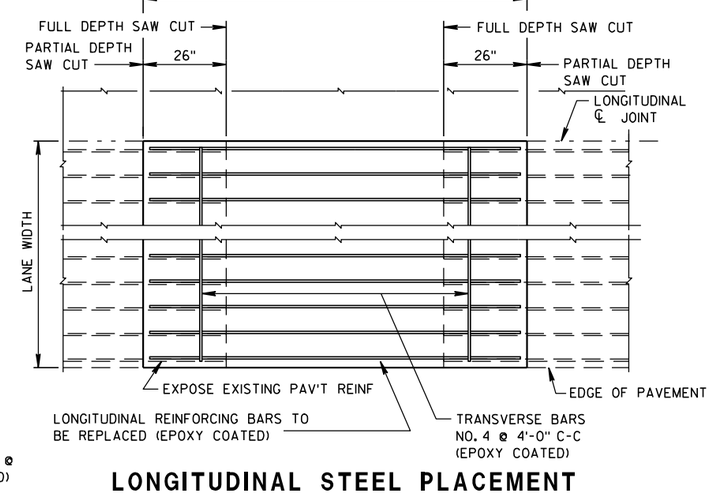
ADD TRANSVERSE STEEL BARS TO REPAIRS GREATER THAN 6'IN LENGTH, USE NO. 4 BARS PLACED TRANSVERSELY AND SPACED 4'C-C. PAYMENT SHALL BE INCIDENTAL TO "CONCRETE PAVEMENT CONTINUOUS REINFORCEMENT".

TIE ALL CONCRETE PAVEMENT REPAIRS WHICH ARE GREATER THAN 15'IN LENGTH, AND ARE ADJACENT TO EXISING CONCRETE PAVEMENT, TO THE EXISTING PAVEMENT USING TIE BARS. DETAILS FOR TIE BAR CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND STANDARD DETAIL DRAWINGS.

① PROVIDE A MINIMUM DISTANCE OF 24 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

② ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

③ SAW CUT THE LONGITUDINAL EDGE JOINT IF THE ADJACENT SHOULDER IS CONCRETE.



LONGITUDINAL STEEL PLACEMENT IN CRCP REPAIRS

PLAN VIEW

CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

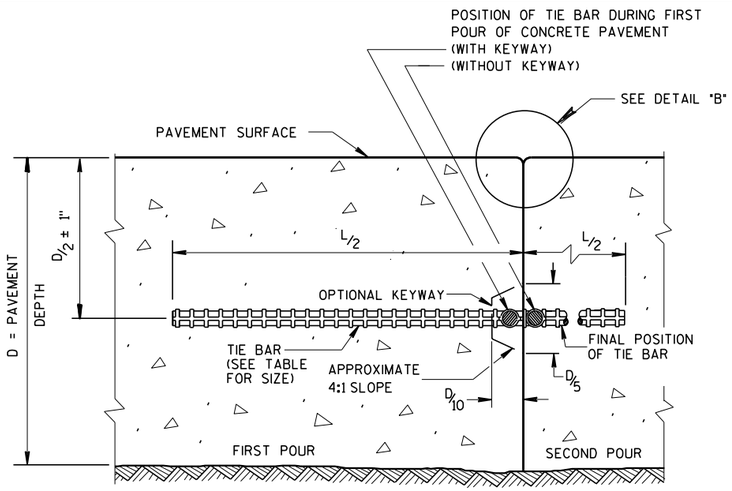
11/1/2011 — DATE

/S/ Deb Bischoff — PAVEMENT POLICY & DE NEER

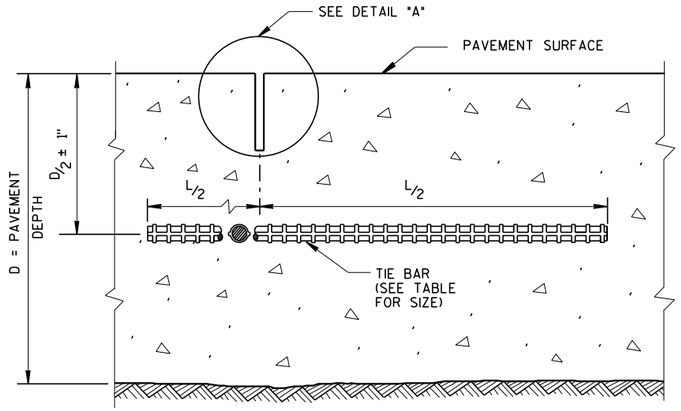
FHWA

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S.D.D. 13 A 7-2



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp PE — PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

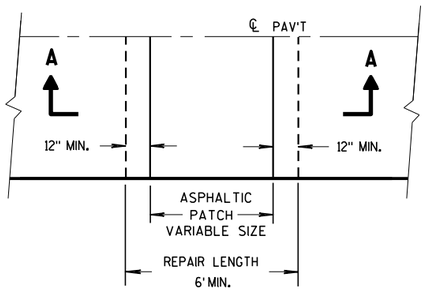
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

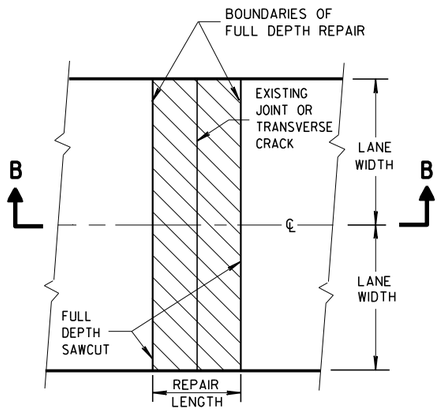
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

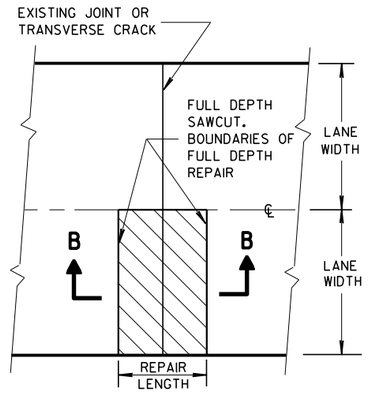
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

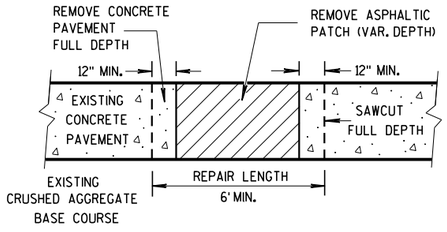


PLAN VIEW
(DOUBLE LANE REPAIR)



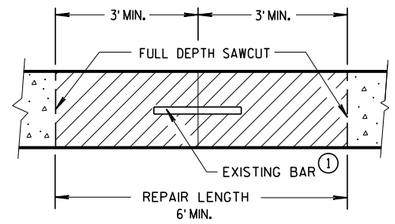
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

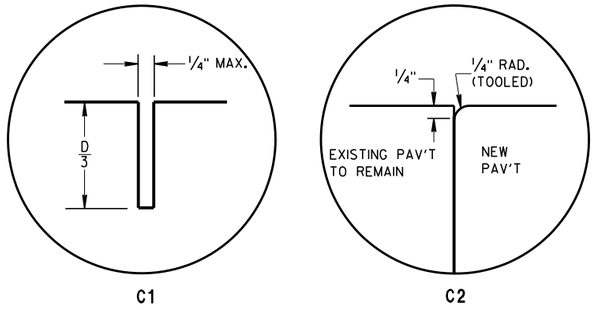
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 13 C 9-15a

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S.D.D. 13 C 9-15a



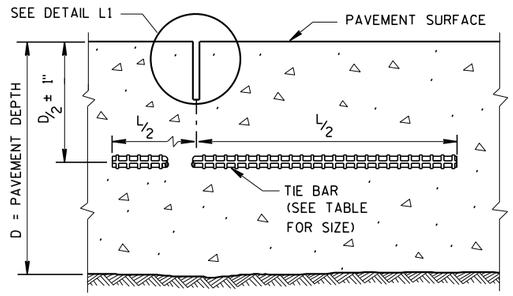
TRANSVERSE JOINTS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

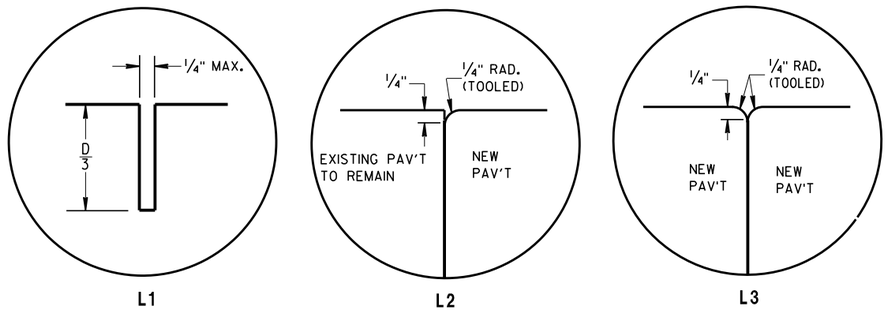
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

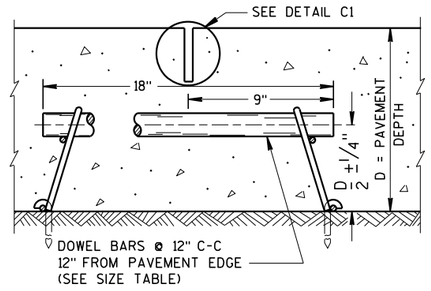
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

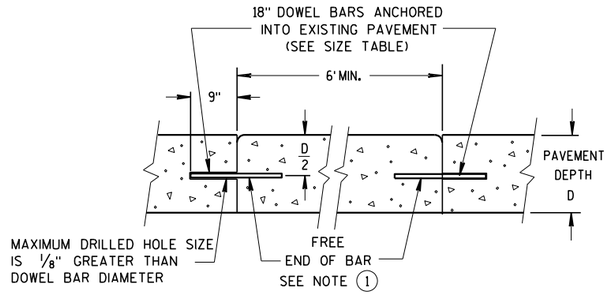


LONGITUDINAL JOINTS

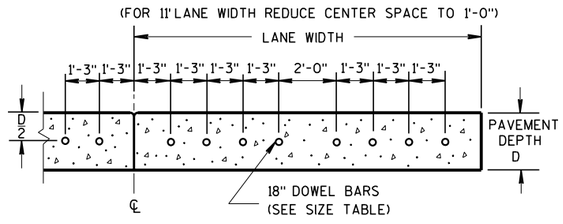


SECTION F-F

CONTRACTION JOINT



SECTION D-D

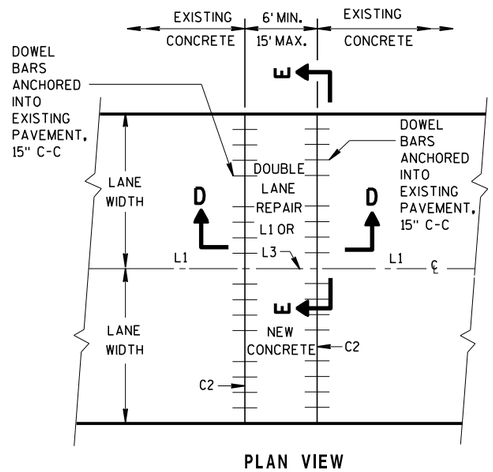


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

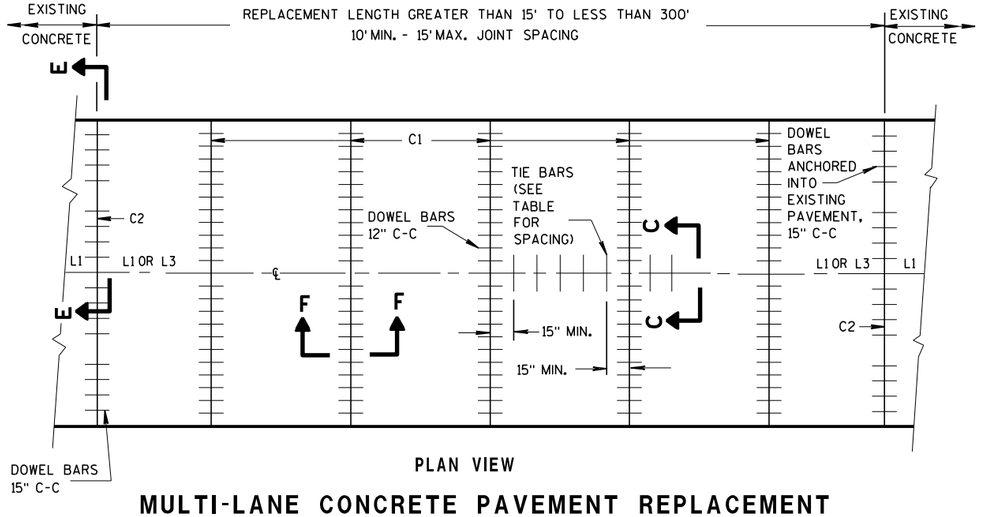
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW

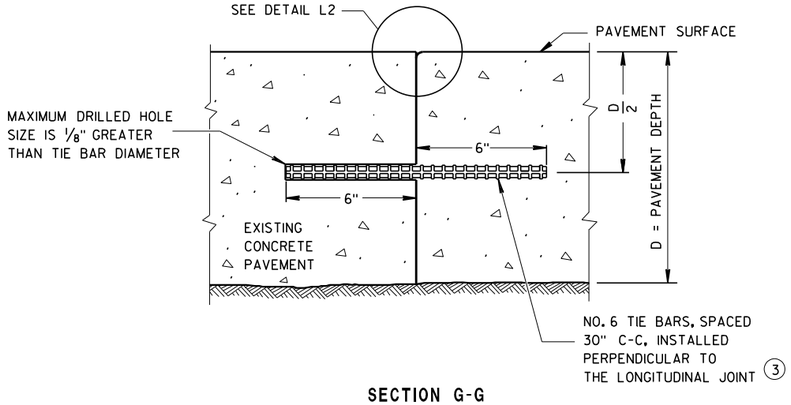
MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT



SECTION G-G

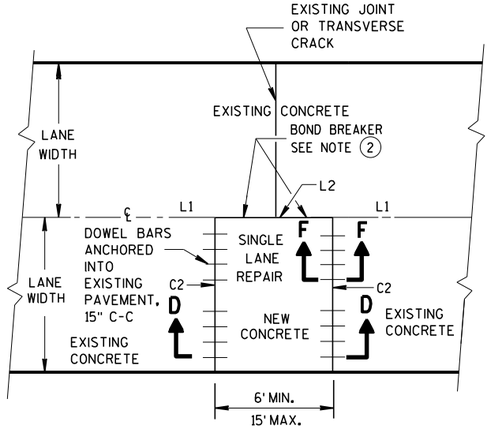
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

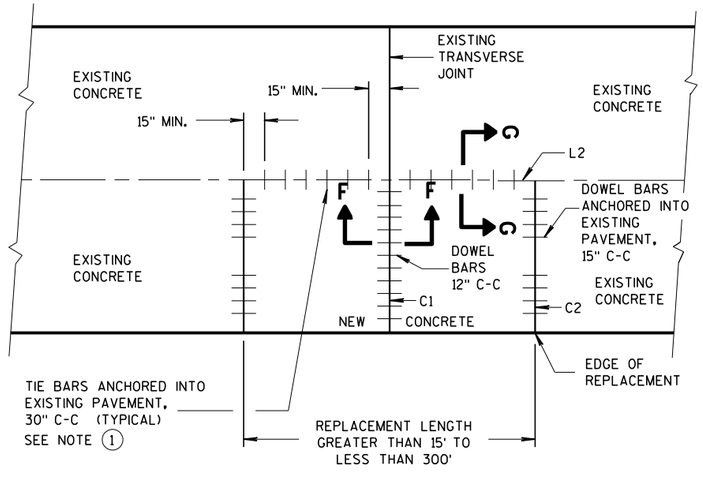
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

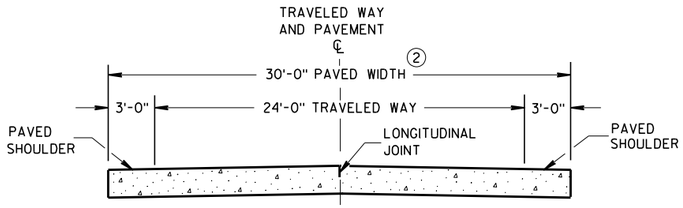
SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

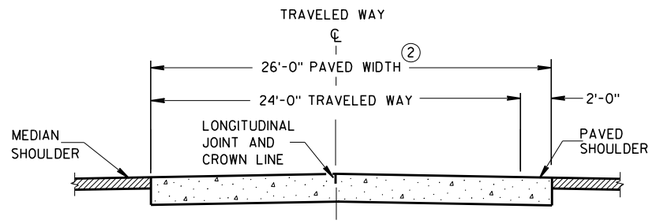
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Ken... — PAVEMENT SUPE...
FHWA

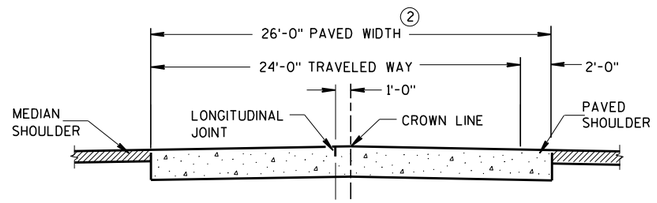
S.D.D. 13 C 9-15c



SECTION A-A
TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B-B



ALTERNATIVE SECTION B-B
(1)
DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

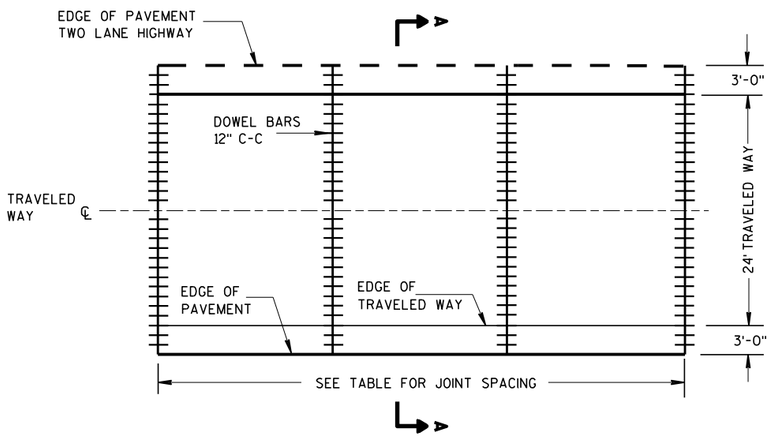
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

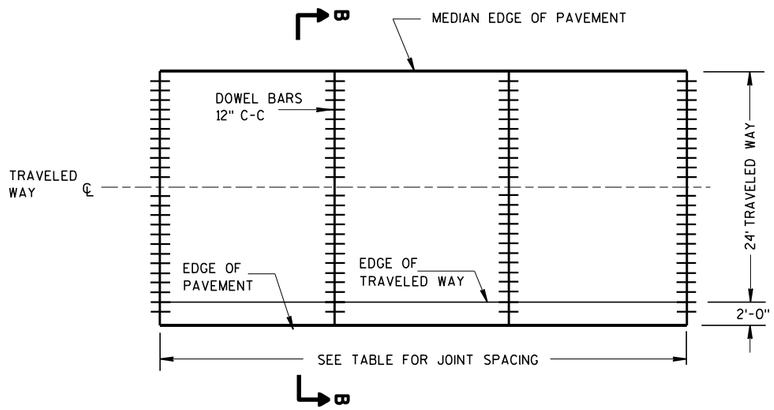
(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



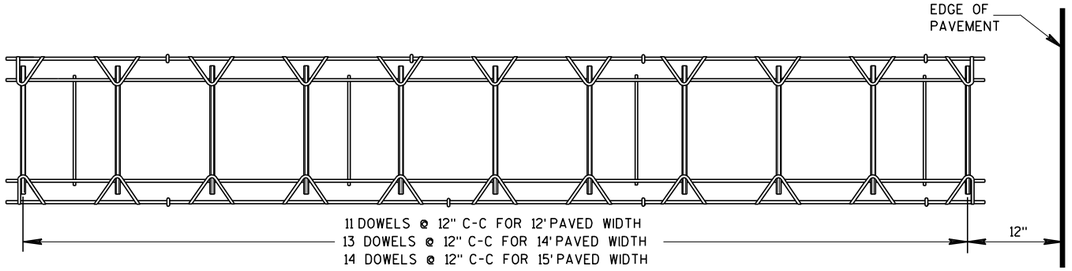
CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

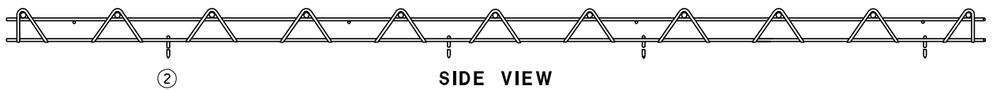
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 11-12a



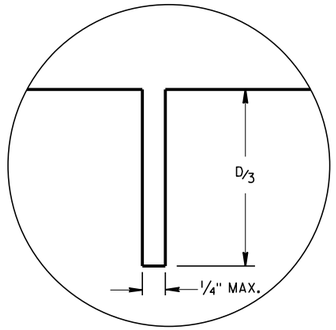
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

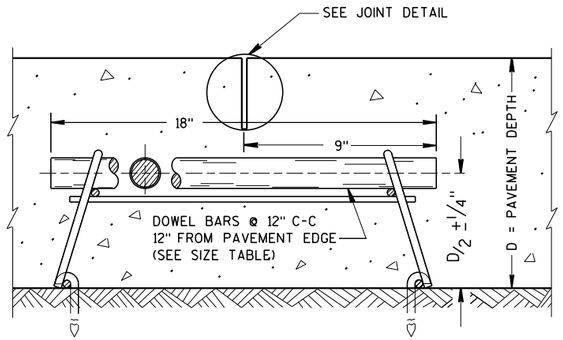
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

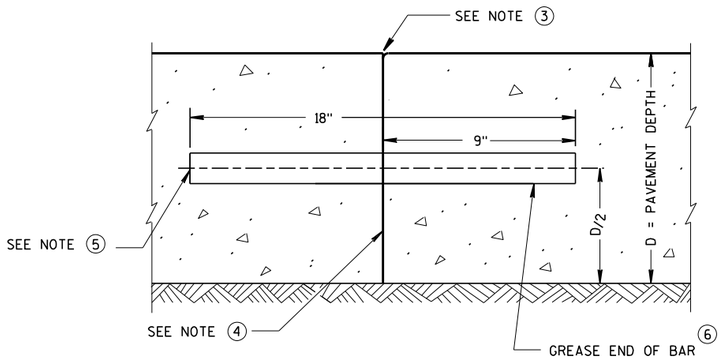
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

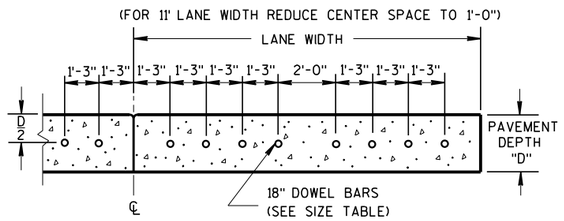
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

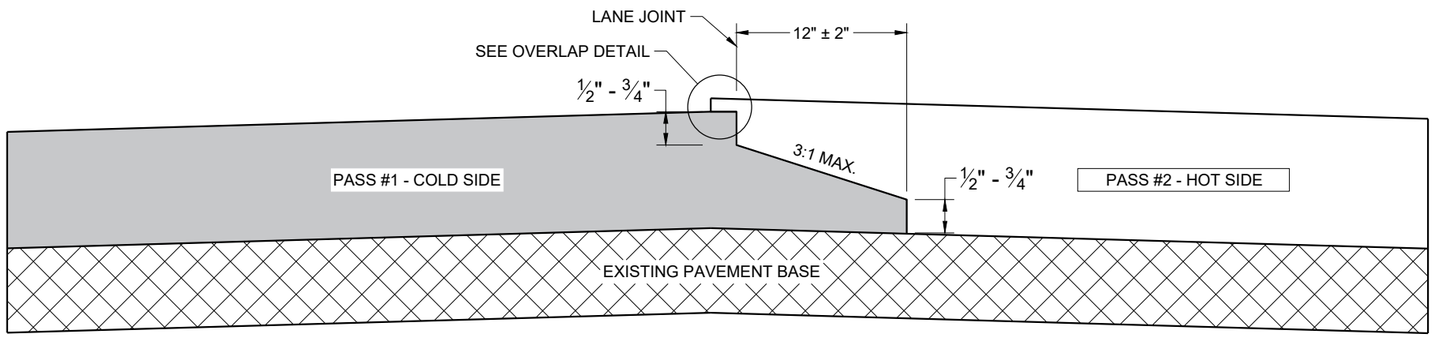
RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

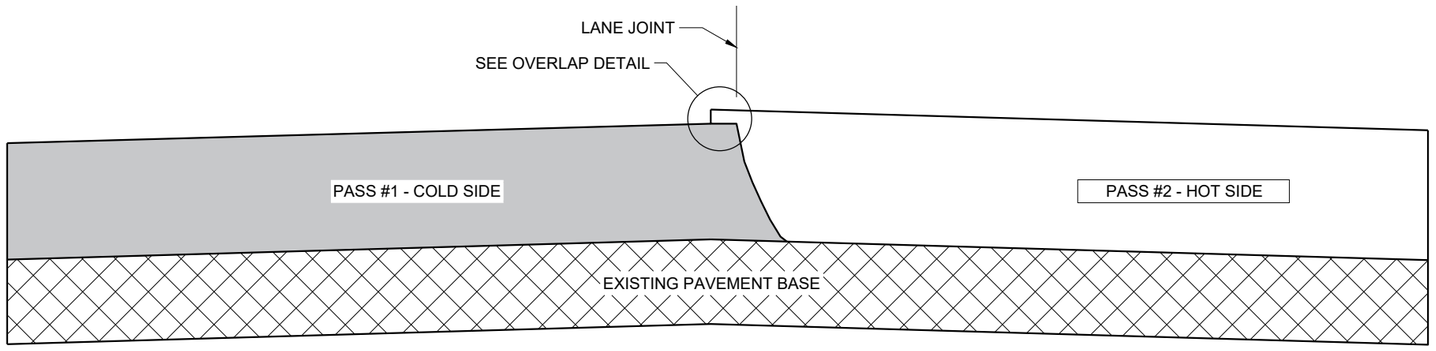
APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUP
FHWA

6

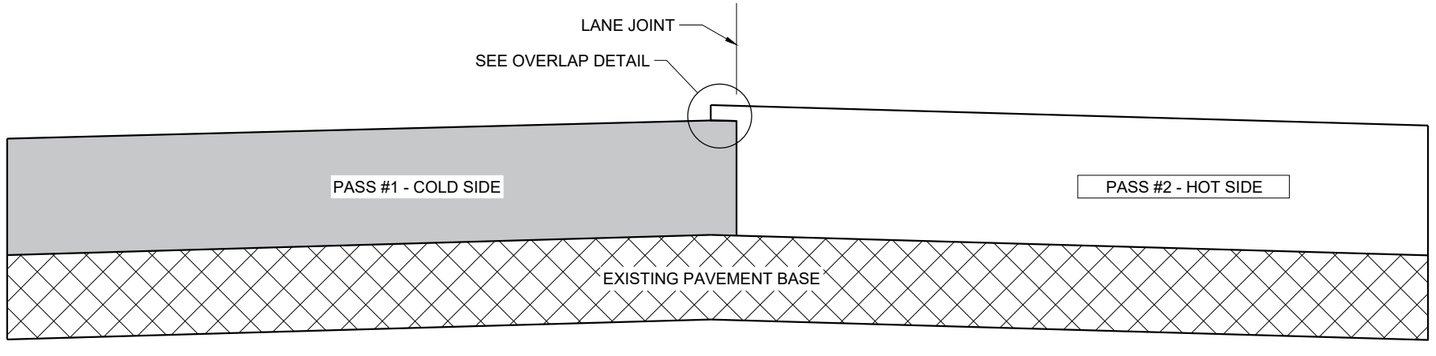
S.D.D. 13 C 11-12b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

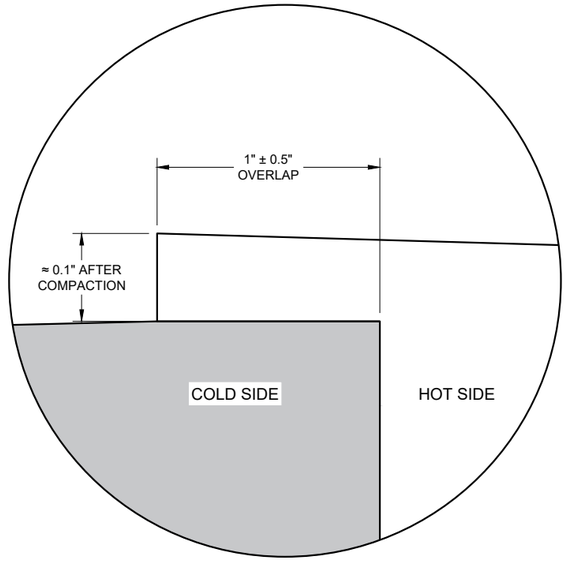
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

GENERAL NOTES

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

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

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

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

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

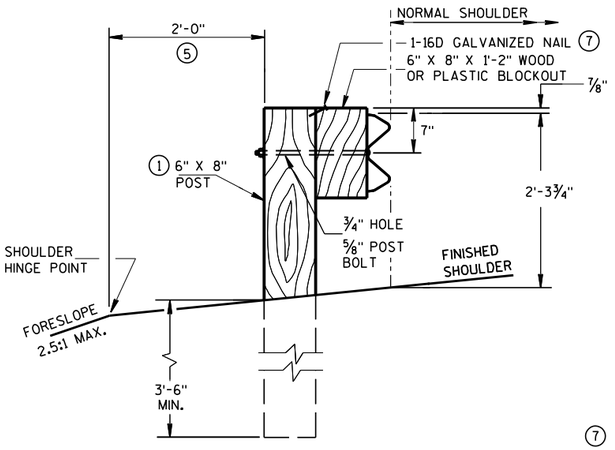
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

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

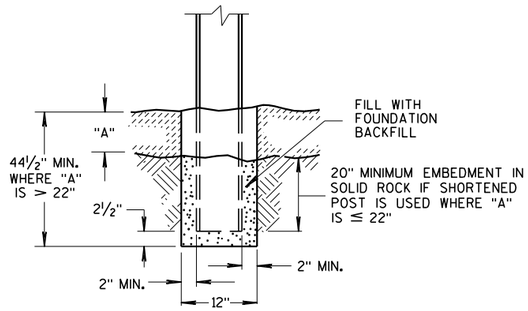
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

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

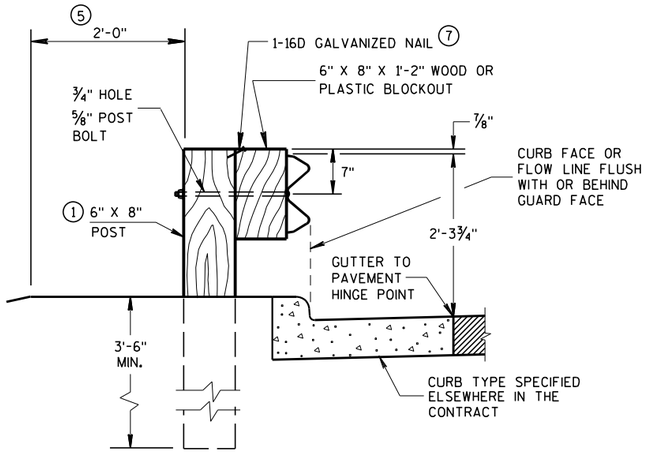
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



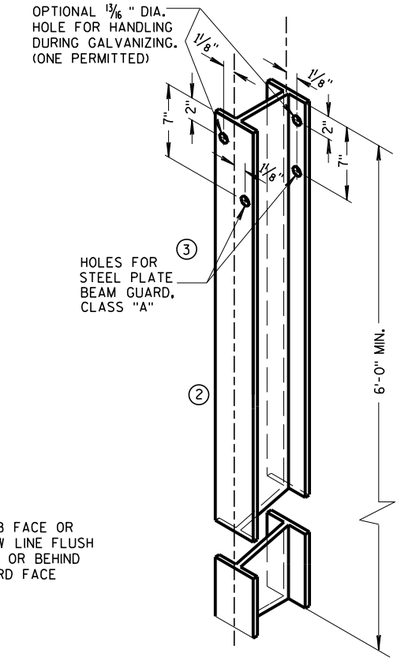
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



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

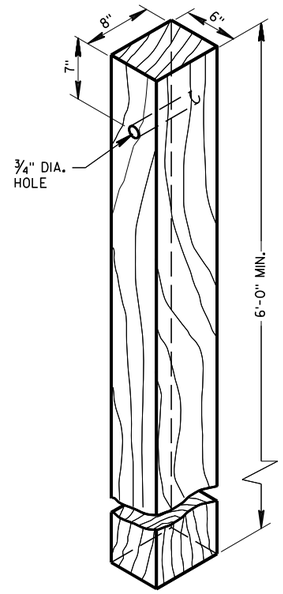


END VIEW
LOCATED ALONG A CURBED ROADWAY

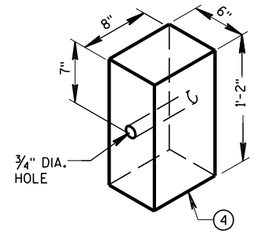


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

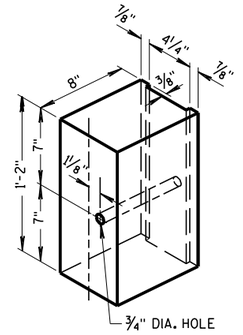
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



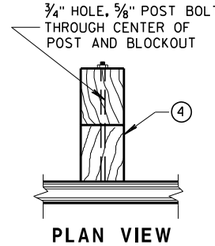
WOOD POST
(6"X8") NOMINAL



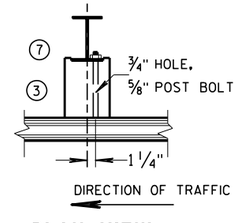
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



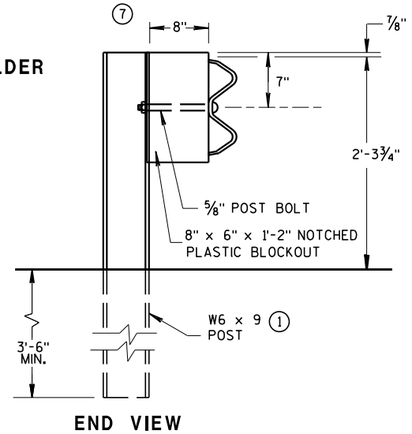
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



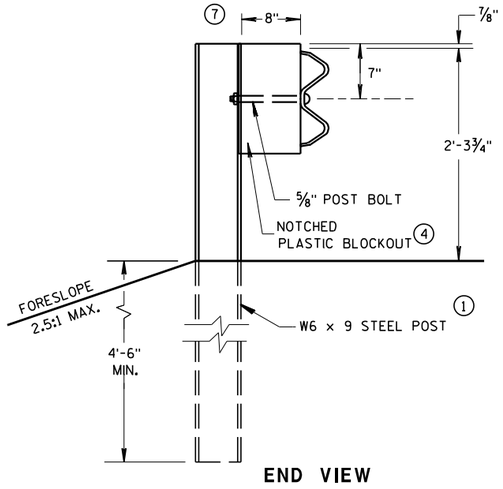
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



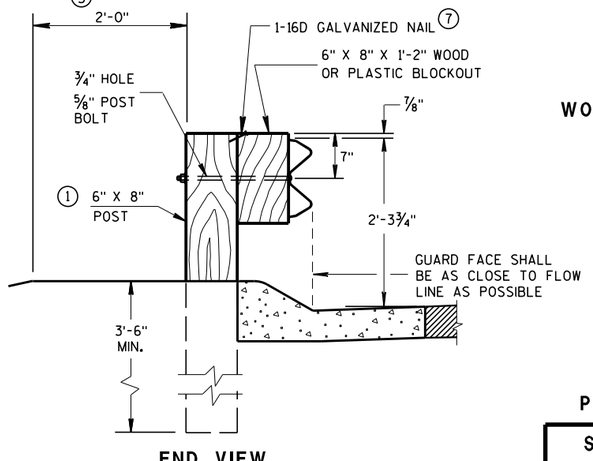
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



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



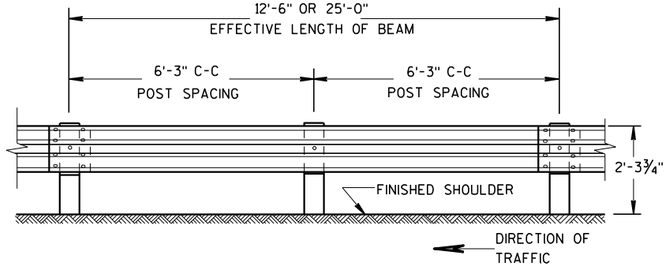
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

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

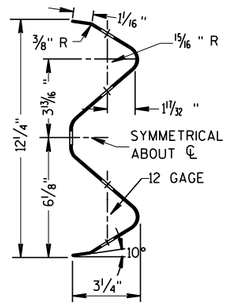
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

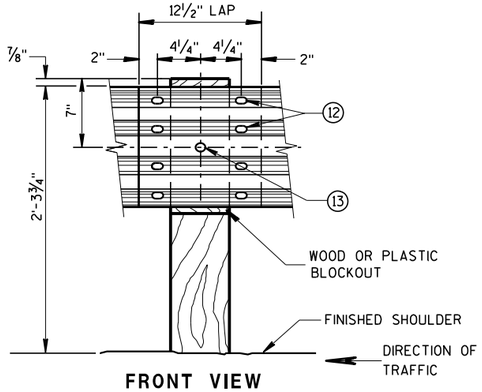


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

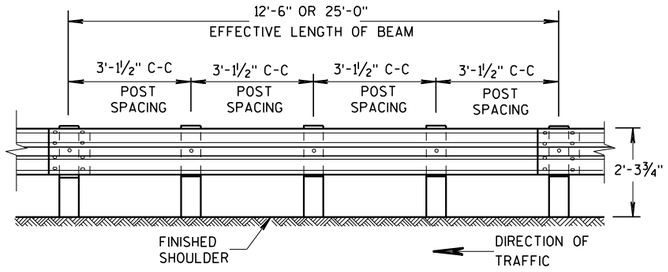
GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

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

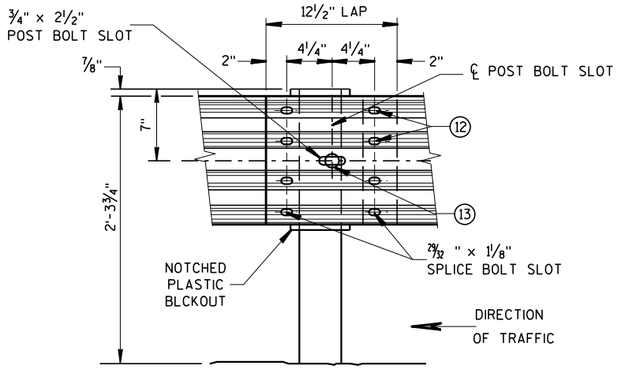
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

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



FRONT VIEW

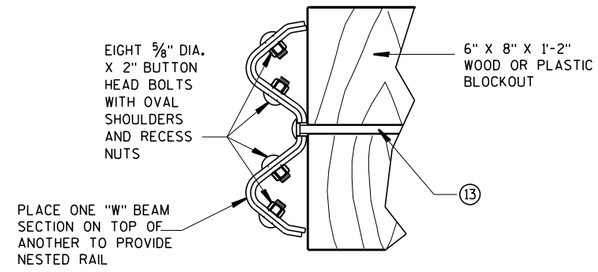
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

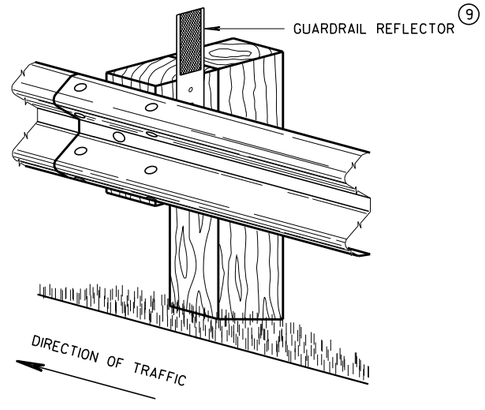
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD



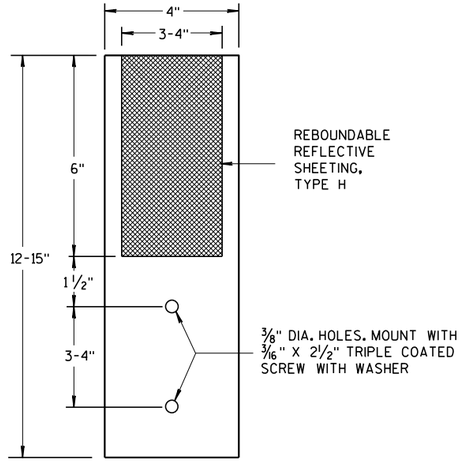
NESTED W BEAM (NW)

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

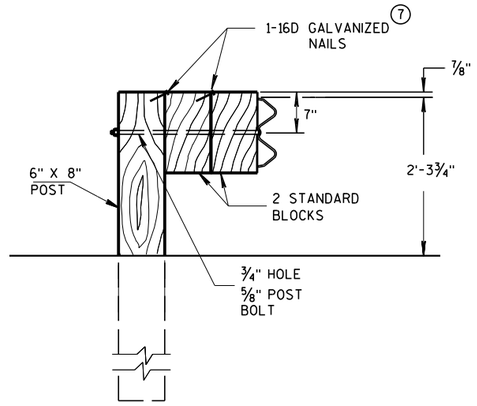
STATE OF WISCO 150
DEPARTMENT OF TRANSPORTATION

6

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

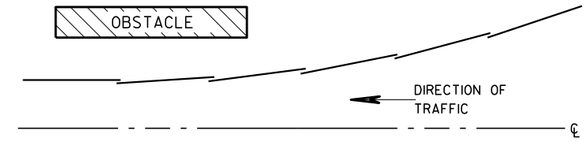
6

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

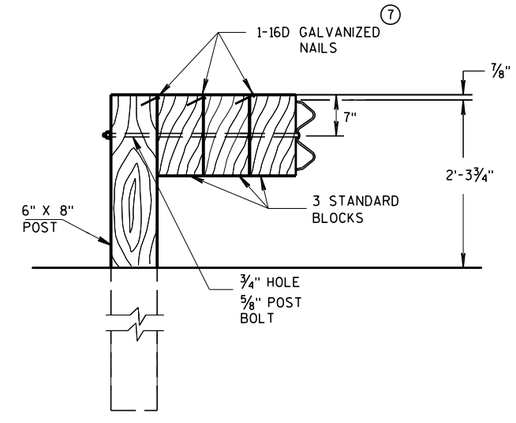


DETAIL FOR DOUBLE BLOCKS

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

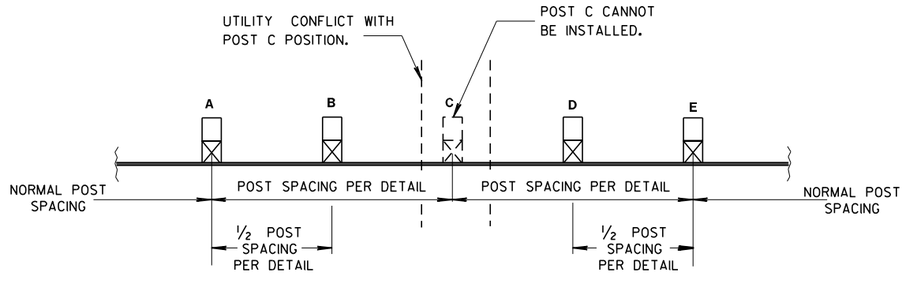


PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS

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



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

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.

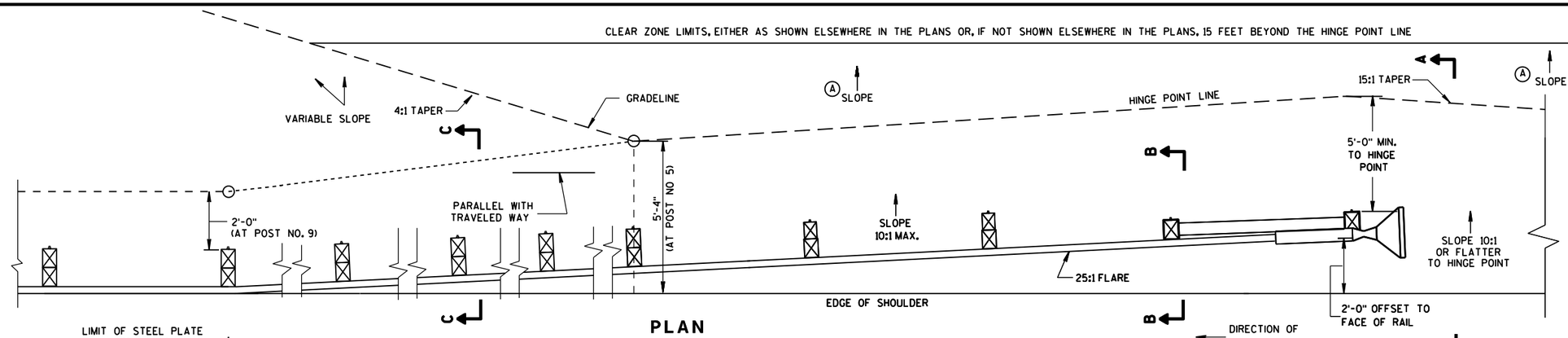
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

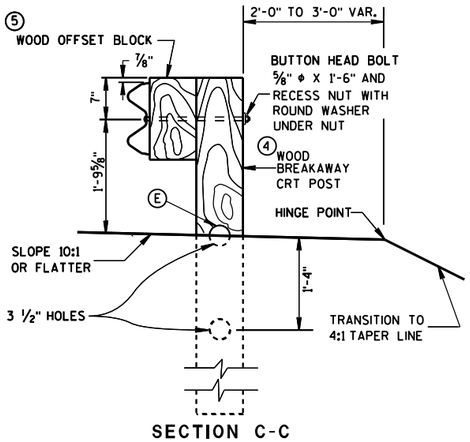
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

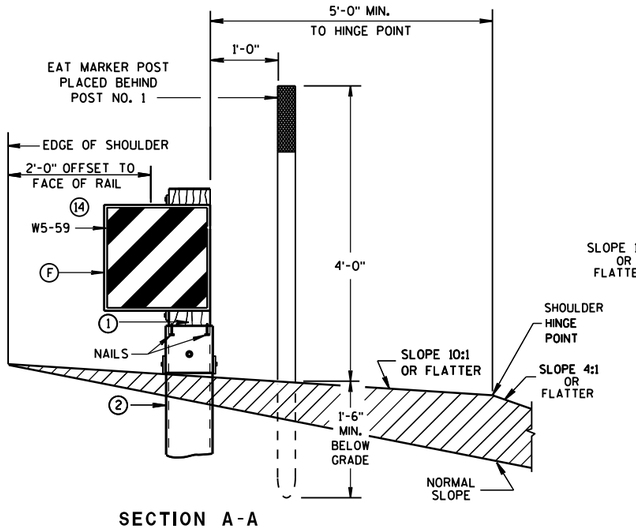
STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

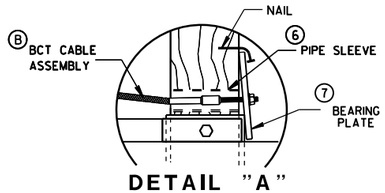
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

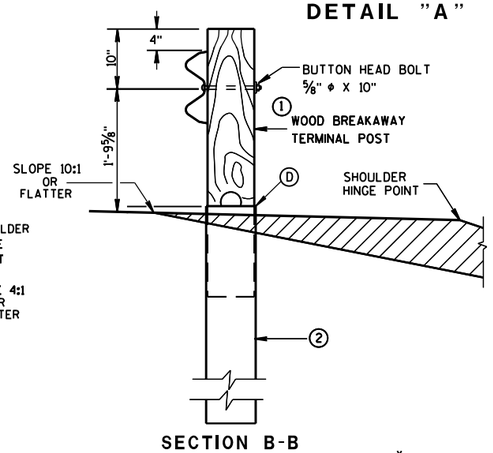
* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

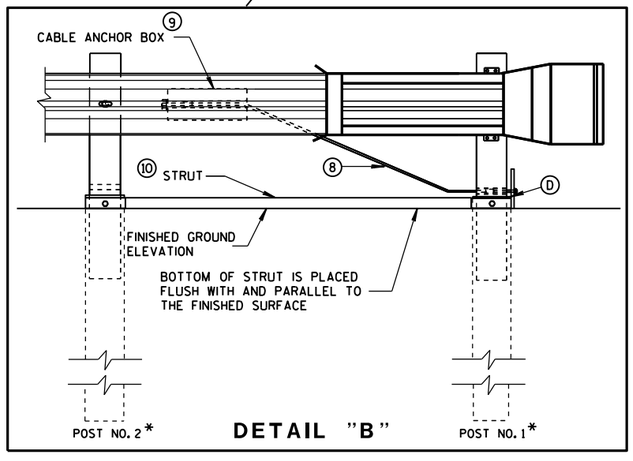










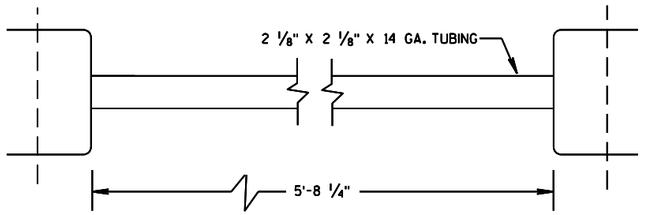


STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

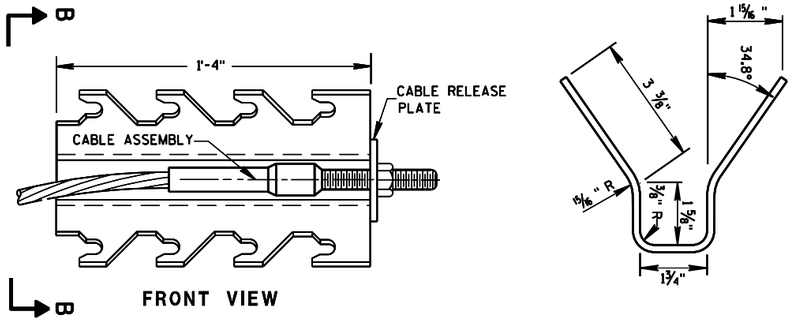
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

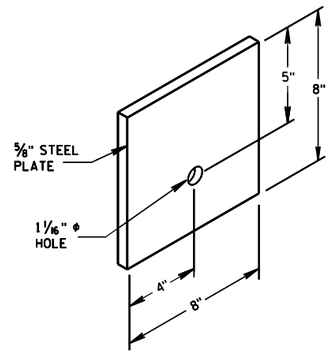
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL



⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

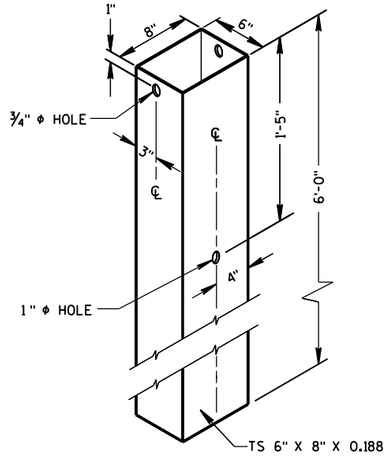
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S.D.D. 14 B 24-9b

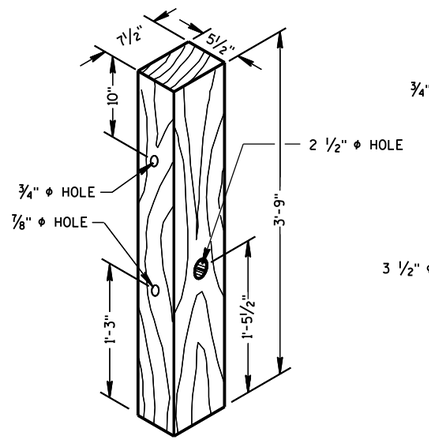
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

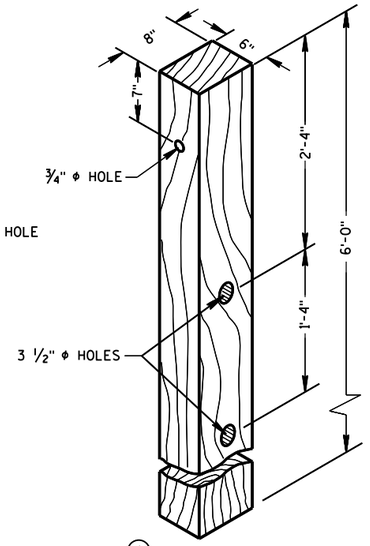
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

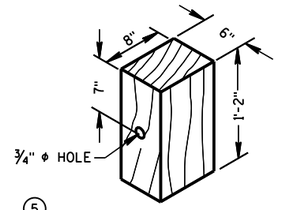


④ CRT POST
(POSTS NO'S 5-8

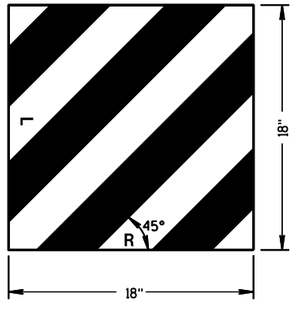
WOOD BREAKAWAY POSTS

GENERAL NOTES

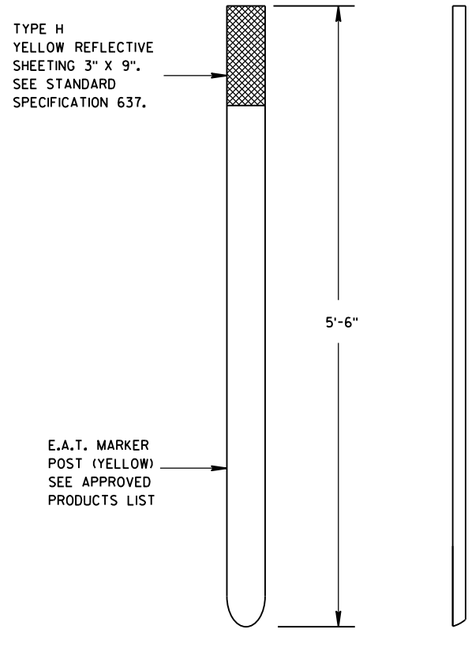
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH,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



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



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

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

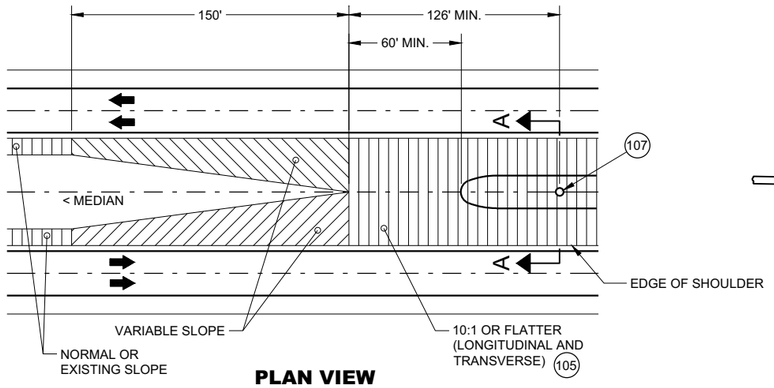
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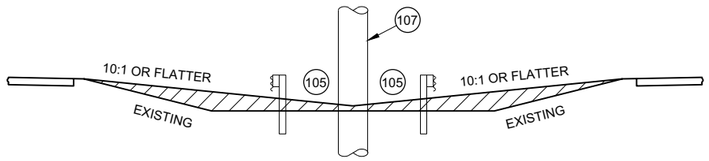
S.D.D. 14 B 24-9c

6

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



PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)



SECTION A -A
MEDIAN GRADING
(ALL INSTALLATIONS)

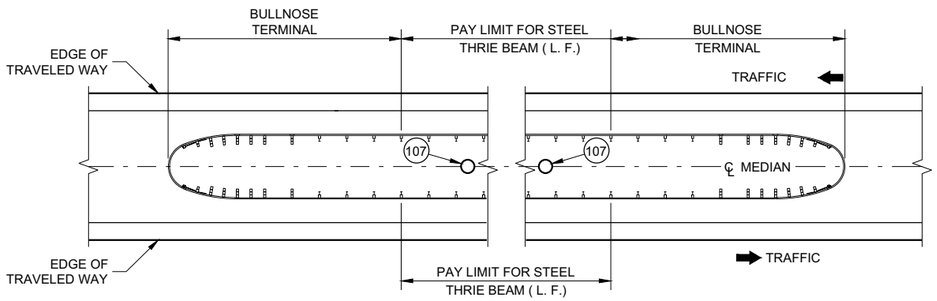
GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

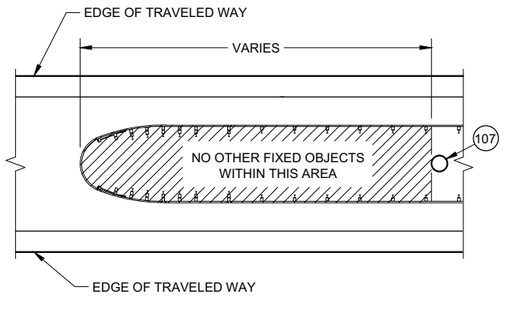
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

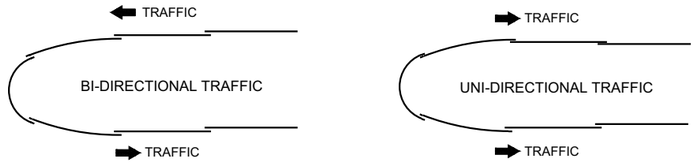
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.
- (100) DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- (101) U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- (102) NOSE CABLE WITH SWAGGED END BUTTONS.
- (103) NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- (104) THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.
- (105) MINIMUM WORKING WIDTH 4' - 2".
- (106) MAX. WIDTH OF SYSTEM IS 14' - 2 ½" MEASURED FROM THE BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.
- (107) FIXED OBJECT OR OTHER HAZARD.
- (108) PLAN IS TO PROVIDE STATION OFFSET TO CENTER OF POST 5 IN PLANS.



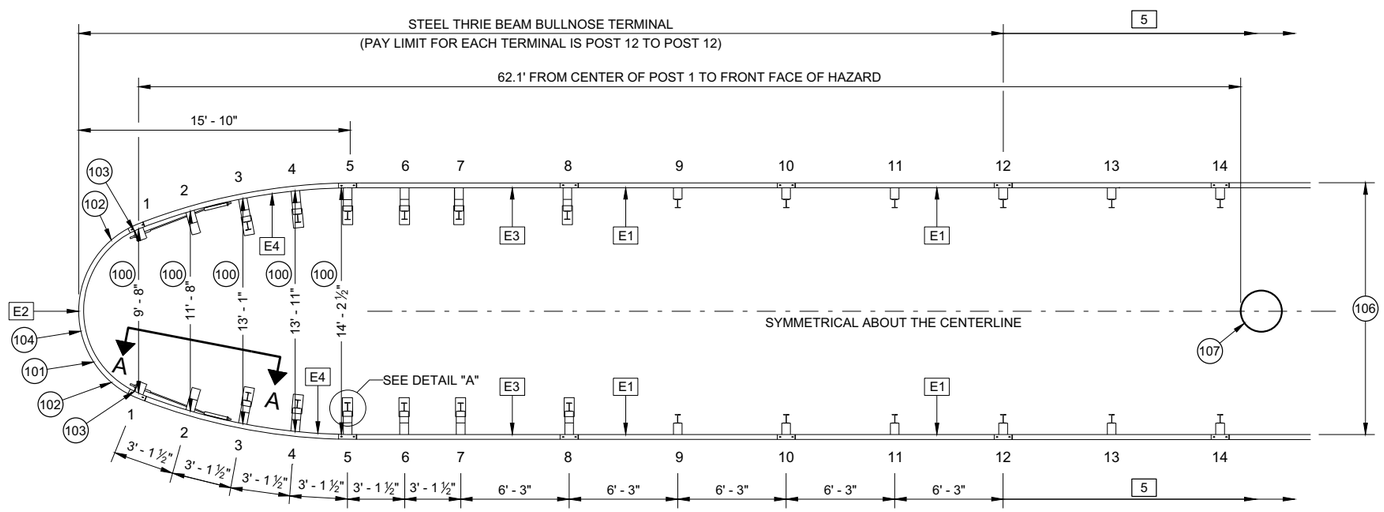
MEDIAN HAZARD PROTECTION PAY LIMITS



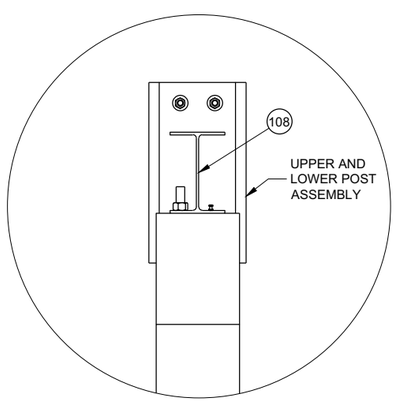
HAZARD FREE AREA
INSIDE BULLNOSE



LAPPING DETAIL



PLAN VIEW
TYPICAL BULLNOSE LAYOUT



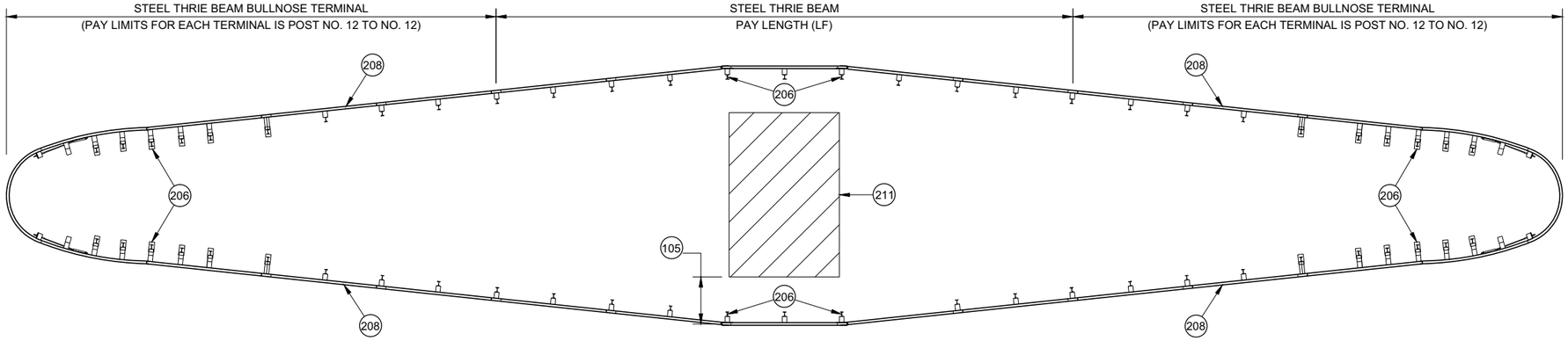
DETAIL "A"

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B26 - 04a

SDD 14B26 - 04a



VARIABLE WIDTH BULLNOSE

GENERAL NOTES

200 6' - 3" ASYMMETRICAL 10-GAUGE W-BEAM TO THRIE BEAM GUARD TRANSITION. SEE SDD 14B45 FOR MORE INFORMATION.

201 W-BEAM RAIL. SEE SDD 14B42 FOR MORE INFORMATION.

202 SEE POST NO. 9 AND ALL STEEL THRIE BEAM POST BEYOND DETAIL.

203 SEE SDD 14B42 FOR INSTALLATION INFORMATION.

204 SEE SDD 14B45 FOR INSTALLATION DETAILS. REPLACE ASYMMETRICAL W-BEAM TO THRIE BEAM TRANSITION AND W-BEAM RAIL WITH E1. PAY FOR MODIFIED THRIE BEAM TRANSITION.

205 CONCRETE BARRIER OR BRIDGE RAIL.

206 SEE PLAN FOR STATION AND OFFSET TO CENTER OF POST.

207 SEE PLAN FOR STATION AND OFFSET TO CENTER OF SPLICE.

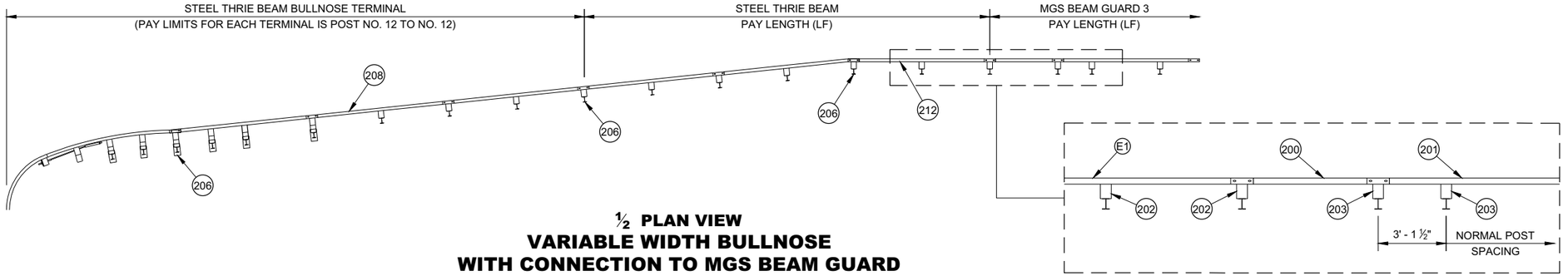
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

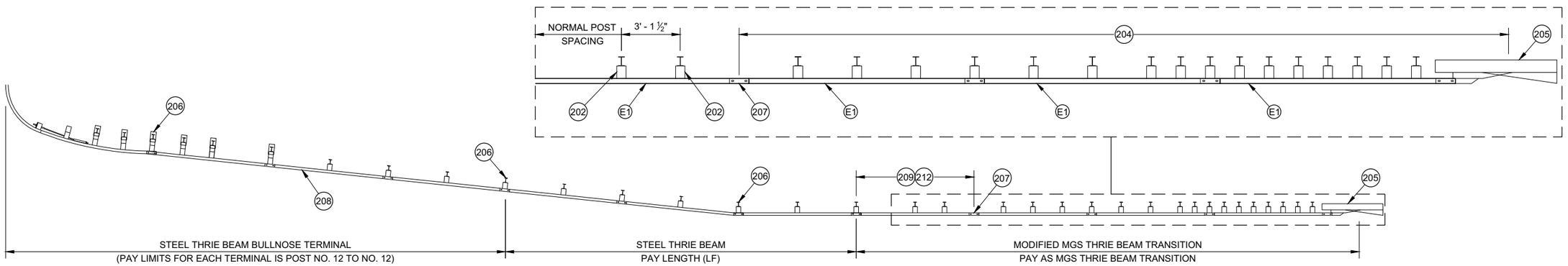
210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

211 WIDER HAZARD TO BE SHIELDED.

212 TRANSITION RAIL HEIGHT TO 31" OVER THE LENGTH OF A 12' - 6" BEAM SECTION.



½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO MGS BEAM GUARD



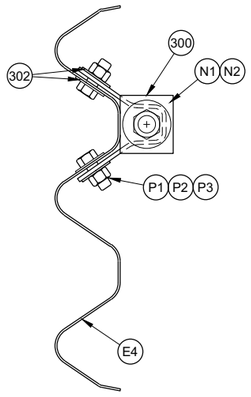
½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO RIGID BARRIER

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

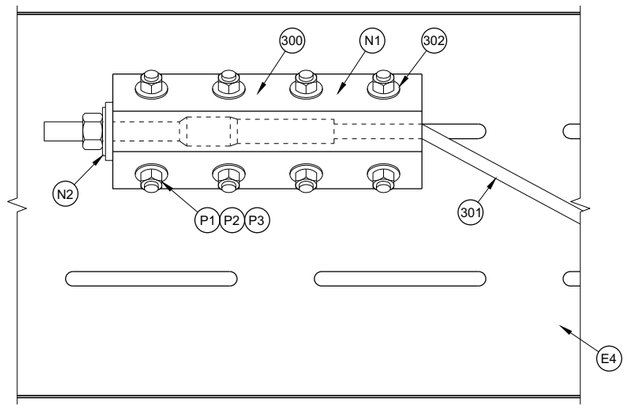
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SDD 14B26 - 04b

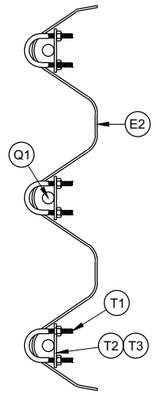


PROFILE VIEW

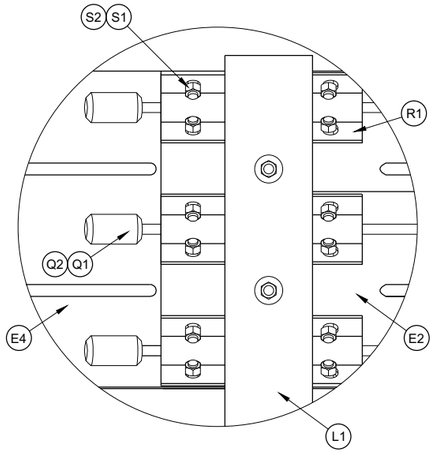
CABLE ANCHOR ASSEMBLY CONNECTION



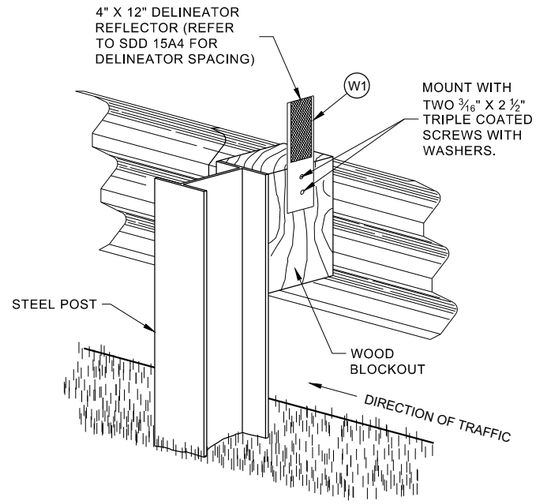
CABLE ANCHOR ASSEMBLY



NOSE CABLE RETAINING CLIP



DETAIL "A"



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

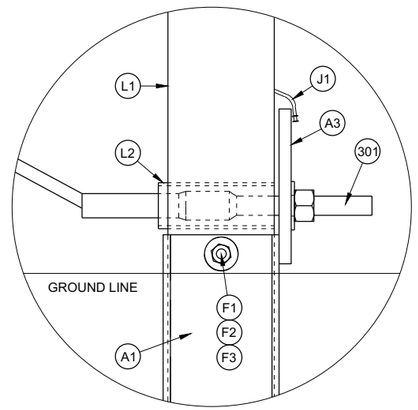
POST 8

POST 3

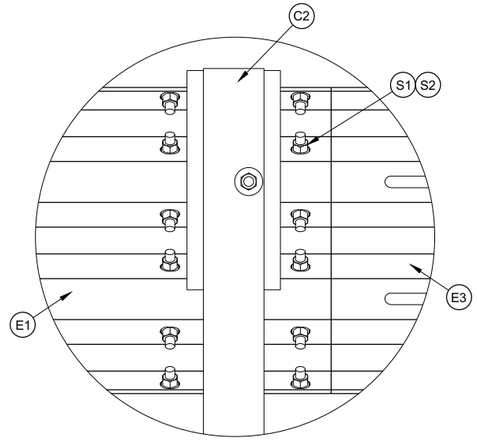
POST 2

POST 1

CROSS SECTION A - A



DETAIL "B"



DETAIL "C" THRIE BEAM SPLICE

GENERAL NOTES

(300) SEE ANCHOR BRACKET ASSEMBLY DETAIL.

(301) SEE ANCHOR CABLE ASSEMBLY DETAIL

(302) ONE WASHER BETWEEN BOLT HEAD AND RAIL AND BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

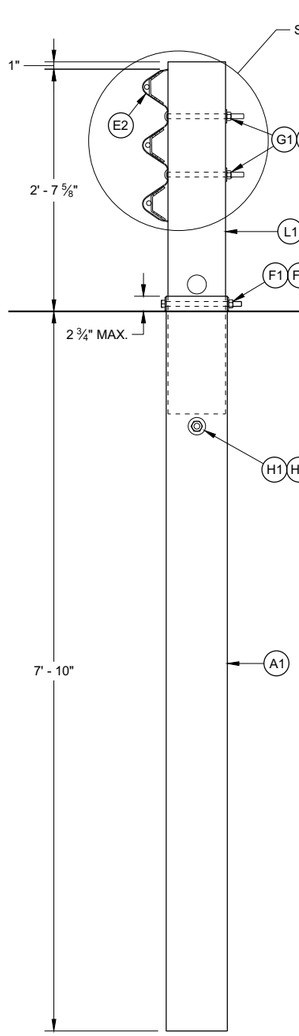
(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

STEEL THRIE BEAM BULLNOSE TERMINAL

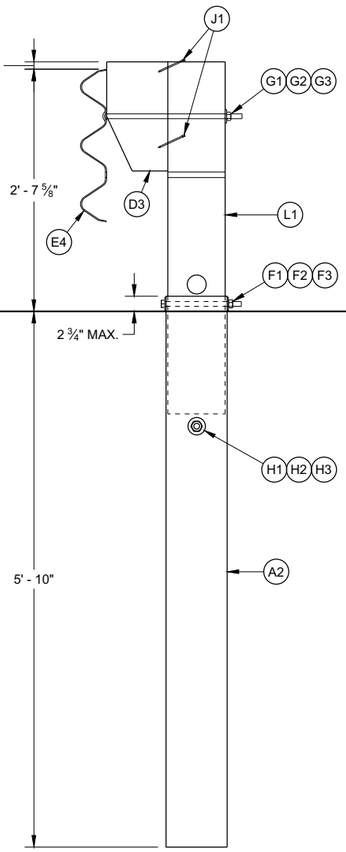
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

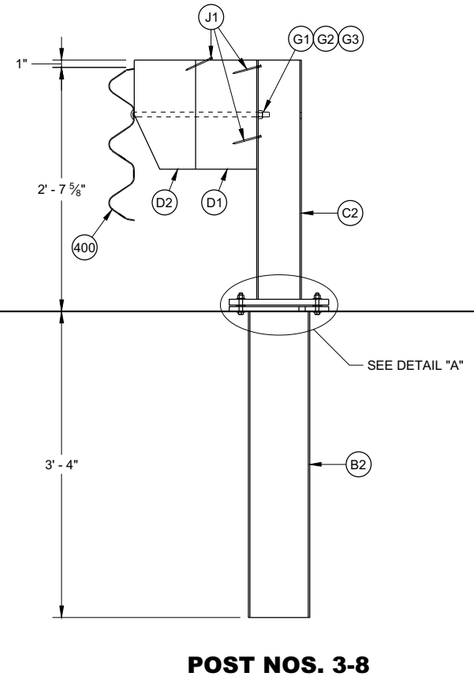
SDD 14B26 - 04c



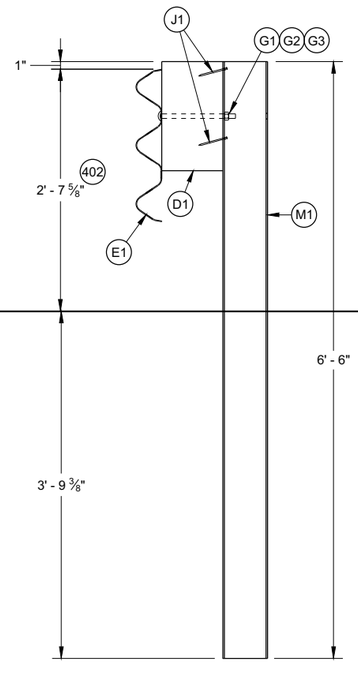
POST NO. 1



POST NO. 2



POST NOS. 3-8



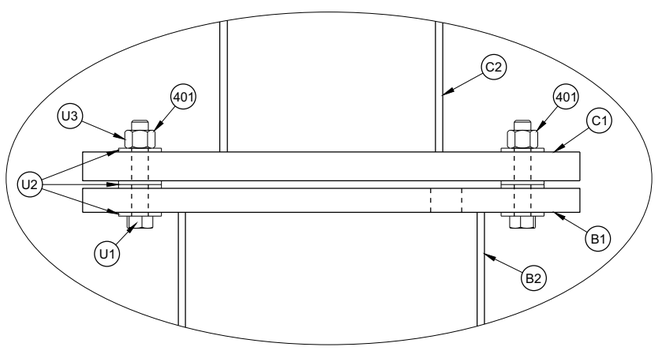
POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND

GENERAL NOTES

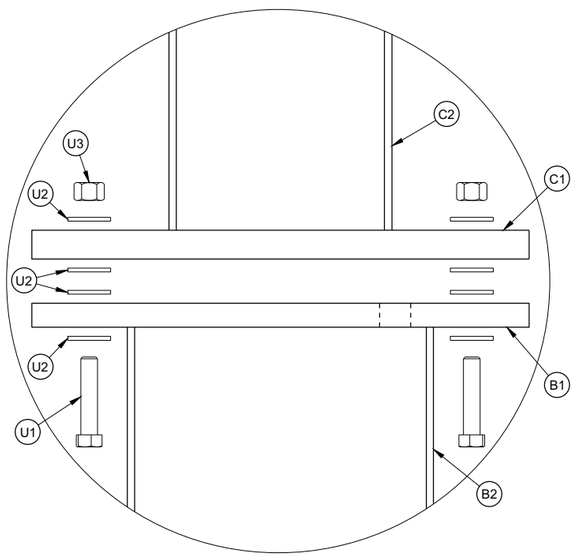
400 RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

401 TORQUE BOLD BETWEEN 60-75 FT-LB

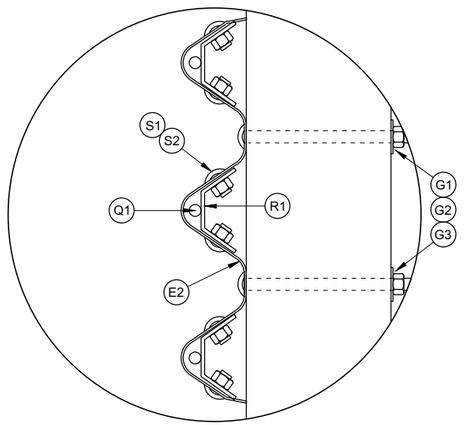
402 HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".



DETAIL "A"



EXPLODED VIEW
DETAIL "A"



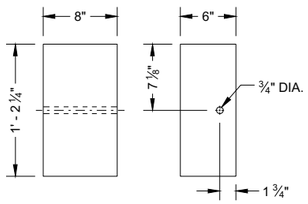
DETAIL "B"

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

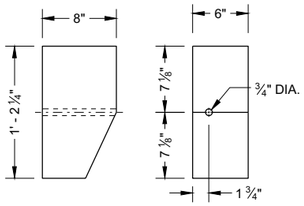
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SDD 14B26 - 04d



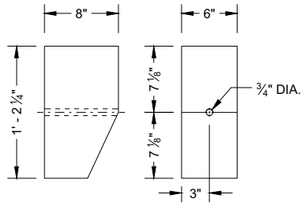
ELEVATION PROFILE

BLOCKOUT (D1)



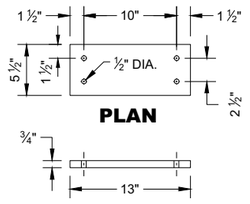
ELEVATION PROFILE

BLOCKOUT (D2)



ELEVATION PROFILE

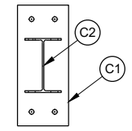
BLOCKOUT (D3)



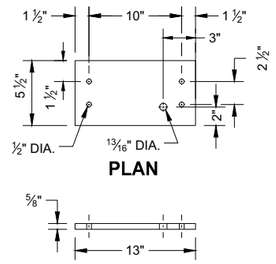
PLAN

PROFILE

UPPER SHEAR PLATE (C1)



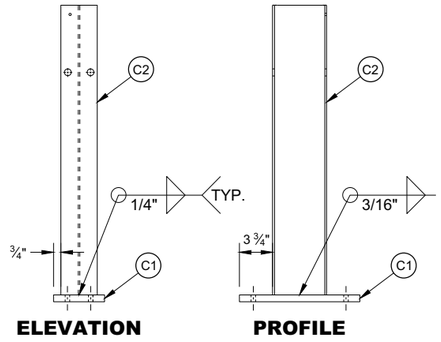
PLAN



PLAN

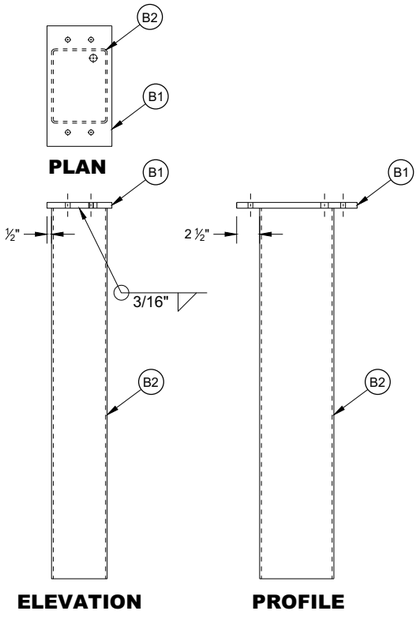
PROFILE

LOWER SHEAR PLATE (B1)



ELEVATION PROFILE

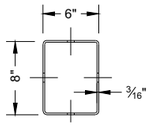
UPPER POST ASSEMBLY



PLAN

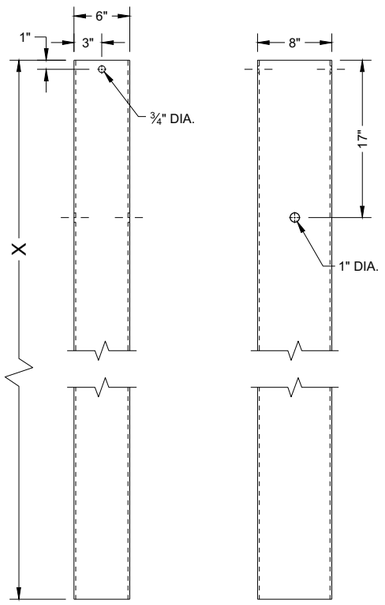
ELEVATION PROFILE

LOWER POST ASSEMBLY



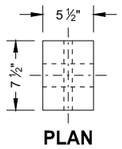
PLAN

PART	LENGTH "X"
A1	8' - 0"
A2	6' - 0"
B2	3' - 6"

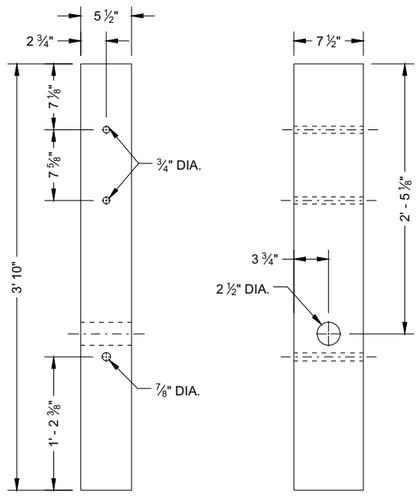


ELEVATION PROFILE

FOUNDATION TUBE

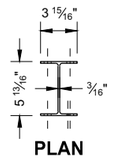


PLAN

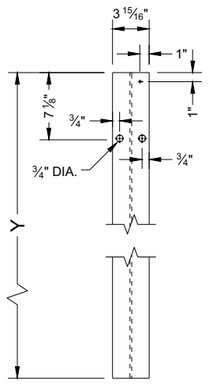


ELEVATION PROFILE

BCT POST (L1)



PLAN



ELEVATION

POST

PART	LENGTH "Y"
M1	6' - 6"
M2	5' - 8 5/8"
C2	2' - 8 5/8"

STEEL THRIE BEAM BULLNOSE TERMINAL

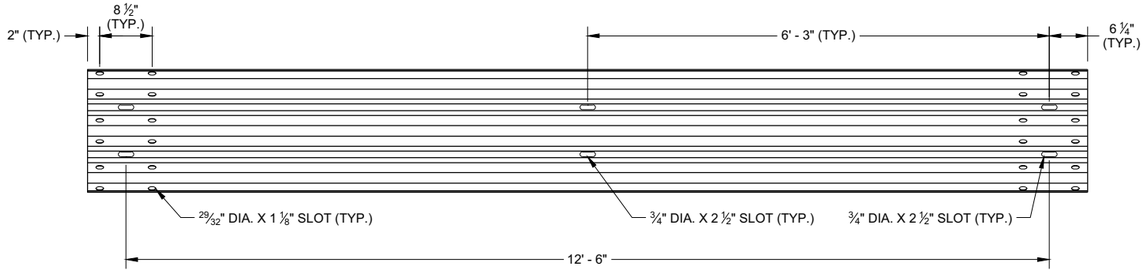
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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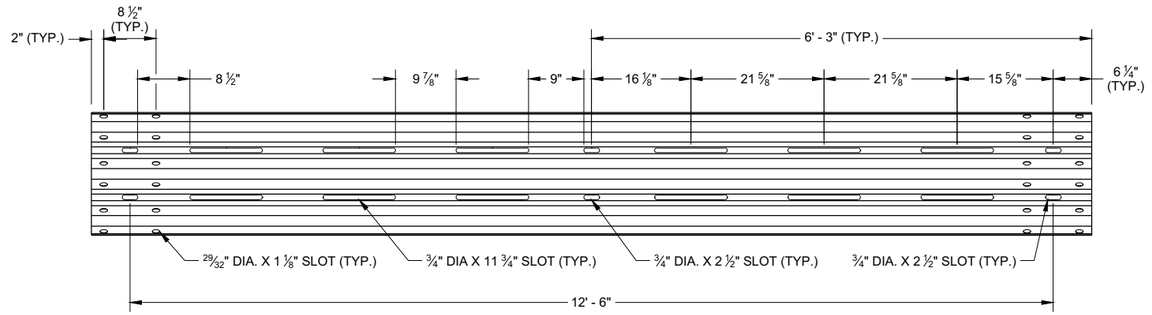
SDD 14B26 - 04e

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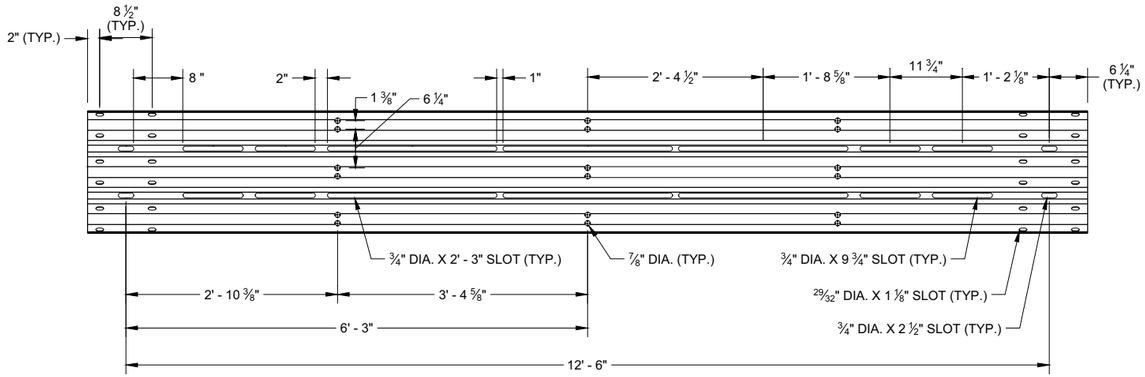
SDD 14B26 - 04e



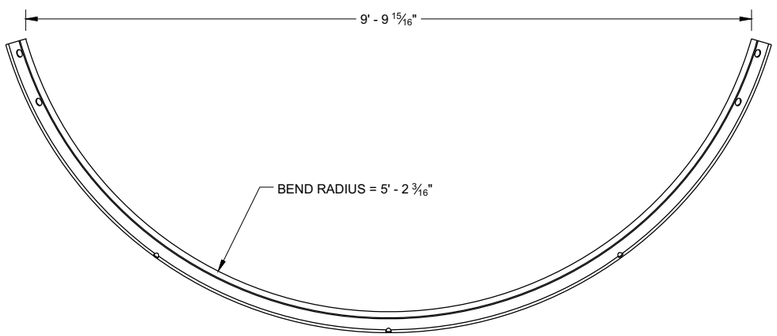
SLOTTED THRIE BEAM RAIL E1



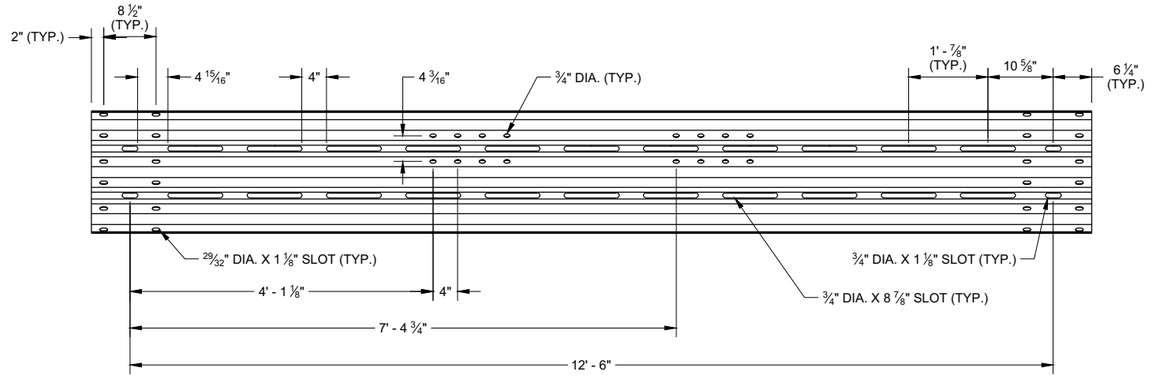
SLOTTED THRIE BEAM RAIL E3



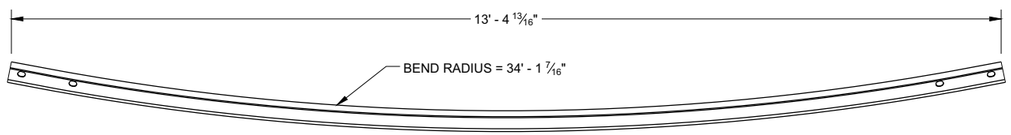
ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E2



PLAN VIEW
SLOTTED THRIE BEAM RAIL E2



ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E4



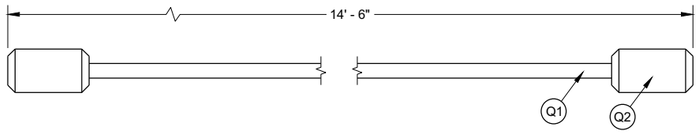
PLAN VIEW
SLOTTED THRIE BEAM RAIL E4

STEEL THRIE BEAM BULLNOSE TERMINAL

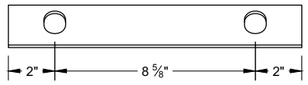
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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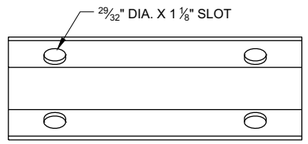
SDD 14B26 - 04f



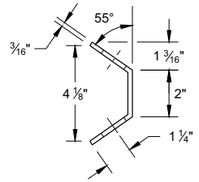
NOSE CABLE AND SWAGE BUTTON



PLAN VIEW

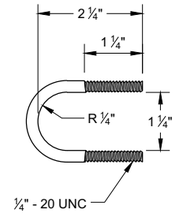


ELEVATION VIEW

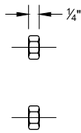


PROFILE VIEW

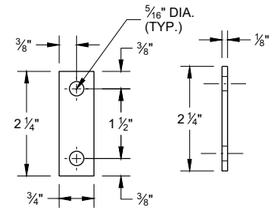
NOSE CABLE ANCHOR (R1)



U - BOLT (T1)

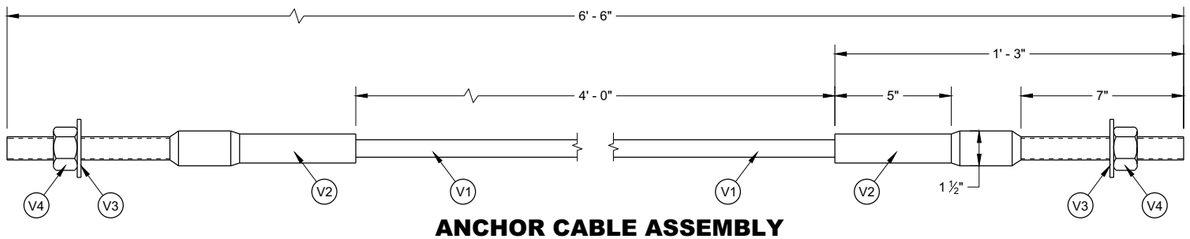


U - BOLT NUT (T3)

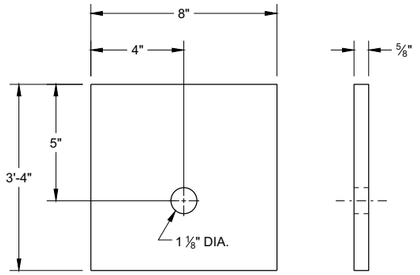


ELEVATION VIEW **PROFILE VIEW**

U - BOLT PLATE WASHER (T2)

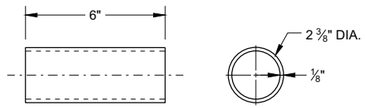


ANCHOR CABLE ASSEMBLY



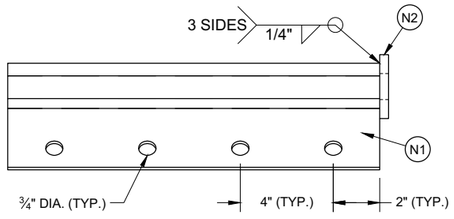
ELEVATION VIEW **PROFILE VIEW**

BCT BEARING PLATE (A3)

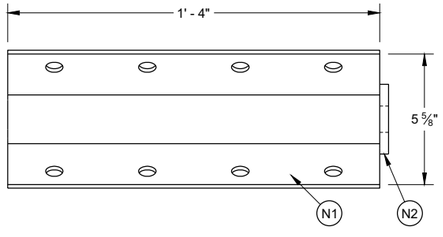


ELEVATION VIEW **PROFILE VIEW**

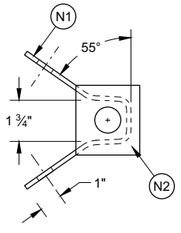
BCT POST SLEEVE (L2)



PLAN VIEW

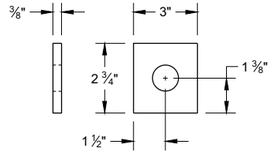


ELEVATION VIEW



PROFILE VIEW

ANCHOR BRACKET ASSEMBLY (N1)



ANCHOR BRACKET END PLATE (N2)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA 161

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SDD 14B26 - 04g

BILL OF MATERIALS LIST

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
A1	LONG FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A2	FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A3	BEARING PLATE AT POST	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B1	LOWER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B2	LOWER SLIP POST ASSEMBLY - TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
C1	UPPER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
C2	UPPER SLIP POST ASSEMBLY - POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
D1	BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D2	TAPERED BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D3	TAPERED BLOCK FOR BCT POST - WOOD	WISDOT SPEC. 614
E1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E2	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
E3	THRIE BEAM RAIL - PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E4	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
F1	5/8" DIA. HEX HEAD GROUND STRUT AND YOKE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
F2	5/8" DIA. GROUND STRUT AND YOKE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
F3	GROUND STRUT AND YOKE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
G1	5/8 " DIA. POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G2	POST BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G3	POST BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
H1	7/8" DIA. SOIL TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
H2	SOIL TUBE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDEN WASHER ONLY)
H3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
J1	16D DOUBLE HEAD NAIL	ASTM A153 HOT DIPPED CLASS D DOUBLE HEAD ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)
L1	BCT TIMBER POST	WISDOT SPEC. 614 S4S FINISH ON 4 SIDE
L2	BCT POST SLEEVE	AASHTO M111/ASTM A123 2 3/8" OD ASTM 53 GRADE B
M1	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
M2	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N1	ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N2	ANCHOR BRACKET - BEARING PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
P1	5/8" DIA. ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
P2	ANCHOR BRACKET BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
P3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
Q1	5/8" DIA. NOSE CABLE	6X19 AASTHO M30 / ASTM A741 XIPS INDEPENDENT WIRE CORE (IWRC) PR 6X25 XIPS, IWRC NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
Q2	NOSE CABLE-SWAGE BUTTON	COLD TUFF BUTTON, S-409 SIZE NO. 12 STOCK NUMBER 1040395 OR ANY OTHER SIMILAR SIZED WAGED-GRIP-BUTTON FERRULES. ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FIELD SWAGED PER MANUFACTURERS RECOMMENDATION. NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
R1	NOSE CABLE ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
S1	5/8" DIA. SPLICE BOLT - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
S2	SPLICE - BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD 5/8" ASTM A563DH OR SAE J995 GRADE 5
T1	1/4" DIA. NOSE CABLE - U BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
T2	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
T3	U-BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
U1	7/16" DIA. SLIP POST ASSEMBLY - BREAKAWAY BOLT	ASTM A153 OR B695 CLASS 55 OR F2329 UNC FULLY THREADED HEX HEAD TAP BOLT ASTM A449 OR SAE J429 GRADE 5
U2	7/16" DIA. SLIP POST ASSEBLY - BREAKAWAY BOLT - WASHER	ASTM F436 TYPE I (HARDEN TYPICALLY USED WITH STEEL) GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO POST BOLT CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 55, F2329
U3	SLIP POST ASSEBLY - BREAKAWAY BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / STM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
V1	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V2	ANCHOR CABLE-SWAGE FITTING	UNC ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FACTORY SWAGED. MIN. BREAKING STRENGTH OF 42.7 KIPS. ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."
V3	1" DIA. ANCHOR CABLE-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V4	1" DIA. ANCHOR CABLE-NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
W1	REFLECTOR	SEE SDD 15A4

6

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SDD 14B26 - 04h

SDD 14B26 - 04h

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

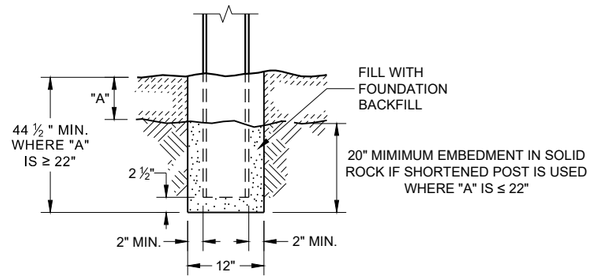
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

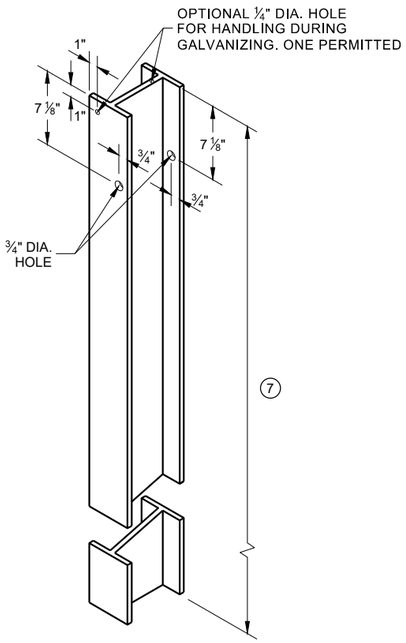
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

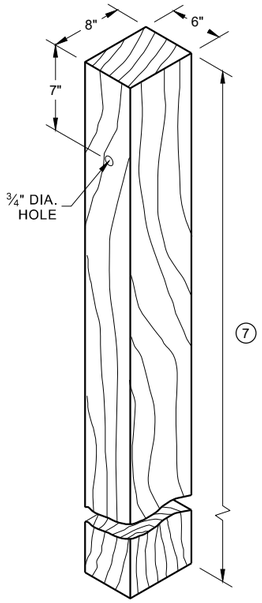
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



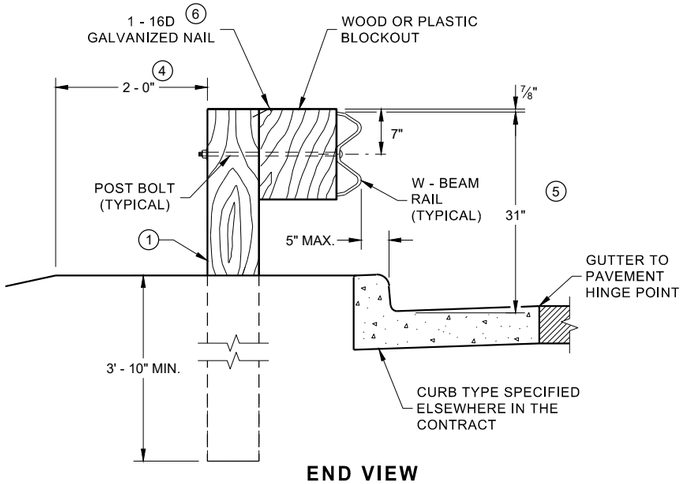
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



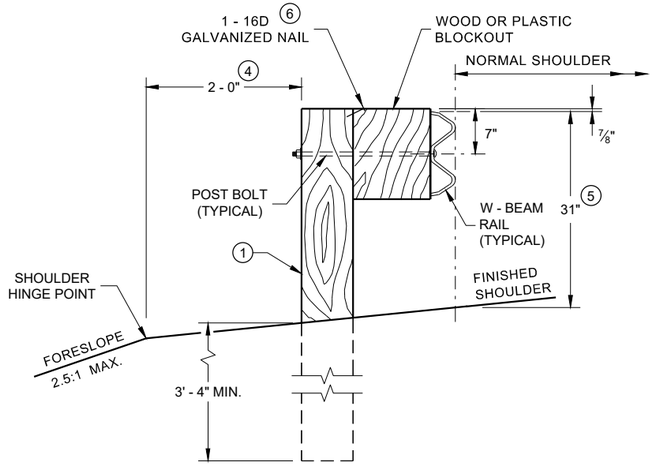
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



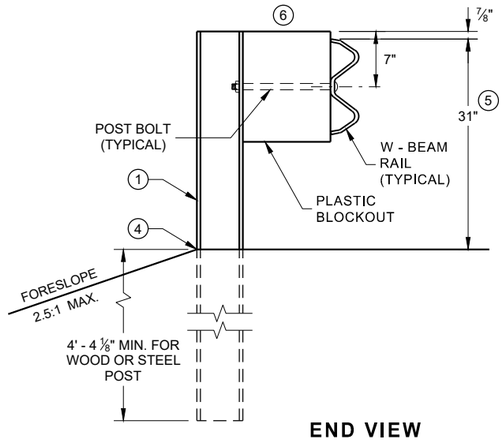
WOOD POST (6" X 8") NOMINAL (1)



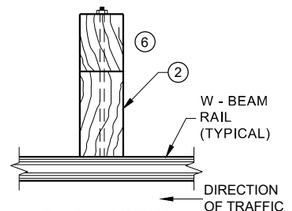
END VIEW
LOCATED ALONG A CURBED ROADWAY



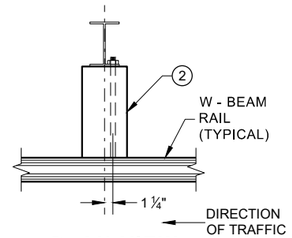
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



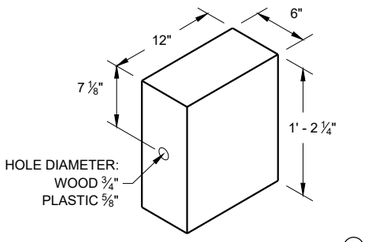
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

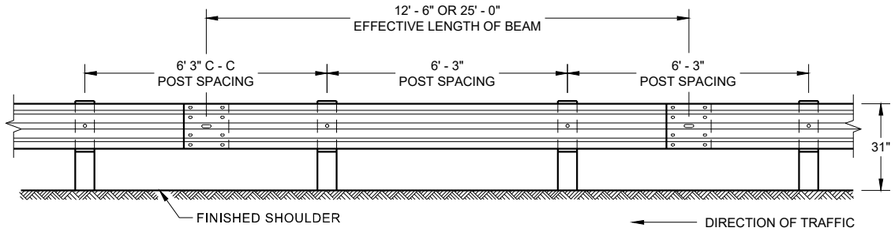
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

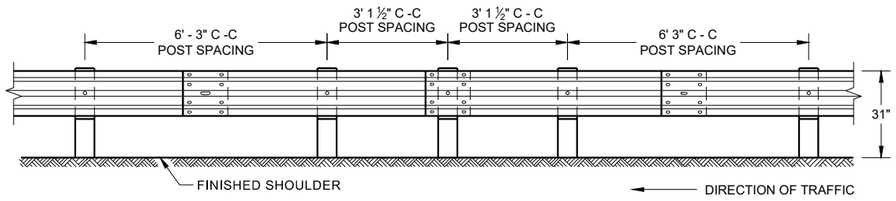
SDD 14B42 - 07a

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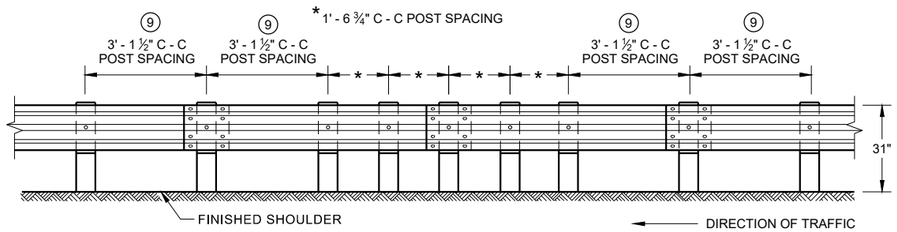
SDD 14B42 - 07a



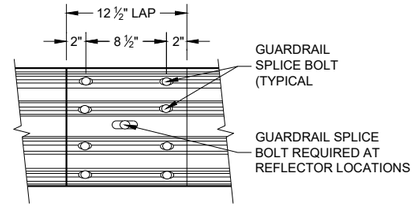
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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



FRONT VIEW
QUARTER POST SPACING (QS)



FRONT VIEW
MID-SPAN BEAM SPLICE

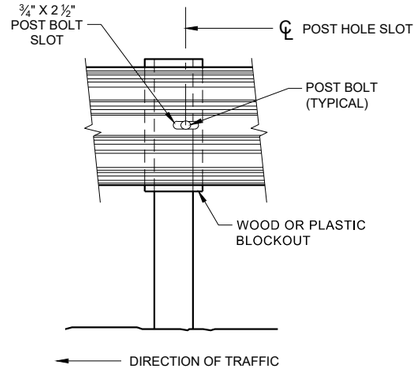
GENERAL NOTES

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

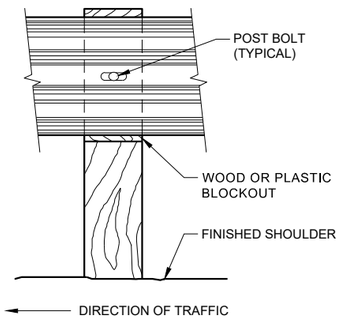
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

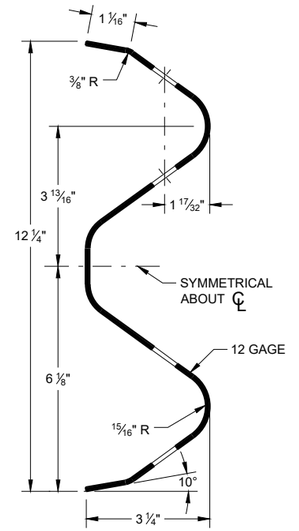
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



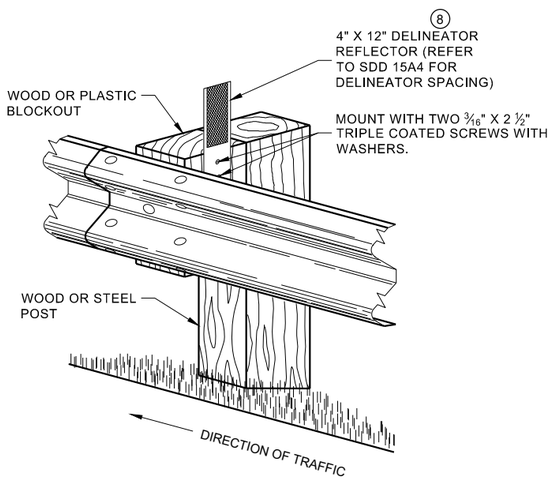
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



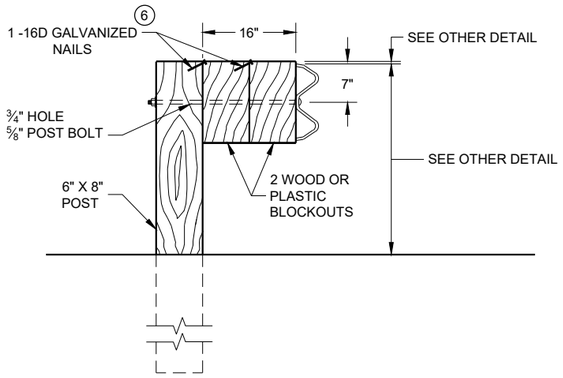
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07b

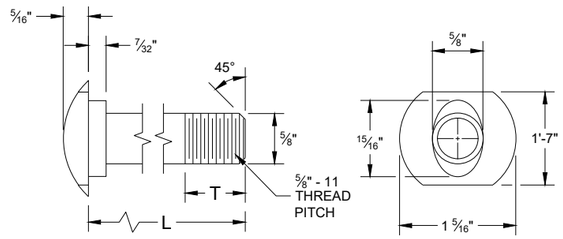


DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.

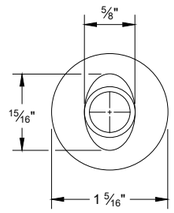
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3⁄16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

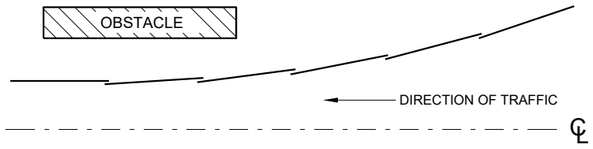


POST BOLT TABLE

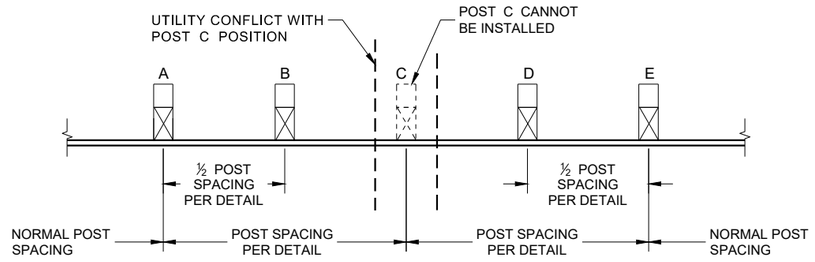
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



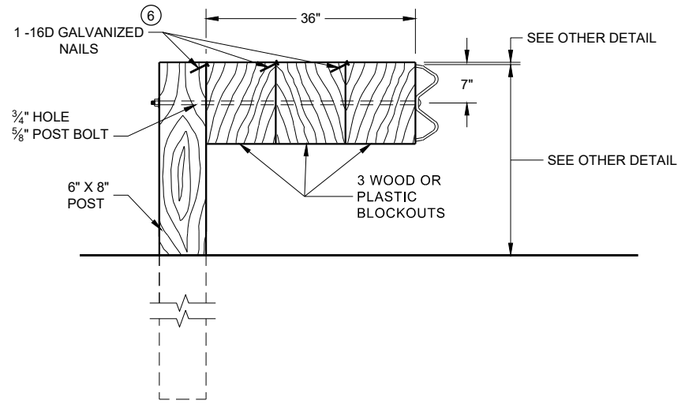
ALTERNATE BOLT HEAD



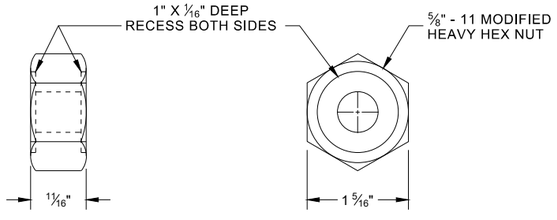
PLAN VIEW
BEAM LAPPING DETAIL



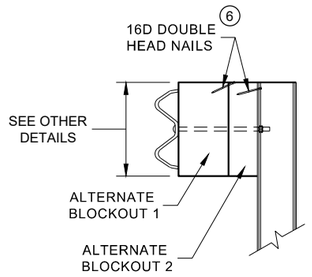
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



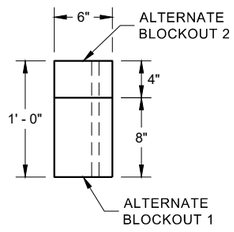
DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW



PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

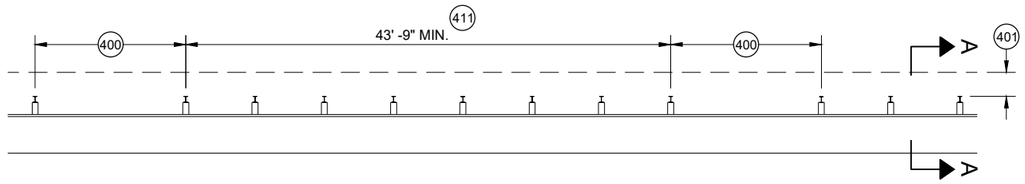
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

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

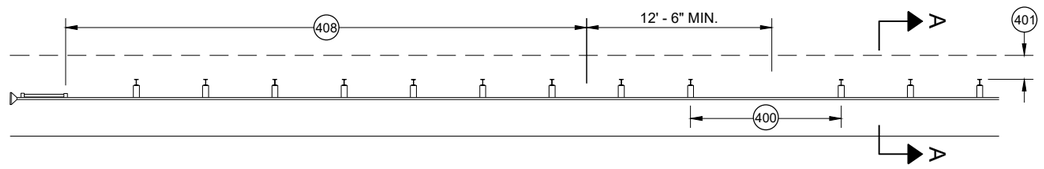
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

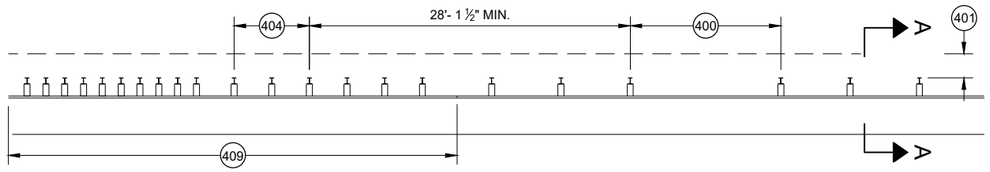
SDD 14B42 - 07c



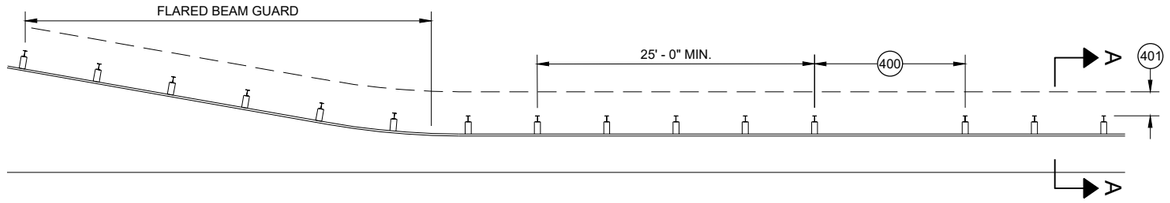
MISSING POST IN MGS GUARDRAIL



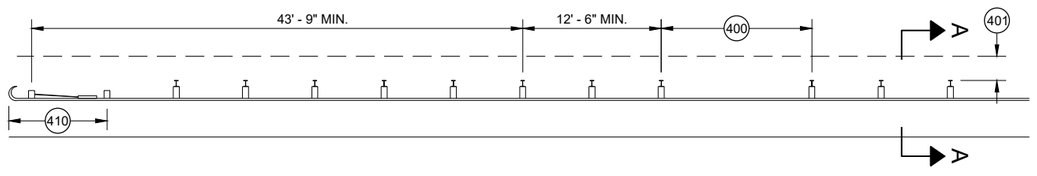
MISSING POST IN MGS GUARDRAIL NEAR EAT



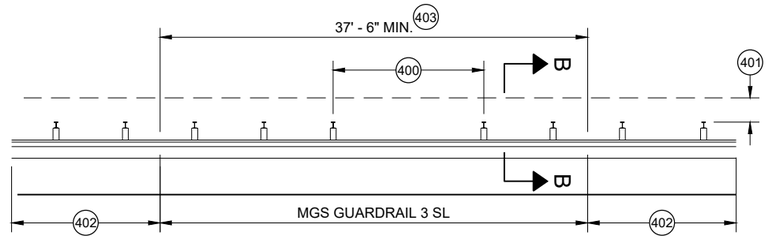
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

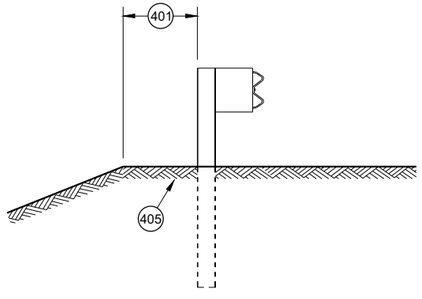


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

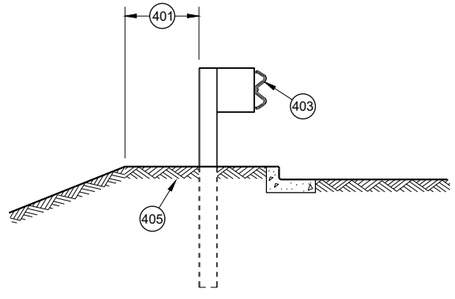


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

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

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

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

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

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

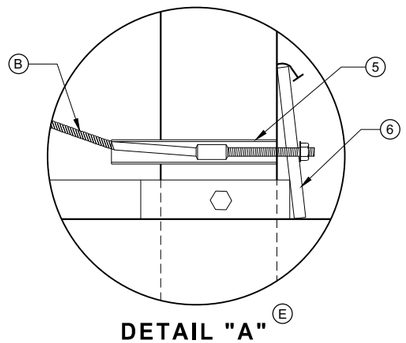
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

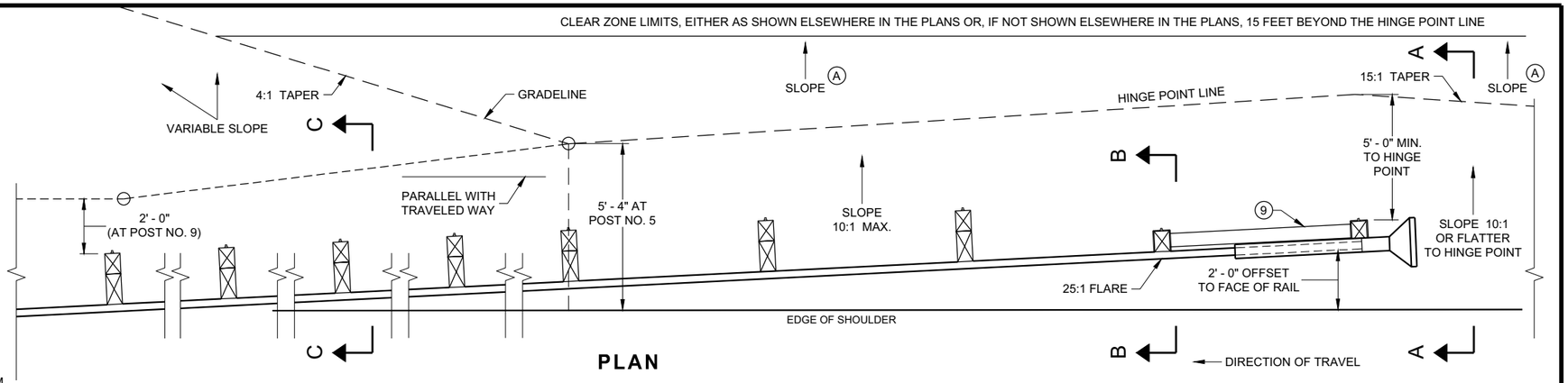
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

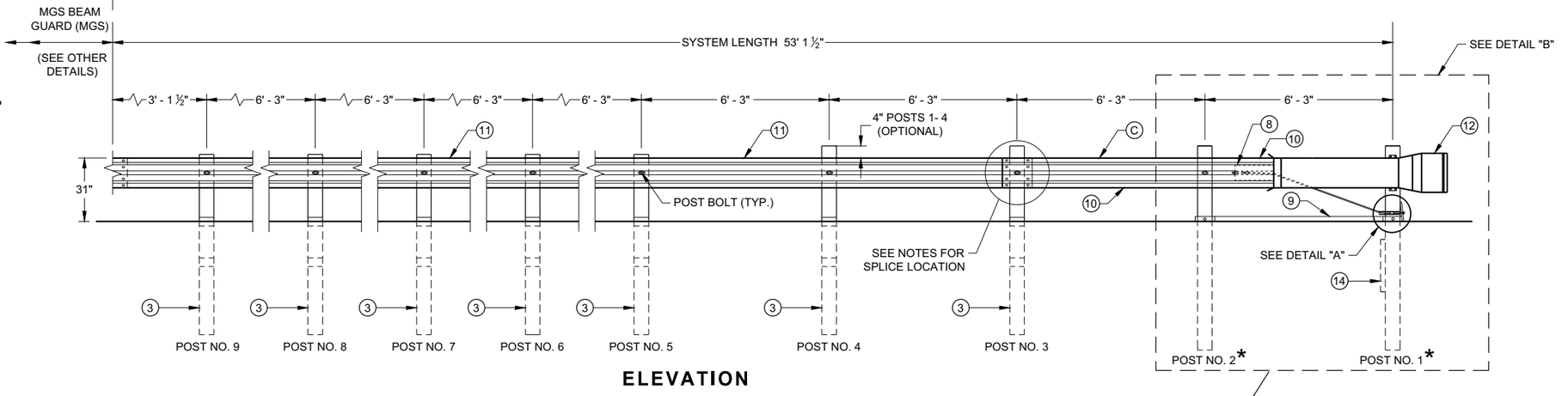
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



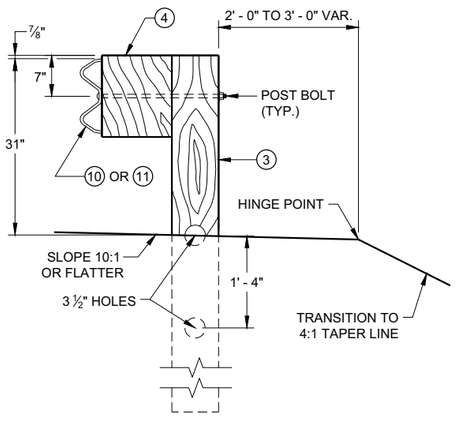
DETAIL "A" (E)



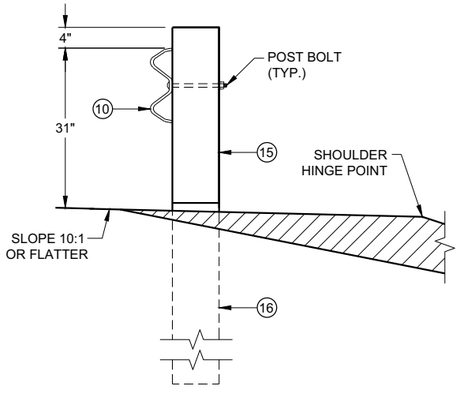
PLAN



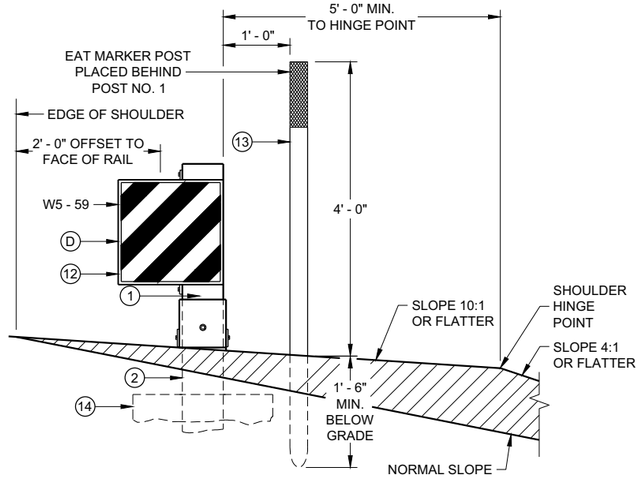
ELEVATION



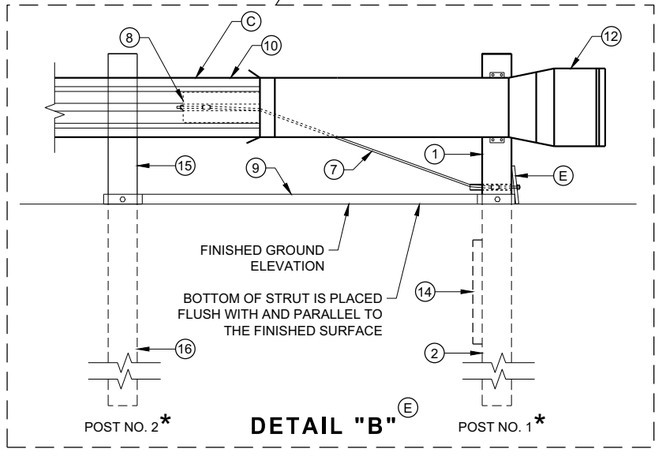
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



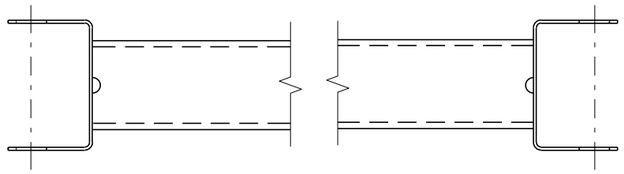
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

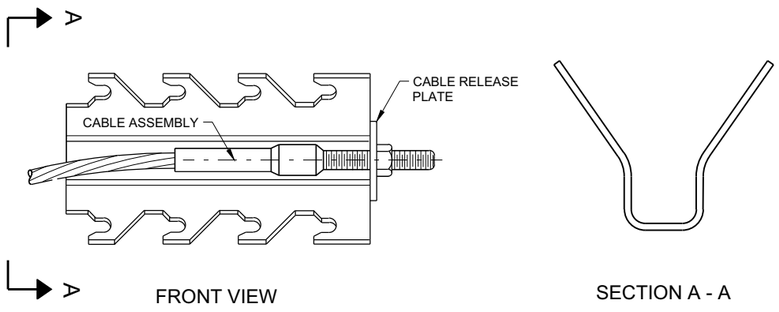
SDD 14B44 - 04a



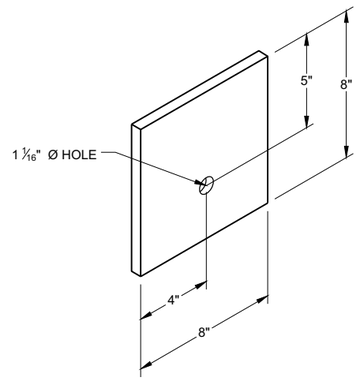
GENERIC GROUND STRUT (9) (E)

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
(1)	UPPER POST NO. 1 6" X 6" TUBE
(2)	LOWER POST NO. 1
(3)	WOOD CRT
(4)	WOOD BLOCKOUT
(5)	PIPE SLEEVE
(6)	BEARING PLATE
(7)	BCT CABLE ASSEMBLY
(8)	ANCHOR CABLE BOX
(9)	GROUND STRUT
(10)	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
(11)	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
(12)	IMPACT HEAD
(13)	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
(14)	SOIL PLATE
(15)	UPPER POST NO. 2
(16)	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX (9) (E)



BEARING PLATE (6) (E)

6

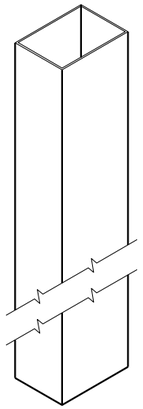
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SDD 14B44 - 04b

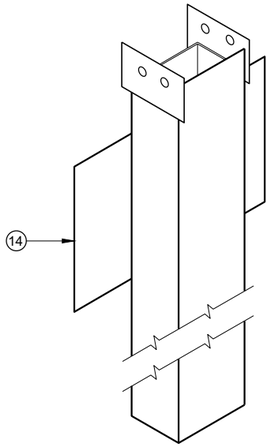
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

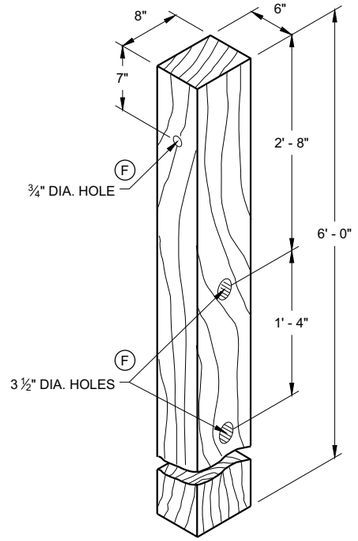
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA1 168



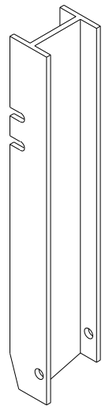
UPPER POST NO. 1 (1) (E)



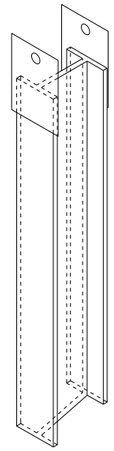
LOWER POST NO. 1 (2) (E)



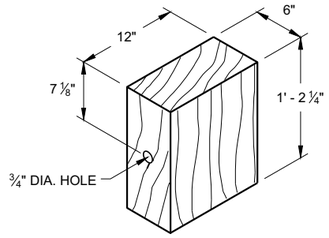
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



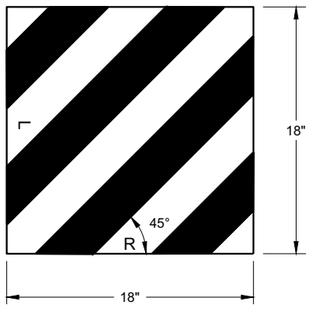
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

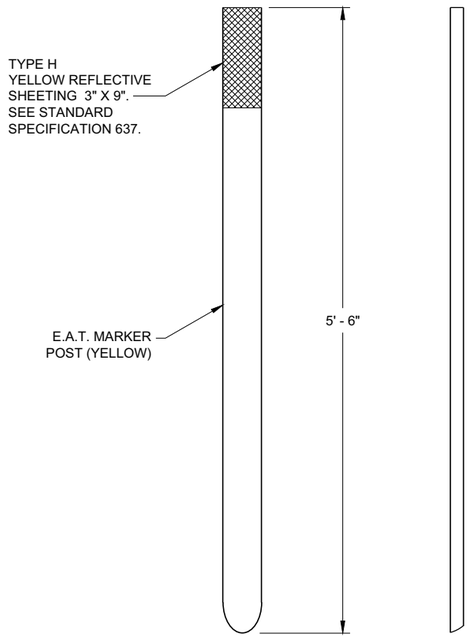


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



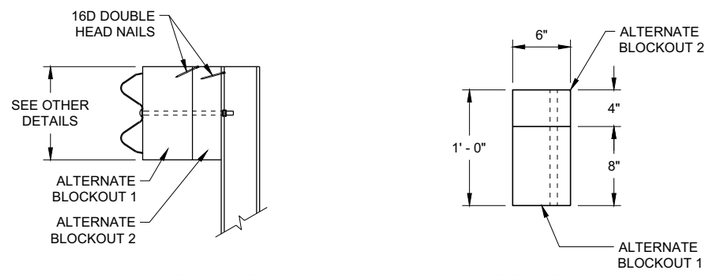
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

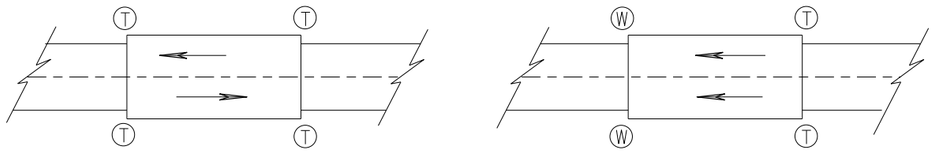
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

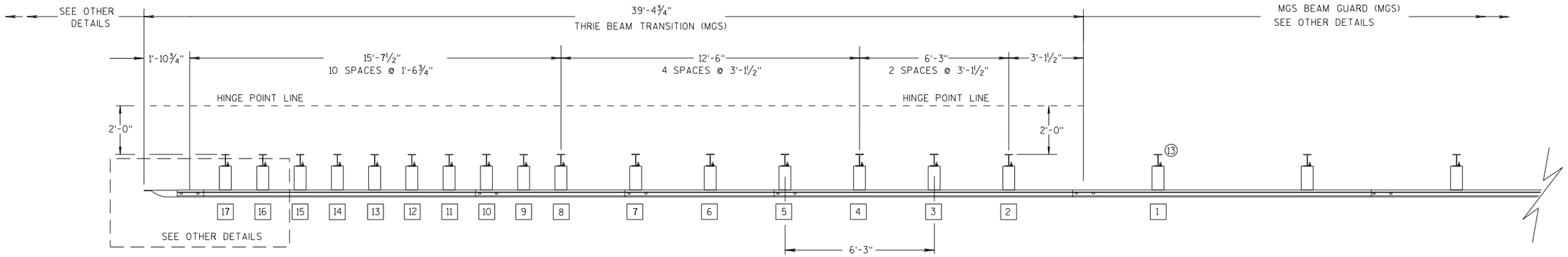
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

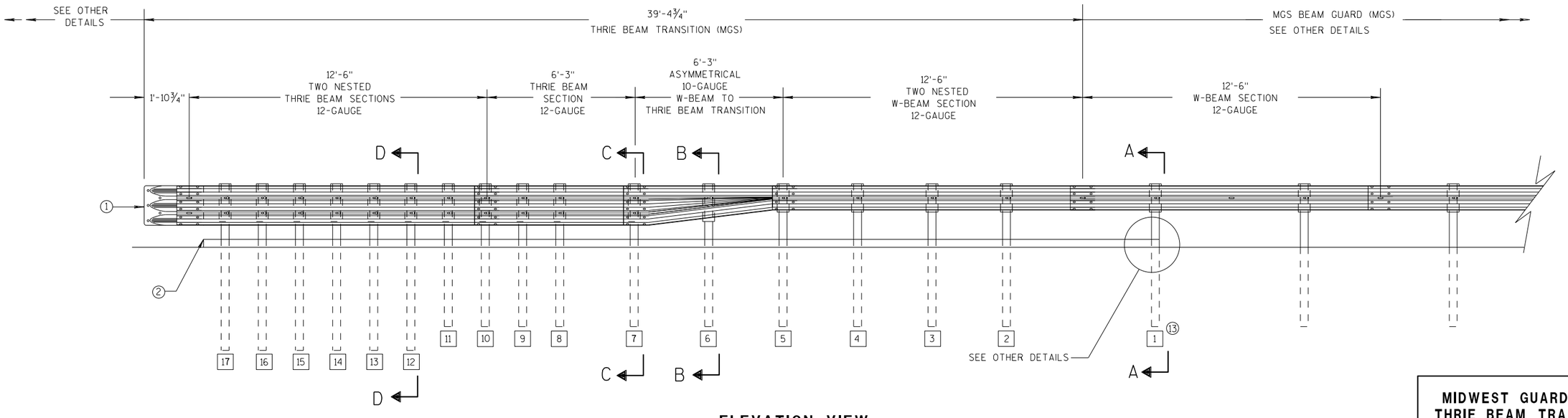
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

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

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

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

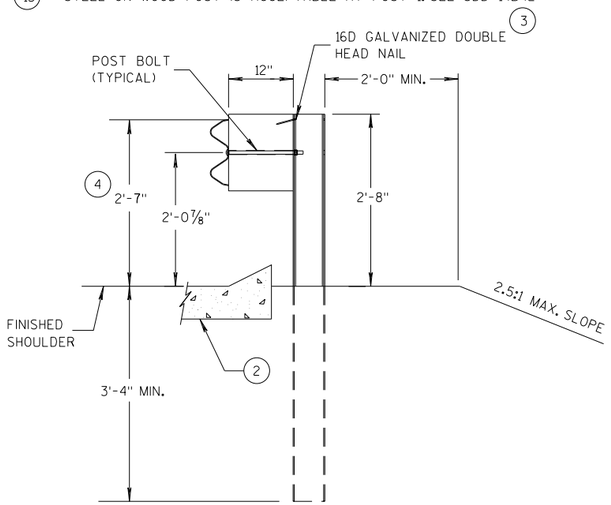
GENERAL NOTES

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

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

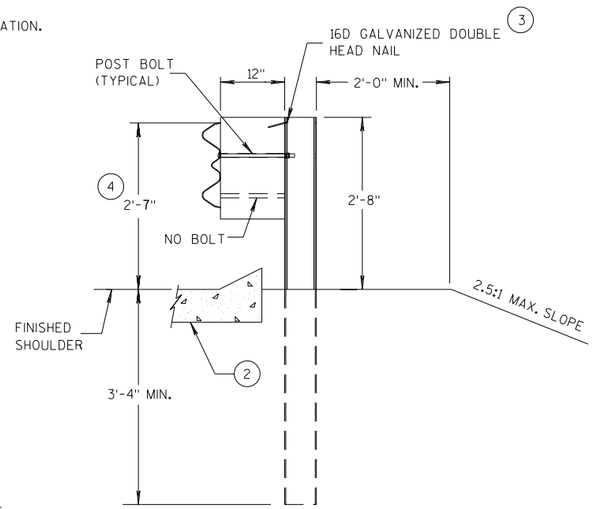
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

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



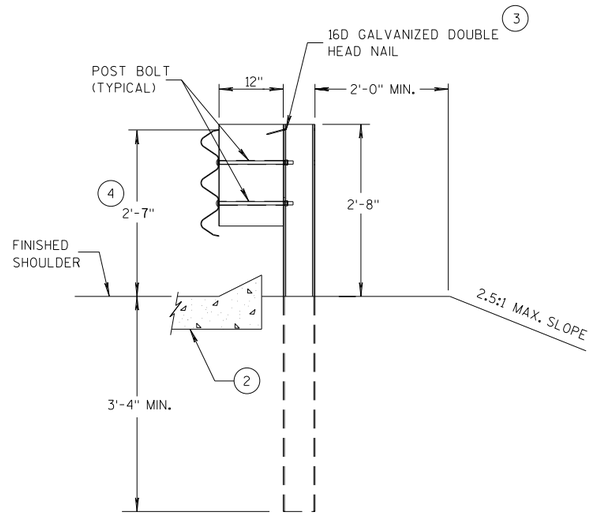
SECTION A-A (13)

POSTS 1-5



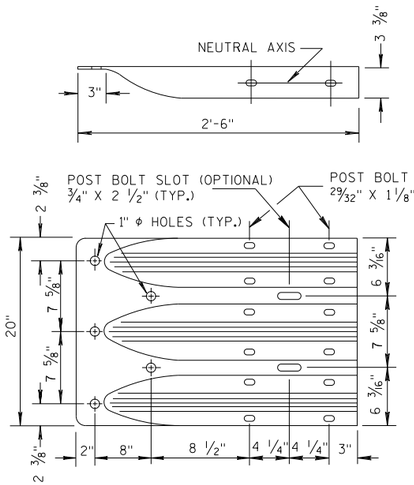
SECTION B-B

POST 6

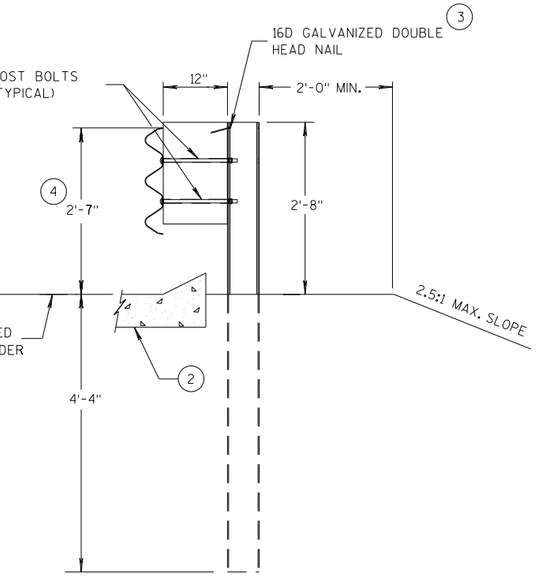


SECTION C-C

POSTS 7-11

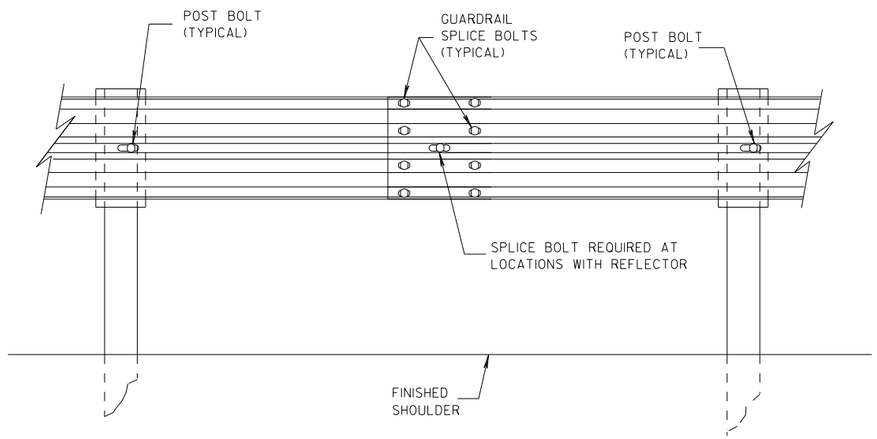


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

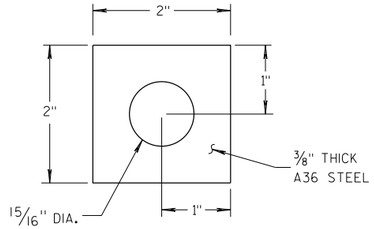
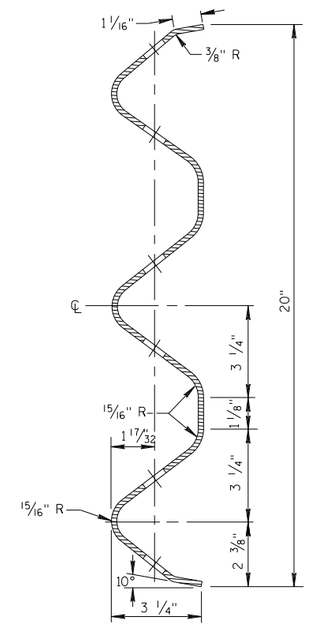


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

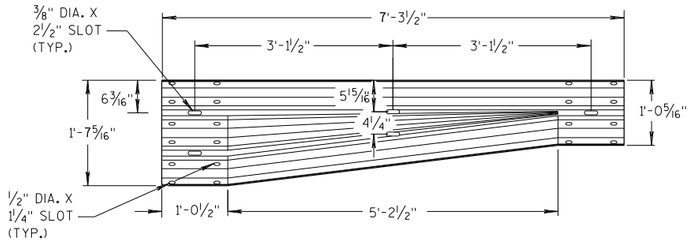
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 171

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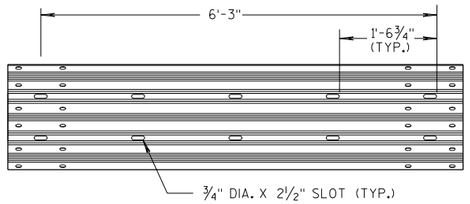
S.D.D. 14 B 45-5b

6

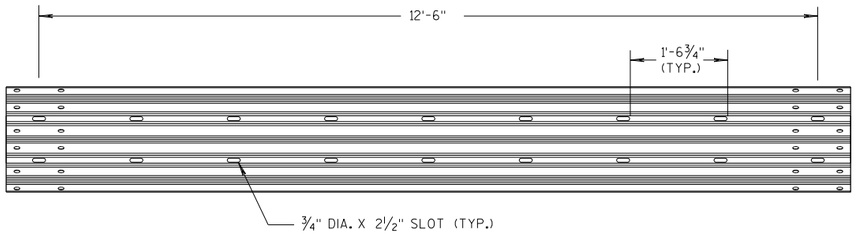
S.D.D. 14 B 45-5b



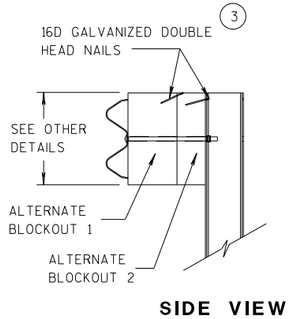
W-BEAM TO THRIE BEAM TRANSITION SECTION



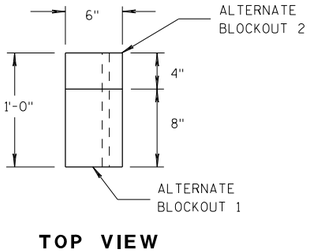
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

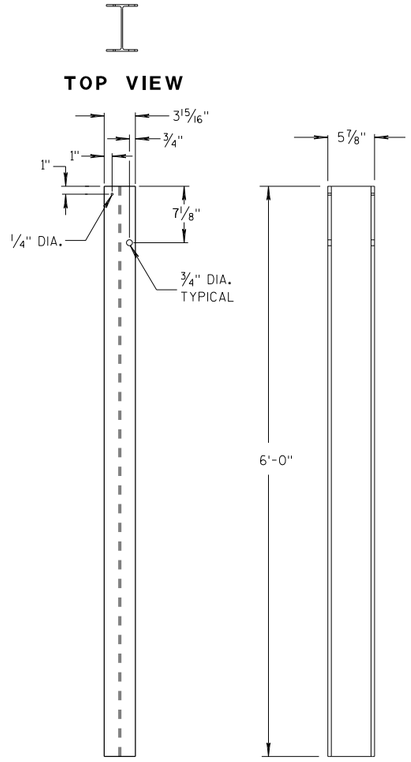


SIDE VIEW



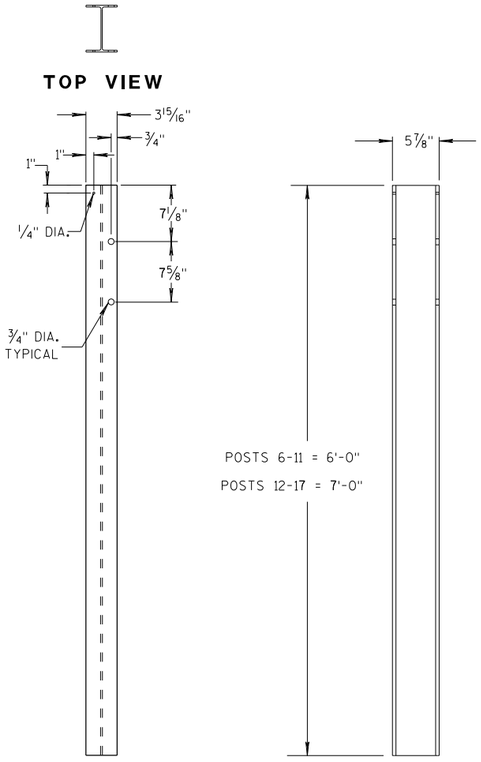
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



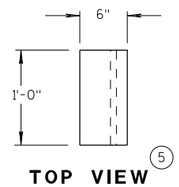
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

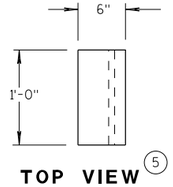


FRONT VIEW SIDE VIEW

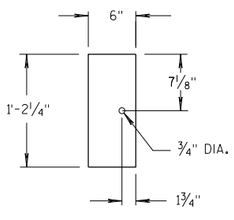
STEEL POSTS 6-17



TOP VIEW (5)

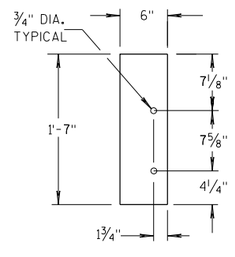


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

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

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

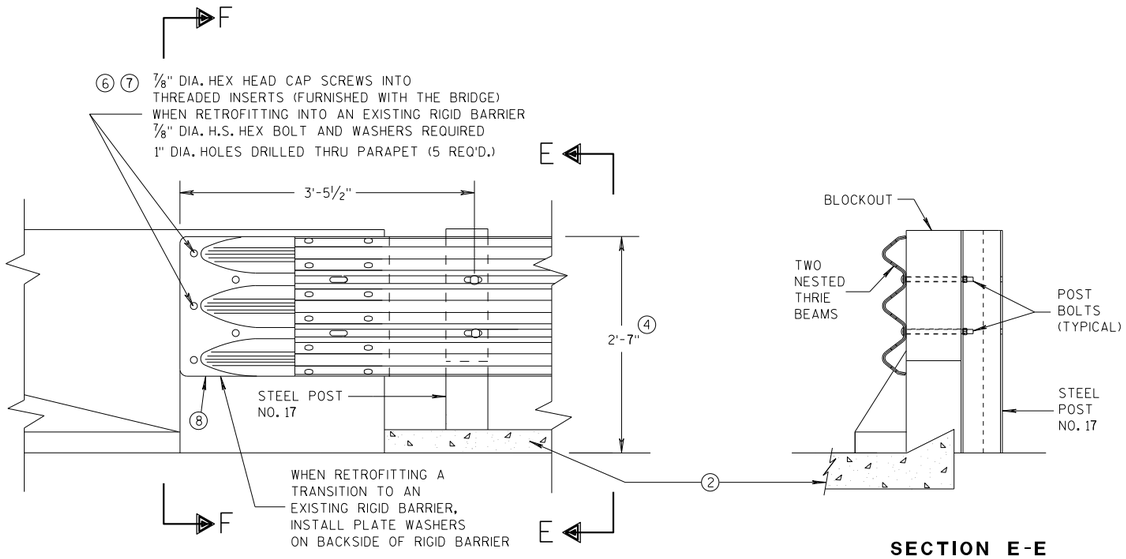
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

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



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

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

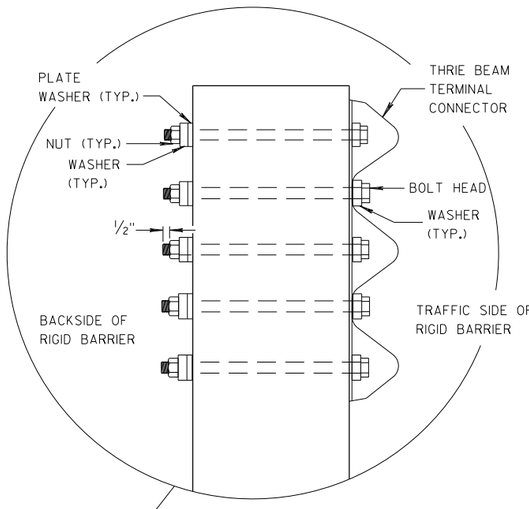
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

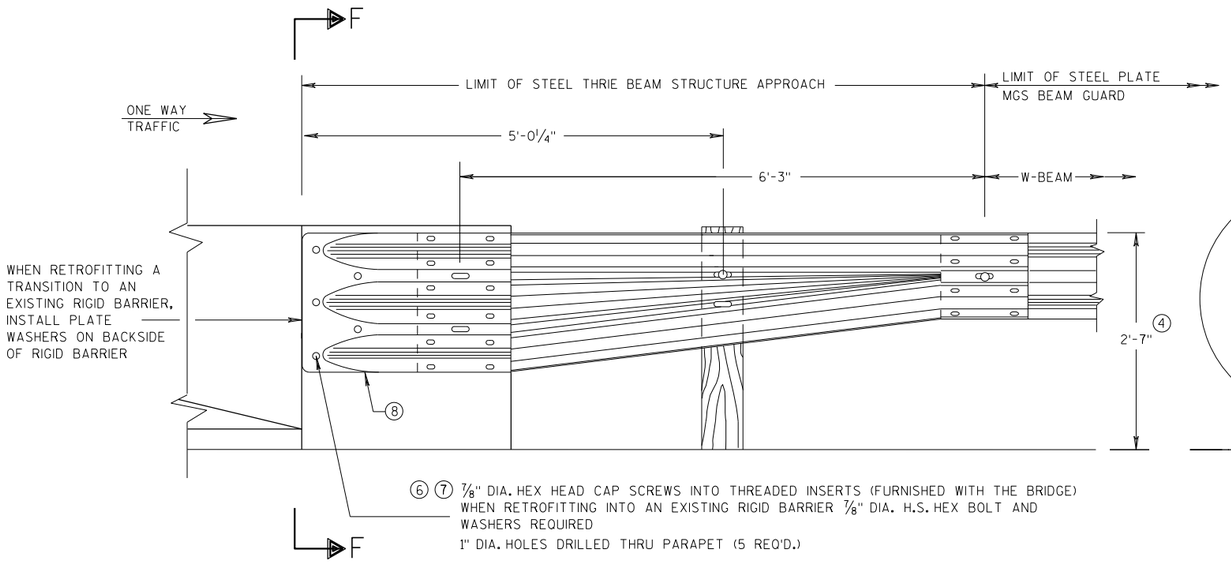
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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

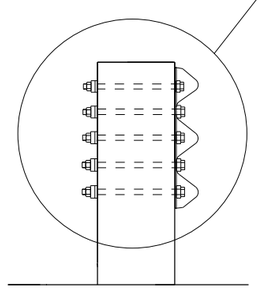
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

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

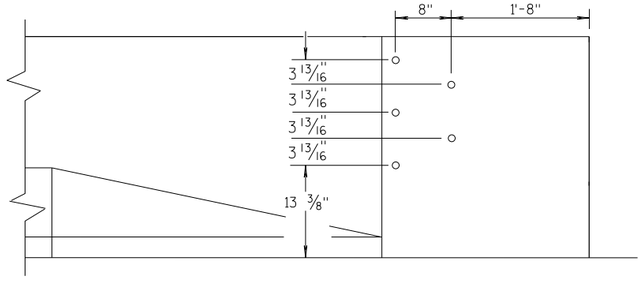




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS NT
FHWA

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

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GENERAL NOTES

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

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

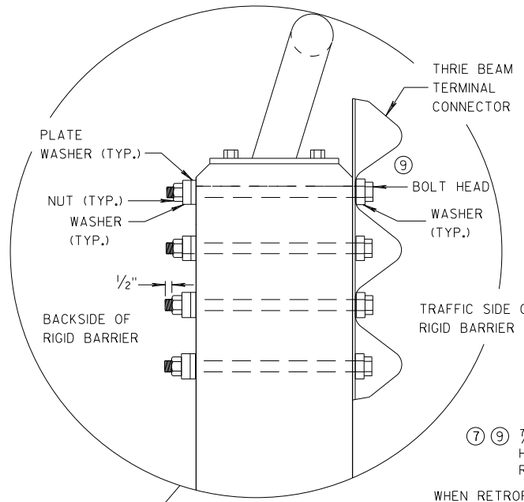
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

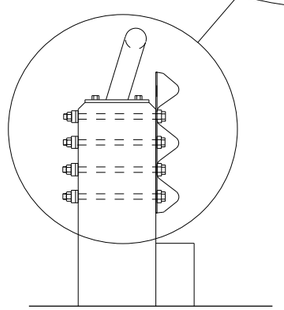
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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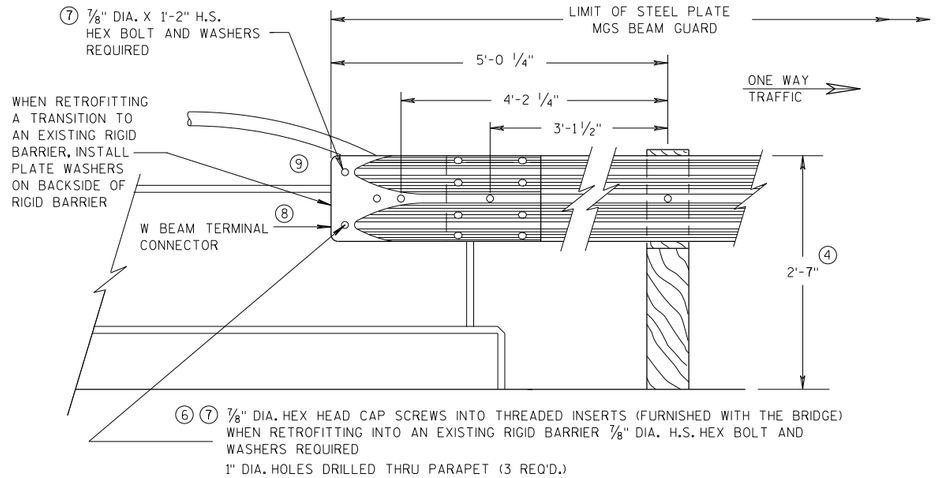
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





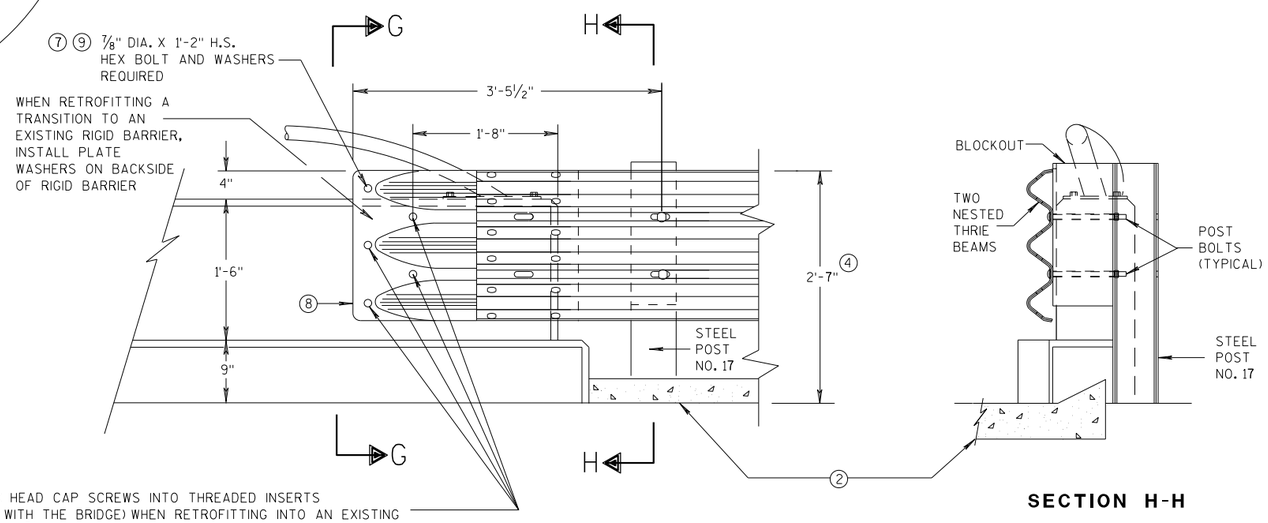
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

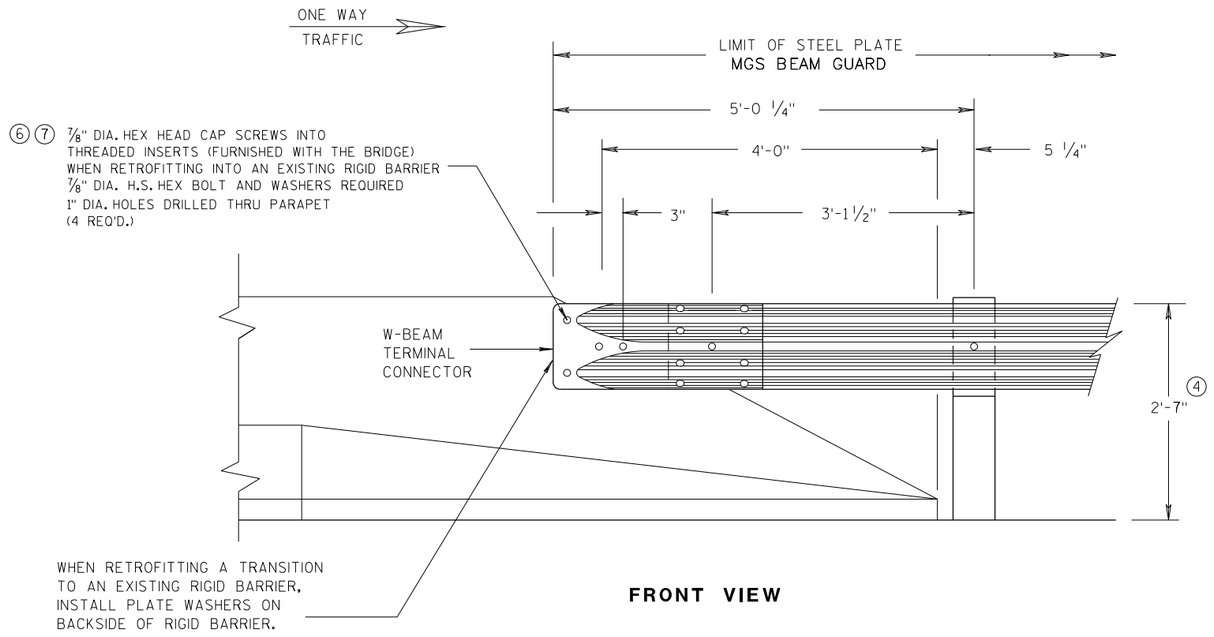
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S.D.D. 14 B 45-5e



FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

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

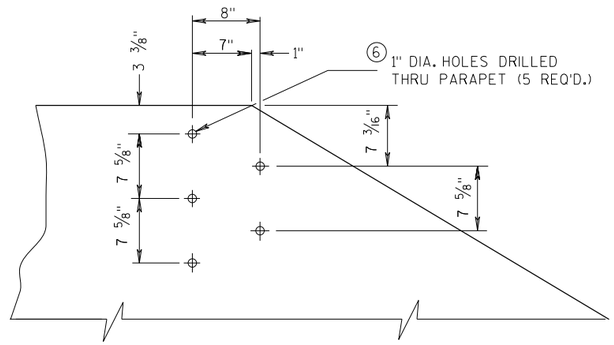
GENERAL NOTES

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

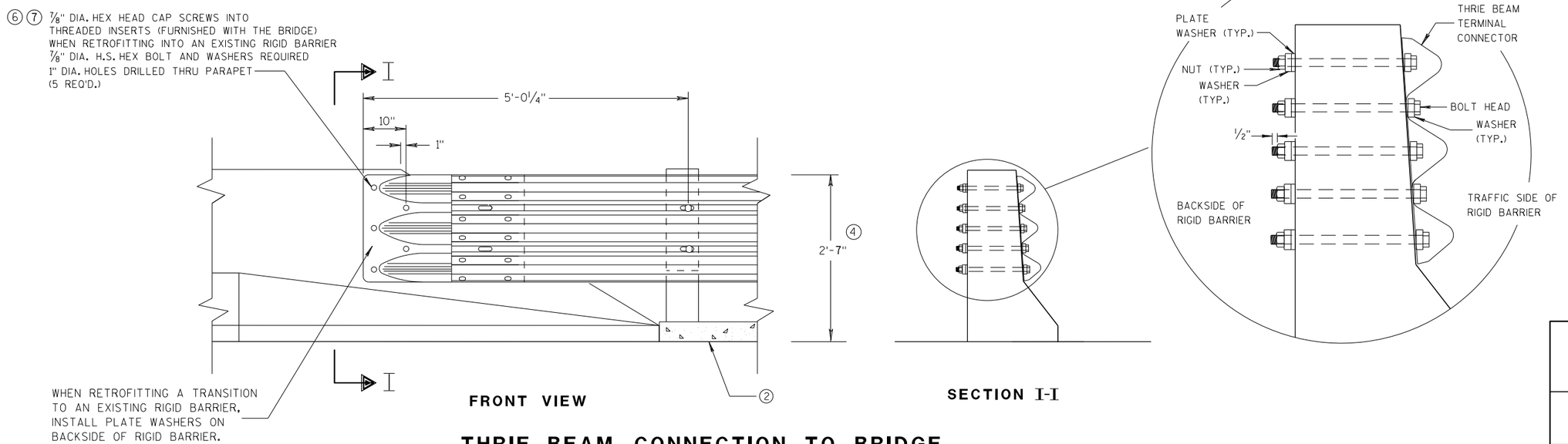
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

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DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW

SECTION I-I

THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

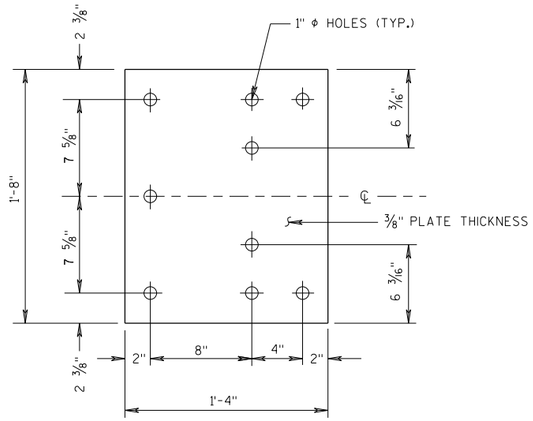
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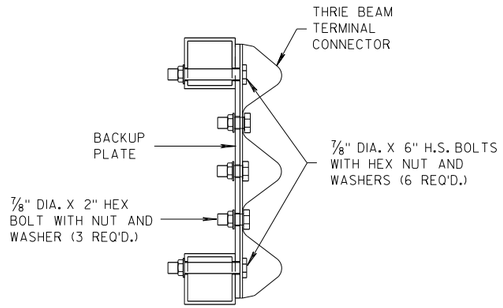
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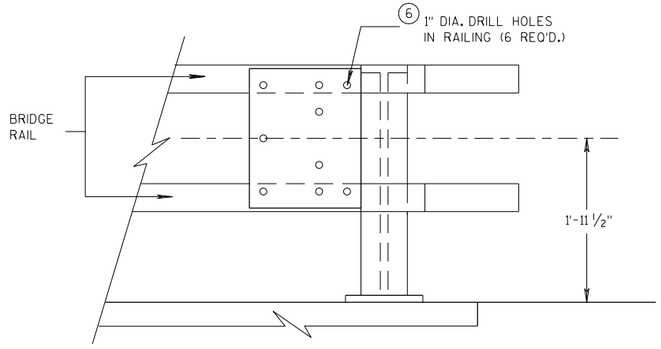
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BACK-UP PLATE DETAIL



SECTION J-J

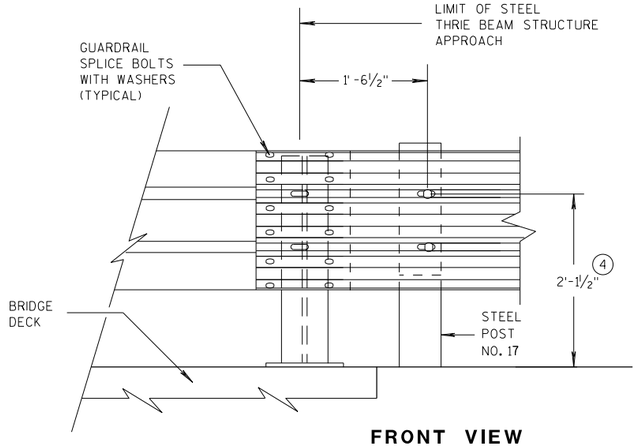


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

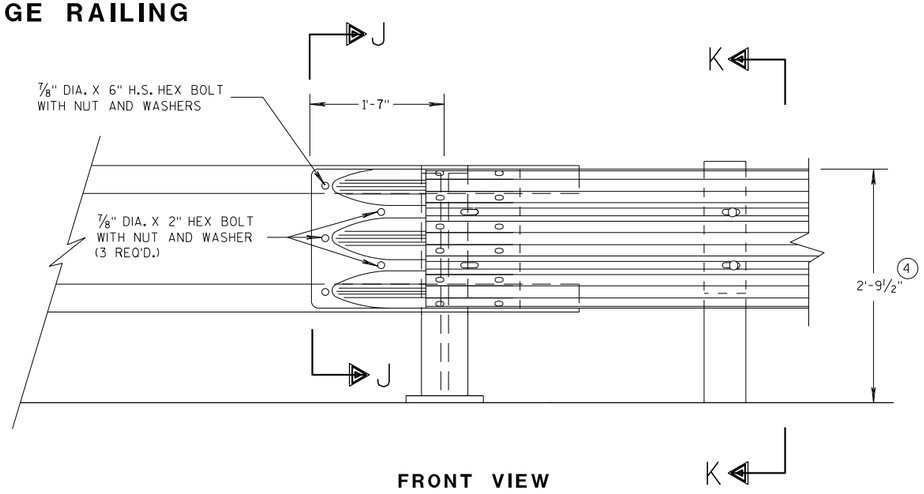
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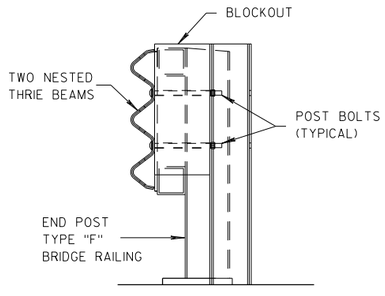


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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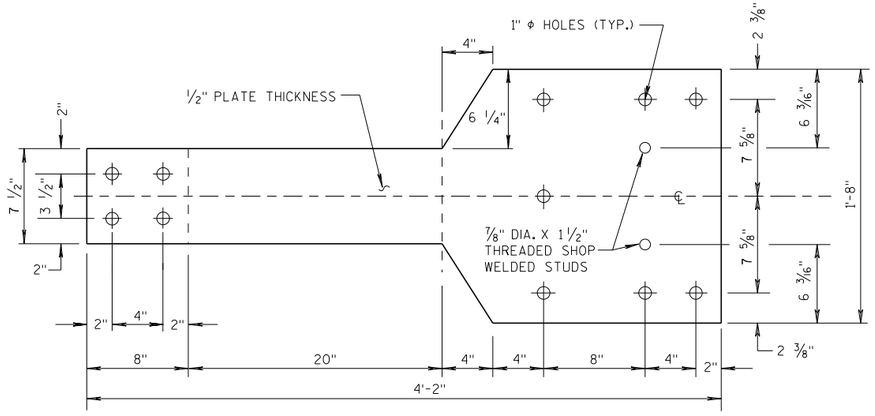
S.D.D. 14 B 45-5g

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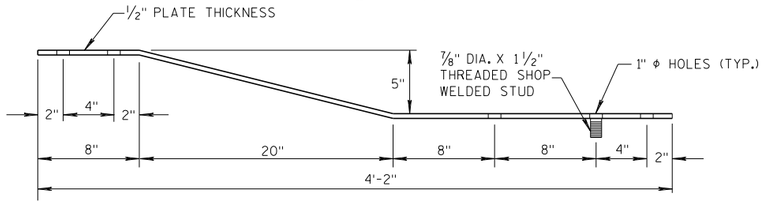
S.D.D. 14 B 45-5g

GENERAL NOTES

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

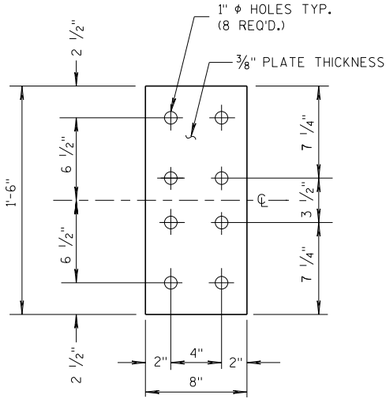


FRONT VIEW



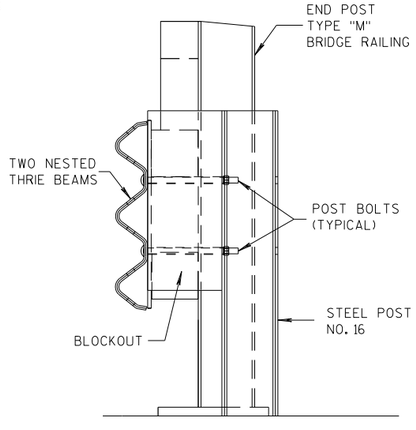
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

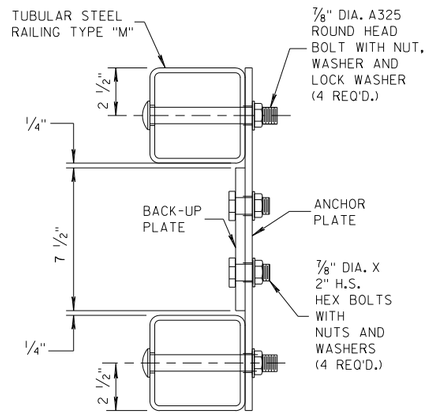


FRONT VIEW

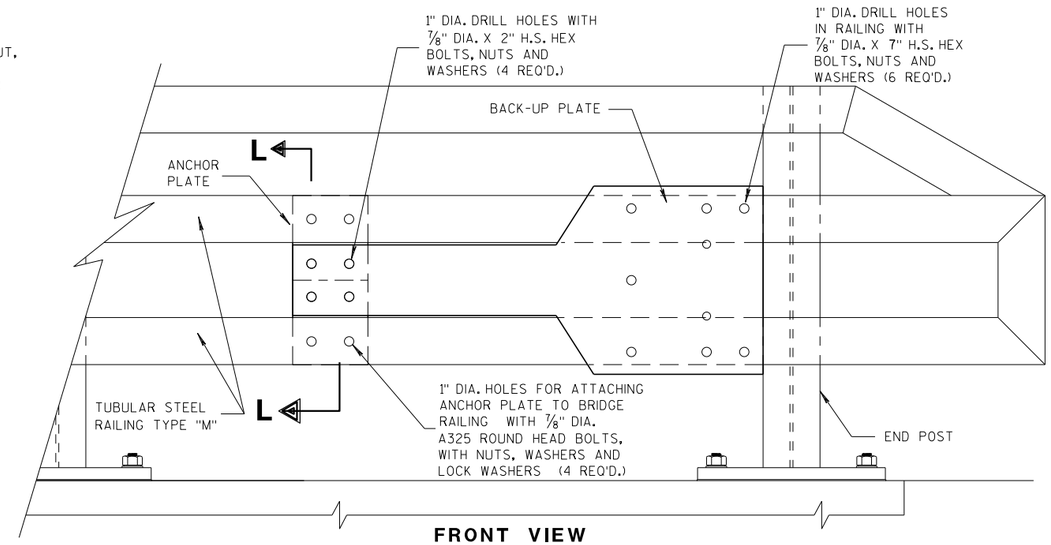
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

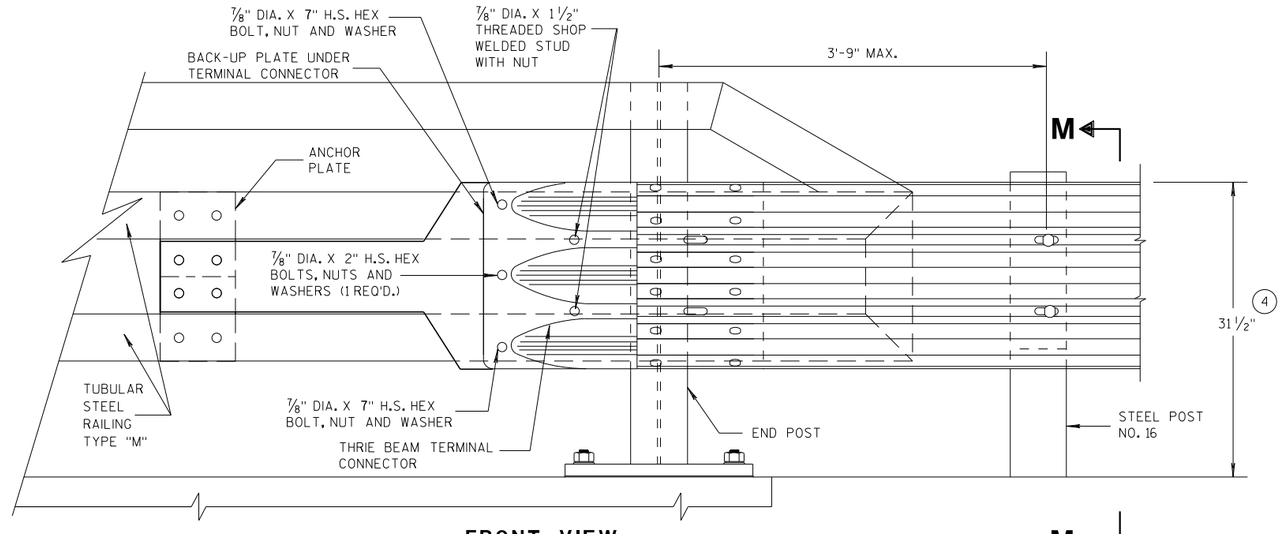


SECTION L-L

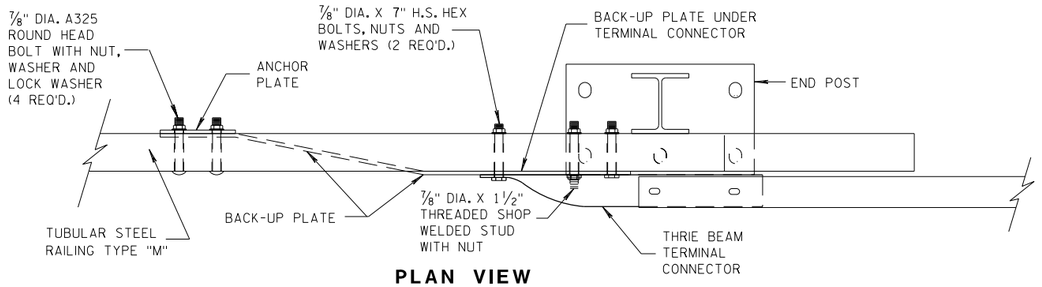


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
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/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVISOR
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S.D.D. 14 B 45-5h

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

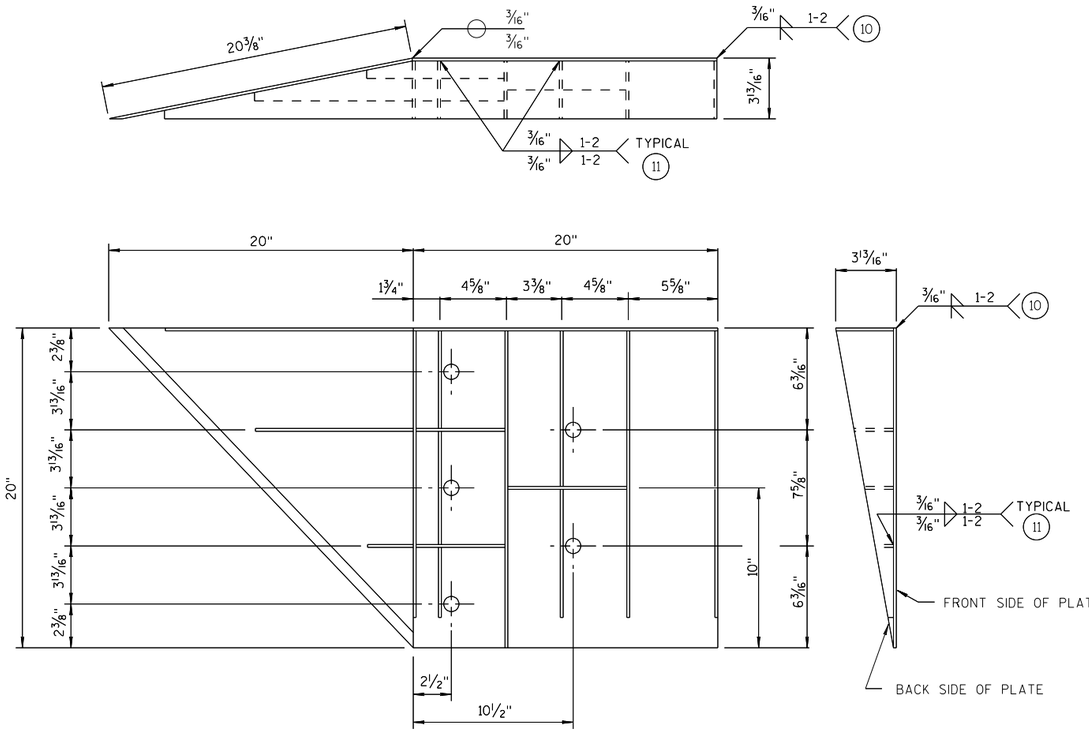
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

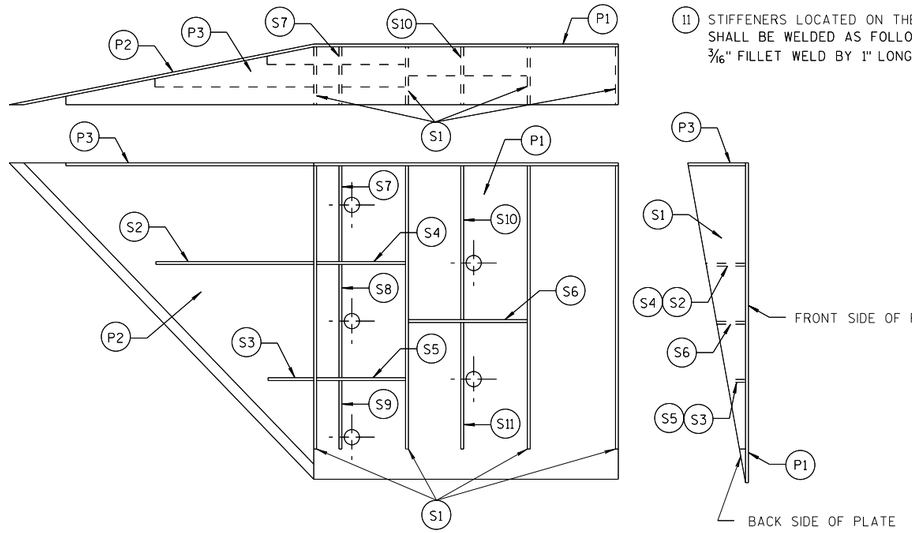


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

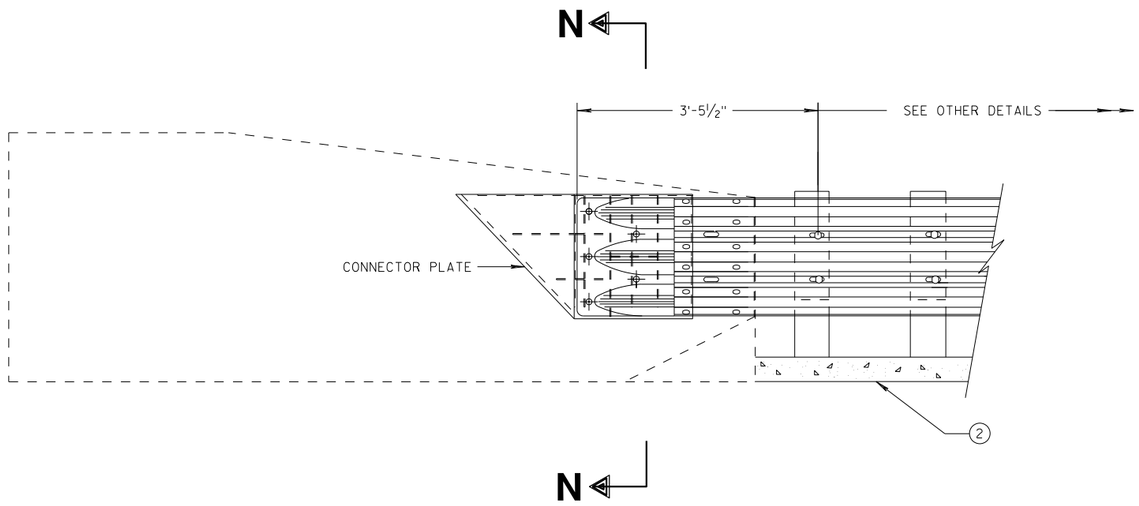
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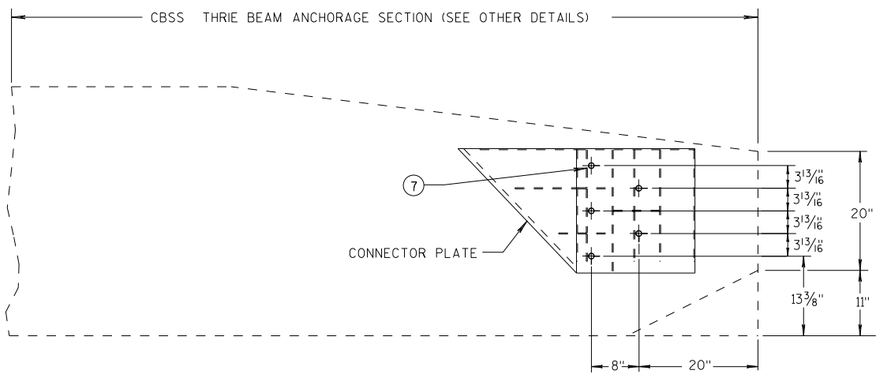
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THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



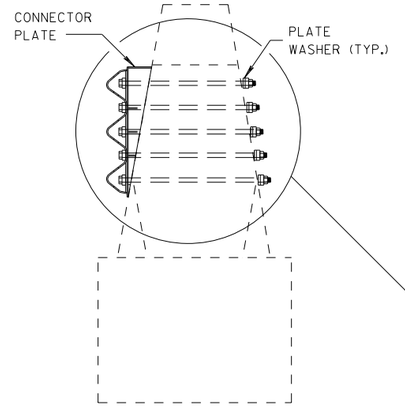
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

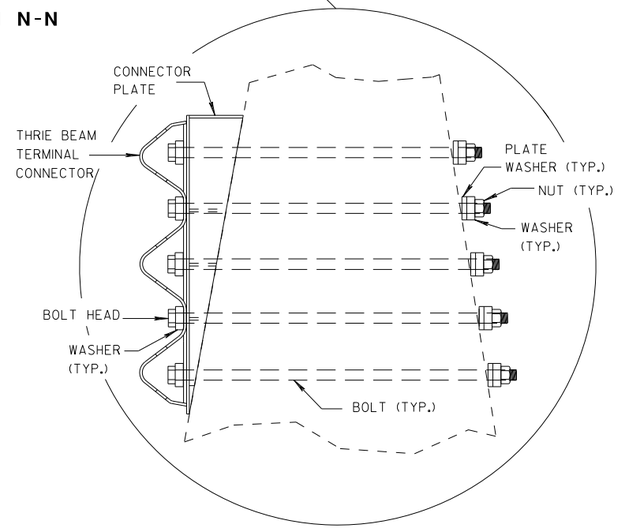
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

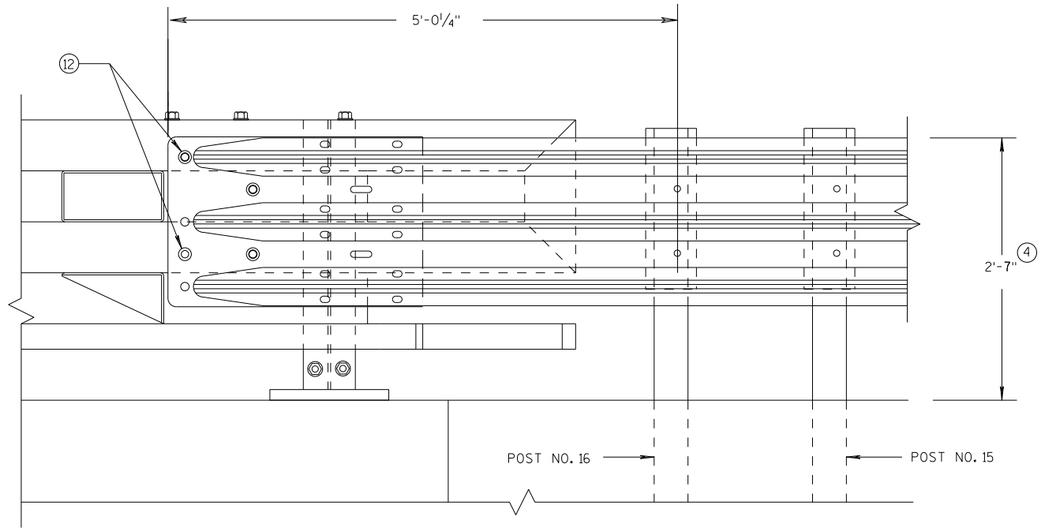
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UNIT SUPERVIS

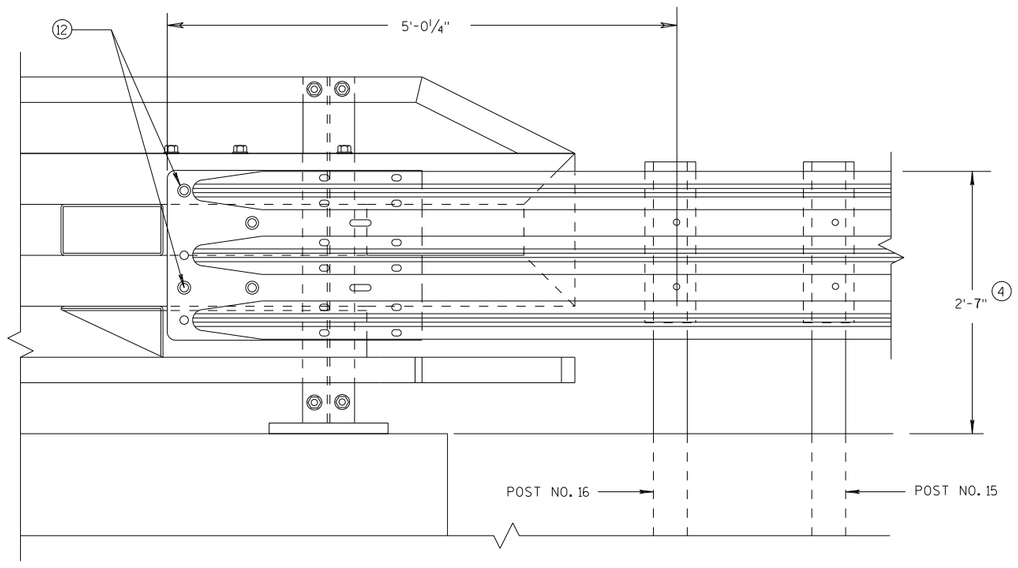
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ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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ROADWAY STANDARDS D
UNIT SUPERVIS

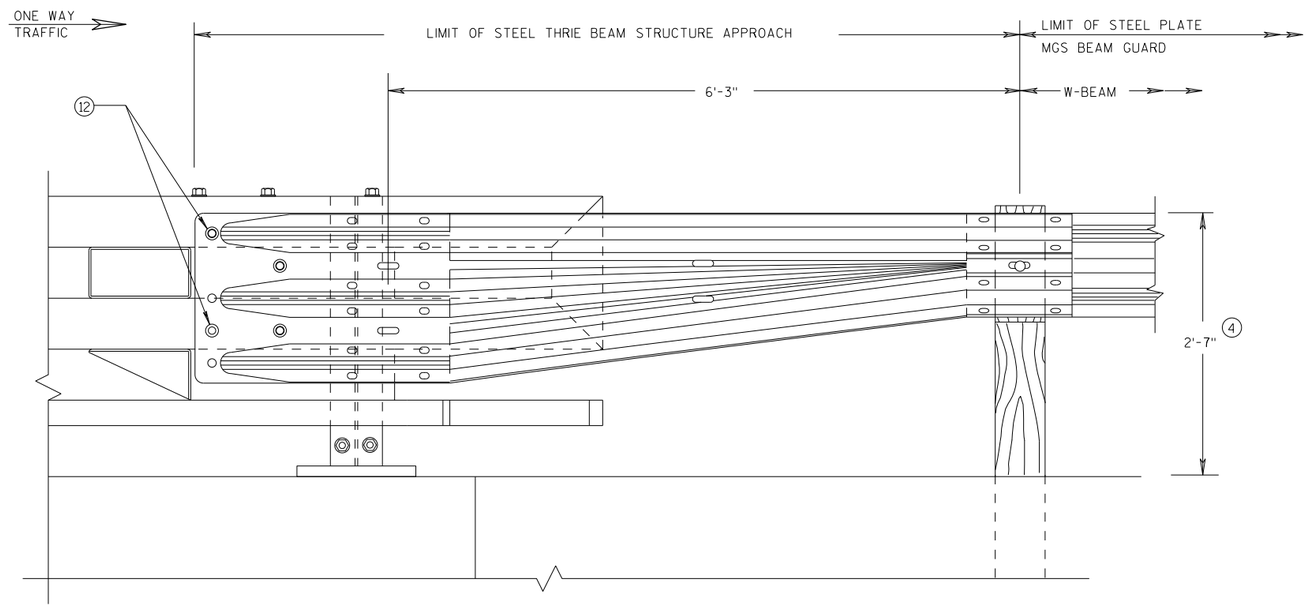
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S.D.D. 14 B 45-5k

6

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



FRONT VIEW

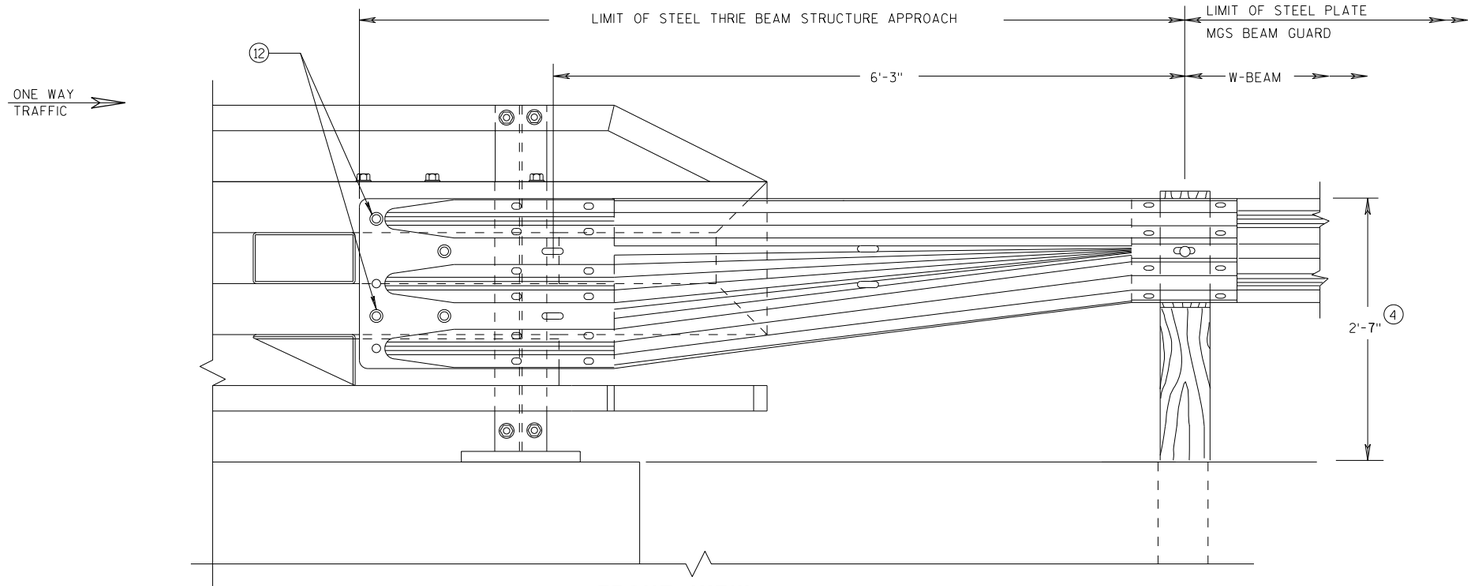
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

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

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

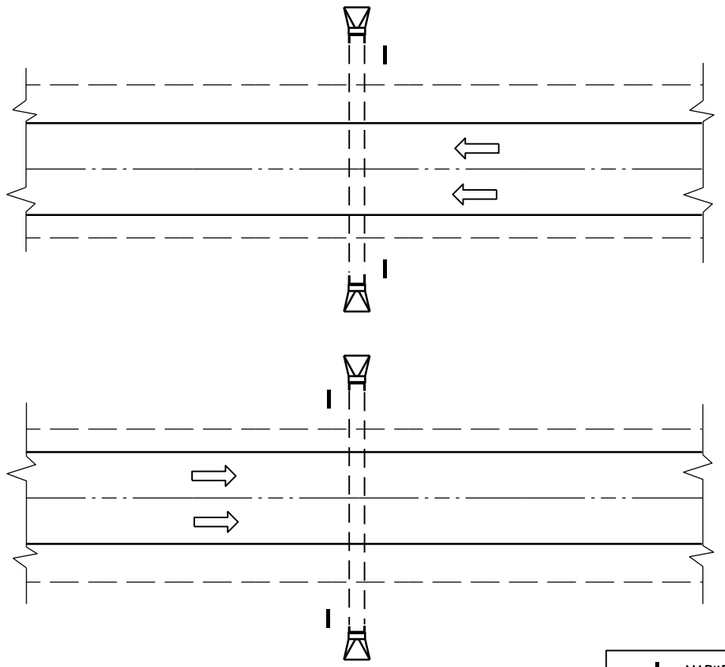
APPROVED
7/2018 DATE
/S/ Rodney Taylor
ROADWAY STANDARDS D UNIT SUPERVIS
NT
FHWA

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

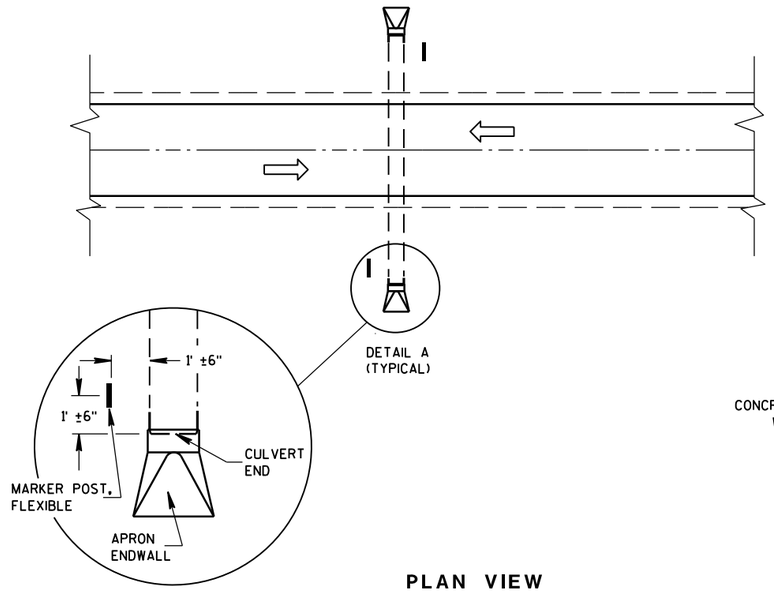
6

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



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

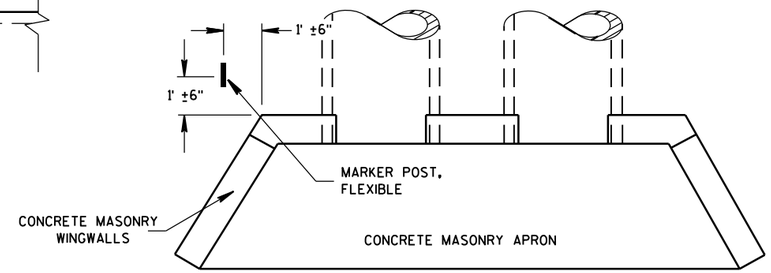
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

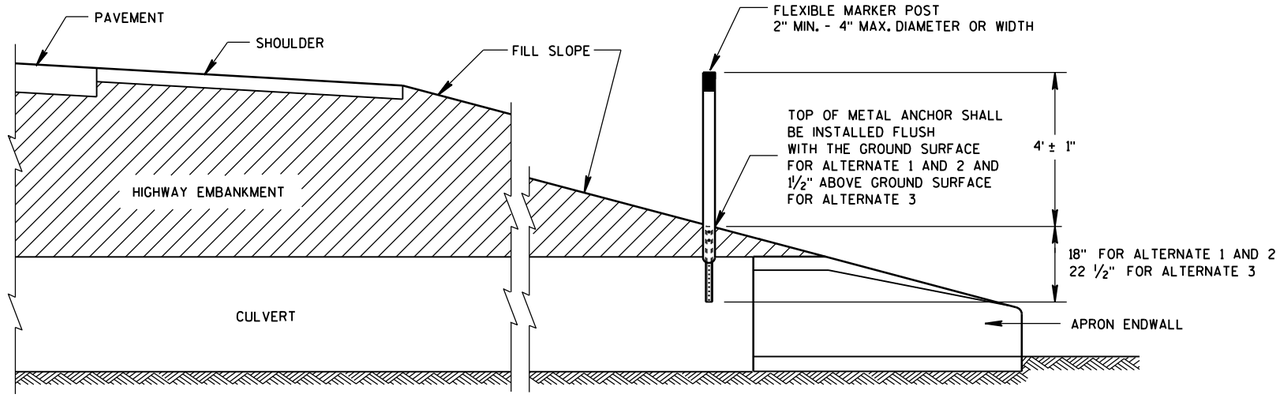
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

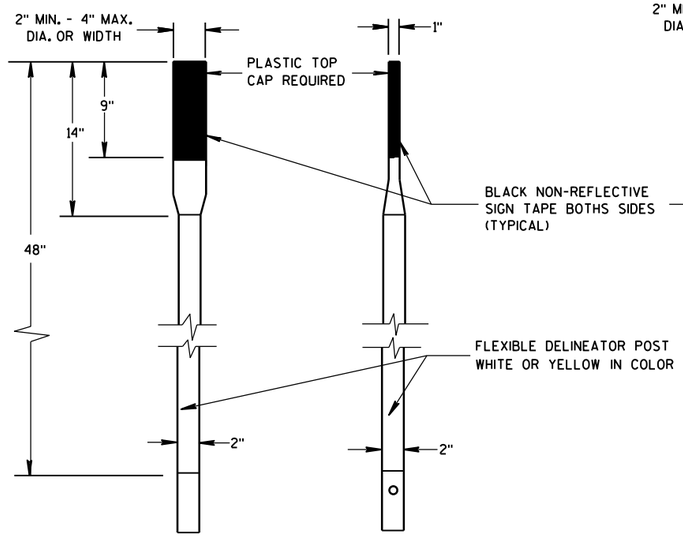
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

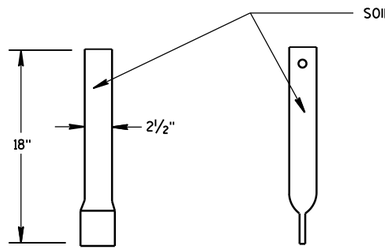
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S.D.D. 15 A 3-2a

6

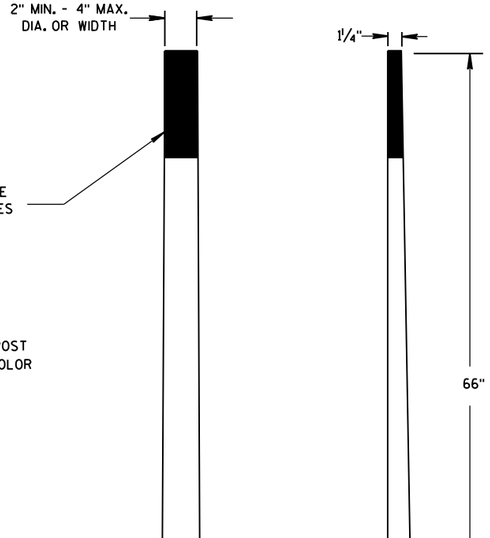
S.D.D. 15 A 3-2a





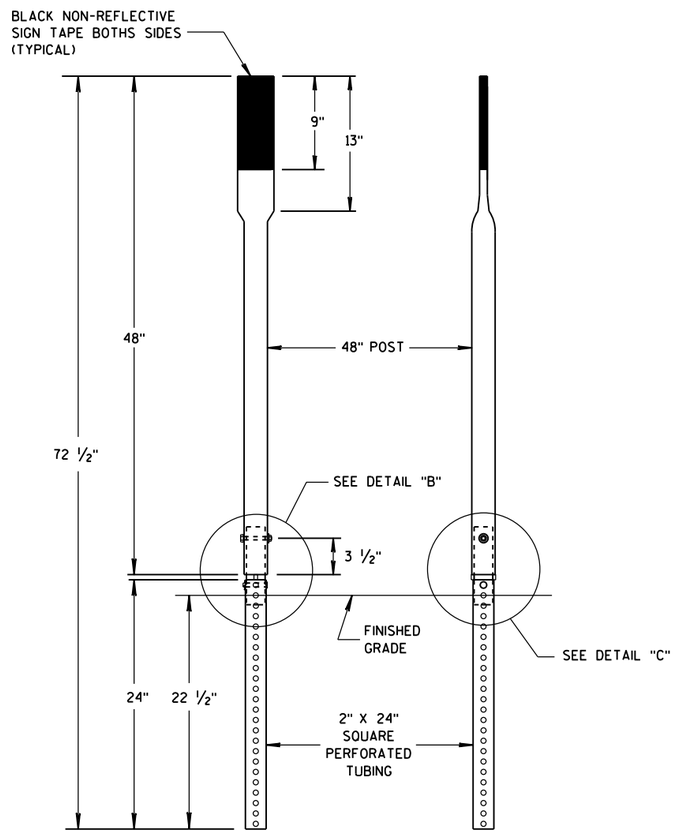
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

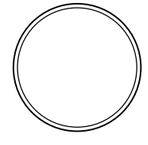
ALTERNATE 2



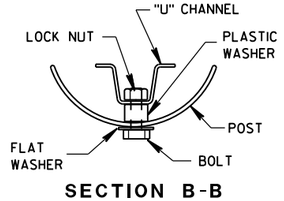
FRONT VIEW SIDE VIEW

ALTERNATE 3

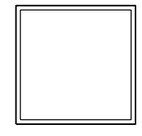
FLEXIBLE MARKER POSTS



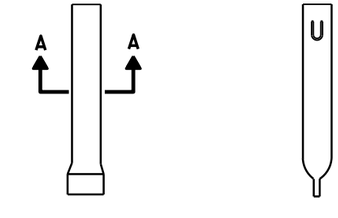
SECTION A-A



SECTION B-B

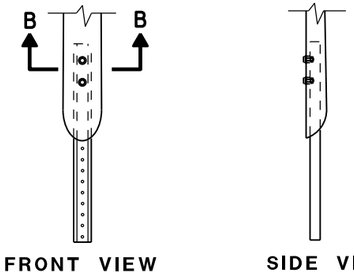


SECTION C-C



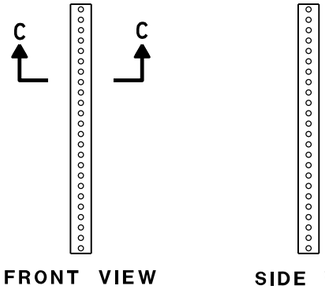
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

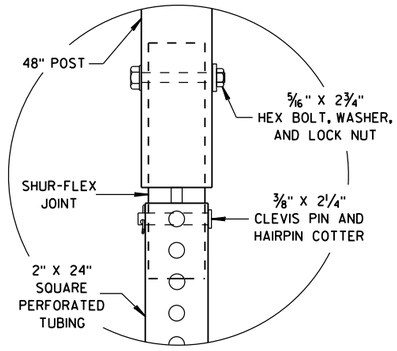
ALTERNATE 2



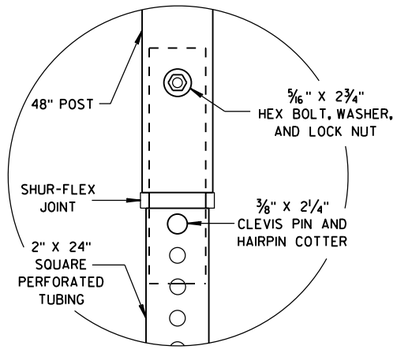
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

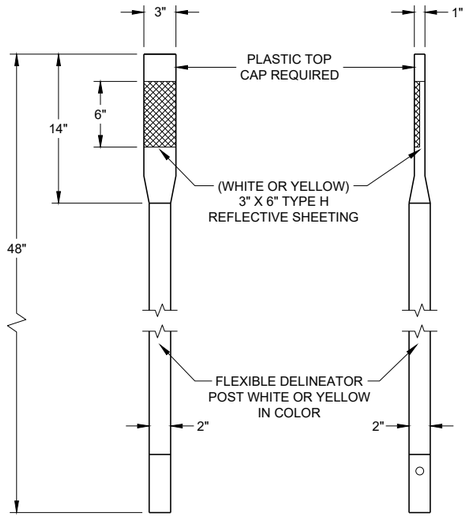
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

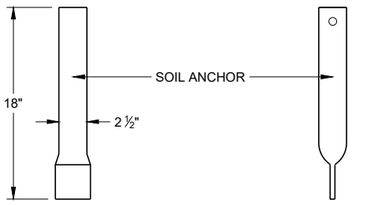
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S.D.D. 15 A 3-2b

6

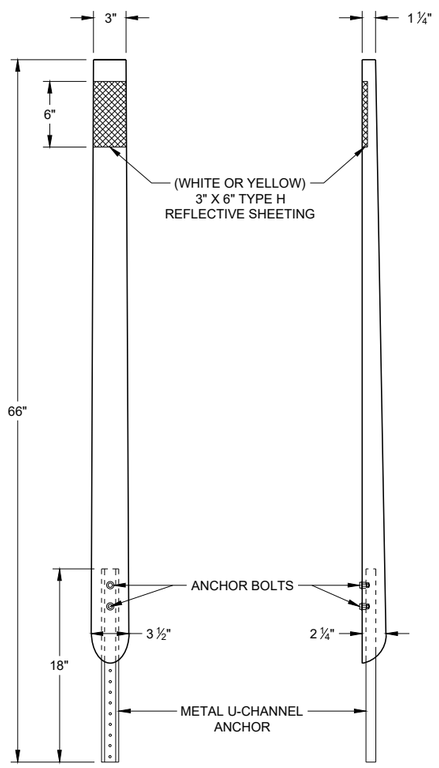
S.D.D. 15 A 3-2b





FRONT VIEW SIDE VIEW

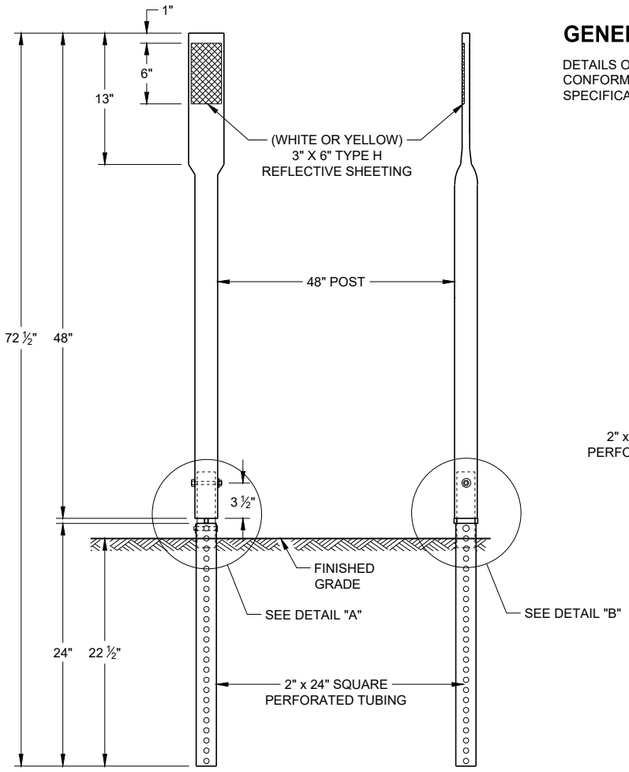
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE DELINEATOR POSTS

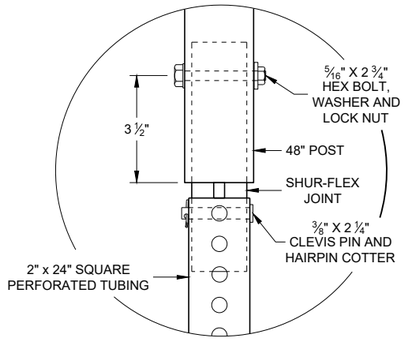


FRONT VIEW SIDE VIEW

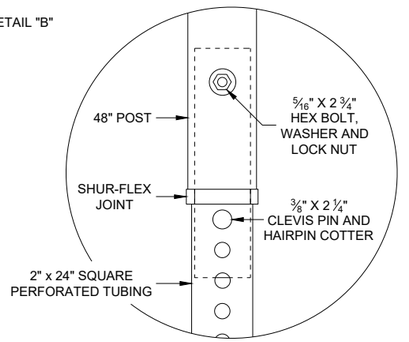
ALTERNATE 3

GENERAL NOTES

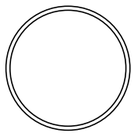
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



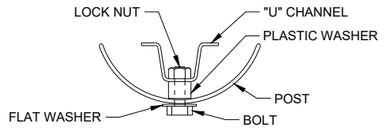
DETAIL A



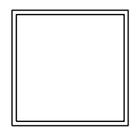
DETAIL B



SECTION A - A



SECTION B - B

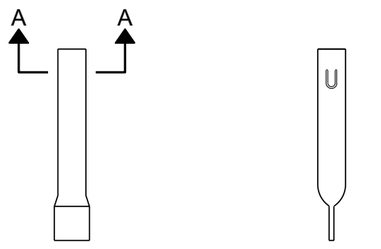


SECTION C - C

REFLECTOR SPACING TABLE

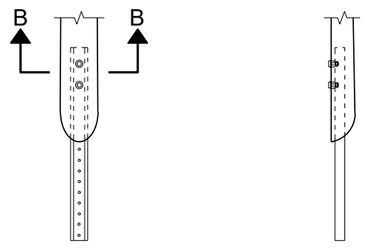
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER



FRONT VIEW SIDE VIEW

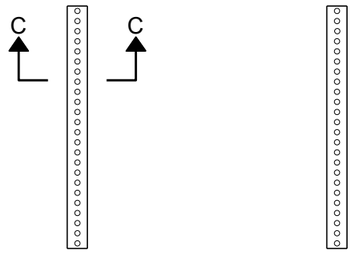
ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2

FLEXIBLE MARKER POST ANCHORS



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

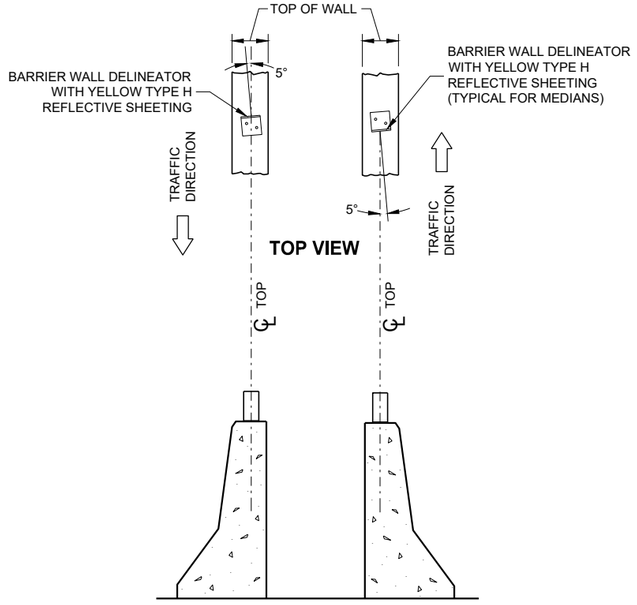
APPROVED
May 2021 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

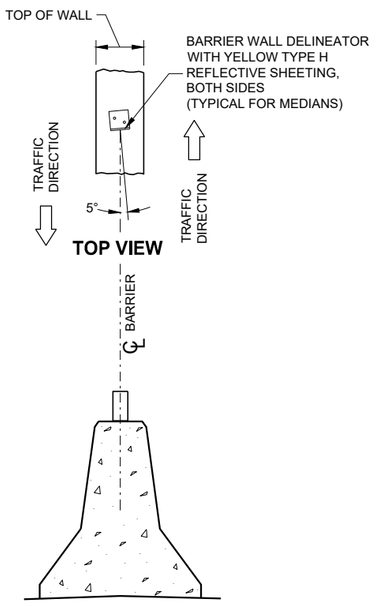
SDD 15A04 - 06a

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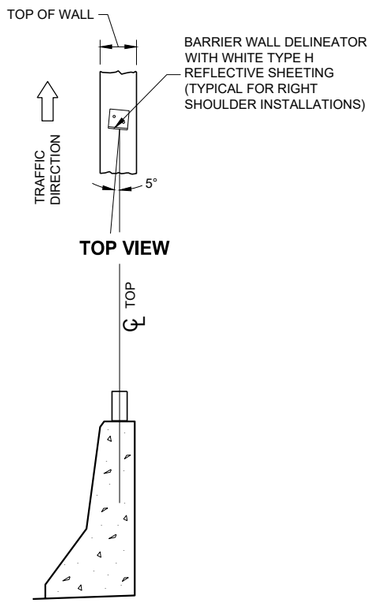
SDD 15A04 - 06a



SIDE VIEW
DOUBLE BARRIERS IN MEDIAN

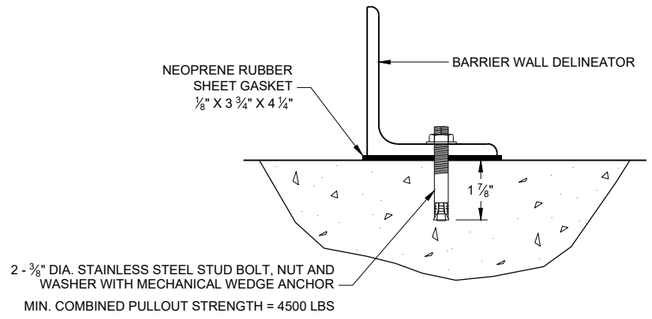


SIDE VIEW
MEDIAN BARRIER

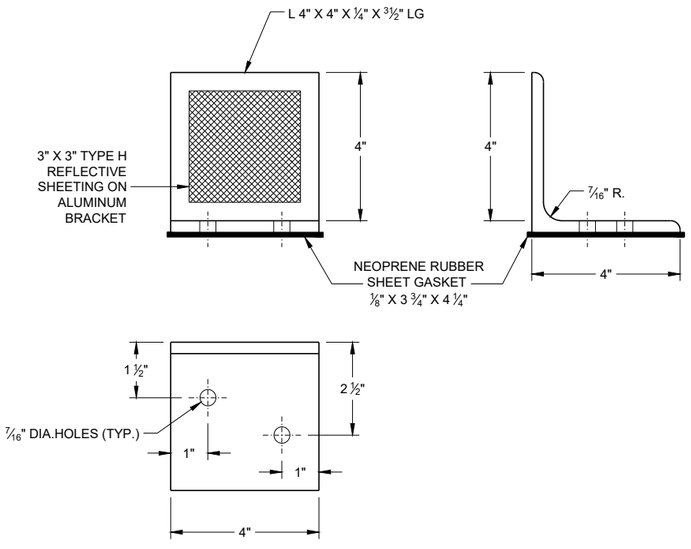


SIDE VIEW
TO RIGHT OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR BARRIER WALL DELINEATOR MOUNTED ON CONCRETE BARRIERS



BARRIER WALL DELINEATOR MOUNTING DETAIL



BARRIER WALL DELINEATOR

REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING

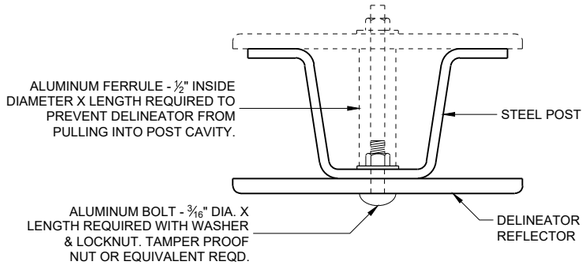
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

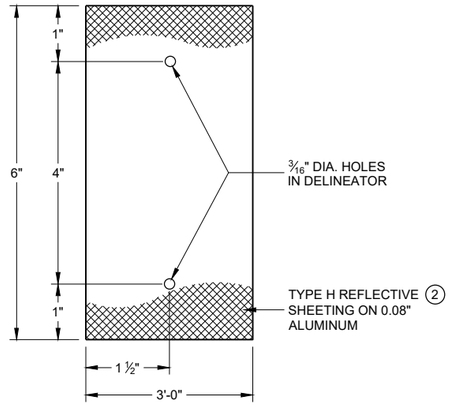
FHWA

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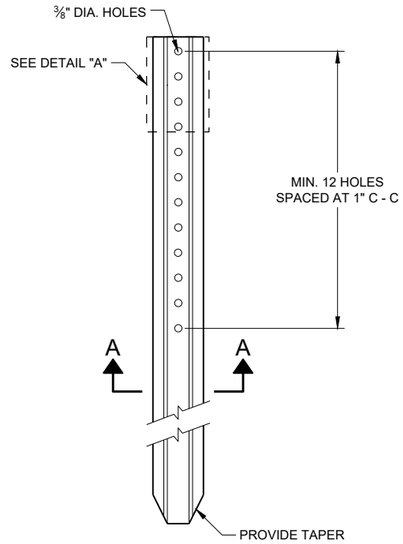
SDD 15A04 - 06b



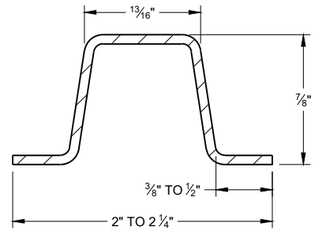
MOUNTING DETAIL FOR DELINEATOR REFLECTOR



DETAIL "A" 3" X 6" DELINEATOR REFLECTOR



DELINEATOR POST



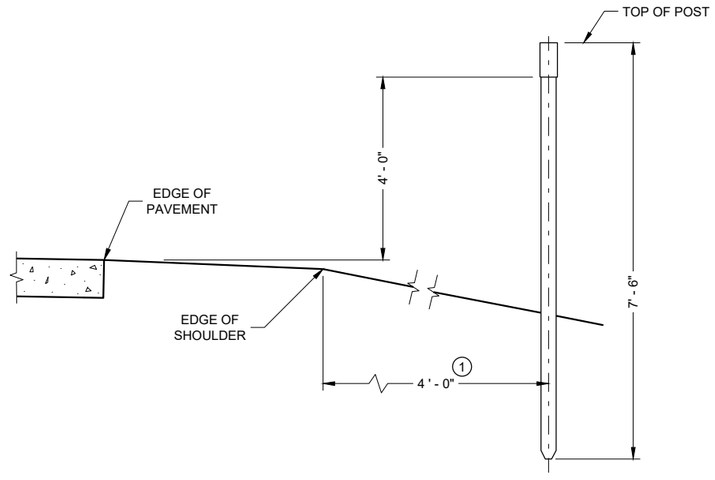
SECTION A - A

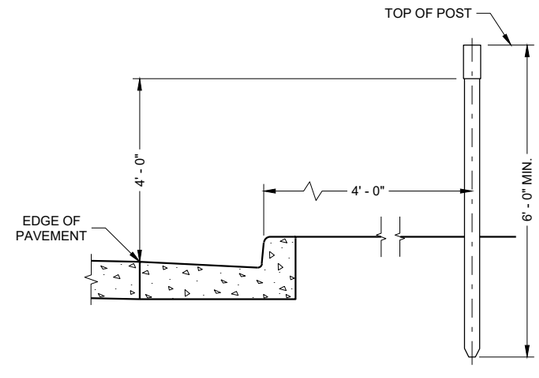
WEIGHT 1.12 LBS PER FT. \ 0.1 LB.

REFLECTOR SPACING TABLE

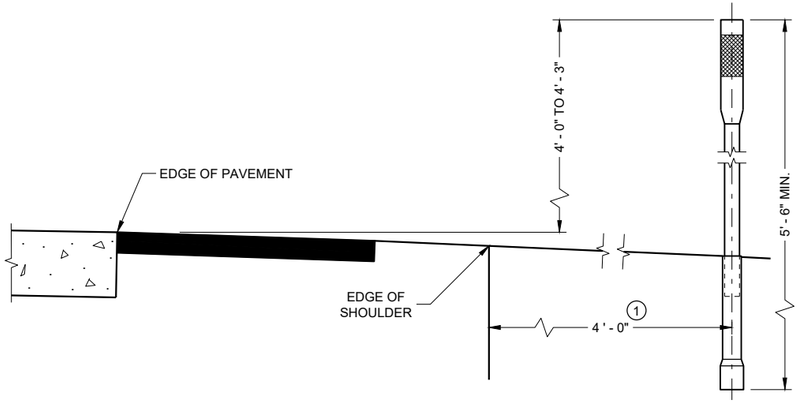
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

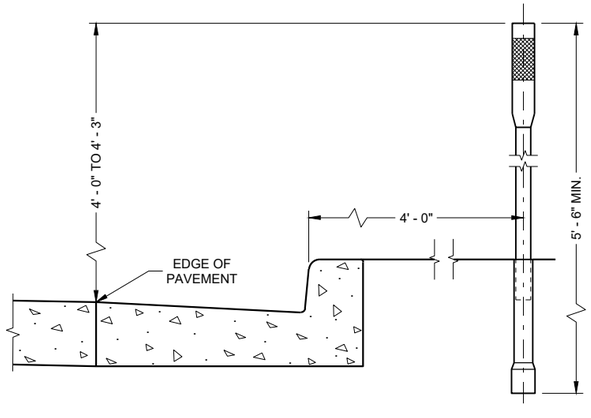
* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER





TYPICAL INSTALLATIONS OF DELINEATOR POSTS





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

GENERAL NOTES

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

1. DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.
2. FURNISH TYPE H SHEETING FROM THE APPROVED PRODUCTS LIST.

DELINEATOR POST WITH REFLECTIVE SHEETING

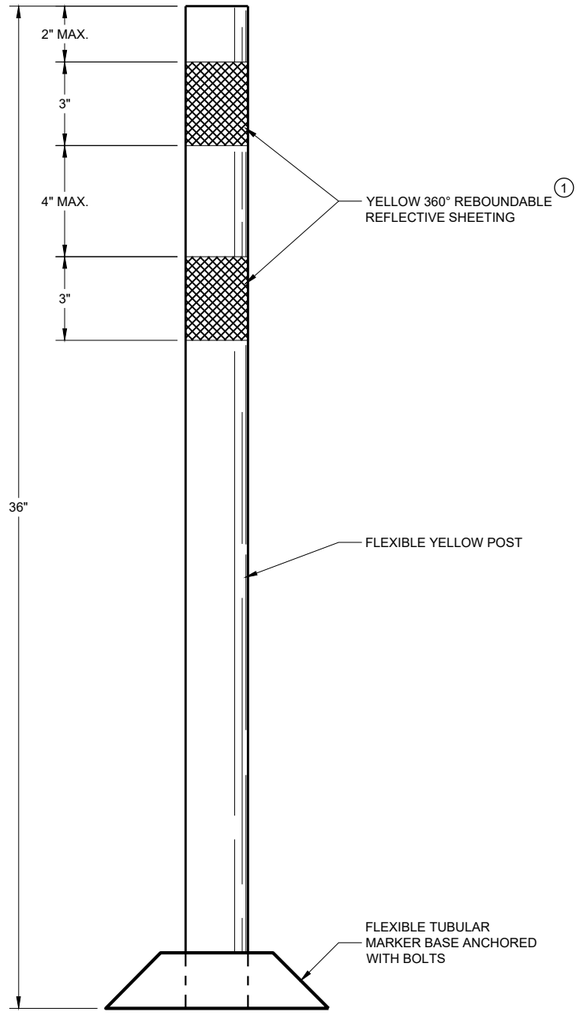
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15A04 - 06c



PERMANENT FLEXIBLE TUBULAR MARKER POST

GENERAL NOTES

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

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

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

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

6

SDD 15A04 - 06d

CHANNELIZING DEVICES
PERMANENT FLEXIBLE
TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

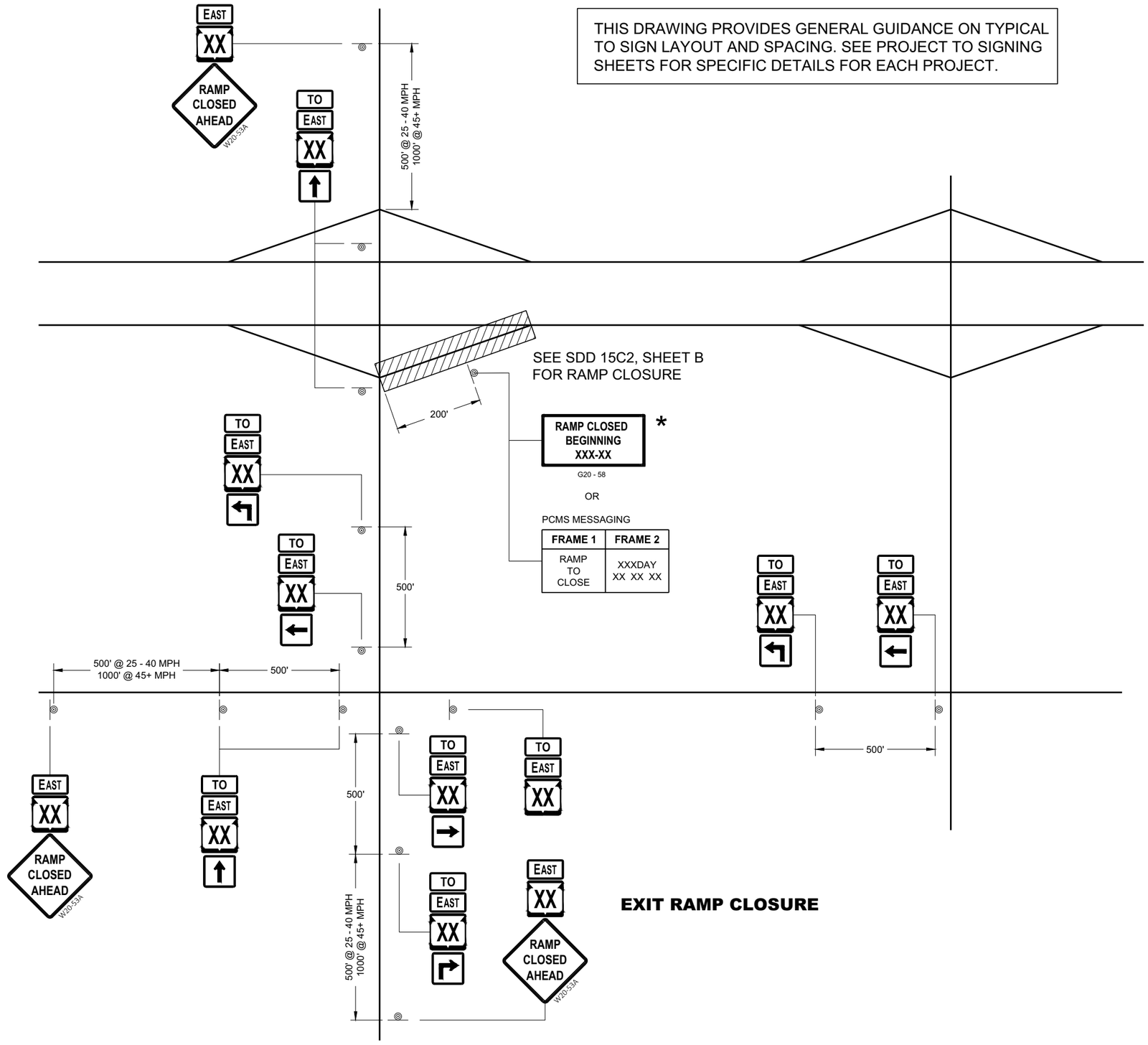
May 2021
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

6

SDD 15A04 - 06d



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

EXIT RAMP CLOSURE

ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

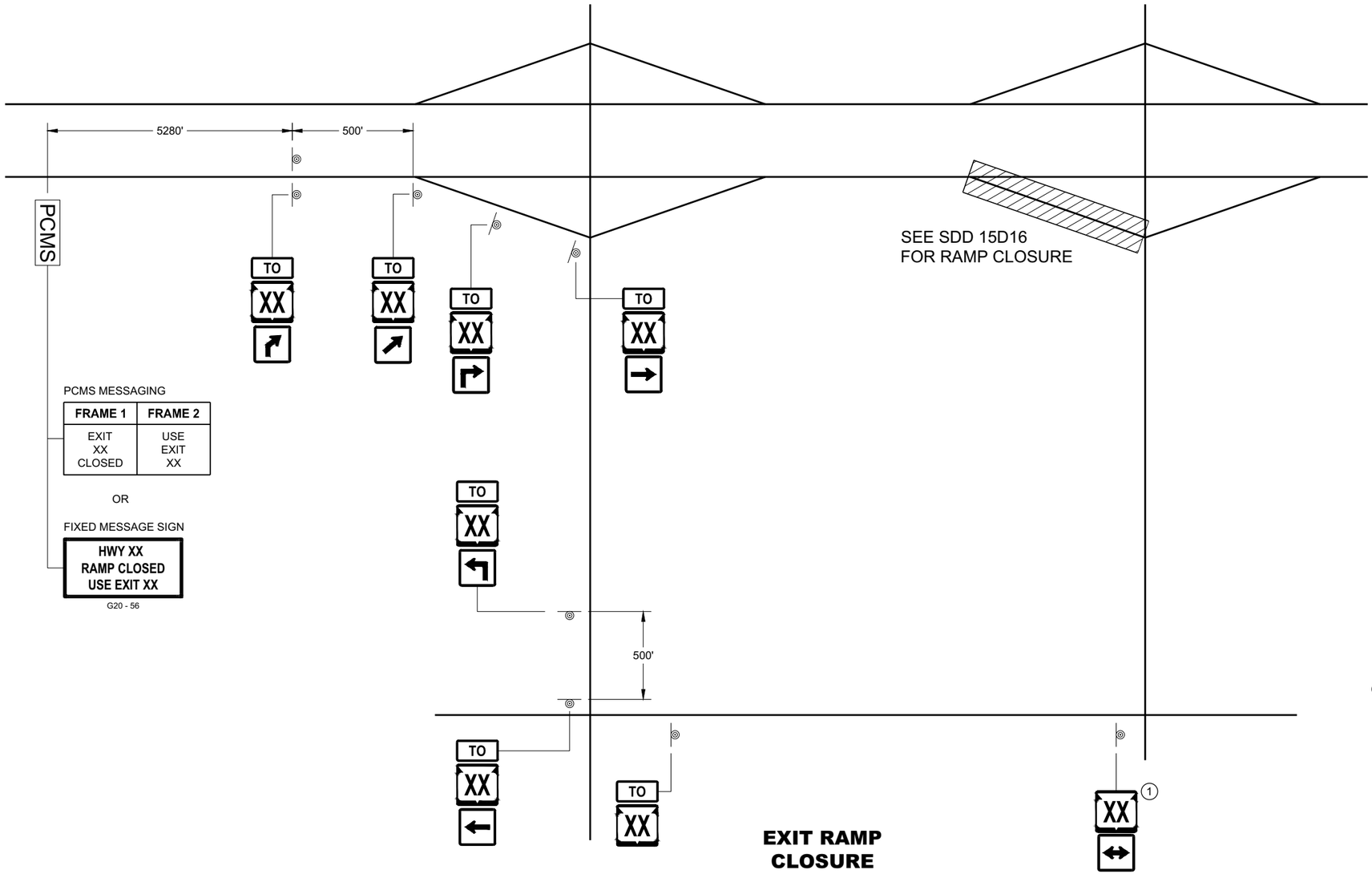
APPROVED
February 2020 (DATE)
/S/ Andrew Heidtke (WORK ZONE ENGINEER)

FHWA

6

SDD 15C02 - 08d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

EXIT RAMP CLOSURE

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEE
FHWA

6

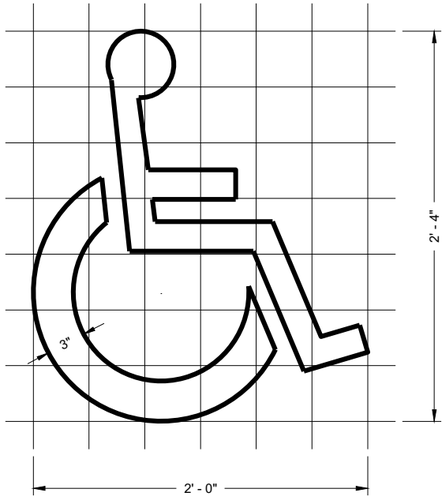
SDD 15C02 - 08e

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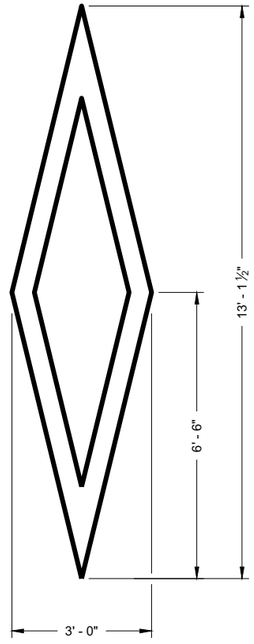
SDD 15C02 - 08e

GENERAL NOTES

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



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

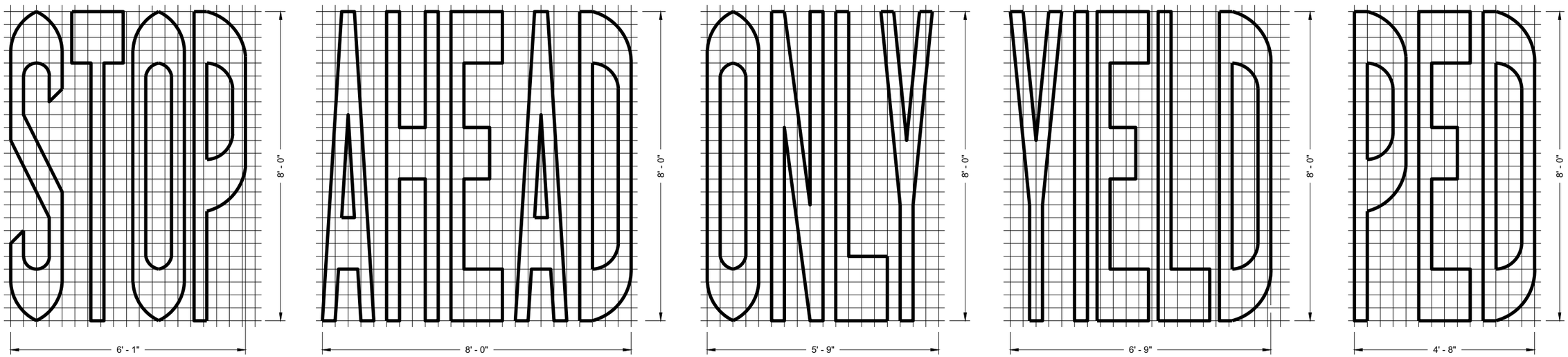
PAVEMENT MARKING SYMBOLS

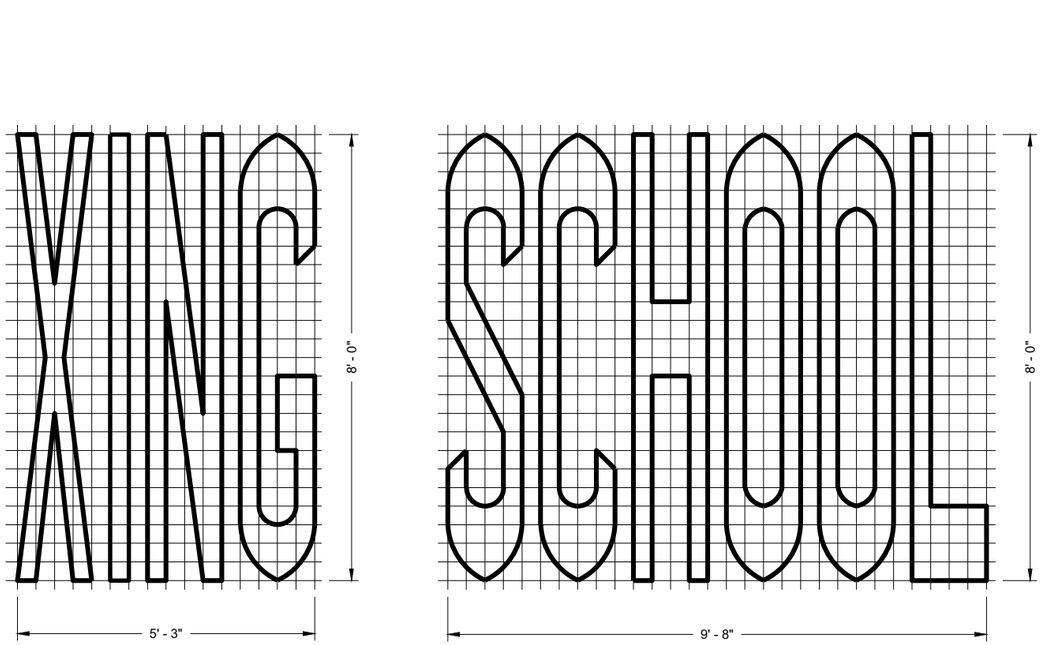
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

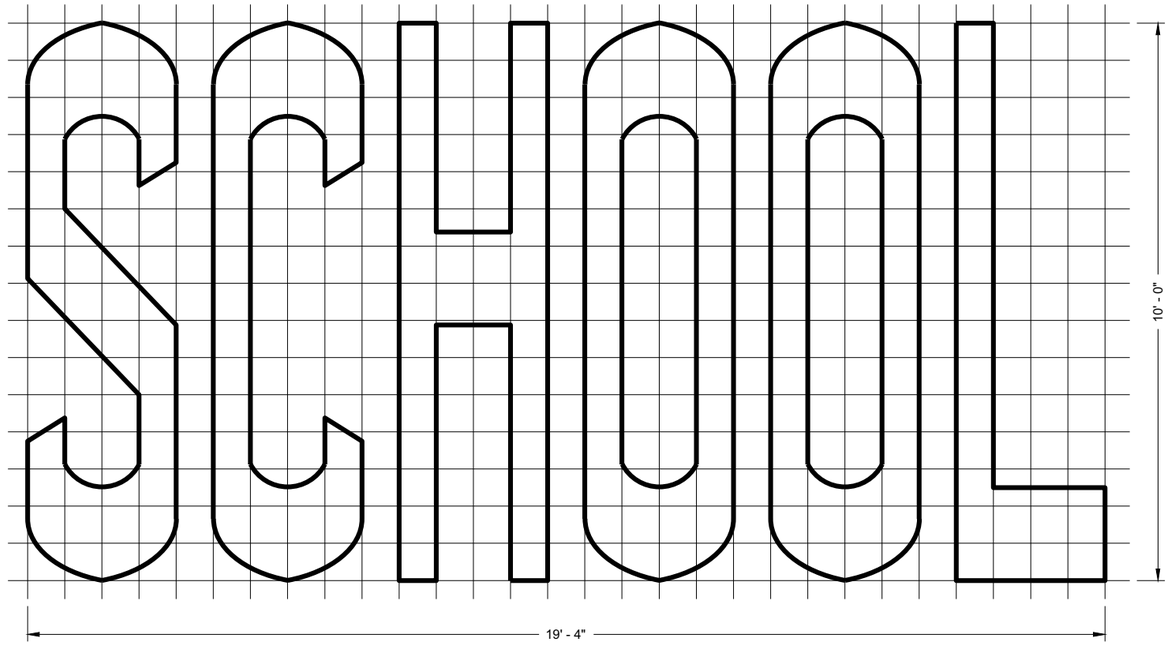
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

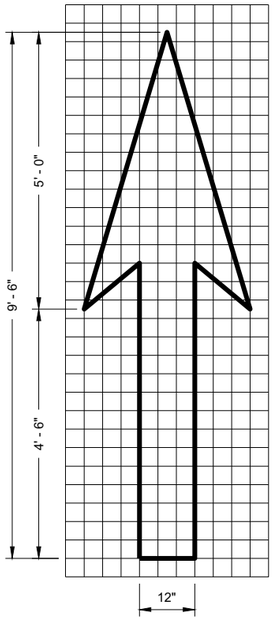
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SDD 15C07 - 15b

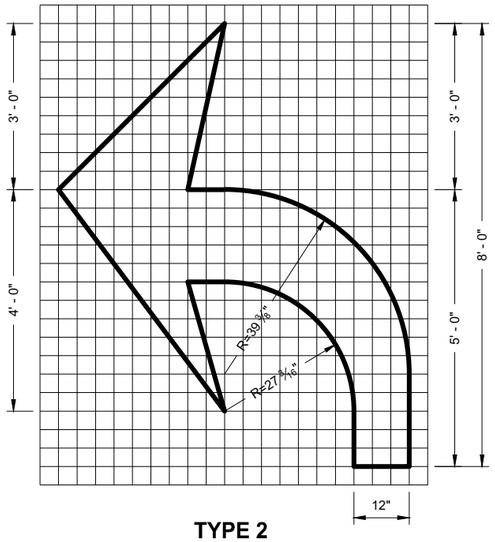
SDD 15C07 - 15b

GENERAL NOTES

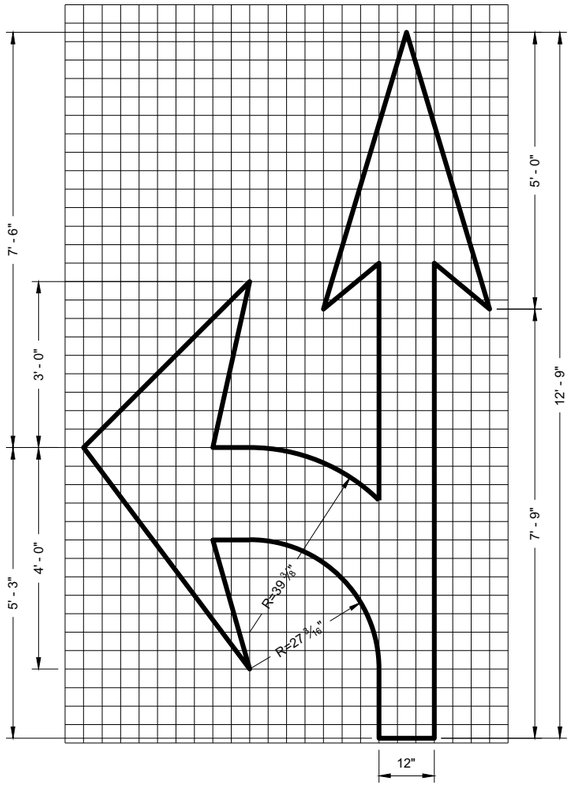
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



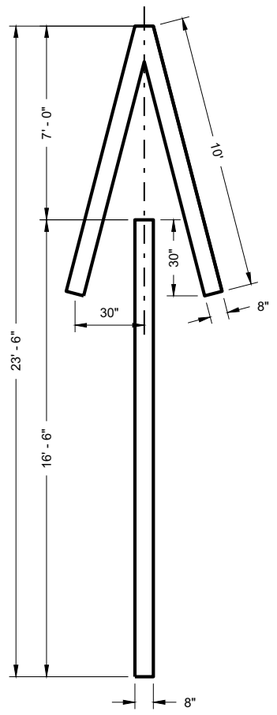
TYPE 1



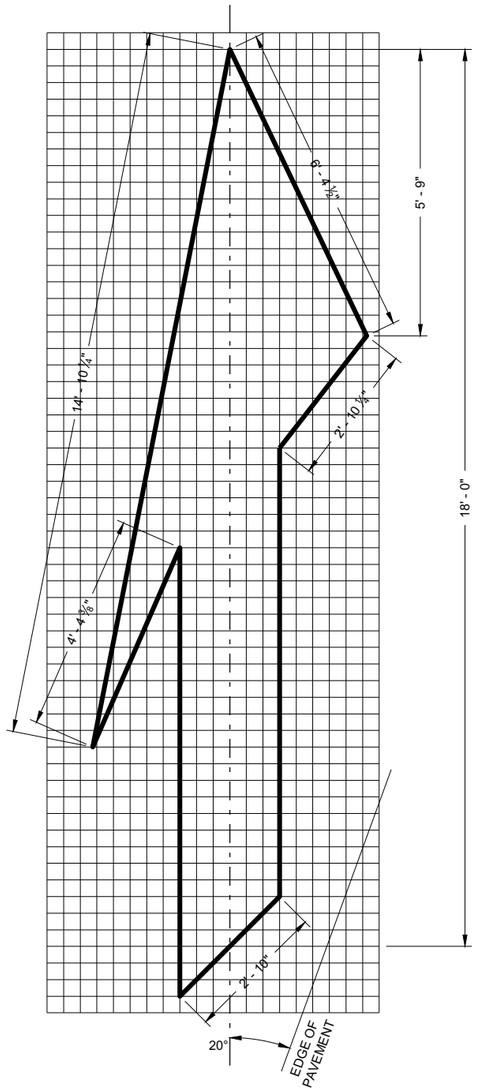
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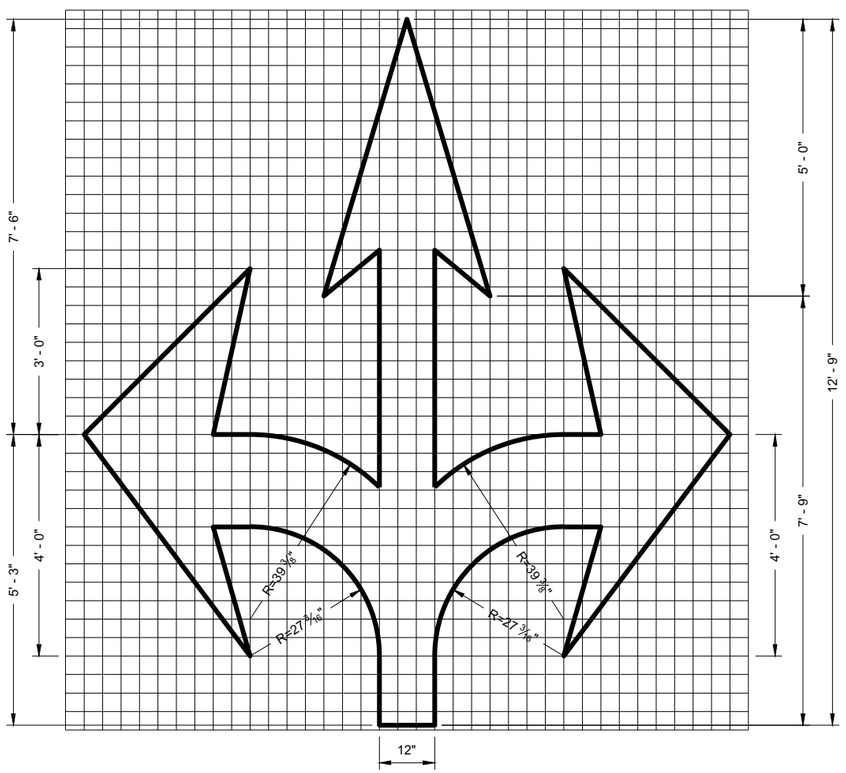
TYPE 3



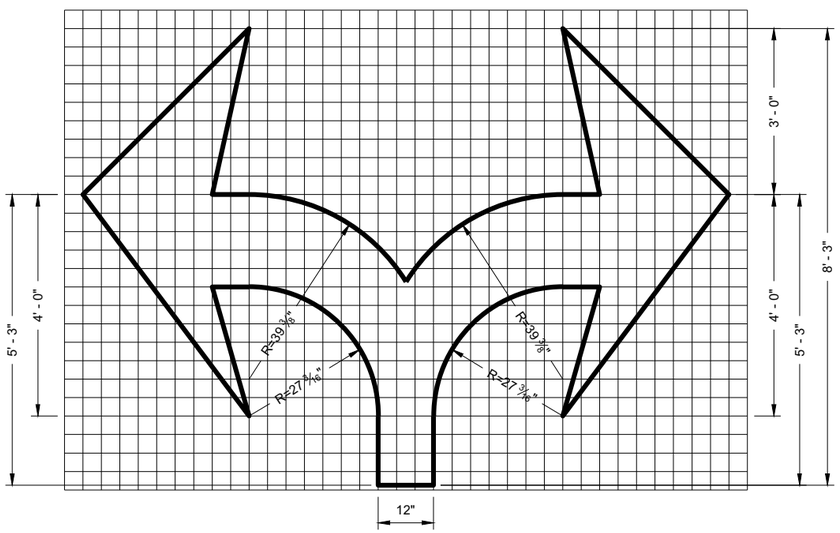
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

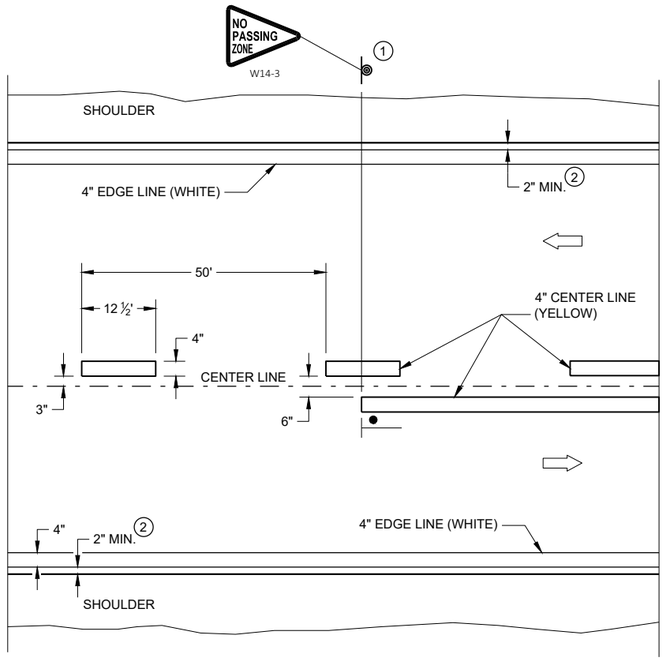
FHWA

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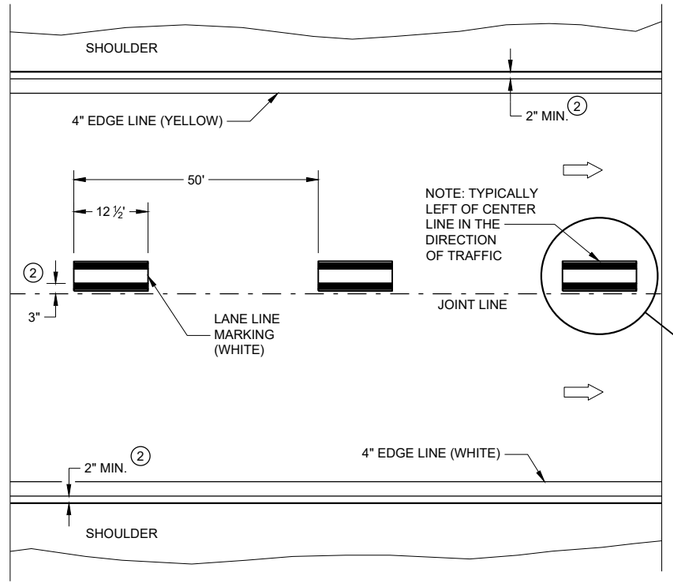
SDD 15C07 - 15c

6

SDD 15C07 - 15c

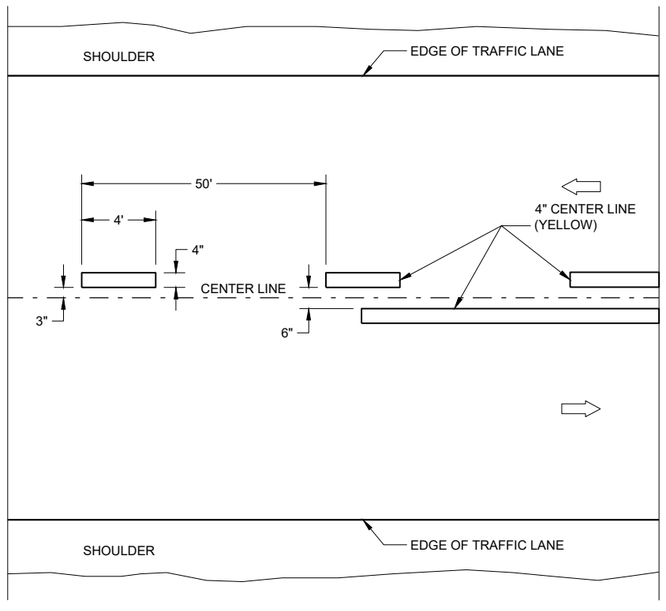


TWO WAY TRAFFIC

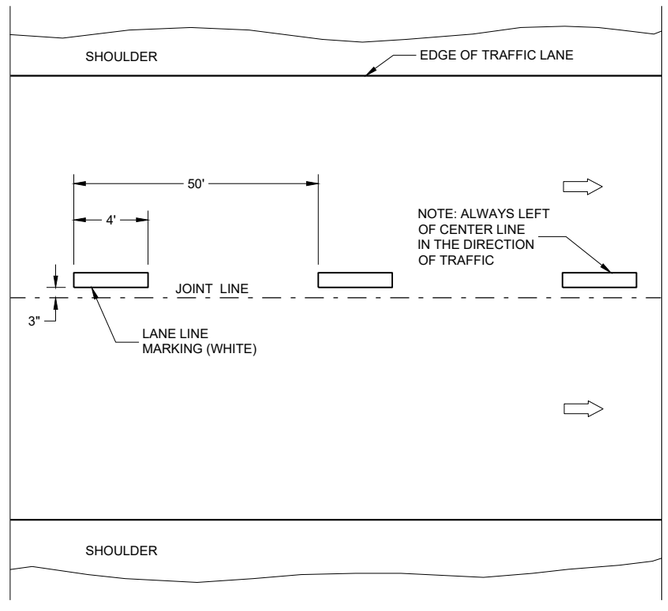


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

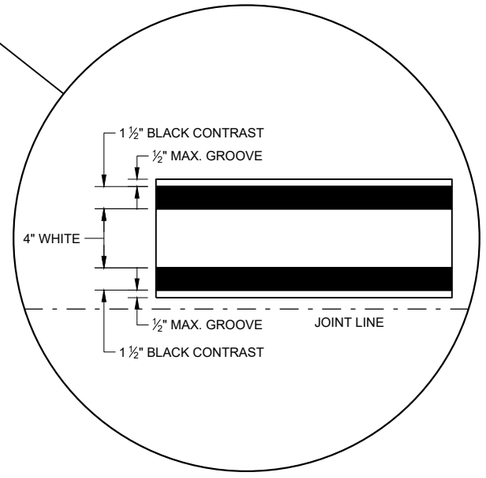
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

FHWA

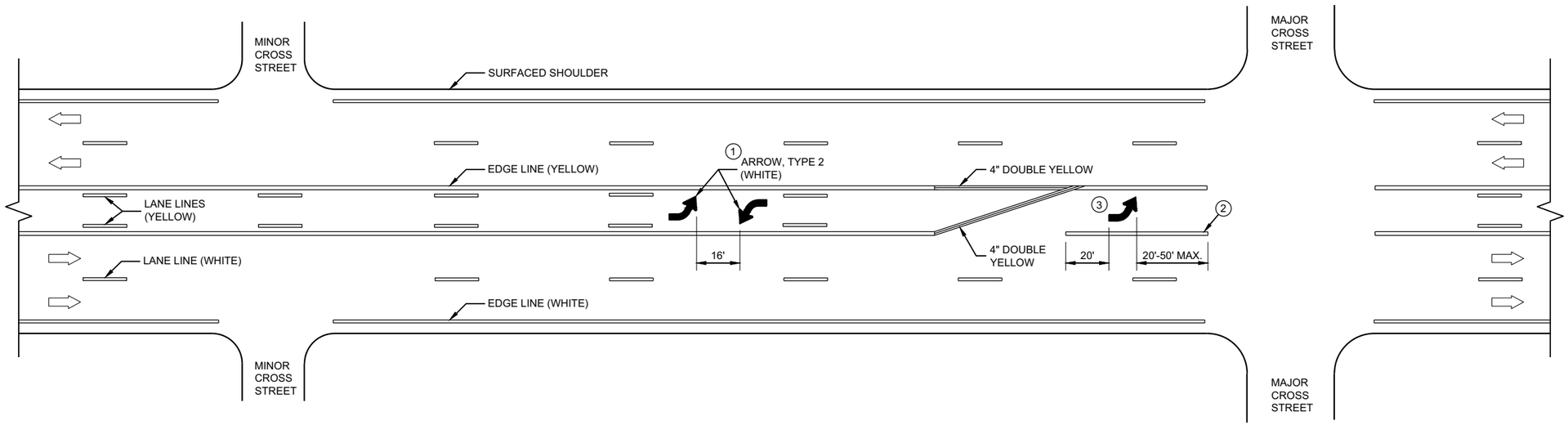
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

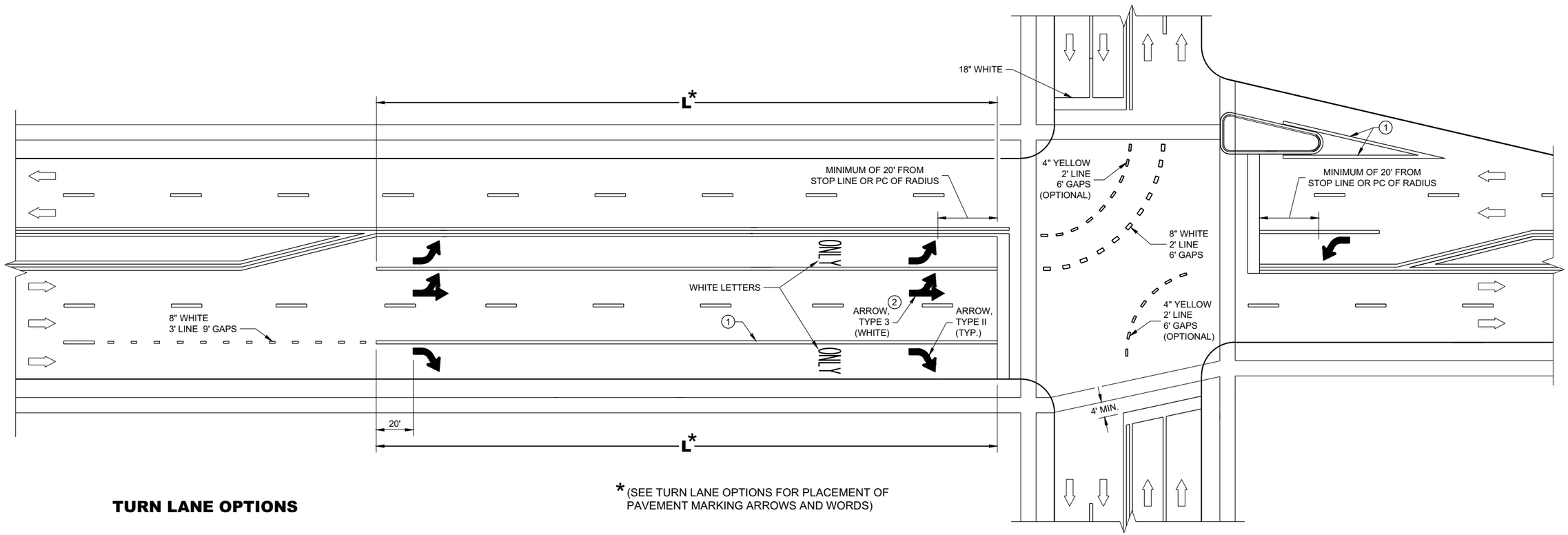
SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

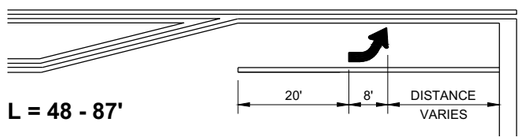
SDD 15C08 - 20b



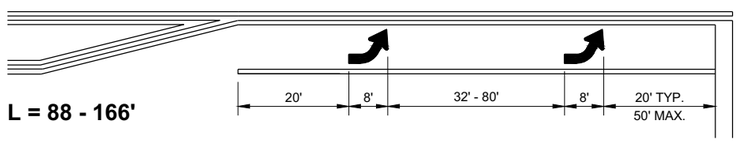
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

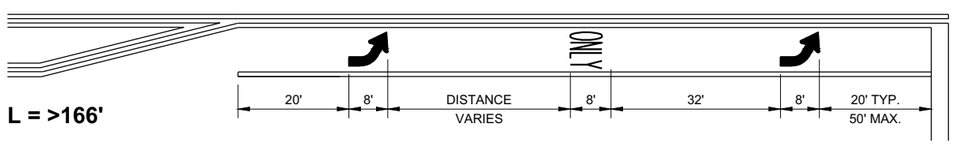
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

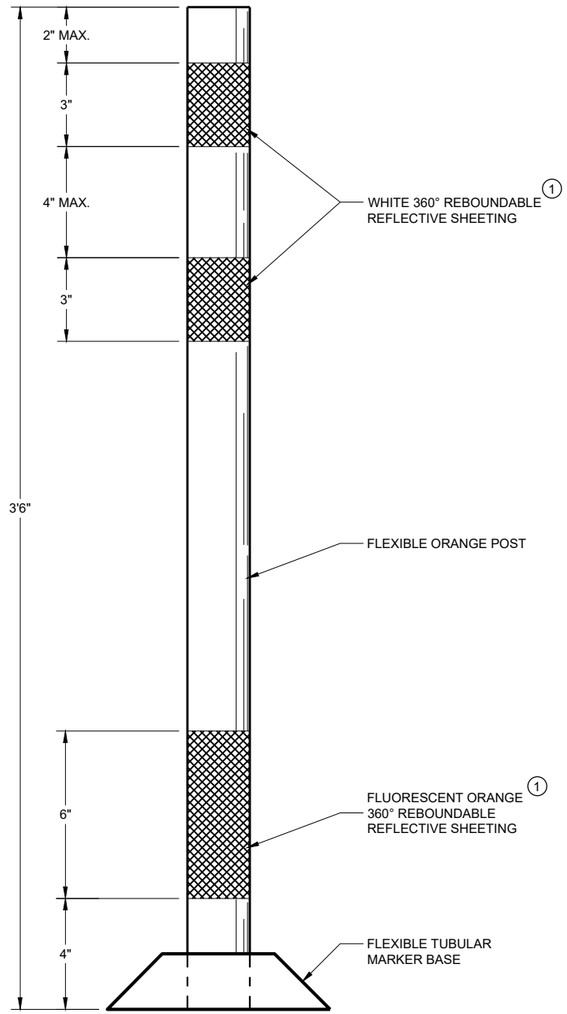
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 20c



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

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

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

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

6

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

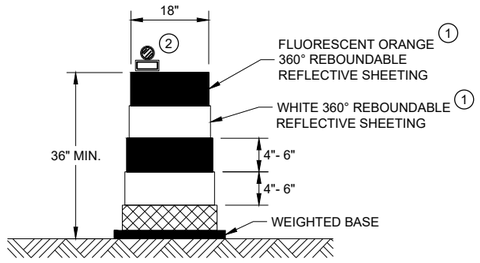
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

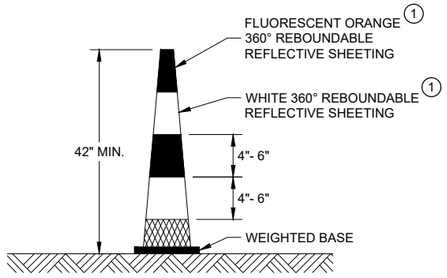
SDD 15C11 - 09a

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

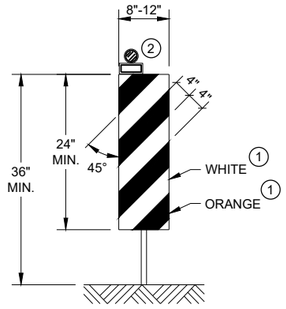


DRUM



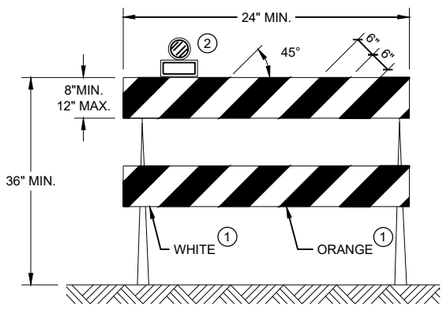
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



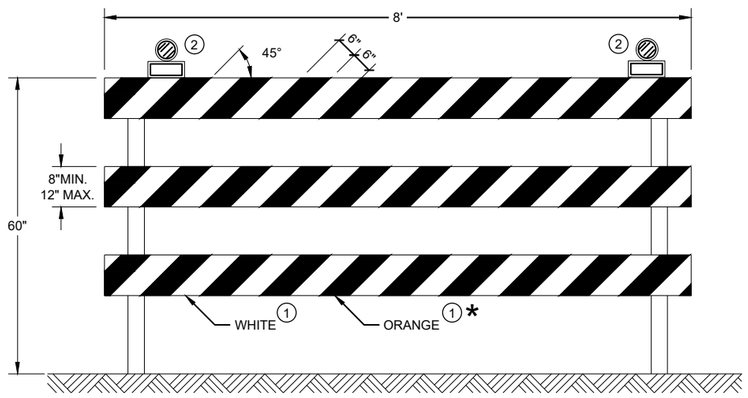
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 09b

6

SDD 15C11 - 09b

LEGEND

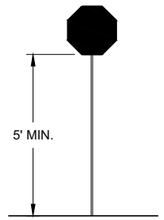
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

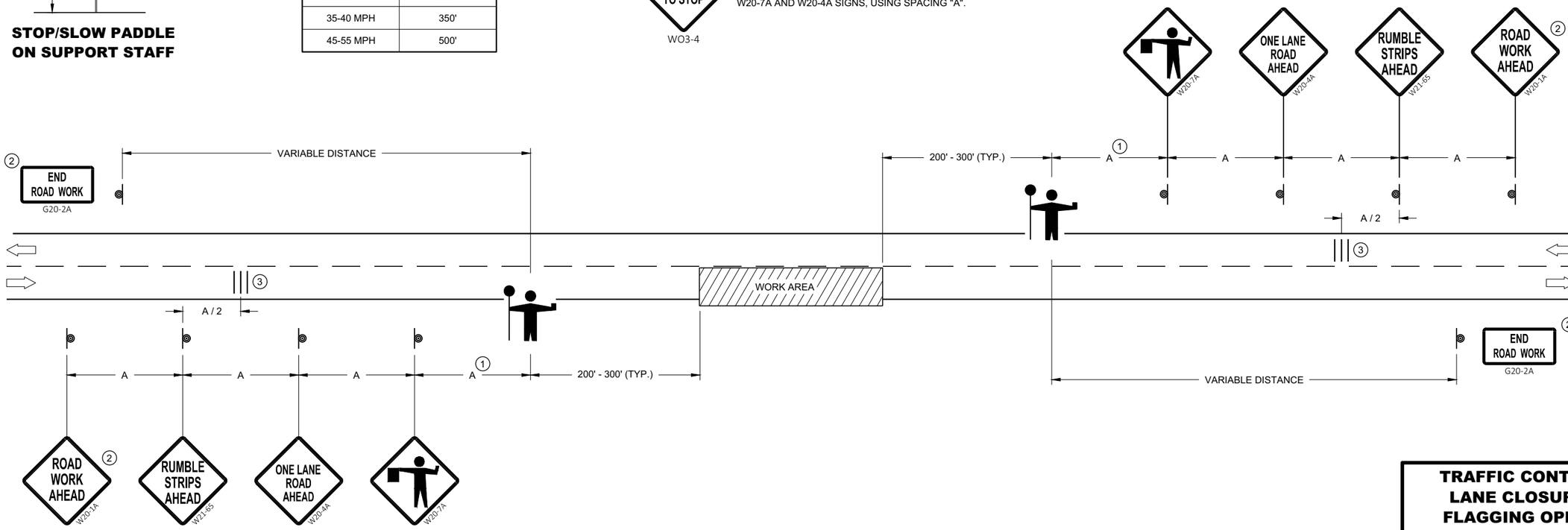
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

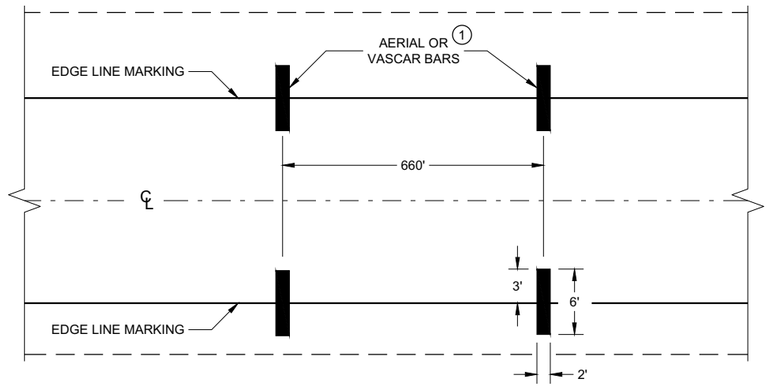
SDD 15C12 - 07

SDD 15C12 - 07

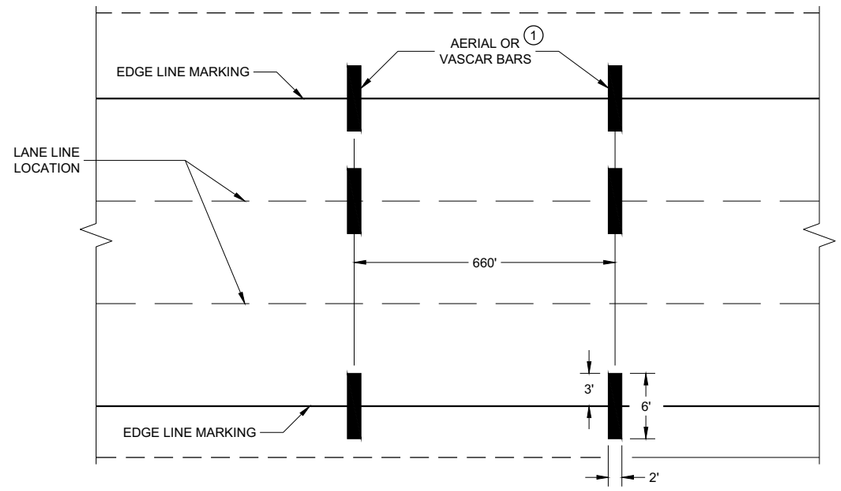
GENERAL NOTES

(1) PLACE TWO TO FIVE AERIAL OR VASCAR BARS AT 660 FOOT SPACING.

A CAR CAN BE PROVIDED BY THE WISCONSIN STATE PATROL FOR TRAFFIC CONTROL.



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

6

SDD 15C14 - 04

AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

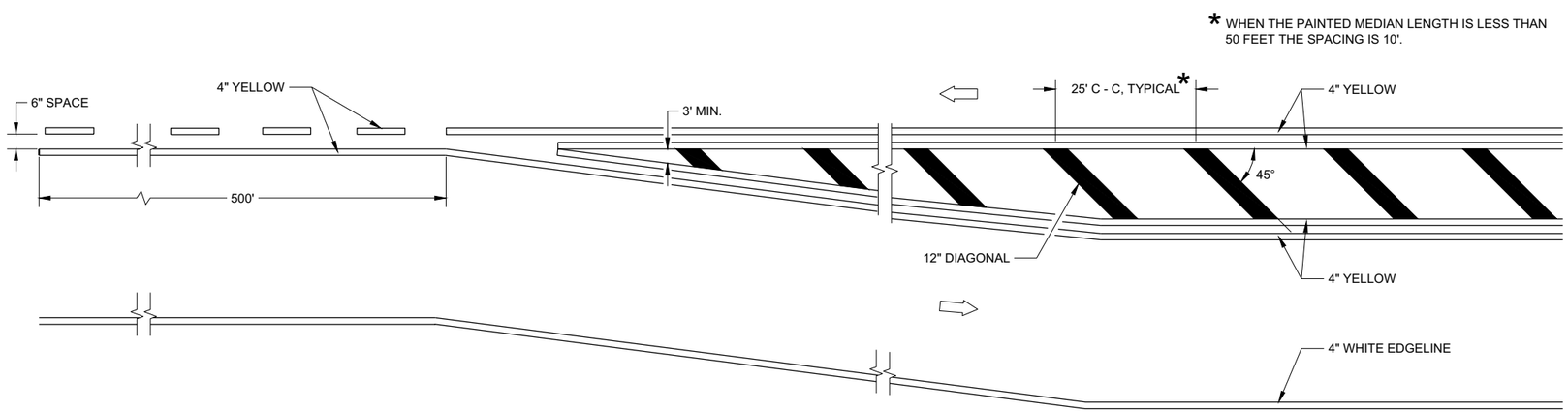
February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR ENGINEER

FHWA

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SDD 15C14 - 04

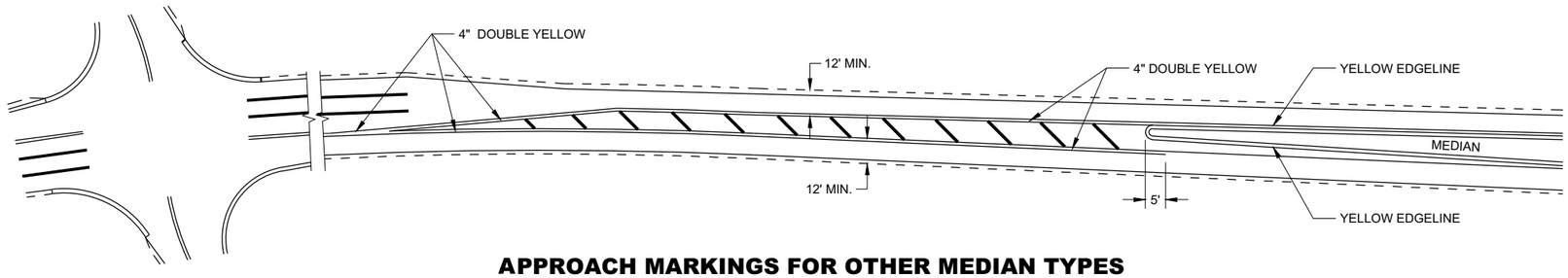


MEDIAN ISLAND DETAIL

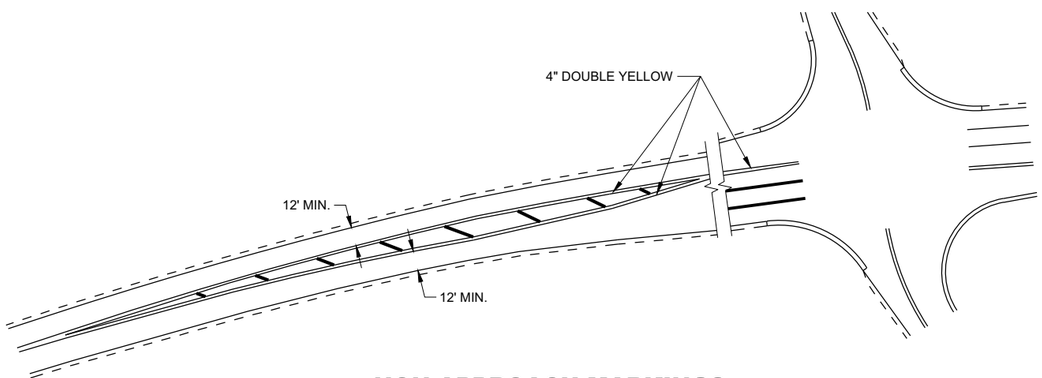
GENERAL NOTES

DIAGONALS ARE OPTIONAL WHEN PAINED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

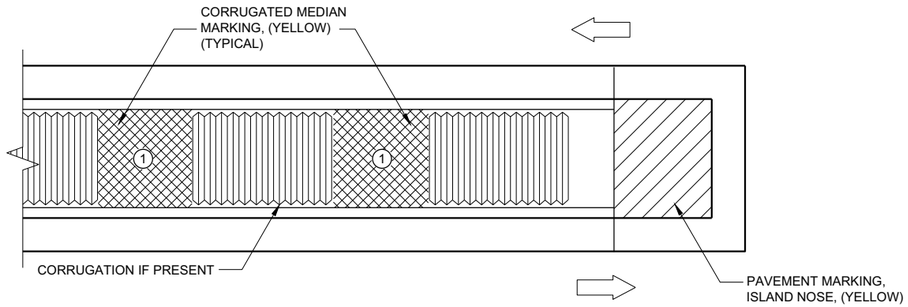
FHWA

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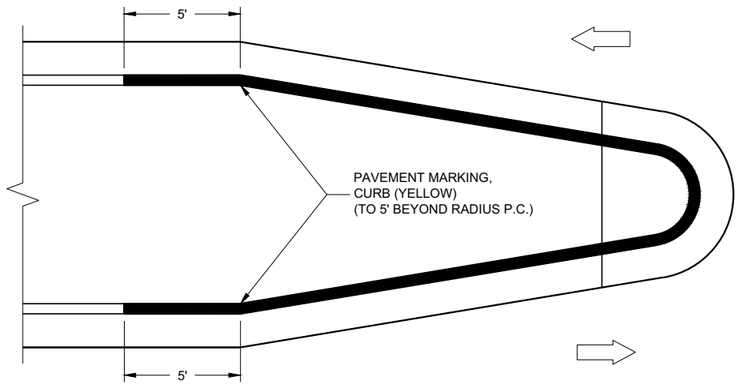
SDD 15C18 - 05a

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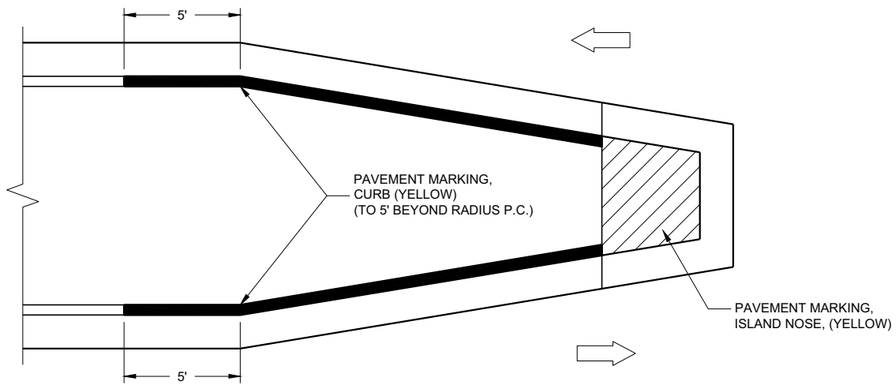
SDD 15C18 - 05a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAR
ENGINEER

FHWA

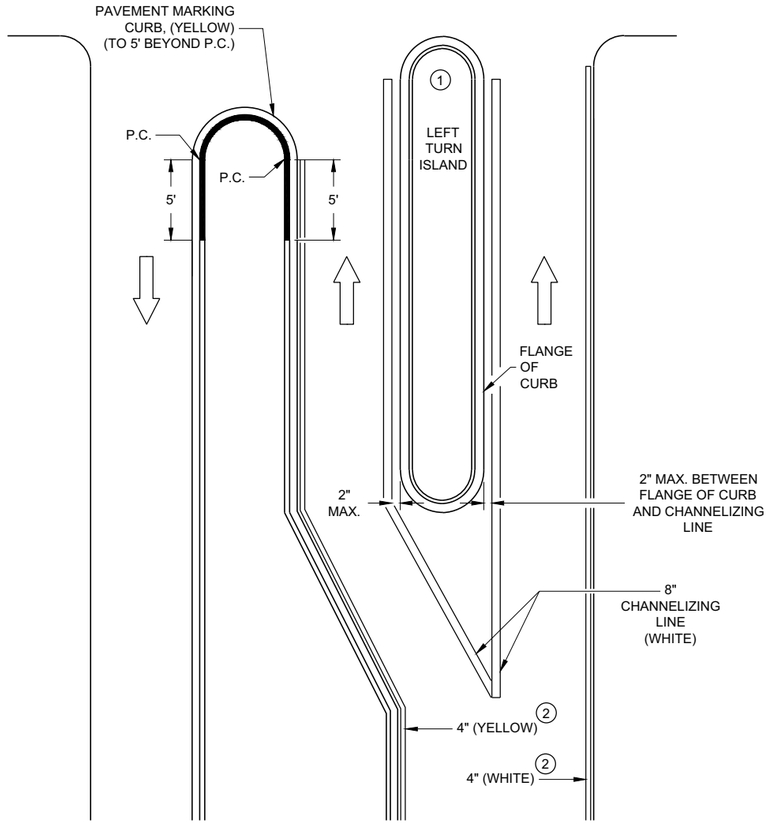
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SDD 15C18 - 05b

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SDD15C18 - 05b

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



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

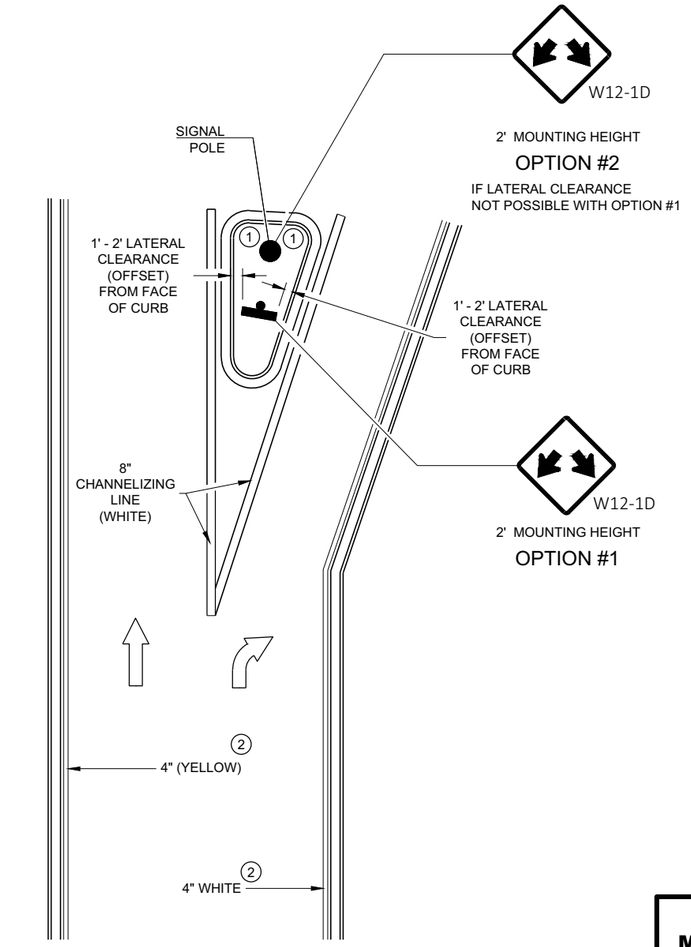
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

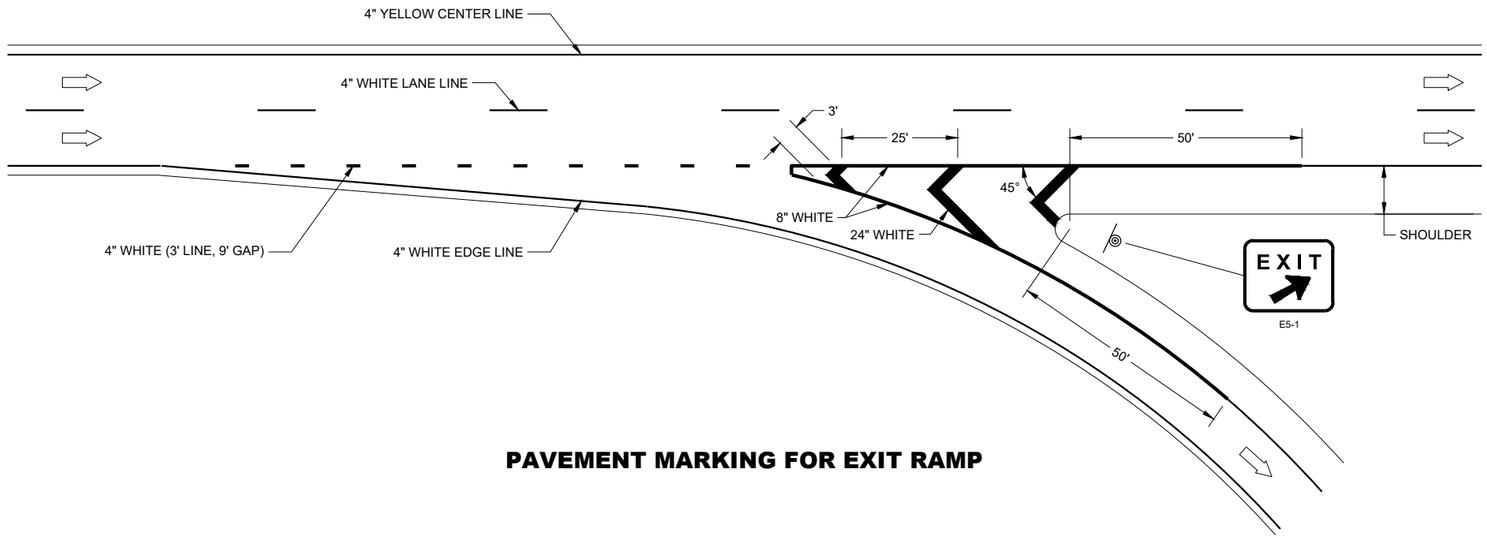
FHWA

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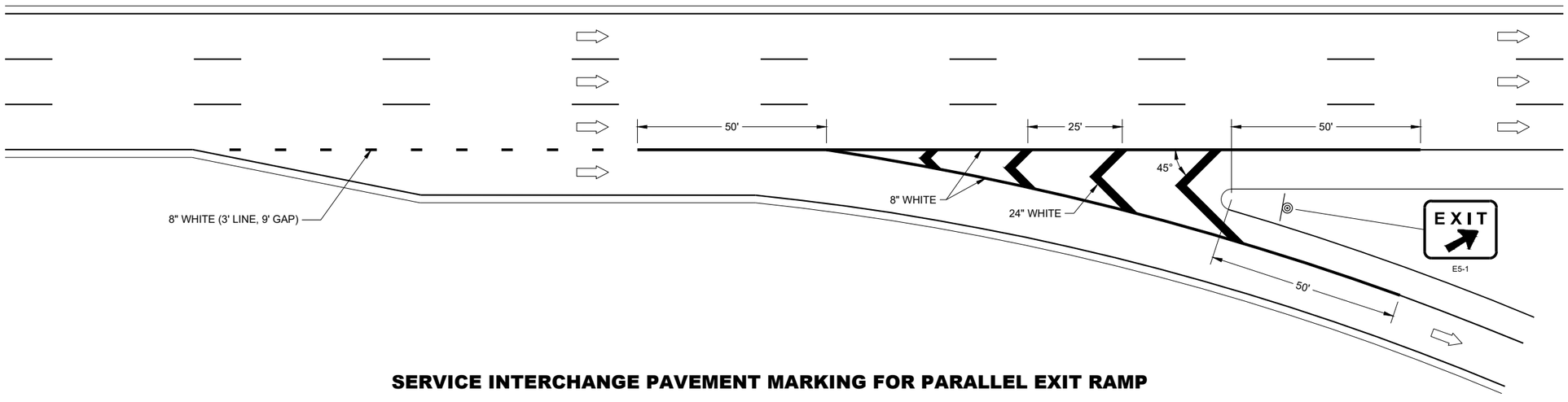
SDD 15C18 - 05c

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SDD15C18 - 05c



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

6

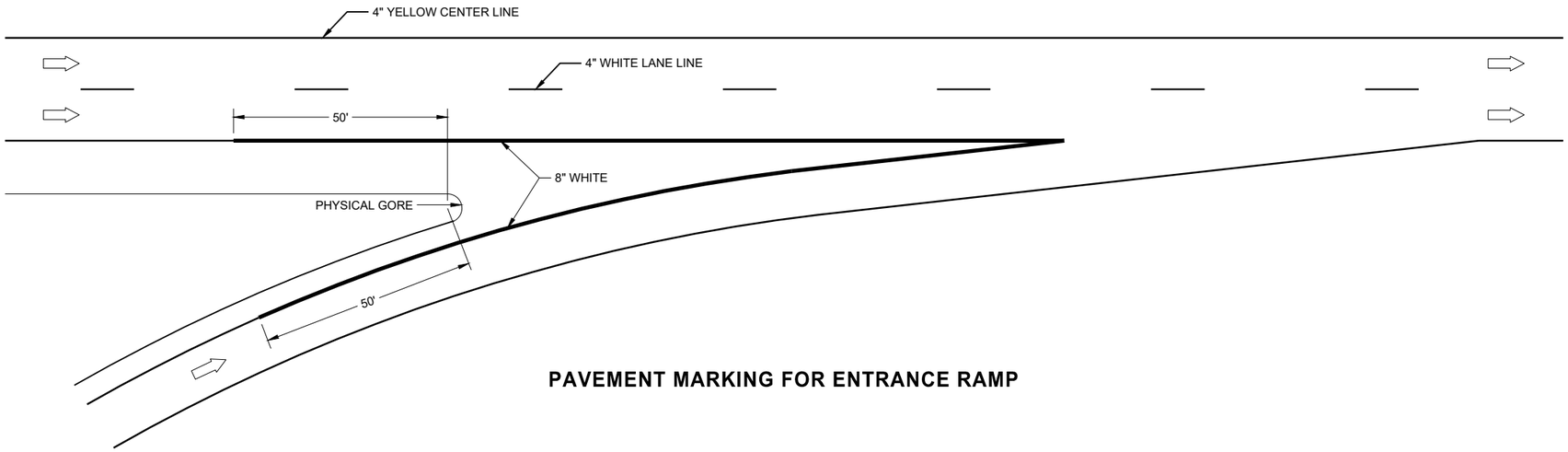
SDD 15C31 - 04a

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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SDD 15C31 - 04a



PAVEMENT MARKING FOR ENTRANCE RAMP

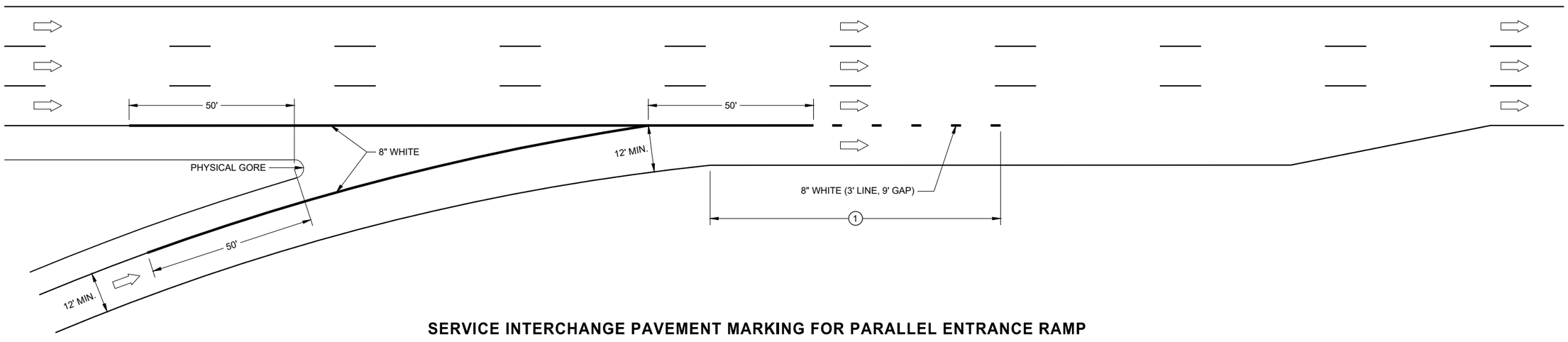
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

(1) ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

DIRECTION OF TRAVEL



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

6

SDD 14C31 - 04c

PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

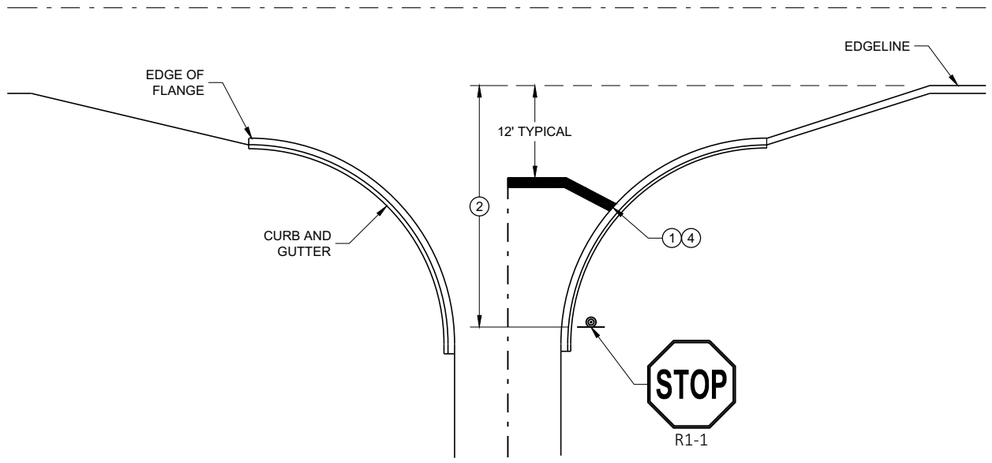
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SDD 14C31 - 04c

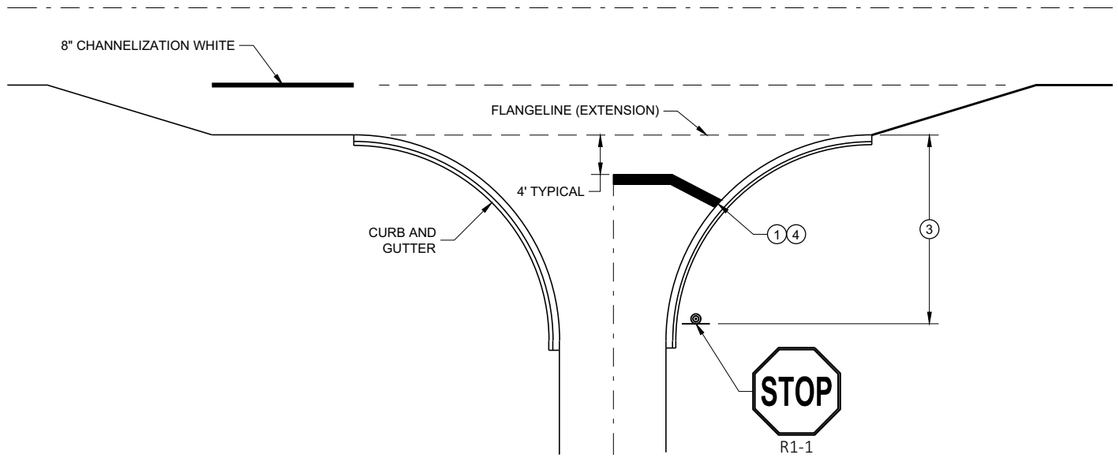
GENERAL NOTES

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

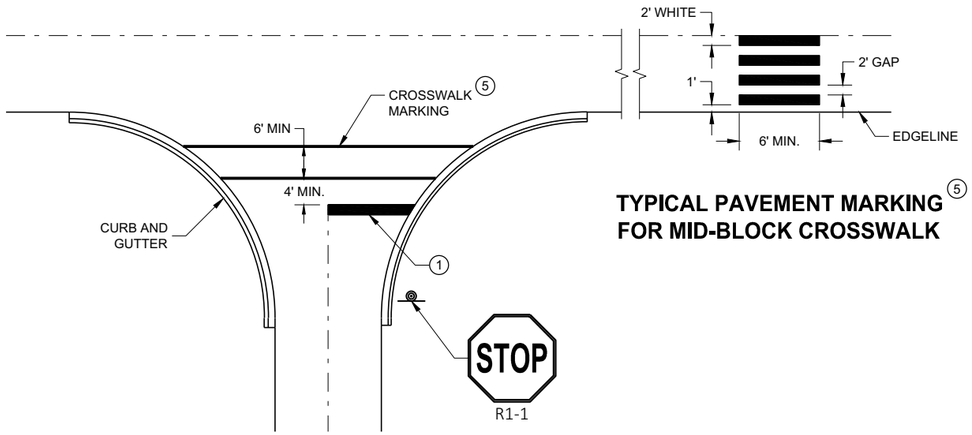
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

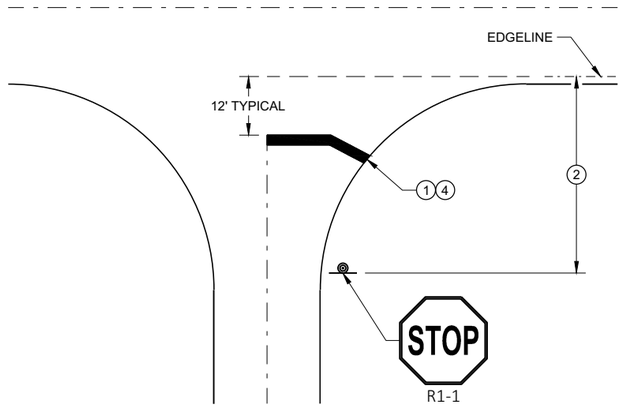


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER
FHWA

6
SDD 15C33 - 04

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

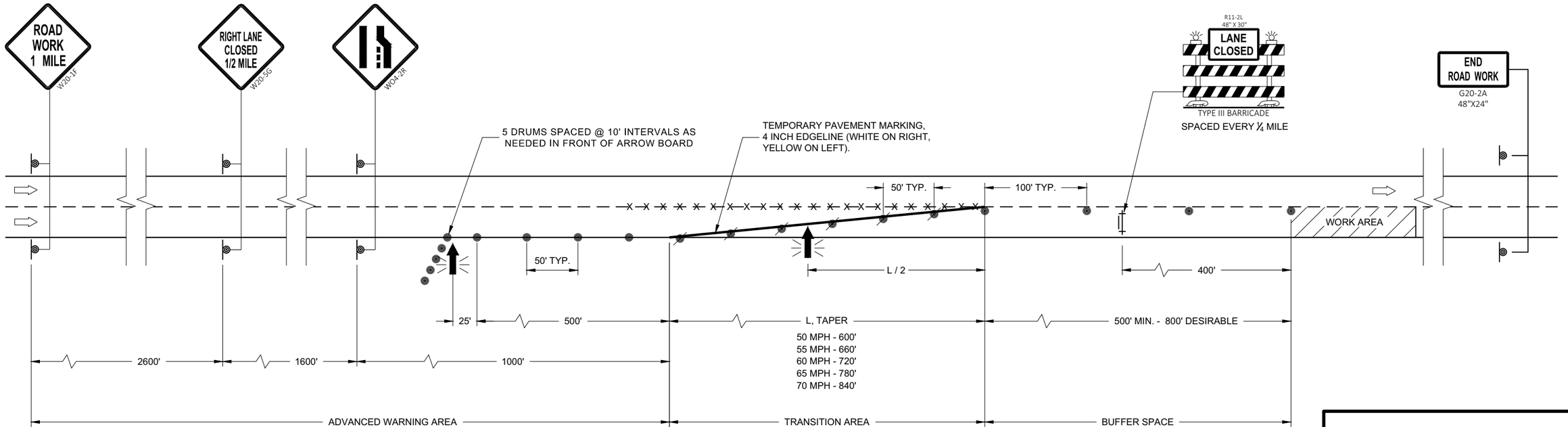
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D12 - 09a

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SDD 15D12 - 09a

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

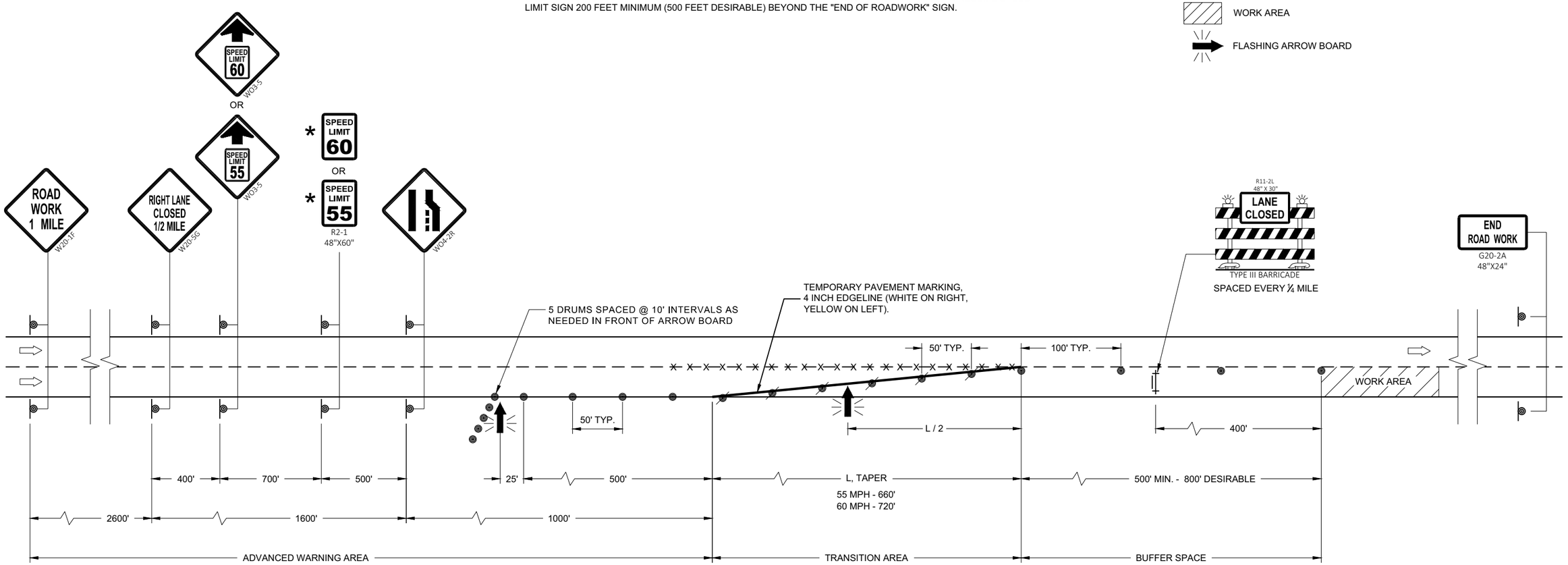
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* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D12 - 09b

SDD 15D12 - 09b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- (S) PORTABLE TRAFFIC SENSOR (PTS)
- FBS FLASHING BEACON SIGN

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

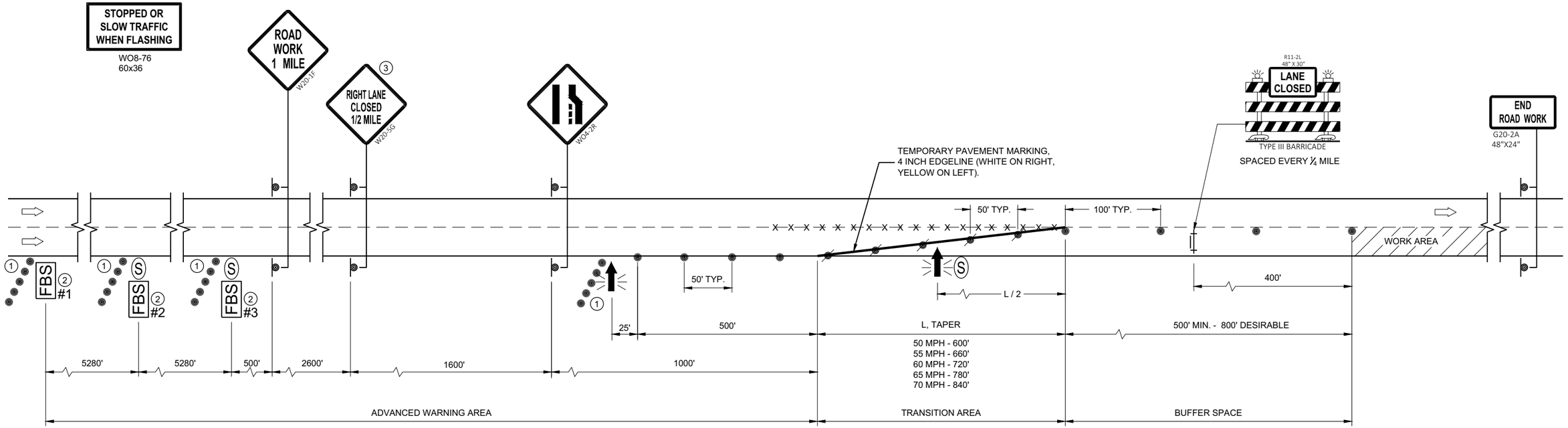
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON THE FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

1. 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.
2. IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE FBS ON BOTH SIDES OF THE ROADWAY.
3. IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A "RESUME SPEED LIMIT" SIGN 200 FEET MINIMUM (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D12 - 09d

SDD 15D12 - 09d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

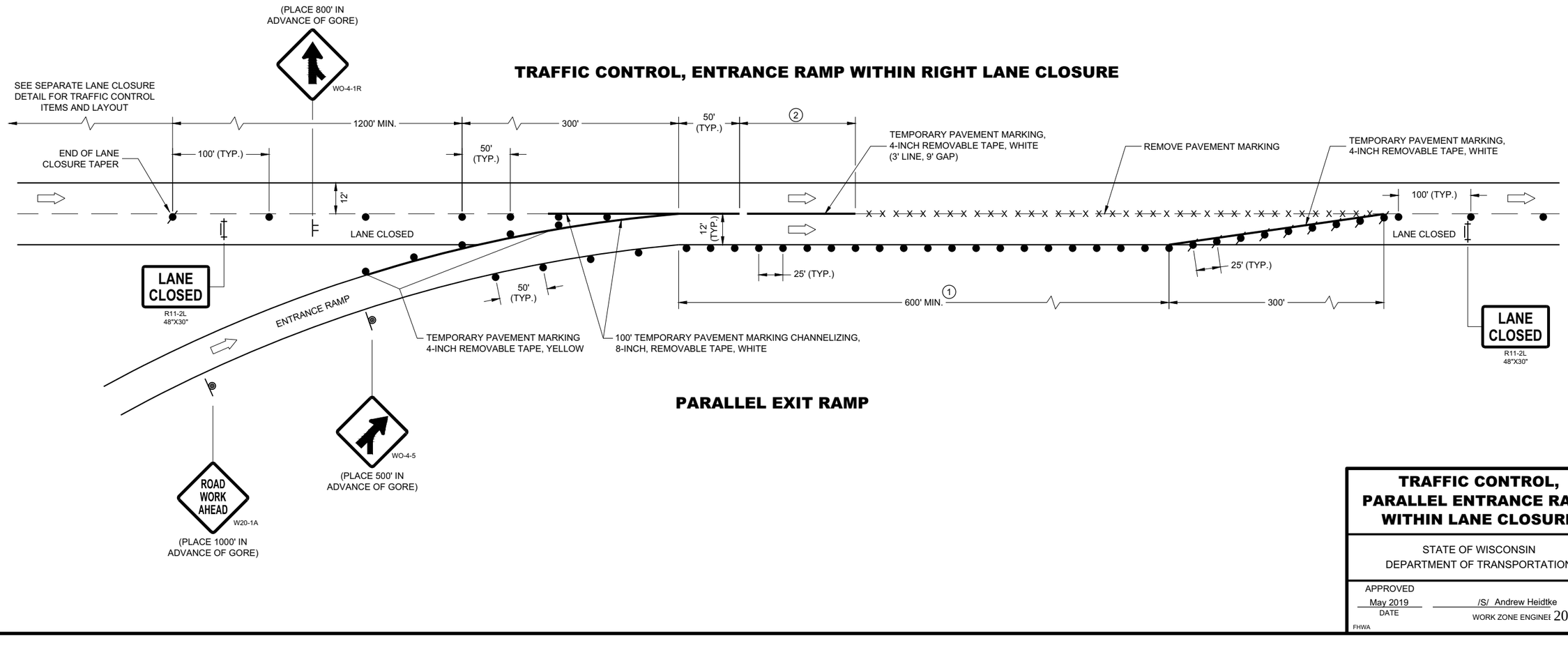
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY MARKING AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



PARALLEL EXIT RAMP

TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D15 - 05a

6

SDD 15D15 - 05a

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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

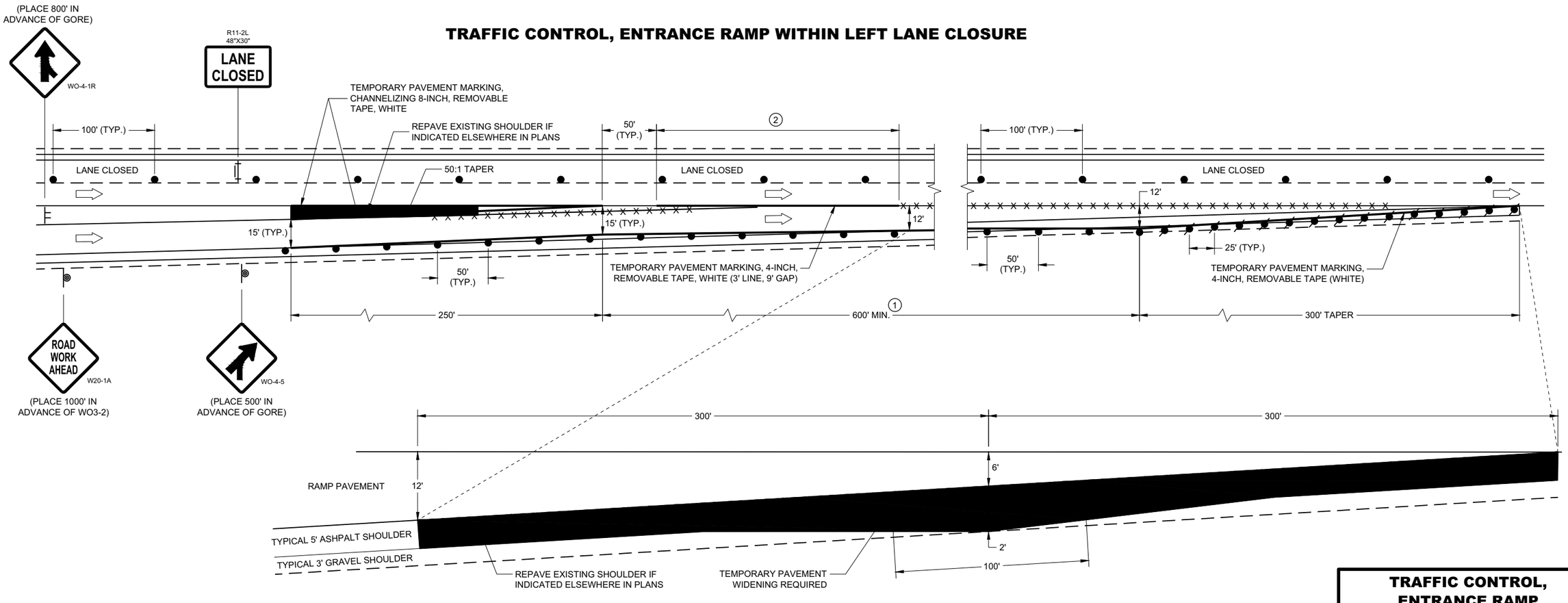
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY MARKING AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LEFT LANE CLOSURE



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY, ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05b

6

SDD15D15 - 05b

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

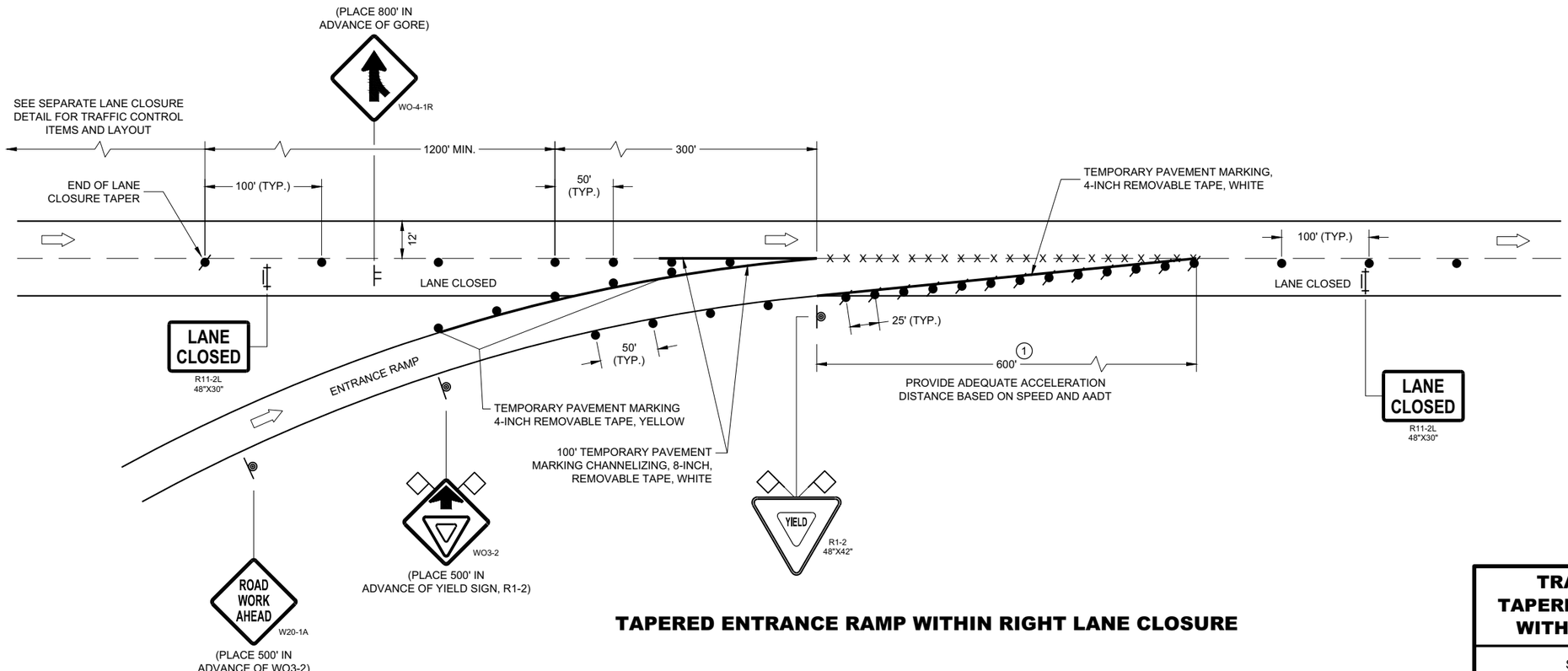
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05c

6

SDD 15D15 - 05c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

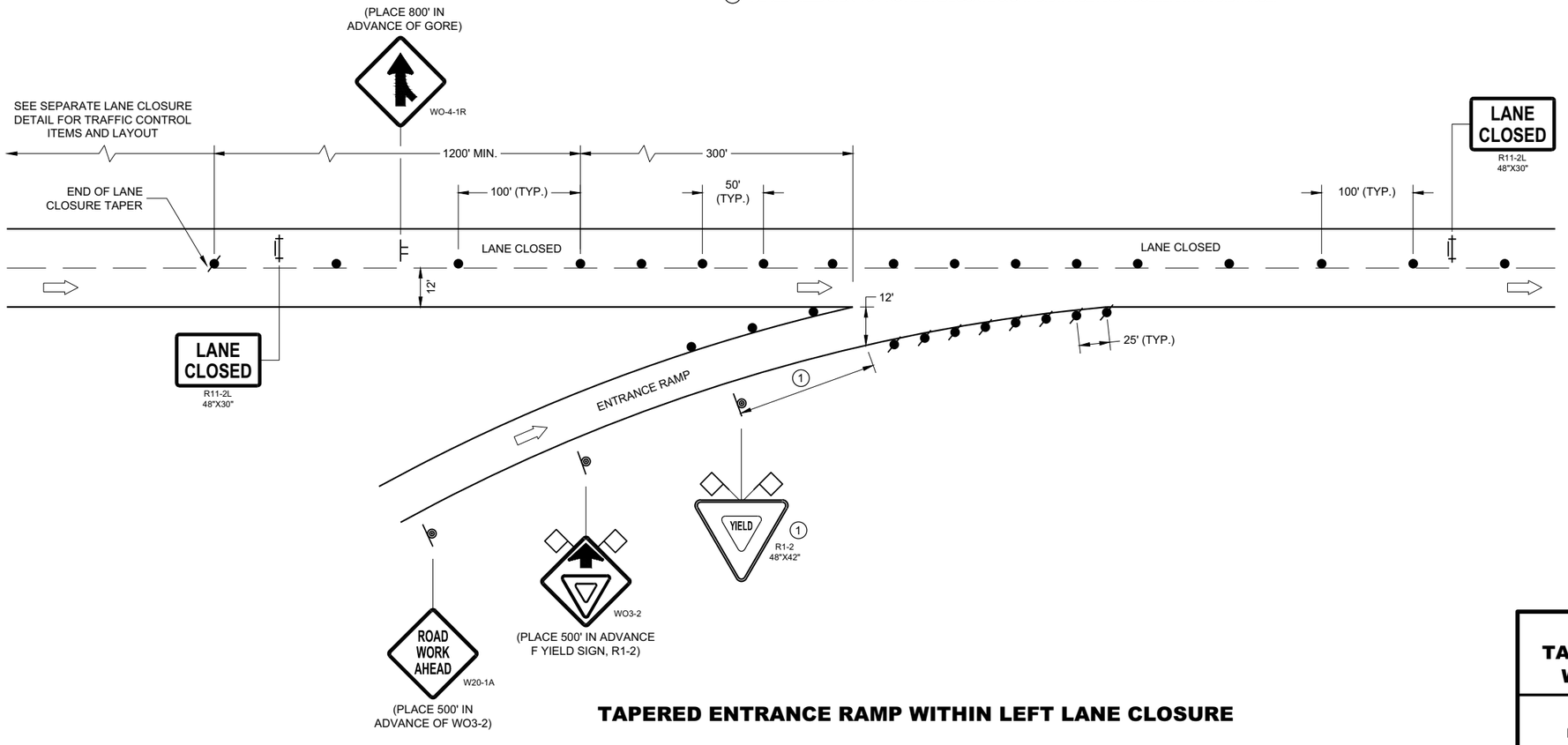
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05d

6

SDD15D15 - 05d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

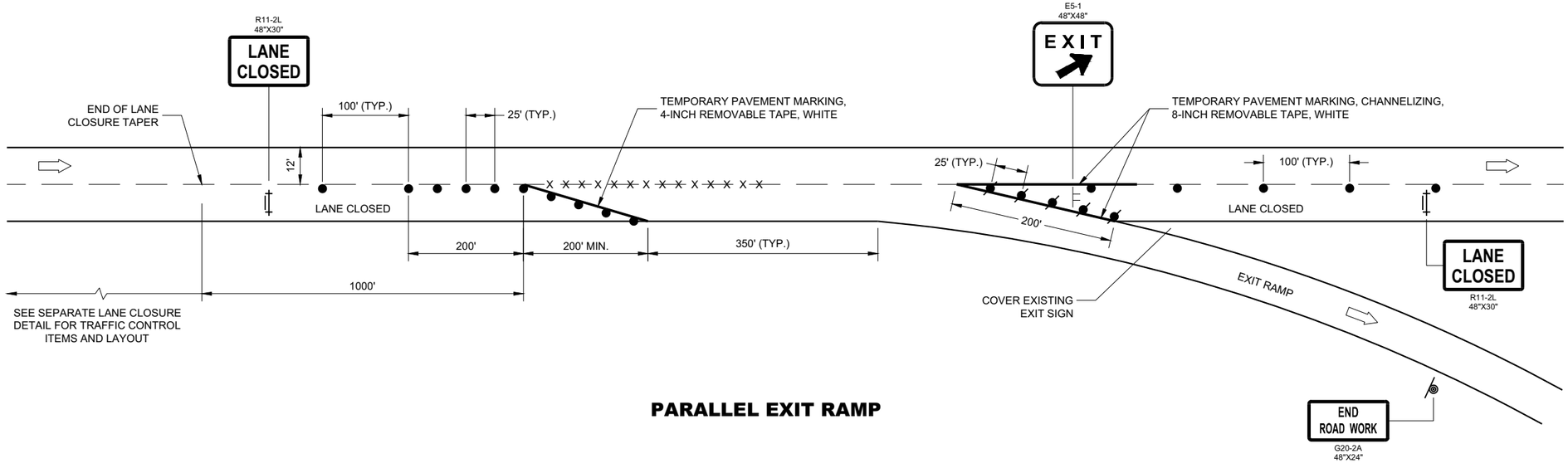
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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



PARALLEL EXIT RAMP

TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

SDD 15D15 - 05e

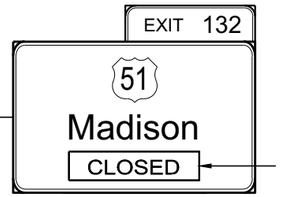
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SDD15D15 - 05e



G20 - 60
108" X 24"

OR



G20 - 60
108" X 24"

PLACE SIGN G20 - 60 OVER MILEAGE
ON EXISTING E1 - 1A SIGN

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

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

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

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

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

PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

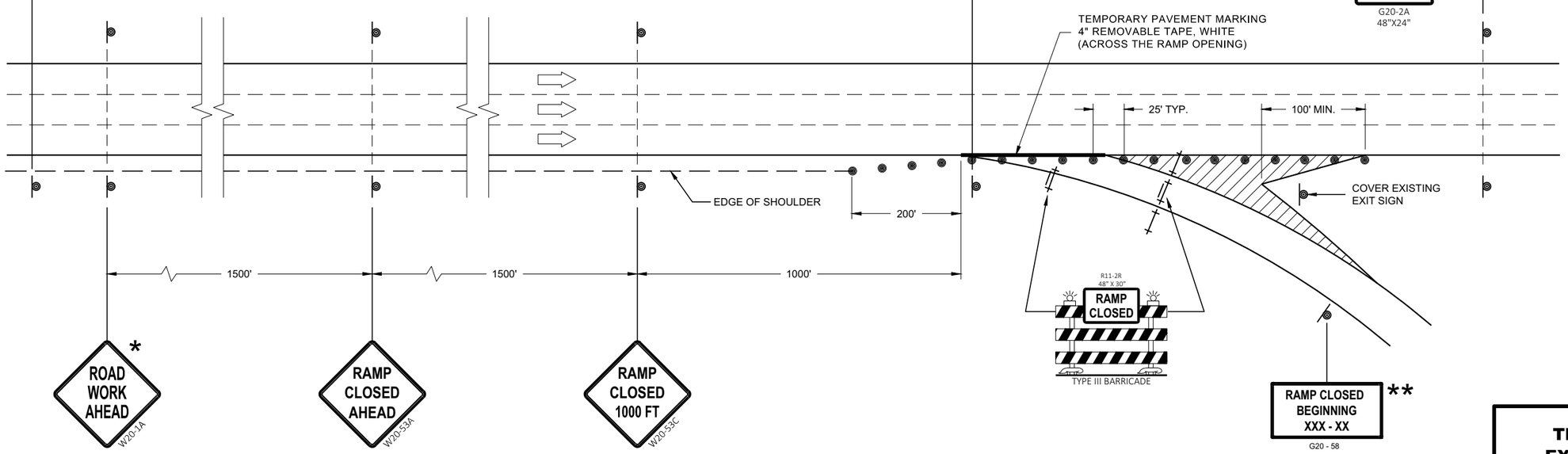
* W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



COVER ARROW ON EXISTING
E4 - 1 SIGN (COVERING SIGNS
TYPE I)

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 15D16 - 04

6

SDD 15D16 - 04

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

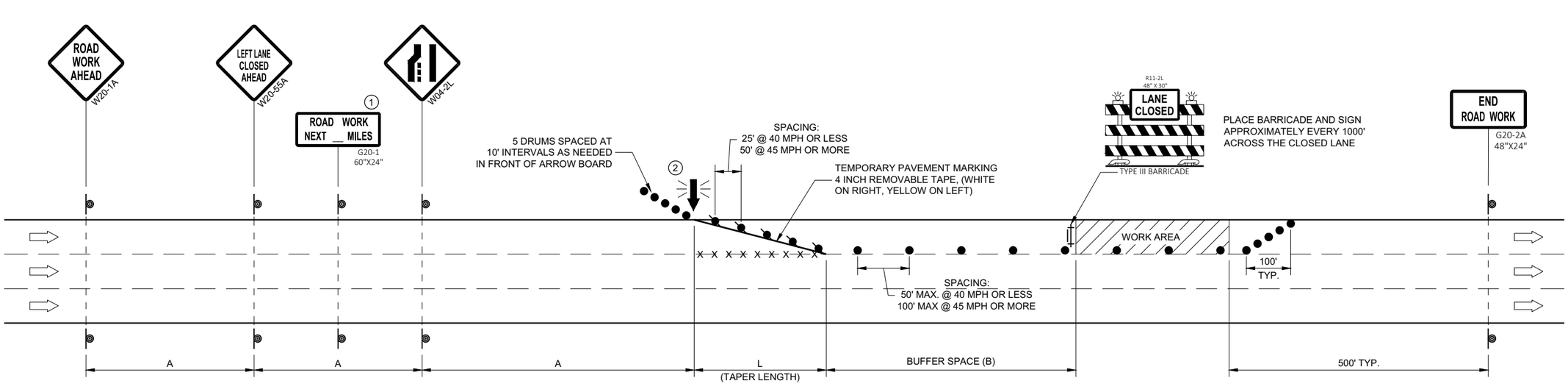
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD15D20 - 05a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA



GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

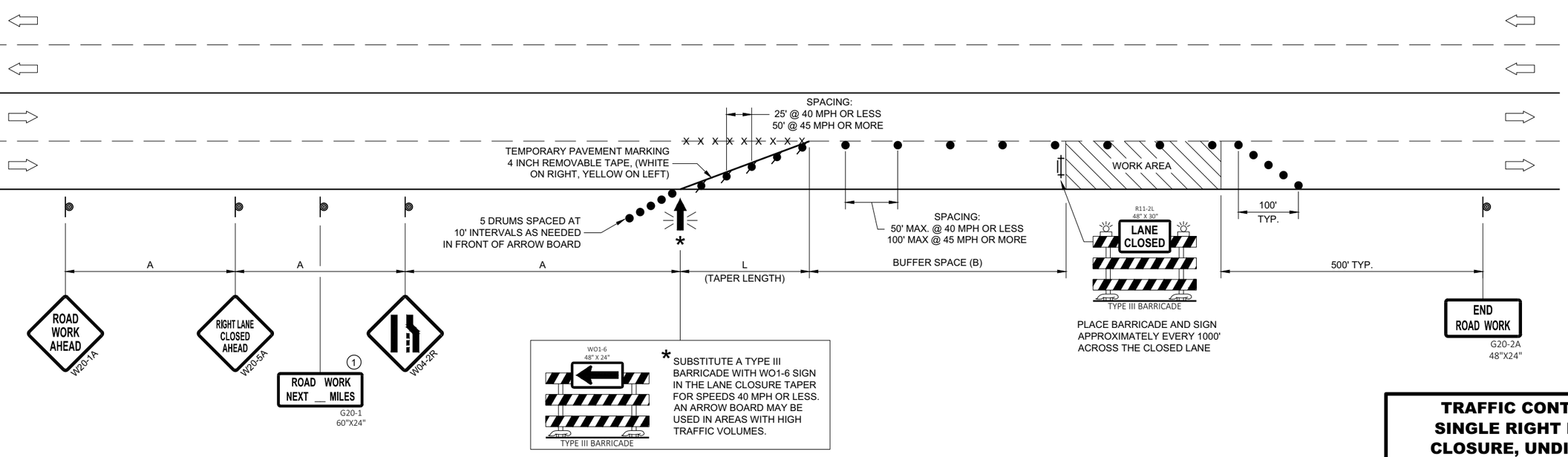
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'





TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D20 - 05b

SDD 15D20 - 05b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

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REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

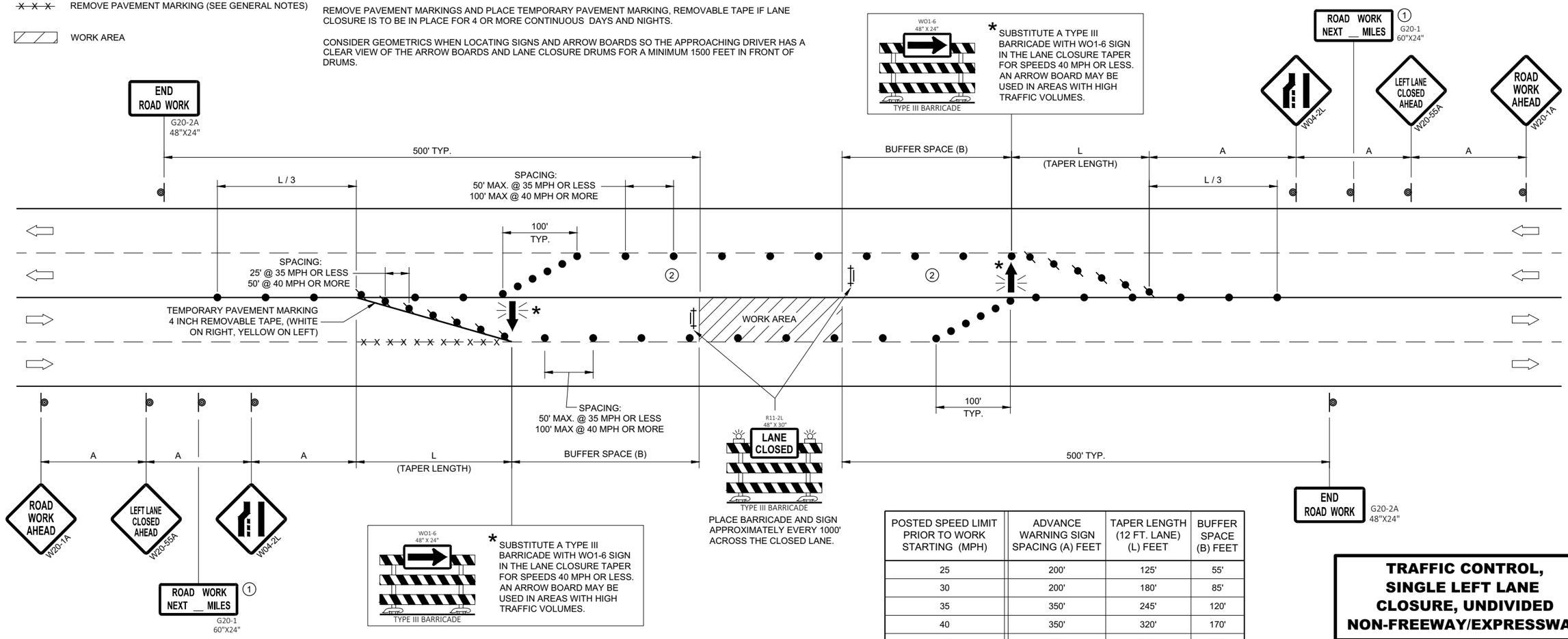
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
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45	500'	540'	220'
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TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

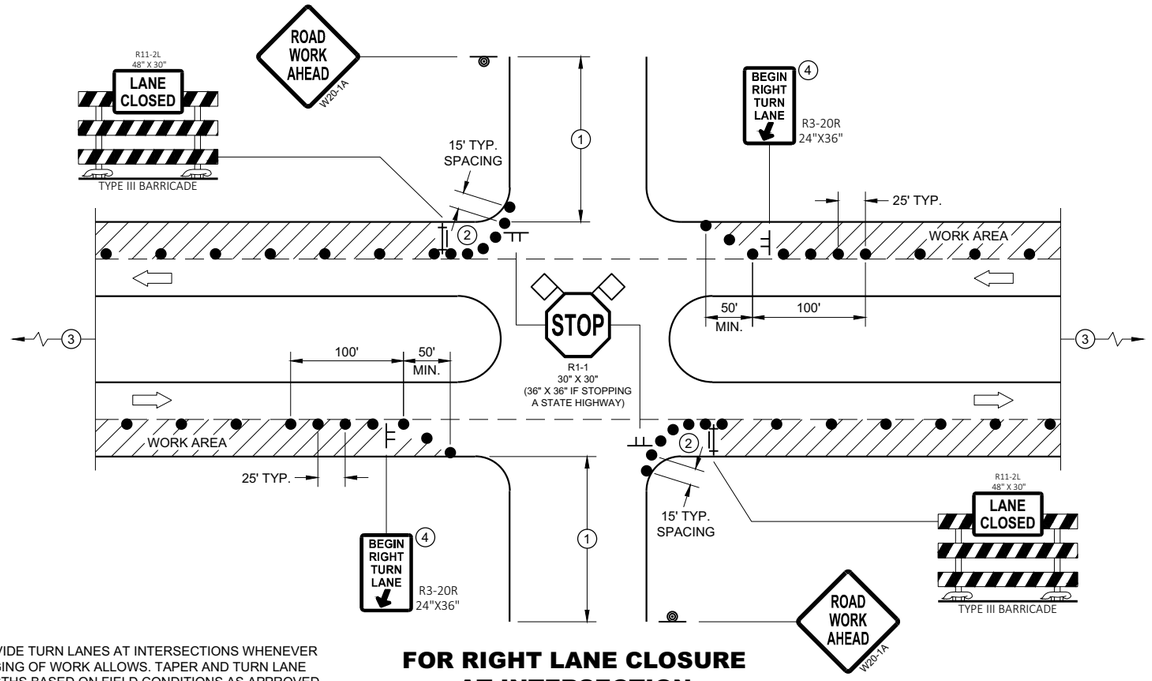
APPROVED
May 2020 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

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SDD 15D20 - 05c

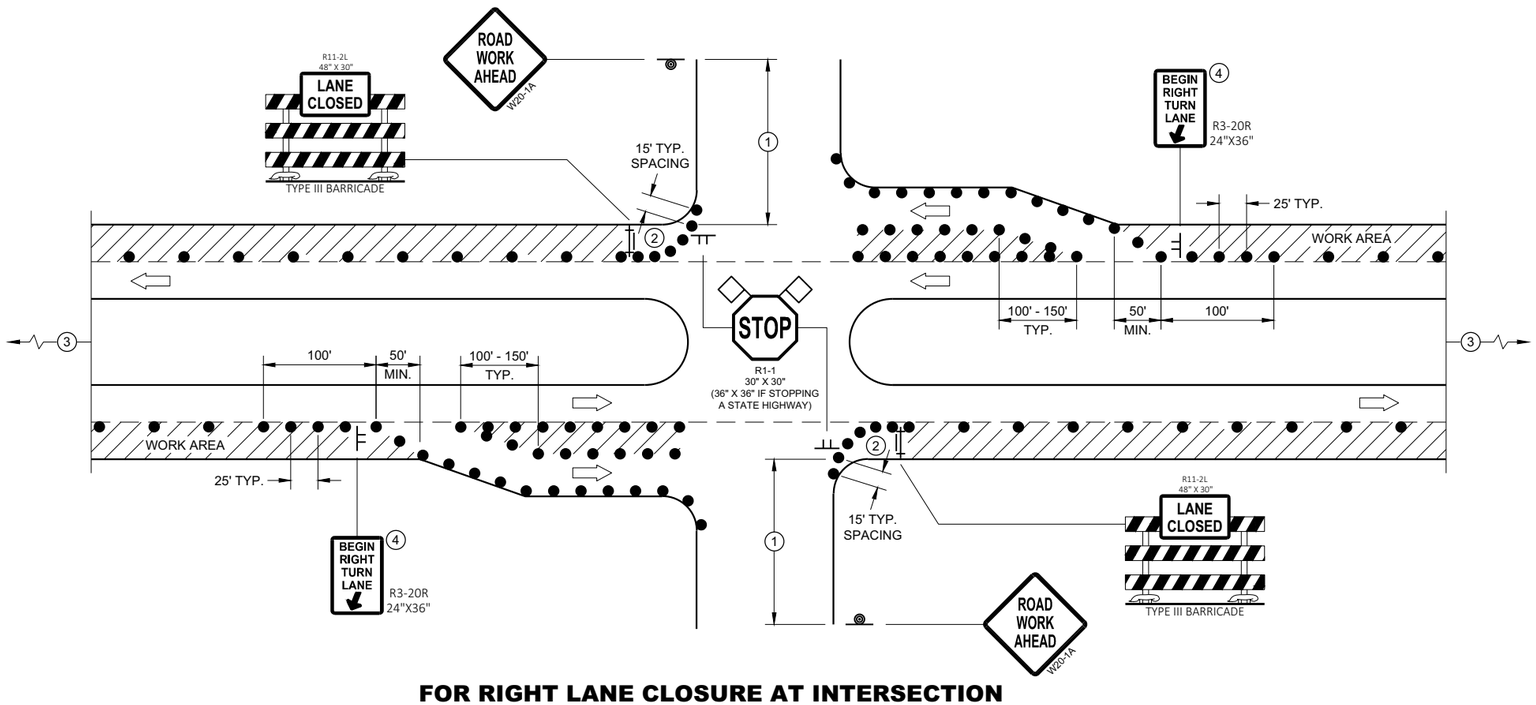
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SDD 15D20 - 05c



FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

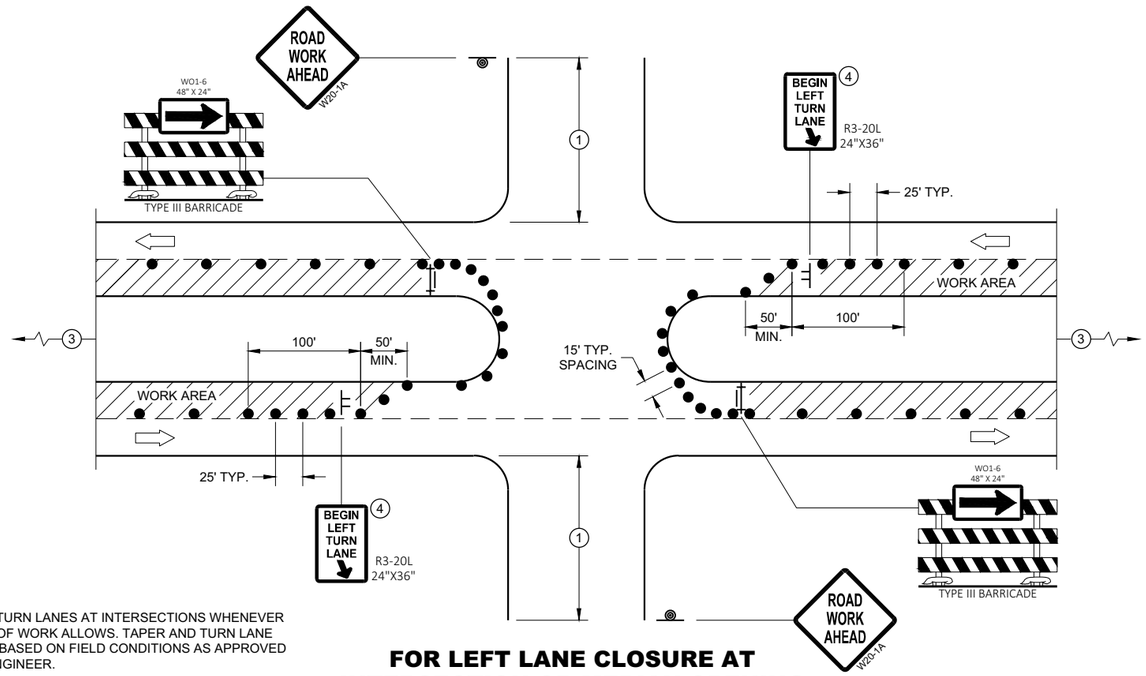
LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

6

SDD15D21 - 07a



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

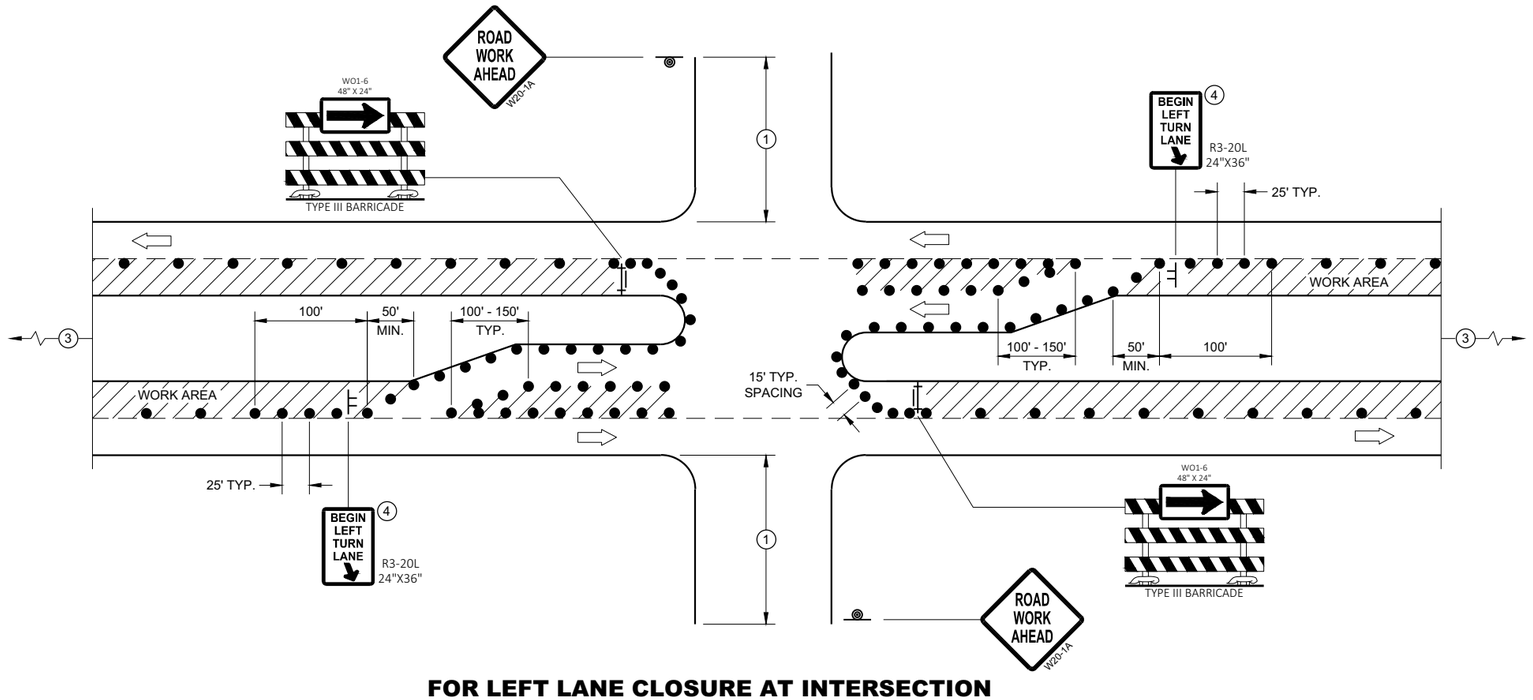
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(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

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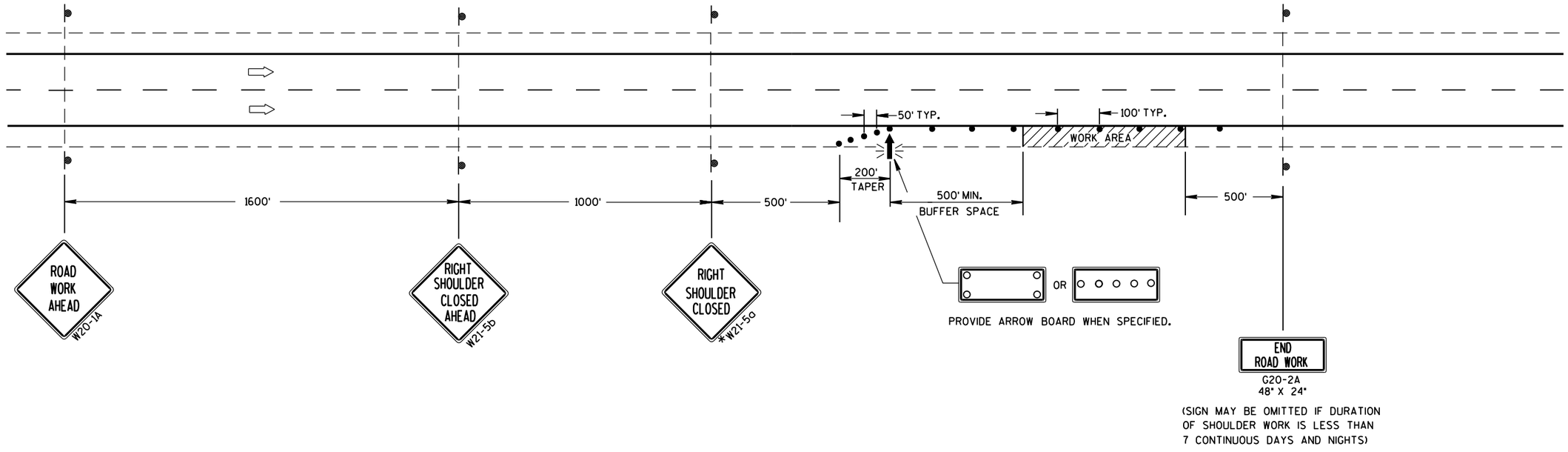
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

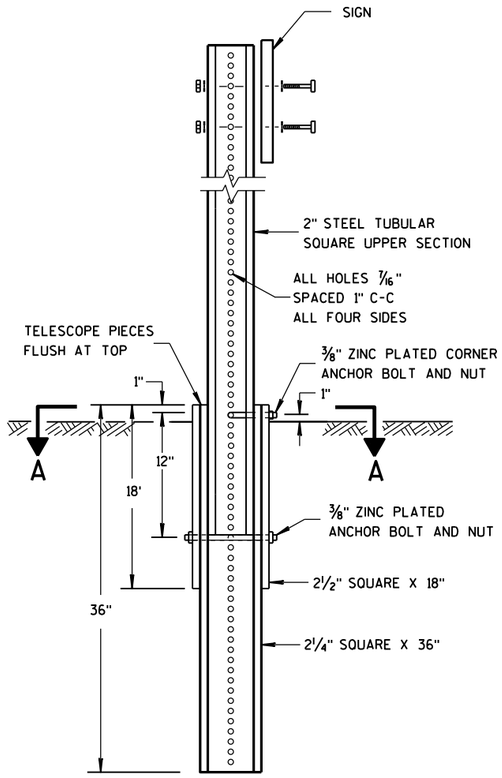
APPROVED

June 2016 — DATE

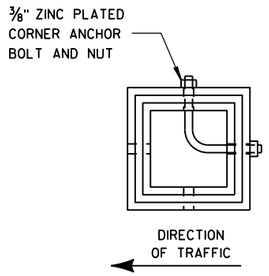
/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]
FHWA

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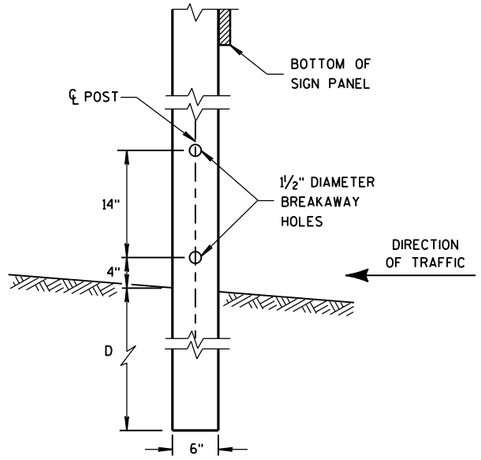
S.D.D. 15 D 27-3



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



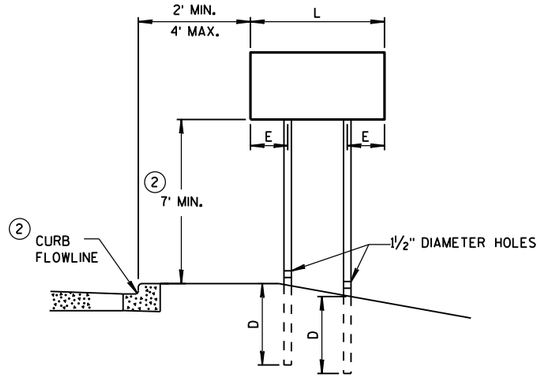
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

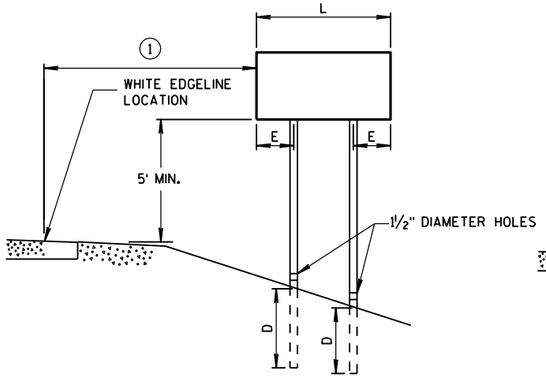
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

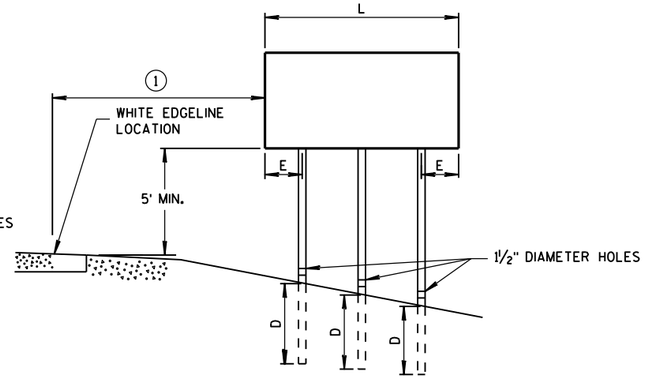
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

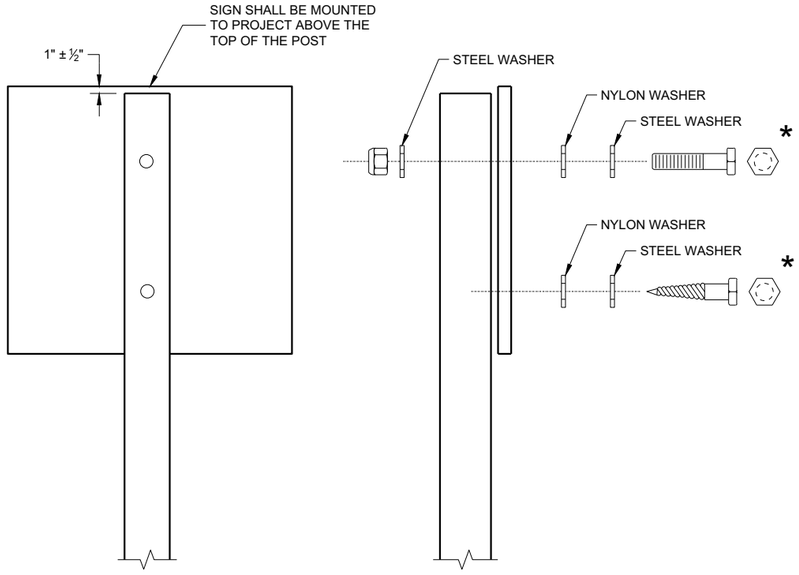
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 NYLON

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

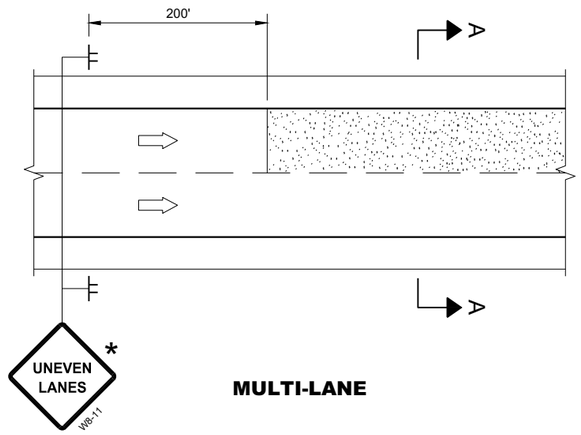
SDD 15D38 - 02b

SDD15D38 - 02b

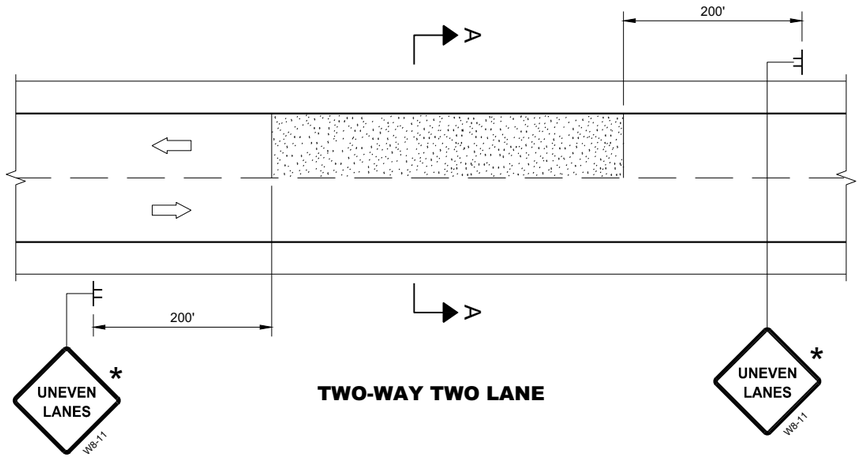
ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

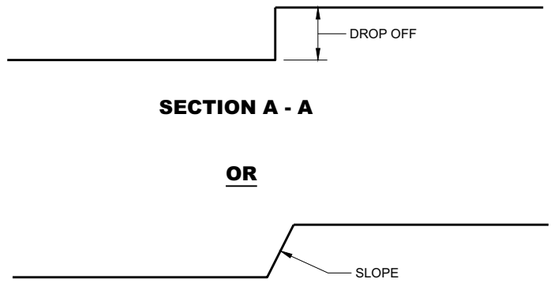
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

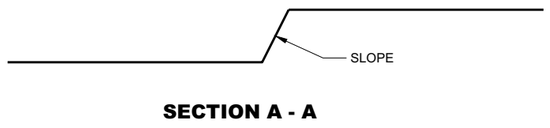
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

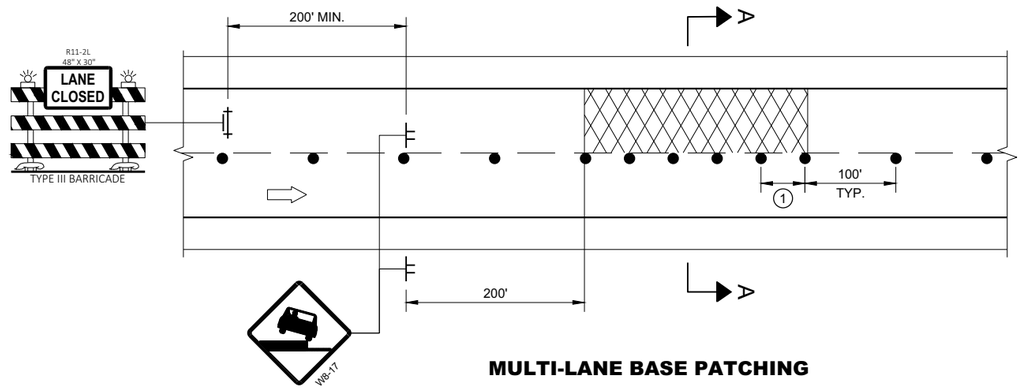


SECTION A - A

OR

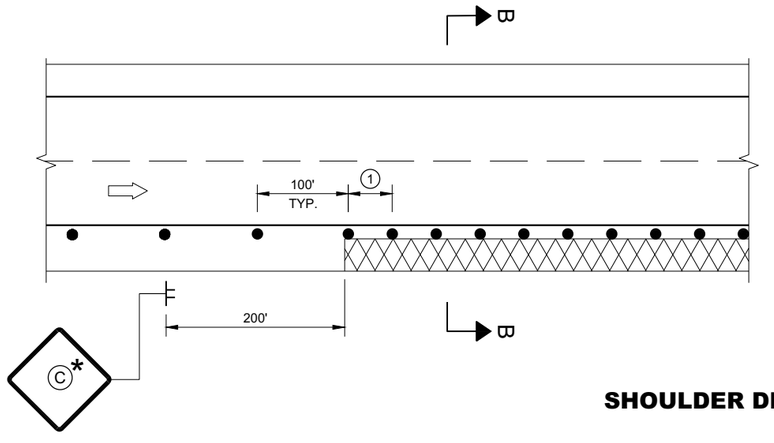


SECTION A - A

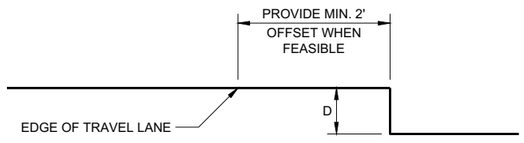


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

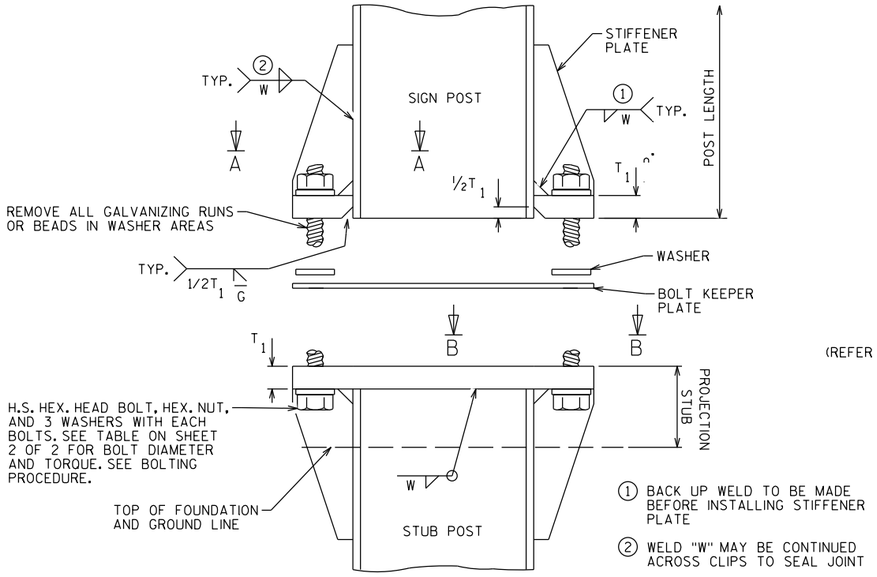
FHWA

6

SDD 15D39 - 02

6

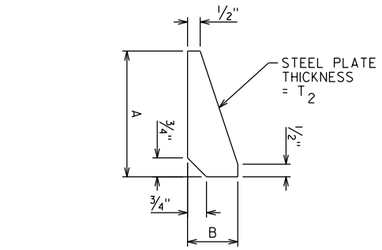
SDD 15D39 - 02



① BACK UP WELD TO BE MADE BEFORE INSTALLING STIFFENER PLATE

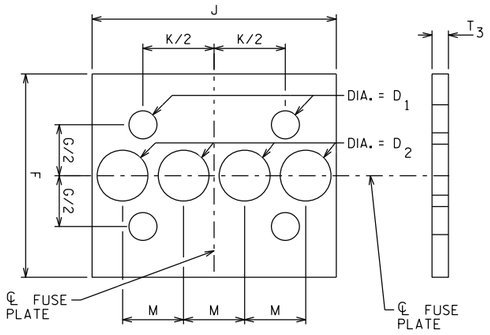
② WELD "W" MAY BE CONTINUED ACROSS CLIPS TO SEAL JOINT

SIGN POST & STUB POST ELEVATION



STIFFENER PLATE DETAIL

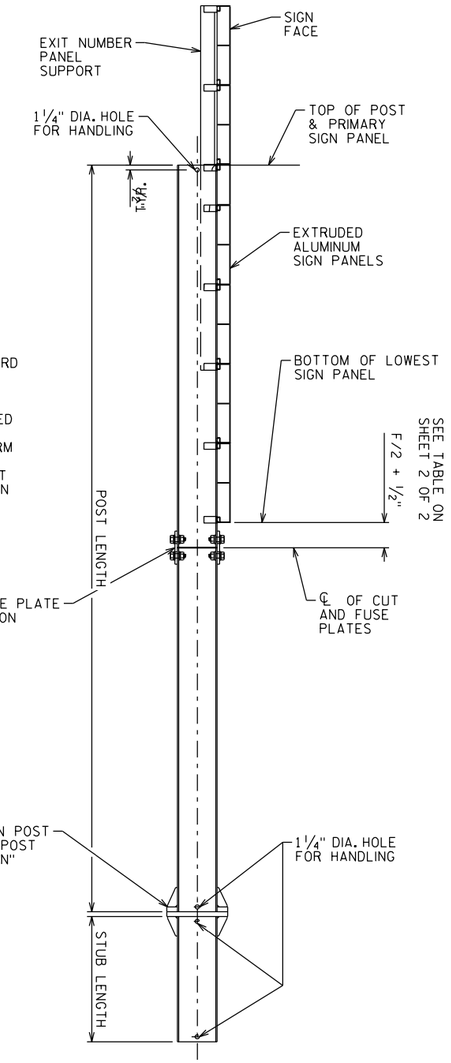
(REFER TO TABLE ON SHEET 2 OF 2 FOR DIMENSIONS)



PERFORATED FUSE PLATE DETAIL

USE H.S. HEX HEAD BOLTS, HEX HEAD NUT AND FLAT WASHER UNDER NUT. INSTALL BOLTS PER THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 506.3.12.3.

ALL HOLES SHALL BE DRILLED, SUB-PUNCHED AND REAMED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. HOWEVER, FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. ASTM A572 GRADE 50 OR ASTM A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. MILL TEST REPORTS SHALL BE SUBMITTED FOR FUSE PLATES. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.



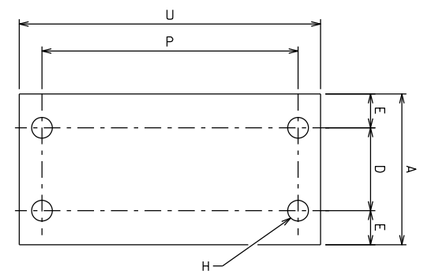
POST DETAIL

☆ WELD THICKNESS = FLANGE THICKNESS - 1/16"

SECTION A-A

SECTION B-B

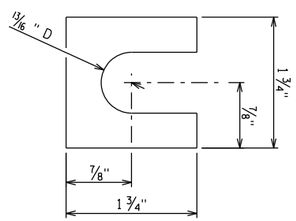
FUSE PLATE CONNECTION DETAIL



H = BOLT DIA. + 1/8"

BOLT KEEPER PLATE DETAIL

30 GA GALVANIZED SHEET STEEL



SHIM DETAIL

FURNISH TWO .012"± THICK AND TWO .032"± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B36.

BOLTING PROCEDURE FOR BASE CONNECTION

1. ASSEMBLE SIGN POST, BOLT KEEPER PLATE, AND STUB POST WITH BOLTS AND THREE FLAT WASHERS PER BOLT AS SHOWN.
2. SHIM AS REQUIRED TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING, LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS.
5. LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PERSCRIBED TORQUE. (SEE TABLE FOR PERSCRIBED TORQUE). DO NOT OVER-TIGHTEN.
6. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

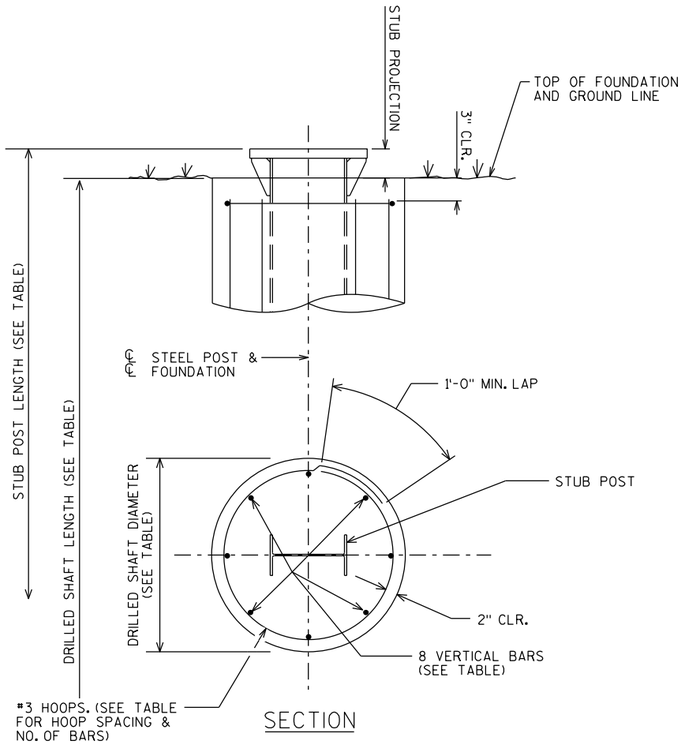
CONNECTION & FOUNDATION DETAILS 1 OF 2

SHEET A3-1.20

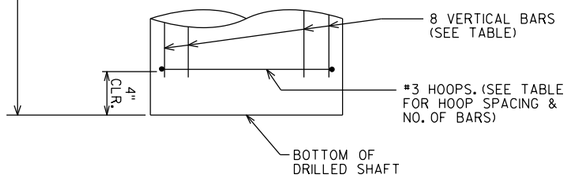
224

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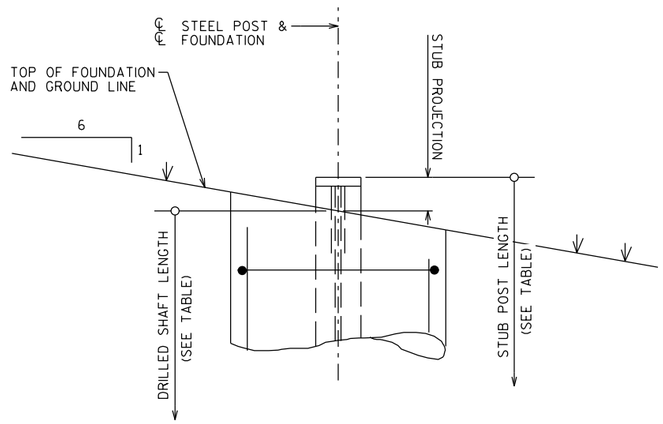
7



SECTION



FOUNDATION DETAIL



SHAFT PLACEMENT

FOUNDATION DATA TABLE

POST SHAPE	STUB LENGTH	STUB PROJECTION	DRILLED SHAFT DIAMETER	DRILLED SHAFT LENGTH	VERTICAL BARS		HOOPS		CONCRETE VOLUME ◆	TOTAL REINF. WEIGHT ◆
					SIZE	LENGTH	MAX SPA.	NO.		
W6X15	2'-6"	3"	24"	6'-6"	#5	5'-11"	10"	9	0.8 CY	71 LB
W8X18	2'-6"	3"	24"	7'-6"	#6	6'-11"	12"	8	0.9 CY	102 LB
W8X21	3'-0"	2½"	24"	8'-0"	#6	7'-5"	12"	9	1.0 CY	110 LB
W10X22	3'-0"	2½"	24"	8'-6"	#7	7'-11"	12"	9	1.0 CY	151 LB
W12X26	3'-0"	2½"	24"	10'-0"	#7	9'-5"	12"	11	1.2 CY	180 LB

◆ QUANTITIES SHOWN ARE FOR ONE DRILLED SHAFT

BASE CONNECTION & FUSE PLATE DATA TABLE

POST SHAPE	WEIGHT PER FOOT	BASE CONNECTION DATA: BOLT SIZE & TORQUE	A	B	C	D	E	T1	T2	W	R	BOLT KEEPER PLATE DATA: P	U	PERFORATED FUSE PLATE DATA: F	G	J	K	M	D1	D2	T3	BOLT DIA.	WGT. EA. LBS	BOLT LENGTH	V ◪
W6X15	15 LB	⅝" DIA. X 4" 36 TO 38 FT-LB	5"	2"	1¼"	2¾"	1⅛"	1¼"	½"	¼"	11/32"	8½"	10"	5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.4	2	73.0 LB
W8X18	18 LB											10⅝"	12⅛"	5"	2½"	5¼"	2¾"	1¼"	11/16"	1 1/16"	⅜"	⅝"	2.0	2	83.0 LB
W8X21	21 LB	¾" DIA. X 4¾" 62 TO 63 FT-LB	6"	2¼"	1⅜"	3½"	1¼"	1½"	¾"	5/16"	13/32"	11"	12¾"	5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.1	2¼"	124.0 LB
W10X22	22 LB											12⅞"	14⅝"	6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	3.9	2¼"	134.0 LB
W12X26	26 LB											15"	16¾"	6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.5	2¼"	152.0 LB

◪ TOTAL STRUCTURAL CARBON STEEL WEIGHT FOR ONE POST = V + (POST LENGTH X POST WEIGHT PER FOOT)

"V" INCLUDES STUB POST, BASE PLATES, STIFFENER PLATES, PERFORATED FUSE PLATES, BOLTS, NUTS, AND WASHERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

MATERIALS SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506, UNLESS NOTED OTHERWISE.

FABRICATION SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506.

ALL POST, POST STUBS & ATTACHMENTS SHALL BE ASTM A709 GRADE 50, GALVANIZED IN ACCORDANCE WITH ASTM A123.

THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.

H.S. BOLTS, WASHERS, & NUTS SHALL BE A325 GALVANIZED.

FOUNDATION MATERIAL PROPERTIES

CONCRETE MASONRY	F'C = 3,500 P.S.I.
BAR STEEL REINFORCEMENT (UNCOATED), GRADE 60	FY = 60,000 P.S.I.

DESIGN DATA

DESIGN CONFORMS TO AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 1ST EDITION 2015 (WITH 2017 & 2018 INTERIM REVISIONS).

DEAD LOADS (DL):

- STEEL POST SELF WEIGHT
- SIGN PANEL WEIGHT = 3 PSF

WIND LOADS (WL):

WIND LOADS WERE APPLIED TO THE PROJECTED AREAS OF THE SIGN PANELS AND THE STEEL SIGN POSTS.

- BASIC WIND SPEED = 76 MPH
- MEAN RECURRANCE INTERVAL (MRI) = 10 YEARS
- HEIGHT & EXPOSURE FACTOR = 1.00
- DIRECTIONALITY FACTOR = 0.85
- GUST EFFECT FACTOR = 1.14

WIND LOAD CASES:

- WL CASE 1: 1.0 X NORMAL WIND
- WL CASE 2: 1.0 X TRANSVERSE WIND
- WL CASE 3: 0.75 X NORMAL WIND + 0.75 X TRANSVERSE WIND

LOAD COMBINATIONS:

LOAD COMBINATION	TYPE	DL FACTOR	WL FACTOR
STRENGTH I	GRAVITY	1.25	-
EXTREME I	WIND	1.10	1.0
		0.9	1.0
SERVICE I	DEFLECTION	1.0	1.0

FOUNDATION DESIGN DATA

THE FOUNDATION DESIGN ASSUMED COHESIONLESS SOILS (LOOSE SAND) ABOVE THE WATER TABLE WITH THE FOLLOWING PROPERTIES:

- SOIL UNIT WEIGHT = 115 PCF
- ANGLE OF INTERNAL FRICTION = 24 DEGREES
- SOIL MODULUS PARAMETER = 25 LB/IN3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 2 OF 2

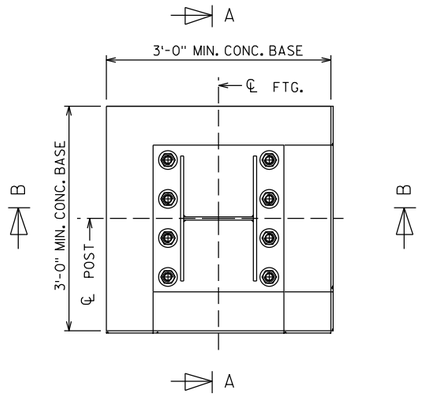
SHEET A3-1.20

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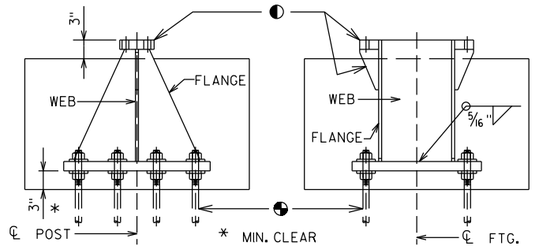
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FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A31.DGN PLOT DATE : 3-MAR-2020 PLOT BY : dotc4c

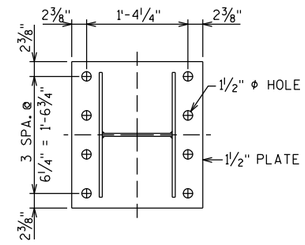
STUB AND ADHESIVE ANCHOR DETAILS



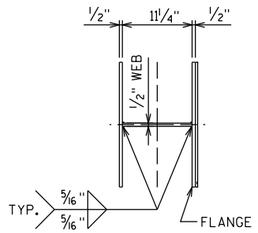
STUB SECTION



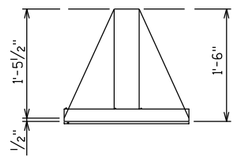
SECTION A-A SECTION B-B



BASE PLATE



STUB



FLANGE

◐ SEE BASE CONNECTION DETAILS ON "CONNECTIONS & FOUNDATION DETAILS" SHEETS.

◔ ADHESIVE ANCHORS 1¼-INCHES. ALLOWABLE PULL OUT CAPACITY = 15 KIPS. EMBED 1'-3" INTO ROCK.

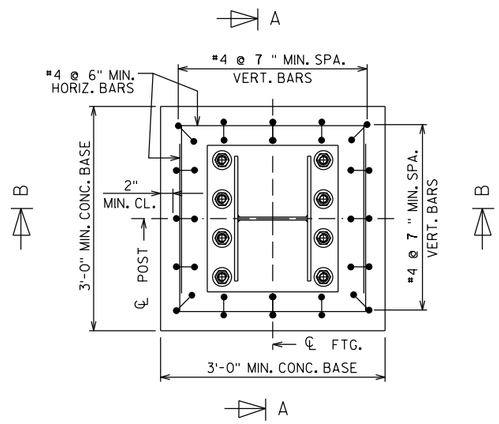
GENERAL NOTES:

QUANTITIES PER BASE:
REINFORCING STEEL = 62 LB
CONCRETE = 0.6 CY
STRUCTURAL STEEL = 335 LB

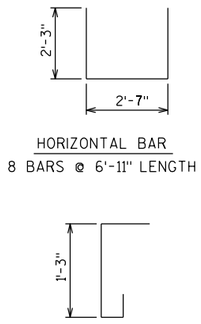
ALL MATERIALS, EXCEPT FOR ANCHOR ROD, NUTS, AND WASHERS, SHALL BE ASTM A709 GRADE 50. ALL MATERIALS TO BE GALVANIZED AFTER FABRICATION.

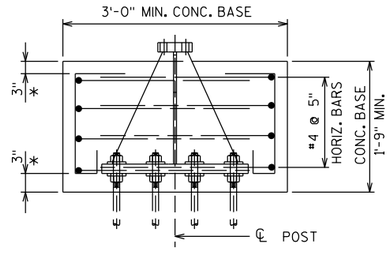
IF ROCK IS ENCOUNTERED PRIOR TO REACHING THE MINIMUM DRILLED SHAFT EMBEDMENT DEPTH DEFINED ON THE FOUNDATION DATA TABLE OF THE "CONNECTIONS & FOUNDATION DETAILS 2 OF 2" SHEET, THE CONTRACTOR SHALL INSTALL A TEST ADHESIVE ANCHOR AND DETERMINE THE PULL-OUT CAPACITY. IF THE FIELD TEST RESULTS IN A PULL-OUT CAPACITY GREATER THAN OR EQUAL TO 15 KIPS, THE CONTRACTOR MAY INSTALL THE ALTERNATE CONCRETE BASE AND BREAK-WAY STUB PER THE DETAILS ON THIS SHEET.

CONCRETE BASE DETAILS

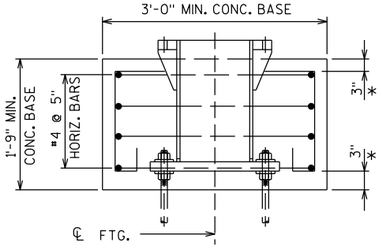


CONCRETE BASE PLAN





SECTION A-A



SECTION B-B

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

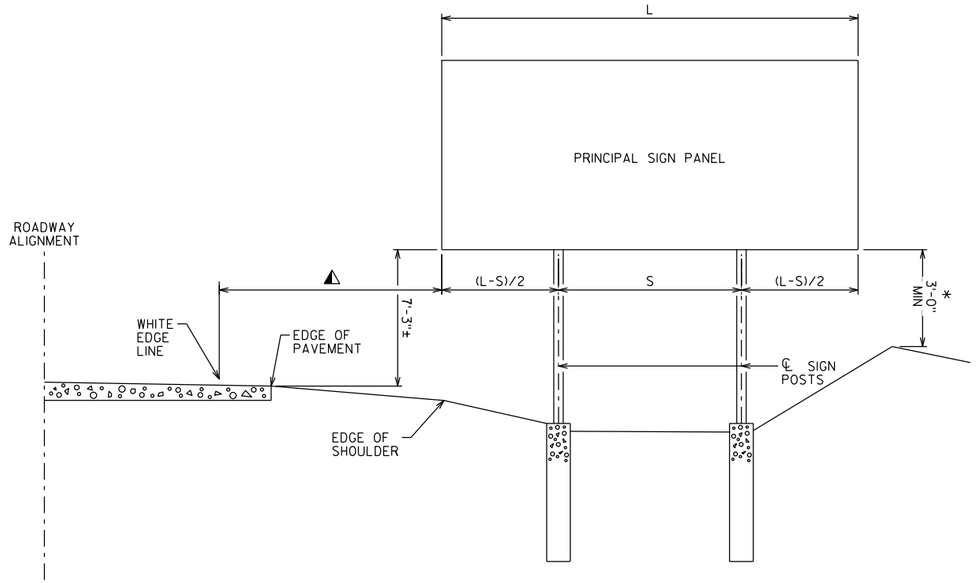
STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

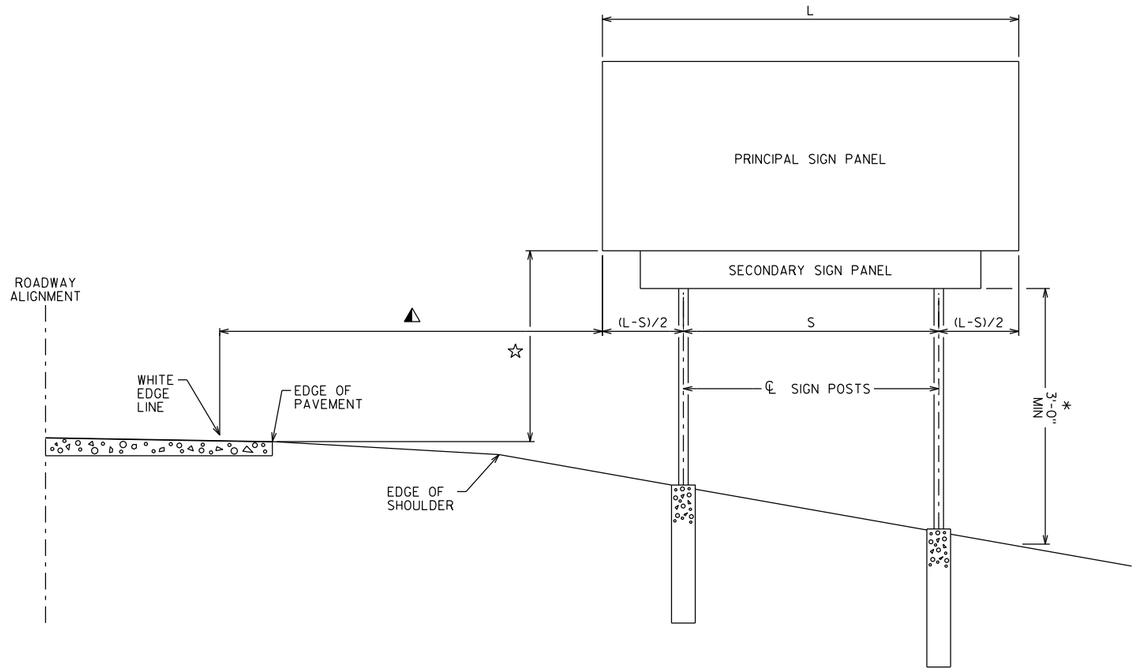
ALTERNATE BREAK-AWAY BASE ON ROCK

SHEET A3-1M.2

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INSTALLATION WITHOUT SECONDARY SIGN



INSTALLATION WITH SECONDARY SIGN

TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

◭ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

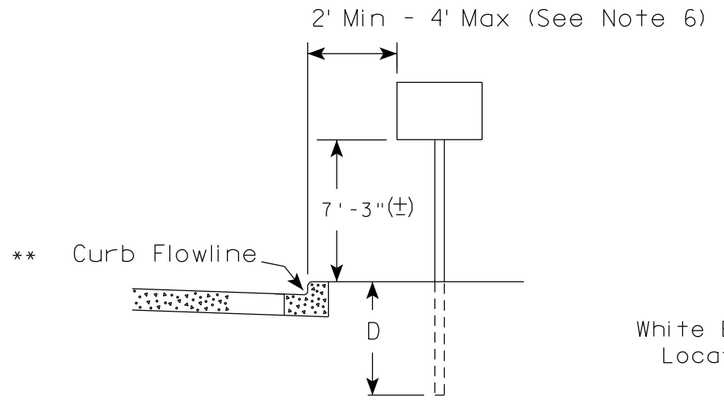
DRAWN BY | PLANS CK'D.

TYPICAL TYPE I SIGN INSTALLATION

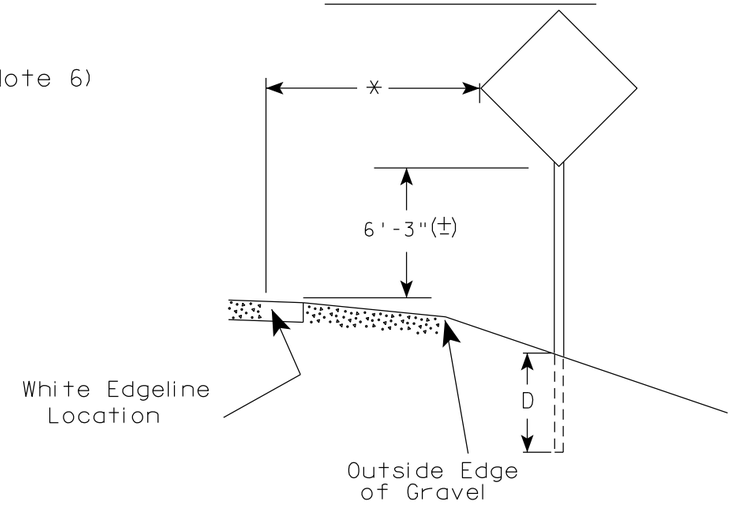
SHEET A4-1.10

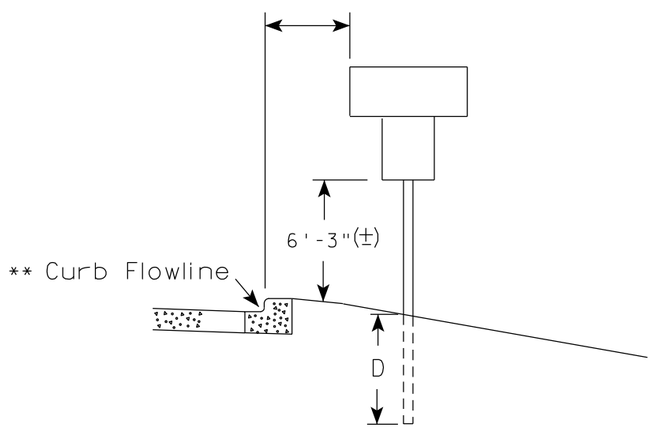
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 227 | E

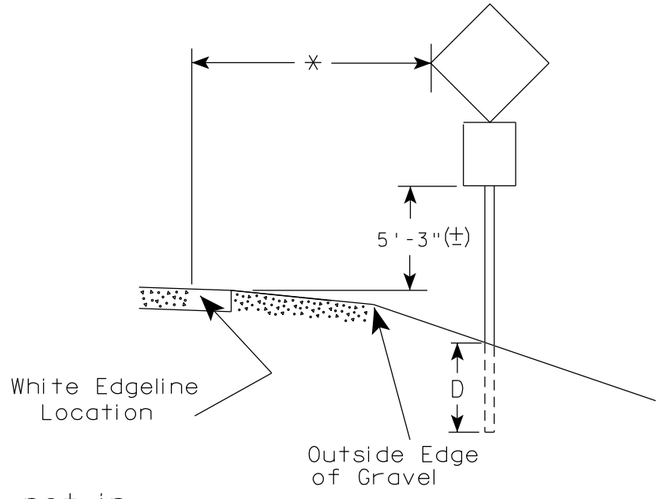
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

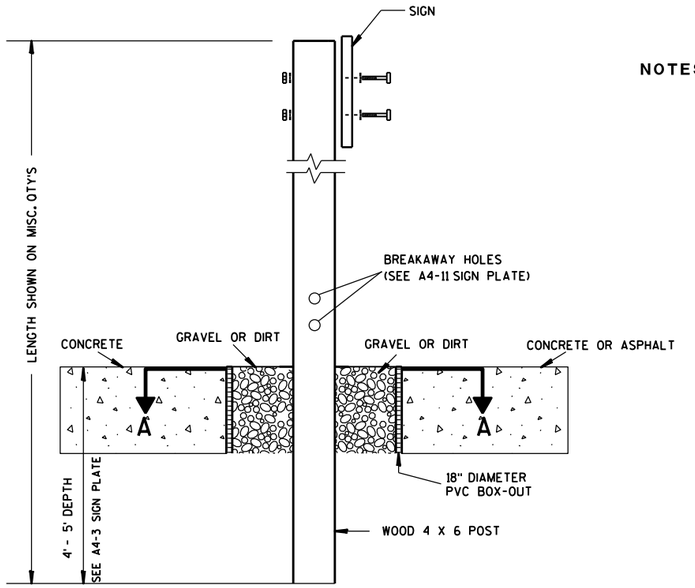
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

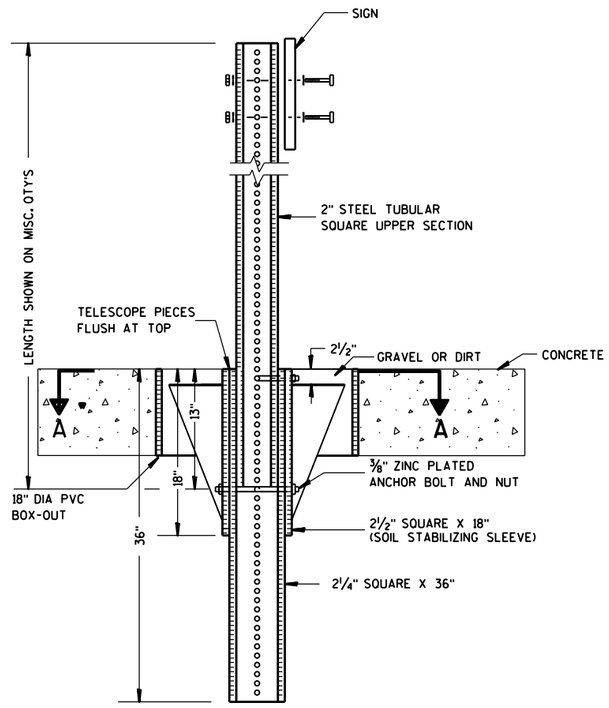
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 228	E



ELEVATION VIEW

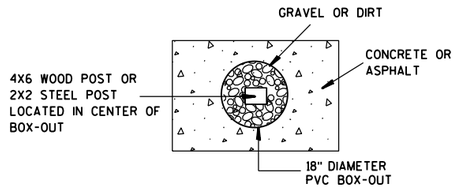
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

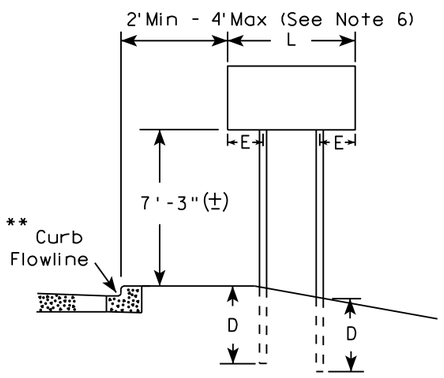
APPROVED Matthew R Rauch
for State Traffic Engineer

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

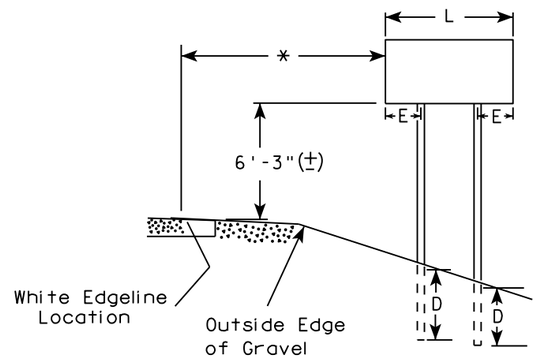
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

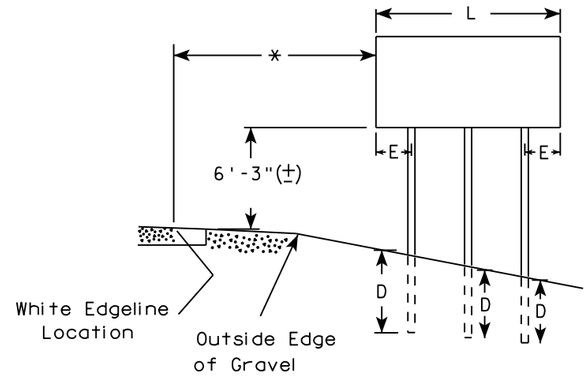
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

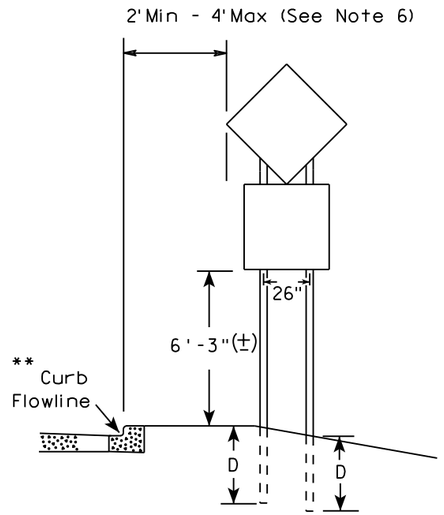
URBAN AREA



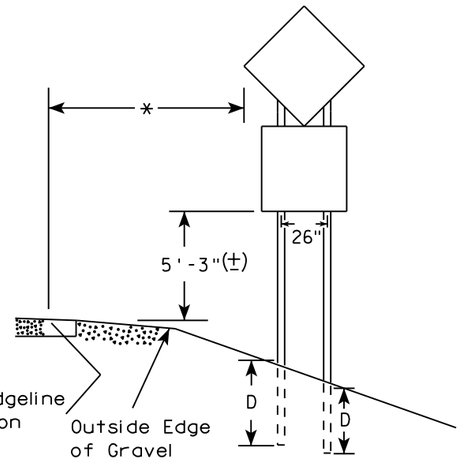
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

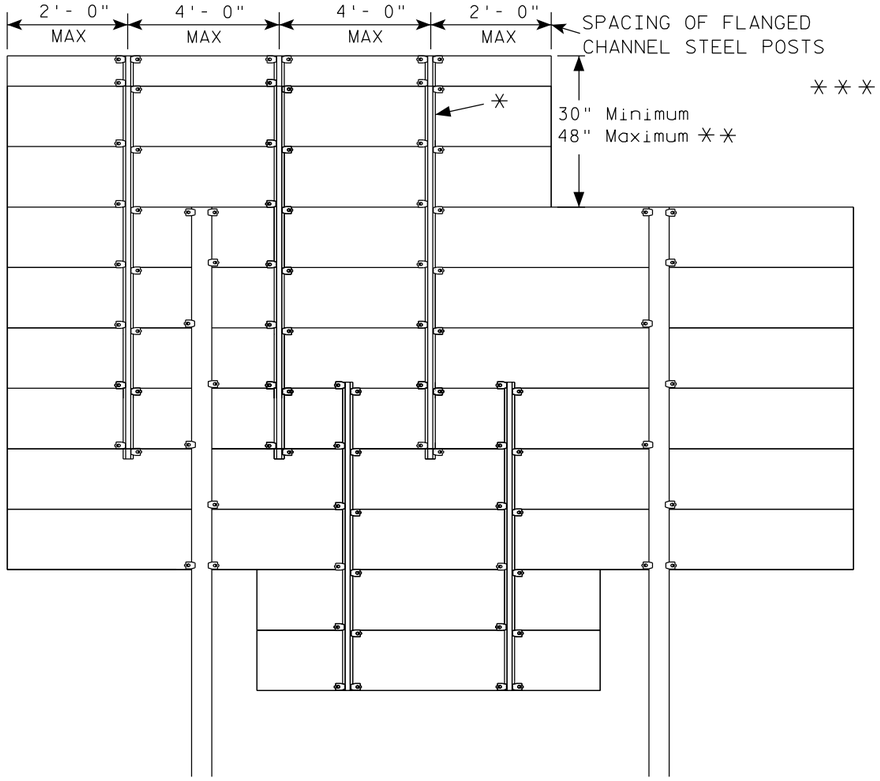
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 230	E

GROUND MOUNTED SIGN



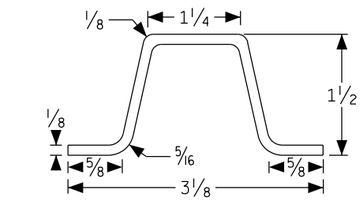
✳=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

✳✳=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

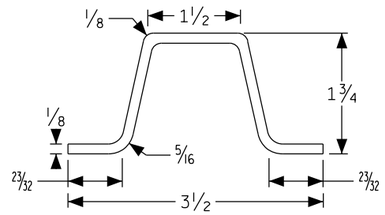
✳✳✳ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAILS

NOT TO SCALE

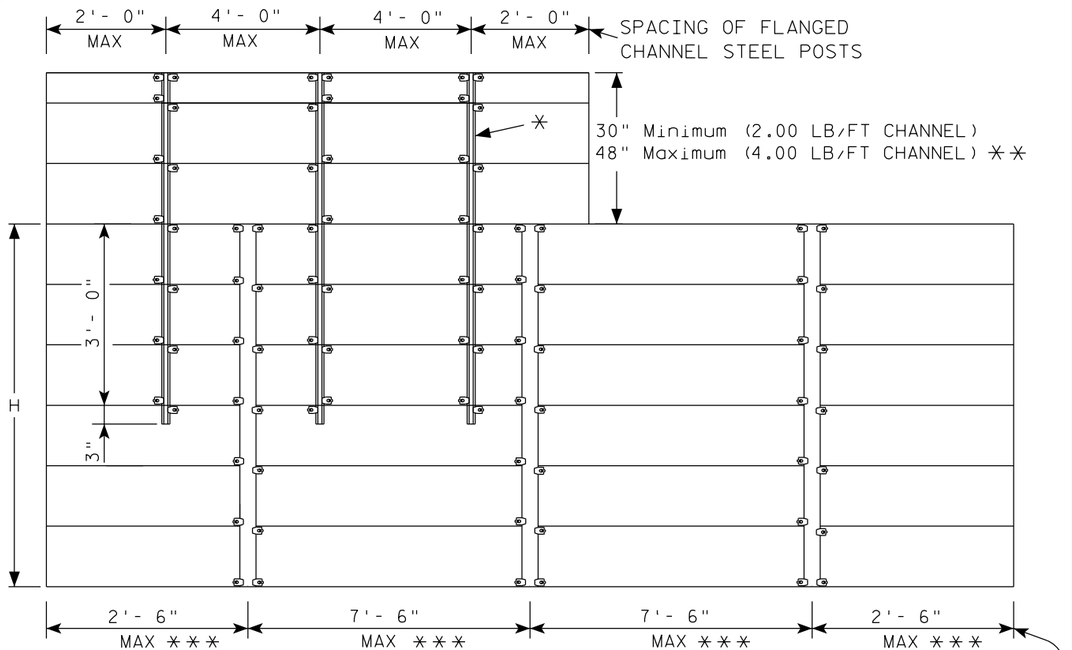


2.00 LB/FT CHANNEL



4.00 LB/FT CHANNEL

SIGN BRIDGE MOUNTED SIGN



GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

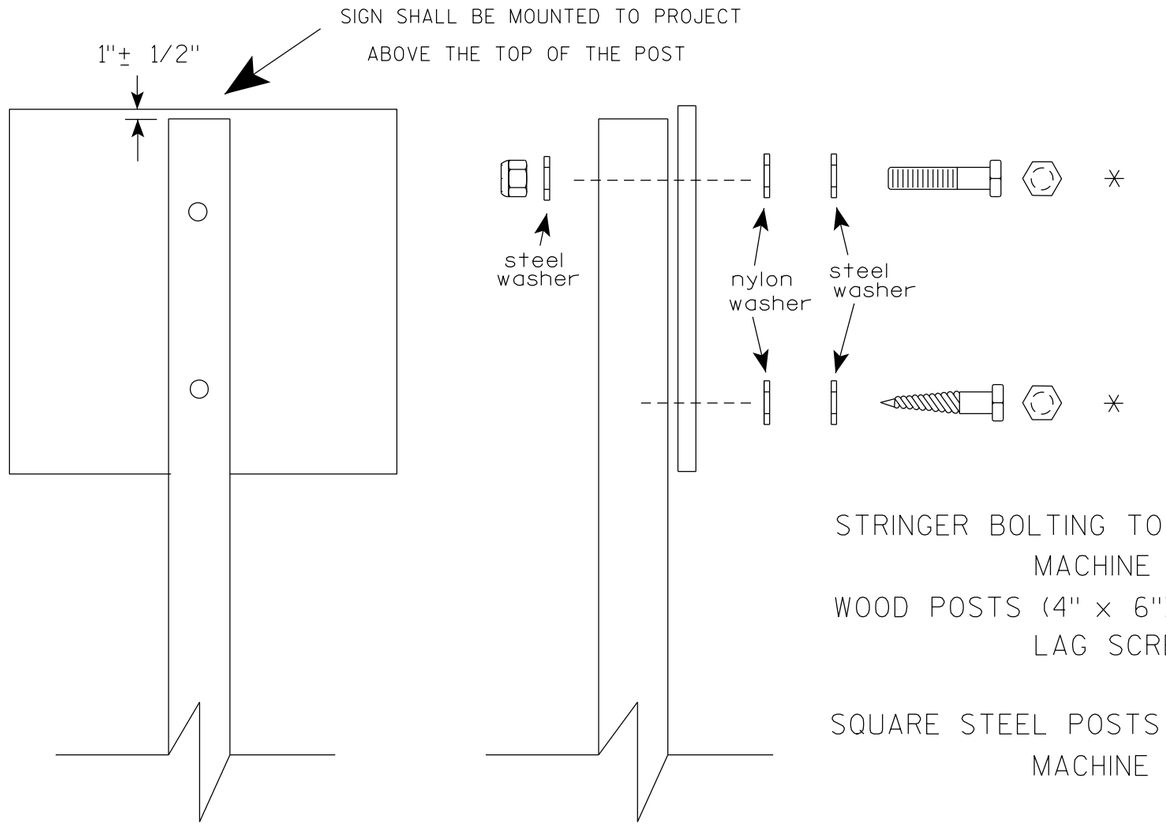
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-6.12



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

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

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

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 232 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 01-APRIL-2020 PLOT BY : dotc4c

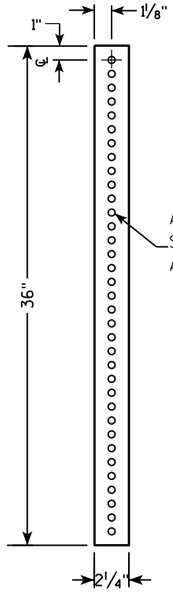
WISDOT/CADDS SHEET 42

7

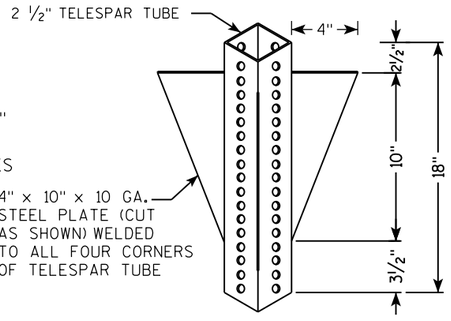
7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

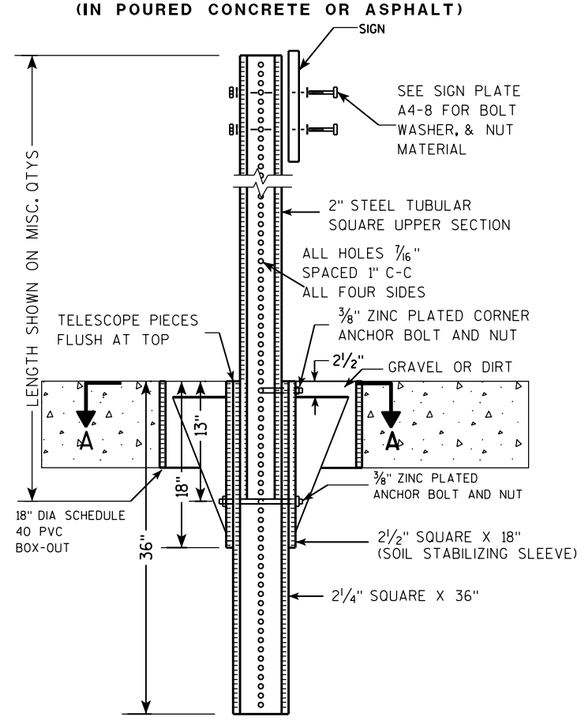
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



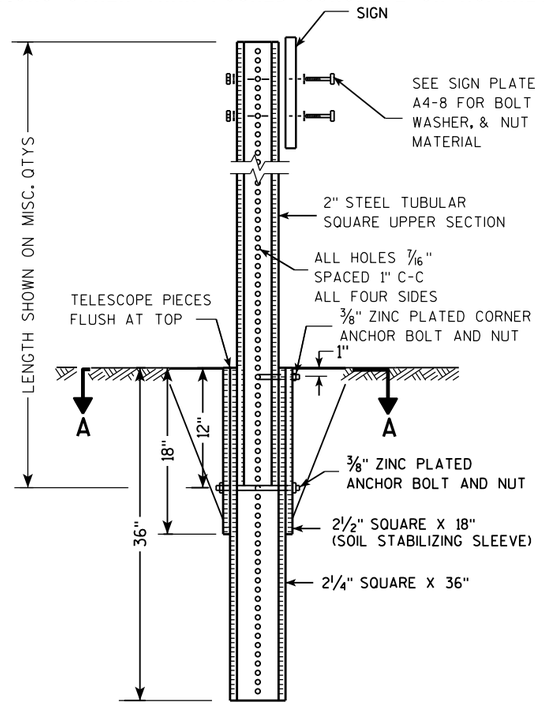
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

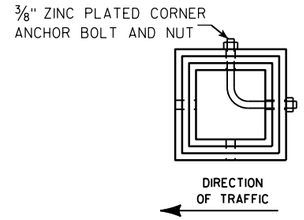


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

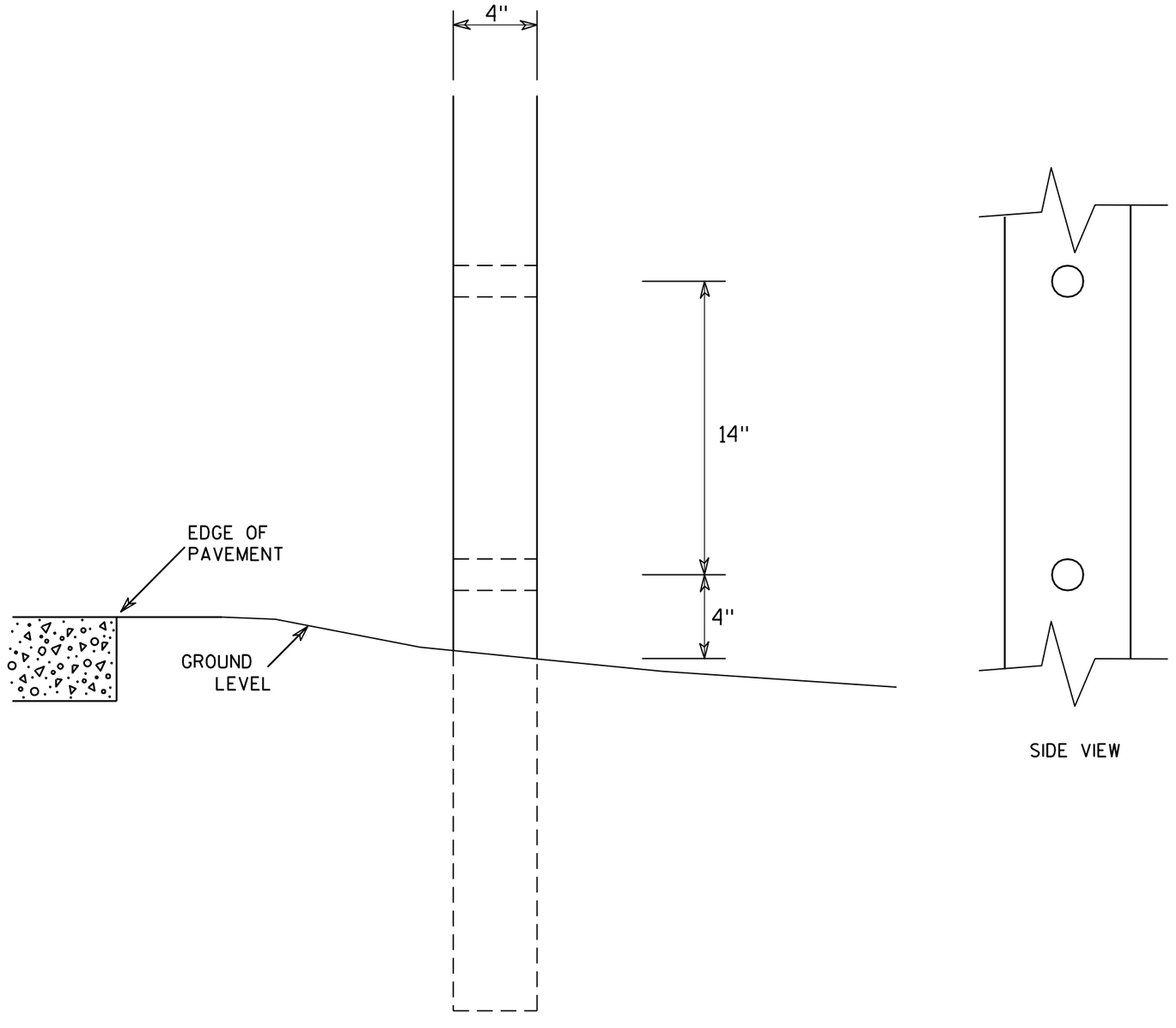
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 233 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

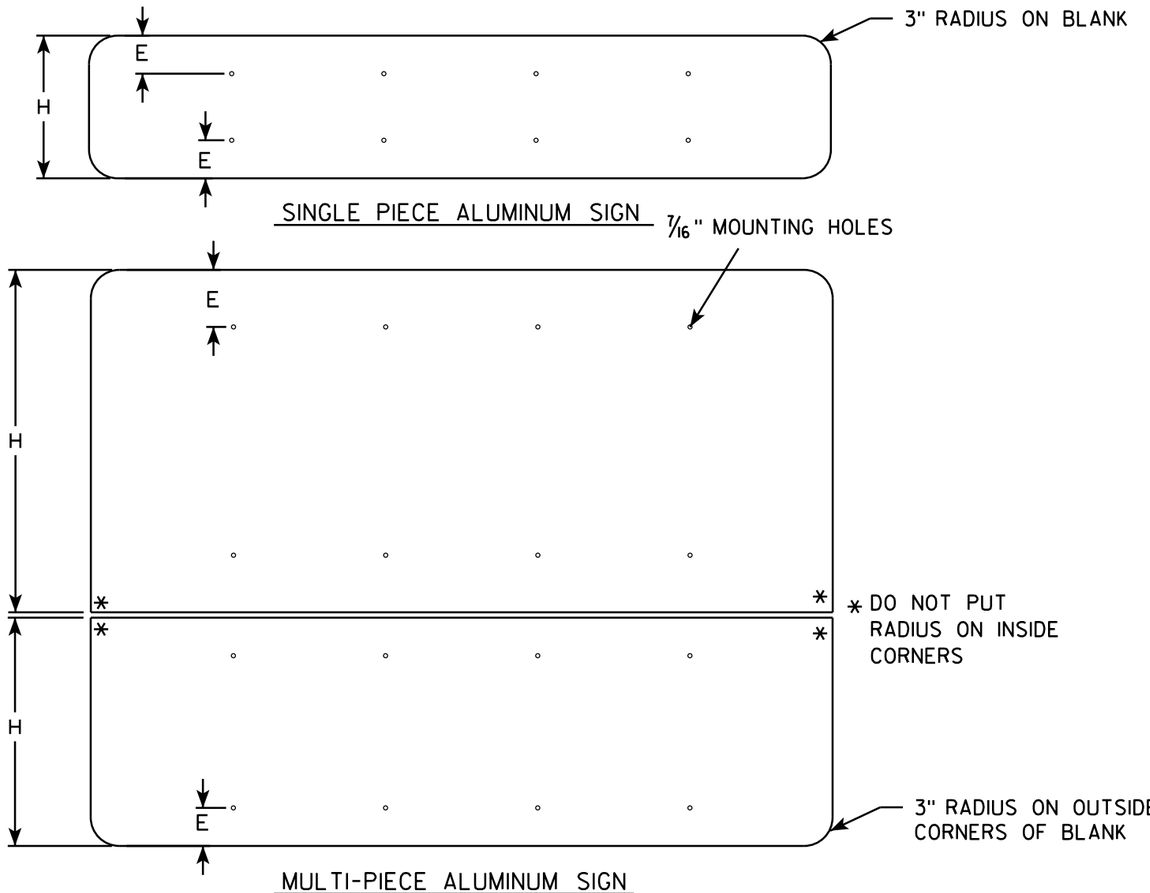
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

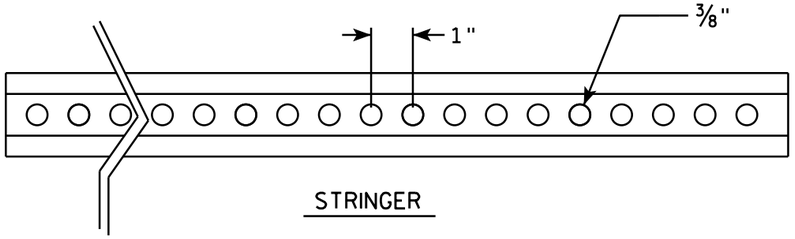
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 234	E



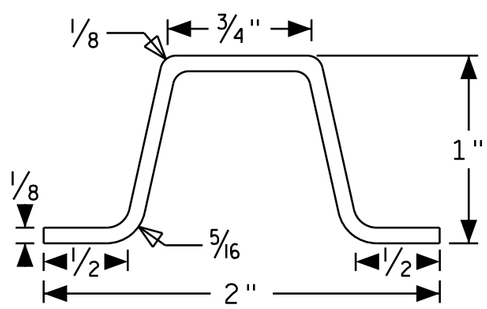
GENERAL NOTES

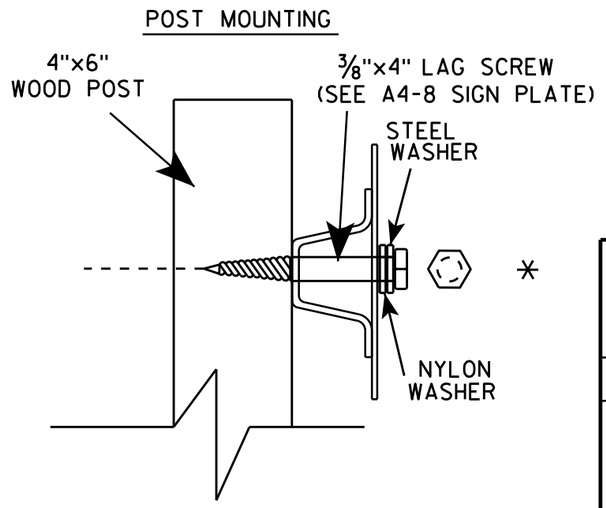
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"



STRINGER





SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

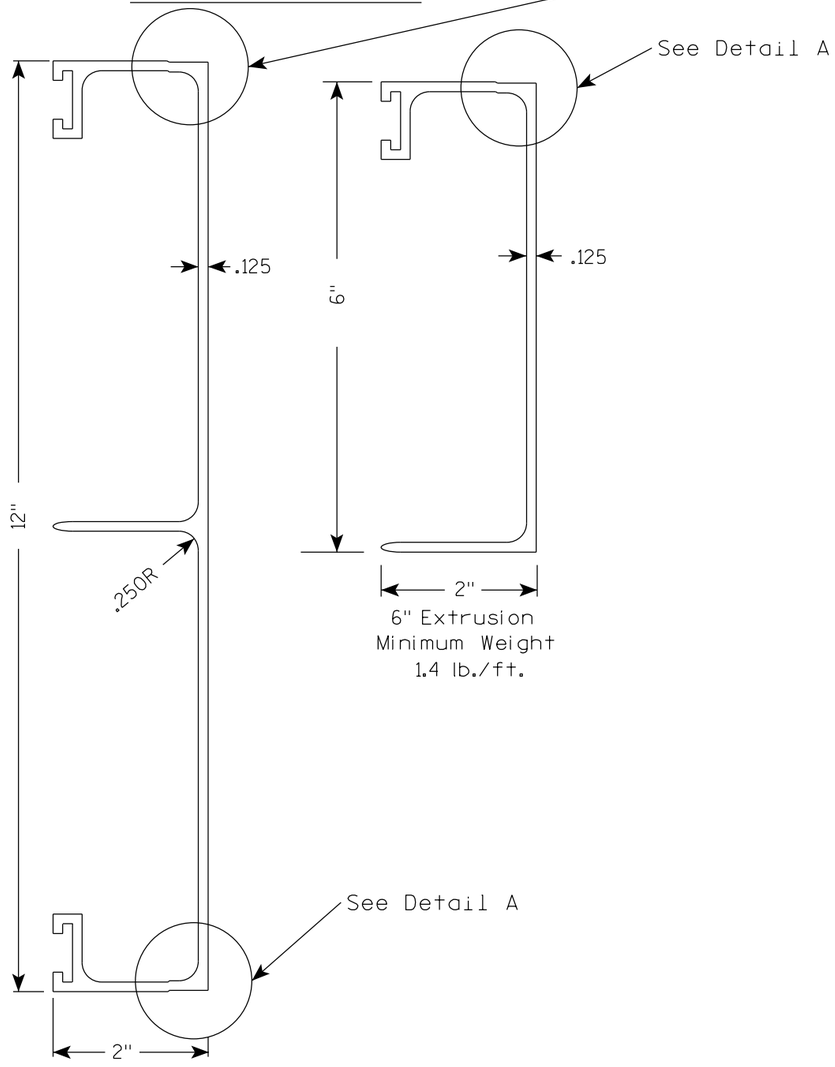
for State Traffic Engineer

DATE 4/26/16 PLATE NO A4-18.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

Extruded Shape

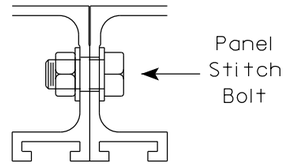


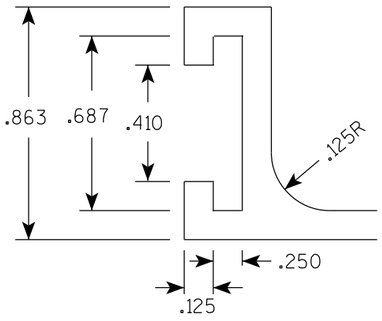
Hardware

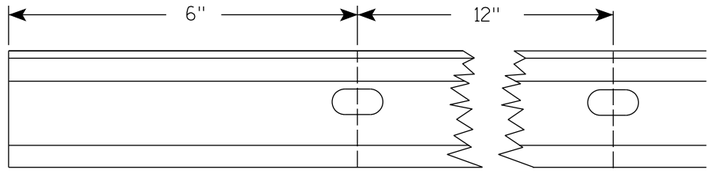
STITCH BOLT, WASHER & NUT

The hardware includes:

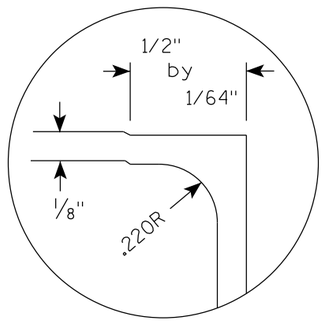
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy







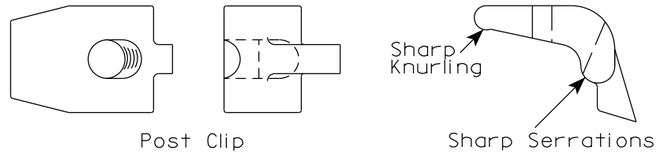
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

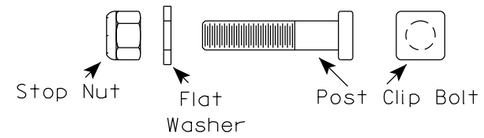


DETAIL A (EDGE WRAP JOINT)

POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

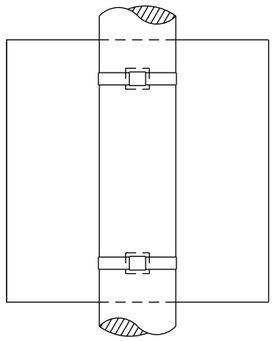
WISCONSIN DEPT OF TRANSPORTATION

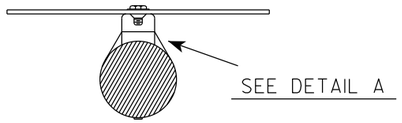
APPROVED Matthew R Rauch
For State Traffic Engineer

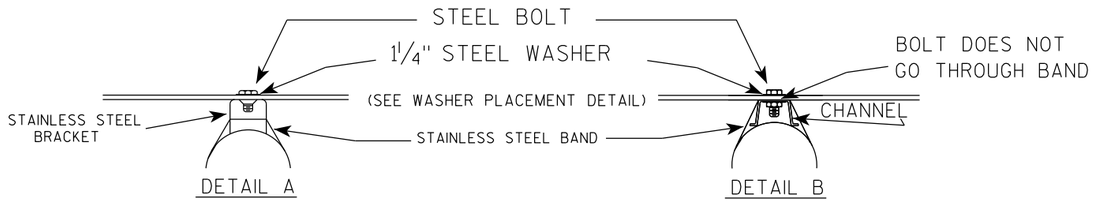
DATE 1/07/20 PLATE NO. A5-2.10

BANDING

SINGLE SIGN



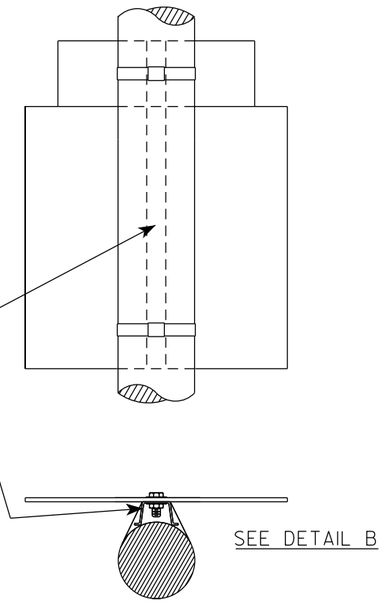




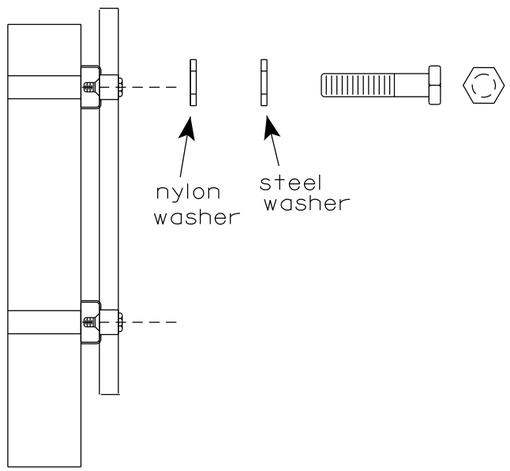
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

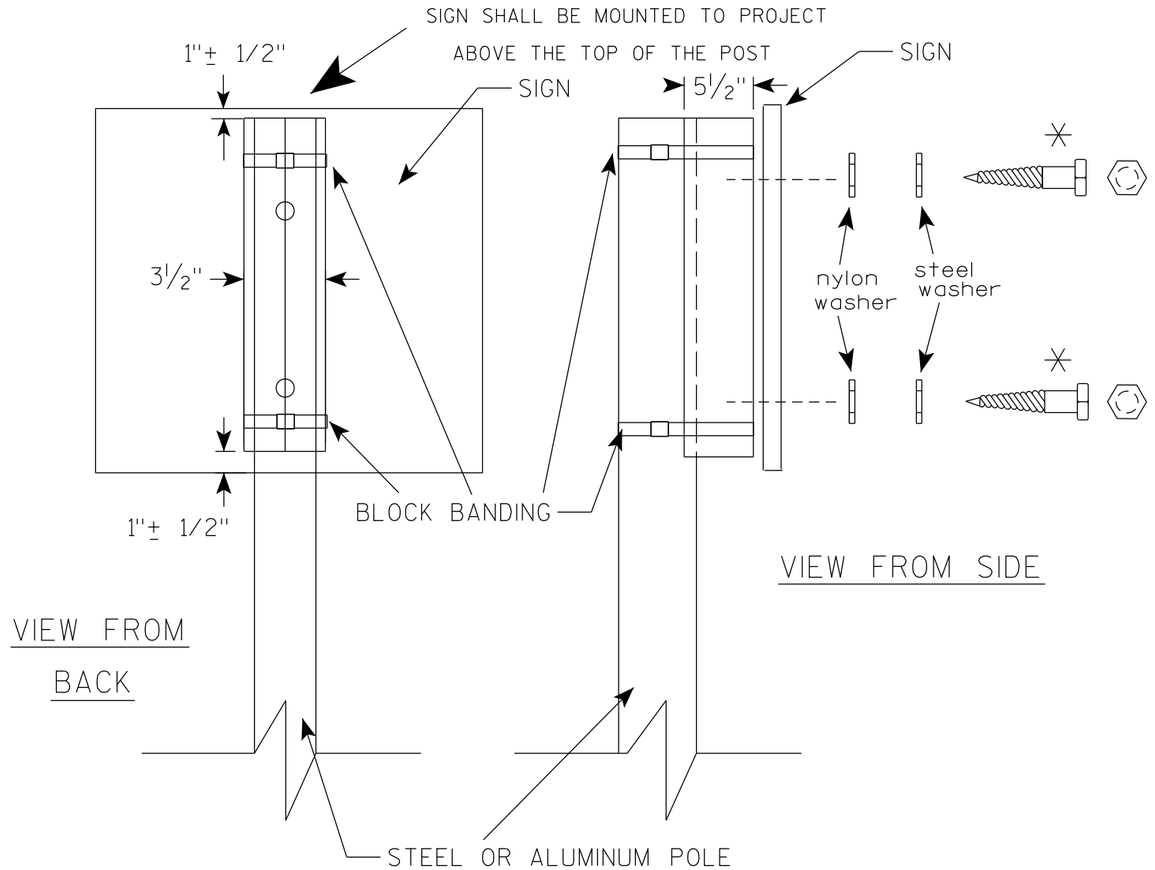
WISCONSIN DEPT OF TRANSPORTATION

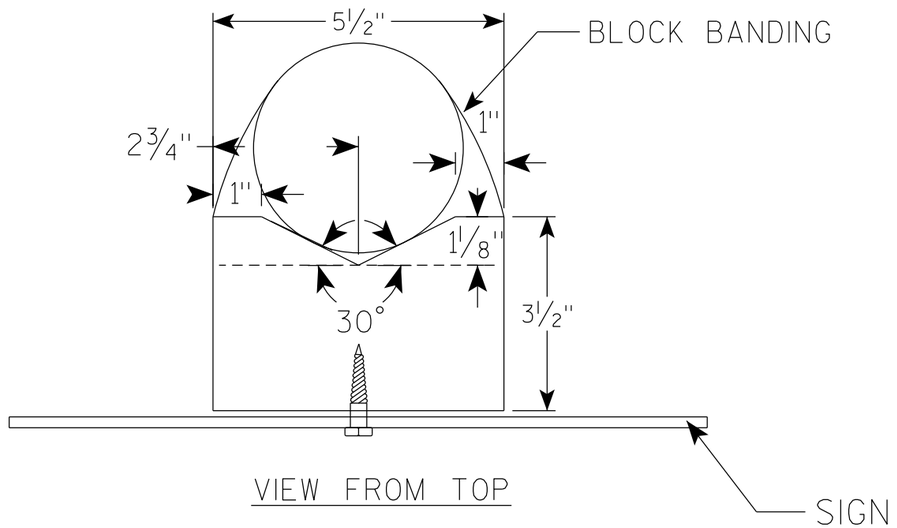
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 237	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

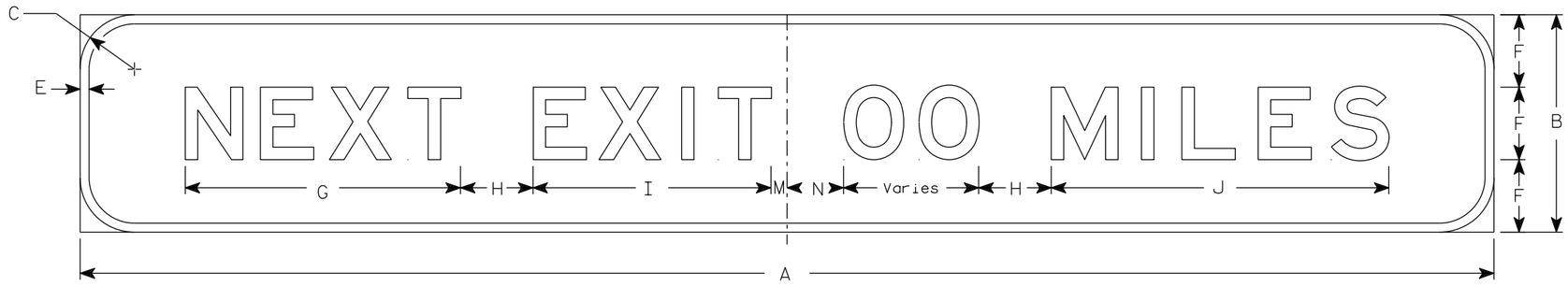
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

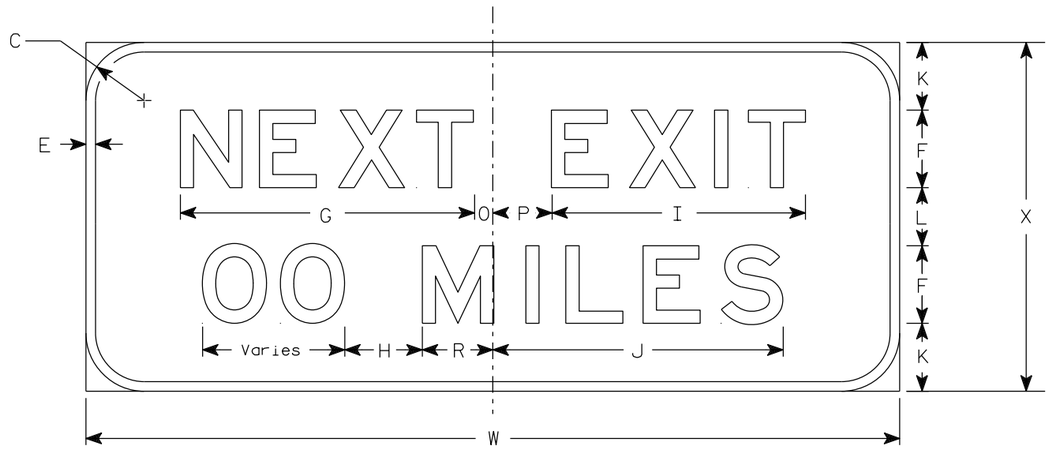
PROJECT NO:				SHEET NO: 238	E

NOTES

1. Signs are Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E
4. Substitute appropriate numerals and adjust spacing as required to achieve proper balance.
5. Use appropriate sign in conjunction with E1-1A. Width varies per sign



E2-1 *For use with E1-1A, 13' wide or wider. Sign width must match with of E1-1A.



E2-1A *For use with E1-1A, under 13'in width.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	E2-1 Area sq. ft.	E2-1A Area sq. ft.
1																										
2																										
3																										
4	varies	24	6		1	8	30 3/8	8	26 1/4	30	7	6	1 3/4	6 1/4	1 7/8	6 1/8		7 1/4					84	36	varies	21.0
5	varies	24	6		1	8	30 3/8	8	26 1/4	30	7	6	1 3/4	6 1/4	1 7/8	6 1/8		7 1/4					84	36	varies	21.0

STANDARD SIGN
E2-1 & E2-1A

WISCONSIN DEPT OF TRANSPORTATION

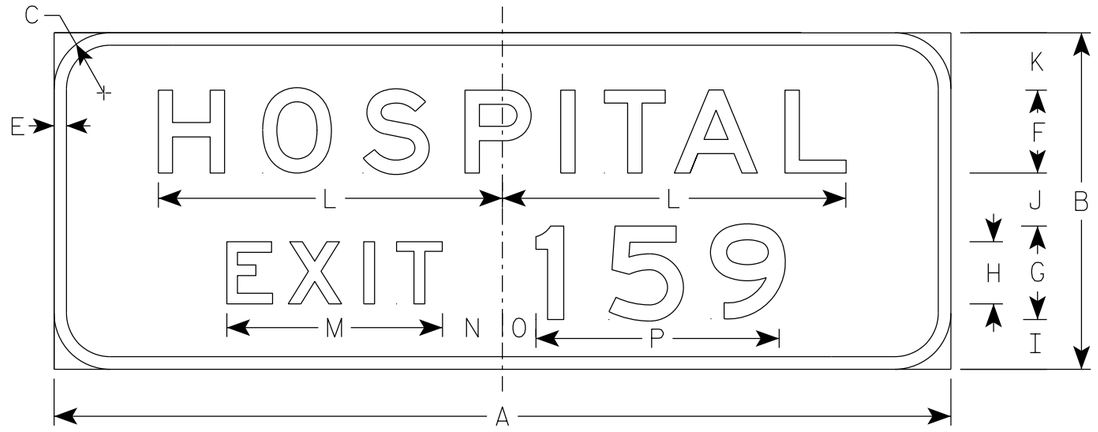
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/2020 PLATE NO. E2-1.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 239 | E

NOTES

1. Sign is Type I - Type SH Reflective
2. Color:
   Background - Blue
   Message - White
3. Message Series - E
4. Apply proper Exit Numbers and letters, optically center to adjust spacing to achieve proper balance.



E10-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	144	54	9		2	13 3/8	15	10	8	8 1/2	9 1/4	55 1/4	34 5/8	9 5/8	5 3/8	39											54.0
5	144	54	9		2	13 3/8	15	10	8	8 1/2	9 1/4	55 1/4	34 5/8	9 5/8	5 3/8	39											54.0

TYPICAL SIGNS

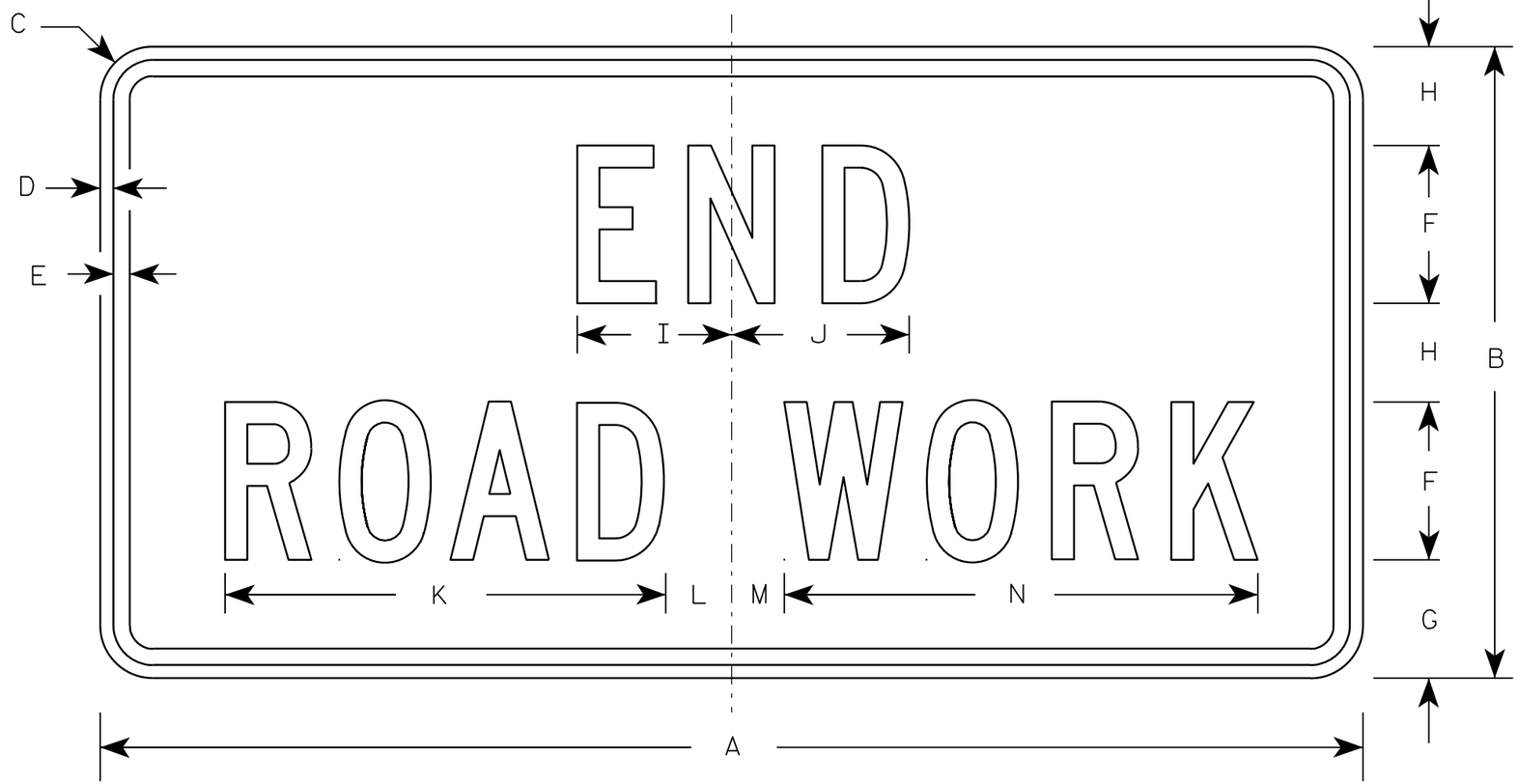
E10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/5/2020 PLATE NO. E10-61.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 240 | E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

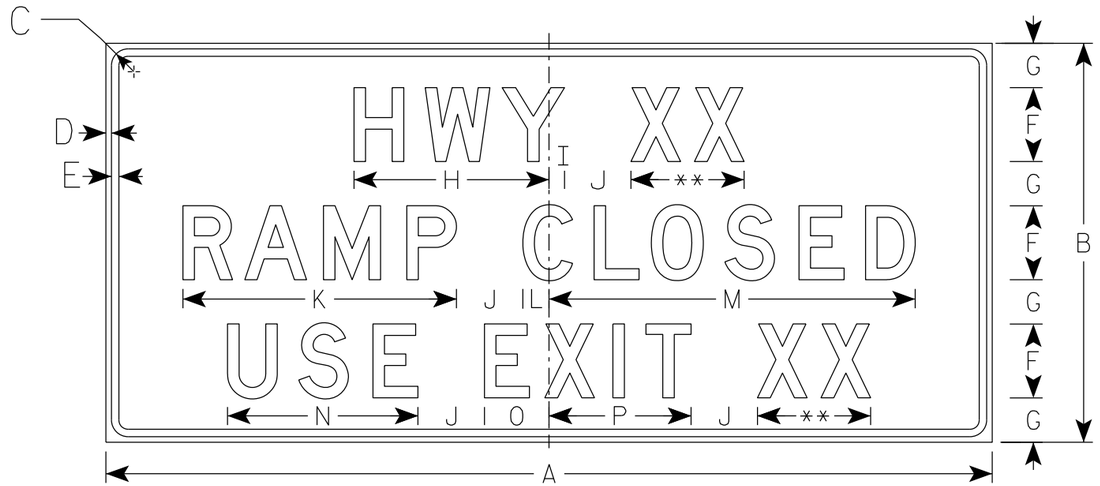
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 241	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate Highway Number and Exit Number and optically center message



G20-56

** See Note 4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	54	3	¾	1	10	6	26 ⅜	2 ⅛	9	37	3 ½	49 ⅝	25 ¾	8 ¾	19 ¼											45.0
5	120	54	3	¾	1	10	6	26 ⅜	2 ⅛	9	37	3 ½	49 ⅝	25 ¾	8 ¾	19 ¼											45.0

STANDARD SIGN
G20-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/19/18 PLATE NO. G20-56.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 242 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - E
4. Material shall be .040 aluminmum



G20-60

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	108	24				12	6	14 7/8	78 1/4																		18.0
5																											

STANDARD SIGN
G20-60

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/15 PLATE NO G20-60.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G2060.DGN PLOT DATE : 13-MAY-2015 08:46 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 20.431338:1.000000
WISDOT/CADDS SHEET 42

NOTES

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



G20-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

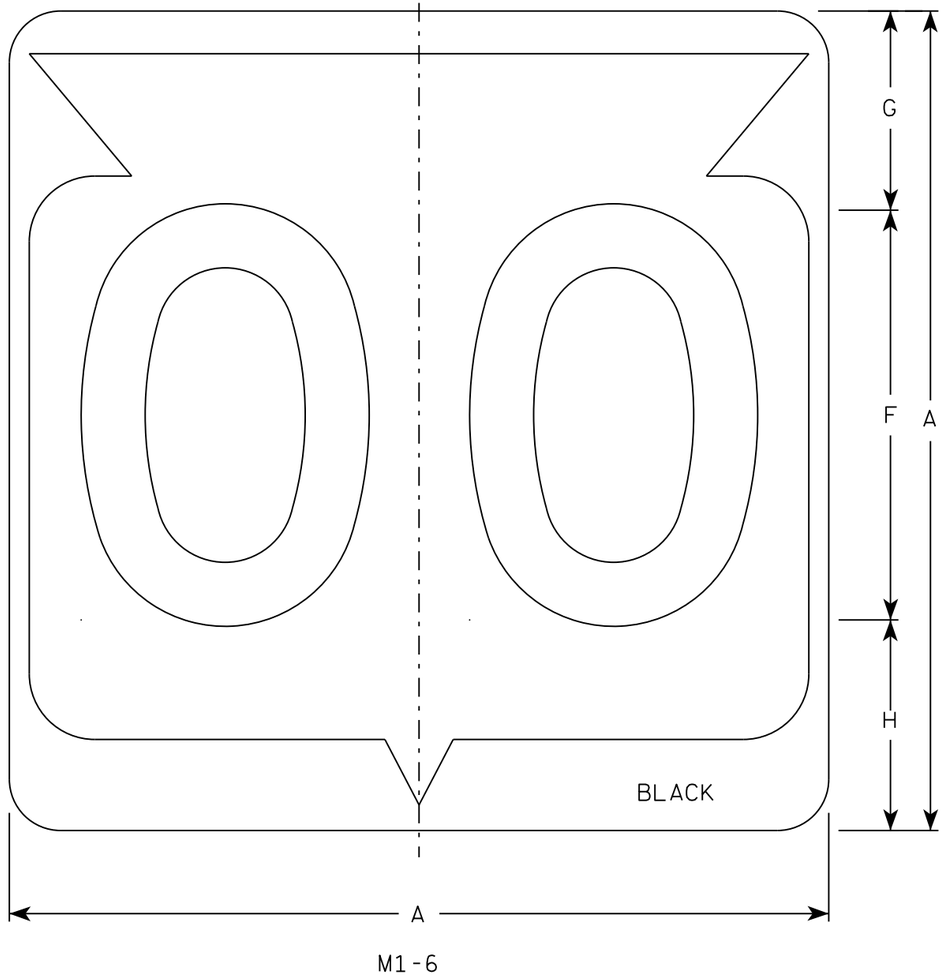
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/07/15 PLATE NO G20-61.1

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

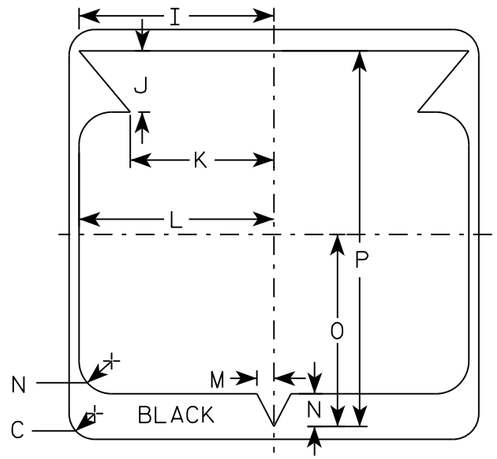
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M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

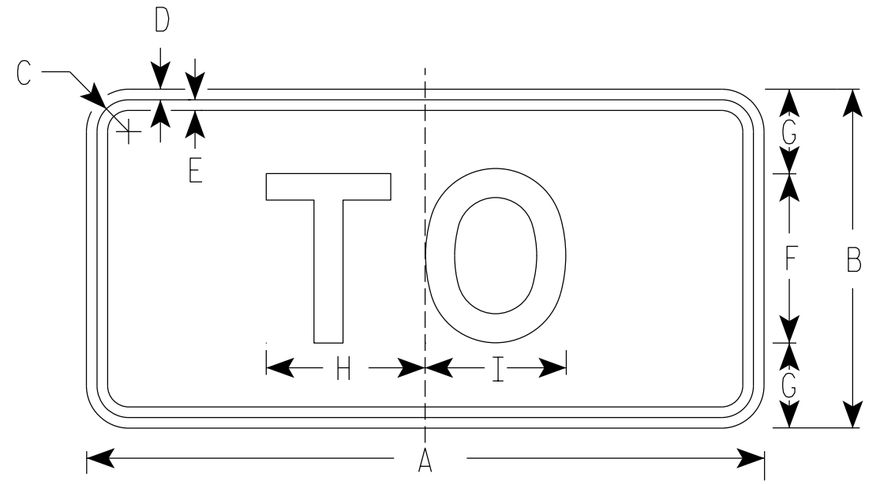
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

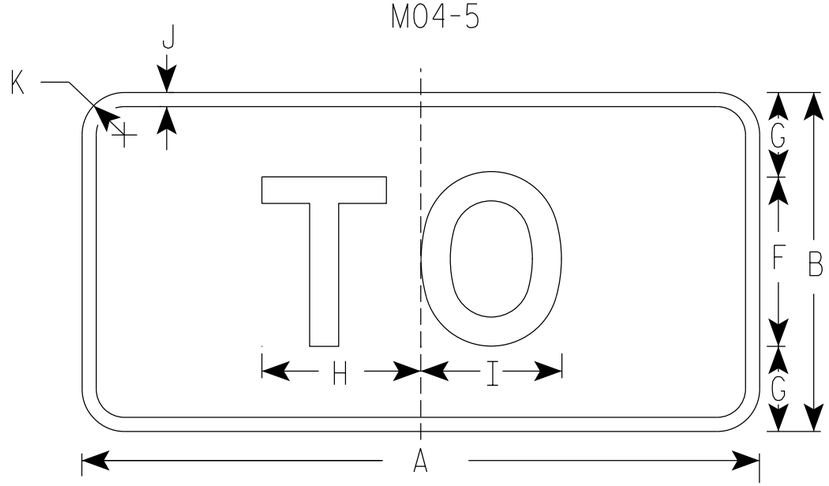
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 245 E



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

STANDARD SIGN
M4-5

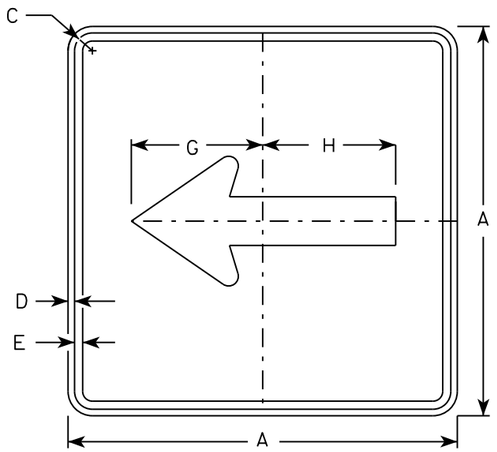
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

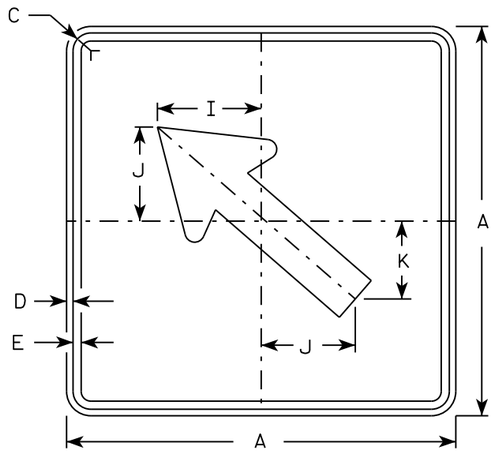
DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 246 | E

7



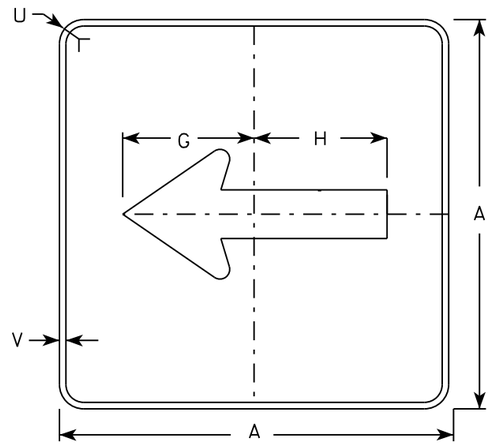
M6-1
MM6-1
MO6-1
MP6-1



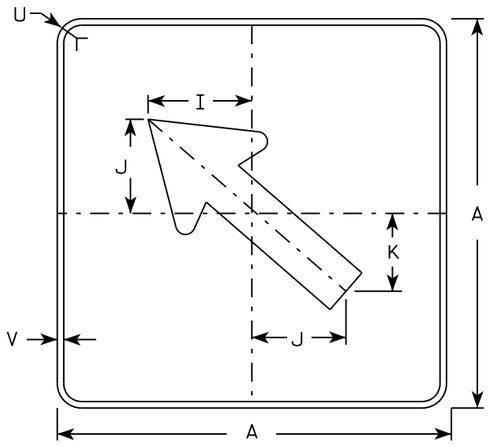
M6-2
MM6-2
MO6-2
MP6-2

NOTES

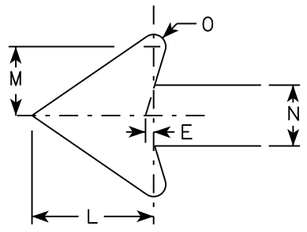
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



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



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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

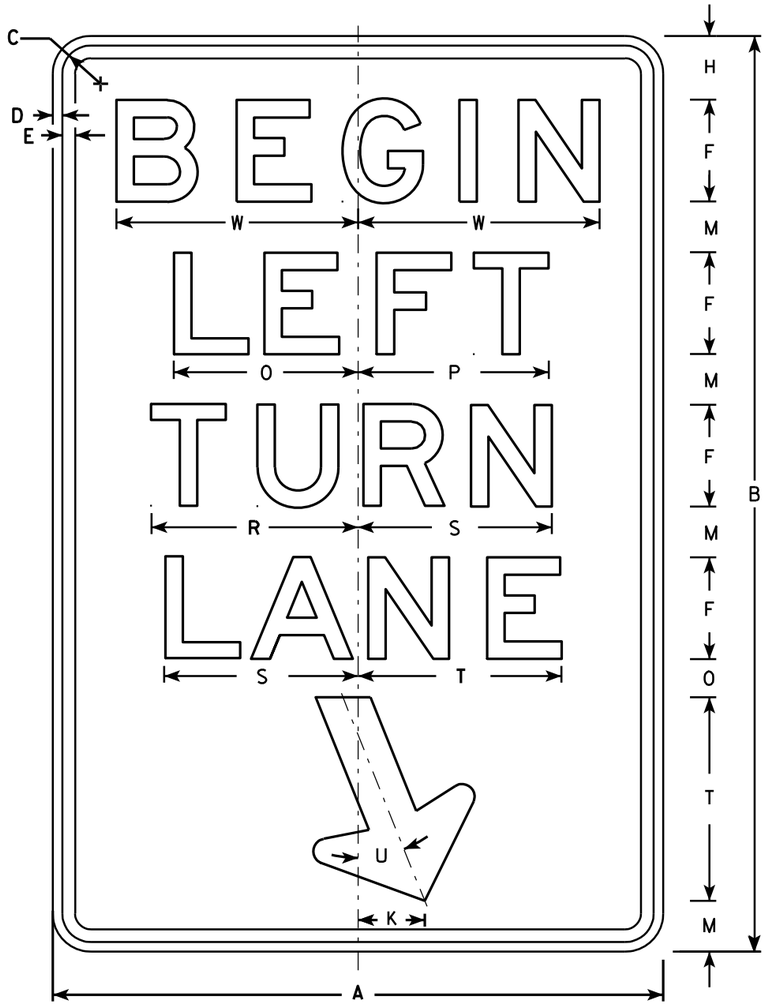
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 247 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

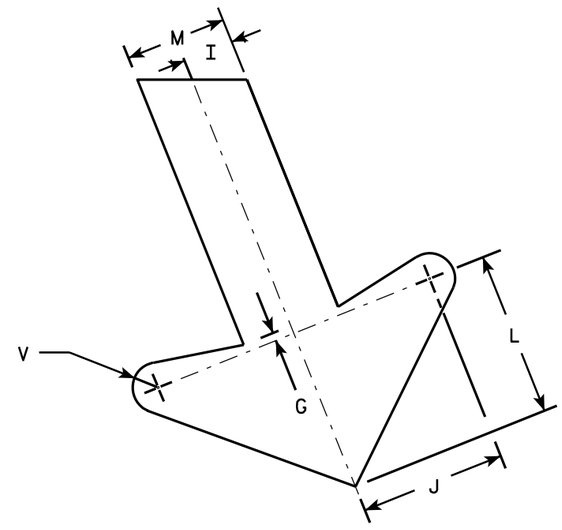
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

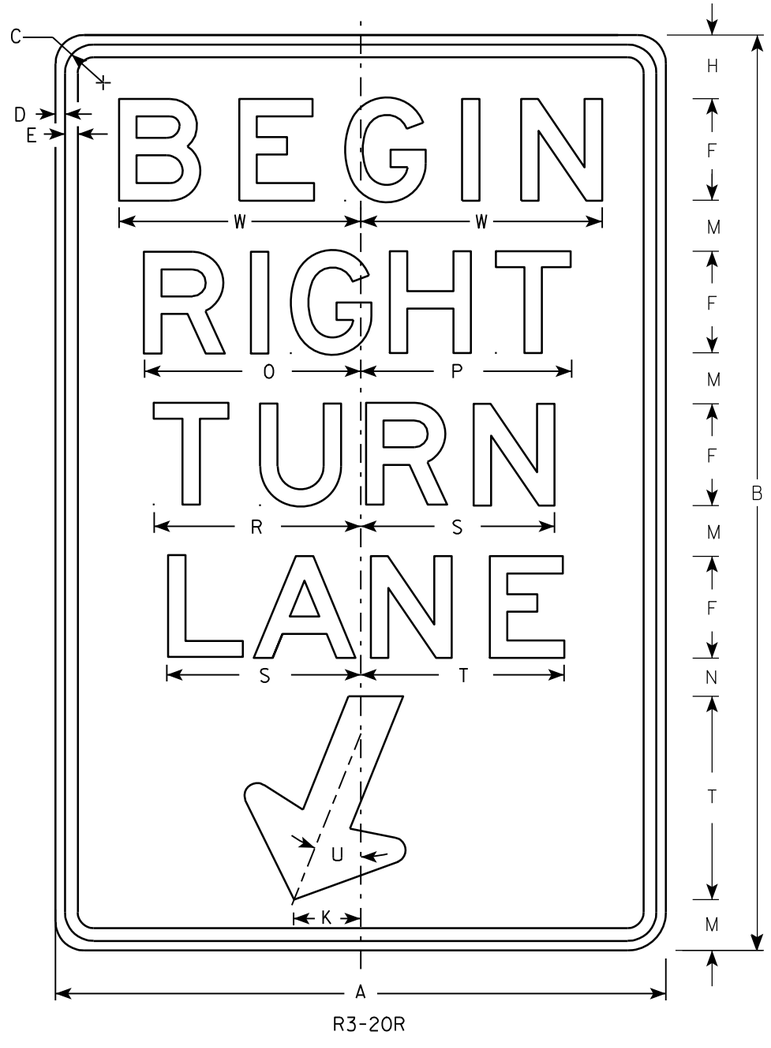
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

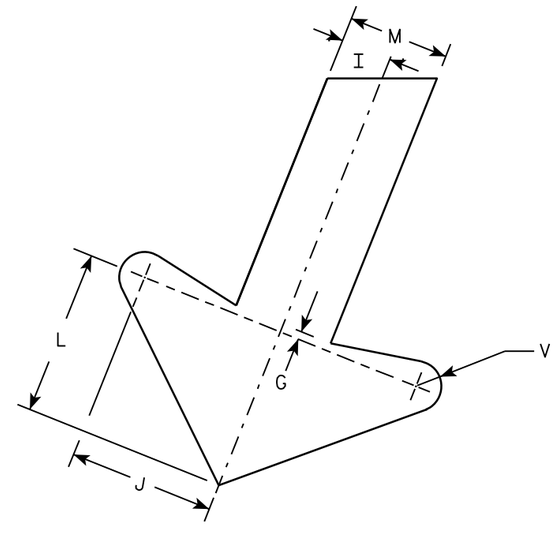
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 248 | E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

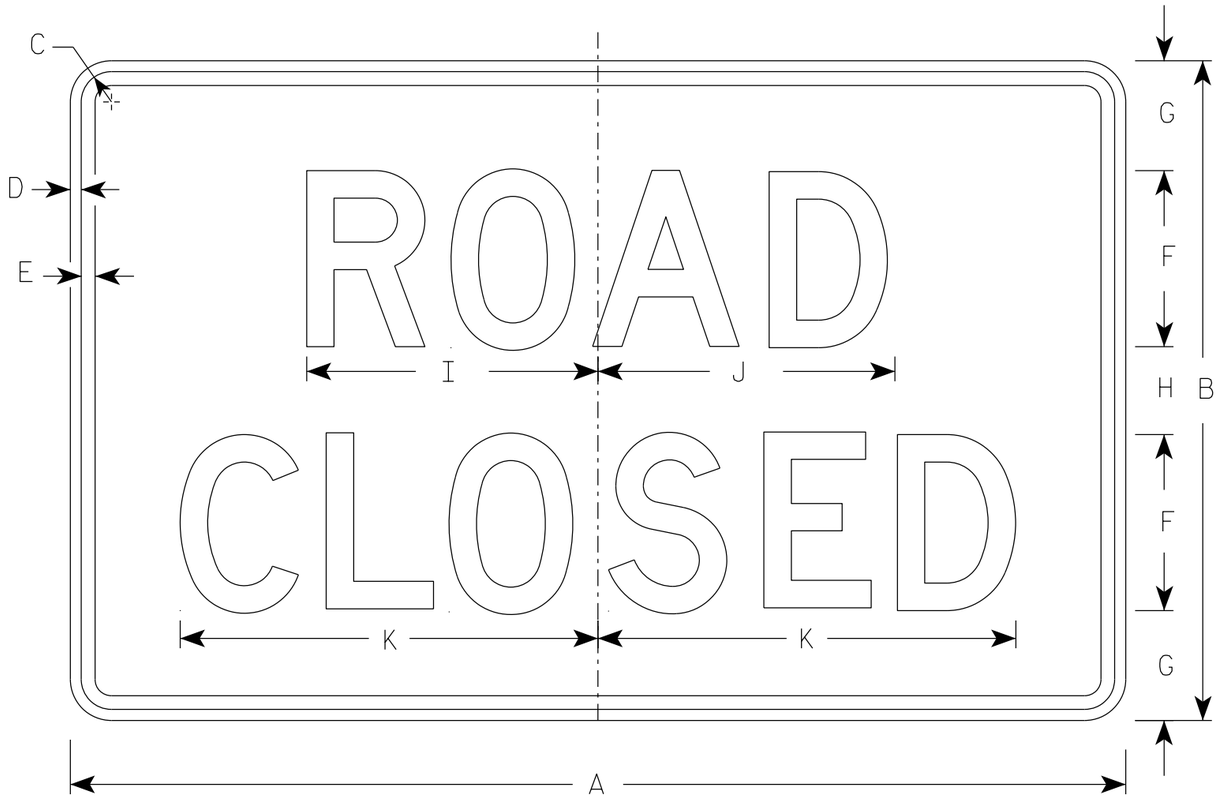
STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

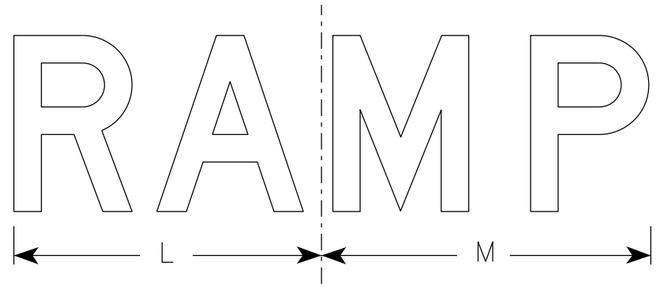
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 249 | E



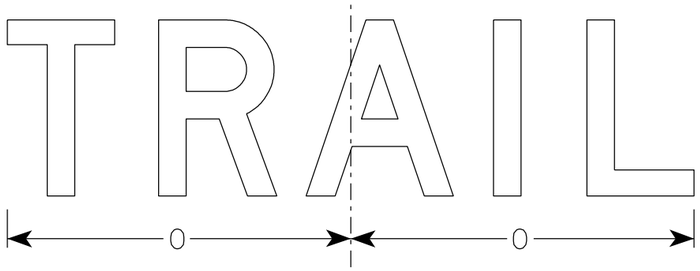
R11-2

NOTES

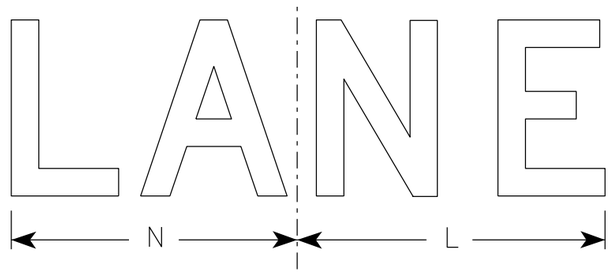
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

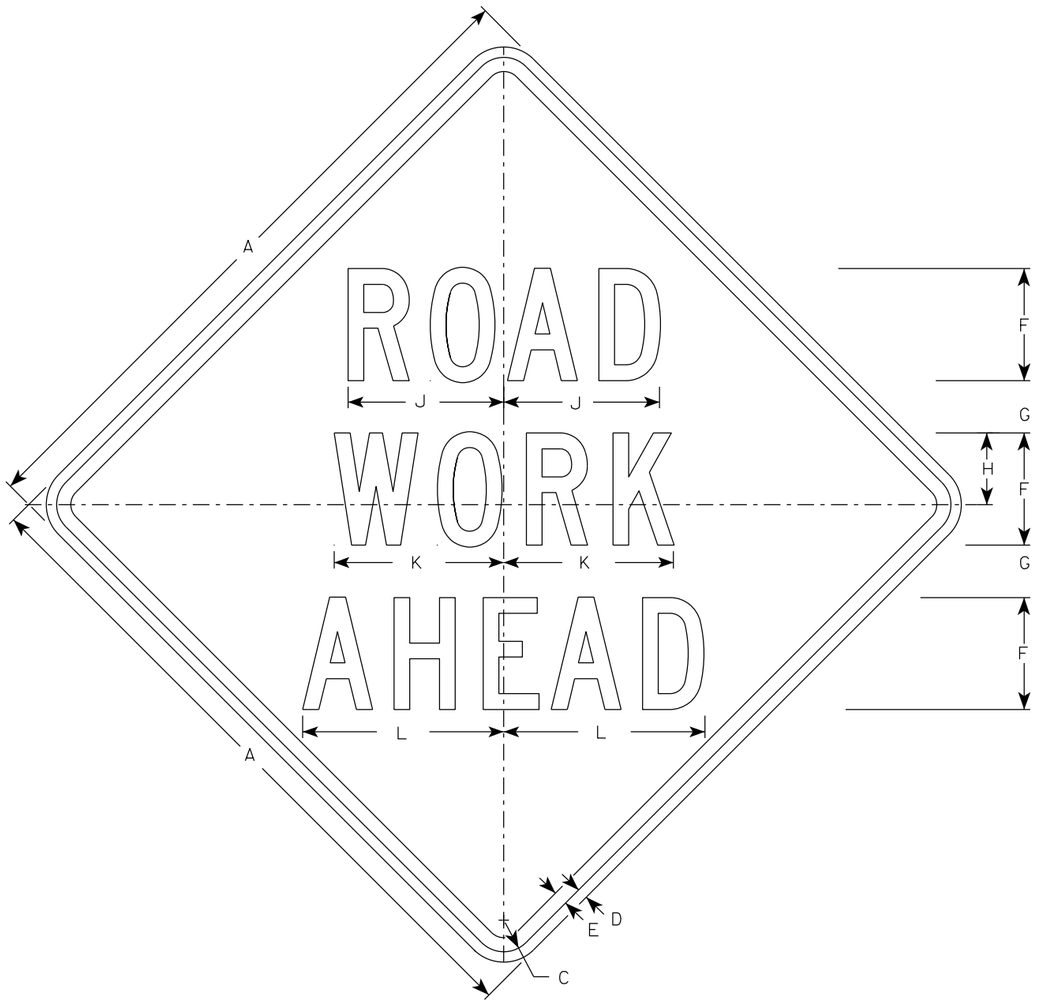
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

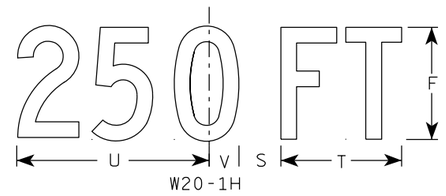
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 250 E

NOTES

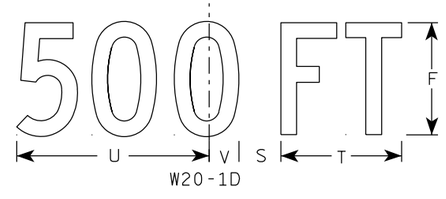
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



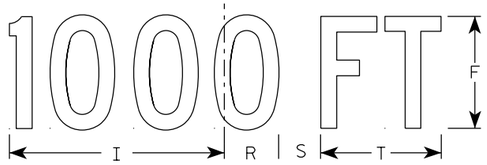
W20-1A



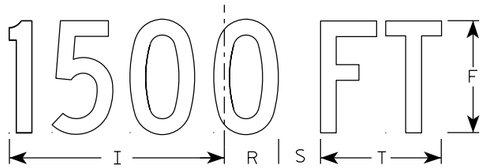
W20-1H



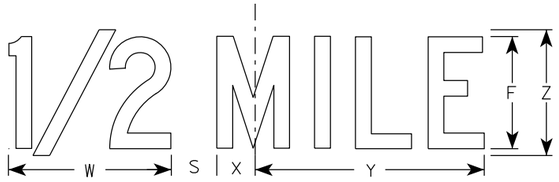
W20-1D



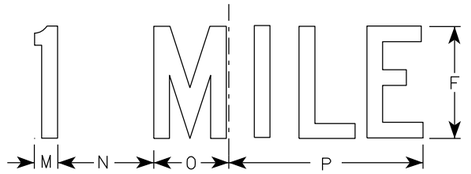
W20-1C



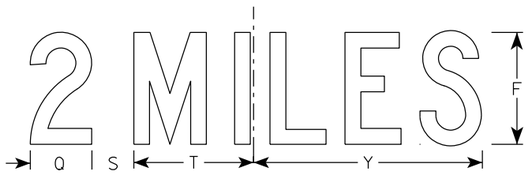
W20-1B



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

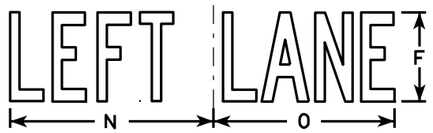
WISDOT/CADDS SHEET 42

7

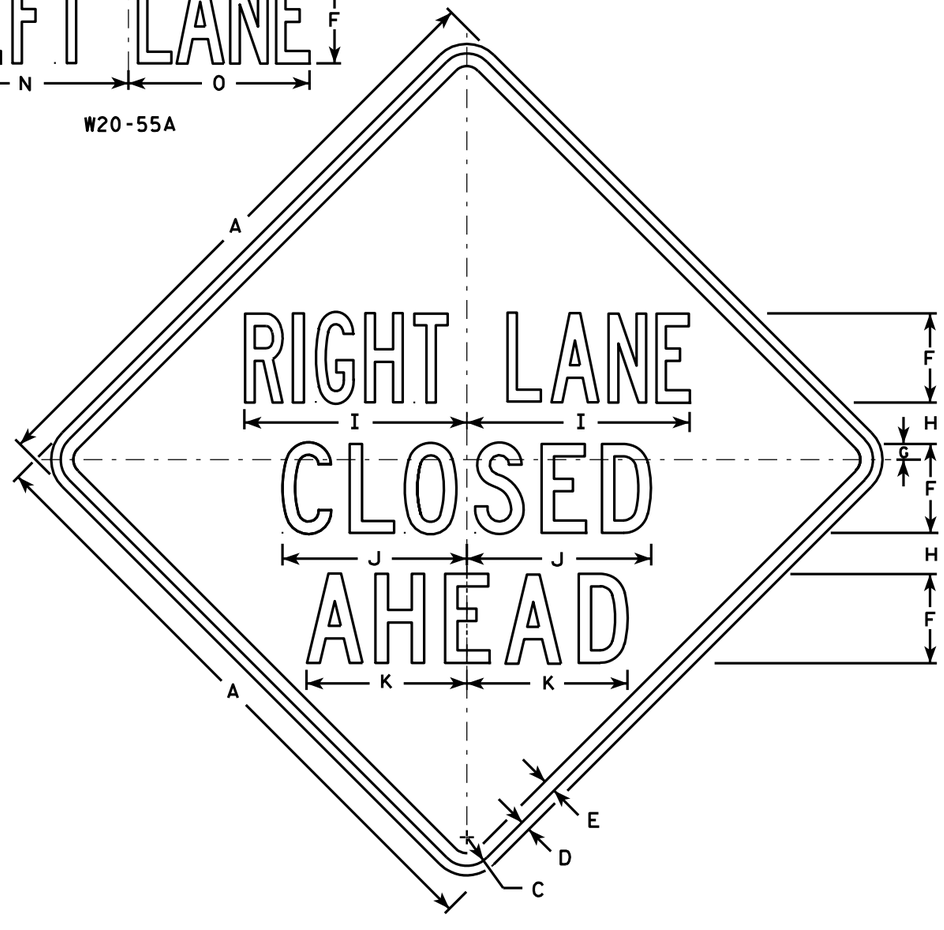
7



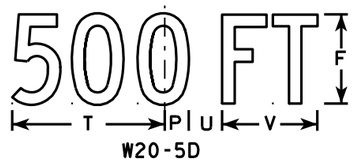
W20-56A



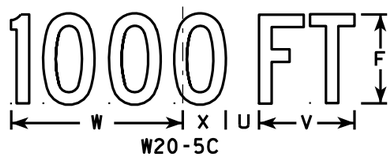
W20-55A



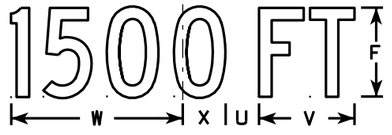
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

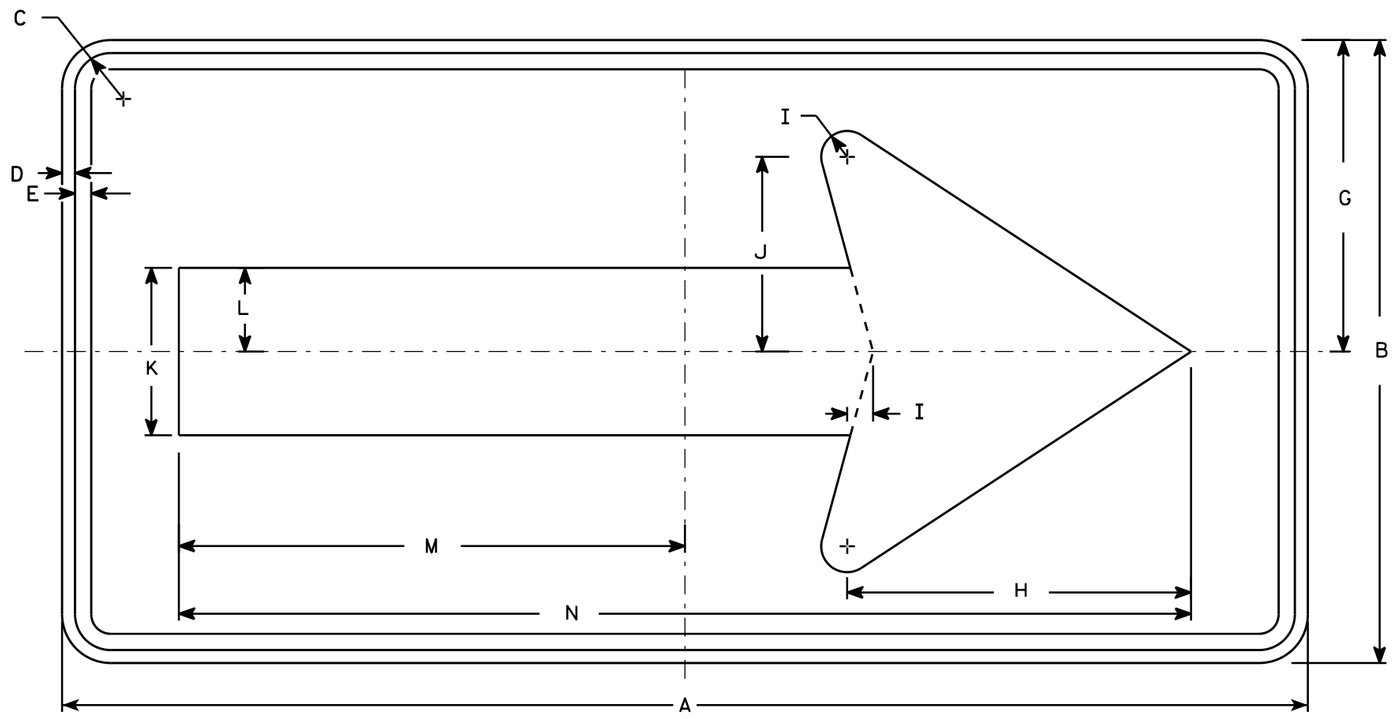
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 252	E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

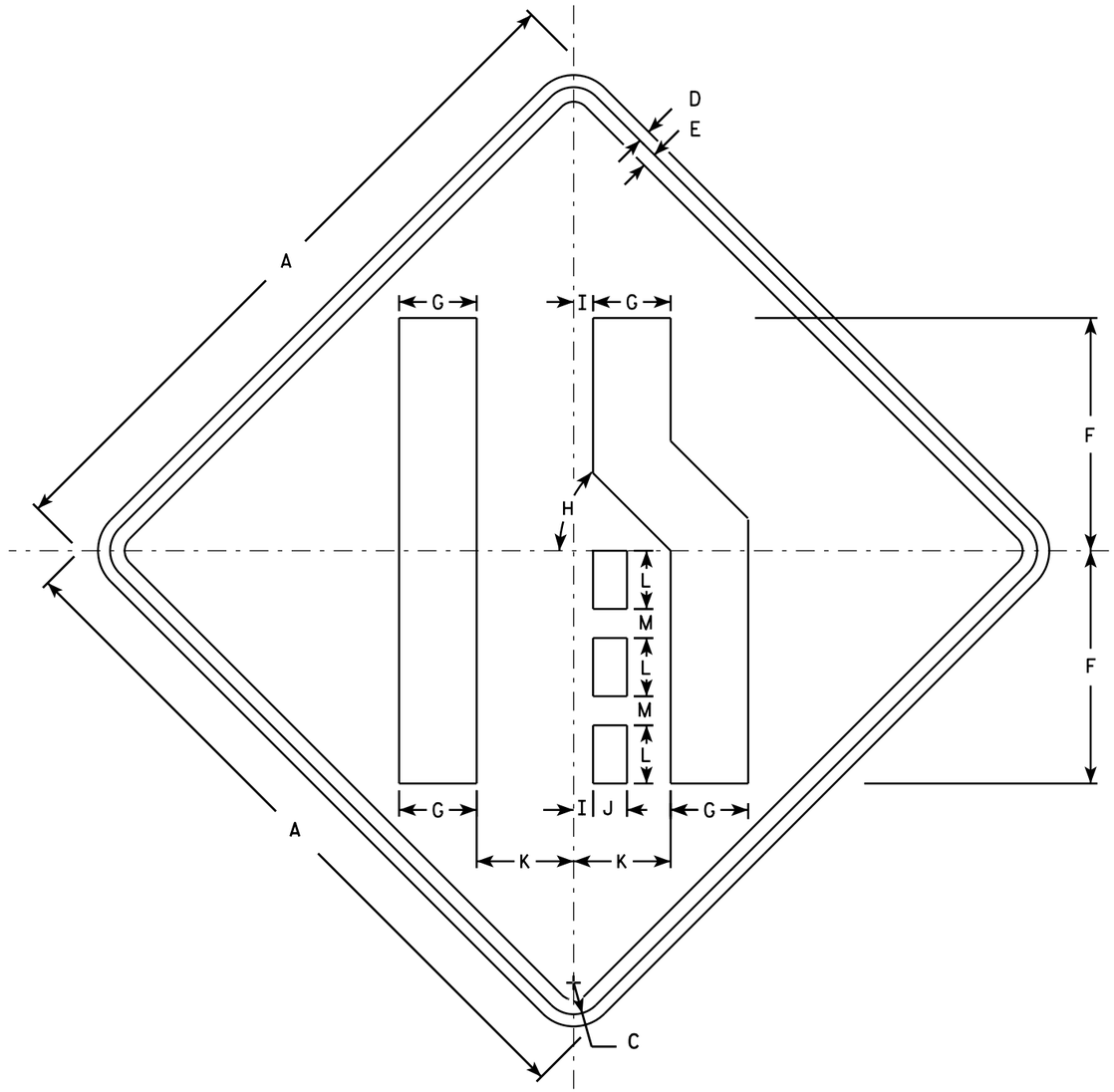
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

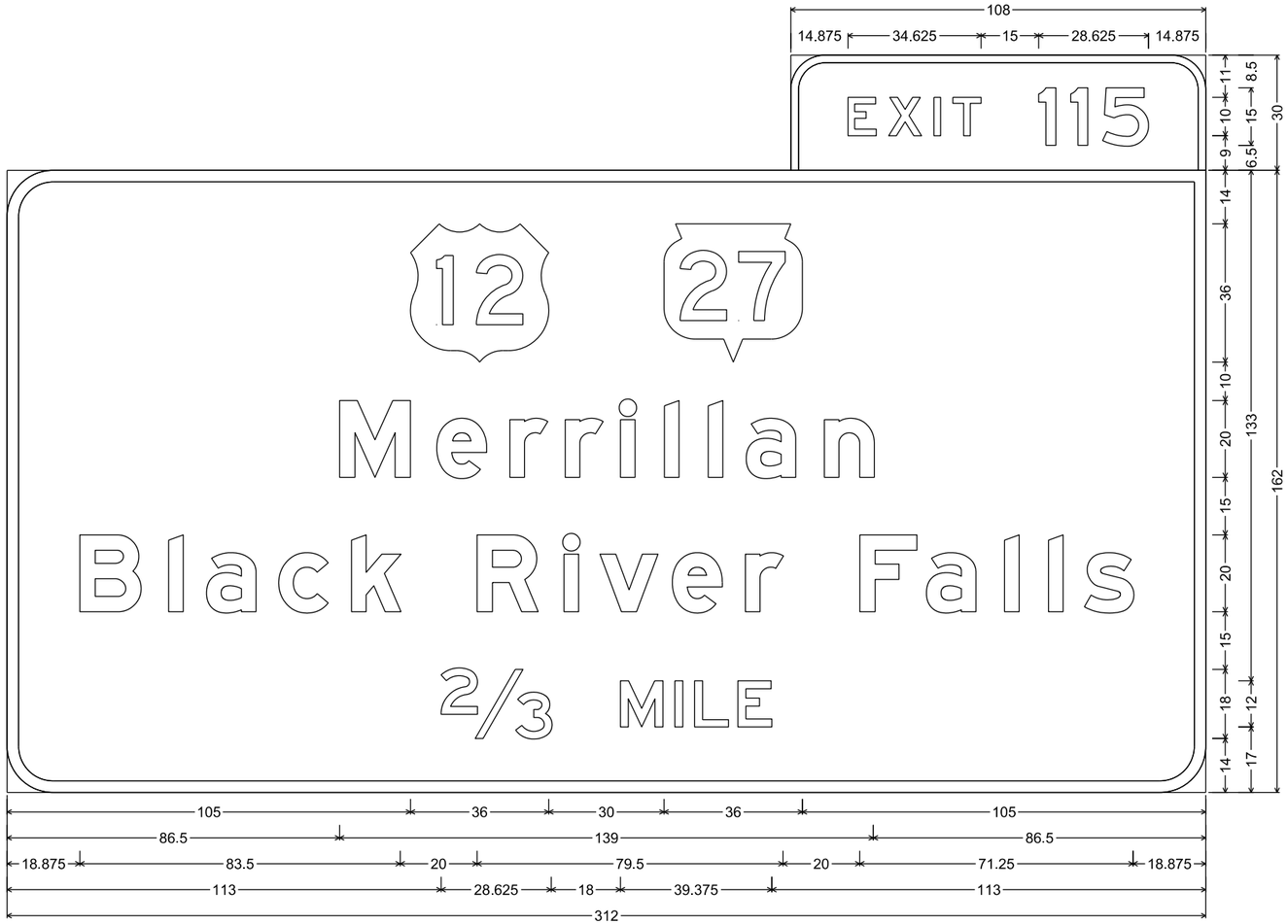
DATE 11/20/13 PLATE 254 W04-2.1

PROJECT NO:

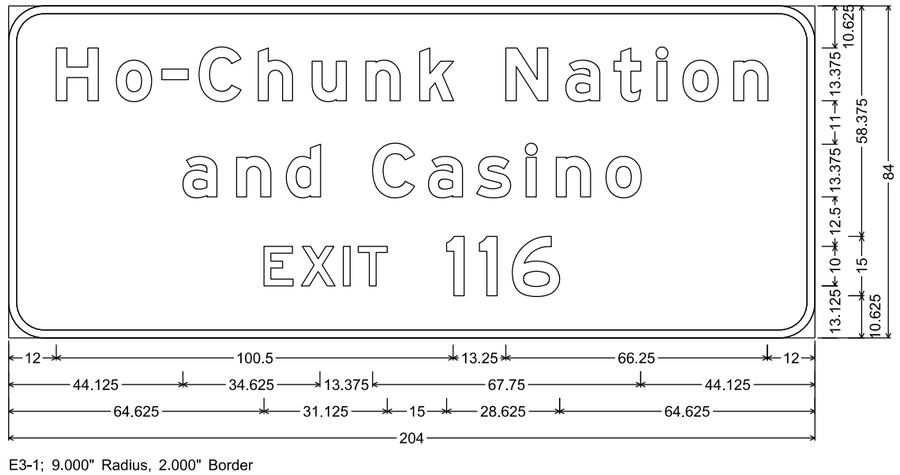
SHEET NO: E

NOTES

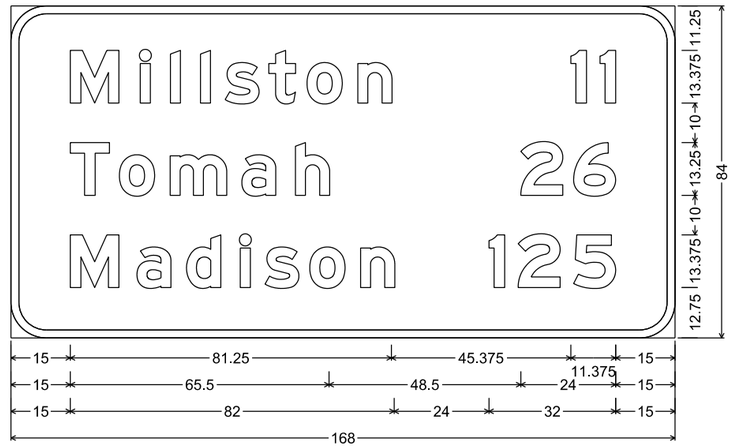
1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except as noted



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border



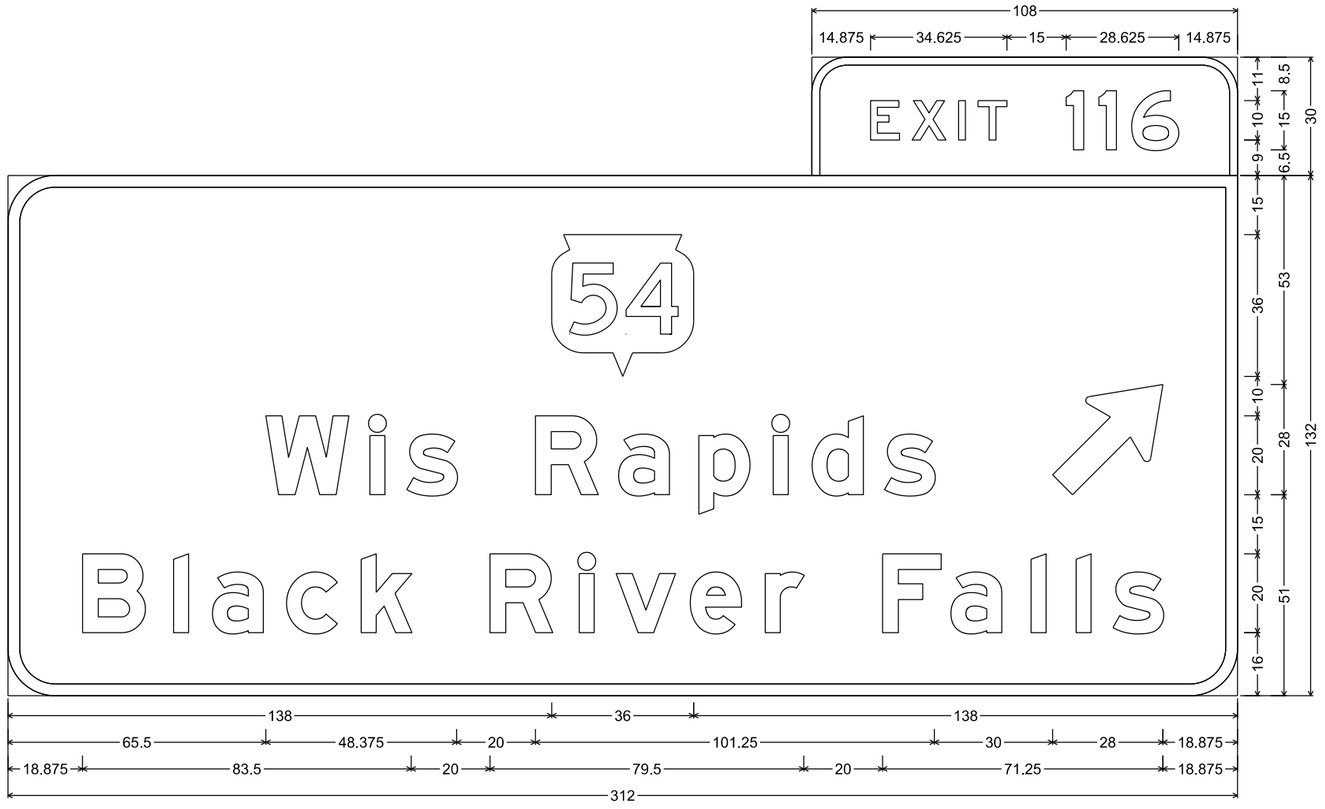
E3-1; 9.000" Radius, 2.000" Border



D2-3; 9.000" Radius, 2.000" Border, White on, Green;

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except as noted



E1-5P; 9.000" Radius, 2.000" Border
E4-1A; 12.000" Radius, 3.000" Border

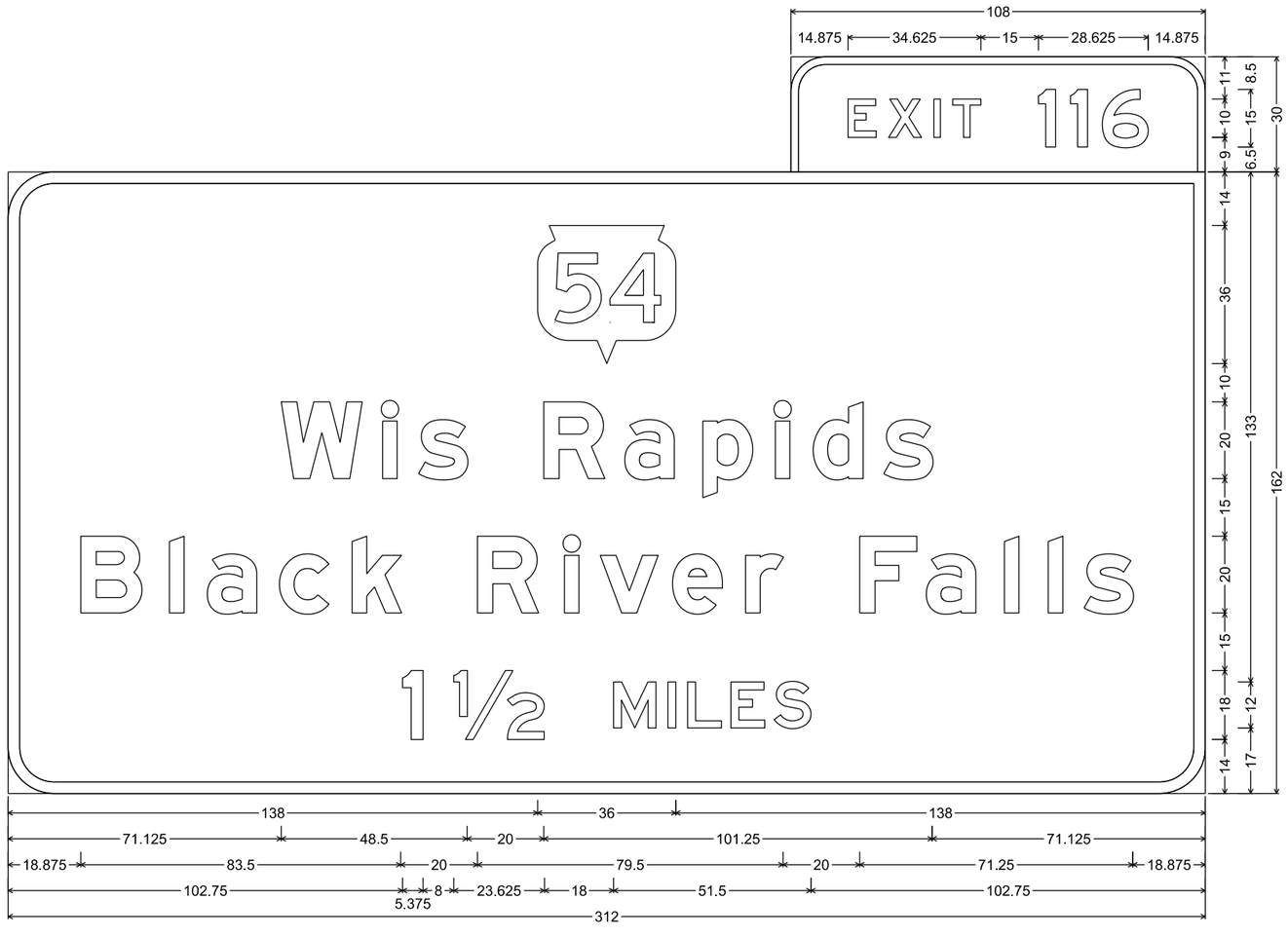
7

7

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET NO: 256	E

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except as noted



E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

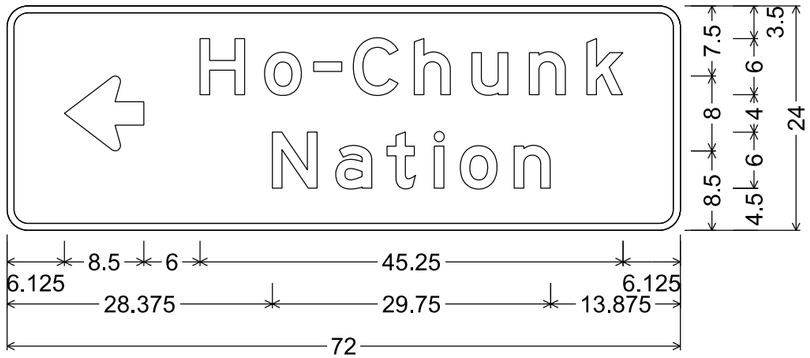
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7

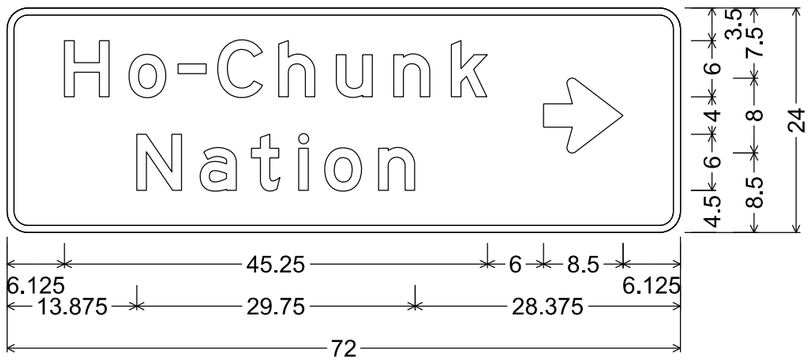
PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET NO: 257	E

NOTES

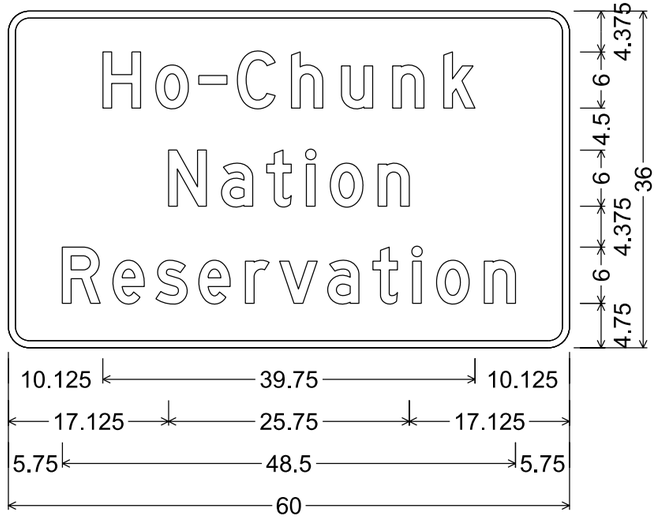
1. All Signs Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted



D1-2; 2.250" Radius, 0.750" Border



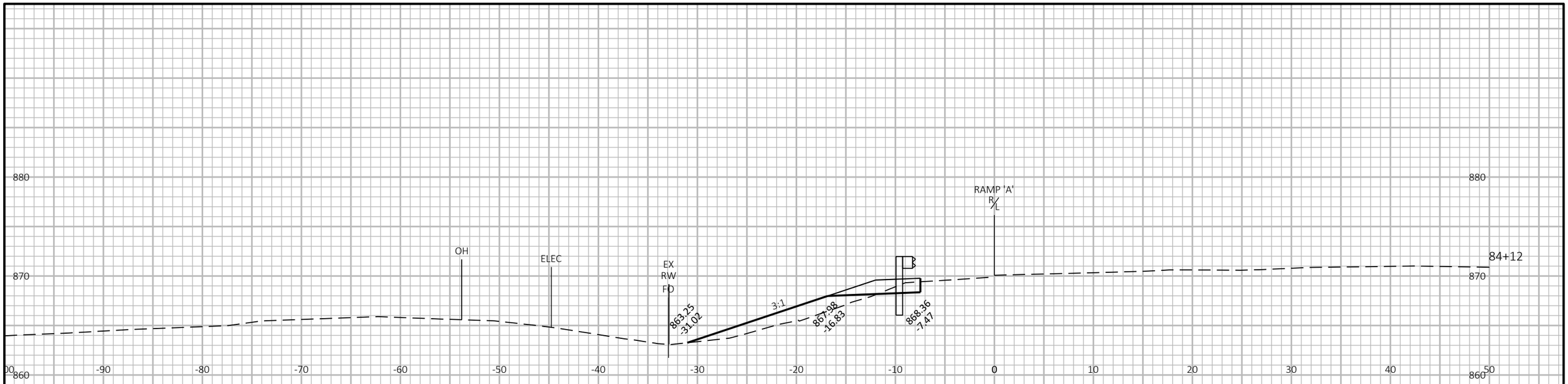
D1-2; 2.250" Radius, 0.750" Border

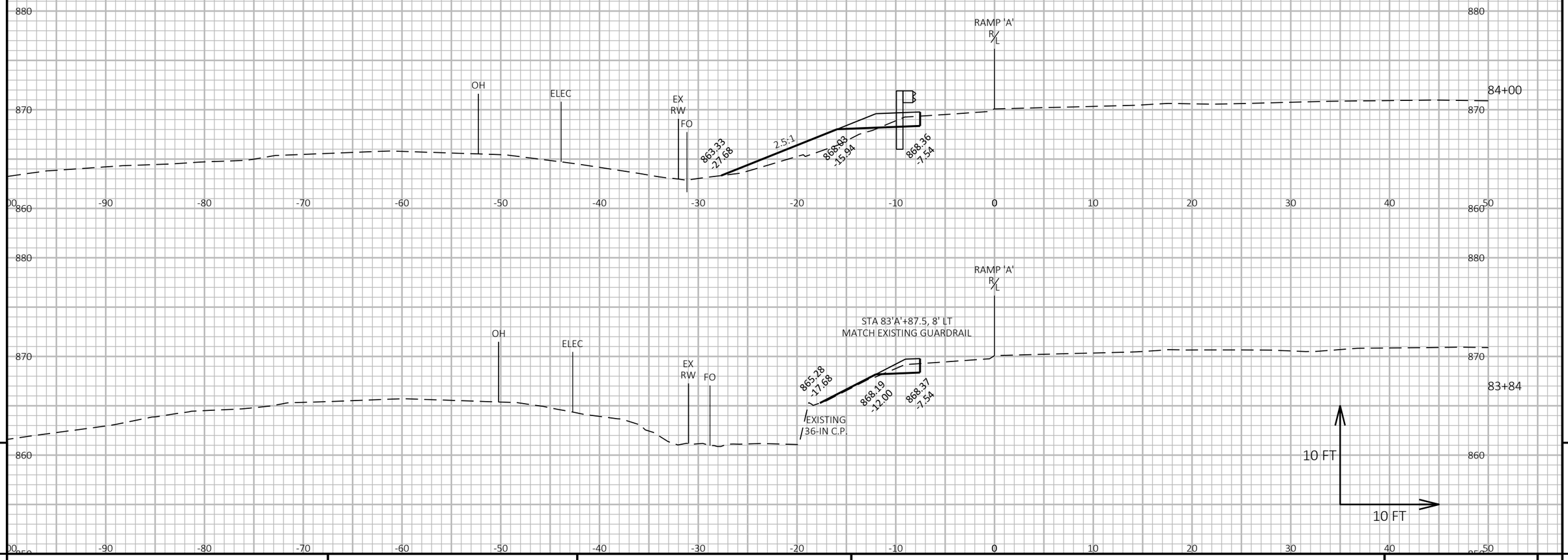


I2-2R; 2.250" Radius, 0.750" Border,
"Ho-Chunk", D; "Nation", D; "Reservation", D

7

7





9

9

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: RAMP 'A' GUARDRAIL	SHEET 259	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 1

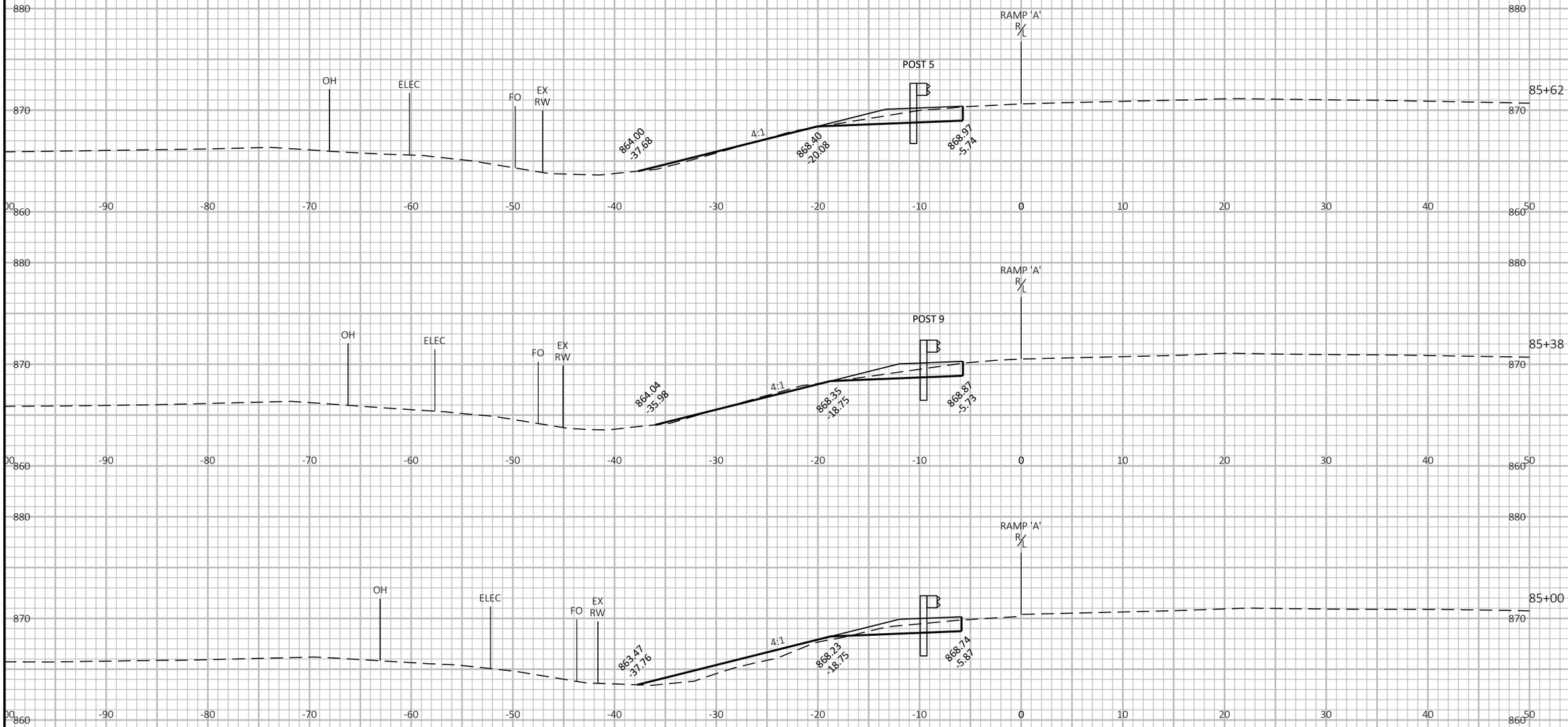
PLOT DATE : 7/19/2021 5:12 PM

PLOT BY : ANDERSON, THOMAS R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

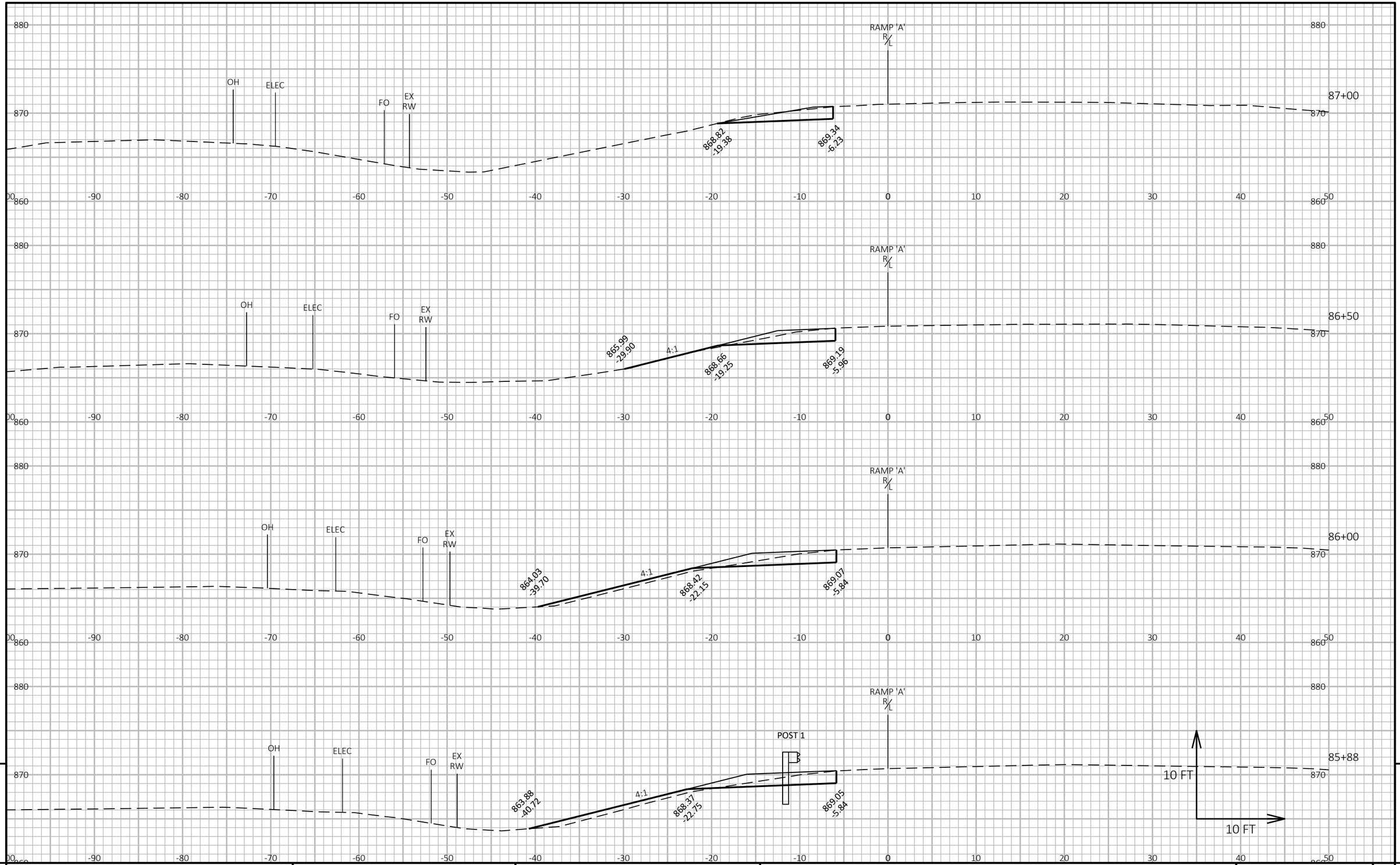
9

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: RAMP 'A' GUARDRAIL	SHEET 260	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 2

PLOT DATE : 7/19/2021 5:13 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: RAMP 'A' GUARDRAIL	SHEET 261	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 3

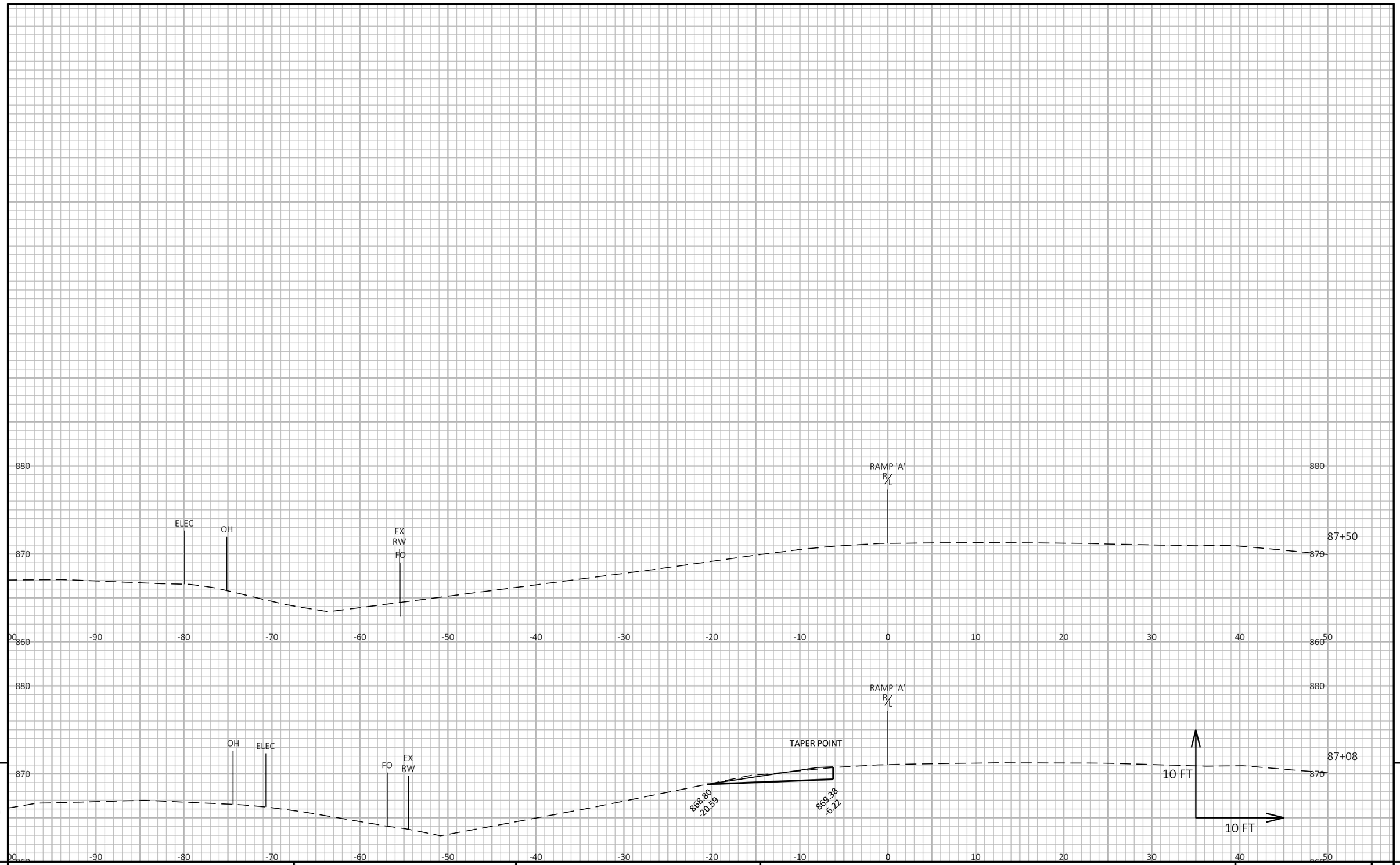
PLOT DATE : 7/19/2021 5:13 PM

PLOT BY : ANDERSON, THOMAS R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: RAMP 'A' GUARDRAIL	SHEET 262	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 4

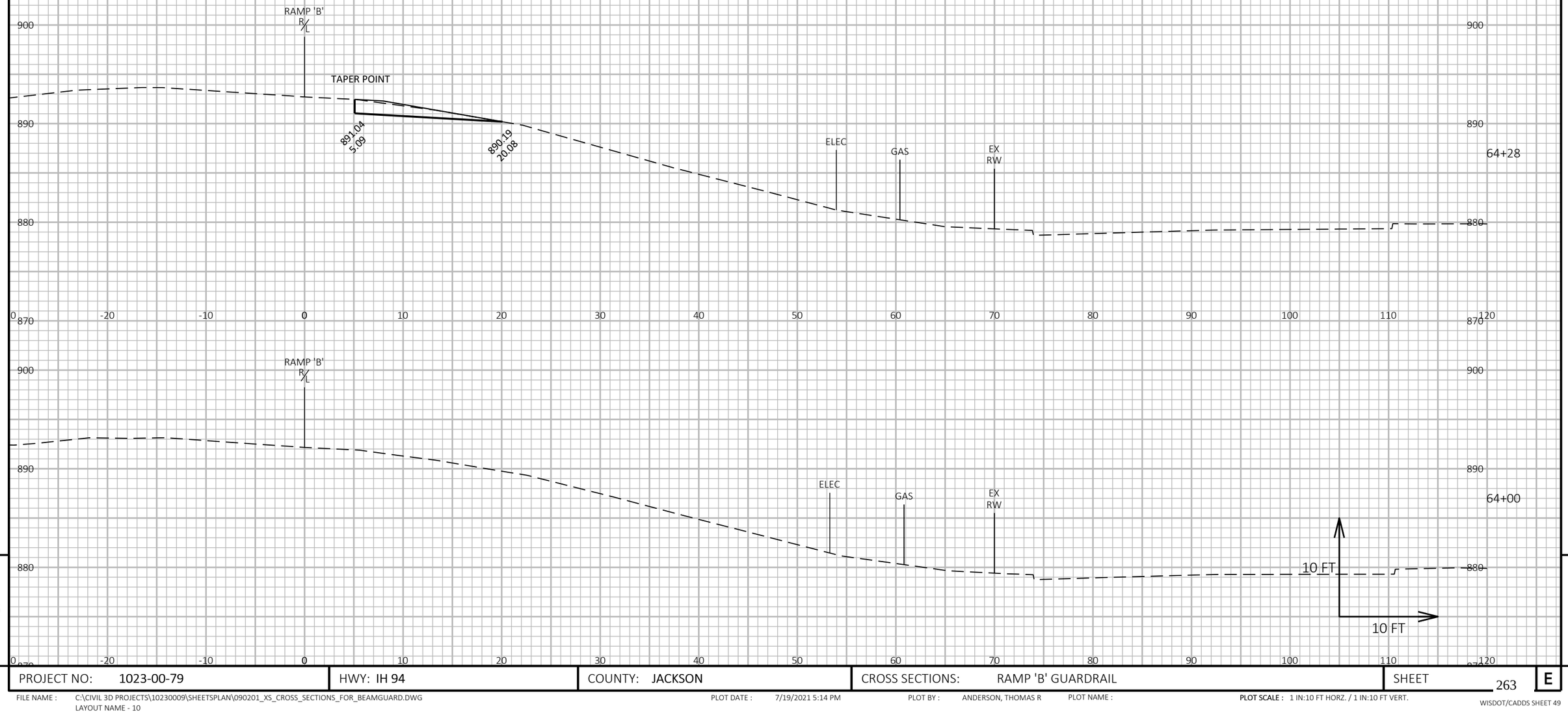
PLOT DATE : 7/19/2021 5:14 PM

PLOT BY : ANDERSON, THOMAS R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: RAMP 'B' GUARDRAIL	SHEET 263	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 10

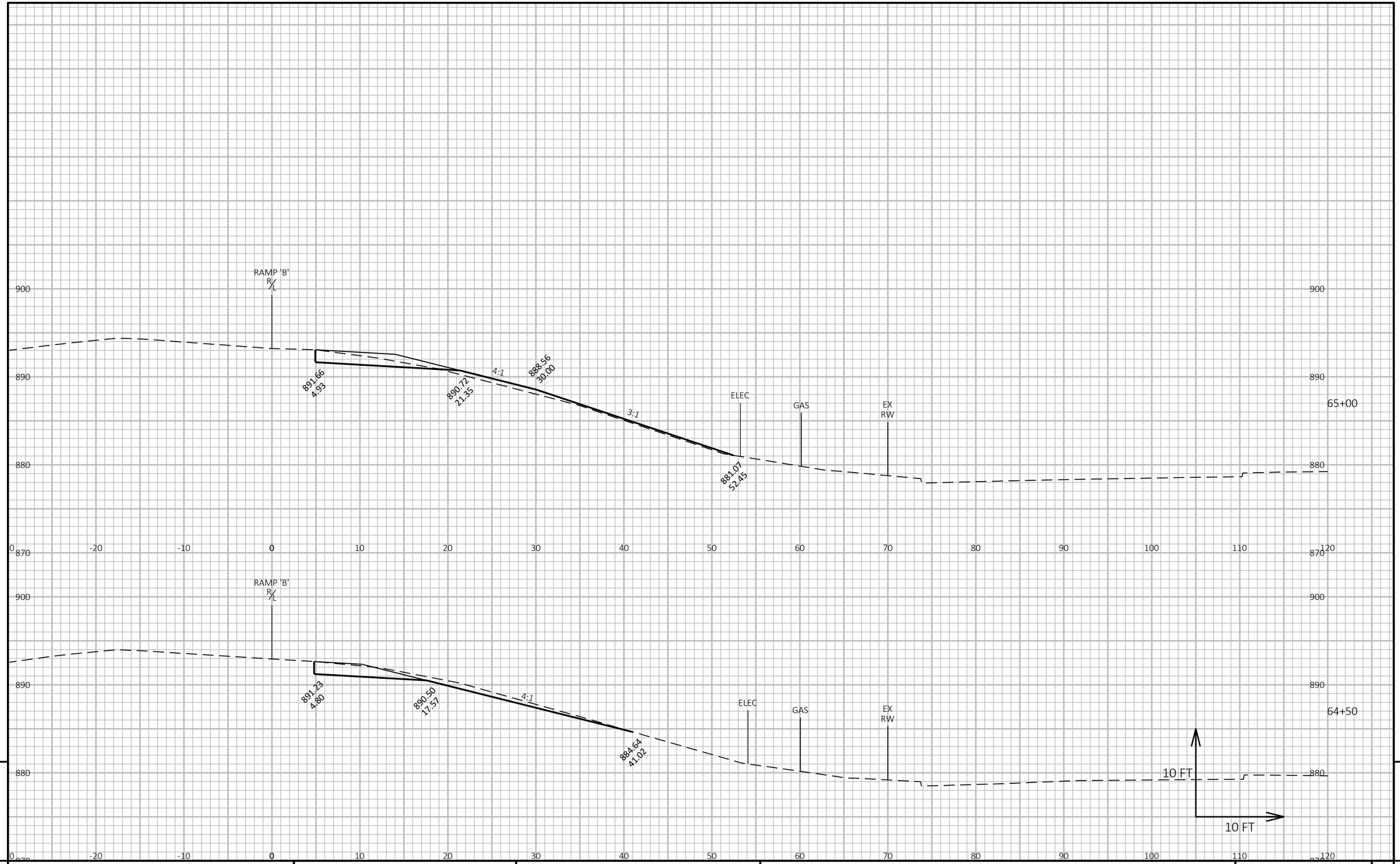
PLOT DATE : 7/19/2021 5:14 PM

PLOT BY : ANDERSON, THOMAS R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

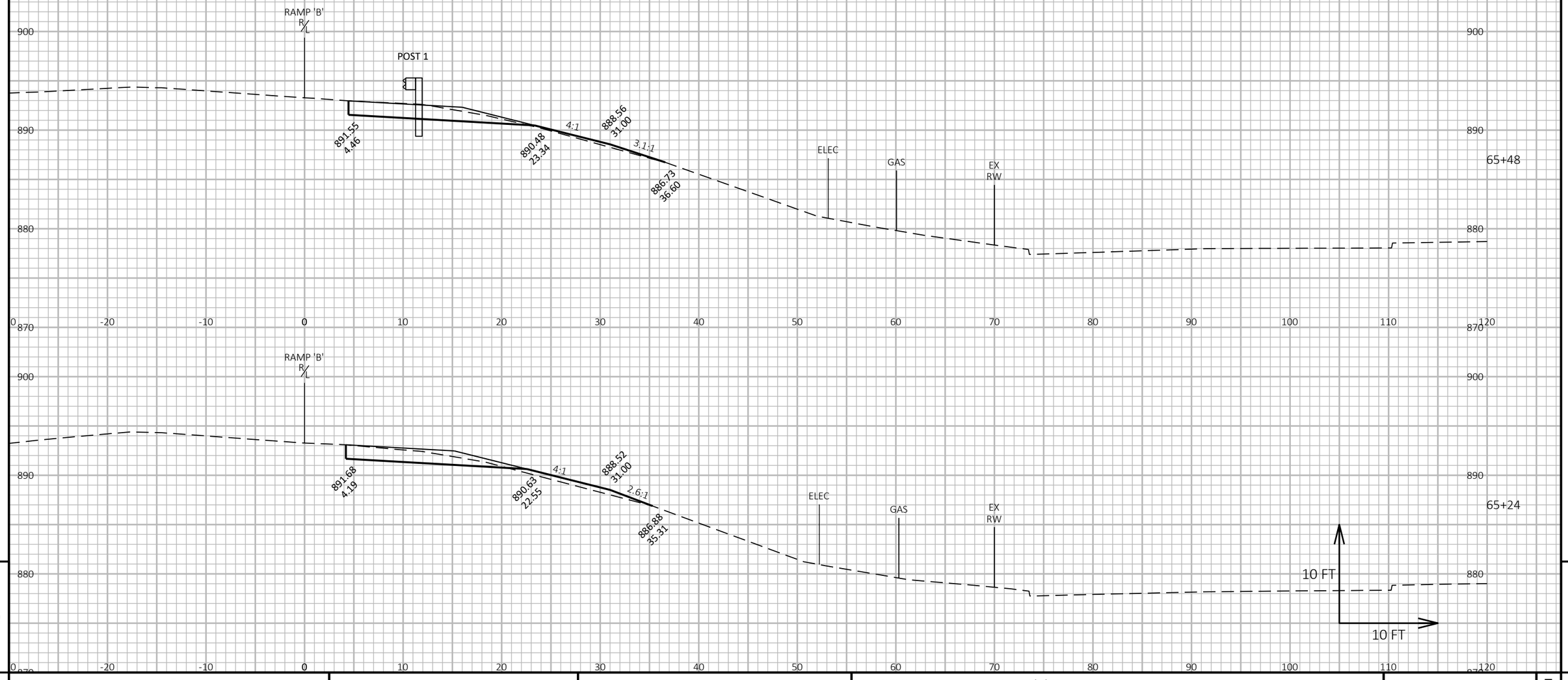
PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: RAMP 'B' GUARDRAIL	SHEET 264	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 11

PLOT DATE : 7/19/2021 5:14 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

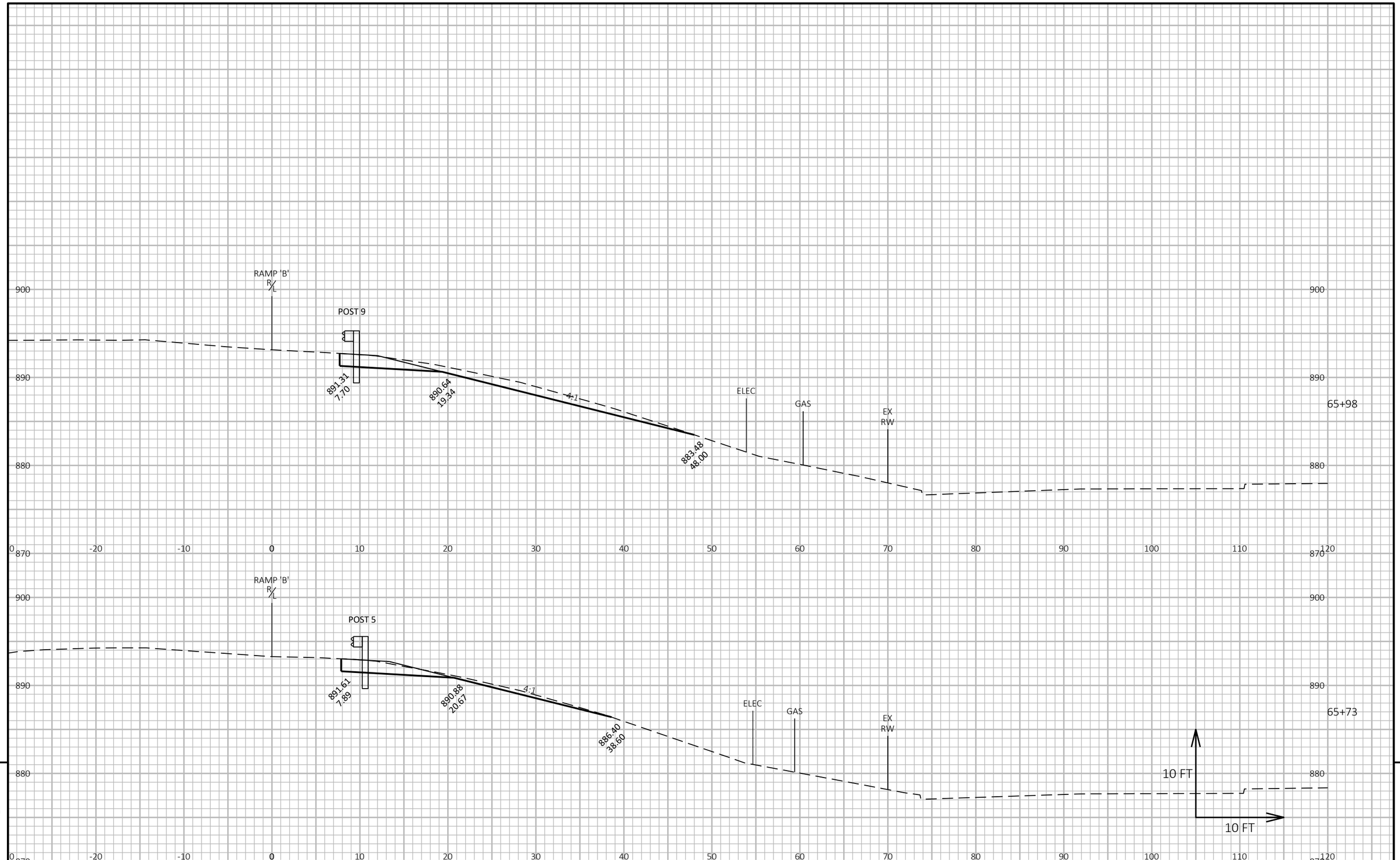
PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: RAMP 'B' GUARDRAIL	SHEET 265	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 12

PLOT DATE : 7/19/2021 5:15 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

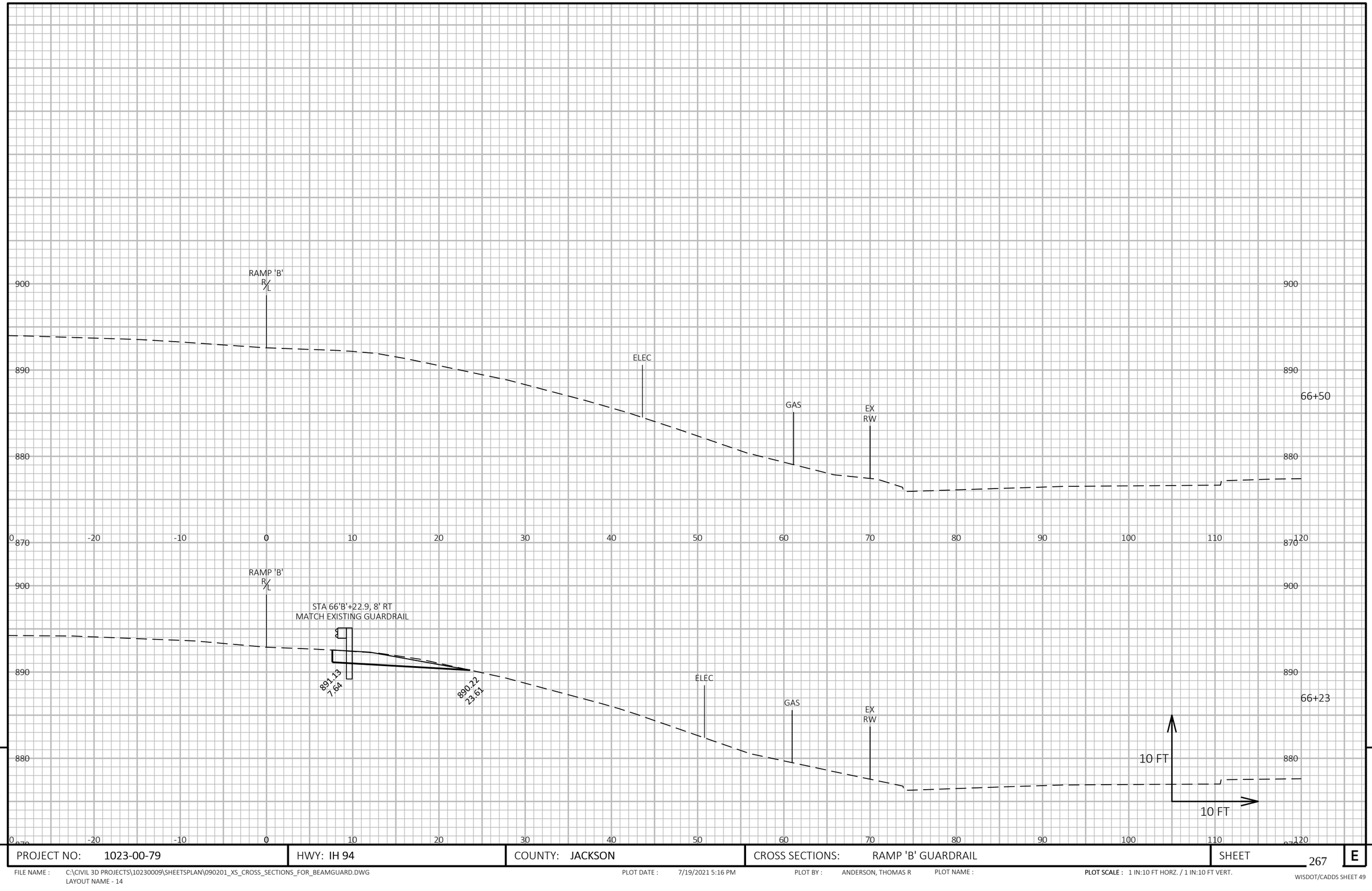
PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: RAMP 'B' GUARDRAIL	SHEET 266	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 13

PLOT DATE : 7/19/2021 5:15 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

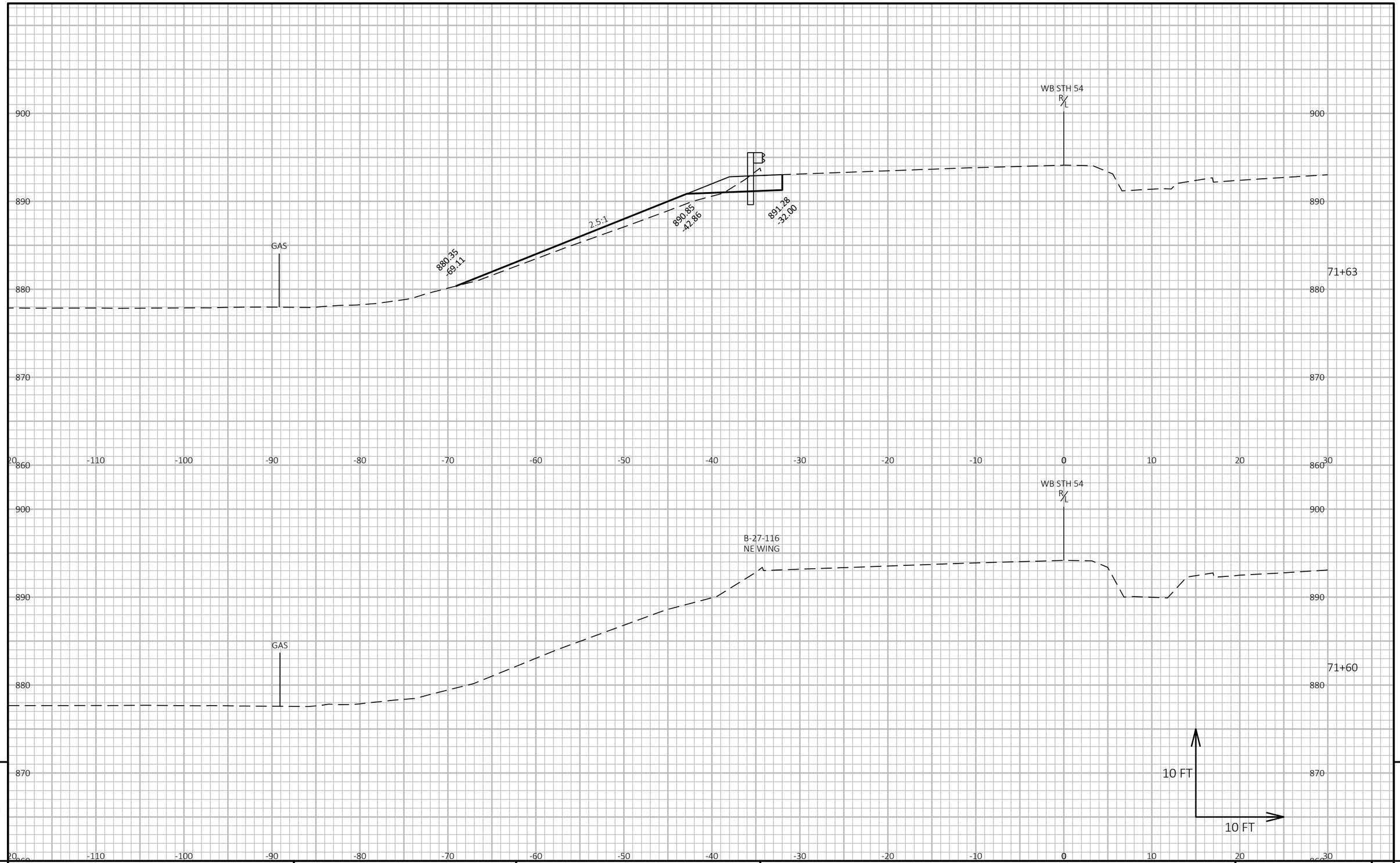
PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: RAMP 'B' GUARDRAIL	SHEET 267	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 14

PLOT DATE : 7/19/2021 5:16 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: WB STH 54 GUARDRAIL	SHEET 268	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 5

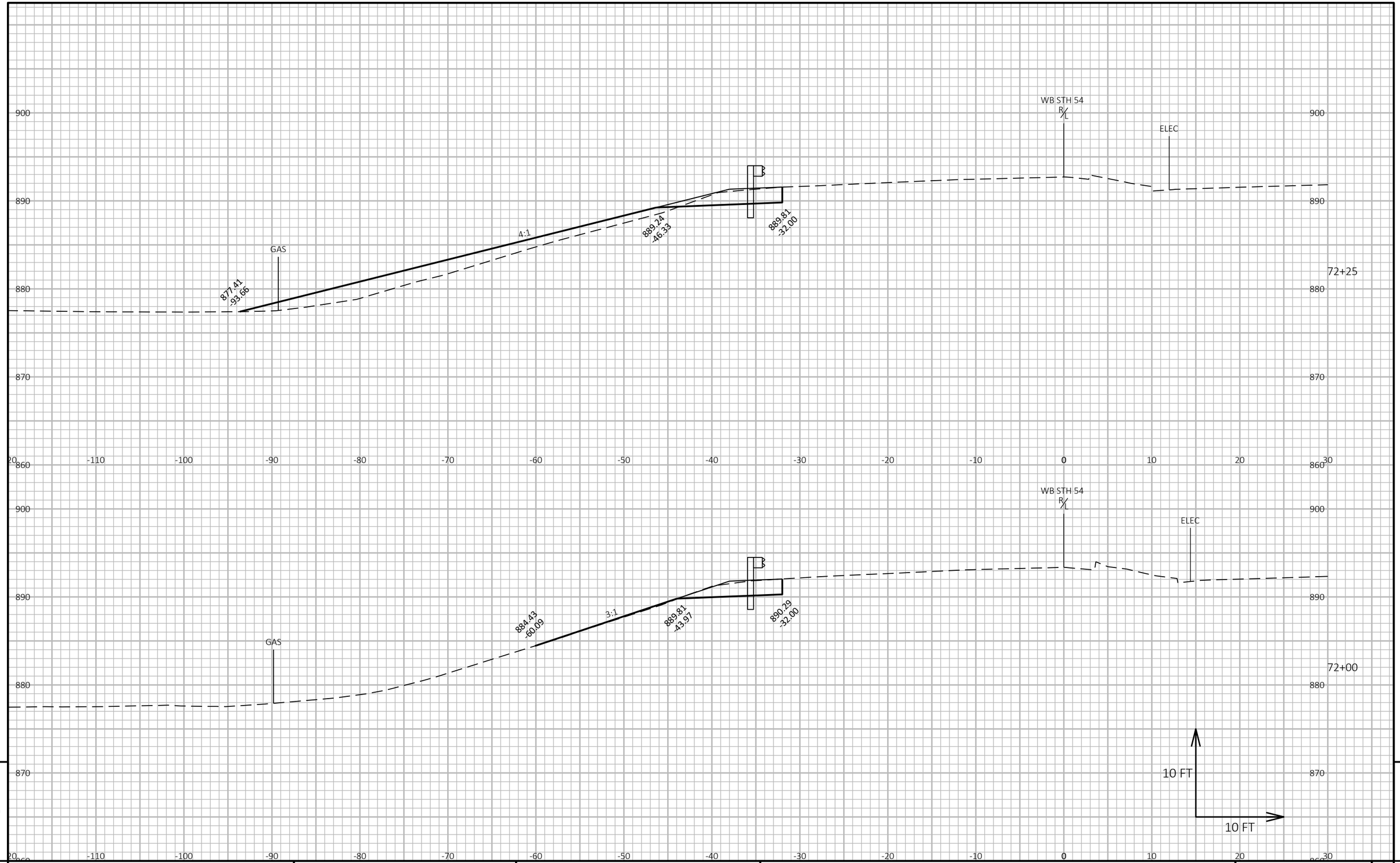
PLOT DATE : 7/19/2021 5:16 PM

PLOT BY : ANDERSON, THOMAS R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: WB STH 54 GUARDRAIL	SHEET 269	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 6

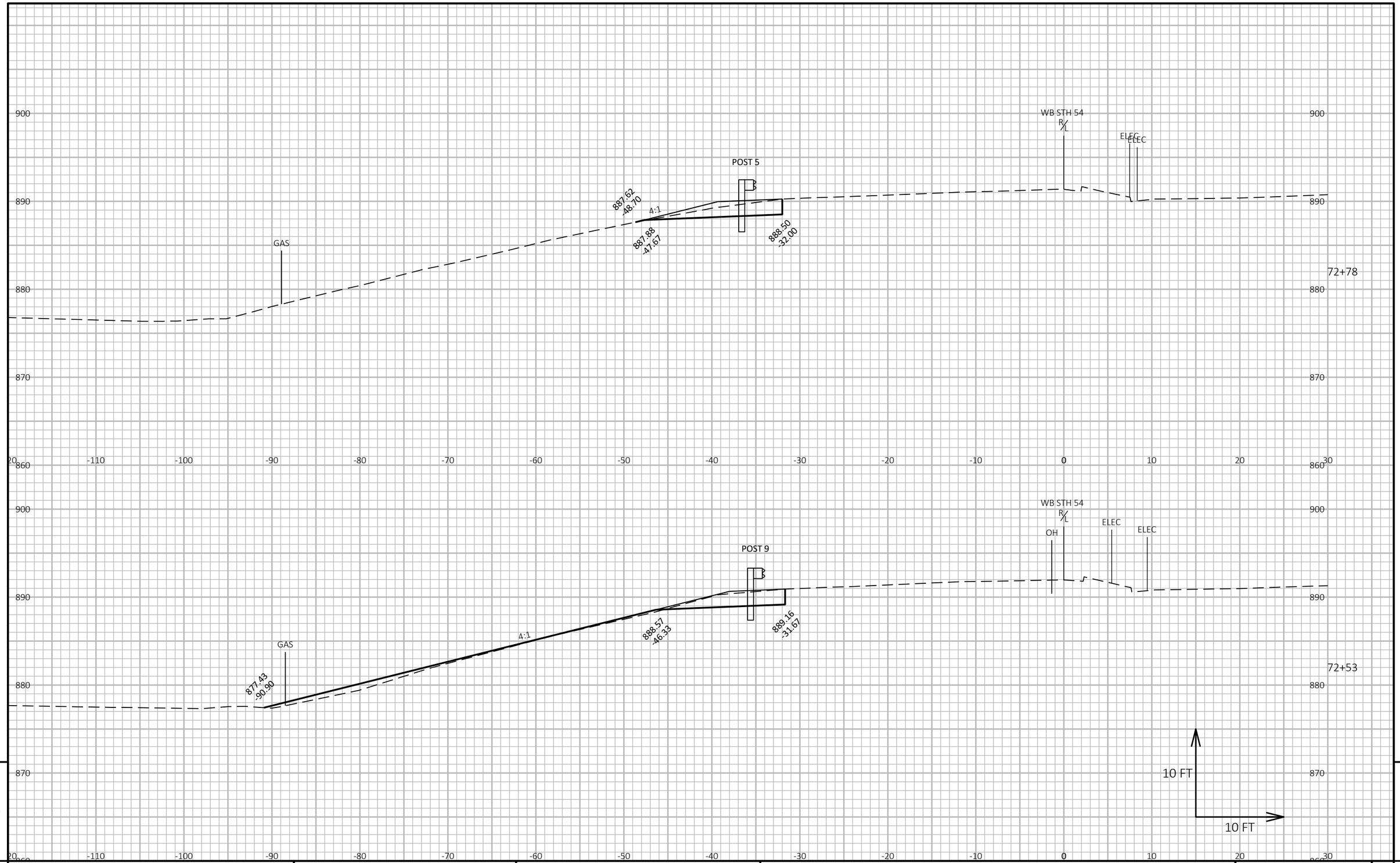
PLOT DATE : 7/19/2021 5:16 PM

PLOT BY : ANDERSON, THOMAS R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

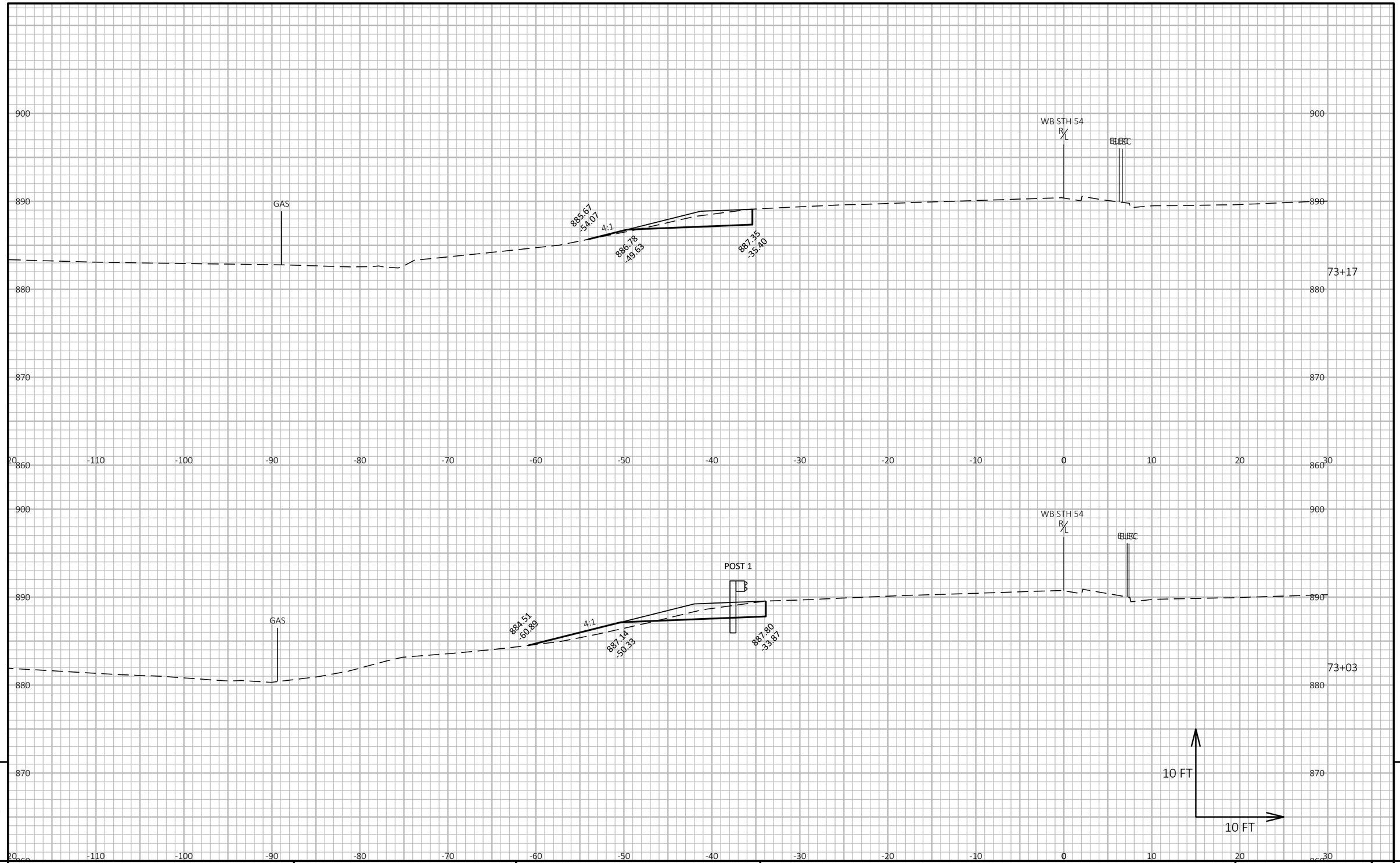
PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: WB STH 54 GUARDRAIL	SHEET 270	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 7

PLOT DATE : 7/19/2021 5:17 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

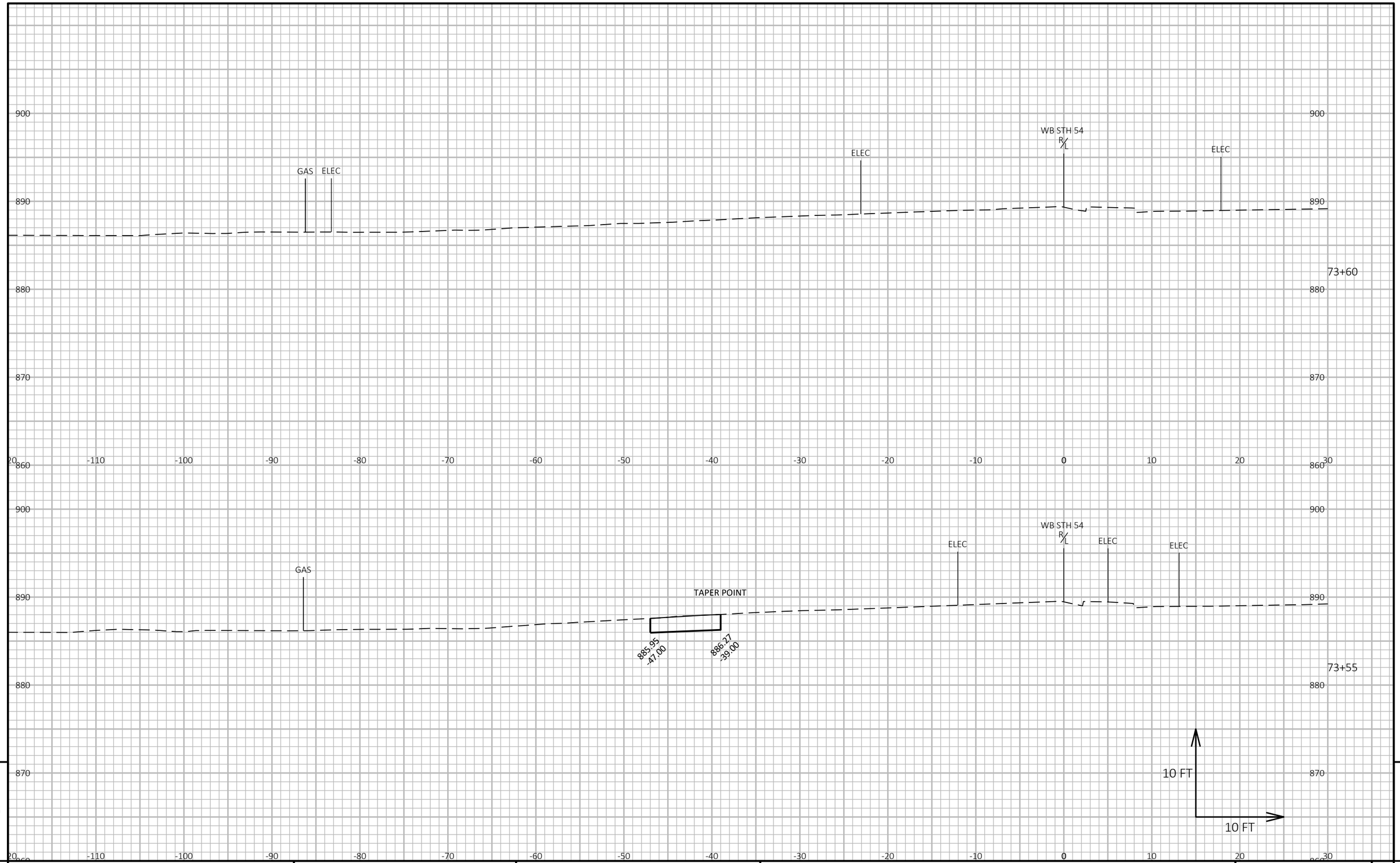
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PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: WB STH 54 GUARDRAIL	SHEET 271	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 8

PLOT DATE : 7/19/2021 5:17 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



9

9

PROJECT NO: 1023-00-79	HWY: IH 94	COUNTY: JACKSON	CROSS SECTIONS: WB STH 54 GUARDRAIL	SHEET 272	E

FILE NAME : C:\CIVIL 3D PROJECTS\10230009\SHEETSPLAN\090201_XS_CROSS_SECTIONS_FOR_BEAMGUARD.DWG
LAYOUT NAME - 9

PLOT DATE : 7/19/2021 5:18 PM

PLOT BY : ANDERSON, THOMAS R

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov

EAU

PROJECT ID: **1024-01-75**

WITH: 1023-00-79

COUNTY: **JACKSON**

NOVEMBER 2021

ORDER OF SHEETS

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

TOTAL SHEETS = 258



21

N

DESIGN DESIGNATION

A.A.D.T.	2024	=	27,200
A.A.D.T.	2044	=	32,000
D.H.V.		=	4,512
D.D.		=	58/42
T.		=	25.1%
DESIGN SPEED		=	70 MPH
ESALS		=	32,000,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

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

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

OSSEO - BLACK RIVER FALLS

CTH F TO BLACK RIVER (EAST/WEST BD)

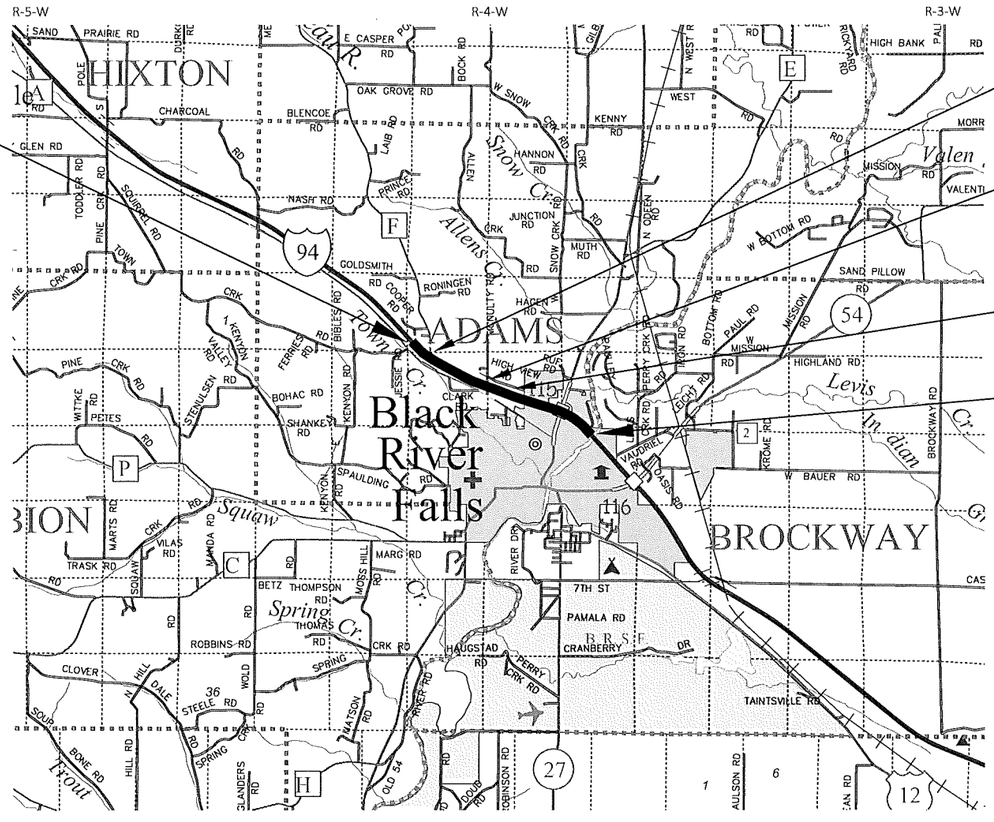
IH 94

JACKSON COUNTY

STATE PROJECT NUMBER
1024-01-75

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1024-01-75	WISC 2022017	1

BEGIN PROJECT
STA 1371+40'EB'
Y=107132.44
X= 78653.63
STA 1371+40'WB'
Y=107177.25
X= 78700.86



EXCEPTION TO NET C/L LENGTH
STA 1388+25'EB' - STA 1389+41'EB', B-27-29
STA 1387+56'WB' - STA 1388+75'WB', B-27-30

EXCEPTION TO NET C/L LENGTH
STA 1432+52'EB' - STA 1433+58'EB', B-27-31
STA 1432+26'WB' - STA 1433+31'WB', B-27-32

EQUATION STA 1450+36.54'EB' BK = STA 1435+74.04'EB' AHD
STA 1450+36.88'WB' BK = STA 1435+74.04'WB' AHD

END PROJECT
STA 1498+58'EB'
STA 1498+18'WB'

LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 2.644 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), JACKSON COUNTY, NAD 83 (1991), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (1991). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12B.

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	CHRISTINA MARTIN
Designer	TOM ANDERSON
Project Manager	JESSE LARSON
Regional Examiner	NW REGION
Regional Supervisor	NICOLE PASSUELLO

APPROVED FOR THE DEPARTMENT
DATE: 8/17/21 Nicole Passuello
(Signature)

E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\010201_TI.DWG PLOT DATE : 8/17/2021 8:00 AM PLOT BY : ANDERSON, THOMAS R PLOT NAME :

LIST OF STANDARD ABBREVIATIONS

ABUT.	ABUTMENT
AGG.	AGGREGATE
AH.	AHEAD
APPROX.	APPROXIMATE
A.E.W.	APRON ENDWALL
ASPH.	ASPHALTIC
A.D.T.	AVERAGE DAILY TRAFFIC
AZ.	AZIMUTH
BK.	BACK
BEG.	BEGIN
B.M.	BENCH MARK
C/L	CENTER LINE
CONC.	CONCRETE
CONST.	CONSTRUCTION
CO.	COUNTY
C.T.H.	COUNTY TRUNK HIGHWAY
X-SEC.	CROSS SECTION
CR.	CRUSHED
CFS	CUBIC FEET/SECOND
C.Y., CU. YD.	CUBIC YARD
CULV.	CULVERT
C.P.	CULVERT PIPE
D.O.T.	DEPARTMENT OF TRANSPORTATION
D.H.V.	DESIGN HOUR VOLUME
DIA.	DIAMETER
D.	DIRECTIONAL DISTRIBUTION
DISCH. OR DIS.	DISCHARGE
EA.	EACH
ELECT.	ELECTRIC
EL. OR ELEV.	ELEVATION
EMB.	EMBANKMENT
E.B.S.	EXCAVATION BELOW SUBGRADE
EXIST.	EXISTING
FERT.	FERTILIZE
F.E.	FIELD ENTRANCE
FIN.	FINISHED
FT.	FOOT
F.L.	FLOW LINE
GA.	GAUGE
HORIZ.	HORIZONTAL
CWT.	HUNDREDWEIGHT
INL.	INLET
LT.	LEFT
L.H.F.	LEFT-HAND FORWARD
LIN.	LINEAR
LIN. FT.	LINEAR FOOT
L.S.	LUMP SUM
MAX.	MAXIMUM
MI.	MILE
MISC.	MISCELLANEOUS
N.E.	NORTH EAST
N.W.	NORTH WEST
PAV'T	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.O.T.	POINT ON TANGENT
LB.	POUND
P.E.	PRIVATE ENTRANCE
PROJ.	PROJECT
R.	RANGE
REQ'D	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT-HAND FORWARD
R/W	RIGHT OF WAY
RD.	ROAD
SHR.	SHRINKAGE
SL.	SLOPE
STD.	STANDARD
S.D.D.	STANDARD DETAIL DRAWINGS
S.T.H.	STATE TRUNK HIGHWAY
STA.	STATION
S.P.P.A.	STRUCTURAL PLATE PIPE ARCH
STRUCT.	STRUCTURE
SURF.	SURFACE
TEL.	TELEPHONE
TN.	TOWN
T.	TRUCKS (PERCENT OF)
UNCL.	UNCLASSIFIED
U.G.	UNDERGROUND
V.	VELOCITY OR DESIGN SPEED
V.C.	VERTICAL CURVE

UTILITIES

COMMUNICATIONS

AT&T LEGACY (COMMUNICATION LINE)
KENNETH M. NINE
110 N MAIN ST
CULVER, IN 46511
PHONE: 574-904-6336
EMAIL: KNINE@JMCEAINC.COM

CENTURYLINK (COMMUNICATION LINE)
BRIAN STELPLUGH
333 NORTH FRONT STREET
LA CROSSE, WI 54601
PHONE: 608-780-1238
EMAIL: BRIAN.STELPLUGH@LUMEN.COM

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

GAS & PETROLEUM

NORTHERN NATURAL GAS CO (GAS/PETROLEUM)
JOHN DELASKE
4685 212th STREET W
PO BOX 188
FARMINGTON, MN 55024
PHONE: 402-530-3420
EMAIL: JOHN.DELASKE@NNGCO.COM

WE ENERGIES (GAS/PETROLEUM)
JEREMY SLOWINSKI
1921 8TH STREET SOUTH
WISCONSIN RAPIDS, WI 54494
PHONE: 715-418-1831
EMAIL: JEREMY.SLOWINSKI@WE-ENERGIES.COM

WATER

BLACK RIVER FALLS UTILITIES (WATER)
BRFMU WATER LEAD OPERATOR
119 N WATER STREET
BLACK RIVER FALLS, WI 54615
PHONE: 715-299-5861
EMAIL: BRFWATER@WPPIENERGY.ORG

ELECTRICITY

BLACK RIVER FALLS UTILITIES (ELECTRICITY)
KEVIN LAVALLEY
119 N WATER STREET
BLACK RIVER FALLS, WI 54615
PHONE: 715-896-0511
EMAIL: KLAVALLEY@WPPIENERGY.ORG

JACKSON ELECTRIC COOPERATIVE (ELECTRICITY)
KEVIN BABCOCK
N6868 CO HWY F
PO BOX 546
BLACK RIVER FALLS, WI 54615
PHONE: 715-284-5385
EMAIL: KEVINB@JACKELEC.COM

ELECTRICITY - TRANSMISSION

ATC MANAGEMENT INC (ELECTRICITY - TRANSMISSION)
DOUG VOSBERG
2489 RINDEN ROAD
COTTAGE GROVE, WI 53527
PHONE: 608-877-7650
EMAIL: DVOSBERG@ATCLLC.COM

XCEL ENERGY (ELECTRICITY - TRANSMISSION)
MITCHELL DIENGER
414 NICOLLET MALL 5TH FLOOR
MINNEAPOLIS, MN 55401
PHONE: 608-386-2233
EMAIL: MITCHELL.A.DIENGER@XCELENERGY.COM
COPY ALL XCEL ENERGY CORRESPONDENCE TO:
CORISSA SEELY
1414 WEST HAMILTON AVENUE
PO BOX 0008
EAU CLAIRE, WI 54702-0008
PHONE: 715-737-4097
EMAIL: CORISSA.E.SEELY@XCELENERGY.COM

GENERAL NOTES

HORIZONTAL CONTROL POINTS AND ANY OTHER SURVEY INFORMATION WILL BE PROVIDED BY THE NORTHWEST REGION TECHNICAL SERVICES UPON REQUEST.

CURVE DATA IS BASED ON THE ARC DEFINITION.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL DIGGERS HOTLINE PRIOR TO BEGINNING WORK OPERATIONS.

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

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE SUGGESTED LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

WETLANDS MAY EXIST IN LOCATIONS THAT ARE NOT SHOWN ON THE PLANS. DO NOT STAGE IN OR DISTURB WETLAND AREAS.

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

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

WISCONSIN DNR CONTACT

BRAD BETTHAUSER
DEPARTMENT OF NATURAL RESOURCES
WISCONSIN RAPIDS SERVICE CENTER
473 GRIFFITH DRIVE
WISCONSIN RAPIDS, WI 54494
715-421-7851

WISDOT REGION ENVIR COORD

HANNAH FREDERICKSON
WISDOT NW REGION
718 W CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
715-817-0407

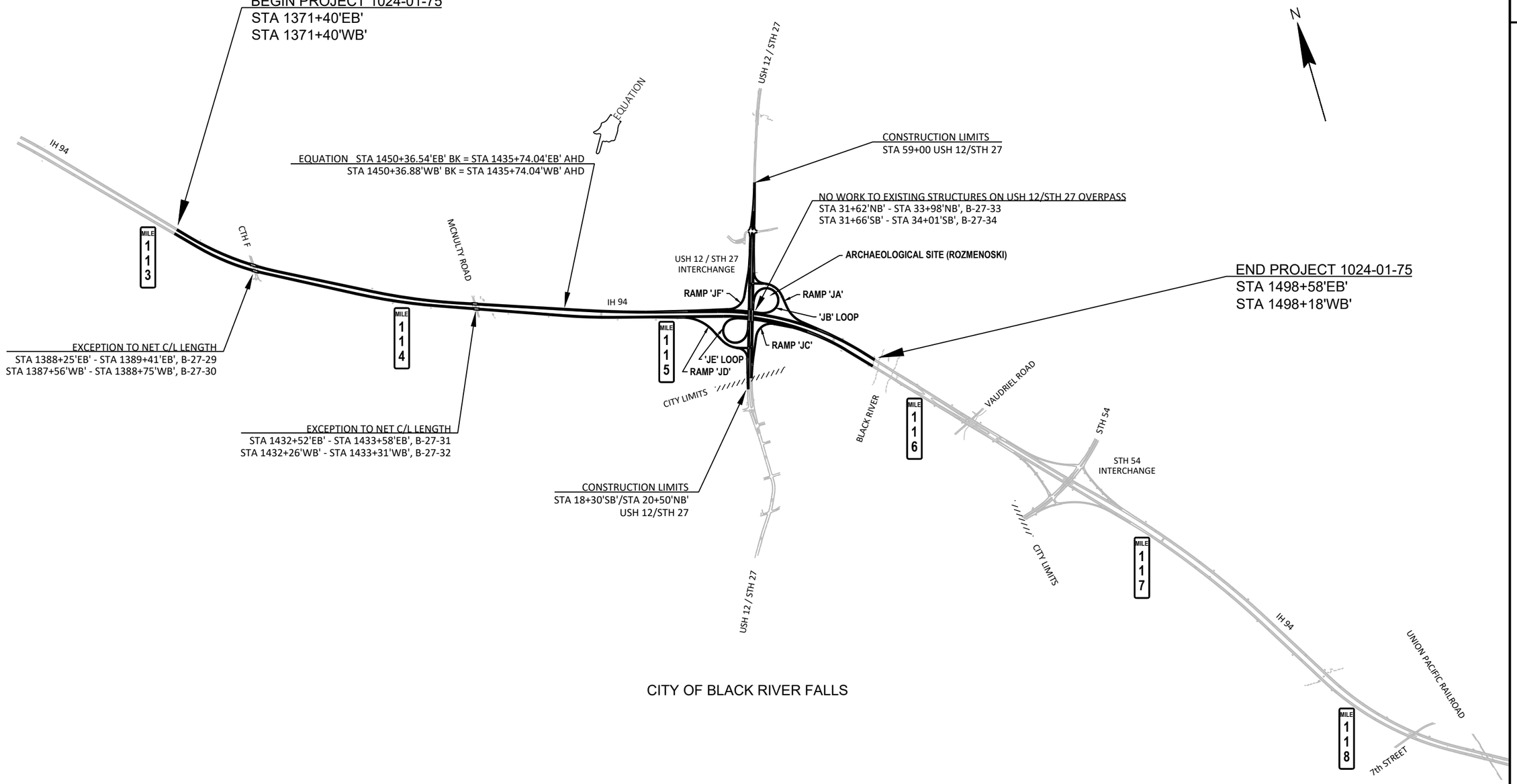
WISDOT STORMWATER ENGR & EC

DAVID LARSON
WISDOT NW REGION
718 W CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
715-836-2067

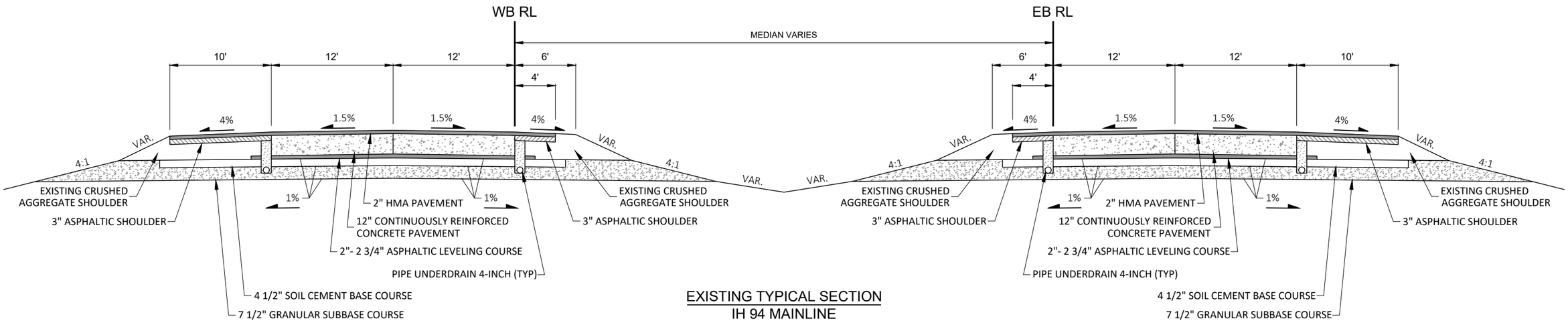
ORDER OF SECTION 2 SHEETS

PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PLAN DETAIL - ARCHAEOLOGICAL SITE
PERMANENT SIGNING
PAVEMENT MARKING
TRAFFIC CONTROL
ALIGNMENT DATA
SUPERELEVATION DATA

2

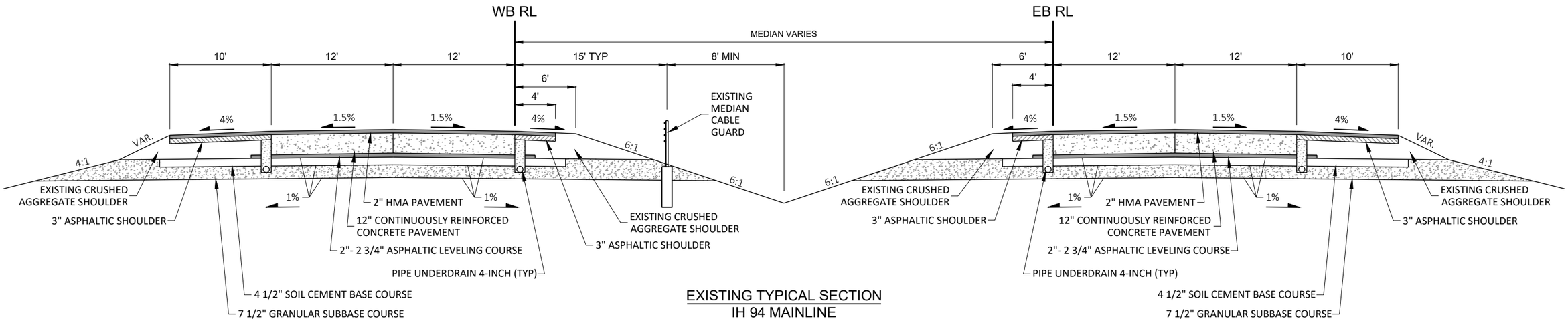


PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PROJECT OVERVIEW	SHEET 3	E



EXISTING TYPICAL SECTION
IH 94 MAINLINE

STA 1371+40'EB' - STA 1443+44'EB'
STA 1488+97'EB' - STA 1498+58'EB
STA 1371+40'WB' - STA 1443+38'WB'
STA 1488+80'WB' - STA 1498+18'WB'



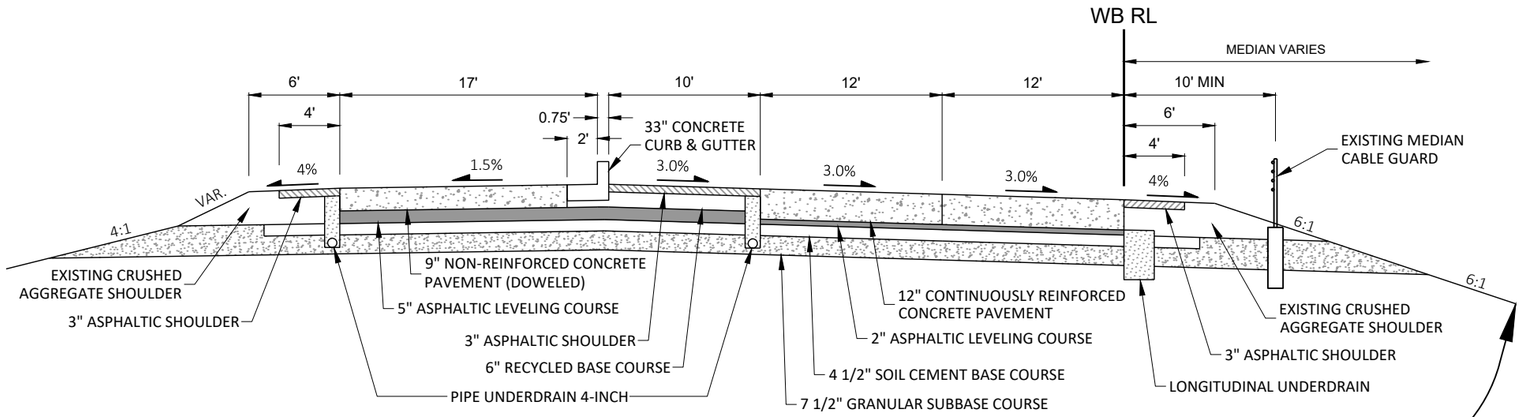
EXISTING TYPICAL SECTION
IH 94 MAINLINE

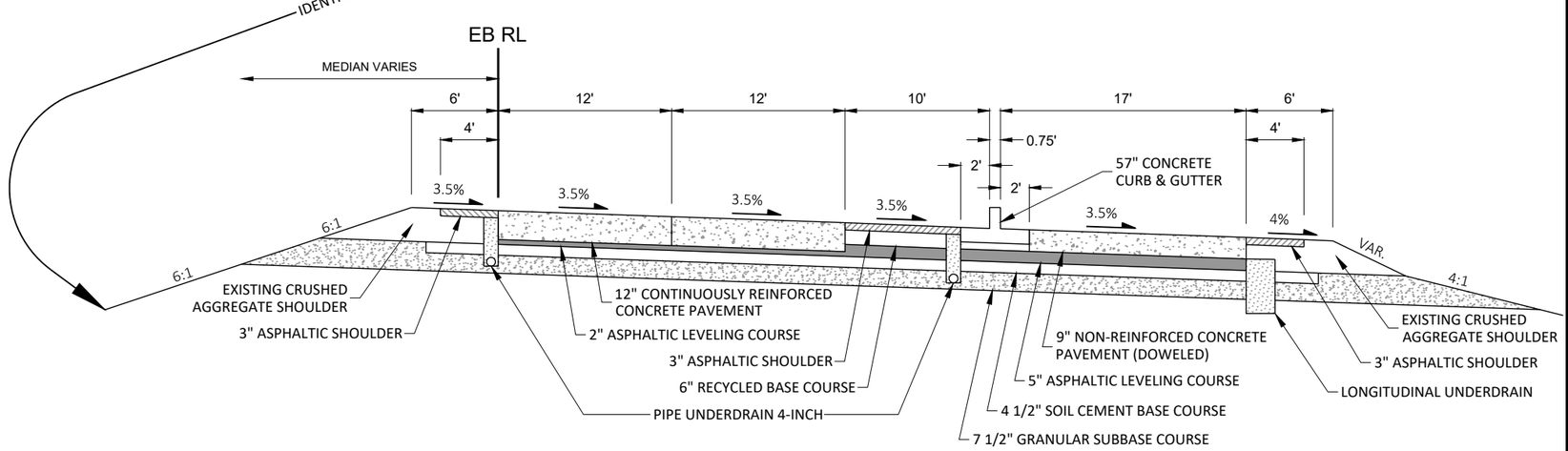
STA 1443+44'EB' - STA 1470+50'EB'
STA 1474+52'EB' - STA 1488+97'EB'
STA 1443+38'WB' - STA 1470+14'WB'
STA 1474+14'WB' - STA 1488+80'WB'

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	EXISTING TYPICAL SECTIONS	SHEET 4	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\020315_TS_EXISTING_TYPICALS.DWG
LAYOUT NAME - 01
PLOT DATE : 7/19/2021 5:25 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



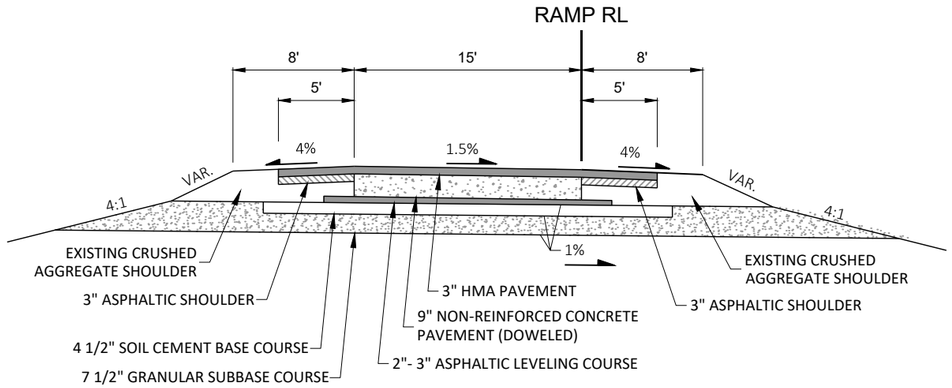


EXISTING TYPICAL SECTION
IH 94 MAINLINE

STA 1470+50'EB' - STA 1474+52'EB'
STA 1470+14'WB' - STA 1474+14'WB'

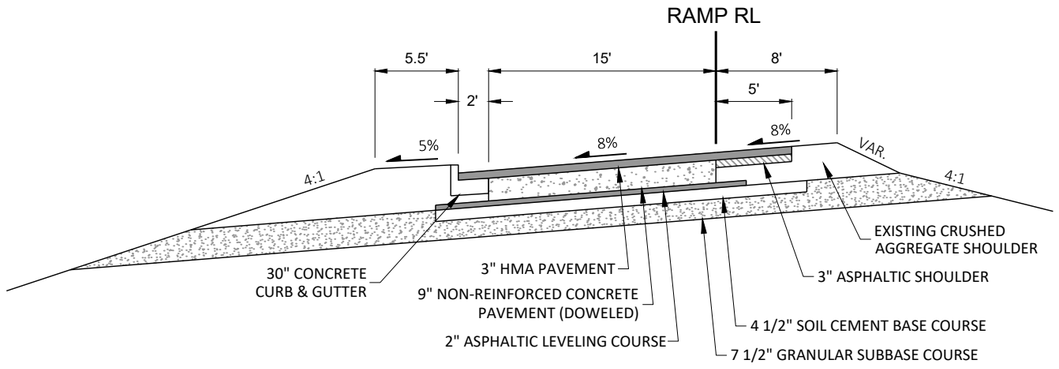
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2



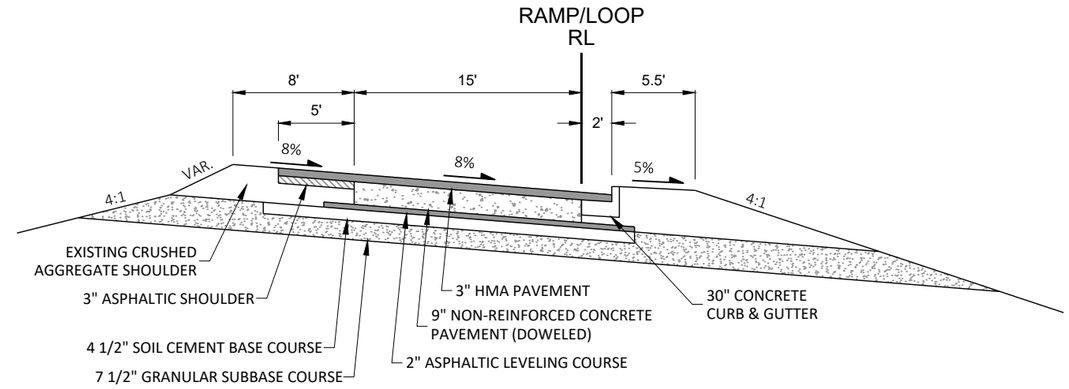
EXISTING TYPICAL SECTION
USH 12 / STH 27 RAMP

STA 66+78.42'JC' - STA 72+44.50'JC'
STA 59+07.65'JD' - 68+13'JD'
72+45'JD' - 74+08.48'JD'



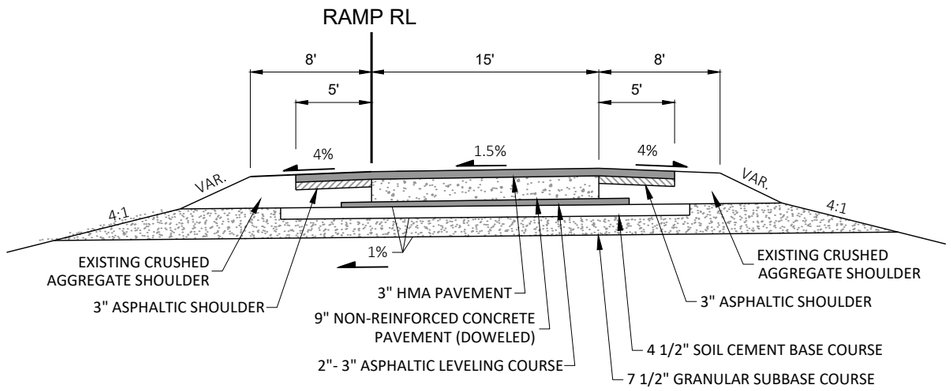
EXISTING TYPICAL SECTION
USH 12 / STH 27 RAMP

STA 68+13'JD' - STA 72+45'JD'



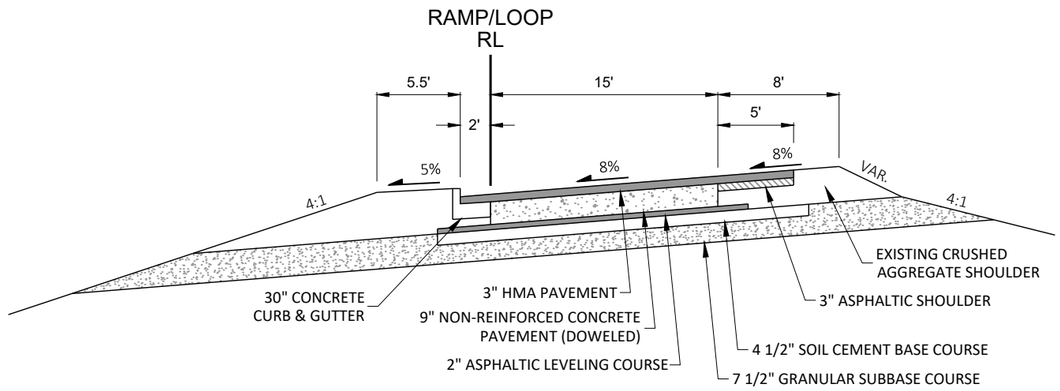
EXISTING TYPICAL SECTION
USH 12 / STH 27 RAMP/LOOP

STA 72+44.50'JC' - STA 77+22.91'JC'
STA 72+03.77'JDD' - 74+83.54'JDD'
STA 58+19.43'JE' - STA 70+23.70'JE'



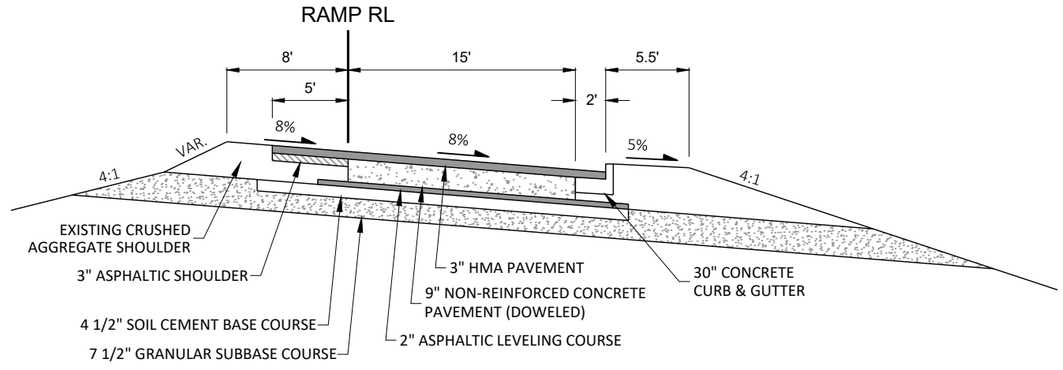
EXISTING TYPICAL SECTION
USH 12 / STH 27 RAMP

STA 68+52.71'JA' - STA 70+75'JA'
STA 75+56'JA' - STA 86+16.58'JA'
STA 71+95.33'JF' - STA 77+89.27'JF'



EXISTING TYPICAL SECTION
USH 12 / STH 27 RAMP/LOOP

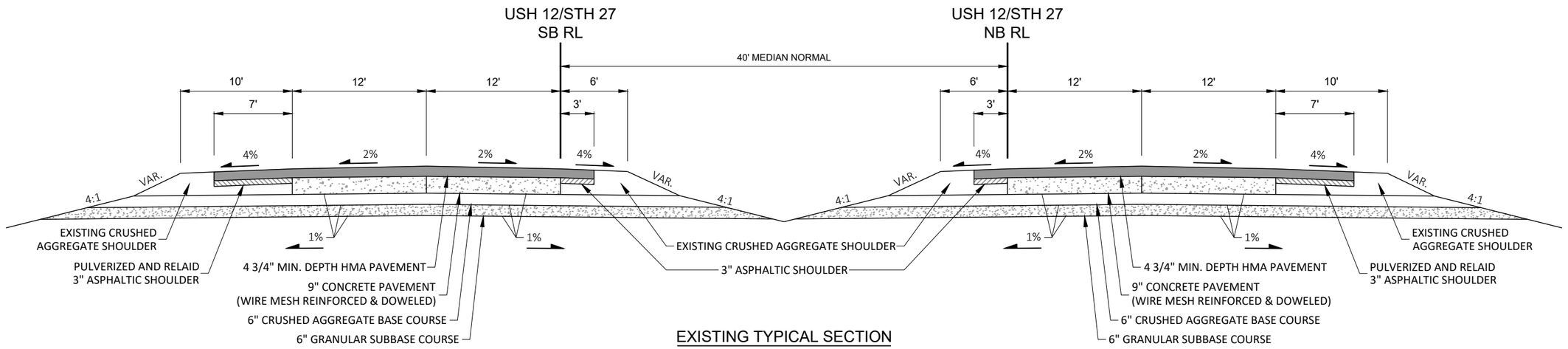
STA 67+77.67'JAA' - STA 70+62.07'JAA'
STA 73+62.39'JB' - STA 86+30.26'JB'
STA 67+60.38'JF' - STA 71+95.33'JF'



EXISTING TYPICAL SECTION
USH 12 / STH 27 RAMP

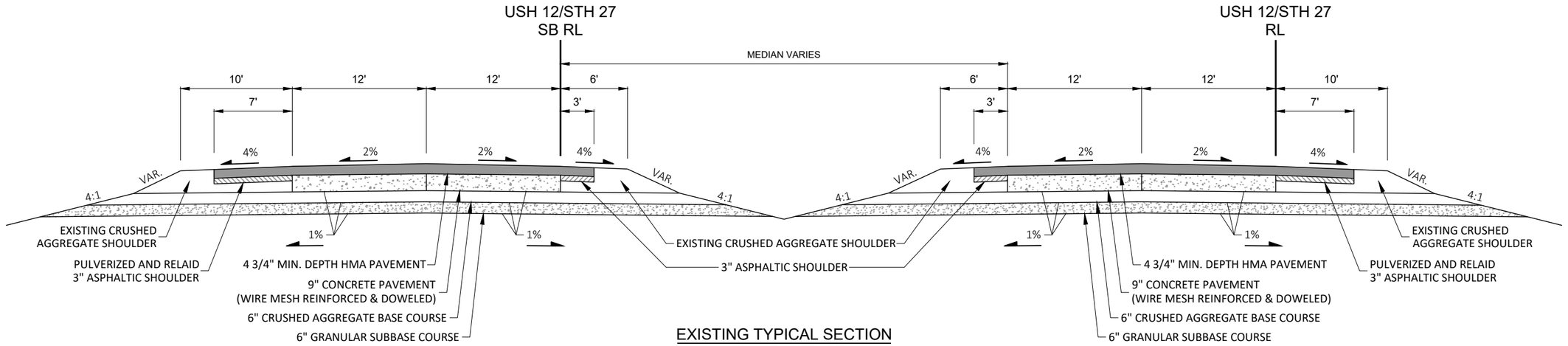
STA 70+75'JA' - STA 75+56'JA'

2



EXISTING TYPICAL SECTION
USH 12 / STH 27

STA 20+50'NB' - STA 30+97NB'
STA 34+15'NB' - STA 47+00'NB
STA 18+30'SB' - STA 30+19'SB'
STA 34+21'SB' - STA 47+00'SB'

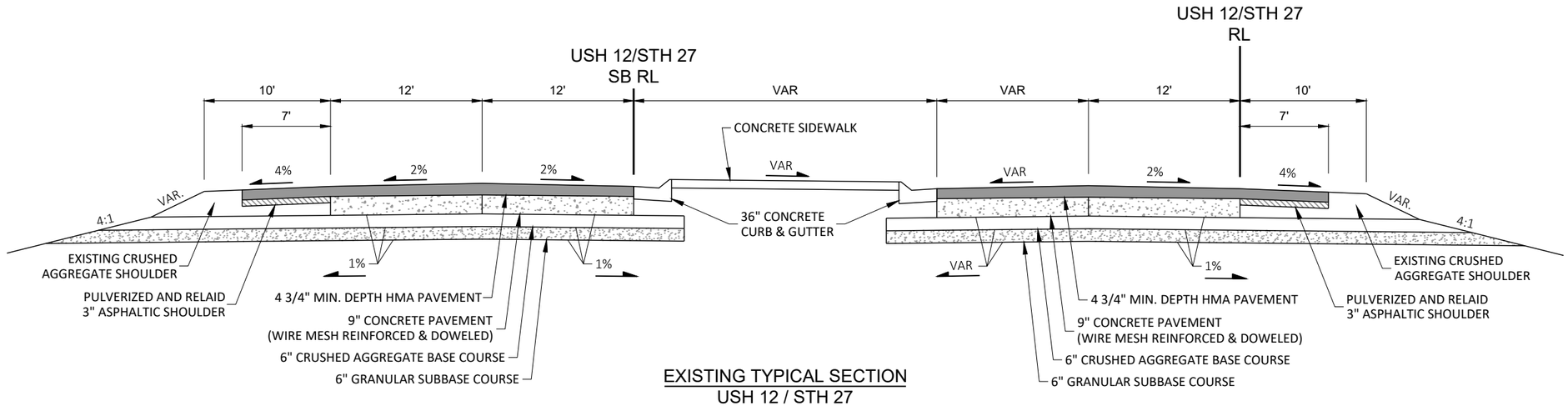


EXISTING TYPICAL SECTION
USH 12 / STH 27

STA 47+00 - STA 50+50

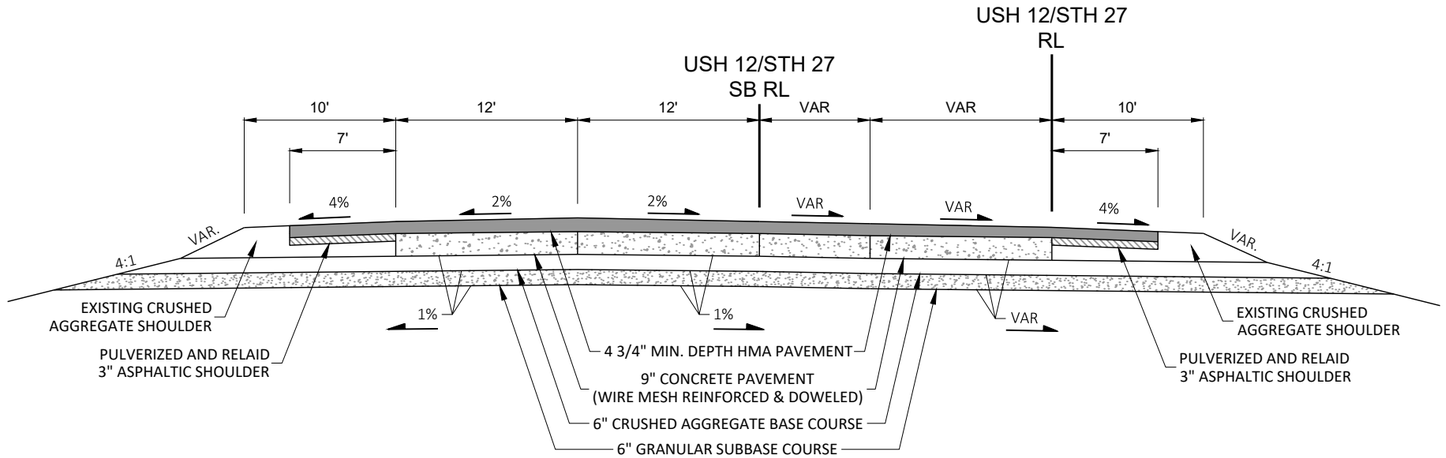
PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	EXISTING TYPICAL SECTIONS	SHEET 8	E

2



EXISTING TYPICAL SECTION
USH 12 / STH 27

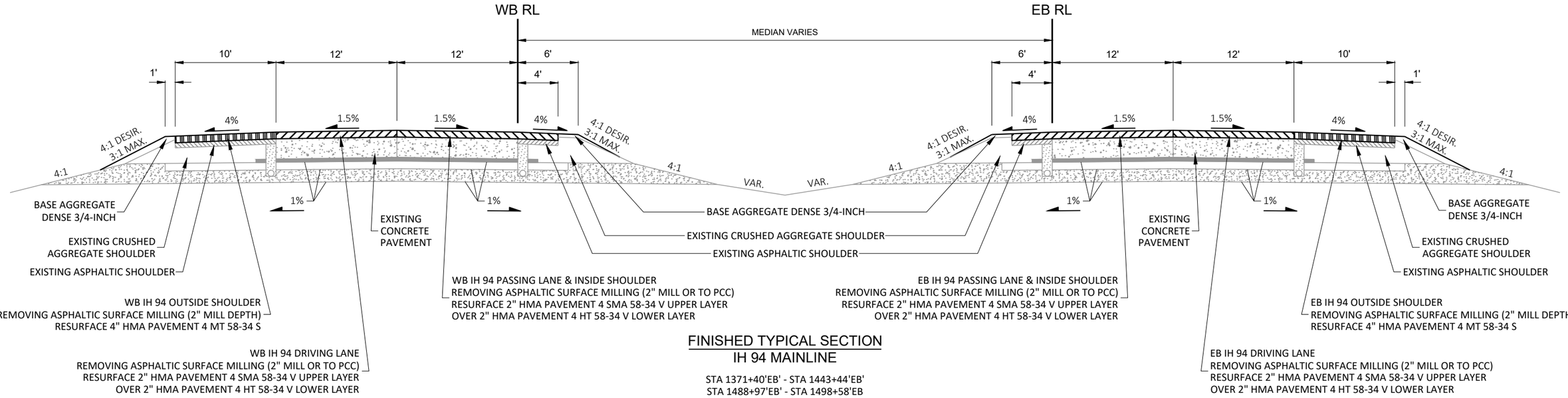
STA 50+50 - STA 53+75



EXISTING TYPICAL SECTION
USH 12 / STH 27

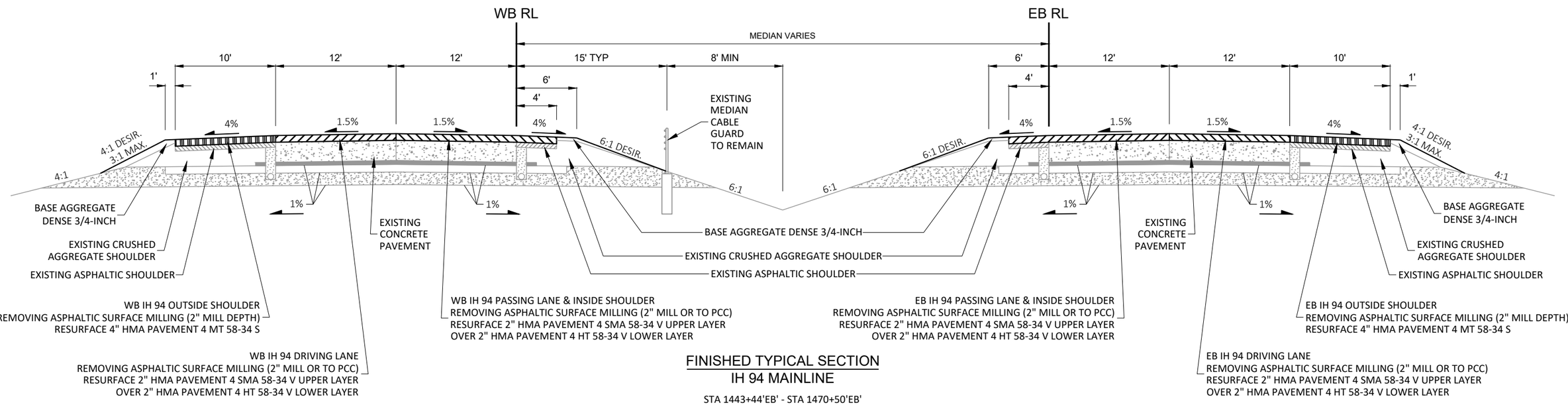
STA 53+75 - STA 59+00

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	EXISTING TYPICAL SECTIONS	SHEET 9	E



FINISHED TYPICAL SECTION
IH 94 MAINLINE

STA 1371+40'EB' - STA 1443+44'EB'
STA 1488+97'EB' - STA 1498+58'EB
STA 1371+40'WB' - STA 1443+38'WB'
STA 1488+80'WB' - STA 1498+18'WB'

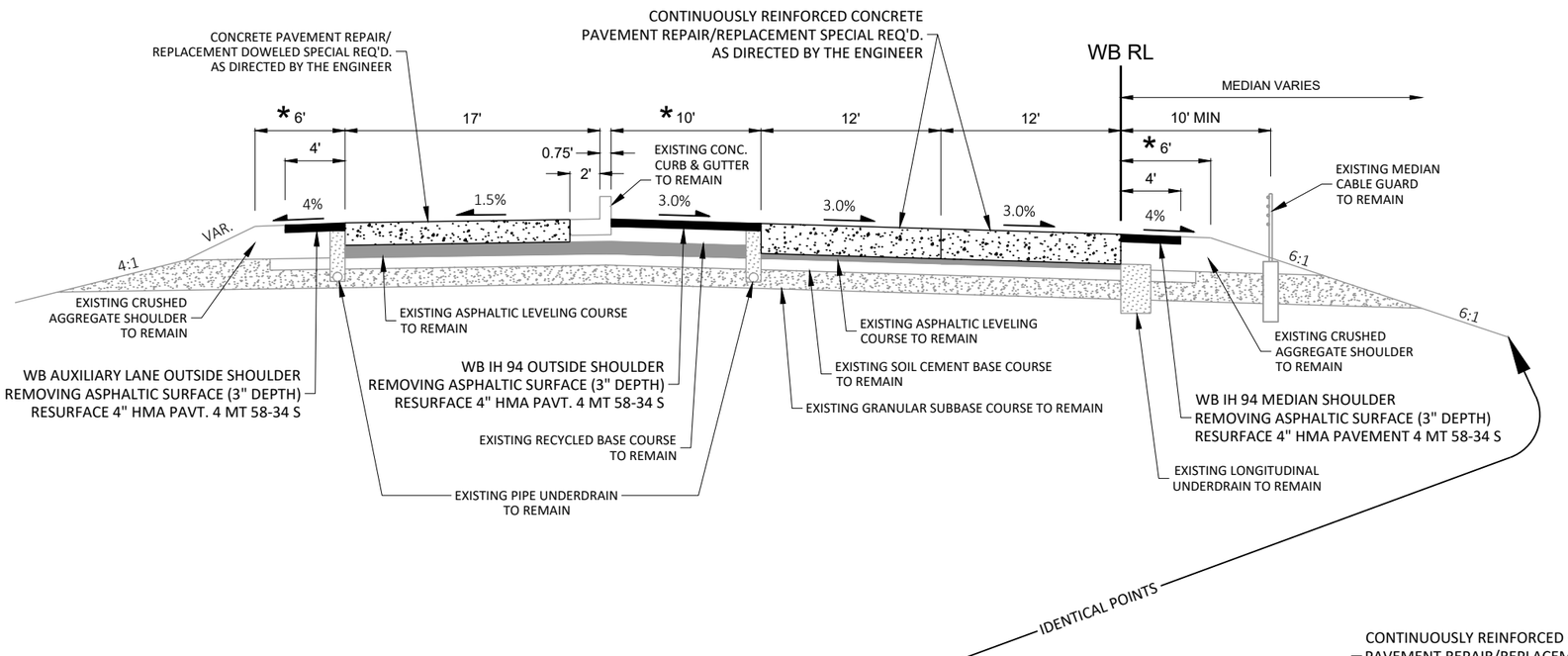


FINISHED TYPICAL SECTION
IH 94 MAINLINE

STA 1443+44'EB' - STA 1470+50'EB'
STA 1474+52'EB' - STA 1488+97'EB'
STA 1443+38'WB' - STA 1470+14'WB'
STA 1474+14'WB' - STA 1488+80'WB'

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	FINISHED TYPICAL SECTIONS	SHEET 10	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\020355_TS_FINISHED_TYPICALS.DWG
LAYOUT NAME - 01
PLOT DATE : 7/19/2021 5:26 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



NOTES:

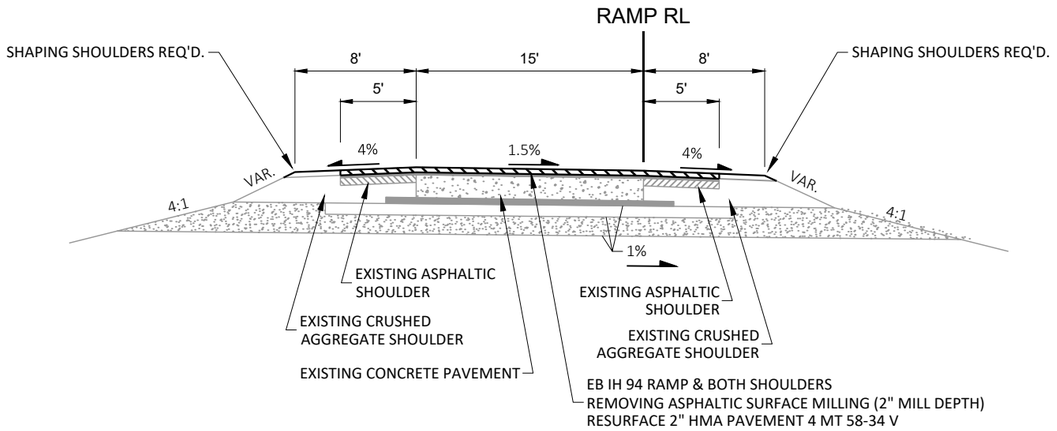
* ITEM 211.0400, PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS, REQ'D. (THIS ITEM INCLUDES SHAPING THE FINISHED AGGREGATE SHOULDERS WHERE NECESSARY)

FINISHED TYPICAL SECTION
IH 94 MAINLINE

STA 1470+50'EB' - STA 1474+52'EB'
STA 1470+14'WB' - STA 1474+14'WB'

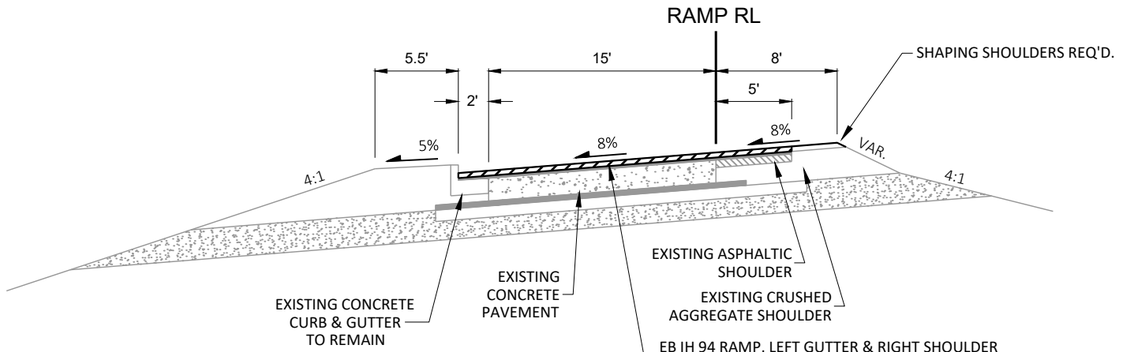
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2



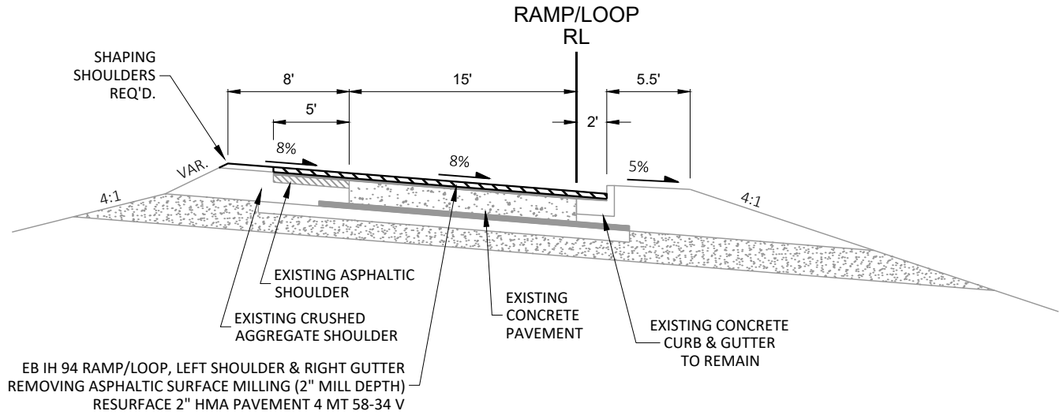
FINISHED TYPICAL SECTION
USH 12 / STH 27 RAMP

STA 66+78.42'JC' - STA 72+44.50'JC'
STA 59+07.65'JD' - 68+13'JD'
72+45'JD' - 74+08.48'JD'



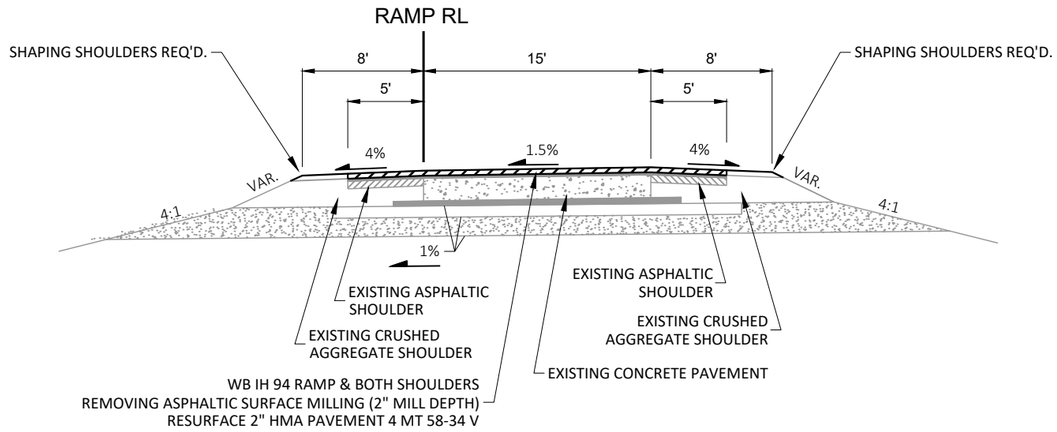
FINISHED TYPICAL SECTION
USH 12 / STH 27 RAMP

STA 68+13'JD' - STA 72+45'JD'



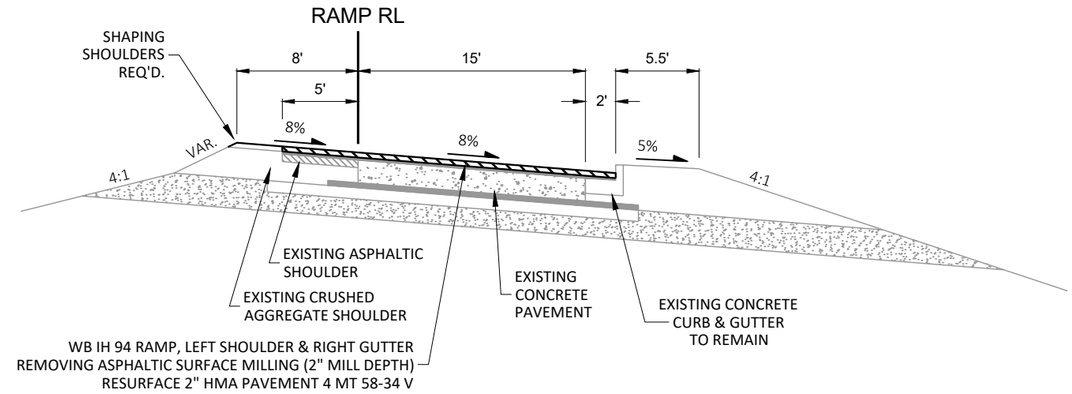
FINISHED TYPICAL SECTION
USH 12 / STH 27 RAMP/LOOP

STA 72+44.50'JC' - STA 77+22.91'JC'
STA 72+03.77'JDD' - 74+83.54'JDD'
STA 58+19.43'JE' - STA 70+23.70'JE'



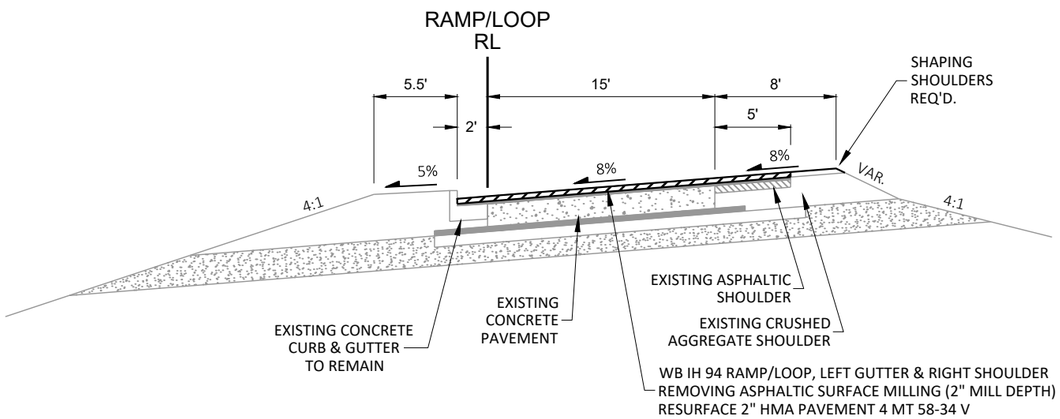
FINISHED TYPICAL SECTION
USH 12 / STH 27 RAMP

STA 68+52.71'JA' - STA 70+75'JA'
STA 75+56'JA' - STA 86+16.58'JA'
STA 71+95.33'JF' - STA 77+89.27'JF'



FINISHED TYPICAL SECTION
USH 12 / STH 27 RAMP

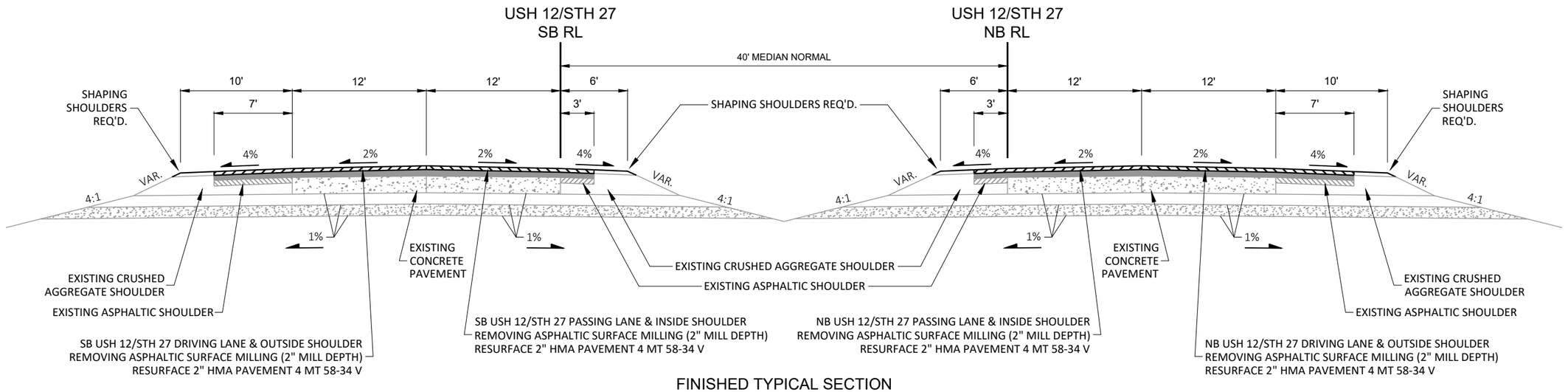
STA 70+75'JA' - STA 75+56'JA'



FINISHED TYPICAL SECTION
USH 12 / STH 27 RAMP/LOOP

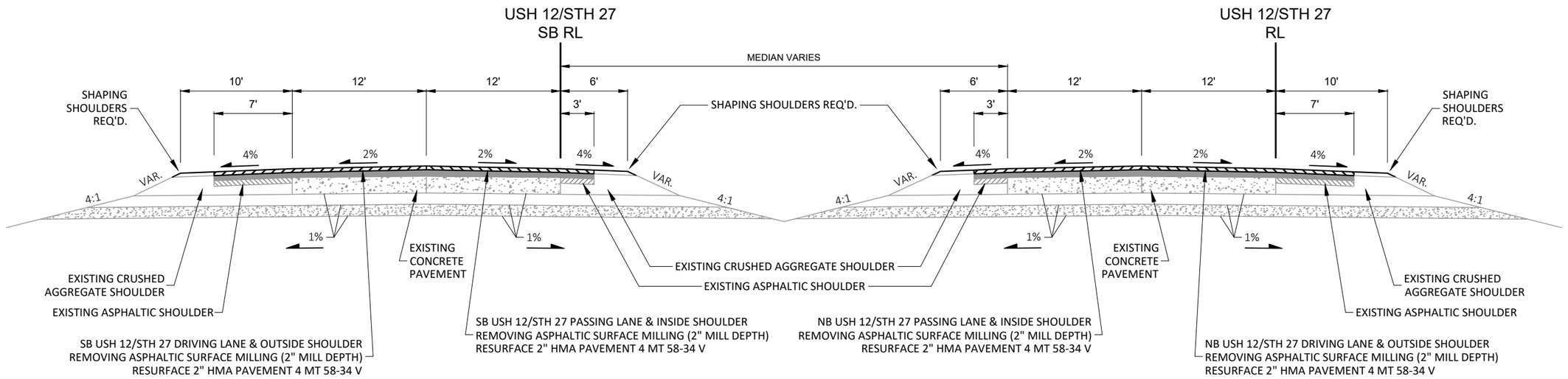
STA 67+77.67'JAA' - STA 70+62.07'JAA'
STA 73+62.39'JB' - STA 86+30.26'JB'
STA 67+60.38'JF' - STA 71+95.33'JF'

2



FINISHED TYPICAL SECTION
USH 12 / STH 27

STA 20+50'NB' - STA 30+97'NB'
STA 34+15'NB' - STA 47+00'NB
STA 18+30'SB' - STA 30+19'SB'
STA 34+21'SB' - STA 47+00'SB'

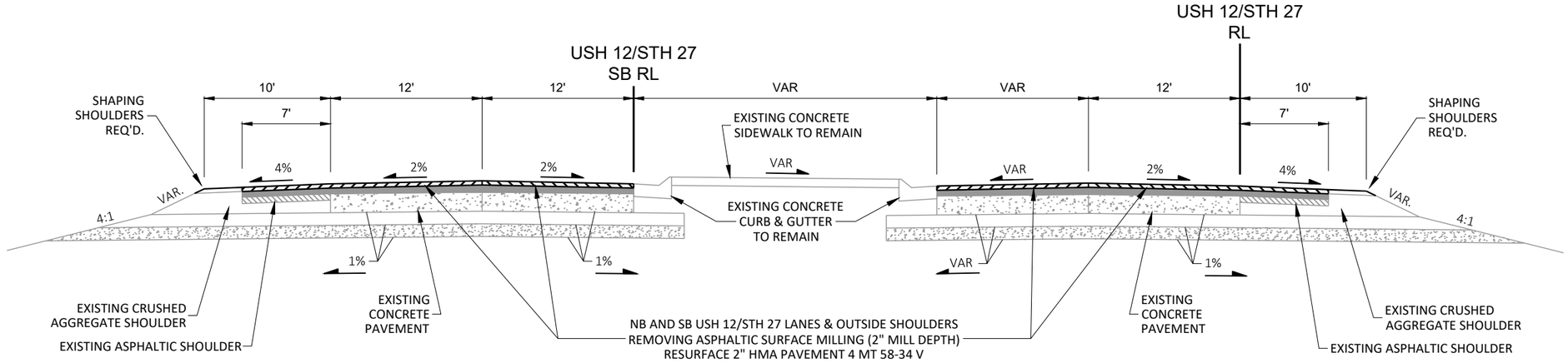


FINISHED TYPICAL SECTION
USH 12 / STH 27

STA 47+00 - STA 50+50

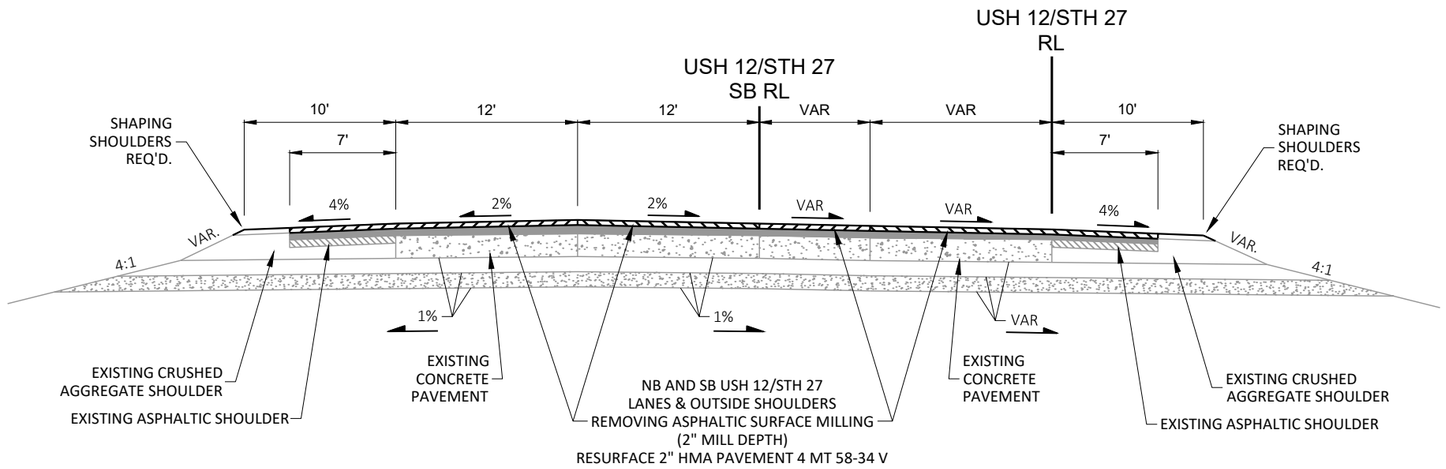
PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	FINISHED TYPICAL SECTIONS	SHEET 14	E

2



FINISHED TYPICAL SECTION
USH 12 / STH 27

STA 50+50 - STA 53+75



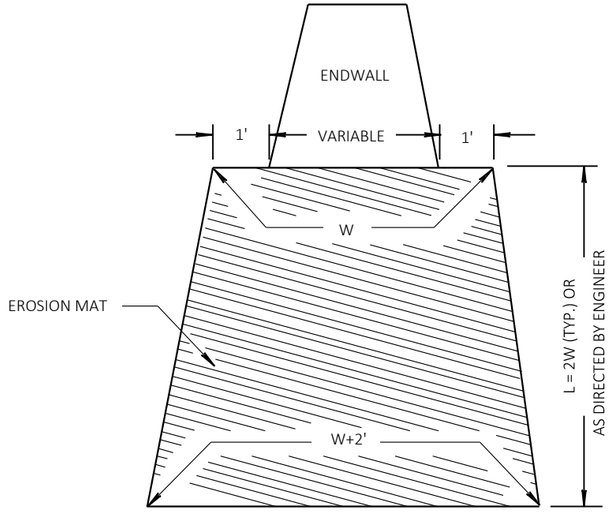
FINISHED TYPICAL SECTION
USH 12 / STH 27

STA 53+75 - STA 59+00

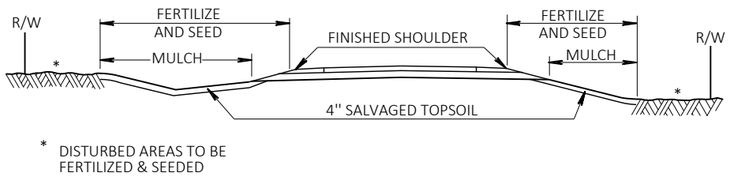
RUNOFF COEFFICIENT TABLE

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

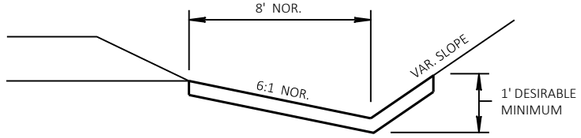
TOTAL PROJECT AREA = 140 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 40 ACRES



EROSION MAT TREATMENT AT CULVERTS

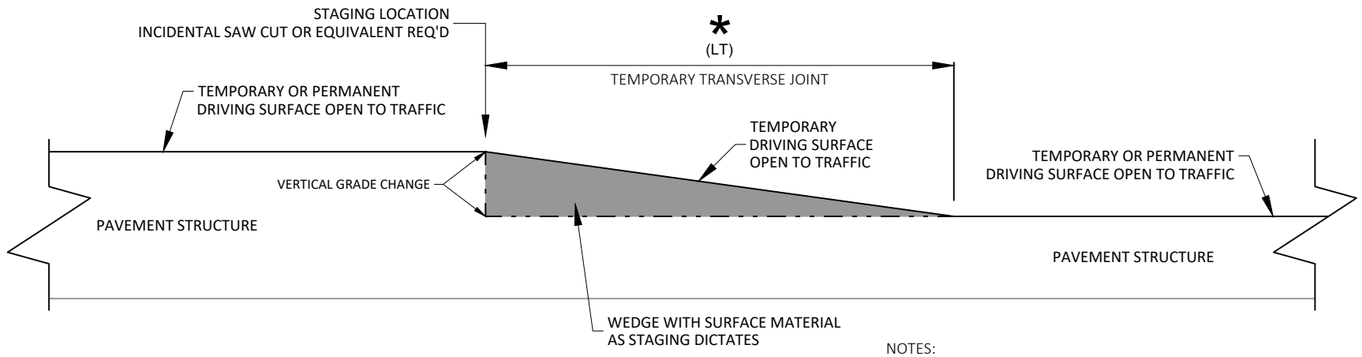


DETAIL FOR FINISHING ITEMS



EROSION MAT DETAIL FOR DITCHES

2



* (LT) = 25 FT PER INCH OF VERTICAL GRADE CHANGE FOR IH 94 TRAFFIC, OR AS DIRECTED BY THE ENGINEER.
(LT) = 20 FT PER INCH OF VERTICAL GRADE CHANGE FOR USH 12/STH 27 TRAFFIC, OR AS DIRECTED BY THE ENGINEER.

NOTES:

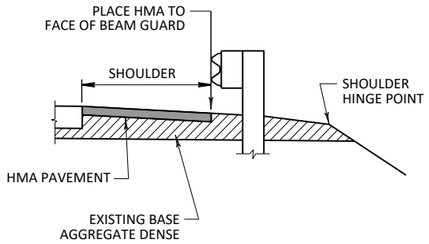
THE LOCATION AND FREQUENCY OF TEMPORARY TRANSVERSE JOINTS WILL BE DICTATED BY THE CONTRACTOR'S OPERATIONS.

DO NOT OPEN TO TRAFFIC ANY TRAVEL LANE THAT HAS A MILLED SURFACE.

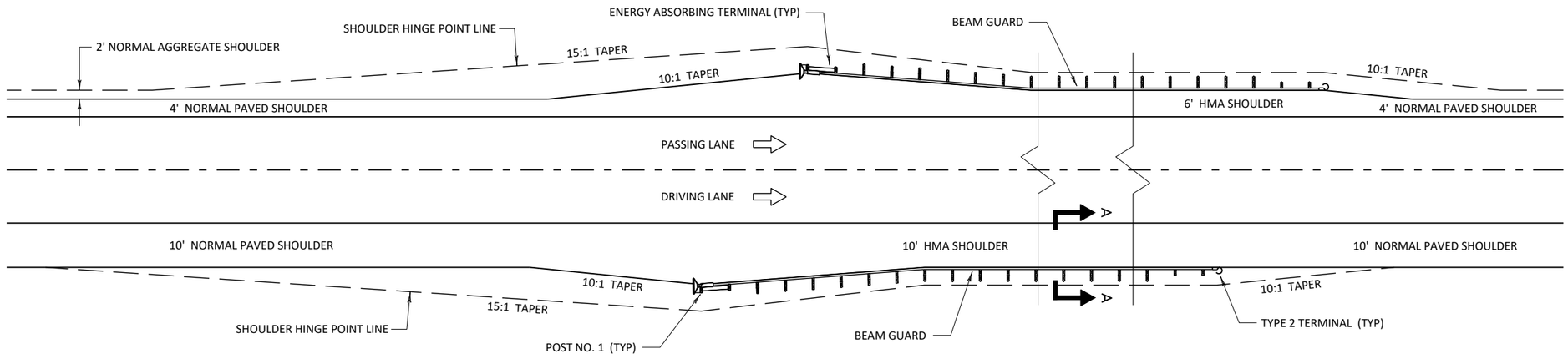
PRIOR TO SUBSEQUENT MILLING/PAVING OPERATIONS, MILL AND REMOVE THE TEMPORARY TRANSVERSE JOINT TO A TRUE LINE WITH A VERTICAL FACE PERPENDICULAR TO THE REMAINING PAVEMENT SURFACE, PAID FOR UNDER THE ITEM "MILLING AND REMOVING TEMPORARY TRANSVERSE JOINTS (PROJECT)".

TEMPORARY TRANSVERSE JOINT DETAIL

REQUIRED FOR INTERMEDIATE STAGING LIMITS



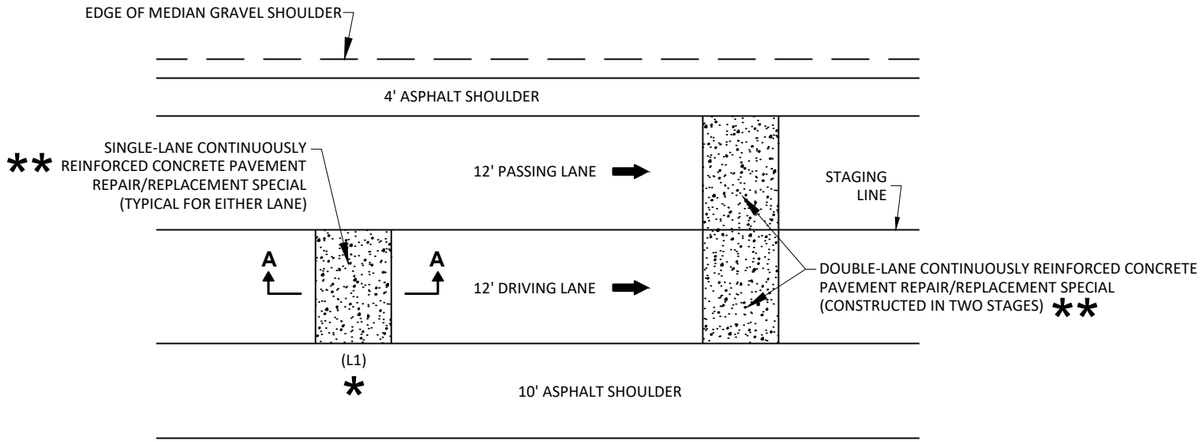
SECTION A-A



PLAN VIEW

HMA SHOULDER AT BEAM GUARD DETAIL

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	CONSTRUCTION DETAILS	SHEET 17	E



PLAN VIEW

NOTES:

CONSTRUCT CONCRETE PAVEMENT REPAIR/REPLACEMENT PRIOR TO HMA MILL & OVERLAY.

THICKNESS OF CONCRETE PAVEMENT REPAIR/REPLACEMENT MAY VARY. AVERAGE THICKNESS OF 14" IS EXPECTED.

DAMAGE TO EITHER EXISTING PAVEMENTS OR EXISTING SHOULDERS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AND WILL BE INCIDENTAL TO THE ITEMS OF "CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR SPECIAL" AND "CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPLACEMENT SPECIAL".

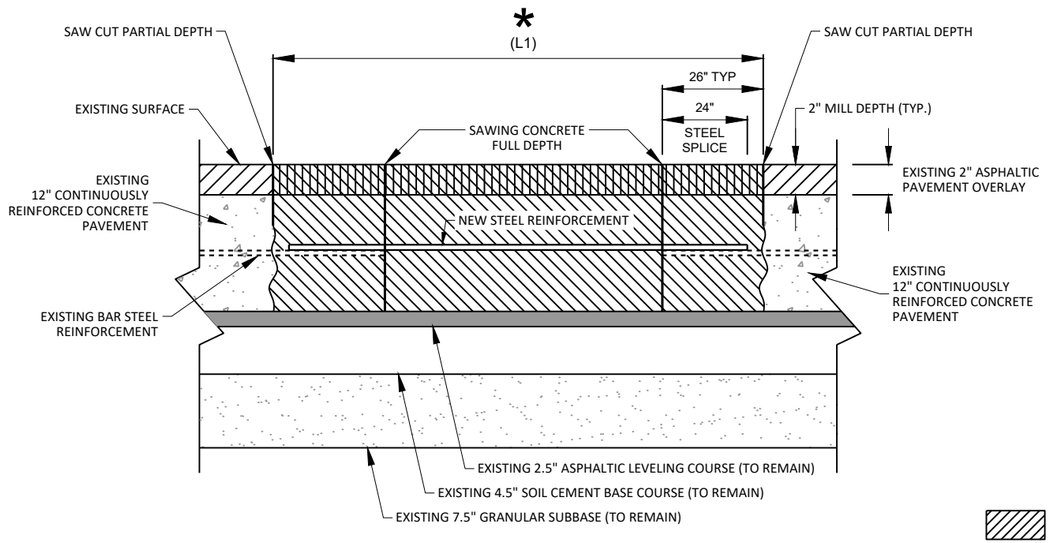
PARTIAL DEPTH AND FULL DEPTH TRANSVERSE SAW CUTS, AS WELL AS THE LONGITUDINAL CUT ON THE STAGING LINE, TO BE PAID FOR AS "SAWING CONCRETE". SAWING THROUGH EXISTING ASPHALTIC PAVEMENT OVERLAY WILL BE INCIDENTAL TO THE ITEM OF "SAWING CONCRETE".

SAWING THE EDGE LINE BETWEEN A TRAVEL LANE AND PAVED SHOULDER IS REQUIRED ONLY FOR PAVEMENTS WITH AN ASPHALTIC OVERLAY, AND WILL BE PAID FOR AS "SAWING ASPHALT".

SEE SDD 13-A-7, "CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR ADDITIONAL INFORMATION.

* (L1) = 7' MINIMUM TO 15' MAXIMUM FOR CONCRETE REPAIR, AS DIRECTED BY THE ENGINEER.
CONCRETE REPLACEMENT IS FOR LENGTHS RANGING FROM 15' UP TO 300' MAXIMUM.

** PARTIAL DEPTH OR FULL DEPTH SAW CUTS REQUIRED ON ALL SIDES OF CONCRETE PAVEMENT REPAIR/REPLACEMENT, INCLUDING STAGING LINE, TO BE PAID FOR AS "SAWING CONCRETE" OR "SAWING ASPHALT".
EDGE LINE JOINTS BETWEEN CONCRETE SURFACE AND ASPHALT SHOULDERS DO NOT REQUIRE SAWING.



SECTION A-A

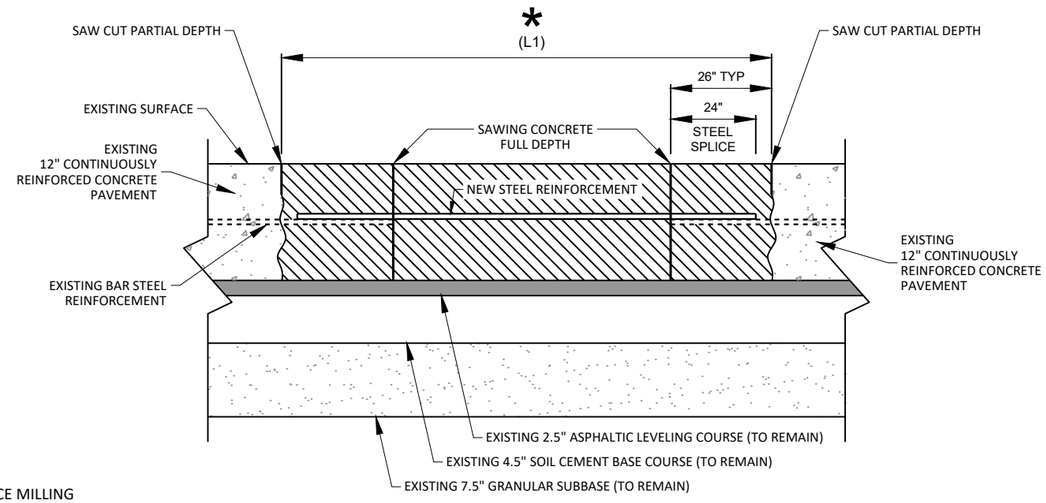
IH 94 MAINLINE

STA 1371'EB'+40 to STA 1470'EB'+50
STA 1474'EB'+52 to STA 1498'EB'+58
STA 1371'WB'+40 to STA 1470'WB'+14
STA 1474'WB'+14 to STA 1498'EB'+18

REMOVING ASPHALTIC SURFACE MILLING

CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR/REPLACEMENT SPECIAL

REMOVING CONCRETE SURFACE PARTIAL DEPTH



SECTION A-A

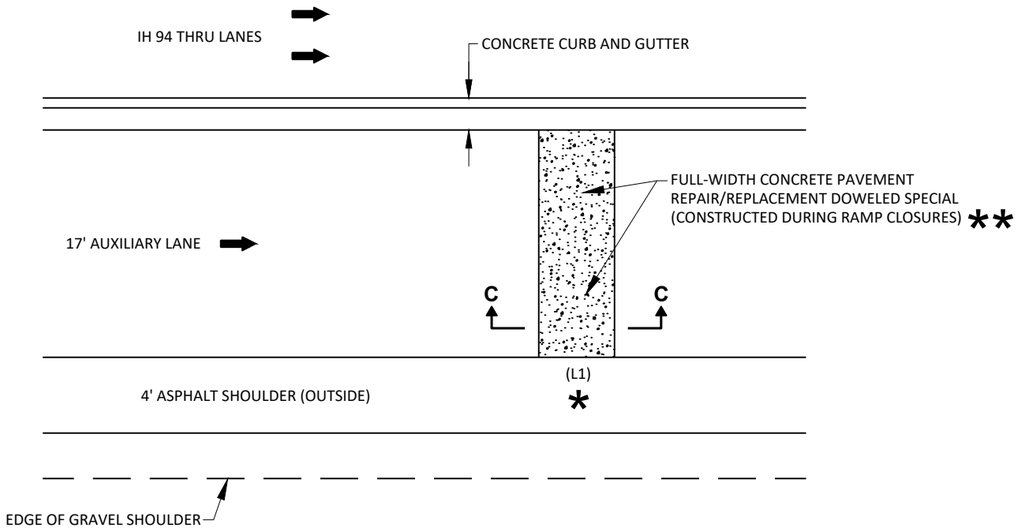
IH 94 MAINLINE

STA 1470'EB'+50 to STA 1474'EB'+52
STA 1470'WB'+14 to STA 1474'WB'+14

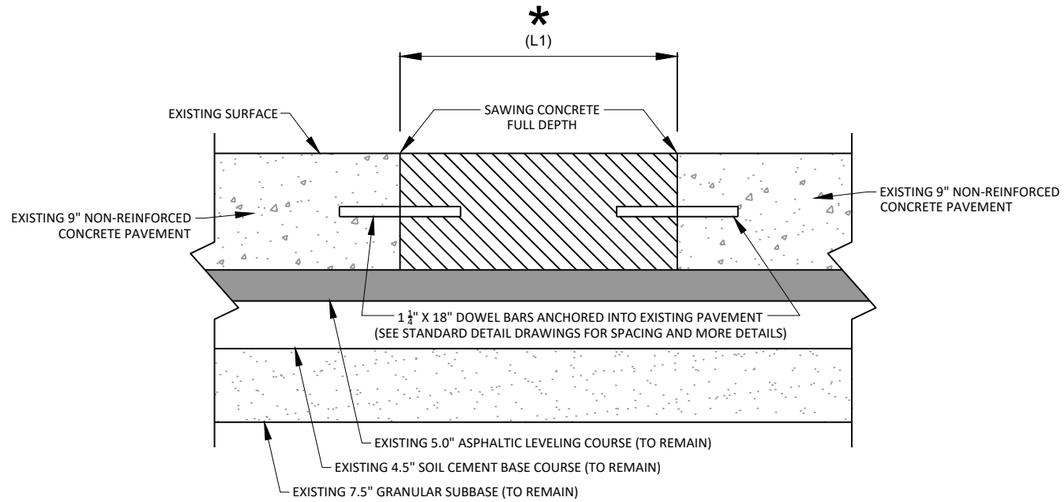
CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR/REPLACEMENT SPECIAL DETAIL

IH 94 MAINLINE

(LOCATIONS DETERMINED IN THE FIELD BY THE ENGINEER)



PLAN VIEW



SECTION C-C

IH 94 AUXILIARY LANES

STA 1470'EB'+50 to STA 1474'EB'+52
STA 1470'WB'+14 to STA 1474'WB'+14

CONCRETE PAVEMENT REPAIR/REPLACEMENT DOWELED SPECIAL

* (L1) = 6' MINIMUM TO 15' MAXIMUM FOR CONCRETE REPAIR, AS DIRECTED BY THE ENGINEER. CONCRETE REPLACEMENT IS FOR LENGTHS RANGING FROM 15' UP TO 300' MAXIMUM.

** FULL DEPTH SAW CUTS REQUIRED ON ALL SIDES OF CONCRETE PAVEMENT REPAIR/REPLACEMENT TO BE PAID FOR AS "SAWING CONCRETE" OR "SAWING ASPHALT". EDGE LINE JOINTS BETWEEN CONCRETE SURFACE AND ASPHALT SHOULDERS DO NOT REQUIRE SAWING.

NOTES:

THICKNESS OF CONCRETE PAVEMENT REPAIR/REPLACEMENT MAY VARY. AVERAGE THICKNESS OF 9" IS EXPECTED.

DAMAGE TO EITHER EXISTING PAVEMENTS OR EXISTING SHOULDERS SHALL BE REPAIRED AS DIRECTED BY THE ENGINEER AND WILL BE INCIDENTAL TO THE ITEMS OF "CONCRETE PAVEMENT REPAIR DOWELED SPECIAL" AND "CONCRETE PAVEMENT REPLACEMENT DOWELED SPECIAL".

FULL DEPTH TRANSVERSE AND LONGITUDINAL SAW CUTS TO BE PAID FOR AS "SAWING CONCRETE". SAWING THROUGH EXISTING ASPHALTIC PAVEMENT OVERLAY WILL BE INCIDENTAL TO THE ITEM OF "SAWING CONCRETE".

SAWING THE EDGE LINE BETWEEN A TRAVEL LANE AND PAVED SHOULDER IS REQUIRED ONLY FOR PAVEMENTS WITH AN ASPHALTIC OVERLAY, AND WILL BE PAID FOR AS "SAWING ASPHALT".

SEE SDD 13-C-9, "CONCRETE PAVEMENT REPAIR AND REPLACEMENT" FOR ADDITIONAL INFORMATION.

CONCRETE PAVEMENT REPAIR/REPLACEMENT DOWELED SPECIAL DETAIL

IH 94 AUXILIARY LANES - USH 12/STH 27 INTERCHANGE

(LOCATIONS DETERMINED IN THE FIELD BY THE ENGINEER)

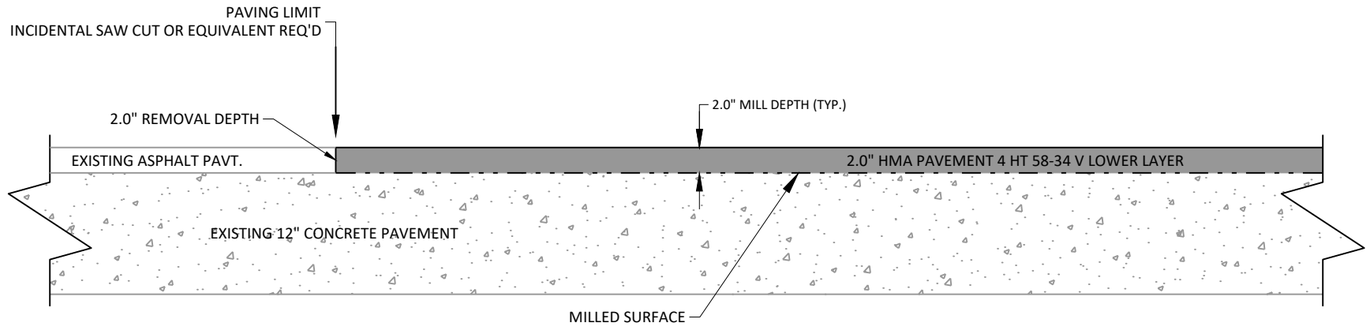
2

NOTES:

MILL AND REMOVE 2.0" (TYP.) OF EXISTING ASPHALTIC SURFACE FOR IH 94 DRIVING LANES AND SHOULDERS.

OVERLAY 2.0" HMA PAVEMENT 4 HT 58-34 V (LOWER LAYER).

FOR IH 94 MAINLINE, TYPICAL WIDTH OF JOINT EXTENDS ACROSS 10-FT OUTSIDE SHOULDER, 12-FT DRIVING LANE, 12-FT PASSING LANE, AND 4-FT INSIDE PAVED SHOULDER.



TEMPORARY BUTT JOINT DETAIL - IH 94 MAINLINE LOWER LAYER

REQUIRED AT BEGIN & END PAVING LIMITS AND ALSO AT EXISTING BRIDGE DECKS/APPROACHES

NOTES:

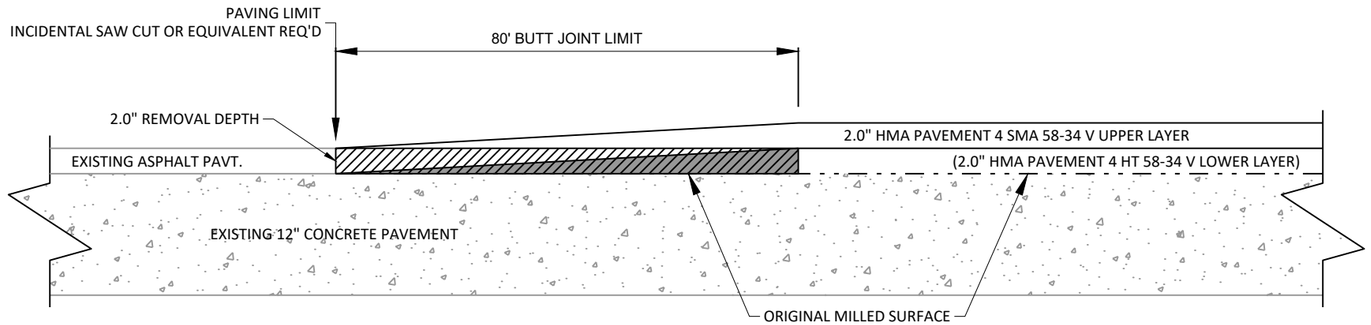
REMOVE 2.0" (TYP.) OF NEW HMA PAVEMENT 4 HT 58-34 V LOWER LAYER WITHIN 80-FT BUTT JOINT LIMITS.

OVERLAY 2.0" HMA PAVEMENT 4 SMA 58-34 V (UPPER LAYER).

FOR IH 94 MAINLINE, TYPICAL WIDTH OF JOINT EXTENDS ACROSS 10-FT OUTSIDE SHOULDER, 12-FT DRIVING LANE, 12-FT PASSING LANE, AND 4-FT INSIDE PAVED SHOULDER.

PAID FOR AS "REMOVING ASPHALTIC SURFACE BUTT JOINTS"

AFTER REMOVING ASPHALTIC SURFACE BUTT JOINT, WEDGE WITH SURFACE MATERIAL PRIOR TO PLACING SURFACE COURSE



REMOVING ASPHALTIC SURFACE BUTT JOINT DETAIL - IH 94 MAINLINE UPPER LAYER

REQUIRED AT BEGIN & END PAVING LIMITS AND ALSO AT EXISTING BRIDGE DECKS/APPROACHES

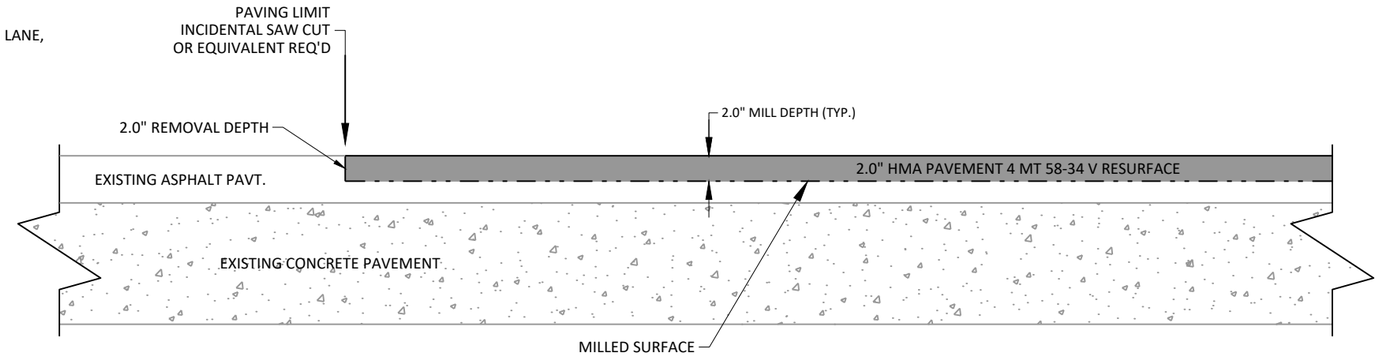
NOTES:

MILL AND REMOVE 2.0" (TYP.) OF EXISTING ASPHALTIC SURFACE FOR DRIVING LANES AND SHOULDERS.

OVERLAY 2.0" HMA PAVEMENT 4 MT 58-34 V.

FOR USH 12/STH 27, TYPICAL WIDTH OF JOINT EXTENDS ACROSS 7-FT OUTSIDE PAVED SHOULDER, 12-FT DRIVING LANE, 12-FT PASSING LANE, AND 3-FT INSIDE PAVED SHOULDER.

FOR INTERCHANGE RAMPS/LOOPS, TYPICAL WIDTH OF JOINT EXTENDS ACROSS 15-FT DRIVING LANE, AND 5-FT PAVED SHOULDERS AND/OR 2-FT GUTTER.



BUTT JOINT DETAIL - USH 12/STH 27 AND INTERCHANGE RAMPS/LOOPS

REQUIRED AT BEGIN & END PAVING LIMITS AND ALSO AT EXISTING BRIDGE DECKS/APPROACHES

2

2

EXISTING R/W

RAMP 'JF'

70'JF'

74'JF'

72'JF'

SB USH 12/STH 27

NB USH 12/STH 27

38'SB'

38'NB'

36'SB'

36'NB'

34'SB'

34'NB'

32'SB'

32'NB'

70'JA'

72'JA'

74'JA'

76'JA'

78'JA'

RAMP 'JA'

'JB' LOOP

82'JB'

84'JB'

80'JB'

86'JB'

74'JB'

76'JB'

78'JB'

ROZMENOSKI (47JA63)
ARCHAEOLOGICAL SITE
SEE SPECIAL PROVISIONS

B-27-33

B-27-34

70'WB'

1472'WB'

1472'EB'

1474'WB'

1474'EB'

1476'WB'

EB IH 94

WB IH 94

IH 94

US 12/STH 27

SIGN

INL

FO

OH

E

SHEET LAYOUT

N

LOCATION MAP

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN DETAIL - ARCHAEOLOGICAL SITE	SHEET 22	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\021222_PD_ARCH_SITE.DWG
LAYOUT NAME - Plan 1 IN 80 FT

PLOT DATE : 7/19/2021 5:29 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:80 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

N

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

BEGIN PROJECT
STA 1371+40'WB'

MILE 113 EXISTING

EMERGENCY STOPPING ONLY EXISTING

Hwy F EXISTING

EXISTING

EXISTING

1365'WB'

1365'EB'

1370'WB'

1370'EB'

1375'WB'

1375'EB'

1380'WB'

1380'EB'

1385'WB'

1385'EB'

1390'WB'

1390'EB'

I 94

CTH A

CTH F

INL

RIPRAP

MILE 113 EXISTING

BEGIN PROJECT
STA 1371+40'EB'

EXISTING

EXISTING

Hwy F EXISTING

EXISTING DMS

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 23	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 7/19/2021 5:31 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT

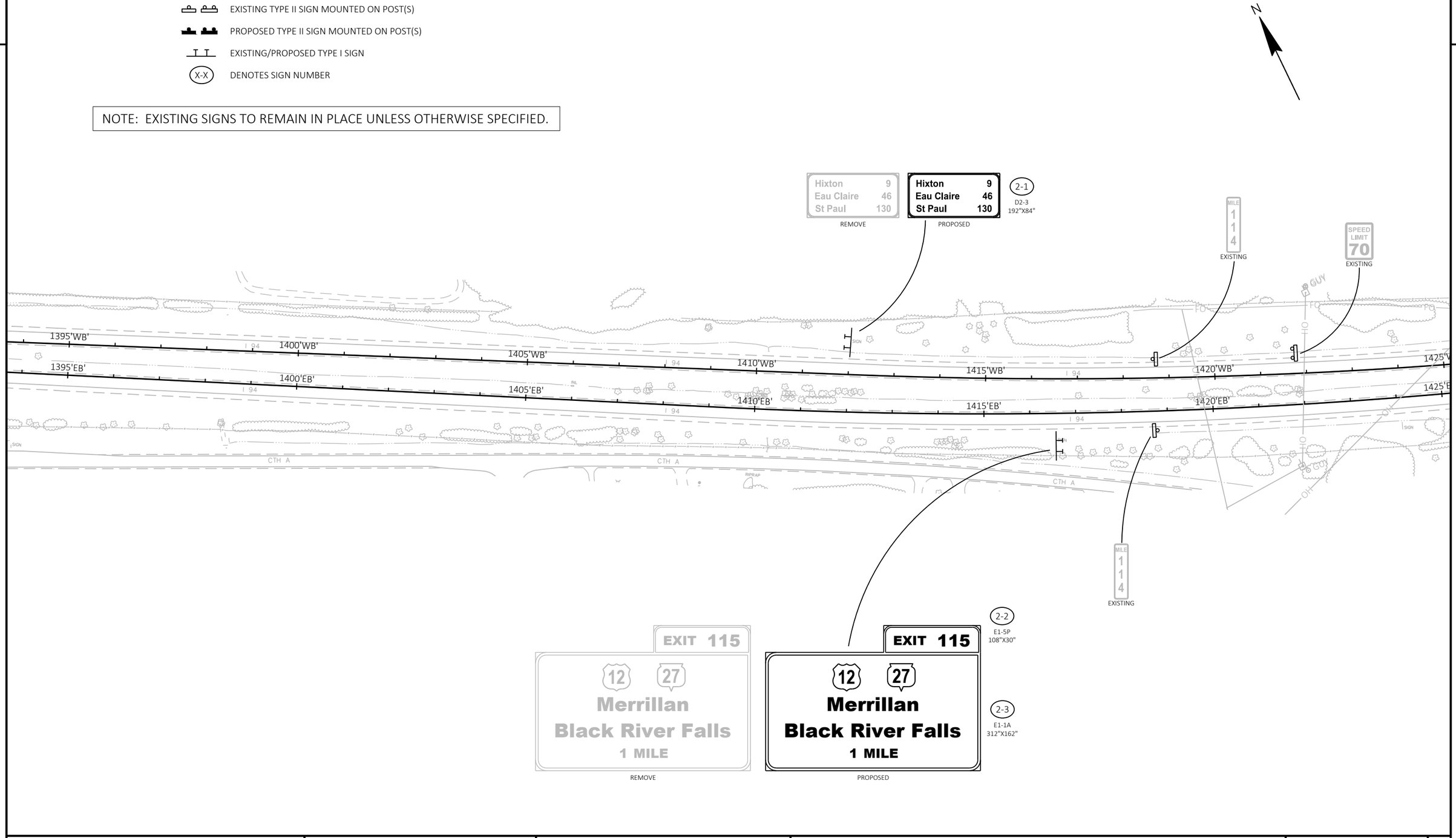
WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING TYPE II SIGN MOUNTED ON POST(S)
- PROPOSED TYPE II SIGN MOUNTED ON POST(S)
- EXISTING/PROPOSED TYPE I SIGN
- (X-X) DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.



PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 24	E

2

2

LEGEND

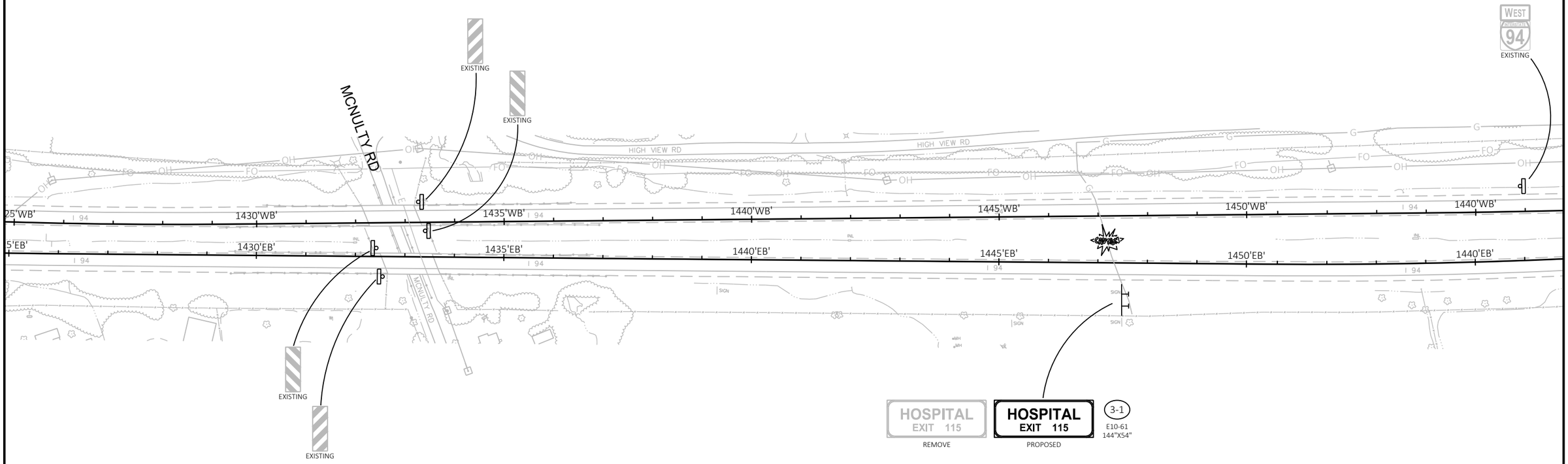
EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.



PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 25	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (3)

PLOT DATE : 7/19/2021 5:31 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EXISTING TYPE II SIGN MOUNTED ON POST(S)
- PROPOSED TYPE II SIGN MOUNTED ON POST(S)
- EXISTING/PROPOSED TYPE I SIGN
- (X-X) DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

N

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING (2)

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

2

WEST NORTH ALT
12 27 94 (ALTERNATE)
EXISTING

Black River Falls
Merrillan
EXISTING

EXIT 115
EXISTING

ALTERNATE 94
EXISTING

EXIT 115
12 27
Merrillan
Black River Falls
REMOVE

5-2
E1-5P
108"X30"

EXIT 115
12 27
Merrillan
Black River Falls
PROPOSED

5-3
E4-1A
312"X132"

EXIT 30 MPH
PROPOSED

5-1
W13-2
48"X60"

EXISTING

END PROJECT
STA 1498+18'WB'

'JB' LOOP

RAMP 'JA'

72'JA' 74'JA' 76'JA' 78'JA' 80'JA' 82'JA' 84'JA' 86'JA'

82'JB' 80'JB' 78'JB' 76'JB' 74'JB' 72'JB' 84'JB'

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
EXISTING

15'-11"
EXISTING (2)

EXISTING

EXISTING

EXISTING

1475'WB' 1480'WB' 1485'WB' 1490'WB' 1495'WB' 1500'WB' 1501'WB'

1475'EB' 1480'EB' 1485'EB' 1490'EB' 1495'EB' 1500'EB' 1502'EB'

IH 94

EXISTING

EXISTING

EXISTING

EXISTING

EXISTING

Black River
EXISTING

BLACK RIVER

END PROJECT
STA 1498+58'EB'

Ho-Chunk Nation and Casino
EXIT 116
PROPOSED

5-7
E3-1
204"X84"

Ho Chunk Casino
EXIT 116
REMOVE

EXIT 116
54
Wisconsin Rapids
Black River Falls
2/3 MILE
NEXT EXIT 12 MILES
REMOVE

EXIT 116
54
Wis Rapids
Black River Falls
2/3 MILE
NEXT EXIT 12 MILES
PROPOSED

5-4
E1-5P
108"X30"

5-5
E1-1A
312"X162"

E2-1
156"X24"

5-6

USH 12 / STH 27

RAMP 'JC'

RAMP 'JD'

'JE' LOOP

34'NB' 32'NB' 30'NB' 28'NB' 26'NB' 74'JC' 72'JC' 70'JC' 74'JD' 72'JD' 60'JE' 62'JE'

PEDESTRIANS
BICYCLES
NON MOTORIZED TRAFFIC
MOTOR BICYCLES
PROHIBITED
EXISTING

LEGEND

- EXISTING TYPE II SIGN MOUNTED ON POST(S)
- PROPOSED TYPE II SIGN MOUNTED ON POST(S)
- EXISTING/PROPOSED TYPE I SIGN
- X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 27	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (5)
PLOT DATE : 7/19/2021 5:32 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:200 FT

2

LEGEND

- EXISTING TYPE II SIGN MOUNTED ON POST(S)
- PROPOSED TYPE II SIGN MOUNTED ON POST(S)
- EXISTING/PROPOSED TYPE I SIGN
- X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

N

CANOPY

PHONE

FILLER CAPS

SIGN

H

EXISTING

COUNTY A

EXISTING

SPEED LIMIT 40

EXISTING

NO ENGINE BRAKING EXCEPT IN EMERGENCY

EXISTING

Black River Falls POPULATION 3622

EXISTING

DO NOT ENTER

EXISTING

SB USH 12 / STH 27

16'SB' 18'SB' 20'SB'

BEGIN CONSTRUCTION
STA 18+73'SB'
STA 20+50'NB'

16'NB' 18'NB' 20'NB'

NB USH 12 / STH 27

USH 12

RAMP CLOSED WHEN FLASHING USE ALT ROUTE

EXISTING

INTERSTATE 94 EAST
NEXT RIGHT
INTERSTATE 94 WEST
SECOND RIGHT

EXISTING

RAMP
30
MPH

EXISTING

INTERSTATE 94 WEST
Eau Claire
INTERSTATE 94 EAST
Madison

EXISTING

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 28	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (12)
PLOT DATE : 7/19/2021 5:32 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

SB USH 12 / STH 27

RAMP 'JD'

22'SB'

24'SB'

26'SB'

74'JD'

22'NB'

24'NB'

26'NB'

NB USH 12 / STH 27

68'JC'

70'JC'

RAMP 'JC'

EXISTING

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 29	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (13)

PLOT DATE : 7/19/2021 5:33 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

(X-X) DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

'JE' LOOP

60'JE'

PEDESTRIANS BICYCLES NON MOTORIZED TRAFFIC MOTOR BICYCLES PROHIBITED
EXISTING

15'-10"
EXISTING

SPEED LIMIT 40
EXISTING

RAMP 25 MPH
EXISTING

INL

EB IH 94

WB IH 94

N

SB USH 12 / STH 27

28'SB' 30'SB' 32'SB'

EXISTING

28'NB' 30'NB' 32'NB'

NB USH 12 / STH 27

USH 12/STH 27

IH 94

WEST INTERSTATE 94
EXISTING

INTERSTATE 94 WEST Eau Claire
EXISTING

EXISTING

72'JC'

RAMP 'JC'

74'JC'

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 30	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (14)

PLOT DATE : 7/19/2021 5:33 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

RAMP 'JF'

72'JF'

74'JF'

EAST 94 Madison

EXISTING

EXISTING

EAST 94

EXISTING

SIGN

SIGN

SB USH 12 / STH 27

34'SB'

36'SB'

38'SB'

40'SB'

ONE WAY

EXISTING

EXISTING

EXISTING

WRONG WAY

EXISTING

EXISTING

EXISTING

34'NB'

36'NB'

38'NB'

40'NB'

DO NOT ENTER

EXISTING

DO NOT ENTER

EXISTING

NB USH 12 / STH 27

EXISTING

86'JB'

RAMP 25 MPH

EXISTING

'JB' LOOP

15'-11"

EXISTING

STOP

EXISTING

WRONG WAY

EXISTING

EXISTING

ONE WAY

STOP

DIVIDED HIGHWAY

EXISTING

84'JB'

RAMP 'JA'

70'JA'

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 31	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (15)

PLOT DATE : 7/19/2021 5:34 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

RAMP CLOSED USE ALT ROUTE
EXISTING

RAMP 30 MPH
EXISTING

RAMP CLOSED WHEN FLASHING USE ALT ROUTE
EXISTING

INTERSTATE 94 EAST
Madison
INTERSTATE 94 WEST
Eau Claire
EXISTING

76'JF'

RAMP 'JF'

SB USH 12 / STH 27

42'SB' 44'SB' 46'SB'

42'NB' 44'NB' 46'NB'

EXISTING

WRONG WAY
EXISTING

NB USH 12 / STH 27

YIELD
EXISTING

WEST NORTH ALT
12 27 INTERSTATE 94
EXISTING

EXISTING

LEGEND

- EXISTING TYPE II SIGN MOUNTED ON POST(S)
- PROPOSED TYPE II SIGN MOUNTED ON POST(S)
- EXISTING/PROPOSED TYPE I SIGN
- (X-X) DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 32	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (16)
PLOT DATE : 7/19/2021 5:34 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

2

ROZMENOSKI RD.

INTERSTATE 94 WEST
NEXT RIGHT

INTERSTATE 94 EAST
SECOND RIGHT

EXISTING

ONE WAY
STOP
DIVIDED HIGHWAY
EXISTING

ONE WAY
EXISTING

ONE WAY
EXISTING

DO NOT ENTER
EXISTING

WRONG WAY
EXISTING

SIGN

2/STH 27 S.B.

48'SB'

50'SB'

52'SB'

SB USH 12 / STH 27

INL

INL

EXISTING

EXISTING

DO NOT ENTER
EXISTING

2/STH 27 N.B.

48'NB'

50'NB'

52'NB'

NB USH 12 / STH 27

ONE WAY
EXISTING

SPEED LIMIT 55
EXISTING

WRONG WAY
EXISTING

ONE WAY

STOP
DIVIDED HIGHWAY
EXISTING

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

(X-X) DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

RUINS

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 33	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (17)

PLOT DATE : 7/19/2021 5:34 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

EXISTING TYPE II SIGN MOUNTED ON POST(S)

PROPOSED TYPE II SIGN MOUNTED ON POST(S)

EXISTING/PROPOSED TYPE I SIGN

X-X DENOTES SIGN NUMBER

NOTE: EXISTING SIGNS TO REMAIN IN PLACE UNLESS OTHERWISE SPECIFIED.

N

JCT INTERSTATE 94 EXISTING

STOP EXISTING

RUF RD

EXISTING

USH 12 / STH 27

54'SB'

54'NB'

56'SB'

56'NB'

DO NOT ENTER EXISTING

EXISTING

Merrillan 10
Augusta 34
EXISTING

END CONSTRUCTION
STA 59+00'NB'

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PERMANENT SIGNING	SHEET 34	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\023202_PS_PERMANENT_SIGNING.DWG
LAYOUT NAME - Sheet - (18)

PLOT DATE : 7/19/2021 5:34 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:40 FT

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

FOR USH 12/STH 27 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".

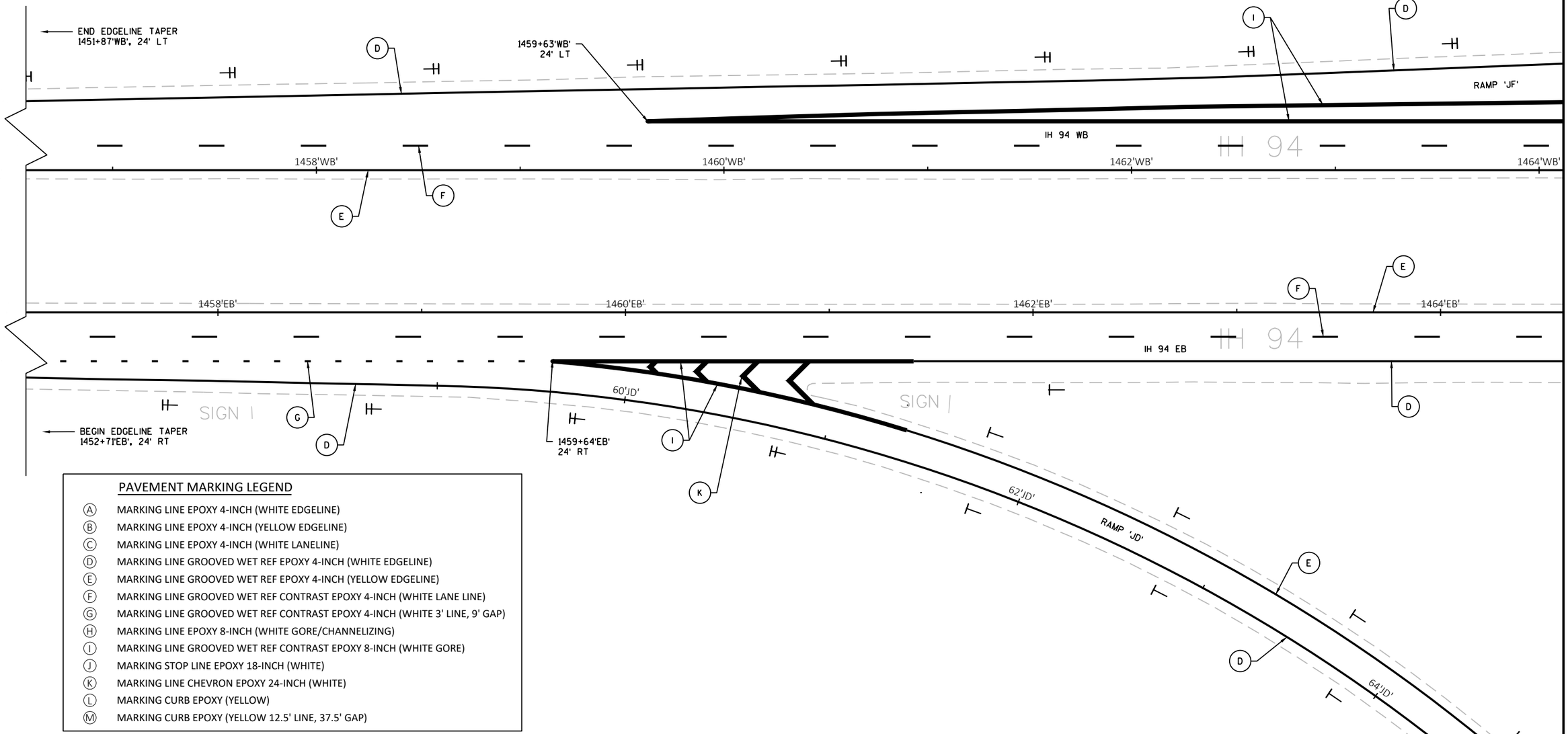
LEGEND

DELINEATOR

DOUBLE DELINEATOR

WHITE/RIGHT YELLOW/LEFT

N



PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (L) MARKING CURB EPOXY (YELLOW)
- (M) MARKING CURB EPOXY (YELLOW 12.5' LINE, 37.5' GAP)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING	SHEET 35	E

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

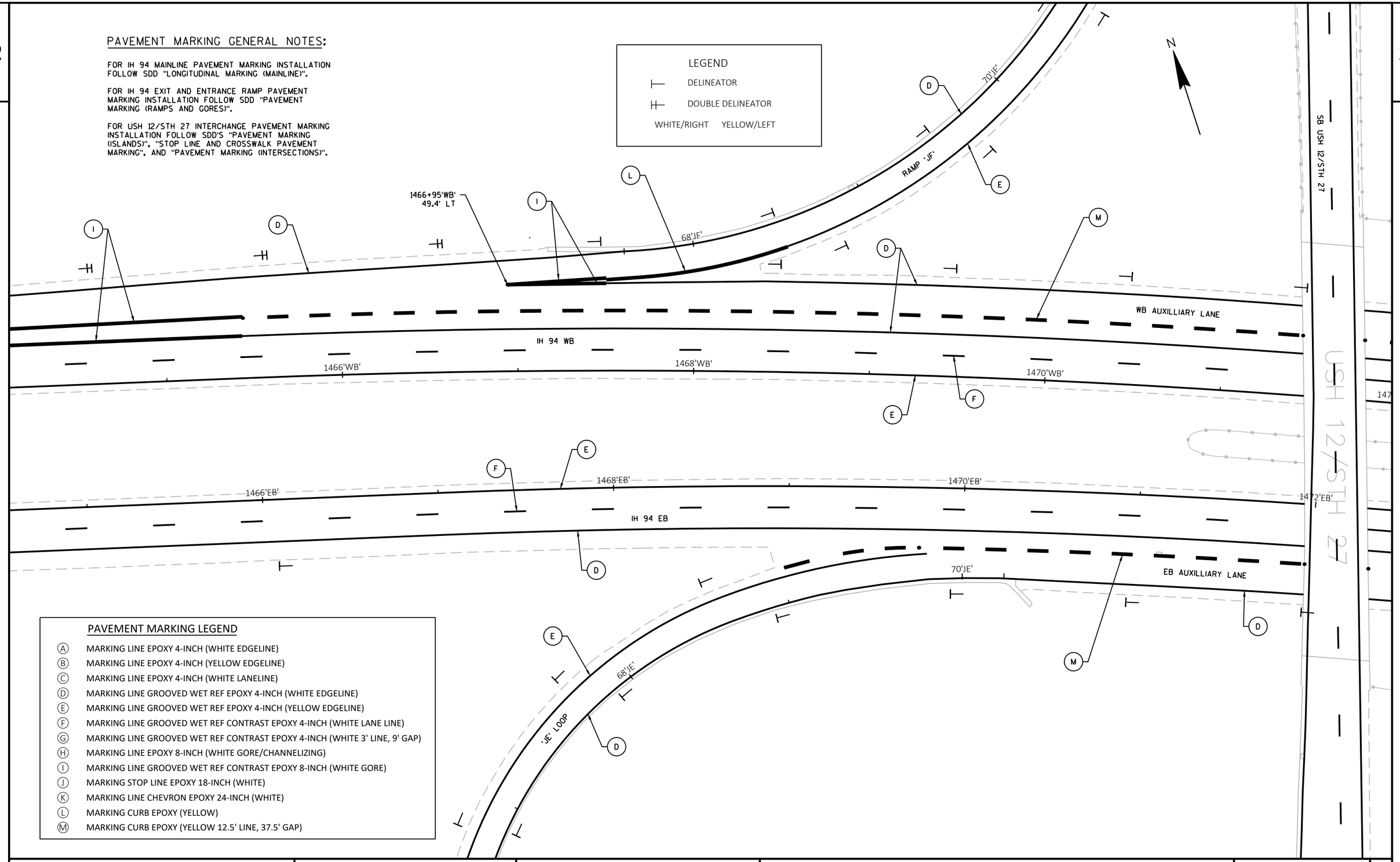
FOR USH 12/STH 27 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".

LEGEND

DELINEATOR

DOUBLE DELINEATOR

WHITE/RIGHT YELLOW/LEFT



PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (L) MARKING CURB EPOXY (YELLOW)
- (M) MARKING CURB EPOXY (YELLOW 12.5' LINE, 37.5' GAP)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING	SHEET 36	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\024502_PM_PAVT_MARKING.DWG
LAYOUT NAME - Sheet - (2)
PLOT DATE : 7/19/2021 5:42 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

FOR USH 12/STH 27 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".

LEGEND

DELINEATOR

DOUBLE DELINEATOR

WHITE/RIGHT YELLOW/LEFT

N

RAMP 'JA'

'JB' LOOP

76'JB'

74'JB'

WB AUXILLIARY LANE

IH 94 WB

IH 94

1472'WB'

1474'WB'

1476'WB'

1478'WB'

34'NB'

ST/STH 27

1474'EB'

1476'EB'

1478'EB'

1480'EB'

IH 94 EB

EB AUXILLIARY LANE

32'NB'

NB USH 12/STH 27

76'JC'

RAMP 'JC'

1477+68'EB'
51.5' RT

PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (L) MARKING CURB EPOXY (YELLOW)
- (M) MARKING CURB EPOXY (YELLOW 12.5' LINE, 37.5' GAP)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING	SHEET 37	E

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

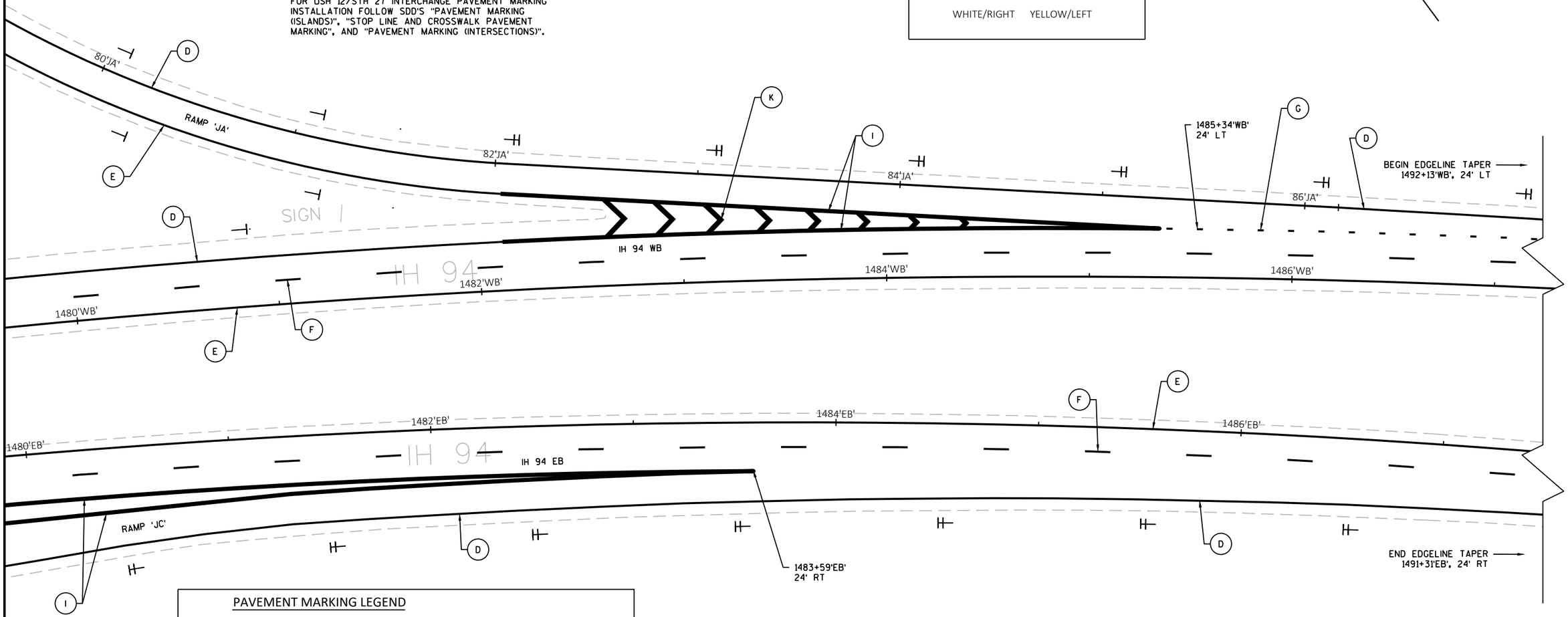
FOR USH 12/STH 27 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".

LEGEND

DELINEATOR

DOUBLE DELINEATOR

WHITE/RIGHT YELLOW/LEFT



PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (L) MARKING CURB EPOXY (YELLOW)
- (M) MARKING CURB EPOXY (YELLOW 12.5' LINE, 37.5' GAP)

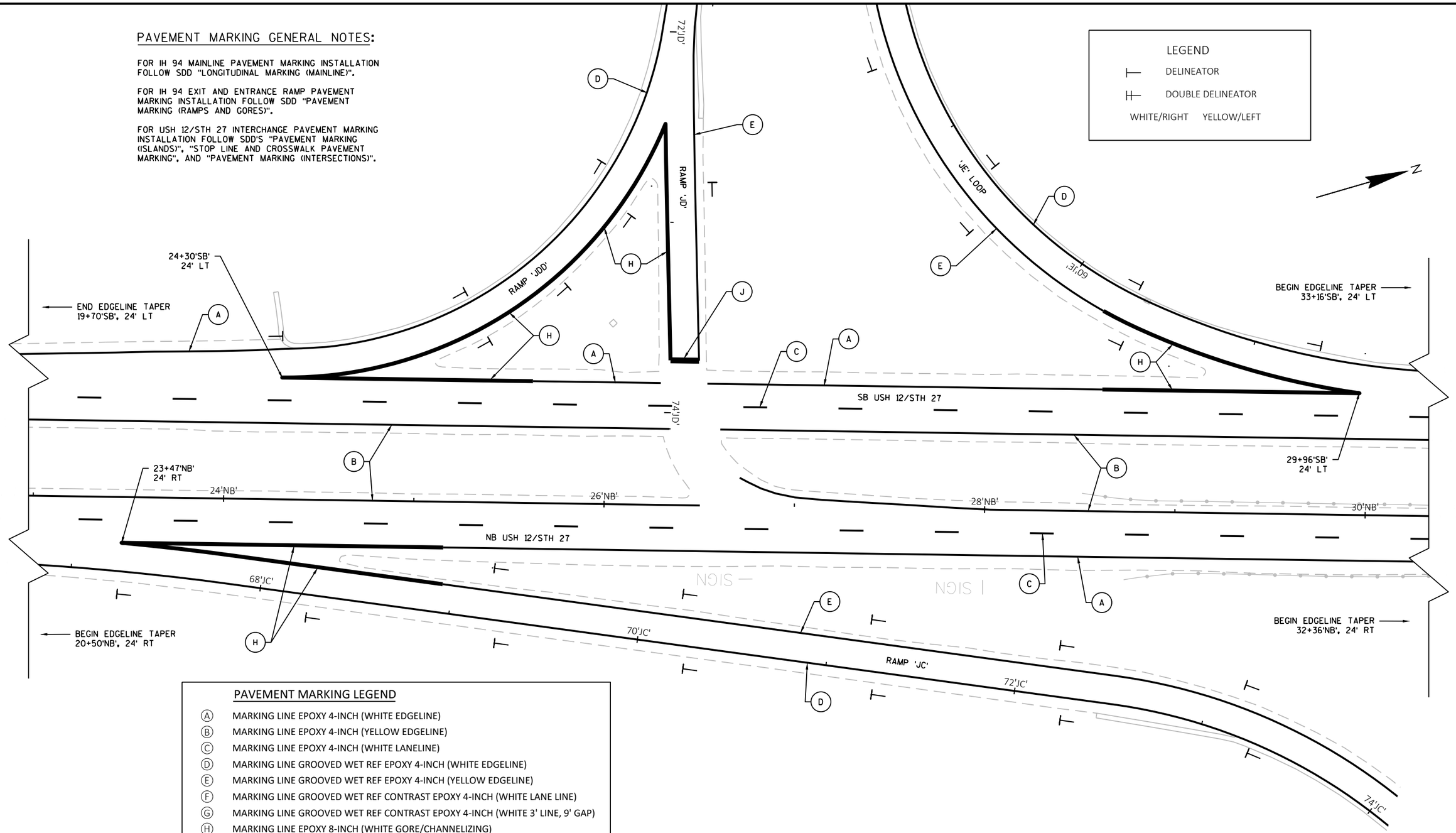
PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING	SHEET 38	E

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

FOR USH 12/STH 27 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".



PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (L) MARKING CURB EPOXY (YELLOW)
- (M) MARKING CURB EPOXY (YELLOW 12.5' LINE, 37.5' GAP)

2

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

FOR USH 12/STH 27 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".

LEGEND

DELINEATOR

DOUBLE DELINEATOR

WHITE/RIGHT YELLOW/LEFT

N

72'JF'

RAMP 'JF'

74'JF'

76'JF'

D

E

H

42+13'SB'
24' LT

BEGIN EDGELINE TAPER
33+16'SB', 24' LT

C

A

SB USH 12/STH 27

35+67'NB'
24' RT

B

36'NB'

38'NB'

40'NB'

42'NB'

NB USH 12/STH 27

BEGIN EDGELINE TAPER
32+36'NB', 24' RT

J

RAMP 'JA'

70'JA'

RAMP 'JAA'

41+24'NB'
24' RT

84'JB'

'JB' LOOP

PAVEMENT MARKING LEGEND

A	MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
B	MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
C	MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
D	MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
E	MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
F	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
G	MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
H	MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
I	MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
J	MARKING STOP LINE EPOXY 18-INCH (WHITE)
K	MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
L	MARKING CURB EPOXY (YELLOW)
M	MARKING CURB EPOXY (YELLOW 12.5' LINE, 37.5' GAP)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING	SHEET 40	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\024502_PM_PAVT_MARKING.DWG
LAYOUT NAME - Sheet - (6)

PLOT DATE : 7/19/2021 5:43 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

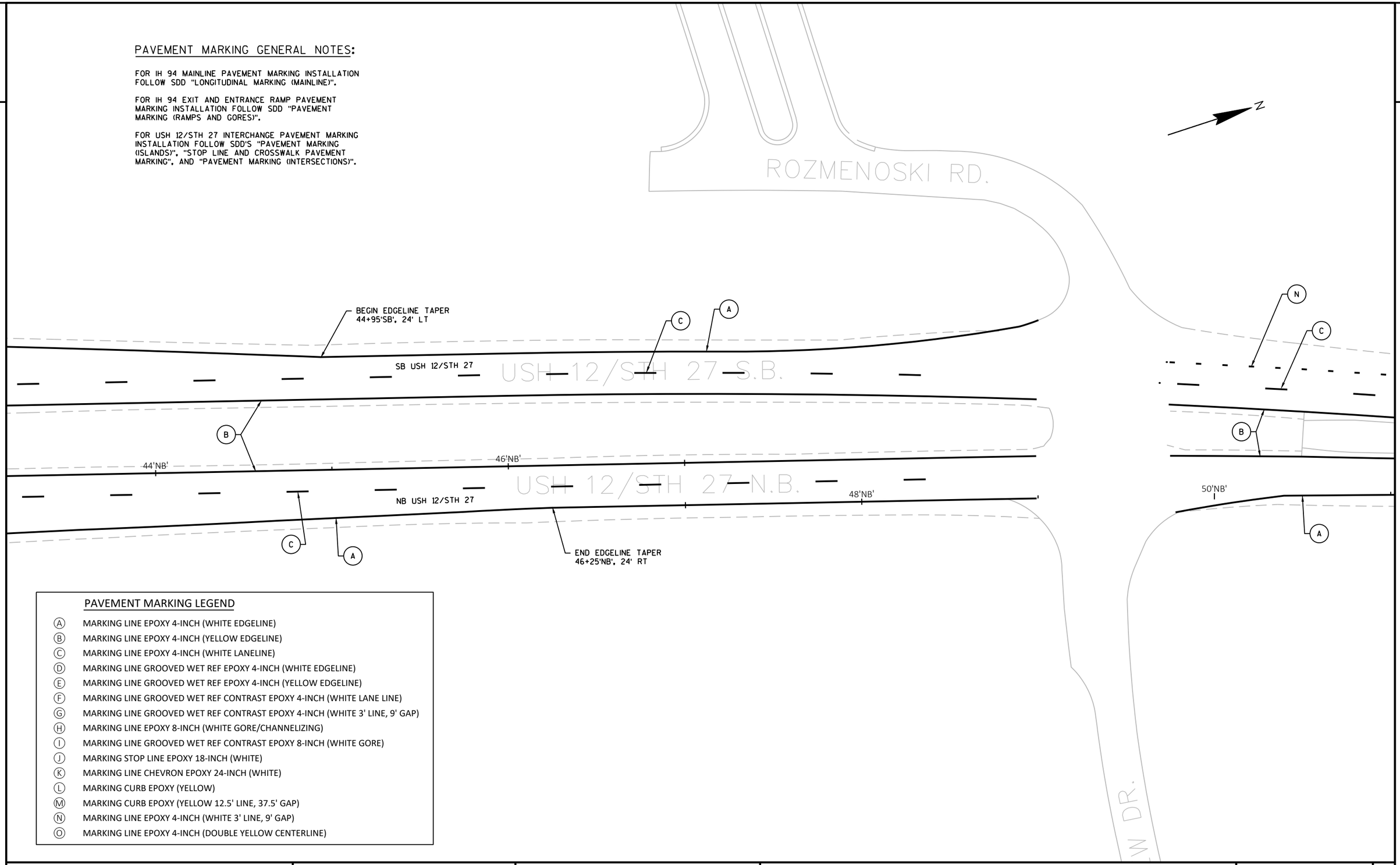
2

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

FOR USH 12/STH 27 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".



PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (L) MARKING CURB EPOXY (YELLOW)
- (M) MARKING CURB EPOXY (YELLOW 12.5' LINE, 37.5' GAP)
- (N) MARKING LINE EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (O) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING	SHEET 41	E

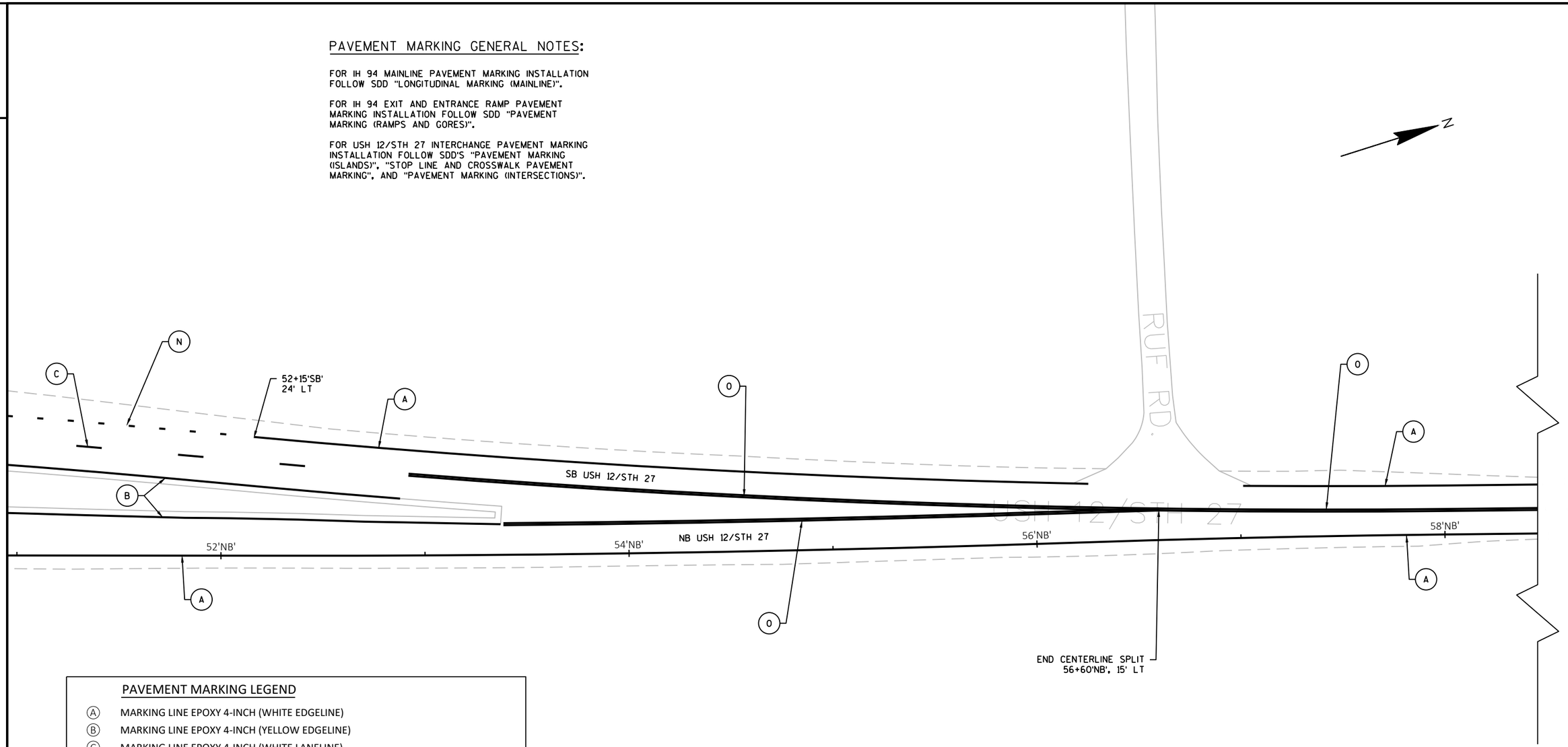
2

PAVEMENT MARKING GENERAL NOTES:

FOR IH 94 MAINLINE PAVEMENT MARKING INSTALLATION FOLLOW SDD "LONGITUDINAL MARKING (MAINLINE)".

FOR IH 94 EXIT AND ENTRANCE RAMP PAVEMENT MARKING INSTALLATION FOLLOW SDD "PAVEMENT MARKING (RAMPS AND GORES)".

FOR USH 12/STH 27 INTERCHANGE PAVEMENT MARKING INSTALLATION FOLLOW SDD'S "PAVEMENT MARKING (ISLANDS)", "STOP LINE AND CROSSWALK PAVEMENT MARKING", AND "PAVEMENT MARKING (INTERSECTIONS)".



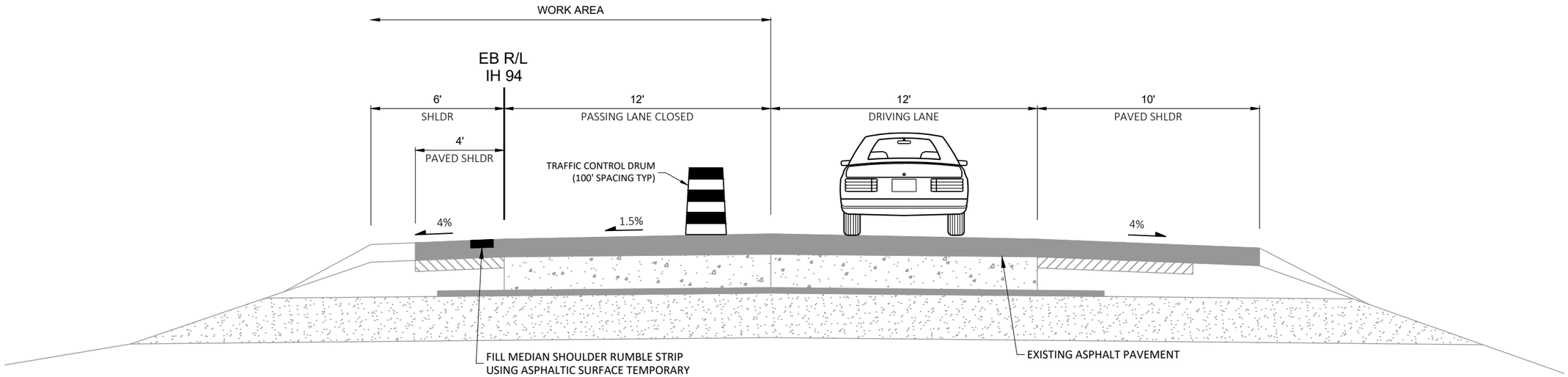
PAVEMENT MARKING LEGEND

- (A) MARKING LINE EPOXY 4-INCH (WHITE EDGELINE)
- (B) MARKING LINE EPOXY 4-INCH (YELLOW EDGELINE)
- (C) MARKING LINE EPOXY 4-INCH (WHITE LANELINE)
- (D) MARKING LINE GROOVED WET REF EPOXY 4-INCH (WHITE EDGELINE)
- (E) MARKING LINE GROOVED WET REF EPOXY 4-INCH (YELLOW EDGELINE)
- (F) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE LANE LINE)
- (G) MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (H) MARKING LINE EPOXY 8-INCH (WHITE GORE/CHANNELIZING)
- (I) MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH (WHITE GORE)
- (J) MARKING STOP LINE EPOXY 18-INCH (WHITE)
- (K) MARKING LINE CHEVRON EPOXY 24-INCH (WHITE)
- (L) MARKING CURB EPOXY (YELLOW)
- (M) MARKING CURB EPOXY (YELLOW 12.5' LINE, 37.5' GAP)
- (N) MARKING LINE EPOXY 4-INCH (WHITE 3' LINE, 9' GAP)
- (O) MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW CENTERLINE)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PAVEMENT MARKING	SHEET 42	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\024502_PM_PAVT_MARKING.DWG
LAYOUT NAME - Sheet - (8)
PLOT DATE : 7/19/2021 5:43 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

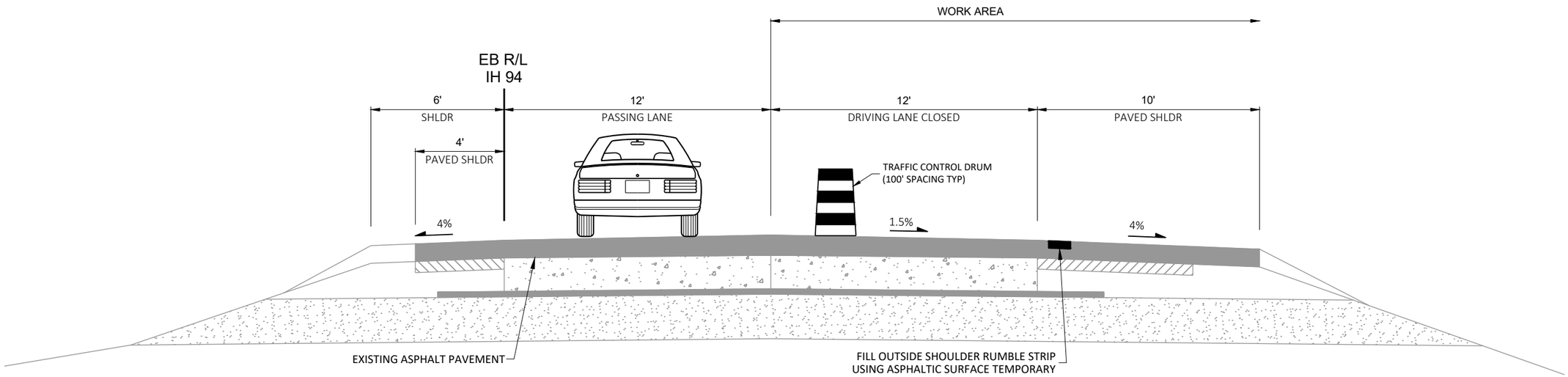
2



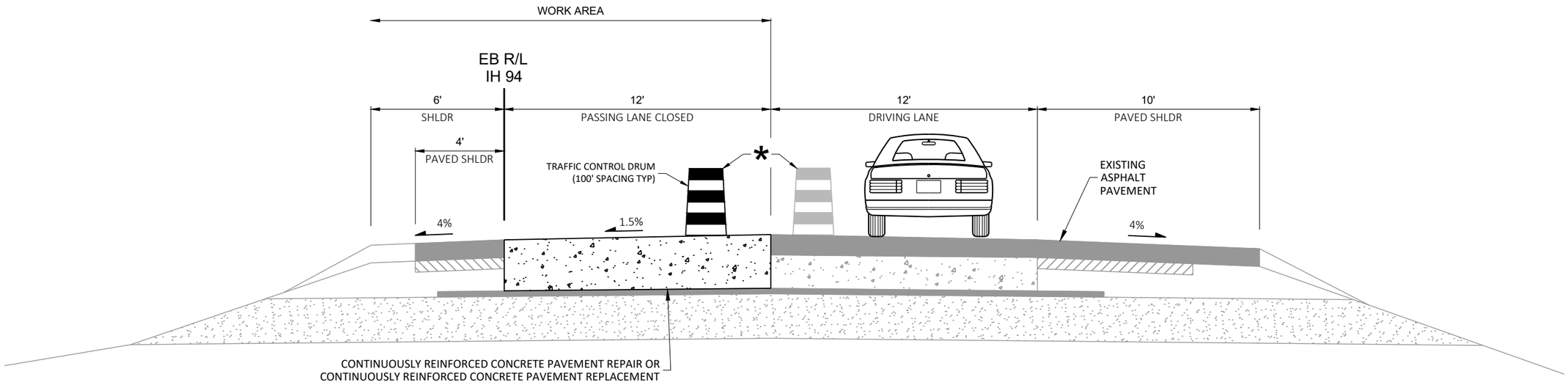
STAGE 1A
FILL MEDIAN SHOULDER RUMBLE STRIP

NOTES:

EB LANES SHOWN, MIRROR STAGING FOR WB LANES.



STAGE 1B
FILL OUTSIDE SHOULDER RUMBLE STRIP



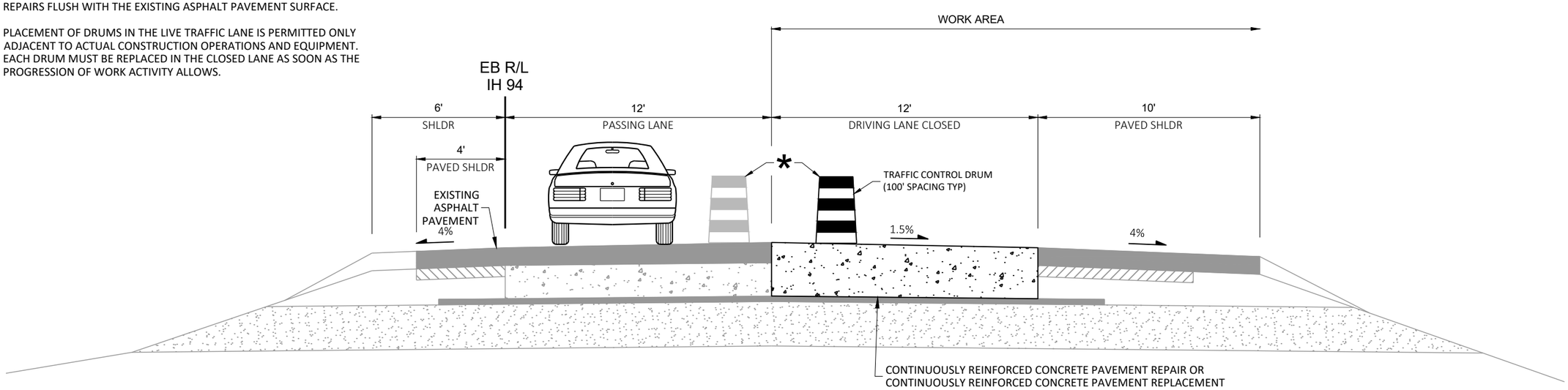
STAGE 2A
CONCRETE REPAIRS IN PASSING LANE

NOTES:

EB LANES SHOWN, MIRROR STAGING FOR WB LANES.

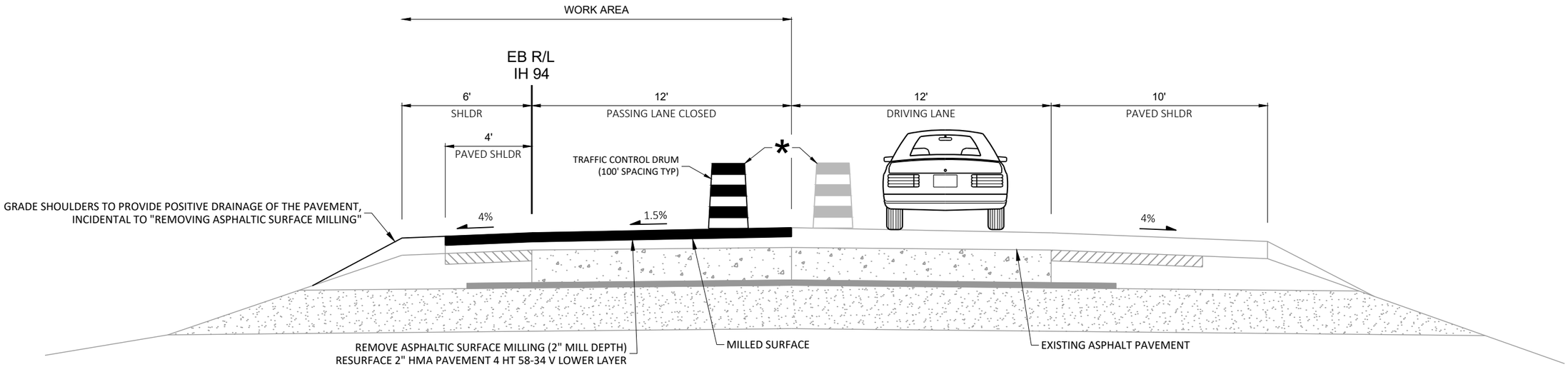
PRIOR TO MILLING OPERATIONS, CONSTRUCT CONCRETE PAVEMENT REPAIRS FLUSH WITH THE EXISTING ASPHALT PAVEMENT SURFACE.

* PLACEMENT OF DRUMS IN THE LIVE TRAFFIC LANE IS PERMITTED ONLY ADJACENT TO ACTUAL CONSTRUCTION OPERATIONS AND EQUIPMENT. EACH DRUM MUST BE REPLACED IN THE CLOSED LANE AS SOON AS THE PROGRESSION OF WORK ACTIVITY ALLOWS.



STAGE 2B
CONCRETE REPAIRS IN DRIVING LANE

2



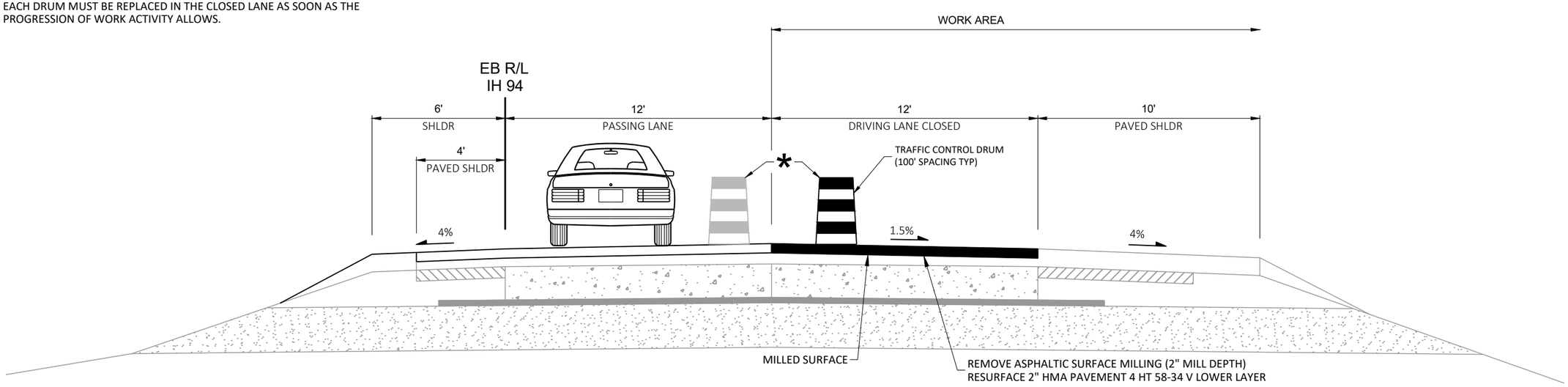
STAGE 3A

MILL 2" AND OVERLAY 2"
PASSING LANE & MEDIAN SHOULDER

NOTES:

EB LANES SHOWN, MIRROR STAGING FOR WB LANES.

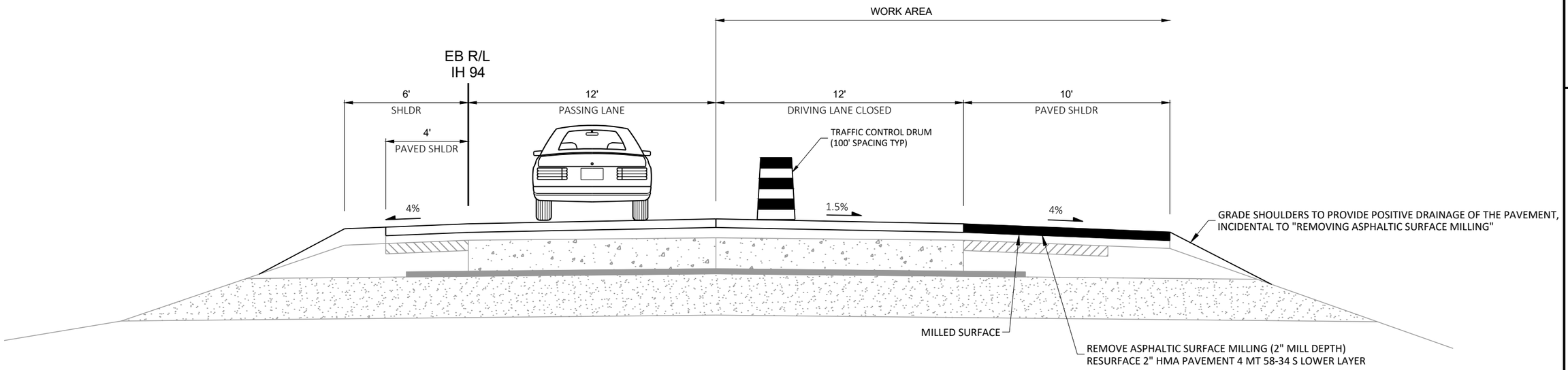
* PLACEMENT OF DRUMS IN THE LIVE TRAFFIC LANE IS PERMITTED ONLY ADJACENT TO ACTUAL CONSTRUCTION OPERATIONS AND EQUIPMENT. EACH DRUM MUST BE REPLACED IN THE CLOSED LANE AS SOON AS THE PROGRESSION OF WORK ACTIVITY ALLOWS.



STAGE 3B

MILL 2" AND OVERLAY 2" DRIVING LANE

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STAGED TYPICAL SECTIONS	SHEET 45	E



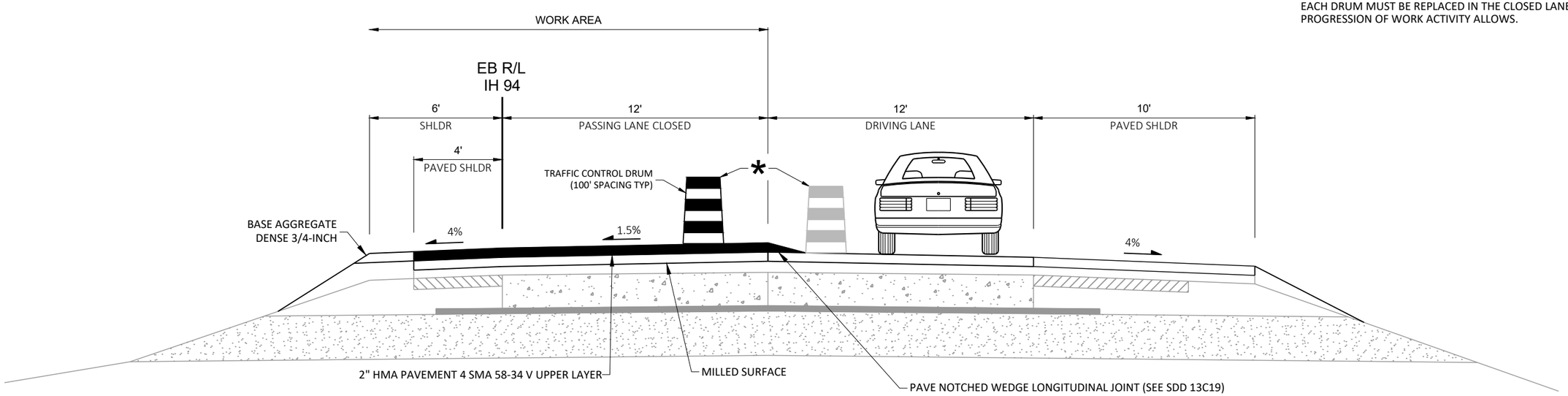
STAGE 3C

MILL 2" AND OVERLAY 2" OUTSIDE SHOULDER

NOTES:

EB LANES SHOWN, MIRROR STAGING FOR WB LANES.

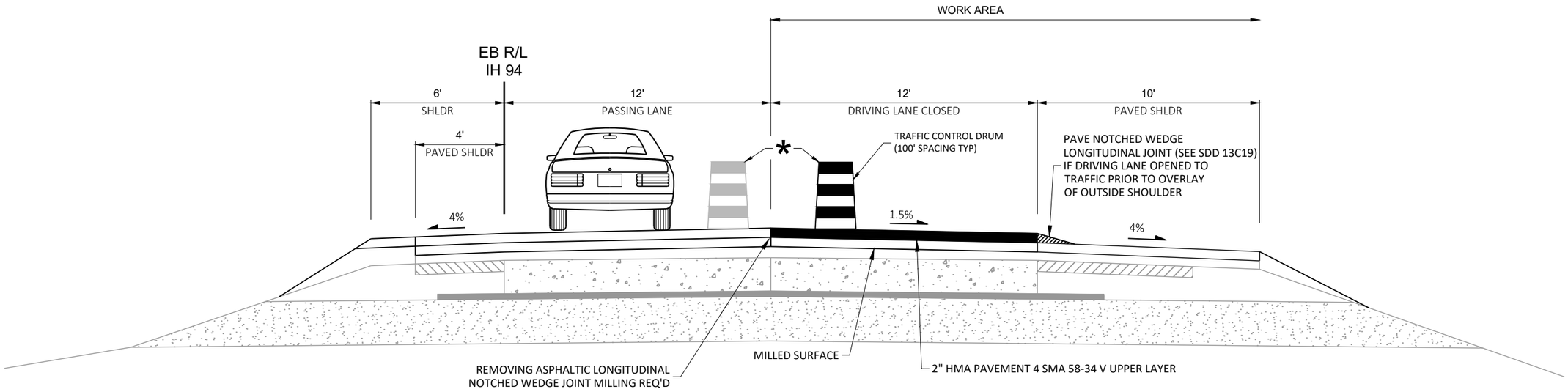
* PLACEMENT OF DRUMS IN THE LIVE TRAFFIC LANE IS PERMITTED ONLY ADJACENT TO ACTUAL CONSTRUCTION OPERATIONS AND EQUIPMENT. EACH DRUM MUST BE REPLACED IN THE CLOSED LANE AS SOON AS THE PROGRESSION OF WORK ACTIVITY ALLOWS.



STAGE 4A

2" OVERLAY PASSING LANE & MEDIAN SHOULDER

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STAGED TYPICAL SECTIONS	SHEET 46	E

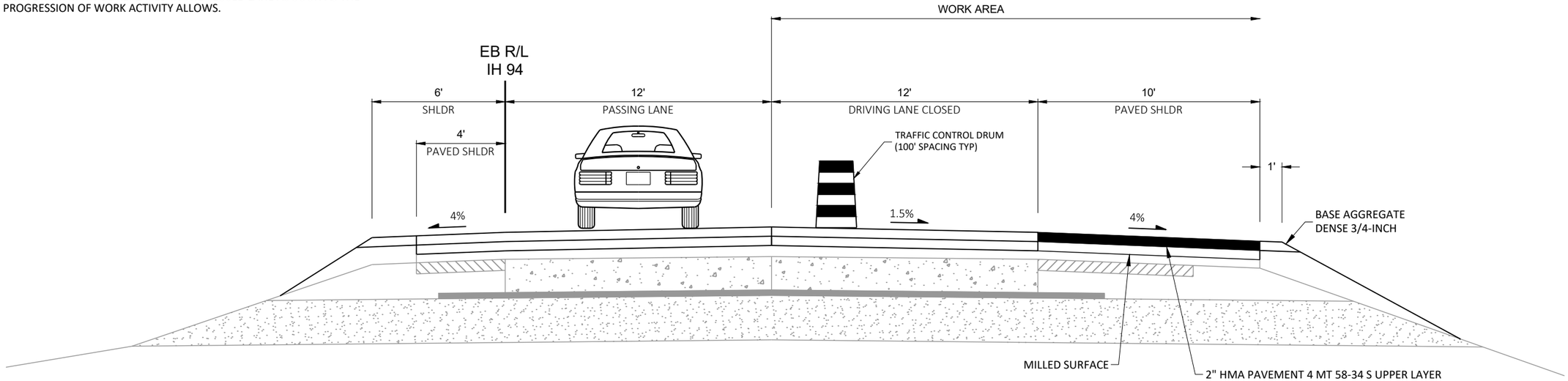


STAGE 4B
2" OVERLAY DRIVING LANE

NOTES:

EB LANES SHOWN, MIRROR STAGING FOR WB LANES.

* PLACEMENT OF DRUMS IN THE LIVE TRAFFIC LANE IS PERMITTED ONLY ADJACENT TO ACTUAL CONSTRUCTION OPERATIONS AND EQUIPMENT. EACH DRUM MUST BE REPLACED IN THE CLOSED LANE AS SOON AS THE PROGRESSION OF WORK ACTIVITY ALLOWS.



STAGE 4C
2" OVERLAY OUTSIDE SHOULDER

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - STAGED TYPICAL SECTIONS	SHEET 47	E

2

PCMS MESSAGING		
1 WEEK PRIOR TO CLOSURE:	FRAME 1	FRAME 2
(A)	RAMP WILL BE CLOSED	STARTING XXXDAY XX-XX-XX
DURING CLOSURE:	FRAME 1	FRAME 2
(A)	EXIT RAMP CLOSED	NEXT EXIT 2 MILES

PCMS MESSAGING		
1 WEEK PRIOR TO CLOSURE:	FRAME 1	FRAME 2
(B)	EB I-94 ON RAMP CLOSED	STARTING XXXDAY XX-XX-XX
DURING CLOSURE:	FRAME 1	FRAME 2
(B)	EB I-94 ON RAMP CLOSED	USE ALT ROUTE

INSTALL ON SB USH 12/STH 27
1400' NORTH OF IH 94

(B) --------

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

N

MB

12 27

EXIT 115
12 27
Merrillan
Black River Falls
EXISTING

SEE SDD 15D16 TRAFFIC CONTROL,
EXIT RAMP CLOSURE

WESTBOUND
EASTBOUND

95

EXIT 105

94

1/2 MILE

1000 FT

1/4 MILE

DMS

MB

EXISTING DYNAMIC
MESSAGE SIGN

HWY 12 / 27
RAMP CLOSED
USE EXIT 116
G20-56
120"X54"

1-1/2 MILE

MB

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

(A) --------

95

PORTABLE CHANGEABLE MESSAGE
SIGN TO BE PROGRAMMED BY
WI STATE PATROL OR TRAFFIC
MANAGEMENT CENTER AS NEEDED.

PCMS MESSAGING:

EXIT 115
MERRILLAN
CLOSED

EXIT 115
12 27
Merrillan
Black River Falls
CLOSED
EXISTING
G20-60
108"X24"

EXIT 115
12 27
Merrillan
Black River Falls
CLOSED
EXISTING
G20-61
120"X30"

MB

MB

MB

PORTABLE CHANGEABLE MESSAGE
SIGNS TO BE PROGRAMMED BY
WI STATE PATROL OR TRAFFIC
MANAGEMENT CENTER AS NEEDED.

PCMS MESSAGING 1 WEEK PRIOR TO CLOSURE:

FRAME 1	FRAME 2
RAMP WILL BE CLOSED	STARTING XXXDAY XX-XX-XX

12 27

MB

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

(B) --------

INSTALL ON NB USH 12/STH 27
1600' SOUTH OF IH 94

94

SEE NEXT SHEET

MATCH LINE

EXIT 116
54
Wisconsin Rapids
Black River Falls
2/3 MILE
NEXT EXIT 12 MILES
EXISTING

643.0910 TRAFFIC CONTROL
COVERING SIGNS TYPE I

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - EB RAMPS CLOSED	SHEET 48	E

2

2

MATCH LINE SEE PREVIOUS SHEET

EXIT 115
12 27
Merrillan
Black River Falls
2/3 MILE
NEXT EXIT 10 MILES
EXISTING

54

EXIT 116
54
Wis Rapids
Black River Falls
EXISTING

EXIT 116
54
Wis Rapids
Black River Falls
EXISTING

EXIT 116
54
Wis Rapids
Black River Falls
1 1/2 MILES
EXISTING

EXIT 116

M4-8 36"X18"
DETOUR DETOUR
M4-8 36"X18"
12 27
M1-6 36"X36"
M1-4 36"X36"

D9-2 24"X24"
H
M6-1 21"X21"

EXIT 116
EXISTING

TO
MO4-5 36"X18"
M1-4 36"X36"
12 27
M1-6 36"X36"
MO6-2 30"X30"

54

TO
MO4-5 36"X18"
M1-4 36"X36"
12 27
M1-6 24"X24"
MO6-1 30"X30"

WESTBOUND
EASTBOUND
94

EXISTING DYNAMIC MESSAGE SIGN
DMS

1100 FT

N

0

EXIT 128

0

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - EB RAMPS CLOSED	SHEET 49	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025401_TC_EB_RAMPS_CLOSED.DWG
LAYOUT NAME - 47

PLOT DATE : 7/19/2021 5:45 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:5 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

643.0920 TRAFFIC CONTROL
COVERING SIGNS TYPE II

N

16+00'SB' 17+00'SB' 18+00'SB' 19+00'SB' 20+00'SB' 21+00'SB' 22+00'SB' 23+00'SB'

16+00'NB' 17+00'NB' 18+00'NB' 19+00'NB' 20+00'NB' 21+00'NB' 22+00'NB' 23+00'NB'

PT: 20+30.22'NB'
PT: 20+30.22'SB'

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, WHITE

25' TYP

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

RAMP CLOSED WHEN FLASHING USE ALT ROUTE
EXISTING

94 WEST
SECOND RIGHT
EXISTING

94 WEST
Eau Claire
EXISTING

(RAMP CLOSED)

15'-10"
EXISTING

24+00'SB' 25+00'SB' 26+00'SB' 27+00'SB' 28+00'SB' 29+00'SB' 30+00'SB' 31+00'SB' 32+00'SB'

24+00'NB' 25+00'NB' 26+00'NB' 27+00'NB' 28+00'NB' 29+00'NB' 30+00'NB' 31+00'NB' 32+00'NB'

RAMP CLOSED USE ALT ROUTE
EXISTING

94 WEST
Eau Claire
EXISTING

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - EB RAMPS CLOSED	SHEET 50	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025405_TC_EB_RAMPS_CLOSED_DETAILS.DWG
LAYOUT NAME - Sheet - (3)

PLOT DATE : 7/19/2021 5:46 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:55 FT

WISDOT/CADDS SHEET 44

2

643.0920 TRAFFIC CONTROL
COVERING SIGNS TYPE II

EXISTING

25' TYP

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, WHITE

33+00'SB' 34+00'SB' 35+00'SB' 36+00'SB' 37+00'SB' 38+00'SB' 39+00'SB' 40+00'SB'

33+00'NB' 34+00'NB' 35+00'NB' 36+00'NB' 37+00'NB' 38+00'NB' 39+00'NB' 40+00'NB'

RAMP
25
MPH
EXISTING

15'-11"
EXISTING

EXISTING R11-54F
(FOLDED)

RAMP
30
MPH
EXISTING

RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE
EXISTING

WEST
94
Eau Claire
EXISTING

PC: 46+00.00'SB'

EP: 47+00.00'NB'

WEST
94
NEXT RIGHT
EXISTING

41+00'SB' 42+00'SB' 43+00'SB' 44+00'SB' 45+00'SB' 46+00'SB' 47+00'SB' 48+00'SB' 49+00'SB'

41+00'NB' 42+00'NB' 43+00'NB' 44+00'NB' 45+00'NB' 46+00'NB'

WEST NORTH ALT
12 27 94
EXISTING

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - EB RAMPS CLOSED	SHEET 51	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025405_TC_EB_RAMPS_CLOSED_DETAILS.DWG
LAYOUT NAME - Sheet - (4)

PLOT DATE : 7/19/2021 5:46 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:55 FT

WISDOT/CADDS SHEET 44

2

PCMS MESSAGING

1 WEEK PRIOR TO CLOSURE:

	FRAME 1	FRAME 2
(B)	WB I-94 ON RAMP CLOSED	STARTING XXXDAY XX-XX-XX

DURING CLOSURE:

	FRAME 1	FRAME 2
(B)	WB I-94 ON RAMP CLOSED	USE ALT ROUTE

INSTALL ON SB USH 12/STH 27
1400' NORTH OF IH 94

(B) --------

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

PCMS MESSAGING 1 WEEK PRIOR TO CLOSURE:

FRAME 1	FRAME 2
RAMP WILL BE CLOSED	STARTING XXXDAY XX-XX-XX

PORTABLE CHANGEABLE MESSAGE
SIGNS TO BE PROGRAMMED BY
WI STATE PATROL OR TRAFFIC
MANAGEMENT CENTER AS NEEDED.

SEE SDD 15D16 TRAFFIC CONTROL,
EXIT RAMP CLOSURE

MB

12 27

EXIT 115

EXISTING
12 27
Merrillan
Black River Falls
CLOSED
G20-61
120"X30"

EXIT 105

95

WESTBOUND
EASTBOUND
94

1/2 MILE

DMS

EXISTING DYNAMIC
MESSAGE SIGN

EXIT 115
12 27
Merrillan
Black River Falls
1 MILE
EXISTING

EXIT 115
12 27
Merrillan
Black River Falls
EXISTING

EXIT 116
54
Wisconsin Rapids
Black River Falls
2/3 MILE
NEXT EXIT 12 MILES
EXISTING

SEE NEXT SHEET
MATCH LINE

PORTABLE CHANGEABLE MESSAGE SIGN
TO BE PROGRAMMED BY WI STATE PATROL
OR TRAFFIC MANAGEMENT CENTER AS NEEDED.

(B) --------

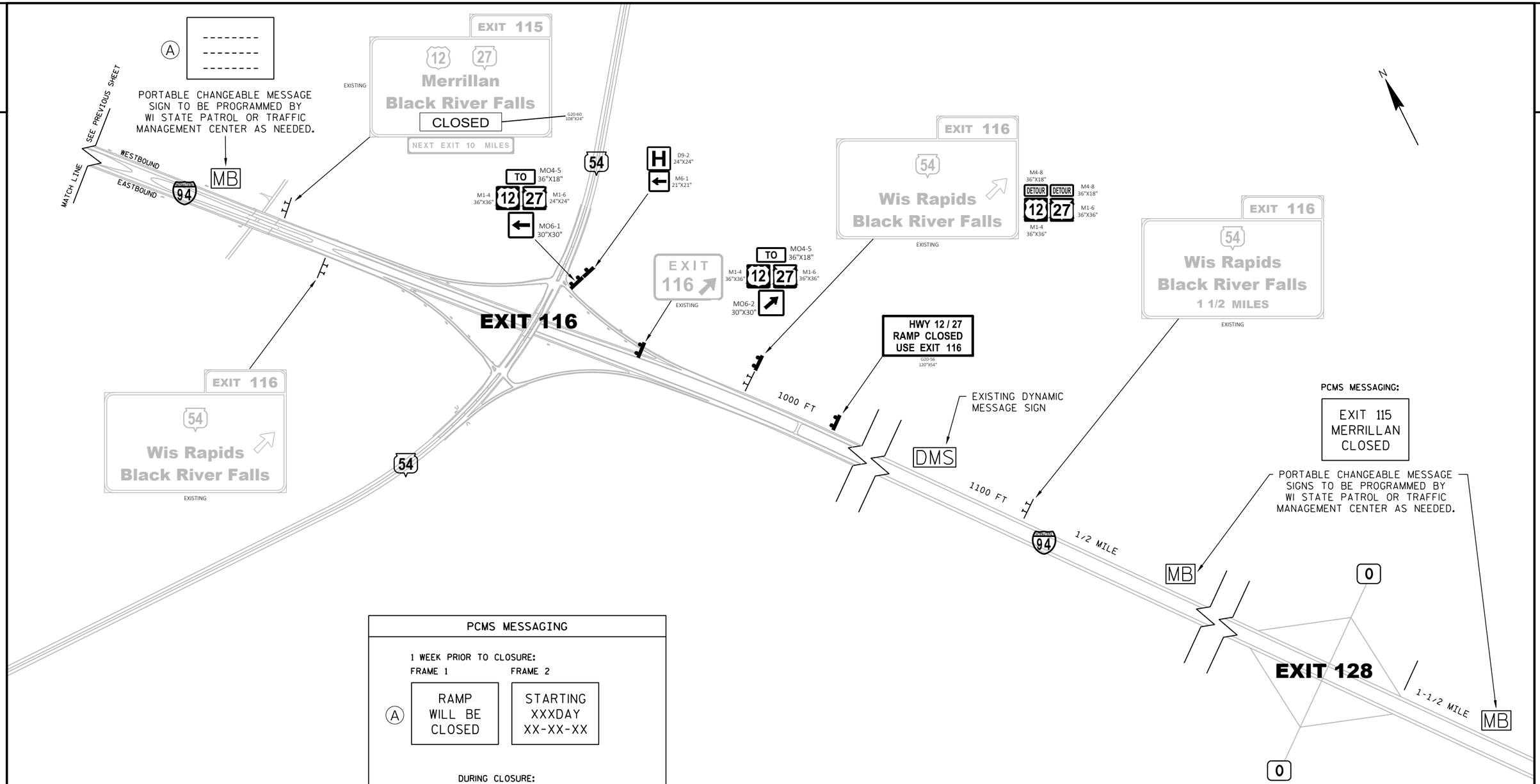
INSTALL ON NB USH 12/STH 27
1600' SOUTH OF IH 94

643.0910 TRAFFIC CONTROL
COVERING SIGNS TYPE I

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - WB RAMPS CLOSED	SHEET 52	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025451_TC_WB_RAMPS_CLOSED.DWG
LAYOUT NAME - 56
PLOT DATE : 7/19/2021 5:48 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

2



PCMS MESSAGING

1 WEEK PRIOR TO CLOSURE:

	FRAME 1	FRAME 2
A	RAMP WILL BE CLOSED	STARTING XXXDAY XX-XX-XX

DURING CLOSURE:

	FRAME 1	FRAME 2
A	EXIT RAMP CLOSED	NEXT EXIT 10 MILES

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - WB RAMPS CLOSED	SHEET 53	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025451_TC_WB_RAMPS_CLOSED.DWG
LAYOUT NAME - 57
PLOT DATE : 7/19/2021 5:48 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:5 FT
WISDOT/CADDS SHEET 42

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II

N

16+00'SB' 17+00'SB' 18+00'SB' 19+00'SB' 20+00'SB' 21+00'SB' 22+00'SB' 23+00'SB'

16+00'NB' 17+00'NB' 18+00'NB' 19+00'NB' 20+00'NB' 21+00'NB' 22+00'NB' 23+00'NB'

PT: 20+30.22'NB'

PT: 20+30.22'SB'

SIGN

94 EAST
NEXT RIGHT
EXIT ONLY
EXISTING

RAMP CLOSED WHEN FLASHING USE ALT ROUTE
EXISTING

RAMP
30
MPH
EXISTING

94 WEST
Local Traffic
94 EAST
Madison
EXISTING

N

24+00'SB' 25+00'SB' 26+00'SB' 27+00'SB' 28+00'SB' 29+00'SB' 30+00'SB' 31+00'SB' 32+00'SB'

24+00'NB' 25+00'NB' 26+00'NB' 27+00'NB' 28+00'NB' 29+00'NB' 30+00'NB' 31+00'NB' 32+00'NB'

15'-10"
EXISTING

RAMP
25
MPH
EXISTING

EXISTING R11-54F
(FOLDED)

EXISTING

25' TYP

94 WEST
Local Traffic
EXISTING

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - WB RAMPS CLOSED	SHEET 54	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025455_TC_WB_RAMPS_CLOSED_DETAILS.DWG
LAYOUT NAME - Sheet - (3)

PLOT DATE : 7/19/2021 5:49 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:55 FT

2

EAST 94 Madison
EXISTING

EAST 94
EXISTING

(RAMP CLOSED)

SIGN

USH 12/STH 27

33+00'SB' 34+00'SB' 35+00'SB' 36+00'SB' 37+00'SB' 38+00'SB' 39+00'SB' 40+00'SB'

33+00'NB' 34+00'NB' 35+00'NB' 36+00'NB' 37+00'NB' 38+00'NB' 39+00'NB' 40+00'NB'

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, WHITE

25' TYP

EXISTING

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

15'-11"
EXISTING

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

(RAMP CLOSED)

(RAMP CLOSED)

(RAMP CLOSED)

IH 94

IH 94

RAMP CLOSED
USE
ALT ROUTE
EXISTING

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

25' TYP

EXISTING

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

RAMP CLOSED
WHEN FLASHING
USE
ALT ROUTE
EXISTING

EAST 94 Madison
EXISTING

PC: 46+00.00'SB'

EP: 47+00.00'NB'

WEST 12 NORTH 27 ALT 94
WEST SECOND RIGHT
EAST 94
SECOND RIGHT
EXISTING

41+00'SB' 42+00'SB' 43+00'SB' 44+00'SB' 45+00'SB' 46+00'SB' 47+00'SB' 48+00'SB' 49+00'SB'

41+00'NB' 42+00'NB' 43+00'NB' 44+00'NB' 45+00'NB' 46+00'NB'

(RAMP CLOSED)

WEST NORTH ALT
12 27 94
EXISTING

643.0920 TRAFFIC CONTROL
COVERING SIGNS TYPE II

LEGEND

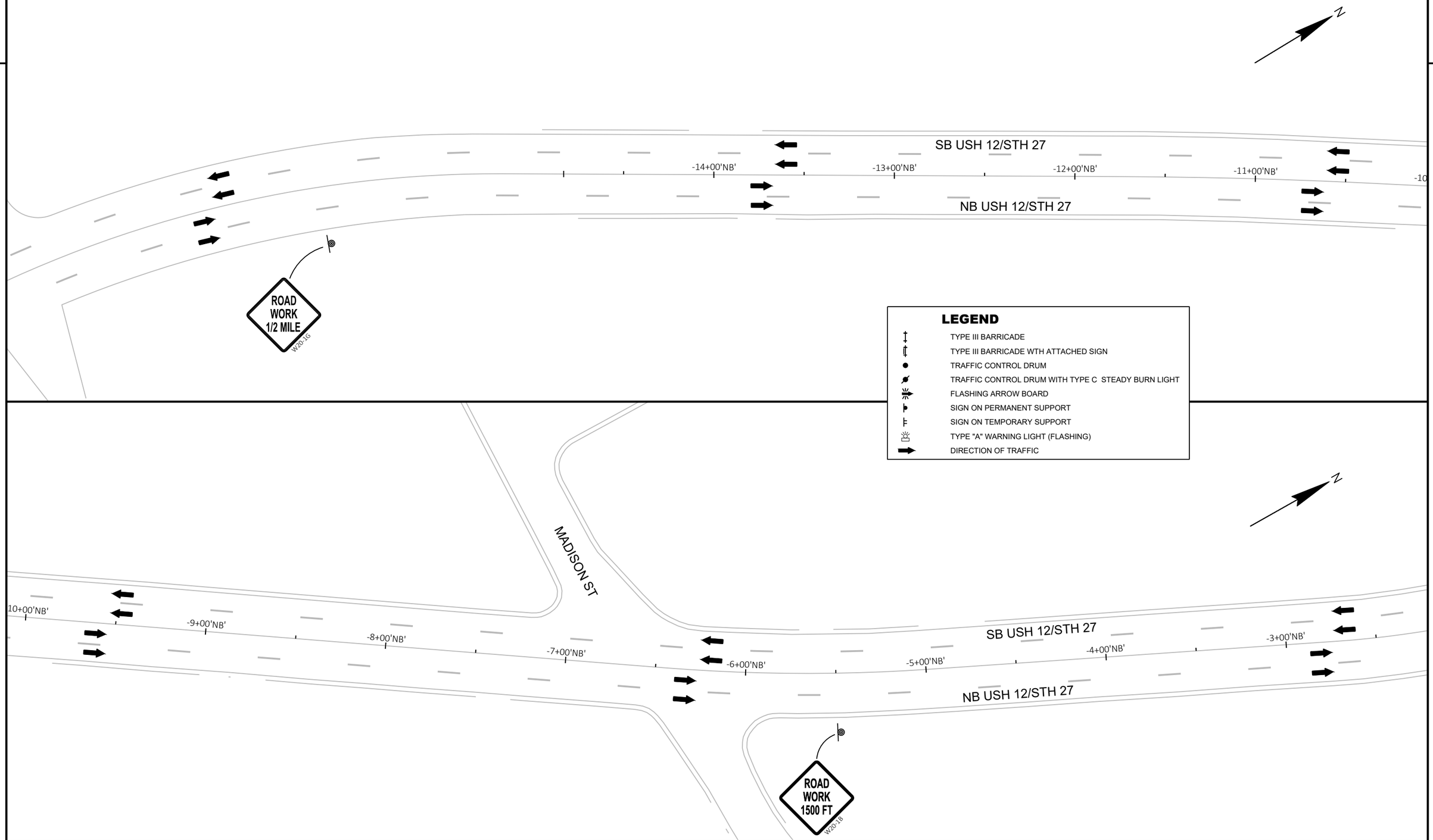
- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - WB RAMPS CLOSED	SHEET 55	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025455_TC_WB_RAMPS_CLOSED_DETAILS.DWG
LAYOUT NAME - Sheet - (4)

PLOT DATE : 7/19/2021 5:49 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:55 FT

2



PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 PASSING LANE CLOSED	SHEET 56	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025501_TC_USH12_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 7/19/2021 5:50 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

SB USH 12/STH 27

NB USH 12/STH 27

-2+00'NB'

-1+00'NB'

0+00'NB'

1+00'NB'

2+00'NB'

3+00'NB'

4+00'NB'

5+00'NB'

JEFFERSON ST

LEFT LANE CLOSED 1000 FT
W20-5SC

LEFT LANE CLOSED 500 FT
W20-5SD

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

N

END ROAD WORK
G20-2A
48"X24"

SB USH 12/STH 27

NB USH 12/STH 27

6+00'NB'

7+00'NB'

8+00'NB'

9+00'NB'

10+00'NB'

11+00'NB'

12+00'NB'

13+00'NB'

25' TYP

E ADAMS ST

W04-2L

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, YELLOW

REMOVE PAVEMENT MARKING

E WASHINGTON ST

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, YELLOW

BEGIN LEFT TURN LANE
R3-20L
24"X36"

ROAD WORK AHEAD
W20-1A

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 PASSING LANE CLOSED	SHEET 57	E

2

ROAD WORK AHEAD
W20-1A

END ROAD WORK
G20-2A
48"X24"

CTH A

SIGN

SIGN

BEGIN CONSTRUCTION
STA 18+30'SB'

N

50' TYP

SB USH 12/STH 27

25' TYP

BEGIN CONSTRUCTION
STA 20+50'NB'

15+00'NB'

16+00'NB'

17+00'NB'

18+00'NB'

19+00'NB'

20+00'NB'

21+00'NB

14+00'NB'

NB USH 12/STH 27

TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, WHITE

BEGIN LEFT TURN LANE
R3-20LL
24"X36"

W01-6
48" X 24"
TYPE III BARRICADE

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

SIGN

SIGN

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN, ORANGE

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

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

RAMP 'JD'

'JE' LOOP

N

R4-7
24"X30"

SB USH 12/STH 27

22+00'NB'

23+00'NB'

24+00'NB'

25+00'NB'

27+00'NB'

28+00'NB'

YIELD
R1-2
36"X31"

50' TYP

NB USH 12/STH 27

SIGN

SIGN

RAMP 'JC'

W01-6
48" X 24"
TYPE III BARRICADE

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 PASSING LANE CLOSED	SHEET 58	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025501_TC_USH12_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (3)
PLOT DATE : 7/19/2021 5:50 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2

'JE' LOOP

EB IH 94

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

B-27-34

SB USH 12/STH 27

50' TYP

29+00'NB' 30+00'NB' 31+00'NB' 32+00'NB' 33+00'NB' 34+00'NB' 35+00'NB' 36+00'NB'

NB USH 12/STH 27

B-27-33

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

WB IH 94

N

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN, ORANGE

2

W01-6
48" X 24"
TYPE III BARRICADE

SIGN

SIGN

RAMP 'JF'

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

SB USH 12/STH 27

R1-2
36"X31"

37+00'NB' 38+00'NB' 39+00'NB' 40+00'NB' 41+00'NB' 42+00'NB' 43+00'NB' 44+00'NB'

NB USH 12/STH 27

50' TYP

R4-7
24"X30"

RAMP 'JA'

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

'JB' LOOP

N

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 PASSING LANE CLOSED	SHEET 59	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025501_TC_USH12_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (4)

PLOT DATE : 7/19/2021 5:50 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

ROAD WORK AHEAD
W20-1A

ROZMENOSKI RD

WO1-6
48" X 24"
TYPE III BARRICADE

N

SB USH 12/STH 27

50' TYP

45+00'NB'
46+00'NB'
47+00'NB'
48+00'NB'
49+00'NB'
50+00'NB'
51+00'NB'
52+00'NB'

NB USH 12/STH 27

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

WO1-6
48" X 24"
TYPE III BARRICADE

ROAD WORK AHEAD
W20-1A

RIVERVIEW RD

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN, ORANGE

ROAD WORK AHEAD
W20-1A

RUF RD

R4-7
24"X30"

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

N

50' TYP

SB USH 12/STH 27

NB USH 12/STH 27

53+00'NB'
54+00'NB'
55+00'NB'
56+00'NB'
57+00'NB'
58+00'NB'
59+00'NB'
60+00'NB'

END CONSTRUCTION
STA 59+00'NB'

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 PASSING LANE CLOSED	SHEET 60	E

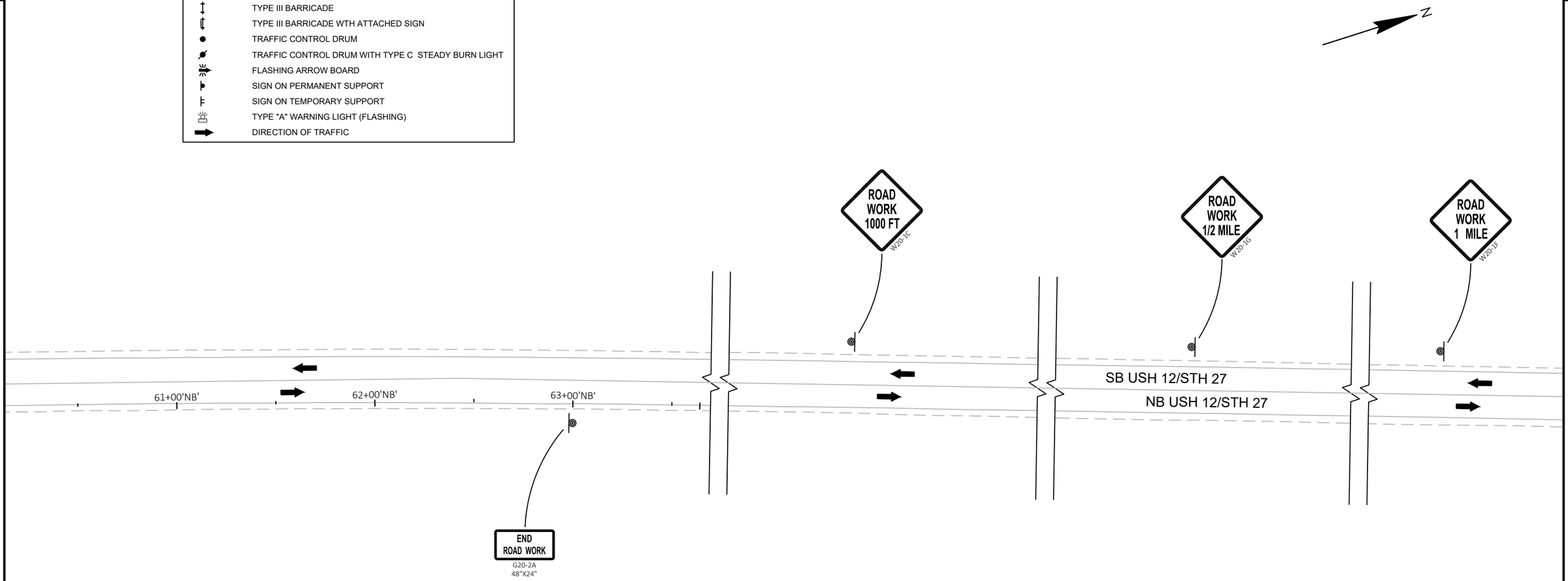
FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025501_TC_USH12_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (5)

PLOT DATE : 7/19/2021 5:50 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

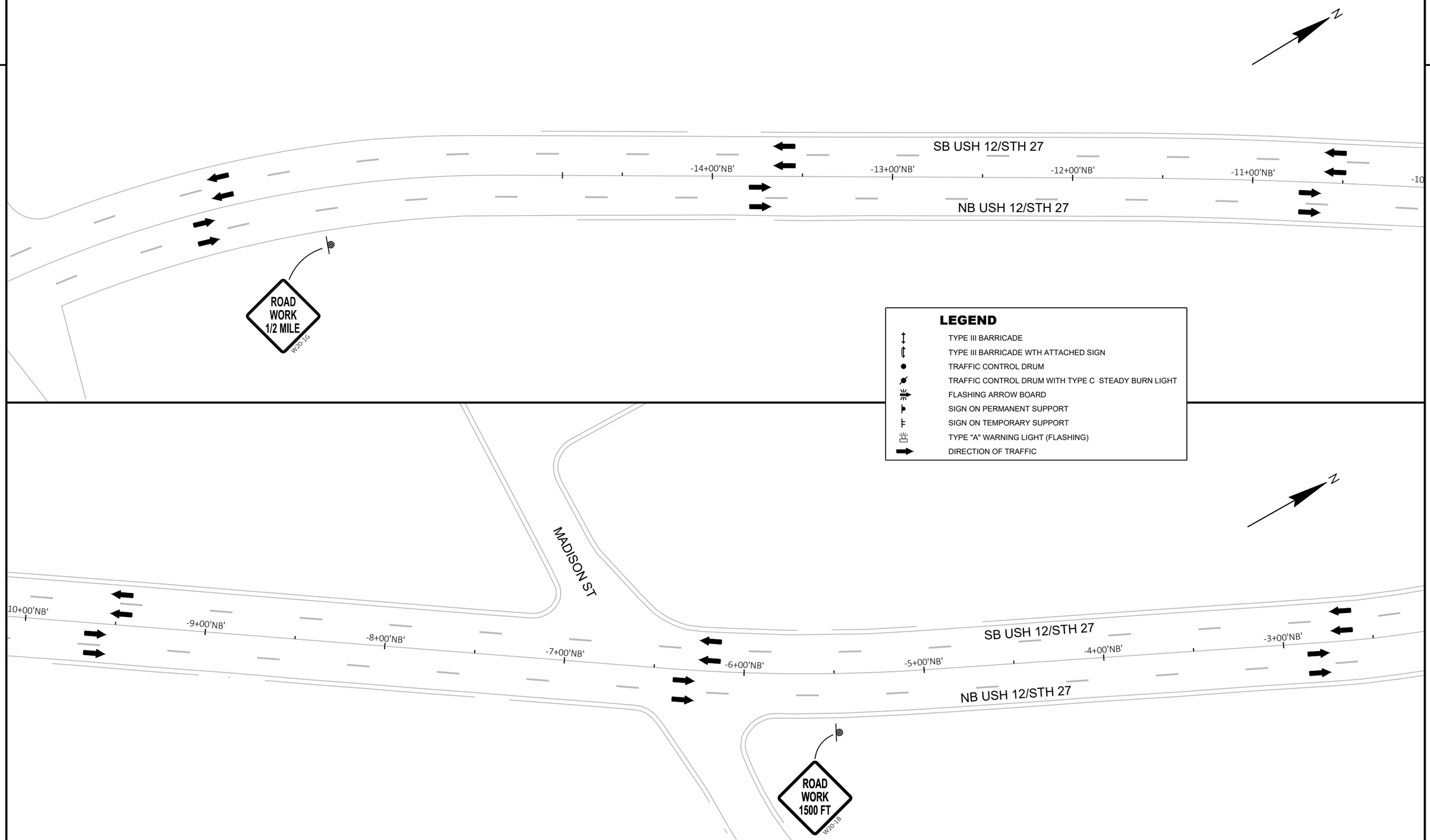


PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 PASSING LANE CLOSED	SHEET 61	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025501_TC_USH12_PASSING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (6)

PLOT DATE : 7/19/2021 5:50 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 DRIVING LANE CLOSED	SHEET 62	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025551_TC_USH12_DRIVING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 7/19/2021 5:52 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

SB USH 12/STH 27

NB USH 12/STH 27

-2+00'NB'

-1+00'NB'

0+00'NB'

1+00'NB'

2+00'NB'

3+00'NB'

4+00'NB'

5+00'NB'

JEFFERSON ST

RIGHT LANE CLOSED 1000 FT
W20-5C

RIGHT LANE CLOSED 500 FT
W20-5D

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

N

END ROAD WORK
G20-2A
48"X24"

SB USH 12/STH 27

NB USH 12/STH 27

6+00'NB'

7+00'NB'

8+00'NB'

9+00'NB'

10+00'NB'

11+00'NB'

12+00'NB'

13+00'NB'

E ADAMS ST

W4-2R

REMOVE PAVEMENT MARKING

E WASHINGTON ST

BEGIN LEFT TURN LANE
R3-20L
24"X36"

25' TYP

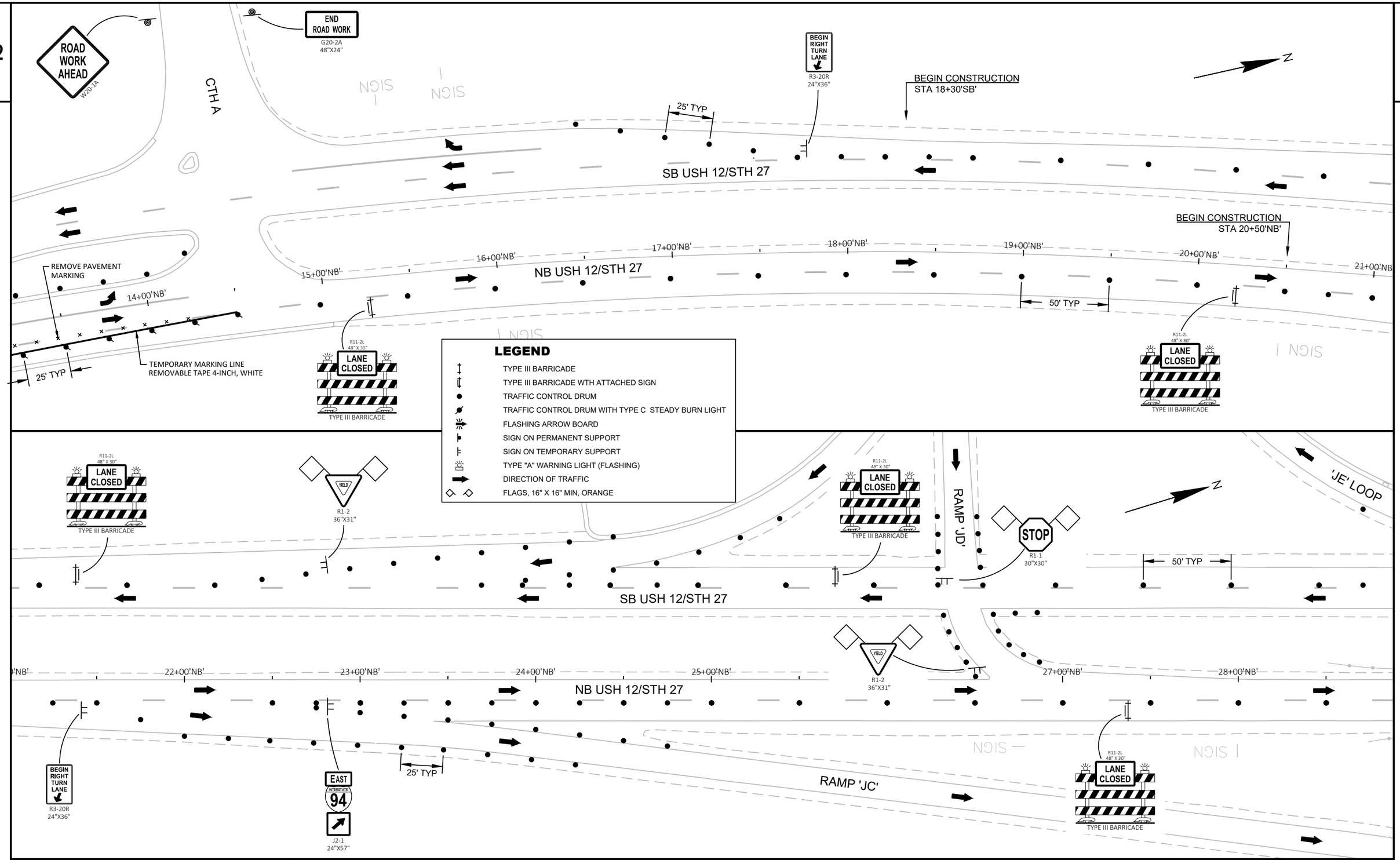
TEMPORARY MARKING LINE
REMOVABLE TAPE 4-INCH, WHITE

ROAD WORK AHEAD
W20-1A

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 DRIVING LANE CLOSED	SHEET 63	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025551_TC_USH12_DRIVING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (2)
PLOT DATE : 7/19/2021 5:52 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 DRIVING LANE CLOSED	SHEET 64	E

2

'JE' LOOP

25' TYP

EAST INTERSTATE 94

J2-1
24"X57"

BEGIN RIGHT TURN LANE

R3-20R
24"X36"

WB IH 94

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

B-27-34

SB USH 12/STH 27

WEST INTERSTATE 94

J2-1
24"X57"

29+00'NB' 30+00'NB' 31+00'NB' 32+00'NB' 33+00'NB' 34+00'NB' 35+00'NB' 36+00'NB'

NB USH 12/STH 27

50' TYP

B-27-33

EB IH 94

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

BEGIN RIGHT TURN LANE

R3-20R
24"X36"

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN, ORANGE

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

SIGN

SIGN

RAMP 'JF'

50' TYP

SB USH 12/STH 27

BEGIN RIGHT TURN LANE

R3-20R
24"X36"

WEST INTERSTATE 94

J2-1
24"X57"

YIELD

R1-2
36"X31"

37+00'NB' 38+00'NB' 39+00'NB' 40+00'NB' 41+00'NB' 42+00'NB' 43+00'NB' 44+00'NB'

NB USH 12/STH 27

RAMP 'JA'

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

25' TYP

STOP

R1-1
30"X30"

'JB' LOOP

YIELD

R1-2
36"X31"

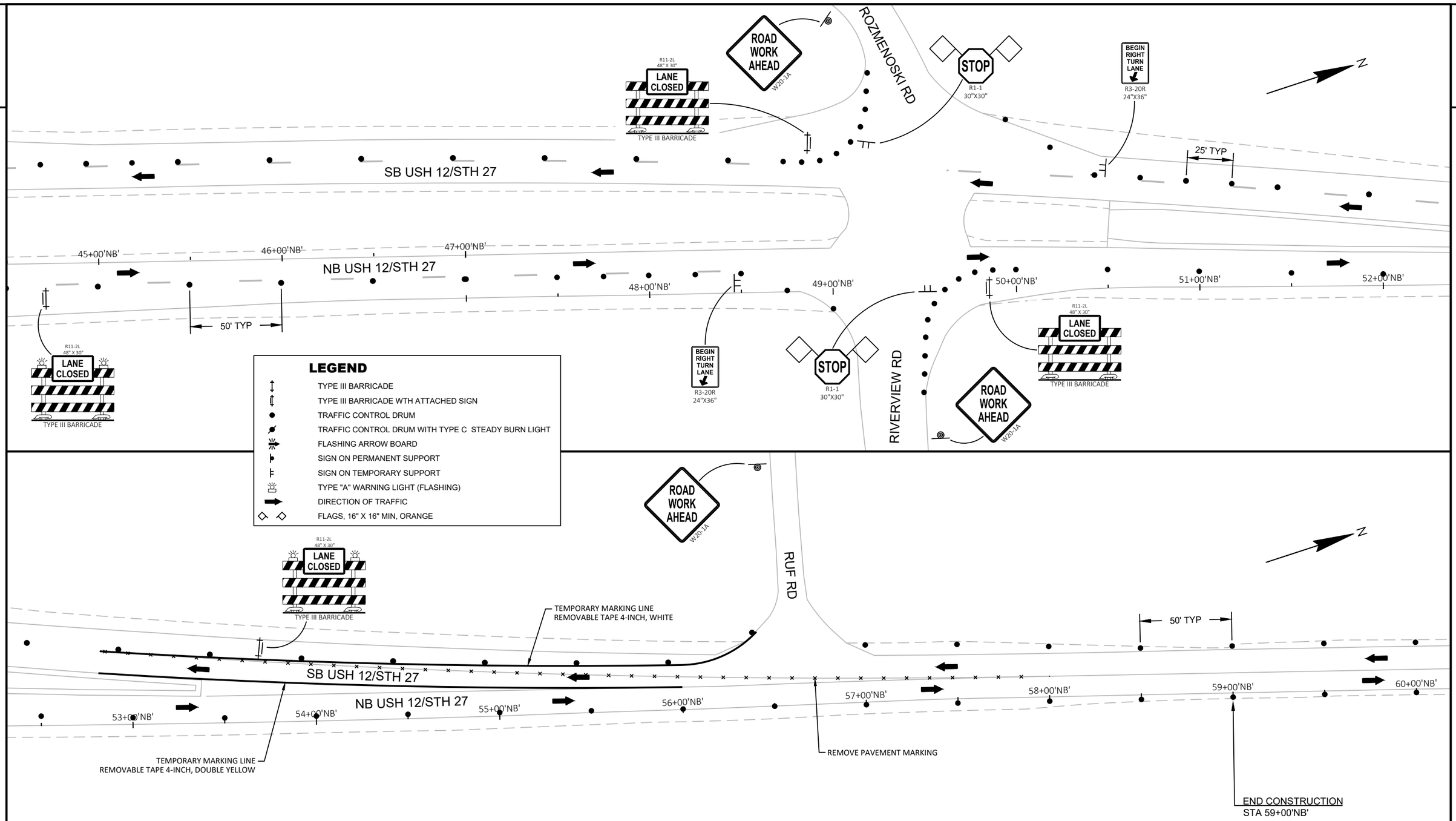
PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 DRIVING LANE CLOSED	SHEET 65	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025551_TC_USH12_DRIVING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (4)

PLOT DATE : 7/19/2021 5:52 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

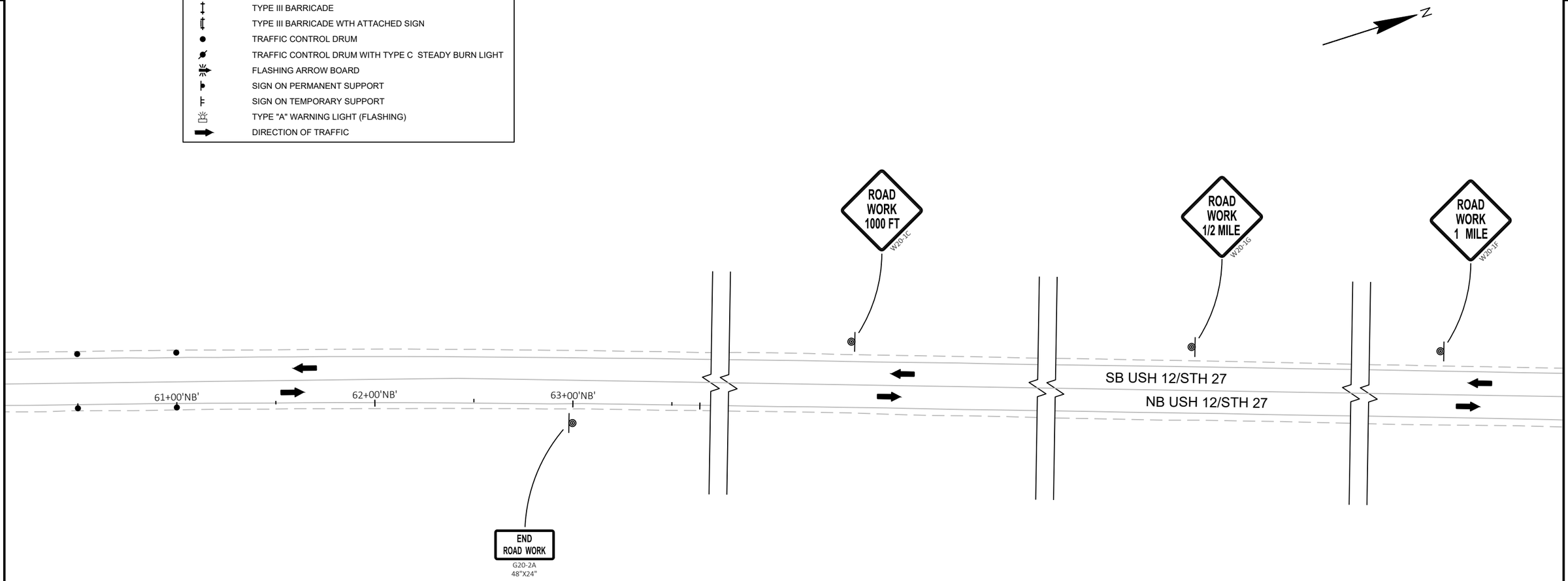


PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 DRIVING LANE CLOSED	SHEET 66	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

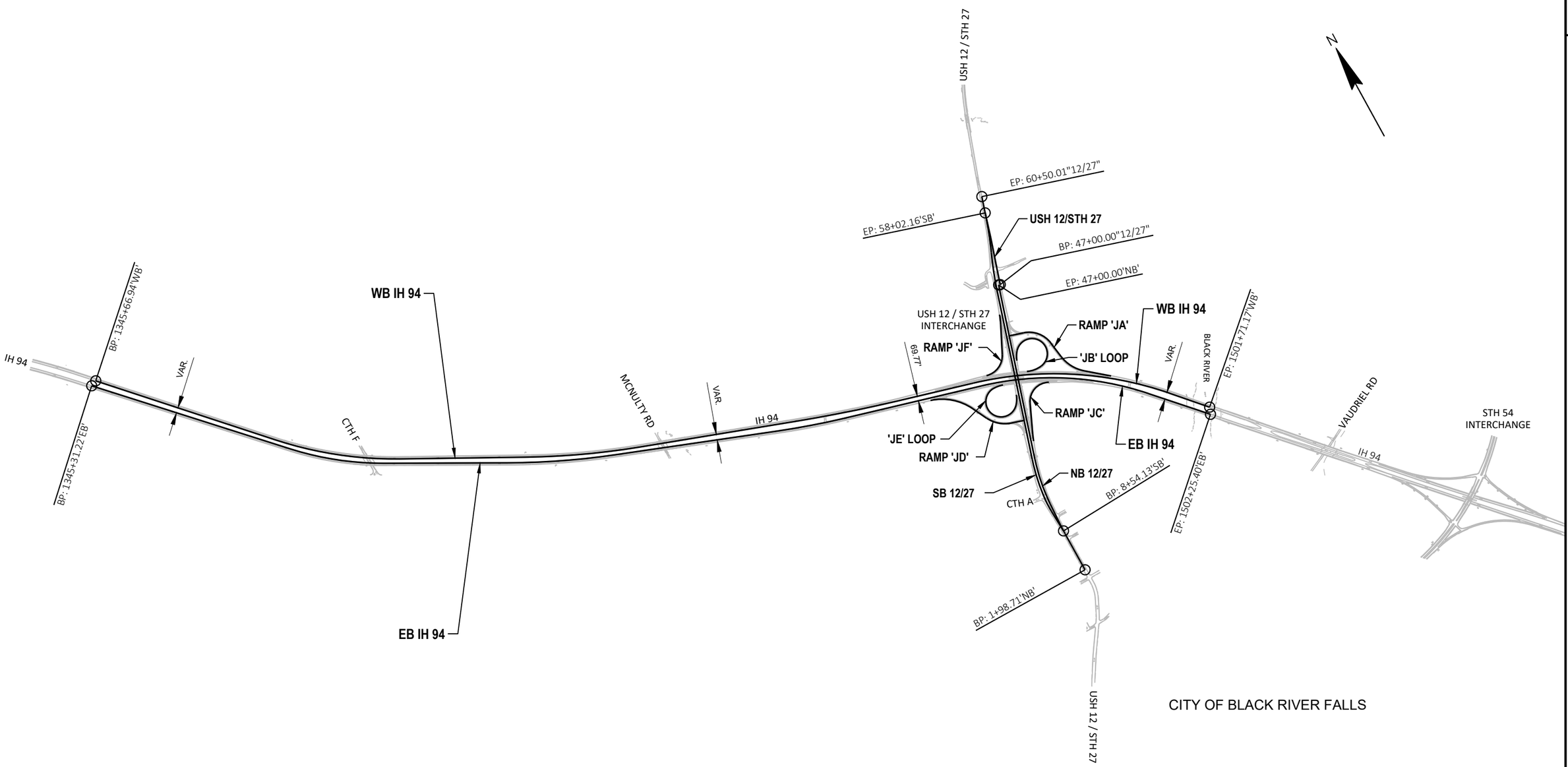


PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	TRAFFIC CONTROL - USH 12 DRIVING LANE CLOSED	SHEET 67	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\025551_TC_USH12_DRIVING_LANE_CLOSED.DWG
LAYOUT NAME - Sheet - (6)

PLOT DATE : 7/19/2021 5:52 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:50 FT

2



PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	ALIGNMENT PLAN	SHEET 68	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\027202_AD.DWG
LAYOUT NAME - Align Plan

PLOT DATE : 7/19/2021 5:57 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:1500 FT

****
Alignment Name: IH 94 EB Ref Line (2)
Station Range: Start: 1345+31.22, End: 1502+25.40
Description: 'EB'
****

Begin IH 94 EB Ref Line (2)
N 109,020.9140 E 76,853.7933 1345+31.22

Line (1)
S43° 37' 23.66"E 3,130.336'
N 106,754.8882 E 79,013.4537 1376+61.56
Line (1)

Curve (2)
BC N 106,754.8882 E 79,013.4537 1376+61.56
CTR N 109,917.2157 E 82,331.5290
PI N 106,235.2139 E 79,508.7350

Direction Back S43° 37' 23.66"E
Radius 4,583.660'
Delta 17°48'09"(LT)
Length 1,424.208'
Tangent 717.889'
Chord Direction S52° 31' 28.36"E Distance 1,418.486'
Direction Ahead S61° 25' 33.07"E

EC N 105,891.8506 E 80,139.1844 1390+85.76
Curve (2)

Line (3)
S61° 25' 33.07"E 1,853.338'
N 105,005.4072 E 81,766.7836 1409+39.10
Line (3)

Curve (4)
BC N 105,005.4072 E 81,766.7836 1409+39.10
CTR N 115,068.8288 E 87,247.6499
PI N 104,615.8216 E 82,482.1019

Direction Back S61° 25' 33.07"E
Radius 11,459.160'
Delta 8°07'54"(LT)
Length 1,626.322'
Tangent 814.529'
Chord Direction S65° 29' 29.97"E Distance 1,624.958'
Direction Ahead S69° 33' 26.86"E

EC N 104,331.3329 E 83,245.3341 1425+65.43
Curve (4)

Line (5)
S69° 33' 26.86"E 2,471.116'
N 103,468.2517 E 85,560.8265 1435+74.04

(Continued)

Station Equation Station Back: 1450+36.54 Station Ahead: 1435+74.04

Line (5)

Curve (6)
BC N 103,468.2517 E 85,560.8265 1435+74.04
CTR N 114,205.7475 E 89,563.1422
PI N 103,296.2873 E 86,022.1760

Direction Back S69° 33' 26.86"E
Radius 11,459.160'
Delta 4°55'14"(LT)
Length 984.108'
Tangent 492.357'
Chord Direction S72° 01' 03.83"E Distance 983.806'
Direction Ahead S74° 28' 40.81"E

EC N 103,164.5285 E 86,496.5755 1445+58.15
Curve (6)

Line (7)
S74° 28' 40.81"E 2,145.635'
N 102,590.3387 E 88,563.9545 1467+03.79
Line (7)

Curve (8)
BC N 102,590.3387 E 88,563.9545 1467+03.79
CTR N 98,173.8550 E 87,337.3288
PI N 102,241.6791 E 89,819.3085

Direction Back S74° 28' 40.81"E
Radius 4,583.660'
Delta 31°44'05"(RT)
Length 2,538.786'
Tangent 1,302.873'
Chord Direction S58° 36' 38.08"E Distance 2,506.459'
Direction Ahead S42° 44' 35.36"E

EC N 101,284.8447 E 90,703.5852 1492+42.57
Curve (8)

Line (9)
S42° 44' 35.36"E 982.830'
N 100,563.0505 E 91,370.6449 1502+25.40
Line (9)

N 100,563.0505 E 91,370.6449 1502+25.40
End IH 94 EB Ref Line (2)

****
Alignment Length: 17,156.681'
****

****
Alignment Name: IH 94 WB Ref Line (2)
Station Range: Start: 1345+66.94, End: 1501+71.17
Description: 'WB'
****

Begin IH 94 WB Ref Line (2)
N 109,057.4885 E 76,944.3462 1345+66.94

Line (1)
S43° 03' 05.28"E 2,837.578'
N 106,983.9543 E 78,881.4332 1374+04.52
Line (1)

Curve (2)
BC N 106,983.9543 E 78,881.4332 1374+04.52
CTR N 110,895.2809 E 83,068.2711
PI N 106,284.9135 E 79,534.4742

Direction Back S43° 03' 05.28"E
Radius 5,729.580'
Delta 18°57'27"(LT)
Length 1,895.752'
Tangent 956.619'
Chord Direction S52° 31' 48.81"E Distance 1,887.117'
Direction Ahead S62° 00' 32.34"E

Station Equation Station Back: 1393+00.27 Station Ahead: 1393+23.28

EC N 105,835.9404 E 80,379.1894 1393+23.28
Curve (2)

Line (3)
S62° 00' 32.34"E 1,893.271'
N 104,947.3655 E 82,050.9880 1412+16.55
Line (3)

Curve (4)
BC N 104,947.3655 E 82,050.9880 1412+16.55
CTR N 115,066.0465 E 87,429.1514
PI N 104,544.0017 E 82,809.8919

Direction Back S62° 00' 32.34"E
Radius 11,459.160'
Delta 8°34'42"(LT)
Length 1,715.668'
Tangent 859.440'
Chord Direction S66° 17' 53.35"E Distance 1,714.066'
Direction Ahead S70° 35' 14.36"E

Station Equation Station Back: 1429+32.22 Station Ahead: 1429+42.43

EC N 104,258.3497 E 83,620.4722 1429+42.43
Curve (4)

Line (5)
S70° 35' 14.36"E 2,382.631'
N 103,466.4350 E 85,867.6484 1438+62.22

(Continued)

Station Equation Station Back: 1450+36.88 Station Ahead: 1435+74.04

Line (5)

Curve (6)
BC N 103,466.4350 E 85,867.6484 1438+62.22
CTR N 125,081.8287 E 93,485.0068
PI N 103,207.7066 E 86,601.8291

Direction Back S70° 35' 14.36"E
Radius 22,918.320'
Delta 3°53'26"(LT)
Length 1,556.273'
Tangent 778.435'
Chord Direction S72° 31' 57.58"E Distance 1,555.974'
Direction Ahead S74° 28' 40.81"E

Station Equation Station Back: 1454+18.49 Station Ahead: 1453+78.10

EC N 102,999.3908 E 87,351.8733 1453+78.10
Curve (6)

Line (7)
S74° 28' 40.81"E 1,165.741'
N 102,687.4289 E 88,475.0967 1465+43.85
Line (7)

Curve (8)
BC N 102,687.4289 E 88,475.0967 1465+43.85
CTR N 97,591.4846 E 87,059.7591
PI N 102,275.9986 E 89,956.4573

Direction Back S74° 28' 40.81"E
Radius 5,288.840'
Delta 32°25'04"(RT)
Length 2,992.399'
Tangent 1,537.434'
Chord Direction S58° 16' 09.01"E Distance 2,952.644'
Direction Ahead S42° 03' 37.21"E

EC N 101,134.5463 E 90,986.4042 1495+36.24
Curve (8)

Line (9)
S42° 03' 37.21"E 634.927'
N 100,663.1516 E 91,411.7497 1501+71.17
Line (9)

N 100,663.1516 E 91,411.7497 1501+71.17
End IH 94 WB Ref Line (2)

****
Alignment Length: 17,074.240'
****

****

Alignment Name: JB Loop Ref Line
Station Range: Start: 73+62.39, End: 86+30.26
Description: 'JB'

****

Begin JB Loop Ref Line
N 102,453.4233 E 89,264.1696 73+62.39

Curve (1)
BC N 102,453.4233 E 89,264.1696 73+62.39
CTR N 102,826.1604 E 89,433.1691
PI N 102,403.9872 E 89,373.2035

Direction Back S65° 36' 37.39"E
Radius 409.260'
Delta 32°36'39"(LT)
Length 232.937'
Tangent 119.718'
Chord Direction S81° 54' 56.78"E Distance 229.805'
Direction Ahead N81° 46' 43.84"E

EC N 102,421.1061 E 89,491.6910 75+95.33

Curve (1)

Compound Curve

Curve (2)
BC N 102,421.1061 E 89,491.6910 75+95.33
CTR N 102,647.9310 E 89,458.9196
PI N 102,334.7493 E 88,893.9793

Direction Back N81° 46' 43.84"E
Radius 229.180'
Delta 221°33'45"(LT)
Length 886.237'
Tangent 603.918'
Chord Direction N29° 00' 08.44"W Distance 428.540'
Direction Ahead S40° 12' 59.29"W

EC N 102,795.9073 E 89,283.9153 84+81.56

Curve (2)

Compound Curve

Curve (3)
BC N 102,795.9073 E 89,283.9153 84+81.56
CTR N 102,531.6574 E 89,596.4305
PI N 102,738.5002 E 89,235.3743

Direction Back S40° 12' 59.29"W
Radius 409.260'
Delta 20°49'04"(LT)
Length 148.699'
Tangent 75.178'
Chord Direction S29° 48' 27.51"W Distance 147.883'
Direction Ahead S19° 23' 55.73"W

EC N 102,667.5897 E 89,210.4044 86+30.26

Curve (3)

N 102,667.5897 E 89,210.4044 86+30.26

End JB Loop Ref Line

****

Alignment Length: 1,267.873'

****

****

Alignment Name: JE Loop Ref Line
Station Range: Start: 58+07.02, End: 70+23.70
Description: 'JE'

****

Begin JE Loop Ref Line
N 102,223.0551 E 88,957.2691 58+07.02

Curve (1)
BC N 102,223.0551 E 88,957.2691 58+07.02
CTR N 102,358.9874 E 88,571.2430
PI N 102,150.4632 E 88,931.7071

Direction Back S19° 23' 55.73"W
Radius 409.260'
Delta 21°18'00"(RT)
Length 152.145'
Tangent 76.961'
Chord Direction S30° 02' 55.90"W Distance 151.271'
Direction Ahead S40° 41' 56.07"W

EC N 102,092.1155 E 88,881.5221 59+59.17

Curve (1)

Compound Curve

Curve (2)
BC N 102,092.1155 E 88,881.5221 59+59.17
CTR N 102,241.5601 E 88,707.7700
PI N 102,493.7587 E 89,226.9764

Direction Back S40° 41' 56.07"W
Radius 229.180'
Delta 226°47'13"(RT)
Length 907.135'
Tangent 529.770'
Chord Direction N25° 54' 27.48"W Distance 420.683'
Direction Ahead N87° 29' 08.96"E

EC N 102,470.5195 E 88,697.7167 68+66.30

Curve (2)

Compound Curve

Curve (3)
BC N 102,470.5195 E 88,697.7167 68+66.30
CTR N 102,061.6534 E 88,715.6695
PI N 102,474.0149 E 88,777.3222

Direction Back N87° 29' 08.96"E
Radius 409.260'
Delta 22°02'06"(RT)
Length 157.395'
Tangent 79.682'
Chord Direction S81° 29' 47.83"E Distance 156.427'
Direction Ahead S70° 28' 44.63"E

EC N 102,447.3889 E 88,852.4243 70+23.70

Curve (3)

N 102,447.3889 E 88,852.4243 70+23.70

End JE Loop Ref Line

****

Alignment Length: 1,216.676'

****

2

****
Alignment Name: Ramp JA Ref Line
Station Range: Start: 68+52.71, End: 86+16.58
Description: 'JA'
****

Begin Ramp JA Ref Line
N 103,049.6091 E 89,289.4452 68+52.71

Line (1)
S72° 59' 53.57"E 219.485'
N 102,985.4313 E 89,499.3379 70+72.20
Line (1)

Curve (2)
BC N 102,985.4313 E 89,499.3379 70+72.20
CTR N 102,594.0578 E 89,379.6697
PI N 102,909.8850 E 89,746.4112

Direction Back S72° 59' 53.57"E
Radius 409.260'
Delta 64°31'42"(RT)
Length 460.921'
Tangent 258.365'
Chord Direction S40° 44' 02.71"E Distance 436.945'
Direction Ahead S8° 28' 11.85"E

EC N 102,654.3380 E 89,784.4660 75+33.12
Curve (2)

Line (3)
S8° 28' 11.85"E 252.666'
N 102,404.4278 E 89,821.6813 77+85.79
Line (3)

Curve (4)
BC N 102,404.4278 E 89,821.6813 77+85.79
CTR N 102,488.8195 E 90,388.3922
PI N 102,186.8090 E 89,854.0880

Direction Back S8° 28' 11.85"E
Radius 572.960'
Delta 42°00'50"(LT)
Length 420.141'
Tangent 220.018'
Chord Direction S29° 28' 36.86"E Distance 410.791'
Direction Ahead S50° 29' 01.86"E

EC N 102,046.8123 E 90,023.8202 82+05.93
Curve (4)

Line (5)
S50° 29' 01.86"E 410.653'
N 101,785.5154 E 90,340.6167 86+16.58
Line (5)

N 101,785.5154 E 90,340.6167 86+16.58
End Ramp JA Ref Line

****
Alignment Length: 1,763.866'
****

****
Alignment Name: Ramp JAA Ref Line
Station Range: Start: 67+77.67, End: 70+62.07
Description: 'JAA'
****

Begin Ramp JAA Ref Line
N 103,233.1949 E 89,386.3616 67+77.67

Curve (1)
BC N 103,233.1949 E 89,386.3616 67+77.67
CTR N 103,174.7146 E 89,577.6207
PI N 103,068.4660 E 89,335.9933

Direction Back S17° 00' 06.43"W
Radius 200.000'
Delta 81°28'33"(LT)
Length 284.404'
Tangent 172.257'
Chord Direction S23° 44' 09.96"E Distance 261.040'
Direction Ahead S64° 28' 26.36"E

EC N 102,994.2367 E 89,491.4366 70+62.07
Curve (1)

N 102,994.2367 E 89,491.4366 70+62.07
End Ramp JAA Ref Line

****
Alignment Length: 284.404'
****

****
Alignment Name: Ramp JC Ref Line
Station Range: Start: 66+78.42, End: 77+22.91
Description: 'JC'
****

Begin Ramp JC Ref Line
N 101,488.8510 E 88,849.8655 66+78.42

Curve (1)
BC N 101,488.8510 E 88,849.8655 66+78.42
CTR N 101,006.1852 E 90,198.4958
PI N 101,538.7024 E 88,867.7070

Direction Back N19° 41' 31.02"E
Radius 1,432.400'
Delta 4°14'02"(RT)
Length 105.848'
Tangent 52.948'
Chord Direction N21° 48' 32.02"E Distance 105.824'
Direction Ahead N23° 55' 33.02"E

EC N 101,587.1005 E 88,889.1802 67+84.26
Curve (1)

Line (2)
N23° 55' 33.02"E 467.988'
N 102,014.8746 E 89,078.9745 72+52.25
Line (2)

Curve (3)
BC N 102,014.8746 E 89,078.9745 72+52.25
CTR N 101,898.6916 E 89,340.8376
PI N 102,296.3349 E 89,203.8524

Direction Back N23° 55' 33.02"E
Radius 286.480'
Delta 94°07'53"(RT)
Length 470.659'
Tangent 307.919'
Chord Direction N70° 59' 29.56"E Distance 419.484'
Direction Ahead S61° 56' 33.89"E

EC N 102,151.5039 E 89,475.5845 77+22.91
Curve (3)

N 102,151.5039 E 89,475.5845 77+22.91
End Ramp JC Ref Line

****
Alignment Length: 1,044.494'
****

****
Alignment Name: Ramp JF Ref Line
Station Range: Start: 67+60.38, End: 77+89.27
Description: 'JF'
****

Begin Ramp JF Ref Line
N 102,689.8694 E 88,703.3240 67+60.38

Curve (1)
BC N 102,689.8694 E 88,703.3240 67+60.38
CTR N 102,988.7234 E 88,784.6047
PI N 102,622.2539 E 88,951.9337

Direction Back S74° 47' 06.11"E
Radius 309.710'
Delta 79°30'45"(LT)
Length 429.802'
Tangent 257.640'
Chord Direction N65° 27' 31.30"E Distance 396.133'
Direction Ahead N25° 42' 08.70"E

EC N 102,854.4031 E 89,063.6716 71+90.18
Curve (1)

Line (2)
N25° 42' 08.70"E 449.093'
N 103,259.0619 E 89,258.4417 76+39.27
Line (2)

Curve (3)
BC N 103,259.0619 E 89,258.4417 76+39.27
CTR N 103,880.2852 E 87,967.7742
PI N 103,326.7029 E 89,290.9986

Direction Back N25° 42' 08.70"E
Radius 1,432.390'
Delta 6°00'00"(LT)
Length 150.000'
Tangent 75.068'
Chord Direction N22° 42' 08.70"E Distance 149.931'
Direction Ahead N19° 42' 08.70"E

EC N 103,397.3765 E 89,316.3068 77+89.27
Curve (3)

N 103,397.3765 E 89,316.3068 77+89.27
End Ramp JF Ref Line

****
Alignment Length: 1,028.894'
****

****
Alignment Name: Ramp JD Ref Line
Station Range: Start: 59+07.65, End: 74+08.48
Description: 'JD'
****

Begin Ramp JD Ref Line
N 102,768.6627 E 87,787.2116 59+07.65

Curve (1)
BC N 102,768.6627 E 87,787.2116 59+07.65
CTR N 101,984.2286 E 87,553.4984
PI N 102,668.2516 E 88,124.2310

Direction Back S73° 24' 33.03"E
Radius 818.510'
Delta 46°30'00"(RT)
Length 664.285'
Tangent 351.660'
Chord Direction S50° 09' 33.03"E Distance 646.204'
Direction Ahead S26° 54' 33.03"E

EC N 102,354.6678 E 88,283.3843 65+71.93
Curve (1)

Line (2)
S26° 54' 33.03"E 253.077'
N 102,128.9928 E 88,397.9212 68+25.01
Line (2)

Curve (3)
BC N 102,128.9928 E 88,397.9212 68+25.01
CTR N 102,345.0850 E 88,823.6932
PI N 101,947.8727 E 88,489.8451

Direction Back S26° 54' 33.03"E
Radius 477.470'
Delta 46°05'21"(LT)
Length 384.079'
Tangent 203.112'
Chord Direction S49° 57' 13.30"E Distance 373.808'
Direction Ahead S72° 59' 53.57"E

EC N 101,888.4825 E 88,684.0802 72+09.09
Curve (3)

Line (4)
S72° 59' 53.57"E 199.393'
N 101,830.1798 E 88,874.7585 74+08.48
Line (4)

N 101,830.1798 E 88,874.7585 74+08.48
End Ramp JD Ref Line

****
Alignment Length: 1,500.834'
****

****
Alignment Name: Ramp JDD Ref Line
Station Range: Start: 72+03.77, End: 74+83.54
Description: 'JDD'
****

Begin Ramp JDD Ref Line
N 101,884.1212 E 88,677.1097 72+03.77

Curve (1)
BC N 101,884.1212 E 88,677.1097 72+03.77
CTR N 101,705.6869 E 88,586.7703
PI N 101,808.1168 E 88,827.2301

Direction Back S63° 08' 50.55"E
Radius 200.000'
Delta 80°08'57"(RT)
Length 279.773'
Tangent 168.264'
Chord Direction S23° 04' 22.06"E Distance 257.514'
Direction Ahead S17° 00' 06.43"W

EC N 101,647.2066 E 88,778.0294 74+83.54
Curve (1)

N 101,647.2066 E 88,778.0294 74+83.54
End Ramp JDD Ref Line

****
Alignment Length: 279.773'
****

2

****
Alignment Name: STH 27 NB Ref Line
Station Range: Start: 1+98.71, End: 47+00.00
Description: 'NB'
****

Begin STH 27 NB Ref Line
N 99,423.7067 E 88,598.1111 1+98.71

Line (1)
N0° 16' 57.02"W 619.302'
N 100,043.0010 E 88,595.0575 8+18.01
Line (1)

Curve (2)
BC N 100,043.0010 E 88,595.0575 8+18.01
CTR N 100,057.1263 E 91,459.8127
PI N 100,118.5822 E 88,594.6848

Direction Back N0° 16' 57.02"W
Radius 2,864.790'
Delta 3°01'21"(RT)
Length 151.129'
Tangent 75.582'
Chord Direction N1° 13' 43.62"E Distance 151.112'
Direction Ahead N2° 44' 24.27"E

EC N 100,194.0779 E 88,598.2980 9+69.14
Curve (2)

Line (3)
N2° 44' 24.27"E 347.997'
N 100,541.6770 E 88,614.9341 13+17.14
Line (3)

(Continued)

Curve (4)
BC N 100,541.6770 E 88,614.9341 13+17.14
CTR N 100,404.7254 E 91,476.4487
PI N 100,899.6625 E 88,632.0672

Direction Back N2° 44' 24.27"E
Radius 2,864.790'
Delta 14°15'42"(RT)
Length 713.086'
Tangent 358.395'
Chord Direction N9° 52' 15.35"E Distance 711.246'
Direction Ahead N17° 00' 06.43"E

EC N 101,242.3944 E 88,736.8625 20+30.22
Curve (4)

Line (5)
N17° 00' 06.43"E 2,669.778'
N 103,795.4911 E 89,517.5096 47+00.00
Line (5)

N 103,795.4911 E 89,517.5096 47+00.00
End STH 27 NB Ref Line

****
Alignment Length: 4,501.291'
****

****
Alignment Name: STH 27 SB Ref Line
Station Range: Start: 8+54.13, End: 58+02.16
Description: 'SB'
****

Begin STH 27 SB Ref Line
N 100,090.9774 E 88,594.8210 8+54.13

Line (1)
N2° 53' 21.32"W 347.829'
N 100,438.3640 E 88,577.2884 12+01.96
Line (1)

Curve (2)
BC N 100,438.3640 E 88,577.2884 12+01.96
CTR N 100,510.5646 E 90,007.8576
PI N 100,526.0036 E 88,572.8653

Direction Back N2° 53' 21.32"W
Radius 1,432.390'
Delta 7°00'41"(RT)
Length 175.283'
Tangent 87.751'
Chord Direction N0° 36' 59.11"E Distance 175.174'
Direction Ahead N4° 07' 19.54"E

EC N 100,613.5277 E 88,579.1730 13+77.25
Curve (2)

Compound Curve

Curve (3)
BC N 100,613.5277 E 88,579.1730 13+77.25
CTR N 100,404.7254 E 91,476.4487
PI N 100,940.5497 E 88,602.7410

Direction Back N4° 07' 19.54"E
Radius 2,904.790'
Delta 12°52'47"(RT)
Length 652.977'
Tangent 327.870'
Chord Direction N10° 33' 42.99"E Distance 651.603'
Direction Ahead N17° 00' 06.43"E

EC N 101,254.0904 E 88,698.6107 20+30.22
Curve (3)

(Continued)

Line (4)
N17° 00' 06.43"E 2,569.778'
N 103,711.5576 E 89,450.0176 46+00.00
Line (4)

Curve (5)
BC N 103,711.5576 E 89,450.0176 46+00.00
CTR N 102,036.2196 E 94,929.1900
PI N 103,999.2256 E 89,537.9763

Direction Back N17° 00' 06.43"E
Radius 5,729.580'
Delta 6°00'39"(RT)
Length 601.078'
Tangent 300.815'
Chord Direction N20° 00' 25.83"E Distance 600.802'
Direction Ahead N23° 00' 45.23"E

EC N 104,276.1014 E 89,655.5748 52+01.08
Curve (5)

Reversing Curve

Curve (6)
BC N 104,276.1014 E 89,655.5748 52+01.08
CTR N 106,515.9832 E 84,381.9597
PI N 104,552.9772 E 89,773.1733

Direction Back N23° 00' 45.23"E
Radius 5,729.580'
Delta 6°00'39"(LT)
Length 601.078'
Tangent 300.815'
Chord Direction N20° 00' 25.83"E Distance 600.802'
Direction Ahead N17° 00' 06.43"E

EC N 104,840.6453 E 89,861.1321 58+02.16
Curve (6)

N 104,840.6453 E 89,861.1321 58+02.16
End STH 27 SB Ref Line

****
Alignment Length: 4,948.022'
****

****
Alignment Name: USH 12 STH 27 Ref Line
Station Range: Start: 47+00.00, End: 60+50.01
Description:
****

Begin USH 12 STH 27 Ref Line
N 103,788.4734 E 89,540.4607 47+00.00

Line (1)
N17° 00' 06.43"E 164.030'
N 103,945.3346 E 89,588.4233 48+64.03
Line (1)

Curve (2)
BC N 103,945.3346 E 89,588.4233 48+64.03
CTR N 100,594.6587 E 100,546.7680
PI N 104,009.0908 E 89,607.9177

Direction Back N17° 00' 06.43"E
Radius 11,459.160'
Delta 0°40'00"(RT)
Length 133.338'
Tangent 66.670'
Chord Direction N17° 20' 06.48"E Distance 133.338'
Direction Ahead N17° 40' 06.52"E

EC N 104,072.6159 E 89,628.1526 49+97.37
Curve (2)

Line (3)
N17° 40' 06.52"E 224.953'
N 104,286.9576 E 89,696.4279 52+22.32
Line (3)

(Continued)

Curve (4)
BC N 104,286.9576 E 89,696.4279 52+22.32
CTR N 107,764.9148 E 78,777.8125
PI N 104,477.5191 E 89,757.1283

Direction Back N17° 40' 06.52"E
Radius 11,459.160'
Delta 1°59'59"(LT)
Length 399.951'
Tangent 199.996'
Chord Direction N16° 40' 06.97"E Distance 399.930'
Direction Ahead N15° 40' 07.42"E

EC N 104,670.0827 E 89,811.1421 56+22.27
Curve (4)

Reversing Curve

Curve (5)
BC N 104,670.0827 E 89,811.1421 56+22.27
CTR N 102,606.8613 E 97,166.6952
PI N 104,755.6548 E 89,835.1450

Direction Back N15° 40' 07.42"E
Radius 7,639.440'
Delta 1°19'59"(RT)
Length 177.741'
Tangent 88.875'
Chord Direction N16° 20' 06.92"E Distance 177.737'
Direction Ahead N17° 00' 06.43"E

EC N 104,840.6453 E 89,861.1321 58+00.01
Curve (5)

Line (6)
N17° 00' 06.43"E 250.000'
N 105,079.7192 E 89,934.2324 60+50.01
Line (6)

N 105,079.7192 E 89,934.2324 60+50.01
End USH 12 STH 27 Ref Line

****
Alignment Length: 1,350.013'
****

2

EB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1383+79.45'EB'		**RAD = 4583.66'**				**158**	**68**	**226**
END NORMAL CROWN	1374+88.23'EB'	-4.00%	-1.50%	-1.50%	-4.00%			
LEVEL CROWN	1375+56.23'EB'	-4.00%	-1.50%	0.00%	0.00%			
REMOVE ADVERSE CROWN	1376+24.23'EB'	-4.00%	-1.50%	1.50%	1.50%			
BEGIN CURVE PC	1376+61.56'EB'	-4.00%	-2.33%	2.33%	2.33%			
BEGIN FULL SUPER	1377+14.23'EB'	-4.00%	-3.50%	3.50%	3.50%			
END FULL SUPER	1390+33.09'EB'	-4.00%	-3.50%	3.50%	3.50%			
END CURVE PT	1390+85.76'EB'	-4.00%	-2.33%	2.33%	2.33%			
REMOVE ADVERSE CROWN	1391+23.09'EB'	-4.00%	-1.50%	1.50%	1.50%			
LEVEL CROWN	1391+91.09'EB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN NORMAL CROWN	1392+59.09'EB'	-4.00%	-1.50%	-1.50%	-4.00%			

EB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1417+53.63'EB'		**RAD = 11459.16'**				**68**	**68**	**136**
END NORMAL CROWN	1408+25.77'EB'	-4.00%	-1.50%	-1.50%	-4.00%			
LEVEL CROWN	1408+93.77'EB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN CURVE PC	1409+39.10'EB'	-4.00%	-1.50%	1.00%	1.00%			
REMOVE ADVERSE CROWN	1409+61.77'EB'	-4.00%	-1.50%	1.50%	1.50%			
BEGIN FULL SUPER	1409+61.77'EB'	-4.00%	-1.50%	1.50%	1.50%			
END FULL SUPER	1425+42.76'EB'	-4.00%	-1.50%	1.50%	1.50%			
REMOVE ADVERSE CROWN	1425+42.76'EB'	-4.00%	-1.50%	1.50%	1.50%			
END CURVE PT	1425+65.43'EB'	-4.00%	-1.50%	1.00%	1.00%			
LEVEL CROWN	1426+10.76'EB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN NORMAL CROWN	1426+78.76'EB'	-4.00%	-1.50%	-1.50%	-4.00%			

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EB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1440+66.40'EB'		**RAD = 11459.16'**				**68**	**68**	**136**
END NORMAL CROWN	1449+23.21'EB'	-4.00%	-1.50%	-1.50%	-4.00%			
LEVEL CROWN	1449+91.21'EB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN CURVE PC	1435+74.04'EB'	-4.00%	-1.50%	1.00%	1.00%	STA EQUATION 1450+36.54'EB' BK = 1435+74.04'EB' AH		
REMOVE ADVERSE CROWN	1435+96.71'EB'	-4.00%	-1.50%	1.50%	1.50%			
BEGIN FULL SUPER	1435+96.71'EB'	-4.00%	-1.50%	1.50%	1.50%			
END FULL SUPER	1445+35.48'EB'	-4.00%	-1.50%	1.50%	1.50%			
REMOVE ADVERSE CROWN	1445+35.48'EB'	-4.00%	-1.50%	1.50%	1.50%			
END CURVE PT	1445+58.15'EB'	-4.00%	-1.50%	1.00%	1.00%			
LEVEL CROWN	1446+03.48'EB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN NORMAL CROWN	1446+71.48'EB'	-4.00%	-1.50%	-1.50%	-4.00%			

EB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1480+06.66'EB'		**RAD = 4583.66'**				**158**	**68**	**226**
END NORMAL CROWN	1465+30.46'EB'	-4.00%	-1.50%	-1.50%	-4.00%			
LEVEL CROWN	1465+98.46'EB'	0.00%	0.00%	-1.50%	-4.00%			
REMOVE ADVERSE CROWN	1466+66.46'EB'	1.50%	1.50%	-1.50%	-4.00%			
BEGIN CURVE PC	1467+03.79'EB'	2.33%	2.33%	-2.33%	-4.00%			
BEGIN FULL SUPER	1467+56.46'EB'	3.50%	3.50%	-3.50%	-4.00%			
END FULL SUPER	1491+89.90'EB'	3.50%	3.50%	-3.50%	-4.00%			
END CURVE PT	1492+42.57'EB'	2.33%	2.33%	-2.33%	-4.00%			
REMOVE ADVERSE CROWN	1492+79.90'EB'	1.50%	1.50%	-1.50%	-4.00%			
LEVEL CROWN	1493+47.90'EB'	0.00%	0.00%	-1.50%	-4.00%			
BEGIN NORMAL CROWN	1494+15.90'EB'	-4.00%	-1.50%	-1.50%	-4.00%			

WB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1383+61.14'WB'		**RAD = 5729.58'**				**126**	**68**	**194**
END NORMAL CROWN	1372+52.52'WB'	-4.00%	-1.50%	-1.50%	-4.00%			
LEVEL CROWN	1373+20.52'WB'	-4.00%	-1.50%	0.00%	0.00%			
REMOVE ADVERSE CROWN	1373+88.52'WB'	-4.00%	-1.50%	1.50%	1.50%			
BEGIN CURVE PC	1374+04.52'WB'	-4.00%	-1.87%	1.87%	1.87%			
BEGIN FULL SUPER	1374+46.52'WB'	-4.00%	-2.80%	2.80%	2.80%			
END FULL SUPER	1392+58.27'WB'	-4.00%	-2.80%	2.80%	2.80%			
END CURVE PT	1393+23.28'WB'	-4.00%	-1.87%	1.87%	1.87%	STA EQUATION 1393+00.27'WB' BK = 1393+23.28'WB' AH		
REMOVE ADVERSE CROWN	1393+39.28'WB'	-4.00%	-1.50%	1.50%	1.50%			
LEVEL CROWN	1394+07.28'WB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN NORMAL CROWN	1394+75.28'WB'	-4.00%	-1.50%	-1.50%	-4.00%			

WB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1420+75.99'WB'		**RAD = 11459.16'**				**68**	**68**	**136**
END NORMAL CROWN	1411+03.22'WB'	-4.00%	-1.50%	-1.50%	-4.00%			
LEVEL CROWN	1411+71.22'WB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN CURVE PC	1412+16.55'WB'	-4.00%	-1.50%	1.00%	1.00%			
REMOVE ADVERSE CROWN	1412+39.22'WB'	-4.00%	-1.50%	1.50%	1.50%			
BEGIN FULL SUPER	1412+39.22'WB'	-4.00%	-1.50%	1.50%	1.50%			
END FULL SUPER	1429+09.55'WB'	-4.00%	-1.50%	1.50%	1.50%			
REMOVE ADVERSE CROWN	1429+09.55'WB'	-4.00%	-1.50%	1.50%	1.50%			
END CURVE PT	1429+42.43'WB'	-4.00%	-1.50%	1.00%	1.00%	STA EQUATION 1429+32.22'WB' BK = 1429+42.43'WB' AH		
LEVEL CROWN	1429+87.76'WB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN NORMAL CROWN	1430+55.76'WB'	-4.00%	-1.50%	-1.50%	-4.00%			

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WB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1446+40.66'WB'		**RAD = 22918.32'**				**68**	**68**	**136**
END NORMAL CROWN	1437+48.89'WB'	-4.00%	-1.50%	-1.50%	-4.00%			
LEVEL CROWN	1438+16.89'WB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN CURVE PC	1438+62.22'WB'	-4.00%	-1.50%	1.00%	1.00%			
REMOVE ADVERSE CROWN	1438+84.89'WB'	-4.00%	-1.50%	1.50%	1.50%			
BEGIN FULL SUPER	1438+84.89'WB'	-4.00%	-1.50%	1.50%	1.50%			
END FULL SUPER	1453+95.82'WB'	-4.00%	-1.50%	1.50%	1.50%			
REMOVE ADVERSE CROWN	1453+95.82'WB'	-4.00%	-1.50%	1.50%	1.50%			
END CURVE PT	1453+78.10'WB'	-4.00%	-1.50%	1.00%	1.00%	STA EQUATION 1454+18.49'WB' BK = 1453+78.10'WB' AH		
LEVEL CROWN	1454+23.43'WB'	-4.00%	-1.50%	0.00%	0.00%			
BEGIN NORMAL CROWN	1454+91.43'WB'	-4.00%	-1.50%	-1.50%	-4.00%			

WB IH 94								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 1480+81.28'WB'		**RAD =5288.84'**				**135**	**68**	**203**
END NORMAL CROWN	1463+85.85'WB'	-4.00%	-1.50%	-1.50%	-4.00%			
LEVEL CROWN	1464+53.85'WB'	0.00%	0.00%	-1.50%	-4.00%			
REMOVE ADVERSE CROWN	1465+21.85'WB'	1.50%	1.50%	-1.50%	-4.00%			
BEGIN CURVE PC	1465+43.85'WB'	2.00%	2.00%	-2.00%	-4.00%			
BEGIN FULL SUPER	1465+88.85'WB'	3.00%	3.00%	-3.00%	-4.00%			
END FULL SUPER	1494+91.24'WB'	3.00%	3.00%	-3.00%	-4.00%			
END CURVE PT	1495+36.24'WB'	2.00%	2.00%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	1495+58.24'WB'	1.50%	1.50%	-1.50%	-4.00%			
LEVEL CROWN	1496+26.24'WB'	0.00%	0.00%	-1.50%	-4.00%			
BEGIN NORMAL CROWN	1496+94.24'WB'	-4.00%	-1.50%	-1.50%	-4.00%			

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NB USH 12/STH 27								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 16+75.53'NB'		**RAD = 2864.79'**				**72**	**72**	**144**
END NORMAL CROWN	11+97.14'NB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	12+69.14'NB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN CURVE PC	13+17.14'NB'	1.33%	1.33%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	13+41.14'NB'	2.00%	2.00%	-2.00%	-4.00%			
BEGIN FULL SUPER	13+41.14'NB'	2.00%	2.00%	-2.00%	-4.00%			
END FULL SUPER	20+06.22'NB'	2.00%	2.00%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	20+06.22'NB'	2.00%	2.00%	-2.00%	-4.00%			
END CURVE PT	20+30.22'NB'	1.33%	1.33%	-2.00%	-4.00%			
LEVEL CROWN	20+78.22'NB'	0.00%	0.00%	-2.00%	N/A	RAMP TAPER RIGHT		
BEGIN NORMAL CROWN	21+50.22'NB'	-4.00%	-2.00%	-2.00%	N/A	RAMP TAPER RIGHT		

NB USH 12/STH 27								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 49+30.70'NB'		**RAD = 11459.16'**				**72**	**72**	**144**
END NORMAL CROWN	47+44.03'NB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	48+16.03'NB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN CURVE PC	48+64.03'NB'	1.33%	1.33%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	48+88.03'NB'	2.00%	2.00%	-2.00%	-4.00%			
BEGIN FULL SUPER	48+88.03'NB'	2.00%	2.00%	-2.00%	-4.00%			
END FULL SUPER	49+73.37'NB'	2.00%	2.00%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	49+73.37'NB'	2.00%	2.00%	-2.00%	-4.00%			
END CURVE PT	49+97.37'NB'	1.33%	1.33%	-2.00%	-4.00%			
LEVEL CROWN	50+45.37'NB'	N/A	VAR.	-2.00%	-4.00%	VARIABLE LANE TRANSITION		
BEGIN NORMAL CROWN	51+17.37'NB'	N/A	VAR.	-2.00%	-4.00%	VARIABLE LANE TRANSITION		

SB USH 12/STH 27								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 17+05.12'SB'		**RAD = 2904.79'**				**72**	**72**	**144**
END NORMAL CROWN	12+57.25'SB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	13+29.25'SB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN CURVE PC	13+77.25'SB'	1.33%	1.33%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	14+01.25'SB'	2.00%	2.00%	-2.00%	-4.00%			
BEGIN FULL SUPER	14+01.25'SB'	2.00%	2.00%	-2.00%	-4.00%			
END FULL SUPER	20+06.22'SB'	2.00%	2.00%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	20+06.22'SB'	2.00%	2.00%	-2.00%	-4.00%			
END CURVE PT	20+30.22'SB'	1.33%	1.33%	-2.00%	-4.00%			
LEVEL CROWN	20+78.22'SB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN NORMAL CROWN	21+50.22'SB'	-4.00%	-2.00%	-2.00%	-4.00%			

SB USH 12/STH 27								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 49+00.81'SB'		**RAD = 5729.58'**				**72**	**72**	**144**
END NORMAL CROWN	44+80.00'SB'	-4.00%	-2.00%	-2.00%	-4.00%			
LEVEL CROWN	45+52.00'SB'	0.00%	0.00%	-2.00%	-4.00%			
BEGIN CURVE PC	46+00.00'SB'	1.33%	1.33%	-2.00%	-4.00%			
REMOVE ADVERSE CROWN	46+24.00'SB'	2.00%	2.00%	-2.00%	-4.00%			
BEGIN FULL SUPER	46+24.00'SB'	2.00%	2.00%	-2.00%	-4.00%			
END FULL SUPER	51+29.08'SB'	2.00%	2.00%	-2.00%	N/A	MODIFIED TRANSITION		
MANUAL ENTRY	51+65.08'SB'	1.00%	1.00%	-1.00%	N/A	MODIFIED TRANSITION		
END CURVE PCC	52+01.08'SB'	0.00%	0.00%	0.00%	N/A	REVERSE CURVE		
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SB USH 12/STH 27								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF CROWNLINE		RIGHT OF CROWNLINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 55+01.89'SB'		**RAD = 5729.58'**				**72**	**72**	**144**
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BEGIN CURVE PCC	52+01.08'SB'	0.00%	0.00%	0.00%	N/A	REVERSE CURVE		
MANUAL ENTRY	52+37.08'SB'	-2.00%	-1.00%	1.00%	N/A	MODIFIED TRANSITION		
BEGIN FULL SUPER	52+73.08'SB'	-4.00%	-2.00%	2.00%	N/A	MODIFIED TRANSITION		
END FULL SUPER	54+56.00'SB'	-4.00%	-2.00%	2.00%	N/A	MODIFIED TRANSITION		
MANUAL ENTRY	54+92.00'SB'	-4.00%	-2.00%	1.00%	N/A	MODIFIED TRANSITION		
MANUAL ENTRY	55+28.00'SB'	-4.00%	-2.00%	0.00%	N/A	MODIFIED TRANSITION		
MANUAL ENTRY	55+64.00'SB'	-4.00%	-2.00%	-1.00%	N/A	MODIFIED TRANSITION		
BEGIN NORMAL CROWN	56+00.00'SB'	-4.00%	-2.00%	-2.00%	N/A	MODIFIED TRANSITION		

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RAMP 'JAA'

SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 69+49.92'JAA'		**RAD = 200.00'**				**97**	**32**	**129**
END NORMAL CROWN	66+81.00'JAA'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
LEVEL CROWN	67+13.00'JAA'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
REMOVE ADVERSE CROWN	67+45.00'JAA'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
BEGIN CURVE PC	67+77.67'JAA'	N/A	N/A	4.00%	4.00%	CURB AND GUTTER LEFT		
BEGIN FULL SUPER	68+10.00'JAA'	N/A	N/A	6.00%	6.00%	CURB AND GUTTER LEFT		
END FULL SUPER	70+29.74'JAA'	N/A	N/A	6.00%	6.00%	CURB AND GUTTER LEFT		
END CURVE PT	70+62.07'JAA'	N/A	N/A	4.00%	4.00%	CURB AND GUTTER LEFT		
REMOVE ADVERSE CROWN	70+94.74'JAA'	N/A	N/A	N/A	N/A	MATCH RAMP 'JA'		
LEVEL CROWN	71+26.74'JAA'	N/A	N/A	N/A	N/A	MATCH RAMP 'JA'		
BEGIN NORMAL CROWN	71+58.74'JAA'	N/A	N/A	N/A	N/A	MATCH RAMP 'JA'		

RAMP 'JA'

SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 73+30.56'JA'		**RAD = 409.26'**				**126**	**27**	**153**
END NORMAL CROWN	69+61.20'JA'	-4.00%	N/A	1.50%	-4.00%			
LEVEL CROWN	69+88.20'JA'	0.00%	N/A	0.00%	-4.00%			
REMOVE ADVERSE CROWN	70+15.20'JA'	1.50%	N/A	-1.50%	-4.00%			
BEGIN CURVE PC	70+72.20'JA'	4.67%	N/A	-4.67%	-4.67%			
BEGIN FULL SUPER	71+14.20'JA'	7.00%	N/A	-7.00%	N/A	CURB AND GUTTER RIGHT		
END FULL SUPER	74+91.12'JA'	7.00%	N/A	-7.00%	N/A	CURB AND GUTTER RIGHT		
END CURVE PT	75+33.12'JA'	4.67%	N/A	-4.67%	-4.67%			
REMOVE ADVERSE CROWN	75+90.12'JA'	1.50%	N/A	-1.50%	-4.00%			
LEVEL CROWN	76+17.12'JA'	0.00%	N/A	0.00%	-4.00%			
BEGIN NORMAL CROWN	76+44.12'JA'	-4.00%	N/A	1.50%	-4.00%			

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RAMP 'JA'

SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 80+05.80'JA'		**RAD = 572.96'**				**159**	**31**	**190**
END NORMAL CROWN	76+48.79'JA'	-4.00%	N/A	1.50%	-4.00%			
LEVEL CROWN	76+79.79'JA'	-4.00%	N/A	1.50%	0.00%			
REMOVE ADVERSE CROWN	77+10.79'JA'	-4.00%	N/A	1.50%	1.50%			
BEGIN CURVE PC	77+85.79'JA'	-5.13%	N/A	5.13%	5.13%			
BEGIN FULL SUPER	78+38.79'JA'	-7.70%	N/A	7.70%	7.70%			
END FULL SUPER	81+52.93'JA'	-7.70%	N/A	7.70%	7.70%			
END CURVE PT	82+05.93'JA'	-5.13%	N/A	5.13%	5.13%			
REMOVE ADVERSE CROWN	82+80.93'JA'	-4.00%	N/A	1.50%	VAR	RIGHT SHOULDER MATCHES RAMP GORE		
LEVEL CROWN	83+11.93'JA'	-4.00%	N/A	1.50%	VAR	RIGHT SHOULDER MATCHES RAMP GORE		
BEGIN NORMAL CROWN	83+42.93'JA'	-4.00%	N/A	1.50%	VAR	RIGHT SHOULDER MATCHES RAMP GORE		

'JB' LOOP

SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 74+82.11'JB'		**RAD = 409.26'**				**156**	**29**	**185**
END NORMAL CROWN	72+29.39'JB'	-4.00%	N/A	1.50%	N/A			
LEVEL CROWN	72+58.39'JB'	-4.00%	N/A	1.50%	N/A			
REMOVE ADVERSE CROWN	72+87.39'JB'	-4.00%	N/A	1.50%	N/A			
BEGIN CURVE PC	73+62.39'JB'	N/A	N/A	5.33%	N/A	CURB AND GUTTER LEFT		
BEGIN FULL SUPER	74+14.39'JB'	N/A	N/A	8.00%	8.00%	CURB AND GUTTER LEFT		
END FULL SUPER	75+43.33'JB'	N/A	N/A	8.00%	8.00%	CURB AND GUTTER LEFT		
END CURVE PCC	75+95.33'JB'	N/A	N/A	8.00%	8.00%	COMPOUND CURVE		
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'JB' LOOP								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 85+56.74'JB'		**RAD = 409.26'**				**156**	**29**	**185**
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BEGIN CURVE PCC	84+81.56'JB'	N/A	N/A	8.00%	8.00%	COMPOUND CURVE		
BEGIN FULL SUPER	85+33.56'JB'	N/A	N/A	8.00%	8.00%	CURB AND GUTTER LEFT		
END FULL SUPER	85+78.26'JB'	N/A	N/A	8.00%	8.00%	CURB AND GUTTER LEFT		
END CURVE PT	86+30.26'JB'	N/A	N/A	5.33%	N/A	CURB AND GUTTER LEFT		
REMOVE ADVERSE CROWN	87+05.26'JB'	N/A	N/A	2.00%	N/A	CURB AND GUTTER LEFT / RAMP TAPER RIGHT		
LEVEL CROWN	87+34.26'JB'	N/A	N/A	2.00%	N/A	CURB AND GUTTER LEFT / RAMP TAPER RIGHT		
BEGIN NORMAL CROWN	87+63.26'JB'	N/A	N/A	2.00%	N/A	CURB AND GUTTER LEFT / RAMP TAPER RIGHT		

RAMP 'JC'								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 67+31.36'JC'		**RAD = 1432.40'**				**86**	**29**	**115**
END NORMAL CROWN	65+92.09'JC'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
LEVEL CROWN	66+21.09'JC'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
REMOVE ADVERSE CROWN	66+50.09'JC'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN CURVE PC	66+78.42'JC'	N/A	2.93%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN FULL SUPER	67+07.09'JC'	N/A	4.40%	N/A	-4.40%	RAMP TAPER LEFT		
END FULL SUPER	67+55.59'JC'	N/A	4.40%	N/A	-4.40%	RAMP TAPER LEFT		
END CURVE PT	67+84.26'JC'	2.93%	2.93%	N/A	-4.00%	RAMP TAPER LEFT		
REMOVE ADVERSE CROWN	68+12.59'JC'	1.50%	1.50%	N/A	-4.00%			
LEVEL CROWN	68+41.59'JC'	0.00%	1.50%	N/A	-4.00%			
BEGIN NORMAL CROWN	68+70.59'JC'	-4.00%	1.50%	N/A	-4.00%			

2

RAMP 'JC'

SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 75+60.17'JC'		**RAD = 286.48'**				**139**	**27**	**166**
END NORMAL CROWN	71+32.58'JC'	-4.00%	1.50%	N/A	-4.00%			
LEVEL CROWN	71+59.58'JC'	0.00%	1.50%	N/A	-4.00%			
REMOVE ADVERSE CROWN	71+86.58'JC'	1.50%	1.50%	N/A	-4.00%			
BEGIN CURVE PC	72+52.25'JC'	5.13%	5.13%	N/A	-5.13%			
BEGIN FULL SUPER	72+98.58'JC'	7.70%	7.70%	N/A	N/A	CURB AND GUTTER RIGHT		
END FULL SUPER	76+76.58'JC'	7.70%	7.70%	N/A	N/A	CURB AND GUTTER RIGHT		
END CURVE PT	77+22.91'JC'	5.13%	5.13%	N/A	N/A	RAMP TAPER LEFT / CURB AND GUTTER RIGHT		
REMOVE ADVERSE CROWN	77+88.58'JC'	N/A	1.50%	N/A	-4.00%	RAMP TAPER LEFT		
LEVEL CROWN	78+15.58'JC'	N/A	1.50%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN NORMAL CROWN	78+42.58'JC'	N/A	1.50%	N/A	-4.00%	RAMP TAPER LEFT		

RAMP 'JD'

SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 62+59.31'JD'		**RAD = 818.51'**				**190**	**36**	**226**
END NORMAL CROWN	57+44.98'JD'	N/A	1.50%	N/A	-4.00%	RAMP TAPER LEFT		
LEVEL CROWN	57+80.98'JD'	N/A	1.50%	N/A	-4.00%	RAMP TAPER LEFT		
REMOVE ADVERSE CROWN	58+16.98'JD'	N/A	1.50%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN CURVE PC	59+07.65'JD'	N/A	5.27%	N/A	-5.27%	RAMP TAPER LEFT		
BEGIN FULL SUPER	59+70.98'JD'	N/A	7.90%	N/A	-7.90%	RAMP TAPER LEFT		
END FULL SUPER	65+08.60'JD'	7.90%	7.90%	N/A	-7.90%			
END CURVE PT	65+71.93'JD'	5.27%	5.27%	N/A	-5.27%			
REMOVE ADVERSE CROWN	66+62.60'JD'	1.50%	1.50%	N/A	-4.00%			
LEVEL CROWN	66+98.60'JD'	0.00%	1.50%	N/A	-4.00%			
BEGIN NORMAL CROWN	67+34.60'JD'	-4.00%	1.50%	N/A	-4.00%			

2

RAMP 'JD'								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 70+28.12'JD'		**RAD = 477.47'**				**156**	**29**	**185**
END NORMAL CROWN	66+92.01'JD'	-4.00%	1.50%	N/A	-4.00%			
LEVEL CROWN	67+21.01'JD'	-4.00%	0.00%	N/A	0.00%			
REMOVE ADVERSE CROWN	67+50.01'JD'	-4.00%	-1.50%	N/A	1.50%			
BEGIN CURVE PC	68+25.01'JD'	N/A	-5.33%	N/A	5.33%	CURB AND GUTTER LEFT		
BEGIN FULL SUPER	68+77.01'JD'	N/A	-8.00%	N/A	8.00%	CURB AND GUTTER LEFT		
END FULL SUPER	71+57.09'JD'	N/A	-8.00%	N/A	8.00%	CURB AND GUTTER LEFT		
END CURVE PT	72+09.09'JD'	N/A	-5.33%	N/A	5.33%	CURB AND GUTTER LEFT		
REMOVE ADVERSE CROWN	72+84.09'JD'	-4.00%	-1.50%	N/A	1.50%			
LEVEL CROWN	73+13.09'JD'	-4.00%	0.00%	N/A	0.00%			
BEGIN NORMAL CROWN	73+42.09'JD'	-4.00%	1.50%	N/A	-4.00%			

RAMP 'JDD'								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 73+72.03'JDD'		**RAD = 200.00'**				**97**	**32**	**129**
END NORMAL CROWN	71+07.10'JDD'	N/A	2.00%	N/A	N/A	MATCH RAMP 'JD'		
LEVEL CROWN	71+39.10'JDD'	N/A	2.00%	N/A	N/A	MATCH RAMP 'JD'		
REMOVE ADVERSE CROWN	71+71.10'JDD'	N/A	2.00%	N/A	N/A	MATCH RAMP 'JD'		
BEGIN CURVE PC	72+03.77'JDD'	4.00%	4.00%	N/A	N/A	CURB AND GUTTER RIGHT		
BEGIN FULL SUPER	72+36.10'JDD'	6.00%	6.00%	N/A	N/A	CURB AND GUTTER RIGHT		
END FULL SUPER	74+51.21'JDD'	6.00%	6.00%	N/A	N/A	CURB AND GUTTER RIGHT		
END CURVE PT	74+83.54'JDD'	4.00%	4.00%	N/A	N/A	CURB AND GUTTER RIGHT		
REMOVE ADVERSE CROWN	75+16.21'JDD'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
LEVEL CROWN	75+48.21'JDD'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		
BEGIN NORMAL CROWN	75+80.21'JDD'	N/A	2.00%	N/A	-4.00%	RAMP TAPER LEFT		

2

'JE' LOOP								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 58+83.99'JE'		**RAD = 409.26'**				**156**	**29**	**185**
END NORMAL CROWN	56+74.02'JE'	N/A	2.00%	N/A	N/A	RAMP TAPER LEFT / CURB AND GUTTER RIGHT		
LEVEL CROWN	57+03.02'JE'	N/A	2.00%	N/A	N/A	RAMP TAPER LEFT / CURB AND GUTTER RIGHT		
REMOVE ADVERSE CROWN	57+32.02'JE'	N/A	2.00%	N/A	N/A	RAMP TAPER LEFT / CURB AND GUTTER RIGHT		
BEGIN CURVE PC	58+07.02'JE'	N/A	5.33%	N/A	N/A	CURB AND GUTTER RIGHT		
BEGIN FULL SUPER	58+59.02'JE'	8.00%	8.00%	N/A	N/A	CURB AND GUTTER RIGHT		
END FULL SUPER	59+07.17'JE'	8.00%	8.00%	N/A	N/A	CURB AND GUTTER RIGHT		
END CURVE PCC	59+59.17'JE'	8.00%	8.00%	N/A	N/A	COMPOUND CURVE		
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'JE' LOOP								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 69+45.99'JE'		**RAD = 409.26'**				**156**	**29**	**185**
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BEGIN CURVE PCC	68+66.30'JE'	8.00%	8.00%	N/A	N/A	COMPOUND CURVE		
BEGIN FULL SUPER	69+18.30'JE'	8.00%	8.00%	N/A	N/A	CURB AND GUTTER RIGHT		
END FULL SUPER	69+71.70'JE'	8.00%	8.00%	N/A	N/A	CURB AND GUTTER RIGHT		
END CURVE PT	70+23.70'JE'	N/A	5.33%	N/A	N/A	CURB AND GUTTER RIGHT		
REMOVE ADVERSE CROWN	70+98.70'JE'	N/A	3.50%	N/A	-4.00%			
LEVEL CROWN	71+27.70'JE'	N/A	3.50%	N/A	-4.00%			
BEGIN NORMAL CROWN	71+56.70'JE'	N/A	3.50%	N/A	-4.00%			

2

RAMP 'JF'								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 70+18.02'JF'		**RAD =309.71'**				**109**	**27**	**136**
END NORMAL CROWN	66+60.71'JF'	-4.00%	N/A	1.50%	N/A	RAMP TAPER RIGHT		
LEVEL CROWN	66+87.71'JF'	-4.00%	N/A	1.50%	N/A	RAMP TAPER RIGHT		
REMOVE ADVERSE CROWN	67+14.71'JF'	N/A	N/A	1.50%	N/A	CURB AND GUTTER LEFT / RAMP TAPER RIGHT		
BEGIN CURVE PC	67+60.38'JF'	N/A	N/A	4.00%	N/A	CURB AND GUTTER LEFT / RAMP TAPER RIGHT		
BEGIN FULL SUPER	67+96.71'JF'	N/A	N/A	6.00%	6.00%	CURB AND GUTTER LEFT		
END FULL SUPER	71+53.85'JF'	N/A	N/A	6.00%	6.00%	CURB AND GUTTER LEFT		
END CURVE PT	71+90.18'JF'	N/A	N/A	4.00%	4.00%	CURB AND GUTTER LEFT		
REMOVE ADVERSE CROWN	72+35.85'JF'	-4.00%	N/A	1.50%	1.50%			
LEVEL CROWN	72+62.85'JF'	-4.00%	N/A	1.50%	0.00%			
BEGIN NORMAL CROWN	72+89.85'JF'	-4.00%	N/A	1.50%	-4.00%			

RAMP 'JF'								
SUPERELEVATION TRANSITION EVENTS		RATE				NOTES		
LOCATION	STATION	LEFT OF REF LINE		RIGHT OF REF LINE				
		LEFT SHOULDER	LEFT LANE	RIGHT LANE	RIGHT SHOULDER	L	X	T
PI STA = 77+14.34'JF'		**RAD = 1432.39'**				**83**	**32**	**115**
END NORMAL CROWN	75+51.94'JF'	-4.00%	N/A	2.00%	-4.00%			
LEVEL CROWN	75+83.94'JF'	-4.00%	N/A	2.00%	0.00%			
REMOVE ADVERSE CROWN	76+15.94'JF'	-4.00%	N/A	2.00%	2.00%			
BEGIN CURVE PC	76+39.27'JF'	-4.00%	N/A	2.67%	VAR	RIGHT SHOULDER MATCHES RAMP GORE		
BEGIN FULL SUPER	76+66.94'JF'	-4.00%	N/A	4.00%	VAR	RIGHT SHOULDER MATCHES RAMP GORE		
END FULL SUPER	77+61.60'JF'	-4.00%	N/A	4.00%	N/A	RAMP TAPER RIGHT		
END CURVE PT	77+89.27'JF'	-4.00%	N/A	2.67%	N/A	RAMP TAPER RIGHT		
REMOVE ADVERSE CROWN	78+12.60'JF'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
LEVEL CROWN	78+44.60'JF'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		
BEGIN NORMAL CROWN	78+76.60'JF'	-4.00%	N/A	2.00%	N/A	RAMP TAPER RIGHT		

1024-01-75

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0004	204.0109.S	Removing Concrete Surface Partial Depth	SF	56,700.000	56,700.000
0006	204.0110	Removing Asphaltic Surface	SY	1,481.000	1,481.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	6,275.000	6,275.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	169,370.000	169,370.000
0012	204.0126.S	Removing Asphaltic Longitudinal Notched Wedge Joint Milling	LF	54,168.000	54,168.000
0014	204.0165	Removing Guardrail	LF	471.000	471.000
0016	204.0180	Removing Delineators and Markers	EACH	262.000	262.000
0020	211.0100	Prepare Foundation for Asphaltic Paving (project) 02. 1024-01-75	LS	1.000	1.000
0022	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	23.000	23.000
0026	213.0100	Finishing Roadway (project) 02. 1024-01-75	EACH	1.000	1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	3,975.000	3,975.000
0030	305.0500	Shaping Shoulders	STA	200.740	200.740
0032	416.0610	Drilled Tie Bars	EACH	1,672.000	1,672.000
0034	416.0620	Drilled Dowel Bars	EACH	400.000	400.000
0036	455.0605	Tack Coat	GAL	17,877.000	17,877.000
0038	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0040	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0042	460.0115.S	HMA Pavement Test Strips Volumetrics	EACH	1.000	1.000
0044	460.0120.S	HMA Pavement Test Strips Density	EACH	1.000	1.000
0046	460.2000	Incentive Density HMA Pavement	DOL	14,250.000	14,250.000
0048	460.2005	Incentive Density PWL HMA Pavement	DOL	10,250.000	10,250.000
0050	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	21,680.000	21,680.000
0052	460.2010	Incentive Air Voids HMA Pavement	DOL	10,250.000	10,250.000
0054	460.6244	HMA Pavement 4 MT 58-34 S	TON	6,370.000	6,370.000
0056	460.6444	HMA Pavement 4 MT 58-34 H	TON	5,650.000	5,650.000
0058	460.7644	HMA Pavement 4 HT 58-34 V	TON	10,245.000	10,245.000
0062	460.8644	HMA Pavement 4 SMA 58-34 V	TON	10,245.000	10,245.000
0066	460.9000.S	Material Transfer Vehicle 02. 1024-01-75	EACH	1.000	1.000
0068	465.0105	Asphaltic Surface	TON	100.000	100.000
0070	465.0110	Asphaltic Surface Patching	TON	50.000	50.000
0072	465.0125	Asphaltic Surface Temporary	TON	200.000	200.000
0074	465.0400	Asphaltic Shoulder Rumble Strips	LF	52,380.000	52,380.000
0076	520.8000	Concrete Collars for Pipe	EACH	4.000	4.000
0078	520.8700	Cleaning Culvert Pipes	EACH	14.000	14.000
0082	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	4.000	4.000
0086	524.0118	Culvert Pipe Salvaged 18-Inch	LF	8.000	8.000
0088	524.0618	Apron Endwalls for Culvert Pipe Salvaged 18-Inch	EACH	10.000	10.000
0092	524.0630	Apron Endwalls for Culvert Pipe Salvaged 30-Inch	EACH	5.000	5.000
0094	524.0636	Apron Endwalls for Culvert Pipe Salvaged 36-Inch	EACH	6.000	6.000
0096	524.0642	Apron Endwalls for Culvert Pipe Salvaged 42-Inch	EACH	2.000	2.000
0098	531.1100	Concrete Masonry Ancillary Structures Type NS	CY	16.800	16.800
0100	531.1140	Steel Reinforcement HS Ancillary Structures Type NS	LB	2,520.000	2,520.000
0106	614.0220	Steel Thrie Beam Bullnose Terminal	EACH	2.000	2.000
0108	614.0230	Steel Thrie Beam	LF	300.000	300.000
0114	614.0400	Adjusting Steel Plate Beam Guard	LF	5,564.000	5,564.000
0116	614.0950	Replacing Guardrail Posts and Blocks	EACH	90.000	90.000
0118	614.0951	Replacing Guardrail Rail and Hardware	LF	600.000	600.000
0120	614.0952	Replacing Guardrail Reflectors	EACH	200.000	200.000

1024-01-75

Line	Item	Item Description	Unit	Total	Qty
0130	618.0100	Maintenance And Repair of Haul Roads (project) 02. 1024-01-75	EACH	1.000	1.000
0132	619.1000	Mobilization	EACH	0.400	0.400
0134	624.0100	Water	MGAL	80.000	80.000
0136	625.0500	Salvaged Topsoil	SY	3,300.000	3,300.000
0138	627.0200	Mulching	SY	3,300.000	3,300.000
0140	628.1504	Silt Fence	LF	1,000.000	1,000.000
0142	628.1520	Silt Fence Maintenance	LF	1,000.000	1,000.000
0144	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0146	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0148	628.2004	Erosion Mat Class I Type B	SY	760.000	760.000
0150	628.7504	Temporary Ditch Checks	LF	200.000	200.000
0152	628.7555	Culvert Pipe Checks	EACH	80.000	80.000
0154	629.0210	Fertilizer Type B	CWT	2.000	2.000
0156	630.0130	Seeding Mixture No. 30	LB	60.000	60.000
0158	630.0200	Seeding Temporary	LB	90.000	90.000
0160	633.0100	Delineator Posts Steel	EACH	262.000	262.000
0162	633.0500	Delineator Reflectors	EACH	312.000	312.000
0164	633.5200	Markers Culvert End	EACH	34.000	34.000
0170	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	20.000	20.000
0172	635.0200	Sign Supports Structural Steel HS	LB	10,059.000	10,059.000
0174	635.0300	Sign Supports Replacing Base Connection Bolts	EACH	2.000	2.000
0176	637.1220	Signs Type I Reflective SH	SF	1,675.000	1,675.000
0178	637.2210	Signs Type II Reflective H	SF	2.000	2.000
0180	638.2601	Removing Signs Type I	EACH	7.000	7.000
0182	638.3100	Removing Structural Steel Sign Supports	EACH	5.000	5.000
0184	642.5201	Field Office Type C	EACH	0.400	0.400
0186	643.0300	Traffic Control Drums	DAY	63,255.000	63,255.000
0188	643.0420	Traffic Control Barricades Type III	DAY	4,120.000	4,120.000
0190	643.0705	Traffic Control Warning Lights Type A	DAY	6,960.000	6,960.000
0192	643.0715	Traffic Control Warning Lights Type C	DAY	8,040.000	8,040.000
0194	643.0800	Traffic Control Arrow Boards	DAY	440.000	440.000
0196	643.0900	Traffic Control Signs	DAY	9,170.000	9,170.000
0198	643.0910	Traffic Control Covering Signs Type I	EACH	2.000	2.000
0200	643.0920	Traffic Control Covering Signs Type II	EACH	18.000	18.000
0202	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	180.000	180.000
0204	643.1205.S	Basic Traffic Queue Warning System	DAY	160.000	160.000
0206	643.4100.S	Traffic Control Interim Lane Closure	EACH	160.000	160.000
0208	643.5000	Traffic Control	EACH	0.400	0.400
0212	646.1020	Marking Line Epoxy 4-Inch	LF	17,147.000	17,147.000
0214	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	72,463.000	72,463.000
0216	646.1545	Marking Line Grooved Wet Ref Contrast Epoxy 4-Inch	LF	7,545.000	7,545.000
0218	646.3020	Marking Line Epoxy 8-Inch	LF	2,277.000	2,277.000
0220	646.3545	Marking Line Grooved Wet Ref Contrast Epoxy 8-Inch	LF	3,681.000	3,681.000
0224	646.5420	Marking Aerial Enforcement Bar Epoxy	EACH	20.000	20.000
0226	646.6120	Marking Stop Line Epoxy 18-Inch	LF	30.000	30.000
0228	646.7220	Marking Chevron Epoxy 24-Inch	LF	204.000	204.000
0230	646.8120	Marking Curb Epoxy	LF	605.000	605.000
0234	646.9000	Marking Removal Line 4-Inch	LF	1,172.000	1,172.000
0236	649.0105	Temporary Marking Line Paint 4-Inch	LF	104,355.000	104,355.000

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Line	Item	Item Description	Unit	Total	Qty
0238	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	4,334.000	4,334.000
0240	649.0205	Temporary Marking Line Paint 8-Inch	LF	5,958.000	5,958.000
0242	650.8000	Construction Staking Resurfacing Reference	LF	42,922.000	42,922.000
0246	650.9910	Construction Staking Supplemental Control (project) 02. 1024-01-75	LS	1.000	1.000
0248	690.0150	Sawing Asphalt	LF	4,500.000	4,500.000
0250	690.0250	Sawing Concrete	LF	34,860.000	34,860.000
0252	740.0440	Incentive IRI Ride	DOL	20,520.600	20,520.600
0258	SPV.0060	Special 01. Cleaning Ditch	EACH	5.000	5.000
0262	SPV.0060	Special 03. Milling and Removing Temporary Transverse Joints (03. 1024-01-75)	EACH	1.000	1.000
0270	SPV.0180	Special 04. Concrete Pavement Repair Doweled Special	SY	180.000	180.000
0272	SPV.0180	Special 05. Concrete Pavement Replacement Doweled Special	SY	120.000	120.000
0274	SPV.0180	Special 06. Continuously Reinforced Concrete Pavement Repair Special	SY	4,200.000	4,200.000
0276	SPV.0180	Special 07. Continuously Reinforced Concrete Pavement Replacement Special	SY	400.000	400.000

REMOVING SMALL PIPE CULVERTS

CATEGORY	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS EACH	REMARKS
0010	1378+40	EB IH 94, LT & RT	1	2-AEW RCCP 18-INCH
0010	1480+00	EB IH 94, RT	1	1-AEW RCCP 18-INCH
0010	1489+00	EB IH 94, LT	1	1-AEW RCCP 18-INCH
		TOTAL 0010	3	

REMOVING CONCRETE SURFACE PARTIAL DEPTH

CATEGORY	STATION	TO	STATION	LOCATION	204.0109.S REMOVING CONCRETE SURFACE PARTIAL DEPTH SF	REMARKS
0010	1371+40	-	1498+58	EB IH 94	28,350	CONCRETE REPAIR/REPLACEMENT
0010	1371+40	-	1498+18	WB IH 94	28,350	CONCRETE REPAIR/REPLACEMENT
				TOTAL 0010	56,700	

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	REMARKS
0010	1470+51	-	1474+51	EB IJH 94, LT	178	MEDIAN SHOULDER
0010	1470+51	-	1474+51	EB IJH 94, 24' RT	355	OUTSIDE SHOULDER
0010	1470+51	-	1474+51	EB IJH 94, 51.5' RT	178	AUX. LANE SHOULDER
0010	1470+14	-	1474+14	WB IH 94, RT	178	MEDIAN SHOULDER
0010	1470+14	-	1474+14	WB IH 94, 24' LT	454	OUTSIDE SHOULDER
0010	1470+14	-	1473+17	WB IH 94, 51.5' LT	138	AUX. LANE SHOULDER
				TOTAL 0010	1,481	

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
0010	4A	1371+40	-	1372+20	EB IH 94, PASSING LN & INSIDE SHOULDER	143	16-FT WIDTH
0010	4A	1387+45	-	1388+25	EB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4A	1389+41	-	1390+21	EB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4A	1431+72	-	1432+52	EB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4A	1433+58	-	1434+38	EB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4A	1469+71	-	1470+51	EB IH 94, PASSING LN & INSIDE SHOULDER	143	16-FT WIDTH
0010	4A	1474+51	-	1475+31	EB IH 94, PASSING LN & INSIDE SHOULDER	143	16-FT WIDTH
0010	4A	1497+78	-	1498+58	EB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4B	1371+40	-	1372+20	EB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1387+45	-	1388+25	EB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1389+41	-	1390+21	EB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1431+72	-	1432+52	EB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1433+58	-	1434+38	EB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1469+71	-	1470+51	EB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1474+51	-	1475+31	EB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1497+78	-	1498+58	EB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4C	1371+40	-	1372+20	EB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1387+45	-	1388+25	EB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1389+41	-	1390+21	EB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1431+72	-	1432+52	EB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1433+58	-	1434+38	EB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1469+71	-	1470+51	EB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1474+51	-	1475+31	EB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1497+78	-	1498+58	EB IH 94, OUTSIDE SHOULDER	63	VAR. WIDTH
0010	---	1469+71	-	1470+51	EB IH 94, AUX. LANE, RT	174	VAR. WIDTH
0010	---	1474+51	-	1475+31	EB IH 94, AUX. LANE, RT	187	21-FT WIDTH
0010	4A	1371+40	-	1372+20	WB IH 94, PASSING LN & INSIDE SHOULDER	143	16-FT WIDTH
0010	4A	1386+76	-	1387+56	WB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4A	1388+75	-	1389+55	WB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4A	1431+46	-	1432+26	WB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4A	1433+31	-	1434+11	WB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4A	1469+34	-	1470+14	WB IH 94, PASSING LN & INSIDE SHOULDER	143	16-FT WIDTH
0010	4A	1474+14	-	1474+94	WB IH 94, PASSING LN & INSIDE SHOULDER	143	16-FT WIDTH
0010	4A	1497+38	-	1498+18	WB IH 94, PASSING LN & INSIDE SHOULDER	160	18-FT WIDTH
0010	4B	1371+40	-	1372+20	WB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1386+76	-	1387+56	WB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1388+75	-	1389+55	WB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1431+46	-	1432+26	WB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1433+31	-	1434+11	WB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1469+34	-	1470+14	WB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1474+14	-	1474+94	WB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4B	1497+38	-	1498+18	WB IH 94, DRIVING LANE	107	12-FT WIDTH
0010	4C	1371+40	-	1372+20	WB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1386+76	-	1387+56	WB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1388+75	-	1389+55	WB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1431+46	-	1432+26	WB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1433+31	-	1434+11	WB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1469+34	-	1470+14	WB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1474+14	-	1474+94	WB IH 94, OUTSIDE SHOULDER	89	10-FT WIDTH
0010	4C	1497+38	-	1498+18	WB IH 94, OUTSIDE SHOULDER	78	VAR. WIDTH
0010	---	1469+34	-	1470+14	WB IH 94, AUX. LANE, LT	187	21-FT WIDTH
0010	---	1474+14	-	1474+94	WB IH 94, AUX. LANE, LT	170	VAR. WIDTH
					TOTAL 0010	6,275	

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
0010	3A	1371+40.00	-	1388+25.24	EB IH 94	3,075	PASSING LANE & INSIDE SHOULDER
0010	3A	1389+40.62	-	1432+52.38	EB IH 94	7,810	PASSING LANE & INSIDE SHOULDER
0010	3A	1433+57.57	-	1452+71.00	EB IH 94	6,075	PASSING LANE & INSIDE SHOULDER
0010	3A	1452+71.00	-	1460+90.40	EB IH 94	1,460	PASSING LANE & INSIDE SHOULDER
0010	3A	1460+90.40	-	1470+50.00	EB IH 94	1,705	PASSING LANE & INSIDE SHOULDER
0010	3A	1474+50.00	-	1478+52.94	EB IH 94	715	PASSING LANE & INSIDE SHOULDER
0010	3A	1478+52.94	-	1491+30.76	EB IH 94	2,270	PASSING LANE & INSIDE SHOULDER
0010	3A	1491+30.76	-	1498+58.00	EB IH 94	1,385	PASSING LANE & INSIDE SHOULDER
0010	3B	1371+40.00	-	1388+25.24	EB IH 94	2,270	DRIVING LANE
0010	3B	1389+40.62	-	1432+52.38	EB IH 94	5,750	DRIVING LANE
0010	3B	1433+57.57	-	1452+71.00	EB IH 94	4,495	DRIVING LANE
0010	3B	1452+71.00	-	1460+90.40	EB IH 94	1,920	DRIVING LANE & EXIT TAPER
0010	3B	1460+90.40	-	1470+50.00	EB IH 94	1,280	DRIVING LANE
0010	3B	1474+50.00	-	1478+52.94	EB IH 94	535	DRIVING LANE
0010	3B	1478+52.94	-	1491+30.76	EB IH 94	3,620	DRIVING LANE & ENTRANCE TAPER
0010	3B	1491+30.76	-	1498+58.00	EB IH 94	975	DRIVING LANE
0010	3C	1371+40.00	-	1388+25.24	EB IH 94	1,905	OUTSIDE SHOULDER
0010	3C	1389+40.62	-	1432+52.38	EB IH 94	4,790	OUTSIDE SHOULDER
0010	3C	1433+57.57	-	1452+71.00	EB IH 94	3,745	OUTSIDE SHOULDER
0010	3C	1452+71.00	-	1460+90.40	EB IH 94	535	OUTSIDE SHOULDER
0010	3C	1460+90.40	-	1470+50.00	EB IH 94	1,110	OUTSIDE SHOULDER
0010	3C	1474+50.00	-	1478+52.94	EB IH 94	445	OUTSIDE SHOULDER
0010	3C	1478+52.94	-	1491+30.76	EB IH 94	795	OUTSIDE SHOULDER
0010	3C	1491+30.76	-	1498+58.00	EB IH 94	785	OUTSIDE SHOULDER
0010	3A	1371+40.00	-	1387+55.96	WB IH 94	2,935	PASSING LANE & INSIDE SHOULDER
0010	3A	1388+74.76	-	1432+25.88	WB IH 94	7,825	PASSING LANE & INSIDE SHOULDER
0010	3A	1433+31.23	-	1451+86.57	WB IH 94	5,985	PASSING LANE & INSIDE SHOULDER
0010	3A	1451+86.57	-	1465+43.85	WB IH 94	2,485	PASSING LANE & INSIDE SHOULDER
0010	3A	1465+43.85	-	1470+10.00	WB IH 94	830	PASSING LANE & INSIDE SHOULDER
0010	3A	1474+10.00	-	1482+60.38	WB IH 94	1,515	PASSING LANE & INSIDE SHOULDER
0010	3A	1482+60.38	-	1492+13.23	WB IH 94	1,695	PASSING LANE & INSIDE SHOULDER
0010	3A	1492+13.23	-	1498+18.00	WB IH 94	1,095	PASSING LANE & INSIDE SHOULDER

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REMOVING ASPHALTIC SURFACE MILLING (CONT'D.)

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
0010	3B	1371+40.00	-	1387+55.96	WB IH 94	2,135	DRIVING LANE
0010	3B	1388+74.76	-	1432+25.88	WB IH 94	5,760	DRIVING LANE
0010	3B	1433+31.23	-	1451+86.57	WB IH 94	4,435	DRIVING LANE
0010	3B	1451+86.57	-	1465+43.85	WB IH 94	4,095	DRIVING LANE & ENTRANCE TAPER
0010	3B	1465+43.85	-	1470+10.00	WB IH 94	625	DRIVING LANE
0010	3B	1474+10.00	-	1482+60.38	WB IH 94	1,140	DRIVING LANE
0010	3B	1482+60.38	-	1492+13.23	WB IH 94	2,505	DRIVING LANE & EXIT TAPER
0010	3B	1492+13.23	-	1498+18.00	WB IH 94	810	DRIVING LANE
0010	3C	1371+40.00	-	1387+55.96	WB IH 94	1,765	OUTSIDE SHOULDER
0010	3C	1388+74.76	-	1432+25.88	WB IH 94	4,800	OUTSIDE SHOULDER
0010	3C	1433+31.23	-	1451+86.57	WB IH 94	3,700	OUTSIDE SHOULDER
0010	3C	1451+86.57	-	1465+43.85	WB IH 94	840	OUTSIDE SHOULDER
0010	3C	1465+43.85	-	1470+10.00	WB IH 94	520	OUTSIDE SHOULDER
0010	3C	1474+10.00	-	1482+60.38	WB IH 94	960	OUTSIDE SHOULDER
0010	3C	1482+60.38	-	1492+13.23	WB IH 94	605	OUTSIDE SHOULDER
0010	3C	1492+13.23	-	1498+18.00	WB IH 94	670	OUTSIDE SHOULDER
0010	---	60+87.52	-	73+76.72	RAMP 'JD' & RAMP 'JDD'	3,885	-----
0010	---	59+19.17	-	70+23.70	'JE' LOOP	2,845	-----
0010	---	68+66.98	-	76+25.60	RAMP 'JC'	2,050	-----
0010	---	1474+50.00	-	1478+52.94	EB IH 94	1,370	EB AUX LANE & ENTRANCE TAPER
0010	---	1465+43.85	-	1470+10.00	WB IH 94	1,360	WB AUX LANE & ENTRANCE TAPER
0010	---	67+60.38	-	76+13.80	RAMP 'JF'	2,255	-----
0010	---	85+21.57	-	74+08.92	'JB' LOOP	2,795	-----
0010	---	68+84.42	-	82+53.09	RAMP 'JA' & RAMP 'JAA'	4,120	-----
0010	---	20+50.00	-	30+96.20	NB USH 12/STH 27	1,960	PASSING LANE
0010	---	34+14.63	-	49+00.00	NB USH 12/STH 27	2,710	PASSING LANE
0010	---	49+00.00	-	59+00.00	NB USH 12/STH 27	2,970	LANES
0010	---	18+30.00	-	30+17.93	SB USH 12/STH 27	2,210	PASSING LANE
0010	---	34+21.00	-	49+00.00	SB USH 12/STH 27	2,755	PASSING LANE
0010	---	49+00.00	-	59+00.00	SB USH 12/STH 27	3,640	LANES
0010	---	20+50.00	-	30+96.20	NB USH 12/STH 27	2,700	DRIVING LANE & TAPER
0010	---	34+14.63	-	49+00.00	NB USH 12/STH 27	3,830	DRIVING LANE & TAPERS
0010	---	18+30.00	-	30+17.93	SB USH 12/STH 27	3,115	DRIVING LANE & TAPERS
0010	---	34+21.00	-	49+00.00	SB USH 12/STH 27	3,620	DRIVING LANE & TAPER
					TOTAL 0010	169,370	

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REMOVING ASPHALTIC LONGITUDINAL NOTCHED WEDGE JOINT MILLING

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	204.0126.S REMOVING ASPHALTIC LONGITUDINAL NOTCHED WEDGE JOINT MILLING LF	REMARKS
0010	4B	1371+40	-	1388+33	EB IH 94, 12' RT	1,696	
0010	4B	1389+48	-	1432+57	EB IH 94, 12' RT	4,311	
0010	4B	1433+62	-	1470+51	EB IH 94, 12' RT	5,151	
0010	4B	1474+51	-	1498+58	EB IH 94, 12' RT	2,404	
0010	4B	1371+40	-	1387+47	WB IH 94, 12' LT	1,604	
0010	4B	1388+67	-	1432+21	WB IH 94, 12' LT	4,319	
0010	4B	1433+26	-	1470+14	WB IH 94, 12' LT	5,191	
0010	4B	1474+14	-	1498+18	WB IH 94, 12' LT	2,411	
0010	4C	1371+40	-	1388+40	EB IH 94, 24' RT	1,707	
0010	4C	1389+56	-	1432+62	EB IH 94, 24' RT	4,310	
0010	4C	1433+67	-	1460+86	EB IH 94, VAR. RT	4,185	
0010	4C	1460+90	-	1470+51	EB IH 94, 24' RT	958	
0010	4C	1474+51	-	1478+53	EB IH 94, 24' RT	399	
0010	4C	1478+53	-	1498+58	EB IH 94, VAR. RT	1,997	
0010	4C	1371+40	-	1387+38	WB IH 94, 24' LT	1,593	
0010	4C	1388+58	-	1432+16	WB IH 94, 24' LT	4,319	
0010	4C	1433+22	-	1465+44	WB IH 94, VAR. LT	4,724	
0010	4C	1465+44	-	1470+14	WB IH 94, 24' LT	472	
0010	4C	1474+14	-	1482+60	WB IH 94, 24' LT	850	
0010	4C	1482+62	-	1498+18	WB IH 94, VAR. LT	1,567	
					TOTAL 0010	54,168	

REMOVING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	REMARKS
0010	1471+23	-	1473+52	EB IH 94, LT	471	MEDIAN BULLNOSE
				TOTAL 0010	471	

REMOVING DELINEATORS AND MARKERS

CATEGORY	STATION	TO	STATION	LOCATION	204.0180 REMOVING DELINEATORS AND MARKERS EACH	REMARKS
0010	1371+40	-	1498+58	EB IH 94	128	DELINEATORS
0010	1371+40	-	1498+18	WB IH 94	134	DELINEATORS
				TOTAL 0010	262	

PREPARE FOUNDATION FOR ASPHALTIC PAVING (02. 1024-01-75)

CATEGORY	STATION	TO	STATION	LOCATION	211.0100.02 PREPARE FOUNDATION FOR ASPHALTIC PAVING (02. 1024-01-75) LS	REMARKS
0010	1371+40	-	1498+58	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	REMARKS
0010	1470+51	-	1474+51	EB IH 94, LT	4	MEDIAN SHOULDER
0010	1470+51	-	1474+51	EB IH 94, 24' RT	4	OUTSIDE SHOULDER
0010	1470+51	-	1474+51	EB IH 94, 51.5' RT	4	AUX. LANE SHOULDER
0010	1470+14	-	1474+14	WB IH 94, RT	4	MEDIAN SHOULDER
0010	1470+14	-	1474+14	WB IH 94, 24' LT	4	OUTSIDE SHOULDER
0010	1470+14	-	1473+17	WB IH 94, 51.5' LT	3	AUX. LANE SHOULDER
				TOTAL 0010	23	

FINISHING ROADWAY (02. 1024-01-75)

CATEGORY	STATION	TO	STATION	LOCATION	213.0100.02 FINISHING ROADWAY (02. 1024-01-75) EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

BASE AGGREGATE DENSE 3/4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	REMARKS
0010	1371+40	-	1388+12	EB IH 94, 6' LT	100	MEDIAN SHOULDER
0010	1389+49	-	1432+39	EB IH 94, 6' LT	260	MEDIAN SHOULDER
0010	1433+67	-	1470+51	EB IH 94, 6' LT	310	MEDIAN SHOULDER
0010	1474+51	-	1498+51	EB IH 94, 6' LT	145	MEDIAN SHOULDER
0010	1371+40	-	1388+36	EB IH 94, 35' RT	130	OUTSIDE SHOULDER
0010	1389+71	-	1432+53	EB IH 94, 35' RT	325	OUTSIDE SHOULDER
0010	1433+81	-	1455+39	EB IH 94, 35' RT	275	OUTSIDE SHOULDER
0010	1455+39	-	1460+84	EB IH 94, EXIT TAPER RT	40	OUTSIDE SHOULDER
0010	1461+19	-	1468+85	EB IH 94, 35' RT	60	OUTSIDE SHOULDER
0010	1474+52	-	1476+15	EB IH 94, 56' RT	10	OUTSIDE SHOULDER
0010	1477+30	-	1488+43	EB IH 94, ENTRANCE TAPER RT	80	OUTSIDE SHOULDER
0010	1488+43	-	1498+48	EB IH 94, 35' RT	75	OUTSIDE SHOULDER
0010	1371+40	-	1387+48	WB IH 94, 6' RT	100	MEDIAN SHOULDER
0010	1388+88	-	1432+17	WB IH 94, 6' RT	260	MEDIAN SHOULDER
0010	1433+42	-	1470+14	WB IH 94, 6' RT	315	MEDIAN SHOULDER
0010	1474+14	-	1498+08	WB IH 94, 6' RT	145	MEDIAN SHOULDER
0010	1371+40	-	1387+21	WB IH 94, 35' LT	120	OUTSIDE SHOULDER
0010	1388+63	-	1432+04	WB IH 94, 35' LT	325	OUTSIDE SHOULDER
0010	1433+29	-	1453+78	WB IH 94, 35' LT	270	OUTSIDE SHOULDER
0010	1453+78	-	1467+17	WB IH 94, ENTRANCE TAPER LT	100	OUTSIDE SHOULDER
0010	1468+42	-	1470+14	WB IH 94, 56' LT	10	OUTSIDE SHOULDER
0010	1474+93	-	1481+80	WB IH 94, 35' LT	55	OUTSIDE SHOULDER
0010	1482+63	-	1489+42	WB IH 94, EXIT TAPER LT	50	OUTSIDE SHOULDER
0010	1489+42	-	1498+00	WB IH 94, 35' LT	65	OUTSIDE SHOULDER
0010	1371+40	-	1498+58	IH 94	350	UNDISTRIBUTED
				TOTAL 0010	3,975	

DRILLED TIE BARS

CATEGORY	STATION	TO	STATION	LOCATION	416.0610 DRILLED TIE BARS EACH	REMARKS
0010	1371+40	-	1498+58	EB IH 94	400	PASSING LANE
0010	1371+40	-	1498+58	EB IH 94	400	DRIVING LANE
0010	1470+51	-	1474+51	EB IH 94, RT	36	AUXILIARY LANE
0010	1371+40	-	1498+18	WB IH 94	400	PASSING LANE
0010	1371+40	-	1498+18	WB IH 94	400	DRIVING LANE
0010	1470+14	-	1474+14	WB IH 94, LT	36	AUXILIARY LANE
				TOTAL 0010	1,672	

SHAPING SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	305.0500 SHAPING SHOULDERS STA	REMARKS
0010	68+87	-	70+70	RAMP 'JA', RT	1.83	
0010	68+87	-	69+85	RAMP 'JA', LT	0.98	
0010	71+26	-	81+77	RAMP 'JA', LT	10.51	
0010	75+56	-	81+77	RAMP 'JA', RT	6.21	
0010	68+59	-	69+92	RAMP 'JAA', RT	1.33	
0010	74+86	-	85+18	'JB' LOOP, RT	10.32	
0010	68+84	-	72+44	RAMP 'JC', RT	3.60	
0010	68+84	-	76+24	RAMP 'JC', LT	7.40	
0010	61+14	-	68+13	RAMP 'JD', LT	6.99	
0010	61+14	-	71+46	RAMP 'JD', RT	10.32	
0010	72+45	-	73+74	RAMP 'JD', LT	1.29	
0010	72+81	-	73+74	RAMP 'JD', RT	0.93	
0010	72+74	-	74+02	RAMP 'JDD', LT	1.28	
0010	59+19	-	68+95	'JE' LOOP, LT	9.76	
0010	68+38	-	76+00	RAMP 'JF', RT	7.62	
0010	71+96	-	76+00	RAMP 'JF', LT	4.04	
0010	20+50	-	30+97	NB USH 12/STH 27, LT	10.47	
0010	20+50	-	30+97	NB USH 12/STH 27, RT	10.47	
0010	34+15	-	49+06	NB USH 12/STH 27, LT	14.91	
0010	36+48	-	38+94	NB USH 12/STH 27, RT	2.46	
0010	39+28	-	40+36	NB USH 12/STH 27, RT	1.08	
0010	41+25	-	49+04	NB USH 12/STH 27, RT	7.79	
0010	49+73	-	59+00	NB USH 12/STH 27, RT	9.27	
0010	18+30	-	30+19	SB USH 12/STH 27, RT	11.89	
0010	18+30	-	24+28	SB USH 12/STH 27, LT	5.98	
0010	25+17	-	26+26	SB USH 12/STH 27, LT	1.09	
0010	26+59	-	29+15	SB USH 12/STH 27, LT	2.56	
0010	34+18	-	49+07	SB USH 12/STH 27, RT	14.89	
0010	34+21	-	48+89	SB USH 12/STH 27, LT	14.68	
0010	49+71	-	56+38	SB USH 12/STH 27, LT	6.67	
0010	56+88	-	59+00	SB USH 12/STH 27, LT	2.12	
				TOTAL 0010	200.74	

DRILLED DOWEL BARS

CATEGORY	STATION	TO	STATION	LOCATION	416.0620 DRILLED DOWEL BARS EACH	REMARKS
0010	1470+51	-	1474+51	EB IH 94, RT	200	AUXILIARY LANE
0010	1470+14	-	1474+14	WB IH 94, LT	200	AUXILIARY LANE
				TOTAL 0010	400	

TACK COAT

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	REMARKS	APPLIED ON	APPLICATION RATE GAL/SY
0010	1371+40.00	-	1388+25.24	EB IH 94	215	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1389+40.62	-	1432+52.38	EB IH 94	547	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1433+57.57	-	1452+71.00	EB IH 94	425	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1452+71.00	-	1460+90.40	EB IH 94	102	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1460+90.40	-	1470+50.00	EB IH 94	120	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1474+50.00	-	1478+52.94	EB IH 94	50	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1478+52.94	-	1491+30.76	EB IH 94	159	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1491+30.76	-	1498+58.00	EB IH 94	97	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1371+40.00	-	1388+25.24	EB IH 94	159	DRIVING LANE	MILLED SURFACE	0.07
0010	1389+40.62	-	1432+52.38	EB IH 94	403	DRIVING LANE	MILLED SURFACE	0.07
0010	1433+57.57	-	1452+71.00	EB IH 94	315	DRIVING LANE	MILLED SURFACE	0.07
0010	1452+71.00	-	1460+90.40	EB IH 94	135	DRIVING LANE & EXIT TAPER	MILLED SURFACE	0.07
0010	1460+90.40	-	1470+50.00	EB IH 94	90	DRIVING LANE	MILLED SURFACE	0.07
0010	1474+50.00	-	1478+52.94	EB IH 94	38	DRIVING LANE	MILLED SURFACE	0.07
0010	1478+52.94	-	1491+30.76	EB IH 94	254	DRIVING LANE & ENTRANCE TAPER	MILLED SURFACE	0.07
0010	1491+30.76	-	1498+58.00	EB IH 94	68	DRIVING LANE	MILLED SURFACE	0.07
0010	1371+40.00	-	1388+25.24	EB IH 94	133	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1389+40.62	-	1432+52.38	EB IH 94	335	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1433+57.57	-	1452+71.00	EB IH 94	262	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1452+71.00	-	1460+90.40	EB IH 94	38	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1460+90.40	-	1470+50.00	EB IH 94	78	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1474+50.00	-	1478+52.94	EB IH 94	31	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1478+52.94	-	1491+30.76	EB IH 94	56	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1491+30.76	-	1498+58.00	EB IH 94	55	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1371+40.00	-	1388+25.24	EB IH 94	154	PASSING LANE & INSIDE SHOULDER	LOWER LAYER	0.05
0010	1389+40.62	-	1432+52.38	EB IH 94	391	PASSING LANE & INSIDE SHOULDER	LOWER LAYER	0.05
0010	1433+57.57	-	1452+71.00	EB IH 94	304	PASSING LANE & INSIDE SHOULDER	LOWER LAYER	0.05
0010	1452+71.00	-	1460+90.40	EB IH 94	73	PASSING LANE & INSIDE SHOULDER	LOWER LAYER	0.05
0010	1460+90.40	-	1470+50.00	EB IH 94	85	PASSING LANE & INSIDE SHOULDER	LOWER LAYER	0.05
0010	1474+50.00	-	1478+52.94	EB IH 94	36	PASSING LANE & INSIDE SHOULDER	LOWER LAYER	0.05
0010	1478+52.94	-	1491+30.76	EB IH 94	114	PASSING LANE & INSIDE SHOULDER	LOWER LAYER	0.05
0010	1491+30.76	-	1498+58.00	EB IH 94	70	PASSING LANE & INSIDE SHOULDER	LOWER LAYER	0.05
0010	1371+40.00	-	1388+25.24	EB IH 94	114	DRIVING LANE	LOWER LALYER	0.05
0010	1389+40.62	-	1432+52.38	EB IH 94	288	DRIVING LANE	LOWER LALYER	0.05
0010	1433+57.57	-	1452+71.00	EB IH 94	225	DRIVING LANE	LOWER LALYER	0.05
0010	1452+71.00	-	1460+90.40	EB IH 94	96	DRIVING LANE & EXIT TAPER	LOWER LALYER	0.05
0010	1460+90.40	-	1470+50.00	EB IH 94	64	DRIVING LANE	LOWER LALYER	0.05
0010	1474+50.00	-	1478+52.94	EB IH 94	27	DRIVING LANE	LOWER LALYER	0.05
0010	1478+52.94	-	1491+30.76	EB IH 94	181	DRIVING LANE & ENTRANCE TAPER	LOWER LALYER	0.05
0010	1491+30.76	-	1498+58.00	EB IH 94	49	DRIVING LANE	LOWER LALYER	0.05
0010	1371+40.00	-	1388+25.24	EB IH 94	95	OUTSIDE SHOULDER	LOWER LAYER	0.05
0010	1389+40.62	-	1432+52.38	EB IH 94	240	OUTSIDE SHOULDER	LOWER LAYER	0.05
0010	1433+57.57	-	1452+71.00	EB IH 94	187	OUTSIDE SHOULDER	LOWER LAYER	0.05
0010	1452+71.00	-	1460+90.40	EB IH 94	27	OUTSIDE SHOULDER	LOWER LAYER	0.05
0010	1460+90.40	-	1470+50.00	EB IH 94	56	OUTSIDE SHOULDER	LOWER LAYER	0.05
0010	1474+50.00	-	1478+52.94	EB IH 94	23	OUTSIDE SHOULDER	LOWER LAYER	0.05
0010	1478+52.94	-	1491+30.76	EB IH 94	40	OUTSIDE SHOULDER	LOWER LAYER	0.05
0010	1491+30.76	-	1498+58.00	EB IH 94	39	OUTSIDE SHOULDER	LOWER LAYER	0.05
0010	1371+40.00	-	1387+55.96	WB IH 94	206	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1388+74.76	-	1432+25.88	WB IH 94	548	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1433+31.23	-	1451+86.57	WB IH 94	419	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1451+86.57	-	1465+43.85	WB IH 94	174	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1465+43.85	-	1470+10.00	WB IH 94	58	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1474+10.00	-	1482+60.38	WB IH 94	106	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1482+60.38	-	1492+13.23	WB IH 94	119	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07
0010	1492+13.23	-	1498+18.00	WB IH 94	77	PASSING LANE & INSIDE SHOULDER	MILLED SURFACE	0.07

TACK COAT (CONT'D.)

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	REMARKS	APPLIED ON	APPLICATION RATE GAL/SY
0010	1371+40.00	-	1387+55.96	WB IH 94	150	DRIVING LANE	MILLED SURFACE	0.07
0010	1388+74.76	-	1432+25.88	WB IH 94	403	DRIVING LANE	MILLED SURFACE	0.07
0010	1433+31.23	-	1451+86.57	WB IH 94	311	DRIVING LANE	MILLED SURFACE	0.07
0010	1451+86.57	-	1465+43.85	WB IH 94	287	DRIVING LANE & ENTRANCE TAPER	MILLED SURFACE	0.07
0010	1465+43.85	-	1470+10.00	WB IH 94	44	DRIVING LANE	MILLED SURFACE	0.07
0010	1474+10.00	-	1482+60.38	WB IH 94	80	DRIVING LANE	MILLED SURFACE	0.07
0010	1482+60.38	-	1492+13.23	WB IH 94	176	DRIVING LANE & EXIT TAPER	MILLED SURFACE	0.07
0010	1492+13.23	-	1498+18.00	WB IH 94	57	DRIVING LANE	MILLED SURFACE	0.07
0010	1371+40.00	-	1387+55.96	WB IH 94	124	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1388+74.76	-	1432+25.88	WB IH 94	336	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1433+31.23	-	1451+86.57	WB IH 94	259	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1451+86.57	-	1465+43.85	WB IH 94	59	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1465+43.85	-	1470+10.00	WB IH 94	37	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1474+10.00	-	1482+60.38	WB IH 94	68	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1482+60.38	-	1492+13.23	WB IH 94	42	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1492+13.23	-	1498+18.00	WB IH 94	47	OUTSIDE SHOULDER	MILLED SURFACE	0.07
0010	1371+40.00	-	1387+55.96	WB IH 94	147	PASSING LANE & INSIDE SHOULDER	LOWER LALYER	0.05
0010	1388+74.76	-	1432+25.88	WB IH 94	391	PASSING LANE & INSIDE SHOULDER	LOWER LALYER	0.05
0010	1433+31.23	-	1451+86.57	WB IH 94	300	PASSING LANE & INSIDE SHOULDER	LOWER LALYER	0.05
0010	1451+86.57	-	1465+43.85	WB IH 94	125	PASSING LANE & INSIDE SHOULDER	LOWER LALYER	0.05
0010	1465+43.85	-	1470+10.00	WB IH 94	42	PASSING LANE & INSIDE SHOULDER	LOWER LALYER	0.05
0010	1474+10.00	-	1482+60.38	WB IH 94	76	PASSING LANE & INSIDE SHOULDER	LOWER LALYER	0.05
0010	1482+60.38	-	1492+13.23	WB IH 94	85	PASSING LANE & INSIDE SHOULDER	LOWER LALYER	0.05
0010	1492+13.23	-	1498+18.00	WB IH 94	55	PASSING LANE & INSIDE SHOULDER	LOWER LALYER	0.05
0010	1371+40.00	-	1387+55.96	WB IH 94	107	DRIVING LANE	LOWER LALYER	0.05
0010	1388+74.76	-	1432+25.88	WB IH 94	288	DRIVING LANE	LOWER LALYER	0.05
0010	1433+31.23	-	1451+86.57	WB IH 94	222	DRIVING LANE	LOWER LALYER	0.05
0010	1451+86.57	-	1465+43.85	WB IH 94	205	DRIVING LANE & ENTRANCE TAPER	LOWER LALYER	0.05
0010	1465+43.85	-	1470+10.00	WB IH 94	31	DRIVING LANE	LOWER LALYER	0.05
0010	1474+10.00	-	1482+60.38	WB IH 94	57	DRIVING LANE	LOWER LALYER	0.05
0010	1482+60.38	-	1492+13.23	WB IH 94	126	DRIVING LANE & EXIT TAPER	LOWER LALYER	0.05
0010	1492+13.23	-	1498+18.00	WB IH 94	41	DRIVING LANE	LOWER LALYER	0.05
0010	1371+40.00	-	1387+55.96	WB IH 94	88	OUTSIDE SHOULDER	LOWER LALYER	0.05
0010	1388+74.76	-	1432+25.88	WB IH 94	240	OUTSIDE SHOULDER	LOWER LALYER	0.05
0010	1433+31.23	-	1451+86.57	WB IH 94	185	OUTSIDE SHOULDER	LOWER LALYER	0.05
0010	1451+86.57	-	1465+43.85	WB IH 94	42	OUTSIDE SHOULDER	LOWER LALYER	0.05
0010	1465+43.85	-	1470+10.00	WB IH 94	26	OUTSIDE SHOULDER	LOWER LALYER	0.05
0010	1474+10.00	-	1482+60.38	WB IH 94	48	OUTSIDE SHOULDER	LOWER LALYER	0.05
0010	1482+60.38	-	1492+13.23	WB IH 94	30	OUTSIDE SHOULDER	LOWER LALYER	0.05
0010	1492+13.23	-	1498+18.00	WB IH 94	34	OUTSIDE SHOULDER	LOWER LALYER	0.05
0010	60+87.52	-	73+76.72	RAMP 'JD' & RAMP 'JDD'	272	RAMP	MILLED SURFACE	0.07
0010	59+19.17	-	70+23.70	'JE' LOOP	199	RAMP	MILLED SURFACE	0.07
0010	68+66.98	-	76+25.60	RAMP 'JC'	144	RAMP	MILLED SURFACE	0.07
0010	1474+50.00	-	1478+52.94	EB IH 94	96	EB AUX LANE & ENTRANCE TAPER	MILLED SURFACE	0.07
0010	1465+43.85	-	1470+10.00	WB IH 94	95	WB AUX LANE & ENTRANCE TAPER	MILLED SURFACE	0.07
0010	67+60.38	-	76+13.80	RAMP 'JF'	158	RAMP	MILLED SURFACE	0.07
0010	85+21.57	-	74+08.92	'JB' LOOP	196	RAMP	MILLED SURFACE	0.07
0010	68+84.42	-	82+53.09	RAMP 'JA' & RAMP 'JAA'	289	RAMP	MILLED SURFACE	0.07
0010	20+50.00	-	30+96.20	NB USH 12/STH 27	137	PASSING LANE	MILLED SURFACE	0.07
0010	34+14.63	-	49+00.00	NB USH 12/STH 27	190	PASSING LANE	MILLED SURFACE	0.07
0010	49+00.00	-	59+00.00	NB USH 12/STH 27	208	LANES	MILLED SURFACE	0.07
0010	18+30.00	-	30+17.93	SB USH 12/STH 27	155	PASSING LANE	MILLED SURFACE	0.07
0010	34+21.00	-	49+00.00	SB USH 12/STH 27	193	PASSING LANE	MILLED SURFACE	0.07
0010	49+00.00	-	59+00.00	SB USH 12/STH 27	255	LANES	MILLED SURFACE	0.07
0010	20+50.00	-	30+96.20	NB USH 12/STH 27	189	DRIVING LANE & TAPER	MILLED SURFACE	0.07
0010	34+14.63	-	49+00.00	NB USH 12/STH 27	268	DRIVING LANE & TAPERS	MILLED SURFACE	0.07
0010	18+30.00	-	30+17.93	SB USH 12/STH 27	218	DRIVING LANE & TAPERS	MILLED SURFACE	0.07
0010	34+21.00	-	49+00.00	SB USH 12/STH 27	254	DRIVING LANE & TAPER	MILLED SURFACE	0.07
0010	18+30.00			EB IH 94, LT	20	MAINT. CROSSOVER	EXISTING SURFACE	0.07
0010	34+21.00			EB IH 94, LT	20	MAINT. CROSSOVER	EXISTING SURFACE	0.07
				TOTAL 0010	17,877			

HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS

CATEGORY	STATION	TO	STATION	LOCATION	460.0105.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	1	LOWER LAYER
				TOTAL 0010	1	

HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY

CATEGORY	STATION	TO	STATION	LOCATION	460.0110.S HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	1	LOWER LAYER
				TOTAL 0010	1	

HMA PAVEMENT TEST STRIPS VOLUMETRICS

CATEGORY	STATION	TO	STATION	LOCATION	460.0115.S HMA PAVEMENT TEST STRIPS VOLUMETRICS EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	1	UPPER LAYER
				TOTAL 0010	1	

HMA PAVEMENT TEST STRIPS DENSITY

CATEGORY	STATION	TO	STATION	LOCATION	460.0120.S HMA PAVEMENT TEST STRIPS DENSITY EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	1	UPPER LAYER
				TOTAL 0010	1	

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HMA PAVEMENT 4 MT 58-34 S

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	460.6244 HMA PAVEMENT 4 MT 58-34 S TON	REMARKS	HMA LIFT
0010	3C	1371+40.00	-	1388+25.24	EB IH 94	215	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1389+40.62	-	1432+52.38	EB IH 94	540	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1433+57.57	-	1452+71.00	EB IH 94	420	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1452+71.00	-	1460+90.40	EB IH 94	60	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1460+90.40	-	1470+50.00	EB IH 94	125	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1474+50.00	-	1478+52.94	EB IH 94	50	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1478+52.94	-	1491+30.76	EB IH 94	90	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1491+30.76	-	1498+58.00	EB IH 94	90	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	4C	1371+40.00	-	1388+25.24	EB IH 94	215	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1389+40.62	-	1432+52.38	EB IH 94	540	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1433+57.57	-	1452+71.00	EB IH 94	420	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1452+71.00	-	1460+90.40	EB IH 94	60	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1460+90.40	-	1470+50.00	EB IH 94	125	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1474+50.00	-	1478+52.94	EB IH 94	50	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1478+52.94	-	1491+30.76	EB IH 94	90	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1491+30.76	-	1498+58.00	EB IH 94	90	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	3C	1371+40.00	-	1387+55.96	WB IH 94	200	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1388+74.76	-	1432+25.88	WB IH 94	540	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1433+31.23	-	1451+86.57	WB IH 94	415	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1451+86.57	-	1465+43.85	WB IH 94	95	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1465+43.85	-	1470+10.00	WB IH 94	60	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1474+10.00	-	1482+60.38	WB IH 94	110	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1482+60.38	-	1492+13.23	WB IH 94	70	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	3C	1492+13.23	-	1498+18.00	WB IH 94	75	OUTSIDE SHOULDER	2-IN. LOWER LAYER
0010	4C	1371+40.00	-	1387+55.96	WB IH 94	200	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1388+74.76	-	1432+25.88	WB IH 94	540	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1433+31.23	-	1451+86.57	WB IH 94	415	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1451+86.57	-	1465+43.85	WB IH 94	95	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1465+43.85	-	1470+10.00	WB IH 94	60	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1474+10.00	-	1482+60.38	WB IH 94	110	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1482+60.38	-	1492+13.23	WB IH 94	70	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	4C	1492+13.23	-	1498+18.00	WB IH 94	75	OUTSIDE SHOULDER	2-IN. UPPER LAYER
0010	---	1482+60.38			EBJ IH 94, LT	30	MAINT. CROSSOVER	2-IN. SURFACE
0010	---	1492+13.23			EBJ IH 94, LT	30	MAINT. CROSSOVER	2-IN. SURFACE
					TOTAL 0010	6,370		

3

HMA PAVEMENT 4 MT 58-34 H

CATEGORY	STATION	TO	STATION	LOCATION	460.6444 HMA PAVEMENT 4 MT 58-34 H TON	REMARKS	HMA LIFT
0010	60+87.52	-	73+76.72	RAMP 'JD' & RAMP 'JDD'	435	RAMP	2-IN. SURFACE
0010	59+19.17	-	70+23.70	'JE' LOOP	320	RAMP	2-IN. SURFACE
0010	68+66.98	-	76+25.60	RAMP 'JC'	230	RAMP	2-IN. SURFACE
0010	1474+50.00	-	1478+52.94	EB IH 94	155	EB AUX LANE & ENTRANCE TAPER	2-IN. SURFACE
0010	1465+43.85	-	1470+10.00	WB IH 94	155	WB AUX LANE & ENTRANCE TAPER	2-IN. SURFACE
0010	67+60.38	-	76+13.80	RAMP 'JF'	255	RAMP	2-IN. SURFACE
0010	85+21.57	-	74+08.92	'JB' LOOP	315	RAMP	2-IN. SURFACE
0010	68+84.42	-	82+53.09	RAMP 'JA' & RAMP 'JAA'	465	RAMP	2-IN. SURFACE
0010	20+50.00	-	30+96.20	NB USH 12/STH 27	220	PASSING LANE	2-IN. SURFACE
0010	34+14.63	-	49+00.00	NB USH 12/STH 27	305	PASSING LANE	2-IN. SURFACE
0010	49+00.00	-	59+00.00	NB USH 12/STH 27	335	LANES	2-IN. SURFACE
0010	20+50.00	-	30+96.20	NB USH 12/STH 27	305	DRIVING LANE & TAPER	2-IN. SURFACE
0010	34+14.63	-	49+00.00	NB USH 12/STH 27	430	DRIVING LANE & TAPERS	2-IN. SURFACE
0010	18+30.00	-	30+17.93	SB USH 12/STH 27	250	PASSING LANE	2-IN. SURFACE
0010	34+21.00	-	49+00.00	SB USH 12/STH 27	310	PASSING LANE	2-IN. SURFACE
0010	49+00.00	-	59+00.00	SB USH 12/STH 27	410	LANES	2-IN. SURFACE
0010	18+30.00	-	30+17.93	SB USH 12/STH 27	350	DRIVING LANE & TAPERS	2-IN. SURFACE
0010	34+21.00	-	49+00.00	SB USH 12/STH 27	405	DRIVING LANE & TAPER	2-IN. SURFACE
				TOTAL 0010	5,650		

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HMA PAVEMENT 4 HT 58-34 V

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	460.7644 HMA PAVEMENT 4 HT 58-34 V TON	REMARKS	HMA LIFT
0010	3A	1371+40.00	-	1388+25.24	EB IH 94	345	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1389+40.62	-	1432+52.38	EB IH 94	875	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1433+57.57	-	1452+71.00	EB IH 94	680	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1452+71.00	-	1460+90.40	EB IH 94	165	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1460+90.40	-	1470+50.00	EB IH 94	195	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1474+50.00	-	1478+52.94	EB IH 94	80	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1478+52.94	-	1491+30.76	EB IH 94	255	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1491+30.76	-	1498+58.00	EB IH 94	155	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3B	1371+40.00	-	1388+25.24	EB IH 94	255	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1389+40.62	-	1432+52.38	EB IH 94	645	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1433+57.57	-	1452+71.00	EB IH 94	505	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1452+71.00	-	1460+90.40	EB IH 94	215	DRIVING LANE & EXIT TAPER	2-IN. LOWER LAYER
0010	3B	1460+90.40	-	1470+50.00	EB IH 94	145	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1474+50.00	-	1478+52.94	EB IH 94	60	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1478+52.94	-	1491+30.76	EB IH 94	405	DRIVING LANE & ENTRANCE TAPER	2-IN. LOWER LAYER
0010	3B	1491+30.76	-	1498+58.00	EB IH 94	110	DRIVING LANE	2-IN. LOWER LAYER
0010	3A	1371+40.00	-	1387+55.96	WB IH 94	330	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1388+74.76	-	1432+25.88	WB IH 94	880	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1433+31.23	-	1451+86.57	WB IH 94	670	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1451+86.57	-	1465+43.85	WB IH 94	280	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1465+43.85	-	1470+10.00	WB IH 94	95	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1474+10.00	-	1482+60.38	WB IH 94	170	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1482+60.38	-	1492+13.23	WB IH 94	190	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3A	1492+13.23	-	1498+18.00	WB IH 94	125	PASSING LANE & INSIDE SHOULDER	2-IN. LOWER LAYER
0010	3B	1371+40.00	-	1387+55.96	WB IH 94	240	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1388+74.76	-	1432+25.88	WB IH 94	645	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1433+31.23	-	1451+86.57	WB IH 94	500	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1451+86.57	-	1465+43.85	WB IH 94	460	DRIVING LANE & ENTRANCE TAPER	2-IN. LOWER LAYER
0010	3B	1465+43.85	-	1470+10.00	WB IH 94	70	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1474+10.00	-	1482+60.38	WB IH 94	130	DRIVING LANE	2-IN. LOWER LAYER
0010	3B	1482+60.38	-	1492+13.23	WB IH 94	280	DRIVING LANE & EXIT TAPER	2-IN. LOWER LAYER
0010	3B	1492+13.23	-	1498+18.00	WB IH 94	90	DRIVING LANE	2-IN. LOWER LAYER
					TOTAL 0010	10,245		

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HMA PAVEMENT 4 SMA 58-34 V

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	460.8644 HMA PAVEMENT 4 SMA 58-34 V TON	REMARKS	HMA LIFT
0010	4A	1371+40.00	-	1388+25.24	EB IH 94	345	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1389+40.62	-	1432+52.38	EB IH 94	875	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1433+57.57	-	1452+71.00	EB IH 94	680	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1452+71.00	-	1460+90.40	EB IH 94	165	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1460+90.40	-	1470+50.00	EB IH 94	195	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1474+50.00	-	1478+52.94	EB IH 94	80	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1478+52.94	-	1491+30.76	EB IH 94	255	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1491+30.76	-	1498+58.00	EB IH 94	155	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4B	1371+40.00	-	1388+25.24	EB IH 94	255	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1389+40.62	-	1432+52.38	EB IH 94	645	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1433+57.57	-	1452+71.00	EB IH 94	505	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1452+71.00	-	1460+90.40	EB IH 94	215	DRIVING LANE & EXIT TAPER	2-IN. UPPER LAYER
0010	4B	1460+90.40	-	1470+50.00	EB IH 94	145	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1474+50.00	-	1478+52.94	EB IH 94	60	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1478+52.94	-	1491+30.76	EB IH 94	405	DRIVING LANE & ENTRANCE TAPER	2-IN. UPPER LAYER
0010	4B	1491+30.76	-	1498+58.00	EB IH 94	110	DRIVING LANE	2-IN. UPPER LAYER
0010	4A	1371+40.00	-	1387+55.96	WB IH 94	330	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1388+74.76	-	1432+25.88	WB IH 94	880	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1433+31.23	-	1451+86.57	WB IH 94	670	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1451+86.57	-	1465+43.85	WB IH 94	280	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1465+43.85	-	1470+10.00	WB IH 94	95	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1474+10.00	-	1482+60.38	WB IH 94	170	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1482+60.38	-	1492+13.23	WB IH 94	190	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4A	1492+13.23	-	1498+18.00	WB IH 94	125	PASSING LANE & INSIDE SHOULDER	2-IN. UPPER LAYER
0010	4B	1371+40.00	-	1387+55.96	WB IH 94	240	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1388+74.76	-	1432+25.88	WB IH 94	645	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1433+31.23	-	1451+86.57	WB IH 94	500	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1451+86.57	-	1465+43.85	WB IH 94	460	DRIVING LANE & ENTRANCE TAPER	2-IN. UPPER LAYER
0010	4B	1465+43.85	-	1470+10.00	WB IH 94	70	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1474+10.00	-	1482+60.38	WB IH 94	130	DRIVING LANE	2-IN. UPPER LAYER
0010	4B	1482+60.38	-	1492+13.23	WB IH 94	280	DRIVING LANE & EXIT TAPER	2-IN. UPPER LAYER
0010	4B	1492+13.23	-	1498+18.00	WB IH 94	90	DRIVING LANE	2-IN. UPPER LAYER
					TOTAL 0010	10,245		

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ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	465.0105 ASPHALTIC SURFACE TON	REMARKS
0010	1371+40	-	1498+58	UNDISTRIBUTED	100	PREPARE FOUNDATION FOR ASPHALTIC PAVING
				TOTAL 0010	100	

ASPHALTIC SURFACE PATCHING

CATEGORY	STATION	TO	STATION	LOCATION	465.0110 ASPHALTIC SURFACE PATCHING TON	REMARKS
0010	1371+40	-	1498+58	UNDISTRIBUTED	50	REPAIRING/FILLING POTHOLES
				TOTAL 0010	50	

ASPHALTIC SURFACE TEMPORARY

CATEGORY	STATION	TO	STATION	LOCATION	465.0125 ASPHALTIC SURFACE TEMPORARY TON	REMARKS
0010	1371+40	-	1388+41	EB IH 94, 25' RT	6	FILL RUMBLE STRIP
0010	1389+57	-	1432+62	EB IH 94, 25' RT	14	FILL RUMBLE STRIP
0010	1433+68	-	1451+71	EB IH 94, 25' RT	11	FILL RUMBLE STRIP
0010	1460+89	-	1478+53	EB IH 94, 25' RT	6	FILL RUMBLE STRIP
0010	1484+98	-	1498+58	EB IH 94, VAR. RT	5	FILL RUMBLE STRIP
0010	1371+40	-	1388+24	EB IH 94, 1' LT	6	FILL RUMBLE STRIP
0010	1389+40	-	1432+51	EB IH 94, 1' LT	14	FILL RUMBLE STRIP
0010	1433+57	-	1498+58	EB IH 94, 1' LT	26	FILL RUMBLE STRIP
0010	1371+40	-	1387+57	WB IH 94, 1' RT	6	FILL RUMBLE STRIP
0010	1388+76	-	1432+26	WB IH 94, 1' RT	14	FILL RUMBLE STRIP
0010	1433+32	-	1498+18	WB IH 94, 1' RT	26	FILL RUMBLE STRIP
0010	1371+40	-	1387+37	WB IH 94, 25' LT	6	FILL RUMBLE STRIP
0010	1388+58	-	1432+15	WB IH 94, 25' LT	14	FILL RUMBLE STRIP
0010	1433+21	-	1457+68	WB IH 94, VAR. LT	13	FILL RUMBLE STRIP
0010	1465+44	-	1482+63	WB IH 94, 25' LT	6	FILL RUMBLE STRIP
0010	1493+13	-	1498+18	WB IH 94, 25' LT	2	FILL RUMBLE STRIP
0010	1371+40	-	1498+58	UNDISTRIBUTED	25	AS DIRECTED BY THE ENGINEER
				TOTAL 0010	200	

ASPHALTIC SHOULDER RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF	REMARKS
0010	1371+40	-	1388+41	EB IH 94	1,708	25' RT
0010	1389+57	-	1432+62	EB IH 94	4,310	25' RT
0010	1433+68	-	1451+71	EB IH 94	3,268	25' RT
0010	1460+89	-	1478+53	EB IH 94	1,757	25' RT
0010	1484+98	-	1498+58	EB IH 94	1,357	VAR. RT
0010	1371+40	-	1388+24	EB IH 94	1,684	1' LT
0010	1389+40	-	1432+51	EB IH 94	4,312	1' LT
0010	1433+57	-	1498+58	EB IH 94	7,966	1' LT
0010	1371+40	-	1387+57	WB IH 94	1,617	1' RT
0010	1388+76	-	1432+26	WB IH 94	4,318	1' RT
0010	1433+32	-	1498+18	WB IH 94	7,991	1' RT
0010	1371+40	-	1387+37	WB IH 94	1,591	25' LT
0010	1388+58	-	1432+15	WB IH 94	4,319	25' LT
0010	1433+21	-	1457+68	WB IH 94	3,948	VAR. LT
0010	1465+44	-	1482+63	WB IH 94	1,726	25' LT
0010	1493+13	-	1498+18	WB IH 94	508	25' LT
				TOTAL 0010	52,380	

PWL Mixture Use Table

The following acceptance criteria are applicable for this project:

Station	to	Station	Location	Mixture Use	Underlying Surface	Bid Item	Tons	Thickness (inches)	Quality Management Program to be used for: Mixture Acceptance	Density Acceptance
1371+40	-	1498+58	EB IH 94 Outside Shoulder	Lower Layer	Milled Existing HMA Surface	4 MT 58-34 S	1590	2	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
1371+40	-	1498+58	EB IH 94 Outside Shoulder	Upper Layer	4 MT 58-34 S	4 MT 58-34 S	1590	2	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
1371+40	-	1498+18	WB IH 94 Outside Shoulder	Lower Layer	Milled Existing HMA Surface	4 MT 58-34 S	1565	2	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
1371+40	-	1498+18	WB IH 94 Outside Shoulder	Upper Layer	4 MT 58-34 S	4 MT 58-34 S	1565	2	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
1371+40	-	1498+58	Various Median Crossovers	Surface Layer	Existing HMA Surface	4 MT 58-34 S	60	2	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
Various			Interchange Ramps	Surface Layer	Milled Existing HMA Surface	4 MT 58-34 H	2330	2	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
20+50	-	59+00	NB USH 12/STH 27 Lanes and Shoulders	Surface Layer	Milled Existing HMA Surface	4 MT 58-34 H	1595	2	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
18+30	-	59+00	SB USH 12/STH 27 Lanes and Shoulders	Surface Layer	Milled Existing HMA Surface	4 MT 58-34 H	1725	2	QMP as per Standard Spec 460	Incentive Density HMA Pavement, Item 460.2000
1371+40	-	1498+58	EB IH 94 Passing Lane and Inside Shoulder	Lower Layer	Milled Existing HMA Surface or Concrete Base	4 HT 58-34 V	2750	2	PWL Incentive Air Voids HMA Pavement, Item 460.2010	Incentive Density PWL HMA Pavement, Item 460.2005
1371+40	-	1498+58	EB IH 94 Driving Lane	Lower Layer	Milled Existing HMA Surface or Concrete Base	4 HT 58-34 V	2340	2	PWL Incentive Air Voids HMA Pavement, Item 460.2010	Incentive Density PWL HMA Pavement, Item 460.2005
1371+40	-	1498+18	WB IH 94 Passing Lane and Inside Shoulder	Lower Layer	Milled Existing HMA Surface or Concrete Base	4 HT 58-34 V	2740	2	PWL Incentive Air Voids HMA Pavement, Item 460.2010	Incentive Density PWL HMA Pavement, Item 460.2005
1371+40	-	1498+18	WB IH 94 Driving Lane	Lower Layer	Milled Existing HMA Surface or Concrete Base	4 HT 58-34 V	2415	2	PWL Incentive Air Voids HMA Pavement, Item 460.2010	Incentive Density PWL HMA Pavement, Item 460.2005
1371+40	-	1498+58	EB IH 94 Passing Lane and Inside Shoulder	Upper Layer	4 HT 58-34 V	4 SMA 58-34 V	2750	2	QMP as per Standard Spec 460 and Special Provisions	Incentive Density HMA Pavement, Item 460.2000
1371+40	-	1498+58	EB IH 94 Driving Lane	Upper Layer	4 HT 58-34 V	4 SMA 58-34 V	2340	2	QMP as per Standard Spec 460 and Special Provisions	Incentive Density HMA Pavement, Item 460.2000
1371+40	-	1498+18	WB IH 94 Passing Lane and Inside Shoulder	Upper Layer	4 HT 58-34 V	4 SMA 58-34 V	2740	2	QMP as per Standard Spec 460 and Special Provisions	Incentive Density HMA Pavement, Item 460.2000
1371+40	-	1498+18	WB IH 94 Driving Lane	Upper Layer	4 HT 58-34 V	4 SMA 58-34 V	2415	2	QMP as per Standard Spec 460 and Special Provisions	Incentive Density HMA Pavement, Item 460.2000
Various			IH 94 Lanes and Ramp Tapers	Prepare Foundation for Asphaltic Paving	Existing Concrete Pavement	Asphaltic Surface	100	Var.	QMP as per Standard Spec 465	Acceptance by ordinary compaction
Various			IH 94 Lanes and Ramp Tapers	Repairing/Filling Potholes	Milled Existing HMA Surface	Asphaltic Surface Patching	50	Var.	QMP as per Standard Spec 465	Acceptance by ordinary compaction
Various			IH 94 Lanes and Ramps	Fill Existing Rumble Strips	Existing HMA Pavement	Asphaltic Surface Temporary	200	Var.	QMP as per Standard Spec 465	Acceptance by ordinary compaction

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CONCRETE COLLARS FOR PIPE

CATEGORY	STATION	LOCATION	520.8000 CONCRETE COLLARS FOR PIPE EACH	REMARKS
0010	1378+40	EB IH 94, RT	1	18-IN AEW
0010	1378+40	EB IH 94, LT	1	18-IN AEW
0010	1480+00	EB IH 94, RT	1	18-IN AEW
0010	1489+00	EB IH 94, LT	1	18-IN AEW
		TOTAL 0010	4	

CLEANING CULVERT PIPES

CATEGORY	STATION	LOCATION	520.8700 CLEANING CULVERT PIPES EACH	REMARKS
0010	1432+00	EB IH 94	1	18-IN RCCP
0010	1441+95	WB IH 94	1	30-IN RCCP
0010	1442+00	EB IH 94	1	30-IN RCCP
0010	1438+62	WB IH 94	1	30-IN RCCP
0010	1438+80	EB IH 94	1	30-IN RCCP
0010	1452+20	EB IH 94	1	30-IN RCCP
0010	1456+00	EB IH 94	1	36-IN RCCP
0010	1470+92	EB IH 94	1	18-IN RCCP
0010	1471+12	EB IH 94	1	18-IN RCCP
0010	1474+93	EB IH 94	1	18-IN RCCP
0010	1478+35	EB IH 94	1	18-IN RCCP
0010	1480+00	EB IH 94	1	18-IN RCCP
0010	1485+10	EB IH 94	1	42-IN RCCP
0010	1489+00	EB IH 94	1	18-IN RCCP
		TOTAL 0010	14	

CULVERT PIPE SALVAGED 18-INCH

CATEGORY	STATION	LOCATION	524.0118 CULVERT PIPE SALVAGED 18-INCH LF	REMARKS	INCIDENTAL DRILLED JOINT TIES EACH
0010	1406+00	EB IH 94, RT	8	SALVAGE AND RELAY	2
		TOTAL 0010	8		

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH

CATEGORY	STATION	LOCATION	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH EACH	REMARKS
0010	1378+40	EB IH 94, RT	1	
0010	1378+40	EB IH 94, LT	1	
0010	1480+00	EB IH 94, RT	1	
0010	1489+00	EB IH 94, LT	1	
		TOTAL 0010	4	

SALVAGED APRON ENDWALLS

CATEGORY	STATION	LOCATION	524.0618 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 18-INCH EACH	524.0630 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 30-INCH EACH	524.0636 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 36-INCH EACH	524.0642 APRON ENDWALLS FOR CULVERT PIPE SALVAGED 42-INCH EACH	REMARKS	INCIDENTAL DRILLED JOINT TIES EACH
0010	1384+39	WB IH 94, LT	---	1	---	---	SALVAGE AND RELAY	2
0010	1398+40	EB IH 94, RT	---	---	---	1	SALVAGE AND RELAY	2
0010	1398+40	WB IH 94, LT	---	---	---	1	SALVAGE AND RELAY	2
0010	1406+00	EB IH 94, RT	1	---	---	---	SALVAGE AND RELAY	2
0010	1410+30	EB IH 94, RT	---	---	1	---	SALVAGE AND RELAY	2
0010	1410+30	WB IH 94, LT	---	---	1	---	SALVAGE AND RELAY	2
0010	1426+20	EB IH 94, RT	1	---	---	---	SALVAGE AND RELAY	2
0010	1426+20	EB IH 94, LT	1	---	---	---	SALVAGE AND RELAY	2
0010	1432+00	EB IH 94, RT	1	---	---	---	SALVAGE AND RELAY	2
0010	1441+95	WB IH 94, LT	---	1	---	---	SALVAGE AND RELAY	2
0010	1442+00	EB IH 94, RT	---	1	---	---	SALVAGE AND RELAY	2
0010	1438+62	WB IH 94, LT	---	1	---	---	SALVAGE AND RELAY	2
0010	1451+00	EB IH 94, LT	1	---	---	---	SALVAGE AND RELAY	2
0010	1451+95	WB IH 94, LT	---	1	---	---	SALVAGE AND RELAY	2
0010	1455+52	WB IH 94, LT	---	---	1	---	SALVAGE AND RELAY	2
0010	1456+00	EB IH 94, RT	---	---	1	---	SALVAGE AND RELAY	2
0010	1466+53	WB IH 94, LT	---	---	1	---	SALVAGE AND RELAY	2
0010	1467+00	EB IH 94, RT	---	---	1	---	SALVAGE AND RELAY	2
0010	1470+92	EB IH 94, RT	1	---	---	---	SALVAGE AND RELAY	2
0010	1471+12	EB IH 94, RT	1	---	---	---	SALVAGE AND RELAY	2
0010	1480+00	EB IH 94, LT	1	---	---	---	SALVAGE AND RELAY	2
0010	1489+00	EB IH 94, RT	1	---	---	---	SALVAGE AND RELAY	2
0010	1497+00	EB IH 94, RT	1	---	---	---	SALVAGE AND RELAY	2
		TOTAL 0010	10	5	6	2		

STEEL THRIE BEAM

CATEGORY	STATION	TO	STATION	LOCATION	614.0220 STEEL THRIE BEAM BULLNOSE TERMINAL EACH	614.0230 STEEL THRIE BEAM LF	REMARKS
0010	1471+26	-	1473+57	EB IH 94, LT	2	300	MEDIAN PIER PROTECTION B-27-33 & 34
				TOTAL 0010	2	300	

ADJUSTING STEEL PLATE BEAM GUARD

CATEGORY	STATION	TO	STATION	LOCATION	614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF	REMARKS
0010	1385+09	-	1388+13	EB IH 94, LT	303	
0010	1386+21	-	1388+36	EB IH 94, RT	217	
0010	1389+49	-	1392+64	EB IH 94, LT	315	
0010	1389+71	-	1392+73	EB IH 94, RT	303	
0010	1429+43	-	1432+40	EB IH 94, LT	296	
0010	1429+46	-	1432+54	EB IH 94, RT	307	
0010	1433+66	-	1436+82	EB IH 94, LT	315	
0010	1433+81	-	1437+09	EB IH 94, RT	328	
0010	1494+58	-	1498+51	EB IH 94, LT	392	
0010	1495+93	-	1498+51	EB IH 94, RT	255	
0010	1374+78	-	1378+84	WB IH 94, LT	403	
0010	1384+67	-	1387+48	WB IH 94, RT	281	
0010	1385+00	-	1387+26	WB IH 94, LT	220	
0010	1388+63	-	1390+14	WB IH 94, LT	149	
0010	1388+88	-	1392+14	WB IH 94, RT	326	
0010	1429+13	-	1432+19	WB IH 94, RT	293	
0010	1430+12	-	1432+04	WB IH 94, LT	192	
0010	1433+29	-	1436+45	WB IH 94, LT	316	
0010	1433+42	-	1436+95	WB IH 94, RT	353	
				TOTAL 0010	5,564	

REPLACING GUARDRAIL

CATEGORY	STATION	TO	STATION	LOCATION	614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS EACH	614.0951 REPLACING GUARDRAIL RAIL AND HARDWARE LF	614.0952 REPLACING GUARDRAIL REFLECTORS EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	90	600	200	UNDISTRIBUTED
				TOTAL 0010	90	600	200	

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MAINTENANCE AND REPAIR OF HAUL ROADS (02. 1024-01-75)

CATEGORY	STATION	TO	STATION	LOCATION	618.0100.02 MAINTENANCE AND REPAIR OF HAUL ROADS (02. 1024-01-75) EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

MOBILIZATION

CATEGORY	STATION	TO	STATION	LOCATION	619.1000 MOBILIZATION EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	0.4	UNDISTRIBUTED
				TOTAL 0010	0.4	

3

WATER

CATEGORY	STATION	TO	STATION	LOCATION	624.0100 WATER MGAL	REMARKS
0010	1371+40	-	1498+58	IH 94	80	UNDISTRIBUTED
				TOTAL 0010	80	

SILT FENCE

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	REMARKS
0010	1371+40	-	1498+58	IH 94	1,000	1,000	UNDISTRIBUTED
				TOTAL 0010	1,000	1,000	

MOBILIZATIONS EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	4	2	UNDISTRIBUTED
				TOTAL 0010	4	2	

EROSION MAT

CATEGORY	STATION	LOCATION	628.2004 EROSION MAT CLASS I TYPE B SY	REMARKS
0010	1378+40	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1378+40	EB IH 94, RT	130	CLEAN DITCH
0010	1384+50	EB IH 94, RT	130	CLEAN DITCH
0010	1398+40	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1406+00	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1410+30	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1426+20	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1432+00	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1442+00	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1456+00	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1467+00	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1470+92	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1471+12	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1480+00	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1480+00	EB IH 94, RT	130	CLEAN DITCH
0010	1489+00	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1497+00	EB IH 94, RT	10	CULVERT DISCHARGE
0010	1497+00	EB IH 94, LT & RT	130	CLEAN DITCH
0010	-----	IH 94	100	UNDISTRIBUTED
		TOTAL 0010	760	

TEMPORARY DITCH CHECKS

CATEGORY	STATION	TO	STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF	REMARKS
0010	1371+40	-	1498+58	IH 94	200	UNDISTRIBUTED
				TOTAL 0010	200	

CULVERT PIPE CHECKS

CATEGORY	STATION	LOCATION	628.7555 CULVERT PIPE CHECKS EACH	REMARKS
0010	1378+40	EB IH 94, LT	4	18-INCH CULVERT PIPE
0010	1384+39	WB IH 94, LT	4	30-INCH CULVERT PIPE
0010	1398+40	WB IH 94, LT	6	42-INCH CULVERT PIPE
0010	1410+30	WB IH 94, LT	6	36-INCH CULVERT PIPE
0010	1426+20	EB IH 94, LT	4	18-INCH CULVERT PIPE
0010	1441+95	WB IH 94, LT	4	30-INCH CULVERT PIPE
0010	1438+62	WB IH 94, LT	4	30-INCH CULVERT PIPE
0010	1451+00	EB IH 94, LT	4	18-INCH CULVERT PIPE
0010	1451+95	WB IH 94, LT	4	30-INCH CULVERT PIPE
0010	1455+52	WB IH 94, LT	6	36-INCH CULVERT PIPE
0010	1466+53	WB IH 94, LT	6	36-INCH CULVERT PIPE
0010	1480+00	EB IH 94, LT	4	18-INCH CULVERT PIPE
0010	1489+00	EB IH 94, LT	4	18-INCH CULVERT PIPE
0010	-----	IH 94	20	UNDISTRIBUTED
		TOTAL 0010	80	

FINISHING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0200 SEEDING TEMPORARY LB	REMARKS
0010	1371+40	-	1498+58	IH 94	3,300	3,300	2	60	90	UNDISTRIBUTED
				TOTAL 0010	3,300	3,300	2	60	90	

DELINEATORS

CATEGORY	STATION	TO	STATION	LOCATION	633.0100 DELINEATOR POSTS STEEL EACH	633.0500 DELINEATOR REFLECTORS EACH	REMARKS
0010	1371+40	-	1452+70	EB IH 94, RT	25	25	WHITE
0010	1452+70	-	1461+20	EB IH 94, RT	9	18	DOUBLE WHITE
0010	1461+20	-	1477+30	EB IH 94, RT	9	9	WHITE
0010	1477+30	-	1491+30	EB IH 94, RT	14	28	DOUBLE WHITE
0010	1491+30	-	1498+58	EB IH 94, RT	2	2	WHITE
0010	1371+40	-	1451+90	WB IH 94, LT	25	25	WHITE
0010	1451+90	-	1467+50	WB IH 94, LT	16	32	DOUBLE WHITE
0010	1467+50	-	1482+10	WB IH 94, LT	8	8	WHITE
0010	1482+10	-	1492+30	WB IH 94, LT	11	22	DOUBLE WHITE
0010	1492+30	-	1498+18	WB IH 94, LT	2	2	WHITE
0010	69+75	-	91+50	RAMP 'JA' & "JAA', LT	14	14	WHITE
0010	69+75	-	91+50	RAMP 'JA' & "JAA', RT	15	15	YELLOW
0010	74+25	-	86+00	'JB' LOOP, LT	12	12	WHITE
0010	74+25	-	86+00	JB' LOOP, RT	12	12	YELLOW
0010	67+10	-	76+50	RAMP 'JC', RT	10	10	WHITE
0010	67+10	-	76+50	RAMP 'JC', LT	8	8	YELLOW
0010	61+20	-	73+80	RAMP 'JD' & 'JDD', RT	14	14	WHITE
0010	61+20	-	73+80	RAMP 'JD' & 'JDD', LT	15	15	YELLOW
0010	58+25	-	69+25	JE' LOOP, RT	11	11	WHITE
0010	58+25	-	69+25	JE' LOOP, LT	11	11	YELLOW
0010	67+50	-	77+75	RAMP 'JF', LT	11	11	WHITE
0010	67+50	-	77+75	RAMP 'JF', RT	8	8	YELLOW
				TOTAL 0010	262	312	

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 MARKERS CULVERT END EACH	REMARKS
0010	1376+74	EB IH 94, RT	1	
0010	1378+40	EB IH 94, LT & RT	2	
0010	1384+39	WB IH 94, LT	1	
0010	1384+50	EB IH 94, LT & RT	2	
0010	1390+00	WB IH 94, LT	1	
0010	1398+40	WB IH 94, LT	1	
0010	1398+40	EB IH 94, RT	1	
0010	1406+00	EB IH 94, LT & RT	2	
0010	1410+30	WB IH 94, LT	1	
0010	1410+30	EB IH 94, RT	1	
0010	1426+20	EB IH 94, LT & RT	2	
0010	1432+00	EB IH 94, LT & RT	2	
0010	1441+95	WB IH 94, LT	1	
0010	1442+00	EB IH 94, RT	1	
0010	1438+62	WB IH 94, LT	1	
0010	1451+00	EB IH 94, LT	1	
0010	1451+95	WB IH 94, LT	1	
0010	1455+52	WB IH 94, LT	1	
0010	1456+00	EB IH 94, RT	1	
0010	1466+53	WB IH 94, LT	1	
0010	1467+00	EB IH 94, RT	1	
0010	1470+92	EB IH 94, RT	1	
0010	1471+12	EB IH 94, RT	1	
0010	1480+00	EB IH 94, LT & RT	2	
0010	1489+00	EB IH 94, LT & RT	2	
0010	1497+00	EB IH 94, LT & RT	2	
		TOTAL 0010	34	

SIGNS TYPE II

CATEGORY	SIGN NO.	APPROX. STATION	LOCATION	SIGN CODE	SIGN SIZE (INCHES)	SIGN DESCRIPTION	634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	REMARKS
0010	5-1	1487+30	WB IH 94, LT	W13-2	48X60	EXIT 30 MPH	20	2	
			TOTAL 0010				20	2	

SIGNS TYPE I

CATEGORY	SIGN NO.	APPROX. STATION	LOCATION	SIGN CODE	SIGN SIZE (INCHES)	POST NO.- SIZE	POST LENGTH INSIDE/MIDDLE/OUTSIDE	531.1100 CONCRETE MASONRY ANCILLARY STRUCTURES TYPE NS CY	531.1140 STEEL REINFORCEMENT HS ANCILLARY STRUCTURES TYPE NS LB	635.0200 SIGN SUPPORTS STRUCTURAL STEEL HS LB	635.0300 SIGN SUPPORTS REPLACING BASE CONNECTION BOLTS EACH	637.1220 SIGNS TYPE I REFLECTIVE SH SF	638.2601 REMOVING SIGNS TYPE I EACH	638.3100 REMOVING STRUCTURAL STEEL SIGN SUPPORTS EACH	SIGN MOUNTED ON SAME POST AS	REMARKS
0010	2-1	1412+03	WB IH 94, LT	D2-1	192X84	EXIST	EXIST	---	---	---	1	112.00	1	---	---	
0010	2-2	1416+57	EB IH 94, RT	E1-5P	108X30	---	---	---	---	---	---	22.50	---	---	2-3	
0010	2-3	1416+57	EB IH 94, RT	E1-1A	312X162	3 - W12X26	22.1'/22.8'/23.5'	3.6	540	2,235	---	351.00	1	1	2-2	
0010	3-1	1447+48	EB IH 94, RT	E10-61	144X54	EXIST	EXIST	---	---	---	1	54.00	1	---	---	
0010	4-1	1453+94	EB IH 94, RT	E1-5P	108X30	---	---	---	---	---	---	22.50	---	---	4-2	
0010	4-2	1453+94	EB IH 94, RT	E4-1A	312X132	3 - W12X26	21.0'/20.0'/19.0'	3.6	540	2,016	---	286.00	1	1	4-1	
0010	5-2	1490+86	WB IH 94, LT	E1-5P	108X30	---	---	---	---	---	---	22.50	---	---	5-3	
0010	5-3	1490+86	WB IH 94, LT	E4-1A	312X132	3 - W12X26	20.7'/22.4'/24.0'	3.6	540	2,201	---	286.00	1	1	5-2	
0010	5-4	1491+57	EB IH 94, RT	E1-5P	108X30	---	---	---	---	---	---	22.50	---	---	5-5	
0010	5-5	1491+57	EB IH 94, RT	E1-1A	312X162	3 - W12X26	23.5'/22.5'/21.5'	3.6	540	2,211	---	351.00	1	1	5-4/5-6	
0010	5-6	1491+57	EB IH 94, RT	E2-1	156X24	---	---	---	---	---	---	26.00	---	---	5-5	
0010	5-7	1497+66	EB IH 94, RT	E3-1	204X84	2 - W12X26	19.0'/-----/23.0'	2.4	360	1,396	---	119.00	1	1	---	
			TOTAL 0010					16.8	2,520	10,059	2	1,675.00	7	5		

FIELD OFFICE TYPE C

CATEGORY	STATION	TO	STATION	LOCATION	642.5201 FIELD OFFICE TYPE C EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	0.4	UNDISTRIBUTED
				TOTAL 0010	0.4	

TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	STAGE	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0800 TRAFFIC CONTROL ARROW BOARDS DAY	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1051 TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS DAY	643.1205.S BASIC TRAFFIC QUEUE WARNING SYSTEM DAY	643.4100.S TRAFFIC CONTROL INTERIM LANE CLOSURE EACH
0010	EB IH 94	MAINLINE LANE CLOSURES	20,800	1,600	2,800	3,600	160	3,200	---	80	80
0010	WB IH 94	MAINLINE LANE CLOSURES	20,800	1,600	2,800	3,600	160	3,200	---	80	80
0010	IH 94 & USH 12/STH 27	EB RAMPS CLOSED	250	40	80	---	---	95	84	---	---
0010	IH 94 & USH 12/STH 27	WB RAMPS CLOSED	255	40	80	---	---	95	96	---	---
0010	USH 12/STH 27	PASSING LANE CLOSED	8,250	450	540	450	60	1,110	---	---	---
0010	USH 12/STH 27	DRIVING LANE CLOSED	12,900	390	660	390	60	1,470	---	---	---
	TOTAL 0010		63,255	4,120	6,960	8,040	440	9,170	180	160	160

TRAFFIC CONTROL COVERING SIGNS

CATEGORY	STATION	TO	STATION	LOCATION	643.0910 TRAFFIC CONTROL COVERING SIGNS TYPE I EACH	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH	REMARKS
0010	1453+94	-	---	EB IH 94, RT	1	---	EB RAMPS CLOSED
0010	1461+59	-	---	EB IH 94, RT	---	1	EB RAMPS CLOSED
0010	16+00	-	48+00	USH 12/STH 27	---	8	EB RAMPS CLOSED
0010	1481+40	-	---	WB IH 94, LT	---	1	WB RAMPS CLOSED
0010	1490+86	-	---	WB IH 94, LT	1	---	WB RAMPS CLOSED
0010	16+00	-	48+00	USH 12/STH 27	---	8	WB RAMPS CLOSED
				TOTAL 0010	2	18	

NOTE: 1 CYCLE / 1 SIGN FOR EACH DIRECTION OF RAMP CLOSURES.

TRAFFIC CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	643.5000 TRAFFIC CONTROL EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	0.4	UNDISTRIBUTED
				TOTAL 0010	0.4	

MARKING LINE EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH LF	REMARKS
0010	19+00	-	26+50	NB USH 12/STH 27, R/L	750	YELLOW EDGELINE
0010	26+71	-	38+85	NB USH 12/STH 27, R/L	1,216	YELLOW EDGELINE
0010	39+23	-	49+00	NB USH 12/STH 27, R/L	977	YELLOW EDGELINE
0010	49+75	-	53+37	NB USH 12/STH 27, VAR. LT	362	YELLOW EDGELINE
0010	53+38	-	56+60	NB USH 12/STH 27, 15' LT	644	DOUBLE YELLOW C/L
0010	19+00	-	49+00	NB USH 12/STH 27, 12' RT	750	WHITE LANE LINE SKIPS
0010	19+00	-	22+99	NB USH 12/STH 27, 24' RT	398	WHITE EDGELINE
0010	25+16	-	35+32	NB USH 12/STH 27, 24' RT	1,016	WHITE EDGELINE
0010	36+95	-	38+99	NB USH 12/STH 27, 24' RT	204	WHITE EDGELINE
0010	39+23	-	39+88	NB USH 12/STH 27, 24' RT	65	WHITE EDGELINE
0010	41+24	-	49+00	NB USH 12/STH 27, 24' RT	776	WHITE EDGELINE
0010	49+78	-	60+00	USH 12/STH 27, R/L	1,023	WHITE EDGELINE
0010	18+00	-	26+34	SB USH 12/STH 27, R/L	834	YELLOW EDGELINE
0010	26+60	-	38+84	SB USH 12/STH 27, R/L	1,226	YELLOW EDGELINE
0010	39+05	-	49+00	SB USH 12/STH 27, R/L	995	YELLOW EDGELINE
0010	49+75	-	52+90	SB USH 12/STH 27, R/L	315	YELLOW EDGELINE
0010	52+90	-	60+00	USH 12/STH 27, LT	1,420	DOUBLE YELLOW C/L
0010	18+00	-	49+00	SB USH 12/STH 27, 12' LT	775	WHITE LANE LINE SKIPS
0010	49+70	-	52+90	SB USH 12/STH 27, 12' LT	75	WHITE LANE LINE SKIPS
0010	18+00	-	24+29	SB USH 12/STH 27, 24' LT	632	WHITE EDGELINE
0010	25+62	-	26+29	SB USH 12/STH 27, 24' LT	67	WHITE EDGELINE
0010	26+53	-	28+61	SB USH 12/STH 27, 24' LT	208	WHITE EDGELINE
0010	30+32	-	40+39	SB USH 12/STH 27, 24' LT	1,007	WHITE EDGELINE
0010	42+60	-	49+00	SB USH 12/STH 27, 24' LT	643	WHITE EDGELINE
0010	49+73	-	52+16	SB USH 12/STH 27, 24' LT	60	WHITE 3' LINE, 9' GAP
0010	52+16	-	56+26	SB USH 12/STH 27, 24' LT	410	WHITE EDGELINE
0010	57+01	-	60+00	USH 12/STH 27, LT	299	WHITE EDGELINE
				TOTAL 0010	17,147	

MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.1545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 4-INCH LF	REMARKS
0010	1370+00	-	1499+00	EB IH 94, 12' RT	3,600	WHITE LANE LINE SKIPS
0010	1452+71	-	1459+64	EB IH 94, 24' RT	174	WHITE 3' LINE, 9' GAP
0010	1370+00	-	1499+00	WB IH 94, 12' LT	3,600	WHITE LANE LINE SKIPS
0010	1485+34	-	1492+13	WB IH 94, 24' LT	171	WHITE 3' LINE, 9' GAP
				TOTAL 0010	7,545	

MARKING LINE GROOVED WET REF EPOXY 4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH LF	REMARKS
0010	1370+00	-	1499+00	EB IH 94, R/L	14,363	YELLOW EDGELINE
0010	1370+00	-	1459+08	EB IH 94, 24' RT	10,383	WHITE EDGELINE
0010	1461+41	-	1478+53	EB IH 94, 24' RT	1,706	WHITE EDGELINE
0010	1470+24	-	1475+69	EB IH 94, 51.5' RT	539	WHITE EDGELINE
0010	1477+23	-	1499+00	EB IH 94, 24' RT	2,165	WHITE EDGELINE
0010	1370+00	-	1499+00	WB IH 94, R/L	14,370	YELLOW EDGELINE
0010	1370+00	-	1467+60	WB IH 94, 24' LT	11,220	WHITE EDGELINE
0010	1465+44	-	1482+12	WB IH 94, 24' LT	1,675	WHITE EDGELINE
0010	1467+50	-	1473+62	WB IH 94, 51.5' LT	618	WHITE EDGELINE
0010	1486+22	-	1499+00	WB IH 94, 24' LT	1,283	WHITE EDGELINE
0010	59+08	-	74+84	RAMP 'JD' & RAMP 'JDD', R/L	1,577	WHITE EDGELINE
0010	61+37	-	73+72	RAMP 'JD', 15' LT	1,232	YELLOW EDGELINE
0010	58+07	-	70+24	'JE' LOOP, R/L	1,217	WHITE EDGELINE
0010	59+78	-	69+81	'JE' LOOP, 15' LT	1,065	YELLOW EDGELINE
0010	66+78	-	77+23	RAMP 'JC', R/L	1,045	WHITE EDGELINE
0010	68+95	-	75+78	RAMP 'JC', 15' LT	701	YELLOW EDGELINE
0010	67+60	-	77+89	RAMP 'JF', R/L	1,029	WHITE EDGELINE
0010	68+51	-	75+69	RAMP 'JF', 15' RT	735	YELLOW EDGELINE
0010	73+62	-	86+30	'JB' LOOP, R/L	1,268	WHITE EDGELINE
0010	74+09	-	84+68	'JB' LOOP, 15' RT	1,123	YELLOW EDGELINE
0010	67+78	-	86+17	RAMP 'JAA' & RAMP 'JA', R/L	1,840	WHITE EDGELINE
0010	68+89	-	82+03	RAMP 'JA', 15' RT	1,309	YELLOW EDGELINE
				TOTAL 0010	72,463	

MARKING LINE EPOXY 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.3020 MARKING LINE EPOXY 8-INCH LF	REMARKS
0010	72+48	-	73+72	RAMP 'JD', R/L	124	WHITE GORE
0010	72+45	-	74+83	RAMP 'JDD', 15' LT	256	WHITE GORE
0010	58+42	-	59+78	'JE' LOOP, 15' LT	142	WHITE GORE
0010	67+25	-	68+95	RAMP 'JC', 15' LT	170	WHITE GORE
0010	75+69	-	77+43	RAMP 'JF', 15' RT	175	WHITE GORE
0010	84+68	-	85+97	'JB' LOOP, 15' RT	134	WHITE GORE
0010	68+89	-	70+23	RAMP 'JA', R/L	134	WHITE GORE
0010	67+77	-	70+27	RAMP 'JAA', 15' RT	268	WHITE GORE
0010	23+47	-	25+16	NB USH 12/STH 27, 24' RT	169	WHITE GORE
0010	35+67	-	36+95	NB USH 12/STH 27, 24' RT	128	WHITE GORE
0010	39+88	-	41+24	NB USH 12/STH 27, 24' RT	136	WHITE GORE
0010	24+30	-	25+62	SB USH 12/STH 27, 24' LT	132	WHITE GORE
0010	28+61	-	39+96	SB USH 12/STH 27, 24' LT	135	WHITE GORE
0010	40+39	-	42+13	SB USH 12/STH 27, 24' LT	174	WHITE GORE
				TOTAL 0010	2,277	

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MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.3545 MARKING LINE GROOVED WET REF CONTRAST EPOXY 8-INCH LF	REMARKS
0010	1459+64	-	1461+41	EB IH 94, 24' RT	177	EB EXIT GORE
0010	1475+69	-	1477+68	EB IH 94, 51.5' RT	197	EB ENTRANCE GORE
0010	1478+53	-	1483+59	EB IH 94, 24' RT	504	EB ENTRANCE GORE
0010	1478+53	-	1483+59	EB IH 94, VAR. RT	503	EB ENTRANCE GORE
0010	1459+62	-	1465+44	WB IH 94, 24' LT	582	WB ENTRANCE GORE
0010	1459+63	-	1465+44	WB IH 94, VAR. LT	581	WB ENTRANCE GORE
0010	1466+94	-	1467+50	WB IH 94, 51.5' LT	57	WB ENTRANCE GORE
0010	1482+12	-	1485+34	WB IH 94, 24' LT	324	WB EXIT GORE
0010	59+63	-	61+37	RAMP 'JD', 15' LT	177	EB EXIT RAMP GORE
0010	75+78	-	77+69	RAMP 'JC', 15' LT	197	EB ENTRANCE RAMP GORE
0010	66+92	-	67+48	RAMP 'JF', 15' RT	56	WB ENTRANCE RAMP GORE
0010	82+03	-	85+29	RAMP 'JA', 15' RT	326	WB EXIT RAMP GORE
				TOTAL 0010	3,681	

MARKING AERIAL ENFORCEMENT BAR EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.5420 MARKING AERIAL ENFORCEMENT BAR EPOXY EACH	REMARKS
0010	1371+40	-	1498+58	EB IH 94	10	UNDISTRIBUTED
0010	1371+40	-	1498+18	WB IH 94	10	UNDISTRIBUTED
				TOTAL 0010	20	

MARKING STOP LINE EPOXY 18-INCH

CATEGORY	STATION	LOCATION	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	REMARKS
0010	73+72	RAMP 'JD', LT	15	
0010	68+89	RAMP 'JA', RT	15	
		TOTAL 0010	30	

MARKING CHEVRON EPOXY 24-INCH

CATEGORY	STATION	TO	STATION	LOCATION	646.7220 MARKING CHEVRON EPOXY 24-INCH LF	REMARKS
0010	1459+64	-	1461+41	EB IH 94, RT	74	EB EXIT GORE
0010	1482+12	-	1485+34	WB IH 94, LT	130	WB EXIT GORE
				TOTAL 0010	204	

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MARKING CURB EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.8120 MARKING CURB EPOXY LF	REMARKS
0010	1469+00	-	1478+50	EB IH 94, 34' RT	250	YELLOW 12.5' LINE / 37.5' GAP
0010	1465+50	-	1475+00	WB IH 94, 34' LT	250	YELLOW 12.5' LINE / 37.5' GAP
0010	67+45	-	68+50	RAMP 'JF', 15' RT	105	YELLOW
				TOTAL 0010	605	

MARKING REMOVAL LINE 4-INCH

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	646.9000 MARKING REMOVAL LINE 4-INCH LF	REMARKS
0010	PASSING LANE CLOSED	9+25	-	14+50	NB USH 12/STH 27, 12' RT	138	LANE LINE SKIPS
0010	DRIVING LANE CLOSED	52+83	-	58+00	SB USH 12/STH 27	1,034	DOUBLE YELLOW C/L
					TOTAL 0010	1,172	

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH

CATEGORY	STAAGE	STATION	TO	STATION	LOCATION	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF	REMARKS
0010	EB RAMPS CLOSED	1452+71	-	1459+64	EB IH 94, 24' RT	695	WHITE EDGELINE
0010	EB RAMPS CLOSED	20+46	-	23+42	NB USH 12/STH 27, 24' RT	296	WHITE EDGELINE
0010	EB RAMPS CLOSED	30+08	-	33+16	SB USH 12/STH 27, 24' LT	308	WHITE EDGELINE
0010	WB RAMPS CLOSED	1485+34	-	1492+13	WB IH 94, 24' LT	680	WHITE EDGELINE
0010	WB RAMPS CLOSED	32+30	-	35+64	NB USH 12/STH 27, 24' RT	334	WHITE EDGELINE
0010	WB RAMPS CLOSED	42+34	-	44+95	SB USH 12/STH 27, 24' LT	261	WHITE EDGELINE
0010	PASSING LANE CLOSED	9+50	-	10+68	NB USH 12/STH 27	118	YELLOW EDGELINE TAPER
0010	PASSING LANE CLOSED	11+38	-	13+27	NB USH 12/STH 27	195	YELLOW EDGELINE TAPER
0010	PASSING LANE CLOSED	13+23	-	14+35	NB USH 12/STH 27	112	WHITE EDGELINE
0010	DRIVING LANE CLOSED	11+30	-	14+50	NB USH 12/STH 27	330	WHITE EDGELINE TAPER
0010	DRIVING LANE CLOSED	52+83	-	56+42	SB USH 12/STH 27	365	WHITE EDGELINE
0010	DRIVING LANE CLOSED	52+83	-	56+00	SB USH 12/STH 27	640	DOUBLE YELLOW C/L
					TOTAL 0010	4,334	

TEMPORARY MARKING LINE PAINT 4-INCH

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH LF	REMARKS
0010	LOWER LAYER	1370+00	-	1499+00	EB IH 94, R/L	14,363	YELLOW EDGELINE
0010	LOWER LAYER	1370+00	-	1499+00	EB IH 94, 12' RT	3,600	WHITE 12.5' LANE LINE
0010	LOWER LAYER	1370+00	-	1459+08	EB IH 94, 24' RT	10,383	WHITE EDGELINE
0010	LOWER LAYER	1452+71	-	1459+64	EB IH 94, 24' RT	174	WHITE 3' LINE, 9' GAP
0010	LOWER LAYER	1461+41	-	1478+53	EB IH 94, 24' RT	1,706	WHITE EDGELINE
0010	LOWER LAYER	1470+24	-	1475+69	EB IH 94, 51.5' RT	539	WHITE EDGELINE
0010	LOWER LAYER	1477+23	-	1499+00	EB IH 94, 24' RT	2,165	WHITE EDGELINE
0010	UPPER LAYER	1370+00	-	1499+00	EB IH 94, 12' RT	3,600	WHITE 12.5' LANE LINE
0010	LOWER LAYER	1370+00	-	1499+00	WB IH 94, R/L	14,370	YELLOW EDGELINE
0010	LOWER LAYER	1370+00	-	1499+00	WB IH 94, 12' LT	3,600	WHITE 12.5' LANE LINE
0010	LOWER LAYER	1370+00	-	1467+60	WB IH 94, 24' LT	11,220	WHITE EDGELINE
0010	LOWER LAYER	1465+44	-	1482+12	WB IH 94, 24' LT	1,675	WHITE EDGELINE
0010	LOWER LAYER	1467+50	-	1473+62	WB IH 94, 51.5' LT	618	WHITE EDGELINE
0010	LOWER LAYER	1485+34	-	1492+13	WB IH 94, 24' LT	171	WHITE 3' LINE, 9' GAP
0010	LOWER LAYER	1486+22	-	1499+00	WB IH 94, 24' LT	1,283	WHITE EDGELINE
0010	UPPER LAYER	1370+00	-	1499+00	WB IH 94, 12' LT	3,600	WHITE 12.5' LANE LINE
0010	-----	59+08	-	74+84	\MP 'JD' & RAMP 'JDD', R	1,577	WHITE EDGELINE
0010	-----	61+37	-	73+72	RAMP 'JD', 15' LT	1,232	YELLOW EDGELINE
0010	-----	58+07	-	70+24	'JE' LOOP, R/L	1,217	WHITE EDGELINE
0010	-----	59+78	-	69+81	'JE' LOOP, 15' LT	1,065	YELLOW EDGELINE
0010	-----	66+78	-	77+23	RAMP 'JC', R/L	1,045	WHITE EDGELINE
0010	-----	68+95	-	75+78	RAMP 'JC', 15' LT	701	YELLOW EDGELINE
0010	-----	67+60	-	77+89	RAMP 'JF', R/L	1,029	WHITE EDGELINE
0010	-----	68+51	-	75+69	RAMP 'JF', 15' RT	735	YELLOW EDGELINE
0010	-----	73+62	-	86+30	'JB' LOOP, R/L	1,268	WHITE EDGELINE
0010	-----	74+09	-	84+68	'JB' LOOP, 15' RT	1,123	YELLOW EDGELINE
0010	-----	67+78	-	86+17	\MP 'JAA' & RAMP 'JA', R	1,840	WHITE EDGELINE
0010	-----	68+89	-	82+03	RAMP 'JA', 15' RT	1,309	YELLOW EDGELINE
0010	-----	19+00	-	26+50	NB USH 12/STH 27, R/L	750	YELLOW EDGELINE
0010	-----	26+71	-	38+85	NB USH 12/STH 27, R/L	1,216	YELLOW EDGELINE
0010	-----	39+23	-	49+00	NB USH 12/STH 27, R/L	977	YELLOW EDGELINE
0010	-----	49+75	-	53+37	3 USH 12/STH 27, VAR.	362	YELLOW EDGELINE
0010	-----	53+38	-	56+60	IB USH 12/STH 27, 15' L	644	DOUBLE YELLOW C/L
0010	-----	19+00	-	49+00	IB USH 12/STH 27, 12' R	750	WHITE LANE LINE SKIPS
0010	-----	19+00	-	22+99	IB USH 12/STH 27, 24' R	398	WHITE EDGELINE
0010	-----	25+16	-	35+32	IB USH 12/STH 27, 24' R	1,016	WHITE EDGELINE
0010	-----	36+95	-	38+99	IB USH 12/STH 27, 24' R	204	WHITE EDGELINE
0010	-----	39+23	-	39+88	IB USH 12/STH 27, 24' R	65	WHITE EDGELINE
0010	-----	41+24	-	49+00	IB USH 12/STH 27, 24' R	776	WHITE EDGELINE
0010	-----	49+78	-	60+00	USH 12/STH 27, R/L	1,023	WHITE EDGELINE
0010	-----	18+00	-	26+34	SB USH 12/STH 27, R/L	834	YELLOW EDGELINE
0010	-----	26+60	-	38+84	SB USH 12/STH 27, R/L	1,226	YELLOW EDGELINE
0010	-----	39+05	-	49+00	SB USH 12/STH 27, R/L	995	YELLOW EDGELINE
0010	-----	49+75	-	52+90	SB USH 12/STH 27, R/L	315	YELLOW EDGELINE
0010	-----	52+90	-	60+00	USH 12/STH 27, LT	1,420	DOUBLE YELLOW C/L
0010	-----	18+00	-	49+00	B USH 12/STH 27, 12' L	775	WHITE LANE LINE SKIPS
0010	-----	49+70	-	52+90	B USH 12/STH 27, 12' L	75	WHITE LANE LINE SKIPS
0010	-----	18+00	-	24+29	B USH 12/STH 27, 24' L	632	WHITE EDGELINE
0010	-----	25+62	-	26+29	B USH 12/STH 27, 24' L	67	WHITE EDGELINE
0010	-----	26+53	-	28+61	B USH 12/STH 27, 24' L	208	WHITE EDGELINE
0010	-----	30+32	-	40+39	B USH 12/STH 27, 24' L	1,007	WHITE EDGELINE
0010	-----	42+60	-	49+00	B USH 12/STH 27, 24' L	643	WHITE EDGELINE
0010	-----	49+73	-	52+16	B USH 12/STH 27, 24' L	60	WHITE 3' LINE, 9' GAP
0010	-----	52+16	-	56+26	B USH 12/STH 27, 24' L	410	WHITE EDGELINE
0010	-----	57+01	-	60+00	USH 12/STH 27, LT	299	WHITE EDGELINE
					TOTAL 0010	104,355	

TEMPORARY MARKING LINE PAINT 8-INCH

CATEGORY	STATION	TO	STATION	LOCATION	649.0205 TEMPORARY MARKING LINE PAINT 8-INCH LF	REMARKS
0010	1459+64	-	1461+41	EB IH 94, 24' RT	177	EB EXIT GORE
0010	1475+69	-	1477+68	EB IH 94, 51.5' RT	197	EB ENTRANCE GORE
0010	1478+53	-	1483+59	EB IH 94, 24' RT	504	EB ENTRANCE GORE
0010	1478+53	-	1483+59	EB IH 94, VAR. RT	503	EB ENTRANCE GORE
0010	1459+62	-	1465+44	WB IH 94, 24' LT	582	WB ENTRANCE GORE
0010	1459+63	-	1465+44	WB IH 94, VAR. LT	581	WB ENTRANCE GORE
0010	1466+94	-	1467+50	WB IH 94, 51.5' LT	57	WB ENTRANCE GORE
0010	1482+12	-	1485+34	WB IH 94, 24' LT	324	WB EXIT GORE
0010	59+63	-	61+37	RAMP 'JD', 15' LT	177	EB EXIT RAMP GORE
0010	75+78	-	77+69	RAMP 'JC', 15' LT	197	EB ENTRANCE RAMP GORE
0010	66+92	-	67+48	RAMP 'JF', 15' RT	56	WB ENTRANCE RAMP GORE
0010	82+03	-	85+29	RAMP 'JA', 15' RT	326	WB EXIT RAMP GORE
0010	72+48	-	73+72	RAMP 'JD', R/L	124	WHITE GORE
0010	72+45	-	74+83	RAMP 'JDD', 15' LT	256	WHITE GORE
0010	58+42	-	59+78	'JE' LOOP, 15' LT	142	WHITE GORE
0010	67+25	-	68+95	RAMP 'JC', 15' LT	170	WHITE GORE
0010	75+69	-	77+43	RAMP 'JF', 15' RT	175	WHITE GORE
0010	84+68	-	85+97	'JB' LOOP, 15' RT	134	WHITE GORE
0010	68+89	-	70+23	RAMP 'JA', R/L	134	WHITE GORE
0010	67+77	-	70+27	RAMP 'JAA', 15' RT	268	WHITE GORE
0010	23+47	-	25+16	NB USH 12/STH 27, 24' RT	169	WHITE GORE
0010	35+67	-	36+95	NB USH 12/STH 27, 24' RT	128	WHITE GORE
0010	39+88	-	41+24	NB USH 12/STH 27, 24' RT	136	WHITE GORE
0010	24+30	-	25+62	SB USH 12/STH 27, 24' LT	132	WHITE GORE
0010	28+61	-	39+96	SB USH 12/STH 27, 24' LT	135	WHITE GORE
0010	40+39	-	42+13	SB USH 12/STH 27, 24' LT	174	WHITE GORE
				TOTAL 0010	5,958	

CONSTRUCTION STAKING RESURFACING REFERENCE

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	REMARKS
0010	1371+00	-	1499+00	EB IH 94 R/L	14,263	INSIDE EOP
0010	1371+00	-	1499+00	WB IH 94 R/L	14,270	INSIDE EOP
0010	68+52.71	-	86+16.58	RAMP 'JA' R/L	1,764	OUTSIDE EOP
0010	67+77.67	-	70+62.07	RAMP 'JAA' R/L	285	OUTSIDE EOP
0010	73+62.39	-	86+30.26	'JB' LOOP R/L	1,268	OUTSIDE EOP
0010	66+78.42	-	77+22.91	RAMP 'JC' R/L	1,045	OUTSIDE EOP
0010	59+07.65	-	74+08.48	RAMP 'JD' R/L	1,501	OUTSIDE EOP
0010	72+03.77	-	74+83.54	RAMP 'JDD' R/L	280	OUTSIDE EOP
0010	58+07.02	-	70+23.70	'JE' LOOP R/L	1,217	OUTSIDE EOP
0010	67+60.38	-	77+89.27	RAMP 'JF' R/L	1,029	OUTSIDE EOP
0010	59+00	-	79+00	NB STH 27 R/L	2,000	INSIDE EOP
0010	59+00	-	79+00	SB STH 27 R/L	2,000	INSIDE EOP
0010	59+00	-	79+00	USH 12/STH 27 R/L	2,000	OUTSIDE EOP
				TOTAL 0010	42,922	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (02. 1024-01-75)

CATEGORY	STATION	TO	STATION	LOCATION	650.9910.02 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (02. 1024-01-75) LS	REMARKS
0010	1371+40	-	1498+58	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

SAWING ASPHALT

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
0010	2A	1371+40	-	1498+58	EB IH 94	915	PASSING LANE
0010	2B	1371+40	-	1498+58	EB IH 94	1,335	DRIVING LANE
0010	2A	1371+40	-	1498+18	WB IH 94	915	PASSING LANE
0010	2B	1371+40	-	1498+18	WB IH 94	1,335	DRIVING LANE
					TOTAL 0010	4,500	

SAWING CONCRETE

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	690.0250 SAWING CONCRETE LF	REMARKS
0010	2A	1371+40	-	1498+58	EB IH 94	6,725	PASSING LANE
0010	2B	1371+40	-	1498+58	EB IH 94	10,025	DRIVING LANE
0010	---	1470+51	-	1474+51	EB IH 94, RT	680	AUXILIARY LANE
0010	2A	1371+40	-	1498+18	WB IH 94	6,725	PASSING LANE
0010	2B	1371+40	-	1498+18	WB IH 94	10,025	DRIVING LANE
0010	---	1470+14	-	1474+14	WB IH 94, LT	680	AUXILIARY LANE
					TOTAL 0010	34,860	

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CLEANING DITCH

CATEGORY	STATION	LOCATION	SPV.0060.01 SPECIAL (01. CLEANING DITCH) EACH	REMARKS
0010	1378+40	EB IH 94, RT	1	
0010	1384+50	EB IH 94, RT	1	
0010	1480+00	EB IH 94, RT	1	
0010	1497+00	EB IH 94, LT & RT	2	
		TOTAL 0010	5	

MILLING AND REMOVING TEMPORARY TRANSVERSE JOINTS (03. 1024-01-75)

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0060.03 SPECIAL (03. MILLING AND REMOVING TEMPORARY TRANSVERSE JOINTS (03. 1024-01-75)) EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

MATERIAL TRANSFER VEHICLE (05. 1024-01-75)

CATEGORY	STATION	TO	STATION	LOCATION	460.9000.S.02 MATERIAL TRANSFER VEHICLE (1024-01-75) EACH	REMARKS
0010	1371+40	-	1498+58	IH 94	1	UNDISTRIBUTED
				TOTAL 0010	1	

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CONCRETE PAVEMENT REPAIR/REPLACEMENT DOWELED SPECIAL

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0180.04 SPECIAL (04. CONCRETE PAVEMENT REPAIR DOWELED SPECIAL) SY	SPV.0180.05 SPECIAL (05. CONCRETE PAVEMENT REPLACEMENT DOWELED SPECIAL) SY	REMARKS
0010	1470+51	-	1474+51	EB IH 94, RT	90	60	AUXILIARY LANE
0010	1470+14	-	1474+14	WB IH 94, LT	90	60	AUXILIARY LANE
				TOTAL 0010	180	120	

CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR/REPLACEMENT SPECIAL

CATEGORY	STAGE	STATION	TO	STATION	LOCATION	SPV.0180.06 SPECIAL (06. CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR SPECIAL) SY	SPV.0180.07 SPECIAL (07. CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPLACEMENT SPECIAL) SY	REMARKS
0010	2A	1371+40	-	1498+58	EB IH 94	840	100	PASSING LANE
0010	2B	1371+40	-	1498+58	EB IH 94	1,260	100	DRIVING LANE
0010	2A	1371+40	-	1498+18	WB IH 94	840	100	PASSING LANE
0010	2B	1371+40	-	1498+18	WB IH 94	1,260	100	DRIVING LANE
					TOTAL 0010	4,200	400	

BEGIN PROJECT
STA 1371+40'WB'
Y=107177.25
X= 78700.86
MATCH EXISTING
BUTT JOINT REQ'D

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1374'WB'+78 TO STA 1378'WB'+84, LT

PI STA = 1383+61.14'WB'
DELTA = 18°57'27"
D = 1°00'00"
T = 956.62'
L = 1895.75'
R = 5729.58'
PC STA = 1374+04.52'WB'
PT STA = 1393+23.28'WB'
SE = MATCH EXISTING (2.8%)

STA 1384'WB'+39, LT
SALVAGE AND RELAY 1-30" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

EXISTING R/W

JACKSON ELECTRIC COOP.

EXISTING C-27-34
10' X 7'
R.C. BOX CULVERT

WETLAND

PC: 1374+04.52'WB'

70'WB'
VAR
1372'WB'
S43° 03' 05"E
1374'WB'
1376'WB'
1378'WB'
1380'WB'
1382'WB'
1384'WB'

0'EB'
1372'EB'
S43° 37' 24"E
1374'EB'
1376'EB'
1378'EB'
1380'EB'
1382'EB'
1384'EB'

I 94

PC: 1376+61.56'EB'

INL

EXISTING R/W

PI: 1383+61.14

PI: 1383+79.45

CTH A

BEGIN PROJECT
STA 1371+40'EB'
Y=107132.44
X= 78653.63
MATCH EXISTING
BUTT JOINT REQ'D

STA 1384'EB'+50, RT
CLEAN DITCH
2-CULVERT END MARKERS REQ'D, MEDIAN & RT

STA 1376'EB'+74, RT
1-CULVERT END MARKER REQ'D

STA 1378'EB'+40, LT & RT
REMOVE 2 EXISTING 18" REINF CONC AEW
2-CONCRETE COLLARS REQ'D
2-18" REINF CONC AEW REQ'D
2-CULVERT END MARKERS REQ'D

STA 1378'EB'+40, RT
CLEAN DITCH

PI STA = 1383+79.45'EB'
DELTA = 17°48'09"
D = 1°15'00"
T = 717.89'
L = 1424.21'
R = 4583.66'
PC STA = 1376+61.56'EB'
PT STA = 1390+85.76'EB'
SE = MATCH EXISTING (3.5%)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 123	E

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1384'WB'+67 TO STA 1387'WB'+48, RT
STA 1385'WB'+00 TO STA 1387'WB'+26, LT
STA 1388'WB'+63 TO STA 1390'WB'+14, LT
STA 1388'WB'+88 TO STA 1392'WB'+14, RT

STA 1390'WB'+00, LT
1-CULVERT END MARKER REQ'D

N

EXCEPTION TO NET C/L LENGTH
STA 1387'WB'+56 - STA 1388'WB'+75
EXISTING B-27-30
BUTT JOINTS REQ'D

EQUATION

STA 1398'WB'+40, LT
SALVAGE AND RELAY 1-42" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

EXISTING R/W

PT: 1393+23.28'WB'
STA BACK = 1393+00.27'WB'
STA AHEAD = 1393+23.28'WB'

1386'WB' 1388'WB' 1390'WB' 1392'WB' 1394'WB' 1396'WB' S62° 00' 32"E 1398'WB' 1400'WB'

1386'EB' 1388'EB' 1390'EB' 1392'EB' 1394'EB' 1396'EB' S61° 25' 33"E 1398'EB' 1400'EB'

I 94

CTH F

CTH A

SIGN

RIPRAP

PT: 1390+85.76'EB'

EXISTING R/W

JACKSON ELECTRIC COOP.

EXCEPTION TO NET C/L LENGTH
STA 1388'EB'+25 - STA 1389'EB'+41
EXISTING B-27-29
BUTT JOINTS REQ'D

STA 1398'EB'+40, RT
SALVAGE AND RELAY 1-42" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1385'EB'+09 TO STA 1388'EB'+13, LT
STA 1386'EB'+21 TO STA 1388'EB'+36, RT
STA 1389'EB'+49 TO STA 1392'EB'+64, LT
STA 1389'EB'+71 TO STA 1392'EB'+73, RT

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 124	E

STA 1410'WB'+30, LT
SALVAGE AND RELAY 1-36" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

N

5

EXISTING R/W

PC: 1412+16.55'WB'

1402'WB' 1404'WB' 1406'WB' 1408'WB' 1410'WB' 1412'WB' 1414'WB' 1416'WB'

VAR

INL

WETLAND

1402'EB' 1404'EB' 1406'EB' 1408'EB' 1410'EB' 1412'EB' 1414'EB' 1416'EB'

I 94

PC: 1409+39.10'EB'

WETLAND

EXISTING R/W

CTH A

RIPRAP

5

STA 1406'EB'+00, RT
SALVAGE AND RELAY 18" X 8' RCCP
SALVAGE AND RELAY 1-18" REINF CONC AEW
4-DRILLED JOINT TIES REQ'D (INCIDENTAL)
2-CULVERT END MARKERS REQ'D, LT & RT

STA 1410'EB'+30, RT
SALVAGE AND RELAY 1-36" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 125	E

PI STA = 1420+75.99'WB'
DELTA = 8°34'42"
D = 0°30'00"
T = 859.44'
L = 1715.67'
R = 11459.16'
PC STA = 1412+16.55'WB'
PT STA = 1429+42.43'WB'
SE = MATCH EXISTING RC (1.5%)

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1429'WB'+13 TO STA 1432'WB'+19, RT
STA 1430'WB'+12 TO STA 1432'WB'+04, LT

N

AT&T LEGACY
XCEL ENERGY
EXISTING R/W
JACKSON ELECTRIC COOP.
EQUATION
STA BACK = 1429+32.22'WB'
STA AHEAD = 1429+42.43'WB'
PT: 1429+42.43'WB'
ATC MANAGEMENT
AT&T LEGACY

5

1416'WB' 1418'WB' 1420'WB' 1422'WB' 1424'WB' 1426'WB' 1428'WB' 1430'WB'

1418'EB' 1420'EB' 1422'EB' 1424'EB' 1426'EB' 1428'EB' 1430'EB'

I 94

SIGN

PI: 1417+53.63

PI: 1420+75.99

PT: 1425+65.43'EB'

WETLAND

CTH A

EXISTING R/W

ATC MANAGEMENT

5

PI STA = 1417+53.63'EB'
DELTA = 8°07'54"
D = 0°30'00"
T = 814.53'
L = 1626.32'
R = 11459.16'
PC STA = 1409+39.10'EB'
PT STA = 1425+65.43'EB'
SE = MATCH EXISTING RC (1.5%)

STA 1426'EB'+20, LT & RT
SALVAGE AND RELAY 2-18" REINF CONC AEW
4-DRILLED JOINT TIES REQ'D (INCIDENTAL)
2-CULVERT END MARKERS REQ'D

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1429'EB'+43 TO STA 1432'EB'+40, LT
STA 1429'EB'+46 TO STA 1432'EB'+54, RT

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 126	E

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1433'WB'+29 TO STA 1436'WB'+45, LT
STA 1433'WB'+42 TO STA 1436'WB'+95, RT

STA 1441'WB'+95
CLEAN EXISTING 30" RCCP
SALVAGE AND RELAY 1-30" REINF CONC AEW, LT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D, LT

N

EXCEPTION TO NET C/L LENGTH
STA 1432'WB'+26 - STA 1433'WB'+31
EXISTING B-27-32
BUTT JOINTS REQ'D

AT&T LEGACY
ATC MANAGEMENT
NORTHERN NATURAL GAS
EXISTING R/W
HIGH VIEW RD
CAUTION

5

1432'WB' 1434'WB' 1436'WB' 1438'WB' S70° 35' 14"E 1440'WB' 1442'WB' 1444'WB' 1446'WB'

I 94

BRF UTILITIES

1432'EB' 1434'EB' 1436'EB' 1438'EB' S69° 33' 27"E 1440'EB' 1442'EB' 1444'EB' 1446'EB'

VAR

EXISTING C-27-32
TWIN CELL 6' X 6'
R.C. BOX CULVERT

MCNULTY RD

EXISTING R/W

NORTHERN NATURAL GAS

BLACK RIVER FALLS UTILITIES

EXCEPTION TO NET C/L LENGTH
STA 1432'EB'+52 - STA 1433'EB'+58
EXISTING B-27-31
BUTT JOINTS REQ'D

STA 1432'EB'+00
CLEAN EXISTING 18" RCCP
SALVAGE AND RELAY 1-18" REINF CONC AEW, RT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
2-CULVERT END MARKERS REQ'D, LT & RT

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1433'EB'+66 TO STA 1436'EB'+82, LT
STA 1433'EB'+81 TO STA 1437'EB'+09, RT

STA 1442'EB'+00
CLEAN EXISTING 30" RCCP
SALVAGE AND RELAY 1-30" REINF CONC AEW, RT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D, RT

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 127 E

STA 1438'WB'+62
CLEAN EXISTING 30" RCCP
SALVAGE AND RELAY 1-30" REINF CONC AEW, LT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D, LT

PI STA = 1446+40.66'WB'
DELTA = 3°53'26"
D = 0°15'00"
T = 778.44'
L = 1556.27'
R = 22918.32'
PC STA = 1438+62.22'WB'
PT STA = 1453+78.10'WB'
SE = MATCH EXISTING RC (1.5%)

N

OVERLAY EXISTING CROSSOVER
2" HMA PAVEMENT 4 MT 58-34 S

NORTHERN NATURAL GAS
AT&T LEGACY
ATC MANAGEMENT
EQUATION
CAUTION
EXISTING R/W
WETLAND
STA BACK = 1450+36.88'WB'
STA AHEAD = 1435+74.04'WB
PC: 1438+62.22'WB'
1448'WB' 1450'WB' 1436'WB' 1438'WB' 1440'WB' 1442'WB' 1444'WB' 1446'WB' 1448'WB'
I 94
INL

5

NORTHERN NATURAL GAS
1448'EB' 1450'EB' 1436'EB' 1438'EB' 1440'EB' 1442'EB' 1444'EB' 1446'EB' 1448'EB'
I 94
SIGN
CAUTION
SIGN
STA BACK = 1450+36.54'EB'
STA AHEAD = 1435+74.04'EB'
PC: 1435+74.04'EB'
PI: 1440+66.40
EQUATION
EXISTING CABLE BARRIER
TO REMAIN
WETLAND
PT: 1445+58.15'EB'
PI: 1446+40.66
SIGN
WETLAND
EXISTING R/W

STA 1438'EB'+80
CLEAN EXISTING 30" RCCP

PI STA = 1440+66.40'EB'
DELTA = 4°55'14"
D = 0°30'00"
T = 492.36'
L = 984.11'
R = 11459.16'
PC STA = 1435+74.04'EB'
PT STA = 1445+58.15'EB'
SE = MATCH EXISTING RC (1.5%)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 128	E

STA 1451'WB'+95, LT
SALVAGE AND RELAY 1-30" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

STA 1455'WB'+52, LT
SALVAGE AND RELAY 1-36" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

N

AT&T LEGACY
ATC MANAGEMENT
EQUATION
EXISTING R/W
'WB'+86.57
-24.00'L
BP: 1453+78.10'WB'
STA BACK = 1454+18.49'WB'
STA AHEAD = 1453+78.10'WB'
WE ENERGIES
AT&T LEGACY
ATC MANAGEMENT
5
5
448'WB'
1450'WB'
1452'WB'
1454'WB'
1456'WB'
S74° 28' 41"E
1458'WB'
1460'WB'
1462'WB'
IH 94
EXISTING CABLE BARRIER
TO REMAIN
CAUTION
69.77'
48'EB'
1450'EB'
1452'EB'
1454'EB'
1456'EB'
S74° 28' 41"E
1458'EB'
1460'EB'
1462'EB'
IH 94
'EB'+71.00
24.00'R
EXISTING R/W
WETLAND
'EB'+07.65
36.04'R
60'JD'
62'JD'
BP: 59+07.65'JD'
WETLAND
SIGN
SIGN
SIGN
SIGN
MH
MH
MH
MH
MH
MH
MH
MH
INL
INL
INL
INL
OH
FO
W

STA 1456'EB'+00
CLEAN EXISTING 36" RCCP

STA 1451'EB'+00, LT
SALVAGE AND RELAY 1-18" REINF CONC AEW, LT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D, LT

STA 1452'EB'+20
CLEAN EXISTING 30" RCCP

STA 1456'EB'+00, RT
SALVAGE AND RELAY 1-36" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 129	E

STA 1471'EB'+23 TO STA 1473'EB'+52, LT
REMOVE EXISTING GUARDRAIL

STA 1471'EB'+26 TO STA 1473'EB'+57, LT
300 LF STEEL THRIE BEAM REQ'D
2-STEEL THRIE BEAM BULLNOSE TERMINAL REQ'D

STA 1466'WB'+53, LT
SALVAGE AND RELAY 1-36" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

PT: 71+90.18'JF'

PCC: 84+81.56'JB'

EP: 86+30.26'JB'

ATC MANAGEMENT

AT&T LEGACY

ATC MANAGEMENT

EXISTING R/W

BP: 67+60.38'JF'

PC: 75+95.33'JB'

BP: 73+62.39'JB'

'WB'+60.38
-67.92'L

'WB'+62.39
-49.50'L

EXISTING B-27-34

EXISTING B-27-33

END HMA PAVING
STA 1470'WB'+14
MATCH EXISTING CONC
BUTT JOINT REQ'D

RESUME HMA PAVING
STA 1474'WB'+14
MATCH EXISTING CONC
BUTT JOINT REQ'D

END HMA PAVING
STA 1470'EB'+50
MATCH EXISTING CONC
BUTT JOINT REQ'D

RESUME HMA PAVING
STA 1474'EB'+52
MATCH EXISTING CONC
BUTT JOINT REQ'D

SB USH 12 / STH 27

NB USH 12 / STH 27

IH 94

EXISTING CABLE BARRIER
TO REMAIN

'EB'+23.70
49.50'R

'EB'+22.91
67.71'R

PC: 70+03.19'JE'

PCC: 68+66.30'JE'

EP: 70+23.70'JE'

WETLAND (TYP.)

BP: 58+07.02'JE'

EXISTING R/W

STA 1467'EB'+00, RT
SALVAGE AND RELAY 1-36" REINF CONC AEW
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D

STA 1470'EB'+92
CLEAN EXISTING 18" RCCP
SALVAGE AND RELAY 1-18" REINF CONC AEW, RT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D, RT

PCC: 59+59.17'JE'

STA 1471'EB'+12, RT (AUX LANE)
CLEAN EXISTING 18" RCCP
SALVAGE AND RELAY 1-18" REINF CONC AEW, RT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
1-CULVERT END MARKER REQ'D, RT

PC: 72+52.25'JC'

STA 1474'EB'+93, RT (AUX LANE)
CLEAN EXISTING 18" RCCP

STA 1478'EB'+35, RT (AUX LANE)
CLEAN EXISTING 18" RCCP

PT: 65+71.53'JD'

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 130 E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\050101_PL_MAINLINE.DWG
LAYOUT NAME - Sheet 108

PLOT DATE : 7/19/2021 6:02 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

PI STA = 1480+81.28'WB'
DELTA = 32°25'04"
D = 1°05'00"
T = 1537.43'
L = 2992.40'
R = 5288.84'
PC STA = 1465+43.85'WB'
PT STA = 1495+36.24'WB'
SE = MATCH EXISTING (3.0%)

OVERLAY EXISTING CROSSOVER
2" HMA PAVEMENT 4 MT 58-34 S

PC: 77+85.79'JA'
PI: 1480+81.28
PT: 82+05.93'JA'
EP: 86+16.58'JA'
PI: 1480+06.66
EB

AT&T LEGACY
ATC MANAGEMENT
ATC MANAGEMENT
AT&T LEGACY
EXISTING R/W

80'JA'
82'JA'
84'JA'
86'JA'
'WB'+21.96
-36.00'L
'WB'+13.23
-24.00'L

1480'WB'
1482'WB'
1484'WB'
1486'WB'
1488'WB'
1490'WB'
1492'WB'
1494'WB'

EXISTING CABLE BARRIER
TO REMAIN

1480'EB'
1482'EB'
1484'EB'
1486'EB'
1488'EB'
1490'EB'
1492'EB'
1494'EB'

VAR

'EB'+81.84
45.09'R
WETLAND
'EB'+30.76
24.00'R
PT: 1492+42.57'EB'
WETLAND

BLACK RIVER FALLS UTILITIES
EXISTING R/W

STA 1480'EB'+00, RT
CLEAN DITCH

STA 1480'EB'+00
CLEAN EXISTING 18" RCCP
SALVAGE AND RELAY 18" REINF CONC AEW, LT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
REMOVE 6' EXISTING 18" RCCP (RT AEW)
1-CONCRETE COLLAR REQ'D, RT
1-18" REINF CONC AEW REQ'D, RT
2-CULVERT END MARKERS REQ'D, LT & RT

PI STA = 1480+06.66'EB'
DELTA = 31°44'05"
D = 1°15'00"
T = 1302.87'
L = 2538.79'
R = 4583.66'
PC STA = 1467+03.79'EB'
PT STA = 1492+42.57'EB'
SE = MATCH EXISTING (3.5%)

STA 1485'EB'+10
CLEAN EXISTING 42" RCCP

STA 1489'EB'+00
CLEAN EXISTING 18" RCCP
REMOVE 6' EXISTING 18" RCCP (LT AEW)
1-CONCRETE COLLAR REQ'D, LT
1-18" REINF CONC AEW REQ'D, LT
SALVAGE AND RELAY 18" REINF CONC AEW, RT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
2-CULVERT END MARKERS REQ'D, LT & RT

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 131	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\050101_PL_MAINLINE.DWG
LAYOUT NAME - Sheet 109
PLOT DATE : 7/19/2021 6:03 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : ##########

END PROJECT
STA 1498+18'WB'
MATCH EXISTING BRIDGE DECK
BUTT JOINT REQ'D

WE ENERGIES

ATC MANAGEMENT

AT&T LEGACY

CAUTION

EXISTING R/W

PT: 1495+36.24'WB'

1494'WB'

1496'WB'

1498'WB'

S42° 03' 37"E

1500'WB'

IH 94

1501'WB'

EP: 1501+71.17'WB'

EXISTING B-27-40

ATC MANAGEMENT

AT&T LEGACY

SIGN

INL

1494'EB'

1496'EB'

1498'EB'

S42° 44' 35"E

1500'EB'

1502'EB'

IH 94

EXISTING B-27-39

EP: 1502+25.40'EB'

SIGN

WETLAND

EXISTING R/W

BLACK RIVER

SIGN

GUY

BLACK RIVER FALLS UTILITIES

STA 1497'EB'+00, LT & RT
CLEAN DITCH

STA 1497'EB'+00
SALVAGE AND RELAY 18" REINF CONC AEW, RT
2-DRILLED JOINT TIES REQ'D (INCIDENTAL)
2-CULVERT END MARKERS REQ'D, LT & RT

END PROJECT
STA 1498+58'EB'
MATCH EXISTING BRIDGE DECK
BUTT JOINT REQ'D

ADJUSTING STEEL PLATE BEAM GUARD REQ'D
STA 1494'EB'+58 TO STA 1498'EB'+51, LT
STA 1495'EB'+93 TO STA 1498'EB'+51, RT

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: IH 94 EB & WB	SHEET 132	E

PI STA = 12+89.71'SB'
DELTA = 7°00'41"
D = 4°00'00"
T = 87.75'
L = 175.28'
R = 1432.39'
PC STA = 12+01.96'SB'
PT STA = 13+77.25'SB'

N

BP: 8+54.13'SB'
PI: 8+93.59
PC: 12+01.96'SB'
PI: 12+89.71
PCC: 13+77.25'SB'

2'NB'
4'NB'
6'NB'
N0° 16' 57"W
8'NB'
10'SB'
10'NB'
N2° 53' 21"W
N2° 44' 24"E
12'SB'
12'NB'
14'SB'
14'NB'

BP: 1+98.71'NB'
PC: 8+18.01'NB'
PT: 9+69.14'NB'
PC: 13+17.14'NB'

EXISTING R/W

PI STA = 8+93.59'NB'
DELTA = 3°01'21"
D = 2°00'00"
T = 75.58'
L = 151.13'
R = 2864.79'
PC STA = 8+18.01'NB'
PT STA = 9+69.14'NB'

JEFFERSON ST
ADAMS ST E
WASHINGTON ST
USH 12
FOOTBRIDGE
CANOPY
FILLER CAPS

5

5

PI STA = 17+05.12'SB'
DELTA = 12°52'47"
D = 1°58'21"
T = 327.87'
L = 652.98'
R = 2904.79'
PC STA = 13+77.25'SB'
PT STA = 20+30.22'SB'
SE = MATCH EXISTING RC (2.0%)

BEGIN CONSTRUCTION
STA 18+30'SB'
MATCH EXISTING
BUTT JOINT REQ'D

BP: 72+03.77'JDD'
PT: 72+09.09'JD'
EP: 74+83.54'JDD'
PCC: 59+59.17'JE'
EP: 74+08.48'JD'
EXISTING R/W

'SB'+70.71
-24.00'L
'SB'+29.38
-39.00'L

PI: 16+75.53
PI: 17+05.12
PT: 20+30.22'SB'

16'SB'
18'SB'
20'SB'
22'SB'
24'SB'
26'SB'
28'SB'
14'SB'
16'NB'
18'NB'
20'NB'
22'NB'
24'NB'
26'NB'
28'NB'
40'

'NB'+50.00
24.00'R
'NB'+98.95
36.00'R

68'JC'
70'JC'
72'JC'

PT: 20+30.22'NB'
BP: 66+78.42'JC'
PT: 67+84.26'JC'
C: 72+52.25'JC'

PI STA = 16+75.53'NB'
DELTA = 14°15'42"
D = 2°00'00"
T = 358.40'
L = 713.09'
R = 2864.79'
PC STA = 13+17.14'NB'
PT STA = 20+30.22'NB'
SE = MATCH EXISTING RC (2.0%)

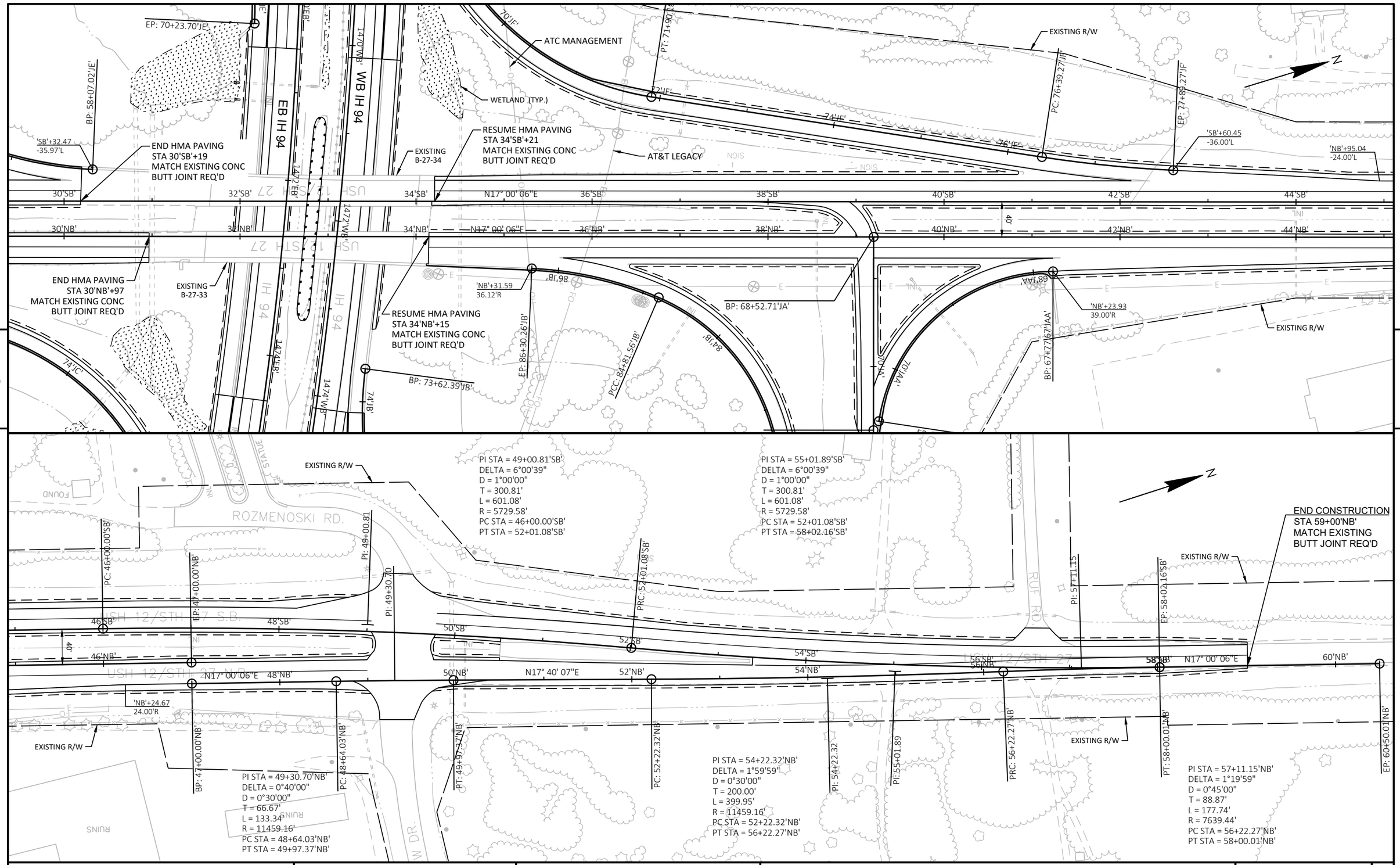
BEGIN CONSTRUCTION
STA 20+50'NB'
MATCH EXISTING
BUTT JOINT REQ'D

EXISTING R/W

CANOPY
PHONE
CTH A
USH 12

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: USH 12 / STH 27	SHEET 133	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\050201_PL_12_27.DWG
LAYOUT NAME - Sheet - (1)
PLOT DATE : 7/19/2021 6:05 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: USH 12 / STH 27	SHEET 134	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\050201_PL_12_27.DWG
LAYOUT NAME - Sheet - (2)
PLOT DATE : 7/19/2021 6:06 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

PI STA = 85+56.74'JB'
DELTA = 20°49'04"
D = 13°59'59"
T = 75.18'
L = 148.70'
R = 409.26'
PC STA = 84+81.56'JB'
PT STA = 86+30.26'JB'
SE = MATCH EXIST. (8.0%)

PI STA = 69+91.41'JB'
DELTA = 221°33'45"
D = 25°00'01"
T = 603.92'
L = 886.24'
R = 229.18'
PC STA = 75+95.33'JB'
PT STA = 84+81.56'JB'
SE = MATCH EXIST. (8.0%)

PI STA = 74+82.11'JB'
DELTA = 32°36'39"
D = 13°59'59"
T = 119.72'
L = 232.94'
R = 409.26'
PC STA = 73+62.39'JB'
PT STA = 75+95.33'JB'
SE = MATCH EXIST. (8.0%)

PI STA = 73+30.56'JA'
DELTA = 64°31'42"
D = 13°59'59"
T = 258.36'
L = 460.92'
R = 409.26'
PC STA = 70+72.20'JA'
PT STA = 75+33.12'JA'
SE = MATCH EXISTING (7.0%)

PI STA = 80+05.80'JA'
DELTA = 42°00'50"
D = 10°00'00"
T = 220.02'
L = 420.14'
R = 572.96'
PC STA = 77+85.79'JA'
PT STA = 82+05.93'JA'
SE = MATCH EXISTING (7.7%)

PI STA = 69+49.92'JAA'
DELTA = 81°28'33"
D = 28°38'52"
T = 172.26'
L = 284.40'
R = 200.00'
PC STA = 67+77.67'JAA'
PT STA = 70+62.07'JAA'
SE = MATCH EXISTING

N

RUINS

EXISTING R/W

EXISTING R/W

NB USH 12 / STH 27

SB USH 12 / STH 27

'NB'+23.93
39.00'R

'NB'+31.59
36.12'R

'WB'+62.39
-49.50'L

PI: 73+30.56'JA'

PT: 75+33.12'JA'

PC: 77+85.79'JA'

PI: 80+05.80'JA'

BP: 67+77.67'JAA'

EP: 70+62.07'JAA'

PC: 70+72.20'JA'

BP: 68+52.71'JA'

PI: 83+56.74'JB'

EP: 86+30.26'JB'

PCC: 84+81.56'JB'

PCC: 75+95.33'JB'

BP: 73+62.39'JB'

PI: 74+82.11'JB'

ATC MANAGEMENT

AT&T LEGACY

EXISTING
B-27-33

EXISTING
B-27-34

WETLAND (TYP.)

WB IH 94

EB IH 94

IH 94

US 12 / STH 27

SIGN

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMPS JA & JB	SHEET 135	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\050301_PL_RAMP_JA_JB.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 7/19/2021 6:08 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:100 FT

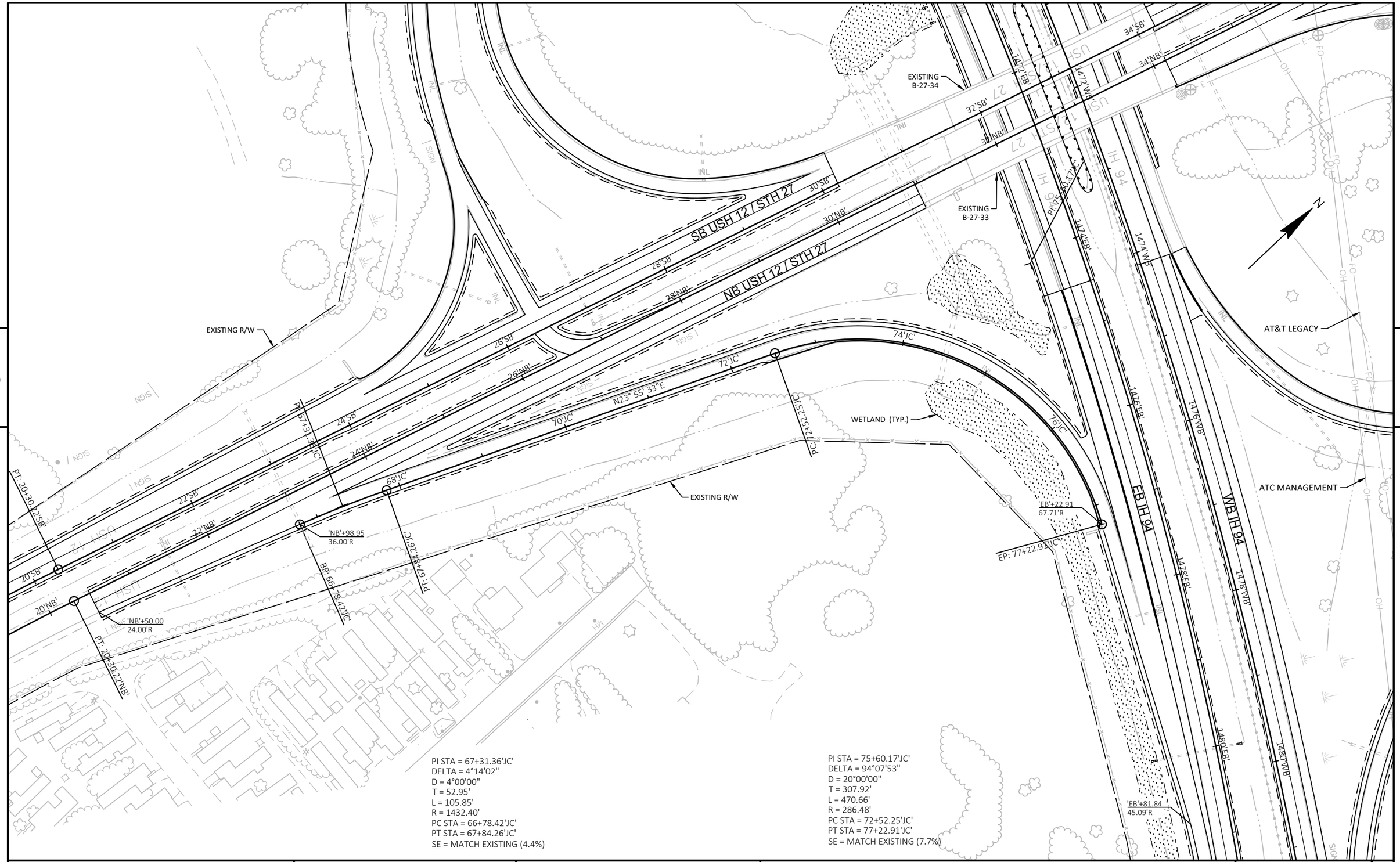
WISDOT/CADDS SHEET 44

PI STA = 80+05.80'JA'
DELTA = 42°00'50"
D = 10°00'00"
T = 220.02'
L = 420.14'
R = 572.96'
PC STA = 77+85.79'JA'
PT STA = 82+05.93'JA'
SE = MATCH EXISTING (7.7%)

AT&T LEGACY
ATC MANAGEMENT
ATC MANAGEMENT
AT&T LEGACY
EXISTING R/W
PI: 82+05.93'JA'
EP: 81+16.58'JA'
PT: 1495+36.74'WB'
80'JA'
82'JA'
84'JA'
86'JA'
'WB'+15.83
-62.38'L
'WB'+21.96
-36.00'L
'WB'+13.23
-24.00'L
S50°-29'-02"E
WB IH 94
IH 94
1480'WB'
1482'WB'
1484'WB'
1486'WB'
1488'WB'
1490'WB'
1492'WB'
1494'WB'
1482'EB'
1484'EB'
1486'EB'
1488'EB'
1490'EB'
1492'EB'
1494'EB'
EB IH 94
PT: 1492+42.57'EB'
SIGN
WETLAND (TYP.)
BLACK RIVER FALLS UTILITIES
EXISTING R/W
5
5

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMPS JA & JB	SHEET 136	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\050301_PL_RAMP_JA_JB.DWG
LAYOUT NAME - Sheet - (2)
PLOT DATE : 7/19/2021 6:08 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

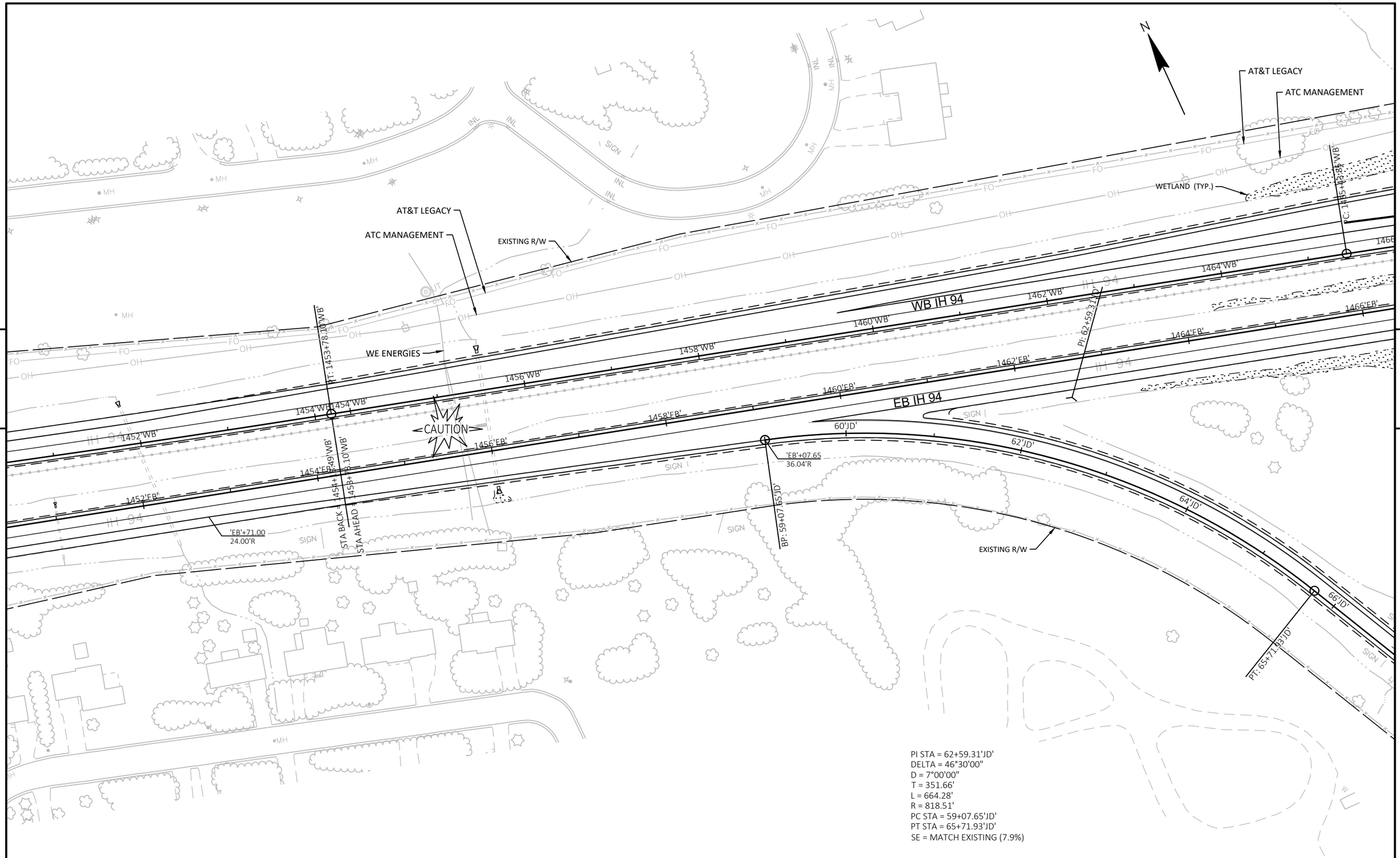


PI STA = 67+31.36'JC'
DELTA = 4°14'02"
D = 4°00'00"
T = 52.95'
L = 105.85'
R = 1432.40'
PC STA = 66+78.42'JC'
PT STA = 67+84.26'JC'
SE = MATCH EXISTING (4.4%)

PI STA = 75+60.17'JC'
DELTA = 94°07'53"
D = 20°00'00"
T = 307.92'
L = 470.66'
R = 286.48'
PC STA = 72+52.25'JC'
PT STA = 77+22.91'JC'
SE = MATCH EXISTING (7.7%)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMP JC	SHEET 137 E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\050401_PL_RAMP_JC.DWG
LAYOUT NAME - Sheet - (1)
PLOT DATE : 7/19/2021 6:10 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



5

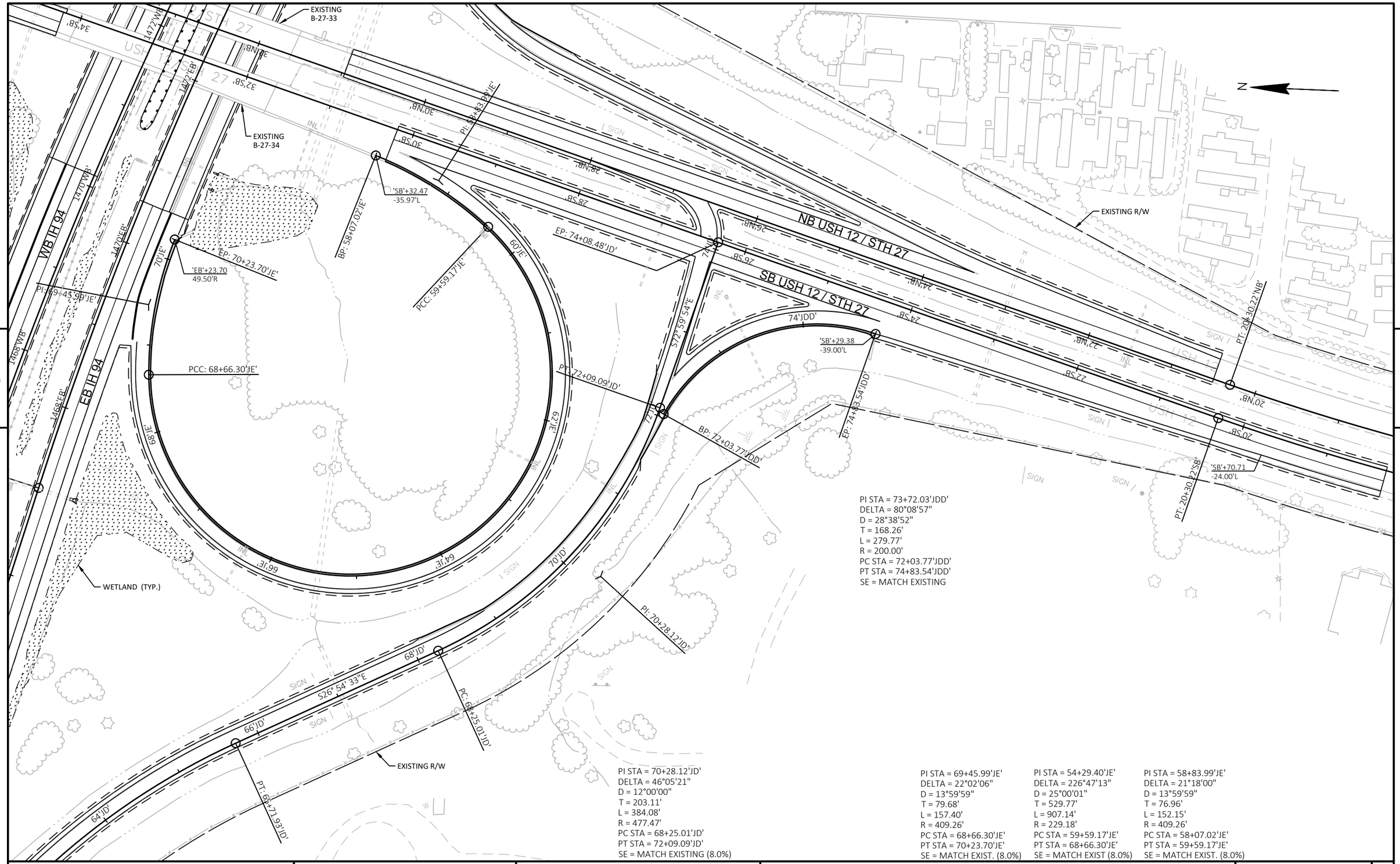
5

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMPS JD & JE	SHEET 138	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\050501_PL_RAMP_JD_JE.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 7/19/2021 6:13 PM PLOT BY : ANDERSON, THOMAS R PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PI STA = 73+72.03'JDD'
DELTA = 80°08'57"
D = 28°38'52"
T = 168.26'
L = 279.77'
R = 200.00'
PC STA = 72+03.77'JDD'
PT STA = 74+83.54'JDD'
SE = MATCH EXISTING

PI STA = 70+28.12'JD'
DELTA = 46°05'21"
D = 12°00'00"
T = 203.11'
L = 384.08'
R = 477.47'
PC STA = 68+25.01'JD'
PT STA = 72+09.09'JD'
SE = MATCH EXISTING (8.0%)

PI STA = 69+45.99'JE'
DELTA = 22°02'06"
D = 13°59'59"
T = 79.68'
L = 157.40'
R = 409.26'
PC STA = 68+66.30'JE'
PT STA = 70+23.70'JE'
SE = MATCH EXIST. (8.0%)

PI STA = 54+29.40'JE'
DELTA = 226°47'13"
D = 25°00'01"
T = 529.77'
L = 907.14'
R = 229.18'
PC STA = 59+59.17'JE'
PT STA = 68+66.30'JE'
SE = MATCH EXIST (8.0%)

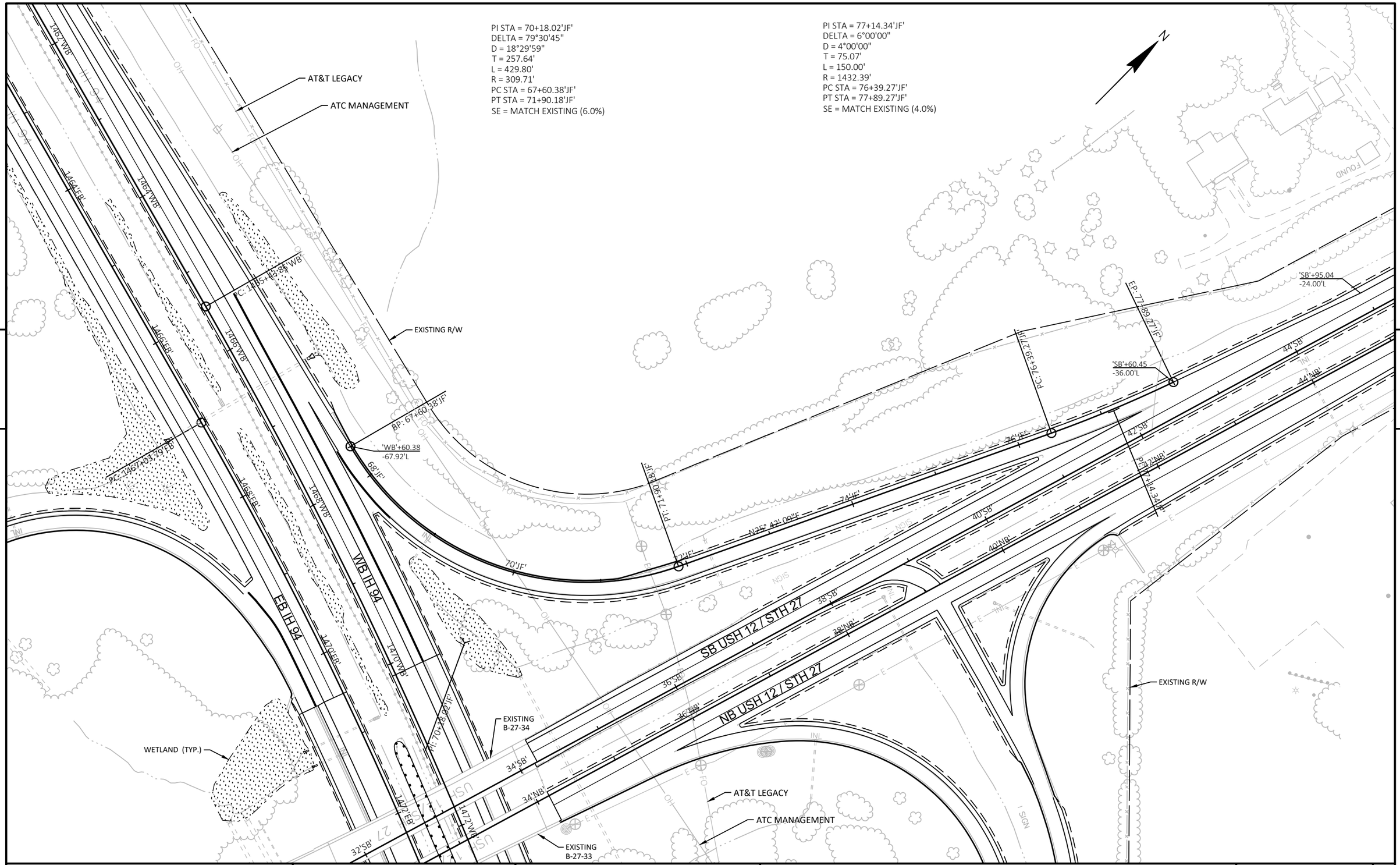
PI STA = 58+83.99'JE'
DELTA = 21°18'00"
D = 13°59'59"
T = 76.96'
L = 152.15'
R = 409.26'
PC STA = 58+07.02'JE'
PT STA = 59+59.17'JE'
SE = MATCH EXIST. (8.0%)

PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMPS JD & JE	SHEET 139	E

FILE NAME : C:\CIVIL 3D PROJECTS\10240105\SHEETSPLAN\050501_PL_RAMP_JD_JE.DWG
LAYOUT NAME - Sheet - (2)
PLOT DATE : 7/19/2021 6:13 PM
PLOT BY : ANDERSON, THOMAS R
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

PI STA = 70+18.02'JF'
DELTA = 79°30'45"
D = 18°29'59"
T = 257.64'
L = 429.80'
R = 309.71'
PC STA = 67+60.38'JF'
PT STA = 71+90.18'JF'
SE = MATCH EXISTING (6.0%)

PI STA = 77+14.34'JF'
DELTA = 6°00'00"
D = 4°00'00"
T = 75.07'
L = 150.00'
R = 1432.39'
PC STA = 76+39.27'JF'
PT STA = 77+89.27'JF'
SE = MATCH EXISTING (4.0%)



PROJECT NO: 1024-01-75	HWY: IH 94	COUNTY: JACKSON	PLAN: RAMP JF	SHEET 140	E

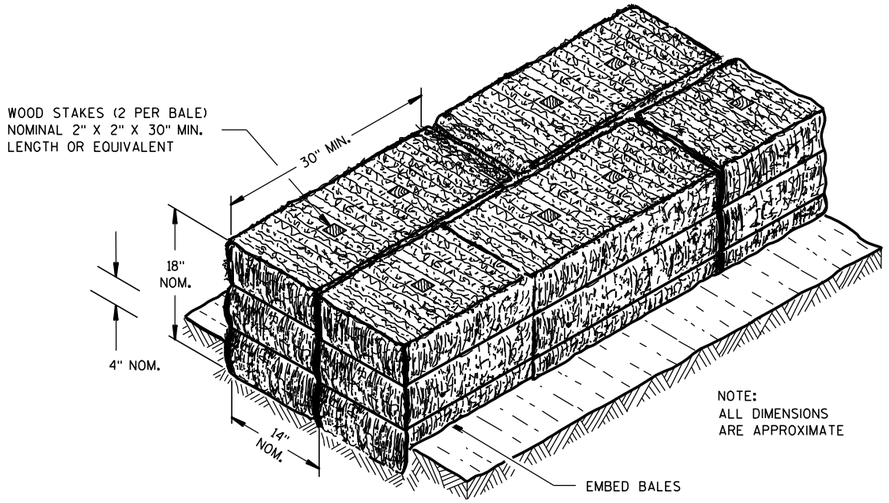
Standard Detail Drawing List

08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
11A01-06	MAINTENANCE CROSSOVER FOR FREEWAYS
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13A07-02	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-15A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C11-12A	RURAL DOWELED CONCRETE PAVEMENT
13C11-12B	RURAL DOWELED CONCRETE PAVEMENT
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B26-04A	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04B	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04C	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04D	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04E	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04F	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04G	STEEL THRIE BEAM BULLNOSE TERMINAL
14B26-04H	STEEL THRIE BEAM BULLNOSE TERMINAL
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15A04-06A	PERMANENT FLEXIBLE DELINEATOR POST
15A04-06B	DELINEATOR BRACKET WITH REFLECTIVE SHEETING
15A04-06C	DELINEATOR POST WITH REFLECTIVE SHEETING
15A04-06D	DELINEATOR POST WITH REFLECTIVE SHEETING
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-08D	ON RAMP LANE CLOSURE
15C02-08E	OFF RAMP LANE CLOSURE
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C14-04	AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS
15C18-05A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-05B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C18-05C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C31-04A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-04C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D12-09D	TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM
15D15-05A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05B	TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05C	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05D	TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE
15D15-05E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D20-05B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

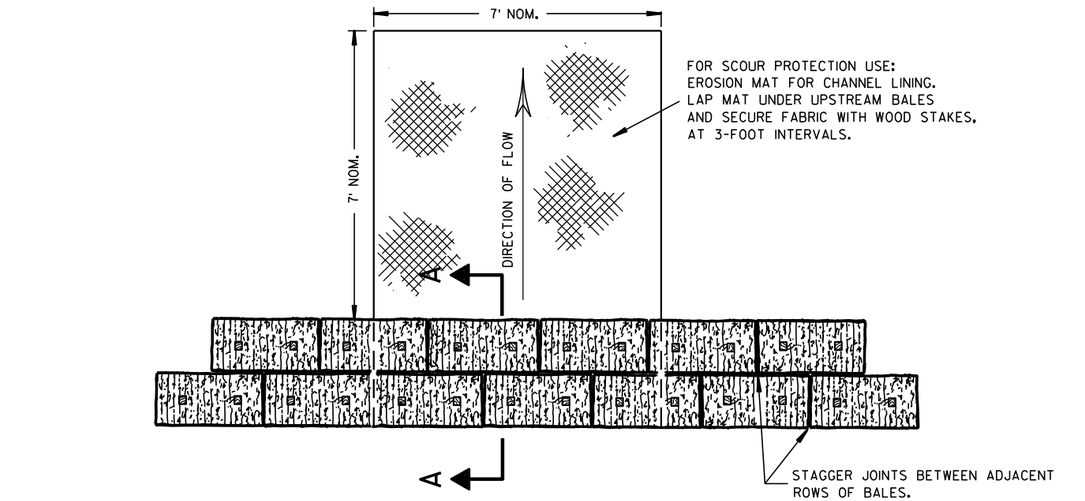
6

Standard Detail Drawing List

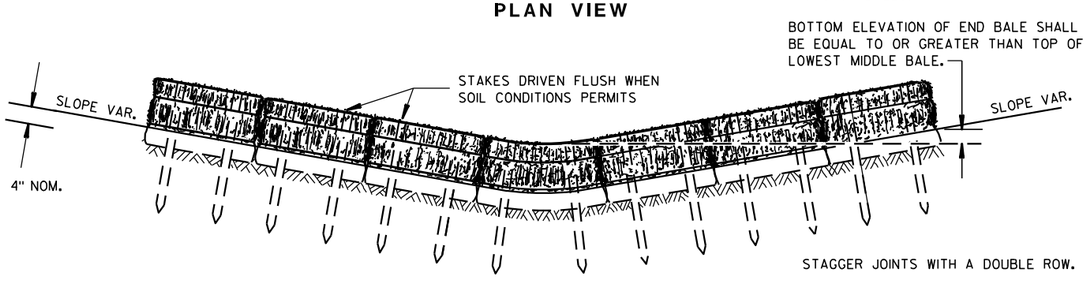
15D20-05C	TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING



SECTION A-A



PLAN VIEW



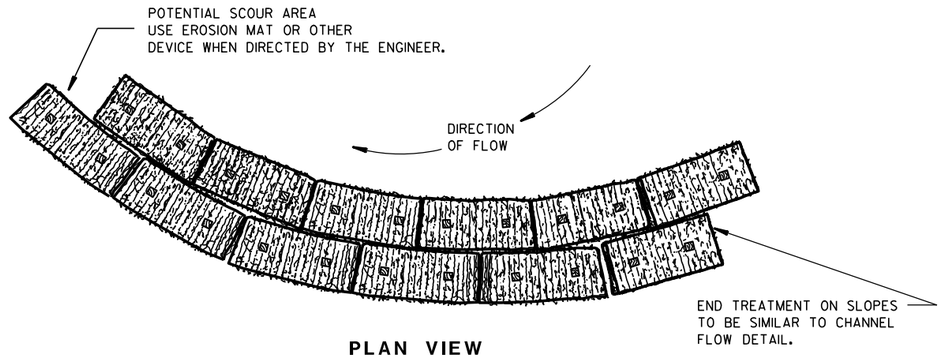
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

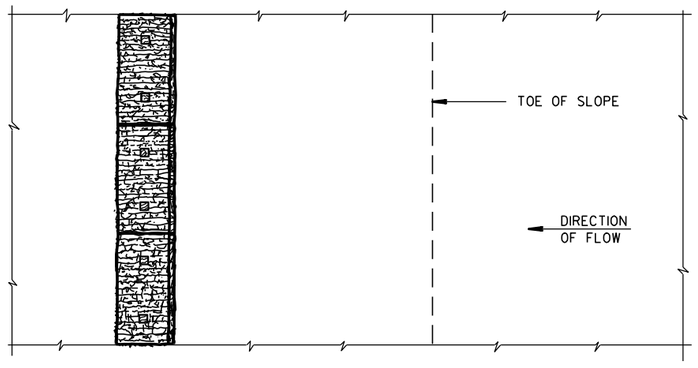
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

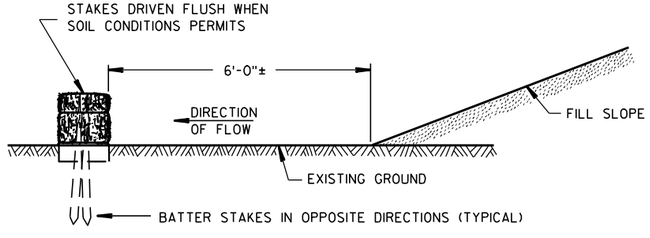


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

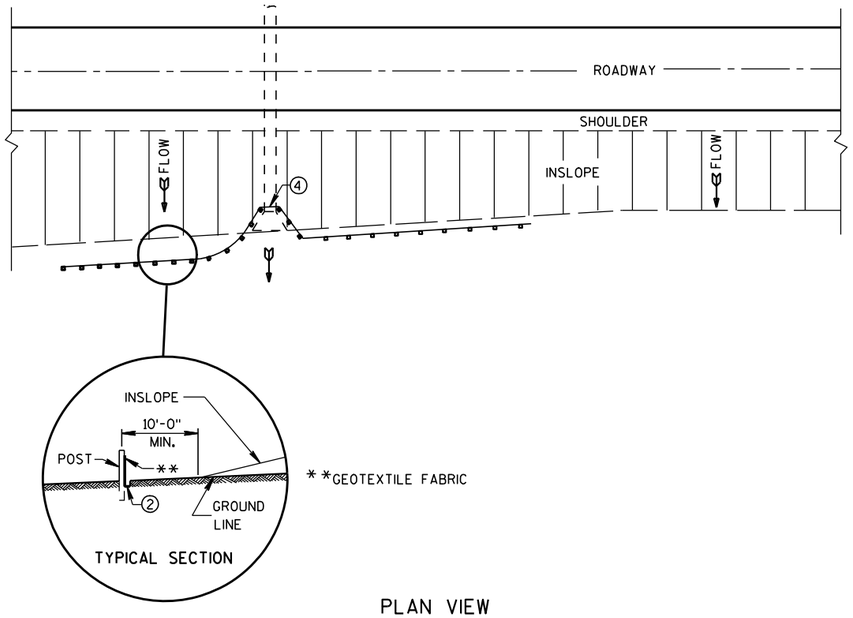
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

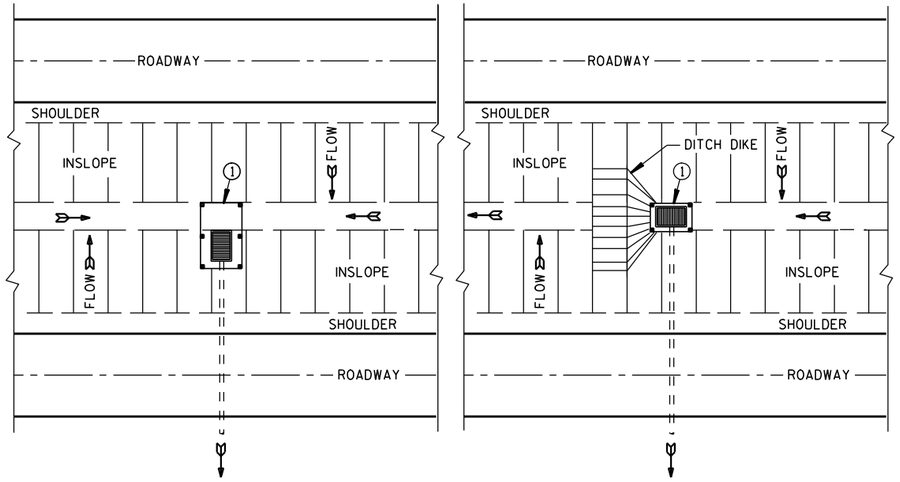
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



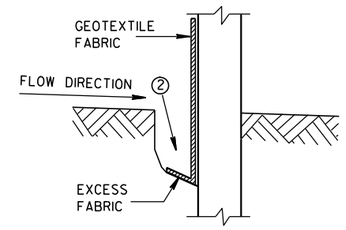
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

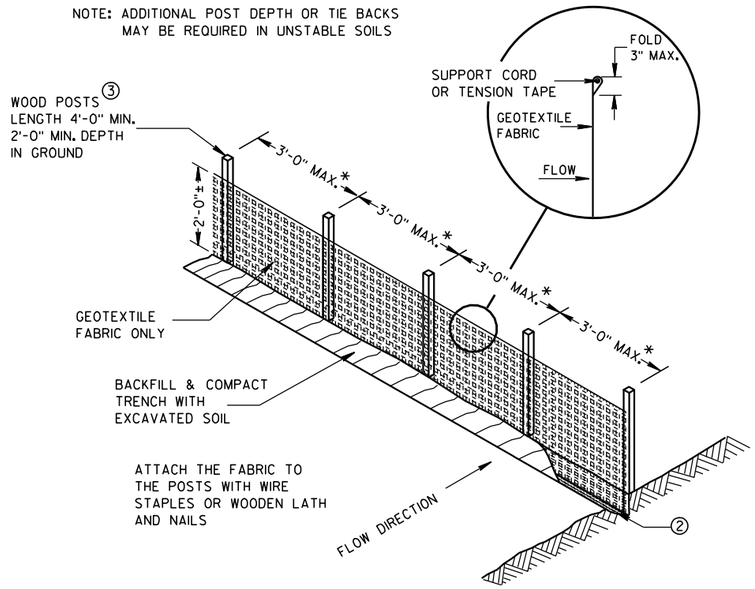
GENERAL NOTES

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

1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

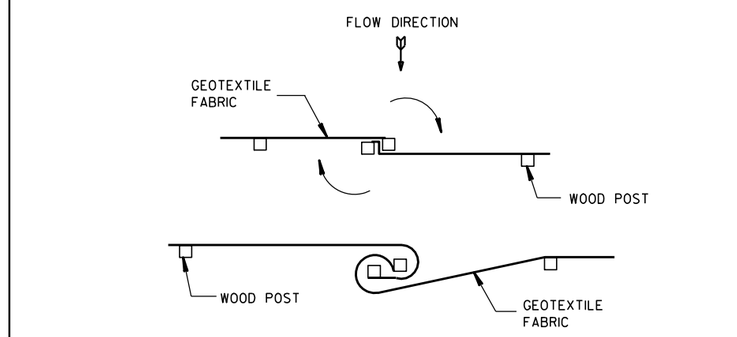


TRENCH DETAIL

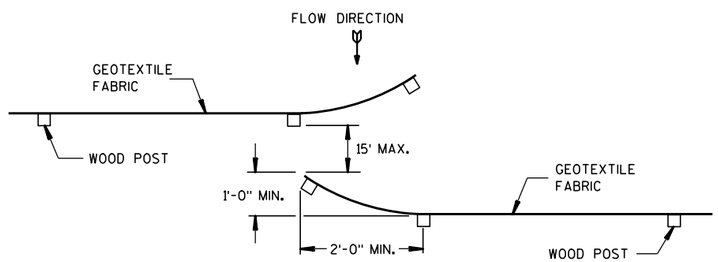


*NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.

SILT FENCE

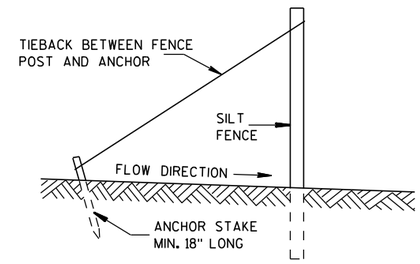


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

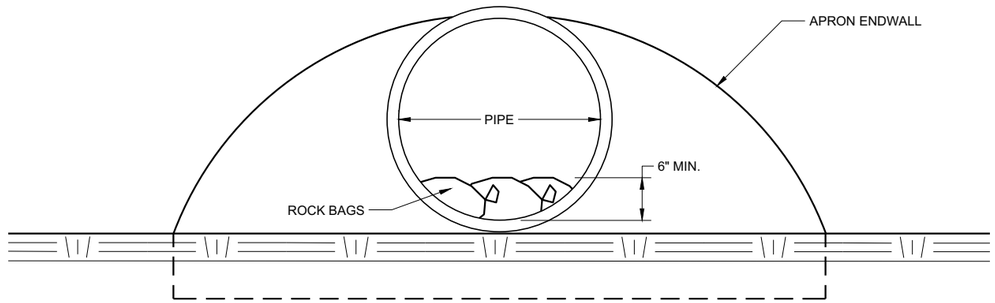
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

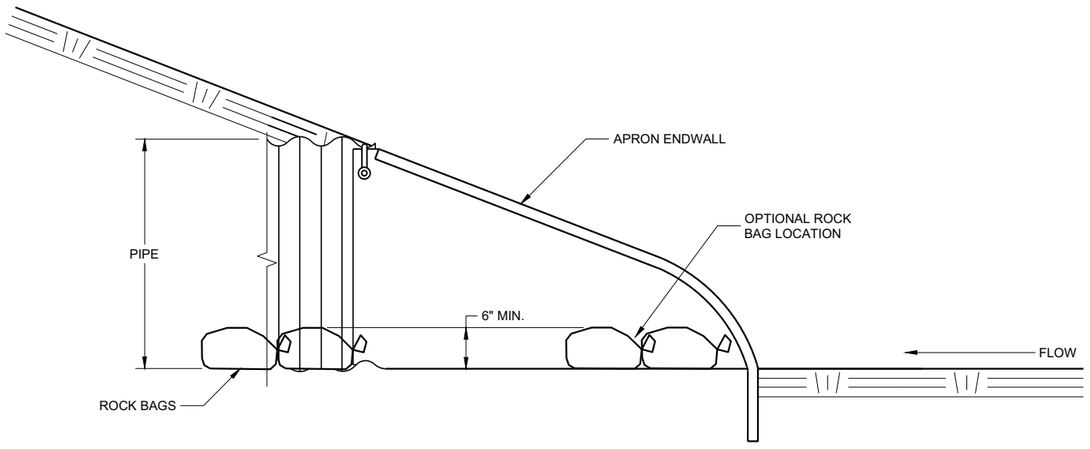
S.D.D. 8 E 9-6

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S.D.D. 8 E 9-6



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI
FHWA	

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SDD 08E15 - 01

METAL APRON ENDWALLS

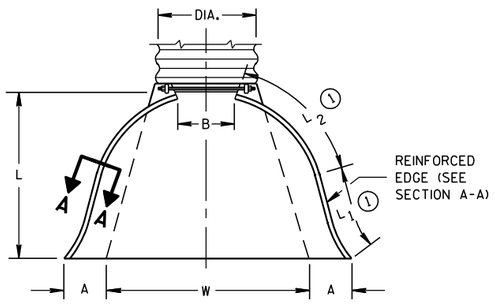
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

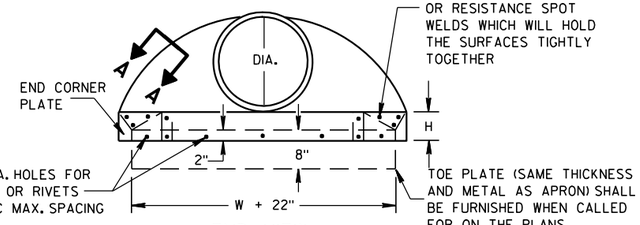
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

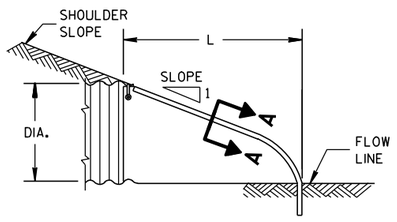
*MINIMUM
**MAXIMUM



PLAN VIEW

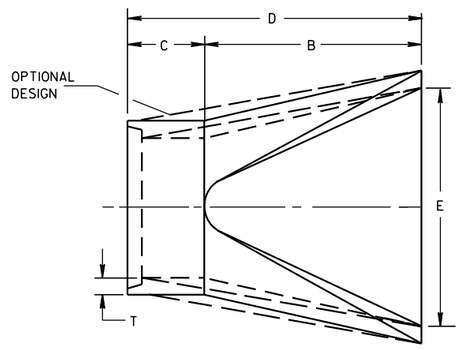


END VIEW

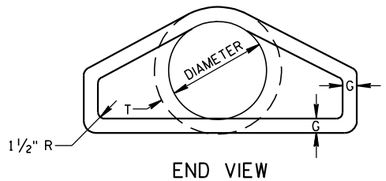


SIDE ELEVATION

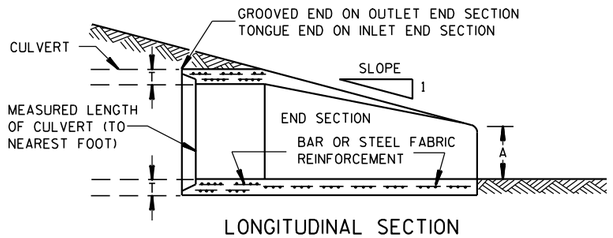
METAL ENDWALLS



PLAN

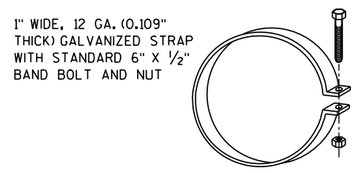


END VIEW



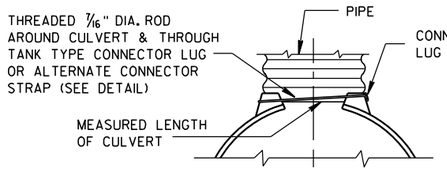
LONGITUDINAL SECTION

CONCRETE ENDWALLS

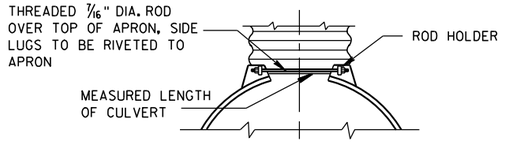


ALTERNATE FOR TYPE 1 CONNECTION

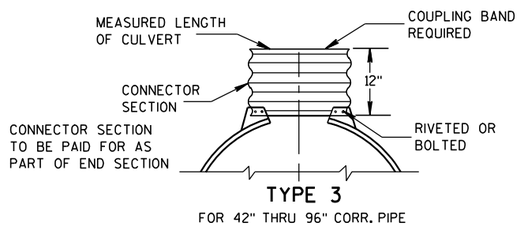
END SECTION CONNECTOR STRAP



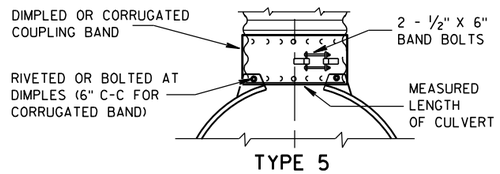
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

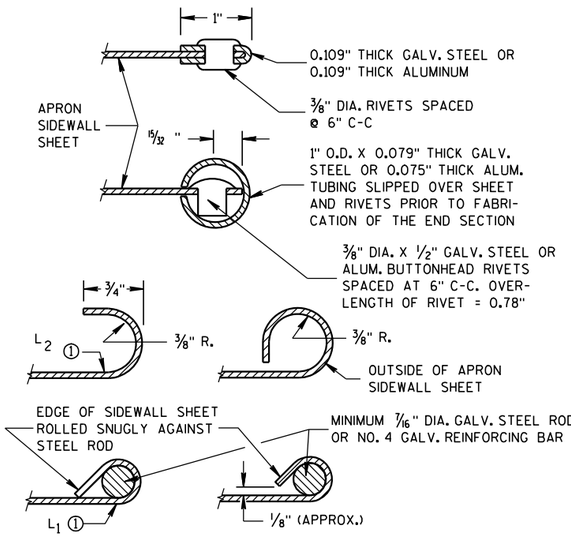
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

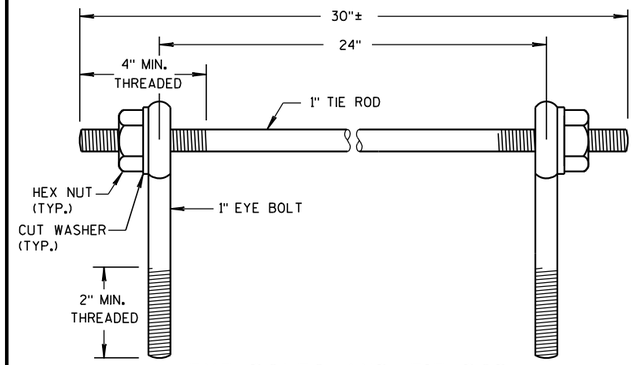
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

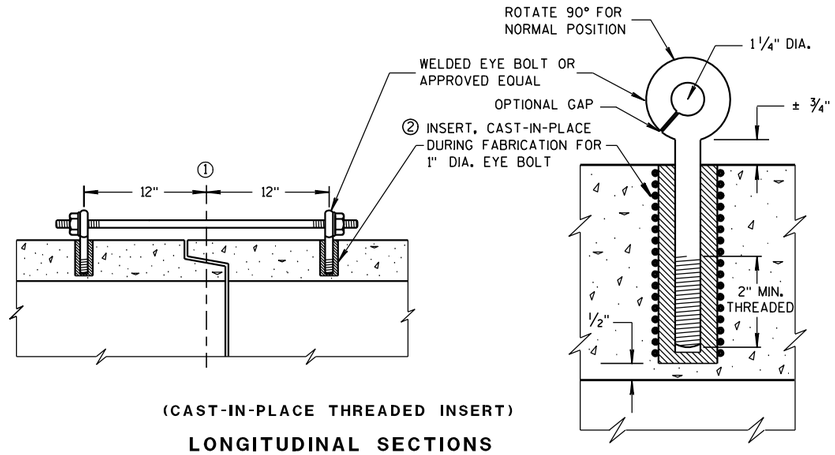
APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 F 1-11



EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)

GENERAL NOTES

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

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

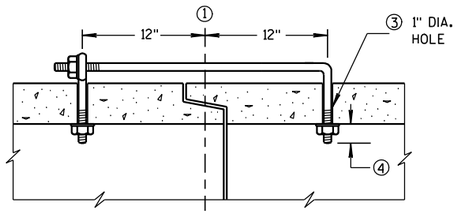
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

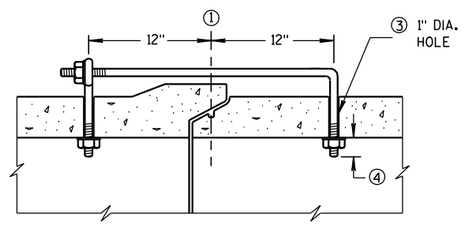
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

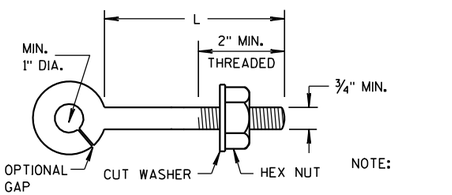


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

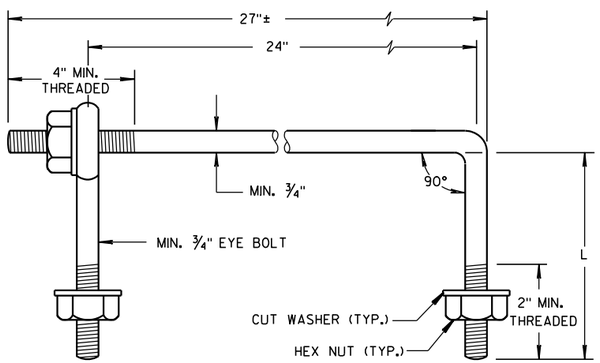
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

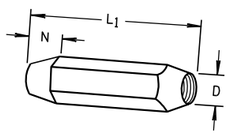
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

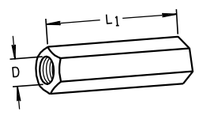
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



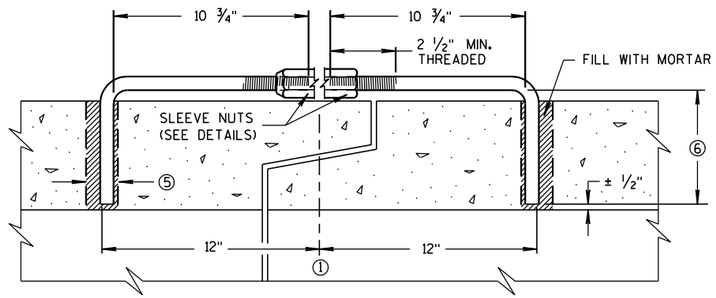
TAPERED



PLAIN

RIGHT AND LEFT THREADS

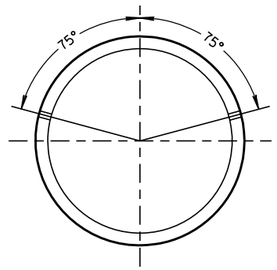
SLEEVE NUTS



LONGITUDINAL SECTION

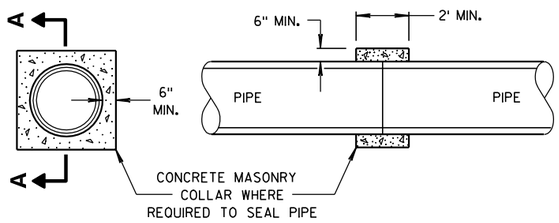
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

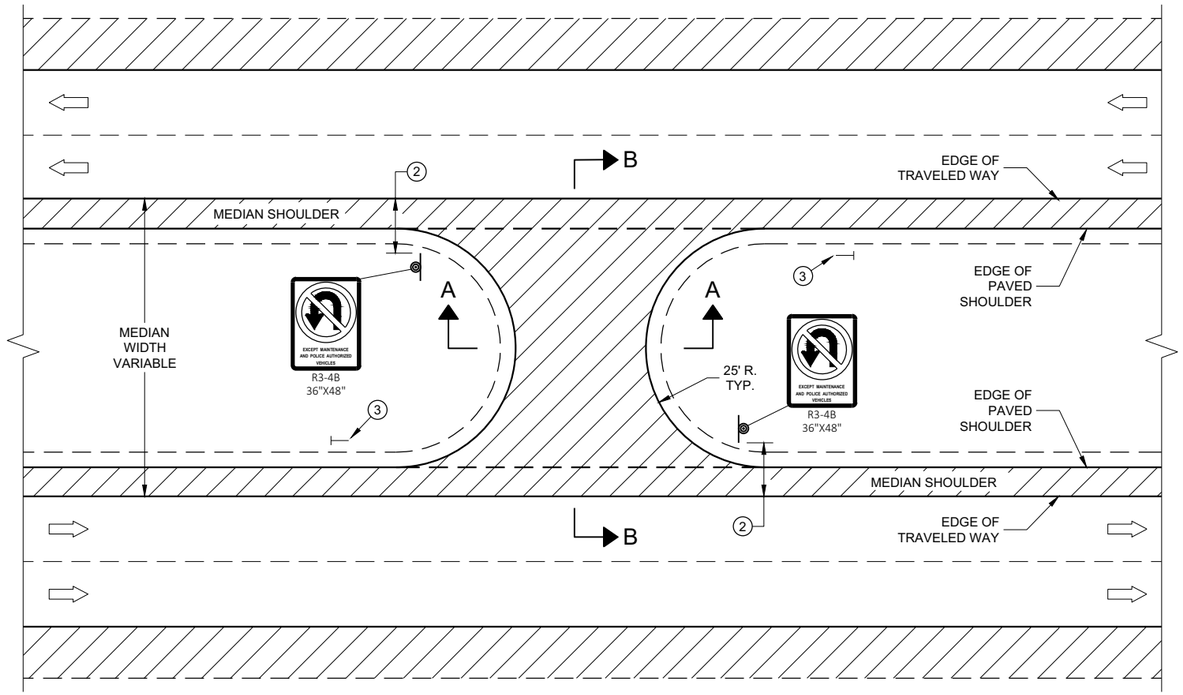
APPROVED
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
147
FHWA

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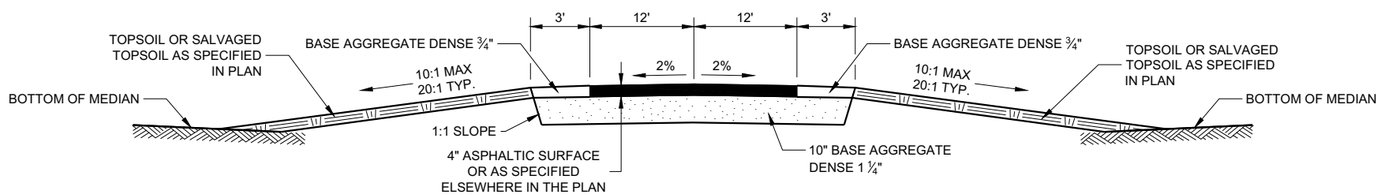
S.D.D. 8 F 4-7

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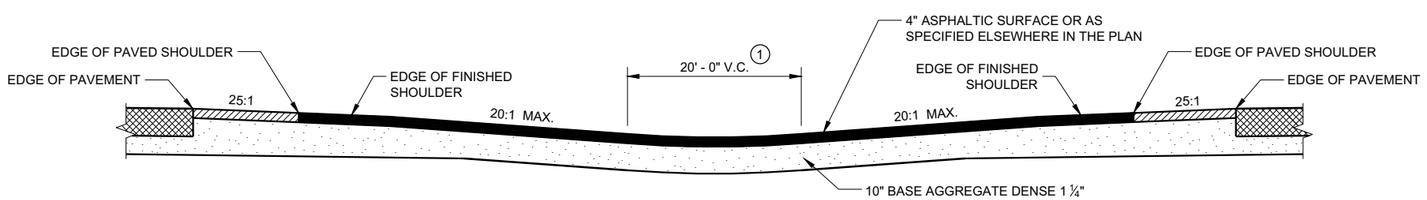
S.D.D. 8 F 4-7



PLAN VIEW



SECTION A-A



SECTION B-B

GENERAL NOTES

1. ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.
2. SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.
3. INSTALL DELINEATOR. SEE STANDARD DETAIL DRAWING 15A4.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR
- DIRECTION OF TRAFFIC

MAINTENANCE CROSSOVER FOR FREEWAYS

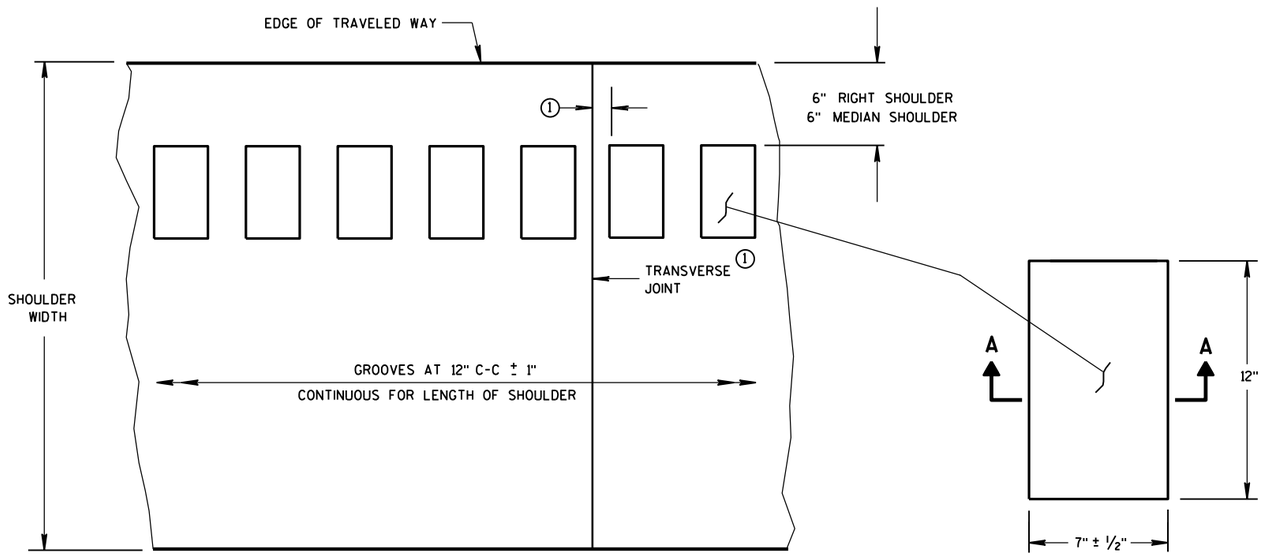
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6
SDD 11A01 - 06



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

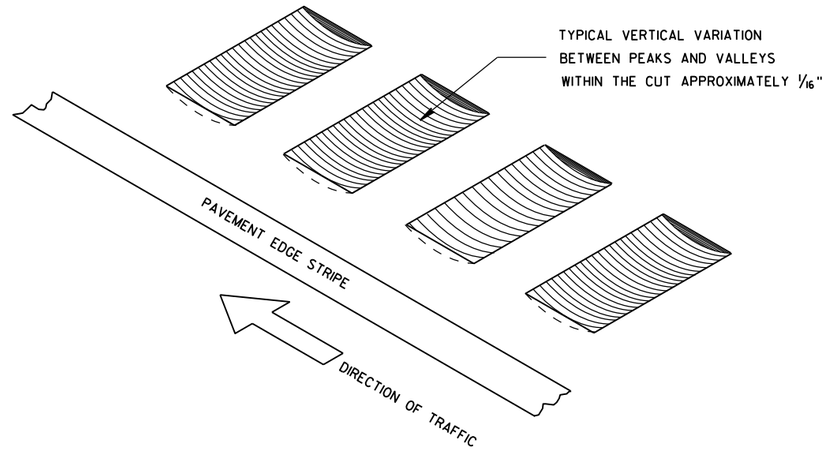
GENERAL NOTES

DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

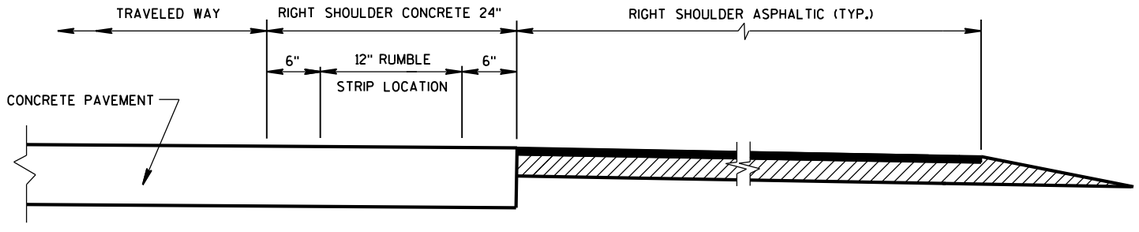
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

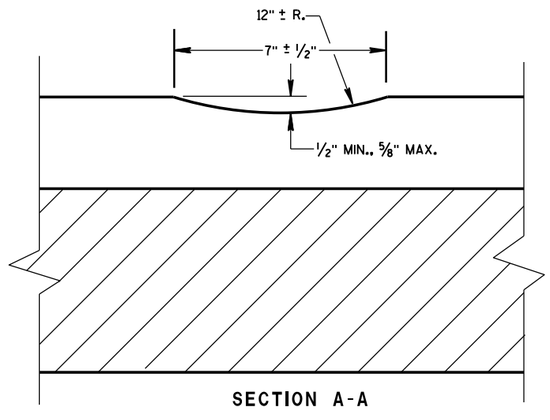
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



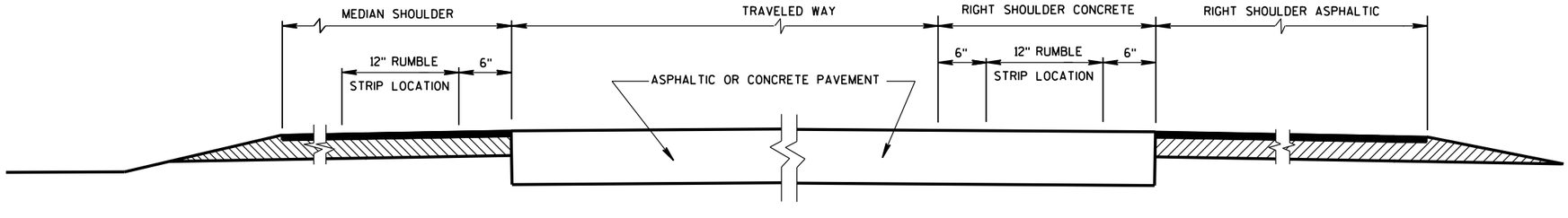
ISOMETRIC



SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION A-A



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)

SHOULDER RUMBLE STRIP, MILLING

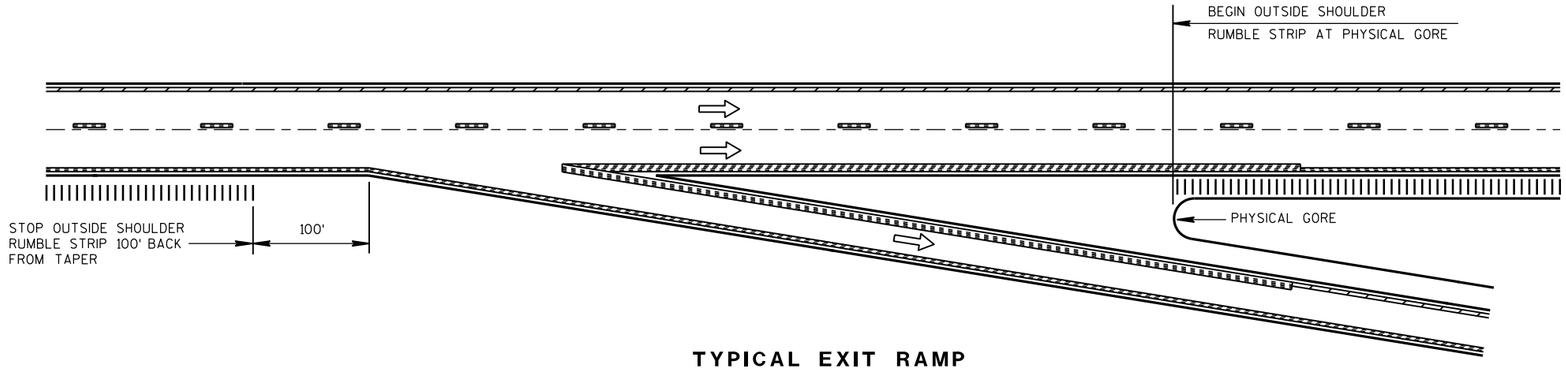
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 13 A 5-5a

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S.D.D. 13 A 5-5a



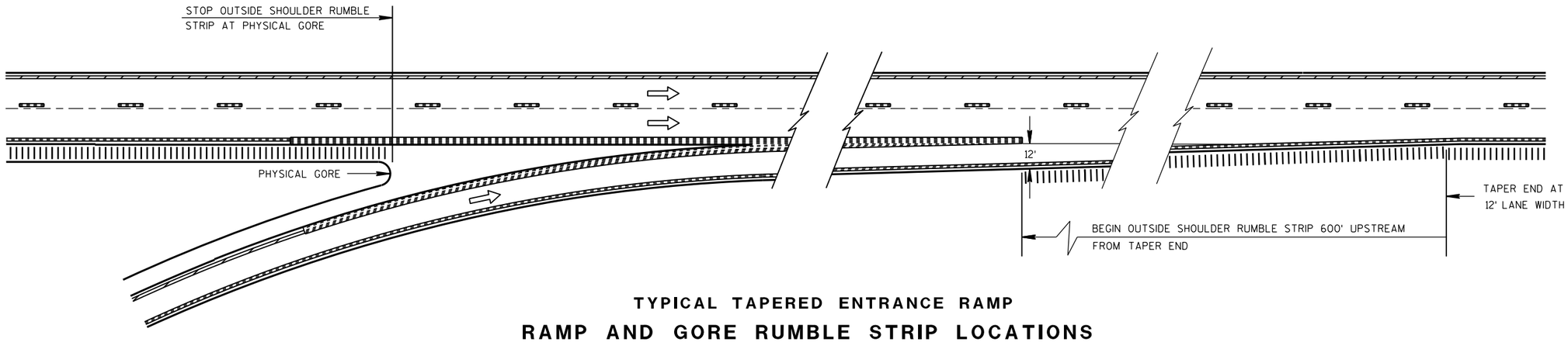
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

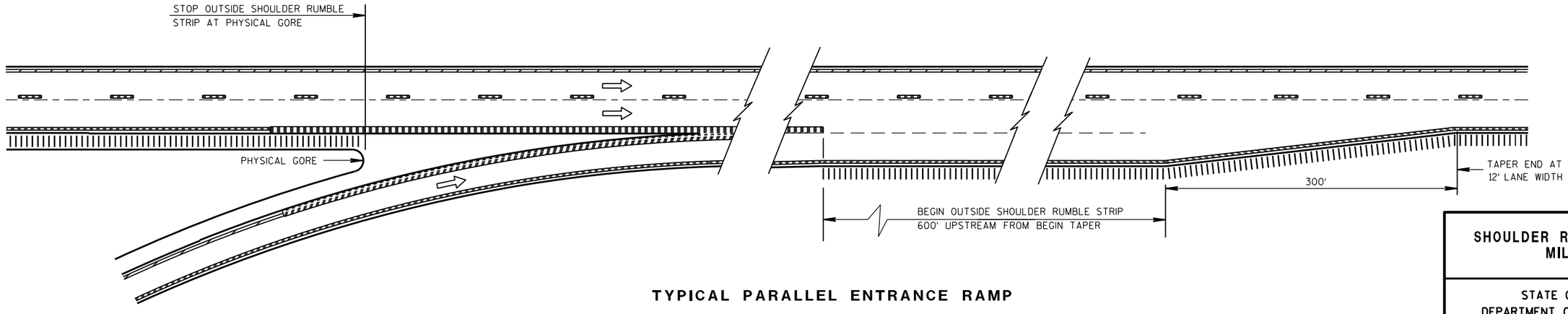
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12/17/2012
DATE

/S/ Jerry H. Zoga
ROADWAY STANDARDS ENGINEER

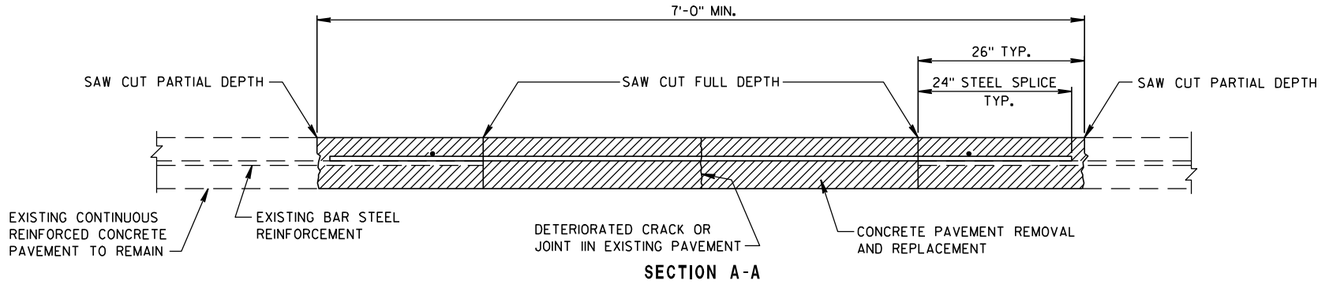
FHWA

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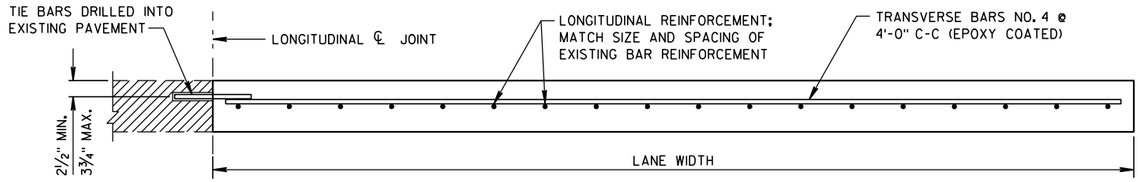
S.D.D. 13 A 5-5b

6

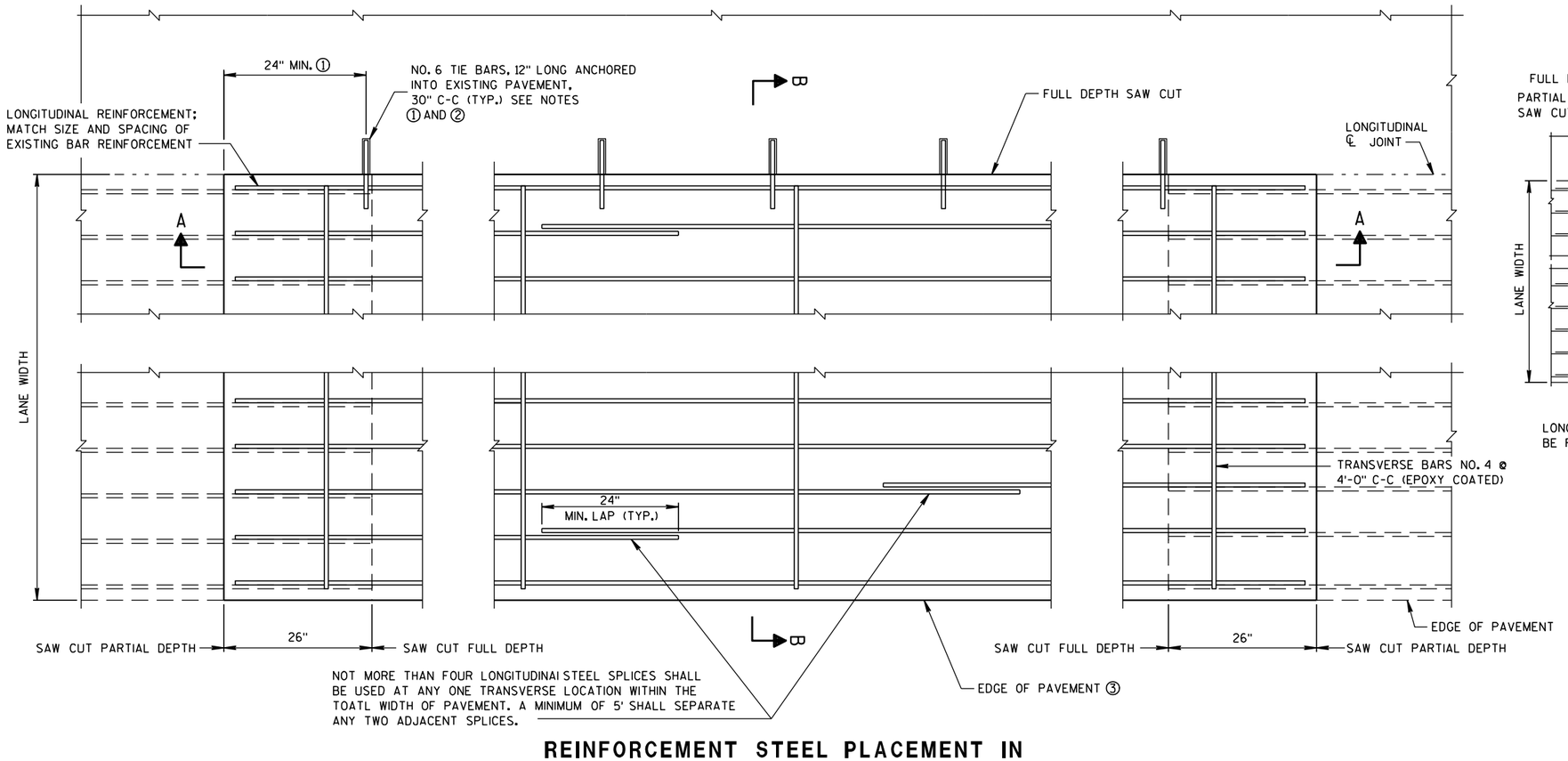
S.D.D. 13 A 5-5b



SECTION A-A



SECTION B-B



NOT MORE THAN FOUR LONGITUDINAI STEEL SPLICES SHALL BE USED AT ANY ONE TRANSVERSE LOCATION WITHIN THE TOATL WIDTH OF PAVEMENT. A MINIMUM OF 5' SHALL SEPARATE ANY TWO ADJACENT SPLICES.

REINFORCEMENT STEEL PLACEMENT IN CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPLACEMENT

GENERAL NOTES

PLACE ALL BAR STEEL REINFORCEMENT AT MID PAVEMENT DEPTH UNLESS OTHERWISE NOTED.

PAY FOR THE TRANSVERSE AND LONGITUDINAL JOINT SAW CUT AS LINEAR FEET OF "SAWING CONCRETE".

WHEN THE PASSING AND TRAVELING LANES ARE TO BE REPLACED, REPLACE THE PASSING LANE FIRST.

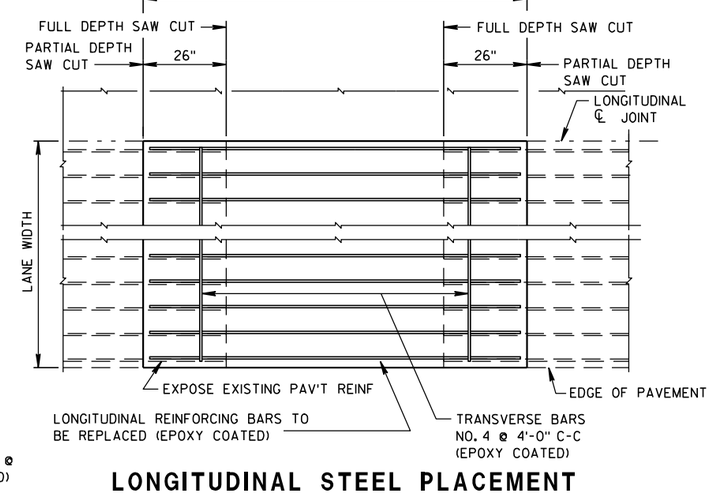
ADD TRANSVERSE STEEL BARS TO REPAIRS GREATER THAN 6'IN LENGTH, USE NO. 4 BARS PLACED TRANSVERSELY AND SPACED 4'C-C. PAYMENT SHALL BE INCIDENTAL TO "CONCRETE PAVEMENT CONTINUOUS REINFORCEMENT".

TIE ALL CONCRETE PAVEMENT REPAIRS WHICH ARE GREATER THAN 15'IN LENGTH, AND ARE ADJACENT TO EXISING CONCRETE PAVEMENT, TO THE EXISTING PAVEMENT USING TIE BARS. DETAILS FOR TIE BAR CONSTRUCTION SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND STANDARD DETAIL DRAWINGS.

① PROVIDE A MINIMUM DISTANCE OF 24 INCHES FROM AN EXISTING TRANSVERSE JOINT OR THE EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

② ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

③ SAW CUT THE LONGITUDINAL EDGE JOINT IF THE ADJACENT SHOULDER IS CONCRETE.



LONGITUDINAL STEEL PLACEMENT IN CRCP REPAIRS

PLAN VIEW

CONTINUOUSLY REINFORCED CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

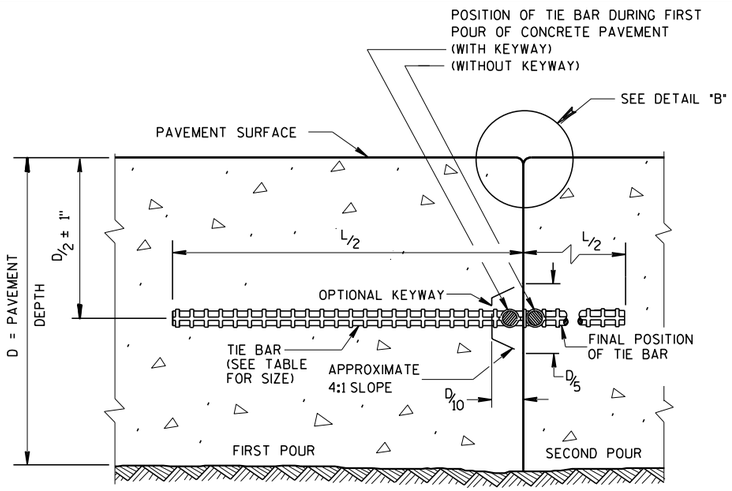
11/1/2011 — DATE

/S/ Deb Bischoff — PAVEMENT POLICY & DE NEER

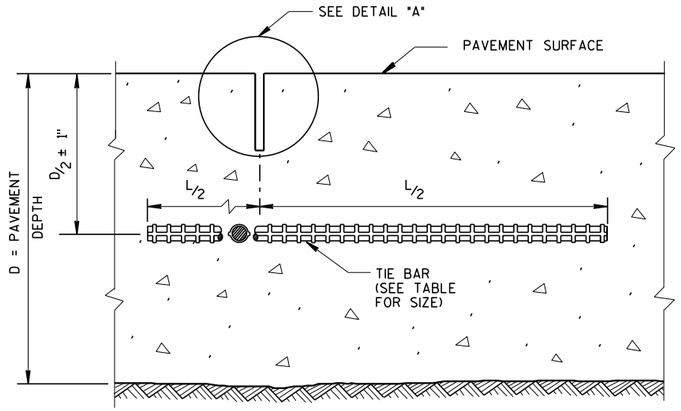
FHWA

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S.D.D. 13 A 7-2



CONSTRUCTION JOINT



SAWED JOINT

GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

PLAN VIEW

SECTION A-A

LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

DETAIL "A"

DETAIL "B"

DETAIL "C"

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
/S/ Peter Kemp PE
PAVEMENT SUPE
FHWA

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S.D.D. 13 C 1-19

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S.D.D. 13 C 1-19

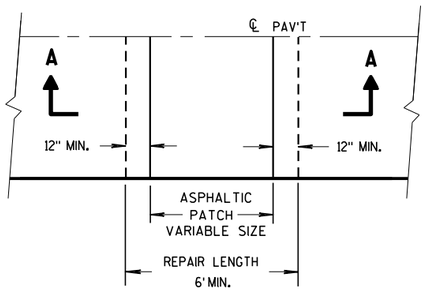
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

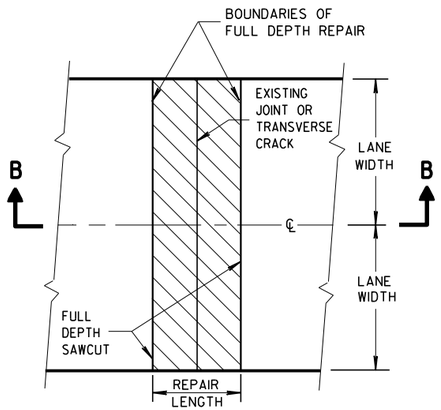
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

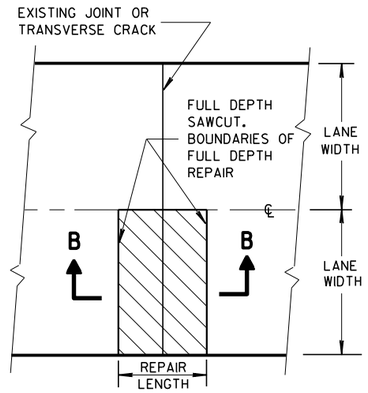
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

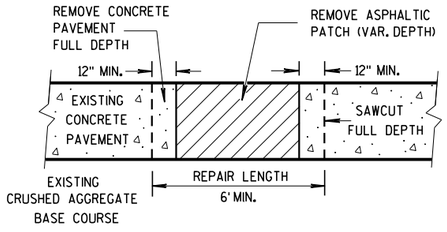


PLAN VIEW
(DOUBLE LANE REPAIR)



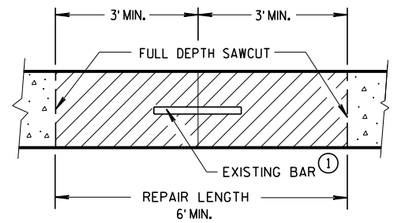
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

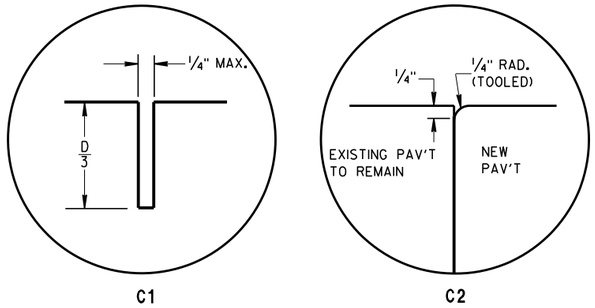
CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 13 C 9-15a



C1 C2

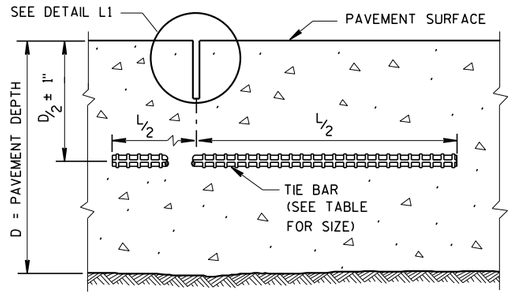
TRANSVERSE JOINTS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

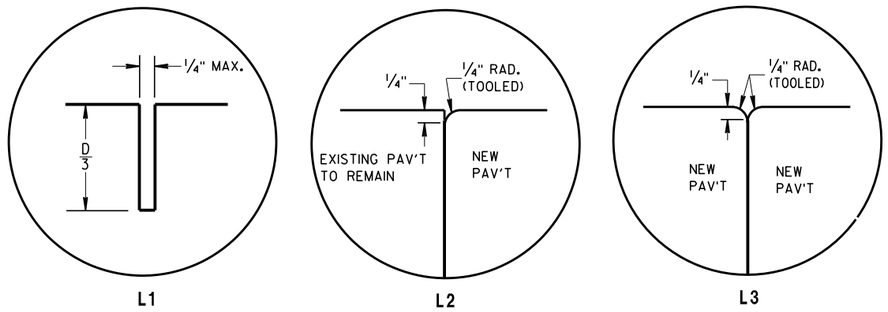
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

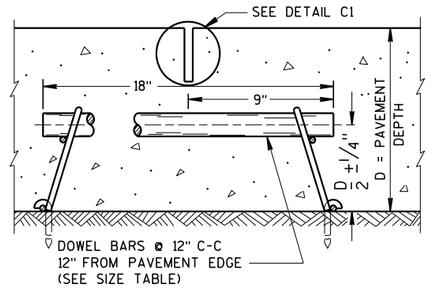
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



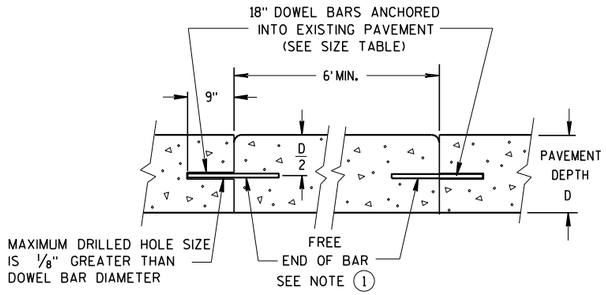
L1 L2 L3

LONGITUDINAL JOINTS

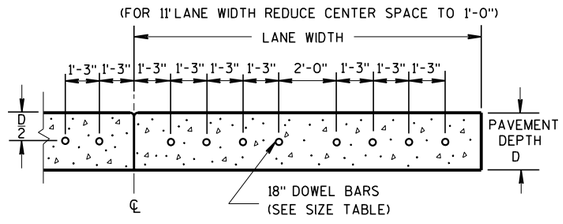


SECTION F-F

CONTRACTION JOINT



SECTION D-D

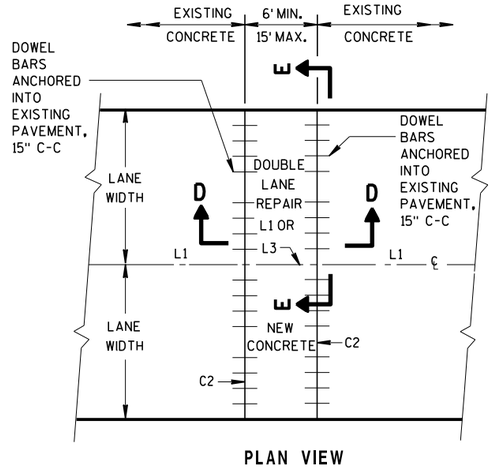


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

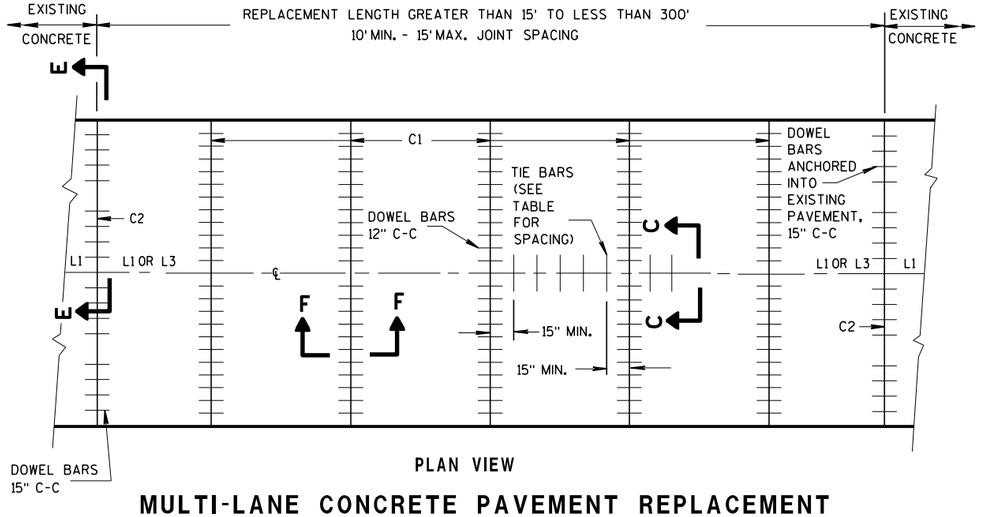
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW

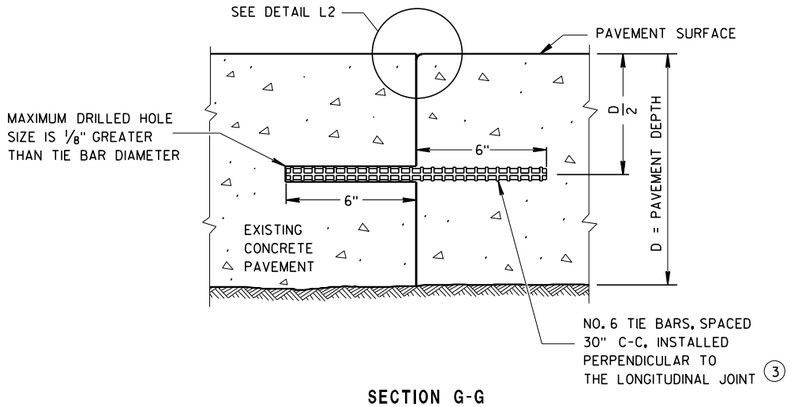
MULTI-LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT



SECTION G-G

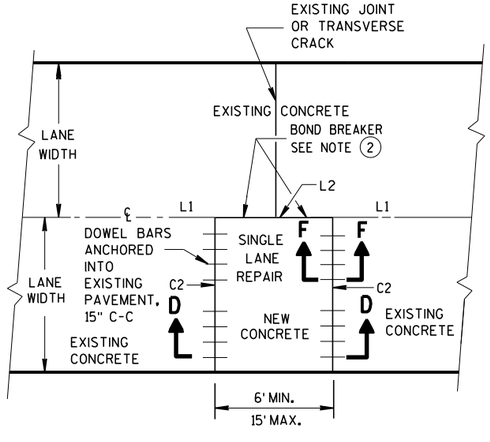
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

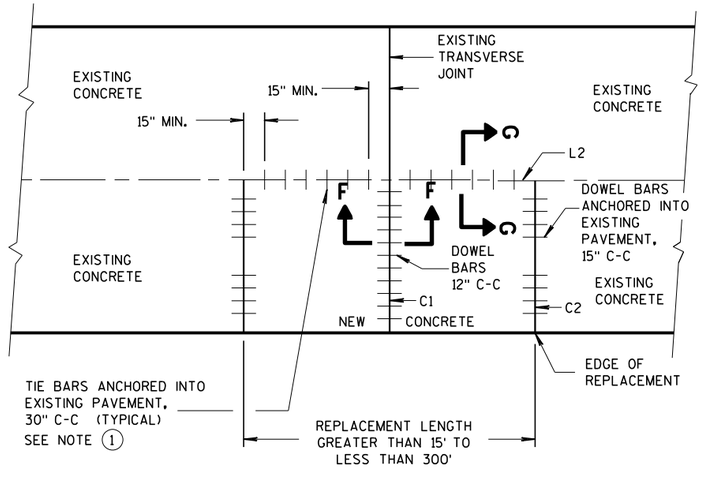
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

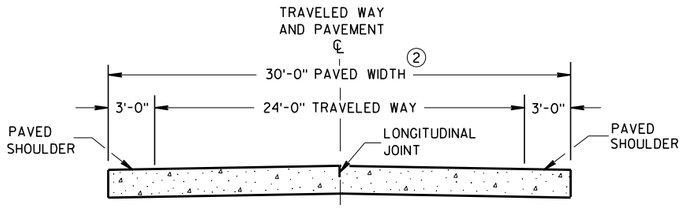
SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

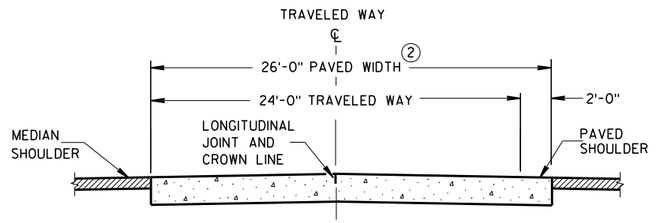
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Ken... — PAVEMENT SUPE...
FHWA

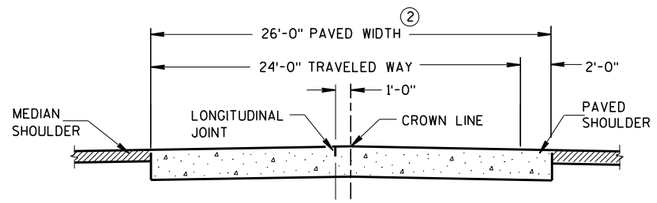
6
S.D.D. 13 C 9-15c



SECTION A-A
TWO-LANE TWO-WAY HIGHWAY ①



SECTION B-B



ALTERNATIVE SECTION B-B
①
DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

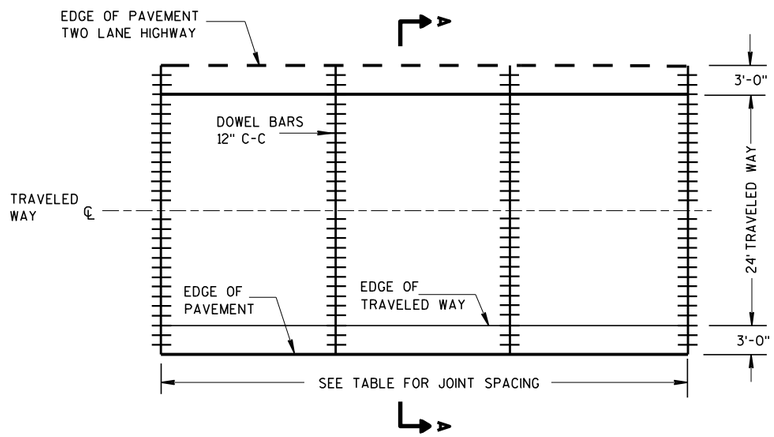
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

① REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

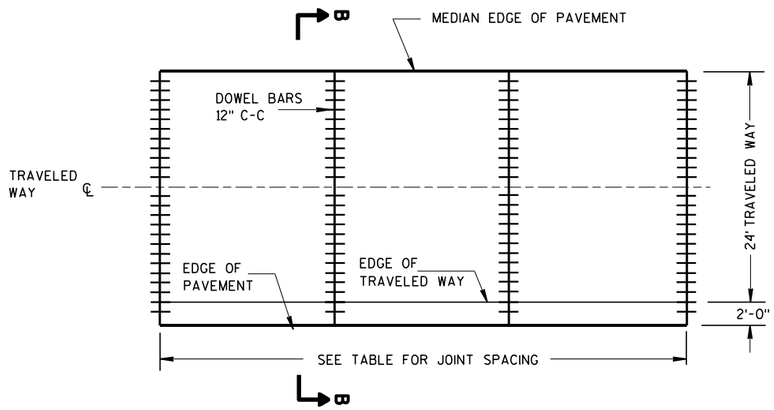
② MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

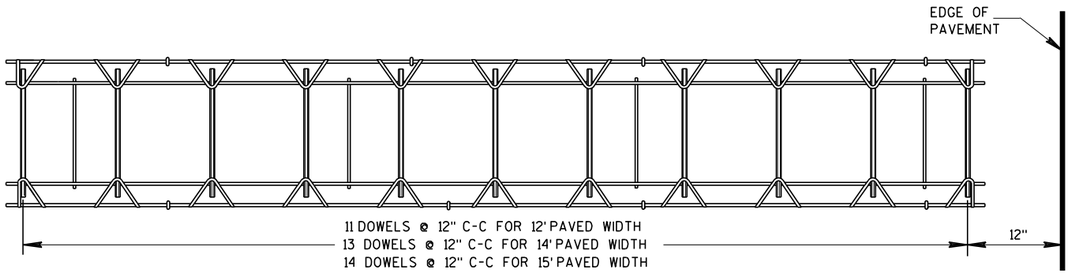
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

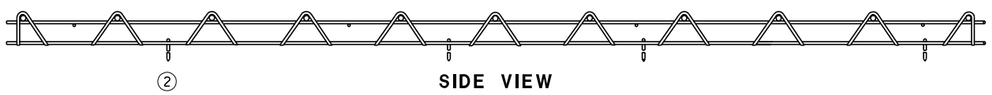
S.D.D. 13 C 11-12a

6

S.D.D. 13 C 11-12a



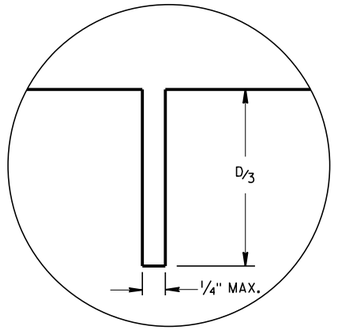
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

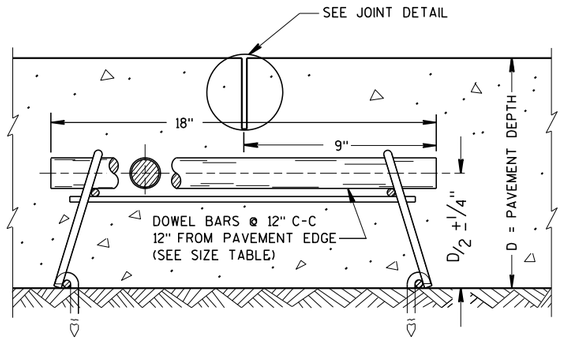
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

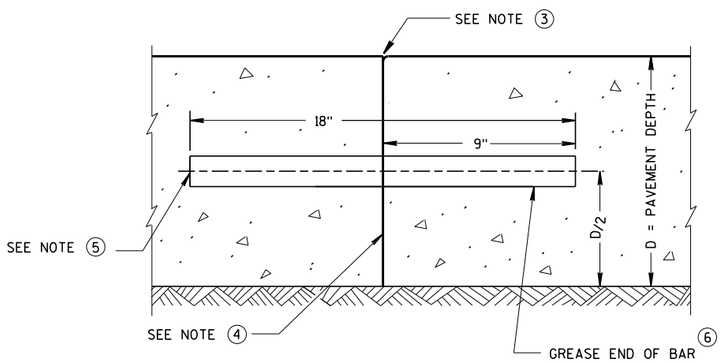
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

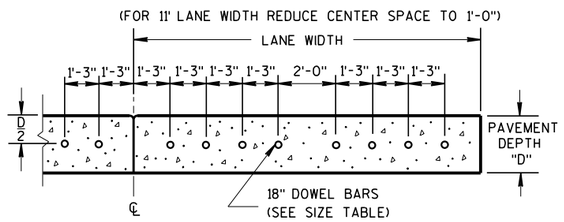
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT

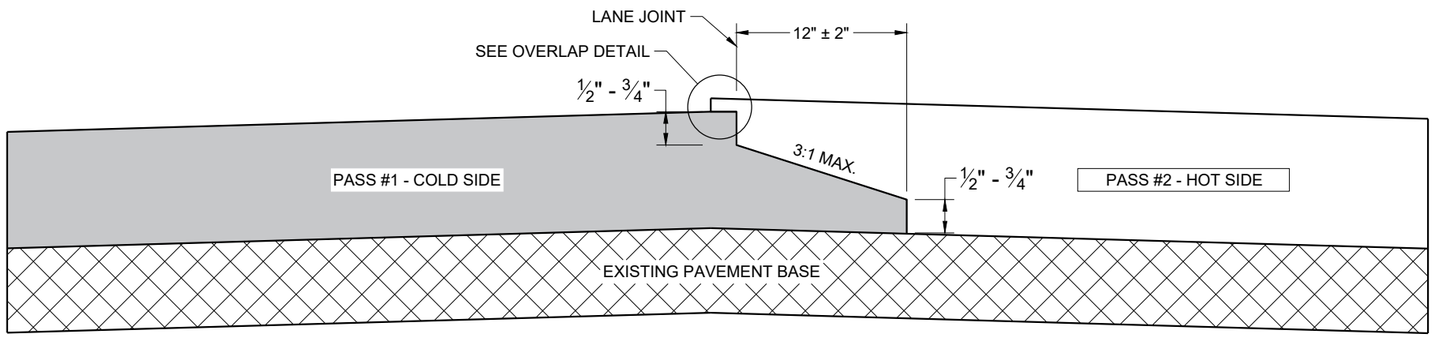


DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

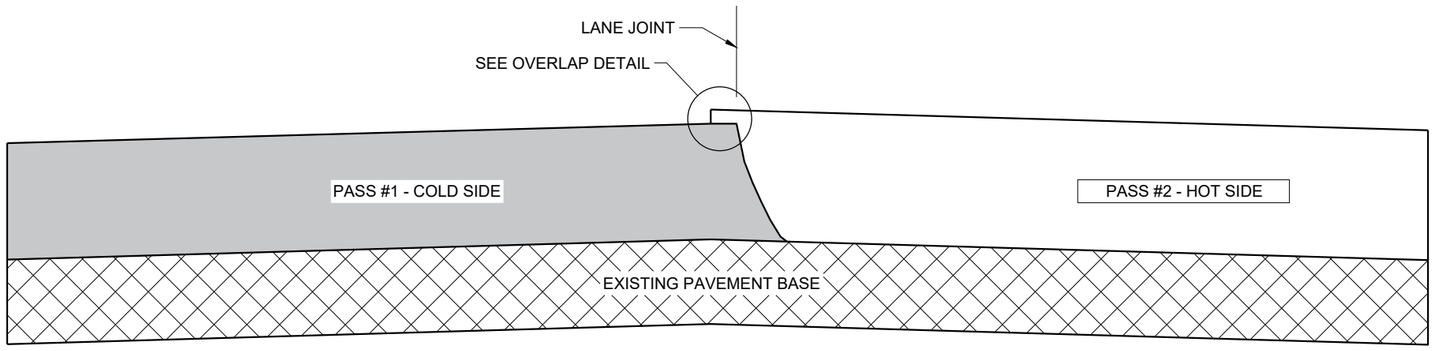
RURAL DOWELED CONCRETE PAVEMENT	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2018 DATE	/S/ Peter Kemp P.E. PAVEMENT SUP
FHWA	

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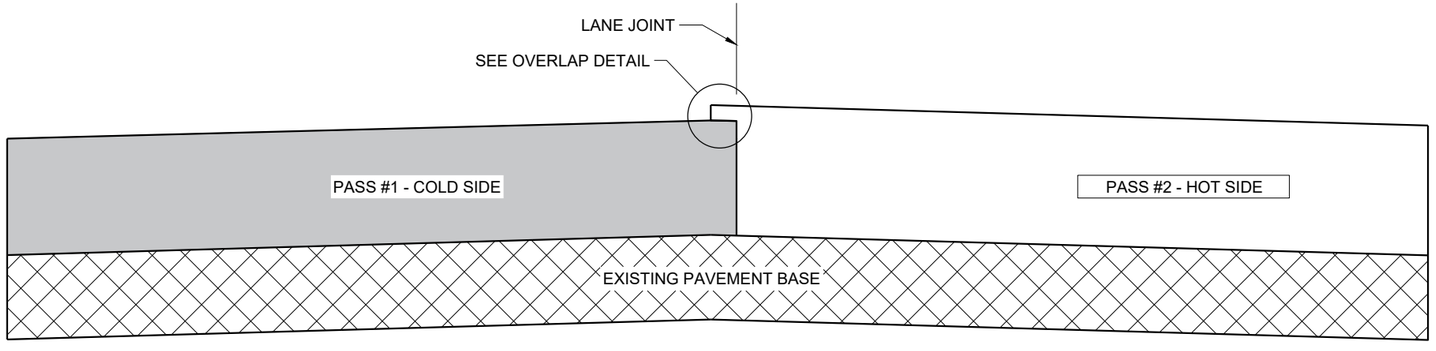
S.D.D. 13 C 11-12b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

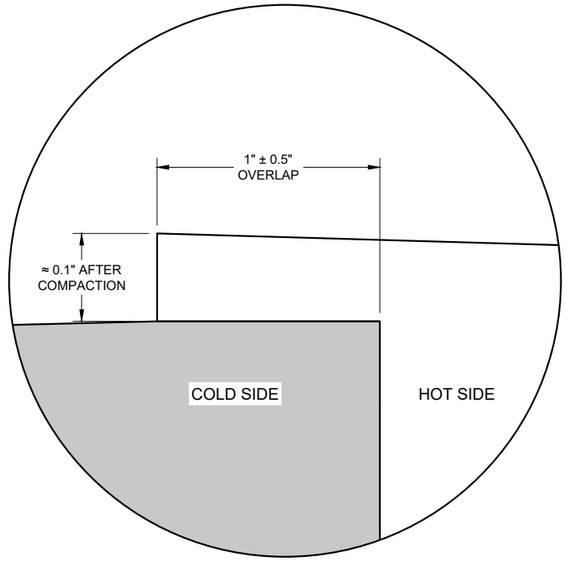
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

GENERAL NOTES

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

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

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

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

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

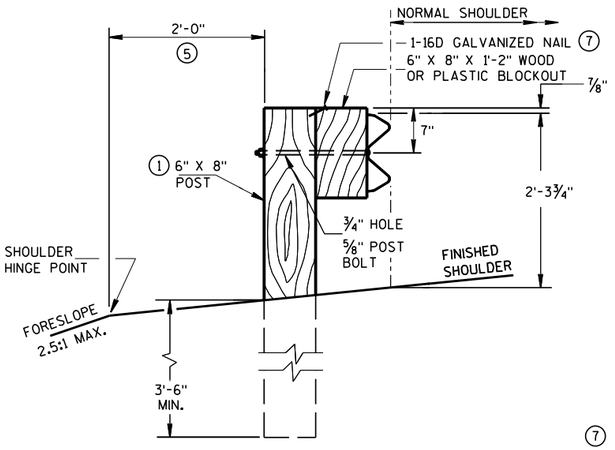
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

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

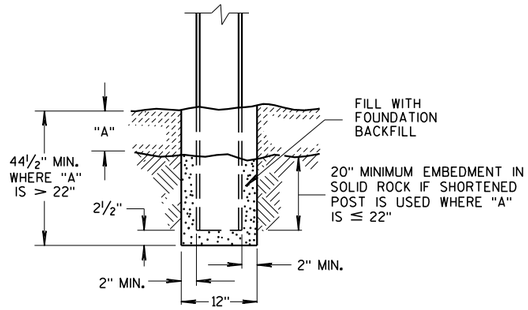
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

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

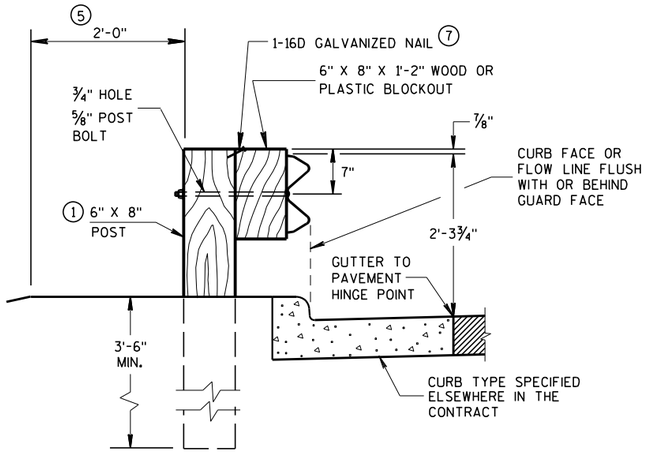
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



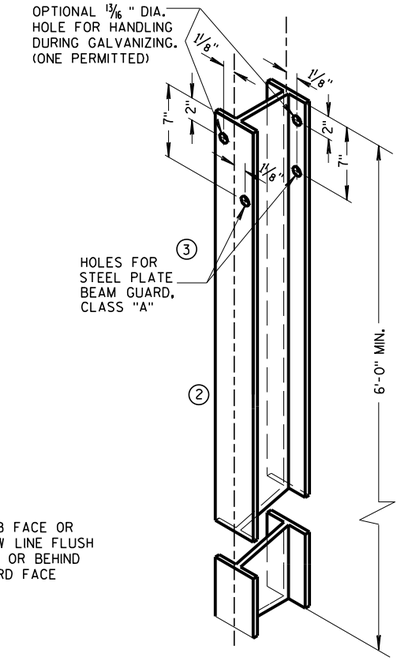
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



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

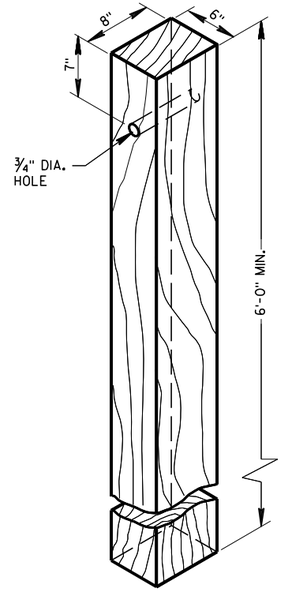


END VIEW
LOCATED ALONG A CURBED ROADWAY

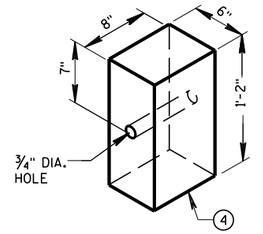


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) ①

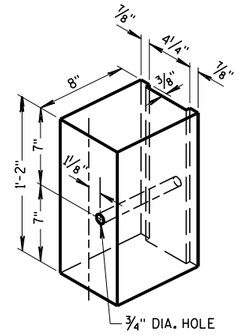
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



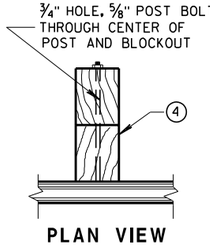
WOOD POST
(6"X8") NOMINAL



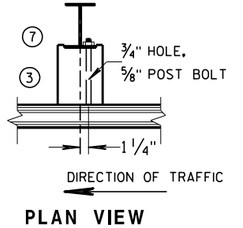
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



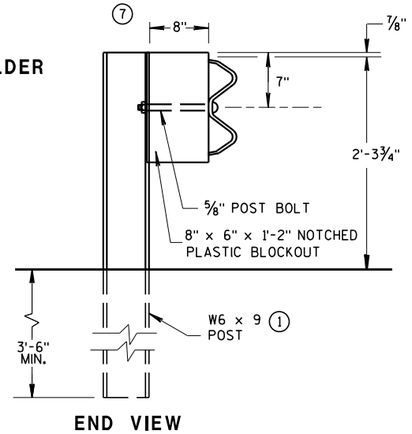
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



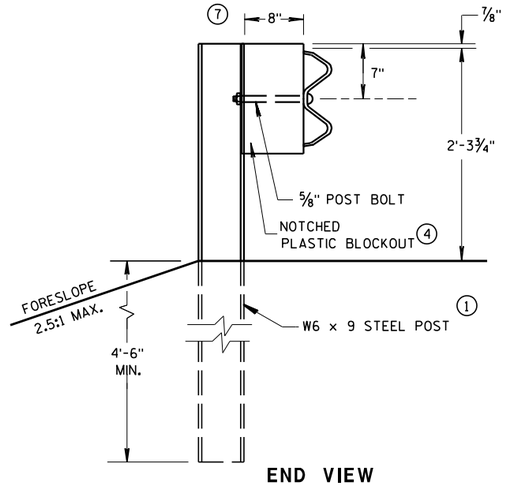
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



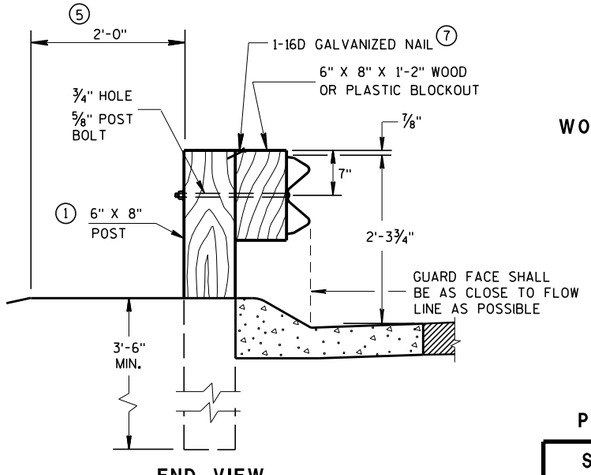
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



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



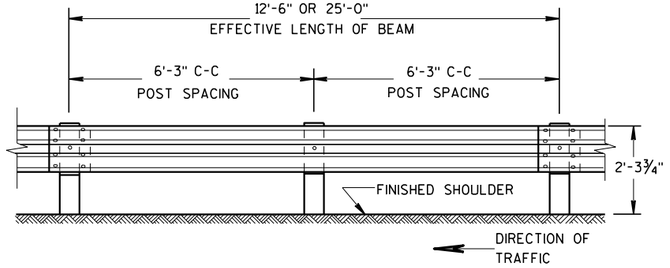
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

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

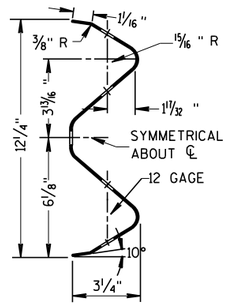
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

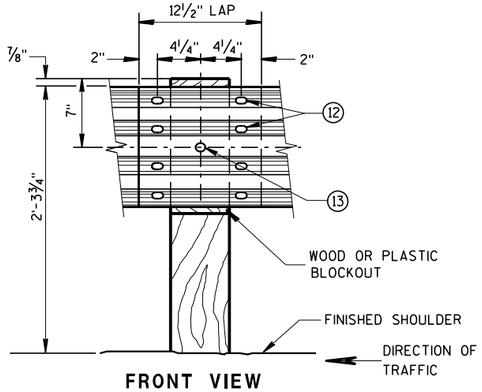


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

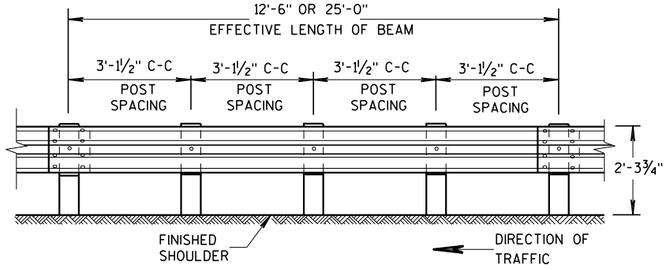
GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

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

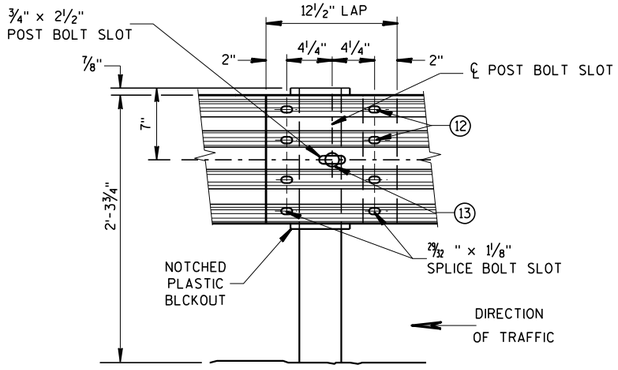
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

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



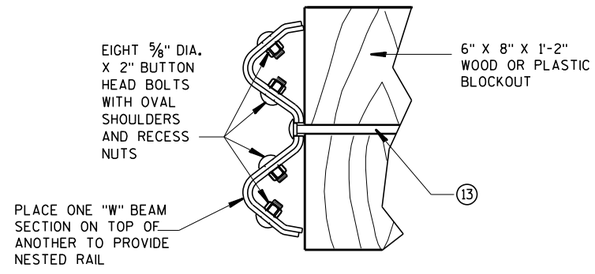
FRONT VIEW

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



FRONT VIEW

BEAM SPLICE AT STEEL POST

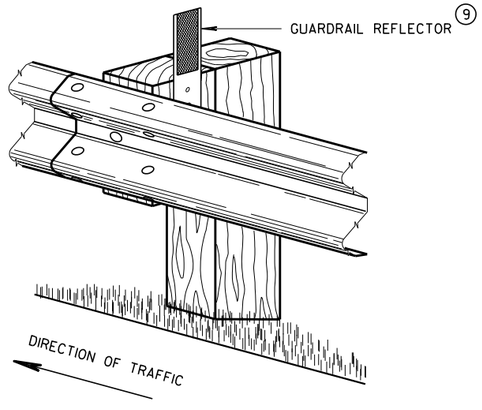


NESTED W BEAM (NW)

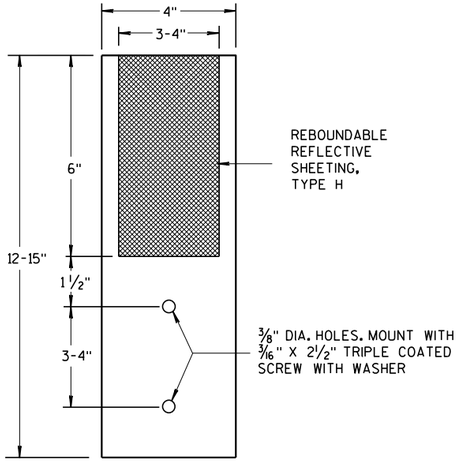
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD

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



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



4"x 12" GUARDRAIL REFLECTOR

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

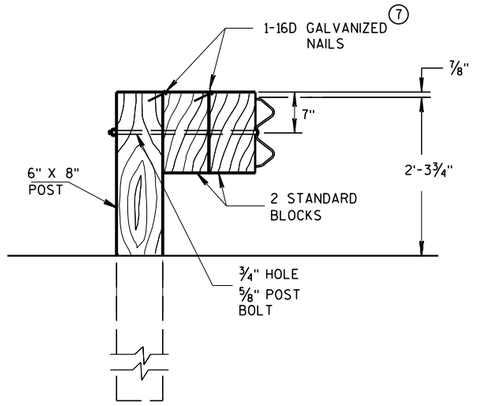
STATE OF WISCO 160
DEPARTMENT OF TRANSPORTATION

6

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

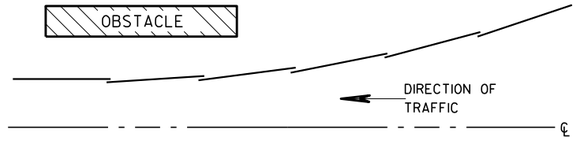
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S.D.D. 14 B 15-11b

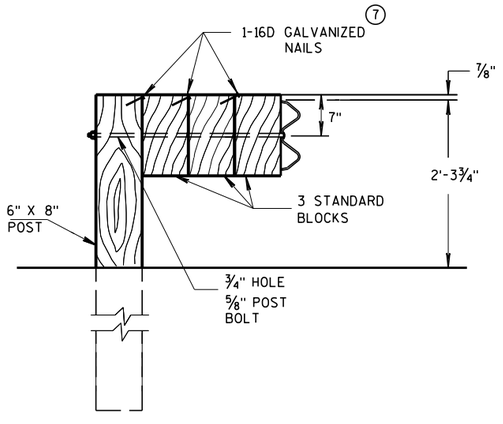


DETAIL FOR DOUBLE BLOCKS

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

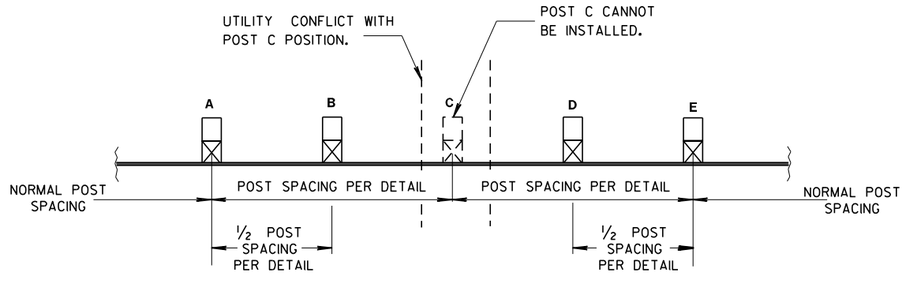


PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS

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



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

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

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

BILL OF MATERIALS

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

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

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

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

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

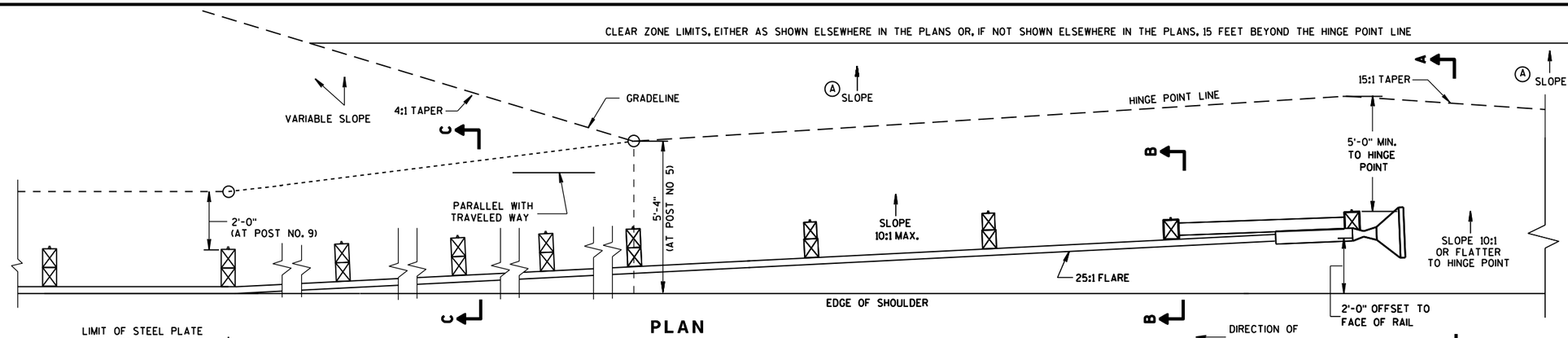
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

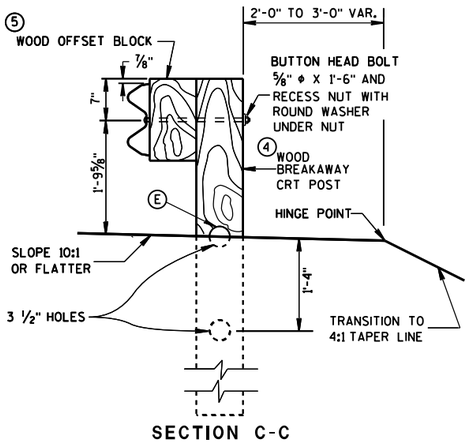
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

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

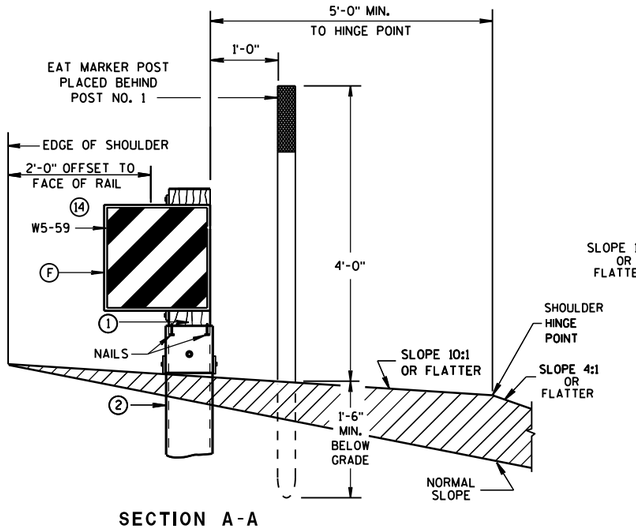
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

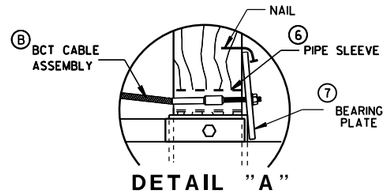




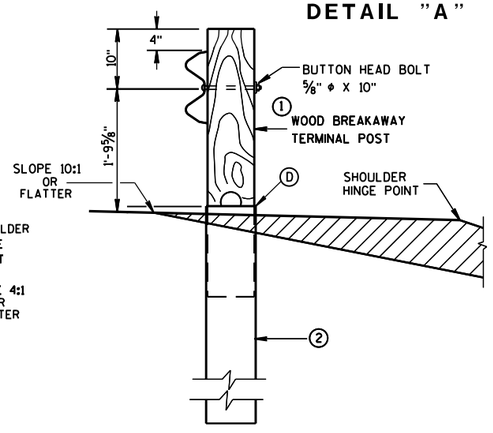
SECTION C-C
TYPICAL AT POST NOS. 6, 8



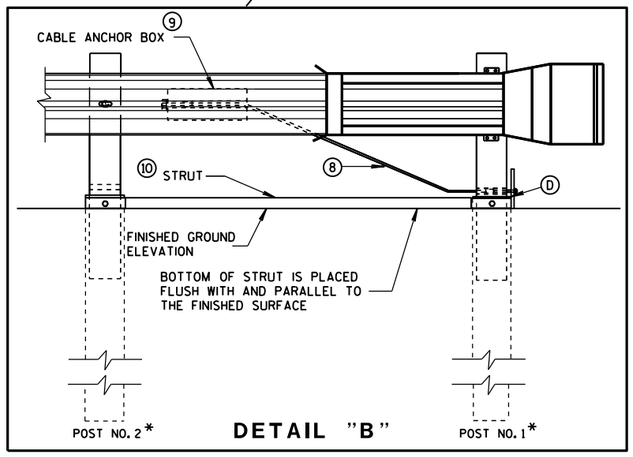
SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



SECTION B-B
TYPICAL AT POST NO. 2*



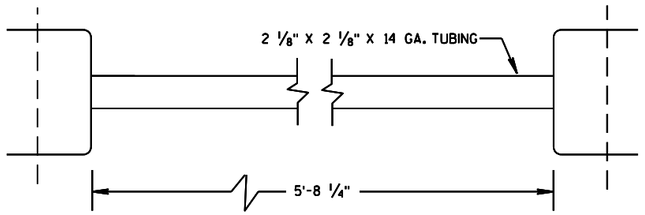
DETAIL "B"

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

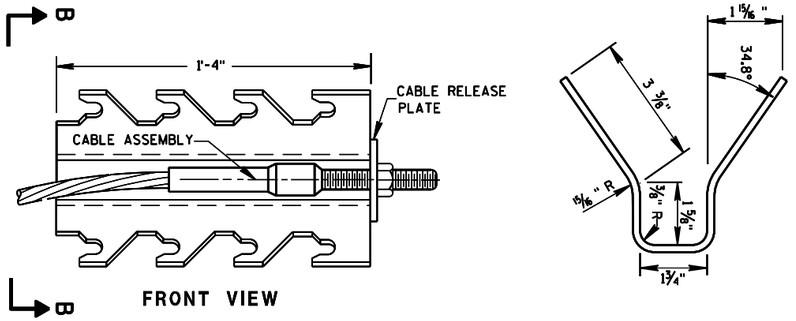
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

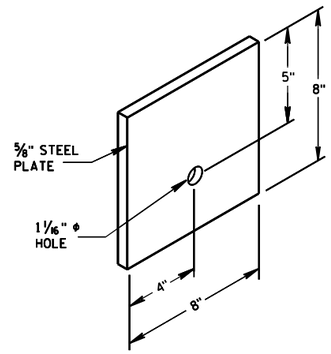
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL



⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

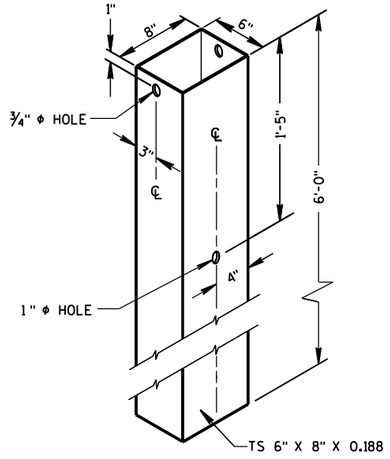
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S.D.D. 14 B 24-9b

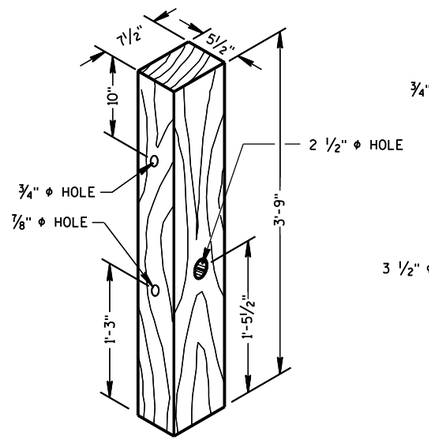
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

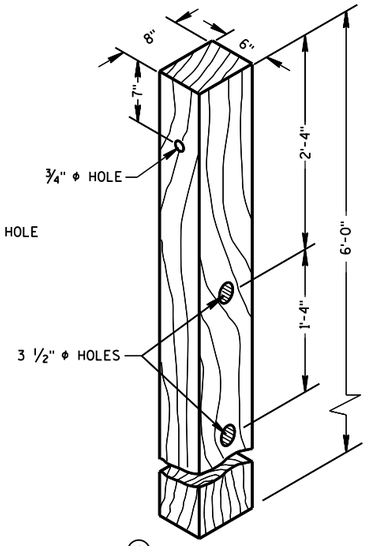
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

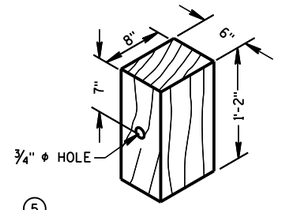


④ CRT POST
(POSTS NO'S 5-8

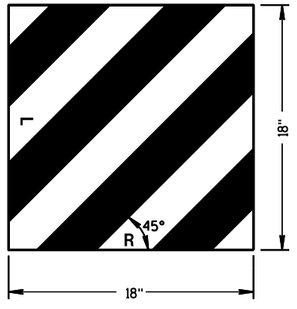
WOOD BREAKAWAY POSTS

GENERAL NOTES

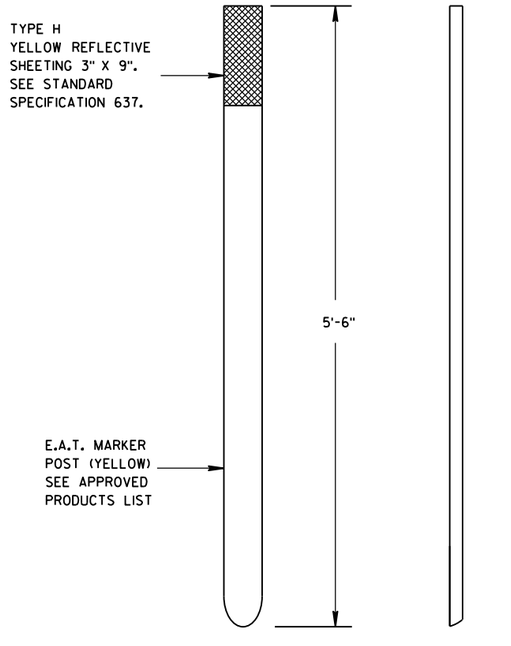
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH,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



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



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

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

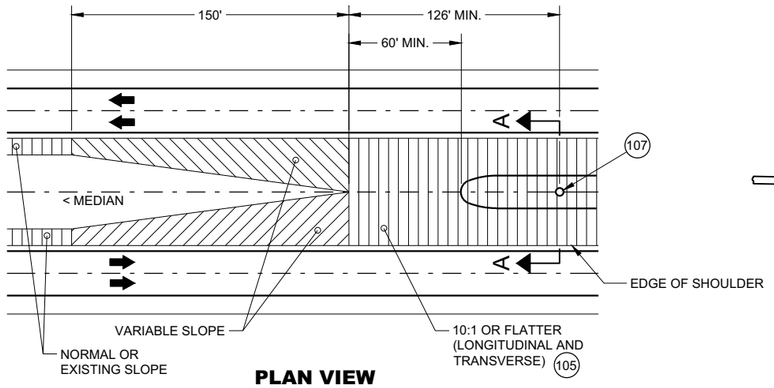
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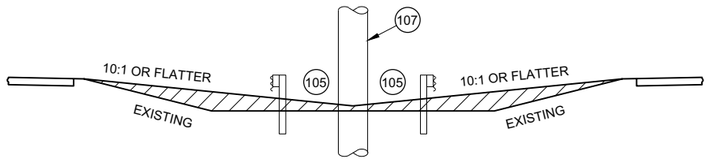
S.D.D. 14 B 24-9c

6

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



PLAN VIEW
GRADING AT BULLNOSE
(ALL INSTALLATIONS)



SECTION A -A
MEDIAN GRADING
(ALL INSTALLATIONS)

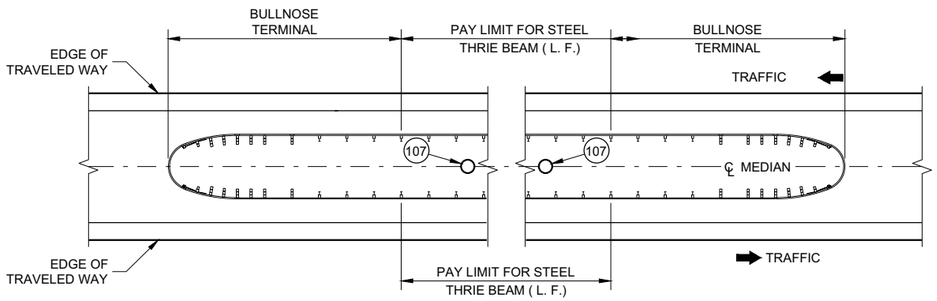
GENERAL NOTES

THRIE BEAM RAILS MAY NEED TO BE FIELD BENT TO FIT THE LOCATION.

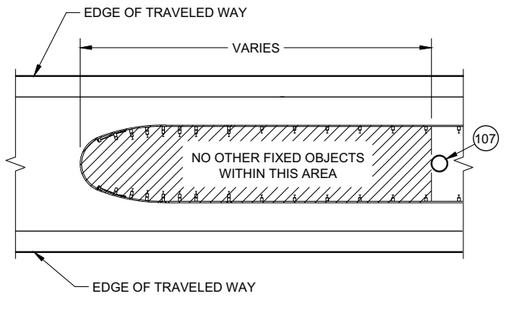
SEE STANDARD DETAIL DRAWINGS 14B26 SHEETS a-h.

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½". MINIMUM DIAMETER OF THE ROCK REMOVAL IS 12" DIAMETER

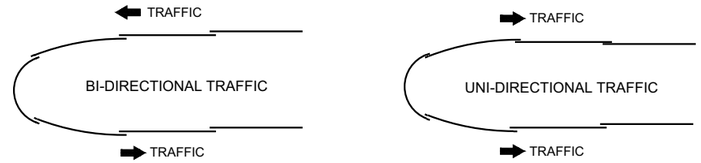
- E1 UNBENT STANDARD THRIE BEAM RAIL B1 (POST 8 TO POST 10 AND POST 10 TO POST 12)
- E2 SLOTTED THRIE BEAM RAIL E1 (POST 1 TO POST 1)
- E3 SLOTTED THRIE BEAM RAIL B3 (POST 5 TO POST 8)
- E4 SLOTTED THRIE BEAM RAIL E4 (POST 1 TO POST 5)
- 5 BEYOND POST 12: CONSTRUCT STEEL THRIE BEAM - USE UNBENT STANDARD THRIE BEAM RAIL NO. 5.
- (100) DIMENSIONS ARE FROM BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO POST OR BLOCK.
- (101) U-BOLT CABLE CLIPS (3 PER CABLE) SPACED OUT ON NOSE, TO HOLD CABLE TO BACKSIDE OF THE RAIL.
- (102) NOSE CABLE WITH SWAGGED END BUTTONS.
- (103) NOSE CABLE ANCHOR PLATE (BACKSIDE OF SPLICE).
- (104) THE SLACK IN THE NOSE CABLES SHALL BE EVENLY DISTRIBUTED BETWEEN THE CABLE CLIP FASTENERS AND POST NO. 1 ON EITHER SIDE OF THE NOSE.
- (105) MINIMUM WORKING WIDTH 4' - 2".
- (106) MAX. WIDTH OF SYSTEM IS 14' - 2 ½" MEASURED FROM THE BACK OF RAIL TO BACK OF RAIL WHERE RAIL IS BOLTED TO A POST OR BLOCK.
- (107) FIXED OBJECT OR OTHER HAZARD.
- (108) PLAN IS TO PROVIDE STATION OFFSET TO CENTER OF POST 5 IN PLANS.



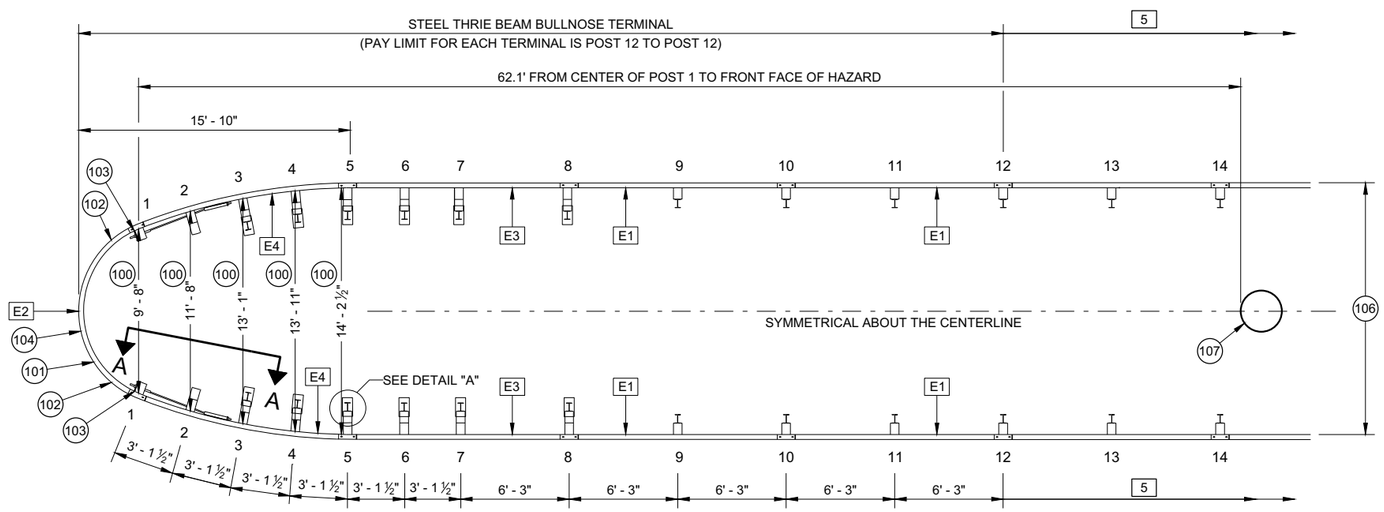
MEDIAN HAZARD PROTECTION PAY LIMITS



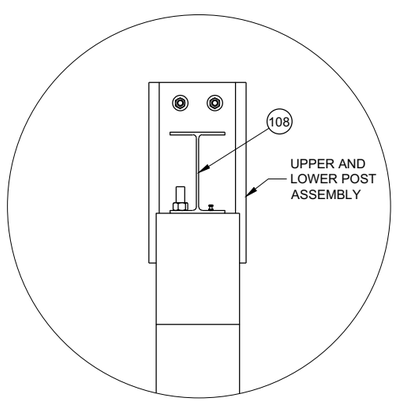
HAZARD FREE AREA
INSIDE BULLNOSE



LAPPING DETAIL



PLAN VIEW
TYPICAL BULLNOSE LAYOUT



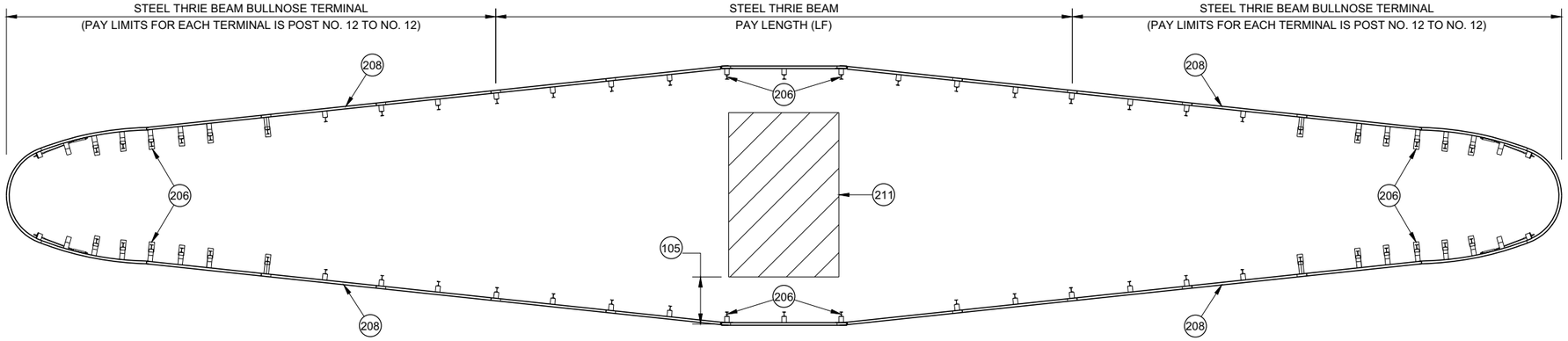
DETAIL "A"

STEEL THRIE BEAM
BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B26 - 04a

SDD 14B26 - 04a



VARIABLE WIDTH BULLNOSE

GENERAL NOTES

200 6' - 3" ASYMMETRICAL 10-GAUGE W-BEAM TO THRIE BEAM GUARD TRANSITION. SEE SDD 14B45 FOR MORE INFORMATION.

201 W-BEAM RAIL. SEE SDD 14B42 FOR MORE INFORMATION.

202 SEE POST NO. 9 AND ALL STEEL THRIE BEAM POST BEYOND DETAIL.

203 SEE SDD 14B42 FOR INSTALLATION INFORMATION.

204 SEE SDD 14B45 FOR INSTALLATION DETAILS. REPLACE ASYMMETRICAL W-BEAM TO THRIE BEAM TRANSITION AND W-BEAM RAIL WITH E1. PAY FOR MODIFIED THRIE BEAM TRANSITION.

205 CONCRETE BARRIER OR BRIDGE RAIL.

206 SEE PLAN FOR STATION AND OFFSET TO CENTER OF POST.

207 SEE PLAN FOR STATION AND OFFSET TO CENTER OF SPLICE.

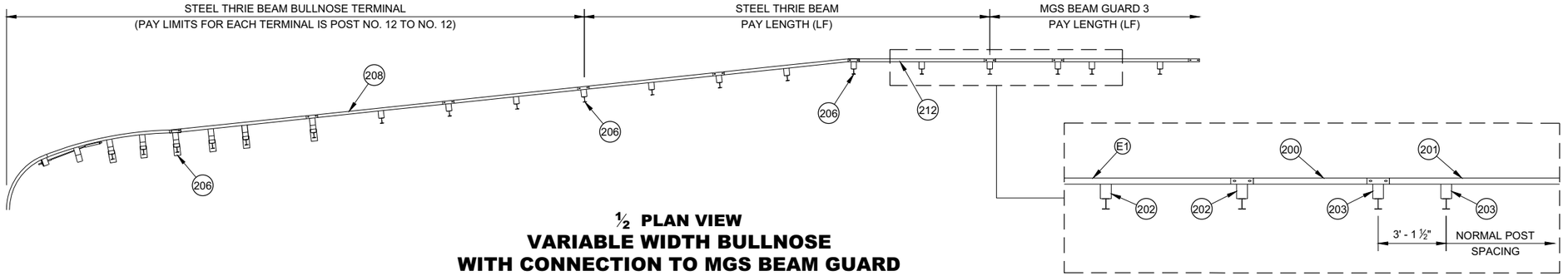
208 SEE PLAN FOR FLARE RATE.

209 A MINIMUM OF 25 FT OF THRIE BEAM TANGENT BEFORE TRANSITIONING TO BEAM GUARD OR THRIE BEAM TRANSITION.

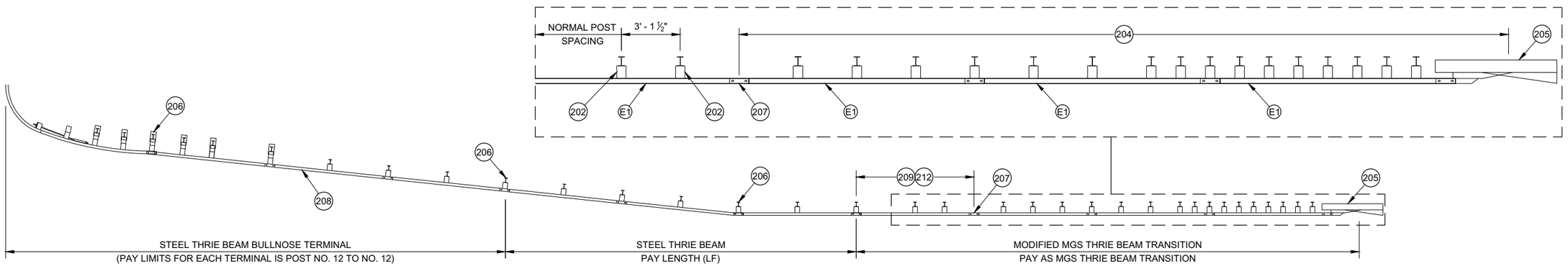
210 NOT ALL BULLNOSE HARDWARE SHOWN. SEE OTHER SHEETS IN 14B26.

211 WIDER HAZARD TO BE SHIELDED.

212 TRANSITION RAIL HEIGHT TO 31" OVER THE LENGTH OF A 12' - 6" BEAM SECTION.



½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO MGS BEAM GUARD



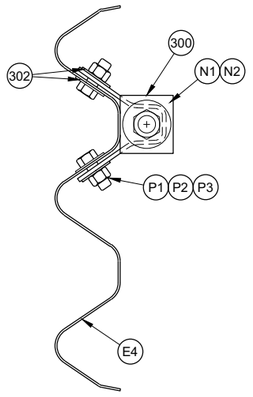
½ PLAN VIEW
VARIABLE WIDTH BULLNOSE
WITH CONNECTION TO RIGID BARRIER

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

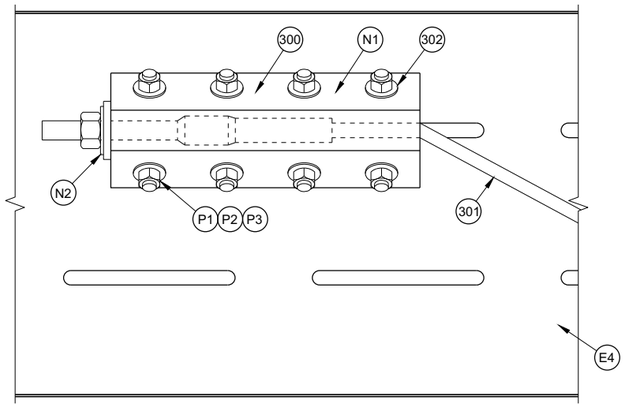
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SDD 14B26 - 04b

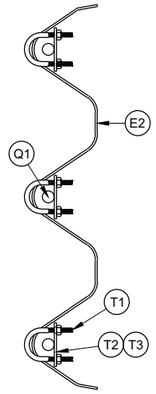


PROFILE VIEW

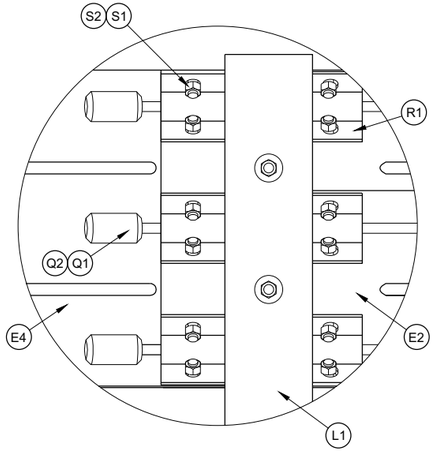
CABLE ANCHOR ASSEMBLY CONNECTION



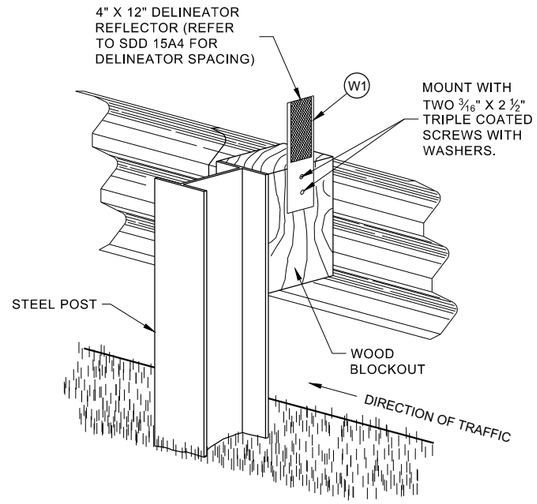
CABLE ANCHOR ASSEMBLY



NOSE CABLE RETAINING CLIP



DETAIL "A"



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

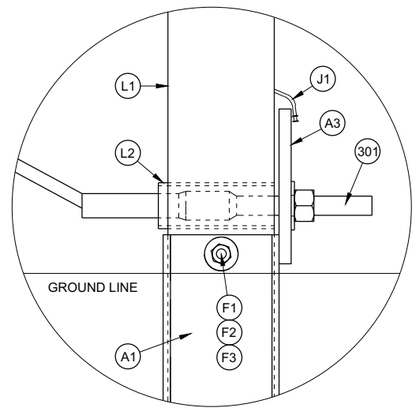
POST 8

POST 3

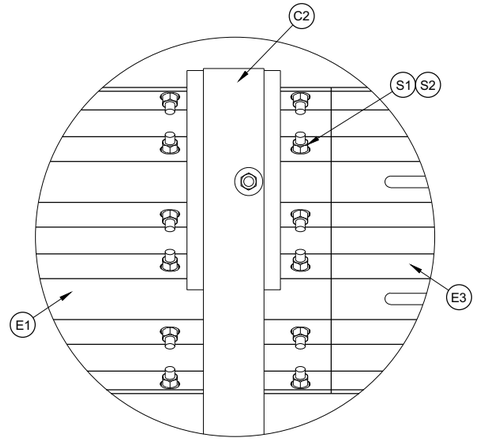
POST 2

POST 1

CROSS SECTION A - A



DETAIL "B"



DETAIL "C" THRIE BEAM SPLICE

GENERAL NOTES

(300) SEE ANCHOR BRACKET ASSEMBLY DETAIL.

(301) SEE ANCHOR CABLE ASSEMBLY DETAIL

(302) ONE WASHER BETWEEN BOLT HEAD AND RAIL AND BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

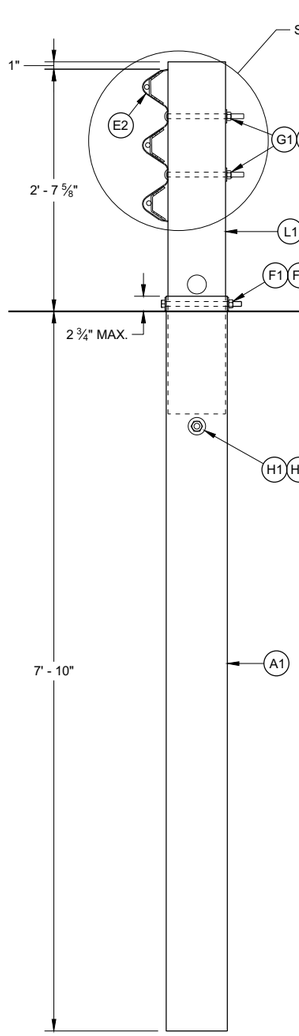
(303) ONE WASHER BETWEEN BOLD HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

STEEL THRIE BEAM BULLNOSE TERMINAL

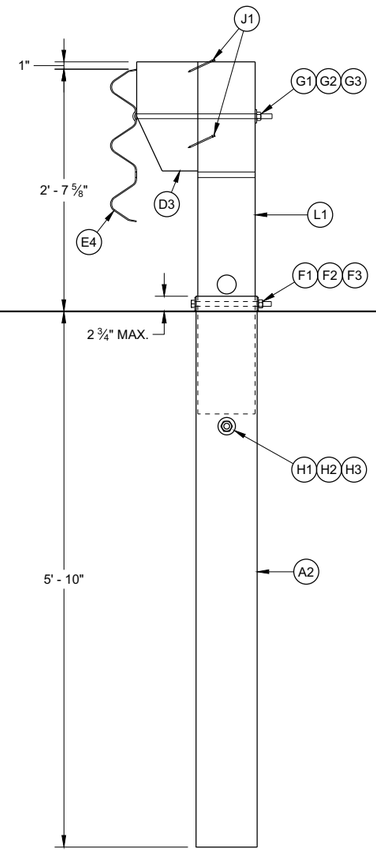
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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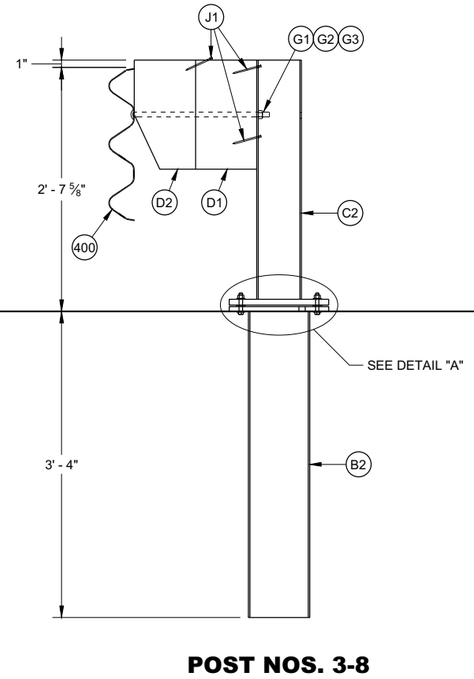
SDD 14B26 - 04c



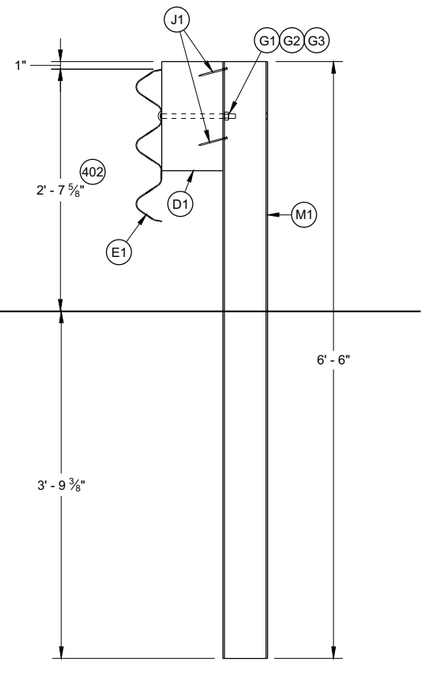
POST NO. 1



POST NO. 2



POST NOS. 3-8



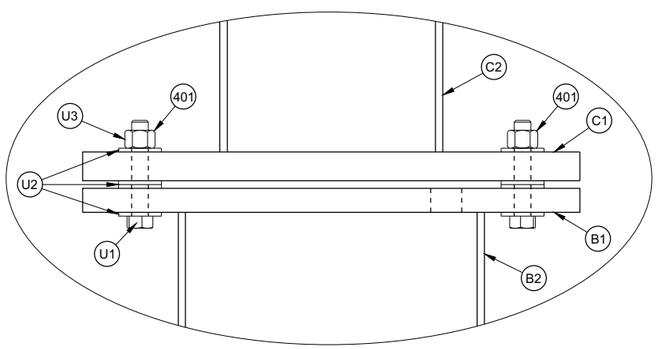
POST NOS. 9 AND ALL STEEL THRIE BEAM POSTS BEYOND

GENERAL NOTES

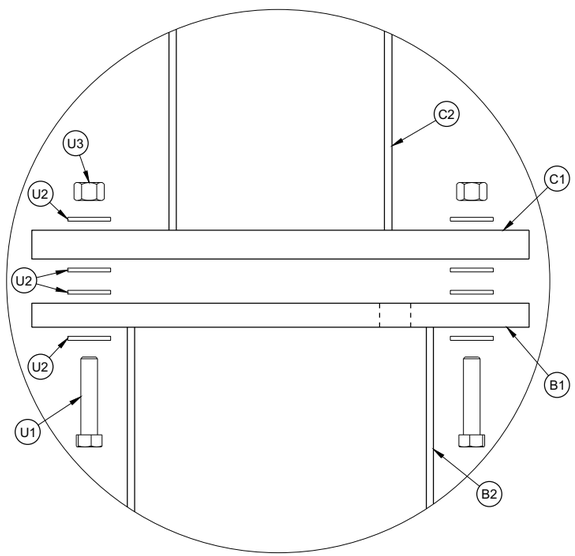
400 RAIL CAN BE E3 OR E4 DEPENDING ON POST LOCATION.

401 TORQUE BOLD BETWEEN 60-75 FT-LB

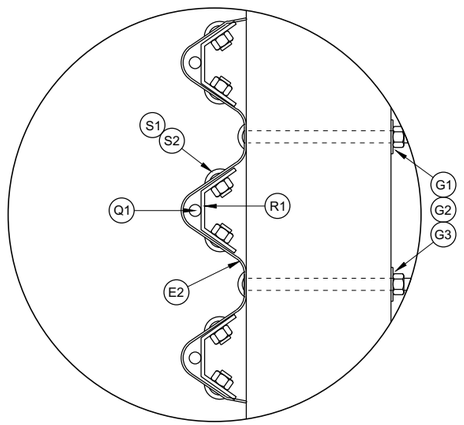
402 HEIGHT WILL VARY WITHIN HEIGHT TRANSITION TO OTHER HARDWARE. SEE NOTE 213, SHEET "b".



DETAIL "A"



EXPLODED VIEW
DETAIL "A"



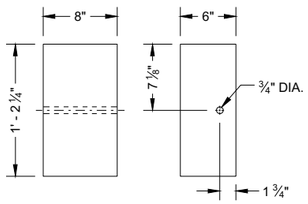
DETAIL "B"

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

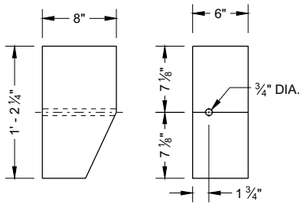
6

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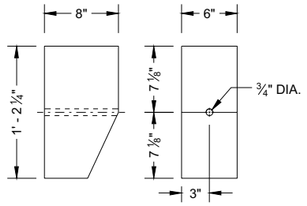
ELEVATION PROFILE

BLOCKOUT (D1)



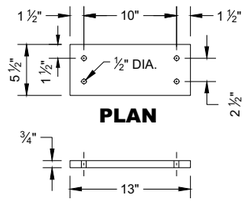
ELEVATION PROFILE

BLOCKOUT (D2)



ELEVATION PROFILE

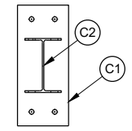
BLOCKOUT (D3)



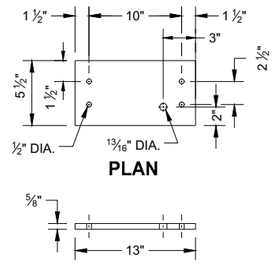
PLAN

PROFILE

UPPER SHEAR PLATE (C1)



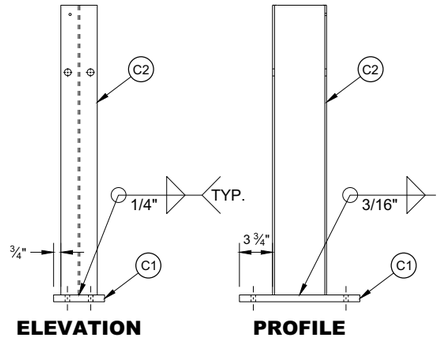
PLAN



PLAN

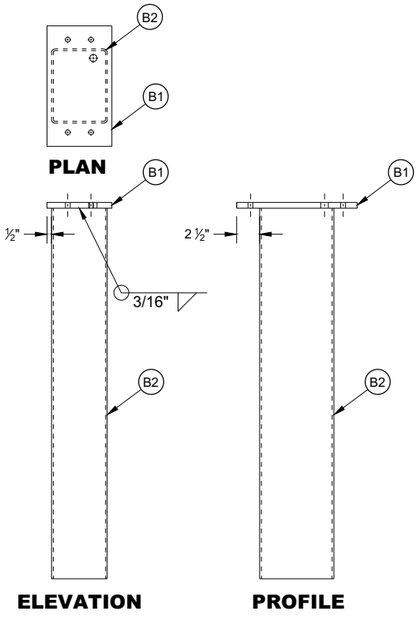
PROFILE

LOWER SHEAR PLATE (B1)



ELEVATION PROFILE

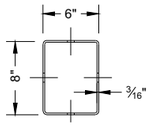
UPPER POST ASSEMBLY



PLAN

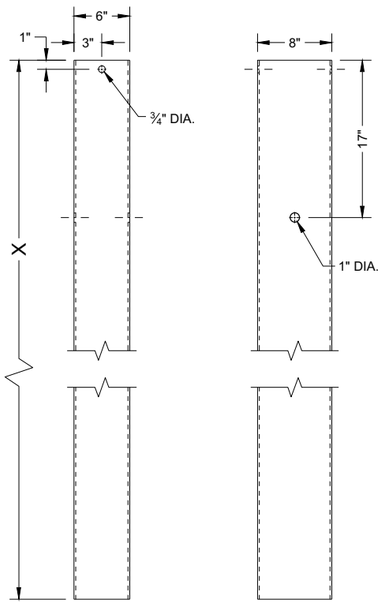
ELEVATION PROFILE

LOWER POST ASSEMBLY



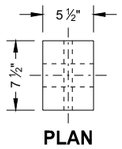
PLAN

PART	LENGTH "X"
A1	8' - 0"
A2	6' - 0"
B2	3' - 6"

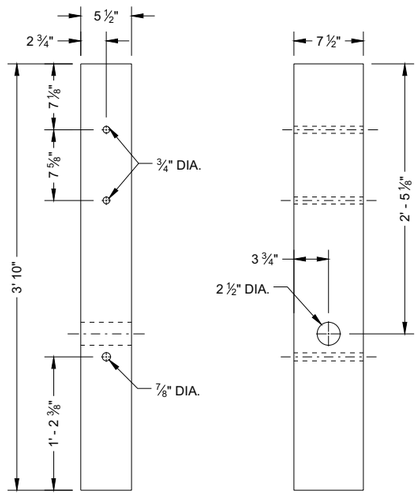


ELEVATION PROFILE

FOUNDATION TUBE

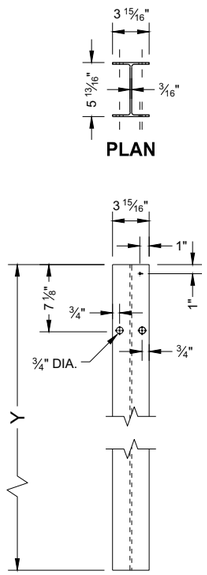


PLAN



ELEVATION PROFILE

BCT POST (L1)



PLAN

ELEVATION

POST

PART	LENGTH "Y"
M1	6' - 6"
M2	5' - 8 5/8"
C2	2' - 8 5/8"

STEEL THRIE BEAM BULLNOSE TERMINAL

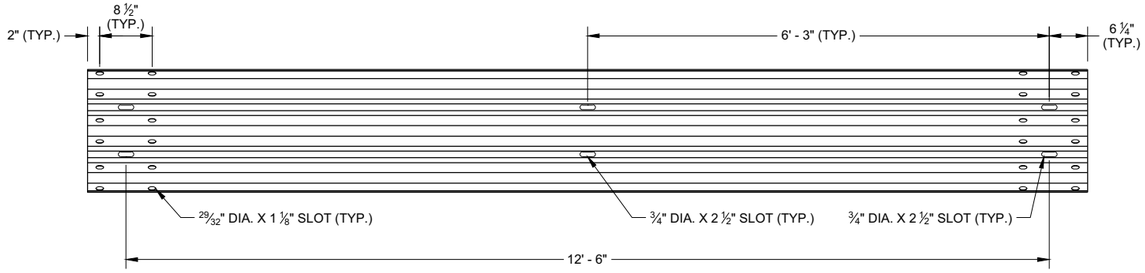
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTAT

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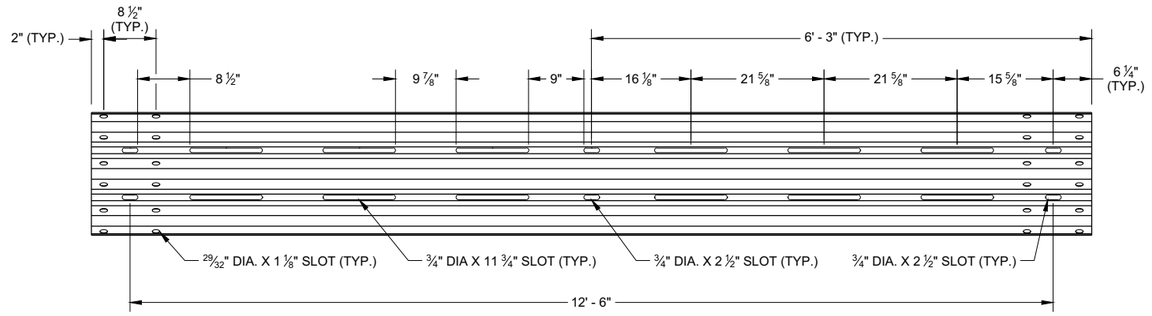
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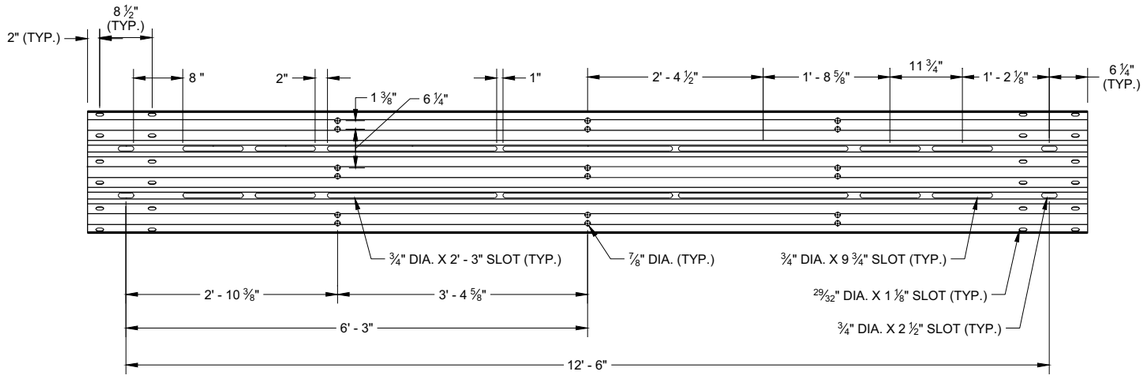
SDD 14B26 - 04e



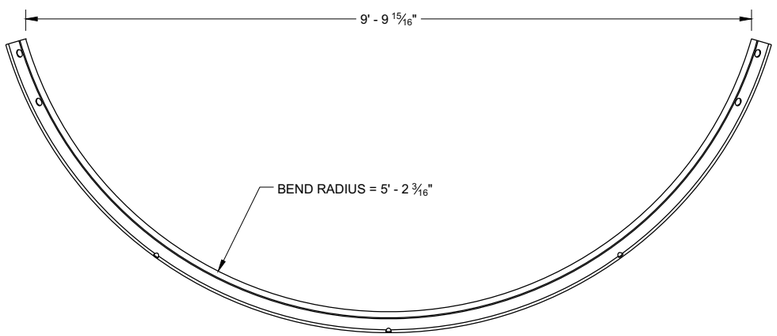
SLOTTED THRIE BEAM RAIL E1



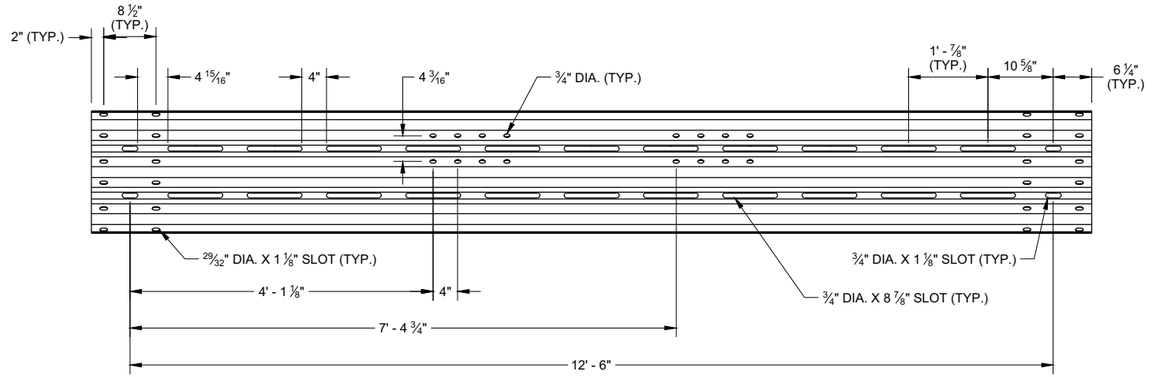
SLOTTED THRIE BEAM RAIL E3



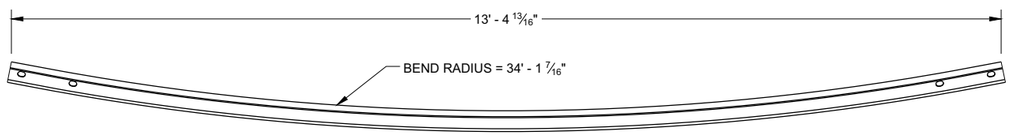
ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E2



PLAN VIEW
SLOTTED THRIE BEAM RAIL E2



ELEVATION VIEW NON - RADIUSED
SLOTTED THRIE BEAM RAIL E4

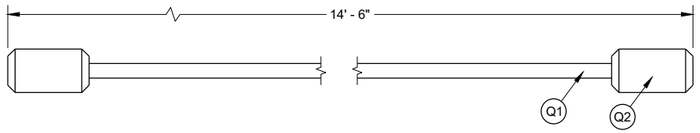


PLAN VIEW
SLOTTED THRIE BEAM RAIL E4

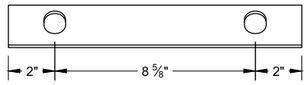
STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
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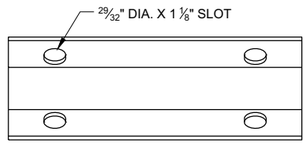
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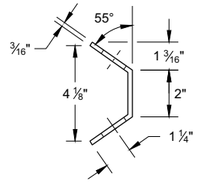
NOSE CABLE AND SWAGE BUTTON



PLAN VIEW

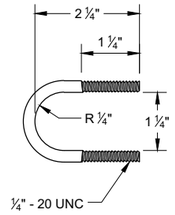


ELEVATION VIEW

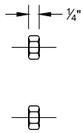


PROFILE VIEW

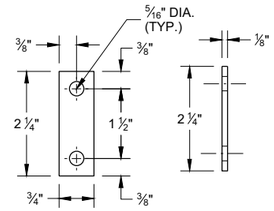
NOSE CABLE ANCHOR (R1)



U - BOLT (T1)

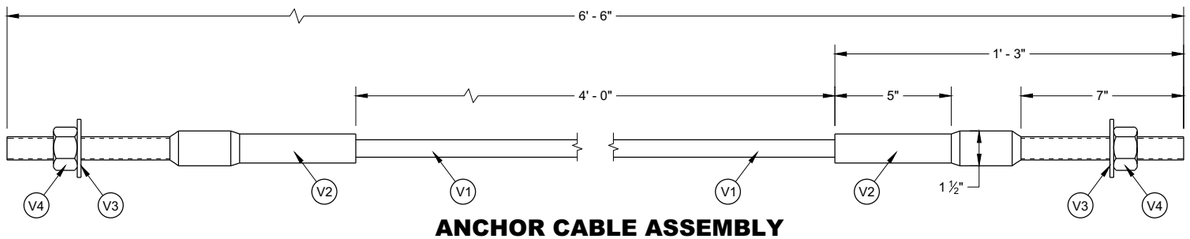


U - BOLT NUT (T3)

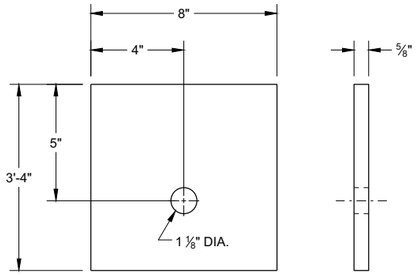


ELEVATION VIEW **PROFILE VIEW**

U - BOLT PLATE WASHER (T2)

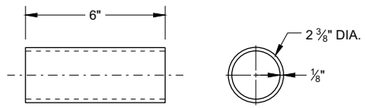


ANCHOR CABLE ASSEMBLY



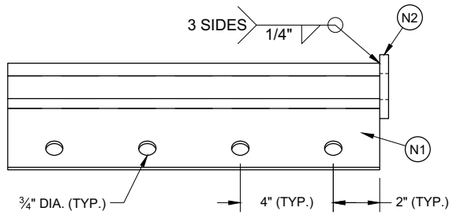
ELEVATION VIEW **PROFILE VIEW**

BCT BEARING PLATE (A3)

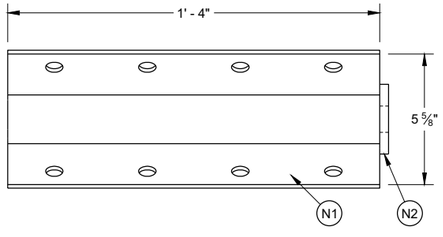


ELEVATION VIEW **PROFILE VIEW**

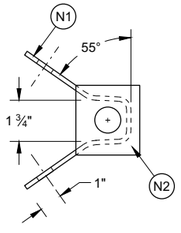
BCT POST SLEEVE (L2)



PLAN VIEW

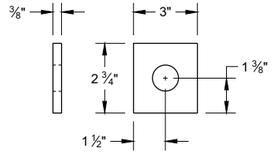


ELEVATION VIEW



PROFILE VIEW

ANCHOR BRACKET ASSEMBLY (N1)



ANCHOR BRACKET END PLATE (N2)

STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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BILL OF MATERIALS LIST

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
A1	LONG FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A2	FOUNDATION TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
A3	BEARING PLATE AT POST	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B1	LOWER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
B2	LOWER SLIP POST ASSEMBLY - TUBE	AASHTO M111/ASTM A123 ASTM A500 GRADE B OR ASTM A-501
C1	UPPER SLIP POST ASSEMBLY - PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
C2	UPPER SLIP POST ASSEMBLY - POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
D1	BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D2	TAPERED BLOCK FOR STEEL POST - WOOD	WISDOT SPEC. 614
D3	TAPERED BLOCK FOR BCT POST - WOOD	WISDOT SPEC. 614
E1	THRIE BEAM RAIL	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E2	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
E3	THRIE BEAM RAIL - PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER
E4	THRIE BEAM RAIL - SHOP BENT AND PUNCHED	AASHTO M180 CLASS A TYPE 2 APPROVED PRODUCER. INDICATE RADIUS BEAM GUARD IS BENT TO ON THE BACKSIDE OF RAIL. FOLLOW AASHTO M180. MARK RADIUS.
F1	5/8" DIA. HEX HEAD GROUND STRUT AND YOKE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
F2	5/8" DIA. GROUND STRUT AND YOKE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
F3	GROUND STRUT AND YOKE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
G1	5/8 " DIA. POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G2	POST BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER TYPICALLY USED WITH STEEL POSTS) OR ASTM F844 (UNHARDENED WASHER TYPICALLY USED WITH WOOD)
G3	POST BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
H1	7/8" DIA. SOIL TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
H2	SOIL TUBE BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 7/8" ASTM F844 TYPE 1 (HARDEN WASHER ONLY)
H3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD 7/8" ASTM A563DH OR SAE J995 GRADE 5
J1	16D DOUBLE HEAD NAIL	ASTM A153 HOT DIPPED CLASS D DOUBLE HEAD ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)
L1	BCT TIMBER POST	WISDOT SPEC. 614 S4S FINISH ON 4 SIDE
L2	BCT POST SLEEVE	AASHTO M111/ASTM A123 2 3/8" OD ASTM 53 GRADE B
M1	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
M2	W6X8.5 OR W6X9 STEEL POST	AASHTO M111/ASTM A123 ASTM A6 W6X9 OR W6X8.5 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N1	ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
N2	ANCHOR BRACKET - BEARING PLATE	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI

PART NUMBER	DESCRIPTION	MATERIAL SPECIFICATION
P1	5/8" DIA. ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
P2	ANCHOR BRACKET BOLT - WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
P3	SOIL TUBE BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
Q1	5/8" DIA. NOSE CABLE	6X19 AASTHO M30 / ASTM A741 XIPS INDEPENDENT WIRE CORE (IWRC) PR 6X25 XIPS, IWRC NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
Q2	NOSE CABLE-SWAGE BUTTON	COLD TUFF BUTTON, S-409 SIZE NO. 12 STOCK NUMBER 1040395 OR ANY OTHER SIMILAR SIZED WAGED-GRIP-BUTTON FERRULES. ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FIELD SWAGED PER MANUFACTURERS RECOMMENDATION. NOMINAL BREAKING STRENGTH OF 41.2 KIPS.
R1	NOSE CABLE ANCHOR BRACKET	AASHTO M111/ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX. STRENGTH 50 KSI, OR ASTM A709 MAX. STRENGTH 50 KSI, OR ASTM A992 MAX. STRENGTH 50 KSI
S1	5/8" DIA. SPLICE BOLT - BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
S2	SPLICE - BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD 5/8" ASTM A563DH OR SAE J995 GRADE 5
T1	1/4" DIA. NOSE CABLE - U BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36
T2	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
T3	U-BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
U1	7/16" DIA. SLIP POST ASSEMBLY - BREAKAWAY BOLT	ASTM A153 OR B695 CLASS 55 OR F2329 UNC FULLY THREADED HEX HEAD TAP BOLT ASTM A449 OR SAE J429 GRADE 5
U2	7/16" DIA. SLIP POST ASSEBLY - BREAKAWAY BOLT - WASHER	ASTM F436 TYPE I (HARDEN TYPICALLY USED WITH STEEL) GALV. AASHTO M111/ASTM A 123 OR GALV. HOT DIP. TO POST BOLT CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 55, F2329
U3	SLIP POST ASSEBLY - BREAKAWAY BOLT - NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / STM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
V1	U-BOLT - PLATE WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V2	ANCHOR CABLE-SWAGE FITTING	UNC ASTM A576 GRADE 1035 SWAGE FITTING ARE TO BE FACTORY SWAGED. MIN. BREAKING STRENGTH OF 42.7 KIPS. ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."
V3	1" DIA. ANCHOR CABLE-WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)
V4	1" DIA. ANCHOR CABLE-NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1/ ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5
W1	REFLECTOR	SEE SDD 15A4

6

6

SDD 14B26 - 04h

SDD 14B26 - 04h

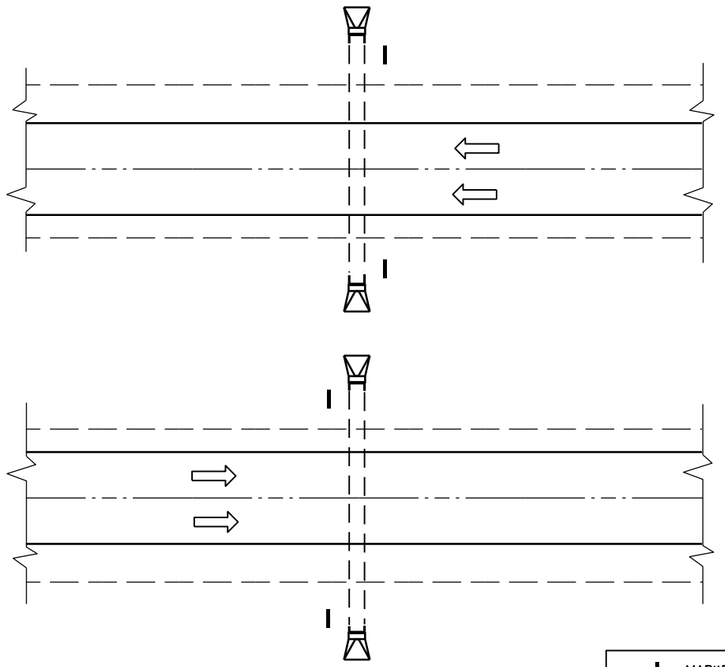
STEEL THRIE BEAM BULLNOSE TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

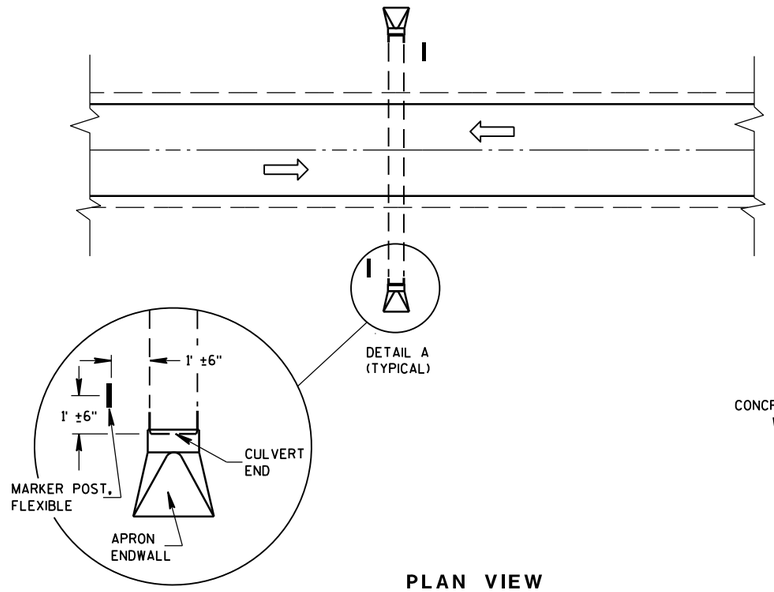
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

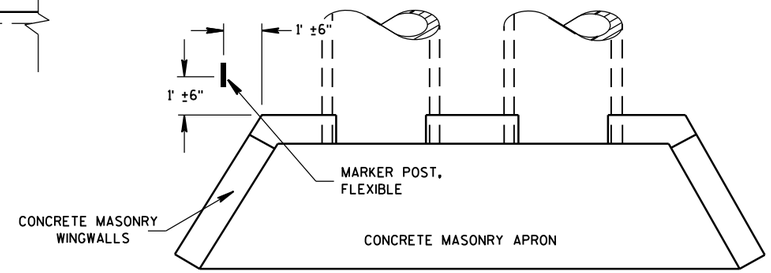
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

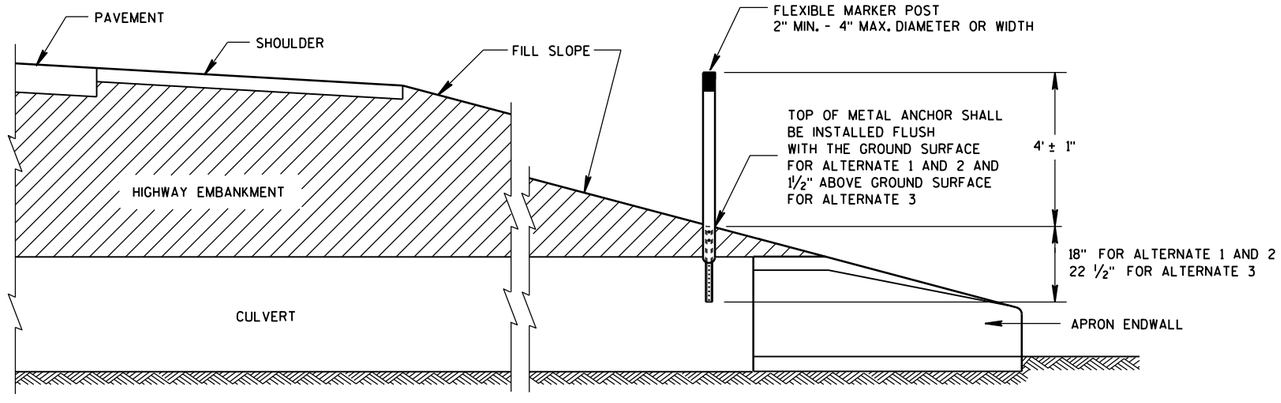
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

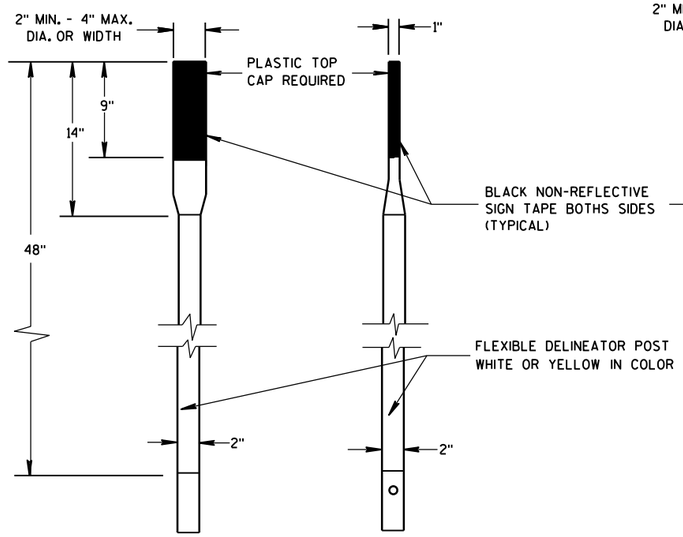
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

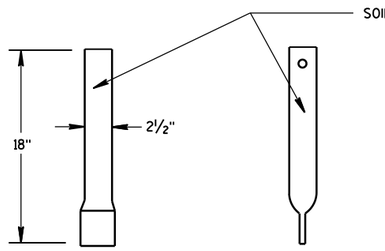
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S.D.D. 15 A 3-2a

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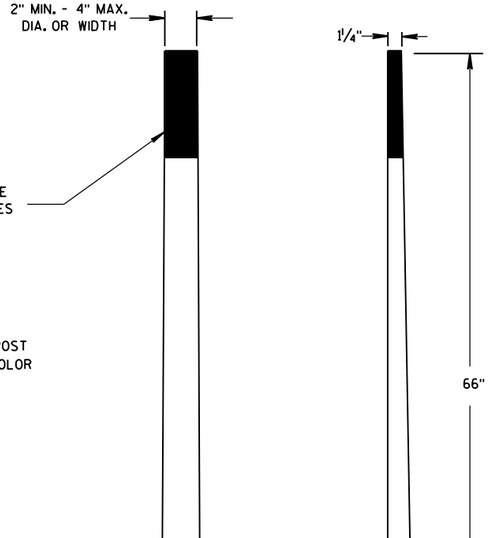
S.D.D. 15 A 3-2a





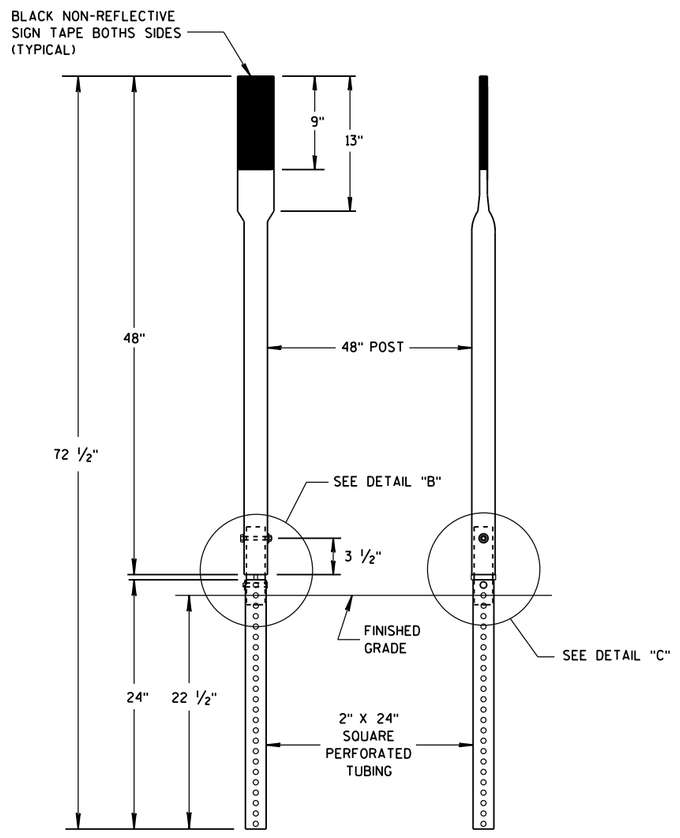
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

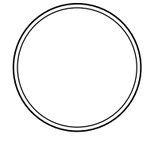
ALTERNATE 2



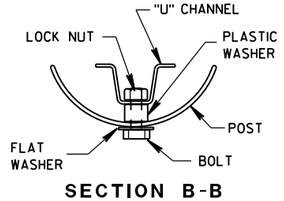
FRONT VIEW SIDE VIEW

ALTERNATE 3

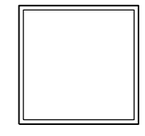
FLEXIBLE MARKER POSTS



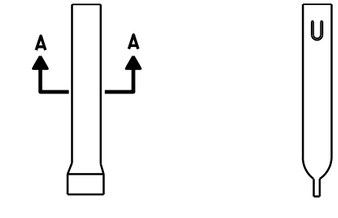
SECTION A-A



SECTION B-B

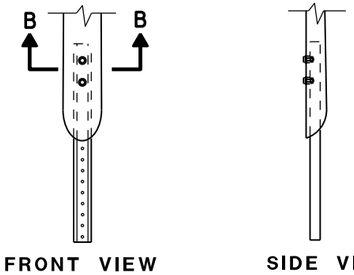


SECTION C-C



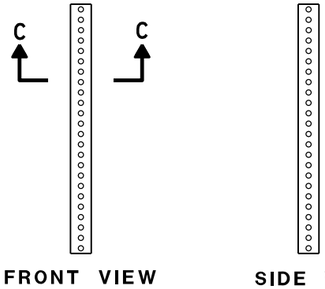
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

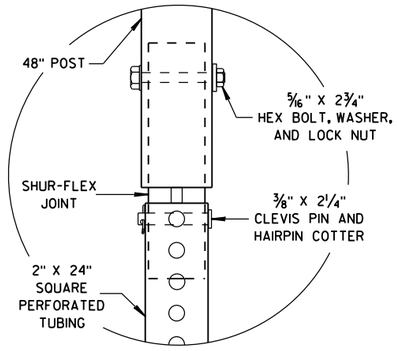
ALTERNATE 2



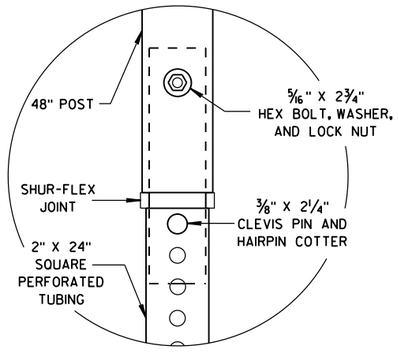
FRONT VIEW SIDE VIEW

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

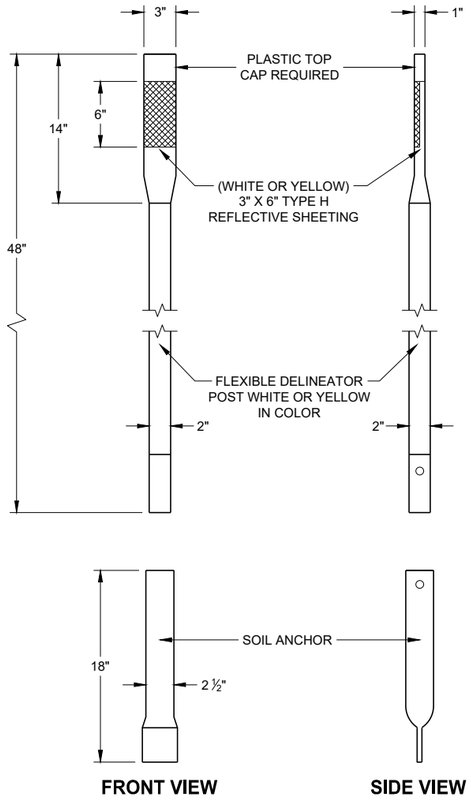
FHWA

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

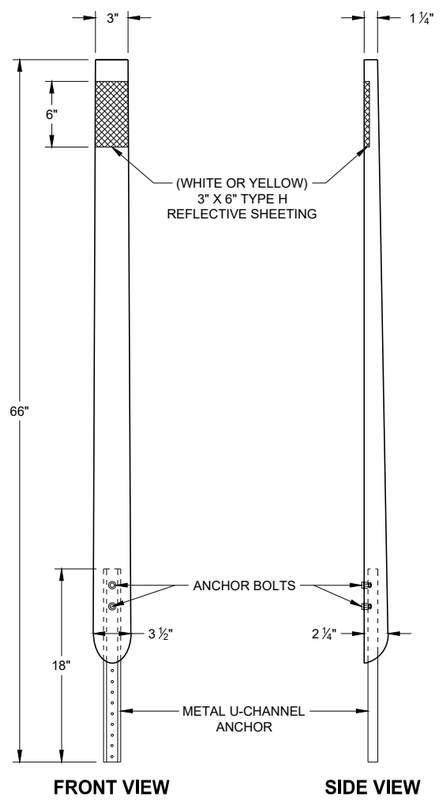
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S.D.D. 15 A 3-2b



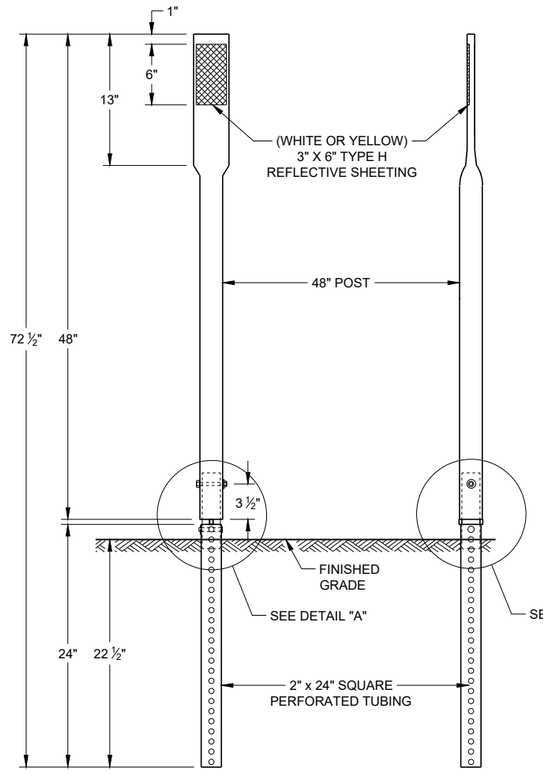
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



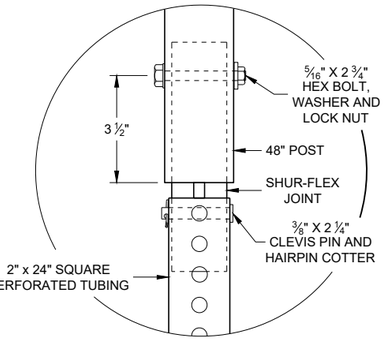
FRONT VIEW SIDE VIEW

ALTERNATE 3

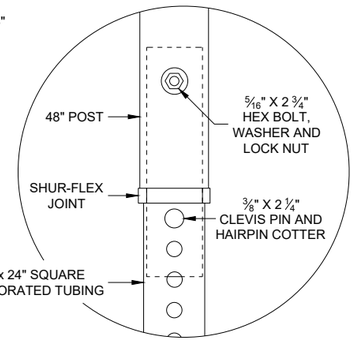
FLEXIBLE DELINEATOR POSTS

GENERAL NOTES

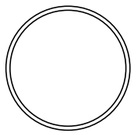
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



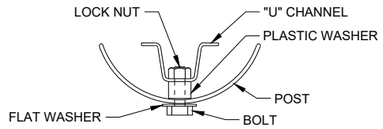
DETAIL A



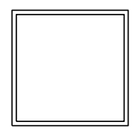
DETAIL B



SECTION A - A



SECTION B - B

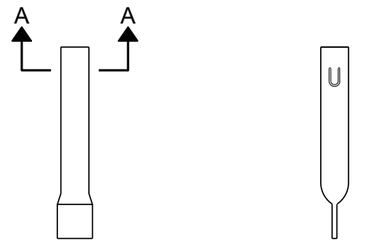


SECTION C - C

REFLECTOR SPACING TABLE

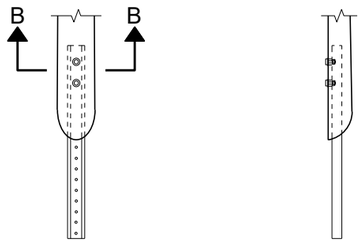
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER



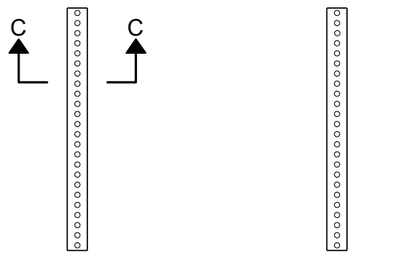
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

ALTERNATE 2



FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE DELINEATOR POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

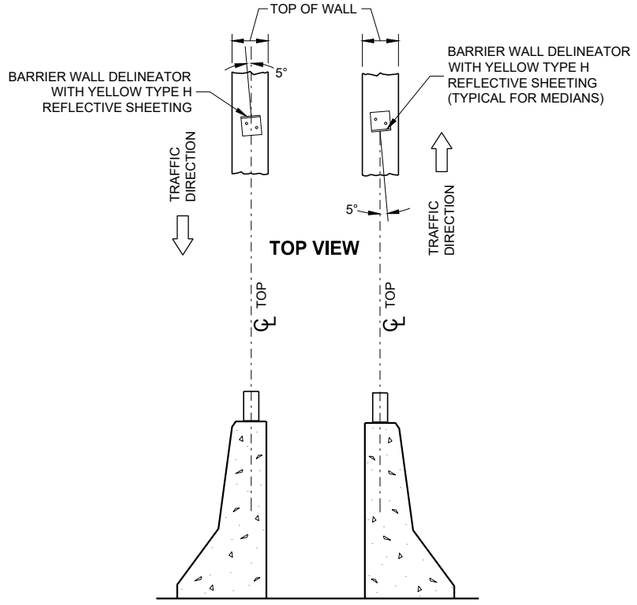
APPROVED
May 2021 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

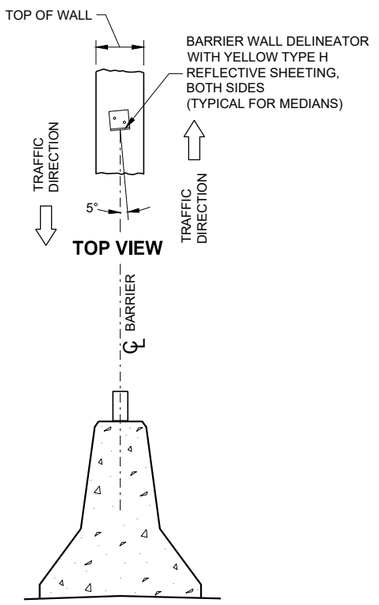
SDD 15A04 - 06a

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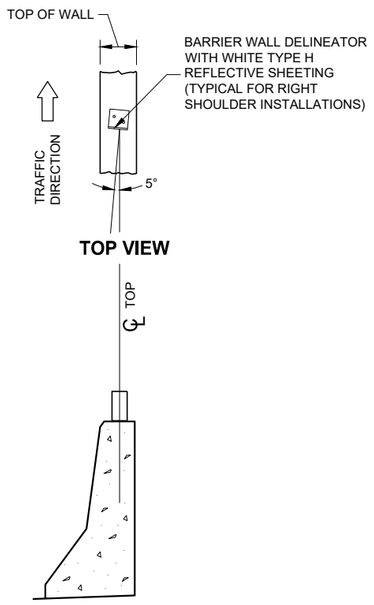
SDD 15A04 - 06a



SIDE VIEW
DOUBLE BARRIERS IN MEDIAN

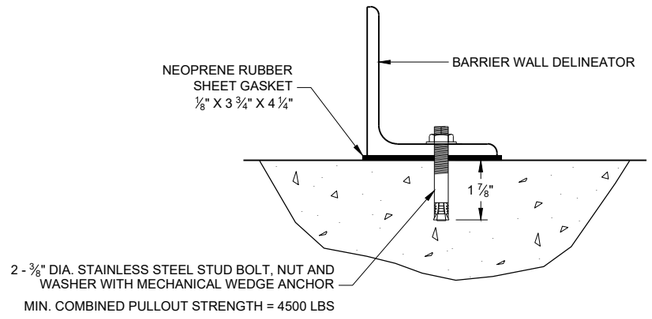


SIDE VIEW
MEDIAN BARRIER

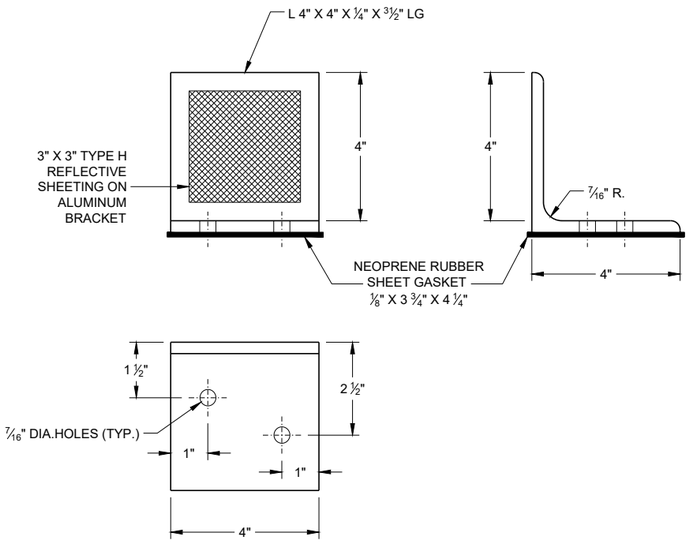


SIDE VIEW
TO RIGHT OF TRAFFIC FLOW

LOCATION AND AIMING DETAILS FOR BARRIER WALL DELINEATOR MOUNTED ON CONCRETE BARRIERS



BARRIER WALL DELINEATOR MOUNTING DETAIL



BARRIER WALL DELINEATOR

REFLECTOR SPACING TABLE

REFLECTOR SPACING	MINIMUM NUMBER OF REFLECTORS
100' C-C	3

BARRIER WALL DELINEATOR WITH REFLECTIVE SHEETING

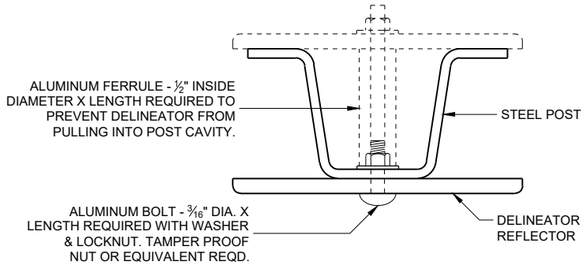
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

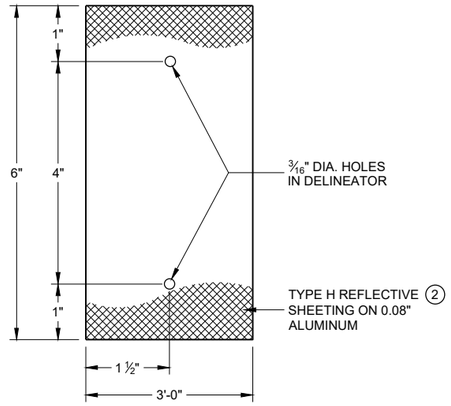
FHWA

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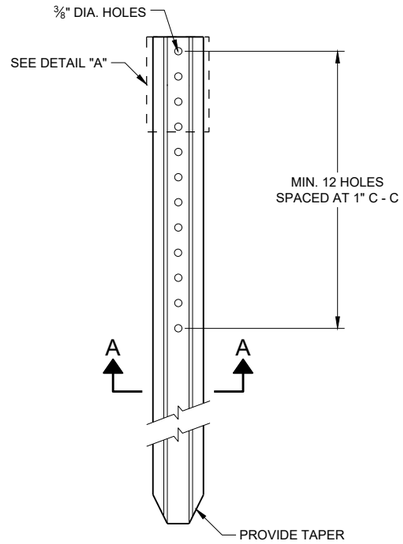
SDD 15A04 - 06b



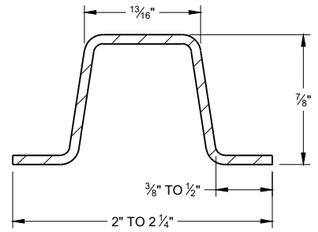
MOUNTING DETAIL FOR DELINEATOR REFLECTOR



DETAIL "A" 3" X 6" DELINEATOR REFLECTOR



DELINEATOR POST



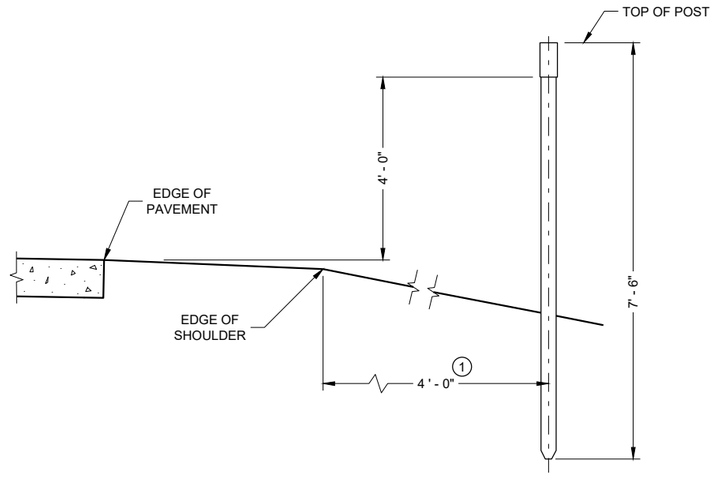
SECTION A - A

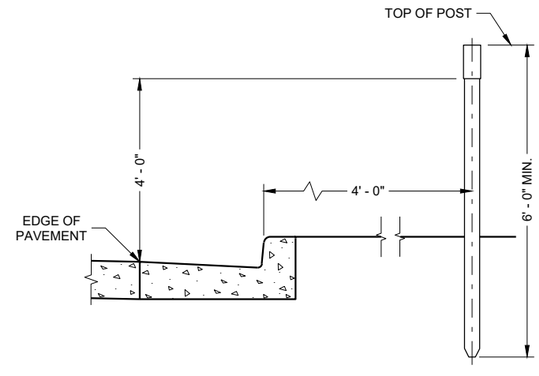
WEIGHT 1.12 LBS PER FT. \ 0.1 LB.

REFLECTOR SPACING TABLE

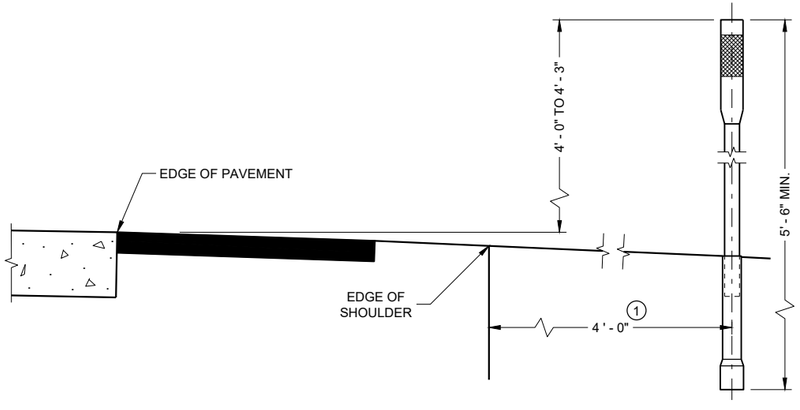
REFLECTOR SPACING	LOCATION
* 100' C-C	RAMPS
400' C-C	MAINLINE

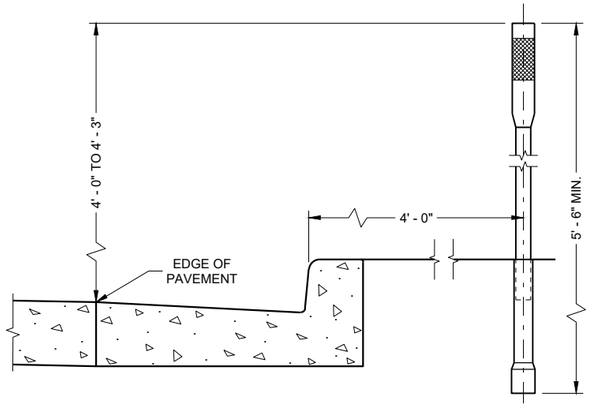
* START AT BEGINNING OF RAMP TAPER AND END AT END OF RAMP TAPER





TYPICAL INSTALLATIONS OF DELINEATOR POSTS





TYPICAL INSTALLATIONS OF FLEXIBLE DELINEATOR POSTS

GENERAL NOTES

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

1. DELINEATORS SHALL BE PLACED AT A CONSTANT DISTANCE FROM THE EDGE OF THE SHOULDER FOR THE LENGTH OF THE INSTALLATION.
2. FURNISH TYPE H SHEETING FROM THE APPROVED PRODUCTS LIST.

DELINEATOR POST WITH REFLECTIVE SHEETING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

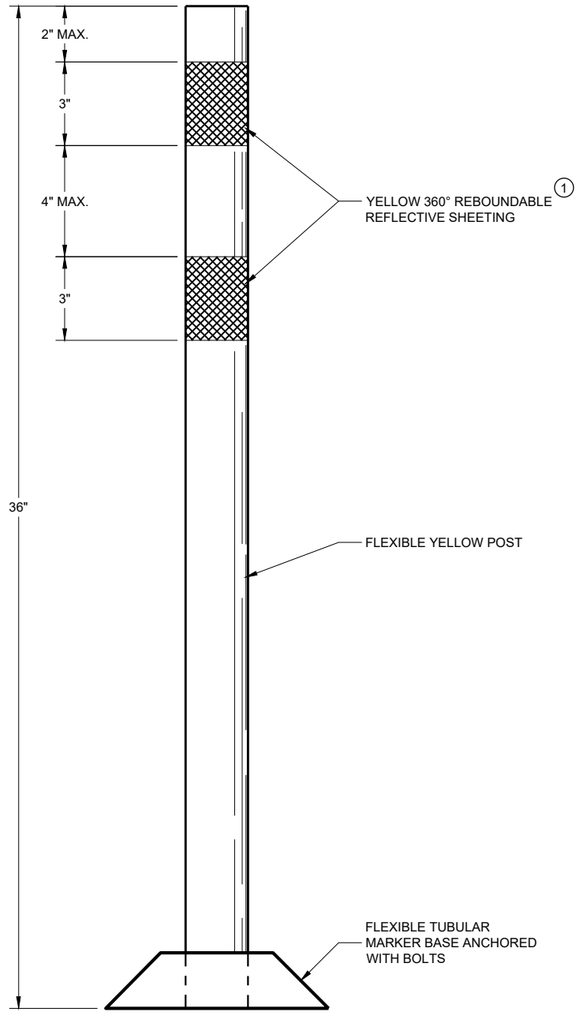
FHWA

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SDD 15A04 - 06c

6

SDD 15A04 - 06c



PERMANENT FLEXIBLE TUBULAR MARKER POST

GENERAL NOTES

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

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

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

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

6

SDD 15A04 - 06d

CHANNELIZING DEVICES
PERMANENT FLEXIBLE
TUBULAR MARKER POST

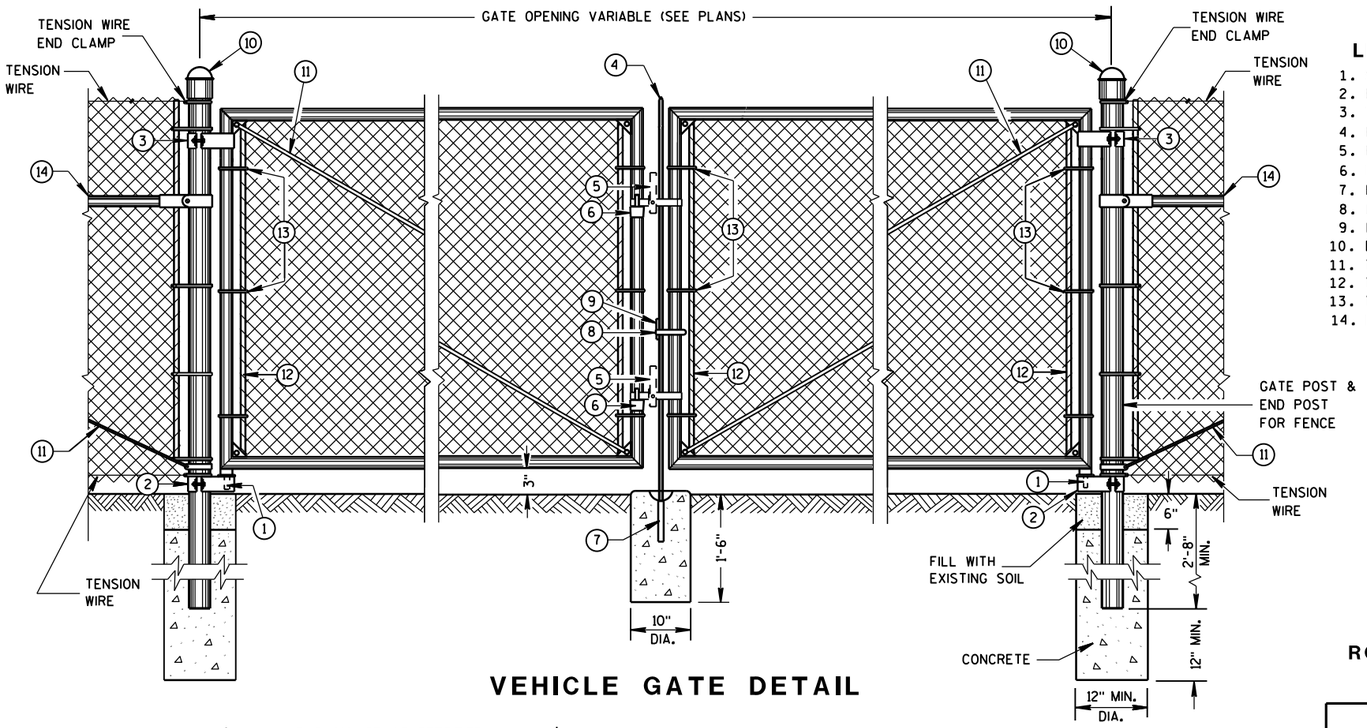
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

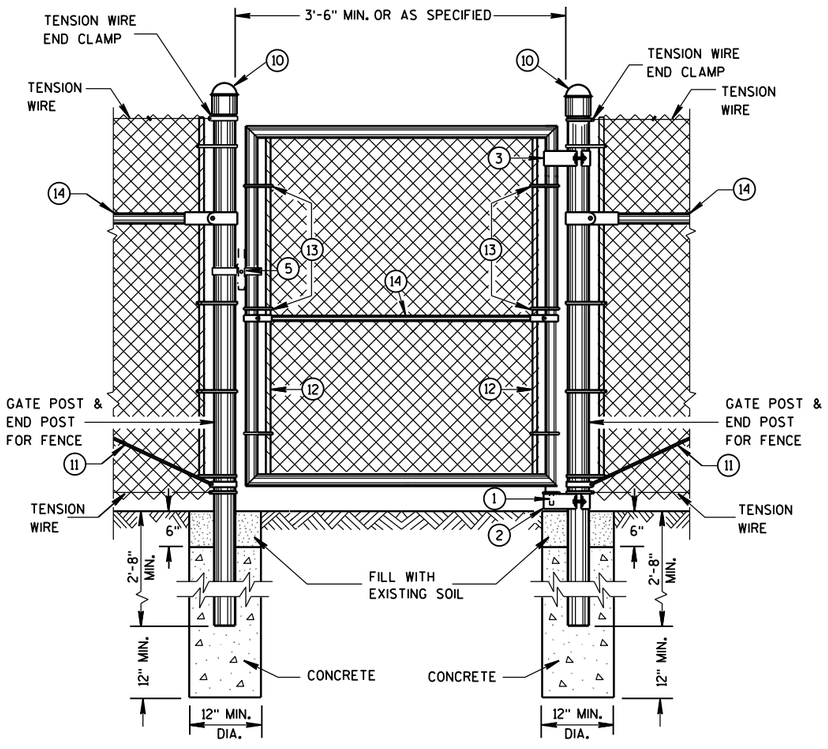
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SDD 15A04 - 06d



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

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

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

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

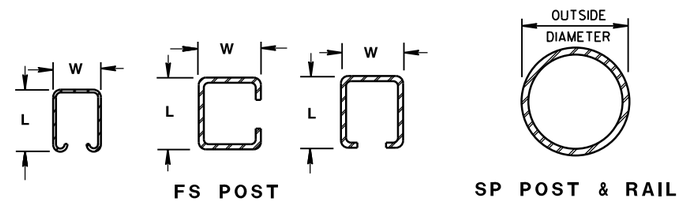
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

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

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

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

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



CROSS SECTIONS OF POSTS AND RAILS

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

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

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

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

REQUIRED FENCE POST SIZES

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

REQUIRED POST SIZE FOR GATES

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

BRACE RAIL TYPES

USE		TYPE
BRACE RAIL		SP1 OR FS1

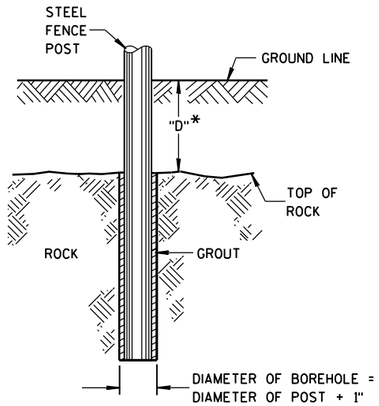
** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

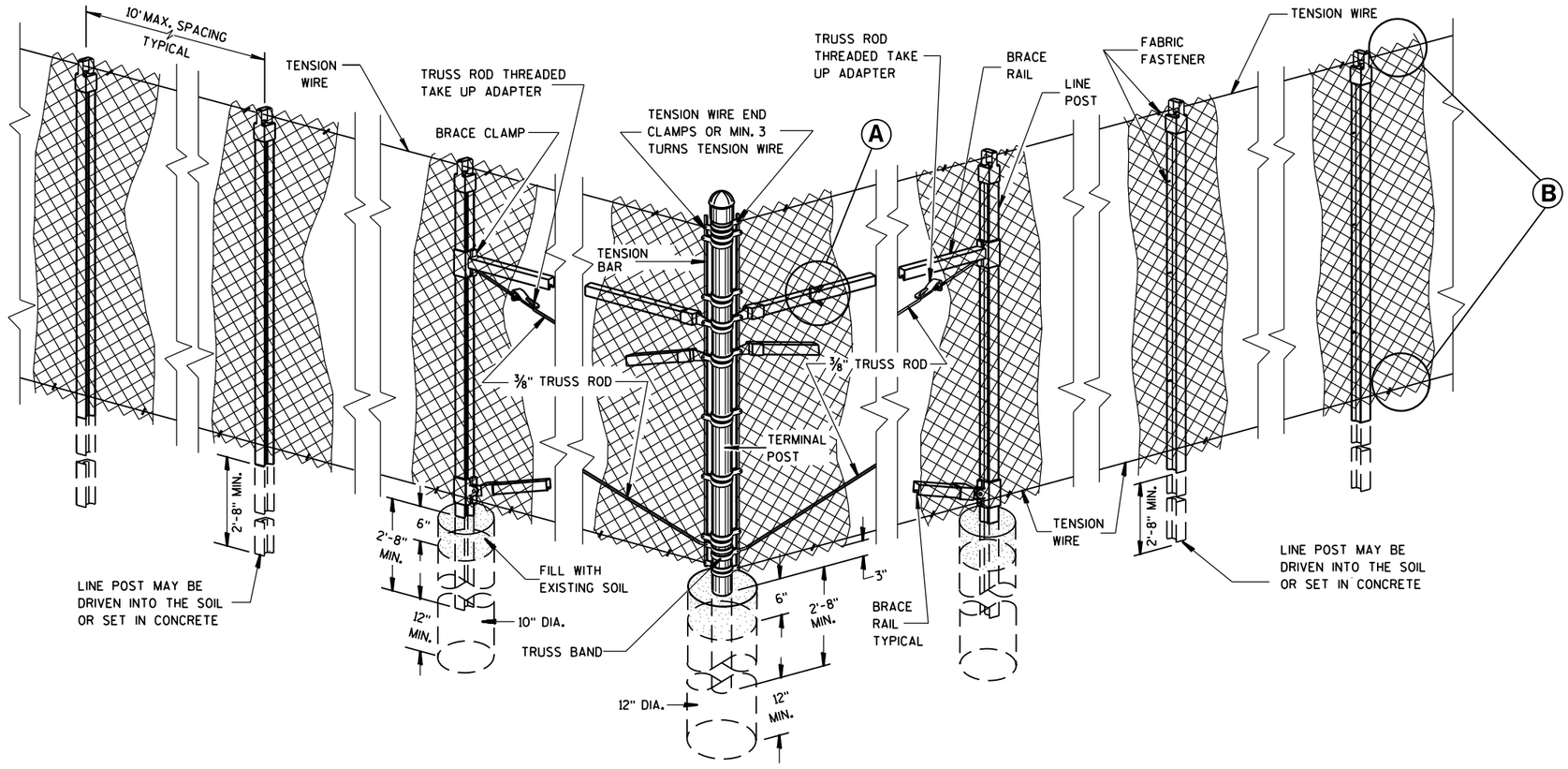
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S.D.D. 15 B 3-15a

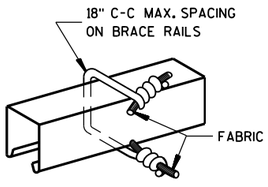


*IF "D" IS LESS THAN 2'-6", DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST



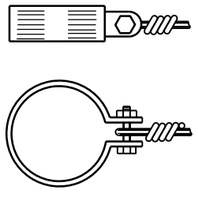
END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS



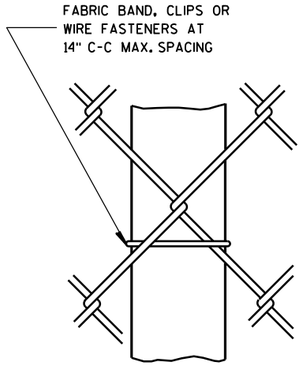
BRACE RAIL

FABRIC FASTENER

Ⓐ



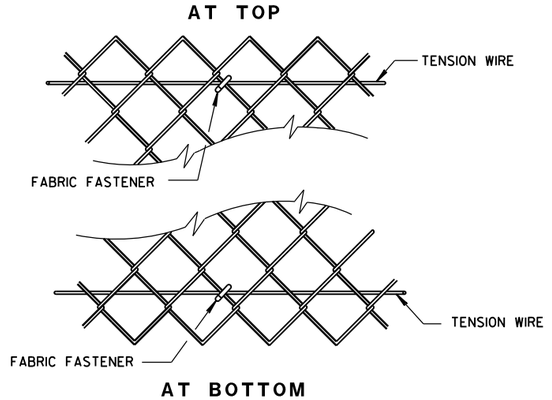
TENSION WIRE END CLAMP



LINE POST

FABRIC FASTENER

AT TOP



AT BOTTOM

SELVAGES

Ⓑ

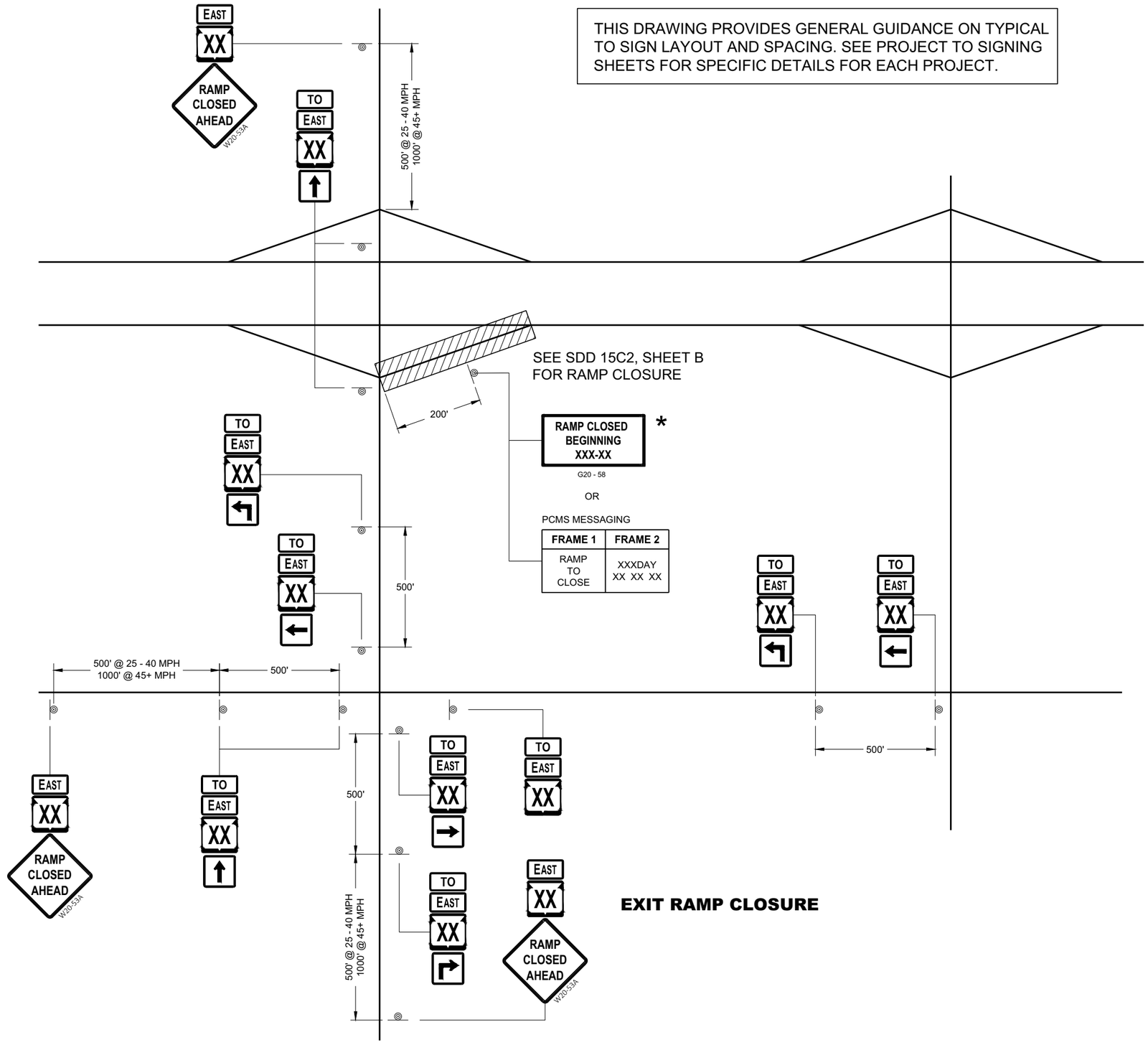
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

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



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL TO SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

SIGN ON PERMANENT SUPPORT

TO EAST — MO4 - 5, M3 - X

XX M1 - 6 OR XX M1 - 4 OR INTERSTATE XX M1 - 1

M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE TO ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- M3 - X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 1, M1 - 4, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).
- W20 - 53A SHALL BE 48" X 48"

* PLACE "RAMP CLOSED BEGINNING" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR LAYOUT.

ON RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

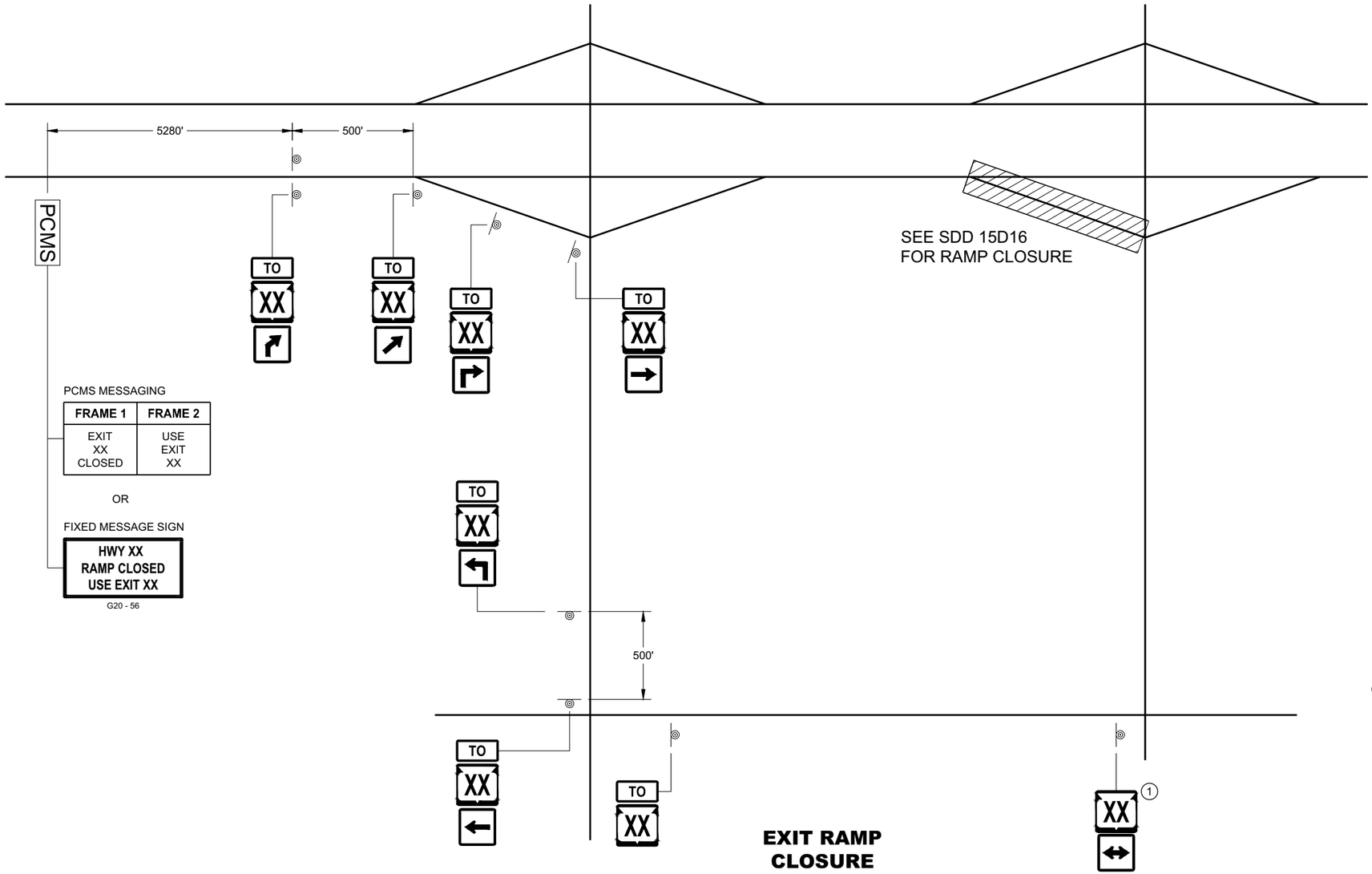
APPROVED
February 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

6

SDD 15C02 - 08d

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL "TO" MO-4 SIGN LAYOUT AND SPACING. SEE PROJECT TO SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.



PCMS MESSAGING

FRAME 1	FRAME 2
EXIT XX CLOSED	USE EXIT XX

OR

FIXED MESSAGE SIGN

HWY XX
RAMP CLOSED
USE EXIT XX

G20 - 56

EXIT RAMP CLOSURE

LEGEND

SIGN ON PERMANENT SUPPORT

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

TO MO4 - 5

XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A

M05 - 1 OR M05 - 2 OR M06 - 1 OR M06 - 2 OR M06 - 4

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

IF THERE ARE ANY ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE "TO" MO-4 ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT TO SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND "TO" MO-4 SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

SIGN SIZES SHALL BE AS FOLLOW:
- MO4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
- M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS).
- MO5 - 1, MO5 - 2, AND MO6 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS).

(1) ONLY ADD IF THERE ARE NO EXISTING ROUTE MARKERS FOR THE INTERSECTING ROADWAY.

OFF RAMP LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

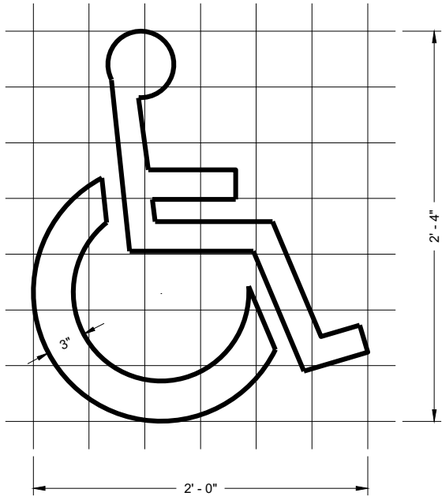
APPROVED
February 2020 DATE
/S/ Andrew Heidtke WORK ZONE ENGINEE
FHWA

6 SDD 15C02 - 08e

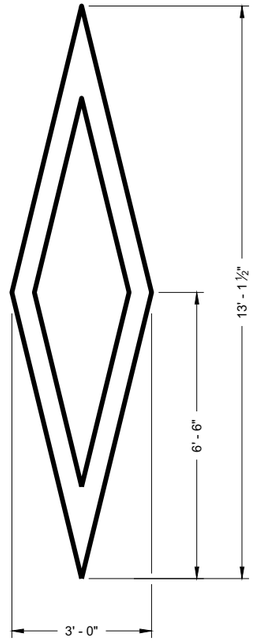
6 SDD 15C02 - 08e

GENERAL NOTES

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



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

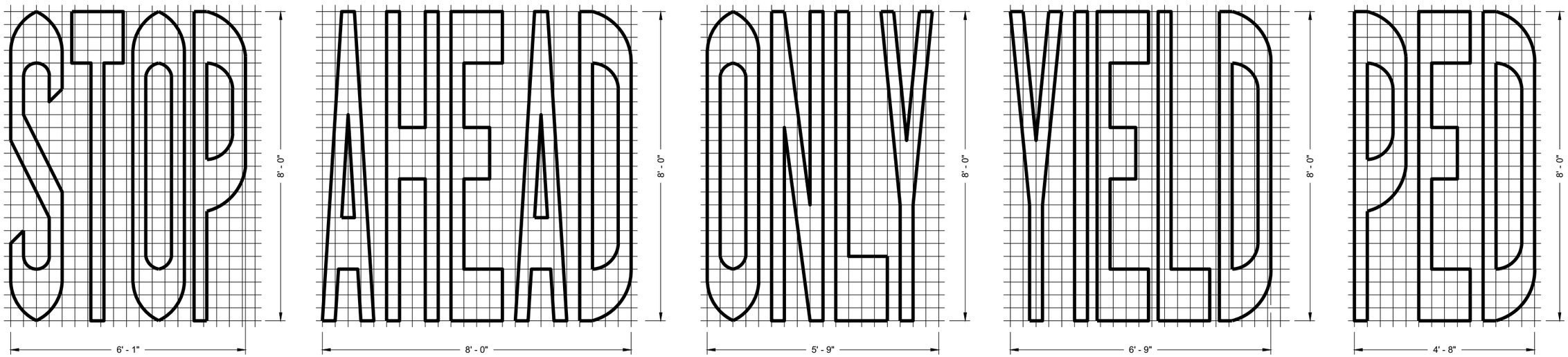
PAVEMENT MARKING SYMBOLS

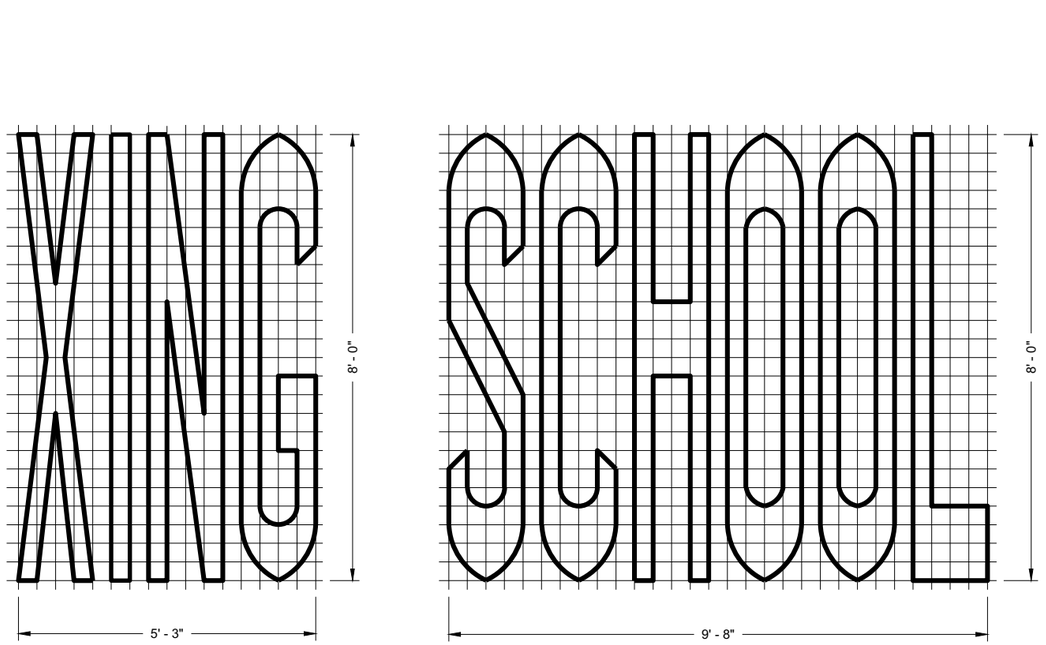
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

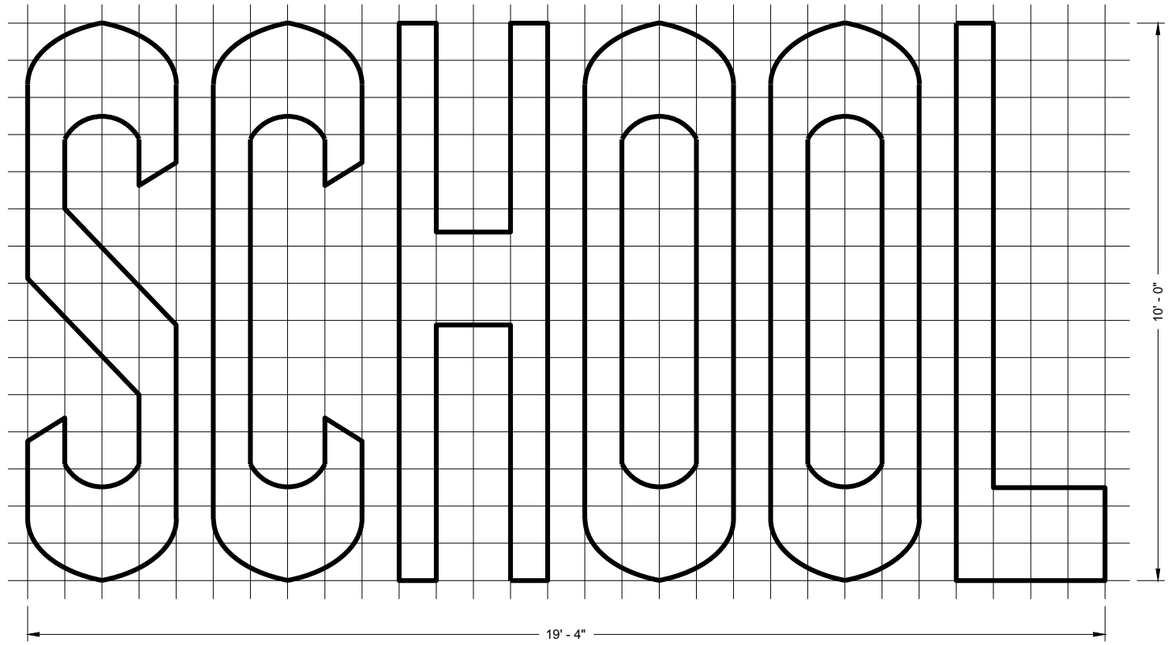
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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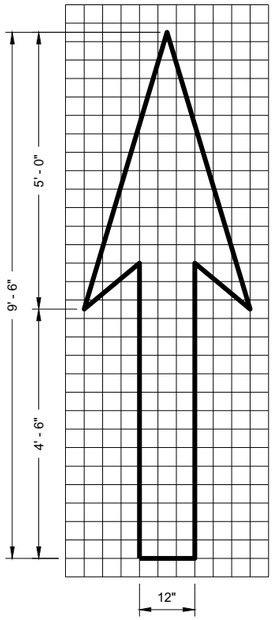
SDD 15C07 - 15b

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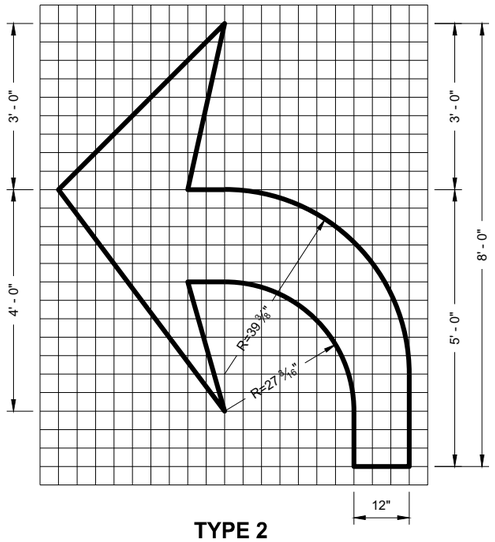
SDD 15C07 - 15b

GENERAL NOTES

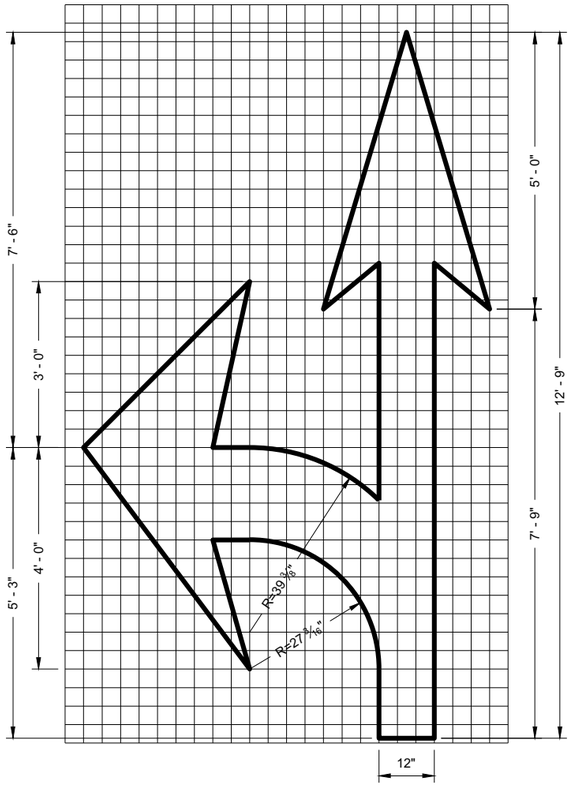
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



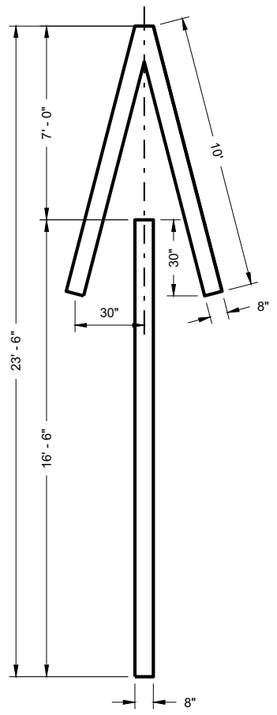
TYPE 1



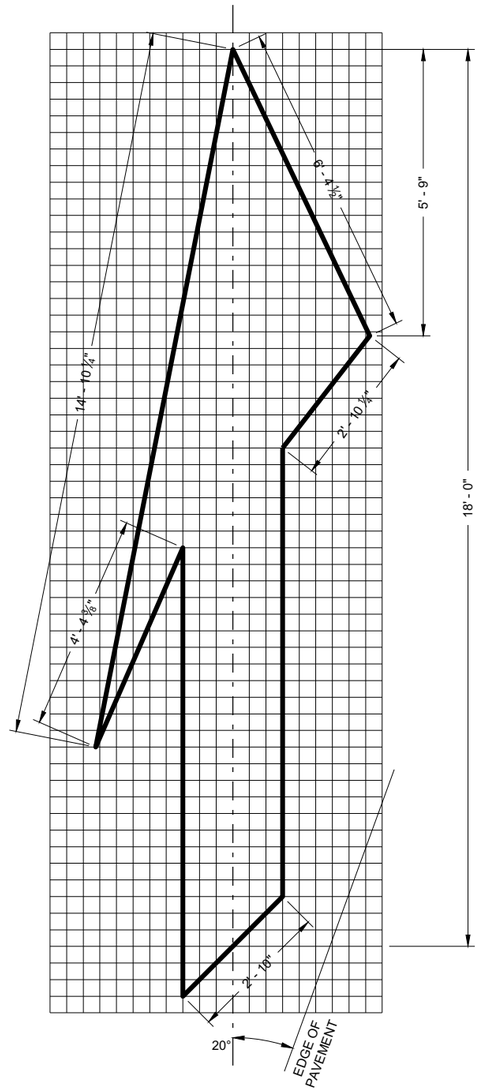
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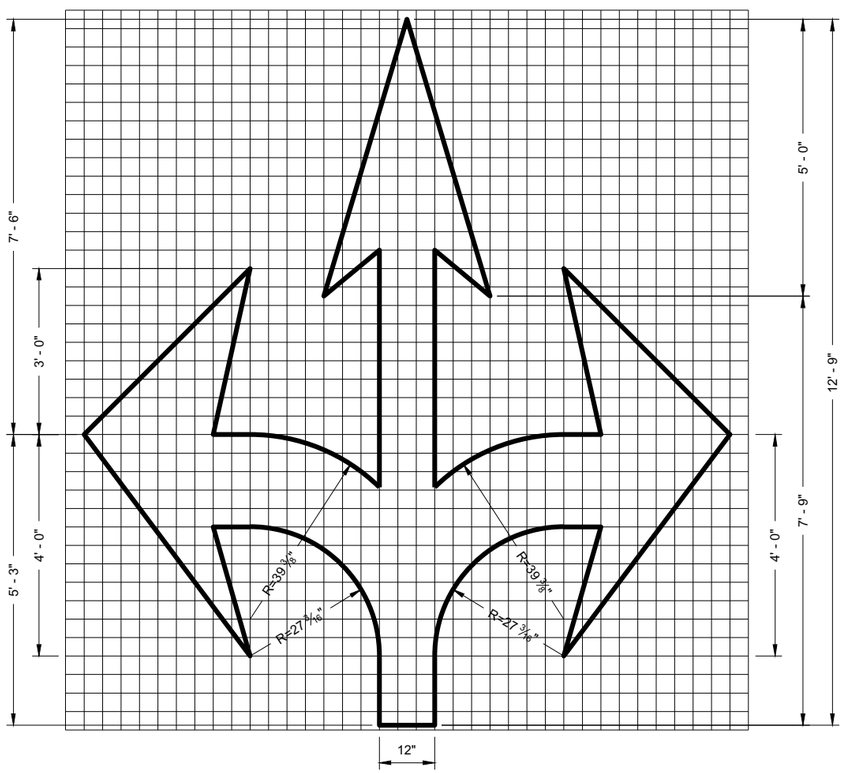
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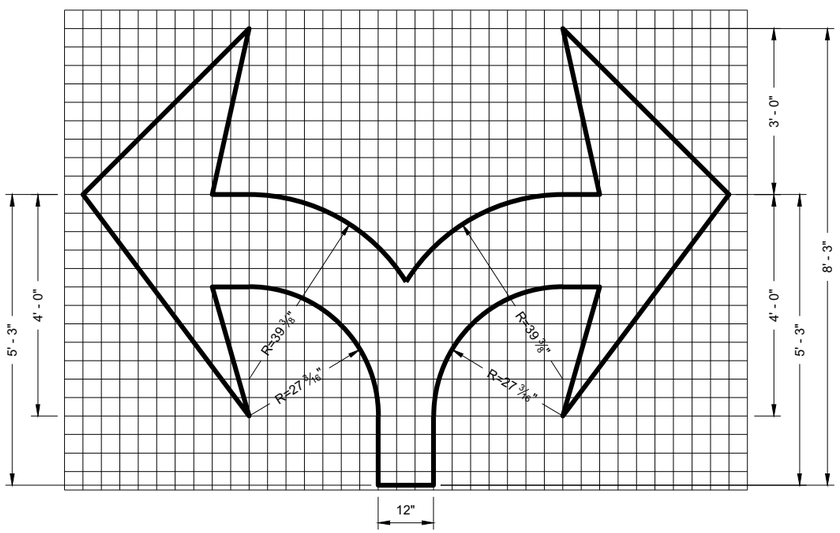
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

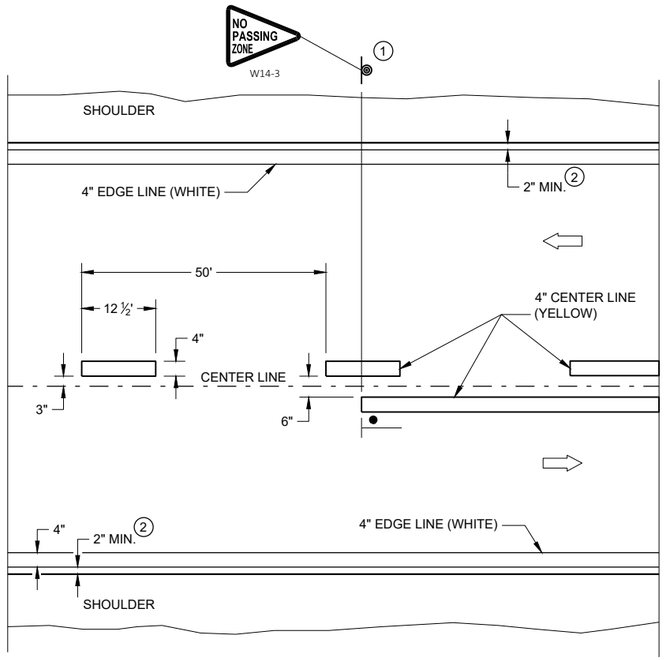
FHWA

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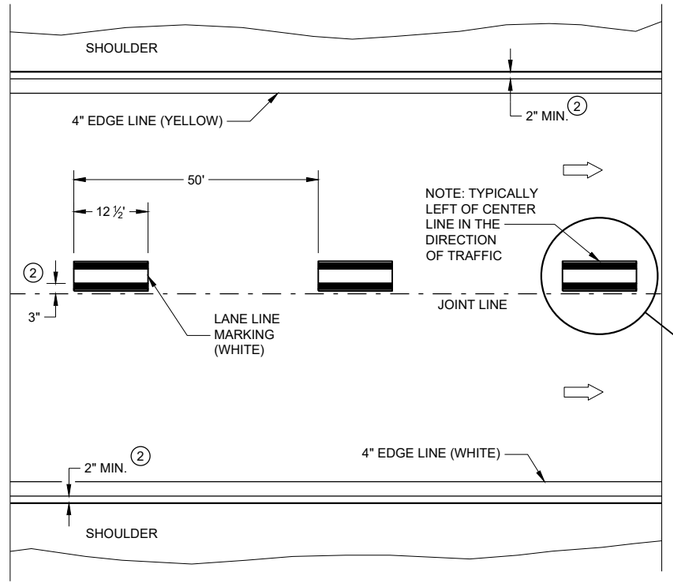
SDD 15C07 - 15c

6

SDD 15C07 - 15c

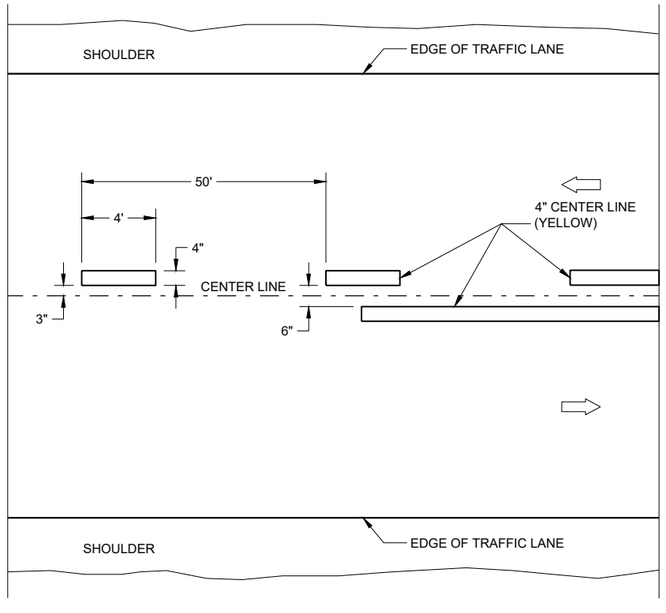


TWO WAY TRAFFIC

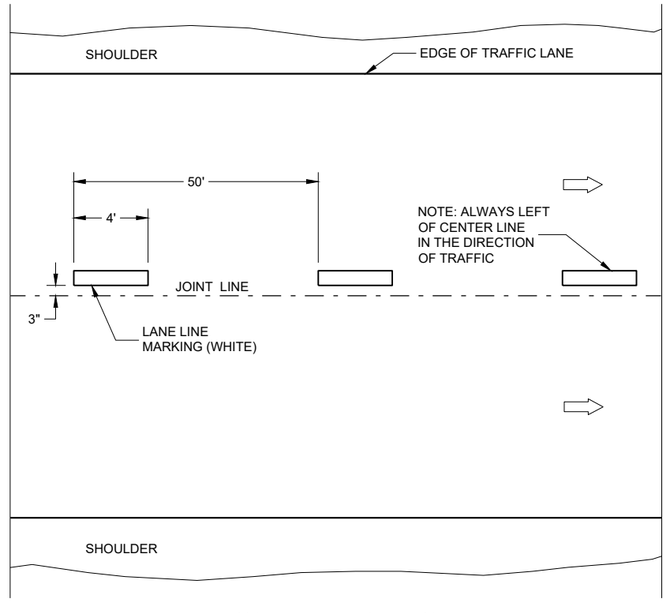


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

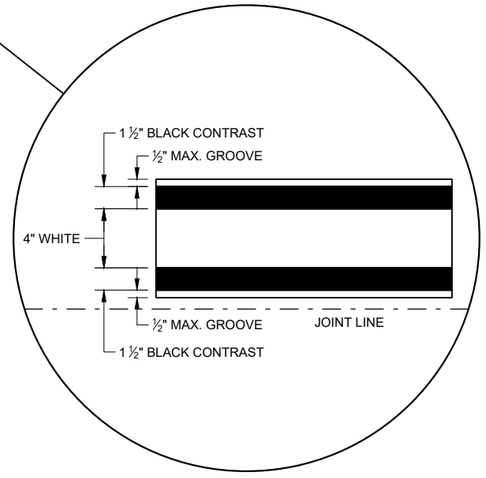
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

FHWA

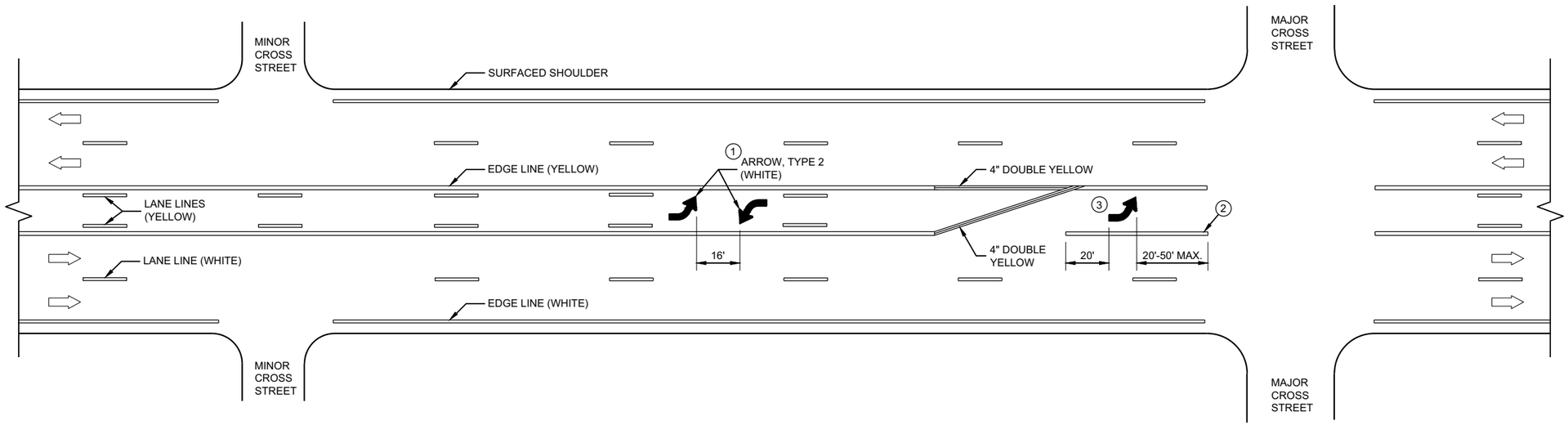
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

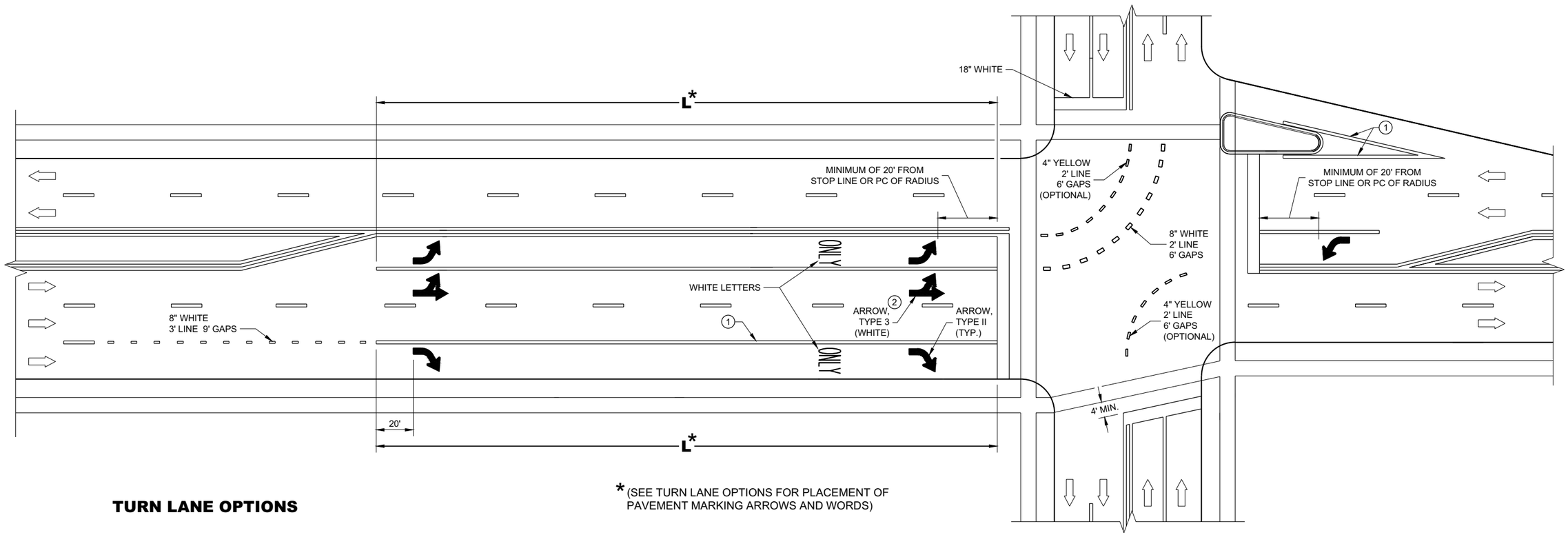
SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

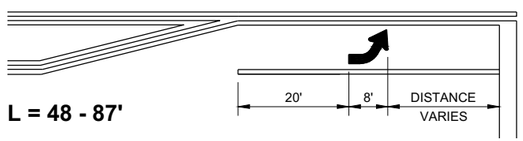
SDD 15C08 - 20b



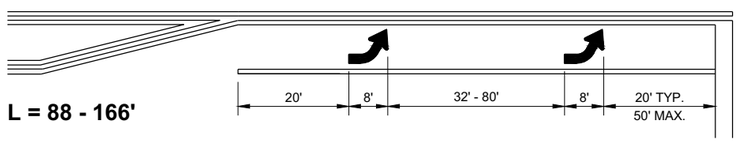
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

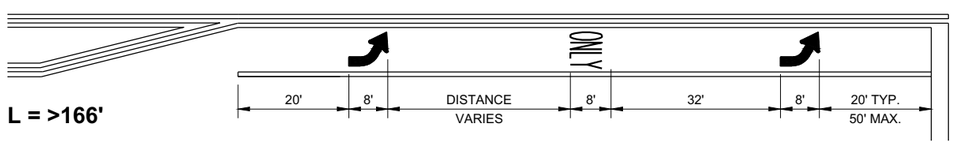
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

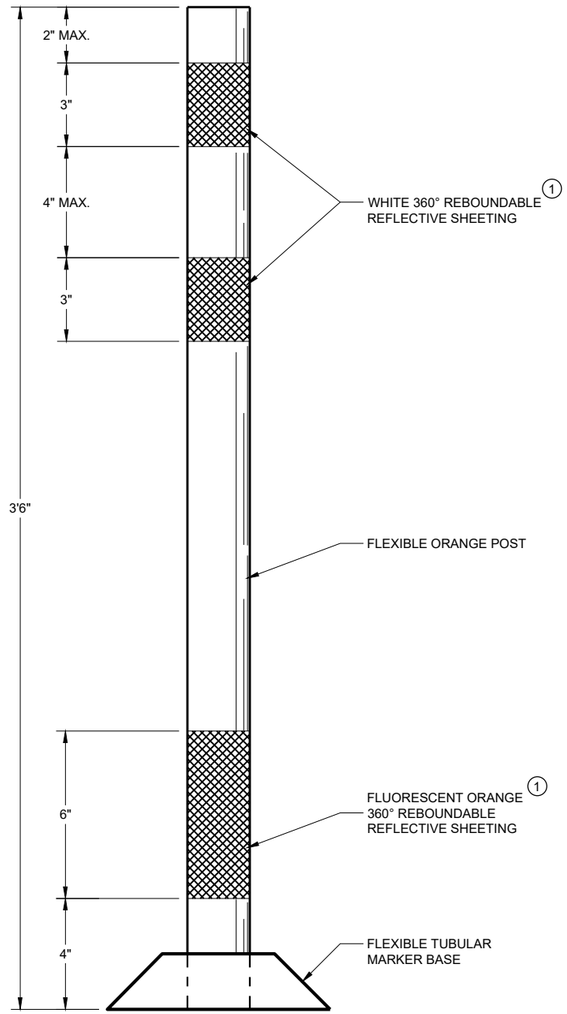
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 20c



FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

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

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

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

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

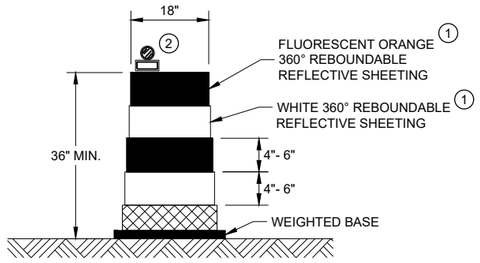
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SDD 15C11 - 09a

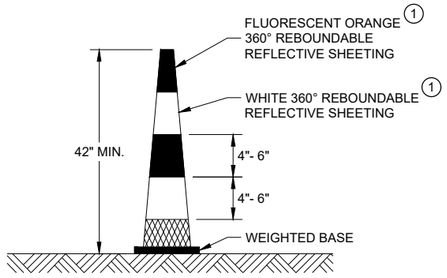
SDD 15C11 - 09a

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

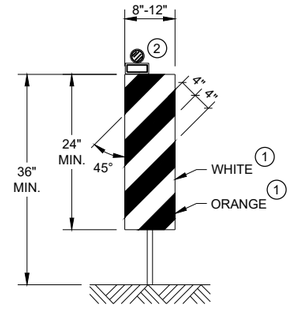


DRUM



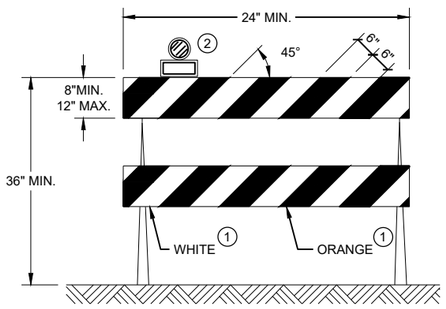
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



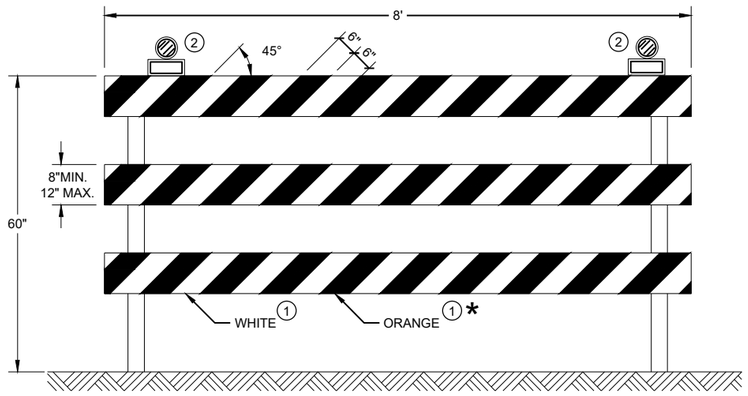
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD15C11 - 09b

SDD15C11 - 09b

LEGEND

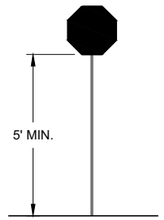
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



STOP/SLOW PADDLE ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

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

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

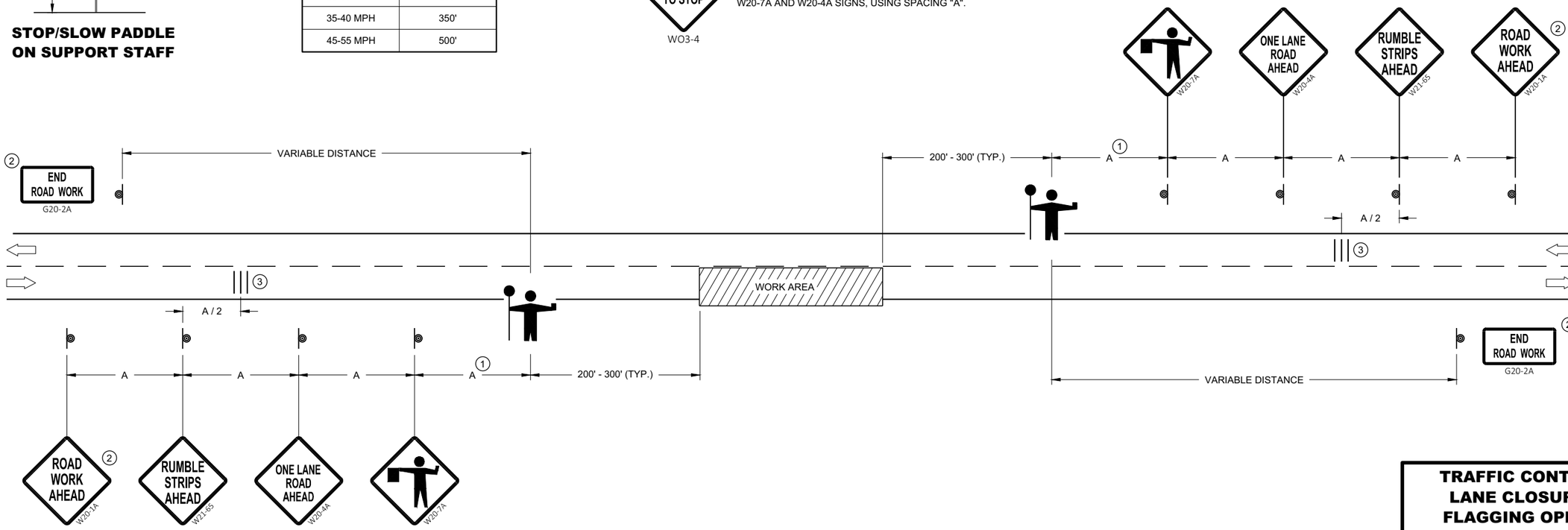
SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

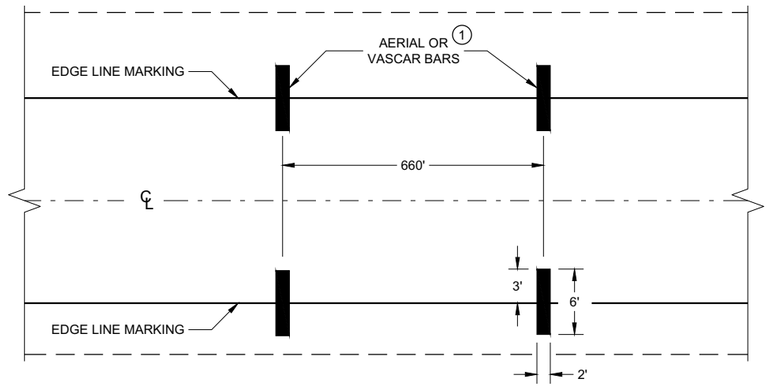
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SDD 15C12 - 07

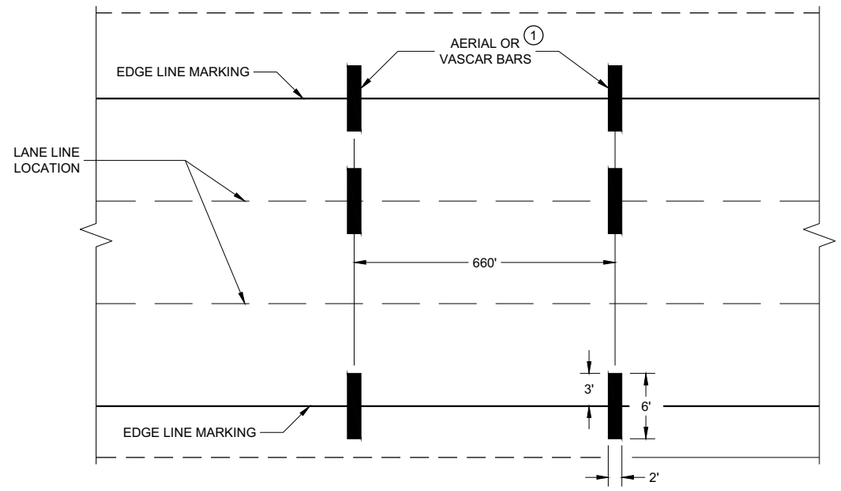
GENERAL NOTES

(1) PLACE TWO TO FIVE AERIAL OR VASCAR BARS AT 660 FOOT SPACING.

A CAR CAN BE PROVIDED BY THE WISCONSIN STATE PATROL FOR TRAFFIC CONTROL.



TYPICAL FOR TWO WAY OR ONE WAY TRAFFIC



TYPICAL FOR MULTILANE TRAFFIC

SPEED ENFORCEMENT ZONE WITH AERIAL OR VASCAR BARS

6

SDD 15C14 - 04

AERIAL ENFORCEMENT BARS PAVEMENT MARKING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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February 2021
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STATE SIGNING AND MAR ENGINEER

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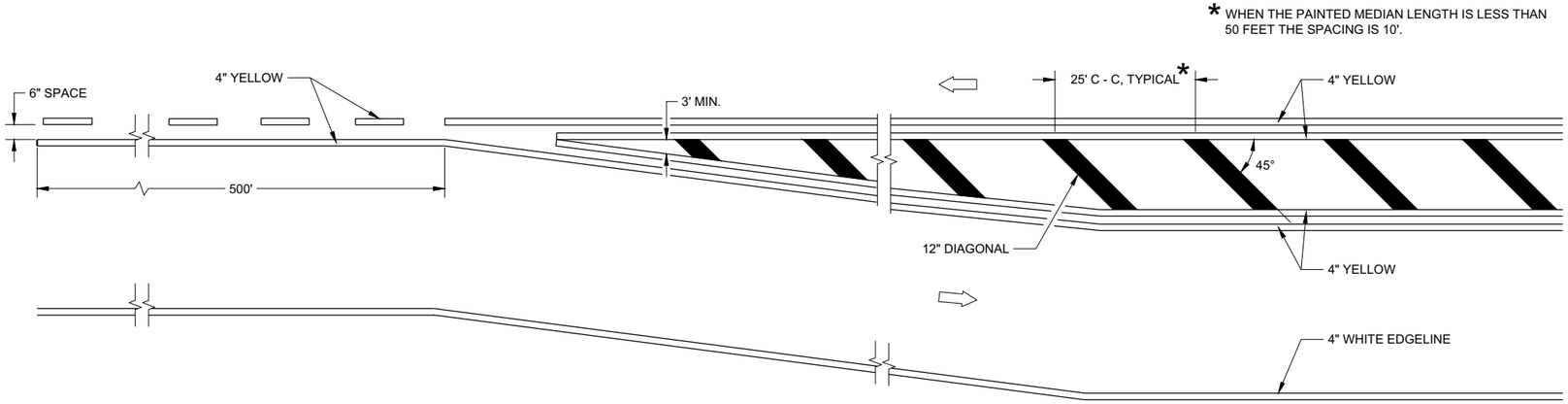
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SDD 15C14 - 04

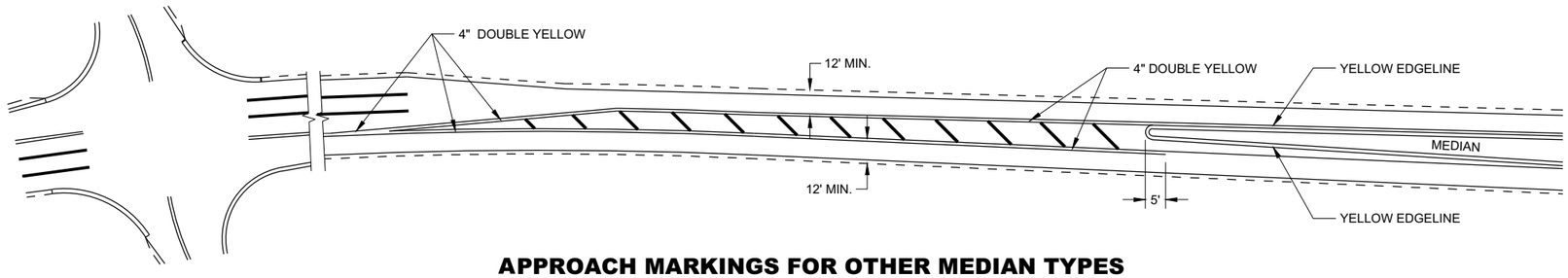
GENERAL NOTES

DIAGONALS ARE OPTIONAL WHEN PAINED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

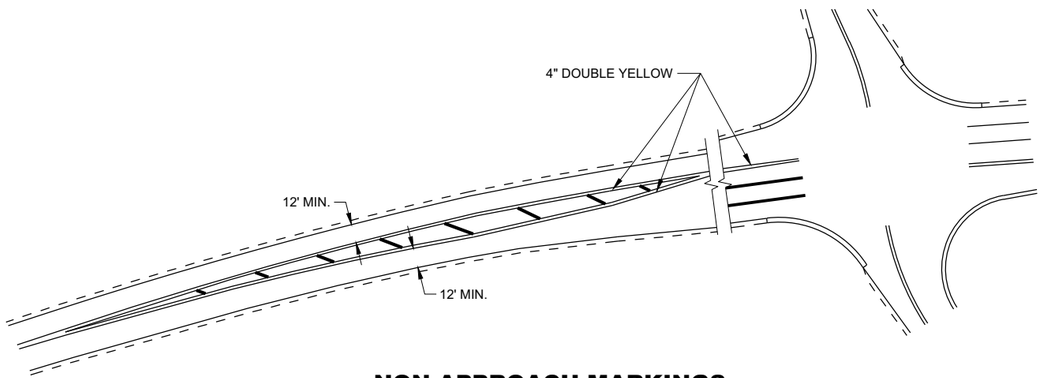
⇨ DIRECTION OF TRAVEL



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

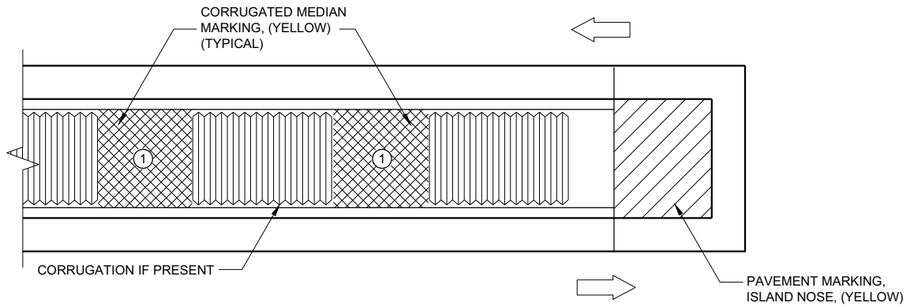
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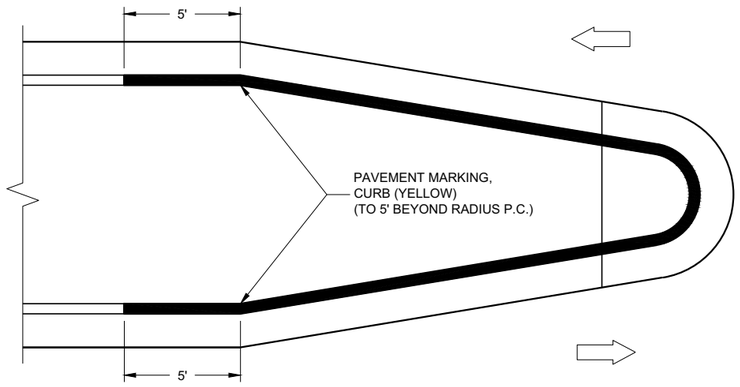
SDD 15C18 - 05a

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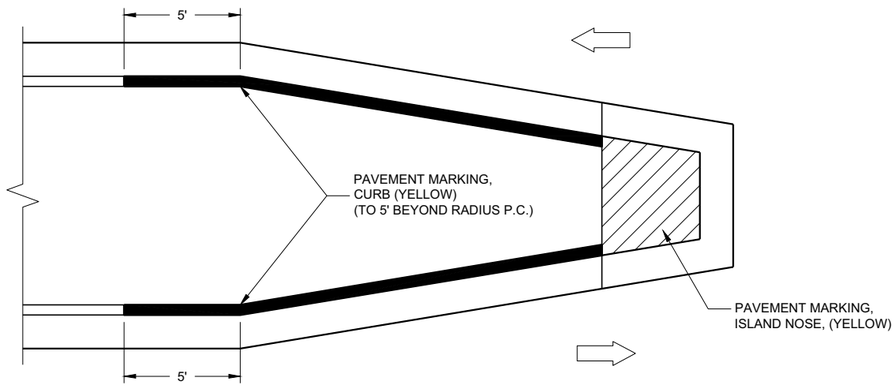
SDD 15C18 - 05a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF
ENGINEER

FHWA

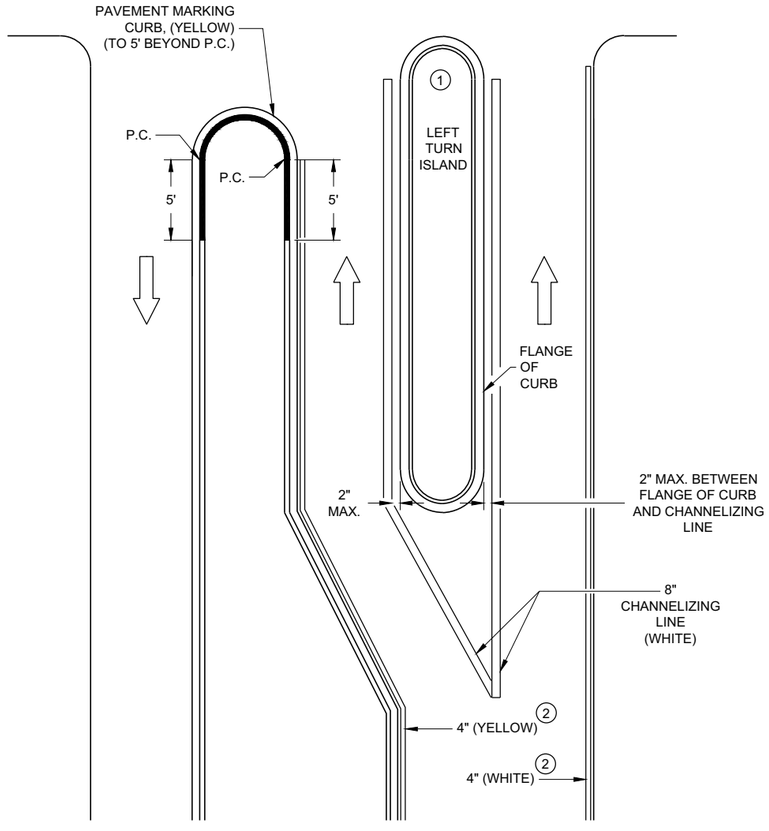
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SDD 15C18 - 05b

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SDD15C18 - 05b

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



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

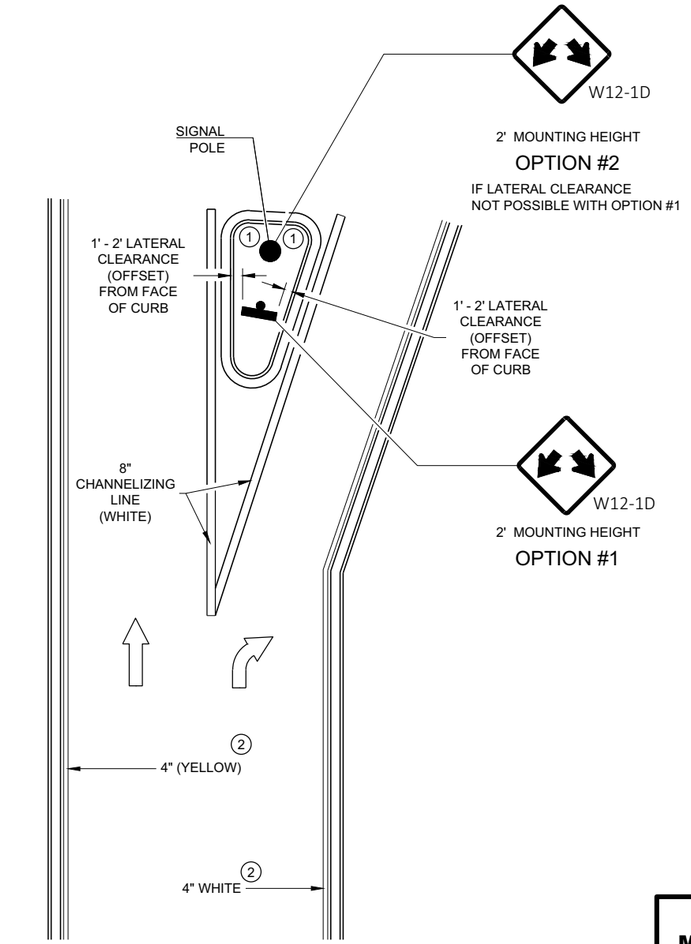
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

February 2021
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

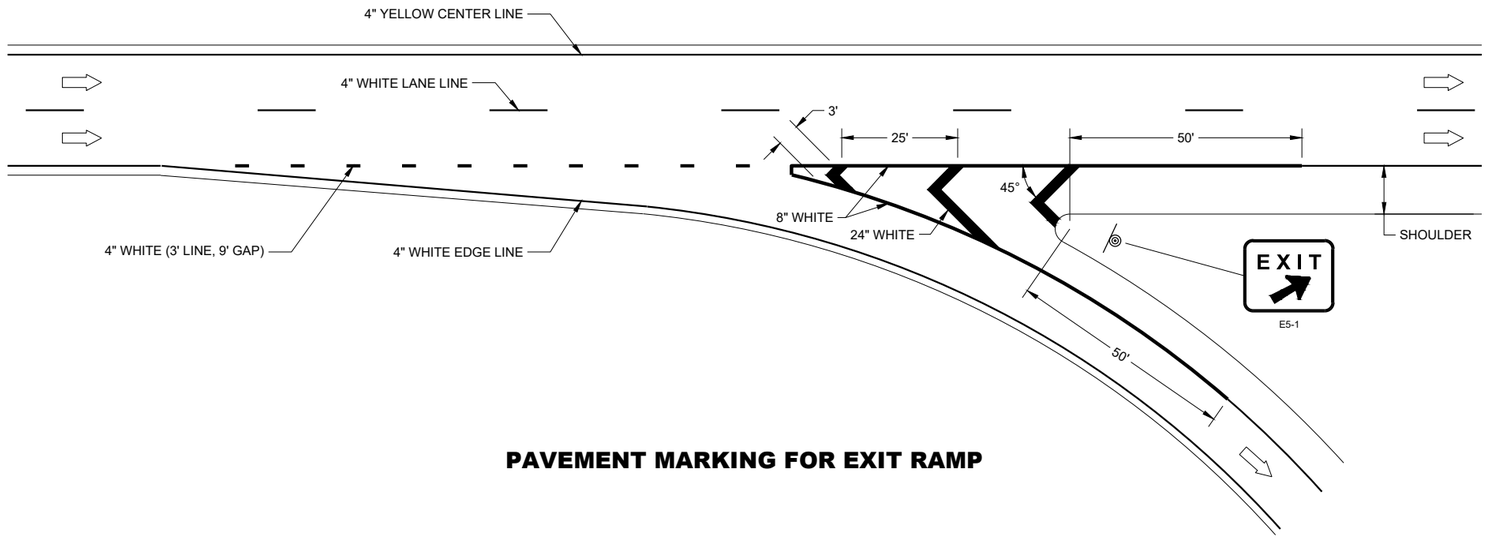
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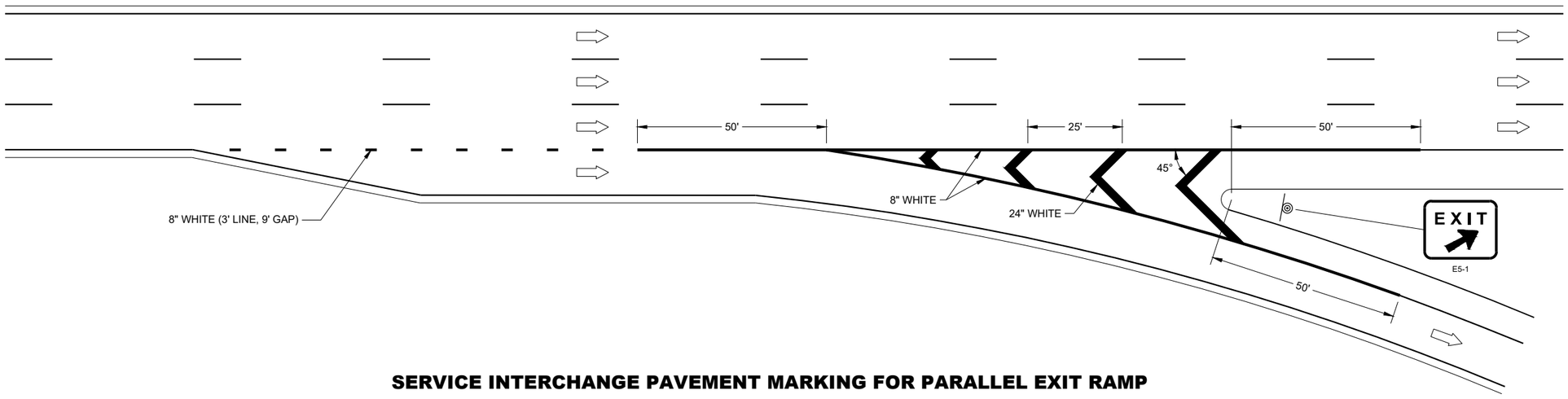
SDD 15C18 - 05c

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SDD 15C18 - 05c



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAVEL

6

SDD 15C31 - 04a

PAVEMENT MARKING, EXIT RAMP AND PARALLEL EXIT RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

6

SDD 15C31 - 04a

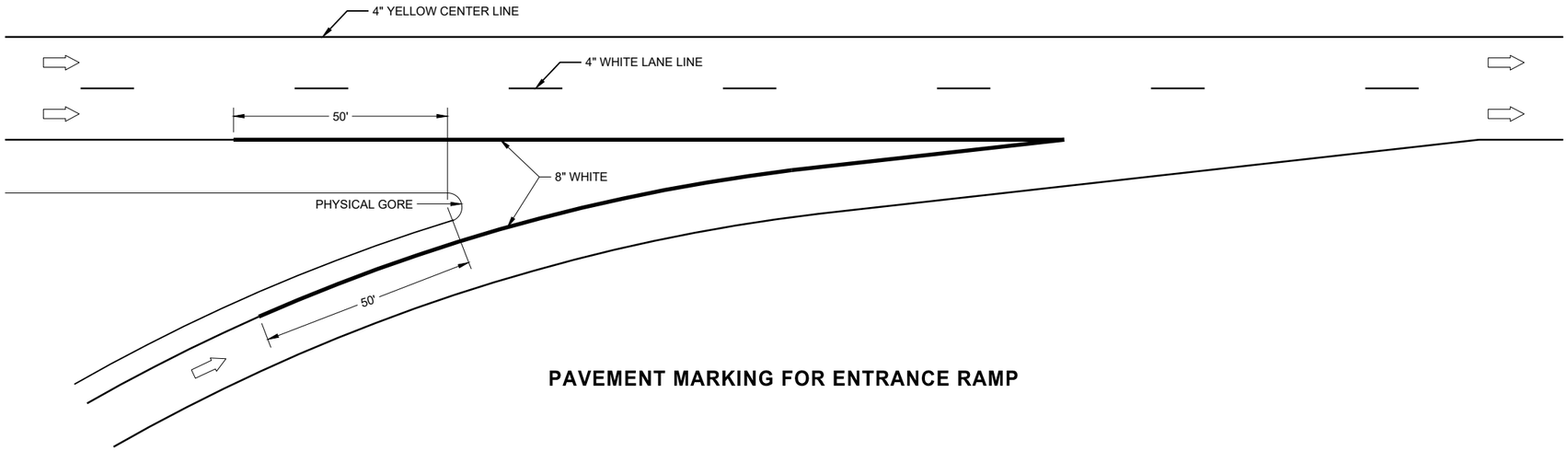
GENERAL NOTES

PLACE GROOVE 3 INCHES LEFT OF JOINT.

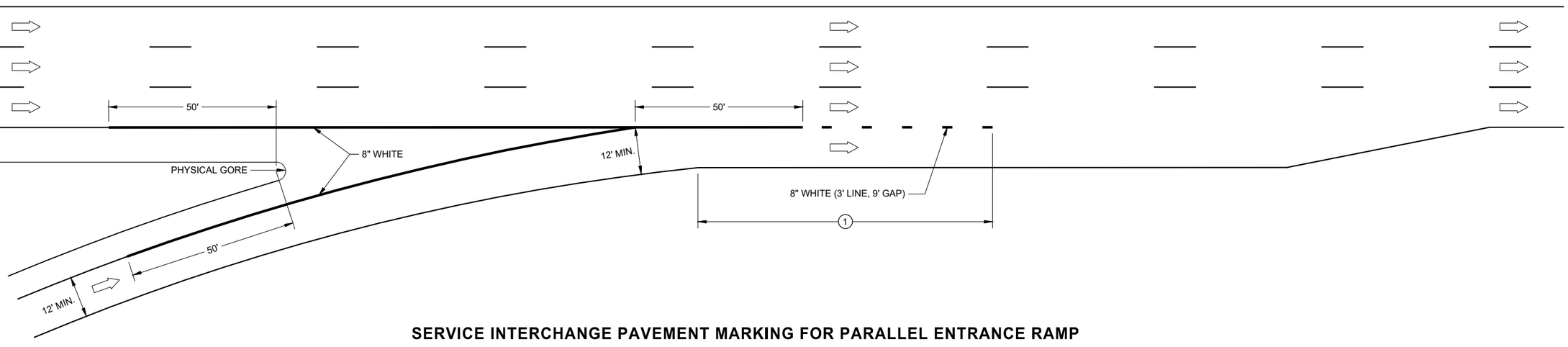
(1) ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

DIRECTION OF TRAVEL



PAVEMENT MARKING FOR ENTRANCE RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

6

6

SDD 14C31 - 04c

SDD 14C31 - 04c

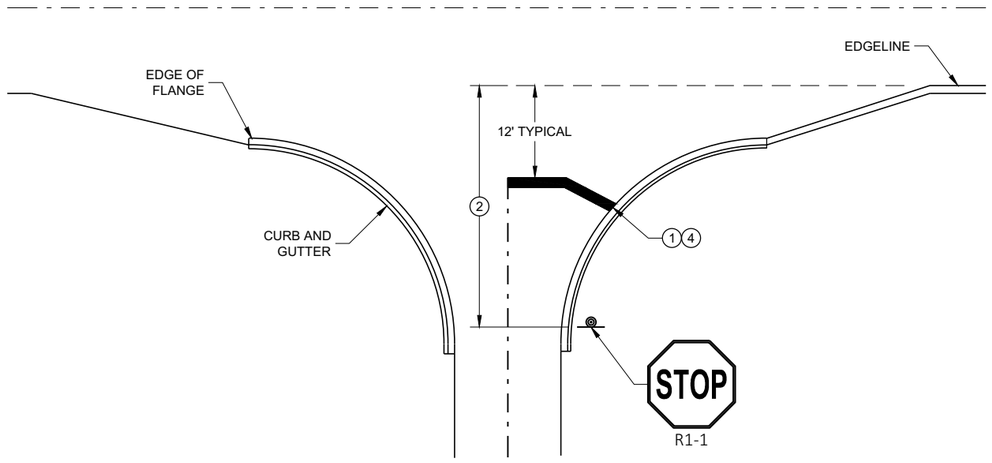
PAVEMENT MARKING, ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

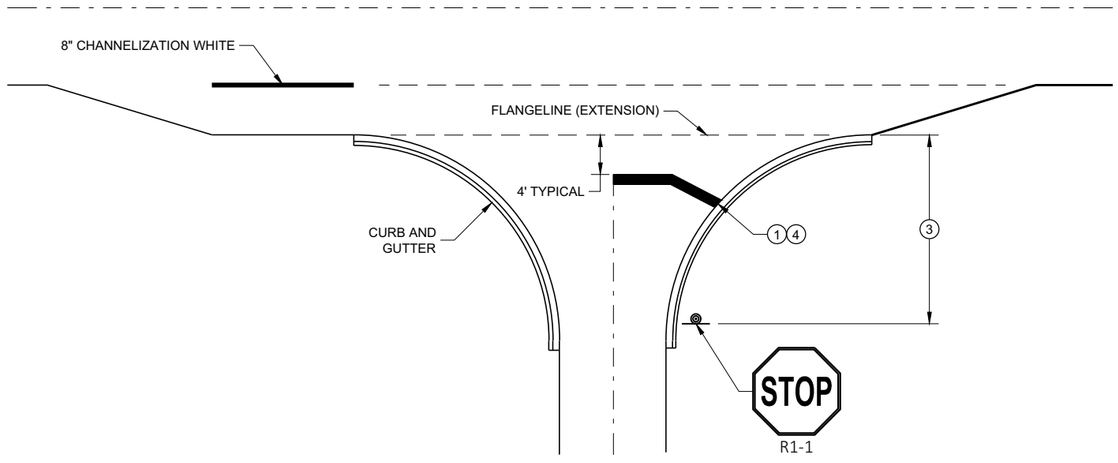
GENERAL NOTES

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

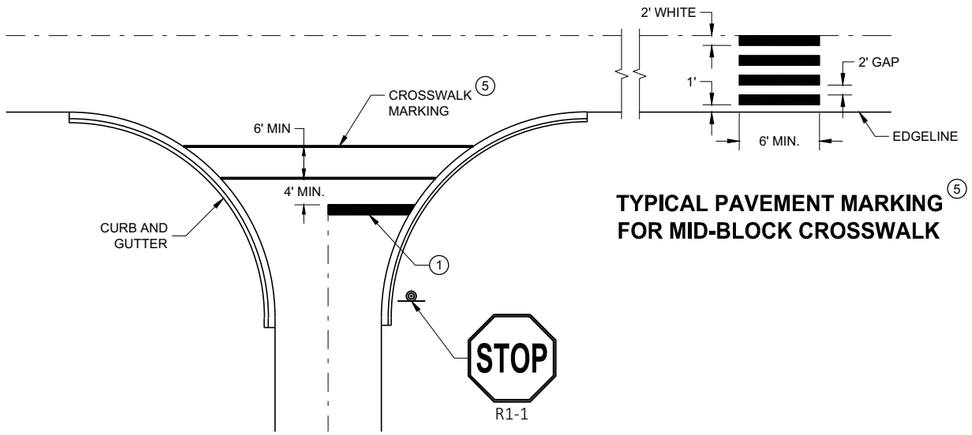
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

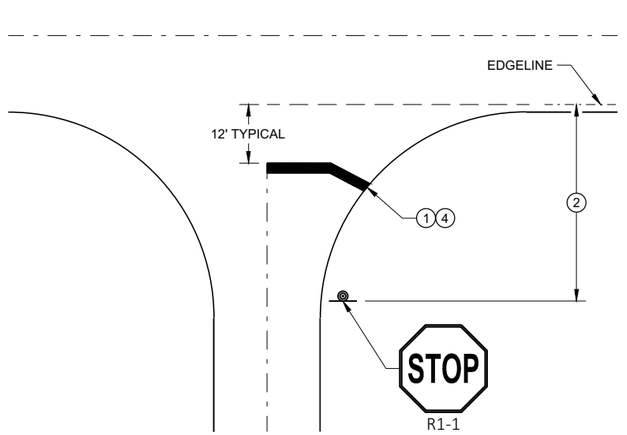


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C33 - 04

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

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

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

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

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

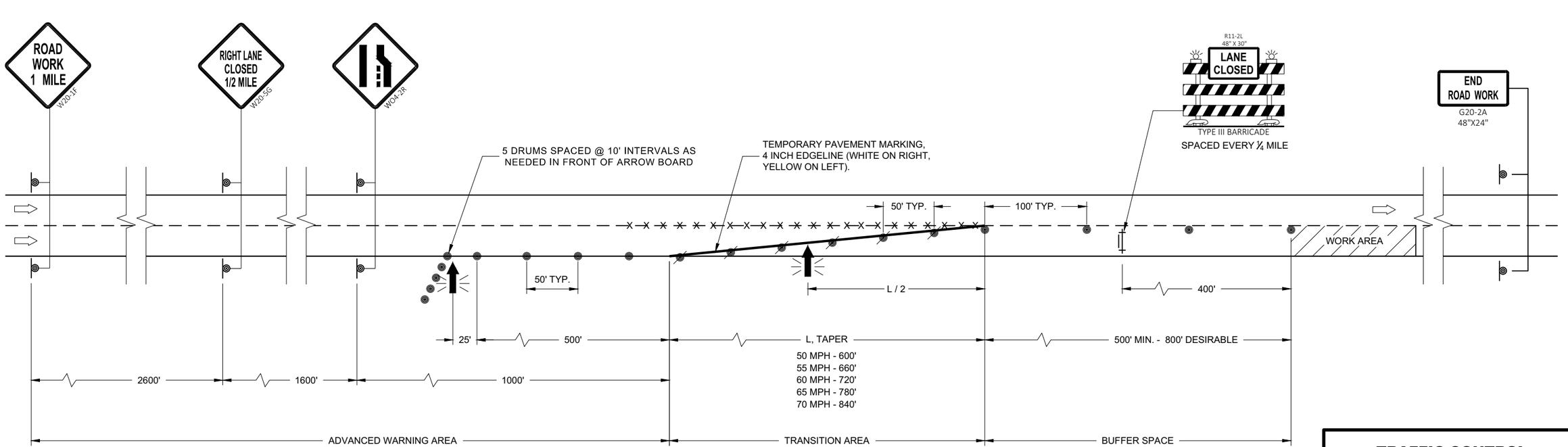
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D12 - 09a

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SDD 15D12 - 09a

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

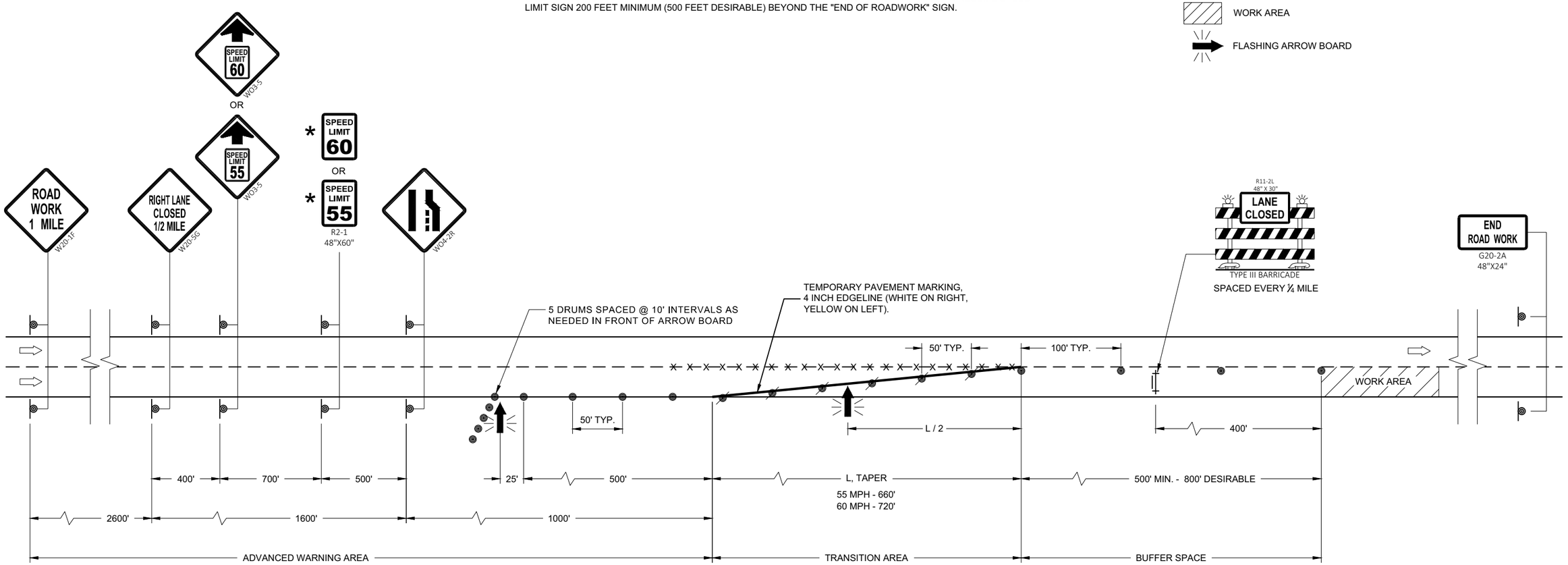
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE 200

FHWA

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SDD 15D12 - 09b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- (S) PORTABLE TRAFFIC SENSOR (PTS)
- FBS FLASHING BEACON SIGN

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED OR AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED SIGNS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

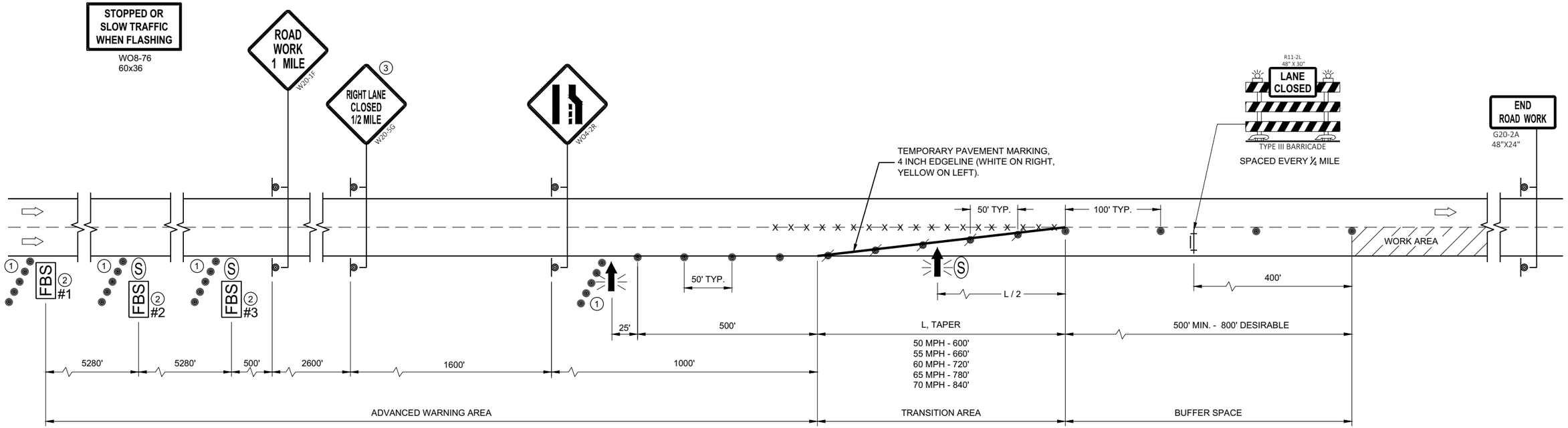
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON THE FBS, ARROW BOARD OR OTHER TRAILER DEVICES.

1. 5 DRUMS SPACED AT 10 FOOT INTERVALS AS NEEDED.
2. IF THERE ARE MORE THAN TWO LANES OR IF SPECIFIED IN THE PLANS, PLACE FBS ON BOTH SIDES OF THE ROADWAY.
3. IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A "RESUME SPEED LIMIT" SIGN 200 FEET MINIMUM (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, BASIC TRAFFIC QUEUE WARNING SYSTEM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D12 - 09d

6
SDD 15D12 - 09d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

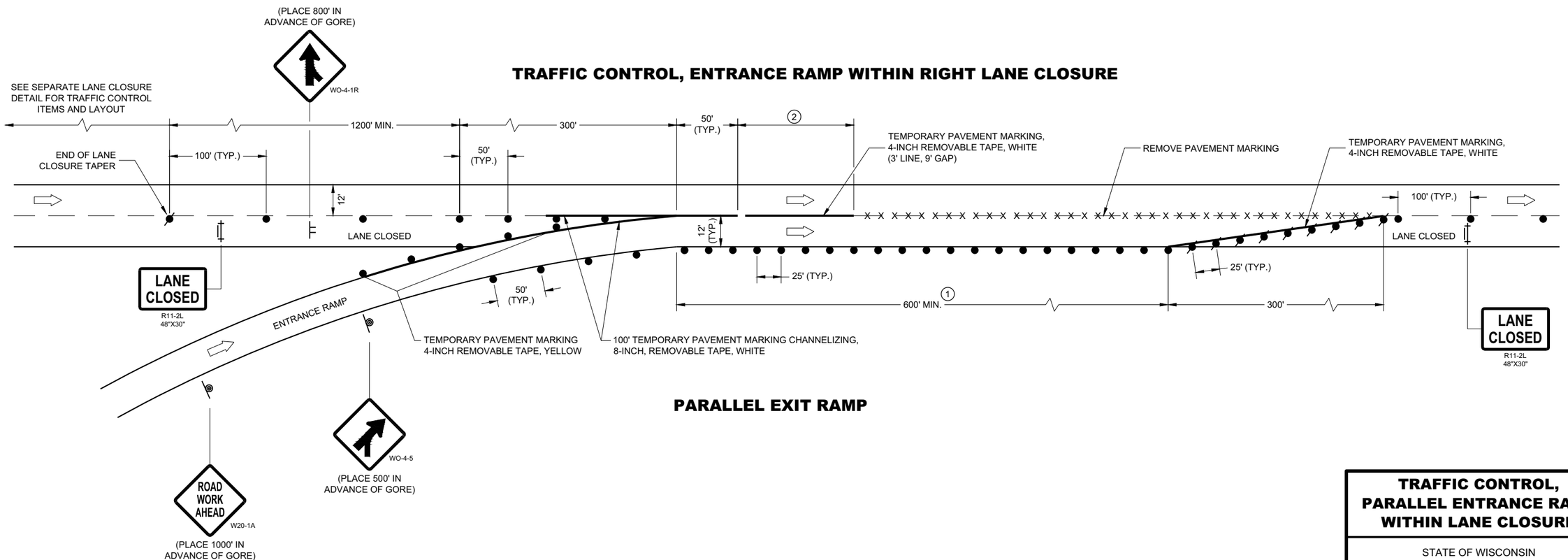
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

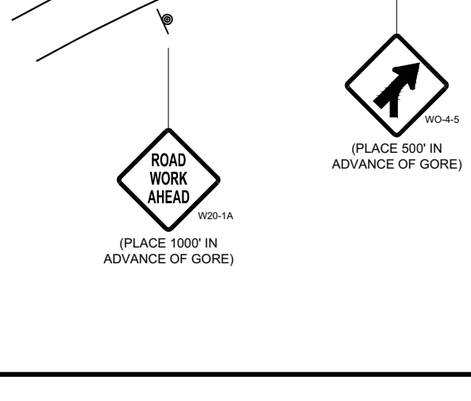
(1) EXTEND THE LENGTH OF THE MERGE ARE IF THE ENTERING (DESIGN) SPEED IS LESS THAN 50MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY MARKING AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



PARALLEL EXIT RAMP



TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

SDD 15D15 - 05a

SDD 15D15 - 05a

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS /OR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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

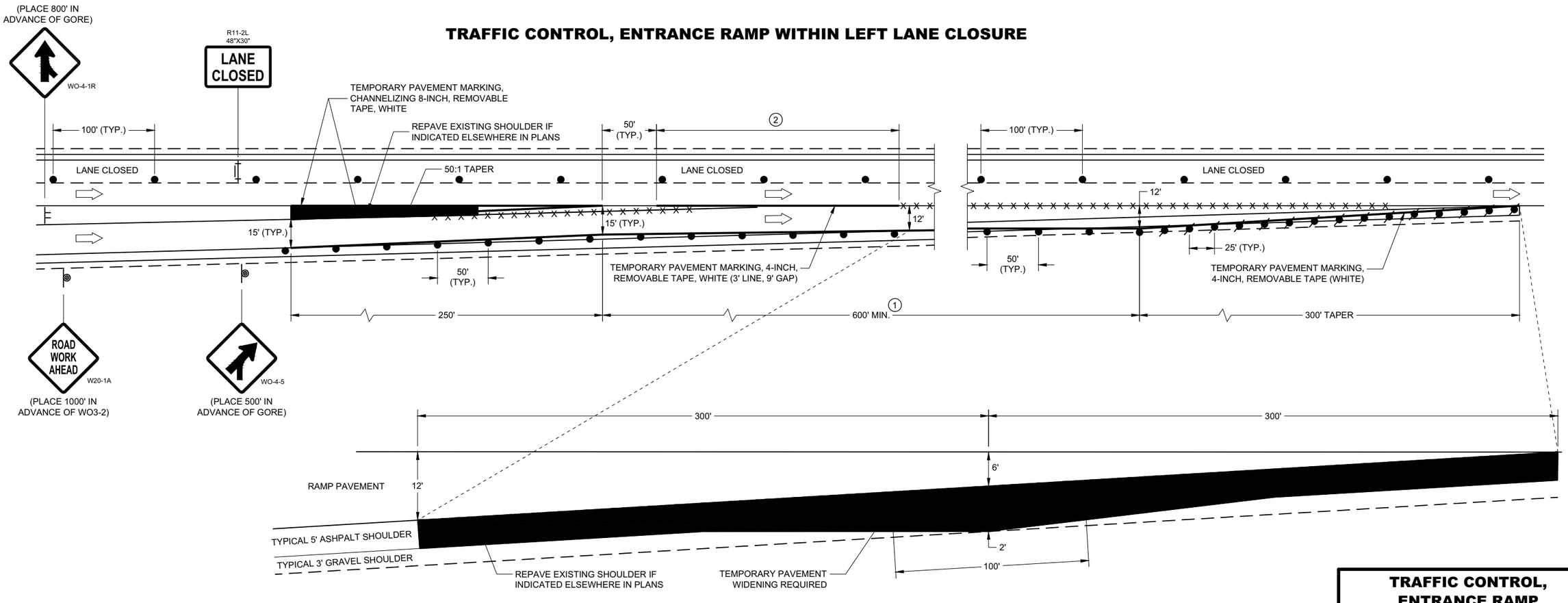
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) EXTEND THE LENGTH OF THE MERGE AREA IF THE ENTERING (DESIGN) SPEED OF THE RAMP IS LESS THAN 50 MPH OR IF THE MAINLINE GRADE EXCEEDS ±2.2%.

(2) END TEMPORARY MARKING AT ½ THE LENGTH OF FULL WIDTH OF THE ACCELERATION LANE.

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LEFT LANE CLOSURE



TEMPORARY PAVEMENT DETAIL

(EXISTING RAMP DIMENSIONS MAY VARY, ADJUST TEMPORARY PAVEMENT ACCORDINGLY)

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05b

6

SDD15D15 - 05b

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

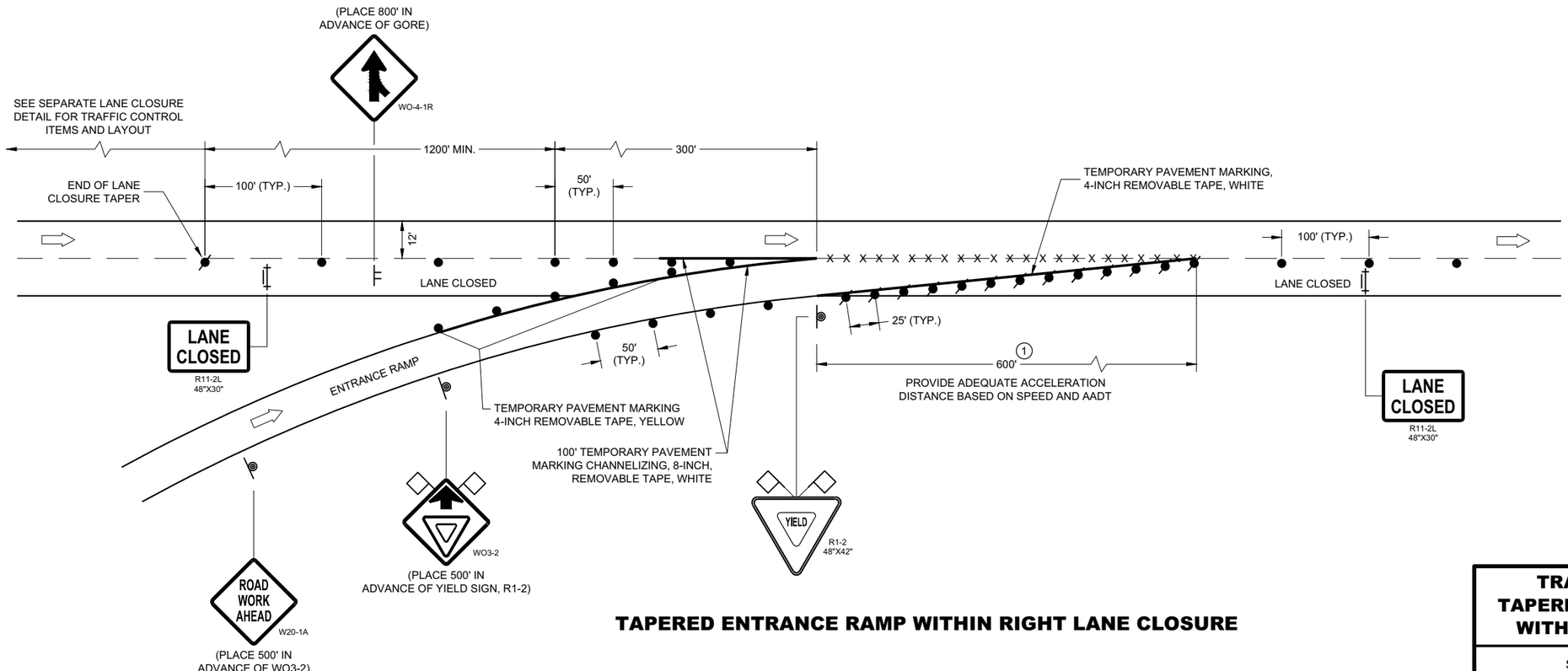
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) CONSULT WITH REGIONAL WORK ZONE ENGINEER IF NEED TO REDUCE LENGTH EXISTS.



TAPERED ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05c

6

SDD 15D15 - 05c

LEGEND

SIGN ON PERMANENT SUPPORT

SIGN ON TEMPORARY SUPPORT

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT

TYPE III BARRICADE WITH ATTACHED SIGN

FLAGS, 16" X 16" MIN., ORANGE

DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

YIELD SIGN AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE LEFT LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

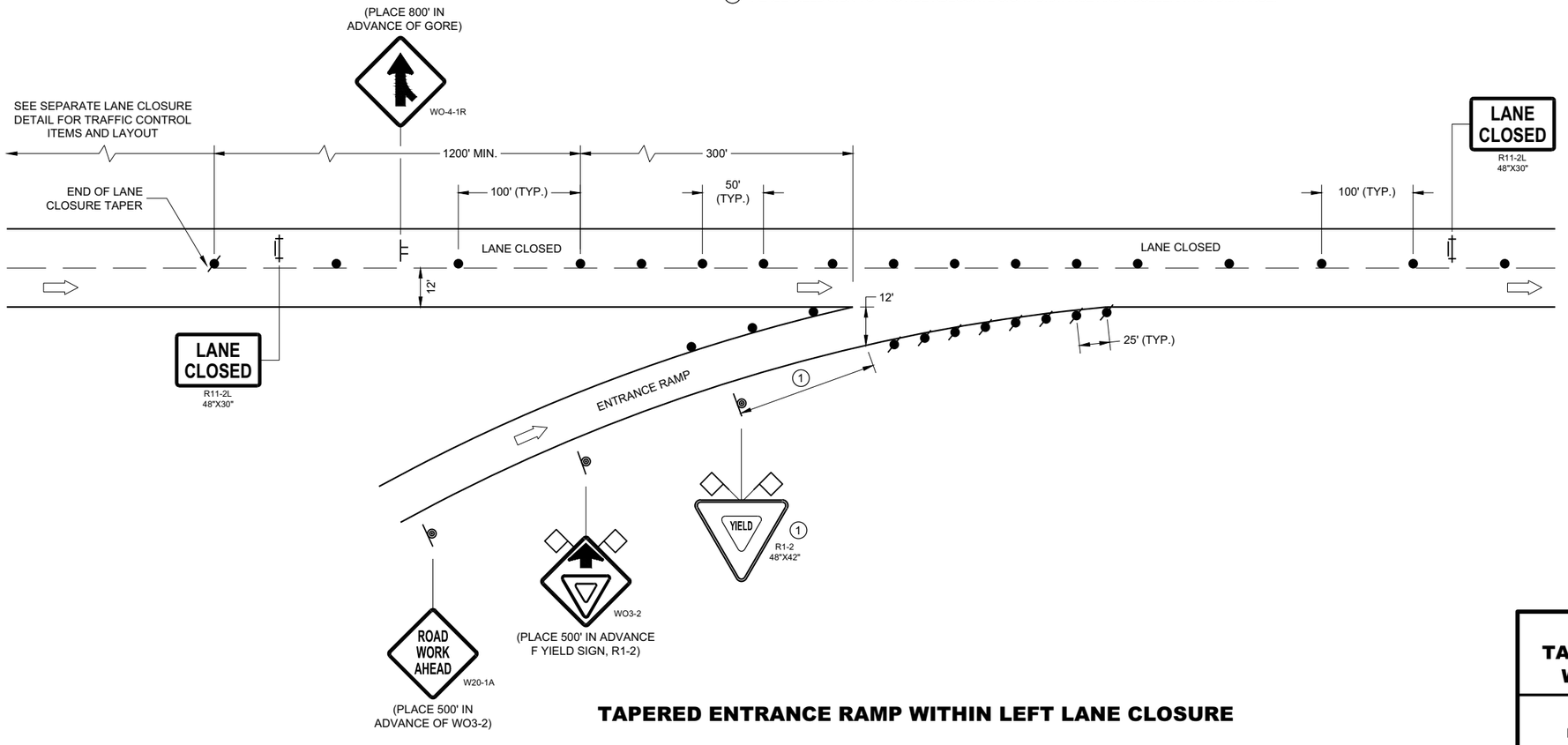
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

(1) PLACE YIELD SIGN TO PROVIDE ADEQUATE SIGHT DISTANCE AND ACCELERATION DISTANCE.



TAPERED ENTRANCE RAMP WITHIN LEFT LANE CLOSURE

TRAFFIC CONTROL, TAPERED ENTRANCE RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05d

6

SDD15D15 - 05d

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC

GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP. AT SPECIFIC FIELD LOCATIONS, SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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

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

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2L "LANE CLOSED" SIGNS.

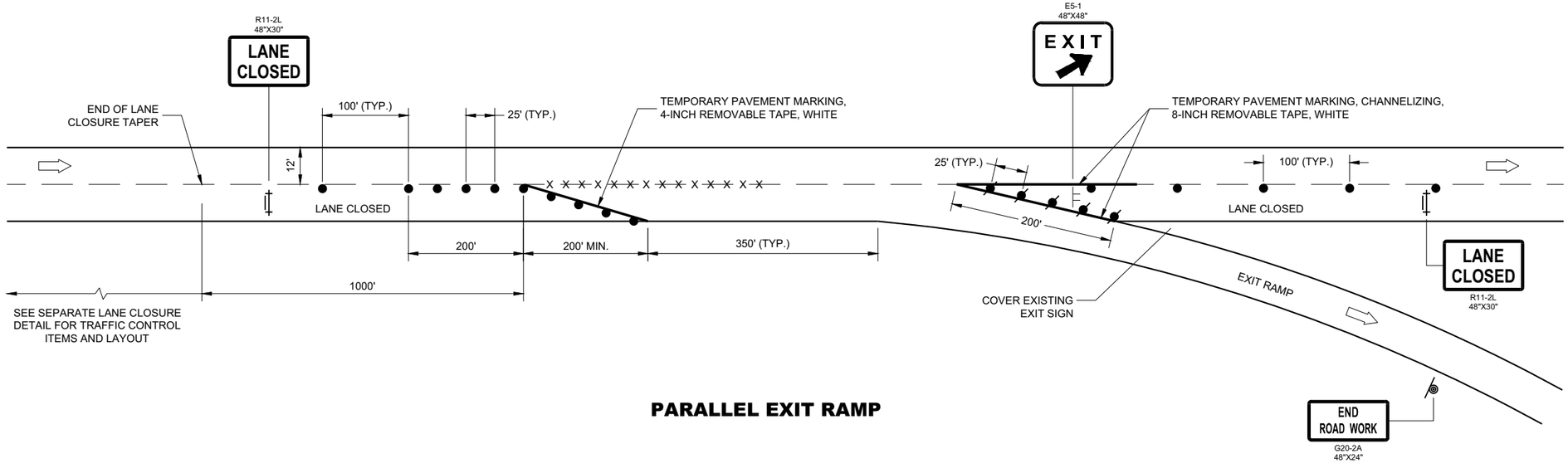
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE EXIT RAMP AND MAINLINE TRAFFIC.

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

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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



PARALLEL EXIT RAMP

TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEE

FHWA

6

SDD 15D15 - 05e

6

SDD15D15 - 05e

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

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

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

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

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

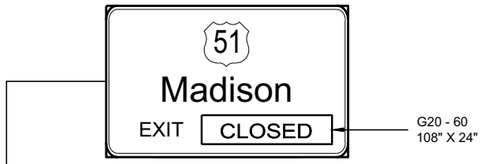
PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.

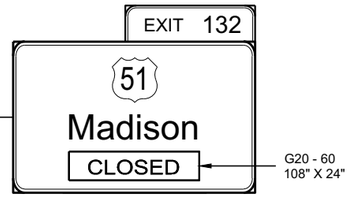
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.

* W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.



OR

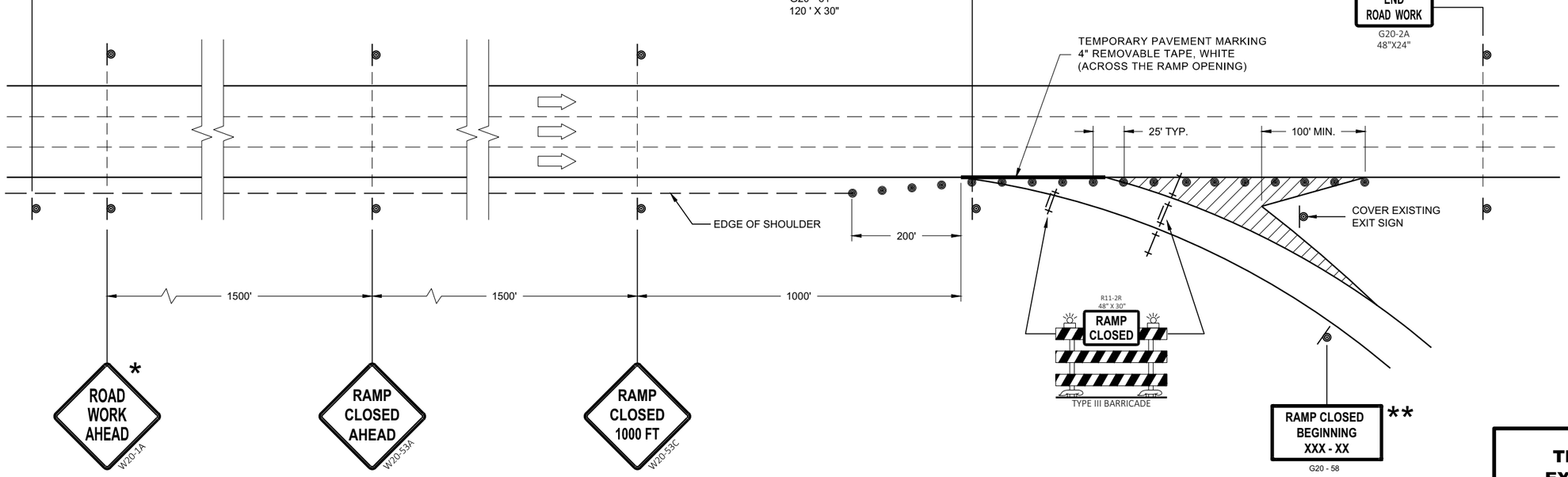


PLACE SIGN G20 - 60 OVER MILEAGE ON EXISTING E1 - 1A SIGN



COVER ARROW ON EXISTING E4 - 1 SIGN (COVERING SIGNS TYPE I)

G20 - 61
120 ' X 30"



OR

PCMS MESSAGING

FRAME 1	FRAME 2
RAMP TO CLOSE	XXXDAY XX XX XX

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Andrew Heidtke
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 15D16 - 04

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

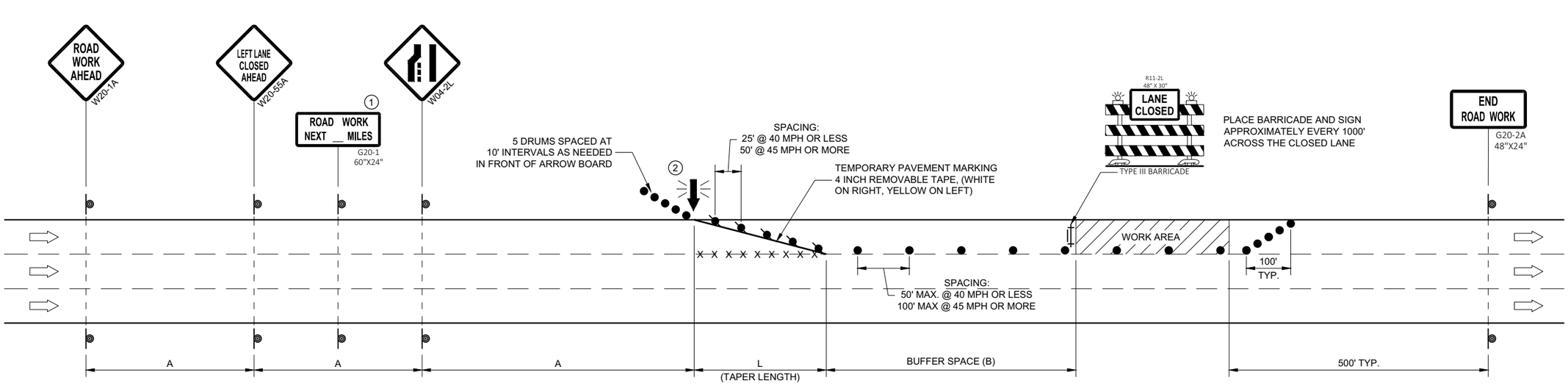
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

6

SDD 15D20 - 05a
SDD15D20 - 05a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA



GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

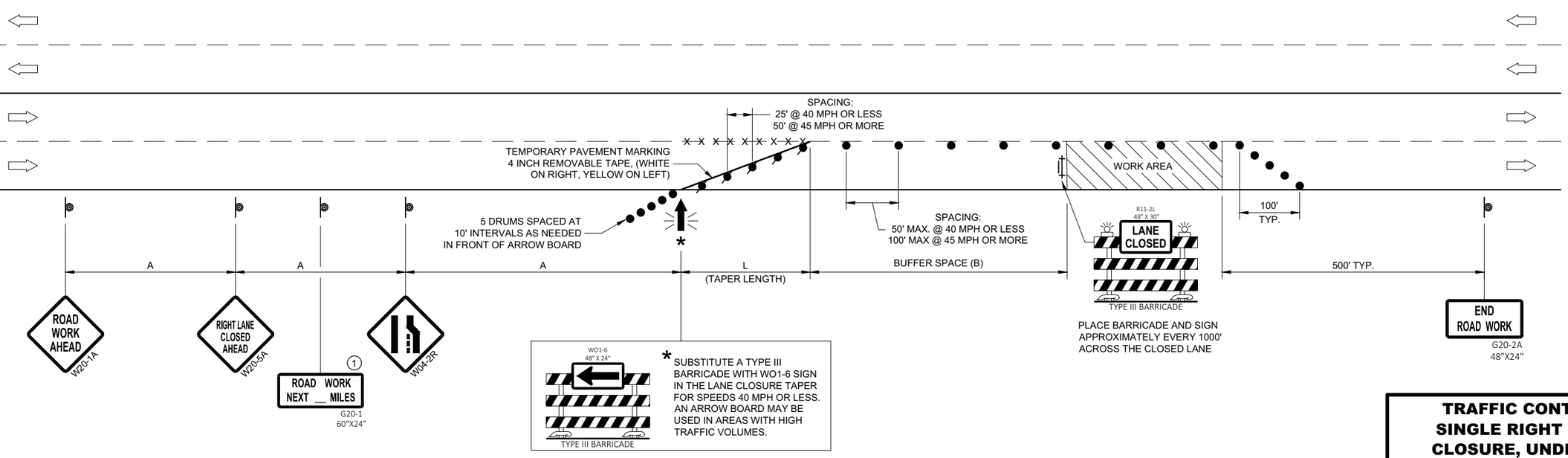
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'





TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

SDD 15D20 - 05b

SDD 15D20 - 05b

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36"X 36" SIGNS MAY BE USED IF APPROVED BY REGIONAL TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

DUE TO LACK OF SHOULDER/MEDIAN, ARROW BOARD IS PLACED AT THE THE END OF THE TAPER.

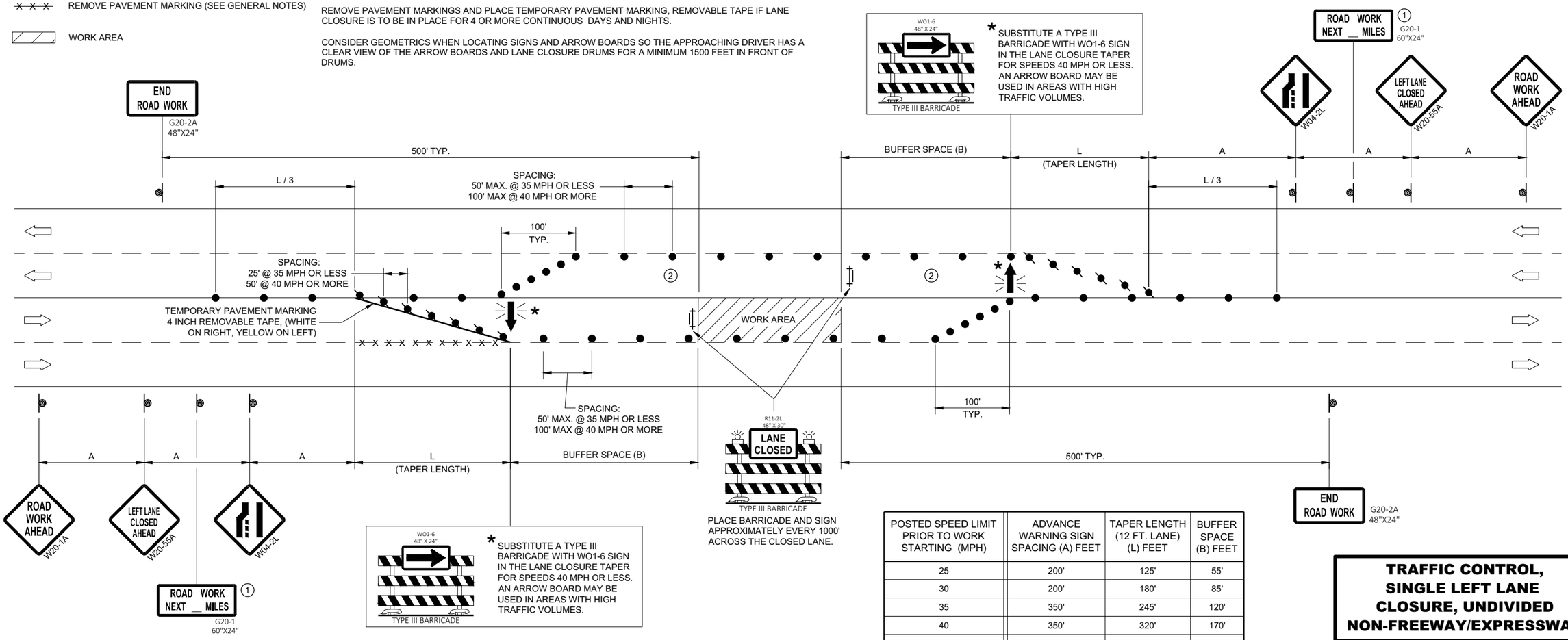
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

(1) OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

(2) LANE MAY BE OPENED WHEN WORKERS ARE NOT PRESENT IN THE WORK AREA.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'
50	500'	600'	280'
55	500'	660'	335'

TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

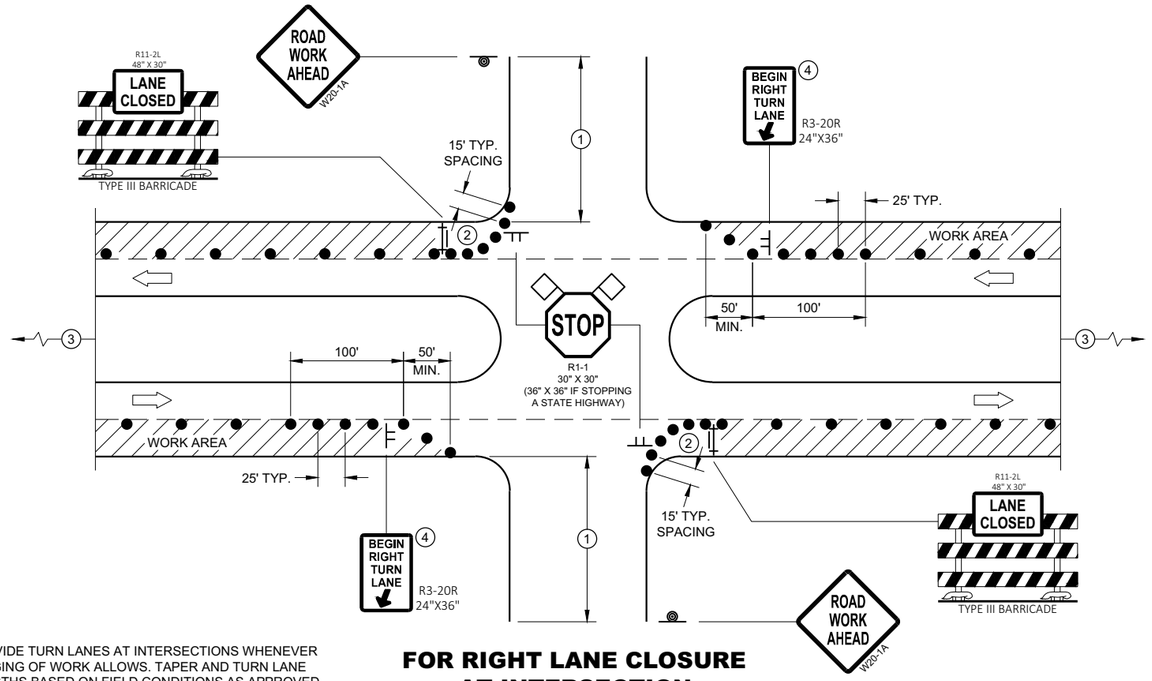
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE
/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

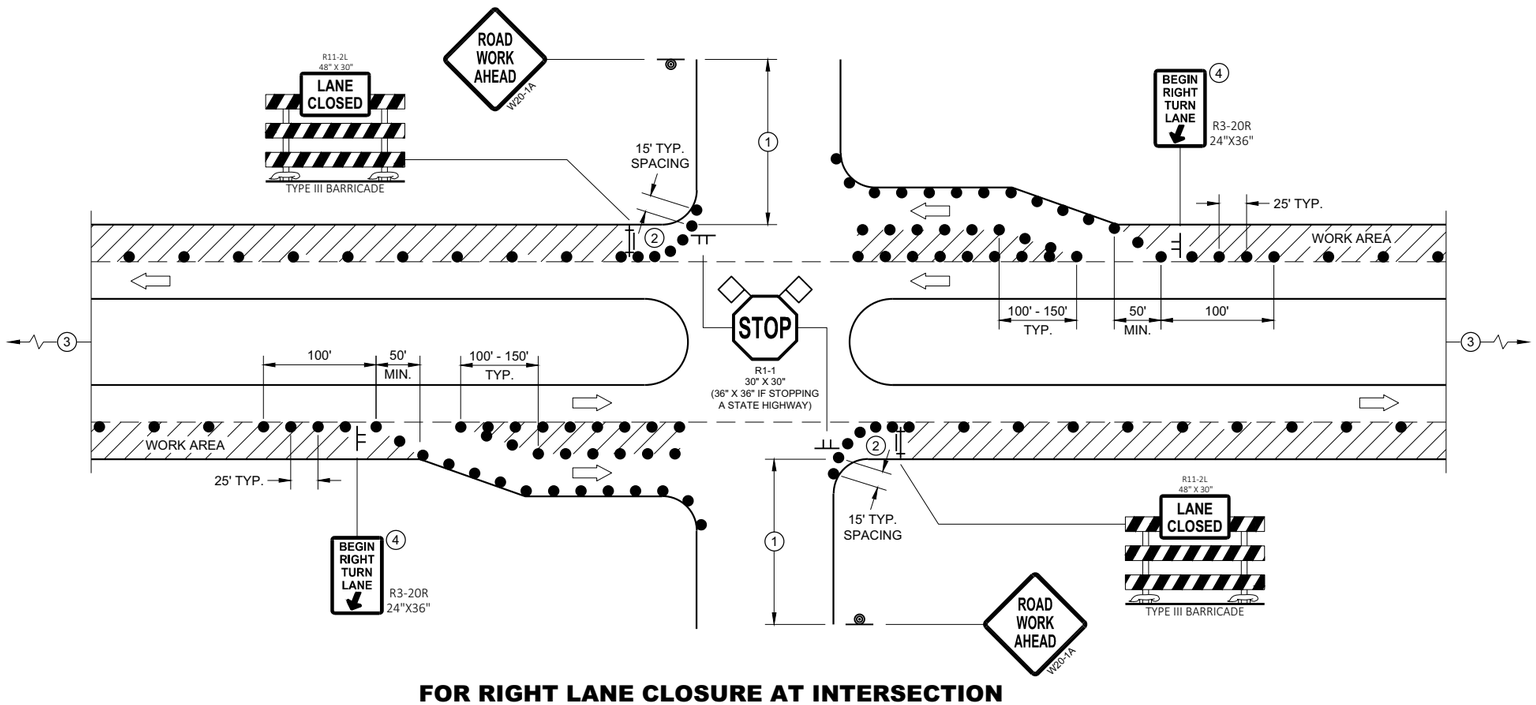
SDD 15D20 - 05c

SDD 15D20 - 05c



FOR RIGHT LANE CLOSURE AT INTERSECTION

PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

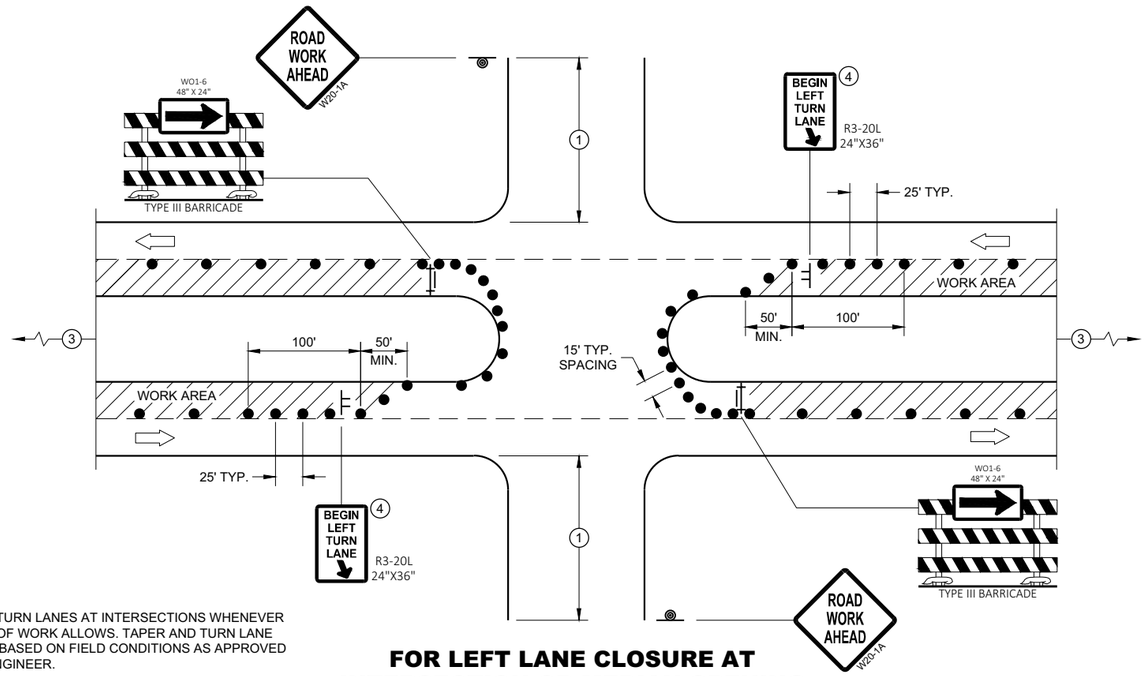
(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

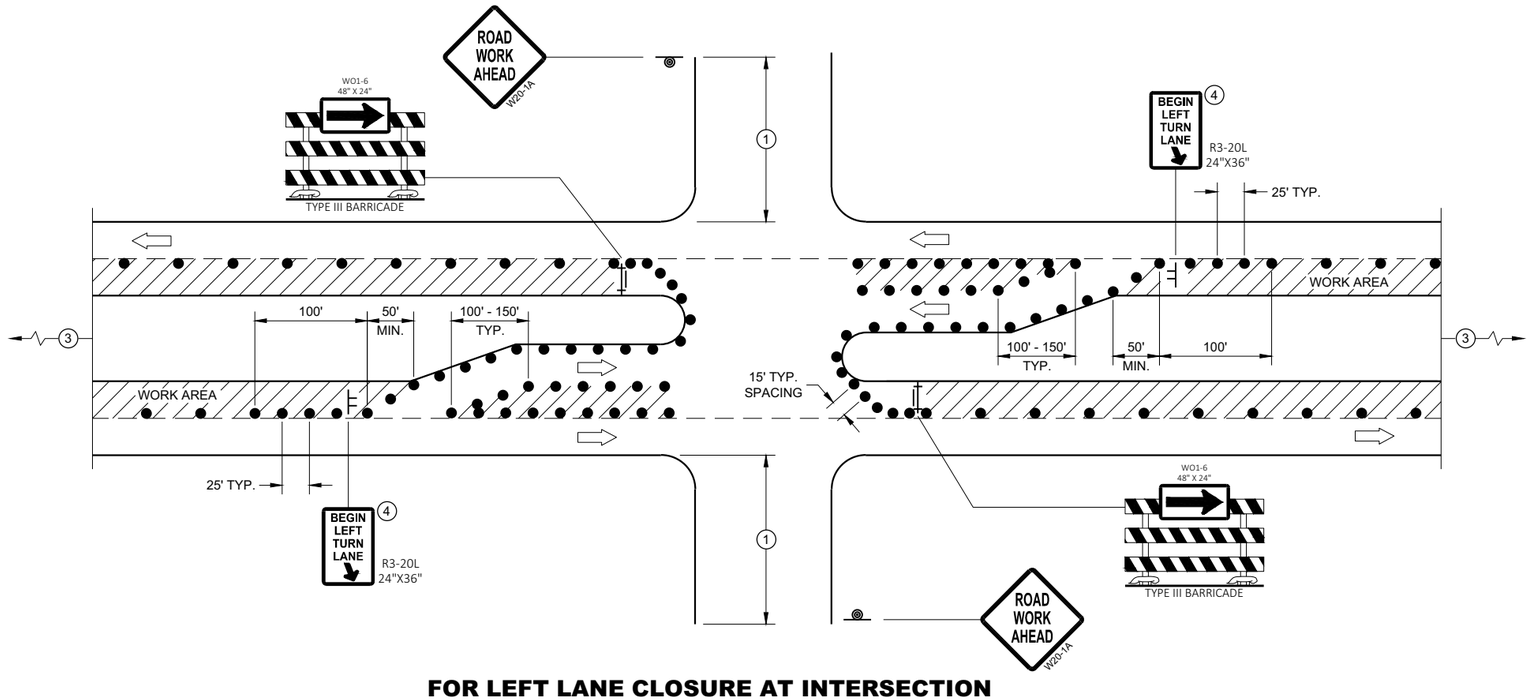
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER
FHWA

6

SDD 15D21 - 07b

6

SDD 15D21 - 07b

LEGEND

- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- FLASHING ARROW BOARD
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

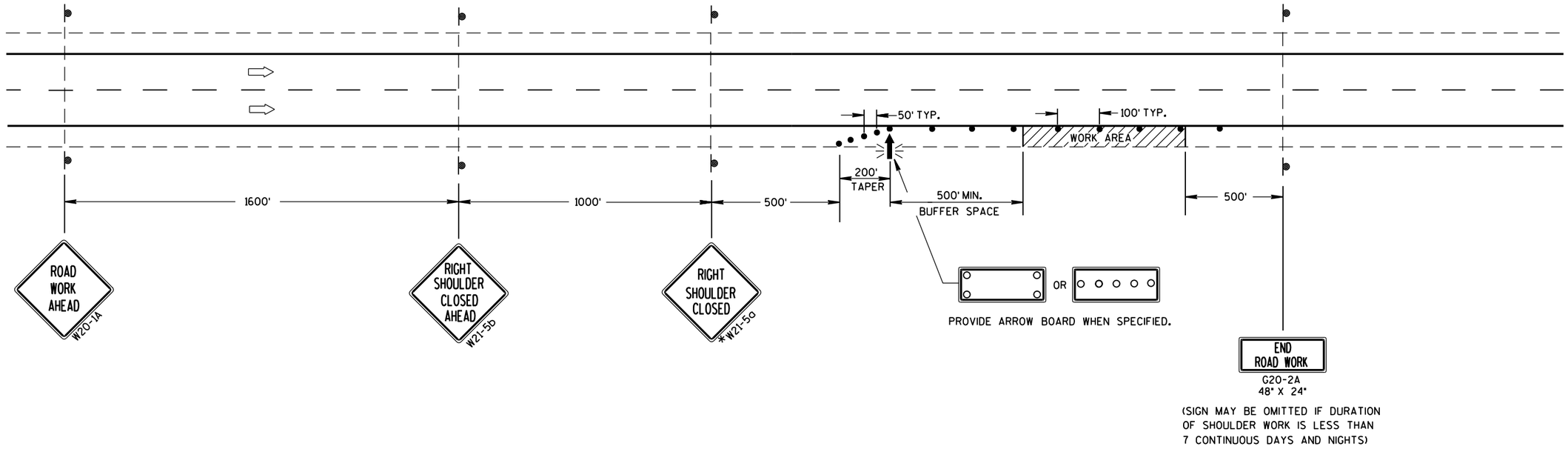
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

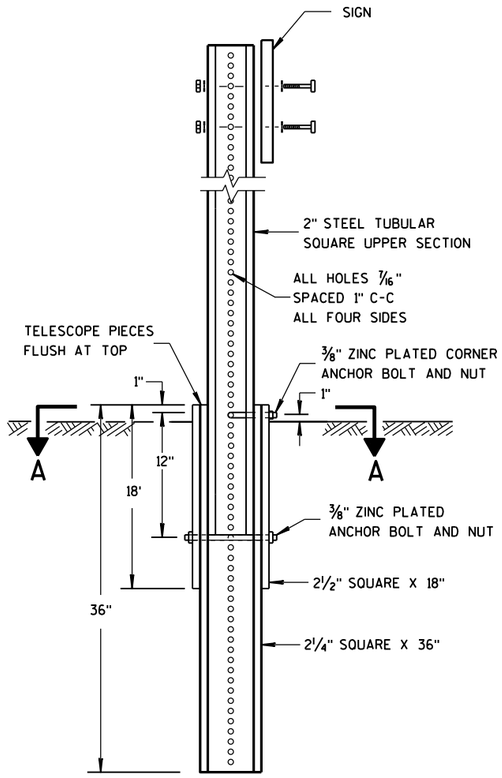
June 2016 — DATE

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZO[illegible] SAFETY ENGI[illegible]

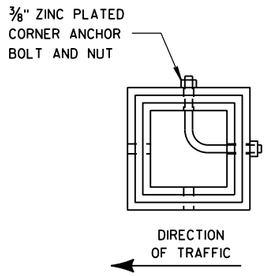
FHWA

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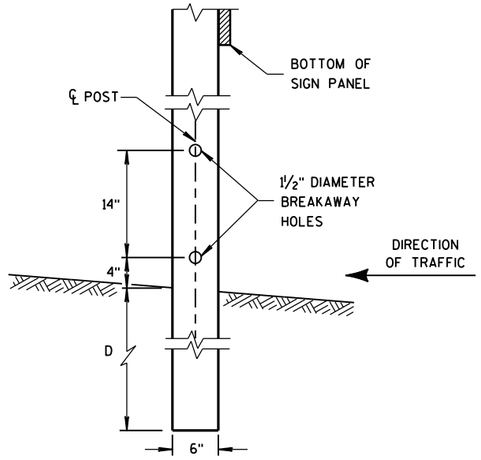
S.D.D. 15 D 27-3



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



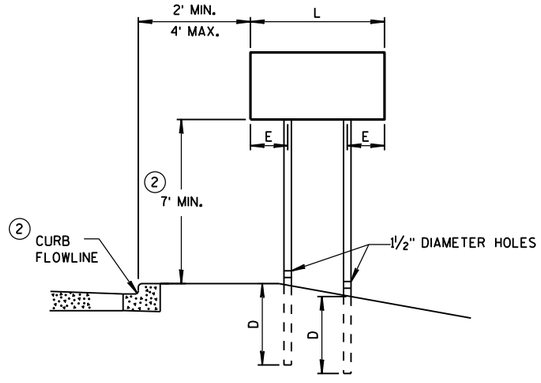
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

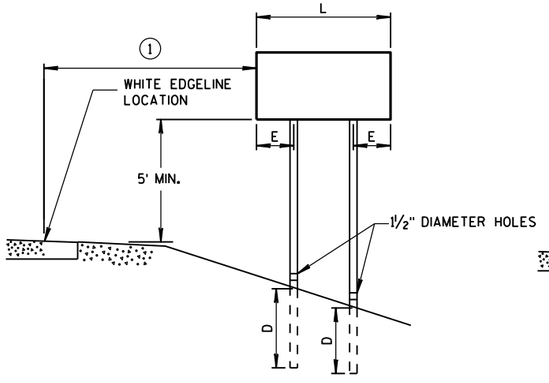
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

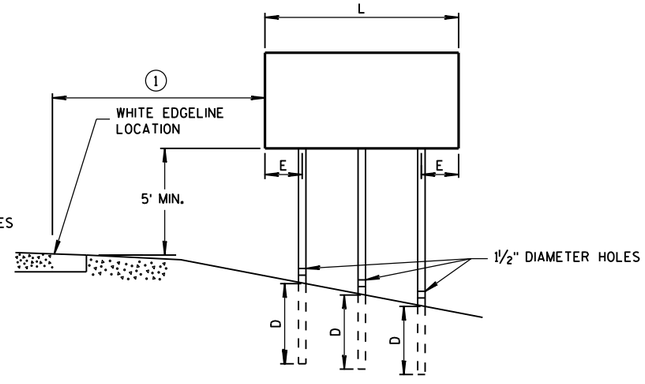
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

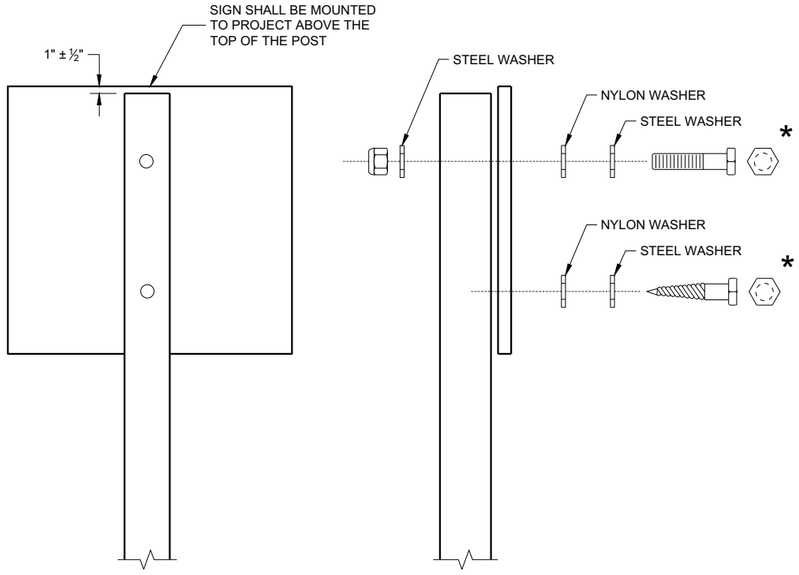
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

6

S.D.D. 15 D 38-2a



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 NYLON

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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SDD 15D38 - 02b

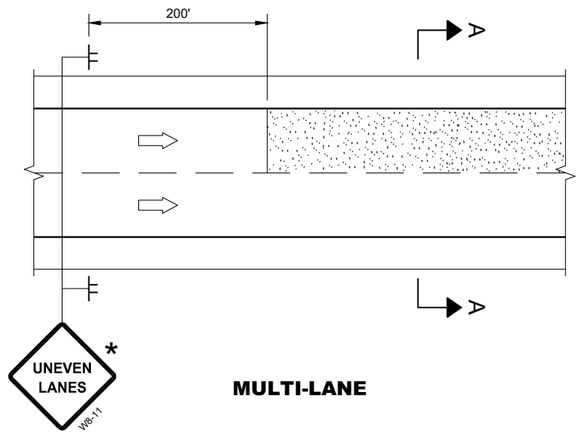
SDD 15D38 - 02b

ATTACHMENT OF SIGNS TO POSTS

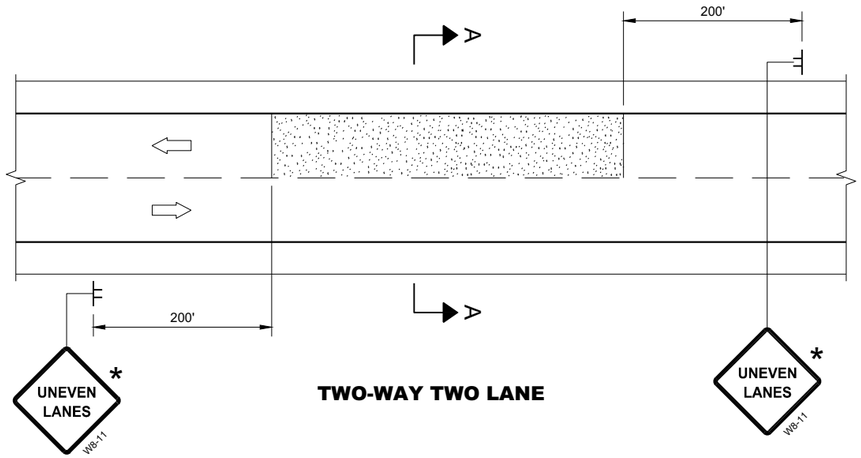
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA



MULTI-LANE



TWO-WAY TWO LANE

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

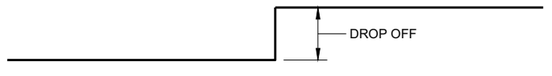
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

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

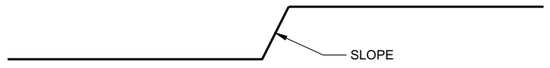
LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE

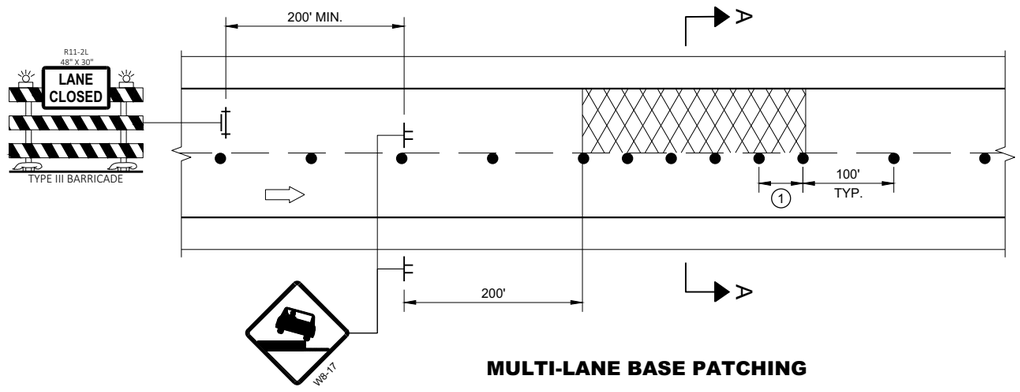


SECTION A - A

OR

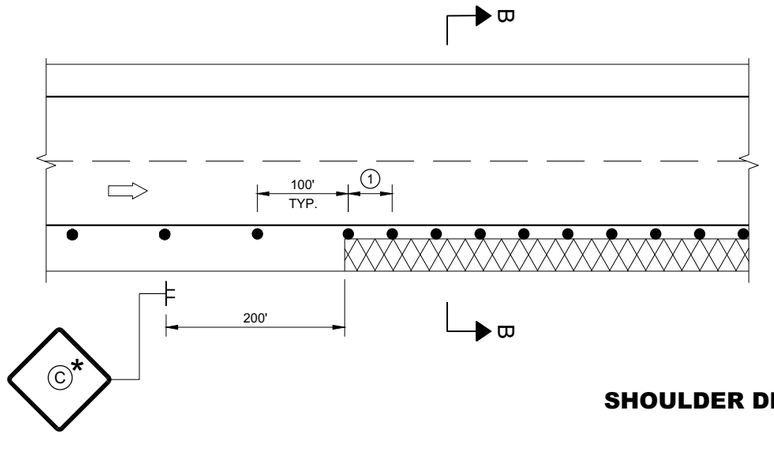


SECTION A - A

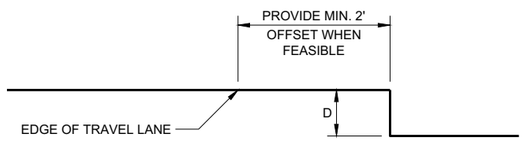


MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

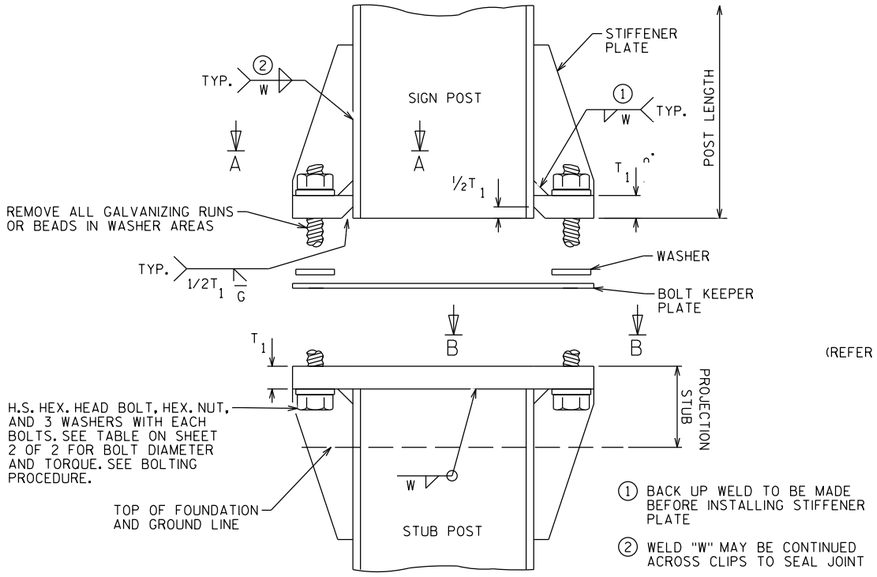
FHWA

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SDD 15D39 - 02

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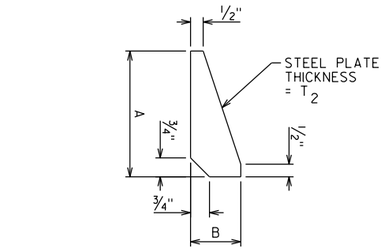
SDD 15D39 - 02



① BACK UP WELD TO BE MADE BEFORE INSTALLING STIFFENER PLATE

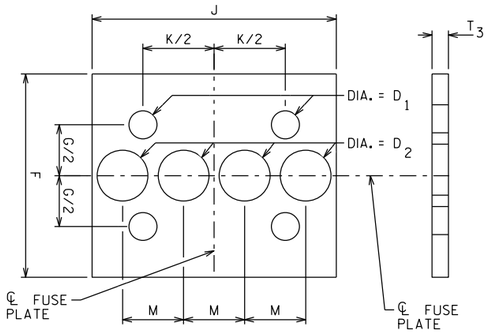
② WELD "W" MAY BE CONTINUED ACROSS CLIPS TO SEAL JOINT

SIGN POST & STUB POST ELEVATION



STIFFENER PLATE DETAIL

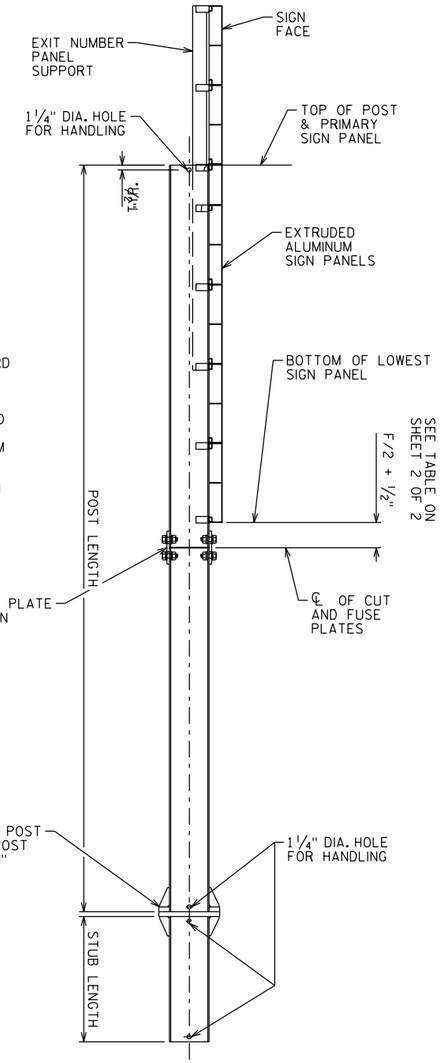
(REFER TO TABLE ON SHEET 2 OF 2 FOR DIMENSIONS)



PERFORATED FUSE PLATE DETAIL

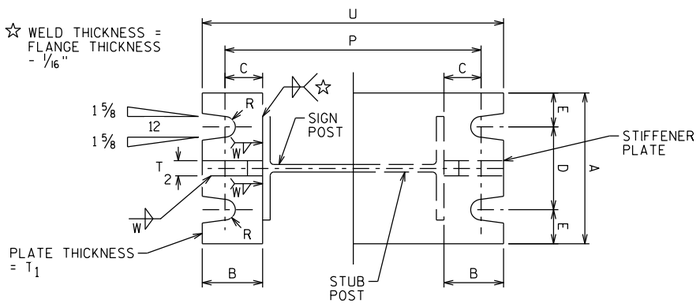
USE H.S. HEX HEAD BOLTS, HEX HEAD NUT AND FLAT WASHER UNDER NUT. INSTALL BOLTS PER THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATION SECTION 506.3.12.3.

ALL HOLES SHALL BE DRILLED, SUB-PUNCHED AND REAMED. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. HOWEVER, FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE PERMITTED. STEEL FUSE PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36. ASTM A572 GRADE 50 OR ASTM A588 MAY BE SUBSTITUTED FOR A36 AT THE OPTION OF THE FABRICATOR. MILL TEST REPORTS SHALL BE SUBMITTED FOR FUSE PLATES. STEEL USED SHALL HAVE AN ULTIMATE TENSILE STRENGTH NOT TO EXCEED 80 KSI.



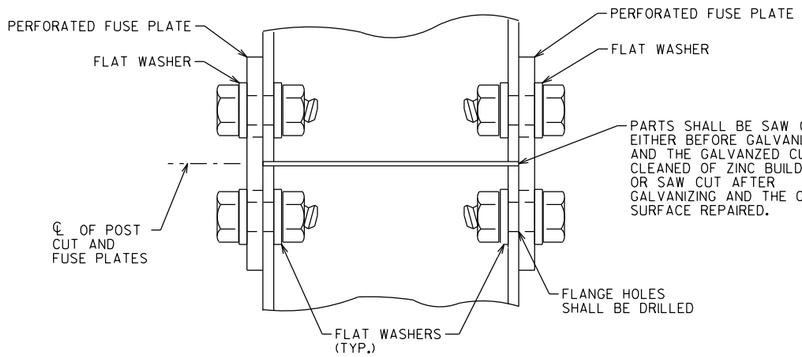
POST DETAIL

☆ WELD THICKNESS = FLANGE THICKNESS - 1/16"

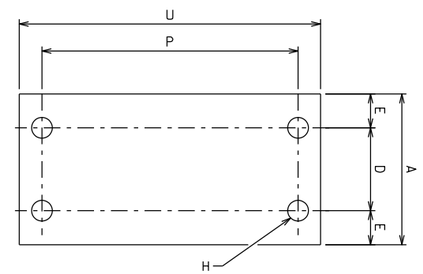


SECTION A-A

SECTION B-B



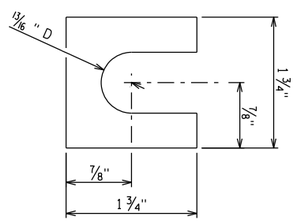
FUSE PLATE CONNECTION DETAIL



H = BOLT DIA. + 1/8"

BOLT KEEPER PLATE DETAIL

30 GA GALVANIZED SHEET STEEL



SHIM DETAIL

FURNISH TWO .012"± THICK AND TWO .032"± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B36.

BOLTING PROCEDURE FOR BASE CONNECTION

1. ASSEMBLE SIGN POST, BOLT KEEPER PLATE, AND STUB POST WITH BOLTS AND THREE FLAT WASHERS PER BOLT AS SHOWN.
2. SHIM AS REQUIRED TO PLUMB POST.
3. PRIOR TO BOLT TIGHTENING, LUBRICATE BASE CONNECTION BOLTS WITH BEESWAX OR OTHER HIGH-WAX LUBRICANT.
4. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" OR 15" WRENCH TO BED WASHERS & SHIMS AND TO CLEAN BOLT THREADS.
5. LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PERSCRIBED TORQUE. (SEE TABLE FOR PERSCRIBED TORQUE). DO NOT OVER-TIGHTEN.
6. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH TO PREVENT NUT LOOSENING.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

DRAWN BY | PLANS CK'D.

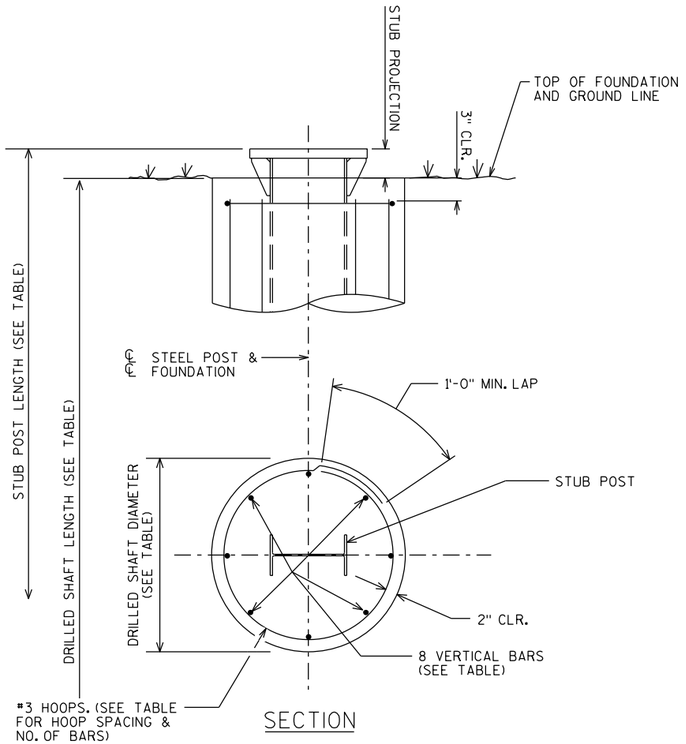
CONNECTION & FOUNDATION DETAILS 1 OF 2

SHEET A3-1.20

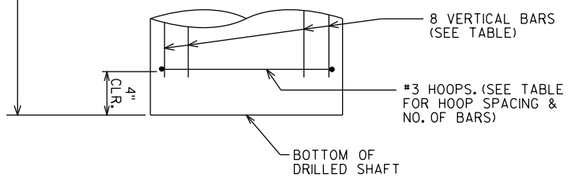
217

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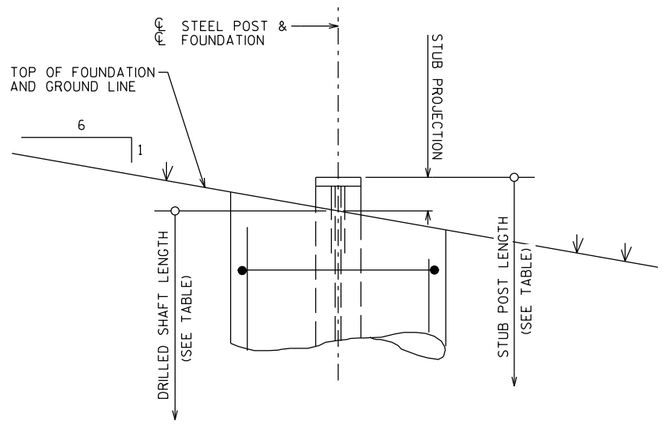
7



SECTION



FOUNDATION DETAIL



SHAFT PLACEMENT

FOUNDATION DATA TABLE

POST SHAPE	STUB LENGTH	STUB PROJECTION	DRILLED SHAFT DIAMETER	DRILLED SHAFT LENGTH	VERTICAL BARS		HOOPS		CONCRETE VOLUME ◆	TOTAL REINF. WEIGHT ◆
					SIZE	LENGTH	MAX SPA.	NO.		
W6X15	2'-6"	3"	24"	6'-6"	#5	5'-11"	10"	9	0.8 CY	71 LB
W8X18	2'-6"	3"	24"	7'-6"	#6	6'-11"	12"	8	0.9 CY	102 LB
W8X21	3'-0"	2½"	24"	8'-0"	#6	7'-5"	12"	9	1.0 CY	110 LB
W10X22	3'-0"	2½"	24"	8'-6"	#7	7'-11"	12"	9	1.0 CY	151 LB
W12X26	3'-0"	2½"	24"	10'-0"	#7	9'-5"	12"	11	1.2 CY	180 LB

◆ QUANTITIES SHOWN ARE FOR ONE DRILLED SHAFT

BASE CONNECTION & FUSE PLATE DATA TABLE

POST SHAPE	WEIGHT PER FOOT	BASE CONNECTION DATA: BOLT SIZE & TORQUE	A	B	C	D	E	T1	T2	W	R	BOLT KEEPER PLATE DATA: P	U	PERFORATED FUSE PLATE DATA: F	G	J	K	M	D1	D2	T3	BOLT DIA.	WGT. EA. LBS	BOLT LENGTH	V ◪
W6X15	15 LB	⅝" DIA. X 4" 36 TO 38 FT-LB	5"	2"	1¼"	2¾"	1⅛"	1¼"	½"	¼"	11/32"	8½"	10"	5"	2½"	6"	3½"	1½"	11/16"	1¼"	⅜"	⅝"	2.4	2	73.0 LB
W8X18	18 LB											10⅝"	12⅛"	5"	2½"	5¼"	2¾"	1¼"	11/16"	1 1/16"	⅜"	⅝"	2.0	2	83.0 LB
W8X21	21 LB	¾" DIA. X 4¾" 62 TO 63 FT-LB	6"	2¼"	1⅜"	3½"	1¼"	1½"	¾"	5/16"	13/32"	11"	12¾"	5½"	2½"	5¼"	2¾"	1¼"	13/16"	1"	½"	¾"	3.1	2¼"	124.0 LB
W10X22	22 LB											12⅞"	14⅝"	6"	3"	5¾"	2¾"	1⅜"	13/16"	1⅛"	½"	¾"	3.9	2¼"	134.0 LB
W12X26	26 LB											15"	16¾"	6"	3"	6½"	3½"	1⅝"	13/16"	1 5/16"	½"	¾"	4.5	2¼"	152.0 LB

◪ TOTAL STRUCTURAL CARBON STEEL WEIGHT FOR ONE POST = V + (POST LENGTH X POST WEIGHT PER FOOT)

"V" INCLUDES STUB POST, BASE PLATES, STIFFENER PLATES, PERFORATED FUSE PLATES, BOLTS, NUTS, AND WASHERS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED

MATERIALS SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506, UNLESS NOTED OTHERWISE.

FABRICATION SHALL CONFORM TO THE WISCONSIN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS SECTION 506.

ALL POST, POST STUBS & ATTACHMENTS SHALL BE ASTM A709 GRADE 50, GALVANIZED IN ACCORDANCE WITH ASTM A123.

THE POST, BASE PLATES, UPPER SIX INCHES OF STUB POST, FLANGE SPLICE PLATE AND FUSE PLATE SHALL BE GALVANIZED AFTER FABRICATION.

H.S. BOLTS, WASHERS, & NUTS SHALL BE A325 GALVANIZED.

FOUNDATION MATERIAL PROPERTIES

CONCRETE MASONRY	F'C = 3,500 P.S.I.
BAR STEEL REINFORCEMENT (UNCOATED), GRADE 60	FY = 60,000 P.S.I.

DESIGN DATA

DESIGN CONFORMS TO AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS 1ST EDITION 2015 (WITH 2017 & 2018 INTERIM REVISIONS).

DEAD LOADS (DL):

- STEEL POST SELF WEIGHT
- SIGN PANEL WEIGHT = 3 PSF

WIND LOADS (WL):

WIND LOADS WERE APPLIED TO THE PROJECTED AREAS OF THE SIGN PANELS AND THE STEEL SIGN POSTS.

- BASIC WIND SPEED = 76 MPH
- MEAN RECURRANCE INTERVAL (MRI) = 10 YEARS
- HEIGHT & EXPOSURE FACTOR = 1.00
- DIRECTIONALITY FACTOR = 0.85
- GUST EFFECT FACTOR = 1.14

WIND LOAD CASES:

- WL CASE 1: 1.0 X NORMAL WIND
- WL CASE 2: 1.0 X TRANSVERSE WIND
- WL CASE 3: 0.75 X NORMAL WIND + 0.75 X TRANSVERSE WIND

LOAD COMBINATIONS:

LOAD COMBINATION	TYPE	DL FACTOR	WL FACTOR
STRENGTH I	GRAVITY	1.25	-
EXTREME I	WIND	1.10	1.0
		0.9	1.0
SERVICE I	DEFLECTION	1.0	1.0

FOUNDATION DESIGN DATA

THE FOUNDATION DESIGN ASSUMED COHESIONLESS SOILS (LOOSE SAND) ABOVE THE WATER TABLE WITH THE FOLLOWING PROPERTIES:

- SOIL UNIT WEIGHT = 115 PCF
- ANGLE OF INTERNAL FRICTION = 24 DEGREES
- SOIL MODULUS PARAMETER = 25 LB/IN3

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

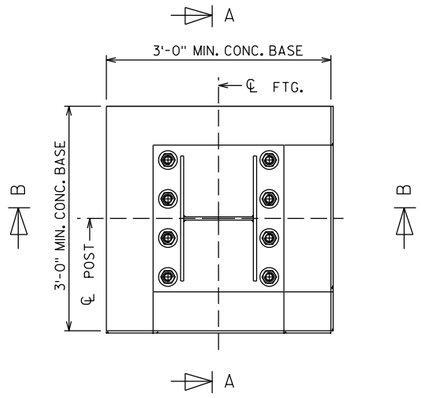
DRAWN BY | PLANS CK'D.

CONNECTION & FOUNDATION DETAILS 2 OF 2

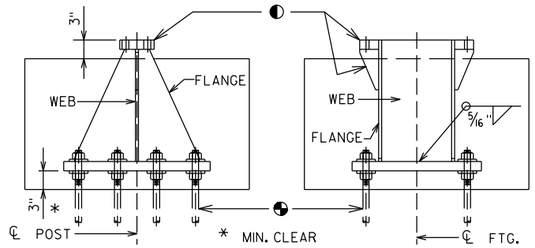
SHEET A3-1.20

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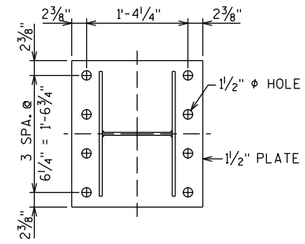
STUB AND ADHESIVE ANCHOR DETAILS



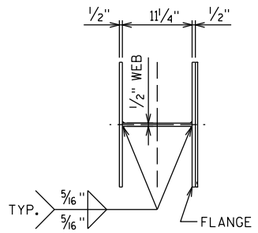
STUB SECTION



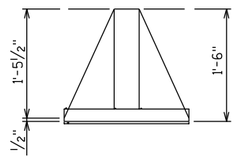
SECTION A-A SECTION B-B



BASE PLATE



STUB



FLANGE

◐ SEE BASE CONNECTION DETAILS ON "CONNECTIONS & FOUNDATION DETAILS" SHEETS.

◔ ADHESIVE ANCHORS 1¼-INCHES. ALLOWABLE PULL OUT CAPACITY = 15 KIPS. EMBED 1'-3" INTO ROCK.

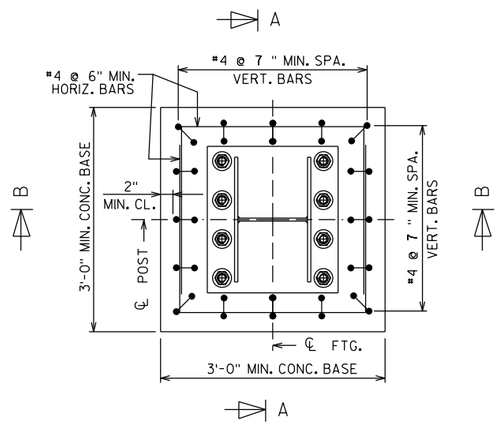
GENERAL NOTES:

QUANTITIES PER BASE:
REINFORCING STEEL = 62 LB
CONCRETE = 0.6 CY
STRUCTURAL STEEL = 335 LB

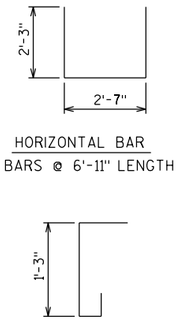
ALL MATERIALS, EXCEPT FOR ANCHOR ROD, NUTS, AND WASHERS, SHALL BE ASTM A709 GRADE 50. ALL MATERIALS TO BE GALVANIZED AFTER FABRICATION.

IF ROCK IS ENCOUNTERED PRIOR TO REACHING THE MINIMUM DRILLED SHAFT EMBEDMENT DEPTH DEFINED ON THE FOUNDATION DATA TABLE OF THE "CONNECTIONS & FOUNDATION DETAILS 2 OF 2" SHEET, THE CONTRACTOR SHALL INSTALL A TEST ADHESIVE ANCHOR AND DETERMINE THE PULL-OUT CAPACITY. IF THE FIELD TEST RESULTS IN A PULL-OUT CAPACITY GREATER THAN OR EQUAL TO 15 KIPS, THE CONTRACTOR MAY INSTALL THE ALTERNATE CONCRETE BASE AND BREAK-WAY STUB PER THE DETAILS ON THIS SHEET.

CONCRETE BASE DETAILS

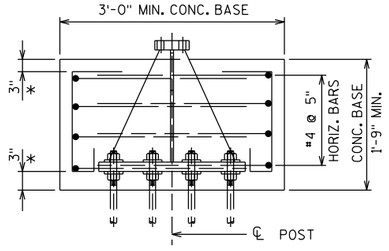


CONCRETE BASE PLAN

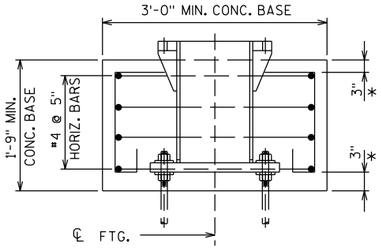


HORIZONTAL BAR
8 BARS @ 6'-11" LENGTH

VERTICAL BARS
16 BARS @ 2'-4" LENGTH
MAY BE PLACED IN SKEW
FOR CLEARANCE NEED



SECTION A-A



SECTION B-B

* MIN. CLEAR

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

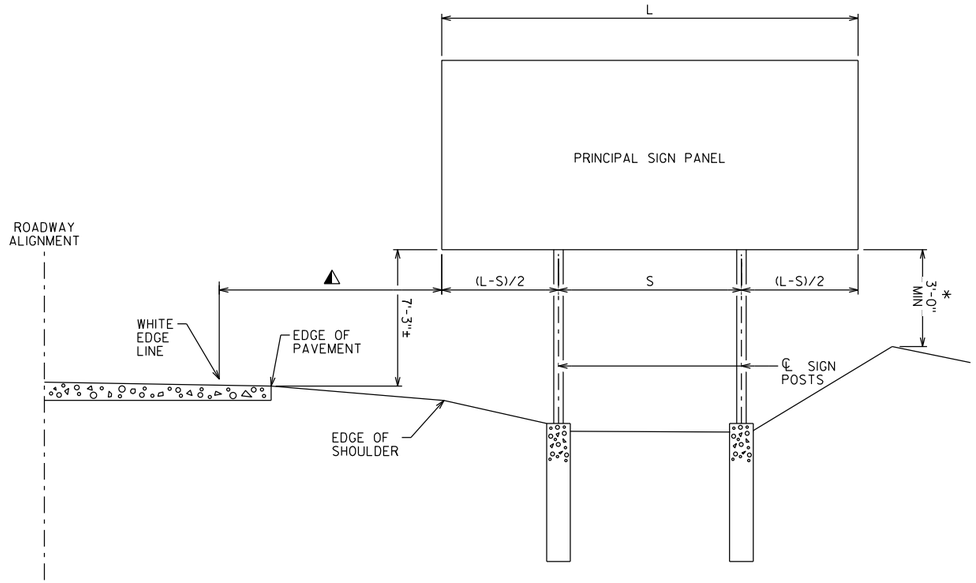
STRUCTURE BTO TYPE I SIGNS

DRAWN BY	PLANS CK'D.

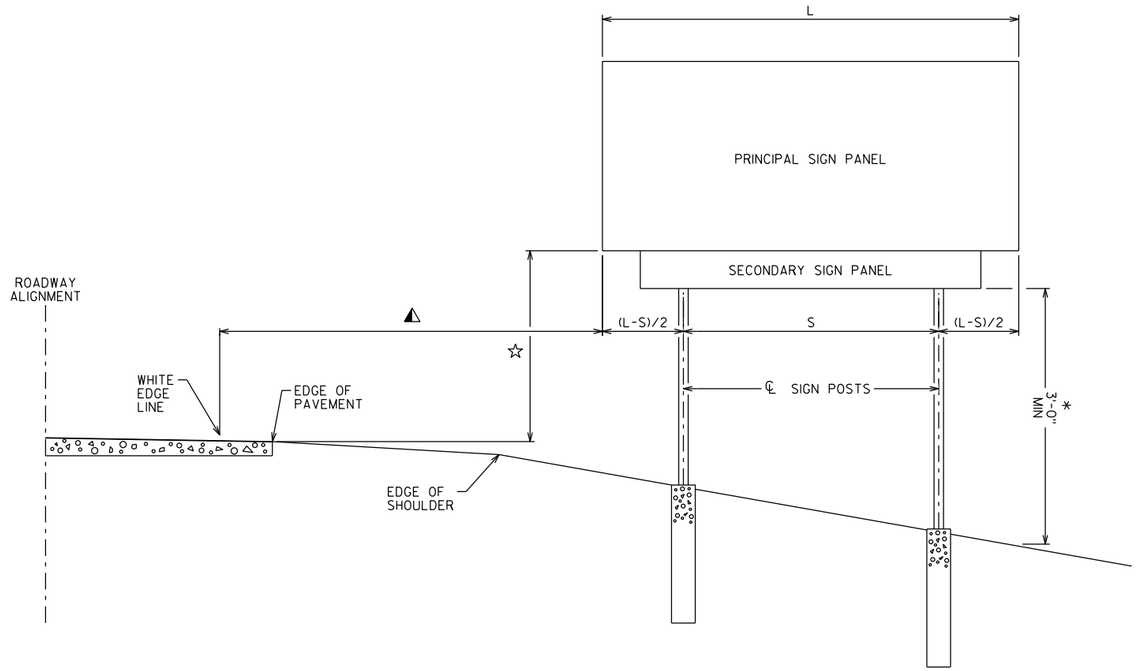
ALTERNATE BREAK-AWAY BASE ON ROCK

SHEET A3-1M.2

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INSTALLATION WITHOUT SECONDARY SIGN



INSTALLATION WITH SECONDARY SIGN

TYPE 1 SIGN INSTALLATION NOTES:

FOR A 2-POST INSTALLATION, "S" EQUALS 3L/5, BUT SHALL NOT BE LESS THAN 6'-0".

FOR A 3-POST INSTALLATION, "S" EQUALS 5L/7, BUT SHALL NOT BE LESS THAN 12'-0". THE SPACING BETWEEN ANY TWO POSTS SHALL NOT BE LESS THAN 6'-0".

⚠ UNLESS NOTED IN THE PLANS, THE SIGN OFFSET DISTANCE SHALL BE A MINIMUM OF 17'-6" FROM THE WHITE EDGE LINE, DESIRABLE 30'-0".

THE ± TOLERANCE SHOWN ON THIS SHEETS IS 3".

THE VERTICAL SIGN HEIGHT CLEARANCES SHOWN ON THIS SHEET ARE MEASURED FROM THE BOTTOM OF THE SIGN PANEL TO THE NEAR EDGE OF PAVEMENT.

☆ THE VERTICAL CLEARANCE SHALL BE 8'-3"± WHEN THE SECONDARY SIGN HEIGHT IS 3'-0" OR LESS. FOR SECONDARY SIGN HEIGHTS LARGER THAN 3'-0", THE VERTICAL CLEARANCE TO THE BOTTOM OF THE SECONDARY SIGN PANEL SHALL BE 5'-3"±.

* THE VERTICAL SIGN GROUND CLEARANCE ON RIGHT END OF SIGN SHALL BE A MINIMUM OF 3'-0"±.

POST LENGTHS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE ESTIMATED LENGTHS. THE CONTRACTOR SHALL VERIFY POST LENGTHS AT THE TIME OF FINAL GRADING.

REFER TO THE TRAFFIC ENGINEERING OPERATIONS AND SAFETY MANUAL FOR FURTHER GUIDANCE ON MINIMUM VERTICAL CLEARANCE REQUIREMENTS.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE BTO TYPE I SIGNS

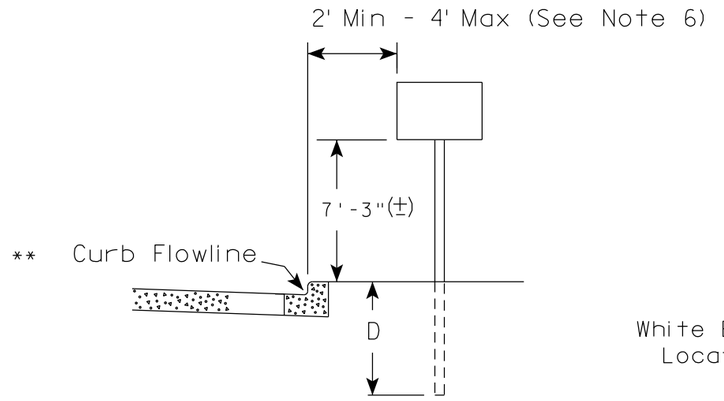
DRAWN BY | PLANS CK'D.

TYPICAL TYPE I SIGN INSTALLATION

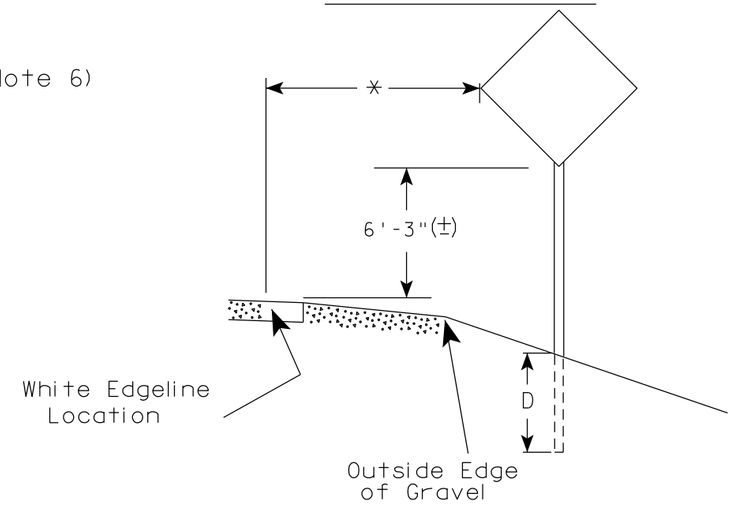
SHEET A4-1.10

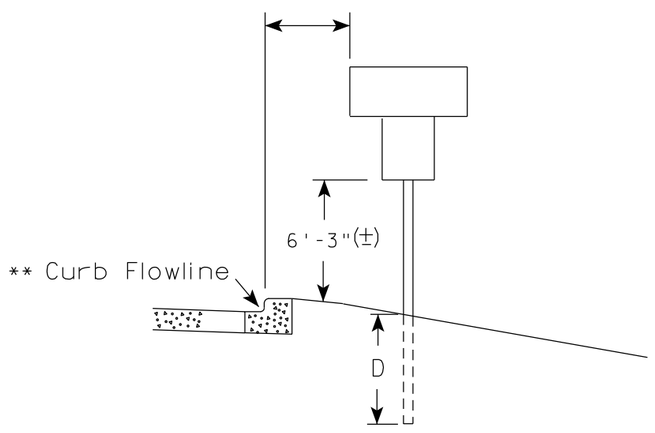
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 220 | E

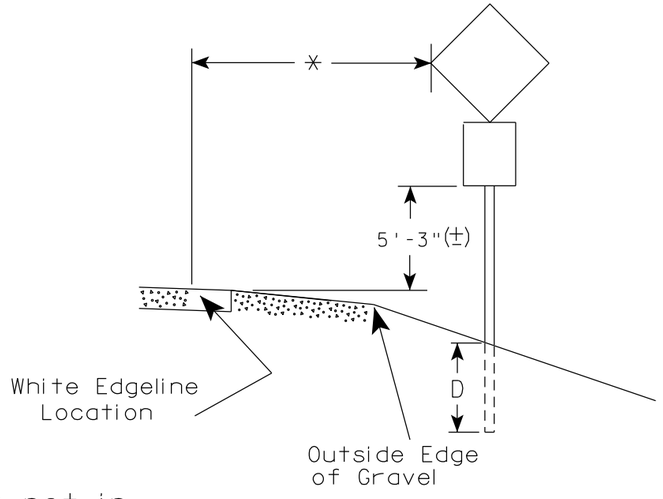
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

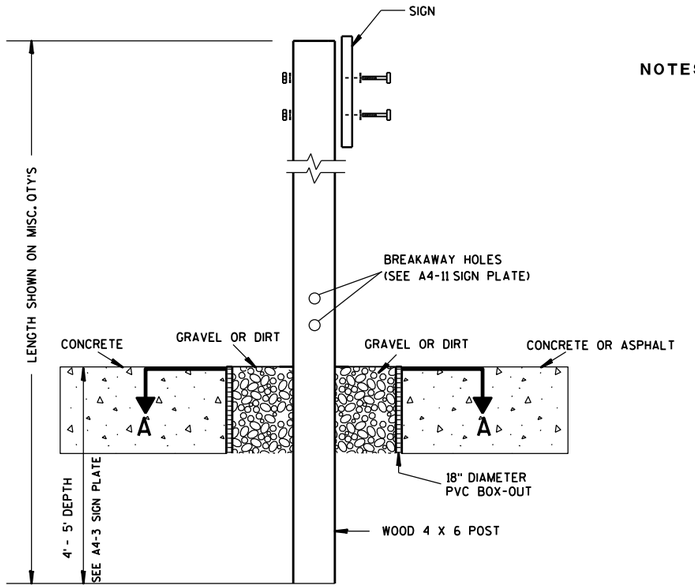
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

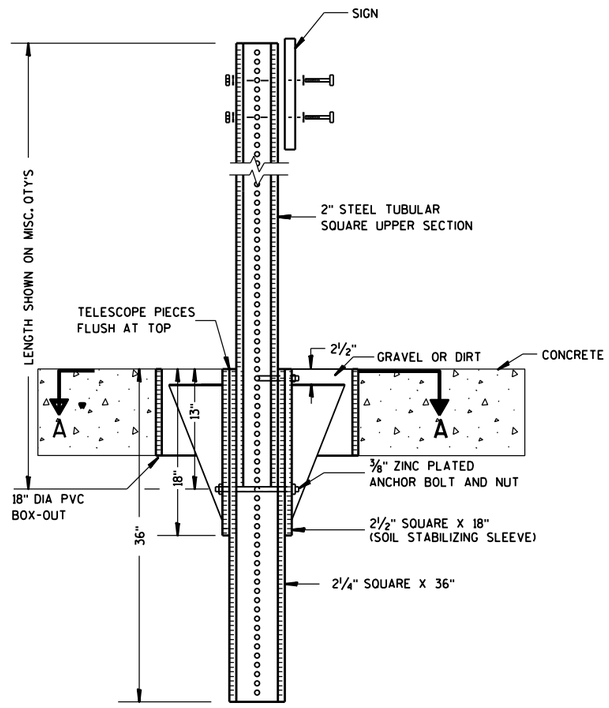
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 221	E



ELEVATION VIEW

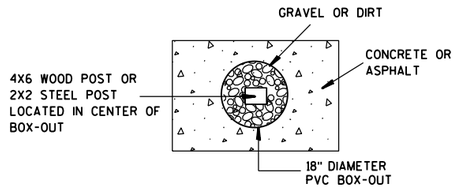
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

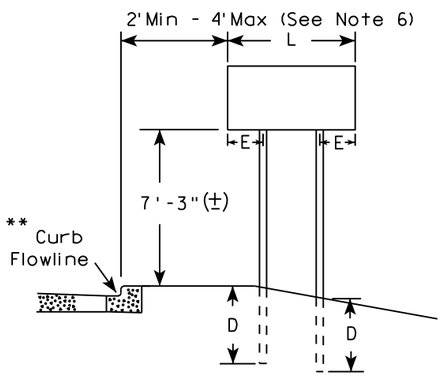
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

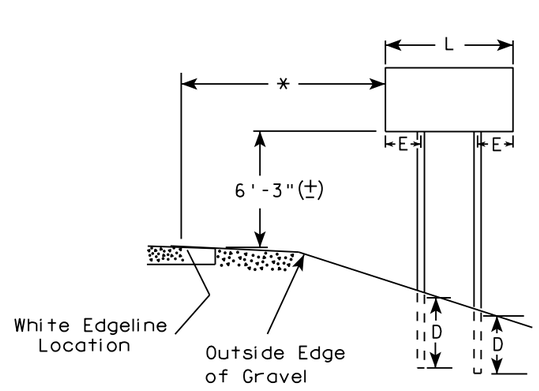
DATE 1/27/14 PLATE NO. A4-3B.1

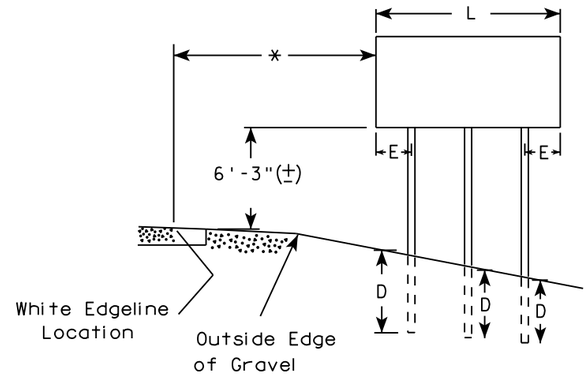
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

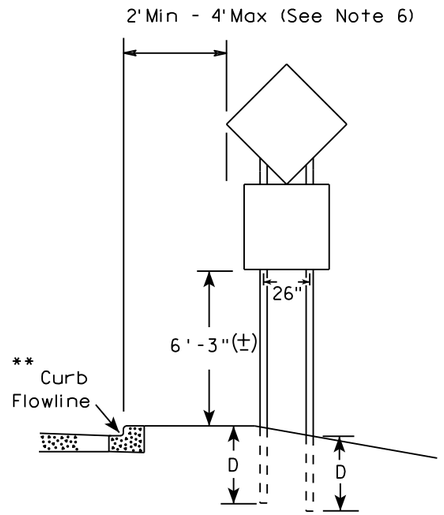
URBAN AREA



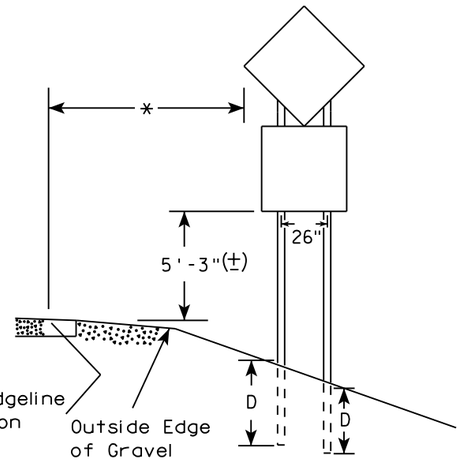
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

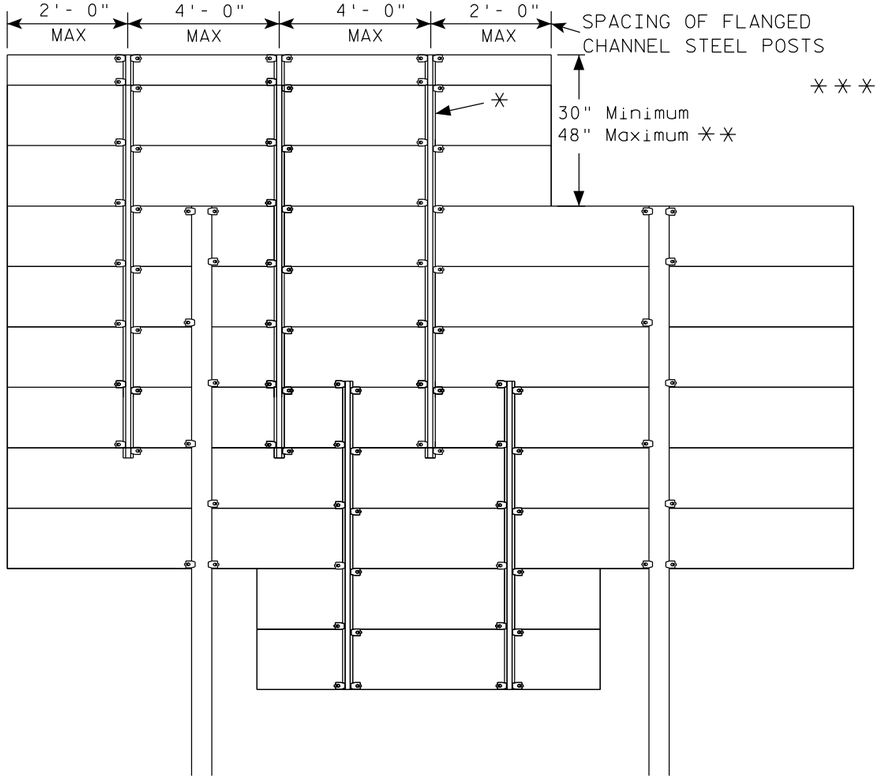
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 223	E

GROUND MOUNTED SIGN



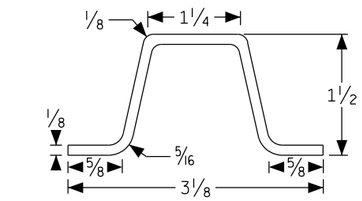
✳=2.00 lb/ft AND 4.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

✳✳=FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

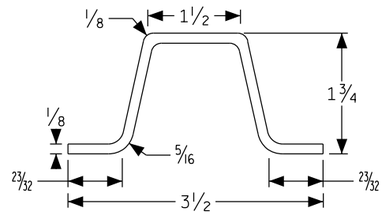
✳✳✳ THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 15 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 15 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAILS

NOT TO SCALE

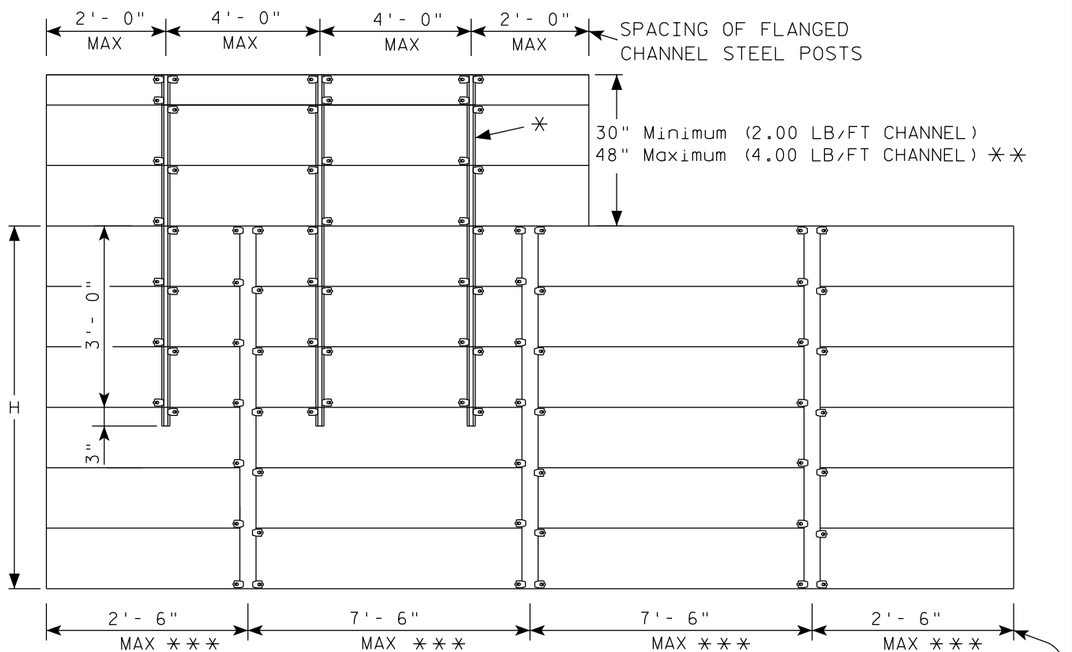


2.00 LB/FT CHANNEL



4.00 LB/FT CHANNEL

SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS
5" X 3.5" X 3.7 LBS./ft.

GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:

   PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
   PANEL LENGTH 9'- 0" - 12'- 0" = 3 CHANNELS
   PANEL LENGTH 13'- 0" OR MORE = 4 CHANNELS

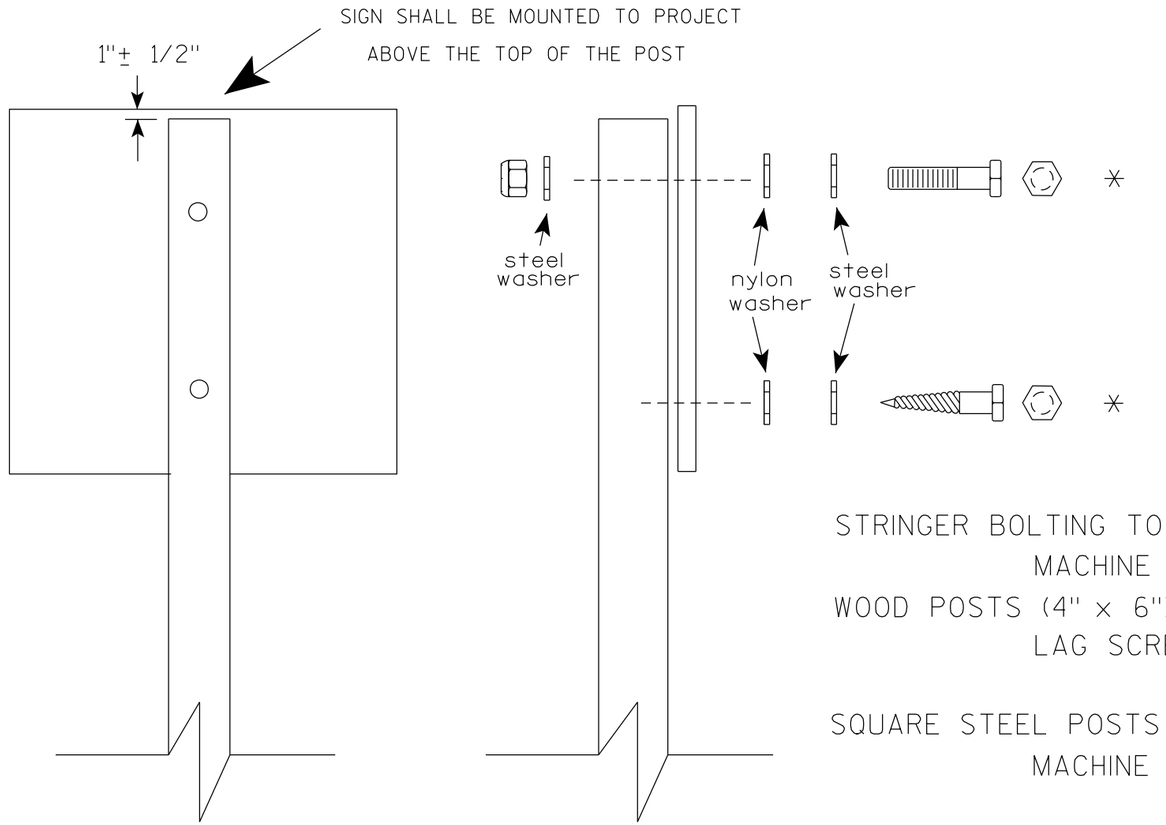
   If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.
3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/07/20 PLATE NO. A4-6.12



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

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

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

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

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

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

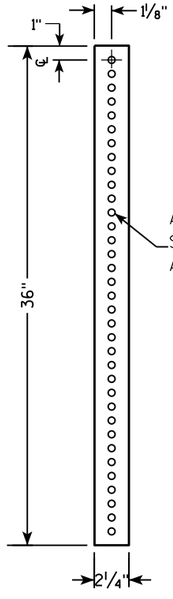
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

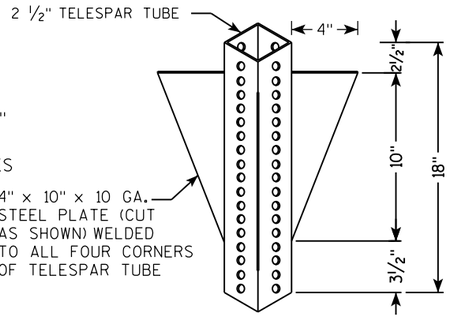
SHEET NO: 225 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

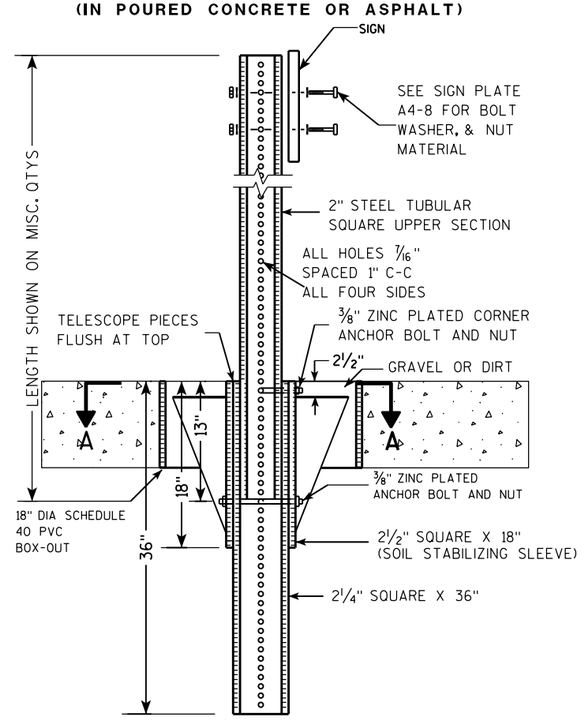
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



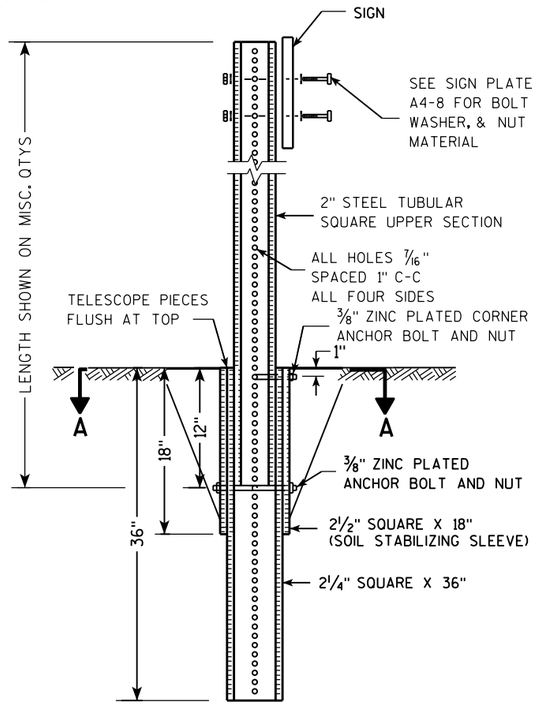
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

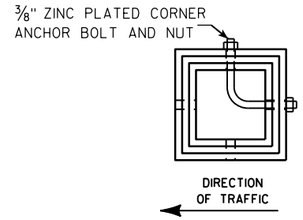


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

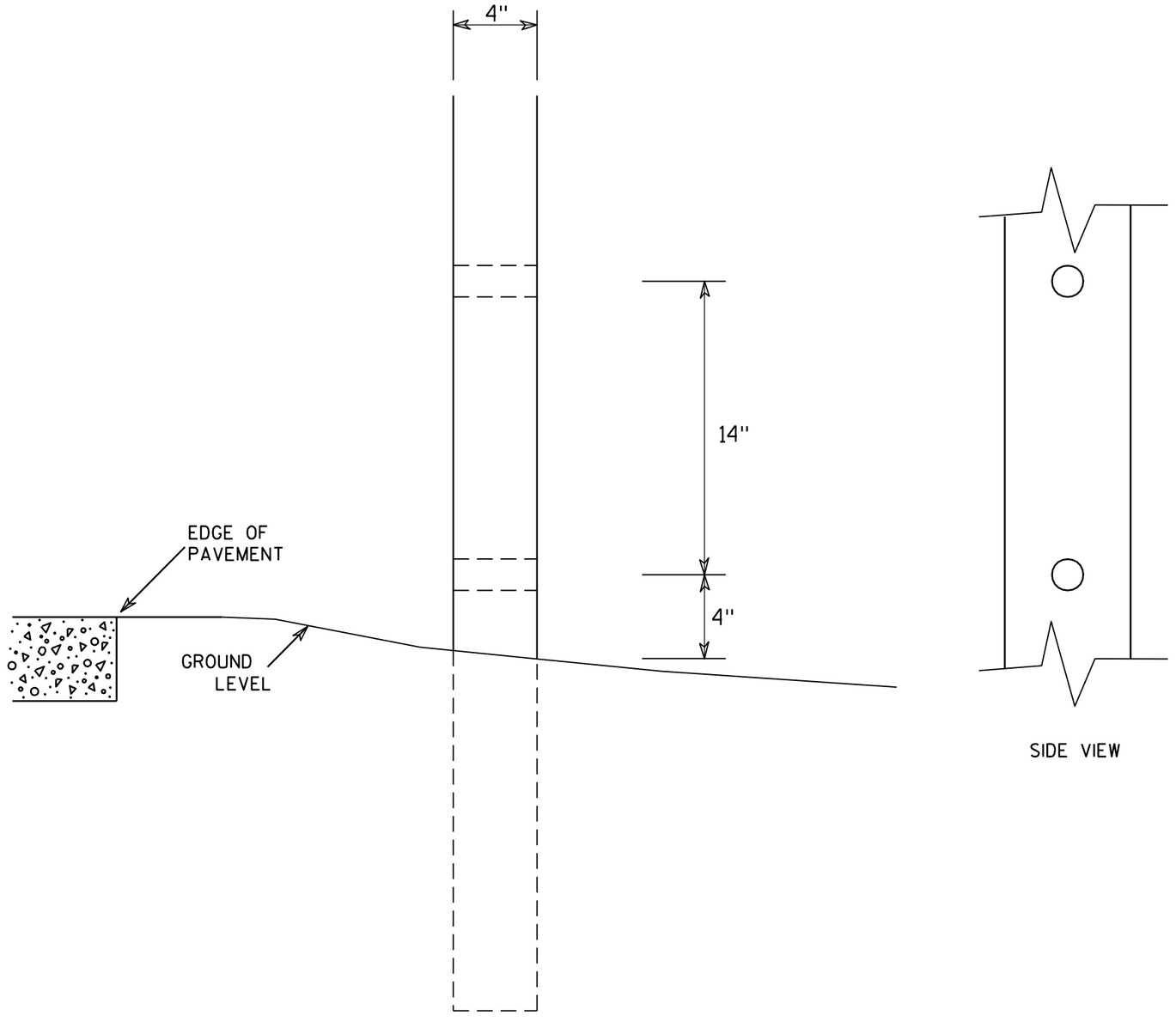
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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



SIDE VIEW

GENERAL NOTES

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

4 X 6 WOOD POST MODIFICATIONS

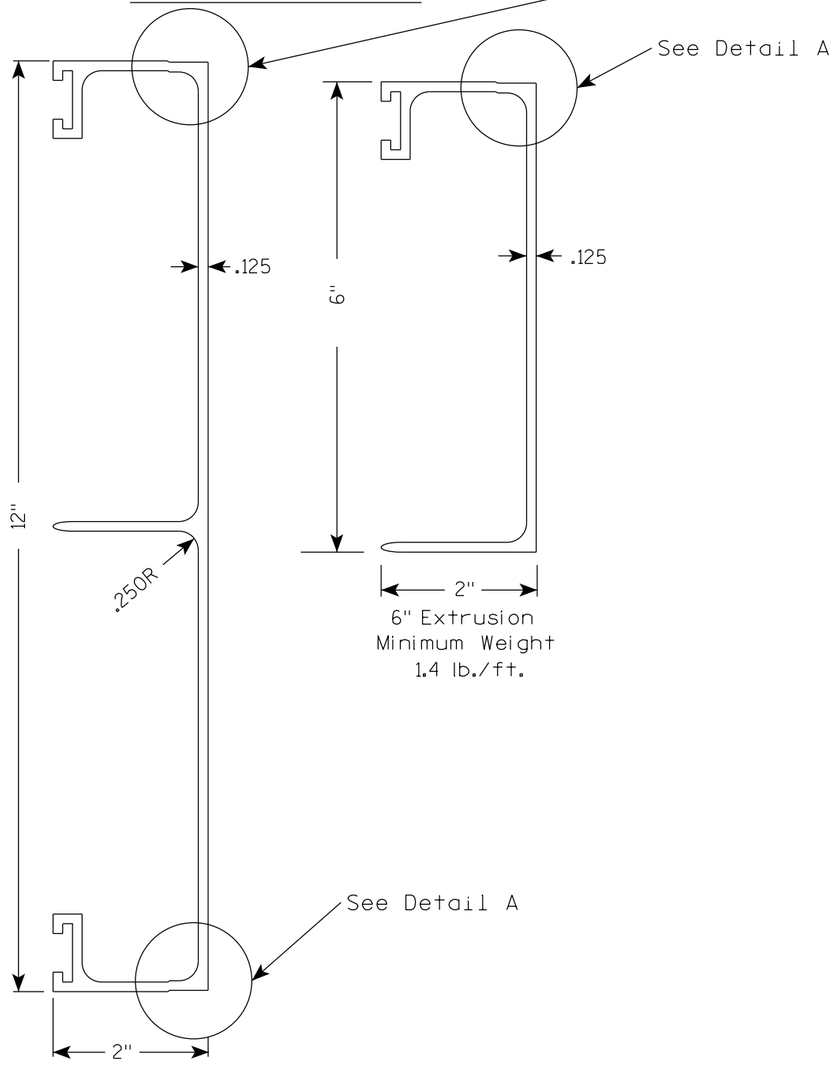
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 227	E

Extruded Shape

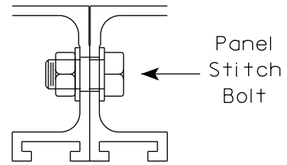


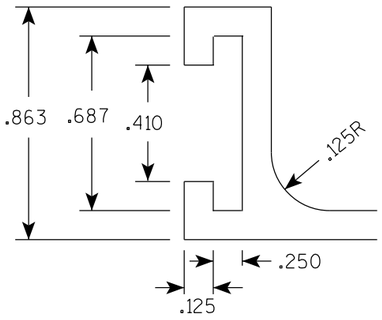
Hardware

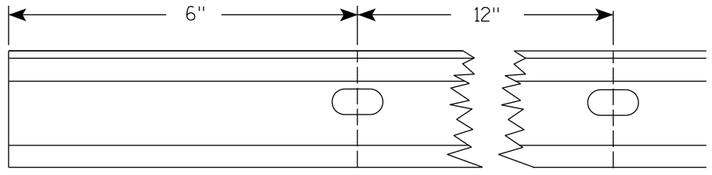
STITCH BOLT, WASHER & NUT

The hardware includes:

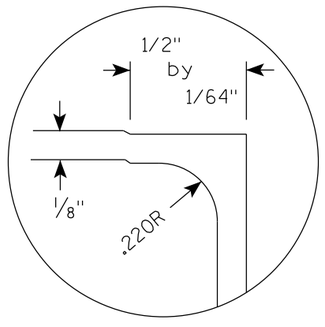
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy
3/8 " - Stainless steel stop nut
3/8" X .064 Flat Washers, Alclad 2024-T4 alloy







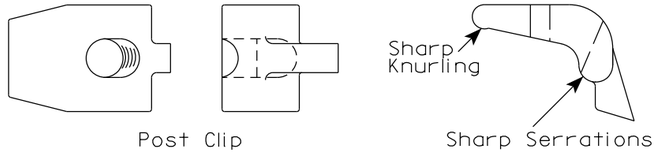
Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.

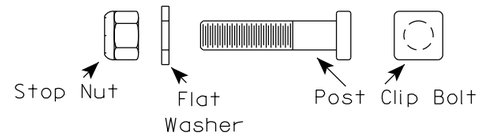


DETAIL A (EDGE WRAP JOINT)

POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6
Post Clip Bolt shall be Stainless Steel.
Flat washer shall be 3/8" X .091, Stainless Steel.
Stop nut shall be stainless steel.





NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/07/20 PLATE NO. A5-2.10

PROJECT NO:

SHEET NO: 228 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A52.DGN PLOT DATE : 7-Jan-2020 PLOT BY : dotc4c

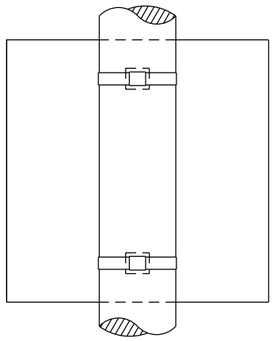
WISDOT/CADDS SHEET 42

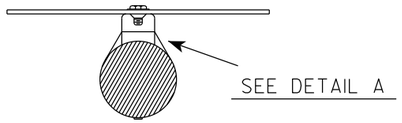
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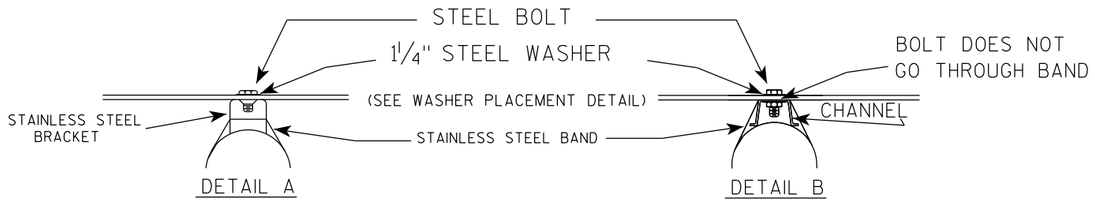
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BANDING

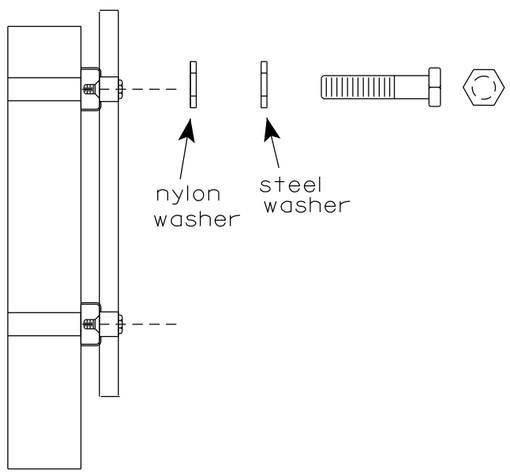
SINGLE SIGN







WASHER PLACEMENT

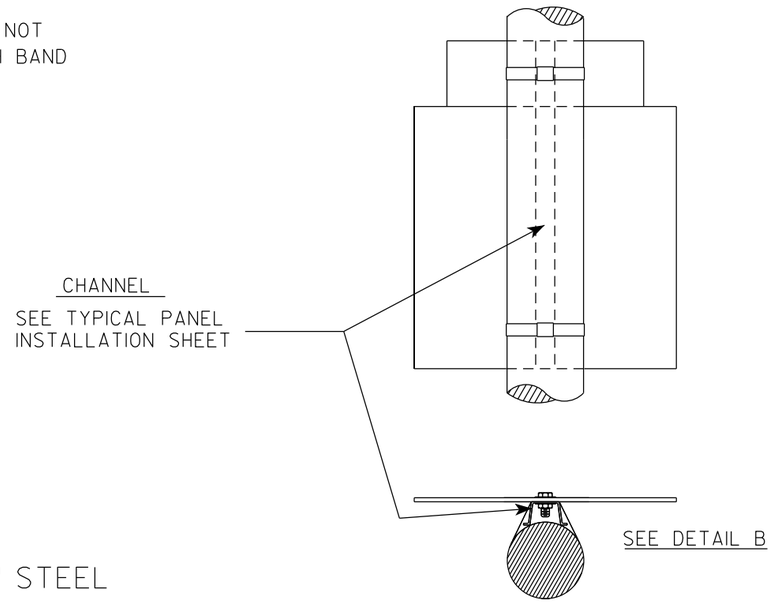


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

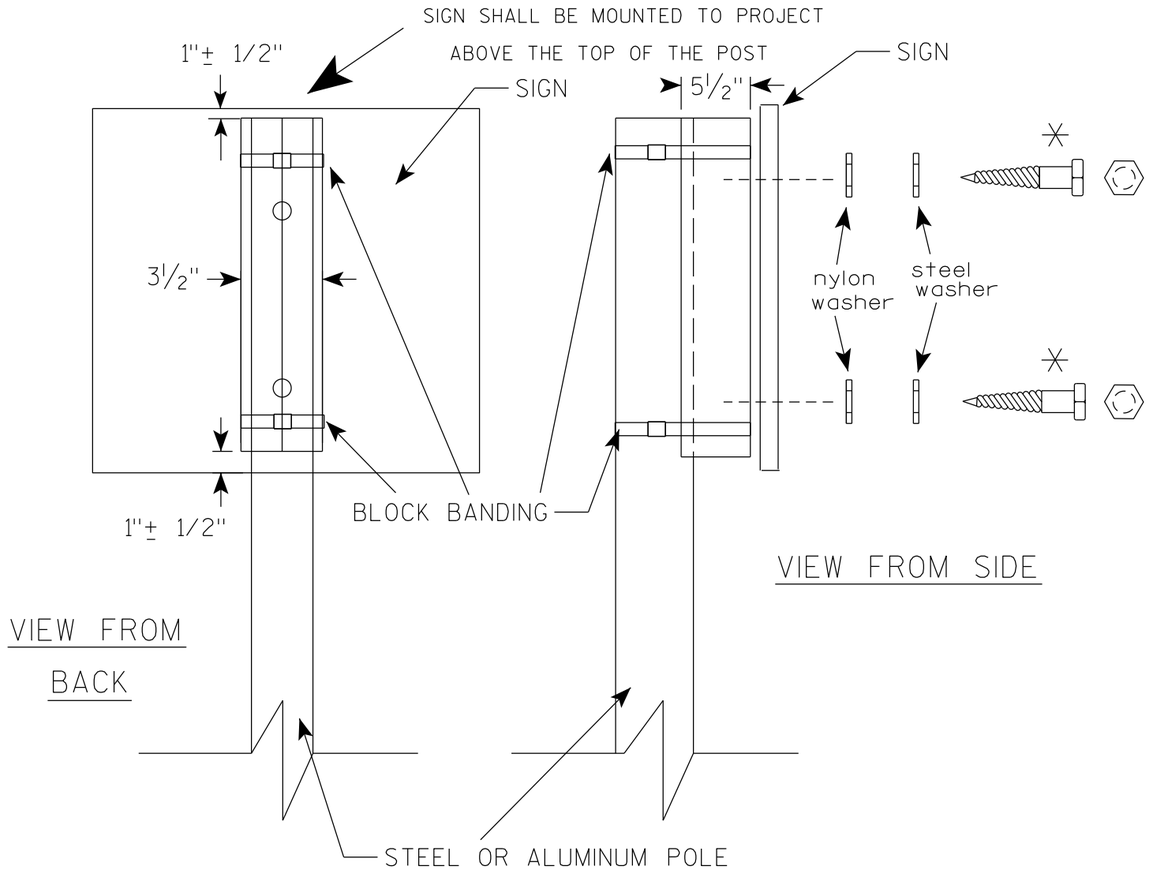
DATE 6/10/19 PLATE NO. A5-9.4

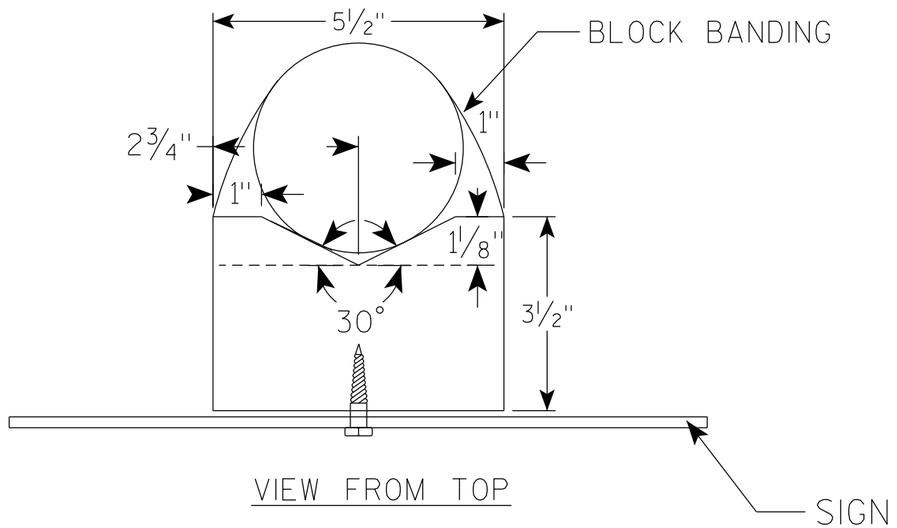
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 229	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

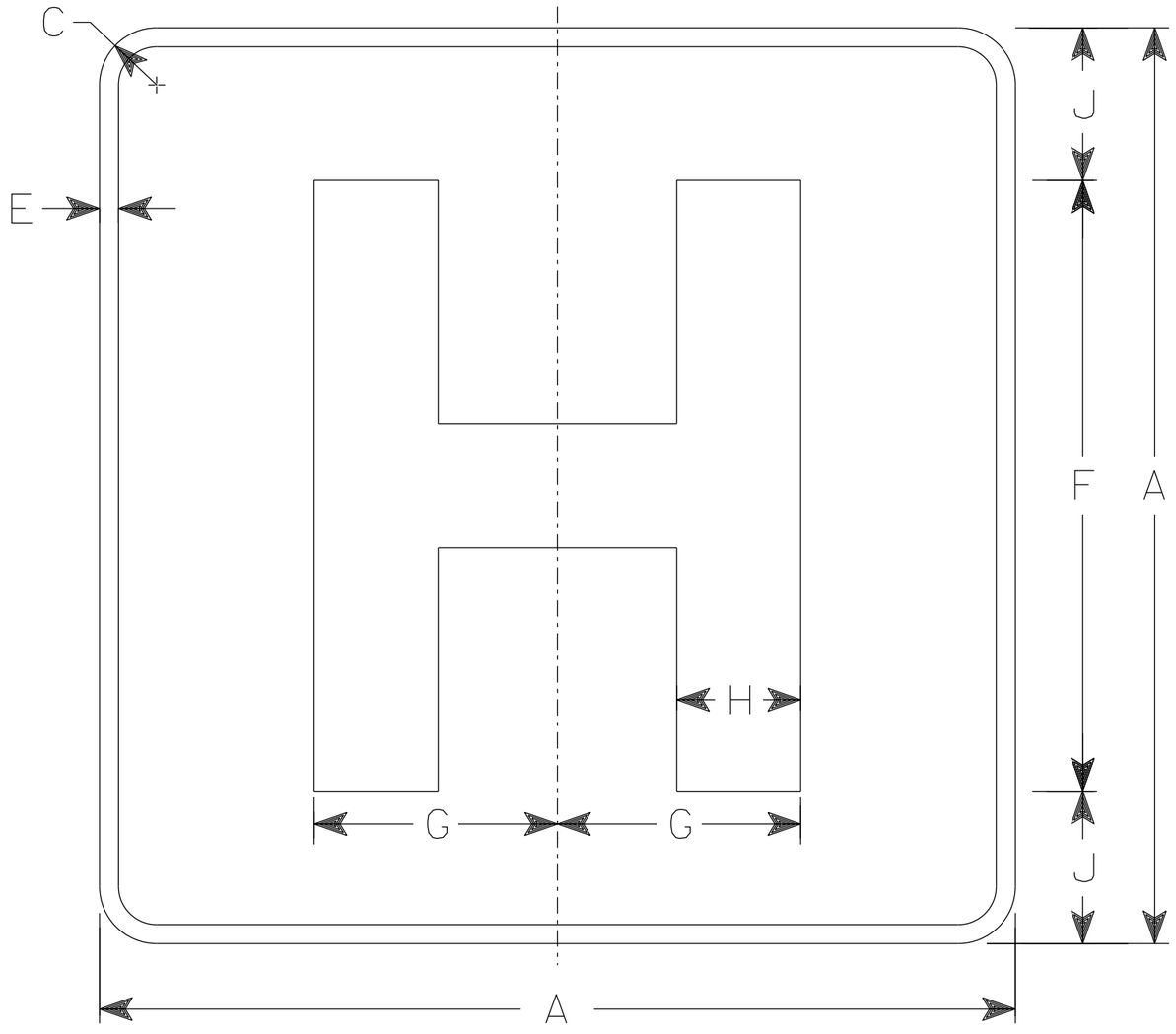
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:				SHEET NO: 230	E



D9-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Blue
   Message - White
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/8		1/2	12	4 3/4	2 3/8		3																	2.25
2S	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
2M	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

STANDARD SIGN
D9-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

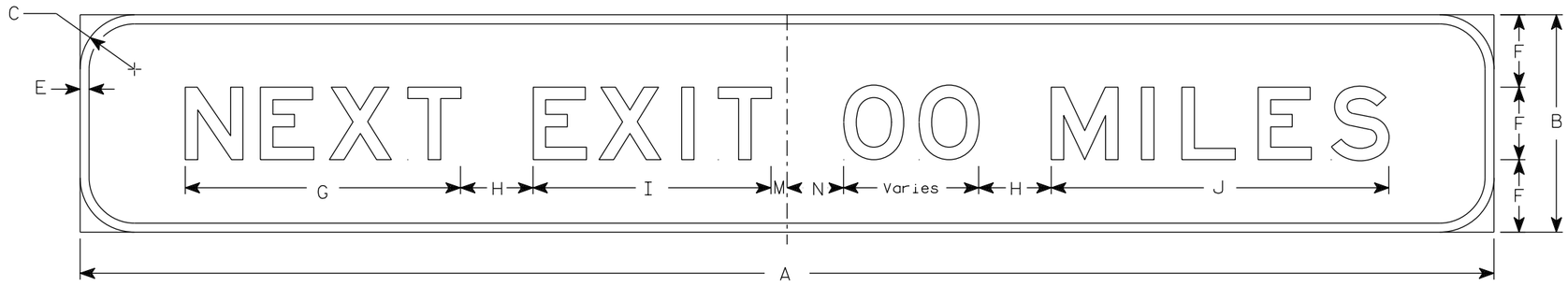
DATE 1/28/21 PLATE NO. D9-2.5

PROJECT NO:

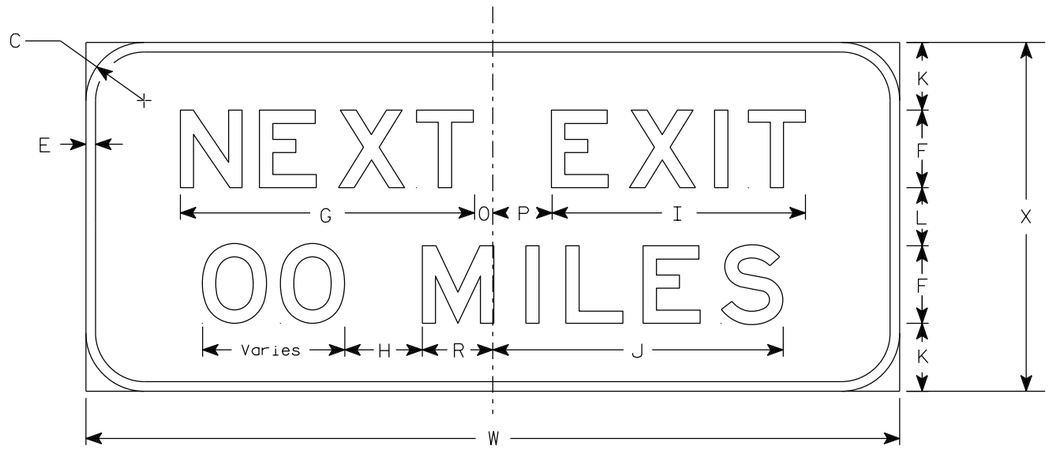
SHEET NO: 231 E

NOTES

1. Signs are Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E
4. Substitute appropriate numerals and adjust spacing as required to achieve proper balance.
5. Use appropriate sign in conjunction with E1-1A. Width varies per sign



E2-1 *For use with E1-1A, 13' wide or wider. Sign width must match with of E1-1A.



E2-1A *For use with E1-1A, under 13'in width.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	E2-1 Area sq. ft.	E2-1A Area sq. ft.
1																										
2																										
3																										
4	varies	24	6		1	8	30 3/8	8	26 1/4	30	7	6	1 3/4	6 1/4	1 7/8	6 1/8		7 1/4					84	36	varies	21.0
5	varies	24	6		1	8	30 3/8	8	26 1/4	30	7	6	1 3/4	6 1/4	1 7/8	6 1/8		7 1/4					84	36	varies	21.0

STANDARD SIGN
E2-1 & E2-1A

WISCONSIN DEPT OF TRANSPORTATION

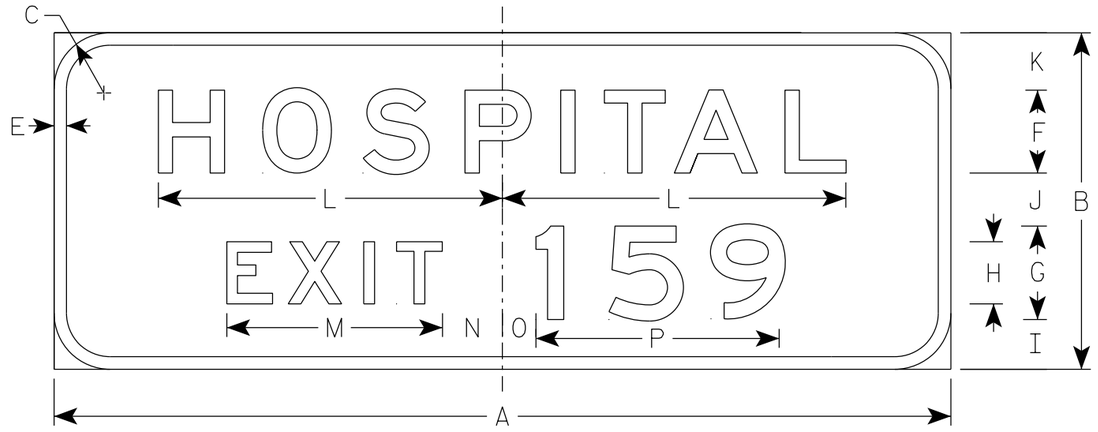
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 7/28/2020 PLATE NO. E2-1.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 232 | E

NOTES

1. Sign is Type I - Type SH Reflective
2. Color:
   Background - Blue
   Message - White
3. Message Series - E
4. Apply proper Exit Numbers and letters, optically center to adjust spacing to achieve proper balance.



E10-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	144	54	9		2	13 3/8	15	10	8	8 1/2	9 1/4	55 1/4	34 5/8	9 5/8	5 3/8	39											54.0
5	144	54	9		2	13 3/8	15	10	8	8 1/2	9 1/4	55 1/4	34 5/8	9 5/8	5 3/8	39											54.0

TYPICAL SIGNS

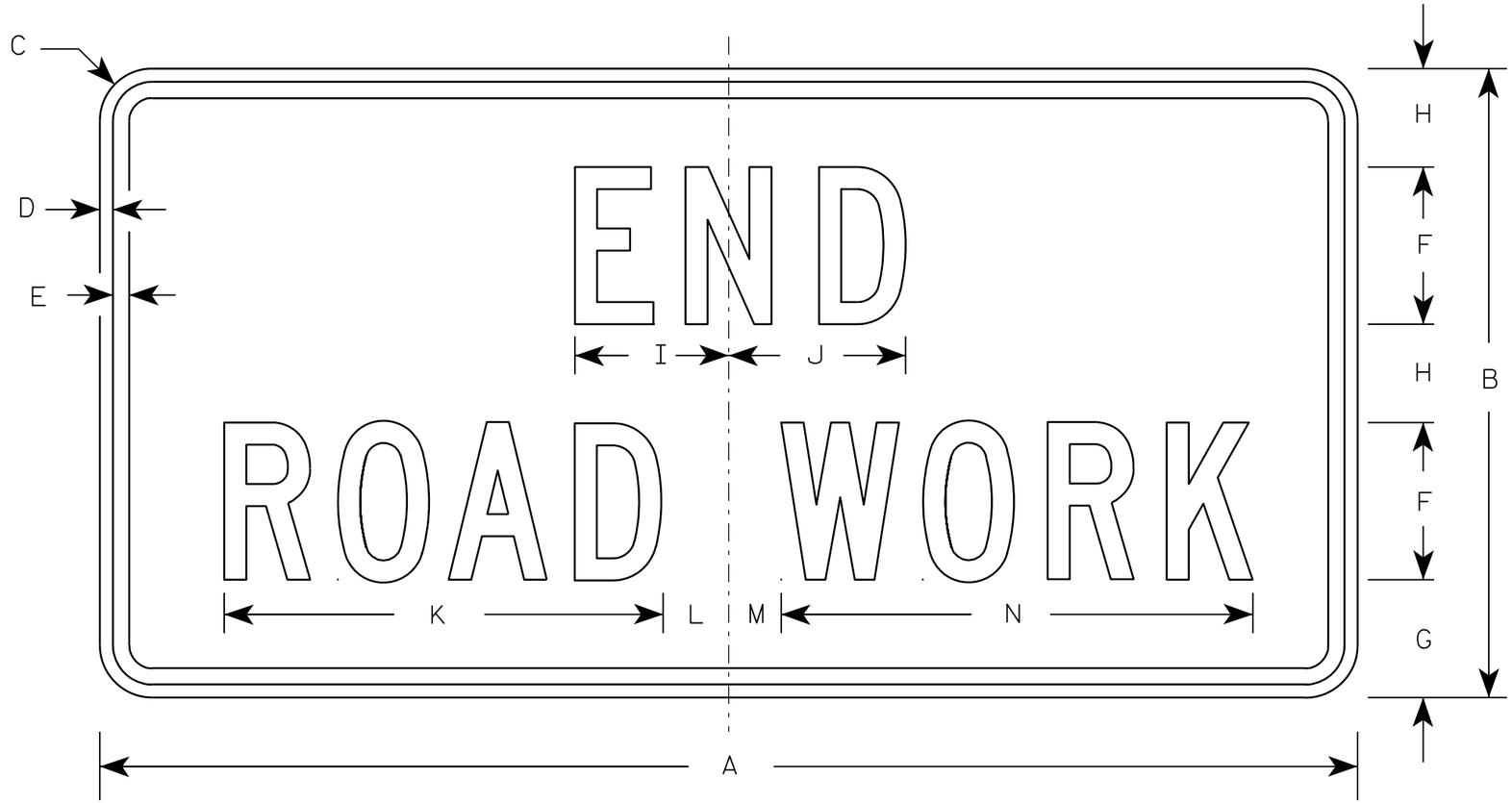
E10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/5/2020 PLATE NO. E10-61.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 233 | E



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

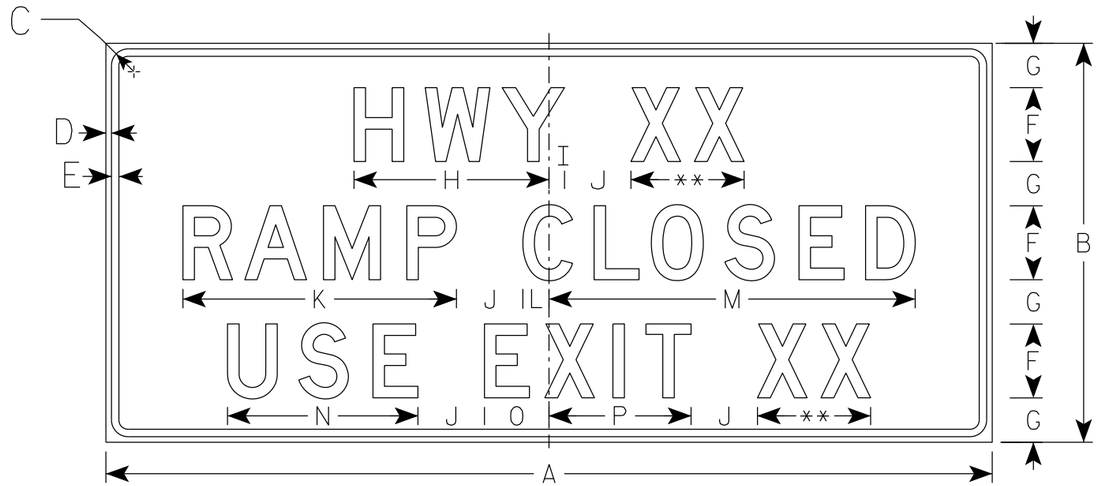
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 234	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate Highway Number and Exit Number and optically center message



G20-56

** See Note 4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	54	3	¾	1	10	6	26 ⅜	2 ⅛	9	37	3 ½	49 ⅝	25 ¾	8 ¾	19 ¼											45.0
5	120	54	3	¾	1	10	6	26 ⅜	2 ⅛	9	37	3 ½	49 ⅝	25 ¾	8 ¾	19 ¼											45.0

STANDARD SIGN
G20-56

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 6/19/18 PLATE NO. G20-56.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 235 | E

NOTES

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



G20-61

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3																											
4	120	30	6		2	12	9	21	78 1/4	20 3/4																	25.0
5																											

STANDARD SIGN
G20-61

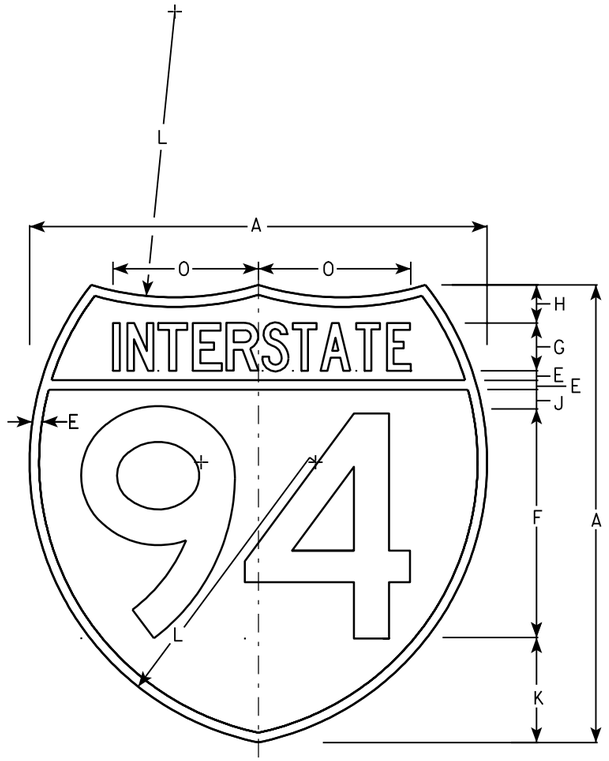
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

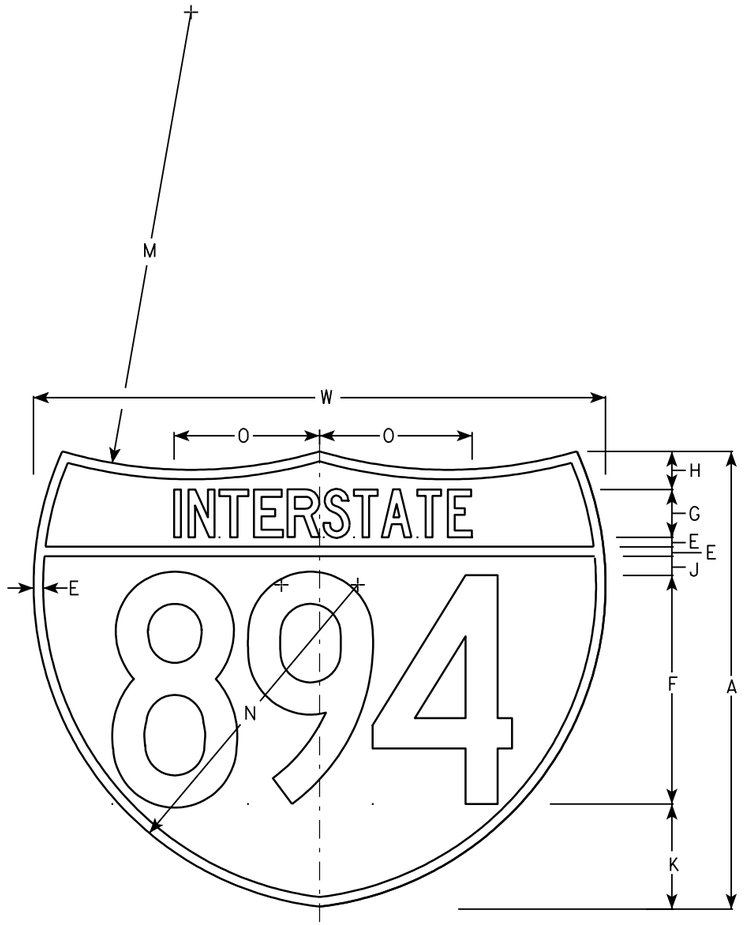
DATE 5/07/15 PLATE NO G20-61.1

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\G2061.DGN PLOT DATE : 07-MAY-2015 13:47 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 20.431338:1.000000 WISDOT/CADDS SHEET 42



M1-1



M1-1A

NOTES

1. Sign is Type II - See Note 6 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Top Red - Bottom Blue (See Note 6)
   Message - White - See Note 6
3. Message Series - See note 5
4. Substitute appropriate numerals & ajust spacing as per plate A10-1.
5. M1-1 - Numerals - D
   Interstate - C
   M1-1A - All copy - C
6. Permanent Signs
   Message - Type H Reflective
   Detour or other temporary signs
   Background - Reflective
   Message - Reflective

Metric equivalent for these signs are:

SIZE	M1-1	SIZE	M1-1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m2	M1-1A Area m2
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

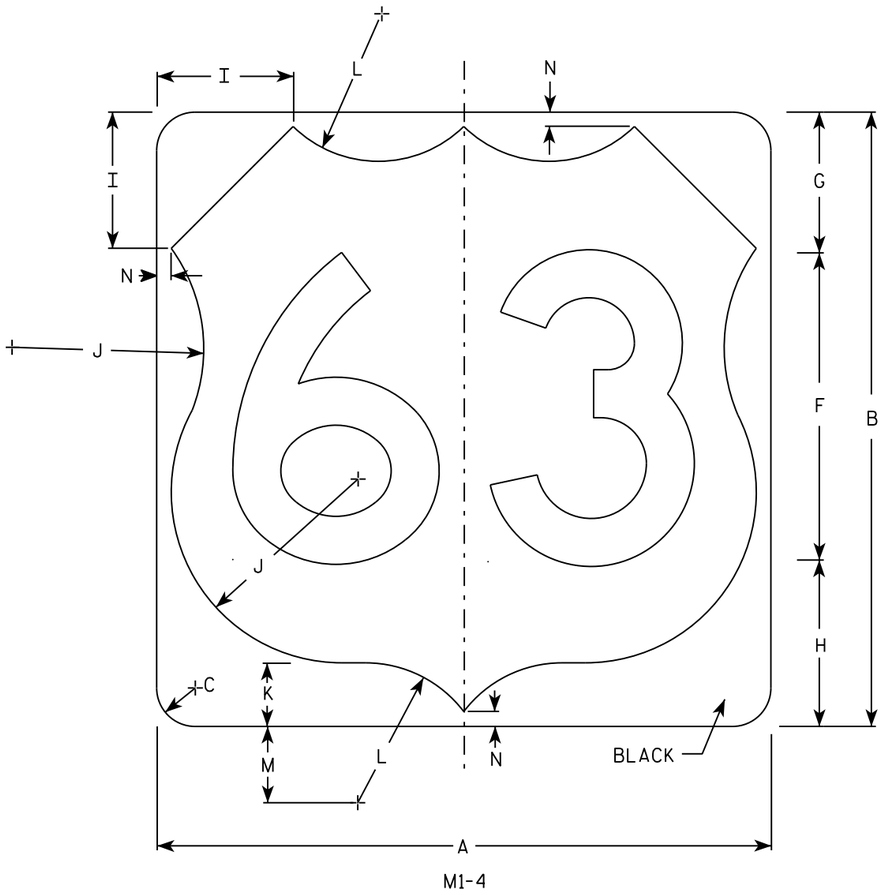
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

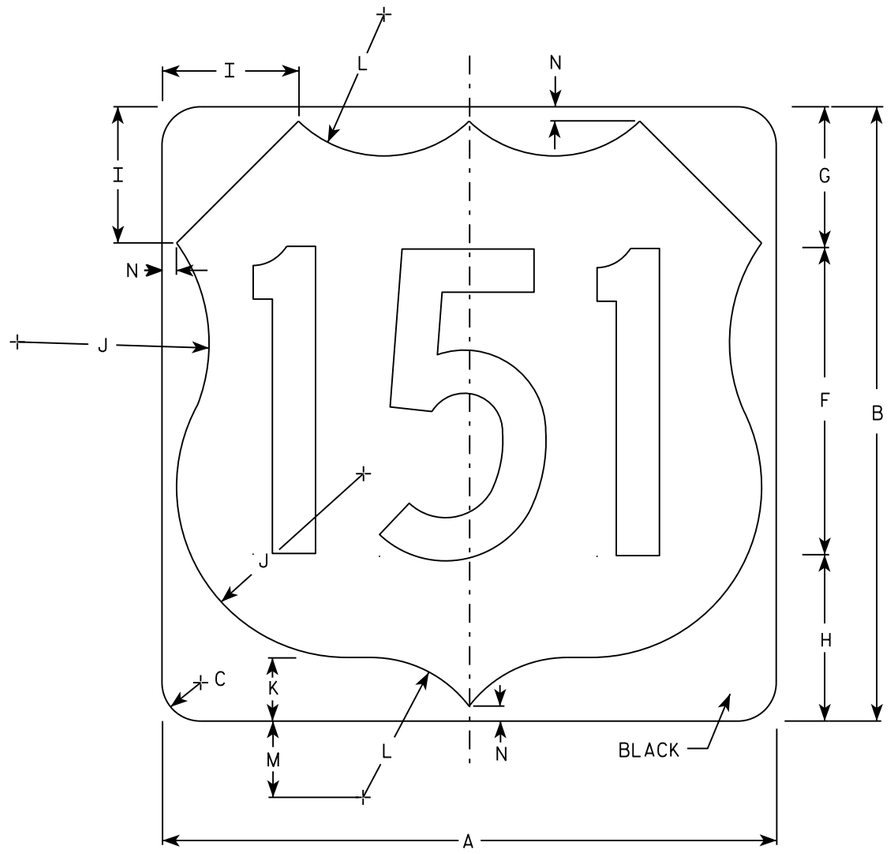
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 237	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M1-4



M1-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. ft.
1																											
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0

USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-4.10

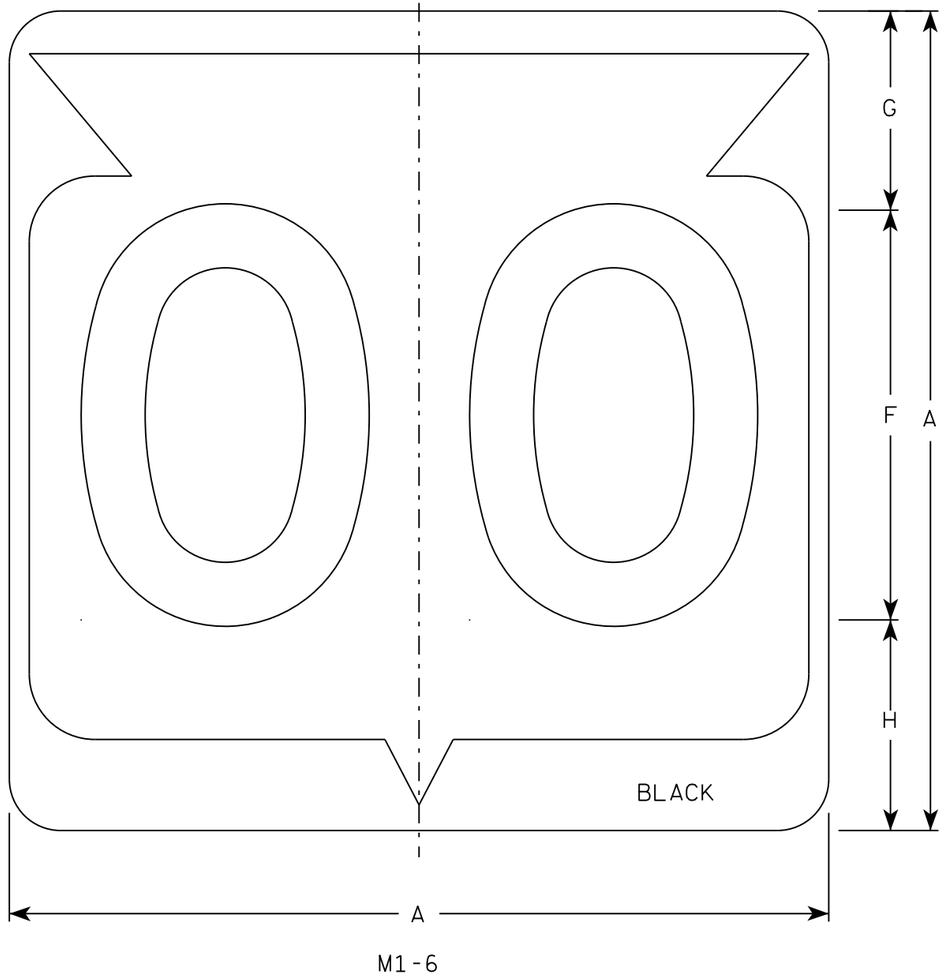
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 238 | E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M14.DGN PLOT DATE : 16-MAR-2018 14:06 PLOT BY : $$...plotuser...$$ PLOT NAME : PLOT SCALE : 5.918903:1.000000

WISDOT/CADDS SHEET 42

7

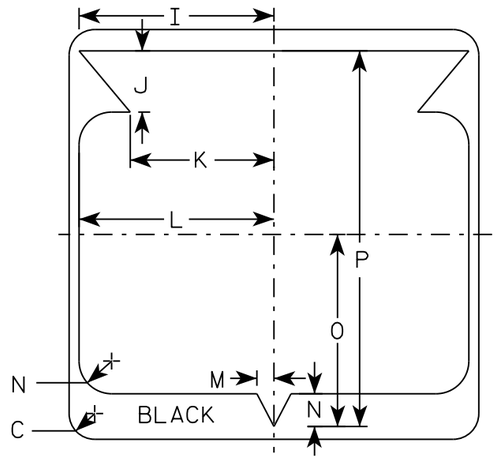
7



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

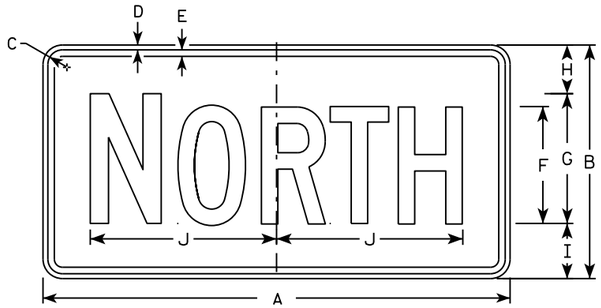
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

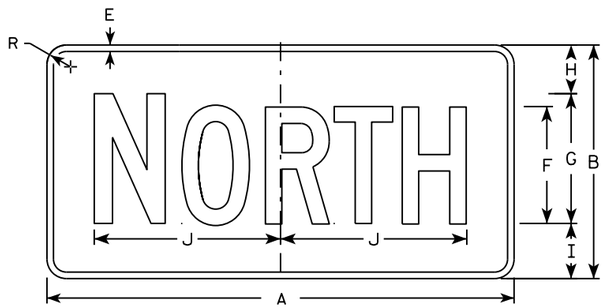
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 239 | E



M3-1
MM3-1
MP3-1



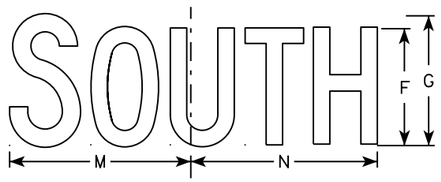
MB3-1
MK3-1
MN3-1



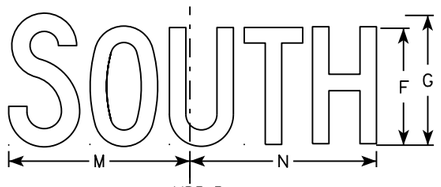
M3-2
MM3-2
MP3-2



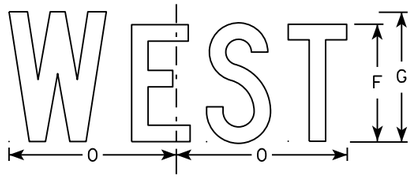
MB3-2
MK3-2
MN3-2



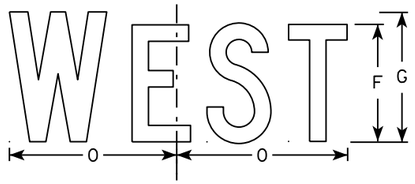
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thur M3-4
SERIES

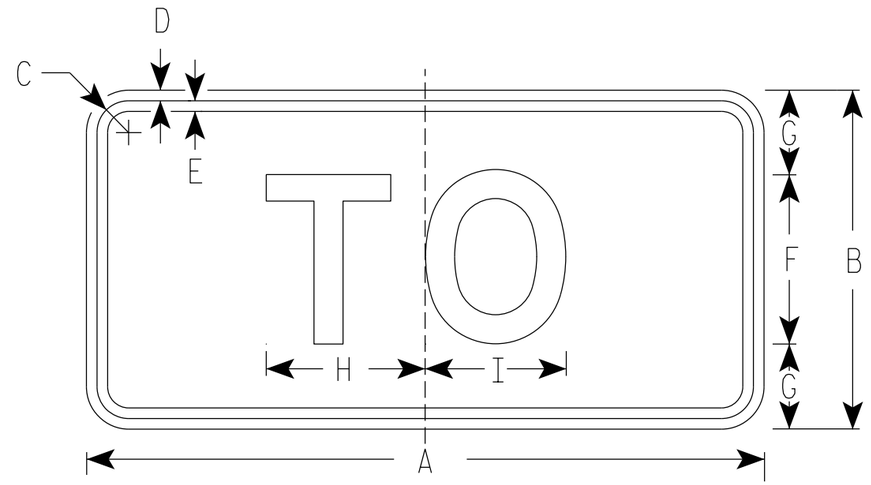
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

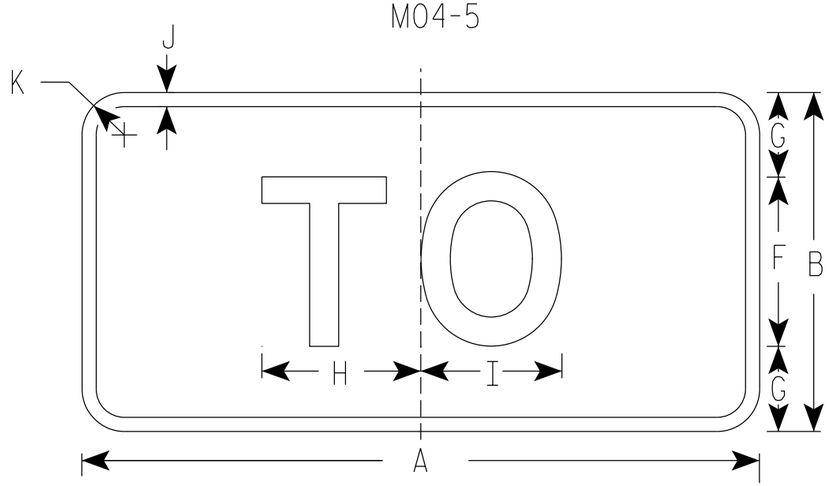
DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-5
MM4-5
MP4-5
M04-5



MB4-5
MK4-5
MN4-5

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-5 Background - White
   Message - Black

   MB4-5 Background - Blue
   Message - White

   MK4-5 Background - Green
   Message - White

   MM4-5 Background - White
   Message - Green

   MN4-5 Background - Brown
   Message - White

   MP4-5 Background - White
   Message - Blue

   M04-5 Background - Orange Type F Reflective
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	5 3/8	5 1/4	1/2	1 1/2																2.00
3	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
4	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5
5	36	18	1 3/8	3/8	1/2	9	4 1/2	8 1/4	8 3/8	1/2	1 1/2																4.5

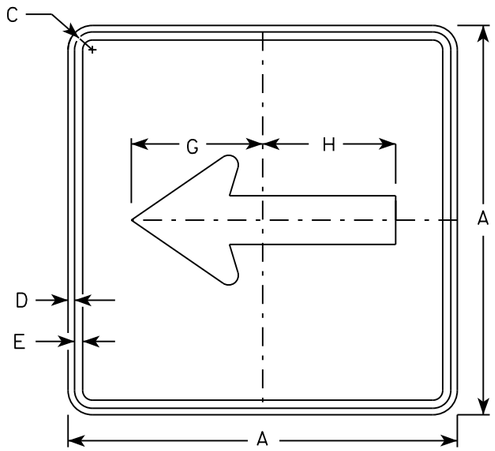
STANDARD SIGN
M4-5

WISCONSIN DEPT OF TRANSPORTATION

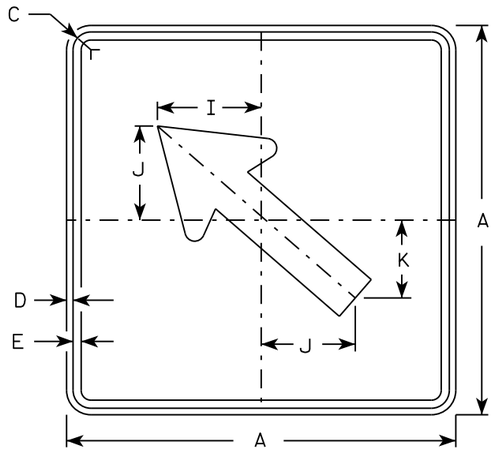
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 03/7/19 PLATE NO. M4-5.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 241 | E



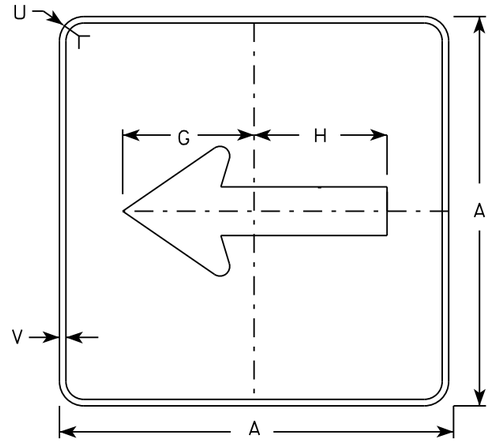
M6-1
MM6-1
MO6-1
MP6-1



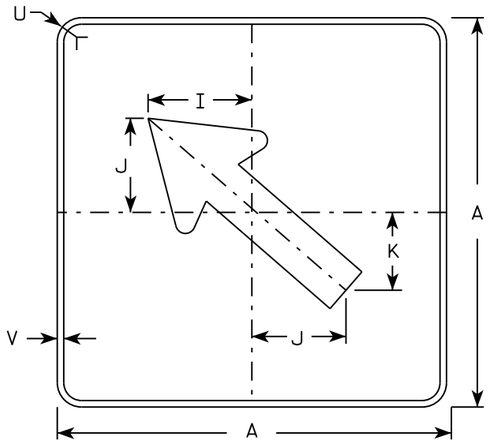
M6-2
MM6-2
MO6-2
MP6-2

NOTES

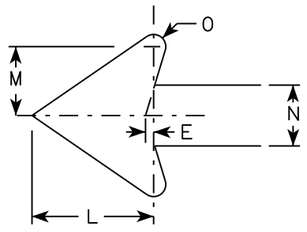
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



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



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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

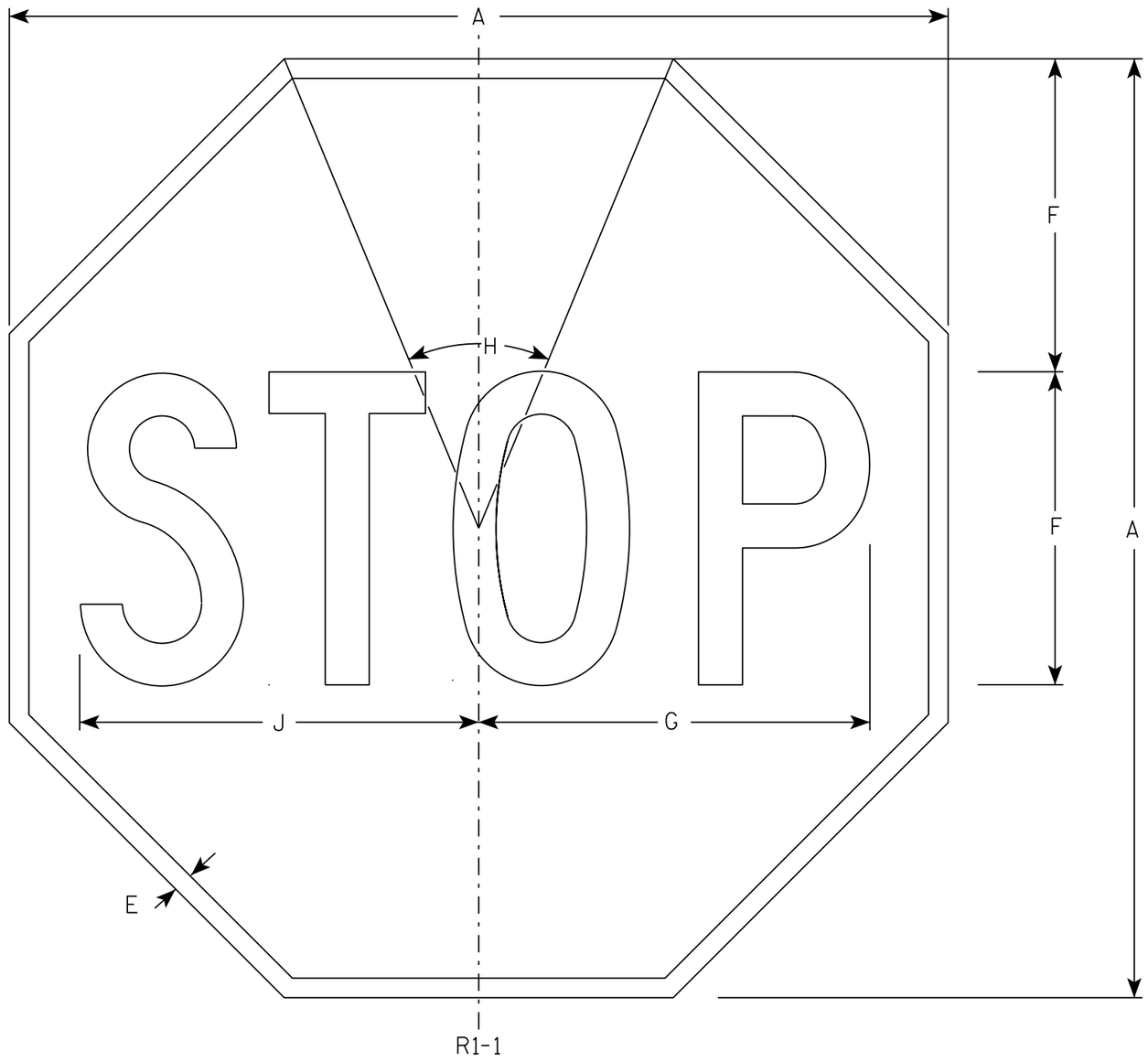
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 242 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN

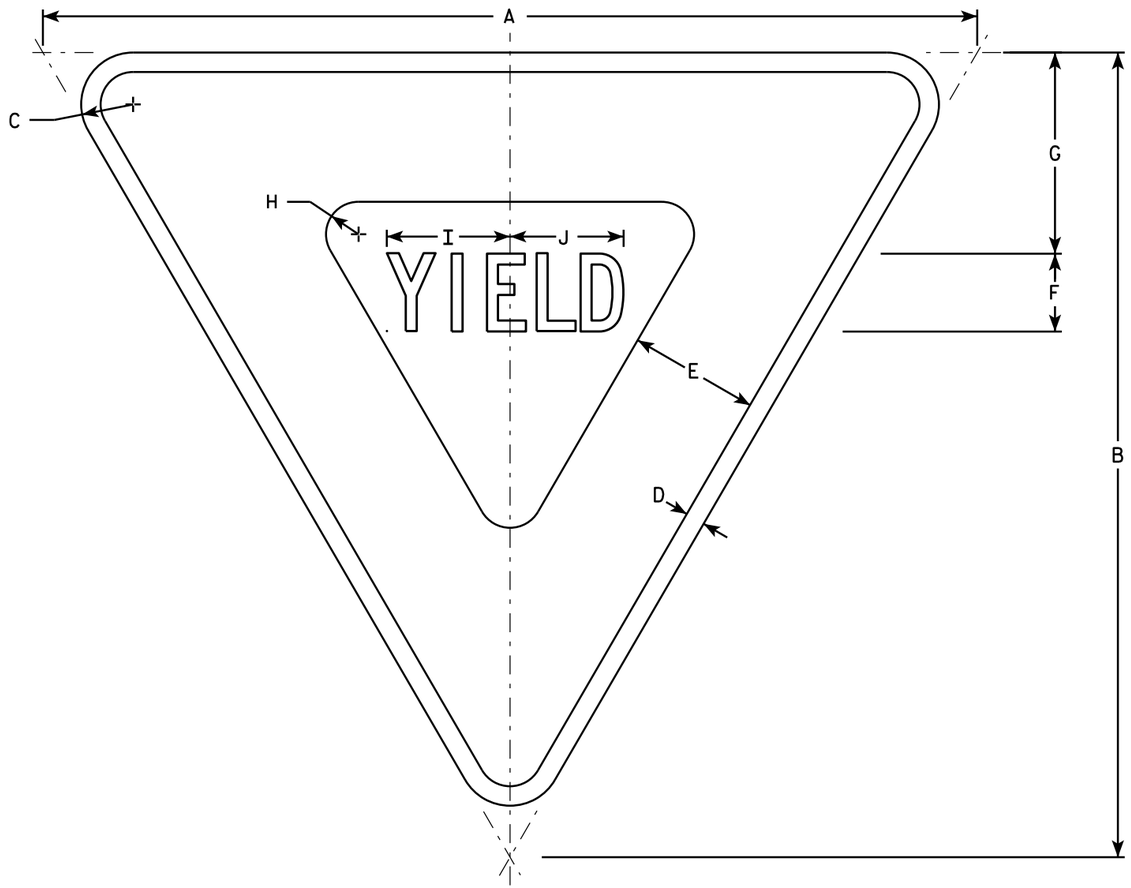
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 243	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

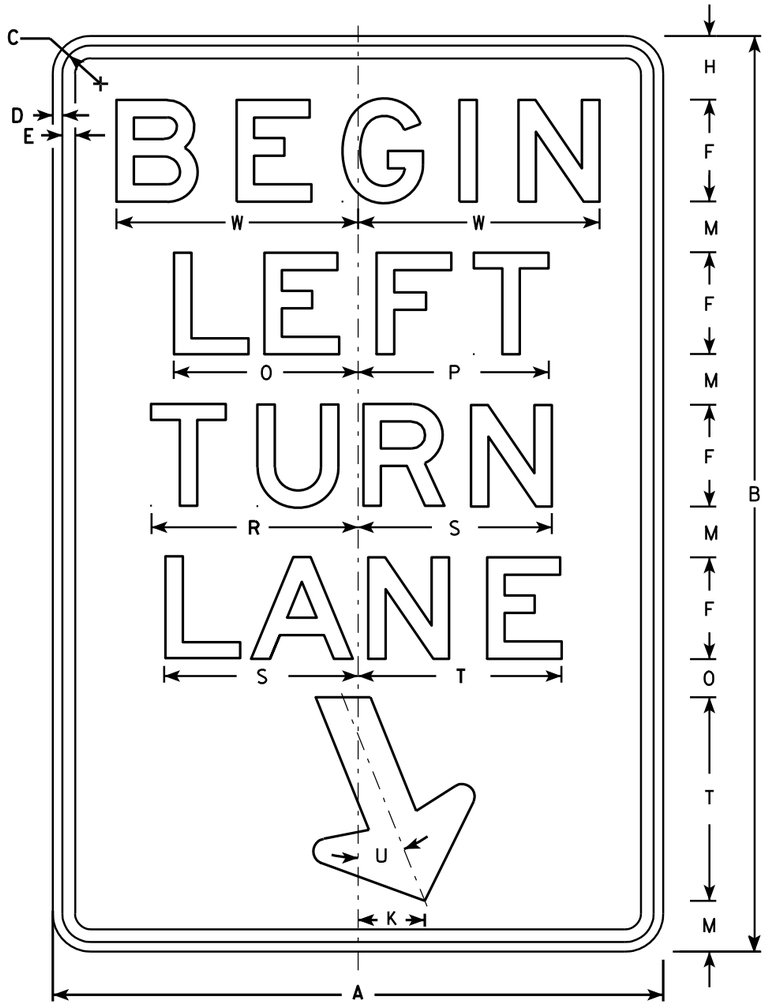
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

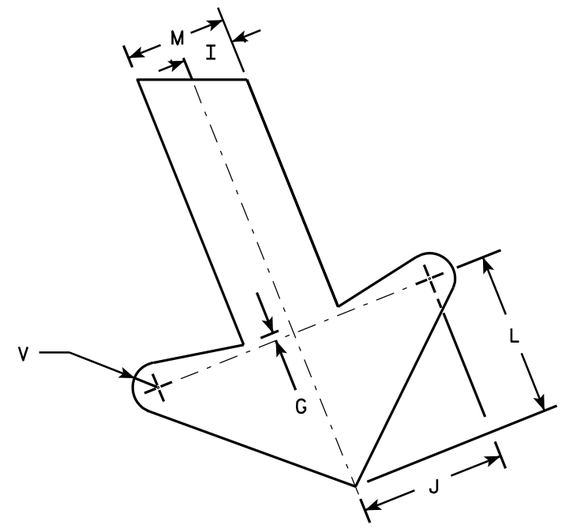
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R3-20L

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

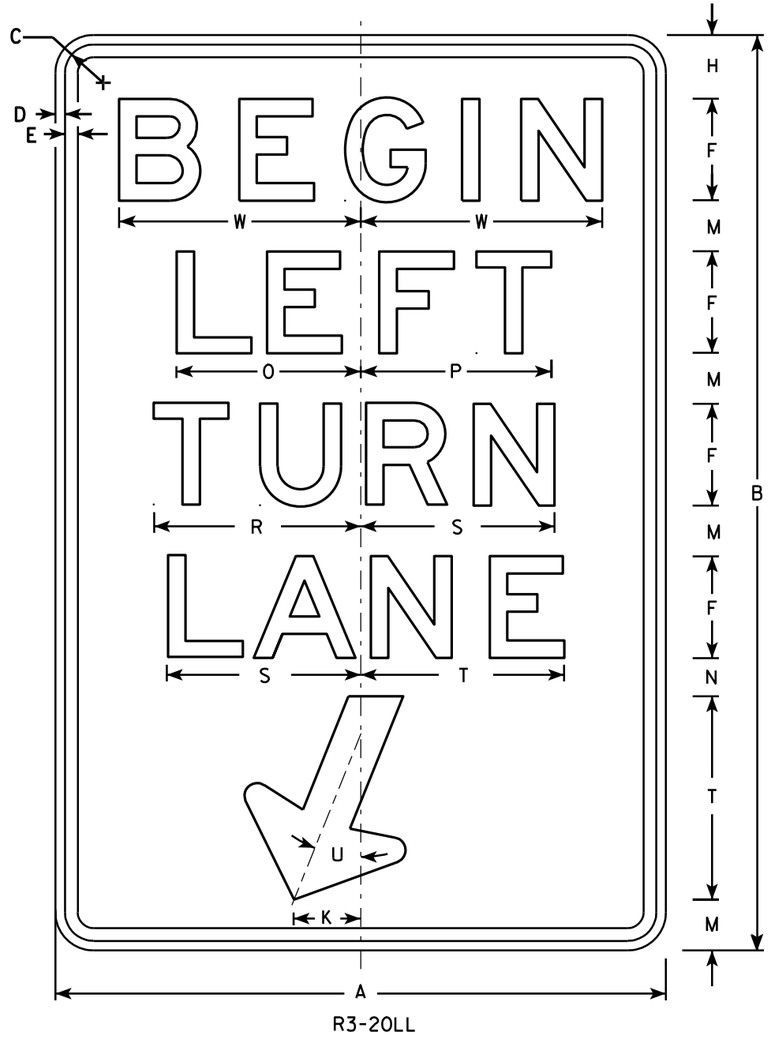
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

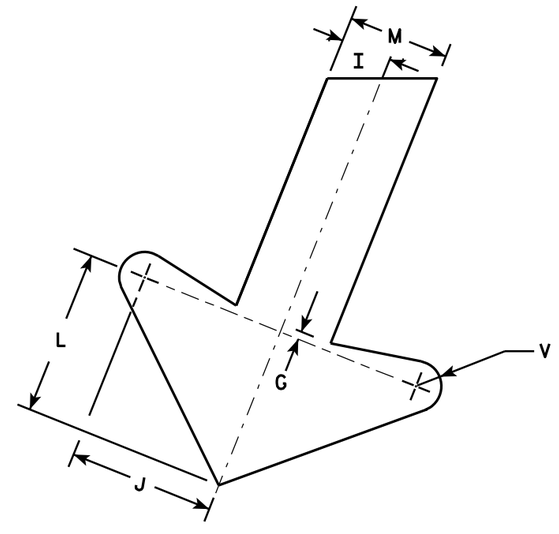
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 245 | E



R3-20LL

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20LL

WISCONSIN DEPT OF TRANSPORTATION

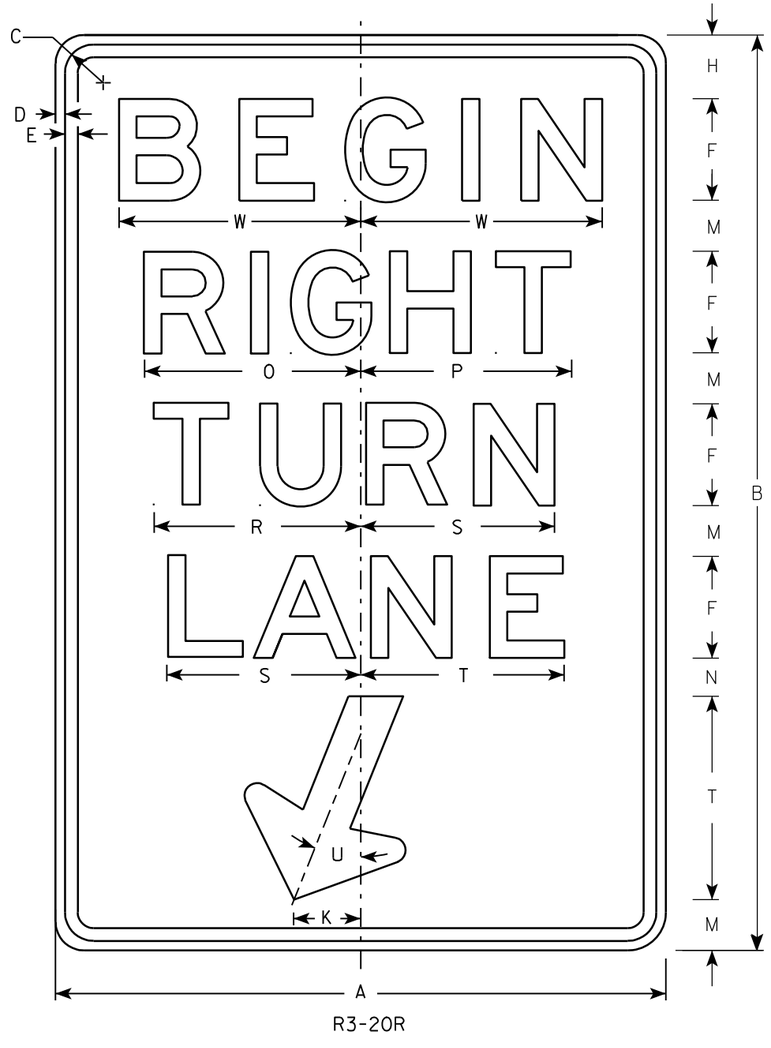
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20LL.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 246	E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R320LL.DGN PLOT DATE : 15-OCT-2010 14:38 PLOT BY : dotsja PLOT NAME : PLOT SCALE : 5.959043:1.000000

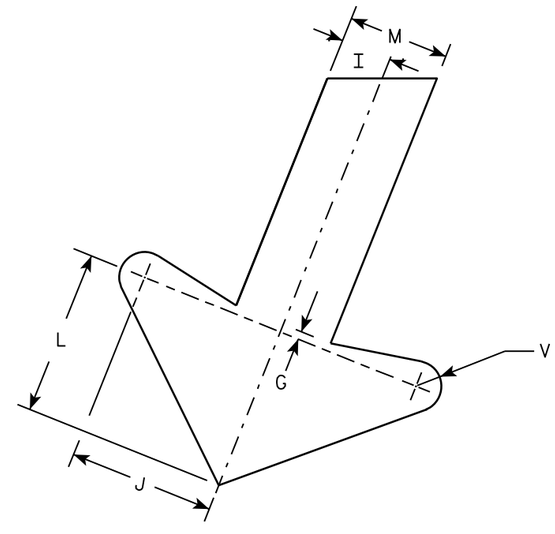
WISDOT/CADDS SHEET 42



R3-20R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

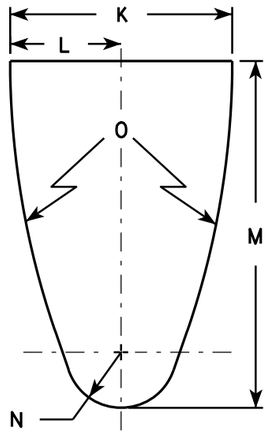
STANDARD SIGN
R3-20R

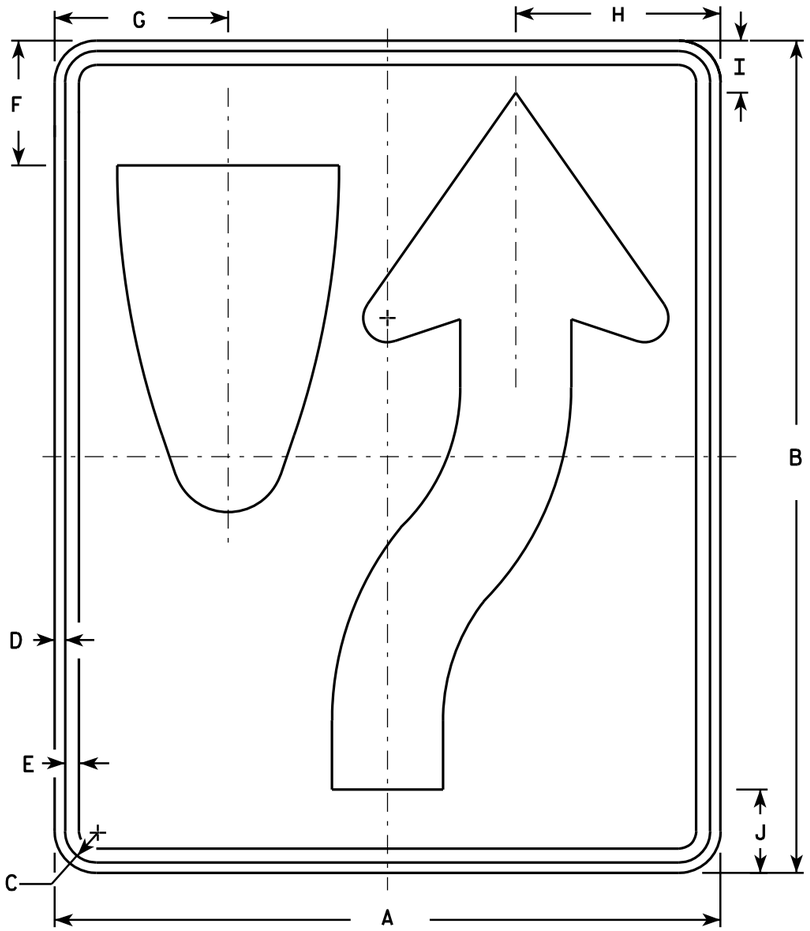
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 247 | E

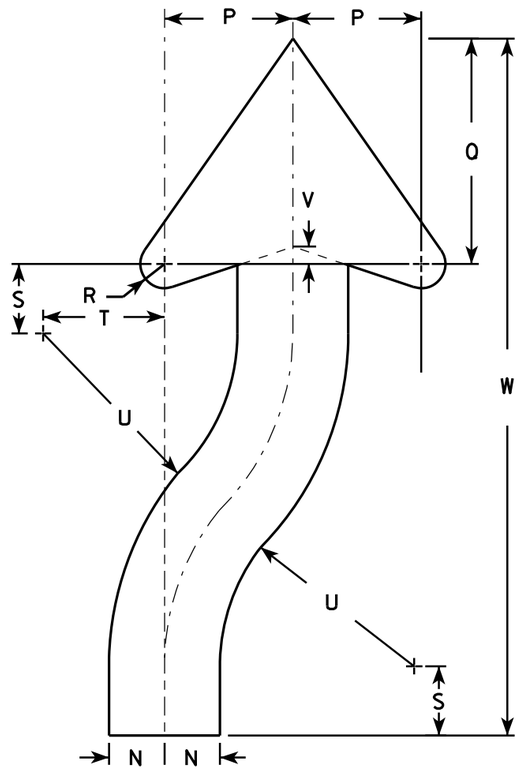




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

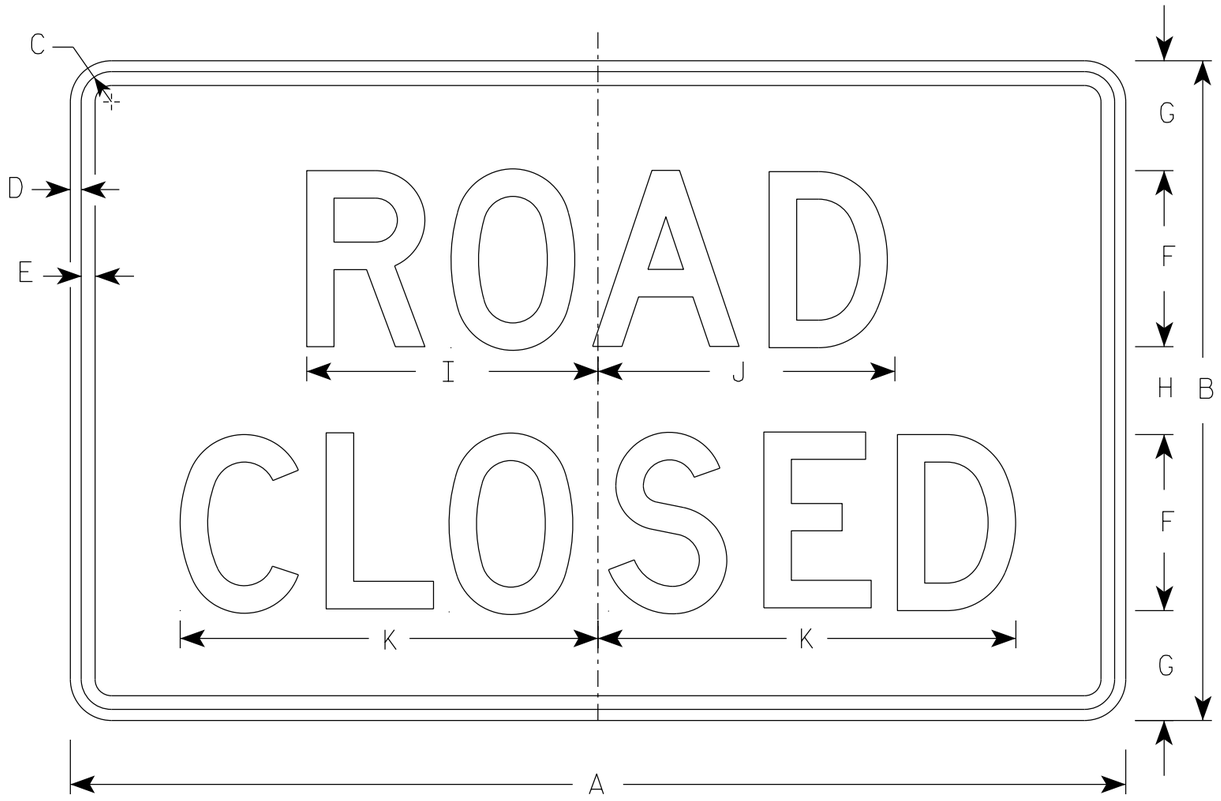
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

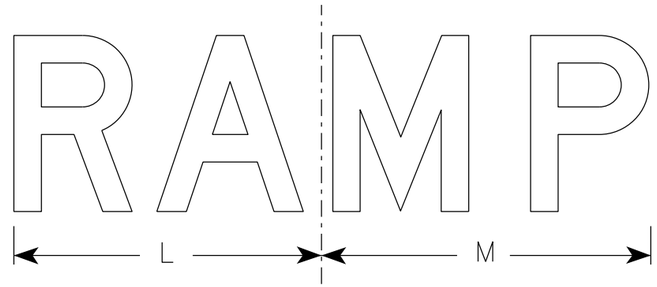
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 248	E



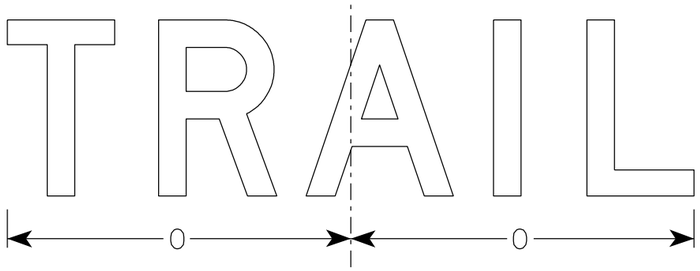
R11-2

NOTES

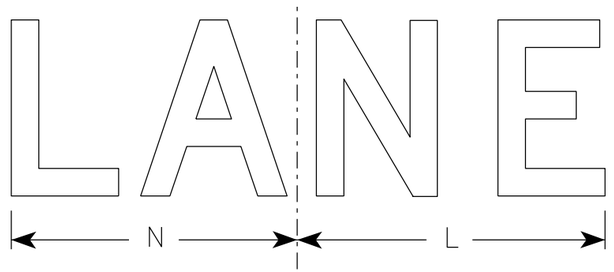
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

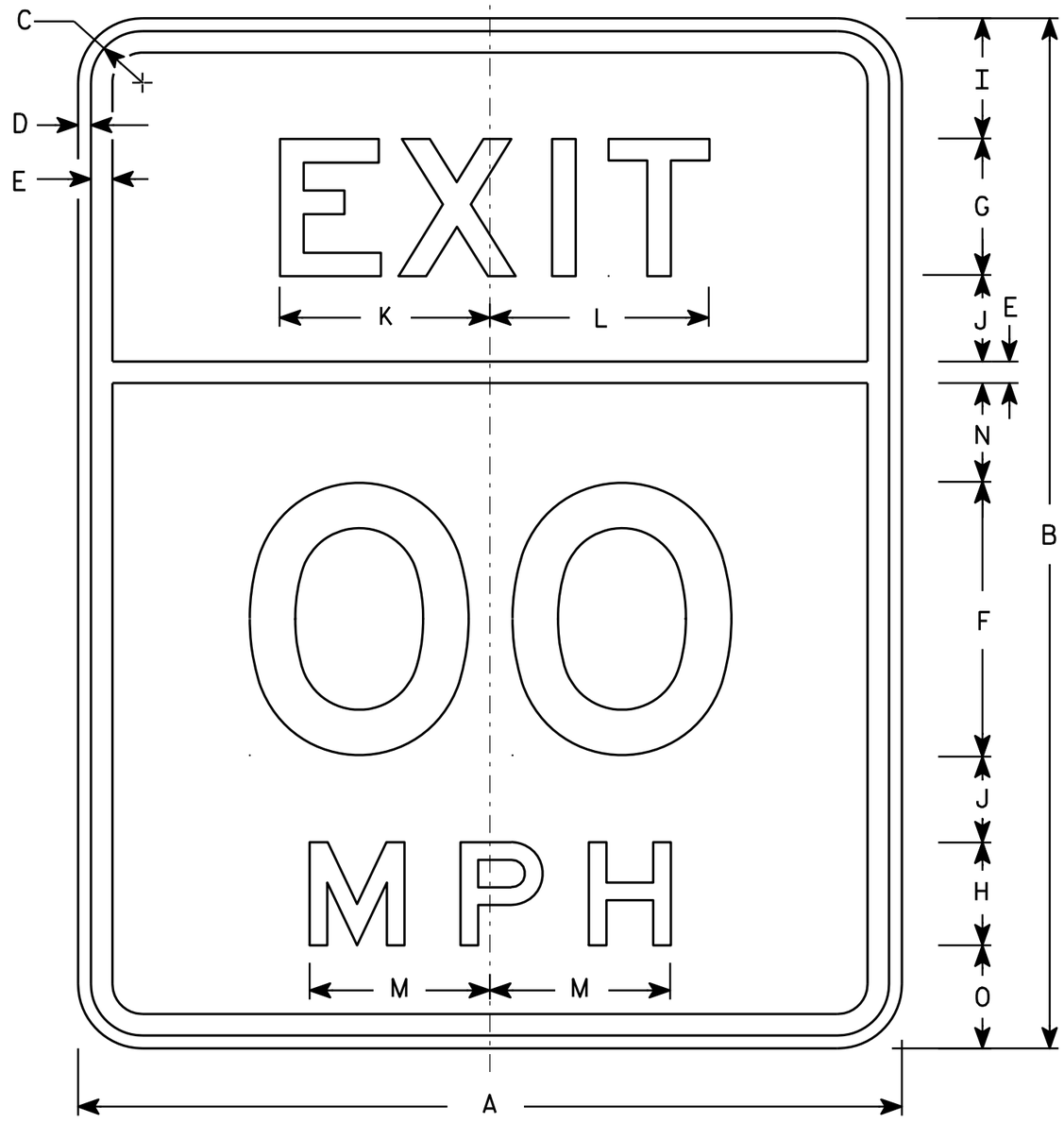
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

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

FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 29-MAR 2021 8:15 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/2	3/8	5/8	8	4	3	3 1/2	2 1/2	6 1/8	6 3/8	5 1/4	2 7/8	3												5.0
2M	24	30	1 1/2	3/8	5/8	8	4	3	3 1/2	2 1/2	6 1/8	6 3/8	5 1/4	2 7/8	3												5.0
3	36	48	2 1/4	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0
4	36	48	2 1/4	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0
5	48	60	2 1/4	3/4	1	16	8	6	7	5	12 1/4	12 3/4	10 5/8	5 3/4	6												20.0

STANDARD SIGN
W13-2

WISCONSIN DEPT OF TRANSPORTATION

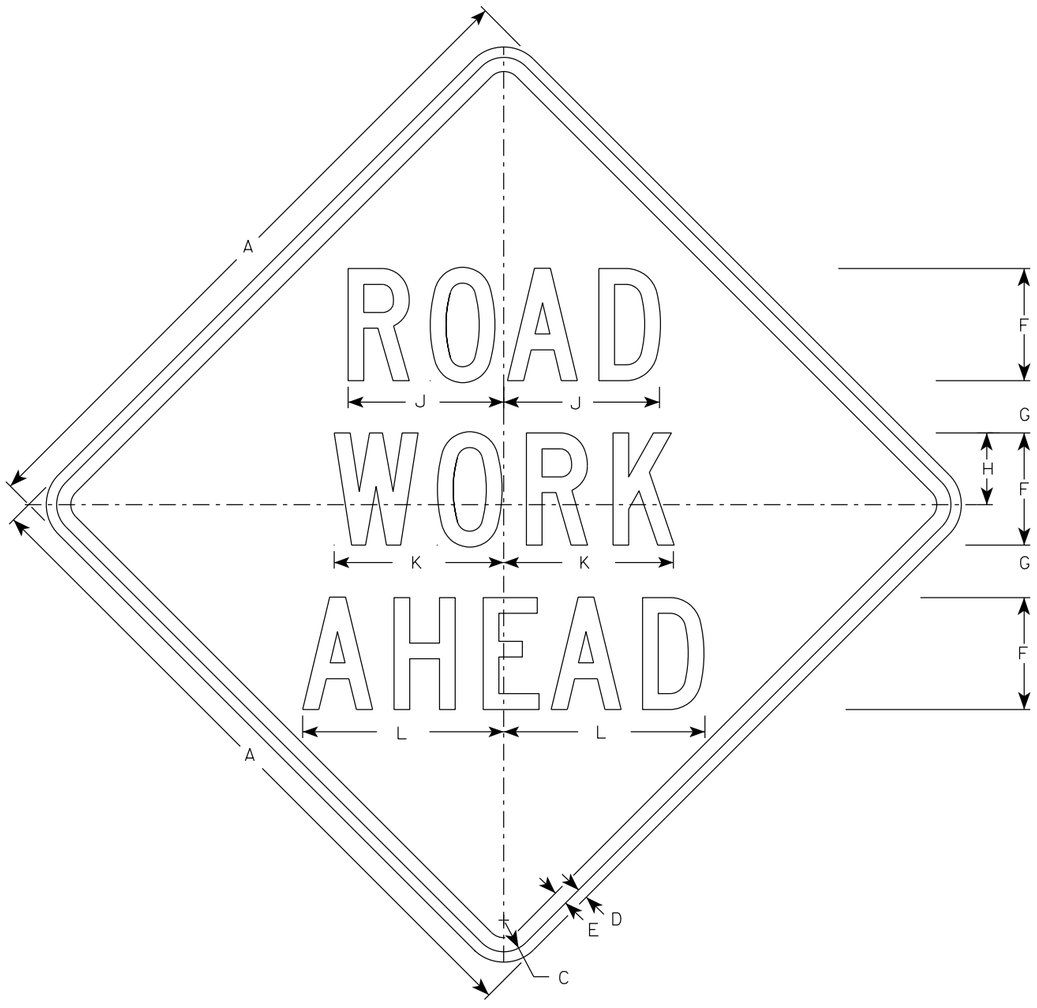
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-2.9

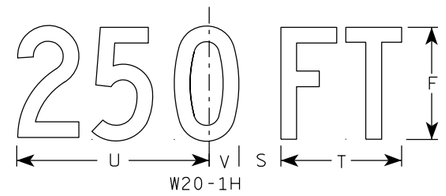
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 250 | E

NOTES

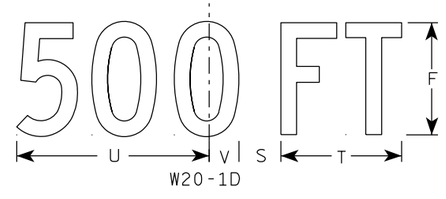
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



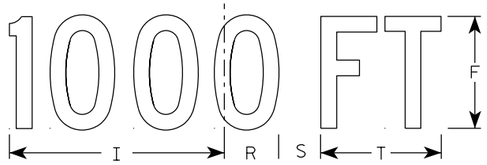
W20-1A



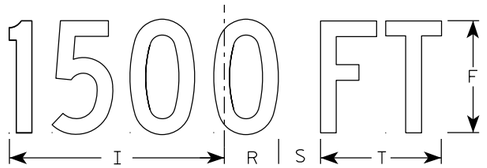
W20-1H



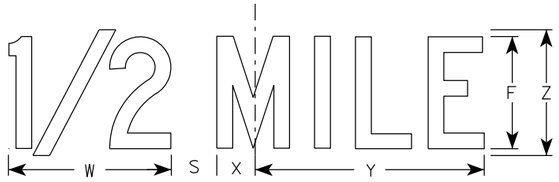
W20-1D



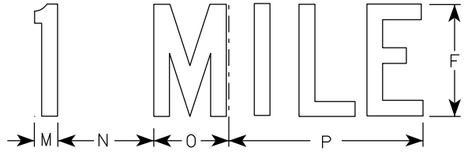
W20-1C



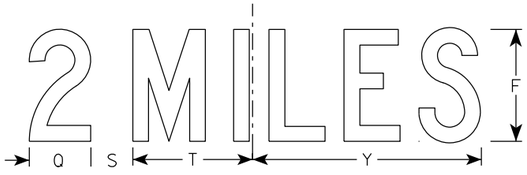
W20-1B



W20-1G



W20-1F



W20-1E

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

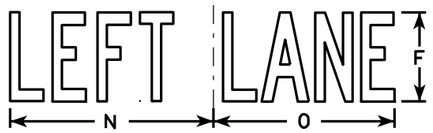
WISDOT/CADDS SHEET 42

7

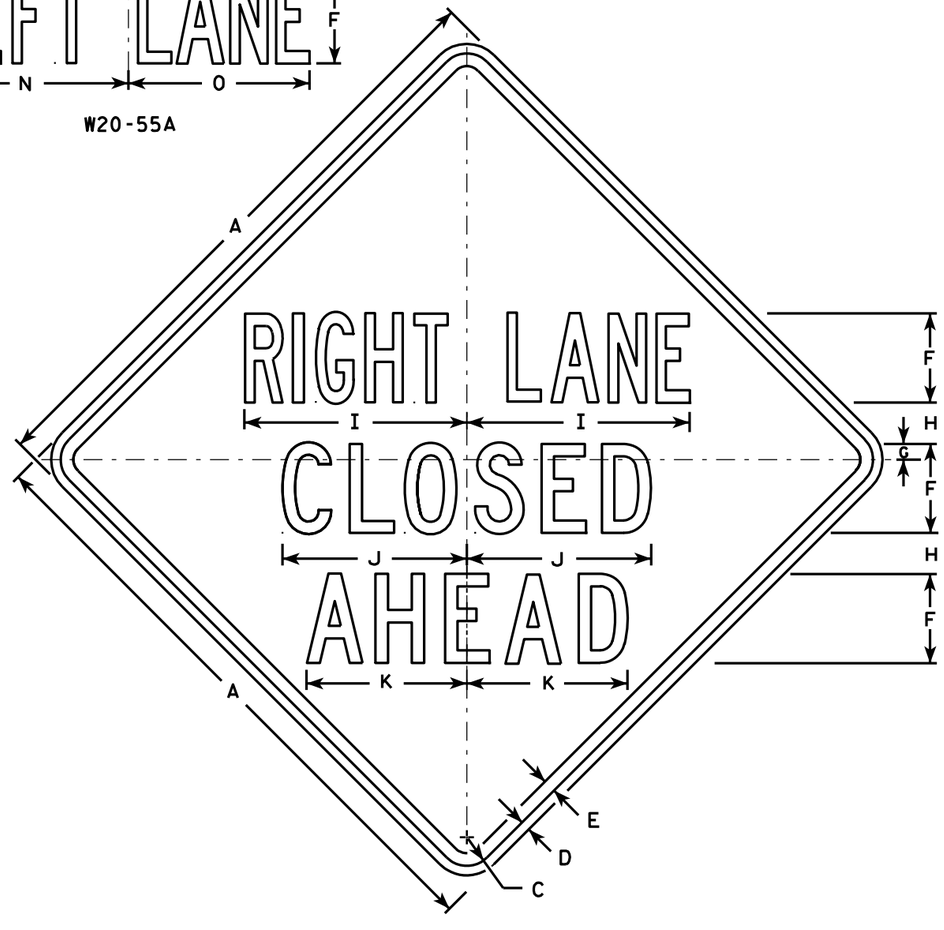
7



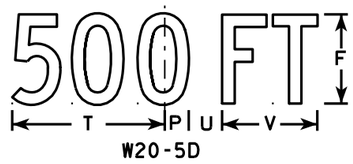
W20-56A



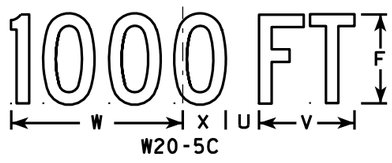
W20-55A



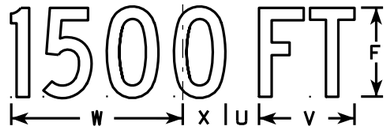
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. " _____ LANE" is Series B.
   All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

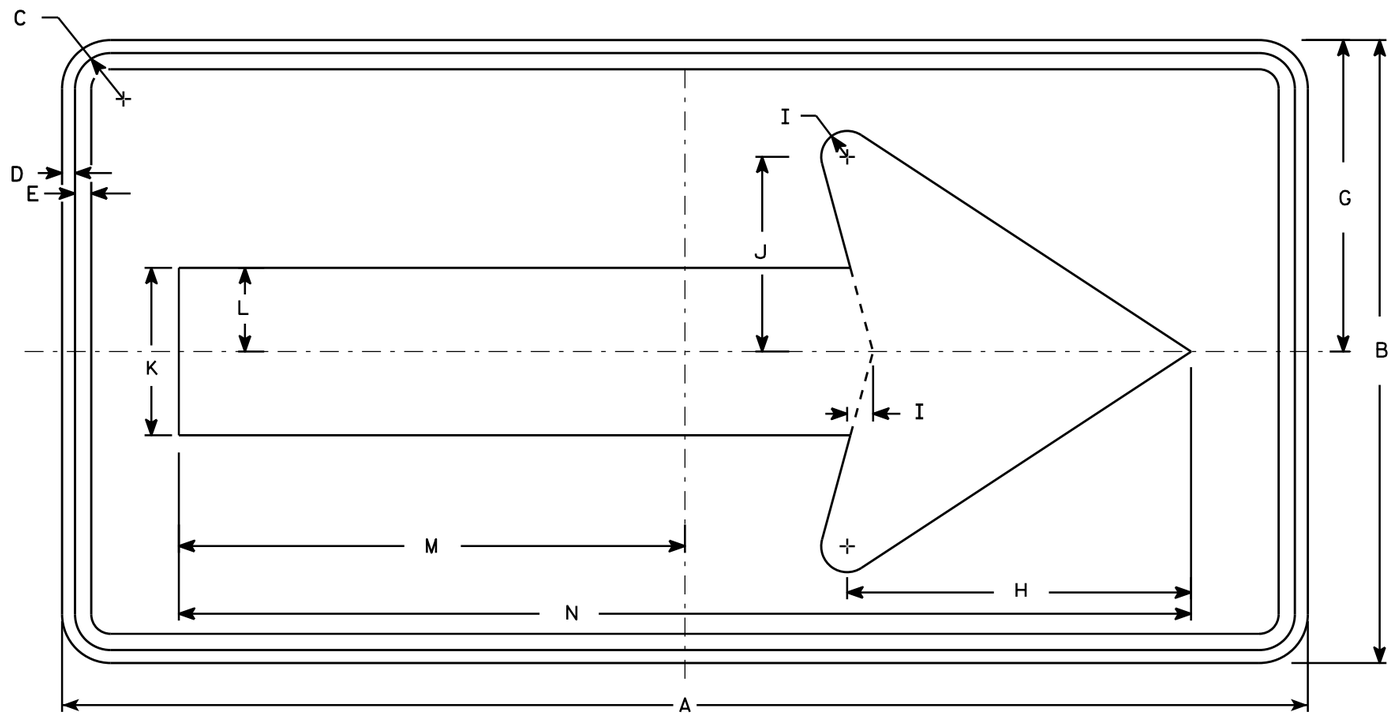
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 252	E

7

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W205.DGN PLOT DATE : 18-MAR-2011 12:15 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 11.918087:1.000000
WISDOT/CADDS SHEET 42



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

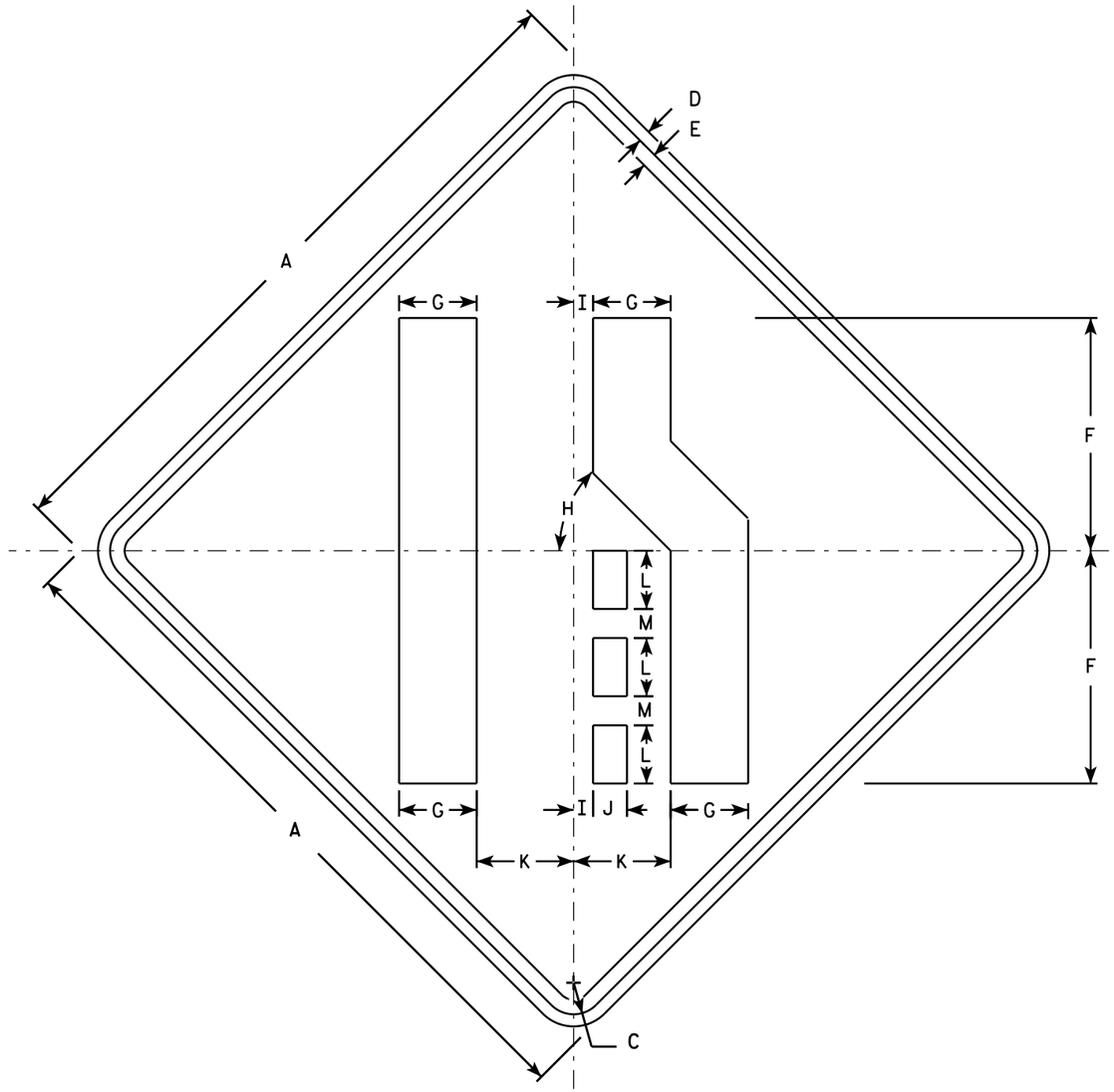
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

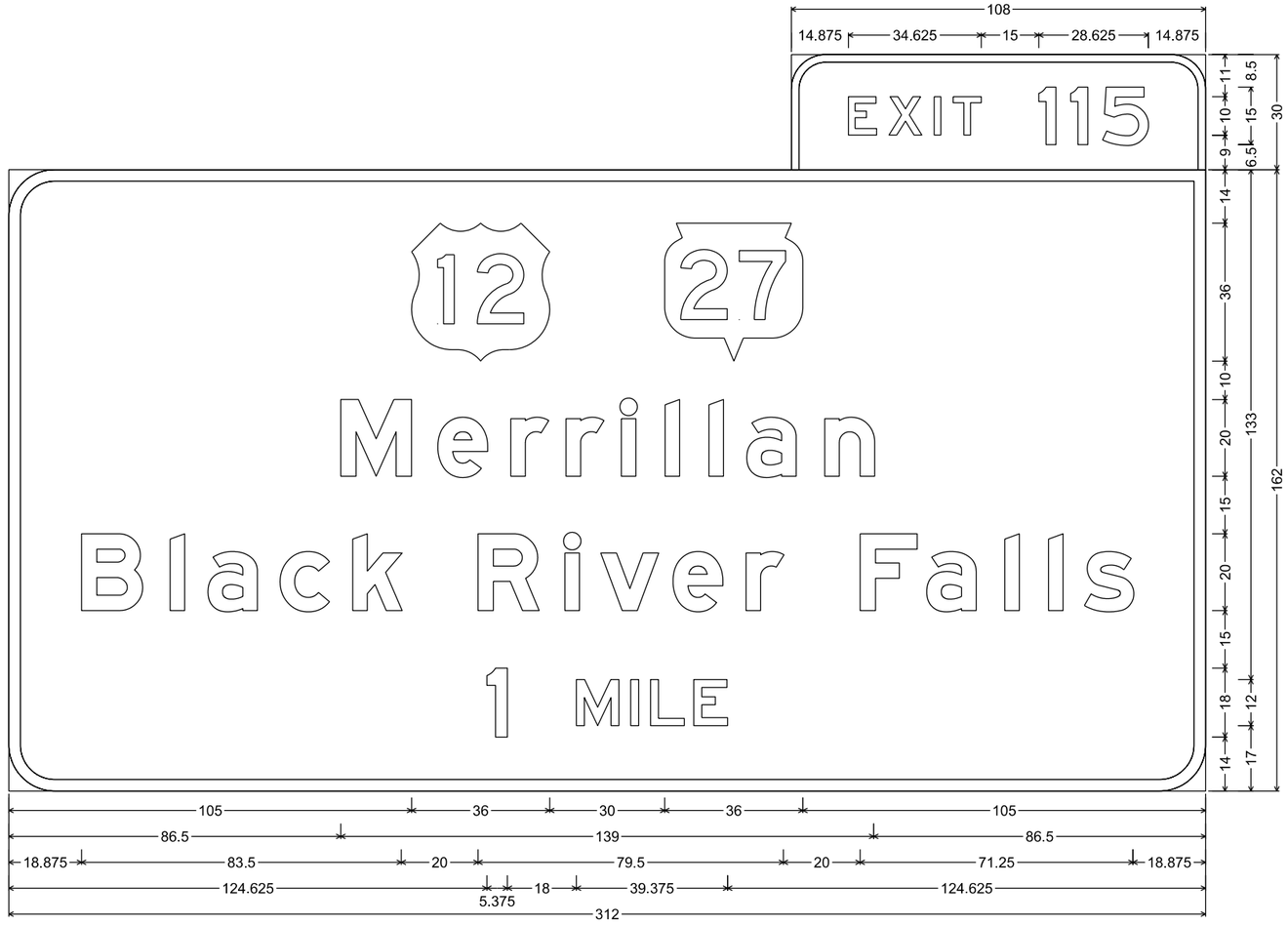
DATE 11/20/13 PLATE 254 W04-2.1

PROJECT NO:

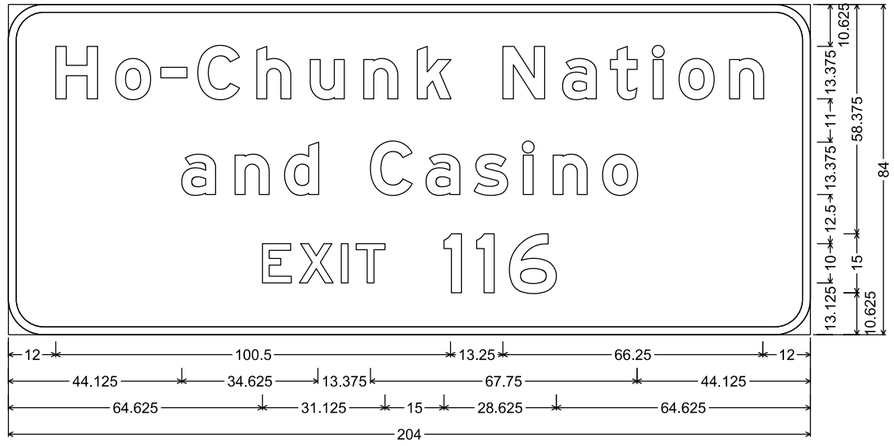
SHEET NO: E

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except as noted



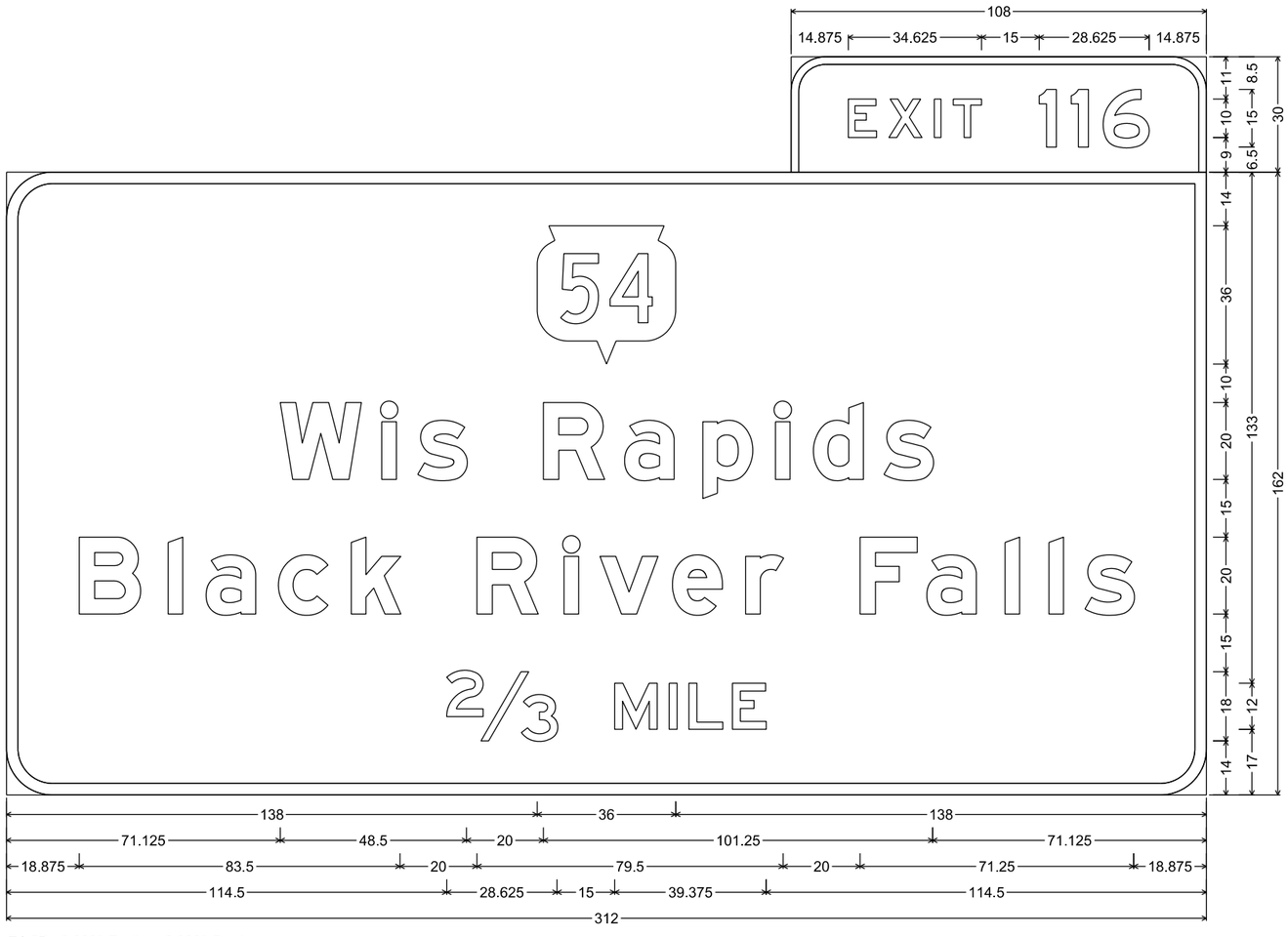
E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border



E3-1; 9.000" Radius, 2.000" Border

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except as noted



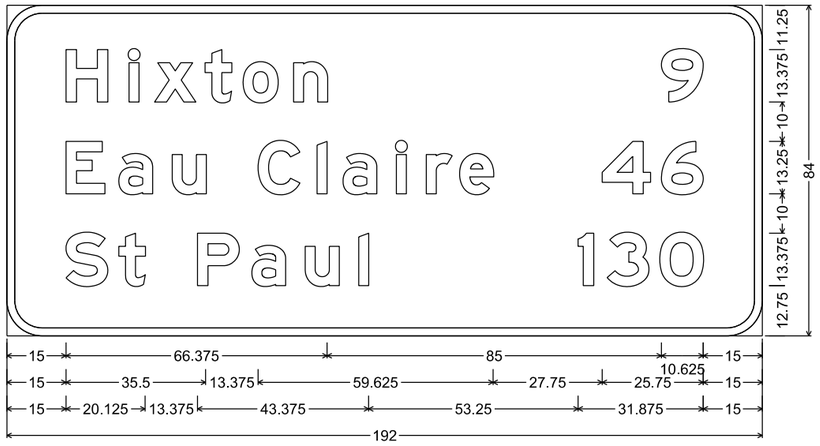
E1-5P; 9.000" Radius, 2.000" Border,
E1-1A; 12.000" Radius, 3.000" Border

7

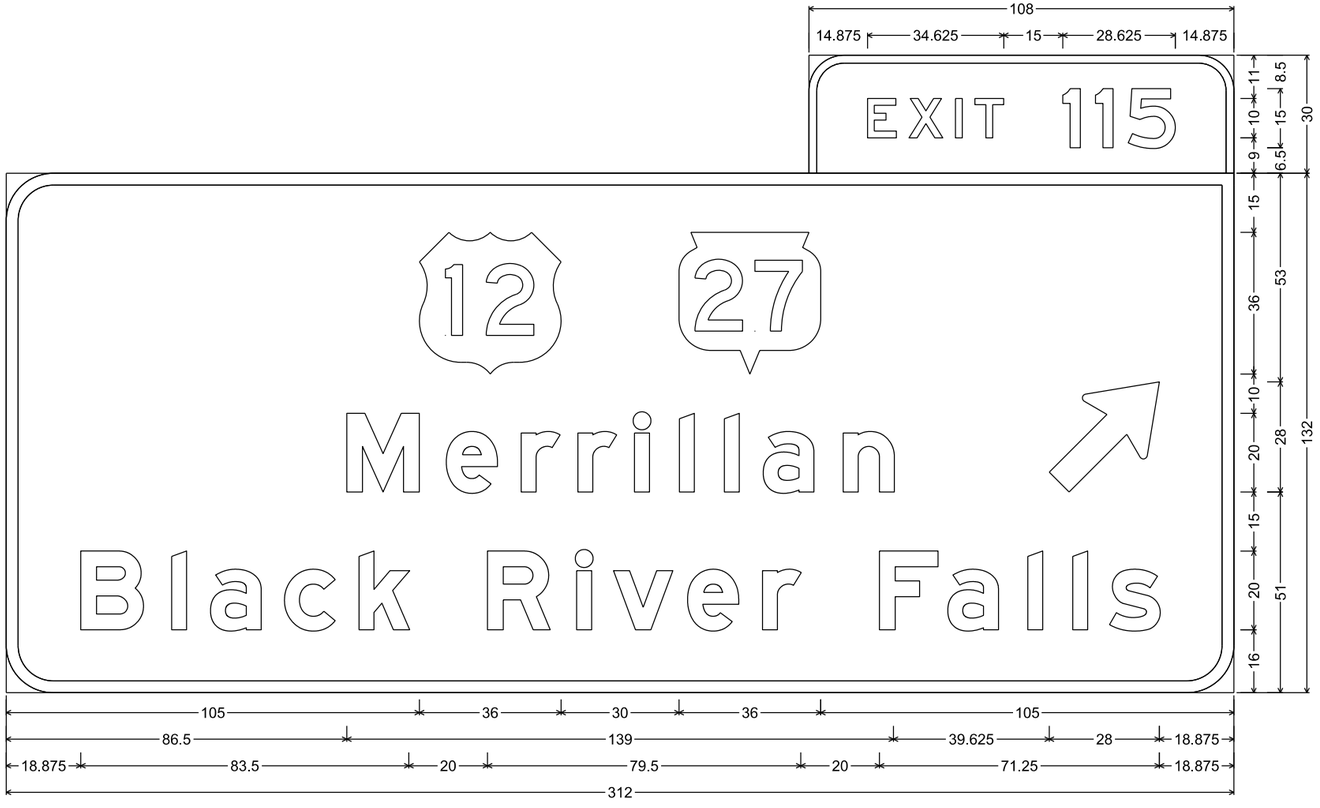
7

NOTES

1. All Signs Type I - Type SH Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E Modified except as noted



D2-3; 9.000" Radius, 2.000" Border



E1-5P; 9.000" Radius, 2.000" Border,
E4-1A; 12.000" Radius, 3.000" Border

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