MAD

PROJECT ID: WITH: N/A

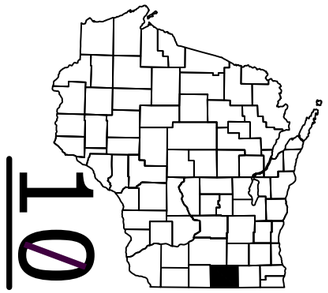
5350-02-65, 5350-02-75

COUNTY: ROCK

JANUARY 2026

ORDER OF SHEETS

TOTAL SHEETS = 228



N

DESIGN DESIGNATION

A.A.D.T.	2025	=	17,700
A.A.D.T.	2044	=	17,700
D.H.V.		=	11.9
D.D.		=	59/41
T.		=	6.5%
DESIGN SPEED		=	35 MPH
ESALS		=	3,400,000

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

C JANESVILLE, CENTER AVENUE

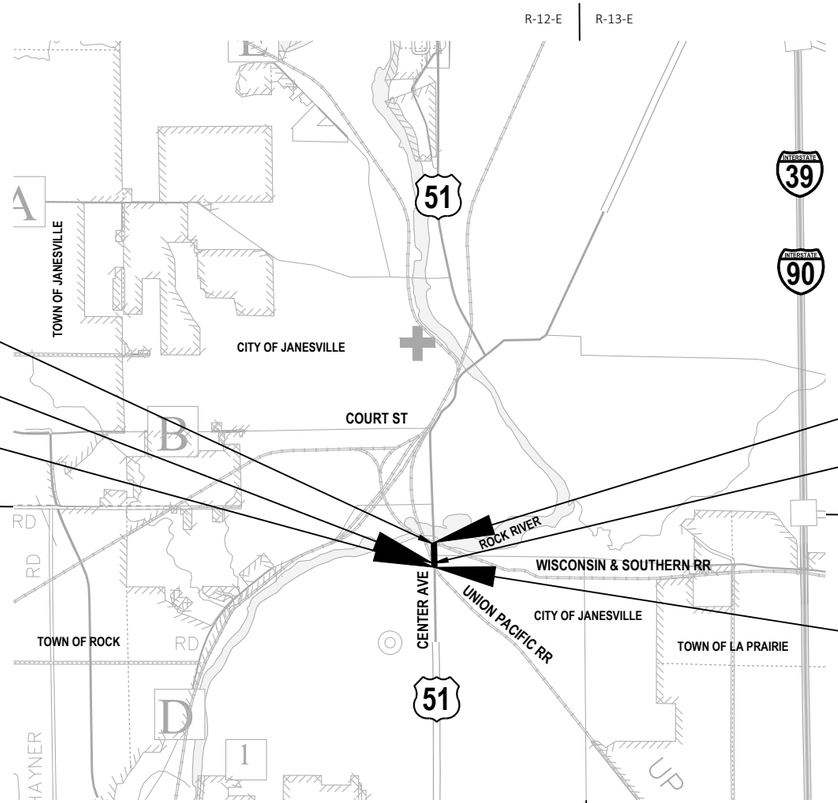
UP RR STRUCTURE B-53-135 — **USH 51** — **ROCK COUNTY**

STATE PROJECT NUMBER: **5350-02-65**

W STATE ST TO WSOR BRIDGE B-53-154 — **USH 51** — **ROCK COUNTY**

STATE PROJECT NUMBER: **5350-02-75**

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5350-02-65	WISC 2026130	1
5350-02-75	WISC 2026131	



STRUCTURE B-53-154

END PROJECT 5350-02-65
STA 609+04

BEGIN PROJECT 5350-02-65
STA 608+36
Y = 263,043.43
X = 490,981.99

T-3-N
T-2-N

END PROJECT 5350-02-75
STA 616+69

EXCEPTION TO NET CENTERLINE LENGTH (5350-02-75)
STA 608+36 TO STA 609+04

T-3-N
T-2-N

BEGIN PROJECT 5350-02-75
STA 606+40
Y = 262,847.32
X = 490,986.35

LAYOUT

SCALE 0 — 1 MI

TOTAL NET LENGTH OF CENTERLINE (5350-02-65) = 0.013 MI
TOTAL NET LENGTH OF CENTERLINE (5350-02-75) = 0.182 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), ROCK COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ACCEPTED FOR

CITY of JANESVILLE

7/21/25 (Date) — City Engineer (Signature & Title of Official)

ORIGINAL PLANS PREPARED BY

raSmith
CREATIVITY BEYOND ENGINEERING
rasmith.com

WISCONSIN PROFESSIONAL ENGINEER
ANDREW J. AXT
E-45143-6
MILWAUKEE
WI

07/30/2025 (Date) — (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	raSmith
Designer	raSmith
Project Manager	JIM SIMPSON
Regional Examiner	SW REGION
Regional Supervisor	JIM SIMPSON

APPROVED FOR THE DEPARTMENT

DATE 07-29-2025 (Signature)

E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\010101-TI.DWG

PLOT DATE : 4/15/2025 9:11 AM

PLOT BY : AXT, ANDREW

PLOT NAME :

DESIGNER
raSmith
ANDREW AXT
16745 W BLUEMOUND RD, SUITE 200
BROOKFIELD, WI 53005
(262) 317-3357
ANDREW.AXT@RASMITH.COM

WISCONSIN DEPT OF TRANSPORTATION
SOUTHWEST REGION
JIM SIMPSON
2101 WRIGHT ST
MADISON, WI 53704
(608) 246-5628
JIM.SIMPSON@DOT.WI.GOV

WISCONSIN DEPT OF NATURAL RESOURCES
TRANSPORTATION LIAISON
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3911 FISH HATCHERY RD
FITCHBURG, WI 53711
(608) 444-2835
SHELLEY.NELSON@WISCONSIN.GOV

CITY OF JANESVILLE
PROJECT MANAGER
AHNARAY BIZJAK
18 N JACKSON ST
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BIZJAKA@JANESVILLEWI.GOV

CITY OF JANESVILLE - STREET LIGHTING
BRAD WILDES
18 N JACKSON ST
JANESVILLE, WI 53548
(608) 373-3407
WILDESB@JANESVILLEWI.GOV

CITY OF JANESVILLE - TRAFFIC SIGNALS
BRAD WILDES
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JANESVILLE, WI 53548
(608) 373-3407
WILDESB@JANESVILLEWI.GOV

ROCK COUNTY
DIRECTOR OF PUBLIC WORKS
DUANE JORGENSON
3715 N NEWVILLE RD
JANESVILLE, WI 53545
(608) 757-5450
DUANE.JORGENSON@CO.ROCK.WI.US

UTILITY CONTACTS

ALLIANT ENERGY - ELECTRIC
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935 W B R TOWNLINE RD
BELOIT, WI 53511
(608) 364-6566 OFFICE
(608) 444-9362 MOBILE
NICHOLAS.DACHNIWSKYJ@ALLIANTENERGY.COM

ALLIANT ENERGY - GAS
NICHOLAS DACHNIWSKYJ
935 W B R TOWNLINE RD
BELOIT, WI 53511
(608) 364-6566 OFFICE
(608) 444-9362 MOBILE
NICHOLAS.DACHNIWSKYJ@ALLIANTENERGY.COM

AT&T WISCONSIN - COMMUNICATION
RICK PODOLAK
304 S DEWEY ST
EAU CLAIRE, WI 54701
(715) 839-5565 OFFICE
(715) 410-0656 MOBILE
RP4514@ATT.COM

ATC - ELECTRIC
DOUG VOSBERG
2489 RINDEN RD
COTTAGE GROVE, WI 53527
(608) 877-7650
DVOSBERG@ATCLLC.COM

CITY OF JANESVILLE - SANITARY SEWER
CRAIG THIESENHUSEN
123 E DELAVAN DR
JANESVILLE, WI 53546
(608) 373-3471
THIESENHUSENC@CI.JANESVILLE.WI.US

CITY OF JANESVILLE - WATER
CRAIG THIESENHUSEN
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JANESVILLE, WI 53546
(608) 373-3471
THIESENHUSENC@CI.JANESVILLE.WI.US

EVERSTREAM - COMMUNICATION
ABIGAIL STEIN
324 E WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
(262) 442-9427
ASTEIN@EVERSTREAM.NET

MCI METRO - COMMUNICATION
RJ CICATELLO
15725 W RYERSON RD
NEW BERLIN, WI 53151
(262) 782-9836 OFFICE
(262) 232-1323 MOBILE
RANDY.CICATELLO@VERIZON.COM

SPECTRUM - COMMUNICATION
BRIAN KOEHN
1348 PLAINFIELD AVE
JANESVILLE, WI 53545
(608) 373-7536
BRIAN.KOEHN@CHARTER.COM

TDS TELECOM - COMMUNICATION
JOHN BAIERL
525 JUNCTION RD
MADISON, WI 53717
(608) 664-6340
JOHN.BAIERL@TDSTELECOM.COM

UNITE PRIVATE NETWORKS - COMMUNICATION
JEREMY JENSEN
1319 CONDE ST
JANESVILLE, WI 53546
(816) 534-0303
JEREMY.JENSEN@SEGRAFIBER.COM

GENERAL NOTES

1. EROSION CONTROL DEVICES ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTORS EROSION CONTROL IMPLEMENTATION PLAN AND BY THE ENGINEER. MAINTAIN EROSION CONTROL DEVICES UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE DEVICE IS NO LONGER REQUIRED.
2. PLACE EROSION CONTROL DEVICES IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
3. RESHAPE, RESTORE, AND FINISH ALL PREVIOUSLY GRASSED AREAS DISTURBED OUTSIDE THE NORMAL CONSTRUCTION LIMITS AT NO EXPENSE TO THE DEPARTMENT.
4. PLACE TOPSOIL TO 1 INCH BELOW TOP OF ADJACENT CONCRETE CURBS OR SIDEWALKS IN SOD AREAS.
5. THE LOCATIONS OF EXISTING UTILITY INSTALLATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS IN THE AREA THAT ARE NOT SHOWN.
6. SEE SUBSURFACE EXPLORATION REPORTS FOR SOIL BORING INFORMATION. REPORTS ARE AVAILABLE FROM WISDOT BY CONTACTING JIM SIMPSON, WISDOT PROJECT MANAGER, 608-246-5628.
7. STATIONING, DISTANCES AND OFFSETS FOR SIGNS SHOWN ON THE PLANS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
8. ALL CURB AND GUTTER STATIONS, OFFSETS, RADII, AND GRADES ARE MEASURED TO THE FLANGE LINE UNLESS OTHERWISE NOTED.
9. SIGNS IN CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE COVERED AS DIRECTED BY THE ENGINEER AND PAID FOR AS COVERING SIGNS TYPE I OR TYPE II. IN LIEU OF COVERING WOOD POST MOUNTED SIGNS, THE CONTRACTOR MAY CHOOSE TO REMOVE AND REINSTALL THEM.
10. HMA PAVEMENT QUANTITIES WERE CALCULATED USING A UNIT WEIGHT OF 112 LB/SY-INCH. APPLY TACK COAT AT A RATE OF 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.

HMA PAVEMENT LAYERS SUMMARY TABLE

HMA	LAYER	THICKNESS	HMA TYPE
2"	UPPER LAYER	2"	4 MT 58-28 H

ORDER OF SECTION 2 SHEETS

STANDARD ABBREVIATIONS

BOS	WISDOT BUREAU OF STRUCTURES
C-C	CENTER TO CENTER
C/L	CONSTRUCTION LINE
HP	HIGH POINT
IN	INCHES
JTS	JANESVILLE TRANSIT SYSTEM
LC	LATERAL CLEARANCE
LP	LOW POINT
PGL	PROFILE GRADE LINE
UPRR	UNION PACIFIC RAILROAD

2

2

N

CITY OF JANESVILLE

NOTE: DOTTED CURB FLANGES REPRESENT GUTTER PANS TO BE OVERLAID WITH HMA PAVEMENT.

END PROJECT 5350-02-65
STA 609+04

BEGIN PROJECT 5350-02-65
STA 608+36
STRUCTURE B-53-135
Y = 263,043.43
X = 490,981.99

USH 51 C/L

UNION PACIFIC RR

BUILDING

GUARD RAIL

STOP-CONTROLLED
ON SIDE ROAD

GRAND AVE

WISCONSIN & SOUTHERN RR

END PROJECT 5350-02-75
STA 616+69

USH 51 / CENTER AVE

604 606 608 610 612 614 616 618

EXCEPTION TO NET CENTERLINE LENGTH (5350-02-75)
STA 608+36 TO STA 609+04
STRUCTURE B-53-135

BEGIN PROJECT 5350-02-75
STA 606+40
Y = 262,847.32
X = 490,986.35

DELAVAN DR

STRUCTURE B-53-154
NO WORK REQ'D

STRUCTURE B-53-153
NO WORK REQ'D

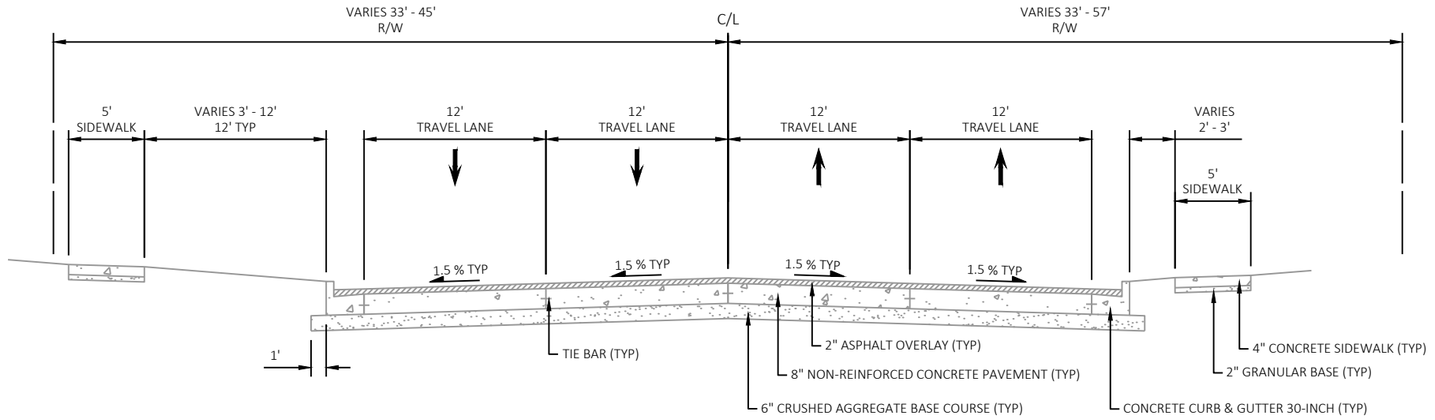
CITY OF JANESVILLE

PROJECT NO: 5350-02-65, 5350-02-75	HWY: USH 51	COUNTY: ROCK	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\020201-PO.DWG
LAYOUT NAME - PO

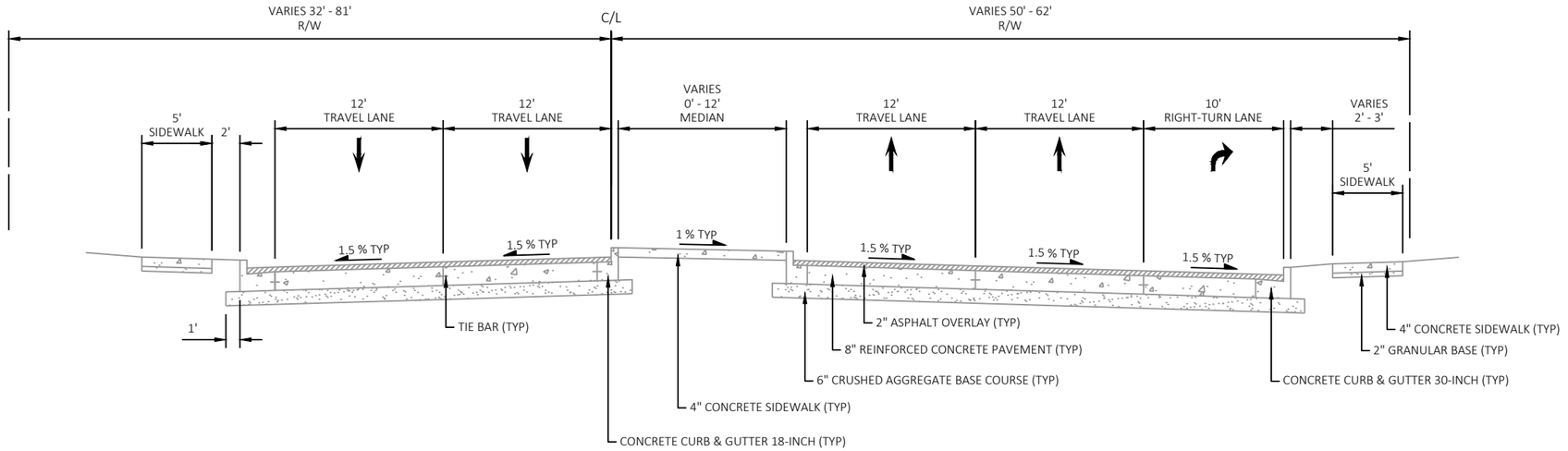
PLOT DATE : 4/15/2025 9:11 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION
USH 51

STA 606+40 - STA 609+90



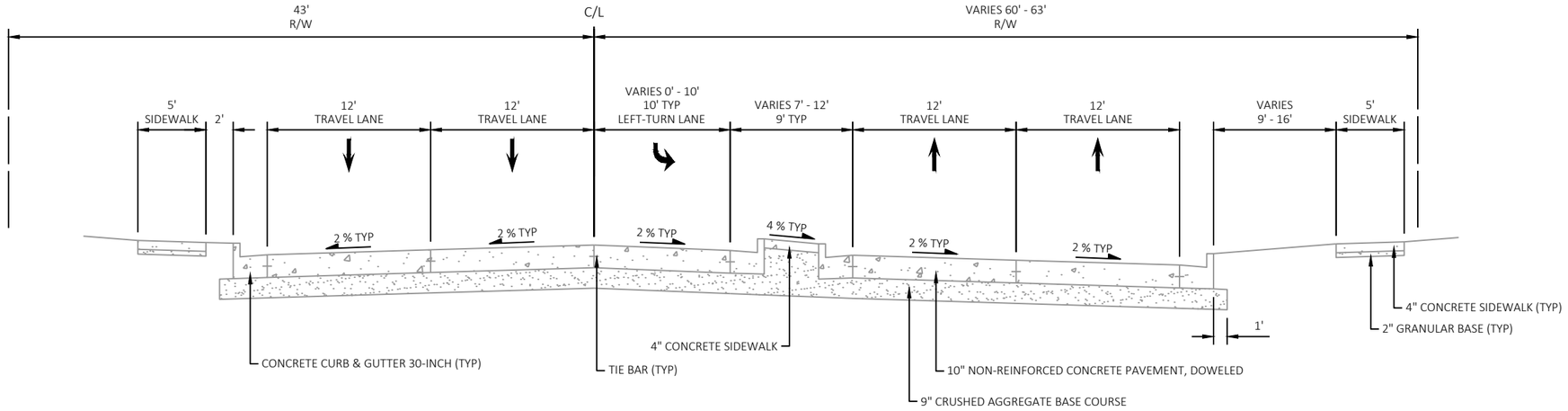
EXISTING TYPICAL SECTION
USH 51

STA 609+90 - STA 612+64

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 4	E

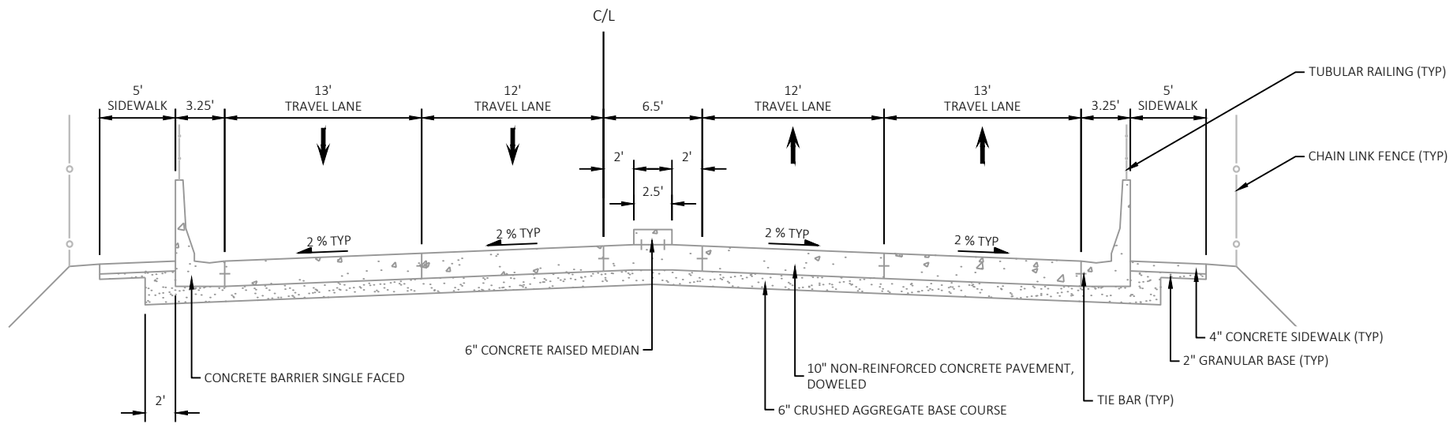
FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\020301-TS.DWG
LAYOUT NAME - 01-Ex

PLOT DATE : 4/15/2025 9:11 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT



EXISTING TYPICAL SECTION
USH 51

STA 612+64 - STA 615+73

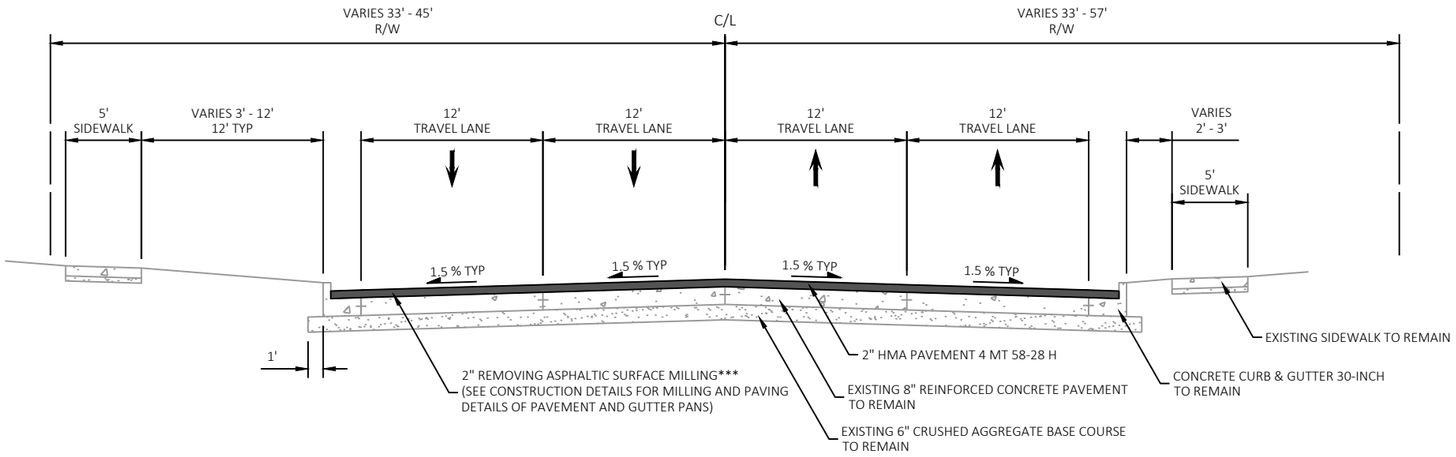


EXISTING TYPICAL SECTION
USH 51

STA 615+73 - STA 616+69

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 5	E

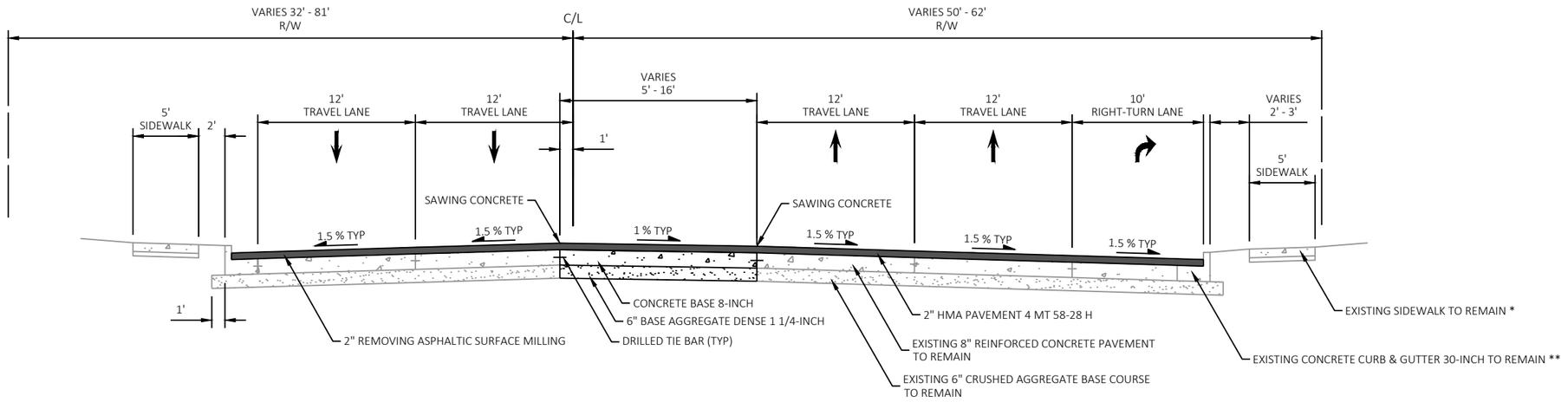
2



FINISHED TYPICAL SECTION
USH 51

STA 606+40 - STA 610+50

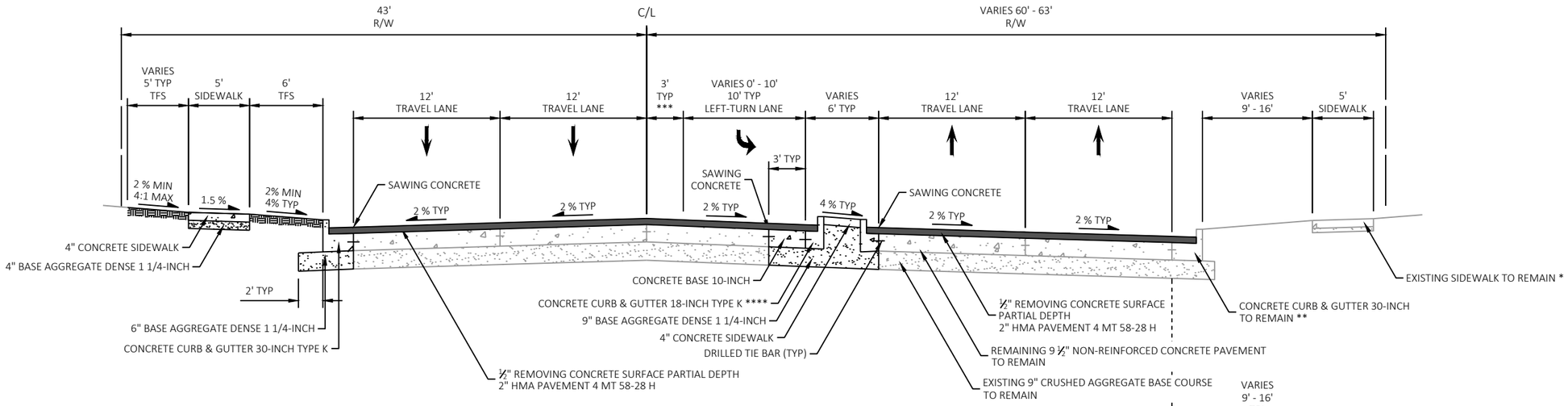
* = SEE CURB RAMP DETAILS FOR SIDEWALK REPLACEMENT LOCATIONS
** = SEE PLAN DETAILS FOR CURB & GUTTER REPLACEMENT LOCATIONS
*** = ACROSS STRUCTURE B-53-135 USE 2" REMOVING ASPHALTIC CONCRETE DECK OVERLAY ONLY. DO NOT REMOVE UNDERLYING CONCRETE MATERIAL FROM THE BRIDGE DECK. SEE REMOVAL PLANS AND STRUCTURE PLANS.



FINISHED TYPICAL SECTION
USH 51

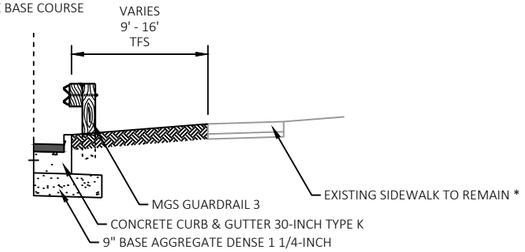
STA 610+50 - STA 612+64

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 6	E



FINISHED TYPICAL SECTION
USH 51

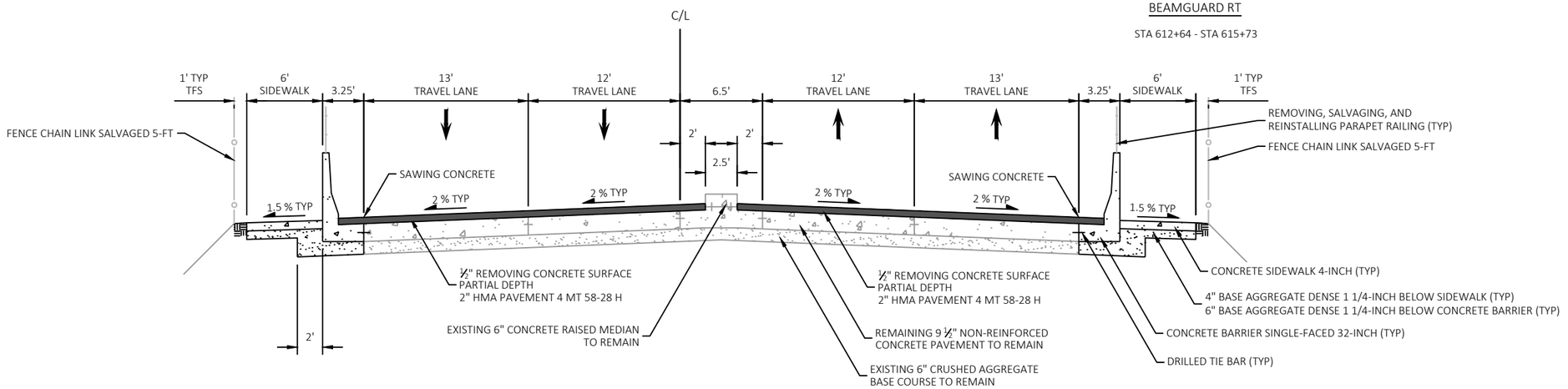
STA 612+64 - STA 615+73



TFS = TOPSOIL, FERTILIZER TYPE B, SOD LAWN
* = SEE CURB RAMP DETAILS FOR SIDEWALK REPLACEMENT LOCATIONS
** = SEE PLAN DETAILS FOR CURB & GUTTER REPLACEMENT LOCATIONS
*** = PAINTED MEDIAN
**** = CONCRETE CURB & GUTTER 30-INCH TYPE K
STA 614+15 TO STA 615+21 (SOUTHBOUND SIDE)
= EXISTING CURB & GUTTER TO REMAIN
STA 615+21 TO STA 616+69 (SOUTHBOUND SIDE)
STA 614+77 TO STA 616+69 (NORTHBOUND SIDE)

BEAMGUARD RT

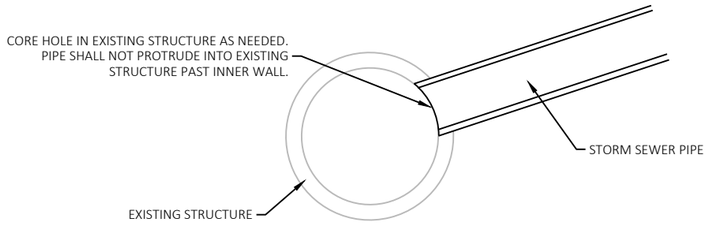
STA 612+64 - STA 615+73



FINISHED TYPICAL SECTION
USH 51

STA 615+73 - STA 616+69

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 7	E



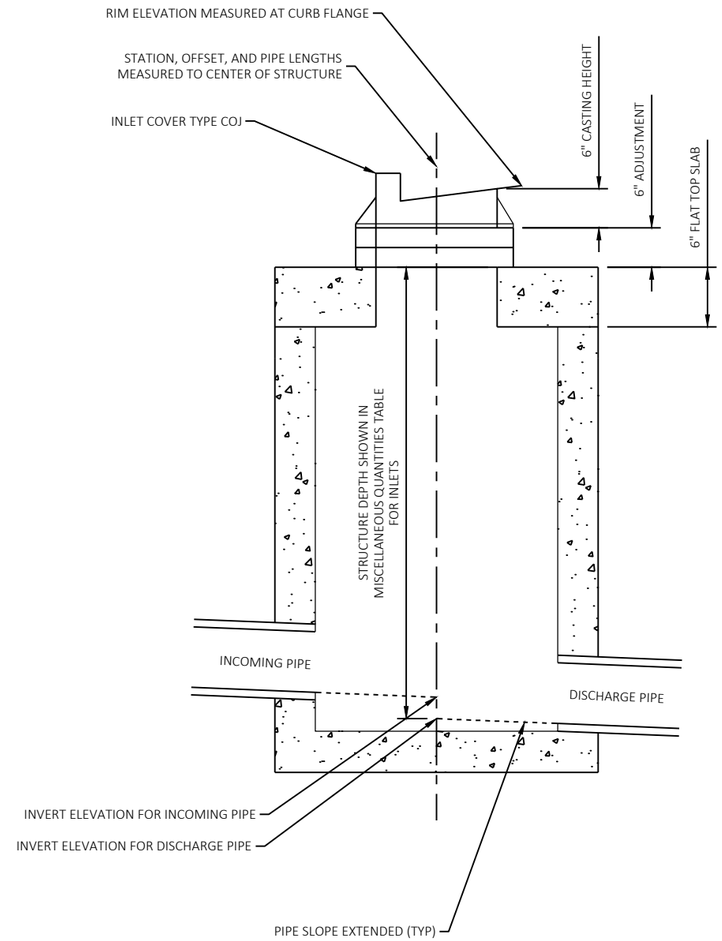
CONNECTION OF PROPOSED PIPE TO EXISTING STRUCTURE

CONNECT STORM SEWER PIPE TO EXISTING STRUCTURE IN ACCORDANCE TO STANDARD SPEC 611.3.2.
CONNECTION OF PROPOSED PIPE TO EXISTING STRUCTURE IS PAID AS RECONSTRUCTING MANHOLES.
CONNECTIONS OF MULTIPLE PROPOSED PIPES TO A MANHOLE IS QUANTIFIED AS ONE RECONSTRUCTING MANHOLE.

RUNOFF COEFFICIENT TABLE

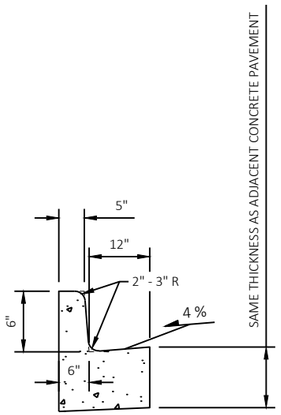
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .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 = 2.80 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.55 ACRES



INLETS 4-FT DIAMETER

STRUCTURE DEPTH AND INVERT DETAIL

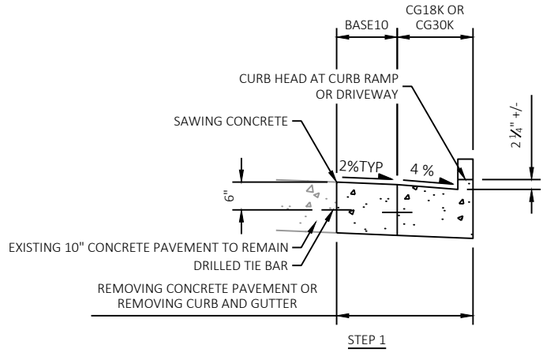


CONCRETE CURB & GUTTER 18-INCH TYPE K

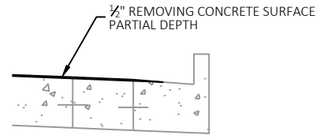
TIE BARS REQUIRED. SEE SDD CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS FOR ADDITIONAL INFORMATION.

TRIPPING HAZARD SIDEWALK REPLACEMENTS

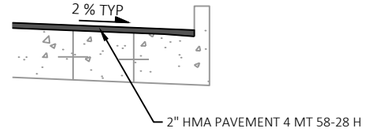
LOOKING NORTH. RIGHT SIDE SHOWN. LEFT SIDE IS MIRROR IMAGE.
SEE PLAN DETAILS FOR LOCATIONS



STEP 1

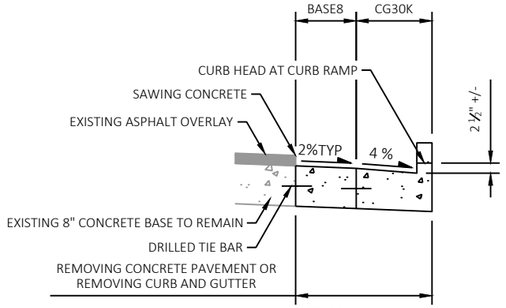


STEP 2

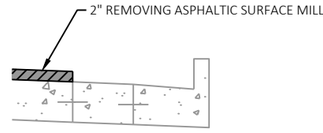


STEP 3

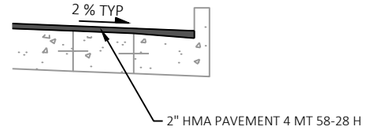
EXISTING CONCRETE PAVEMENT



STEP 1

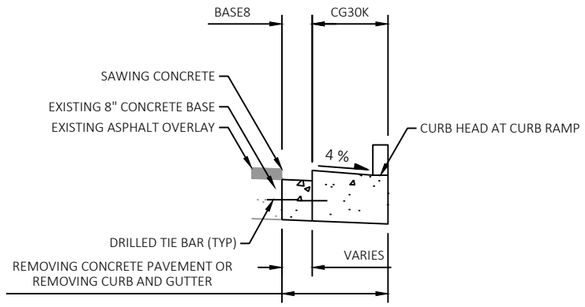


STEP 2

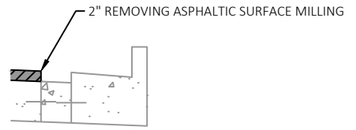


STEP 3

CONCRETE PAVEMENT WITH EXISTING ASPHALT OVERLAY AND OVERLAID GUTTER PAN



STEP 1



STEP 2

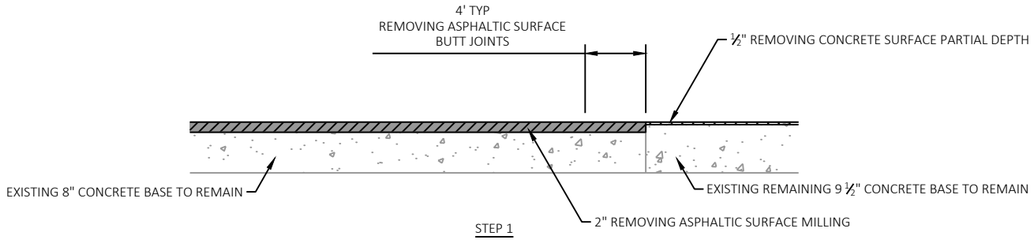
STEP 3

CONCRETE PAVEMENT WITH EXISTING ASPHALT OVERLAY (NO OVERLAID GUTTER PAN)

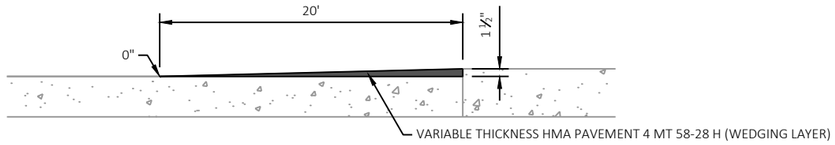
CONCRETE CURB & GUTTER REPLACEMENTS

SEE REMOVAL PLANS AND PLAN DETAILS FOR ADDITIONAL INFORMATION.

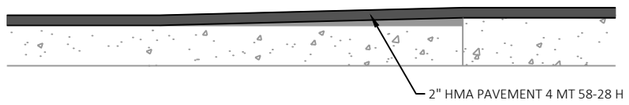
BASE8 = CONCRETE BASE 8-INCH
BASE10 = CONCRETE BASE 10-INCH
CG18K = CONCRETE CURB AND GUTTER 18-INCH TYPE K
CG30K = CONCRETE CURB AND GUTTER 30-INCH TYPE K
WHEN THE WIDTH OF THE CONCRETE BASE IS NARROW THE CONCRETE BASE AND GUTTER PAN MAY BE POURED INTEGRALLY



STEP 1



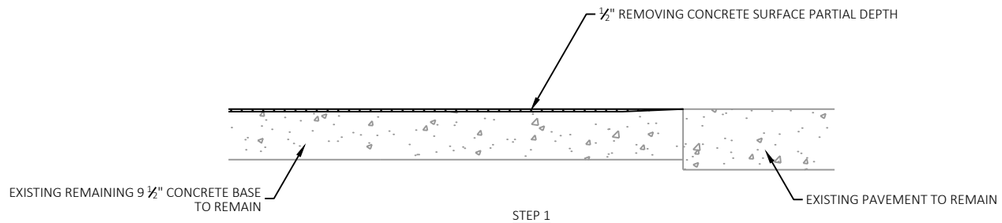
STEP 2



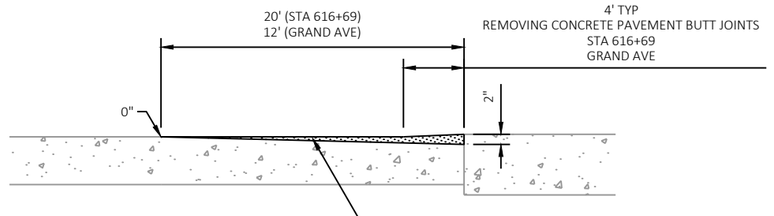
STEP 3

STA 612+41 TO STA 612+61

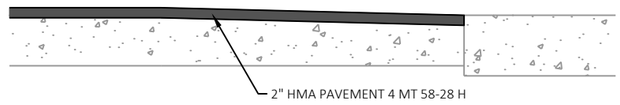
LOOKING WEST



STEP 1



STEP 2



STEP 3

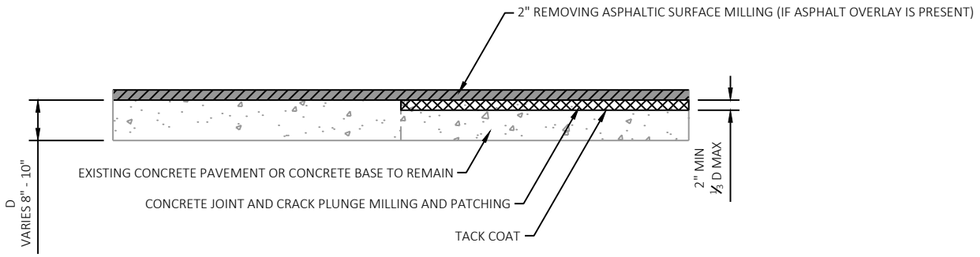
STA 616+69 (LOOKING WEST)
GRAND AVE (LOOKING SOUTH)

BUTT JOINT AND PAVING DETAILS

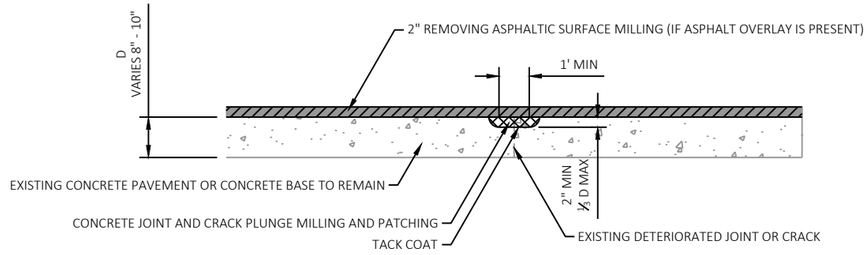
2

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CONSTRUCTION DETAILS	SHEET 10	E

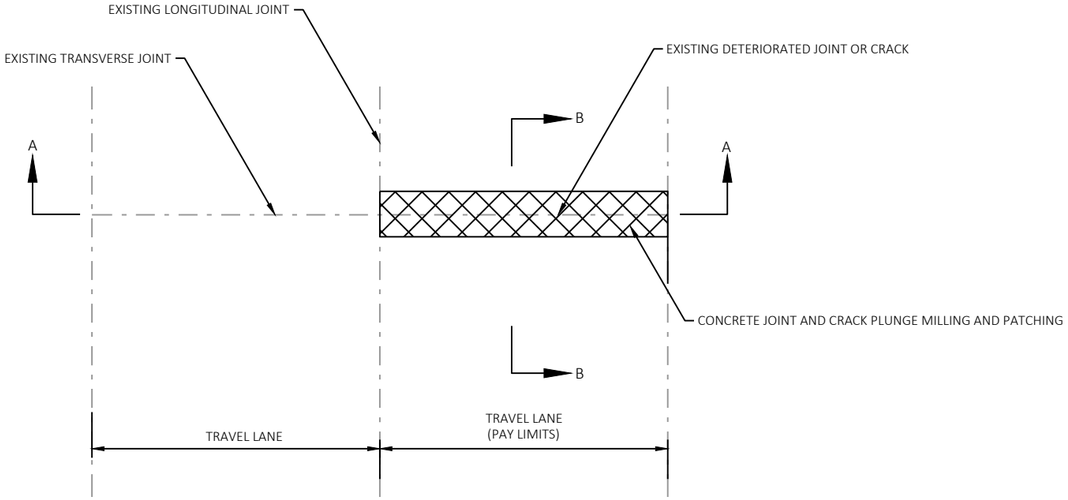
FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\021001-CD.DWG
LAYOUT NAME - 03
PLOT DATE : 4/15/2025 9:12 AM
PLOT BY : AXT, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



SECTION A-A



SECTION B-B

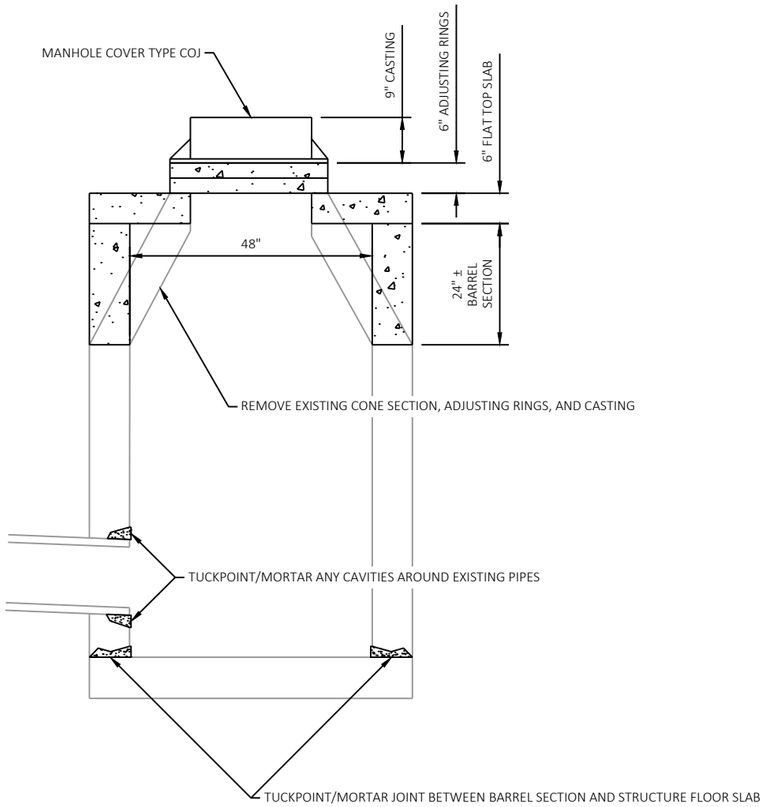


PLAN VIEW

CONCRETE JOINT AND CRACK PLUNGE MILLING AND PATCHING

1. EXACT LOCATIONS AND LENGTHS OF CONCRETE JOINT AND CRACK PLUNGE MILLING AND PATCHING TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

2



STORM SEWER STRUCTURE REPAIR

NOTES:

1. EXISTING CASTING IS SITTING APPROXIMATELY 3" BELOW ADJACENT CONCRETE PAVEMENT SURFACE. INSTALL THE NEW CASTING FLUSH WITH ADJACENT NEW ASPHALT PAVEMENT, WHICH WILL BE APPROXIMATELY 4 ½" HIGHER THAN THE EXISTING CASTING ELEVATION.
2. THE 6" TOTAL HEIGHT OF ADJUSTING RINGS IS THE TYPICAL AMOUNT. MORE OR LESS RINGS MAY BE NEEDED AND SHALL BE DETERMINED BY THE ENGINEER. MINIMUM HEIGHT OF ADJUSTMENT SHALL BE 3" AND MAXIMUM HEIGHT SHALL BE 12".

2

2

LEGEND (SEE PLAN DETAILS FOR LOCATION INFORMATION)

- RI — REMOVING INLETS
- REMOVING STORM SEWER
- REMOVING CURB & GUTTER
- REMOVING CONCRETE BARRIER
- CONCRETE JOINT AND CRACK CLEANING
- CONCRETE JOINT AND CRACK PLUNGE MILLING AND PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- REMOVING ASPHALTIC SURFACE BUTT JOINTS
- REMOVING CONCRETE PAVEMENT BUTT JOINTS
- REMOVING CONCRETE SURFACE PARTIAL DEPTH
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING ASPHALTIC SURFACE
- ASPHALT PAVEMENT REMOVAL (PAID AS EXCAVATION COMMON)
- SAWING ASPHALT
- XXXXXXXXX SAWING CONCRETE
- SLOPE INTERCEPT

N

CAUTION

ALLIANT ENERGY GAS

R/W

USH 51 C/L

UNION PACIFIC RR

R/W

605 606 607 608 609 610

USH 51 / CENTER AVE

MATCH LINE 611+00

R/W

UNION PACIFIC RR

B-53-135
2" REMOVING ASPHALTIC
CONCRETE DECK OVERLAY
SEE STRUCTURE PLANS

AT&T WISCONSIN

SIDEWALK REPLACEMENT LOCATION PREVIOUSLY
MARKED BY THE CITY OF JANESVILLE

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	REMOVAL PLAN	SHEET 13	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\021101-RM.DWG
LAYOUT NAME - 01

PLOT DATE : 4/15/2025 9:12 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE 611+00

DELAVAN DR

UNION PACIFIC RR

GRAND AVE

USH 51 / CENTER AVE

WISCONSIN & SOUTHERN RR

N

ALLIANT ENERGY GAS

UNITE PRIVATE NETWORKS

AT&T WISCONSIN

ALLIANT ENERGY ELECTRIC

SPECTRUM

EXISTING SIGN TO REMAIN

EXISTING LANDSCAPING TO REMAIN

ALLIANT ENERGY ELECTRIC

EXISTING TREE TO REMAIN

EXISTING TREE TO REMAIN

CITY OF JANESVILLE STREET LIGHTING

USH 51 C/L TLE

B-53-154
NO WORK REQ'D

REMOVE INLET COVERS

+14.2
9.6' RT

25'

+39.2
8.0' RT

+40.8
32.0' RT

+15.8
34.0' RT

CONCRETE PAVEMENT REPLACEMENT SHES

STORM SEWER STRUCTURE REPAIR

CITY OF JANESVILLE STREET LIGHTING

SIDEWALK REPLACEMENT LOCATION PREVIOUSLY MARKED
BY THE CITY OF JANESVILLE

CAUTION

612 613 614 615 616 617

R/W

TLE

ASPH

CONC

LEGEND (SEE PLAN DETAILS FOR LOCATION INFORMATION)

- RI — REMOVING INLETS
- REMOVING STORM SEWER
- REMOVING CURB & GUTTER
- REMOVING CONCRETE BARRIER
- CONCRETE JOINT AND CRACK CLEANING
- CONCRETE JOINT AND CRACK PLUNGE MILLING AND PATCHING
- REMOVING CONCRETE PAVEMENT
- REMOVING CONCRETE SIDEWALK
- REMOVING ASPHALTIC SURFACE BUTT JOINTS
- REMOVING CONCRETE PAVEMENT BUTT JOINTS
- REMOVING CONCRETE SURFACE PARTIAL DEPTH
- REMOVING ASPHALTIC SURFACE MILLING
- REMOVING ASPHALTIC SURFACE
- ASPHALT PAVEMENT REMOVAL (PAID AS EXCAVATION COMMON)
- SAWING ASPHALT
- XXXXXXXX SAWING CONCRETE
- SLOPE INTERCEPT

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	REMOVAL PLAN	SHEET 14	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\021101-RM.DWG
LAYOUT NAME - 02

PLOT DATE : 10/22/2025 12:23 PM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

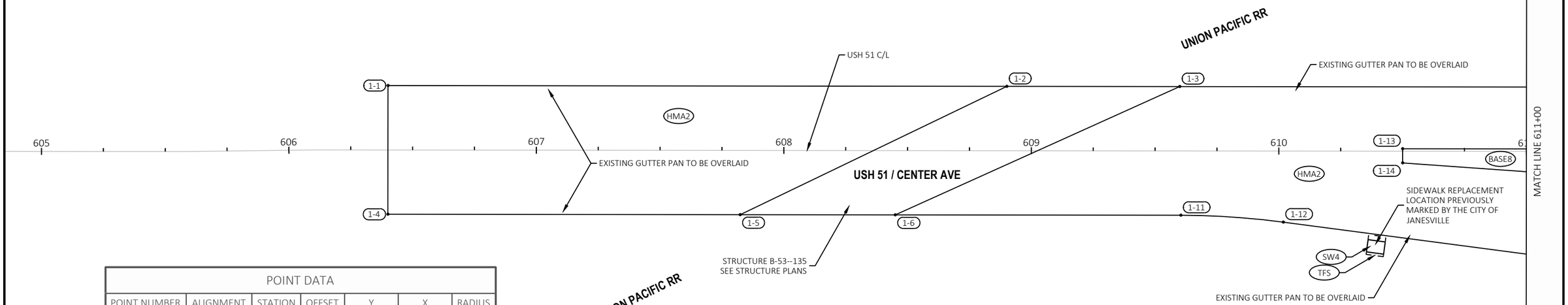
LEGEND

- CG18K — CONCRETE CURB & GUTTER 18-INCH TYPE K
- CG30K — CONCRETE CURB & GUTTER 30-INCH TYPE K
- CG30L — CONCRETE CURB & GUTTER 30-INCH TYPE L
- SW4 — CONCRETE SIDEWALK 4-INCH
- CONCRETE SIDEWALK 6-INCH
- BASE8 — 2" HMA PAVEMENT, CONCRETE BASE 8-INCH
- BASE10 — 2" HMA PAVEMENT, CONCRETE BASE 10-INCH (SEE NOTE 3)
- HMA2 — 2" HMA PAVEMENT
- DWY8 — CONCRETE DRIVEWAY 8-INCH
- NOSE2 — CONCRETE MEDIAN SLOPED NOSE TYPE 2
- ASPH — 3" ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
- MGS — MGS GUARDRAIL 3
- EAT — MGS GUARDRAIL TERMINAL EAT
- TBT — MGS GUARDRAIL THRIE BEAM TRANSITION
- CBSF — CONCRETE BARRIER SINGLE-FACED 32-INCH
- TFS — TOPSOIL, FERTILIZER TYPE B, SOD LAWN
- REVERSE SLOPE GUTTER
- FENCE CHAIN LINK SALVAGED 5-FT
- SLOPE INTERCEPT

NOTES:

1. SEE CURB RAMP DETAILS FOR LAYOUT INFORMATION OF CURB RAMPS.
2. DOTTED CURB FLANGES REPRESENT GUTTER PANS TO BE OVERLAID WITH HMA PAVEMENT.
3. CONCRETE BASE 10-INCH REPRESENTS THE MATERIAL TO BE CONSTRUCTED PRIOR TO REMOVING ½" OF CONCRETE SURFACE UNDER THE REMOVING CONCRETE SURFACE PARTIAL DEPTH ITEM.

N



POINT DATA

POINT NUMBER	ALIGNMENT	STATION	OFFSET	Y	X	RADIUS
1-1	51	606+40.0	26.0' LT	262,846.74	490,960.36	
1-2	51	608+90.0	26.0' LT	263,096.66	490,954.80	
1-3	51	609+59.9	26.0' LT	263,166.52	490,953.25	
1-4	51	606+40.0	26.0' RT	262,847.89	491,012.34	
1-5	51	607+82.3	26.0' RT	262,990.20	491,009.18	
1-6	51	608+45.0	26.0' RT	263,052.87	491,007.79	
1-11	51	609+60.4	26.0' RT	263,168.22	491,005.22	
1-12	51	610+01.8	28.7' RT	263,209.69	491,006.99	
1-13	51	610+50.0	1.0' LT	263,257.19	490,976.24	
1-14	51	610+50.0	4.7' RT	263,257.32	490,981.94	

2

LEGEND

CG18K	CONCRETE CURB & GUTTER 18-INCH TYPE K
CG30K	CONCRETE CURB & GUTTER 30-INCH TYPE K
CG30L	CONCRETE CURB & GUTTER 30-INCH TYPE L
SW4	CONCRETE SIDEWALK 4-INCH
	CONCRETE SIDEWALK 6-INCH
BASE8	2" HMA PAVEMENT, CONCRETE BASE 8-INCH
BASE10	2" HMA PAVEMENT, CONCRETE BASE 10-INCH (SEE NOTE 3)
HMA2	2" HMA PAVEMENT
DWY8	CONCRETE DRIVEWAY 8-INCH
NOSE2	CONCRETE MEDIAN SLOPED NOSE TYPE 2
ASPH	3" ASPHALTIC SURFACE DRIVEWAYS & FIELD ENTRANCES
MGS	MGS GUARDRAIL 3
EAT	MGS GUARDRAIL TERMINAL EAT
TBT	MGS GUARDRAIL THRIE BEAM TRANSITION
CBSF	CONCRETE BARRIER SINGLE-FACED 32-INCH
TFS	TOPSOIL, FERTILIZER TYPE B, SOD LAWN
	REVERSE SLOPE GUTTER
	FENCE CHAIN LINK SALVAGED 5-FT
	SLOPE INTERCEPT

NOTES:

1. SEE CURB RAMP DETAILS FOR LAYOUT INFORMATION OF CURB RAMPS.
2. DOTTED CURB FLANGES REPRESENT GUTTER PANS TO BE OVERLAID WITH HMA PAVEMENT.
3. CONCRETE BASE 10-INCH REPRESENTS THE MATERIAL TO BE CONSTRUCTED PRIOR TO REMOVING ½" OF CONCRETE SURFACE UNDER THE REMOVING CONCRETE SURFACE PARTIAL DEPTH ITEM.

N

DELAVAN DR

UNION PACIFIC RR

GRAND AVE

USH 51 / CENTER AVE

WISCONSIN & SOUTHERN RR

MATCH LINE 611+00

EXISTING GUTTER PAN TO BE OVERLAID

EXISTING FENCE TO REMAIN

SIDEWALK REPLACEMENT LOCATION PREVIOUSLY MARKED BY THE CITY OF JANESVILLE

BEGIN DRIVEWAY CURB STA 613+72

END DRIVEWAY CURB STA 614+72

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	PLAN DETAILS	SHEET 16	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\021201-PD.DWG
LAYOUT NAME - 02
PLOT DATE : 4/15/2025 9:13 AM
PLOT BY : AXT, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

POINT DATA						
POINT NUMBER	ALIGNMENT	STATION	OFFSET	Y	X	RADIUS
2-1	51	611+60.5	24.0' LT	263,367.15	490,950.79	
2-2	51	611+60.5	22.0' LT	263,367.20	490,952.79	
2-3	51	611+80.8	22.0' LT	263,387.49	490,952.33	
2-4	51	611+83.6	24.0' LT	263,390.23	490,950.27	
2-5	51	611+90.1	18.5' LT	263,396.83	490,955.66	
2-6	51	611+90.1	13.5' LT	263,396.94	490,960.63	
2-7	51	611+99.2	13.5' LT	263,405.94	490,960.43	
2-8	51	611+99.3	22.0' LT	263,405.75	490,951.93	
2-9	51	612+10.5	21.8' LT	263,416.92	490,951.68	
2-10	51	612+11.2	50.5' LT	263,416.62	490,923.00	
2-11	51	612+11.3	53.5' LT	263,416.59	490,920.00	
2-12	51	612+12.0	83.4' LT	263,416.28	490,890.08	
2-13	51	612+13.0	124.4' LT	263,415.86	490,849.09	
2-14	51	612+39.4	132.9' LT	263,441.89	490,839.72	
2-15	51	612+11.7	71.4' LT	263,416.41	490,902.08	
2-16	51	612+40.4	80.2' LT	263,444.75	490,892.33	
2-17	51	612+40.6	72.2' LT	263,445.19	490,900.32	
2-18	51	612+40.7	63.2' LT	263,445.67	490,909.32	
2-19	51	612+41.5	24.3' LT	263,447.79	490,948.17	
2-20	51	612+80.2	24.0' LT	263,486.68	490,947.13	
2-21	51	613+76.3	37.5' LT	263,582.36	490,931.07	
2-22	51	613+76.3	42.5' LT	263,582.23	490,926.07	
2-23	51	613+87.6	32.5' LT	263,593.79	490,935.76	
2-24	51	614+22.6	42.5' LT	263,628.51	490,924.83	
2-25	51	614+22.6	32.5' LT	263,628.78	490,934.83	
2-26	51	614+87.2	24.0' LT	263,692.72	490,941.62	
2-27	51	614+88.8	24.0' LT	263,694.33	490,941.52	
2-28	51	614+88.8	22.0' LT	263,694.46	490,943.51	
2-31	51	615+25.5	24.0' LT	263,730.94	490,939.18	
2-32	51	615+26.1	22.0' LT	263,731.69	490,941.13	
2-33	51	615+25.8	17.8' LT	263,731.69	490,945.38	
2-34	51	615+28.7	17.6' LT	263,734.56	490,945.38	
2-35	51	615+29.0	22.0' LT	263,734.57	490,940.95	
2-36	51	615+51.4	22.0' LT	263,756.95	490,939.52	
2-37	51	615+52.5	50.0' LT	263,756.21	490,911.52	
2-38	51	615+52.6	52.8' LT	263,756.14	490,908.75	
2-39	51	615+52.9	60.4' LT	263,755.93	490,901.06	
2-40	51	615+52.6	65.5' LT	263,755.30	490,896.08	
2-41	51	615+79.5	64.5' LT	263,782.29	490,895.36	
2-42	51	615+78.9	59.5' LT	263,781.92	490,900.37	
2-43	51	615+78.6	52.0' LT	263,782.12	490,907.85	
2-44	51	615+78.5	51.4' LT	263,782.14	490,908.41	
2-45	51	615+77.5	24.2' LT	263,782.86	490,935.61	
2-46	51	616+03.5	25.5' LT	263,808.72	490,932.70	
2-47	51	616+14.5	25.5' LT	263,819.62	490,932.01	

POINT DATA						
POINT NUMBER	ALIGNMENT	STATION	OFFSET	Y	X	RADIUS
2-48	51	616+14.5	27.5' LT	263,819.49	490,930.01	
2-49	51	616+18.8	28.1' LT	263,823.76	490,929.16	
2-50	51	616+21.3	28.0' LT	263,826.26	490,929.09	
2-51	51	616+25.2	27.3' LT	263,830.28	490,929.56	
2-52	51	616+38.4	24.5' LT	263,844.51	490,931.67	
2-53	51	616+54.1	24.5' LT	263,860.21	490,931.23	
2-54	51	616+79.8	25.0' LT	263,885.90	490,930.03	
2-55	51	616+80.7	27.0' LT	263,886.70	490,928.00	
2-56	51	612+55.4	18.9' RT	263,463.16	490,990.78	
2-57	51	612+67.4	19.0' RT	263,475.22	490,990.45	
2-58	51	612+69.6	19.0' RT	263,477.37	490,990.40	
2-59	51	612+67.5	10.0' RT	263,474.98	490,981.46	
2-60	51	612+69.6	13.0' RT	263,477.21	490,984.40	
2-62	51	612+00.0	1.0' LT	263,407.14	490,972.87	
2-63	51	612+00.0	15.3' RT	263,407.71	490,989.13	
2-65	51	614+04.3	19.0' RT	263,611.91	490,986.80	
2-66	51	614+06.8	13.0' RT	263,614.18	490,980.73	
2-67	51	614+11.3	10.0' RT	263,618.65	490,977.61	
2-68	51	614+18.8	9.6' RT	263,626.16	490,977.00	
2-69	51	614+66.9	15.1' RT	263,674.37	490,981.18	
2-70	51	614+76.8	13.8' RT	263,684.25	490,979.66	
2-71	51	614+85.0	0.0'	263,692.06	490,965.65	
2-72	51	614+86.8	0.0'	263,693.81	490,965.60	
2-75	51	615+20.9	0.0'	263,727.90	490,963.42	
2-76	51	611+29.6	45.4' RT	263,337.82	491,020.83	
2-77	51	611+39.5	44.1' RT	263,347.64	491,019.29	
2-78	51	611+65.1	45.9' RT	263,373.32	491,020.52	
2-79	51	611+97.4	48.1' RT	263,405.68	491,022.07	
2-80	51	611+98.4	80.5' RT	263,408.42	491,054.34	
2-81	51	612+00.8	128.9' RT	263,412.53	491,102.64	
2-86	51	612+46.6	92.7' RT	263,456.99	491,064.87	
2-87	51	612+56.5	64.6' RT	263,465.93	491,036.41	
2-88	51	612+66.0	51.7' RT	263,474.90	491,023.18	
2-89	51	612+81.4	46.2' RT	263,489.75	491,017.27	
2-90	51	612+99.3	45.0' RT	263,507.65	491,015.60	
2-91	51	613+66.6	43.0' RT	263,574.88	491,011.80	
2-92	51	613+71.6	43.0' RT	263,579.88	491,011.66	
2-93	51	614+04.3	43.0' RT	263,612.55	491,010.79	
2-94	51	614+03.3	54.6' RT	263,611.86	491,022.39	
2-95	51	614+38.3	53.7' RT	263,646.82	491,020.62	
2-96	51	614+69.9	38.9' RT	263,678.02	491,004.90	
2-97	51	614+71.4	38.7' RT	263,679.54	491,004.66	
2-98	51	614+76.4	38.0' RT	263,684.48	491,003.90	
2-99	51	615+27.3	33.0' RT	263,736.39	490,995.91	
2-100	51	615+58.5	31.2' RT	263,767.40	490,992.13	

POINT DATA						
POINT NUMBER	ALIGNMENT	STATION	OFFSET	Y	X	RADIUS
2-101	51	615+67.4	31.3' RT	263,776.32	490,991.67	
2-102	51	615+67.4	33.3' RT	263,776.43	490,993.67	
2-103	51	615+72.4	33.9' RT	263,781.45	490,993.99	
2-104	51	615+74.9	34.0' RT	263,783.95	490,993.86	
2-105	51	615+78.9	33.4' RT	263,787.91	490,993.08	
2-106	51	616+46.3	31.8' RT	263,853.94	490,987.68	
2-107	51	616+55.5	31.8' RT	263,863.14	490,987.42	
2-112	51	612+09.7	298.5' RT	263,427.29	491,271.88	
2-113	51	612+10.2	288.5' RT	263,427.49	491,261.88	
2-114	51	612+31.2	289.7' RT	263,448.49	491,262.31	
2-115	51	612+30.6	299.7' RT	263,448.28	491,272.31	
2-116	51	611+79.4	58.1' LT	263,385.33	490,916.27	27'
2-117	51	612+80.2	64.0' LT	263,485.62	490,907.15	40'
2-118	51	611+62.5	82.8' RT	263,371.55	491,057.48	37'
2-119	51	612+99.3	95.0' RT	263,508.98	491,065.58	52'
2-120	51	615+25.5	51.0' LT	263,729.22	490,912.23	27'
2-121	51	616+03.5	50.5' LT	263,807.13	490,907.75	25'

2

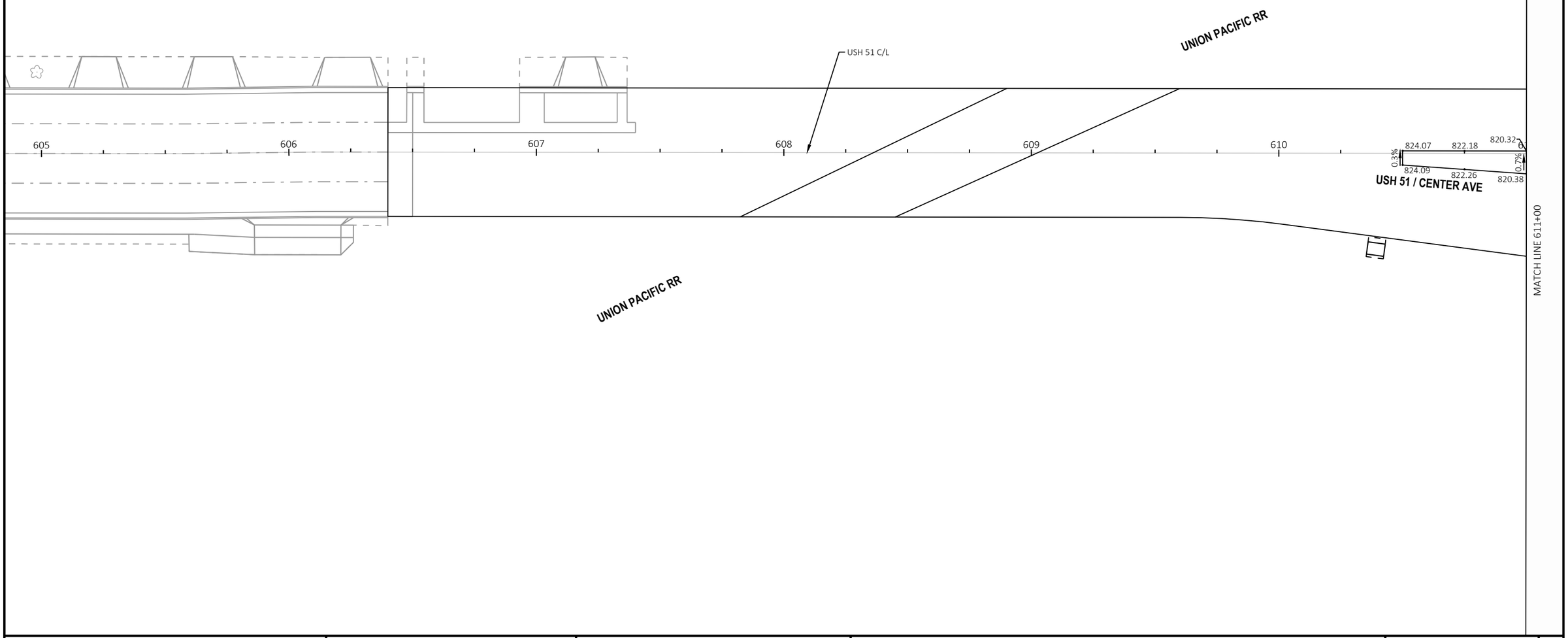
2

LEGEND

##.##	PAVING GRADE
##.##E	EXISTING
##.##HP	HIGH POINT
##.##LP	LOW POINT

N

NOTES:
1. DOTTED CURB FLANGES REPRESENT GUTTER PANS TO BE OVERLAID WITH HMA PAVEMENT.
2. PAVING GRADES ARE FINISHED GRADES AFTER PAVING OPERATIONS, INCLUDING OVERLAID GUTTERS.



PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	PAVING GRADES	SHEET 18	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\021203-PG.DWG
LAYOUT NAME - 01
PLOT DATE : 4/15/2025 9:14 AM
PLOT BY : AXT, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

NOTES:
1. DOTTED CURB FLANGES REPRESENT GUTTER PANS TO BE OVERLAID WITH HMA PAVEMENT.
2. PAVING GRADES ARE FINISHED GRADES AFTER PAVING OPERATIONS, INCLUDING OVERLAID GUTTERS.

LEGEND

##.##	PAVING GRADE
##.##E	EXISTING
##.##HP	HIGH POINT
##.##LP	LOW POINT

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	PAVING GRADES	SHEET 19	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\021203-PG.DWG
LAYOUT NAME - 02
PLOT DATE : 4/15/2025 9:14 AM
PLOT BY : AXT, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. MATCH EXISTING SIDEWALK WIDTH AND CROSS SLOPE AT MATCH POINT.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE SUGGESTED JOINT LOCATIONS. THESE ARE FOR INFORMATION ONLY.
5. THE CROSS SLOPE OF THE GUTTER DURING CONCRETE CURB & GUTTER POURING SHALL BE 4.0%. THIS INCLUDES GUTTERS THAT ARE TO BE OVERLAID WITH HMA PAVEMENT. DOTTED CURB FLANGES REPRESENT GUTTER PANS TO BE OVERLAID WITH HMA PAVEMENT. GUTTER CROSS SLOPES SHOWN AT LOCATIONS WHERE THE GUTTER PAN IS TO BE OVERLAID REPRESENT GUTTER CROSS SLOPES AFTER THE GUTTER PAN IS OVERLAID WITH HMA PAVEMENT. CURB HEIGHTS ARE MEASURED FROM THE FINISHED GRADE AFTER GUTTER PANS HAVE BEEN OVERLAID. NOTE THAT NOT ALL GUTTER PANS ARE TO BE OVERLAID.
6. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
7. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
8. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

LEGEND

XXX.XX	SIDEWALK ELEVATION
XXX.XX(F)	CURB FLANGE ELEVATION
XXX.XX(G)	GUTTER FLOWLINE ELEVATION
XXX.XX(T)	TOP OF CURB ELEVATION
XXX.XX(E)	EXISTING ELEVATION
(LL)	LEVEL LANDING
(PED)	CONCRETE CURB PEDESTRIAN
100	POINT NUMBER
MEF	MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT
	SLOPE INTERCEPTS
	GRADED FLARE
	DETECTABLE WARNING FIELD
A	SIDEWALK RADIUS POINT NUMBER
T	TRAVERSABLE FLARE
N	NON-TRAVERSABLE FLARE
	REVERSE SLOPE GUTTER

N

DELAVAN DR & UPRR CROSSING NORTHWEST QUADRANT

CURB RAMP TYPE 8 MODIFIED

807.89 (E) 100 — 101 808.02 (E)
807.73 102 — 103 807.81
807.36 104 — 105 807.43
107 806.78
806.80 106

2.6% 1.5% 7.5% 5.6% 7.5% 7.5% 1.5% 7.5% 5.4% 5' 0.3%

806.77 200 — 201 806.76
806.86 202 — 203 806.93
806.94 204 — 205 807.01
806.97 (E) 206 — 207 807.08 (E)

0.1% 1.7% 1.1% 5' 1.4% 1.5% 1.6% 1.5% 0.8% 1.6% 1.9%

CURB RAMP TYPE 8 MODIFIED

DELAVAN DR & UPRR CROSSING NORTHEAST QUADRANT

DELAVAN DR
R/W
MCI METRO
ALLIANT ENERGY GAS
CAUTION
GUARD RAIL
18"x12"
ASPH
CONC
GUY
MP

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CURB RAMP DETAILS	SHEET 20	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\021301-CR.DWG
LAYOUT NAME - 08

PLOT DATE : 4/15/2025 9:14 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT

DELAVAN DR & UPRR NW QUADRANT					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	612+53.22	166.69' LT	807.89	263454.53	490805.42
101	612+58.22	166.64' LT	808.02	263459.53	490805.29
102	612+53.19	163.86' LT	807.73	263454.60	490808.25
103	612+58.19	163.81' LT	807.81	263459.60	490808.13
104	612+53.14	158.86' LT	807.36	263454.72	490813.25
105	612+58.14	158.81' LT	807.43	263459.72	490813.12
106	612+53.04	148.52' LT	806.80	263454.98	490823.58
107	612+58.05	150.08' LT	806.78	263459.94	490821.85

DELAVAN DR & UPRR NE QUADRANT					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
200	612+52.92	136.60' LT	806.77	263455.28	490835.50
201	612+57.93	138.14' LT	806.76	263460.24	490833.79
202	612+52.83	127.92' LT	806.86	263455.49	490844.18
203	612+57.83	127.87' LT	806.93	263460.49	490844.05
204	612+52.78	122.92' LT	806.94	263455.62	490849.17
205	612+57.78	122.87' LT	807.01	263460.61	490849.05
206	612+52.23	118.65' LT	806.97	263455.22	490853.46
207	612+57.89	118.59' LT	807.08	263460.88	490853.32

2

CAUTION

UNITE PRIVATE NETWORKS

ALLIANT ENERGY GAS

RADIUS TABLE					
POINT NUMBER	STATION	OFFSET	Y	X	RADIUS
A	611+83.58	51.00' LT	263389.63	490923.28	16'
B	612+80.20	64.00' LT	263485.62	490907.15	28'

NOTE: MEF ELEMENTS AT SOUTHWEST QUADRANT ARE DUE TO LONGITUDINAL AND CROSS SLOPES, OF BOTH SIDEWALKS AND LEVEL LANDINGS, EXCEEDING ADA STANDARDS.

USH 51 & DELAVAN DR SOUTHWEST QUADRANT

USH 51 & DELAVAN DR NORTHWEST QUADRANT

DELAVAN DR

USH 51 / CENTER AVE

USH 51 C/L

AT&T WISCONSIN

ALLIANT ENERGY ELECTRIC SPECTRUM

ALLIANT ENERGY ELECTRIC

CURB RAMP TYPE 3 MODIFIED

CURB RAMP TYPE 5 MODIFIED

LEGEND

XXX.XX	SIDEWALK ELEVATION
XXX.XX(F)	CURB FLANGE ELEVATION
XXX.XX(G)	GUTTER FLOWLINE ELEVATION
XXX.XX(T)	TOP OF CURB ELEVATION
XXX.XX(E)	EXISTING ELEVATION
LL	LEVEL LANDING
PED	CONCRETE CURB PEDESTRIAN
100	POINT NUMBER
MEF	MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT
	SLOPE INTERCEPTS
	GRADED FLARE
	DETECTABLE WARNING FIELD
A	SIDEWALK RADIUS POINT NUMBER
T	TRAVERSABLE FLARE
N	NON-TRAVERSABLE FLARE
	REVERSE SLOPE GUTTER

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. MATCH EXISTING SIDEWALK WIDTH AND CROSS SLOPE AT MATCH POINT.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE SUGGESTED JOINT LOCATIONS. THESE ARE FOR INFORMATION ONLY.
5. THE CROSS SLOPE OF THE GUTTER DURING CONCRETE CURB & GUTTER POURING SHALL BE 4.0%. THIS INCLUDES GUTTERS THAT ARE TO BE OVERLAID WITH HMA PAVEMENT. DOTTED CURB FLANGES REPRESENT GUTTER PANS TO BE OVERLAID WITH HMA PAVEMENT. GUTTER CROSS SLOPES SHOWN AT LOCATIONS WHERE THE GUTTER PAN IS TO BE OVERLAID REPRESENT GUTTER CROSS SLOPES AFTER THE GUTTER PAN IS OVERLAID WITH HMA PAVEMENT. CURB HEIGHTS ARE MEASURED FROM THE FINISHED GRADE AFTER GUTTER PANS HAVE BEEN OVERLAID. NOTE THAT NOT ALL GUTTER PANS ARE TO BE OVERLAID.
6. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
7. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
8. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CURB RAMP DETAILS	SHEET 22	E

USH 51 & DELAVAN DR SW QUADRANT					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
300	612+08.80	53.57' LT	809.88	263414.09	490920.03
301	612+08.72	50.57' LT	810.08	263414.12	490923.03
302	612+08.21	50.58' LT	810.12	263413.61	490923.03
303	612+08.09	45.58' LT	810.56	263413.66	490928.03
304	612+07.18	42.60' LT	811.35	263412.86	490931.04
305	612+05.10	45.66' LT	810.79	263410.68	490928.06
306	612+04.50	45.67' LT	810.80	263410.07	490928.07
307	612+04.01	44.12' LT	810.83	263409.64	490929.64
308	611+89.23	30.78' LT	813.09	263395.73	490943.37
309	611+87.81	30.43' LT	813.11	263394.31	490943.75
310	611+87.73	29.54' LT	813.12	263394.25	490944.64
311	611+90.55	27.51' LT	813.53	263397.12	490946.61
312	611+87.48	26.81' LT	813.34	263394.06	490947.38
313	611+82.50	27.27' LT	813.64	263389.07	490947.03
314	611+82.43	26.50' LT	813.70	263389.02	490947.80
315	611+79.41	26.50' LT	814.31	263386.01	490947.87
316	611+82.75	30.00' LT	813.42	263389.26	490944.29
317	611+63.50	30.00' LT	815.85	263370.02	490944.72
318	611+58.50	30.00' LT	815.93	263365.02	490944.83
319	611+58.50	35.00' LT	816.00	263364.91	490939.83
320	611+63.50	35.00' LT	815.93	263369.91	490939.72
321	611+82.75	35.00' LT	813.50	263389.15	490939.29
322	611+87.89	35.59' LT	813.16	263394.27	490938.59
323	611+99.30	45.80' LT	810.90	263404.87	490928.12
324	612+00.23	50.78' LT	810.43	263405.62	490923.11
325	612+05.23	50.66' LT	810.36	263410.62	490923.06
326	612+11.22	50.51' LT	810.15	263416.62	490923.00
327	612+10.52	45.01' LT	810.63	263416.11	490928.52
328	611+87.87	24.34' LT	813.41	263394.51	490949.83
329	611+83.58	24.00' LT	813.65	263390.23	490950.27
330	611+82.43	24.00' LT	813.72	263389.07	490950.30
331	611+52.51	35.02' LT	816.45	263358.92	490939.95
332	611+52.47	30.16' LT	816.32	263358.98	490944.81

USH 51 & DELAVAN DR NW QUADRANT					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
400	612+82.25	26.50' LT	809.95	263488.67	490944.58
401	612+79.25	26.98' LT	809.71	263485.65	490944.18
402	612+79.25	26.51' LT	809.70	263485.67	490944.65
403	612+74.25	26.98' LT	809.77	263480.66	490944.32
404	612+71.47	27.60' LT	810.14	263477.64	490943.79
405	612+74.25	32.50' LT	809.91	263480.51	490938.79
406	612+69.07	32.53' LT	809.85	263475.06	490938.94
407	612+68.14	32.89' LT	809.84	263474.12	490938.61
408	612+62.92	35.56' LT	809.76	263468.81	490936.13
409	612+54.78	42.75' LT	809.66	263460.42	490929.23
410	612+53.47	44.46' LT	809.65	263459.05	490927.56
411	612+51.84	44.50' LT	809.64	263457.42	490927.58
412	612+50.66	41.53' LT	810.16	263456.35	490930.59
413	612+48.61	44.58' LT	809.51	263454.19	490927.61
414	612+48.73	49.58' LT	809.43	263454.14	490922.61
415	612+46.06	49.65' LT	809.26	263451.47	490922.64
416	612+44.96	52.68' LT	809.60	263450.26	490919.65
417	612+51.91	49.50' LT	809.56	263457.32	490922.58
418	612+52.13	65.55' LT	808.82	263456.98	490906.53
419	612+51.21	70.56' LT	808.64	263455.88	490901.56
420	612+57.20	70.48' LT	808.67	263461.88	490901.43
421	612+57.13	65.48' LT	808.90	263461.98	490906.43
422	612+56.91	49.43' LT	809.63	263462.32	490922.47
423	612+56.89	48.31' LT	809.65	263462.34	490923.59
424	612+58.65	45.91' LT	809.69	263464.18	490925.93
425	612+65.58	39.80' LT	809.84	263471.32	490931.80
426	612+70.02	37.52' LT	809.92	263475.84	490933.92
427	612+74.25	37.50' LT	809.99	263480.37	490933.80
428	612+79.25	37.50' LT	809.92	263485.37	490933.66
429	612+84.25	37.50' LT	810.21	263490.37	490933.53
430	612+84.25	32.50' LT	810.14	263490.50	490938.53
431	612+79.25	32.50' LT	809.85	263485.51	490938.66
432	612+80.20	24.00' LT	809.72	263486.68	490947.13
433	612+79.18	24.01' LT	809.73	263485.67	490947.15
434	612+73.85	24.51' LT	809.80	263480.33	490946.79
435	612+46.47	43.29' LT	809.58	263452.10	490928.98
436	612+43.74	48.70' LT	809.33	263449.19	490923.67
437	612+40.74	63.16' LT	808.71	263445.67	490909.32

2

LEGEND

XXX.XX	SIDEWALK ELEVATION
XXX.XX(F)	CURB FLANGE ELEVATION
XXX.XX(G)	GUTTER FLOWLINE ELEVATION
XXX.XX(T)	TOP OF CURB ELEVATION
XXX.XX(E)	EXISTING ELEVATION
LL	LEVEL LANDING
PED	CONCRETE CURB PEDESTRIAN
100	POINT NUMBER
MEF	MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT
	SLOPE INTERCEPTS
	GRADED FLARE
	DETECTABLE WARNING FIELD
A	SIDEWALK RADIUS POINT NUMBER
T	TRAVERSABLE FLARE
N	NON-TRAVERSABLE FLARE
	REVERSE SLOPE GUTTER

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. MATCH EXISTING SIDEWALK WIDTH AND CROSS SLOPE AT MATCH POINT.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE SUGGESTED JOINT LOCATIONS. THESE ARE FOR INFORMATION ONLY.
5. THE CROSS SLOPE OF THE GUTTER DURING CONCRETE CURB & GUTTER POURING SHALL BE 4.0%. THIS INCLUDES GUTTERS THAT ARE TO BE OVERLAID WITH HMA PAVEMENT. DOTTED CURB FLANGES REPRESENT GUTTER PANS TO BE OVERLAID WITH HMA PAVEMENT. GUTTER CROSS SLOPES SHOWN AT LOCATIONS WHERE THE GUTTER PAN IS TO BE OVERLAID REPRESENT GUTTER CROSS SLOPES AFTER THE GUTTER PAN IS OVERLAID WITH HMA PAVEMENT. CURB HEIGHTS ARE MEASURED FROM THE FINISHED GRADE AFTER GUTTER PANS HAVE BEEN OVERLAID. NOTE THAT NOT ALL GUTTER PANS ARE TO BE OVERLAID.
6. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
7. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
8. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

RADIUS TABLE					
POINT NUMBER	STATION	OFFSET	Y	X	RADIUS
C	611+64.99	73.74' RT	263373.82	491048.41	15'
D	611+75.06	90.87' RT	263384.26	491065.30	15'

AT&T WISCONSIN
ALLIANT ENERGY GAS
CAUTION
USH 51 / CENTER AVE
ALLIANT ENERGY ELECTRIC SPECTRUM
AT&T WISCONSIN
ALLIANT ENERGY ELECTRIC

CURB RAMP TYPE 5 MODIFIED
810.04 (G) 809.90 (G)
810.04 620 621 809.90
809.96 623 622 809.81
809.96 (G) 809.81 (G)
CURB RAMP TYPE 5 MODIFIED

CURB RAMP TYPE 3 MODIFIED
812.60 501
812.45 502
812.16 529
812.59 (G) 531 812.63(F)
813.70(F) 530
503 811.95
811.95 (G)
532 811.99(F)
812.93 (G)
813.23(T) 500
815.30 537
815.38 (E) 527
813.05 528
811.53 (G)
504 811.94(T) 507 810.09
505 811.66 508 810.05
510 810.59(T)
810.30 (G)
815.45 (E) 526
815.37 536
506 811.62
509 810.01
533 809.80(F)
809.76 (G)
813.12 525
812.23 524
511 809.76
CURB RAMP TYPE 3 MODIFIED
534 809.10(F)
809.06 (G)
512 809.07
513 809.23
811.69 523
810.16 522
809.79 521
516 809.72
808.64 (G)
515 808.93(T)
514 809.48
517 808.23
535 807.36(F)
808.30 520
807.50 519
518 807.42

USH 51 & DELAVAN DR
SOUTHEAST QUADRANT

NOTE: MEF ELEMENTS AT SOUTHEAST QUADRANT ARE DUE TO LONGITUDINAL AND CROSS SLOPES, OF SIDEWALKS, CURB RAMPS, AND LEVEL LANDINGS, EXCEEDING ADA STANDARDS.

DELAVAN DR

CURB RAMP TYPE 3 MODIFIED
619 808.49(F)
808.58 (G)
606 808.59
808.49 (G)
608 808.95(T)
808.52 605
808.51 (G)
808.42(F) 618
808.62 604
607 808.59
609 808.69
610 808.64
808.46 603
808.31(F) 617
808.40 (G)
808.41 602
808.53(E) 624
808.67 (E) 625
CURB RAMP TYPE 2 MODIFIED
808.22(F) 616
808.30 (G)
808.31 601
807.91 (G)
808.41(T) 600
807.52(F) 615
613 808.69
612 808.77
611 808.72
614 808.46

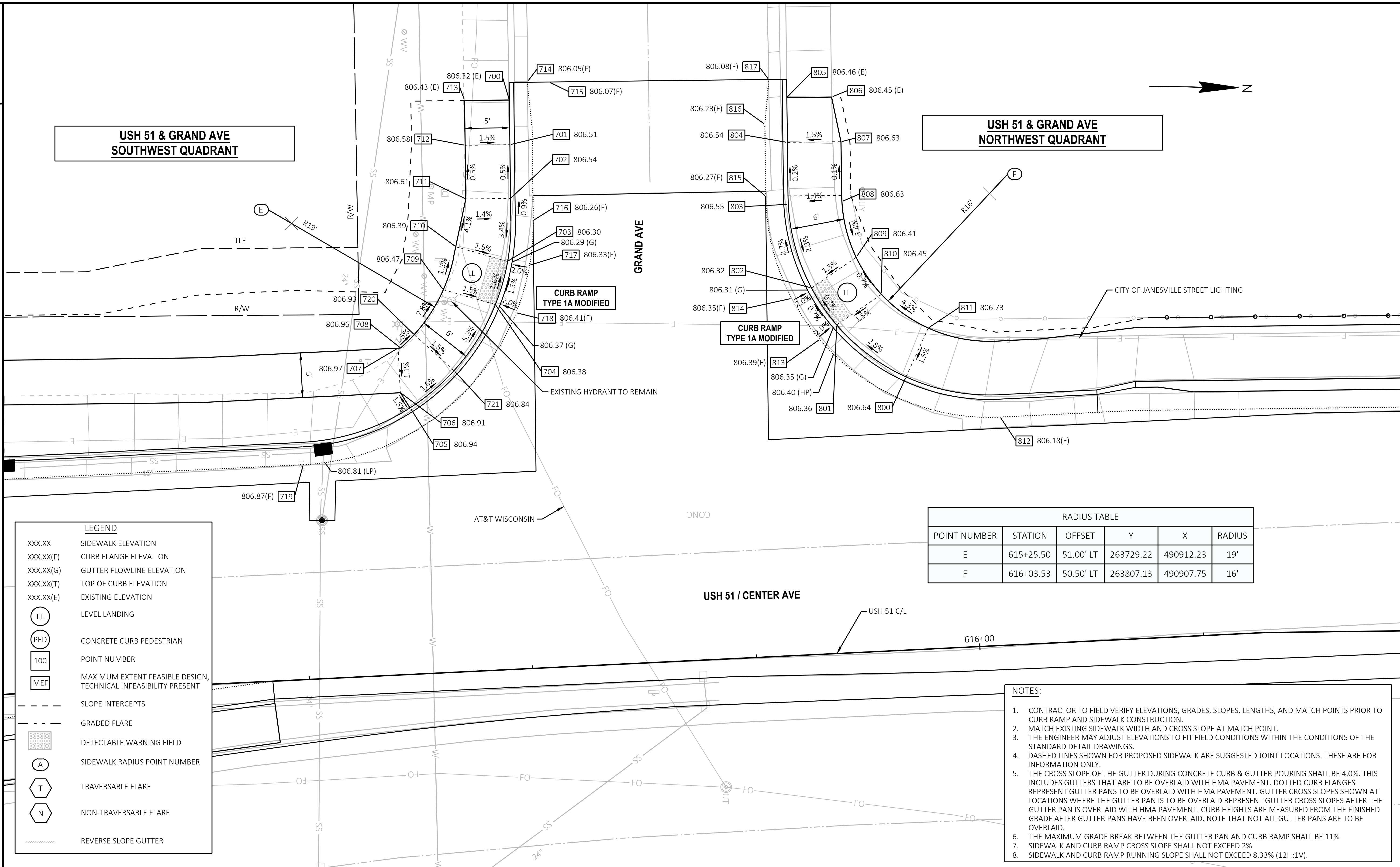
USH 51 & DELAVAN DR
NORTHEAST QUADRANT

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CURB RAMP DETAILS	SHEET 24	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\021301-CR.DWG
LAYOUT NAME - 10
PLOT DATE : 4/15/2025 9:15 AM
PLOT BY : AXT, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:10 FT

USH 51 & DELAVAN DR SE QUADRANT					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
500	611+72.41	49.71' RT	813.23	263380.70	491024.21
501	611+75.33	50.73' RT	812.60	263383.64	491025.16
502	611+75.15	52.64' RT	812.45	263383.50	491027.08
503	611+80.13	53.09' RT	811.95	263388.49	491027.42
504	611+82.97	54.97' RT	811.94	263391.37	491029.24
505	611+79.79	56.78' RT	811.66	263388.24	491031.12
506	611+79.50	59.98' RT	811.62	263388.01	491034.32
507	611+82.88	64.71' RT	810.09	263391.50	491038.97
508	611+85.19	64.48' RT	810.05	263393.81	491038.70
509	611+88.30	64.18' RT	810.01	263396.90	491038.33
510	611+89.35	61.07' RT	810.59	263397.89	491035.19
511	611+91.40	63.88' RT	809.76	263400.00	491037.96
512	611+94.01	68.65' RT	809.07	263402.71	491042.67
513	611+91.88	68.86' RT	809.23	263400.59	491042.93
514	611+88.78	69.16' RT	809.48	263397.50	491043.30
515	611+95.16	71.56' RT	808.93	263403.93	491045.55
516	611+85.67	69.46' RT	809.72	263394.40	491043.66
517	611+92.30	80.73' RT	808.23	263401.27	491054.78
518	611+95.02	89.62' RT	807.42	263404.19	491063.61
519	611+90.03	89.93' RT	807.50	263399.21	491064.03
520	611+87.99	83.26' RT	808.30	263397.02	491057.41
521	611+81.36	71.99' RT	809.79	263390.15	491046.29
522	611+78.57	67.24' RT	810.16	263387.25	491041.60
523	611+75.87	63.42' RT	811.69	263384.46	491037.84
524	611+72.36	60.68' RT	812.23	263380.89	491035.18
525	611+67.07	58.89' RT	813.12	263375.56	491033.51
526	611+48.05	56.24' RT	815.45	263356.49	491031.28
527	611+48.74	51.28' RT	815.38	263357.07	491026.31
528	611+67.76	53.94' RT	813.05	263376.14	491028.54
529	611+74.81	56.32' RT	812.16	263383.25	491030.77
530	611+65.12	45.85' RT	813.70	263373.32	491020.52
531	611+76.25	48.40' RT	812.63	263384.51	491022.82
532	611+81.41	50.94' RT	811.99	263389.72	491025.25
533	611+93.49	62.51' RT	809.80	263402.06	491036.55
534	611+96.29	67.63' RT	809.10	263404.97	491041.60
535	611+98.43	80.47' RT	807.36	263408.42	491054.34
536	611+53.00	56.93' RT	815.37	263361.46	491031.86
537	611+53.70	51.97' RT	815.30	263362.04	491026.89

USH 51 & DELAVAN DR NE QUADRANT					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
600	612+58.48	66.13' RT	808.41	263467.94	491037.91
601	612+61.03	62.91' RT	808.31	263470.37	491034.60
602	612+66.56	57.43' RT	808.41	263475.71	491028.93
603	612+70.16	57.13' RT	808.46	263479.29	491028.50
604	612+74.25	56.83' RT	808.62	263482.90	491028.09
605	612+74.25	52.32' RT	808.52	263482.78	491023.59
606	612+79.25	49.75' RT	808.59	263487.71	491020.89
607	612+79.25	52.32' RT	808.59	263487.77	491023.45
608	612+82.25	48.54' RT	808.95	263490.67	491019.59
609	612+79.25	56.83' RT	808.69	263487.89	491027.96
610	612+84.85	56.83' RT	808.64	263493.49	491027.81
611	612+84.85	61.83' RT	808.72	263493.63	491032.81
612	612+79.25	61.83' RT	808.77	263488.03	491032.96
613	612+74.25	61.83' RT	808.69	263483.03	491033.09
614	612+70.58	62.11' RT	808.46	263479.88	491033.47
615	612+51.83	72.36' RT	807.52	263461.50	491044.37
616	612+59.14	61.28' RT	808.22	263468.42	491033.04
617	612+64.95	55.52' RT	808.31	263474.03	491027.08
618	612+72.98	50.17' RT	808.42	263481.45	491021.46
619	612+78.23	47.47' RT	808.49	263486.63	491018.63
620	612+74.25	14.50' RT	810.04	263481.76	490985.78
621	612+79.25	14.50' RT	809.90	263486.76	490985.64
622	612+79.25	17.50' RT	809.81	263486.84	490988.64
623	612+74.25	17.50' RT	809.96	263481.84	490988.78
624	612+90.08	56.91' RT	808.53	263498.72	491027.75
625	612+90.00	61.78' RT	808.67	263498.78	491032.62



RADIUS TABLE					
POINT NUMBER	STATION	OFFSET	Y	X	RADIUS
E	615+25.50	51.00' LT	263729.22	490912.23	19'
F	616+03.53	50.50' LT	263807.13	490907.75	16'

LEGEND

XXX.XX	SIDEWALK ELEVATION
XXX.XX(F)	CURB FLANGE ELEVATION
XXX.XX(G)	GUTTER FLOWLINE ELEVATION
XXX.XX(T)	TOP OF CURB ELEVATION
XXX.XX(E)	EXISTING ELEVATION
LL	LEVEL LANDING
PED	CONCRETE CURB PEDESTRIAN
100	POINT NUMBER
MEF	MAXIMUM EXTENT FEASIBLE DESIGN, TECHNICAL INFEASIBILITY PRESENT
	SLOPE INTERCEPTS
	GRADED FLARE
	DETECTABLE WARNING FIELD
A	SIDEWALK RADIUS POINT NUMBER
T	TRAVERSABLE FLARE
N	NON-TRAVERSABLE FLARE
	REVERSE SLOPE GUTTER

NOTES:

1. CONTRACTOR TO FIELD VERIFY ELEVATIONS, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. MATCH EXISTING SIDEWALK WIDTH AND CROSS SLOPE AT MATCH POINT.
3. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONDITIONS WITHIN THE CONDITIONS OF THE STANDARD DETAIL DRAWINGS.
4. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE SUGGESTED JOINT LOCATIONS. THESE ARE FOR INFORMATION ONLY.
5. THE CROSS SLOPE OF THE GUTTER DURING CONCRETE CURB & GUTTER POURING SHALL BE 4.0%. THIS INCLUDES GUTTERS THAT ARE TO BE OVERLAID WITH HMA PAVEMENT. DOTTED CURB FLANGES REPRESENT GUTTER PANS TO BE OVERLAID WITH HMA PAVEMENT. GUTTER CROSS SLOPES SHOWN AT LOCATIONS WHERE THE GUTTER PAN IS TO BE OVERLAID REPRESENT GUTTER CROSS SLOPES AFTER THE GUTTER PAN IS OVERLAID WITH HMA PAVEMENT. CURB HEIGHTS ARE MEASURED FROM THE FINISHED GRADE AFTER GUTTER PANS HAVE BEEN OVERLAID. NOTE THAT NOT ALL GUTTER PANS ARE TO BE OVERLAID.
6. THE MAXIMUM GRADE BREAK BETWEEN THE GUTTER PAN AND CURB RAMP SHALL BE 11%
7. SIDEWALK AND CURB RAMP CROSS SLOPE SHALL NOT EXCEED 2%
8. SIDEWALK AND CURB RAMP RUNNING SLOPE SHALL NOT EXCEED 8.33% (12H:1V).

USH 51 & GRAND AVE SW QUADRANT					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
700	615+50.48	63.58' LT	806.32	263753.35	490898.09
701	615+50.30	58.58' LT	806.51	263753.48	490903.09
702	615+50.07	52.58' LT	806.54	263753.64	490909.08
703	615+49.39	45.57' LT	806.30	263753.41	490916.13
704	615+47.79	40.83' LT	806.38	263752.11	490920.95
705	615+37.72	29.77' LT	806.94	263742.77	490932.64
706	615+36.72	31.50' LT	806.91	263741.66	490930.98
707	615+36.72	36.50' LT	806.97	263741.35	490925.99
708	615+36.99	36.50' LT	806.96	263741.61	490925.97
709	615+42.06	42.77' LT	806.47	263746.28	490919.39
710	615+43.70	47.49' LT	806.39	263747.61	490914.57
711	615+45.08	52.77' LT	806.61	263748.65	490909.22
712	615+45.30	58.77' LT	806.58	263748.49	490903.22
713	615+45.49	63.76' LT	806.43	263748.35	490898.22
714	615+52.56	65.46' LT	806.05	263755.30	490896.08
715	615+55.05	65.37' LT	806.07	263757.80	490896.01
716	615+52.48	49.99' LT	806.26	263756.21	490911.52
717	615+51.83	45.02' LT	806.33	263755.88	490916.52
718	615+50.06	39.80' LT	806.41	263754.45	490921.85
719	615+25.50	24.00' LT	806.87	263730.94	490939.18
720	615+38.58	37.92' LT	806.93	263743.11	490924.45
721	615+42.82	33.67' LT	806.84	263747.61	490928.42

USH 51 & GRAND AVE NW QUADRANT					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
800	615+93.23	30.50' LT	806.64	263798.12	490928.37
801	615+85.77	36.69' LT	806.36	263790.28	490922.67
802	615+83.16	40.95' LT	806.32	263787.41	490918.58
803	615+81.03	50.40' LT	806.55	263784.68	490909.28
804	615+81.27	57.33' LT	806.54	263784.48	490902.36
805	615+81.46	62.33' LT	806.46	263784.34	490897.36
806	615+86.46	62.14' LT	806.45	263789.34	490897.23
807	615+87.27	57.11' LT	806.63	263790.47	490902.20
808	615+87.03	50.43' LT	806.63	263790.67	490908.88
809	615+88.32	44.11' LT	806.41	263792.35	490915.10
810	615+90.93	39.85' LT	806.45	263795.23	490919.19
811	615+95.98	35.83' LT	806.73	263800.52	490922.87
812	616+03.53	25.50' LT	806.18	263808.72	490932.70
813	615+83.80	35.15' LT	806.39	263788.41	490924.33
814	615+80.90	39.89' LT	806.35	263785.21	490919.79
815	615+78.55	51.43' LT	806.27	263782.14	490908.41
816	615+78.85	59.47' LT	806.23	263781.92	490900.37
817	615+79.54	64.45' LT	806.08	263782.29	490895.36

2

2

2

LEGEND

INLET PROTECTION (TYPE AS NOTED)

SLOPE INTERCEPT

UNION PACIFIC RR

DELAVAN DR

GRAND AVE

USH 51 R/L

USH 51 / CENTER AVE

WISCONSIN & SOUTHERN RR

PLACE INLET PROTECTION TYPE C AT NEXT DOWNSTREAM INLET ON WEST SIDE OF USH 51

PLACE INLET PROTECTION TYPE C AT NEXT DOWNSTREAM INLET ON EAST SIDE OF USH 51

PLACE INLET PROTECTION TYPE C AT NEXT DOWNSTREAM INLET ON SOUTH SIDE OF DELAVAN DR

PLACE INLET PROTECTION TYPE C AT NEXT DOWNSTREAM INLET ON NORTH SIDE OF DELAVAN DR

611 612 613 614 615 616 617

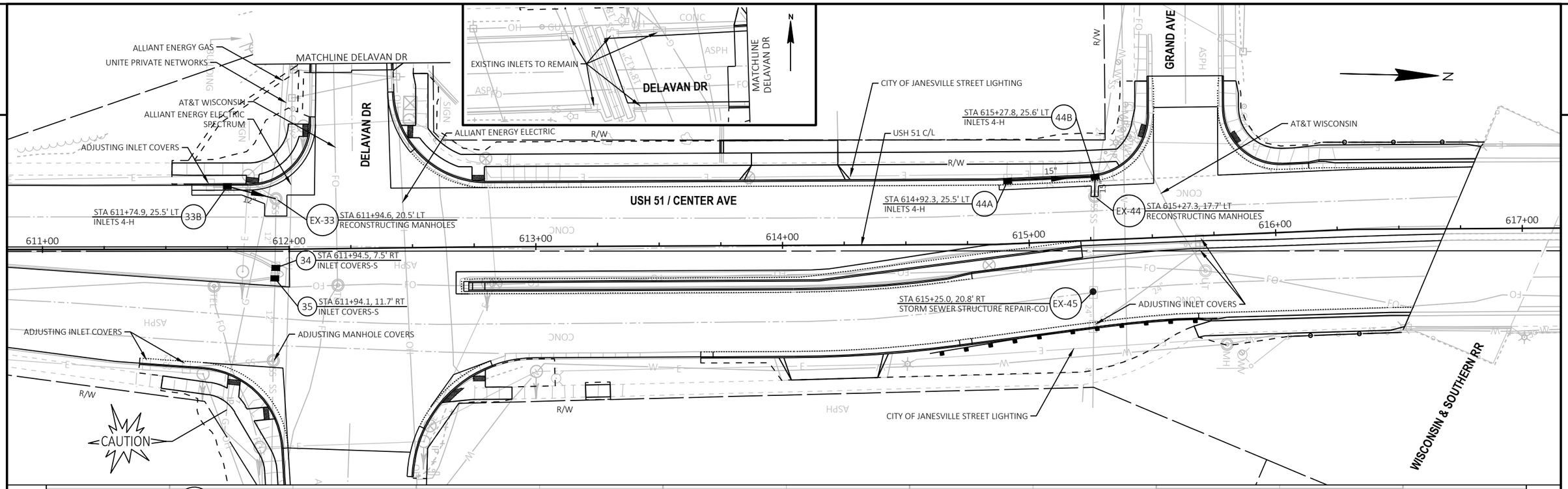
ASPH CONC GUARD RAIL BUILDING SIGN

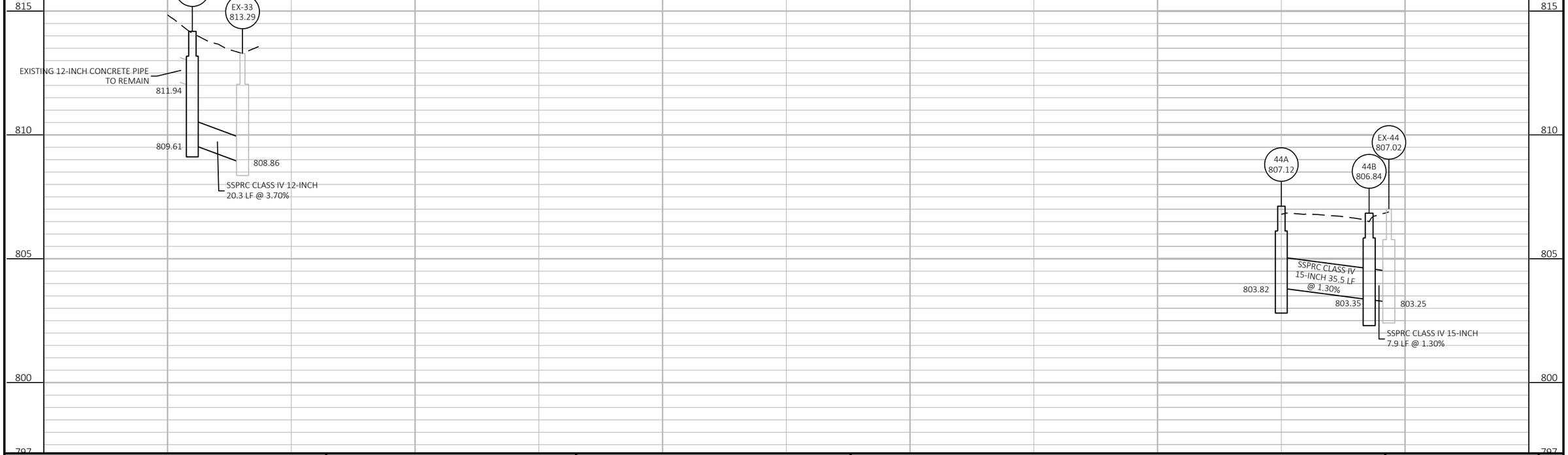
PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	EROSION CONTROL	SHEET 28	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\022001-EC.DWG
LAYOUT NAME - 06

PLOT DATE : 4/15/2025 9:16 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

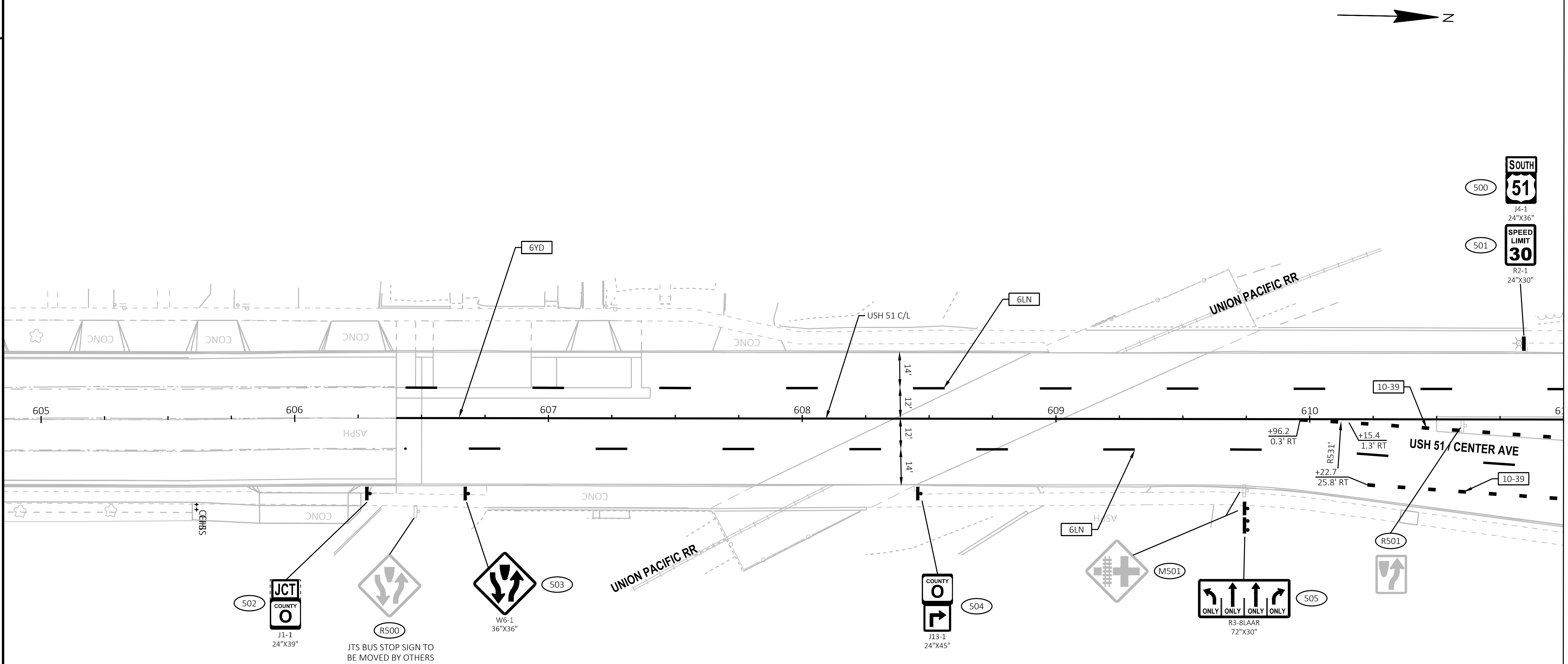




PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	STORM SEWER	SHEET 29	E

NOTES

1. R10-3 SIGNS ARE INCIDENTAL TO PEDESTRIAN PUSH BUTTONS.



SIGNING LEGEND

- EXISTING SIGN ON EXISTING POST OR POLE
- (MXX) EXISTING SIGN MOVED TO NEW LOCATION
- (RXX) EXISTING SIGN TO BE REMOVED
- (XXX) NEW SIGN
- SIGN MOUNTED ON SINGLE OR MULTIPLE POST(S)
- SIGN MOUNTED ON POLE/OVERHEAD
- ESTR EXISTING SIGN TO REMAIN

PAVEMENT MARKING LEGEND

6Y	MARKING LINE EPOXY 6-INCH (YELLOW)
6YD	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
6LN	MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)
6	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
10	MARKING LINE EPOXY 10-INCH (WHITE)
10-39	MARKING LINE EPOXY 10-INCH (3'LINE, 9' GAP, WHITE)
18	MARKING STOP LINE EPOXY 18-INCH (WHITE)
12	MARKING STOP LINE EPOXY 12-INCH (DOUBLE WHITE)
ARW2	MARKING ARROW EPOXY (TYPE 2, WHITE)
CURB	MARKING LINE CURB EPOXY (YELLOW)
NOSE	MARKING ISLAND NOSE EPOXY (YELLOW)

NOTES

1. REMOVAL OF PEDESTRIAN PUSH BUTTON SIGNS IS INCIDENTAL TO REMOVING TRAFFIC SIGNS
2. R10-3 SIGNS ARE INCIDENTAL TO PEDESTRIAN PUSH BUTTONS.

N

MATCH LINE 611+00

DELAVAN DR

DELAVAN DRIVE

UNION PACIFIC RR

USH 51 / CENTER AVE

GRAND AVE

GRAND AVENUE

WISCONSIN & SOUTHERN RR

USH 51 C/L

JTS BUS STOP SIGN TO BE MOVED BY OTHERS

REMOVE

ESTR

SIGNING LEGEND

- EXISTING SIGN ON EXISTING POST OR POLE
- MXX — EXISTING SIGN MOVED TO NEW LOCATION
- RXX — EXISTING SIGN TO BE REMOVED
- XXX — NEW SIGN
- SIGN MOUNTED ON SINGLE OR MULTIPLE POST(S)
- SIGN MOUNTED ON POLE/OVERHEAD
- ESTR — EXISTING SIGN TO REMAIN

PAVEMENT MARKING LEGEND

- 6Y — MARKING LINE EPOXY 6-INCH (YELLOW)
- 6YD — MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
- 6LN — MARKING LINE EPOXY 6-INCH (12.5' LINE, 37.5' GAP, WHITE)
- 6 — MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- 10 — MARKING LINE EPOXY 10-INCH (WHITE)
- 10-39 — MARKING LINE EPOXY 10-INCH (3'LINE, 9' GAP, WHITE)
- 18 — MARKING STOP LINE EPOXY 18-INCH (WHITE)
- 12 — MARKING STOP LINE EPOXY 12-INCH (DOUBLE WHITE)
- ARW2 — MARKING ARROW EPOXY (TYPE 2, WHITE)
- CURB — MARKING LINE CURB EPOXY (YELLOW)
- NOSE — MARKING ISLAND NOSE EPOXY (YELLOW)

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	SIGNING & PAVEMENT MARKING	SHEET 31	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\023201-PSPM.DWG
LAYOUT NAME - 02

PLOT DATE : 11/17/2025 2:05 PM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

LEGEND

SERVICE POLE

LIGHTING CONTROL CABINET AND ELECTRICAL SERVICE BREAKER PEDESTAL ON CONCRETE CONTROL CABINET BASE

NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED

PULL BOX STEEL, 24" X 42"

EXISTING LIGHT POLE, ARM MOUNTED LUMINAIRE (TO REMAIN)

1 / 2" | 2 / 10 LIGHT | 1 / 8 GND

- CONDUIT QUANTITY
- PHASE CONDUCTOR QUANTITY
- EQUIPMENT GROUNDING CONDUCTOR QUANTITY
- EQUIPMENT GROUNDING CONDUCTOR SIZE (AWG)
- PHASE CONDUCTOR SIZE (AWG)
- CONDUIT SIZE

X-X-(X)
STA. XX+XX, X' RT/LT

- LIGHTING CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT (240 VOLT)
- LOCATION (TO CENTER OF POLE)

N

UNION PACIFIC RR

DELAVAN DR

USH 51 / CENTER AVE

INSTALL RAILROAD PREEMPTION CABLE FROM CB1 TO NEW BUNGALOW EXTERIOR. INSTALLATION FROM BUNGALOW EXTERIOR TO BUNGALOW INTERIOR TO BE DONE BY OTHERS.

EXISTING RR BUNGALOW

EXISTING CONDUIT TO REMAIN

TLE

R/W

LP1 LP2 LP3

L-PB1 L-PB2 L-PB3 L-PB4 L-PB5 L-PB6

225' TO NEAR RIGHT SIGNAL

608 609 610 611 612 613

MATCH LINE 614+00

PAGE 1 OF 3

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	LIGHTING PLAN	SHEET 32	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\023601-LP.DWG
LAYOUT NAME - 01

PLOT DATE : 4/15/2025 9:18 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

N

R/W

GRAND AVE

TLE

R/W

LP5

L-PB8

LP7

LP8

MATCH LINE 614+00

615

616

617

618

619

MATCH LINE 620+00

225' TO NEAR RIGHT SIGNAL

USH 51 / CENTER AVE

L-PB7

LP4

R/W

LP6

LP9

WISCONSIN & SOUTHERN RR

ROCK RIVER

1 / 2" | 2 / 10 LIGHT | 1 / 8 GND

1 / 2" | 2 / 12 LIGHT | 1 / 8 GND

LEGEND

- SERVICE POLE
- LIGHTING CONTROL CABINET AND ELECTRICAL SERVICE BREAKER PEDESTAL ON CONCRETE CONTROL CABINET BASE
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- PULL BOX STEEL, 24" X 42"
- EXISTING LIGHT POLE, ARM MOUNTED LUMINAIRE (TO REMAIN)

1 / 2" | 2 / 10 LIGHT | 1 / 8 GND

- CONDUIT QUANTITY
- PHASE CONDUCTOR QUANTITY
- EQUIPMENT GROUNDING CONDUCTOR QUANTITY
- EQUIPMENT GROUNDING CONDUCTOR SIZE (AWG)
- PHASE CONDUCTOR SIZE (AWG)
- CONDUIT SIZE

X-X-(X)
STA. XX+XX, X' RT/LT

- LIGHTING CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUIT (240 VOLT)
- LOCATION (TO CENTER OF POLE)

PAGE 2 OF 3

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	LIGHTING PLAN	SHEET 33	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\023601-LP.DWG
LAYOUT NAME - 02

PLOT DATE : 4/15/2025 9:18 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

SERVICE POLE

LIGHTING CONTROL CABINET AND ELECTRICAL SERVICE BREAKER PEDESTAL ON CONCRETE CONTROL CABINET BASE

NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED

PULL BOX STEEL, 24" X 42"

EXISTING LIGHT POLE, ARM MOUNTED LUMINAIRE (TO REMAIN)

CONDUIT QUANTITY
PHASE CONDUCTOR QUANTITY
EQUIPMENT GROUNDING CONDUCTOR QUANTITY
1 / 2" | 2 / 10 LIGHT | 1 / 8 GND
EQUIPMENT GROUNDING CONDUCTOR SIZE (AWG)
PHASE CONDUCTOR SIZE (AWG)
CONDUIT SIZE

LIGHTING CONTROL CABINET DESIGNATION
POLE NUMBER
LIGHTING CIRCUIT (240 VOLT)
X-X-(X)
STA. XX+XX, X' RT/LT
LOCATION (TO CENTER OF POLE)

N

MATCH LINE 620+00

620 621 622 623 624 625 626

USH 51 / CENTER AVE

R/W

INTERCEPT EXISTING CONDUIT

L-PB9

LP10

LP12

LP14

EX L-PB2

LP11

L-PB10

LP13

EX L-PB1

INTERCEPT EXISTING CONDUIT

R/W

R/W

PAGE 3 OF 3

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	LIGHTING PLAN	SHEET 34	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\023601-LP.DWG
LAYOUT NAME - 03

PLOT DATE : 4/15/2025 9:18 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

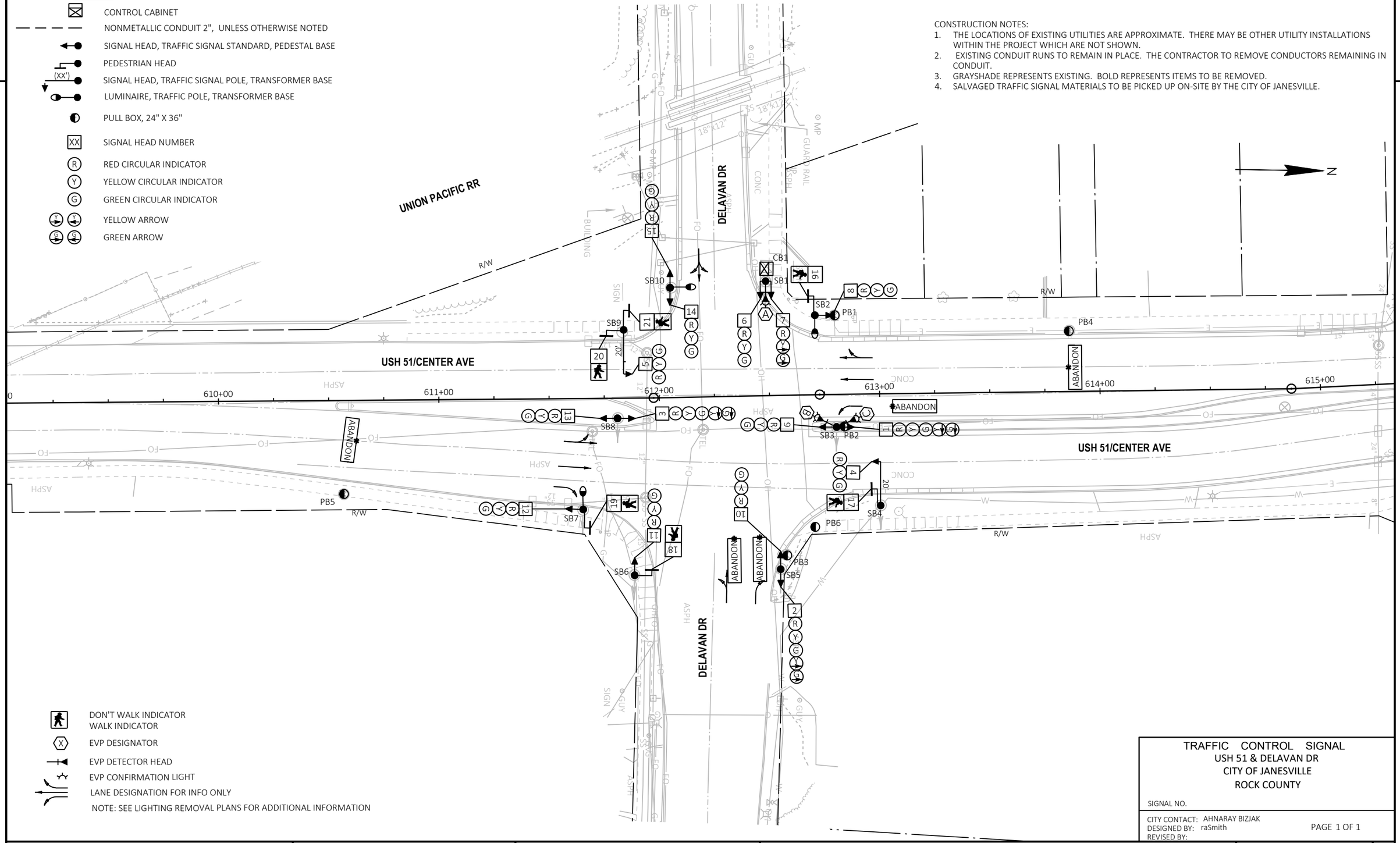
WISDOT/CADDS SHEET 42

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- PEDESTRIAN HEAD
- (XX') SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PULL BOX, 24" X 36"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- YELLOW ARROW
- GREEN ARROW

CONSTRUCTION NOTES:

1. THE LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
2. EXISTING CONDUIT RUNS TO REMAIN IN PLACE. THE CONTRACTOR TO REMOVE CONDUCTORS REMAINING IN CONDUIT.
3. GRAYSHADE REPRESENTS EXISTING. BOLD REPRESENTS ITEMS TO BE REMOVED.
4. SALVAGED TRAFFIC SIGNAL MATERIALS TO BE PICKED UP ON-SITE BY THE CITY OF JANESVILLE.



- DON'T WALK INDICATOR / WALK INDICATOR
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- EVP CONFIRMATION LIGHT
- LANE DESIGNATION FOR INFO ONLY
- NOTE: SEE LIGHTING REMOVAL PLANS FOR ADDITIONAL INFORMATION

TRAFFIC CONTROL SIGNAL
USH 51 & DELAVAN DR
CITY OF JANESVILLE
ROCK COUNTY

SIGNAL NO.

CITY CONTACT: AHNARAY BIZJAK
DESIGNED BY: raSmith
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 35	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\024002-SR-DELAVAN.DWG
LAYOUT NAME - Plan 1 IN 40 FT

PLOT DATE : 4/15/2025 8:22 AM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

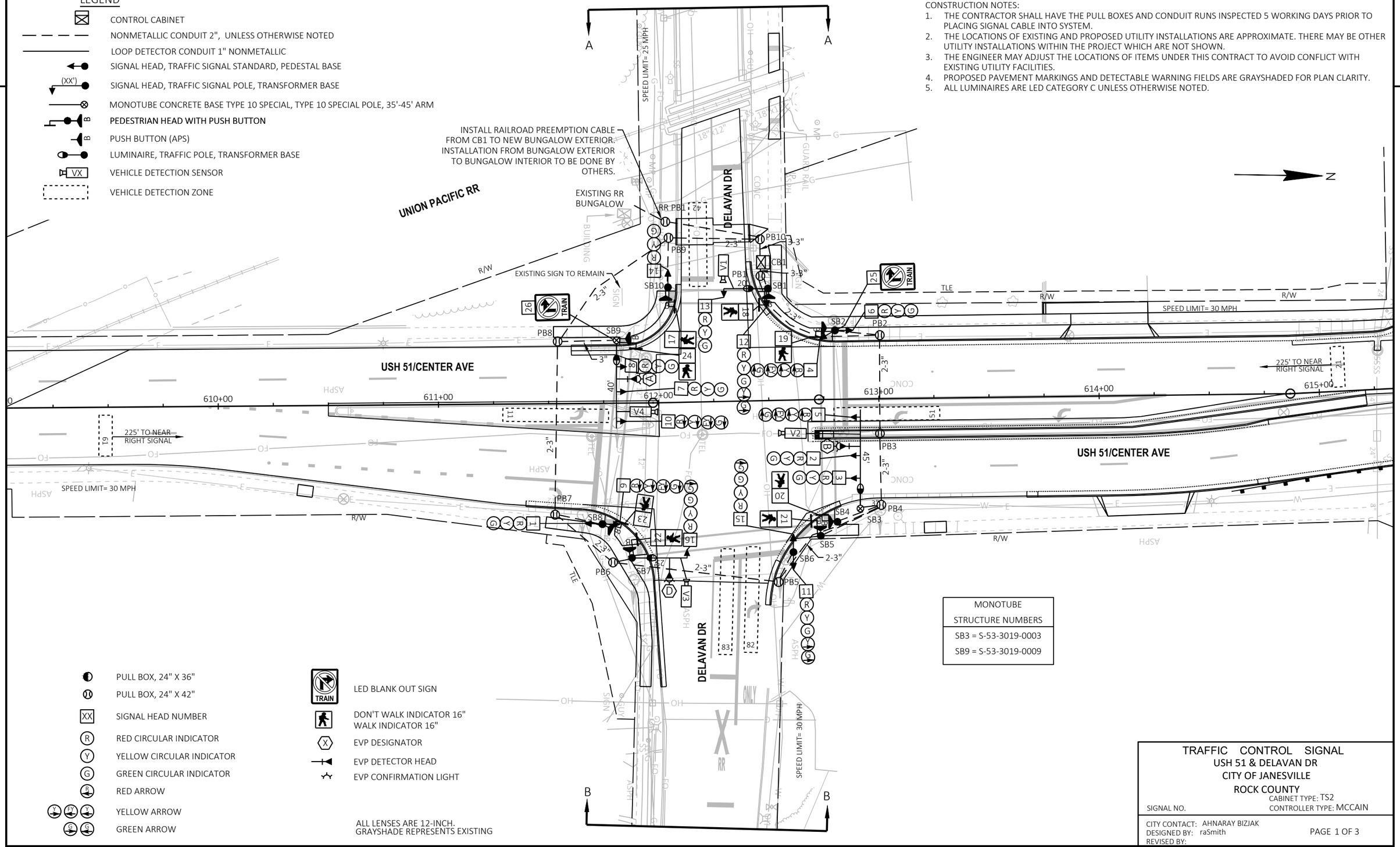
2

LEGEND

- CONTROL CABINET
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- LOOP DETECTOR CONDUIT 1" NONMETALLIC
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX') SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- MONOTUBE CONCRETE BASE TYPE 10 SPECIAL, TYPE 10 SPECIAL POLE, 35'-45' ARM
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- B PUSH BUTTON (APS)
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- VX VEHICLE DETECTION SENSOR
- VEHICLE DETECTION ZONE

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED 5 WORKING DAYS PRIOR TO PLACING SIGNAL CABLE INTO SYSTEM.
2. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT WHICH ARE NOT SHOWN.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH EXISTING UTILITY FACILITIES.
4. PROPOSED PAVEMENT MARKINGS AND DETECTABLE WARNING FIELDS ARE GRAYSHADED FOR PLAN CLARITY.
5. ALL LUMINAIRES ARE LED CATEGORY C UNLESS OTHERWISE NOTED.



- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- XX SIGNAL HEAD NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- R RED ARROW
- Y Y Y YELLOW ARROW
- G G GREEN ARROW

- TRAIN LED BLANK OUT SIGN
- DON'T WALK INDICATOR 16" / WALK INDICATOR 16"
- X EVP DESIGNATOR
- EVP DETECTOR HEAD
- EVP CONFIRMATION LIGHT

ALL LENSES ARE 12-INCH.
GRAYSHADE REPRESENTS EXISTING

TRAFFIC CONTROL SIGNAL
USH 51 & DELAVAN DR
CITY OF JANESVILLE
ROCK COUNTY

SIGNAL NO.
CABINET TYPE: TS2
CONTROLLER TYPE: MCCAIN

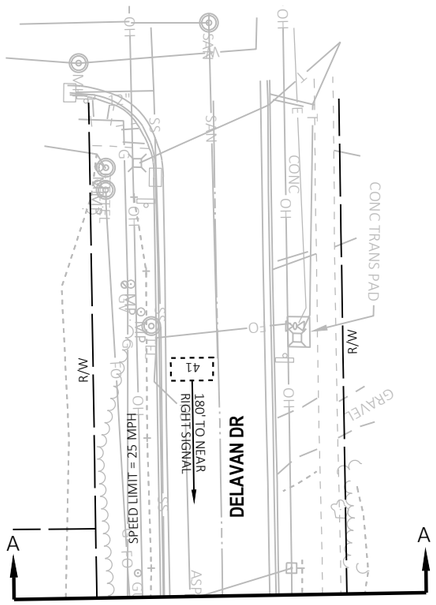
CITY CONTACT: AHNARAY BIZJAK
DESIGNED BY: raSmith
REVISED BY:

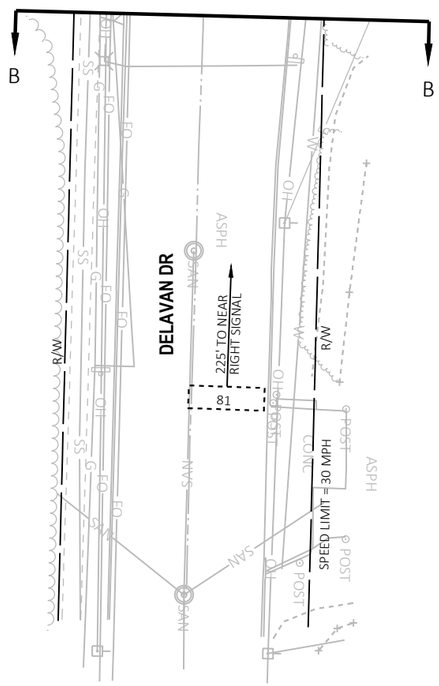
PAGE 1 OF 3

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC SIGNAL PLAN	SHEET 36	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\024202-SP-DELAVAN.DWG
LAYOUT NAME - 01
PLOT DATE : 11/13/2025 3:40 PM
PLOT BY : UTIC, ANDY
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2





N

TRAFFIC CONTROL SIGNAL
USH 51 & DELAVAN DR
CITY OF JANESVILLE
ROCK COUNTY

SIGNAL NO.

CITY CONTACT: AHNARAY BIZJAK
DESIGNED BY: raSmith
REVISED BY:

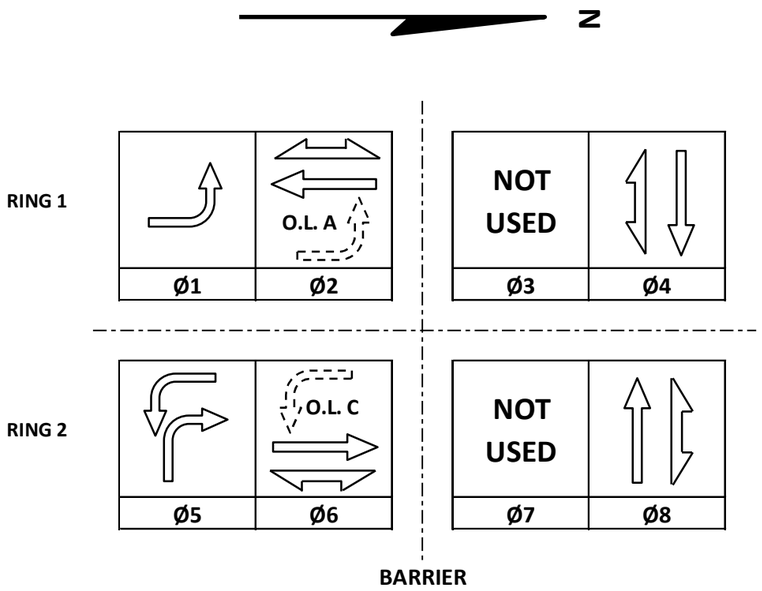
PAGE 2 OF 3

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC SIGNAL PLAN	SHEET 37	E

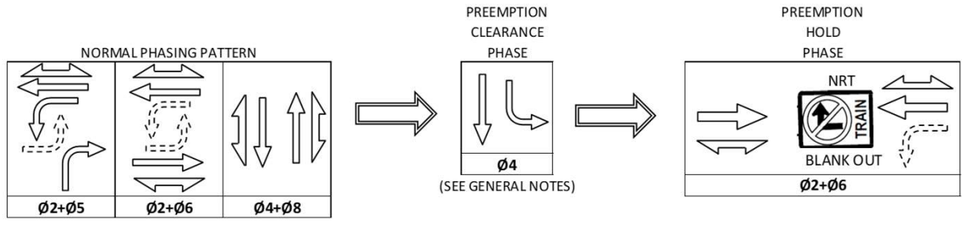
FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\024202-SP-DELAVAN.DWG
LAYOUT NAME - 02

PLOT DATE : 4/15/2025 9:23 AM PLOT BY : UTIC, ANDY PLOT NAME : PLOT SCALE : ##########

	HEAD NUMBERS	FLASH
Ø1	4,5	R ←
Ø2	6,7,8	R
Ø3		
Ø4	14,15,16	R
Ø5	9,10,11,12	R ←
Ø6	1,2,3	R
Ø7		
Ø8	11,12,13	R
Ø2P	17,18	
Ø4P	23,24	
Ø6P	21,22	
Ø8P	19,20	
OLA	4,5	-
OLC	9,10	-



RAILROAD PREEMPTION PHASING



CONTROLLER LOGIC

PHASE NUMBER	PHASE LOCKING	DUAL ENTRY W / Ø	PHASE RECALL	PHASE ACTIVE
1		6		X
2	X	6	MIN	X
3				
4		8		X
5		2		X
6	X	2	MIN	X
7				
8		4		X

EMERGENCY VEHICLE PREEMPTION SEQUENCE

EMERGENCY VEHICLE PREEMPTOR	A	B	D
MOVEMENT			
PHASE	2+5	6+1	8+4

AFTER PREEMPTION SEQUENCE 2+5 OR 6+1, CONTROLLER SHALL RETURN TO PHASES 2+6.
AFTER PREEMPTION SEQUENCE 8+4, CONTROLLER SHALL RETURN TO PHASES 4+8.

TYPE OF INTERCONNECT/COMMUNICATION	
NONE	X
CLOSED LOOP	
TWISTED PAIR	
FIBER OPTIC*	
FIBER OPTIC (ETHERNET)	
RADIO	
CELL MODEM	

TYPE OF COORDINATION	
NONE	
TBC	X
TRAFFIC RESPONSIVE	
ADAPTIVE	
*LOCATION OF MASTER CONTROLLER NO: S-	
SIGNAL SYSTEM NO: SS-	

TYPE OF LIGHTING	
BY OTHER AGENCY	
IN TRAFFIC CABINET	X
IN SEPARATE DOT LIGHTING CABINET	

TYPE OF PRE-EMPT	
NONE	
RAILROAD	X
EMERGENCY VEHICLE	X
GTT	
TOMAR	
HARDWIRE	
OTHER	
CONFIRMATION LIGHTS	X
LIFT BRIDGE	
QUEUE DETECTION	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
PLAN LOOP DETECTOR(S)	11	41	51	81	83			
PHASE CALLED	2		5		8			
PHASE EXTENDED	2	4	5	8	8			
CALLING DELAY								
EXTENSION STRETCH		X		X				
ADDED INITIAL								
SWITCH PHASE			6					

19	17	23	21	27	25	31	29	DETECTOR INPUT
								PLAN LOOP DETECTOR(S)
								PHASE CALLED
								PHASE EXTENDED
								CALLING DELAY
								EXTENSION STRETCH
								ADDED INITIAL
								SWITCH PHASE

DETECTOR INPUT	4	2	8	6	12	10	16	14
PLAN LOOP DETECTOR(S)	21	42	61	82				
PHASE CALLED	2	4	6	8				
PHASE EXTENDED	2	4	6	8				
CALLING DELAY				X				
EXTENSION STRETCH								
ADDED INITIAL	X		X					
SWITCH PHASE								

20	18	24	22	28	26	32	30	DETECTOR INPUT
								PLAN LOOP DETECTOR(S)
								PHASE CALLED
								PHASE EXTENDED
								CALLING DELAY
								EXTENSION STRETCH
								ADDED INITIAL
								SWITCH PHASE

GENERAL NOTES:

1. PHASE 1 IS FOR EVP ONLY.
2. WHEN RAILROAD PREEMPT CALL IS PLACED, TRANSITION NORMAL PHASING PATTERN TO ALL RED, THEN PROCEED TO TRACK CLEARANCE PHASE.
3. HEADS 25 AND 26 (LED BLANK OUT SIGNS) ARE ACTIVATED BY RAILROAD PREEMPTION.

USH 51 (CENTER AVE) & DELAVAN DR
CITY OF JANESVILLE
ROCK COUNTY

SIGNAL NO: LOCAL CABINET TYPE: TS2
CONTROLLER TYPE: MCCAIN
DATE: 11/2025 PAGE NUMBER: 3 OF 3

PROJECT ID:	5350-02-75
INTERSECTION:	USH 51 (Center Ave) & Delavan Dr

Signal Wire Color Coding	BLK - black	RED - red	GRN - green
	WHT - white	BLU - blue	ORG - orange

CB1 TO	AWG14 # OF CONDUCTORS	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED NEUTRAL	PED INPUT
			RED	YELLOW	GREEN	<RED>	<YELLOW>	<GREEN>	<FLASHING YELLOW>	D/WALK	WALK		
SB1	12	12	RED	ORG	GRN		ORG/BLK	GRN/BLK					
		13	RED	ORG	GRN								
		18								BLK	BLU		
		BUTTON										BLU/BLK	WHT/BLK
SB2	12	4				RED/BLK	ORG	GRN	BLK/WHT				
		6	RED	ORG	GRN								
		19								BLK	BLU		
		BUTTON										BLU/BLK	WHT/BLK
SB3	12	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		5				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
SB4	7	20								BLK	BLU		
		BUTTON										GRN	WHT/BLK
SB5	7	21								BLK	BLU		
		BUTTON										GRN	WHT/BLK
SB6	12	11	RED	ORG	GRN		BLK	BLU/BLK					
		15	RED	ORG	GRN			GRN/BLK					
SB7	12	16	RED	ORG	GRN			GRN/BLK					
		22								BLK	BLU		
		BUTTON										BLU/BLK	WHT/BLK
SB8	12	1	RED	ORG	GRN								
		9				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		23								BLK	BLU		
		BUTTON										BLU/BLK	WHT/BLK
SB9	12	7	RED	ORG	GRN								
		8	RED	ORG	GRN								
		10				RED/BLK	ORG/BLK	GRN/BLK	BLK/WHT				
		24								BLK	BLU		
		BUTTON										BLU/BLK	WHT/BLK
SB10	12	14	RED	ORG	GRN								
		17								BLK	BLU		
		BUTTON										BLU/BLK	WHT/BLK

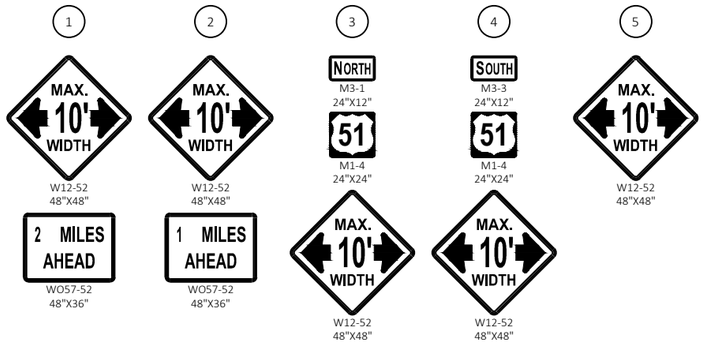
Equipment Grounding Conductor 10 AWG Green XLP	
From	To
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	SB10
SB10	CB1

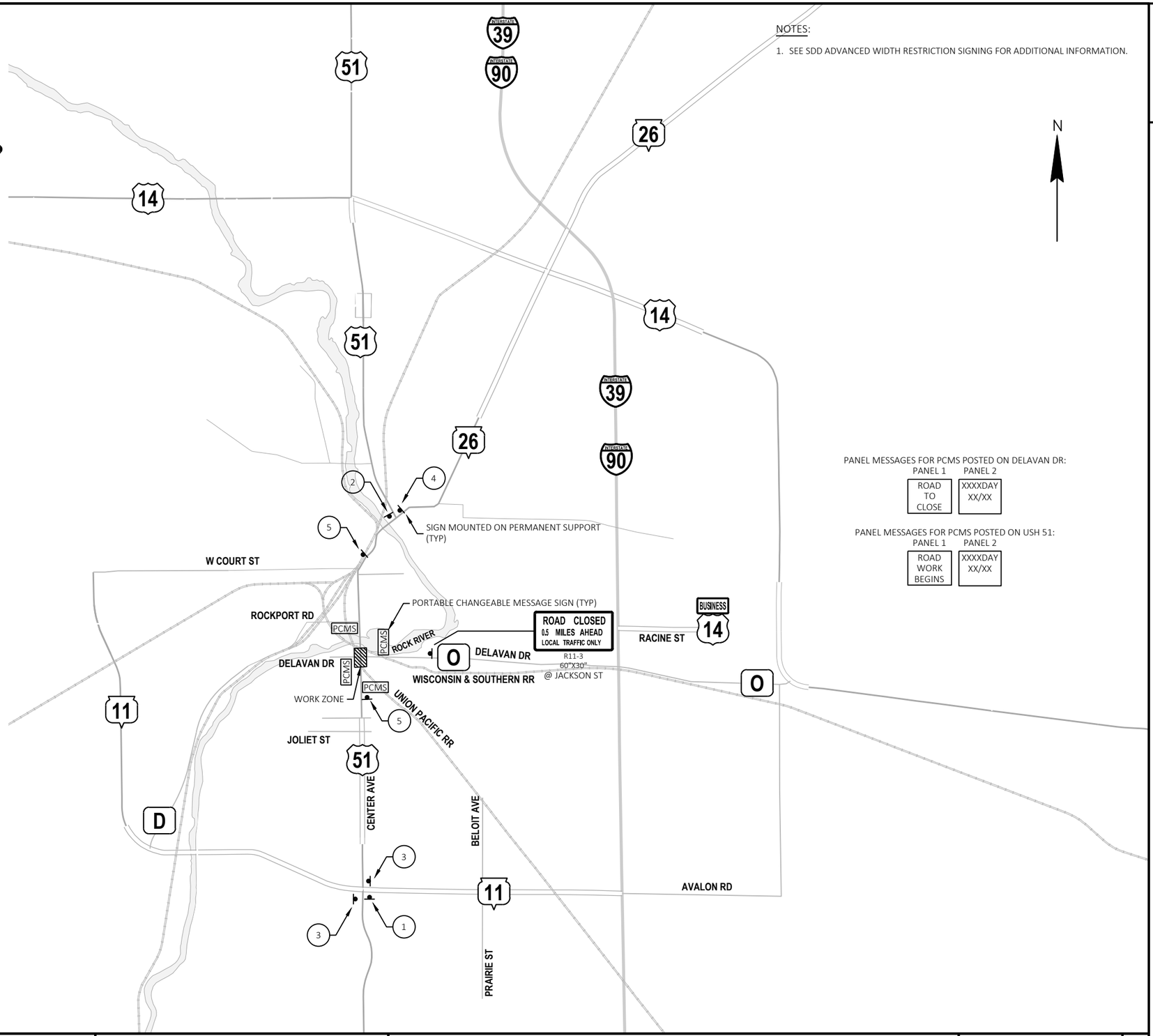
Pull Box Bonding Jumper 10 AWG Green XLP	
From	To
PB1	CB1
PB2	SB2
PB3	SB3
PB4	SB3
PB5	SB6
PB6	SB7
PB7	SB8
PB8	SB9
PB9	SB10
PB10	CB1

Lighting UF 2-10 AWG Grounded	
From	To
CB1	SB1
SB1	SB3
CB1	SB9
SB9	SB7

Emergency Vehicle Preemption	
From	To
CB1	HEAD A (SB9)
CB1	HEAD B (SB4)
CB1	HEAD D (SB7)

*Use the white conductor in the cable assembly as the grounded conductor for all traffic signal indications
*Ensure the grounded conductor in the feeder cable and the pole cables are both 18" longer than the ungrounded conductors.
*At the signal bases, connect one terminal from the pedestrian push buttons to the color indicated in the chart. Connect the other terminal to the grounded conductor.
*Reconnect the grounding conductors wherever the circuit has been interrupted to ensure the grounding circuit is complete.





NOTES:

1. SEE SDD ADVANCED WIDTH RESTRICTION SIGNING FOR ADDITIONAL INFORMATION.

PANEL MESSAGES FOR PCMS POSTED ON DELAVAN DR:

PANEL 1	PANEL 2
ROAD TO CLOSE	XXXXDAY XX/XX

PANEL MESSAGES FOR PCMS POSTED ON USH 51:

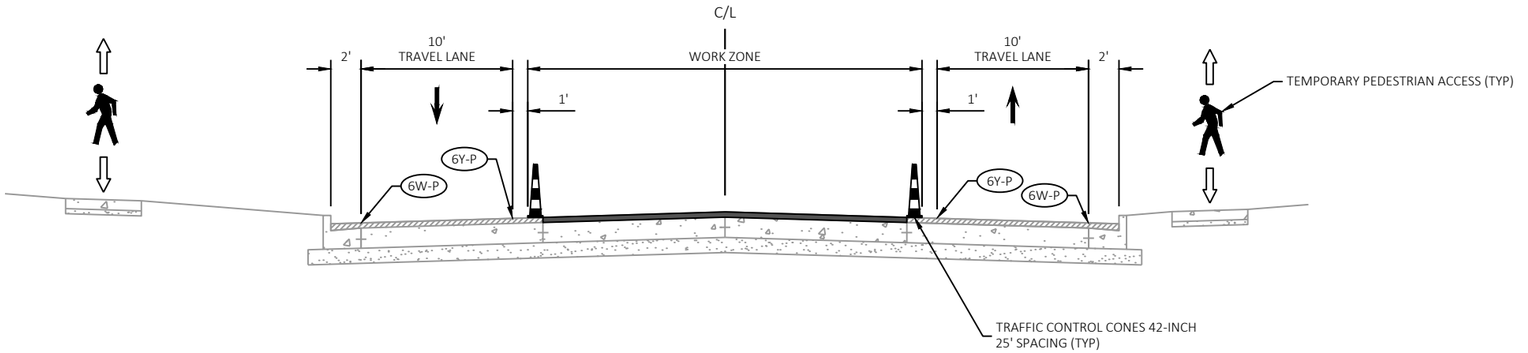
PANEL 1	PANEL 2
ROAD WORK BEGINS	XXXXDAY XX/XX

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	ADVANCED WARNING SIGNING	SHEET 40	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025001-AW.DWG
LAYOUT NAME - AW

PLOT DATE : 4/15/2025 9:21 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:1 MI

2

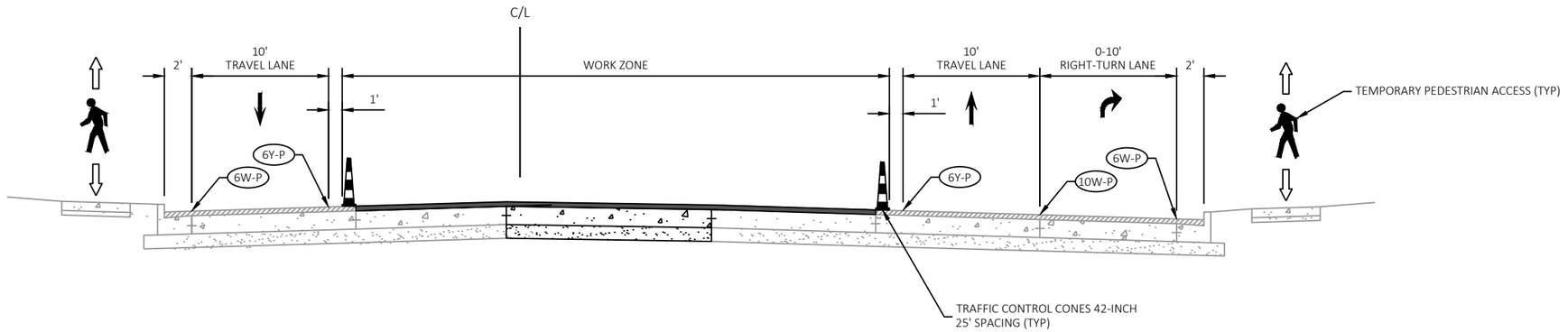


TRAFFIC CONTROL TYPICAL SECTION - STAGE 1
USH 51

STA 606+40 - STA 610+50

TEMPORARY MARKING LEGEND

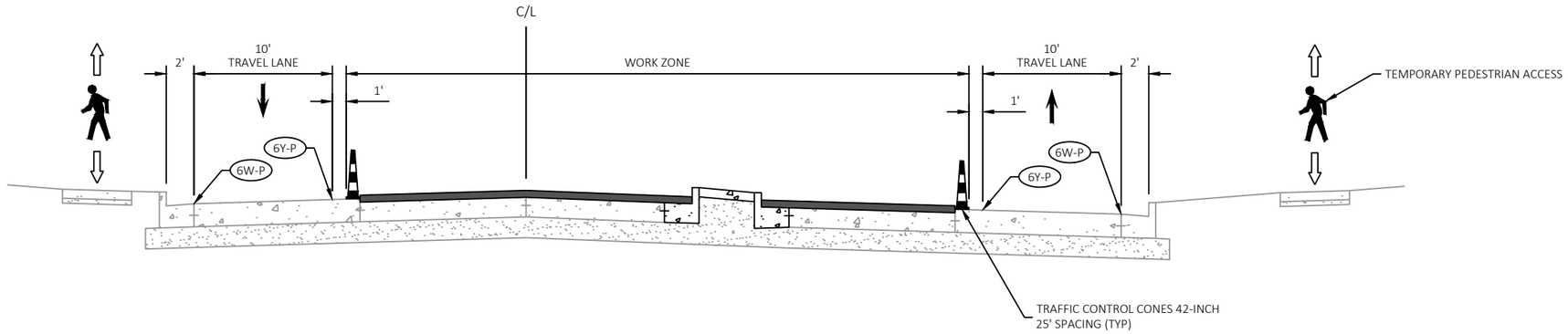
- 6Y-P — TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
- 6Y-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 6W-P — TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6W-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 10W-P — TEMPORARY MARKING STOP LINE PAINT 10-INCH (WHITE)



TRAFFIC CONTROL TYPICAL SECTION - STAGE 1
USH 51

STA 610+50 - STA 612+00

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 41	E



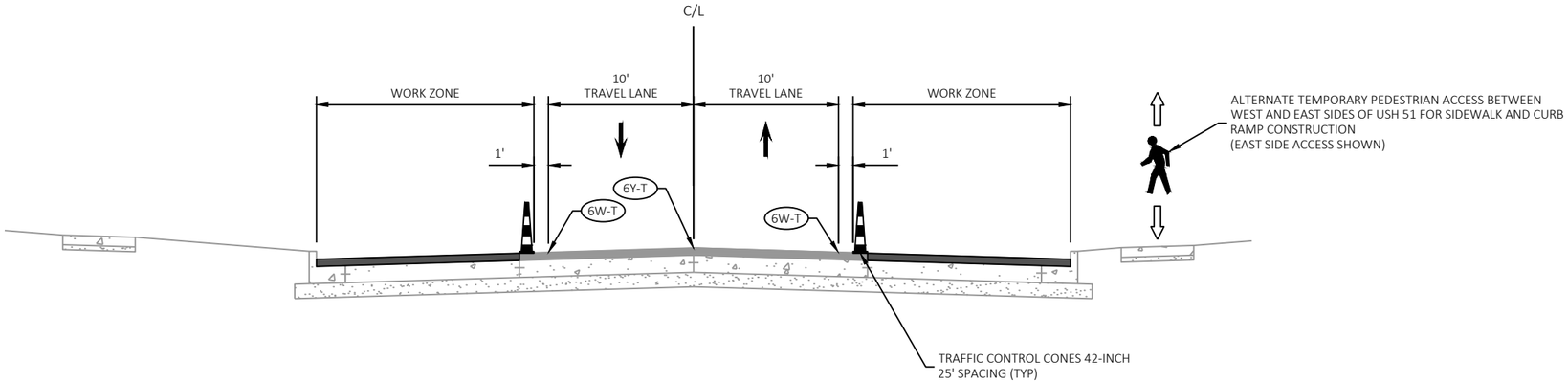
TRAFFIC CONTROL TYPICAL SECTION - STAGE 1
USH 51

STA 612+00 - STA 616+69

TEMPORARY MARKING LEGEND

- 6Y-P TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
- 6Y-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 6W-P TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6W-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 10W-P TEMPORARY MARKING STOP LINE PAINT 10-INCH (WHITE)

2

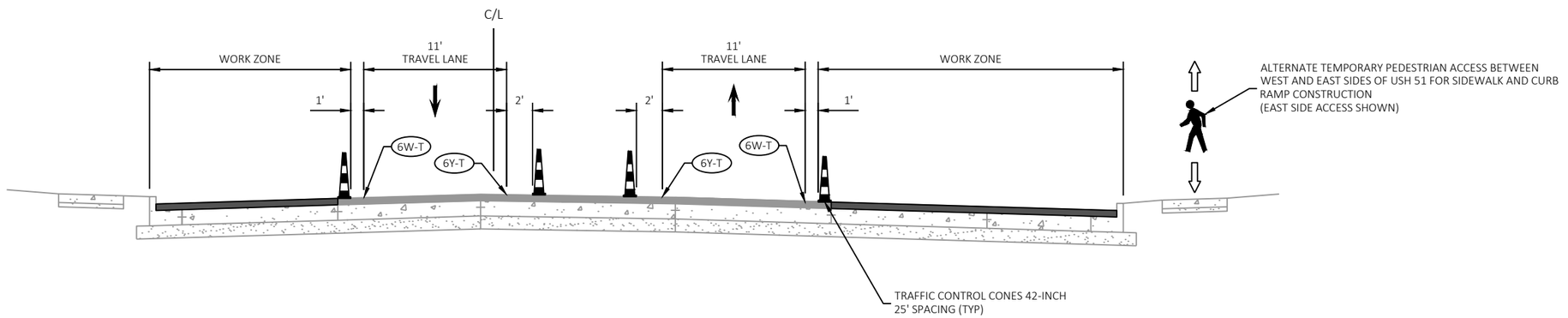


TRAFFIC CONTROL TYPICAL SECTION - STAGE 2
USH 51

STA 606+40 - STA 610+50

TEMPORARY MARKING LEGEND

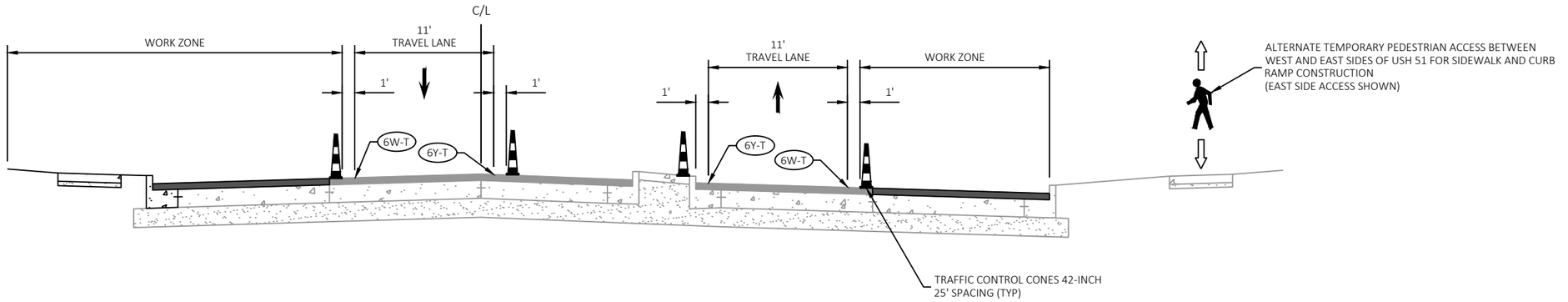
- 6Y-P TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
- 6Y-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 6W-P TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6W-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 10W-P TEMPORARY MARKING STOP LINE PAINT 10-INCH (WHITE)



TRAFFIC CONTROL TYPICAL SECTION - STAGE 2
USH 51

STA 610+50 - STA 612+00

2



TRAFFIC CONTROL TYPICAL SECTION - STAGE 2
USH 51

STA 612+00 - STA 616+69

TEMPORARY MARKING LEGEND

- 6Y-P TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
- 6Y-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 6W-P TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6W-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- 10W-P TEMPORARY MARKING STOP LINE PAINT 10-INCH (WHITE)

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 44	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025100-TCTS.DWG
LAYOUT NAME - 02b
PLOT DATE : 4/15/2025 9:21 AM
PLOT BY : AXT, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

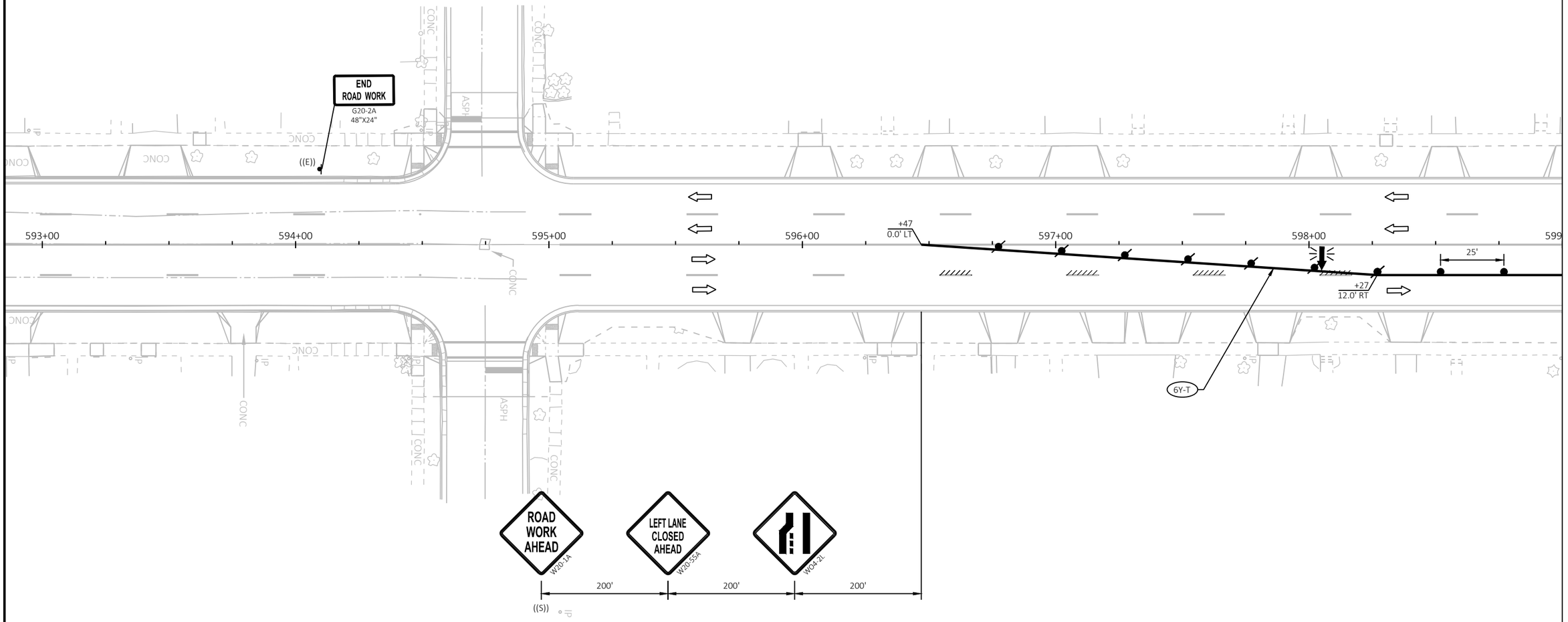
TEMPORARY MARKING LEGEND

6Y-P	TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
6Y-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
6W-P	TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
6W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
XW-P	TEMPORARY MARKING CROSSWALK PAINT 6-INCH (WHITE)
10W-P	TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
10W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)
ARW-P	TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
//////	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
XXXX	MARKING REMOVAL LINE 6-INCH

TRAFFIC CONTROL LEGEND

I/I	TYPE II / III BARRICADE
I/I	TYPE II / III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	CONNECTED ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
((S))	CONNECTED WORK ZONE START LOCATION MARKER
((E))	CONNECTED WORK ZONE END LOCATION MARKER
	TRAFFIC CONTROL 42-INCH CONE
	WORK AREA
	DIRECTION OF TRAFFIC
	TEMPORARY PEDESTRIAN BARRICADE
TDWF	TEMPORARY DETECTABLE WARNING FIELD

N



2

TEMPORARY MARKING LEGEND

- 6Y-P — TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
- 6Y-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 6W-P — TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6W-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- XW-P — TEMPORARY MARKING CROSSWALK PAINT 6-INCH (WHITE)
- 10W-P — TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
- 10W-T — TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)
- ARW-P — TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
- ////. — TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- XXXX — MARKING REMOVAL LINE 6-INCH

TRAFFIC CONTROL LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- ((S)) — CONNECTED WORK ZONE START LOCATION MARKER
- ((E)) — CONNECTED WORK ZONE END LOCATION MARKER
- TRAFFIC CONTROL 42-INCH CONE
- WORK AREA
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN BARRICADE
- TDWF — TEMPORARY DETECTABLE WARNING FIELD

N

ROAD WORK AHEAD W20-1A

@ WASHINGTON ST

STATE STREET

MATCH LINE 599+00

MATCH LINE 605+00

599+00 600+00 601+00 602+00 603+00 604+00 605+00

25'

+12 12.0' RT

+84 12.0' RT

+93.5 0.0'

+18.3 12.0' RT

25'

12'

+50 11.6' RT

USH 51 / CENTER AVE

6Y-T

10W-T

6Y-T

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

WO1-6 48"X24"

MARQUETTE STREET

GRAVEL

ASPH

CONC

ROAD WORK AHEAD W20-1A

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 1	SHEET 46	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC1.DWG
LAYOUT NAME - 02

PLOT DATE : 4/15/2025 9:22 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

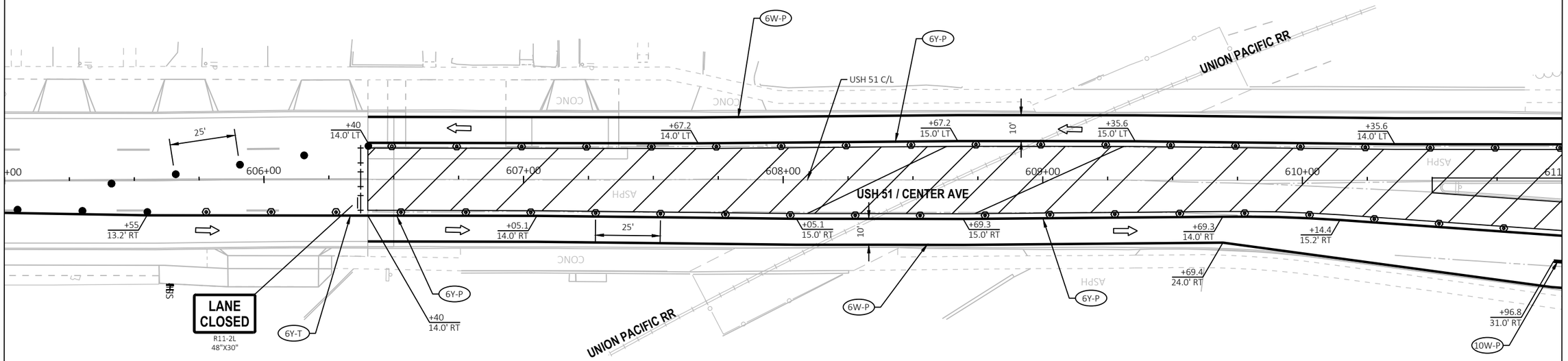
TEMPORARY MARKING LEGEND

- 6Y-P — TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
- 6Y-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 6W-P — TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6W-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- XW-P — TEMPORARY MARKING CROSSWALK PAINT 6-INCH (WHITE)
- 10W-P — TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
- 10W-T — TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)
- ARW-P — TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
- ////// — TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- XXXX — MARKING REMOVAL LINE 6-INCH

TRAFFIC CONTROL LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- ((S)) — CONNECTED WORK ZONE START LOCATION MARKER
- ((E)) — CONNECTED WORK ZONE END LOCATION MARKER
- TRAFFIC CONTROL 42-INCH CONE
- WORK AREA
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN BARRICADE
- TDWF — TEMPORARY DETECTABLE WARNING FIELD

N



PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 1	SHEET 47	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC1.DWG
LAYOUT NAME - 03

PLOT DATE : 4/15/2025 9:22 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

ROAD CLOSED AHEAD
W20-3A
@ WASHINGTON ST

WO11-2 48"X48"
WO16-7L 24"X12"
1

WO11-2 48"X48"
WO16-7R 24"X12"
2

WO11-2 48"X48"
AHEAD
WO16-9P 24"X12"
3

TRAFFIC CONTROL LEGEND

TYPE II / III BARRICADE	TRAFFIC CONTROL 42-INCH CONE
TYPE II / III BARRICADE WTH ATTACHED SIGN	WORK AREA
TRAFFIC CONTROL DRUM	DIRECTION OF TRAFFIC
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	TEMPORARY PEDESTRIAN BARRICADE
CONNECTED ARROW BOARD	TDWF — TEMPORARY DETECTABLE WARNING FIELD
SIGN ON PERMANENT SUPPORT	
SIGN ON TEMPORARY SUPPORT	
((S)) CONNECTED WORK ZONE START LOCATION MARKER	
((E)) CONNECTED WORK ZONE END LOCATION MARKER	

ROAD WORK AHEAD
W20-1A
@ TERRACE ST

N

UNION PACIFIC RR

DELAVAN DR

GRAND AVE

USH 51 C/L

USH 51 / CENTER AVE

WISCONSIN & SOUTHERN RR

MATCH LINE 611+00

MATCH LINE 617+00

MATCH LINE DELAVAN DR

STOP
R1-1
30"X30"

ONLY
R3-50R
30"X36"

LANE CLOSED
R11-2L
48"X30"

ROAD CLOSED
R11-2
48"X30"

WO1-6
48"X24"

R3-2
24"X24"

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED AHEAD
W20-3A

END ROAD WORK
G20-2A
48"X24"

STORM SEWER STRUCTURE REPAIRS,
AND CONCRETE PAVEMENT REPLACEMENT SHES ACROSS BOTH LANES.
SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING
SHORT TERM CLOSURE OF NORTHBOUND LANES.

TEMPORARY MARKING LEGEND

6Y-P	TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
6Y-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
6W-P	TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
6W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
XW-P	TEMPORARY MARKING CROSSWALK PAINT 6-INCH (WHITE)
10W-P	TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
10W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)
ARW-P	TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
//////	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
XXXX	MARKING REMOVAL LINE 6-INCH

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 1	SHEET 48	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC1.DWG
LAYOUT NAME - 04
PLOT DATE : 10/22/2025 12:30 PM
PLOT BY : AXT, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

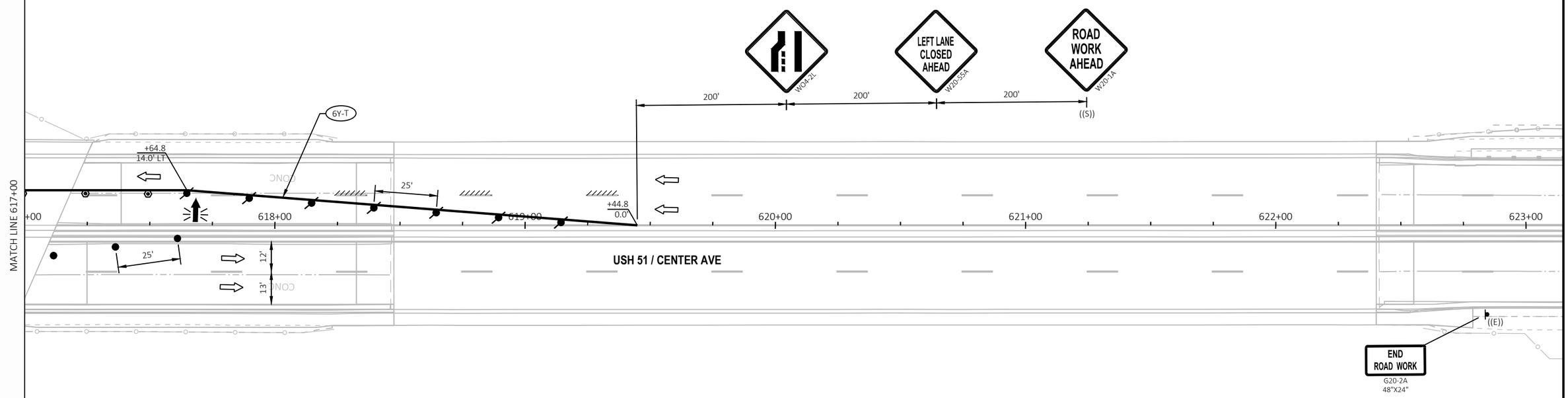
TEMPORARY MARKING LEGEND

6Y-P	TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
6Y-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
6W-P	TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
6W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
XW-P	TEMPORARY MARKING CROSSWALK PAINT 6-INCH (WHITE)
10W-P	TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
10W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)
ARW-P	TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
//////	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
XXXX	MARKING REMOVAL LINE 6-INCH

TRAFFIC CONTROL LEGEND

I/‡	TYPE II / III BARRICADE
I/‡	TYPE II / III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	CONNECTED ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
((S))	CONNECTED WORK ZONE START LOCATION MARKER
((E))	CONNECTED WORK ZONE END LOCATION MARKER
	TRAFFIC CONTROL 42-INCH CONE
	WORK AREA
	DIRECTION OF TRAFFIC
	TEMPORARY PEDESTRIAN BARRICADE
TDWF	TEMPORARY DETECTABLE WARNING FIELD

N



PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 1	SHEET 49 E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC1.DWG
LAYOUT NAME - 05
PLOT DATE : 4/15/2025 9:23 AM
PLOT BY : AXT, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

2

TEMPORARY MARKING LEGEND

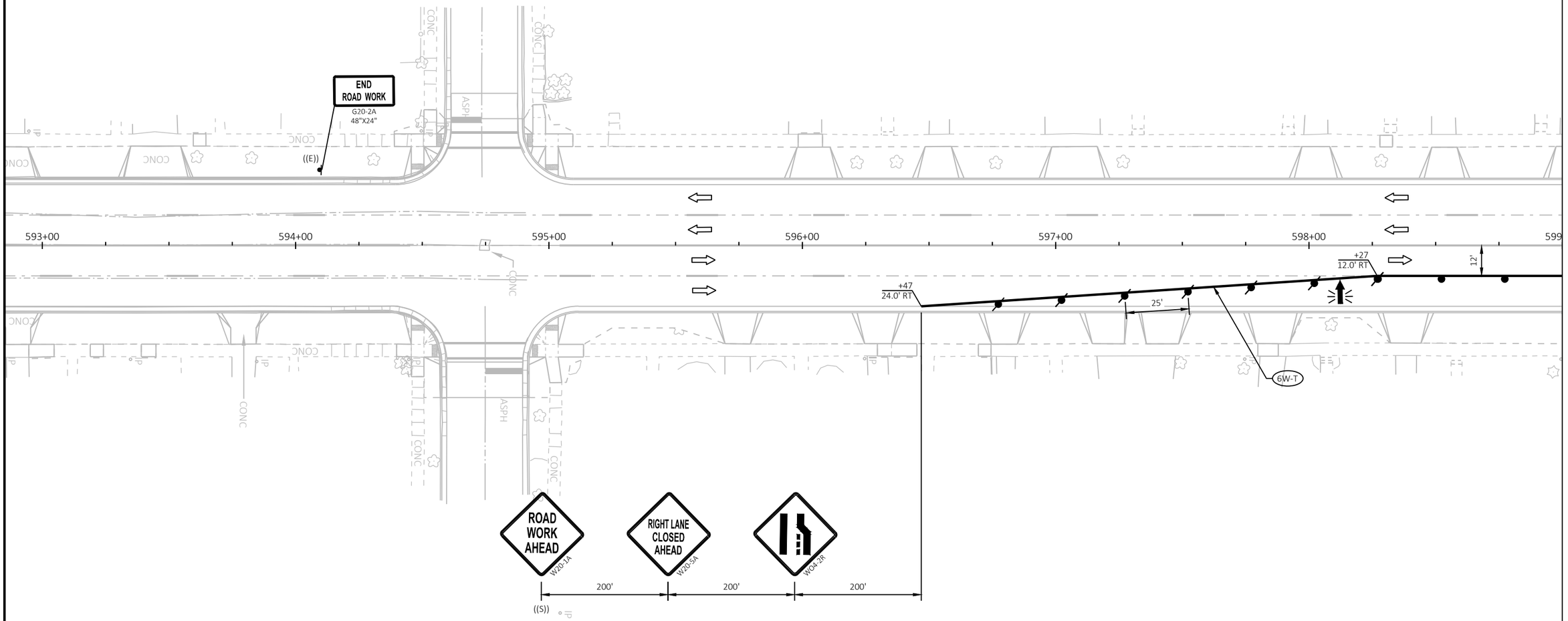
6Y-P	TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
6Y-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
6W-P	TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
6W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
XW-T	TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
10W-P	TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
ARW-P	TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
//////	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
XXXX	MARKING REMOVAL LINE 6-INCH

I/‡	TYPE II / III BARRICADE
I/‡	TYPE II / III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	CONNECTED ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
((S))	CONNECTED WORK ZONE START LOCATION MARKER
((E))	CONNECTED WORK ZONE END LOCATION MARKER

TRAFFIC CONTROL LEGEND

⊙	FLEXIBLE TUBULAR MARKER POST/BASE
⬡	TRAFFIC CONTROL 42-INCH CONE
▨	WORK AREA
⇨	DIRECTION OF TRAFFIC
▭	TEMPORARY PEDESTRIAN BARRICADE
TDWF	TEMPORARY DETECTABLE WARNING FIELD

N



2

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 2	SHEET 50	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC2.DWG
LAYOUT NAME - 01

PLOT DATE : 4/15/2025 9:23 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

2

TEMPORARY MARKING LEGEND

- 6Y-P — TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
- 6Y-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 6W-P — TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6W-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- XW-T — TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
- 10W-P — TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
- ARW-P — TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
- TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- XXXX — MARKING REMOVAL LINE 6-INCH

TRAFFIC CONTROL LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- ((S)) CONNECTED WORK ZONE START LOCATION MARKER
- ((E)) CONNECTED WORK ZONE END LOCATION MARKER
- FLEXIBLE TUBULAR MARKER POST/BASE
- TRAFFIC CONTROL 42-INCH CONE
- WORK AREA
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN BARRICADE
- TDWF — TEMPORARY DETECTABLE WARNING FIELD

N

STATE STREET

USH 51 / CENTER AVE

MARQUETTE STREET

MATCH LINE 599+00

599+00

600+00

601+00

602+00

603+00

604+00

605+00

MATCH LINE 605+00

12'

25'

+34
12.0' RT

+76.2
24.0' RT

+88.5
24.0' RT

+13.3
12.0' RT

+50.1
12.0' RT

6W-T

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

LANE CLOSED
R11-2L
48"X30"

POST CONC @ POST

ASPH

GRAVEL

CONC

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 2	SHEET 51	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC2.DWG
LAYOUT NAME - 02

PLOT DATE : 4/15/2025 9:24 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

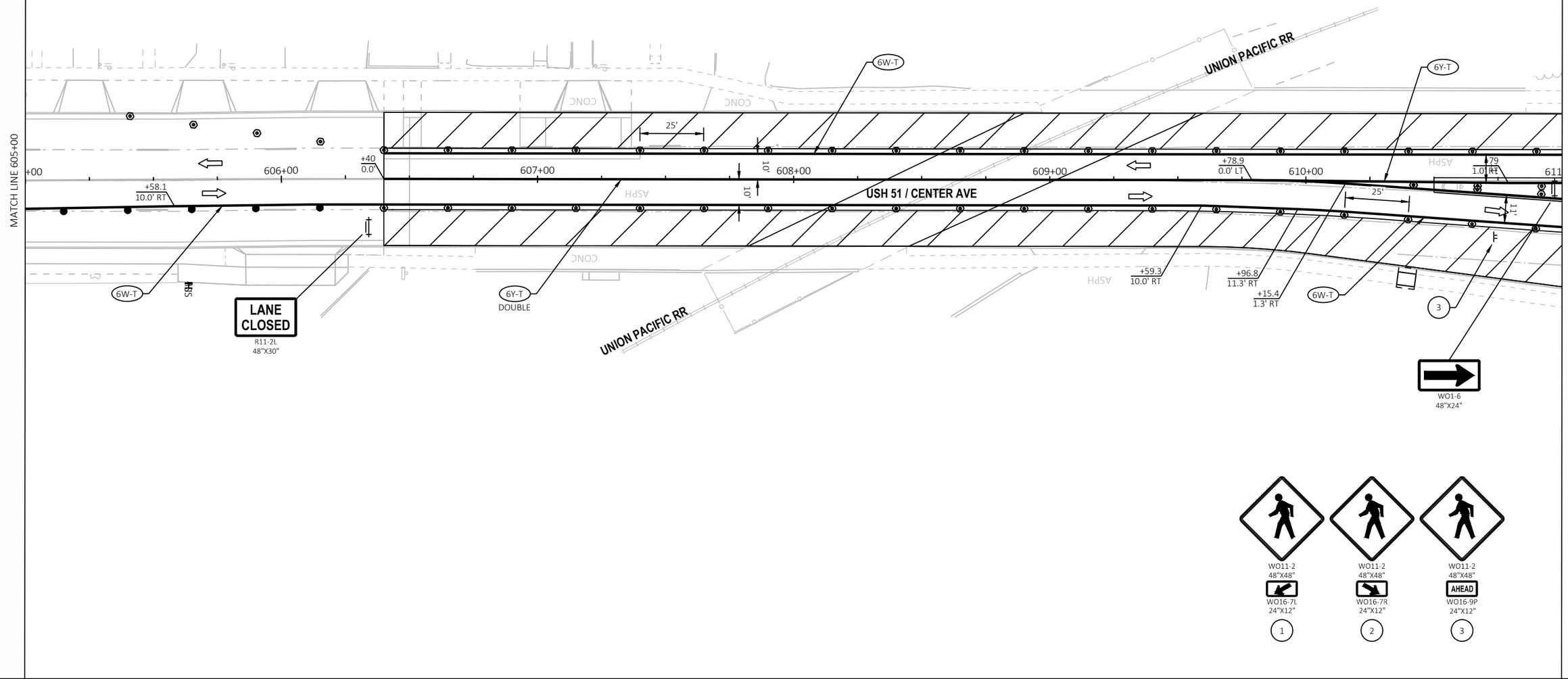
TEMPORARY MARKING LEGEND

- 6Y-P — TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
- 6Y-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 6W-P — TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6W-T — TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- XW-T — TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
- 10W-P — TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
- ARW-P — TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
- TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- XXXX — MARKING REMOVAL LINE 6-INCH

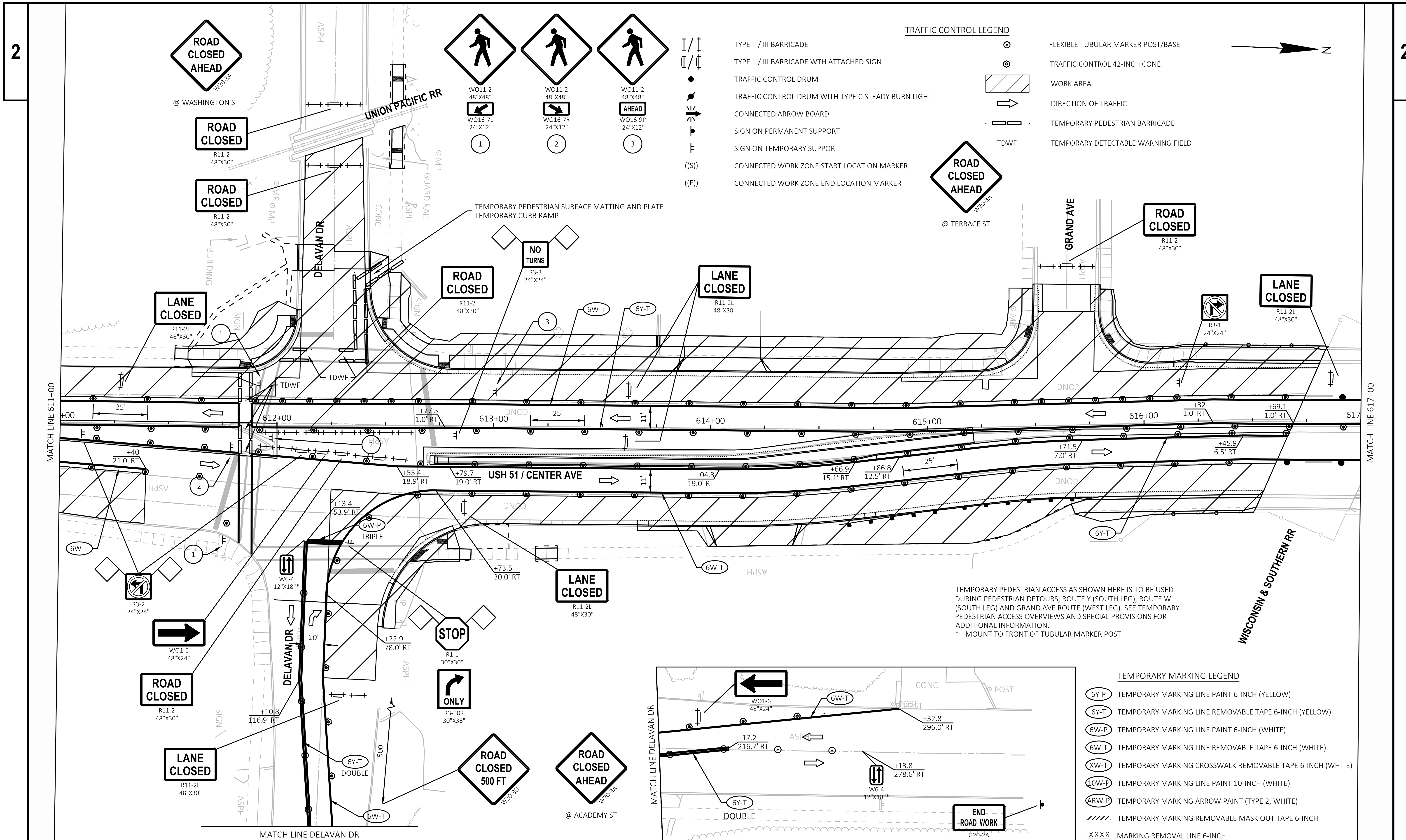
TRAFFIC CONTROL LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- ((S)) — CONNECTED WORK ZONE START LOCATION MARKER
- ((E)) — CONNECTED WORK ZONE END LOCATION MARKER
- FLEXIBLE TUBULAR MARKER POST/BASE
- TRAFFIC CONTROL 42-INCH CONE
- WORK AREA
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN BARRICADE
- TDWF — TEMPORARY DETECTABLE WARNING FIELD

N



PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 2	SHEET 52	E



2
TRAFFIC CONTROL LEGEND
TYPE II / III BARRICADE
TYPE II / III BARRICADE WTH ATTACHED SIGN
TRAFFIC CONTROL DRUM
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
CONNECTED ARROW BOARD
SIGN ON PERMANENT SUPPORT
SIGN ON TEMPORARY SUPPORT
((S)) CONNECTED WORK ZONE START LOCATION MARKER
((E)) CONNECTED WORK ZONE END LOCATION MARKER
FLEXIBLE TUBULAR MARKER POST/BASE
TRAFFIC CONTROL 42-INCH CONE
WORK AREA
DIRECTION OF TRAFFIC
TEMPORARY PEDESTRIAN BARRICADE
TDWF TEMPORARY DETECTABLE WARNING FIELD
N
ROAD CLOSED AHEAD W20-3A @ WASHINGTON ST
ROAD CLOSED R11-2 48"X30"
WO11-2 48"X48" WO16-7L 24"X12" 1
WO11-2 48"X48" WO16-7R 24"X12" 2
WO11-2 48"X48" AHEAD WO16-9P 24"X12" 3
ROAD CLOSED AHEAD W20-3A @ TERRACE ST
UNION PACIFIC RR
DELAVAN DR
GRAND AVE
TEMPORARY PEDESTRIAN SURFACE MATTING AND PLATE
TEMPORARY CURB RAMP
NO TURNS R3-3 24"X24"
LANE CLOSED R11-2L 48"X30"
R3-1 24"X24"
TDWF
MATCH LINE 611+00
MATCH LINE 617+00
612+00 613+00 614+00 615+00 616+00 617
25' 11'
+77.5 1.0' RT
+32 1.0' RT
+69.1 1.0' RT
+40 21.0' RT
+55.4 18.9' RT
+79.7 19.0' RT
USH 51 / CENTER AVE
+04.3 19.0' RT
+66.9 15.1' RT
+86.8 12.5' RT
+71.5 7.0' RT
+45.9 6.5' RT
+13.4 53.9' RT
6W-P TRIPLE
6W-T 6Y-T
+73.5 30.0' RT
+22.9 78.0' RT
+10.8 116.9' RT
W6-4 12"X18"*
R3-2 24"X24"
WO1-6 48"X24"
STOP R1-1 30"X30"
ONLY R3-50R 30"X36"
10'
500'
6Y-T DOUBLE
ROAD CLOSED 500 FT W20-3D
ROAD CLOSED AHEAD W20-3A @ ACADEMY ST
MATCH LINE DELAVAN DR
WISCONSIN & SOUTHERN RR
TEMPORARY PEDESTRIAN ACCESS AS SHOWN HERE IS TO BE USED DURING PEDESTRIAN DETOURS, ROUTE Y (SOUTH LEG), ROUTE W (SOUTH LEG) AND GRAND AVE ROUTE (WEST LEG). SEE TEMPORARY PEDESTRIAN ACCESS OVERVIEWS AND SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.
* MOUNT TO FRONT OF TUBULAR MARKER POST
MATCH LINE DELAVAN DR
WO1-6 48"X24"
+32.8 296.0' RT
+17.2 216.7' RT
+13.8 278.6' RT
W6-4 12"X18"*
6Y-T DOUBLE
END ROAD WORK G20-2A 48"X24"
TEMPORARY MARKING LEGEND
6Y-P TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
6Y-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
6W-P TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
6W-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
XW-T TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
10W-P TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
ARW-P TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
XXXX MARKING REMOVAL LINE 6-INCH

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 2 (TEMP PED DETOUR ROUTES Y AND GRAND AVE SHOWN)	SHEET 53	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC2.DWG
LAYOUT NAME - 04
PLOT DATE : 4/15/2025 9:24 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

TRAFFIC CONTROL LEGEND

- TYPE II / III BARRICADE
- TYPE II / III BARRICADE WTH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- CONNECTED ARROW BOARD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- ((S)) CONNECTED WORK ZONE START LOCATION MARKER
- ((E)) CONNECTED WORK ZONE END LOCATION MARKER
- FLEXIBLE TUBULAR MARKER POST/BASE
- TRAFFIC CONTROL 42-INCH CONE
- WORK AREA
- DIRECTION OF TRAFFIC
- TEMPORARY PEDESTRIAN BARRICADE
- TDWF TEMPORARY DETECTABLE WARNING FIELD

N

ROAD CLOSED AHEAD W20-3A
@ WASHINGTON ST

ROAD CLOSED R11-2 48"X30"

ROAD CLOSED R11-2 48"X30"

WO11-2 48"X48" WO16-7L 24"X12" 1

WO11-2 48"X48" WO16-7R 24"X12" 2

WO11-2 48"X48" AHEAD WO16-9P 24"X12" 3

UNION PACIFIC RR

DELAVAN DR

GUARD RAIL

ROAD CLOSED AHEAD W20-3A
@ TERRACE ST

GRAND AVE

ROAD CLOSED R11-2 48"X30"

LANE CLOSED R11-2L 48"X30"

ROAD CLOSED R11-2 48"X30"

NO TURNS R3-3 24"X24"

LANE CLOSED R11-2L 48"X30"

R3-1 24"X24"

LANE CLOSED R11-2L 48"X30"

MATCH LINE 611+00

MATCH LINE 617+00

611+00 25' 612+00 +73.7 1.0' RT 613+00 25' 614+00 615+00 616+00 +32 1.0' RT +69.1 1.0' RT 617

12.5' 11' 11' 12.5'

TDWF XW-T 6W-T 6Y-T 10W-P

+97.8 25.1' RT +55.4 18.9' RT +04.3 19.0' RT +66.9 15.1' RT +86.8 12.5' RT +71.5 7.0' RT +45.9 6.5' RT

USH 51 / CENTER AVE

6W-P 6Y-P

+86.6 30.0' RT +35.9 65.1' RT

LANE CLOSED R11-2L 48"X30"

6W-T TRIPLE

R3-2 24"X24"

WO1-6 48"X24"

ROAD CLOSED R11-2 48"X30"

+13.1 81.2' RT

TEMPORARY PEDESTRIAN SURFACE MATTING AND PLATE
TEMPORARY CURB RAMP
+10.3 139.0' RT

STOP R1-1 30"X30"

ONLY R3-50R 30"X36"

+33.4 117.0' RT

+31.9 147.0' RT

LANE CLOSED R11-2L 48"X30"

DELAVAN DR

MATCH LINE DELAVAN DR

TEMPORARY PEDESTRIAN ACCESS AS SHOWN HERE IS TO BE USED DURING PEDESTRIAN DETOURS, ROUTE X (NORTH AND EAST LEGS) AND ROUTE Z (NORTH LEG). SEE TEMPORARY PEDESTRIAN ACCESS OVERVIEWS AND SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

WISCONSIN & SOUTHERN RR

ROAD CLOSED 500 FT W20-3D

ROAD CLOSED AHEAD W20-3A

500' 500'

+20.6 214.2' RT

MATCH LINE DELAVAN DR

END ROAD WORK G20-2A 48"X24"

TEMPORARY MARKING LEGEND

- 6Y-P TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
- 6Y-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
- 6W-P TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
- 6W-T TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
- XW-T TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
- 10W-P TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
- 10W-T TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH (WHITE)
- ARW-P TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
- ////// TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
- XXXX MARKING REMOVAL LINE 6-INCH

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 2 (TEMPORARY PEDESTRIAN DETOUR ROUTES X AND Z SHOWN)	SHEET 54	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC2-DELAVAN.DWG
LAYOUT NAME - 03
PLOT DATE : 4/15/2025 9:25 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

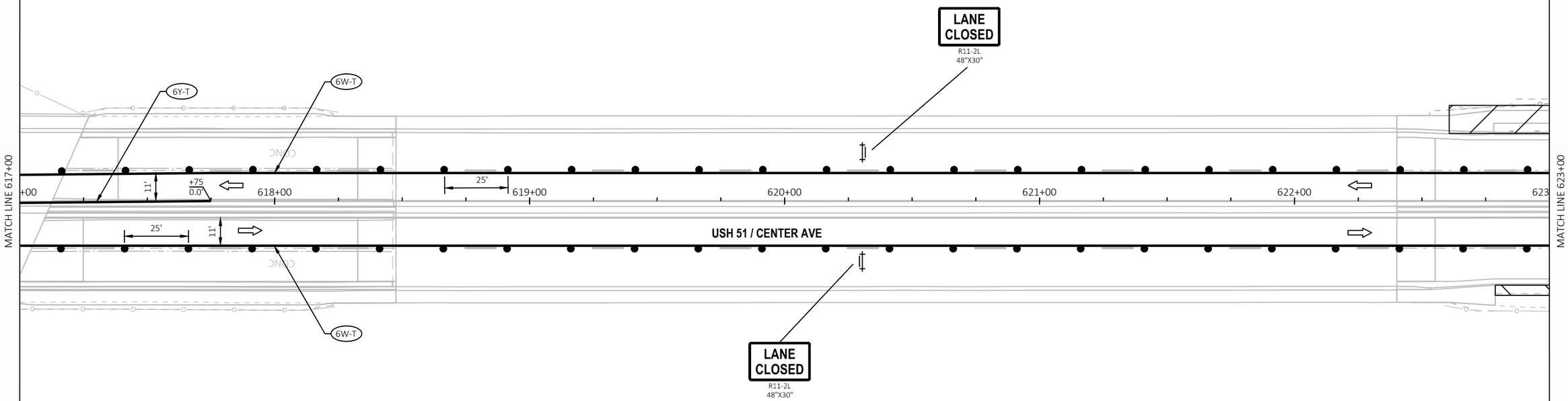
TEMPORARY MARKING LEGEND

6Y-P	TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
6Y-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
6W-P	TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
6W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
XW-T	TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
10W-P	TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
ARW-P	TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
//////	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
XXXX	MARKING REMOVAL LINE 6-INCH

TRAFFIC CONTROL LEGEND

I/I	TYPE II / III BARRICADE
I/I	TYPE II / III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	CONNECTED ARROW BOARD
	SIGN ON PERMANENT SUPPORT
	SIGN ON TEMPORARY SUPPORT
((S))	CONNECTED WORK ZONE START LOCATION MARKER
((E))	CONNECTED WORK ZONE END LOCATION MARKER
⊙	FLEXIBLE TUBULAR MARKER POST/BASE
⊙	TRAFFIC CONTROL 42-INCH CONE
▨	WORK AREA
⇨	DIRECTION OF TRAFFIC
	TEMPORARY PEDESTRIAN BARRICADE
TDWF	TEMPORARY DETECTABLE WARNING FIELD

N



PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 2	SHEET 55 E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC2.DWG
LAYOUT NAME - 05
PLOT DATE : 4/15/2025 9:26 AM
PLOT BY : AXT, ANDREW
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

TEMPORARY MARKING LEGEND

6Y-P	TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
6Y-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
6W-P	TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
6W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
XW-T	TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
10W-P	TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
ARW-P	TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
//////	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
XXXX	MARKING REMOVAL LINE 6-INCH

I/‡	TYPE II / III BARRICADE
I/‡	TYPE II / III BARRICADE WTH ATTACHED SIGN
●	TRAFFIC CONTROL DRUM
●	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
	CONNECTED ARROW BOARD
	SIGN ON PERMANENT SUPPORT
‡	SIGN ON TEMPORARY SUPPORT
((S))	CONNECTED WORK ZONE START LOCATION MARKER
((E))	CONNECTED WORK ZONE END LOCATION MARKER

TRAFFIC CONTROL LEGEND

⊙	FLEXIBLE TUBULAR MARKER POST/BASE
◎	TRAFFIC CONTROL 42-INCH CONE
	WORK AREA
⇨	DIRECTION OF TRAFFIC
	TEMPORARY PEDESTRIAN BARRICADE
TDWF	TEMPORARY DETECTABLE WARNING FIELD

N

LANE CLOSED
R11-2L
48"X30"

ROAD WORK AHEAD
W20-1A
@ WASHINGTON ST

RIVERSIDE STREET

SILL ELEV=767.90

SILL ELEV=767.52

SILL ELEV=767.65

BEGIN RIGHT TURN LANE
R3-2OR
24"X36"

6W-T

25'

11'

12.5'

+16.5
11.0' LT

+70
11.0' LT

MATCH LINE 623+00

+00

624+00

625+00

626+00

627+00

628+00

629

MATCH LINE 629+00

USH 51 / CENTER AVE

+25
17.5' RT

© MP

IP

RIVERSIDE STREET

SILL ELEV=768.38

ROAD WORK AHEAD
W20-1A
@ LINN ST

2

TEMPORARY MARKING LEGEND

6Y-P	TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW)
6Y-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW)
6W-P	TEMPORARY MARKING LINE PAINT 6-INCH (WHITE)
6W-T	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE)
XW-T	TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH (WHITE)
10W-P	TEMPORARY MARKING LINE PAINT 10-INCH (WHITE)
ARW-P	TEMPORARY MARKING ARROW PAINT (TYPE 2, WHITE)
//////	TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
XXXX	MARKING REMOVAL LINE 6-INCH

TRAFFIC CONTROL LEGEND

TYPE II / III BARRICADE	FLEXIBLE TUBULAR MARKER POST/BASE
TYPE II / III BARRICADE WTH ATTACHED SIGN	TRAFFIC CONTROL 42-INCH CONE
TRAFFIC CONTROL DRUM	WORK AREA
TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT	DIRECTION OF TRAFFIC
CONNECTED ARROW BOARD	TEMPORARY PEDESTRIAN BARRICADE
SIGN ON PERMANENT SUPPORT	TDWF — TEMPORARY DETECTABLE WARNING FIELD
SIGN ON TEMPORARY SUPPORT	
CONNECTED WORK ZONE START LOCATION MARKER	
CONNECTED WORK ZONE END LOCATION MARKER	

N

ROAD WORK AHEAD W20-1A
@ WASHINGTON ST

ROCKPORT RD

LANE CLOSED
R11-2L
48"X30"

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

WO4-2R

RIGHT LANE CLOSED AHEAD W20-5A

ROAD WORK AHEAD W20-1A

200' 200' 200'

((S))

6W-T

6W-T

+20.1
11.0' LT

+53
11.0' LT

+20
11.0' LT

+00
22.0' LT

11'

630+00 631+00 632+00 633+00 634+00 635+00

MATCH LINE 629+00

USH 51 / CENTER AVE

SILL ELEV=773.41

DECK

POST

CONC

ASPH

ROCKPORT RD

WILSON AVE

ROAD WORK AHEAD W20-1A
@ LINN ST

ROAD WORK AHEAD W20-1A
@ LINN ST

200'

((E))

END ROAD WORK
G20-2A
48"X24"

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TRAFFIC CONTROL - STAGE 2	SHEET 57	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025101-TC2.DWG
LAYOUT NAME - 07

PLOT DATE : 4/15/2025 9:26 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

LEGEND

WORK AREA

TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT

TEMPORARY AUDIBLE MESSAGE DEVICE

TEMPORARY PEDESTRIAN DETOUR (USH 51 ROUTE Z)

NOTE: SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING TEMPORARY PEDESTRIAN ROUTES.

N

TERRACE ST

STATE ST

WASHINGTON ST

DELAVAN DR

GRAND AVE

WISCONSIN & SOUTHERN RR

UNION PACIFIC RR

RIVERSIDE ST

USH 51 / CENTER AVE

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

DETOUR
M4-9BR
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"

TEMPORARY PEDESTRIAN BARRICADE FOR USE WITH USH 51 ROUTE Z

M4-60D
30"X24"

DETOUR
M4-9BL
30"X24"

598 600 602 604 606 608 610 612 614 616 618 620 622 624 626 628

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BR
30"X24"

M4-60D
30"X24"

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BR
30"X24"

DELAVAN DR

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TEMPORARY PEDESTRIAN ACCESS OVERVIEW (STAGE 2A - ROUTE Z)	SHEET 58	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025100-TC-PEDOV2A-RTZ.DWG
LAYOUT NAME - PO

PLOT DATE : 4/15/2025 9:27 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK AREA

TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT

TEMPORARY AUDIBLE MESSAGE DEVICE

TEMPORARY PEDESTRIAN DETOUR (USH 51 ROUTE Y)

NOTE: SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING TEMPORARY PEDESTRIAN ROUTES.

N

TERRACE ST

STATE ST

DELAVAN DR

GRAND AVE

WISCONSIN & SOUTHERN RR

UNION PACIFIC RR

RIVERSIDE ST

WASHINGTON ST

USH 51 / CENTER AVE

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

DETOUR
M4-9BR
30"X24"

TEMPORARY PEDESTRIAN BARRICADE FOR USE WITH USH 51 ROUTE Y

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

DETOUR
M4-9BL
30"X24"

M4-60D
30"X24"

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BR
30"X24"

DELAVAN DR

598 600 602 604 606 608 610 612 614 616 618 620 622 624 626 628

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TEMPORARY PEDESTRIAN ACCESS OVERVIEW (STAGE 2A - ROUTE Y)	SHEET 59	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025100-TC-PEDOV2A-RTY.DWG
LAYOUT NAME - PO

PLOT DATE : 4/15/2025 9:27 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:200 FT

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TEMPORARY PEDESTRIAN ACCESS OVERVIEW (STAGE 2A - GRAND AVE ROUTE)	SHEET 60	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025100-TC-PEDOV2A-RTGRAND.DWG
LAYOUT NAME - PO

PLOT DATE : 4/15/2025 9:28 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

WORK AREA

TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT

TEMPORARY AUDIBLE MESSAGE DEVICE

TEMPORARY PEDESTRIAN DETOUR (USH 51 ROUTE X)

NOTE: SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING TEMPORARY PEDESTRIAN ROUTES.

N

TERRACE ST

STATE ST

WASHINGTON ST

DELAVAN DR

GRAND AVE

WISCONSIN & SOUTHERN RR

UNION PACIFIC RR

RIVERSIDE ST

USH 51 / CENTER AVE

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BL
30"X24"

DETOUR
M4-9BR
30"X24"

SIDEWALK CLOSED
R9-9
24"X12"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

SIDEWALK CLOSED AHEAD
R9-9A
30"X18"

M4-60R
30"X24"

DETOUR
M4-9BR
30"X24"

DETOUR
M4-9BL
30"X24"

600 602 604 606 608 610 612 614 616 618 620 622 624 626 628

DELAVAN DR

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TEMPORARY PEDESTRIAN ACCESS OVERVIEW (STAGE 2B - ROUTE X)	SHEET 61	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025100-TC-PEDOV2B-RTX.DWG
LAYOUT NAME - PO

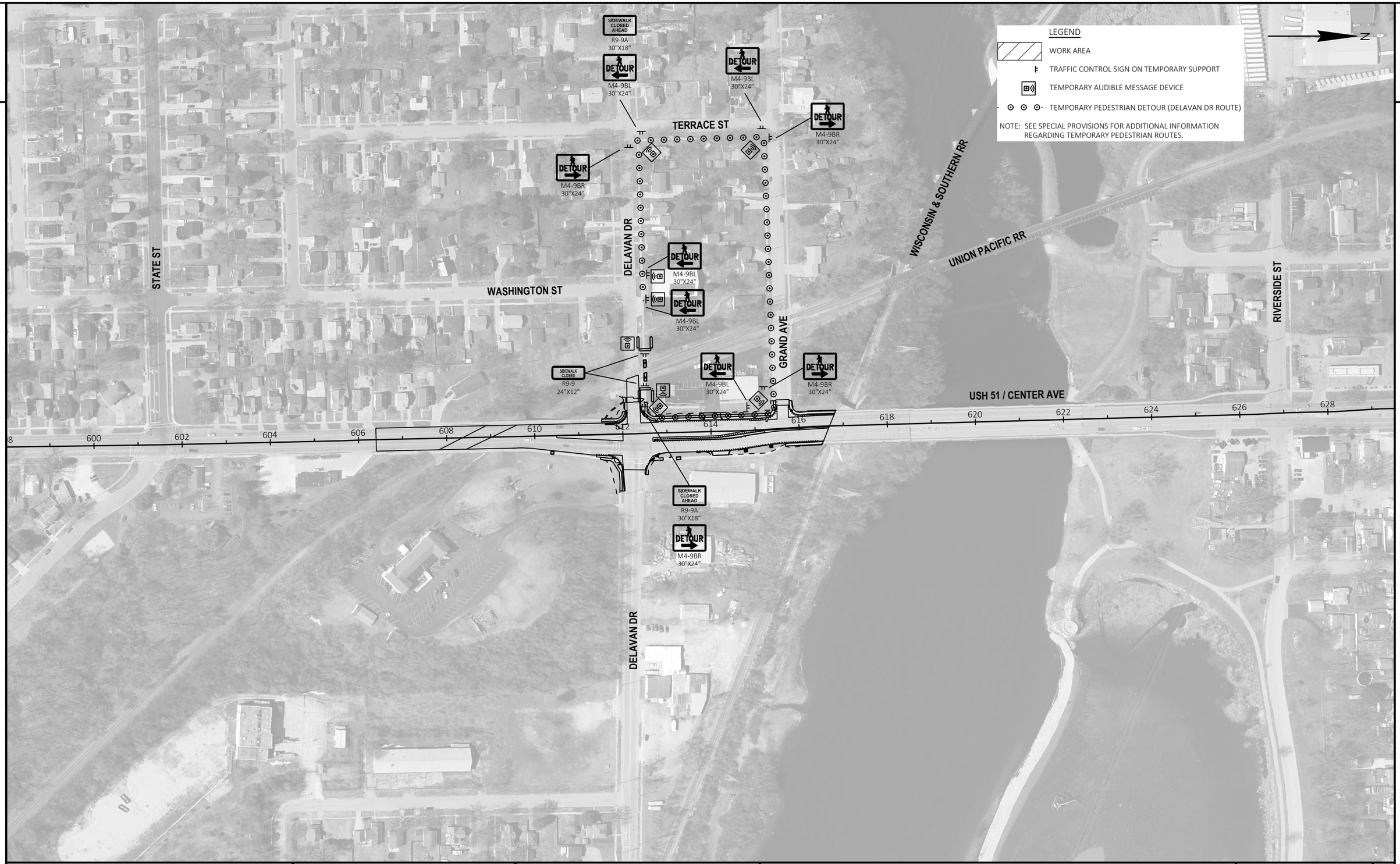
PLOT DATE : 4/15/2025 9:28 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

2


LEGEND
WORK AREA
TRAFFIC CONTROL SIGN ON TEMPORARY SUPPORT
TEMPORARY AUDIBLE MESSAGE DEVICE
TEMPORARY PEDESTRIAN DETOUR (USH 51 ROUTE W)
NOTE: SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION REGARDING TEMPORARY PEDESTRIAN ROUTES.
N
TERRACE ST
WASHINGTON ST
STATE ST
DELAVAN DR
GRAND AVE
WISCONSIN & SOUTHERN RR
UNION PACIFIC RR
RIVERSIDE ST
USH 51 / CENTER AVE
600
602
604
606
608
610
612
614
616
618
620
622
624
626
628
DETOUR
M4-9BR
30"X24"
DETOUR
M4-9BL
30"X24"
SIDEWALK CLOSED AHEAD
R9-9A
30"X18"
DETOUR
M4-9BL
30"X24"
DETOUR
M4-9BR
30"X24"
DETOUR
M4-9BL
30"X24"
SIDEWALK CLOSED AHEAD
R9-9A
30"X18"
DETOUR
M4-9BR
30"X24"
SIDEWALK CLOSED
R9-9
24"X12"

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TEMPORARY PEDESTRIAN ACCESS OVERVIEW (STAGE 2B - ROUTE W)	SHEET 62	E



PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	TEMPORARY PEDESTRIAN ACCESS OVERVIEW (STAGE 2B - DELAVAN DR ROUTE)	SHEET 63	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\025100-TC-PEDOV2B-RTDELAVAN.DWG
LAYOUT NAME - PO

PLOT DATE : 4/15/2025 9:29 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:200 FT

2

STATE ST

NO EXISTING MONUMENT
Y = 262298.90
X = 488320.91

PI: 601+51.83

PI: 605+58.00

600+00 601+00 602+00 603+00 L2 604+00 605+00 L2 L3 606

USH 51 / CENTER AVE

CUT X IN MANHOLE COVER
Y = 262310.13
X = 493639.57

USH 51 R/L = SECTION LINE

CP 103

USH 51 C/L

STA 605+58
END USH 51 R/L = SECTION LINE

MARQUETTE ST

NO EXISTING MONUMENT
Y = 262310.13
X = 493639.57

MATCH LINE 606+00

2

MATCH LINE 606+00

PI: 606+11.01

STA 606+11.01
BEGIN SECTION LINE 0.75' RT
OF USH 51 R/L

CP 104

USH 51 C/L

CP 151

STA 611+97.43
END SECTION LINE 0.75' RT OF
USH 51 C/L

+00 607+00 608+00 L4 609+00 610+00 611+00 L4 612

0.75'

0.75'

CP 153

USH 51 / CENTER AVE

SECTION LINE

BM 1004

UNION PACIFIC RR

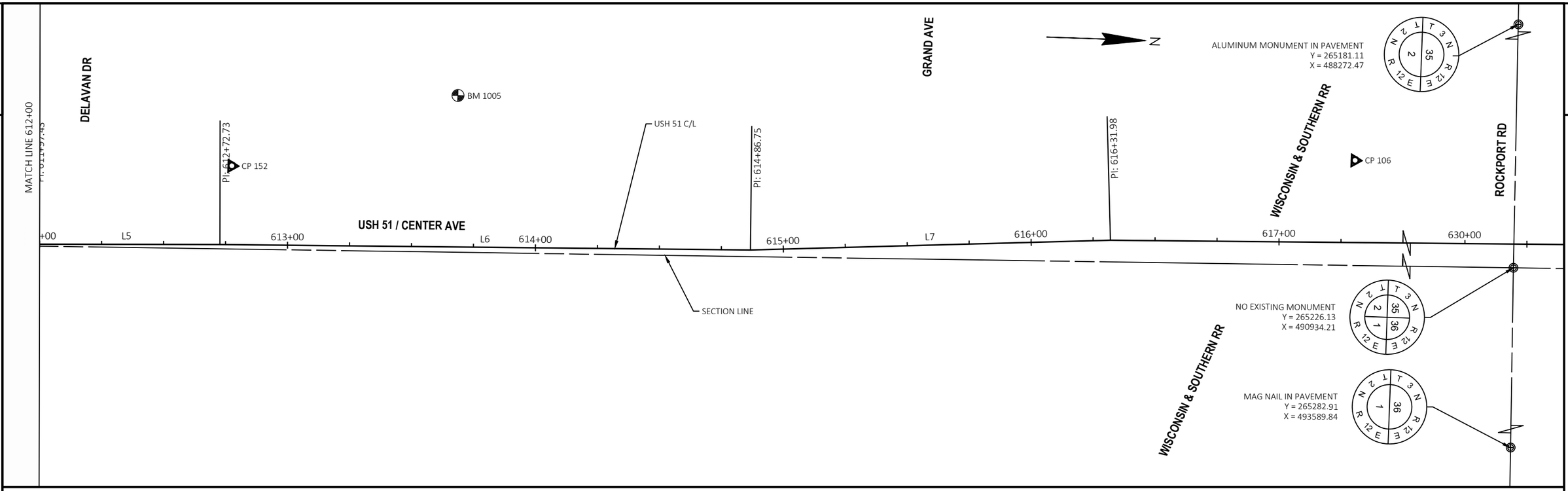
MATCH LINE 612+00

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	ALIGNMENT PLAN	SHEET 64	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\027201-AD.DWG
LAYOUT NAME - 01

PLOT DATE : 4/15/2025 9:29 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44



2

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	ALIGNMENT PLAN	SHEET 65	E

ALIGNMENT TABLE - USH 51 C/L						
NUMBER	BEGIN LINE (STA)	END LINE (STA)	BEGIN LINE (Y,X)	END LINE (Y,X)	LENGTH	BEARING AHEAD
L1	575+00.00	601+51.83	259707.75 491037.32	262359.28 490997.95	2651.83'	N0°51'02.3"W
L2	601+51.83	605+58.00	262359.28 490997.95	262765.36 490988.92	406.17'	N1°16'25.4"W
L3	605+58.00	606+11.01	262765.36 490988.92	262818.33 490987.00	53.01'	N2°05'04.0"W
L4	606+11.01	611+97.43	262818.33 490987.00	263404.61 490973.96	586.42'	N1°16'25.4"W
L5	611+97.43	612+72.73	263404.61 490973.96	263479.86 490971.32	75.30'	N2°00'24.5"W
L6	612+72.73	614+86.75	263479.86 490971.32	263693.81 490965.60	214.02'	N1°31'55.5"W
L7	614+86.75	616+31.98	263693.81 490965.60	263838.74 490956.33	145.23'	N3°39'28.7"W
L8	616+31.98	622+41.54	263838.74 490956.33	264448.07 490939.56	609.55'	N1°34'38.5"W
L9	622+41.54	626+41.21	264448.07 490939.56	264847.59 490928.54	399.67'	N1°34'47.1"W
L10	626+41.21	627+13.30	264847.59 490928.54	264919.59 490925.02	72.09'	N2°47'43.8"W
L15	627+13.30	628+18.01	264919.59 490925.02	265024.28 490922.69	104.72'	N1°16'25.4"W
L16	628+18.01	629+18.09	265024.28 490922.69	265124.17 490916.47	100.08'	N3°33'51.6"W
L17	629+18.09	629+88.35	265124.17 490916.47	265194.40 490914.91	70.26'	N1°16'25.4"W
L11	629+88.35	630+57.35	265194.40 490914.91	265263.27 490910.73	69.00'	N3°28'18.9"W
L18	630+57.35	631+81.71	265263.27 490910.73	265387.54 490905.84	124.36'	N2°15'08.3"W
L19	631+81.71	632+81.79	265387.54 490905.84	265487.62 490905.91	100.08'	N0°02'17.9"E
L20	632+81.79	643+26.64	265487.62 490905.91	266531.66 490864.85	1044.85'	N2°15'08.3"W

BENCHMARKS & CONTROL POINTS TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
BM 1003	601+39.83	105.63' RT	262348.853	491103.751	839.880	NW CORNER OF AT&T CONCRETE PAD
BM 1004	606+79.74	35.79' RT	262887.838	491021.247	839.085	ALUMINUM CAP ON SE-MOST WALL OF BRIDGE
BM 1005	613+68.09	61.02' LT	263573.555	490907.780	809.697	NE CORNER OF CONCRETE FLAGPOLE BASE AT 966 CENTER AVE
BM 1008	630+59.60	43.88' LT	265263.801	490866.799	772.708	NE CORNER OF STOOP AT 624 CENTER AVE
CP 103	600+94.10	48.11' RT	262302.278	491046.917	840.189	CAPPED 1″ IRON PIPE AT THE SE QUADRANT OF THE MARQUETTE ST INTERSECTION
CP 104	607+36.63	31.31' LT	262943.222	490952.902	835.690	CAPPED 1″ IRON PIPE IN THE WEST TERRACE AT 1038 CENTER AVE
CP 106	617+30.33	33.10' LT	263936.138	490920.536	803.454	CUT "T" IN THE WEST SIDEWALK ON THE NORTH SIDE OF RAILROAD BRIDGE
CP 108	630+54.82	80.70' RT	265265.634	490991.440	772.452	CAPPED 1″ BEHIND WALK AT THE NE QUADRANT OF THE ROCKPORT RD INTERSECTION
CP 151	609+08.36	30.01' LT	263114.938	490950.380	832.009	CUT "T" IN THE SIDEWALK ON THE WEST SIDE OF CENTER AVE
CP 152	612+77.18	31.74' LT	263483.459	490939.475	810.053	CUT "T" IN THE SIDEWALK IN THE NW QUADRANT OF THE DELAVAN DR INTERSECTION
CP 153	611+47.28	5.63' RT	263354.594	490980.708	817.025	CUT "T" IN THE CONCRETE MEDIAN OF CENTER AVE AT THE DELAVAN DR INTERSECTION

Estimate Of Quantities

Line	Item	Item Description	Unit	Total	5350-02-65 Qty	5350-02-75 Qty
0002	203.0211.S	Abatement of Asbestos Containing Material (structure) 001. Barrier Walls	EACH	2.000		2.000
0004	204.0100	Removing Concrete Pavement	SY	403.000		403.000
0006	204.0105	Removing Concrete Pavement Butt Joints	SY	41.000		41.000
0008	204.0109.S	Removing Concrete Surface Partial Depth	SF	26,238.000		26,238.000
0010	204.0110	Removing Asphaltic Surface	SY	32.000		32.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	107.000		107.000
0014	204.0120	Removing Asphaltic Surface Milling	SY	4,348.000		4,348.000
0016	204.0150	Removing Curb & Gutter	LF	965.000		965.000
0018	204.0155	Removing Concrete Sidewalk	SY	736.000		736.000
0020	204.0157	Removing Concrete Barrier	LF	183.000		183.000
0022	204.0195	Removing Concrete Bases	EACH	11.000		11.000
0024	204.0220	Removing Inlets	EACH	3.000		3.000
0026	204.0245	Removing Storm Sewer (size) 012. 12-Inch	LF	21.000		21.000
0028	204.0245	Removing Storm Sewer (size) 015. 15-Inch	LF	44.000		44.000
0030	204.9060.S	Removing (item description) 201. Traffic Signals USH 51 & Delavan Dr	EACH	1.000		1.000
0032	204.9060.S	Removing (item description) 202. Loop Detector Wire and Lead-In Cable USH 51 & Delavan Dr	EACH	1.000		1.000
0034	205.0100	Excavation Common	CY	618.000		618.000
0036	213.0100	Finishing Roadway (project) 001. 5350-02-65	EACH	1.000	1.000	
0038	213.0100	Finishing Roadway (project) 004. 5350-02-75	EACH	1.000		1.000
0040	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	784.000		784.000
0042	320.0145	Concrete Base 8-Inch	SY	315.000		315.000
0044	320.0165	Concrete Base 10-Inch	SY	127.000		127.000
0046	416.0610	Drilled Tie Bars	EACH	636.000		636.000
0048	416.0620	Drilled Dowel Bars	EACH	15.000		15.000
0050	416.1725	Concrete Pavement Replacement SHES	SY	67.000		67.000
0052	455.0605	Tack Coat	GAL	407.000		407.000
0054	460.2000	Incentive Density HMA Pavement	DOL	530.000		530.000
0056	460.6424	HMA Pavement 4 MT 58-28 H	TON	828.000		828.000
0058	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	5.000		5.000
0060	502.3200	Protective Surface Treatment	SY	383.000	383.000	
0062	502.3215	Protective Surface Treatment Reseal	SY	121.000	121.000	
0064	509.0301	Preparation Decks Type 1	SY	25.000	25.000	
0066	509.1200	Curb Repair	LF	133.000	133.000	
0068	509.1500	Concrete Surface Repair	SF	10.000	10.000	
0070	509.2500	Concrete Masonry Overlay Decks	CY	22.000	22.000	
0072	509.9010.S	Removing Asphaltic Concrete Deck Overlay (structure) 001. B-53-135	SY	383.000	383.000	
0074	513.9006.S	Removing and Resetting Tubular Railing (structure) 001. Barrier Walls	EACH	2.000		2.000
0076	601.0417	Concrete Curb & Gutter 30-Inch Type K	LF	932.000		932.000
0078	601.0419	Concrete Curb & Gutter 30-Inch Type L	LF	74.000		74.000
0080	602.0405	Concrete Sidewalk 4-Inch	SF	4,730.000		4,730.000
0082	602.0415	Concrete Sidewalk 6-Inch	SF	403.000		403.000
0084	602.0820	Concrete Driveway 8-Inch	SY	89.000		89.000
0086	603.0105	Concrete Barrier Single-Faced 32-Inch	LF	144.000		144.000
0088	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	21.000		21.000
0090	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	44.000		44.000
0092	611.0420	Reconstructing Manholes	EACH	2.000		2.000
0094	611.0624	Inlet Covers Type H	EACH	3.000		3.000
0096	611.0651	Inlet Covers Type S	EACH	2.000		2.000

Line	Item	Item Description	Unit	Total	5350-02-65 Qty	5350-02-75 Qty
0098	611.3004	Inlets 4-FT Diameter	EACH	3.000		3.000
0100	611.8110	Adjusting Manhole Covers	EACH	3.000		3.000
0102	611.8115	Adjusting Inlet Covers	EACH	6.000		6.000
0104	614.2300	MGS Guardrail 3	LF	25.000		25.000
0106	614.2500	MGS Thrie Beam Transition	LF	39.000		39.000
0108	614.2610	MGS Guardrail Terminal EAT	EACH	1.000		1.000
0110	616.0405	Fence Chain Link Salvaged 5-FT	LF	112.000		112.000
0112	619.1000	Mobilization	EACH	1.000	0.140	0.860
0114	620.0300	Concrete Median Sloped Nose	SF	18.000		18.000
0116	624.0100	Water	MGAL	17.000		17.000
0118	625.0100	Topsoil	SY	988.000		988.000
0120	627.0200	Mulching	SY	48.000		48.000
0122	628.1905	Mobilizations Erosion Control	EACH	5.000		5.000
0124	628.1910	Mobilizations Emergency Erosion Control	EACH	5.000		5.000
0126	628.7005	Inlet Protection Type A	EACH	4.000		4.000
0128	628.7010	Inlet Protection Type B	EACH	12.000		12.000
0130	628.7015	Inlet Protection Type C	EACH	20.000		20.000
0132	629.0210	Fertilizer Type B	CWT	0.660		0.660
0134	630.0200	Seeding Temporary	LB	2.000		2.000
0136	631.0300	Sod Water	MGAL	23.000		23.000
0138	631.1000	Sod Lawn	SY	943.000		943.000
0140	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	2.000		2.000
0142	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	5.000		5.000
0144	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	8.000		8.000
0146	634.0812	Posts Tubular Steel 2x2-Inch X 12-FT	EACH	3.000		3.000
0148	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	1.000		1.000
0150	637.2210	Signs Type II Reflective H	SF	163.430		163.430
0152	637.2215	Signs Type II Reflective H Folding	SF	20.720		20.720
0154	637.2230	Signs Type II Reflective F	SF	9.000		9.000
0156	638.2102	Moving Signs Type II	EACH	4.000		4.000
0158	638.2602	Removing Signs Type II	EACH	14.000		14.000
0160	638.3000	Removing Small Sign Supports	EACH	5.000		5.000
0162	638.4000	Moving Small Sign Supports	EACH	2.000		2.000
0164	643.0300	Traffic Control Drums	DAY	8,630.000		8,630.000
0166	643.0420	Traffic Control Barricades Type III	DAY	2,455.000		2,455.000
0168	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	11.000		11.000
0170	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	11.000		11.000
0172	643.0705	Traffic Control Warning Lights Type A	DAY	4,915.000		4,915.000
0174	643.0715	Traffic Control Warning Lights Type C	DAY	1,161.000		1,161.000
0176	643.0810	Traffic Control Connected Arrow Boards	DAY	168.000		168.000
0178	643.0900	Traffic Control Signs	DAY	6,392.000		6,392.000
0180	643.1050	Traffic Control Signs PCMS	DAY	42.000		42.000
0182	643.1070	Traffic Control Cones 42-Inch	DAY	9,821.000		9,821.000
0184	643.1220	Traffic Control Connected Work Zone Start and End Location Markers	DAY	331.000		331.000
0186	643.3165	Temporary Marking Line Paint 6-Inch	LF	4,044.000		4,044.000
0188	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	9,281.000		9,281.000
0190	643.3265	Temporary Marking Line Paint 10-Inch	LF	70.000		70.000
0192	643.3280	Temporary Marking Line Removable Tape 10-Inch	LF	100.000		100.000
0194	643.3305	Temporary Marking Crosswalk Paint 6-inch	LF	167.000		167.000

Line	Item	Item Description	Unit	Total	5350-02-65 Qty	5350-02-75 Qty
0196	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	280.000		280.000
0198	643.3505	Temporary Marking Arrow Paint	EACH	1.000		1.000
0200	643.3550	Temporary Marking Arrow Removable Tape	EACH	2.000		2.000
0202	643.3960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	150.000		150.000
0204	643.5000	Traffic Control	EACH	1.000		1.000
0206	644.1430	Temporary Pedestrian Surface Plate	SF	50.000		50.000
0208	644.1440	Temporary Pedestrian Surface Matting	SF	80.000		80.000
0210	644.1601	Temporary Pedestrian Curb Ramp	DAY	20.000		20.000
0212	644.1605	Temporary Pedestrian Detectable Warning Field	SF	100.000		100.000
0214	644.1810	Temporary Pedestrian Barricade	LF	670.000		670.000
0216	644.1900.S	Temporary Audible Message Devices	DAY	370.000		370.000
0218	646.2020	Marking Line Epoxy 6-Inch	LF	2,527.000		2,527.000
0220	646.4020	Marking Line Epoxy 10-Inch	LF	539.000		539.000
0222	646.5020	Marking Arrow Epoxy	EACH	5.000		5.000
0224	646.6020	Marking Stop Line Epoxy 12-Inch	LF	27.000		27.000
0226	646.6120	Marking Stop Line Epoxy 18-Inch	LF	151.000		151.000
0228	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	578.000		578.000
0230	646.8120	Marking Curb Epoxy	LF	10.000		10.000
0232	646.8220	Marking Island Nose Epoxy	EACH	1.000		1.000
0234	646.9002	Marking Removal Line 6-Inch	LF	225.000		225.000
0236	650.4000	Construction Staking Storm Sewer	EACH	3.000		3.000
0238	650.4500	Construction Staking Subgrade	LF	456.000		456.000
0240	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	74.000		74.000
0242	650.6501	Construction Staking Structure Layout (structure) 001. B-53-135	EACH	1.000	1.000	
0244	650.8000	Construction Staking Resurfacing Reference	LF	1,029.000		1,029.000
0246	650.8501	Construction Staking Electrical Installations (project) 004. 5350-02-75	EACH	1.000		1.000
0248	650.9000	Construction Staking Curb Ramps	EACH	10.000		10.000
0250	650.9500	Construction Staking Sidewalk (project) 004. 5350-02-75	EACH	1.000		1.000
0252	650.9911	Construction Staking Supplemental Control (project) 004. 5350-02-75	EACH	1.000		1.000
0254	650.9920	Construction Staking Slope Stakes	LF	400.000		400.000
0256	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,830.000		1,830.000
0258	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	647.000		647.000
0260	652.0605	Conduit Special 2-Inch	LF	216.000		216.000
0262	652.0615	Conduit Special 3-Inch	LF	464.000		464.000
0264	653.0140	Pull Boxes Steel 24x42-Inch	EACH	21.000		21.000
0266	653.0905	Removing Pull Boxes	EACH	6.000		6.000
0268	654.0101	Concrete Bases Type 1	EACH	6.000		6.000
0270	654.0102	Concrete Bases Type 2	EACH	2.000		2.000
0272	654.0120	Concrete Bases Type 10-Special	EACH	2.000		2.000
0274	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000		1.000
0276	655.0230	Cable Traffic Signal 5-14 AWG	LF	495.000		495.000
0278	655.0240	Cable Traffic Signal 7-14 AWG	LF	791.000		791.000
0280	655.0260	Cable Traffic Signal 12-14 AWG	LF	1,738.000		1,738.000
0282	655.0320	Cable Type UF 2-10 AWG Grounded	LF	679.000		679.000
0284	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,651.000		1,651.000
0286	655.0610	Electrical Wire Lighting 12 AWG	LF	5,212.000		5,212.000
0288	655.0615	Electrical Wire Lighting 10 AWG	LF	4,860.000		4,860.000
0290	655.0620	Electrical Wire Lighting 8 AWG	LF	3,468.000		3,468.000
0292	655.0900	Traffic Signal EVP Detector Cable	LF	943.000		943.000

Line	Item	Item Description	Unit	Total	5350-02-65 Qty	5350-02-75 Qty
0294	656.0201	Electrical Service Meter Breaker Pedestal (location) 201. USH 51 & Delavan Dr	EACH	1.000		1.000
0296	657.0100	Pedestal Bases	EACH	6.000		6.000
0298	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	2.000		2.000
0300	657.0310	Poles Type 3	EACH	2.000		2.000
0302	657.0352	Poles Type 10-Special	EACH	2.000		2.000
0304	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	1.000		1.000
0306	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	3.000		3.000
0308	657.0430	Traffic Signal Standards Aluminum 10-FT	EACH	2.000		2.000
0310	657.0541	Monotube Arms 40-FT-Special	EACH	1.000		1.000
0312	657.0546	Monotube Arms 45-FT-Special	EACH	1.000		1.000
0314	657.0590	Trombone Arms 20-FT	EACH	1.000		1.000
0316	657.0595	Trombone Arms 25-FT	EACH	1.000		1.000
0318	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	2.000		2.000
0320	657.0812	Luminaire Arms Steel 12-FT	EACH	2.000		2.000
0322	658.0173	Traffic Signal Face 3S 12-Inch	EACH	8.000		8.000
0324	658.0174	Traffic Signal Face 4S 12-Inch	EACH	6.000		6.000
0326	658.0175	Traffic Signal Face 5S 12-Inch	EACH	2.000		2.000
0328	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000		8.000
0330	658.5070	Signal Mounting Hardware (location) 201. USH 51 & Delavan Dr	EACH	1.000		1.000
0332	659.1125	Luminaires Utility LED C	EACH	4.000		4.000
0334	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor	EACH	19.000		19.000
0336	674.0300	Remove Cable	LF	3,631.000		3,631.000
0338	690.0150	Sawing Asphalt	LF	129.000		129.000
0340	690.0250	Sawing Concrete	LF	2,254.000		2,254.000
0342	715.0502	Incentive Strength Concrete Structures	DOL	500.000	500.000	
0344	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,200.000		1,200.000
0346	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	600.000		600.000
0348	SPV.0060	Special 101. Utility Line Opening (ULO)	EACH	10.000		10.000
0350	SPV.0060	Special 102. Adjusting Water Valve Boxes	EACH	3.000		3.000
0352	SPV.0060	Special 103. Installing City Supplied Street Name Signs	EACH	2.000		2.000
0354	SPV.0060	Special 104. Storm Sewer Structure Repair	EACH	1.000		1.000
0356	SPV.0060	Special 105. Manhole Covers Type COJ	EACH	1.000		1.000
0358	SPV.0060	Special 201. Furnish & Install Traffic Signal Cabinet & Controller USH 51 & Delavan Dr	EACH	1.000		1.000
0360	SPV.0060	Special 202. Furnish & Install EVP System USH 51 & Delavan Dr	EACH	1.000		1.000
0362	SPV.0060	Special 203. Furnish & Install Audible Pedestrian Push Button System USH 51 & Delavan Dr	EACH	1.000		1.000
0364	SPV.0060	Special 204. Traffic Signal LED No Right Turn Blank Out Signs	EACH	2.000		2.000
0366	SPV.0060	Special 205. Artificial Intelligence Vehicle Detection System USH 51 & Delavan Dr	EACH	1.000		1.000
0368	SPV.0060	Special 401. Near-Surface Mounted Carbon Fiber Reinforcement	EACH	22.000	22.000	
0370	SPV.0090	Special 101. Concrete Curb & Gutter 18-Inch Type K	LF	356.000		356.000
0372	SPV.0090	Special 102. Concrete Joint and Crack Plunge Milling and Patching	LF	568.000		568.000
0374	SPV.0090	Special 103. Concrete Joint and Crack Cleaning	LF	1,256.000		1,256.000

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REMOVALS

CATEGORY	STATION	TO	STATION	LOCATION	203.0211.S.001 ABATEMENT OF ASBESTOS CONTAINING MATERIAL BARRIER WALLS EACH	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0105 REMOVING CONCRETE PAVEMENT BUTT JOINTS SY	204.0109.S REMOVING CONCRETE SURFACE PARTIAL DEPTH SF	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0150 REMOVING CURB & GUTTER LF	204.0155 REMOVING CONCRETE SIDEWALK SY	204.0157 REMOVING CONCRETE BARRIER LF	204.0220 REMOVING INLETS EACH	204.0245.012 REMOVING STORM SEWER 12-INCH LF	204.0245.015 REMOVING STORM SEWER 15-INCH LF	616.0405 FENCE CHAIN LINK SALVAGED 5-FT LF
0010	605+00	-	611+00		-	19	-	-	-	24	2,381	-	26	-	-	-	-	0
	611+00	-	617+00		2	384	41	26,238	32	83	1,967	965	710	183	3	21	44	112
				TOTAL 0010	**2**	**403**	**41**	**26,238**	**32**	**107**	**4,348**	**965**	**736**	**183**	**3**	**21**	**44**	**112**

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EARTHWORK

ROADWAY	FROM/TO STATION	205.0100 EXCAVATION COMMON (1) CY / CUT EXCAVATION (2)	CY SALVAGED/UNUSABLE PAVEMENT MATERIAL (3)	CY AVAILABLE MATERIAL (4)	CY UNEXPANDED FILL	CY EXPANDED FILL FACTOR 1.10	CY MASS ORDINATE +/- (5)	CY WASTE (6)
DELAVAN	610+50 - 616+69	618	263	355	10	11	344	344
SUBTOTAL		618	263	355	10	11	344	344
	TOTAL 0010	**618**						

NOTES:
(1) EXCAVATION COMMON IS THE SUM OF THE CUT COLUMN.
(2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL INCLUDES ASPHALT PAVEMENT, CONCRETE PAVEMENT, CURB & GUTTER, AND CONCRETE SIDEWALK.
(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) THE MASS ORDINATE IS EITHER + OR - QUANTITY. POSITIVE QUANTITY INDICATES AN EXCESS OF MATERIAL. NEGATIVE QUANTITY INDICATES A SHORTAGE OF MATERIAL.
(6) WASTE = MASS ORDINATE. FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL
0010	605+00	-	611+00		16	1
	611+00	-	617+00		768	16
				TOTAL 0010	**784**	**17**

CONCRETE BASE AND PAVEMENT

CATEGORY	STATION	TO	STATION	LOCATION	320.0145 CONCRETE BASE 8-INCH SY	320.0165 CONCRETE BASE 10-INCH SY	416.1725 CONCRETE PAVEMENT REPLACEMENT SHES SY
0010	605+00	-	611+00		41	-	-
	611+00	-	617+00		274	127	67
				TOTAL 0010	**315**	**127**	**67**

DRILLED TIE BARS

CATEGORY	STATION	TO	STATION	LOCATION	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
0010	605+00	-	611+00		37	2
	611+00	-	617+00		599	13
				TOTAL 0010	**636**	**15**

3

ASPHALT

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	460.6424 HMA PAVEMENT 4 MT 58-28 H TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
0010	605+00	-	611+00		128	267	-
	611+00	-	617+00		275	561	5
				UNDISTRIBUTED	4	-	-
				TOTAL 0010	**407**	**828**	**5**

CONCRETE CURB & GUTTER

CATEGORY	STATION	TO	STATION	LOCATION	601.0417 CONCRETE CURB & GUTTER 30-INCH TYPE K LF	601.0419 CONCRETE CURB & GUTTER 30-INCH TYPE L LF	SPV.0090.101 CONCRETE CURB & GUTTER 18-INCH TYPE K LF
0010	605+00	-	611+00		-	-	-
	611+00	-	617+00		932	74	356
				TOTAL 0010	**932**	**74**	**356**

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CONCRETE SIDEWALK

CATEGORY	STATION	TO	STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0415 CONCRETE SIDEWALK 6-INCH SF	602.0820 CONCRETE DRIVEWAY 8-INCH SY	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
0010	605+00	-	611+00		35	-	-	-
	611+00	-	617+00		4,695	403	89	18
				TOTAL 0010	**4,730**	**403**	**89**	**18**

BARRIERS

CATEGORY	STATION	TO	STATION	LOCATION	513.9006.S.001 REMOVING AND RESETTING TUBULAR RAILING BARRIER WALLS EACH	603.0105 CONCRETE BARRIER SINGLE-FACED 32-INCH LF	614.2300 MGS GUARDRAIL 3 LF	614.2500 MGS THRIE BEAM TRANSITION LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH
0010	611+00	-	617+00		2	144	25	39	1
				TOTAL 0010	**2**	**144**	**25**	**39**	**1**

STORM SEWER PIPES

FROM STR	TO STR	INLET ELEV	DISCH ELEV	SLOPE %	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0415 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF
33B	EX-33	809.61	808.86	3.70%	20.3	-
EX-33	-	-	-	-	-	-
34	-	-	-	-	-	-
35	-	-	-	-	-	-
44A	44B	803.82	803.35	1.30%	-	35.5
44B	EX-44	803.35	803.25	1.30%	-	7.9
EX-44	-	-	-	-	-	-
UNDISTRIBUTED					-	-
TOTAL 0010					**21**	**44**

NOTES:
1. PIPE LENGTHS ARE FROM CENTER TO CENTER OF STRUCTURES.

STORM SEWER STRUCTURES

STRUCTURE NUMBER	STATION	OFFSET	RIM ELEV	INVERT ELEV	STR DEPTH FEET	611.0420 RECONSTRUCTING MANHOLES EACH	611.0624 INLET COVERS TYPE H EACH	611.0651 INLET COVERS TYPE S EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.8110 # ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH	SPV.0060.104 STORM SEWER STRUCTURE REPAIR EACH	SPV.0060.105 MANHOLE COVERS TYPE COJ EACH
33B	**611+74.9**	25.5' LT	814.18	809.61	3.57	-	1	-	1	-	-	-	-
EX-33	**611+74.9**	25.5' LT	813.29	-	-	1	-	-	-	-	-	-	-
34	**611+94.5**	7.5' RT	813.38	-	-	-	-	1	-	-	-	-	-
35	**611+94.1**	11.7' RT	813.28	-	-	-	-	1	-	-	-	-	-
44A	**614+92.3**	25.5' LT	807.12	803.82	2.30	-	1	-	1	-	-	-	-
44B	**615+27.8**	25.6' LT	806.84	803.35	2.49	-	1	-	1	-	-	-	-
EX-44	**615+27.3**	17.7' LT	807.02	-	-	1	-	-	-	-	-	-	-
EX-45	**615+25.0**	20.8' RT	806.96	-	-	-	-	-	-	-	-	1	1
UNDISTRIBUTED						-	-	-	-	2	6	-	-
TOTAL 0010						**2**	**3**	**2**	**3**	**2**	**6**	**1**	**1**

NOTES:
1. RIM ELEVATIONS ARE GIVEN AT THE FLANGE LINE OF STRUCTURES WITHIN CURB LINES. RIM ELEVATIONS ARE GIVEN AT THE CENTER OF ALL OTHER STRUCTURES.
2. STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES.
3. STRUCTURE DEPTH FOR INLETS 4-FT DIAMETER: RIM - INVERT - CASTING - 6" ADJUSTMENT
4. CASTING HEIGHT = 6" FOR TYPE H COVERS AND TYPE S COVERS

ADDITIONAL QUANTITIES SHOWN ELSEWHERE. SEE "ADJUSTING MUNICIPAL SANITARY SEWER & WATER COVERS" TABLE.

3

EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH
0010	605+00	-	611+00		-	-	-	-	-
	611+00	-	617+00		-	-	3	9	14
	617+00	-	619+00		-	-	-	-	2
				UNDISTRIBUTED	5	5	1	3	4
				TOTAL 0010	**5**	**5**	**4**	**12**	**20**

RESTORATION

CATEGORY	STATION	TO	STATION	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0200 SEEDING TEMPORARY LB	631.0300 SOD WATER MGAL	631.1000 SOD LAWN SY
0010	605+00	-	611+00		40	-	0.01	-	1	40
	611+00	-	617+00		903	-	0.62	-	21	903
				UNDISTRIBUTED	45	48	0.03	2	1	45
				TOTAL 0010	**988**	**48**	**0.66**	**2**	**23**	**943**

TRAFFIC CONTROL

CATEGORY	LOCATION	643.0300 TRAFFIC CONTROL DRUMS + EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0420 TRAFFIC CONTROL BARRICADES TYPE III + EACH	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0500 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER POSTS EACH	643.0600 TRAFFIC CONTROL FLEXIBLE TUBULAR MARKER BASES EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A + EACH	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAY	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C + EACH	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAY	643.0810 TRAFFIC CONTROL CONNECTED ARROW BOARD + EACH	643.0810 TRAFFIC CONTROL CONNECTED ARROW BOARD DAY	643.0900 TRAFFIC CONTROL SIGNS + EACH	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS + EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.1070 TRAFFIC CONTROL CONES 42-INCH + EACH	643.1070 TRAFFIC CONTROL CONES 42-INCH DAY	643.1220 TRAFFIC CONTROL CONNECTED WORK ZONE START AND END LOCATION MARKERS + EACH	643.1220 TRAFFIC CONTROL CONNECTED WORK ZONE START AND END LOCATION MARKERS DAY	+ ESTIMATED CALENDAR DAYS
0010	STAGE 1	60	2,340	20	780	-	-	40	1,560	14	546	2	78	63	2,457	6	42	89	3,471	4	156	39
	STAGE 2	156	5,880	40	1,560	10	10	80	3,120	14	560	2	80	138	3,630	-	-	152	5,880	4	160	40
	UNDISTRIBUTED		410		115	1	1		235		55		10		305		-		470		15	
	TOTAL 0010		**8,630**		**2,455**	**11**	**11**		**4,915**		**1,161**		**168**		**6,392**		**42**		**9,821**		**331**	

+ FOR INFORMATION ONLY

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REMOVING SIGNS

CATEGORY	SIGN #	SHEET #	SIGN CODE	SIGN MOUNTED ON SAME POST AS #	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	DESCRIPTION
0010	R500	1 OF 2	W6-1	-	1	1	DIVIDED HIGHWAY AHEAD SYMBOL
	R501	1 OF 2	R4-7	-	1	1	KEEP RIGHT
	R600	2 OF 2	R4-7	-	1	-	KEEP RIGHT
	R601	2 OF 2	R1-1F	-	1	-	STOP (FOLDING)
	R602	2 OF 2	R5-2	R601	-	-	NO TRUCKS SYMBOL
	R603	2 OF 2	R10-11B	-	1	-	NO TURN ON RED
	R604	2 OF 2	R1-1F	-	1	-	STOP (FOLDING)
	R605	2 OF 2	R1-1	-	1	1	STOP
	R606	2 OF 2	R3-2	R605	-	-	NO LEFT TURN SYMBOL
	R607	2 OF 2	R6-2R	-	1	1	ONE WAY RIGHT ARROW
	R608	2 OF 2	R1-1F	-	1	-	STOP (FOLDING)
	R609	2 OF 2	R1-1F	-	1	-	STOP (FOLDING)
	R610	2 OF 2	R10-11B	-	1	-	NO TURN ON RED
	R611	2 OF 2	R1-1F	R610	-	-	STOP (FOLDING)
	R612	2 OF 2	R4-7	-	1	-	KEEP RIGHT
	R613	2 OF 2	R1-1F	R612	-	-	STOP (FOLDING)
	R614	2 OF 2	-	R608	-	-	TRUCKS NO LEFT TURN
	R615	2 OF 2	-	R604	-	-	TRUCKS NO RIGHT TURN
	R616	2 OF 2	R3-8ER	-	1	1	LEFT-AHEAD, RIGHT ONLY
	R617	2 OF 2	-	-	1	-	CENTER AVE
	R618	2 OF 2	-	R617	-	-	W DELAVAN DR
TOTAL 0010					**14**	**5**	

FILE NAME : T:\1202703\Civil 3D\53500200\Design\Quantities\Delavan\53500272_030201-mq.ppt PLOT DATE : 5/30/2024 11:41 AM PLOT BY : ANDREW AXT PLOT NAME : PLOT SCALE : 1:1

PERMANENT SIGNING (1 OF 2)

CATEGORY	SIGN #	SIGN CODE	SHEET #	SIGN SIZE	SIGN SIZE W IN.	SIGN SIZE X	SIGN SIZE H IN.	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0811 POSTS TUBULAR STEEL 2X2-INCH X 11-FT EACH	634.0812 POSTS TUBULAR STEEL 2X2-INCH X 12-FT EACH	634.0814 POSTS TUBULAR STEEL 2X2-INCH X 14-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	SPV.0060.103 INSTALLING CITY SUPPLIED STREET NAME SIGNS EACH	SIGN MOUNTED ON SAME POST AS #	DESCRIPTION	NOTES
0010	500	J4-1	1 OF 2	2S	24	X	36	6	-	-	-	-	-	-	-	-	-	-	-	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)	LIGHT POLE
		M3-3	1 OF 2	2S	24	X	12	-	-	-	-	-	-	-	-	-	-	-	-	SOUTH CARDINAL ROUTE MARKER	-
		M1-4	1 OF 2	2S	24	X	24	-	-	-	-	-	-	-	-	-	-	-	-	US ROUTE MARKER	-
	501	R2-1	1 OF 2	2S	24	X	30	5	-	-	-	-	-	-	-	-	-	-	500	SPEED LIMIT 30 MPH	LIGHT POLE
	502	J1-1	1 OF 2	2S	24	X	39	6.5	-	-	-	1	-	-	-	-	-	-	-	JUNCTION OR END ASSEMBLY	-
		M2-1	1 OF 2	2S	21	X	15	-	-	-	-	-	-	-	-	-	-	-	-	JCT	-
		M1-5A	1 OF 2	2S	24	X	24	-	-	-	-	-	-	-	-	-	-	-	-	COUNTY MARKER	-
	503	W6-1	1 OF 2	2S	36	X	36	-	-	9	-	-	-	-	1	-	-	-	-	DIVIDED HIGHWAY AHEAD SYMBOL	-
	504	J13-1	1 OF 2	2S	24	X	45	7.5	-	-	-	1	-	-	-	-	-	-	-	DIRECTIONAL WITHOUT CARDINAL (1 HEADED ROUTE PANEL)	-
		M1-5A	1 OF 2	2S	24	X	24	-	-	-	-	-	-	-	-	-	-	-	-	COUNTY MARKER	-
		M5-1R	1 OF 2	2S	21	X	21	-	-	-	-	-	-	-	-	-	-	-	-	ADVANCE ARROW RIGHT TURN	-
	505	R3-8LAAR	1 OF 2	2S	72	X	30	15	-	-	2	-	-	-	-	-	-	-	-	LEFT ONLY, AHEAD ONLY, AHEAD ONLY, RIGHT ONLY	-
	M501	W10-2	1 OF 2	2S	36	X	36	-	-	-	-	-	-	-	-	1	1	-	-	CROSS ROAD TRACKS LEFT / RIGHT SIDE	-
	600	M4-4	2 OF 2	2S	24	X	12	2	-	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB9	TRUCK	MONOTUBE ARM MOUNT
	601	R3-2	2 OF 2	2S	24	X	24	4	-	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB9	NO LEFT TURN SYMBOL	MONOTUBE ARM MOUNT
	602	R1-1F	2 OF 2	2S	30	X	30	-	5.18	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB10	STOP (FOLDING)	SIGNAL POLE MOUNT
	603	R5-2	2 OF 2	2S	24	X	24	4	-	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB9	NO TRUCKS SYMBOL	SIGNAL POLE MOUNT
	604	R10-11B	2 OF 2	2S	24	X	24	4	-	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB1	NO TURN ON RED	-
	605	M4-4	2 OF 2	2S	24	X	12	2	-	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB2	TRUCK	SIGNAL POLE MOUNT
	606	R3-1	2 OF 2	2S	24	X	24	4	-	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB2	NO RIGHT TURN SYMBOL	SIGNAL POLE MOUNT
	607	R1-1F	2 OF 2	2S	30	X	30	-	5.18	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB2	STOP (FOLDING)	SIGNAL POLE MOUNT
	608	J13-1	2 OF 2	2S	24	X	45	7.5	-	-	-	1	-	-	-	-	-	-	-	DIRECTIONAL WITHOUT CARDINAL (1 HEADED ROUTE PANEL)	CONCRETE BOX OUT
		M1-5A	2 OF 2	2S	24	X	24	-	-	-	-	-	-	-	-	-	-	-	-	COUNTY MARKER	-
		M6-1	2 OF 2	2S	21	X	21	-	-	-	-	-	-	-	-	-	-	-	-	ARROW - RIGHT, LEFT, OR AHEAD	-
	609	R3-8LAF	2 OF 2	2S	54	X	30	11.25	-	-	-	-	2	-	-	-	-	-	-	LEFT ONLY, AHEAD ONLY, AHEAD-RIGHT	CONCRETE BOX OUT
	610	R1-1	2 OF 2	2S	30	X	30	5.18	-	-	-	-	-	1	-	-	-	-	-	STOP	-
	611	R3-2	2 OF 2	2S	24	X	24	4	-	-	-	-	-	-	-	-	-	-	610	NO LEFT TURN SYMBOL	-
	612	R6-2R	2 OF 2	2S	24	X	30	5	-	-	-	-	1	-	-	-	-	-	-	ONE WAY RIGHT ARROW	CONCRETE BOX OUT
	613	J13-1	2 OF 2	2S	24	X	45	7.5	-	-	-	1	-	-	-	-	-	-	-	DIRECTIONAL WITHOUT CARDINAL (1 HEADED ROUTE PANEL)	-
		M1-5A	2 OF 2	2S	24	X	24	-	-	-	-	-	-	-	-	-	-	-	-	COUNTY MARKER	-
		M6-1	2 OF 2	2S	21	X	21	-	-	-	-	-	-	-	-	-	-	-	-	ARROW - RIGHT, LEFT, OR AHEAD	-
	614	R1-1F	2 OF 2	2S	30	X	30	-	5.18	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB8	STOP (FOLDING)	SIGNAL POLE MOUNT
	615	M1-5A	2 OF 2	2S	24	X	24	4	-	-	-	-	1	-	-	-	-	-	-	COUNTY MARKER	-
	616	R10-11B	2 OF 2	2S	24	X	24	4	-	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB6	NO TURN ON RED	SIGNAL POLE MOUNT
	617	R1-1F	2 OF 2	2S	30	X	30	-	5.18	-	-	-	-	-	-	-	-	-	SIGNAL POLE SB6	STOP (FOLDING)	SIGNAL POLE MOUNT
	618	J13-1	2 OF 2	2S	24	X	45	7.5	-	-	-	-	-	1	-	-	-	-	-	DIRECTIONAL WITHOUT CARDINAL (1 HEADED ROUTE PANEL)	-
		M1-4	2 OF 2	2S	24	X	24	-	-	-	-	-	-	-	-	-	-	-	-	US ROUTE MARKER	-
		M6-4	2 OF 2	2S	21	X	21	-	-	-	-	-	-	-	-	-	-	-	-	DIRECTIONAL ARROWS LEFT - RIGHT	-
	619	R3-8ER	2 OF 2	2S	36	X	30	7.5	-	-	-	-	1	-	-	-	-	-	-	LEFT-AHEAD, RIGHT ONLY	-
	621	J1-1	2 OF 2	2S	24	X	39	6.5	-	-	-	-	-	1	-	-	-	-	-	JUNCTION OR END ASSEMBLY	-
		M2-1	2 OF 2	2S	21	X	15	-	-	-	-	-	-	-	-	-	-	-	-	JCT	-
		M1-4	2 OF 2	2S	24	X	24	-	-	-	-	-	-	-	-	-	-	-	-	US ROUTE MARKER	-
	622	R4-7	2 OF 2	2S	24	X	30	5	-	-	-	-	1	-	-	-	-	-	-	KEEP RIGHT	CONCRETE BOX OUT
	623	J4-1	2 OF 2	2S	24	X	36	6	-	-	-	-	-	-	-	-	-	-	LIGHT POLE	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)	LIGHT POLE
		M3-1	2 OF 2	2S	24	X	12	-	-	-	-	-	-	-	-	-	-	-	-	NORTH CARDINAL ROUTE MARKER	-
		M1-4	2 OF 2	2S	24	X	24	-	-	-	-	-	-	-	-	-	-	-	-	US ROUTE MARKER	-
	624	R2-1	2 OF 2	2S	24	X	30	5	-	-	-	-	-	-	-	-	-	-	623	SPEED LIMIT 30 MPH	LIGHT POLE
	625	J13-1	2 OF 2	2S	24	X	45	7.5	-	-	-	1	-	-	-	-	-	-	-	DIRECTIONAL WITHOUT CARDINAL (1 HEADED ROUTE PANEL)	-
		M1-5A	2 OF 2	2S	24	X	24	-	-	-	-	-	-	-	-	-	-	-	-	COUNTY MARKER	-
		M5-1L	2 OF 2	2S	21	X	21	-	-	-	-	-	-	-	-	-	-	-	-	ADVANCE ARROW LEFT TURN	-
SUBTOTAL								**153.43**	**20.72**	**9**	**2**	**5**	**6**	**3**	**1**	**1**	**1**	**0**			

3

PERMANENT SIGNING (2 OF 2)

CATEGORY	SIGN #	SIGN CODE	SIGN SIZE	SIGN SIZE W IN.	SIGN SIZE X	SIGN SIZE H IN.	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2215 SIGNS TYPE II REFLECTIVE H FOLDING SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH	634.0811 POSTS TUBULAR STEEL 2X2-INCH X 11-FT EACH	634.0812 POSTS TUBULAR STEEL 2X2-INCH X 12-FT EACH	634.0814 POSTS TUBULAR STEEL 2X2-INCH X 14-FT EACH	638.2102 MOVING SIGNS TYPE II EACH	638.4000 MOVING SMALL SIGN SUPPORTS EACH	SPV.0060.103 INSTALLING CITY SUPPLIED STREET NAME SIGNS EACH	SIGN MOUNTED ON SAME POST AS #	DESCRIPTION	NOTES
0010	626	R8-8 2 OF 2	2S	24	X	30	5	-	-	-	-	1	-	-	-	-	-	-	DO NOT STOP ON TRACKS	-
	627	R8-8 2 OF 2	2S	24	X	30	5	-	-	-	-	1	-	-	-	-	-	-	DO NOT STOP ON TRACKS	-
	M601	D3-1 2 OF 2					-	-	-	-	-	-	-	-	1	-	-	610	STREET NAME SIGN	CENTER AV
	M602	D3-1 2 OF 2					-	-	-	-	-	-	-	-	-	-	-	610	STREET NAME SIGN	GRAND AV
	M603	W10-2 2 OF 2					-	-	-	-	-	-	-	-	1	1	-	-	CROSS ROAD TRACKS LEFT / RIGHT SIDE	-
	628	D3-1 2 OF 2					-	-	-	-	-	-	-	-	1	-	1	614	STREET NAME SIGN	CENTER AVE
	629	D3-1 2 OF 2					-	-	-	-	-	-	-	-	-	-	1	614	STREET NAME SIGN	W DELAVAN DR
	SUBTOTAL						**10**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**3**	**1**	**2**			
	TOTAL 0010						**163.43**	**20.72**	**9**	**2**	**5**	**8**	**3**	**1**	**4**	**2**	**2**			

3

TEMPORARY PAVEMENT MARKING

CATEGORY		STATION	TO	STATION	LOCATION	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) LF	643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (WHITE) LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (YELLOW) LF	643.3180 TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH (WHITE) LF	643.3265 TEMPORARY MARKING LINE PAINT 10-INCH LF	643.3280 TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH LF	643.3305 TEMPORARY MARKING CROSSWALK PAINT 6-INCH LF	643.3350 TEMPORARY MARKING CROSSWALK REMOVABLE TAPE 6-INCH LF	643.3505 TEMPORARY MARKING ARROW PAINT EACH	643.3550 TEMPORARY MARKING ARROW REMOVABLE TAPE EACH	643.3960 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH LF	646.9002 MARKING REMOVAL LINE 6-INCH LF
0010	STAGE 1	593+00	-	599+00		-	-	254	-	-	-	-	-	-	-	50	-
		599+00	-	605+00		-	-	394	-	-	100	-	-	-	2	37.5	-
		605+00	-	611+00		920	921	140	-	4	-	-	-	-	-	-	-
		611+00	-	617+00		1,164	830	123	-	66	-	167	-	1	-	-	90
		617+00	-	623+00		-	-	245	-	-	-	-	-	-	-	37.5	-
					STAGE 1 SUBTOTAL	2,084	1,751	1,156	0	70	100	167	0	1	2	125	90
	STAGE 2	593+00	-	599+00		-	-	-	254	-	-	-	-	-	-	-	-
		599+00	-	605+00		-	-	-	492	-	-	-	-	-	-	-	-
		605+00	-	611+00		-	-	920	1,060	-	-	-	-	-	-	-	-
		611+00	-	617+00		124	85	1,671	1,447	-	-	-	280	-	-	-	135
		617+00	-	623+00		-	-	75	1,200	-	-	-	-	-	-	-	-
		623+00	-	629+00		-	-	-	572	-	-	-	-	-	-	-	-
		629+00	-	635+00		-	-	-	434	-	-	-	-	-	-	25	-
					STAGE 2 SUBTOTAL	124	85	2,666	5,459	0	0	0	280	0	0	25	135
					SUBTOTAL	2,208	1,836	3,822	5,459	-	-	-	-	-	-	-	
					TOTAL 0010	**4,044**		**9,281**		**70**	**100**	**167**	**280**	**1**	**2**	**150**	**225**

TEMPORARY PEDESTRIAN ACCOMMODATIONS

CATEGORY	LOCATION	644.1430 TEMPORARY PEDESTRIAN SURFACE PLATE SF	644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING SF	644.1601 TEMPORARY PEDESTRIAN CURB RAMP DAY	644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD SF	644.1810 TEMPORARY PEDESTRIAN BARRICADE LF	644.1900.S TEMPORARY AUDIBLE MESSAGE DEVICES DAY
0010	STAGE 1	-	-	-	40	170	-
	STAGE 2	50	80	20	60	500	370
	TOTAL 0010	**50**	**80**	**20**	**100**	**670**	**370**

PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	# 646.2020 MARKING LINE EPOXY 6-INCH LF	646.4020 MARKING LINE EPOXY 10-INCH LF	646.5020 MARKING ARROW EPOXY (TYPE 2) EACH	646.6020 MARKING STOP LINE EPOXY 12-INCH LF	646.6120 MARKING STOP LINE EPOXY 18-INCH LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF	646.8120 MARKING CURB EPOXY LF	646.8220 MARKING ISLAND NOSE EPOXY EACH
0010	605+00	-	611+00		1,170	48	-	-	-	-	-	-
	611+00	-	617+00		1,357	491	5	27	151	578	10	1
				TOTAL 0010	**2,527**	**539**	**5**	**27**	**151**	**578**	**10**	**1**

NOTE: ALL PAVEMENT MARKING COLORS ARE WHITE UNLESS NOTED OTHERWISE
YELLOW QUANTITY = 2,077 LF. WHITE QUANTITY = 450 LF

3

REMOVING CONCRETE BASES

CATEGORY	SIGNAL BASE NO.	204.0195 REMOVING CONCRETE BASES EACH
0010	SB1	1
	SB2	1
	SB3	1
	SB4	1
	SB5	1
	SB6	1
	SB7	1
	SB8	1
	SB9	1
	SB10	1
	CB1	1
	TOTAL 0010	11

TRAFFIC SIGNAL REMOVALS

CATEGORY	LOCATION	204.9060.S.201 REMOVING TRAFFIC SIGNALS EACH	204.9060.S.202 REMOVING LOOP DETECTOR WIRE & LEAD-IN CABLE EACH
0010	USH 51 & DELAVAN DR	1	1
	TOTAL 0010	1	1

REMOVING PULL BOXES

CATEGORY	PULL BOX NO.	653.0905 REMOVING PULL BOXES EACH
0010	PB1	1
	PB2	1
	PB3	1
	PB4	1
	PB5	1
	PB6	1
	TOTAL 0010	6

LAMP, BALLAST, LED, SWITCH DISPOSAL

CATEGORY	FIXTURE TYPE	659.5000.S LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
0010	LUMINAIRES, UTILITY, LED C	3
	TRAFFIC SIGNAL, THREE SECTION	12
	TRAFFIC SIGNAL, FIVE SECTION	3
	MERCURY SWITCHES	1
	TOTAL 0010	19

NOTE: CITY OF JANESVILLE TO PICK UP SALVAGED PEDESTRIAN HEADS

(FOR INFORMATION ONLY)

SIGNAL BASE NO.	LUMINAIRES, UTILITY, LED C EACH	TRAFFIC SIGNAL, THREE SECTION EACH	TRAFFIC SIGNAL, FIVE SECTION EACH	MERCURY SWITCHES EACH
SB1	-	2	-	-
SB2	1	1	-	-
SB3	-	1	1	-
SB4	-	1	-	-
SB5	-	1	1	-
SB6	-	1	-	-
SB7	1	1	-	-
SB8	-	1	1	-
SB9	-	1	-	-
SB10	1	2	-	-
CB1	-	-	-	1
TOTAL 0010	3	12	3	1

CONDUIT

CATEGORY	FROM	TO	# 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH L.F.	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH L.F.	652.0615 CONDUIT SPECIAL 3-INCH L.F.
0010	CB1	PB1	-	18	-
	SB1	PB1	6	-	-
	PB2	PB1	-	144	-
	SB2	PB2	20	-	-
	PB3	PB2	-	-	90
	PB4	PB3	-	-	64
	SB3	PB4	-	12	-
	SB4	PB4	24	-	-
	SB5	PB4	33	-	-
	PB5	PB4	-	120	-
	SB6	PB5	15	-	-
	PB6	PB5	-	-	152
	SB7	PB6	9	-	-
	PB7	PB6	-	68	-
	SB8	PB7	22	-	-
	PB7	PB8	-	-	158
	SB9	PB8	-	28	-
	PB9	PB8	-	140	-
	SB10	PB9	23	-	-
	PB10	PB9	-	84	-
	CB1	PB10	-	33	-
	RR PB1	PB10	44	-	-
	TOTAL 0010		196	647	464

ADDITIONAL QUANTITY SHOWN ELSEWHERE ON PLAN

3

PULL BOXES

CATEGORY	PULL BOX NO.	LOCATION ^	# 653.0140 PULL BOXES STEEL 24x42-INCH EACH
0010	PB1	STA 612+47; 56.6' LT	1
	PB2	STA 613+01; 29.0' LT	1
	PB3	STA 613+00; 15.9' RT	1
	PB4	STA 613+00; 48.2' RT	1
	PB5	STA 612+52; 90.4' RT	1
	PB6	STA 611+79; 72.3' RT	1
	PB7	STA 611+53; 60.4' RT	1
	PB8	STA 611+54; 28.2' LT	1
	PB9	STA 612+06; 74.8' LT	1
	PB10	STA 612+47; 73.3' LT	1
	RR PB1	STA 612+05; 82.0' LT	1
		TOTAL 0010	11

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
# ADDITIONAL QUANTITY SHOWN ELSEWHERE ON PLAN

CONCRETE BASES

CATEGORY	SIGNAL BASE NO.	LOCATION ^	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	654.0120 CONCRETE BASES TYPE 10-SPECIAL EACH	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
0010	SB1	STA 612+51; 51.4' LT	-	1	-	-
	SB2	STA 612+80; 31.7' LT	1	-	-	-
	SB3	STA 612+91; 49.8' RT	-	-	1	-
	SB4	STA 612+80; 56.0' RT	1	-	-	-
	SB5	STA 612+72; 62.4' RT	1	-	-	-
	SB6	STA 612+60; 69.1' RT	1	-	-	-
	SB7	STA 611+87; 70.1' RT	-	1	-	-
	SB8	STA 611+74; 55.0' RT	1	-	-	-
	SB9	STA 611+81; 28.5' LT	-	-	1	-
	SB10	STA 612+05; 51.5' LT	1	-	-	-
	CB1	STA 612+48; 62.8' LT	-	-	-	1
		TOTAL 0010	6	2	2	1

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD.

TRAFFIC SIGNAL CABLE AND WIRE (UNDERGROUND)

CATEGORY	FROM	TO	# 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG L.F.	655.0320 CABLE TYPE UF 2-10 AWG GROUNDED L.F.
0010	CB1	SB1	-	25	25
	CB1	SB2	-	133	-
	CB1	SB3	-	228	-
	CB1	SB4	241	-	-
	CB1	SB5	250	-	-
	CB1	SB6	-	315	-
	CB1	SB7	-	356	-
	CB1	SB8	-	287	-
	CB1	SB9	-	195	195
	SB1	SB10	-	105	-
	SB1	SB3	-	-	229
	SB9	SB7	-	-	230
	RR PB1	CB1	-	94	-
		TOTAL 0010	491	1738	679

NOTE: INSTALL CABLE FROM CB1 TO RR PB1. STORE EXCESS CABLE WITHIN RR PB1.
ADDITIONAL QUANTITY SHOWN ELSEWHERE ON PLAN

FILE NAME : T:\1202703\Civil 3D\53500200\Design\Quantities\030201-mq.ppt PLOT DATE : 1/31/2025 9:14 AM PLOT BY : ANDREW AXT PLOT NAME : PLOT SCALE : 1:1

3

TRAFFIC SIGNAL CABLE AND WIRE (GROUNDING)

CATEGORY	FROM	TO	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG L.F.
0010	CB1	SB1	25
	SB1	SB2	134
	SB2	SB3	156
	SB3	SB4	53
	SB4	SB5	76
	SB5	SB6	149
	SB6	SB7	139
	SB7	SB8	128
	SB8	SB9	163
	SB9	SB10	151
	SB10	CB1	105
	PB1	CB1	19
	PB2	SB2	36
	PB3	SB3	84
	PB4	SB3	39
	PB5	SB6	28
	PB6	SB7	32
	PB7	SB8	35
	PB8	SB9	40
	PB9	SB10	36
	PB10	CB1	23
		TOTAL 0010	1651

TRAFFIC SIGNAL CABLE AND WIRE

CATEGORY	FROM	TO	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG L.F.	# 655.0240 CABLE TRAFFIC SIGNAL 7-14 AWG L.F.
0010	SB1	HEAD 12	-	22
	SB1	HEAD 13	45	-
	SB1	HEAD 18	15	-
	SB2	HEAD 6	22	-
	SB2	HEAD 4	-	22
	SB2	HEAD 19	15	-
	SB3	HEAD 2	70	-
	SB3	HEAD 3	70	-
	SB3	HEAD 5	-	71
	SB4	HEAD 20	15	-
	SB5	HEAD 21	15	-
	SB6	HEAD 11	-	23
	SB6	HEAD 15	-	23
	SB7	HEAD 16	-	51
	SB7	HEAD 22	15	-
	SB8	HEAD 23	15	-
	SB8	HEAD 1	19	-
	SB8	HEAD 9	-	22
	SB9	HEAD 10	-	66
	SB9	HEAD 7	65	-
	SB9	HEAD 8	65	-
	SB9	HEAD 24	15	-
	SB10	HEAD 17	15	-
	SB10	HEAD 14	19	-
		TOTAL 0010	495	300

ADDITIONAL QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL CABLE AND WIRE

CATEGORY	FROM	TO	# 655.0610 ELECTRICAL WIRE LIGHTING 12 AWG L.F.
0010	SB1	LUMIN.	117
	SB3	LUMIN.	144
	SB7	LUMIN.	117
	SB9	LUMIN.	144
		TOTAL 0010	522

ADDITIONAL QUANTITY SHOWN ELSEWHERE ON PLAN

TRAFFIC SIGNAL EVP DETECTOR CABLE

CATEGORY	FROM	TO	655.0900 TRAFFIC SIGNAL EVP DETECTOR CABLE L.F.
0010	CB1	SB9 (HEAD A)	248
	CB1	SB3 (HEAD B)	281
	CB1	SB7 (HEAD D)	414
		TOTAL 0010	943

ELECTRICAL SERVICE METER BREAKER PEDESTAL

CATEGORY	LOCATION ^	656.0201.201 ELECTRICAL SERVICE METER BREAKER PEDESTAL EACH
0010	USH 51 & DELAVAN DR	1
	TOTAL 0010	1

^ FINAL LOCATION TO BE DETERMINED BY THE ENGINEER IN THE FIELD

SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.201 SIGNAL MOUNTING HARDWARE EACH
USH 51 & DELAVAN DR	1
TOTAL	1

USH 51 (CENTER AVE) & DELAVAN DR
CITY OF JANESVILLE

POLES

CATEGORY	SIGNAL BASE NO.	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0310 POLES TYPE 3 EACH	657.0420 TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0425 TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	657.0430 TRAFFIC SIGNAL STANDARDS ALUMINUM 10-FT EACH	657.0590 TROMBONE ARMS 20-FT EACH	657.0595 TROMBONE ARMS 25-FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	# 659.1125 LUMINAIRES UTILITY LED C EACH	(INCIDENTAL) ACCESSIBLE PEDESTRIAN PUSH BUTTON EACH
0010	SB1	-	1	1	-	-	-	1	-	1	1	1
	SB2	1	-	-	-	1	-	-	-	-	-	1
	SB4	1	-	-	-	-	1	-	-	-	-	1
	SB5	1	-	-	-	-	1	-	-	-	-	1
	SB6	1	-	-	-	1	-	-	-	-	-	-
	SB7	-	1	1	-	-	-	-	1	1	1	1
	SB8	1	-	-	-	1	-	-	-	-	-	1
	SB10	1	-	-	1	-	-	-	-	-	-	1
	TOTAL 0010	6	2	2	1	3	2	1	1	2	2	7

POLES (MONOTUBES)

CATEGORY	SIGNAL BASE NO.	657.0352 POLES TYPE 10 SPECIAL EACH	657.0541 MONOTUBE ARMS 40-FT SPECIAL EACH	657.0546 MONOTUBE ARMS 45-FT SPECIAL EACH	657.0812 LUMINAIRE ARMS STEEL 12-FT EACH	# 659.1125 LUMINAIRES UTILITY LED C EACH	(INCIDENTAL) ACCESSIBLE PEDESTRIAN PUSH BUTTON EACH
0010	SB3	1	-	1	1	1	-
	SB9	1	1	-	1	1	1
	TOTAL 0010	2	1	1	2	2	1

FURNISH & INSTALL TRAFFIC SIGNAL CABINET & CONTROLLER

CATEGORY	LOCATION	SPV.0060.201 FURNISH & INSTALL TRAFFIC SIGNAL CABINET & CONTROLLER EACH
0010	USH 51 & DELAVAN DR	1
	TOTAL 0010	**1**

3

FACES

CATEGORY	SIGNAL HEAD NO.	SIGNAL BASE NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0175 TRAFFIC SIGNAL FACE 5S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	SPV.0060.204 TRAFFIC SIGNAL LED NO RIGHT TURN BLANK OUT SIGNS EACH
0010	13	SB1	1	-	-	-	-
	12	SB1	-	-	1	-	-
	18	SB1	-	-	-	1	-
	4	SB2	-	1	-	-	-
	6	SB2	1	-	-	-	-
	19	SB2	-	-	-	1	-
	2	SB3	1	-	-	-	-
	3	SB3	1	-	-	-	-
	5	SB3	-	1	-	-	-
	20	SB4	-	-	-	1	-
	21	SB5	-	-	-	1	-
	15	SB6	-	1	-	-	-
	11	SB6	-	-	1	-	-
	16	SB7	-	1	-	-	-
	22	SB7	-	-	-	1	-
	23	SB8	-	-	-	1	-
	9	SB8	-	1	-	-	-
	1	SB8	1	-	-	-	-
	10	SB9	-	1	-	-	-
	7	SB9	1	-	-	-	-
	8	SB9	1	-	-	-	-
	24	SB9	-	-	-	1	-
	17	SB10	-	-	-	1	-
	14	SB10	1	-	-	-	-
	25	SB2	-	-	-	-	1
	26	SB9	-	-	-	-	1
	TOTAL 0010		8	6	2	8	2

RAILROAD - REMOVING WIRE

CATEGORY	LOCATION FROM	LOCATION TO	# 674.0300 REMOVE CABLE LF
0010	CB1	RR PB	80
		TOTAL 0010	**80**

ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

FURNISH & INSTALL EVP SYSTEM

CATEGORY	LOCATION	SPV.0060.202 FURNISH & INSTALL EVP SYSTEM EACH
0010	USH 51 & DELAVAN DR	1
	TOTAL 0010	**1**

FURNISH & INSTALL AUDIBLE PEDESTRIAN PUSH BUTTON SYSTEM

CATEGORY	LOCATION	SPV.0060.203 FURNISH & INSTALL AUDIBLE PEDESTRIAN PUSH BUTTON SYSTEM EACH
0010	USH 51 & DELAVAN DR	1
	TOTAL 0010	**1**

ARTIFICIAL INTELLIGENCE VEHICLE DETECTION SYSTEM

CATEGORY	LOCATION	SPV.0060.205 ARTIFICIAL INTELLIGENCE VEHICLE DETECTION SYSTEM EACH
0010	USH 51 & DELAVAN DR	1
	TOTAL 0010	**1**

LIGHTING - CONDUIT AND WIRE

CATEGORY	SYSTEM	CIRCUIT	LOCATION FROM	LOCATION TO	# 652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	# 652.0605 CONDUIT SPECIAL 2-INCH LF	# 655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF	# 655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF	655.0620 ELECTRICAL WIRE LIGHTING 8 AWG LF
0010	1	A/B	LP1	LP3	-	-	-	540	270
			LP3	L-PB1	108	-	-	216	108
			L-PB1	L-PB2	-	101	-	202	101
			L-PB2	LP5	259	-	-	518	259
			LP5	L-PB8	78	65	-	292	146
			L-PB8	LP7	-	-		272	136
			LP7	LP8	-	-	-	324	162
			LP8	LP10	-	-	-	274	137
			LP10	L-PB9	-	-	-	296	148
			L-PB9	LP12	11	-	-	22	11
			LP12	LP14	305	15	-	610	305
				SUBTOTAL	761	181	0	3,566	1,783
	1	C/D	LP2	L-PB3	224	-	448	-	224
			L-PB3	L-PB4	39	-	78	-	39
			L-PB4	L-PB5	66	-	132	-	66
			L-PB5	L-PB6	64	-	128	-	64
			L-PB6	LP4	144		288		144
			LP4	L-PB7	99	20	238	-	119
			L-PB7	LP6	84	-	268	-	134
			LP6	LP9	-	-	552	-	276
			LP9	LP11	-	-	276	-	138
			LP11	L-PB10	-	-	626	-	313
			L-PB10	LP13	153	15	336	-	168
				SUBTOTAL	873	35	3,370	0	1,685
				TOTAL 0010	**1,634**	**216**	**3,370**	**3,566**	**3,468**

ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

LIGHTING - REMOVING WIRE

CATEGORY	LOCATION FROM	LOCATION TO	# 674.0300 REMOVE CABLE LF
0010	EXISTING SERVICE	LP12	1,332
	EXISTING SERVICE	LP13	1,271
	EXISTING SERVICE	LP1	493
	EXISTING SERVICE	LP2	455
		TOTAL 0010	**3551**

ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

LIGHTING - PULL BOXES

CATEGORY	SYSTEM	DESCRIPTION / SEQUENCE	STATION	OFFSET	LOCATION FROM	LOCATION TO	# 653.0140 PULL BOXES STEEL 24X42-INCH EACH	# 655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF
0010	1	L-PB1	611+82	37'LT	LP3	L-PB1	1	128
		L-PB2	612+84	29'LT	SB2	L-PB2	1	74
		L-PB3	611+65	51'RT	LP2	L-PB3	1	245
		L-PB4	611+88	80'RT	SB7	L-PB4	1	60
		L-PB5	612+53	79'RT	SB6	L-PB5	1	48
		L-PB6	613+07	51'RT	LP4	L-PB6	1	163
		L-PB7	615+66	43'RT	LP4	L-PB7	1	219
		L-PB8	616+79	34'LT	LP5	L-PB8	1	139
		L-PB9	622+61	35'LT	LP12	L-PB9	1	30
		L-PB10	622+58	40'RT	LP13	L-PB10	1	188
						TOTAL 0010	**10**	**1,294**

ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

LIGHTING - LUMINAIRE ARMS AND POLES

CATEGORY	SYSTEM	LIGHTING UNIT	# 655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF	COMMENTS
0010	1	LP1	120	RE-WIRE ONLY
		LP2	120	RE-WIRE ONLY
		LP3	120	RE-WIRE ONLY
		LP4	120	RE-WIRE ONLY
		LP5	120	RE-WIRE ONLY
		LP6	120	RE-WIRE ONLY
		LP7	120	RE-WIRE ONLY
		LP8	120	RE-WIRE ONLY
		LP9	120	RE-WIRE ONLY
		LP10	120	RE-WIRE ONLY
		LP11	120	RE-WIRE ONLY
			1,320	

ADDITIONAL QUANTITIES SHOWN ELSEWHEF

3

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	650.4500 CONSTRUCTION STAKING SUBGRADE LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.8501.004 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS 5350-02-75 EACH	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9500.004 CONSTRUCTION STAKING SIDEWALK 5350-02-75 EACH	650.9911.004 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 5350-02-75 EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	606+40	-	611+00		-	50	-	460	-	-	-	-	-
	611+00	-	616+69		3	406	74	569	-	10	-	-	400
				TOTAL 0010	**3**	**456**	**74**	**1,029**	**1**	**10**	**1**	**1**	**400**

SAWING

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	605+00	-	611+00		-	116
	611+00	-	617+00		129	2,138
				TOTAL 0010	**129**	**2,254**

3

UTILITY LINE OPENING (ULO)

CATEGORY	LOCATION	SPV.0060.101 UTILITY LINE OPENING (ULO) EACH
0010	UNDISTRIBUTED	10
	TOTAL 0010	**10**

ADJUSTING MUNICIPAL SANITARY SEWER & WATER COVERS

CATEGORY	STATION	TO	STATION	LOCATION	# 611.8110 ADJUSTING MANHOLE COVERS EACH	SPV.0060.102 ADJUSTING WATER VALVE BOXES EACH
0020	605+00	-	611+00		1	-
	611+00	-	617+00		-	3
				TOTAL 0020	**1**	**3**

ADDITIONAL QUANTITIES SHOWN ELSEWHERE. SEE "STORM SEWER STRUCTURES" TABLE.

CONCRETE JOINT REPAIRING AND CLEANING

CATEGORY	STATION	TO	STATION	LOCATION	SPV.0090.102 CONCRETE JOINT AND CRACK PLUNGE MILLING AND PATCHING LF	SPV.0090.103 CONCRETE JOINT AND CRACK CLEANING LF
0010	605+00	-	611+00		209	178
	611+00	-	617+00		309	963
				UNDISTRIBUTED	50	115
				TOTAL 0010	**568**	**1,256**

TRANSPORTATION PROJECT PLAT NO: 5350-02-20 - 4.02

THAT PART OF LOTS 2, 3, 65, 66, AND VACATED PUBLIC ALLEY OF MONTEREY ADDITION IN THE SE 1/4-NE 1/4 OF SECTION 2; THAT PART OF LOT 1 CSM 1084599, DOC.1084599, V.13, P.442-443 IN AND INCULDING THAT PART OF THE SW 1/4-NW 1/4 OF SECTION 1, ALL IN TOWNSHIP 2 NORTH, RANGE 12 EAST IN THE CITY OF JANESVILLE, ROCK COUNTY, WISCONSIN.

RELOCATION ORDER USH 51 CITY OF JANESVILLE CENTER AVENUE, (NICOLET STREET TO COURT STREET), ROCK COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIOEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE, OR MAINTAIN A PORTION OF THE HIGHWAY OESIGNATED ABOVE, THE CITY OF JANESVILLE DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACOUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE-NAMED PROJECT. TO EFFECT THIS CHANCE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 62.22, WISCONSIN STATUTES, THE CITY OF JANESVILLE HEREBY ORDERS THAT:

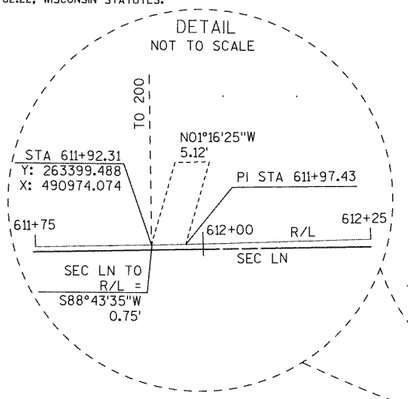
1. THAT PORTION OF SAIO HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIOTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2. THE LANOS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REOUIREO BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACOUIRED IN THE NAME OF THE CITY OF JANESVILLE, PURSUANT TO THE PROVISIONS OF SUBSECTION 62.22, WISCONSIN STATUTES.

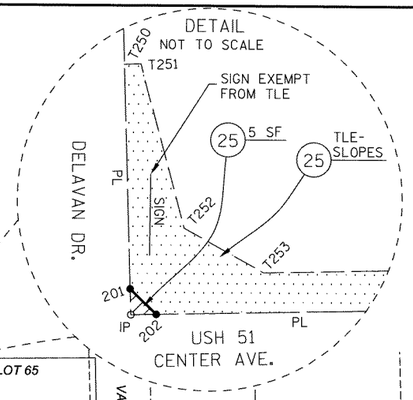
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), ROCK COUNTY, NADB3 (2011) IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINCS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS CROUND DISTANCES.

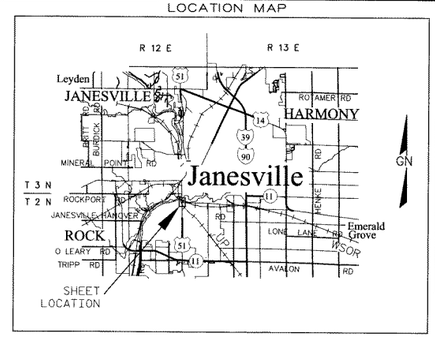
ALL NEW RICHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETIDN OF THE PROJECT.

FDR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE CITY OF JANESVILLE.

REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2, AS DOCUMENT NO.
FOR ADDITIONAL INFORMATIDN.

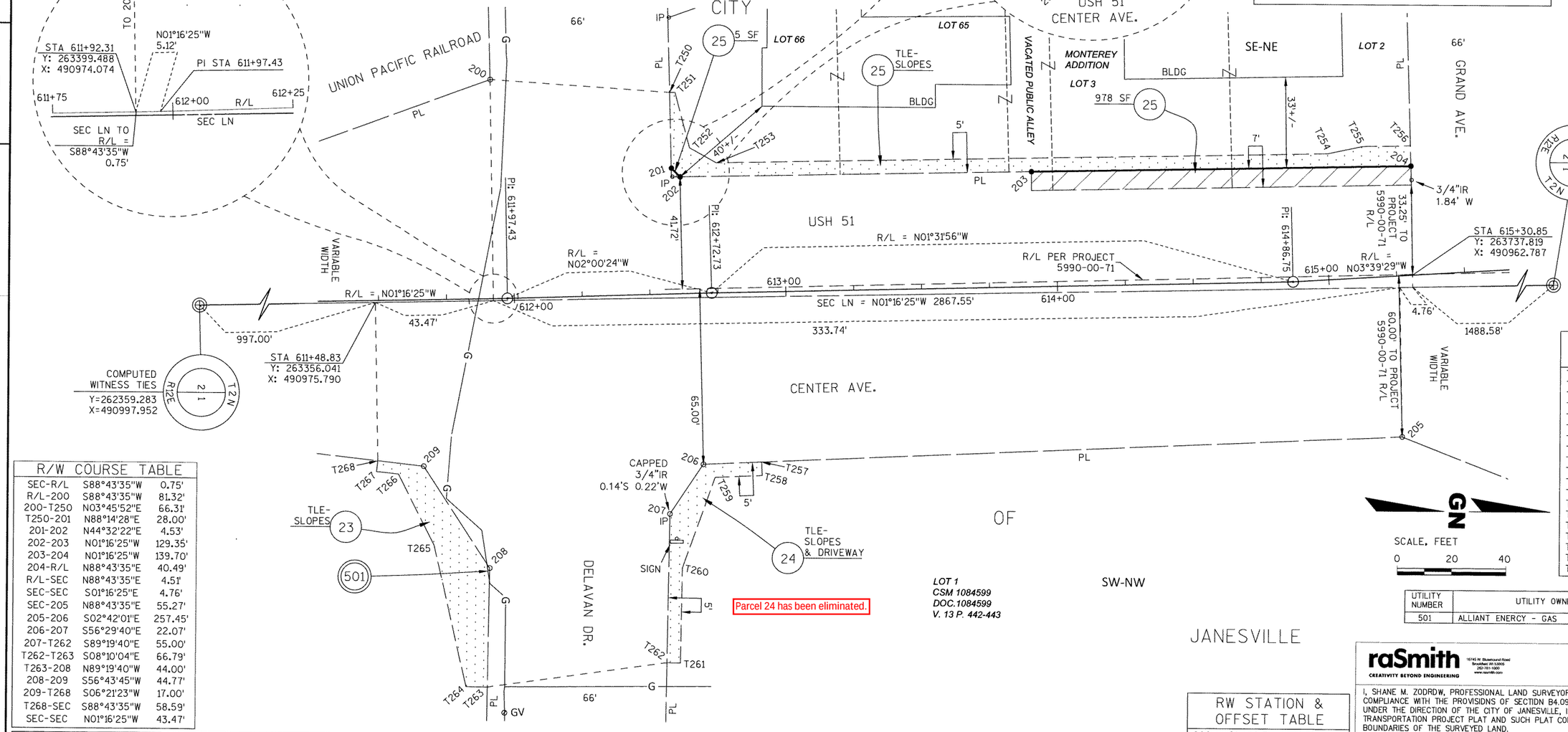


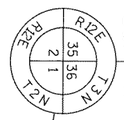




2237757
ANDY DISRUD
REGISTER OF DEEDS
ROCK COUNTY, WI
RECORDED ON
08/2023 09:26 AM
REC FEE: 25.00
TPP-192
PAGES: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5350-02-20 - 4.02
AMENDMENT NO:
SHEET 1 OF 1





COORDINATES FROM COUNTY SURVEYOR TIE SHEET
Y=265226.130
X=490934.210

ALLIANT ENERGY - GAS
501
GAS EASEMENT
DOC.833854
V.564 P.201
PARCEL 23

TLE STATION & OFFSET TABLE

T250	612+59.32	74.71' LT
T251	612+61.36	74.70' LT
T252	612+66.12	54.05' LT
T253	612+75.39	48.28' LT
T254	615+02.32	46.71' LT
T255	615+15.19	48.68' LT
T256	615+32.78	47.95' LT
T257	612+89.90	62.94' RT
T258	612+90.00	67.94' RT
T259	612+72.11	68.29' RT
T260	612+59.12	101.40' RT
T261	612+57.48	136.48' RT
T262	612+52.49	136.24' RT
T263	611+87.91	143.55' RT
T264	611+80.09	143.28' RT
T265	611+69.06	90.78' RT
T266	611+56.34	64.38' RT
T267	611+48.30	63.31' RT
T268	611+48.83	59.34' RT

R/W COURSE TABLE

SEC-R/L	S88°43'35"W	0.75'
R/L-200	S88°43'35"W	81.32'
200-T250	N03°45'52"E	66.31'
T250-201	N88°14'28"E	28.00'
201-202	N44°32'22"E	4.53'
202-203	N01°16'25"W	129.35'
203-204	N01°16'25"W	139.70'
204-R/L	N88°43'35"E	40.49'
R/L-SEC	N88°43'35"E	4.51'
SEC-SEC	S01°16'25"E	4.76'
SEC-205	N88°43'35"E	55.27'
205-206	S02°42'01"E	257.45'
206-207	S56°29'40"E	22.07'
207-T262	S89°19'40"E	55.00'
T262-T263	S08°10'04"E	66.79'
T263-208	N89°19'40"W	44.00'
208-209	S56°43'45"W	44.77'
209-T268	S06°21'23"W	17.00'
T268-SEC	S88°43'35"W	58.59'
SEC-SEC	N01°16'25"W	43.47'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY ANO ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LANO AND INTERESTS TO THE CITY.

PARCEL NUMBER	OWNER	INTEREST REQUIRED	AREAS S.F. REQUIRED			TLE S.F.
			NEW	EXISTING	TOTAL	
23	KIENOW-HILT POST NO. 1621 VETERANS OF FOREIGN WARS OF US	TLE	-	-	-	1,131
24	JAMES GRAFFT	TLE	-	-	-	590
25	BABCOCK PROPERTIES, LLC	FEE, TLE	983	-	983	1,574

HWY	BASIS OF EXISTING R/W	R/W WIDTH	YEAR
USH 51	PROJECT 5990-00-71	VARIES	1989
USH 51	DDC. 754397A	VARIES	1970
USH 51	OOC. 349928	VARIES	1929
OELAVAN DR	MONTEREY AODITION	66'	1849
DELAVAN DR	CSM 10B4599	66'	1988
CRAND AVE	PROJECT 5990-00-71	66'	1989

PI	Y	X	DELTA
611+97.43	263404.607	490973.960	00°43'59" LT
612+72.73	263479.864	490971.323	00°28'29" RT
614+86.75	263693.805	490965.601	02°07'33" LT

RW STATION & OFFSET TABLE

200	611+92.31	81.32' LT
201	612+59.20	46.71' LT
202	612+62.32	43.42' LT
203	613+91.31	42.75' LT
204	615+32.54	40.45' LT
205	615+23.62	59.54' RT
206	612+67.88	63.34' RT
207	612+55.06	81.30' RT
208	611+89.41	99.57' RT
209	611+65.68	61.60' RT

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED
501	ALLIANT ENERGY - GAS	RELEASE OF RICHTS

raSmith
CREATIVITY BEYOND ENGINEERING
16745 W. Bluemound Road
Brookfield, WI 53005
262-781-1000
www.rasmith.com

I, SHANE M. ZODRDW, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIDNS OF SECTIDN B4.095 DF THE WISCDNSIN STATUTES AND UNDER THE DIRECTION OF THE CITY OF JANESVILLE, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN SHANE M. ZODROW S-2869 GREENDALE WI LAND SURVEYOR

SICNATURE: Shane M Zodrow DATE: 02/23/2023
PRINT NAME: SHANE M. ZODROW
REGISTRATIDN NUMBER: S-2869

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF JANESVILLE.

SICNATURE: Mike Payne DATE: 2/27/2023
PRINT NAME: MIKE PAYNE, DIRECTOR DF PUBLIC WC

FILE NAME: S:/5168233/DWG/53500200/PLAT/TPP - 4.02 - CENTER, DELAVAN, GRAND.DWG
APPRAISAL PLAT DATE: 02/23/2023
PLOT DATE: 02/23/2023 7:30 AM
PLOT BY: ATF
PLOT NAME:
PLOT SCALE: 1 IN : 20 FT

5350-02-20 - 4.02

Standard Detail Drawing List

08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-21C	INLET COVERS TYPE F, HM, HM-S, S, T, HM-GJ & HM-GJ-S
08C06-03	INLETS 3-FT AND 4-FT DIAMETER
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-22A	CURB RAMPS TYPES 1 AND 1-A
08D05-22B	CURB RAMPS TYPES 2 AND 3
08D05-22C	CURB RAMPS TYPES 4A AND 4A1
08D05-22D	CURB RAMPS TYPE 4B AND 4B1
08D05-22E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-22F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-22G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-04	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08E10-02	INLET PROTECTION TYPE A, B, C AND D
09B02-10	CONDUIT
09B04-13	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09C15-02	CONCRETE BASE TYPE 10 SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D02-03	SIGNAL CONTROL CABINET
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09G	TYPE 10 SPECIAL POLE 40' MONOTUBE ARM
09E08-09H	TYPE 10 SPECIAL POLE 45' MONOTUBE ARM
09E08-09K	GENERAL NOTES,HARDWARE DETAILS FOR TYPE 9/10,9/10 SPECIAL,12 & 13 POLES W/MONOTUBE ARMS
11B02-02	CONCRETE MEDIAN NOSE
13C15-08A	CONCRETE BASE
13C15-08B	CONCRETE BASE
13C19-03	HMA LONGITUDINAL JOINTS
14B22-07A	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
14B22-07B	CONCRETE BARRIER, SINGLE-FACED (WITH ANCHORAGE)
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)
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-16C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D20-10A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY
15D20-10B	TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY
15D20-10C	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
15D30-10A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

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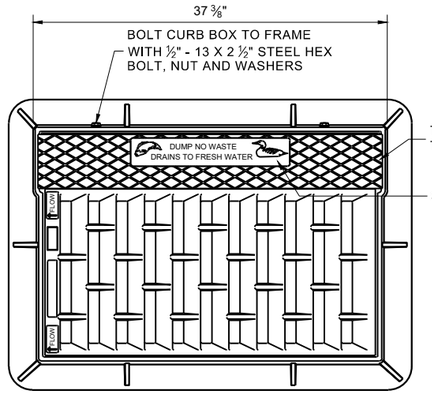
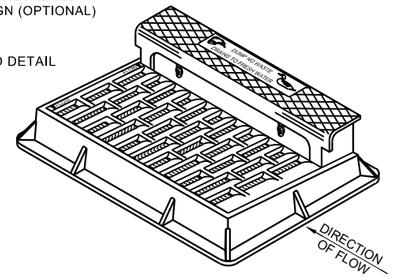
Standard Detail Drawing List

15D30-10F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-10K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D40-06A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

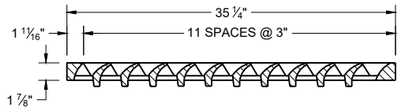
6

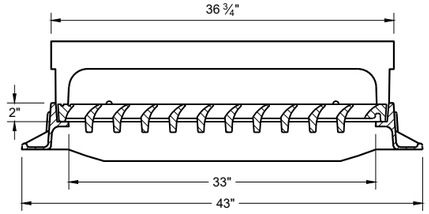


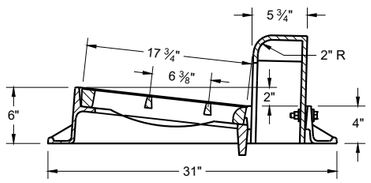
NOTE: EITHER CASTING IS ACCEPTABLE

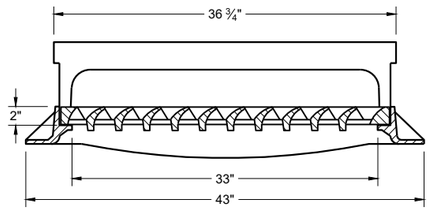


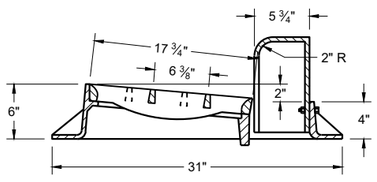
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"







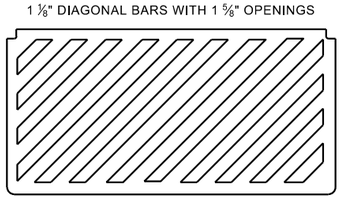




TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE

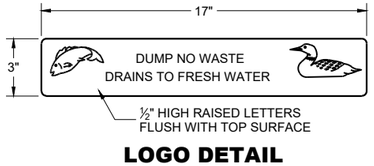
1 1/8" DIAGONAL BARS WITH 1 5/8" OPENINGS



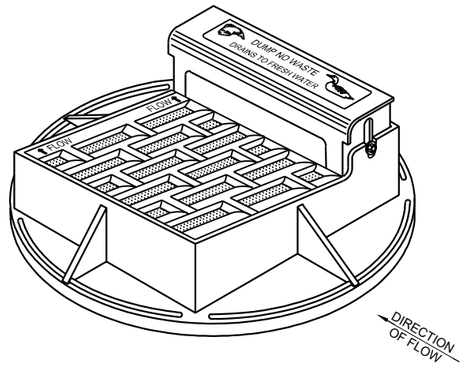
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

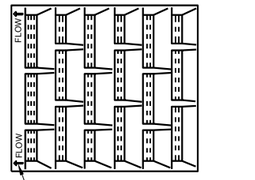


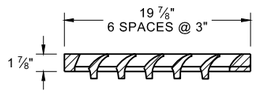
LOGO DETAIL

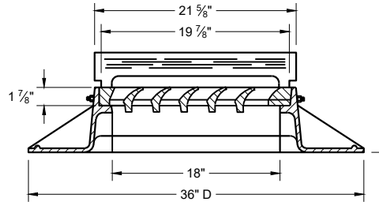


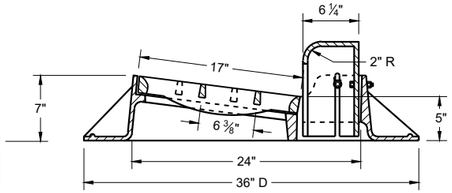
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

NOTE: EITHER CASTING IS ACCEPTABLE









TYPE "A"

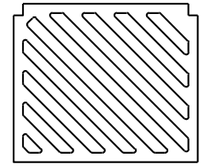
GENERAL NOTES

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.

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

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

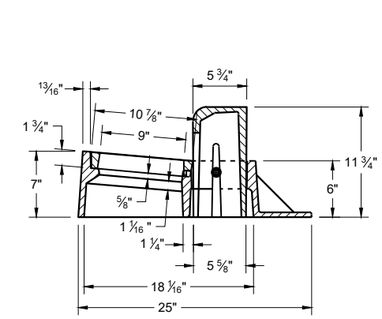
1" DIAGONAL BARS WITH 1 1/2" OPENINGS

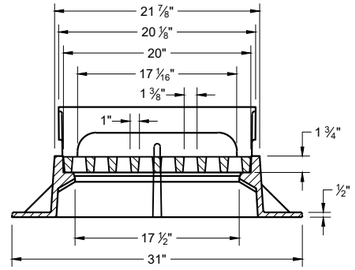


SPECIAL GRATE FOR TYPE "A" COVER

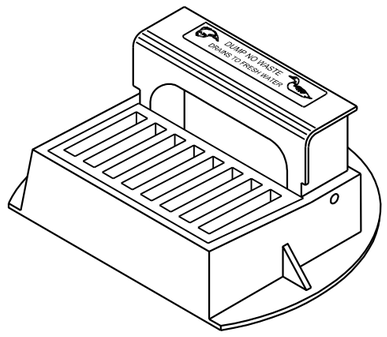
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"



INLET COVERS
TYPES A, H, A-S, H-S AND Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023
DATE

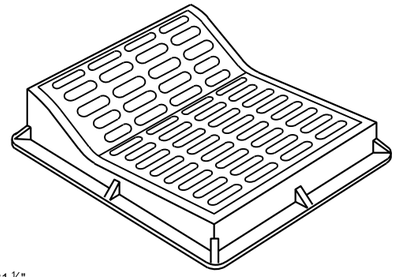
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

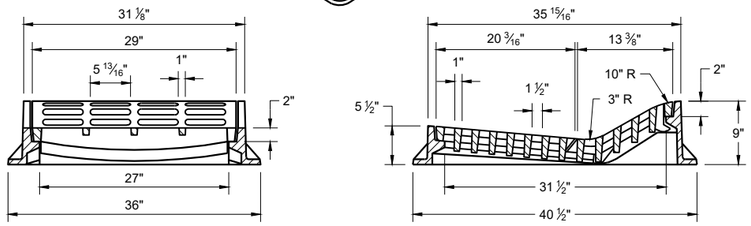
FHWA

GENERAL NOTES

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

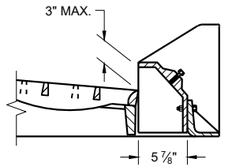
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.





TYPE "F"

USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"

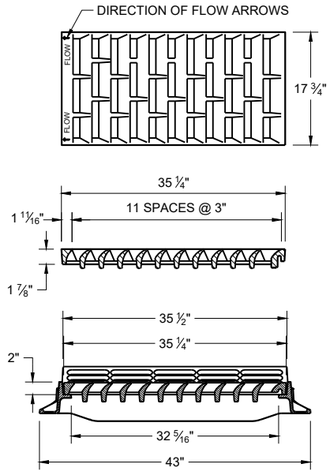


ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

USE WITH TYPES "G" AND "J" CONCRETE CURB AND GUTTER, 30 INCH
NOTED AS TYP "HM-GJ" ON DRAINAGE TABLE

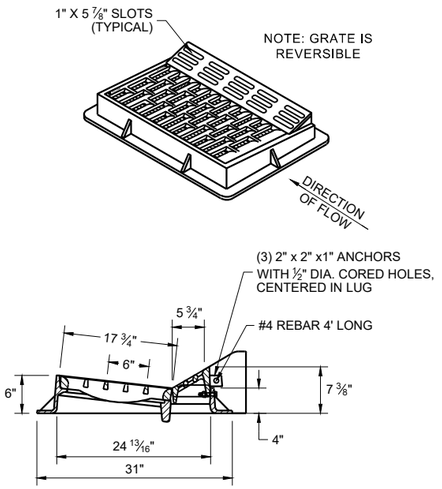
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.



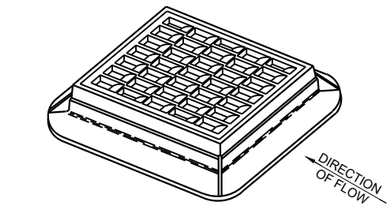
TYPE "HM"

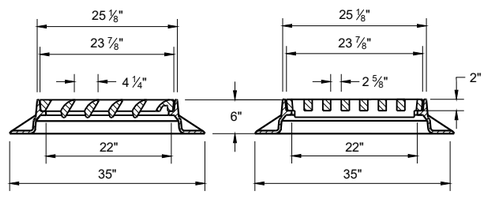
USE WITH TYPES "A" AND "D" CONCRETE CURB AND GUTTER, 36"



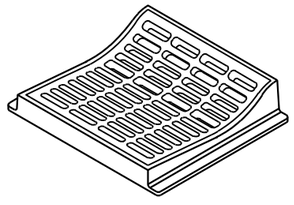
NOTE:
SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER.

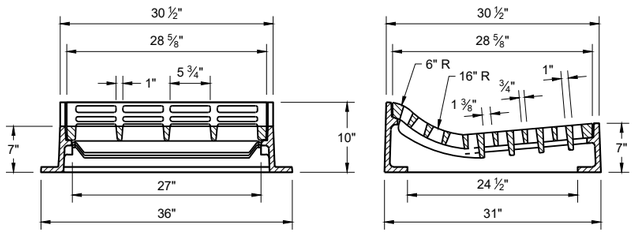
NOTED AS TYPE HM-GJ-S ON THE DRAINAGE TABLE.





TYPE "S"





TYPE "T"

USE WITH TYPES "R" AND "T" CONCRETE CURB AND GUTTER, 36"

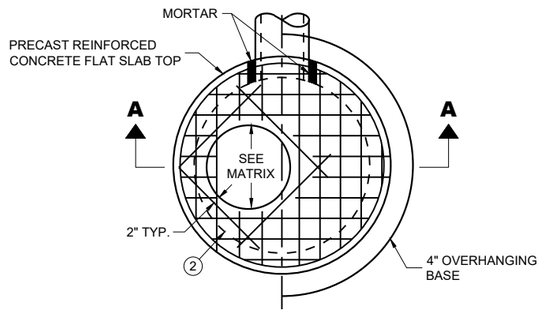
INLET COVERS
TYPES F, HM, HM-S, S, T, HM-GJ AND HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

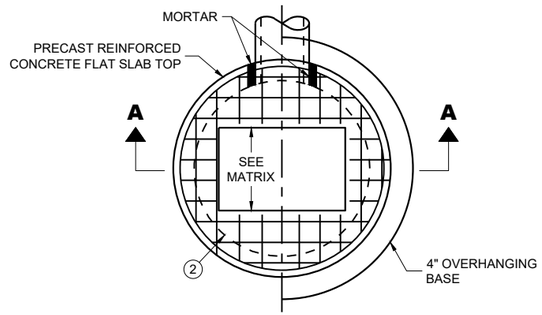
APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

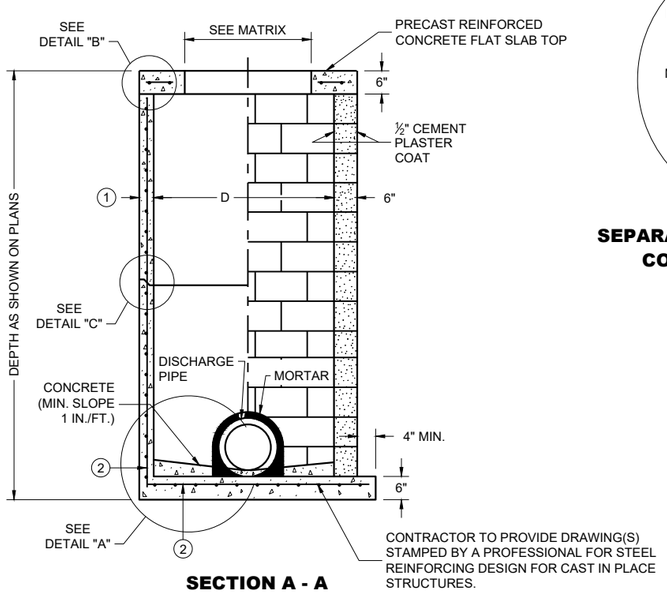
6
SDD 08A05-21c



PLAN VIEW CIRCULAR OPENING



PLAN VIEW RECTANGULAR OPENING



SECTION A - A

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST IN PLACE OR PRECAST REINFORCED CONCRETE BASE (2)

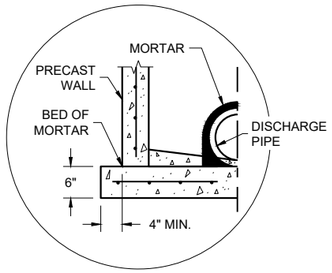
CIRCULAR INLETS WITH FLAT TOP

CATCH BASIN COVER OPENING MATRIX

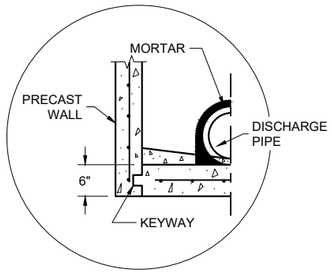
INLET SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V V-B	WM	Z
	OPENING SIZE (FT.)											
3-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
4-FT	2 DIA.				X							X
	2 X 2	X	X					X		X		
	2 X 2.5			X				X	X	X	X	
	2 X 3						X					
	2.5 X 3					X						

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

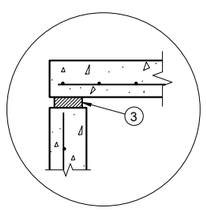


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

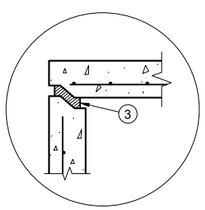


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

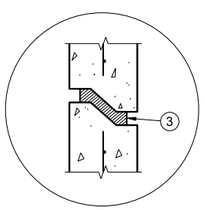
DETAIL "A"



TOP WITH PLAIN END JOINT



TOP WITH TONGUE AND GROOVE JOINT



RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

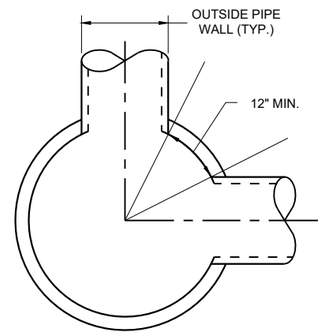
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

(1) MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT DIAMETER AND 5 INCHES FOR 4-FT DIAMTER PRECAST INLETS.

(2) FOR PRECAST INLETS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

(3) JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.



MINIMUM HORIZONTAL PIPE SEPARATION

DETAIL "D"

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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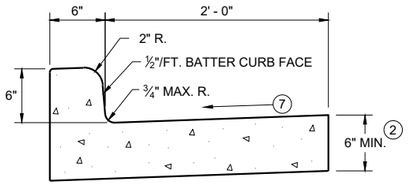
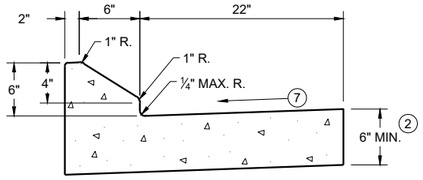
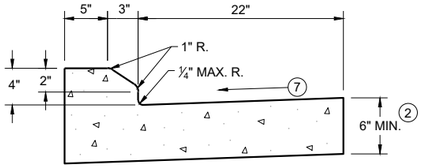
SDD 08C06-03



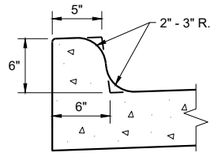
TYPES A (1) & D



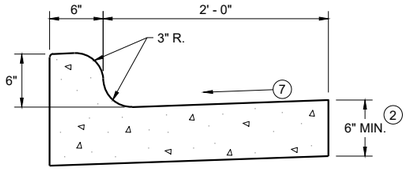
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

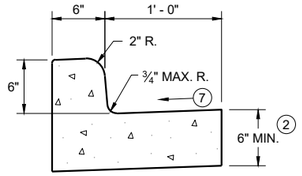


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



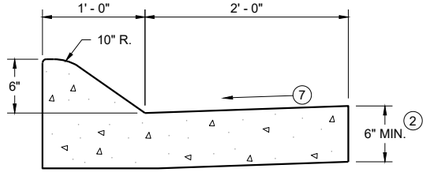
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

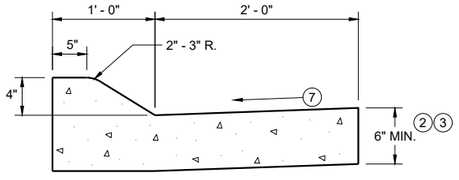


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

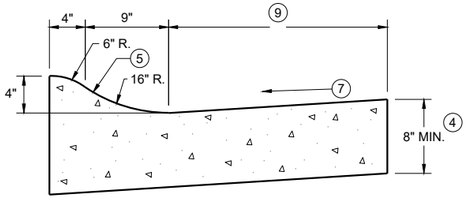


6" SLOPED CURB TYPES A (1) & D



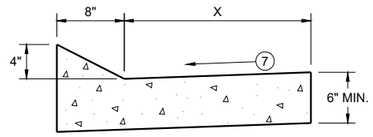
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

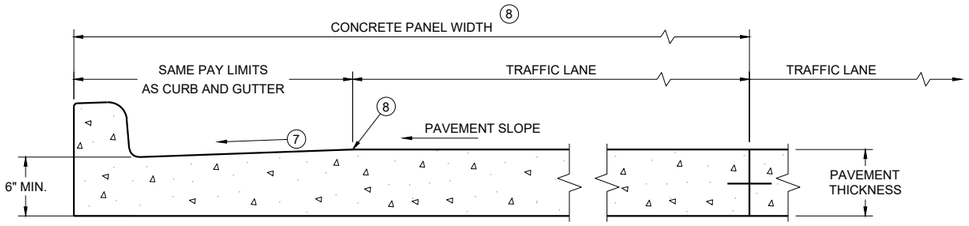


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

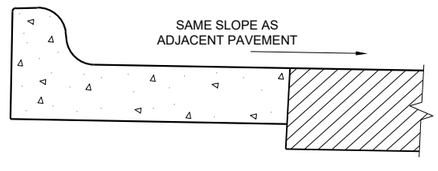
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a

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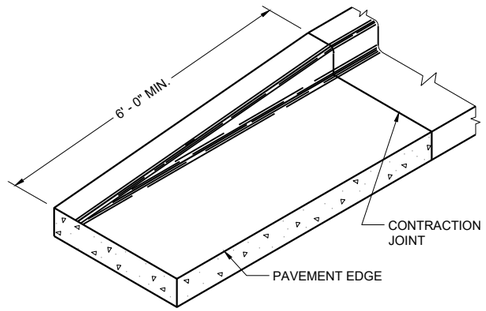
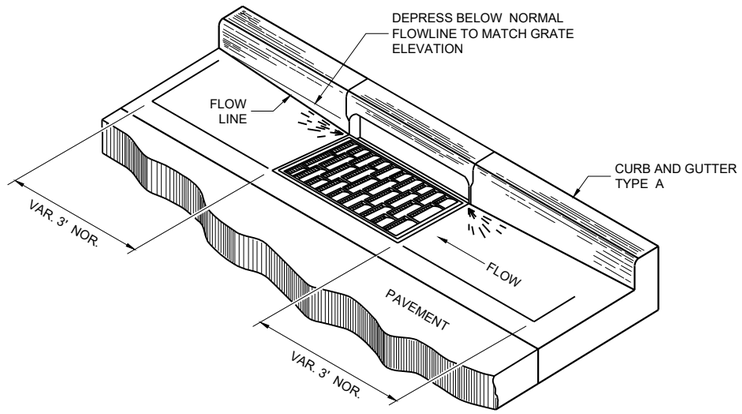


END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

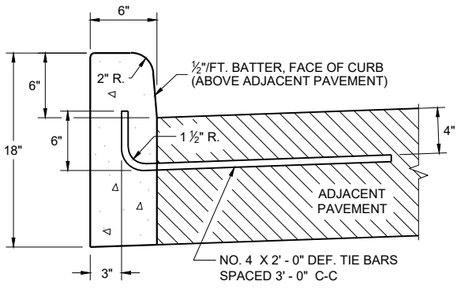
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

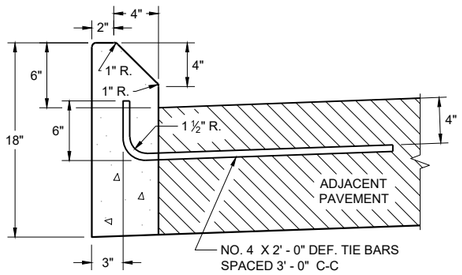
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

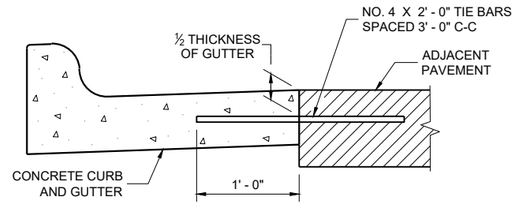


TYPES A (1) & D

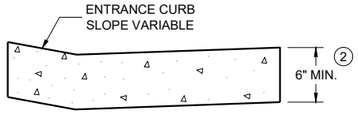


TYPES G (1) & J

CONCRETE CURB

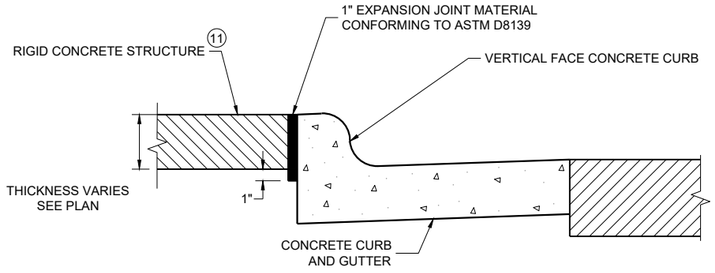


TYPICAL TIE BAR LOCATION (1)

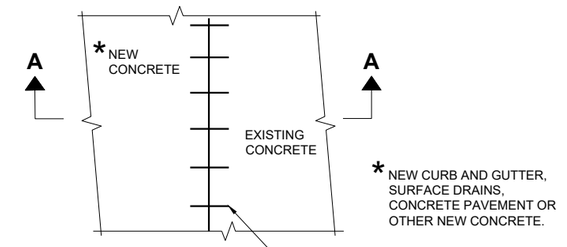


DRIVEWAY ENTRANCE CURB (10)

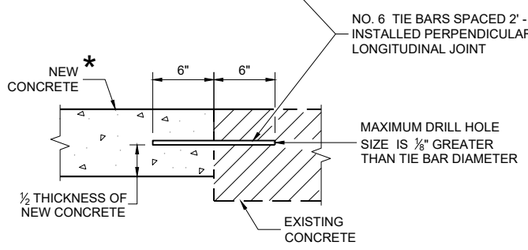
(WHEN DIRECTED BY THE ENGINEER)



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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SDD 08D01-23b

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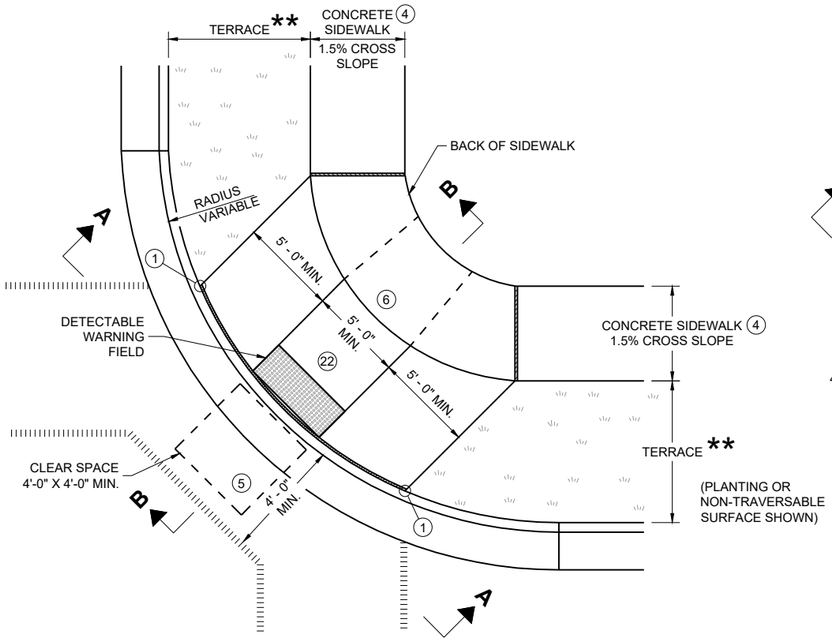
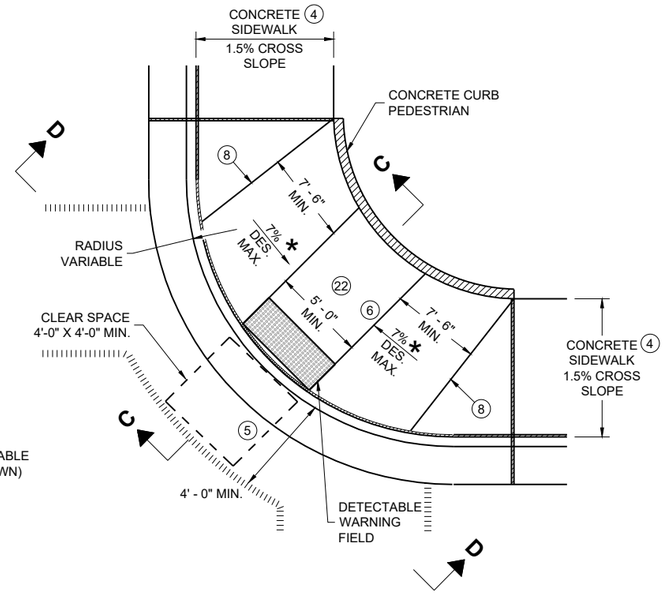
SDD 08D01-23b



PLAN VIEW

CURB RAMP TYPE 1

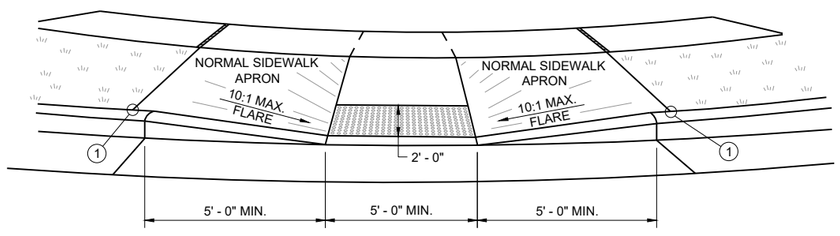
(CENTER OF CORNER RADIUS)



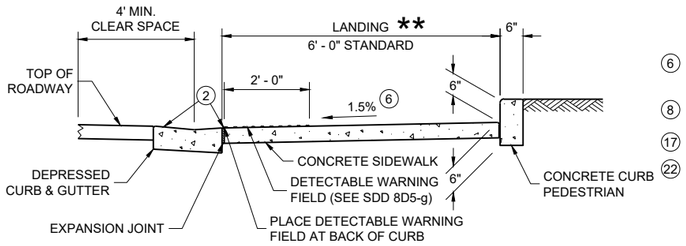
PLAN VIEW

CURB RAMP TYPE 1 - A

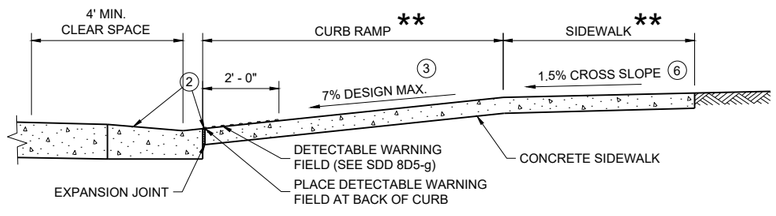
(NO TERRACE)



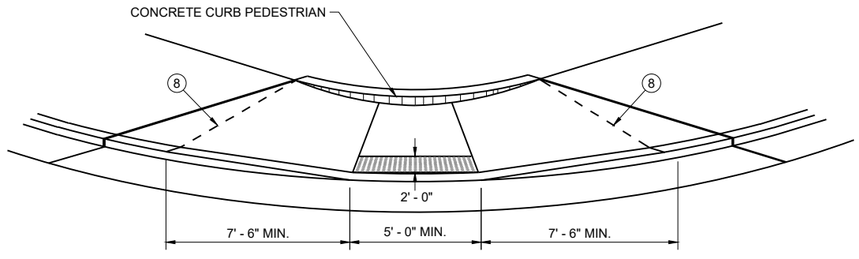
VIEW A - A FOR TYPE 1



SECTION C - C FOR TYPE 1 - A



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE CURB RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF CURB RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE CURB RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A CLEAR SPACE IN THE STREET AND GUTTER AREA. WHEN THE GUTTER CROSS SLOPE EXCEEDS 2.1%, CONSTRUCT THE CLEAR SPACE IN THE STREET AREA AND THE 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE. FOR RECONSTRUCTION AND MODERNIZATION PROJECTS THE CLEAR SPACE SLOPE PARALLEL TO THE CURBLINE SHOULD BE 2.1% MAX FOR CROSSINGS THAT ARE STOP AND YIELD CONTROLLED, AND 5% MAX FOR THOSE THAT ARE SIGNAL CONTROLLED. FOR PERPETUATION AND REHABILITATION PROJECTS THE SLOPE OF THE CLEAR SPACE PARALLEL TO THE CURBLINE WILL MATCH THE ROADWAY LONGITUDINAL SLOPE. THE SLOPE OF THE CLEAR SPACE PERPENDICULAR TO THE CURBLINE WILL MATCH THE ROADWAY CROSS SLOPE BUT SHOULD NOT EXCEED 5% UNLESS THE ROADWAY IS SUPERELEVATED (WHEN SUPERELEVATED THE ROADWAY CROSS SLOPE SHOULD MATCH THE SUPERELEVATION).

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

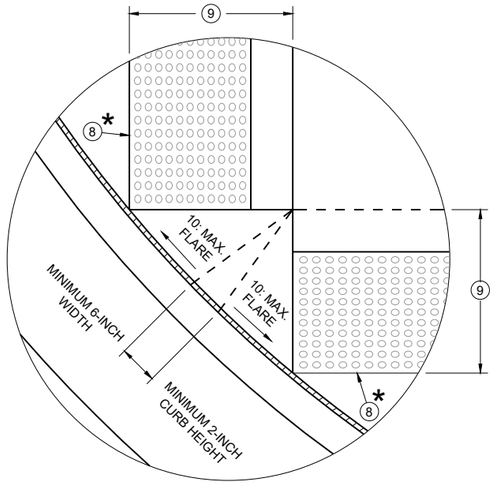
(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

LEGEND

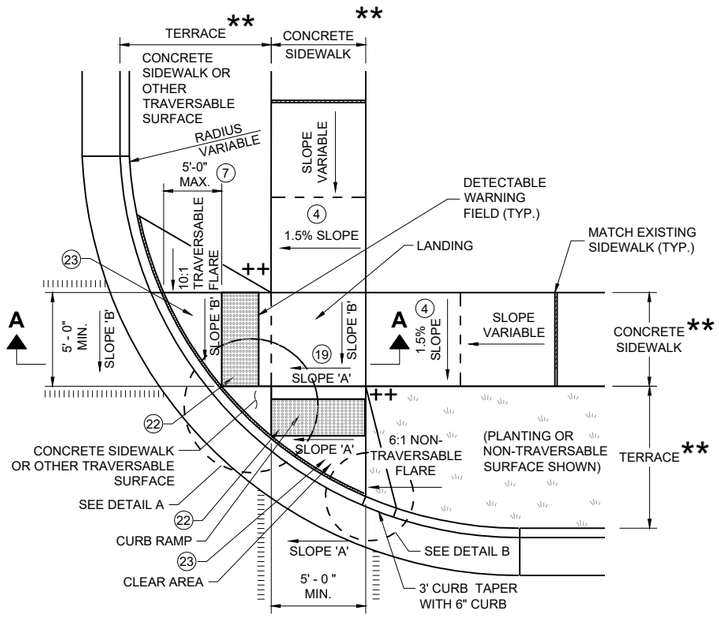
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 8.3%
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS

CURB RAMPS TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



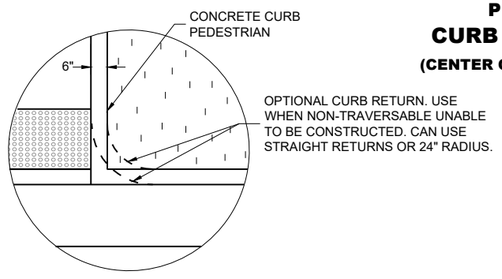
DETAIL A



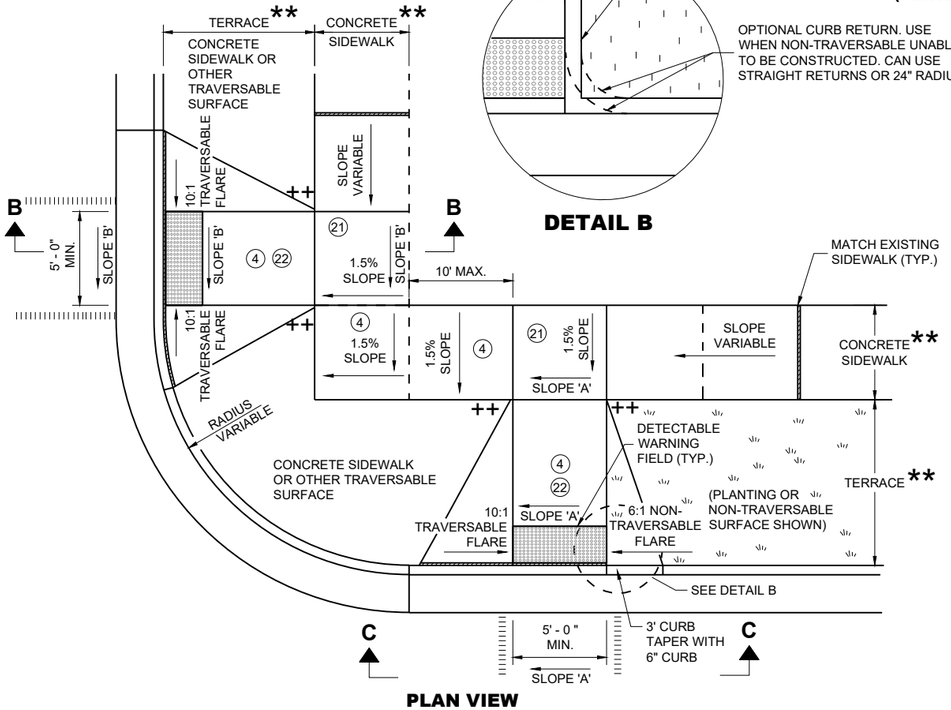
PLAN VIEW

CURB RAMP TYPE 2

(CENTER OF CORNER RADIUS)



DETAIL B



PLAN VIEW

CURB RAMP TYPE 3

(OUTSIDE OF CROSSWALK AREA)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% DESIGN MAXIMUM SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% DESIGN MAXIMUM SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

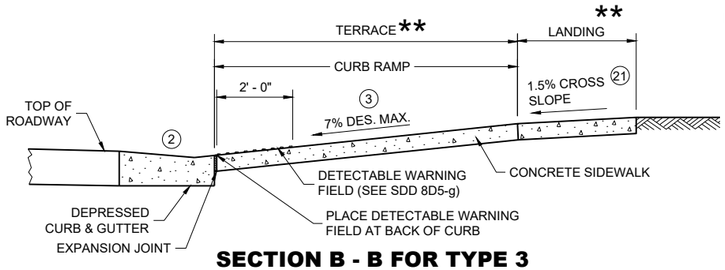
(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

(19) WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE SHALL NOT EXCEED THE CROSS SLOPE AT THE BOTTOM OF THE RAMP OR WITHIN THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.

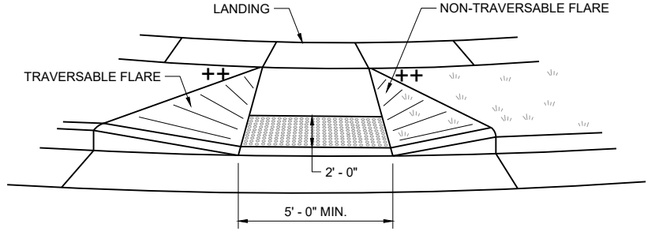
(21) PROVIDE A LANDING WITH A SLOPE PARALLEL TO ROADWAY THAT MATCHES SLOPE AT THE BOTTOM OF THE ADJACENT RAMP. SLOPE PERPENDICULAR TO ROADWAY SHALL BE 2.1% MAXIMUM. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

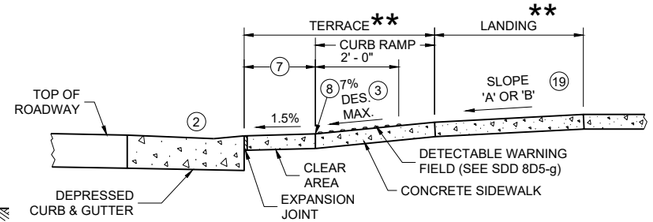
(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3



SECTION A - A FOR TYPE 2

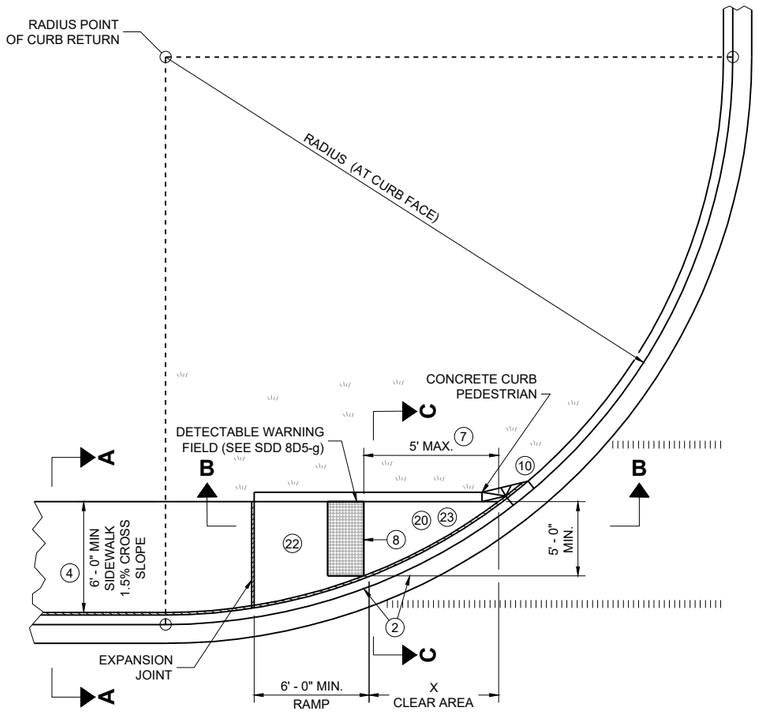
LEGEND

▨	½" EXPANSION JOINT SIDEWALK
– – – –	CONTRACTION JOINT SIDEWALK
ıllıllıllıllıl	PAVEMENT MARKING CROSSWALK (WHITE)
*	MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
**	WIDTH SHOWN ELSEWHERE IN THE PLANS
++	CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

CURB RAMPS TYPE 2 AND 3

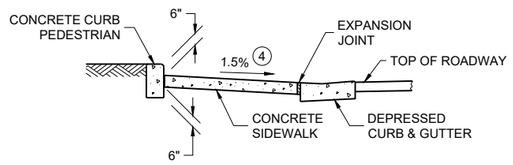
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 08D05-22b

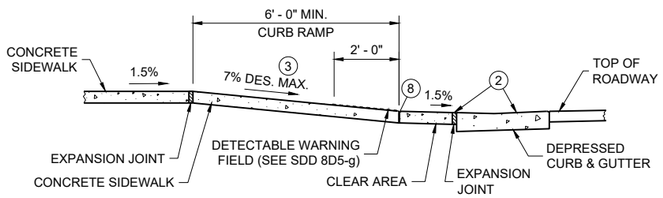


PLAN VIEW

CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A



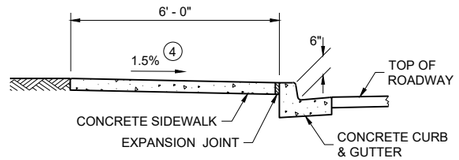
SECTION B - B FOR TYPE 4A AND TYPE 4A1

LEGEND

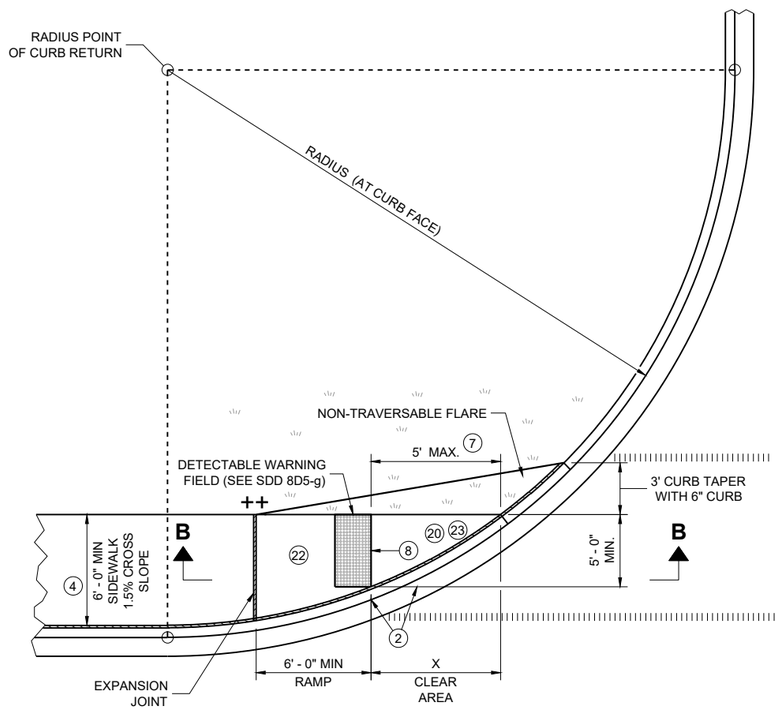
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



PLAN VIEW

CURB RAMP TYPE 4A1

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

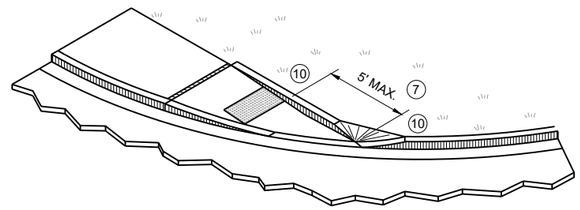
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

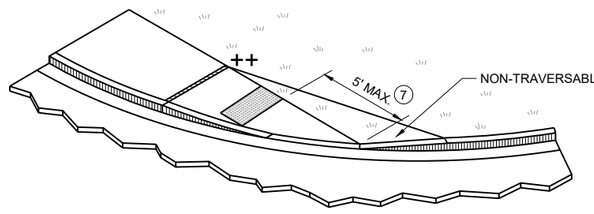
(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



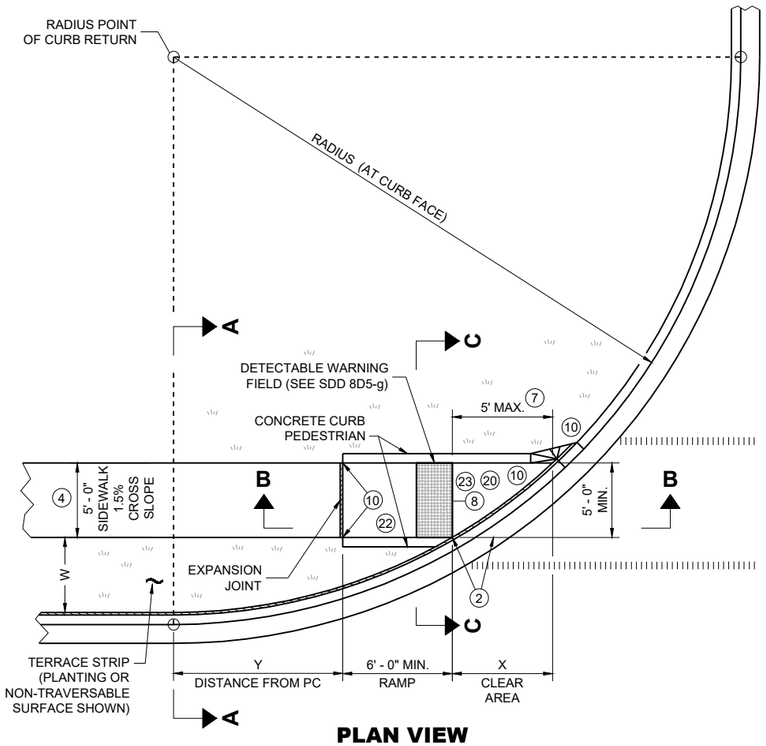
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

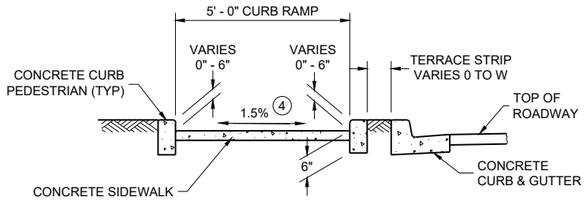
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW
CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET			4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET									4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET															4' - 10 ¾"	19' - 8 ¼"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH



SECTION C - C FOR TYPE 4B

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

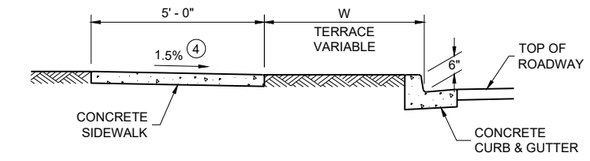
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

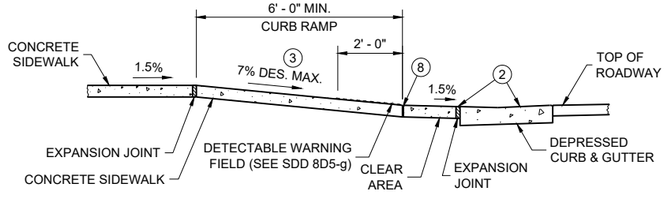
(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

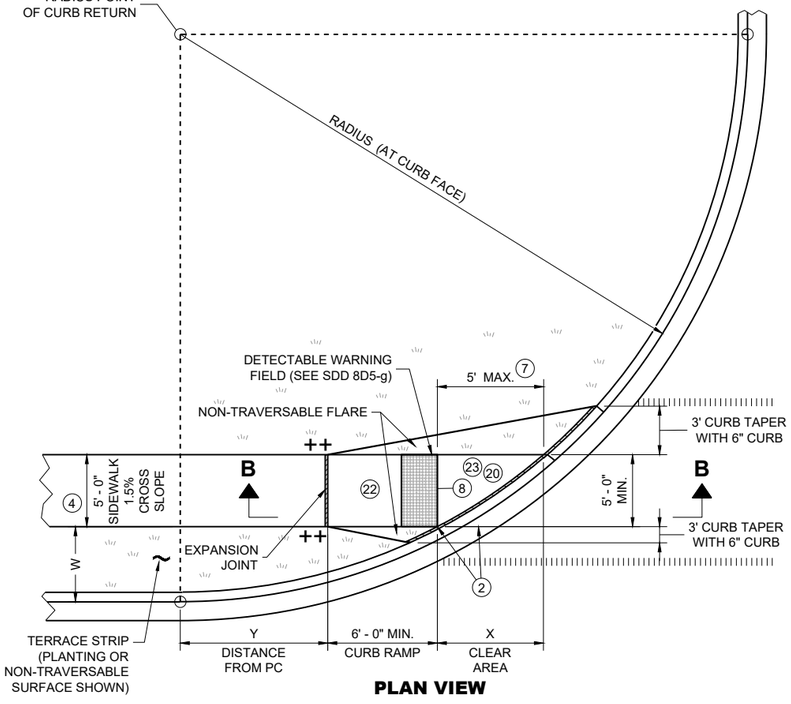
(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



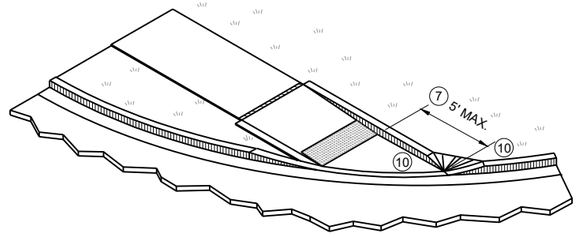
SECTION A - A FOR TYPE 4B



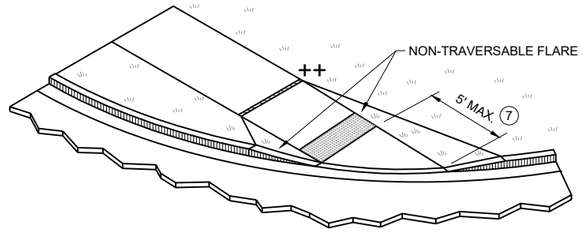
SECTION B - B FOR TYPE 4B AND TYPE 4B1



PLAN VIEW
CURB RAMP TYPE 4B1



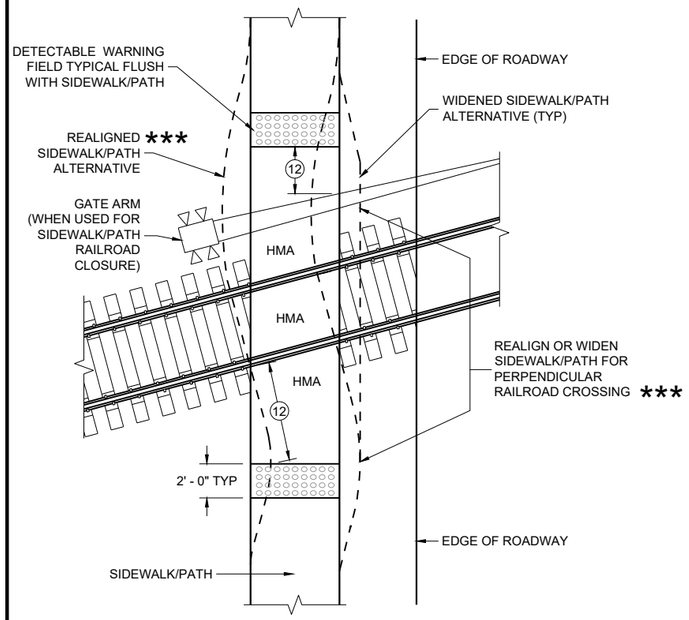
ISOMETRIC VIEW FOR TYPE 4B



ISOMETRIC VIEW FOR TYPE 4B1

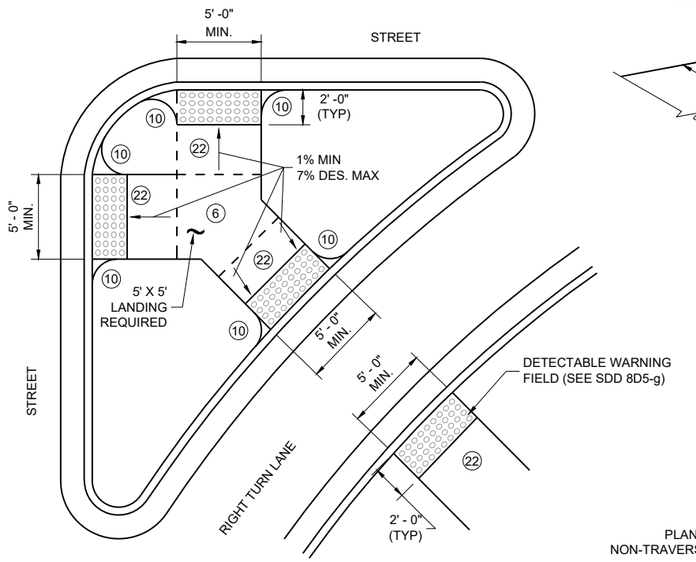
CURB RAMPS
TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP TYPE 8

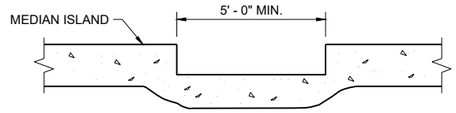
DETECTABLE WARNINGS FOR SIDEWALKS OR SHARED USE PATHS AT RAILROAD CROSSINGS



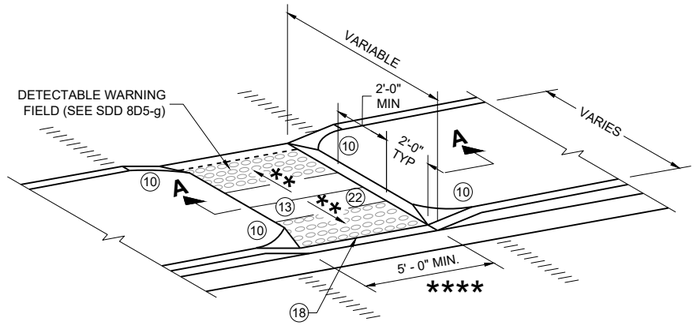
CURB RAMP TYPE 6

DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS

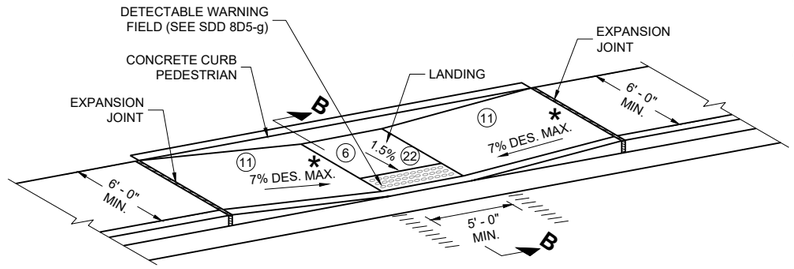


SECTION A - A FOR TYPE 5



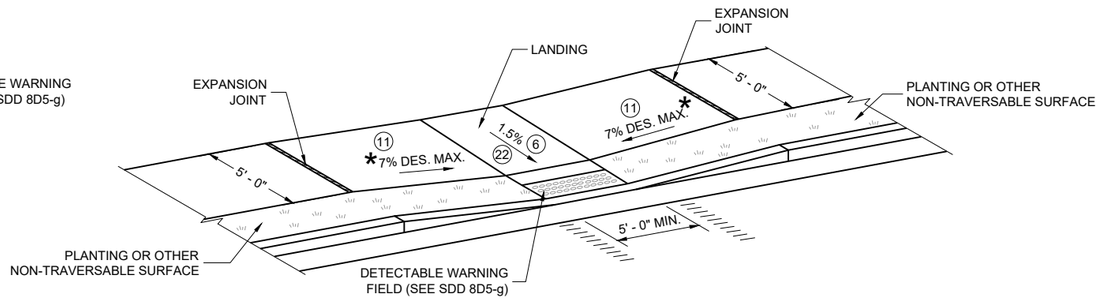
CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING



CURB RAMP TYPE 7A

FOR INTERSECTIONS AND MID BLOCK CROSSINGS



CURB RAMP TYPE 7B

FOR INTERSECTIONS AND MID BLOCK CROSSINGS

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH, WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

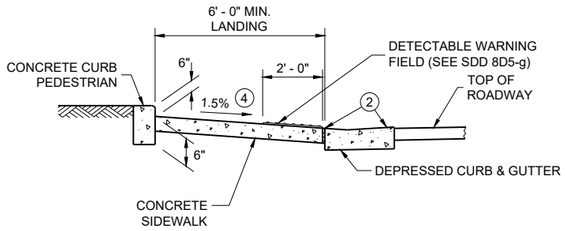
(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

(18) WHEN THE DISTANCE BETWEEN THE BACK OF CURBS IS LESS THAN 6 FEET BUT THE FACE OF CURB TO FACE OF CURB DISTANCE IS 6 FEET OR GREATER THEN THE DETECTABLE WARNING FIELDS MAY BE MOVED SO THAT THE EDGE OF THE WARNING FIELD IS PLACED AT THE GUTTER FLOWLINE. MAINTAIN A MINIMUM OF TWO FEET BETWEEN DETECTABLE WARNING FIELD PANELS.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

LEGEND

═══	½" EXPANSION JOINT SIDEWALK
– – – –	CONTRACTION JOINT FIELD LOCATED
ıı ıı ıı ıı	PAVEMENT MARKING CROSSWALK (WHITE)
*	MAXIMUM 8.3%
**	1% MINIMUM (PROVIDE DRAINAGE)
***	DETAILS TO BE DETERMINED BY ENGINEER
****	FOR SHARED USE PATHS, WIDTH MUST BE AS WIDE AS THE CROSSWALK



SECTION B - B FOR TYPE 7A

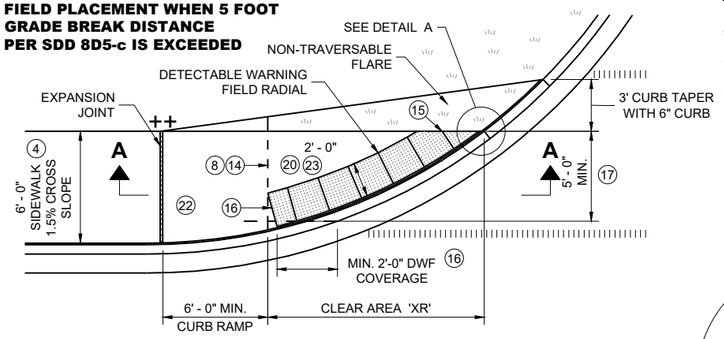
CURB RAMPS
TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05-22e

6

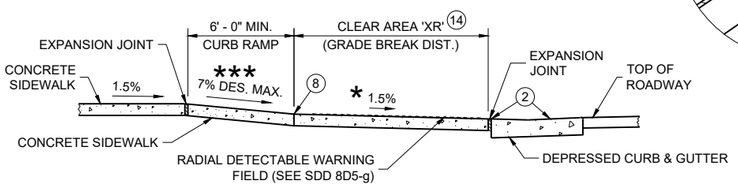
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

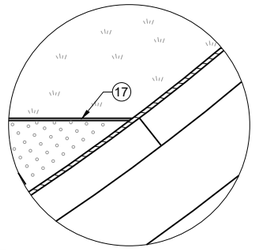
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



SECTION A - A FOR TYPE 4A1

LEGEND

═══	½" EXPANSION JOINT SIDEWALK
– – – –	CONTRACTION JOINT SIDEWALK
ıı ıı ıı ıı	PAVEMENT MARKING CROSSWALK (WHITE)
**	WIDTH SHOWN ELSEWHERE IN THE PLANS
***	MAXIMUM 8.3%
++	CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



DETAIL A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.

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

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.

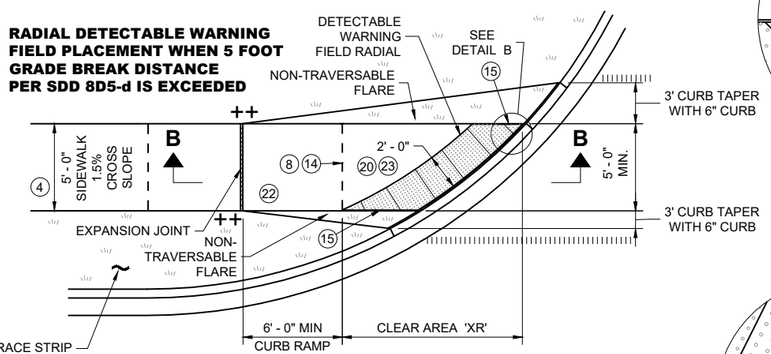
(19) WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE SHALL NOT EXCEED THE CROSS SLOPE AT THE BOTTOM OF THE RAMP OR WITHIN THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.

(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

(22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

(23) THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.

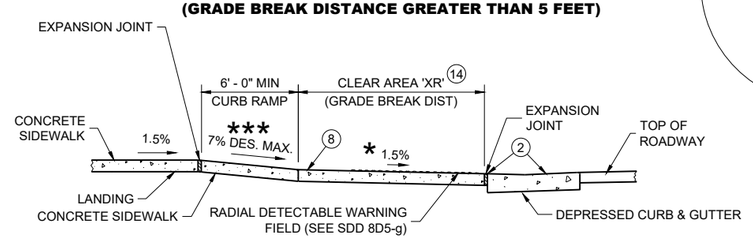
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



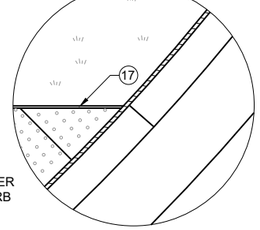
PLAN VIEW

CURB RAMP TYPE 4B1

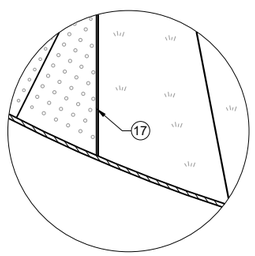
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



SECTION B - B FOR TYPE 4B1

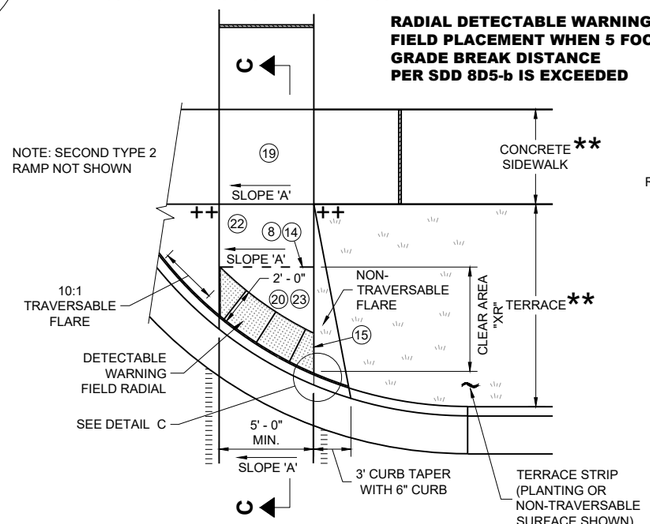


DETAIL B



DETAIL C

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

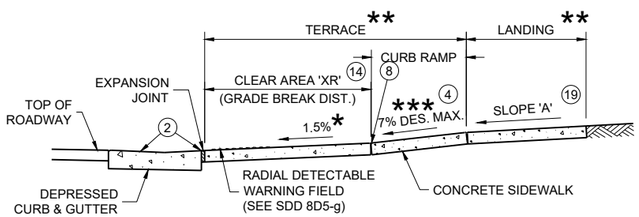


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)



SECTION C - C FOR TYPE 2

CURB RAMPS RADIAL DETECTABLE WARNING

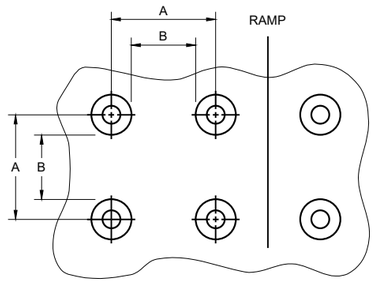
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

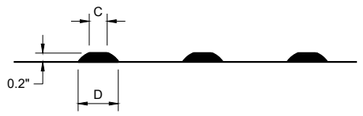
SDD 08D05-22f

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

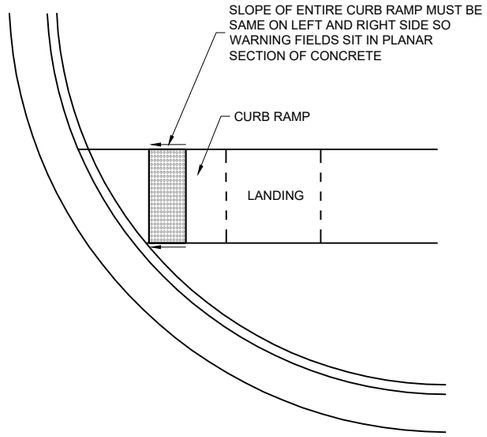
* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



PLAN VIEW



ELEVATION VIEW



DETECTABLE WARNING FIELD
PLANAR INSTALLATION

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

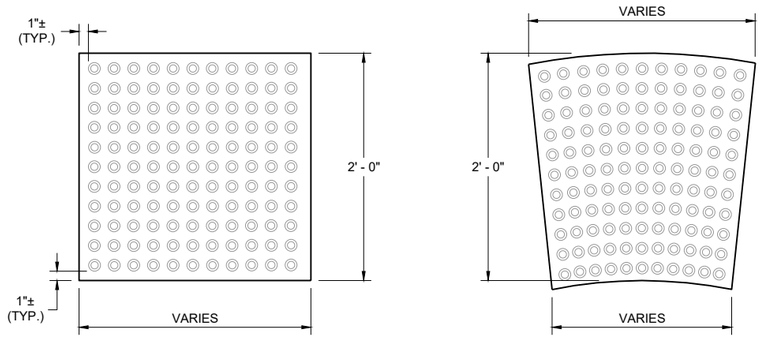
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

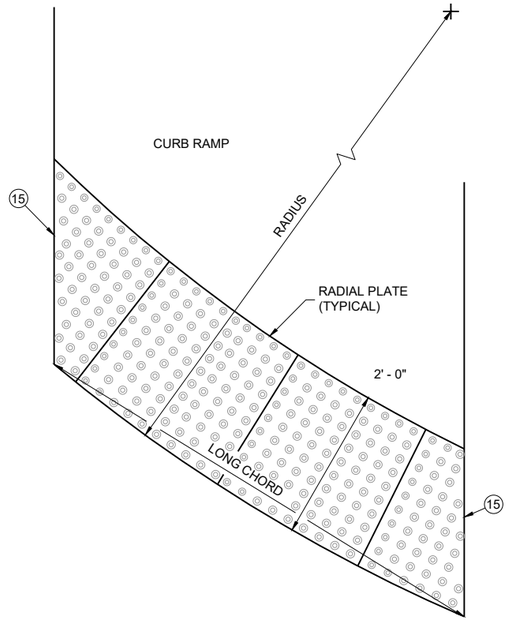
TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



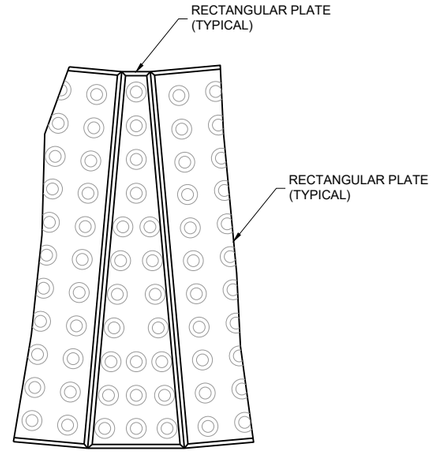
RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025 — DATE
/S/ Rodney Taylor — <position>

FHWA

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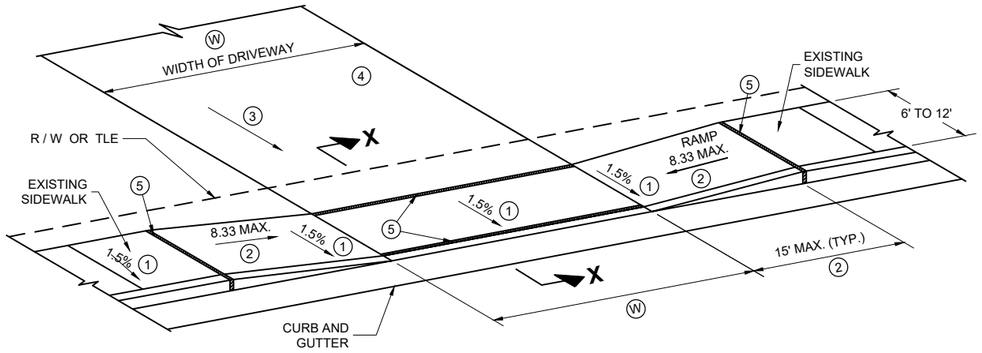
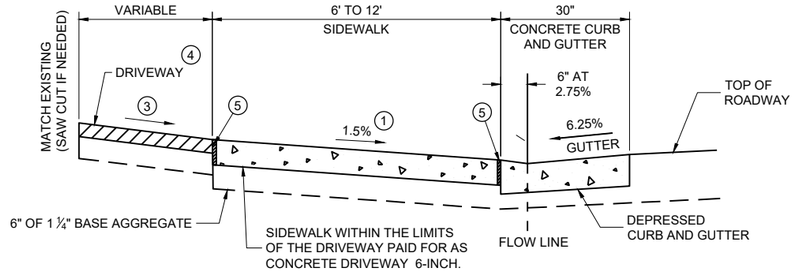
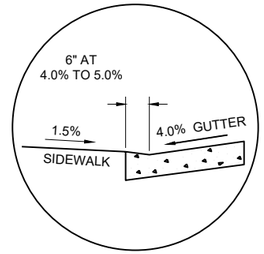
SDD 08D05-22g



TYPE X
SIDEWALK ABUTS CURB AND GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X - X



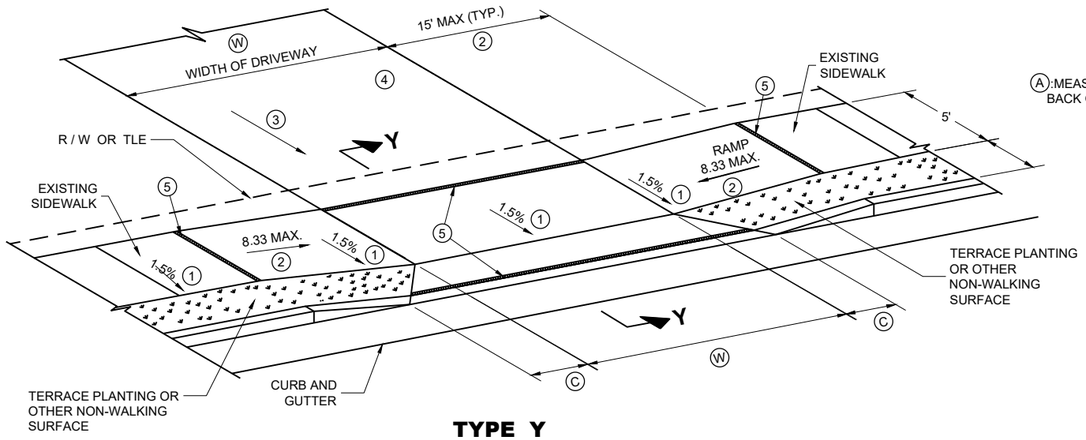
SECTION X - X
4% GUTTER SLOPE

Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

16' MIN. - 35' MAX. COMMERCIAL (CE)

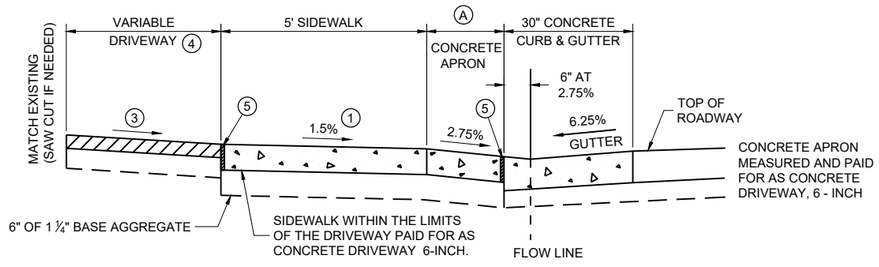
TABLE Y

Ⓐ FEET	Ⓒ FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'



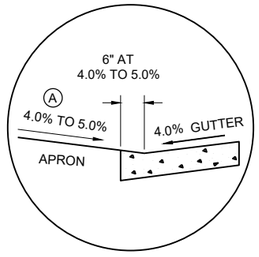
TYPE Y
SIDEWALK WITH NARROWER TERRACE
TERRACE VARIES 4 TO 6 FEET

Ⓐ:MEASURE FROM BACK OF CURB



NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y - Y



SECTION Y - Y
4% GUTTER SLOPE

DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER

(URBAN AND SUBURBAN)

GENERAL NOTES

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

Ⓦ IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM
- 10.5% UP AWAY FROM SIDEWALK (SAG)
- 8.5% DOWN AWAY FROM SIDEWALK (CREST)
- ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

④ DRIVEWAY TYPES
- 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
- 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
- 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

⑤ ½" EXPANSION JOINT FILLER

DRIVEWAY AND SIDEWALK RAMPS TYPES X AND Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2023 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

SDD 08D18-04

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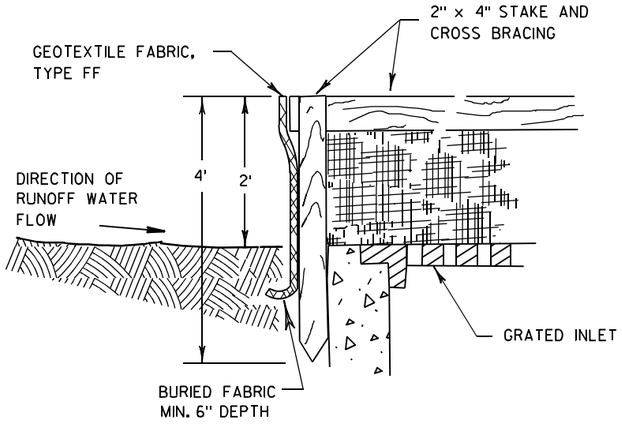
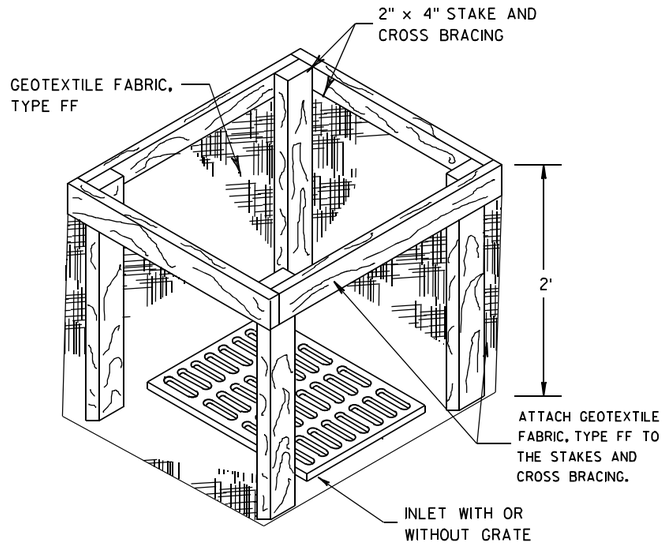
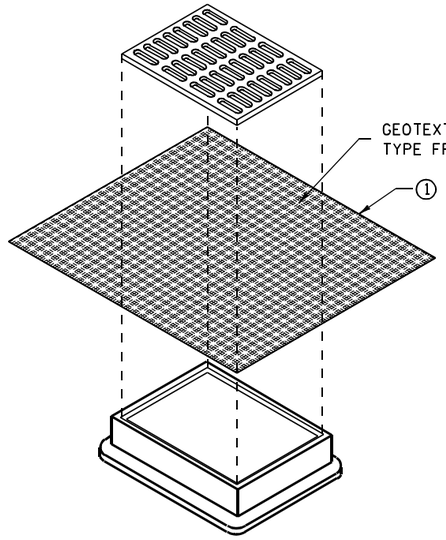


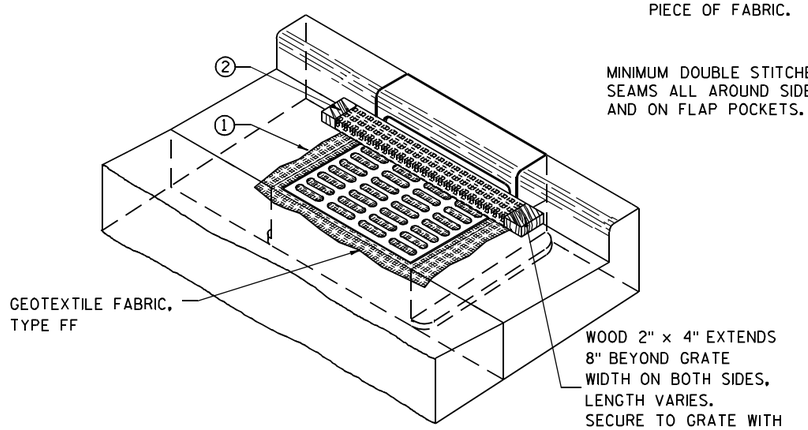


INLET PROTECTION, TYPE A

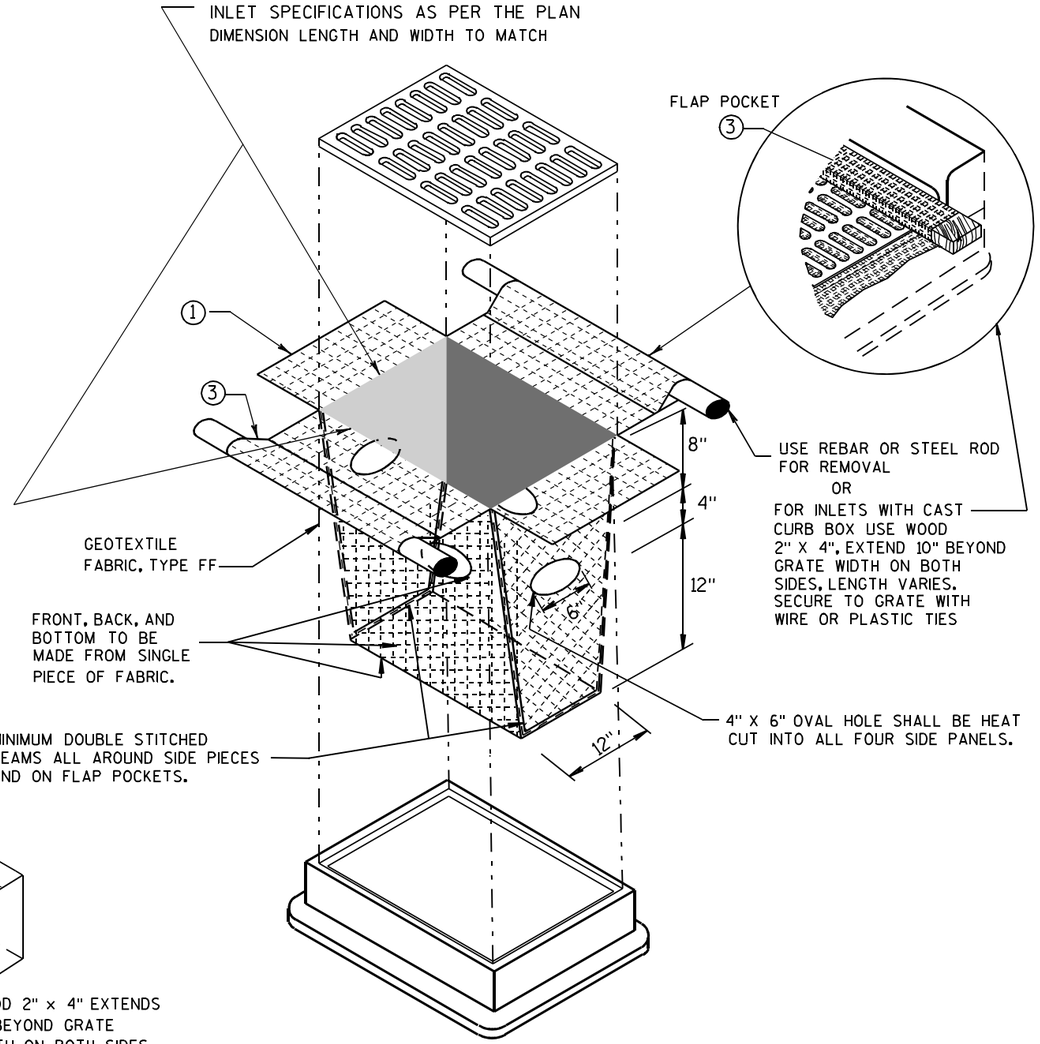


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

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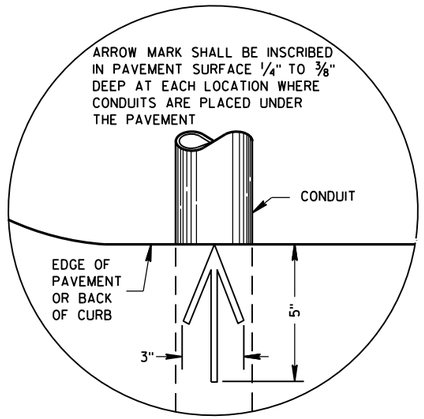
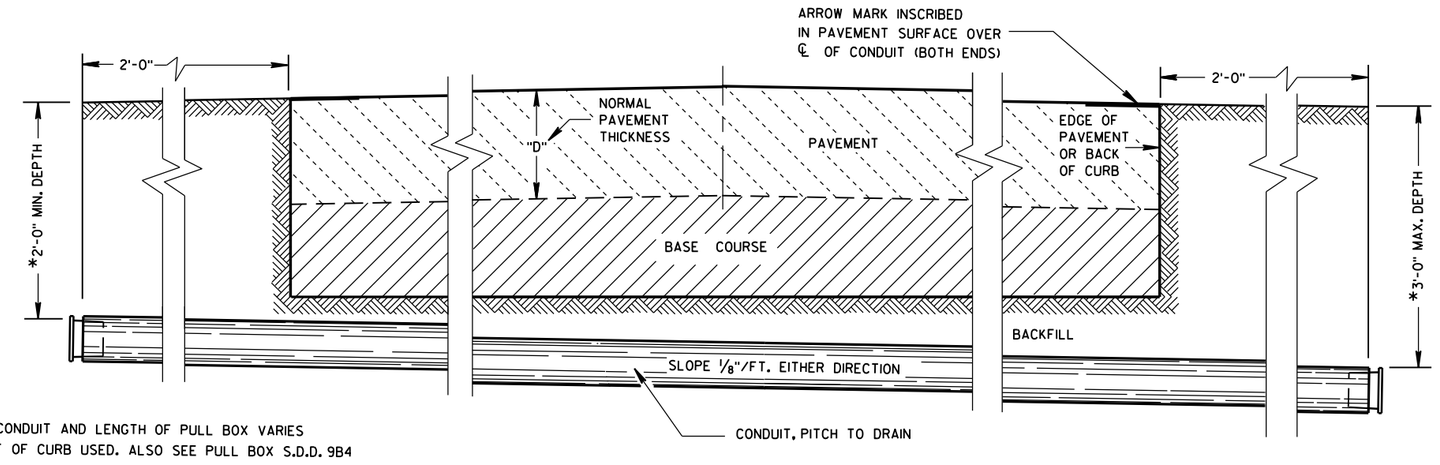
S.D.D. 8 E 10-2



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

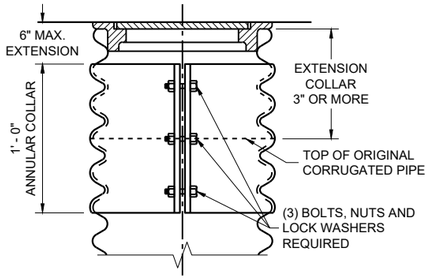
CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

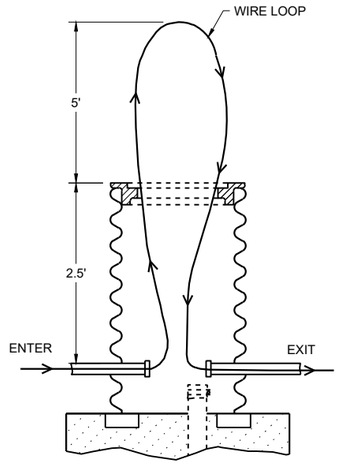
APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

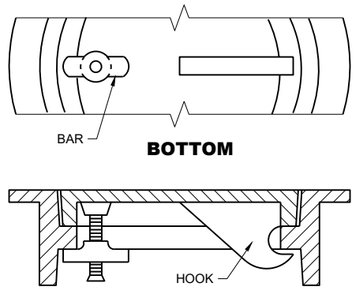
S.D.D. 9 B 2-10



CORRUGATED PIPE EXTENDER



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



BOTTOM

SECTION

ALTERNATE COVER (LOCKING)

TIGHTENING BAR TYPE

GENERAL NOTES

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

ALL FRAMES AND COVERS SHALL BE HEAVY DUTY TYPE, SUITABLE FOR VEHICULAR TRAFFIC LOADS.

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

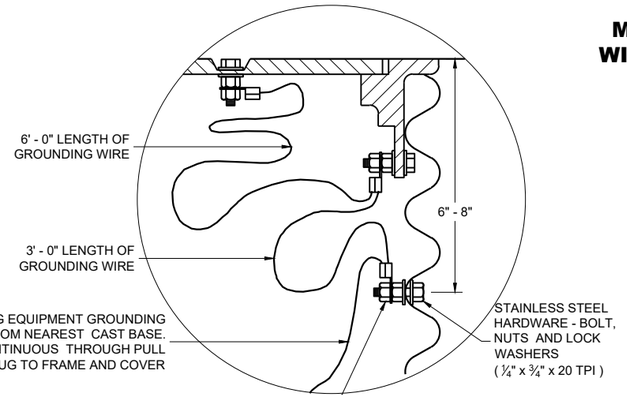
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

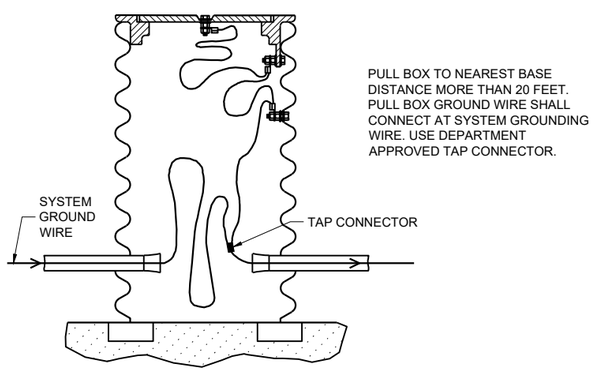
GROUNDING LUGS (MECHANICAL CONNECTORS) SHALL BE U.L. LISTED AND APPROVED FOR USE WITH COPPER WIRE.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

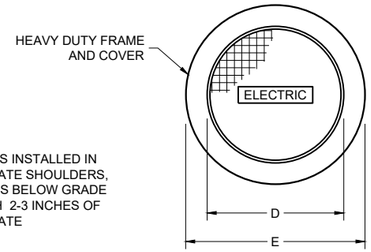
WHEN PULL BOXES ARE INSTALLED FOR FUTURE USE, DO NOT INSTALL THE EQUIPMENT GROUNDING LUG. THE EQUIPMENT GROUNDING LUG, THE EQUIPMENT GROUNDING ELECTRODE AND THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE REQUIRED AND INSTALLED UNDER A FUTURE WIRING CONTRACT.



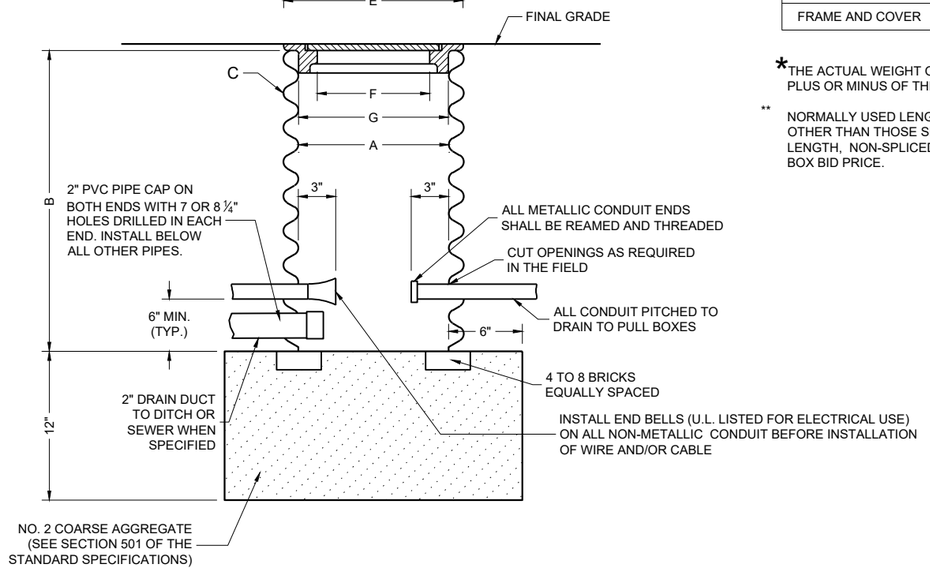
EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE



PULL BOX

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 ¼	10 ¼	10 ¼	16 ¼	16 ¼	16 ¼	22 ¼	22 ¼	22 ¼
FRAME	E	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½	26 ½	26 ½	26 ½
FRAME	F	8 ½	8 ½	8 ½	14 ½	14 ½	14 ½	20 ½	20 ½	20 ½
FRAME	G	11 ½	11 ½	11 ½	17 ½	17 ½	17 ½	23 ½	23 ½	23 ½
WEIGHT IN POUNDS*										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** NORMALLY USED LENGTHS. THE PROJECT ENGINEER SHALL DETERMINE IF PIPE LENGTHS, OTHER THAN THOSE SPECIFIED, SHALL BE USED, TO A MAXIMUM OF 48" (CONTINUOUS LENGTH, NON-SPLICED). THE ADDITIONAL LENGTH SHALL BE INCIDENTAL TO THE PULL BOX BID PRICE.

PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

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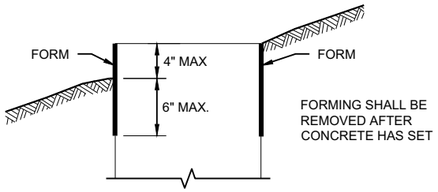
SDD 09B04-13

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

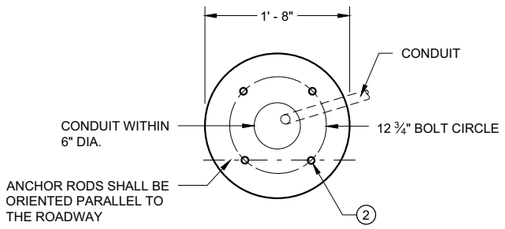
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

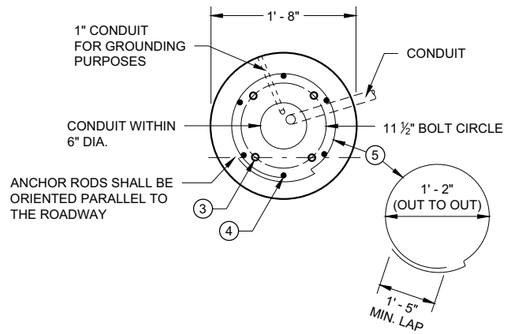
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

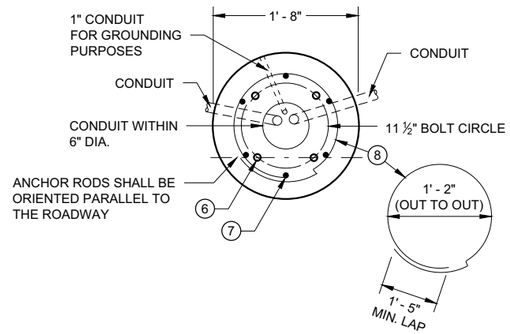
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

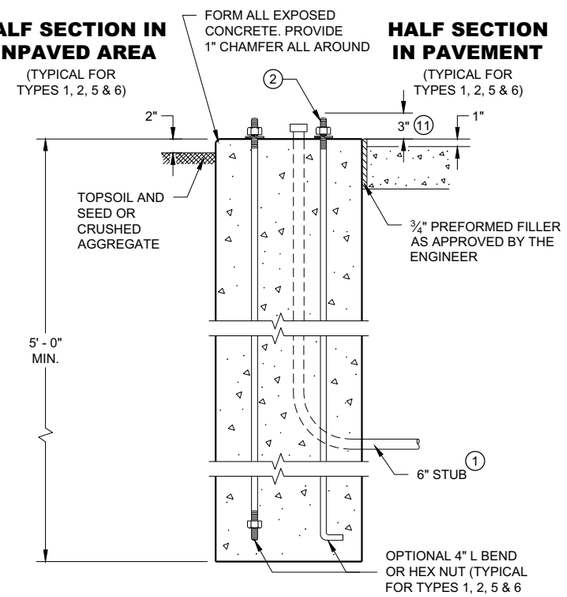
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

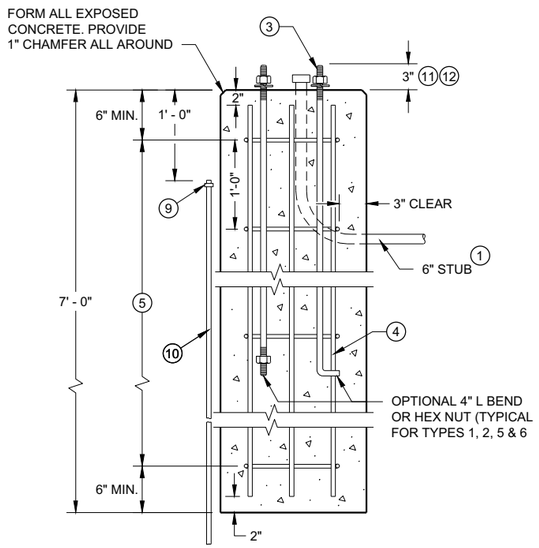
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

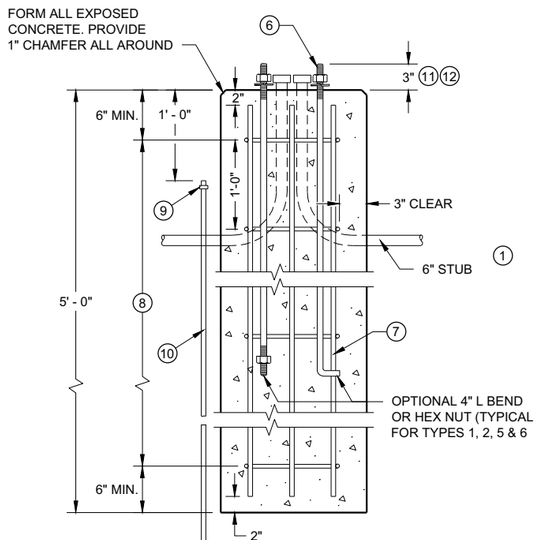
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

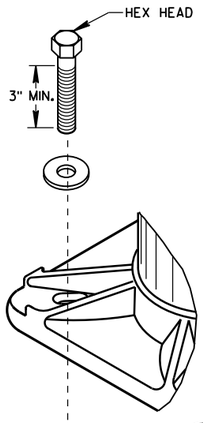
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

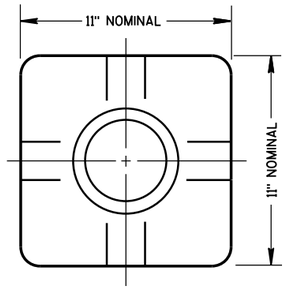
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

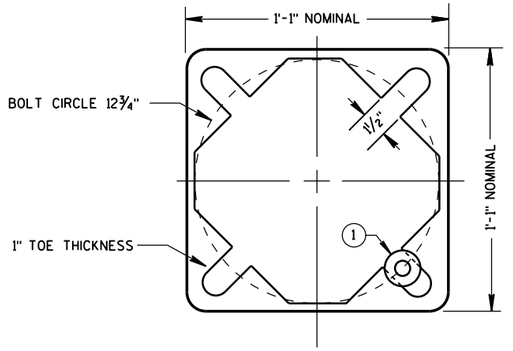
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

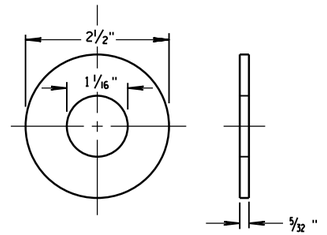




TOP VIEW
(PEDESTAL BASE)

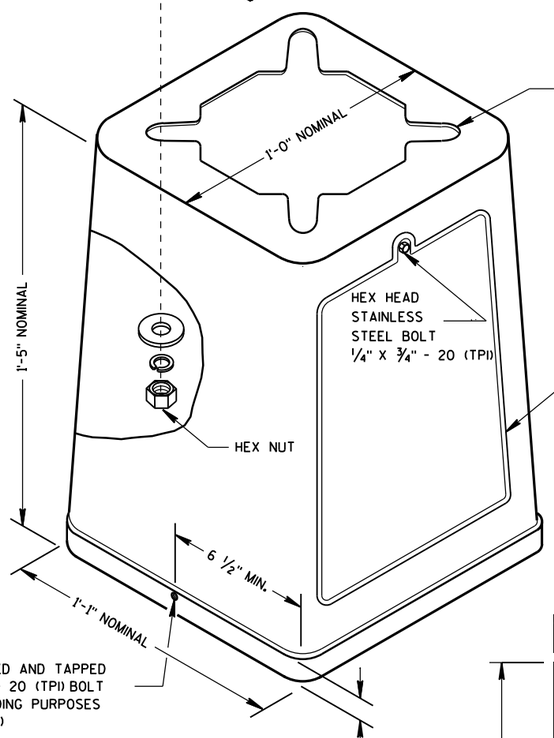


BOTTOM VIEW
(PEDESTAL BASE)

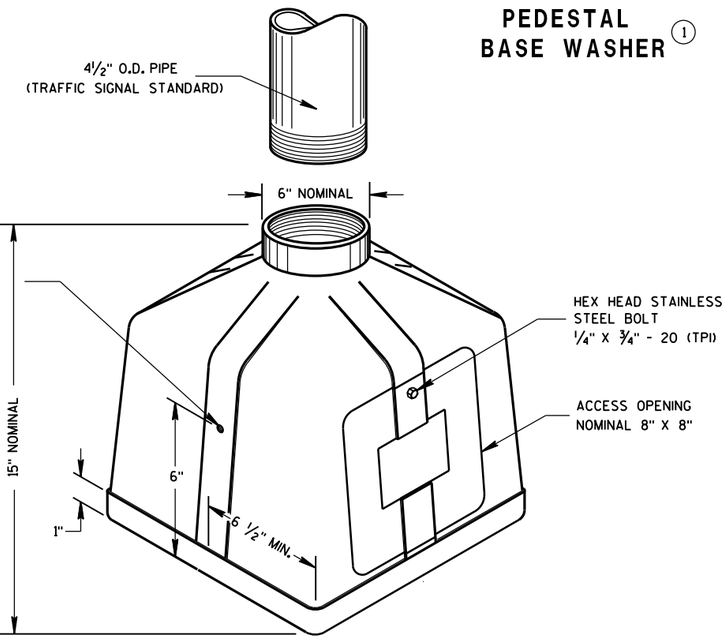


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

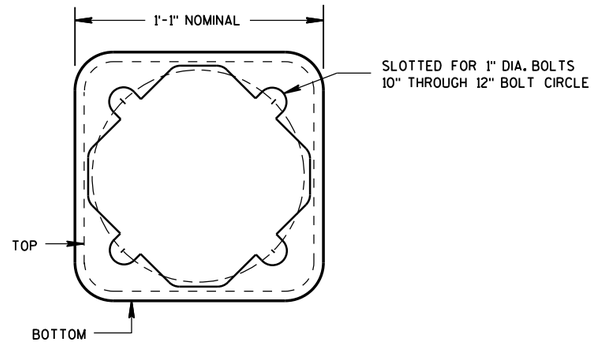
PEDESTAL BASE WASHER (1)



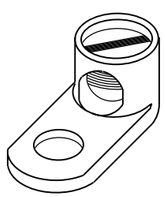
ISOMETRIC VIEW



ISOMETRIC VIEW
PEDESTAL BASE

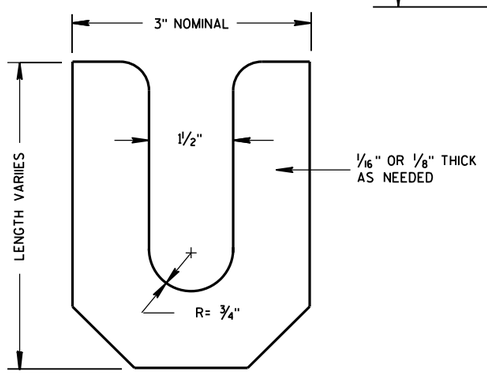


BOTTOM VIEW
(TRANSFORMER BASE)



TYPICAL MECHANICAL CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE
INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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S.D.D. 9 C 3-4

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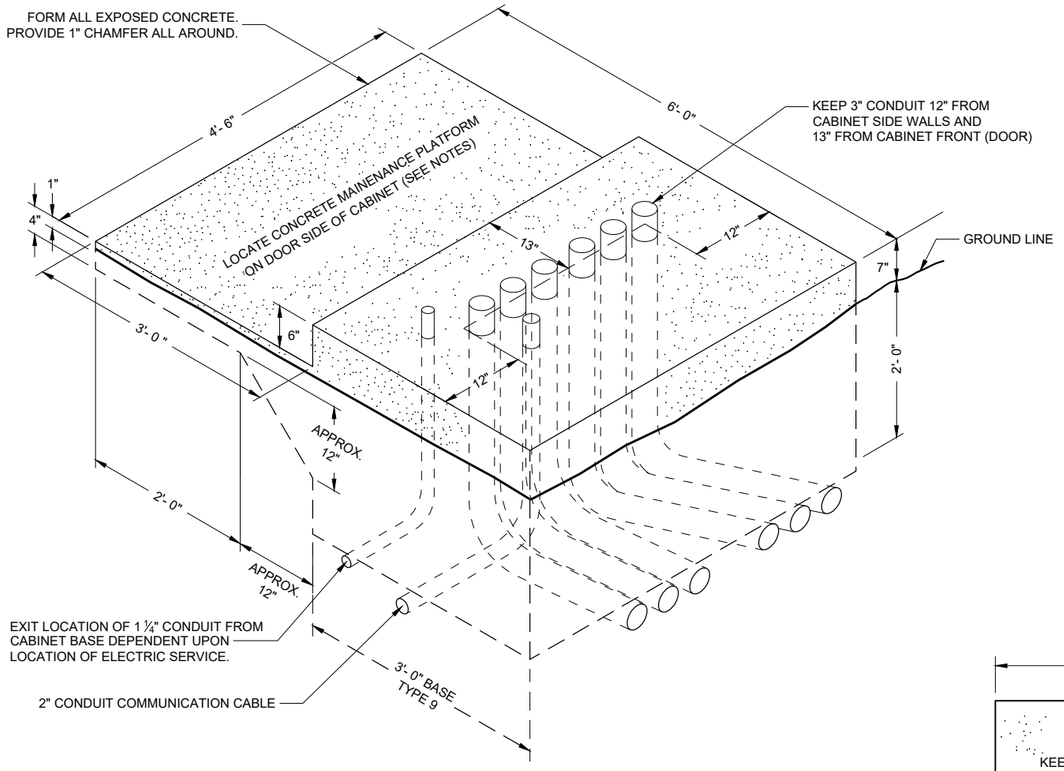
S.D.D. 9 C 3-4

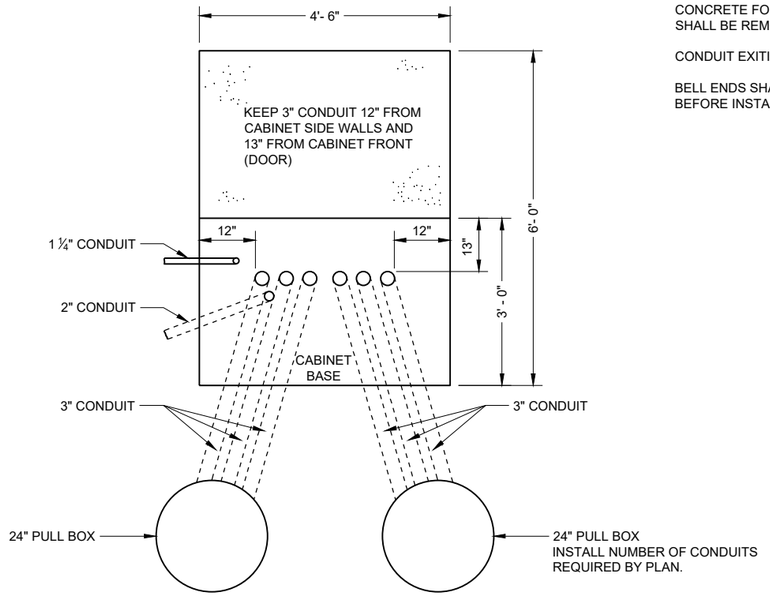
SDD 09C06 Concrete Control Cabinet Base, Type 9, Special



ISOMETRIC VIEW

TYPE 9 SPECIAL

(C.Y. CONCRETE = APPROX. 1.56)



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE 9 SPECIAL

GENERAL NOTES

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

INSTALL FOUR INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE (SIX 3") SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE TYPE 9, SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

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SDD 09C06 - 07

GENERAL NOTES

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

THE CONTRACTOR IS RESPONSIBLE FOR MAKING THEIR OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO.

BASES (SHAFT) SHALL BE EXCAVATED BY THE USE OF A CIRCULAR AUGER. IF BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE SOIL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING. A STEEL CASING OR CORRUGATED METAL PIPE IS ALLOWED TO REMAIN. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BASE IN LAYERS OF ONE FOOT OR LESS.

TOP SURFACE OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

ANY DAMAGE TO THE CONCRETE BASE AND ANCHOR RODS DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE ENGINEER'S DIRECTION, AT THE EXPENSE OF THE CONTRACTOR.

THE REINFORCEMENT AND ANCHOR RODS SHALL BE ADEQUATELY SUPPORTED IN THE PROPER POSITIONS SO NO MOVEMENT OCCURS DURING CONCRETE PLACEMENT.

ORIENT ANCHOR RODS IN FOOTING AND PROVIDE ANCHOR RODS STICK OUT ABOVE TOP OF CONCRETE FOOTING BASE PER THIS SHEET.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).

BENDING DIMENSIONS FOR REINFORCING BARS ARE OUT TO OUT.

WELDING OF ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TEMPLATES SHALL BE USED.

USE 3" CLEAR FOR ALL REINFORCEMENT UNLESS NOTED OTHERWISE.

FORM ALL EXPOSED CONCRETE CORNERS WITH 1" CHAMFER ALL AROUND. TOP OF THE CONCRETE BASE SHALL BE TROWEL FINISHED AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 TIMES THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 4 ½" INCHES. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED. NON-METALLIC CONDUIT SHALL HAVE BELL ENDS INSTALLED. ALL CONDUIT SHALL SLOPE TO PULL BOX.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION OF CABLE OR WIRE.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

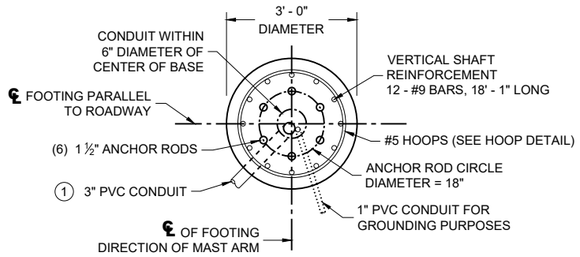
A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD).

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

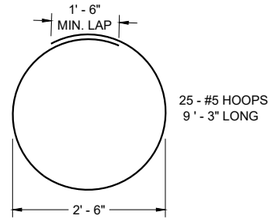
THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

(1) THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES (GREATER THAN 36 INCHES IF INSTALLED IN BREAKER RUN) EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

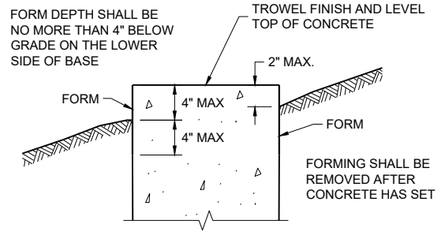
CONCRETE MASONRY.....fc = 3,500 p.s.i
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60.....fy = 60,000 p.s.i.
ANCHOR RODS, ASTM F1554 GRADE 55.....fy = 55,000 p.s.i.
(IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATION)
TEMPLATES, ASTM A709, GRADE 36.....fy = 36,000 p.s.i.



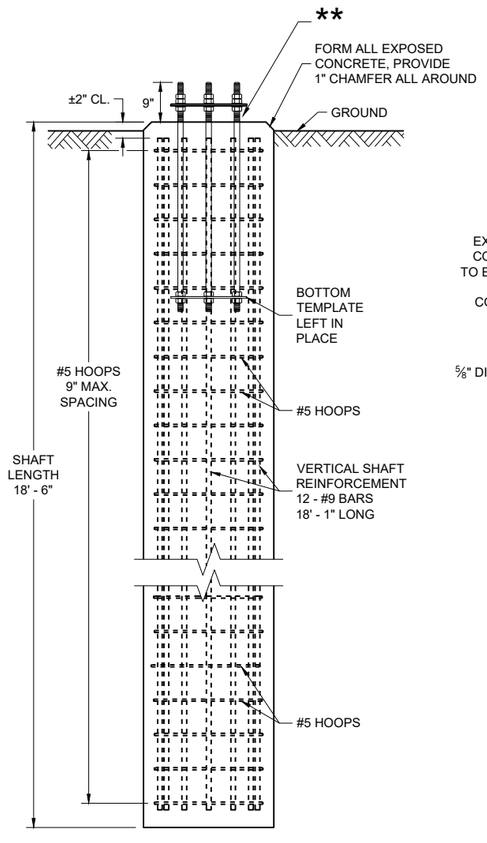
PLAN VIEW



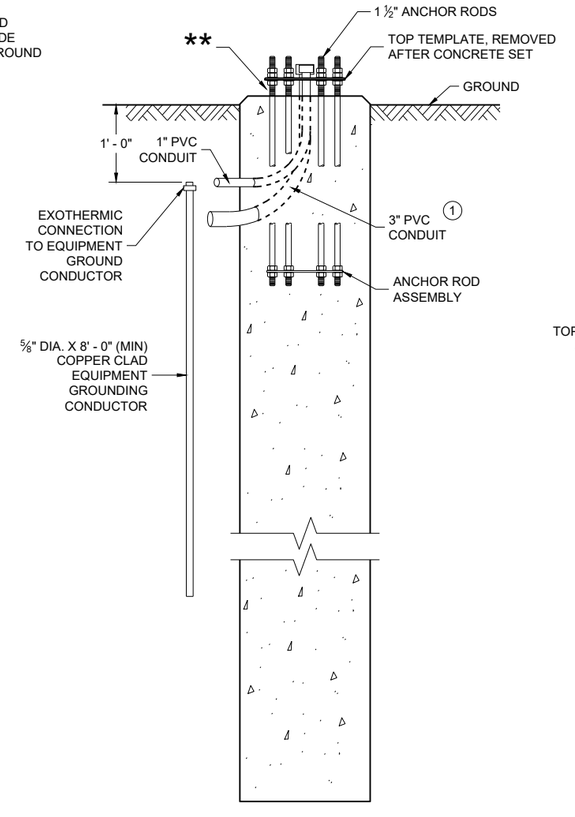
HOOP DETAIL



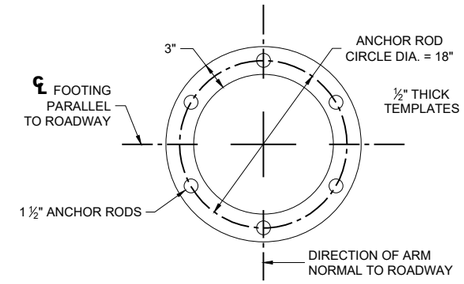
FORMING DETAIL



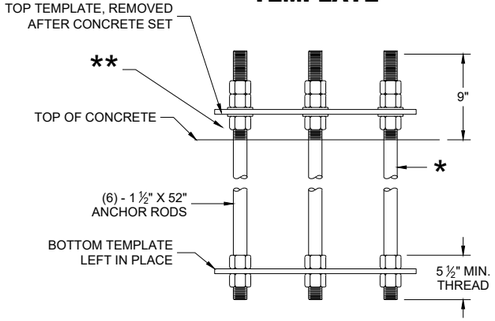
ELEVATION VIEW
(CONDUITS NOT SHOWN ON THIS VIEW FOR CLARITY)



SIDE VIEW
(HOOPS AND VERTICAL SHAFT REINFORCEMENT NOT SHOWN ON THIS VIEW FOR CLARITY)



TOP AND BOTTOM TEMPLATE



ANCHOR ROD ASSEMBLY DETAILS

* THREAD TOP 10" OF ANCHOR ROD FOR 3 NUTS AND 2 WASHERS AND BOTTOM 5 ½" FOR 2 NUTS PER ANCHOR ROD. HOT DIP GALVANIZE THE ENTIRE LENGTH OF THE ANCHOR ROD (ASTM A123) AND HOT DIP NUTS AND WASHERS (ASTM A153. USE ZINC COATED NUTS MANUFACTURED WITH SUFFICIENT ALLOWANCE TO ALLOW NUTS TO RUN FREELY ON THE THREADS.

** RODENT PROTECTION REQUIRED

CONCRETE BASE, TYPE 10 SPECIAL
(FOR TYPE 9 SPECIAL AND TYPE 10 SPECIAL POLES AND OVER HEIGHT (OH) POLES)

CONCRETE = 4.8 CUBIC YARD
H.S. REINFORCEMENT = 979 LBS.

FOR USE WHEN GROUND ELEVATION AT BASE EQUALS OR IS GREATER THAN HIGH POINT OF ROADWAY ELEVATION.

CONCRETE BASE TYPE 10 SPECIAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 — DATE
/S/ Alex Crabtree — WIND LOADED STRUCTURES PROGRAM LEADER

FHWA

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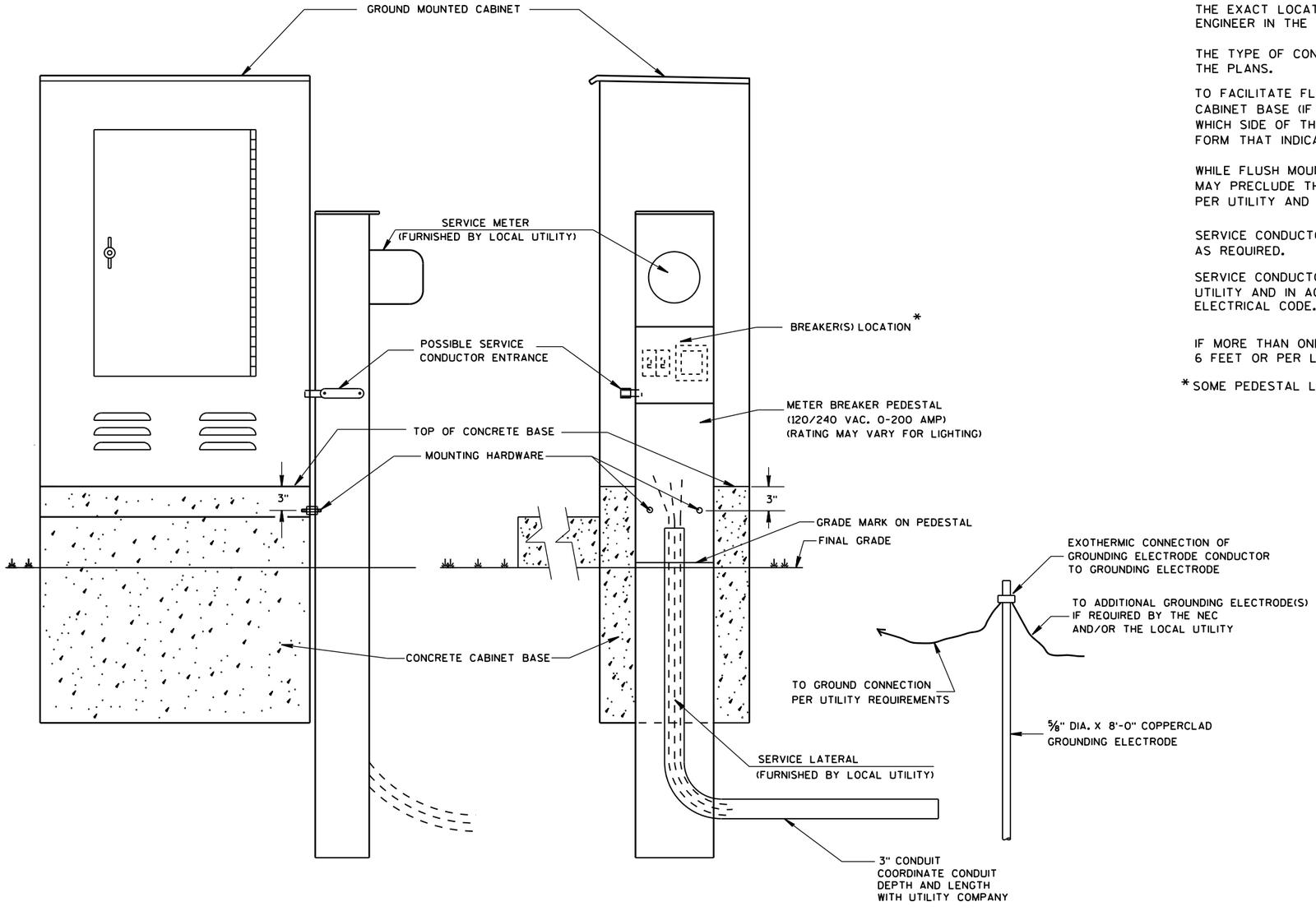
SDD 09C15-03



TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

* SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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S.D.D. 9 D 1-5

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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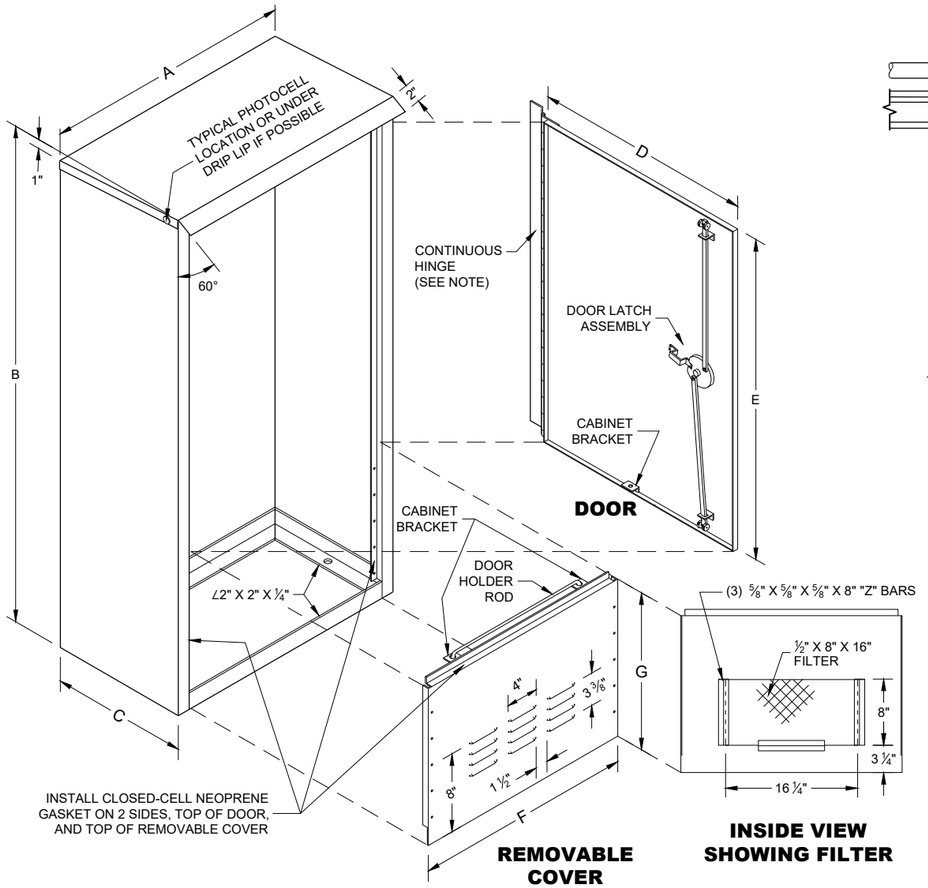
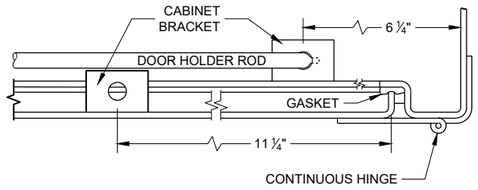
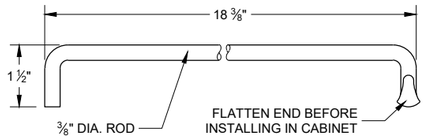
S.D.D. 9 D 1-5

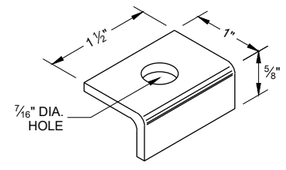




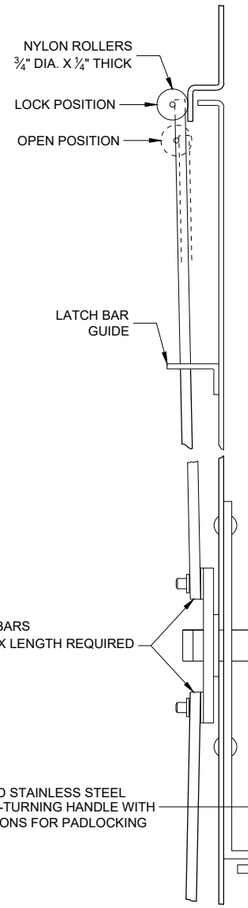
HINGE AND DOOR HOLDER

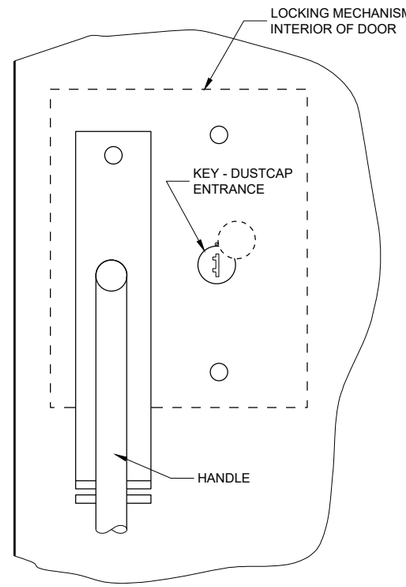


HOLDER ROD



CABINET BRACKET





SIDE VIEW **FRONT VIEW**

LATCH ASSEMBLY

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.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

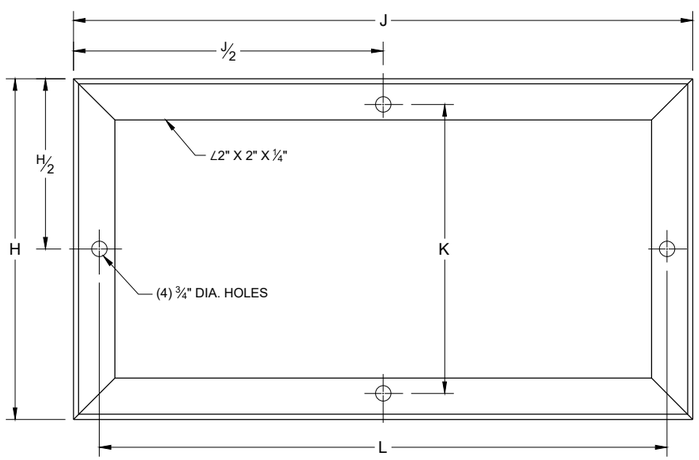
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH ¼" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH ¼" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH - NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

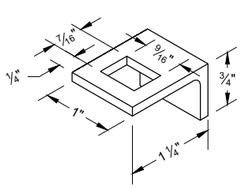
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 ½	16 ½	24
D	26 ½	34 ¾	33 ¾
E	38 ¾	38 ¾	38 ¾
F	26 ½	34 ¾	33 ¾
G	19	19	25
H	16 ½	16 ½	24
H/2	8 ¼	8 ¼	12
J	30	38	38
J/2	15	19	19
K	13 ¾	13 ¾	21 ¼
L	27 ½	35 ½	35 ½



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014
DATE

/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI

FHWA

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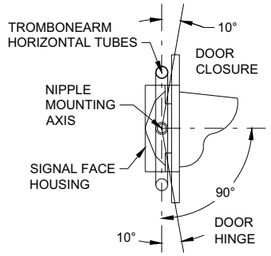
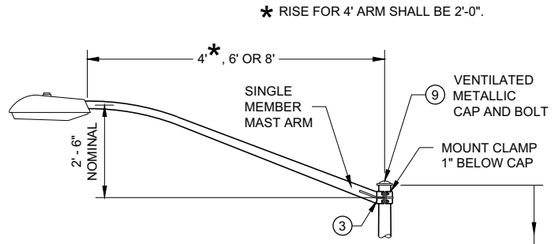
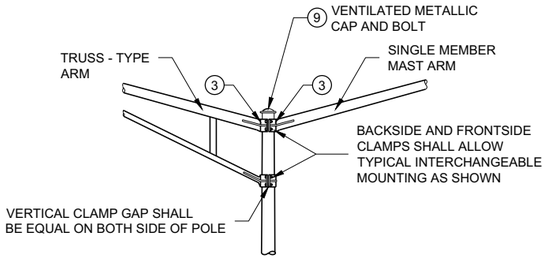
SDD 09D02 - 03

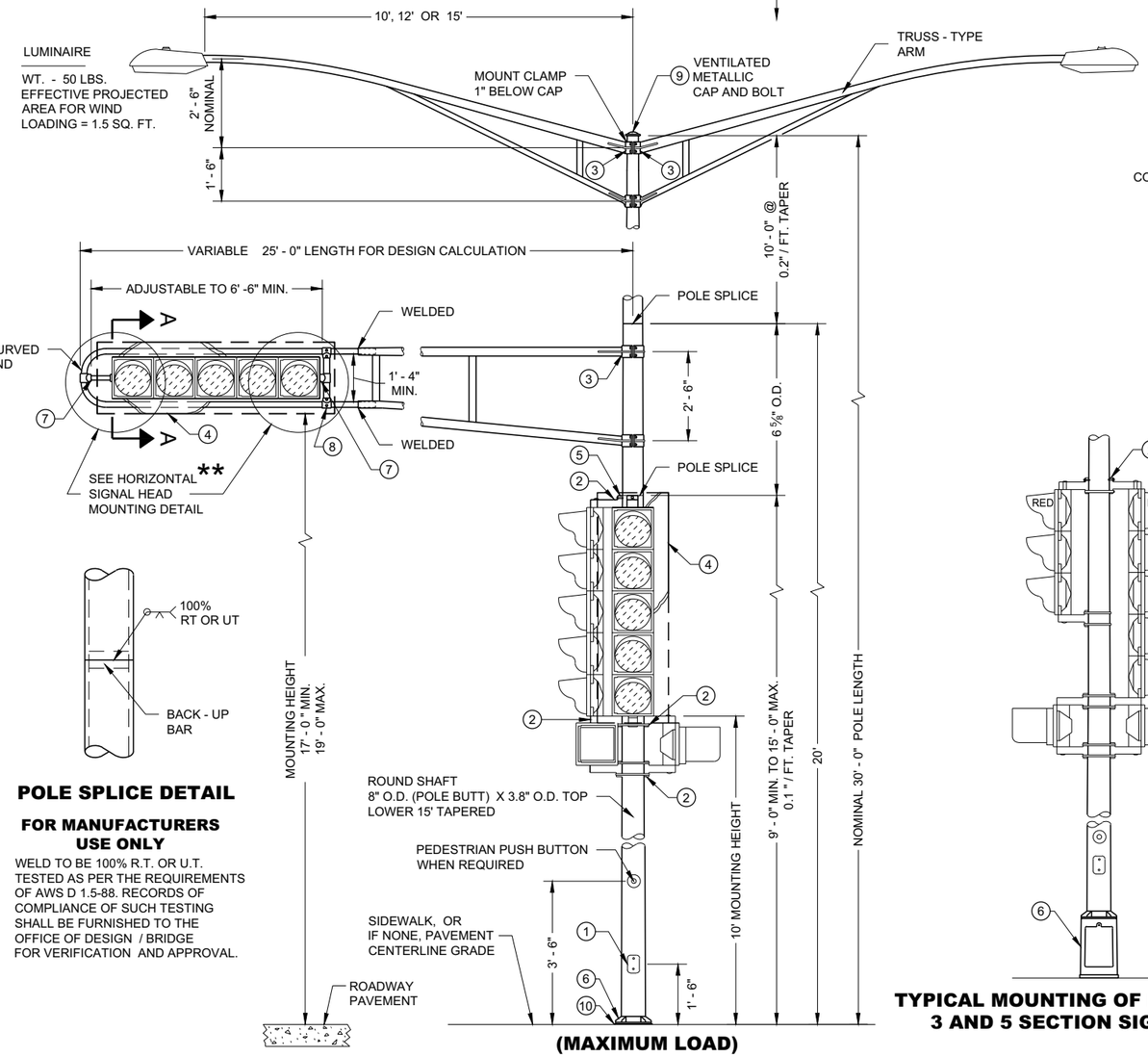


SECTION A-A





INTERCHANGEABLE MOUNTING DETAIL

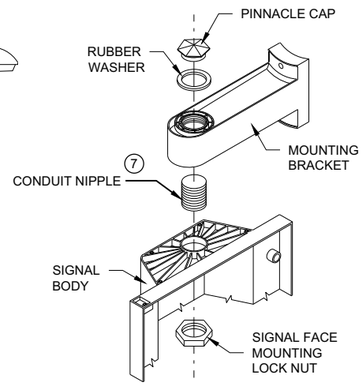


POLE SPLICE DETAIL

FOR MANUFACTURERS USE ONLY

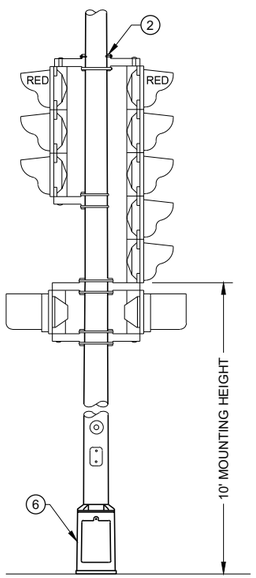
WELD TO BE 100% R.T. OR U.T. TESTED AS PER THE REQUIREMENTS OF AWS D 1.5-88. RECORDS OF COMPLIANCE OF SUCH TESTING SHALL BE FURNISHED TO THE OFFICE OF DESIGN / BRIDGE FOR VERIFICATION AND APPROVAL.

(MAXIMUM LOAD)

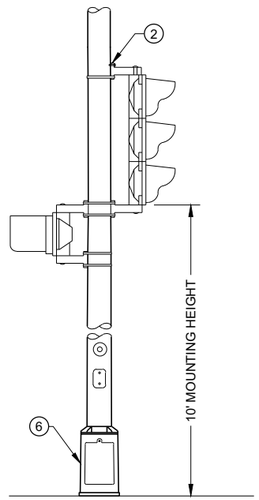


SIGNAL FACE MOUNTING DETAIL

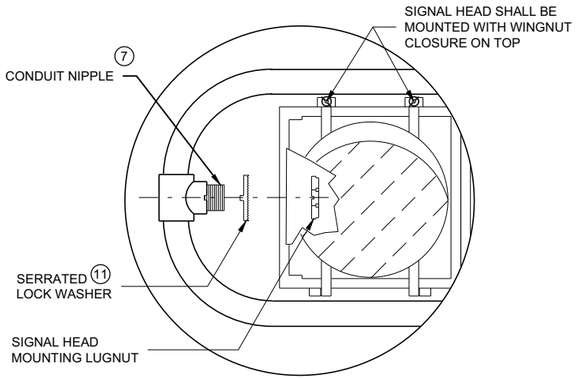
(BANDED)



TYPICAL MOUNTING OF BACK TO BACK 3 AND 5 SECTION SIGNAL FACES



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL

** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

TYPE 3 POLE MOUNTING CONFIGURATION

GENERAL NOTES

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

ALL TYPE 3 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

A PULL WIRE / ROPE SHALL BE INSTALLED IN EACH TROMBONE ARM RACEWAY DURING THE MANUFACTURING PROCESS.

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 3/8 INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

(2) SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.

(4) SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.

(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED. UNDER MAX LOADING, TYPE 3 POLE SHALL BE MOUNTED DIRECTLY TO ITS CONCRETE BASE.

(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACES AND BRACKET ENDS.

(8) VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.

(9) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(11) USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS TYPE 3 (HEAVY DUTY)

STATE OF WISCONSIN
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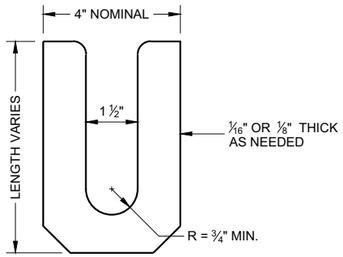
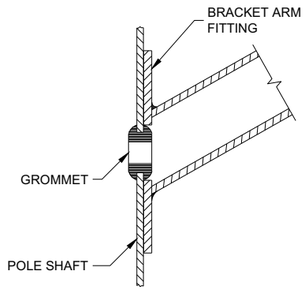
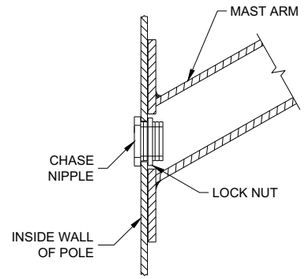


LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

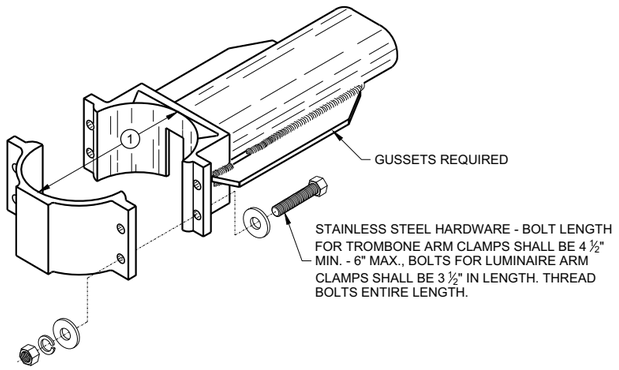
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

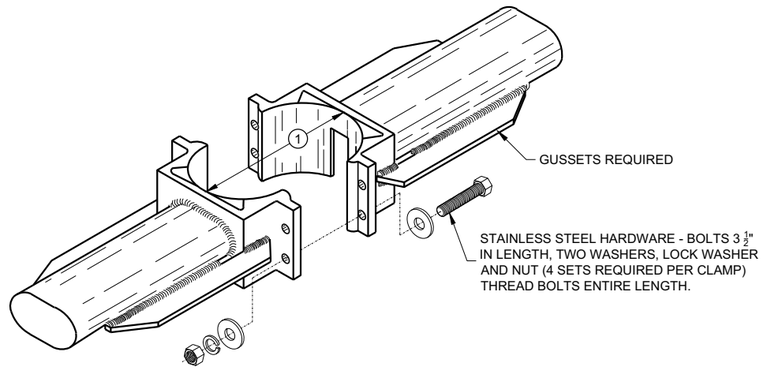
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

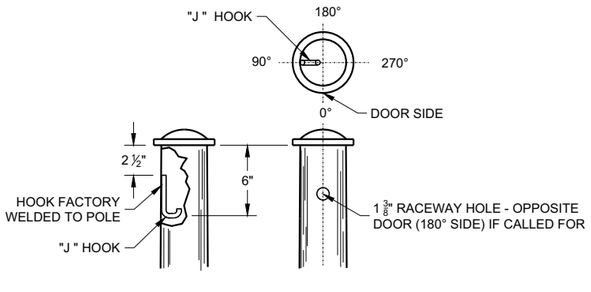
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



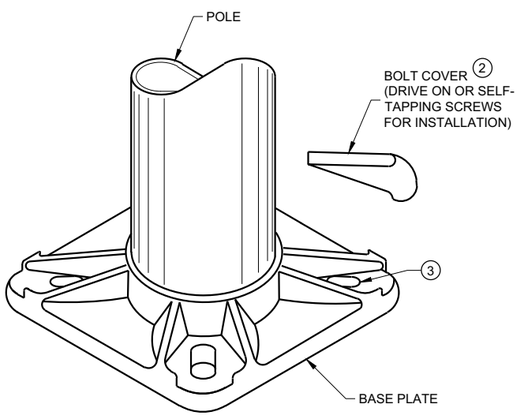
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



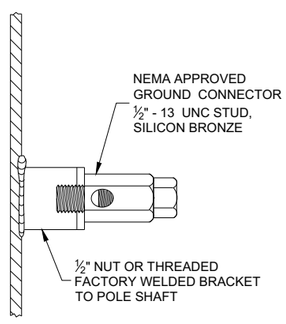
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

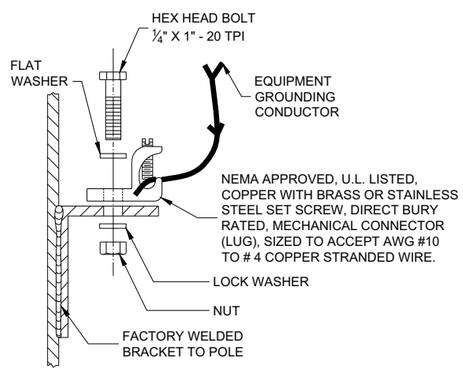


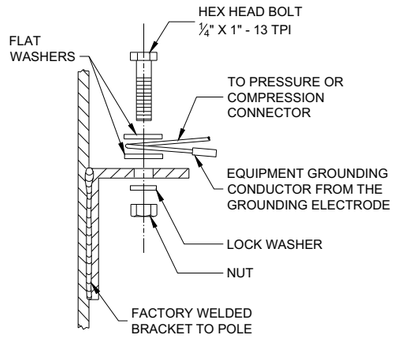
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2018
DATE

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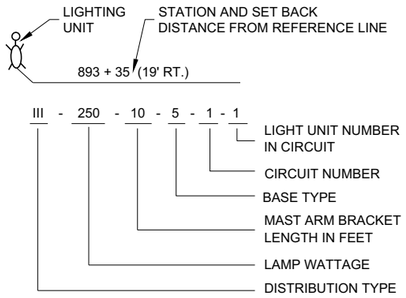
GENERAL NOTES

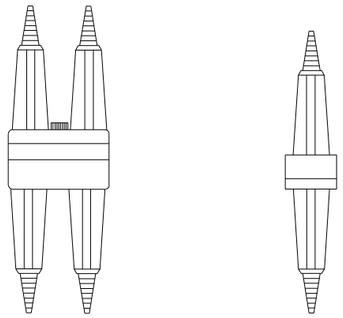
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

THE EQUIPMENT GROUND CONNECTOR SHALL BE TAPED WITH 3 WRAPS (MINIMUM) OF APPROVED RUBBER TAPE AND 3 WRAPS (MINIMUM) OF APPROVED VINYL TAPE TO COVER SHARP WIRE ENDS AFTER THE CONNECTION IS COMPLETED.

WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.

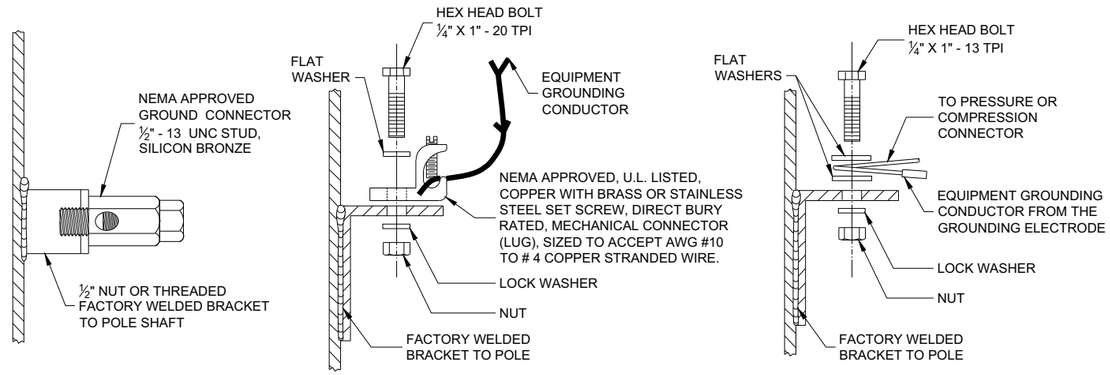


LIGHTING UNIT CODE
(TYPICAL)

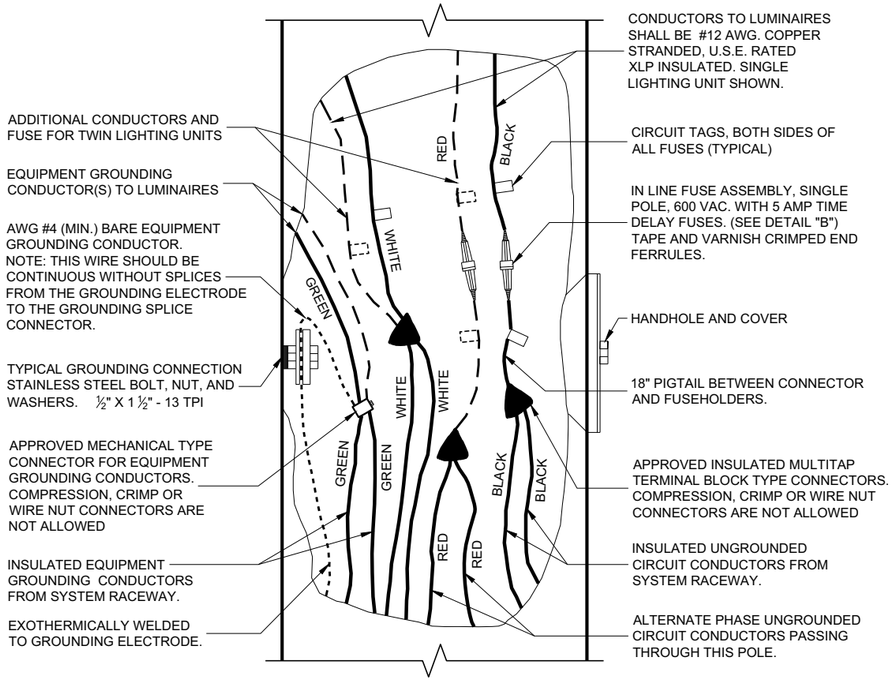


DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT

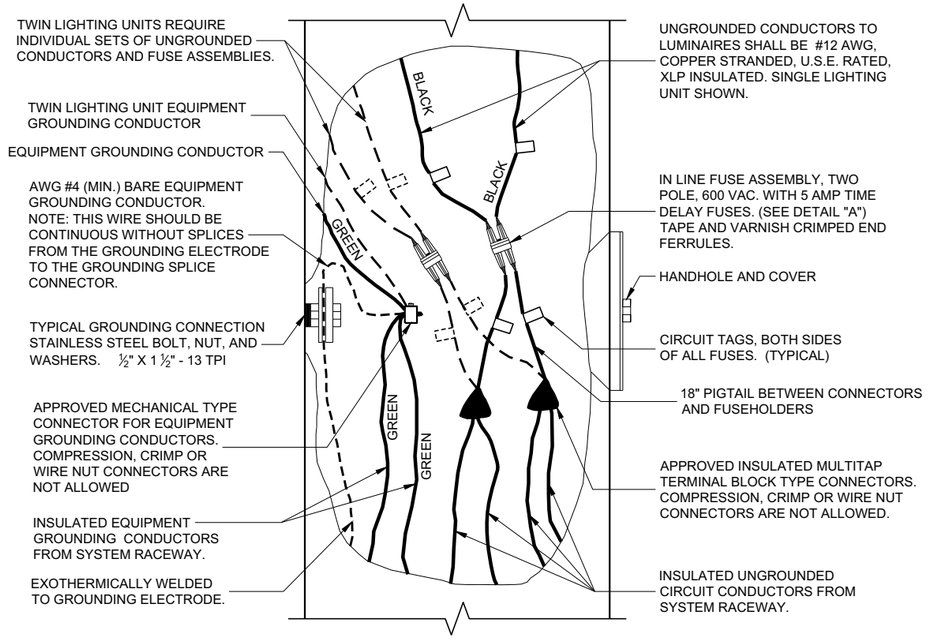
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH GROUNDING CONDUCTOR AND EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS) WITH EQUIPMENT GROUNDING CONDUCTOR

NON - FREEWAY LIGHTING UNIT POLE WIRING

STATE OF WISCONSIN
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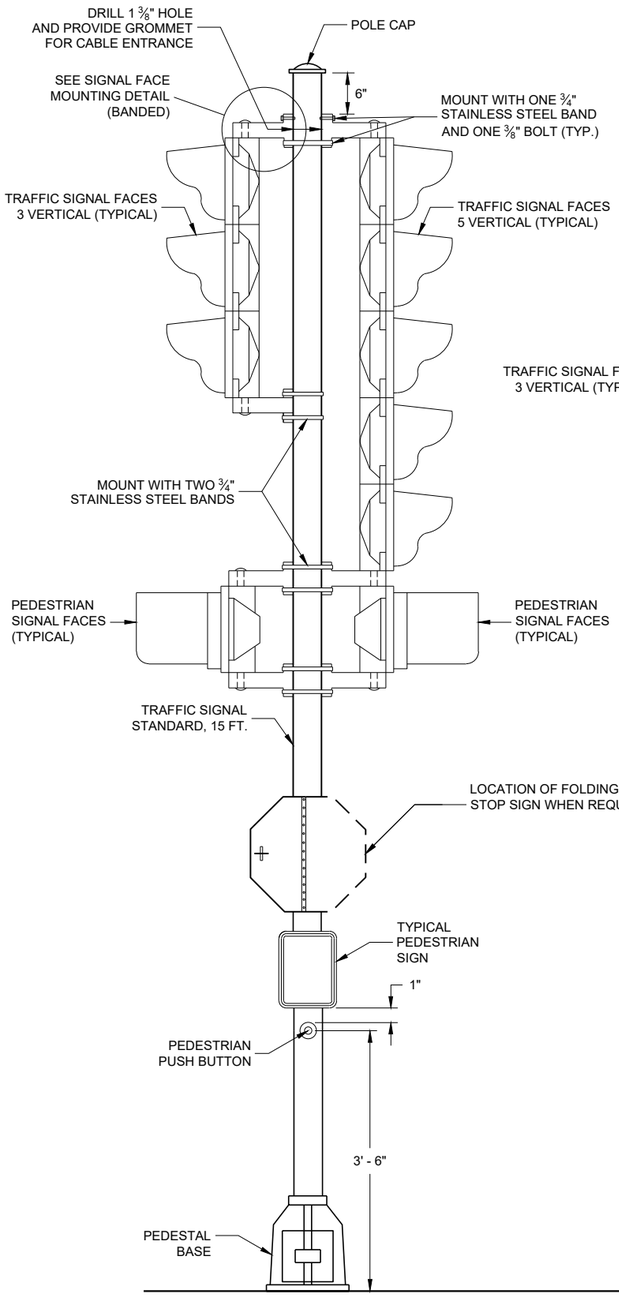
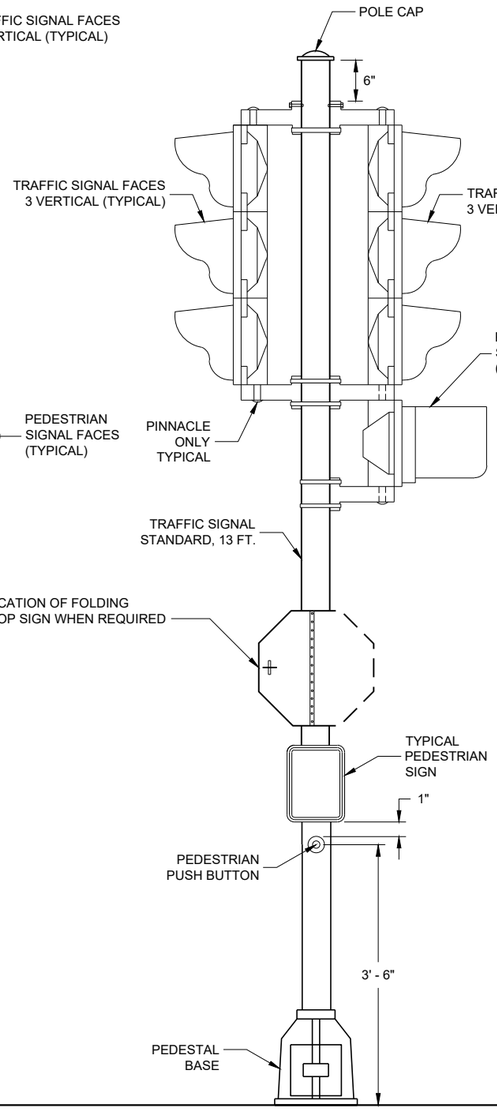
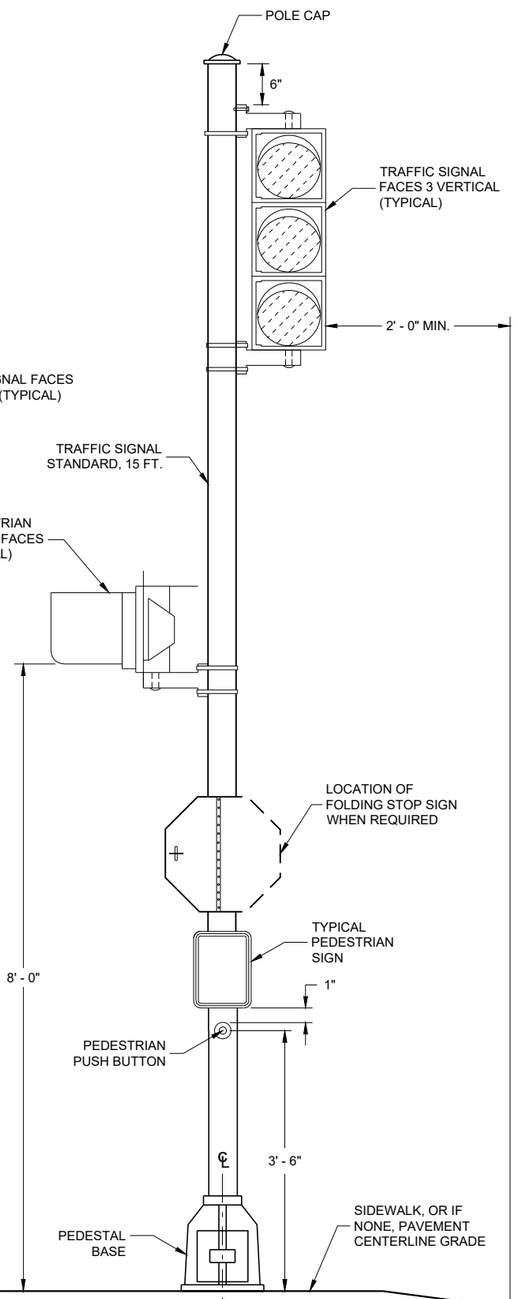


TRAFFIC SIGNAL STANDARD - 15 FT.



TRAFFIC SIGNAL STANDARD - 13 FT.



TRAFFIC SIGNAL TANDARD - 15 FT.
3M MOUNTING (TYPICAL)

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

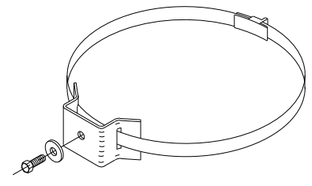
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

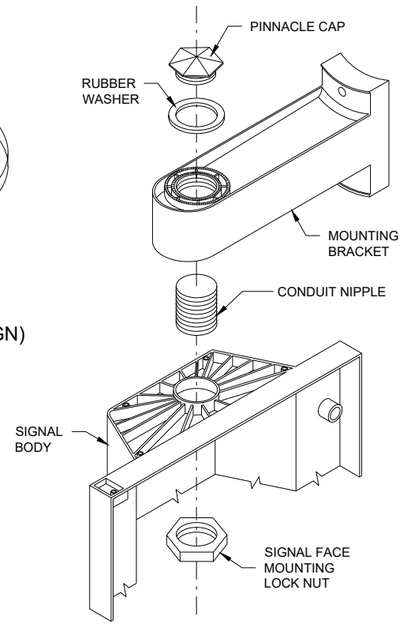
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



SIGNAL FACE MOUNTING DETAIL (BANDED)

TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.

STATE OF WISCONSIN
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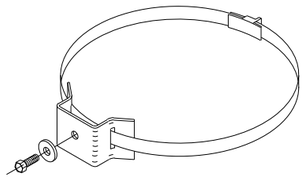
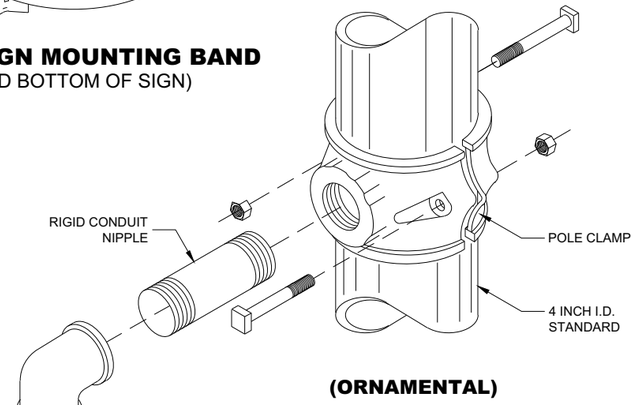
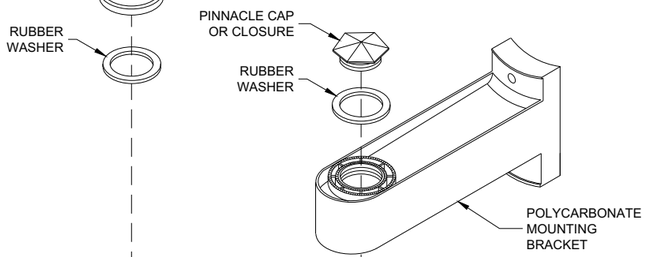


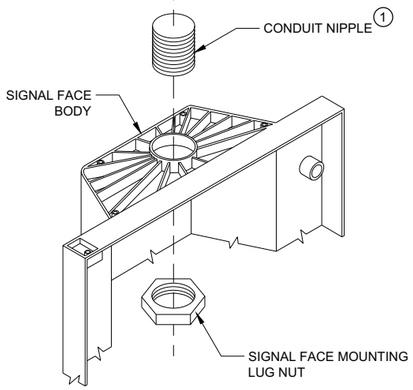
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



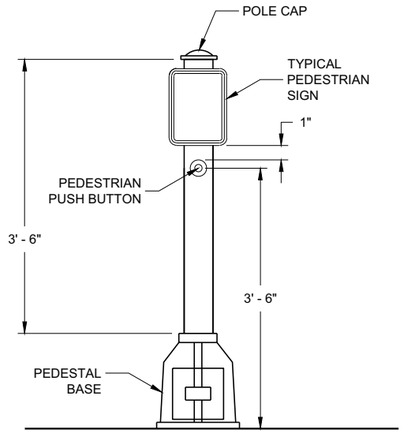
(ORNAMENTAL)



(BANDED)



SIGNAL FACE MOUNTING DETAILS



PEDESTRIAN PUSH BUTTON TYPICAL MOUNTING

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

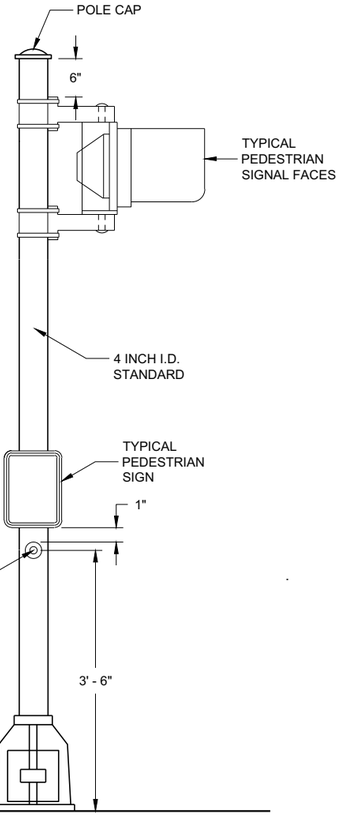
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

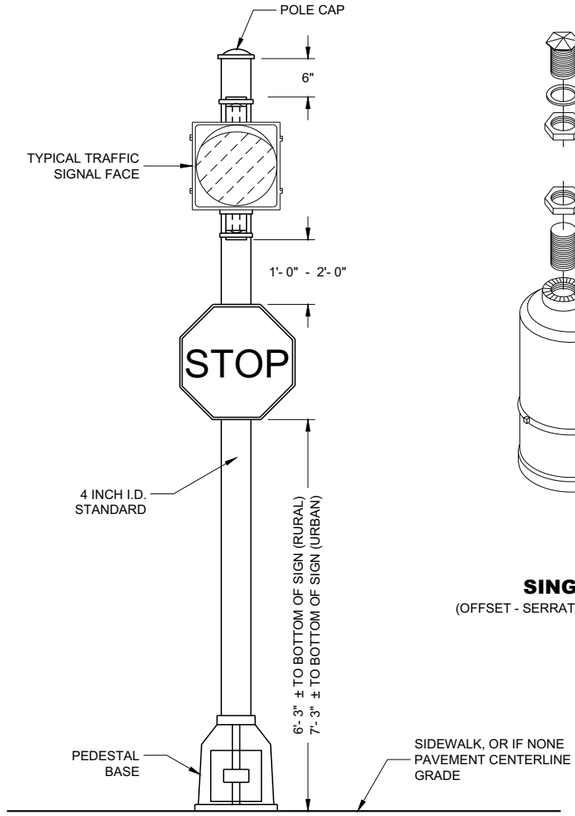
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

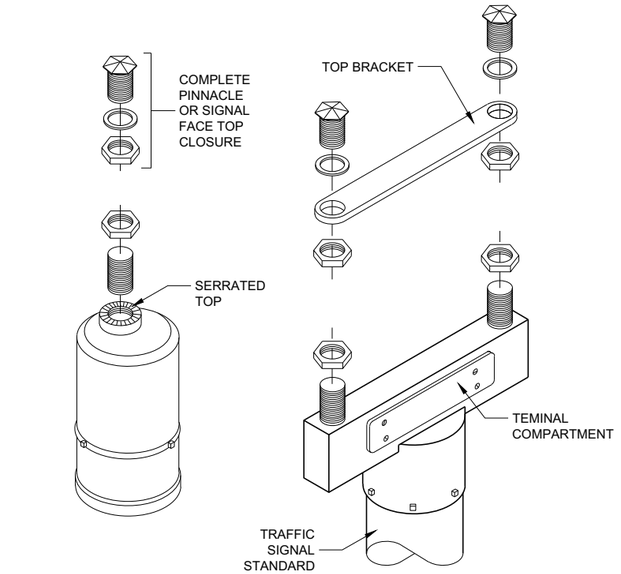
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 ½" OPENING IN SIGNAL FACESAND BRACKET ENDS.



PEDESTRIAN FACE STANDARD - 10 FT.
(WALK - DON'T WALK)



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED



SINGLE
(OFFSET - SERRATED MOUNTING)

DOUBLE
(SERRATED MOUNTING)

SLIPFITTERS

TRAFFIC SIGNAL STANDARD
PEDESTRIAN AND FLASHER
TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
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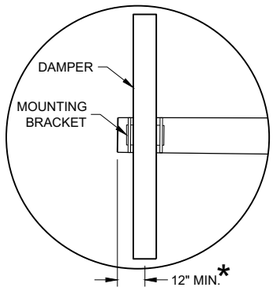
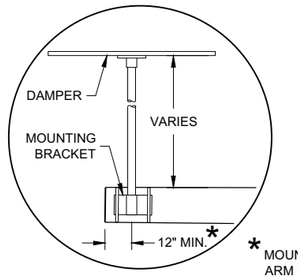
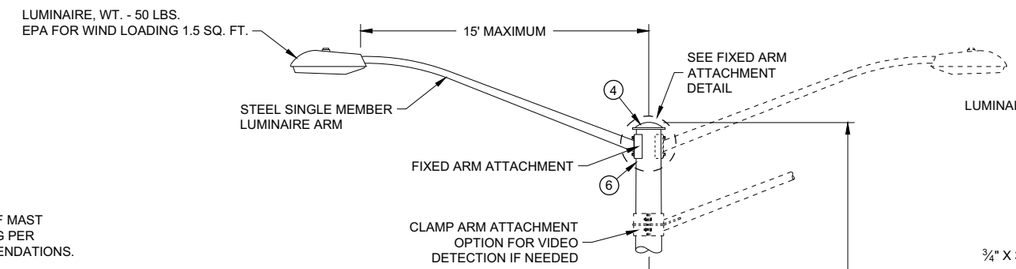


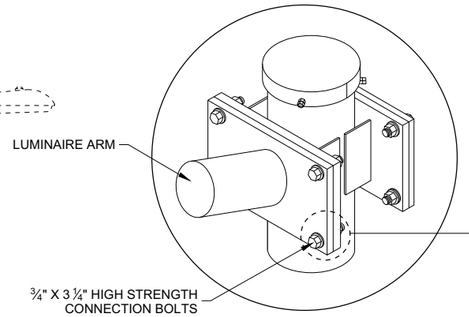
DUMBBELL VIBRATION DAMPER



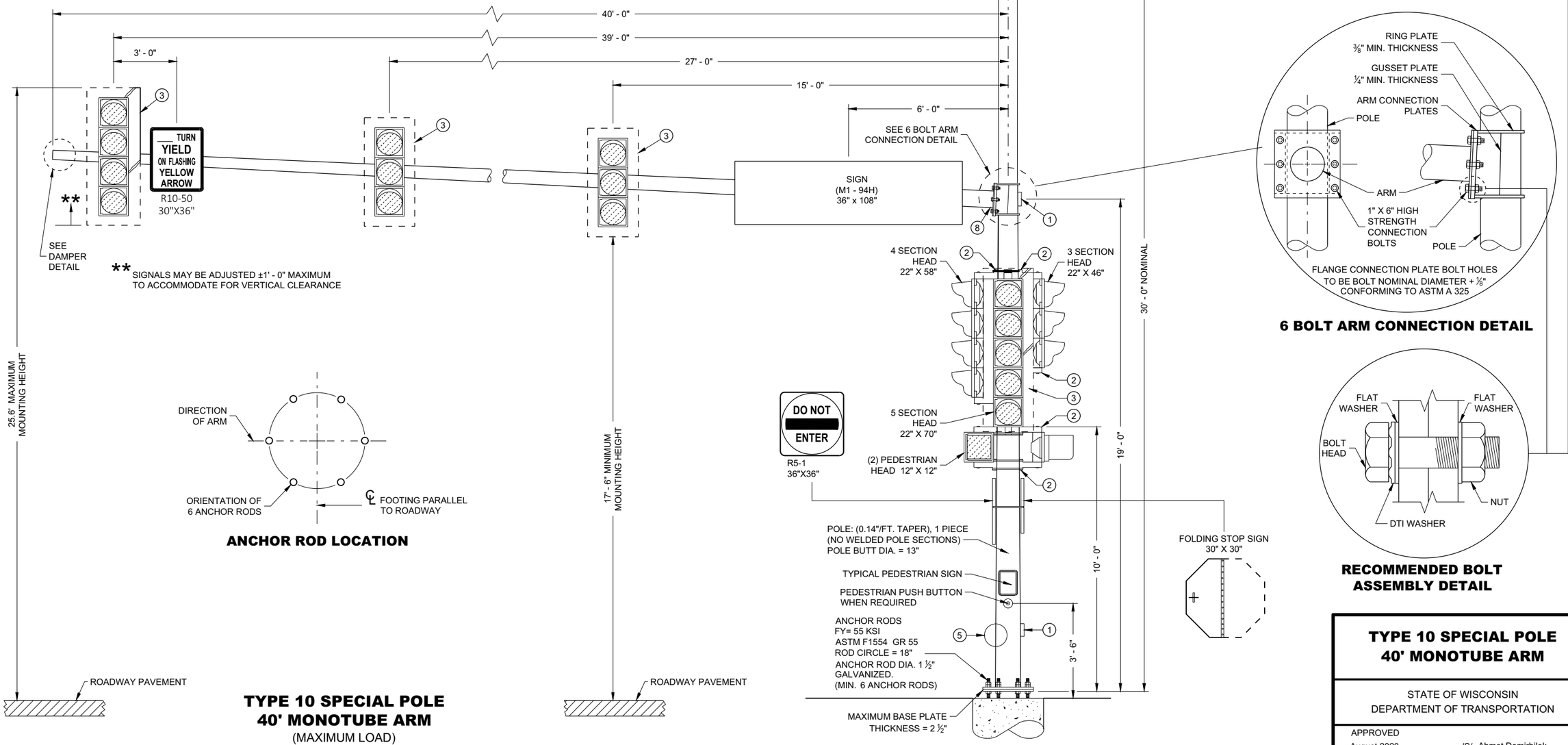
FLAT VIBRATION DAMPER

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.





FIXED ARM ATTACHMENT DETAIL



** SIGNALS MAY BE ADJUSTED ±1' - 0" MAXIMUM TO ACCOMMODATE FOR VERTICAL CLEARANCE

ANCHOR ROD LOCATION

TYPE 10 SPECIAL POLE
40' MONOTUBE ARM
(MAXIMUM LOAD)

6 BOLT ARM CONNECTION DETAIL

RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
40' MONOTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
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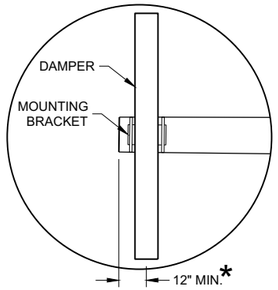
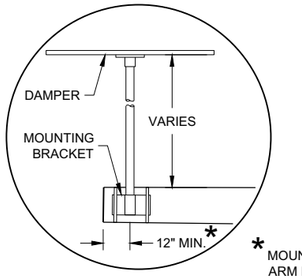
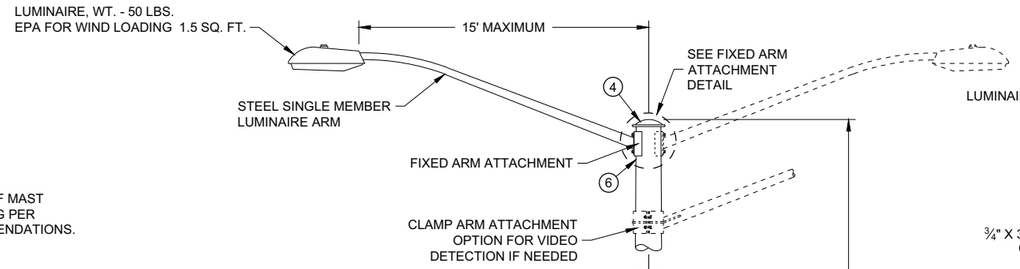


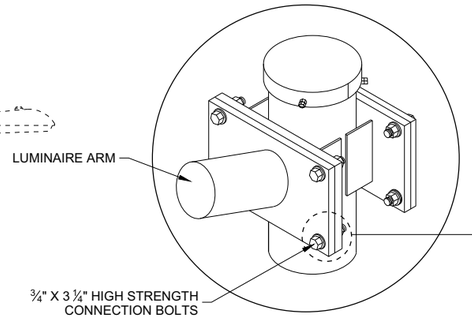
DUMBBELL VIBRATION DAMPER



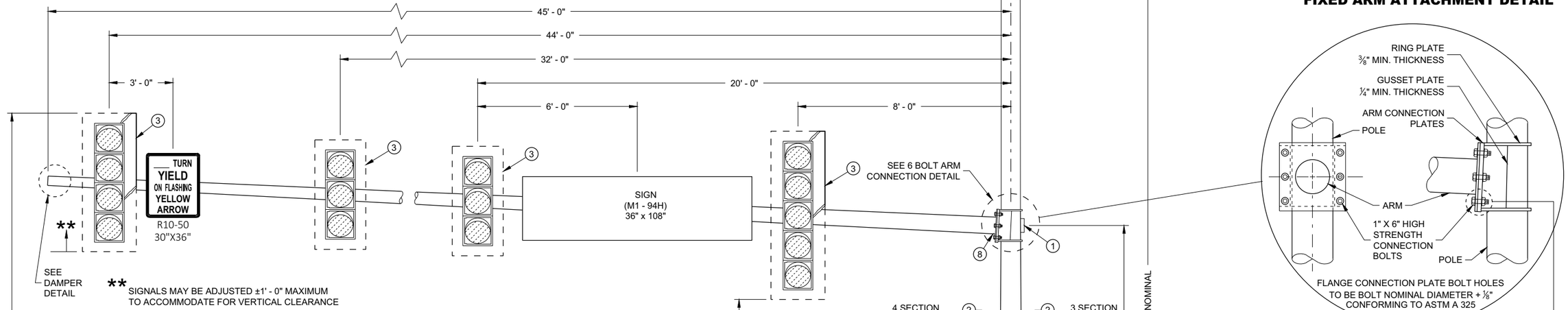
FLAT VIBRATION DAMPER

* MOUNT AS CLOSE TO END OF MAST ARM FOR MAXIMUM DAMPING PER MANUFACTURER'S RECOMMENDATIONS.

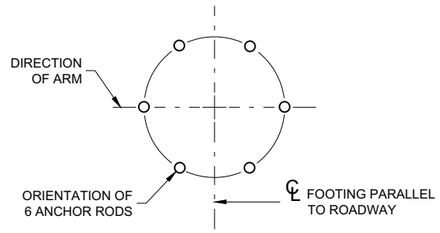




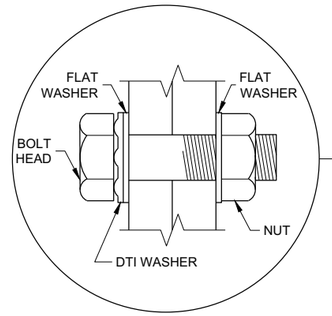
FIXED ARM ATTACHMENT DETAIL



6 BOLT ARM CONNECTION DETAIL



ANCHOR ROD LOCATION



RECOMMENDED BOLT ASSEMBLY DETAIL

TYPE 10 SPECIAL POLE
45' MONOTUBE ARM
(MAXIMUM LOAD)

TYPE 10 SPECIAL POLE
45' MONTUBE ARM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Ahmet Demirbilek
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GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

SECTION 657, POLES OF THE STANDARD SPECIFICATION SHALL APPLY TO THIS DRAWING.

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

(1) DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.

(2) SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).

(3) SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.

(4) THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.

(5) FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.

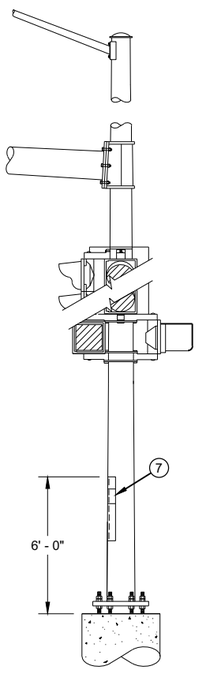
(6) FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.

(7) INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

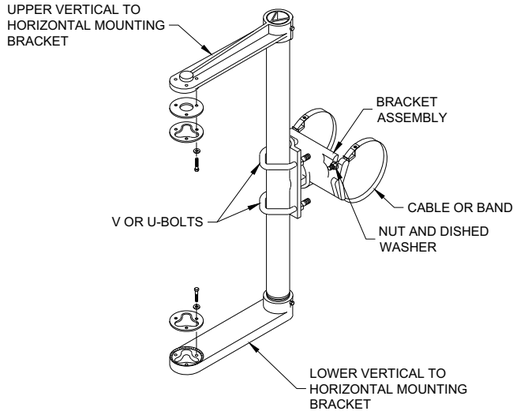
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

(8) FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.

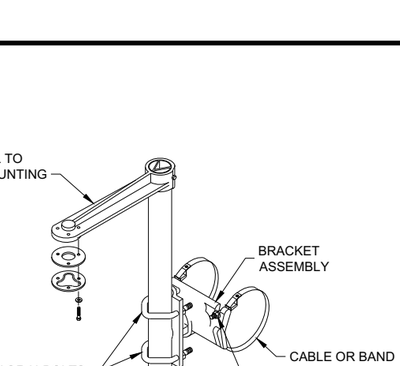


STRUCTURAL IDENTIFICATION PLAQUE PLACEMENT



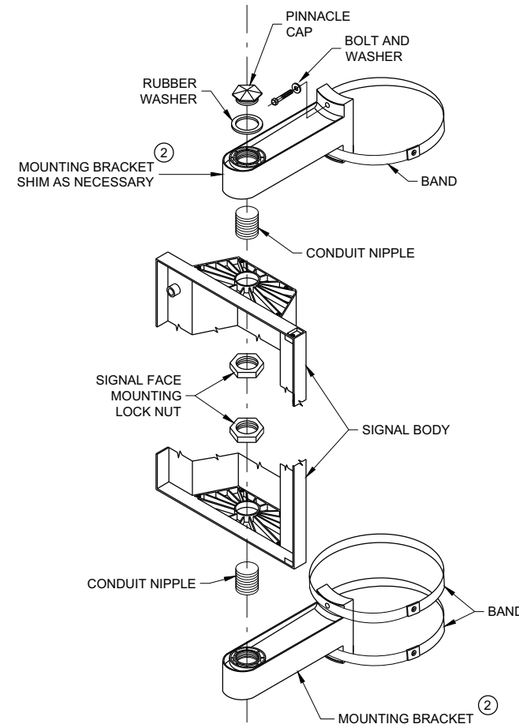
SIGNAL FACE MOUNTING BRACKET DETAIL FOR MONOTUBE ARM

(MOUNT PER MANFACTURER'S RECOMMENDATION)

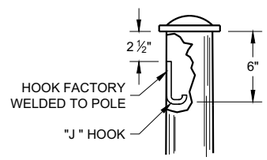


TYPICAL GROUNDING CONNECTIONS (5)

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL



SIGNAL FACE VERTICAL MOUNTING DETAIL



TYPICAL "J" HOOK WIRE SUPPORT (6)

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL ENGINEER

FHWA

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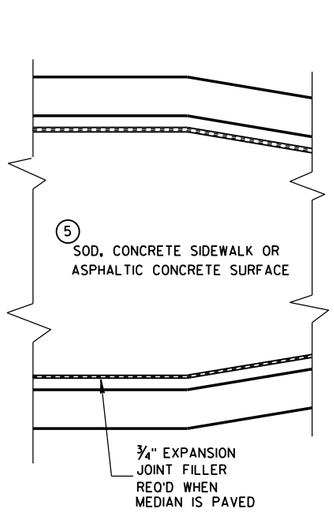
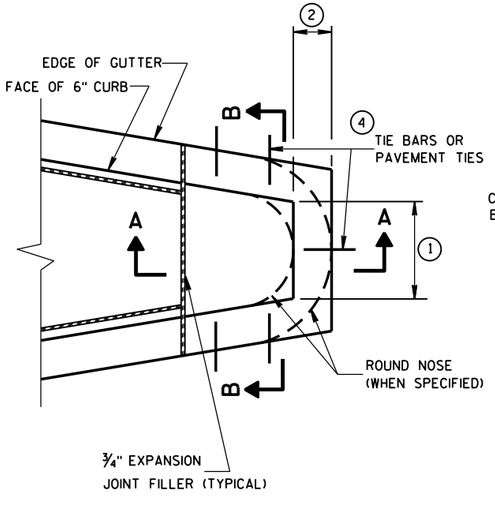
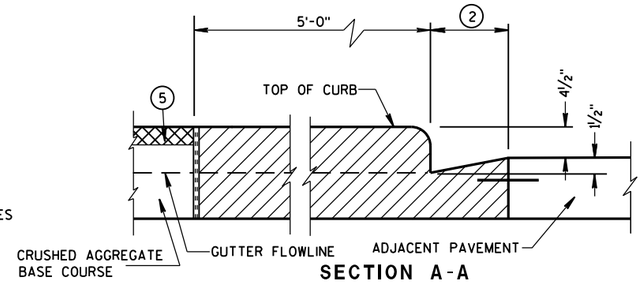
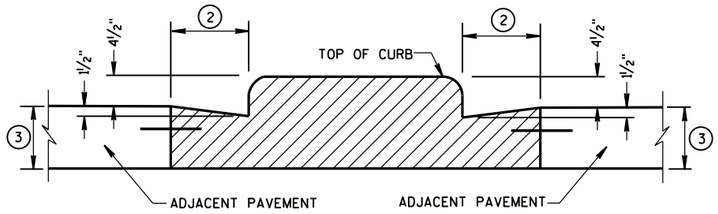
SDD 09E08 - 09k







SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

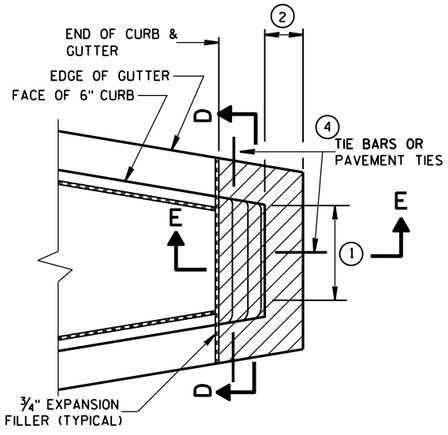
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

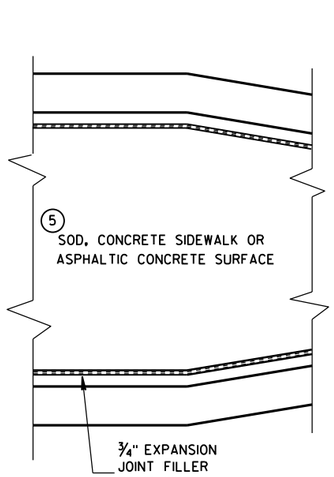
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

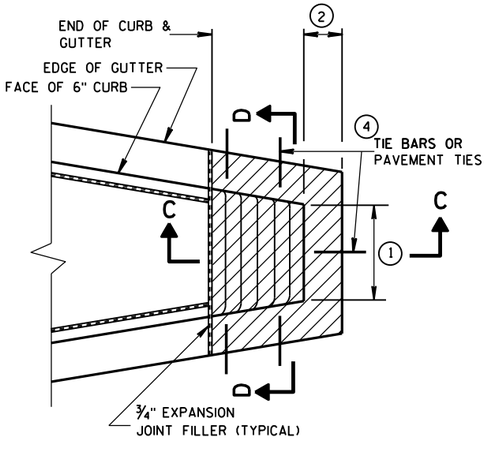
(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

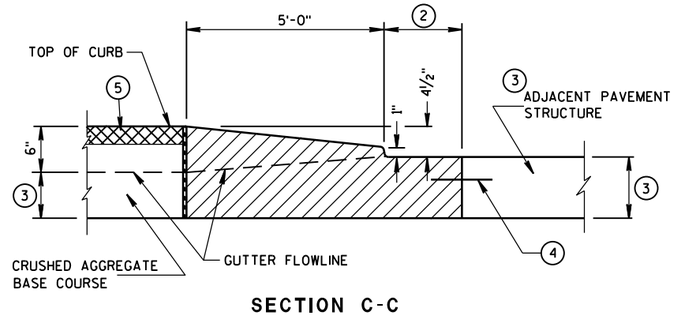
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.



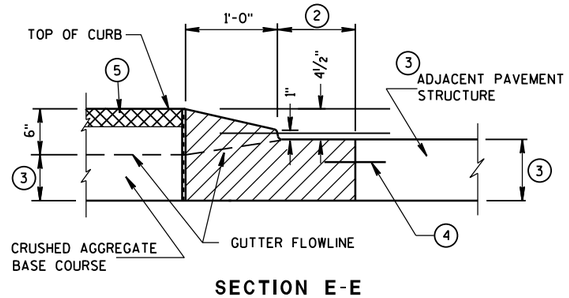




CONCRETE MEDIAN SLOPED NOSE TYPE 1

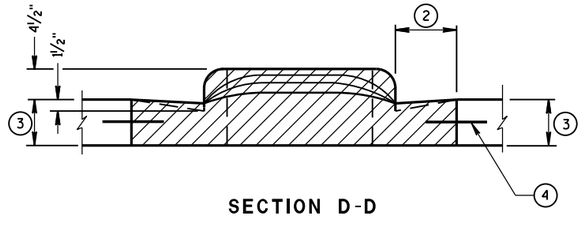


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS D ENGINEER
FHWA

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S.D.D. 11 B 2-2

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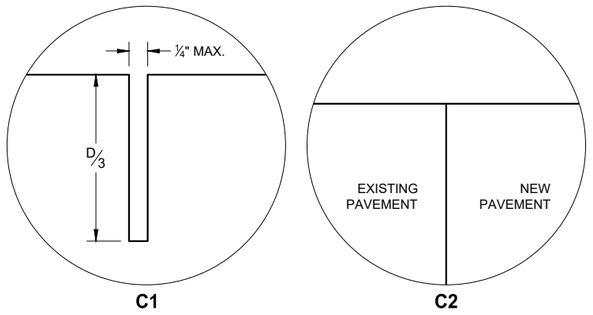
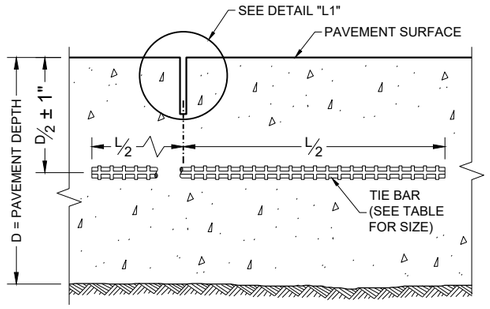
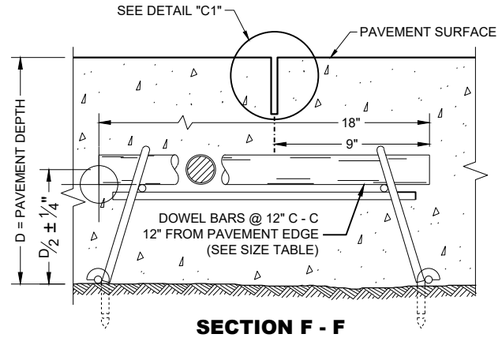
S.D.D. 11 B 2-2



TRANSVERSE JOINTS



SECTION C - C
SAWED JOINT



SECTION F - F
CONTRACTION JOINT

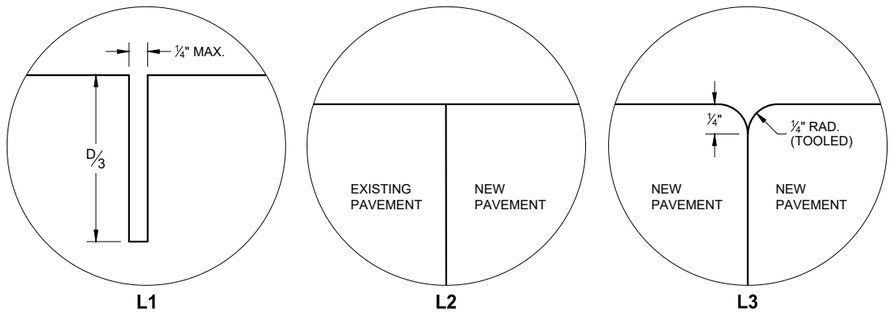
GENERAL NOTES

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

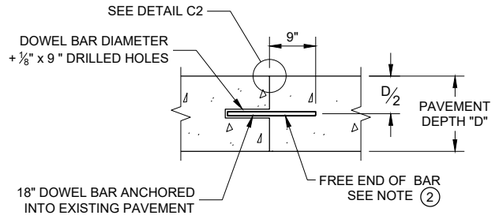
PROVIDE A MIMIMUM DISTANCE OF 15 INCHES FROM AN EXISTING TRANSVERSE JOINT OR EDGE OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

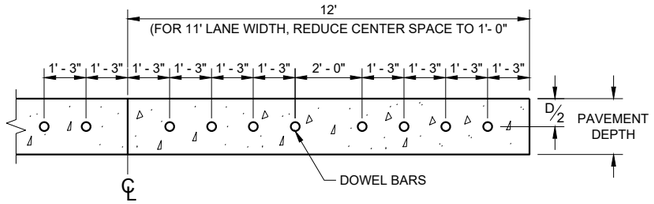
(2) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.



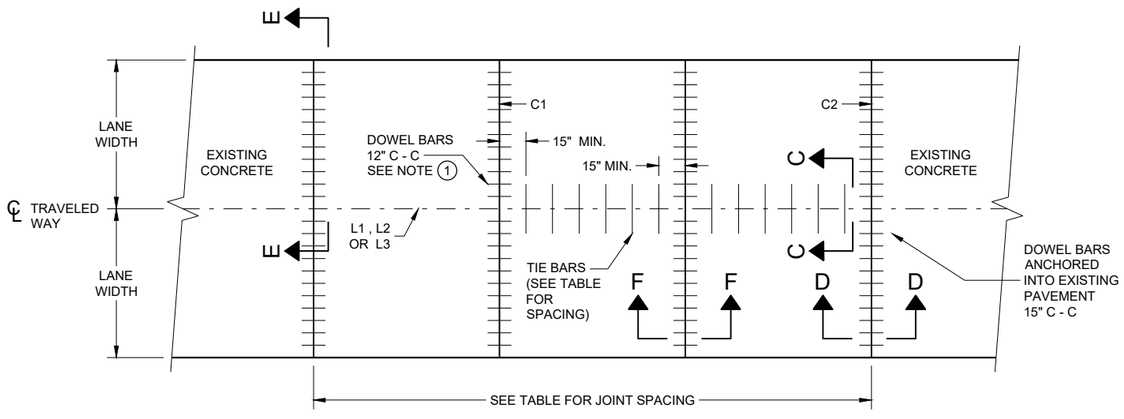
LONGITUDINAL JOINTS



SECTION D - D



SECTION E - E
SPACING OF DOWEL BARS
ANCHORED INTO EXISTING PAVEMENT



PLAN VIEW
CONCRETE BASE
CONTRACTION JOINT LOCATIONS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

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

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

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8" & ABOVE	1 ¼"	15'

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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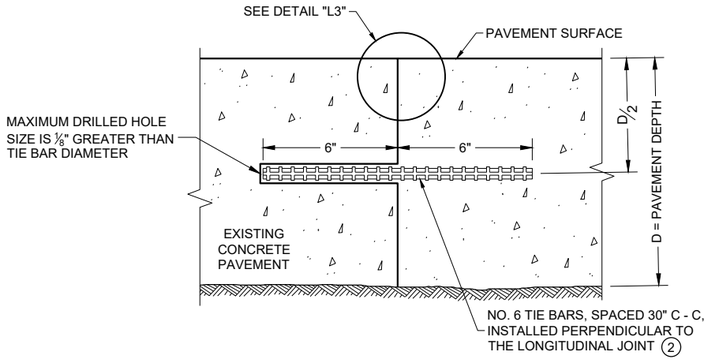
SDD 13C15 - 08a
SDD 13C15 - 08a

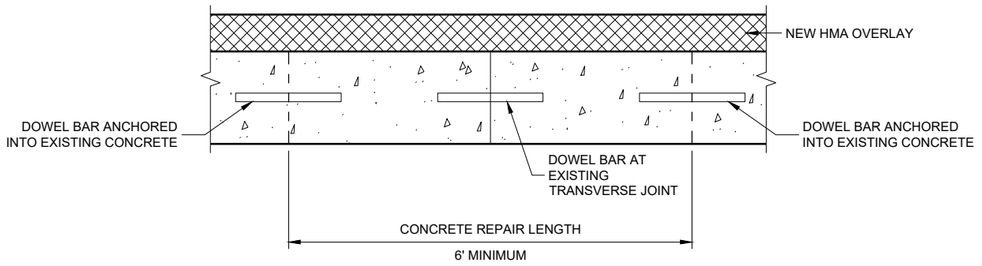
GENERAL NOTES

1. USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) AT THE LONGITUDINAL JOINT IN LIEU OF TIE BARS FOR SINGLE LANE CONCRETE BASE REPAIRS UP TO 15 FEET IN LENGTH.
2. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
3. PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.

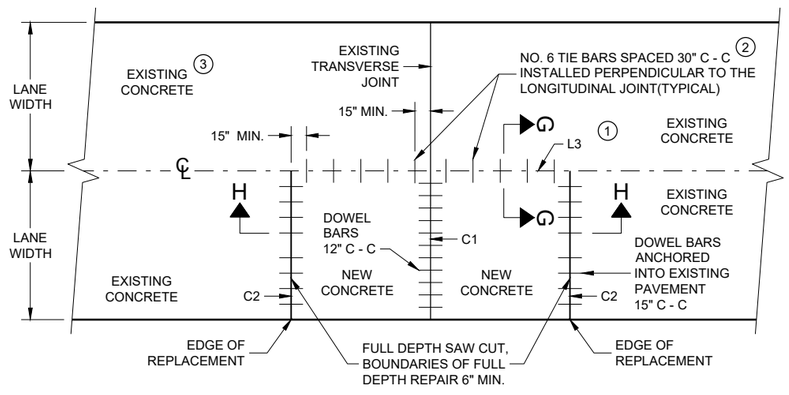


SECTION G - G

TIE BARS ANCHORED INTO EXISTING PAVEMENT



SECTION H - H



PLAN VIEW

SINGLE LANE CONCRETE BASE REPAIR

CONCRETE BASE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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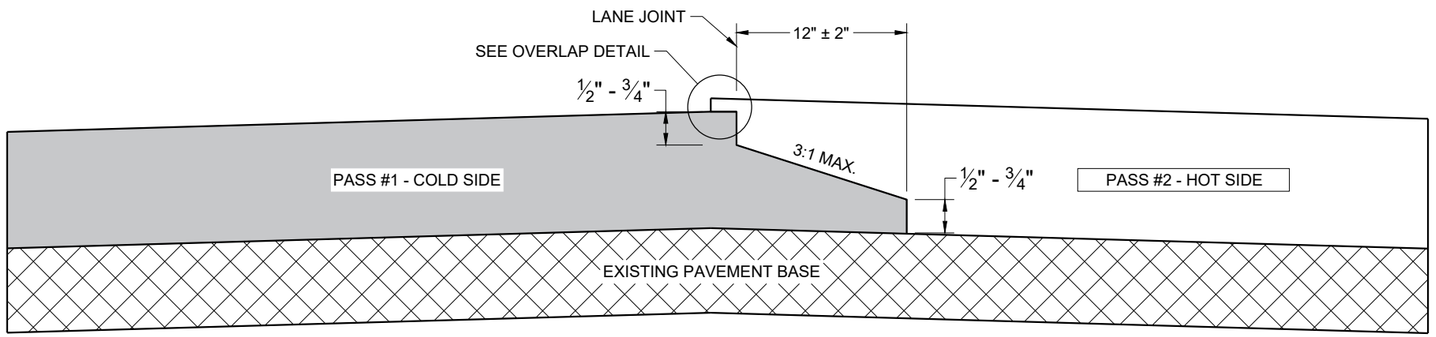
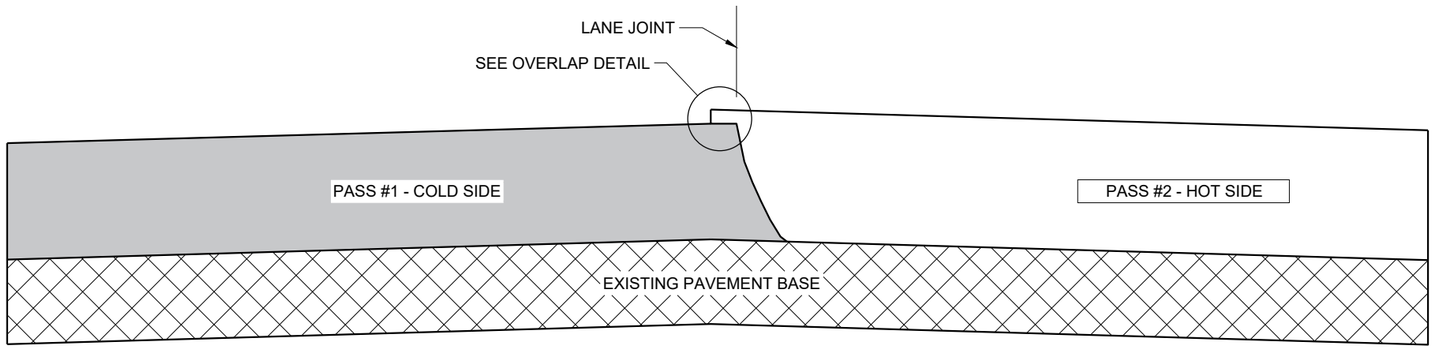
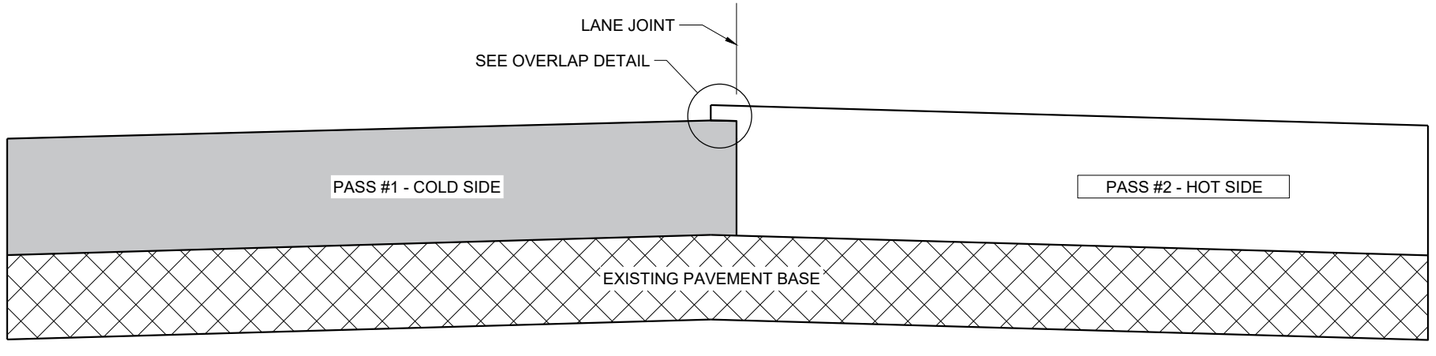
SDD 13C15 - 08b
SDD 13C15 - 08b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

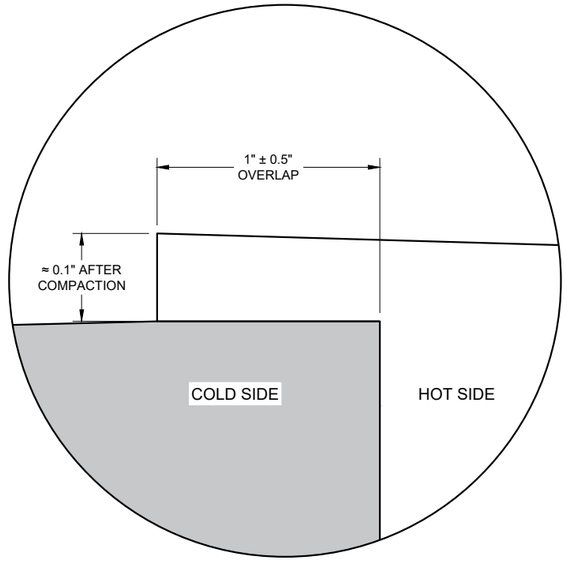
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

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SDD 13C19 - 03

SDD 13C19 - 03

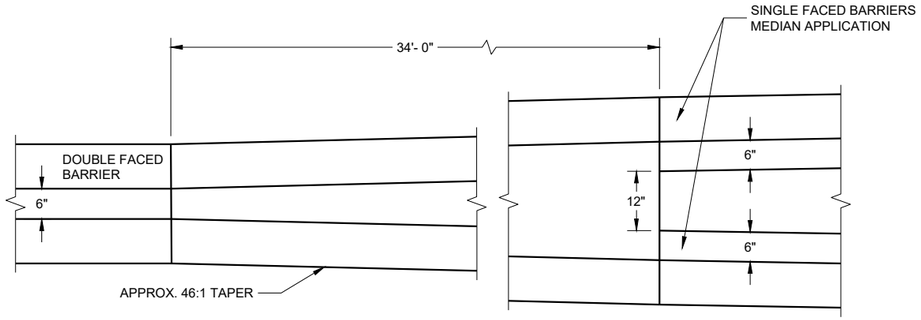
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

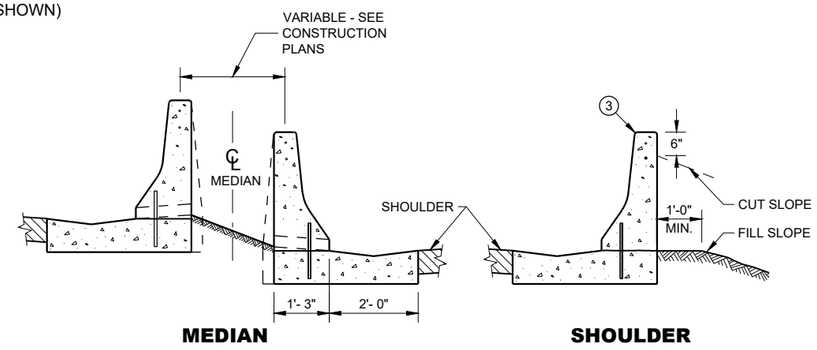


PLAN VIEW

TRANSITION DETAILS OF DOUBLE FACED TO SINGLE FACED CONCRETE MEDIAN BARRIER

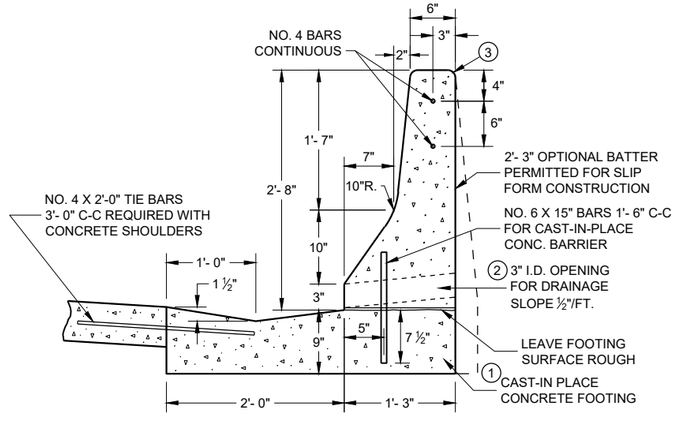
(FOOTINGS ARE NOT SHOWN)

HIGH SIDE CONCRETE BARRIER DETAIL



MEDIAN **SHOULDER**

TYPICAL APPLICATIONS



SECTION VIEW

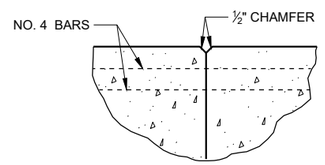
GENERAL NOTES

SPLICES OF LONGITUDINAL BARS SHALL BE MADE WITH BARS LAPPED AT LEAST 18-INCHES AND FIRMLY TIED OR FASTENED TOGETHER.

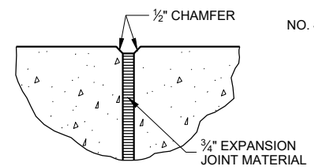
ALL BAR STEEL REINFORCEMENT SHALL CONFORM TO REQUIREMENTS OF AASHTO M31, GRADE 60.

4000 PSI AIR ENTRAINMENT PER STANDARD SPECIFICATION 501.

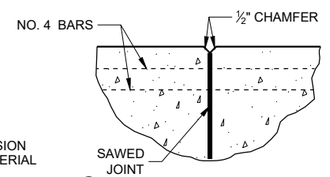
1. BARRIER SHALL BE INSTALLED ON A CONCRETE SHOULDER INSTEAD OF THE CONCRETE FOOTING WHEN SPECIFIED OR SHOWN ELSEWHERE IN THE CONTRACT.
2. OPENINGS FOR DRAINAGE SHALL BE PLACED AT LOW POINTS OF VERTICAL CURVES OR WHERE DIRECTED BY THE ENGINEER.
3. 3/4 -INCH BEVEL OR 1-INCH RADIUS (TYPICAL).
4. NO. 4 BARS SHALL BE CONTINUED THROUGH CONSTRUCTION JOINTS.
5. EXPANSION JOINTS SHALL BE PLACED AT EXISTING EXPANSION JOINTS IN THE PAVEMENT AND AT STRUCTURES. SEE REINFORCEMENT AT BARRIER END DETAIL.
6. SAWED CONTRACTION JOINTS SHALL BE PROVIDED ACROSS THE FULL WIDTH OF THE BARRIER FOOTING, AND IN FRONT, TOP AND BACK FACE OF THE BARRIER AT EXISTING PAVEMENT JOINTS AND AT UNIFORM INTERVALS BETWEEN WITH A MAXIMUM SPACING OF 25 FEET.



4 **CONSTRUCTION JOINT**



5 **EXPANSION JOINT**



6 **CONTRACTION JOINT**

JOINT DETAILS

CONCRETE BARRIER (DOUBLE FACED)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/16/2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

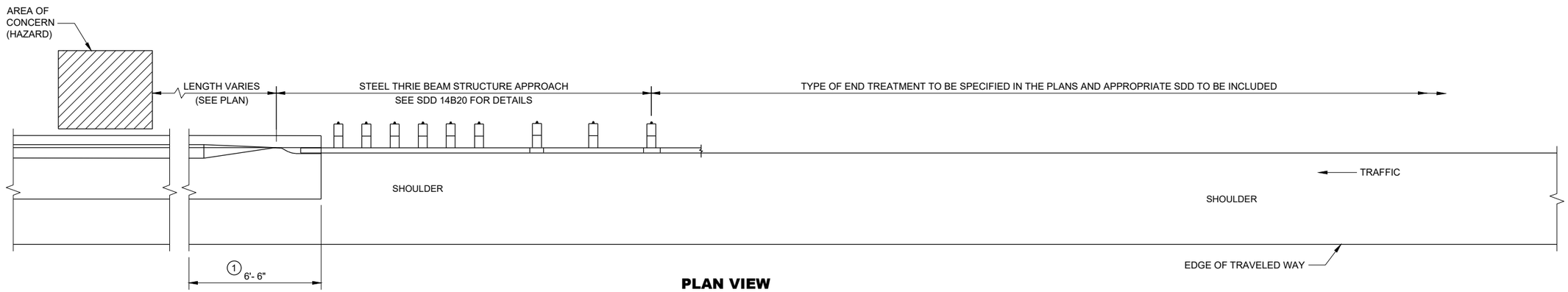
FHWA

6

SDD 14B22 - 07a

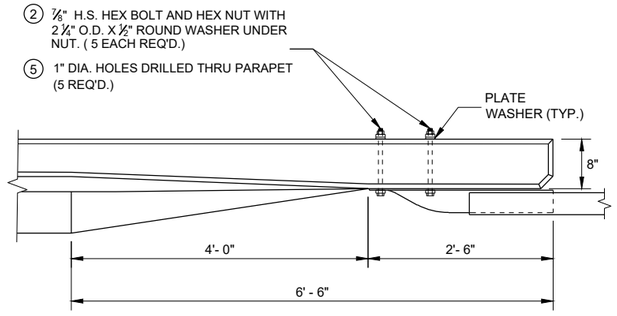
6

SDD 14B22 - 07a



PLAN VIEW

TRANSITION TO STEEL PLATE BEAM GUARD AND END TERMINAL



PLAN VIEW

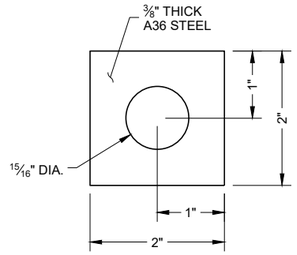
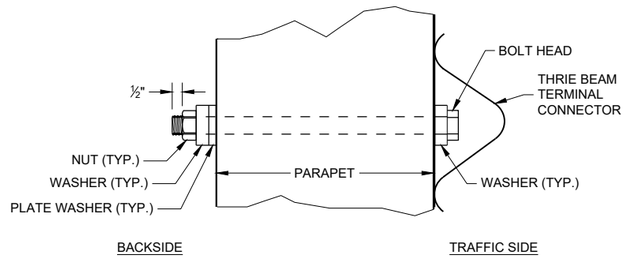


PLATE WASHER DETAIL

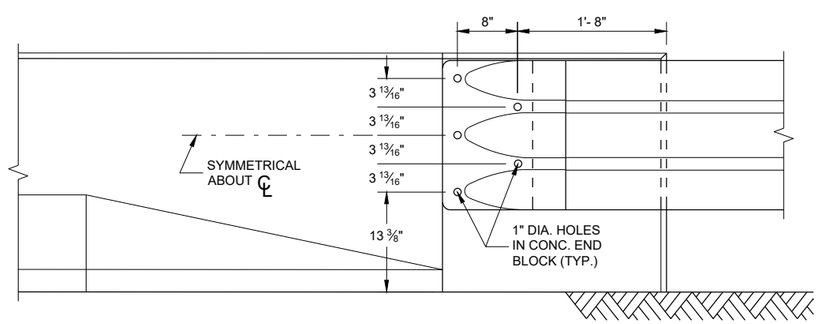


THRIE BEAM BOLT DETAIL

GENERAL NOTES

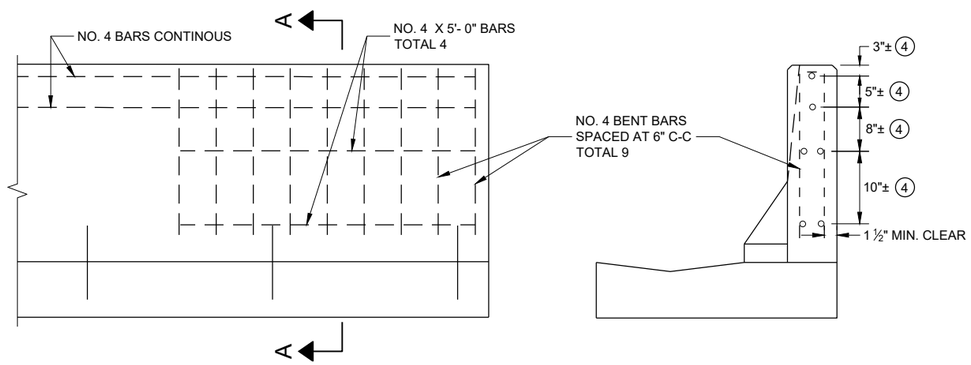
1. A SPECIAL END IS REQUIRED ON THE CONCRETE BARRIER TO TRANSITION TO A CONNECTION WITH THE STEEL THRIE BEAM STRUCTURE APPROACH. SEE THE DETAILS ON THIS SHEET.
2. BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/8" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.
3. REINFORCEMENT REQUIRED AT EXPANSION JOINTS AND WHERE CONCRETE BARRIER IS TERMINATED.
4. PLACE REINFORCEMENT SUCH THAT IT WILL NOT CONFLICT WITH THE BOLT HOLES IN THE THRIE BEAM TERMINAL CONNECTOR.
5. INCLUDE THE PAYMENT FOR DRILLING BOLT HOLES THROUGH THE PARAPET, AND ALL BOLTS, NUTS AND WASHERS IN THE ITEM "STEEL THRIE BEAM STRUCTURAL APPROACH".

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



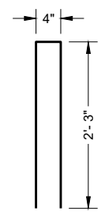
FRONT VIEW

CONCRETE BARRIER TRANSITION TO THRIE BEAM



FRONT VIEW **SECTION A - A**

3 REINFORCEMENT AT BARRIER END



BENT BAR DETAIL

CONCRETE BARRIER, SINGLE FACED (WITH ANCHORAGE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
8/16/2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 14B22 - 07b

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(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

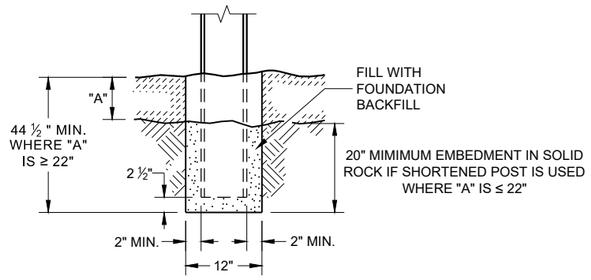
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

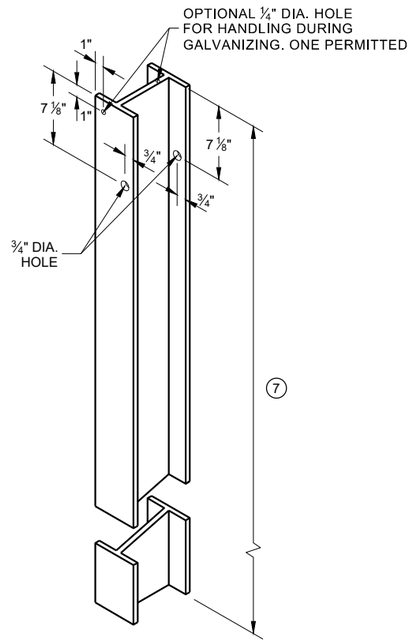
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

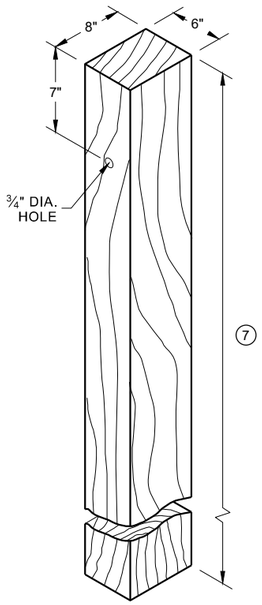
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



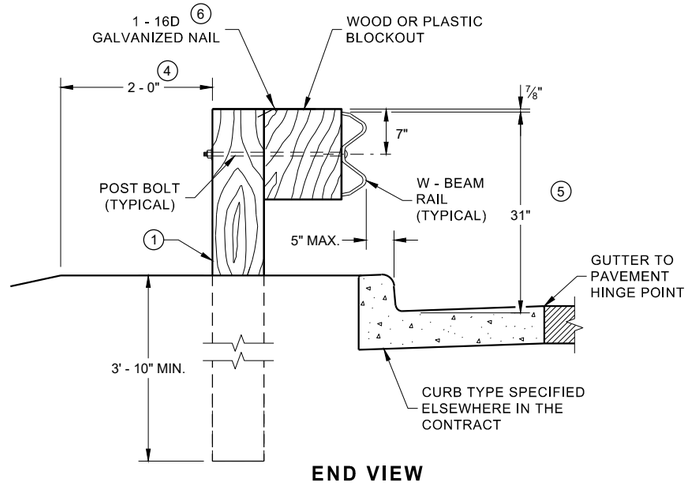
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



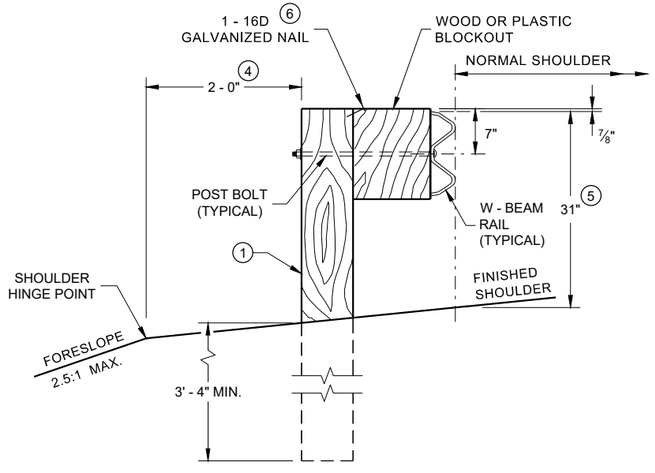
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



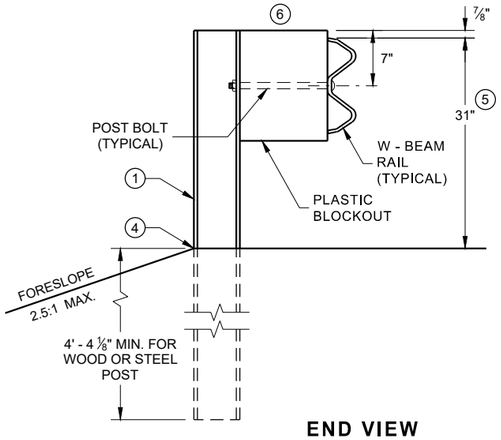
WOOD POST (6" X 8") NOMINAL (1)



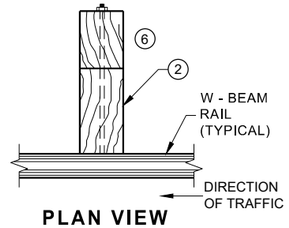
END VIEW
LOCATED ALONG A CURBED ROADWAY



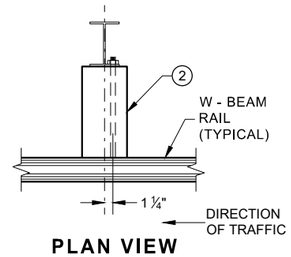
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



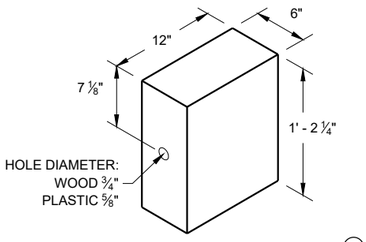
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07a

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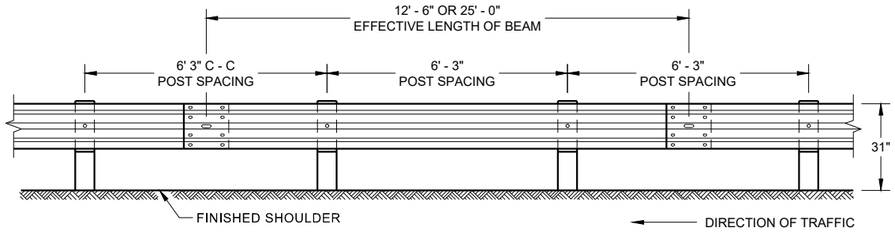
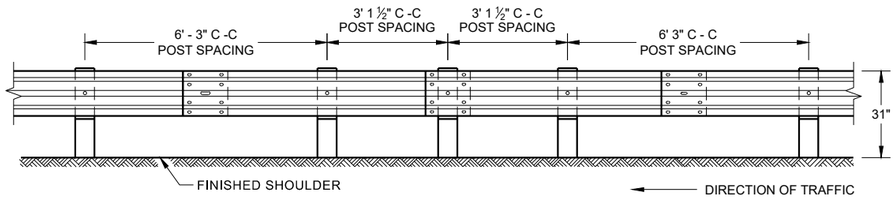
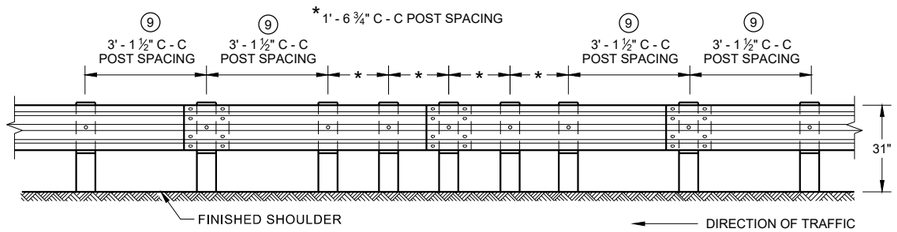
SDD 14B42 - 07a



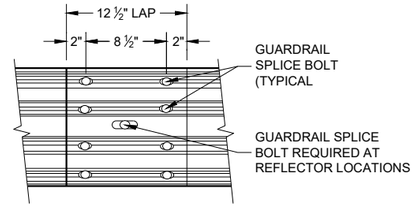
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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

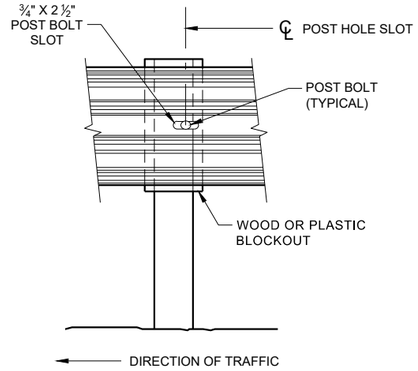
GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

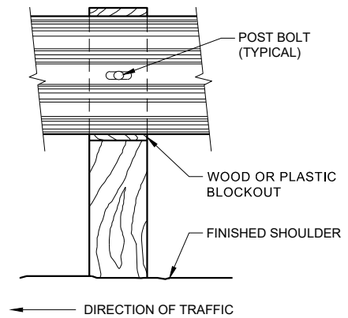
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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.

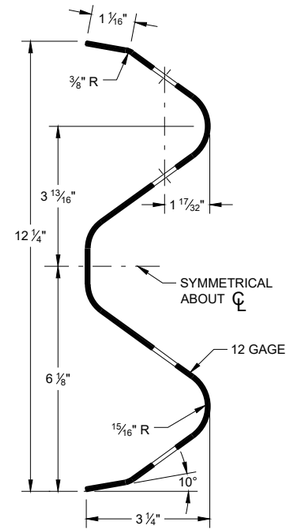
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



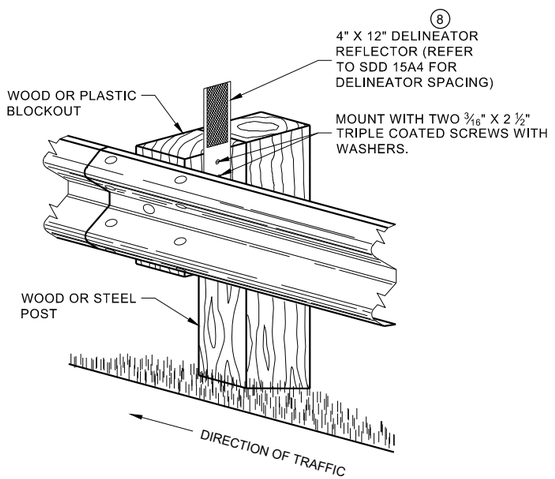
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



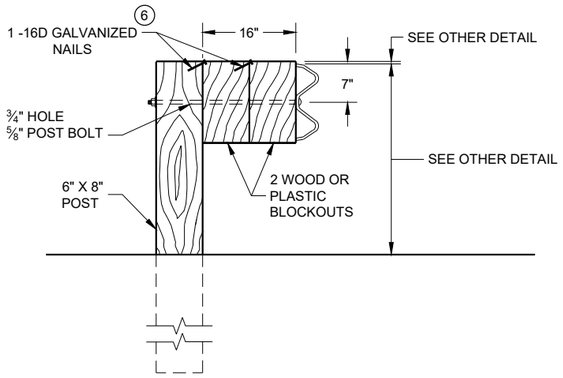
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B42 - 07b

SDD 14B42 - 07b

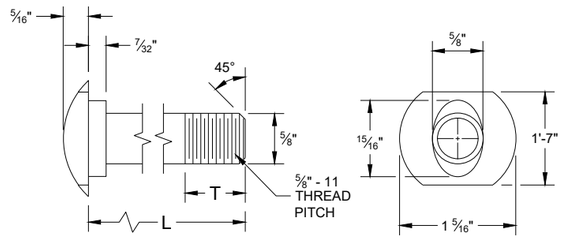


DETAIL FOR 16" BLOCKOUT DEPTH

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.

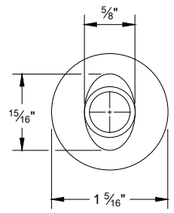
NOTE:

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.

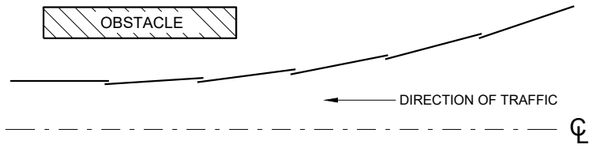


POST BOLT TABLE

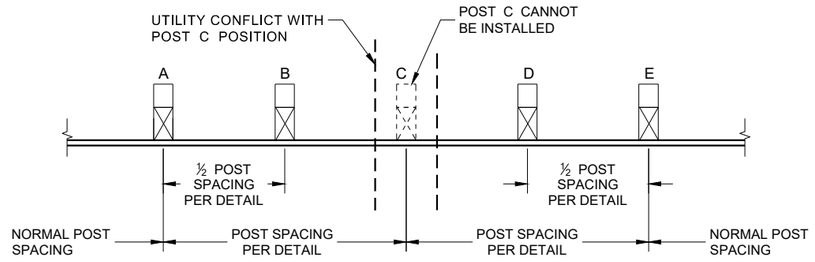
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1⁄16"
18"	4"
21"	4 1⁄16"
25"	4"



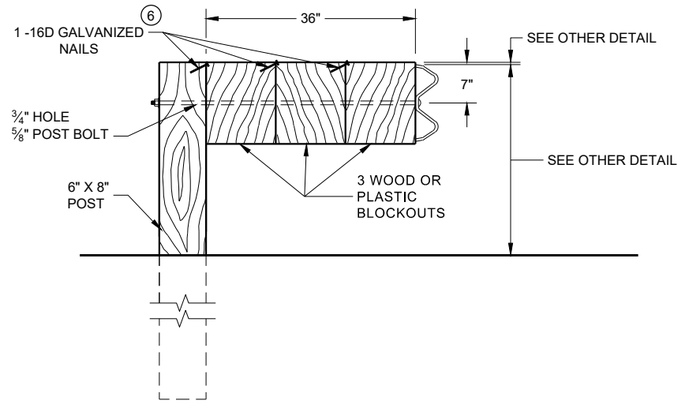
ALTERNATE BOLT HEAD



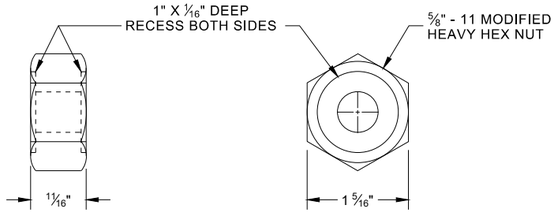
PLAN VIEW
BEAM LAPPING DETAIL



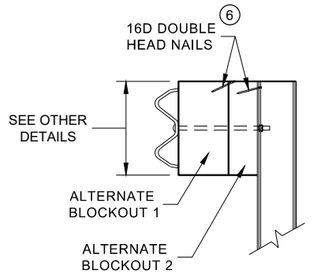
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



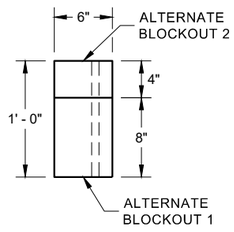
DETAIL FOR 36" BLOCKOUT DEPTH



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.

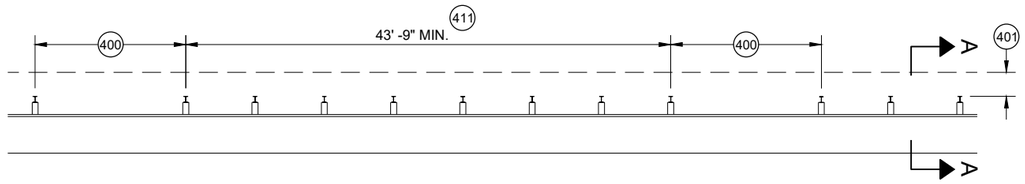
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

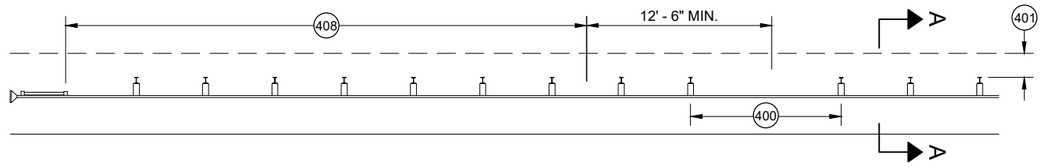
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6

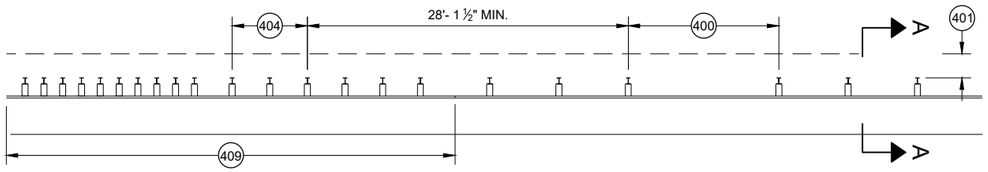
SDD 14B42 - 07c



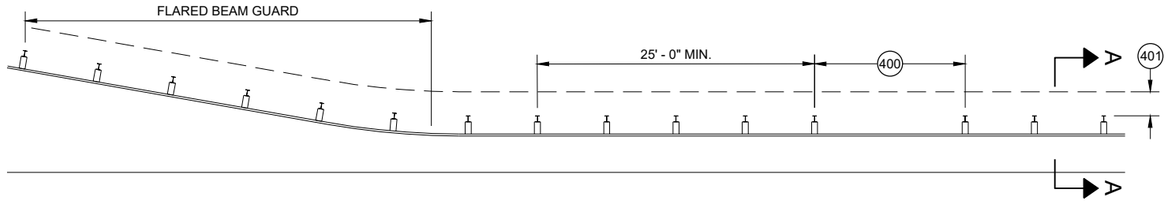
MISSING POST IN MGS GUARDRAIL



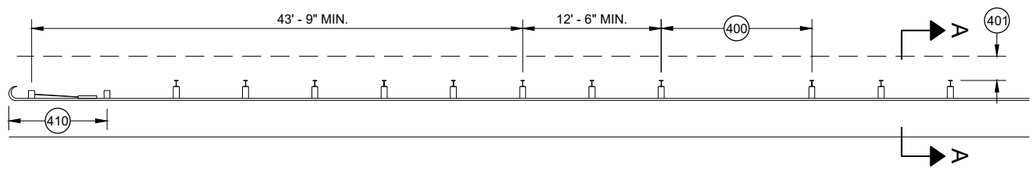
MISSING POST IN MGS GUARDRAIL NEAR EAT



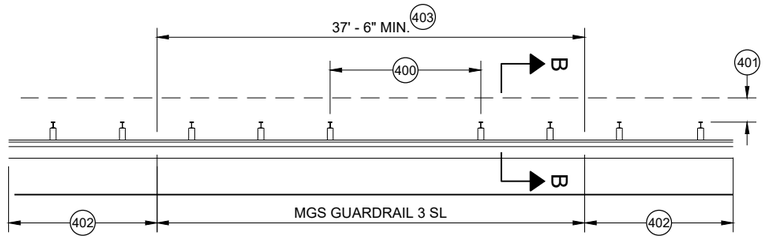
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

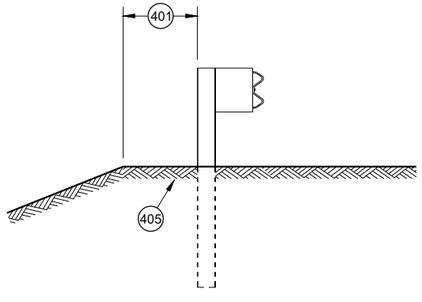


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

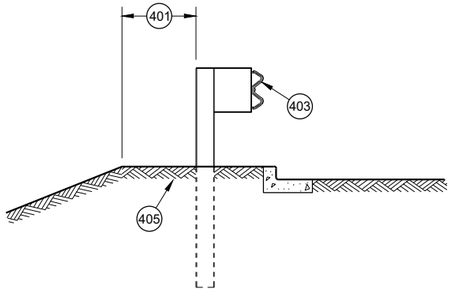


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(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.

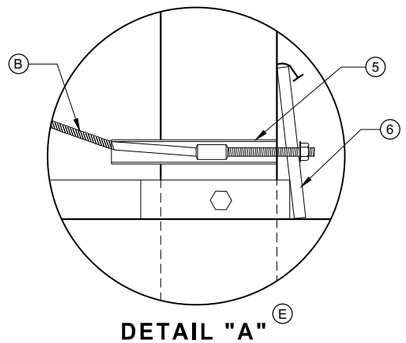
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

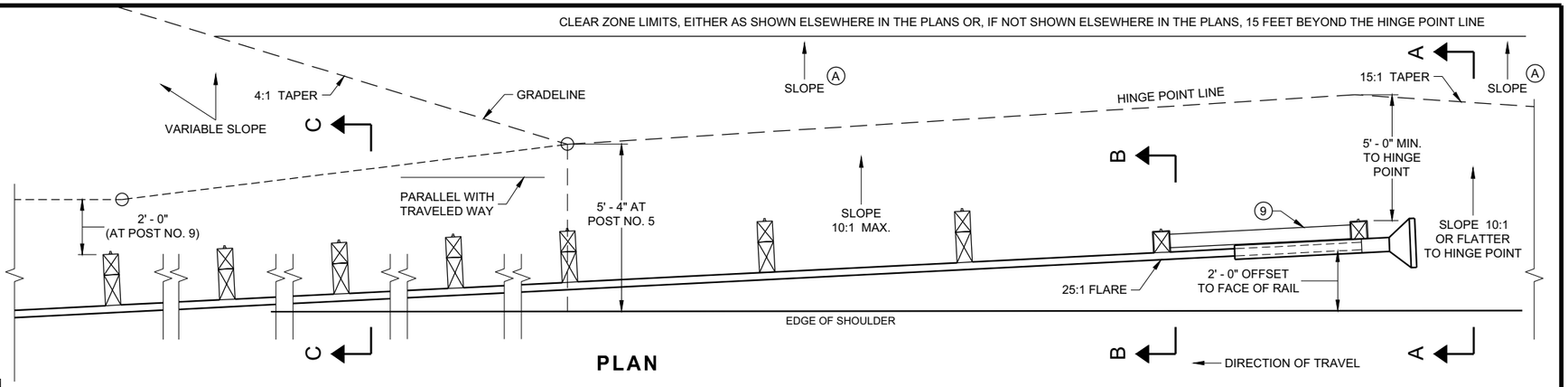
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

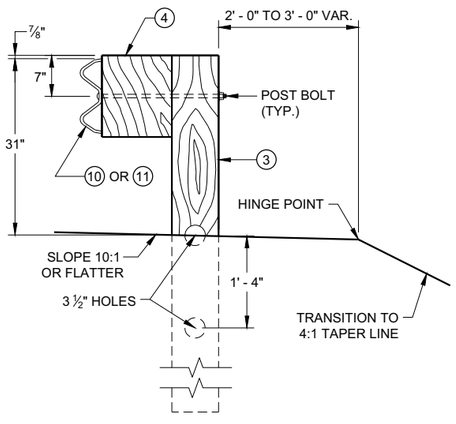
SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

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.

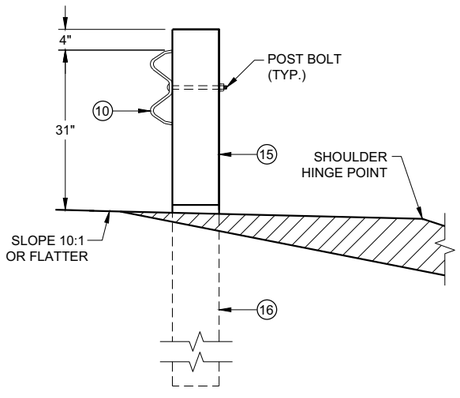


DETAIL "A" (E)

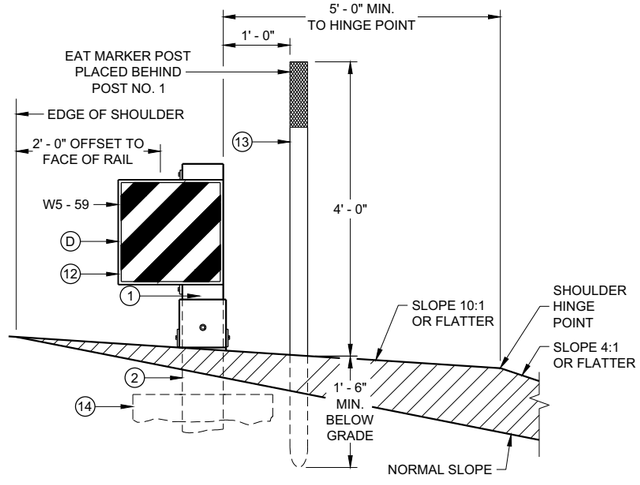




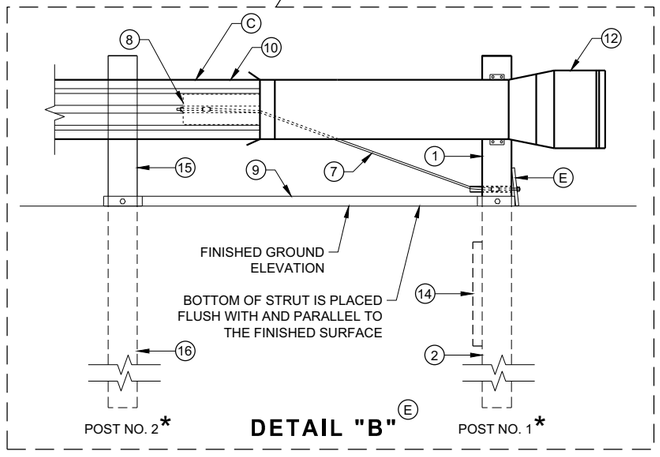
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



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)

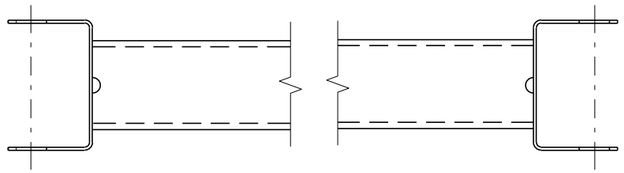
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

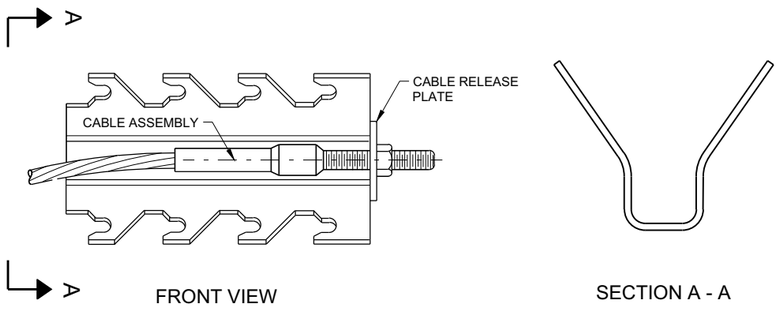
SDD 14B44 - 04a

BILL OF MATERIALS

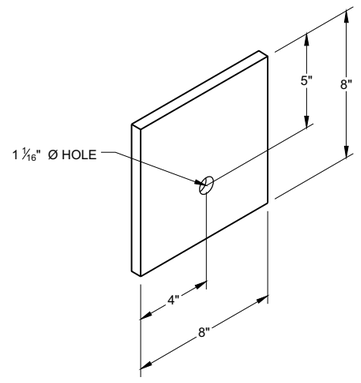
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
1	UPPER POST NO. 1 6" X 6" TUBE
2	LOWER POST NO. 1
3	WOOD CRT
4	WOOD BLOCKOUT
5	PIPE SLEEVE
6	BEARING PLATE
7	BCT CABLE ASSEMBLY
8	ANCHOR CABLE BOX
9	GROUND STRUT
10	PERFORATED W-BEAM RAIL 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 GROUND STRUT (9) (E)



GENERIC ANCHOR CABLE BOX (9) (E)



BEARING PLATE (6) (E)

6

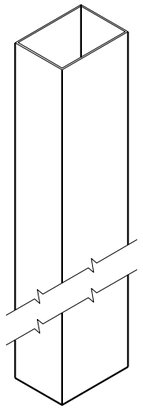
6

SDD 14B44 - 04b

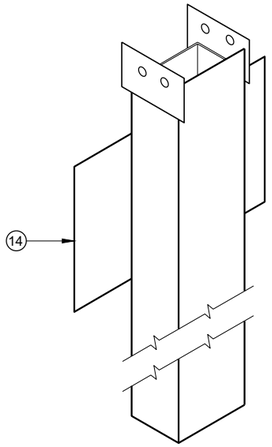
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

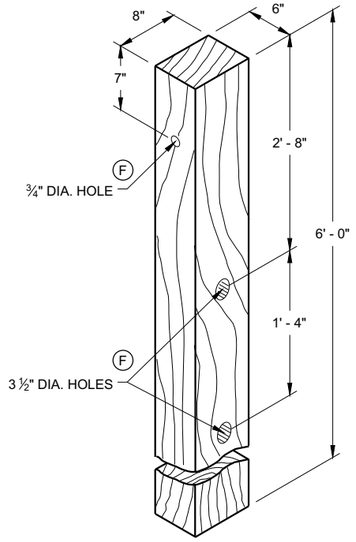
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



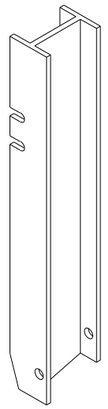
UPPER POST NO. 1 (1) (E)



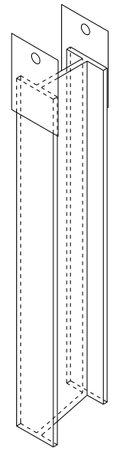
LOWER POST NO. 1 (2) (E)



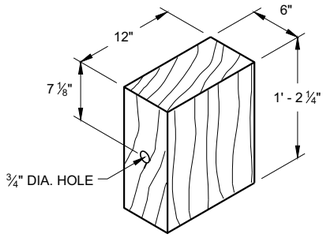
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



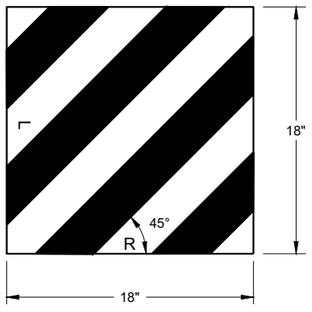
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

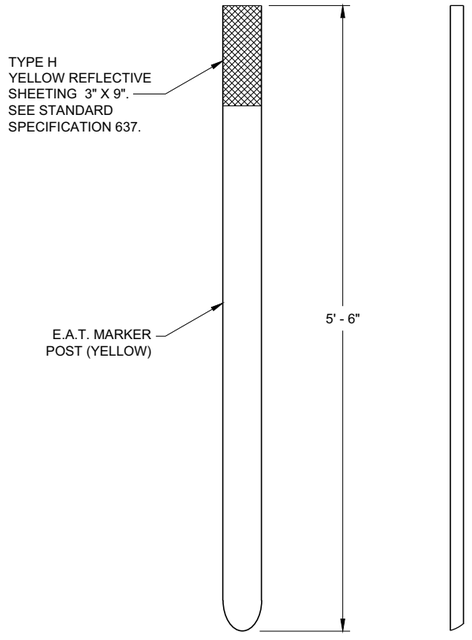


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



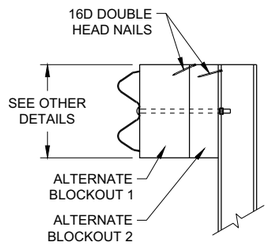
W5 - 59

REFLECTIVE SHEETING DETAIL (E)

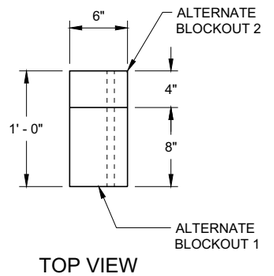


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

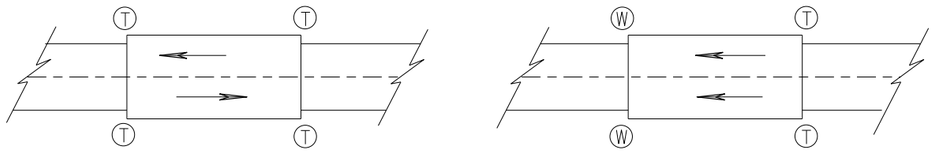
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

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

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

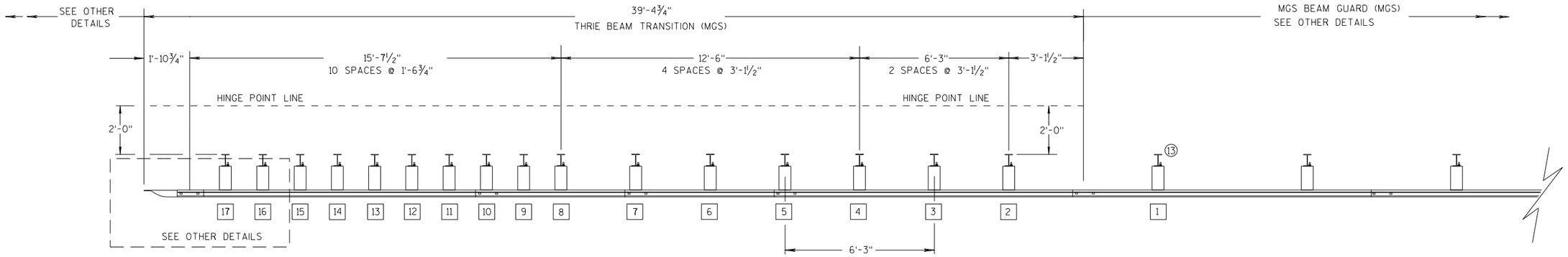
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

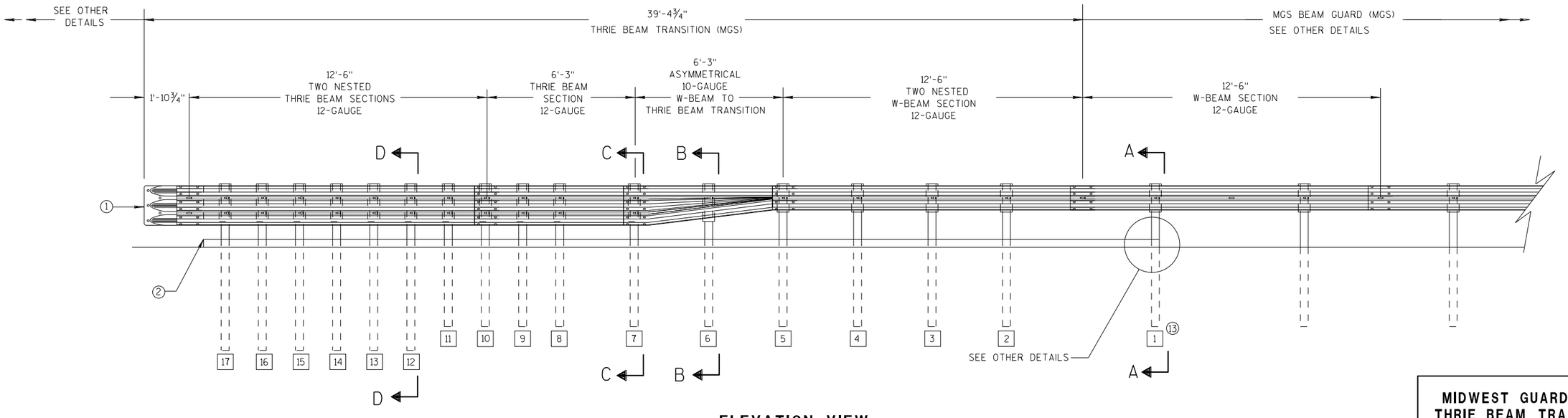
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

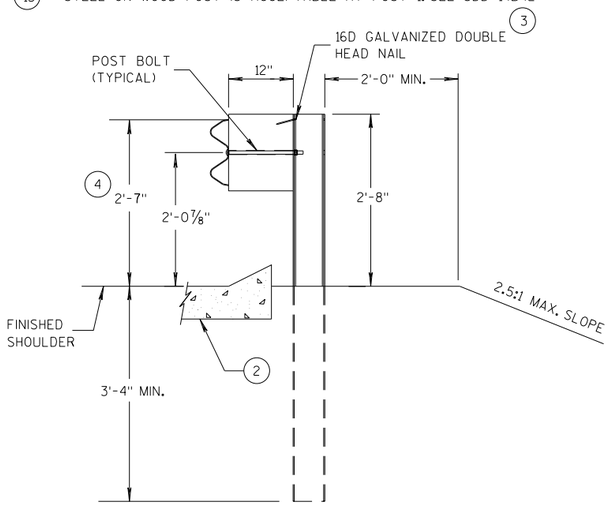
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

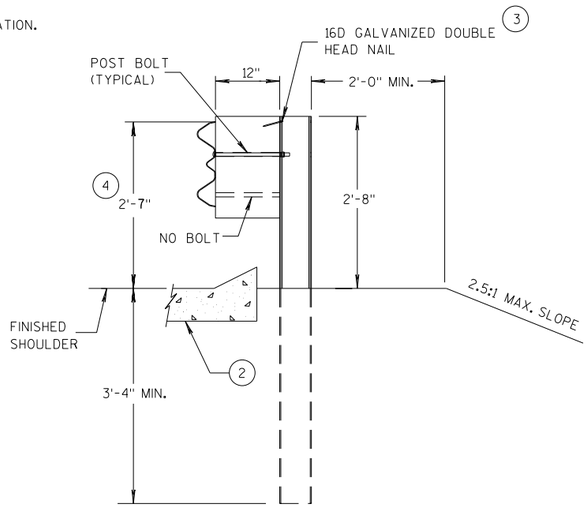
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



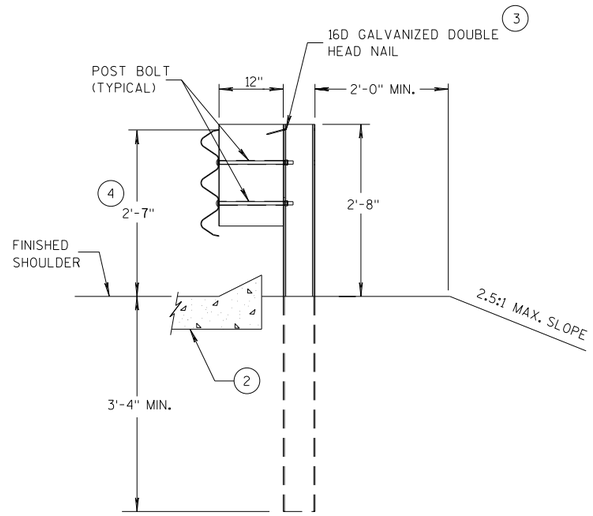
SECTION A-A (13)

POSTS 1-5



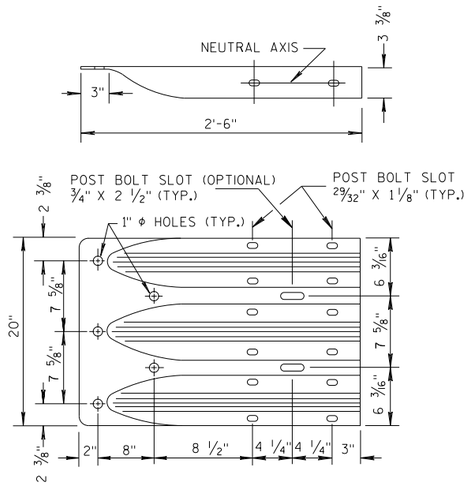
SECTION B-B

POST 6

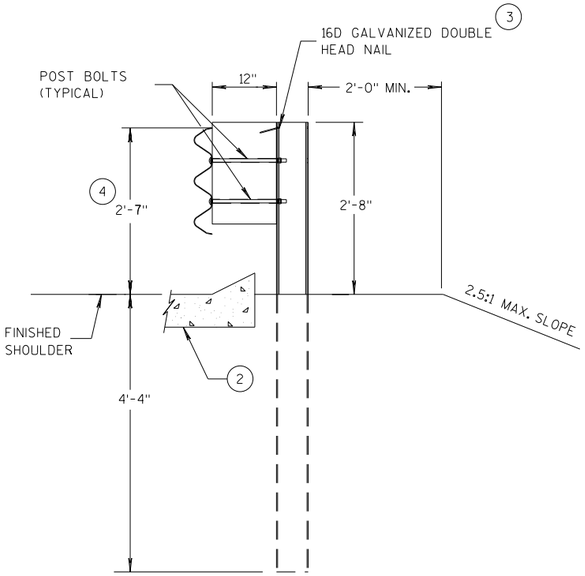


SECTION C-C

POSTS 7-11

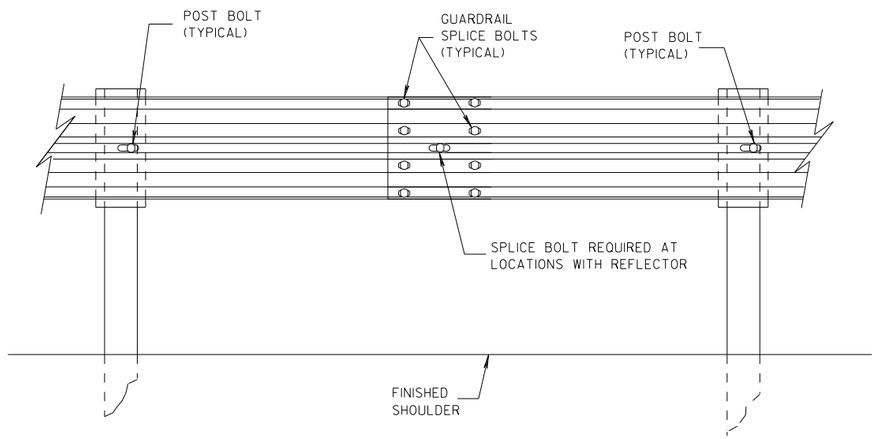


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

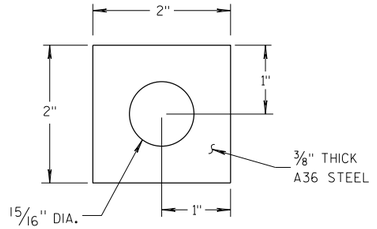
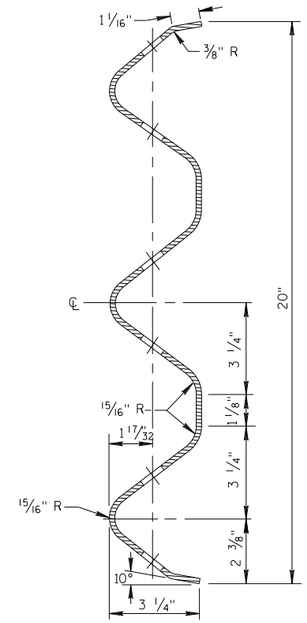


PLATE WASHER DETAIL



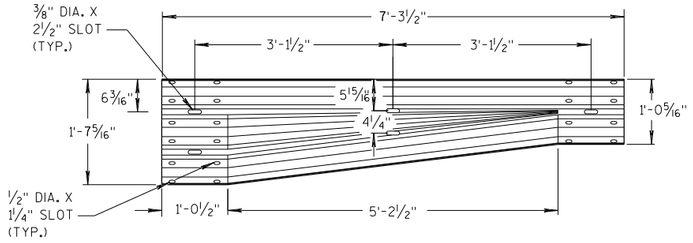
SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

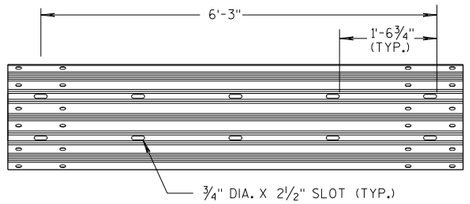
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

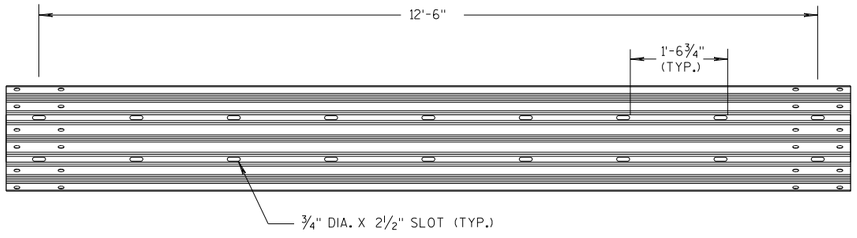
S.D.D. 14 B 45-5b



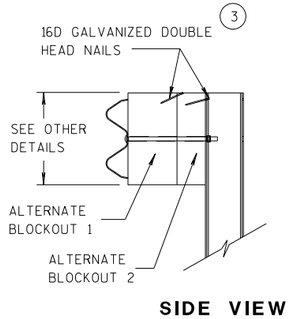
W-BEAM TO THRIE BEAM TRANSITION SECTION



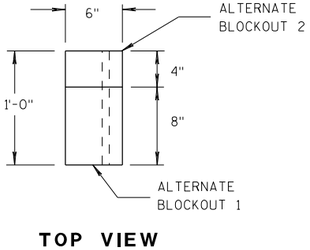
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

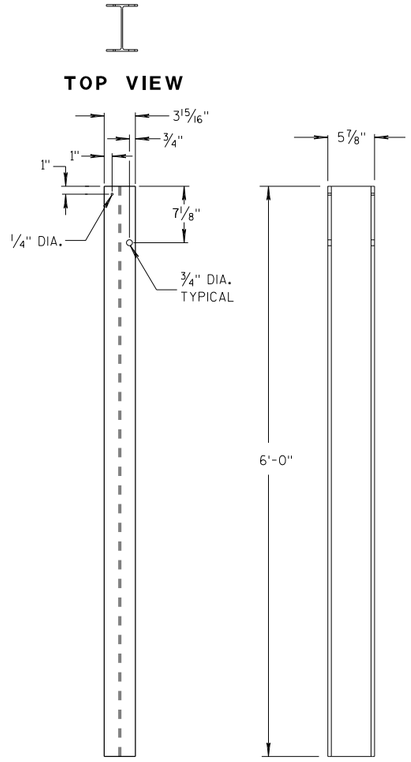


SIDE VIEW



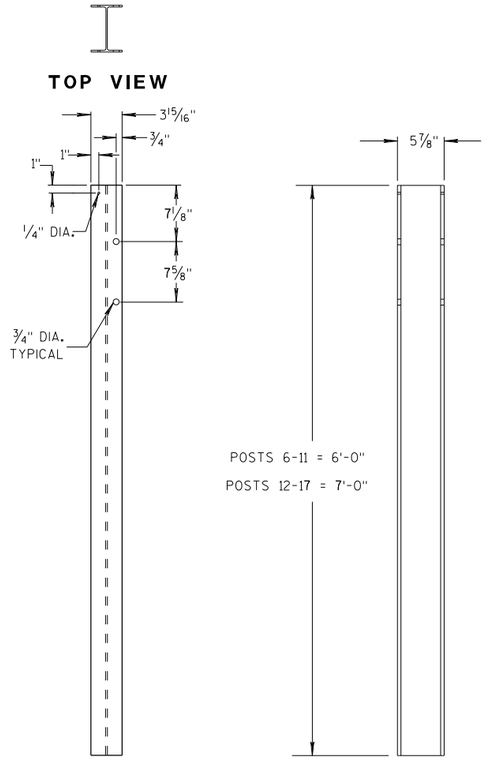
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



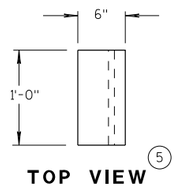
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

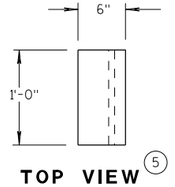


FRONT VIEW SIDE VIEW

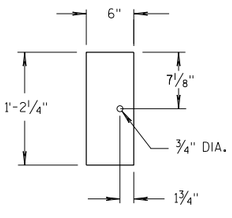
STEEL POSTS 6-17



TOP VIEW (5)

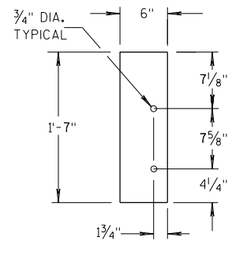


TOP VIEW (5)



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.

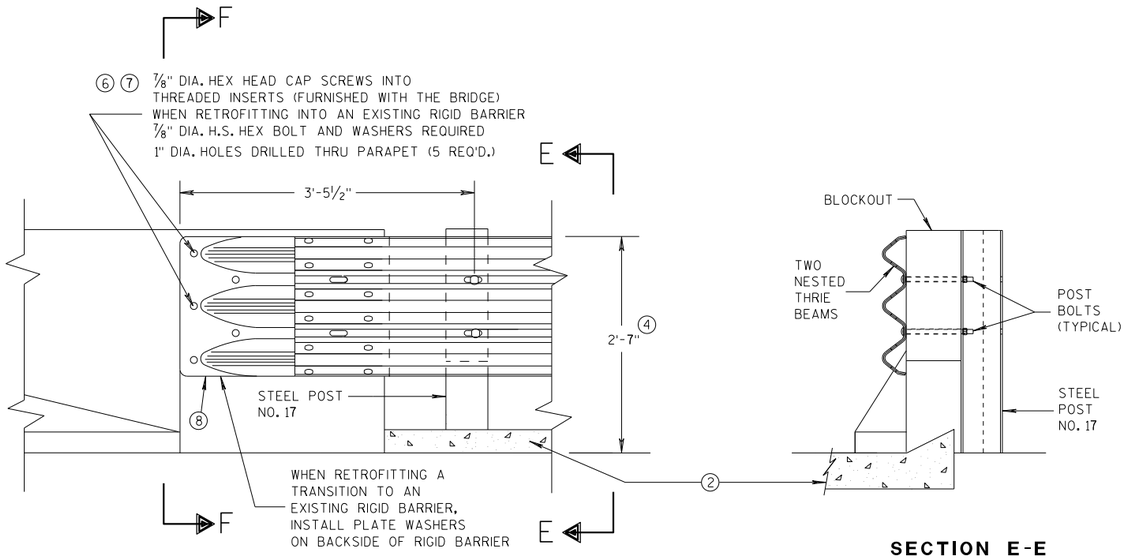
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

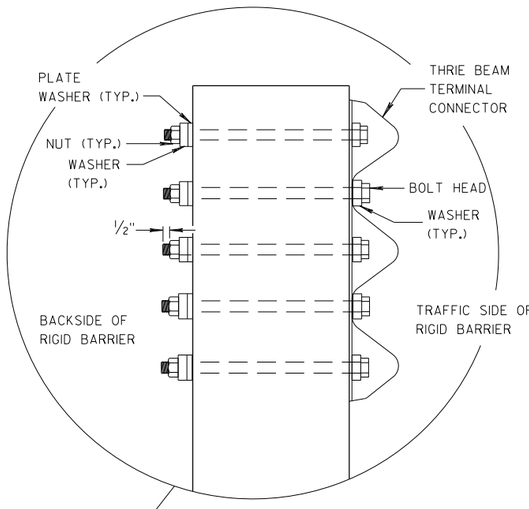
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

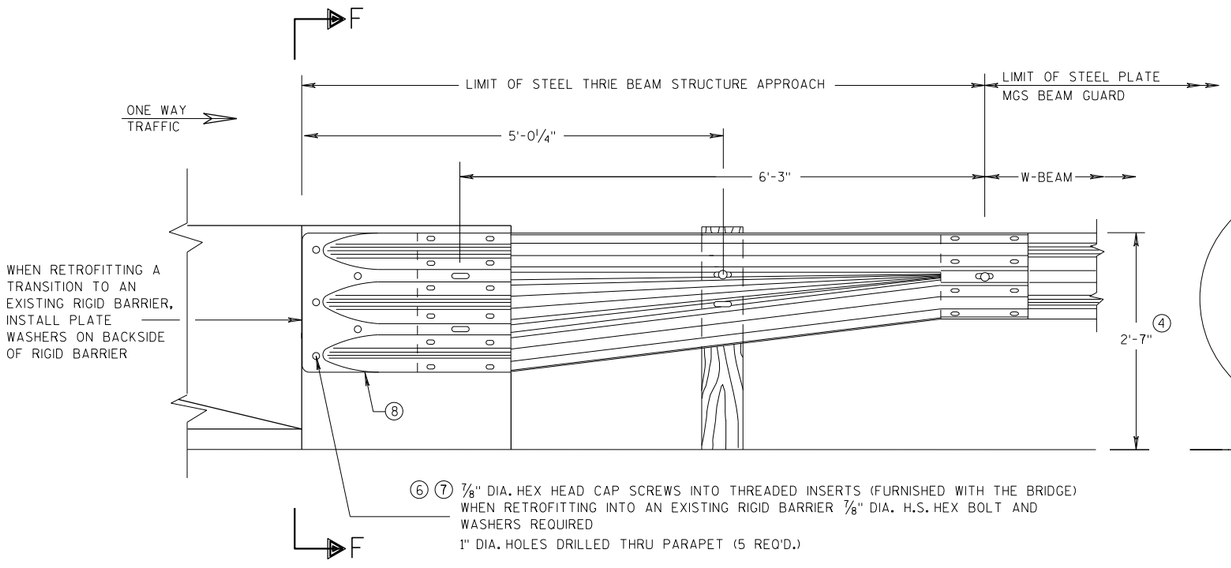
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

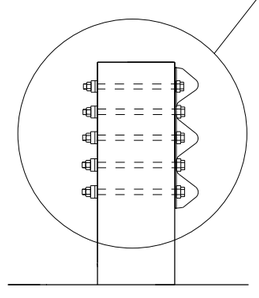
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

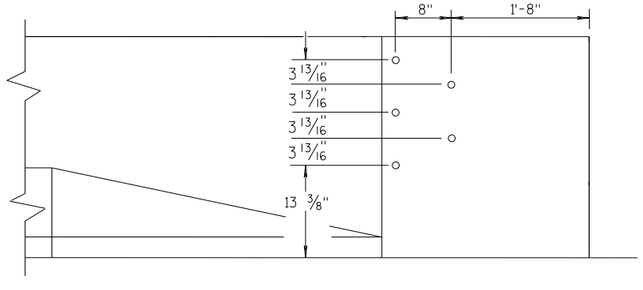




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[illegible] UNIT SUPERVIS[illegible]NT
FHWA

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S.D.D. 14 B 45-5d

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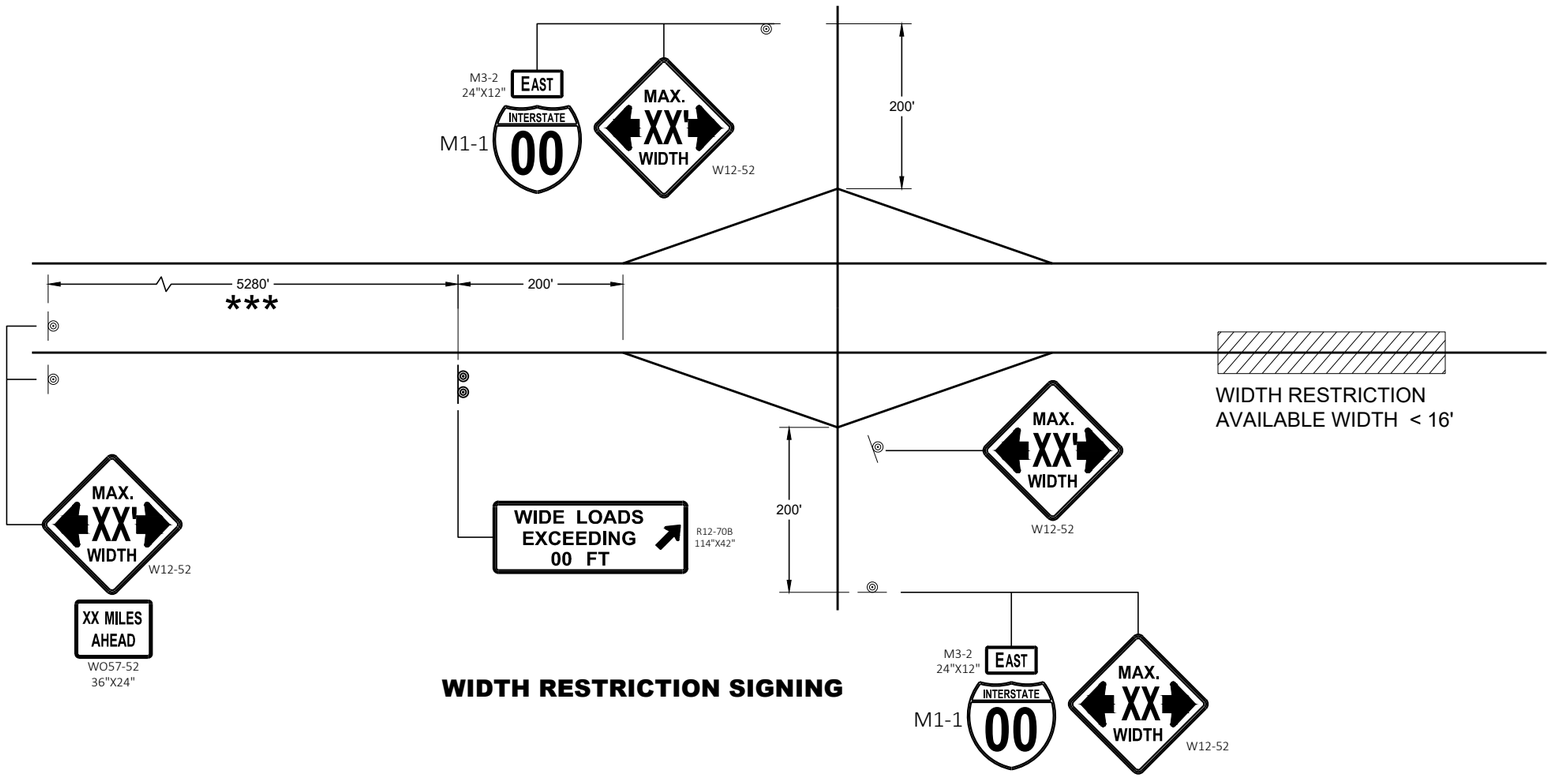
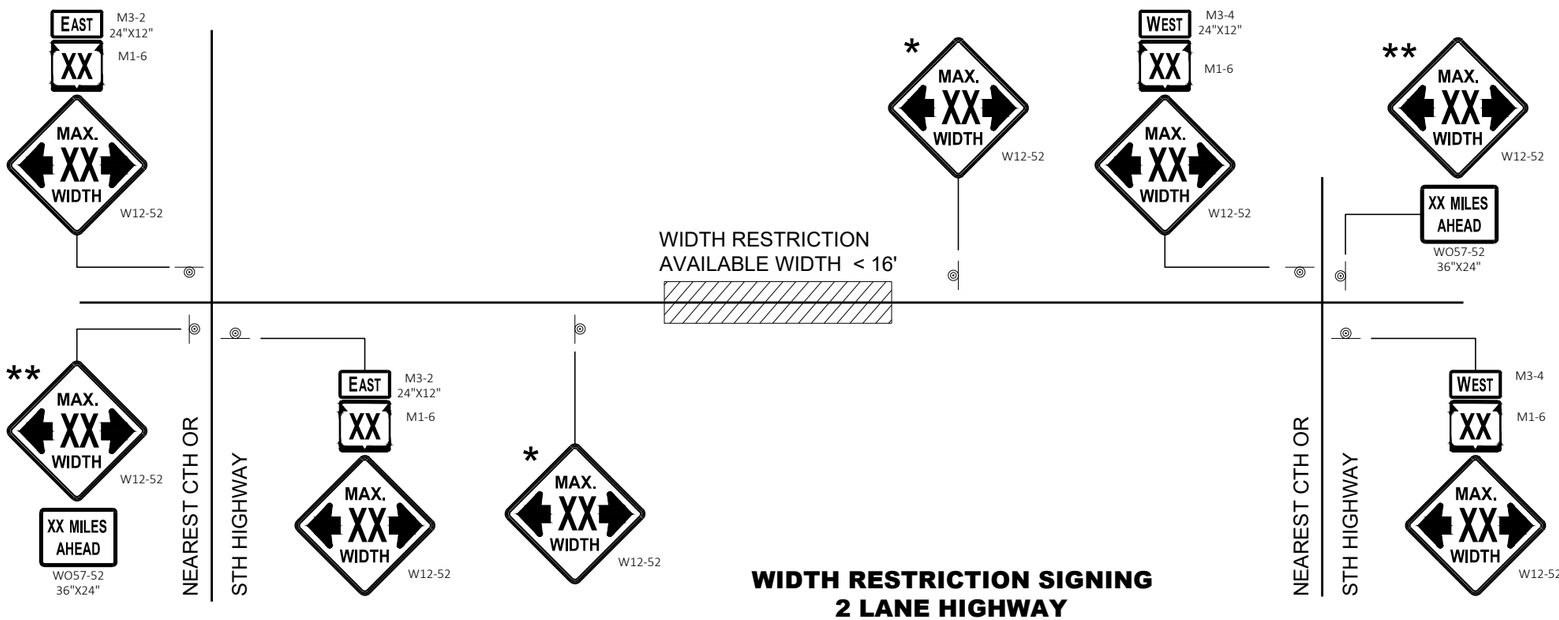
S.D.D. 14 B 45-5d



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

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SDD 15C02 - 09f

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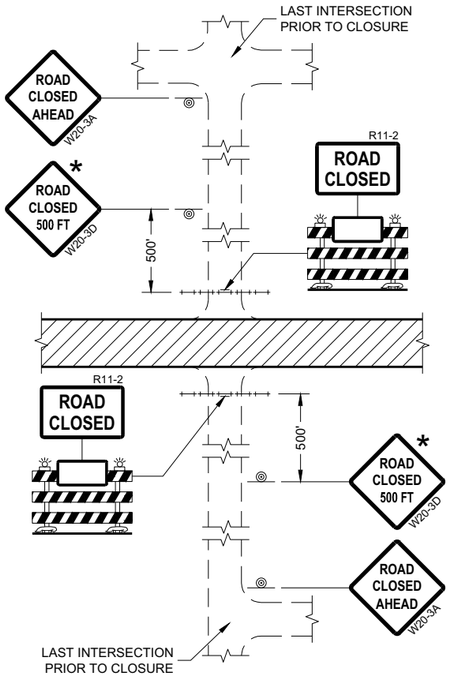
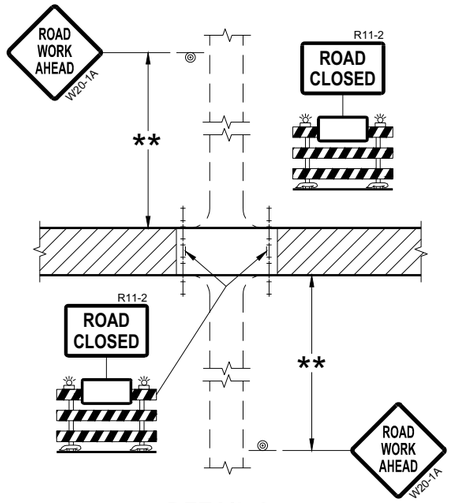
SDD 15C02 - 09f



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

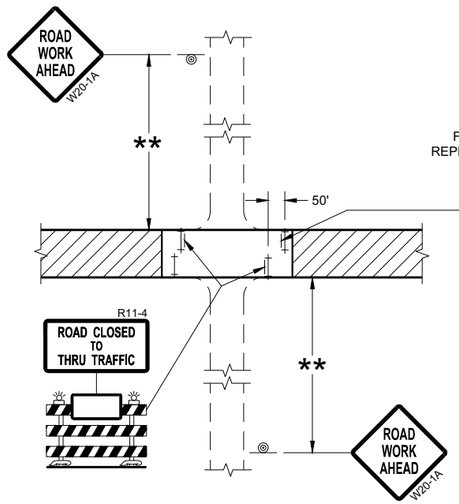
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

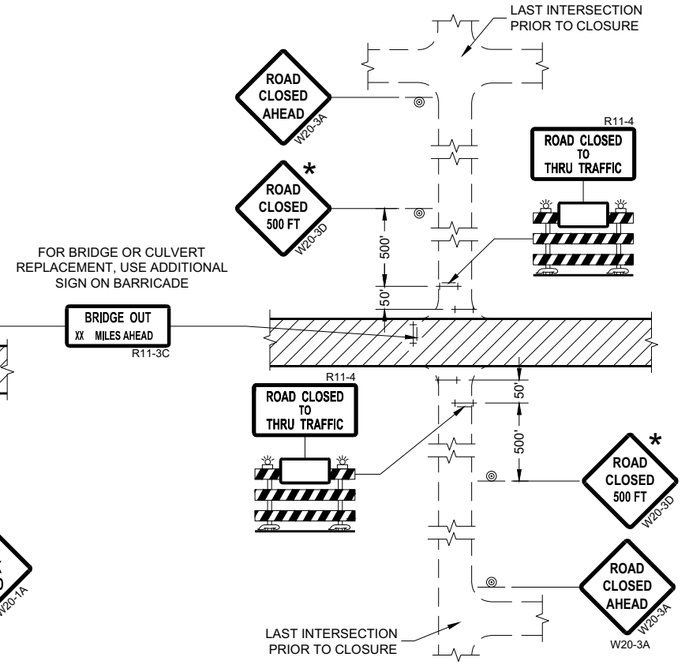
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.





DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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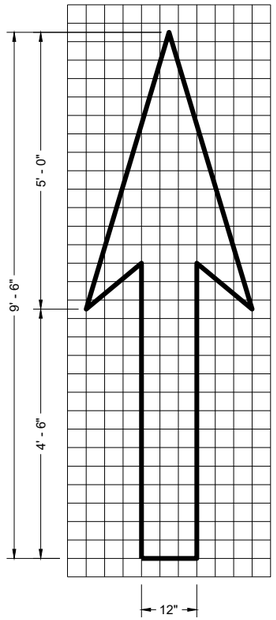
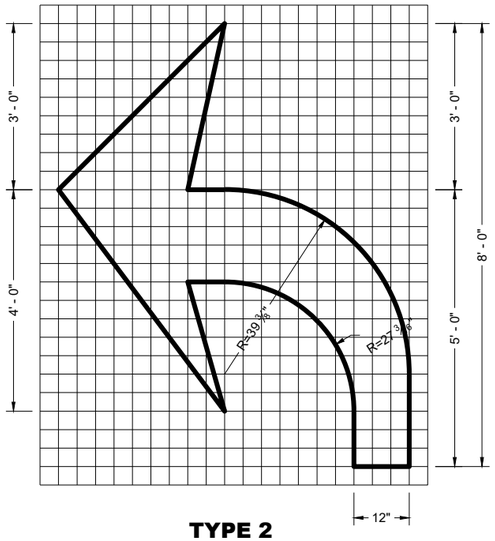
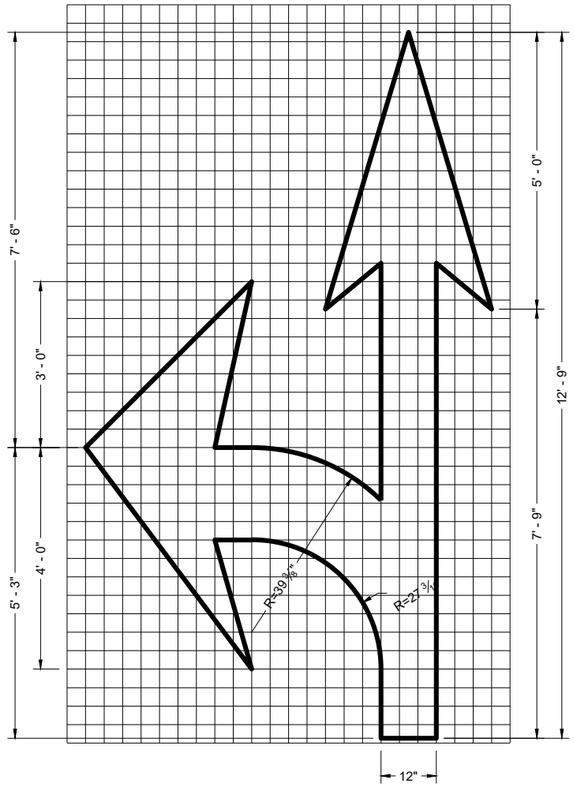
SDD 15C03 - 05



TYPE 1



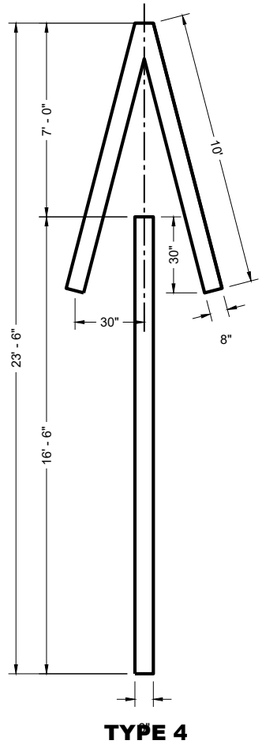
TYPE 2



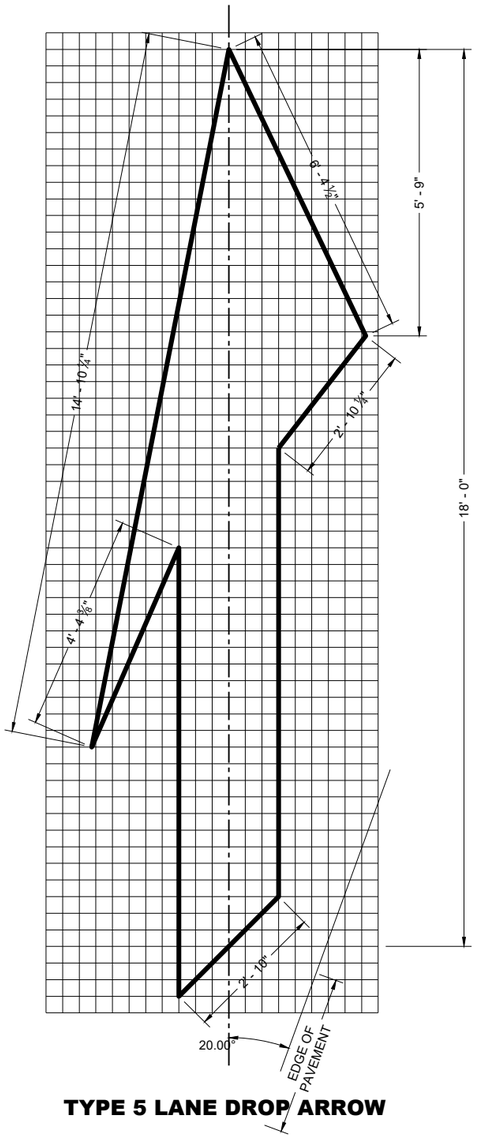
TYPE 3

GENERAL NOTES

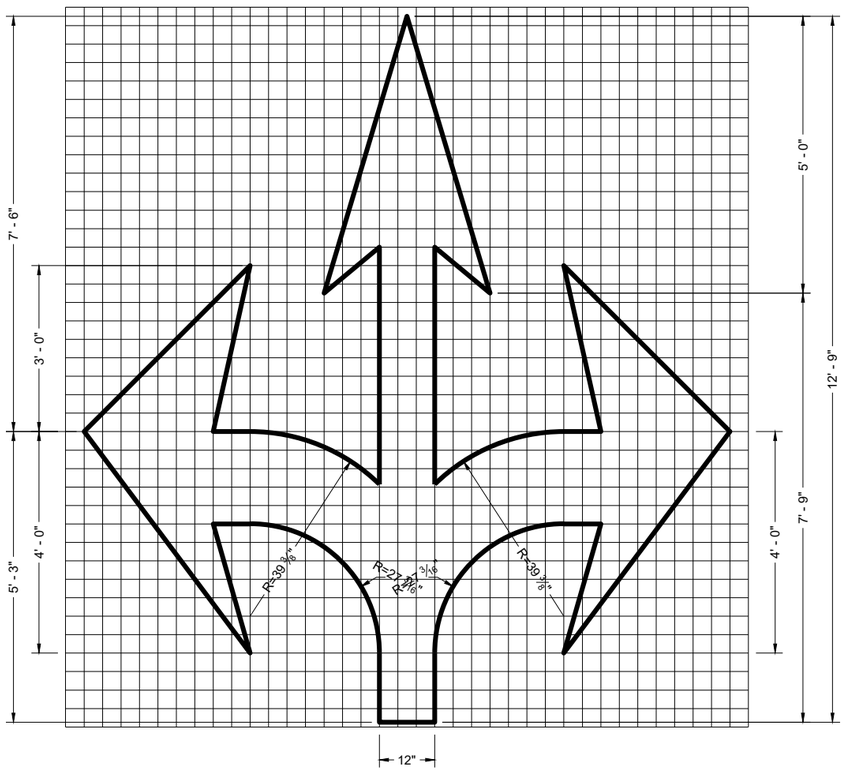
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



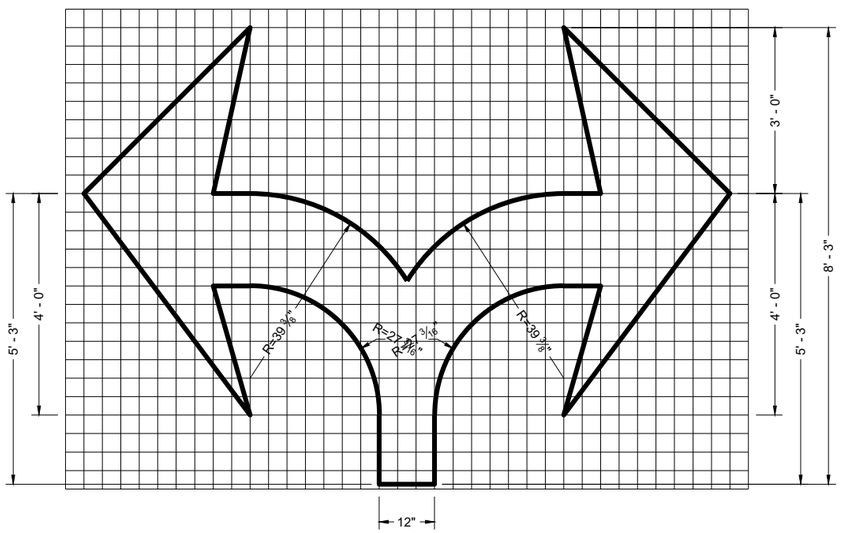
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MARKING ENGINEER

FHWA

6

SDD 15C07-16c

SDD 15C07-16c

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.

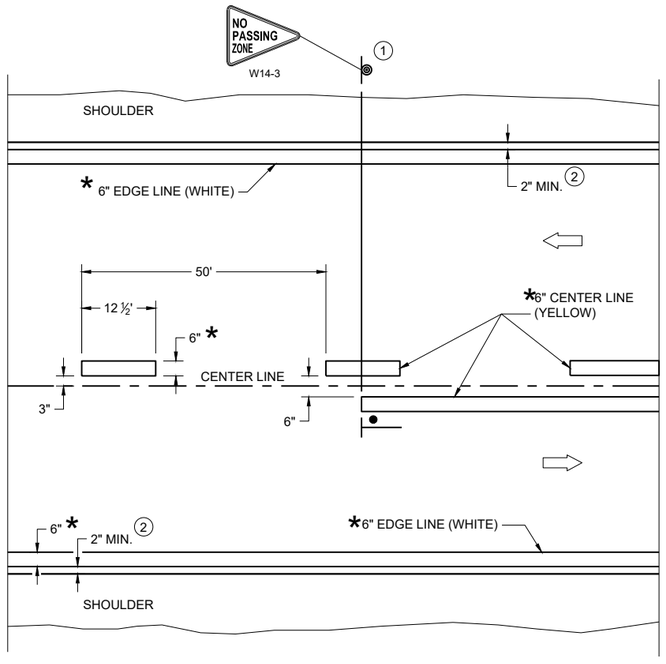
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

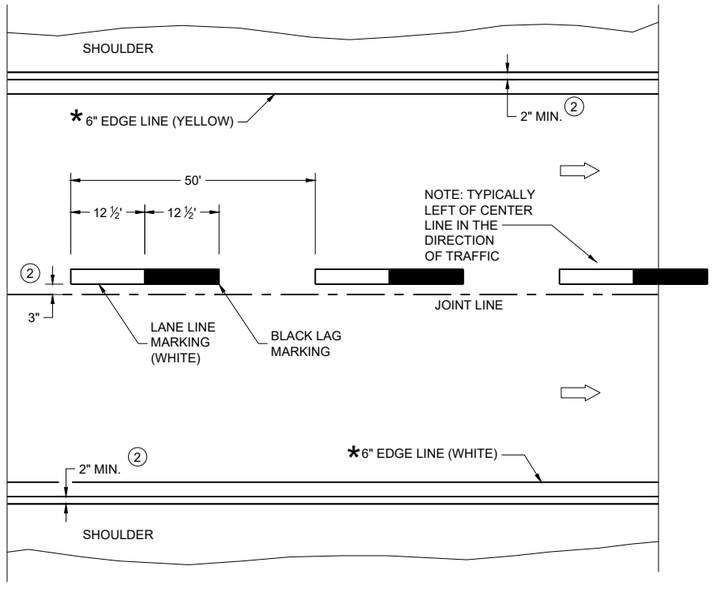
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

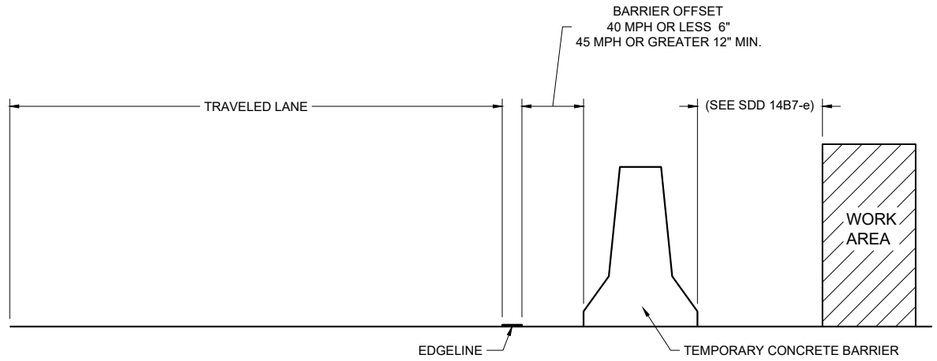
APPROVED

May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

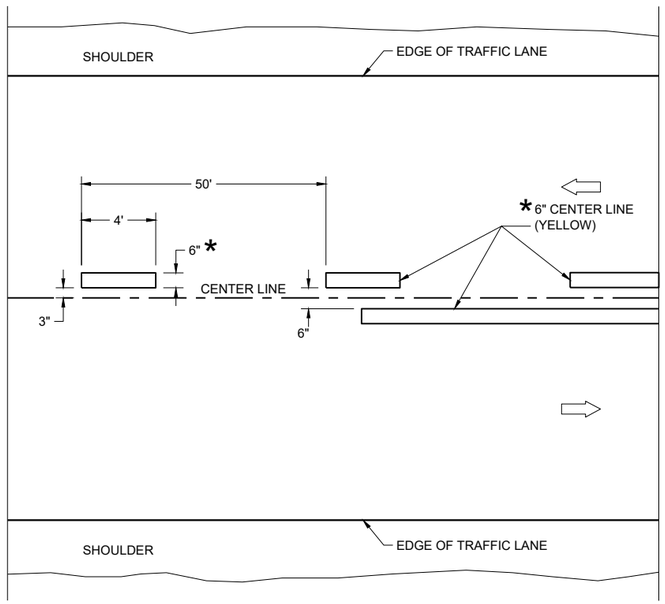
GENERAL NOTES

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

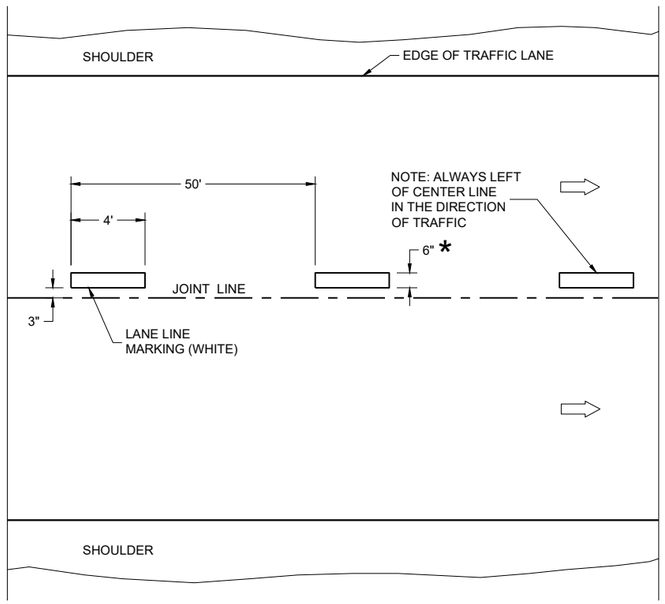
LEGEND

DIRECTION OF TRAFFIC

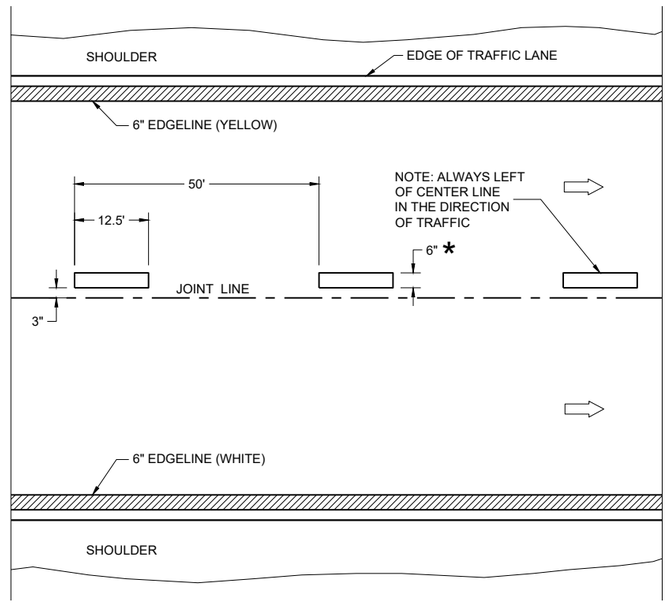
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

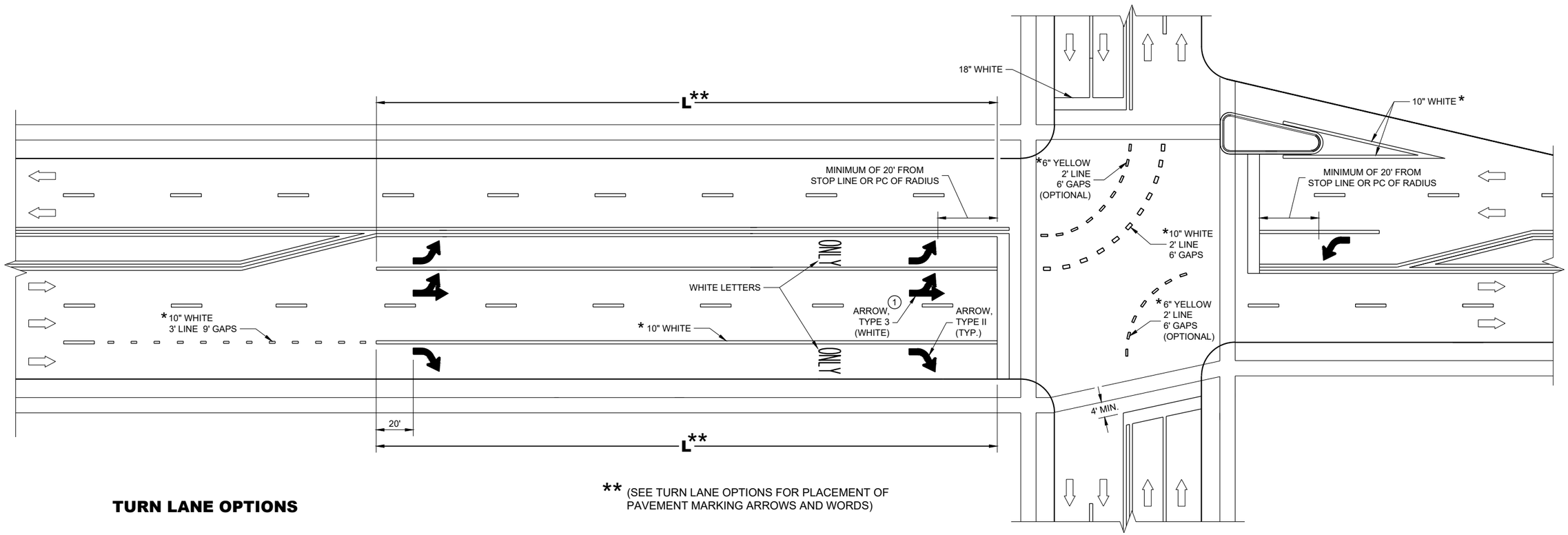
APPROVED
May 2023
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer
FHWA

6

SDD 15C08-23b

6

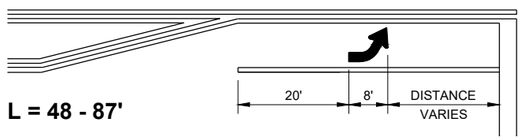
SDD 15C08-23b



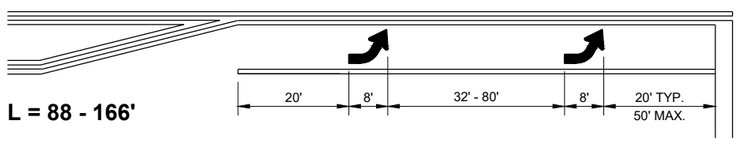
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

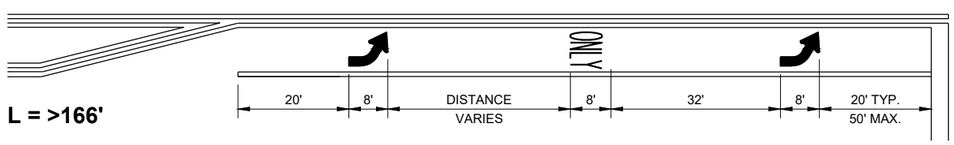
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 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

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

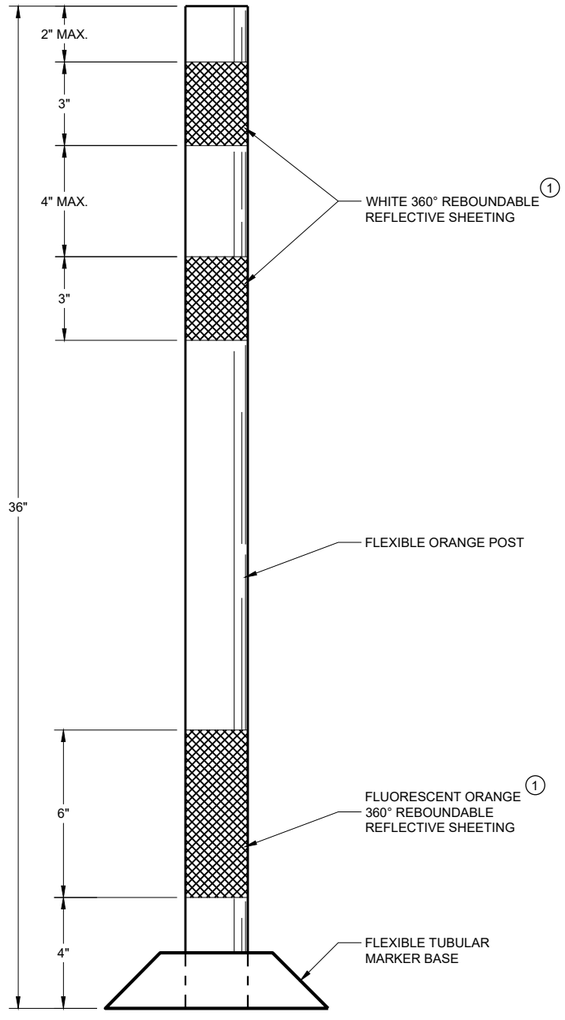
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08-23d

SDD 15C08-23d



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

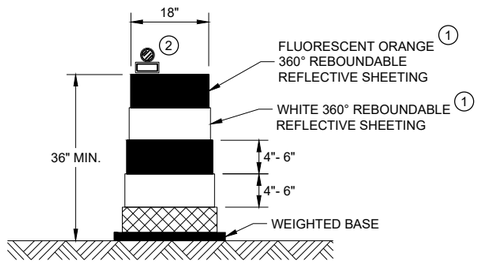
APPROVED
November 2022
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C11 - 10a

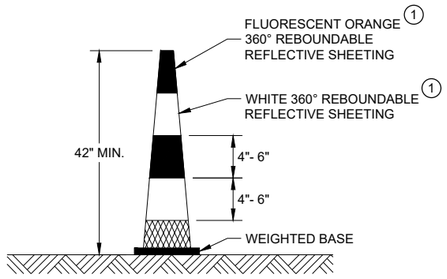
GENERAL NOTES

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

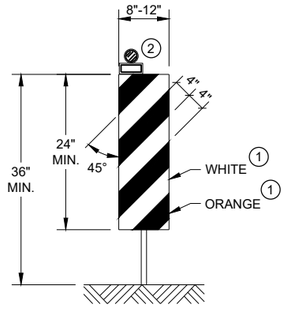
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

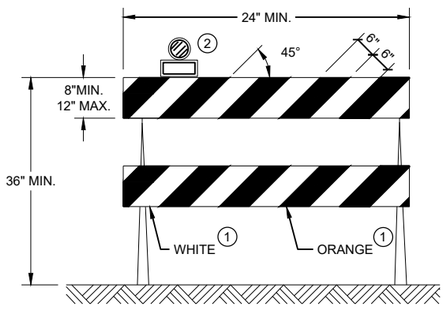
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



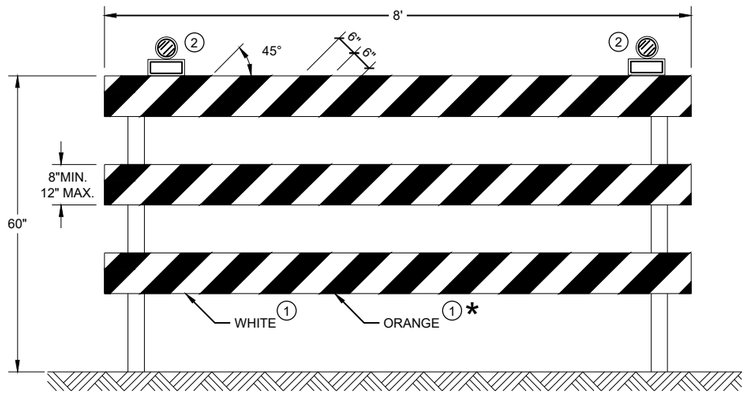
VERTICAL PANEL

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
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 10b

6

SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

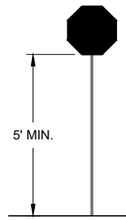
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



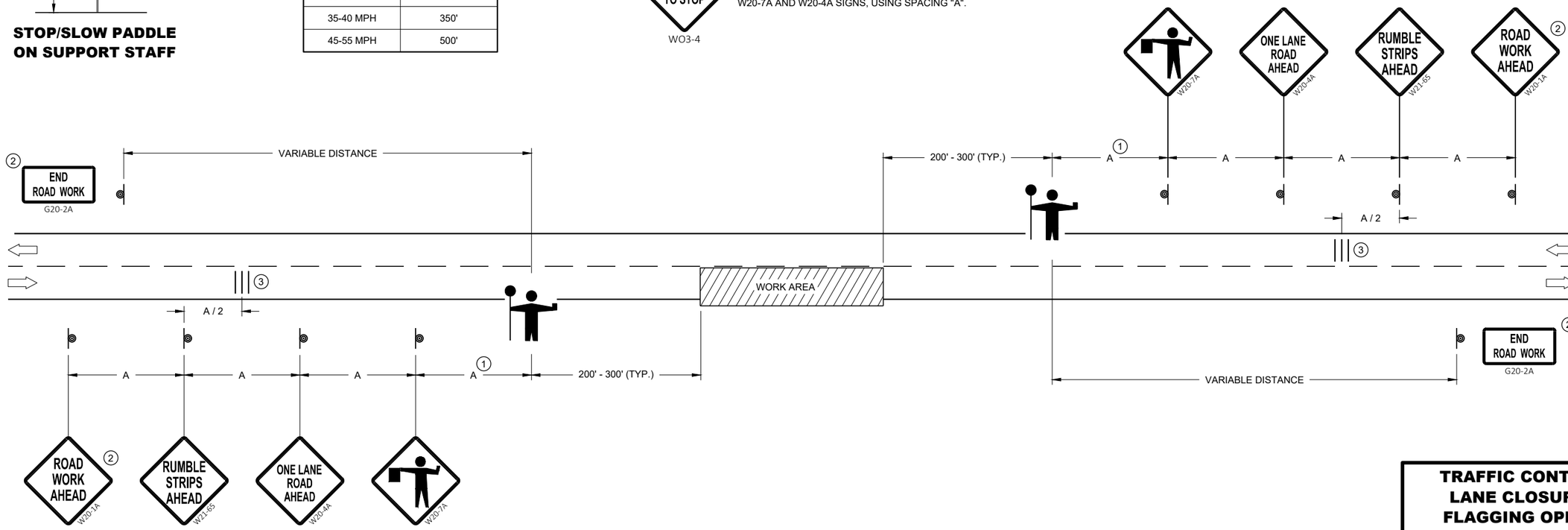
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

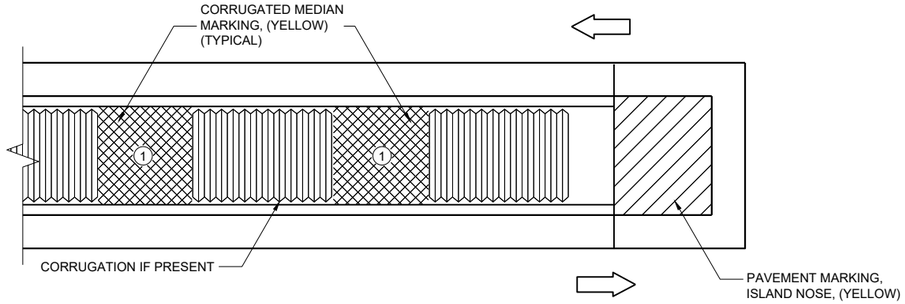
APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

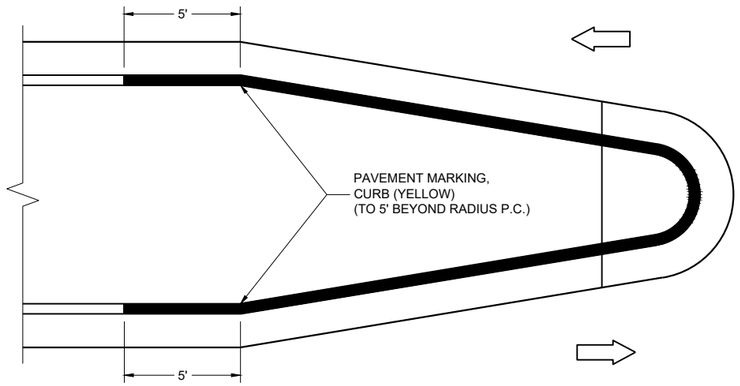
FHWA

SDD 15C12 - 09a

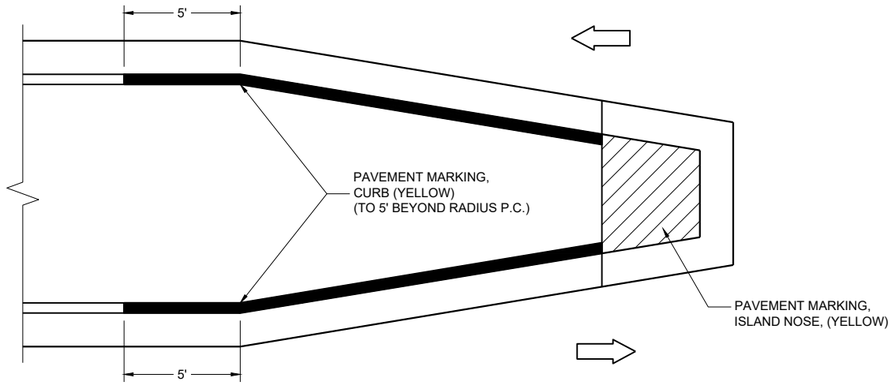
SDD 15C12 - 09a



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.

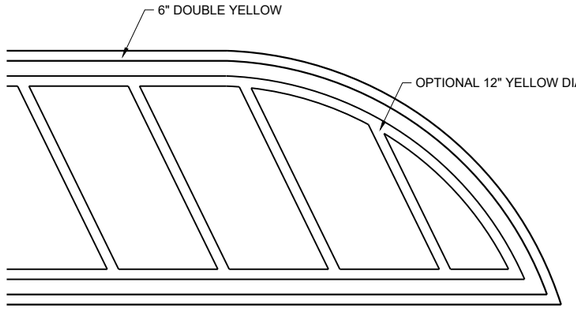
(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL



FLUSH MEDIAN ISLAND NOSE

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

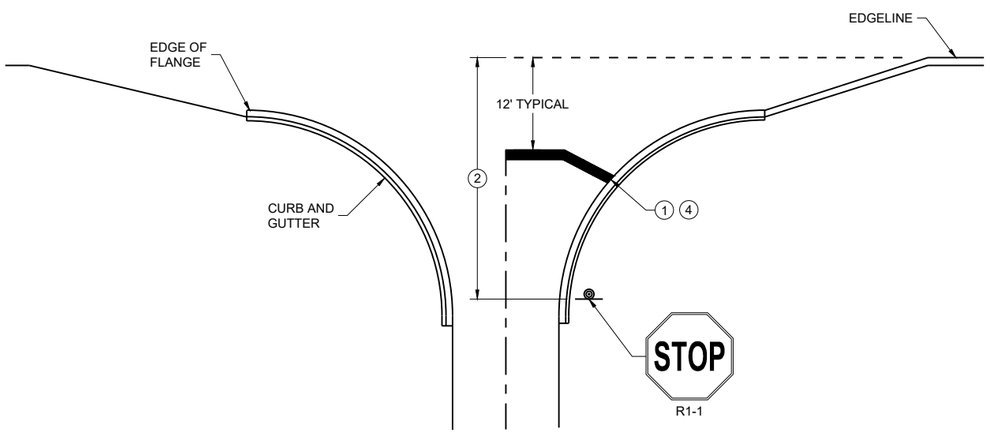
6

SDD 15C18-09b

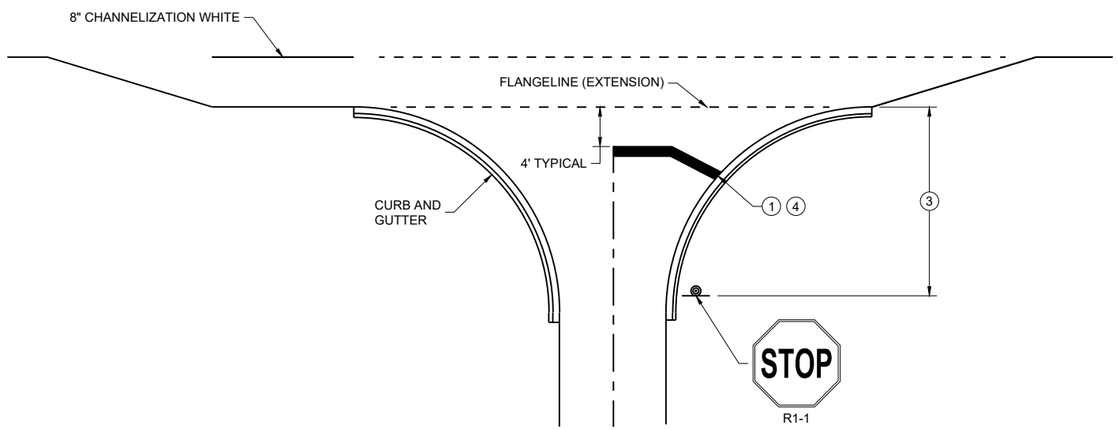
GENERAL NOTES

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

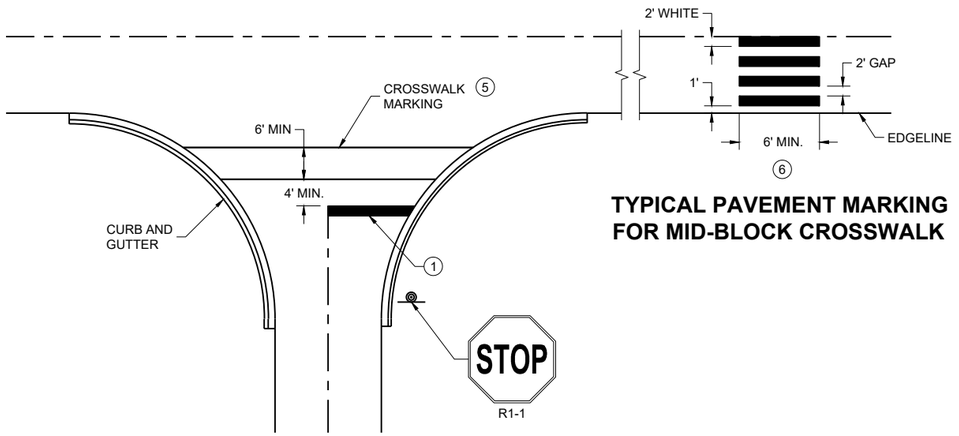
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE 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.
6. POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

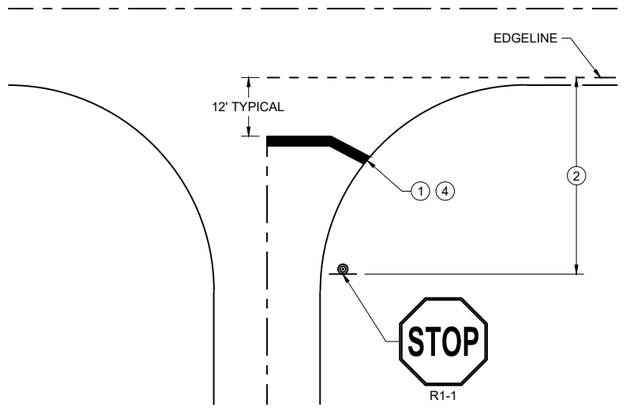


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDE ROADS 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

March 2024 — DATE

/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

FHWA

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
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

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 LINE 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.

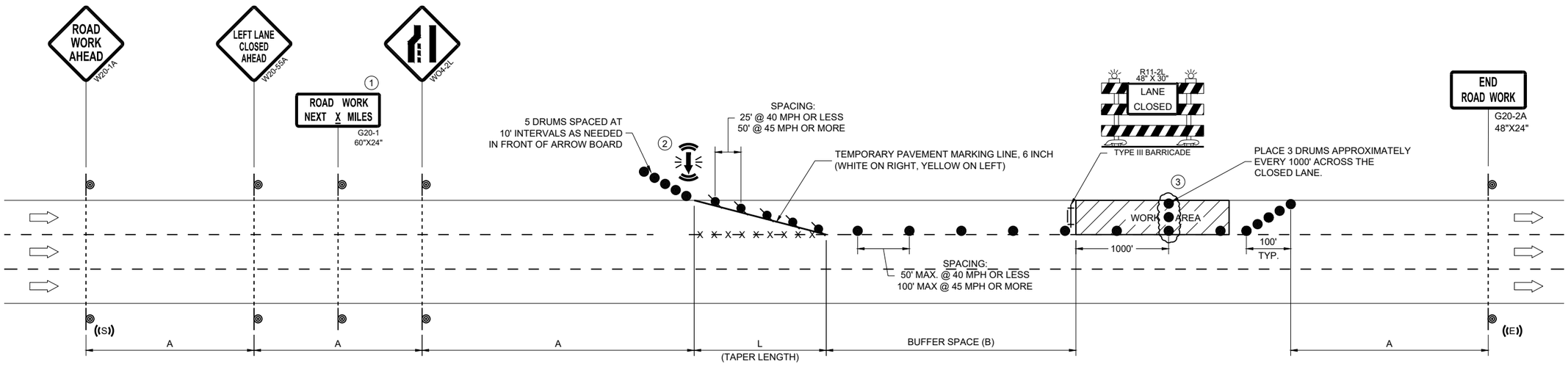
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

(3) DRUMS 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.



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'	155'
30	200'	180'	200'
35	350'	245'	250'
40	350'	320'	305'
45	500'	540'	360'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-11a
SDD 15D20-11a

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
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

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 LINE 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.

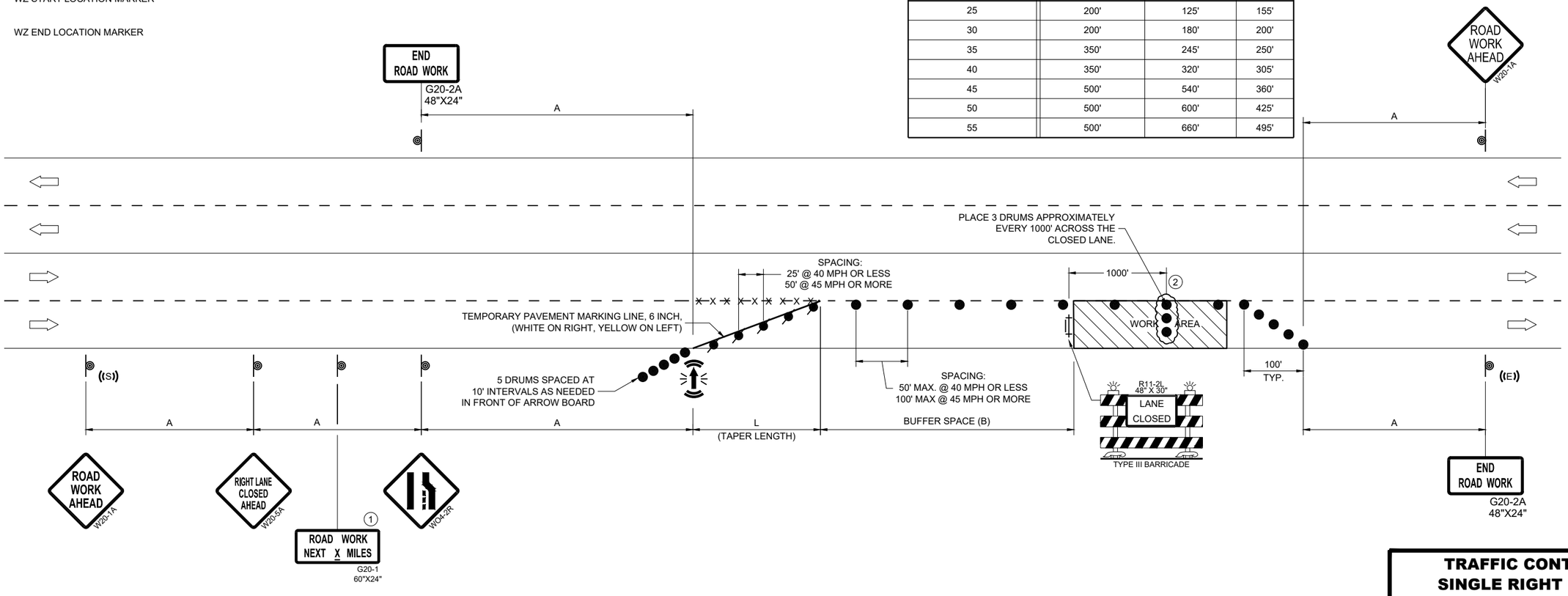
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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) DRUMS 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.

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'	155'
30	200'	180'	200'
35	350'	245'	250'
40	350'	320'	305'
45	500'	540'	360'
50	500'	600'	425'
55	500'	660'	495'



TRAFFIC CONTROL, SINGLE RIGHT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D20-11b

6

SDD 15D20-11b

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
- CONNECTED ARROW BOARD
- WZ START LOCATION MARKER
- WZ END LOCATION MARKER

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 LINE 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.

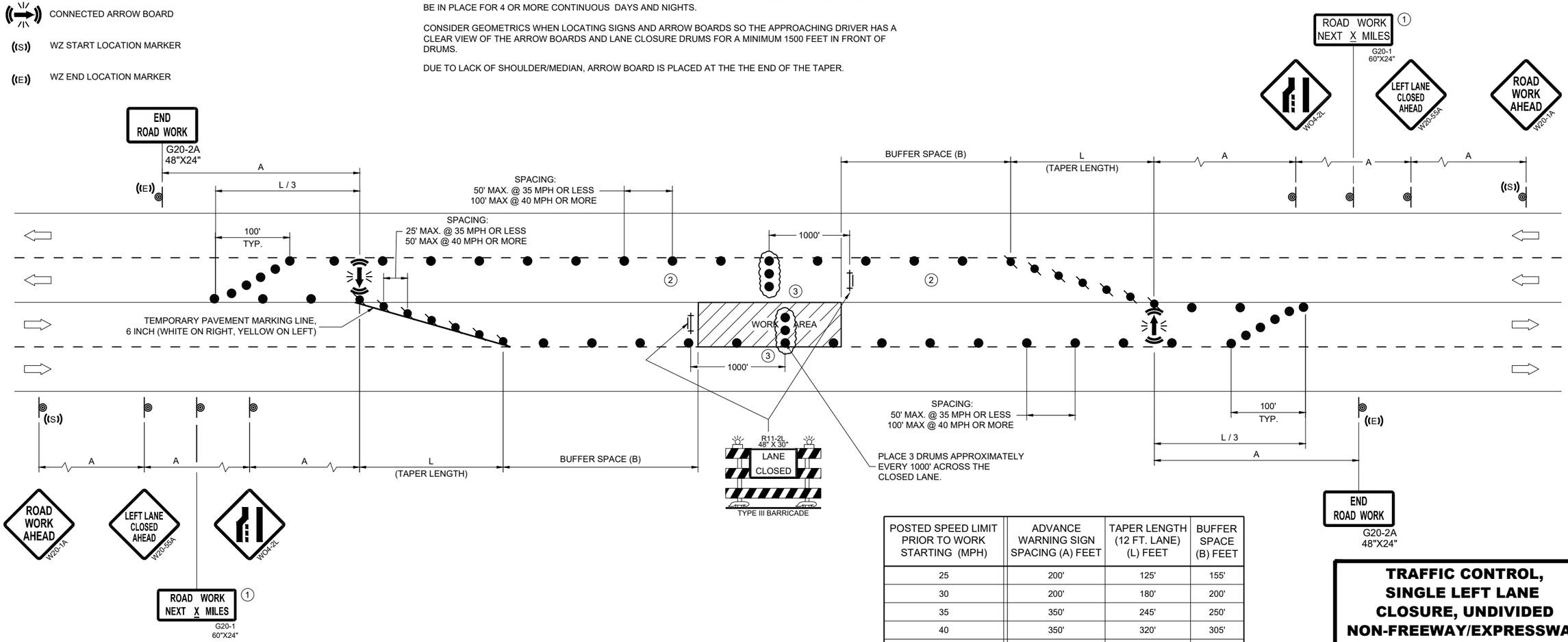
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

DRUMS 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.



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'	155'
30	200'	180'	200'
35	350'	245'	250'
40	350'	320'	305'
45	500'	540'	360'
50	500'	600'	425'
55	500'	660'	495'

TRAFFIC CONTROL, SINGLE LEFT LANE CLOSURE, UNDIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

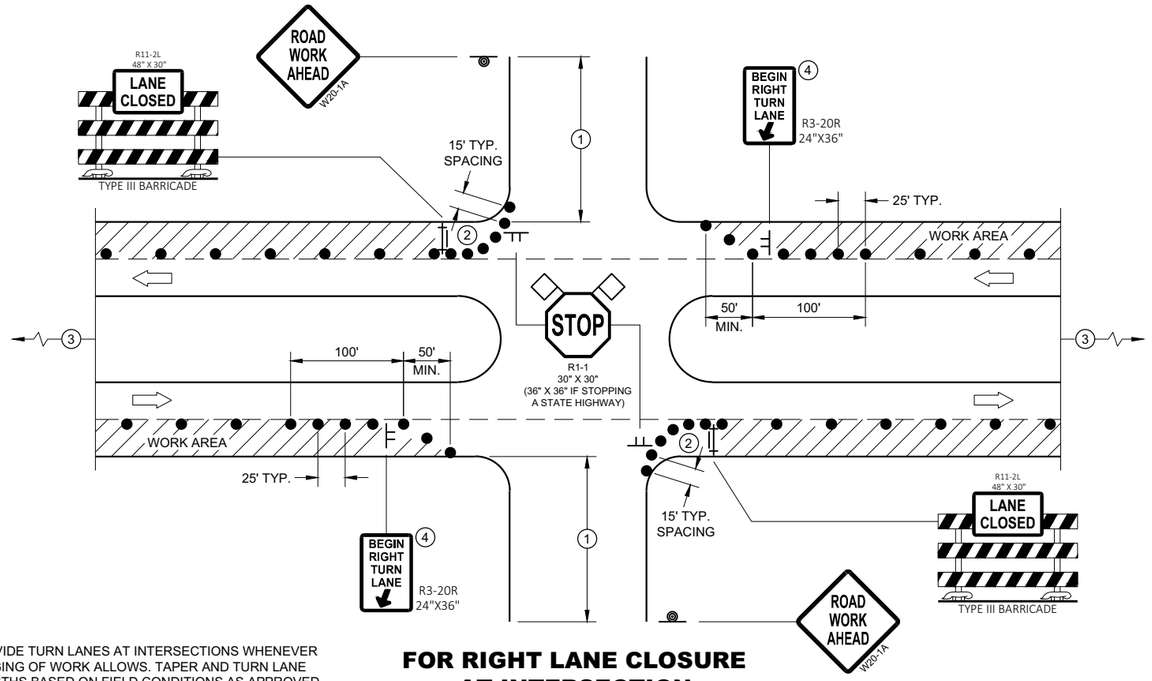
FHWA

6

SDD 15D20-11c

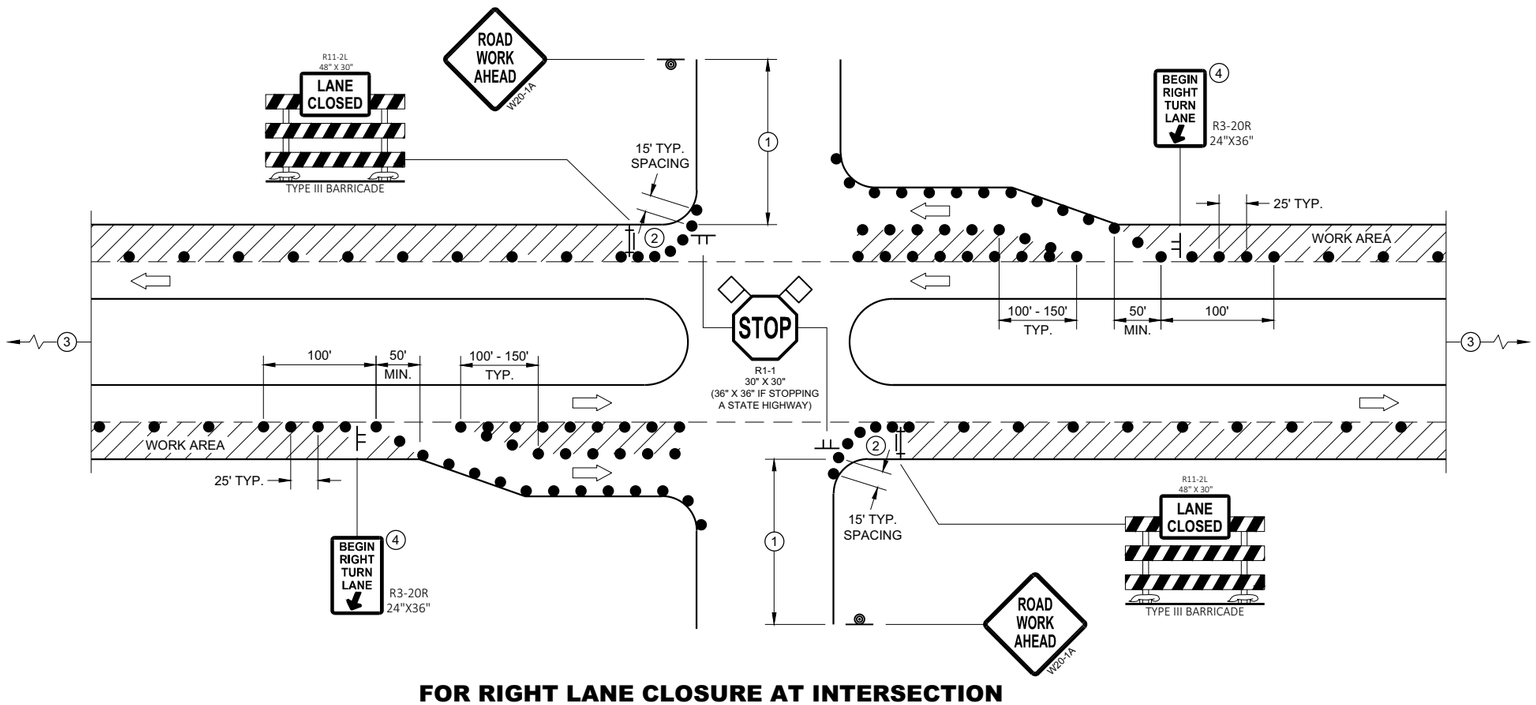
6

SDD 15D20-11c



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

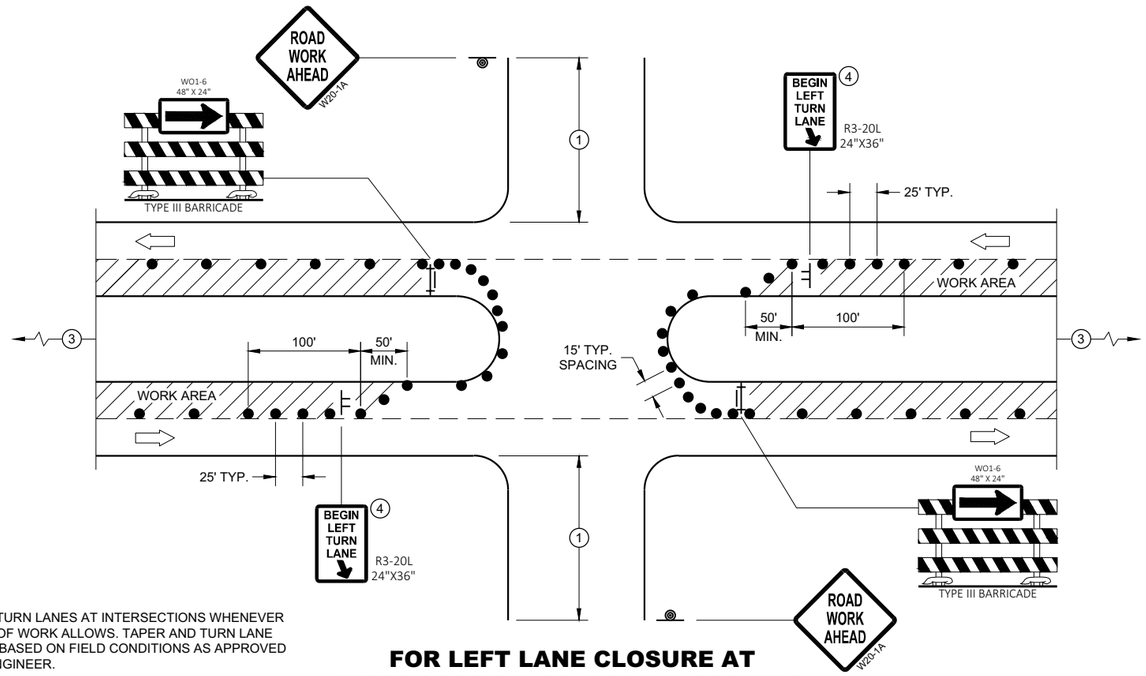
(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(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.

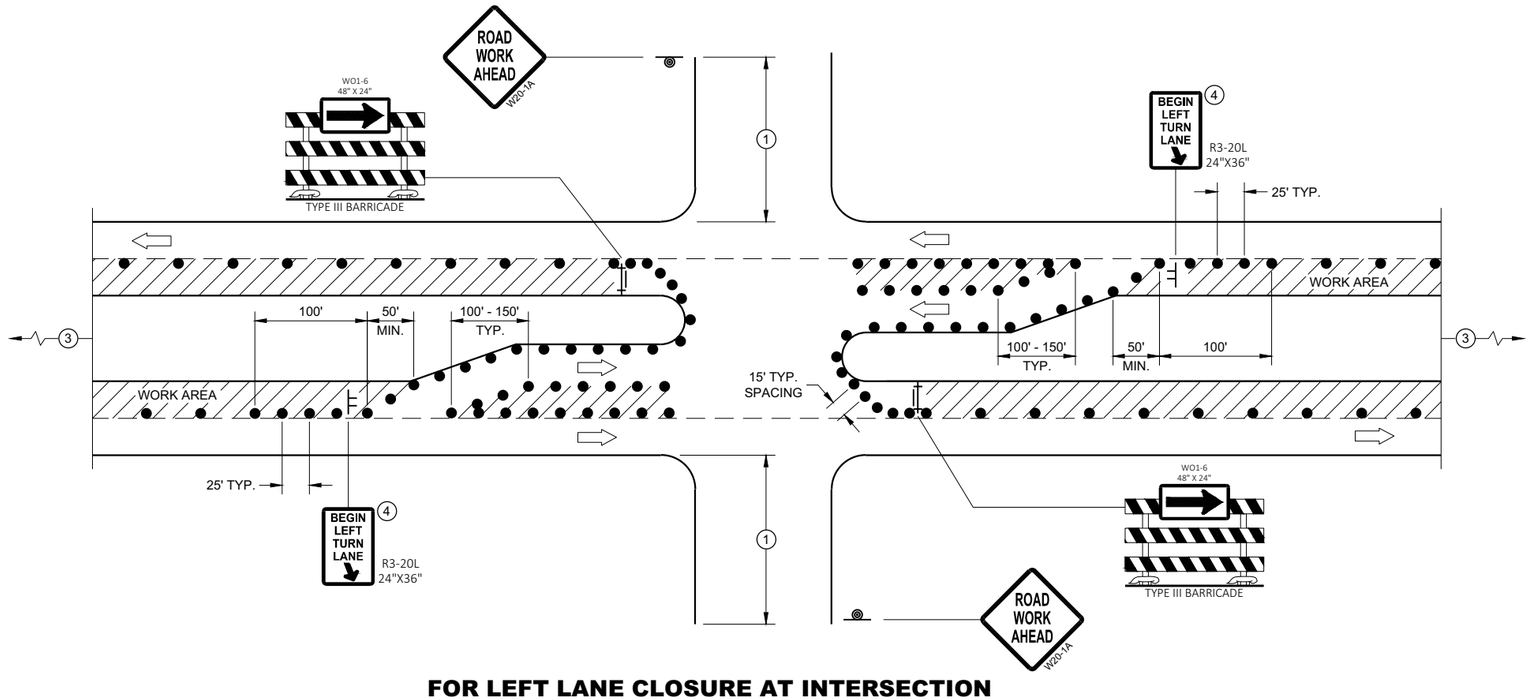
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(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

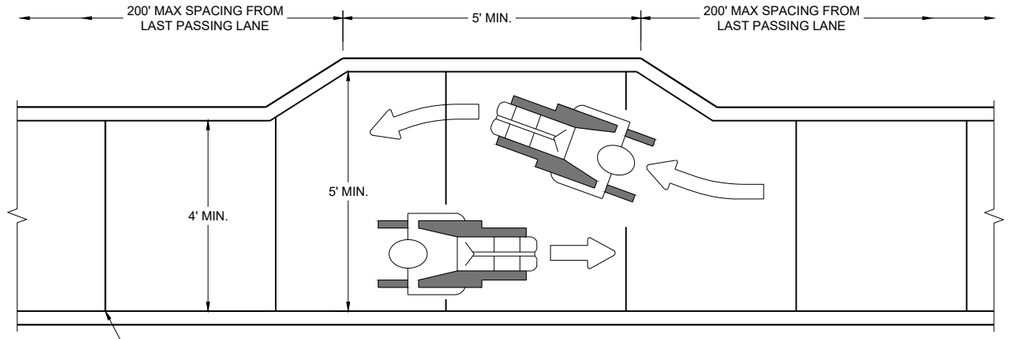
FHWA

6

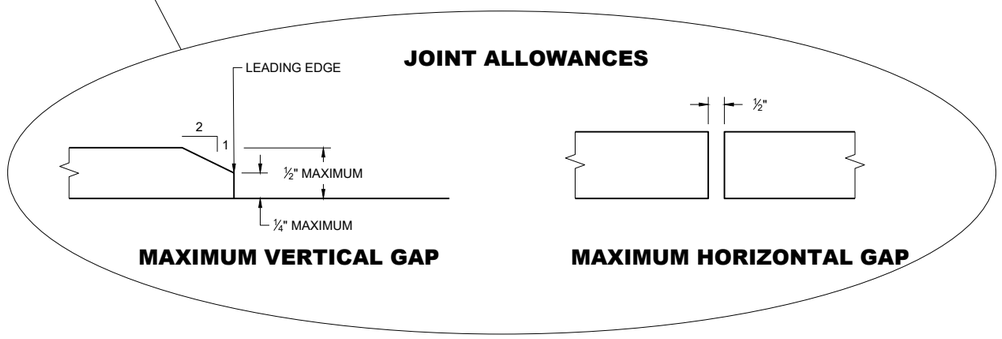
SDD 15D21 - 07b

6

SDD 15D21 - 07b



NARROW SIDEWALK PASSING DETAIL



MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

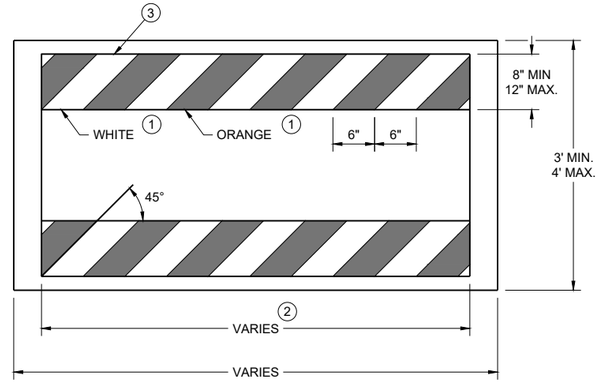
(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

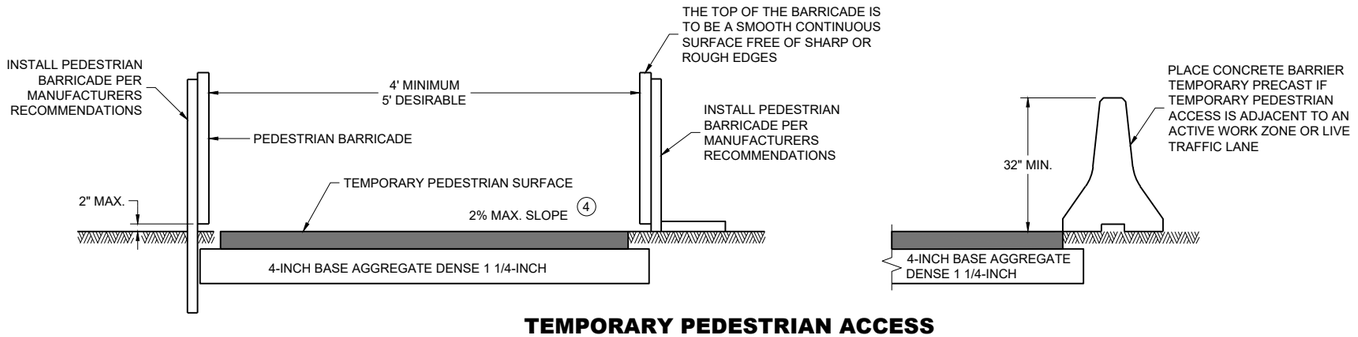
(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.

(4) WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



TEMPORARY PEDESTRIAN BARRICADE *

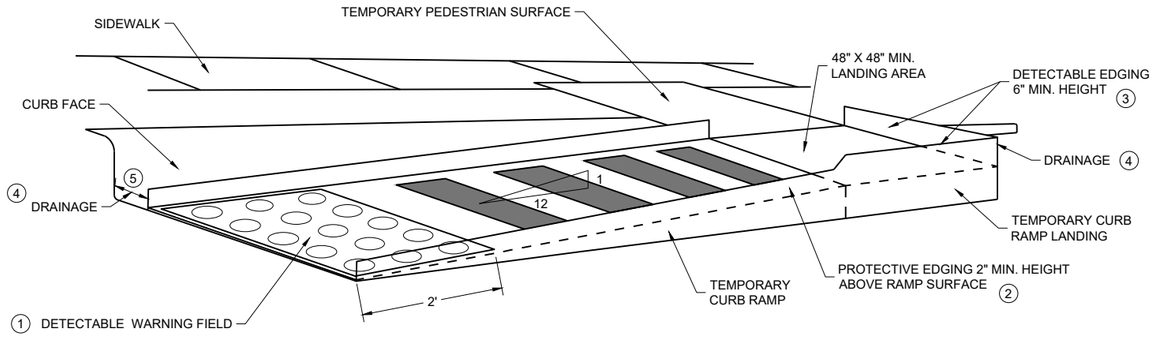


TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15D30-10a



PERSPECTIVE VIEW

GENERAL NOTES

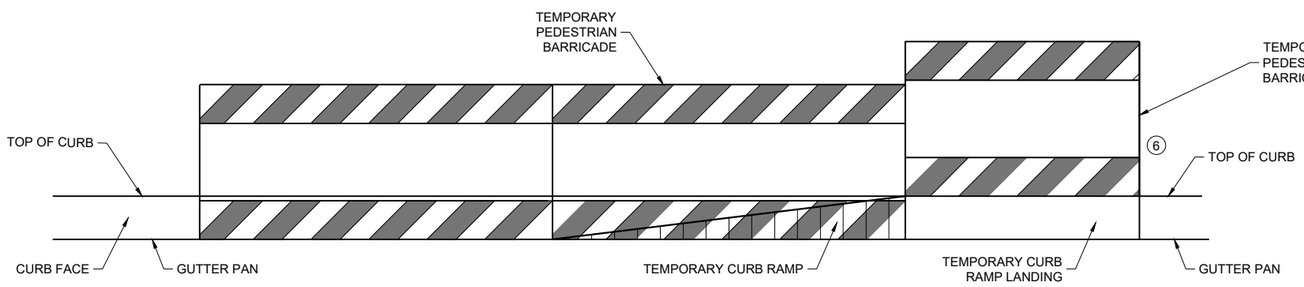
CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

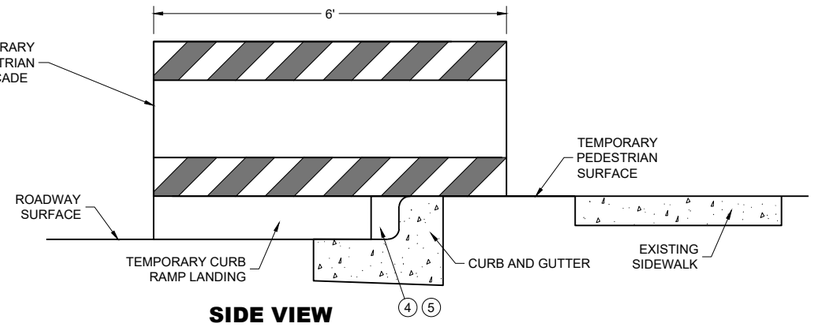
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

1. INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
2. PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
3. DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
4. DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
5. ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
6. IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



FRONT VIEW



SIDE VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB

6

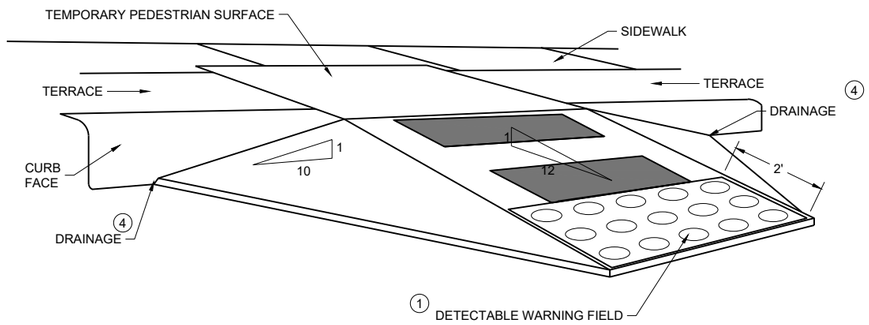
SDD 15D30-10b

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

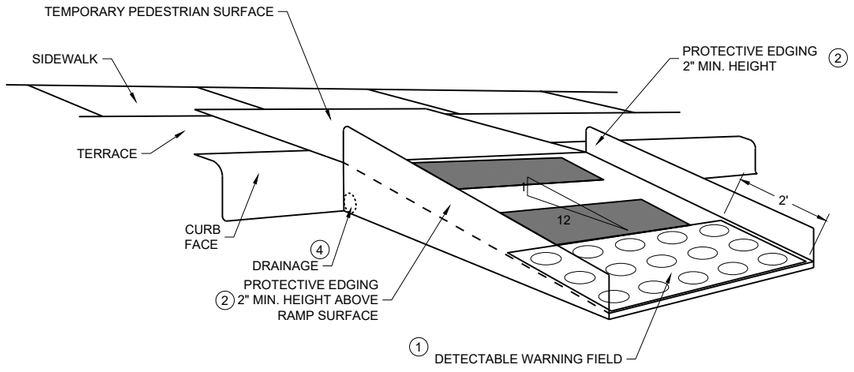
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10b



WITH SIDE APRON (5)



WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

(1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS

(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

6

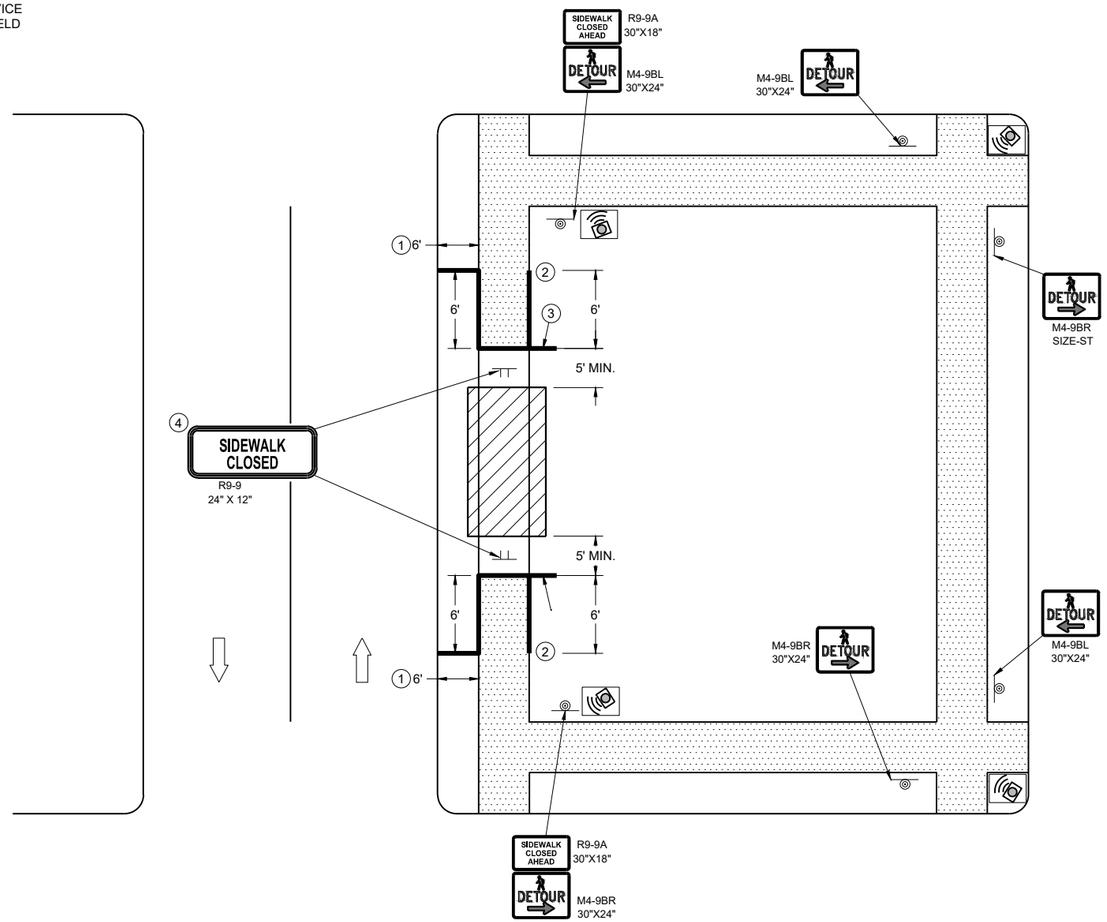
SDD 15D30-10c

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

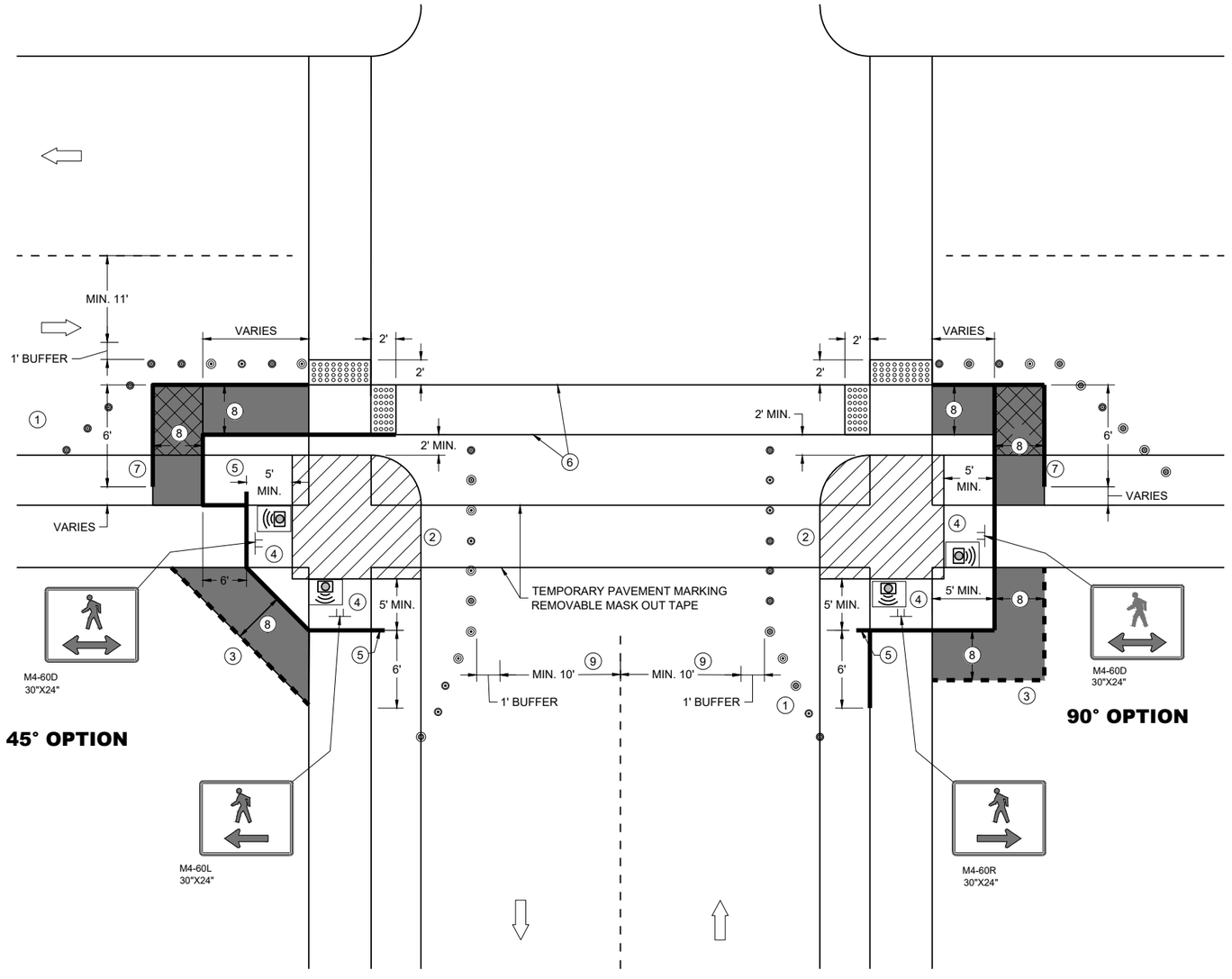
SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

(1) SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.

(2) PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS

(3) USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.

(4) MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.

(5) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.

(6) WHITE 6" TEMPORARY PAVEMENT MARKING

(7) IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.

(8) 4 FEET MINIMUM, 5 FEET DESIRABLE

(9) IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

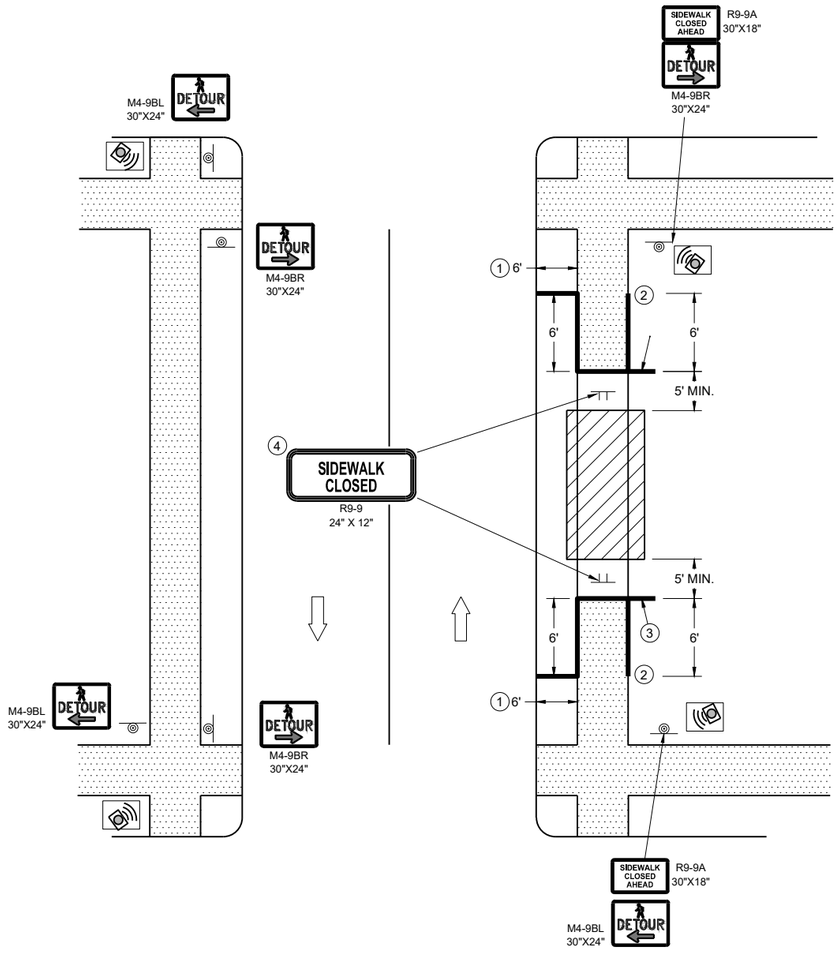
TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 15D30-10j

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

1. IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
2. PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
3. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
4. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30-10k

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- CONCRETE BARRIER TEMPORARY PRECAST

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHIFTING TAPER L/2 W, LATERAL OFFSET (FT)					BUFFER SPACE (B) FEET
		10	11	12	13	14	
25	200	52	57	63	68	73	155
30	200	75	83	90	98	105	200
35	350	102	112	123	133	143	250
40	350	133	147	160	173	187	305
45	500	225	248	270	293	315	360

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) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING LINES 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.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

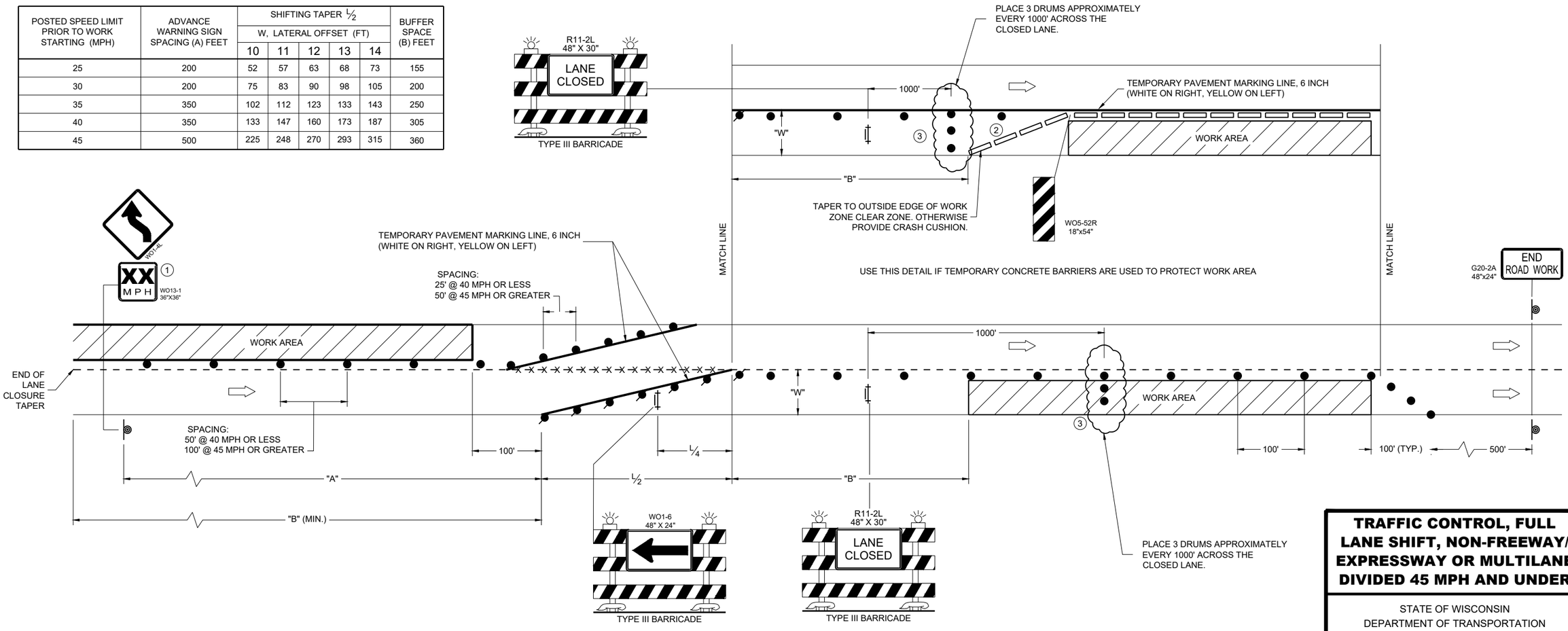
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER

SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL
CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

(2) BARRIER FLARE RATE: 6:1 @ 40 MPH OR LESS
8:1 @ 45 MPH OR GREATER

(3) DRUMS 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.



TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025
DATE

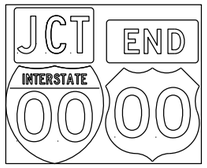
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

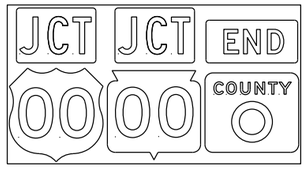
6
SDD 15D40-07a

TYPICAL ASSEMBLIES

J1-1



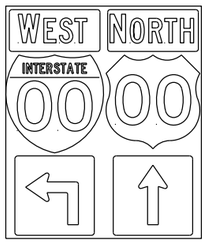
J1-2



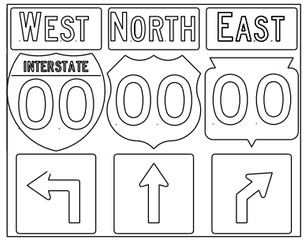
J1-3

JR1-1

J2-1

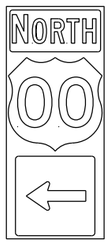


J2-2

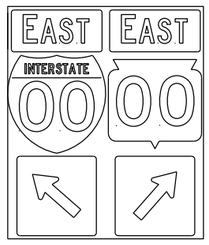


J2-3

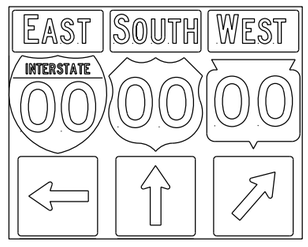
JV
(Typical Vertical J-Assembly
See Note 10 and 11)



J3-1

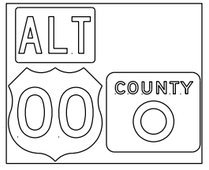


J3-2

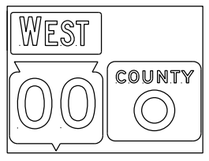


J3-3

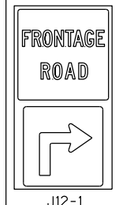
J4-1



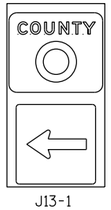
J4-2



J4-2



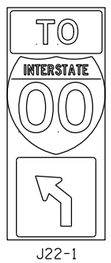
J12-1



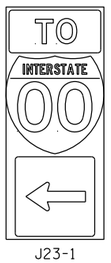
J13-1

J32-1

J33-1



J22-1

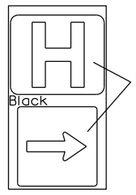


J23-1

JR13-1

JR23-1

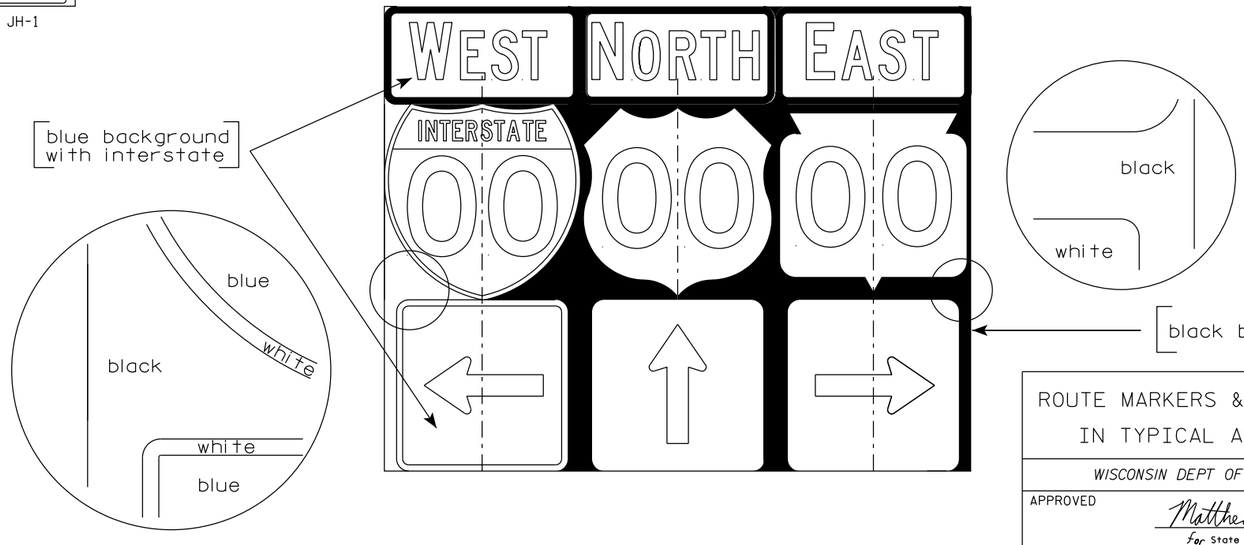
JR99-1



JH-1

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Black Non-reflective
   Message - see Note 4
3. Message Series - See Note 4
4. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
5. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
6. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
7. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
8. Route assemblies that have 36 inch shields and have dimensions greater than 48 inchs (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. All Vertical J Assemblies are given a Sign Code of JV
10. For JV Assemblies that have a mixture of Interstate and Non-Interstate shields, arrows and cardinals shall be white on blue.
11. For JV Assemblies that have a mixture of Non-Interstate and Auto-Tour shields, arrows and cardinals shall be black on white.



ROUTE MARKERS & COMPONENTS IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

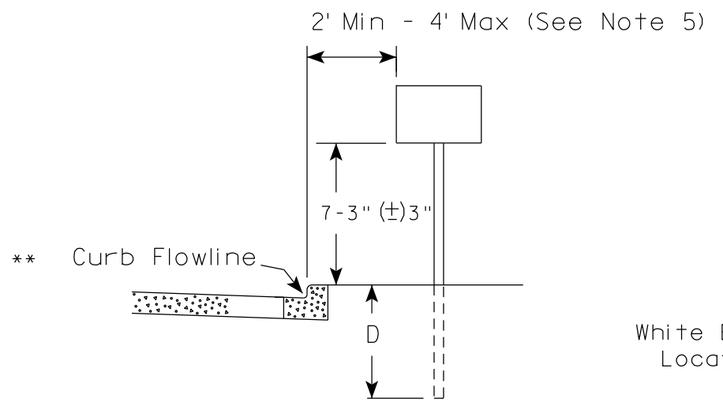
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 6/7/23 PLATE NO. A2-1S.10

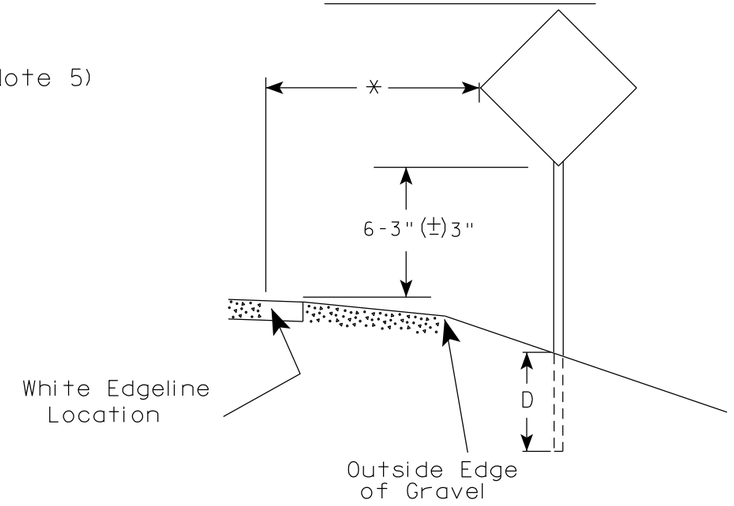
PROJECT NO:

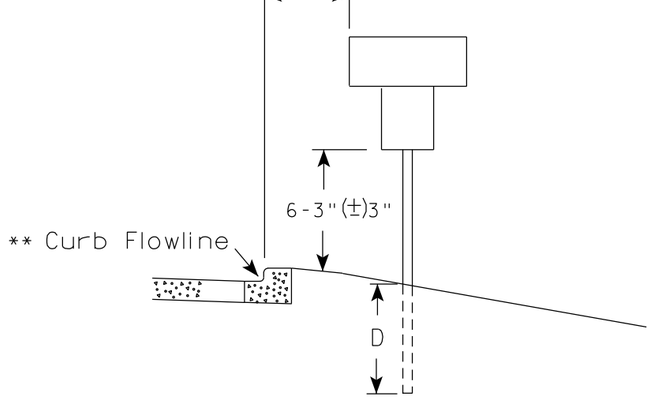
SHEET NO: 158 E

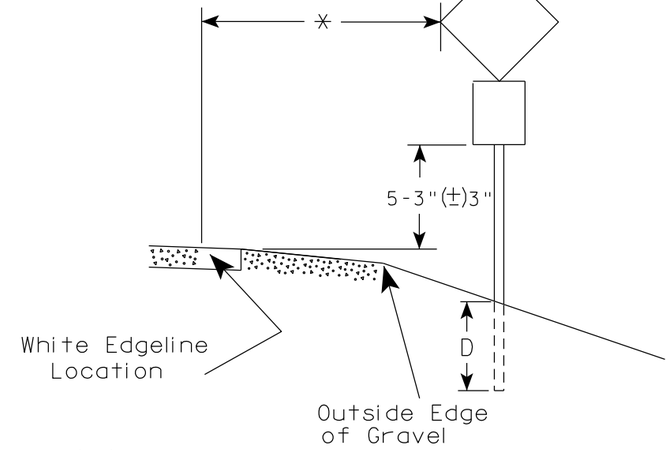
URBAN AREA



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" (±) 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".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

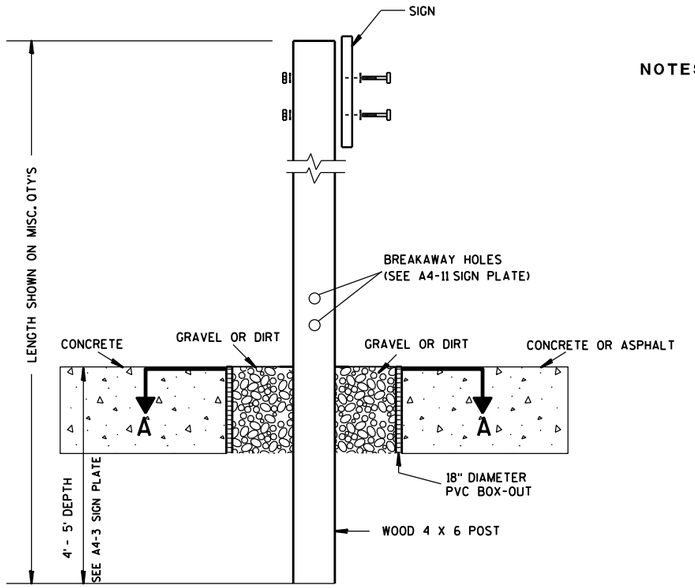
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

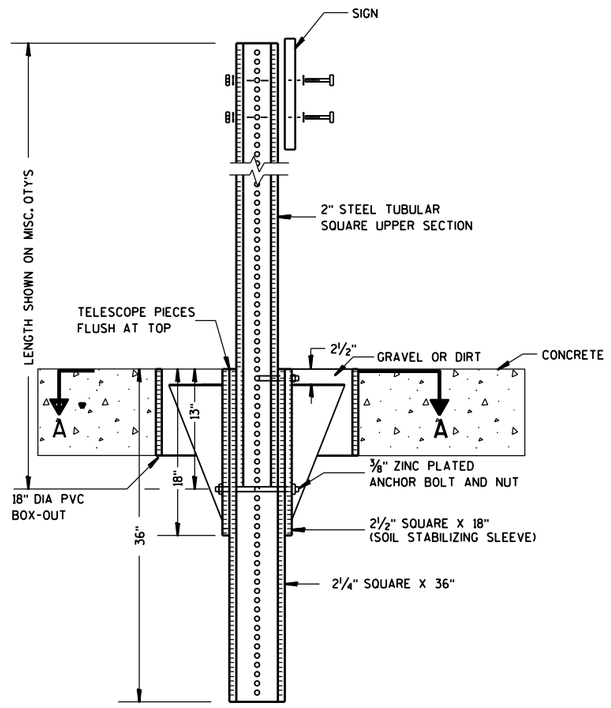
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 159	E



ELEVATION VIEW

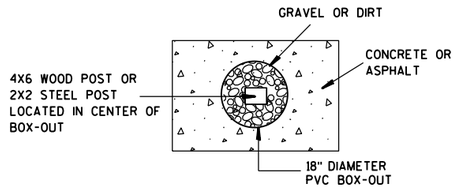
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

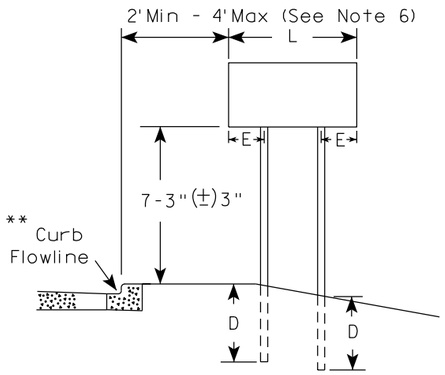
APPROVED Matthew R Rauch
for State Traffic Engineer

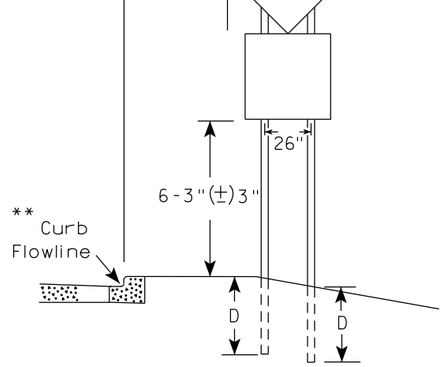
DATE 1/27/14 PLATE NO. A4-3B.1

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

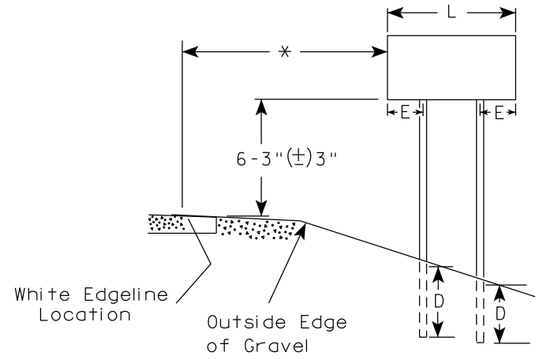
URBAN AREA

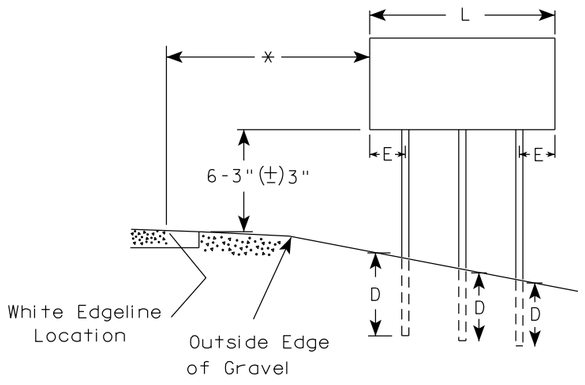


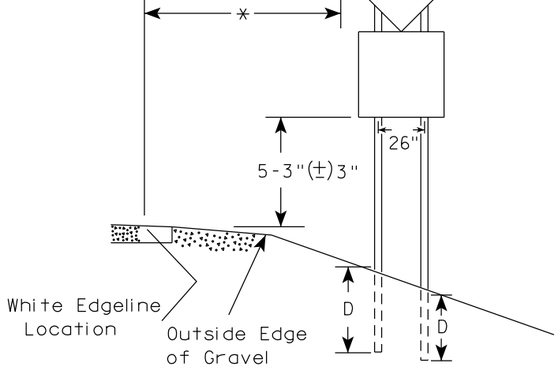


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







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" (±) 3" or 6'-3" (±) 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" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 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" (±) 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'

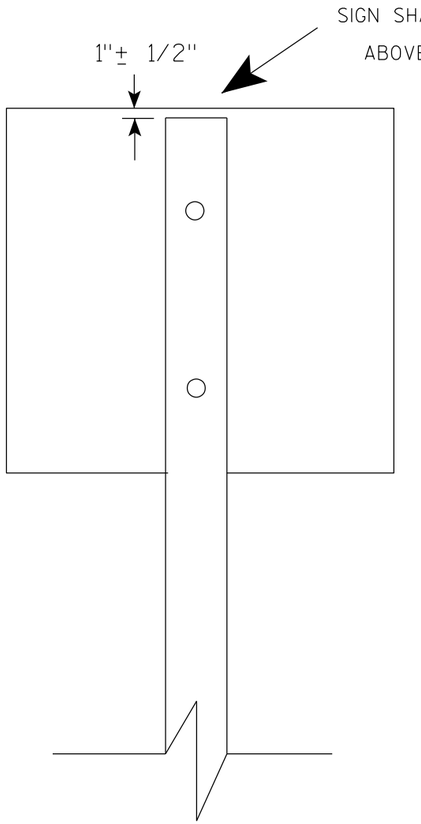
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

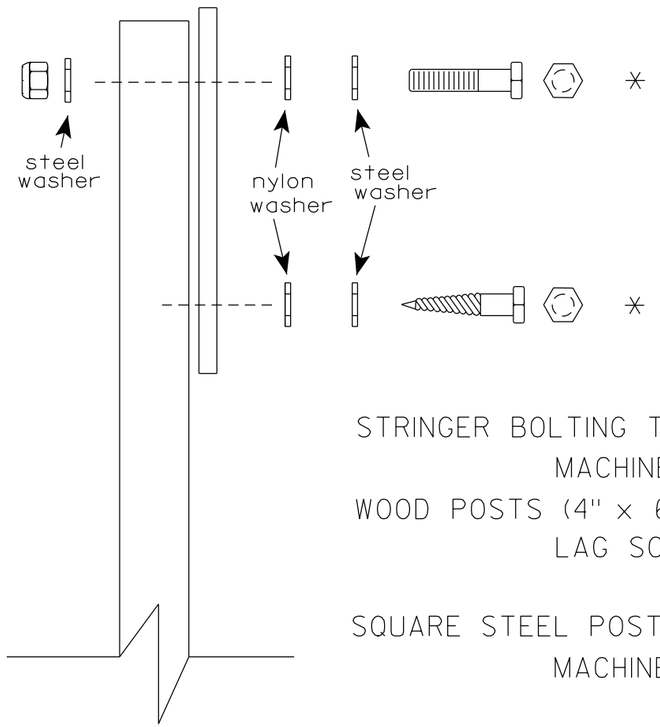
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 161	E





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

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

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

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

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

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

ATTACHMENT OF SIGNS TO POSTS

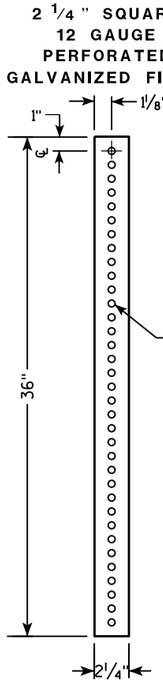
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

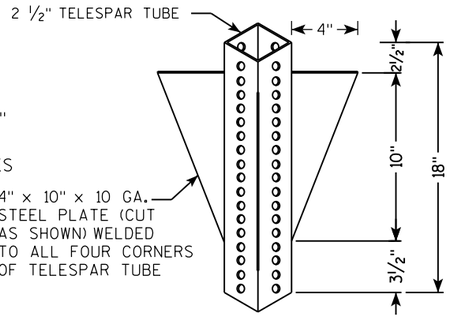
DATE 4/1/2020 PLATE NO. A4-8.9

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

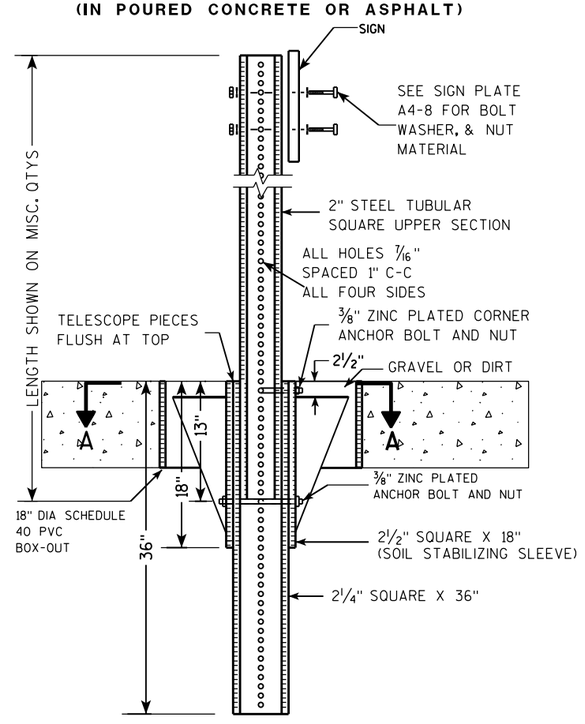
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



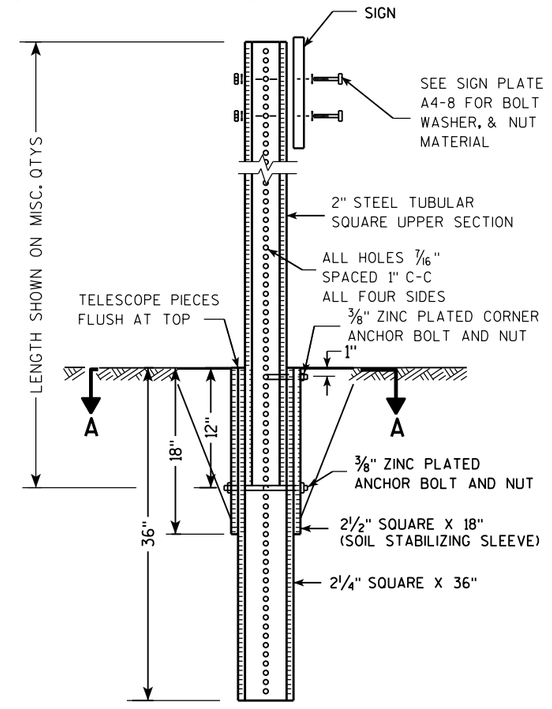
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

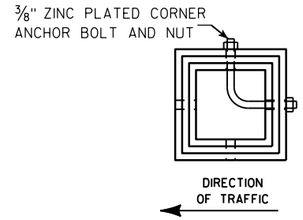


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

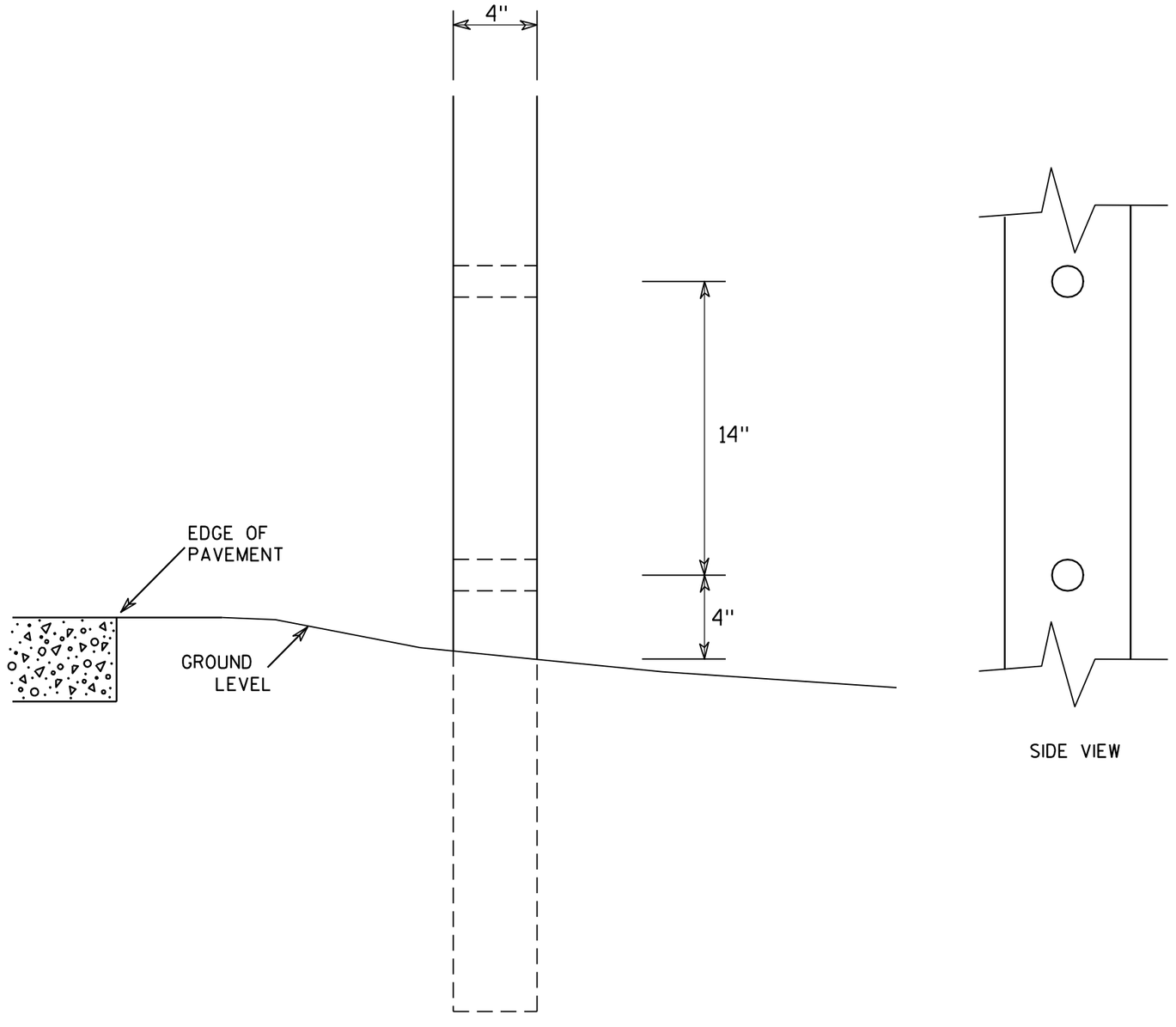
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

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



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

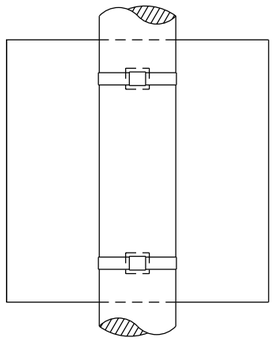
APPROVED Chester J Spang
for State Traffic Engineer

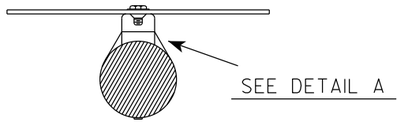
DATE 3/27/97 PLATE NO. A4-11.2

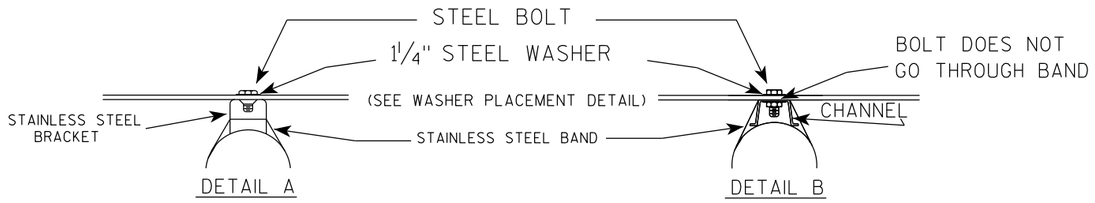
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 164	E

BANDING

SINGLE SIGN



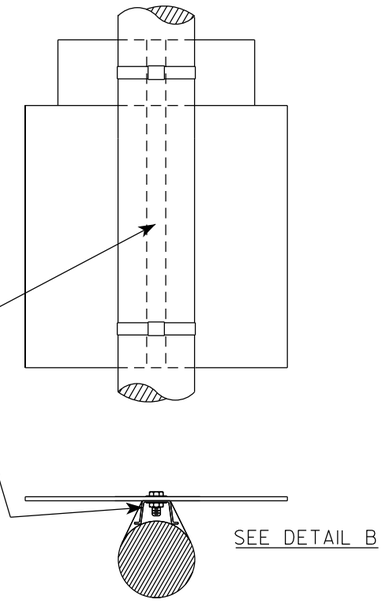




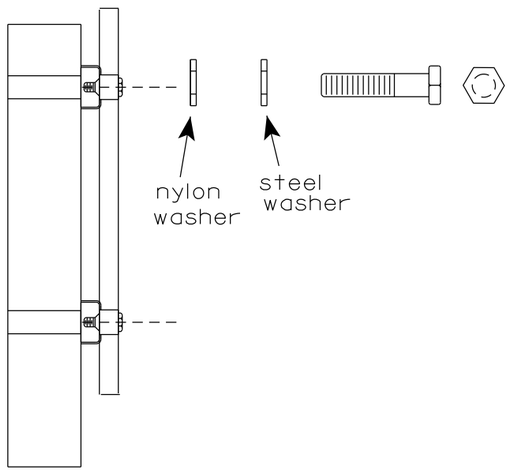
GENERAL NOTES

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

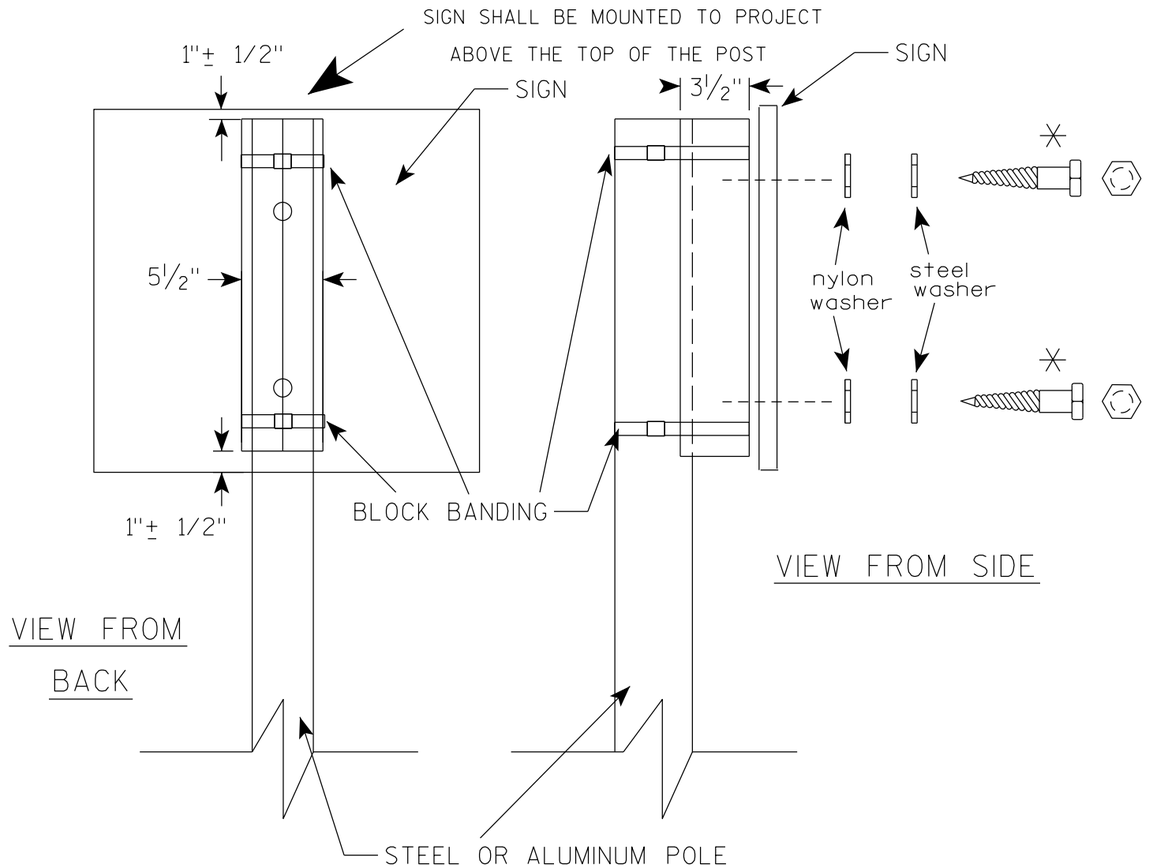
DATE 6/10/19 PLATE NO. A5-9.4

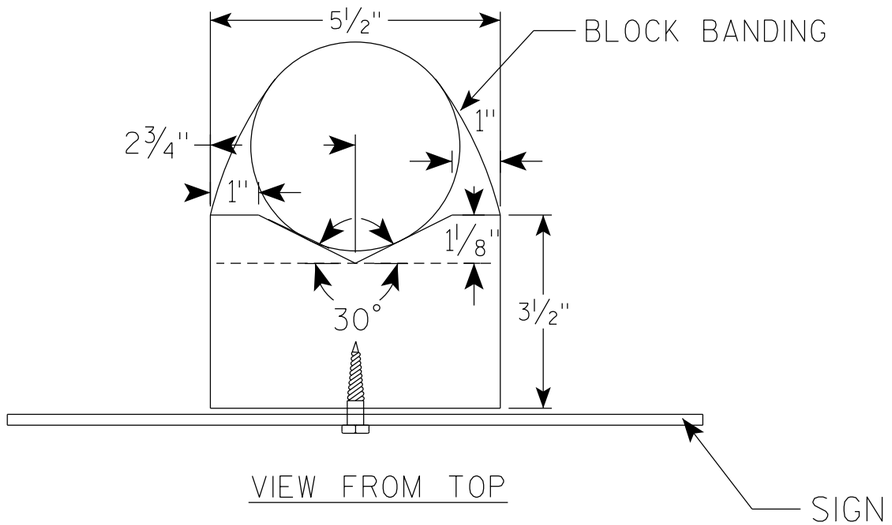
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 165	E

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)

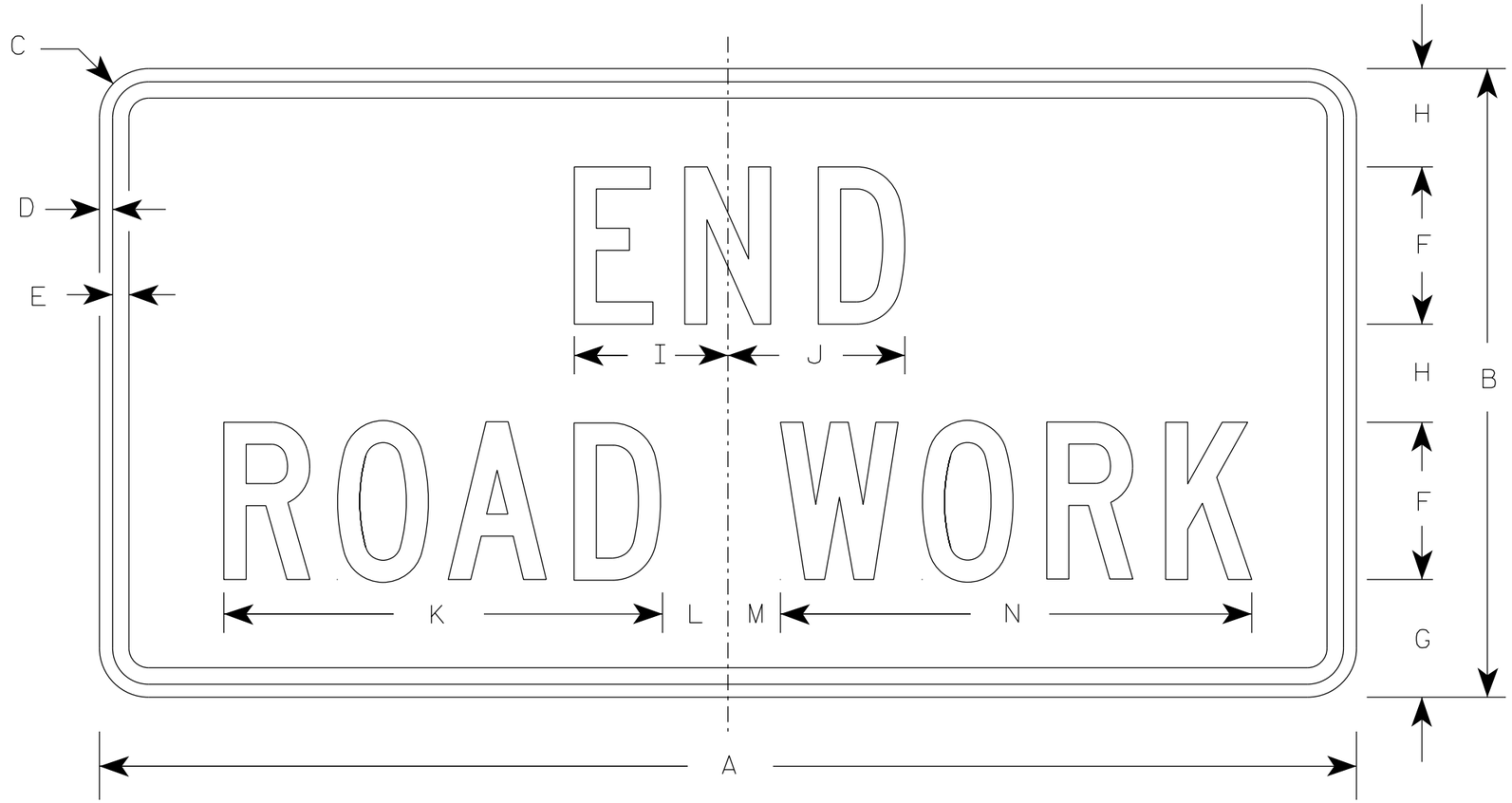
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 166 E



G20-2A

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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	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
2	48	24	1 7/8	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
2M	48	24	1 7/8	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
3	48	24	1 7/8	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
4	48	24	1 7/8	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
5	48	24	1 7/8	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

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

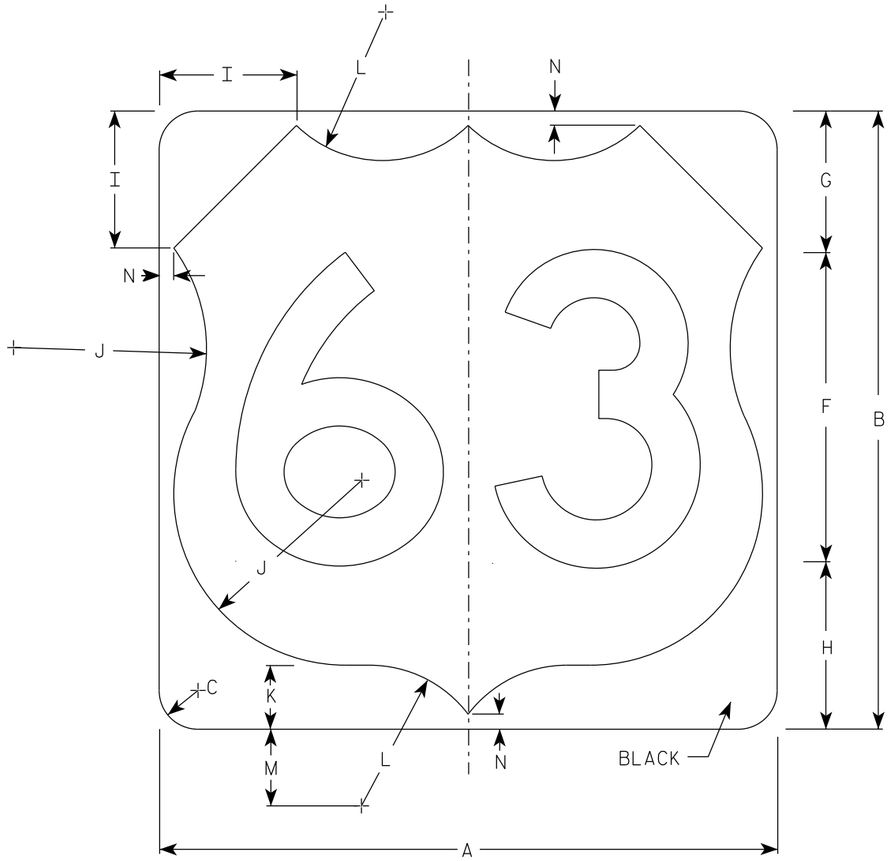
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

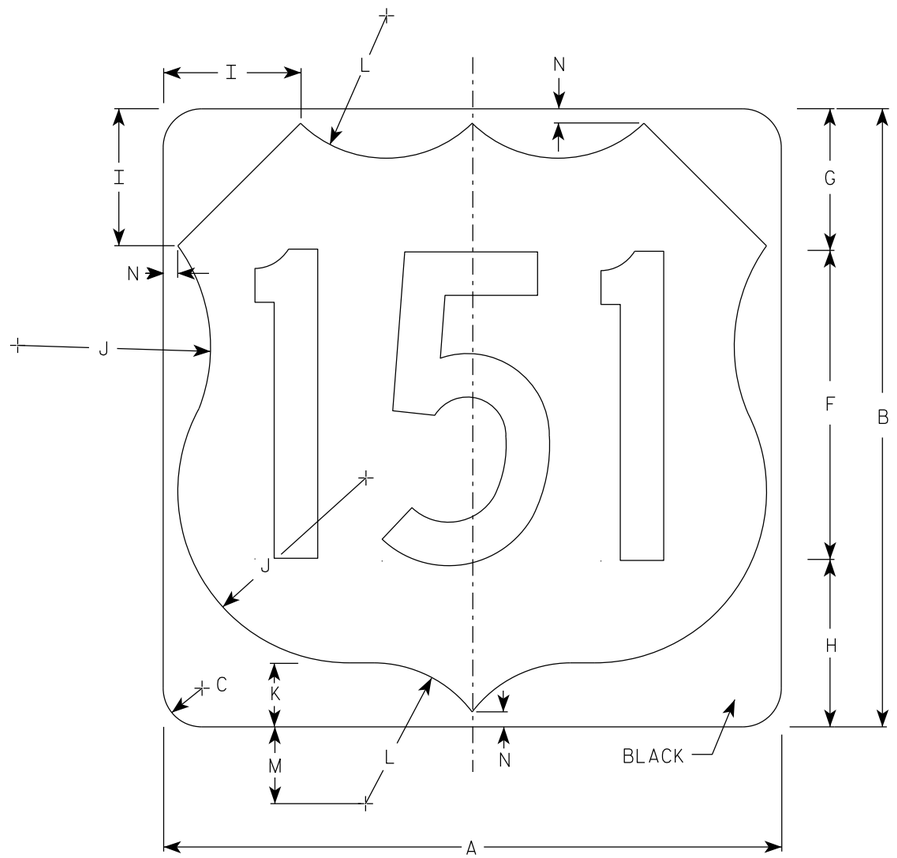
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

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



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
2M	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

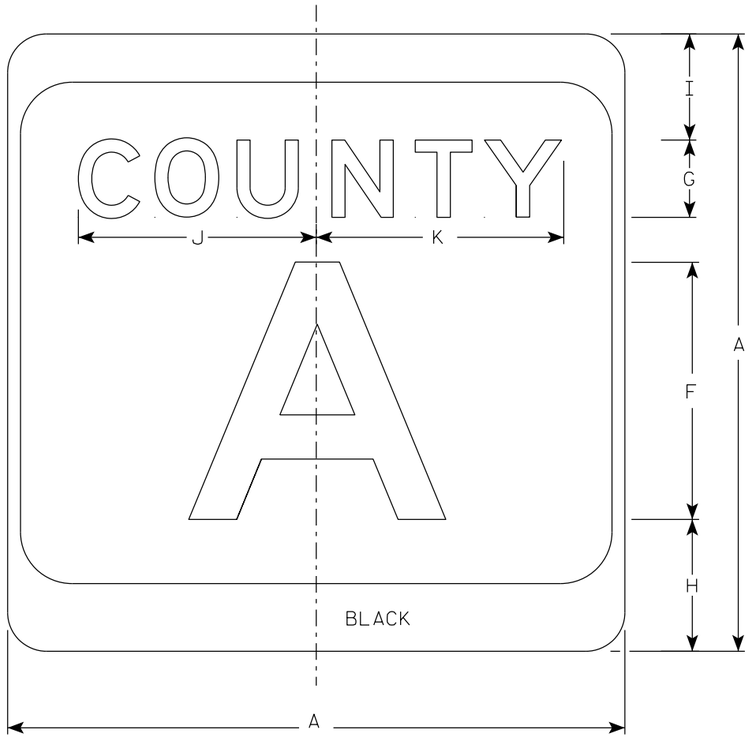
USH MARKER
M1-4 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

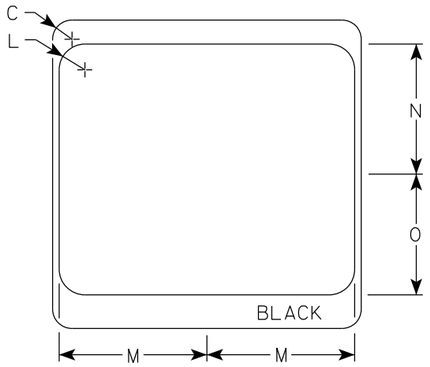
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/20/22 PLATE NO. M1-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 168 | E

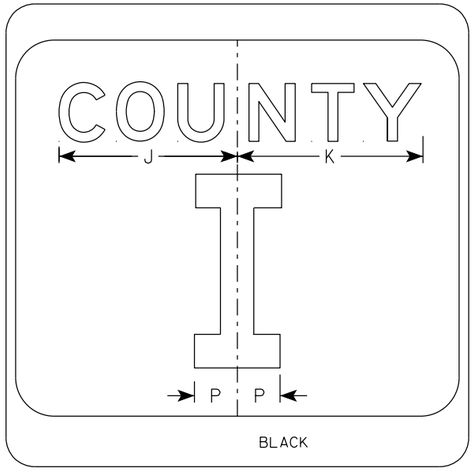


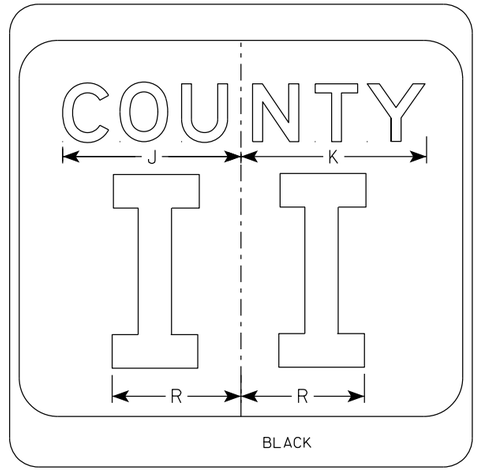
M1-5A



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White & Black
   Message - Black
3. Message Series - see Note 4
4. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
5. Substitute appropriate letters & optically center 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																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
2M	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

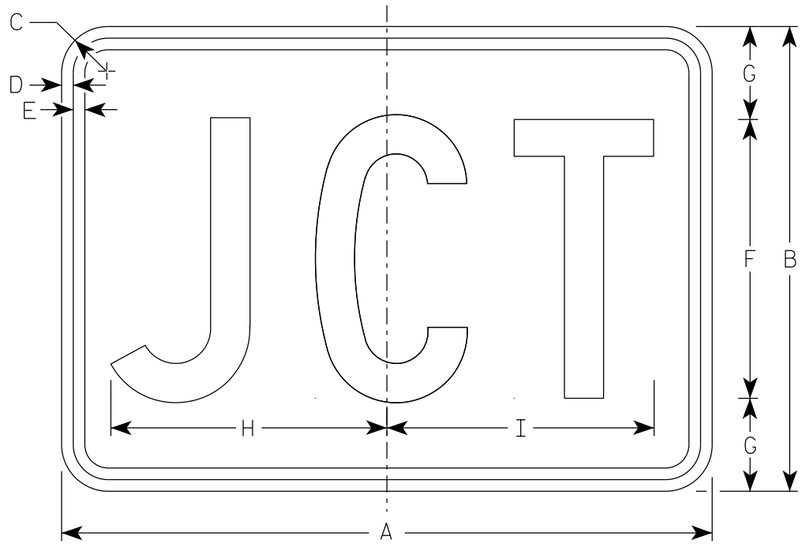
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

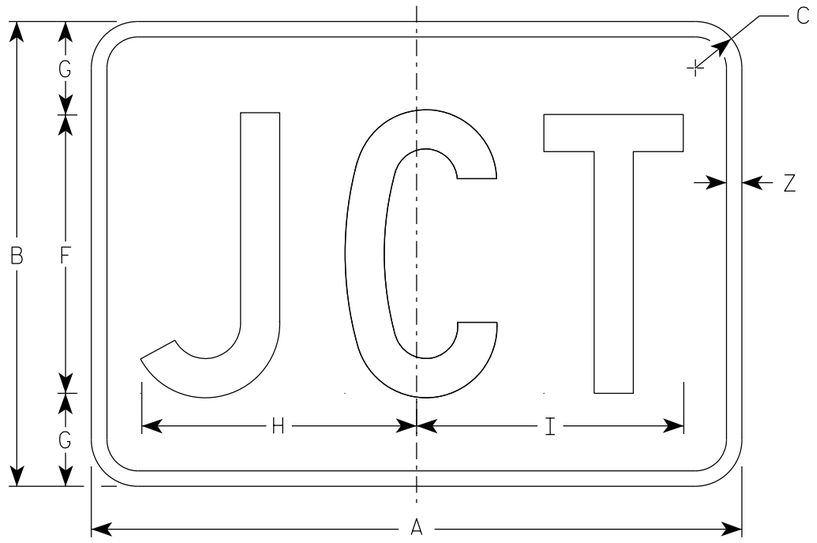
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-5A.9

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21	15	1 1/2	3/8	3/8	9	3	8 7/8	8 5/8																	1/2	2.20
2M	21	15	1 1/2	3/8	3/8	9	3	8 7/8	8 5/8																	1/2	2.20
3	30	21	1 1/2	3/8	3/8	13	4	12 7/8	12 3/8																	1/2	4.40
4	30	21	1 1/2	3/8	3/8	13	4	12 7/8	12 3/8																	1/2	4.40
5	30	21	1 1/2	3/8	3/8	13	4	12 7/8	12 3/8																	1/2	4.40

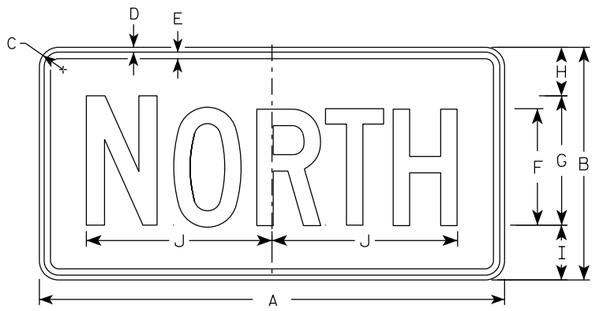
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

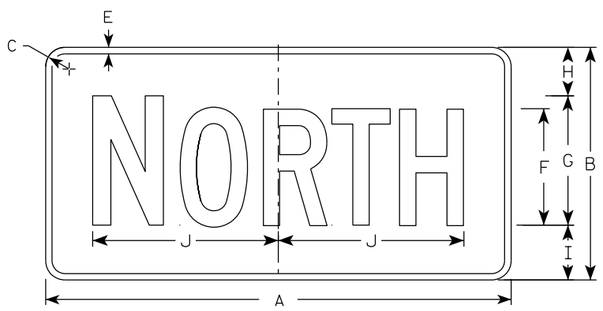
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/8/2023 PLATE NO. M2-1.14

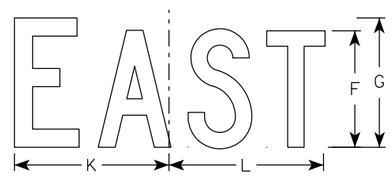
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 170 | E



M3-1
MM3-1
MP3-1

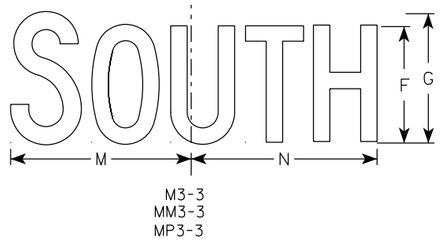


MB3-1
MK3-1
MN3-1

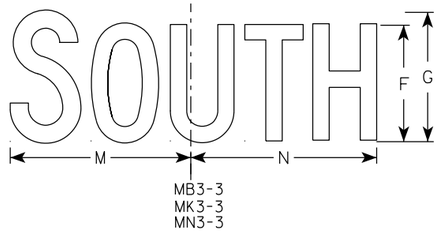


M3-2
MM3-2
MP3-2

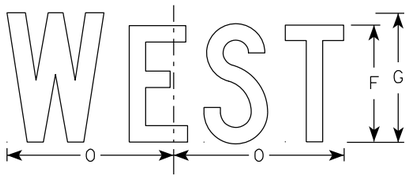
MB3-2
MK3-2
MN3-2



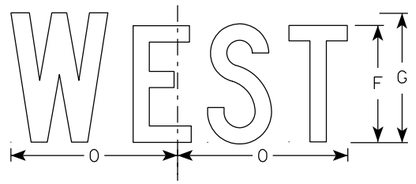
M3-3
MM3-3
MP3-3



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 Reflective
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																											
2S	24	12	1 1/2	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												2.00
2M	24	12	1 1/2	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												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

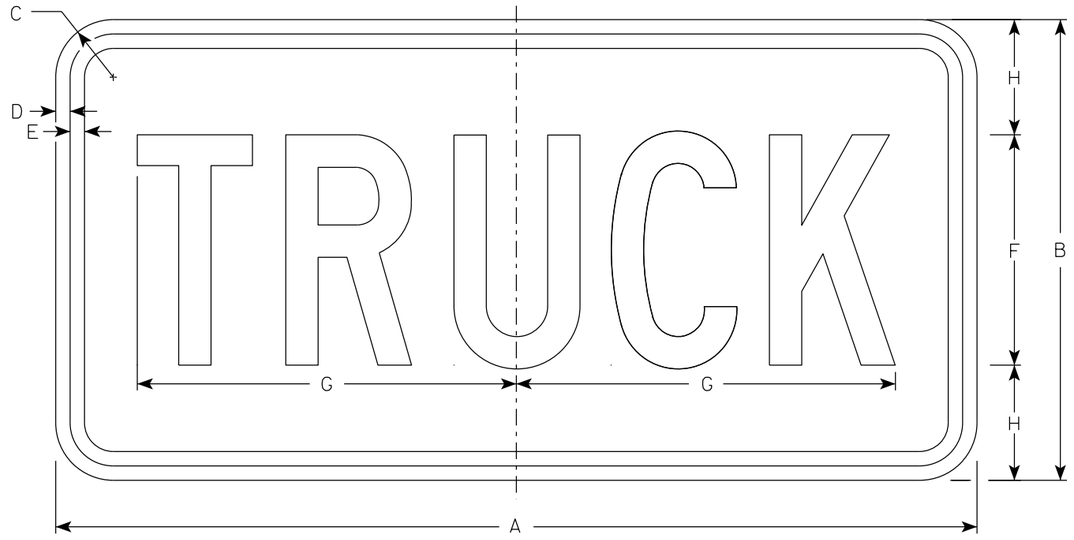
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 171 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C



M4-4

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	12	1 1/2	3/8	3/8	6	9 7/8	3																			2.0
2M	24	12	1 1/2	3/8	3/8	6	9 7/8	3																			2.0
3	36	18	1 1/2	3/8	1/2	9	15 5/8	4 1/2																			4.5
4	36	18	1 1/2	3/8	1/2	9	15 5/8	4 1/2																			4.5
5	36	18	1 1/2	3/8	1/2	9	15 5/8	4 1/2																			4.5

STANDARD SIGN

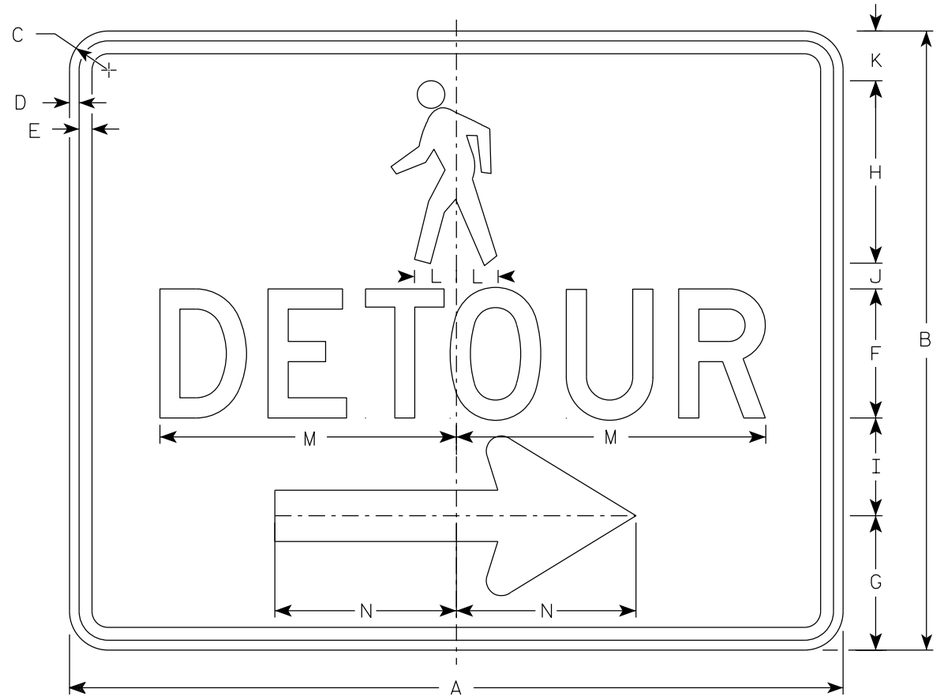
M4-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 11/21/2022 PLATE NO. M4-4.4

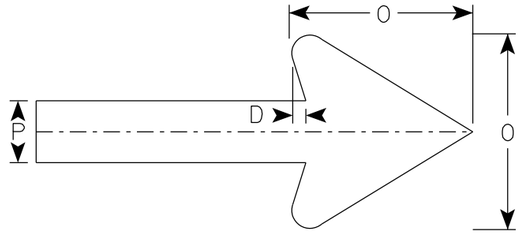
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M4-9BR

NOTES

1. Sign is Type II-Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9BL is the same as M4-9BR except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

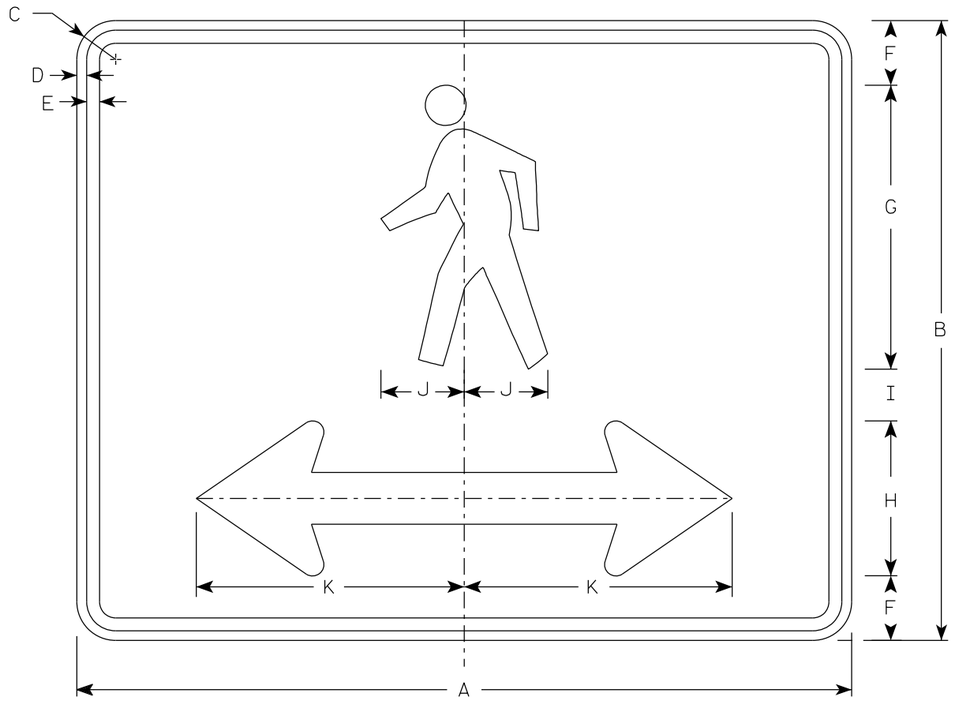
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-9B.4

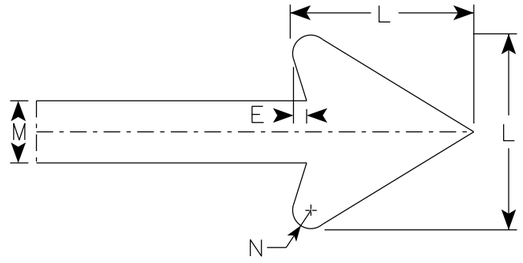
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 173	E



M4-60D

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
2M	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	10 3/8	6	2	3/8													5.00
3																											
4																											
5																											

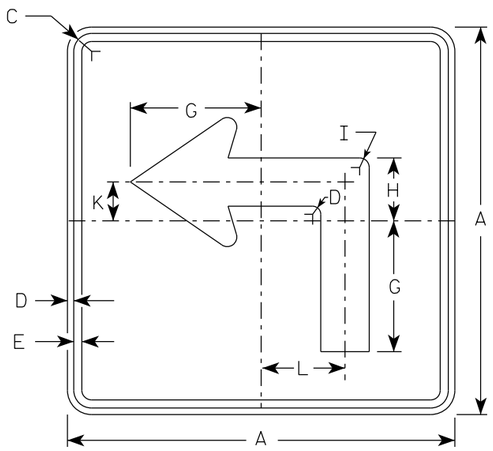
STANDARD SIGN
M4-60D

WISCONSIN DEPT OF TRANSPORTATION

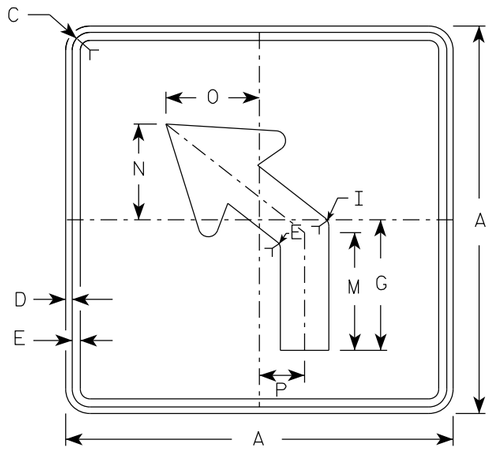
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/2023 PLATE NO. M4-60D.2

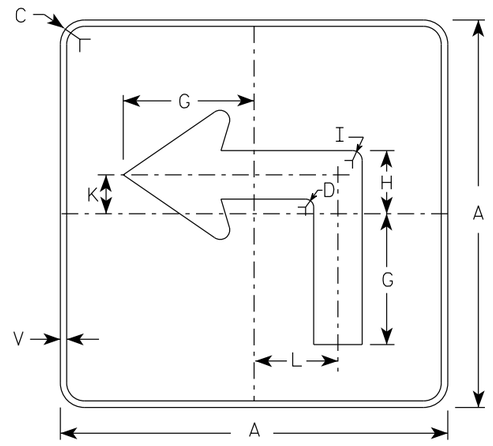
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 174 | E



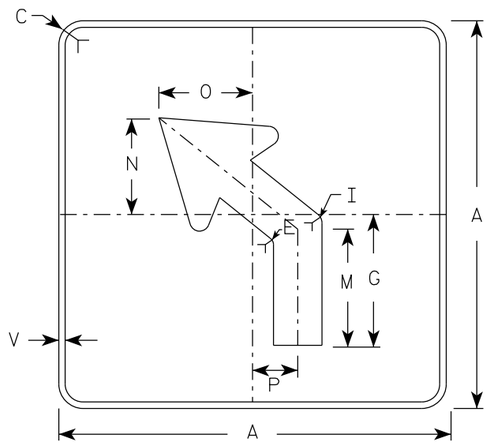
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

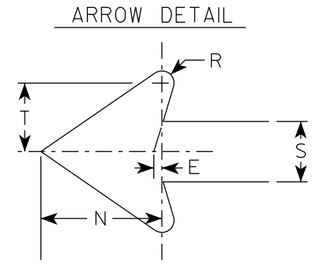


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

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	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

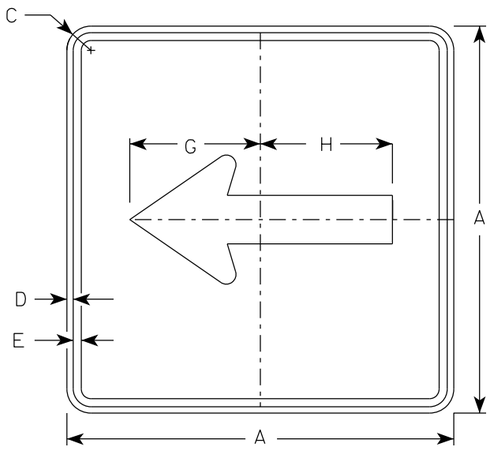
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

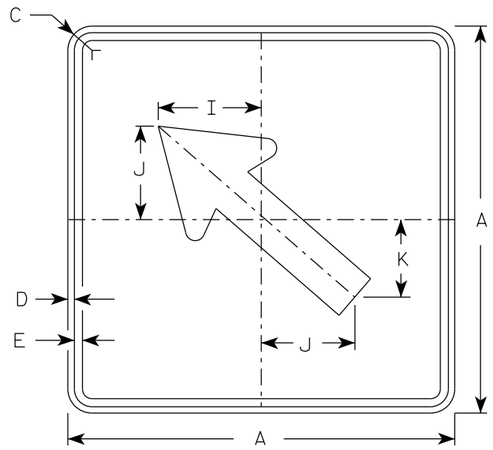
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

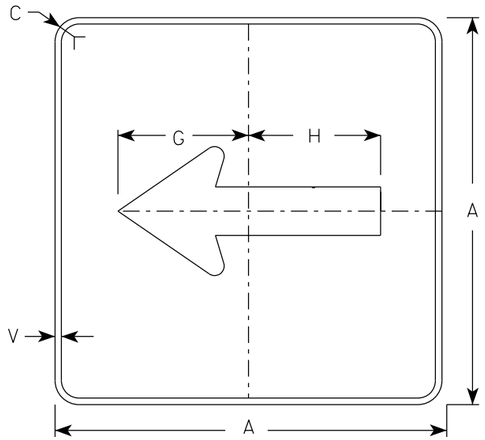
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 175 | E



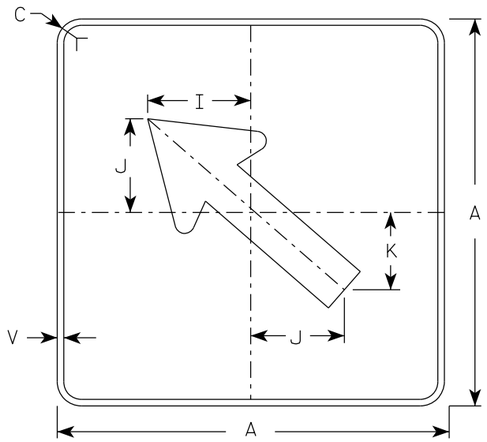
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

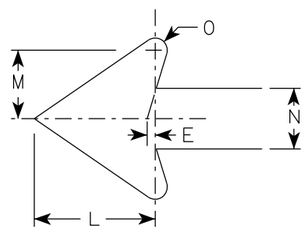


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. 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

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	21		1 1/2	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							1/2					3.06
2M	21		1 1/2	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							1/2					3.06
3	30		1 7/8	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							1/2					6.25
4	30		1 7/8	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							1/2					6.25
5	30		1 7/8	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							1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

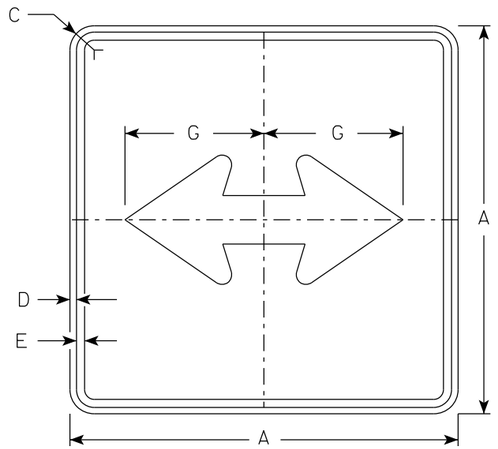
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

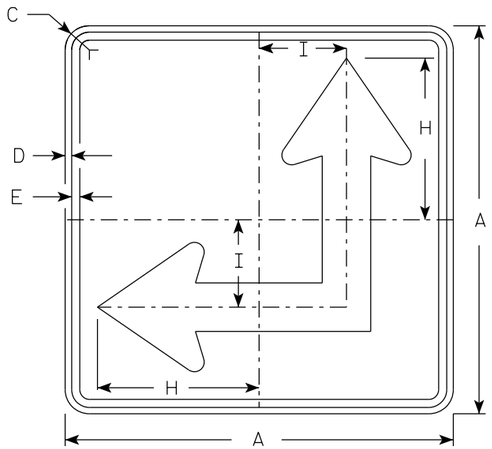
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 176 | E

7

7



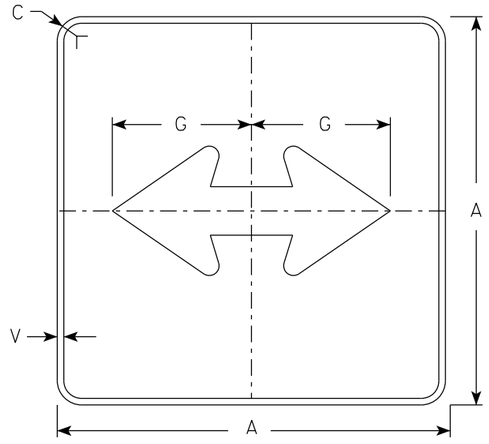
M6-4
MM6-4
MO6-4
MP6-4



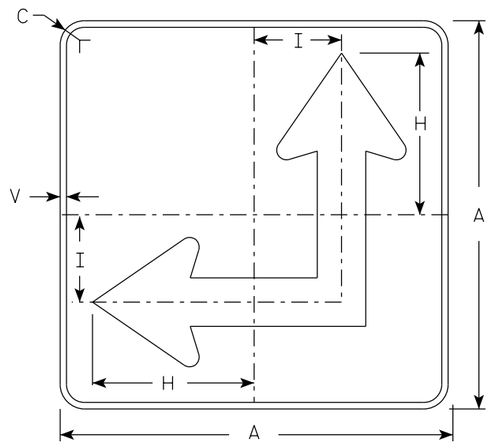
M6-6
MM6-6
MO6-6
MP6-6

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See Note 4
   Message - See Note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-4 and M6-6 Background - White
   Message - Black
   MB6-4 and MB6-6 Background - Blue
   Message - White
   MK6-4 and MK6-6 Background - Green
   Message - White
   MM6-4 and MM6-6 Background - White
   Message - Green
   MN6-4 and MN6-6 Background - Brown
   Message - White
   MO6-4 and MO6-6 Background - Orange - Type F Reflective
   Message - Black
   MP6-4 and MP6-6 Background - White
   Message - Blue
   MR6-4 and MR6-6 Background - Brown
   Message - Yellow
5. M6-6R same as M6-6L except arrow points ahead and right.

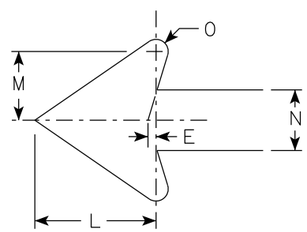


MB6-4
MK6-4
MN6-4
MR6-4



MB6-6
MK6-6
MN6-6
MR6-6

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	21		1 1/2	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

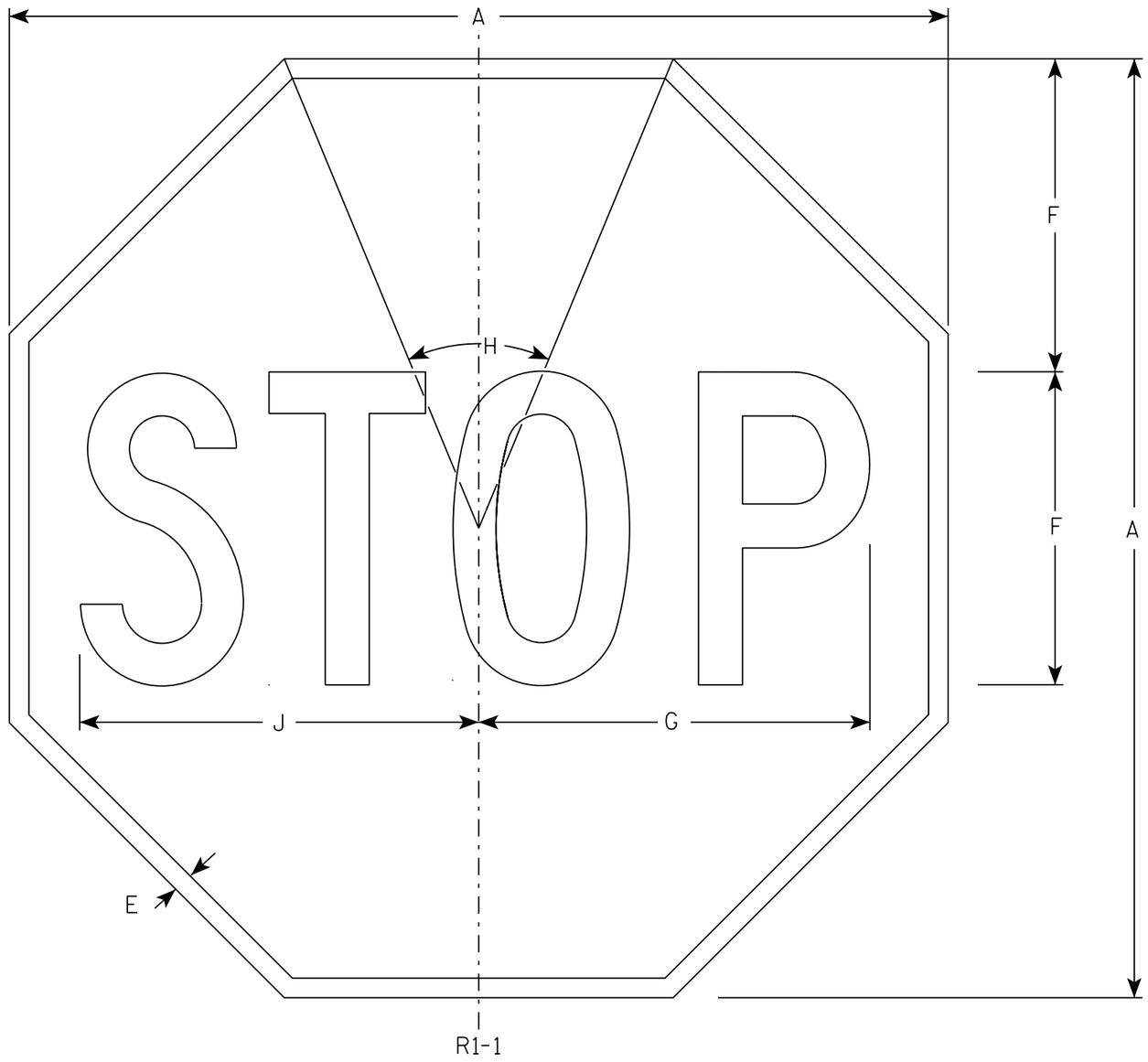
STANDARD SIGN
M6-4 & M6-6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-4.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 177 | E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

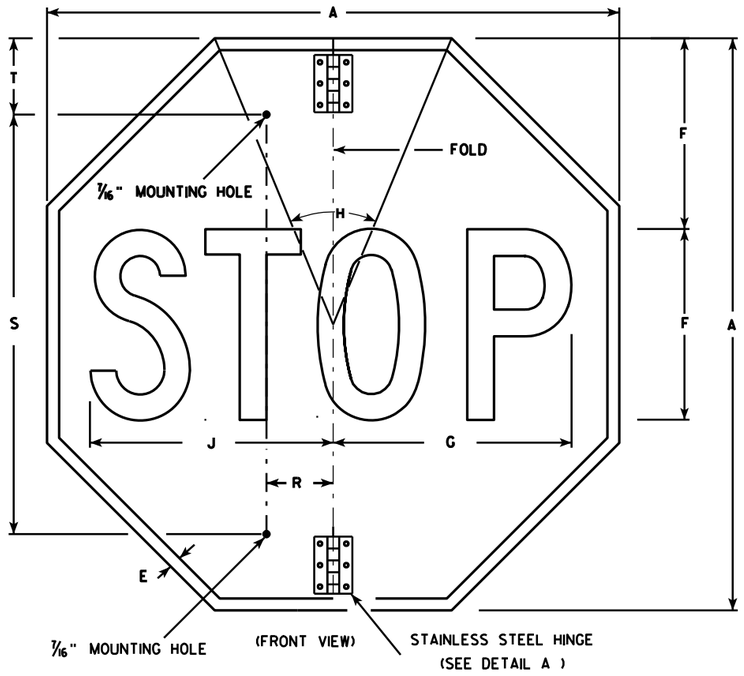
STANDARD SIGN
R1-1

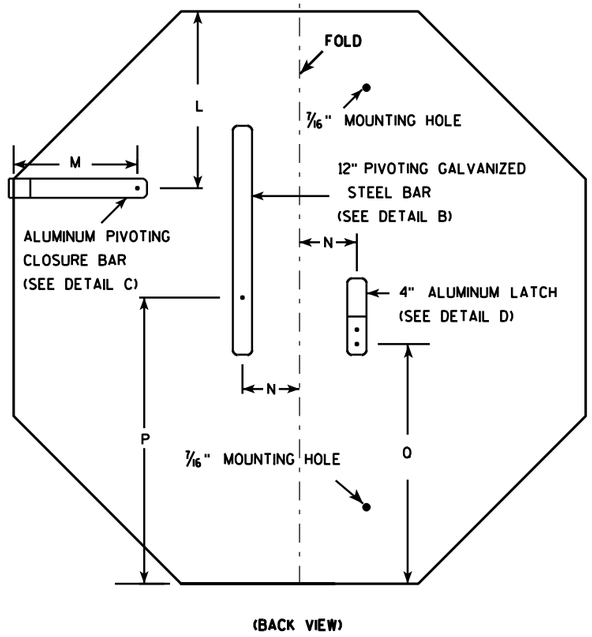
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

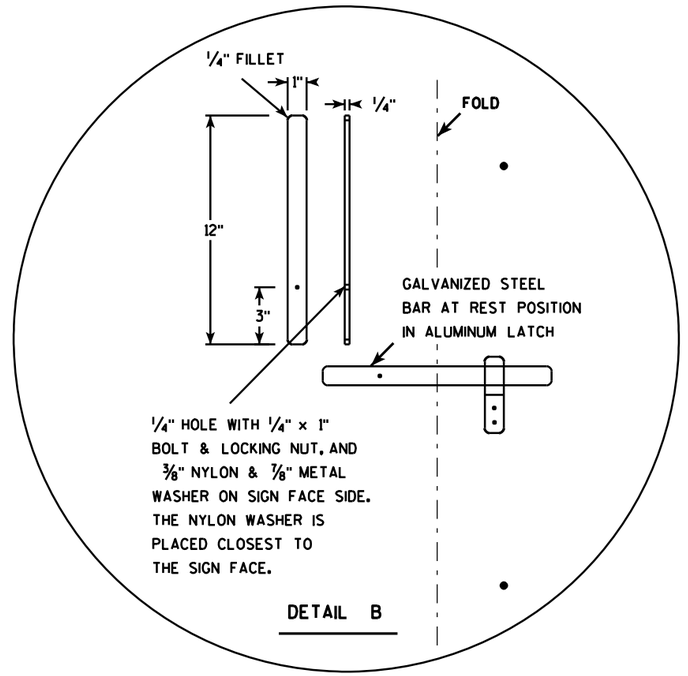
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 178	E

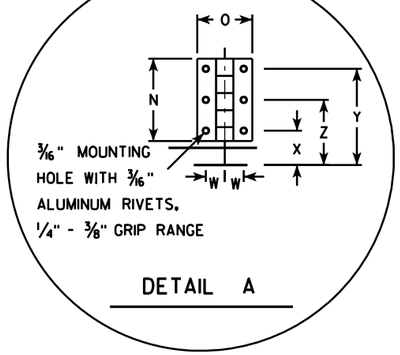


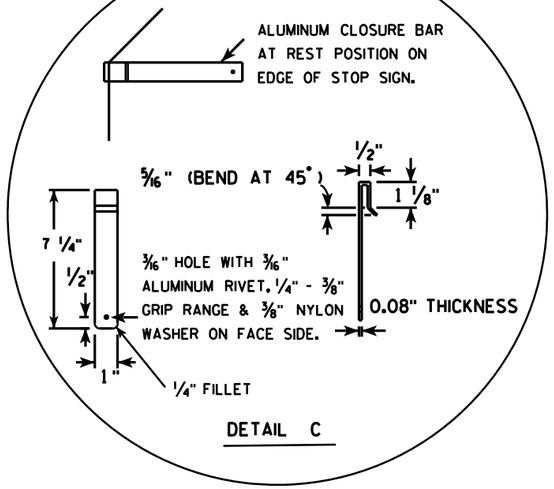


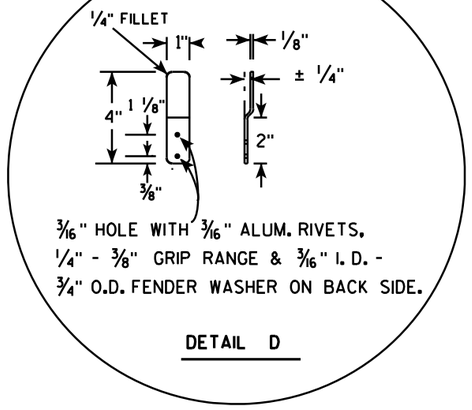
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. All hardware used on the folding STOP sign installation shall conform to 637.2.4 of the WIS DOT Standard Specification.









SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30				5/8	10	12 1/2	45		12 3/4		9 1/4	6 1/2	3	2	15	12 3/8	2 1/2	22	5			11/16	1 1/4	3 1/2	2 3/8	5.18
2M	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
3	36				3/4	12	15	45		15 3/8		11	6 1/2	3	2	18	15 3/8	2 1/2	26	5			11/16	1 1/4	3 1/2	2 3/8	7.46
4																											
5																											

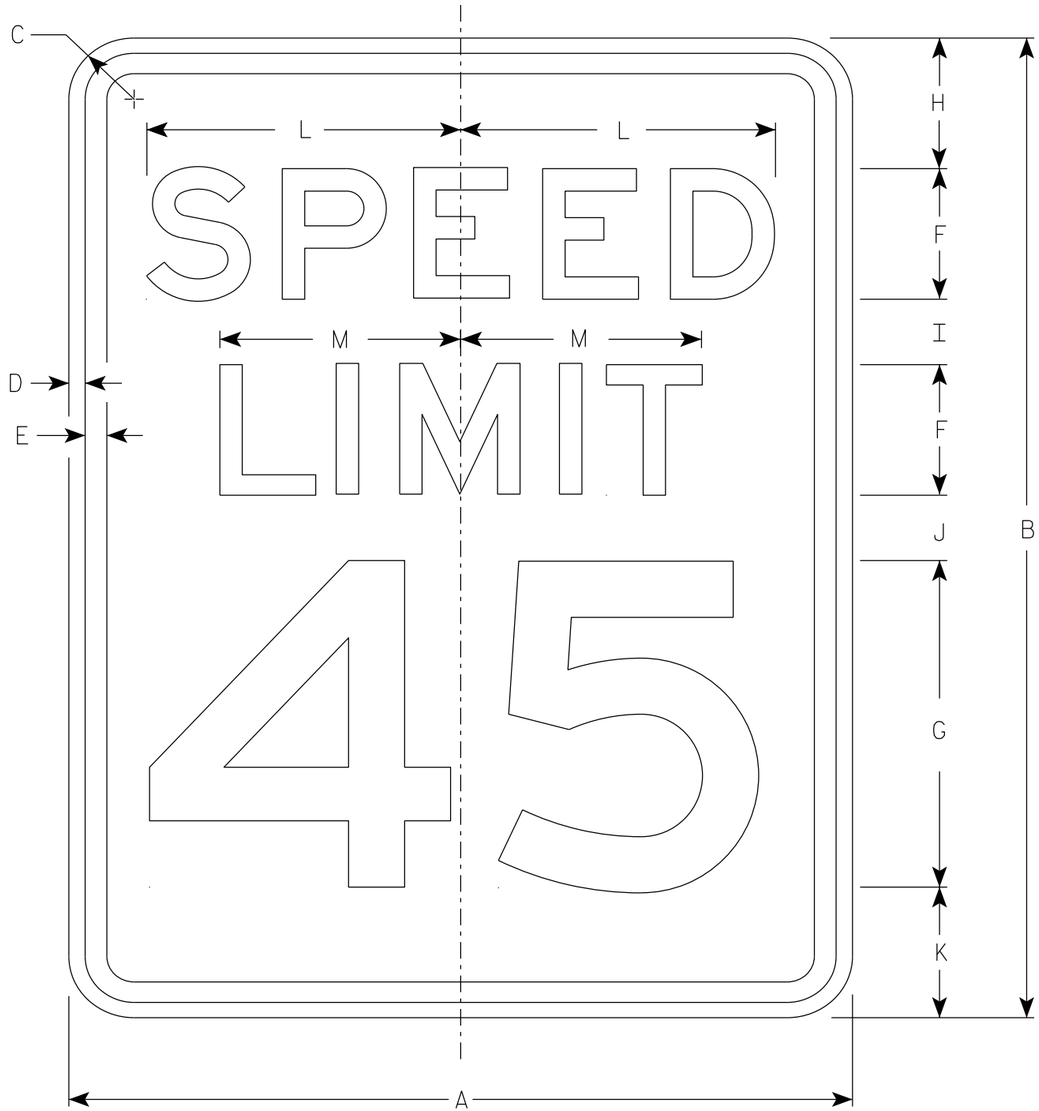
STANDARD SIGN
R1-1F

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-1F.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 179	E



R2-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/2	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/2	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 7/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 7/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	3	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

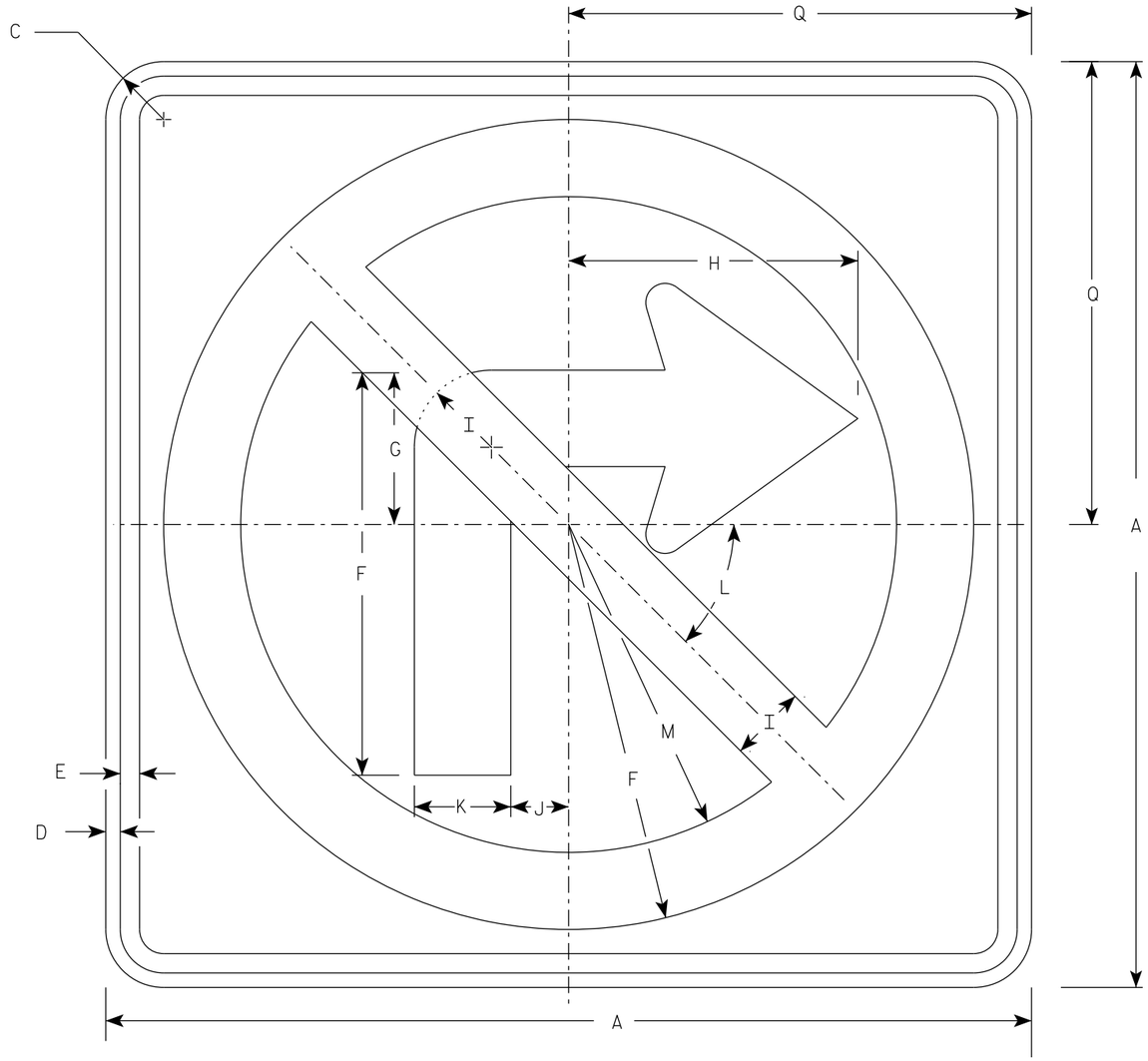
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/23 PLATE NO. R2-1.14

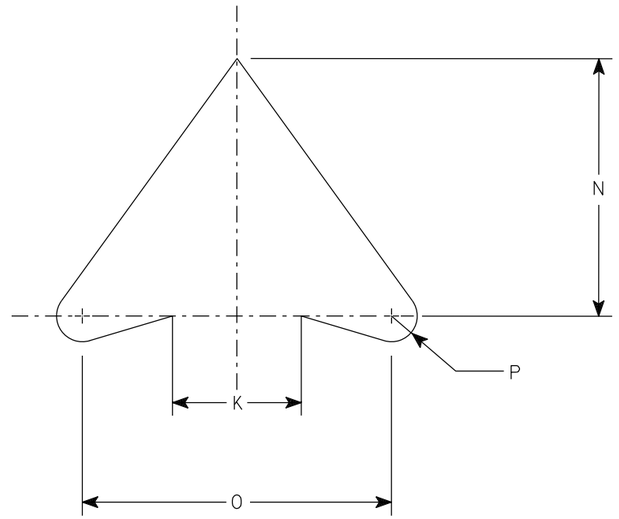
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 180 | E



R3-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45	8 ½	5	6	½	12										4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½	12										4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45	12 ¾	7 ½	9	¾	18										9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾	18										9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

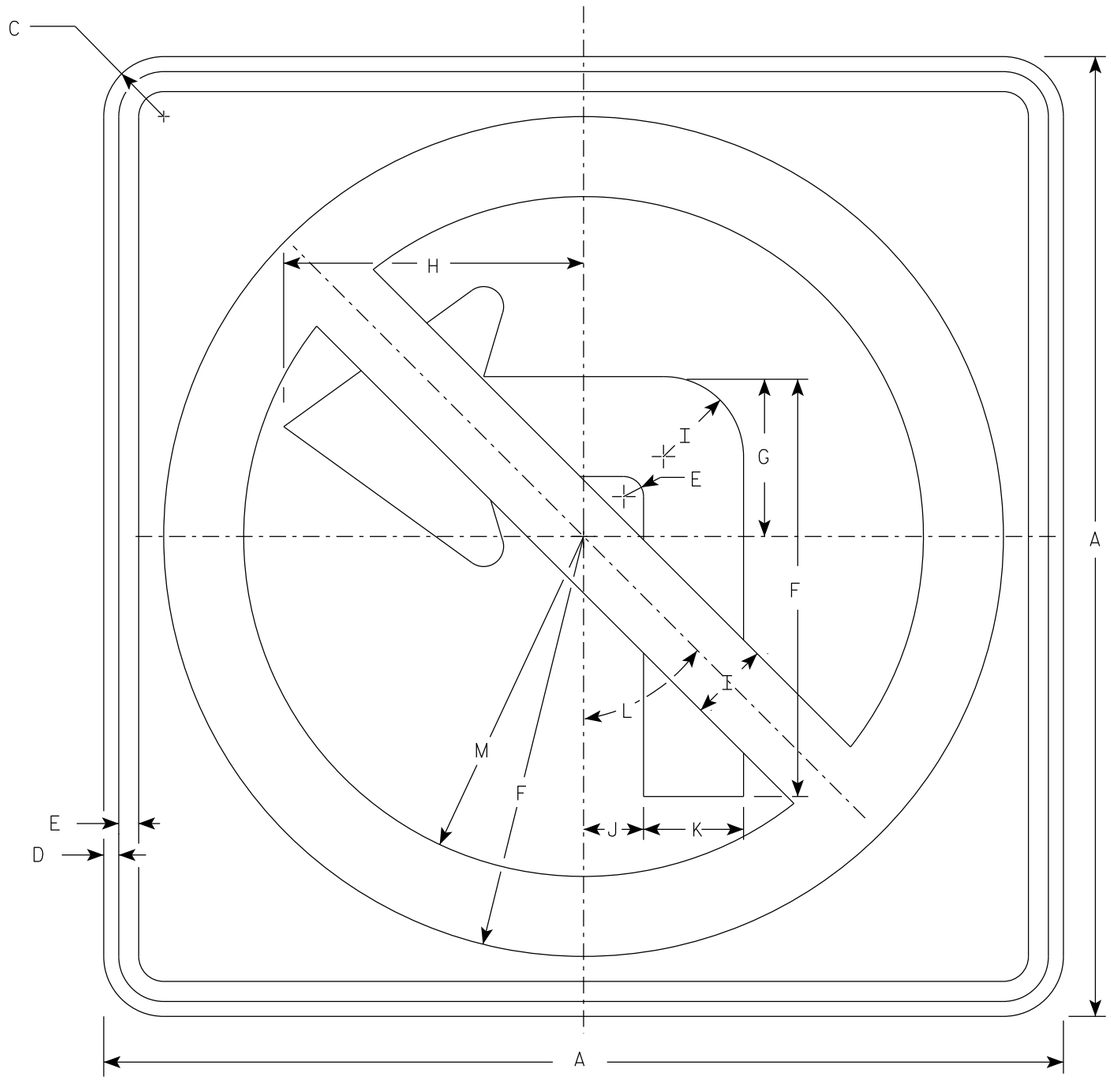
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-1.6

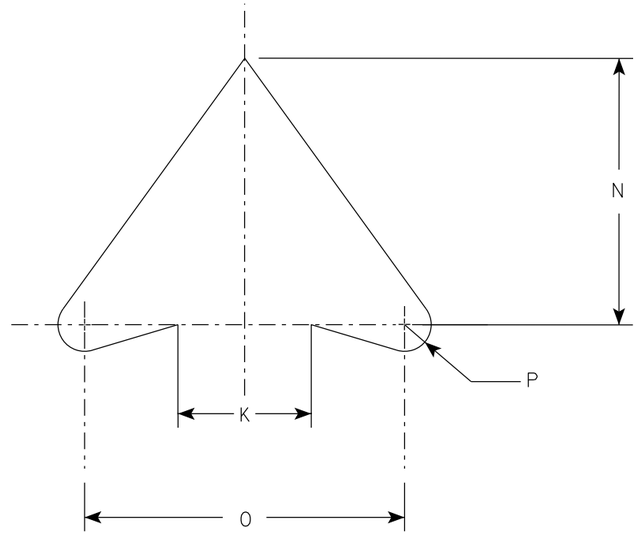
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 181 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



R3-2



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½											4.0
2S	24		1 ½	⅜	½	10 ½	4	7 ½	2	1 ½	2 ½	45°	8 ½	5	6	½											4.0
2M	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
3	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
4	36		2 ¼	⅝	¾	15 ¾	6	11 ¼	3	2 ¼	3 ¾	45°	12 ¾	7 ½	9	¾											9.0
5	48		2 ¼	¾	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

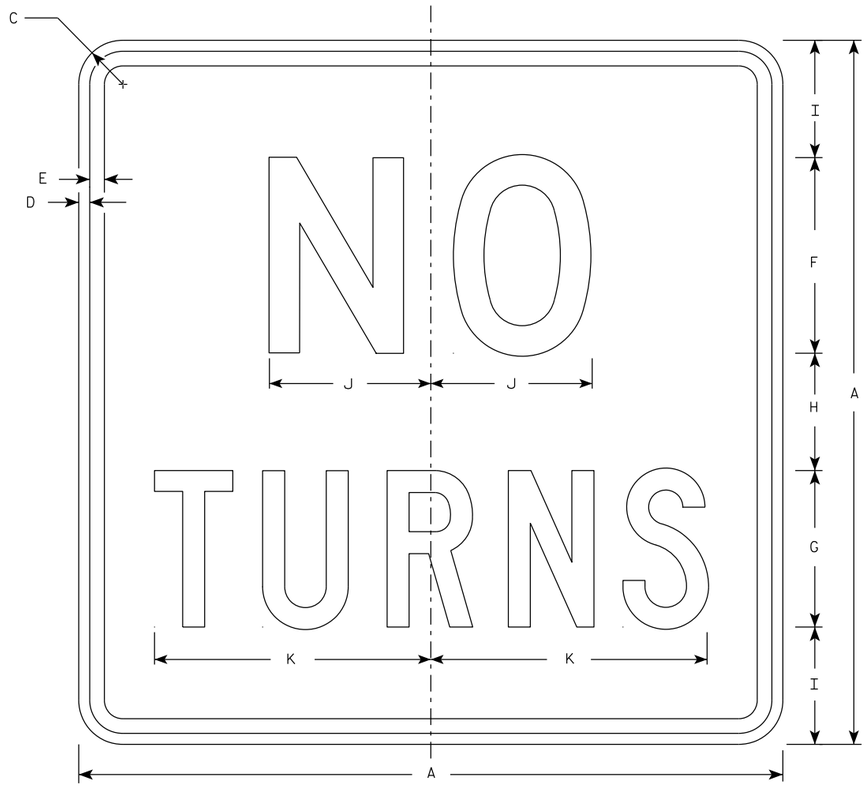
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/2/23 PLATE NO. R3-2.11

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 182 | E



R3-3

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - See Note 4
4. Line 1 is Series D and Line 2 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																											
2S	24		1 1/2	3/8	1/2	6	5	4	4 1/2	5 1/8	8 3/4																4.0
2M	36		2 1/4	5/8	3/4	10	8	6	6	8 1/4	14 1/8																9.0
3	36		2 1/4	5/8	3/4	10	8	6	6	8 1/4	14 1/8																9.0
4	36		2 1/4	5/8	3/4	10	8	6	6	8 1/4	14 1/8																9.0
5	48		2 1/4	3/4	1	12	10	8	9	10 1/4	17 5/8																16.0

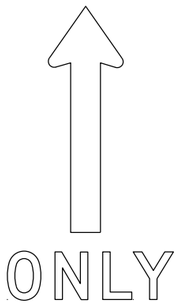
STANDARD SIGN
R3-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

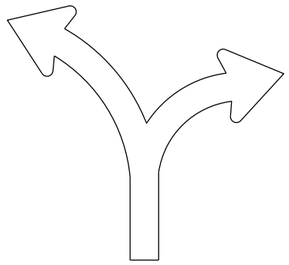
DATE 2/13/23 PLATE NO. R3-3.11

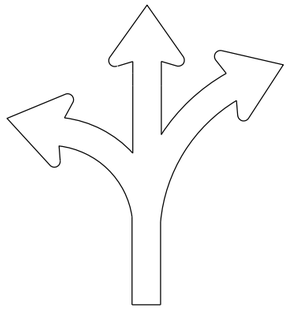
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 183	E

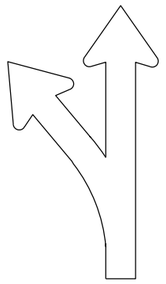


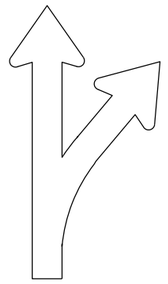
(A)

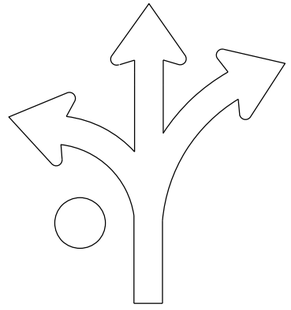
(B)

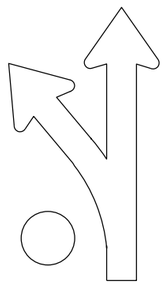

(C)

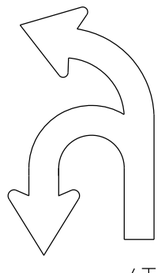

(D)

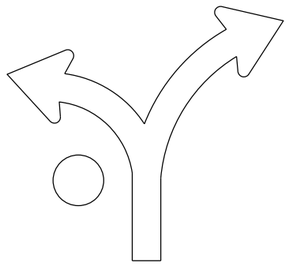

(E)

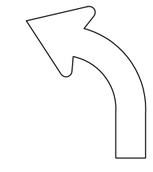

(F)


(G)

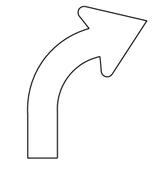

(H)


(I)


(J)



(L)



(R)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1 Letter =	3.75 sq ft	for Size 2
	6.0 sq ft	for Size 3
	10.0 sq ft	for Size 4 or 5
2 Letters =	7.5 sq ft	for Size 2
	12.0 sq ft	for Size 3
	20.0 sq ft	for Size 4 or 5
3 Letters =	11.25 sq ft	for Size 2
	18.0 sq ft	for Size 3
	30.0 sq ft	for Size 4 or 5
4 Letters =	15.0 sq ft	for Size 2
	24.0 sq ft	for Size 3
	40.0 sq ft	for Size 4 or 5
5 Letters =	18.75 sq ft	for Size 2
	30.0 sq ft	for Size 3
	50.0 sq ft	for Size 4 or 5
6 Letters =	22.5 sq ft	for Size 2
	36.0 sq ft	for Size 3
	60.0 sq ft	for Size 4 or 5

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

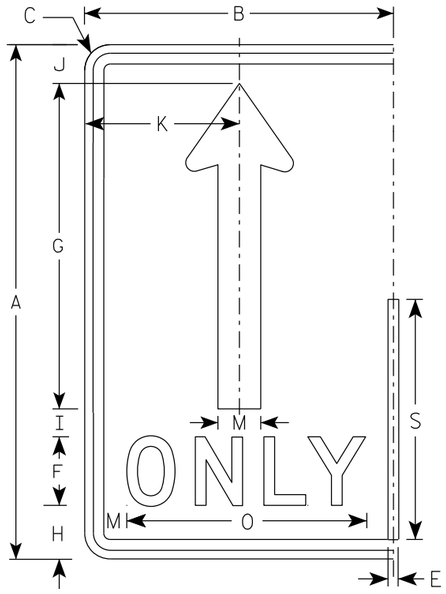
PROJECT NO:

SHEET NO: 184 E

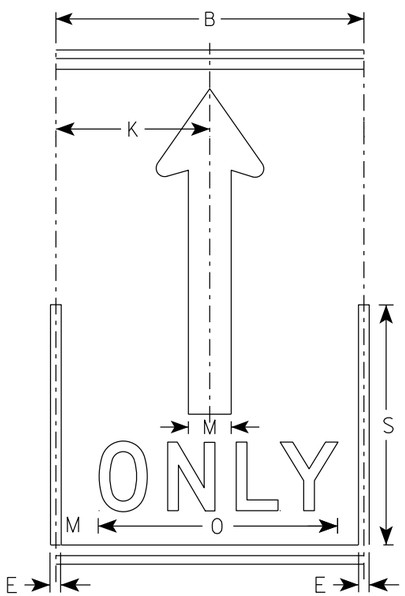
7

NOTES

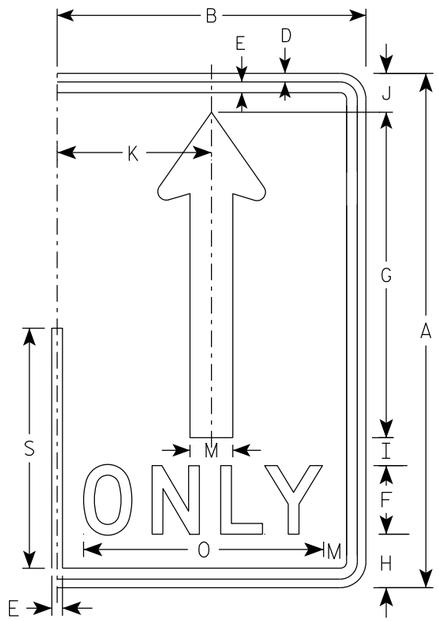
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



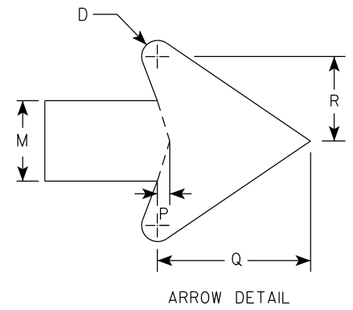
(A)



(A)



(A)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

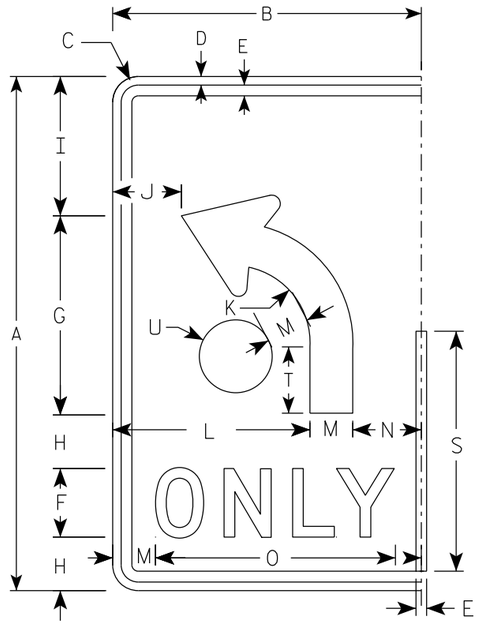
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

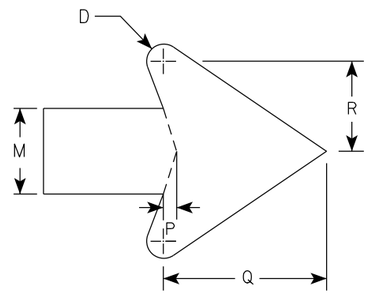
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 185 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D



(B)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

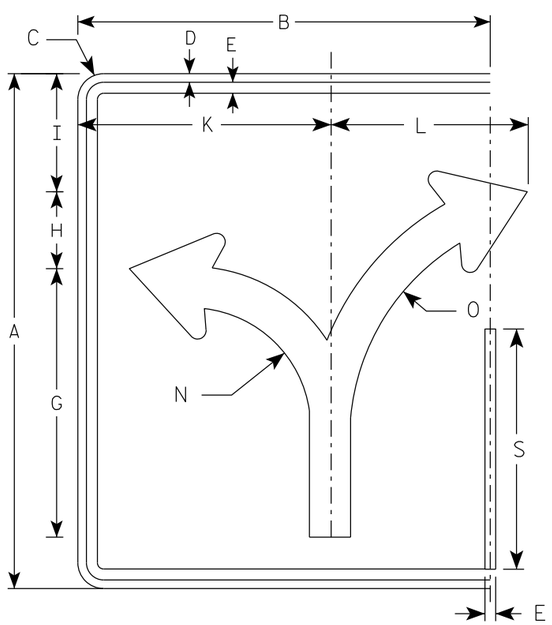
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

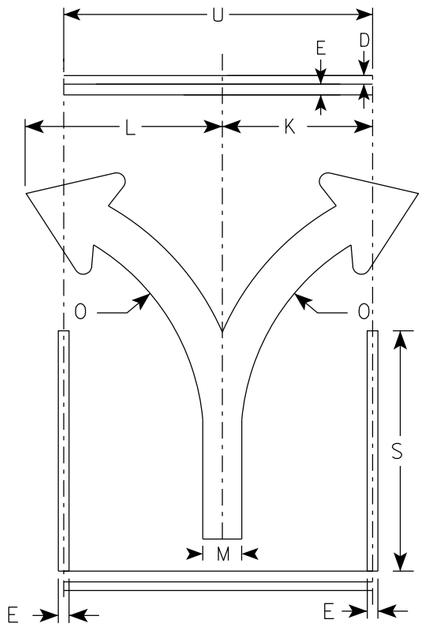
SHEET NO: 186 E

NOTES

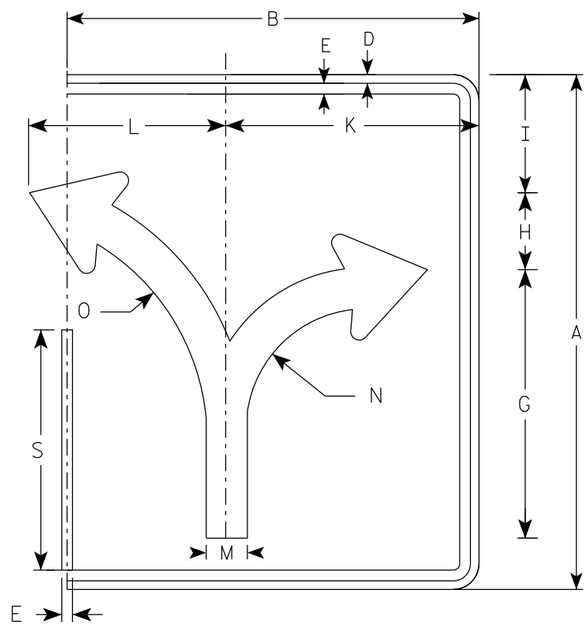
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



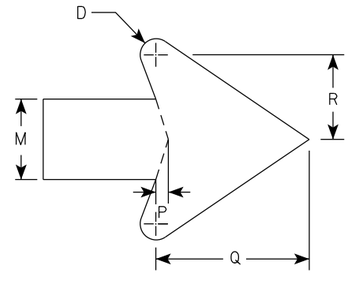
(C)



(C)



(C)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

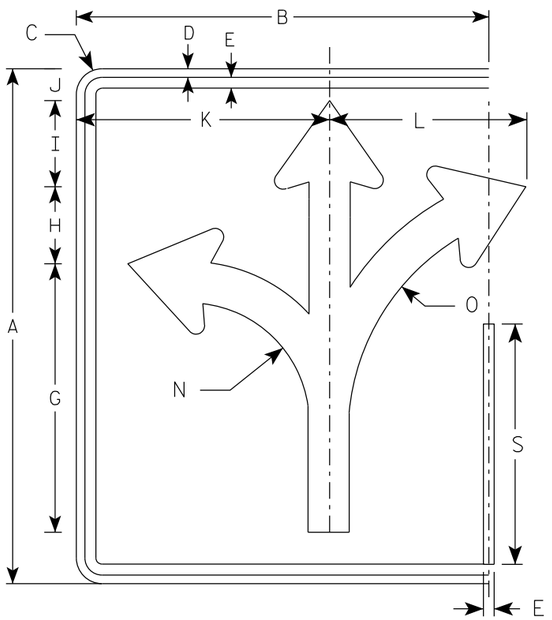
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 187 | E

7

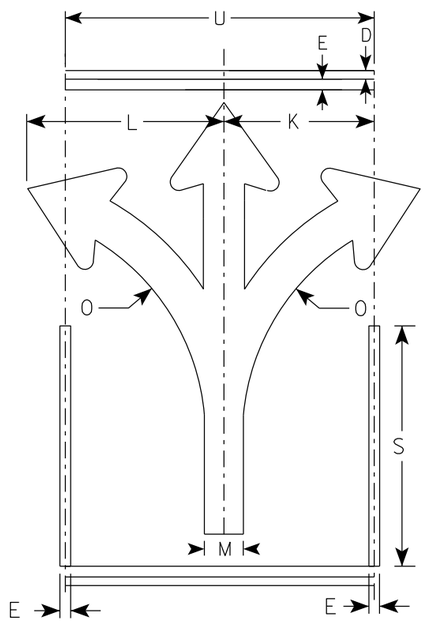
7

NOTES

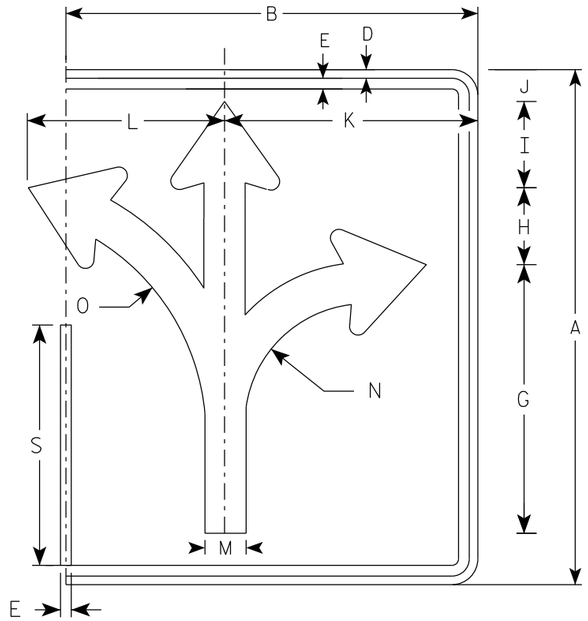
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



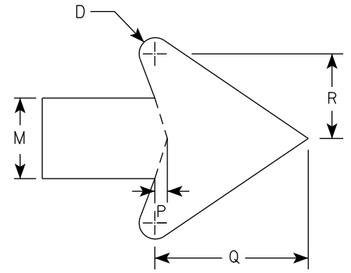
(D)



(D)



(D)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

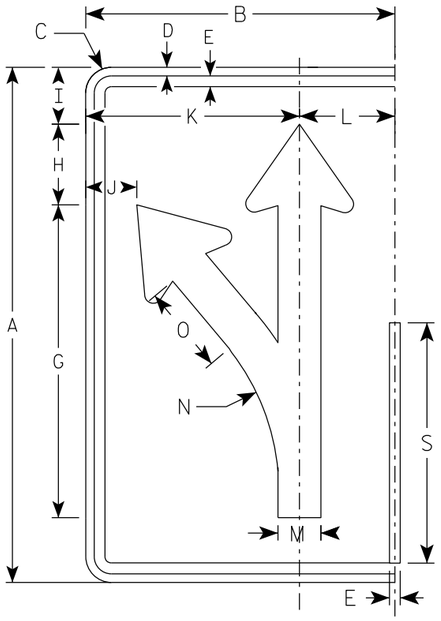
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

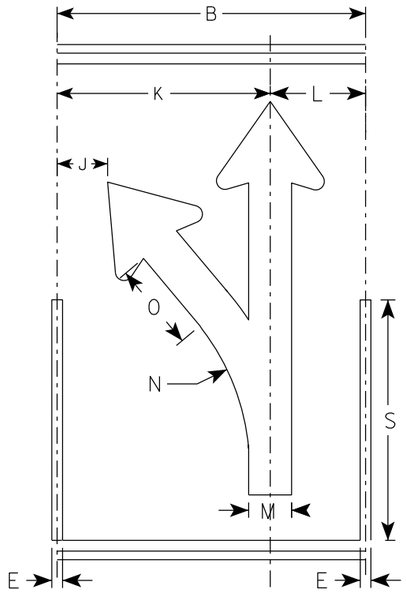
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 188 | E

NOTES

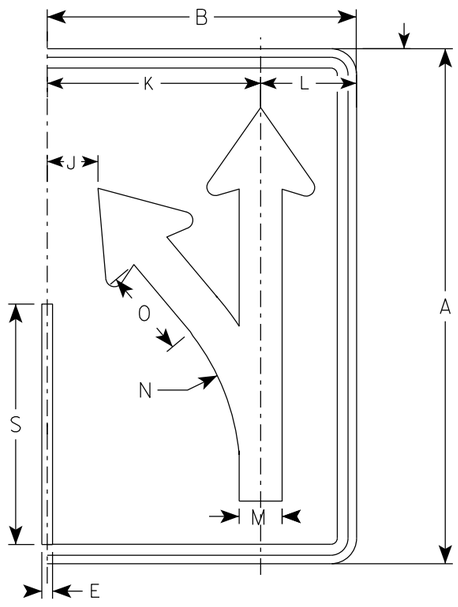
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



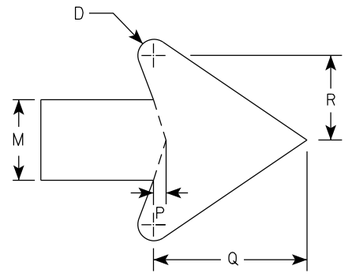
(E)



(E)



(E)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

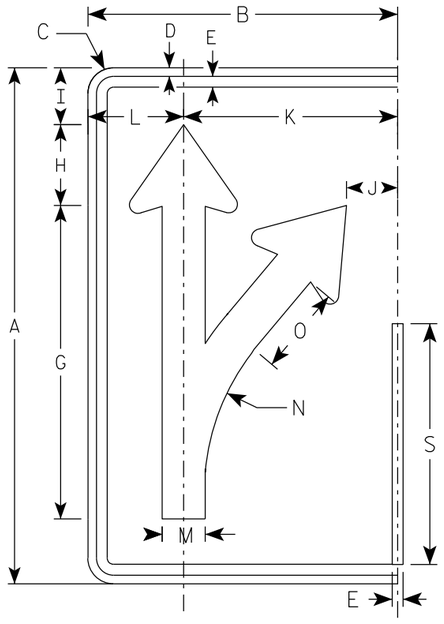
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

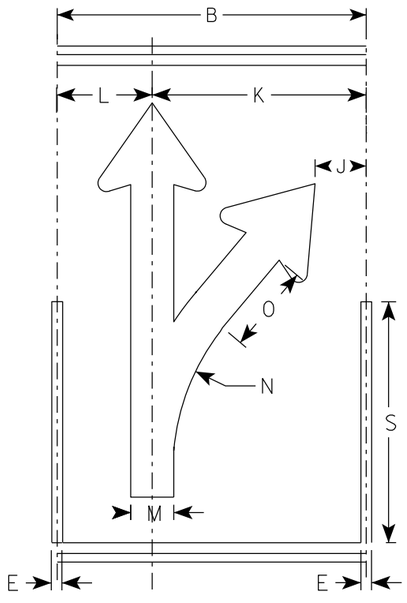
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 189 | E

NOTES

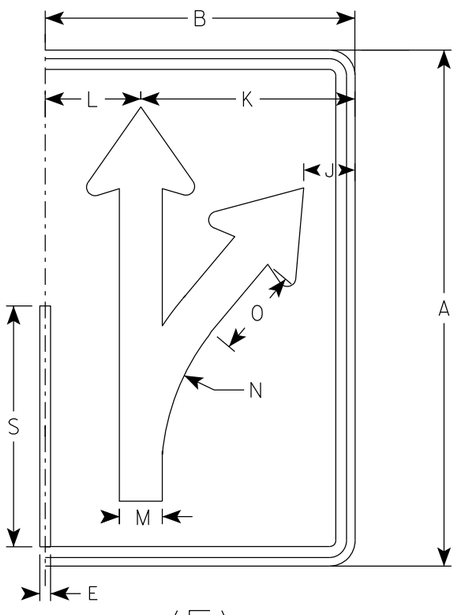
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



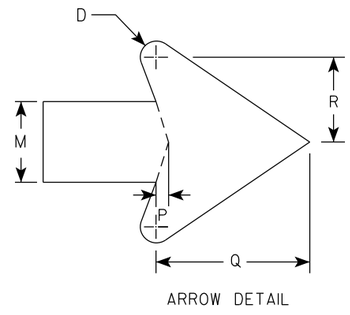
(F)



(F)



(F)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

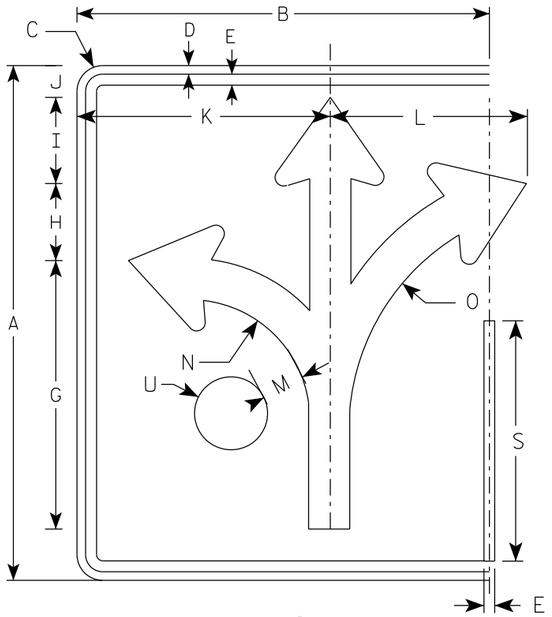
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

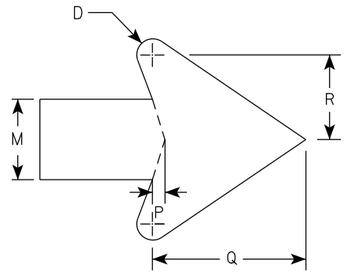
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 190 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

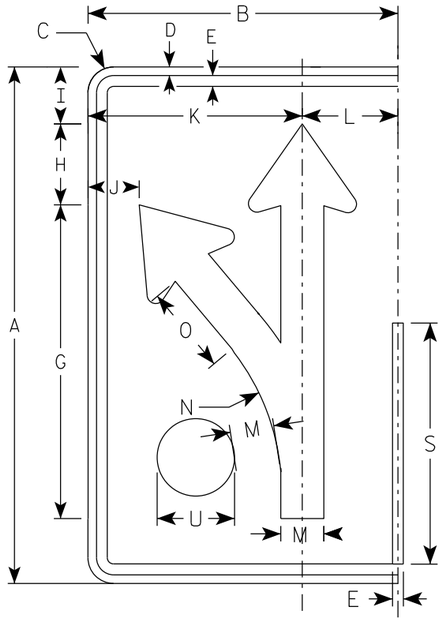
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

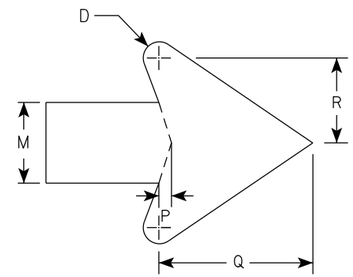
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 191	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

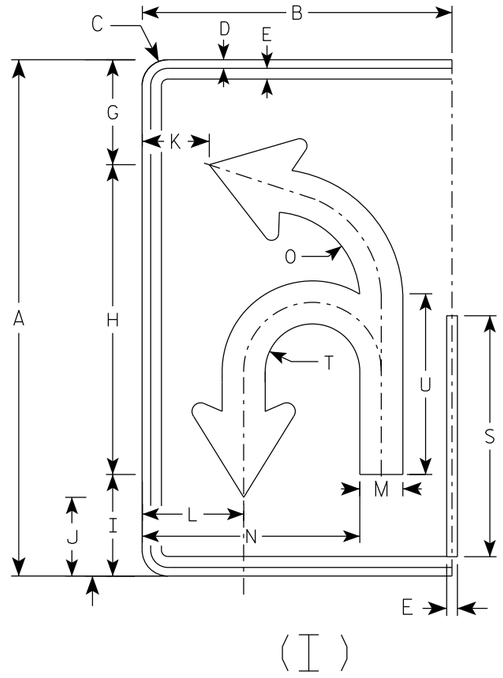
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

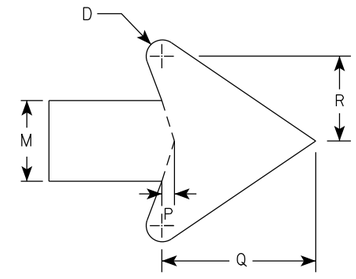
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 192 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

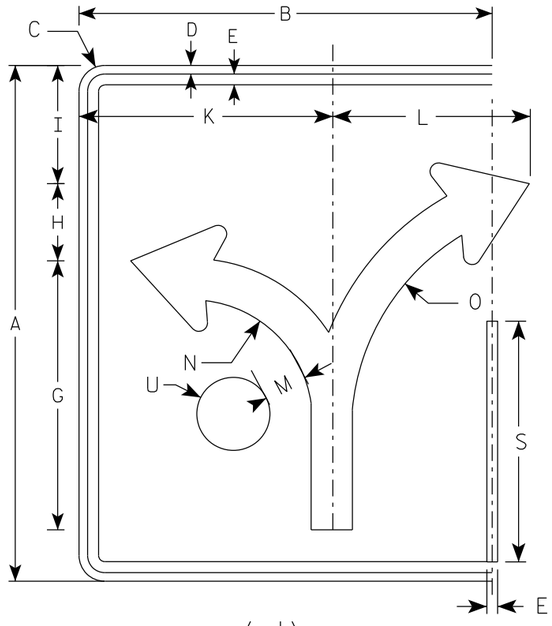
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 193 | E

7

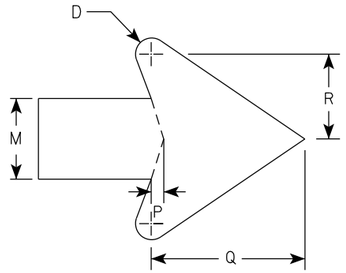
7

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(J)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

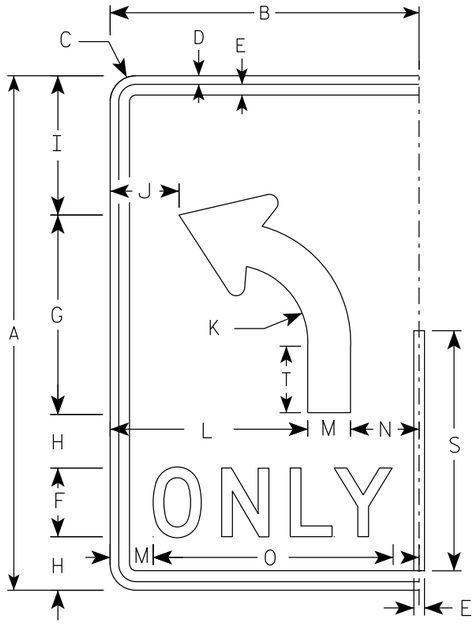
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 194 | E

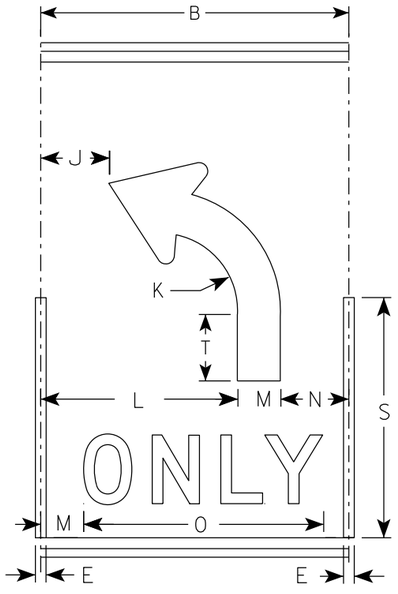
FILE NAME : C:\CAEfiles\Projects\stdplate_R38.dgn PLOT DATE : 14-FEB 2023 3:18 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

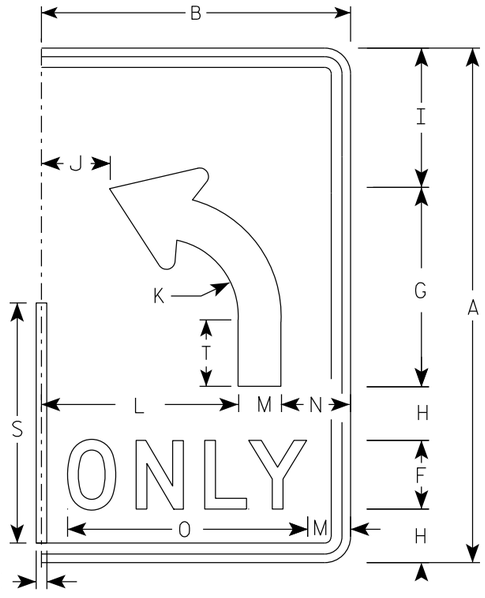
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



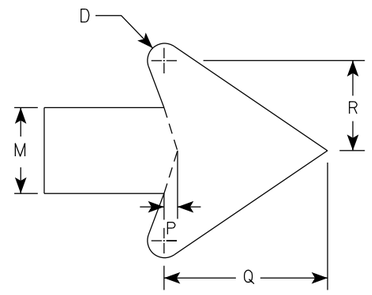
(L)



(L)



(L)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

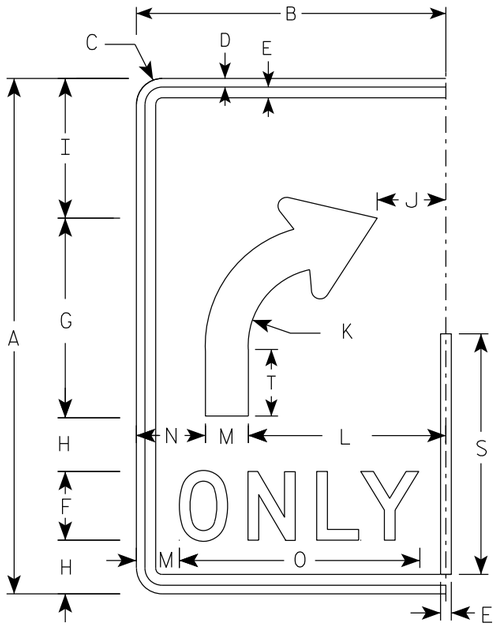
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

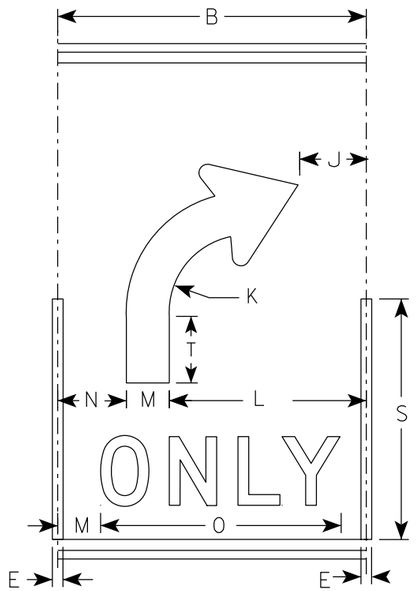
SHEET NO: 195 E

NOTES

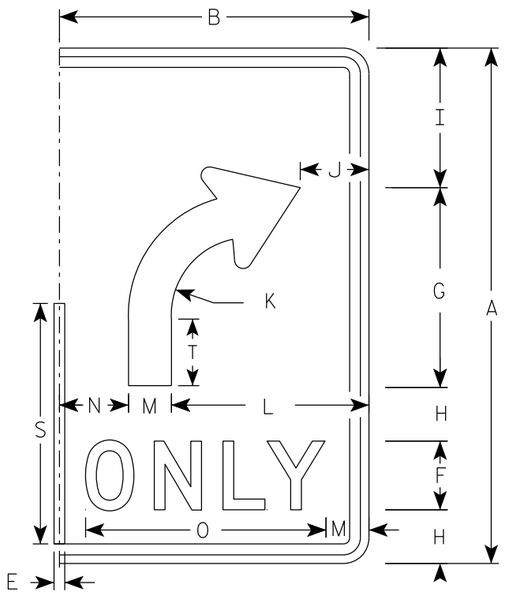
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



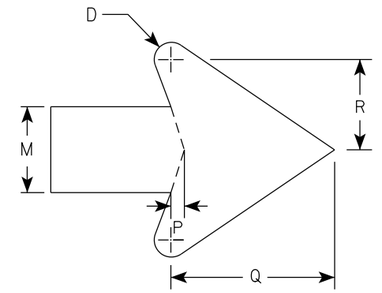
(R)



(R)



(R)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (R) Arrow

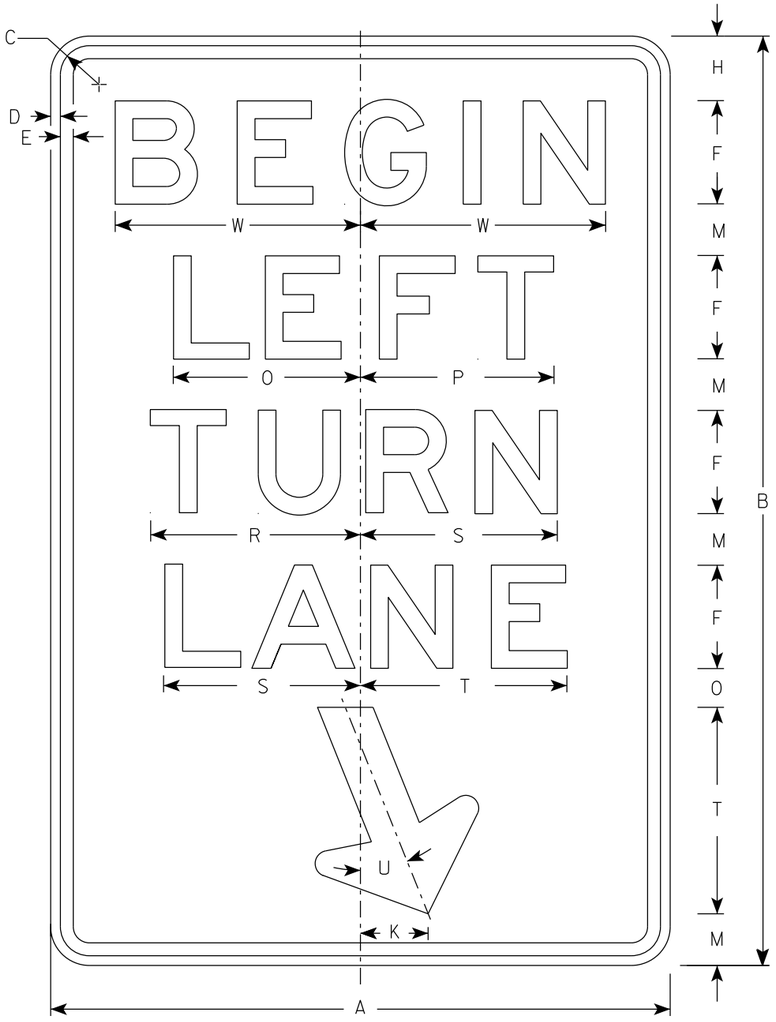
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

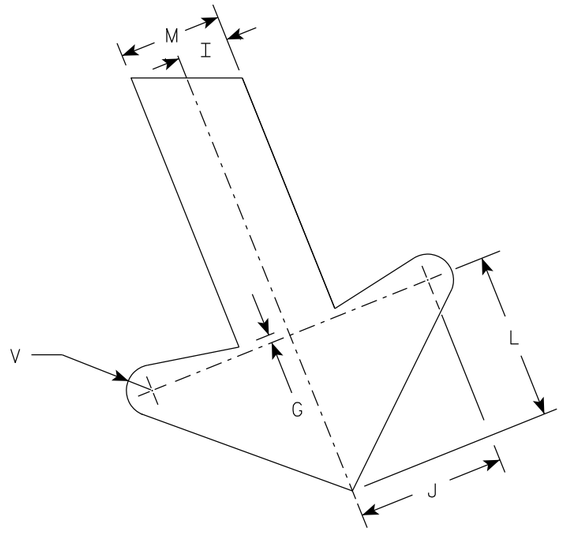
SHEET NO: 196 E



R3-20L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/2	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 1/2	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 7/8	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																											

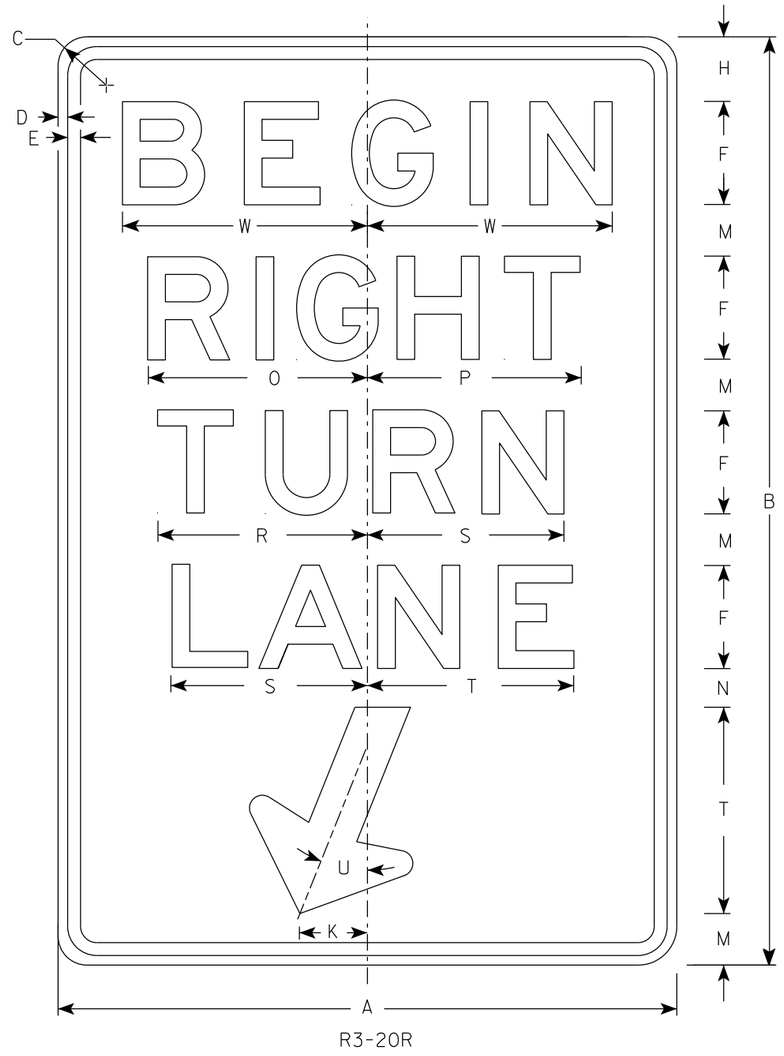
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20L.8

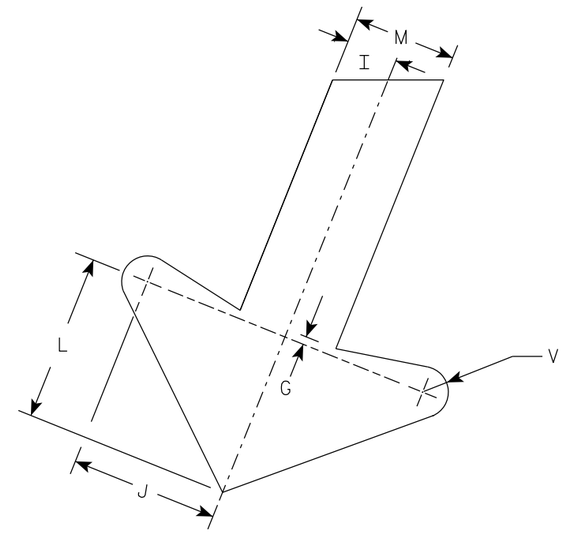
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 197	E



R3-20R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/2	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 1/2	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 7/8	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

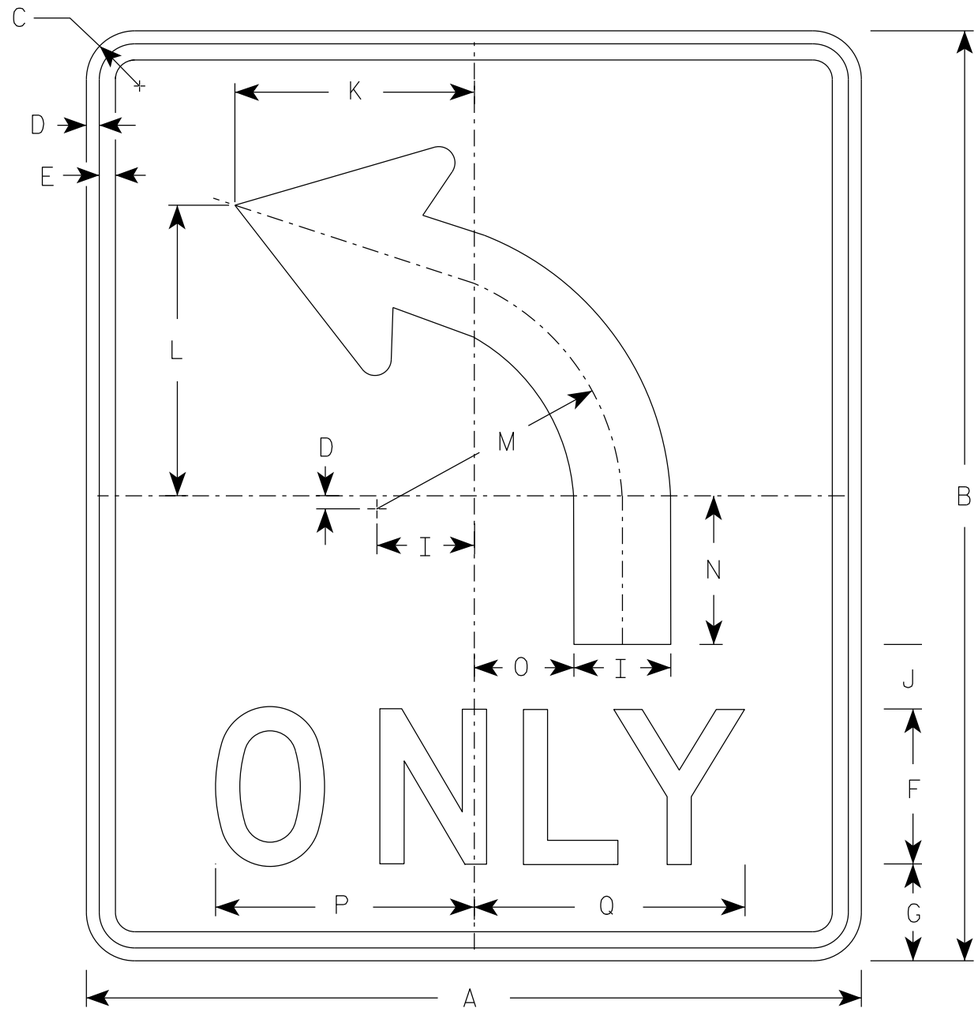
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20R.7

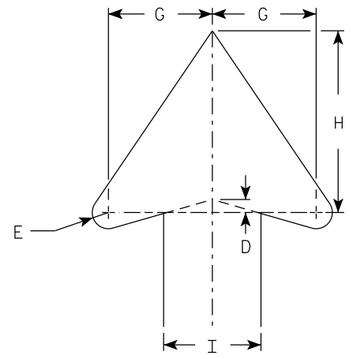
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 198 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. R3-50R is the same as R3-50L except curved portion of arrow points right.



R3-50L



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	36	1 7/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
2M	30	36	1 7/8	1/2	5/8	6	4	7	3 3/4	2 1/2	9 1/4	11 1/4	9 1/2	5 3/4	3 7/8	10	10 1/2										7.5
3																											
4																											
5																											

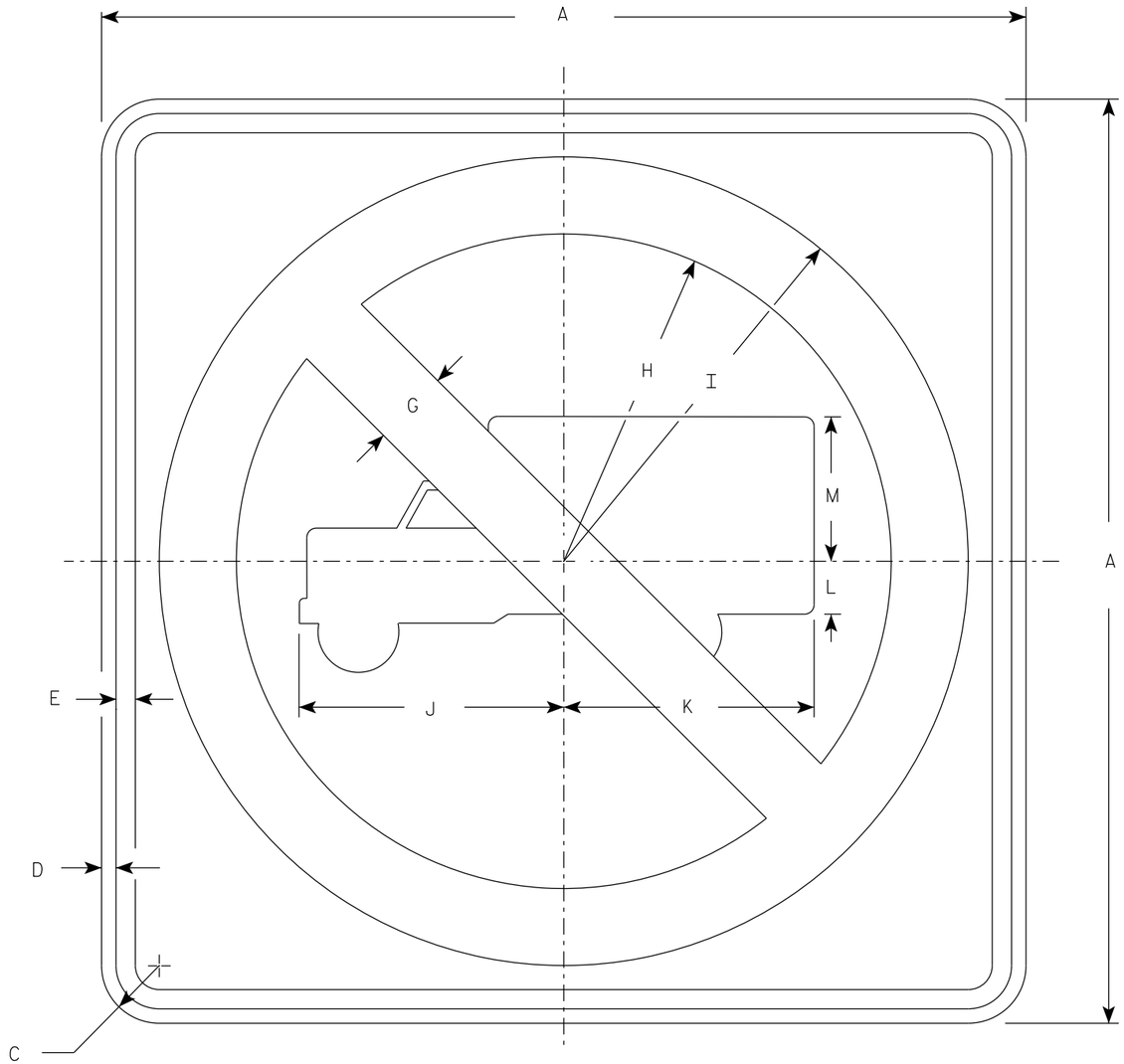
STANDARD SIGN
R3-50

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-50.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 199	E



R5-2

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See Note 3
3. Circle & Diagonal - Red
   Truck Symbol & Border - 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																											
2S	24		1 1/2	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
2M	24		1 1/2	3/8	1/2		2	8 1/2	10 1/2	6 7/8	6 1/2	1 3/8	3 3/4														4.0
3	30		1 7/8	1/2	5/8		2 1/2	10 5/8	13 1/8	8 1/2	8 1/8	1 5/8	4 3/4														6.25
4	36		2 1/4	5/8	3/4		3	12 3/4	15 3/4	10 1/4	9 3/4	2	5 3/4														9.0
5	48		2 1/4	3/4	1		4	17	21	13 5/8	13	2 5/8	7 5/8														16.0

STANDARD SIGN
R5-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/17/23 PLATE NO. R5-2.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 200 | E

R8-8

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	30	1 1/2	3/8	1/2	4	3 5/8	2 1/4	9 1/4	9 5/8	6 5/8	3 5/8	10														5.0
2M	24	30	1 1/2	3/8	1/2	4	3 5/8	2 1/4	9 1/4	9 5/8	6 5/8	3 5/8	10														5.0
3	36	48	1 7/8	1/2	5/8	6	6	4	13 7/8	14 3/8	9 7/8	5 3/8	15														12.0
4	48	60	3	3/4	1	8	7 1/4	4 1/2	18 1/2	19 1/4	13 1/4	7 1/4	20														20.0
5																											

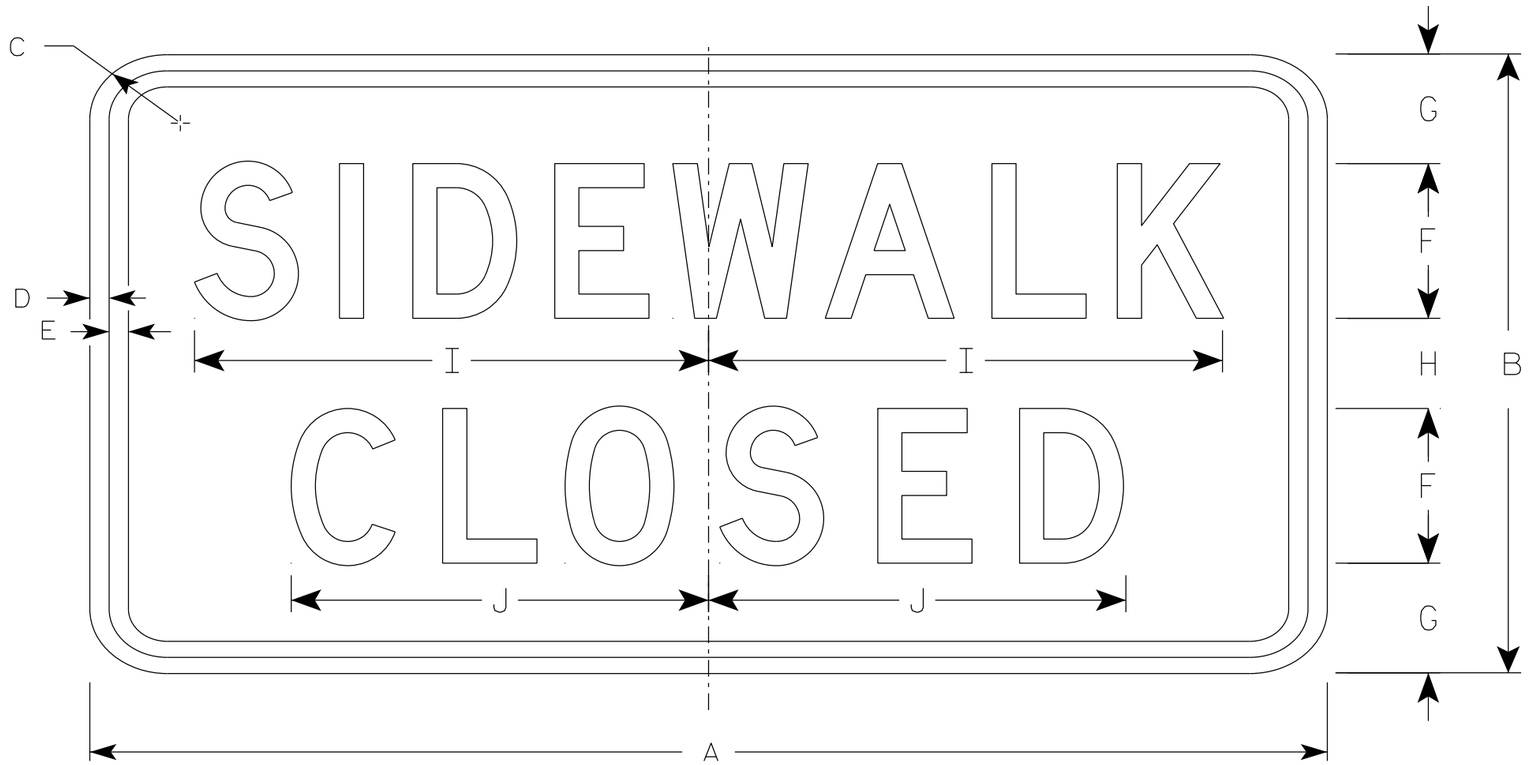
STANDARD SIGN
R8-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/24 PLATE NO. R8-8.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 201 | E



R9-9

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
2M	24	12	1 ½	½	½	3	2 ⅛	1 ¾	10	8 ⅛																	2.0
3	30	18	1 ½	½	½	4	3 ½	3	12 ½	10 ¼																	3.75
4																											
5																											

STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

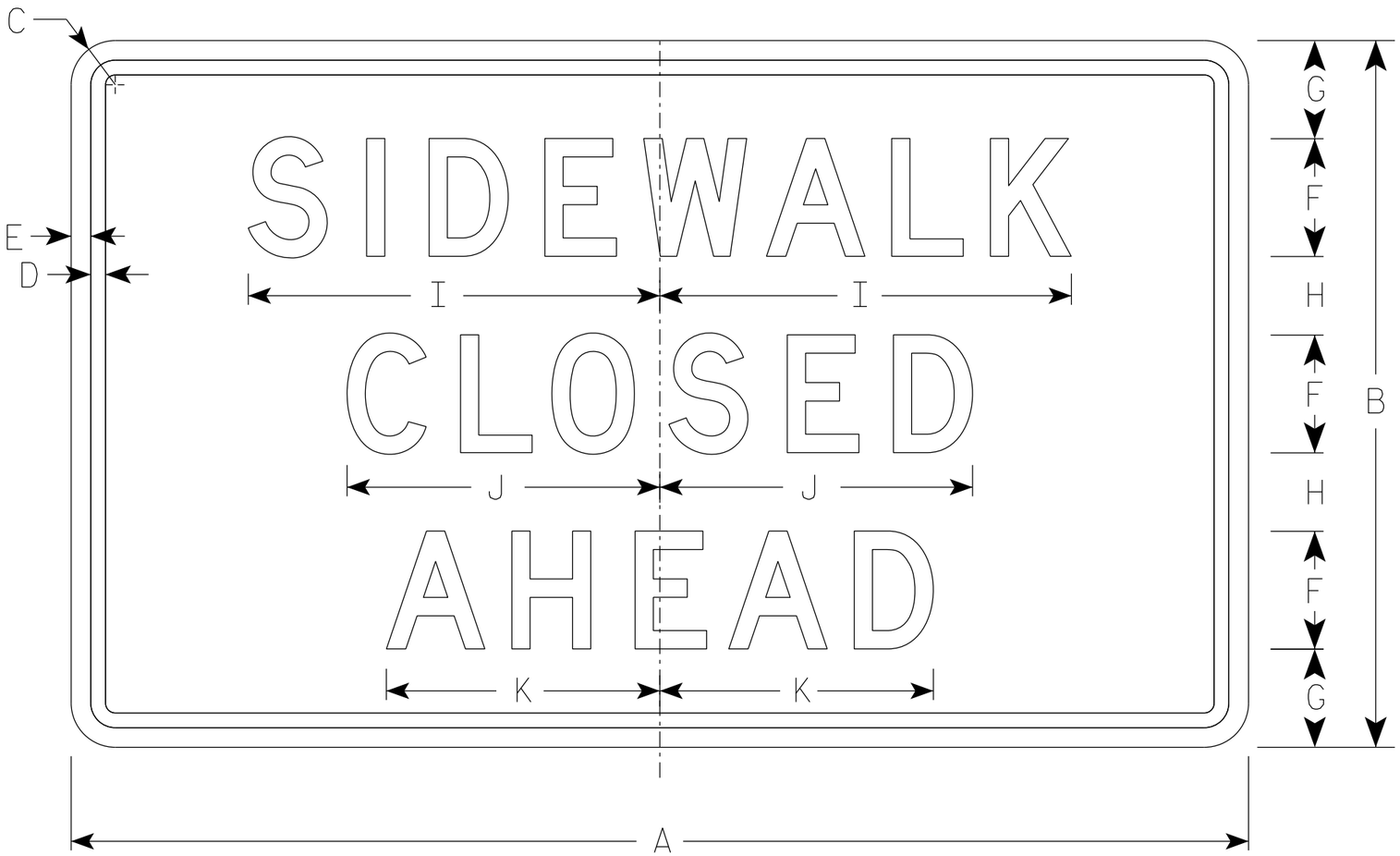
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 202 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



R9-9A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
2M	30	18	1 ½	⅜	½	3	2 ½	2	10 ½	8	7																3.75
3																											
4																											
5																											

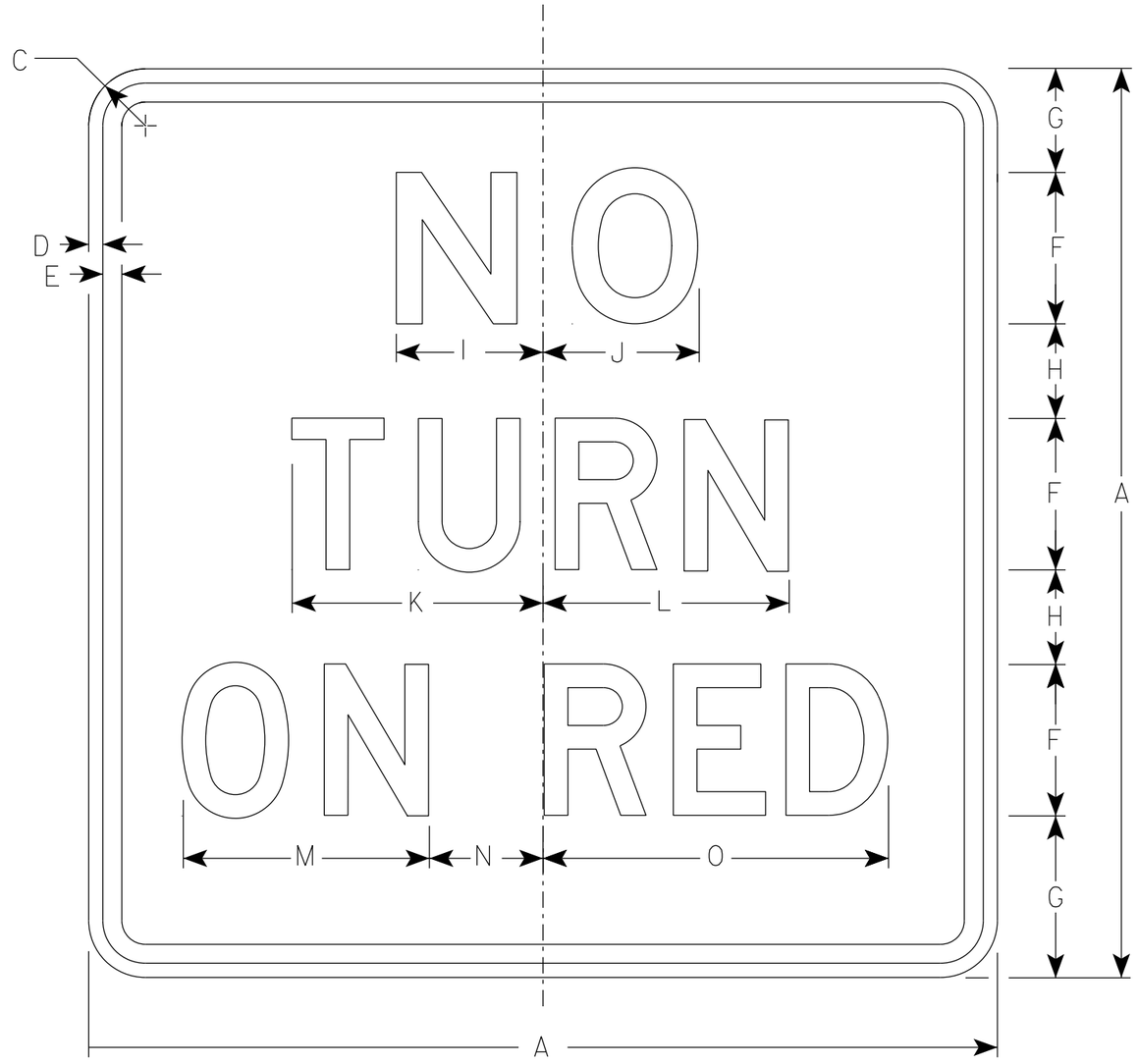
STANDARD SIGN
R9-9A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9A.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 203 | E



R10-11B

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Line 1 is Series E.
   Lines 2 and 3 are Series D.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18		1 1/2	3/8	3/8	3	2 3/4	1 3/4	3	3 1/8	5	4 7/8	5 1/4	1 7/8	7 1/8												2.25
2S	24		1 1/2	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
2M	24		1 1/2	3/8	1/2	4	3 1/2	2 1/2	3 7/8	4 1/8	6 5/8	6 1/2	6 1/2	3	9 1/8												4.0
3	30		1 7/8	1/2	5/8	5	4 1/2	3	4 7/8	5 1/4	8 1/4	8 1/8	7 3/4	4 1/8	11 7/8												6.25
4																											
5																											

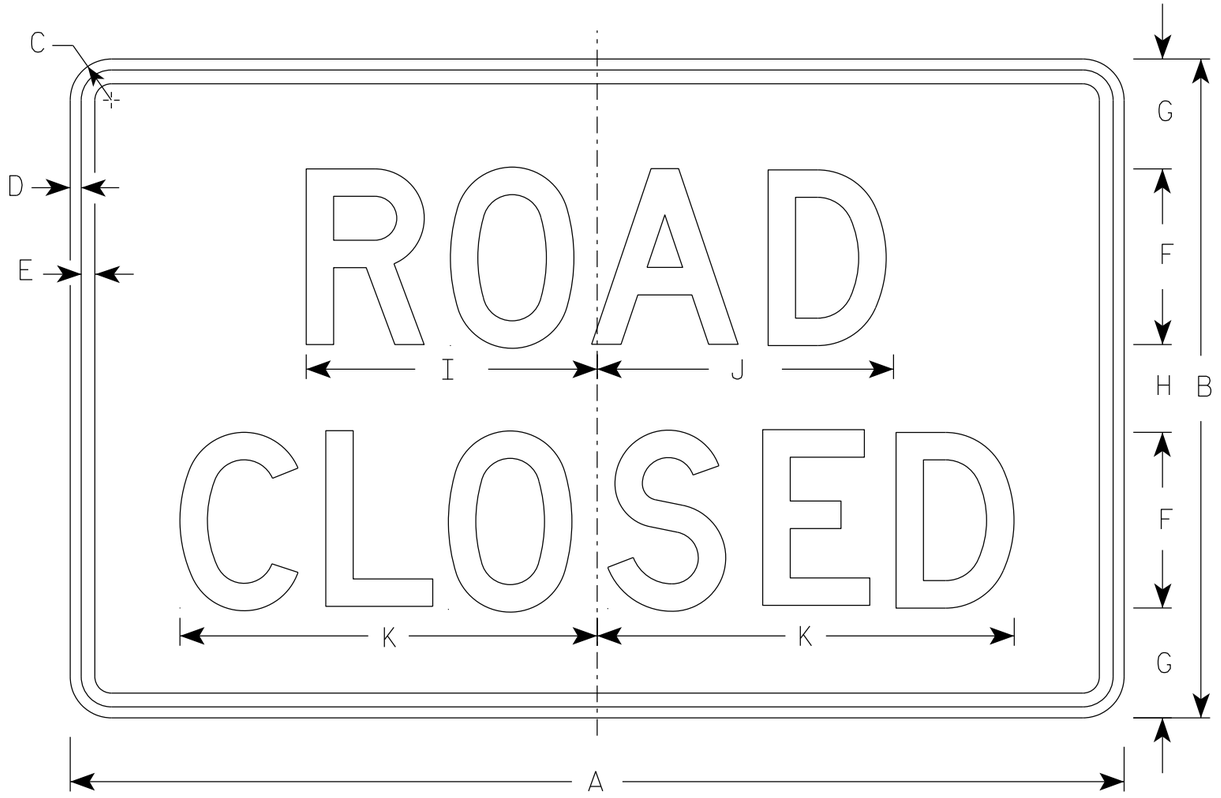
STANDARD SIGN
R10-11B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/31/24 PLATE NO. R10-11B.5

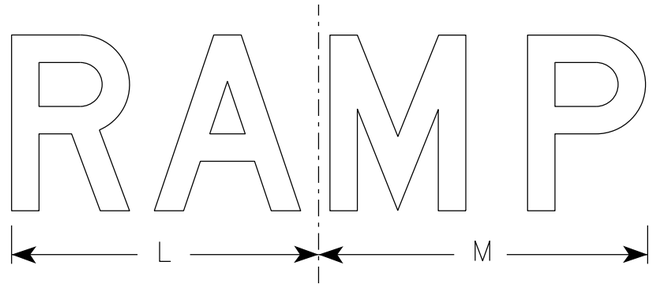
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 204 E



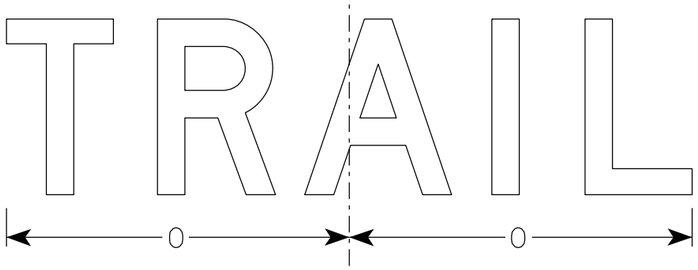
R11-2

NOTES

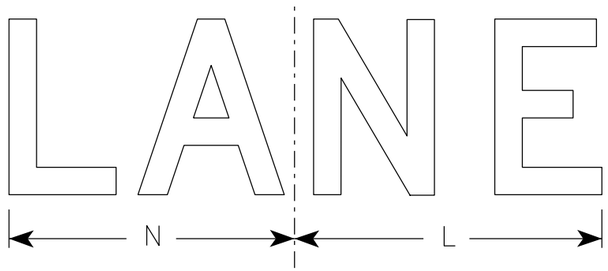
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the 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 7/8	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 7/8	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 7/8	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 7/8	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 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

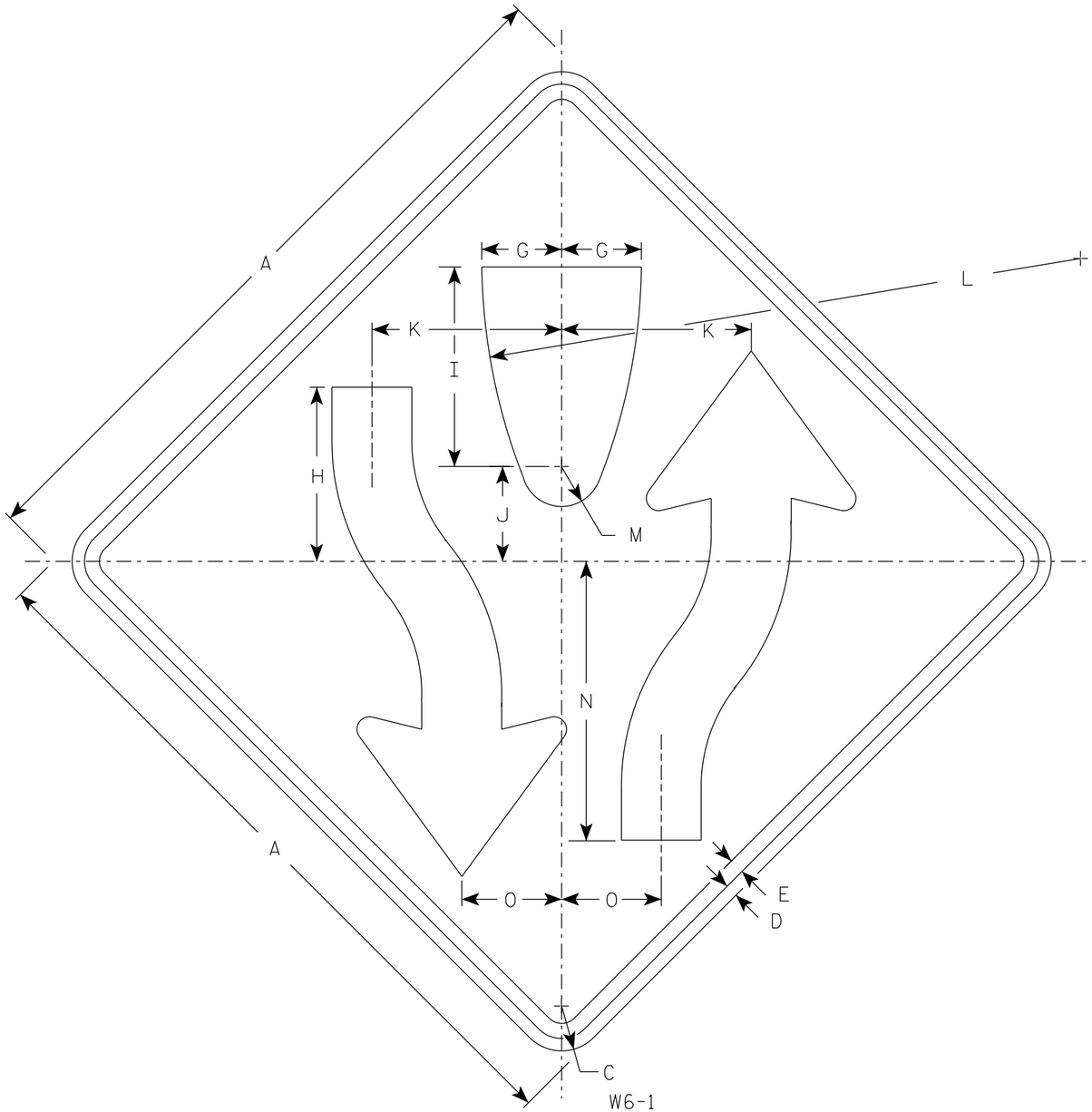
STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

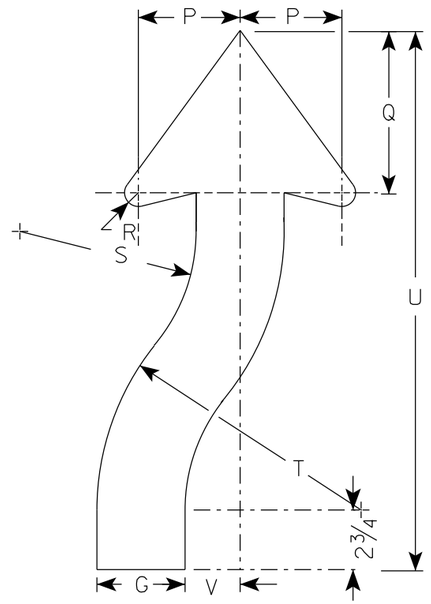
DATE 2/5/24 PLATE NO. R11-2.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W6-2 same as W6-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 7/8	1/2	5/8		3 1/4	8	8 1/4	4 1/8	7 7/8	25	1 3/4	11 5/8	4 1/8	3 7/8	6 3/4	5/8	6 5/8	9 7/8	21 5/8	2					6.25
2S	36		2 1/4	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2M	36		2 1/4	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
3	36		2 1/4	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
4	48		3	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		3	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

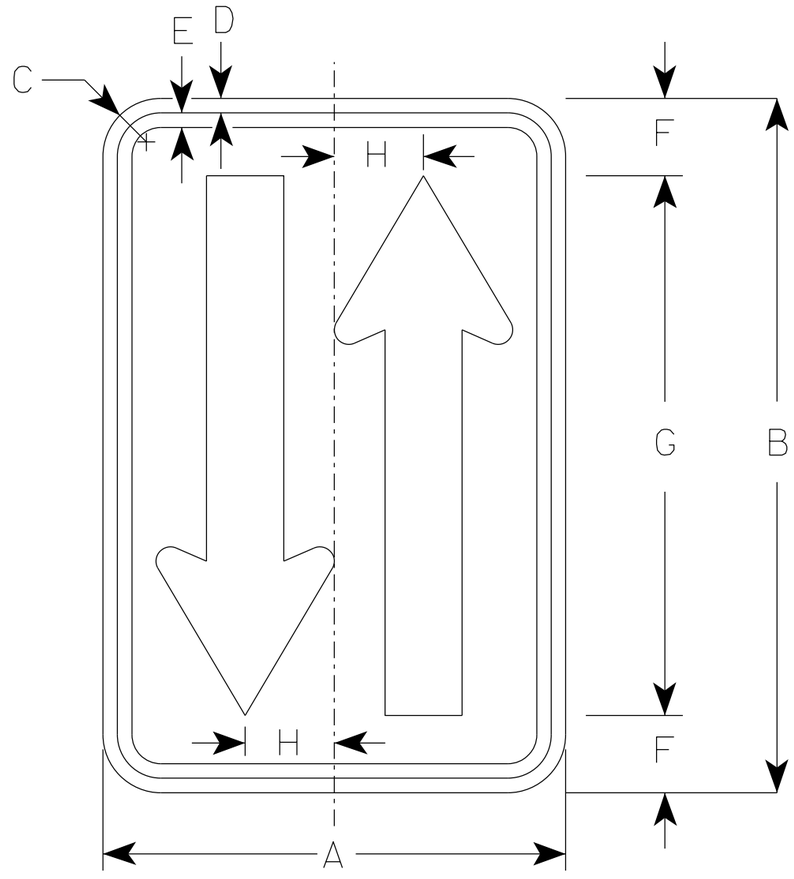
STANDARD SIGN
W6-1 & W6-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/6/2023 PLATE NO. W6-1.15

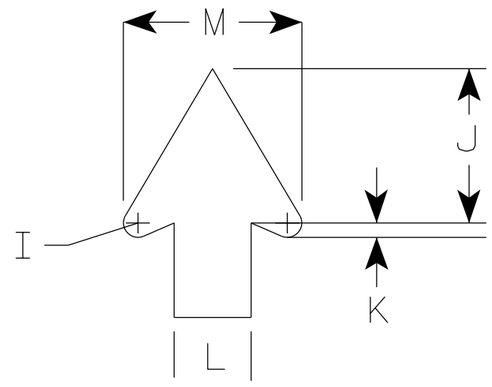
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 206	E



W6-4

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black



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	12	18	1 1/2	3/8	3/8	2	14	2 1/4	3/8	4	1/8	2	4 5/8														1.5
2M	12	18	1 1/2	3/8	3/8	2	14	2 1/4	3/8	4	1/8	2	4 5/8														1.5
3																											
4																											
5																											

STANDARD SIGN
W6-4

WISCONSIN DEPT OF TRANSPORTATION

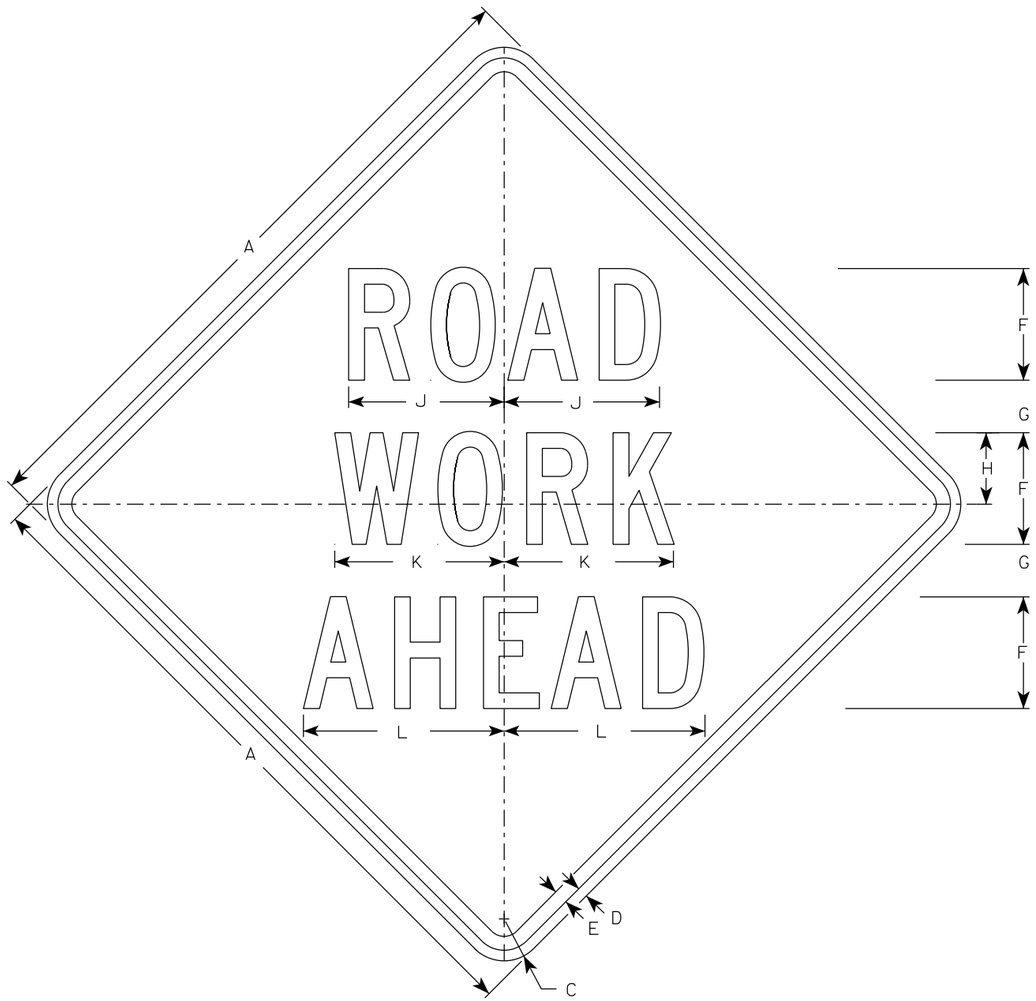
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/6/2023 PLATE NO. W6-4.2

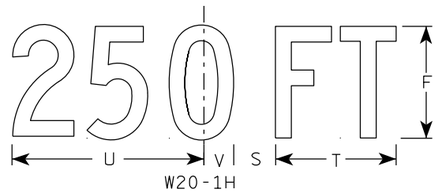
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 207	E

NOTES

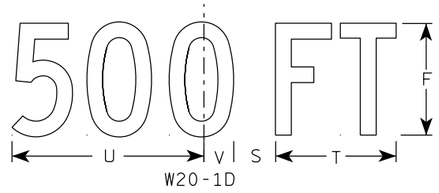
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A

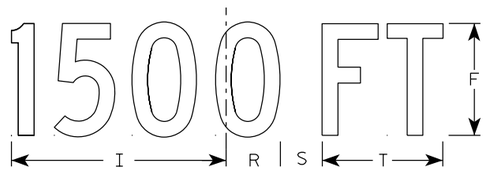


W20-1H

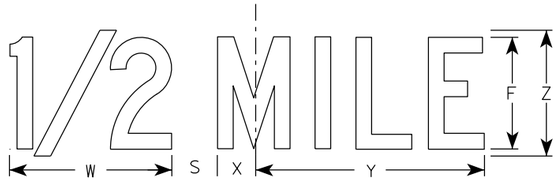


W20-1D

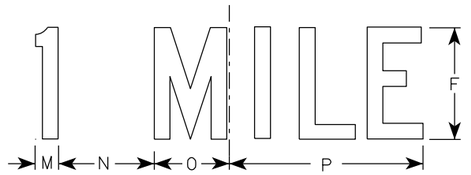
W20-1C



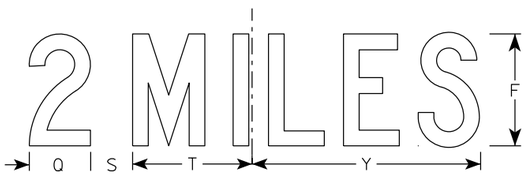
W20-1B



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		2 1/4	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		3	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		3	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		3	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		3	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		3	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 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

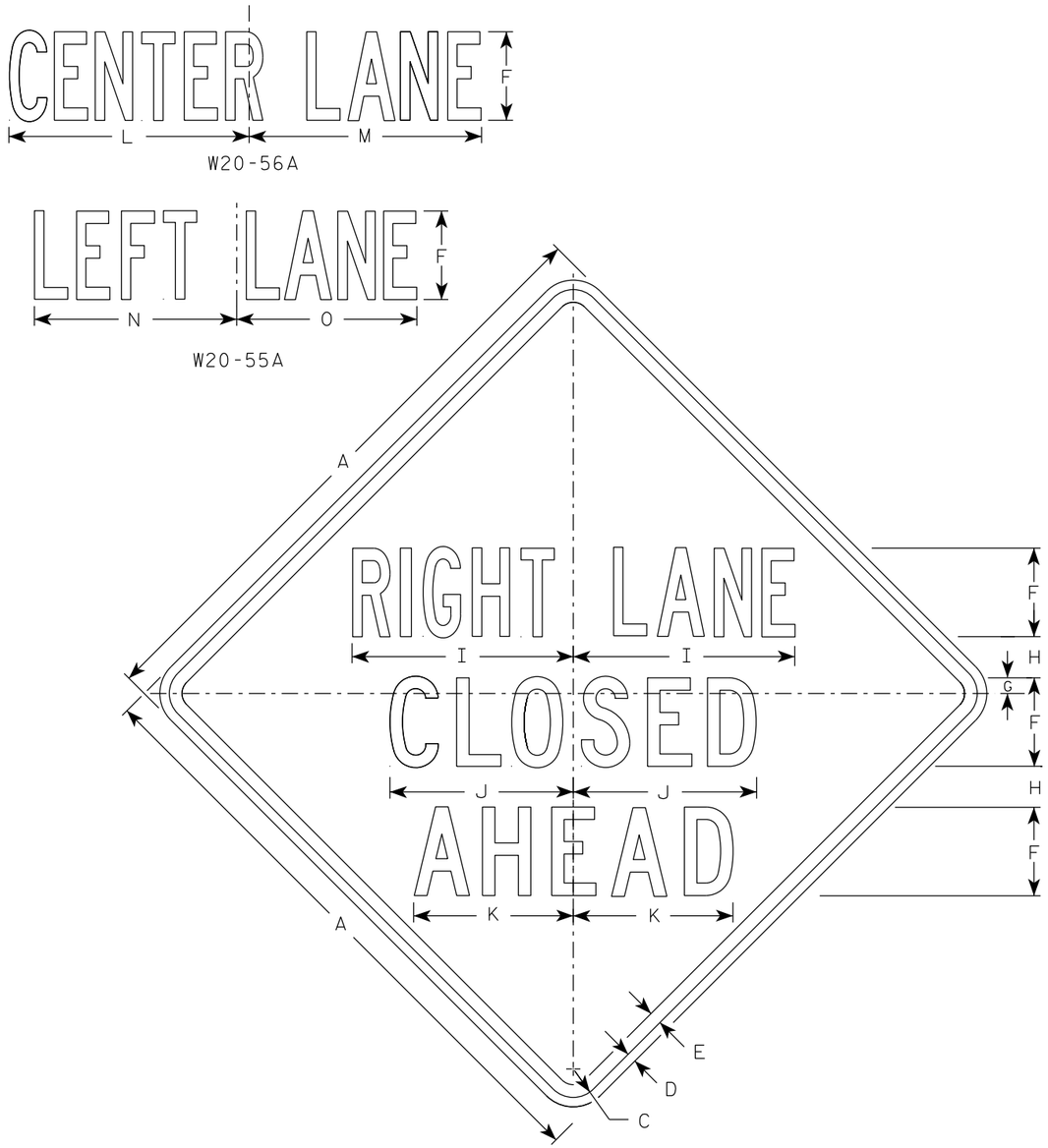
SHEET NO: 208 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 10-JAN 2024 11:16 PLOT BY : dotc4c

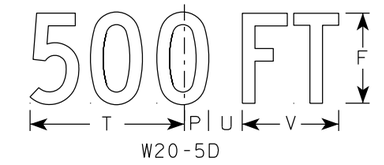
WISDOT/CADDS SHEET 42

7

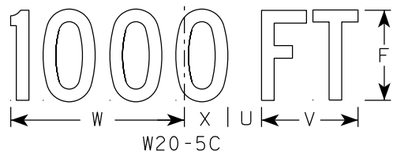
7



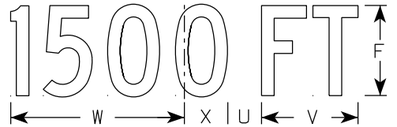
W20-5A



W20-5D



W20-5C



W20-5B

W20-5G

W20-5F

NOTES

1. Sign is Type II - Type F Reflective
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	2 1/4	5/8	3/4	5	7/8	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 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	3	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	3	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	3	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	3	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	3	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

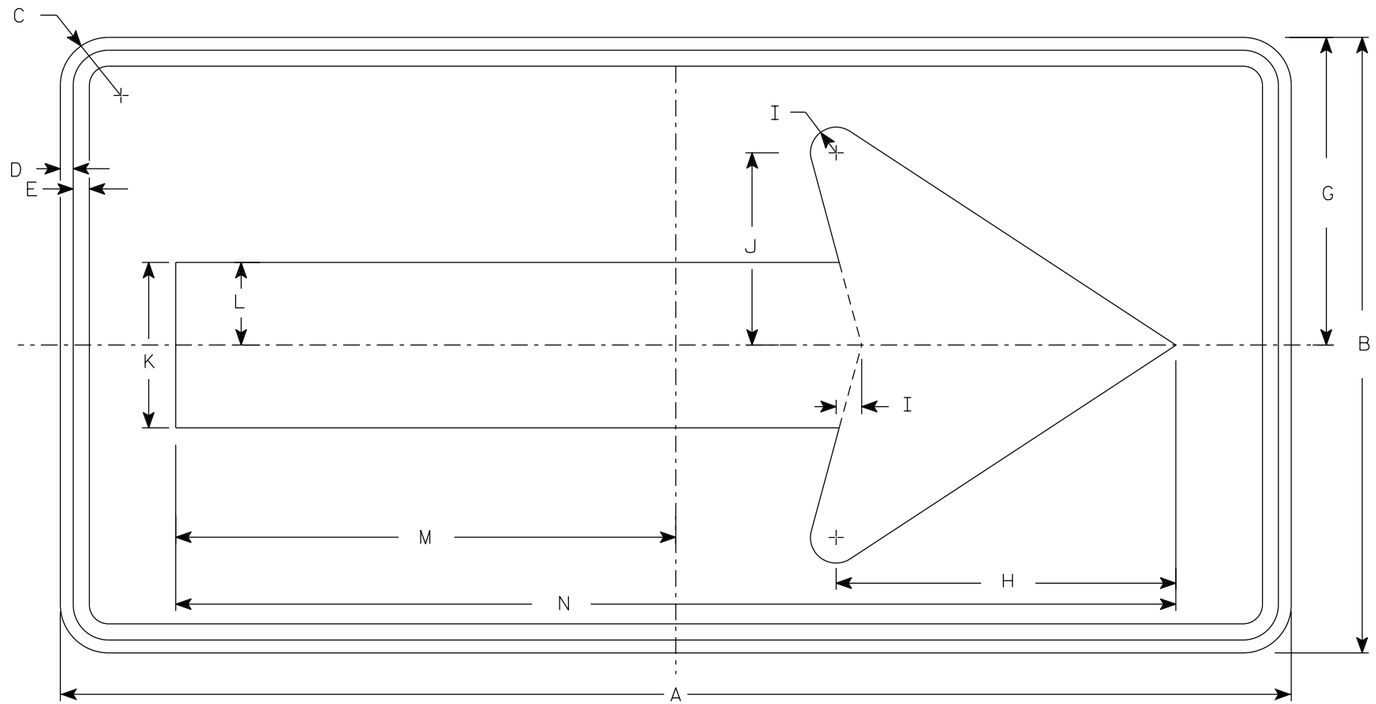
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/27/24 PLATE NO. W20-5.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 209	E



WO1-6

NOTES

1. Sign is Type II - Type F Reflective
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 7/8	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 7/8	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 7/8	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 7/8	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 7/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

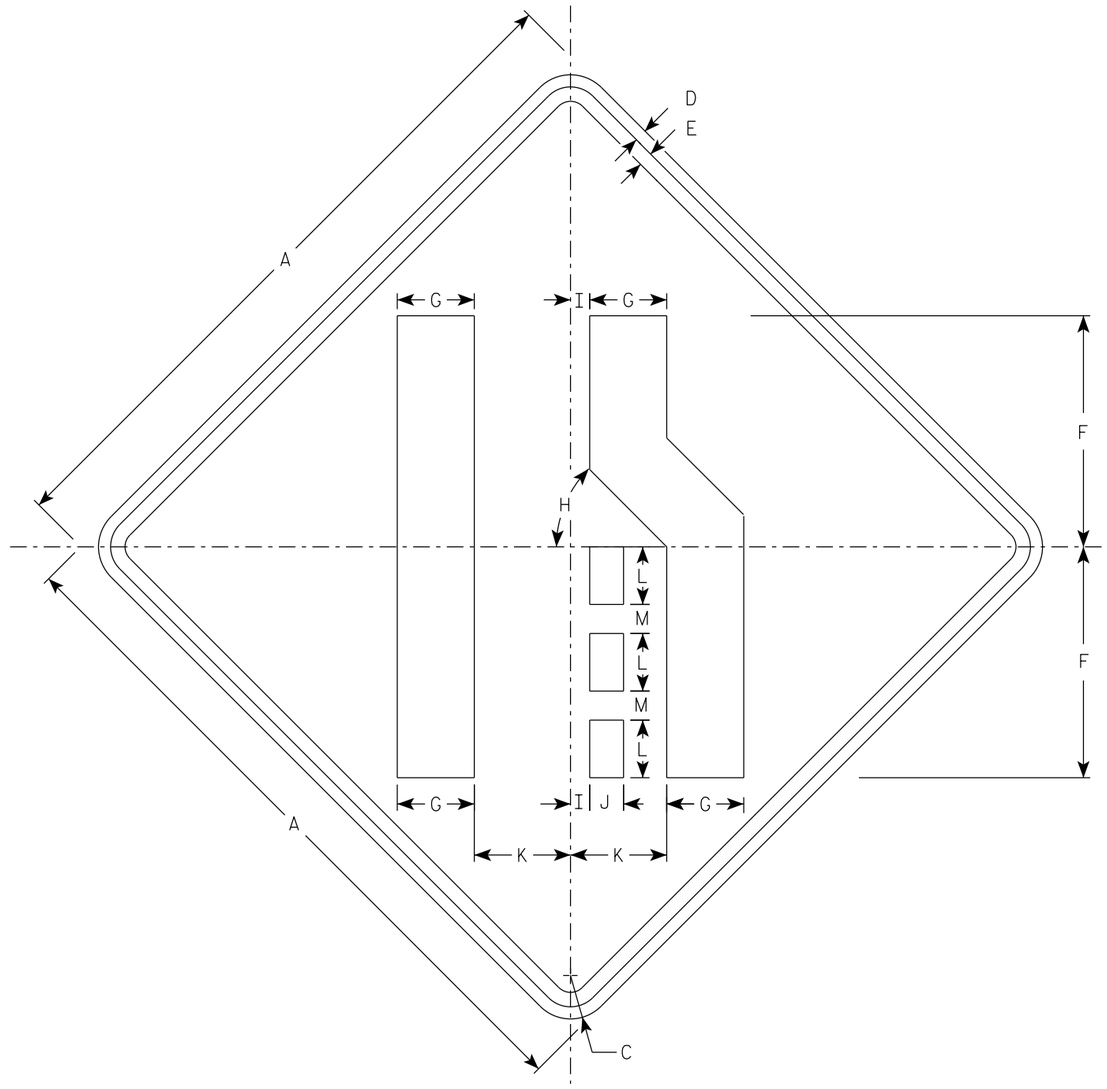
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



W04-2R

NOTES

1. Sign is Type II - Type F Reflective
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		2 1/4	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		3	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		3	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

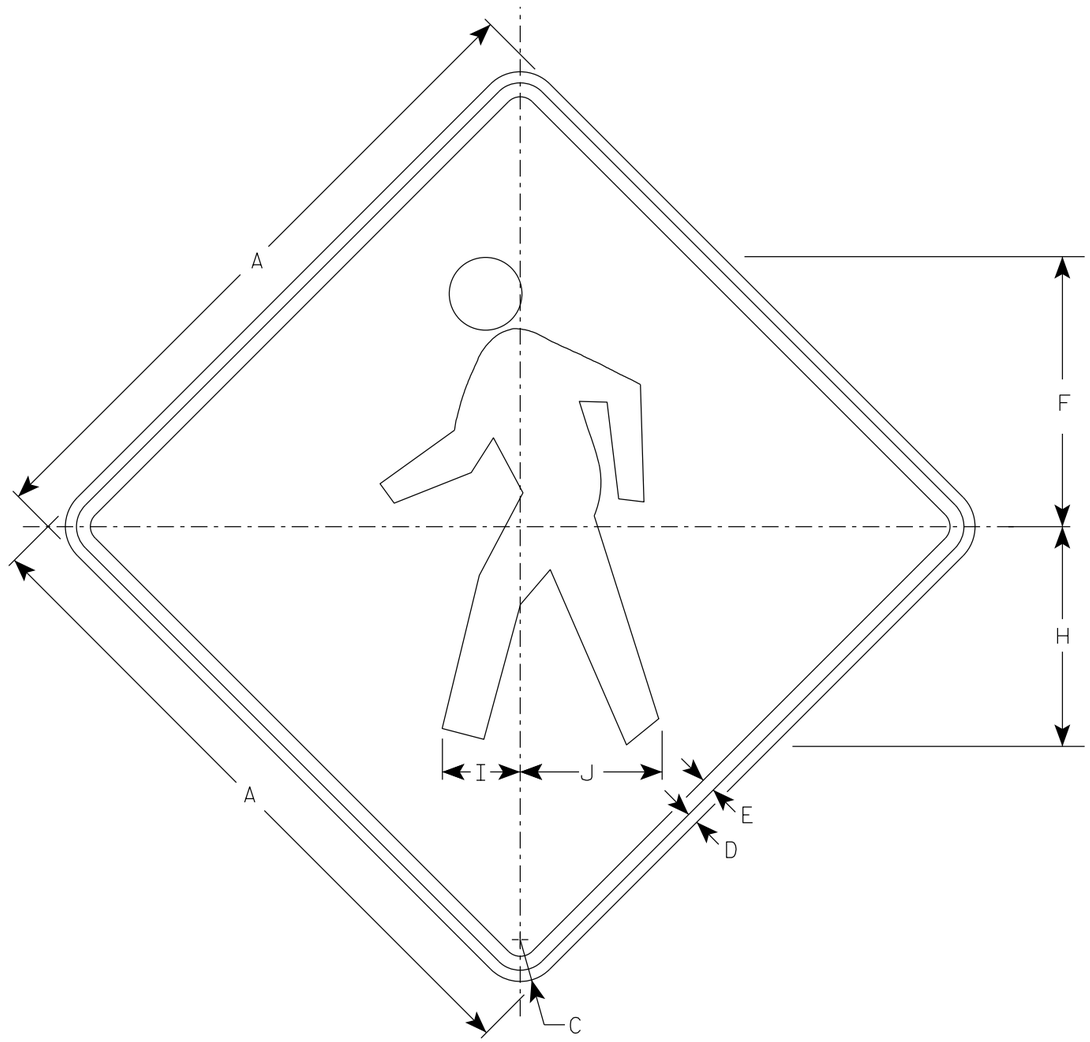
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/25/2024 PLATE NO. W04-2.2

PROJECT NO:

SHEET NO: 211 E



WO11-2

NOTES

1. Sign is Type II - Type F Reflective
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	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
2S	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
2M	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
3	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
4	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN

WO11-2

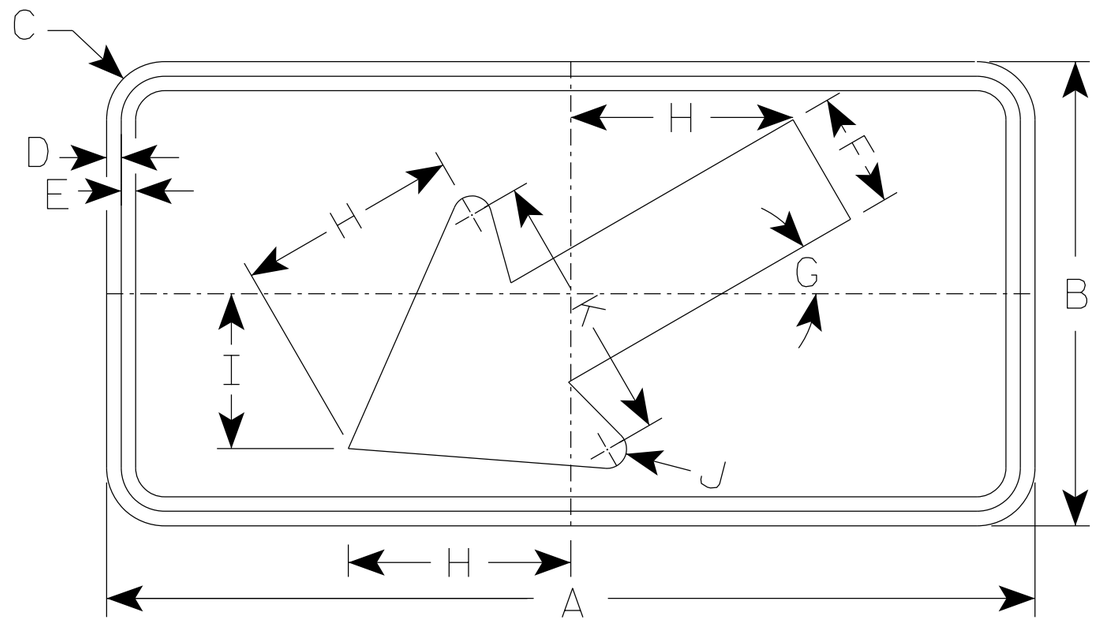
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

For State Traffic Engineer

DATE 2/1/2024 PLATE NO. WO11-2.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 212 E



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0

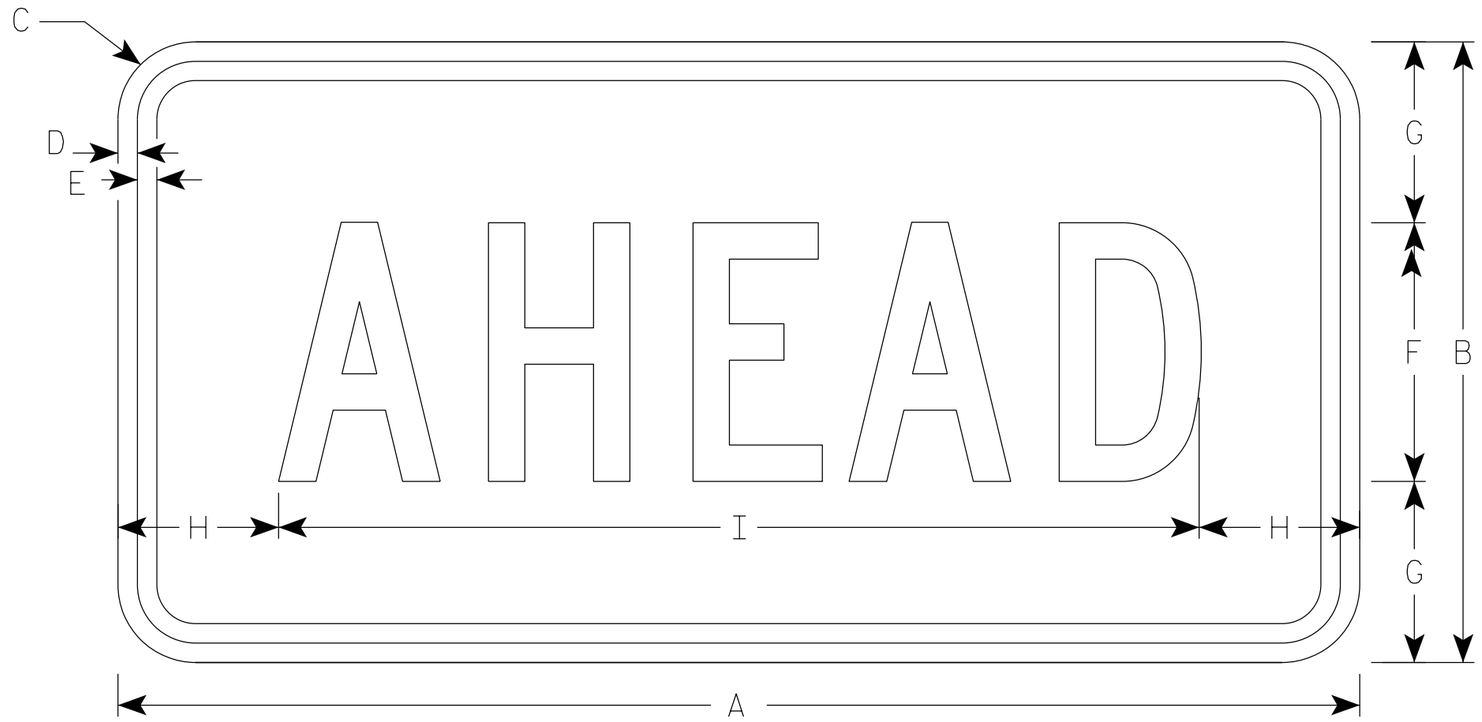
STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W016-7.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 213 | E



W016-9P

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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2S	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
2M	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
3	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
4	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0

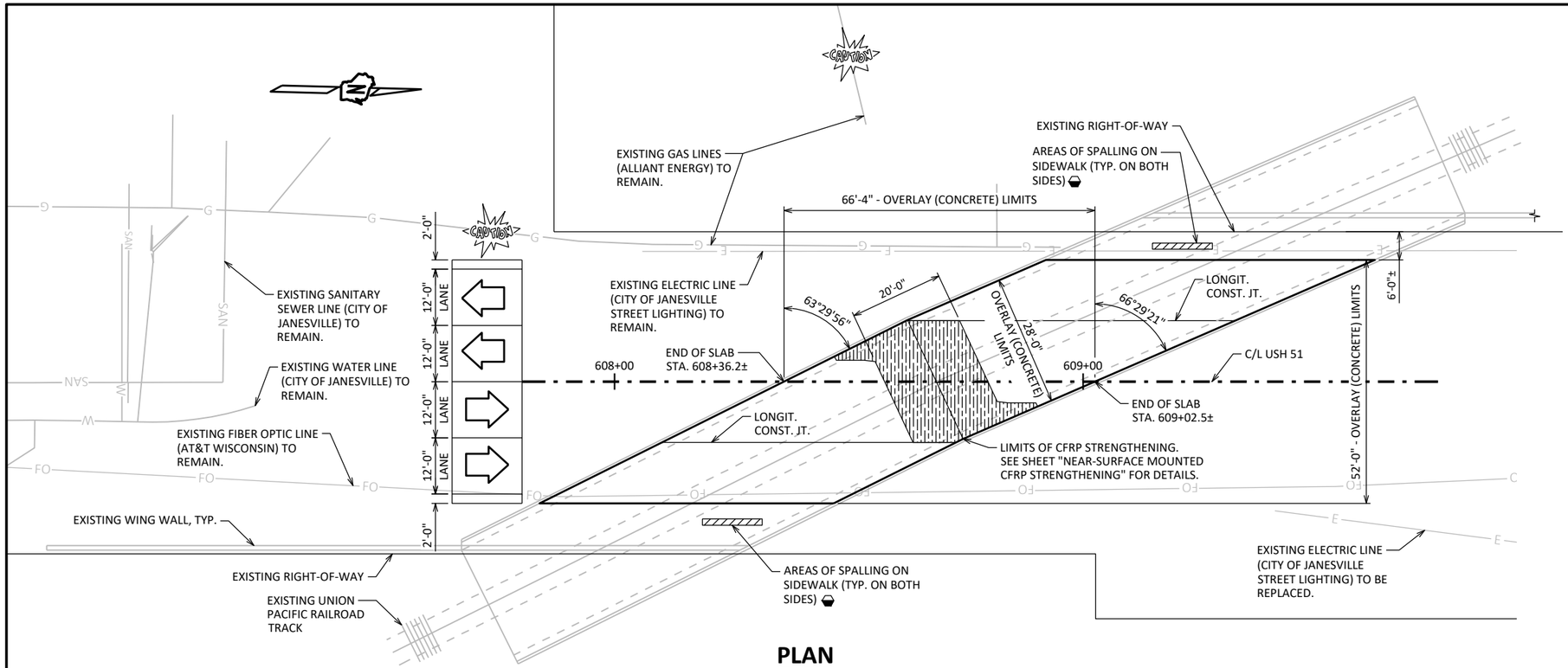
STANDARD SIGN
W016-9P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

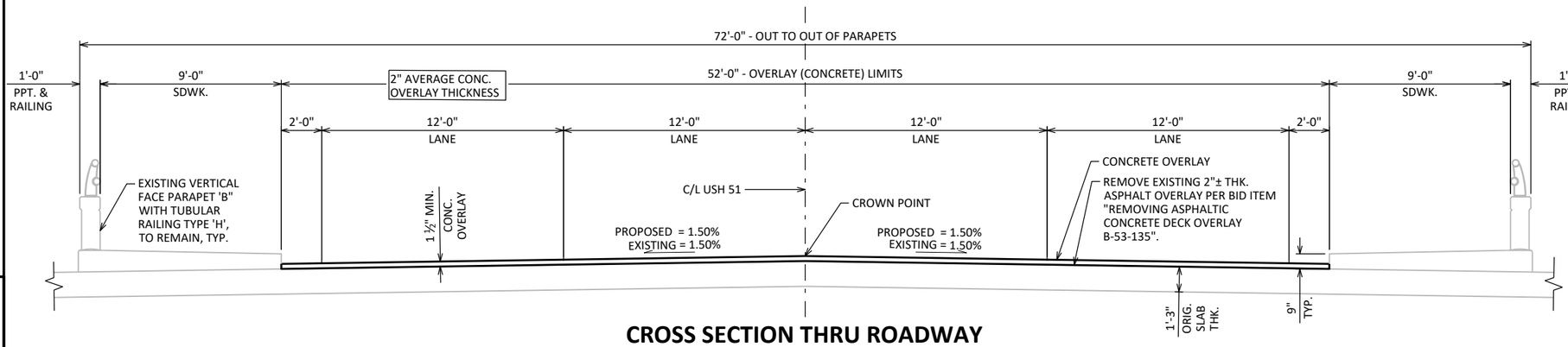
DATE 2/1/2024 PLATE NO. W016-9P.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 214 | E



PLAN

CONCRETE OVERLAY
SINGLE SPAN CONCRETE SLAB BRIDGE



CROSS SECTION THRU ROADWAY

LOOKING NORTH

▲ PROTECTIVE SURFACE TREATMENT RESEAL TO BE APPLIED TO THE ENTIRE TOP AND VERTICAL FACE OF THE REPAIRED CURB, AND EXISTING SIDEWALK WITHIN THE RIGHT OF WAY. SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "PROTECTIVE SURFACE TREATMENT RESEAL".

◐ FULL-DEPTH DECK REPAIR IS NOT PERMITTED. CONTACT BOS IF PREPARATION DECKS TYPE 2 IS NECESSARY BASED ON THE FIELD ENGINEER ASSESSMENT.

◒ CONCRETE SURFACE REPAIR REQUIRED. LOCATIONS NOTED MAY NOT BE ALL INCLUSIVE, AND QUANTITIES SHOWN ON SHEET ARE APPROXIMATE. ADDITIONAL CONCRETE SURFACE REPAIR MAY BE REQUIRED DURING CONSTRUCTION AND SHOULD BE PERFORMED AS DIRECTED BY THE FIELD ENGINEER.

LIMITS OF CFRP STRENGTHENING.

LIST OF DRAWINGS:

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
	502.3200	PROTECTIVE SURFACE TREATMENT	SY	383
▲	502.3215	PROTECTIVE SURFACE TREATMENT RESEAL	SY	121
◐	509.0301	PREPARATION DECKS TYPE 1	SY	25
	509.1200	CURB REPAIR	LF	133
◒	509.1500	CONCRETE SURFACE REPAIR	SF	10
	509.2500	CONCRETE MASONRY OVERLAY DECKS	CY	22
	509.9010.S	REMOVING ASPHALTIC CONCRETE DECK OVERLAY B-53-135	SY	383
	SPV.0060	NEAR-SURFACE MOUNTED CARBON FIBER REINFORCEMENT	EACH	22

DESIGN DATA

STATE PROJECT NUMBER
5350-02-65

LIVE LOAD:

DESIGN LOADING: HS20
INVENTORY RATING: HS-19
OPERATING RATING: HS-32
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 (KIPS)

MATERIAL PROPERTIES:

CONCRETE MASONRY
- OVERLAY DECKS — f'_c = 4,000 PSI
- ALL OTHER — f'_c = 3,500 PSI

CFRP RODS — f_{fu} = 250,000 PSI

TRAFFIC DATA

USH 51:
ADT = 17900 (2044)
R.D.S. = 35 MPH

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

PROTECTIVE SURFACE TREATMENT TO BE APPLIED TO THE ENTIRE TOP SURFACE OF THE NEW CONCRETE OVERLAY.

SEAL OVERLAY CONSTRUCTION JOINTS ACCORDING TO SECTION 502.3.13.1 OF THE STANDARD SPECIFICATIONS. COST INCIDENTAL TO BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

THE AVERAGE OVERLAY THICKNESS IS BASED ON THE MINIMUM OVERLAY THICKNESS PLUS ½-INCH TO ACCOUNT FOR VARIATIONS IN THE DECK SURFACE.

◐ PREPARATION DECKS TYPE 1 AREAS ARE DETERMINED BY THE FIELD ENGINEER. DECK PREPARATION SHALL BE FILLED WITH "CONCRETE MASONRY OVERLAY DECKS".

ANY EXCAVATION NECESSARY TO COMPLETE THE OVERLAY AT THE ABUTMENTS IS TO BE CONSIDERED INCIDENTAL TO THE BID ITEM "CONCRETE MASONRY OVERLAY DECKS".

THE EXISTING OVERLAY SHALL BE REMOVED FROM THE BRIDGE DECK UNDER BID ITEM "REMOVING ASPHALTIC CONCRETE DECK OVERLAY B-53-135".

PROFILE GRADE LINE SHALL BE DETERMINED IN THE FIELD BASED ON A MINIMUM OVERLAY THICKNESS OF 1½" PLACED ABOVE THE DECK SURFACE AFTER SURFACE PREPARATION. EXPECTED AVERAGE OVERLAY THICKNESS IS 2" (OR AS GIVEN ON PLANS). IF EXPECTED AVERAGE OVERLAY THICKNESS IS EXCEEDED BY MORE THAN ½", CONTACT THE STRUCTURES DESIGN SECTION.

SEE ROADWAY PLANS FOR ADDITIONAL TRAFFIC STAGING DETAILS.

"PROTECTIVE SURFACE TREATMENT RESEAL" AND "CONCRETE SURFACE REPAIR" BID ITEMS ON THE WEST SIDEWALK TO BE PERFORMED WITHIN 6' FROM THE THE INSIDE FACE OF CURB TO STAY WITHIN THE RIGHT OF WAY.

SCOPE OF WORK:

- REMOVAL OF EXISTING ASPHALT OVERLAY.
- INSTALLATION OF NEAR-SURFACE MOUNTED CFRP (CARBON FIBER REINFORCED POLYMER) STRENGTHENING SYSTEM.
- PLACEMENT OF NEW CONCRETE OVERLAY.

STRUCTURE DESIGN CONTACTS:
VISTA SHAHRIARI 608-266-7086
KYLE BUSCH 608-267-0465

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES
ACCEPTED KHB 7/28/25
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-53-135

USH 51 OVER UNION PACIFIC RAILROAD

COUNTY	CITY
ROCK	JANESVILLE

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGN CK'D	DRAWN BY	PLANS CK'D
VS	MWB	VS	MWB

CONCRETE OVERLAY

SHEET 1 OF 3
215

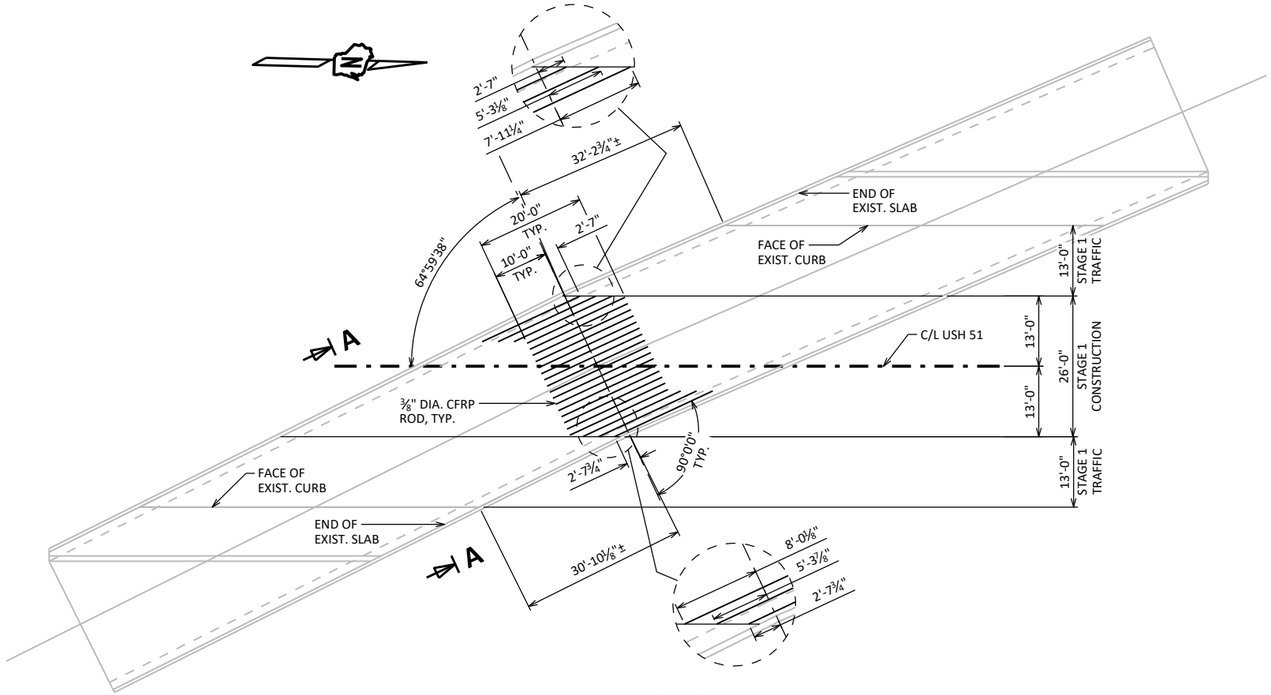
I.D. 5350-02-35A DATE: JUNE 2024

8

8

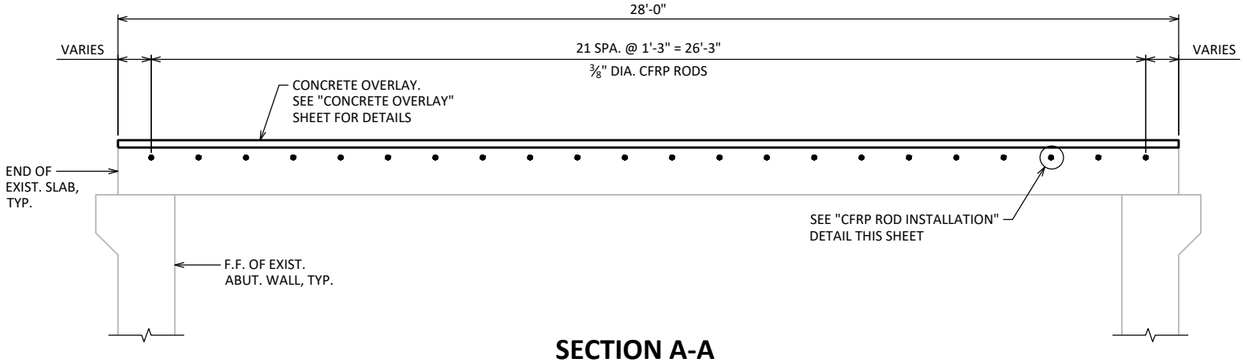
STATE PROJECT NUMBER

5350-02-65

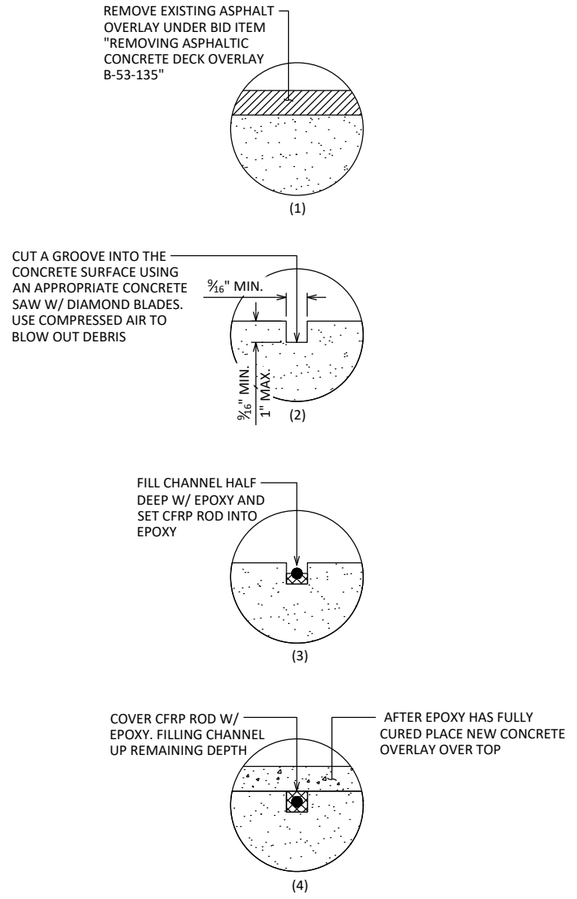


PLAN

CFRP RODS LAYOUT



SECTION A-A



CFRP ROD INSTALLATION

(SEE "NEAR-SURFACE MOUNTED CARBON FIBER REINFORCEMENT" SPV FOR ADDITIONAL INSTALLATION INFORMATION)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-135

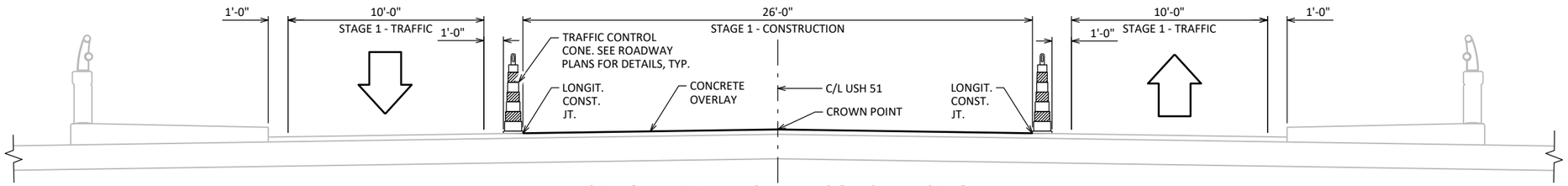
DRAWN BY VS | PLANS CK'D MWB

NEAR-SURFACE MOUNTED CFRP STRENGTHENING

SHEET 2

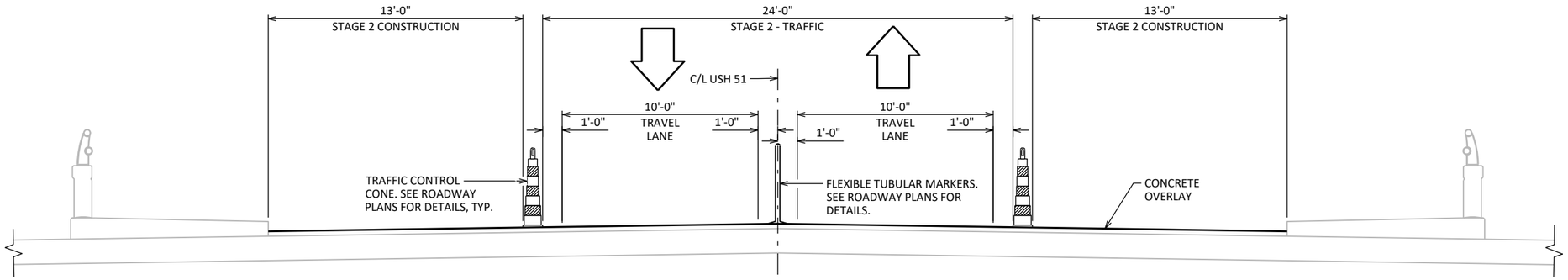
STATE PROJECT NUMBER

5350-02-65



STAGE 1 TRAFFIC AND CONSTRUCTION

(LOOKING NORTH)



STAGE 2 TRAFFIC AND CONSTRUCTION

(LOOKING NORTH)

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-135

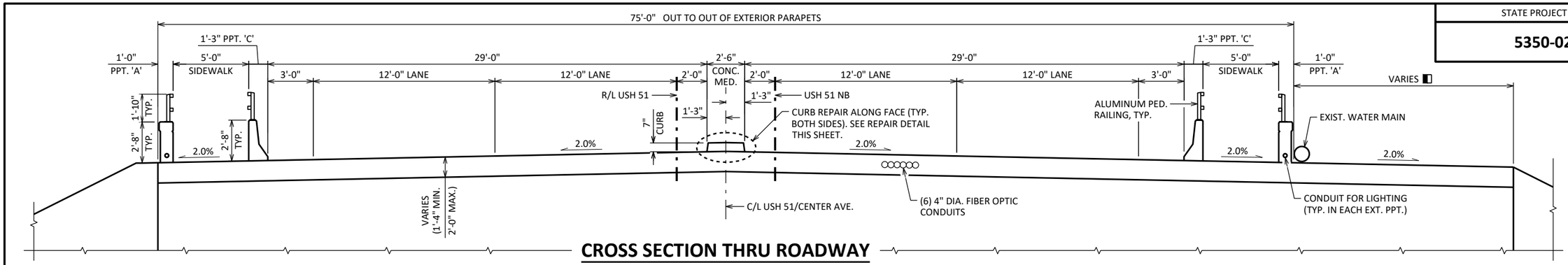
DRAWN BY VS | PLANS CK'D MWB

STAGING DETAILS

SHEET 3
217

STATE PROJECT NUMBER

5350-02-70



CROSS SECTION THRU ROADWAY

LOOKING NORTH

DESIGN DATA

LIVE LOAD:

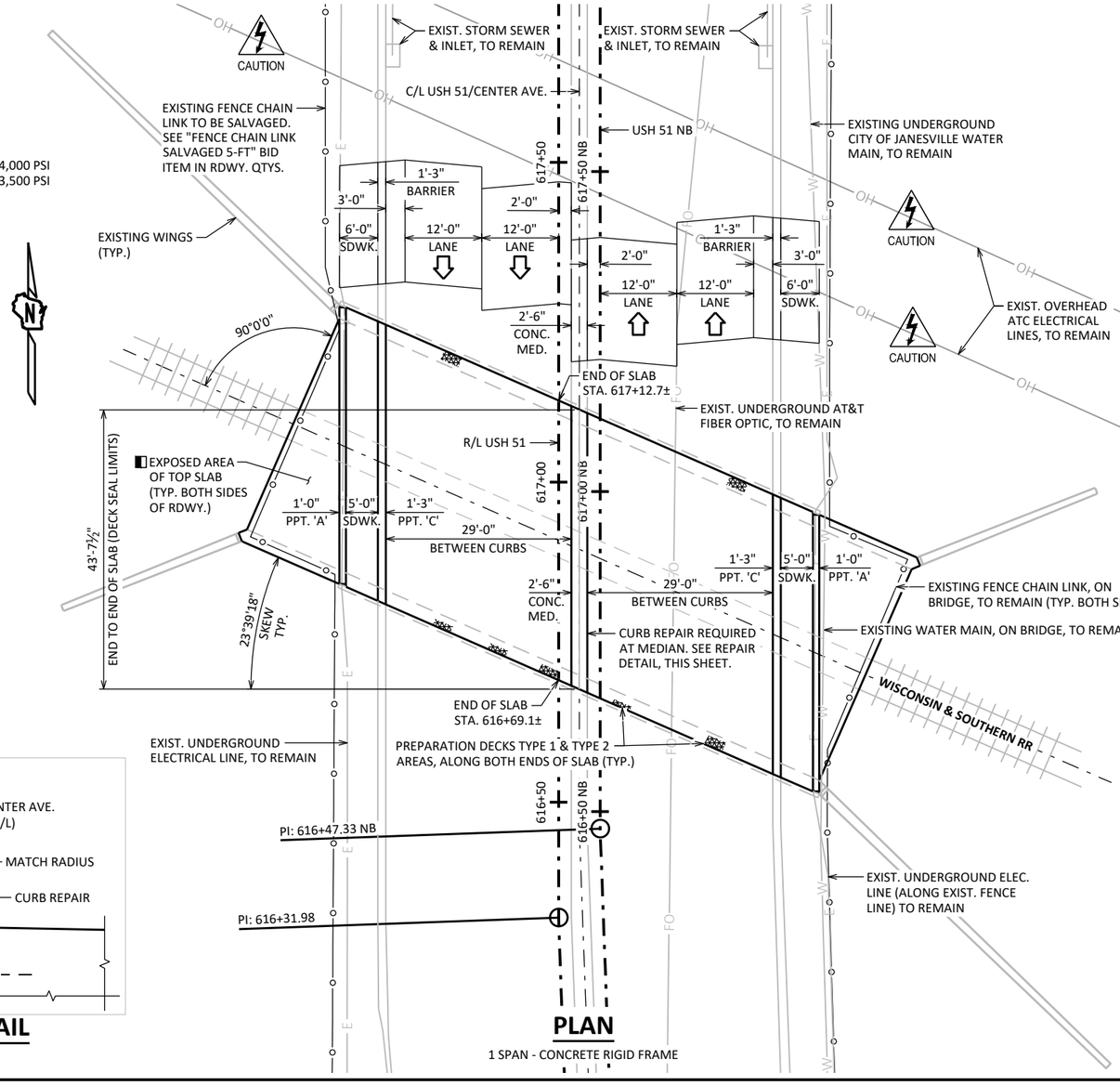
INVENTORY RATING: HS-26
OPERATING RATING: HS-44
MAXIMUM STANDARD PERMIT LOAD: 220 (KIPS)
(3/20/1990 RATING, FROM HSIS)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
SUPERSTRUCTURE —— f'_c = 4,000 PSI
ALL OTHER —— f'_c = 3,500 PSI

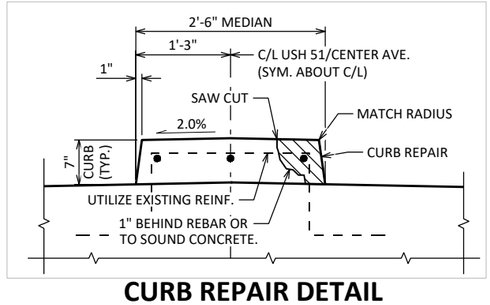
TRAFFIC DATA

USH 51/CENTER AVE.
ADT = 17,900 (2044)
R.D.S. = 35 MPH



PLAN

1 SPAN - CONCRETE RIGID FRAME



CURB REPAIR DETAIL

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 AREAS ARE APPROXIMATE. LOCATIONS NOTED MAY NOT BE ALL INCLUSIVE, AND QUANTITIES SHOWN ON SHEET ARE APPROXIMATE. ADDITIONAL REPAIR MAY BE REQUIRED DURING CONSTRUCTION AND SHOULD BE PERFORMED AS DIRECTED BY THE FIELD ENGINEER. DECK PREPARATION AREAS SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".

CURB REPAIR LOCATIONS/AREAS TO BE DETERMINED BY THE FIELD ENGINEER, AND THE QUANTITY SHOWN ON THIS SHEET IS APPROXIMATE. CURB REPAIRS SHALL BE FILLED WITH "CONCRETE MASONRY DECK REPAIR".

◧ PROTECTIVE SURFACE TREATMENT RESEAL TO BE APPLIED TO THE ENTIRE EXPOSED TOP OF SLAB SURFACES (INCLUDING BOTH SIDEWALKS & EXPOSED AREAS OUTSIDE EXTERIOR SIDEWALK PARAPETS), MEDIAN, AND TO THE VERTICAL AND HORIZONTAL SURFACES OF THE PAVING NOTCHES. SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "PROTECTIVE SURFACE TREATMENT RESEAL".

PIGMENTED SURFACE SEALER RESEAL TO BE APPLIED TO THE FRONT FACE AND THE TOP OF BOTH THE EXTERIOR PARAPETS AND INTERIOR TRAFFIC BARRIERS. SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "PIGMENTED SURFACE SEALER RESEAL".

TOTAL ESTIMATED QUANTITIES

	BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
✳	502.0717.S	CRACK SEALING EPOXY	LF	400
	502.3205	PIGMENTED SURFACE SEALER RESEAL	SY	67
◧	502.3215	PROTECTIVE SURFACE TREATMENT RESEAL	SY	459
	509.0301	PREPARATION DECKS TYPE 1	SY	2
	509.0302	PREPARATION DECKS TYPE 2	SY	1
	509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	20
	509.1200	CURB REPAIR	LF	15
	509.2100.S	CONCRETE MASONRY DECK REPAIR	CY	1

✳ UNDISTRIBUTED QUANTITY AT TOP OF SLAB. LOCATIONS AND TOTAL LENGTH TO BE DETERMINED BY FIELD ENGINEER.

LIST OF DRAWINGS:

STRUCTURE DESIGN CONTACTS:

ALEXANDER CRABTREE	(608) 266-3686
KYLE BUSCH	(608) 267-0465

NO.	DATE	REVISION	BY

BUREAU OF STRUCTURES

ACCEPTED KHB 11/7/23
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE B-53-154

USH 51/CENTER AVE. OVER WISC. SOUTHERN RR

COUNTY	CITY
ROCK	JANESVILLE

DESIGN SPEC.
REHABILITATION N/A

DESIGNED BY	DESIGNED CK'D	DRAWN BY	PLANS CK'D
ARC	MWB	ARC	MWB

GENERAL PLAN

SHEET 1 OF 2
218

SCALE =

I.D. 5350-02-00C

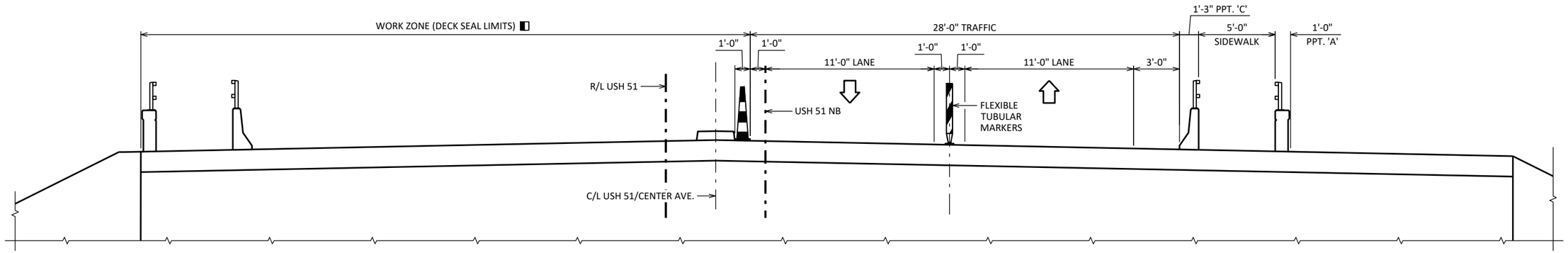
DATE: NOV. 2023

8

8

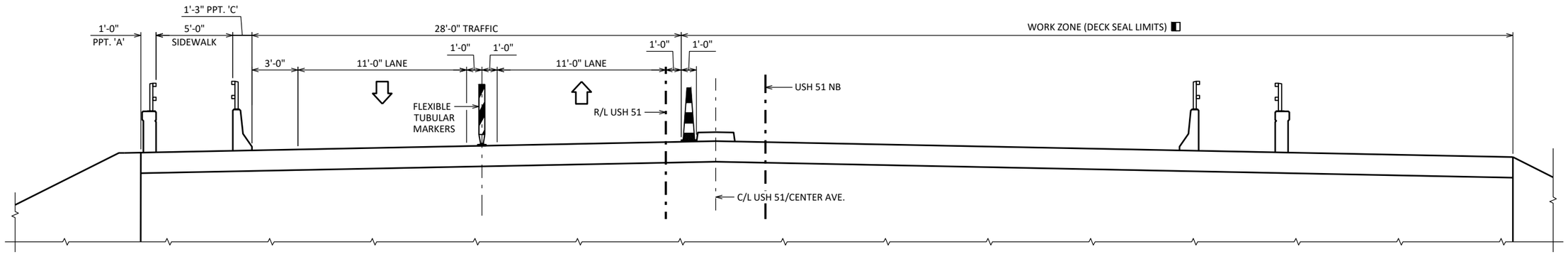
STATE PROJECT NUMBER

5350-02-70



STAGE 1 TRAFFIC & CONSTRUCTION

LOOKING NORTH



STAGE 2 TRAFFIC & CONSTRUCTION

LOOKING NORTH

8

8

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-53-154

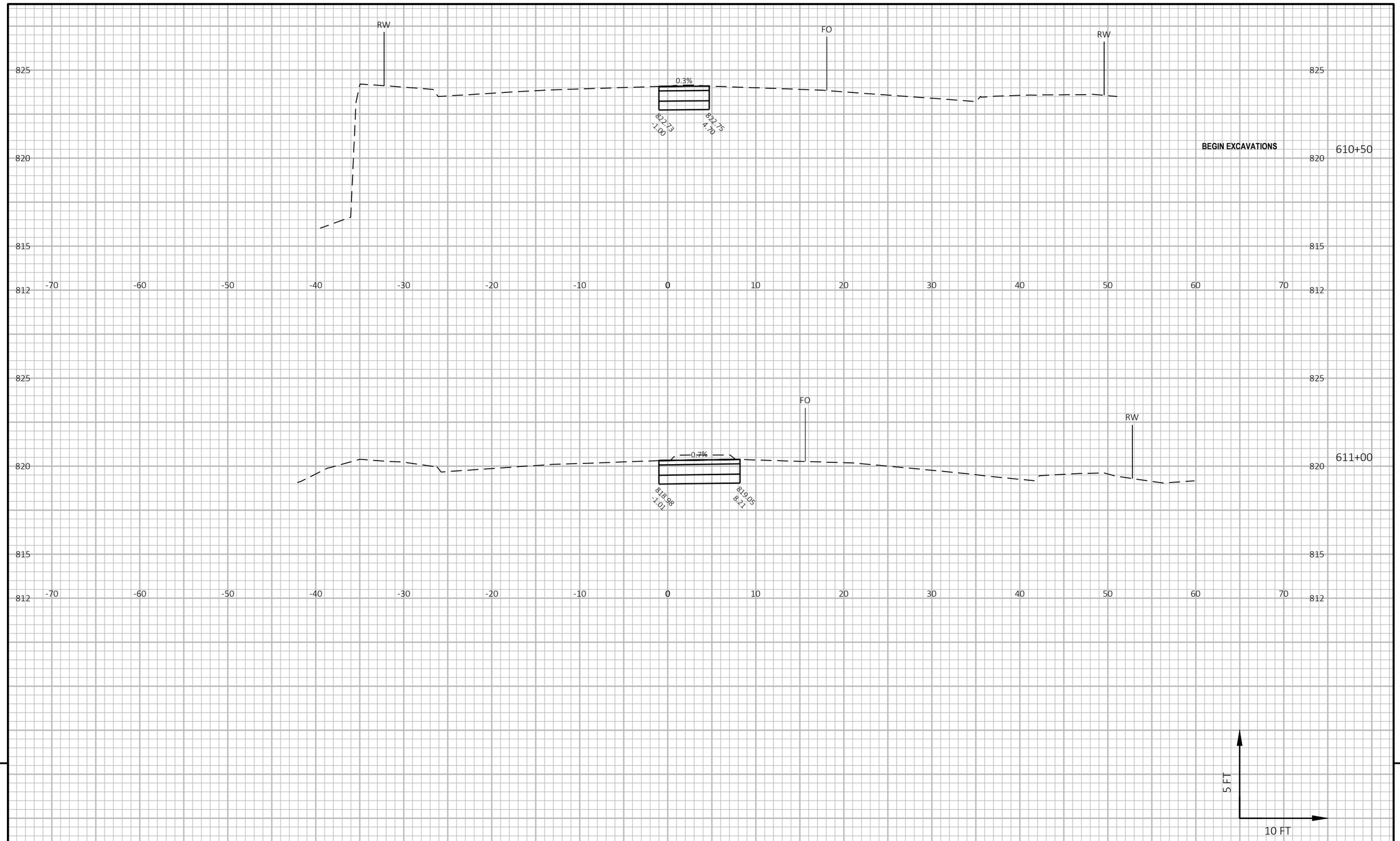
DRAWN BY ARC | PLANS CK'D MWB

STAGING DETAILS

SHEET 2
219

SCALE =

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						1.00	1.10	
610+50.00	0.00	7.81	0.00	0	0	0	0	0
611+00.00	50.00	14.22	0.00	20	0	20	0	20
611+50.00	50.00	31.36	0.00	42	0	62	0	62
612+00.00	50.00	44.98	0.00	71	0	133	0	133
612+73.25	73.25	37.55	0.00	112	0	245	0	245
613+00.00	26.75	35.96	1.41	36	1	281	1	280
613+50.00	50.00	23.96	0.81	55	2	336	3	333
614+00.00	50.00	21.69	0.86	42	2	378	6	373
614+25.00	25.00	25.42	1.68	22	1	400	7	393
614+50.00	25.00	31.21	0.85	26	1	426	8	418
614+59.54	9.54	32.33	0.94	11	0	437	8	429
614+84.21	24.67	27.09	1.58	27	1	464	9	455
615+00.00	15.79	26.45	1.28	16	1	480	10	470
615+07.54	7.54	25.03	1.22	7	0	487	10	477
615+50.00	42.46	52.50	0.30	61	1	548	11	537
616+00.00	50.00	11.43	0.03	59	0	607	11	596
616+50.00	50.00	0.00	0.00	11	0	618	11	607
616+68.06	18.06	0.00	0.00	0	0	618	11	607
			TOTAL	618	10			



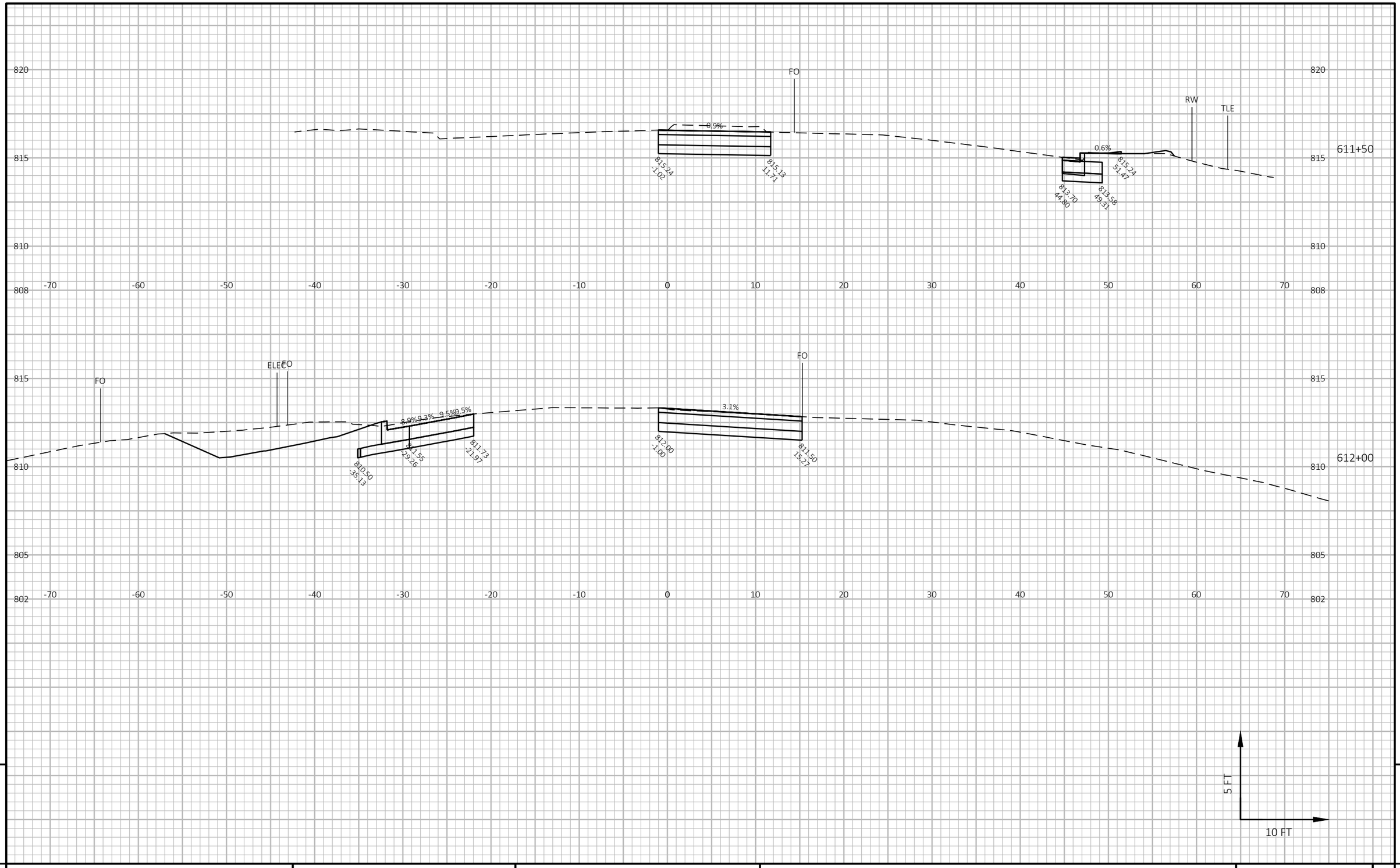
9

9

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CROSS SECTIONS: USH 51	SHEET 221	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\090201-XS.DWG
LAYOUT NAME - 01

PLOT DATE : 4/15/2025 9:30 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:5 FT VERT.



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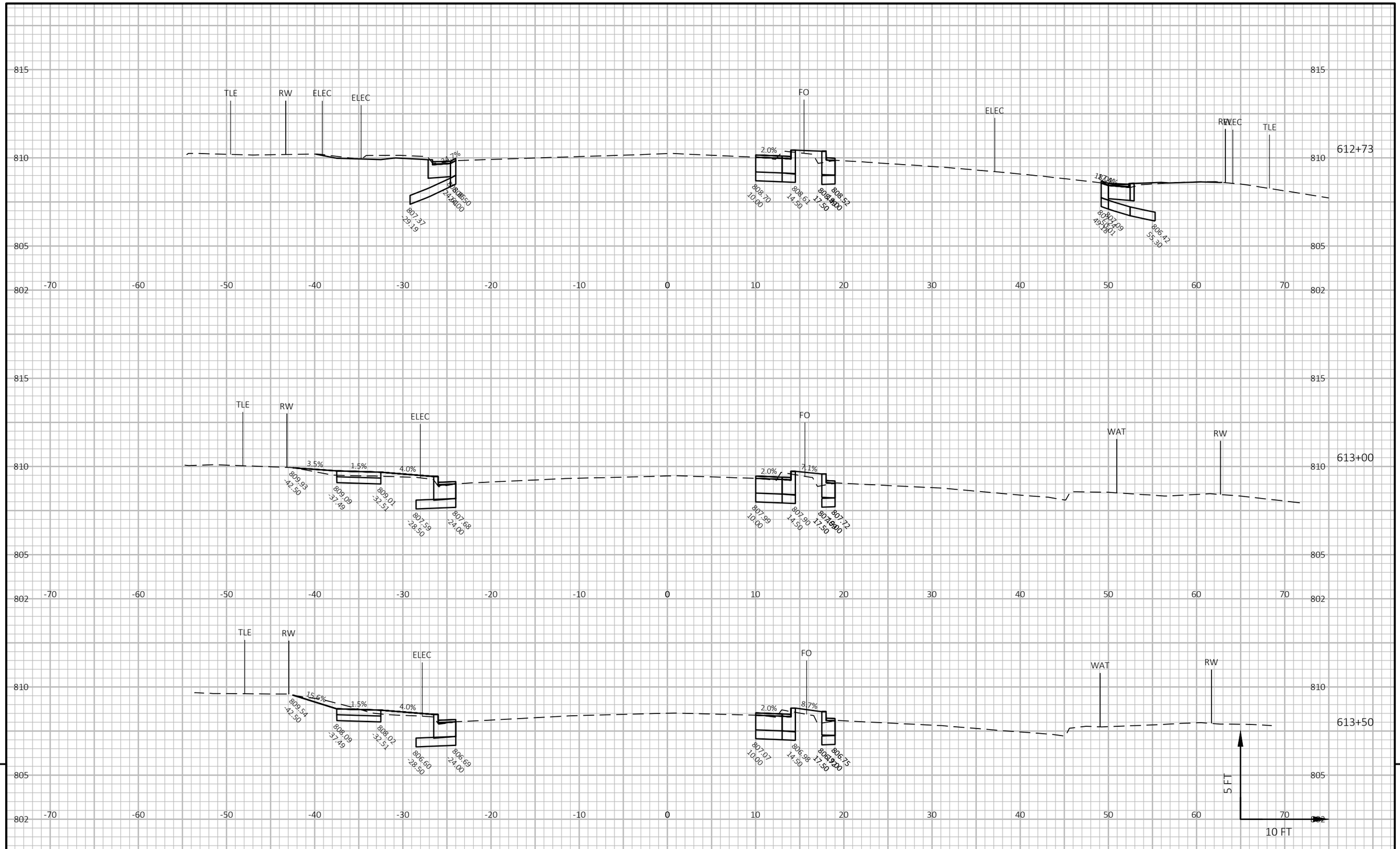
PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CROSS SECTIONS: USH 51	SHEET 222	E

9

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\090201-XS.DWG
LAYOUT NAME - 02

PLOT DATE : 4/15/2025 9:30 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:5 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CROSS SECTIONS: USH 51	SHEET 223	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\090201-XS.DWG
LAYOUT NAME - 03

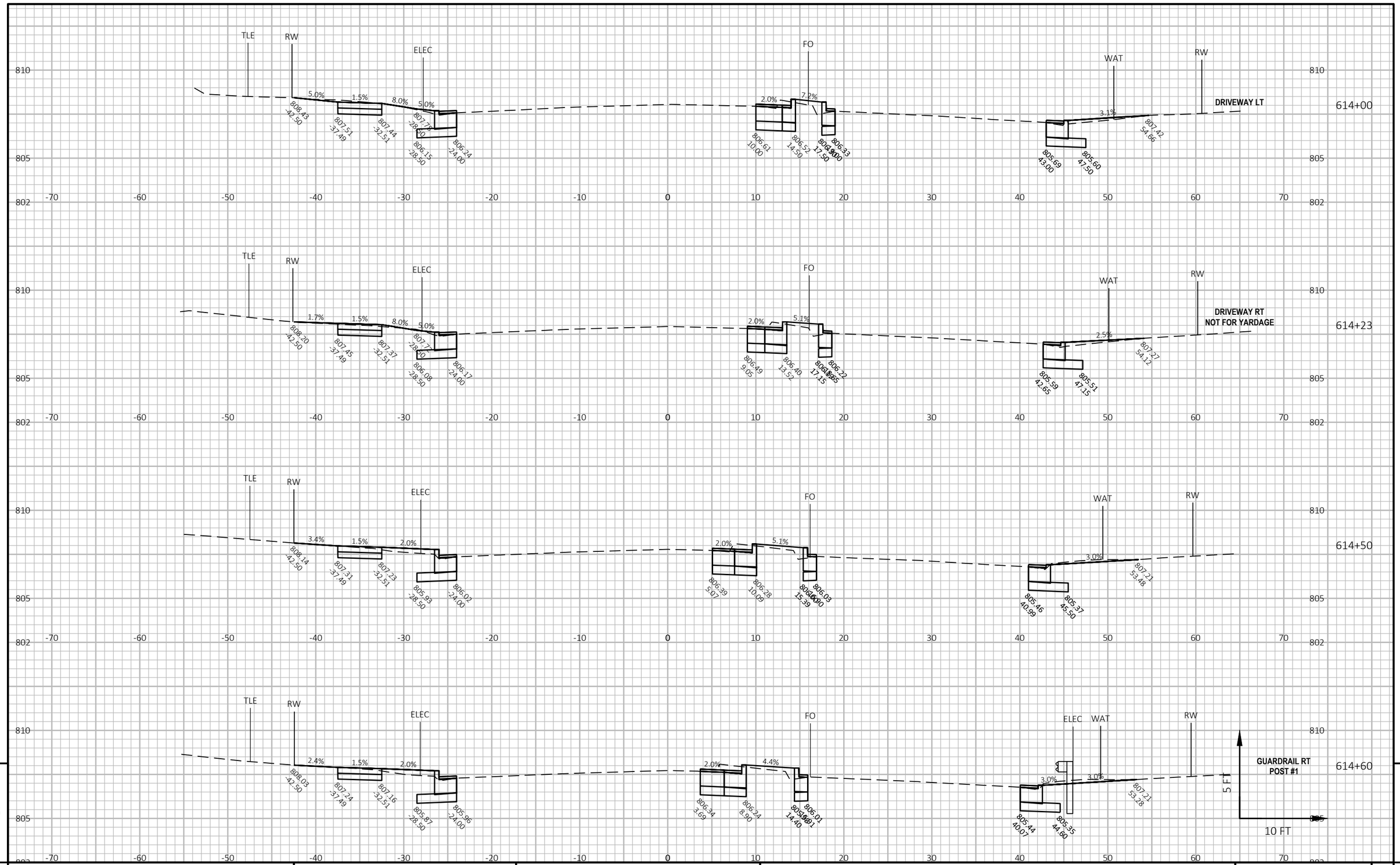
PLOT DATE : 4/15/2025 9:30 AM

PLOT BY : AXT, ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:5 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CROSS SECTIONS: USH 51	SHEET 224	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\090201-XS.DWG
LAYOUT NAME - 04

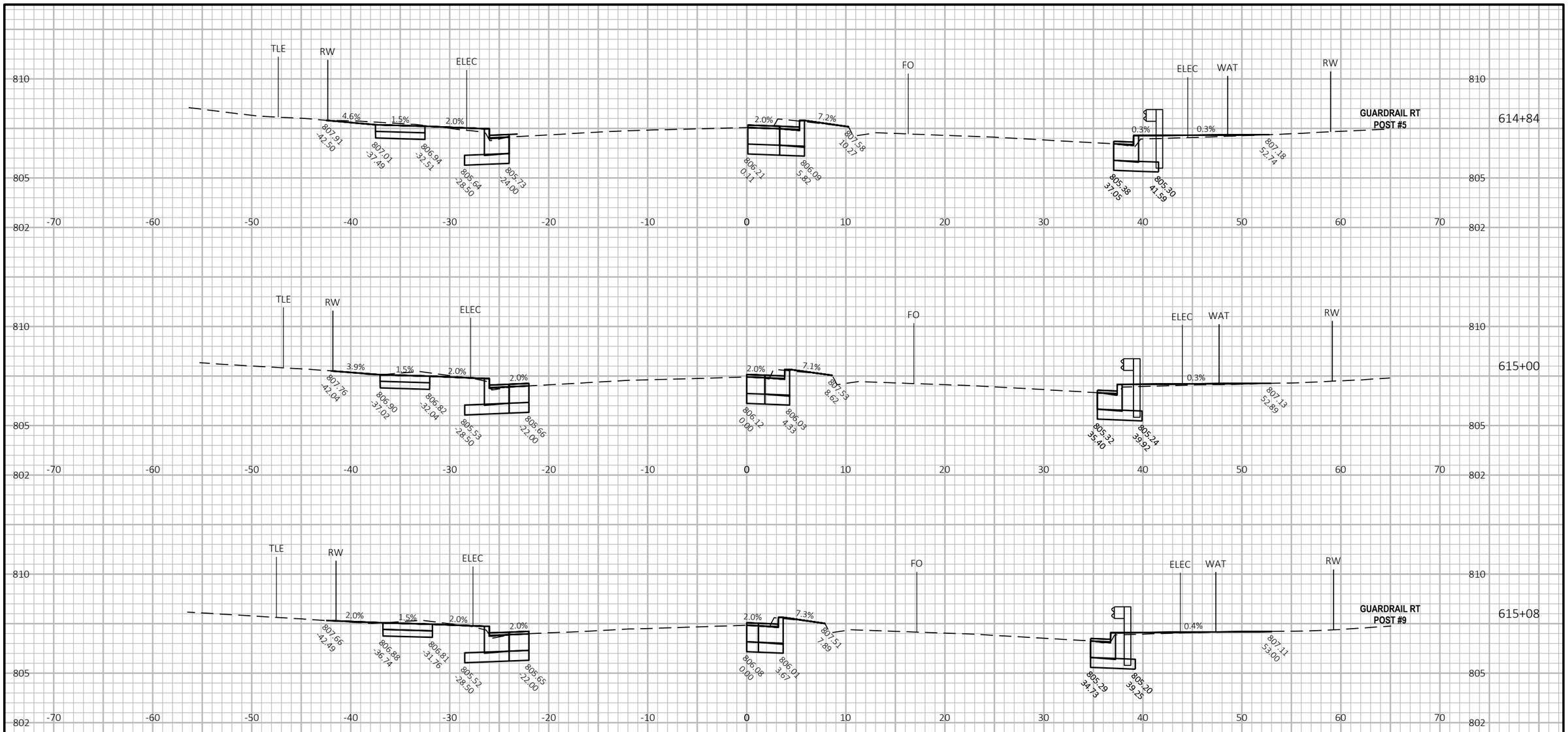
PLOT DATE : 4/15/2025 9:30 AM

PLOT BY : AXT, ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:5 FT VERT.

WISDOT/CADDS SHEET 49

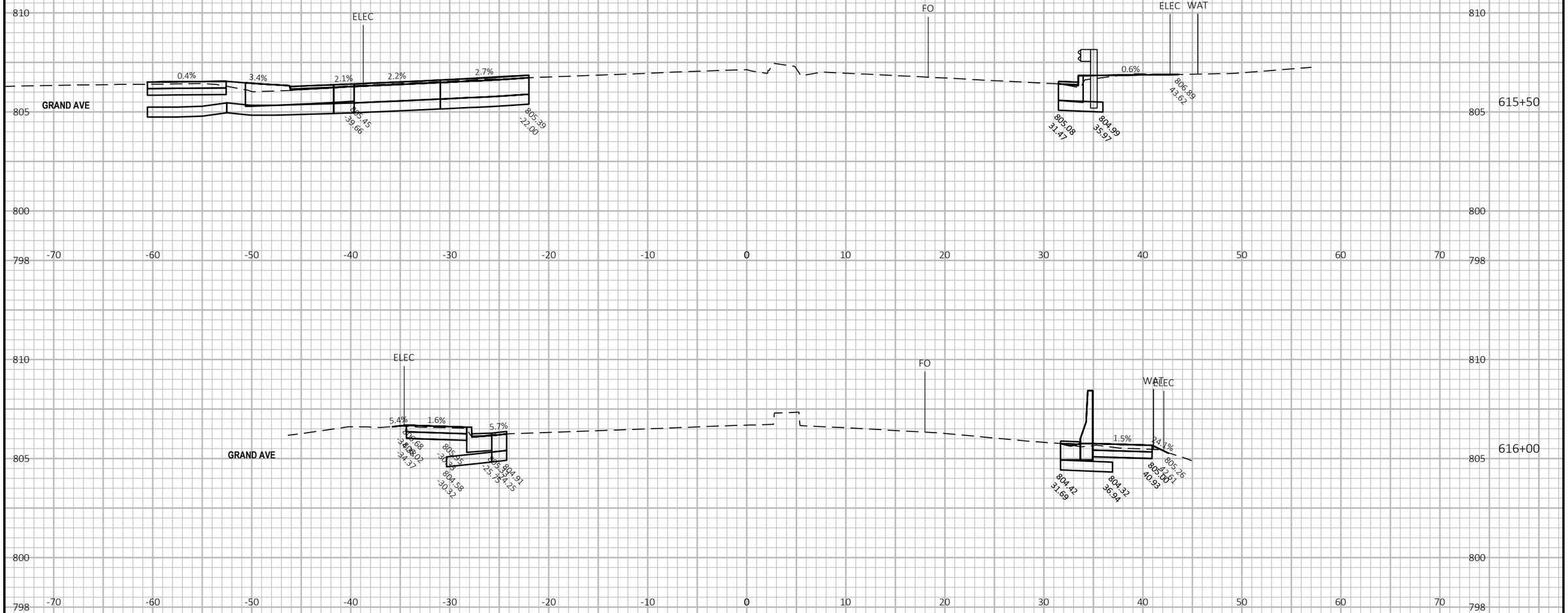


PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CROSS SECTIONS: USH 51	SHEET 225 E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\090201-XS.DWG
LAYOUT NAME - 05

PLOT DATE : 4/15/2025 9:30 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:5 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CROSS SECTIONS: USH 51	SHEET 226	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\090201-XS.DWG
LAYOUT NAME - 06

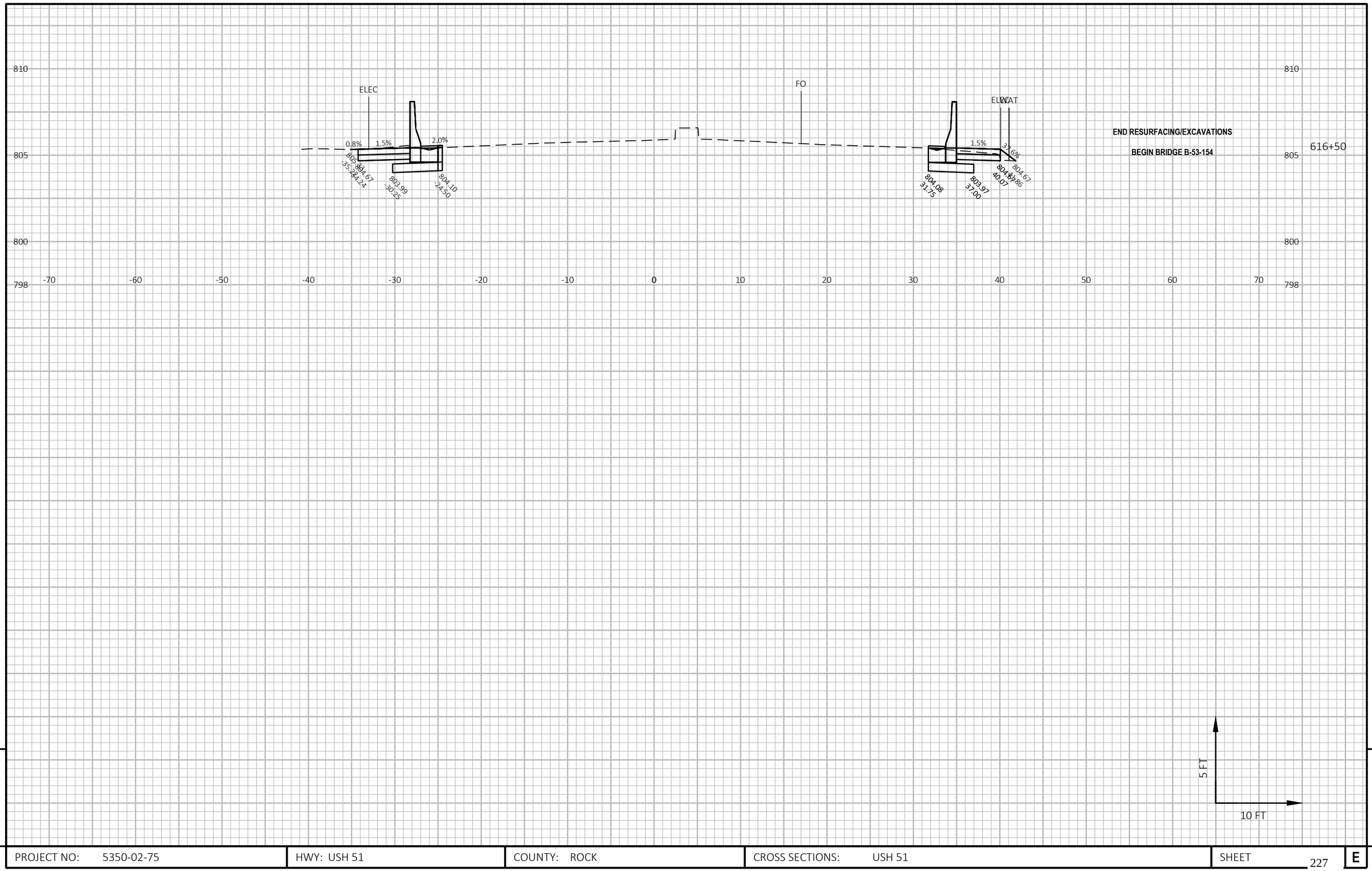
PLOT DATE : 4/15/2025 9:30 AM

PLOT BY : AXT, ANDREW

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:5 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 5350-02-75	HWY: USH 51	COUNTY: ROCK	CROSS SECTIONS: USH 51	SHEET 227	E

FILE NAME : T:\1202703\CIVIL3D\53500200\SHEETSPLAN\DELAVAN\090201-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 4/15/2025 9:30 AM PLOT BY : AXT, ANDREW PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:5 FT VERT.

Wisconsin Department of Transportation

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