RHI

SEPTEMBER 2023

PROJECT ID: 9220-04-72 / 9220-04-82

WITH: NA

COUNTY: SHAWANO

13

ORDER OF SHEETS

TOTAL SHEETS = 220

N

DESIGN DESIGNATION

A.A.D.T.	2021	=	6,700
A.A.D.T.	2041	=	8,000
D.H.V.		=	958
D.D.		=	60/40
T.		=	17.1%
DESIGN SPEED		=	35 MPH
ESALS		=	3,445,600

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

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
9220-04-72	———	—
9220-04-82	———	—

BONDUEL - CECIL

EXPRESS WAY TO MUTZY LANE

STH 117

SHAWANO COUNTY

STATE PROJECT NUMBER

9220-04-72

BONDUEL - CECIL

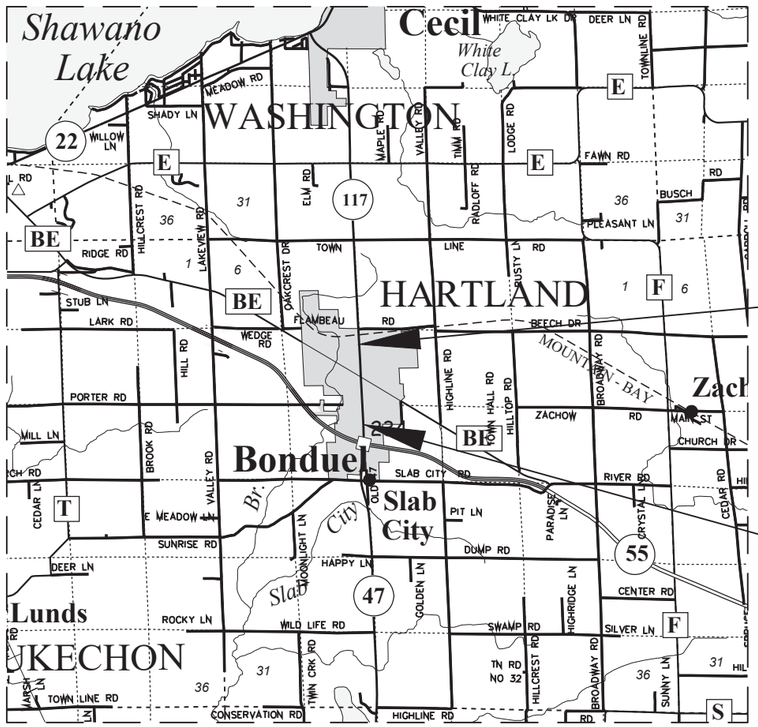
EXPRESS WAY TO MUTZY LANE

STH 117

SHAWANO COUNTY

STATE PROJECT NUMBER

9220-04-82



END PROJECT
STA 1039+00.00

BEGIN PROJECT
STA 981+14.00
Y = 253509.697
X = 902524.406

LAYOUT

SCALE 0 SHAWANO

TOTAL NET LENGTH OF CENTERLINE = 1.1 MI

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

ORIGINAL PLANS PREPARED BY

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
120 Wilshire Boulevard North • Stevens Point, WI 54481
(715) 341-4565 • fax (715) 341-1256

WISCONSIN
DEXTER D. KAETTERHENRY
E-43966
PLOVER
WI
PROFESSIONAL ENGINEER

4/25/2023 — DATE

DEXTER D. KAETTERHENRY, PE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	GREMMER AND ASSOCIATES, INC.
Designer	GREMMER AND ASSOCIATES, INC.
Project Manager	STACY HAGENBUCHER, P.E.
Regional Examiner	FRED SCHUNKE, P.E.
Regional Supervisor	KAI KILEN, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 4/27/23 (Signature)

E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\010101_TI\010101_TI.DWG PLOT DATE : 4/25/2023 9:30 AM PLOT BY : DEXTER KAETTERHENRY PLOT NAME :

GENERAL NOTES

ALL DISTANCES AND STATIONING SHOWN ON THIS PLAN ARE GROUND VALUES.

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

ORDER OF SECTION 2 SHEETS

WDNR CONTACT

DEPARTMENT OF NATURAL RESOURCES
ATTN: JIM DOPERALSKI
2984 SHAWANO AVENUE
GREEN BAY, WI 54313
OFFICE: 920.412.0165
EMAIL: James.doperalski@wisconsin.gov

UTILITIES

ASTREA - COMMUNICATION LINE
ATTN: ANDREW HEIGL
105 KENT STREET
PO BOX 190
IRON MOUNTAIN, MI 49801
PHONE: (906) 221-7536
EMAIL: andy.heigl@astreaconnect.com

BONDUEL WATER AND SEWER UTILITY - SEWER
ATTN: JESSE RANKIN
117 WEST GREEN BAY STREET
BONDUEL, WI 54166
PHONE: (715) 758-8779
EMAIL: j.rankin@villageofbonduel.com

BONDUEL WATER AND SEWER UTILITY - WATER
ATTN: JESSE RANKIN
117 WEST GREEN BAY STREET
BONDUEL, WI 54166
PHONE: (715) 758-8779
EMAIL: j.rankin@villageofbonduel.com

TDS TELECOM - COMMUNICATION LINE
ATTN: COLE HOOKER
2900 NORTH ZUEHLKE DRIVE SUITE B
APPLETON, WI 54911
PHONE: (608) 332-8243
EMAIL: cole.hooker@tdstelecom.com

WE ENERGIES - ELECTRICITY
ATTN: ZACH DUGA
800 SOUTH LYNNDALE DRIVE
APPLETON, WI 54914
EMAIL: Zachary.Duga@we-energies.com

WE ENERGIES - GAS/PETROLEUM
ATTN: ERIC AVELAR
800 SOUTH LYNNDALE DRIVE
APPLETON, WI 54914
EMAIL: Eric.Avelar@we-energies.com

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = 8.18 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 5.50 ACRES

55
47
29

SHIOC ST

N

BE

W MILL ST

E GREEN BAY ST

SOUTH ST

S ELM ST

S 2ND ST

W STATE ST

N 2ND ST

PARK ST

W CEDAR ST

NORTH RD

BEGIN PROJECT
9220-04-72
9220-04-82
STA 981+14

GRANT ST

S 1ST ST

N 1ST ST

END PROJECT
9220-04-72
9220-04-82
STA 1039+00

985 990 995 1000 1005 1010 1015 1020 1025 1030 1035

117

MUTZY LN

117

E MILL ST

CHURCH ST

W GREEN BAY ST

EXPRESS WAY

E LEGION ST

E STATE ST

E PARK ST

E CEDAR ST

E FLAMBEAU RD

N WASHINGTON ST

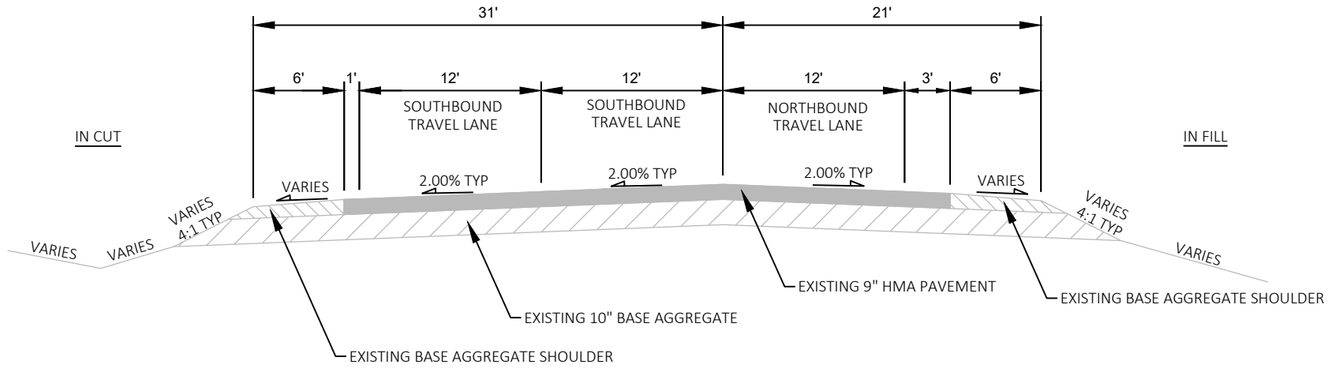
S JEFFERSON ST

BE

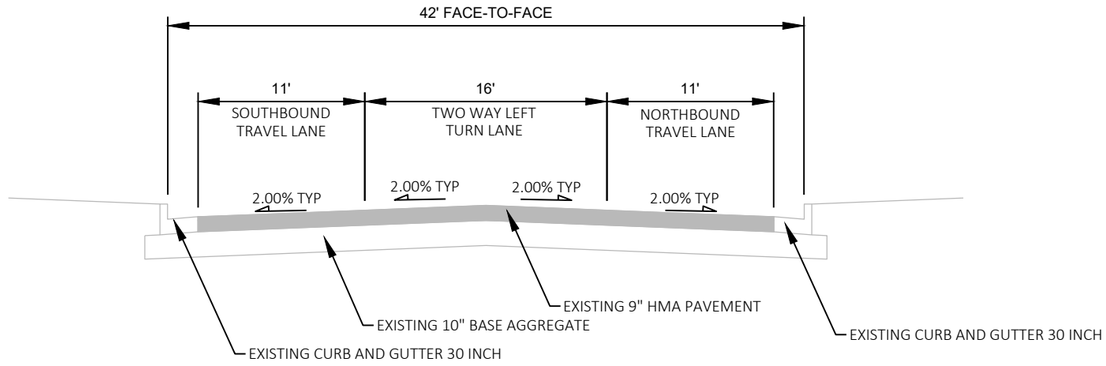
BOETTCHER LN

N ADAMS ST

2



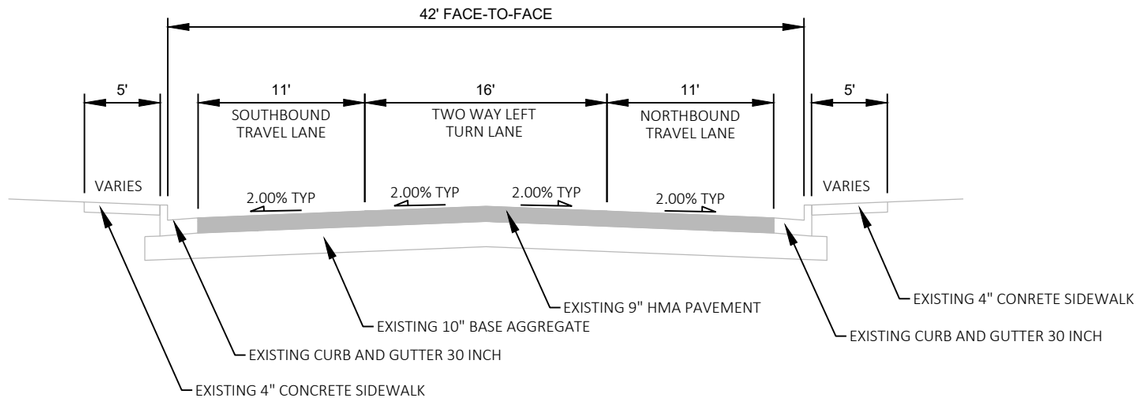
TYPICAL EXISTING SECTION
STA 981+14 - STA 989+77 RT
STA 981+14 - STA 992+50 LT



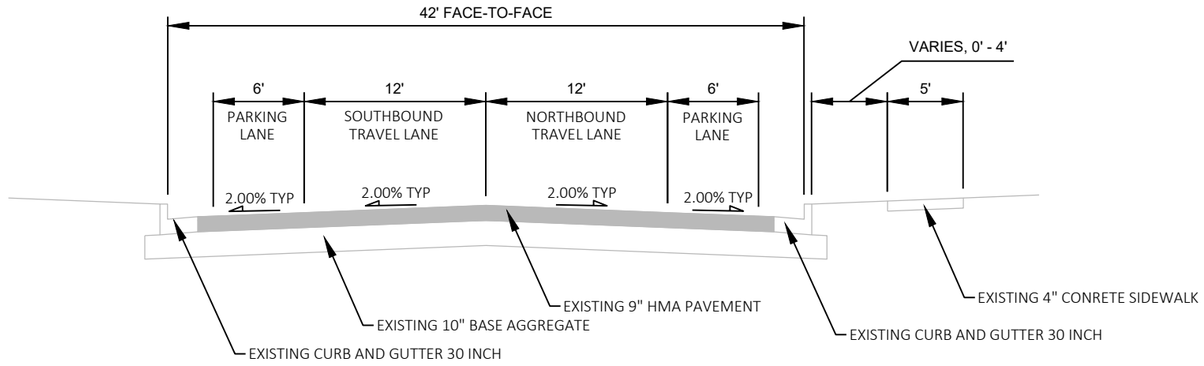
TYPICAL EXISTING SECTION
STA 981+77 - STA 998+91 RT
STA 992+50 - STA 998+53 LT

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 4	E

2



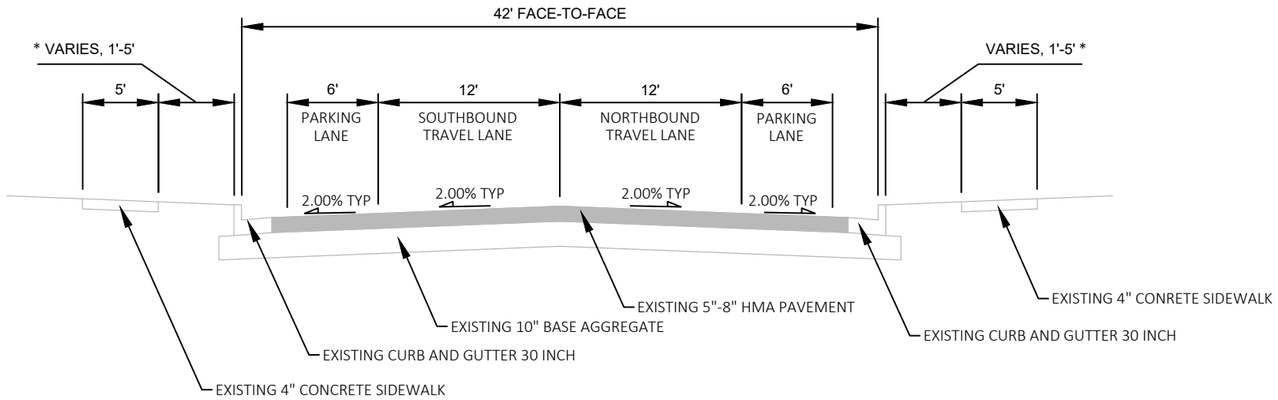
TYPICAL EXISTING SECTION
STA 998+91 - STA 1006+18 RT
STA 998+53 - STA 1007+61 LT



TYPICAL EXISTING SECTION
STA 1006+18 - STA 1013+35 RT
STA 1007+61 - STA 1013+35 LT

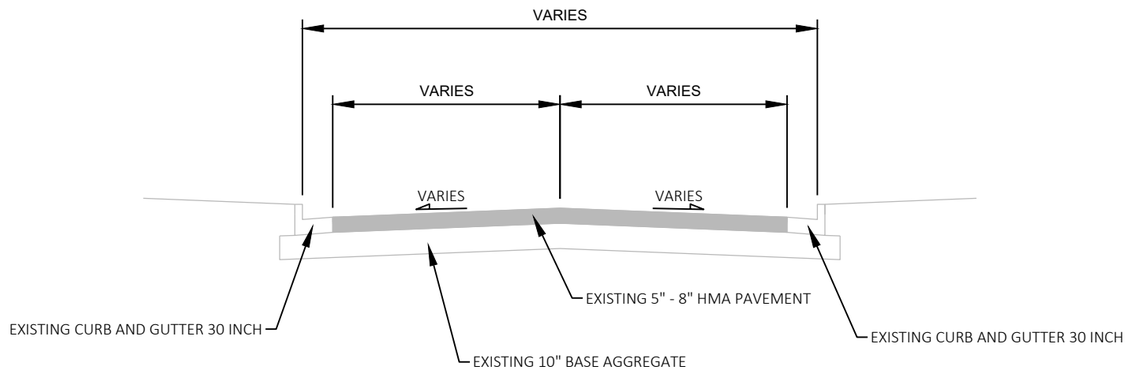
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 5	E

2



* CONCRETE SIDEWALK TERRACE FROM CTH BE TO LEGION STREET

TYPICAL EXISTING SECTION
STA 1013+35 - STA 1039+00

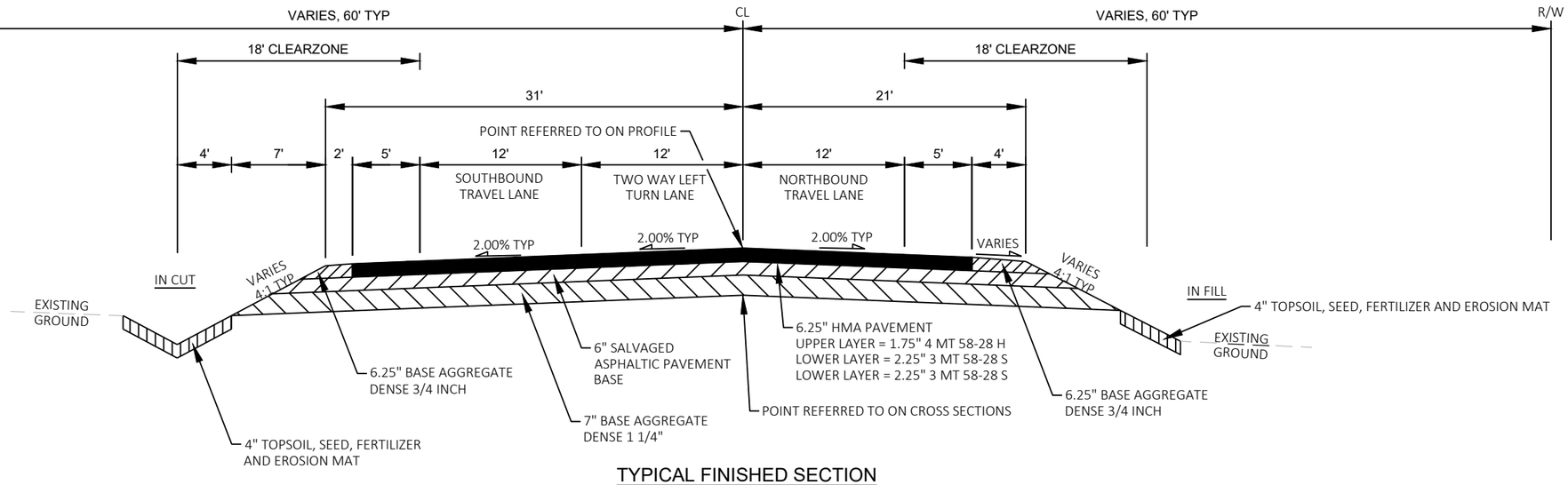


TYPICAL EXISTING SECTION
SIDE STREETS

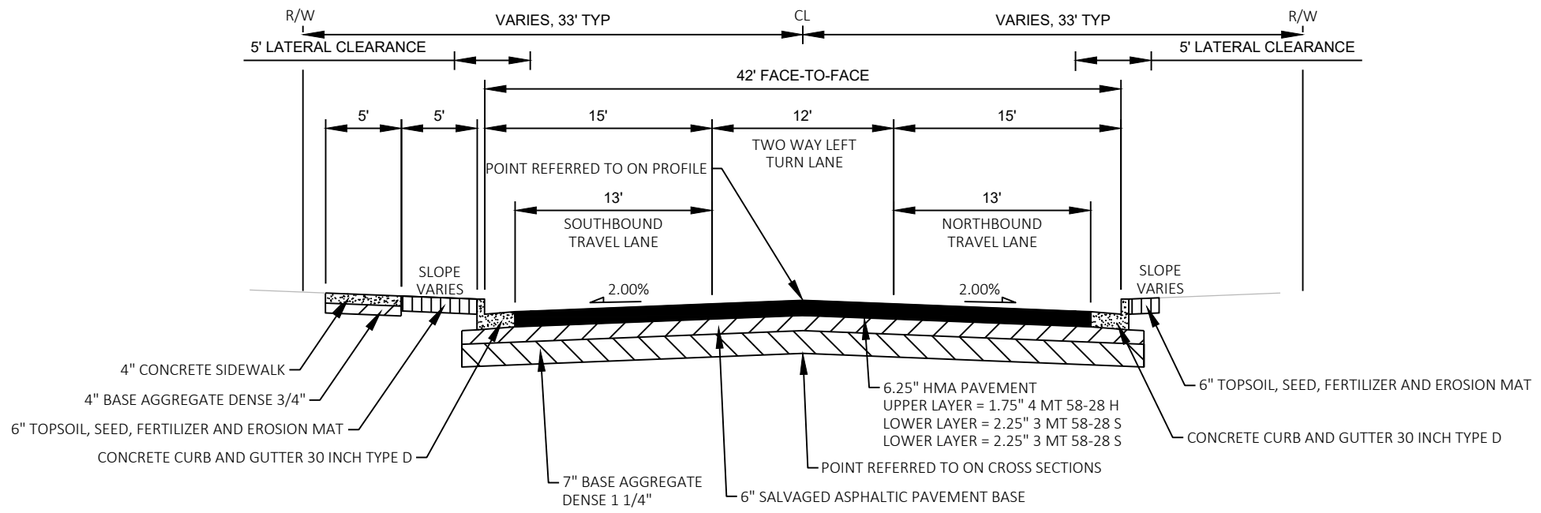
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 6	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\020301_TS\020301_TS.DWG
LAYOUT NAME - 03
PLOT DATE : 3/24/2023 8:28 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

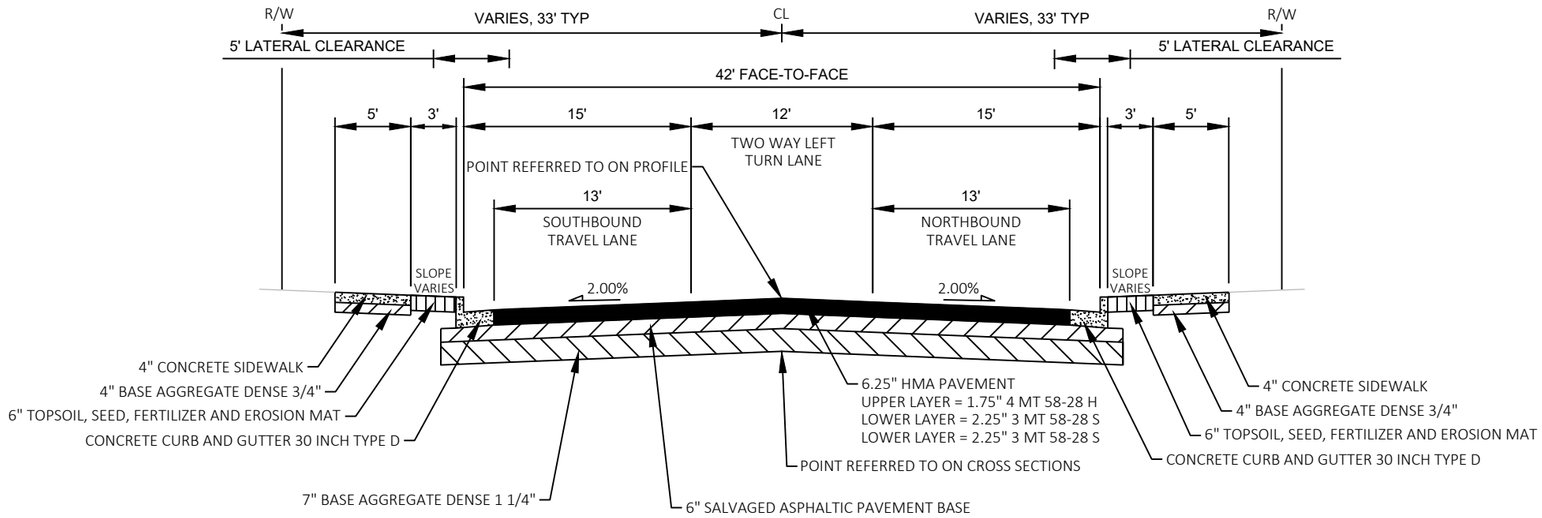


TYPICAL FINISHED SECTION
STA 981+14 - STA 989+77 RT
STA 981+14 - STA 992+50 LT

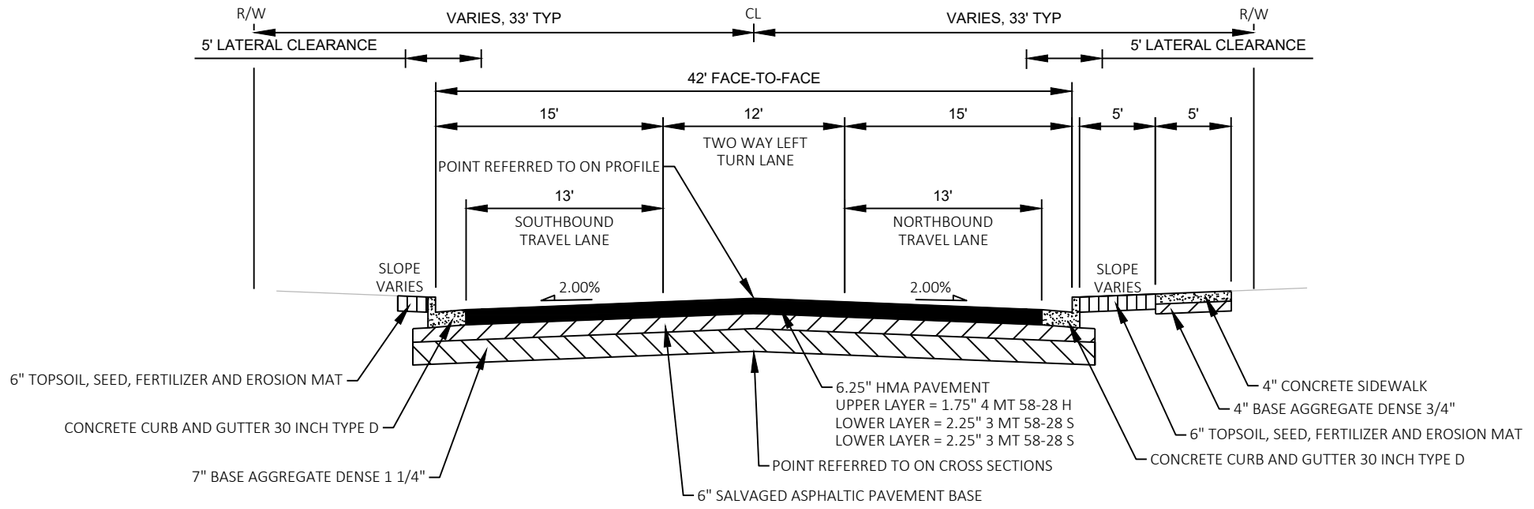


TYPICAL FINISHED SECTION
STA 989+77 - STA 998+91 RT
STA 992+50 - STA 998+53 LT

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 7	E

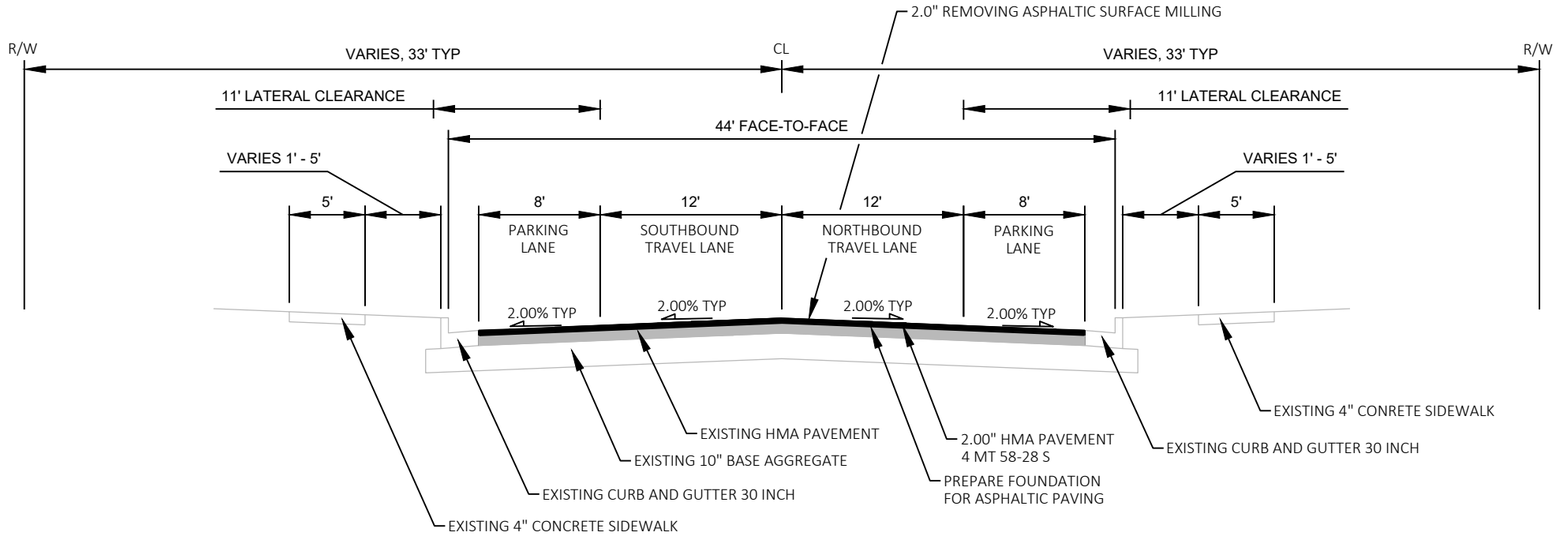


TYPICAL FINISHED SECTION
STA 998+91 - STA 1006+18 RT
STA 998+53 - STA 1007+61 LT

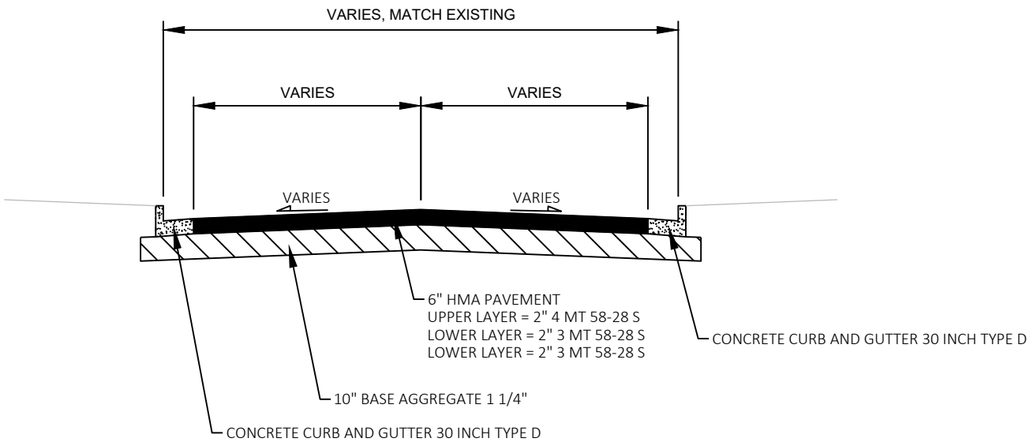


TYPICAL FINISHED SECTION
STA 1006+18 - STA 1013+35 RT
STA 1007+61 - STA 1013+35 LT

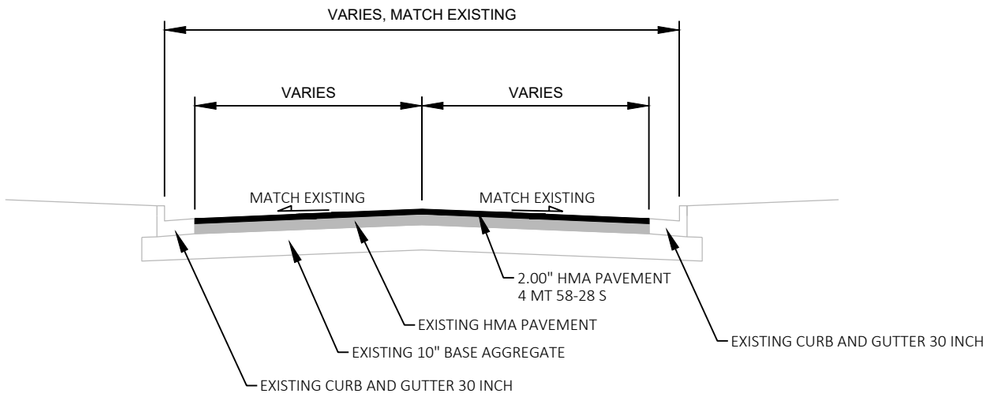
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 8	E



TYPICAL FINISHED SECTION
STA 1013+35 - STA 1039+00

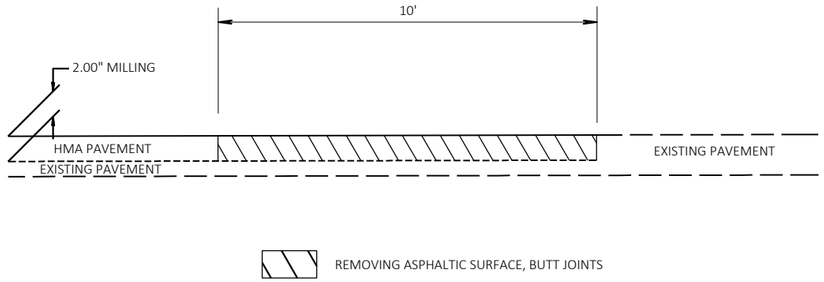


TYPICAL FINISHED SECTION
SIDE ROADS
SOUTH STREET
GRANT STREET
EAST MILL STREET
WEST MILL STREET
CTH BE



TYPICAL FINISHED SECTION
SIDE ROADS
LEGION STREET
EAST STATE STREET
WEST STATE STREET
PARK STREET
EAST CEDAR STREET
WEST CEDAR STREET
MUTZY LANE

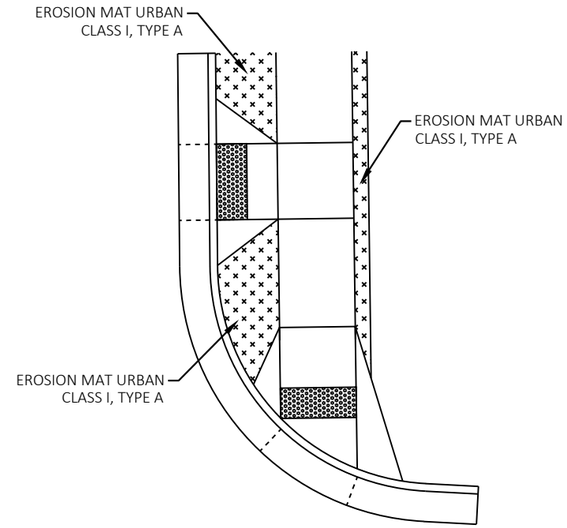
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TYPICAL SECTION	SHEET 9	E



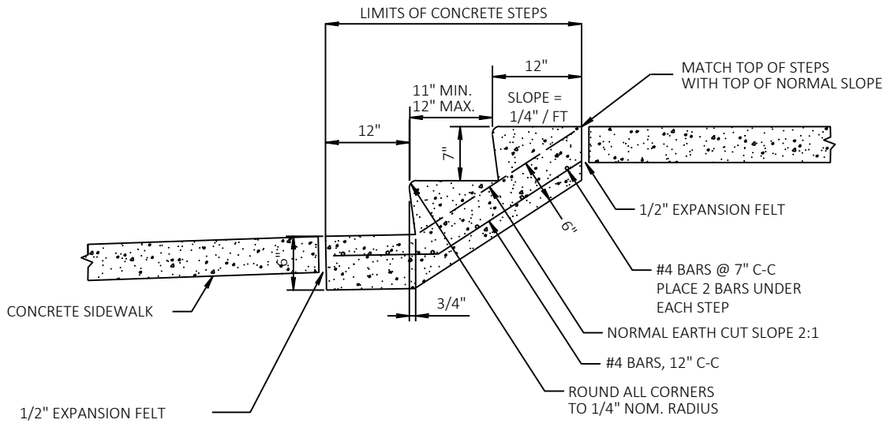
BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS

MAINLINE WITH NO PROFILE CHANGE
(CTH BE AND MUTZY LANE)

SIDE ROADS
(SOUTH STREET, GRANT STREET, EAST MILL STREET, WEST MILL STREET,
LEGION STREET, EAST STATE STREET, WEST STATE STREET ,PARK STREET,
EAST CEDAR STREET, WEST CEDAR STREET, MUTZY LANE)



EROSION MAT URBAN AT CURB RAMPS / CURB REPLACEMENT / SIDEWALK REPLACEMENT DETAIL

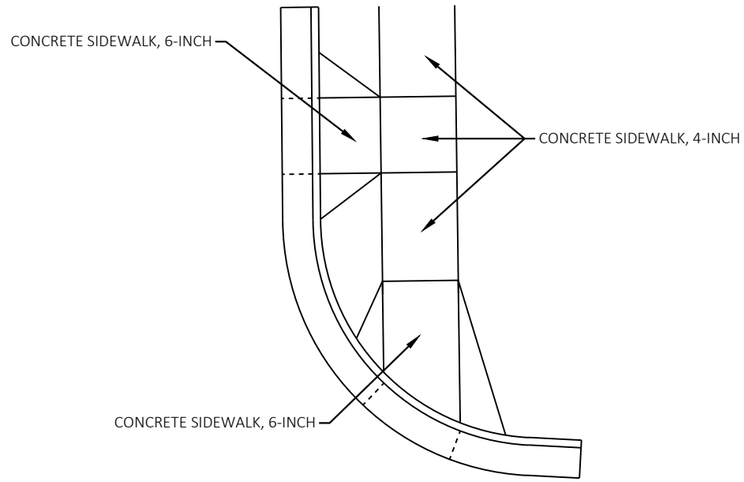


NOTES:

MINIMUM WIDTH OF STEP SHALL BE 4 FEET.

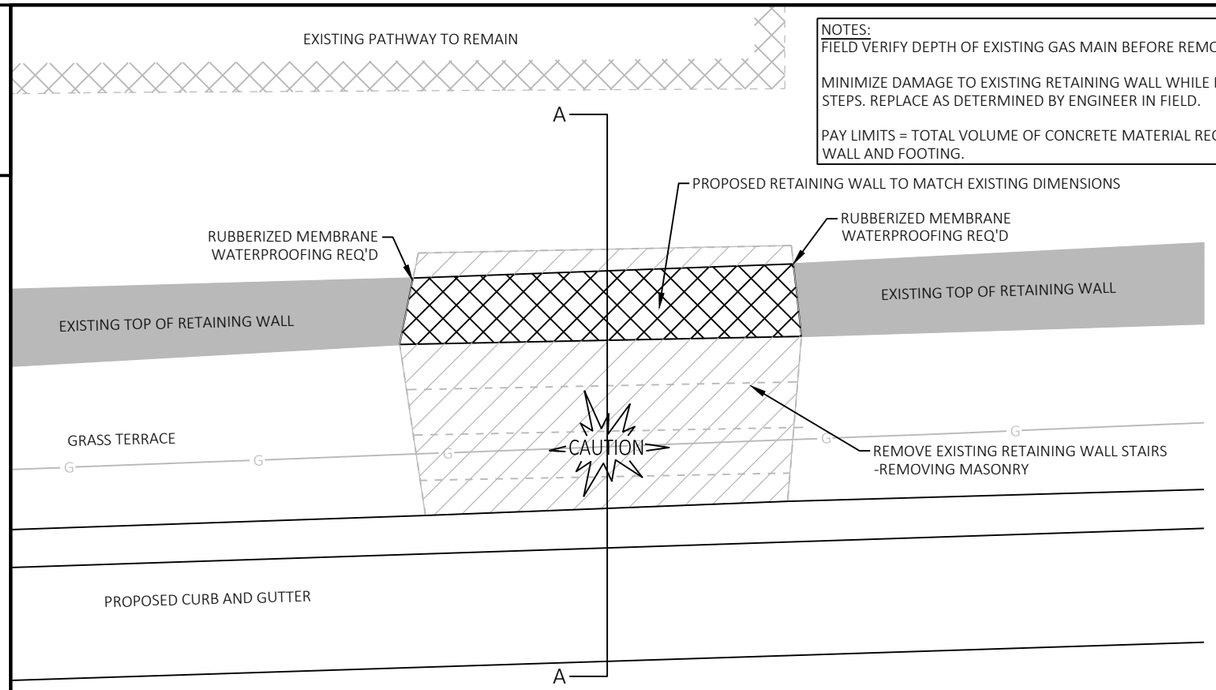
ACTUAL HEIGHT AND NUMBER OF STEPS
VARIES DUE TO FIELD CONDITIONS.

CONCRETE STEPS DETAIL



CONCRETE SIDEWALK AT CURB RAMPS DETAIL

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CONSTRUCTION DETAILS	SHEET 10	E



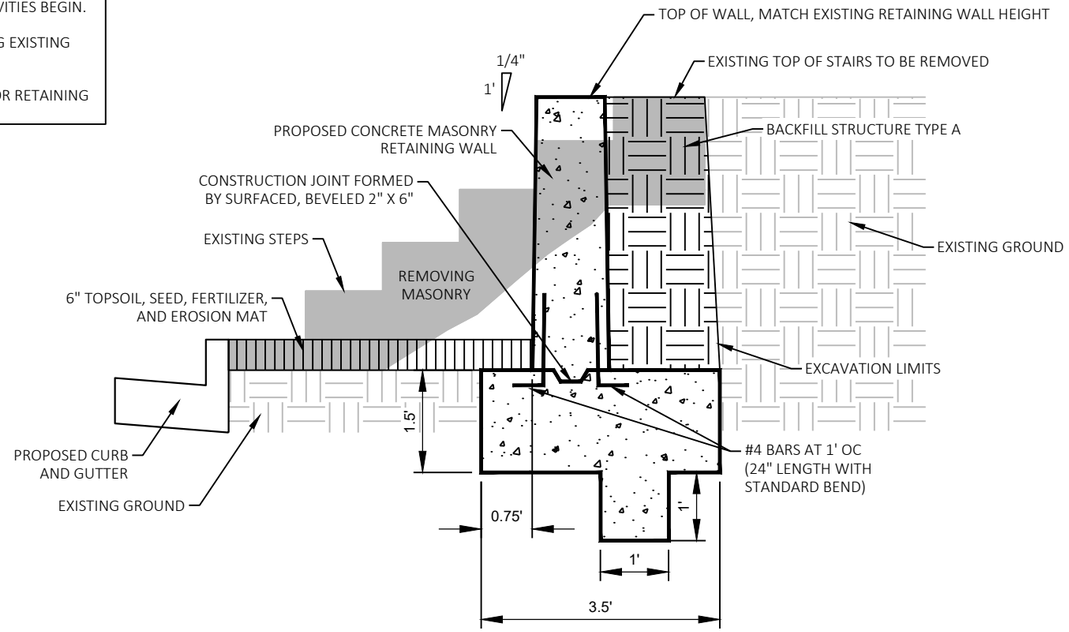
PLAN VIEW

NOTES:
FIELD VERIFY DEPTH OF EXISTING GAS MAIN BEFORE REMOVAL ACTIVITIES BEGIN.

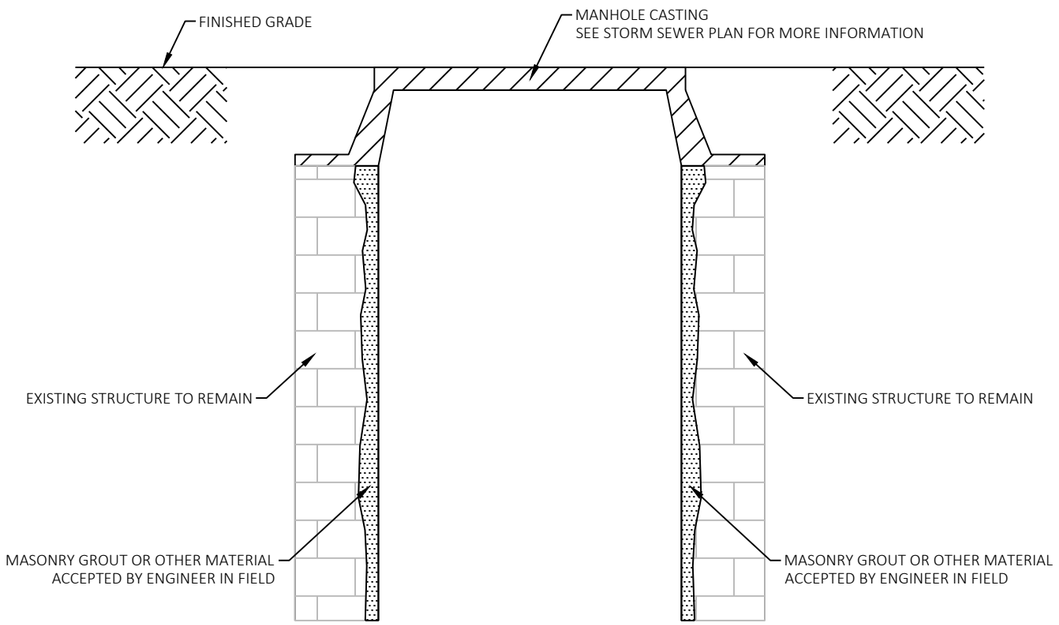
MINIMIZE DAMAGE TO EXISTING RETAINING WALL WHILE REMOVING EXISTING STEPS. REPLACE AS DETERMINED BY ENGINEER IN FIELD.

PAY LIMITS = TOTAL VOLUME OF CONCRETE MATERIAL REQUIRED FOR RETAINING WALL AND FOOTING.

RETAINING WALL DETAIL

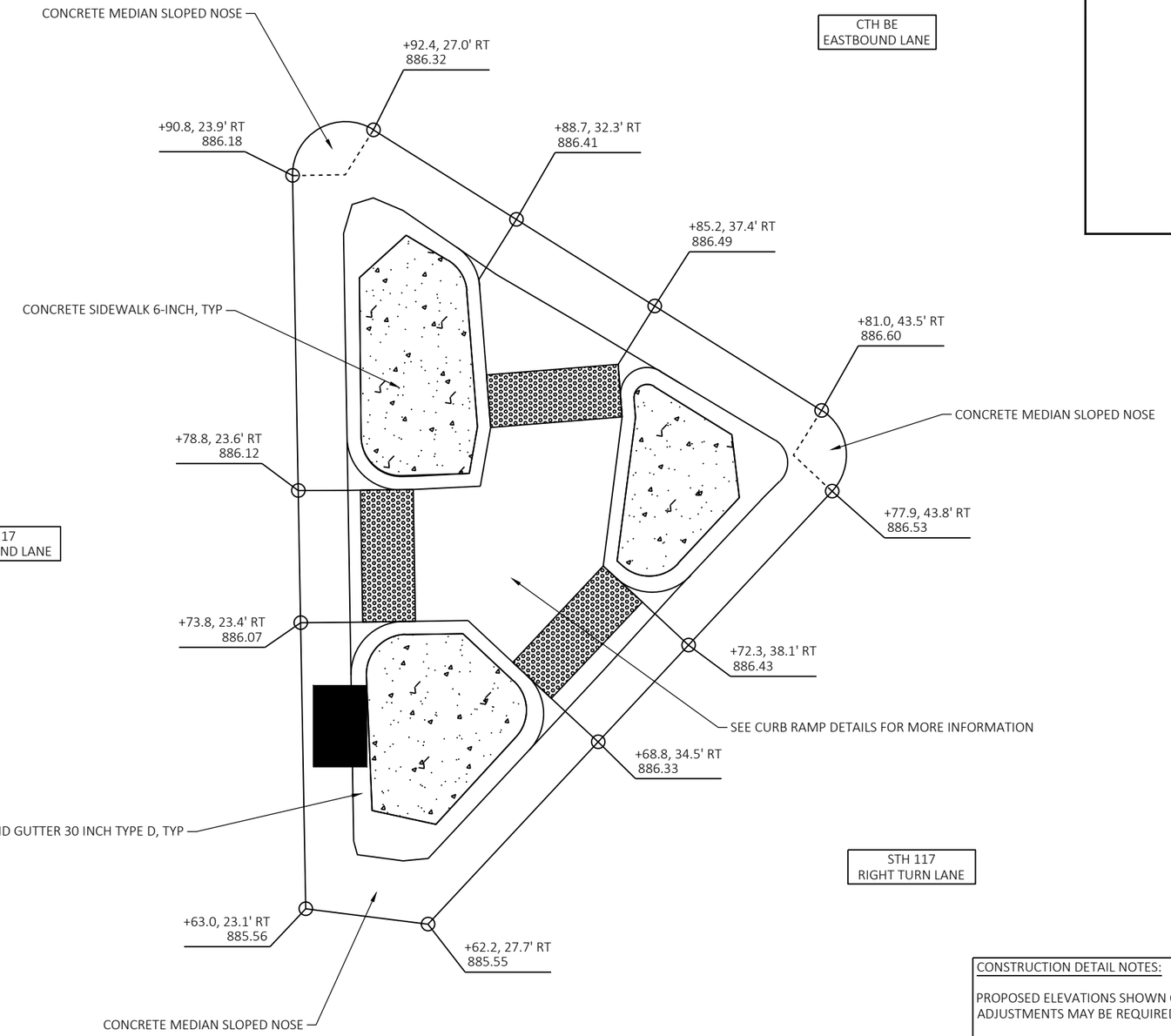


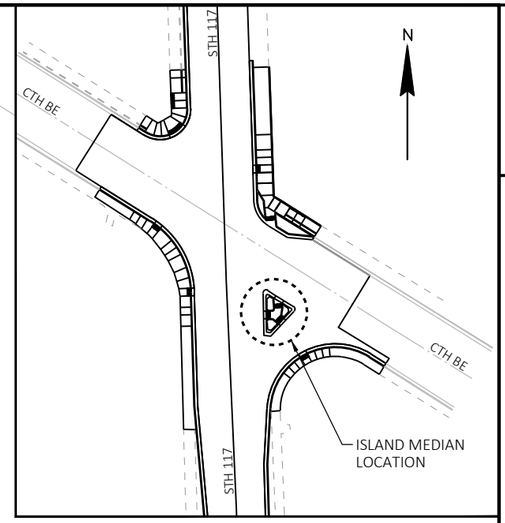
SECTION A-A



REPAIR AND REGROUT STRUCTURES DETAIL

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CONSTRUCTION DETAILS	SHEET 11	E





CONSTRUCTION DETAIL NOTES:

PROPOSED ELEVATIONS SHOWN ON PLANS REPRESENT EXISTING GRADES. ADJUSTMENTS MAY BE REQUIRED IN THE FIELD TO MEET EXISTING CONDITIONS.

MATCH EXISTING GRADES FOR EXISTING UTILITY MANHOLES AND BASES WITHIN SAFETY ISLAND.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CONSTRUCTION DETAILS	SHEET 12	E

TABLE 1

Retaining Gland Restraint - Minimum Distances

Refer to File No. 47A Standard Specifications for Sewer & Water Construction in Wisconsin

Horizontal Bends			Joint Restraint Length (L) in Feet	
Material	**Size**	**Angle (degrees)**	**Length (for each side)**	
DIP	12"	11-1/4	2	
DIP	12"	22-1/2	4	
DIP	12"	45	8	
DIP	10"	11-1/4	2	
DIP	10"	22-1/2	3	
DIP	10"	45	7	
DIP	8"	11-1/4	2	
DIP	8"	22-1/2	3	
DIP	8"	45	6	
DIP	6"	11-1/4	1	
DIP	6"	22-1/2	2	
DIP	6"	45	4	
DIP	12"	90	18	
DIP	10"	90	15	
DIP	8"	90	13	
DIP	6"	90	10	

Dead End		Joint Restraint Length (L) in Feet	
Material	**Size**	**Length**	
DIP	12"	32	
DIP	10"	27	
DIP	8"	22	
DIP	6"	17	

Tess & Crosses			Joint Restraint Length (L) in Feet	
Material	**Size**	**Main (Lr)**	**Branch (b)**	
DIP	12" x 12"	5	20	
DIP	12" x 10"	5	13	
DIP	12" x 8"	5	5	
DIP	12" x 6"	5	1	
DIP	10" x 10"	5	25	
DIP	10" x 8"	5	8	
DIP	10" x 6"	5	1	
DIP	8" x 8"	5	11	
DIP	8" x 6"	5	2	
DIP	6" x 6"	5	5	

Reducer			Joint Restraint Length (L) in Feet	
Material	**Size**		**Length**	
DIP	12" x 10"		10	
DIP	12" x 8"		17	
DIP	12" x 6"		23	
DIP	10" x 8"		9	
DIP	10" x 6"		17	
DIP	8" x 6"		10	

Vertical Offset			Joint Restraint Length (L) in Feet	
Material	**Size**	**Angle (degrees)**	**Upper**	**Lower**
DIP	12"	11-1/4	4	3
DIP	12"	22-1/2	7	6
DIP	12"	45	13	13
DIP	10"	11-1/4	3	3
DIP	10"	22-1/2	6	5
DIP	10"	45	11	11
DIP	8"	11-1/4	3	3
DIP	8"	22-1/2	5	5
DIP	8"	45	10	9
DIP	6"	11-1/4	2	2
DIP	6"	22-1/2	4	4
DIP	6"	45	7	7

Notes:

1) All joints within Length "L" of fitting must be restrained.

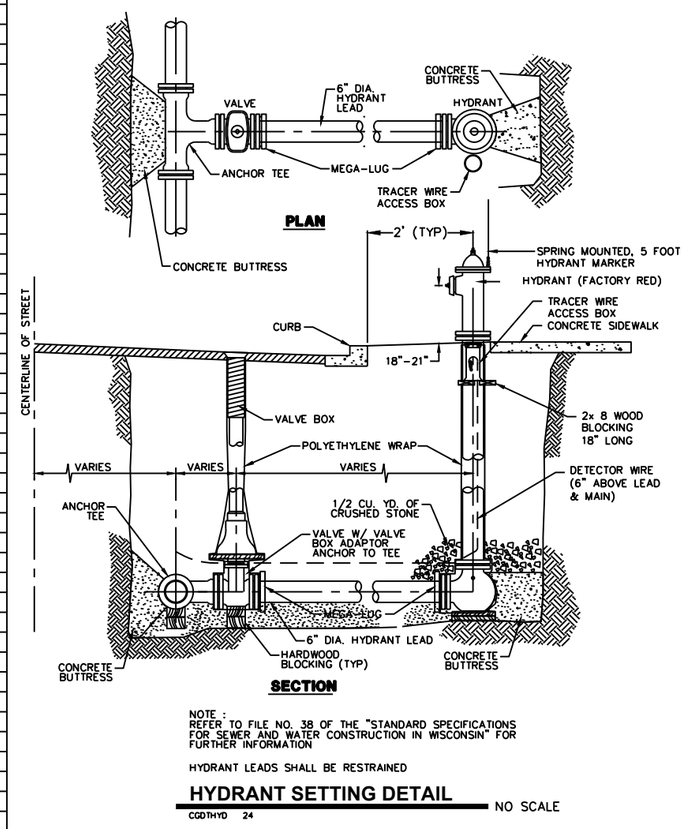
2) Restraint lengths calculating using EBBA iron restrained length calculator, Version 7.1.2.

3) Assumes: CL soils (Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays) backfilled with granular material.

4) Assumes: Trench Type 3

5) Assumes: Depth of Bury to be 7 feet of cover.

6) Assumes: Test Pressure of 150.

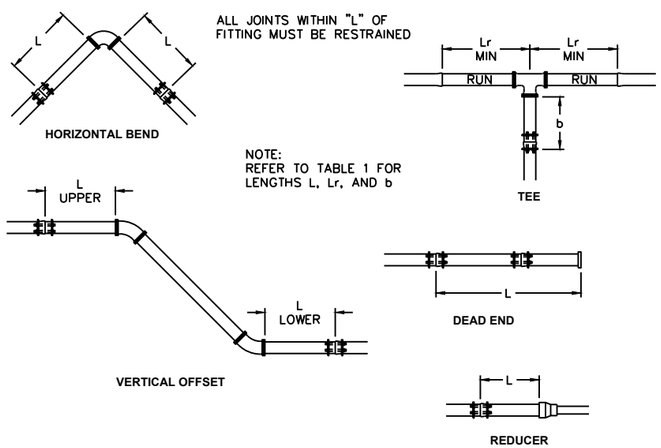


NOTE :
REFER TO FILE NO. 38 OF THE "STANDARD SPECIFICATIONS FOR SEWER AND WATER CONSTRUCTION IN WISCONSIN" FOR FURTHER INFORMATION

HYDRANT LEADS SHALL BE RESTRAINED

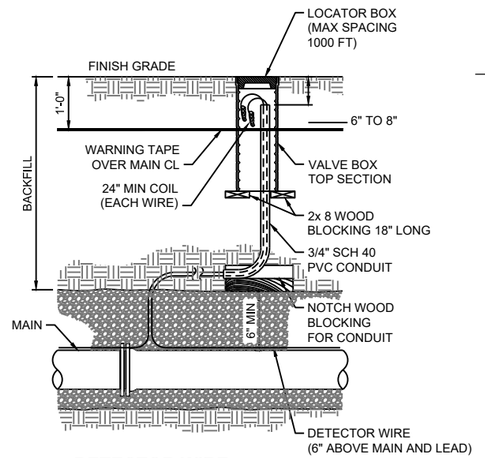
HYDRANT SETTING DETAIL NO SCALE

CGDTHYD 24



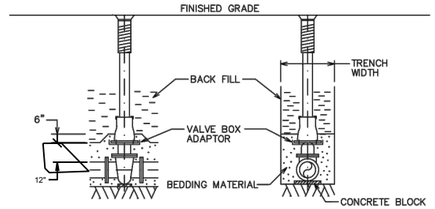
JOINT RESTRAINT DETAIL NO SCALE

WT-BR-03 4

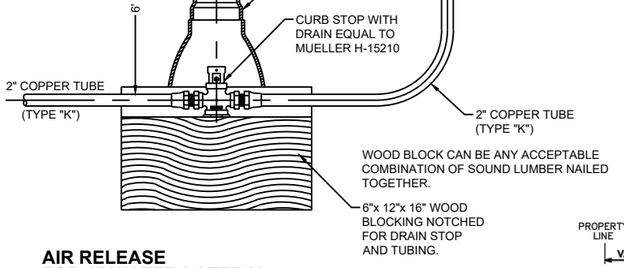


DETECTOR WIRE & LOCATION BOX NO SCALE

WT-TW-01 16

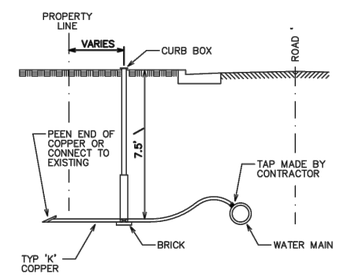


STANDARD VALVE BOX SETTING
NOT TO SCALE



AIR RELEASE FOR 2" WATER LATERAL NO SCALE

WT-LAT-01 12



NOTE: TAP WATER MAIN ON 45^ WITH PIPE. MINIMUM SEPARATION BETWEEN SERVICES SHALL BE 12" VERTICAL AND 18" HORIZONTAL.

WATER MAIN SERVICE INSTALLATION
NOT TO SCALE

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

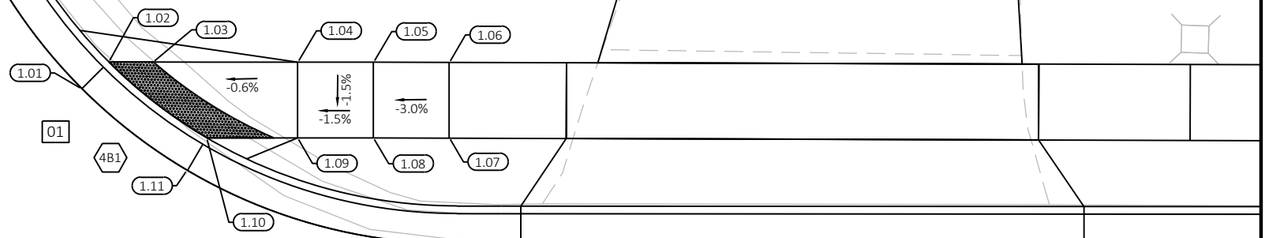
NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

SOUTH STREET

RIGHT-OF-WAY

N



CURB RAMP 01 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
1.01	993+51.37	-28.89	873.93
1.02	993+53.14	-30.65	873.88
1.03	993+56.07	-30.65	873.89
1.04	993+65.61	-30.64	873.93
1.05	993+70.61	-30.63	874.00
1.06	993+75.61	-30.63	874.15
1.07	993+75.60	-25.63	874.08
1.08	993+70.60	-25.63	873.93
1.09	993+65.60	-25.64	873.85
1.10	993+59.60	-25.65	873.76
1.11	993+58.33	-23.49	873.81

RADIAL WARNING FIELD

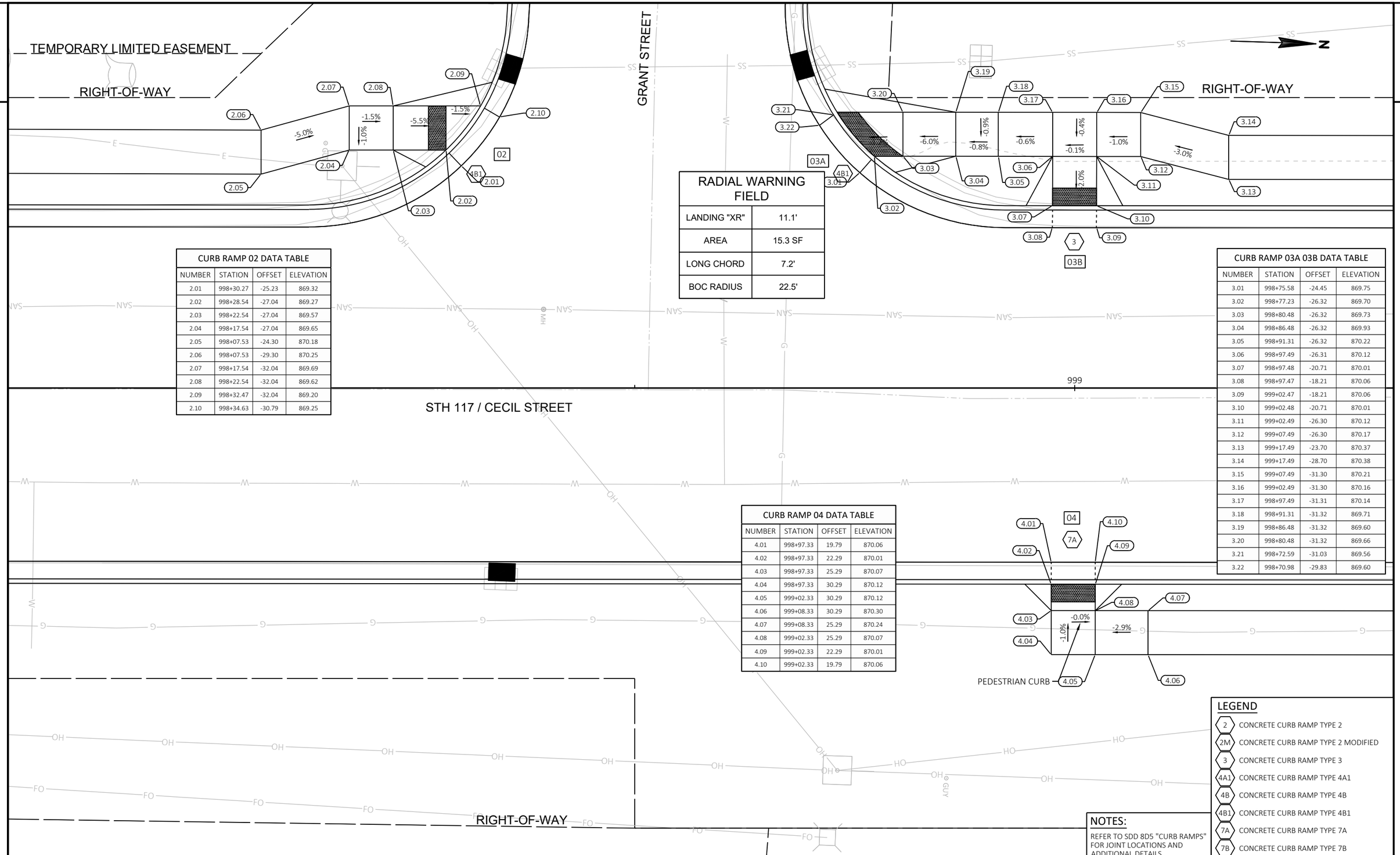
LANDING "XR"	12.5'
AREA	17.5 SF
LONG CHORD	8.2'
BOC RADIUS	32.5'

993

994

STH 117 / CECIL STREET

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DETAILS	SHEET 14	E



RADIAL WARNING FIELD	
LANDING "XR"	11.1'
AREA	15.3 SF
LONG CHORD	7.2'
BOC RADIUS	22.5'

CURB RAMP 02 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
2.01	998+30.27	-25.23	869.32
2.02	998+28.54	-27.04	869.27
2.03	998+22.54	-27.04	869.57
2.04	998+17.54	-27.04	869.65
2.05	998+07.53	-24.30	870.18
2.06	998+07.53	-29.30	870.25
2.07	998+17.54	-32.04	869.69
2.08	998+22.54	-32.04	869.62
2.09	998+32.47	-32.04	869.20
2.10	998+34.63	-30.79	869.25

CURB RAMP 03A 03B DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
3.01	998+75.58	-24.45	869.75
3.02	998+77.23	-26.32	869.70
3.03	998+80.48	-26.32	869.73
3.04	998+86.48	-26.32	869.93
3.05	998+91.31	-26.32	870.22
3.06	998+97.49	-26.31	870.12
3.07	998+97.48	-20.71	870.01
3.08	998+97.47	-18.21	870.06
3.09	999+02.47	-18.21	870.06
3.10	999+02.48	-20.71	870.01
3.11	999+02.49	-26.30	870.12
3.12	999+07.49	-26.30	870.17
3.13	999+17.49	-23.70	870.37
3.14	999+17.49	-28.70	870.38
3.15	999+07.49	-31.30	870.21
3.16	999+02.49	-31.30	870.16
3.17	998+97.49	-31.31	870.14
3.18	998+91.31	-31.32	869.71
3.19	998+86.48	-31.32	869.60
3.20	998+80.48	-31.32	869.66
3.21	998+72.59	-31.03	869.56
3.22	998+70.98	-29.83	869.60

CURB RAMP 04 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
4.01	998+97.33	19.79	870.06
4.02	998+97.33	22.29	870.01
4.03	998+97.33	25.29	870.07
4.04	998+97.33	30.29	870.12
4.05	999+02.33	30.29	870.12
4.06	999+08.33	30.29	870.30
4.07	999+08.33	25.29	870.24
4.08	999+02.33	25.29	870.07
4.09	999+02.33	22.29	870.01
4.10	999+02.33	19.79	870.06

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DETAILS	SHEET 15	E

2

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

CURB RAMP 07 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
7.01	1006+53.32	-17.59	873.98
7.02	1006+53.32	-20.09	873.93
7.03	1006+53.32	-23.09	873.98
7.04	1006+47.32	-23.09	874.34
7.05	1006+47.32	-28.09	874.29
7.06	1006+53.32	-28.09	873.93
7.07	1006+58.32	-28.08	873.98
7.08	1006+64.32	-28.08	874.34
7.09	1006+64.32	-23.08	874.39
7.10	1006+58.32	-23.08	874.02
7.11	1006+58.32	-20.08	874.52
7.12	1006+58.32	-17.58	874.11

GUY POLE

RIGHT-OF-WAY

PEDESTRIAN CURB

7.05 7.06 7.07 7.08 -6.0% 1.0% 1.0% 6.0% 7.04 7.03 7.10 7.09 7.02 7A 7.11 7.01 07 7.12

1006

STH 117 / CECIL STREET

CURB RAMP 05 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
5.01	1005+89.05	24.70	872.17
5.02	1005+87.75	26.84	872.12
5.03	1005+81.25	26.84	872.21
5.04	1005+76.25	26.84	872.29
5.05	1005+76.25	31.84	872.24
5.06	1005+81.25	31.84	872.16
5.07	1005+93.82	31.84	872.08
5.08	1005+95.67	30.16	872.13

5.02 5.01 5.03 5.04 05 4B1 5.08 -1.6% -1.0% -0.7% 5.07 5.05 5.06

RIGHT-OF-WAY

RADIAL WARNING FIELD	
LANDING "XR"	12.6'
AREA	19.1 SF
LONG CHORD	7.9'
BOC RADIUS	27.5'

EAST MILL STREET

CURB RAMP 06A 06B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
6.01	1006+34.03	31.20	873.55
6.02	1006+39.27	31.90	873.52
6.03	1006+45.27	31.91	873.82
6.04	1006+53.31	31.91	874.24
6.05	1006+58.32	31.92	874.28
6.06	1006+64.32	31.92	874.30
6.07	1006+64.32	26.92	874.38
6.08	1006+58.32	26.92	874.22
6.09	1006+58.32	22.92	874.16
6.10	1006+58.32	20.42	874.21
6.11	1006+53.32	20.41	874.11
6.12	1006+53.32	22.91	874.06
6.13	1006+53.32	26.91	874.16
6.14	1006+45.27	26.91	873.88
6.15	1006+39.27	26.90	873.63
6.16	1006+37.44	25.20	873.68

6.11 06B 6.10 6.12 3 6.09 6.15 6.16 06A 4B1 6.14 6.13 6.08 6.07 6.01 -4.6% -0.9% -4.4% -1.4% -0.9% -1.4% 6.02 6.03 6.04 6.05 6.06

RIGHT-OF-WAY

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DETAILS	SHEET 16	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\021001_CD\021002_CD.DWG
LAYOUT NAME - 2
PLOT DATE : 3/24/2023 9:42 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

N

RIGHT-OF-WAY

RIGHT-OF-WAY

WEST MILL STREET

8.01
8.02
8.03
8.04
8.05
8.06
8.07
8.08
8.09
4B1
08

-1.6%
1.1%
-3.3%
-1.4%

1007

1008

STH 117 / CECIL STREET

RIGHT-OF-WAY

CURB RAMP 08 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
8.01	1007+39.65	-21.11	876.96
8.02	1007+38.03	-23.01	876.91
8.03	1007+32.03	-23.01	877.01
8.04	1007+27.03	-23.01	877.19
8.05	1007+27.03	-28.01	877.13
8.06	1007+32.03	-28.02	877.09
8.07	1007+38.03	-28.01	876.82
8.08	1007+41.58	-28.01	876.77
8.09	1007+43.95	-27.21	876.82

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

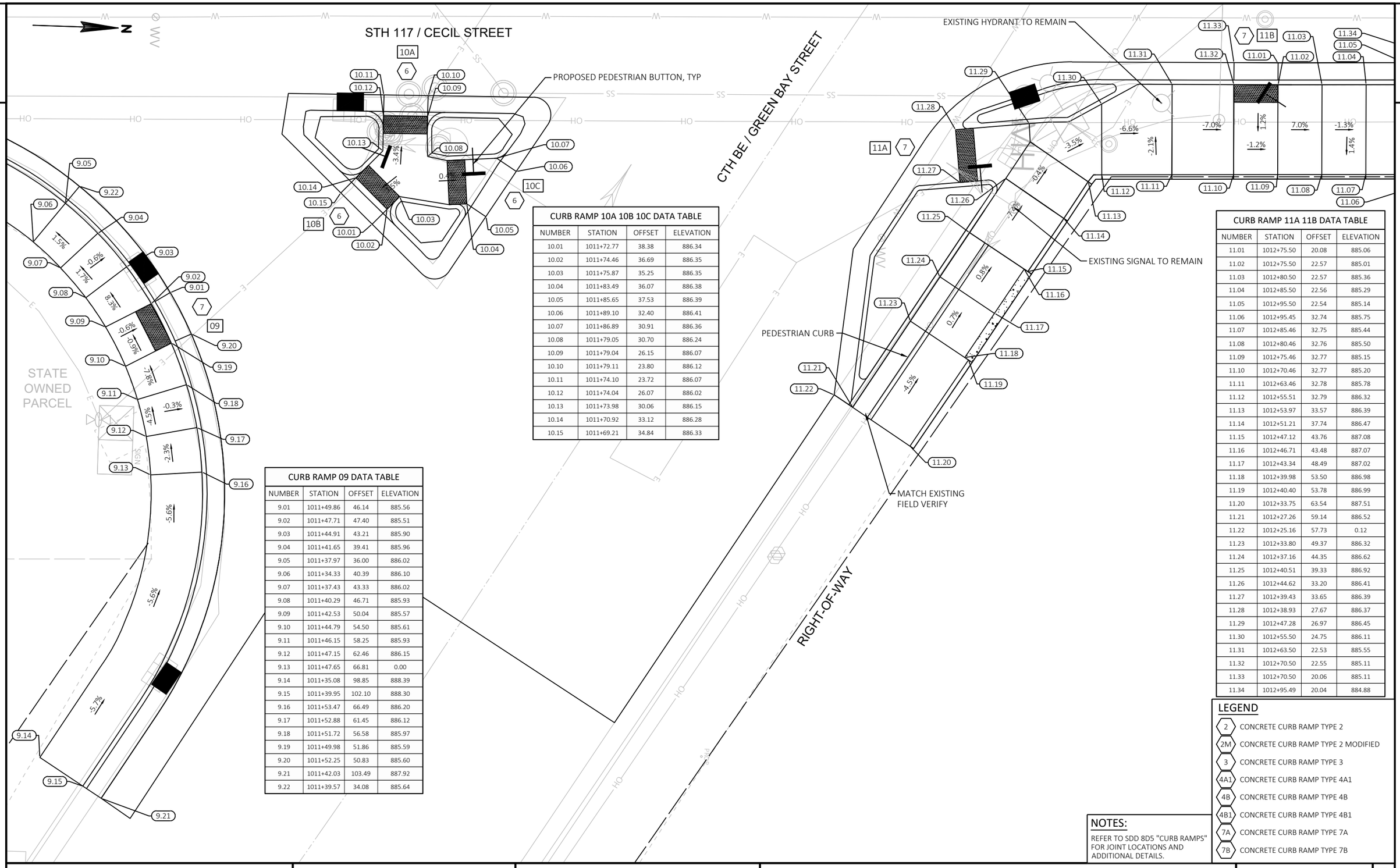
NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DETAILS	SHEET 17	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\021001_CD\021002_CD.DWG
LAYOUT NAME - 3

PLOT DATE : 3/24/2023 9:42 AM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:10 FT



CURB RAMP 10A 10B 10C DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
10.01	1011+72.77	38.38	886.34
10.02	1011+74.46	36.69	886.35
10.03	1011+75.87	35.25	886.35
10.04	1011+83.49	36.07	886.38
10.05	1011+85.65	37.53	886.39
10.06	1011+89.10	32.40	886.41
10.07	1011+86.89	30.91	886.36
10.08	1011+79.05	30.70	886.24
10.09	1011+79.04	26.15	886.07
10.10	1011+79.11	23.80	886.12
10.11	1011+74.10	23.72	886.07
10.12	1011+74.04	26.07	886.02
10.13	1011+73.98	30.06	886.15
10.14	1011+70.92	33.12	886.28
10.15	1011+69.21	34.84	886.33

CURB RAMP 09 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
9.01	1011+49.86	46.14	885.56
9.02	1011+47.71	47.40	885.51
9.03	1011+44.91	43.21	885.90
9.04	1011+41.65	39.41	885.96
9.05	1011+37.97	36.00	886.02
9.06	1011+34.33	40.39	886.10
9.07	1011+37.43	43.33	886.02
9.08	1011+40.29	46.71	885.93
9.09	1011+42.53	50.04	885.57
9.10	1011+44.79	54.50	885.61
9.11	1011+46.15	58.25	885.93
9.12	1011+47.15	62.46	886.15
9.13	1011+47.65	66.81	0.00
9.14	1011+35.08	98.85	888.39
9.15	1011+39.95	102.10	888.30
9.16	1011+53.47	66.49	886.20
9.17	1011+52.88	61.45	886.12
9.18	1011+51.72	56.58	885.97
9.19	1011+49.98	51.86	885.59
9.20	1011+52.25	50.83	885.60
9.21	1011+42.03	103.49	887.92
9.22	1011+39.57	34.08	885.64

CURB RAMP 11A 11B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
11.01	1012+75.50	20.08	885.06
11.02	1012+75.50	22.57	885.01
11.03	1012+80.50	22.57	885.36
11.04	1012+85.50	22.56	885.29
11.05	1012+95.50	22.54	885.14
11.06	1012+95.45	32.74	885.75
11.07	1012+85.46	32.75	885.44
11.08	1012+80.46	32.76	885.50
11.09	1012+75.46	32.77	885.15
11.10	1012+70.46	32.77	885.20
11.11	1012+63.46	32.78	885.78
11.12	1012+55.51	32.79	886.32
11.13	1012+53.97	33.57	886.39
11.14	1012+51.21	37.74	886.47
11.15	1012+47.12	43.76	887.08
11.16	1012+46.71	43.48	887.07
11.17	1012+43.34	48.49	887.02
11.18	1012+39.98	53.50	886.98
11.19	1012+40.40	53.78	886.99
11.20	1012+33.75	63.54	887.51
11.21	1012+27.26	59.14	886.52
11.22	1012+25.16	57.73	0.12
11.23	1012+33.80	49.37	886.32
11.24	1012+37.16	44.35	886.62
11.25	1012+40.51	39.33	886.92
11.26	1012+44.62	33.20	886.41
11.27	1012+39.43	33.65	886.39
11.28	1012+38.93	27.67	886.37
11.29	1012+47.28	26.97	886.45
11.30	1012+55.50	24.75	886.11
11.31	1012+63.50	22.53	885.55
11.32	1012+70.50	22.55	885.11
11.33	1012+70.50	20.06	885.11
11.34	1012+95.49	20.04	884.88

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DETAILS	SHEET 18	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\021001_CD\021002_CD.DWG
LAYOUT NAME - 4
PLOT DATE : 3/24/2023 9:42 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

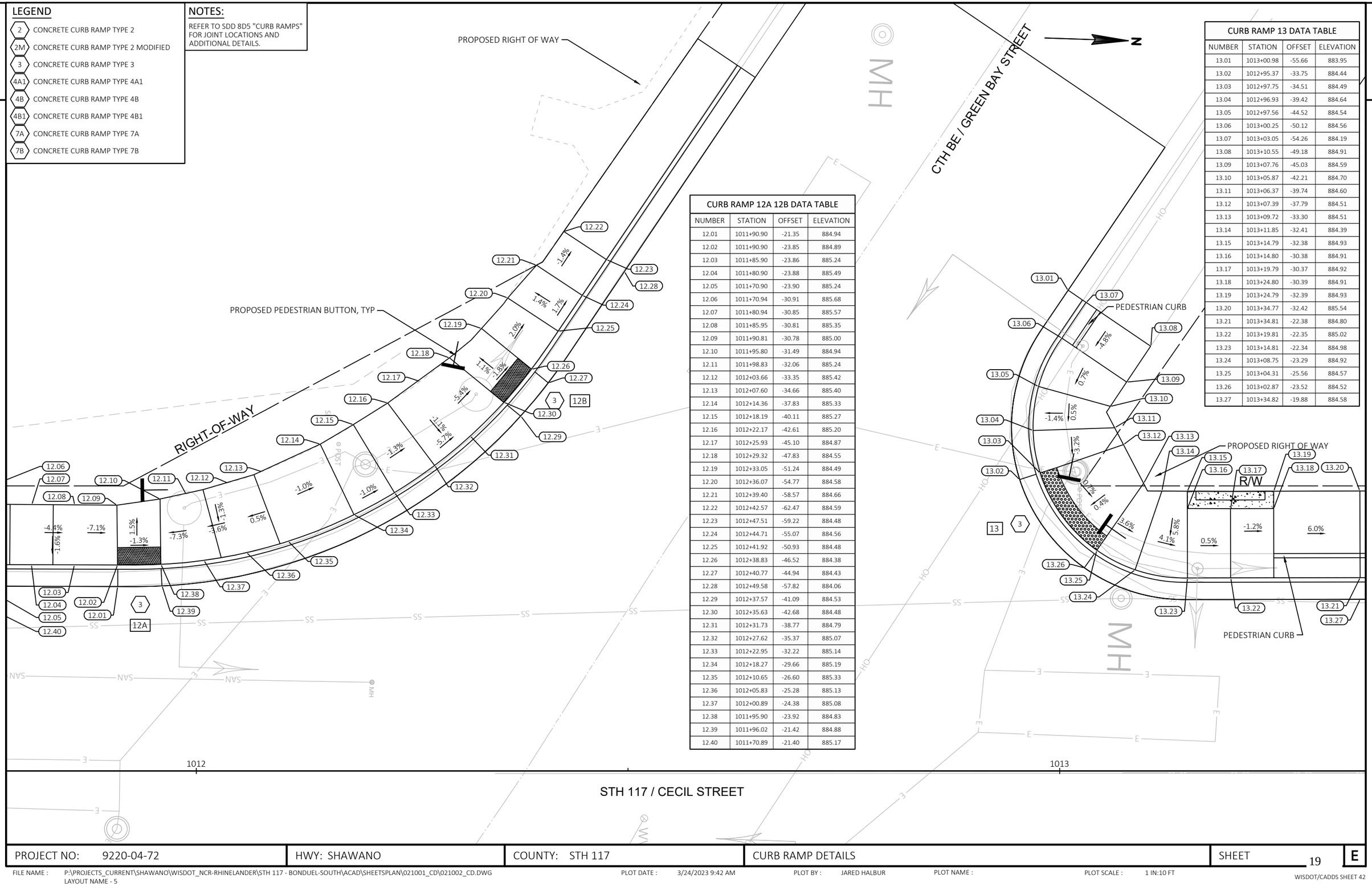
2

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.



CURB RAMP 12A 12B DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
12.01	1011+90.90	-21.35	884.94
12.02	1011+90.90	-23.85	884.89
12.03	1011+85.90	-23.86	885.24
12.04	1011+80.90	-23.88	885.49
12.05	1011+70.90	-23.90	885.24
12.06	1011+70.94	-30.91	885.68
12.07	1011+80.94	-30.85	885.57
12.08	1011+85.95	-30.81	885.35
12.09	1011+90.81	-30.78	885.00
12.10	1011+95.80	-31.49	884.94
12.11	1011+98.83	-32.06	885.24
12.12	1012+03.66	-33.35	885.42
12.13	1012+07.60	-34.66	885.40
12.14	1012+14.36	-37.83	885.33
12.15	1012+18.19	-40.11	885.27
12.16	1012+22.17	-42.61	885.20
12.17	1012+25.93	-45.10	884.87
12.18	1012+29.32	-47.83	884.55
12.19	1012+33.05	-51.24	884.49
12.20	1012+36.07	-54.77	884.58
12.21	1012+39.40	-58.57	884.66
12.22	1012+42.57	-62.47	884.59
12.23	1012+47.51	-59.22	884.48
12.24	1012+44.71	-55.07	884.56
12.25	1012+41.92	-50.93	884.48
12.26	1012+38.83	-46.52	884.38
12.27	1012+40.77	-44.94	884.43
12.28	1012+49.58	-57.82	884.06
12.29	1012+37.57	-41.09	884.53
12.30	1012+35.63	-42.68	884.48
12.31	1012+31.73	-38.77	884.79
12.32	1012+27.62	-35.37	885.07
12.33	1012+22.95	-32.22	885.14
12.34	1012+18.27	-29.66	885.19
12.35	1012+10.65	-26.60	885.33
12.36	1012+05.83	-25.28	885.13
12.37	1012+00.89	-24.38	885.08
12.38	1011+95.90	-23.92	884.83
12.39	1011+96.02	-21.42	884.88
12.40	1011+70.89	-21.40	885.17

CURB RAMP 13 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
13.01	1013+00.98	-55.66	883.95
13.02	1012+95.37	-33.75	884.44
13.03	1012+97.75	-34.51	884.49
13.04	1012+96.93	-39.42	884.64
13.05	1012+97.56	-44.52	884.54
13.06	1013+00.25	-50.12	884.56
13.07	1013+03.05	-54.26	884.19
13.08	1013+10.55	-49.18	884.91
13.09	1013+07.76	-45.03	884.59
13.10	1013+05.87	-42.21	884.70
13.11	1013+06.37	-39.74	884.60
13.12	1013+07.39	-37.79	884.51
13.13	1013+09.72	-33.30	884.51
13.14	1013+11.85	-32.41	884.39
13.15	1013+14.79	-32.38	884.93
13.16	1013+14.80	-30.38	884.91
13.17	1013+19.79	-30.37	884.92
13.18	1013+24.80	-30.39	884.91
13.19	1013+24.79	-32.39	884.93
13.20	1013+34.77	-32.42	885.54
13.21	1013+34.81	-22.38	884.80
13.22	1013+19.81	-22.35	885.02
13.23	1013+14.81	-22.34	884.98
13.24	1013+08.75	-23.29	884.92
13.25	1013+04.31	-25.56	884.57
13.26	1013+02.87	-23.52	884.52
13.27	1013+34.82	-19.88	884.58

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

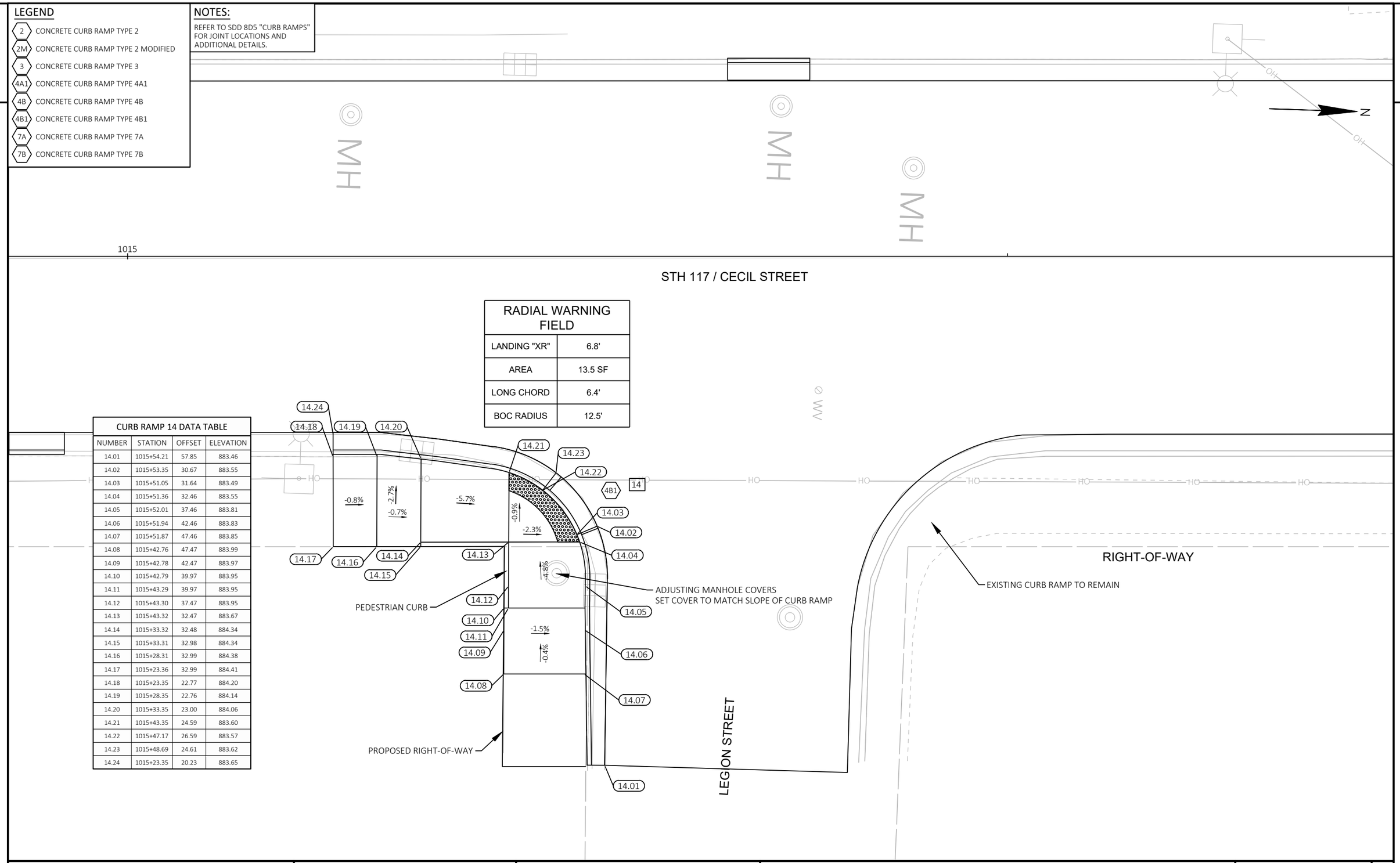
NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

RADIAL WARNING FIELD	
LANDING "XR"	6.8'
AREA	13.5 SF
LONG CHORD	6.4'
BOC RADIUS	12.5'

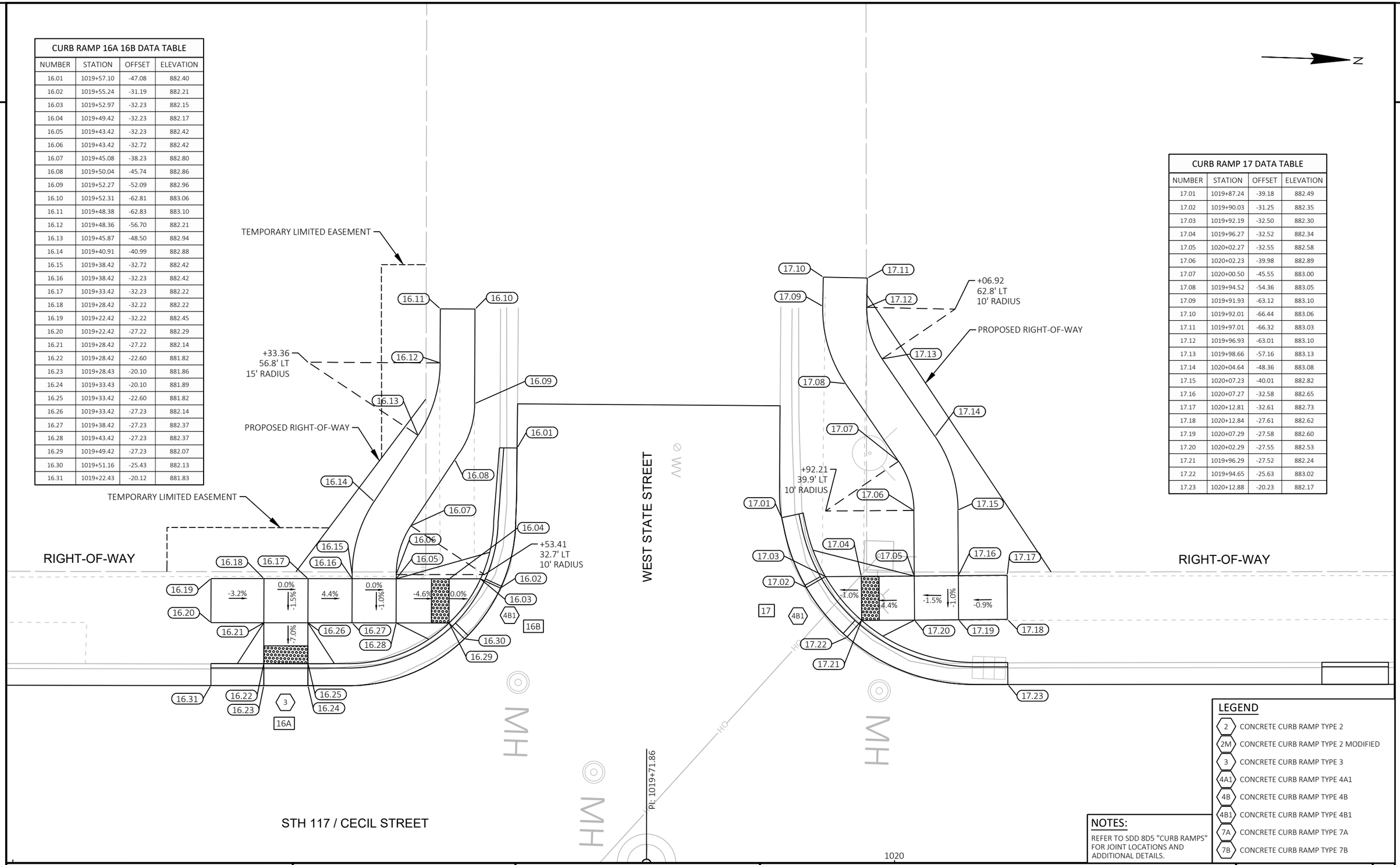
CURB RAMP 14 DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
14.01	1015+54.21	57.85	883.46
14.02	1015+53.35	30.67	883.55
14.03	1015+51.05	31.64	883.49
14.04	1015+51.36	32.46	883.55
14.05	1015+52.01	37.46	883.81
14.06	1015+51.94	42.46	883.83
14.07	1015+51.87	47.46	883.85
14.08	1015+42.76	47.47	883.99
14.09	1015+42.78	42.47	883.97
14.10	1015+42.79	39.97	883.95
14.11	1015+43.29	39.97	883.95
14.12	1015+43.30	37.47	883.95
14.13	1015+43.32	32.47	883.67
14.14	1015+33.32	32.48	884.34
14.15	1015+33.31	32.98	884.34
14.16	1015+28.31	32.99	884.38
14.17	1015+23.36	32.99	884.41
14.18	1015+23.35	22.77	884.20
14.19	1015+28.35	22.76	884.14
14.20	1015+33.35	23.00	884.06
14.21	1015+43.35	24.59	883.60
14.22	1015+47.17	26.59	883.57
14.23	1015+48.69	24.61	883.62
14.24	1015+23.35	20.23	883.65



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DEATILS:	SHEET 20	E

CURB RAMP 16A 16B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
16.01	1019+57.10	-47.08	882.40
16.02	1019+55.24	-31.19	882.21
16.03	1019+52.97	-32.23	882.15
16.04	1019+49.42	-32.23	882.17
16.05	1019+43.42	-32.23	882.42
16.06	1019+43.42	-32.72	882.42
16.07	1019+45.08	-38.23	882.80
16.08	1019+50.04	-45.74	882.86
16.09	1019+52.27	-52.09	882.96
16.10	1019+52.31	-62.81	883.06
16.11	1019+48.38	-62.83	883.10
16.12	1019+48.36	-56.70	882.21
16.13	1019+45.87	-48.50	882.94
16.14	1019+40.91	-40.99	882.88
16.15	1019+38.42	-32.72	882.42
16.16	1019+38.42	-32.23	882.42
16.17	1019+33.42	-32.23	882.22
16.18	1019+28.42	-32.22	882.22
16.19	1019+22.42	-32.22	882.45
16.20	1019+22.42	-27.22	882.29
16.21	1019+28.42	-27.22	882.14
16.22	1019+28.42	-22.60	881.82
16.23	1019+28.43	-20.10	881.86
16.24	1019+33.43	-20.10	881.89
16.25	1019+33.42	-22.60	881.82
16.26	1019+33.42	-27.23	882.14
16.27	1019+38.42	-27.23	882.37
16.28	1019+43.42	-27.23	882.37
16.29	1019+49.42	-27.23	882.07
16.30	1019+51.16	-25.43	882.13
16.31	1019+22.43	-20.12	881.83



CURB RAMP 17 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
17.01	1019+87.24	-39.18	882.49
17.02	1019+90.03	-31.25	882.35
17.03	1019+92.19	-32.50	882.30
17.04	1019+96.27	-32.52	882.34
17.05	1020+02.27	-32.55	882.58
17.06	1020+02.23	-39.98	882.89
17.07	1020+00.50	-45.55	883.00
17.08	1019+94.52	-54.36	883.05
17.09	1019+91.93	-63.12	883.10
17.10	1019+92.01	-66.44	883.06
17.11	1019+97.01	-66.32	883.03
17.12	1019+96.93	-63.01	883.10
17.13	1019+98.66	-57.16	883.13
17.14	1020+04.64	-48.36	883.08
17.15	1020+07.23	-40.01	882.82
17.16	1020+07.27	-32.58	882.65
17.17	1020+12.81	-32.61	882.73
17.18	1020+12.84	-27.61	882.62
17.19	1020+07.29	-27.58	882.60
17.20	1020+02.29	-27.55	882.53
17.21	1019+96.29	-27.52	882.24
17.22	1019+94.65	-25.63	883.02
17.23	1020+12.88	-20.23	882.17

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DETAILS:	SHEET 21	E

STH 117 / CECIL STREET

N

EXISTING POWER POLE TO REMAIN

GUY WIRE RELOCATION REQUIRED

RIGHT-OF-WAY

RIGHT-OF-WAY

TEMPORARY LIMITED EASEMENT

PEDESTRIAN CURB

TEMPORARY LIMITED EASEMENT

PEDESTRIAN CURB

EAST STATE STREET

MH

MH

HO

OH

WV

GV

CURB RAMP 18A 18B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
18.01	1019+55.90	36.57	881.87
18.02	1019+54.60	30.58	881.96
18.03	1019+52.29	31.54	881.92
18.04	1019+48.83	31.54	881.97
18.05	1019+42.83	31.54	882.01
18.06	1019+37.83	31.54	882.08
18.07	1019+33.44	31.54	882.17
18.08	1019+28.44	31.54	882.12
18.09	1019+22.44	31.54	882.28
18.10	1019+16.44	31.54	882.35
18.11	1019+16.44	26.54	882.24
18.12	1019+22.44	26.54	882.14
18.13	1019+28.44	26.54	882.04
18.14	1019+28.44	22.62	881.88
18.15	1019+28.44	20.12	881.93
18.16	1019+33.44	20.11	881.96
18.17	1019+33.44	22.61	881.91
18.18	1019+33.44	26.54	882.10
18.19	1019+37.83	26.54	882.07
18.20	1019+42.83	26.54	882.03
18.21	1019+48.83	26.54	881.96
18.22	1019+50.54	24.71	882.03
18.23	1019+16.44	20.12	881.90

CURB RAMP 19 DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
19.01	1019+87.93	37.23	881.86
19.02	1019+89.57	30.56	882.07
19.03	1019+91.84	31.61	882.02
19.04	1019+95.54	31.60	882.05
19.05	1020+01.54	31.58	882.38
19.06	1020+06.54	31.57	882.65
19.07	1020+11.54	31.55	882.73
19.08	1020+11.53	26.55	882.64
19.09	1020+06.53	26.57	882.59
19.10	1020+01.53	26.58	882.34
19.11	1019+95.53	26.60	882.05
19.12	1019+93.85	24.74	882.10
19.13	1020+11.51	20.09	881.25

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DETAILS:	SHEET 22	E

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

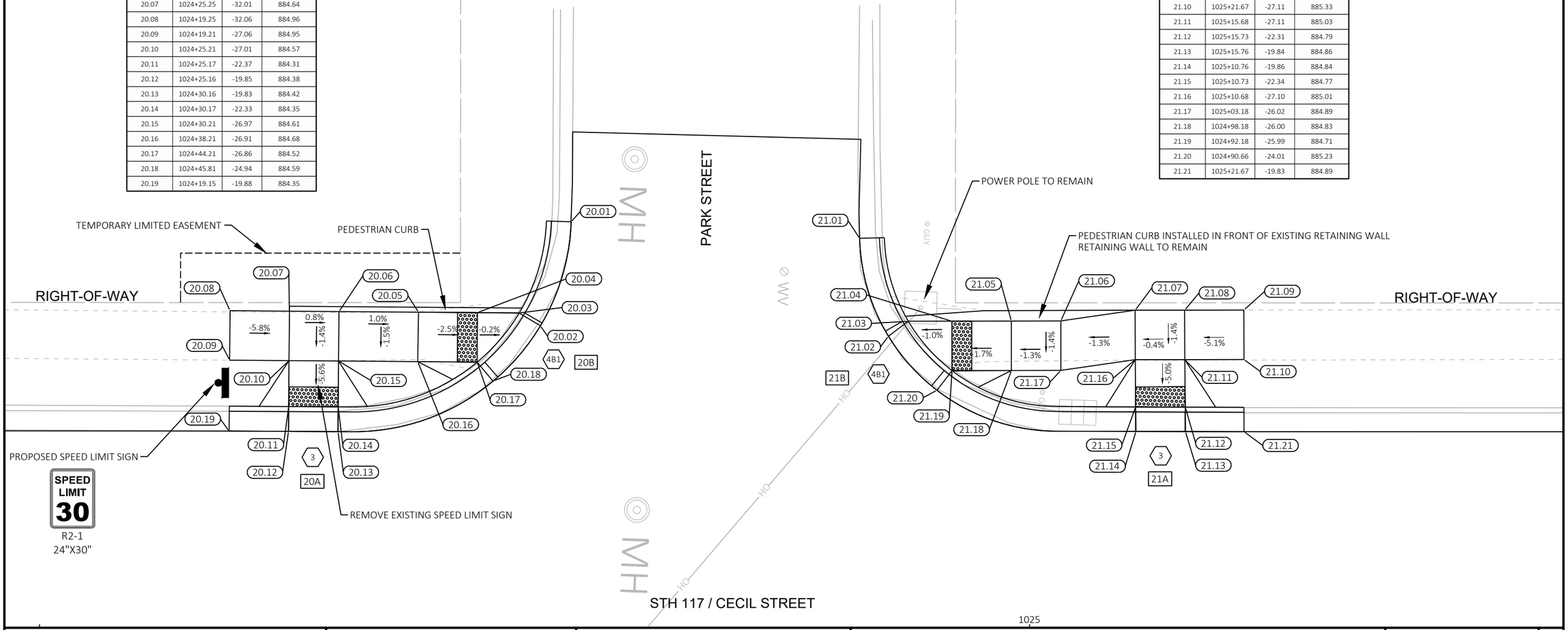
REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

CURB RAMP 20A 20B DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
20.01	1024+53.69	-41.03	884.94
20.02	1024+50.59	-30.54	884.66
20.03	1024+48.44	-31.82	884.59
20.04	1024+44.25	-31.86	884.62
20.05	1024+38.29	-31.90	884.76
20.06	1024+30.25	-31.97	884.68
20.07	1024+25.25	-32.01	884.64
20.08	1024+19.25	-32.06	884.96
20.09	1024+19.21	-27.06	884.95
20.10	1024+25.21	-27.01	884.57
20.11	1024+25.17	-22.37	884.31
20.12	1024+25.16	-19.85	884.38
20.13	1024+30.16	-19.83	884.42
20.14	1024+30.17	-22.33	884.35
20.15	1024+30.21	-26.97	884.61
20.16	1024+38.21	-26.91	884.68
20.17	1024+44.21	-26.86	884.52
20.18	1024+45.81	-24.94	884.59
20.19	1024+19.15	-19.88	884.35

CURB RAMP 21A 21B DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
21.01	1024+82.84	-39.37	884.98
21.02	1024+85.75	-29.46	884.84
21.03	1024+87.76	-30.98	884.77
21.04	1024+92.17	-30.99	884.81
21.05	1024+98.17	-31.00	884.90
21.06	1025+03.17	-31.02	884.97
21.07	1025+10.67	-32.10	885.08
21.08	1025+15.67	-32.11	885.10
21.09	1025+21.66	-32.11	885.41
21.10	1025+21.67	-27.11	885.33
21.11	1025+15.68	-27.11	885.03
21.12	1025+15.73	-22.31	884.79
21.13	1025+15.76	-19.84	884.86
21.14	1025+10.76	-19.86	884.84
21.15	1025+10.73	-22.34	884.77
21.16	1025+10.68	-27.10	885.01
21.17	1025+03.18	-26.02	884.89
21.18	1024+98.18	-26.00	884.83
21.19	1024+92.18	-25.99	884.71
21.20	1024+90.66	-24.01	885.23
21.21	1025+21.67	-19.83	884.89



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DETAILS:	SHEET 23	E

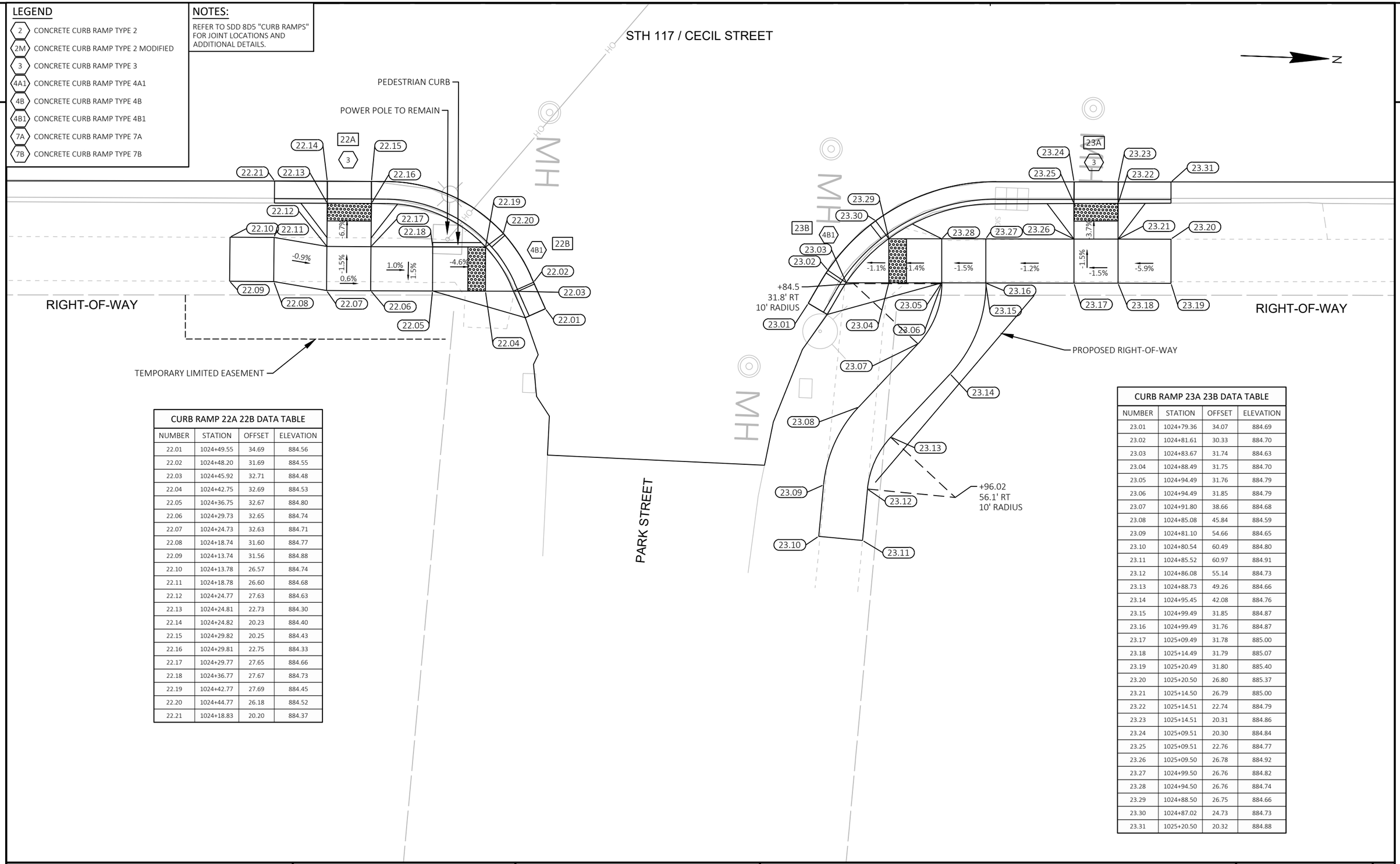
2

LEGEND

- 2 CONCRETE CURB RAMP TYPE 2
- 2M CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 CONCRETE CURB RAMP TYPE 3
- 4A1 CONCRETE CURB RAMP TYPE 4A1
- 4B CONCRETE CURB RAMP TYPE 4B
- 4B1 CONCRETE CURB RAMP TYPE 4B1
- 7A CONCRETE CURB RAMP TYPE 7A
- 7B CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.



CURB RAMP 22A 22B DATA TABLE

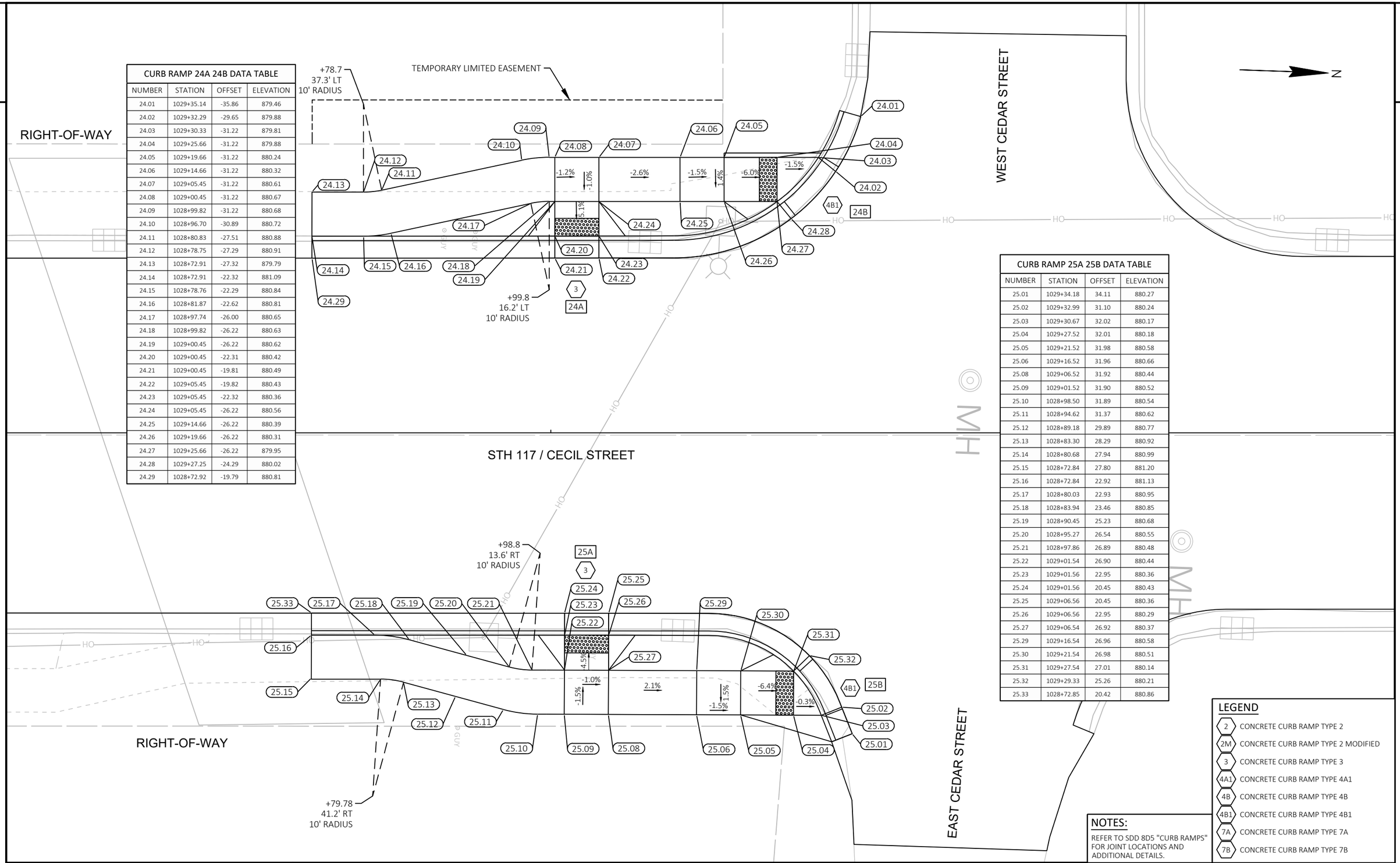
NUMBER	STATION	OFFSET	ELEVATION
22.01	1024+49.55	34.69	884.56
22.02	1024+48.20	31.69	884.55
22.03	1024+45.92	32.71	884.48
22.04	1024+42.75	32.69	884.53
22.05	1024+36.75	32.67	884.80
22.06	1024+29.73	32.65	884.74
22.07	1024+24.73	32.63	884.71
22.08	1024+18.74	31.60	884.77
22.09	1024+13.74	31.56	884.88
22.10	1024+13.78	26.57	884.74
22.11	1024+18.78	26.60	884.68
22.12	1024+24.77	27.63	884.63
22.13	1024+24.81	22.73	884.30
22.14	1024+24.82	20.23	884.40
22.15	1024+29.82	20.25	884.43
22.16	1024+29.81	22.75	884.33
22.17	1024+29.77	27.65	884.66
22.18	1024+36.77	27.67	884.73
22.19	1024+42.77	27.69	884.45
22.20	1024+44.77	26.18	884.52
22.21	1024+18.83	20.20	884.37

CURB RAMP 23A 23B DATA TABLE

NUMBER	STATION	OFFSET	ELEVATION
23.01	1024+79.36	34.07	884.69
23.02	1024+81.61	30.33	884.70
23.03	1024+83.67	31.74	884.63
23.04	1024+88.49	31.75	884.70
23.05	1024+94.49	31.76	884.79
23.06	1024+94.49	31.85	884.79
23.07	1024+91.80	38.66	884.68
23.08	1024+85.08	45.84	884.59
23.09	1024+81.10	54.66	884.65
23.10	1024+80.54	60.49	884.80
23.11	1024+85.52	60.97	884.91
23.12	1024+86.08	55.14	884.73
23.13	1024+88.73	49.26	884.66
23.14	1024+95.45	42.08	884.76
23.15	1024+99.49	31.85	884.87
23.16	1024+99.49	31.76	884.87
23.17	1025+09.49	31.78	885.00
23.18	1025+14.49	31.79	885.07
23.19	1025+20.49	31.80	885.40
23.20	1025+20.50	26.80	885.37
23.21	1025+14.50	26.79	885.00
23.22	1025+14.51	22.74	884.79
23.23	1025+14.51	20.31	884.86
23.24	1025+09.51	20.30	884.84
23.25	1025+09.51	22.76	884.77
23.26	1025+09.50	26.78	884.92
23.27	1024+99.50	26.76	884.82
23.28	1024+94.50	26.76	884.74
23.29	1024+88.50	26.75	884.66
23.30	1024+87.02	24.73	884.73
23.31	1025+20.50	20.32	884.88

2

CURB RAMP 24A 24B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
24.01	1029+35.14	-35.86	879.46
24.02	1029+32.29	-29.65	879.88
24.03	1029+30.33	-31.22	879.81
24.04	1029+25.66	-31.22	879.88
24.05	1029+19.66	-31.22	880.24
24.06	1029+14.66	-31.22	880.32
24.07	1029+05.45	-31.22	880.61
24.08	1029+00.45	-31.22	880.67
24.09	1028+99.82	-31.22	880.68
24.10	1028+96.70	-30.89	880.72
24.11	1028+80.83	-27.51	880.88
24.12	1028+78.75	-27.29	880.91
24.13	1028+72.91	-27.32	879.79
24.14	1028+72.91	-22.32	881.09
24.15	1028+78.76	-22.29	880.84
24.16	1028+81.87	-22.62	880.81
24.17	1028+97.74	-26.00	880.65
24.18	1028+99.82	-26.22	880.63
24.19	1029+00.45	-26.22	880.62
24.20	1029+00.45	-22.31	880.42
24.21	1029+00.45	-19.81	880.49
24.22	1029+05.45	-19.82	880.43
24.23	1029+05.45	-22.32	880.36
24.24	1029+05.45	-26.22	880.56
24.25	1029+14.66	-26.22	880.39
24.26	1029+19.66	-26.22	880.31
24.27	1029+25.66	-26.22	879.95
24.28	1029+27.25	-24.29	880.02
24.29	1028+72.92	-19.79	880.81



CURB RAMP 25A 25B DATA TABLE			
NUMBER	STATION	OFFSET	ELEVATION
25.01	1029+34.18	34.11	880.27
25.02	1029+32.99	31.10	880.24
25.03	1029+30.67	32.02	880.17
25.04	1029+27.52	32.01	880.18
25.05	1029+21.52	31.98	880.58
25.06	1029+16.52	31.96	880.66
25.08	1029+06.52	31.92	880.44
25.09	1029+01.52	31.90	880.52
25.10	1028+98.50	31.89	880.54
25.11	1028+94.62	31.37	880.62
25.12	1028+89.18	29.89	880.77
25.13	1028+83.30	28.29	880.92
25.14	1028+80.68	27.94	880.99
25.15	1028+72.84	27.80	881.20
25.16	1028+72.84	22.92	881.13
25.17	1028+80.03	22.93	880.95
25.18	1028+83.94	23.46	880.85
25.19	1028+90.45	25.23	880.68
25.20	1028+95.27	26.54	880.55
25.21	1028+97.86	26.89	880.48
25.22	1029+01.54	26.90	880.44
25.23	1029+01.56	22.95	880.36
25.24	1029+01.56	20.45	880.43
25.25	1029+06.56	20.45	880.36
25.26	1029+06.56	22.95	880.29
25.27	1029+06.54	26.92	880.37
25.29	1029+16.54	26.96	880.58
25.30	1029+21.54	26.98	880.51
25.31	1029+27.54	27.01	880.14
25.32	1029+29.33	25.26	880.21
25.33	1028+72.85	20.42	880.86

LEGEND

- 2 — CONCRETE CURB RAMP TYPE 2
- 2M — CONCRETE CURB RAMP TYPE 2 MODIFIED
- 3 — CONCRETE CURB RAMP TYPE 3
- 4A1 — CONCRETE CURB RAMP TYPE 4A1
- 4B — CONCRETE CURB RAMP TYPE 4B
- 4B1 — CONCRETE CURB RAMP TYPE 4B1
- 7A — CONCRETE CURB RAMP TYPE 7A
- 7B — CONCRETE CURB RAMP TYPE 7B

NOTES:

REFER TO SDD 8D5 "CURB RAMPS" FOR JOINT LOCATIONS AND ADDITIONAL DETAILS.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CURB RAMP DETAILS:	SHEET 25	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117-BONDUEL-NORTH\ACAD\SHEETSPLAN\021001_CD\021002_CD.DWG
LAYOUT NAME - 6
PLOT DATE : 3/23/2023 1:46 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

N

+76.1
-54.0'LT
R=35'

+76.1, -19.0' LT
873.67
END OF RADIUS

+51.4, -29.1' LT
873.93
MID OF RADIUS

+41.0, -73.4' LT
872.85

+41.1, -53.7' LT
873.53
BEGIN OF RADIUS

+22.7, -73.6' LT
873.64

+19.9, -23.3' LT
875.26

SOUTH
STREET

+04.3, -73.7' LT
873.50

+03.8, -68.8' LT
873.74
END OF RADIUS

+90.3, -40.7' LT
875.19
MID OF RADIUS

+58.3, -28.0' LT
877.39
BEGIN OF RADIUS

+59.0
-73.1'LT
R=45'

994

993

STH 117

STH 117

999

998

+92.1
-44.0'LT
R=25'

+92.1, -19.0' LT
869.81
END OF RADIUS

+67.4, -50.4' LT
869.19

+73.9, -26.8' LT
869.70
MID OF RADIUS

+67.1, -45.4' LT
869.32
BEGIN OF RADIUS

+52.9, -50.9' LT
869.47

+51.4, -19.0' LT
869.90

GRANT
STREET

+38.4, -51.4' LT
869.17

+37.9, -42.4' LT
869.19
END OF RADIUS

+30.1, -25.8' LT
869.33
MID OF RADIUS

+13.0, -19.0' LT
869.99
BEGIN OF RADIUS

+12.9
-44.0'LT
R=25'

STH 117

N

2

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	INTERSECTION DETAIL	SHEET 26	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\021101_ID\021101_ID.DWG
LAYOUT NAME - 1

PLOT DATE : 3/23/2023 2:47 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : ##########

2

STH 117

1007

N

+48.4, 19.0' RT
873.95
BEGIN OF RADIUS

+48.5
34.0'RT
R=15'

+38.2, 23.1' RT
873.69
MID OF RADIUS

+33.5, 33.1' RT
873.50
END OF RADIUS

+32.3, 51.9' RT
873.46

+17.9, 19.0' RT
872.98
END OF RADIUS

+17.9, 51.4' RT
873.16

EAST MILL
STREET

+03.4, 46.0' RT
872.44
BEGIN OF RADIUS

+03.4, 50.9' RT
872.55

+93.6, 26.7' RT
872.15
MID OF RADIUS

1006

+73.5, 19.0' RT
871.81
END OF RADIUS

+73.5
49.0'RT
R=30'

STH 117

WEST
MILL STREET

STH 117

1008

+92.5
-34.0'LT
R=15'

+92.6, -19.0' LT
879.90
END OF RADIUS

+81.7, -23.6' LT
878.76
MID OF RADIUS

+77.8, -39.7' LT
877.64

+77.6, -34.7' LT
877.85
BEGIN OF RADIUS

+61.5, -40.2' LT
877.18

+60.7, -19.0' LT
878.53

+45.1, -40.8' LT
876.42

+44.9, -33.5' LT
876.73
END OF RADIUS

+40.3, -23.2' LT
876.94
MID OF RADIUS

+29.2, -19.0' LT
877.18
BEGIN OF RADIUS

+29.9
-34.0'LT
R=15'

1007

STH 117

N

2

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	INTERSECTION DETAIL	SHEET 27	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\021101_ID\021101_ID.DWG
LAYOUT NAME - 2

PLOT DATE : 3/23/2023 2:47 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : ##########

2

2

STH 117

1013

PEDESTRIAN CURB, TYP
(SEE CURB RAMP DETAILS / MATCH EXISTING CONDITIONS)

+14.5, -19.8' LT
884.60
END OF RADIUS

2 - CONCRETE STEPS
MATCH EXISTING ELEVATIONS

+14.4
-39.8'LT
R=20'

+96.8, -30.4' LT
884.40
MID OF RADIUS

EXISTING SIDEWALK

+12.2, -72.2' LT
MATCH EX

+97.9, -51.1' LT
884.03
BEGIN OF RADIUS

+94.4, -84.4' LT
MATCH EX

CTH BE

+66.0, -42.2' LT
884.43

+76.0, -96.9' LT
MATCH EX

+42.8, -47.8' LT
884.38
END OF RADIUS

+21.2, -28.3' LT
884.79
MID OF RADIUS

EXISTING SIDEWALK

PROPOSED CONCRETE SIDEWALK
MATCH LIMITS MAY VARY
SAWCUT REQ'D
(ENGINEER IN FIELD TO VERIFY)

+93.2, -21.4' LT
884.91
BEGIN OF RADIUS

+94.0
-81.4'LT
R=60'

+37.7, 0.0'
885.58

PROPOSED CONCRETE BUMP OUT
CONCRETE SIDE WALK 6-INCH
(SEE CURB RAMP DETAILS)

+52.1
40.0'RT
R=20'

1 - CONCRETE STEPS
MATCH EXISTING ELEVATIONS

+52.1, 20.0' RT
885.55
BEGIN OF RADIUS

+42.6, 22.4' RT
885.77
MID OF RADIUS

+35.3, 29.0' RT
886.19
END OF RADIUS

+27.3, 41.2' RT
886.33
TAPER POINT

+25.2, 57.7' RT
MATCH EXISTING

+09.8, 41.4' RT
886.62

PROPOSED CONCRETE SAFETY ISLAND
(SEE DETAILS)

1012

+18.2, -22.5' LT
885.79
END TAPER

STH 117

EXISTING SIDEWALK

+99.1, 94.9' RT
887.22

+80.9, 82.7' RT
887.62

CTH BE

+66.0, 72.6' RT
887.22

+47.4, 93.3' RT
887.70
BEGIN OF RADIUS

+44.1, 105.1' RT
888.01

EXISTING SIDEWALK

+51.1, 48.9' RT
885.58
MID OF RADIUS

+10.3
67.8'RT
R=45'

+14.8, 23.1' RT
885.96
END OF RADIUS

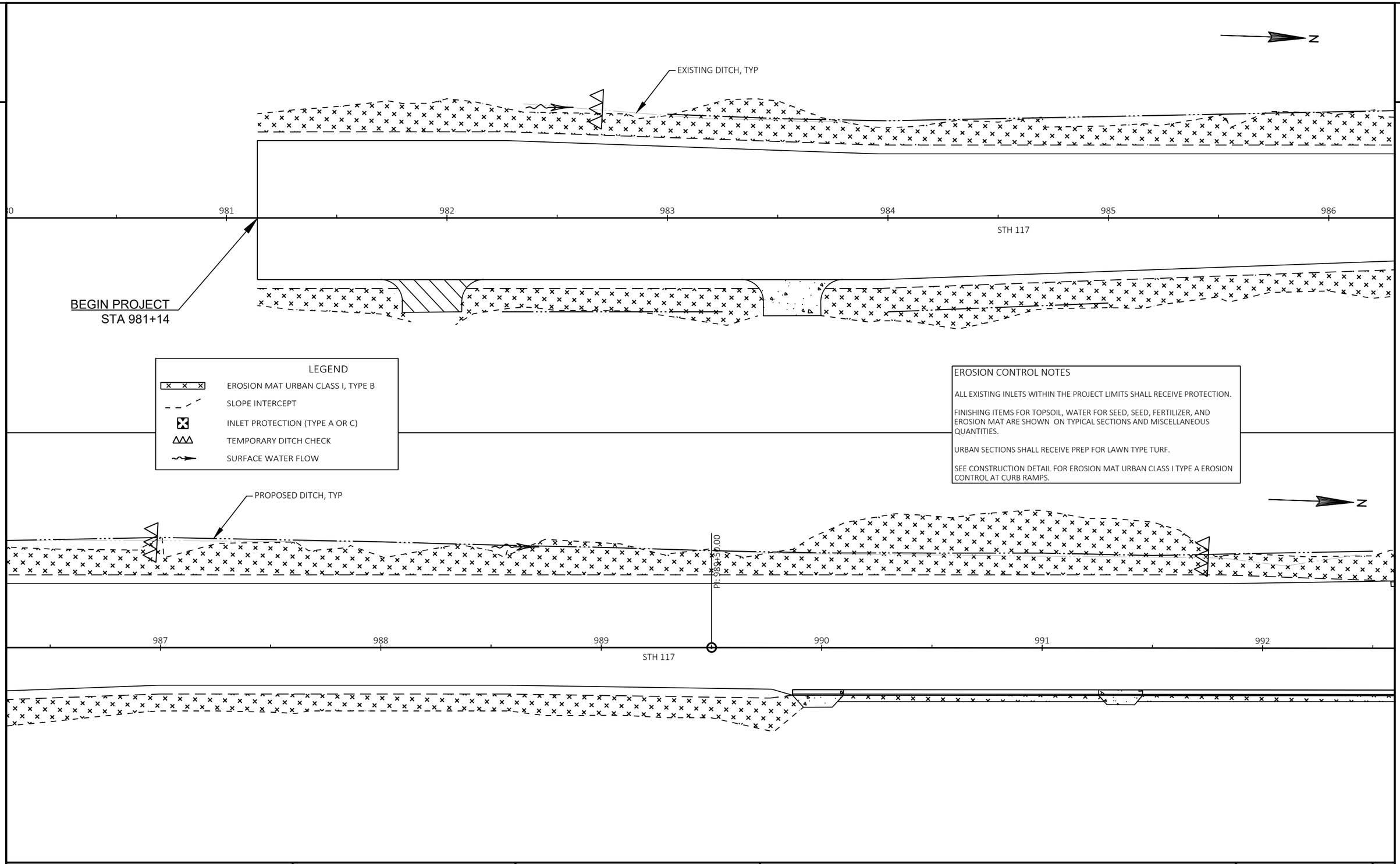
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	INTERSECTION DETAIL	SHEET 28	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\021101_ID\021101_ID.DWG
LAYOUT NAME - 3

PLOT DATE : 3/23/2023 2:47 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : ##########

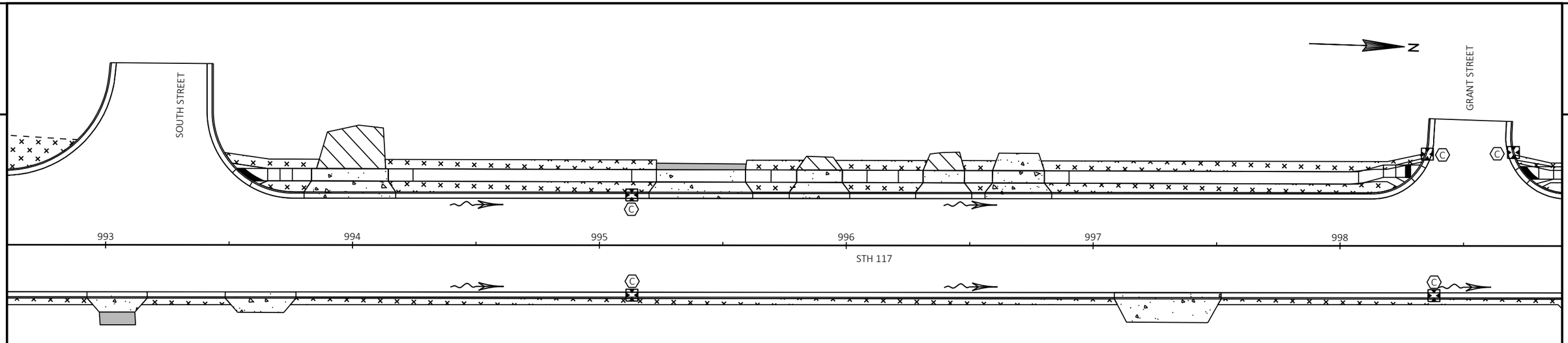
WISDOT/CADDS SHEET 42

2



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	EROSION CONTROL	SHEET 29	E

2



LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SLOPE INTERCEPT
- INLET PROTECTION (TYPE A OR C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW

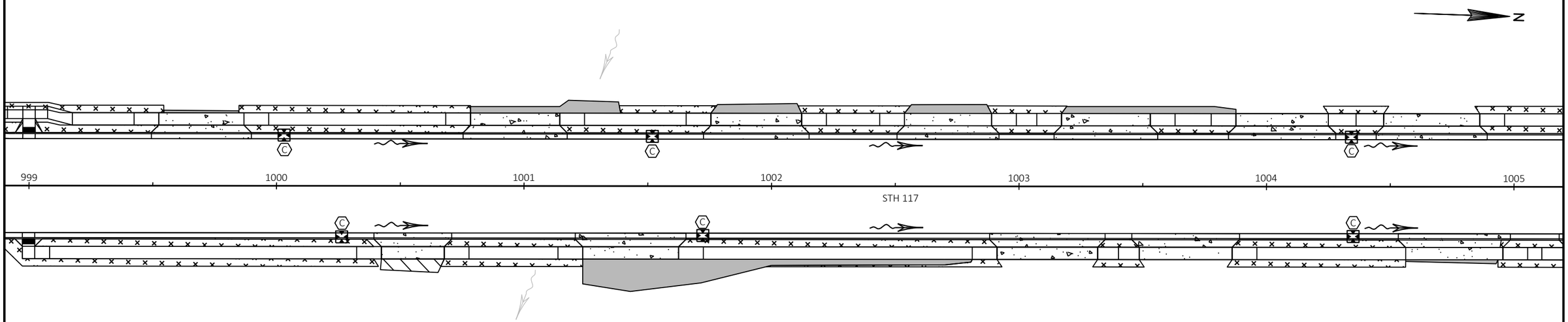
EROSION CONTROL NOTES

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE PROTECTION.

FINISHING ITEMS FOR TOPSOIL, WATER FOR SEED, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN ON TYPICAL SECTIONS AND MISCELLANEOUS QUANTITIES.

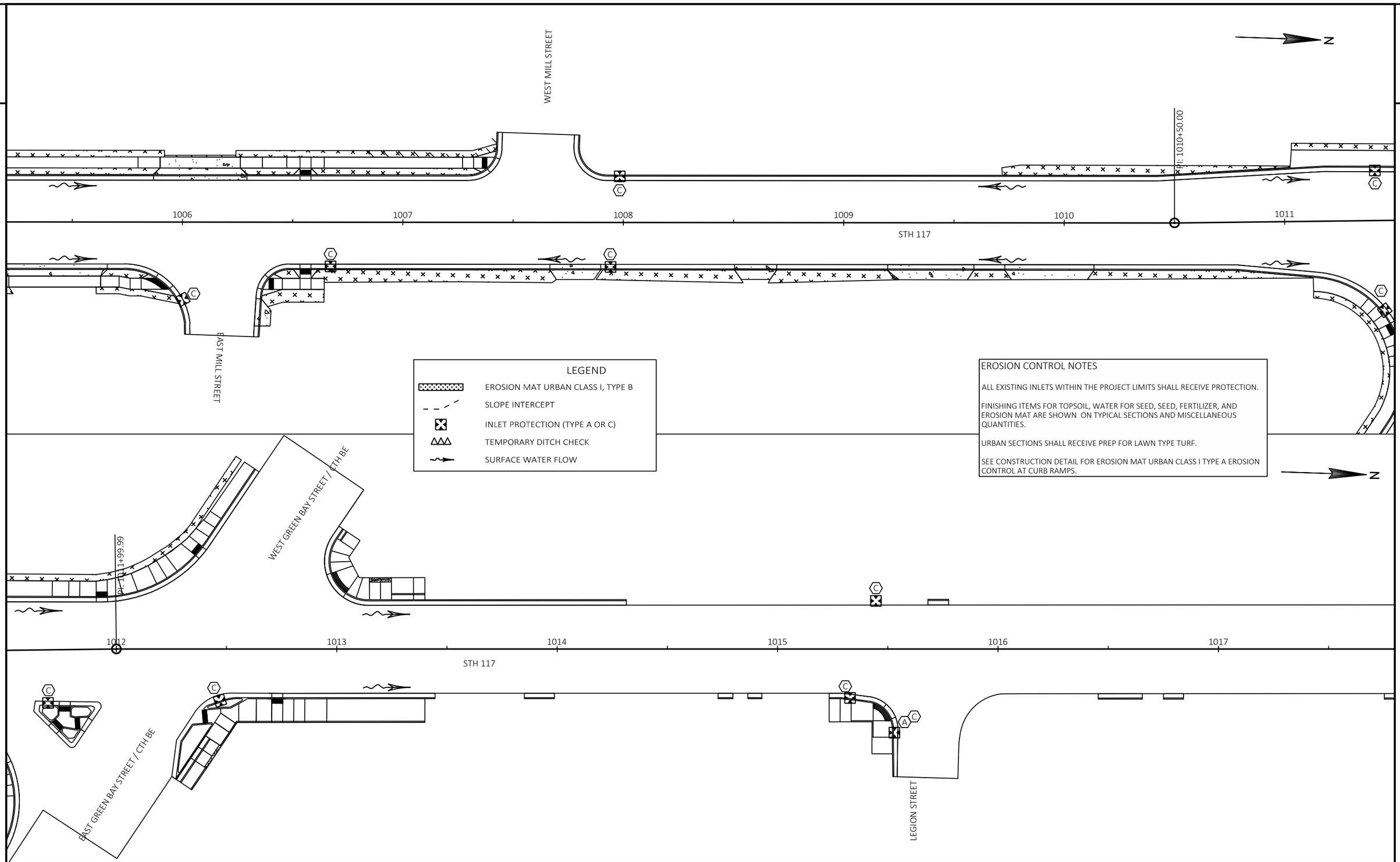
URBAN SECTIONS SHALL RECEIVE PREP FOR LAWN TYPE TURF.

SEE CONSTRUCTION DETAIL FOR EROSION MAT URBAN CLASS I TYPE A EROSION CONTROL AT CURB RAMPS.



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	EROSION CONTROL	SHEET 30	E

2



LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SLOPE INTERCEPT
- INLET PROTECTION (TYPE A OR C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE PROTECTION.

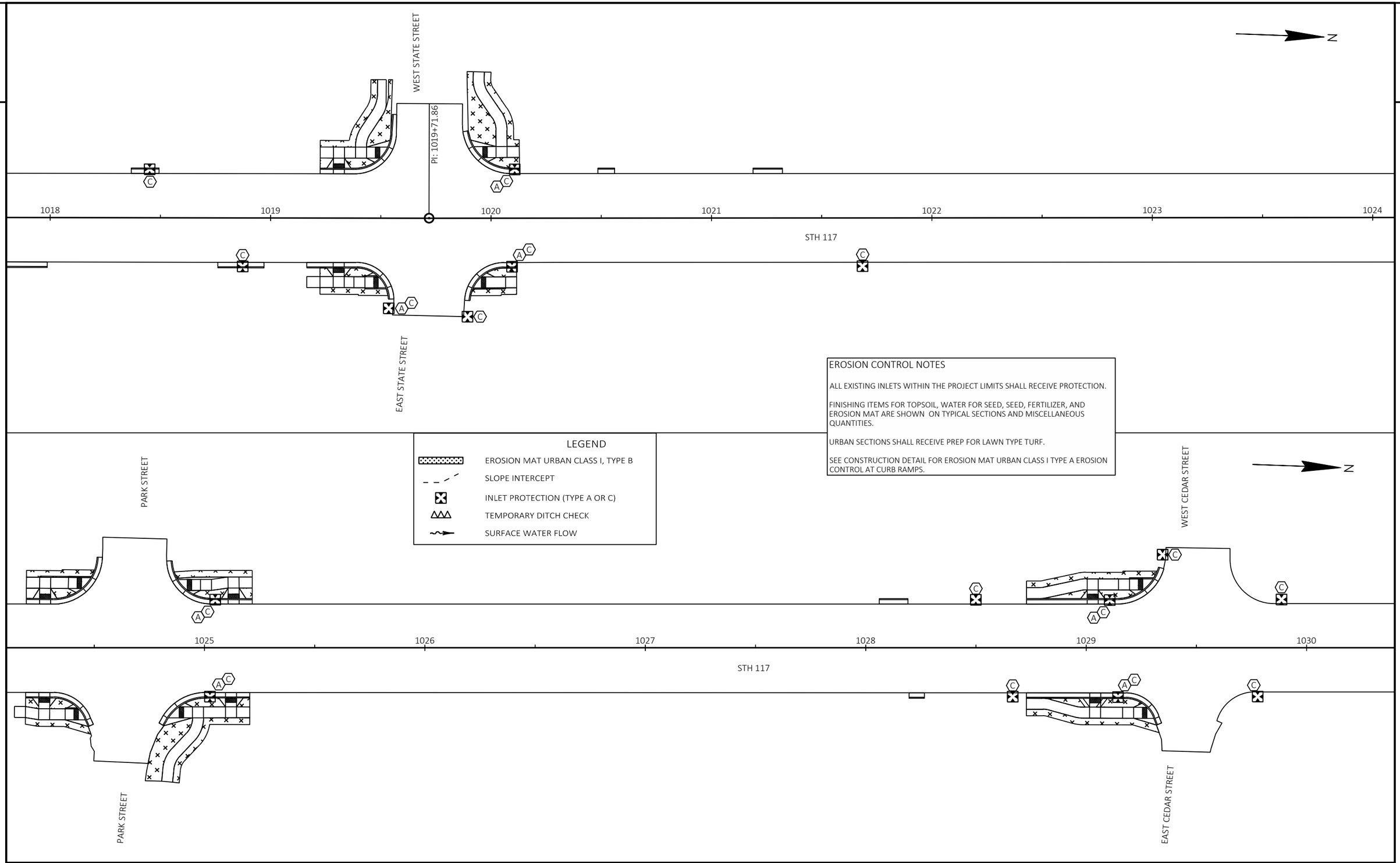
FINISHING ITEMS FOR TOPSOIL, WATER FOR SEED, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN ON TYPICAL SECTIONS AND MISCELLANEOUS QUANTITIES.

URBAN SECTIONS SHALL RECEIVE PREP FOR LAWN TYPE TURF.

SEE CONSTRUCTION DETAIL FOR EROSION MAT URBAN CLASS I TYPE A EROSION CONTROL AT CURB RAMPS.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	EROSION CONTROL	SHEET 31	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\022001_EC\022501_EC.DWG
LAYOUT NAME - 05
PLOT DATE : 3/23/2023 2:40 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42



EROSION CONTROL NOTES

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE PROTECTION.

FINISHING ITEMS FOR TOPSOIL, WATER FOR SEED, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN ON TYPICAL SECTIONS AND MISCELLANEOUS QUANTITIES.

URBAN SECTIONS SHALL RECEIVE PREP FOR LAWN TYPE TURF.

SEE CONSTRUCTION DETAIL FOR EROSION MAT URBAN CLASS I TYPE A EROSION CONTROL AT CURB RAMPS.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	EROSION CONTROL	SHEET 32	E

2

2

N

PI: 1034+60.23

1031 1032 1033 1034 1035 1036

STH 117

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SLOPE INTERCEPT
- INLET PROTECTION (TYPE A OR C)
- TEMPORARY DITCH CHECK
- SURFACE WATER FLOW

EROSION CONTROL NOTES

ALL EXISTING INLETS WITHIN THE PROJECT LIMITS SHALL RECEIVE PROTECTION.

FINISHING ITEMS FOR TOPSOIL, WATER FOR SEED, SEED, FERTILIZER, AND EROSION MAT ARE SHOWN ON TYPICAL SECTIONS AND MISCELLANEOUS QUANTITIES.

URBAN SECTIONS SHALL RECEIVE PREP FOR LAWN TYPE TURF.

SEE CONSTRUCTION DETAIL FOR EROSION MAT URBAN CLASS I TYPE A EROSION CONTROL AT CURB RAMPS.

N

PI: 1039+65.20

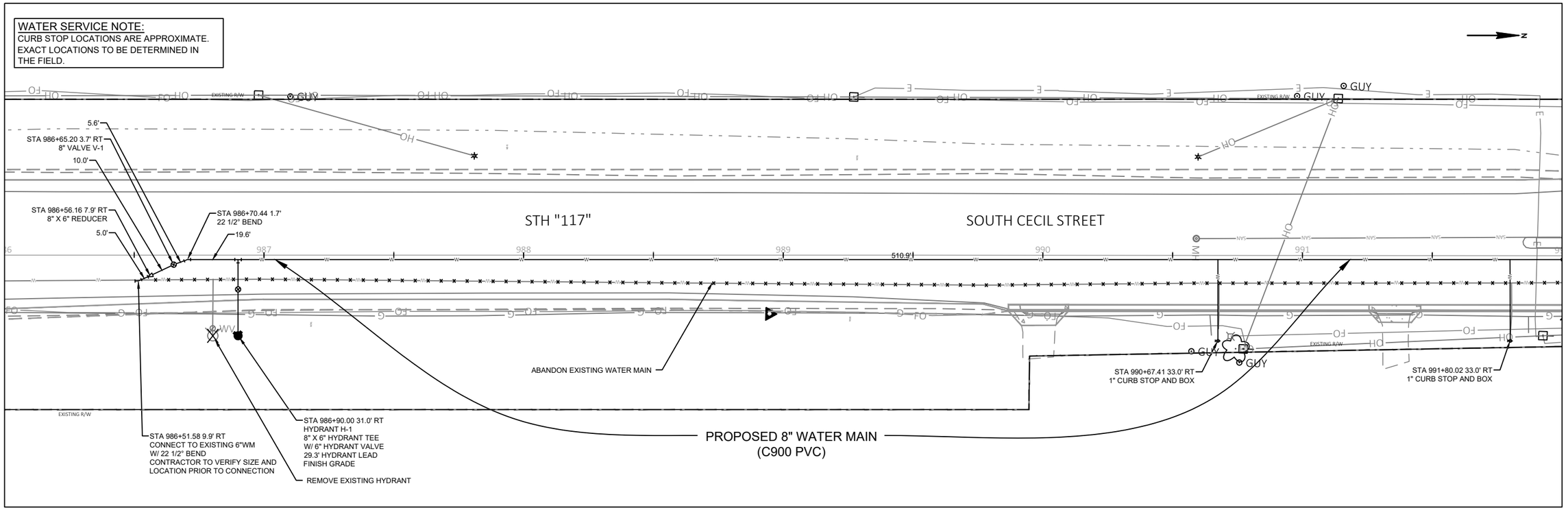
1037 1038 1039 1040 1041 1042 10

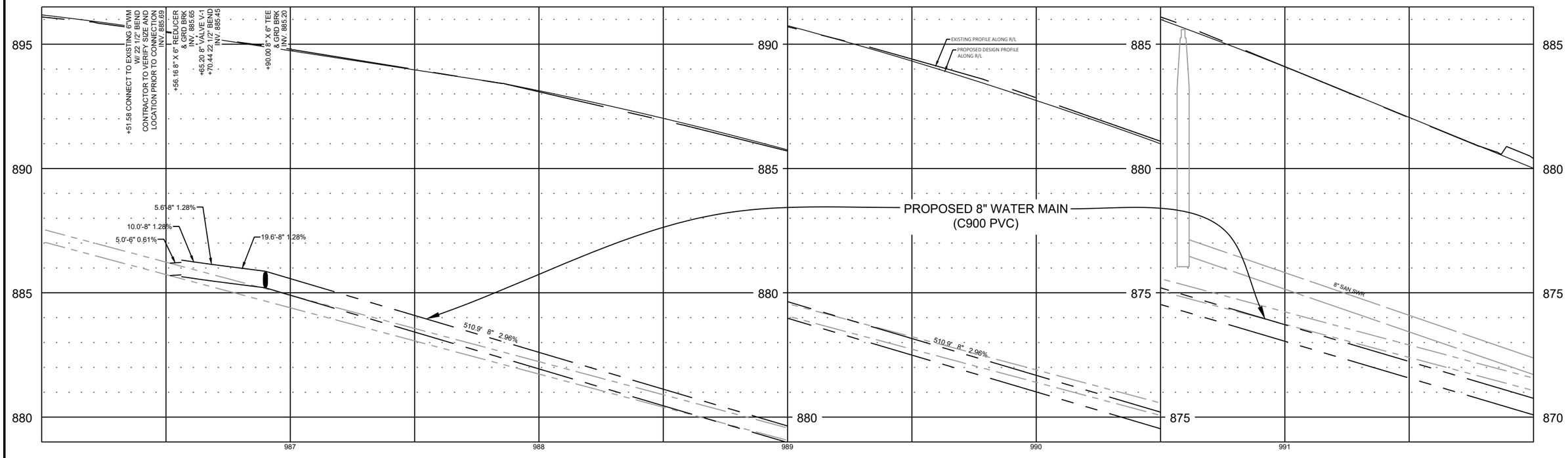
STH 117

END PROJECT
STA 1039+00

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	EROSION CONTROL	SHEET 33	E

WATER SERVICE NOTE:
CURB STOP LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED IN THE FIELD.





PROJECT NO: 9220-04-82	HWY: STH 117	COUNTY: SHAWANO	WATER MAIN/UTILITY PLAN AND PROFILE	SHEET 34	E

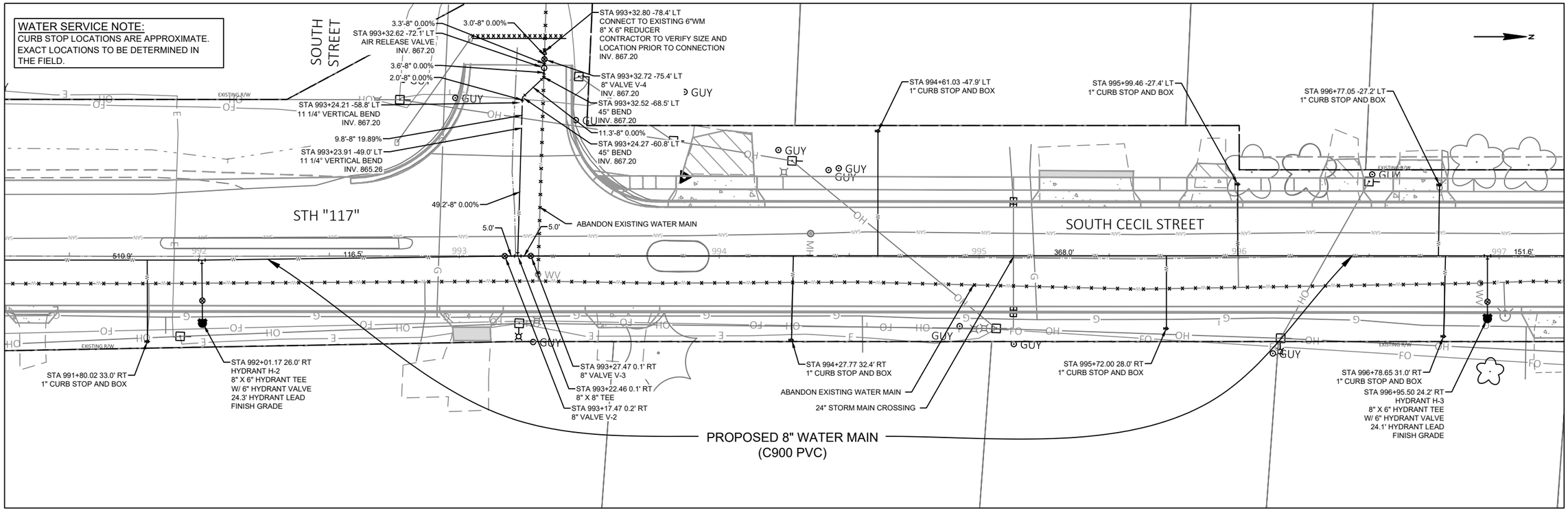
FILE NAME : G:\C3D_2018\8199_VILLAGE OF BONDUEL\10006 STH 117 WM\DWG\Z-CPL-STH-117_WS-02.DWG PLOT DATE : 7/14/2023 1:48 PM PLOT BY : DEPREY, GENE PLOT NAME : PLOT SCALE : 1 IN:40 FT

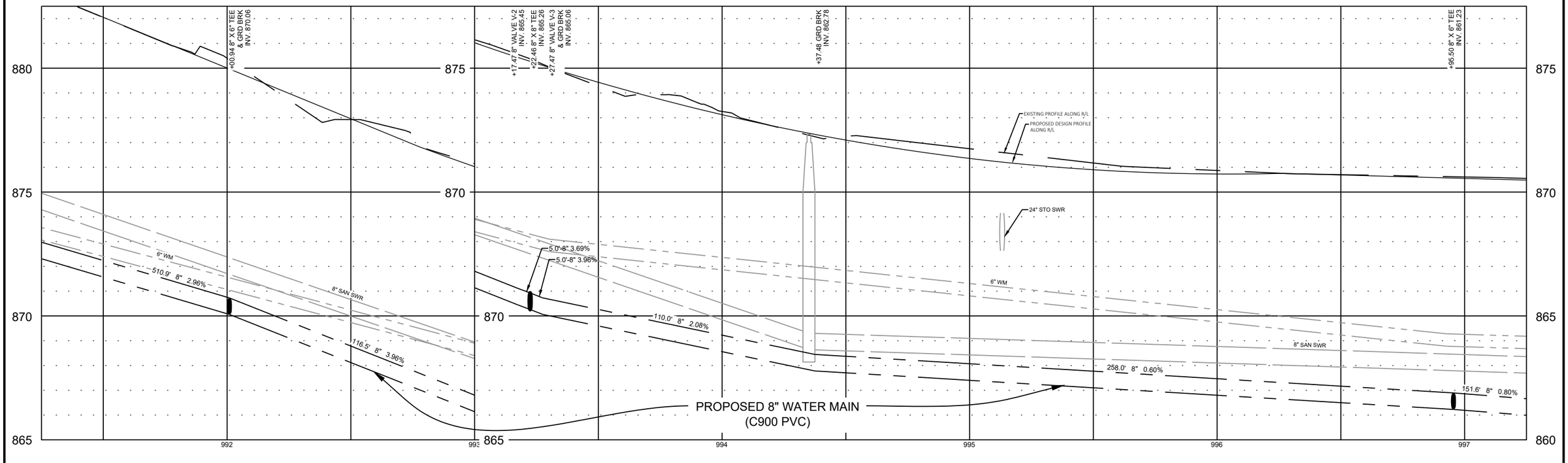
WISDOT/CADDS SHEET 42

LAYOUT NAME - SW-01

2

WATER SERVICE NOTE:
CURB STOP LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED IN THE FIELD.





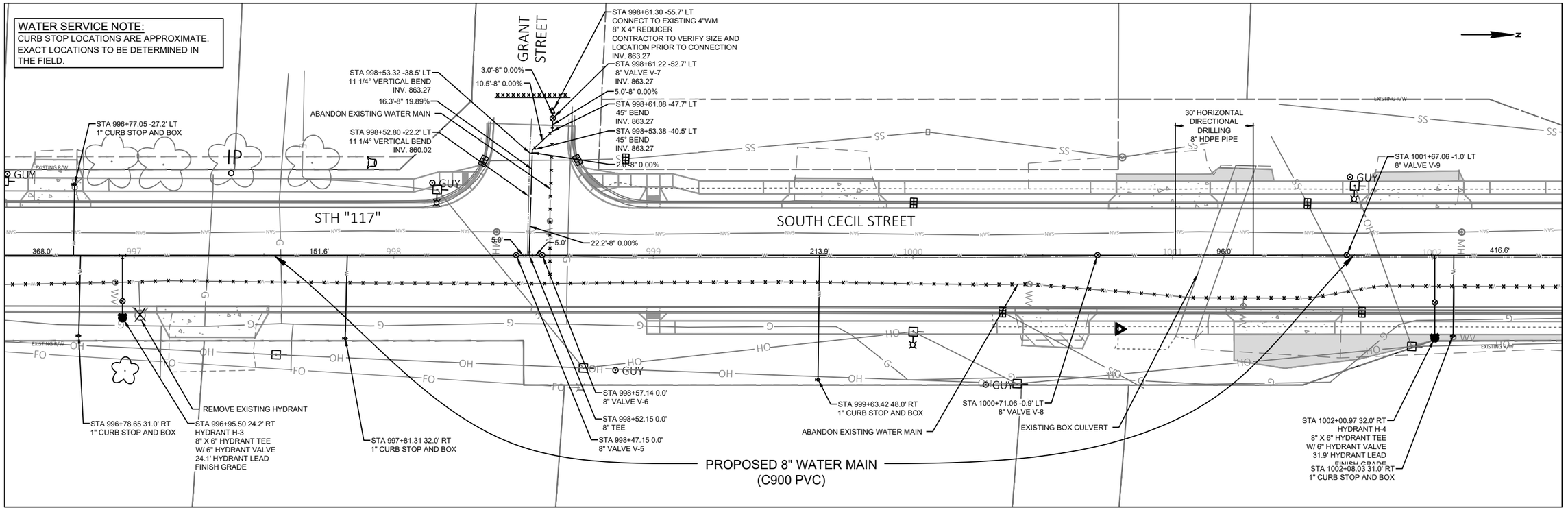
PROJECT NO: 9220-04-82	HWY: STH 117	COUNTY: SHAWANO	WATER MAIN/UTILITY PLAN AND PROFILE	SHEET 35	E

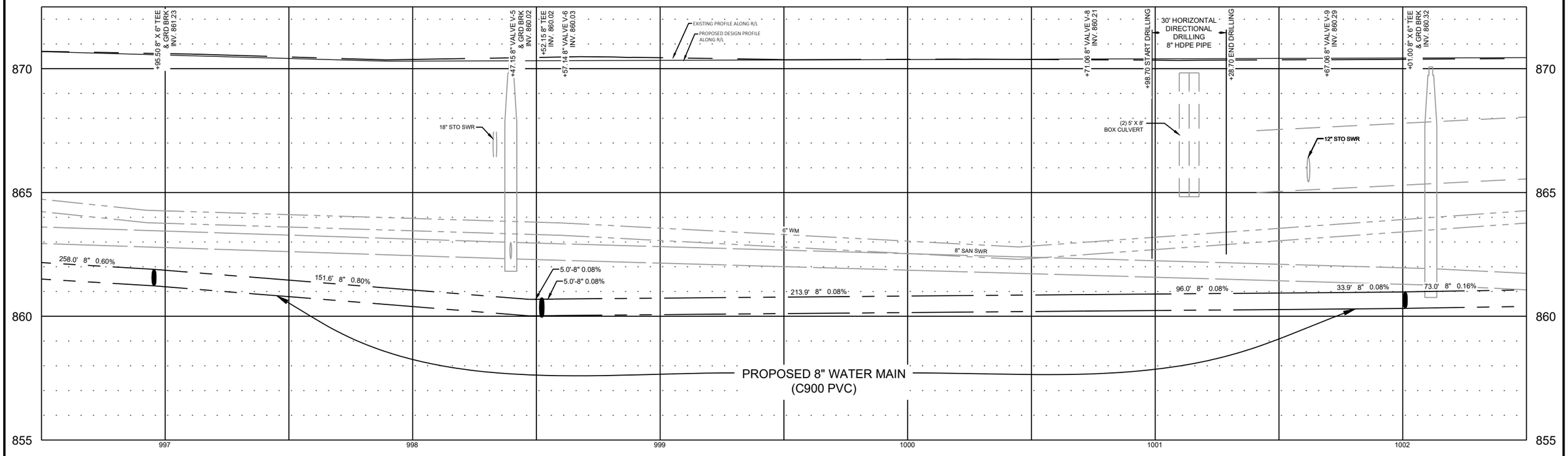
FILE NAME : G:\C3D_2018\8199_VILLAGE OF BONDUEL\10006 STH 117 WM\DWG\Z-CPL-STH-117_WS-03.DWG
PLOT DATE : 7/14/2023 1:49 PM
PLOT BY : DEPREY, GENE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LAYOUT NAME - SW-02

2

WATER SERVICE NOTE:
CURB STOP LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED IN THE FIELD.





PROJECT NO: 9220-04-82	HWY: STH 117	COUNTY: SHAWANO	WATER MAIN/UTILITY PLAN AND PROFILE	SHEET 36	E

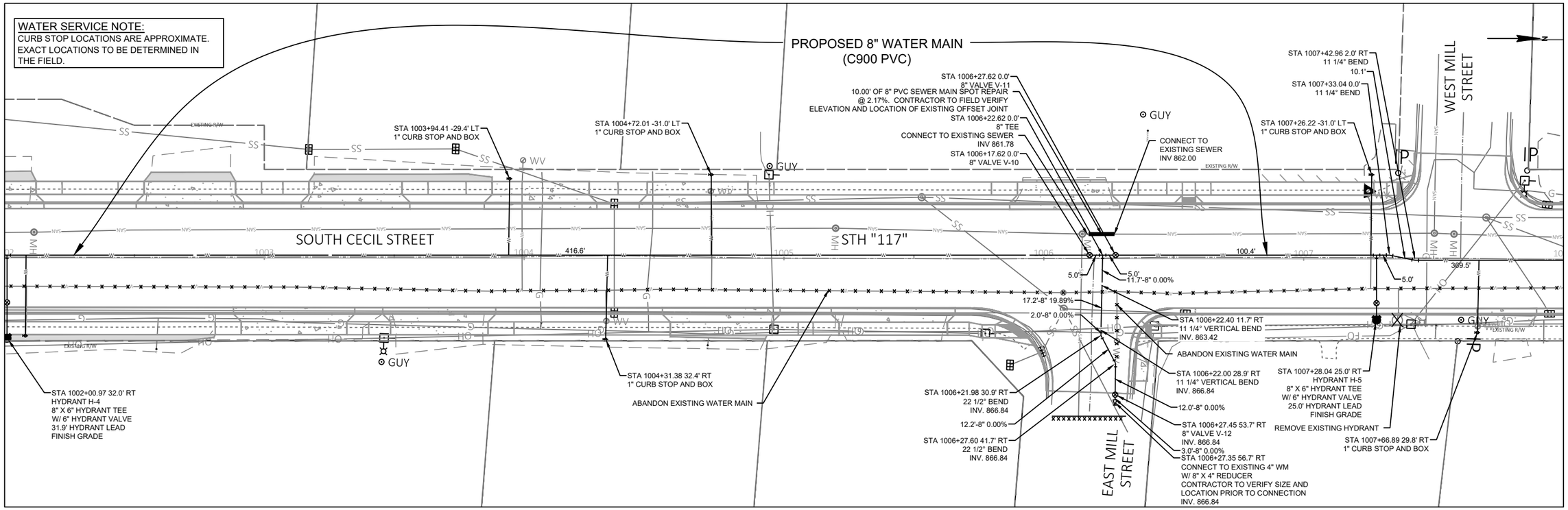
FILE NAME : G:\C3D_2018\8199_VILLAGE OF BONDUEL\10006 STH 117 WM\DWG\Z-CPL-STH-117_WS-04.DWG PLOT DATE : 7/14/2023 1:49 PM PLOT BY : DEPREY, GENE PLOT NAME : PLOT SCALE : 1 IN:40 FT

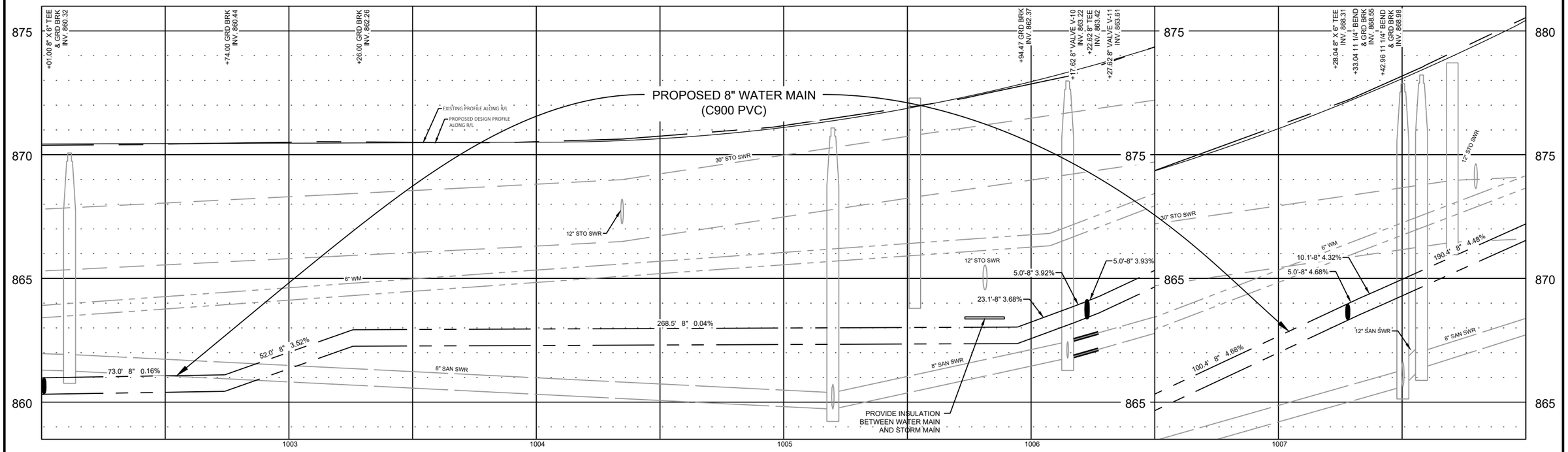
WISDOT/CADDS SHEET 42

LAYOUT NAME - SW-03

2

WATER SERVICE NOTE:
CURB STOP LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED IN THE FIELD.





PROJECT NO: 9220-04-82	HWY: STH 117	COUNTY: SHAWANO	WATER MAIN/UTILITY PLAN AND PROFILE	SHEET 37	E

FILE NAME : G:\C3D_2018\8199_VILLAGE OF BONDUEL\10006 STH 117 WM\DWG\Z-CPL-STH-117_WS-05.DWG
PLOT DATE : 7/14/2023 2:07 PM
PLOT BY : DEPREY, GENE
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

LAYOUT NAME - SW-04

2

WATER SERVICE NOTE:
CURB STOP LOCATIONS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED IN THE FIELD.

WEST MILL STREET

SOUTH CECIL STREET

STH "117"

WEST GREEN BAY STREET/CTH "BE"

EAST GREEN BAY STREET/CTH "BE"

STA 1008+06.67 -31.0' LT
1" CURB STOP AND BOX

STA 1009+45.46 -29.0' LT
1" CURB STOP AND BOX

STA 1010+25.98 -27.7' LT
1" CURB STOP AND BOX

STA 1010+18.99 -27.9' LT
1" CURB STOP AND BOX

STA 1011+07.63 -27.4' LT
1" CURB STOP AND BOX

STA 1011+12.44 2.0' RT
11 1/4° BEND

STA 1011+43.89 8.4' RT
8" VALE V-13

STA 1011+75.33 14.8' RT
11 1/4° BEND

STA 1007+42.96 2.0' RT
11 1/4° BEND

STA 1009+97.45 29.9' RT
1" CURB STOP AND BOX

ABANDON EXISTING WATER MAIN

PROPOSED 8" WATER MAIN
(C900 PVC)

STA 1011+85.33 14.8' RT
CONNECT TO EXISTING 6" WM
CONTRACTOR TO VERIFY SIZE AND
LOCATION PRIOR TO CONNECTION

STA 1011+80.33 14.8' RT
8" X 6" REDUCER

369.5'

32.1'

5.0'

5.0'

EXISTING R/W

+33.04 11 1/4° BEND
INV. 868.55

+33.37 GRD BRK
INV. 877.51

+12.44 11 1/4° BEND
INV. 878.69

+43.89 8° VALE V-13
& GRD BRK
INV. 878.90

+75.33 11 1/4° BEND
INV. 878.90

+??? 8" X 6" REDUCER
INV. 878.90 8"

+85.33 CONNECT TO EXISTING 6" WM
CONTRACTOR TO VERIFY SIZE AND
LOCATION PRIOR TO CONNECTION
INV. 878.98

EXISTING PROFILE ALONG R/L

PROPOSED DESIGN PROFILE
ALONG R/L

12" STO SWR

190.4' 8" 4.48%

30.4' 8" 4.48%

6" WM

210.5' 8" 0.66%

32.1' 8" 0.00%

5.0'-6" 0.00%

5.0'-8" 0.00%

6" WM

15" STO SWR

30" STO SWR

30" STO SWR

8" SAN SWR

8" SAN SWR

PROPOSED 8" WATER MAIN
(C900 PVC)

880 885 875 870 865

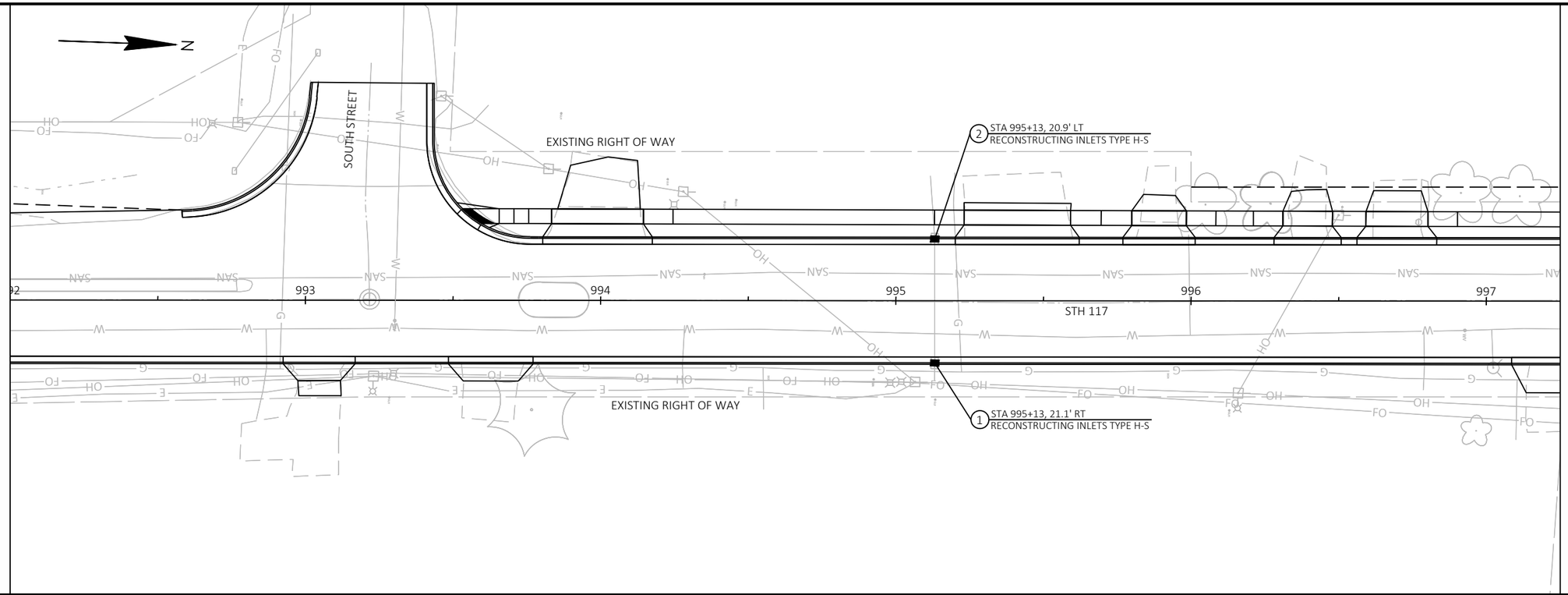
1008 1009 1010 1011 1012 1013

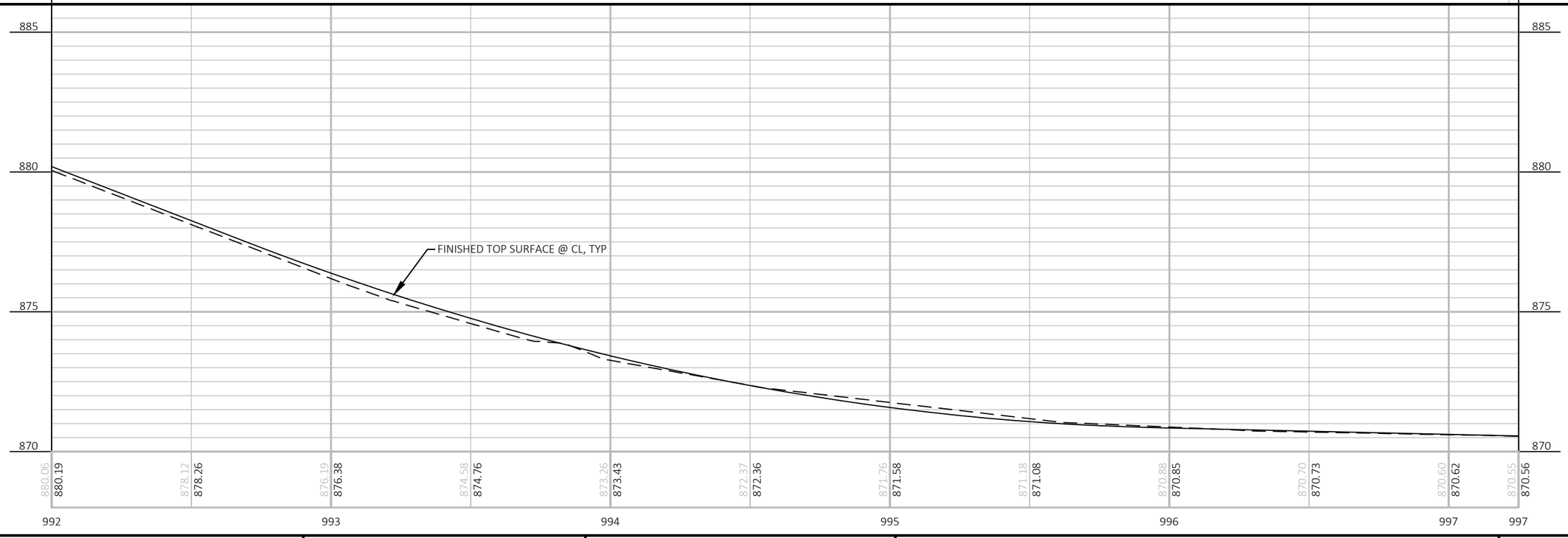
PROJECT NO: 9220-04-82	HWY: STH 117	COUNTY: SHAWANO	WATER MAIN/UTILITY PLAN AND PROFILE	SHEET 38	E

FILE NAME : G:\C3D_2018\8199_VILLAGE OF BONDUEL\10006 STH 117 WM\DWG\Z-CPL-STH-117_WS-06.DWG PLOT DATE : 7/14/2023 2:01 PM PLOT BY : DEPREY, GENE PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

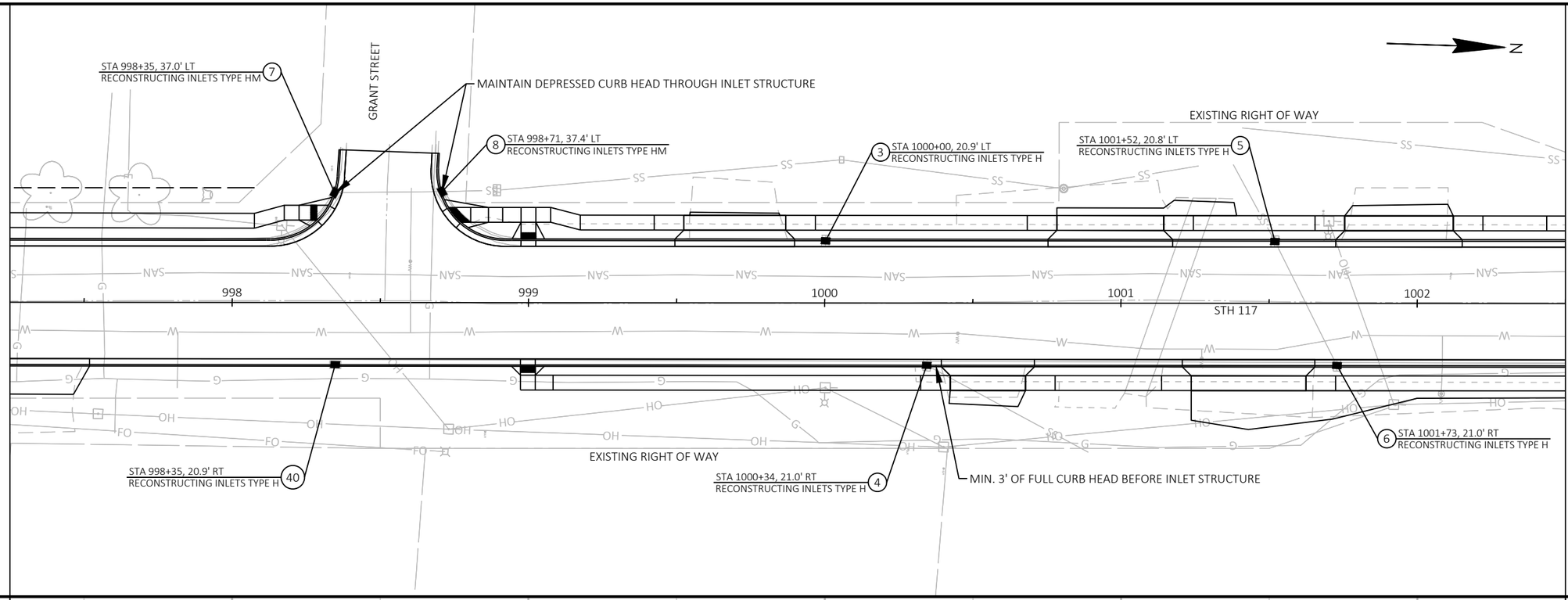
LAYOUT NAME - SW-05





PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	STORM SEWER PLAN: STH 117	SHEET 39	E

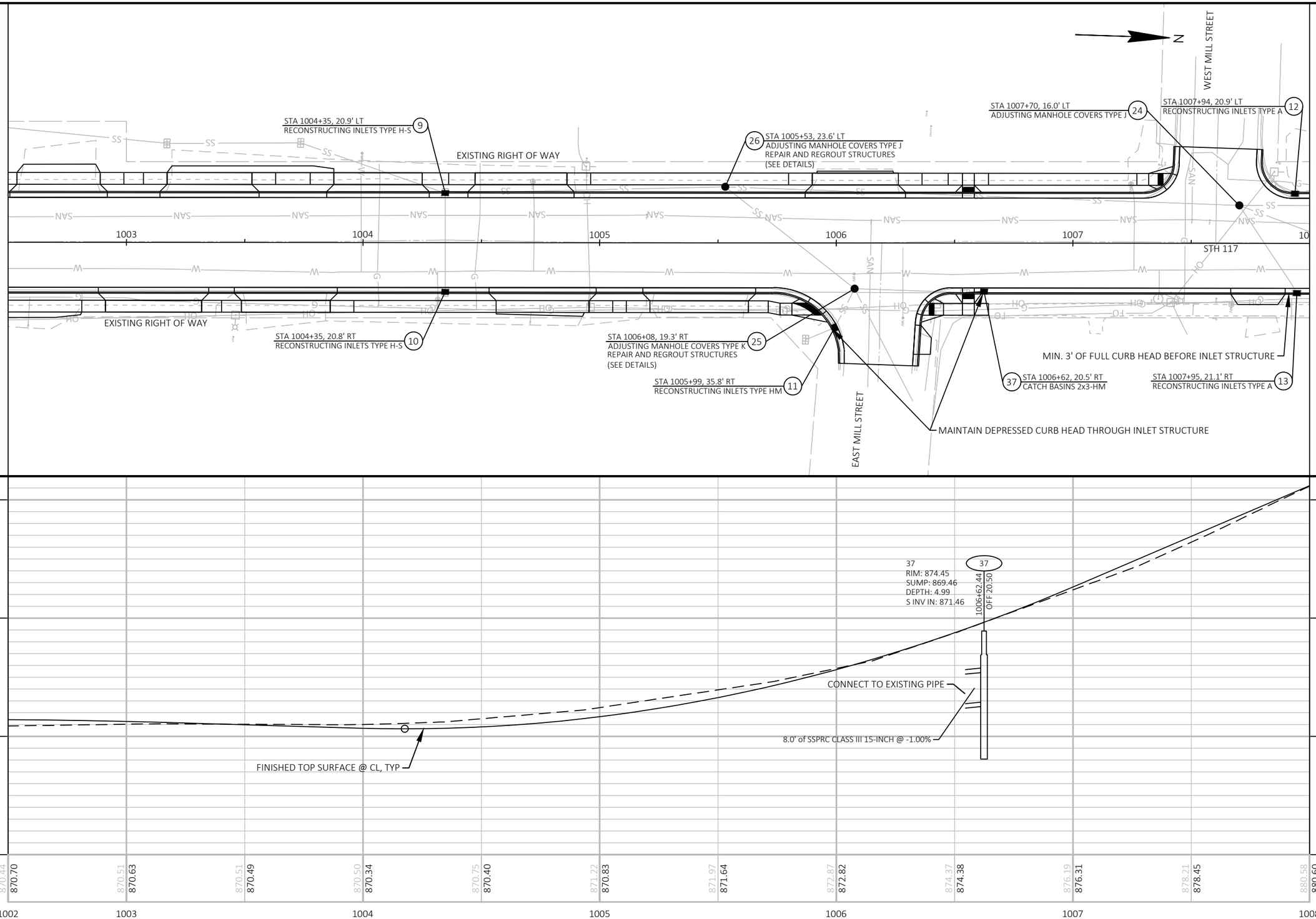
2



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	STORM SEWER PLAN: STH 117	SHEET 40 E

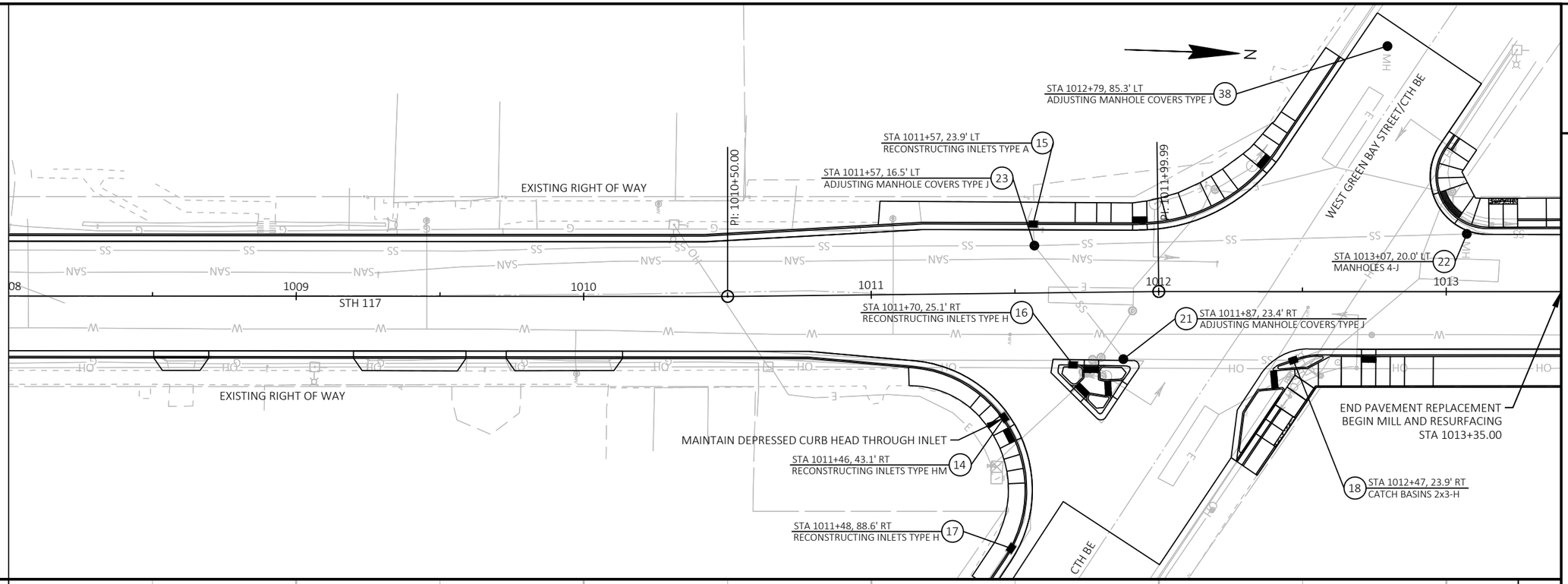
FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\022501_SS\022501_SS.DWG
LAYOUT NAME - 4
PLOT DATE : 4/27/2023 2:15 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

2



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	STORM SEWER PLAN: STH 117	SHEET 41	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\022501_SS\022501_SS.DWG
LAYOUT NAME - 5
PLOT DATE : 4/27/2023 2:16 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	STORM SEWER PLAN: STH 117	SHEET 42	E

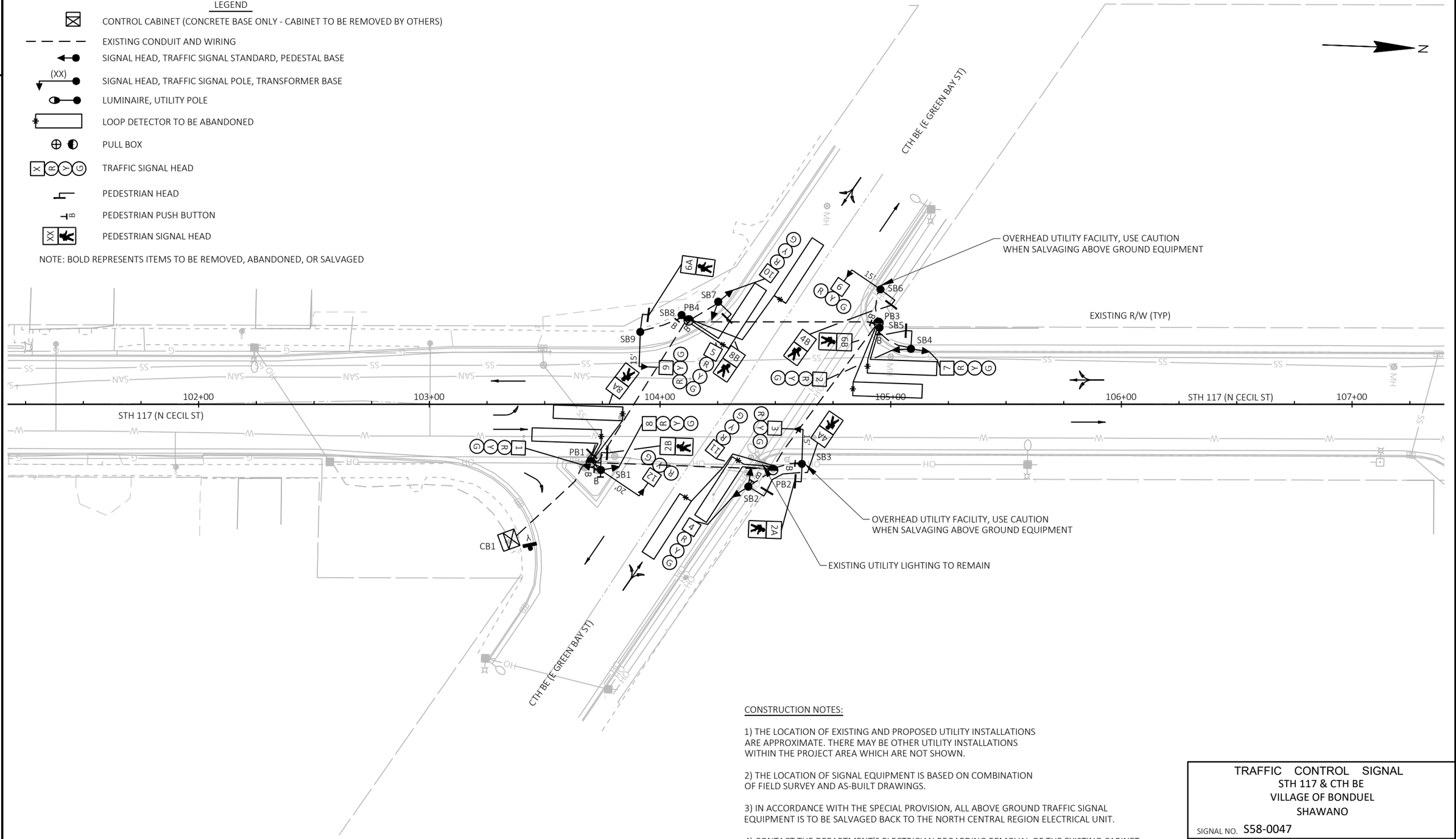
2

2

LEGEND

- CONTROL CABINET (CONCRETE BASE ONLY - CABINET TO BE REMOVED BY OTHERS)
- EXISTING CONDUIT AND WIRING
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- LUMINAIRE, UTILITY POLE
- LOOP DETECTOR TO BE ABANDONED
- PULL BOX
- TRAFFIC SIGNAL HEAD
- PEDESTRIAN HEAD
- PEDESTRIAN PUSH BUTTON
- PEDESTRIAN SIGNAL HEAD

NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED, ABANDONED, OR SALVAGED



CONSTRUCTION NOTES:

1) THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

2) THE LOCATION OF SIGNAL EQUIPMENT IS BASED ON COMBINATION OF FIELD SURVEY AND AS-BUILT DRAWINGS.

3) IN ACCORDANCE WITH THE SPECIAL PROVISION, ALL ABOVE GROUND TRAFFIC SIGNAL EQUIPMENT IS TO BE SALVAGED BACK TO THE NORTH CENTRAL REGION ELECTRICAL UNIT.

4) CONTACT THE DEPARTMENT'S ELECTRICIAN REGARDING REMOVAL OF THE EXISTING CABINET. WISDOT WILL BE RESPONSIBLE FOR THE REMOVAL.

TRAFFIC CONTROL SIGNAL
STH 117 & CTH BE
VILLAGE OF BONDUEL
SHAWANO

SIGNAL NO. S58-0047

REGION CONTACT: RON JOHNSON
DESIGNED BY: KL ENGINEERING
REVISED BY: ---------

PAGE 1 OF 1

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC SIGNAL REMOVAL PLAN	SHEET 43	E

FILE NAME : G:\GREMMER\STH 117 - BONDUEL\CIVIL 3D\SHEETSPLAN\024001-SR.DWG PLOT DATE : 10/20/2022 9:34 AM PLOT BY : KL ENGINEERING PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

2

CONSTRUCTION NOTES

1. THE LOCATIONS OF UTILITY FACILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
2. PAVEMENT MARKING SHOWN IN GRAYSHADE FOR PLAN CLARITY.
3. THE ENGINEER MAY ADJUST THE LOCATIONS OF ELECTRICAL ITEMS UNDER THIS CONTRACT TO AVOID CONFLICT WITH UTILITY FACILITIES.
4. THE FINAL LOCATION AND ORIENTATION OF PEDESTRIAN BUTTONS MUST ADHERE TO THE LATEST STANDARDS OF THE AMERICANS WITH DISABILITIES ACT.
5. ALL SIGNAL EQUIPMENT SHALL BE INSTALLED WITH A 2-FOOT MINIMUM, 3-FOOT DESIRABLE CLEARANCE TO THE FACE OF CURB, UNLESS SHOWN OTHERWISE ON THE PLAN, OR AS DIRECTED BY THE ENGINEER.
6. THE CONTRACTOR SHALL HAVE THE PULL BOXES AND CONDUIT RUNS INSPECTED BEFORE PLACING SIGNAL CABLE INTO THE SYSTEM.
7. INSTALL LOOP DETECTORS ACCORDING TO SDD 9F15-4B (LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL-SPLICE-BOX OFF ROADWAY-OPTION 2). IF LOCATION ADJUSTMENTS ARE REQUIRED FOR CONSTRUCTION, COORDINATE WITH REGION ELECTRICIAN.
8. EACH LOOP DETECTOR SHALL HAVE A SEPARATE LEAD IN CABLE TO THE CONTROL CABINET.
9. ALL WISDOT LUMINAIRES SHOWN ARE 120 VOLT, CATEGORY A LED (EACH WITH A 6-FOOT SINGLE MEMBER LUMINAIRE ARM).
10. FURNISH AND INSTALL FOLDING STOP SIGNS (36"X36") ON SIGNAL BASES (SB1, SB4, SB7, AND SB9).
11. INSTALL 9-FT SIGNAL STANDARDS AT (SB6)
    INSTALL 13-FT SIGNAL STANDARDS AT (SB1, SB9)
    INSTALL TYPE 2 (20-FT) POLES, 25-FT TROMBONE ARMS AT (SB2, SB5, SB8)
    INSTALL TYPE 3 (30-FT) POLES, 25-FT TROMBONE ARMS AT (SB3)
    INSTALL TYPE 4 (30-FT) POLES AT (SB4, SB7, LB1)

TRAFFIC CONTROL SIGNAL
STH 117 (CECIL ST) & CTH BE (OLD STH 29)
VILLAGE OF BONDUEL
SHAWANO COUNTY

REV #6

SIGNAL NO. S58-0047

CABINET TYPE: TS-2
CONTROLLER TYPE: ECONOLITE

REGION CONTACT: RON JOHNSON
DESIGNED BY: KL ENGINEERING
REVISED BY: - - - - - - - - -

PAGE 1 OF 4

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC SIGNAL PLAN	SHEET 44	E

2

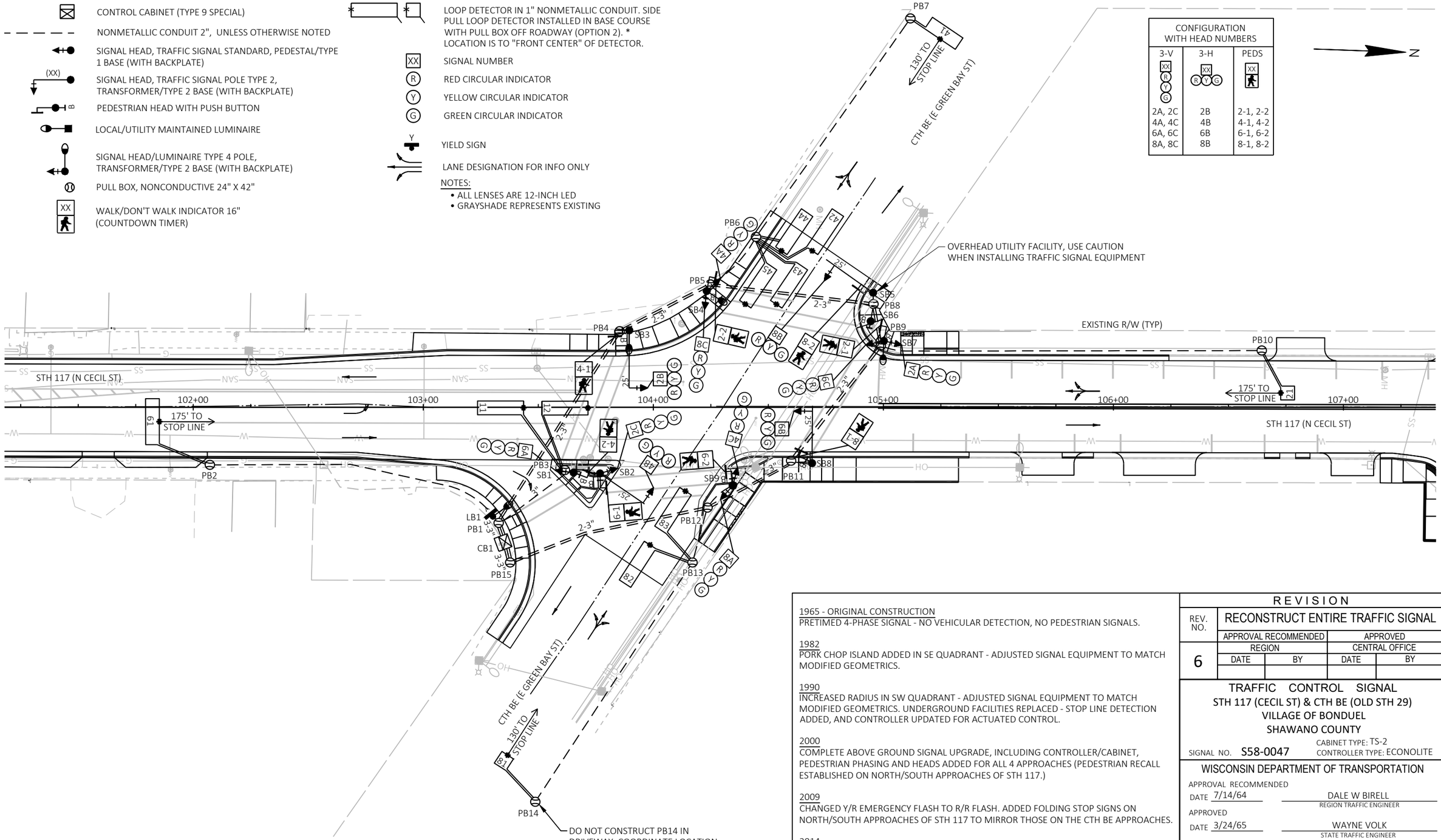
LEGEND

- CONTROL CABINET (TYPE 9 SPECIAL)
- NONMETALLIC CONDUIT 2", UNLESS OTHERWISE NOTED
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL/TYPE 1 BASE (WITH BACKPLATE)
- (XX) SIGNAL HEAD, TRAFFIC SIGNAL POLE TYPE 2, TRANSFORMER/TYPE 2 BASE (WITH BACKPLATE)
- B PEDESTRIAN HEAD WITH PUSH BUTTON
- LOCAL/UTILITY MAINTAINED LUMINAIRE
- SIGNAL HEAD/LUMINAIRE TYPE 4 POLE, TRANSFORMER/TYPE 2 BASE (WITH BACKPLATE)
- PULL BOX, NONCONDUCTIVE 24" X 42"
- XX WALK/DON'T WALK INDICATOR 16" (COUNTDOWN TIMER)
- * * LOOP DETECTOR IN 1" NONMETALLIC CONDUIT. SIDE PULL LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL BOX OFF ROADWAY (OPTION 2). * LOCATION IS TO "FRONT CENTER" OF DETECTOR.
- XX SIGNAL NUMBER
- R RED CIRCULAR INDICATOR
- Y YELLOW CIRCULAR INDICATOR
- G GREEN CIRCULAR INDICATOR
- Y YIELD SIGN
- LANE DESIGNATION FOR INFO ONLY

NOTES:
- ALL LENSES ARE 12-INCH LED
- GRAYSHADE REPRESENTS EXISTING

CONFIGURATION WITH HEAD NUMBERS		
3-V (XX, R, Y, G)	3-H (XX, R Y G)	PEDS (XX)
2A, 2C	2B	2-1, 2-2
4A, 4C	4B	4-1, 4-2
6A, 6C	6B	6-1, 6-2
8A, 8C	8B	8-1, 8-2

N



1965 - ORIGINAL CONSTRUCTION
PRETIMED 4-PHASE SIGNAL - NO VEHICULAR DETECTION, NO PEDESTRIAN SIGNALS.

1982
PORK CHOP ISLAND ADDED IN SE QUADRANT - ADJUSTED SIGNAL EQUIPMENT TO MATCH MODIFIED GEOMETRICS.

1990
INCREASED RADIUS IN SW QUADRANT - ADJUSTED SIGNAL EQUIPMENT TO MATCH MODIFIED GEOMETRICS. UNDERGROUND FACILITIES REPLACED - STOP LINE DETECTION ADDED, AND CONTROLLER UPDATED FOR ACTUATED CONTROL.

2000
COMPLETE ABOVE GROUND SIGNAL UPGRADE, INCLUDING CONTROLLER/CABINET, PEDESTRIAN PHASING AND HEADS ADDED FOR ALL 4 APPROACHES (PEDESTRIAN RECALL ESTABLISHED ON NORTH/SOUTH APPROACHES OF STH 117.)

2009
CHANGED Y/R EMERGENCY FLASH TO R/R FLASH. ADDED FOLDING STOP SIGNS ON NORTH/SOUTH APPROACHES OF STH 117 TO MIRROR THOSE ON THE CTH BE APPROACHES.

2014
REESTABLISHED PEDESTRIAN PUSH BUTTONS ON ALL 4 APPROACHES, FOR ALL 4 PHASES. REMOVED PEDESTRIAN RECALL ON THE NORTH/SOUTH APPROACHES OF STH 117.

REVISION				
REV. NO.	RECONSTRUCT ENTIRE TRAFFIC SIGNAL			
	APPROVAL RECOMMENDED		APPROVED	
6	REGION		CENTRAL OFFICE	
	DATE	BY	DATE	BY

TRAFFIC CONTROL SIGNAL
STH 117 (CECIL ST) & CTH BE (OLD STH 29)
VILLAGE OF BONDUEL
SHAWANO COUNTY

SIGNAL NO. S58-0047
CABINET TYPE: TS-2
CONTROLLER TYPE: ECONOLITE

WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVAL RECOMMENDED
DATE 7/14/64 — DALE W BIRELL, REGION TRAFFIC ENGINEER

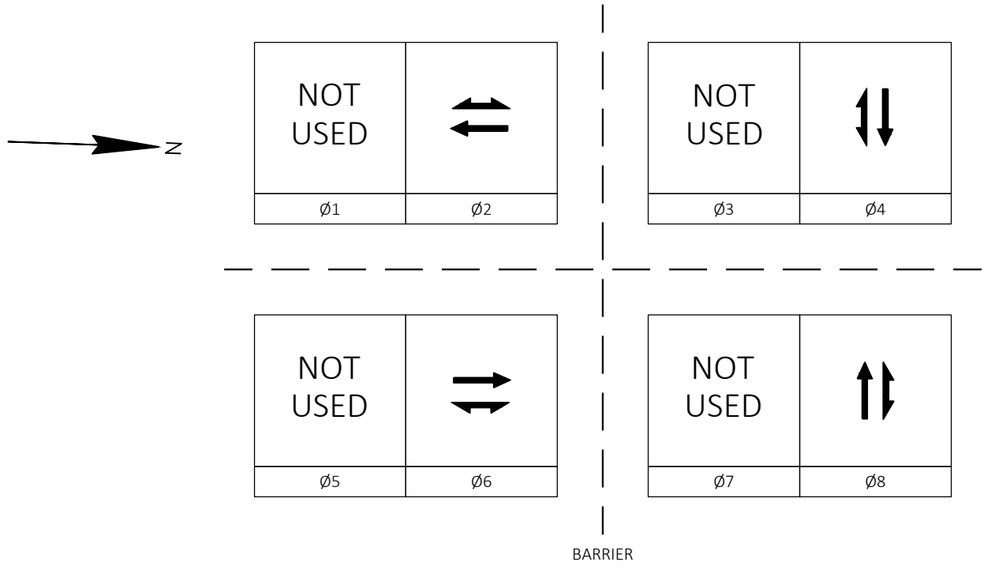
APPROVED
DATE 3/24/65 — WAYNE VOLK, STATE TRAFFIC ENGINEER

REGION CONTACT: RON JOHNSON
DESIGNED BY: KL ENGINEERING
REVISED BY:

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC SIGNAL PLAN	SHEET 45	E

FILE NAME : G:\GREMMER\STH 117 - BONDUEL\CIVIL 3D\SHEETSPLAN\024201-SP.DWG
PLOT DATE : 1/10/2023 1:31 PM
PLOT BY : KL ENGINEERING
PLOT NAME :
PLOT SCALE : 1 IN:40 FT

	HEAD NUMBERS	FLASH
Ø1		
Ø2	2A,2B,2C	R
Ø3		
Ø4	4A,4B,4C	R
Ø5		
Ø6	6A,6B,6C	R
Ø7		
Ø8	8A,8B,8C	R
Ø2 PED	2-1,2-2	-
Ø4 PED	4-1,4-2	-
Ø6 PED	6-1,6-2	-
Ø8 PED	8-1,8-2	-
O.L.A		
O.L.B		
O.L.C		
O.L.D		
O.L.E		
O.L.F		
O.L.G		
O.L.H		



OVERLAPS

O.L. "A"	NONE
O.L. "B"	NONE
O.L. "C"	NONE
O.L. "D"	NONE

SPECIAL OVERLAPS

	PROTECTED	PERMITTED
O.L. "E"	-	-
O.L. "F"	-	-
O.L. "G"	-	-
O.L. "H"	-	-

CONTROLLER LOGIC

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

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

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	61	* 11	21	41	42	44	81	82
CALLS & EXTENDS	X	X	X		X	X		X
CALLS ONLY								
EXTENDS ONLY				X			X	
PHASE CALLED	6	1	2		4	4		8
PHASE EXTENDED	6	1	2	4	4	4	8	8
DISCONNECT PHASE								
CALLING DELAY						8.0		8.0
EXTENSION STRETCH				1.0			1.0	
SIZE	6X20	6X20	6X6	6X16	6X20	6X20	6X6	6X20
NUMBER OF TURNS	3	3	4	4	3	3	4	3

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)								
CALLS & EXTENDS								
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)		* 12			43	45		83
CALLS & EXTENDS		X			X	X		X
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED		1			4	4		8
PHASE EXTENDED		1			4	4		8
DISCONNECT PHASE								
CALLING DELAY						8.0		8.0
EXTENSION STRETCH								
SIZE		6X20			6X20	6X20		6X20
NUMBER OF TURNS		3			3	3		3

DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)								
CALLS & EXTENDS								
CALLS ONLY								
EXTENDS ONLY								
PHASE CALLED								
PHASE EXTENDED								
DISCONNECT PHASE								
CALLING DELAY								
EXTENSION STRETCH								
SIZE								
NUMBER OF TURNS								

* DETECTORS (11,12) ARE INSTALLED FOR FUTURE USE

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

TYPE OF INTERCONNECT	
NONE	X
TBC	
CLOSED LOOP TWISTED PAIR	
CLOSED LOOP FIBER OPTIC	
RADIO	

TYPE OF REMOTE COMMUNICATION	
NONE	
FIBER	
CELL MODEM	X
PHONE	

TRAFFIC CONTROL SIGNAL
STH 117 (CECIL ST) & CTH BE (OLD STH 29)
VILLAGE OF BONDUEL
REV #6 SHAWANO COUNTY
SIGNAL NO. S58-0047 CABINET TYPE: TS-2 CONTROLLER TYPE: ECONOLITE
REGION CONTACT: RON JOHNSON
DESIGNED BY: KL ENGINEERING
REVISED BY: ---------
PAGE 3 OF 4

INTERSECTION:	STH 117 & CTH BE

SIGNAL WIRE	BLK-BLACK	RED-RED	GRN-GREEN
COLOR CODING	WHT-WHITE	BLU-BLUE	ORG-ORANGE

DATE:	Oct-22

CB1 TO	AWG 14 # OF COND.	HEAD NO.	PHASE	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
				RED	YELLOW	GREEN	<RED>	<YELLOW>	<FLASH YEL>	<GREEN>	DWALK	WALK		
SB1	9	1	6	RED	ORG	GRN								
		4B	4								BLK	BLU		
		BUTTON	4										WHT/BLK	
SB2	12	5	2	RED	ORG	GRN								
		12	4	RED/BLK	ORG/BLK	GRN/BLK								
		6A	6								BLK	BLU		
		BUTTON	6										WHT/BLK	
SB3	9	6	2	RED	ORG	GRN								
		4A	4								BLK	BLU		
		BUTTON	4										WHT/BLK	
SB4	12	10	4	RED	ORG	GRN								
		8	8	RED/BLK	ORG/BLK	GRN/BLK								
		2B	2								BLK	BLU		
		BUTTON	2										WHT/BLK	
SB5	9	9	8	RED	ORG	GRN								
SB6	9	8B	8								BLK	BLU		
		BUTTON	8										WHT/BLK	
SB7	12	4	2	RED	ORG	GRN								
		3	6	RED/BLK	ORG/BLK	GRN/BLK								
		2A	2								BLK	BLU		
		BUTTON	2										WHT/BLK	
SB8	12	2	6	RED	ORG	GRN								
		8A	8								BLK	BLU		
		BUTTON	8										WHT/BLK	
SB9	12	11	4	RED	ORG	GRN								
		7	8	RED/BLK	ORG/BLK	GRN/BLK								
		6B	6								BLK	BLU		
		BUTTON	6										WHT/BLK	

EQUIPMENT GROUNDING CONDUCTORS 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	SB9
SB9	CB1

DRAFT CABLE ROUTING SHOWN. WISDOT NORTH CENTRAL REGION TO PROVIDE FINAL CABLE ROUTING.

TRAFFIC CONTROL SIGNAL
STH 117 (CECIL ST) & CTH BE (OLD STH 29)
VILLAGE OF BONDUEL
REV #6 SHAWANO COUNTY
SIGNAL NO. S58-0047 CABINET TYPE: TS-2 CONTROLLER TYPE: ECONOLITE
REGION CONTACT: RON JOHNSON
DESIGNED BY: KL ENGINEERING
REVISED BY: ---------
PAGE 4 OF 4

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CABLE ROUTING (S58-0047)	SHEET 47	E

2

N

SPEED LIMIT 45 — R2-1 24"X30"

SPEED LIMIT 35 — REMOVE

ARROW2 EPOXY

WORD EPOXY

MW8 EPOXY

ARROW2 EPOXY

+26.88 35' LT

MW4 EPOXY

MDY4 EPOXY

+91.04 24' LT

ARROW2 EPOXY

MY4 EPOXY

YS4-12.5 EPOXY

980

EXTEND PAVEMENT MARKING TO INTERSECTION (STA 980+33)

985

STH 117

+33.66 35' RT

BEGIN CONSTRUCTION STA 981+14.00

+13.64 23' RT

MDY4 EPOXY

MW4 EPOXY

MDY4 EPOXY

MY4 EPOXY

YS4-12.5 EPOXY

SPEED LIMIT 35 — R2-1 24"X30"

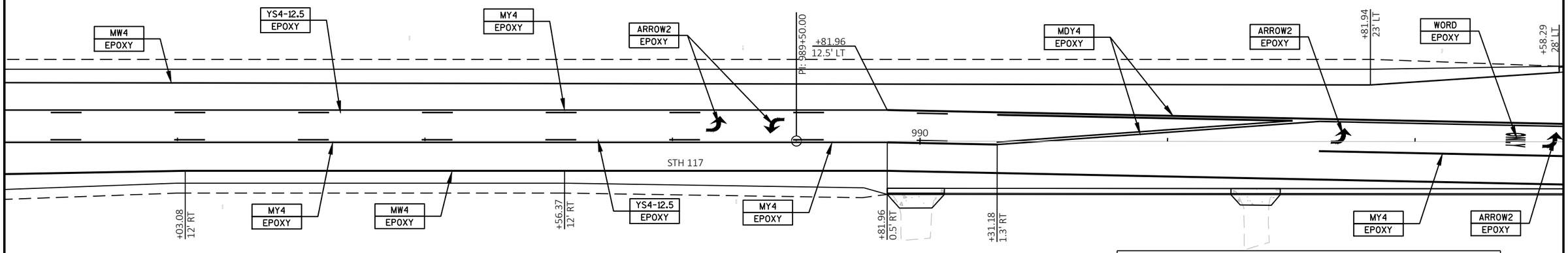
SPEED LIMIT 45 — REMOVE

PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

LEGEND	
ARROW2	MARKING ARROW TYPE 2
CWT6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
DIA6	MARKING DIAGONAL 6-INCH (YELLOW)
EPOXY	EPOXY
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)
MY4	MARKING LINE 4-INCH (YELLOW)
MW4	MARKING LINE 4-INCH (WHITE)
MW8	MARKING LINE 8-INCH (WHITE)
PARK	MARKING LINE PARKING STALL
STOP	MARKING STOP LINE 18-INCH (WHITE)
YS4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)
WORD	MARKING WORD (ONLY) (WHITE)
WS4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12.5' SEG., 37.5' GAP)
WS3-9	MARKING LINE 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)

2

N



PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

LEGEND	
ARROW2	MARKING ARROW TYPE 2
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WS3-9	MARKING LINE 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PAVEMENT MARKING (AND PERMANENT SIGNING)	SHEET 49	E

2

N

SOUTH STREET

GRANT STREET

+61.40
6.5' LT

SPEED LIMIT 35
R2-1
24"X30"

SPEED LIMIT 45
REMOVE

YS4-12.5
EPOXY

MY4
EPOXY

ARROW2
EPOXY

CWT6
EPOXY

995

STH 117

+61.40
6.5' RT

MY4
EPOXY

YS4-12.5
EPOXY

SPEED LIMIT 35
REMOVE

SPEED LIMIT 25
R2-1
24"X30"

W11-2
30"X30"

AHEAD
W16-9P
24"X12"

W11-2
30"X30"

S16-7L
24"X12"

PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

LEGEND	
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MW4	MARKING LINE 4-INCH (WHITE)
MW8	MARKING LINE 8-INCH (WHITE)
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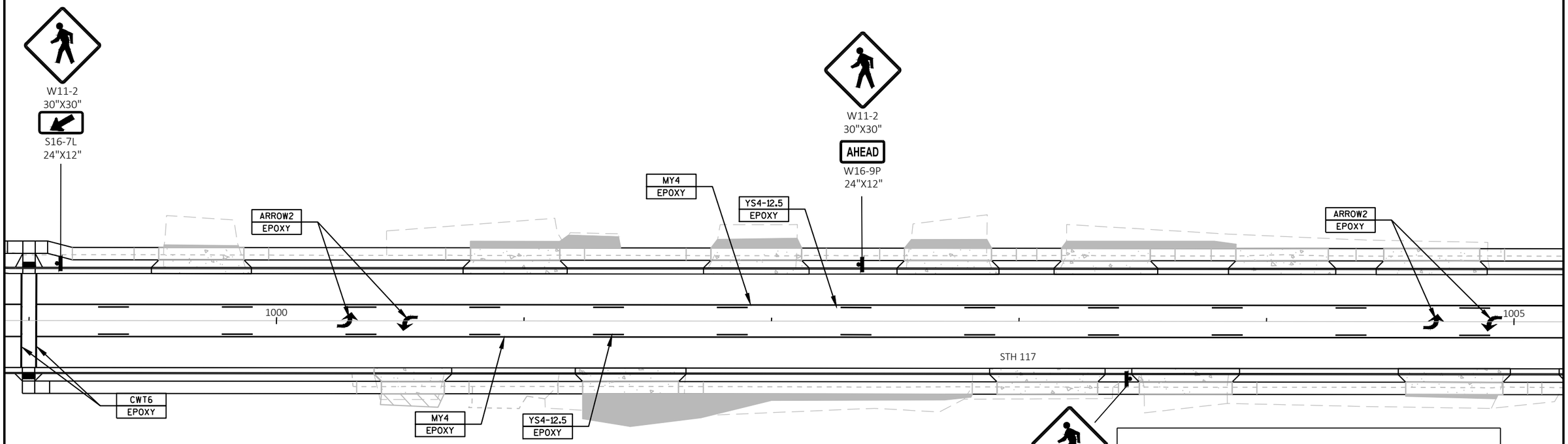
2

N



PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

LEGEND	
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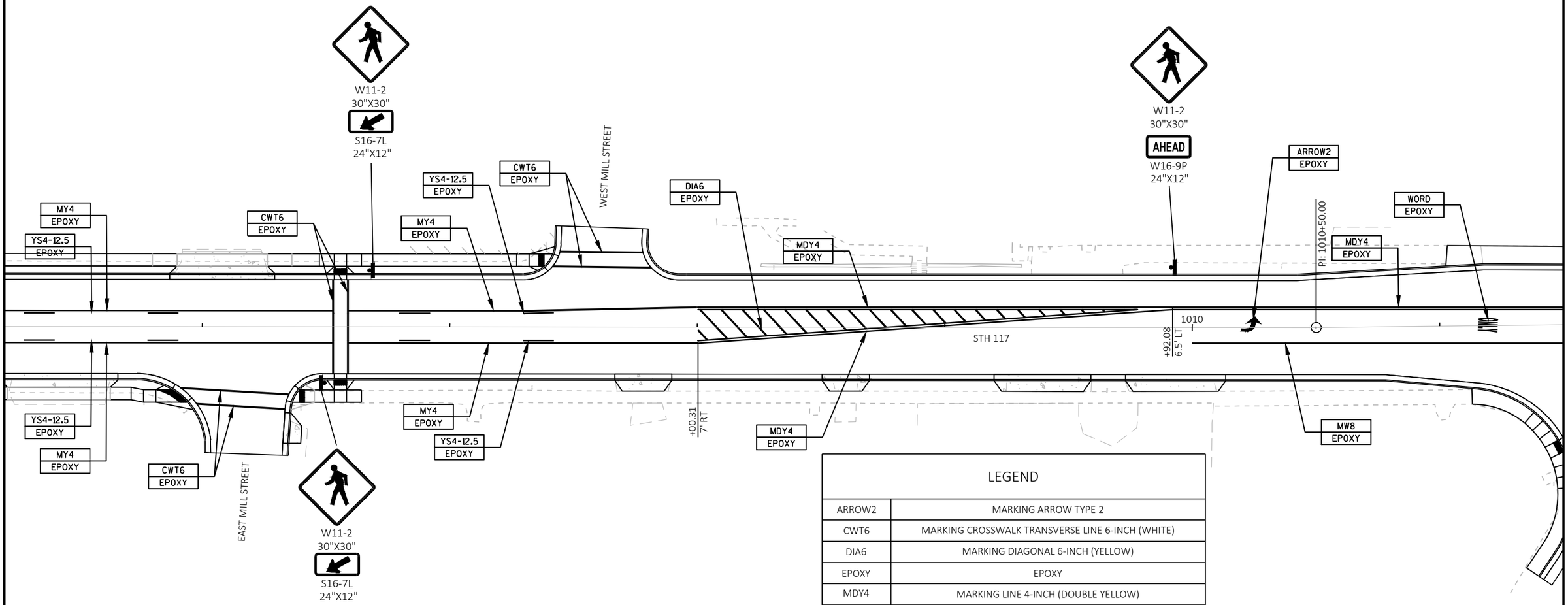
2

N



PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

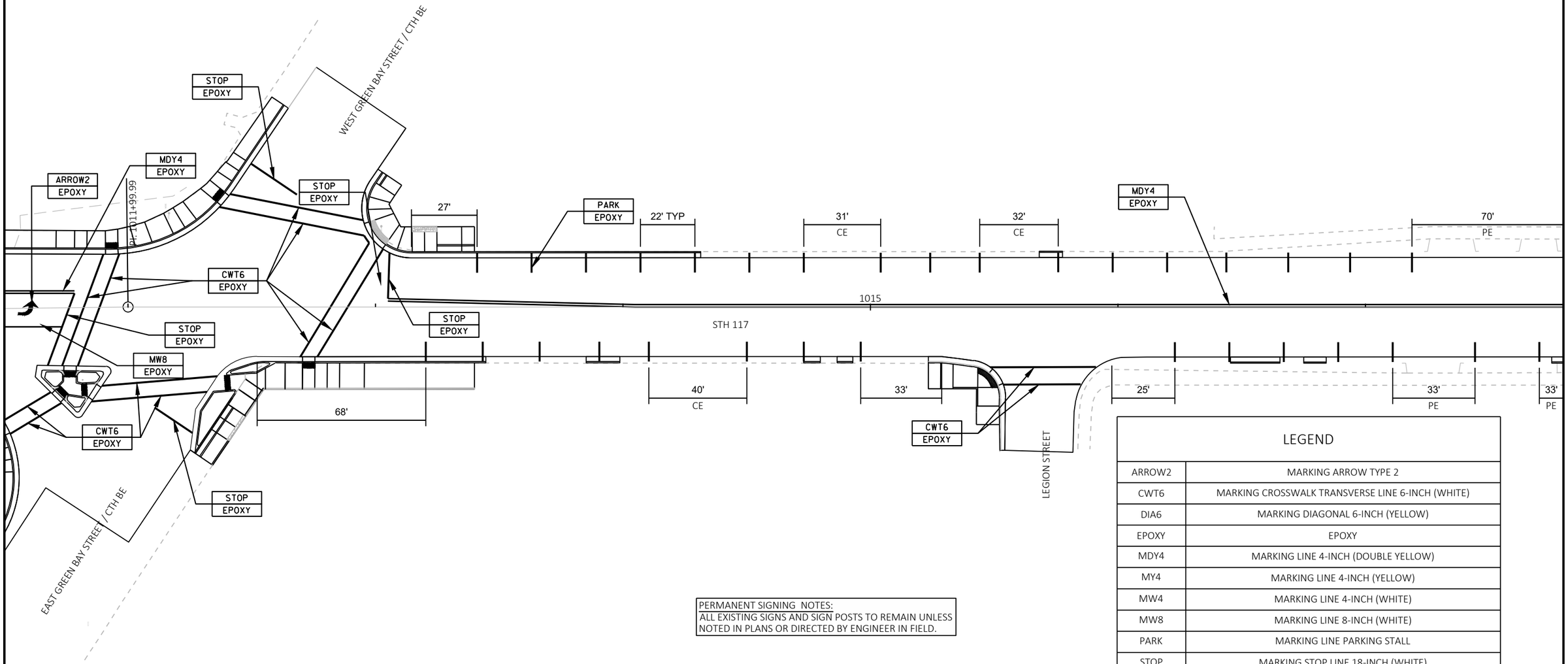
LEGEND	
ARROW2	MARKING ARROW TYPE 2
CWT6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
DIA6	MARKING DIAGONAL 6-INCH (YELLOW)
EPOXY	EPOXY
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)
MY4	MARKING LINE 4-INCH (YELLOW)
MW4	MARKING LINE 4-INCH (WHITE)
MW8	MARKING LINE 8-INCH (WHITE)
PARK	MARKING LINE PARKING STALL
STOP	MARKING STOP LINE 18-INCH (WHITE)
YS4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)
WORD	MARKING WORD (ONLY) (WHITE)
WS4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12.5' SEG., 37.5' GAP)
WS3-9	MARKING LINE 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PAVEMENT MARKING (AND PERMANENT SIGNING)	SHEET 52	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\024501_PM\024501_PM.DWG
LAYOUT NAME - 05
PLOT DATE : 3/24/2023 8:35 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

2

N

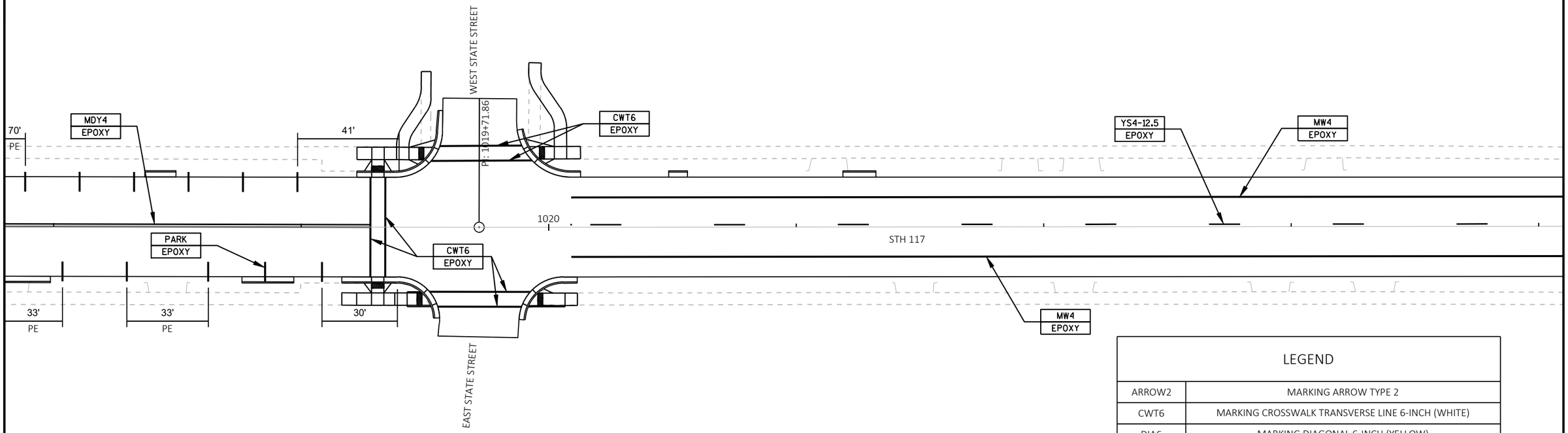


PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

LEGEND	
ARROW2	MARKING ARROW TYPE 2
CWT6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
DIA6	MARKING DIAGONAL 6-INCH (YELLOW)
EPOXY	EPOXY
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)
MY4	MARKING LINE 4-INCH (YELLOW)
MW4	MARKING LINE 4-INCH (WHITE)
MW8	MARKING LINE 8-INCH (WHITE)
PARK	MARKING LINE PARKING STALL
STOP	MARKING STOP LINE 18-INCH (WHITE)
YS4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)
WORD	MARKING WORD (ONLY) (WHITE)
WS4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12.5' SEG., 37.5' GAP)
WS3-9	MARKING LINE 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)

2

N

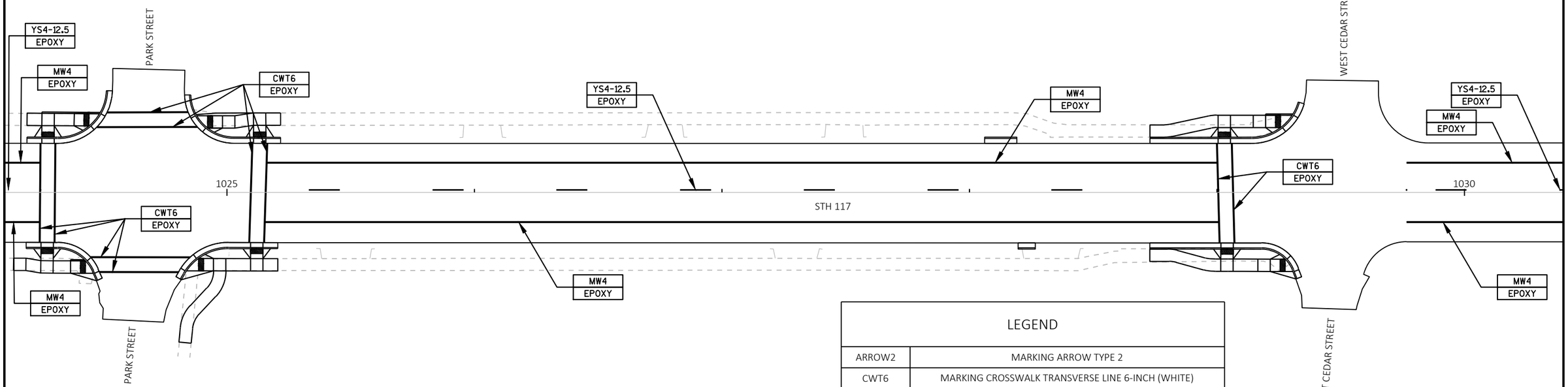


PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

LEGEND	
ARROW2	MARKING ARROW TYPE 2
CWT6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
DIA6	MARKING DIAGONAL 6-INCH (YELLOW)
EPOXY	EPOXY
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)
MY4	MARKING LINE 4-INCH (YELLOW)
MW4	MARKING LINE 4-INCH (WHITE)
MW8	MARKING LINE 8-INCH (WHITE)
PARK	MARKING LINE PARKING STALL
STOP	MARKING STOP LINE 18-INCH (WHITE)
YS4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)
WORD	MARKING WORD (ONLY) (WHITE)
WS4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12.5' SEG., 37.5' GAP)
WS3-9	MARKING LINE 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)

2

N



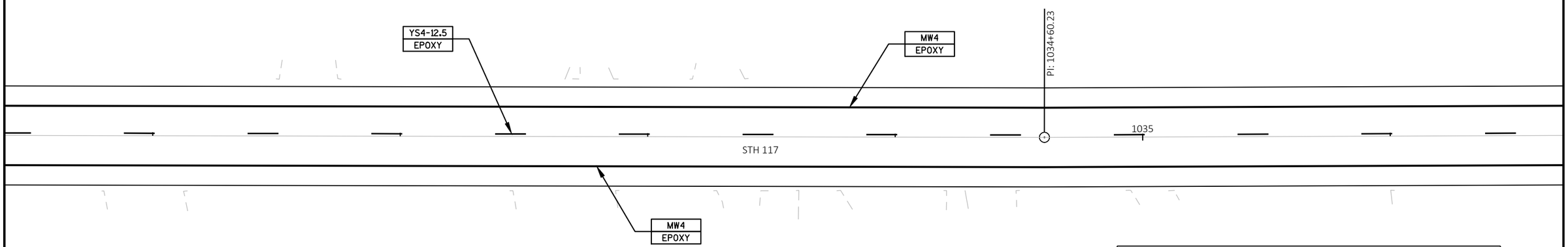
PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

LEGEND	
ARROW2	MARKING ARROW TYPE 2
CWT6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
DIA6	MARKING DIAGONAL 6-INCH (YELLOW)
EPOXY	EPOXY
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)
MY4	MARKING LINE 4-INCH (YELLOW)
MW4	MARKING LINE 4-INCH (WHITE)
MW8	MARKING LINE 8-INCH (WHITE)
PARK	MARKING LINE PARKING STALL
STOP	MARKING STOP LINE 18-INCH (WHITE)
YS4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)
WORD	MARKING WORD (ONLY) (WHITE)
WS4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12.5' SEG., 37.5' GAP)
WS3-9	MARKING LINE 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)

2

N

2



PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

LEGEND	
ARROW2	MARKING ARROW TYPE 2
CWT6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
DIA6	MARKING DIAGONAL 6-INCH (YELLOW)
EPOXY	EPOXY
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)
MY4	MARKING LINE 4-INCH (YELLOW)
MW4	MARKING LINE 4-INCH (WHITE)
MW8	MARKING LINE 8-INCH (WHITE)
PARK	MARKING LINE PARKING STALL
STOP	MARKING STOP LINE 18-INCH (WHITE)
YS4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)
WORD	MARKING WORD (ONLY) (WHITE)
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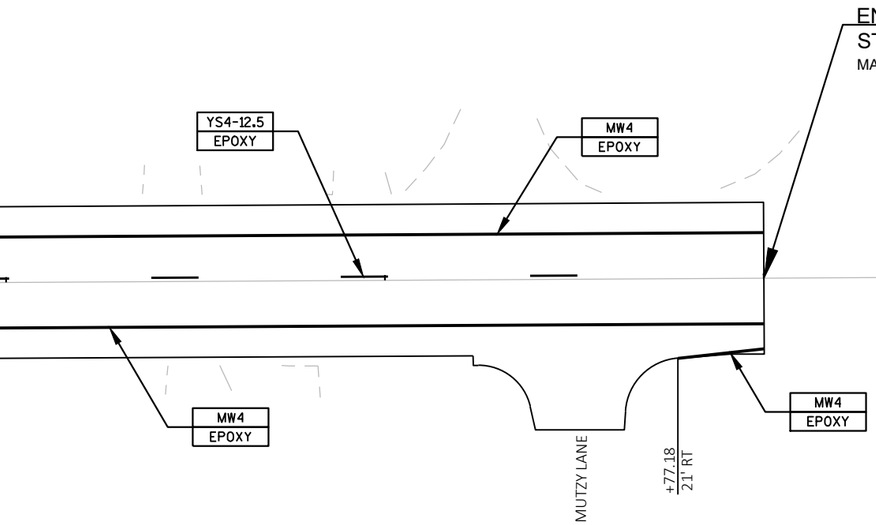
WS3-9	MARKING LINE 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PAVEMENT MARKING (AND PERMANENT SIGNING)	SHEET 56	E

2

N

STA 1044+77
REMOVE EXISTING SOUTHBOUND 30 MPH SPEED LIMIT SIGN AT NORTH STREET AND REPLACE WITH 25 MPH SPEED LIMIT SIGN



END CONSTRUCTION
STA 1039+00.00
MATCH EXISTING

YS4-12.5
EPOXY

MW4
EPOXY

PI: 1039+65.20

1040

STH 117

MW4
EPOXY

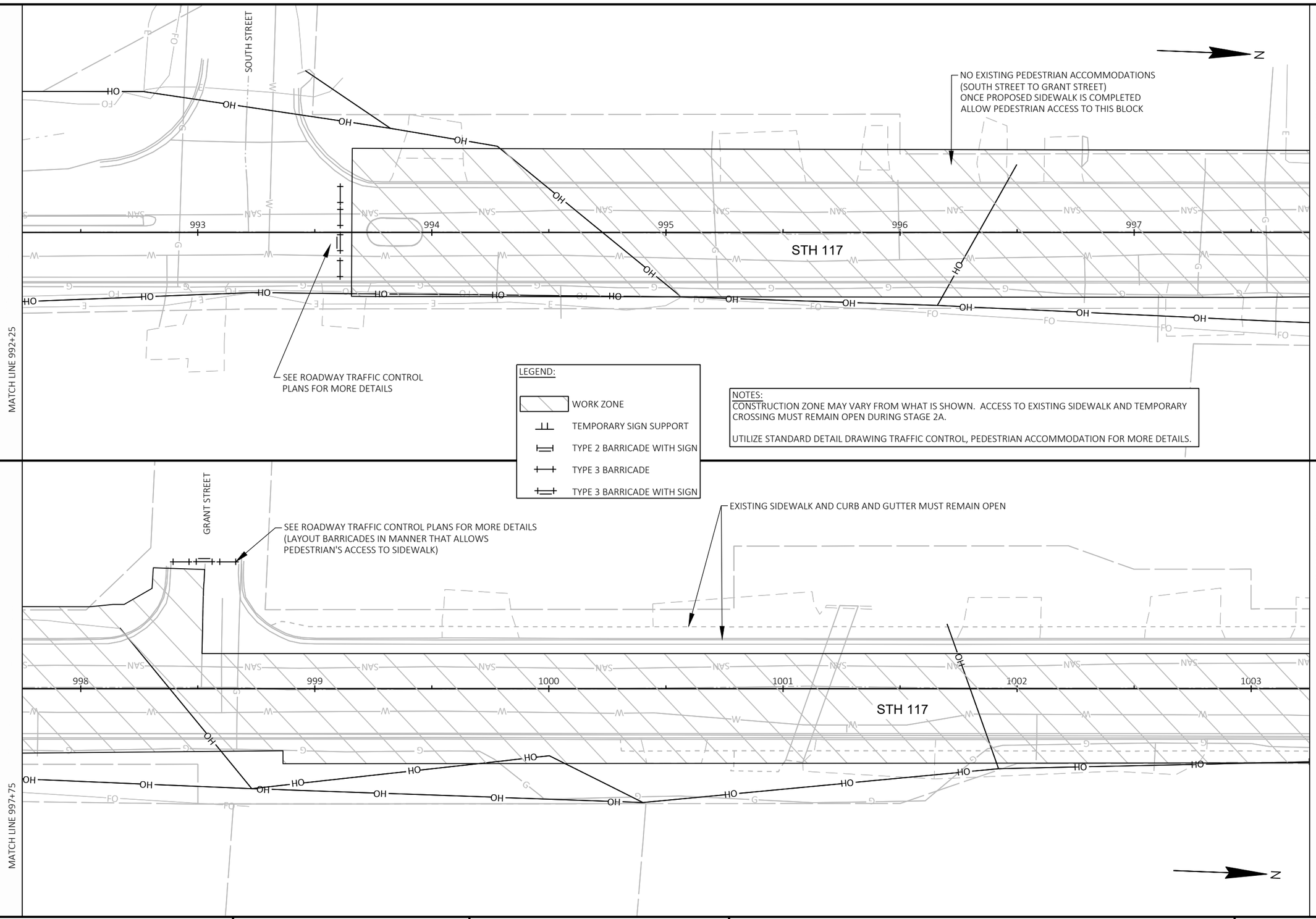
MW4
EPOXY

MUTZY LANE

+77.18
21' RT

PERMANENT SIGNING NOTES:
ALL EXISTING SIGNS AND SIGN POSTS TO REMAIN UNLESS NOTED IN PLANS OR DIRECTED BY ENGINEER IN FIELD.

LEGEND	
ARROW2	MARKING ARROW TYPE 2
CWT6	MARKING CROSSWALK TRANSVERSE LINE 6-INCH (WHITE)
DIA6	MARKING DIAGONAL 6-INCH (YELLOW)
EPOXY	EPOXY
MDY4	MARKING LINE 4-INCH (DOUBLE YELLOW)
MY4	MARKING LINE 4-INCH (YELLOW)
MW4	MARKING LINE 4-INCH (WHITE)
MW8	MARKING LINE 8-INCH (WHITE)
PARK	MARKING LINE PARKING STALL
STOP	MARKING STOP LINE 18-INCH (WHITE)
YS4-12.5	MARKING LINE 4-INCH (YELLOW SKIP) (12.5' SEG., 37.5' GAP)
WORD	MARKING WORD (ONLY) (WHITE)
WS4-12.5	MARKING LINE 4-INCH (WHITE SKIP) (12.5' SEG., 37.5' GAP)
WS3-9	MARKING LINE 4-INCH (WHITE SKIP) (3' SEG., 9' GAP)



LEGEND:

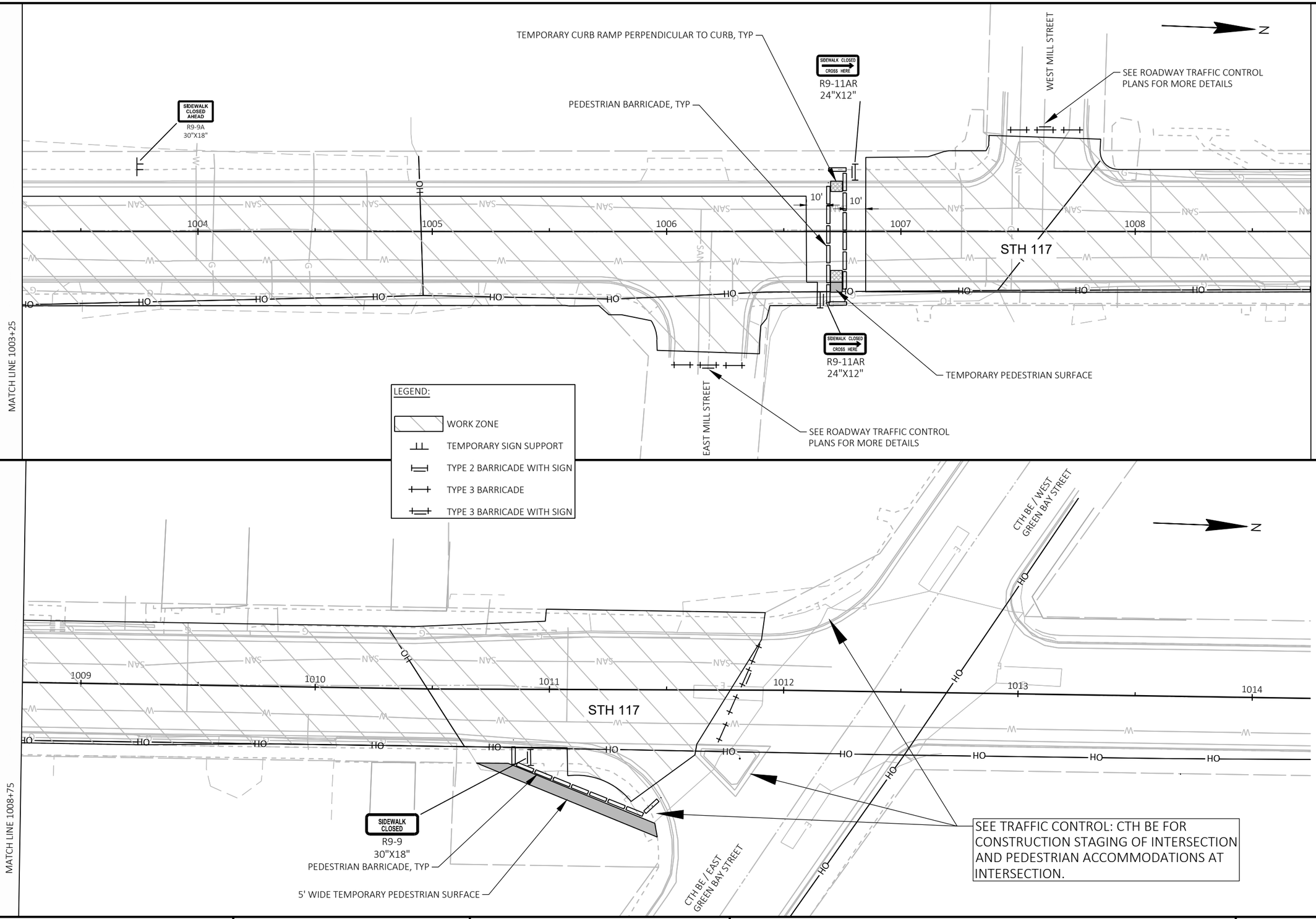
- WORK ZONE
- TEMPORARY SIGN SUPPORT
- TYPE 2 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- TYPE 3 BARRICADE WITH SIGN

NOTES:
CONSTRUCTION ZONE MAY VARY FROM WHAT IS SHOWN. ACCESS TO EXISTING SIDEWALK AND TEMPORARY CROSSING MUST REMAIN OPEN DURING STAGE 2A.

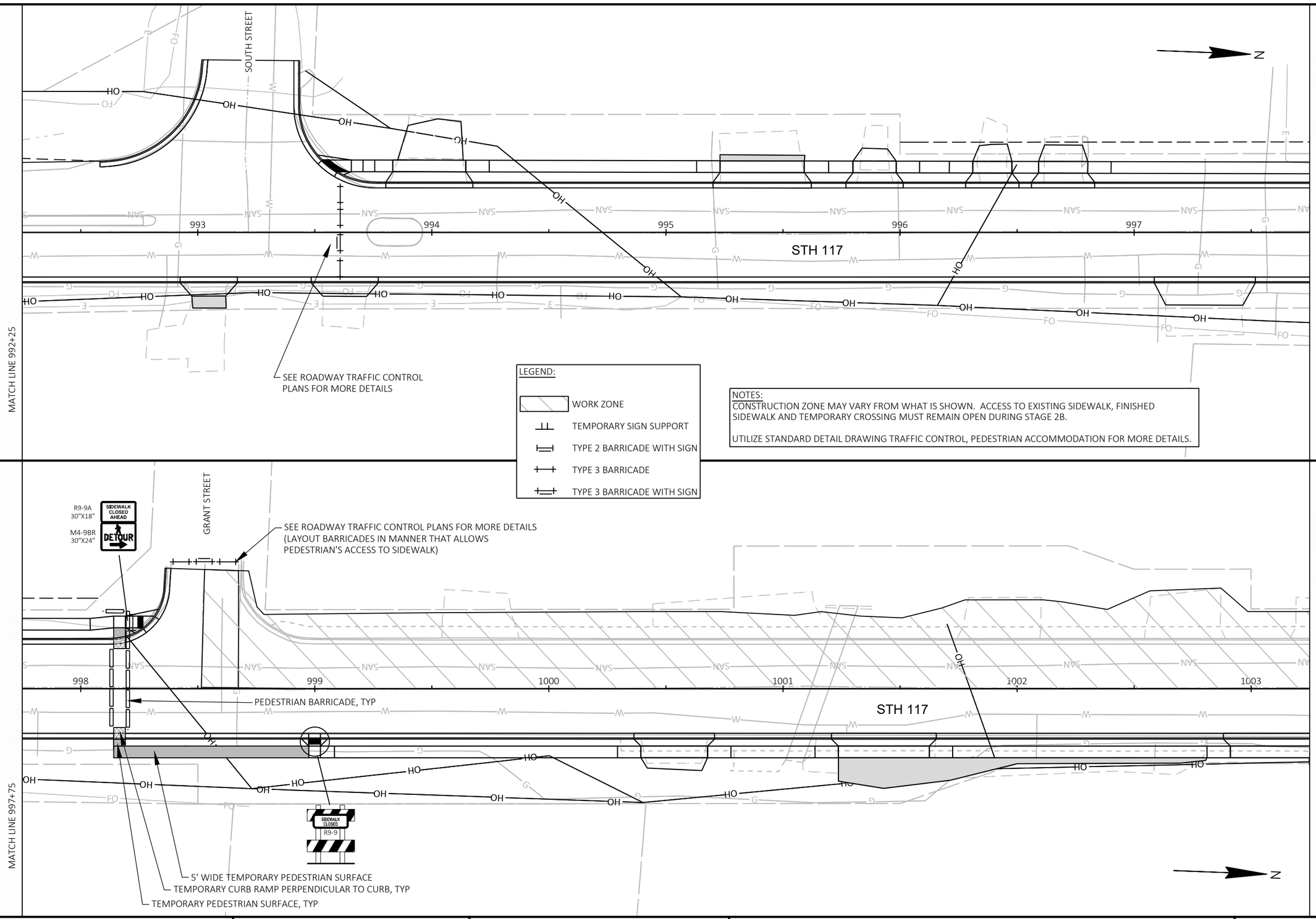
UTILIZE STANDARD DETAIL DRAWING TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION FOR MORE DETAILS.

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL - PEDESTRIAN (STAGE 2A)	SHEET 58	E

2

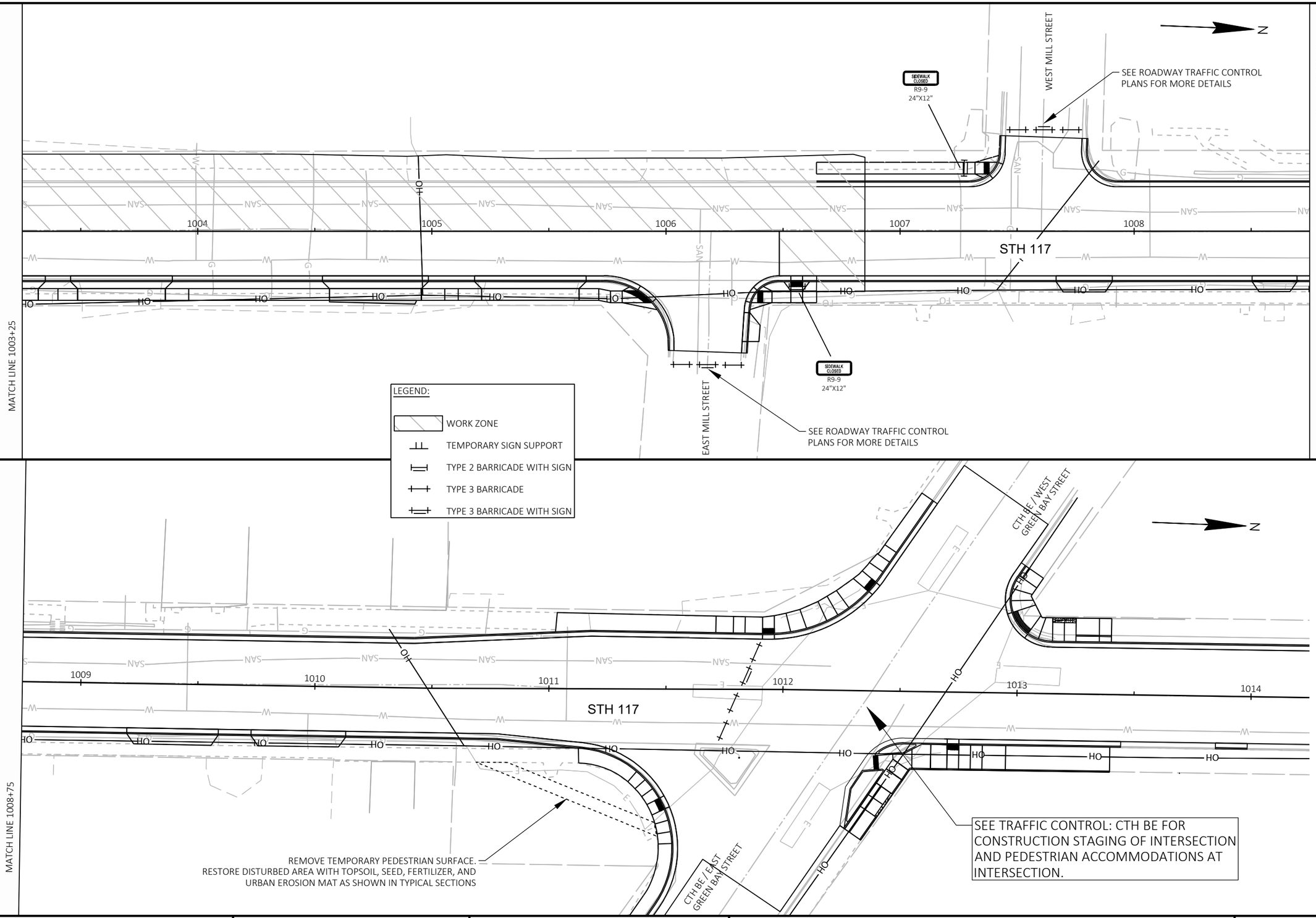


PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL - PEDESTRIAN (STAGE 2A)	SHEET 59	E



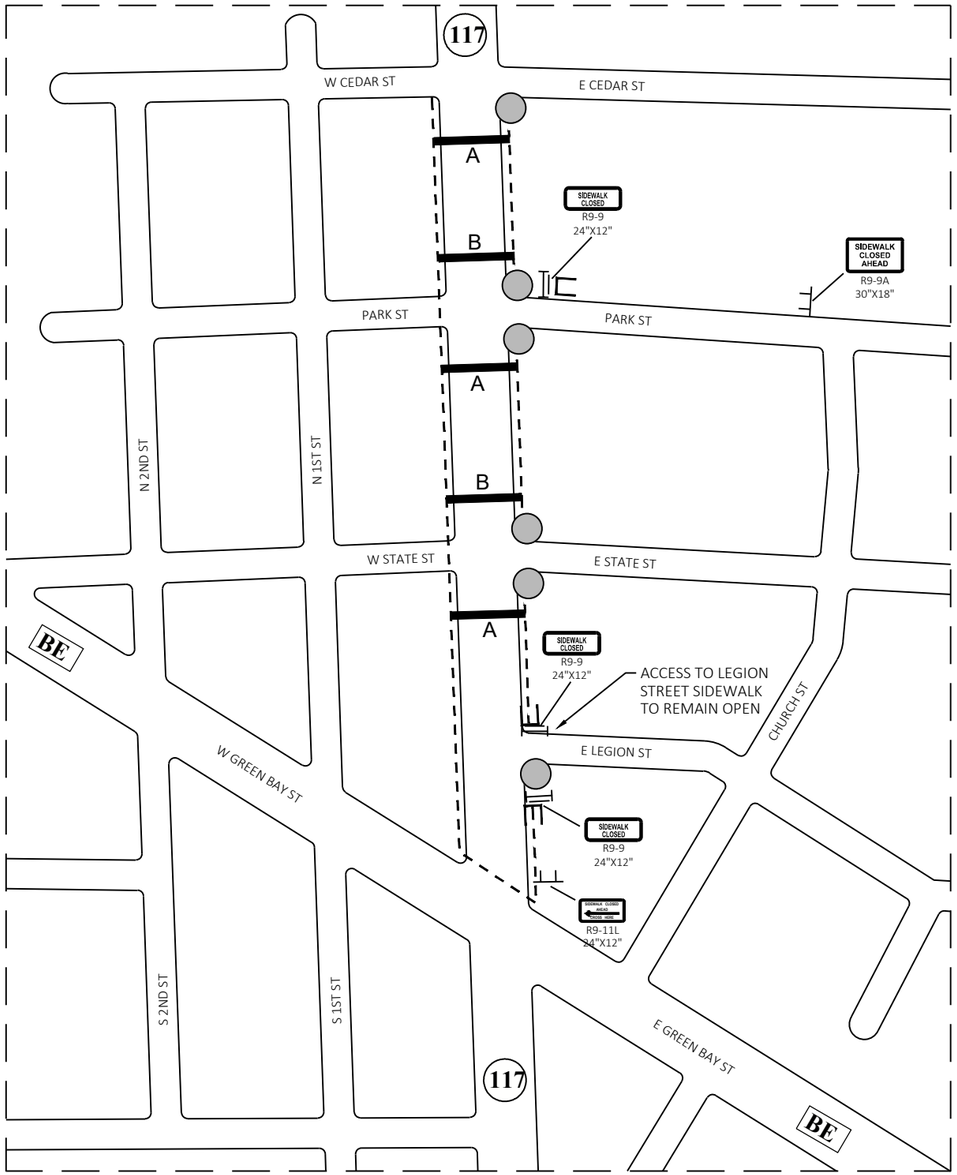
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL - PEDESTRIAN (STAGE 2B)	SHEET 60	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\025001_TC\025000_2TC-PEDESTRIANS.DWG
LAYOUT NAME - 01
PLOT DATE : 3/24/2023 8:42 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

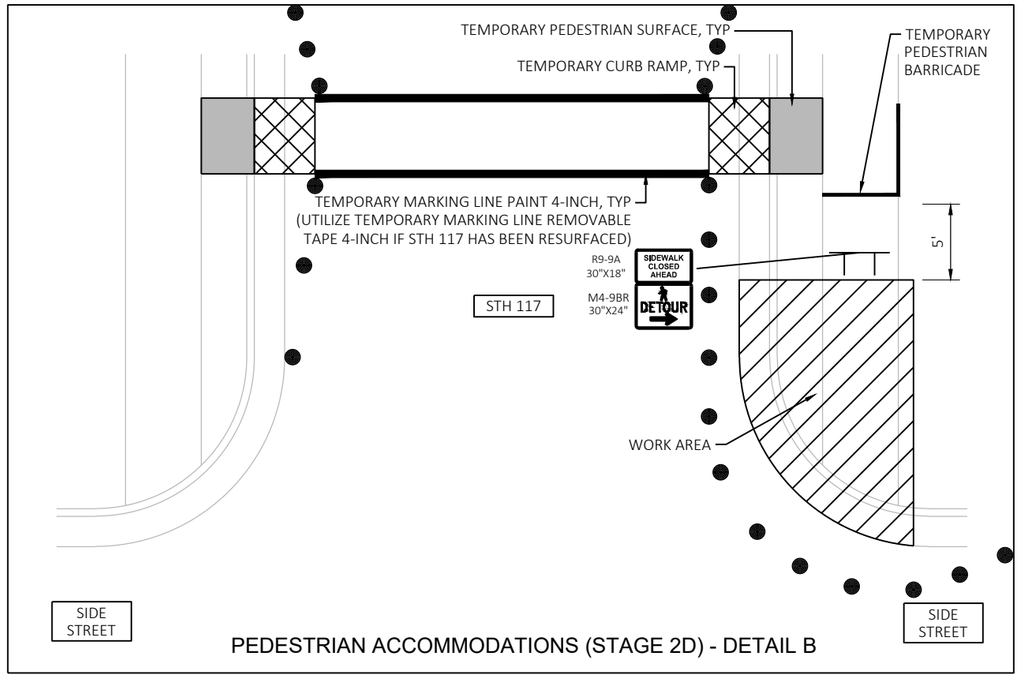


PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL - PEDESTRIAN (STAGE 2B)	SHEET 61	E

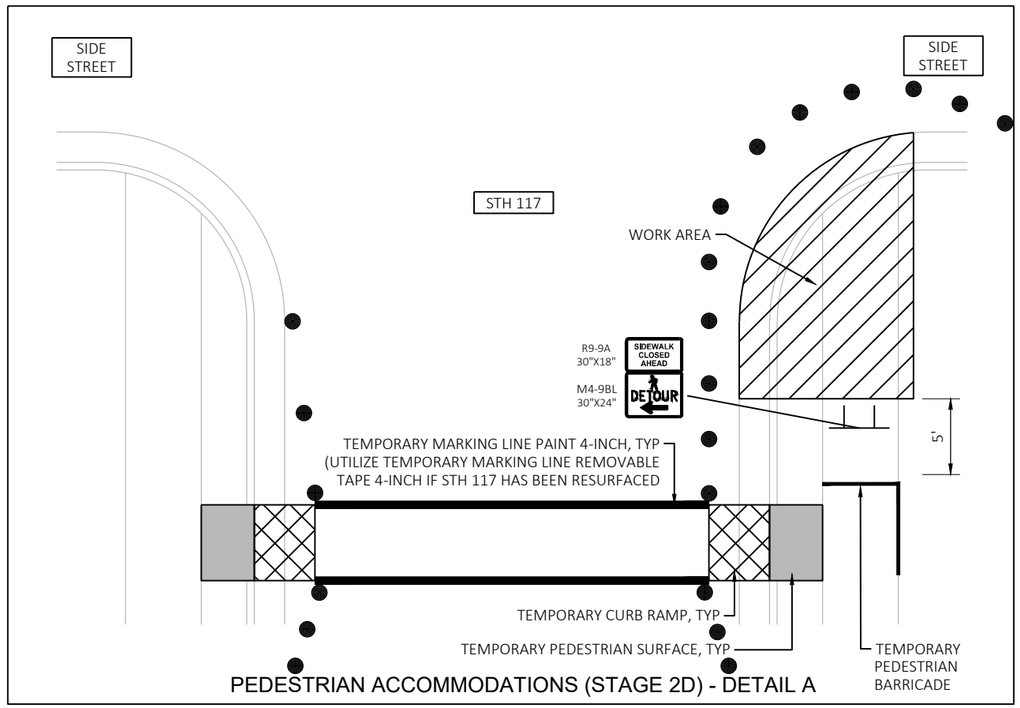
FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\025001_TC\025000_2TC-PEDESTRIANS.DWG
LAYOUT NAME - 02
PLOT DATE : 3/24/2023 8:43 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PEDESTRIAN ACCOMMODATIONS (STAGE 2D) - OVERVIEW



PEDESTRIAN ACCOMMODATIONS (STAGE 2D) - DETAIL B

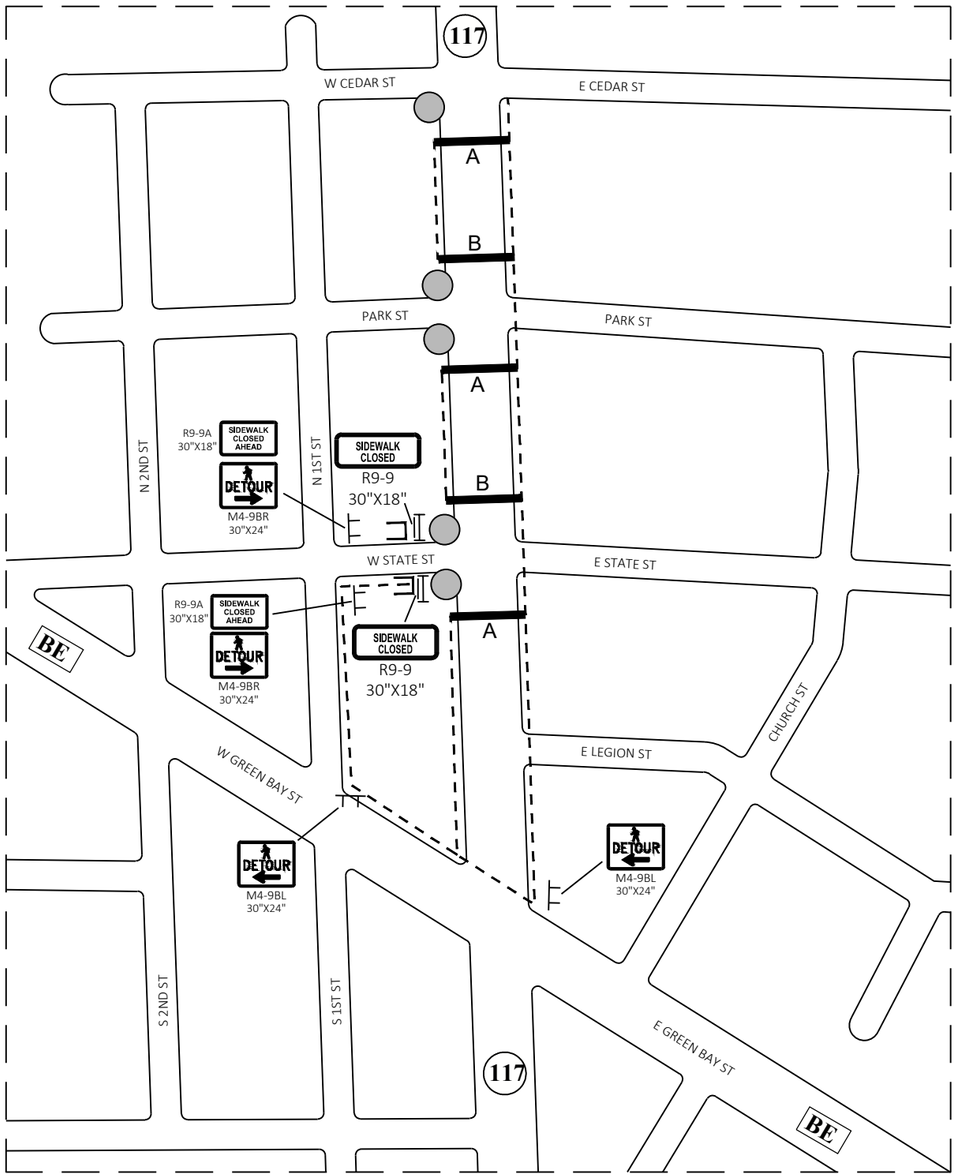


PEDESTRIAN ACCOMMODATIONS (STAGE 2D) - DETAIL A

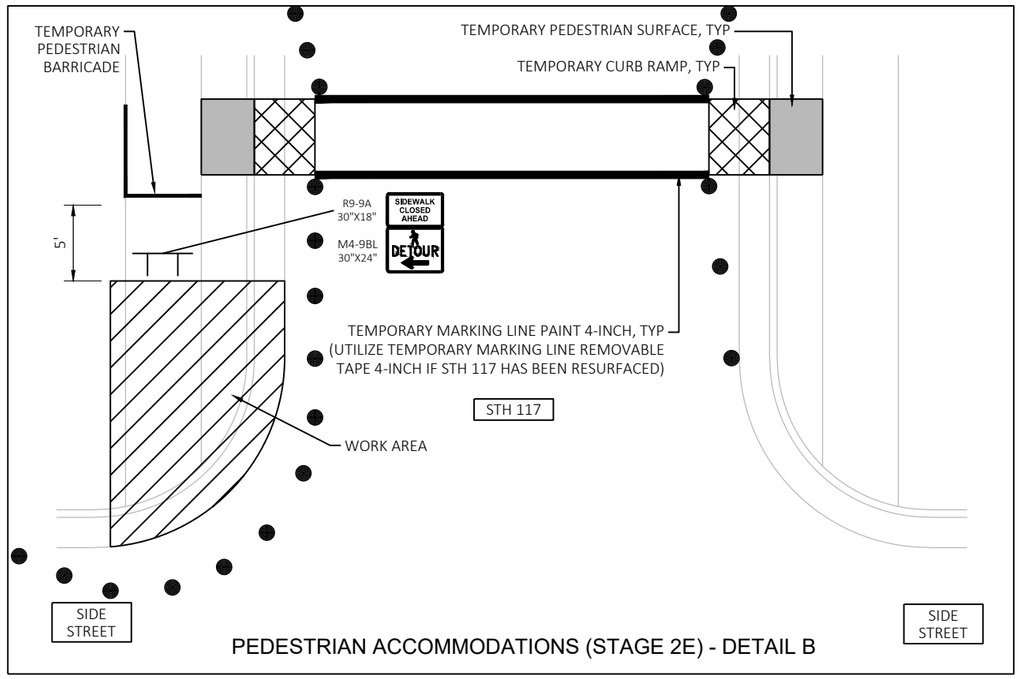
LEGEND:

	CONSTRUCTION ZONE		TEMPORARY SUPPORT WITH SIGN
	TEMPORARY PEDESTRIAN CROSSINGS		BARRICADE TYPE II WITH SIGN
	AVAILABLE PEDESTRIAN ROUTES		TEMPORARY PEDESTRIAN BARRICADE

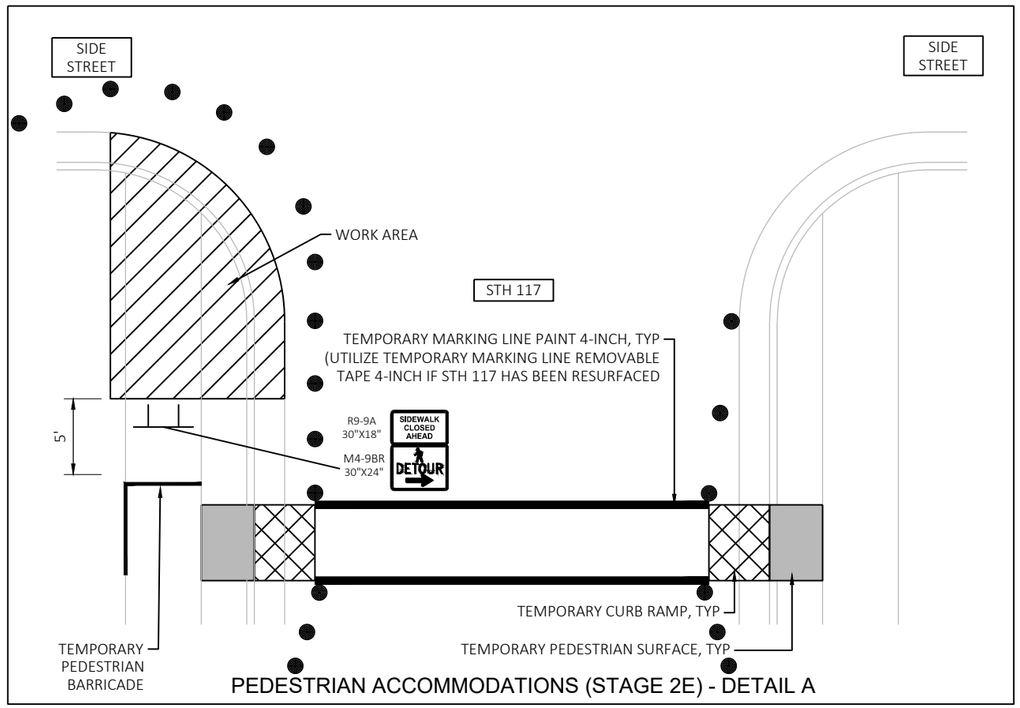
PROJECT NO: 9220-04-72/73	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL: PEDESTRIAN	SHEET 62	E



PEDESTRIAN ACCOMMODATIONS (STAGE 2E) - OVERVIEW



PEDESTRIAN ACCOMMODATIONS (STAGE 2E) - DETAIL B



PEDESTRIAN ACCOMMODATIONS (STAGE 2E) - DETAIL A

LEGEND:

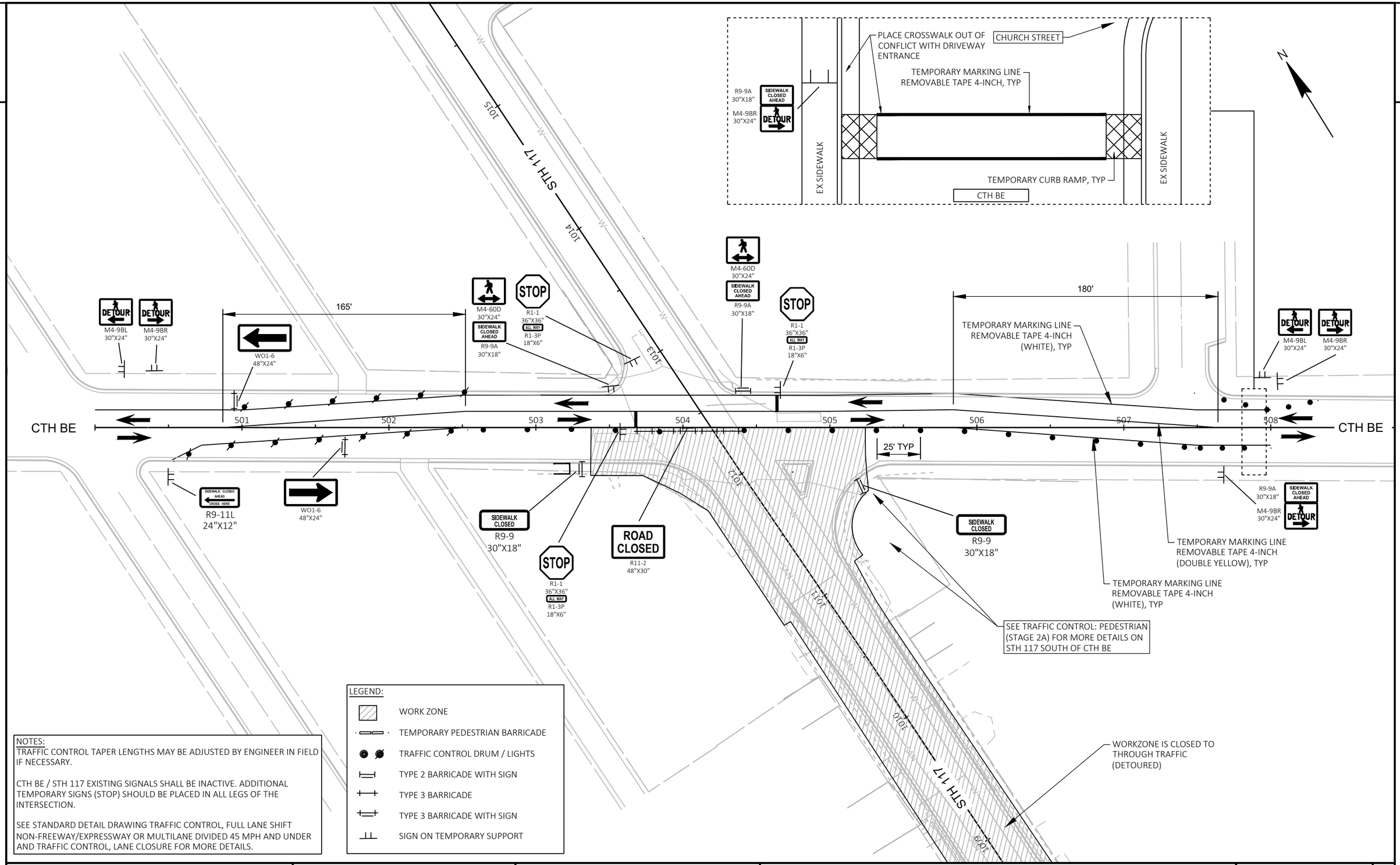
●	CONSTRUCTION ZONE	⊤⊤	TEMPORARY SUPPORT WITH SIGN
▬	TEMPORARY PEDESTRIAN CROSSINGS	⊢⊣	BARRICADE TYPE II WITH SIGN
- - - -	AVAILABLE PEDESTRIAN ROUTES	⊓	TEMPORARY PEDESTRIAN BARRICADE

PROJECT NO: 9220-04-72/73	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL: PEDESTRIAN	SHEET 63	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\025001_TC\025000_TC-PEDESTRIANS.DWG
LAYOUT NAME - 03 (3)
PLOT DATE : 3/24/2023 8:45 AM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2

2



NOTES:
TRAFFIC CONTROL TAPER LENGTHS MAY BE ADJUSTED BY ENGINEER IN FIELD IF NECESSARY.

CTH BE / STH 117 EXISTING SIGNALS SHALL BE INACTIVE. ADDITIONAL TEMPORARY SIGNS (STOP) SHOULD BE PLACED IN ALL LEGS OF THE INTERSECTION.

SEE STANDARD DETAIL DRAWING TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER AND TRAFFIC CONTROL, LANE CLOSURE FOR MORE DETAILS.

LEGEND:

- WORK ZONE
- TEMPORARY PEDESTRIAN BARRICADE
- TRAFFIC CONTROL DRUM / LIGHTS
- TYPE 2 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- TYPE 3 BARRICADE WITH SIGN
- SIGN ON TEMPORARY SUPPORT

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL: CTH BE INTERSECTION (STAGE 2A)	SHEET 64	E

NOTES:
TRAFFIC CONTROL TAPER LENGTHS MAY BE ADJUSTED BY ENGINEER IN FIELD IF NECESSARY.

CTH BE / STH 117 EXISTING SIGNALS SHALL BE INACTIVE. ADDITIONAL TEMPORARY SIGNS (STOP) SHOULD BE PLACED IN ALL LEGS OF THE INTERSECTION.

SEE STANDARD DETAIL DRAWING TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER AND TRAFFIC CONTROL, LANE CLOSURE FOR MORE DETAILS.

LEGEND:
- WORK ZONE
- TEMPORARY PEDESTRIAN BARRICADE
- TRAFFIC CONTROL DRUM / LIGHTS
- TYPE 2 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- TYPE 3 BARRICADE WITH SIGN
- SIGN ON TEMPORARY SUPPORT

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BR 30"X24" DETOUR
PLACE SIGN AND SIGN SUPPORT AT EXISTING CROSSWALK AT STATE STREET

INTERSECTION TO REMAIN OPEN

STH 117

1017
1016
1015
1014
1013
1012

SIDEWALK CLOSED AHEAD R9-9A 30"X18"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW), TYP

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE), TYP

165'

SIDEWALK CLOSED R9-9 30"X18"

PLACE TRAFFIC CONTROL DRUMS IN MANNER TO ALLOW FOR THE MAXIMUM TURNING RADIUS AVAILABLE

R9-11R 24"X12" SIDEWALK CLOSED CROSS HERE
M4-9BL 30"X24" DETOUR

165'

M4-9BR 30"X24" DETOUR
R9-9A 30"X18" SIDEWALK CLOSED AHEAD
R1-1 36"X36" STOP
R1-3P 18"X6" ALL WAY

R1-1 36"X36" STOP
R1-3P 18"X6" ALL WAY
R9-9 30"X18" SIDEWALK CLOSED

180'
INTERSECTION TO REMAIN OPEN
WO1-6 48"X24"

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BL 30"X24" DETOUR

CTH BE

501 502 503 504 505 25' TYP 506 507 508

CTH BE

M4-9BR 30"X24" DETOUR
M4-9BL 30"X24" DETOUR

M4-60D 30"X24"

WO1-6 48"X24"
M4-9BR 30"X24" DETOUR
M4-9BL 30"X24" DETOUR

PLACE STOP SIGN OUT OF CONFLICT WITH SIDEWALK

R1-1 36"X36" STOP
R1-3P 18"X6" ALL WAY

R11-2 48"X30" ROAD CLOSED

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BL 30"X24" DETOUR

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW), TYP

SEE TRAFFIC CONTROL: PEDESTRIAN (STAGE 2B) FOR MORE DETAILS ON STH 117 SOUTH OF CTH BE

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE), TYP

WORKZONE IS CLOSED TO THROUGH TRAFFIC (DETOURED)

PLACE CROSSWALK OUT OF CONFLICT WITH DRIVEWAY ENTRANCE
CHURCH STREET
TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, TYP
EX SIDEWALK
R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BL 30"X24" DETOUR
EX SIDEWALK
TEMPORARY CURB RAMP, TYP
CTH BE

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL: CTH BE INTERSECTION (STAGE 2B)	SHEET 65	E

NOTES:
TRAFFIC CONTROL TAPER LENGTHS MAY BE ADJUSTED BY ENGINEER IN FIELD IF NECESSARY.

CTH BE / STH 117 EXISTING SIGNALS SHALL BE INACTIVE. ADDITIONAL TEMPORARY SIGNS (STOP) SHOULD BE PLACED IN ALL LEGS OF THE INTERSECTION.

SEE STANDARD DETAIL DRAWING TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY/EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER AND TRAFFIC CONTROL, LANE CLOSURE FOR MORE DETAILS.

LEGEND:
- WORK ZONE
- TEMPORARY PEDESTRIAN BARRICADE
- TRAFFIC CONTROL DRUM / LIGHTS
- TYPE 2 BARRICADE WITH SIGN
- TYPE 3 BARRICADE
- TYPE 3 BARRICADE WITH SIGN
- SIGN ON TEMPORARY SUPPORT

N

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BL 30"X24" DETOUR
PLACE SIGN AND SIGN SUPPORT AT EXISTING CROSSWALK AT STATE STREET (SOUTHWEST LEG OF INTERSECTION)

INTERSECTION TO REMAIN OPEN

STH 117
1017
1016
1015
1014
1013
1012
1011

165'

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW), TYP

WO1-6 48"X24"

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE), TYP

STOP R1-1 36"X36" ALL WAY R1-3P 18"X6"

SIDEWALK CLOSED R9-9 30"X18"

R3-1 24"X24"

SIDEWALK CLOSED AHEAD R9-9A 30"X18" DETOUR M4-9BL 30"X24"

R9-9A 30"X18" SIDEWALK CLOSED AHEAD DETOUR M4-9BR 30"X24"

165'

SIDEWALK CLOSED R9-9 30"X18"

STOP R1-1 36"X36" ALL WAY R1-3P 18"X6"

180'

INTERSECTION TO REMAIN OPEN

WO1-6 48"X24"

25' TYP

CTH BE

501 502 503 504 505 506 507 508

CTH BE

DETOUR M4-9BR 30"X24"
DETOUR M4-9BL 30"X24"

M4-60D 30"X24"

PLACE STOP SIGN OUT OF CONFLICT WITH SIDEWALK

STOP R1-1 36"X36" ALL WAY R1-3P 18"X6"

ROAD CLOSED R11-2 48"X30"

R9-9A 30"X18" SIDEWALK CLOSED AHEAD M4-9BL 30"X24" DETOUR

SEE TRAFFIC CONTROL: PEDESTRIAN (STAGE 2B) FOR MORE DETAILS ON STH 117 SOUTH OF CTH BE

WORKZONE IS CLOSED TO THROUGH TRAFFIC (DETOURED)

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW), TYP

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE), TYP

PLACE CROSSWALK OUT OF CONFLICT WITH DRIVEWAY ENTRANCE

CHURCH STREET

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH, TYP

EX SIDEWALK

EX SIDEWALK

R9-9A 30"X18" SIDEWALK CLOSED AHEAD
M4-9BL 30"X24" DETOUR

TEMPORARY CURB RAMP, TYP

CTH BE

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL: CTH BE INTERSECTION (STAGE 2C)	SHEET 66	E

2

2

LEGEND:

TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (BLACK)

MARKING REMOVAL LINE 4-INCH

MARKING REMOVAL LINE WIDE

N

STH 117

1017

1016

1015

1014

1013

1012

1011

1003

EXISTING PARKING STALL, TYP

EXISTING PARKING STALL, TYP

EXISTING STOP BAR

EXISTING STOP BAR

EXISTING PARKING STALL

EXISTING PARKING STALL, TYP

END OF CONSTRUCTION LIMITS

EXISTING CENTERLINE (DOUBLE YELLOW)

END LIMITS AT TEMPORARY CROSSWALK LOCATION

CTH BE

501 502 503 504 505 506 507 508

CTH BE

EXISTING CENTERLINE (DOUBLE YELLOW)

END LIMITS AT EXISTING CROSSWALK LOCATION

EXISTING STOP BAR

EXISTING CROSSWALK

END OF CONSTRUCTION LIMITS

EXISTING PARKING STALL, TYP

REMOVE TO BE OUT OF CONFLICT WITH TEMPORARY CROSSWALK

STH 117

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL: CTH BE INTERSECTION (REMOVAL)	SHEET 67	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\025001_TC\025009_TC-BE_INT.DWG
LAYOUT NAME - 4

PLOT DATE : 3/23/2023 3:26 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : Custom

WISDOT/CADDS SHEET 44

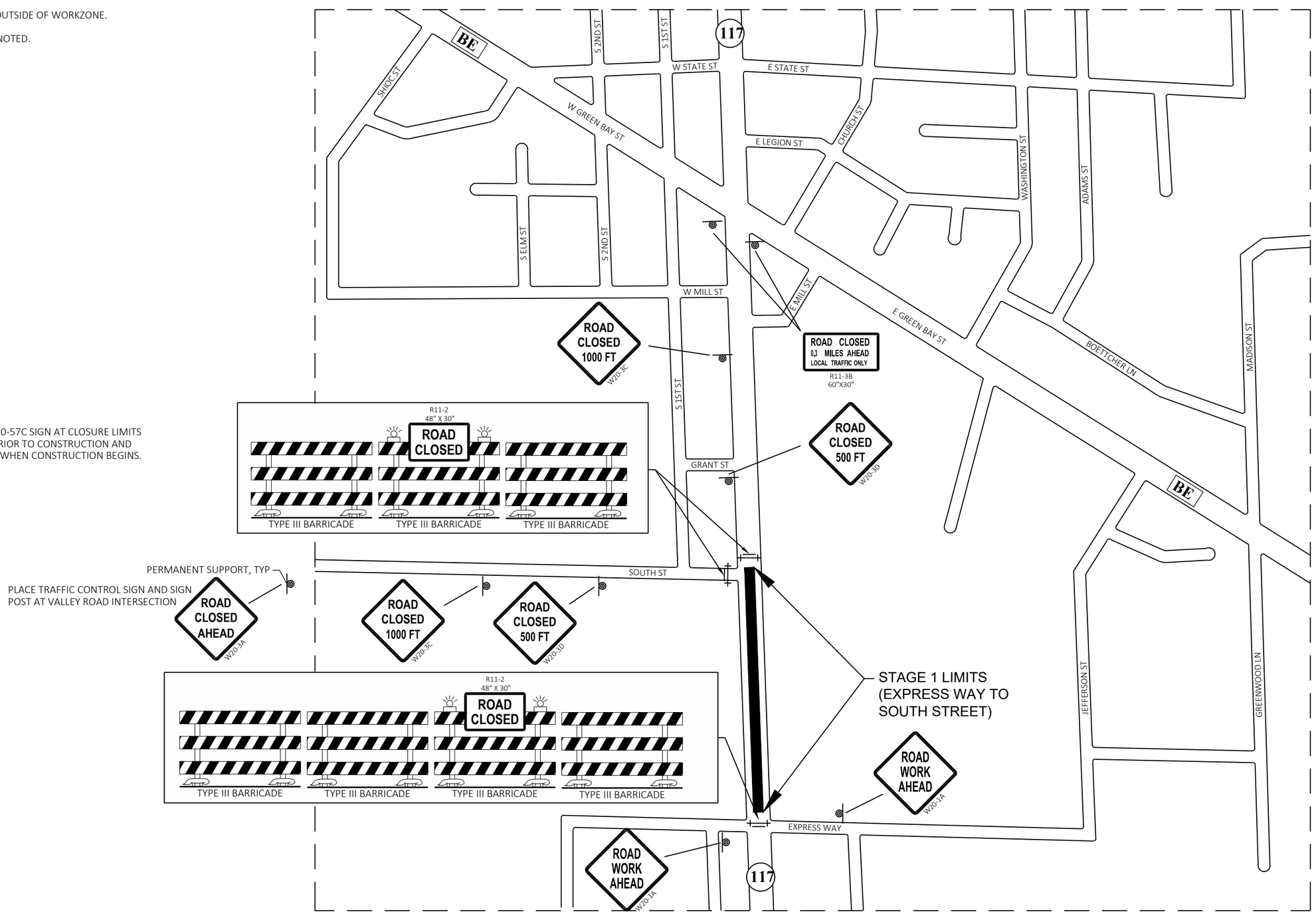
TRAFFIC CONTROL NOTES:

SEE DETOUR PLANS FOR ADVANCE SIGNING OUTSIDE OF WORKZONE.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

G20-57C
72"X36"

PLACE G20-57C SIGN AT CLOSURE LIMITS
7 DAYS PRIOR TO CONSTRUCTION AND
REMOVE WHEN CONSTRUCTION BEGINS.



2

PROJECT NO: 9220-04-72/73	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL: STAGE 1	SHEET 68	E

2

TRAFFIC CONTROL NOTES:

SEE DETOUR PLANS FOR ADVANCE SIGNING OUTSIDE OF WORKZONE.

SEE TRAFFIC CONTROL PEDESTRIAN FOR PEDESTRIAN ACCOMMODATIONS WITHIN THE WORKZONE.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

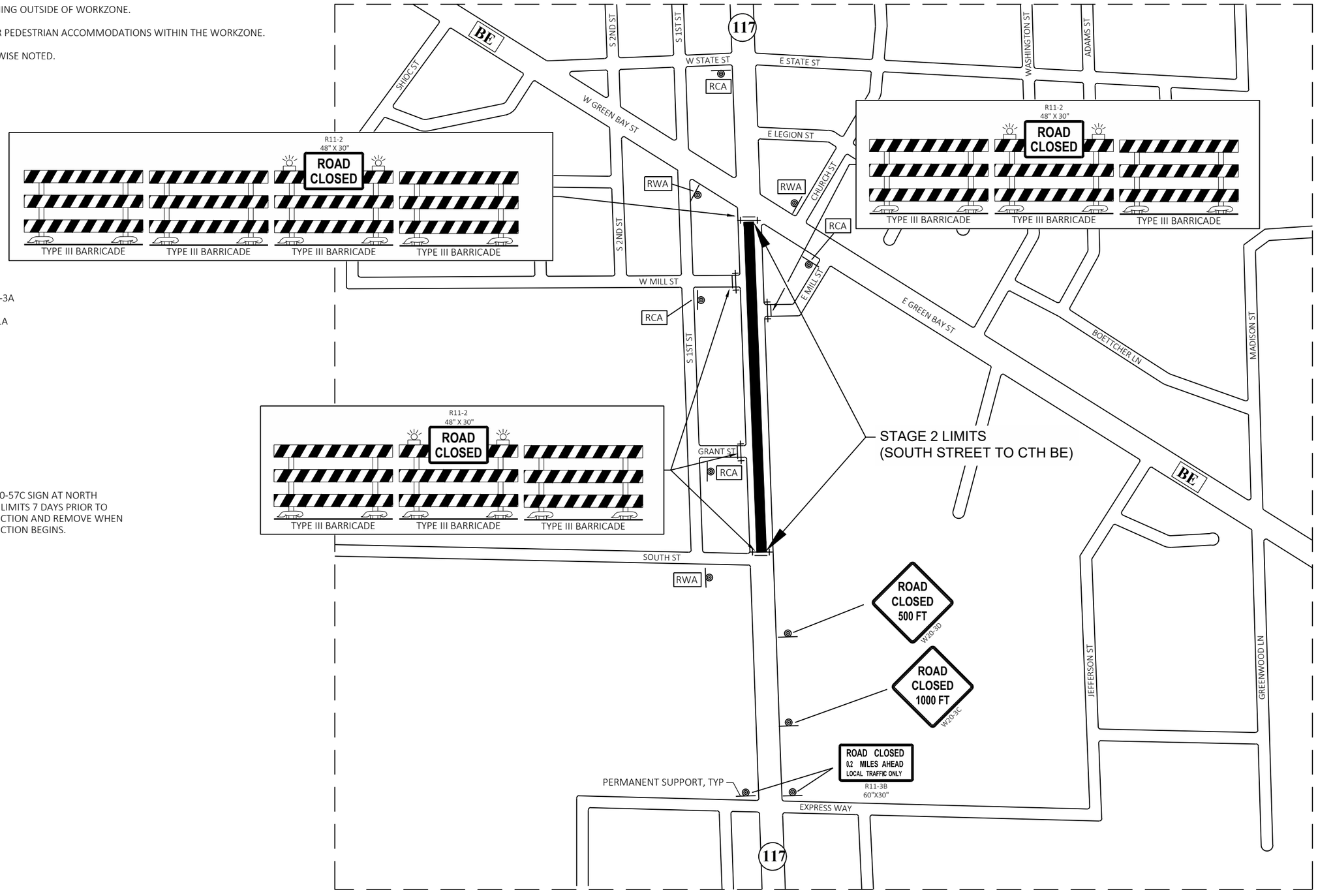
LEGEND

RCA	ROAD CLOSED AHEAD W20-3A
RWA	ROAD WORK AHEAD W20-1A

HWY 117
ROAD CLOSED
BEGINS XXX-XX

G20-57C
72"X36"

PLACE G20-57C SIGN AT NORTH CLOSURE LIMITS 7 DAYS PRIOR TO CONSTRUCTION AND REMOVE WHEN CONSTRUCTION BEGINS.



2

PROJECT NO: 9220-04-72/73	HWY: STH 117	COUNTY: SHAWANO	TRAFFIC CONTROL: STAGE 2	SHEET 69	E

2

N

M4-8 36"X18" DETOUR
M3-3 24"X12" SOUTH
M1-6 24"X24" 117
SOUTH 22

M4-8 36"X18" DETOUR
M3-1 24"X12" NORTH
M1-6 24"X24" 117

Cecil 5
Gillett 16
Oconto 38

M4-8 36"X18" DETOUR
M3-3 24"X12" SOUTH
M1-6 24"X24" 117

M4-8 36"X18" DETOUR
M3-1 24"X12" NORTH
M1-6 24"X24" 117

M3-3 24"X12" SOUTH
M1-6 24"X24" 117
DETOUR AHEAD W20-2A
(117) COVER

M4-8 36"X18" DETOUR
M3-1 36"X18" NORTH
M1-6 36"X36" 117
M5-2R 21"X21"

M3-1 24"X12" NORTH
M1-6 24"X24" 117
DETOUR AHEAD W20-2A

PLACE SIGNS IN MEDIAN ALSO
M4-8 36"X18" DETOUR
M3-1 36"X18" NORTH
M1-6 36"X36" 117
M5-2R 21"X21"

M4-8 36"X18" DETOUR
M3-1 24"X12" NORTH
M1-6 24"X24" 117

M4-8 36"X18" DETOUR
M3-3 24"X12" SOUTH
M1-6 24"X24" 117

M4-8 38"X18" DETOUR
M3-3 24"X12" SOUTH
M1-6 24"X24" 117

EXIT 234
SOUTH 47 (117) COVER
Bonduel COVER
Appleton
1 MILE

ROAD CLOSED 500 FT W20-3D
(NORTH 117) COVER

END PROJECT
STA 1039+00.00

M4-8 36"X18" DETOUR
M3-1 24"X12" NORTH
M1-6 24"X24" 117

BEGIN PROJECT
STA 981+14.00

M3-1 24"X12" NORTH
M1-6 24"X24" 117
DETOUR AHEAD W20-2A

EXIT 234
SOUTH 47 (117) COVER
Bonduel COVER
Appleton
1 MILE

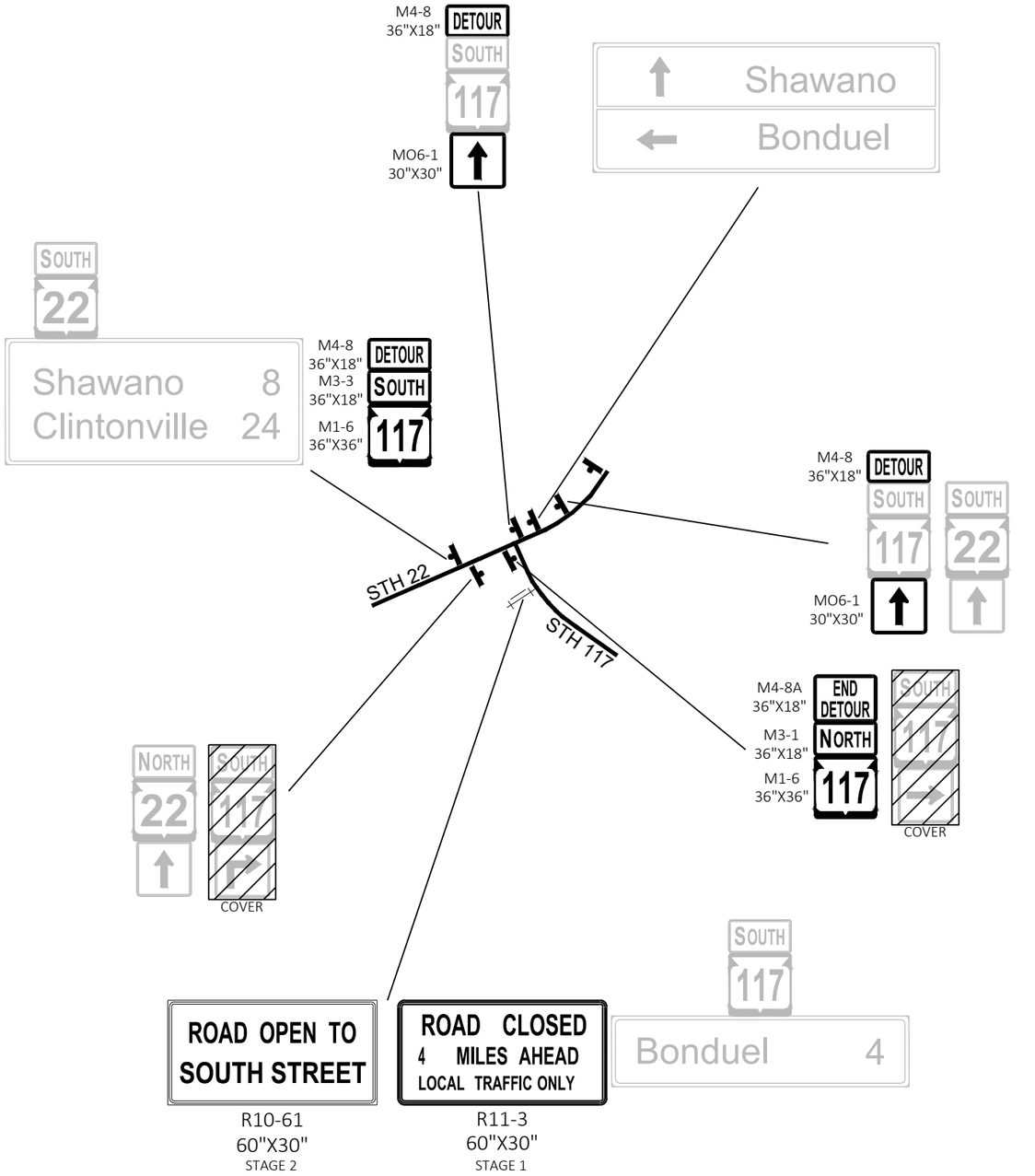
TRAFFIC CONTROL NOTES:
ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED

COVERING SIGN -

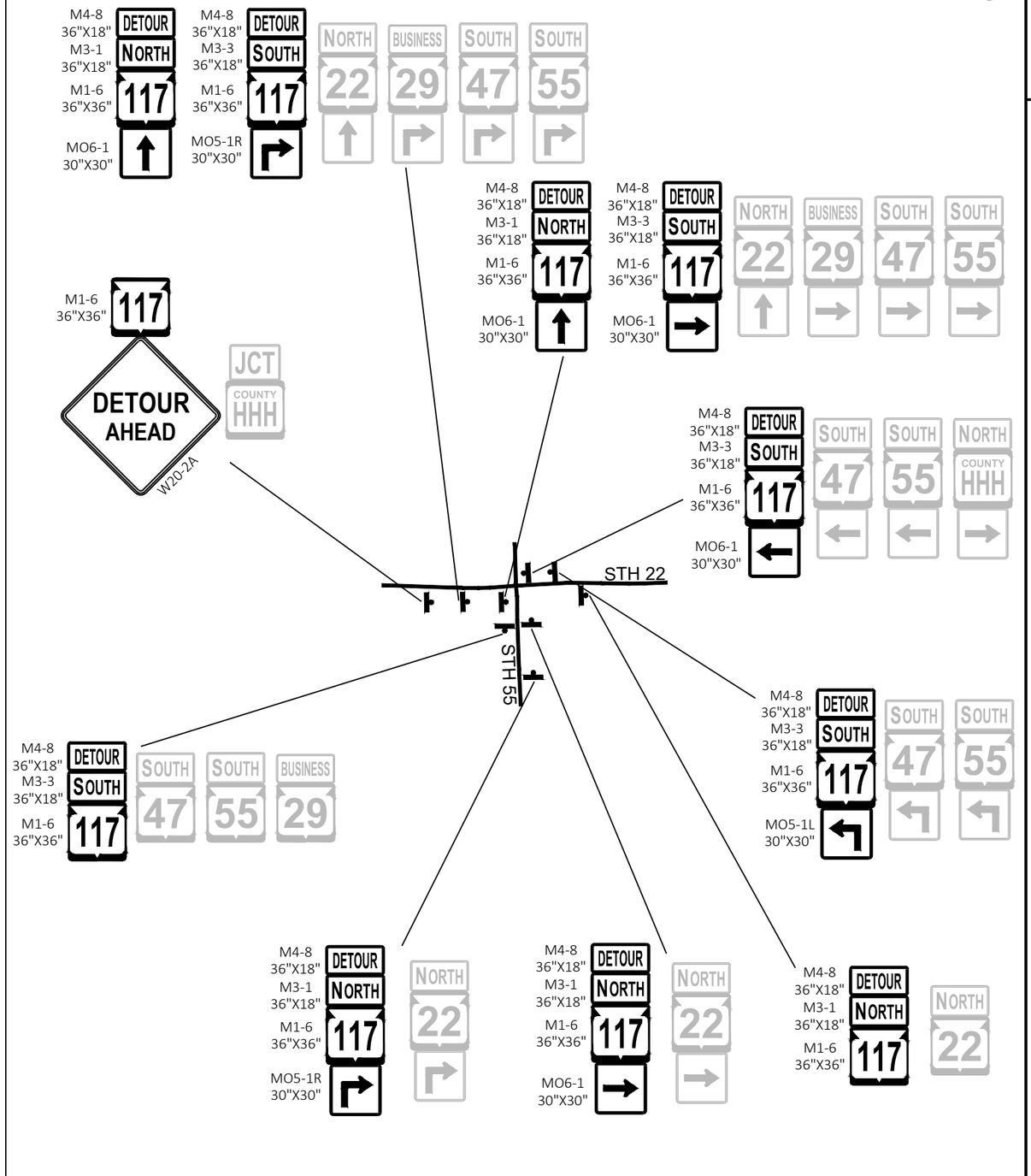
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	DETOURS: STH 117	SHEET 70	E

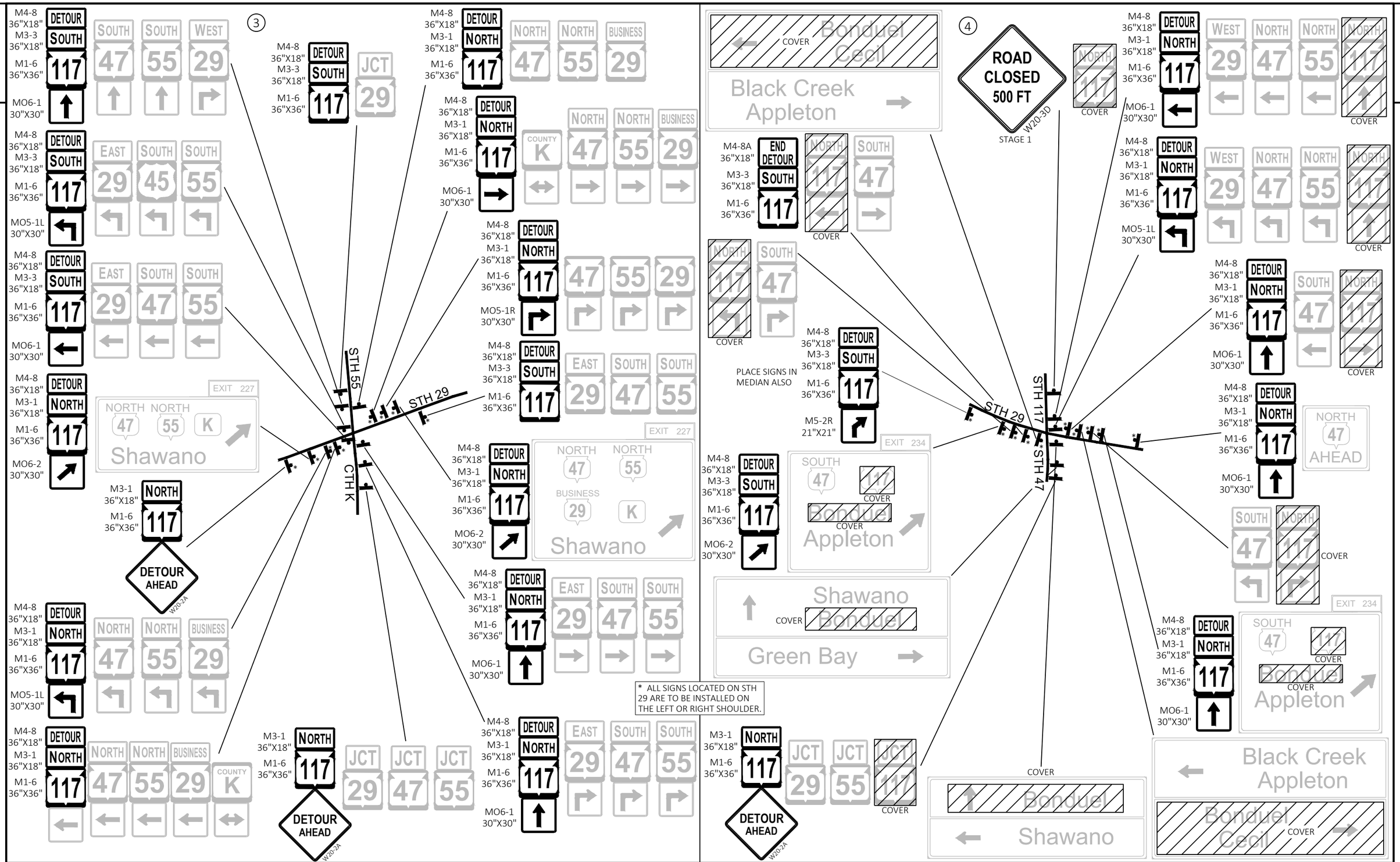
FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\027001_DT\027001_DT.DWG
LAYOUT NAME - 03
PLOT DATE : 3/20/2023 2:52 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:15 FT

①


M4-8 36"X18" DETOUR SOUTH 117
MO6-1 30"X30"
Shawano
Bonduel
SOUTH 22
Shawano 8
Clintonville 24
M4-8 36"X18" DETOUR SOUTH 117
M3-3 36"X18"
M1-6 36"X36"
STH 22
STH 117
M4-8 36"X18" DETOUR SOUTH 117
MO6-1 30"X30"
SOUTH 22
M4-8A 36"X18" END DETOUR
M3-1 36"X18" NORTH 117
M1-6 36"X36"
SOUTH 117
COVER
NORTH 22
SOUTH 117
COVER
SOUTH 117
ROAD OPEN TO SOUTH STREET
R10-61 60"X30" STAGE 2
ROAD CLOSED 4 MILES AHEAD LOCAL TRAFFIC ONLY
R11-3 60"X30" STAGE 1
Bonduel 4

②


M4-8 36"X18" DETOUR NORTH
M3-1 36"X18"
M1-6 36"X36" 117
MO6-1 30"X30"
M4-8 36"X18" DETOUR SOUTH
M3-3 36"X18"
M1-6 36"X36" 117
MO5-1R 30"X30"
NORTH 22
BUSINESS 29
SOUTH 47
SOUTH 55
M1-6 36"X36" 117
DETOUR AHEAD
W20-2A
JCT COUNTY HHH
STH 22
STH 55
M4-8 36"X18" DETOUR SOUTH
M3-3 36"X18"
M1-6 36"X36" 117
MO6-1 30"X30"
NORTH COUNTY HHH
M4-8 36"X18" DETOUR SOUTH
M3-3 36"X18"
M1-6 36"X36" 117
MO5-1L 30"X30"
M4-8 36"X18" DETOUR NORTH
M3-1 36"X18"
M1-6 36"X36" 117
MO5-1R 30"X30"
M4-8 36"X18" DETOUR NORTH
M3-1 36"X18"
M1-6 36"X36" 117
MO6-1 30"X30"
M4-8 36"X18" DETOUR NORTH
M3-1 36"X18"
M1-6 36"X36" 117



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	DETOURS: STH 117	SHEET 72	E

Estimate Of Quantities

Line	Item	Item Description	Unit	Total	9220-04-72 Qty	9220-04-82 Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,220.000	1,220.000	
0004	204.0120	Removing Asphaltic Surface Milling	SY	13,475.000	13,475.000	
0006	204.0150	Removing Curb & Gutter	LF	5,555.000	5,555.000	
0008	204.0155	Removing Concrete Sidewalk	SY	1,600.000	1,600.000	
0010	204.0185	Removing Masonry	CY	2.000	2.000	
0012	204.0195	Removing Concrete Bases	EACH	10.000	10.000	
0014	204.0220	Removing Inlets	EACH	2.000	2.000	
0016	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	60.000	60.000	
0018	205.0100	Excavation Common	CY	10,450.000	10,450.000	
0020	210.1100	Backfill Structure Type A	CY	3.000	3.000	
0022	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 9220-04-72	EACH	1.000	1.000	
0024	213.0100	Finishing Roadway (project) 01. 9220-04-72	EACH	1.000	1.000	
0026	213.0100	Finishing Roadway (project) 01. 9220-04-82	EACH	1.000		1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	375.000	375.000	
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	8,900.000	8,900.000	
0032	416.0160	Concrete Driveway 6-Inch	SY	1,170.000	1,170.000	
0034	455.0605	Tack Coat	GAL	455.000	455.000	
0036	460.2000	Incentive Density HMA Pavement	DOL	4,730.000	4,730.000	
0038	460.6223	HMA Pavement 3 MT 58-28 S	TON	4,175.000	4,175.000	
0040	460.6224	HMA Pavement 4 MT 58-28 S	TON	1,590.000	1,590.000	
0042	460.6424	HMA Pavement 4 MT 58-28 H	TON	1,625.000	1,625.000	
0044	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	30.000	30.000	
0046	504.0500	Concrete Masonry Retaining Walls	CY	3.000	3.000	
0048	516.0500	Rubberized Membrane Waterproofing	SY	2.000	2.000	
0050	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	2.000	2.000	
0052	520.3418	Culvert Pipe Class III-A Non-metal 18-Inch	LF	34.000	34.000	
0054	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	5,675.000	5,675.000	
0056	601.0600	Concrete Curb Pedestrian	LF	260.000	260.000	
0058	602.0405	Concrete Sidewalk 4-Inch	SF	16,675.000	16,675.000	
0060	602.0415	Concrete Sidewalk 6-Inch	SF	1,360.000	1,360.000	
0062	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	335.000	335.000	
0064	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	95.000	95.000	
0066	602.1500	Concrete Steps	SF	32.000	32.000	
0068	602.2400	Concrete Safety Islands	SF	240.000	240.000	
0070	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	60.000	60.000	
0072	611.0430	Reconstructing Inlets	EACH	18.000	18.000	
0074	611.0530	Manhole Covers Type J	EACH	17.000	17.000	
0076	611.0540	Manhole Covers Type K	EACH	1.000	1.000	
0078	611.0600	Inlet Covers Type A	EACH	3.000	3.000	
0080	611.0624	Inlet Covers Type H	EACH	8.000	8.000	
0082	611.0627	Inlet Covers Type HM	EACH	5.000	5.000	
0084	611.0639	Inlet Covers Type H-S	EACH	4.000	4.000	
0086	611.2004	Manholes 4-FT Diameter	EACH	3.000	3.000	
0088	611.3230	Inlets 2x3-FT	EACH	2.000	2.000	
0090	611.8110	Adjusting Manhole Covers	EACH	7.000	7.000	
0092	611.9705	Salvaged Manhole Covers	EACH	4.000	4.000	
0094	618.0100	Maintenance And Repair of Haul Roads (project) 01. 9220-04-72	EACH	1.000	1.000	
0096	619.1000	Mobilization	EACH	1.000	0.710	0.290
0098	620.0300	Concrete Median Sloped Nose	SF	50.000	50.000	

Line	Item	Item Description	Unit	Total	9220-04-72 Qty	9220-04-82 Qty
0100	624.0100	Water	MGAL	280.000	280.000	
0102	625.0100	Topsoil	SY	4,775.000	4,775.000	
0104	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000	
0106	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000	
0108	628.2006	Erosion Mat Urban Class I Type A	SY	4,775.000	4,775.000	
0110	628.7005	Inlet Protection Type A	EACH	8.000	8.000	
0112	628.7015	Inlet Protection Type C	EACH	39.000	39.000	
0114	628.7504	Temporary Ditch Checks	LF	30.000	30.000	
0116	630.0140	Seeding Mixture No. 40	LB	87.000	87.000	
0118	630.0500	Seed Water	MGAL	126.000	126.000	
0120	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	8.000	8.000	
0122	637.2210	Signs Type II Reflective H	SF	94.000	94.000	
0124	638.2102	Moving Signs Type II	EACH	5.000	5.000	
0126	642.5201	Field Office Type C	EACH	1.000	1.000	
0128	643.0300	Traffic Control Drums	DAY	6,000.000	6,000.000	
0130	643.0410	Traffic Control Barricades Type II	DAY	420.000	420.000	
0132	643.0420	Traffic Control Barricades Type III	DAY	800.000	800.000	
0134	643.0705	Traffic Control Warning Lights Type A	DAY	350.000	350.000	
0136	643.0715	Traffic Control Warning Lights Type C	DAY	450.000	450.000	
0138	643.0900	Traffic Control Signs	DAY	17,500.000	17,500.000	
0140	643.0910	Traffic Control Covering Signs Type I	EACH	12.000	12.000	
0142	643.0920	Traffic Control Covering Signs Type II	EACH	11.000	11.000	
0144	643.1000	Traffic Control Signs Fixed Message	SF	306.000	306.000	
0146	643.3105	Temporary Marking Line Paint 4-Inch	LF	360.000	360.000	
0148	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	12,320.000	12,320.000	
0150	643.3850	Temporary Marking Stop Line Removable Tape 18-Inch	LF	99.000	99.000	
0152	643.5000	Traffic Control	EACH	1.000	1.000	
0154	644.1410	Temporary Pedestrian Surface Asphalt	SF	505.000	505.000	
0156	644.1430	Temporary Pedestrian Surface Plate	SF	505.000	505.000	
0158	644.1440	Temporary Pedestrian Surface Matting	SF	505.000	505.000	
0160	644.1601	Temporary Pedestrian Curb Ramp	DAY	420.000	420.000	
0162	644.1810	Temporary Pedestrian Barricade	LF	1,600.000	1,600.000	
0164	646.1020	Marking Line Epoxy 4-Inch	LF	19,200.000	19,200.000	
0166	646.3020	Marking Line Epoxy 8-Inch	LF	1,400.000	1,400.000	
0168	646.5020	Marking Arrow Epoxy	EACH	18.000	18.000	
0170	646.5120	Marking Word Epoxy	EACH	3.000	3.000	
0172	646.6120	Marking Stop Line Epoxy 18-Inch	LF	115.000	115.000	
0174	646.7020	Marking Diagonal Epoxy 6-Inch	LF	250.000	250.000	
0176	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,550.000	1,550.000	
0178	646.8120	Marking Curb Epoxy	LF	50.000	50.000	
0180	646.8320	Marking Parking Stall Epoxy	LF	350.000	350.000	
0182	646.9000	Marking Removal Line 4-Inch	LF	1,725.000	1,725.000	
0184	646.9200	Marking Removal Line Wide	LF	425.000	425.000	
0186	650.4000	Construction Staking Storm Sewer	EACH	1.000	1.000	
0188	650.4500	Construction Staking Subgrade	LF	3,250.000	3,250.000	
0190	650.5000	Construction Staking Base	LF	3,250.000	3,250.000	
0192	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	5,675.000	5,675.000	
0194	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000	
0196	650.8000	Construction Staking Resurfacing Reference	LF	2,565.000	2,565.000	

					9220-04-72	9220-04-82
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0198	650.8501	Construction Staking Electrical Installations (project) 01. 9220-04-72	EACH	1.000	1.000	
0200	650.9000	Construction Staking Curb Ramps	EACH	38.000	38.000	
0202	650.9500	Construction Staking Sidewalk (project) 01. 9220-04-72	EACH	1.000	1.000	
0204	650.9911	Construction Staking Supplemental Control (project) 01. 9220-04-72	EACH	1.000	1.000	
0206	650.9920	Construction Staking Slope Stakes	LF	6,450.000	6,450.000	
0208	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	669.000	669.000	
0210	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	955.000	955.000	
0212	652.0800	Conduit Loop Detector	LF	1,028.000	1,028.000	
0214	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	15.000	15.000	
0216	653.0905	Removing Pull Boxes	EACH	4.000	4.000	
0218	654.0101	Concrete Bases Type 1	EACH	3.000	3.000	
0220	654.0102	Concrete Bases Type 2	EACH	7.000	7.000	
0222	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000	
0224	655.0230	Cable Traffic Signal 5-14 AWG	LF	938.000	938.000	
0226	655.0250	Cable Traffic Signal 9-14 AWG	LF	872.000	872.000	
0228	655.0260	Cable Traffic Signal 12-14 AWG	LF	985.000	985.000	
0230	655.0305	Cable Type UF 2-12 AWG Grounded	LF	709.000	709.000	
0232	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,105.000	1,105.000	
0234	655.0610	Electrical Wire Lighting 12 AWG	LF	488.000	488.000	
0236	655.0700	Loop Detector Lead In Cable	LF	2,303.000	2,303.000	
0238	655.0800	Loop Detector Wire	LF	3,362.000	3,362.000	
0240	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. STH 117 & CTH BE	EACH	1.000	1.000	
0242	657.0100	Pedestal Bases	EACH	3.000	3.000	
0244	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	7.000	7.000	
0246	657.0305	Poles Type 2	EACH	3.000	3.000	
0248	657.0310	Poles Type 3	EACH	1.000	1.000	
0250	657.0315	Poles Type 4	EACH	3.000	3.000	
0252	657.0410	Traffic Signal Standards Aluminum 9-FT	EACH	1.000	1.000	
0254	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	2.000	2.000	
0256	657.0595	Trombone Arms 25-FT	EACH	4.000	4.000	
0258	657.0609	Luminaire Arms Single Member 4-Inch Clamp 6-FT	EACH	4.000	4.000	
0260	658.0173	Traffic Signal Face 3S 12-Inch	EACH	12.000	12.000	
0262	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000	
0264	658.0500	Pedestrian Push Buttons	EACH	8.000	8.000	
0266	658.5070	Signal Mounting Hardware (location) 01. STH 117 & CTH BE	EACH	1.000	1.000	
0268	659.1115	Luminaires Utility LED A	EACH	4.000	4.000	
0270	659.5000.S	Lamp, Ballast, LED, Switch Disposal by Contractor 01. STH 117 & CTH BE	EACH	44.000	44.000	
0272	690.0150	Sawing Asphalt	LF	608.000	608.000	
0274	690.0250	Sawing Concrete	LF	725.000	725.000	
0276	740.0440	Incentive IRI Ride	DOL	4,383.000	4,383.000	
0278	SPV.0030	Special 01. Fertilizer for Lawn Type Turf	CWT	3.050	3.050	
0280	SPV.0060	Special 01. Hydrant Assembly	EACH	5.000		5.000
0282	SPV.0060	Special 02. Water Valve 8-Inch	EACH	13.000		13.000
0284	SPV.0060	Special 03. 1-Inch Curb Stop and Box	EACH	22.000		22.000
0286	SPV.0060	Special 04. 1-Inch Tap and Corporation Valve	EACH	22.000		22.000
0288	SPV.0060	Special 06. Adjust Sanitary Manhole	EACH	6.000		6.000
0290	SPV.0060	Special 07. Removing Valve Boxes	EACH	4.000		4.000
0292	SPV.0060	Special 08. Adjust Water Valve Box	EACH	13.000		13.000
0294	SPV.0060	Special 09. Water Main Vertical Offset	EACH	1.000		1.000

					9220-04-72	9220-04-82
Line	**Item**	**Item Description**	**Unit**	**Total**	**Qty**	**Qty**
0296	SPV.0060	Special 10. Water Service Vertical Offset	EACH	2.000		2.000
0298	SPV.0060	Special 11. Air Release Valve Assembly	EACH	1.000		1.000
0300	SPV.0060	Special 12. Research and Locate Existing Land Parcel Monuments	EACH	100.000	100.000	
0302	SPV.0060	Special 13. Verify and Replace Existing Land Parcel Monuments	EACH	100.000	100.000	
0304	SPV.0060	Special 14. Salvage Traffic Signals STH 117 & CTH BE Intersection	EACH	1.000	1.000	
0306	SPV.0060	Special 15. Repair and Regrout Structures	EACH	5.000	5.000	
0308	SPV.0060	Special 16. Storm Main Crossing	EACH	1.000		1.000
0310	SPV.0060	Special 17. Internal-External Sanitary Manhole Seal	EACH	6.000		6.000
0312	SPV.0090	Special 01. 8-Inch PVC Water Main	LF	2,700.000		2,700.000
0314	SPV.0090	Special 02. 6-Inch PVC Hydrant Lead	LF	134.000		134.000
0316	SPV.0090	Special 03. 1-Inch Water Service Pipe	LF	698.000		698.000
0318	SPV.0090	Special 04. Horizontal Directional Drilling - 8-Inch Water Main	LF	30.000		30.000
0320	SPV.0090	Special 05. Sewer Main Spot Repair	LF	10.000		10.000
0322	SPV.0090	Special 06. 6-inch PVC Water Main	LF	10.000		10.000
0324	SPV.0090	Special 07. Sanitary Sewer Lateral	LF	50.000		50.000
0326	SPV.0180	Special 01. Preparing Topsoil for Lawn Type Turf	SY	4,775.000	4,775.000	
0328	SPV.0195	Special 01. Salvaged Asphaltic Pavement Milling	TON	7,150.000	7,150.000	
0330	SPV.0195	Special 02. Salvaged Asphaltic Pavement Base	TON	7,150.000	7,150.000	

REMOVING ASPHALTIC SURFACE MILLING

STATION - STATION	LOCATION	204.0120 SY	SPV.0195.01 SALVAGED ASPHATLIC PAVEMENT MILLING TON	COMMENTS
CATEGORY CODE 0010				
981+14 - 1013+35	CL	--	7,150	PAVEMENT REPLACEMENT
1013+35 - 1039+00	CL	11,425	--	MILL/FILL
1013+35 - 1019+28	CL	2,050	--	PARKING LANES
TOTALS		**13,475**	**7,150**	

REMOVING CURB AND GUTTER

STATION - STATION	LOCATION	204.0150 LF	COMMENTS
CATEGORY CODE 0010			
984+14 - 1013+35	LT/RT	4,890	INCLUDES SIDEROAD RADII
1013+35 - 1039+00	LT/RT	665	SPOT REPLACEMENT
TOTAL		**5,555**	

REMOVING CONCRETE SIDEWALK

STATION - STATION	LOCATION	204.0155 SY
CATEGORY CODE 0010		
981+14 - 1039+00	LT/RT	1,600
TOTAL		**1,600**

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION - STATION	LOCATION	204.0115 SY	COMMENTS
CATEGORY CODE 0010			
981+14	CL	350	BEGIN PROJECT
993+23	LT	45	SOUTH STREET
998+53	LT	35	GRANT STREET
1006+18	RT	35	EAST MILL STREET
1007+62	LT	41	WEST MILL STREET
1011+68	RT	101	EAST GREEN BAY STREET
1012+72	LT	54	WEST GREEN BAY STREET
1013+35	CL	48	END PAVEMENT REPLACEMENT
1015+68	RT	34	LEGION STREET
1019+71	RT	40	EAST STATE STREET
1019+72	LT	36	WEST STATE STREET
1024+62	RT	31	PARK STREET
1024+68	LT	35	PARK STREET
1029+45	RT	26	EAST CEDAR STREET
1029+51	LT	35	WEST CEDAR STREET
1038+51	RT	30	MUTZY LANE
1039+00	CL	244	END PROJECT
TOTALS		**1,220**	

REMOVING INLETS

STATION	LOCATION	204.0220 EACH
CATEGORY CODE 0010		
1006+54	RT	1
1012+45	RT	1
TOTAL		**2**

REMOVING MASONRY

STATION - STATION	LOCATION	204.0185 CY	COMMENTS
CATEGORY CODE 0010			
1008+90	LT	2	CONCRETE STEPS
TOTALS		**2**	

WATER

STATION - STATION	LOCATION	624.0100 MGAL
CATEGORY CODE 0010		
981+14 - 1039+00	PROJECT	280
TOTALS		**280**

REMOVING STORM SEWER

STATION	LOCATION	204.0245 LF
CATEGORY CODE 0010		
1006+54	RT	8
1012+45	RT	8
UNDISTRIBUTED		44
TOTAL		**60**

CULVERT PIPE

STATION - STATION	LOCATION	520.3418 CULVERT PIPE CLASS III-A NON-METAL 18-INCH LF	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH
CATEGORY CODE 0010			
983+57	RT	34	**2**
TOTALS		**34**	**2**

CONCRETE DRIVEWAY

STATION - STATION	LOCATION	416.0160 6-INCH SY
CATEGORY CODE 0010		
981+14 - 1013+30	LT/RT	1,170
TOTALS		**1,170**

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	SPV.0195.02 SALVAGED ASPHALTIC PAVEMENT BASE TON	COMMENTS
CATEGORY CODE 0010					
981+14 - 1013+35	CL	--	8,350	7,150	ROADWAY
981+14 - 989+77	RT	140	--	--	SHOULDERING
981+14 - 992+50	LT	180	--	--	SHOULDERING
981+14 - 1039+00	LT/RT	--	350	--	SIDEWALK
981+14 - 1013+35	LT/RT	55	--	--	DRIVEWAYS
CATEGORY CODE 0020					
993+51 - 998+33	LT	--	100	--	SIDEWALK
		375	**8,800**	**7,150**	

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RETAINING WALL

STATION - STATION	LOCATION	504.0500 CONCRETE MASONRY RETAINING WALLS CY	516.0500 RUBBERIZED MEMBRANE WATERPROOFING SY	210.1100 BACKFILL STRUCTURE TYPE A CY	COMMENTS
CATEGORY CODE 0010					
1008+90	LT	3	2	3	EXISTING RETAINING WALL
TOTALS		**3**	**2**	**3**	

CONCRETE SIDEWALK

STATION - STATION	LOCATION	602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0415 CONCRETE SIDEWALK 6-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF	602.0605 CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW
CATEGORY CODE 0010					
981+14 - 1039+00	LT/RT	14,175	1,160	325	77
CATEGORY CODE 0020					
993+51 - 998+33	LT	2,500	200	10	18
TOTALS		**16,675**	**1,360**	**335**	**95**

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ASPHALT

STATION - STATION	LOCATION	455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT 3 MT 58-28 S TON	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	460.6424 HMA PAVEMENT 4 MT 58-28 H TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCE TON	COMMENTS
CATEGORY CODE 0010							
981+14 - 1013+35	CL	100	--	--	1,625	--	
981+14 - 1013+35	CL	250	4,175	--	--	--	
981+14 - 1013+35	LT/RT	15	--	215	--	--	SIDEROADS
1013+35 - 1039+00	CL	45	--	950	--	--	2" MILL/FILL
981+14 - 1013+35	LT/RT	5	--	--	--	30	ASPHALTIC SURFACE DRIVEWAY
1013+35 - 1019+29	LT/RT	40	--	425	--	--	PARKING LANES
TOTALS		**455**	**4,175**	**1,590**	**1,625**	**30**	

DITCH CHECK

STATION	LOCATION	628.7504 TEMPORARY DITCH CHECKS LF
CATEGORY CODE 0010		
981+14 - 992+58	LT/RT	30
TOTAL		**30**

TRAFFIC CONTROL

LOCATION	643.0300 DRUMS DAYS	643.0410 BARRICADES TYPE II DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C DAYS	643.0900 SIGNS DAYS	643.0910 COVERING SIGNS TYPE I EACH	643.0920 COVERING SIGNS TYPE II EACH	643.1000 SIGNS FIXED MESSAGE SF	COMMENTS
CATEGORY CODE 0010										
PROJECT	6,000	420	800	350	450	17,500	12	11	306	ONE CYCLE FOR COVERING SIGNS
TOTALS	**6,000**	**420**	**800**	**350**	**450**	**17,500**	**12**	**11**	**306**	

CONCRETE CURB AND GUTTER

STATION - STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0600 CONCRETE CURB PEDESTRIAN LF
CATEGORY CODE 0010			
981+14 - 1013+35	LT/RT	4,650	--
1013+35 - 1039+00	LT/RT	1,025	--
981+14 - 1039+00	LT/RT	--	260
TOTALS		**5,675**	**260**

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STORM SEWER

STATION - STATION	608.0315 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH LF	611.0430 RECONSTRUCTING INLETS EACH	611.0530 MAHOLE COVERS TYPE J EACH	611.0540 MAHOLE COVERS TYPE K EACH	611.0624 INLET COVERS TYPE A EACH	611.0624 INLET COVERS TYPE H EACH	611.0627 INLET COVERS TYPE HM EACH	611.0639 INLET COVERS TYPE H-S EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	611.3230 INLETS 2X3-FT EACH	611.0530 ADJUSTING MANHOLE COVERS EACH	611.9705 SALVAGED MANHOLE COVERS EACH
CATEGORY CODE 0010												
981+14 - 1013+35	8	18	17	1	3	8	5	4	1	2	7	4
UNDISTRIBUTED	52	--	--	--	--	--	--	--	2	--	--	--
TOTALS	**60**	**18**	**17**	**1**	**3**	**8**	**5**	**4**	**3**	**2**	**7**	**4**

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LANDSCAPING

STATION - STATION	LOCATION	625.0100 TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	SPV.0030.01 FERTILIZER FOR LAWN TYPE TURF CWT	630.0140 SEED MIX NO. 40 LBS	630.0500 SEED WATER MGAL	SPV.0180.01 PREPARING TOPSOIL FOR LAWN TYPE TURF SY	COMMENTS
CATEGORY CODE 0010								
981+14 - 1013+35	LT/RT	4,160	4,160	2.65	75	110	4,160	PAVEMENT REPLACEMENT
1013+35 - 1039+00	LT/RT	315	315	.20	6	8	315	MILL/FILL
CATEGORY CODE 0020								
993+51 - 998+33	LT	300	300	.20	6	8	300	NEW SIDEWALK
	TOTALS	**4,775**	**4,775**	**3.05**	**87**	**126**	**4,775**	

MOBILIZATIONS EROSION CONTROL

STATION - STATION	LOCATION	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH
CATEGORY CODE 0010			
981+14 - 1039+00	PROJECT	3	3
TOTALS		**3**	**3**

EARTHWORK SUMMARY

FROM/TO STATION	LOCATION	COMMON EXCAVATION (ITEM #205.0100) (NOTE 1)		SALVAGED / UNUSABLE PAVEMENT MATERIAL (NOTE 4)	AVAILABLE MATERIAL (NOTE 5)	UNEXPANDED FILL	EXPANDED FILL (NOTE 6)	MASS ORDINATE +/- (NOTE 7)	WASTE	COMMENTS
		CUT (NOTE 2)	EBS EXCAVATION (NOTE 3)				FACTOR 1.25			
CATEGORY 0010										
981+14 - 1013+35	STH 117	9,678	0	4,200	5,478	358	448	0	0	
--	SIDE STREETS	250	0	75	175	0	0	0	0	
--	CTH BE INTERSECTION	122	0	25	97	0	0	0	0	
CATEGORY 0020										
993+51 - 998+33	SIDEWALK	200	0	0	0	0	0	0	0	
	TOTAL COMMON EXCAVATION	10,250							0	

1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS.
2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
3) EBS ECAVATION TO BE BACKFILLED WITH SCREENED BREAKER RUN STONE.
4) SALVAGED/UNUSABLE PAVEMENT MATERIAL = LENGTH * TYPICAL WIDTH * TYPICAL DEPTH
5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL
6) EXPANDED FILL. FACTOR = 1.25. EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
7) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATED A SHORTAGE OF MERTIAL WITHIN THE DEVISION

MISC. SHEET 3

PERMANENT SIGNING

STATION	LOCATION	SIGN CODE	DESCRIPTION	SIZE	637.2210 SIGNS TYPE II REFLECTIVE H S.F.	634.0614 POSTS WOOD 4X6X14 EACH	638.2102 MOVING SIGNS TYPE II EACH	COMMENTS
CATEGORY CODE 0010								
981+26	RT	R2-1	SPEED LIMIT 35	24"X30"	5.00	--	--	MOUNTED ON EXISTING POST
981+37	LT	R2-1	SPEED LIMIT 45	24"X30"	5.00	--	--	MOUNTED ON EXISTING POST
994+24	RT	R2-1	SPEED LIMIT 25	24"X30"	5.00	--	--	MOUNTED ON EXISTING POST
994+33	LT	R2-1	SPEED LIMIT 35	24"X30"	5.00	--	--	MOUNTED ON EXISTING POST
995+59	RT	W11-2	PEDESTRIAN CROSSING	30"X30"	6.25	1	--	
995+59	RT	W16-9P	AHEAD	24"X12"	3.00	--	--	MOUNTED ON SAME POST AS PEDESTRIAN CROSSING
998+85	RT	W11-2	PEDESTRIAN CROSSING	30"X30"	6.25	1	--	
998+85	RT	S16-7L	LEFT DOWN ARROW	24"X12"	3.00	--	--	MOUNTED ON SAME POST AS PEDESTRIAN CROSSING
999+12	LT	W11-2	PEDESTRIAN CROSSING	30"X30"	6.25	1	--	
999+12	LT	S16-7L	LEFT DOWN ARROW	24"X12"	3.00	--	--	MOUNTED ON SAME POST AS PEDESTRIAN CROSSING
1002+36	LT	W11-2	PEDESTRIAN CROSSING	30"X30"	6.25	1	--	
1002+36	LT	W16-9P	AHEAD	24"X12"	3.00	--	--	MOUNTED ON SAME POST AS PEDESTRIAN CROSSING
1003+44	RT	W11-2	PEDESTRIAN CROSSING	30"X30"	6.25	1	--	
1003+44	RT	W16-9P	AHEAD	24"X12"	3.00	--	--	MOUNTED ON SAME POST AS PEDESTRIAN CROSSING
1006+49	RT	W11-2	PEDESTRIAN CROSSING	30"X30"	6.25	1	--	
1006+49	RT	S16-7L	LEFT DOWN ARROW	24"X12"	3.00	--	--	MOUNTED ON SAME POST AS PEDESTRIAN CROSSING
1006+68	LT	W11-2	PEDESTRIAN CROSSING	30"X30"	6.25	1	--	
1006+68	LT	S16-7L	LEFT DOWN ARROW	24"X12"	3.00	--	--	MOUNTED ON SAME POST AS PEDESTRIAN CROSSING
1009+92	LT	W11-2	PEDESTRIAN CROSSING	30"X30"	6.25	1	--	
1009+92	LT	W16-9P	AHEAD	24"X12"	3.00	--	--	MOUNTED ON SAME POST AS PEDESTRIAN CROSSING
UNDISTRIBUTED					--	--	5	MOVING SIGNS AT CURB RAMP REPLACEMETNS
				TOTALS	**94.00**	**8**	**5**	

SAWING

LOCATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF	COMMENTS
CATEGORY CODE 0010			
MAINLINE	103	--	BEGIN PROJECT / TRANSITION
SIDESTREETS	255	--	PAVEMENT REPLACEMENT SECTION
DRIVEWAYS	250	625	MATCH POINTS
UNDISTRIBUTED	--	100	CURB / SIDEWALK REPLACEMENT
TOTALS	**608**	**725**	

CONCRETE APPURTENANCES

STATION - STATION	LOCATION	602.1500 CONCRETE STEPS SF	602.2400 CONCRETE SAFETY ISLANDS SF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
CATEGORY CODE 0010				
1011+78	RT	--	240	50
1012+43	RT	12	--	--
1013+20	LT	20	--	--
	TOTALS	**32**	**240**	**50**

TEMPORARY PEDESTRIAN

STATION - STATION	LOCATION	644.1410 SURFACE ASPHALT SF	644.1430 SURFACE PLATE SF	644.1440 SURFACE MATTING SF	644.1601 CURB RAMP DAY	644.1810 BARRICADE LF	COMMENTS
CATEGORY CODE 0010							
1007+15	LT&RT	25	25	25	60	80	
1019+06	LT&RT	25	25	25	60	--	
1020+22	LT&RT	25	25	25	60	--	
1024+04	LT&RT	25	25	25	60	--	
1025+30	LT&RT	25	25	25	60	--	
1028+63	LT&RT	--	--	--	60	--	
1012+38	LT&RT	380	380	380	60	1,520	CTH BE INTERSECTION
	TOTALS	**505**	**505**	**505**	**420**	**1,600**	

REPAIR AND REGROUT STRUCTURES

STATION - STATION	LOCATION	SPV.0060.15 REPAIR AND REGROUT STRUCTURES EACH
CATEGORY CODE 0010		
990+59	LT	1
1005+53	LT	1
1006+08	RT	1
1007+50	LT	1
UNDISTRIBUTED		1
	TOTALS	**5**

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MARKING LINE

STATION - STATION	LOCATION	646.1020 MARKING LINE EPOXY 4-INCH WHITE/YELLOW LF	646.3020 MARKING LINE EPOXY 8-INCH WHITE LF	646.5020 MARKING ARROW EPOXY WHITE EACH	646.5120 MARKING WORD EPOXY WHITE EACH	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF	646.7020 MARKING DIAGONAL EPOXY 6-INCH WHITE LF	646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH WHITE LF	646.8120 MARKING CURB EPOXY LF	616.8320 MARKING PARKING STALL EPOXY LF	646.9000 MARKING REMOVAL LINE 4-INCH LF	646.9200 MARKING REMOVAL LINE WIDE LF
CATEGORY CODE 0010												
981+14 - 1039+00	LT/ RT/CL	19,200	1,400	18	3	115	250	1,550	50	--	1,725	425
1013+35 - 1019+29	LT/RT	--	--	--	--	--	--	--	--	350	--	--
	TOTALS	**19,200**	**1,400**	**18**	**3**	**115**	**250**	**1,550**	**50**	**350**	**1,725**	**425**

LAND PARCEL MONUMENT

STATION - STATION	LOCATION	SPV.0060.12 RESEARCH AND LOCATE EXISTING LAND PARCEL MONUMENTS EACH	SPV.0060.13 VERIFY AND REPLACE EXISTING LAND PARCEL MONUMENTS EACH
CATEGORY CODE 0010			
981+14 - 1039+00	PROJECT	100	100
	TOTALS	**100**	**100**

TEMPORARY MARKING LINE

STATION - STATION	LOCATION	643.3105 TEMPORARY MARKING LINE PAINT 4-INCH YELLOW LF	643.3150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH LF	643.3850 TEMPORARY MARKING STOP LINE REMOVABLE TAPE 18-INCH LF	COMMENTS
CATEGORY CODE 0010					
1012+38	LT/ RT/CL	--	2,780	33	CTH BE LANE SHIFT STAGE 1
1012+38	LT/ RT/CL	--	4,865	33	CTH BE LANE SHIFT STAGE 2
1012+38	LT/ RT/CL	--	4,315	33	CTH BE LANE SHIFT STAGE 3
1019+06	LT/ RT/CL	72	72	--	TEMPORARY PEDESTRIAN CROSSING
1020+22	LT/ RT/CL	72	72	--	TEMPORARY PEDESTRIAN CROSSING
1024+04	LT/ RT/CL	72	72	--	TEMPORARY PEDESTRIAN CROSSING
1025+30	LT/ RT/CL	72	72	--	TEMPORARY PEDESTRIAN CROSSING
1028+63	LT/ RT/CL	72	72	--	TEMPORARY PEDESTRIAN CROSSING
	TOTALS	**360**	**12,320**	**99**	

INLET PROTECTION

STATION	LOCATION	628.7005 TYPE A EACH	628.7015 TYPE C EACH
CATEGORY CODE 0010			
981+14 - 1013+35	LT/RT	8	39
	TOTALS	**8**	**39**

CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.5500 CURB GUTTER CURB & GUTTER LF	650.6000 PIPE CULVERTS EACH	650.8000 RESURFACING REFERENCE LF	650.9000 CURB RAMPS EACH	650.9920 SLOPE STAKES LF	650.9950 SIDEWALK EACH
CATEGORY CODE 0010										
981+14 - 1013+35	CL/LT/RT	1	3,250	3,250	4,650	1	--	19	6,450	--
1013+35 - 1039+00	CL/LT/RT	--	--	--	1,025	--	2,565	19	--	--
941+14 - 1039+00	PROJECT	--	--	--	--	--	--	--	--	1
	TOTALS	**1**	**3,250**	**3,250**	**5,675**	**1**	**2,565**	**38**	**6,450**	**1**

MISC. SHEET 5

TRAFFIC SIGNAL REMOVALS

LOCATION / ITEM NUMBER	204.0195 REMOVING CONCRETE BASES EACH	653.0905 REMOVING PULL BOXES EACH
CATEGORY 0010 STH 117 & CTH BE		
CB1	1	--
SB1	1	--
SB2	1	--
SB3	1	--
SB4	1	--
SB5	1	--
SB6	1	--
SB7	1	--
SB8	1	--
SB9	1	--
PB1	--	1
PB2	--	1
PB3	--	1
PB4	--	1
INTERSECTION TOTAL	**10**	**4**
CATEGORY 0100 TOTAL	**10**	**4**

TRAFFIC SIGNAL PULL BOXES

LOCATION / PULL BOX NUMBER	STATION	OFFSET	L/R	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH
CATEGORY 0010 STH 117 & CTH BE				
PB1	103+32.7	50.3'	RT	1
PB2	102+07.2	25.1'	RT	1
PB3	103+61.6	27.3'	RT	1
PB4	103+85.4	33.1'	LT	1
PB5	104+24.7	53.4'	LT	1
PB6	104+44.6	74.1'	LT	1
PB7	105+11.8	169.1'	LT	1
PB8	104+95.7	44.9'	LT	1
PB9	104+98.9	26.8'	LT	1
PB10	106+64.5	24.7'	LT	1
PB11	104+59.9	23.3'	RT	1
PB12	104+23.6	43.7'	RT	1
PB13	104+17.0	67.5'	RT	1
PB14	103+48.7	171.6'	RT	1
PB15	103+37.8	67.5'	RT	1
INTERSECTION TOTAL				**15**
CATEGORY 0100 TOTAL				**15**

TRAFFIC SIGNAL CONDUIT

LOCATION	FROM	-	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF
CATEGORY 0010 STH 117 & CTH BE					
	CB1	-	PB1	--	27
	PB1	-	LB1	4	--
	PB1	-	PB2	133	--
	PB1	-	PB3	--	38
	PB1	-	PB4	--	198
	PB3	-	SB1	4	--
	PB3	-	SB2	15	--
	PB4	-	SB3	5	--
	PB4	-	PB5	--	90
	PB5	-	SB4	4	--
	PB5	-	PB6	30	--
	PB6	-	PB7	117	--
	PB5	-	PB8	--	144
	PB8	-	SB5	5	--
	PB8	-	SB6	8	--
	PB8	-	PB9	--	36
	PB9	-	SB7	3	--
	PB9	-	PB10	167	--
	PB9	-	PB11	--	128
	PB11	-	SB8	9	--
	PB11	-	PB12	--	84
	PB12	-	SB9	15	--
	PB12	-	PB13	25	--
	PB13	-	PB14	125	--
	PB12	-	PB15	--	180
	PB15	-	CB1	--	30
INTERSECTION TOTAL				**669**	**955**
CATEGORY 0100 TOTAL				**669**	**955**

TRAFFIC SIGNAL LOOP DETECTORS

LOCATION / LOOP NO.	STATION **	OFFSET	L/R	SIZE FT X FT	NO. OF TURNS	INSTALLATION METHOD	652.0800 CONDUIT LOOP DETECTOR LF	655.0800 LOOP DETECTOR WIRE LF	655.0700 * LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0010 STH 117 & CTH BE									
11	103+43.6	0.2'	RT	20 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	114	350	54
12	103+71.6	0.3'	RT	20 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	104	320	54
21	106+72.7	6.2'	LT	6 X 6	5	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	60	308	378
41	105+24.6	160.1'	LT	16 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	60	188	306
42	104+69.0	68.1'	LT	20 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	106	326	188
43	104+53.4	44.8'	LT	20 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	96	296	188
44	104+55.7	68.1'	LT	20 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	74	230	188
45	104+40.0	44.9'	LT	20 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	78	242	188
61	101+85.3	6.3'	RT	20 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	102	314	150
81	103+36.7	151.3'	RT	6 X 6	4	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	62	256	257
82	103+98.6	59.9'	RT	20 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	266	132
83	104+14.0	36.5'	RT	20 X 6	3	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)	86	266	132
INTERSECTION TOTAL							**1028**	**3362**	**2215**
CATEGORY 0100 TOTAL							**1,028**	**3,362**	**2,215**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

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TRAFFIC SIGNAL STRUCTURES

LOCATION / BASE NUMBER	STATION	OFFSET	L/R	654.0101 CONCRETE BASES TYPE 1 EACH	654.0102 CONCRETE BASES TYPE 2 EACH	657.0100 PEDESTAL BASES EACH	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	657.0305 POLES TYPE 2 EACH	657.0310 POLES TYPE 3 EACH	657.0315 POLES TYPE 4 EACH	657.0410 RAFFIC SIGNAL STANDARDS ALUMINUM 9-FT EACH	657.0420 RAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	657.0595 TROMBONE ARMS 25-FT EACH	657.0609 LUMINAIRE ARMS SINGLE MEMBER 4-INCH CLAMP 6-FT EACH	659.1115 LUMINAIRES UTILITY LED A EACH
CATEGORY 0010 STH 117 & CTH BE															
LB1	103+30.3	47.5'	RT	--	1	--	1	--	--	1	--	--	--	1	1
SB1	103+65.3	28.4'	RT	1	--	1	--	--	--	--	--	1	--	--	--
SB2	103+76.8	28.8'	RT	--	1	--	1	1	--	--	--	--	1	--	--
SB3	103+89.5	33.4'	LT	--	1	--	1	--	1	--	--	--	1	1	1
SB4	104+23.2	50.6'	LT	--	1	--	1	--	--	1	--	--	--	1	1
SB5	104+95.5	49.8'	LT	--	1	--	1	1	--	--	--	--	1	--	--
SB6	104+94.4	37.4'	LT	1	--	1	--	--	--	--	1	--	--	--	--
SB7	105+00.2	28.9'	LT	--	1	--	1	--	--	1	--	--	--	1	1
SB8	104+69.0	24.3'	RT	--	1	--	1	1	--	--	--	--	1	--	--
SB9	104+34.6	34.0'	RT	1	--	1	--	--	--	--	--	1	--	--	--
INTERSECTION TOTAL				**3**	**7**	**3**	**7**	**3**	**1**	**3**	**1**	**2**	**4**	**4**	**4**
CATEGORY 0100 TOTAL				**3**	**7**	**3**	**7**	**3**	**1**	**3**	**1**	**2**	**4**	**4**	**4**

PEDESTRIAN PUSH BUTTONS

LOCATION / BASE NUMBER	658.0500 PEDESTRIAN PUSH BUTTON EACH
CATEGORY 0010 STH 117 & CTH BE	
SB1	1
SB2	1
SB3	1
SB4	1
SB6	1
SB7	1
SB8	1
SB9	1
INTERSECTION TOTAL	**8**
CATEGORY 0100 TOTAL	**8**

TRAFFIC SIGNAL HEADS

LOCATION	SIGNAL BASE NO.	HEAD NO.	658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH
CATEGORY 0010 STH 117 & CTH BE				
	SB1	6A	1	--
		4-2	--	1
	SB2	2C	1	--
		4B	1	--
		6-1	--	1
	SB3	2B	1	--
		4-1	--	1
	SB4	4A	1	--
		8C	1	--
		2-2	--	1
	SB5	8B	1	--
		8-2	--	1
	SB7	2A	1	--
		6C	1	--
		2-1	--	1
	SB8	6B	1	--
		8-1	--	1
	SB9	4C	1	--
		8A	1	--
		6-2	--	1
INTERSECTION TOTAL			**12**	**8**
CATEGORY 0100 TOTAL			**12**	**8**

TRAFFIC SIGNAL CABLE AND WIRE - BELOW GROUND

LOCATION	FROM	-	TO	655.0250 CABLE TRAFFIC SIGNAL 9-14 AWG LF	655.0260 CABLE TRAFFIC SIGNAL 12-14 AWG LF	655.0305 CABLE TYPE UF 2-12 AWG GROUNDED LF	655.0515 ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG LF
CATEGORY 0010 STH 117 & CTH BE							
	CB1	-	LB1	--	--	46	--
	CB1	-	SB1	98	--	--	98
	CB1	-	SB2	--	109	--	--
	CB1	-	SB3	160	--	160	--
	CB1	-	SB4	--	219	219	--
	CB1	-	SB5	306	--	--	--
	CB1	-	SB6	308	--	--	--
	CB1	-	SB7	--	284	284	--
	CB1	-	SB8	--	212	--	--
	CB1	-	SB9	--	161	--	161
	SB1	-	SB2	--	--	--	51
	SB2	-	SB3	--	--	--	216
	SB3	-	SB4	--	--	--	99
	SB4	-	SB5	--	--	--	126
	SB5	-	SB6	--	--	--	44
	SB6	-	SB7	--	--	--	76
	SB7	-	SB8	--	--	--	122
	SB8	-	SB9	--	--	--	112
INTERSECTION TOTAL				**872**	**985**	**709**	**1105**
CATEGORY 0100 TOTAL				**872**	**985**	**709**	**1,105**

TRAFFIC SIGNAL CABLE AND WIRE - ABOVE GROUND

LOCATION	FROM SIGNAL BASE	TO SIGNAL HEAD	655.0230 CABLE TRAFFIC SIGNAL 5-14 AWG LF	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG LF	655.0700 * LOOP DETECTOR LEAD IN CABLE LF
CATEGORY 0010 STH 117 & CTH BE					
	LB1	LUMINAIRE	--	122	--
	SB1	6A	24	--	--
		4-2	20	--	--
		BUTTON	--	--	11
	SB2	2C	24	--	--
		4B	55	--	--
		6-1	20	--	--
		BUTTON	--	--	11
	SB3	2B	55	--	--
		4-1	20	--	--
		LUMINAIRE	122	122	--
		BUTTON	--	--	11
	SB4	4A	24	--	--
		8C	24	--	--
		2-2	20	--	--
		LUMINAIRE	122	122	--
		BUTTON	--	--	11
	SB5	8B	55	--	--
		8-2	20	--	--
	SB6	BUTTON	--	--	11
	SB7	2A	24	--	--
		6C	24	--	--
		2-1	20	--	--
		LUMINAIRE	122	122	--
		BUTTON	--	--	11
	SB8	6B	55	--	--
		8-1	20	--	--
		BUTTON	--	--	11
	SB9	4C	24	--	--
		8A	24	--	--
		6-2	20	--	--
		BUTTON	--	--	11
INTERSECTION TOTAL			**938**	**488**	**88**
CATEGORY 0100 TOTAL			**938**	**488**	**88**

*ADDITIONAL QUANTITIES SHOWN ELSEWHERE.

TRAFFIC SIGNAL BASE

LOCATION	654.0217 CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
CATEGORY 0010	
STH 117 & CTH BE	1
CATEGORY 0100 TOTAL	**1**

TRAFFIC SIGNAL MOUNTING HARDWARE

LOCATION	658.5070.01 SIGNAL MOUNTING HARDWARE (LOCATION) EACH
CATEGORY 0010	
STH 117 & CTH BE	1
CATEGORY 0100 TOTAL	**1**

HAZARDOUS WASTE REMOVAL

LOCATION	659.5000.S LAMP, BALLAST, LED, SWITCH DISPOSAL BY CONTRACTOR EACH
CATEGORY 0010	
STH 117 & CTH BE INTERSECTION	44
CATEGORY 0100 TOTAL	**44**

SALVAGE TRAFFIC SIGNALS

LOCATION	SPV.0060.14 SALVAGE TRAFFIC SIGNALS (INTERSECTION) EACH
CATEGORY 0100	
STH 117 & CTH BE	1
CATEGORY 0100 TOTAL	**1**

ELECTRICAL METER BREAKER PEDESTAL

LOCATION	656.0201.01 ELECTRICAL METER BREAKER PEDESTAL (INTERSECTION) EACH
CATEGORY 0010	
STH 117 & CTH BE	1
CATEGORY 0100 TOTAL	**1**

CONSTRUCTION STAKING

LOCATION	650.8501.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) EACH
CATEGORY 0010	
9220-04-72	1
CATEGORY 0100 TOTAL	**1**

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ADJUSTMENTS
CATEGORY 0100

STATION	OFFSET	LOCATION	SPV.0060.06 ADJUST SANITARY MANHOLE EACH	SPV.0060.08 ADJUST VALVE BOXES EACH	SPV.0060.17 INTERNAL-EXTERNAL SANITARY MANHOLE SEAL EACH
986+46	18.5 RT	CECIL ST (STH 117)		1	
990+59	6.4 LT	CECIL ST (STH 117)	1		1
993+17	0.3 LT	CECIL ST (STH 117)		1	
993+27	0.3 LT	CECIL ST (STH 117)		1	
993+33	60.0 LT	SOUTH ST		1	
994+35	8.8 LT	CECIL ST (STH 117)	1		1
998+51	9.7 LT	CECIL ST (STH 117)	1		1
998+52	0.0 LT	CECIL ST (STH 117)		1	
998+57	0.0 LT	CECIL ST (STH 117)		1	
998+61	55.7 LT	GRANT ST		1	
1000+71	0.9 LT	CECIL ST (STH 117)		1	
1001+67	1.0 LT	CECIL ST (STH 117)		1	
1002+11	9.9 LT	CECIL ST (STH 117)	1		1
1006+18	0.0 LT	CECIL ST (STH 117)		1	
1006+27	56.7 RT	EAST MILL ST		1	
1006+28	0.0 LT	CECIL ST (STH 117)		1	
1007+50	9.9 LT	CECIL ST (STH 117)	1		1
1009+29	8.2 LT	CECIL ST (STH 117)	1		1
1011+70	13.8 RT	CECIL ST (STH 117)		1	
		TOTAL	6	13	6

WATER SERVICES
CATEGORY 0010

STATION	LOCATION	OFFSET	SPV.0060.03 1-INCH CURB STOP AND BOX EA	SPV.0060.04 1-INCH TAP AND CORPORATION VALVE EA	SPV.0090.03 1-INCH WATER SERVICE PIPE LF
990+67.41	CECIL ST (STH 117)	33.0 RT	1	1	31
991+80.02	CECIL ST (STH 117)	33.0 RT	1	1	31
994+27.77	CECIL ST (STH 117)	32.4 RT	1	1	32
994+61.03	CECIL ST (STH 117)	47.9 RT	1	1	48
995+72.00	CECIL ST (STH 117)	28.0 RT	1	1	28
995+99.46	CECIL ST (STH 117)	27.4 LT	1	1	28
996+77.05	CECIL ST (STH 117)	27.2 LT	1	1	27
996+78.65	CECIL ST (STH 117)	31.0 RT	1	1	31
997+81.31	CECIL ST (STH 117)	32.0 RT	1	1	32
999+63.42	CECIL ST (STH 117)	48.0 RT	1	1	48
1002+08.03	CECIL ST (STH 117)	31.0 RT	1	1	31
1003+94.41	CECIL ST (STH 117)	29.4 LT	1	1	31
1004+31.38	CECIL ST (STH 117)	32.4 RT	1	1	32
1004+72.01	CECIL ST (STH 117)	31.0 LT	1	1	31
1007+26.22	CECIL ST (STH 117)	31.0 LT	1	1	28
1007+66.89	CECIL ST (STH 117)	29.8 RT	1	1	28
1008+06.67	CECIL ST (STH 117)	31.0 LT	1	1	33
1009+45.52	CECIL ST (STH 117)	31.0 LT	1	1	31
1009+97.45	CECIL ST (STH 117)	29.9 RT	1	1	28
1010+18.99	CECIL ST (STH 117)	27.9 LF	1	1	30
1010+25.98	CECIL ST (STH 117)	27.7 LT	1	1	30
1011+07.63	CECIL ST (STH 117)	27.4 LT	1	1	29
		TOTAL	22	22	698

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HYDRANTS
CATEGORY 0010

STATION	LOCATION	OFFSET	SPV.0060.01 HYDRANT ASSEMBLY EA	SPV.0090.02 6-INCH HYDRANT LEAD LF
986+90	CECIL ST (STH 117)	31.0 RT	1	29
992+01	CECIL ST (STH 117)	26.0 RT	1	24
996+95	CECIL ST (STH 117)	24.2 RT	1	24
1002+01	CECIL ST (STH 117)	32.0 RT	1	32
1007+28	CECIL ST (STH 117)	25.0 RT	1	25
		TOTAL	5	134

WATER MAIN PIPES
CATEGORY 0010

STATION	TO	STATION	LOCATION	SPV.0090.01 8-INCH PVC WATER MAIN LF	SPV.0090.06 6-INCH PVC WATER MAIN LF
986+00		991+50	CECIL ST (STH 117)	495	5
991+50		997+00	CECIL ST (STH 117) & SOUTH ST	633	
997+00		1002+00	CECIL ST (STH 117) & GRANT ST	530	
1002+00		1007+50	CECIL ST (STH 117)	609	
1007+50		1012+00	CECIL ST (STH 117)	433	5
			TOTAL	2,700	10

WATER MAIN VALVES
CATEGORY 0010

STATION	LOCATION	OFFSET	SPV.0060.02 WATER VALVE 8-INCH EA	SPV.0060.11 AIR RELEASE VALVE ASSEMBLY EA
986+65	CECIL ST (STH 117)	3.7 RT	1	
993+17	CECIL ST (STH 117)	0.3 LT	1	
993+27	CECIL ST (STH 117)	0.3 LT	1	
993+33	CECIL ST (STH 117)	72.1 RT		1
993+33	SOUTH ST	75.4 LT	1	
998+47	CECIL ST (STH 117)	0.0 LT	1	
998+57	CECIL ST (STH 117)	0.0 LT	1	
998+61	GRANT ST	52.7 LT	1	
1000+71	CECIL ST (STH 117)	0.9 LT	1	
1001+67	CECIL ST (STH 117)	1.0 LT	1	
1006+18	CECIL ST (STH 117)	0.0 LT	1	
1006+27	EAST MILL ST	53.7 RT	1	
1006+28	CECIL ST (STH 117)	0.0 LT	1	
1011+44	CECIL ST (STH 117)	8.4 RT	1	
		TOTAL	13	1

VERTICAL OFFSETS
CATEGORY 0010

LOCATION	SPV.0060.09 WATER MAIN VERICAL OFFSET EACH	SPV.0060.10 WATER SERVICE VERICAL OFFSET EACH
CATEGORY 0010 UNDISTRIBUTED	1	2
TOTAL	**1**	**2**

SEWER MAIN PIPES
CATEGORY 0010

STATION	TO	STATION	LOCATION	SPV.0090.05 SEWER MAIN SPOT REPAIR LF	SPV.0090.07 Sanitary Sewer Lateral LF
1006+15		1006+25	CECIL ST (STH 117)	10	
999+50			CECIL ST (STH 117)		50
			TOTAL	10	50

STORM MAIN PIPES
CATEGORY 0010

STATION	LOCATION	SPV.0060.16 STORM MAIN CROSSING EA
995+13	CECIL ST (STH 117)	1
	TOTAL	1

HORIZONTAL DIRECTIONAL DRILLING
CATEGORY 0010

STATION	TO	STATION	LOCATION	SPV.0090.04 HORIZONTAL DIRECTIONAL DRILLING - 8-INCH WATER MAIN LF
1000+99		1001+29	CECIL ST (STH 117)	30
			TOTAL	30

TRANSPORTATION PROJECT PLAT NO: 9220-04-22 - 4.01

PART OF LOT 2, BLOCK 9 OF WESTPHAL AND LANGE'S ADDITION TO THE VILLAGE OF BONDUEL, LOCATED IN THE NE1/4-SE1/4 OF SECTION 8 AND PART OF LOT 4, BLOCK 4 OF MAP OF BONDUEL, LOCATED IN THE NW1/4-SW1/4 OF SECTION 9, ALL IN T26N, R17E, VILLAGE OF BONDUEL, SHAWANO COUNTY, WISCONSIN

RELOCATION ORDER: STH 117, BONDUEL-CECIL, EXPRESS WAY TO MUTZY LANE, SHAWANO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9220-04-22 - 4.01
AMENDMENT NO:___

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN RHINELANDER.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: R/W PROJECT NUMBER 1058-11-21, WESTPHAL AND LANGE'S ADDITION TO THE VILLAGE OF BONDUEL, MAP OF BONDUEL AND CSM #3643.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS) SHAWANO COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL
20	JAMES KAMKE	FEE	0.001	0	0.001
36	FREDRICK & MARY LAWRENZ	FEE	0.005	0	0.005

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

CONVENTIONAL UTILITY SYMBOLS

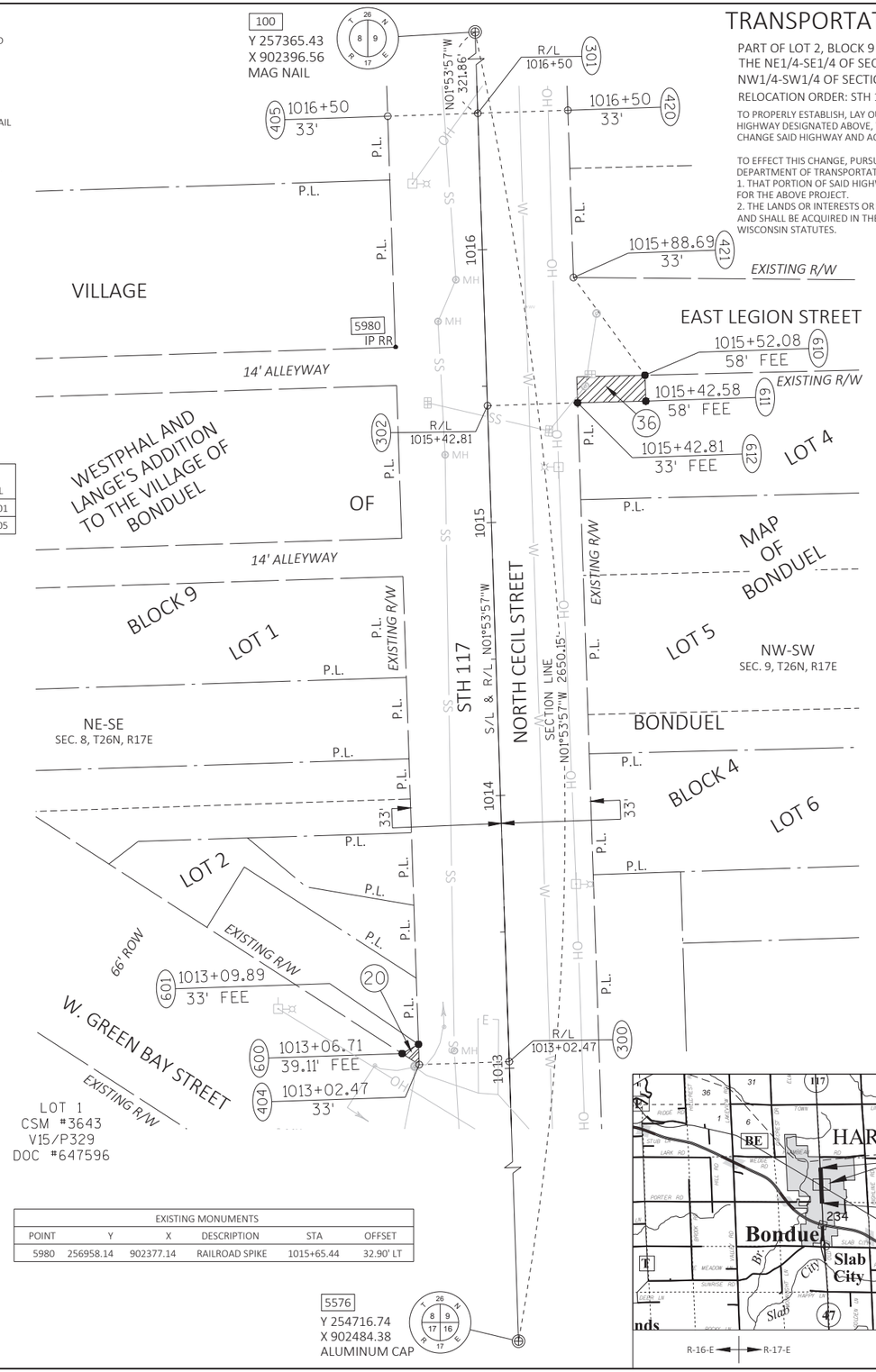
WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	⊠

CONVENTIONAL ABBREVIATIONS

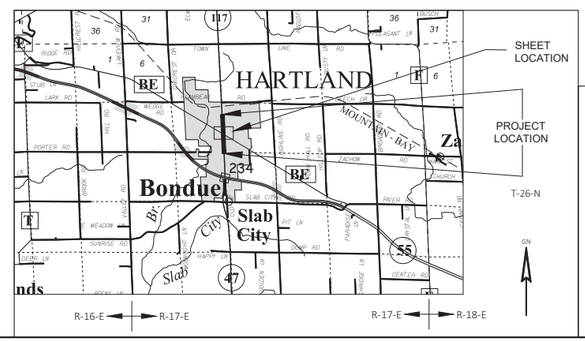
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB



EXISTING MONUMENTS					
POINT	Y	X	DESCRIPTION	STA	OFFSET
5980	256958.14	902377.14	RAILROAD SPIKE	1015+65.44	32.90' LT



CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)

PARCEL NUMBER 25 UTILITY NUMBER 40
PARALLEL OFFSETS

COURSE TABLE

FROM POINT	TO POINT	BEARING	DISTANCE
5576	300	N01°53'57"W	1980.76'
300	404	S88°06'03"W	33.00'
404	600	N57°06'09"W	7.43'
600	601	N60°36'58"E	6.88'
601	405	N01°53'57"W	340.11'
405	301	N88°06'03"E	33.00'
301	420	N88°06'03"E	33.00'
420	421	S01°53'57"E	61.31'
421	610	S36°13'48"E	44.33'
610	611	S01°53'57"E	9.50'
611	612	S88°38'03"W	25.00'
612	302	S88°06'03"W	33.00'
302	300	S01°53'57"E	240.34'

GN
SCALE, FEET
0 25 50

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
220 Market Ave. North • Stevens Point, WI 54481
(715) 344-4200 • fax (715) 344-8250

I, AARON PARKS, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN AARON PARKS S-2861 STEVENS POINT WIS LAND SURVEYOR

SIGNATURE: _____ DATE: 06/11/21
PRINT NAME: AARON PARKS
REGISTRATION NUMBER: S-2861

THIS PLAT IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: _____ DATE: 11/29/21
PRINT NAME: BRENT L. STELLA

TRANSPORTATION PROJECT PLAT NO: 9220-04-22 - 4.02

PART OF LOT 1, BLOCK 9 OF WESTPHAL AND LANGE'S ADDITION TO THE VILLAGE OF BONDUEL, LOCATED IN THE NE 1/4-SE 1/4, PART OF LOT 7, BLOCK 5 OF WESTPHAL AND LANGE'S ADDITION TO THE VILLAGE OF BONDUEL, LOCATED IN THE SE 1/4-NE 1/4 OF SECTION 8, PART OF LOT 1, BLOCK 2 OF GRAF SPENGLER BOETTCHER PLAT, LOCATED IN THE NW 1/4-SW 1/4 AND PART OF LOT 4, BLOCK 3 OF MAP OF BONDUEL, LOCATED IN THE SW1/4-NW1/4 OF SECTION 9, ALL IN T26N, R17E, VILLAGE OF BONDUEL, SHAWANO COUNTY, WISCONSIN

RELOCATION ORDER: STH 117, BONDUEL-CECIL, EXPRESS WAY TO MUTZY LANE, SHAWANO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS) SHAWANO COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

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

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN RHINELANDER.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: GRAF SPENGLER BOETTCHER PLAT, MAP OF BONDUEL AND WESTPHAL AND LANGE'S ADDITION TO THE VILLAGE OF BONDUEL.

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL
25	LK REFLECTIONS LLC	TLE	0.004	0	0.004
26	KEVIN & RENELL BARTLETT	TLE	0.004	0	0.004
		FEE	0.003	0	0.003
27	ROBERT KRAUSE	FEE	0.008	0	0.008
28	NIKOLAY PROPERTIES - STATE STREET, LLC	TLE	0.003	0	0.003

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

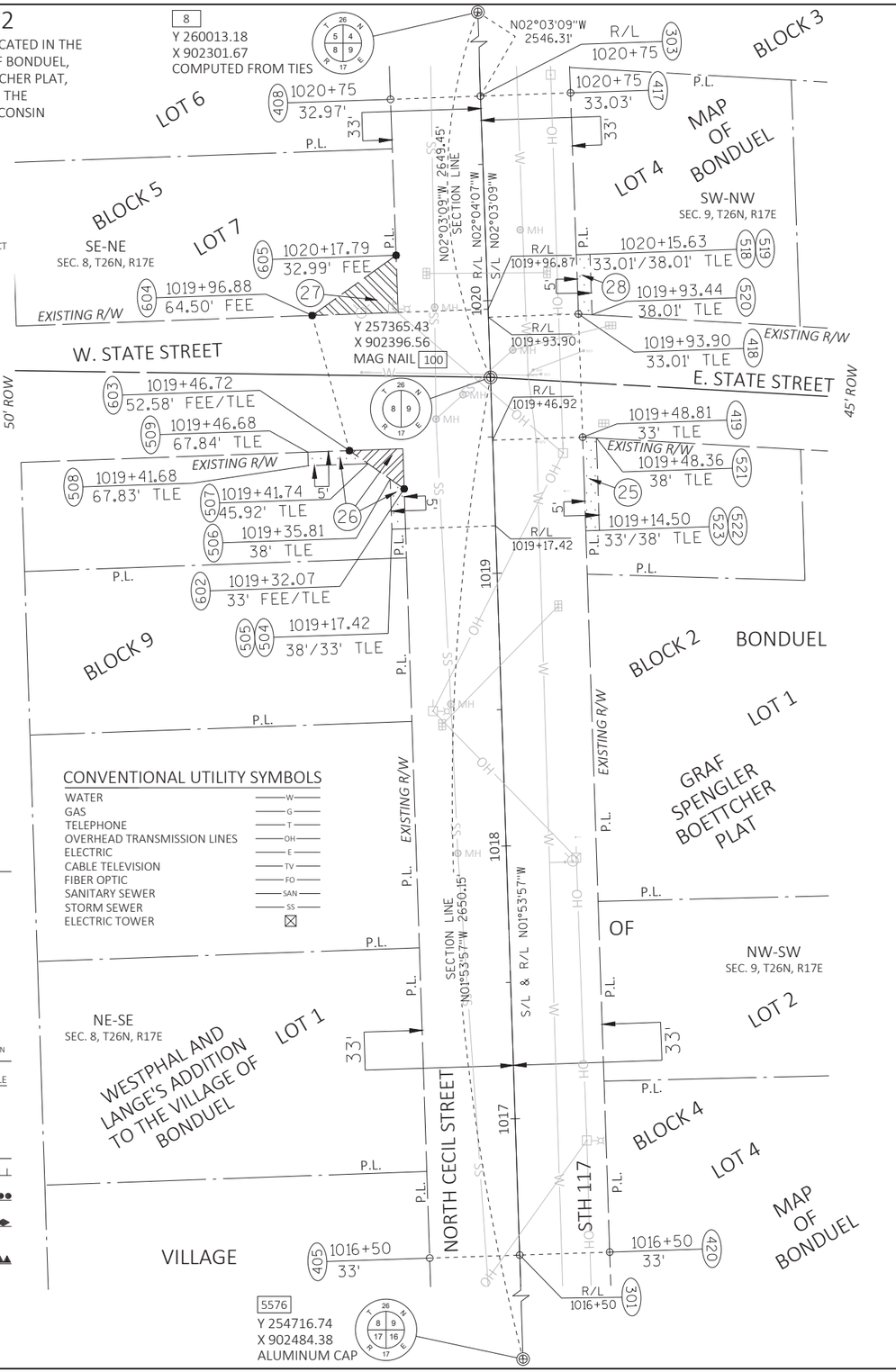
CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE
CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	○
TELEPHONE POLE	●	⌀
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	▣	▫

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER (25)
UTILITY NUMBER (40)
PARALLEL OFFSETS



COURSE TABLE

FROM POINT	TO POINT	BEARING	DISTANCE
5576	301	N01°53'57"W	2328.29'
301	405	S88°06'03"W	33.00'
405	602	N01°53'57"W	282.07'
602	603	N55°04'55"W	24.46'
603	604	N15°23'27"W	51.39'
604	605	N54°21'32"E	37.82'
605	408	N02°03'09"W	57.21'
408	303	N87°55'53"E	32.97'
303	417	N87°55'53"E	33.03'
417	418	S02°03'09"E	81.10'
418	419	S01°58'27"E	45.19'
419	420	S01°53'57"E	298.81'
420	301	S88°06'03"W	33.00'

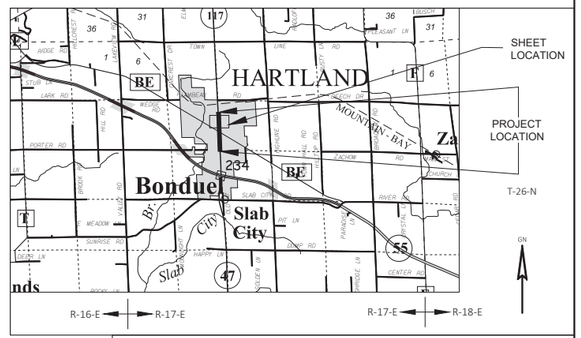
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9220-04-22 - 4.02
AMENDMENT NO:___

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB



GN

SCALE, FEET
0 25 50

I, AARON PARKS, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN AARON PARKS S-2861 STEVENS POINT WIS LAND SURVEYOR

SIGNATURE: _____ DATE: 06/11/21
PRINT NAME: AARON PARKS
REGISTRATION NUMBER: S-2861

THIS PLAT IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

SIGNATURE: _____ DATE: 11/29/21
PRINT NAME: BRENT L. STELLA

GREMMER & ASSOCIATES, INC.
CONSULTING ENGINEERS
Stevens Point • Fond du Lac
120 Water Tech Trail North • Stevens Point, WI 54481
(715) 341-4565 • fax (715) 341-4566

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117-BONDUEL-NORTH\SURVEY\EX ROW\STH117 TPP 9-23-21.DWG
PLOT DATE : 11/30/2021 9:07 AM PLOT BY : AARON PARKS PLOT NAME : PLOT SCALE : 1 IN:50 FT
APPRAISAL PLAT DATE : 11-12-21

9220-04-22 - 4.02

TRANSPORTATION PROJECT PLAT NO: 9220-04-22 - 4.03

PART OF LOT 1, BLOCK 5 OF WESTPHAL AND LANGE'S ADDITION TO THE VILLAGE OF BONDUEL LOCATED IN THE SE 1/4 -NE 1/4 OF SECTION 8, PART OF LOT 1, BLOCK 3 AND PART OF LOT 3, BLOCK 2 OF MAP OF BONDUEL, LOCATED IN THE SW1/4-NW1/4 OF SECTION 9, ALL IN T26N, R17E, VILLAGE OF BONDUEL, SHAWANO COUNTY, WISCONSIN

RELOCATION ORDER: STH 117, BONDUEL-CECIL, EXPRESS WAY TO MUTZY LANE, SHAWANO COUNTY

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09 AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
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2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

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

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN RHINELANDER.

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE TPP DETAIL PAGES.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: NORTHERN LIGHTS PLAT, MAP OF BONDUEL AND WESTPHAL AND LANGE'S ADDITION TO THE VILLAGE OF BONDUEL.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS) SHAWANO COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

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SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL
30	KAYLA L. ARNDT	TLE	0.003	0	0.003
31	BRUCE ZULEGER, ET. AL.	TLE	0.003	0	0.003
32	MARK AND MIRANDA GLINSKI	FEE	0.004	0	0.004

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

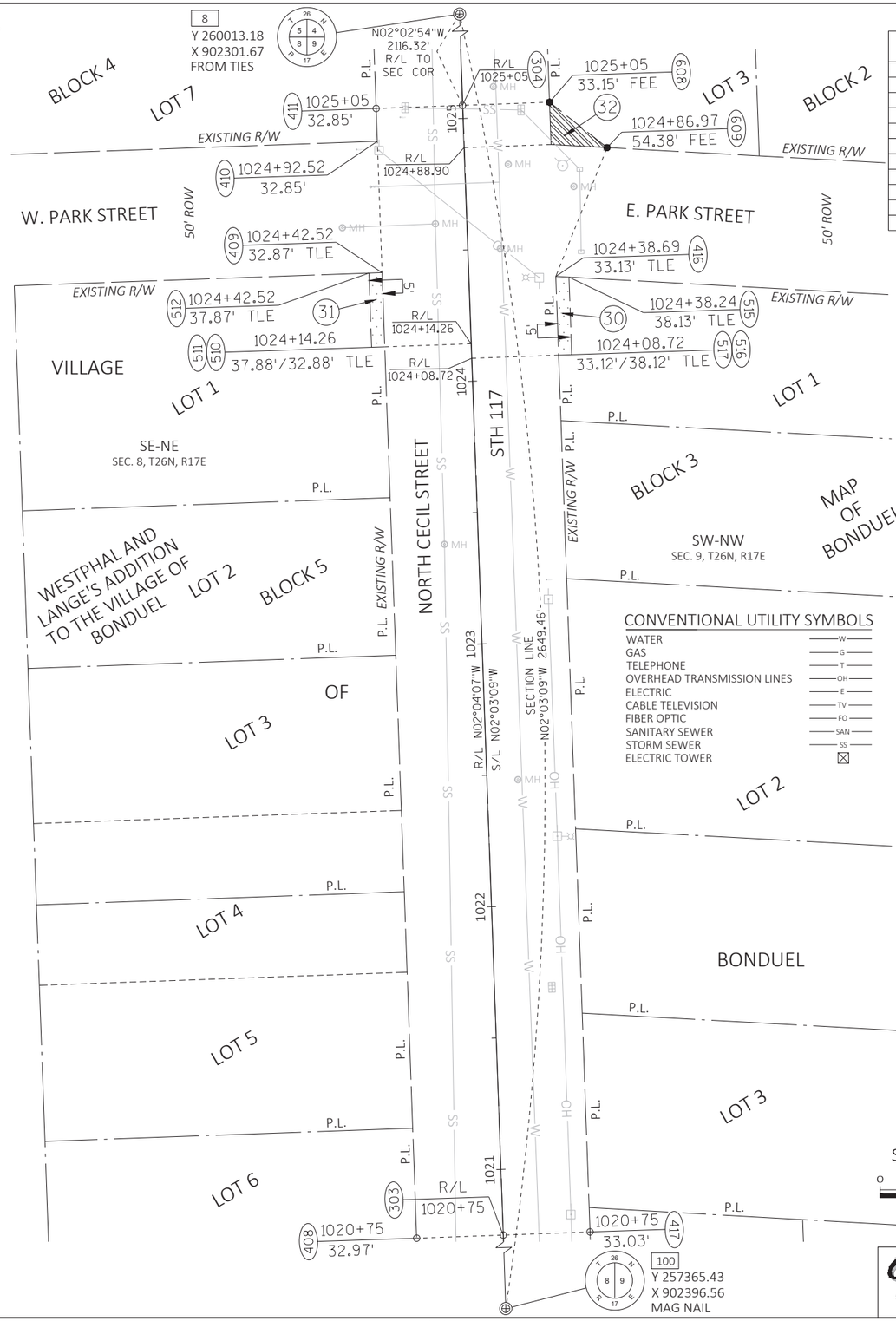
CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING — TO BE REMOVED
BRIDGE — CULVERT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED)
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE		
TELEPHONE POLE		
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)		

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25 — UTILITY NUMBER 40
PARALLEL OFFSETS



COURSE TABLE

FROM POINT	TO POINT	BEARING	DISTANCE
100	303	N02°04'07"W	103.14'
303	408	S87°55'53"W	32.97'
408	409	N02°03'09"W	367.52'
409	410	N02°03'09"W	50.00'
410	411	N02°03'09"W	12.47'
411	304	N87°55'53"E	32.85'
304	608	N87°55'53"E	33.15'
608	609	S51°43'37"E	27.85'
609	416	S21°41'19"W	52.74'
416	417	S02°03'09"E	363.69'
417	303	S87°55'53"W	33.03'

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 9220-04-22 - 4.03
AMENDMENT NO:___

CONVENTIONAL UTILITY SYMBOLS

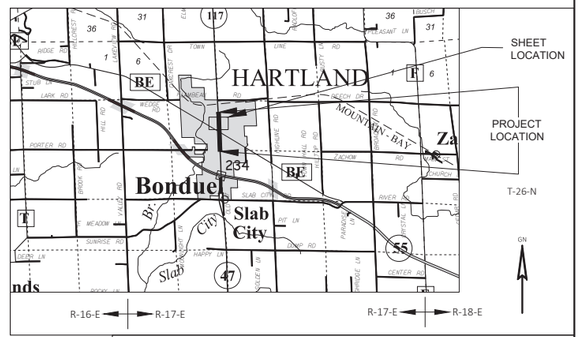
WATER	W
GAS	G
TELEPHONE	T
OVERHEAD TRANSMISSION LINES	OH
ELECTRIC	E
CABLE TELEVISION	TV
FIBER OPTIC	FO
SANITARY SEWER	SAN
STORM SEWER	SS
ELECTRIC TOWER	

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT EASEMENT	RDE
CERTIFIED SURVEY MAP	CSM	RIGHT	RT
CONCRETE	CONC	RIGHT OF WAY	R/W
COUNTY	CO	SECTION	SEC
COUNTY TRUNK HIGHWAY	CTH	SEPTIC VENT	SEPV
DISTANCE	DIST	SQUARE FEET	SF
CORNER	COR	STATE TRUNK HIGHWAY	STH
DOCUMENT NUMBER	DOC	STATION	STA
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV	TRANSPORTATION PROJECT PLAT	TPP
GRID NORTH	GN	UNITED STATES HIGHWAY	USH
HIGHWAY EASEMENT	HE	VOLUME	V
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA ABBREVIATIONS

LONG CHORD	LCH
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE	Δ/DELTA
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB



I, AARON PARKS, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF WISCONSIN DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

WISCONSIN — AARON PARKS — S-2861 — STEVENS POINT WIS — LAND SURVEYOR

SIGNATURE: _____ DATE: 06/11/21
PRINT NAME: AARON PARKS
REGISTRATION NUMBER: S-2861

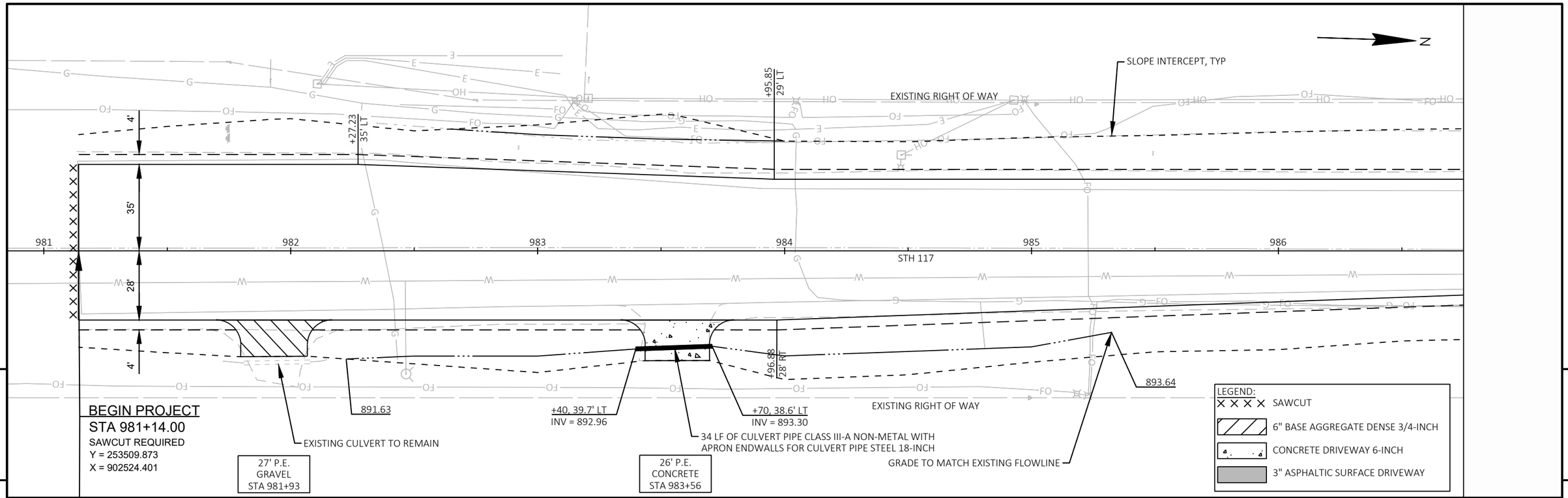
THIS PLAT IS APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION

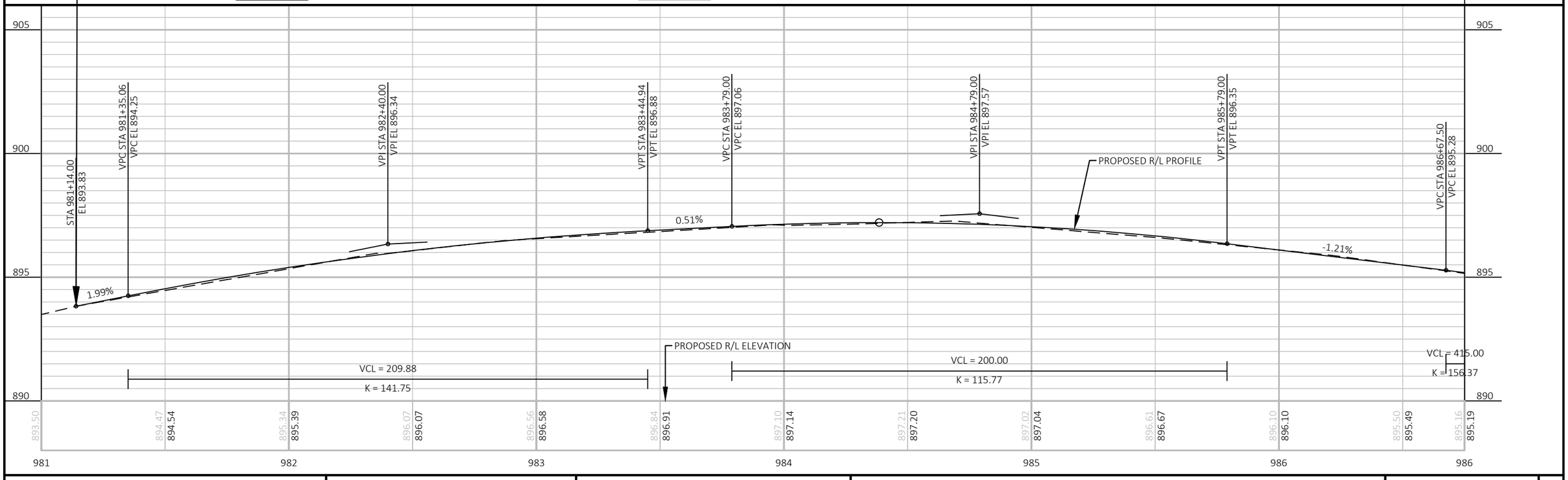
SIGNATURE: _____ DATE: 11/29/21
PRINT NAME: BRENT L. STELLA

GREMMER & ASSOCIATES, INC.
Stevens Point • Fond du Lac
120 Wilshire Boulevard North • Stevens Point, WI 54481
(715) 341-1565 • fax (715) 341-1569

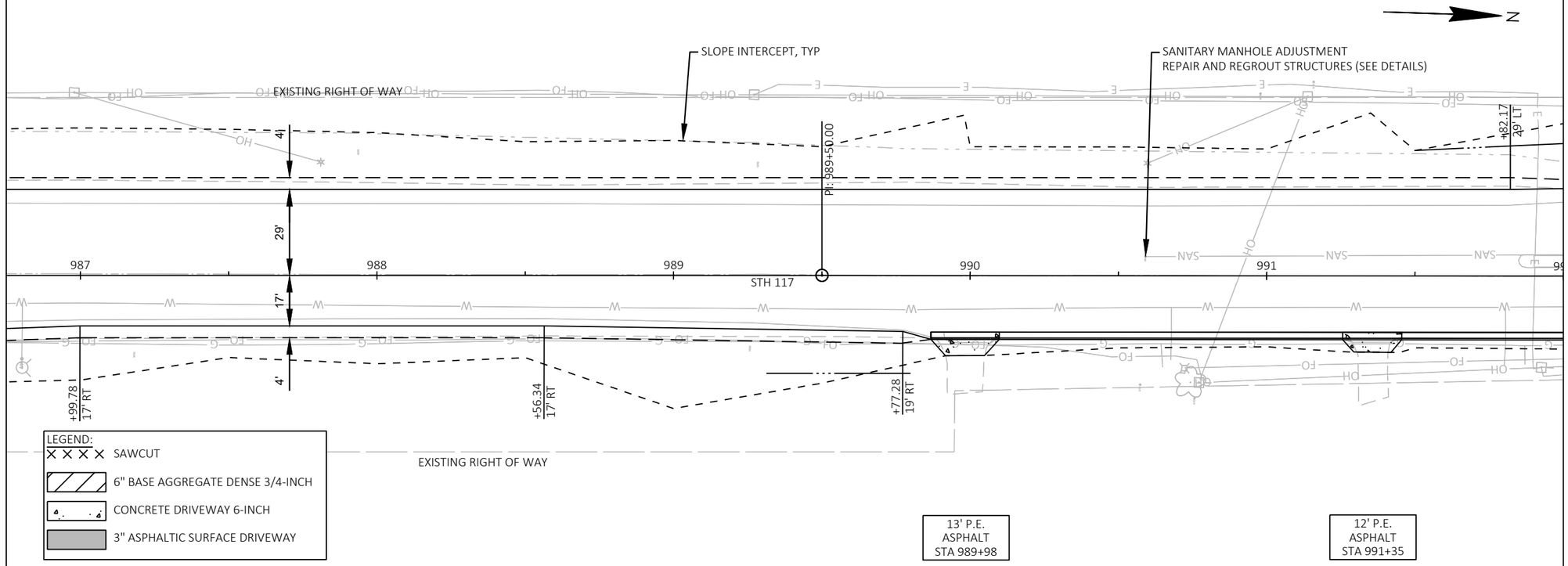
4

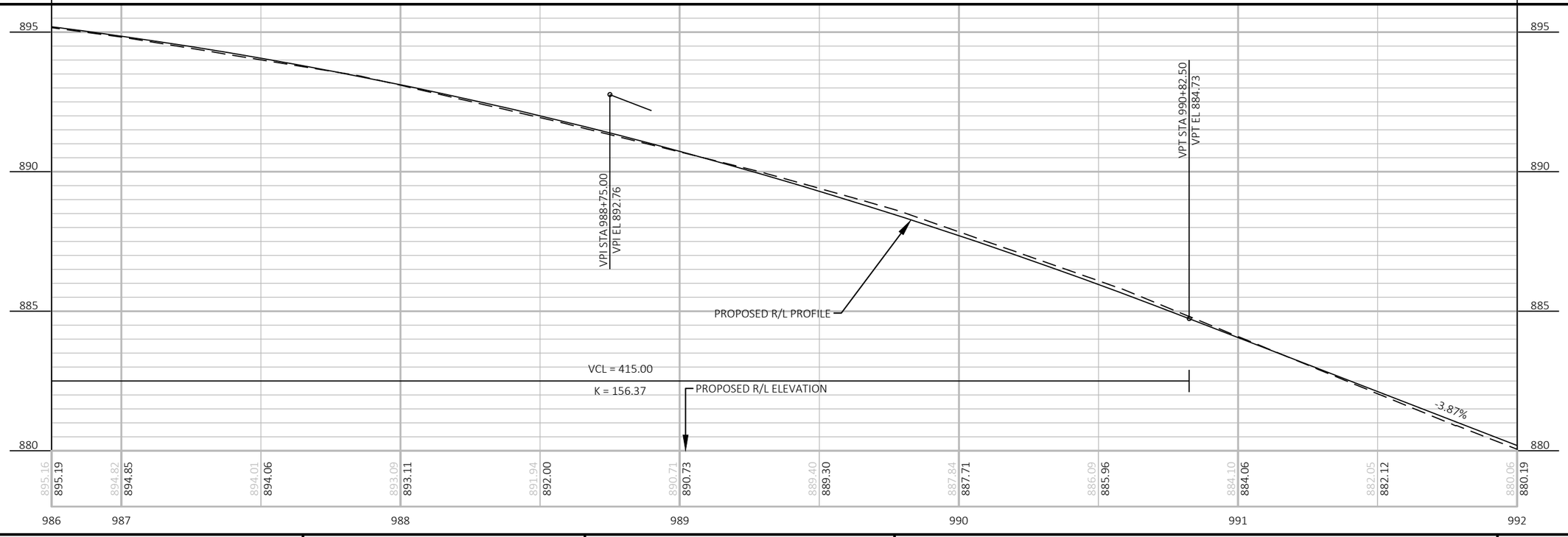
4





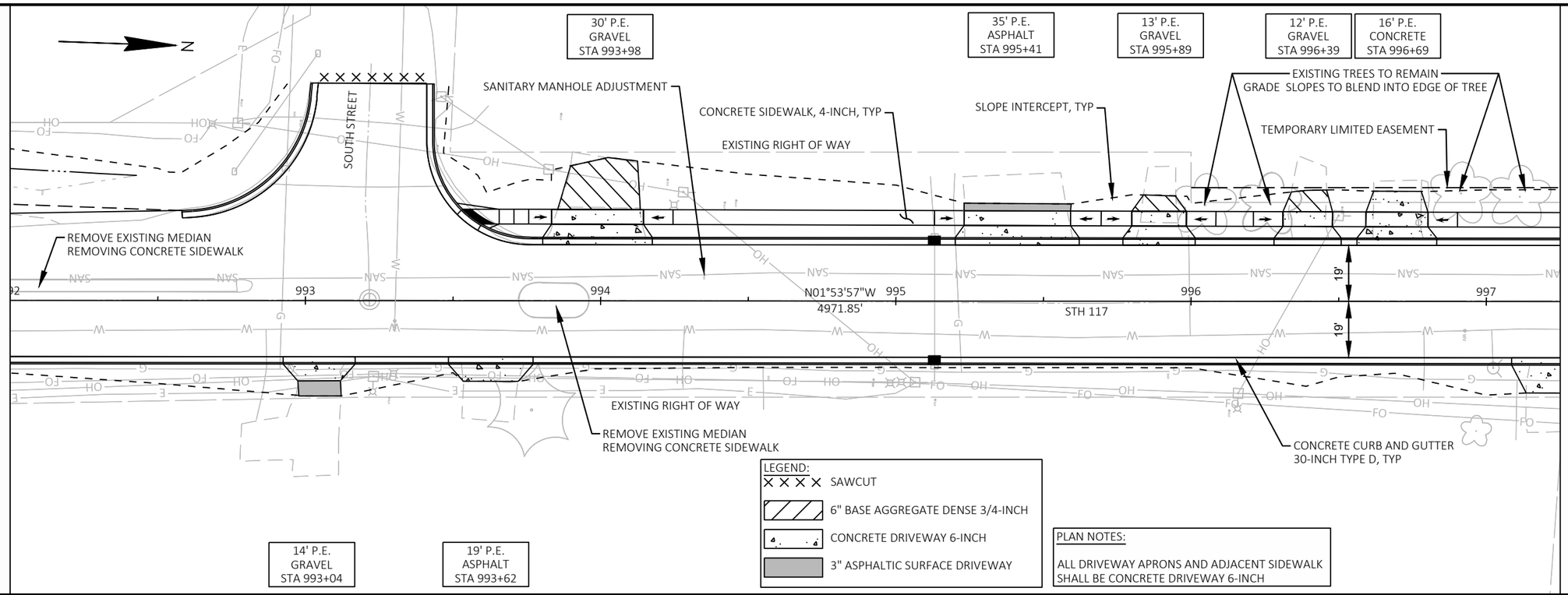
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PLAN AND PROFILE: STH 117	SHEET 89	E

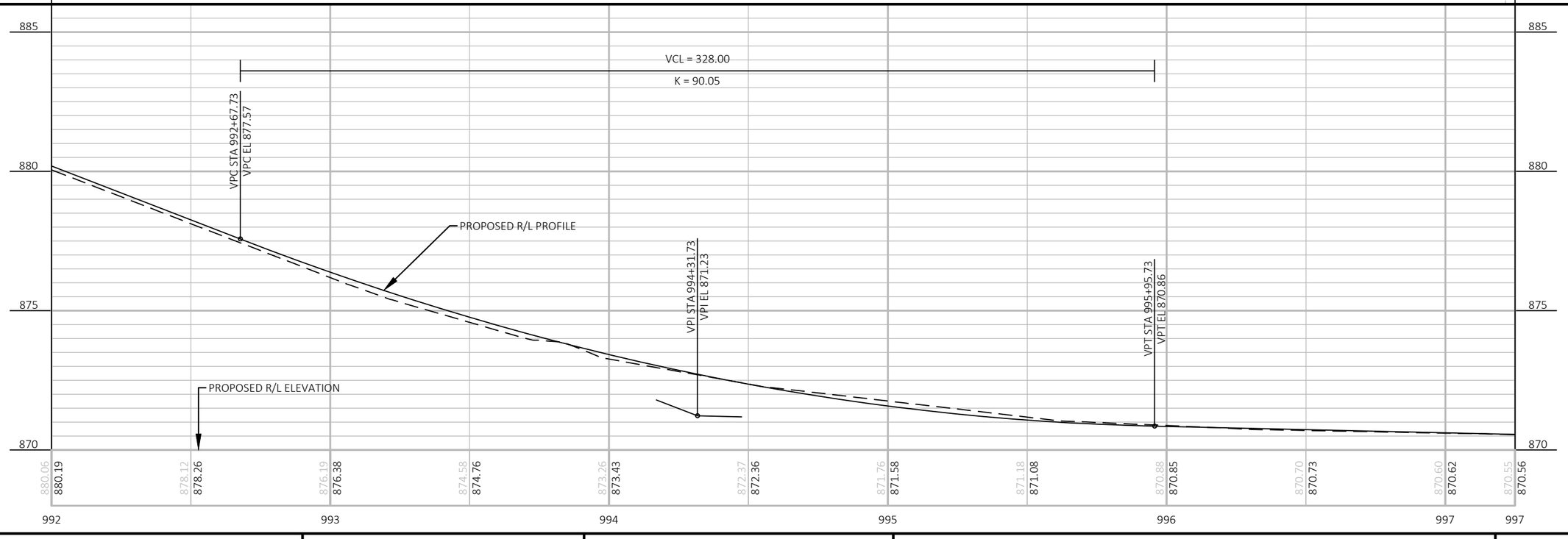




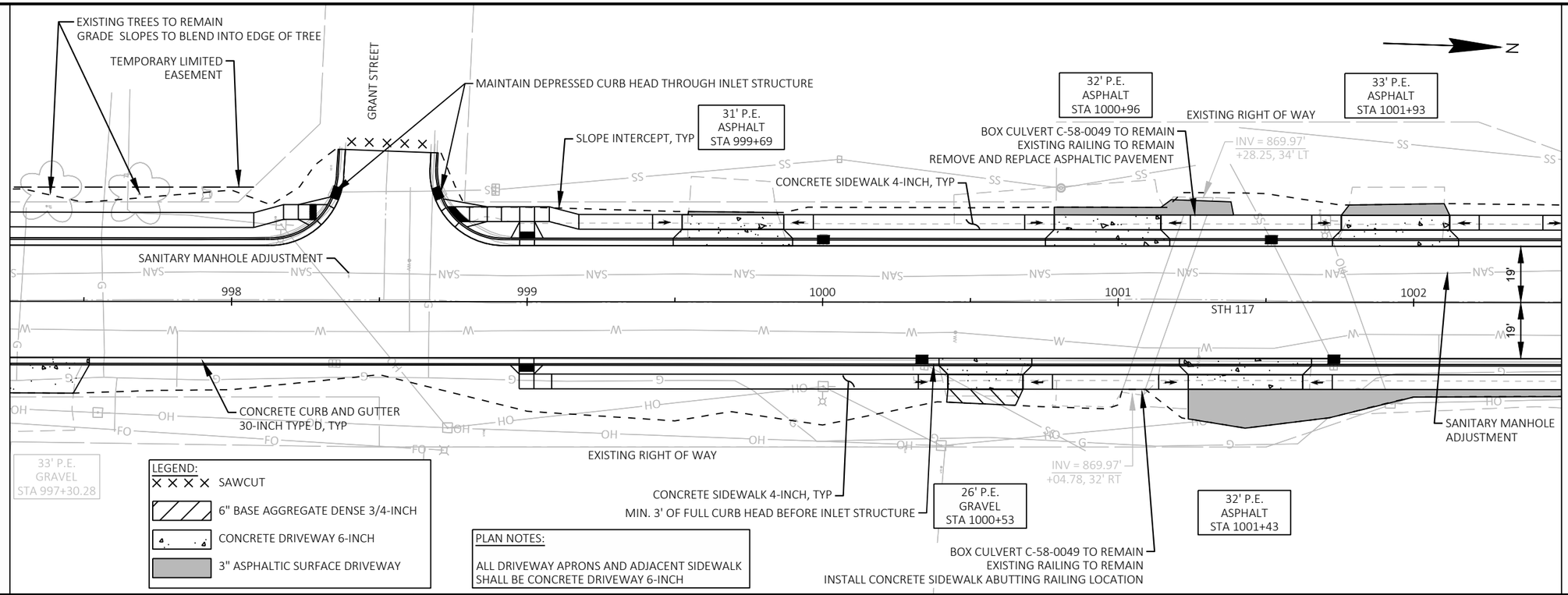
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PLAN AND PROFILE: STH 117	SHEET 90 E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\050501_PP\050501_PP.DWG
LAYOUT NAME - 2
PLOT DATE : 4/27/2023 2:13 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

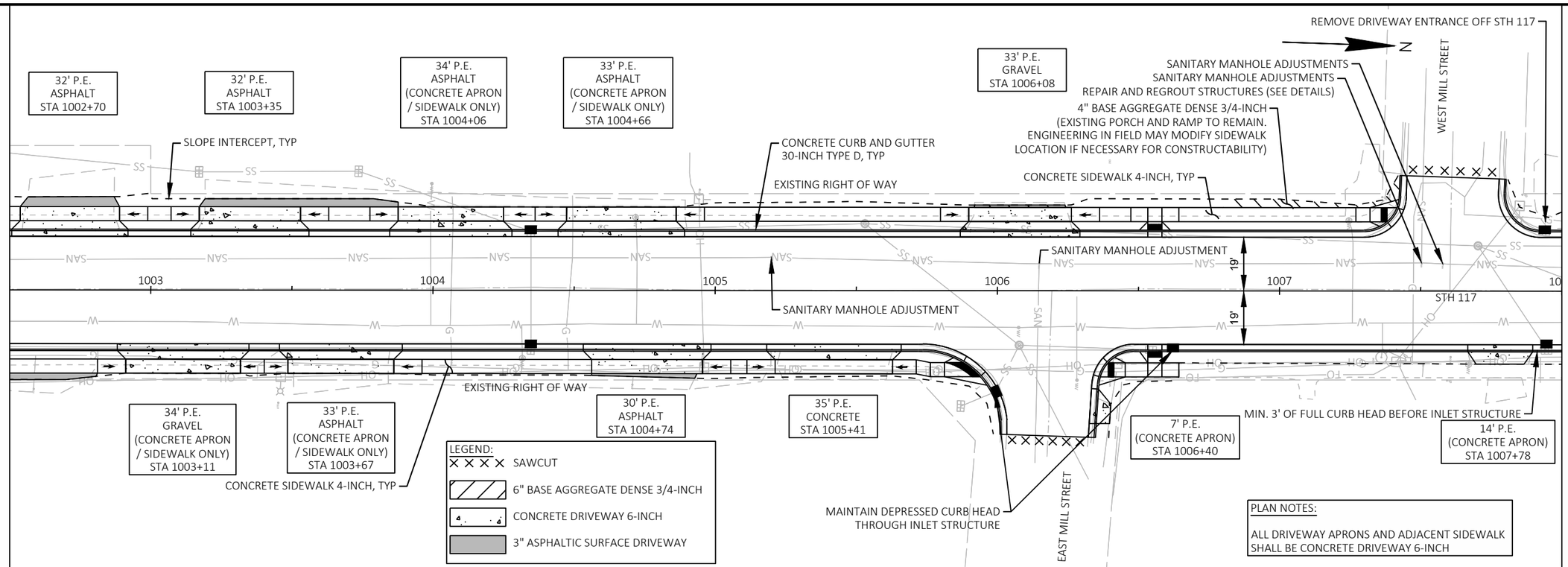


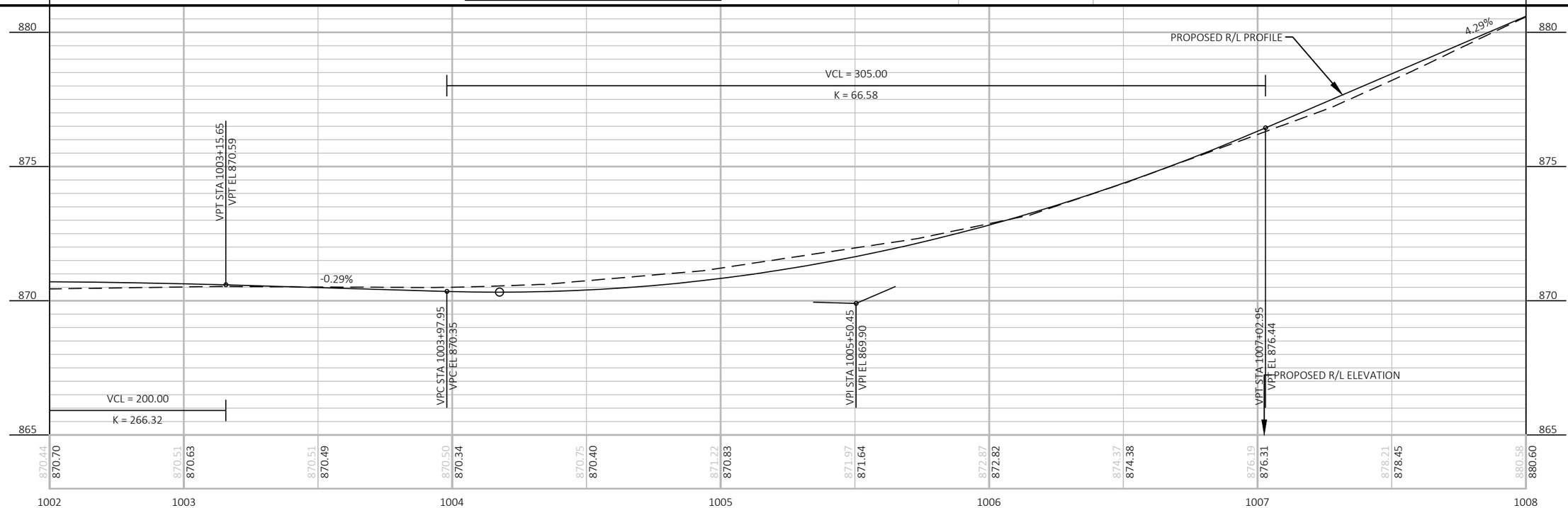


PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PLAN AND PROFILE: STH 117	SHEET 91 E



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PLAN AND PROFILE: STH 117	SHEET 92	E





PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PLAN AND PROFILE: STH 117	SHEET 93 E

STA 1008+89
EXISTING RETAINING WALL STAIRS TO BE
REMOVED AND REPLACED WITH RETAINING WALL
MATCH EXISTING RETAINING WALL HEIGHTS AND
TIE EXISTING AND PROPOSED RETAINING WALL
-WALL MODULAR BLOCK GRAVITY LANDSCAPE
-REMOVING MASONRY

SANITARY MANHOLE ADJUSTMENT

SLOPE INTERCEPT, TYP

CONCRETE CURB AND GUTTER
30-INCH TYPE D, TYP

NEW LOOPS REQUIRED
(SEE SIGNAL PLANS)

EXISTING RIGHT OF WAY

+42.29
19' LT

PI: 1010+50.00

+17.90
21.5' LT

PI: 1011+99.99

WEST GREEN BAY STREET/CTH BE

19'

19'

1008 1009 1010 1011 1012 1013

STH 117

END PAVEMENT REPLACEMENT
BEGIN MILL AND RESURFACING
STA 1013+35.00

EXISTING RIGHT OF WAY

+78.02
19' RT

SANITARY MANHOLE ADJUSTMENT

8' P.E.
(CONCRETE APRON)
STA 1008+60

30' P.E.
(CONCRETE APRON)
STA 1009+39

30' P.E.
(CONCRETE APRON)
STA 1009+93

MAINTAIN DEPRESSED CURB HEAD THROUGH INLET

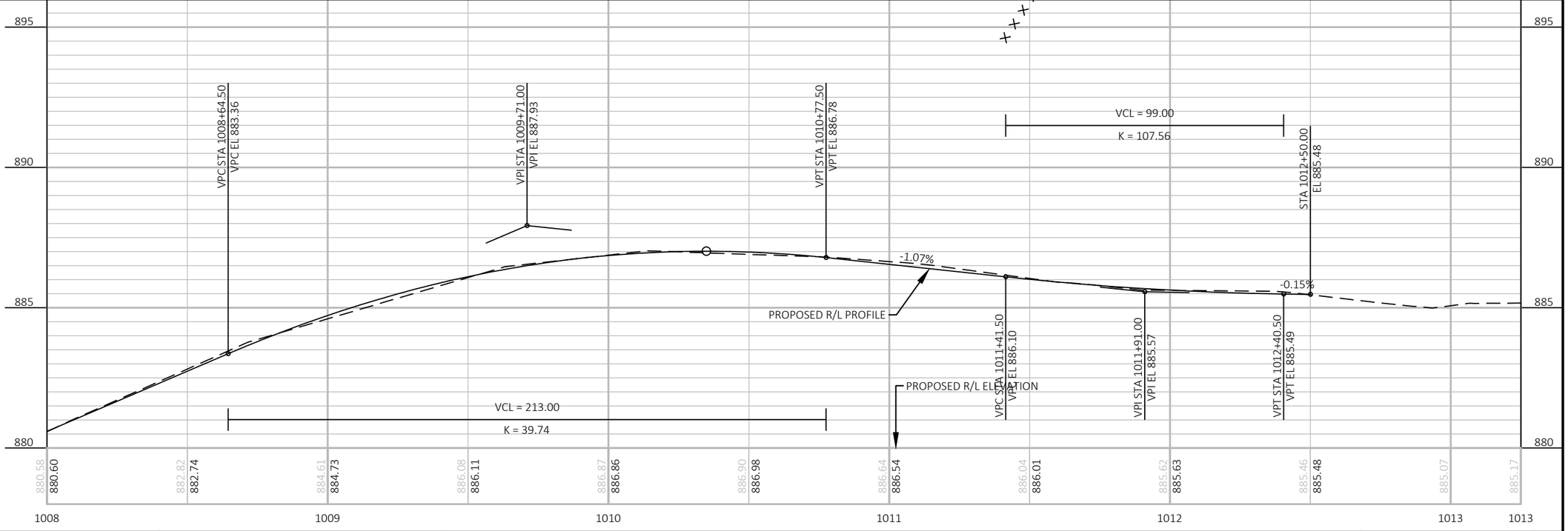
NEW CABINET
(SEE SIGNAL PLANS)

CTH BE

LEGEND:
- SAWCUT
- 6" BASE AGGREGATE DENSE 3/4-INCH
- CONCRETE DRIVEWAY 6-INCH
- 3" ASPHALTIC SURFACE DRIVEWAY

PLAN NOTES:

ALL DRIVEWAY APRONS AND ADJACENT SIDEWALK
SHALL BE CONCRETE DRIVEWAY 6-INCH

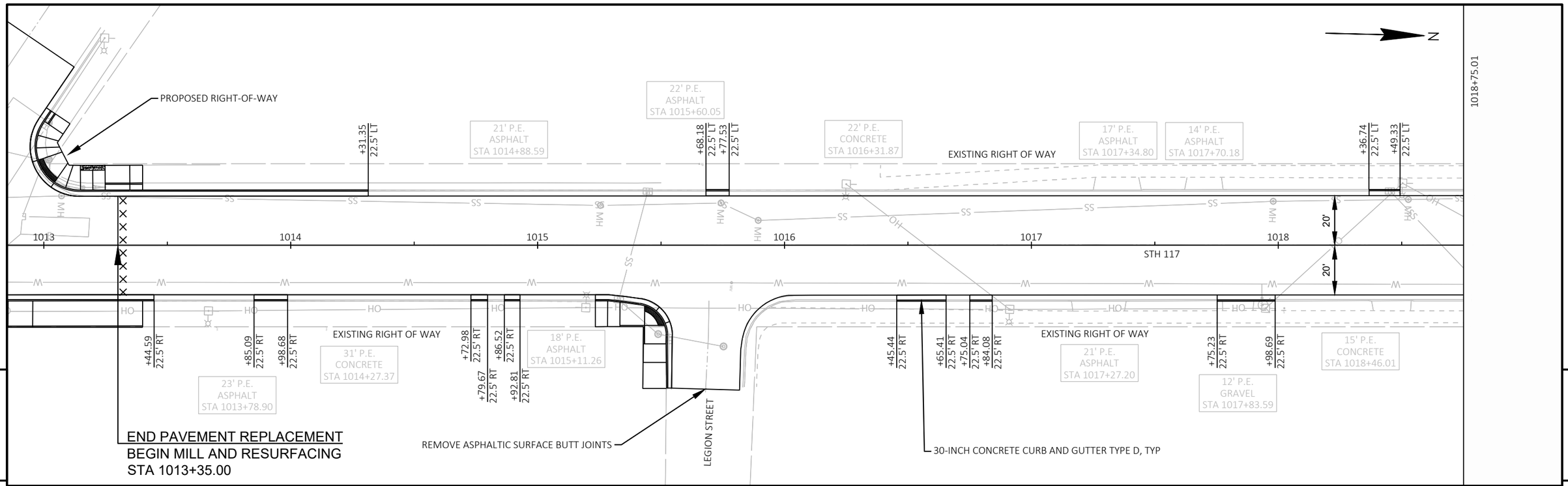


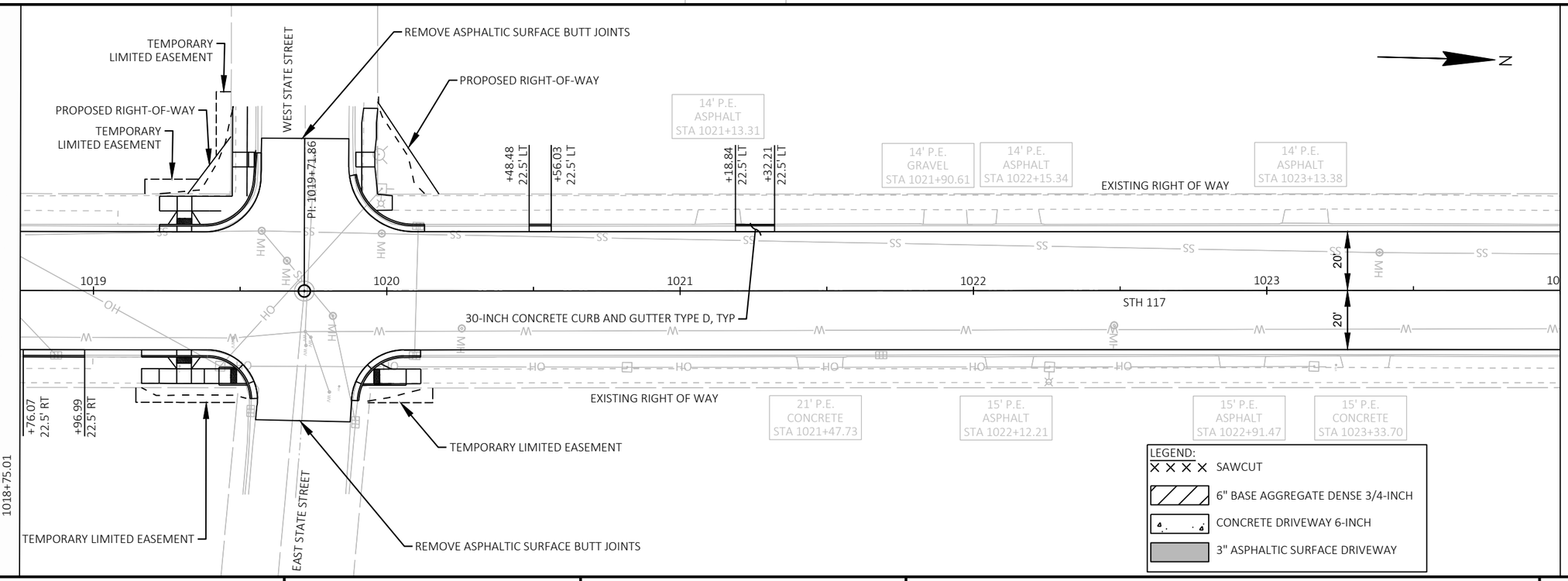
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PLAN AND PROFILE: STH 117	SHEET 94	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\050501_PP\050501_PP.DWG
LAYOUT NAME - 6

PLOT DATE : 4/27/2023 2:13 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT

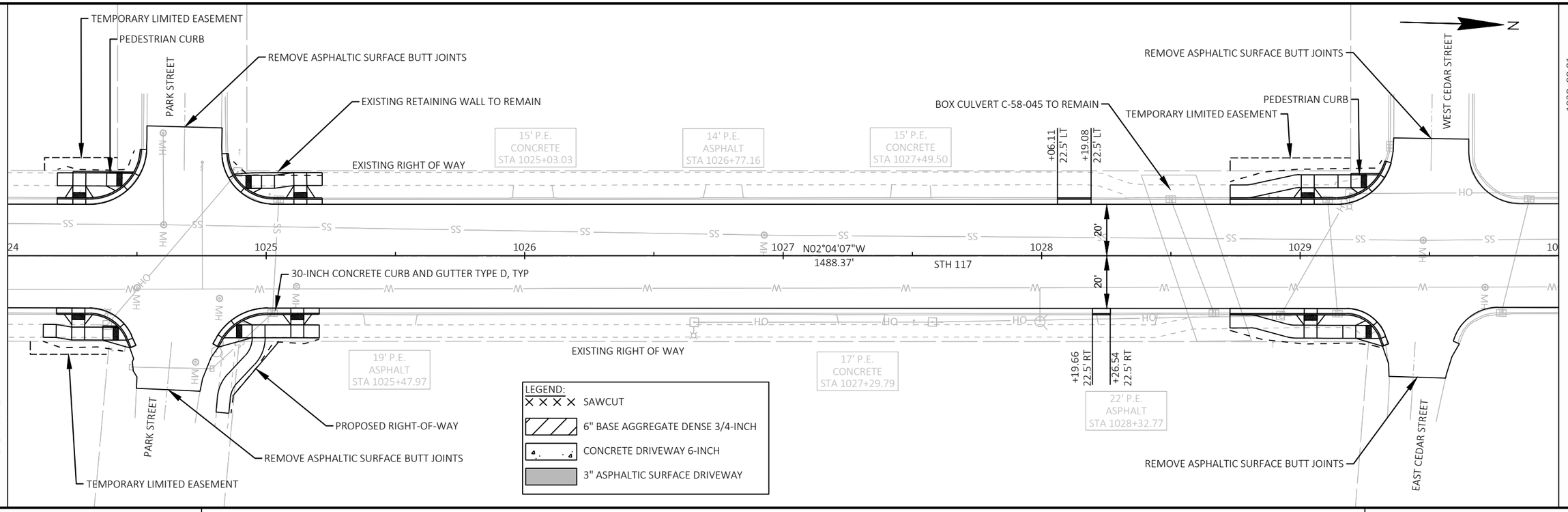
WISDOT/CADDS SHEET 44

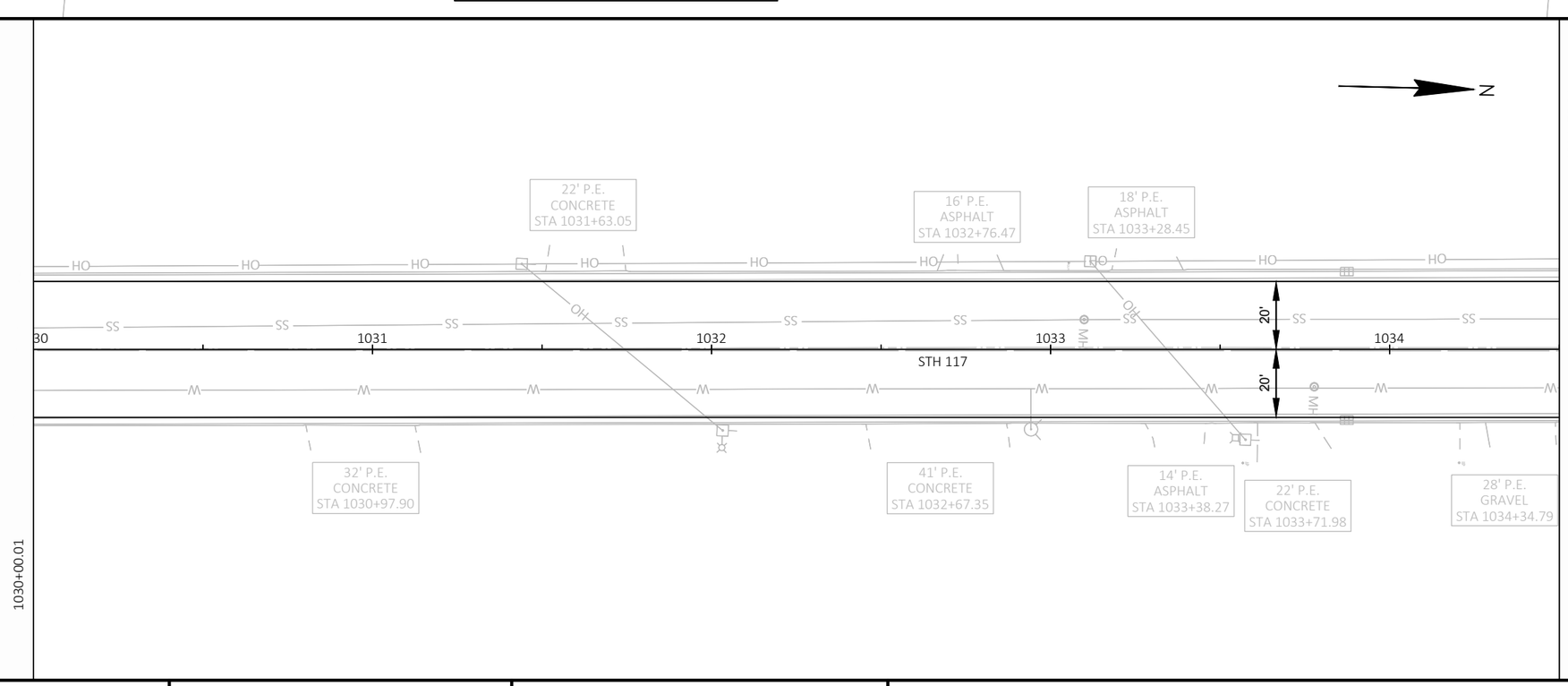




PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PLAN: STH 117	SHEET 95	E

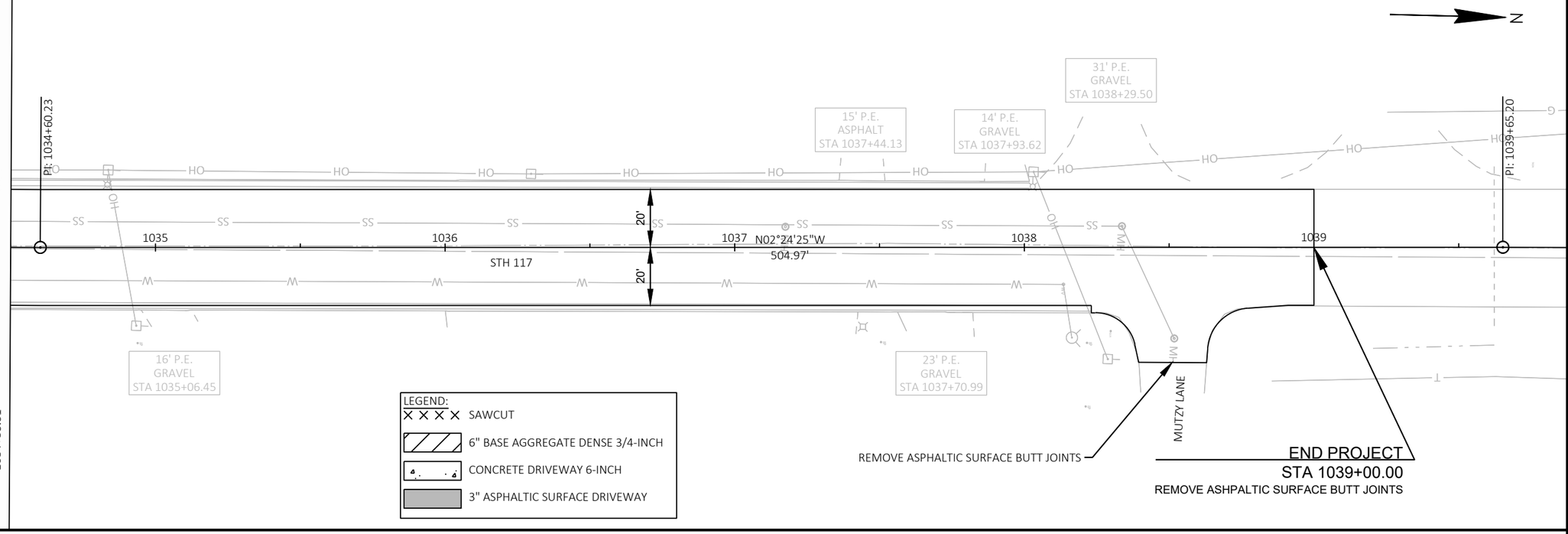
FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\050501_PP\050501_PP.DWG
LAYOUT NAME - 7
PLOT DATE : 4/27/2023 2:14 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PLAN: STH 117	SHEET 96	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\SHEETSPLAN\050501_PP\050501_PP.DWG
LAYOUT NAME - 8
PLOT DATE : 4/27/2023 2:14 PM PLOT BY : JARED HALBUR PLOT NAME : PLOT SCALE : 1 IN:40 FT



5

5

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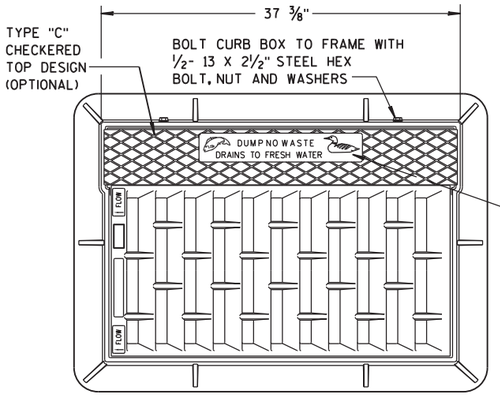
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	PLAN: STH 117	SHEET 97	E

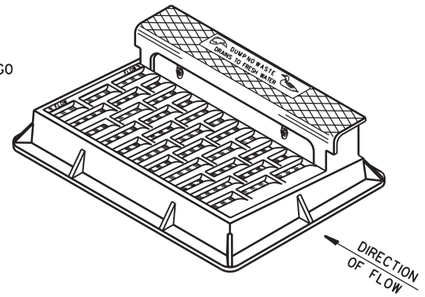
Standard Detail Drawing List

08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08D01-22A	CONCRETE CURB & GUTTER
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D18-03	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D19-03	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08D20-01	DRIVEWAYS WITH CURB & GUTTER RETURNS
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
09B02-10	CONDUIT
09B16-02	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-10	CONCRETE CONTROL CABINET BASES
09C06-07	CONCRETE CONTROL CABINET BASE, TYPE 9, SPECIAL
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09E01-15A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-15B	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 3 (HEAVY DUTY)
09E01-15C	POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4
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
09F15-04B	LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)
09H01-01	BASE ITS CONTROLLER CABINET
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-22A	LONGITUDINAL MARKING (MAINLINE)
15C08-22B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-22C	PAVEMENT MARKING (TURN LANES)
15C08-22D	PAVEMENT MARKING (TURN LANES)
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-07C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C36-01	PARKING STALL MARKING
15D30-08A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-08C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-08K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D40-04A	TRAFFIC CONTROL, FULL LANE SHIFT NON-FREEWAY OR MULTILANE DIVIDED 45 MPH AND UNDER
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

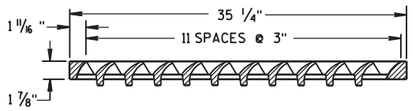
6

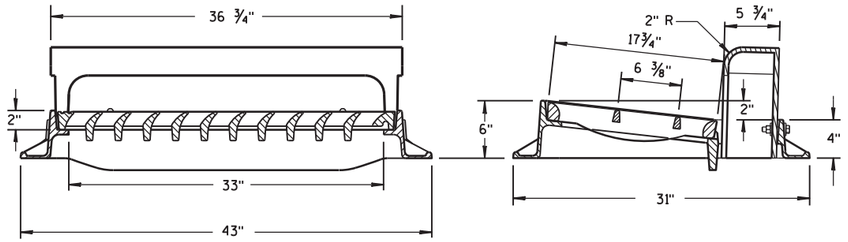


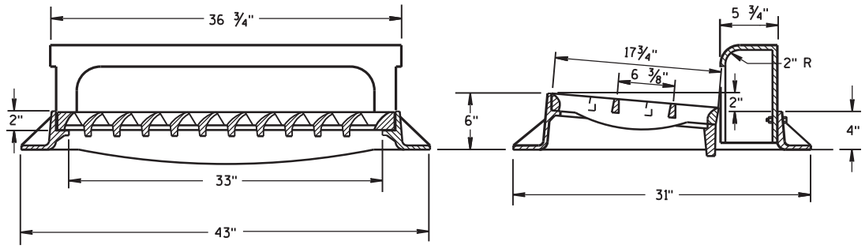
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

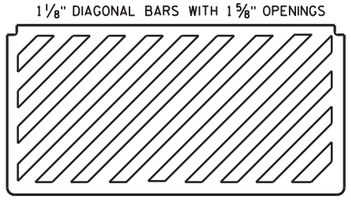






TYPE "H"

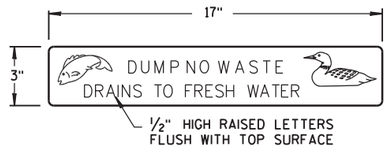
NOTE: EITHER CASTING IS ACCEPTABLE



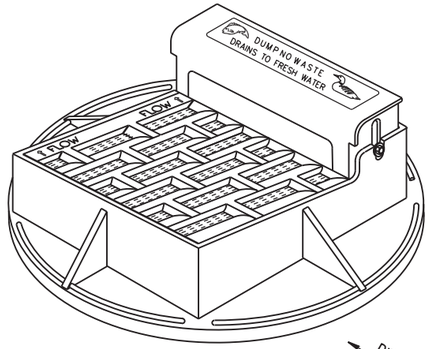
SPECIAL GRATE FOR TYPE "H" COVER

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

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

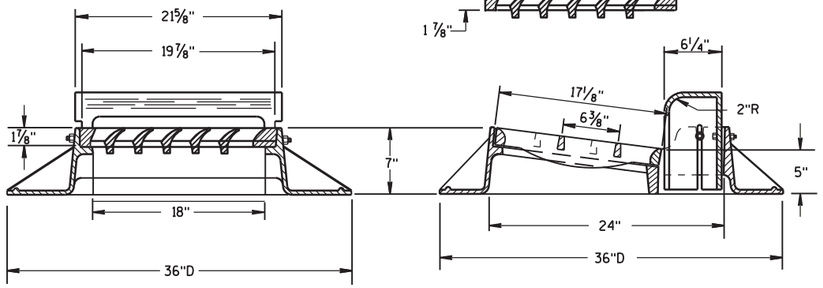


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



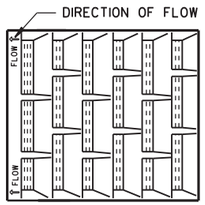
TYPE "A"

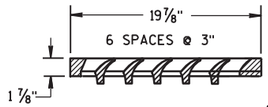
GENERAL NOTES

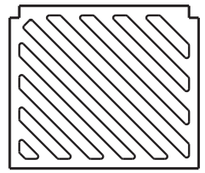
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.



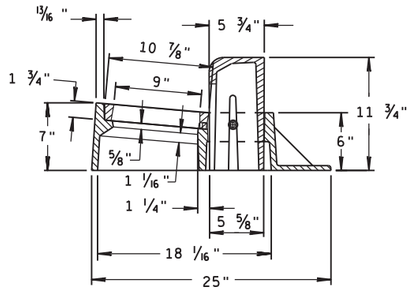


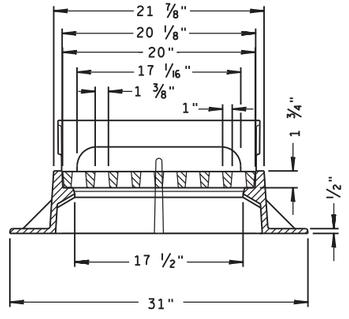


SPECIAL GRATE FOR TYPE "A" COVER

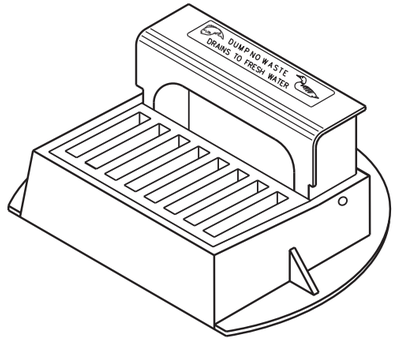
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





TYPE "Z"

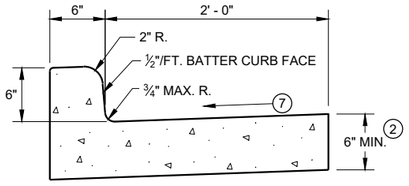


INLET COVERS TYPE A, H, A-S, H-S & Z

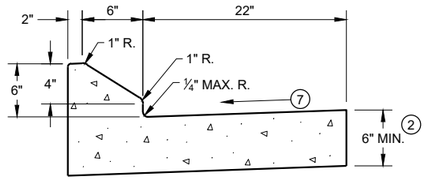
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
99
FHWA

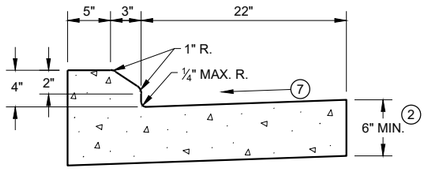
6
S.D.D. 8 A 5-19a



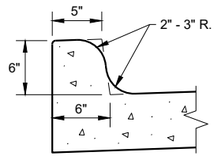
TYPES A (1) & D



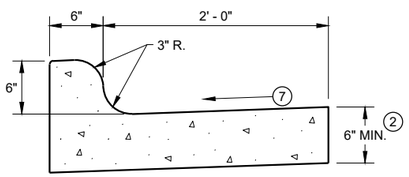
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

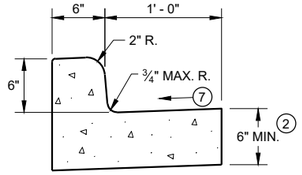


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



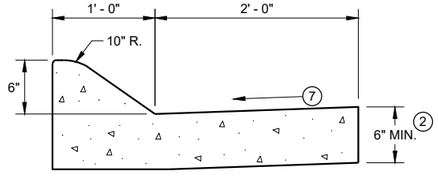
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

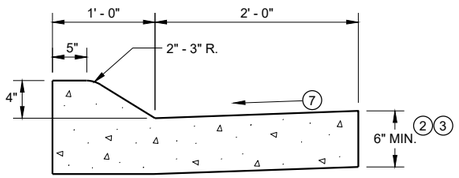


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

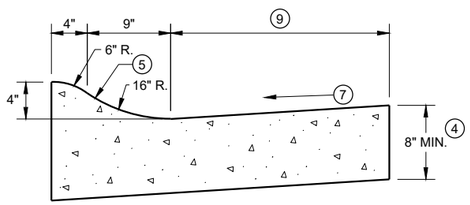


6" SLOPED CURB TYPES A (1) & D



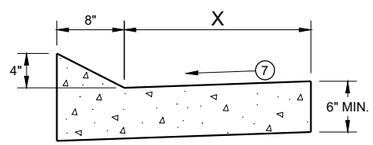
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

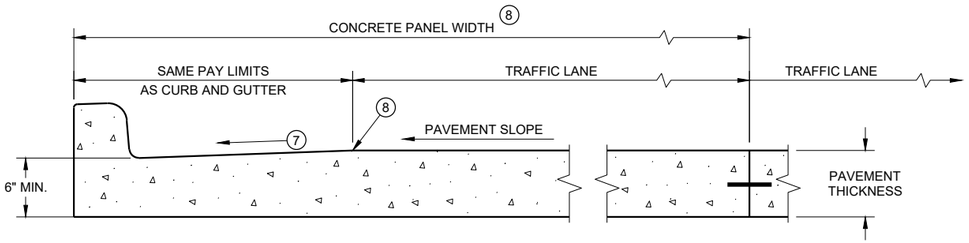


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

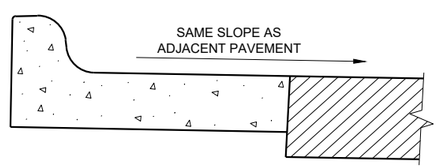
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

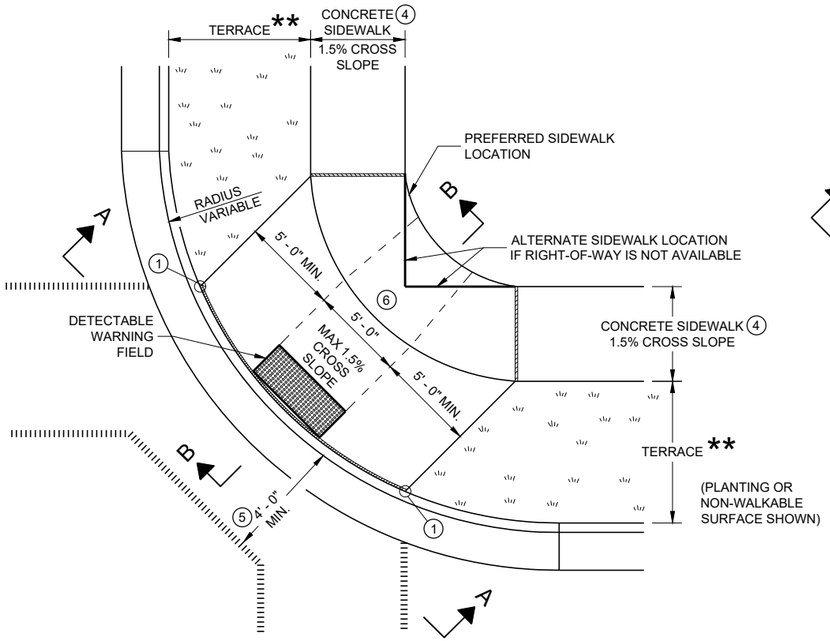
(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

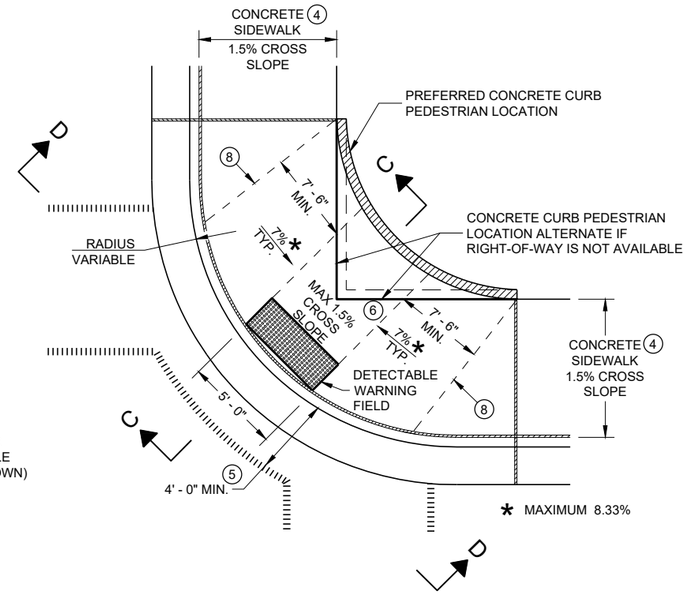
SDD 08D01 - 22a
SDD 08D01 - 22a



PLAN VIEW

CURB RAMP TYPE 1

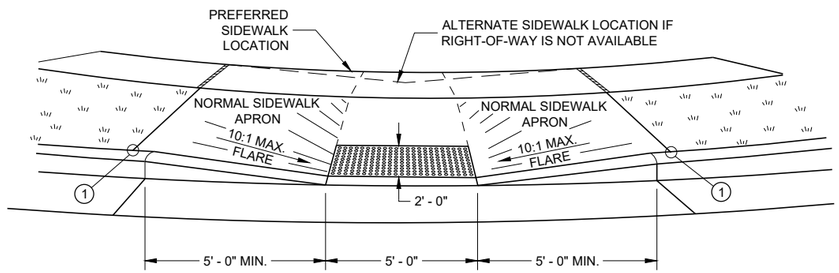
(CENTER OF CORNER RADIUS)



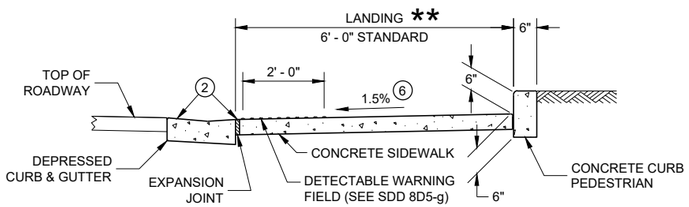
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

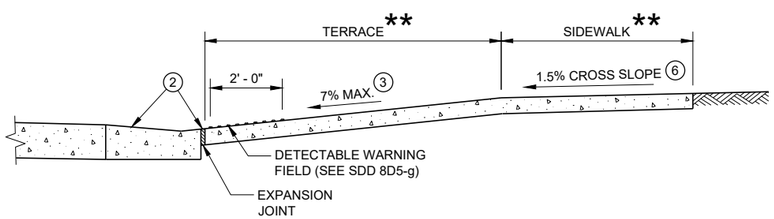


VIEW A - A FOR TYPE 1

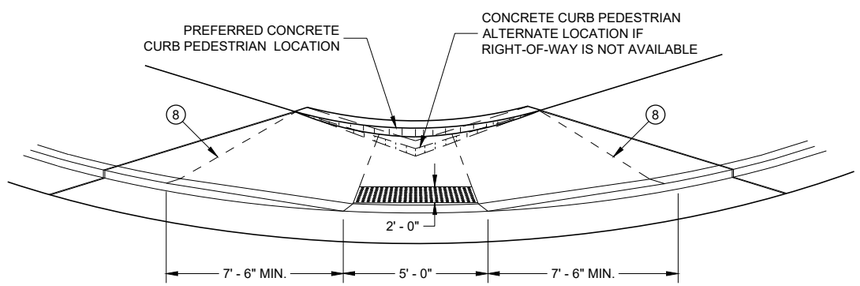


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



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 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 RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF 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 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

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

LEGEND

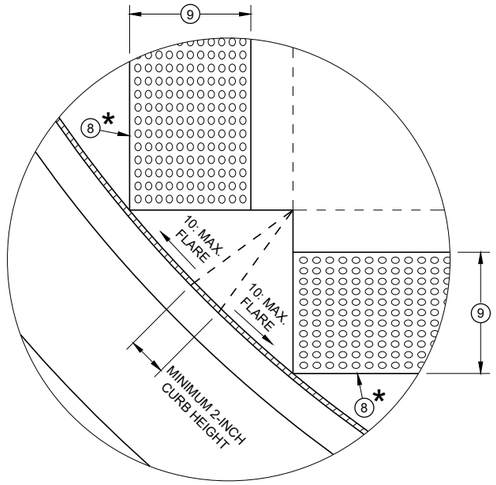
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

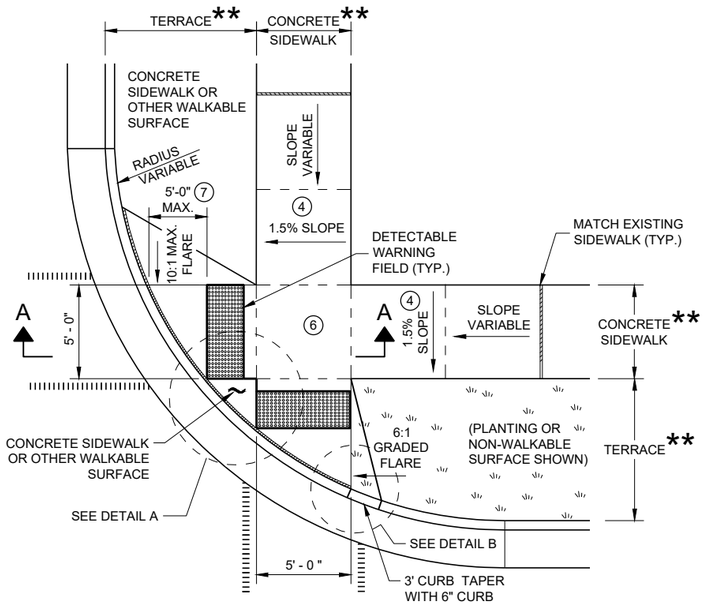
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

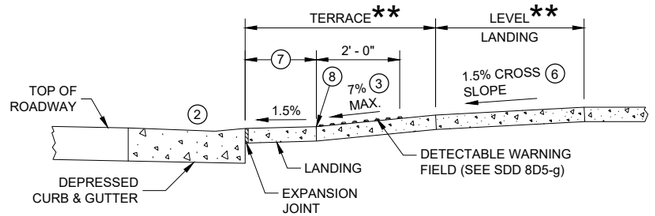
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(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.

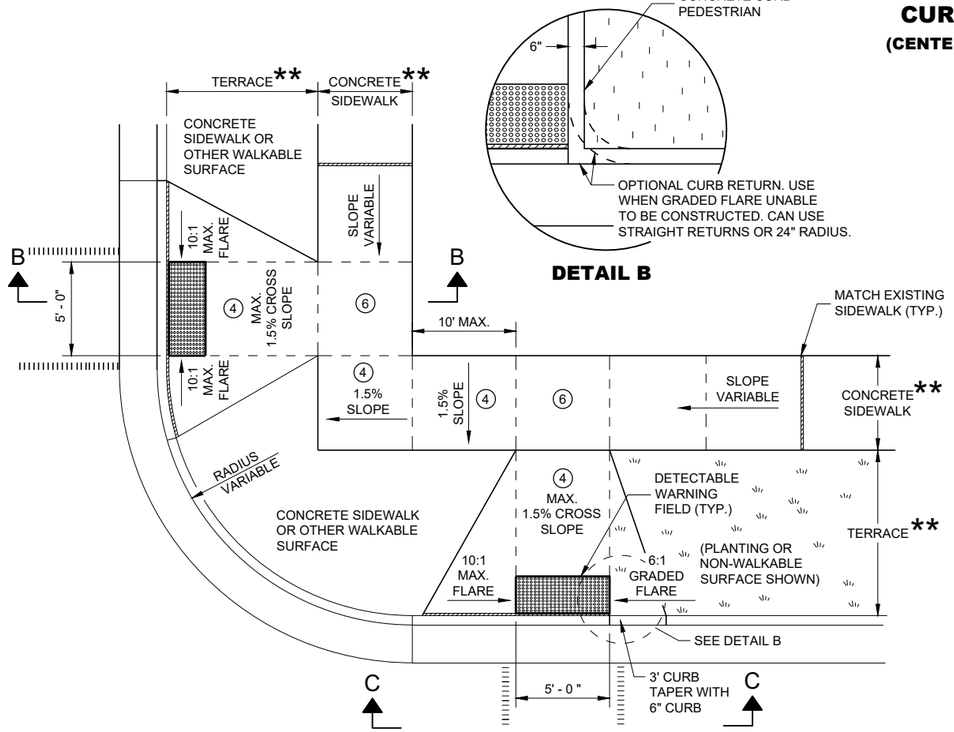
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

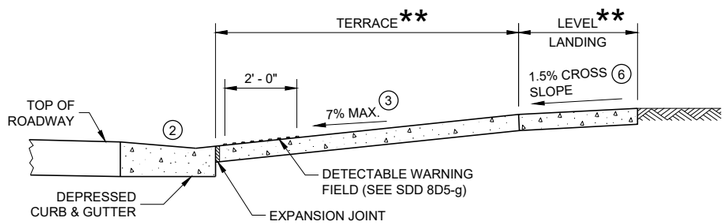
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS



DETAIL B

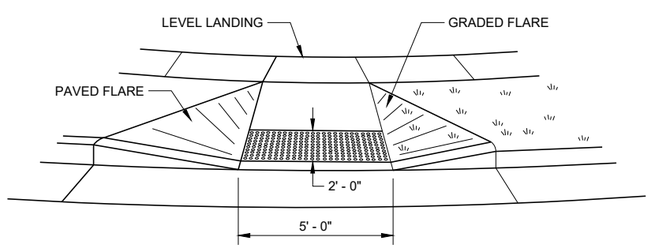
PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



VIEW C - C FOR TYPE 3

CURB RAMPS TYPE 2 AND 3

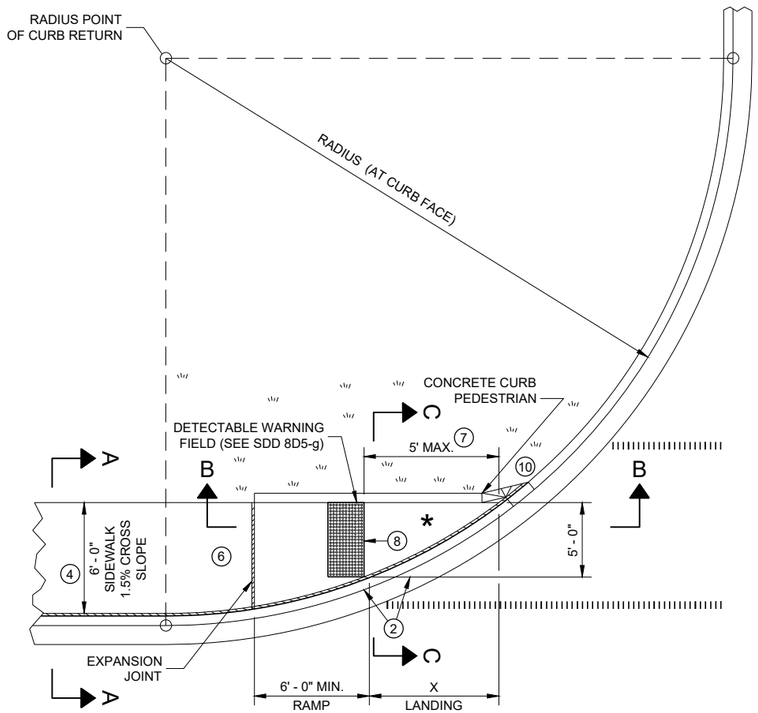
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20b

6

SDD 08D05 - 20b

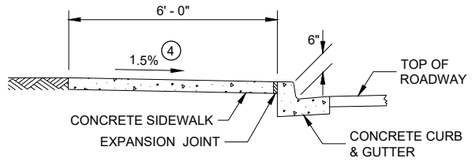


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(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.

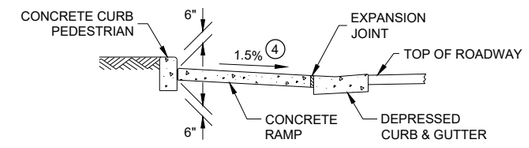
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

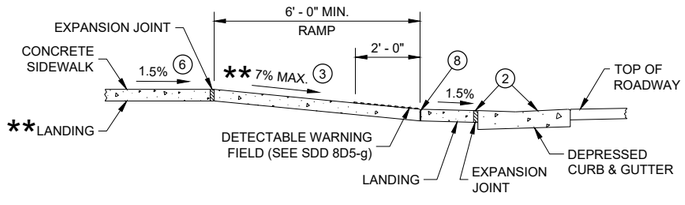
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



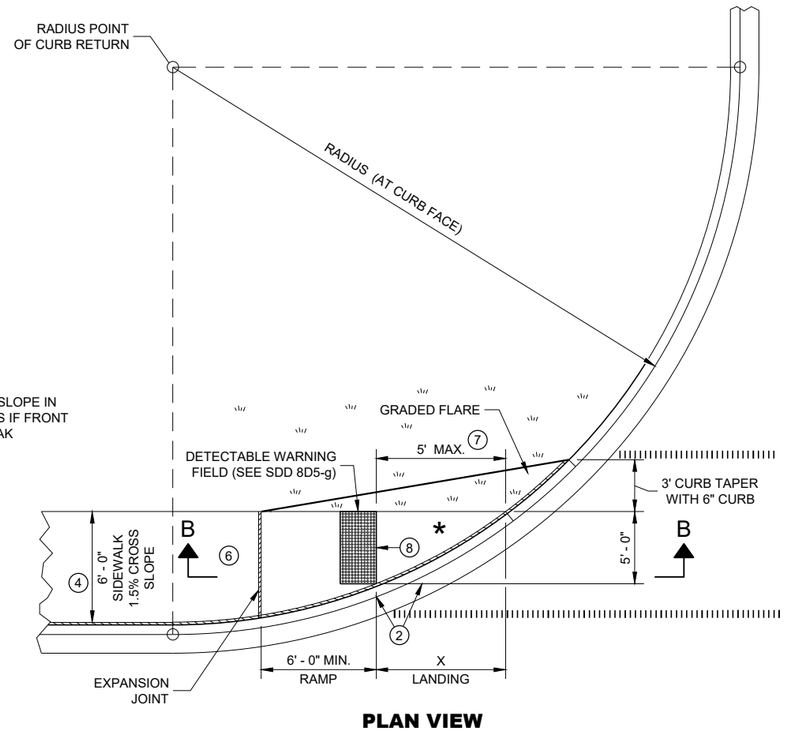
SECTION C - C FOR TYPE 4A



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

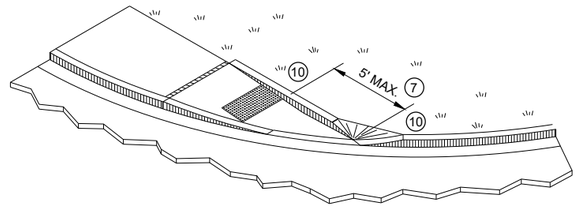
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

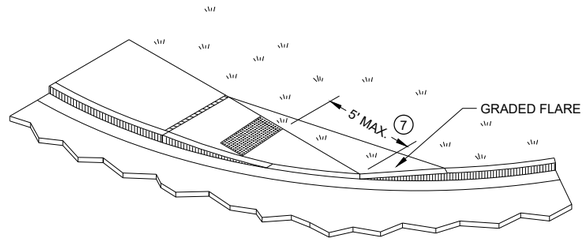


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



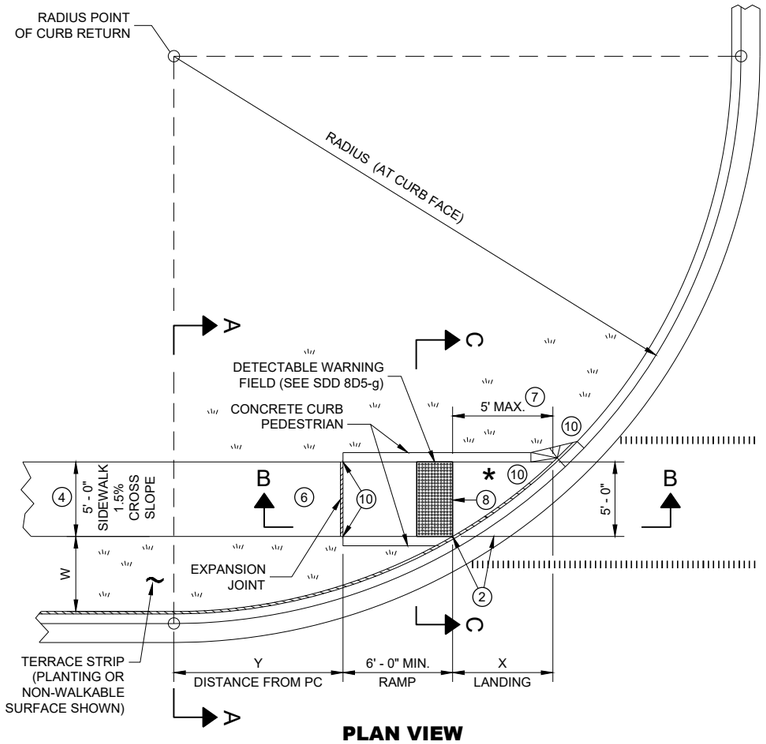
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c

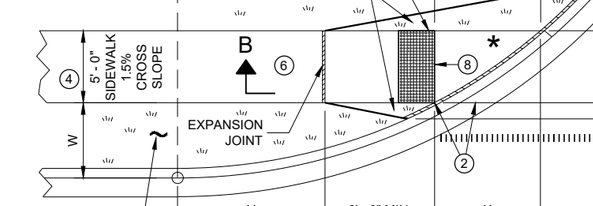


PLAN VIEW

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	5' - 9 ¾"	3' - 6 ½"	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			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	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									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

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)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

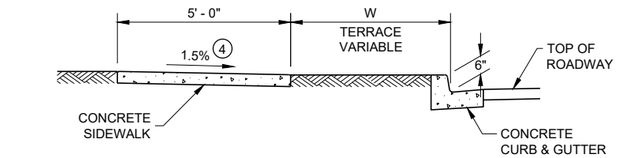
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

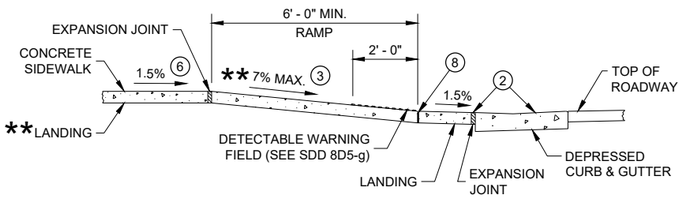
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

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

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



SECTION A - A FOR TYPE 4B



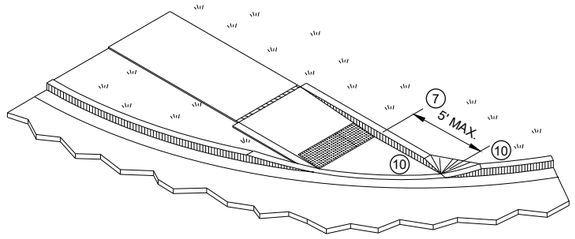
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

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

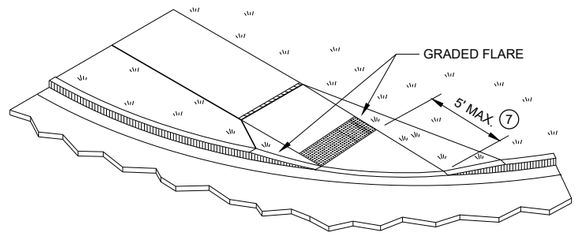
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

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
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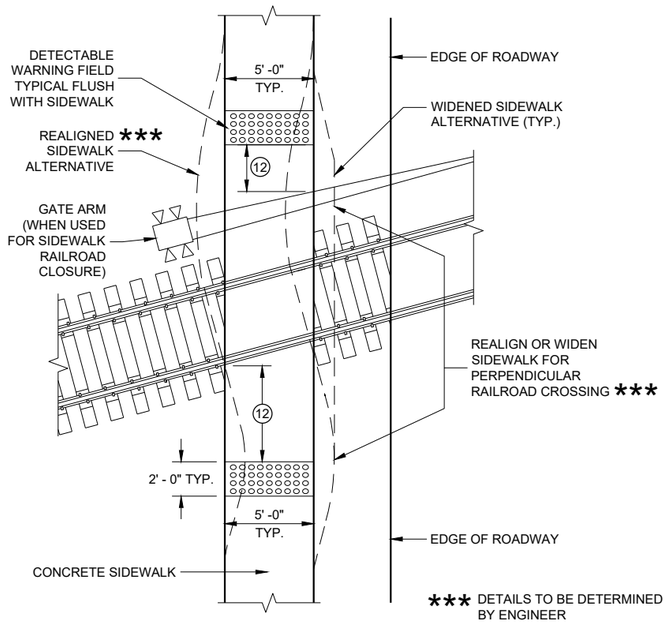
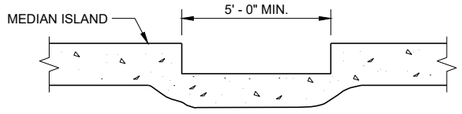
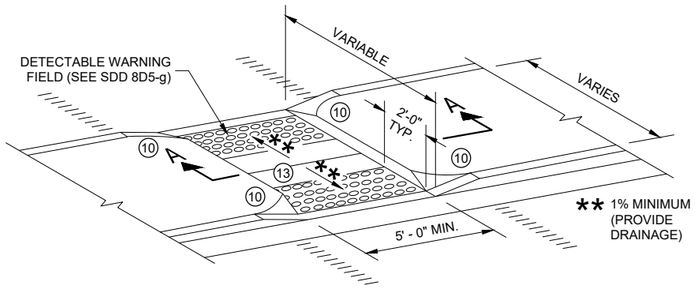


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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%.

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

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

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

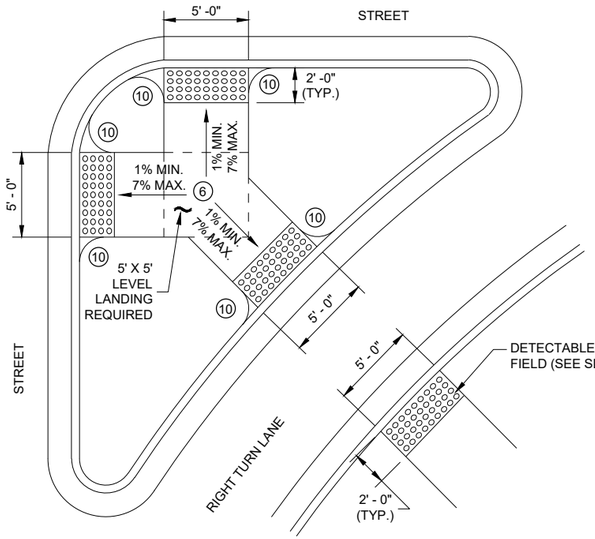
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(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. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET 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.

LEGEND

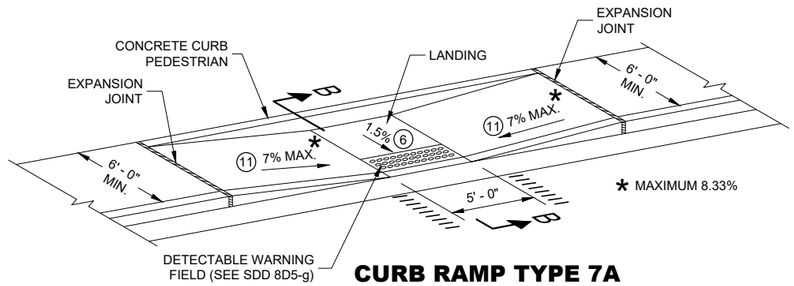
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

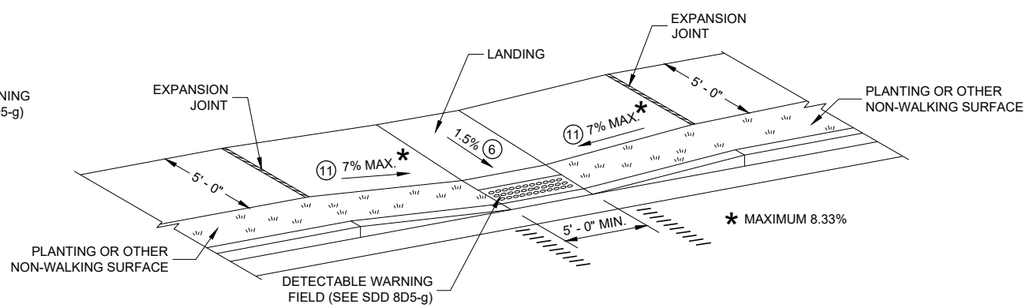
DETECTABLE WARNING AT ISLANDS

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



CURB RAMP TYPE 7A

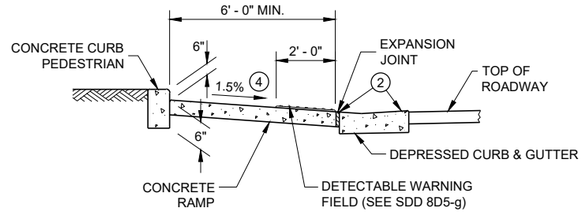
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

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

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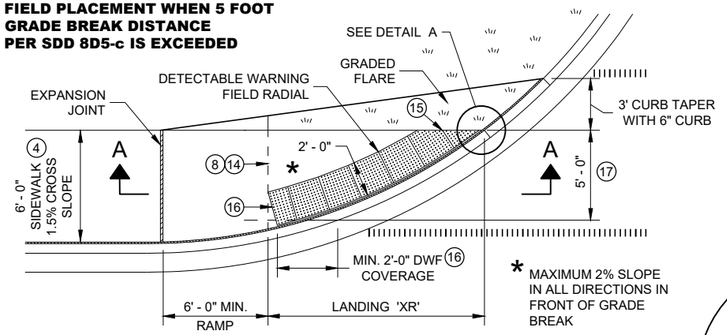
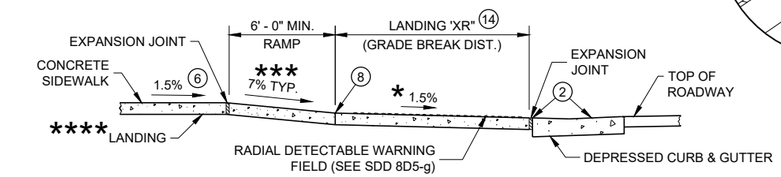
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



PLAN VIEW

CURB RAMP TYPE 4A1

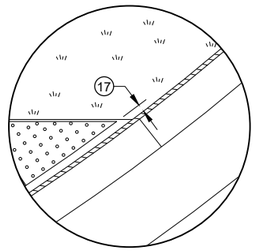
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1



DETAIL A

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

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

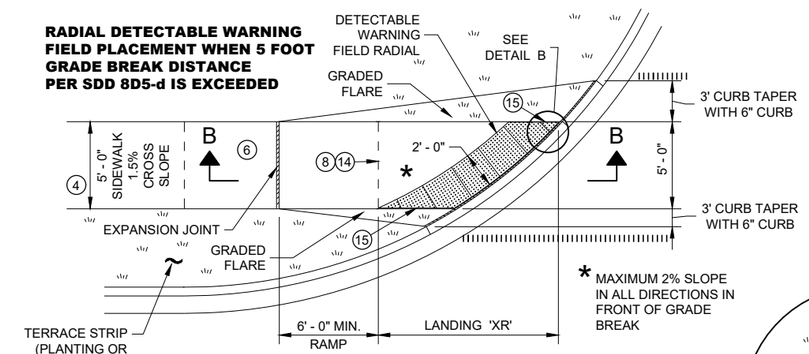
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(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 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

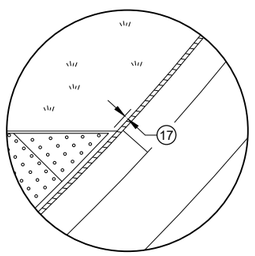
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



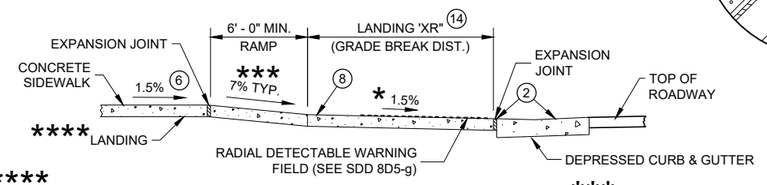
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B

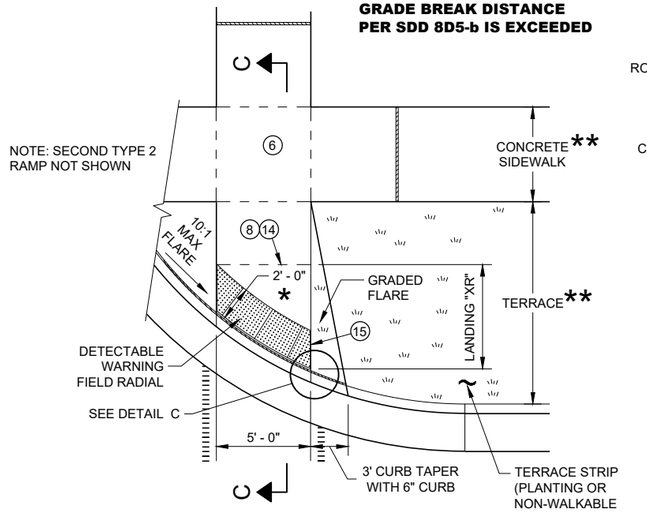


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

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

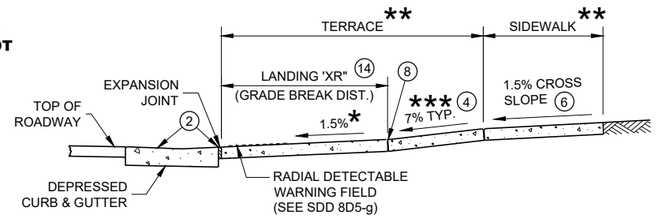


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

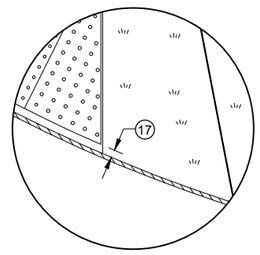


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



DETAIL C

CURB RAMPS
RADIAL DETECTABLE WARNING FIELD APPLICATIONS

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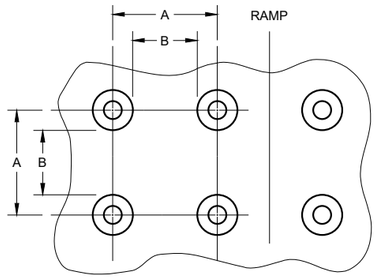
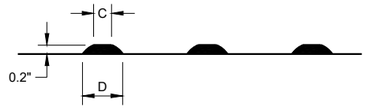
	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

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

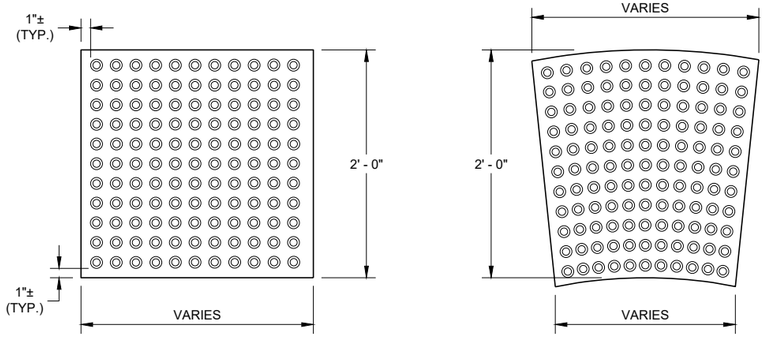


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

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.

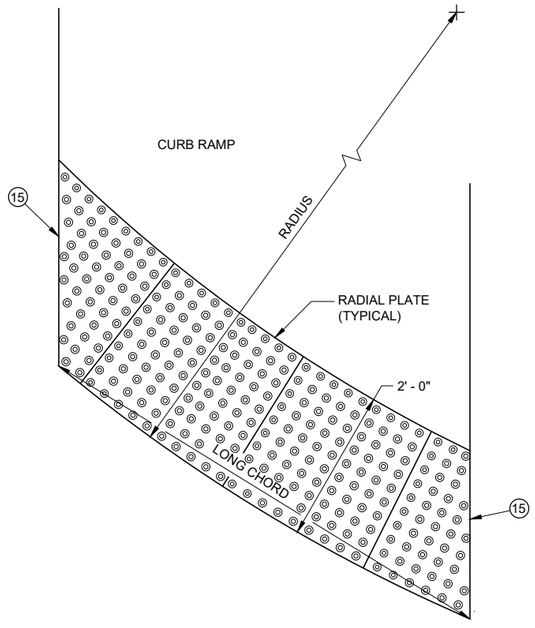
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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.

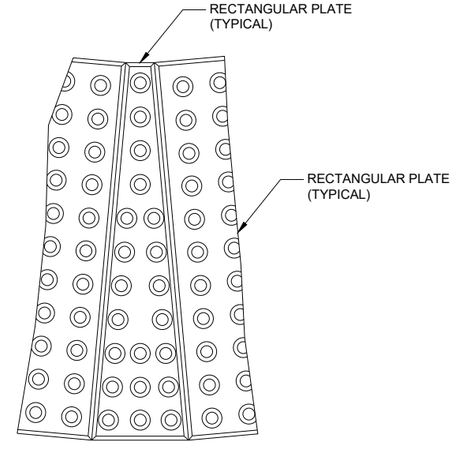
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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.



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
May 2019 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

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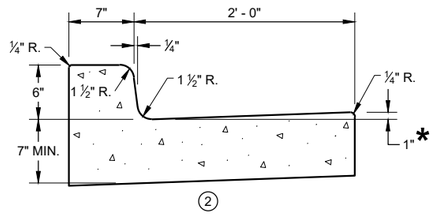
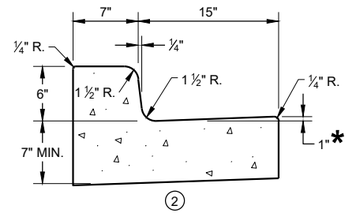
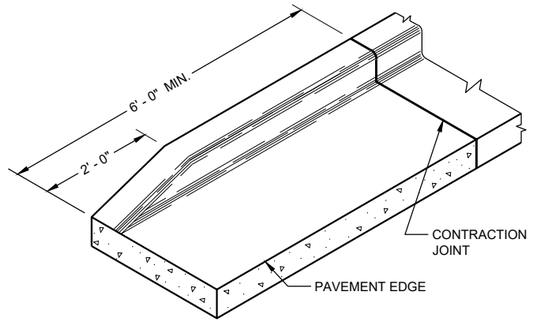


CONCRETE CURB AND GUTTER 31" ①

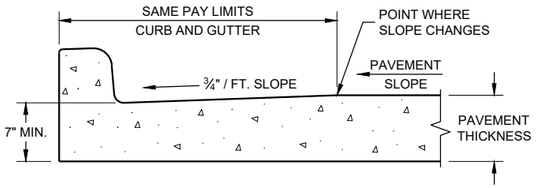
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



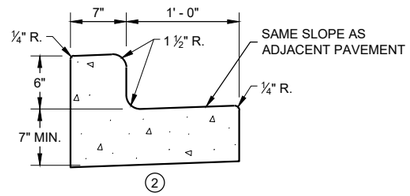
CONCRETE CURB AND GUTTER 22" ①



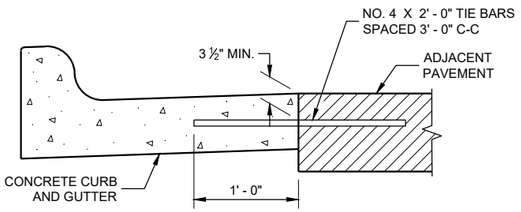
END SECTIONCURB AND GUTTER



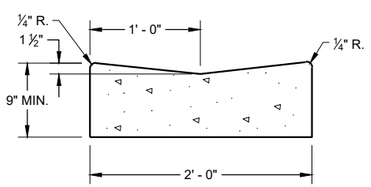
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



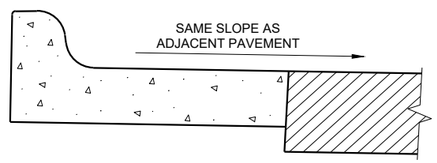
CONCRETE CURB AND GUTTER 19" ①



TYPICAL TIE BAR LOCATION ①



CONCRETE GUTTER 24" ①



HIGH SIDE SECTION ③

(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.

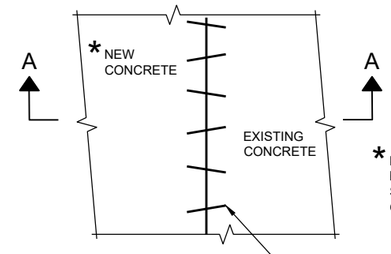
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

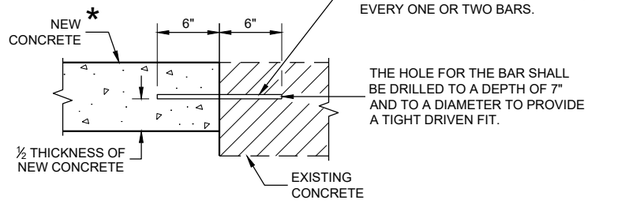
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



PLAN VIEW

* EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.



SECTION A - A

PAVEMENT TIES

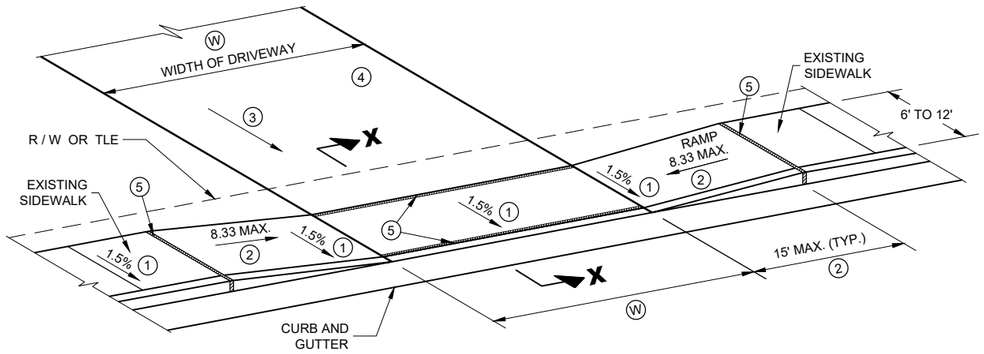
CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional use in Milwaukee Co. Only)

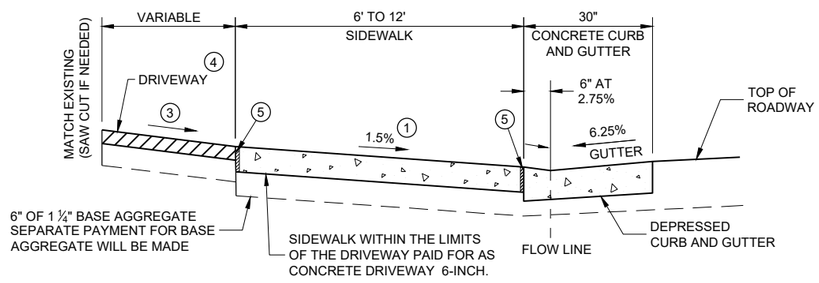
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

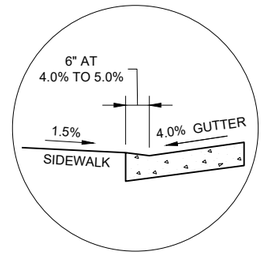
6
SDD 08D16 - 11



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



SECTION X - X



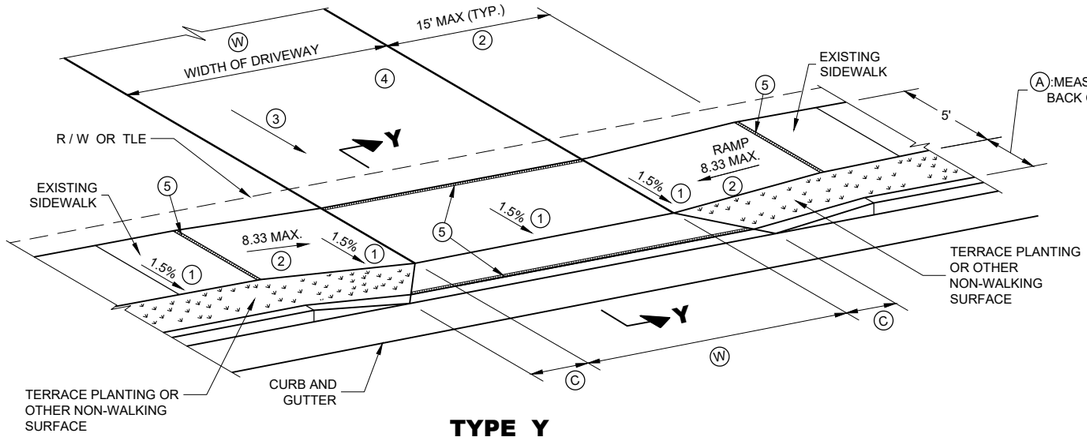
SECTION X - X
4% GUTTER SLOPE

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

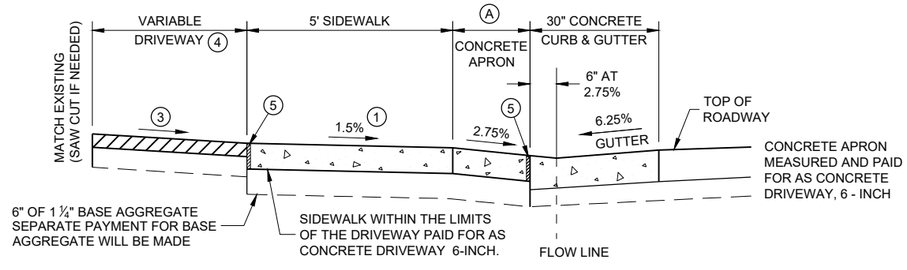
16' MIN. - 35' MAX. COMMERCIAL (CE)

TABLE Y

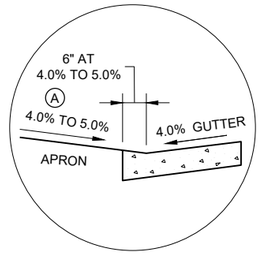
Ⓐ FEET	Ⓒ FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'



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



NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS



SECTION Y - Y
4% GUTTER SLOPE

SECTION Y - Y
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
February 2022
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

SDD 08D18 - 03

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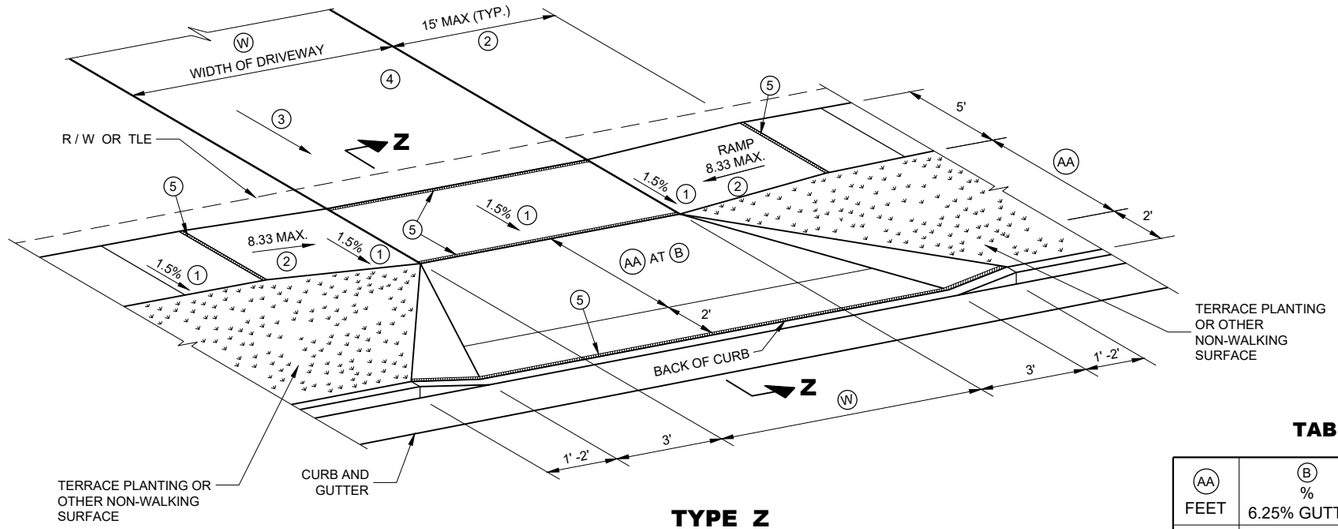


TYPE Z
SIDEWALK WITH WIDER TERRACE
TERRACE VARIES 7 TO 12 FEET

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.

(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.)

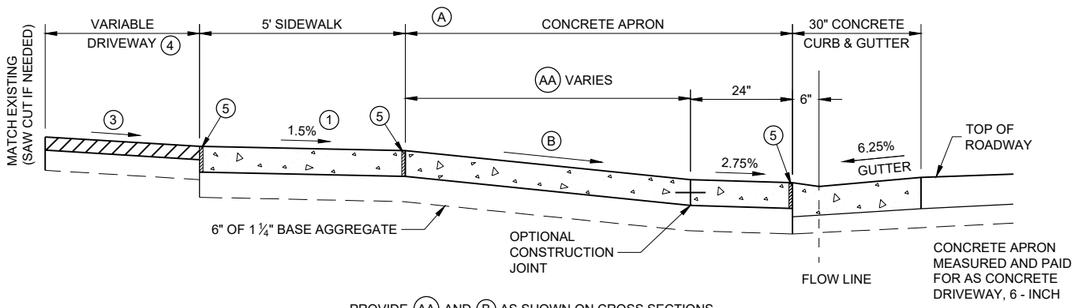
(5) ½" EXPANSION JOINT FILLER.

TABLE Z

(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

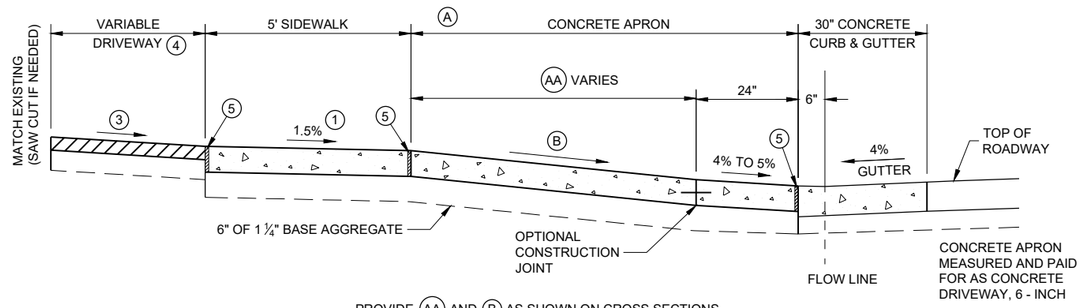
Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

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



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

6.25% GUTTER SLOPE



PROVIDE (AA) AND (B) AS SHOWN ON CROSS SECTIONS.

4% GUTTER SLOPE

NOTE: SIDEWALK MY BE DEPRESSED IN DRIVEWAY AREAS FOR (B) VALUES NOT SHOWN IN TABLE Z.

SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.

SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

SECTION Z - Z

DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER

(URBAN AND SUBURBAN)

DRIVEWAY AND SIDEWALK RAMPS TYPE Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 08D19 - 03

GENERAL NOTES

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

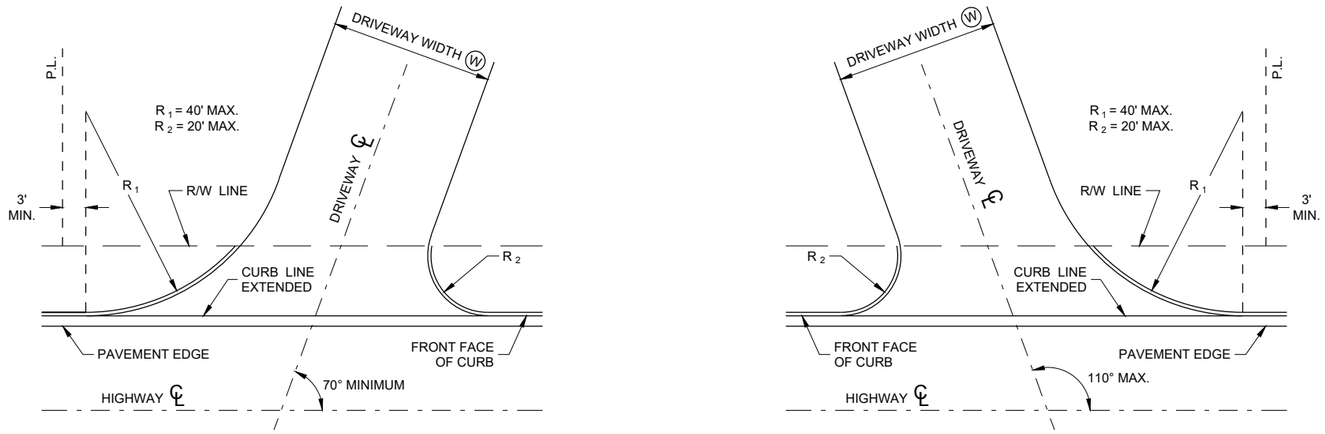
THE MINIMUM ANGLE OF INTERSECTION BETWEEN THE DRIVEWAY AND HIGHWAY CENTERLINES SHALL BE 70°.

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

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

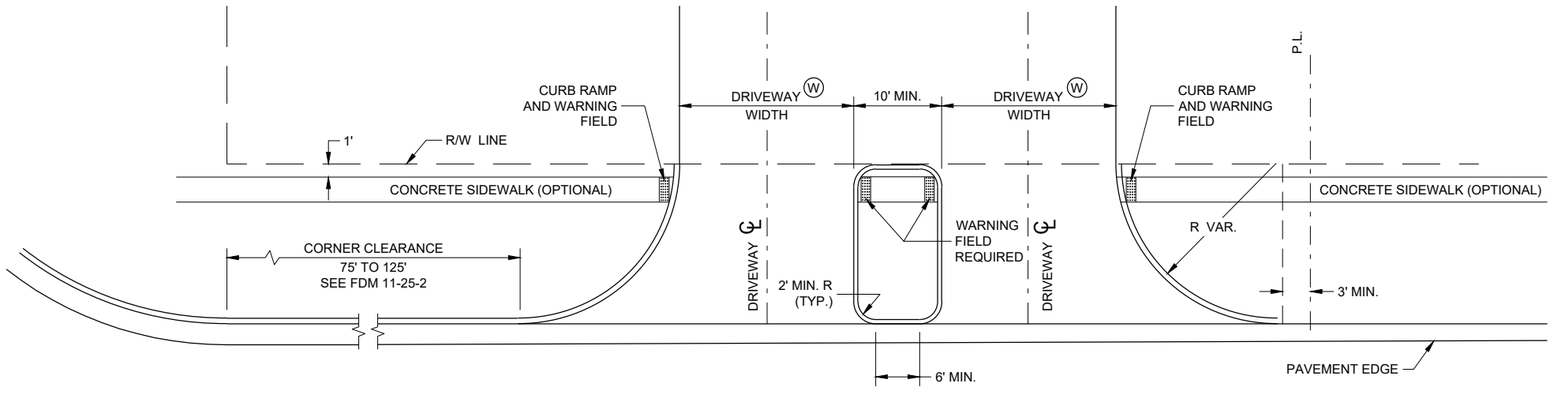
Ⓦ: 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)

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



SKEWED DRIVEWAY DETAILS (COMMERCIAL AND NON-COMMERCIAL)

SIDEWALK NOT SHOWN



DRIVEWAY LOCATION AND SPACING DETAILS

SIDEWALK SHOWN

DRIVEWAYS WITH CURB AND GUTTER RETURNS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

00-00-00 — DATE

/S/ <AUTHOR> — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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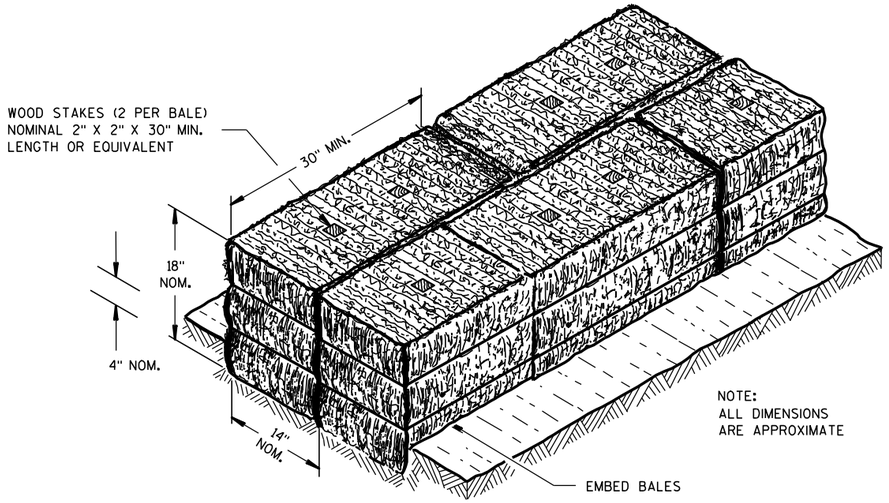
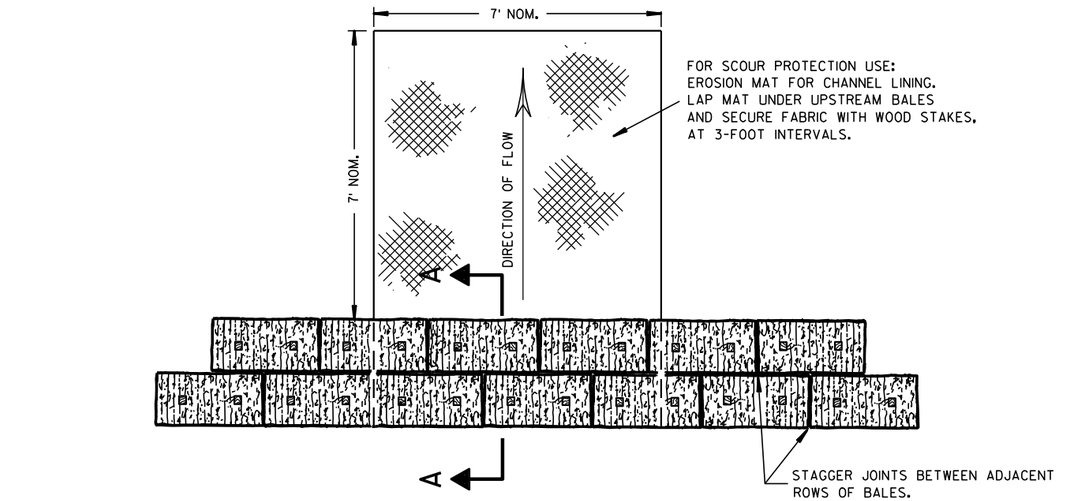
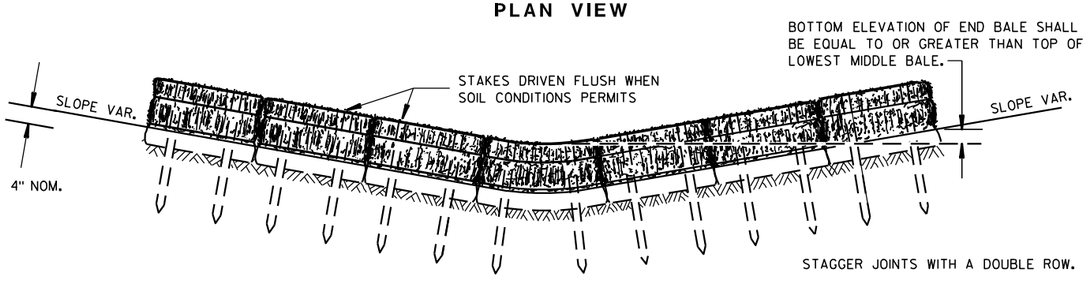
SDD 08D20 - 01



SECTION A-A



PLAN VIEW



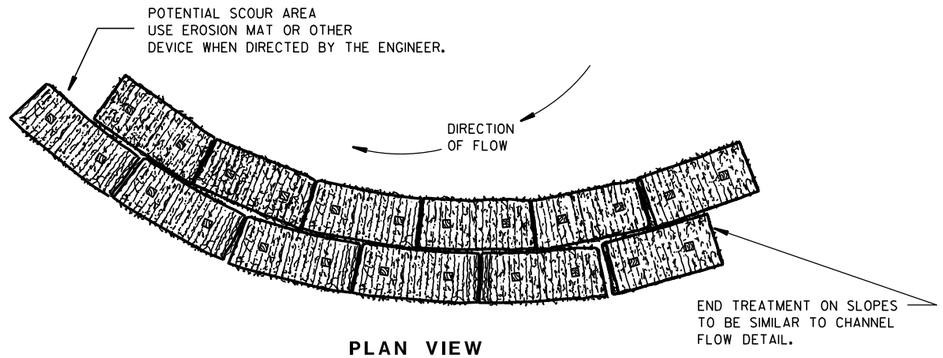
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

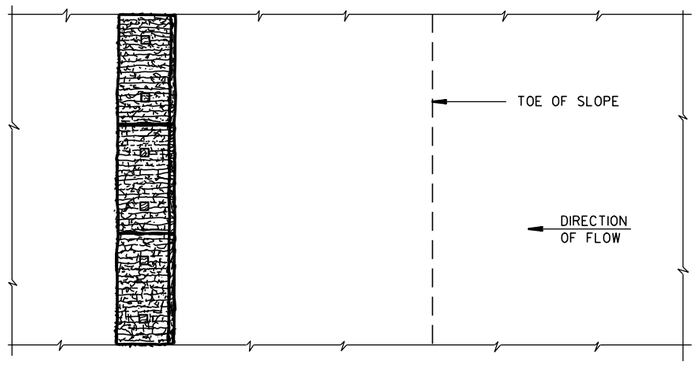
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

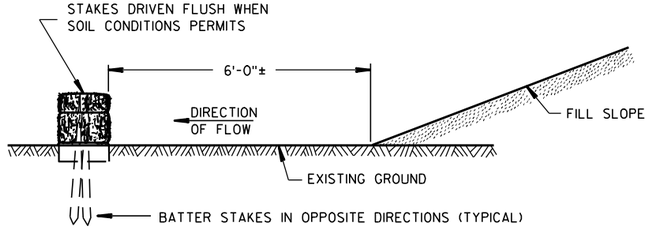


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

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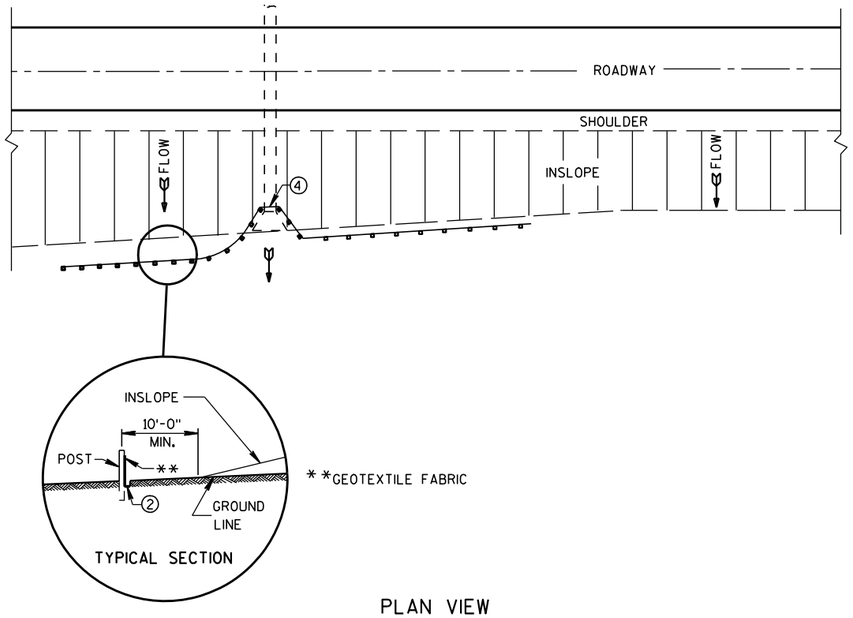
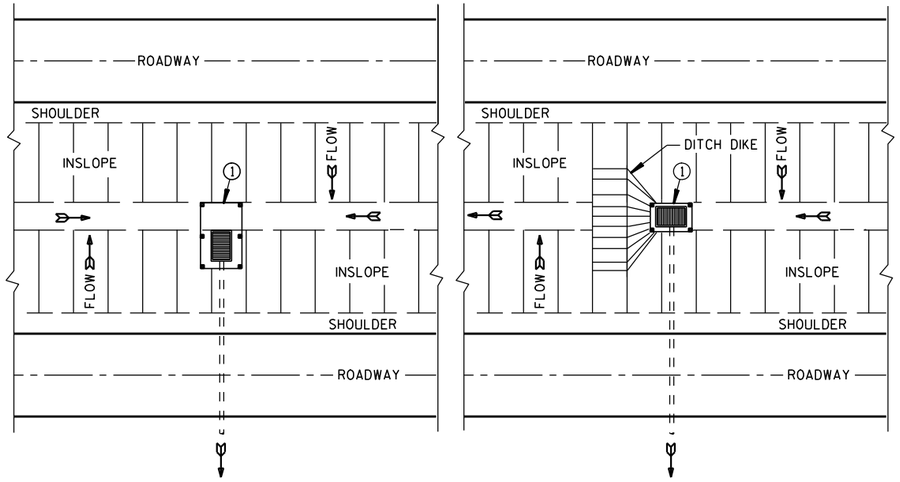
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

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

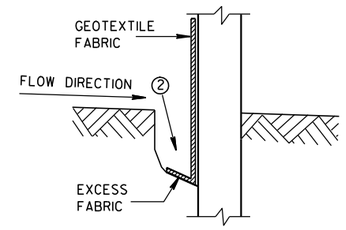
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.

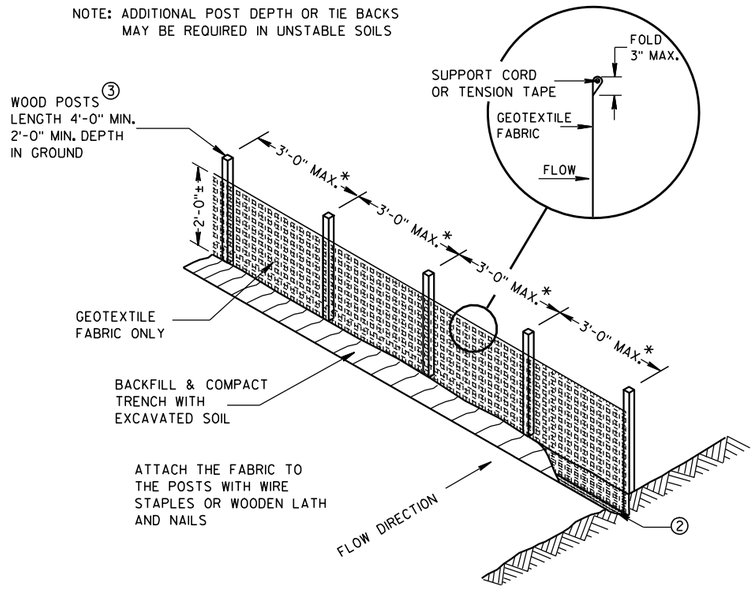
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

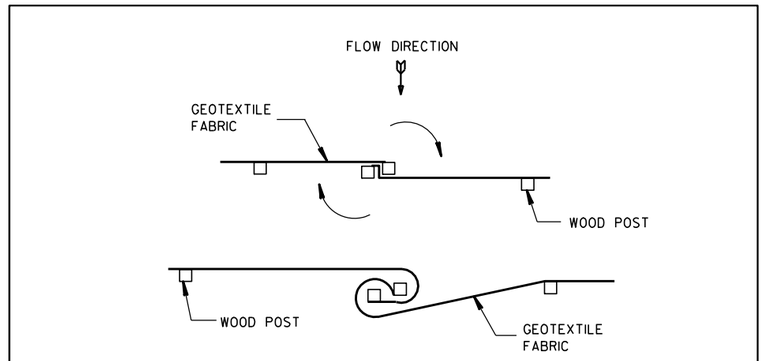
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



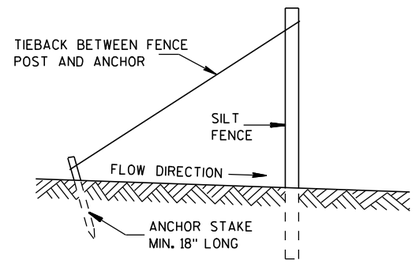
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE ⑤



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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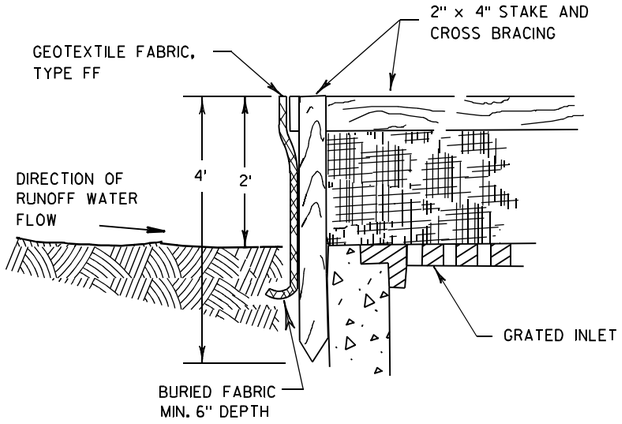
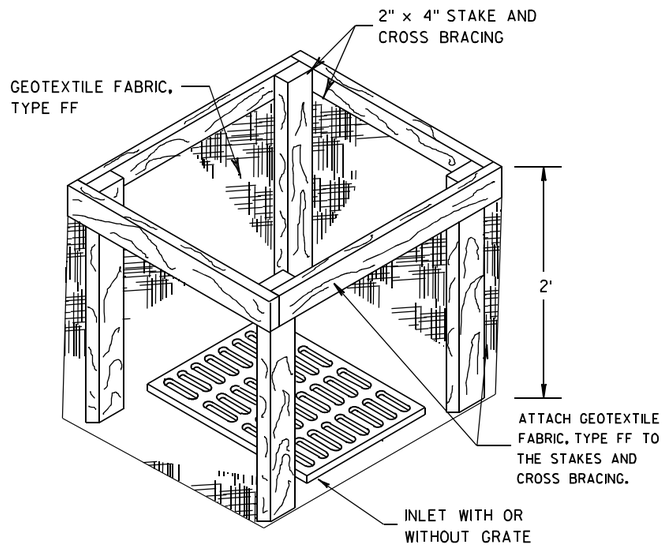
S.D.D. 8 E 9-6

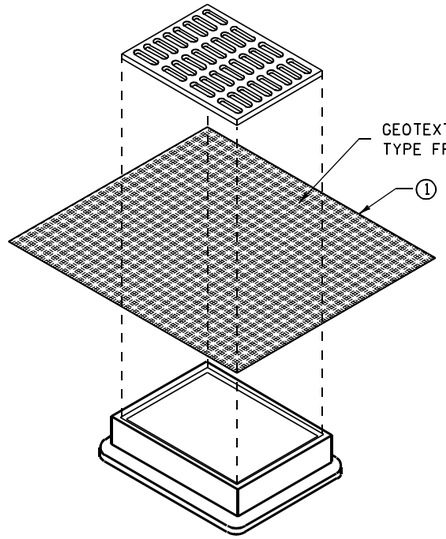
6

S.D.D. 8 E 9-6



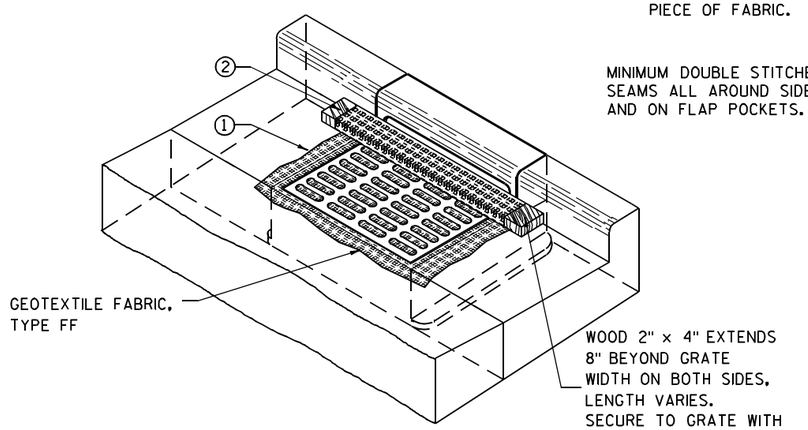


INLET PROTECTION, TYPE A

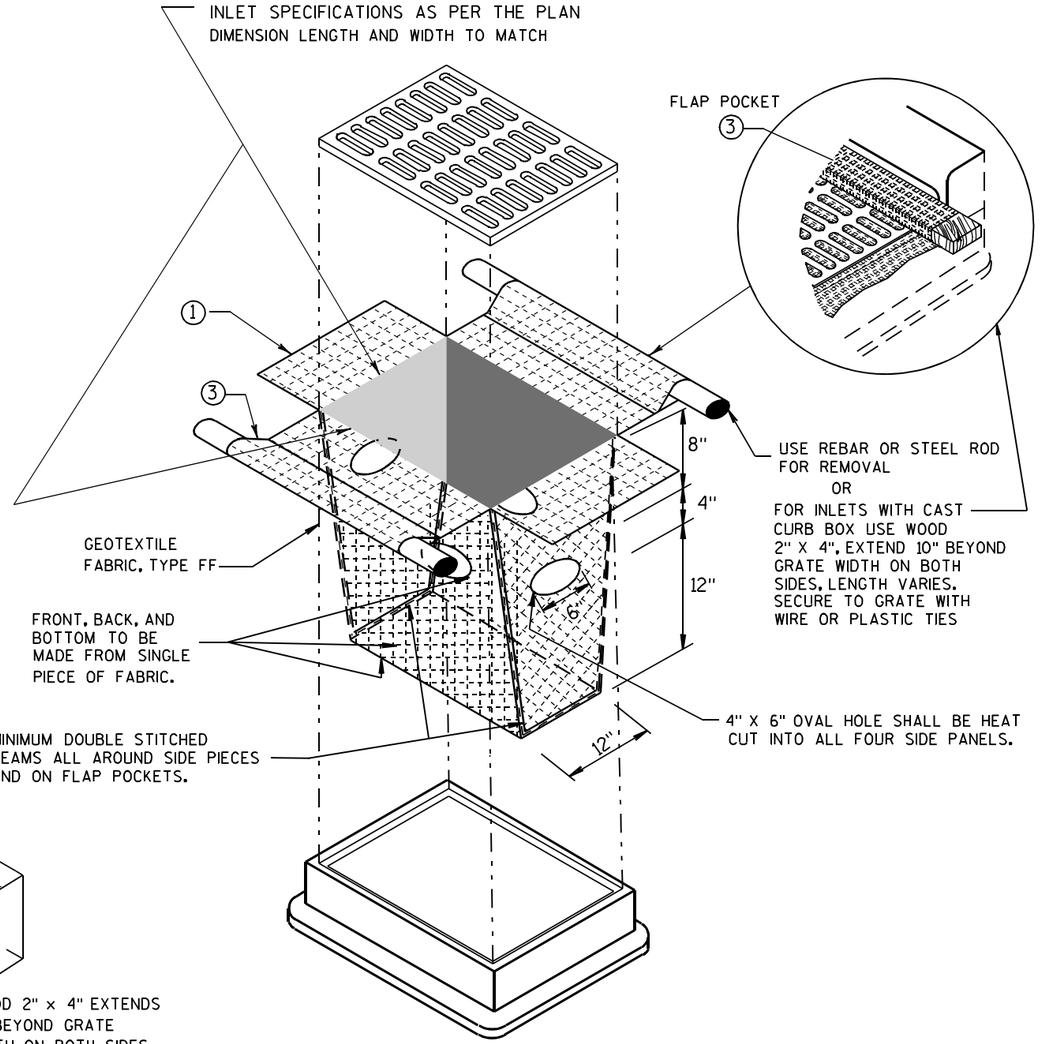


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

GENERAL NOTES

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

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

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

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

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

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

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02
DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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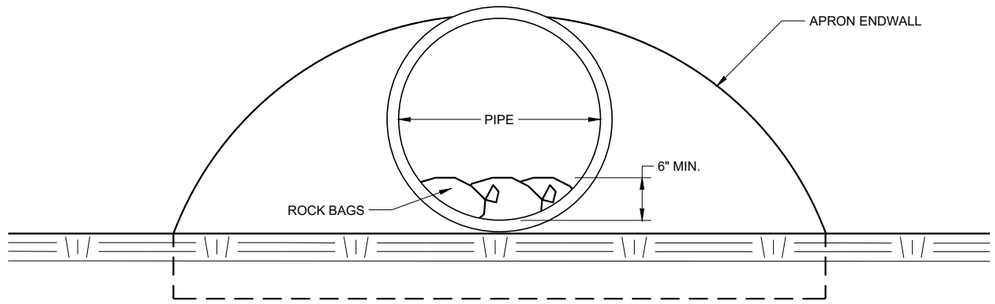
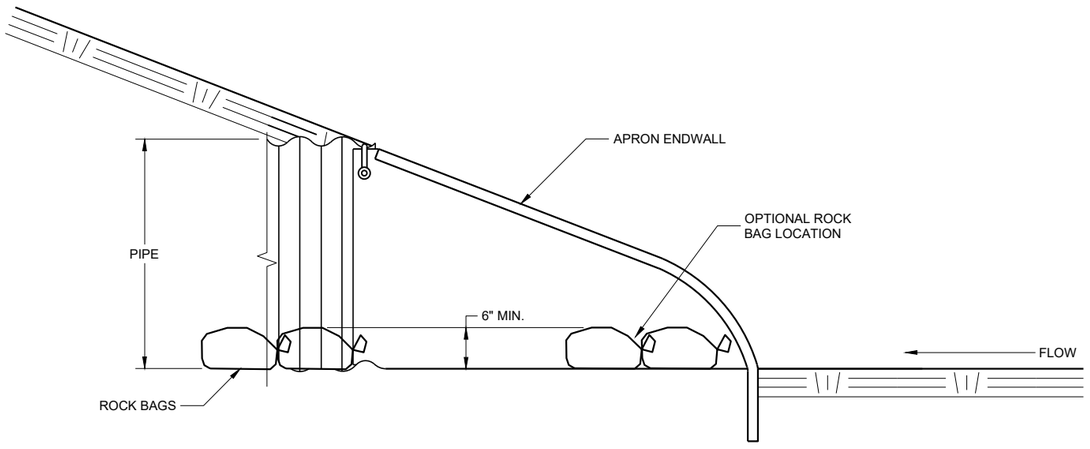
S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

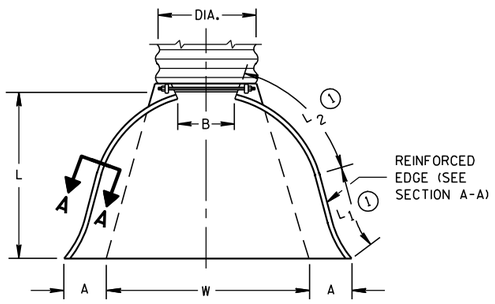
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

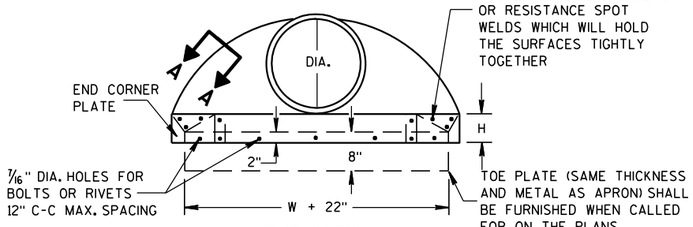
REINFORCED CONCRETE APRON ENDWALLS

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

*MINIMUM
**MAXIMUM



PLAN VIEW



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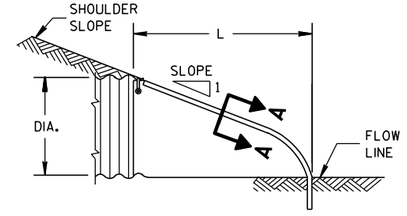
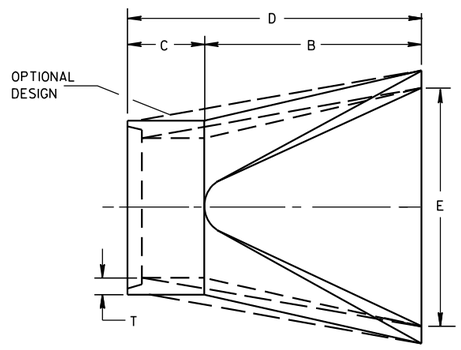
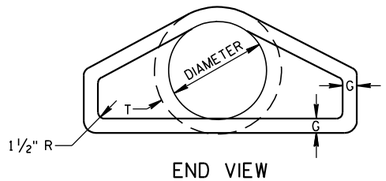


SIDE ELEVATION

METAL ENDWALLS



PLAN



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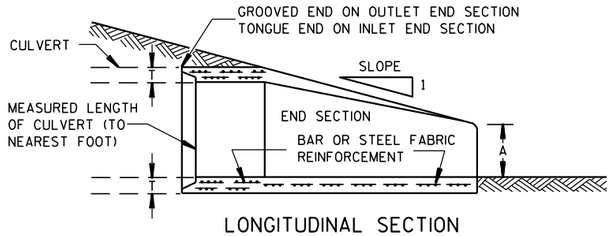
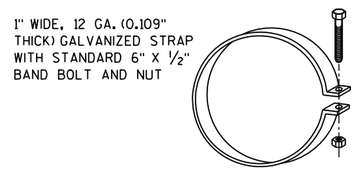


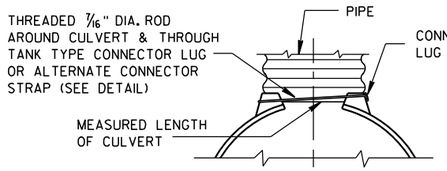
LONGITUDINAL SECTION

CONCRETE ENDWALLS

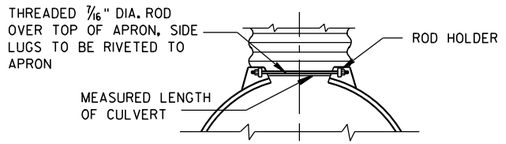


ALTERNATE FOR TYPE 1 CONNECTION

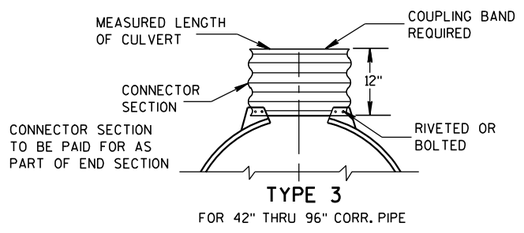
END SECTION CONNECTOR STRAP



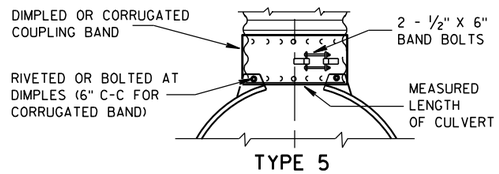
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

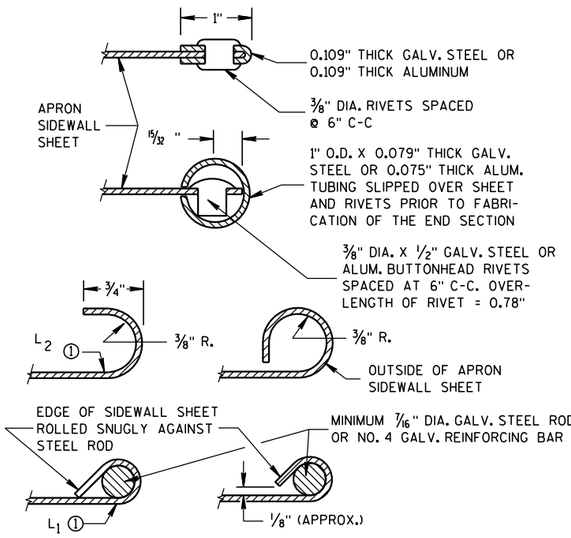
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

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

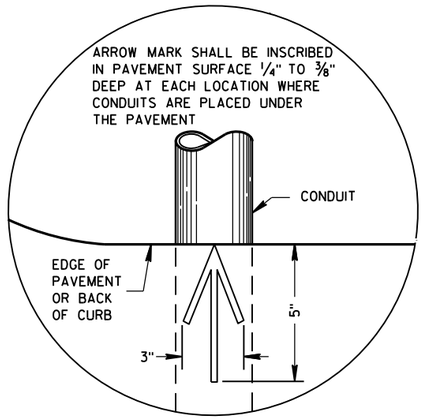
APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

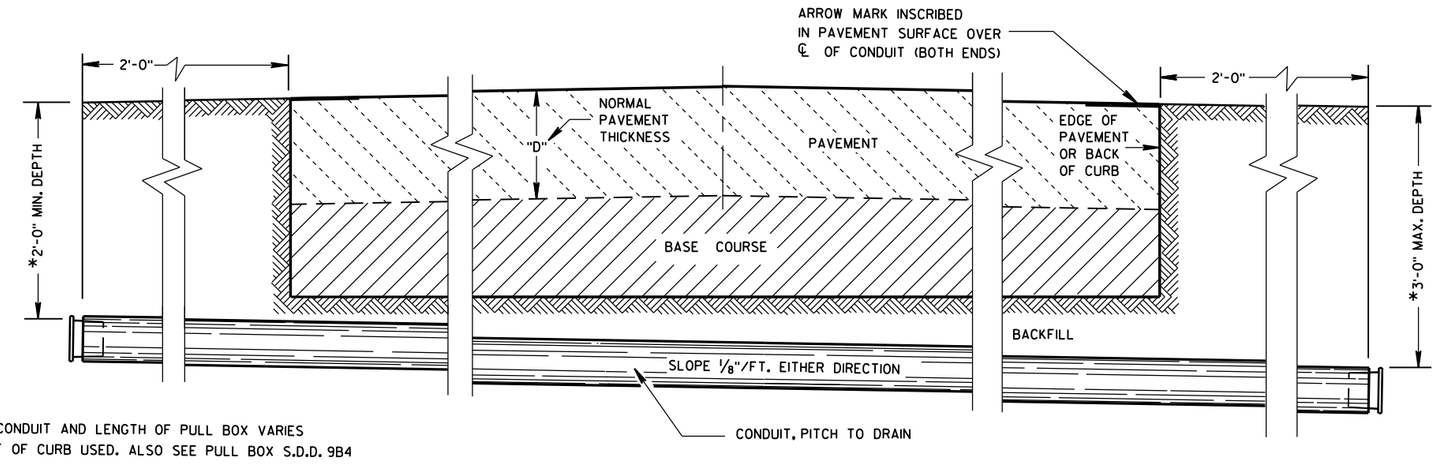
6

S.D.D. 8 F 1-11



PLAN VIEW

ARROW MARK



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

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

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

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

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

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

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

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

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

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

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

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

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

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

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

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

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

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

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

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

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

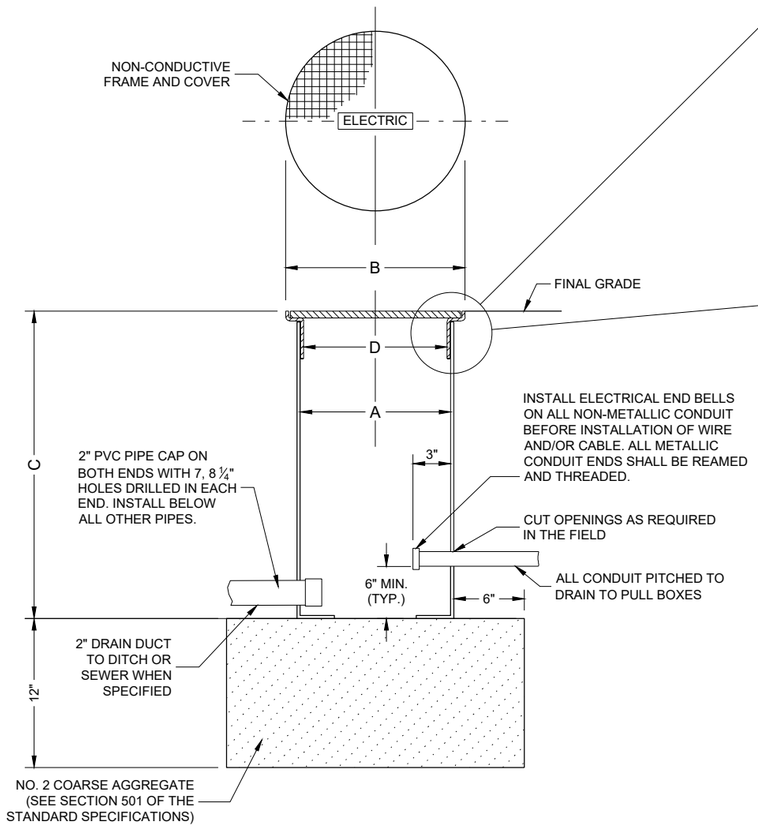
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

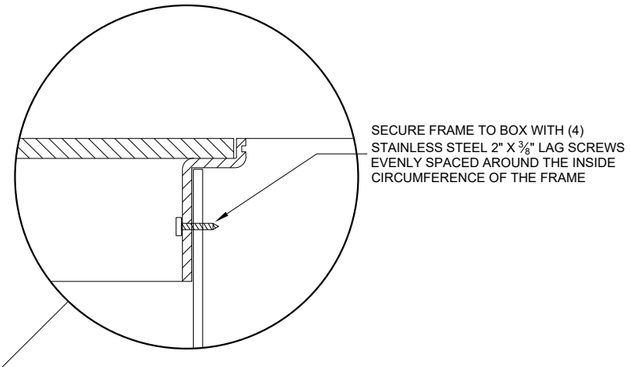
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

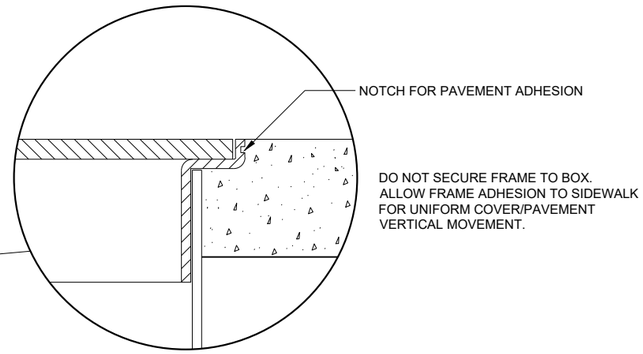
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



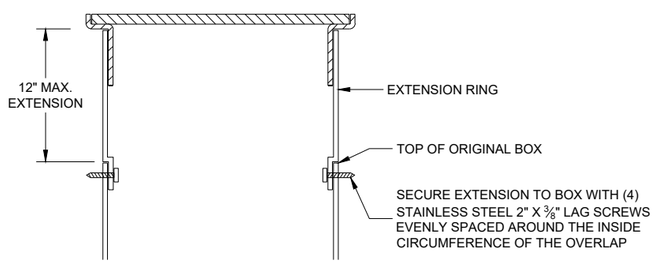
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

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

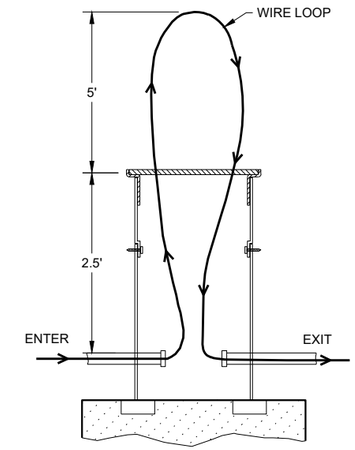
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

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

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

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

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

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SDD 09B16 - 02

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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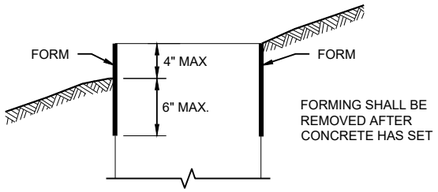
SDD 09B16 - 02

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.

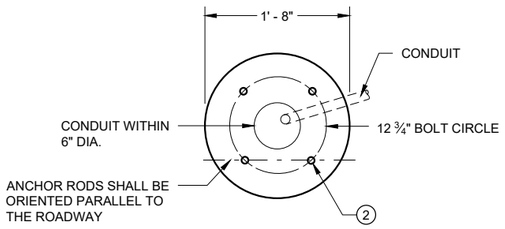
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

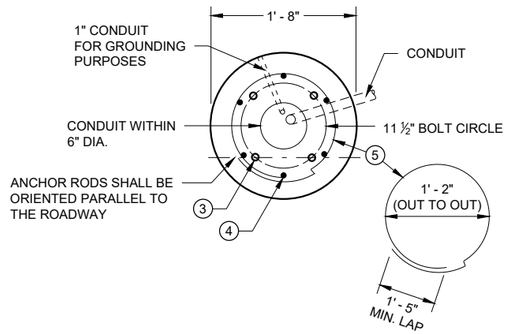
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

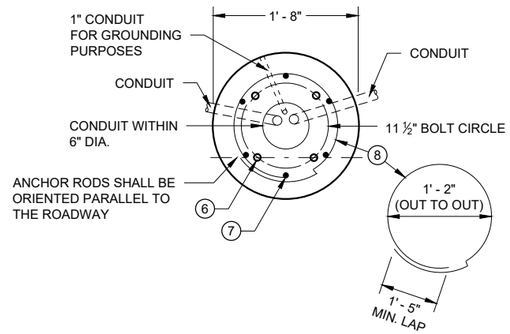
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

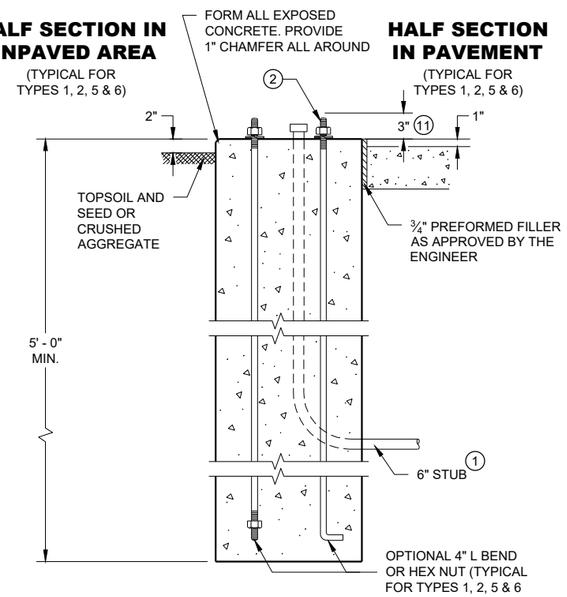
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

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.

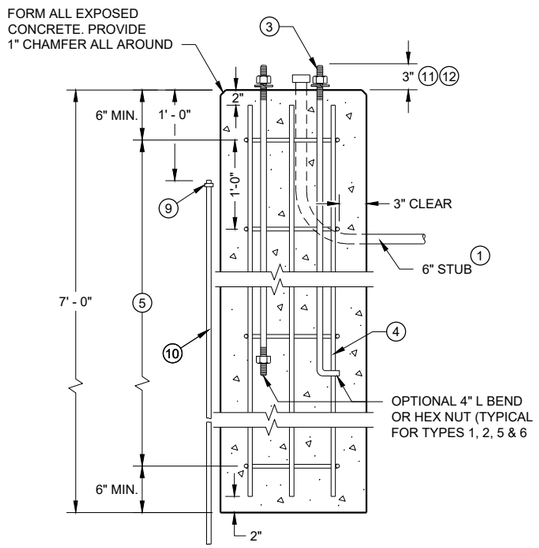
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

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

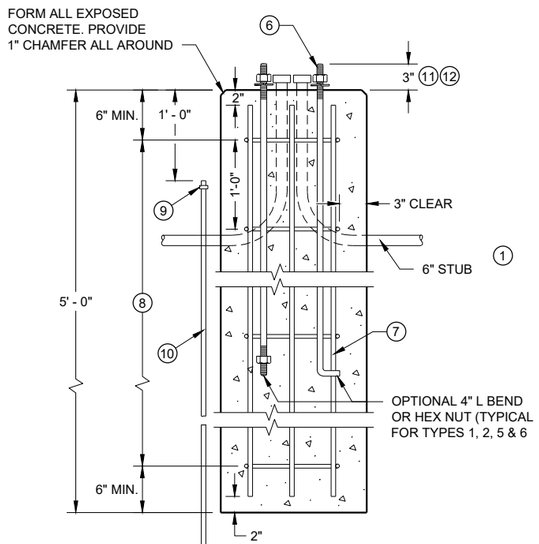
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



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

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SDD 09C02 - 09

GENERAL NOTES

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

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

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

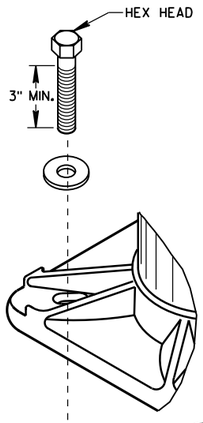
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

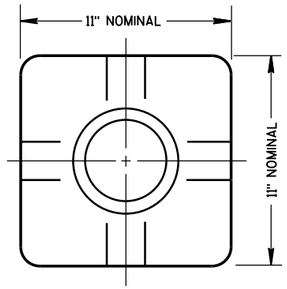
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

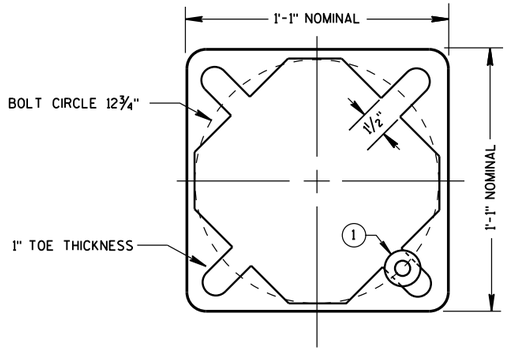
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

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

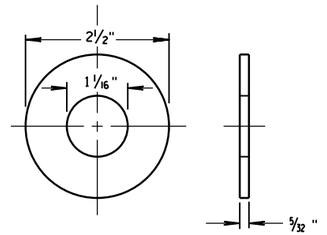




TOP VIEW
(PEDESTAL BASE)

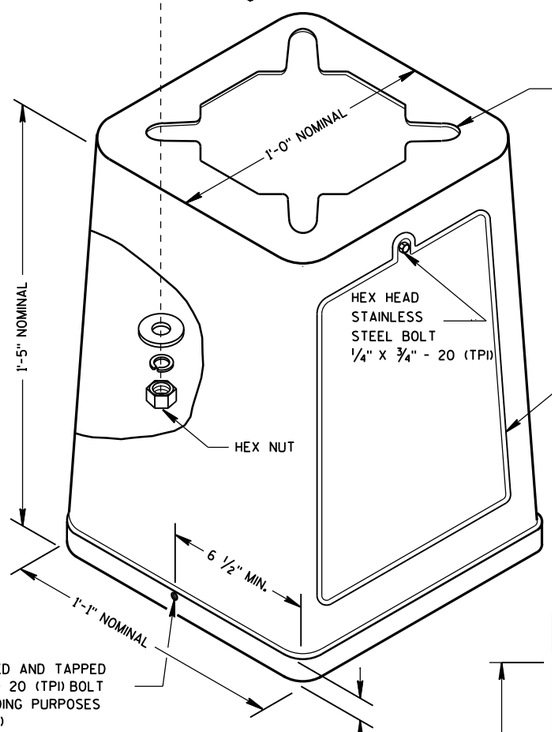


BOTTOM VIEW
(PEDESTAL BASE)

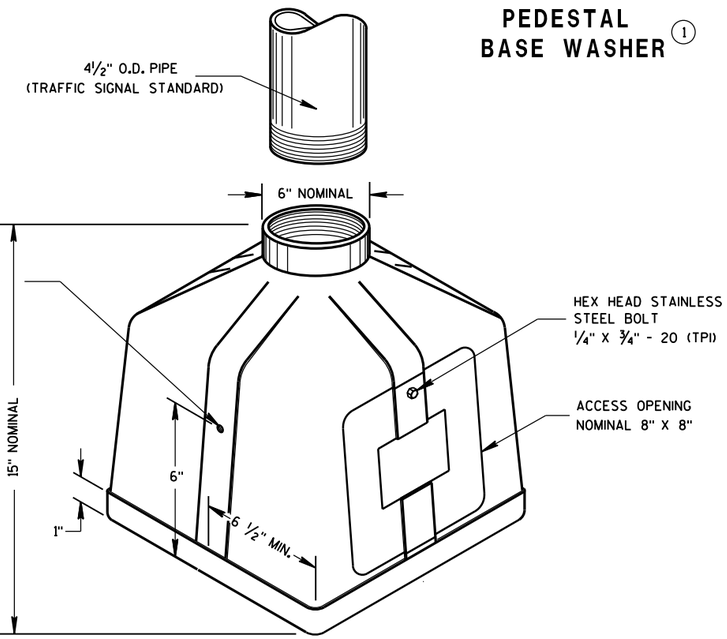


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

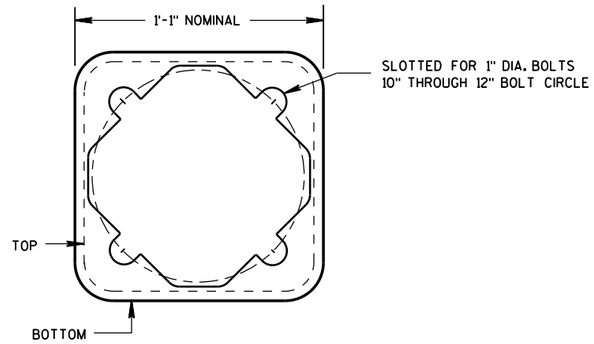


ISOMETRIC VIEW

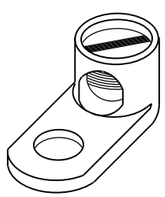


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

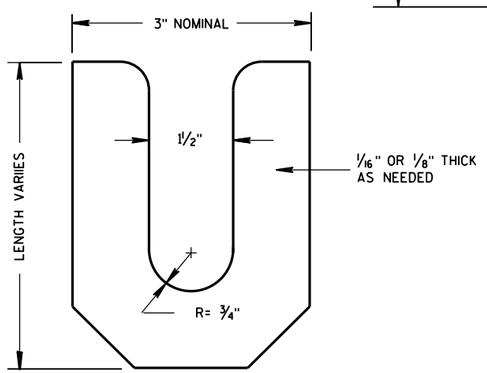


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

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



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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S.D.D. 9 C 3-4

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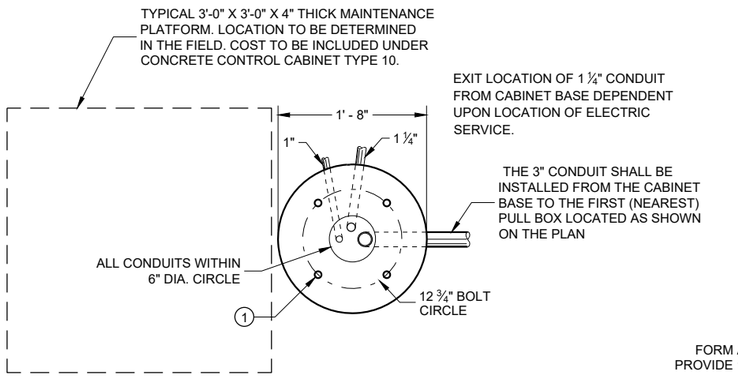
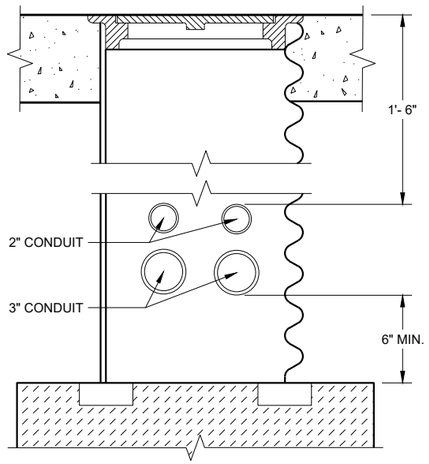
S.D.D. 9 C 3-4

CONTROL CABINET BASE TYPE	DIMENSIONS				CUBIC YARD CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65*

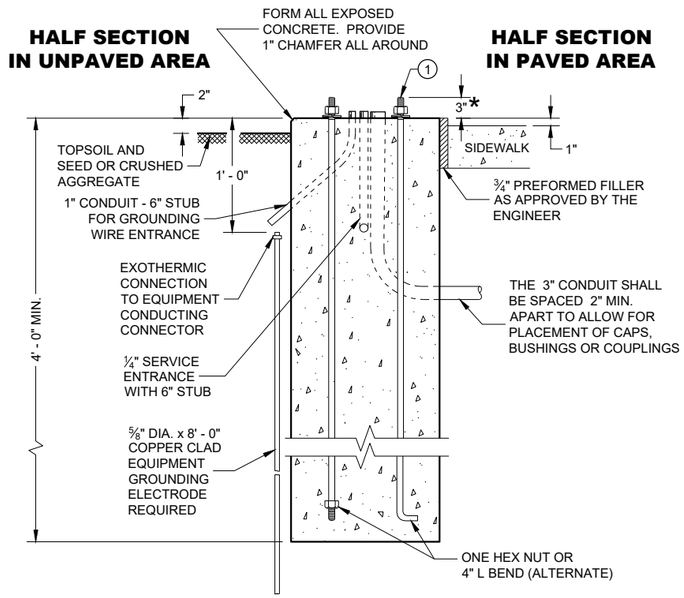
*INCLUDES MAINTENANCE PLATFORM.





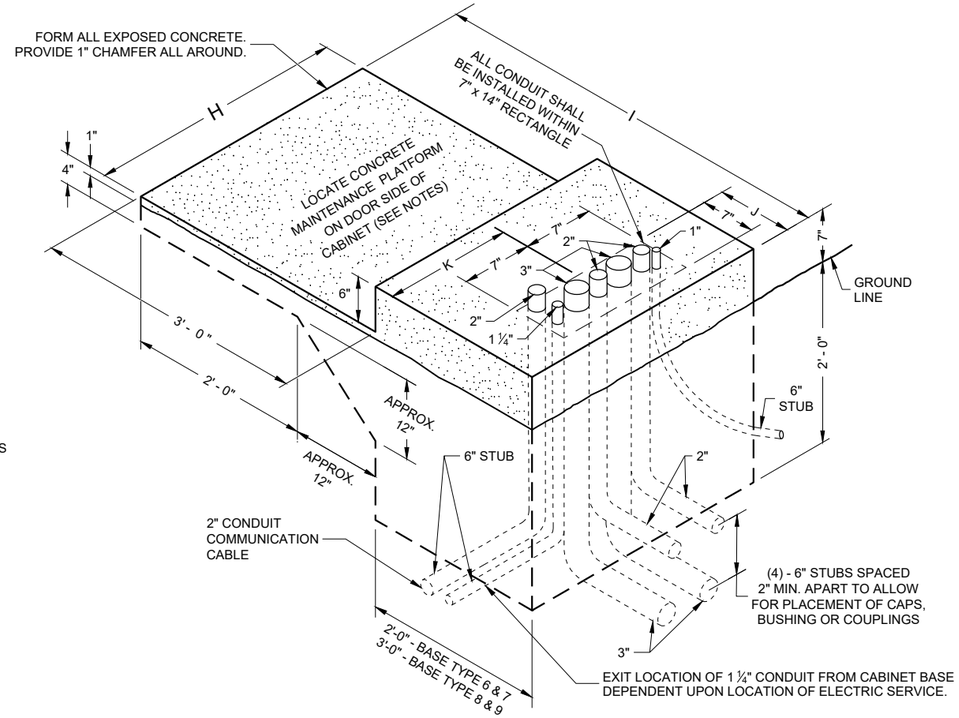
CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)



TYPE 10

*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.



ISOMETRIC VIEW
TYPE 6, 7, 8 AND 9

GENERAL NOTES

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

INSTALL FOUR (4) ½" INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH 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.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE 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.

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.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED 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 FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

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

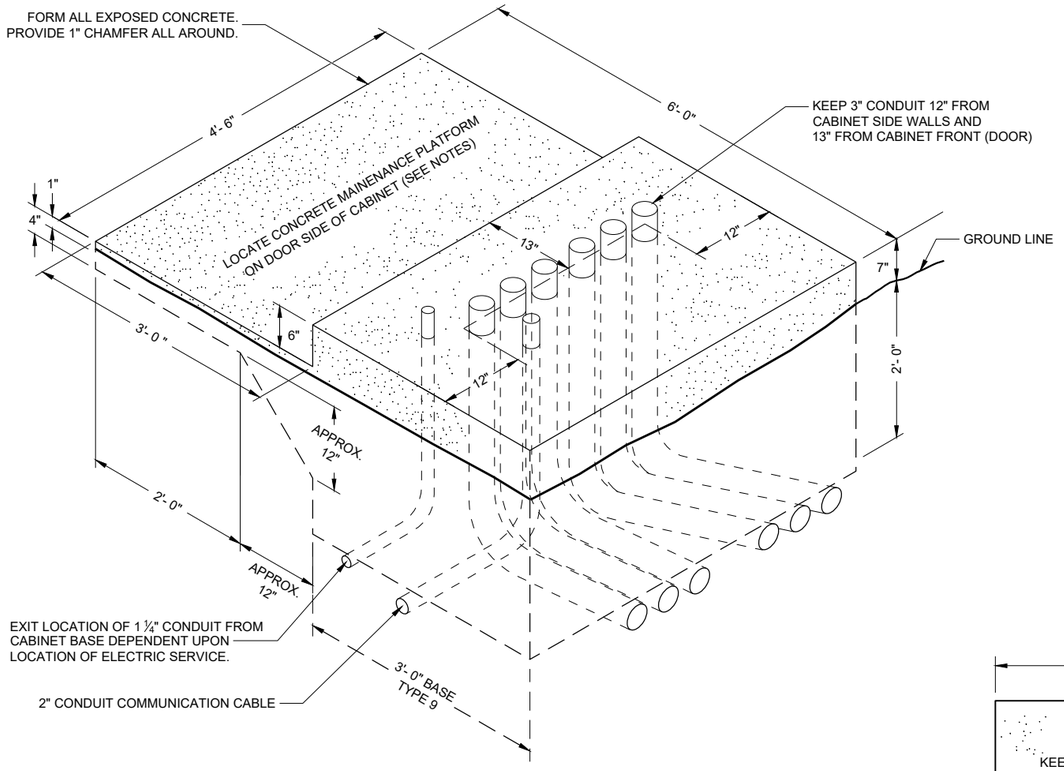
(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2 OF THE STANDARD SPECIFICATIONS.

CONCRETE CABINET CONTROL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2016
DATE
/S/ Ahmet Demerbilek
STATE ELECTRICAL ENGI 121
FHWA

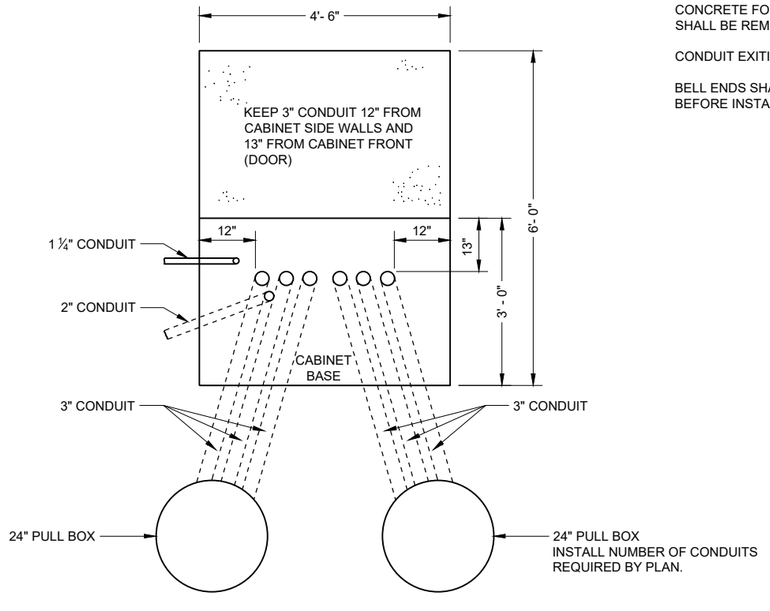
SDD 09C06 Concrete Control Cabinet Base, Type 9, Special



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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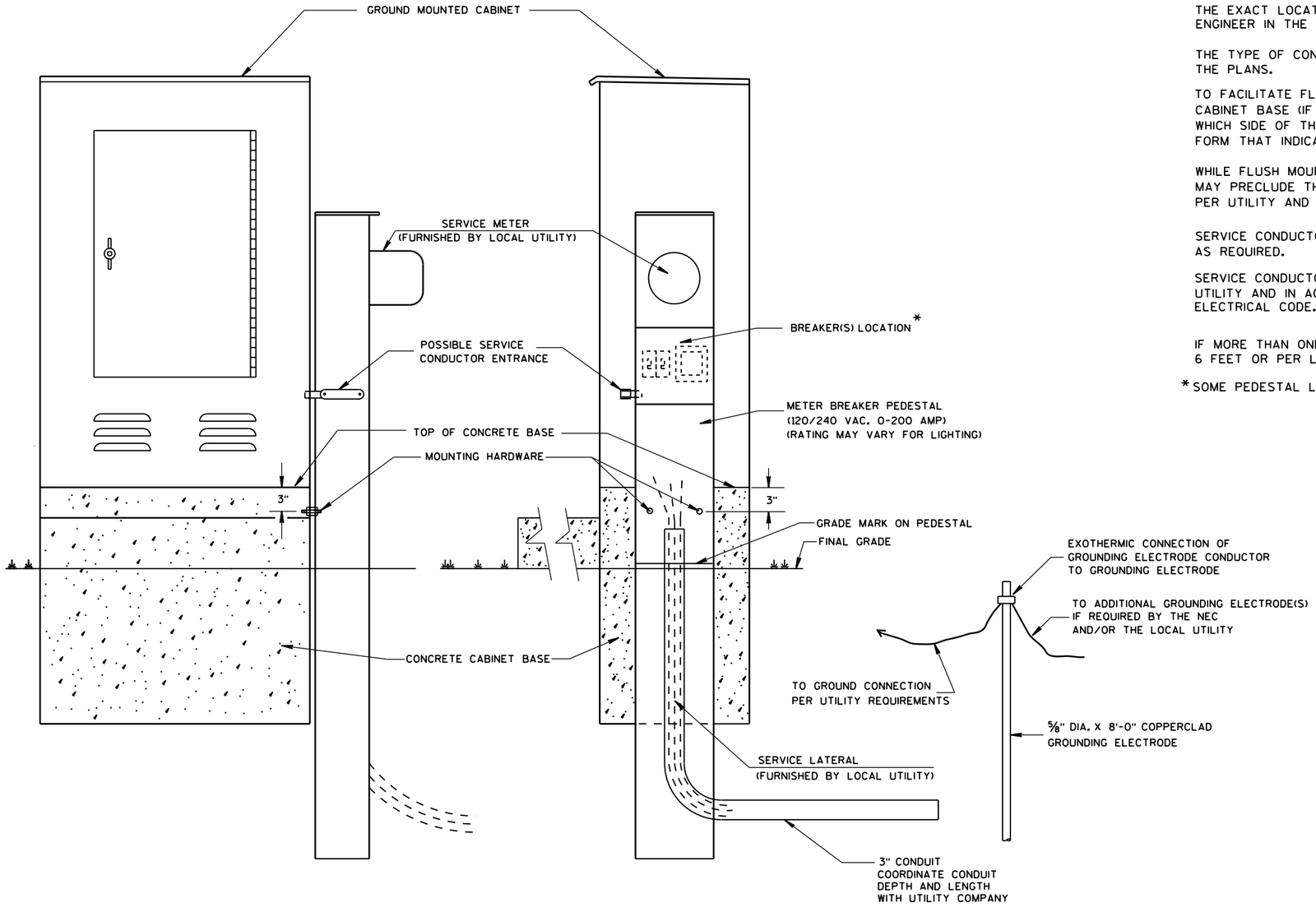
SDD 09C06 - 07



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

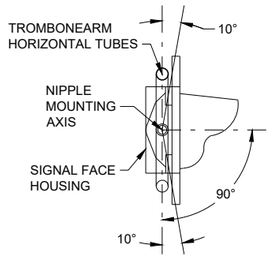
CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

FHWA

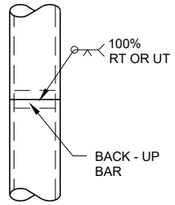


SECTION A-A

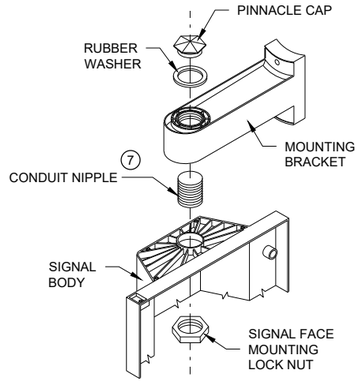
(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

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.



POLE SPLICE DETAIL



SIGNAL FACE MOUNTING DETAIL

(BANDED)

GENERAL NOTES

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

POLES SHALL BE EITHER ALUMINUM OR GALVANIZED STEEL AS CALLED FOR IN THE CONTRACT.

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.

TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

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

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

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

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

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

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

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

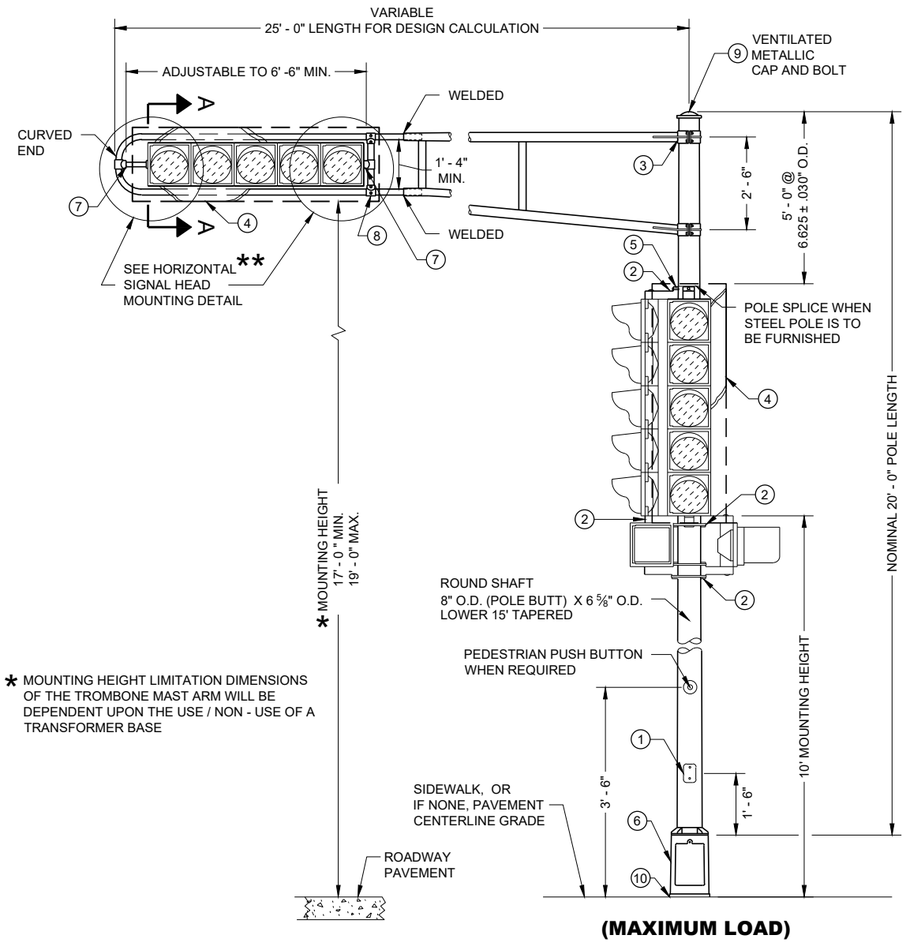
(7) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOTINTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE 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 STRUTIS 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.

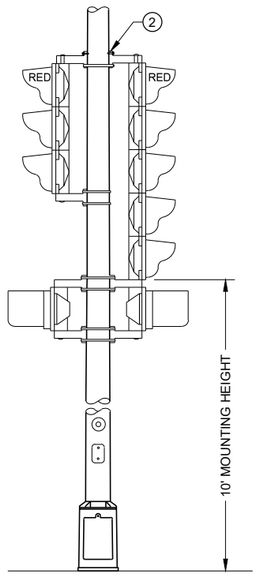
(10) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.

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

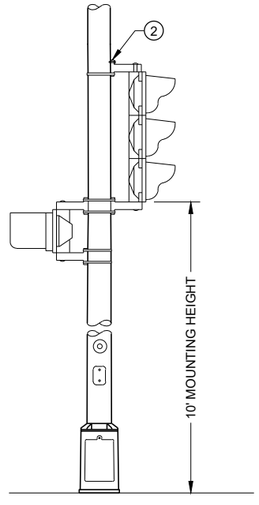


* MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE / NON - USE OF A TRANSFORMER BASE

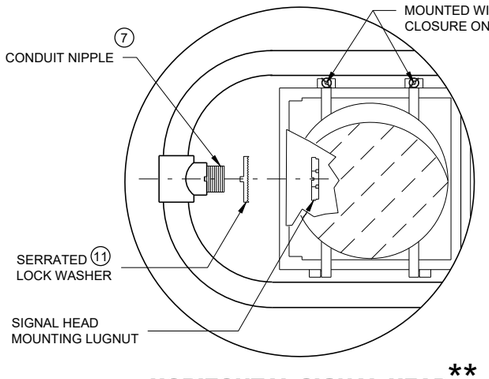
(MAXIMUM LOAD)



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 2 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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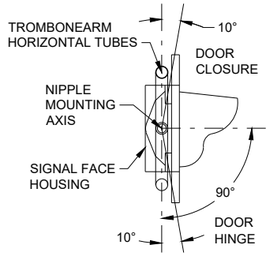
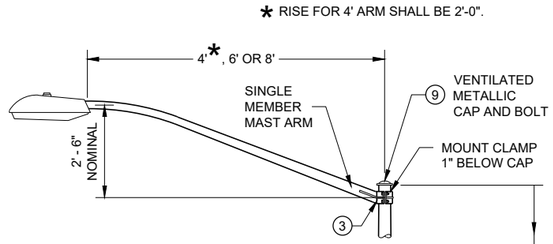
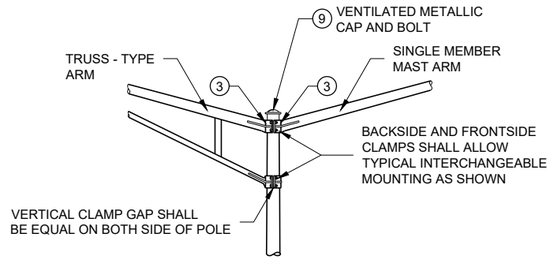
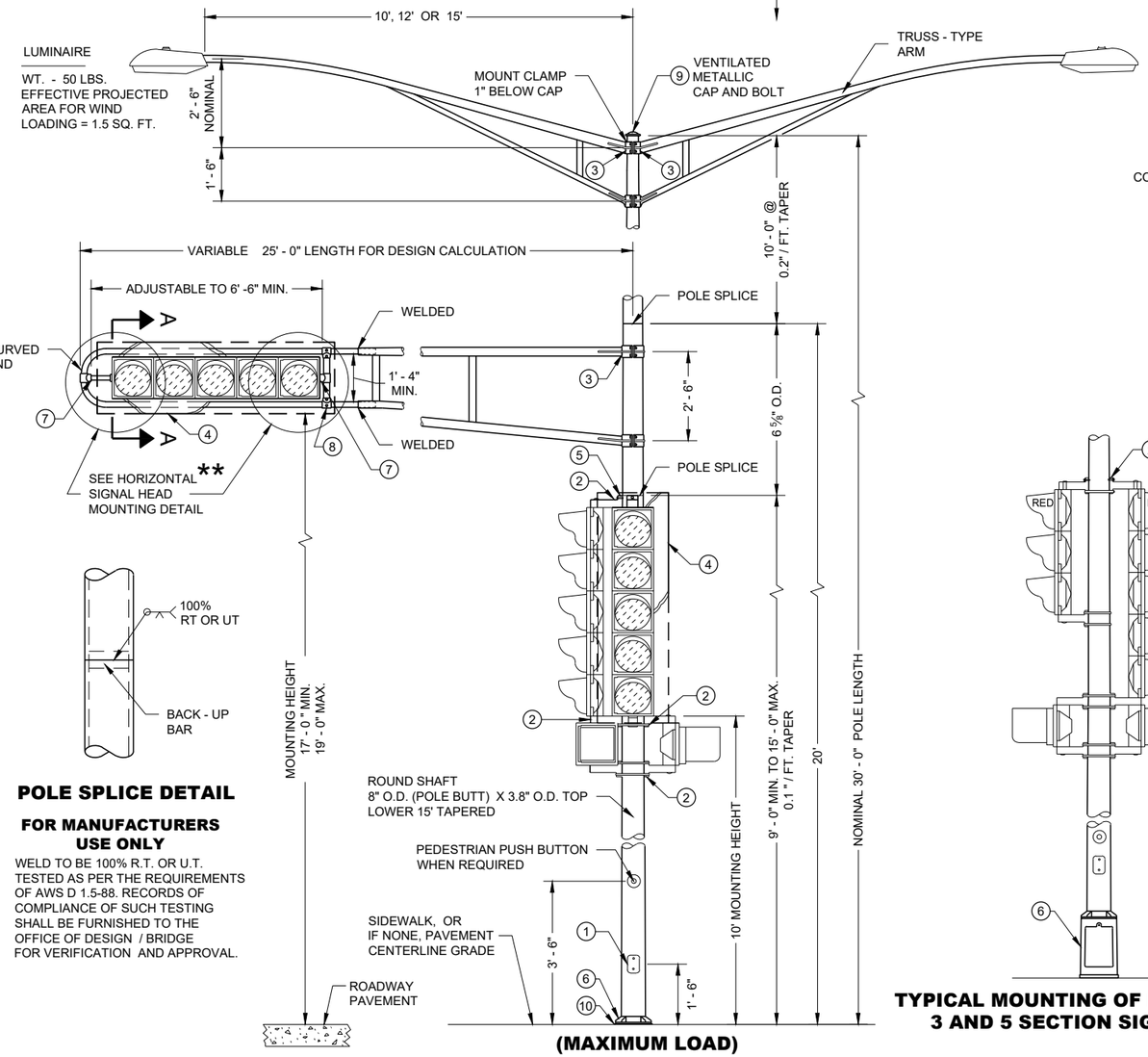


SECTION A-A

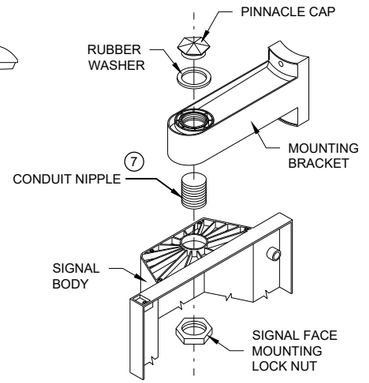




INTERCHANGEABLE MOUNTING DETAIL

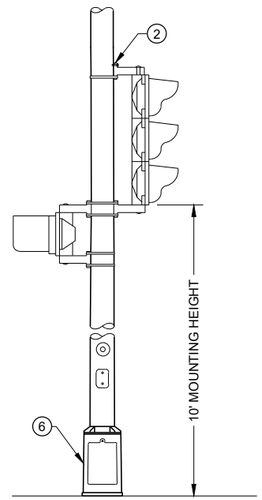


(MAXIMUM LOAD)

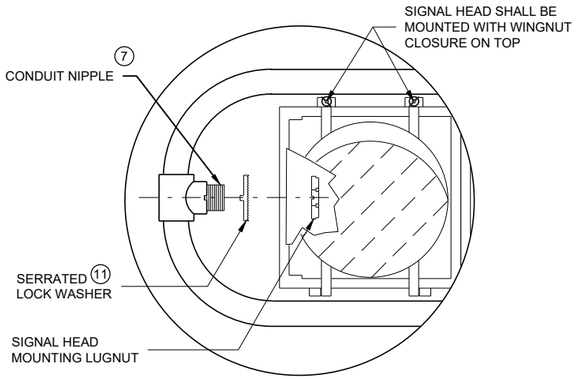


SIGNAL FACE MOUNTING DETAIL
(BANDED)

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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



HORIZONTAL SIGNAL HEAD ** MOUNTING DETAIL

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

POLE SPLICE DETAIL

FOR MANUFACTURERS USE ONLY

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

GENERAL NOTES

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

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

POLES SHALL BE GALVANIZED STEEL.

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

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

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

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

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

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

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

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

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

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

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

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

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

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

TYPE 3 POLE MOUNTING CONFIGURATION

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

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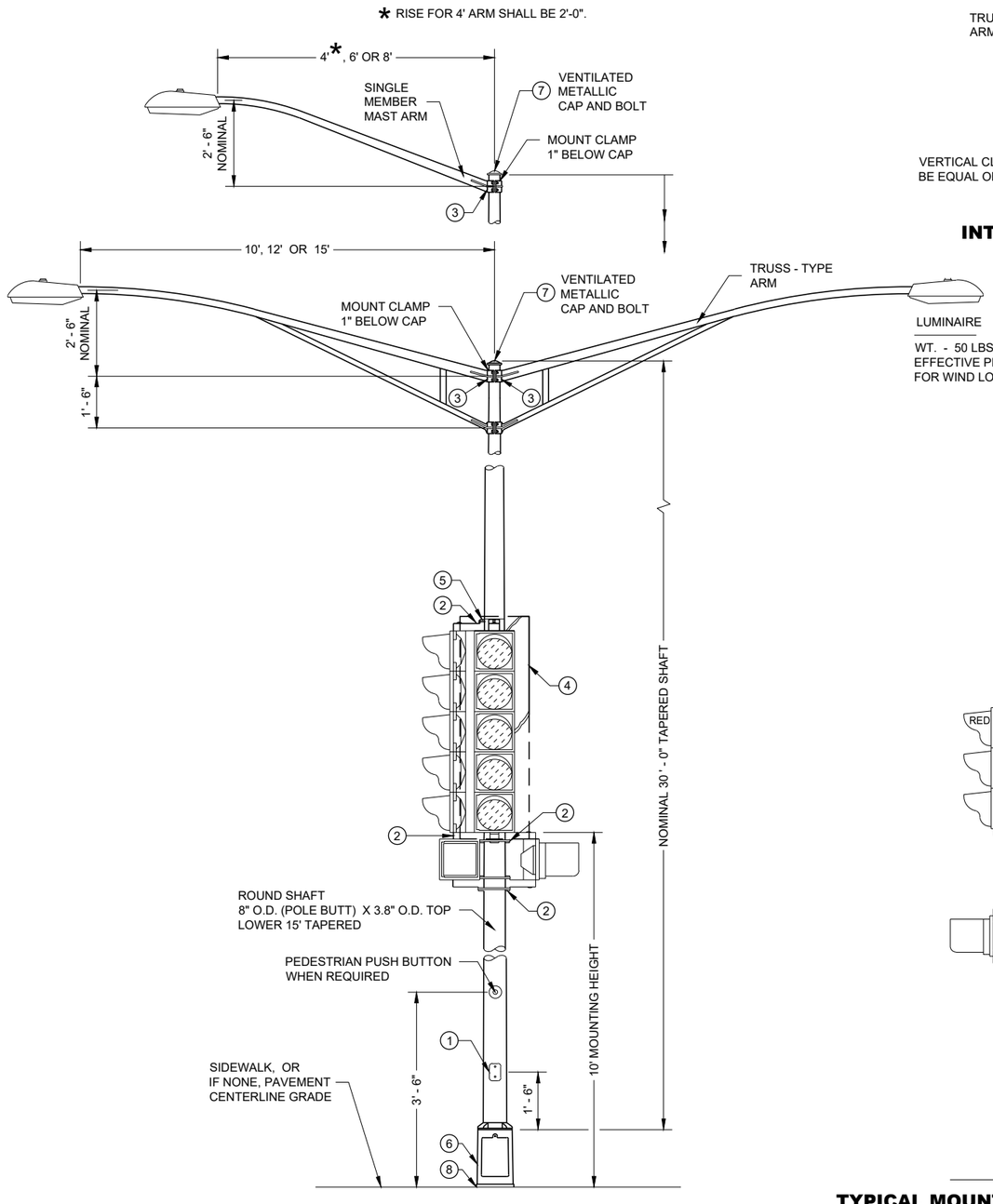
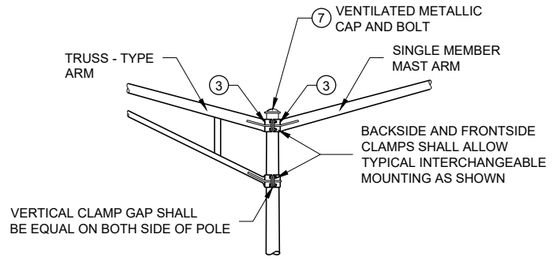


(MAXIMUM LOAD)



INTERCHANGEABLE MOUNTING DETAIL

GENERAL NOTES

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

ALL TYPE 4 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL WITH A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (.1196").

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

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

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

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

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

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

(3) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

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

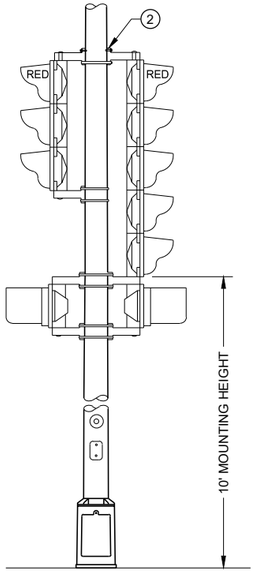
(5) POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACE.

(6) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

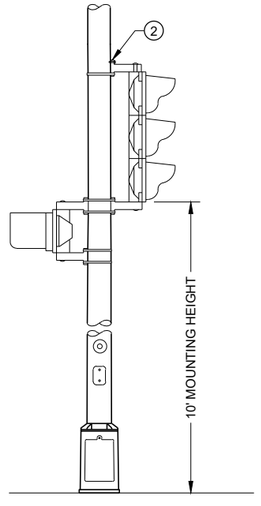
(7) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

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

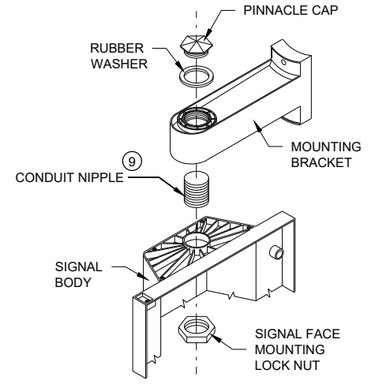
(9) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE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



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



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE



SIGNAL FACE MOUNTING DETAIL
(BANDED)

TYPE 4 POLE MOUNTING CONFIGURATION

POLE MOUNTINGS FOR TRAFFIC SIGNALS AND LIGHTING UNITS, TYPE 4

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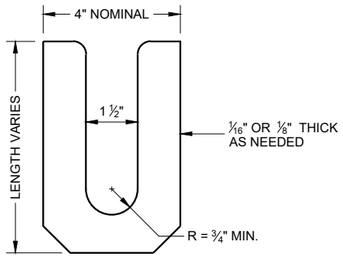
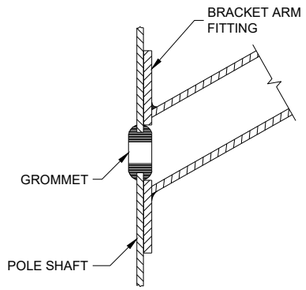
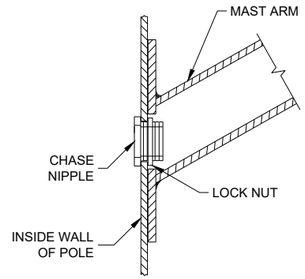


LEVELING SHIM (1)
SHALL BE ALUMINUM



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.

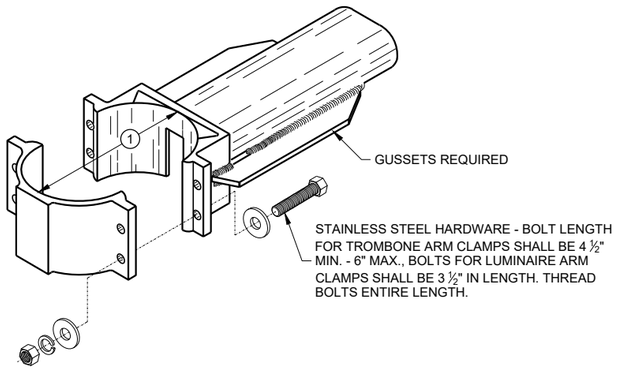
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

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

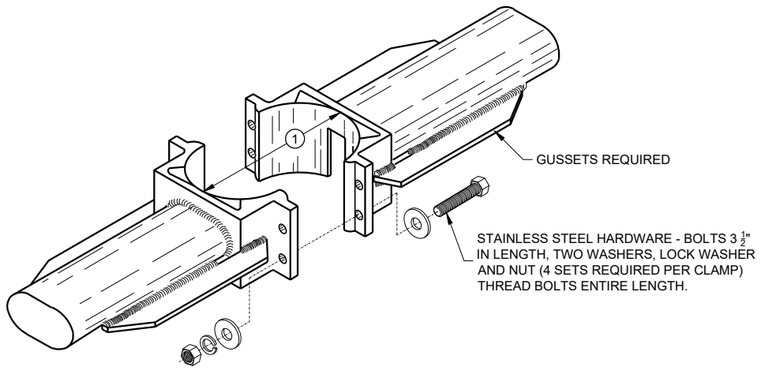
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(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.

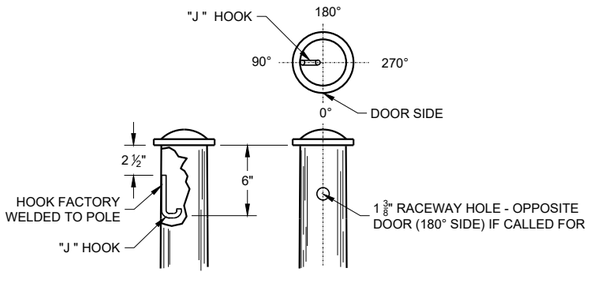
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



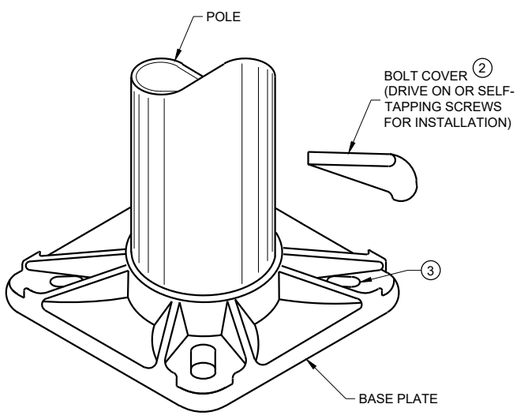
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



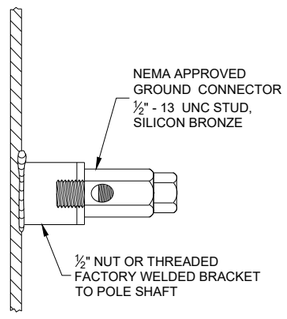
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

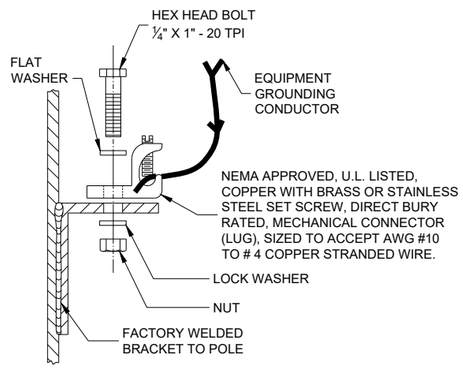


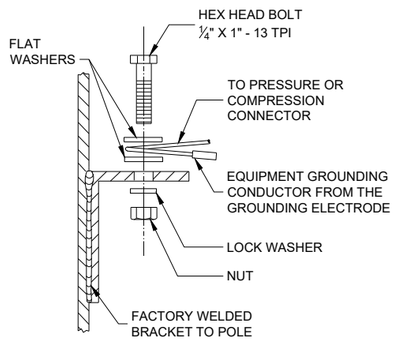
TYPICAL "J" HOOK LOCATION



BASE PLATE







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

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

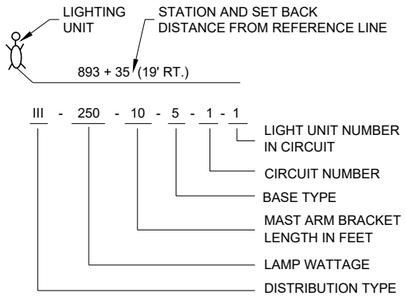
FHWA

GENERAL NOTES

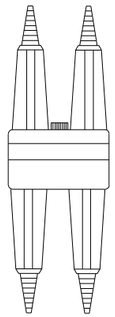
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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.

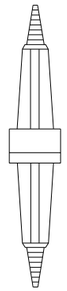
WHEN TRANSFORMER BASES ARE USED, ALL WIRING CONNECTIONS SHALL OCCUR WITHIN THE TRANSFORMER BASES.



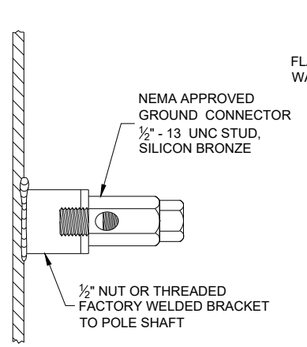
LIGHTING UNIT CODE
(TYPICAL)



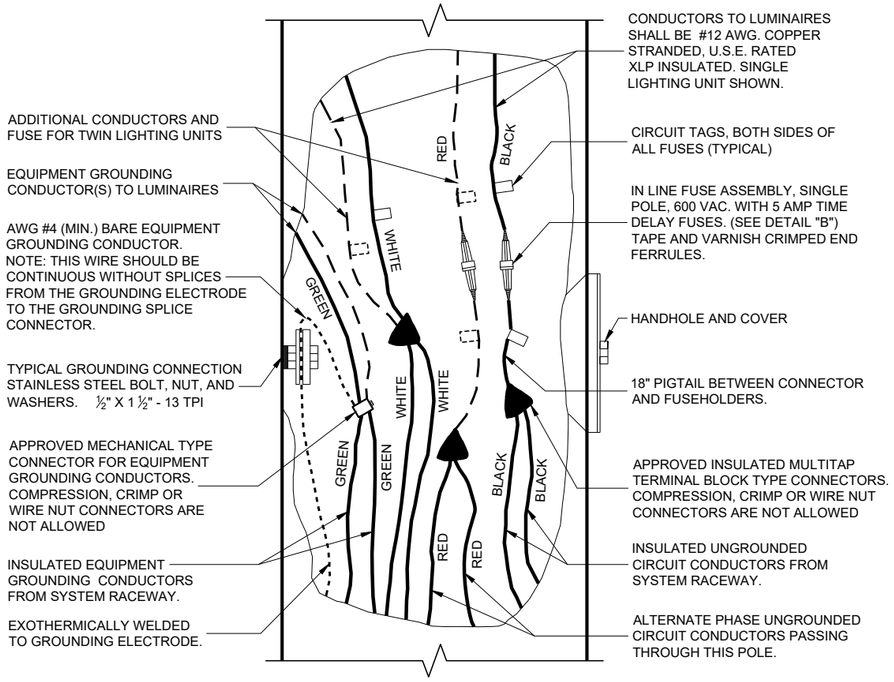
DETAIL "A"
BREAKAWAY DOUBLE POLE WITH WATERPROOF INSULATING BOOT



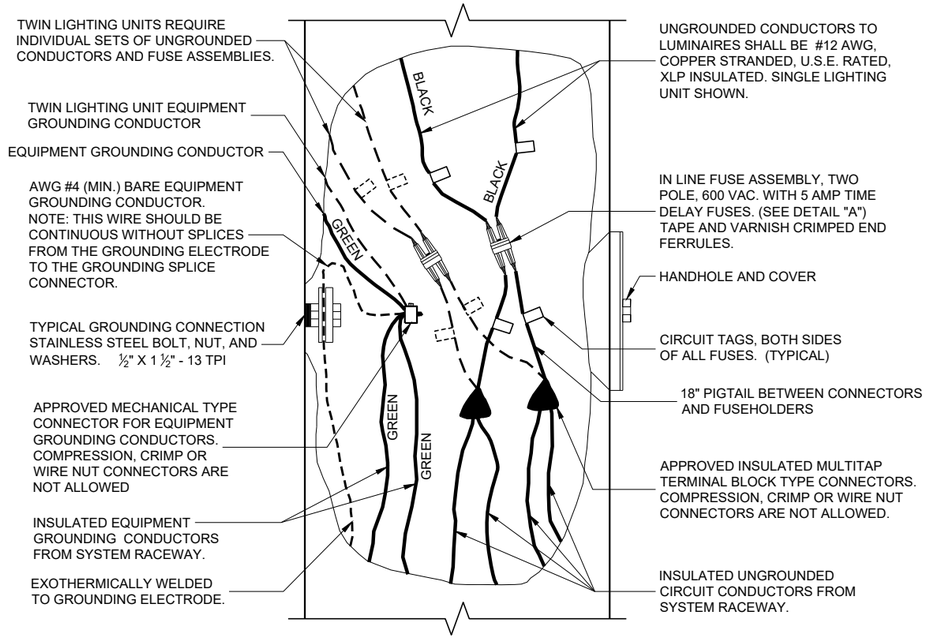
DETAIL "B"
BREAKAWAY SINGLE POLE WITH WATERPROOF INSULATING BOOT



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

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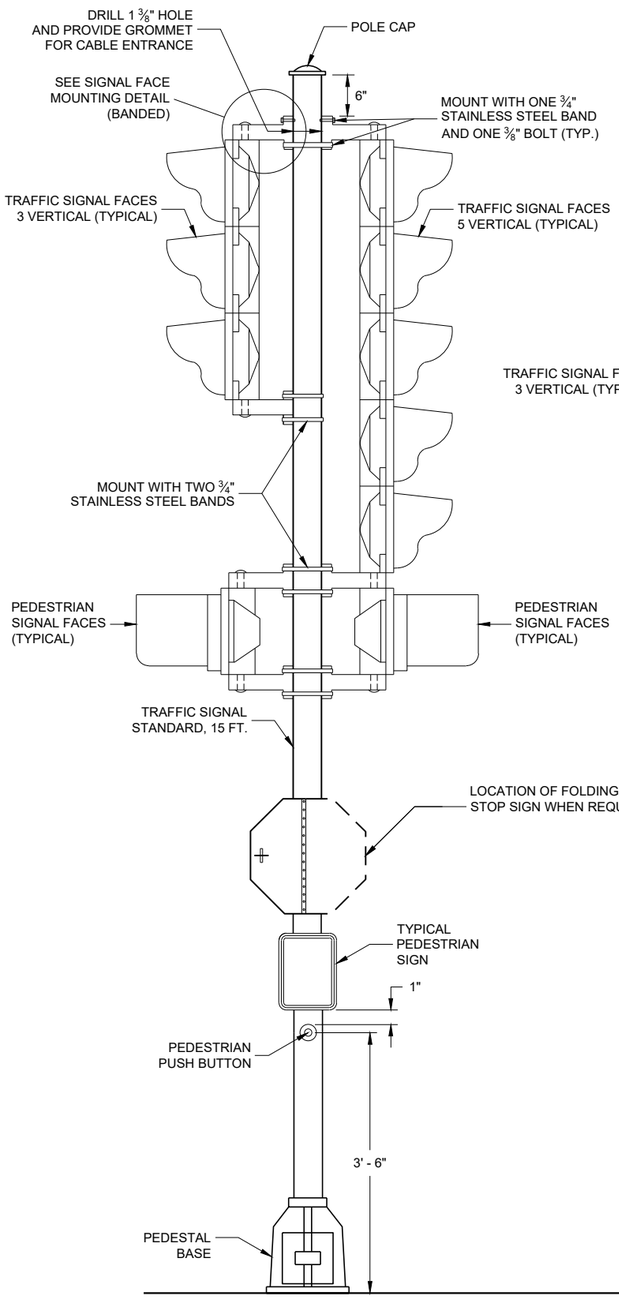
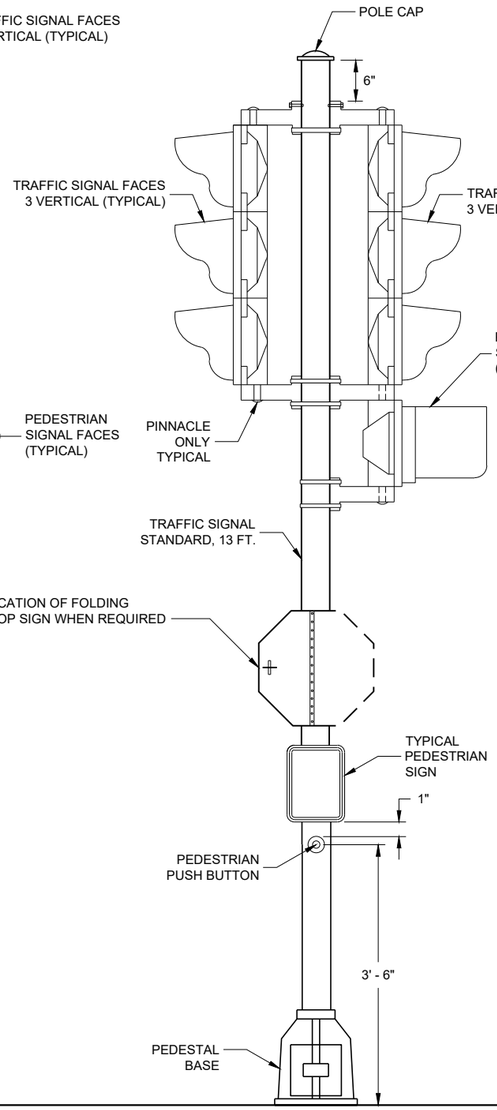
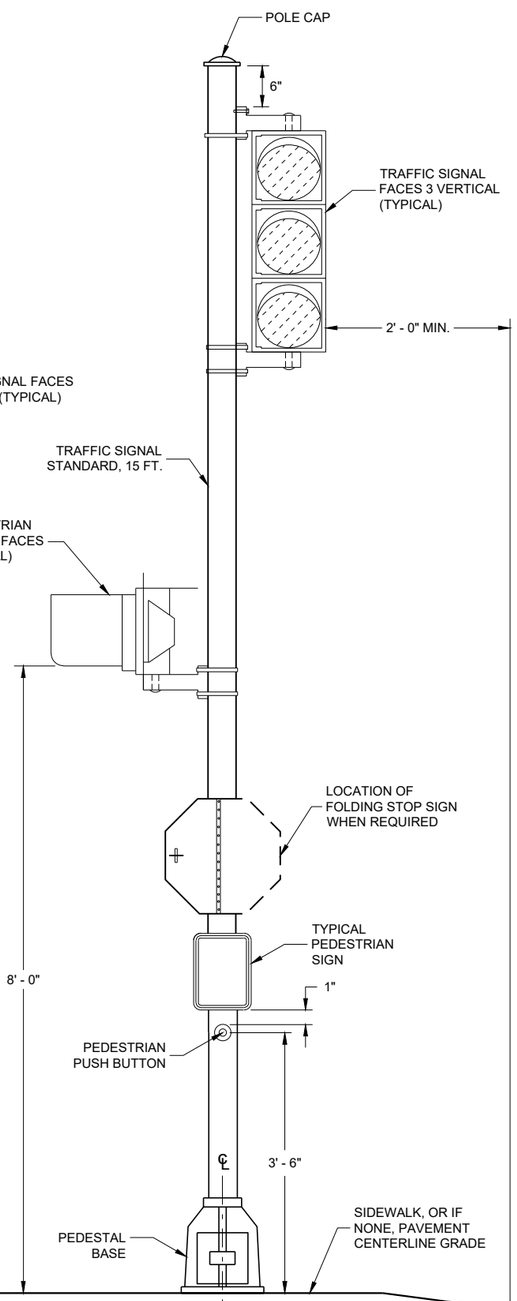


TRAFFIC SIGNAL STANDARD - 15 FT.



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.

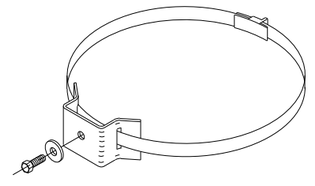
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

OPTICALLY PROGRAMMED SIGNAL FACES SHALL BE MASKED IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS, AND UNDER THE DIRECTIONS OF THE REGION TRAFFIC ENGINEER.

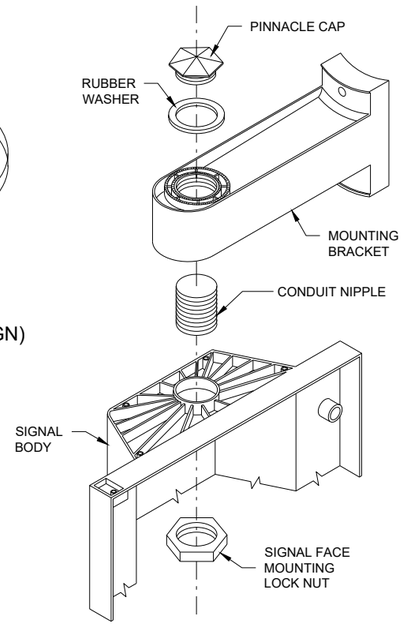
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN IN THE PLANS.

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.

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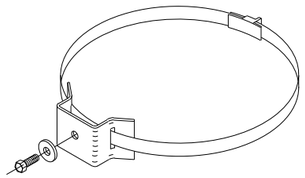
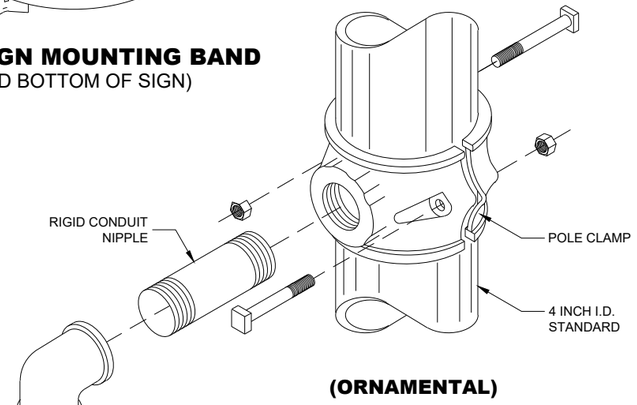
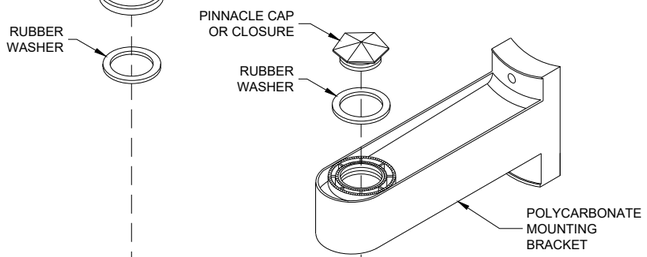


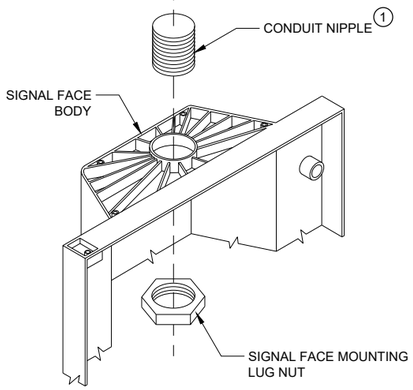
TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)



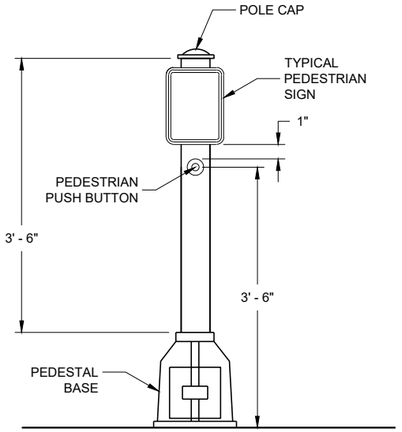
(ORNAMENTAL)



(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.

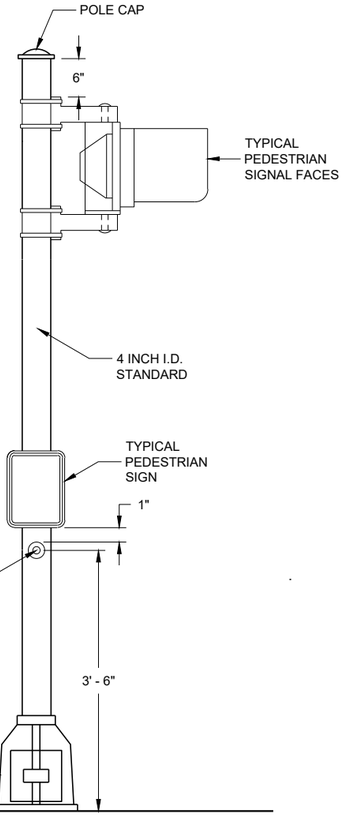
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

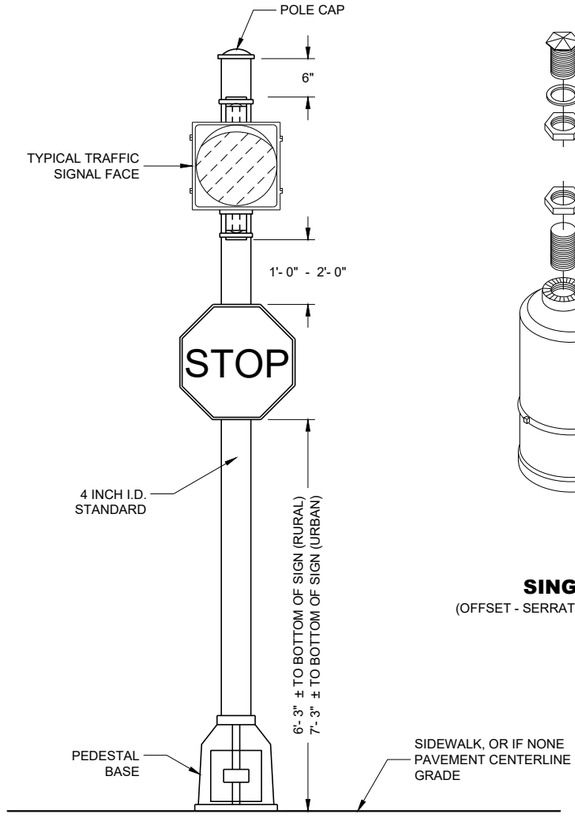
PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

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

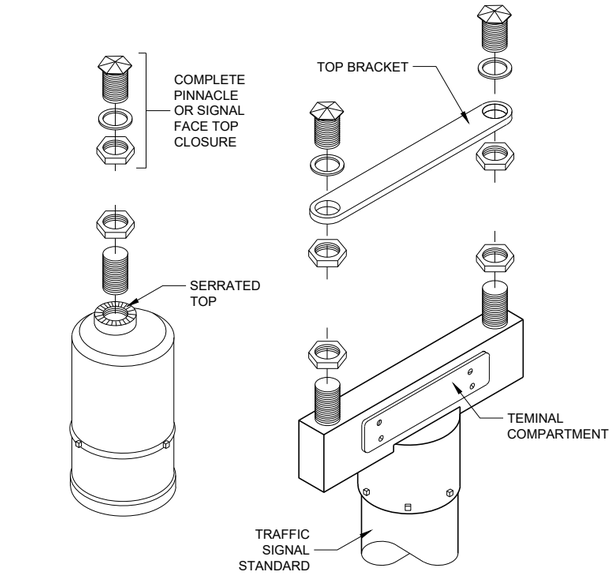
(1) USE 1 ½" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE 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
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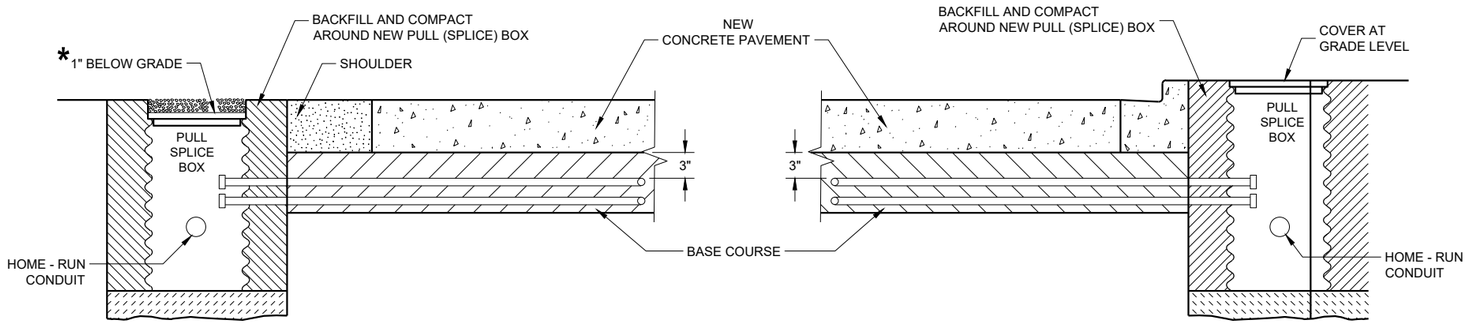


SECTION A - A
NO CURB AND GUTTER

SECTION B - B
CURB AND GUTTER

* RECESS PULL (SPLICE) BOX SO THAT THE COVER IS 3" BELOW GRADE IN SHOULDER AREAS OF CRUSHED AGGREGATE. BACKFILL OVER COVER WITH THE CRUSHED AGGREGATE TO BRING THE AREA TO GRADE LEVEL.

LOOP DETECTOR INSTALLATION DETAIL

GENERAL NOTES

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

PITCH LEAD OUT CONDUIT TO DRAIN TO ROADSIDE PULL (SPLICE) BOX.

LOOP SIZE, LOCATION, NUMBER OF TURNS OF WIRE AND ASSOCIATED SIGNAL PHASE SHALL BE AS SHOWN ON THE PLANS.

SPLICES SHALL BE INSTALLED BY USING CAST IN PLACE SPLICE KITS LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST OR AN ENGINEER APPROVED EQUAL. NON-INSULATED BUTT SPLICES TO FIT #12 AWG STRANDED WIRE SHALL BE USED. SPLICES SHALL BE SOLDERED AND INSULATED FROM EACH OTHER AS PER INSTRUCTIONS INCLUDED IN THE SPLICE KIT.

MEASURE GROUND RESISTANCE USING A MEGGER. REPLACE LOOP WIRE NOT ATTAINING A READING OF INFINITY TO GROUND.

AFTER SPLICING THE LOOP WIRE TO THE LOOP LEAD-IN CABLE, THE CONTRACTOR SHALL MEASURE INDUCTANCE, GROUND RESISTANCE AND WIRE RESISTANCE AT THE CABINET END OF THE LEAD-IN CABLE AND FURNISH A COPY OF THE READING TO THE PROJECT ENGINEER FOR EVALUATION.

LOOP DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATERPROOF TAGS AT BOTH ENDS OF THE CABLE. A LISTING OF THE CABLE IDENTIFICATION PER INDIVIDUAL LOOP LEAD-IN SHALL BE PLACED IN THE CABINET.

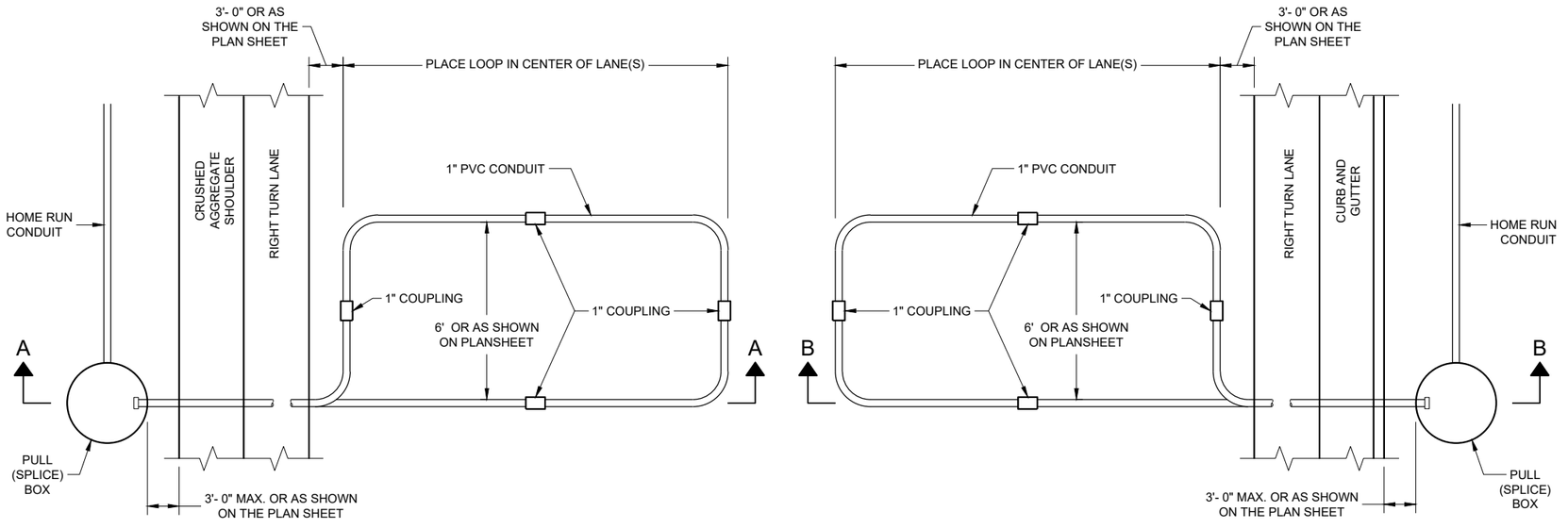
THE #12 AWG LOOP WIRE IN THE PULL (SPLICE) BOX SHALL BE HAND TWISTED AT LEAST 3 TWISTS PER FOOT BEFORE BEING SPLICED TO THE LOOP LEAD-IN CABLE.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN PULL (SPLICE) BOXES AT THE SIDE OF THE ROAD.

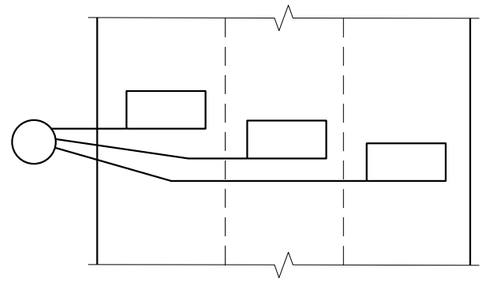
THE #12 AWG LOOP WIRE SHALL BE INSTALLED FROM THE ROADSIDE PULL (SPLICE) BOX, THROUGH THE LOOP CONDUIT, BACK TO THE ROADSIDE PULL (SPLICE) BOX, AND BE INSTALLED IN ONE NON-SPLICED, CONTINUOUS LENGTH.

PROTECTION OF THE CONDUIT IN THE BASE COURSE SHALL BE REQUIRED AFTER INSTALLATION AND BEFORE NEW PAVEMENT IS INSTALLED.

SHOULD INSTALLATION REPAIR BE REQUIRED, IT SHALL BE DONE UNDER THE DIRECTION OF THE PROJECT ENGINEER.



TYPICAL PLAN LOOP DETECTOR
WITH 24" PULL (SPLICE) BOX



MULTI-LANE
INSTALLATION

LOOP DETECTOR INSTALLED IN BASE COURSE WITH PULL (SPLICE) BOX OFF ROADWAY (OPTION 2)

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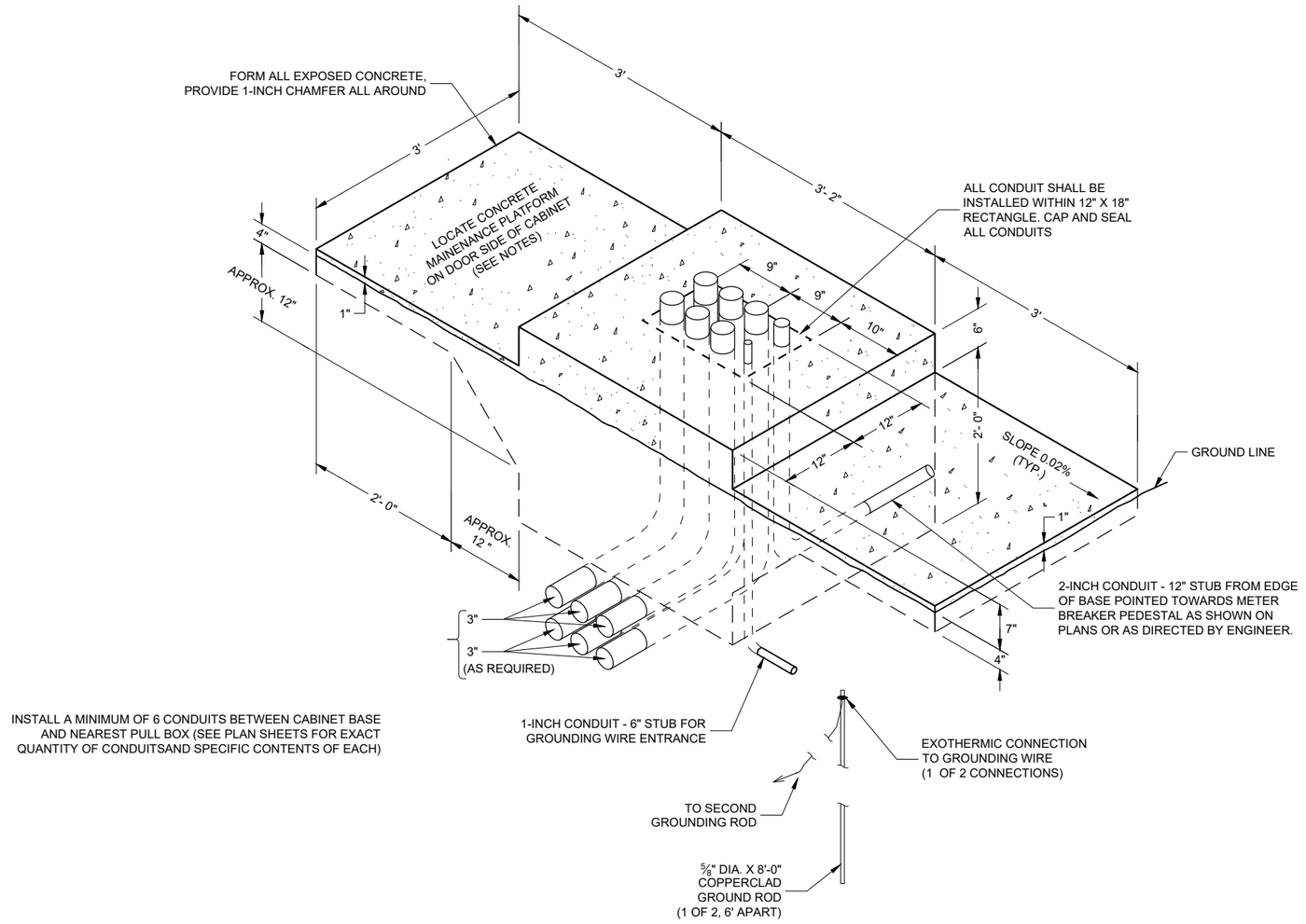

BASE ITS CONTROLLER CABINET

GENERAL NOTES

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

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

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 3-INCHES.

DEPTH OF CONDUIT SHALL BE 24-INCHES MINIMUM AND 36-INCHES MAXIMUM.

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

CONTROLLER CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED AND LEVEL PRIOR TO CABINET INSTALLATION. LEVELING OF TOP SURFACES AFTER CONCRETE BASE HAS CURED SHALL ONLY BE ACCOMPLISHED BY GRINDING.

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

MINIMUM BENDING RADIUS OF CONDUIT EQUALS SIX 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 NONMETALLIC 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 NONMETALLIC, IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS PLACED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

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

ALL METALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE BUSHINGS IF WIRE IS INSTALLED.

ALL NONMETALLIC CONDUIT ENDS AT TOP OF CONCRETE BASES SHALL HAVE END BELLS IF WIRE IS INSTALLED.

ANCHOR THE CABINET WITH FOUR (4) ½" X 4" MECHANICAL WEDGES OR EPOXY STAINLESS STEEL MASONRY ANCHORS WITH A MINIMUM PULLOUT STRENGTH OF 9000 POUNDS.

BASE ITS CONTROLLER CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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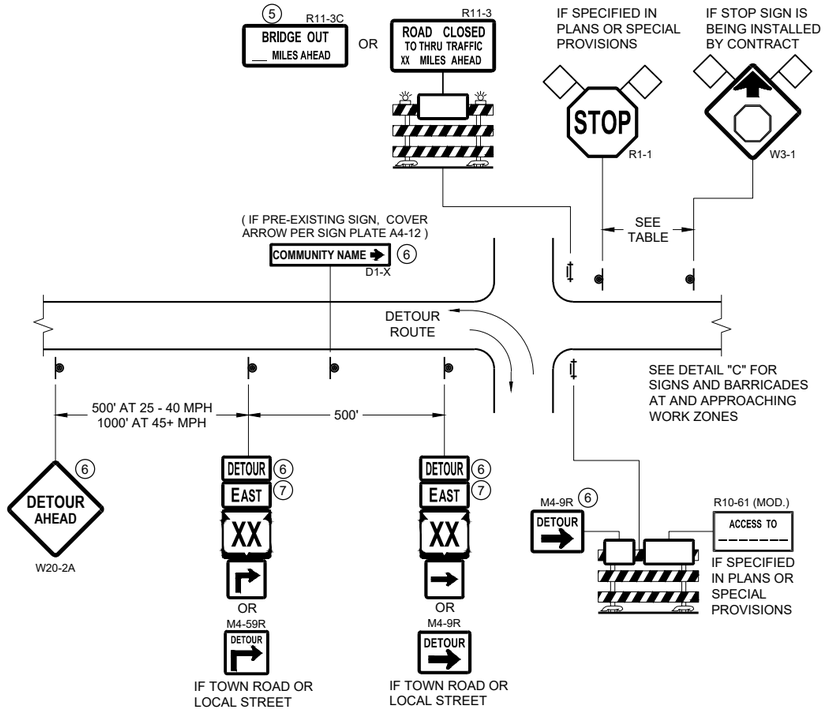
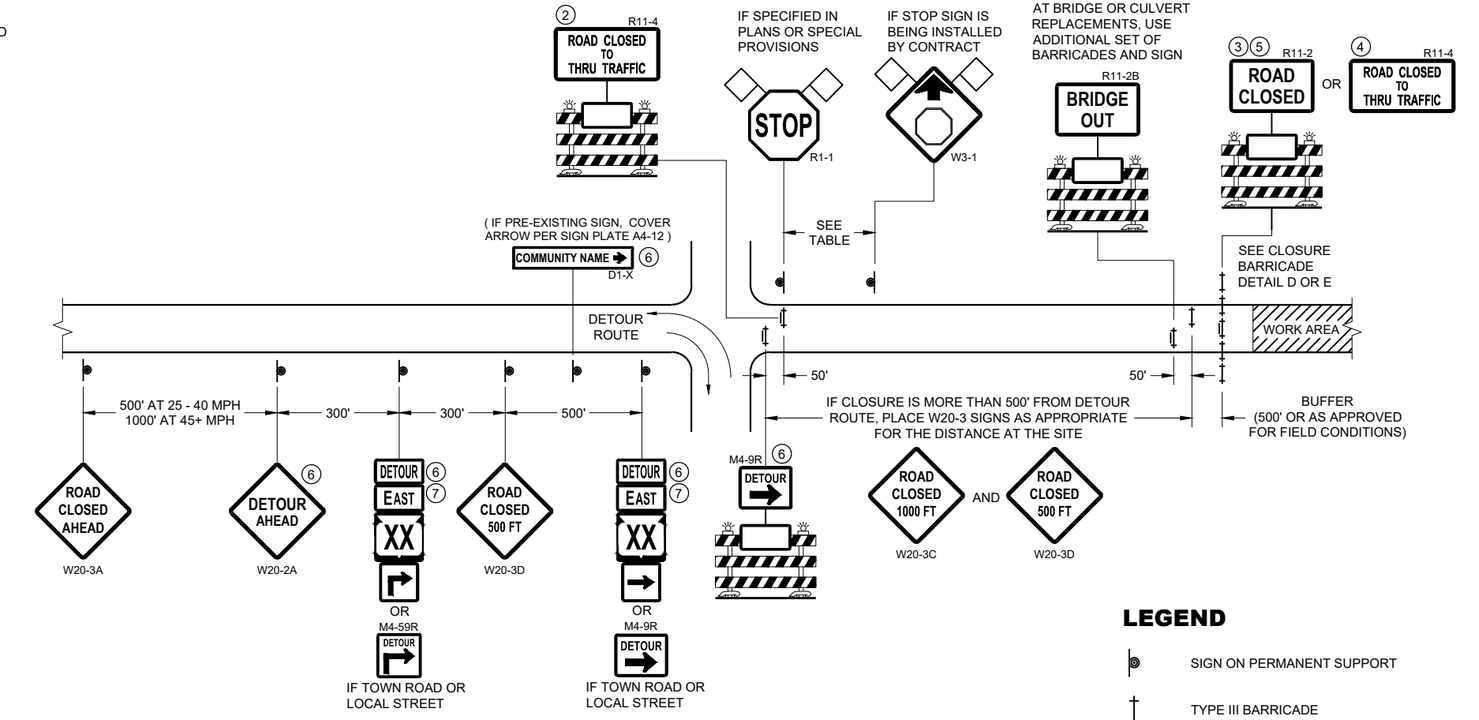


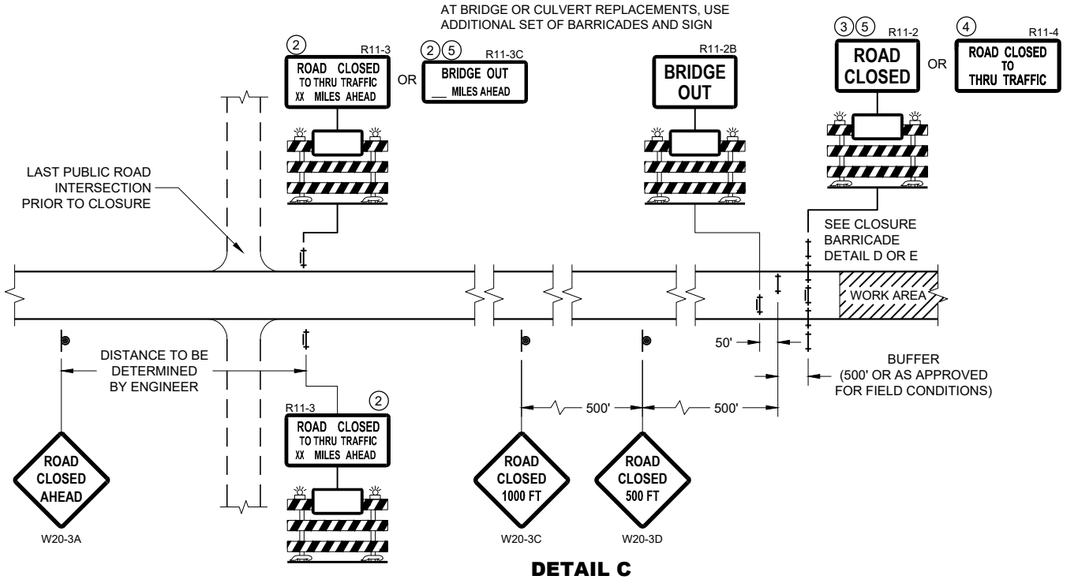
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
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APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

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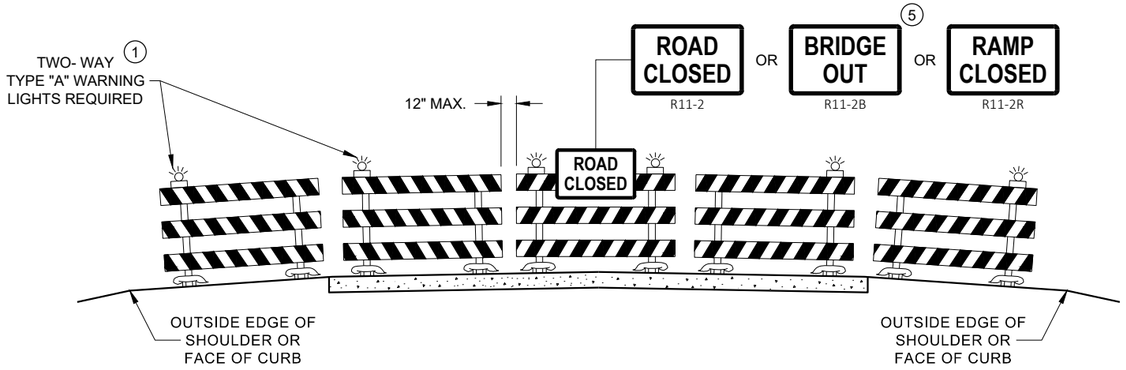
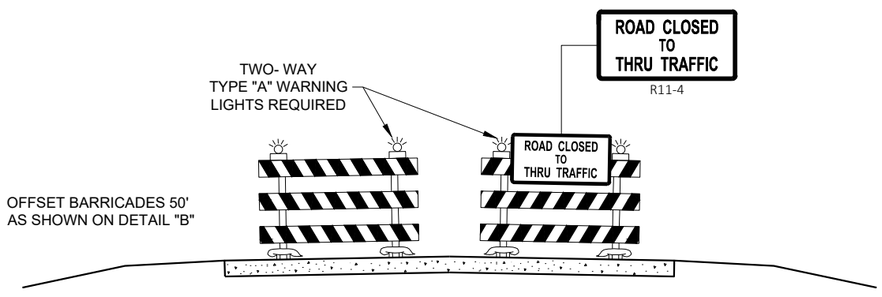
SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

"WO" AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

(1) TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING.

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 08b

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THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

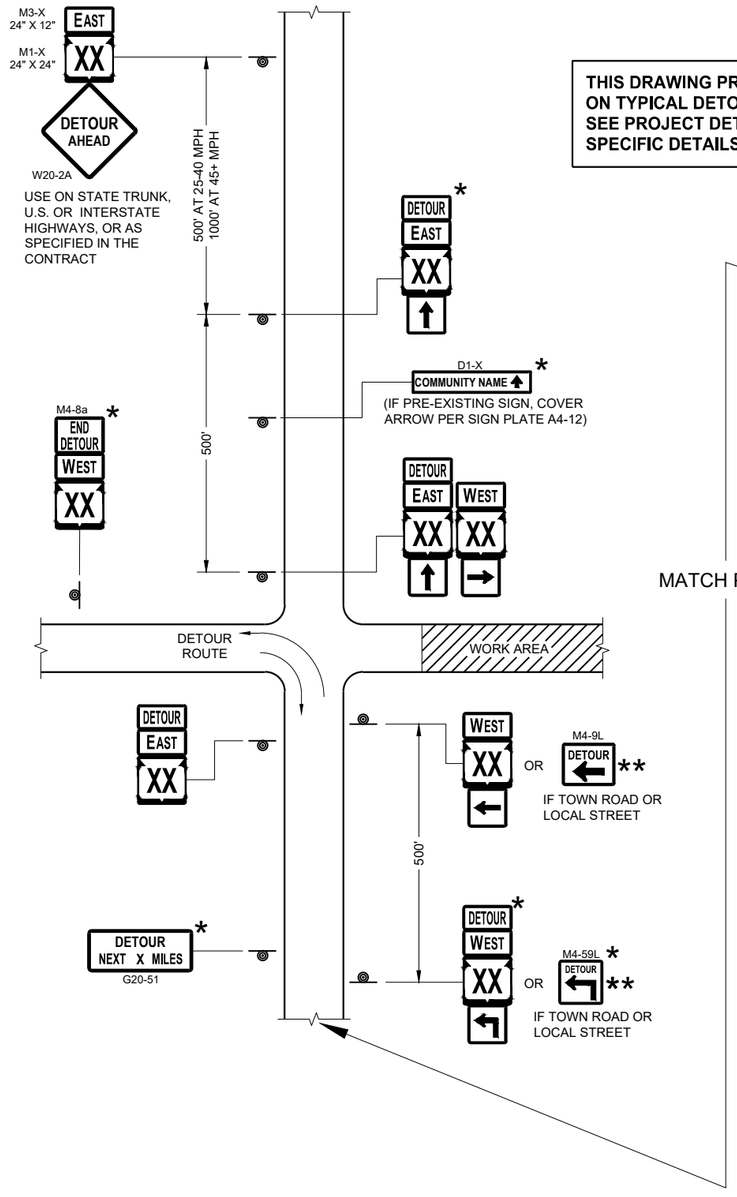
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

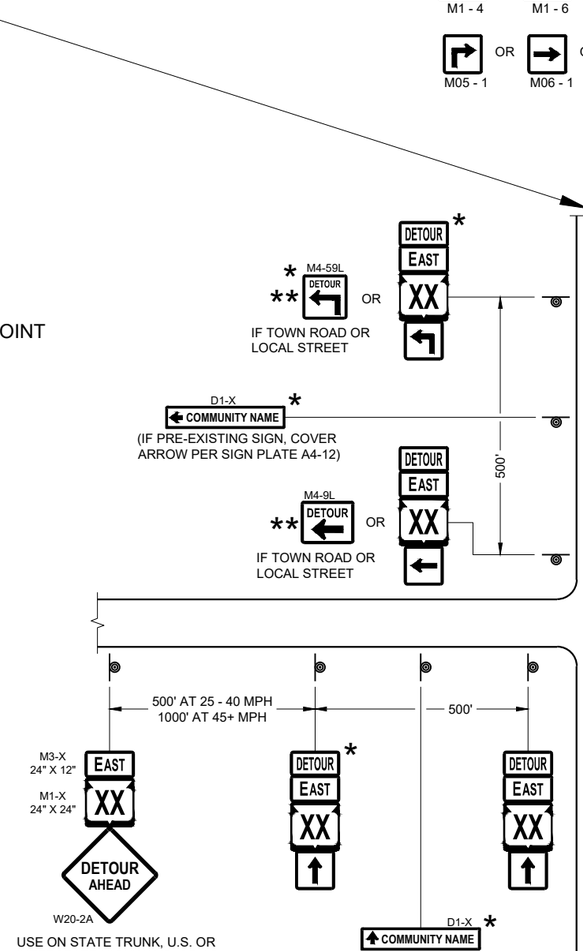
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

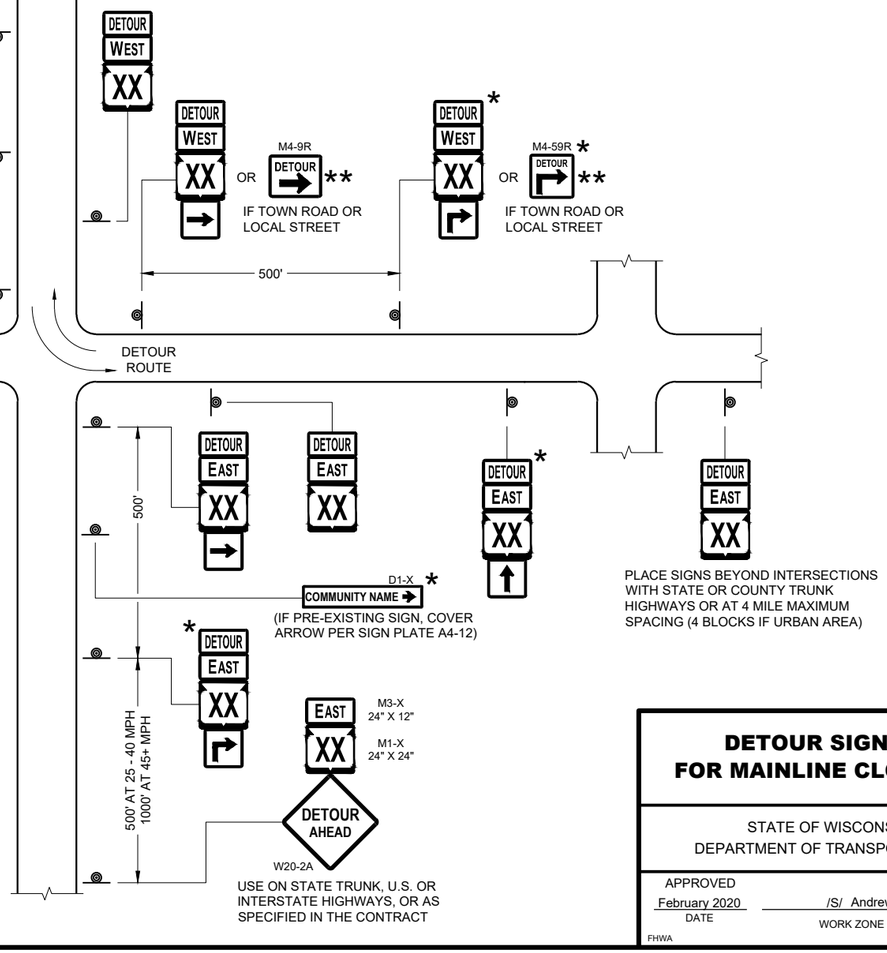
* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



MATCH POINT





SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15C02 - 08c

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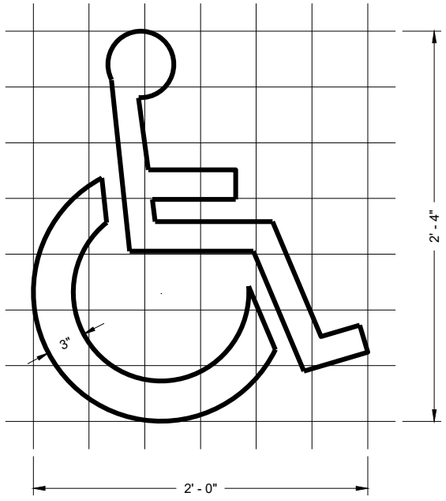
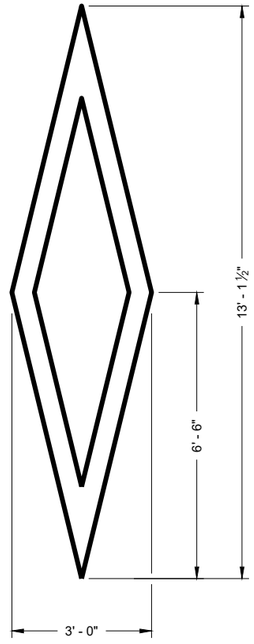
GENERAL NOTES

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



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE

/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

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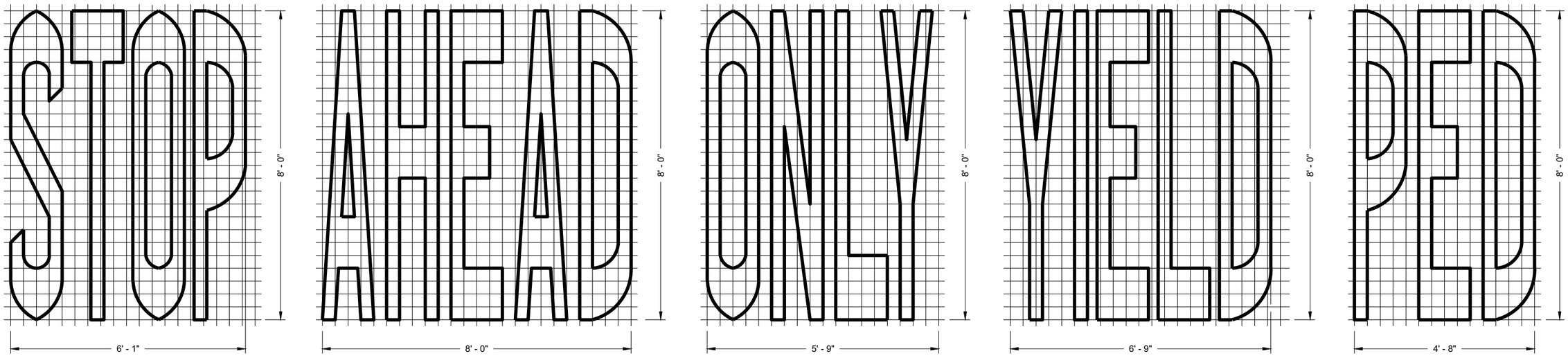
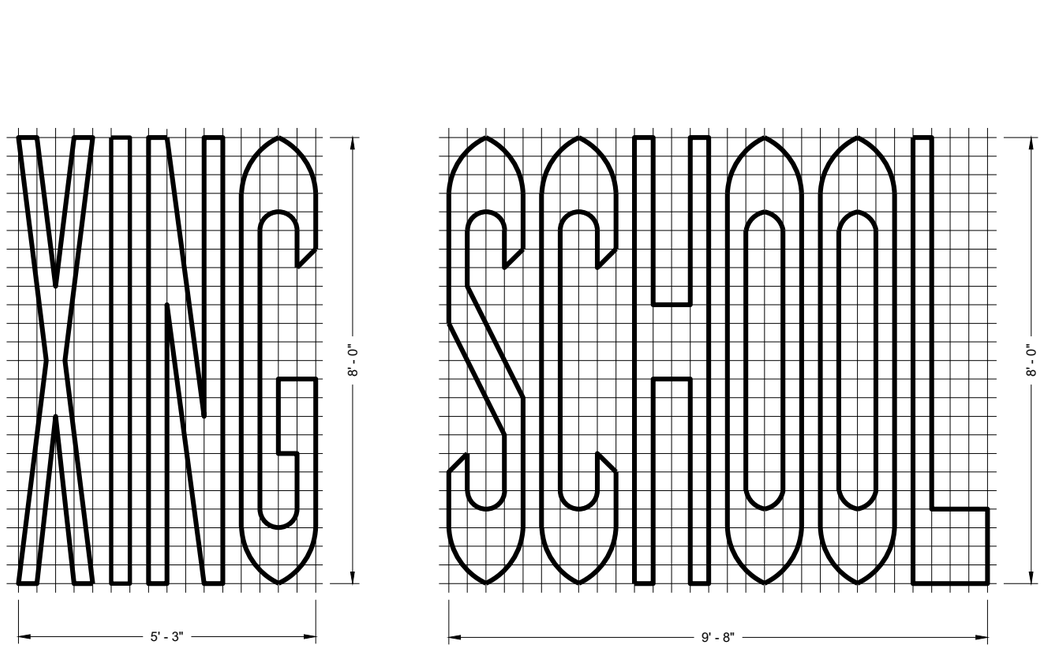
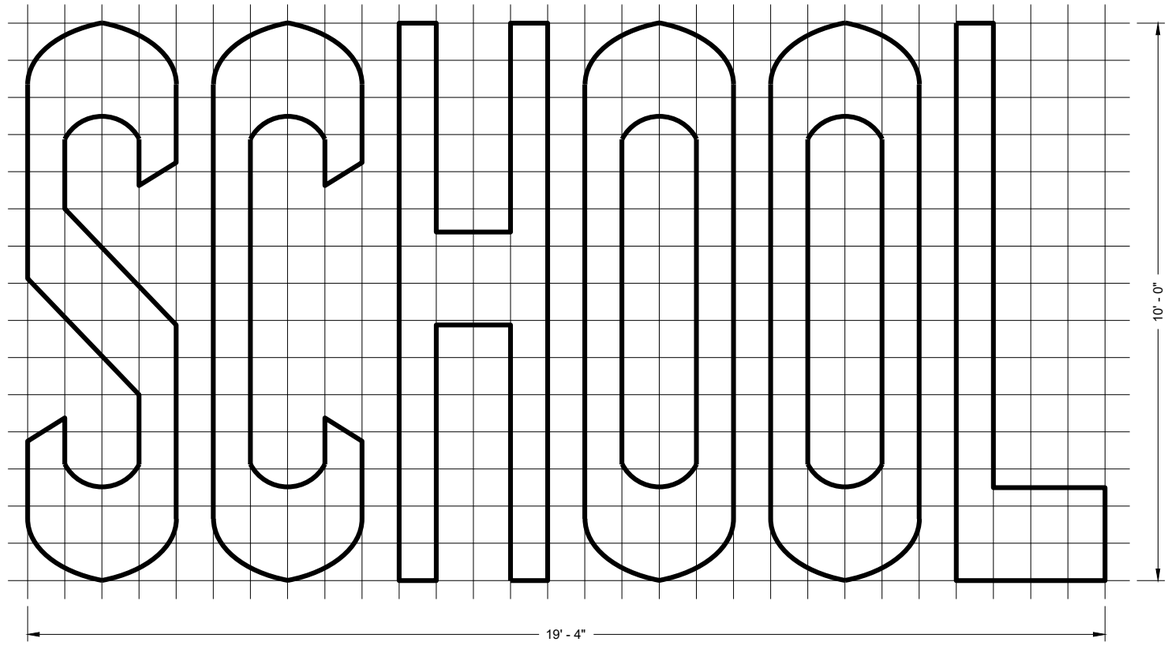




SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF
ENGINEER

FHWA

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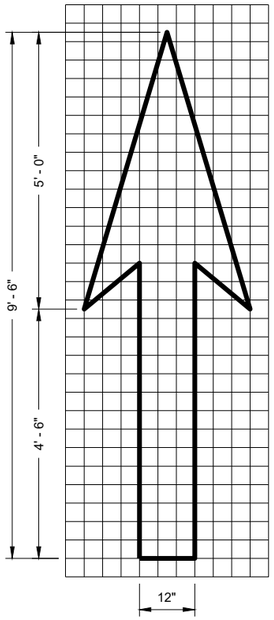
SDD 15C07 - 15b

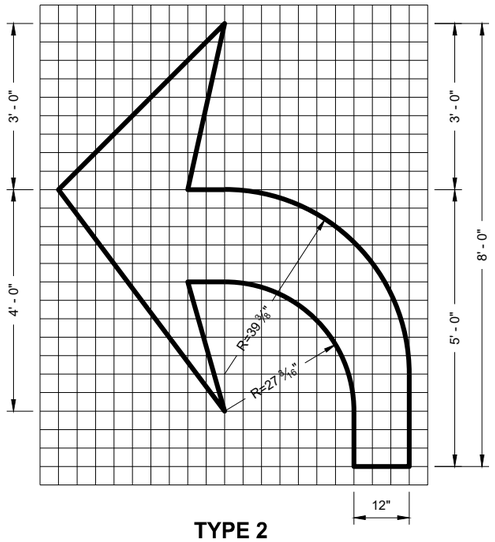
SDD 15C07 - 15b

GENERAL NOTES

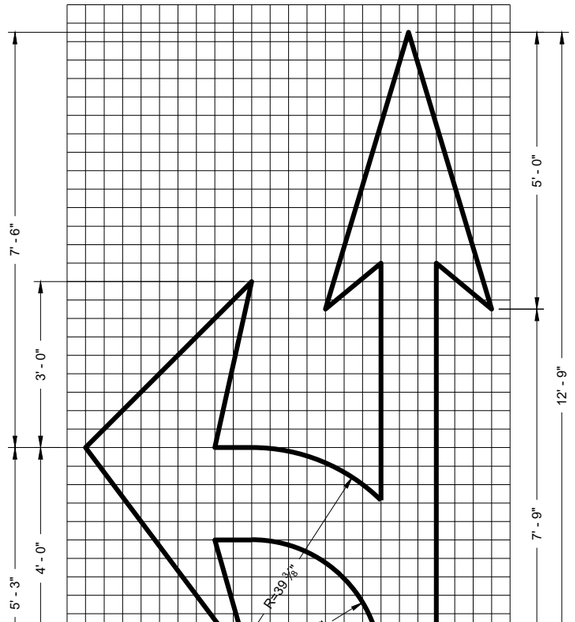
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



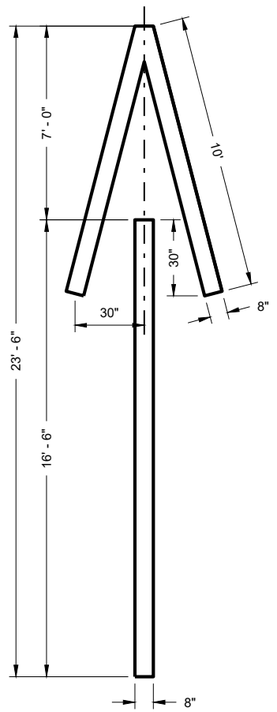
TYPE 1



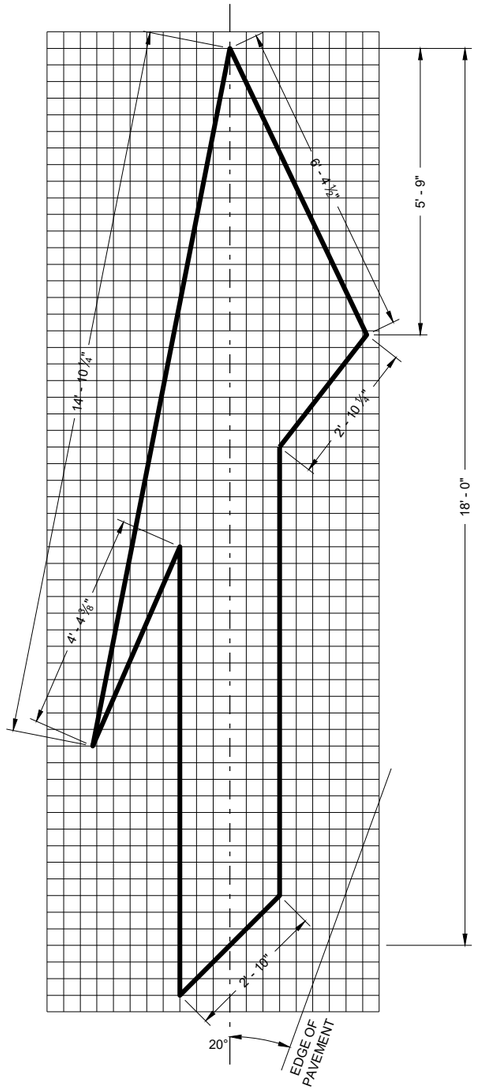
TYPE 2



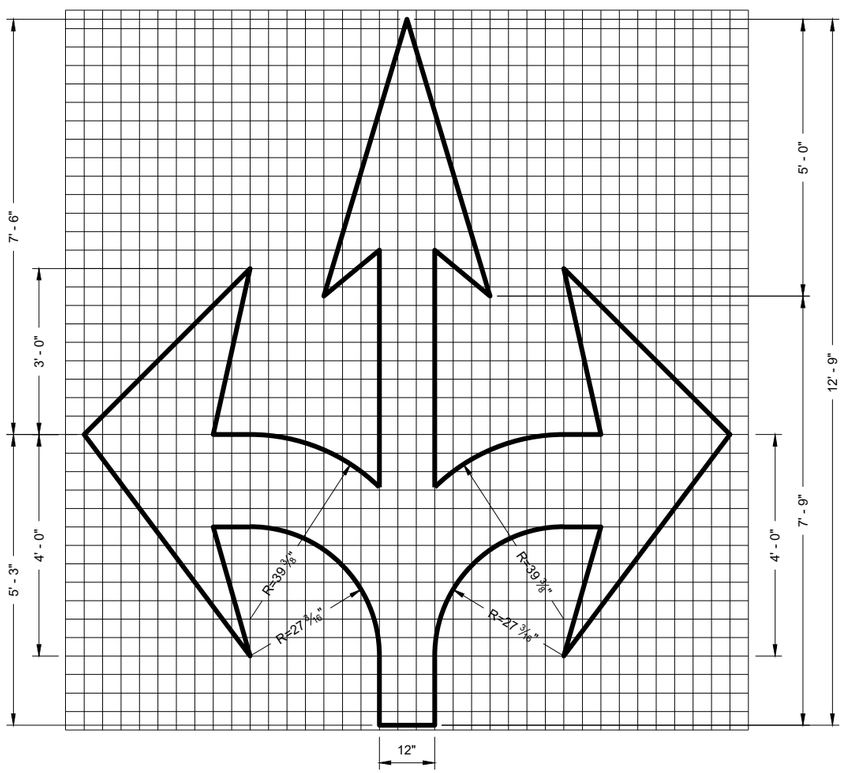
TYPE 3



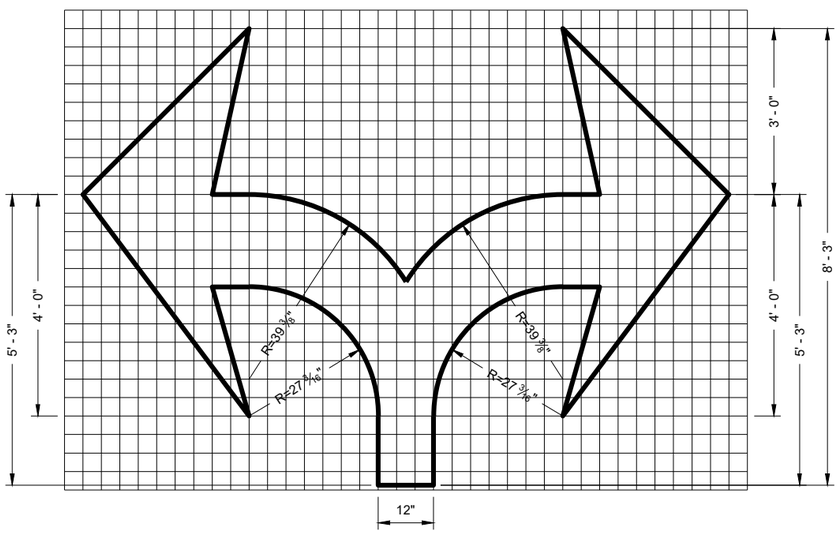
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

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SDD 15C07 - 15c

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SDD 15C07 - 15c

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

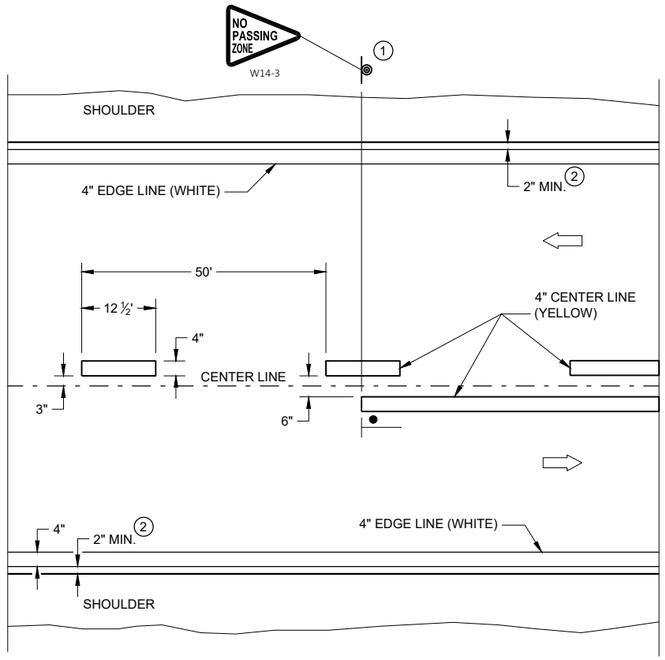
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

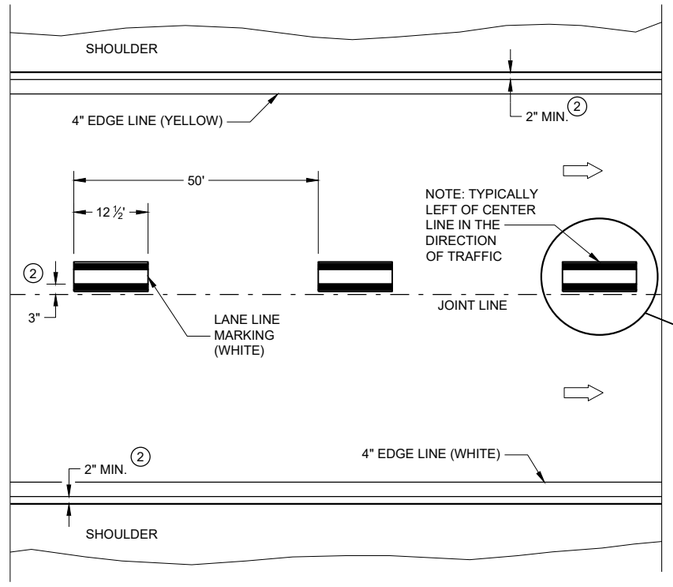
"T" MARKING

SIGN ON PERMANENT SUPPORT

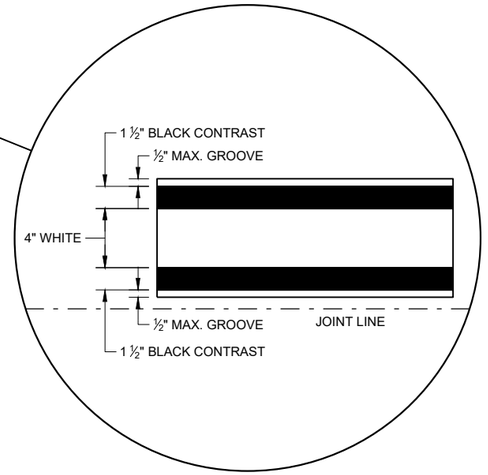
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Jeannie Silver
STATEWIDE SIGNING AND M
ENGINEER

FHWA

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SDD 15C08 - 22a

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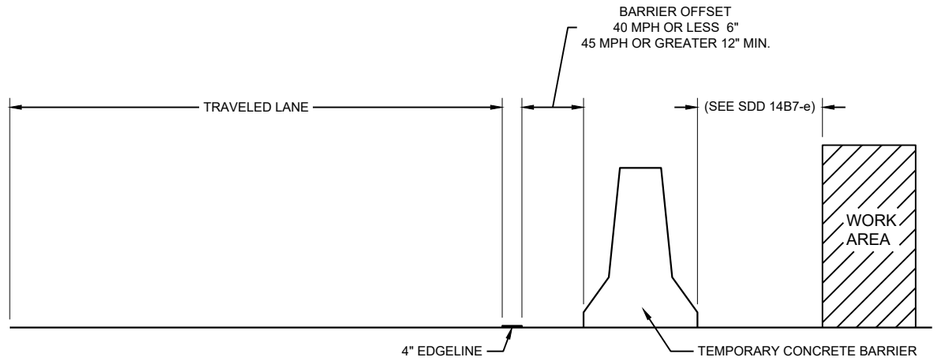
SDD 15C08 - 22a



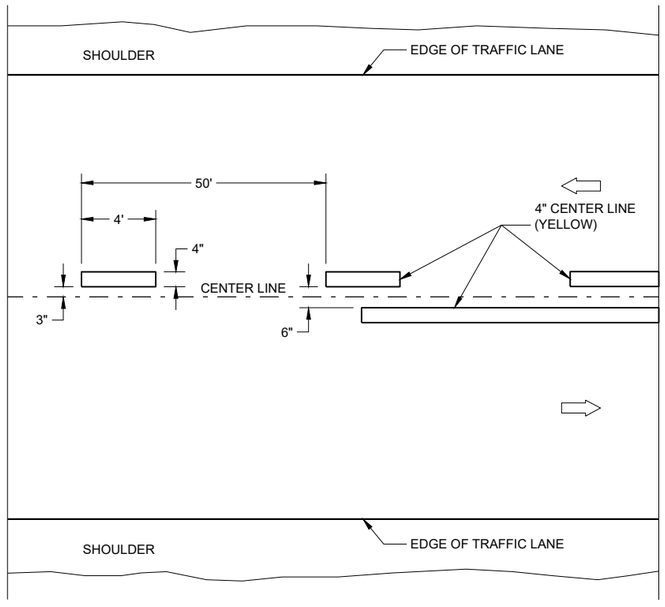
TEMPORARY BARRIER OFFSET FROM EDGELINE

GENERAL NOTES

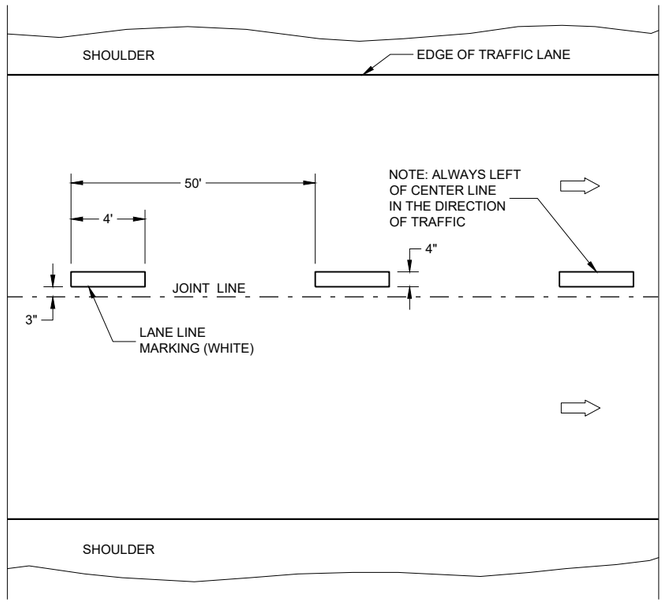
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

LEGEND

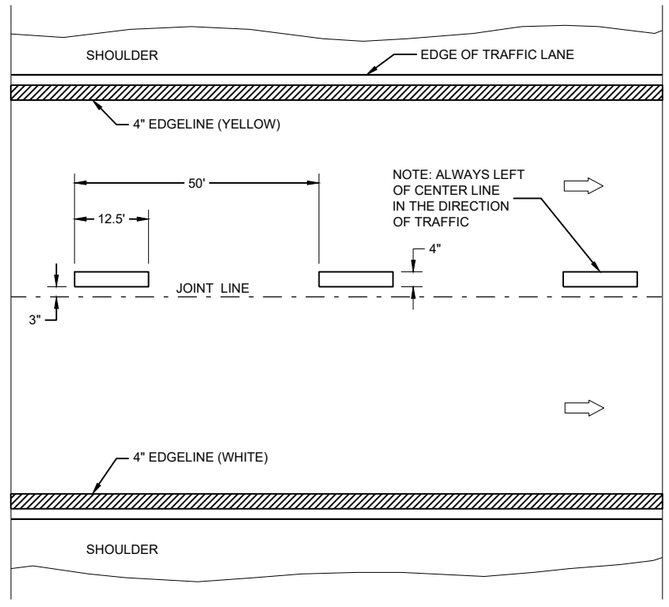
DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2022
DATE

/S/ Jeannie Silver
STATEWIDE SIGNING AND M
ENGINEER

FHWA

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SDD 15C08 - 22b

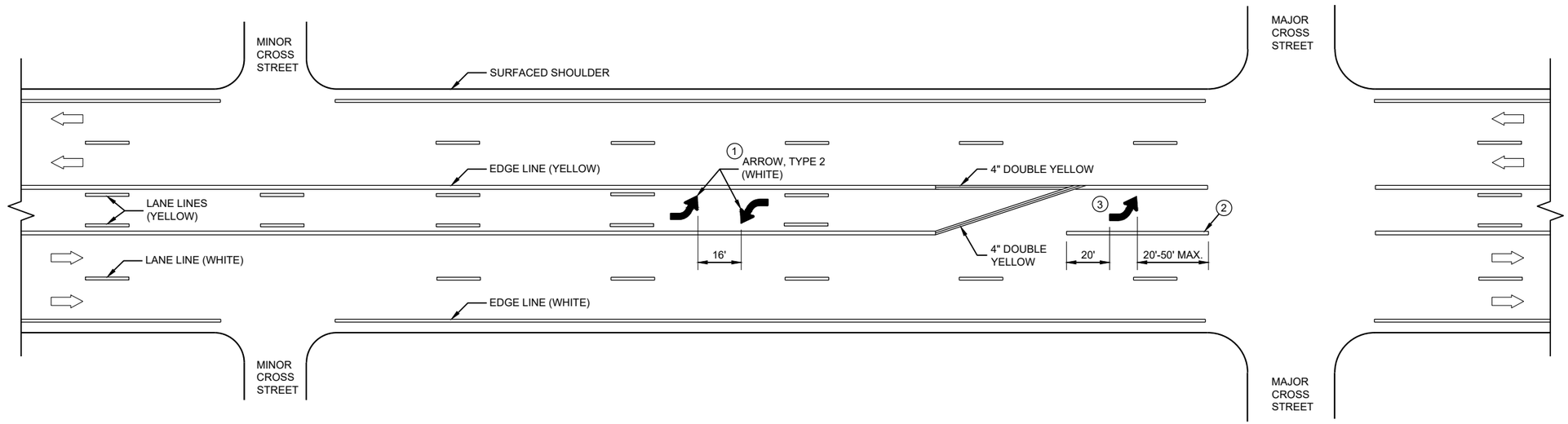
6

SDD 15C08 - 22b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

SDD 15C08 - 22c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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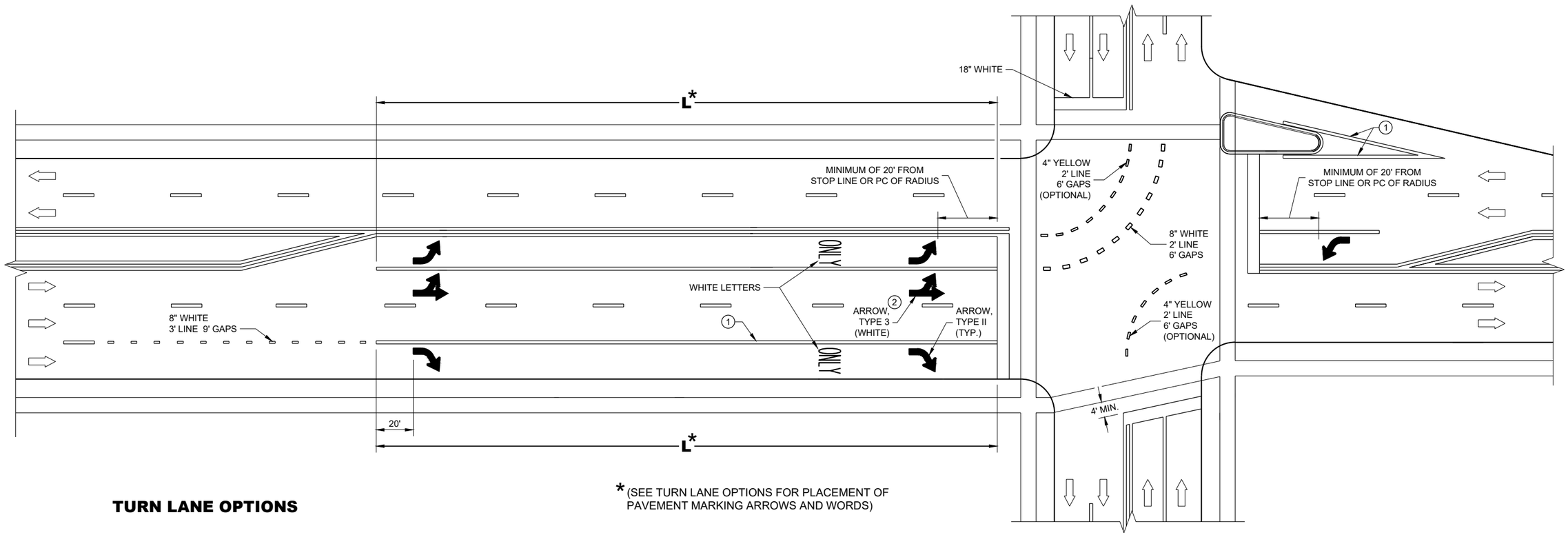
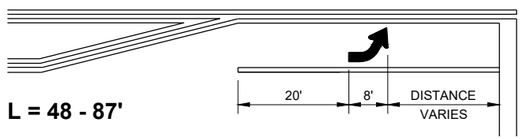
SDD 15C08 - 22c



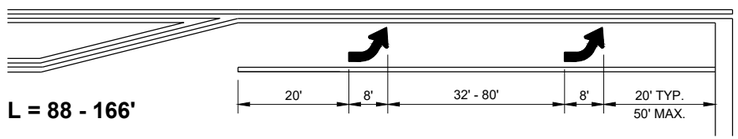
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

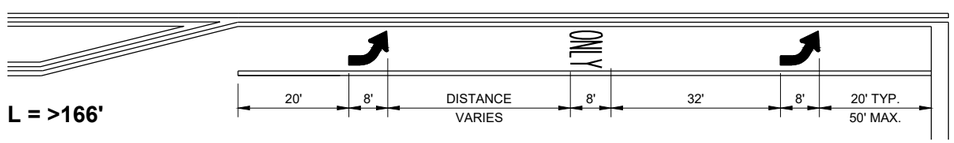
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 22d

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

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

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

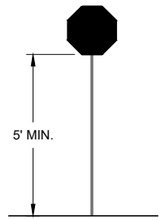
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



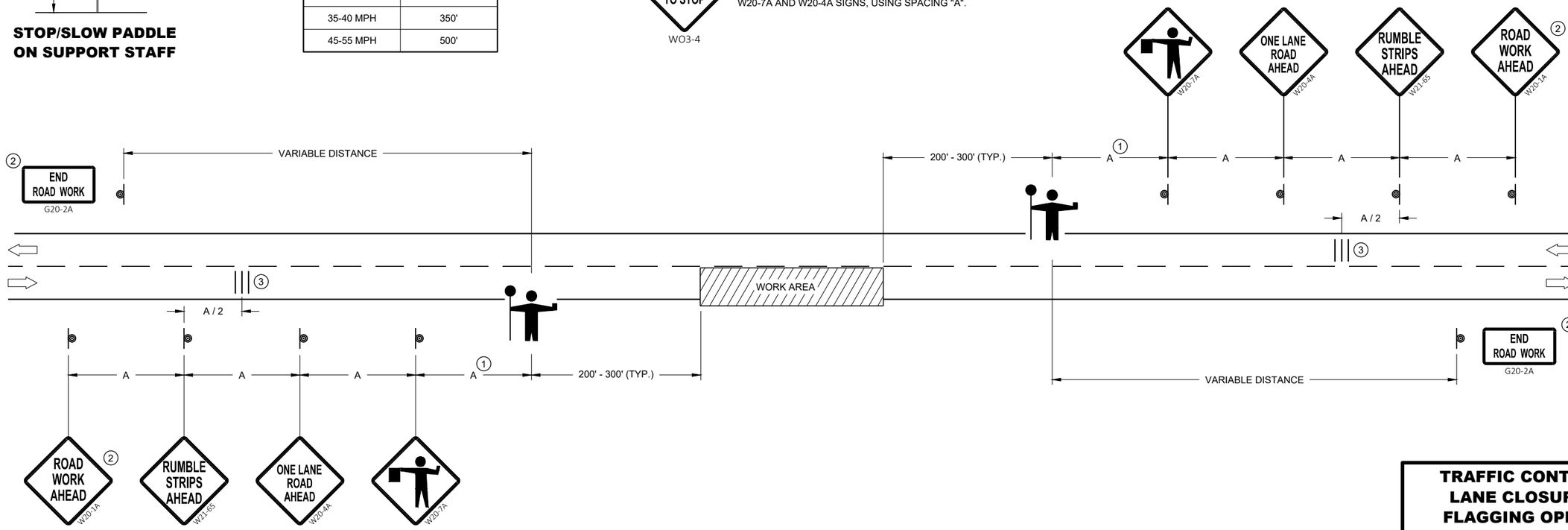
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

WO3-4

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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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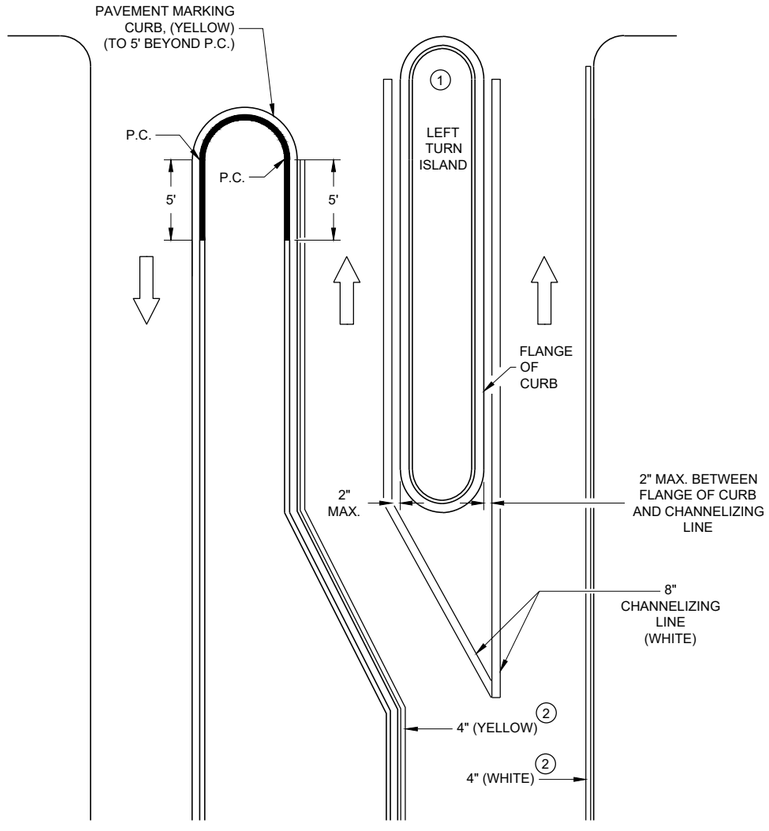
SDD 15C12 - 09a

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



LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

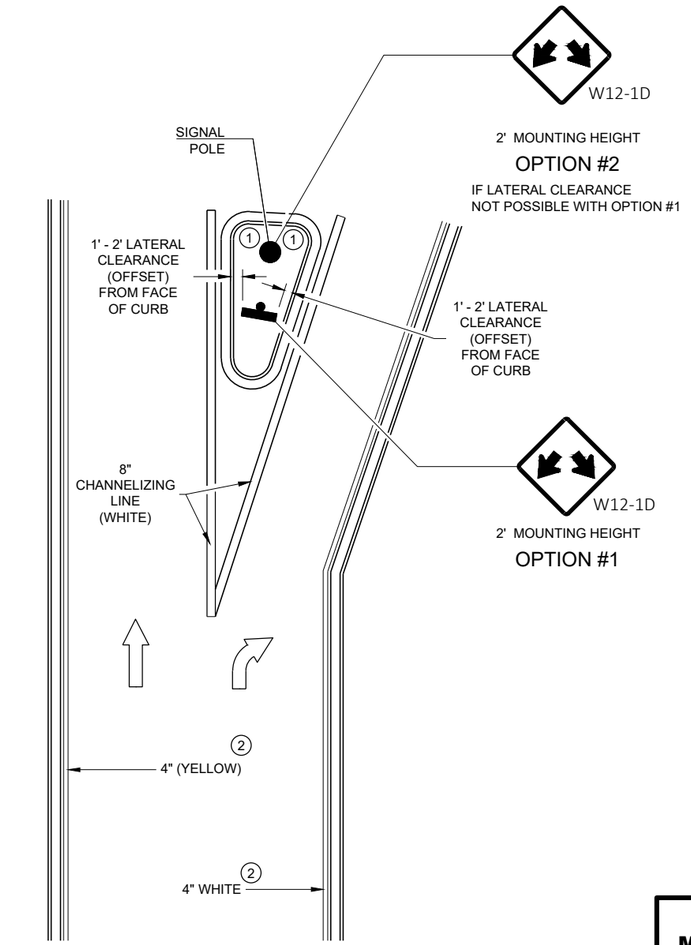
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

(1) MARK CURB NOSES YELLOW.

(2) MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

November 2022
DATE

/S/ Jeannie Silver
STATE SIGNING AND MAF ENGINEER

FHWA

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SDD 15C18 - 07c

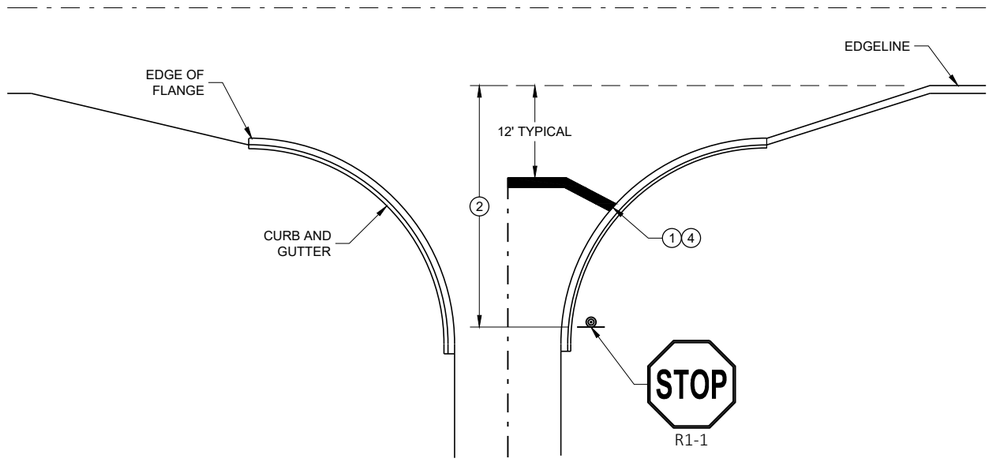
6

SDD15C18 - 07c

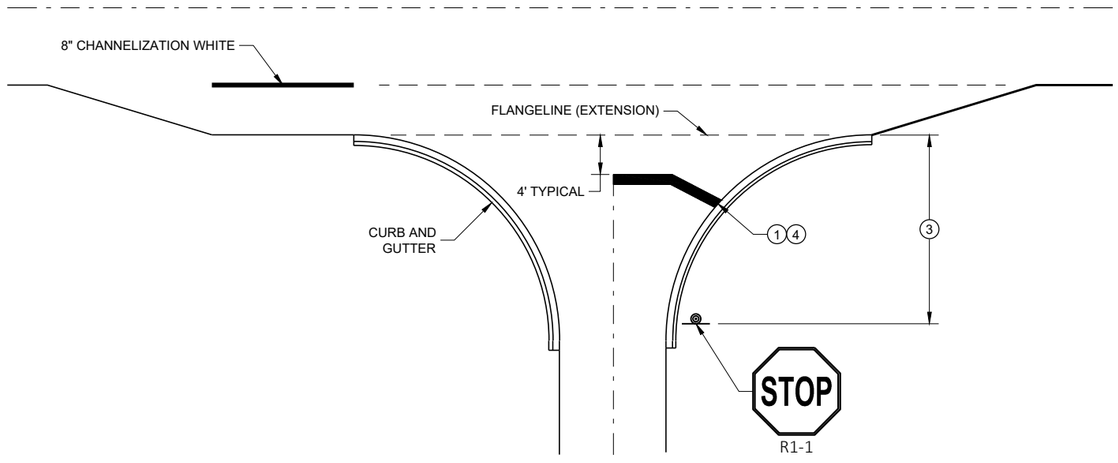
GENERAL NOTES

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

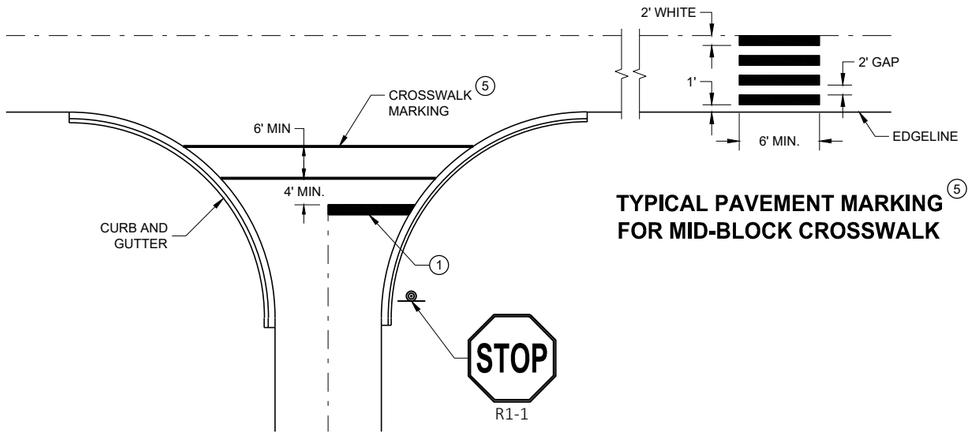
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

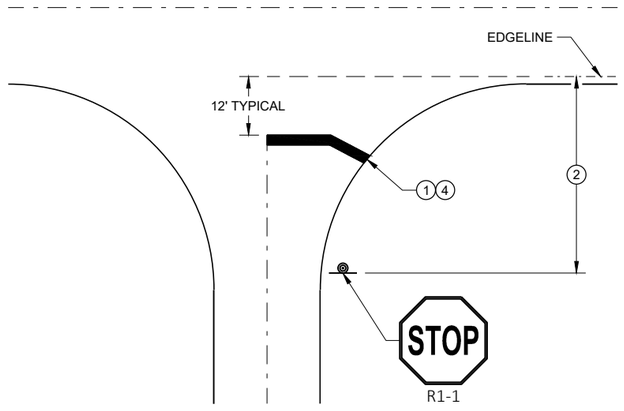


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

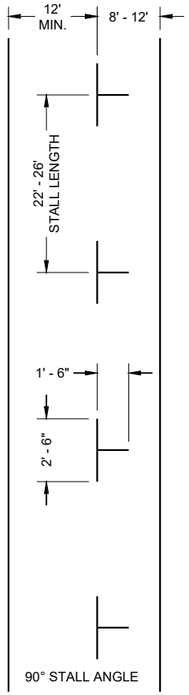
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

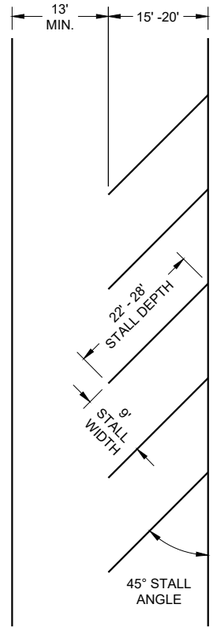
/S/ Matthew Rauch
STATE SIGNING AND MARKING ENGINEER

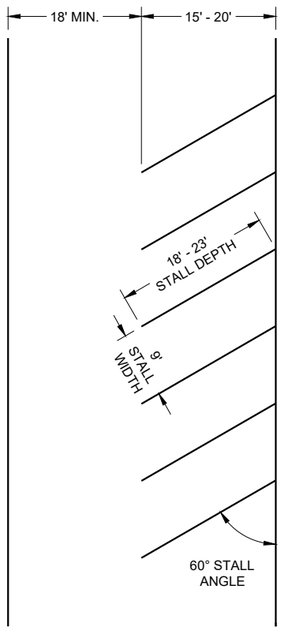
FHWA

6
SDD 15C33 - 04



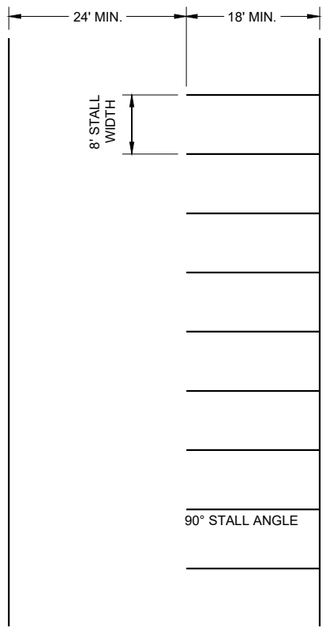
PARALLEL PARKING





ANGLED PARKING

(ANGLED PARKING IS NOT ALLOWED ON STATE HIGHWAYS UNLESS A DESIGN JUSTIFICATION HAS BEEN COMPLETED.)



PARKING LOTS

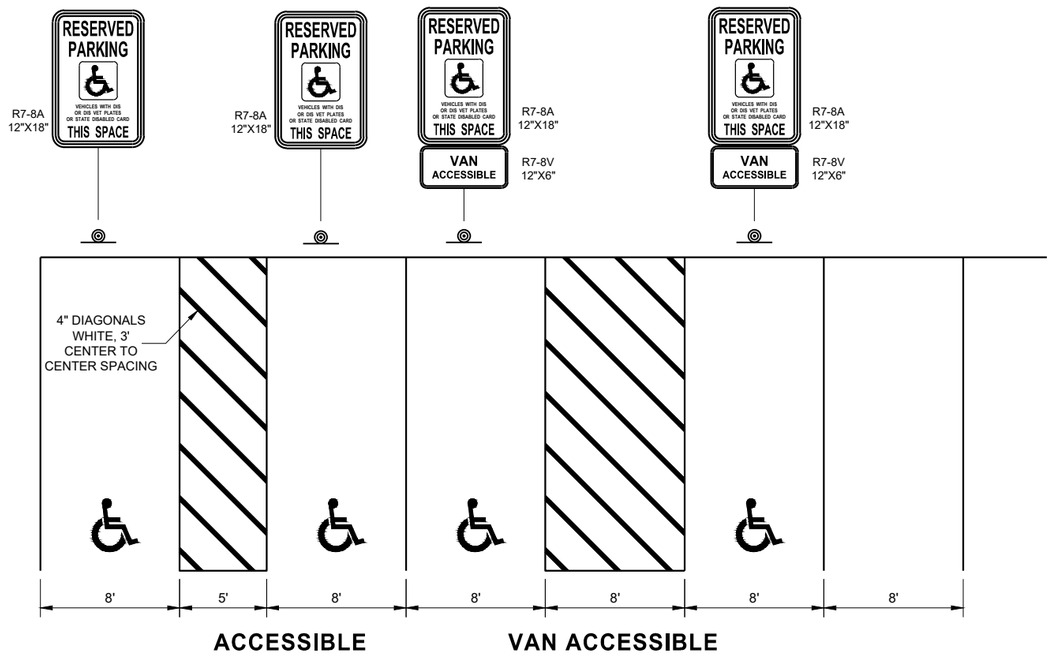
GENERAL NOTES

ALL LINES 4" WHITE (UNLESS OTHERWISE NOTED)

LAST PARKING STALL IS A MINIMUM OF 15' FROM THE CROSSWALK.

LEGEND

SIGN ON PERMANENT SUPPORT



ACCESSIBLE VAN ACCESSIBLE

PARKING STALL MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MAF ENGINEER

FHWA

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SDD 15C36 - 01

GENERAL NOTES

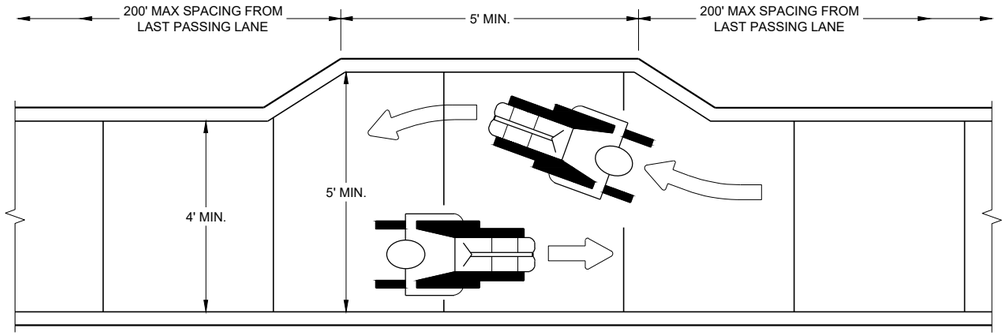
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

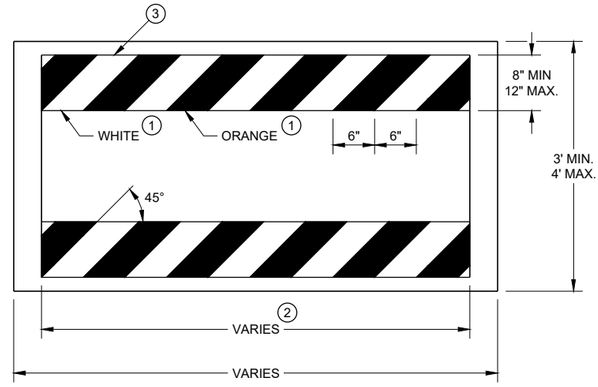
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

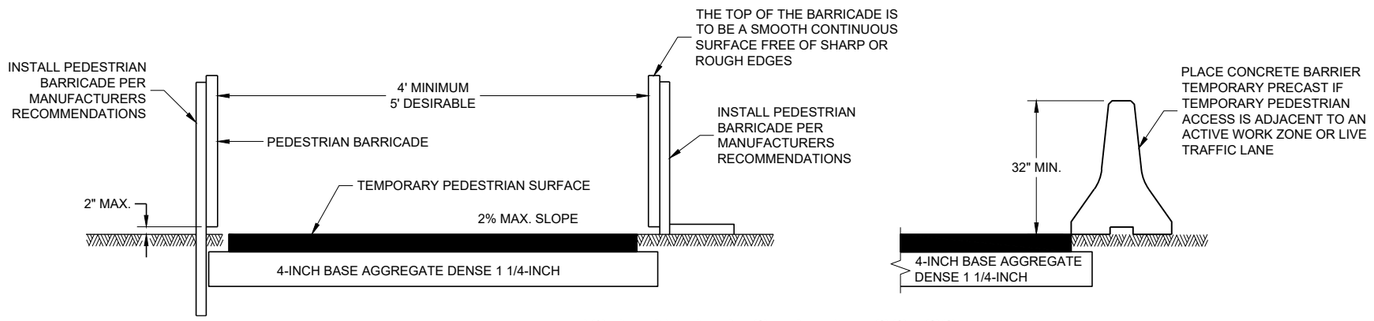
* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



NARROW SIDEWALK PASSING DETAIL



TEMPORARY PEDESTRIAN BARRICADE*



TEMPORARY PEDESTRIAN ACCESS

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

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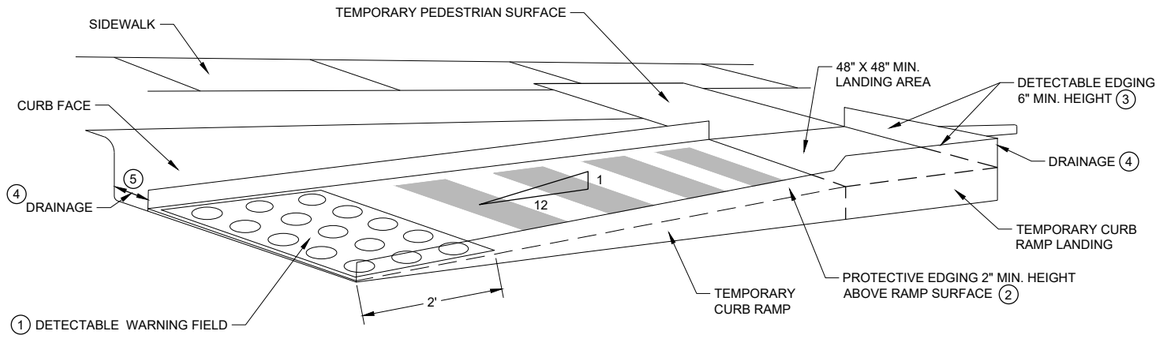
SDD 15D30 - 08a



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.

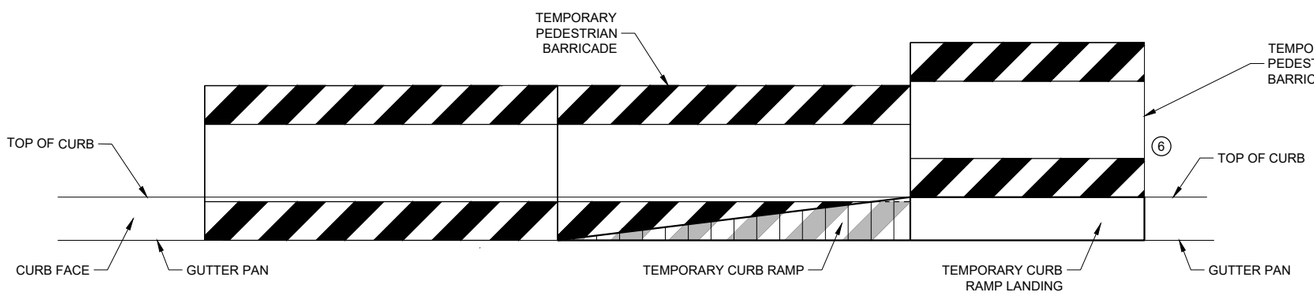
(2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.

(3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

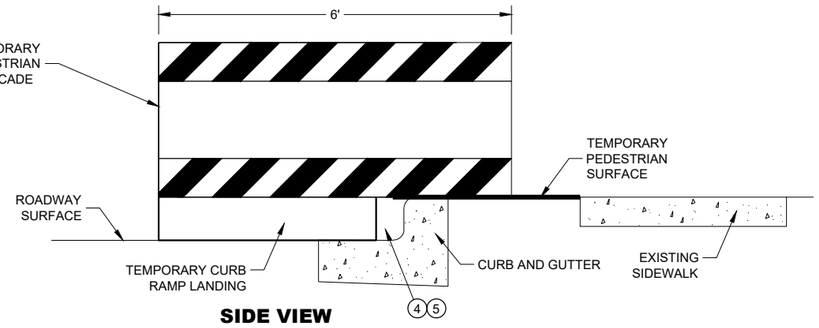
(4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(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

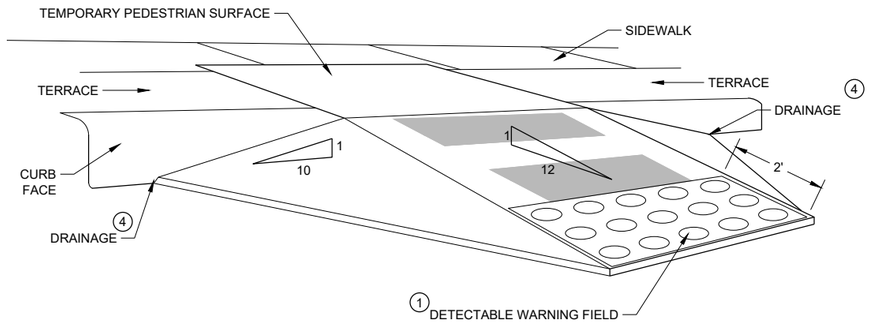
TEMPORARY CURB RAMP PARALLEL TO CURB

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

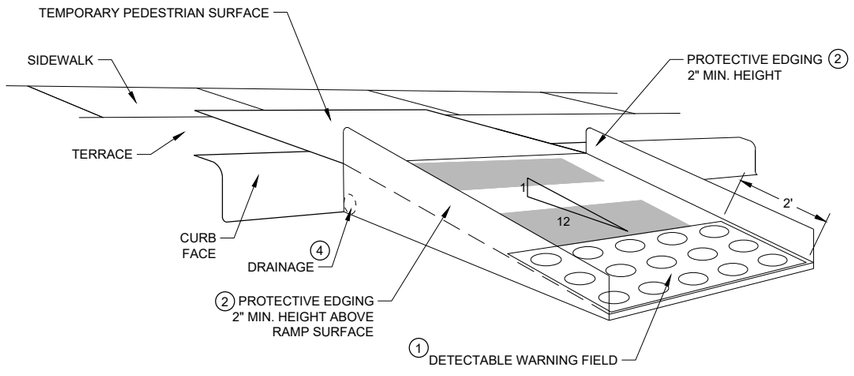
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D30 - 08b



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 - 08c

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

GENERAL NOTES

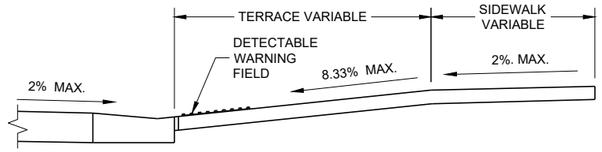
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

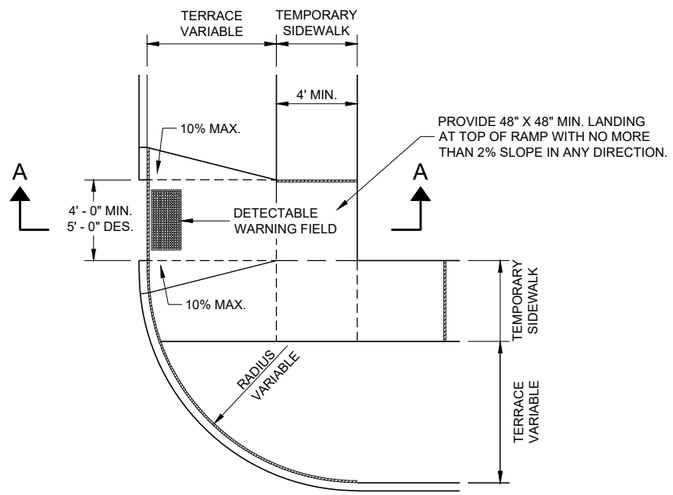
(2) SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.

(3) PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.

* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



SECTION A - A



PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15D30-08d

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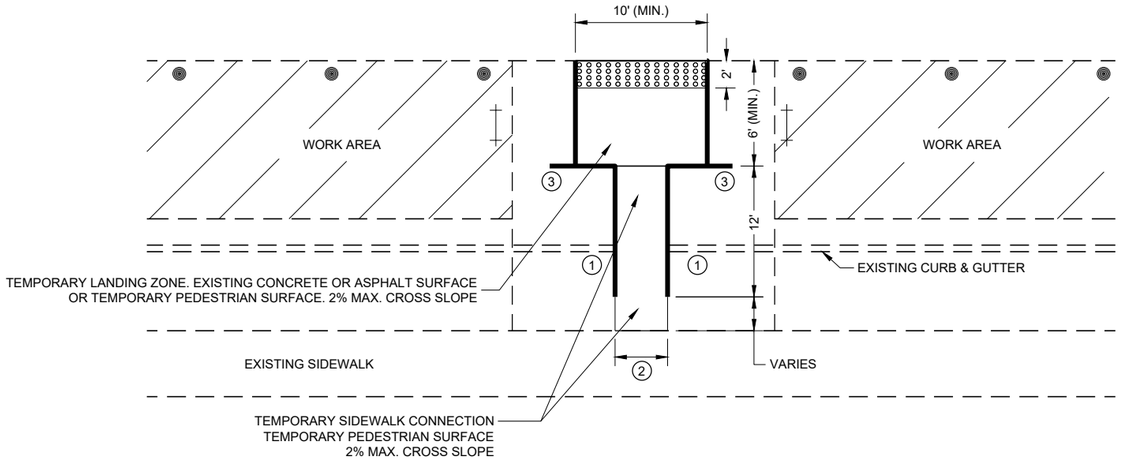
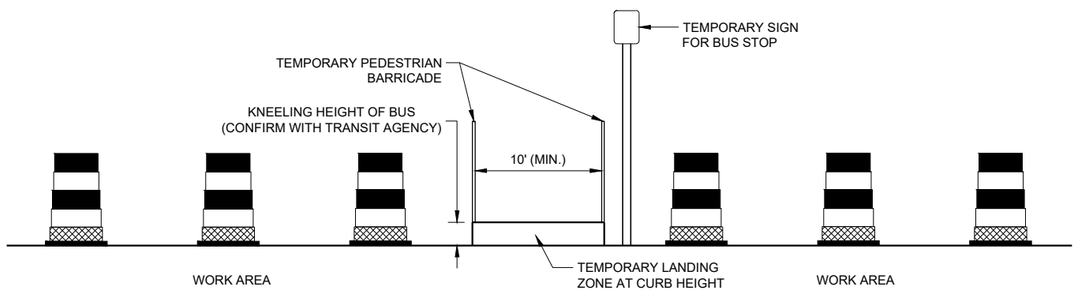
SDD 15D30-08d



PLAN VIEW



PROFILE VIEW

TEMPORARY BUS STOP PAD

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.

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.

DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).

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".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

(1) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.

(2) 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.

(3) PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

6

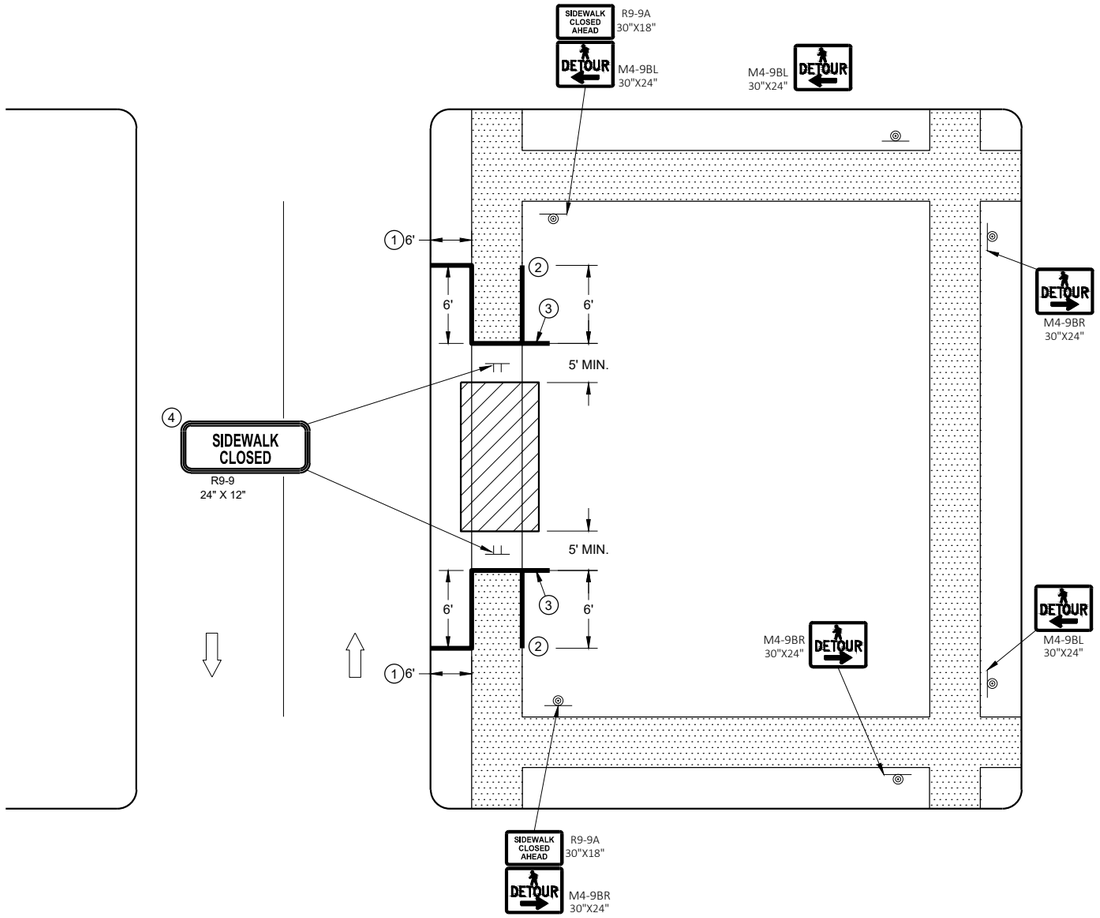
SDD 15D30 - 08e

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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.

SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

6

SDD 15D30 - 08f

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

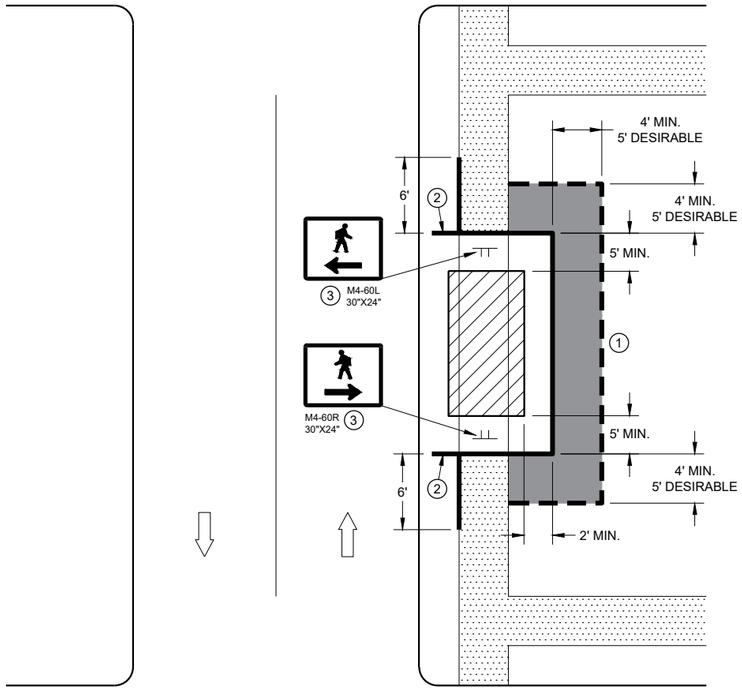
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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.

1. USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
2. IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DIVERSION
SINGLE SIDE

6

SDD 15D30 - 08g

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SDD15D30 - 08g

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

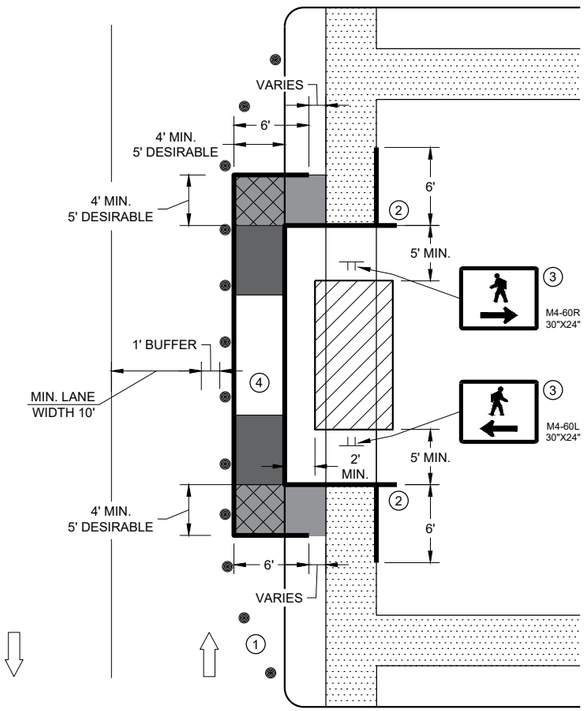
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

1. SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
2. PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
3. MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
4. USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



SIDEWALK DIVERSION, SINGLE SIDE

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15D30 - 08h

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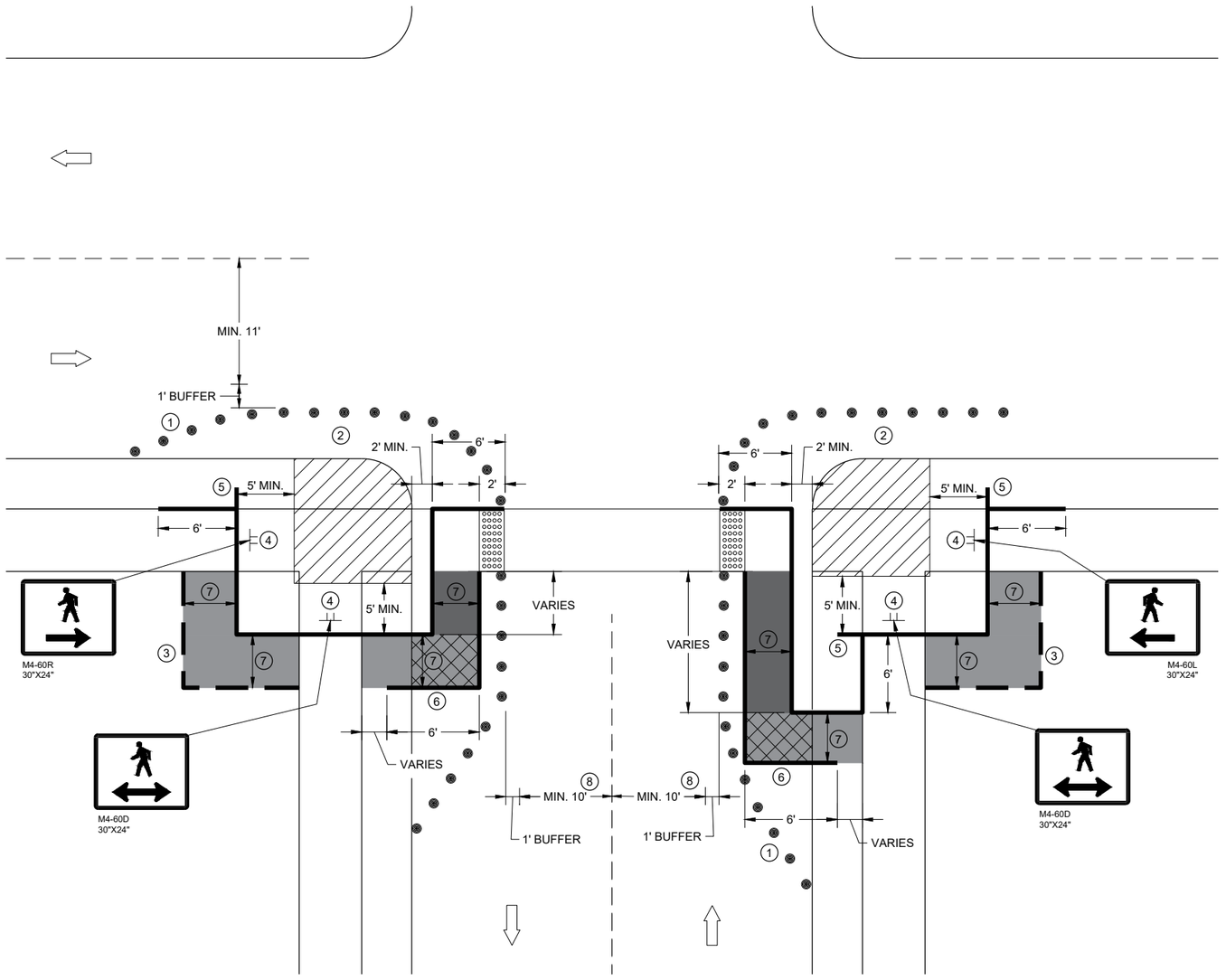
SDD 15D30 - 08h



CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

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.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

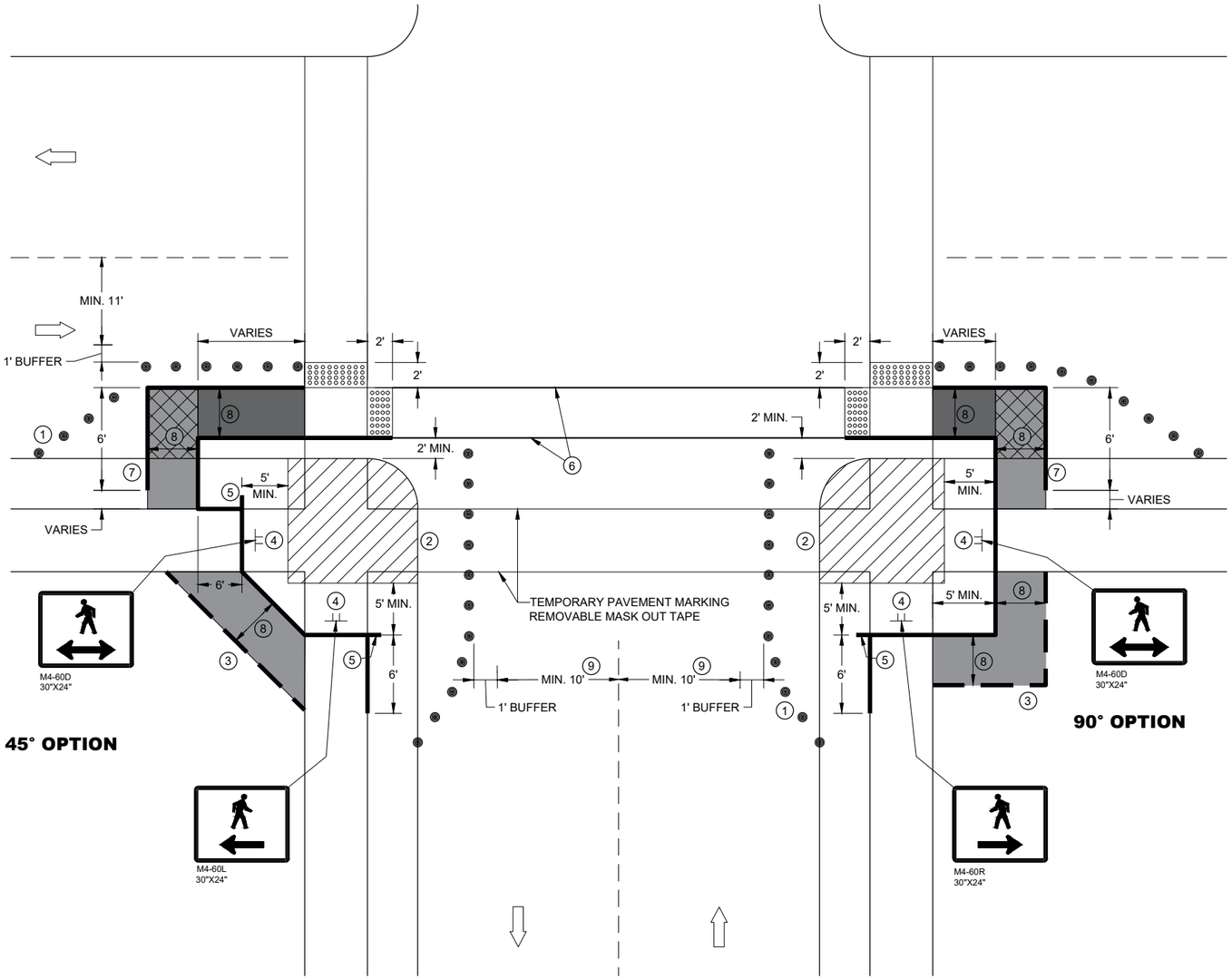
WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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. IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
7. 4 FEET MINIMUM, 5 FEET DESIRABLE
8. 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

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION



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.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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.

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

TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

SDD 15D30 - 08j

6

LEGEND

SIGN ON PERMANENT SUPPORT

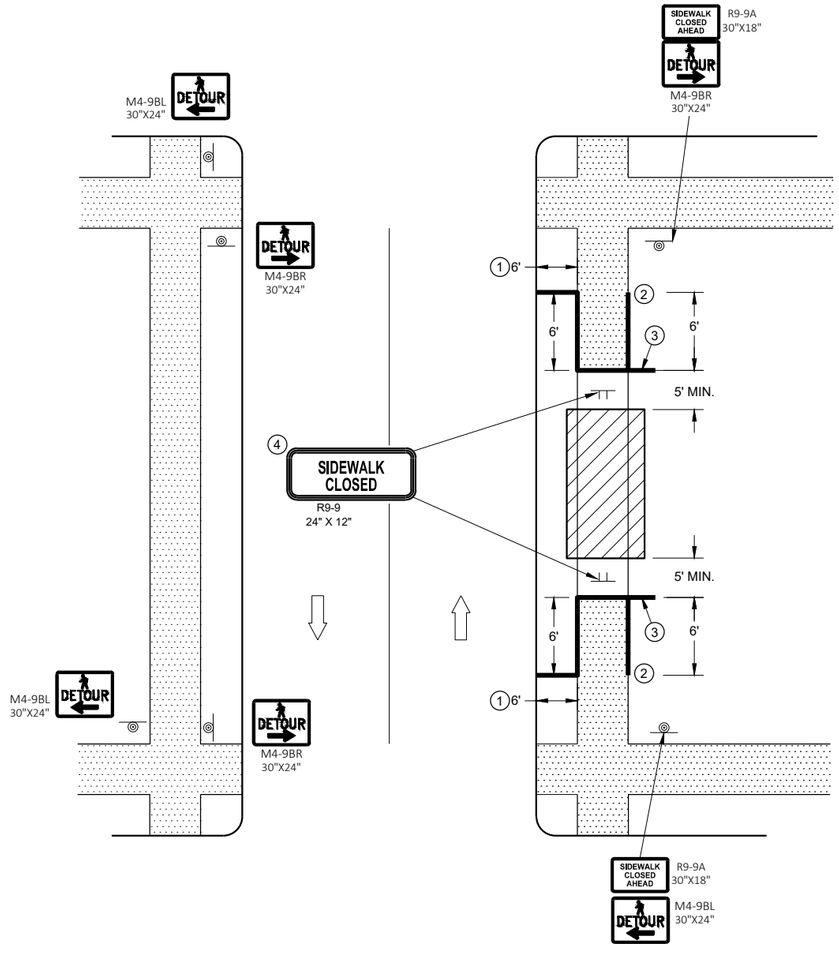
SIGN ON TEMPORARY SUPPORT

UNDER PEDESTRIAN TRAFFIC

WORK AREA

TEMPORARY PEDESTRIAN BARRICADE

DIRECTION OF TRAFFIC



GENERAL NOTES

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

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.

SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

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

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.

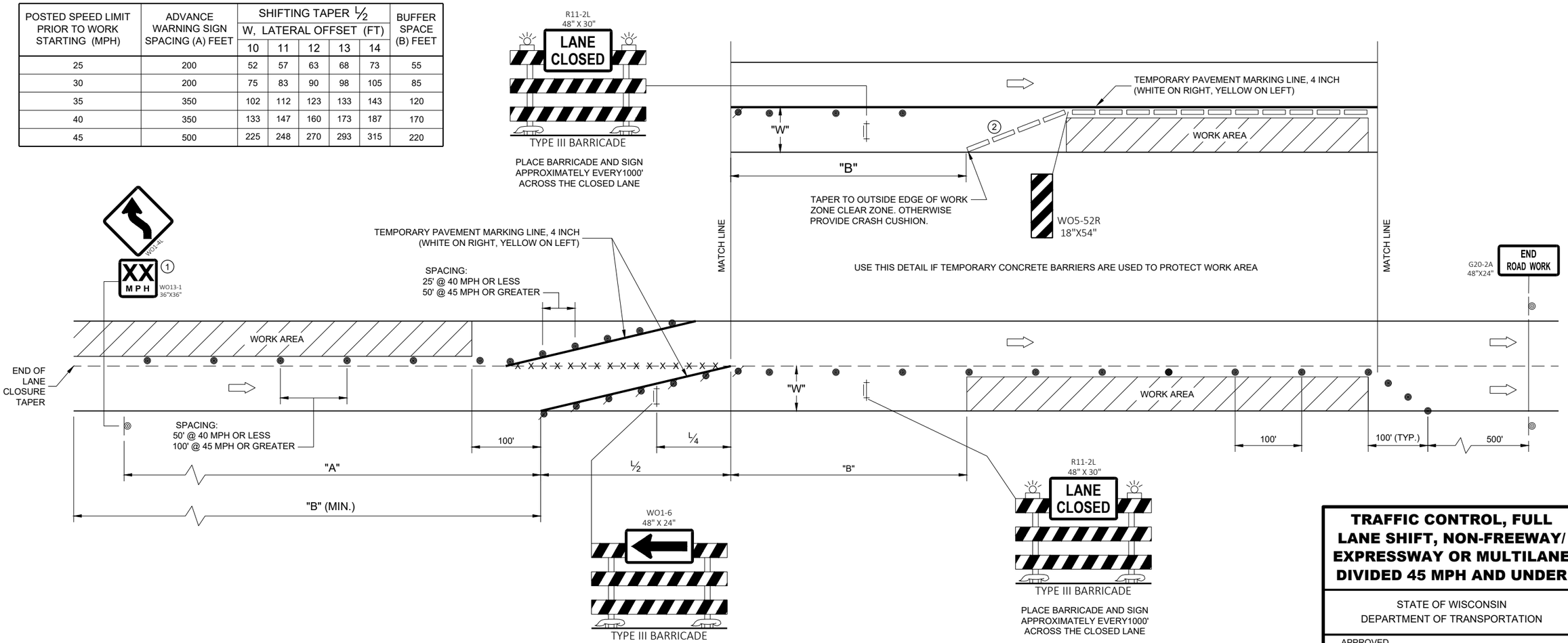
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

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

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	55
30	200	75	83	90	98	105	85
35	350	102	112	123	133	143	120
40	350	133	147	160	173	187	170
45	500	225	248	270	293	315	220



TRAFFIC CONTROL, FULL LANE SHIFT, NON-FREEWAY/ EXPRESSWAY OR MULTILANE DIVIDED 45 MPH AND UNDER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D40 - 04a

SDD 15D40 - 04a

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

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

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

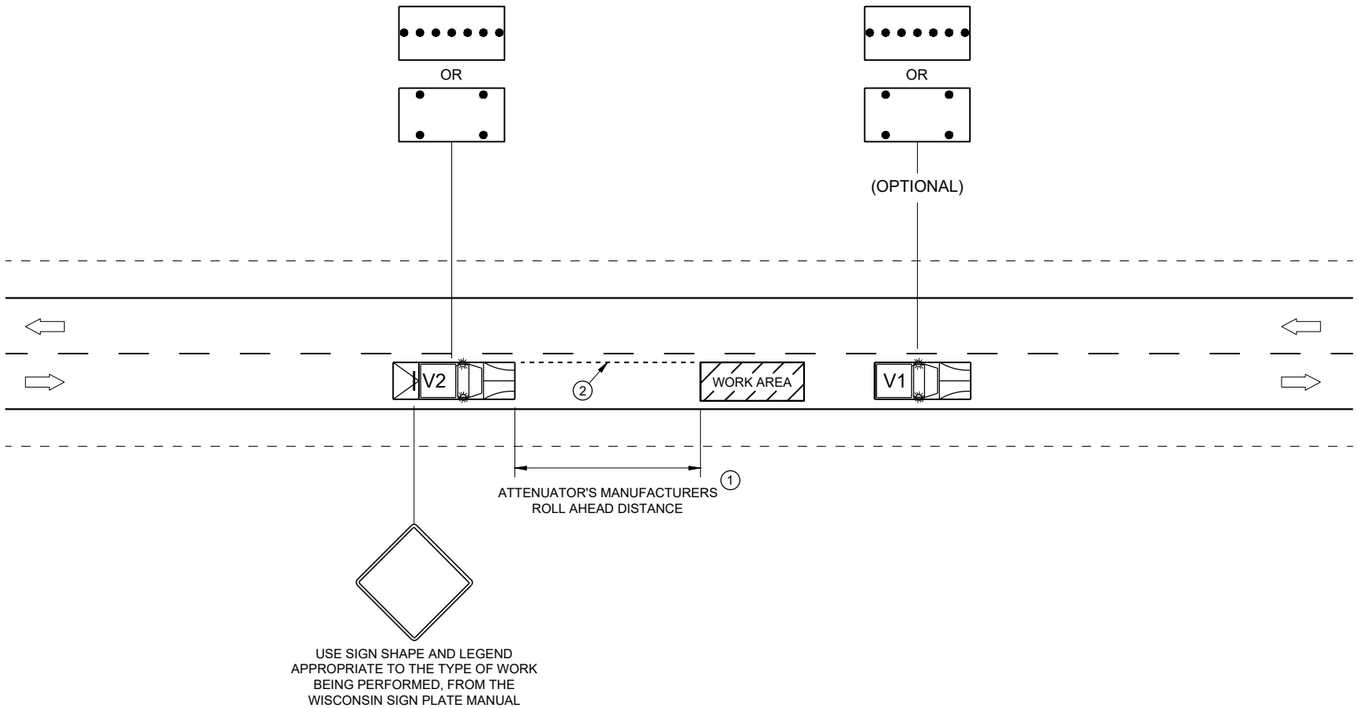
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

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

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

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

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



TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

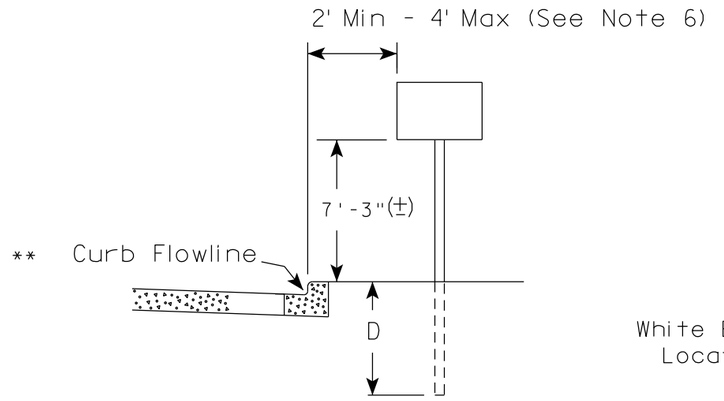
APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER

FHWA

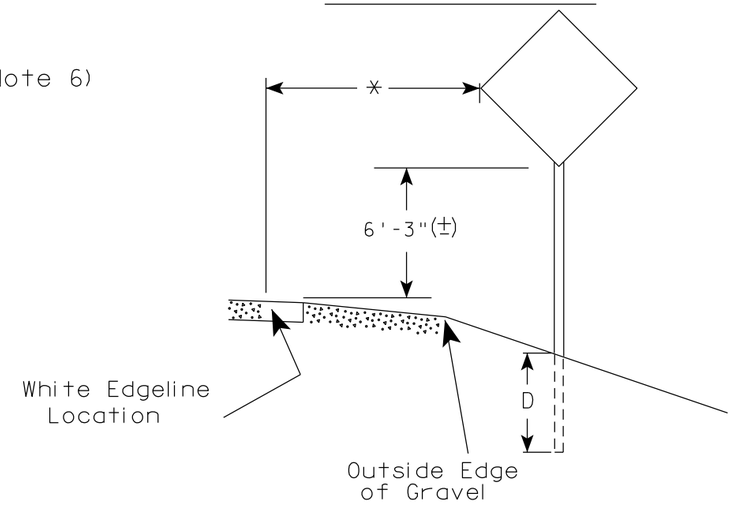
6

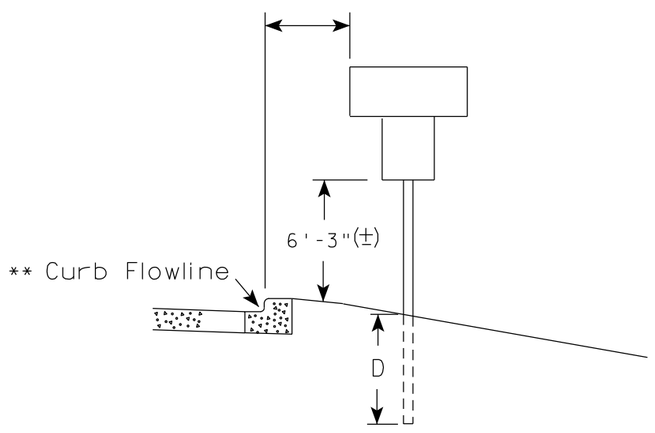
SDD 15D51 - 01

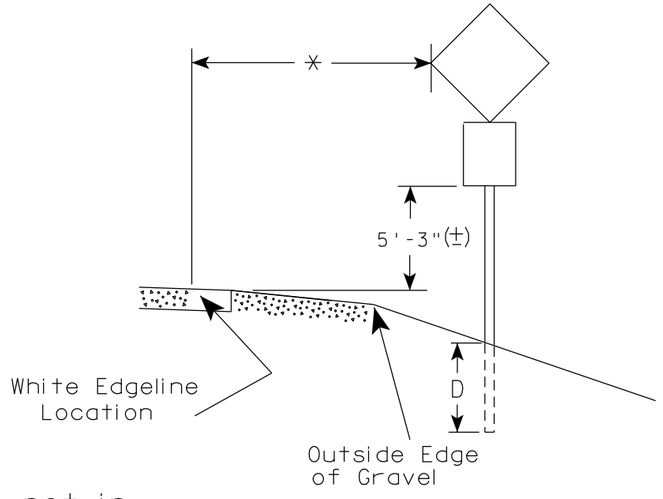
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

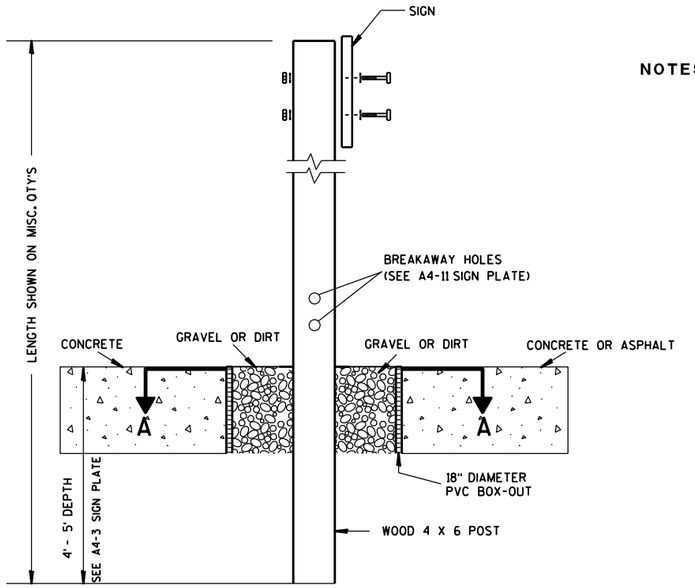
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

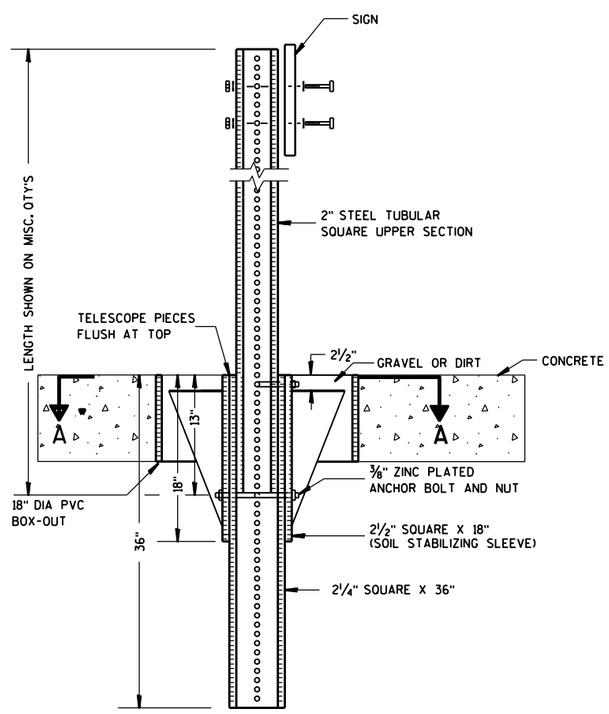
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 160	E



ELEVATION VIEW

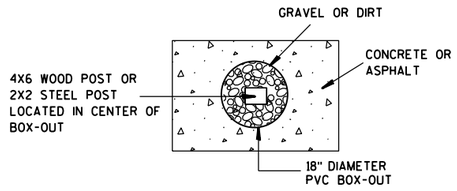
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

WISCONSIN DEPT OF TRANSPORTATION

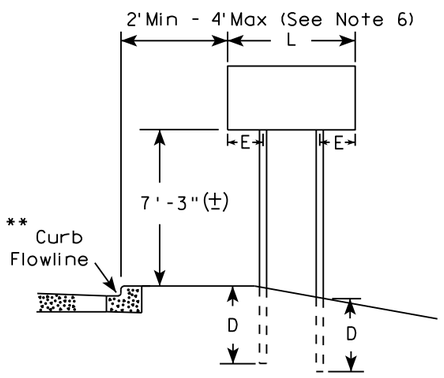
APPROVED Matthew R Rauch
for State Traffic Engineer

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

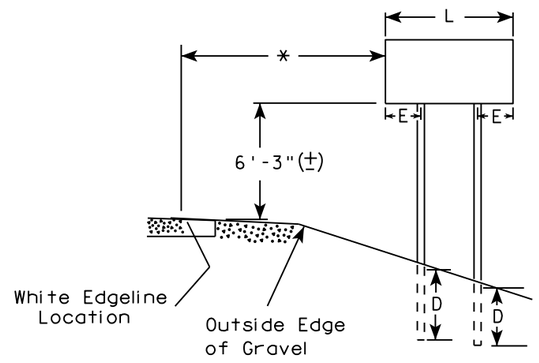
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

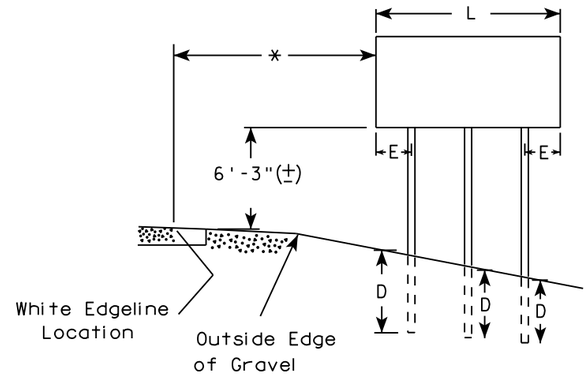
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

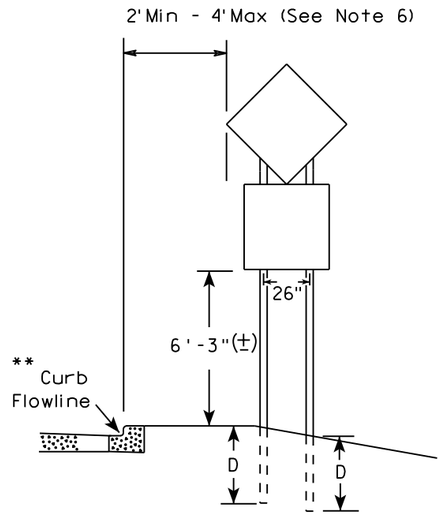
URBAN AREA



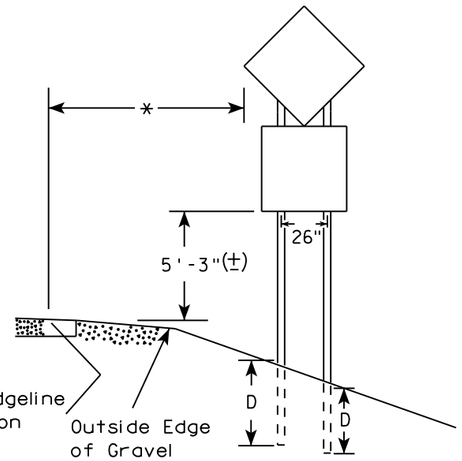
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

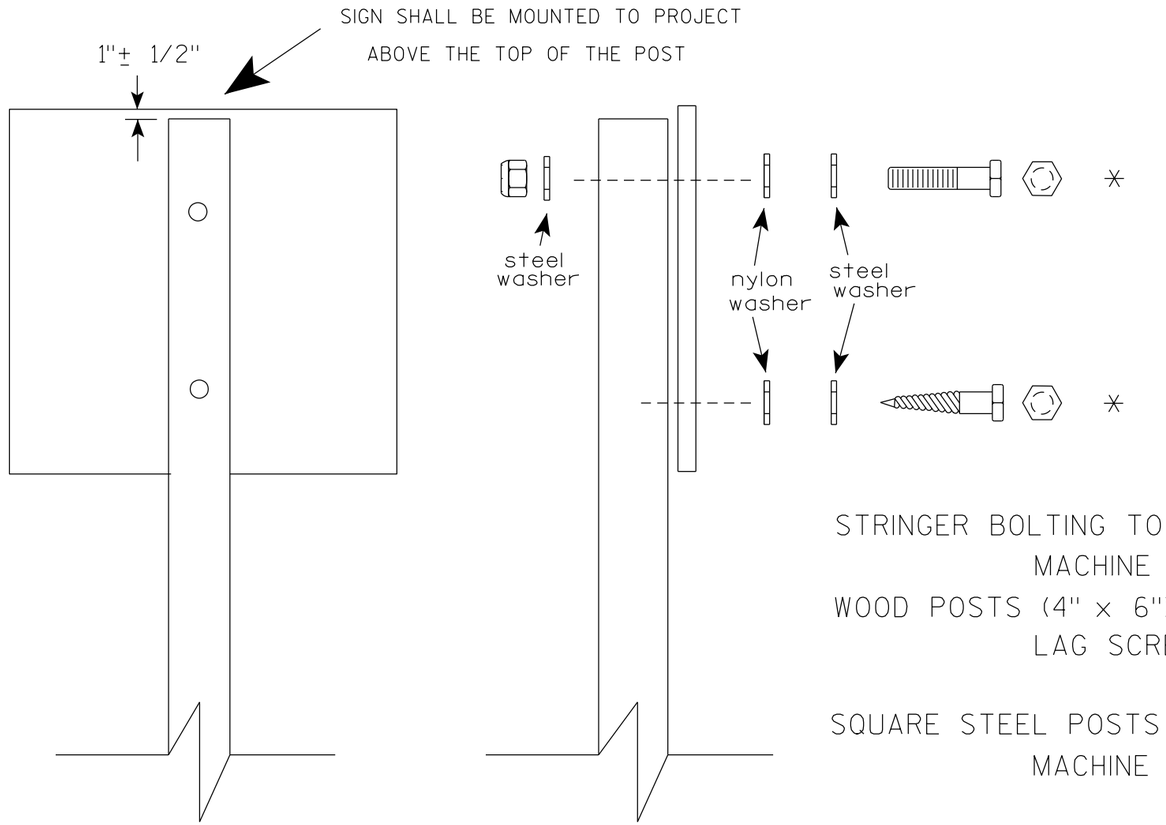
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 162	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

PROJECT NO:

SHEET NO: 163 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 01-APRIL-2020 PLOT BY : dotc4c

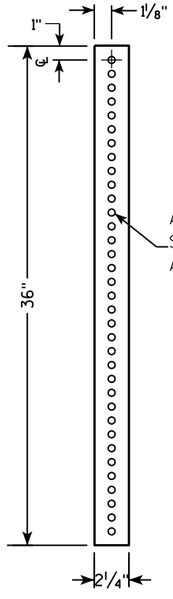
WISDOT/CADDS SHEET 42

7

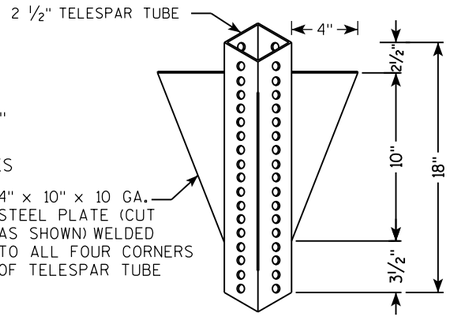
7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

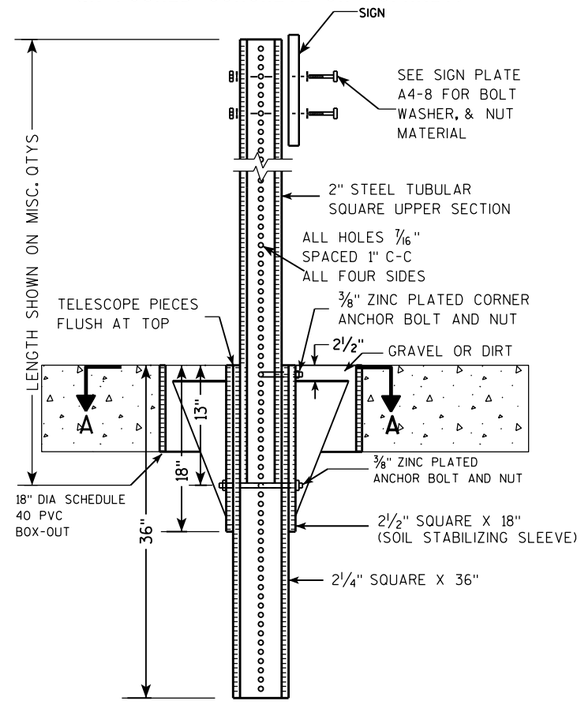
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



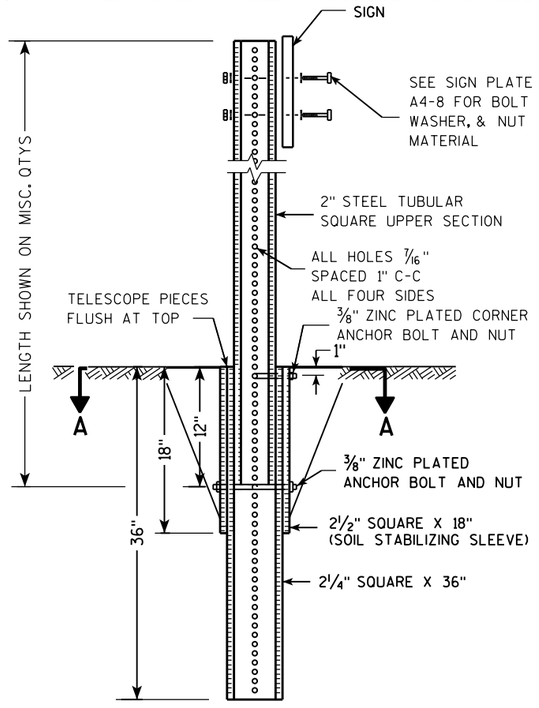
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

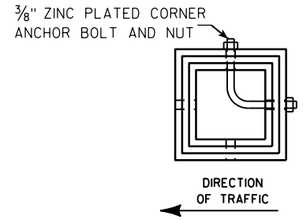


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

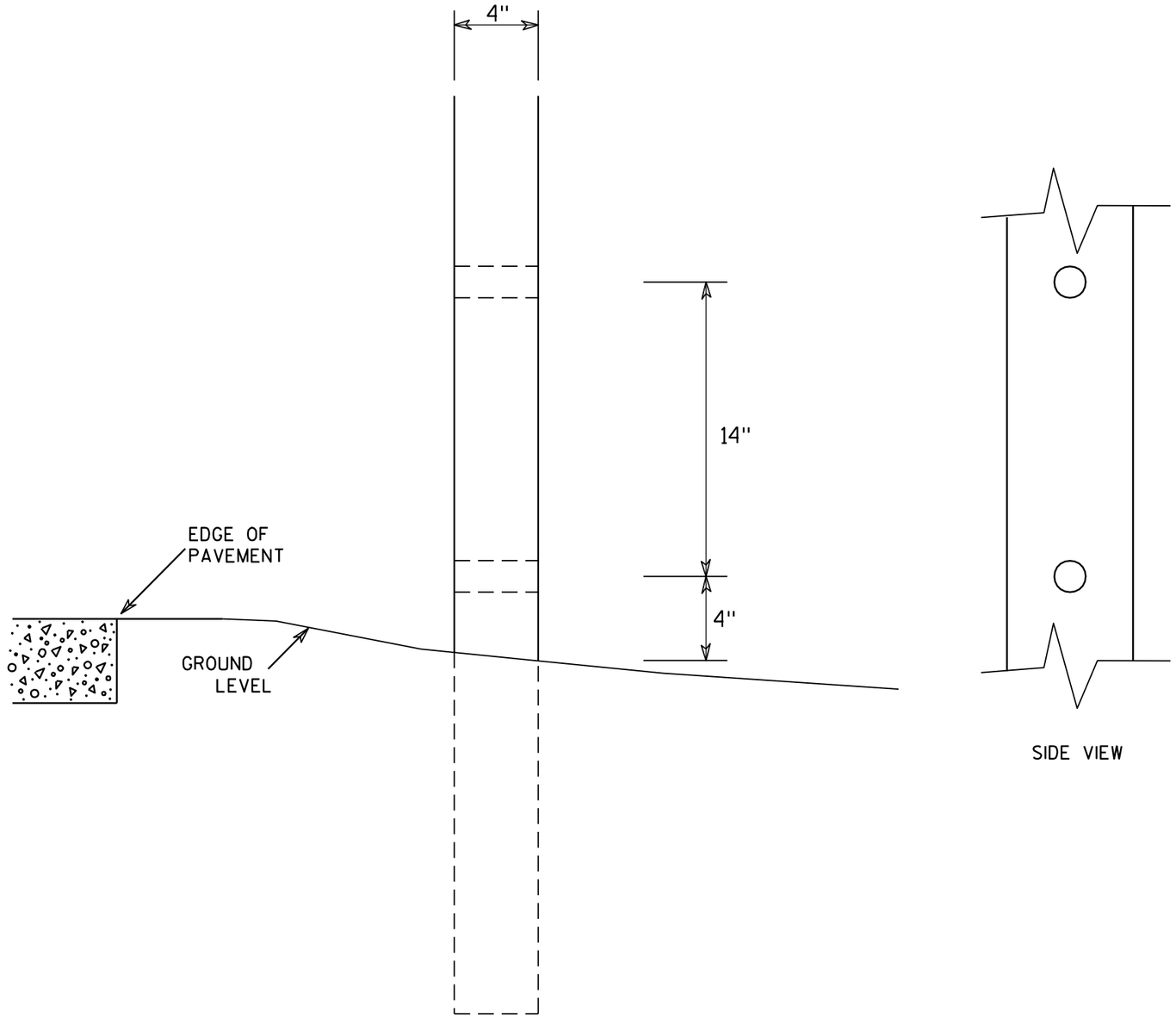
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 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

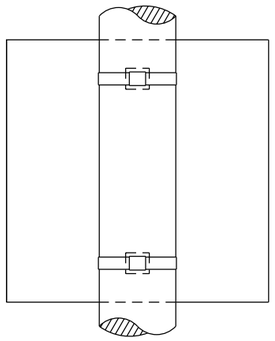
APPROVED Chester J Spang for State Traffic Engineer

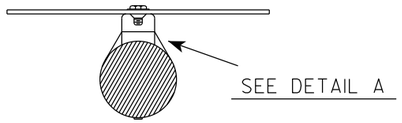
DATE 3/27/97 PLATE NO. A4-11.2

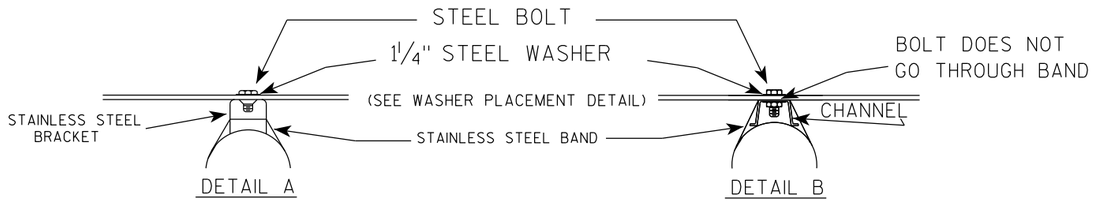
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 165	E

BANDING

SINGLE SIGN



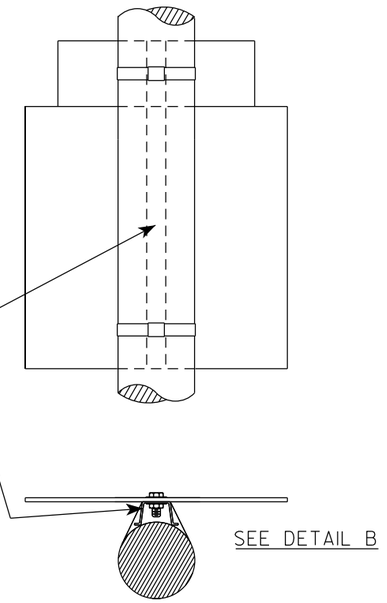




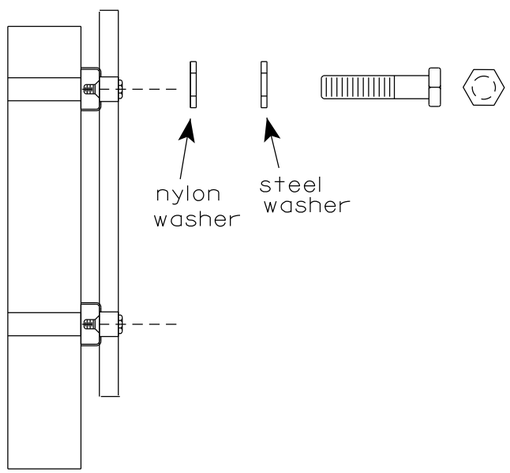
GENERAL NOTES

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

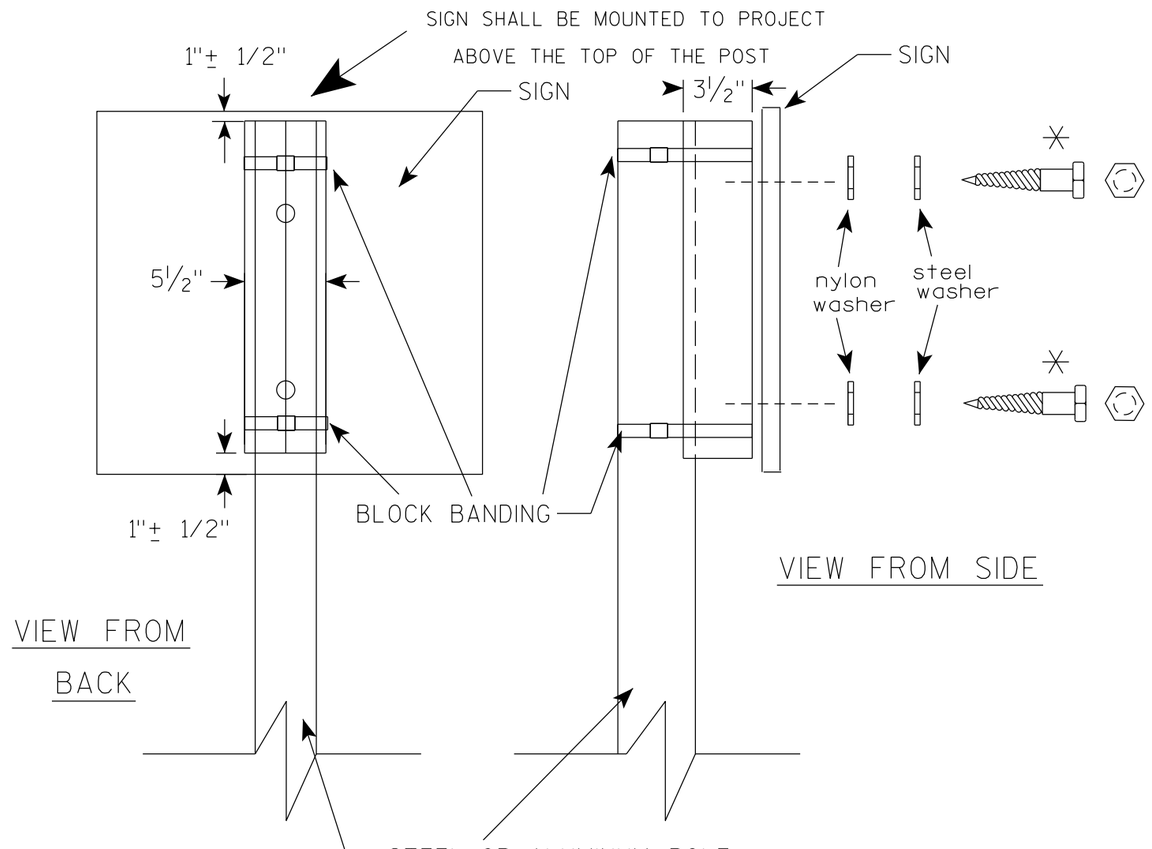
DATE 6/10/19 PLATE NO. A5-9.4

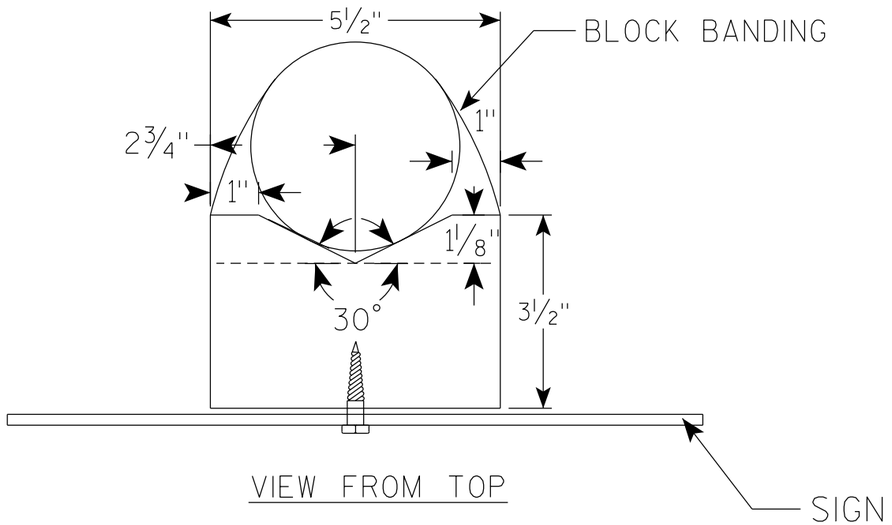
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 166	E

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)

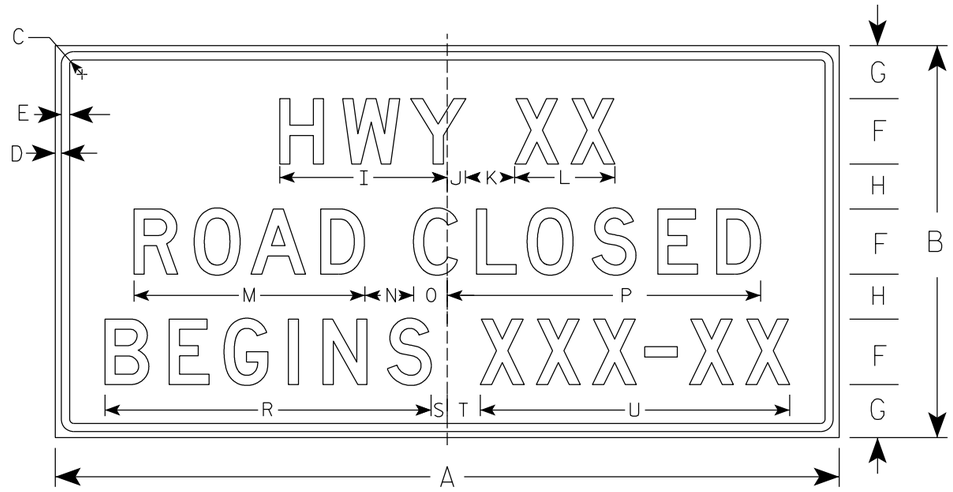
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

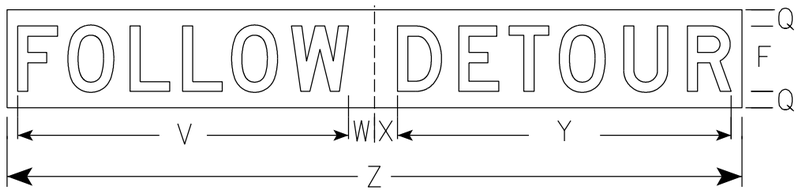
PROJECT NO:

SHEET NO: 167 E



G20-57C

PLAQUE ON .040" ALUMINUM



USE ONLY ONCE WHEN ROAD IS CLOSED

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Substitute appropriate numeral and 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																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/8	5	2 7/8	29	2	30	1 3/4	3 1/4	28 3/8	40 1/2	2	2	29 3/4	66	18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	6	4 1/8	38 3/8	2	39 7/8	2	4	37 7/8	29 3/4	3 1/8	2 7/8	40 7/8	90	32.0
5																											

STANDARD SIGN

G20-57C

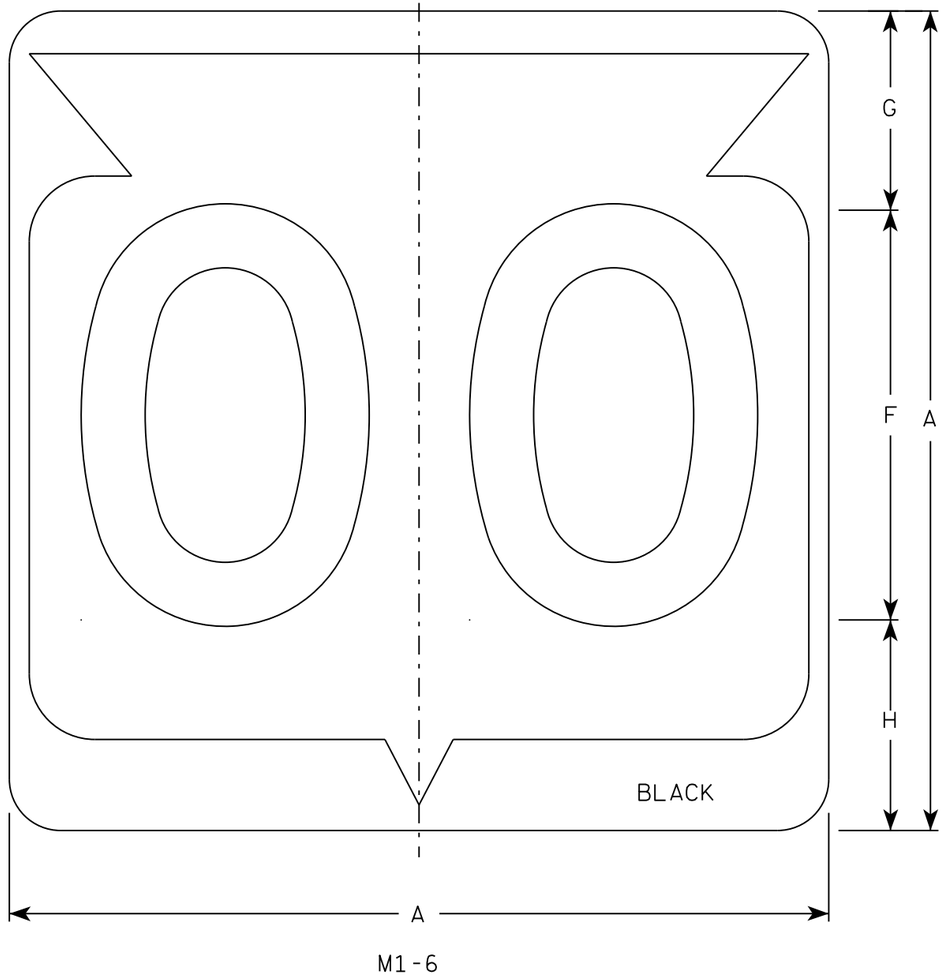
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/25/19

PLATE NO. G20-57C.1

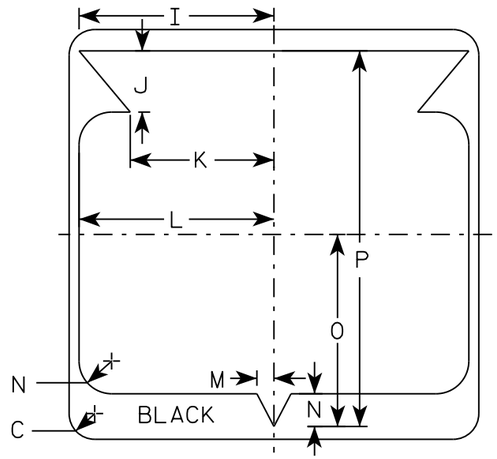
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 168 E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

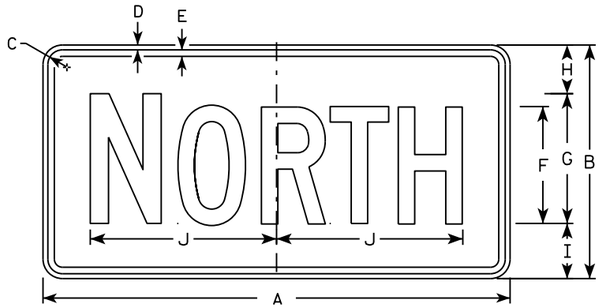
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

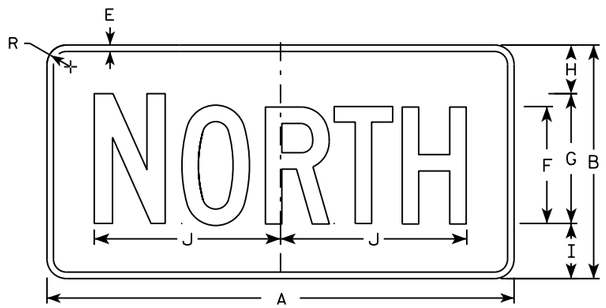
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 169 | E



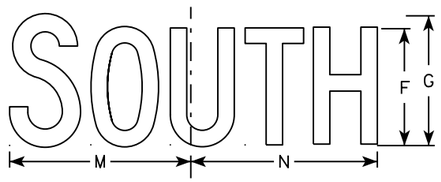
M3-1
MM3-1
MP3-1



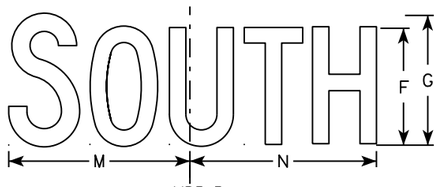
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

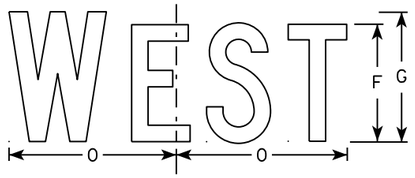
MB3-2
MK3-2
MN3-2



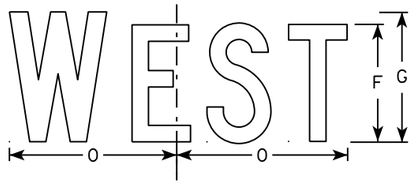
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
   Message - Black
   MB3-1 thru MB3-4 Background - Blue
   Message - White
   MK3-1 thru MK3-4 Background - Green
   Message - White
   MM3-1 thru MM3-4 Background - White
   Message - Green
   MN3-1 thru MN3-4 Background - Brown
   Message - White
   MP3-1 thru MP3-4 Background - White
   Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

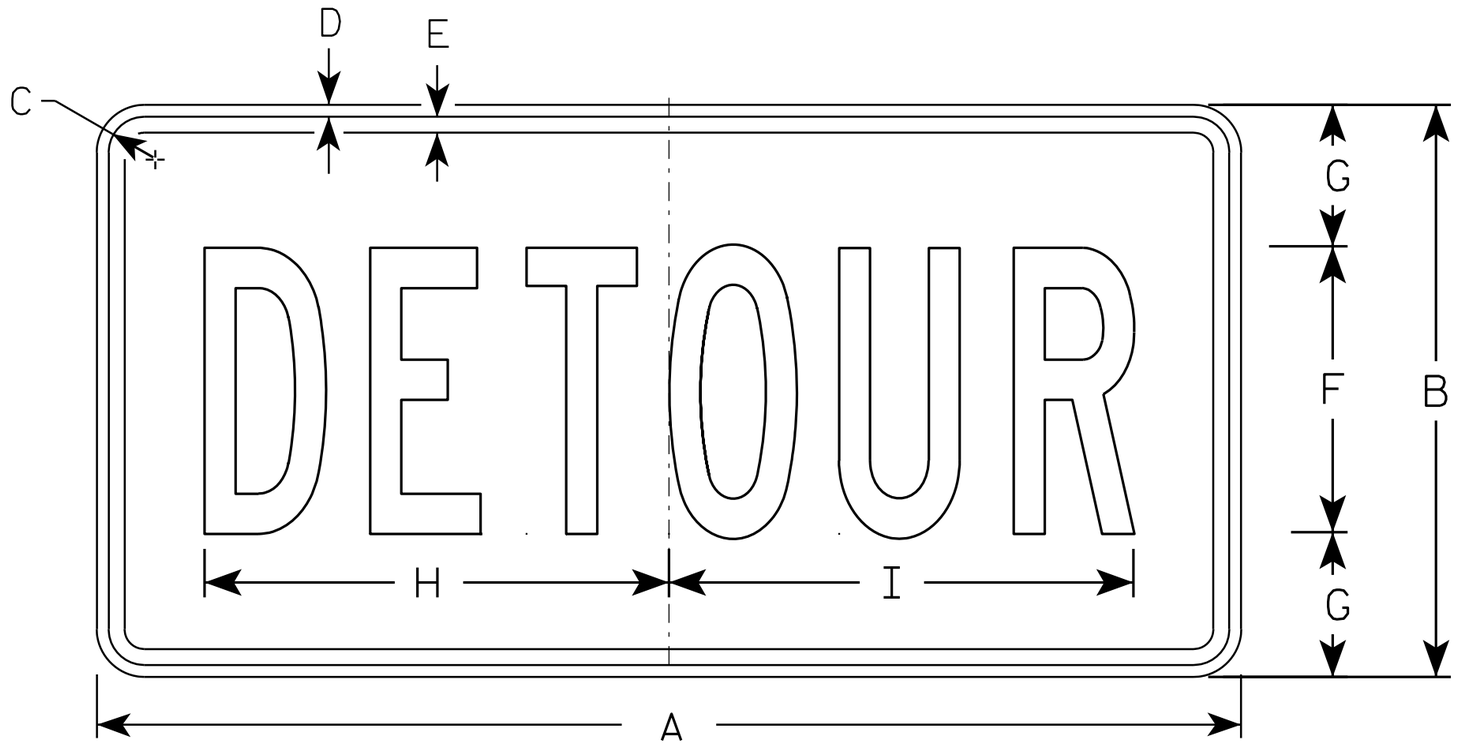
STANDARD SIGNS
M3-1 thur M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E



M4-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

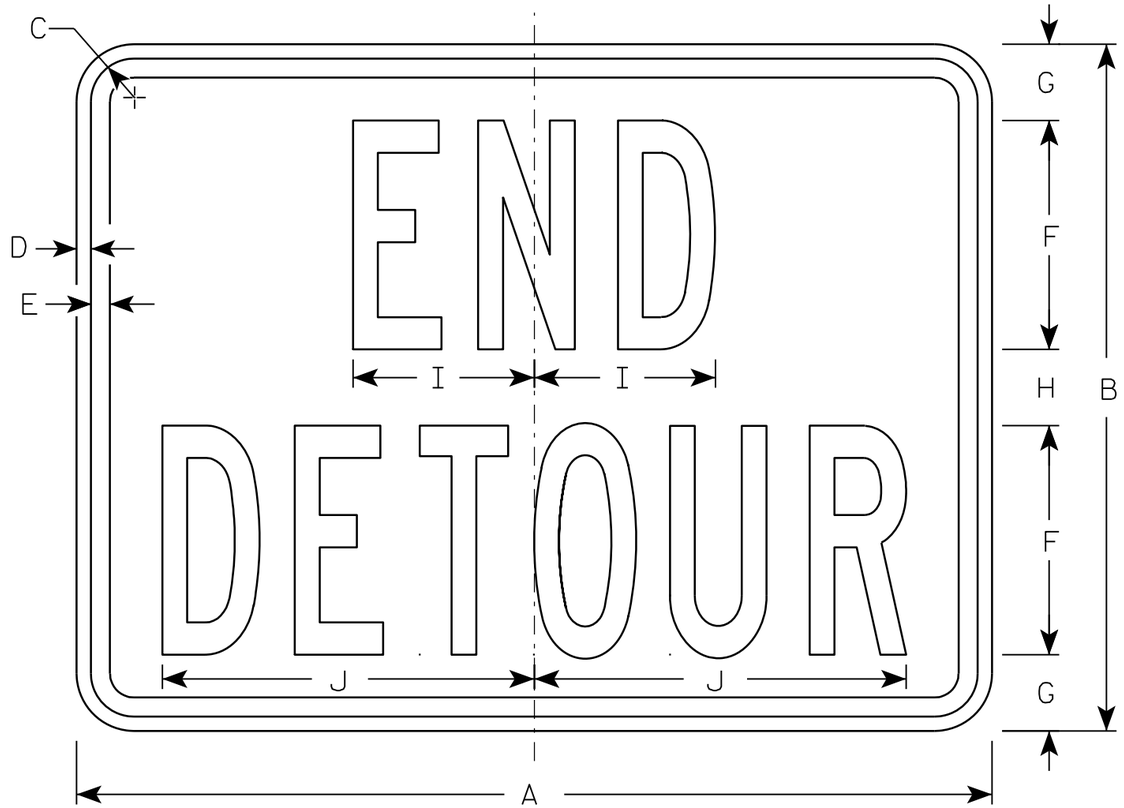
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 171	E



M4-8A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

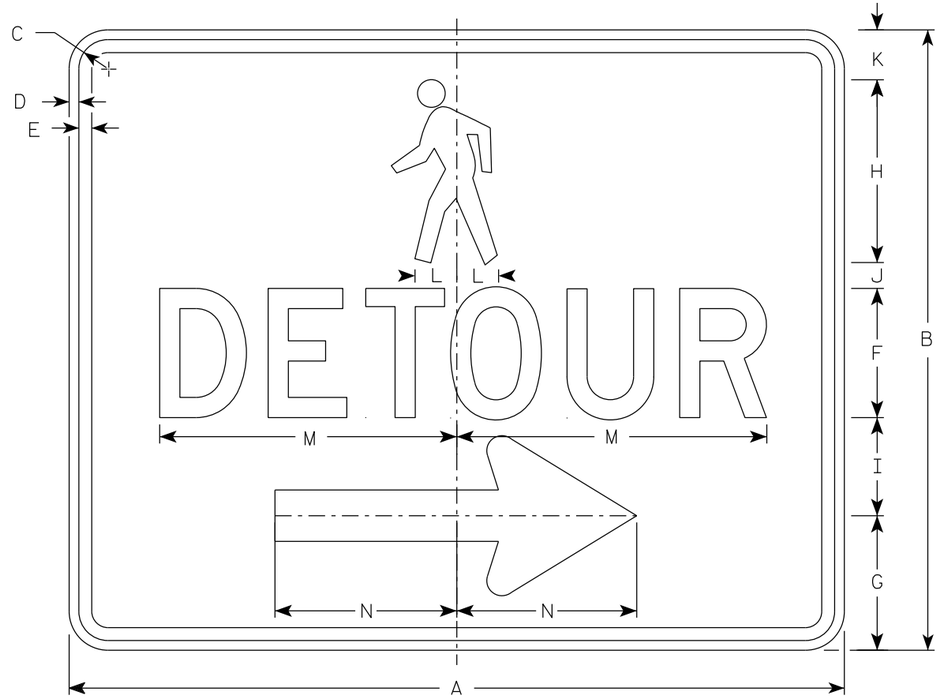
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-8A.2

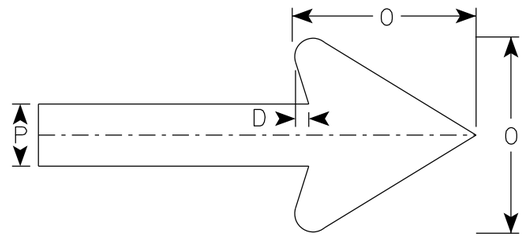
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 172	E



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																											
2	30	24	1 1/8	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											5.00
3																											
4																											
5																											

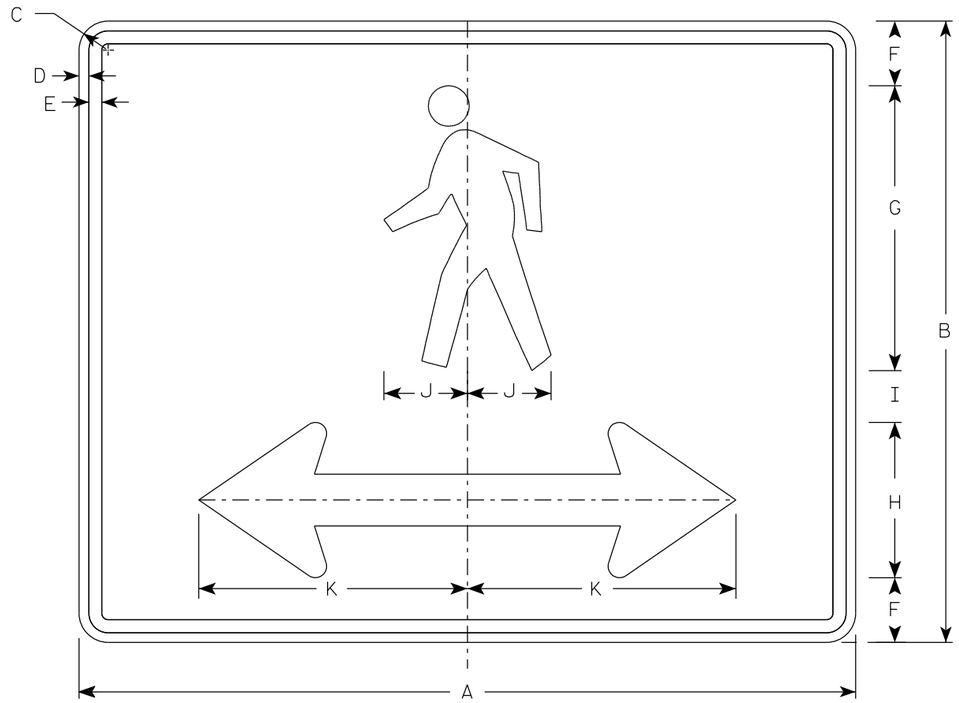
STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 7/1/19 PLATE NO. M4-9B.2

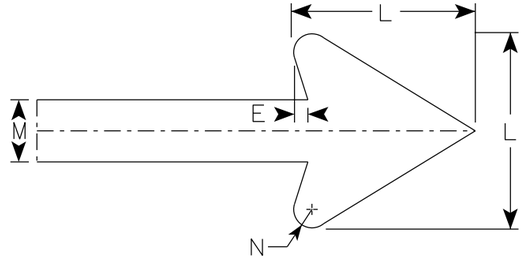
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 173 | E



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																											
2	30	24	1 1/8	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																											

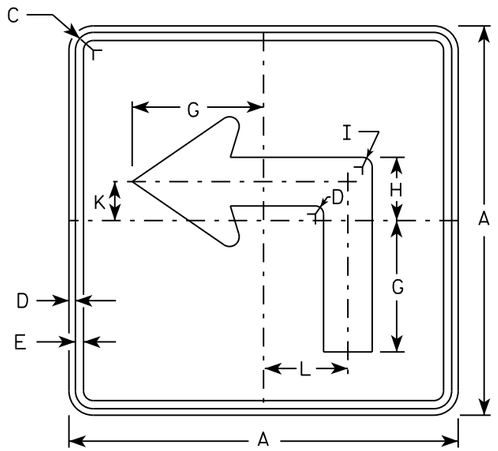
STANDARD SIGN
M4-60D

WISCONSIN DEPT OF TRANSPORTATION

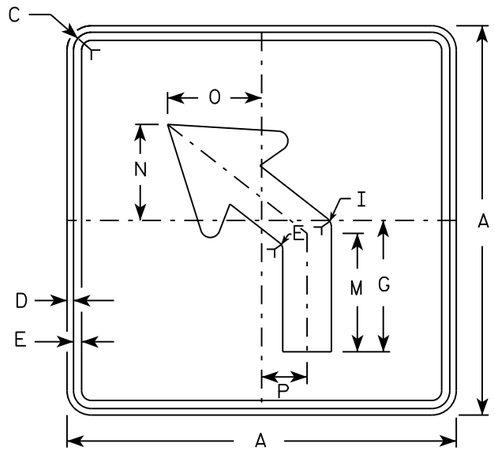
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/2021 PLATE NO. M4-60D.1

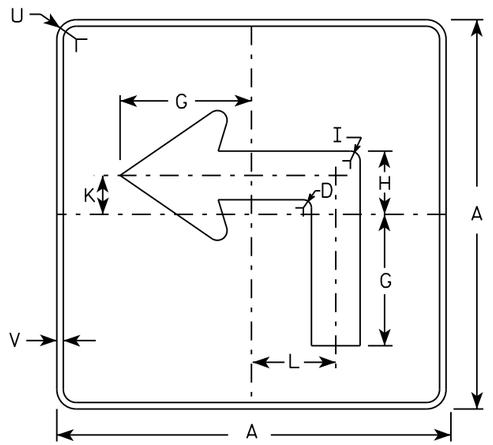
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 174	E



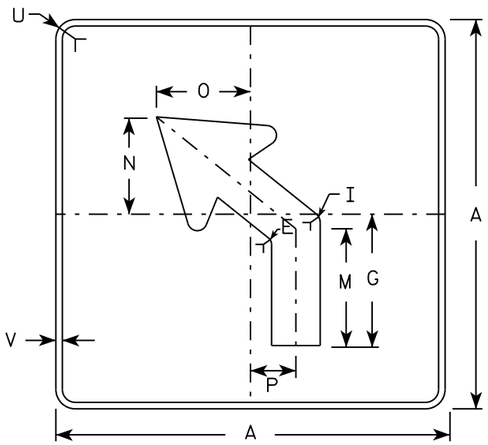
M5-1L
MM5-1L
MO5-1L
MP5-1L



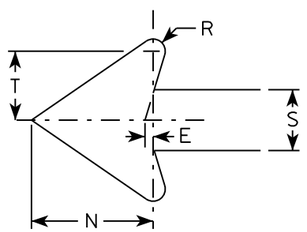
M5-2L
MM5-2L
MO5-2L
MP5-2L



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 - Type H Reflective
   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.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	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 1/2	1/2					3.06
3	30		1 3/8	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 7/8	1/2					6.25
4	30		1 3/8	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 7/8	1/2					6.25
5	30		1 3/8	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 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

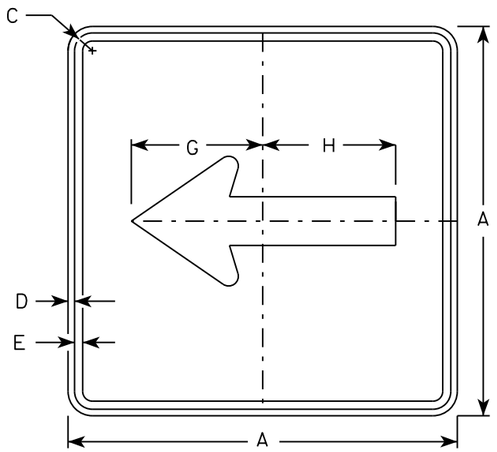
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

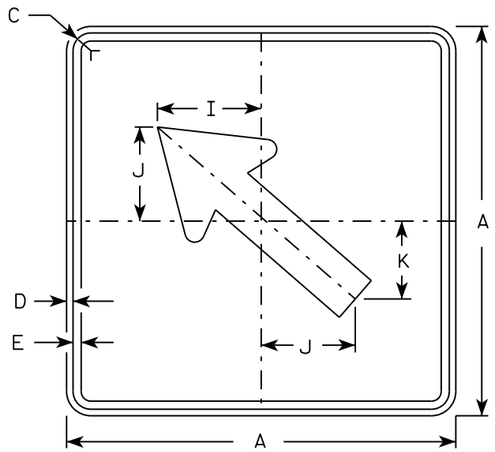
DATE 10/15/15 PLATE NO. M5-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



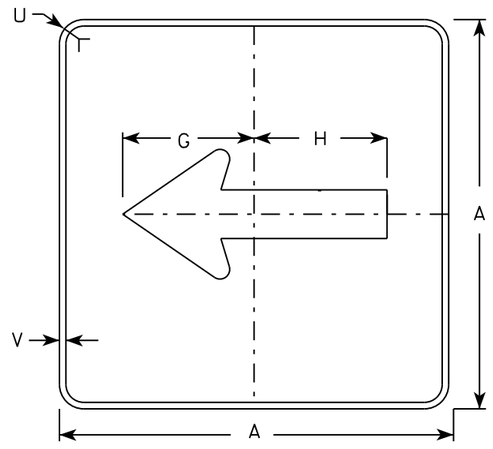
M6-1
MM6-1
MO6-1
MP6-1



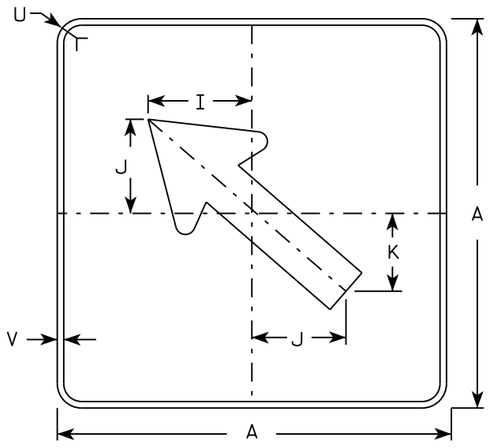
M6-2
MM6-2
MO6-2
MP6-2

NOTES

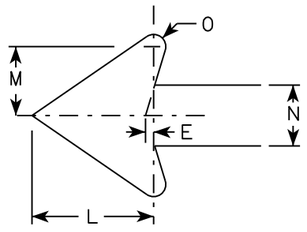
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

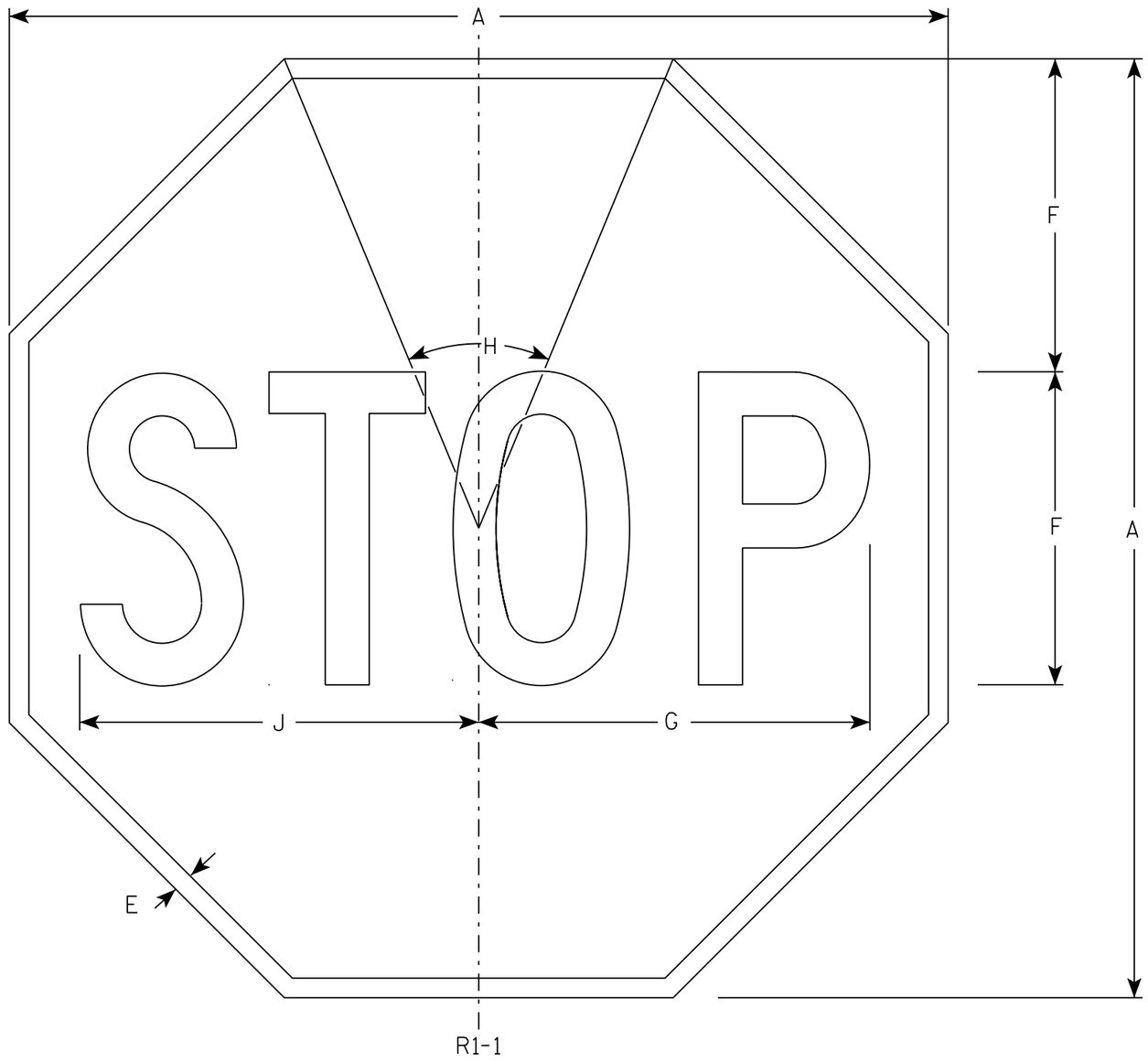
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 176 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	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

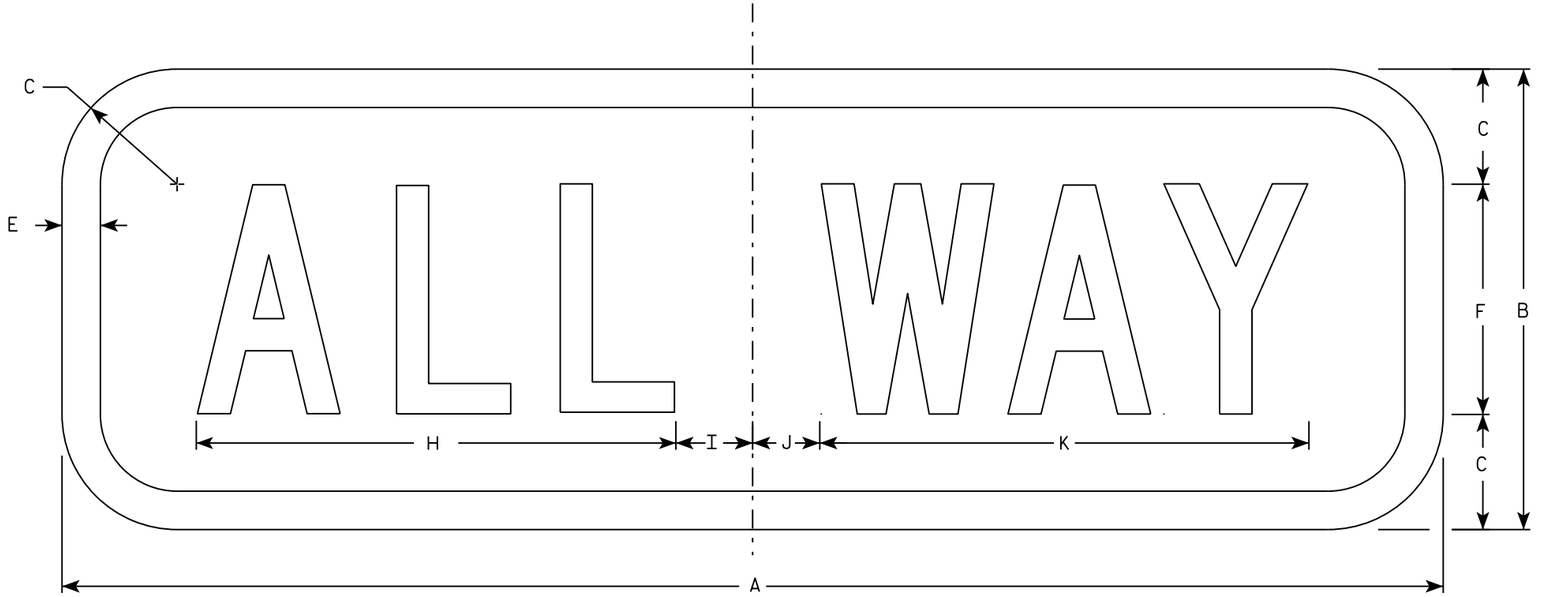
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 177	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - Red
   Message - White
3. Message Series - C
4. For 30"x30" R1-1 use 18"x6" R1-3P sign
   For 36"x36" R1-1 use 24"x9" R1-3P sign
   For 48"x48" R1-1 use 30"x12" R1-3P sign



R1-3P

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	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
4	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
5	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5

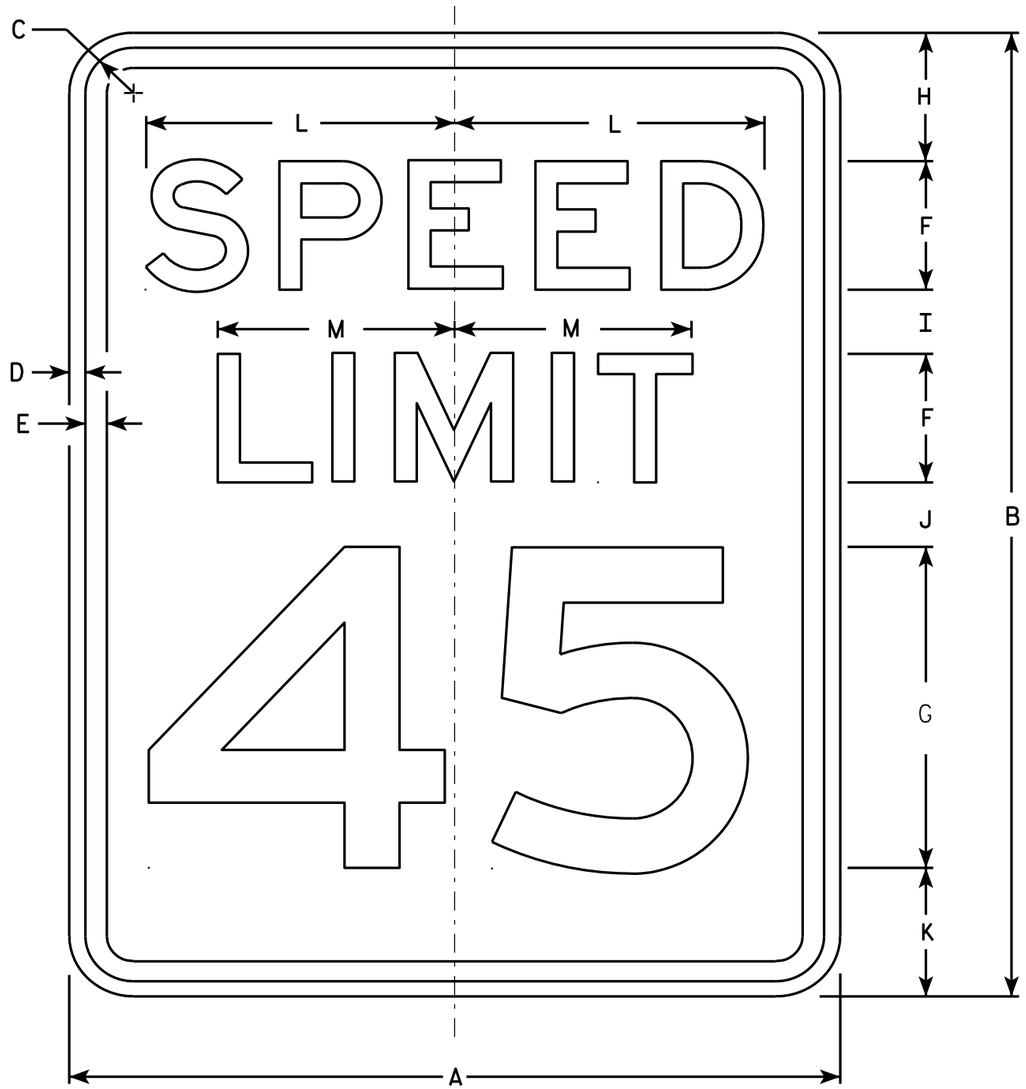
STANDARD SIGN
R1-3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 178 | E



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically 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 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	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 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

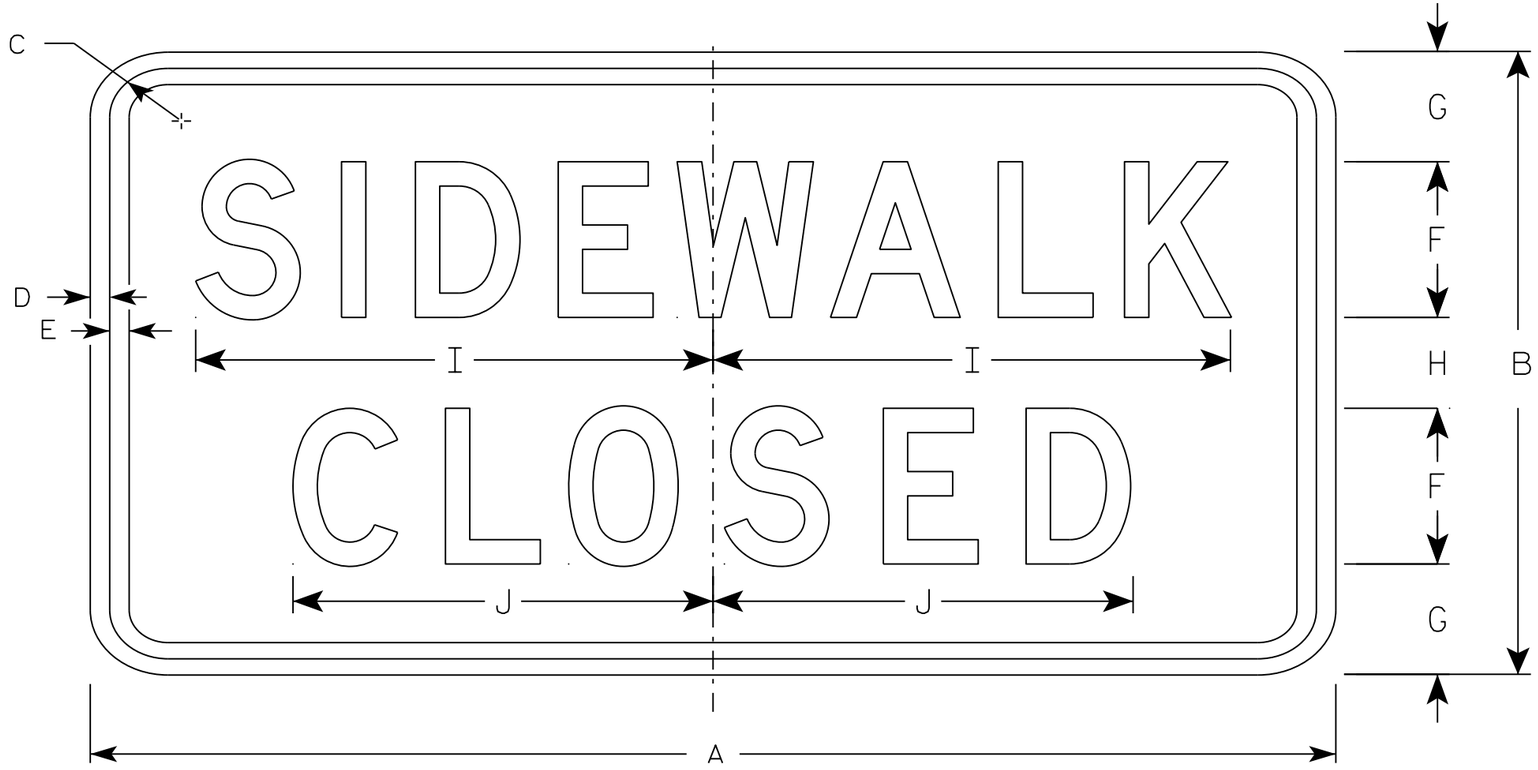
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 179 | E



R9-9

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 3/4	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 3/4	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

STANDARD SIGN
R9-9

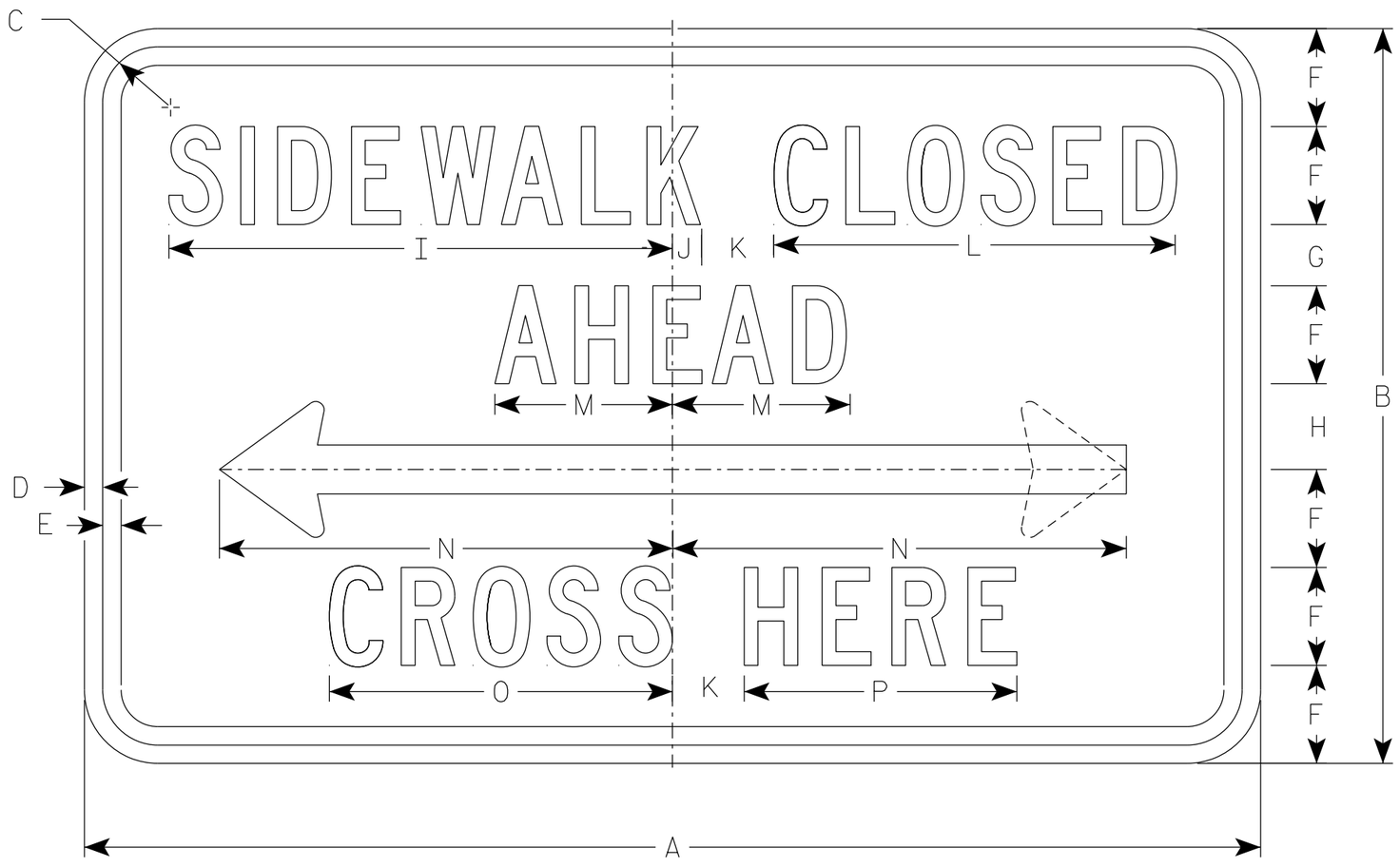
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

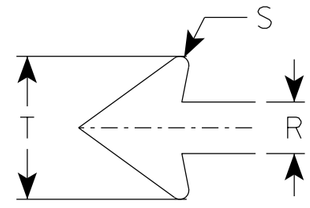
DATE 8/11/16 PLATE 180 R9-9.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R99.DGN PLOT DATE : 11-AUG-2016 11:33 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 2.918761:1.000000



R9-11



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C except Size 1 is 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. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.
6. R9-11 D (double arrow)
   R9-11 L (left arrow)
   R9-11 R (right arrow)

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 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
2M	24	12	1 1/8	3/8	3/8	1 1/2	1 1/2	1 1/2	9 3/4	5/8	1 1/2	7 5/8	3 1/2	9 1/4	6 5/8	5 1/8		1	1/8	2 3/4							2.0
3	30	15	1 1/8	3/8	1/2	2	1 1/2	1 1/2	13	3/4	2	10 1/4	4 5/8	12 3/8	8 7/8	6 7/8		1 1/4	1/4	3 5/8							3.125
4																											
5																											

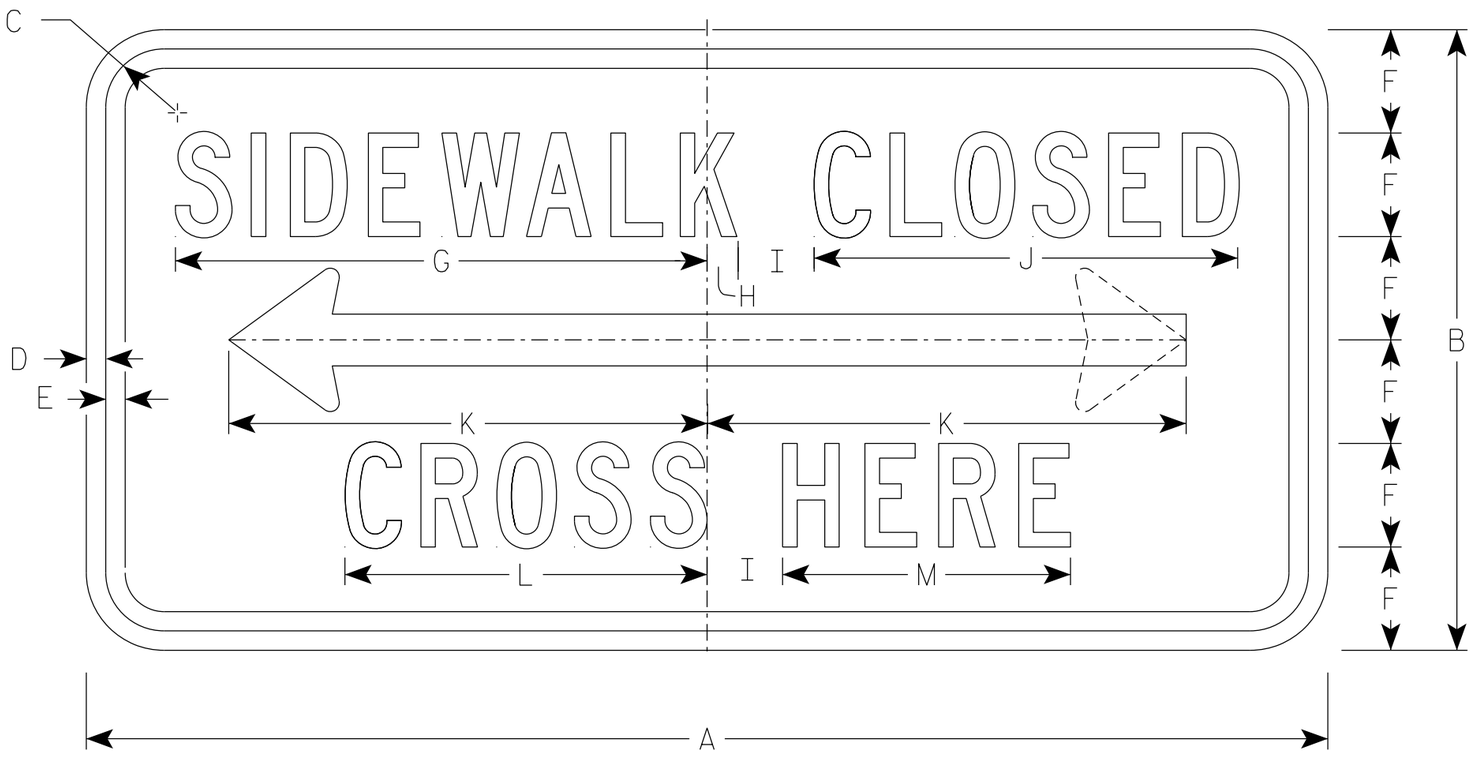
STANDARD SIGN
R9-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/30/2021 PLATE NO. R9-11.4

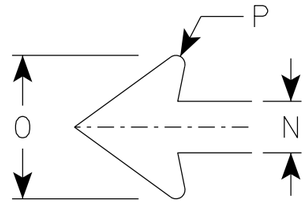
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 181 | E



R9-11A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Use Size 2 for Sidewalks. Use Size 3 for paths and Trails.
6. R9-11AD (double arrow)
   R9-11AL (left arrow)
   R9-11AR (right arrow)



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	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
2M	24	12	1 1/8	3/8	3/8	2	10 1/4	5/8	1 1/2	8 1/4	9 1/4	7	5 5/8	1	2 3/4	1/8											2.0
3	30	15	1 1/8	3/8	1/2	2 1/2	12 3/4	1/2	2	10 1/4	12 3/8	8 5/8	6 3/4	1 1/4	3 5/8	1/4											3.125
4																											
5																											

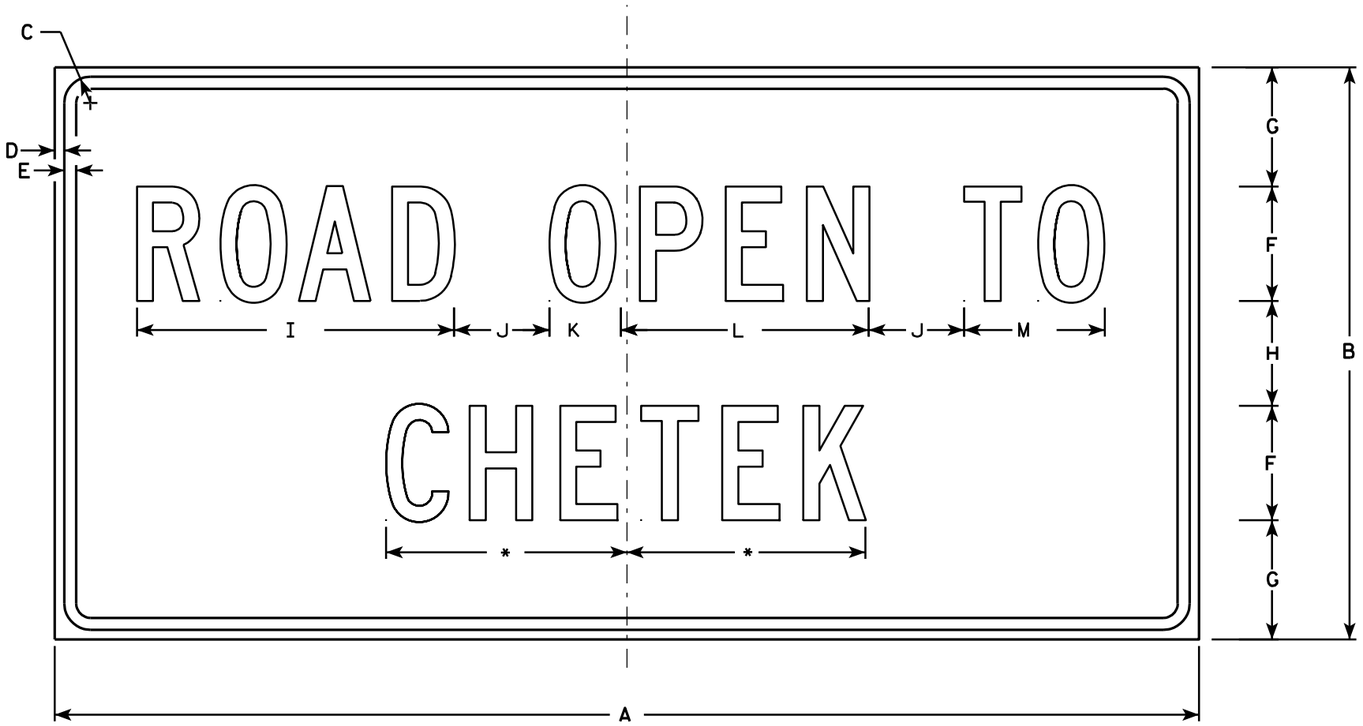
STANDARD SIGN
R9-11A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/31/2021 PLATE NO. R9-11A.5

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 182 | E



R10-61

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate message and optically balance.

*See note 5

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	24	1 3/8	1/2	5/8	4	5 1/2	5	10 3/4	2	2 1/8	8 3/8	4 5/8														6.0
2S	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
2M	60	30	1 3/8	1/2	5/8	6	6 1/4	5 1/2	16 5/8	5	3 3/4	13	7 3/8														12.5
3																											
4																											
5																											

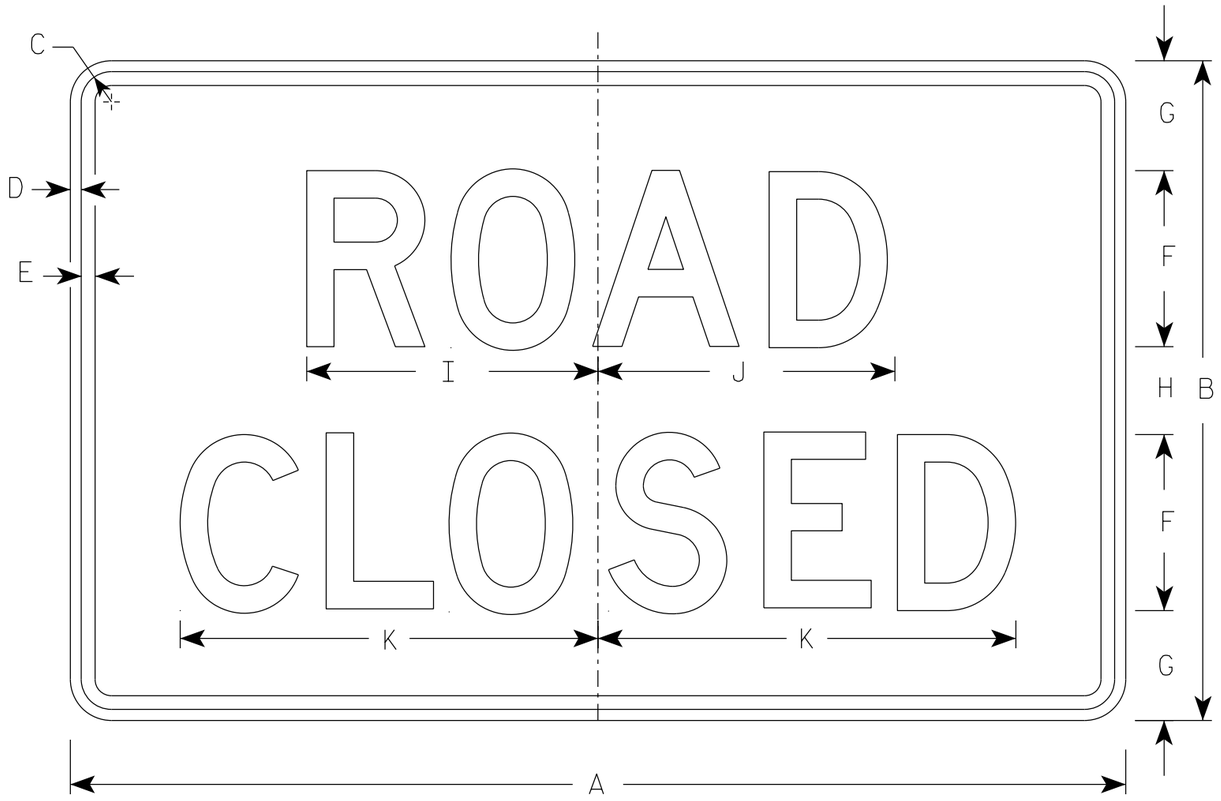
STANDARD SIGN
R10-61

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/4/11 PLATE NO. R10-61.5

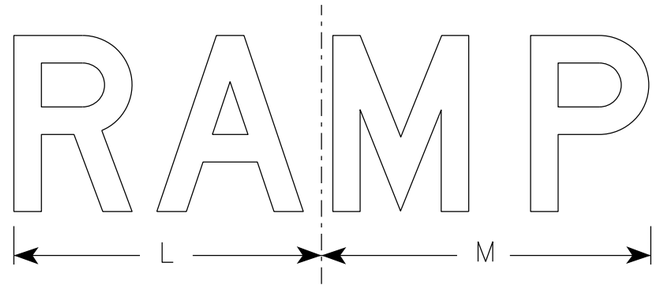
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 183	E



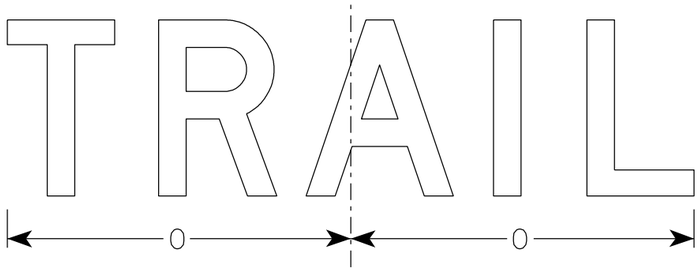
R11-2

NOTES

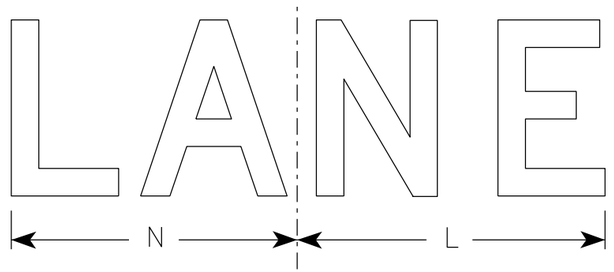
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Modify the message as required.



R11-2R



R11-2T



R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

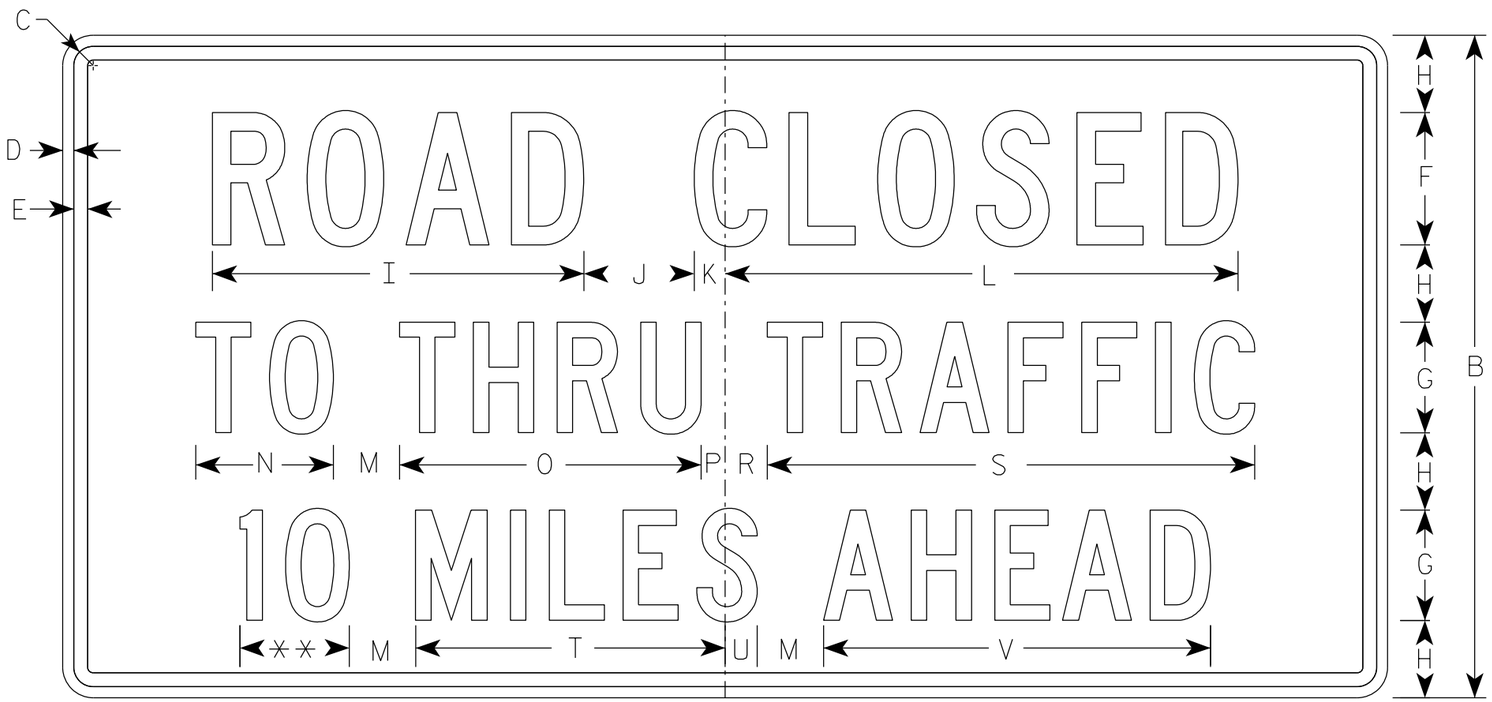
DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

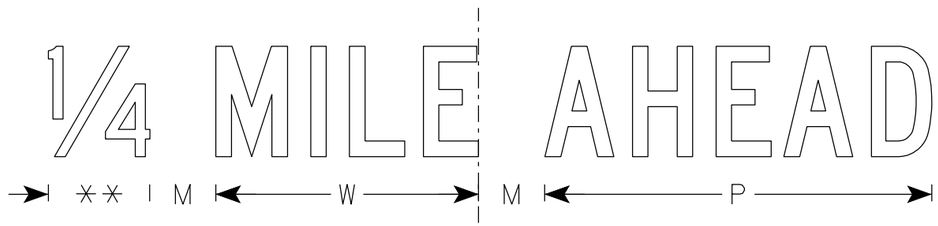
FILE NAME : C:\Users\PROJECTS\tr_stdplate\R112.dgn PLOT DATE : 29-MAR 2021 8:15 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3



** See Note 5

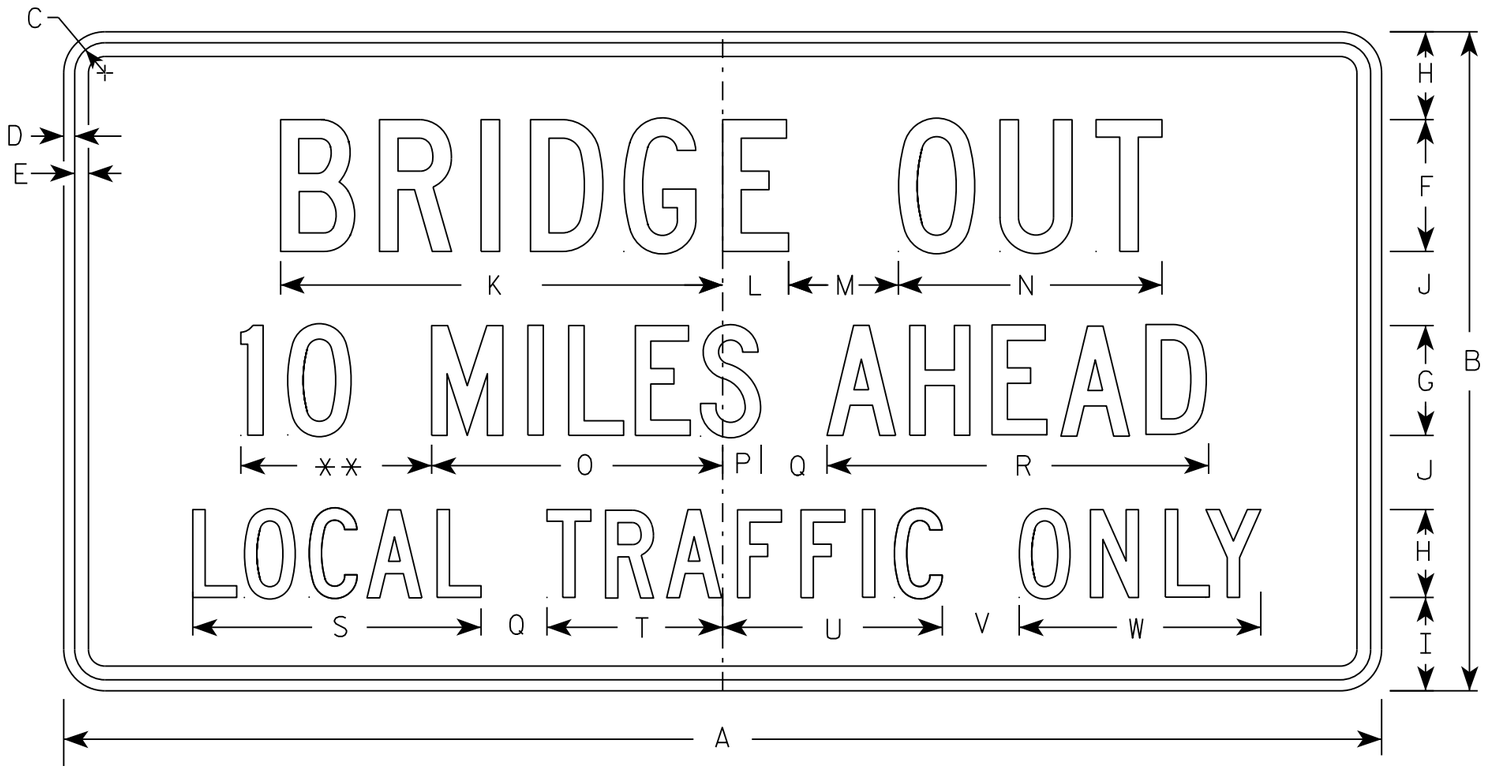
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

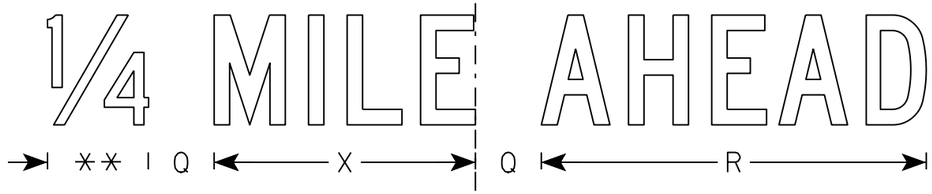
APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 185	E



R11-3B

** See Note 5



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile 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	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

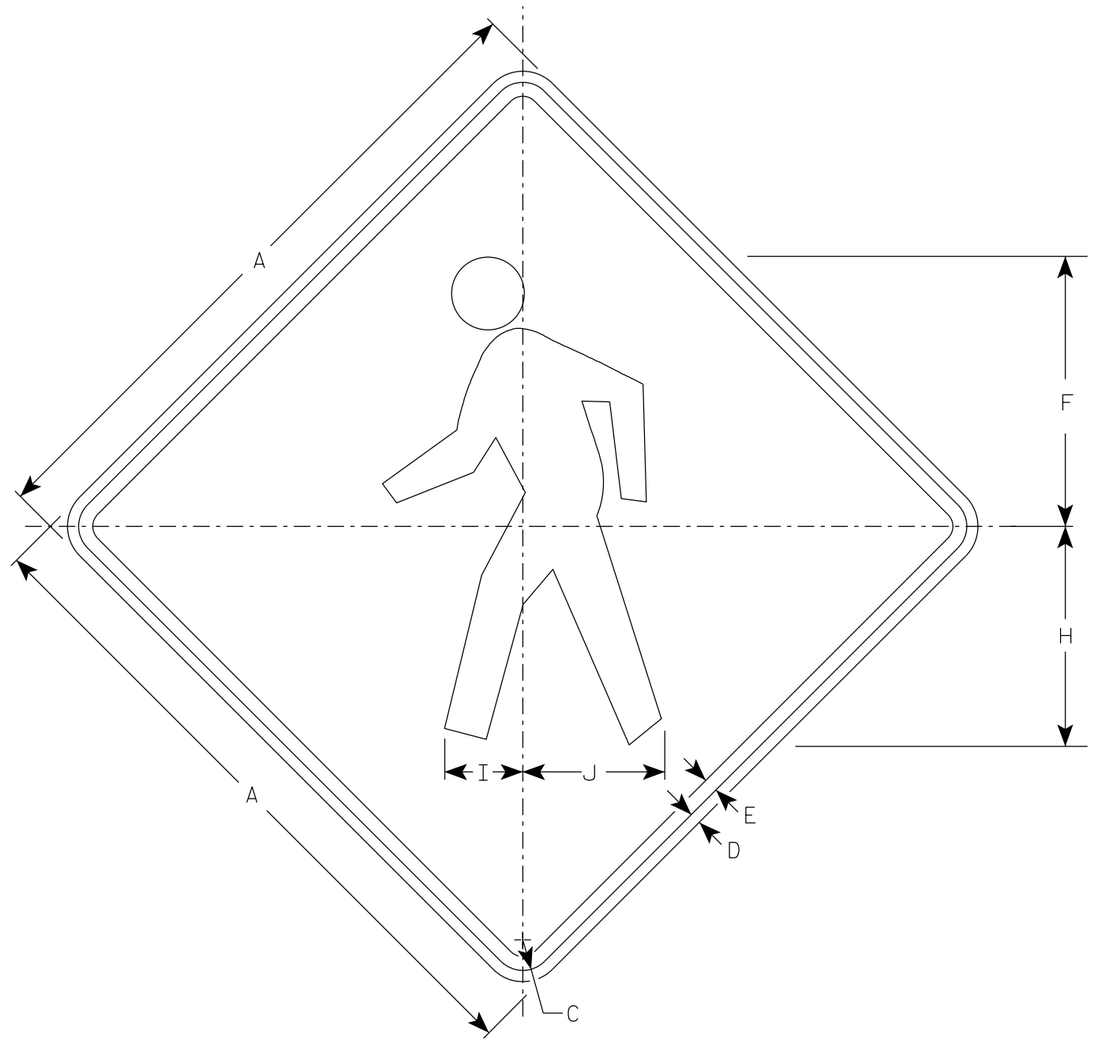
STANDARD SIGN
R11-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. R11-3B.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 186 | E



W11-2

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 3/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		1 5/8	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		2 1/4	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

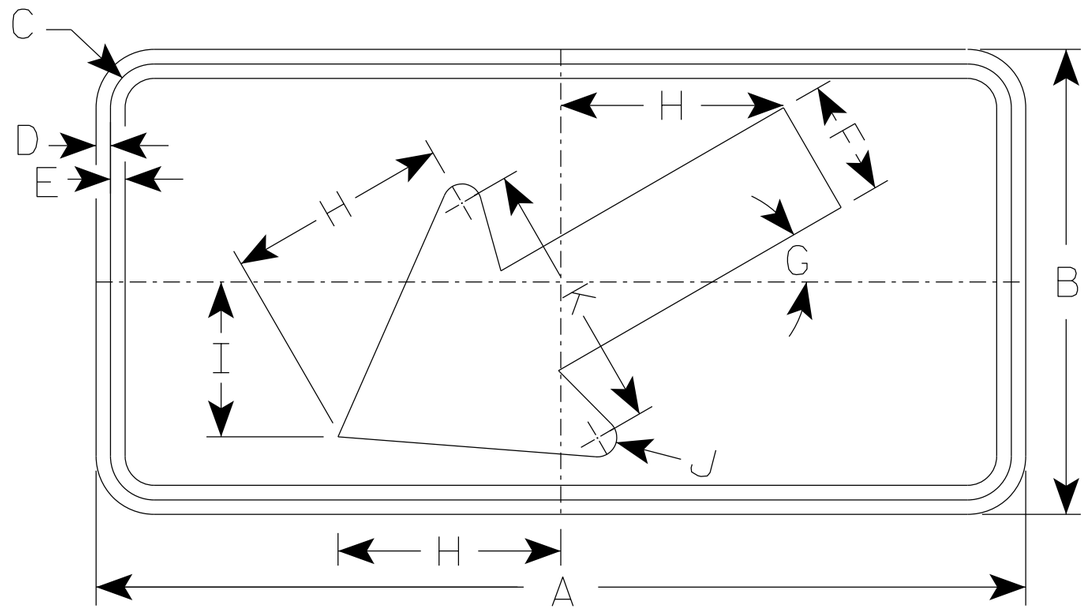
STANDARD SIGN
W11-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/8/2020 PLATE NO. W11-2.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 187 E



W16-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W16-7R is the same as W16-7L except the arrow is reversed along the vertical centerline.

* For 36" x 36" Warning Signs, use 30" x 18" W16-7L signs.
* For 48" x 48" Warning Signs, use 48" x 24" W16-7L signs.

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 1/8	3/8	3/8	3	30°	5 3/4	4	1/2	7																2.0
* 2M	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
* 3	30	18	1 1/8	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
* 4	48	24	1 3/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN
W16-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

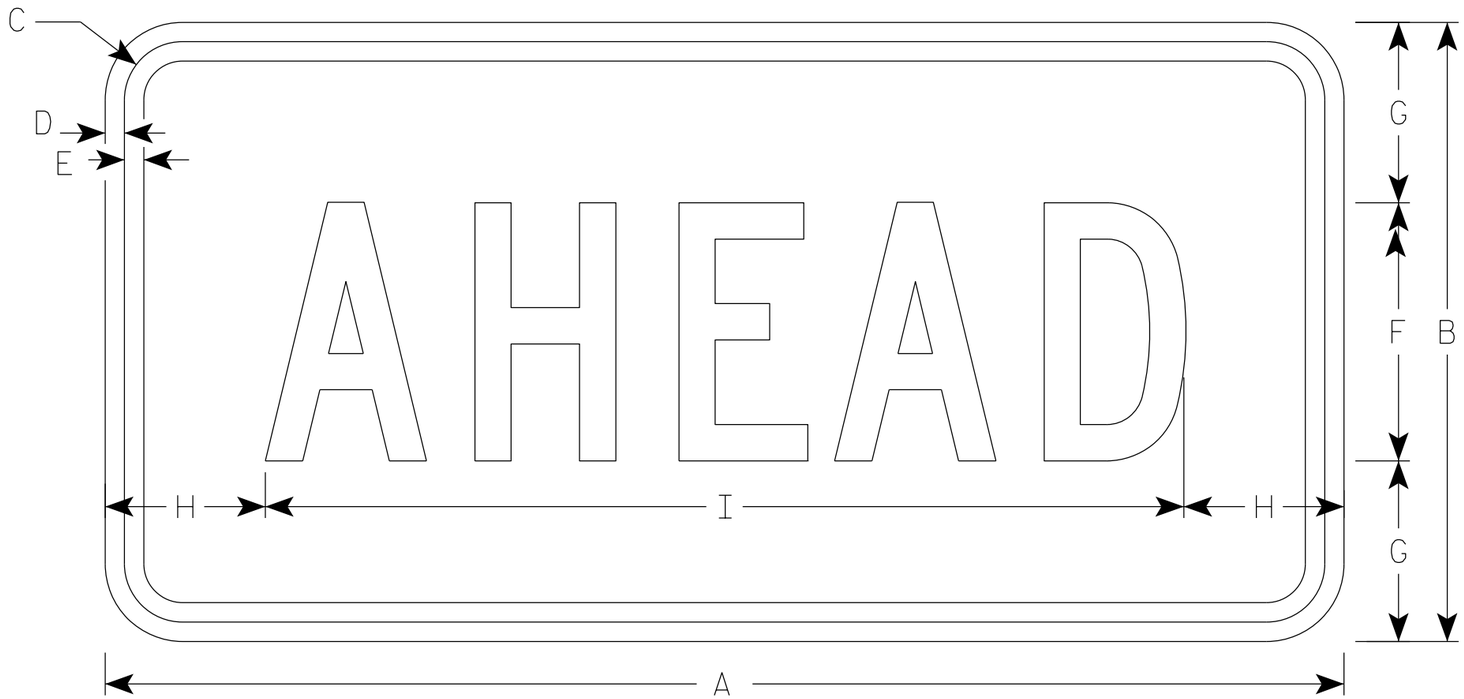
DATE 3/16/2021 PLATE NO. W16-7.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 188	E

7

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - C



W16-9P

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 1/8	3/8	3/8	5	3 1/2	3 1/8	17 3/4																		2.0
2M	30	18	1 1/8	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
3	30	18	1 1/8	3/8	1/2	7	3 1/2	2 3/4	24 1/2																		3.75
4	48	24	1 3/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5																											

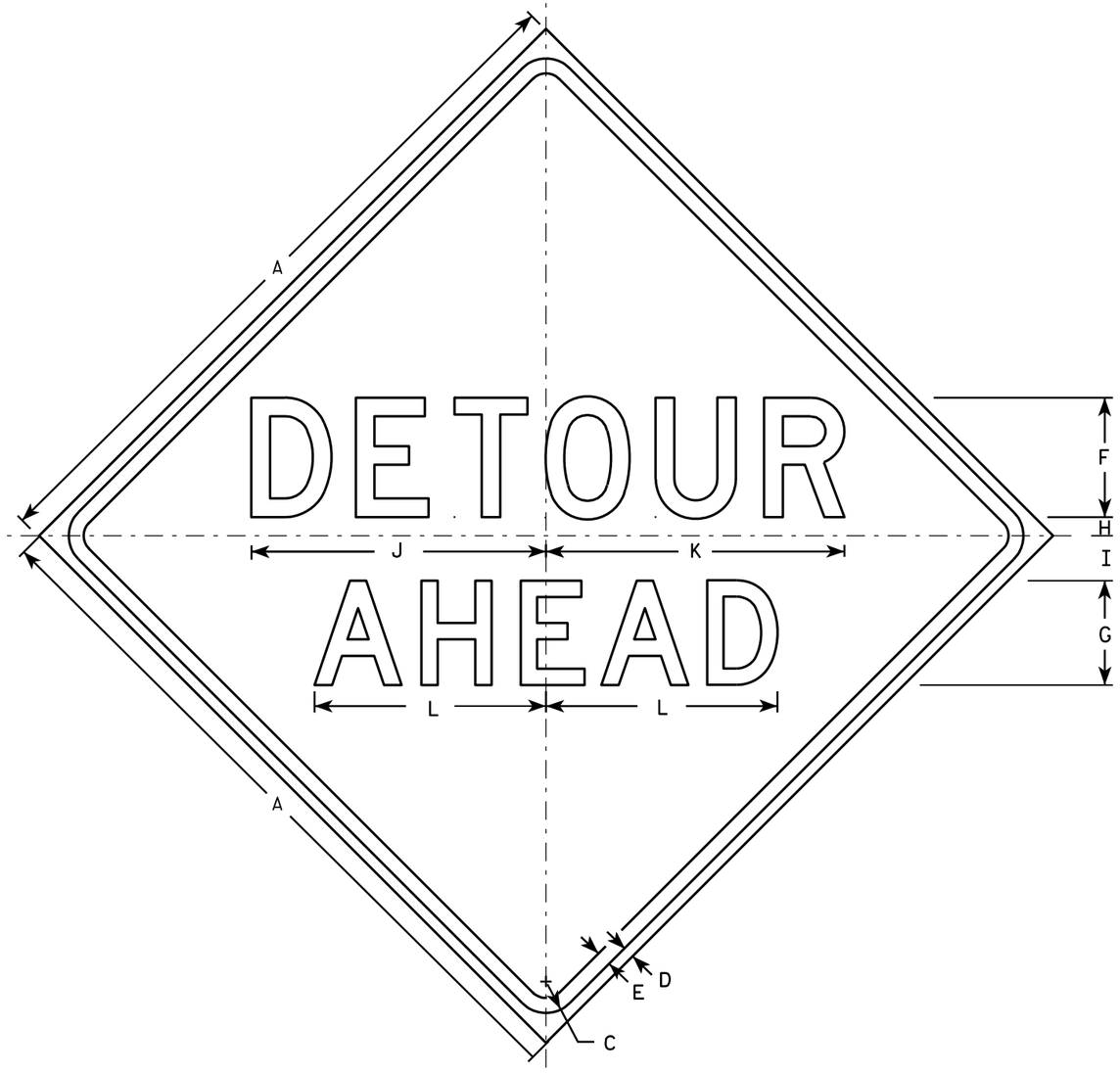
STANDARD SIGN
W16-9P

WISCONSIN DEPT OF TRANSPORTATION

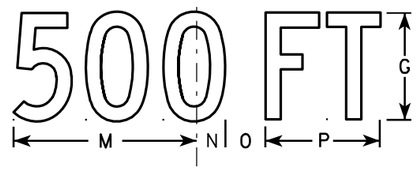
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/7/19 PLATE NO. W16-9P.7

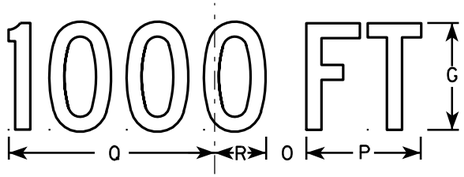
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 189 E



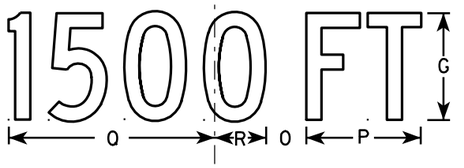
W20-2A



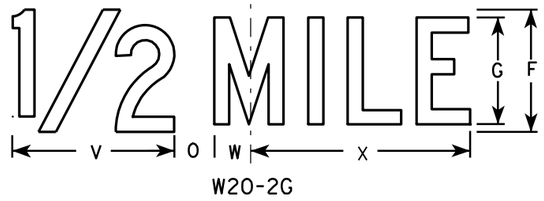
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

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	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

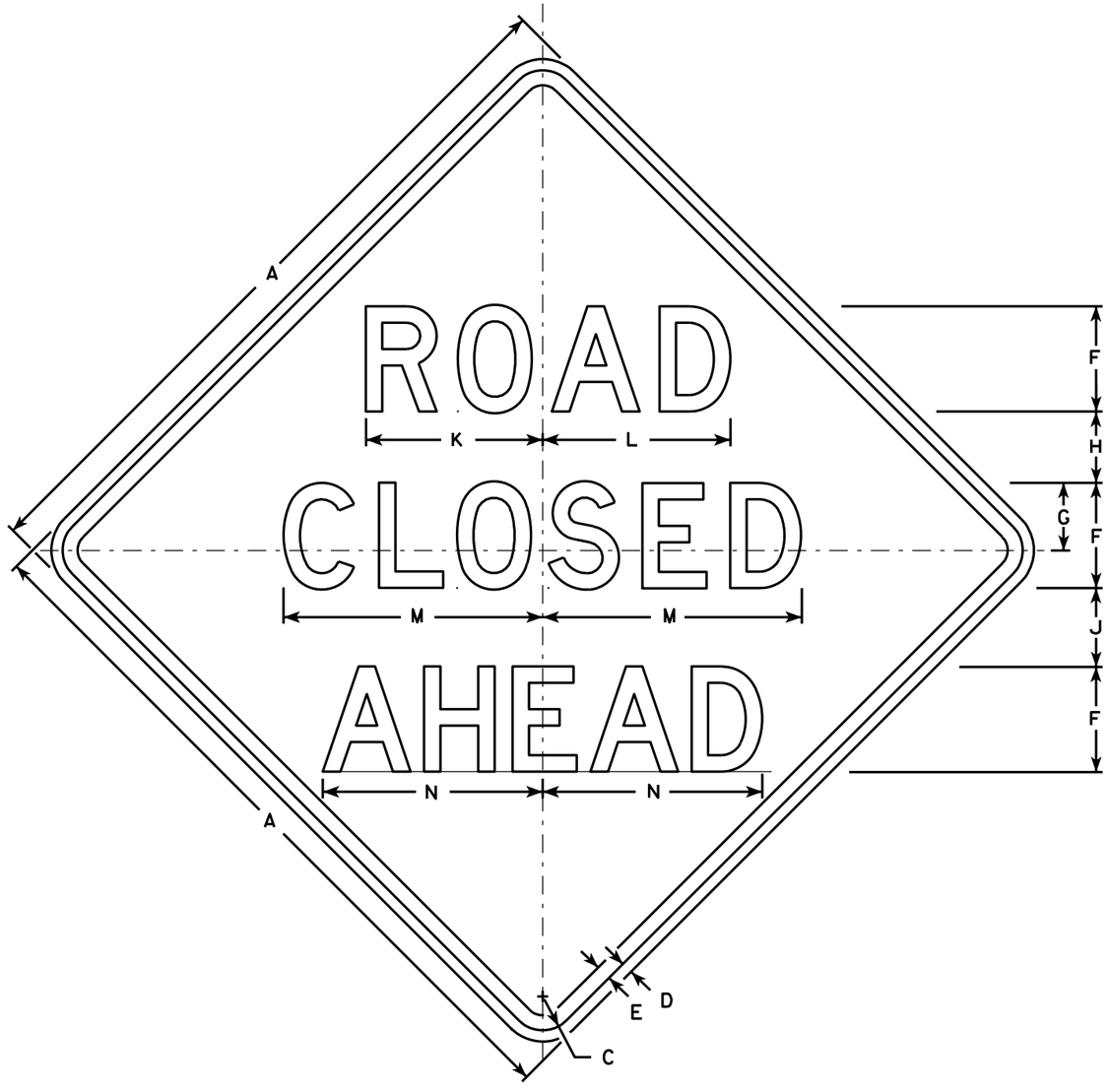
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

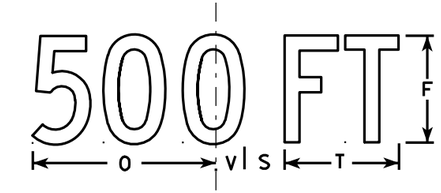
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

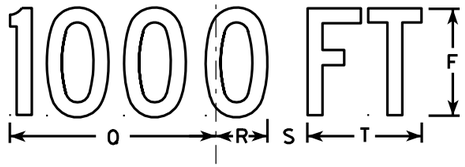
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 190	E



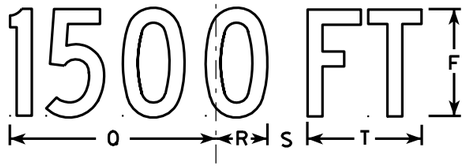
W20-3A



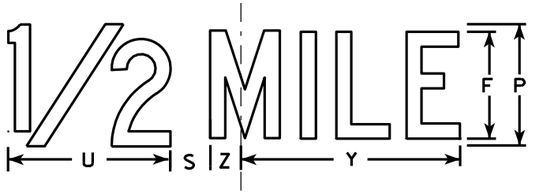
W20-3D



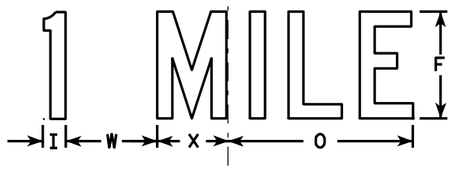
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
   Line 3 is Series D for AHEAD and Series C for all other distances.

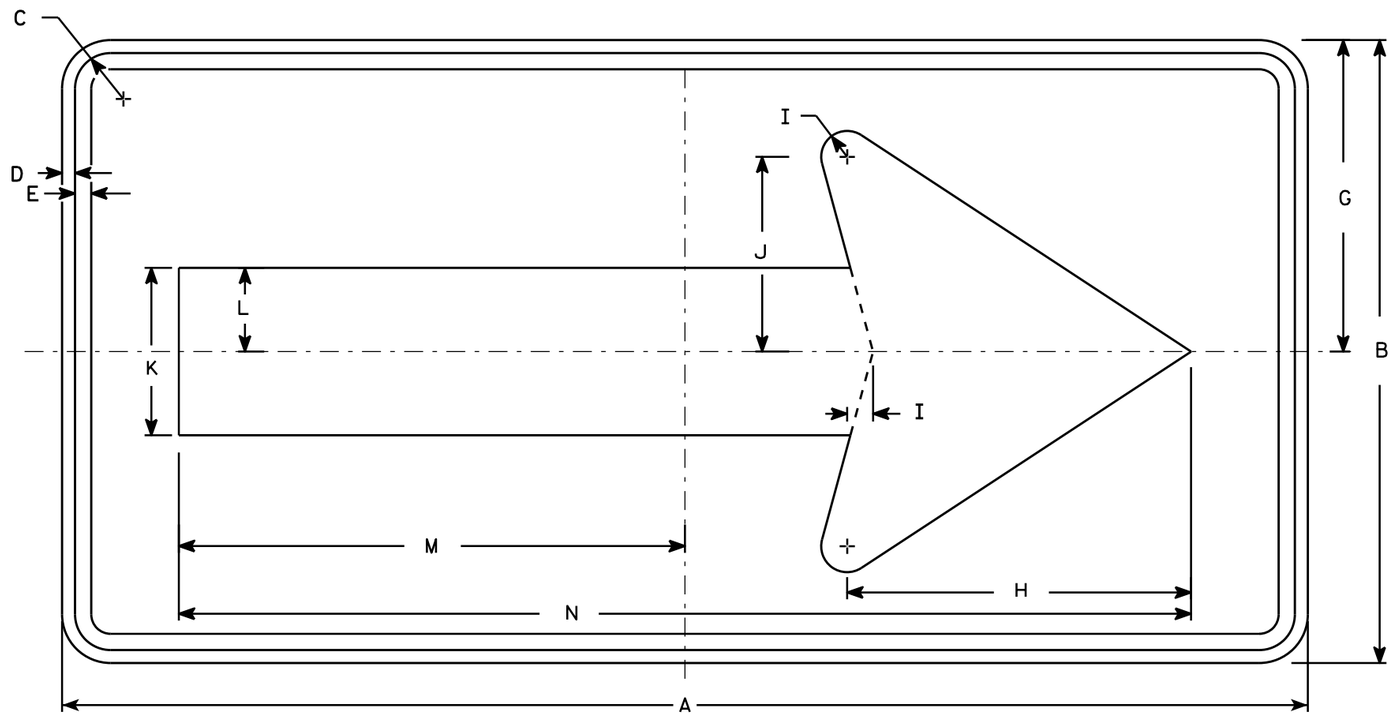
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 191 | E



W01-6

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		MASS ORDINATE
					CUT	FILL	CUT	EXPANDED FILL	
							1	1.25	
			CUT	FILL	NOTE 1	NOTE 2	NOTE 1		NOTE 3
981+14	98114	0	121.2	0.0	0.0	0.0	0.0	0.0	0.0
981+50	98150	36	119.1	0.4	160.2	0.3	160.2	0.3	159.8
982+00	98200	50	114.0	4.2	215.8	4.2	376.0	5.6	370.4
982+50	98250	50	126.8	0.0	223.0	3.8	598.9	10.4	588.5
983+00	98300	50	132.8	0.0	240.4	0.0	839.4	10.4	829.0
983+50	98350	50	127.9	0.0	241.4	0.0	1080.8	10.4	1070.4
984+00	98400	50	126.0	0.0	235.0	0.0	1315.8	10.4	1305.4
984+50	98450	50	119.3	0.8	227.1	0.8	1542.9	11.4	1531.5
985+00	98500	50	104.8	1.6	207.5	2.2	1750.3	14.1	1736.2
985+50	98550	50	86.1	7.6	176.7	8.5	1927.1	24.7	1902.3
986+00	98600	50	86.2	7.6	159.5	14.1	2086.6	42.3	2044.2
986+50	98650	50	85.8	9.0	159.3	15.4	2245.8	61.5	2184.3
987+00	98700	50	81.6	13.4	155.0	20.7	2400.9	87.4	2313.5
987+50	98750	50	81.9	7.5	151.4	19.4	2552.2	111.6	2440.7
988+00	98800	50	83.8	6.4	153.4	12.9	2705.7	127.6	2578.0
988+50	98850	50	81.9	1.6	153.5	7.4	2859.2	136.9	2722.3
989+00	98900	50	94.9	0.6	163.7	2.1	3022.9	139.5	2883.4
989+50	98950	50	99.6	0.2	180.1	0.7	3203.0	140.4	3062.7
990+00	99000	50	88.5	2.1	174.2	2.1	3377.2	143.0	3234.3
990+50	99050	50	87.6	2.3	163.0	4.1	3540.2	148.0	3392.2
991+00	99100	50	82.7	2.2	157.6	4.2	3697.8	153.2	3544.6
991+50	99150	50	78.1	2.3	148.9	4.1	3846.7	158.4	3688.3
992+00	99200	50	88.7	0.7	154.5	2.7	4001.2	161.8	3839.4
992+50	99250	50	74.2	4.4	150.9	4.7	4152.1	167.6	3984.4
993+00	99300	50	64.6	2.5	128.5	6.4	4280.6	175.6	4105.0
993+50	99350	50	65.6	0.3	120.6	2.6	4401.1	178.9	4222.3
994+00	99400	50	71.0	8.6	126.5	8.2	4527.6	189.1	4338.5
994+50	99450	50	73.9	14.2	134.1	21.2	4661.7	215.6	4446.1
995+00	99500	50	81.2	9.6	143.6	22.1	4805.3	243.2	4562.1
995+50	99550	50	82.2	0.5	151.3	9.3	4956.7	254.9	4701.8
996+00	99600	50	82.8	0.0	152.8	0.4	5109.5	255.4	4854.1
996+50	99650	50	76.7	0.2	147.7	0.2	5257.2	255.6	5001.6
997+00	99700	50	76.0	2.3	141.4	2.3	5398.6	258.4	5140.2
997+50	99750	50	60.9	12.9	126.8	14.0	5525.4	276.0	5249.4
998+00	99800	50	58.1	5.1	110.2	16.7	5635.6	296.8	5338.8
998+50	99850	50	57.7	0.3	107.3	5.0	5742.9	303.0	5439.9
999+00	99900	50	68.0	8.8	116.4	8.4	5742.9	303.0	5439.9
999+50	99950	50	68.0	9.3	125.9	16.8	5868.8	324.0	5544.8
1000+00	100000	50	65.0	11.9	123.1	19.7	5991.9	348.6	5643.3

9

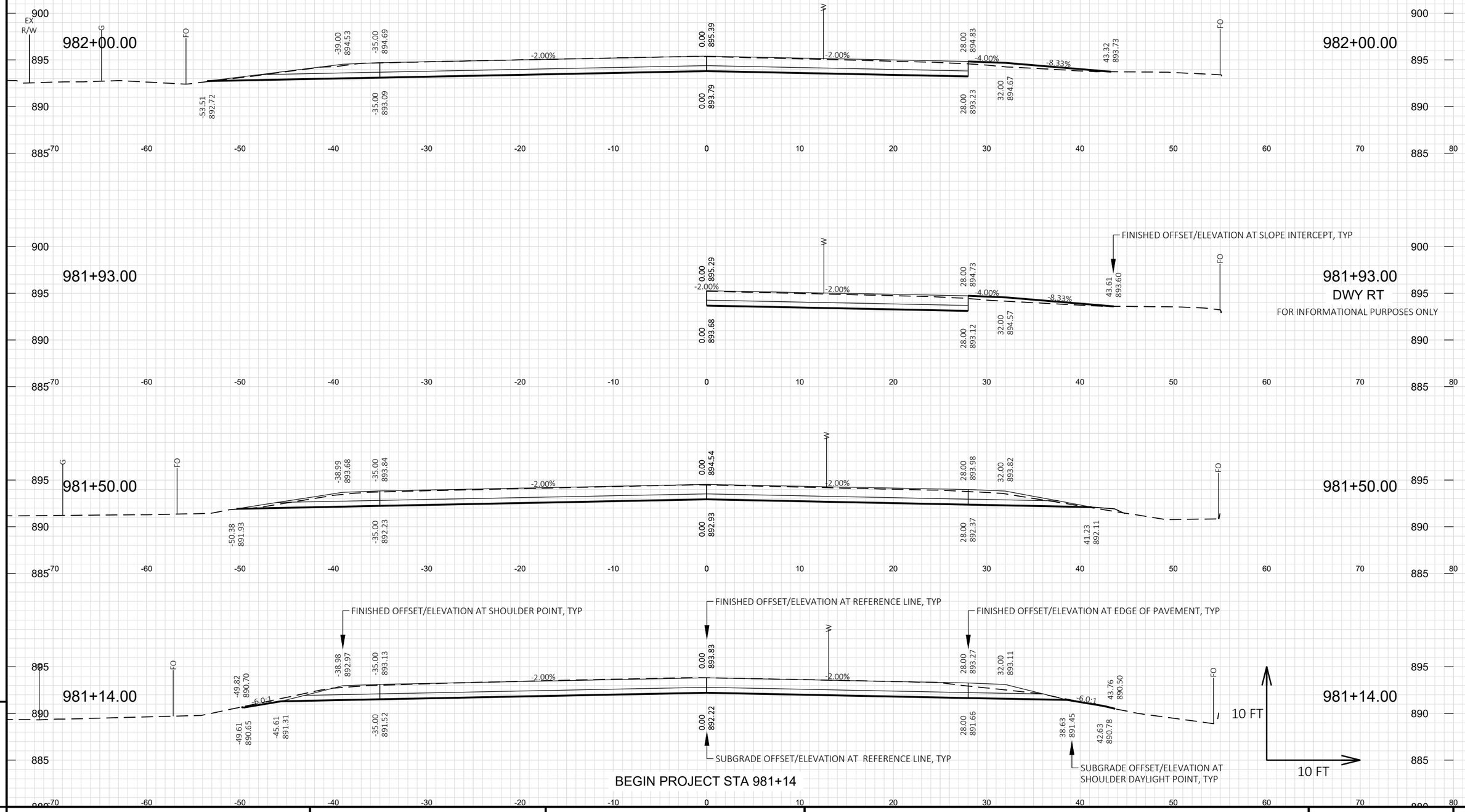
9

PROJECT NO: 9220-04-72 | HWY: STH 117 | COUNTY: SHAWANO | EARTHWORK DATA | SHEET 193 | E

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) CUT NOTE 1	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 2	CUMULATIVE VOL (CY) CUT 1 NOTE 1	CUMULATIVE VOL (CY) EXPANDED FILL 1.25	MASS ORDINATE NOTE 3
1000+50	100050	50	68.1	2.9	123.2	13.7	6115.1	365.8	5749.3
1001+00	100100	50	68.3	5.1	126.2	7.4	6241.3	375.0	5866.3
1001+50	100150	50	71.2	6.3	129.1	10.5	6370.4	388.2	5982.3
1002+00	100200	50	75.0	1.7	135.4	7.4	6505.8	397.4	6108.4
1002+50	100250	50	79.4	2.3	143.0	3.7	6648.8	402.0	6246.8
1003+00	100300	50	84.3	1.7	151.6	3.7	6800.4	406.6	6393.7
1003+50	100350	50	86.8	0.1	158.3	1.7	6958.7	408.8	6549.9
1004+00	100400	50	88.7	0.2	162.5	0.2	7121.2	409.0	6712.1
1004+50	100450	50	92.4	0.2	167.8	0.4	7288.9	409.5	6879.5
1005+00	100500	50	87.4	1.0	166.6	1.2	7455.5	411.0	7044.5
1005+50	100550	50	86.3	0.5	160.8	1.4	7616.3	412.7	7203.6
1006+00	100600	50	68.0	0.5	142.8	0.9	7759.1	413.9	7345.2
1006+50	100650	50	69.8	2.1	127.6	2.4	7886.7	416.9	7469.8
1007+00	100700	50	66.0	1.9	125.7	3.7	8012.4	421.6	7590.8
1007+50	100750	50	52.1	0.2	109.3	1.9	8121.8	424.0	7697.8
1008+00	100800	50	65.1	2.5	108.5	2.4	8230.2	427.0	7803.2
1008+50	100850	50	74.2	0.1	128.9	2.4	8359.2	430.0	7929.2
1009+00	100900	50	64.7	0.4	128.6	0.5	8487.8	430.6	8057.2
1009+50	100950	50	70.3	0.4	125.0	0.7	8612.8	431.5	8181.2
1010+00	101000	50	69.3	0.7	129.3	1.0	8742.0	432.7	8309.3
1010+50	101050	50	69.5	0.2	128.5	0.8	8870.5	433.7	8436.8
1011+00	101100	50	82.0	0.0	140.3	0.2	9010.8	434.0	8576.8
1011+50	101150	50	85.6	1.3	155.2	1.3	9166.0	435.6	8730.4
1012+00	101200	50	94.1	0.0	166.4	1.2	9332.3	437.1	8895.2
1012+50	101250	50	91.6	0.0	171.9	0.0	9504.3	437.1	9067.2
1013+00	101300	50	82.2	0.0	160.9	0.0	9665.2	437.1	9228.1
1013+35	101335	35	66.3	0.0	96.3	0.0	9761.5	437.1	9324.4
				COLUMN TOTALS	9878	358			

EARTHWORK SUMMARY

ROADWAY	EXCAVATION COMMON
STH 117:	9,878 CY
SIDE STREETS:	250 CY
CTH BE INTERSECTION:	122 CY
TOTAL:	10,250 CY



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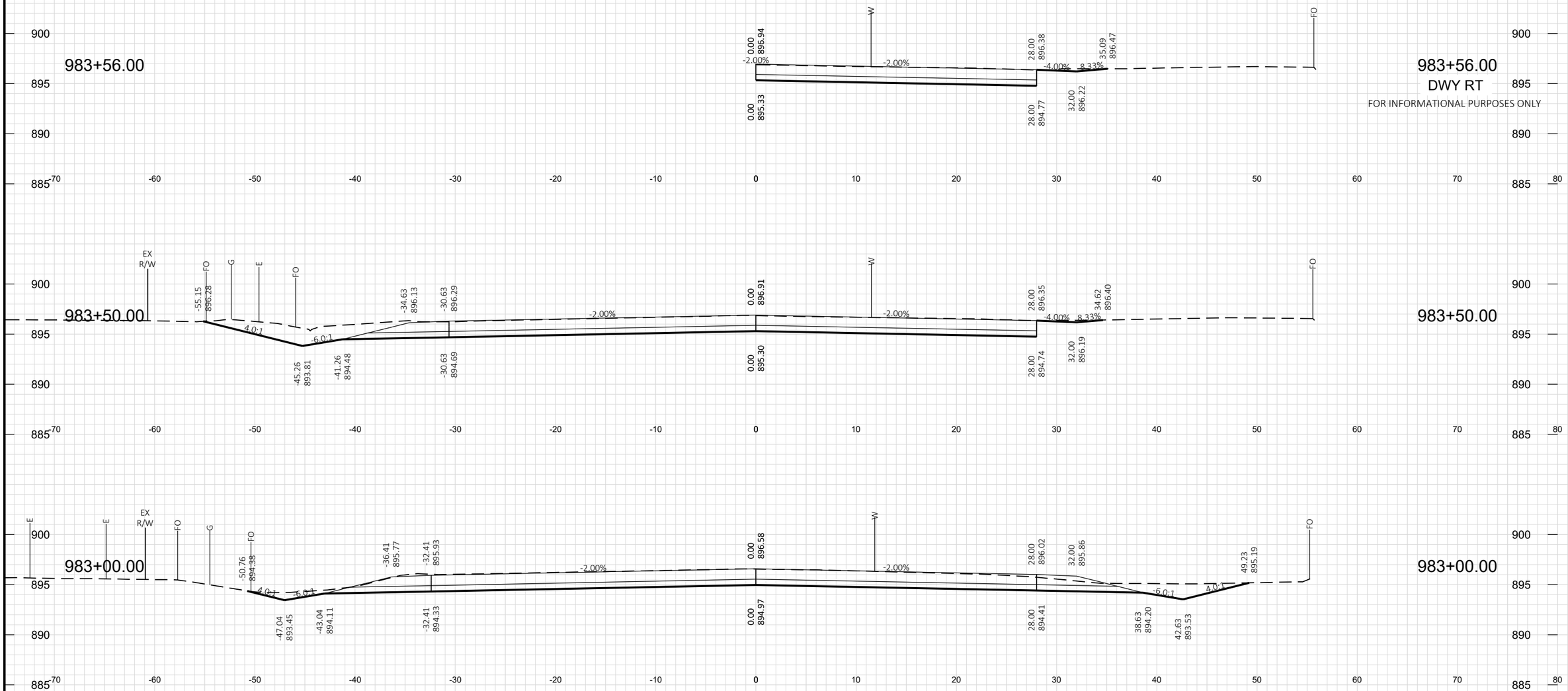
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 195 E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 01

PLOT DATE : 3/23/2023 4:18 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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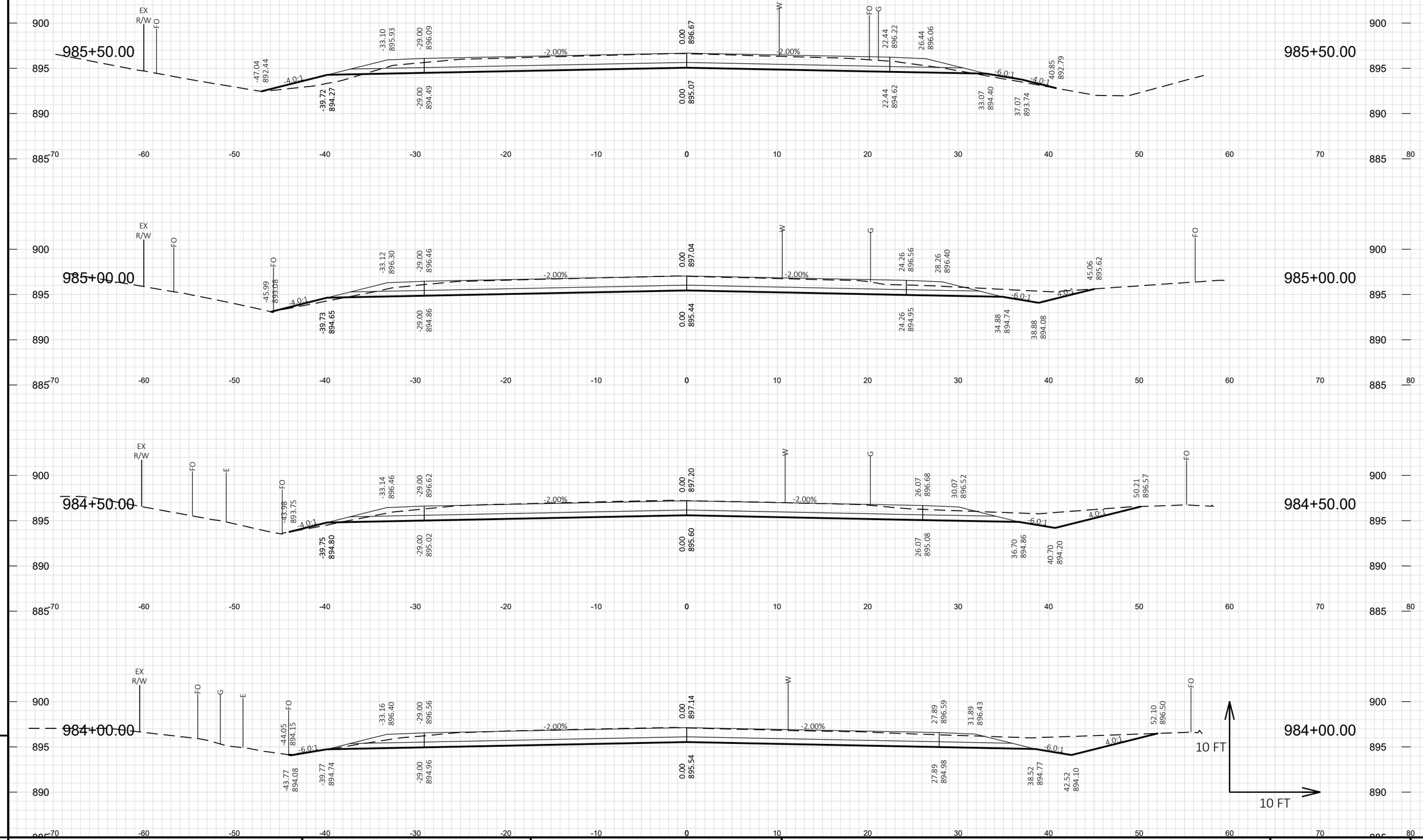
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 196	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 02

PLOT DATE : 3/23/2023 4:18 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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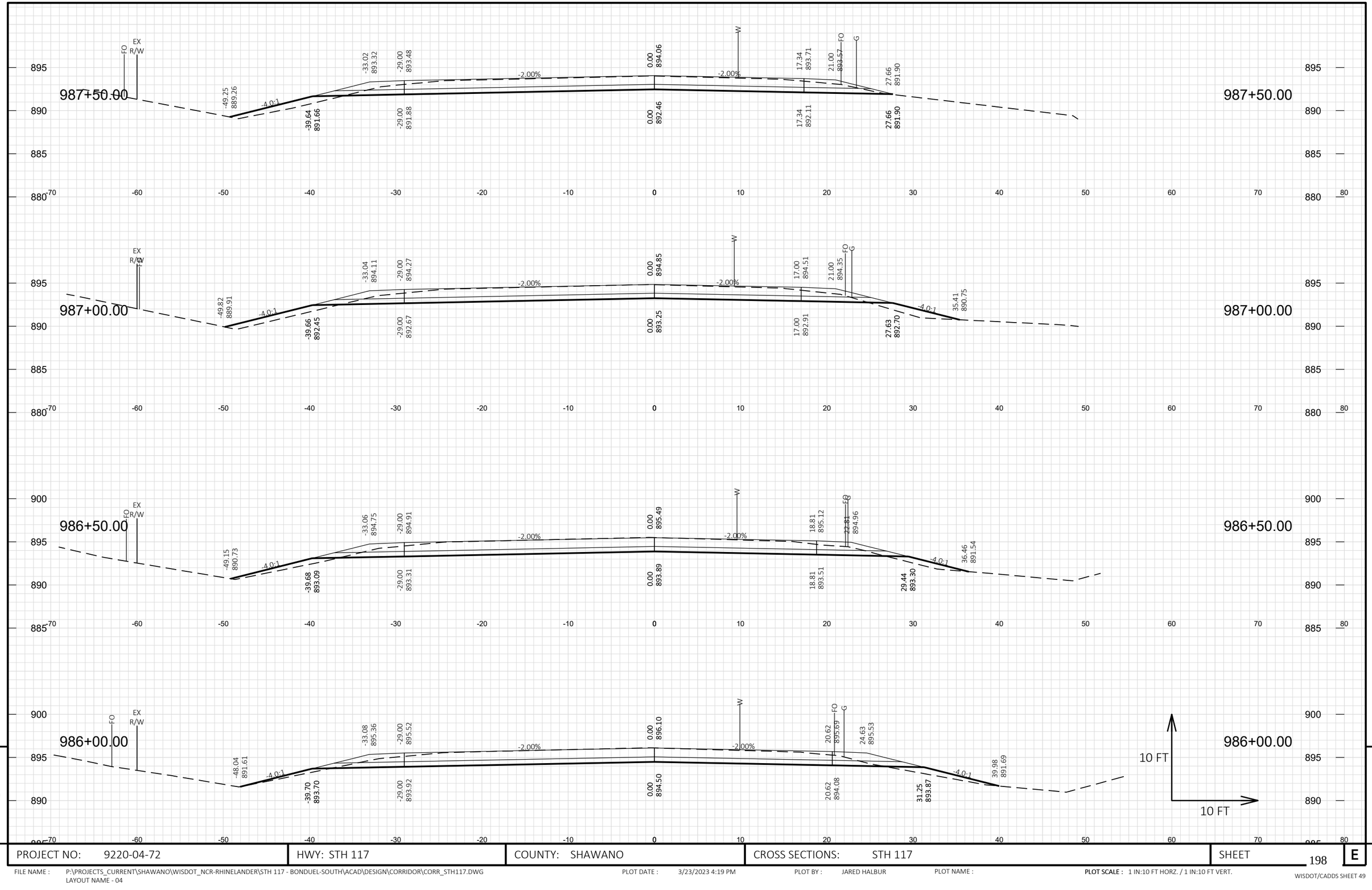
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 197	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 03

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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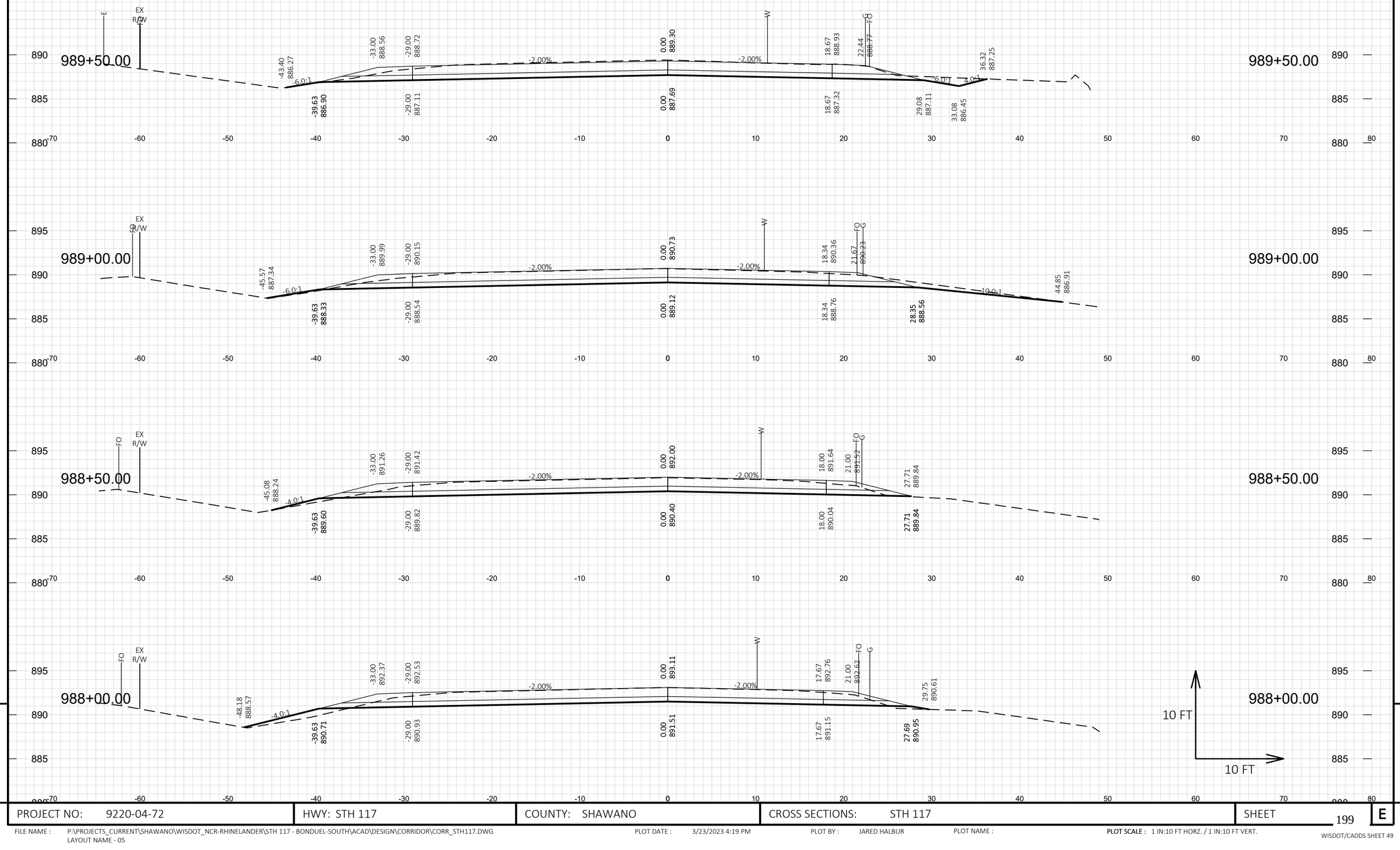
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 198	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 04

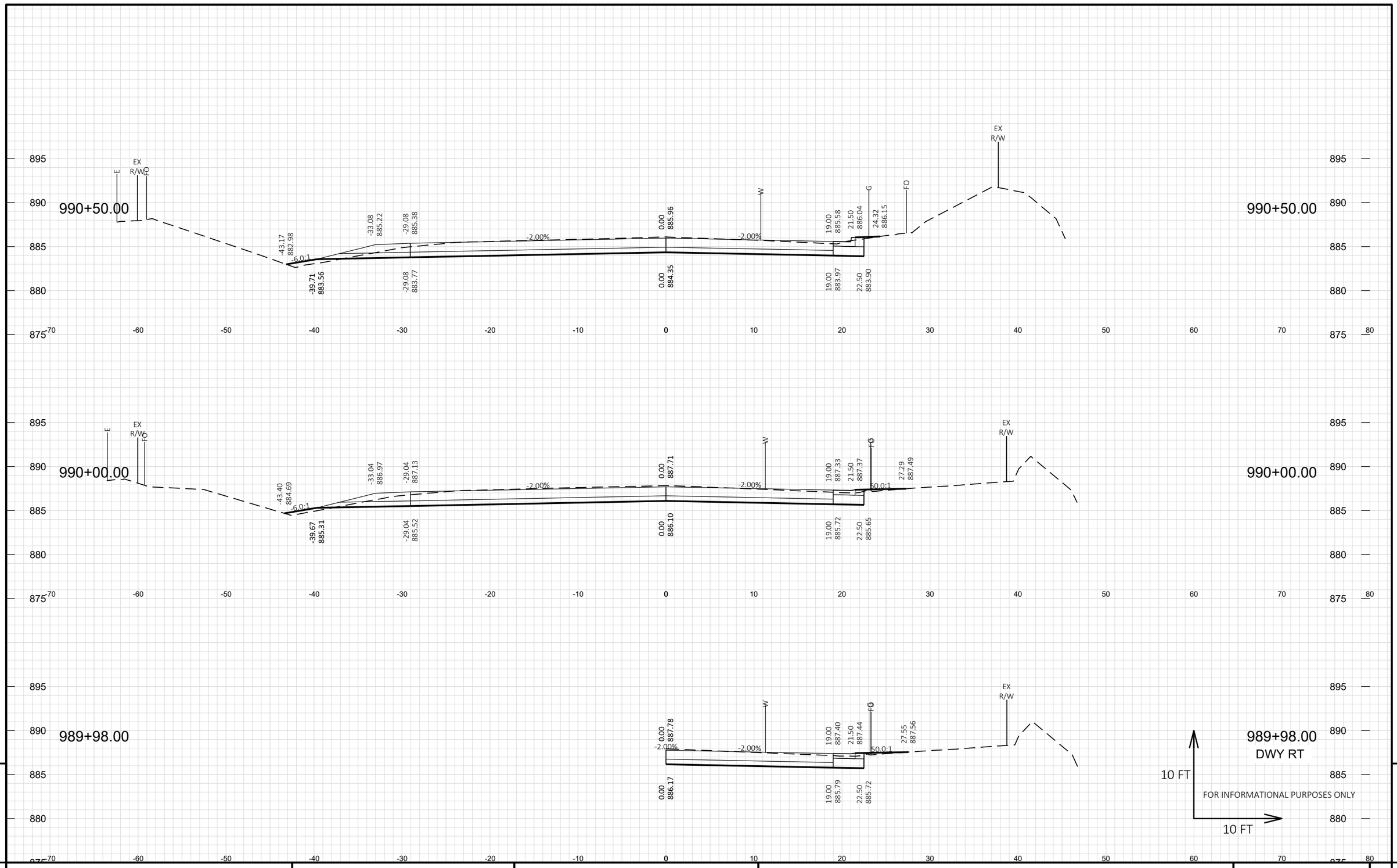
PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 199 E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 05

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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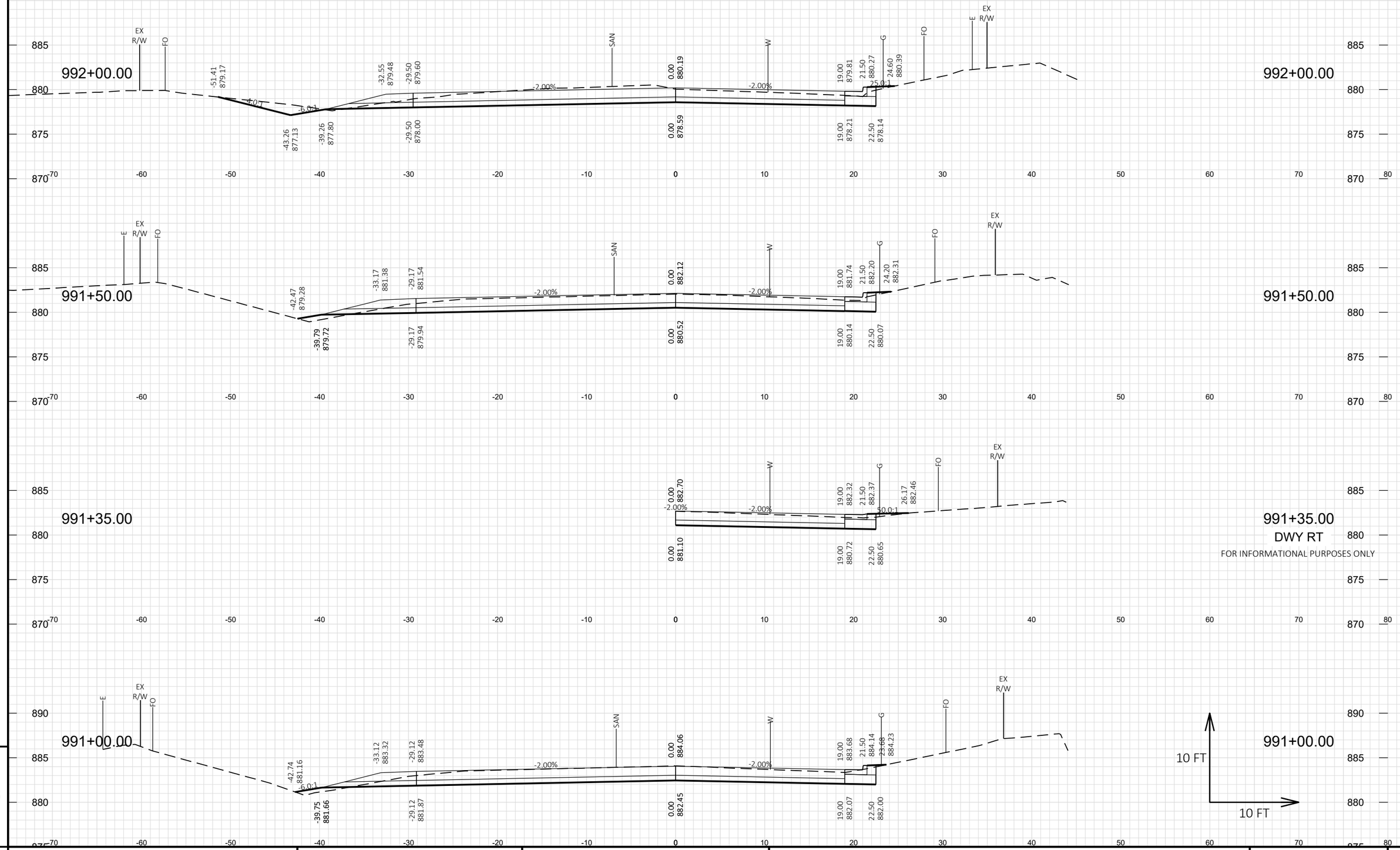
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 200	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 06

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

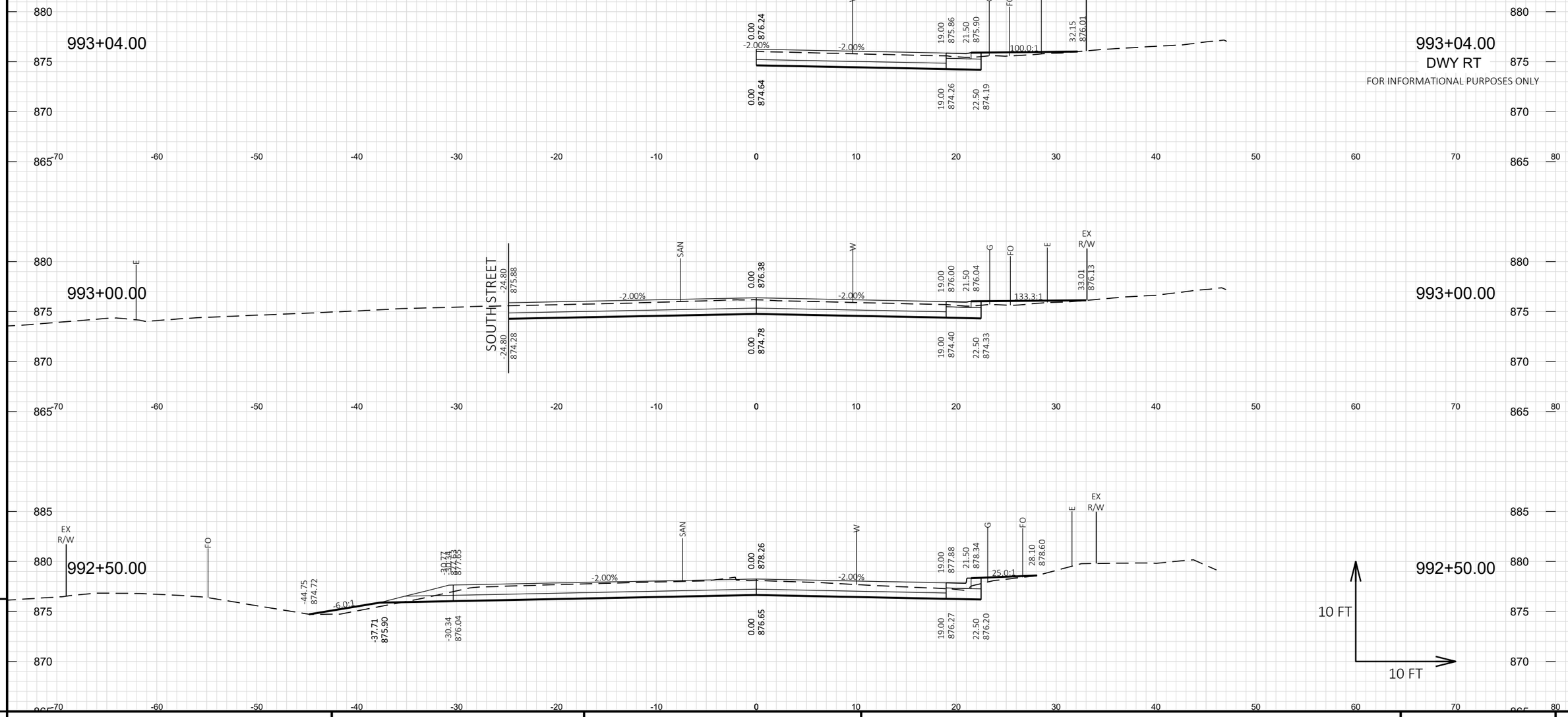


PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 201 E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 07

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

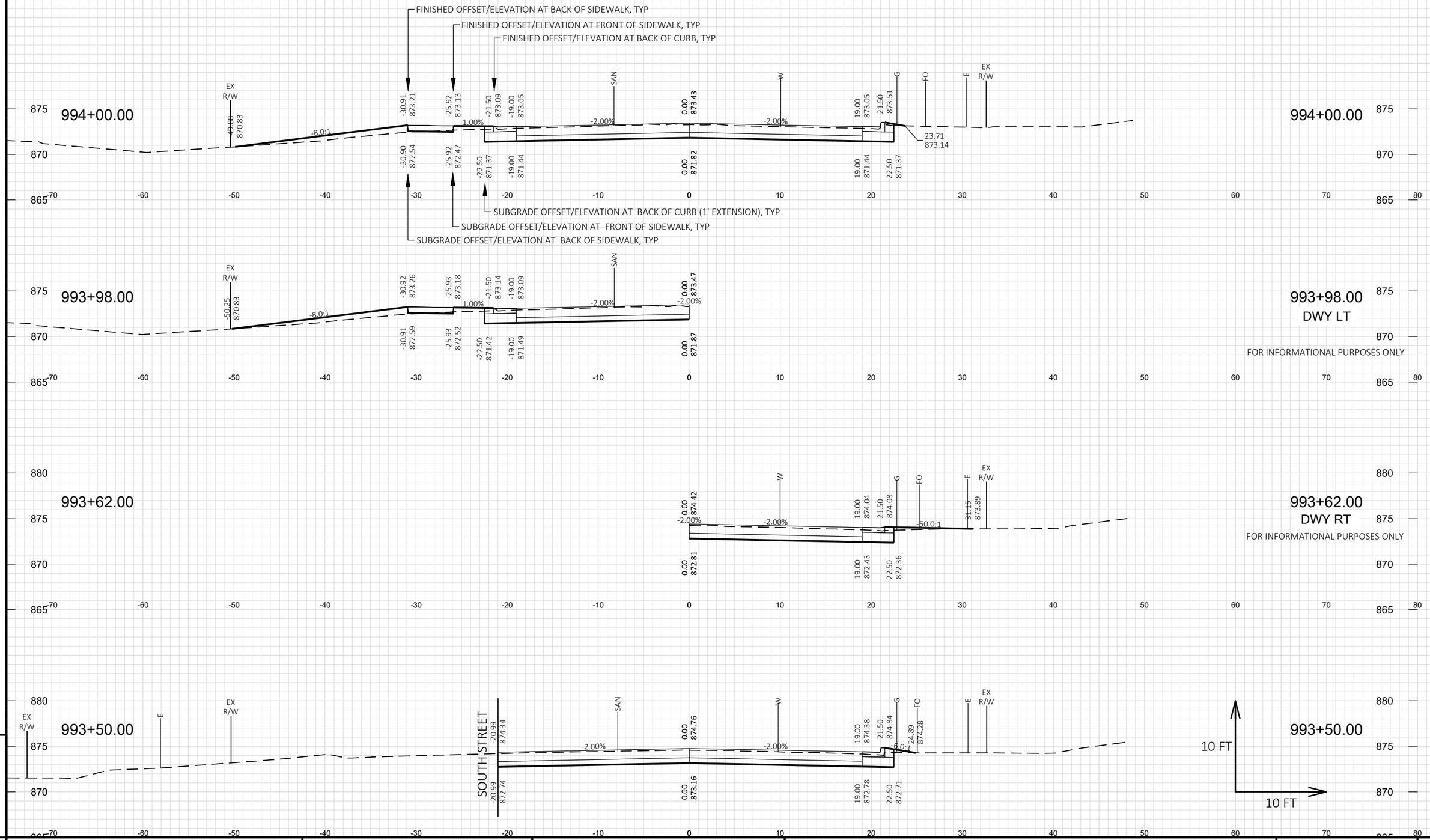


PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 202 E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 08

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

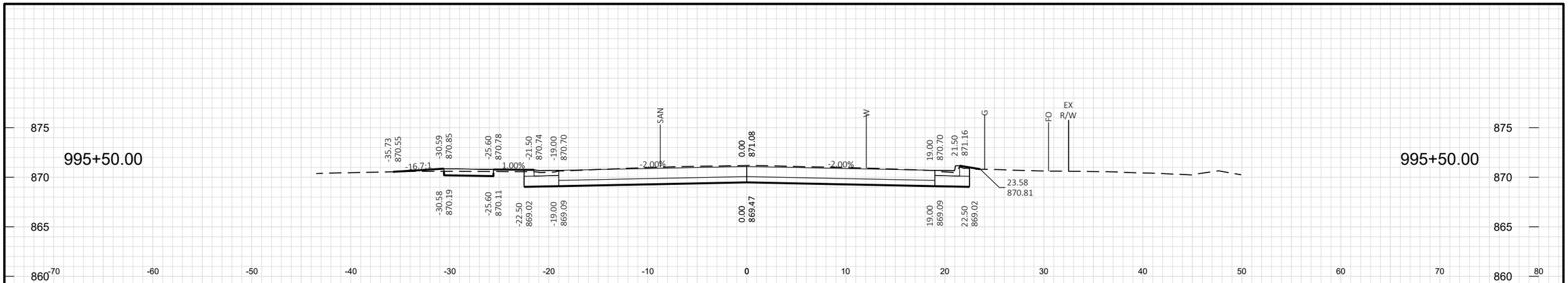


PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 203 E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 09

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

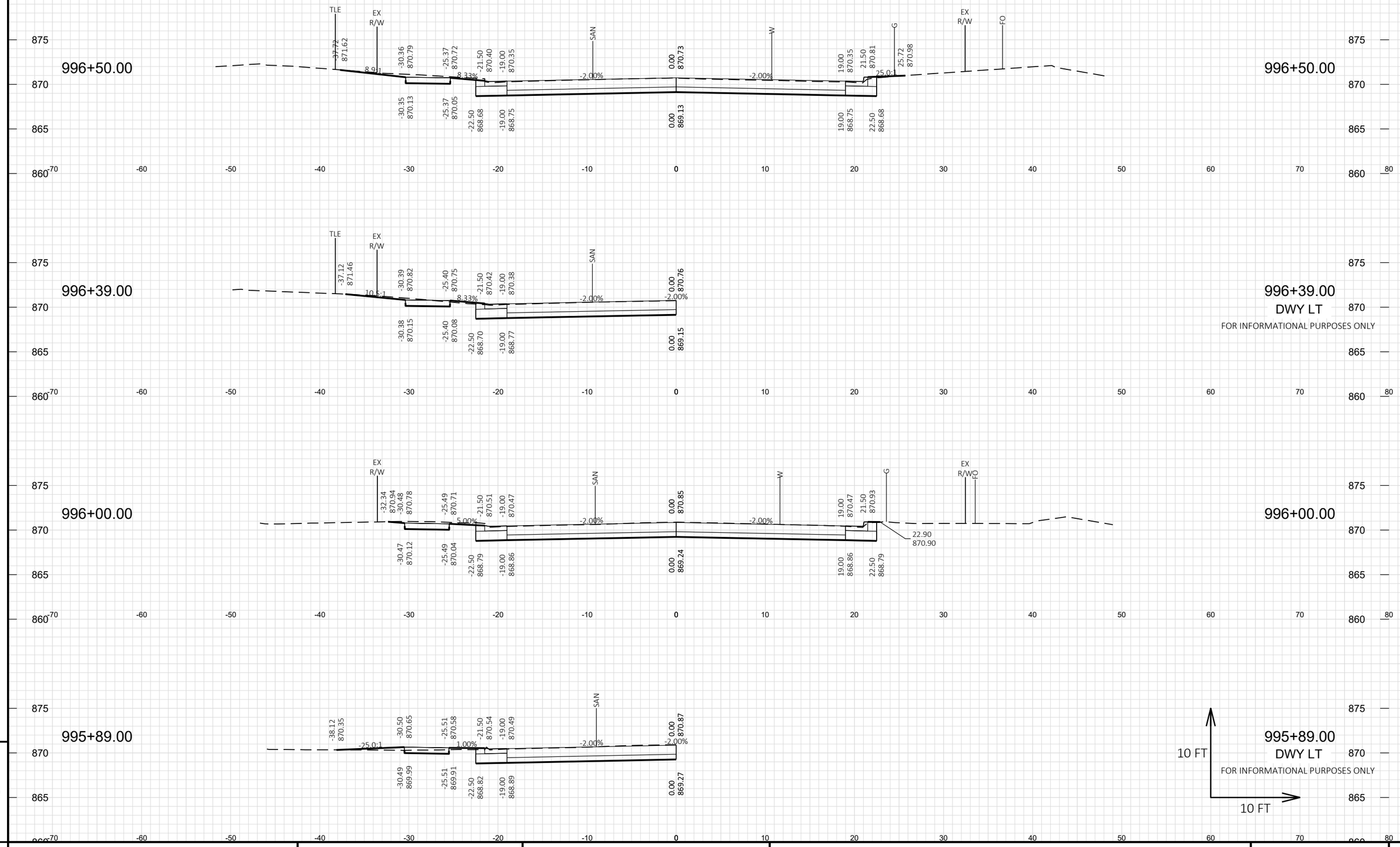


PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 204

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 10

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



996+50.00
DWY LT
FOR INFORMATIONAL PURPOSES ONLY

996+39.00
DWY LT
FOR INFORMATIONAL PURPOSES ONLY

995+89.00
DWY LT
FOR INFORMATIONAL PURPOSES ONLY

10 FT
10 FT

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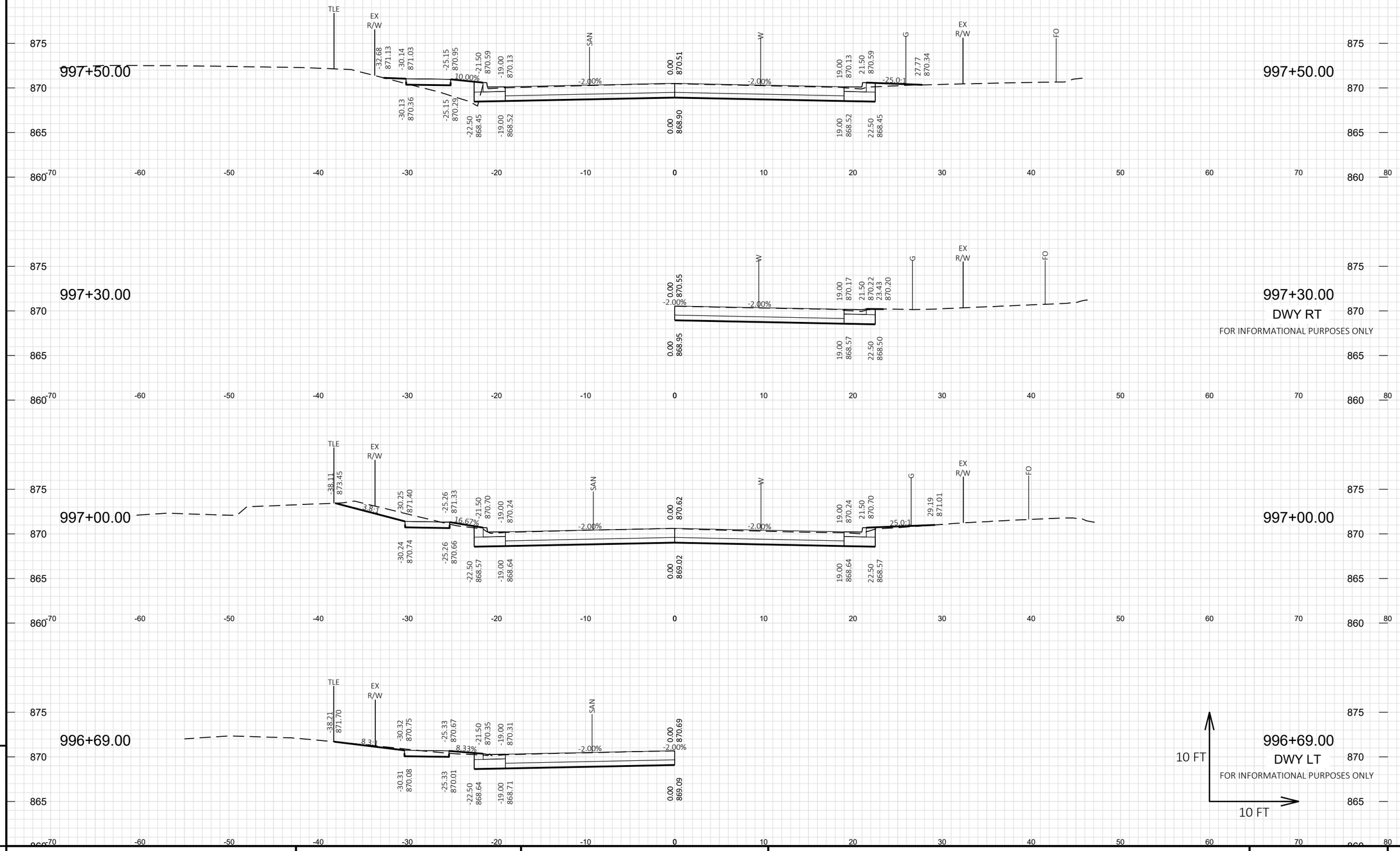
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 205	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 11

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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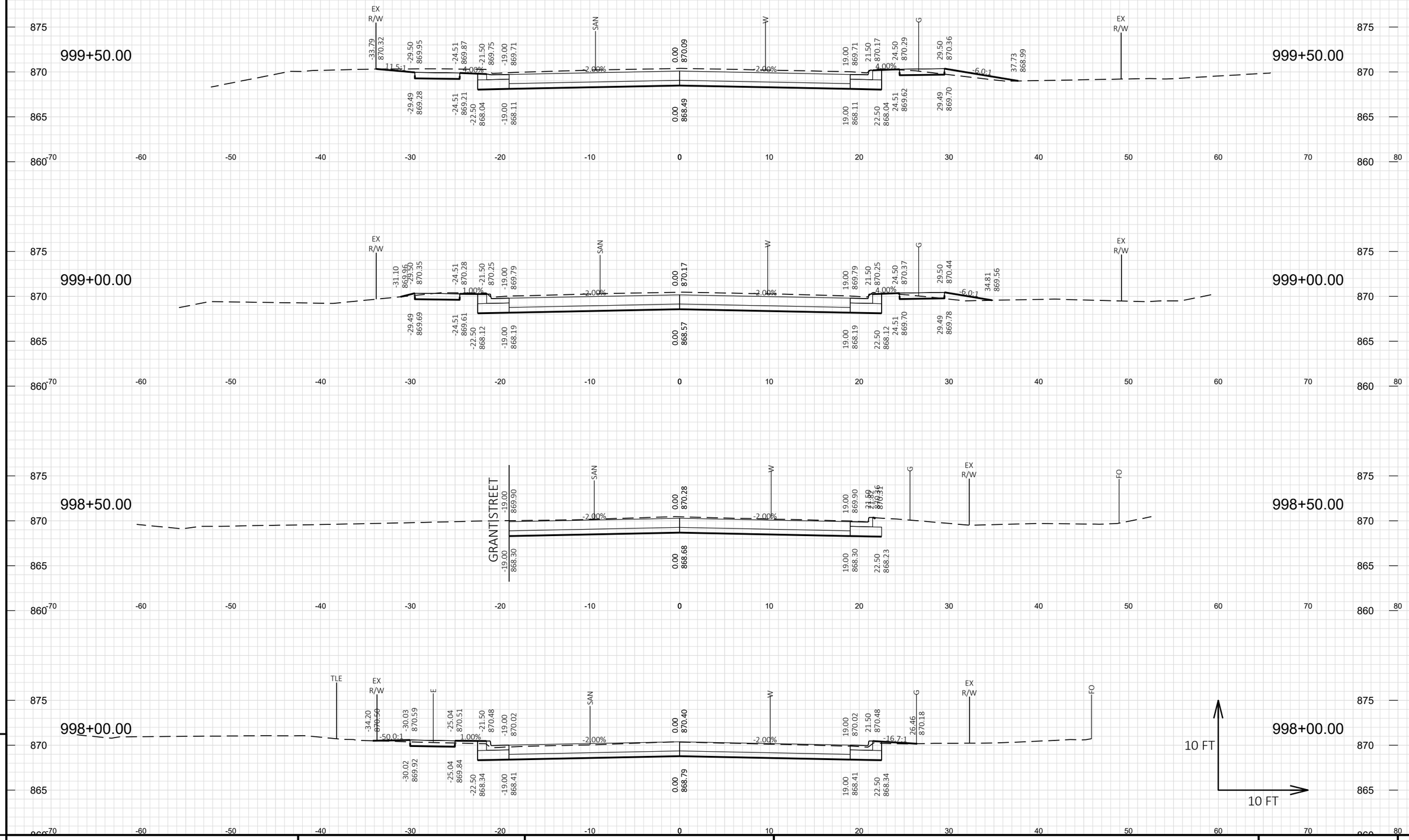
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 206	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 12

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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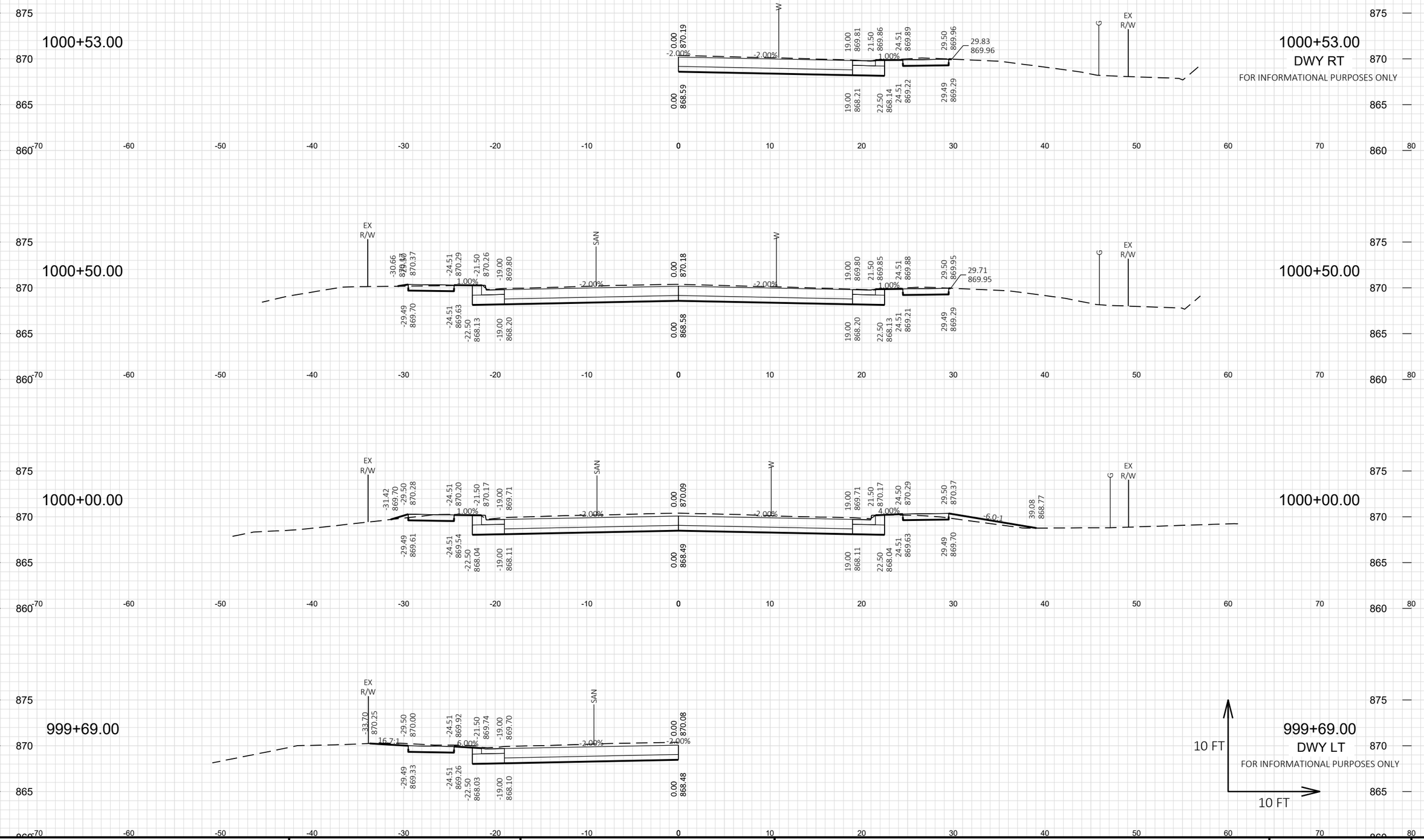
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 207	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 13

PLOT DATE : 3/23/2023 4:19 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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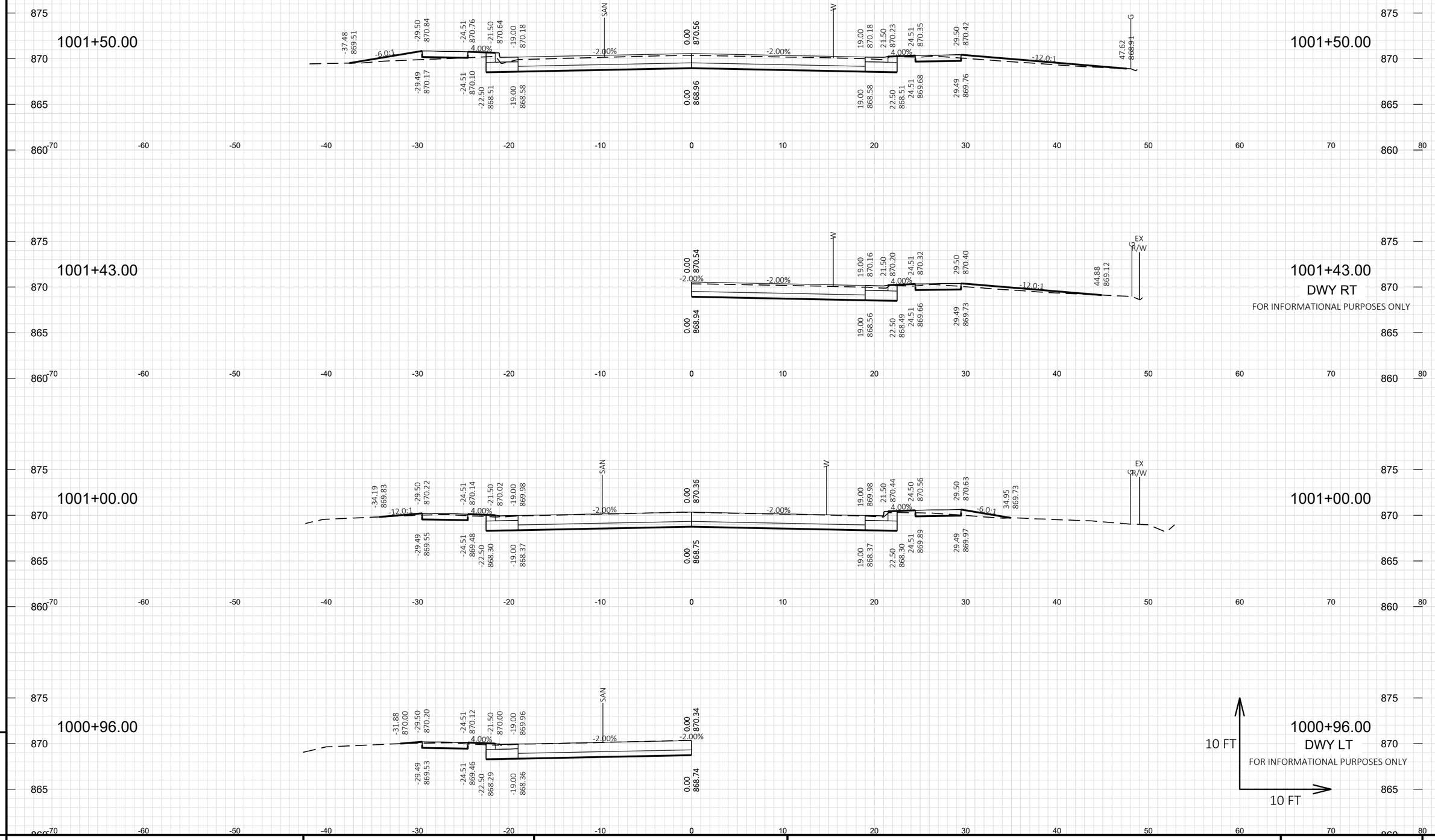
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 208	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 14

PLOT DATE : 3/23/2023 4:20 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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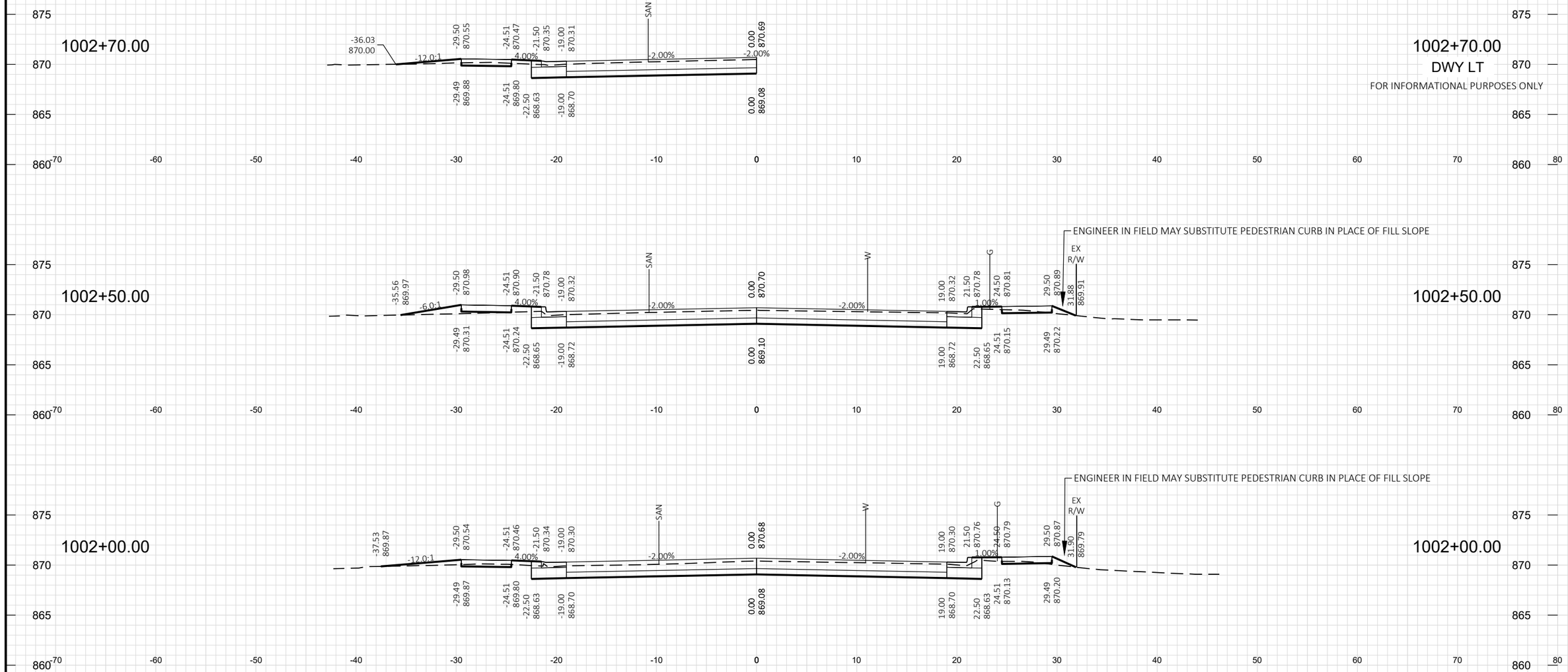
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 209	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 15

PLOT DATE : 3/23/2023 4:20 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

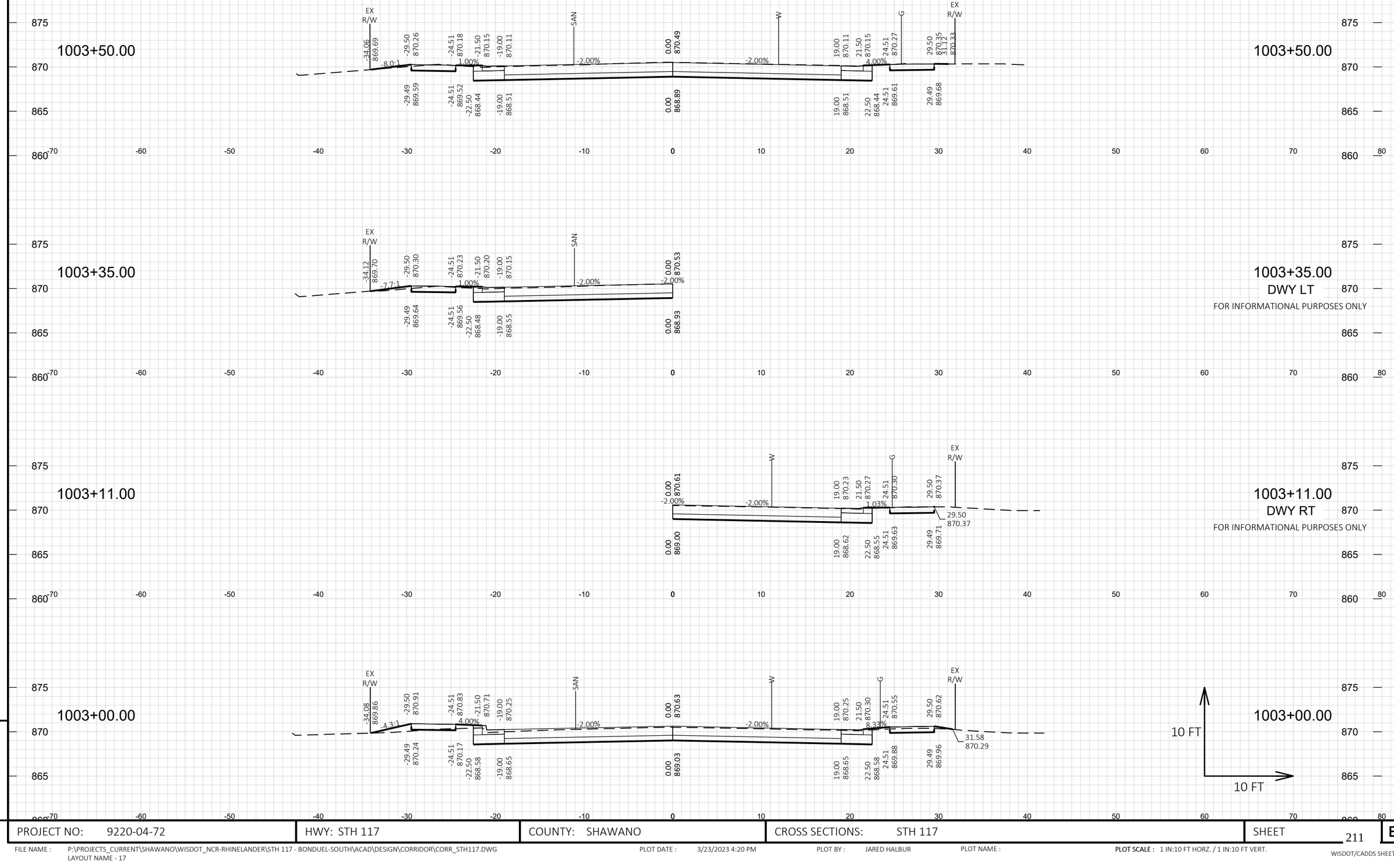


PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 210	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 16

PLOT DATE : 3/23/2023 4:20 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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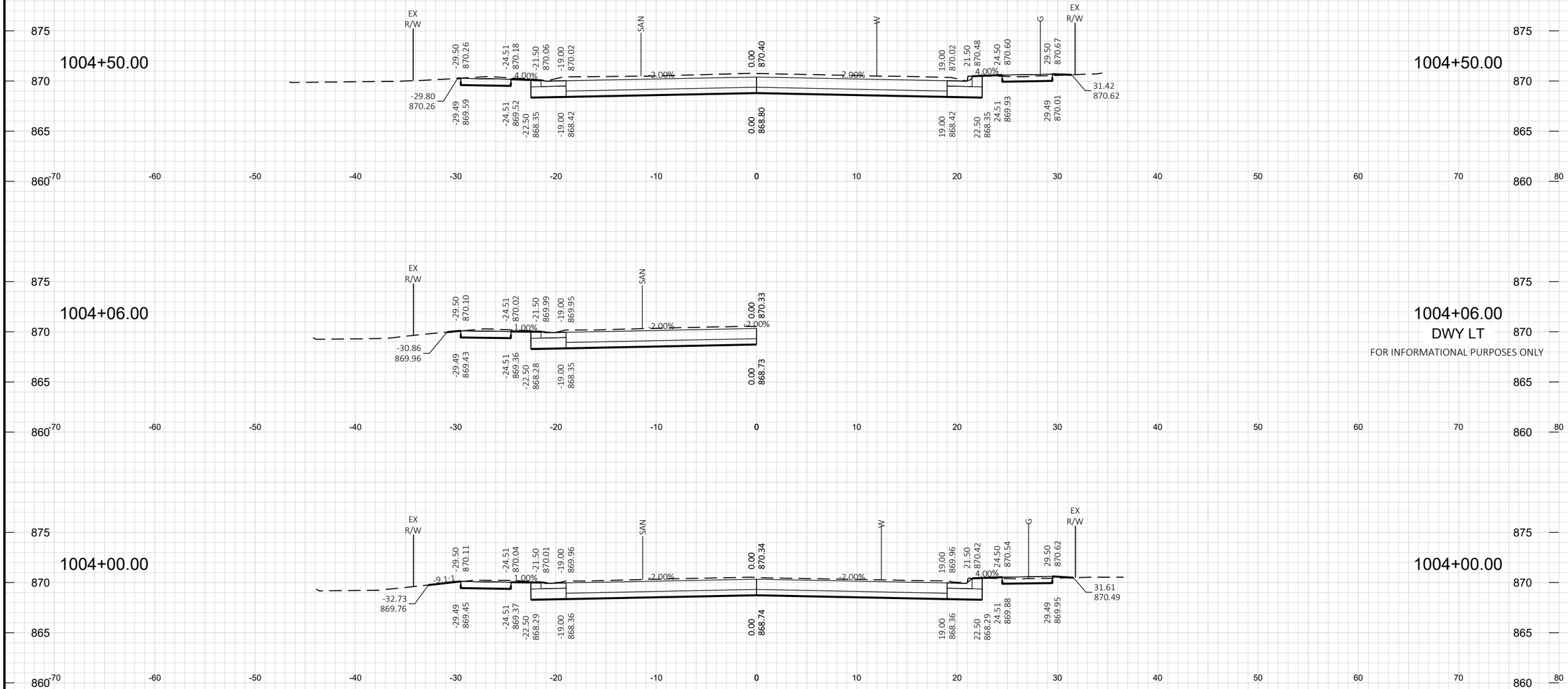
PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 211	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 17

PLOT DATE : 3/23/2023 4:20 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

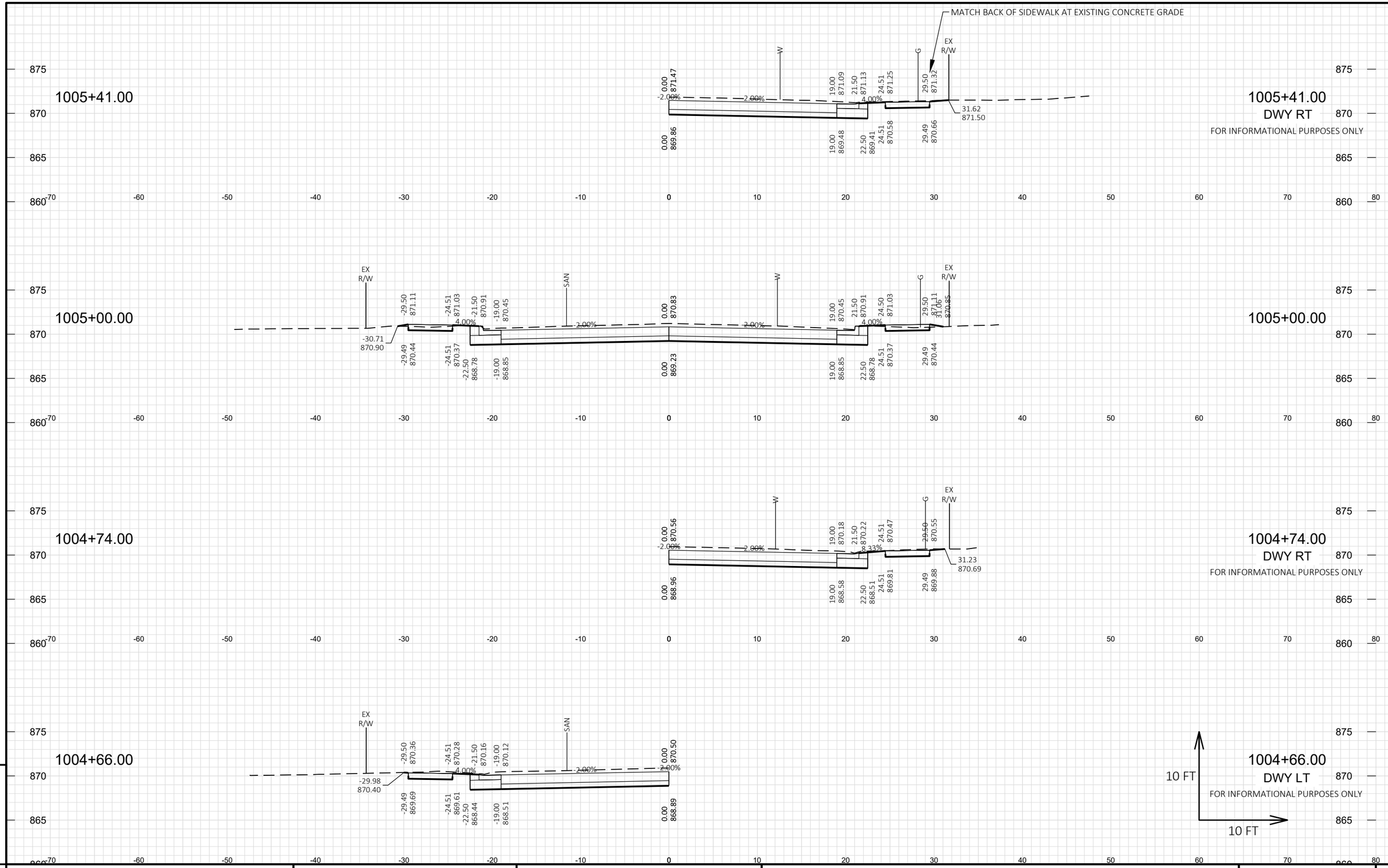


PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 212 E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 18

PLOT DATE : 3/23/2023 4:20 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



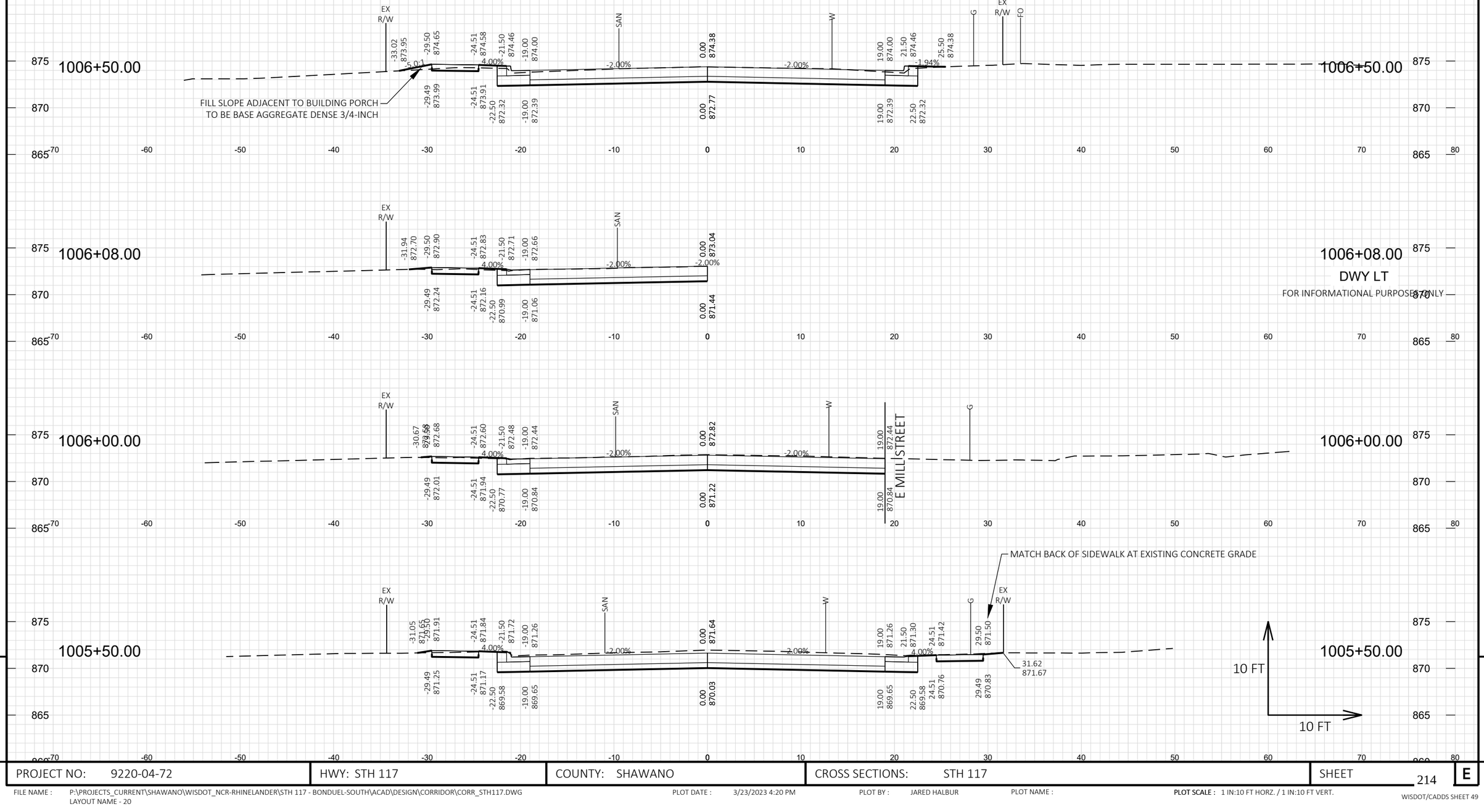
9

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 213 E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 19

PLOT DATE : 3/23/2023 4:20 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



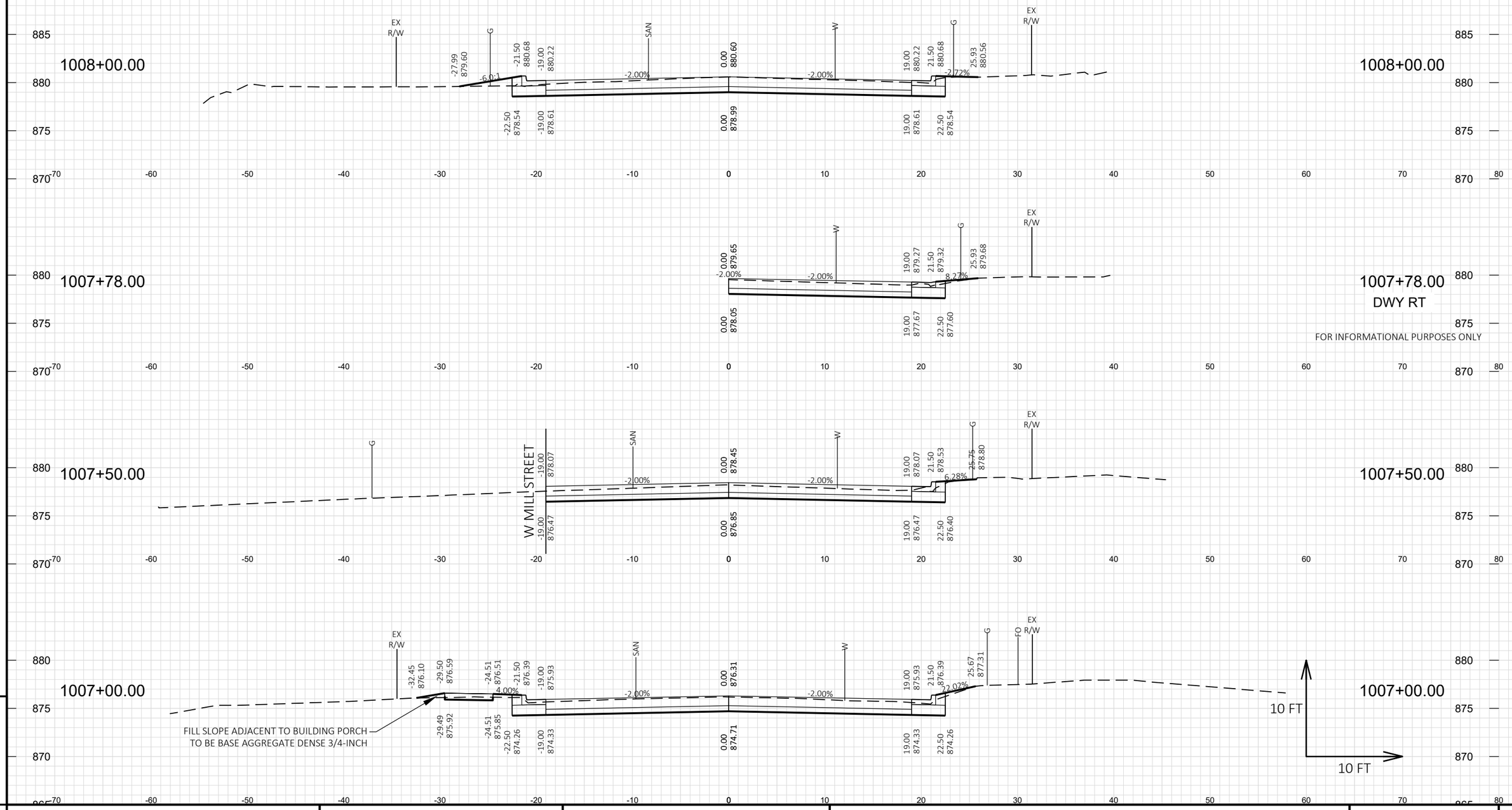
9

9

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 214	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 20

PLOT DATE : 3/23/2023 4:20 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



FOR INFORMATIONAL PURPOSES ONLY

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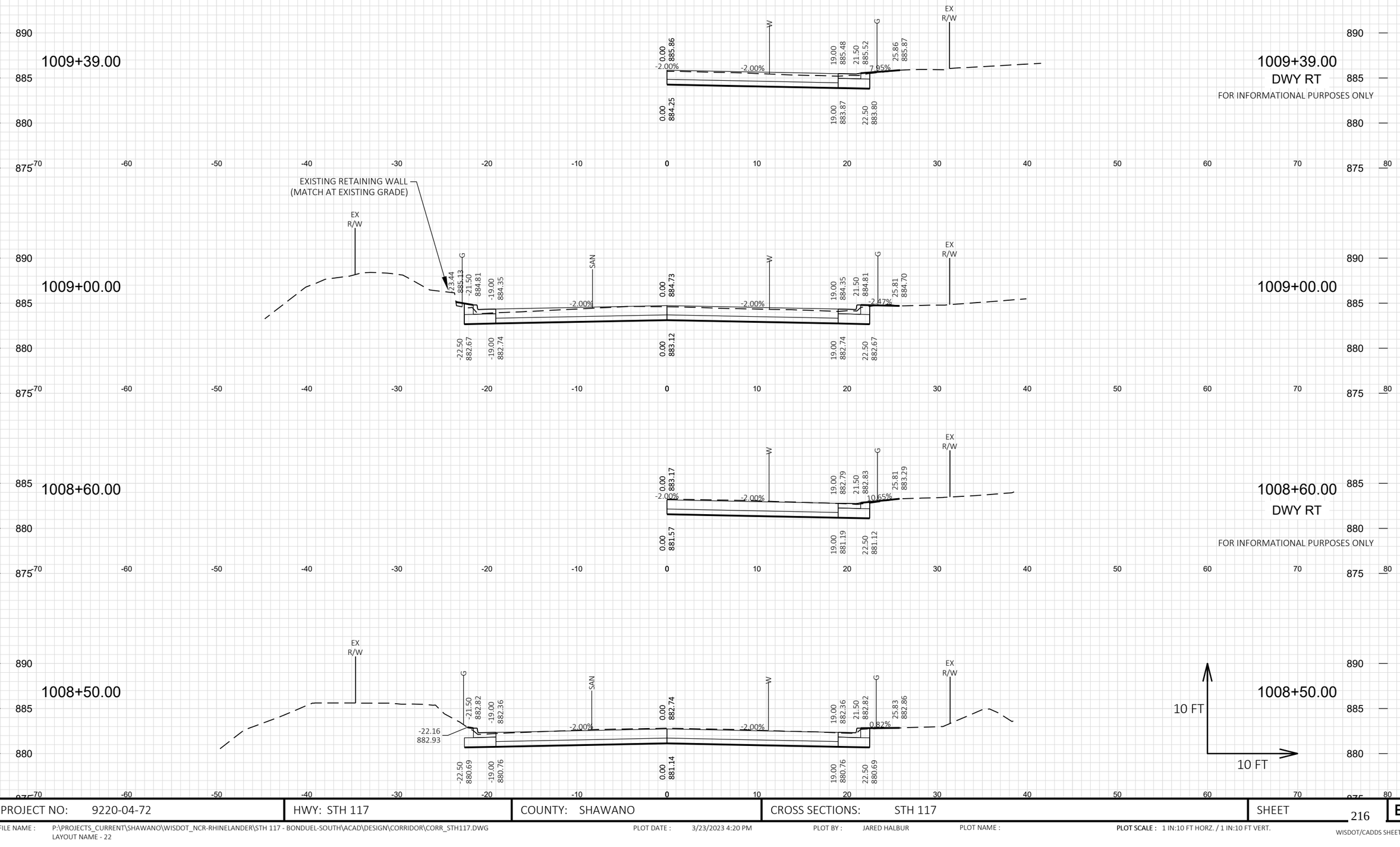
9

PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 215	E

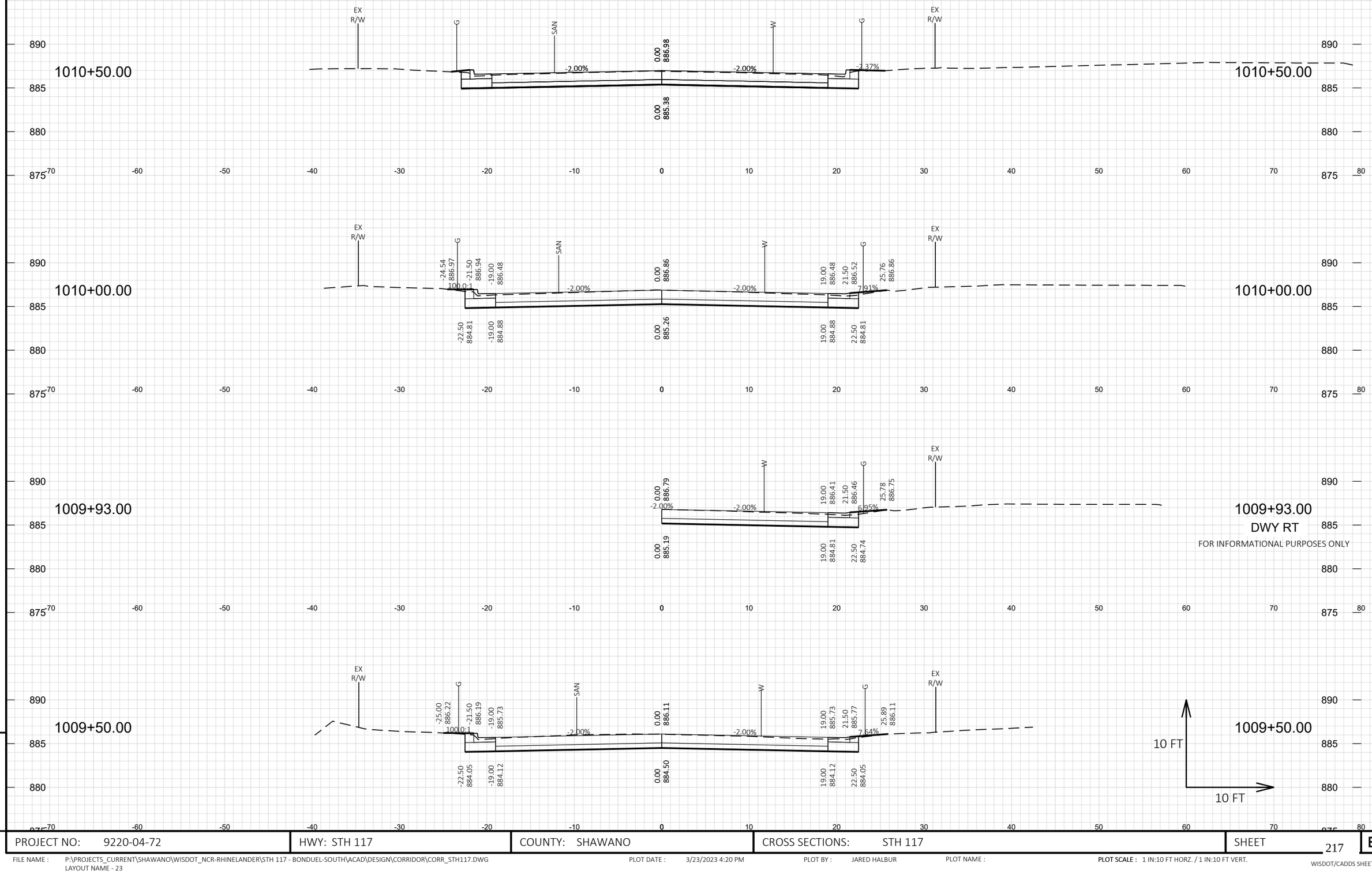
FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 21

PLOT DATE : 3/23/2023 4:20 PM PLOT BY : JARED HALBUR PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 216 E



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PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 217	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 23

PLOT DATE : 3/23/2023 4:20 PM

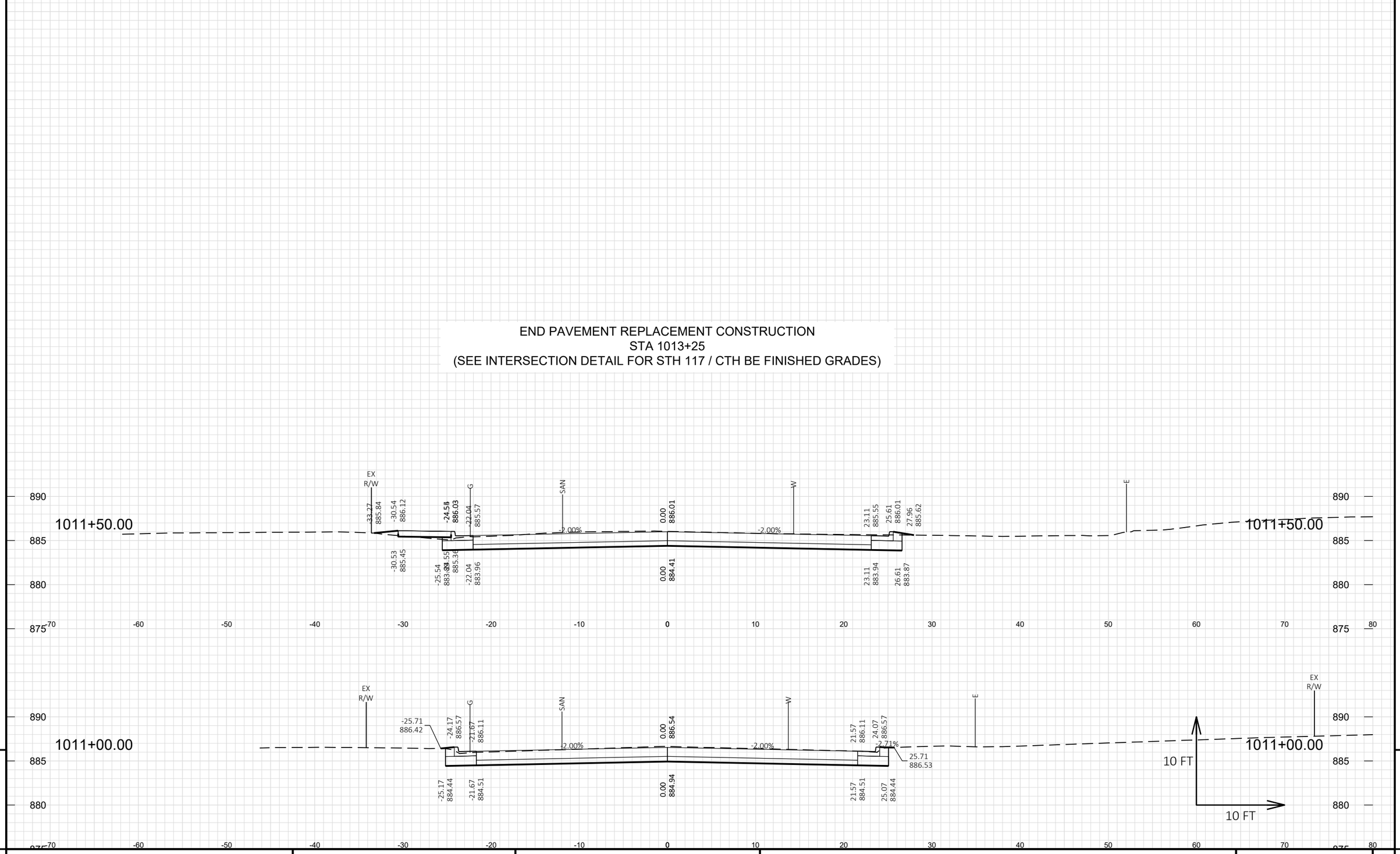
PLOT BY : JARED HALBUR

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

END PAVEMENT REPLACEMENT CONSTRUCTION
STA 1013+25
(SEE INTERSECTION DETAIL FOR STH 117 / CTH BE FINISHED GRADES)



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PROJECT NO: 9220-04-72	HWY: STH 117	COUNTY: SHAWANO	CROSS SECTIONS: STH 117	SHEET 218	E

FILE NAME : P:\PROJECTS_CURRENT\SHAWANO\WISDOT_NCR-RHINELANDER\STH 117 - BONDUEL-SOUTH\ACAD\DESIGN\CORRIDOR\CORR_STH117.DWG
LAYOUT NAME - 24
PLOT DATE : 3/23/2023 4:20 PM
PLOT BY : JARED HALBUR
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

Notes

Wisconsin Department of Transportation

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