

SUP
PROJECT ID:
WITH: N/A

8840-00-70

COUNTY:
POLK

JANUARY 2026

ORDER OF SHEETS

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

TOTAL SHEETS = 148



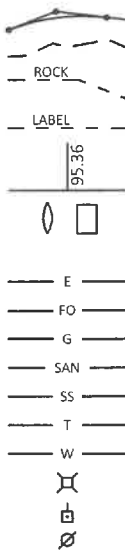
DESIGN DESIGNATION

A.A.D.T.	(2026)	=	5410
A.A.D.T.	(2046)	=	6050
D.H.V.		=	680
D.D.		=	60/40
T.		=	11.0%
DESIGN SPEED		=	35 MPH
ESALS		=	670,000

CONVENTIONAL SYMBOLS

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

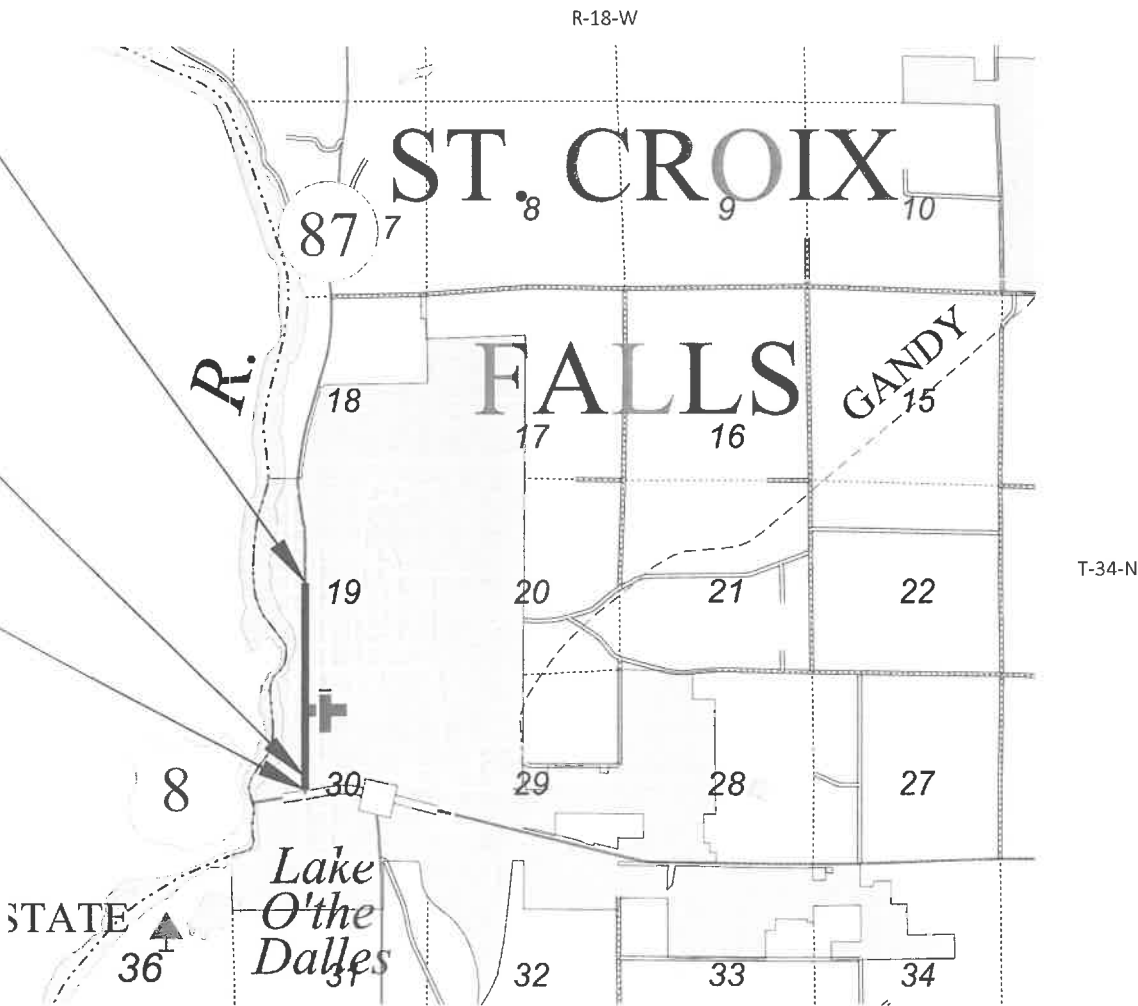
PROFILE	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
UTILITIES	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	



END PROJECT
STA 59+40

BEGIN PROJECT
STA 2+59
Y = 270,489.314
X = 462,038.171

BEGIN CONSTRUCTION
STA 2+46



LAYOUT
SCALE 0 1 MI

TOTAL NET LENGTH OF CENTERLINE = 1.076 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), POLK 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 18.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8840-00-70	WISC2026167	1

ORIGINAL PLANS PREPARED BY

CORRE

ENGINEERING

MADISON | EAU CLAIRE | WAUKESHA | APPLETON | TOMAH | WAUSAU

WISCONSIN PROFESSIONAL ENGINEER

KEVIN L. MEYER
E-38309-008
ELK MOUND
WI

7/1/25

DATE: _____ (Signature)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	WisDOT / CORRE, INC.
Designer	CORRE, INC.
Project Manager	MATTHEW VANNATTA, PE
Regional Examiner	NW REGION
Regional Supervisor	MATTHEW VANNATTA, PE

APPROVED FOR THE DEPARTMENT

DATE: 07/08/2025 *Adam Ketrick*
(Signature)

E

GENERAL NOTES:

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

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

6 INCHES OF BASE AGGREGATE 1 1/4-INCH SHALL BE PLACED UNDER ALL CONCRETE DRIVEWAY 6-INCH AND CONCRETE SIDEWALK 4-INCH.

CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT INTERSECTIONS.

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

THE EXACT LOCATION OF THE EROSION CONTROL DEVICES SHALL BE DETERMINED IN THE FIELD.

BEARINGS SHOWN ON THE PLAN ARE REFERENCED TO THE EXISTING ROADWAY CENTERLINE AND ARE ASSUMED.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS AND PAVEMENTS AT REMOVAL LIMITS.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

WATER LINES ARE PRESENT UNDER STH 87 THAT ARE OWNED BY THE WISCONSIN DNR. A CONTACT FOR THESE LINES ARE AMY CRONK AT 715-520-3976.



UTILITY CONTACTS

CENTURYLINK
COMMUNICATION
KYLE SCHLAMPP
20 S WILSON AVE
RICE LAKE, WI 54868
PHONE: 715-475-2029
EMAIL: KYLE.SCHLAMPP@LUMEN.COM

SPECTRUM
COMMUNICATION
MICKEY BENIK
1201 MCCANN DR
ALTOONA, WI 54720
PHONE: 715-210-3868
EMAIL: MICKEY.BENIK@CHARTER.COM

ST CROIX FALLS MUN WATER UTILITY
WATER
MATT LARSON
710 HWY 35 SOUTH
ST CROIX FALLS, WI 54024
PHONE: 715-483-1245
EMAIL: MATTLARSON@CITYOFSTCROIXFALLS.COM
PHONE (MOBILE): 715-553-1294

WE ENERGIES
GAS / PETROLEUM
STEVEN CHAVERS
104 W SOUTH ST
RICE LAKE, WI 54868
PHONE: 715-234-9605
EMAIL: WE-UTILITY-RELOCATIONS@WE-ENERGIES.COM
PHONE (MOBILE): 715-213-4327

XCEL ENERGY
ELECTRICITY
MITCHELL DIENGER
414 NICOLLET MALL
MINNEAPOLIS, MN 55401
PHONE: 612-321-3109
EMAIL: MITCHELL.A.DIENGER@XCELENERGY.COM

WISCONSIN DNR LIAISON

AMY CRONK
DNR NORTHERN REGION HEADQUARTERS
810 W MAPLE ST
SPOONER, WI 54801
PHONE: 715-520-3976
EMAIL: AMY.CRONK@WISCONSIN.GOV

CONSULTANT CONTACT

KEVIN MEYER, PE
CORRE, INC.
1802 WARDEN ST
EAU CLAIRE, WI 54703
PHONE: 715-299-1894
EMAIL: KMEYER@CORREINC.COM

CITY OF ST CROIX FALLS CONTACT

MATT LARSON
DIRECTOR OF PUBLIC WORKS
710 HWY 35 SO.
ST CROIX FALLS, WI 54024
PHONE: 715-483-1245
EMAIL: MATTLARSON@CITYOFSTCROIXFALLS.COM

ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PLAN DETAILS
- CURB RAMP DETAILS
- STORM SEWER PLAN
- PAVEMENT MARKING
- PEDESTRIAN DETOUR

RUNOFF COEFFICIENT TABLE

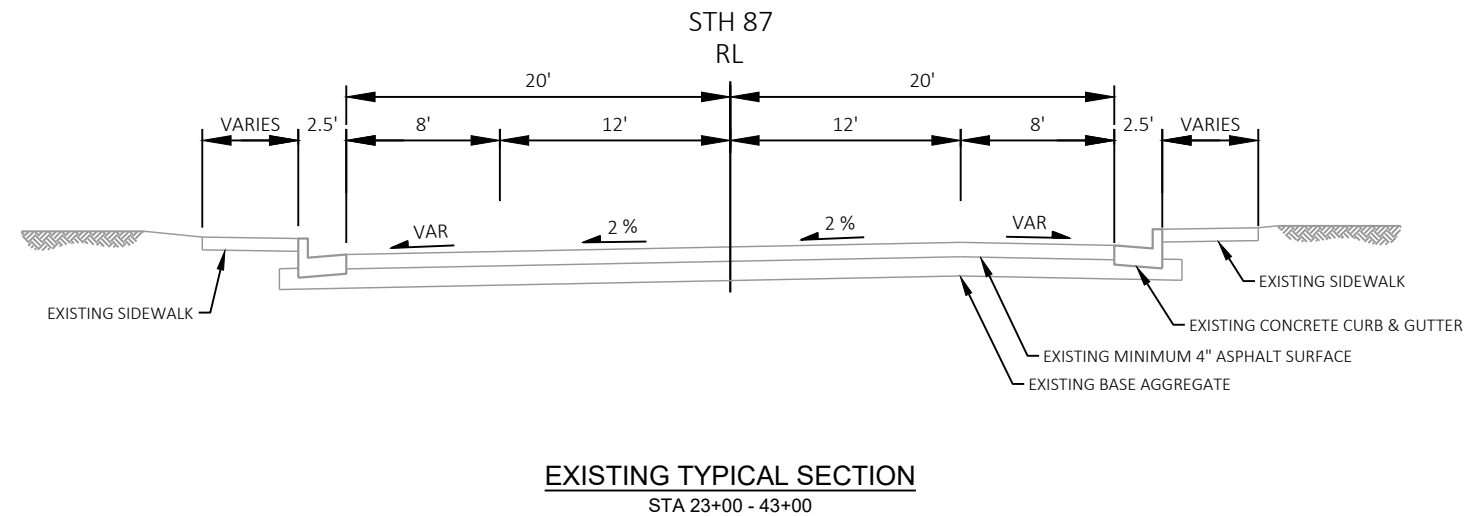
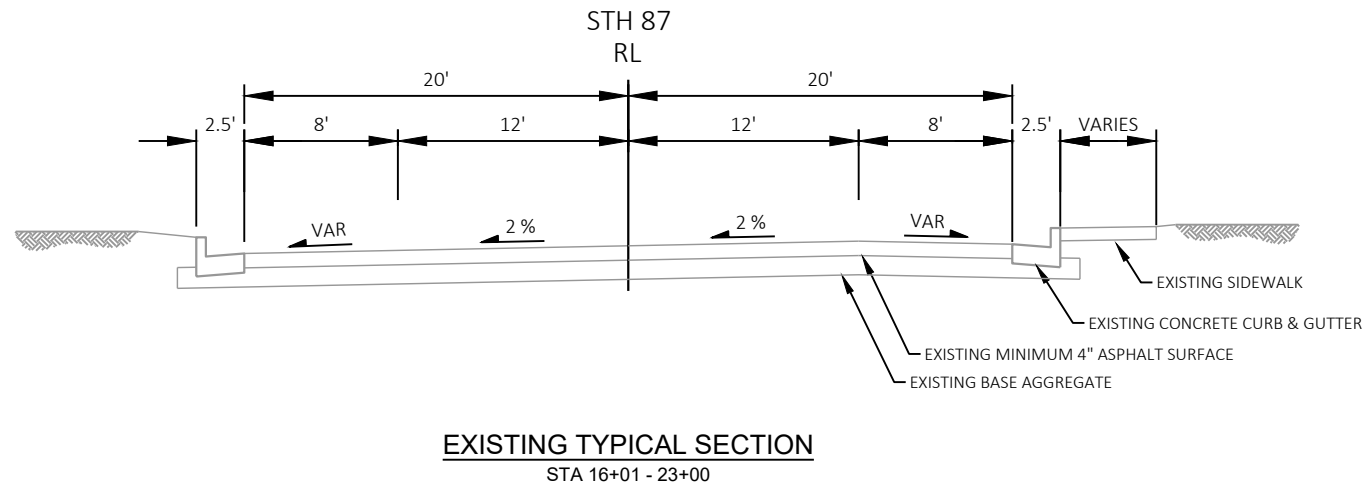
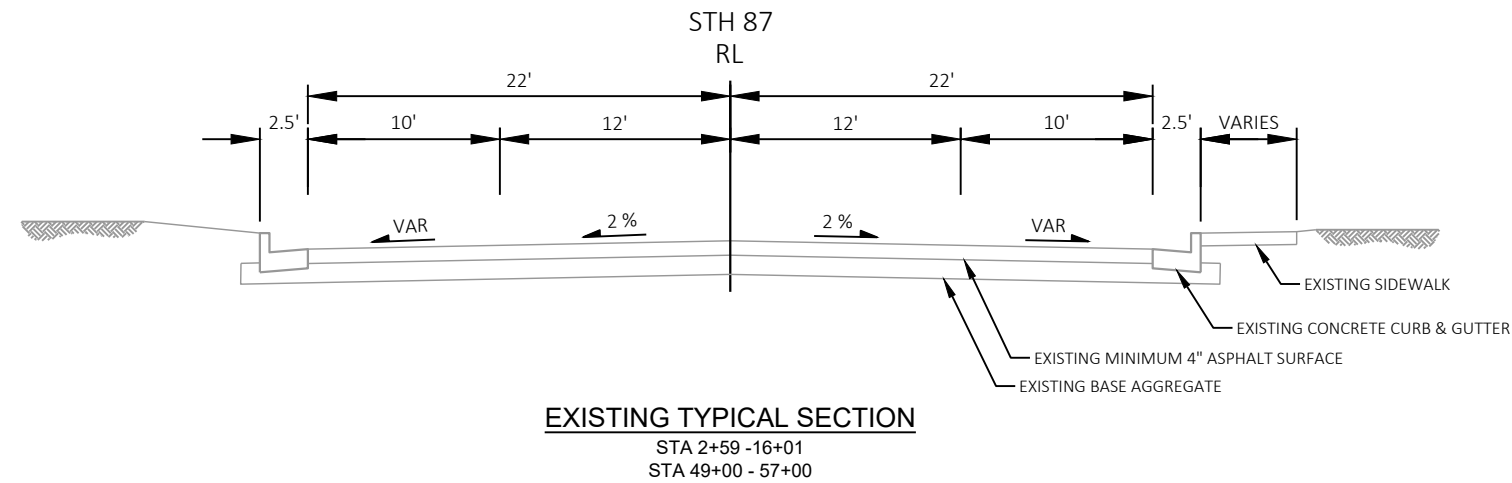
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .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											

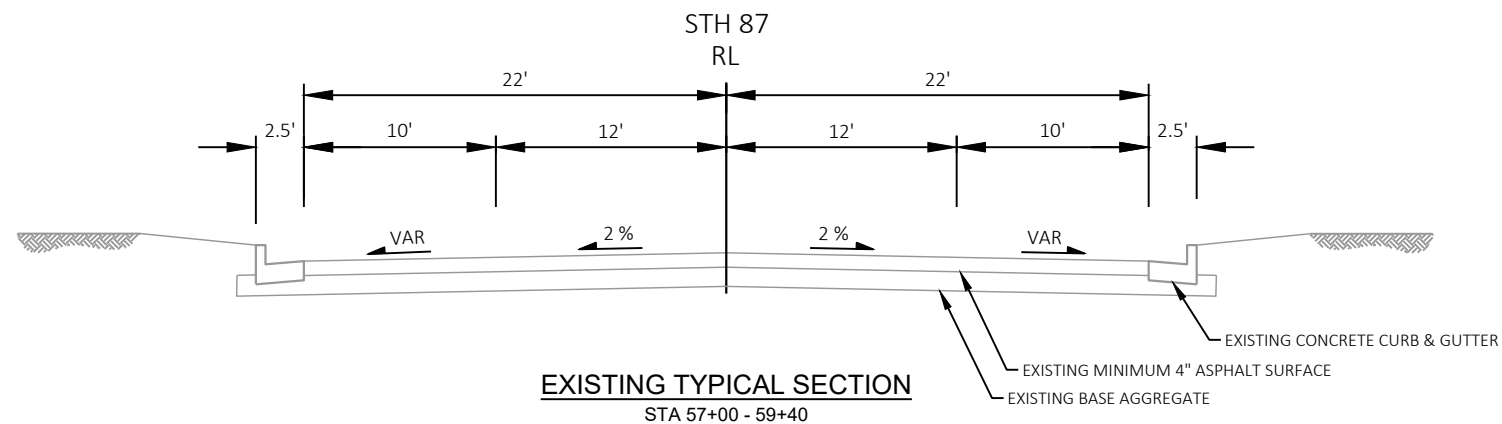
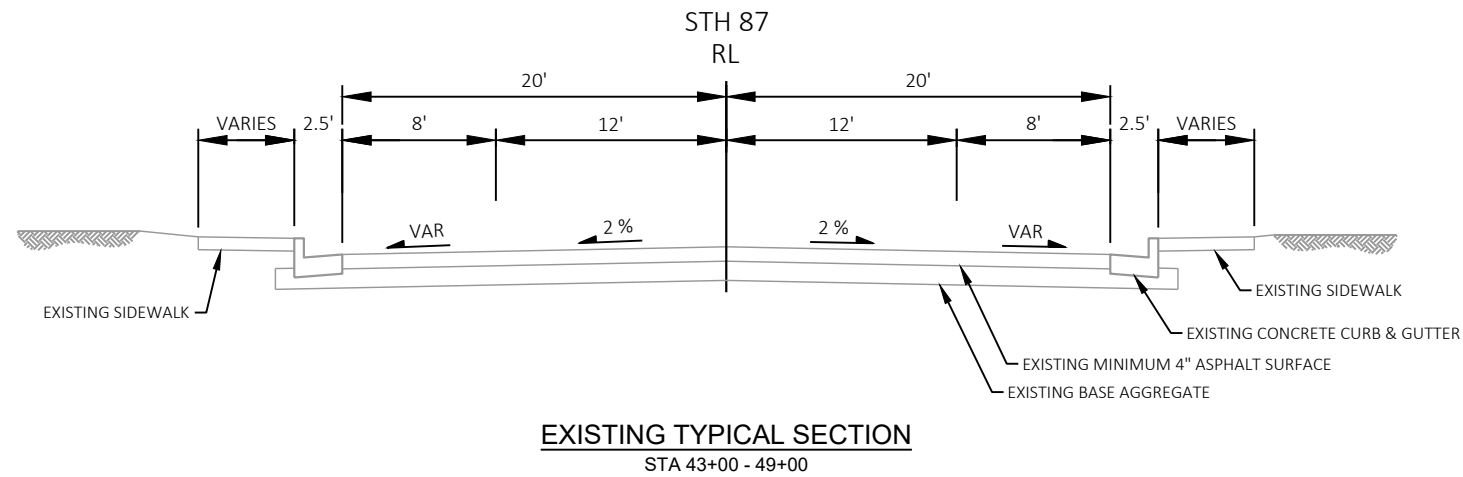
TOTAL PROJECT AREA = 8.6 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0.30 ACRES

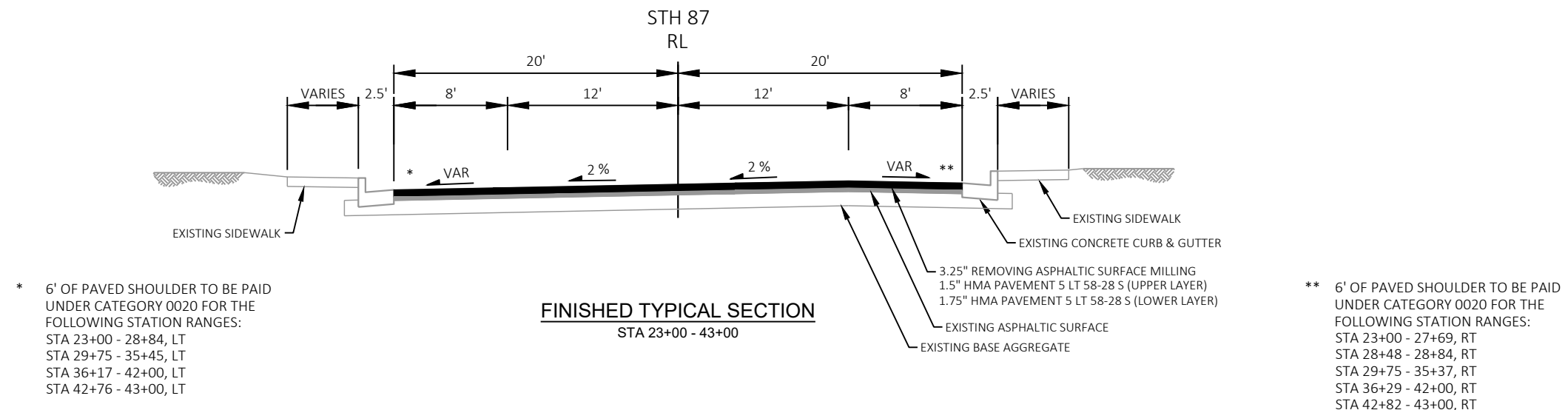
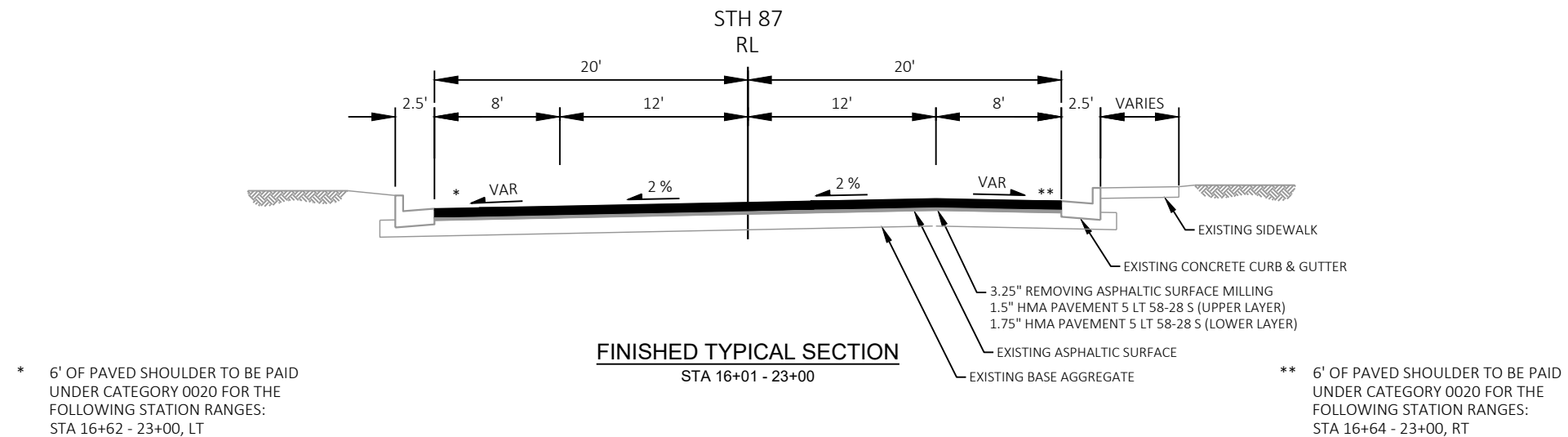
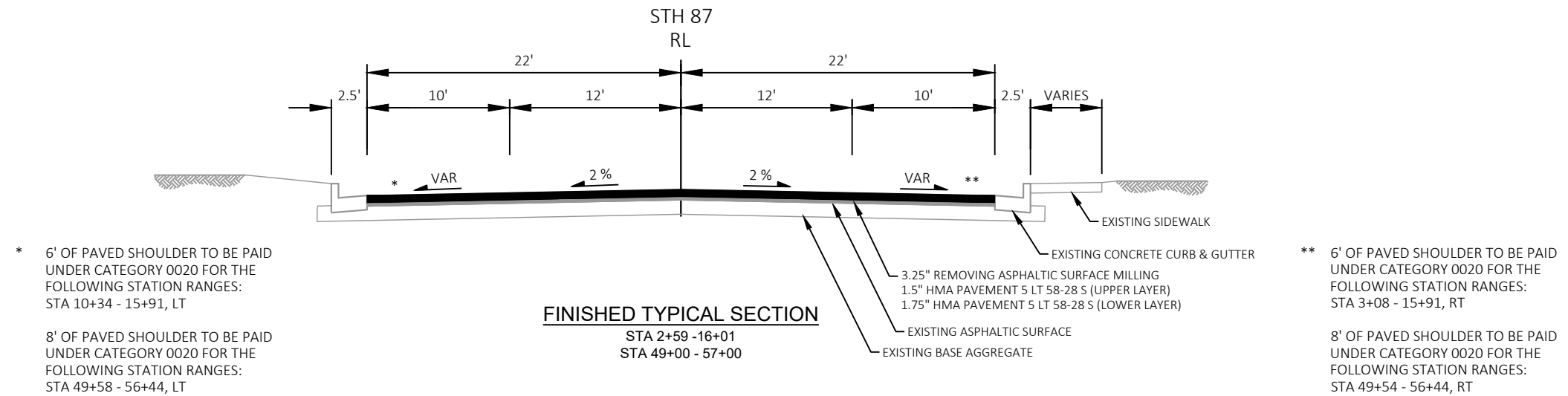
PAVEMENT CORE LOG								
CORE	NORTHING	EASTING	LATITUDE	LONGITUDE	STATION	OFFSET	HMA THICKNESS	MATERIAL BELOW / NOTE
C-01	270852.700	462046.900	N045.403940	W092.644830	6+22	8.4' RT	3.875	BASE
C-02	271909.800	462030.600	N045.406839	W092.644894	16+79	8.9' LT	5.5	BASE
C-03	272758.700	462046.300	N045.409167	W092.644833	25+28	6.0' RT	4.75	BASE
C-04	273765.000	462035.700	N045.411927	W092.644875	35+35	5.6' LT	4.625	BASE
C-05	274755.600	462049.700	N045.414644	W092.644821	45+25	7.5' RT	6.375	BASE
C-06	275719.500	462033.300	N045.417287	W092.644885	54+89	9.8' LT	5.75	BASE

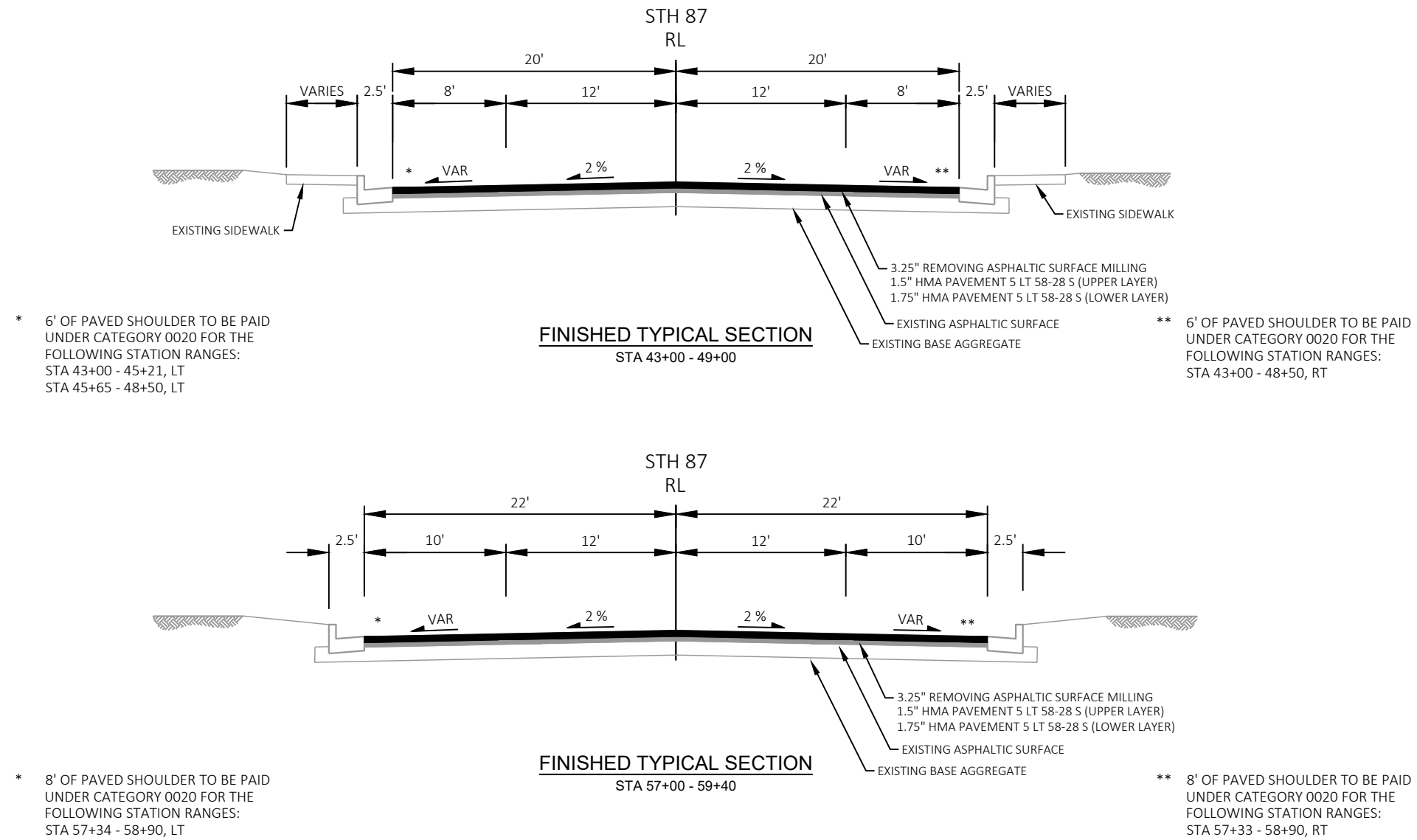


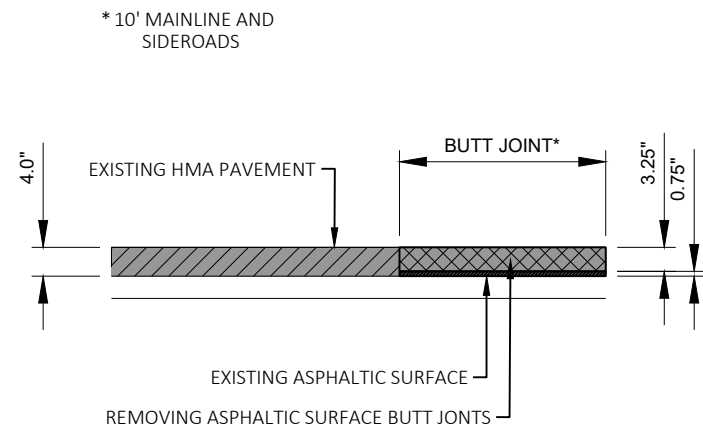
PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	PROJECT OVERVIEW	SHEET	E
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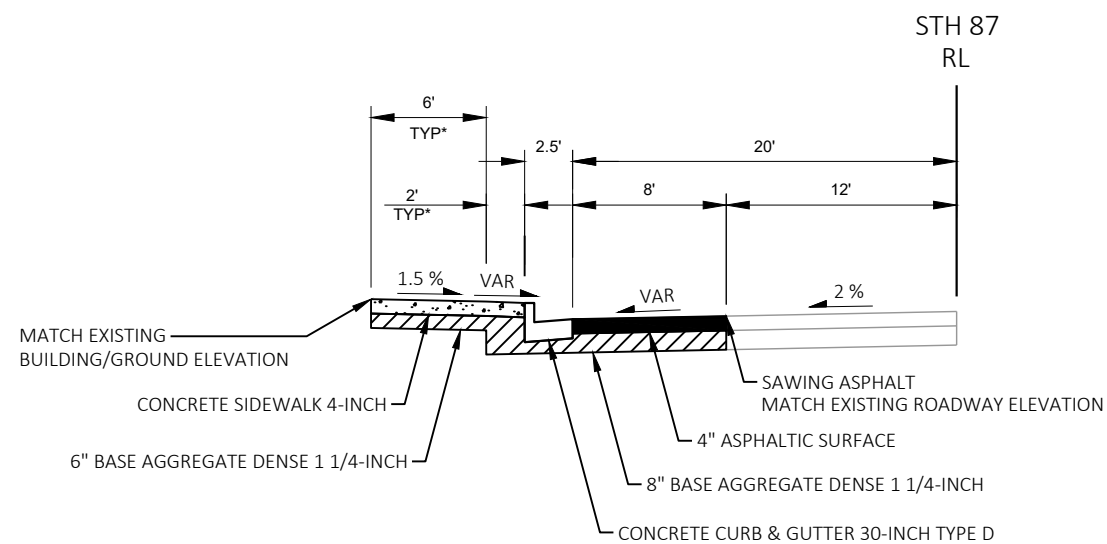




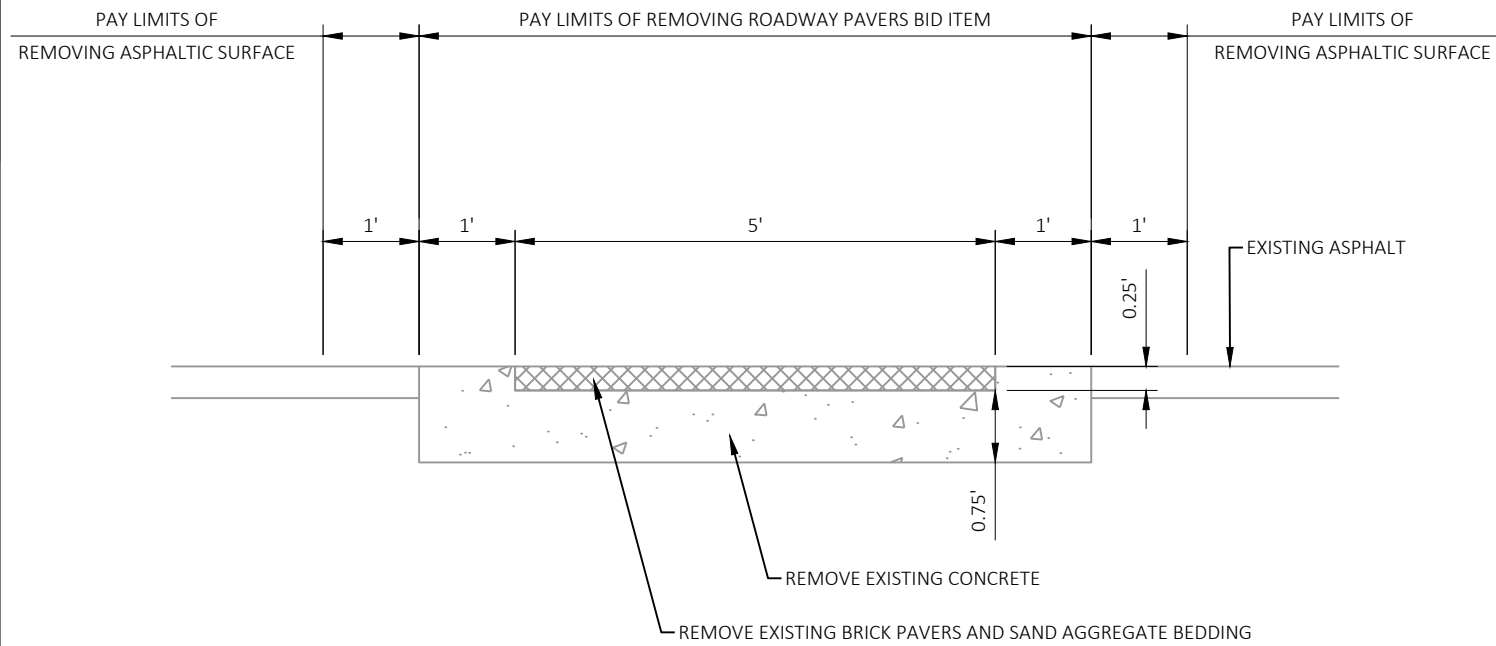


REMOVING ASPHALTIC SURFACE BUTT JOINTS

* SEE PLAN DETAILS FOR WIDTHS AND GRADES FOR
SIDEWALK, CURB & GUTTER, AND PAVEMENT.

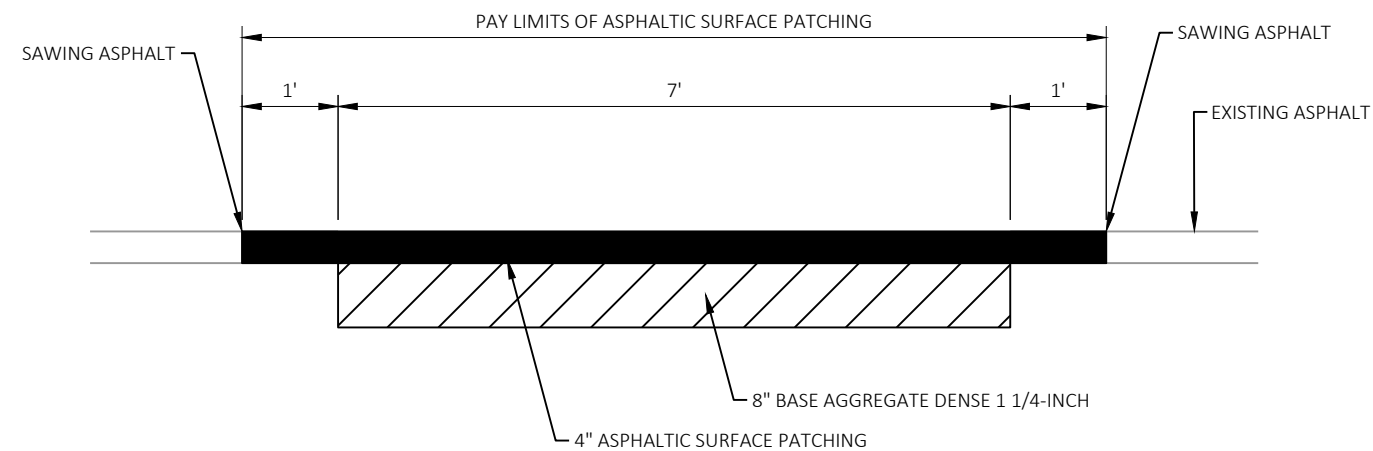


PARKING LANE CONSTRUCTION AT STORM SEWER
STA 26+00 - STA 27+95



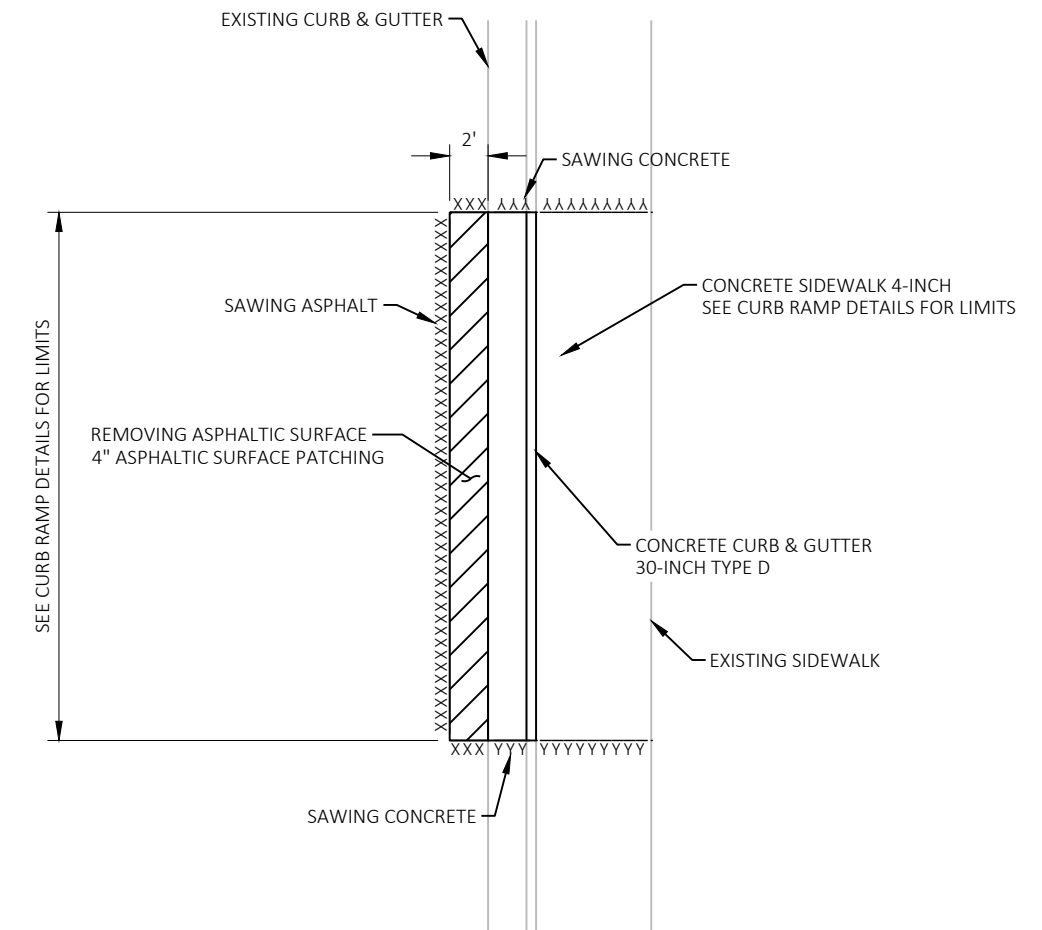
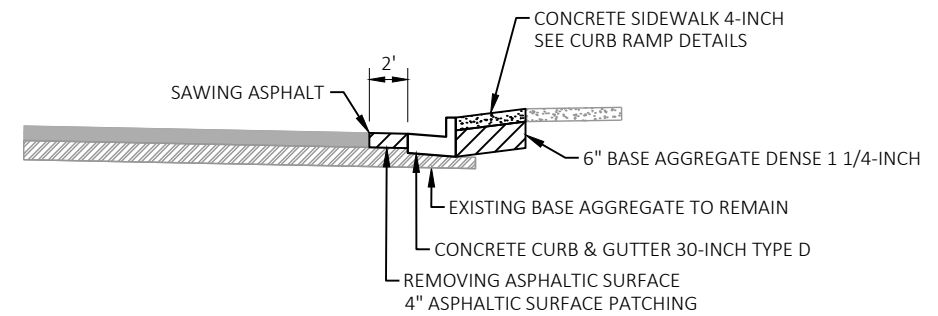
COMPLETE ALL REMOVALS AND PLACEMENT OF ASPHALTIC SURFACE PATCHING PRIOR TO THE START OF MILLING OPERATIONS.

RETAIN THE EXISTING CONCRETE PAVEMENT AT THE BEGINNING OF THE PROJECT; NO REMOVAL IS REQUIRED.



REMOVING ROADWAY PAVERS

NOTE:
COMPLETE CURB & GUTTER AND ASPHALTIC SURFACE PATCHING PRIOR TO MILLING.



CURB REPLACEMENT - PATCHING DETAIL

PROJECT NO: 8840-00-70

HWY: STH 87

COUNTY: POLK

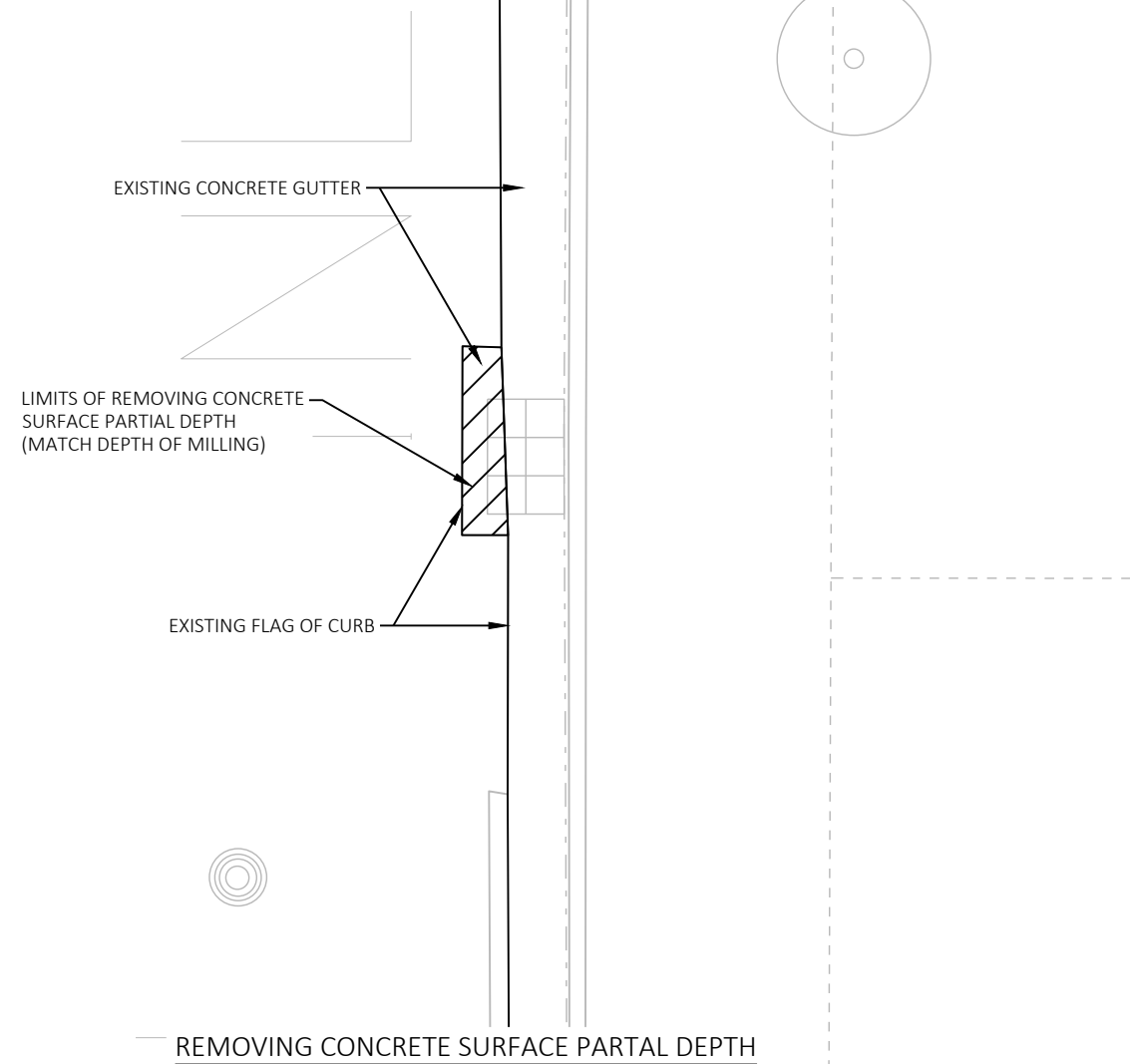
CONSTRUCTION DETAILS

SHEET

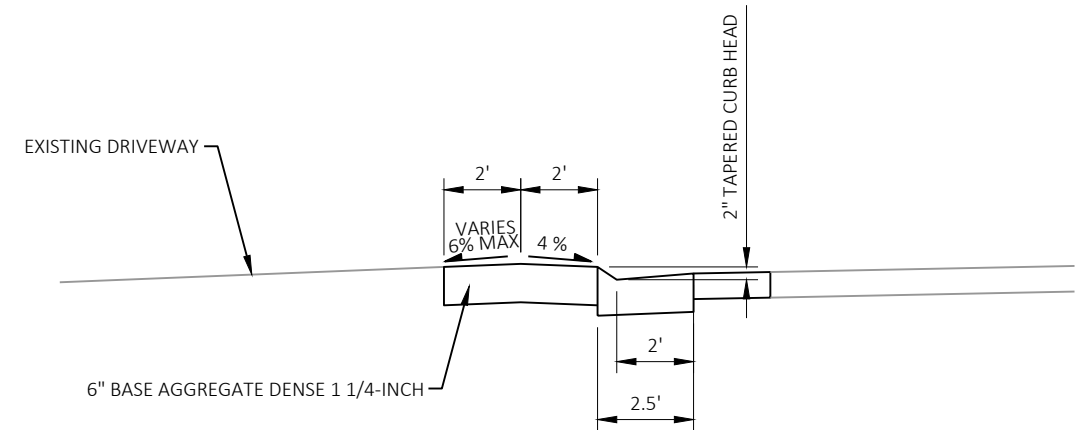
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NOTE:

MILL THE EXISTING CONCRETE GUTTER AT THE LOCATIONS
SPECIFIED INSIDE THE ROADWAY OF THE ADJACENT FLAG OF CURB.



STA 6+55 RT
STA 6+70 LT
STA 6+70 RT
STA 16+00 RT
STA 16+15 RT
STA 22+95 RT
STA 28+20 RT
STA 28+75 RT
STA 32+30 LT

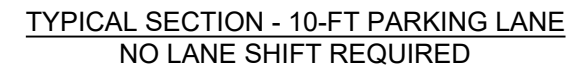
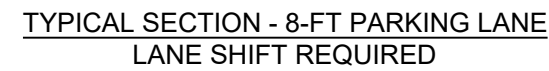
CONCRETE CURB & GUTTER 30-INCH TYPE D

STA 50+27 - STA 50+44, LT

LEGEND

	TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT / TRAFFIC CONTROL DRUM
	WORK AREA
	TEMPORARY PEDESTRIAN CURB RAMP
	TEMPORARY PEDESTRIAN SURFACE MATTING OR PLATE

TEMPORARY PEDESTRIAN SURFACE MATTING OR PLATE



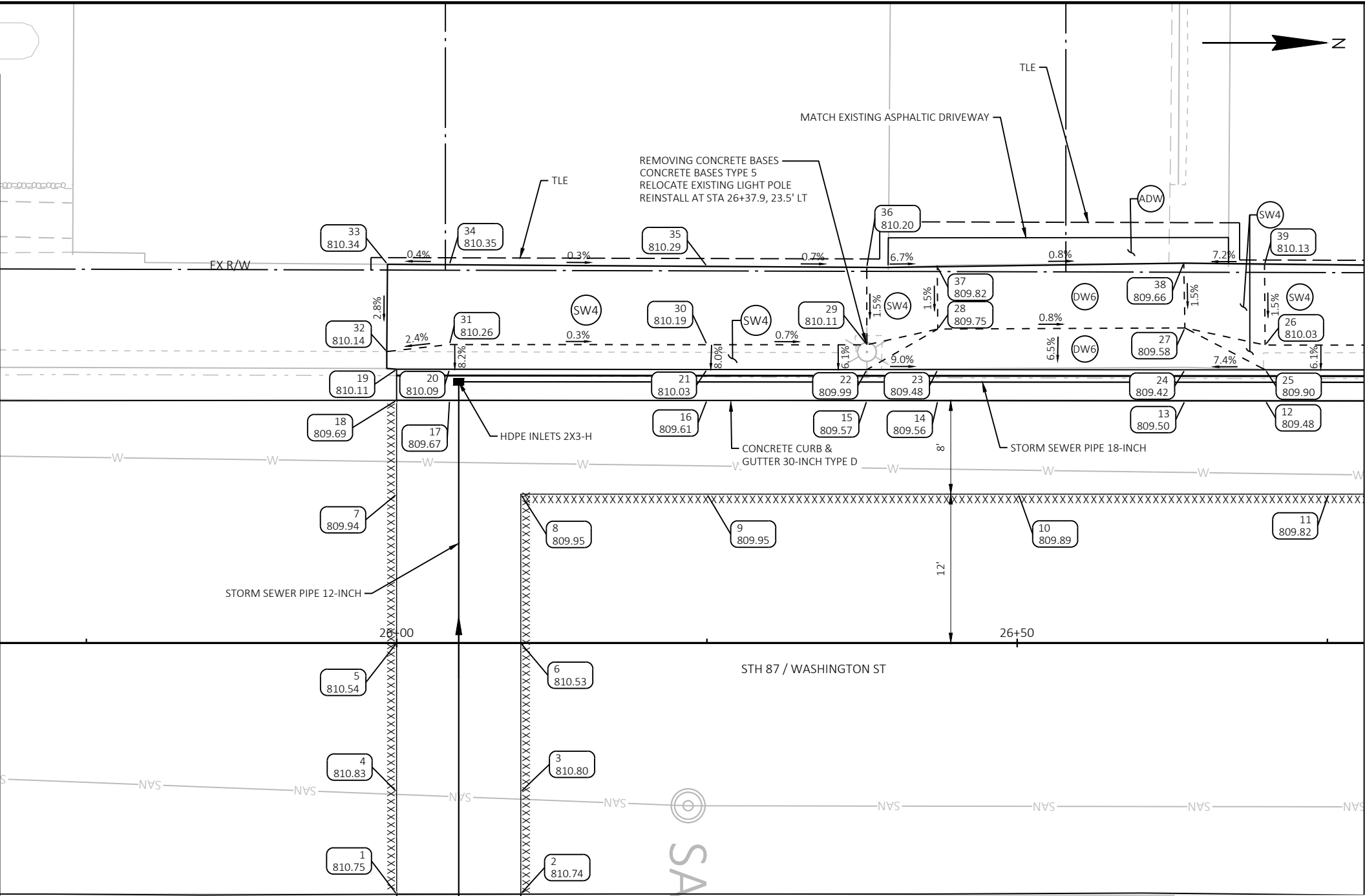
(A) REMOVING ASPHALTIC SURFACE
4" ASPHALTIC SURFACE PATCHING

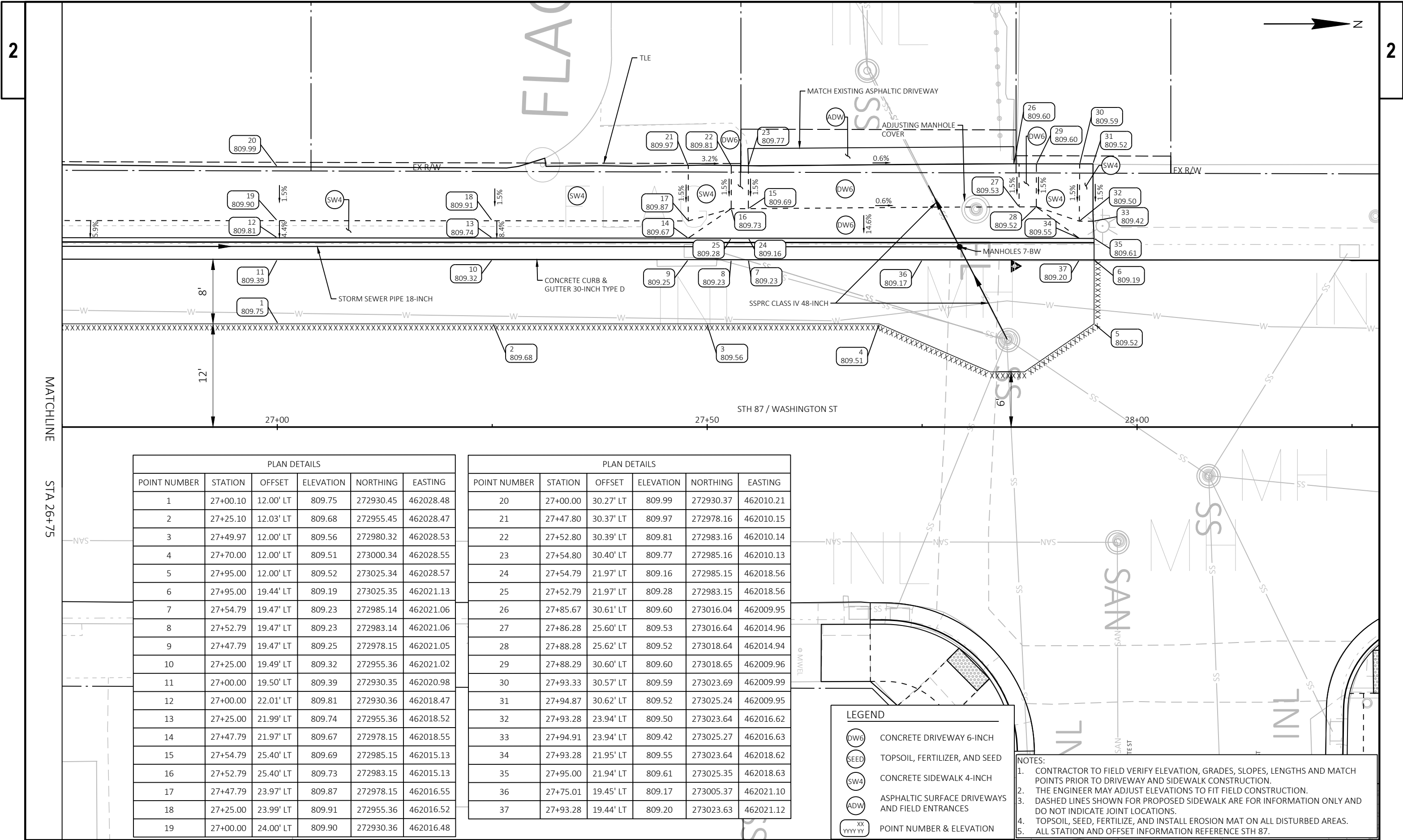
(B) TEMPORARY PEDESTRIAN
CURB RAMP, 8.33 % MAX



SEE "TRAFFIC CONTROL, PEDESTRIAN ACCOMODATION" SDD FOR ADDITIONAL DETAILS.

PLAN DETAILS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	26+00.00	20.26' RT	810.75	272830.32	462060.64
2	26+10.00	20.22' RT	810.74	272840.32	462060.61
3	26+10.00	12.00' RT	810.80	272840.33	462052.39
4	26+00.00	12.00' RT	810.83	272830.33	462052.38
5	26+00.00	0.00'	810.54	272830.34	462040.38
6	26+10.00	0.00'	810.53	272840.34	462040.39
7	26+00.00	12.00' LT	809.94	272830.35	462028.38
8	26+10.00	12.00' LT	809.95	272840.35	462028.39
9	26+25.00	12.00' LT	809.95	272855.35	462028.41
10	26+50.10	12.00' LT	809.89	272880.45	462028.43
11	26+75.10	12.00' LT	809.82	272905.45	462028.45
12	26+70.00	19.52' LT	809.48	272900.35	462020.93
13	26+63.52	19.52' LT	809.74	272893.88	462020.92
14	26+43.61	19.54' LT	809.67	272873.96	462020.89
15	26+37.89	19.54' LT	809.57	272868.25	462020.88
16	26+25.00	19.58' LT	809.61	272855.36	462020.83
17	26+04.26	19.56' LT	809.67	272834.61	462020.83
18	26+00.00	19.56' LT	809.69	272830.35	462020.82
19	26+00.00	22.06' LT	810.11	272830.36	462018.32
20	26+04.26	22.06' LT	810.09	272834.61	462018.33
21	26+25.00	22.05' LT	810.03	272855.36	462018.36
22	26+37.90	22.04' LT	809.99	272868.25	462018.38
23	26+43.60	22.04' LT	809.77	272873.96	462018.39
24	26+63.52	22.02' LT	809.42	272893.88	462018.42
25	26+70.00	22.02' LT	809.90	272900.36	462018.43
26	26+69.98	24.02' LT	810.03	272900.34	462016.43
27	26+63.52	25.40' LT	809.58	272893.88	462015.04
28	26+43.60	25.31' LT	809.75	272873.96	462015.11
29	26+37.89	24.04' LT	810.11	272868.25	462016.38
30	26+25.00	24.05' LT	810.19	272855.36	462016.36
31	26+04.25	24.06' LT	810.26	272834.61	462016.33
32	25+99.21	23.50' LT	810.14	272829.57	462016.89
33	25+99.26	30.54' LT	810.34	272829.62	462009.85
34	26+04.25	30.50' LT	810.35	272834.61	462009.89
35	26+25.00	30.36' LT	810.29	272855.37	462010.04
36	26+37.88	30.29' LT	810.20	272868.25	462010.13
37	26+43.57	30.34' LT	809.82	272873.93	462010.09
38	26+63.43	30.63' LT	809.66	272893.79	462009.82
39	26+69.93	30.49' LT	810.13	272900.30	462009.96





PLAN DETAILS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	27+00.10	12.00' LT	809.75	272930.45	462028.48
2	27+25.10	12.03' LT	809.68	272955.45	462028.47
3	27+49.97	12.00' LT	809.56	272980.32	462028.53
4	27+70.00	12.00' LT	809.51	273000.34	462028.55
5	27+95.00	12.00' LT	809.52	273025.34	462028.57
6	27+95.00	19.44' LT	809.19	273025.35	462021.13
7	27+54.79	19.47' LT	809.23	272985.14	462021.06
8	27+52.79	19.47' LT	809.23	272983.14	462021.06
9	27+47.79	19.47' LT	809.25	272978.15	462021.05
10	27+25.00	19.49' LT	809.32	272955.36	462021.02
11	27+00.00	19.50' LT	809.39	272930.35	462020.98
12	27+00.00	22.01' LT	809.81	272930.36	462018.47
13	27+25.00	21.99' LT	809.74	272955.36	462018.52
14	27+47.79	21.97' LT	809.67	272978.15	462018.55
15	27+54.79	25.40' LT	809.69	272985.15	462015.13
16	27+52.79	25.40' LT	809.73	272983.15	462015.13
17	27+47.79	23.97' LT	809.87	272978.15	462016.55
18	27+25.00	23.99' LT	809.91	272955.36	462016.52
19	27+00.00	24.00' LT	809.90	272930.36	462016.48

PLAN DETAILS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
20	27+00.00	30.27' LT	809.99	272930.37	462010.21
21	27+47.80	30.37' LT	809.97	272978.16	462010.15
22	27+52.80	30.39' LT	809.81	272983.16	462010.14
23	27+54.80	30.40' LT	809.77	272985.16	462010.13
24	27+54.79	21.97' LT	809.16	272985.15	462018.56
25	27+52.79	21.97' LT	809.28	272983.15	462018.56
26	27+85.67	30.61' LT	809.60	273016.04	462009.95
27	27+86.28	25.60' LT	809.53	273016.64	462014.96
28	27+88.28	25.62' LT	809.52	273018.64	462014.94
29	27+88.29	30.60' LT	809.60	273018.65	462009.96
30	27+93.33	30.57' LT	809.59	273023.69	462009.99
31	27+94.87	30.62' LT	809.52	273025.24	462009.95
32	27+93.28	23.94' LT	809.50	273023.64	462016.62
33	27+94.91	23.94' LT	809.42	273025.27	462016.63
34	27+93.28	21.95' LT	809.55	273023.64	462018.62
35	27+95.00	21.94' LT	809.61	273025.35	462018.63
36	27+75.01	19.45' LT	809.17	273005.37	462021.10
37	27+93.28	19.44' LT	809.20	273023.63	462021.12

LEGEND

DW6

CONCRETE DRIVEWAY 6-INCH

SEED

TOPSOIL, FERTILIZER, AND SEED

SW4

CONCRETE SIDEWALK 4-INCH

ADW

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

XX
YYY YV

POINT NUMBER & ELEVATION

- NOTES:
1.

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO DRIVEWAY AND SIDEWALK CONSTRUCTION.
2.

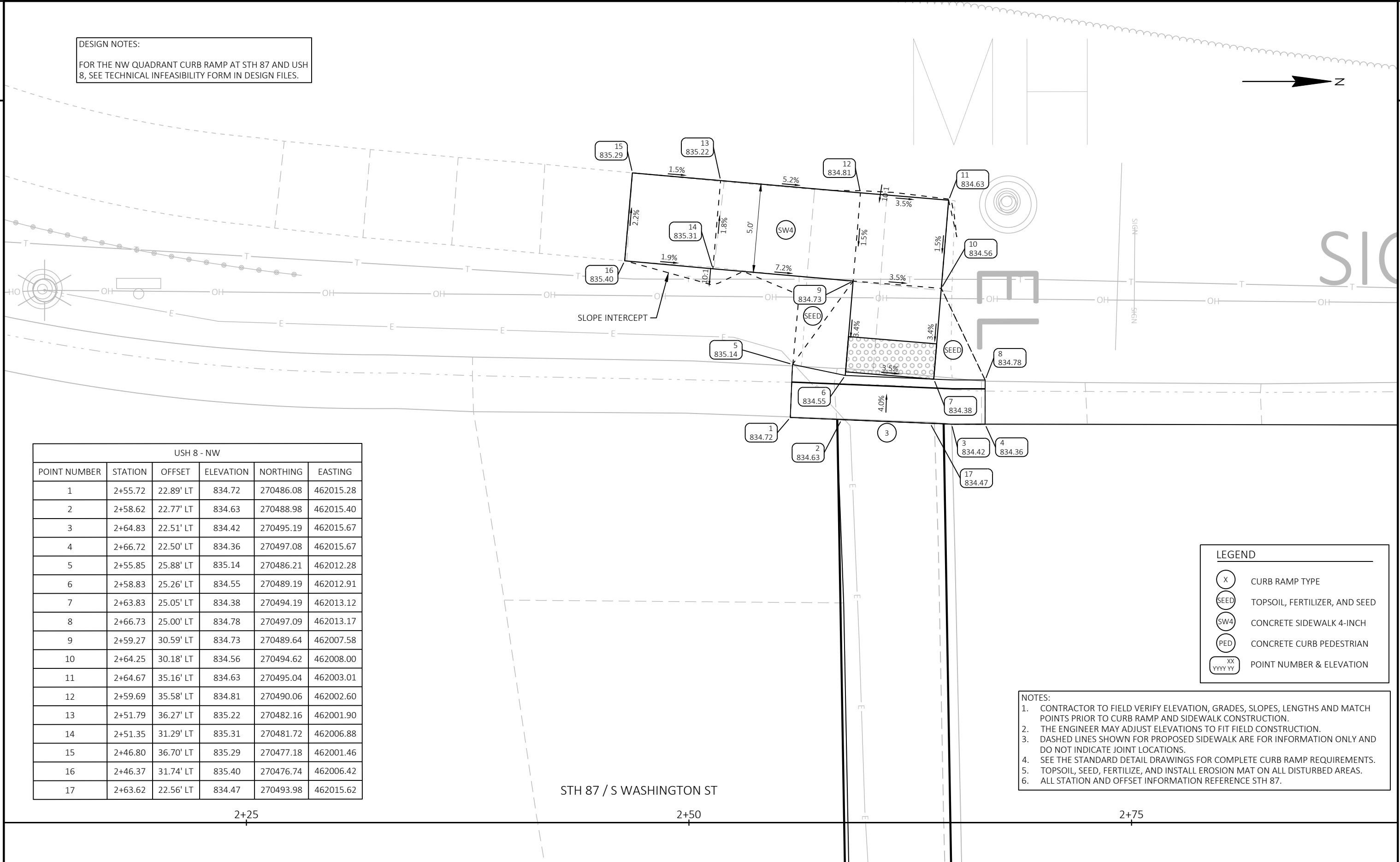
THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
3.

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4.

TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
5.

ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.

DESIGN NOTES:
FOR THE NW QUADRANT CURB RAMP AT STH 87 AND USH 8, SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.



USH 8 - NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	2+55.72	22.89' LT	834.72	270486.08	462015.28
2	2+58.62	22.77' LT	834.63	270488.98	462015.40
3	2+64.83	22.51' LT	834.42	270495.19	462015.67
4	2+66.72	22.50' LT	834.36	270497.08	462015.67
5	2+55.85	25.88' LT	835.14	270486.21	462012.28
6	2+58.83	25.26' LT	834.55	270489.19	462012.91
7	2+63.83	25.05' LT	834.38	270494.19	462013.12
8	2+66.73	25.00' LT	834.78	270497.09	462013.17
9	2+59.27	30.59' LT	834.73	270489.64	462007.58
10	2+64.25	30.18' LT	834.56	270494.62	462008.00
11	2+64.67	35.16' LT	834.63	270495.04	462003.01
12	2+59.69	35.58' LT	834.81	270490.06	462002.60
13	2+51.79	36.27' LT	835.22	270482.16	462001.90
14	2+51.35	31.29' LT	835.31	270481.72	462006.88
15	2+46.80	36.70' LT	835.29	270477.18	462001.46
16	2+46.37	31.74' LT	835.40	270476.74	462006.42
17	2+63.62	22.56' LT	834.47	270493.98	462015.62

LEGEND

X

CURB RAMP TYPE

SEED

TOPSOIL, FERTILIZER, AND SEED

SW4

CONCRETE SIDEWALK 4-INCH

PED

CONCRETE CURB PEDESTRIAN

XX
YYYY YY

POINT NUMBER & ELEVATION

- NOTES:
1.

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2.

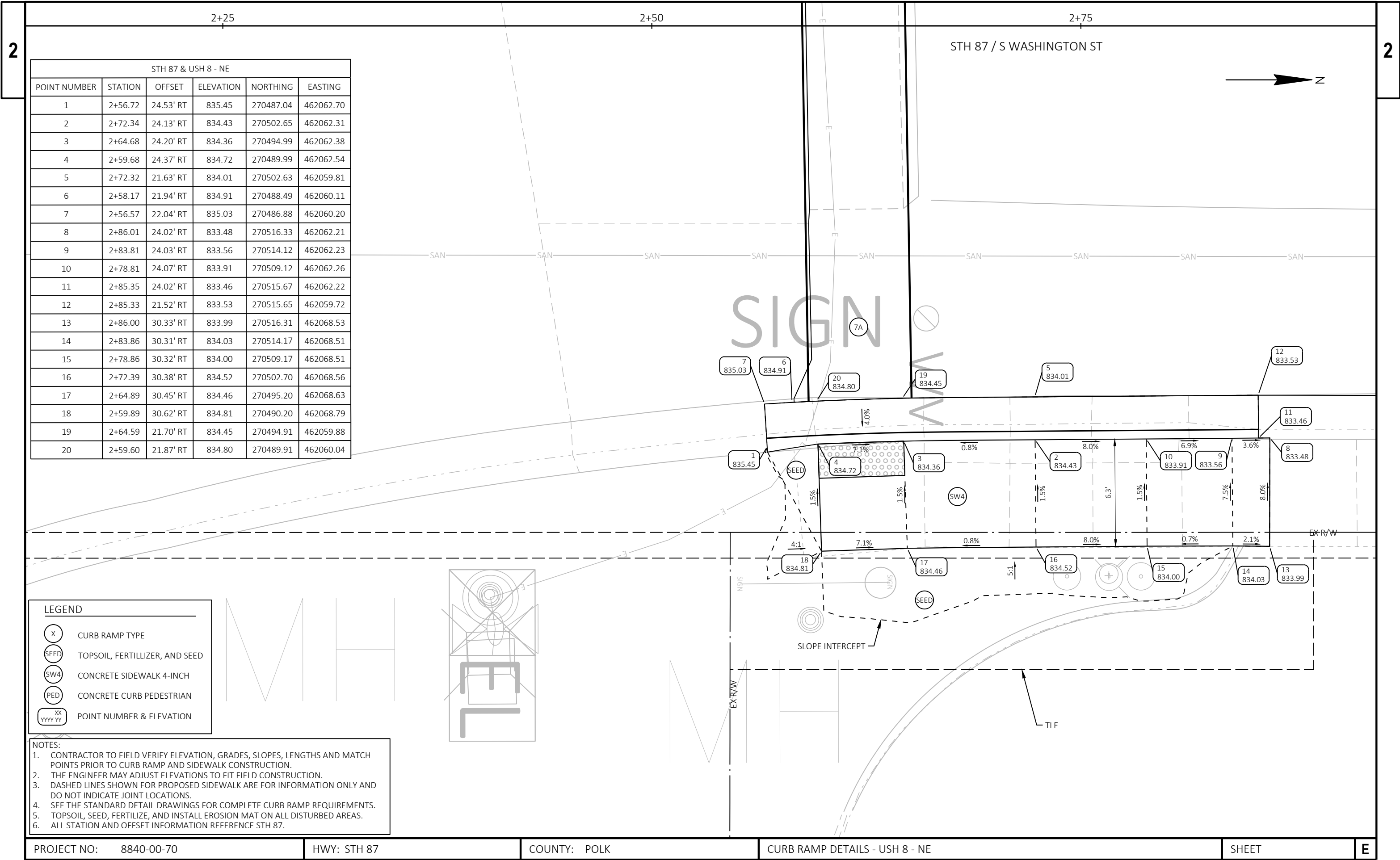
THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
3.

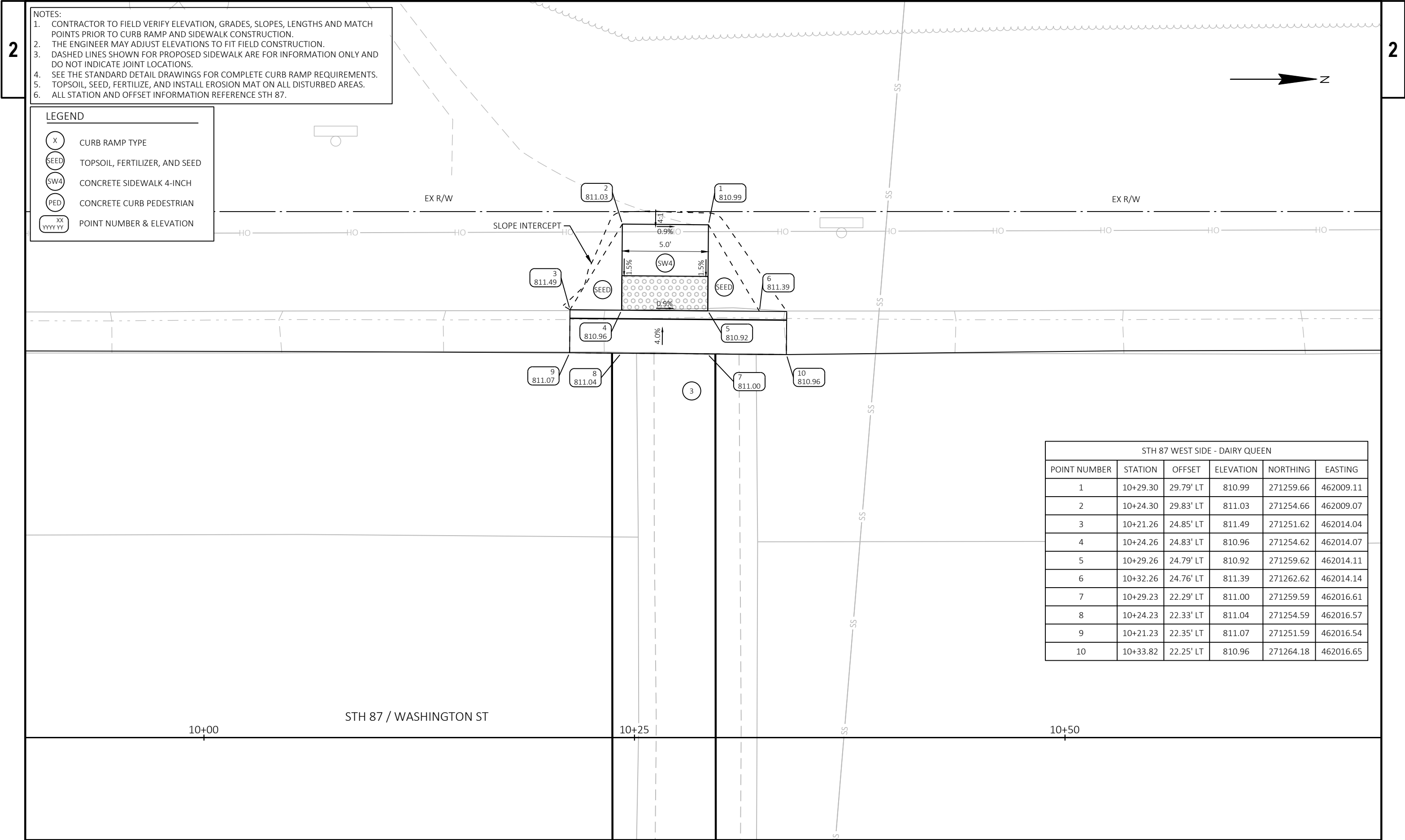
DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4.

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5.

TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
6.

ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.





- NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
 3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 5. TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
 6. ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.

LEGEND

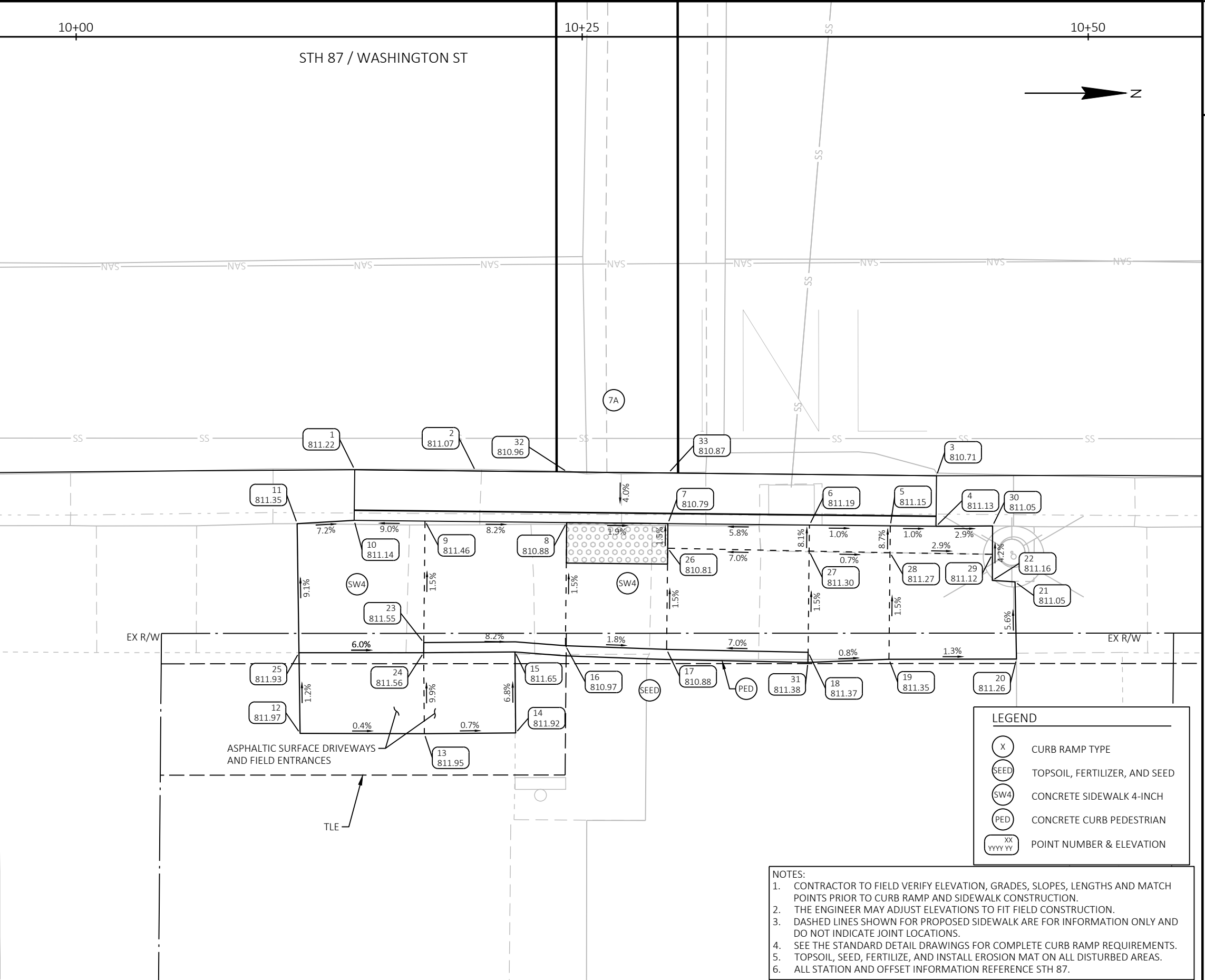
- (X) CURB RAMP TYPE
- (SEED) TOPSOIL, FERTILIZER, AND SEED
- (SW4) CONCRETE SIDEWALK 4-INCH
- (PED) CONCRETE CURB PEDESTRIAN
- (XX YY YY YY YY) POINT NUMBER & ELEVATION

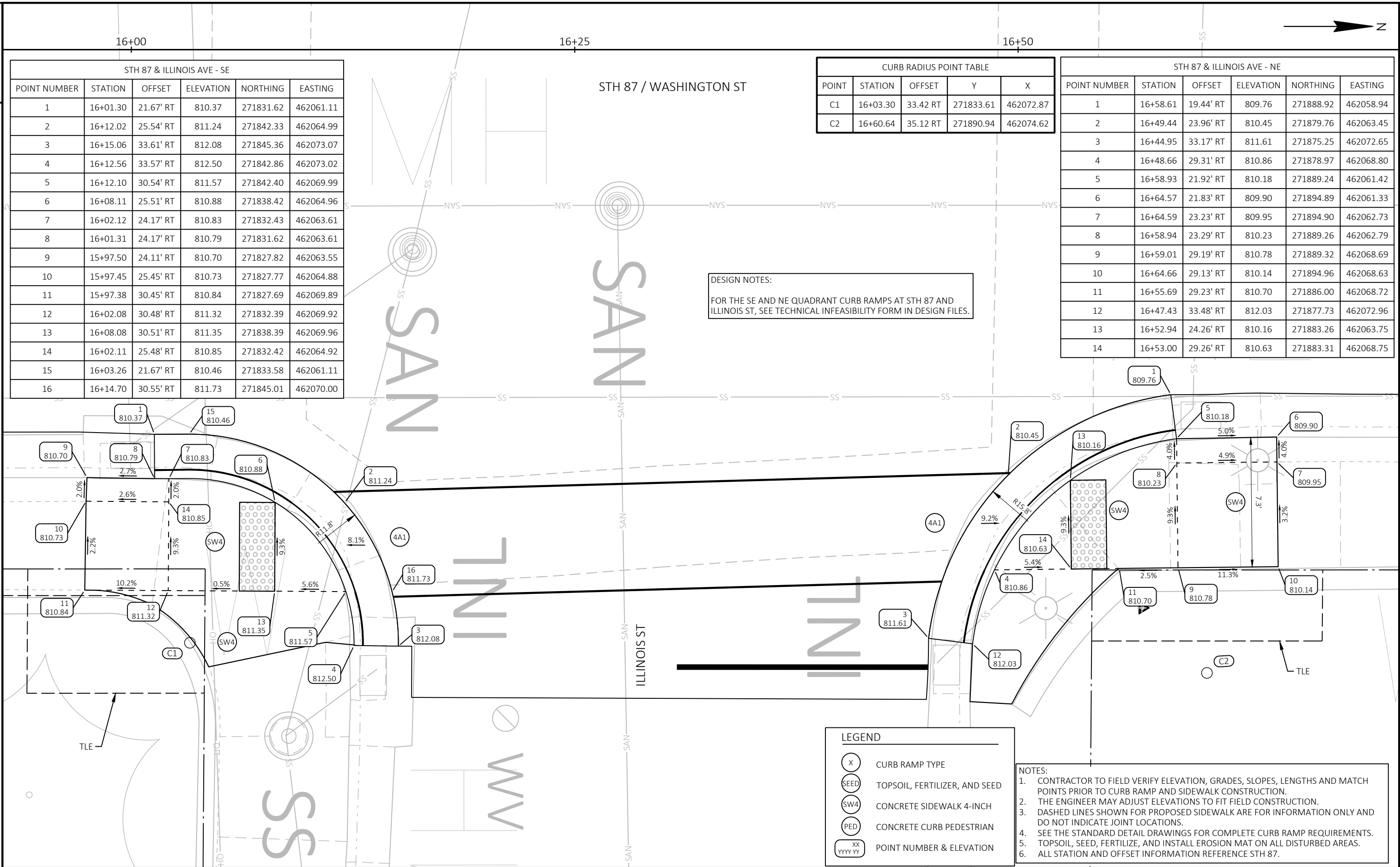
STH 87 WEST SIDE - DAIRY QUEEN					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	10+29.30	29.79' LT	810.99	271259.66	462009.11
2	10+24.30	29.83' LT	811.03	271254.66	462009.07
3	10+21.26	24.85' LT	811.49	271251.62	462014.04
4	10+24.26	24.83' LT	810.96	271254.62	462014.07
5	10+29.26	24.79' LT	810.92	271259.62	462014.11
6	10+32.26	24.76' LT	811.39	271262.62	462014.14
7	10+29.23	22.29' LT	811.00	271259.59	462016.61
8	10+24.23	22.33' LT	811.04	271254.59	462016.57
9	10+21.23	22.35' LT	811.07	271251.59	462016.54
10	10+33.82	22.25' LT	810.96	271264.18	462016.65

2

2

STH 87 EAST SIDE - DAIRY QUEEN					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	10+13.76	21.39' RT	811.22	271244.08	462060.27
2	10+19.73	21.45' RT	811.07	271250.05	462060.34
3	10+42.50	21.68' RT	810.71	271272.82	462060.59
4	10+42.48	24.18' RT	811.13	271272.79	462063.09
5	10+40.22	24.16' RT	811.15	271270.54	462063.07
6	10+36.22	24.12' RT	811.19	271266.54	462063.02
7	10+29.23	24.05' RT	810.79	271259.55	462062.95
8	10+24.24	23.99' RT	810.88	271254.55	462062.89
9	10+17.24	23.92' RT	811.46	271247.55	462062.81
10	10+13.74	23.89' RT	811.14	271244.05	462062.77
11	10+10.92	24.05' RT	811.35	271241.23	462062.93
12	10+11.06	34.41' RT	811.97	271241.37	462073.29
13	10+17.20	34.42' RT	811.95	271247.51	462073.31
14	10+21.71	34.39' RT	811.92	271252.02	462073.28
15	10+21.68	30.39' RT	811.65	271251.99	462069.28
16	10+24.17	30.08' RT	810.97	271254.48	462068.97
17	10+29.17	30.26' RT	810.88	271259.48	462069.16
18	10+36.16	30.40' RT	811.37	271266.47	462069.31
19	10+40.15	30.75' RT	811.35	271270.46	462069.66
20	10+46.45	30.74' RT	811.26	271276.76	462069.65
21	10+46.38	26.92' RT	811.05	271276.69	462065.84
22	10+45.26	26.85' RT	811.16	271275.57	462065.77
23	10+17.17	29.92' RT	811.55	271247.48	462068.81
24	10+17.17	30.42' RT	811.56	271247.48	462069.31
25	10+11.01	30.42' RT	811.93	271241.32	462069.30
26	10+29.22	25.26' RT	810.81	271259.54	462064.16
27	10+36.21	25.40' RT	811.30	271266.52	462064.31
28	10+40.21	25.48' RT	811.27	271270.52	462064.39
29	10+45.26	25.56' RT	811.12	271275.57	462064.48
30	10+45.27	24.16' RT	811.05	271275.59	462063.08
31	10+36.15	30.90' RT	811.38	271266.46	462069.81
32	10+24.26	21.49' RT	810.96	271254.58	462060.39
33	10+29.26	21.55' RT	810.87	271259.58	462060.45





STH 87 & ILLINOIS AVE - SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	16+01.30	21.67' RT	810.37	271831.62	462061.11
2	16+12.02	25.54' RT	811.24	271842.33	462064.99
3	16+15.06	33.61' RT	812.08	271845.36	462073.07
4	16+12.56	33.57' RT	812.50	271842.86	462073.02
5	16+12.10	30.54' RT	811.57	271842.40	462069.99
6	16+08.11	25.51' RT	810.88	271838.42	462064.96
7	16+02.12	24.17' RT	810.83	271832.43	462063.61
8	16+01.31	24.17' RT	810.79	271831.62	462063.61
9	15+97.50	24.11' RT	810.70	271827.82	462063.55
10	15+97.45	25.45' RT	810.73	271827.77	462064.88
11	15+97.38	30.45' RT	810.84	271827.69	462069.89
12	16+02.08	30.48' RT	811.32	271832.39	462069.92
13	16+08.08	30.51' RT	811.35	271838.39	462069.96
14	16+02.11	25.48' RT	810.85	271832.42	462064.92
15	16+03.26	21.67' RT	810.46	271833.58	462061.11
16	16+14.70	30.55' RT	811.73	271845.01	462070.00

CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C1	16+03.30	33.42 RT	271833.61	462072.87
C2	16+60.64	35.12 RT	271890.94	462074.62

STH 87 & ILLINOIS AVE - NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	16+58.61	19.44' RT	809.76	271888.92	462058.94
2	16+49.44	23.96' RT	810.45	271879.76	462063.45
3	16+44.95	33.17' RT	811.61	271875.25	462072.65
4	16+48.66	29.31' RT	810.86	271878.97	462068.80
5	16+58.93	21.92' RT	810.18	271889.24	462061.42
6	16+64.57	21.83' RT	809.90	271894.89	462061.33
7	16+64.59	23.23' RT	809.95	271894.90	462062.73
8	16+58.94	23.29' RT	810.23	271889.26	462062.79
9	16+59.01	29.19' RT	810.78	271889.32	462068.69
10	16+64.66	29.13' RT	810.14	271894.96	462068.63
11	16+55.69	29.23' RT	810.70	271886.00	462068.72
12	16+47.43	33.48' RT	812.03	271877.73	462072.96
13	16+52.94	24.26' RT	810.16	271883.26	462063.75
14	16+53.00	29.26' RT	810.63	271883.31	462068.75

DESIGN NOTES:
FOR THE SE AND NE QUADRANT CURB RAMPS AT STH 87 AND ILLINOIS ST, SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.

LEGEND

X

CURB RAMP TYPE

SEED

TOPSOIL, FERTILIZER, AND SEED

SW4

CONCRETE SIDEWALK 4-INCH

PED

CONCRETE CURB PEDESTRIAN

XX
YYYY YY

POINT NUMBER & ELEVATION

- NOTES:
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27+50

27+75

28+00

STH 87 / WASHINGTON ST

Z

STH 87 & STATE ST - SE

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	27+68.96	20.43' RT	809.97	272999.28	462060.98
2	27+81.09	23.94' RT	810.10	273011.40	462064.50
3	27+84.61	27.48' RT	810.16	273014.92	462068.04
4	27+88.07	37.68' RT	810.29	273018.37	462078.24
5	27+63.27	22.95' RT	810.44	272993.59	462063.49
6	27+68.95	22.93' RT	810.43	272999.27	462063.48
7	27+79.29	25.73' RT	810.05	273009.60	462066.28
8	27+82.82	29.27' RT	810.13	273013.13	462069.83
9	27+85.57	37.72' RT	810.75	273015.87	462078.28
10	27+85.57	45.75' RT	810.63	273015.86	462086.31
11	27+63.25	29.61' RT	810.96	272993.56	462070.15
12	27+68.99	29.59' RT	811.00	272999.29	462070.13
13	27+74.52	30.48' RT	810.89	273004.83	462071.03
14	27+78.13	33.94' RT	810.95	273008.44	462074.49
15	27+79.22	37.97' RT	811.01	273009.52	462078.52
16	27+79.23	39.64' RT	811.04	273009.53	462080.19
17	27+79.30	45.66' RT	810.88	273009.60	462086.21
18	27+72.13	32.40' RT	811.26	273002.44	462072.94
19	27+75.86	36.21' RT	811.26	273006.16	462076.76

CURB RADIUS POINT TABLE

POINT	STATION	OFFSET	Y	X
C1	27+72.56	36.01 RT	273002.86	462076.56

DESIGN NOTES:

FOR THE SE QUADRANT CURB RAMP AT STH 87 AND STATE ST, SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.

ADJUSTING INLET COVERS

1
809.975
810.446
810.4312
811.0011
810.9613
810.892
810.10

1A

3
810.168
810.13

EX R/W

MATCH EXISTING ELEVATION
OF BUILDING ENTRANCE18
811.2719
811.2614
810.9515
811.014
810.299
810.7516
811.0417
810.8810
810.63

NOTES:

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LEGEND

X

CURB RAMP TYPE

SEED

TOPSOIL, FERTILIZER, AND SEED

SW4

CONCRETE SIDEWALK 4-INCH

PED

CONCRETE CURB PEDESTRIAN

XX

POINT NUMBER & ELEVATION

YYYY YY

PROJECT NO: 8840-00-70

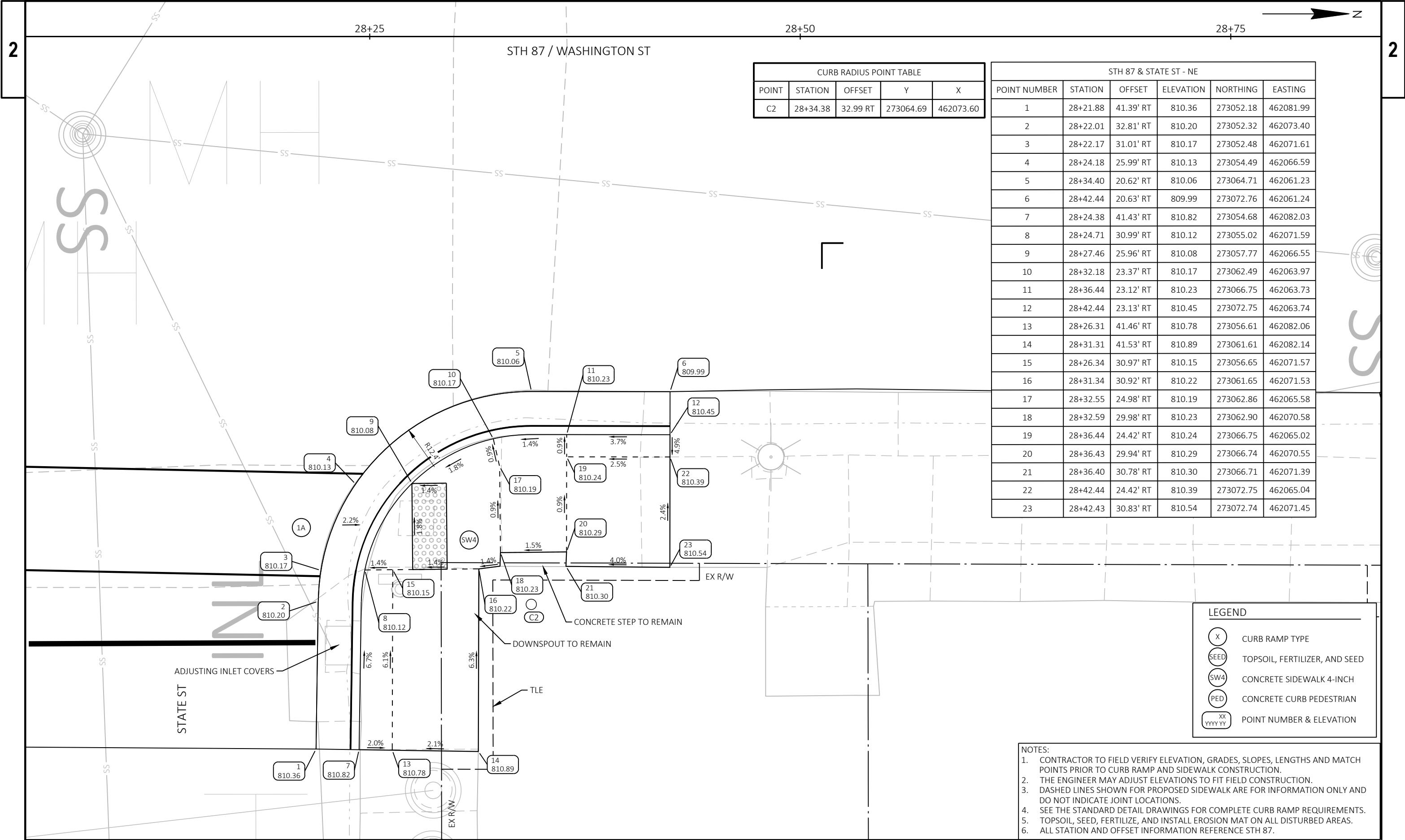
HWY: STH 87

COUNTY: POLK

CURB RAMP DETAILS - STATE ST - SE

SHEET

E



CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C2	28+34.38	32.99 RT	273064.69	462073.60

STH 87 & STATE ST - NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	28+21.88	41.39' RT	810.36	273052.18	462081.99
2	28+22.01	32.81' RT	810.20	273052.32	462073.40
3	28+22.17	31.01' RT	810.17	273052.48	462071.61
4	28+24.18	25.99' RT	810.13	273054.49	462066.59
5	28+34.40	20.62' RT	810.06	273064.71	462061.23
6	28+42.44	20.63' RT	809.99	273072.76	462061.24
7	28+24.38	41.43' RT	810.82	273054.68	462082.03
8	28+24.71	30.99' RT	810.12	273055.02	462071.59
9	28+27.46	25.96' RT	810.08	273057.77	462066.55
10	28+32.18	23.37' RT	810.17	273062.49	462063.97
11	28+36.44	23.12' RT	810.23	273066.75	462063.73
12	28+42.44	23.13' RT	810.45	273072.75	462063.74
13	28+26.31	41.46' RT	810.78	273056.61	462082.06
14	28+31.31	41.53' RT	810.89	273061.61	462082.14
15	28+26.34	30.97' RT	810.15	273056.65	462071.57
16	28+31.34	30.92' RT	810.22	273061.65	462071.53
17	28+32.55	24.98' RT	810.19	273062.86	462065.58
18	28+32.59	29.98' RT	810.23	273062.90	462070.58
19	28+36.44	24.42' RT	810.24	273066.75	462065.02
20	28+36.43	29.94' RT	810.29	273066.74	462070.55
21	28+36.40	30.78' RT	810.30	273066.71	462071.39
22	28+42.44	24.42' RT	810.39	273072.75	462065.04
23	28+42.43	30.83' RT	810.54	273072.74	462071.45

LEGEND

X

CURB RAMP TYPE

SEED

TOPSOIL, FERTILIZER, AND SEED

SW4

CONCRETE SIDEWALK 4-INCH

PED

CONCRETE CURB PEDESTRIAN

XX
YYYY YY

POINT NUMBER & ELEVATION

- NOTES:
1.

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
3.

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4.

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5.

TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
6.

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- NOTES:
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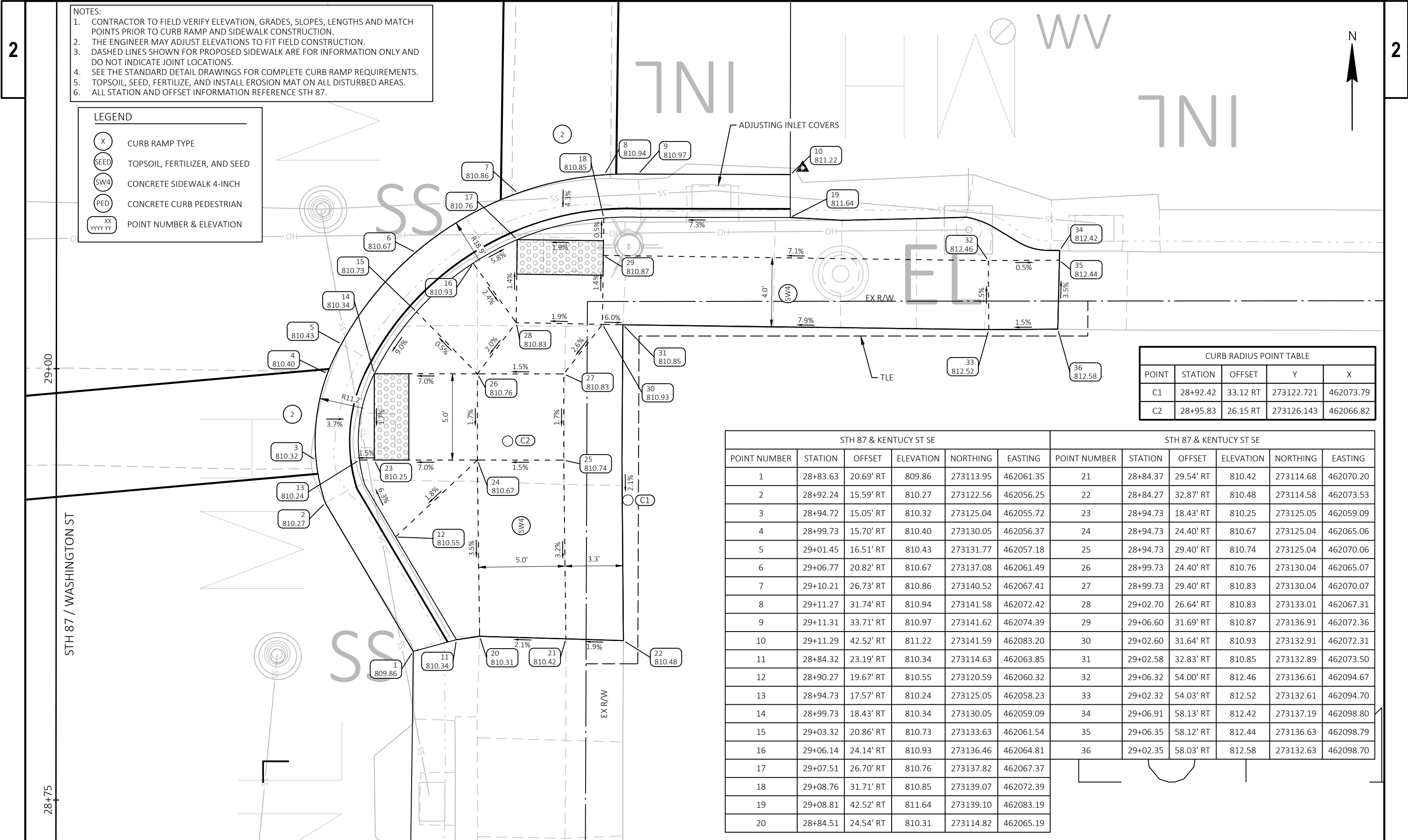
- LEGEND
- (X) CURB RAMP TYPE
 - (SEED) TOPSOIL, FERTILIZER, AND SEED
 - (SW4) CONCRETE SIDEWALK 4-INCH
 - (PED) CONCRETE CURB PEDESTRIAN
 - (XX
YYYY YY) POINT NUMBER & ELEVATION

DESIGN NOTES:
FOR THE SW QUADRANT CURB RAMPS AT STH 87 AND KENTUCKY ST, SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.

STH 87 & KENTUCY ST- SW

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	28+82.90	19.34' LT	808.75	273113.26	462021.31
2	28+84.25	18.98' LT	808.75	273114.60	462021.68
3	28+92.55	14.13' LT	808.69	273122.90	462026.54
4	28+94.77	13.50' LT	808.66	273125.12	462027.17
5	29+06.56	18.60' LT	808.38	273136.92	462022.07
6	29+11.44	30.49' LT	807.89	273141.81	462010.19
7	29+11.48	36.55' LT	807.47	273141.85	462004.13
8	28+91.50	14.74' LT	808.70	273121.85	462025.92
9	28+96.50	13.62' LT	808.64	273126.85	462027.04
10	29+09.56	22.74' LT	808.21	273139.91	462017.93
11	29+11.21	27.77' LT	808.01	273141.58	462012.91
12	29+08.98	36.57' LT	807.89	273139.35	462004.11
13	29+08.98	36.75' LT	807.75	273139.35	462003.93
14	29+08.97	34.25' LT	808.08	273139.33	462006.43
15	29+08.67	27.73' LT	807.95	273139.03	462012.94
16	29+06.65	22.70' LT	808.19	273137.01	462017.97
17	29+03.20	18.96' LT	808.62	273133.55	462021.71
18	28+98.98	16.73' LT	808.75	273129.34	462023.93
19	28+96.50	16.14' LT	808.55	273126.85	462024.52
20	28+91.50	17.63' LT	808.63	273121.86	462023.03
21	28+86.33	20.66' LT	809.16	273116.68	462020.00
22	28+85.51	21.13' LT	809.17	273115.87	462019.52
23	28+82.91	21.84' LT	809.17	273113.26	462018.81
24	28+81.89	21.85' LT	809.19	273112.25	462018.81
25	28+81.89	23.14' LT	809.18	273112.25	462017.51
26	28+91.51	25.42' LT	809.41	273121.87	462015.24
27	28+96.51	25.41' LT	809.40	273126.87	462015.25
28	29+01.51	22.63' LT	808.85	273131.87	462018.04
29	29+01.52	27.63' LT	808.92	273131.88	462013.04
30	29+01.52	30.57' LT	808.95	273131.89	462010.10
31	29+01.43	34.06' LT	808.46	273131.80	462006.61
32	29+01.37	36.57' LT	808.10	273131.74	462004.10
33	28+96.52	30.41' LT	809.50	273126.88	462010.25
34	28+91.52	30.42' LT	809.48	273121.88	462010.24
35	28+81.87	30.37' LT	809.52	273112.23	462010.28

CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C1	28+82.90	16.66 LT	273113.25	462023.99
C3	28+94.40	30.54 LT	273124.76	462010.13
C2	28+94.68	17.39 LT	273125.04	462023.27



CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C1	28+92.42	33.12 RT	273122.721	462073.79
C2	28+95.83	26.15 RT	273126.143	462066.82

STH 87 & KENTUCY ST SE						STH 87 & KENTUCY ST SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	28+83.63	20.69' RT	809.86	273113.95	462061.35	21	28+84.37	29.54' RT	810.42	273114.68	462070.20
2	28+92.24	15.59' RT	810.27	273122.56	462056.25	22	28+84.27	32.87' RT	810.48	273114.58	462073.53
3	28+94.72	15.05' RT	810.32	273125.04	462055.72	23	28+94.73	18.43' RT	810.25	273125.05	462059.09
4	28+99.73	15.70' RT	810.40	273130.05	462056.37	24	28+94.73	24.40' RT	810.67	273125.04	462065.06
5	29+01.45	16.51' RT	810.43	273131.77	462057.18	25	28+94.73	29.40' RT	810.74	273125.04	462070.06
6	29+06.77	20.82' RT	810.67	273137.08	462061.49	26	28+99.73	24.40' RT	810.76	273130.04	462065.07
7	29+10.21	26.73' RT	810.86	273140.52	462067.41	27	28+99.73	29.40' RT	810.83	273130.04	462070.07
8	29+11.27	31.74' RT	810.94	273141.58	462072.42	28	29+02.70	26.64' RT	810.83	273133.01	462067.31
9	29+11.31	33.71' RT	810.97	273141.62	462074.39	29	29+06.60	31.69' RT	810.87	273136.91	462072.36
10	29+11.29	42.52' RT	811.22	273141.59	462083.20	30	29+02.60	31.64' RT	810.93	273132.91	462072.31
11	28+84.32	23.19' RT	810.34	273114.63	462063.85	31	29+02.58	32.83' RT	810.85	273132.89	462073.50
12	28+90.27	19.67' RT	810.55	273120.59	462060.32	32	29+06.32	54.00' RT	812.46	273136.61	462094.67
13	28+94.73	17.57' RT	810.24	273125.05	462058.23	33	29+02.32	54.03' RT	812.52	273132.61	462094.70
14	28+99.73	18.43' RT	810.34	273130.05	462059.09	34	29+06.91	58.13' RT	812.42	273137.19	462098.80
15	29+03.32	20.86' RT	810.73	273133.63	462061.54	35	29+06.35	58.12' RT	812.44	273136.63	462098.79
16	29+06.14	24.14' RT	810.93	273136.46	462064.81	36	29+02.35	58.03' RT	812.58	273132.63	462098.70
17	29+07.51	26.70' RT	810.76	273137.82	462067.37						
18	29+08.76	31.71' RT	810.85	273139.07	462072.39						
19	29+08.81	42.52' RT	811.64	273139.10	462083.19						
20	28+84.51	24.54' RT	810.31	273114.82	462065.19						

STH 87 & KENTUCKY ST- NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	29+45.05	36.46' LT	807.06	273175.42	462004.25
2	29+46.66	28.26' LT	807.93	273177.02	462012.45
3	29+48.60	23.29' LT	808.28	273178.96	462017.43
4	29+53.49	17.10' LT	808.58	273183.84	462023.62
5	29+60.14	13.96' LT	808.76	273190.49	462026.76
6	29+64.00	13.51' LT	808.81	273194.35	462027.22
7	29+66.48	14.08' LT	808.83	273196.83	462026.65
8	29+73.63	18.64' LT	808.86	273203.98	462022.10
9	29+74.71	19.10' LT	808.86	273205.07	462021.64
10	29+74.13	21.53' LT	809.28	273204.49	462019.21
11	29+70.44	19.57' LT	809.27	273200.79	462021.17
12	29+65.13	16.18' LT	808.86	273195.48	462024.55
13	29+65.13	16.18' LT	808.86	273195.48	462024.55
14	29+64.60	15.99' LT	808.74	273194.95	462024.74
15	29+60.55	16.43' LT	808.68	273190.91	462024.29
16	29+59.61	16.68' LT	808.66	273189.96	462024.05
17	29+57.25	17.62' LT	808.84	273187.60	462023.10
18	29+54.58	19.40' LT	808.73	273184.93	462021.32
19	29+51.38	23.33' LT	808.26	273181.74	462017.39
20	29+49.28	28.30' LT	807.91	273179.64	462012.42
21	29+48.08	32.81' LT	807.94	273178.45	462007.90
22	29+47.54	36.67' LT	807.48	273177.91	462004.05
23	29+47.39	37.82' LT	807.50	273177.76	462002.89
24	29+53.63	37.69' LT	807.66	273184.00	462003.02
25	29+53.58	32.76' LT	808.03	273183.94	462007.96
26	29+53.77	29.32' LT	808.08	273184.14	462011.39
27	29+59.81	29.34' LT	808.83	273190.17	462011.38
28	29+64.82	29.33' LT	808.93	273195.18	462011.40
29	29+71.27	29.34' LT	809.46	273201.63	462011.40
30	29+75.18	29.29' LT	809.48	273205.54	462011.45
31	29+75.13	23.17' LT	809.33	273205.49	462017.57
32	29+71.19	24.34' LT	809.38	273201.55	462016.40
33	29+64.79	24.33' LT	808.85	273195.15	462016.40
34	29+59.79	24.34' LT	808.77	273190.15	462016.38
35	29+53.91	23.36' LT	808.43	273184.27	462017.36
36	29+51.31	28.33' LT	807.99	273181.67	462012.39
37	29+75.11	21.73' LT	809.27	273205.46	462019.01
38	29+64.61	16.56' LT	808.74	273194.96	462024.17

CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C3	29+63.56	29.99 LT	273193.929	462010.74
C2	29+64.44	17.26 LT	273194.797	462023.47
C1	29+75.55	15.62 LT	273205.906	462025.12
C4	29+83.28	39.71 LT	273213.658	462001.04

LEGEND

- X CURB RAMP TYPE
- SEED TOPSOIL, FERTILIZER, AND SEED
- SW4 CONCRETE SIDEWALK 4-INCH
- PED CONCRETE CURB PEDESTRIAN
- XX
YYYY YY POINT NUMBER & ELEVATION

NOTES:

- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
- DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
- ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.

DESIGN NOTES:

FOR THE NW QUADRANT CURB RAMP (FACING SOUTH) AT STH 87 AND KENTUCKY ST, SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.

STH 87 / WASHINGTON ST

PROJECT NO: 8840-00-70

HWY: STH 87

COUNTY: POLK

CURB RAMP DETAILS - KENTUCKY ST - NW

SHEET

E

THE CITY OF ST. CROIX FALLS HAS AN AGREEMENT RIGHT OF ENTRY AND EASEMENT OVER LOT 24, BLKOCK 38 FOR BENCH, WASTE RECEPTACLE, AND SIDEWALK CONSTRUCTION AND MAINTENANCE. VOL. 907, PG. 157, DOCUMENT # 633017.

STH 87 / WASHINGTON ST

29+75

29+50

LEGEND

- X CURB RAMP TYPE
- SEED TOPSOIL, FERTILIZER AND SEED
- SW4 CONCRETE SIDEWALK 4-INCH
- PED CONCRETE CURB PEDESTRIAN
- XX
YYYY YY POINT NUMBER & ELEVATION

NOTES:

- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
- THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
- DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
- SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
- TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
- ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.



CURB RADIUS POINT TABLE

POINT	STATION	OFFSET	Y	X
C2	29+62.77	21.03 RT	273193.09	462061.76
C1	29+63.34	32.58 RT	273193.65	462073.31
C3	29+75.24	17.99 RT	273205.56	462058.73

STH 87 & KENTUCKY ST - NE

POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
01	29+45.45	41.66' RT	811.13	273175.75	462082.37
02	29+45.53	32.44' RT	810.83	273175.83	462073.15
03	29+45.53	32.15' RT	810.83	273175.84	462072.86
04	29+46.37	27.16' RT	810.75	273176.68	462067.87
05	29+51.09	19.66' RT	810.57	273181.41	462060.37
06	29+58.84	15.35' RT	810.38	273189.16	462056.07
07	29+62.47	14.79' RT	810.33	273192.79	462055.52
08	29+63.85	14.88' RT	810.31	273194.17	462055.60
09	29+65.96	15.66' RT	810.27	273196.28	462056.39
10	29+73.85	20.33' RT	810.16	273204.17	462061.07
11	29+74.96	20.70' RT	810.15	273205.28	462061.44
12	29+47.95	41.68' RT	811.55	273178.25	462082.39
13	29+48.03	32.18' RT	810.75	273178.34	462072.89
14	29+49.01	27.19' RT	810.66	273179.32	462067.90
15	29+51.06	23.43' RT	811.06	273181.38	462064.15
16	29+52.88	21.40' RT	810.98	273183.20	462062.11
17	29+58.78	17.97' RT	810.36	273189.10	462058.69
18	29+63.79	17.42' RT	810.26	273194.11	462058.15
19	29+68.45	20.04' RT	810.64	273198.76	462060.77
20	29+74.70	23.19' RT	810.57	273205.02	462063.93
21	29+49.00	51.92' RT	811.91	273179.29	462092.64
22	29+53.00	51.93' RT	811.99	273183.29	462092.65
23	29+53.07	41.03' RT	811.35	273183.37	462081.75
24	29+53.04	38.93' RT	811.21	273183.34	462079.65
25	29+49.06	32.19' RT	810.76	273179.36	462072.91
26	29+52.94	32.24' RT	810.82	273183.25	462072.96
27	29+53.00	27.24' RT	810.72	273183.31	462067.96
28	29+58.41	38.99' RT	811.23	273188.71	462079.71
29	29+63.41	39.04' RT	811.23	273193.71	462079.77
30	29+58.48	33.24' RT	811.22	273188.79	462073.97
31	29+63.48	33.30' RT	811.12	273193.79	462074.03
32	29+58.54	28.25' RT	811.17	273188.85	462068.97
33	29+63.54	28.30' RT	811.07	273193.85	462069.03
34	29+63.78	18.09' RT	810.27	273194.10	462058.81
35	29+69.57	33.42' RT	811.10	273199.88	462074.16
36	29+69.67	28.34' RT	811.03	273199.98	462069.07
37	29+74.79	33.53' RT	811.07	273205.09	462074.26
38	29+74.67	28.36' RT	810.80	273204.98	462069.10
39	29+74.66	39.93' RT	811.31	273204.96	462080.67

PROJECT NO: 8840-00-70

HWY: STH 87

COUNTY: POLK

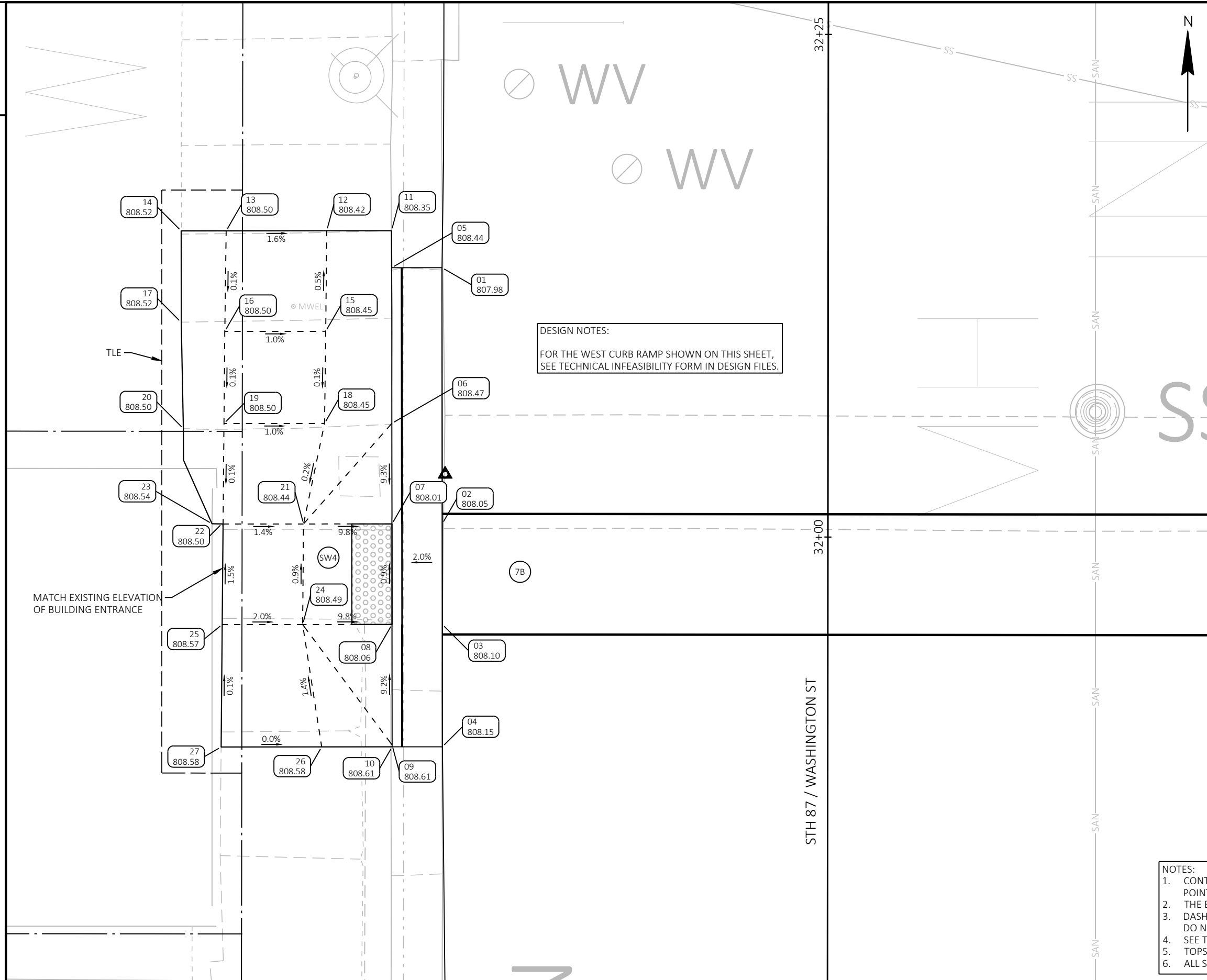
CURB RAMP DETAILS - KENTUCKY ST - NE

SHEET

E

2

2

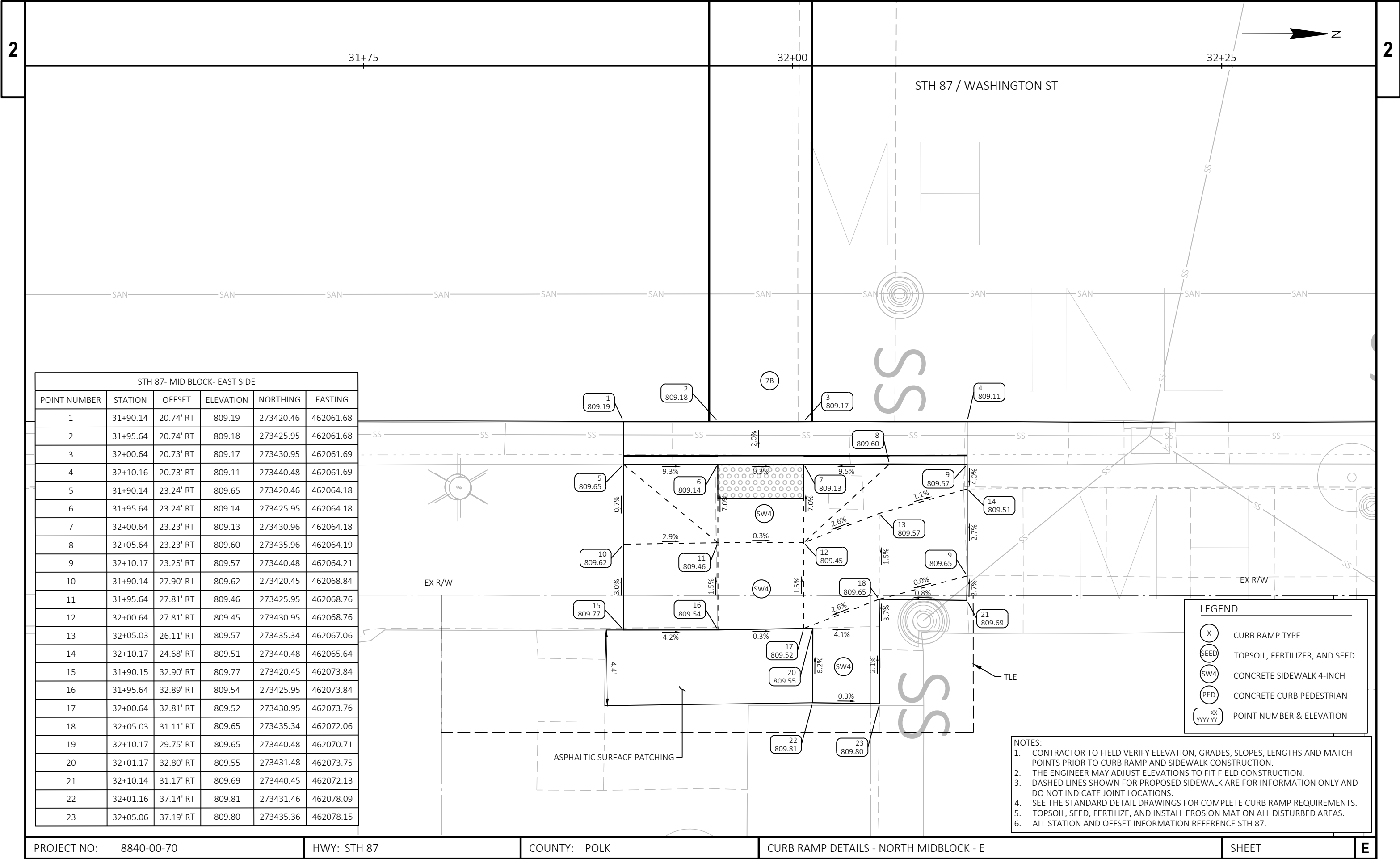


NORTH MIDBLOCK - W					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
01	32+13.38	19.20' LT	807.98	273443.73	462021.76
02	32+00.64	19.18' LT	808.05	273430.99	462021.77
03	31+95.64	19.17' LT	808.10	273425.99	462021.78
04	31+89.55	19.16' LT	808.15	273419.90	462021.78
05	32+13.37	21.70' LT	808.44	273443.73	462019.26
06	32+05.63	21.69' LT	808.47	273435.99	462019.27
07	32+00.63	21.68' LT	808.01	273430.99	462019.27
08	31+95.63	21.67' LT	808.06	273425.99	462019.28
09	31+89.63	21.66' LT	808.61	273419.99	462019.28
10	31+89.54	21.66' LT	808.61	273419.90	462019.28
11	32+15.21	21.72' LT	808.35	273445.57	462019.25
12	32+15.21	24.94' LT	808.42	273445.57	462016.03
13	32+15.20	29.94' LT	808.50	273445.57	462011.03
14	32+15.20	32.17' LT	808.52	273445.56	462008.79
15	32+10.21	24.98' LT	808.45	273440.57	462015.98
16	32+10.20	30.00' LT	808.50	273440.57	462010.96
17	32+10.66	32.18' LT	808.52	273441.02	462008.78
18	32+05.63	25.04' LT	808.45	273435.99	462015.92
19	32+05.62	30.04' LT	808.50	273435.98	462010.92
20	32+05.37	32.06' LT	808.50	273435.74	462008.90
21	32+00.62	26.08' LT	808.44	273430.99	462014.88
22	32+00.65	30.12' LT	808.50	273431.01	462010.83
23	32+00.63	30.63' LT	808.54	273431.00	462010.32
24	31+95.62	26.12' LT	808.49	273425.99	462014.83
25	31+95.62	30.12' LT	808.57	273425.98	462010.83
26	31+89.54	25.16' LT	808.58	273419.90	462015.78
27	31+89.53	30.16' LT	808.58	273419.90	462010.78

LEGEND

	CURB RAMP TYPE
	TOPSOIL, FERTILIZER, AND SEED
	CONCRETE SIDEWALK 4-INCH
	CONCRETE CURB PEDESTRIAN
	POINT NUMBER & ELEVATION

- NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
 3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 5. TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
 6. ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.



STH 87- MID BLOCK- EAST SIDE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	31+90.14	20.74' RT	809.19	273420.46	462061.68
2	31+95.64	20.74' RT	809.18	273425.95	462061.68
3	32+00.64	20.73' RT	809.17	273430.95	462061.69
4	32+10.16	20.73' RT	809.11	273440.48	462061.69
5	31+90.14	23.24' RT	809.65	273420.46	462064.18
6	31+95.64	23.24' RT	809.14	273425.95	462064.18
7	32+00.64	23.23' RT	809.13	273430.96	462064.18
8	32+05.64	23.23' RT	809.60	273435.96	462064.19
9	32+10.17	23.25' RT	809.57	273440.48	462064.21
10	31+90.14	27.90' RT	809.62	273420.45	462068.84
11	31+95.64	27.81' RT	809.46	273425.95	462068.76
12	32+00.64	27.81' RT	809.45	273430.95	462068.76
13	32+05.03	26.11' RT	809.57	273435.34	462067.06
14	32+10.17	24.68' RT	809.51	273440.48	462065.64
15	31+90.15	32.90' RT	809.77	273420.45	462073.84
16	31+95.64	32.89' RT	809.54	273425.95	462073.84
17	32+00.64	32.81' RT	809.52	273430.95	462073.76
18	32+05.03	31.11' RT	809.65	273435.34	462072.06
19	32+10.17	29.75' RT	809.65	273440.48	462070.71
20	32+01.17	32.80' RT	809.55	273431.48	462073.75
21	32+10.14	31.17' RT	809.69	273440.45	462072.13
22	32+01.16	37.14' RT	809.81	273431.46	462078.09
23	32+05.06	37.19' RT	809.80	273435.36	462078.15

LEGEND

X

CURB RAMP TYPE

SEED

TOPSOIL, FERTILIZER, AND SEED

SW4

CONCRETE SIDEWALK 4-INCH

PED

CONCRETE CURB PEDESTRIAN

XX
YYYY YY

POINT NUMBER & ELEVATION

- NOTES:
1.

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2.

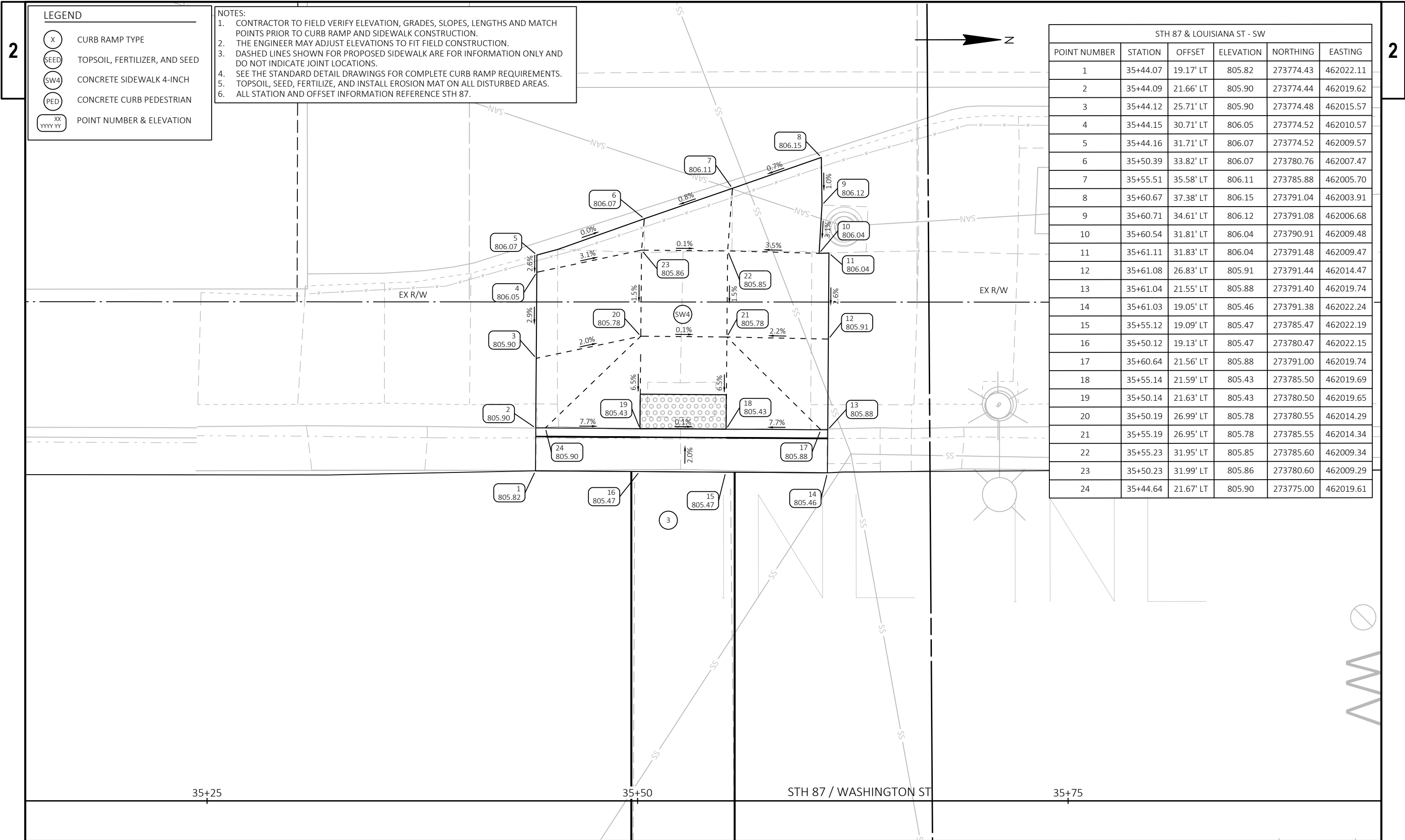
THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
3.

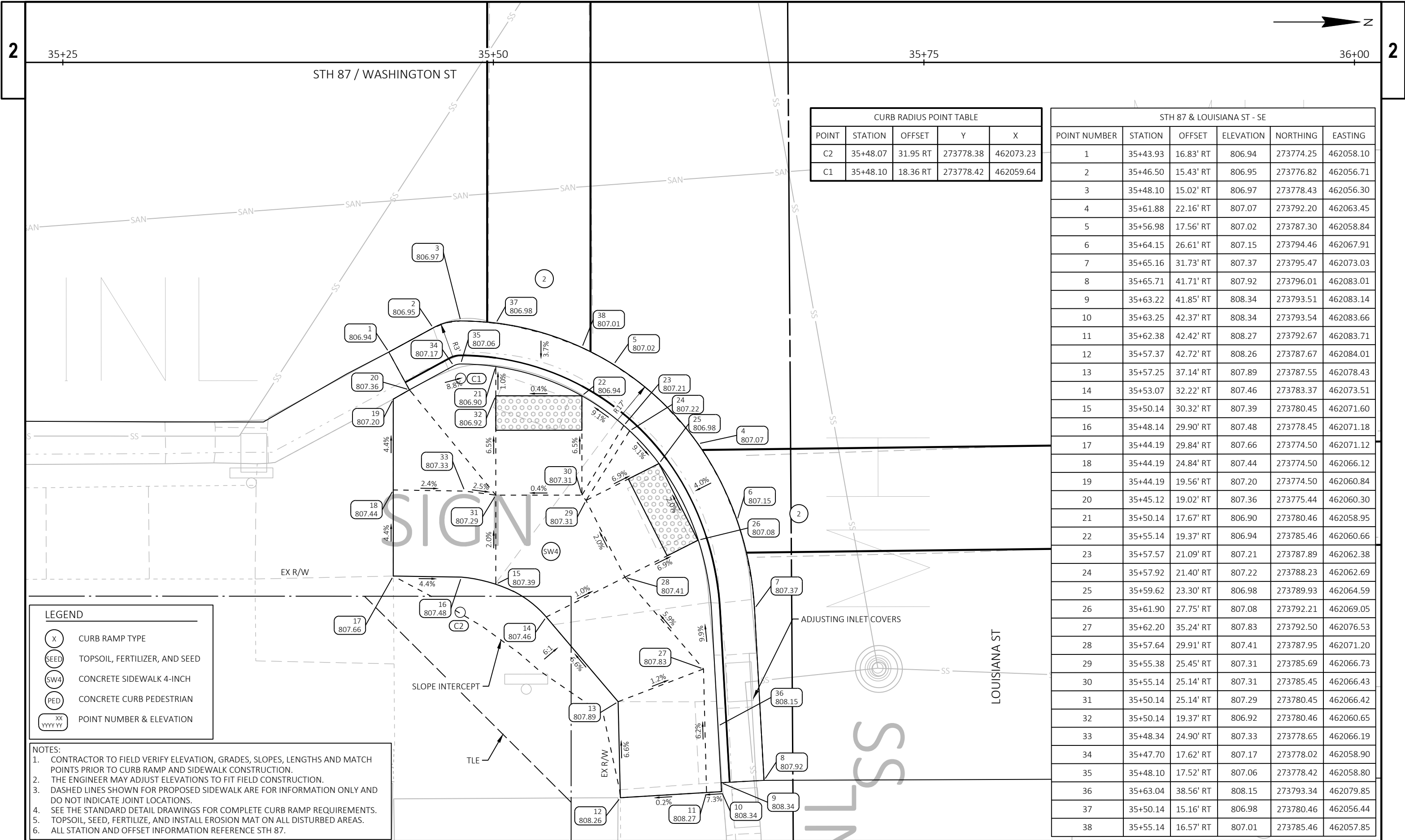
DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4.

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5.

TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
6.

ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.





CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C2	35+48.07	31.95 RT	273778.38	462073.23
C1	35+48.10	18.36 RT	273778.42	462059.64

STH 87 & LOUISIANA ST - SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	35+43.93	16.83' RT	806.94	273774.25	462058.10
2	35+46.50	15.43' RT	806.95	273776.82	462056.71
3	35+48.10	15.02' RT	806.97	273778.43	462056.30
4	35+61.88	22.16' RT	807.07	273792.20	462063.45
5	35+56.98	17.56' RT	807.02	273787.30	462058.84
6	35+64.15	26.61' RT	807.15	273794.46	462067.91
7	35+65.16	31.73' RT	807.37	273795.47	462073.03
8	35+65.71	41.71' RT	807.92	273796.01	462083.01
9	35+63.22	41.85' RT	808.34	273793.51	462083.14
10	35+63.25	42.37' RT	808.34	273793.54	462083.66
11	35+62.38	42.42' RT	808.27	273792.67	462083.71
12	35+57.37	42.72' RT	808.26	273787.67	462084.01
13	35+57.25	37.14' RT	807.89	273787.55	462078.43
14	35+53.07	32.22' RT	807.46	273783.37	462073.51
15	35+50.14	30.32' RT	807.39	273780.45	462071.60
16	35+48.14	29.90' RT	807.48	273778.45	462071.18
17	35+44.19	29.84' RT	807.66	273774.50	462071.12
18	35+44.19	24.84' RT	807.44	273774.50	462066.12
19	35+44.19	19.56' RT	807.20	273774.50	462060.84
20	35+45.12	19.02' RT	807.36	273775.44	462060.30
21	35+50.14	17.67' RT	806.90	273780.46	462058.95
22	35+55.14	19.37' RT	806.94	273785.46	462060.66
23	35+57.57	21.09' RT	807.21	273787.89	462062.38
24	35+57.92	21.40' RT	807.22	273788.23	462062.69
25	35+59.62	23.30' RT	806.98	273789.93	462064.59
26	35+61.90	27.75' RT	807.08	273792.21	462069.05
27	35+62.20	35.24' RT	807.83	273792.50	462076.53
28	35+57.64	29.91' RT	807.41	273787.95	462071.20
29	35+55.38	25.45' RT	807.31	273785.69	462066.73
30	35+55.14	25.14' RT	807.31	273785.45	462066.43
31	35+50.14	25.14' RT	807.29	273780.45	462066.42
32	35+50.14	19.37' RT	806.92	273780.46	462060.65
33	35+48.34	24.90' RT	807.33	273778.65	462066.19
34	35+47.70	17.62' RT	807.17	273778.02	462058.90
35	35+48.10	17.52' RT	807.06	273778.42	462058.80
36	35+63.04	38.56' RT	808.15	273793.34	462079.85
37	35+50.14	15.16' RT	806.98	273780.46	462056.44
38	35+55.14	16.57' RT	807.01	273785.46	462057.85

LEGEND

X

CURB RAMP TYPE

SEED

TOPSOIL, FERTILIZER, AND SEED

SW4

CONCRETE SIDEWALK 4-INCH

PED

CONCRETE CURB PEDESTRIAN

XX
YYYYYY

POINT NUMBER & ELEVATION

- NOTES:
1.

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2.

THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
3.

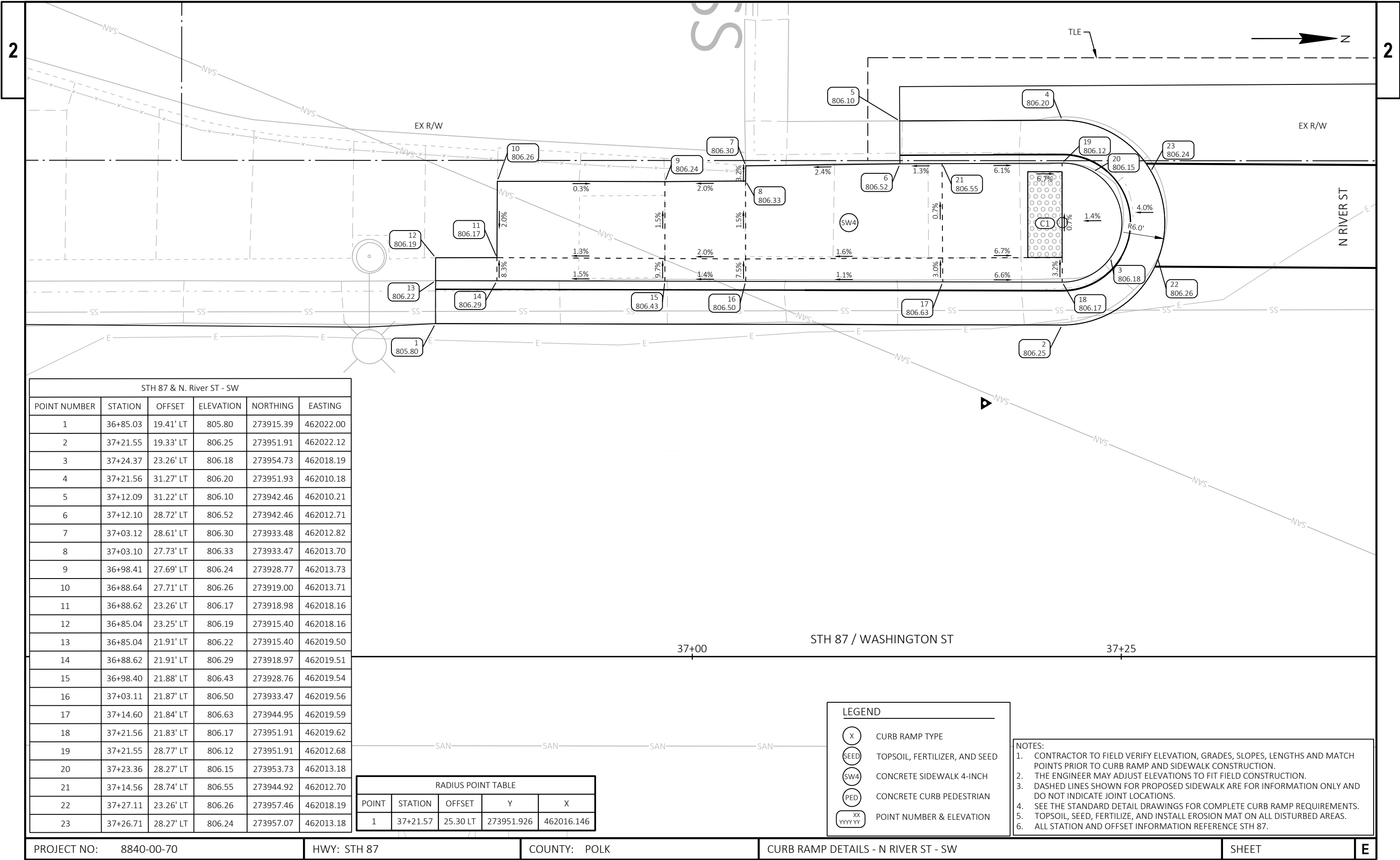
DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4.

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5.

TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
6.

ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.





STH 87 & N. River ST - SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	36+85.03	19.41' LT	805.80	273915.39	462022.00
2	37+21.55	19.33' LT	806.25	273951.91	462022.12
3	37+24.37	23.26' LT	806.18	273954.73	462018.19
4	37+21.56	31.27' LT	806.20	273951.93	462010.18
5	37+12.09	31.22' LT	806.10	273942.46	462010.21
6	37+12.10	28.72' LT	806.52	273942.46	462012.71
7	37+03.12	28.61' LT	806.30	273933.48	462012.82
8	37+03.10	27.73' LT	806.33	273933.47	462013.70
9	36+98.41	27.69' LT	806.24	273928.77	462013.73
10	36+88.64	27.71' LT	806.26	273919.00	462013.71
11	36+88.62	23.26' LT	806.17	273918.98	462018.16
12	36+85.04	23.25' LT	806.19	273915.40	462018.16
13	36+85.04	21.91' LT	806.22	273915.40	462019.50
14	36+88.62	21.91' LT	806.29	273918.97	462019.51
15	36+98.40	21.88' LT	806.43	273928.76	462019.54
16	37+03.11	21.87' LT	806.50	273933.47	462019.56
17	37+14.60	21.84' LT	806.63	273944.95	462019.59
18	37+21.56	21.83' LT	806.17	273951.91	462019.62
19	37+21.55	28.77' LT	806.12	273951.91	462012.68
20	37+23.36	28.27' LT	806.15	273953.73	462013.18
21	37+14.56	28.74' LT	806.55	273944.92	462012.70
22	37+27.11	23.26' LT	806.26	273957.46	462018.19
23	37+26.71	28.27' LT	806.24	273957.07	462013.18

RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
1	37+21.57	25.30 LT	273951.926	462016.146

LEGEND

X

CURB RAMP TYPE

SEED

TOPSOIL, FERTILIZER, AND SEED

SW4

CONCRETE SIDEWALK 4-INCH

PED

CONCRETE CURB PEDESTRIAN

XX
YYYY YY

POINT NUMBER & ELEVATION

- NOTES:
1.

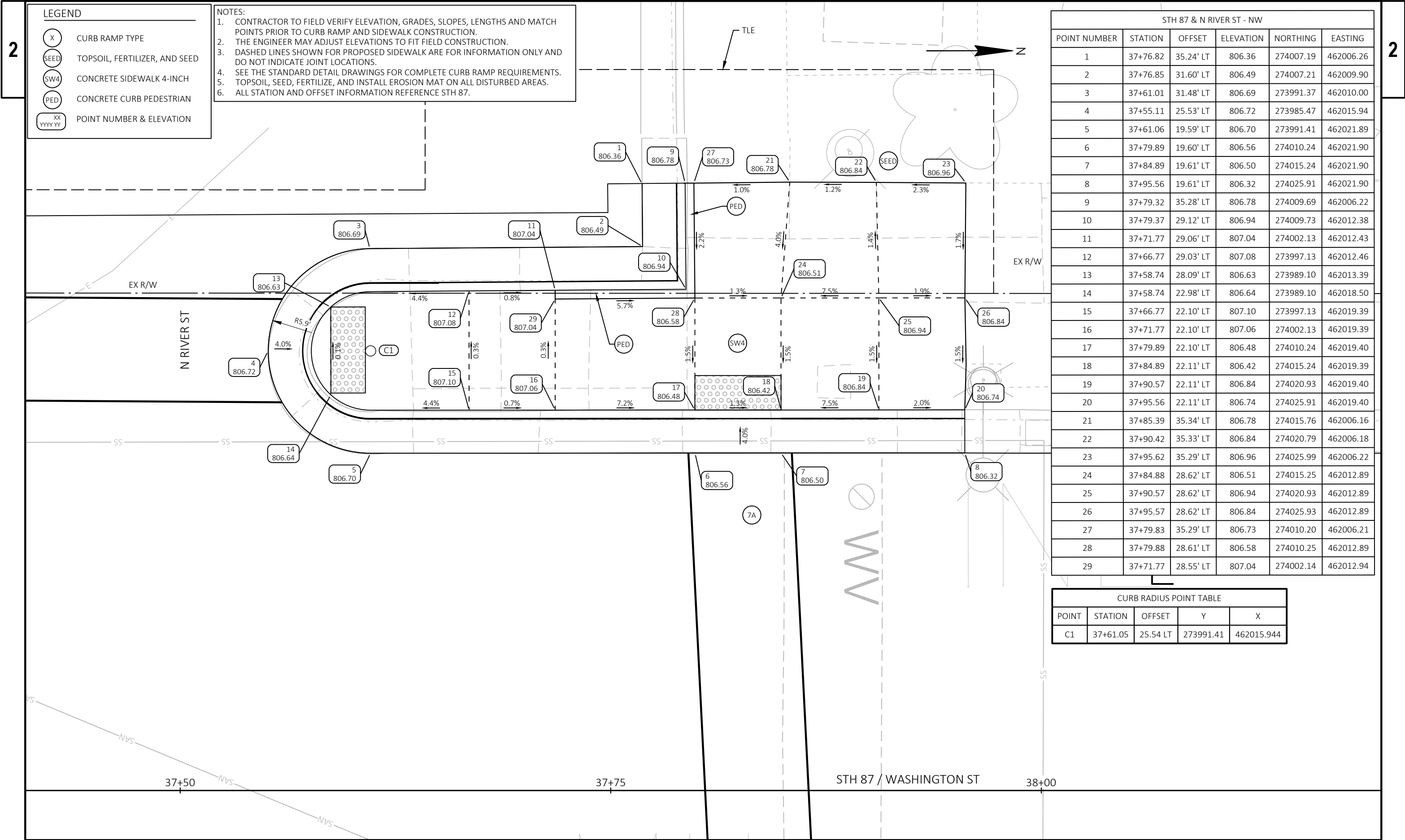
CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2.
- THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.

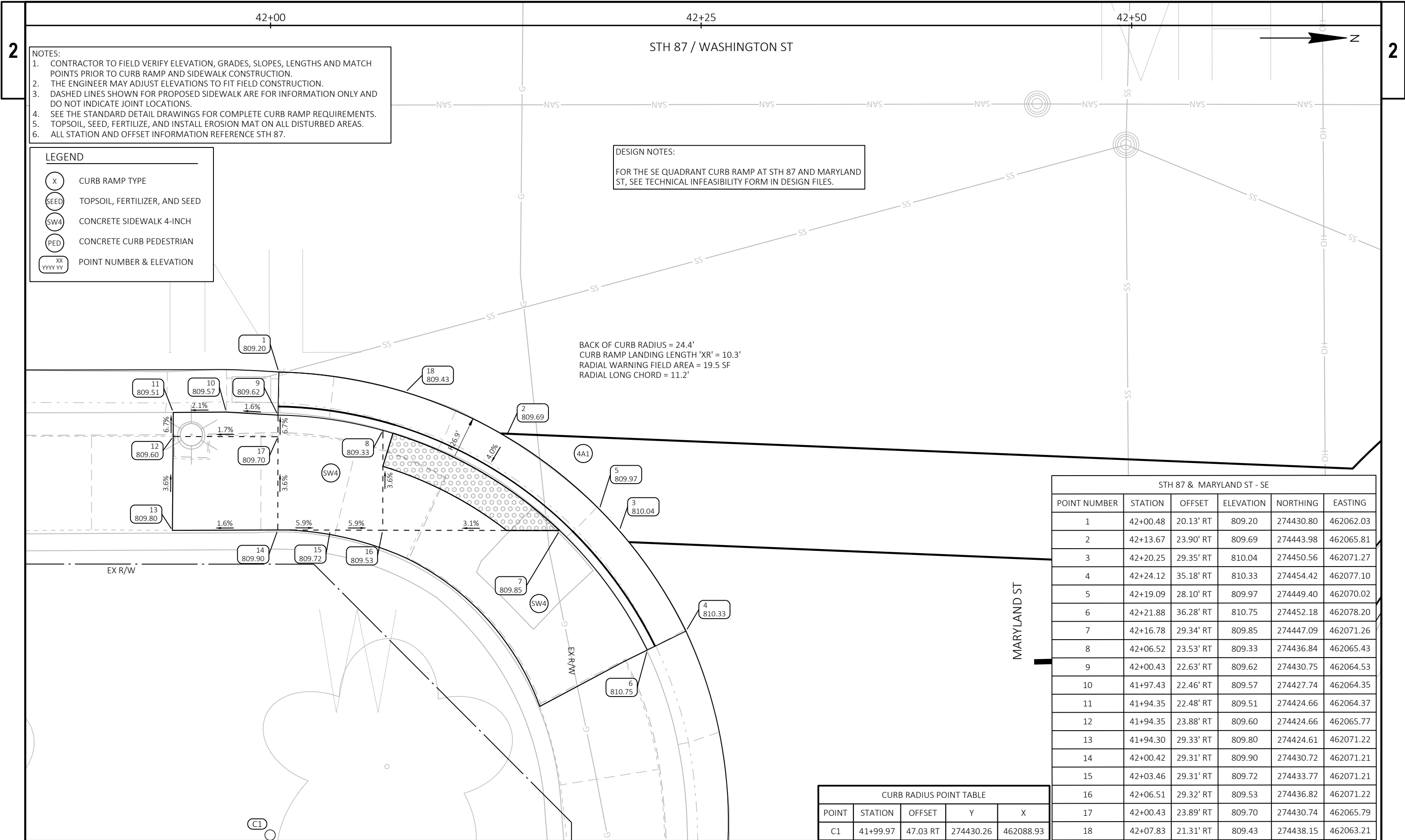
3.

4.

5.

6.

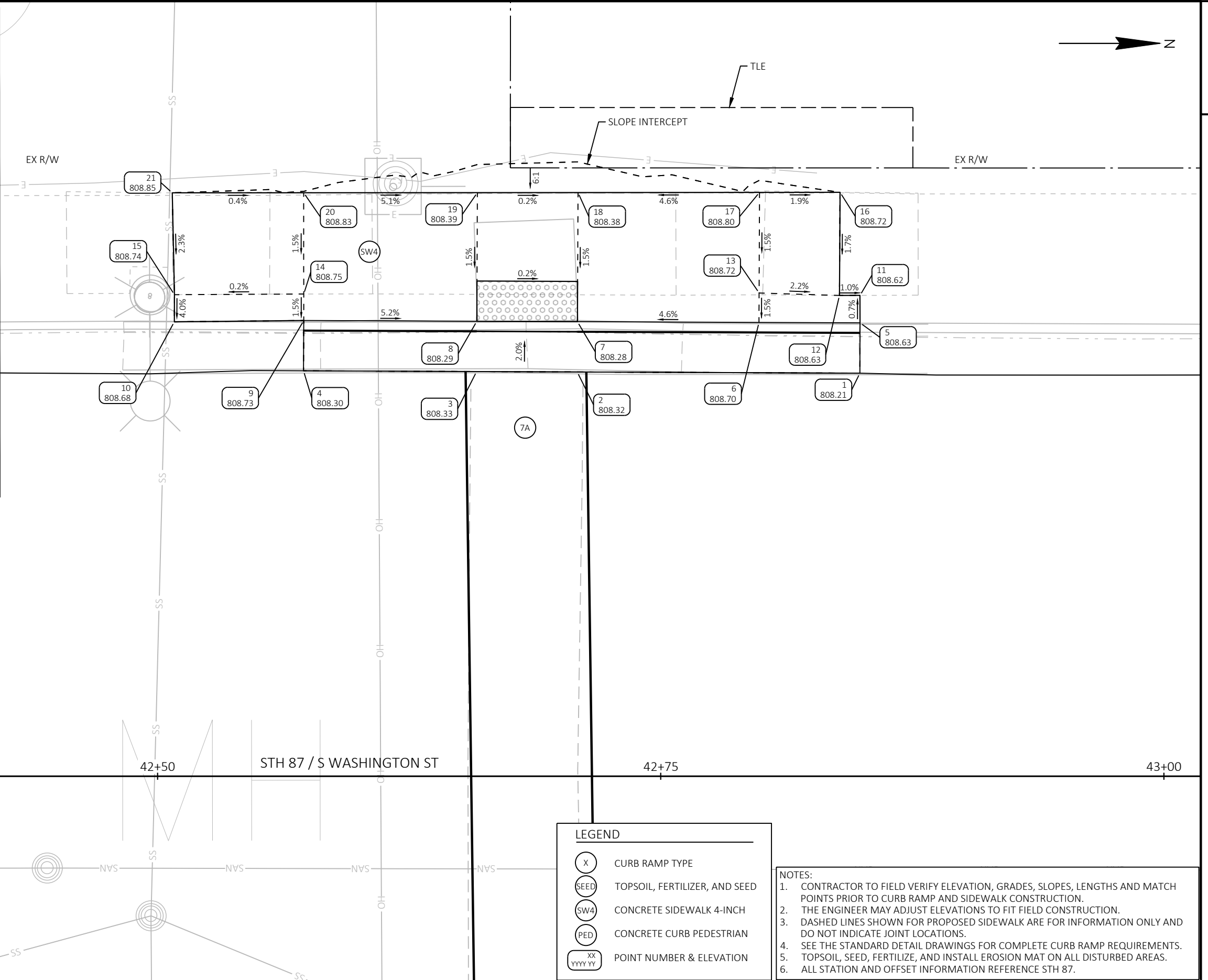




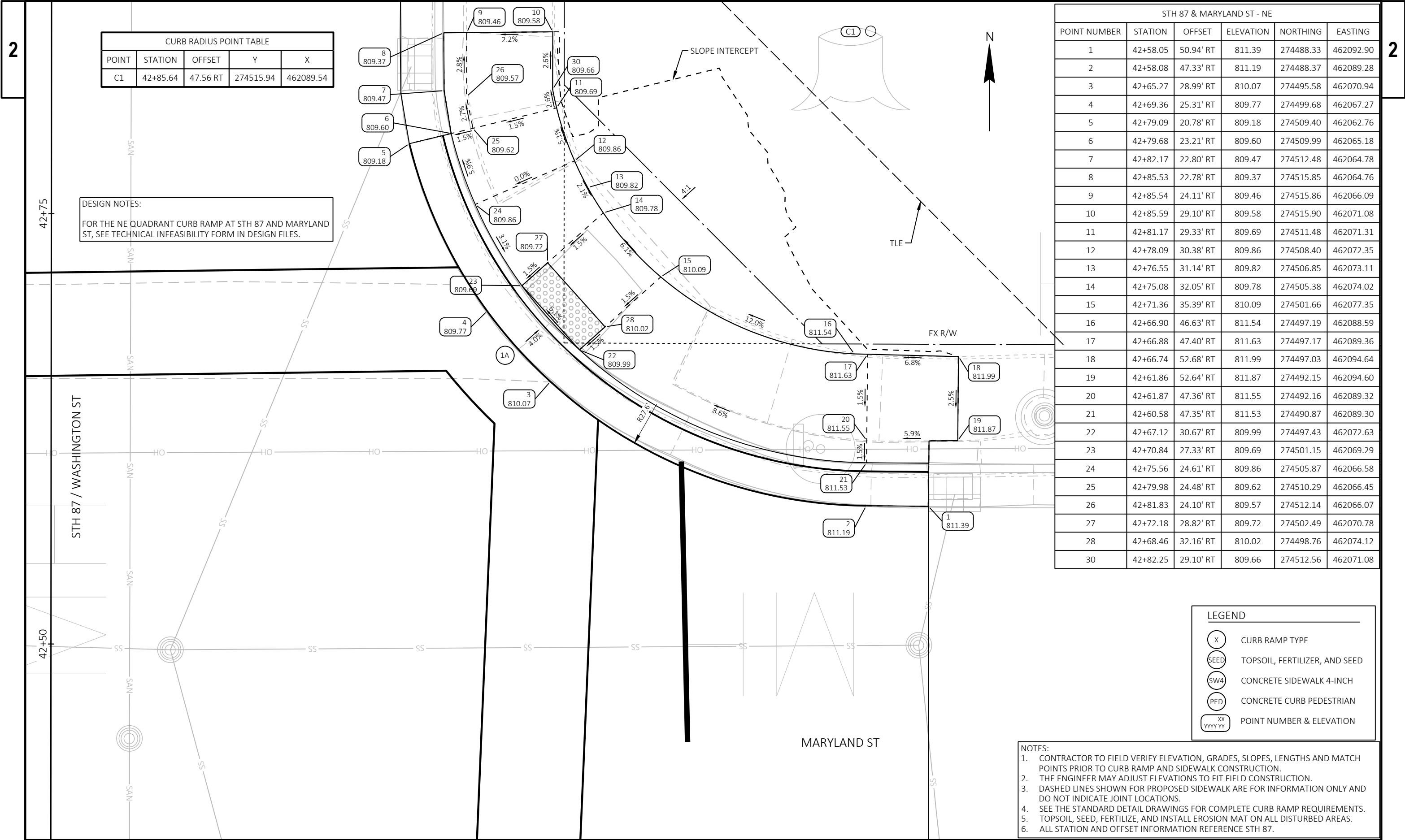
2

STH 87 & MARYLAND ST - NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	42+84.89	20.03' LT	808.21	274515.25	462021.95
2	42+70.85	20.09' LT	808.32	274501.21	462021.88
3	42+65.85	20.11' LT	808.33	274496.21	462021.85
4	42+57.25	20.14' LT	808.30	274487.61	462021.81
5	42+84.90	22.53' LT	808.63	274515.26	462019.45
6	42+79.88	22.55' LT	808.70	274510.24	462019.42
7	42+70.86	22.59' LT	808.28	274501.22	462019.38
8	42+65.86	22.61' LT	808.29	274496.22	462019.35
9	42+57.26	22.64' LT	808.73	274487.62	462019.31
10	42+50.83	22.58' LT	808.68	274481.19	462019.37
11	42+84.90	23.89' LT	808.62	274515.26	462018.08
12	42+83.88	23.89' LT	808.63	274514.24	462018.09
13	42+79.89	24.01' LT	808.72	274510.25	462017.96
14	42+57.26	23.96' LT	808.75	274487.62	462017.99
15	42+50.84	23.93' LT	808.74	274481.20	462018.02
16	42+83.91	29.01' LT	808.72	274514.27	462012.96
17	42+79.91	29.01' LT	808.80	274510.27	462012.96
18	42+70.89	29.00' LT	808.38	274501.25	462012.96
19	42+65.89	29.00' LT	808.39	274496.25	462012.96
20	42+57.26	28.99' LT	808.83	274487.62	462012.96
21	42+50.73	28.99' LT	808.85	274481.09	462012.96

2



PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	CURB RAMP DETAILS - MARYLAND ST - NW	SHEET	E
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CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C1	42+85.64	47.56 RT	274515.94	462089.54

DESIGN NOTES:
FOR THE NE QUADRANT CURB RAMP AT STH 87 AND MARYLAND ST, SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.

STH 87 & MARYLAND ST - NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	42+58.05	50.94' RT	811.39	274488.33	462092.90
2	42+58.08	47.33' RT	811.19	274488.37	462089.28
3	42+65.27	28.99' RT	810.07	274495.58	462070.94
4	42+69.36	25.31' RT	809.77	274499.68	462067.27
5	42+79.09	20.78' RT	809.18	274509.40	462062.76
6	42+79.68	23.21' RT	809.60	274509.99	462065.18
7	42+82.17	22.80' RT	809.47	274512.48	462064.78
8	42+85.53	22.78' RT	809.37	274515.85	462064.76
9	42+85.54	24.11' RT	809.46	274515.86	462066.09
10	42+85.59	29.10' RT	809.58	274515.90	462071.08
11	42+81.17	29.33' RT	809.69	274511.48	462071.31
12	42+78.09	30.38' RT	809.86	274508.40	462072.35
13	42+76.55	31.14' RT	809.82	274506.85	462073.11
14	42+75.08	32.05' RT	809.78	274505.38	462074.02
15	42+71.36	35.39' RT	810.09	274501.66	462077.35
16	42+66.90	46.63' RT	811.54	274497.19	462088.59
17	42+66.88	47.40' RT	811.63	274497.17	462089.36
18	42+66.74	52.68' RT	811.99	274497.03	462094.64
19	42+61.86	52.64' RT	811.87	274492.15	462094.60
20	42+61.87	47.36' RT	811.55	274492.16	462089.32
21	42+60.58	47.35' RT	811.53	274490.87	462089.30
22	42+67.12	30.67' RT	809.99	274497.43	462072.63
23	42+70.84	27.33' RT	809.69	274501.15	462069.29
24	42+75.56	24.61' RT	809.86	274505.87	462066.58
25	42+79.98	24.48' RT	809.62	274510.29	462066.45
26	42+81.83	24.10' RT	809.57	274512.14	462066.07
27	42+72.18	28.82' RT	809.72	274502.49	462070.78
28	42+68.46	32.16' RT	810.02	274498.76	462074.12
30	42+82.25	29.10' RT	809.66	274512.56	462071.08

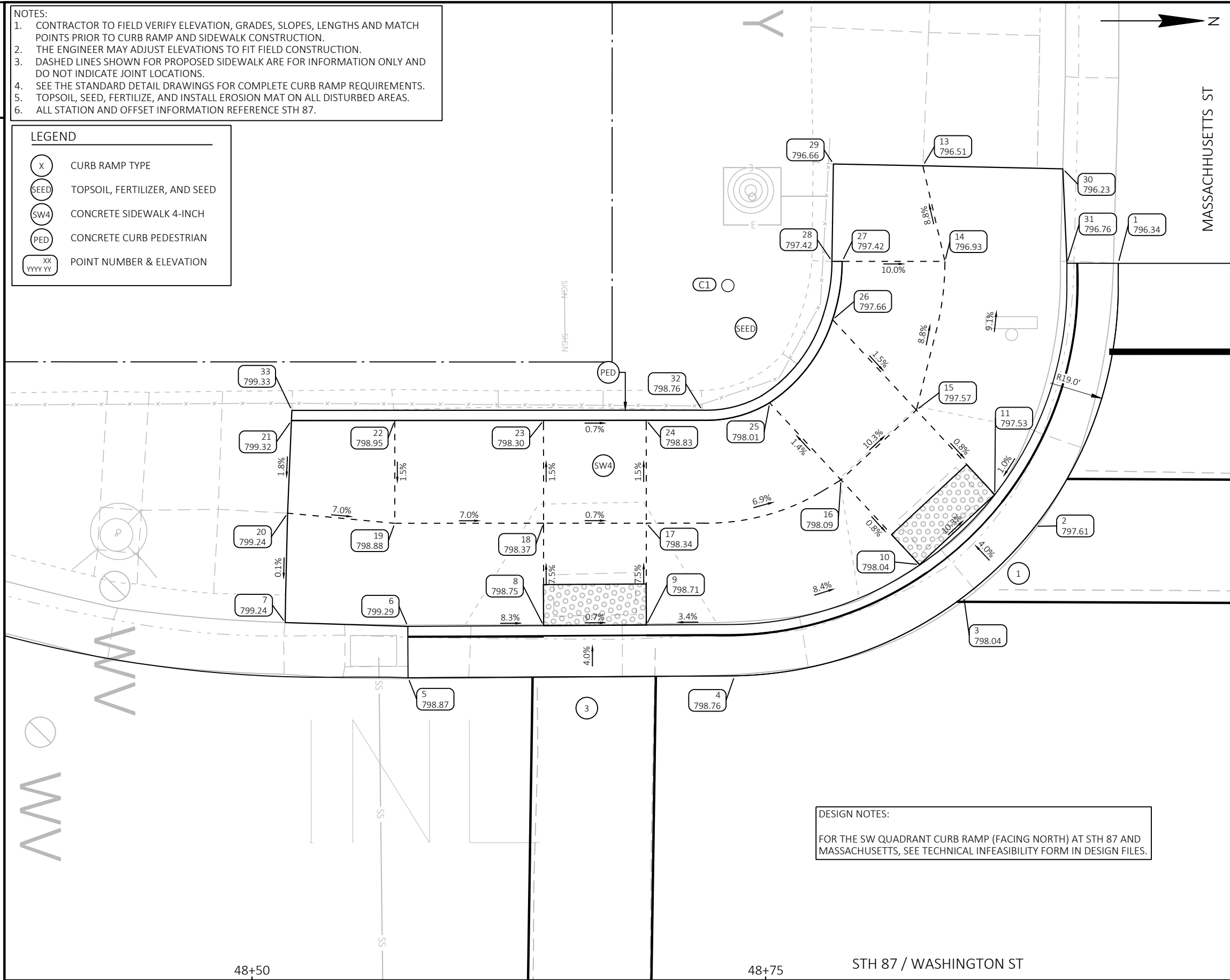
LEGEND	
X	CURB RAMP TYPE
SEED	TOPSOIL, FERTILIZER, AND SEED
SW4	CONCRETE SIDEWALK 4-INCH
PED	CONCRETE CURB PEDESTRIAN
xx yyyy yy	POINT NUMBER & ELEVATION

- NOTES:
- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 - THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
 - DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 - SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 - TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
 - ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.

- NOTES:
1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
 3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 5. TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
 6. ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.

LEGEND

- (X) CURB RAMP TYPE
- (SEED) TOPSOIL, FERTILIZER, AND SEED
- (SW4) CONCRETE SIDEWALK 4-INCH
- (PED) CONCRETE CURB PEDESTRIAN
- (XX
YYYY YY) POINT NUMBER & ELEVATION

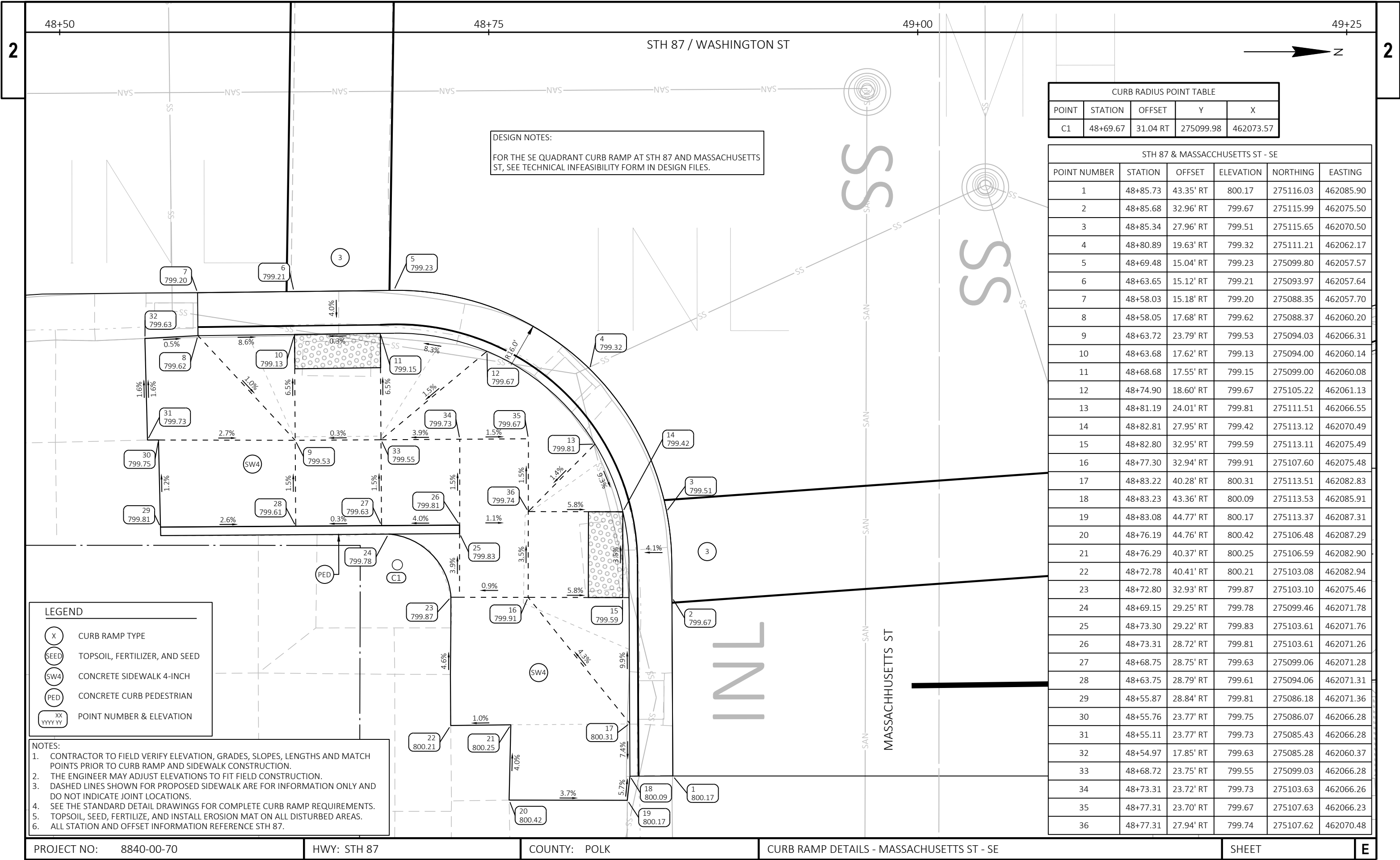


STH 87 & MASSACHUSETTS ST - SW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	48+92.16	34.89' LT	796.34	275122.53	462007.66
2	48+88.12	22.09' LT	797.61	275118.48	462020.46
3	48+84.64	18.67' LT	798.04	275115.00	462023.88
4	48+73.49	14.81' LT	798.76	275103.84	462027.72
5	48+57.60	14.72' LT	798.87	275087.95	462027.80
6	48+57.58	17.22' LT	799.29	275087.94	462025.30
7	48+51.62	17.40' LT	799.24	275081.97	462025.11
8	48+64.19	17.25' LT	798.75	275094.55	462025.27
9	48+69.19	17.28' LT	798.71	275099.55	462025.25
10	48+82.49	20.22' LT	797.89	275112.85	462022.32
11	48+86.15	23.63' LT	797.53	275116.51	462018.91
13	48+82.65	39.64' LT	796.51	275113.03	462002.90
14	48+83.73	34.99' LT	796.93	275114.10	462007.56
15	48+82.34	27.75' LT	797.57	275112.70	462014.79
16	48+78.67	24.35' LT	797.68	275109.03	462018.19
17	48+69.19	22.24' LT	798.34	275099.55	462020.29
18	48+64.19	22.24' LT	798.39	275094.55	462020.28
19	48+56.95	22.24' LT	798.85	275087.31	462020.28
20	48+51.73	22.73' LT	799.24	275082.09	462019.78
21	48+51.92	27.23' LT	799.32	275082.28	462015.28
22	48+56.95	27.23' LT	798.93	275087.31	462015.29
23	48+64.19	27.24' LT	798.36	275094.55	462015.29
24	48+69.19	27.25' LT	798.83	275099.55	462015.28
25	48+75.20	28.10' LT	797.76	275105.56	462014.44
26	48+78.26	32.15' LT	797.66	275108.63	462010.39
27	48+78.73	34.99' LT	797.42	275109.10	462007.55
28	48+78.23	34.99' LT	797.42	275108.60	462007.55
29	48+78.30	39.73' LT	796.66	275108.67	462002.81
30	48+89.46	39.49' LT	796.23	275119.84	462003.06
31	48+89.66	34.90' LT	796.76	275120.03	462007.65
32	48+71.92	27.74' LT	798.76	275102.28	462014.79
33	48+51.94	27.73' LT	799.33	275082.30	462014.78

CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C1	48+73.16	33.81 LT	275103.53	462008.73

DESIGN NOTES:

FOR THE SW QUADRANT CURB RAMP (FACING NORTH) AT STH 87 AND MASSACHUSETTS, SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.



DESIGN NOTES:
FOR THE SE QUADRANT CURB RAMP AT STH 87 AND MASSACHUSETTS ST, SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.

CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C1	48+69.67	31.04 RT	275099.98	462073.57

STH 87 & MASSACHUSETTS ST - SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	48+85.73	43.35' RT	800.17	275116.03	462085.90
2	48+85.68	32.96' RT	799.67	275115.99	462075.50
3	48+85.34	27.96' RT	799.51	275115.65	462070.50
4	48+80.89	19.63' RT	799.32	275111.21	462062.17
5	48+69.48	15.04' RT	799.23	275099.80	462057.57
6	48+63.65	15.12' RT	799.21	275093.97	462057.64
7	48+58.03	15.18' RT	799.20	275088.35	462057.70
8	48+58.05	17.68' RT	799.62	275088.37	462060.20
9	48+63.72	23.79' RT	799.53	275094.03	462066.31
10	48+63.68	17.62' RT	799.13	275094.00	462060.14
11	48+68.68	17.55' RT	799.15	275099.00	462060.08
12	48+74.90	18.60' RT	799.67	275105.22	462061.13
13	48+81.19	24.01' RT	799.81	275111.51	462066.55
14	48+82.81	27.95' RT	799.42	275113.12	462070.49
15	48+82.80	32.95' RT	799.59	275113.11	462075.49
16	48+77.30	32.94' RT	799.91	275107.60	462075.48
17	48+83.22	40.28' RT	800.31	275113.51	462082.83
18	48+83.23	43.36' RT	800.09	275113.53	462085.91
19	48+83.08	44.77' RT	800.17	275113.37	462087.31
20	48+76.19	44.76' RT	800.42	275106.48	462087.29
21	48+76.29	40.37' RT	800.25	275106.59	462082.90
22	48+72.78	40.41' RT	800.21	275103.08	462082.94
23	48+72.80	32.93' RT	799.87	275103.10	462075.46
24	48+69.15	29.25' RT	799.78	275099.46	462071.78
25	48+73.30	29.22' RT	799.83	275103.61	462071.76
26	48+73.31	28.72' RT	799.81	275103.61	462071.26
27	48+68.75	28.75' RT	799.63	275099.06	462071.28
28	48+63.75	28.79' RT	799.61	275094.06	462071.31
29	48+55.87	28.84' RT	799.81	275086.18	462071.36
30	48+55.76	23.77' RT	799.75	275086.07	462066.28
31	48+55.11	23.77' RT	799.73	275085.43	462066.28
32	48+54.97	17.85' RT	799.63	275085.28	462060.37
33	48+68.72	23.75' RT	799.55	275099.03	462066.28
34	48+73.31	23.72' RT	799.73	275103.63	462066.26
35	48+77.31	23.70' RT	799.67	275107.63	462066.23
36	48+77.31	27.94' RT	799.74	275107.62	462070.48

LEGEND

X

CURB RAMP TYPE

SEED

TOPSOIL, FERTILIZER, AND SEED

SW4

CONCRETE SIDEWALK 4-INCH

PED

CONCRETE CURB PEDESTRIAN

XX
YYYY

POINT NUMBER & ELEVATION

- NOTES:
1.

CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2.

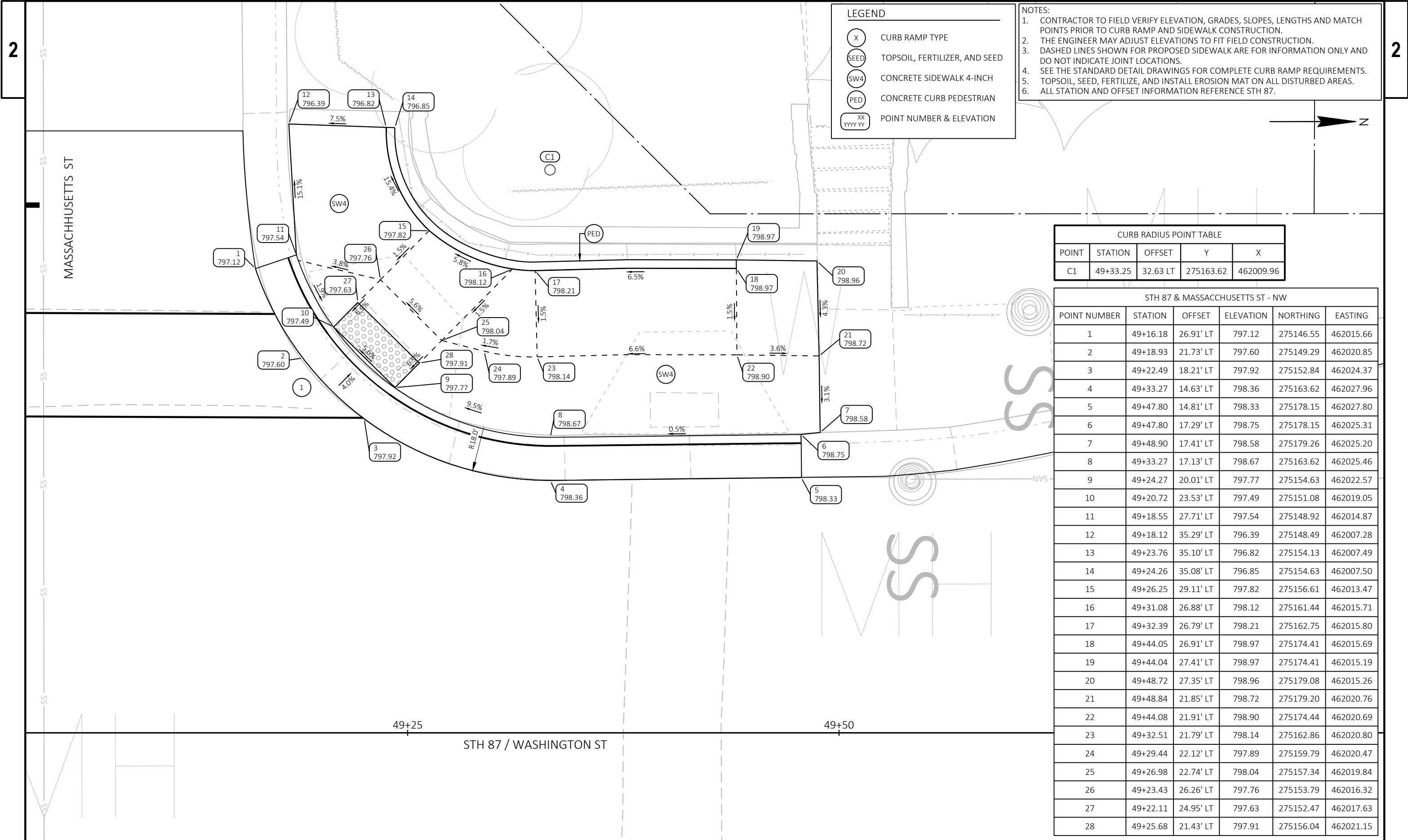
THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
3.

DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4.

SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5.

TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
6.

ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.



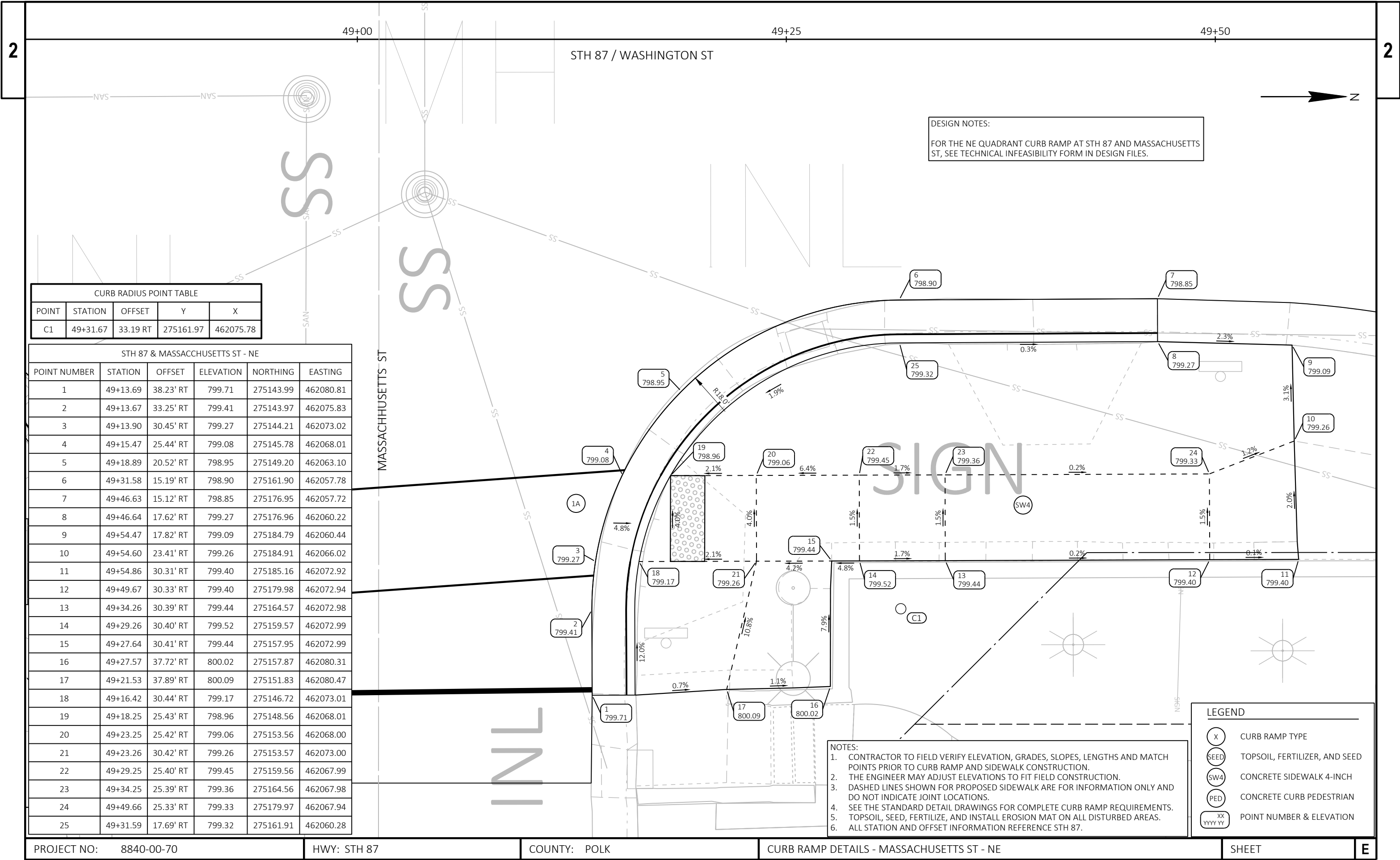
LEGEND

- X CURB RAMP TYPE
- SEED TOPSOIL, FERTILIZER, AND SEED
- SW4 CONCRETE SIDEWALK 4-INCH
- PED CONCRETE CURB PEDESTRIAN
- XX
YYYY YY POINT NUMBER & ELEVATION

- NOTES:**
- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 - THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
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 - SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 - TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
 - ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.

CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C1	49+33.25	32.63 LT	275163.62	462009.96

STH 87 & MASSACHUSETTS ST - NW					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	49+16.18	26.91' LT	797.12	275146.55	462015.66
2	49+18.93	21.73' LT	797.60	275149.29	462020.85
3	49+22.49	18.21' LT	797.92	275152.84	462024.37
4	49+33.27	14.63' LT	798.36	275163.62	462027.96
5	49+47.80	14.81' LT	798.33	275178.15	462027.80
6	49+47.80	17.29' LT	798.75	275178.15	462025.31
7	49+48.90	17.41' LT	798.58	275179.26	462025.20
8	49+33.27	17.13' LT	798.67	275163.62	462025.46
9	49+24.27	20.01' LT	797.77	275154.63	462022.57
10	49+20.72	23.53' LT	797.49	275151.08	462019.05
11	49+18.55	27.71' LT	797.54	275148.92	462014.87
12	49+18.12	35.29' LT	796.39	275148.49	462007.28
13	49+23.76	35.10' LT	796.82	275154.13	462007.49
14	49+24.26	35.08' LT	796.85	275154.63	462007.50
15	49+26.25	29.11' LT	797.82	275156.61	462013.47
16	49+31.08	26.88' LT	798.12	275161.44	462015.71
17	49+32.39	26.79' LT	798.21	275162.75	462015.80
18	49+44.05	26.91' LT	798.97	275174.41	462015.69
19	49+44.04	27.41' LT	798.97	275174.41	462015.19
20	49+48.72	27.35' LT	798.96	275179.08	462015.26
21	49+48.84	21.85' LT	798.72	275179.20	462020.76
22	49+44.08	21.91' LT	798.90	275174.44	462020.69
23	49+32.51	21.79' LT	798.14	275162.86	462020.80
24	49+29.44	22.12' LT	797.89	275159.79	462020.47
25	49+26.98	22.74' LT	798.04	275157.34	462019.84
26	49+23.43	26.26' LT	797.76	275153.79	462016.32
27	49+22.11	24.95' LT	797.63	275152.47	462017.63
28	49+25.68	21.43' LT	797.91	275156.04	462021.15



CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C1	49+31.67	33.19 RT	275161.97	462075.78

STH 87 & MASSACCHUSETTS ST - NE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	49+13.69	38.23' RT	799.71	275143.99	462080.81
2	49+13.67	33.25' RT	799.41	275143.97	462075.83
3	49+13.90	30.45' RT	799.27	275144.21	462073.02
4	49+15.47	25.44' RT	799.08	275145.78	462068.01
5	49+18.89	20.52' RT	798.95	275149.20	462063.10
6	49+31.58	15.19' RT	798.90	275161.90	462057.78
7	49+46.63	15.12' RT	798.85	275176.95	462057.72
8	49+46.64	17.62' RT	799.27	275176.96	462060.22
9	49+54.47	17.82' RT	799.09	275184.79	462060.44
10	49+54.60	23.41' RT	799.26	275184.91	462066.02
11	49+54.86	30.31' RT	799.40	275185.16	462072.92
12	49+49.67	30.33' RT	799.40	275179.98	462072.94
13	49+34.26	30.39' RT	799.44	275164.57	462072.98
14	49+29.26	30.40' RT	799.52	275159.57	462072.99
15	49+27.64	30.41' RT	799.44	275157.95	462072.99
16	49+27.57	37.72' RT	800.02	275157.87	462080.31
17	49+21.53	37.89' RT	800.09	275151.83	462080.47
18	49+16.42	30.44' RT	799.17	275146.72	462073.01
19	49+18.25	25.43' RT	798.96	275148.56	462068.01
20	49+23.25	25.42' RT	799.06	275153.56	462068.00
21	49+23.26	30.42' RT	799.26	275153.57	462073.00
22	49+29.25	25.40' RT	799.45	275159.56	462067.99
23	49+34.25	25.39' RT	799.36	275164.56	462067.98
24	49+49.66	25.33' RT	799.33	275179.97	462067.94
25	49+31.59	17.69' RT	799.32	275161.91	462060.28

DESIGN NOTES:
FOR THE NE QUADRANT CURB RAMP AT STH 87 AND MASSACHUSETTS ST, SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.

- NOTES:
- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 - THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
 - DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 - SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 - TOPSOIL, SEED, FERTILIZE, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
 - ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.

LEGEND	
(X)	CURB RAMP TYPE
(SEED)	TOPSOIL, FERTILIZER, AND SEED
(SW4)	CONCRETE SIDEWALK 4-INCH
(PED)	CONCRETE CURB PEDESTRIAN
(XX YYYY YY)	POINT NUMBER & ELEVATION

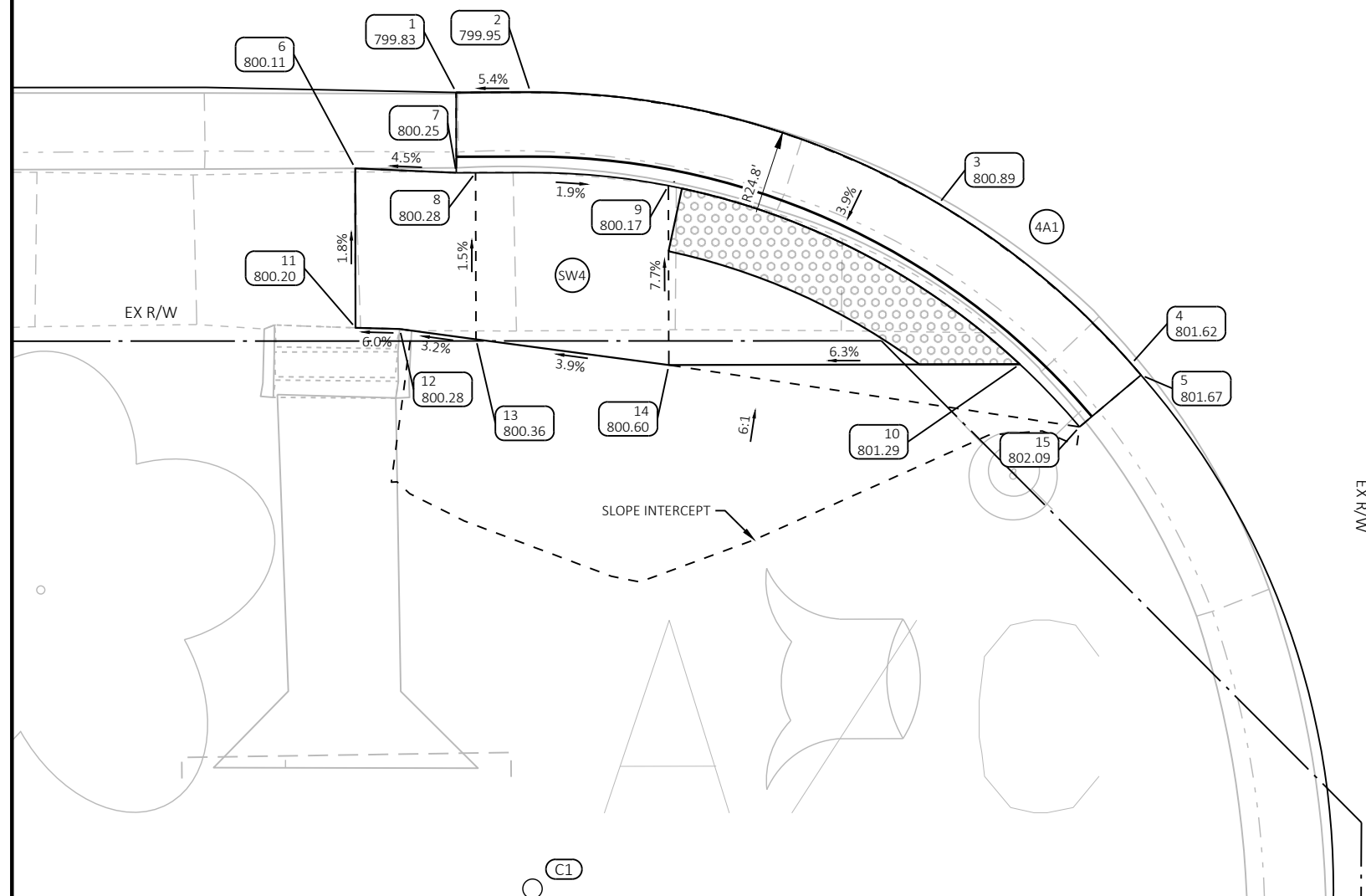
57+00

STH 87 / S WASHINGTON ST



FOR THE SE QUADRANT CURB RAMP AT STH 87 AND MINNESOTA,
SEE TECHNICAL INFEASIBILITY FORM IN DESIGN FILES.

BACK OF CURB RADIUS = 22.3'
CURB RAMP LANDING LENGTH 'XR' = 10.9'
RADIAL WARNING FIELD AREA = 20.7 SF
RADIAL LONG CHORD = 11.9'

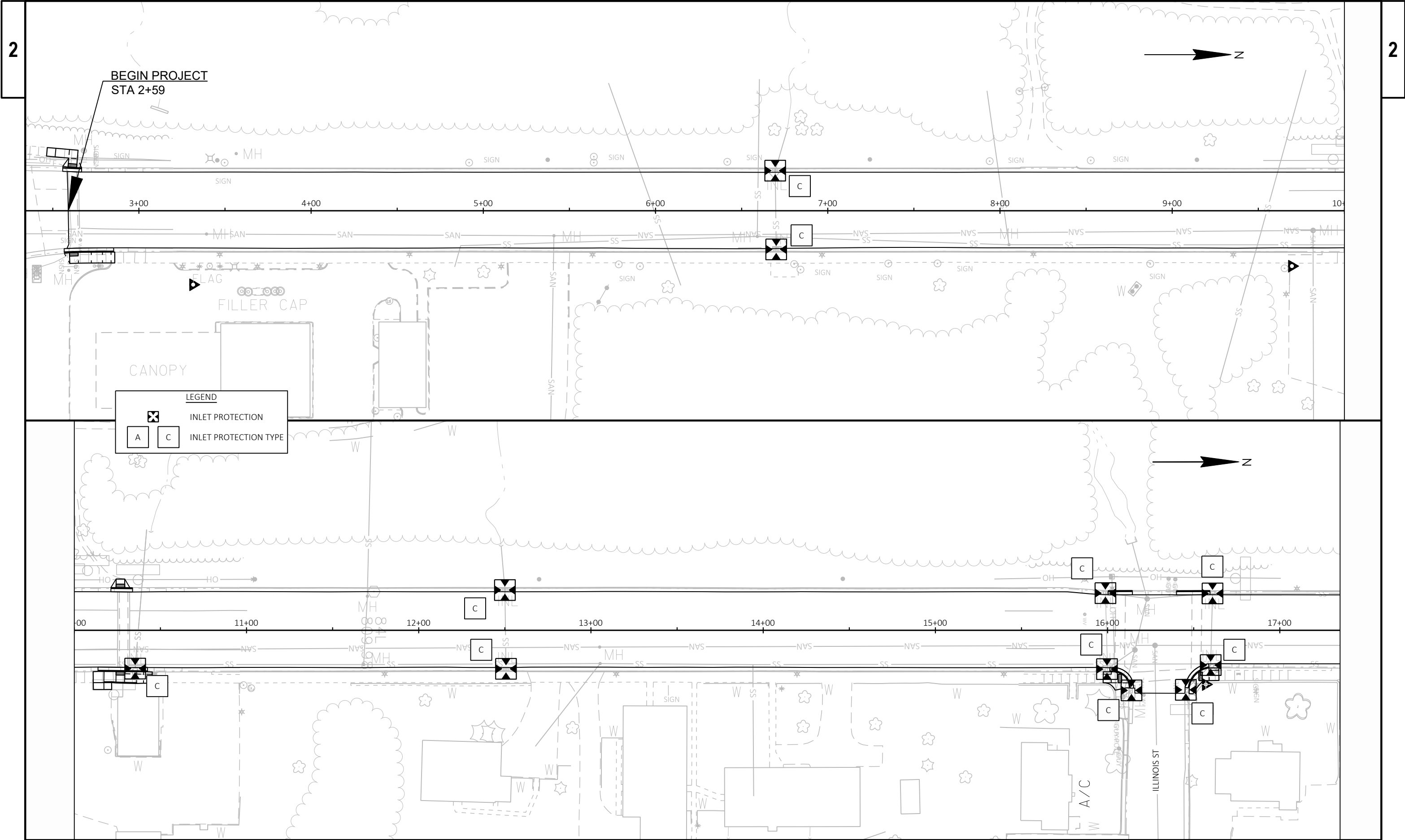


STH 87 & MINNESOTA ST - SE					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	56+49.28	21.90' RT	799.83	275879.59	462065.16
2	56+51.59	21.89' RT	799.95	275881.91	462065.16
3	56+64.30	25.36' RT	800.89	275894.61	462068.64
4	56+70.30	30.35' RT	801.62	275900.61	462073.63
5	56+70.60	30.69' RT	801.67	275900.90	462073.98
6	56+46.14	24.26' RT	800.11	275876.45	462067.52
7	56+49.28	24.40' RT	800.25	275879.60	462067.66
8	56+49.88	24.40' RT	800.28	275880.20	462067.66
9	56+55.89	24.80' RT	800.17	275886.20	462068.07
10	56+66.83	30.35' RT	801.29	275897.13	462073.64
11	56+46.15	29.22' RT	800.20	275876.46	462072.49
12	56+47.52	29.26' RT	800.28	275877.83	462072.53
13	56+49.90	29.58' RT	800.36	275880.20	462072.85
14	56+55.90	30.38' RT	800.60	275886.21	462073.65
15	56+68.69	32.31' RT	802.09	275898.99	462075.59

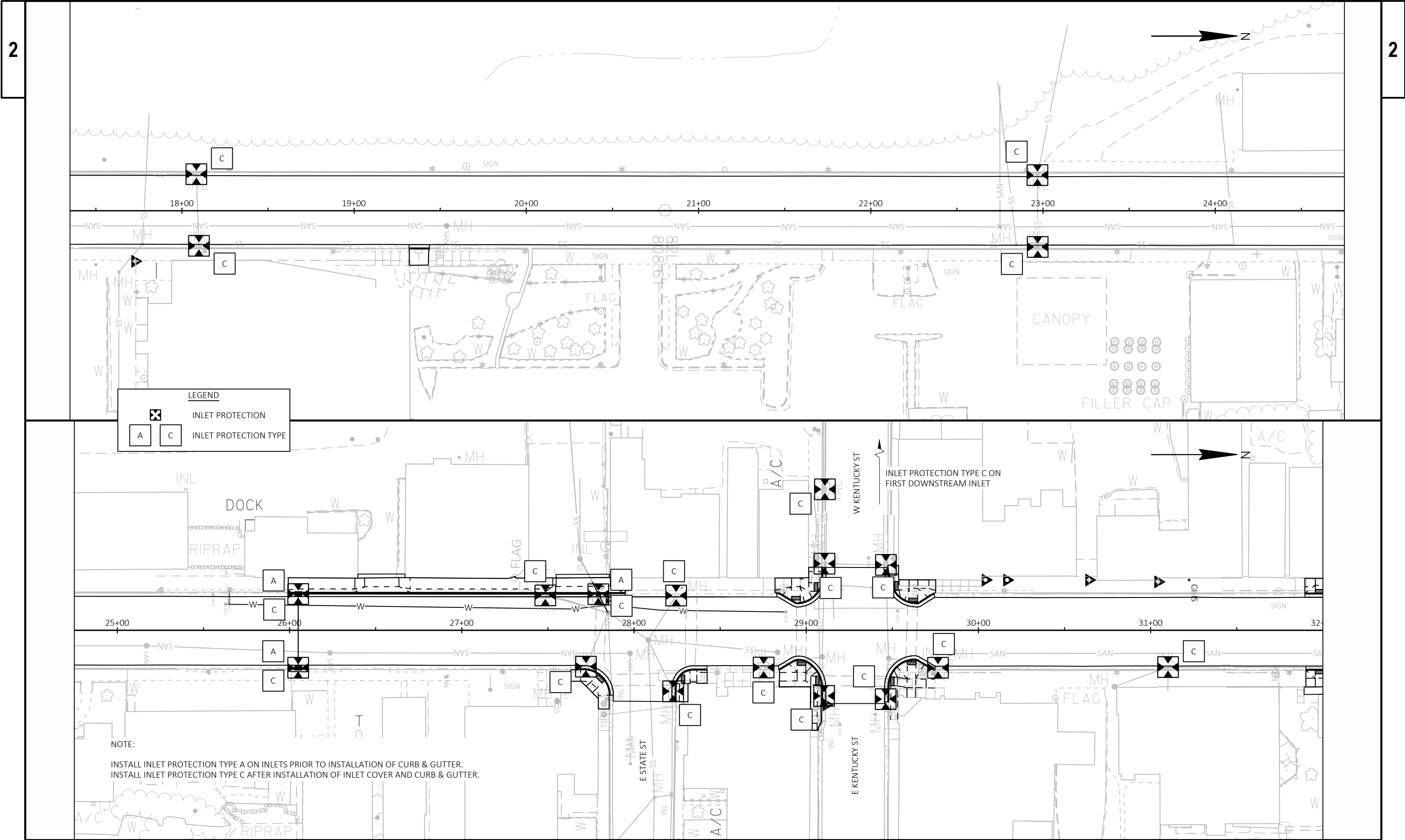
CURB RADIUS POINT TABLE				
POINT	STATION	OFFSET	Y	X
C1	56+51.65	46.68 RT	275881.94	462089.95

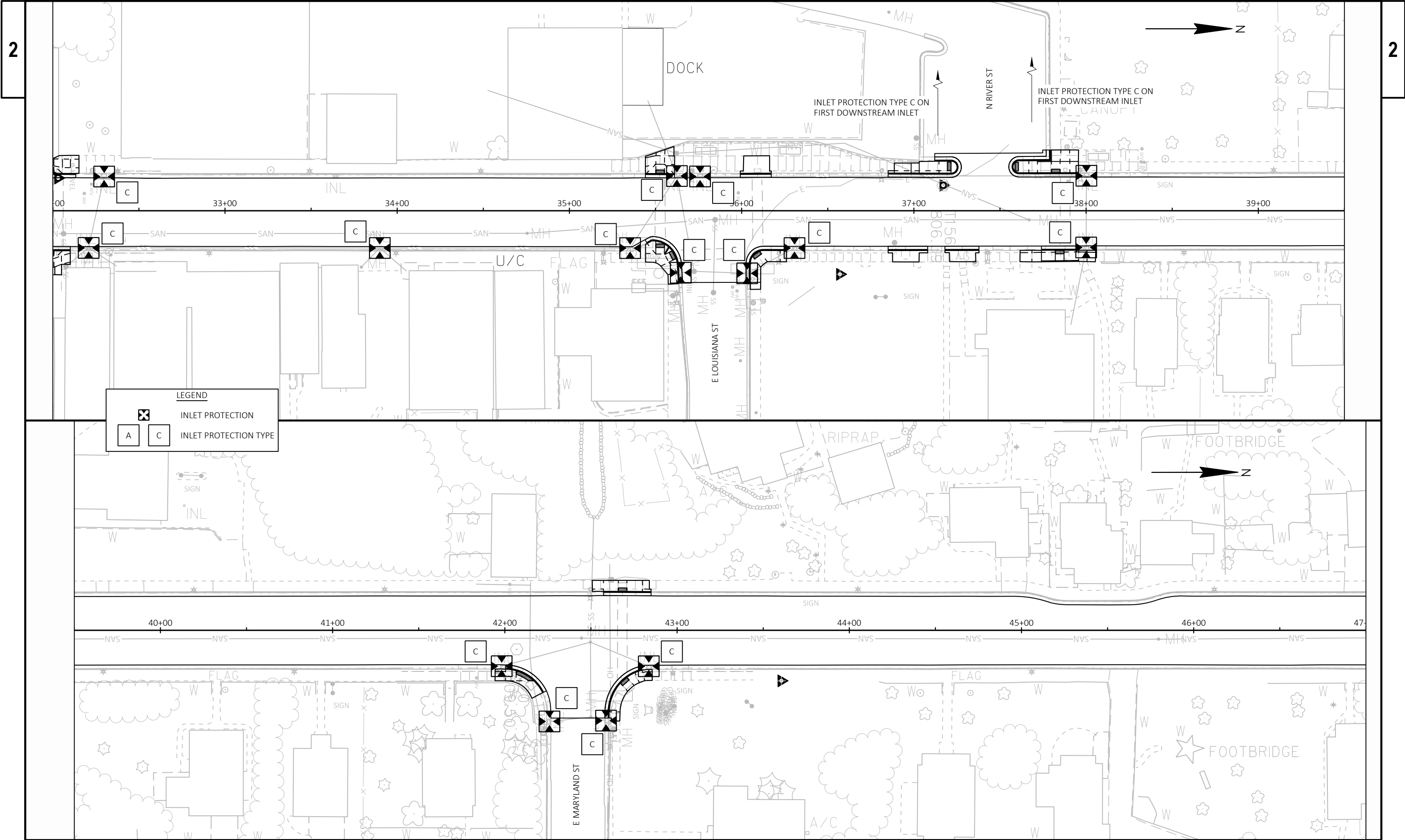
(X)	CURB RAMP TYPE
(SEED)	TOPSOIL, FERTILIZER, AND SEED
(SW4)	CONCRETE SIDEWALK 4-INCH
(PED)	CONCRETE CURB PEDESTRIAN
(XX YYYY YY)	POINT NUMBER & ELEVATION

1. CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5. TOPSOIL, SEED, FERTILIZER, AND INSTALL EROSION MAT ON ALL DISTURBED AREAS.
6. ALL STATION AND OFFSET INFORMATION REFERENCE STH 87.

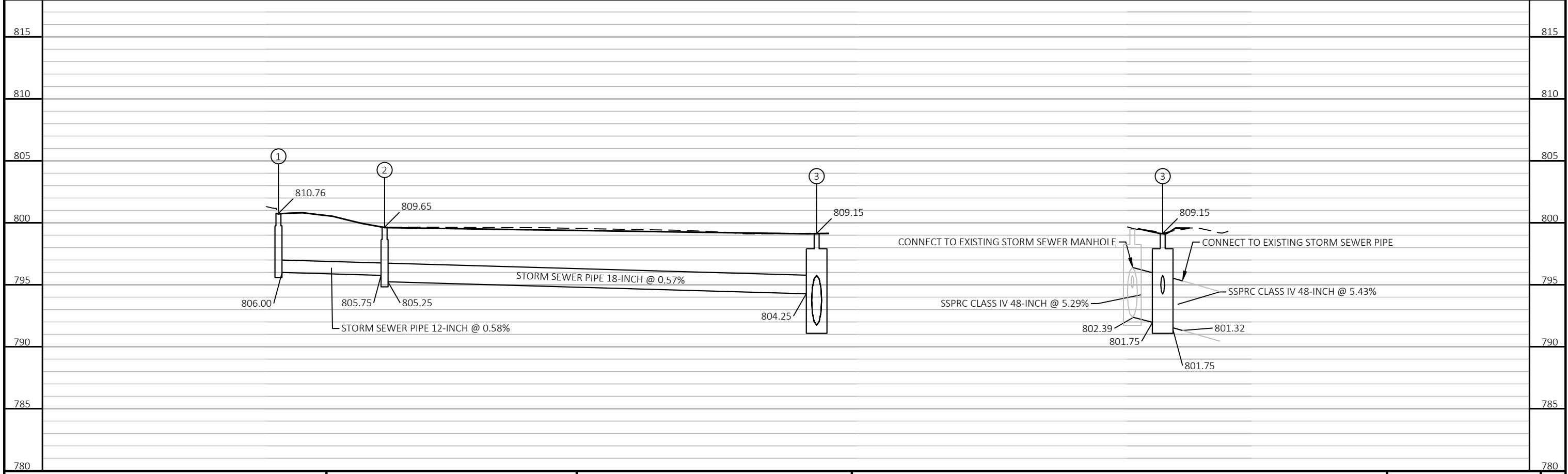
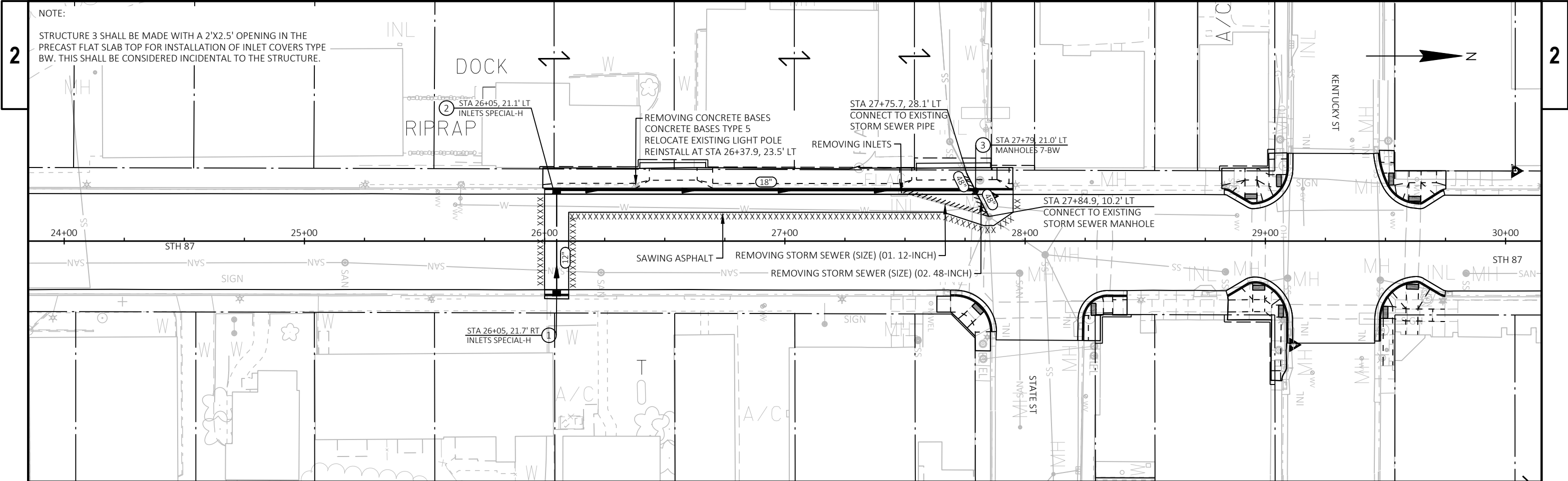


PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	EROSION CONTROL	SHEET	E
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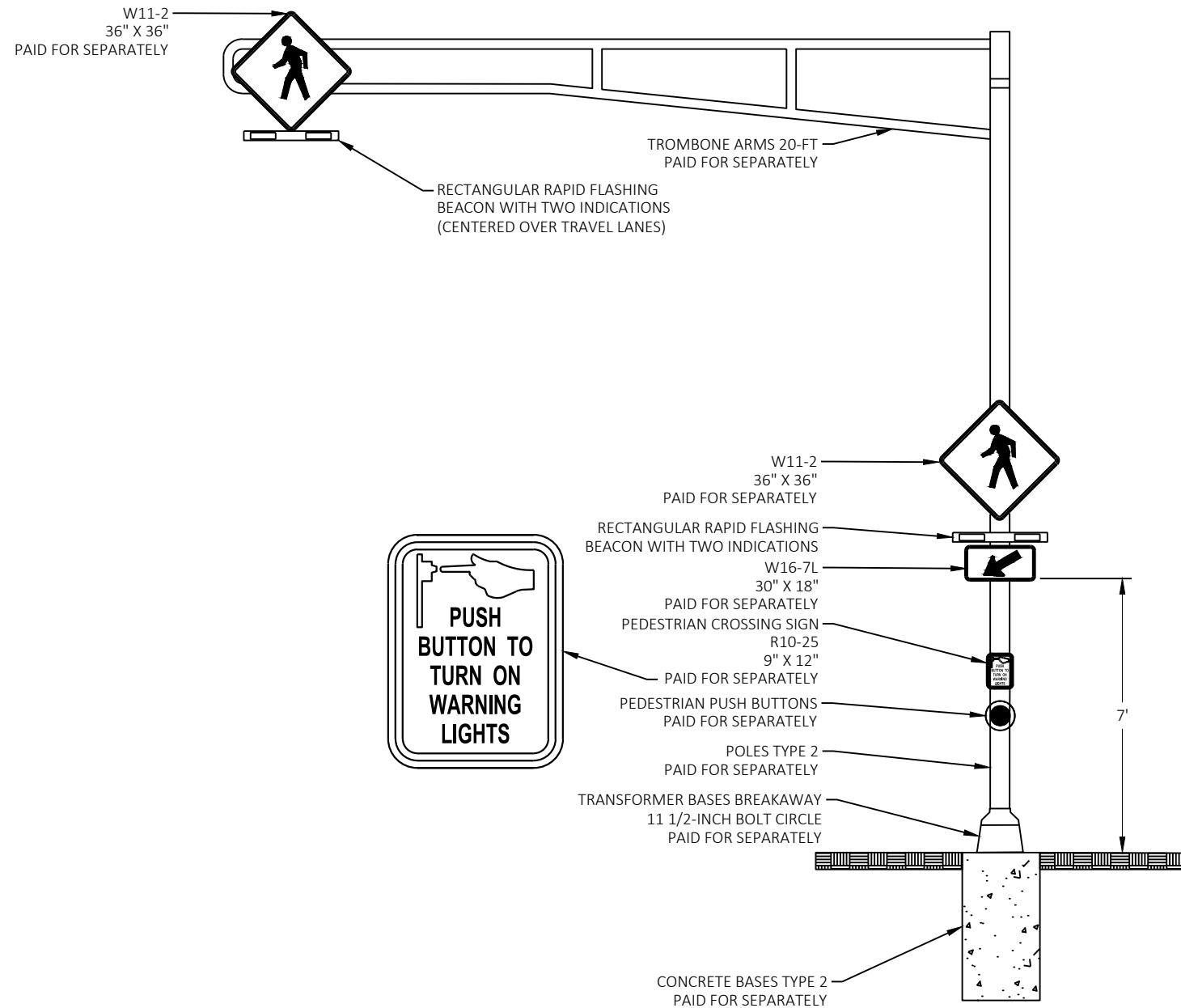


PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	EROSION CONTROL	SHEET	E
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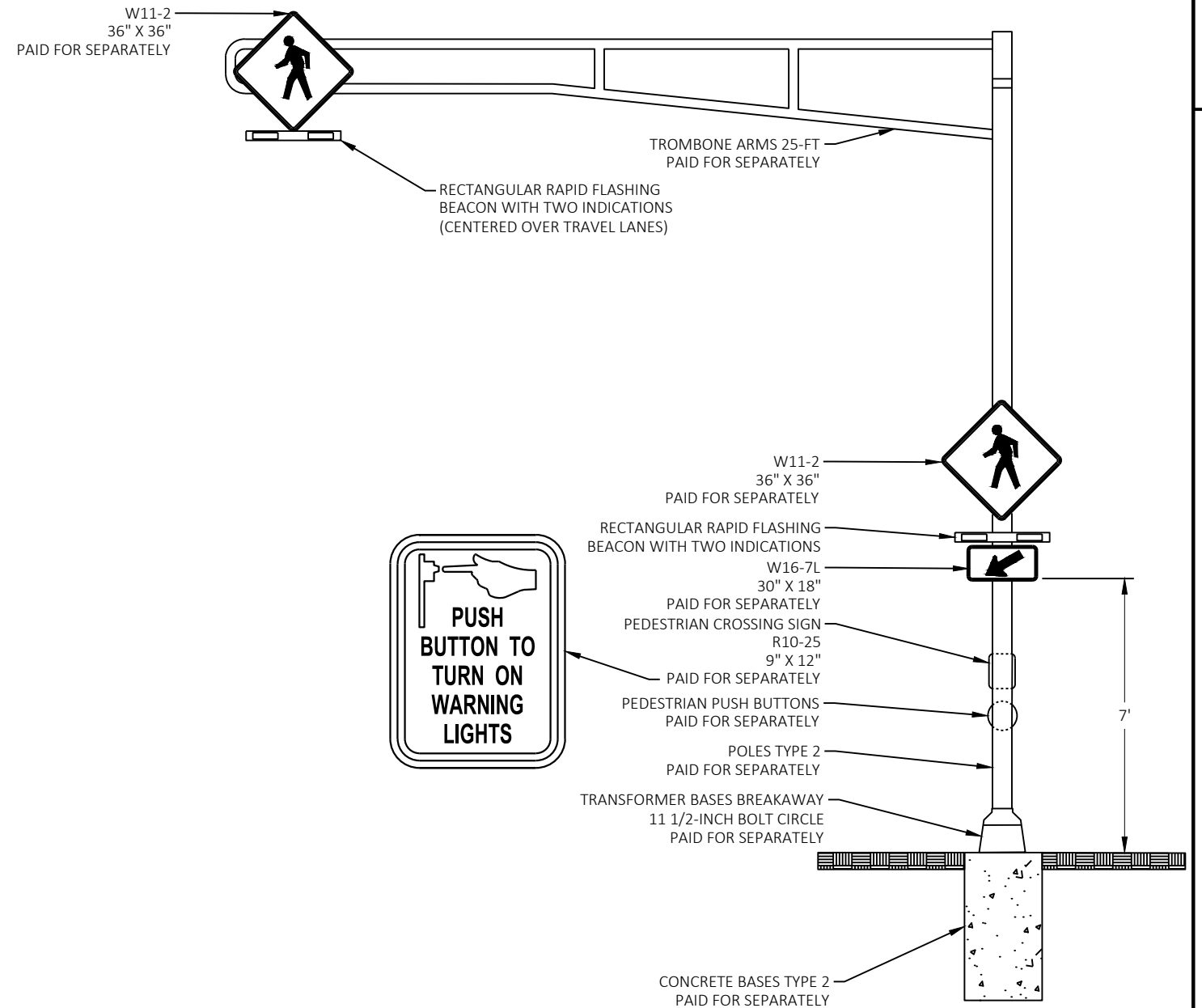




E



STA 31+95, LT
(LOOKING SOUTH)

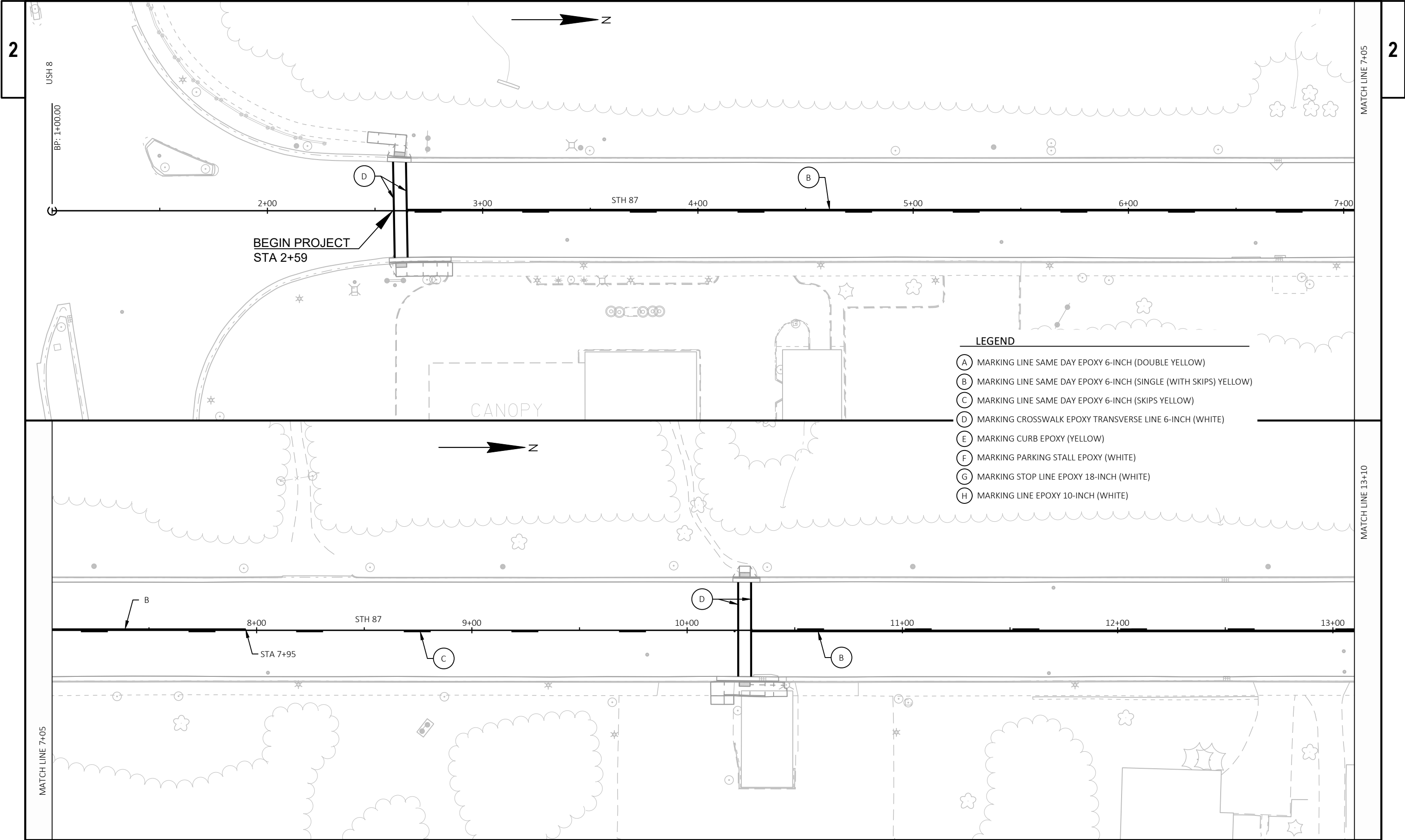


STA 31+95, RT
(LOOKING NORTH)

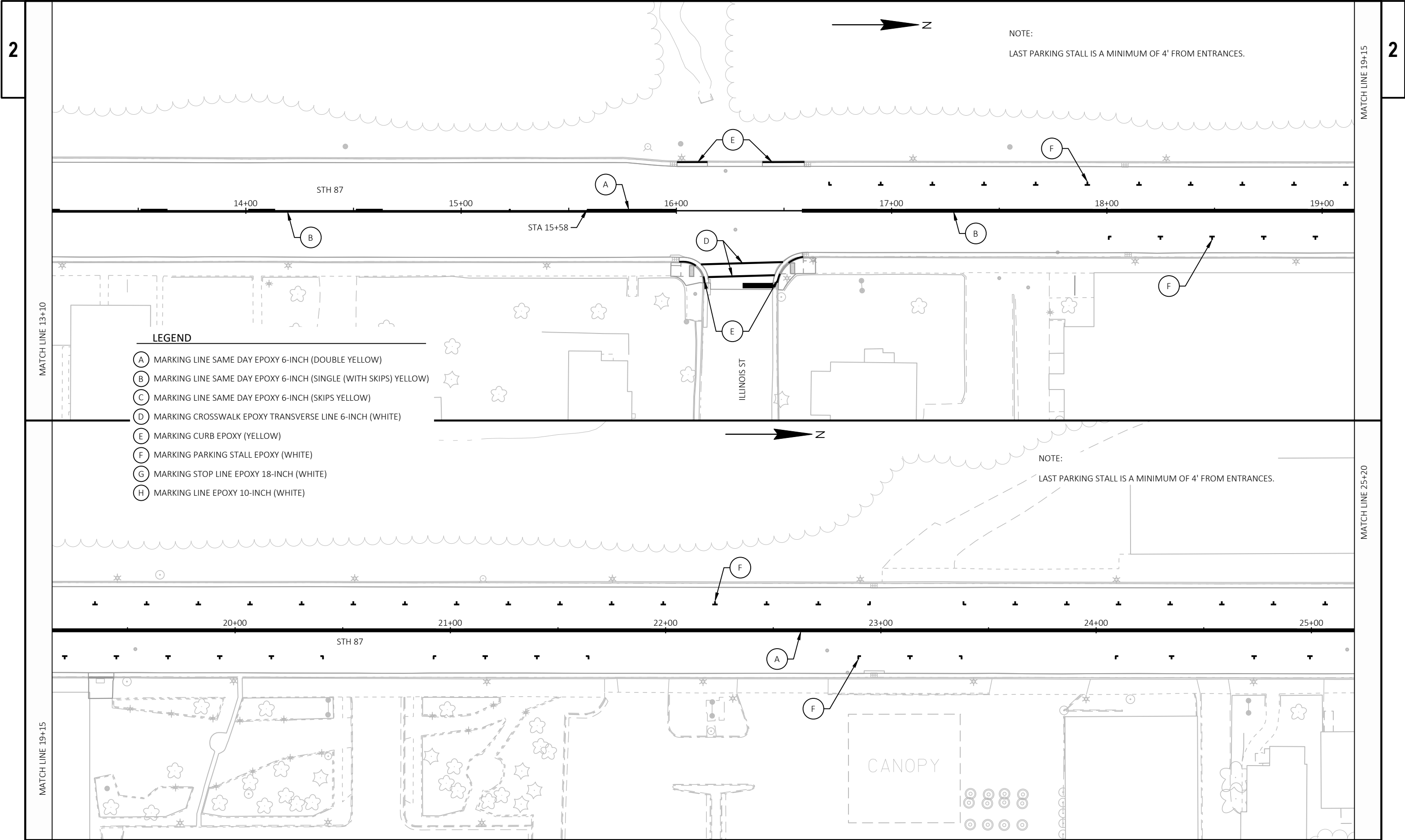
RECTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM

GENERAL NOTES:

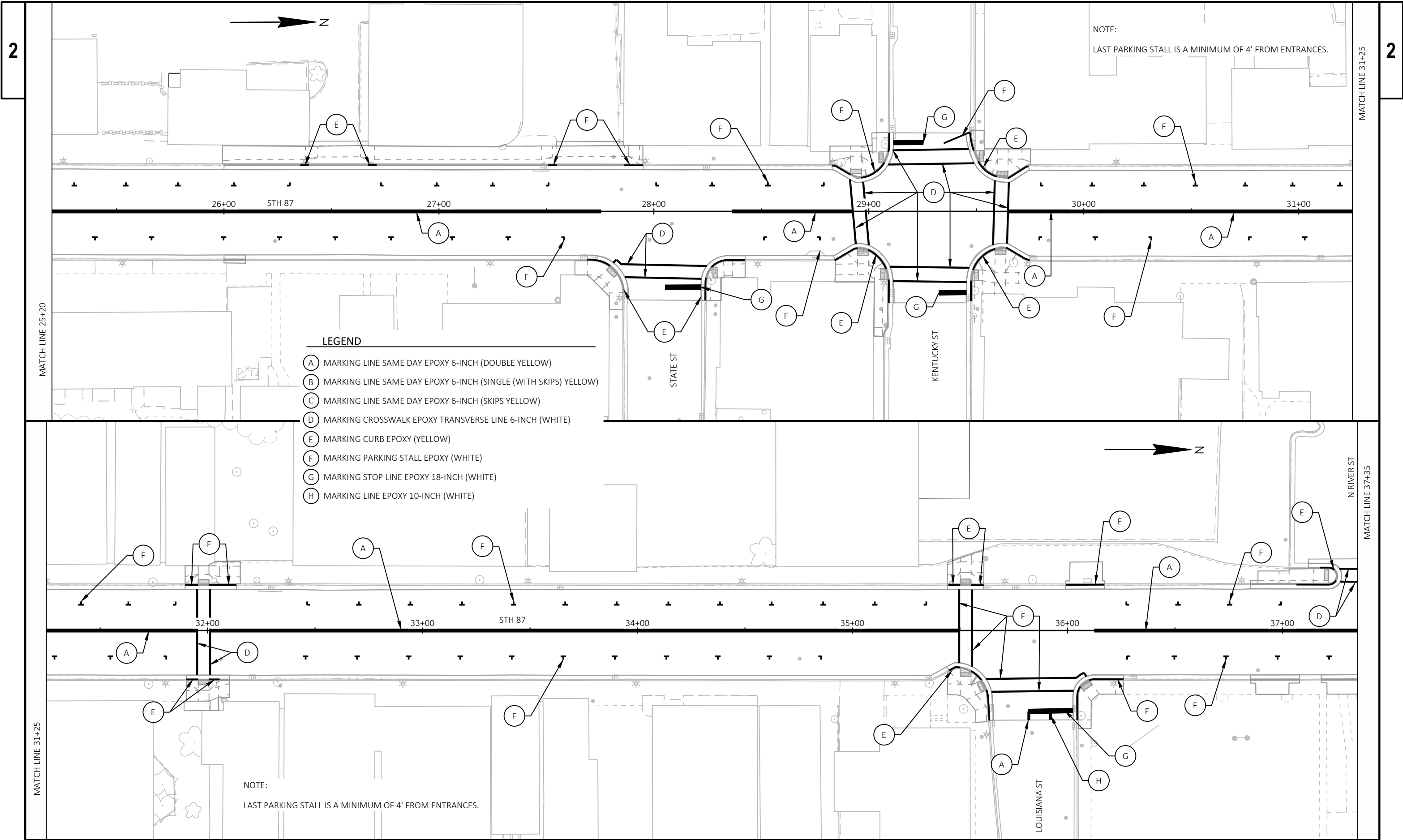
- (1) SEE PLAN DETAIL SHEETS FOR BEACON AND PUSH BUTTON LOCATIONS
- (2) EACH RRFB POLE SHALL HAVE ONE W16-7L SIGN OR ONE W16-7R SIGN, DEPENDING ON LOCATION. THE ARROW SHALL BE DIRECTED TOWARDS THE CROSSWALK.
- (3) LOCATE R10-25 SIGN ABOVE PUSH BUTTON.
- (4) LIGHT BAR, CONTROLS, WIRELESS RADIO, HARDWARE, WIRING, AND INCIDENTALS ARE CONSIDERED PART OF THE "RECTANGULAR RAPID FLASHING BEACON (RRFB) SYSTEM" BID ITEM. OTHER ITEMS WILL BE PAID FOR SEPARATELY.
- (5) LOCATE BASES TO PROVIDE 1.5 FEET OR LESS REACH FROM ADA ACCESSIBLE AREA.



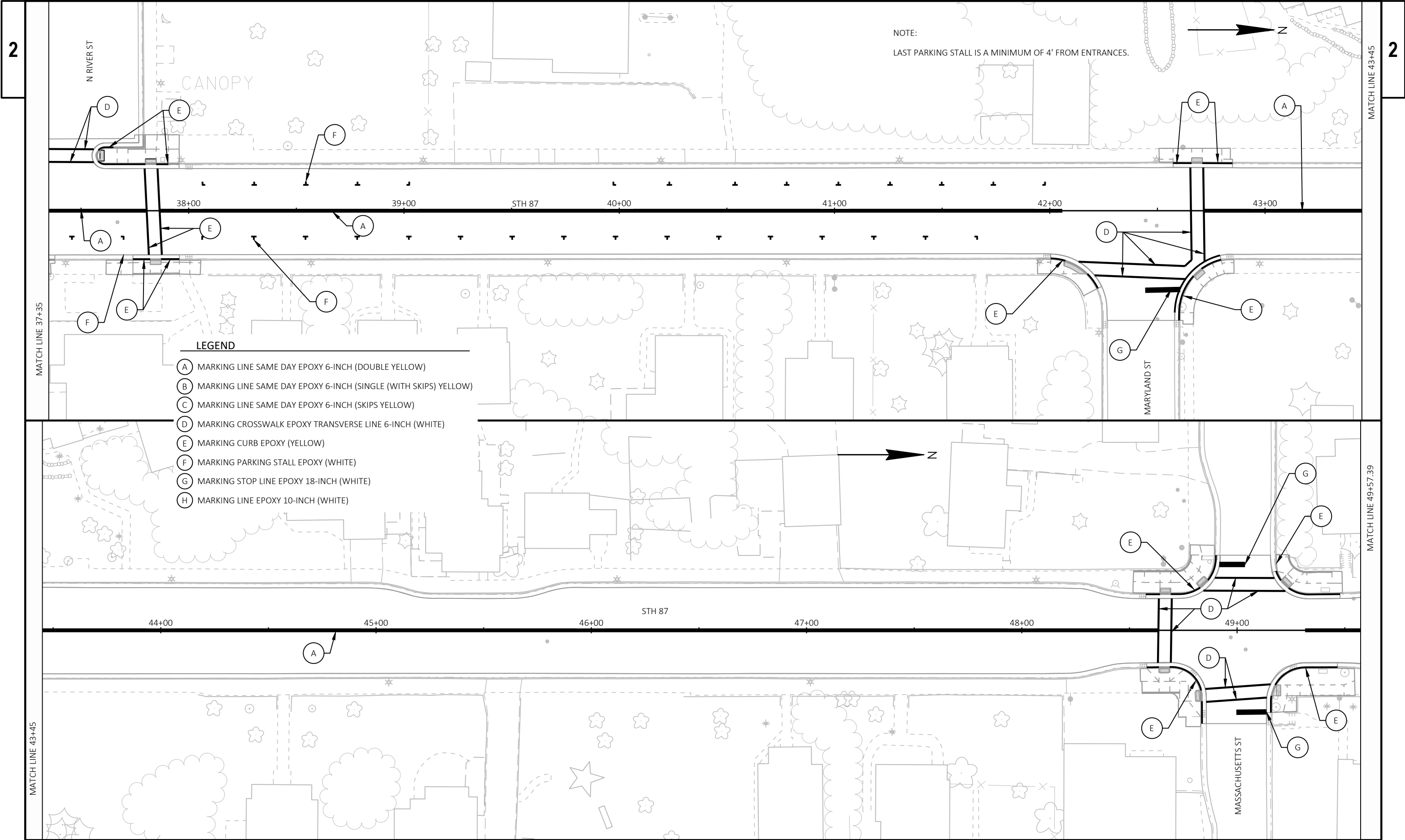
PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	PAVEMENT MARKING	SHEET	E
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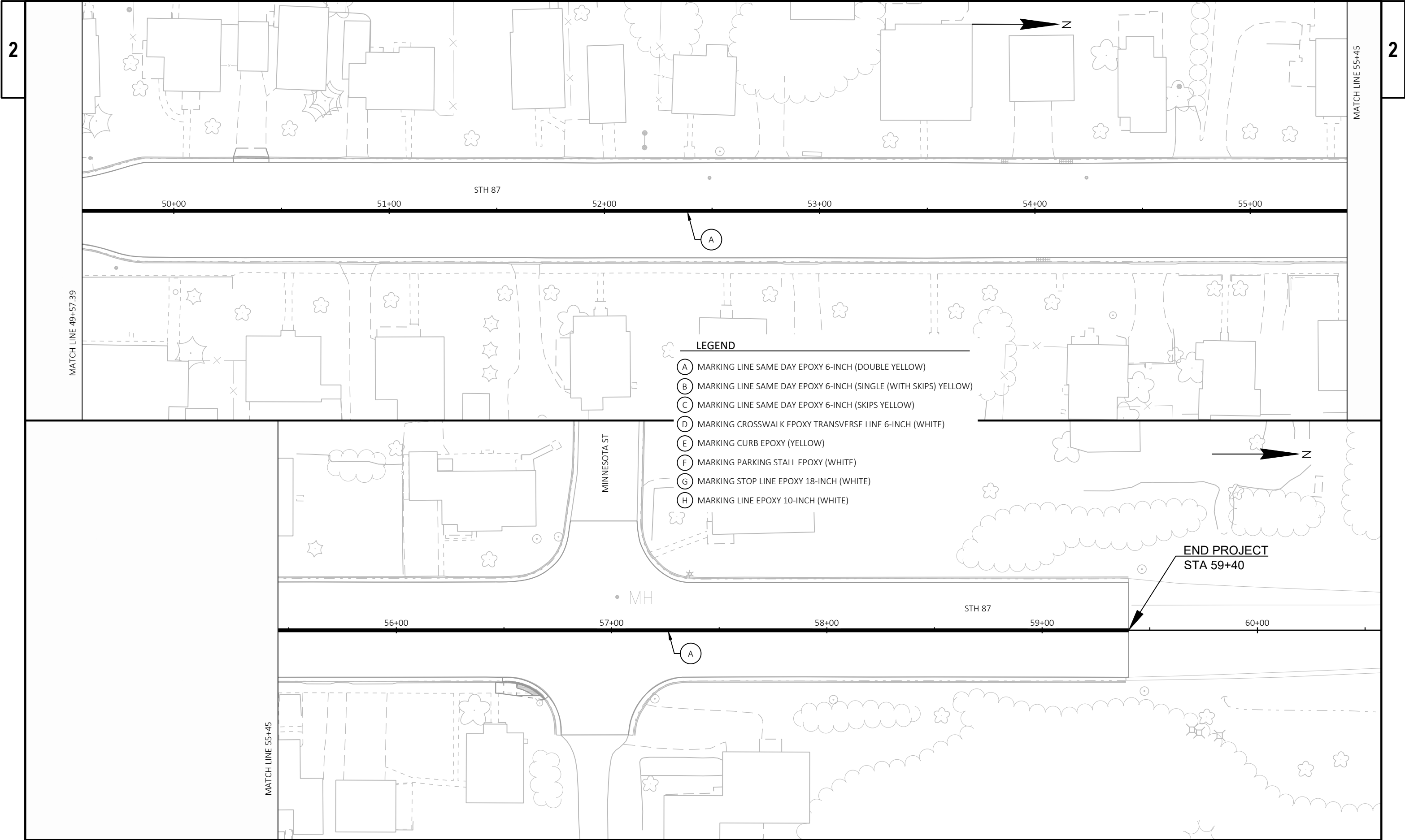


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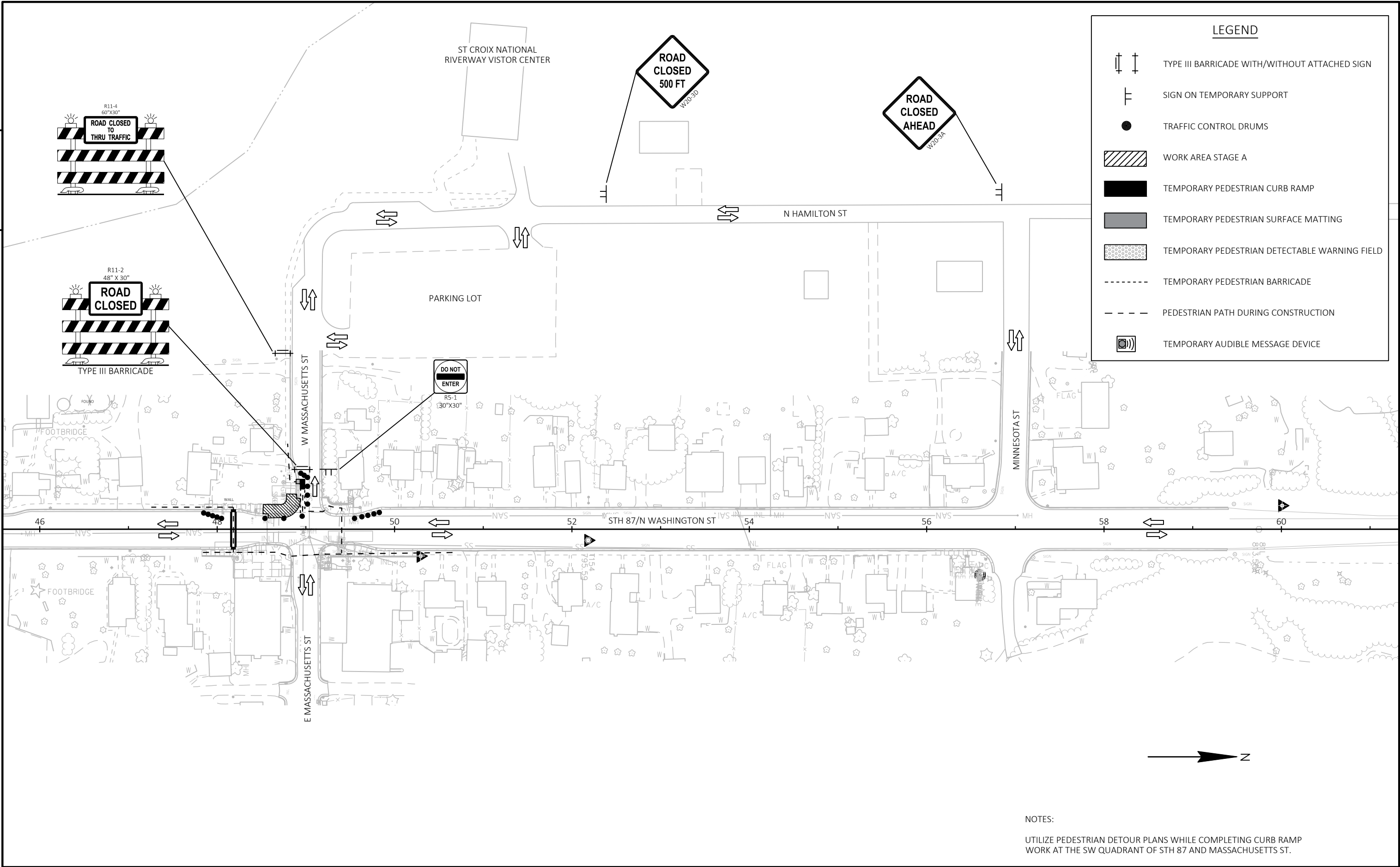


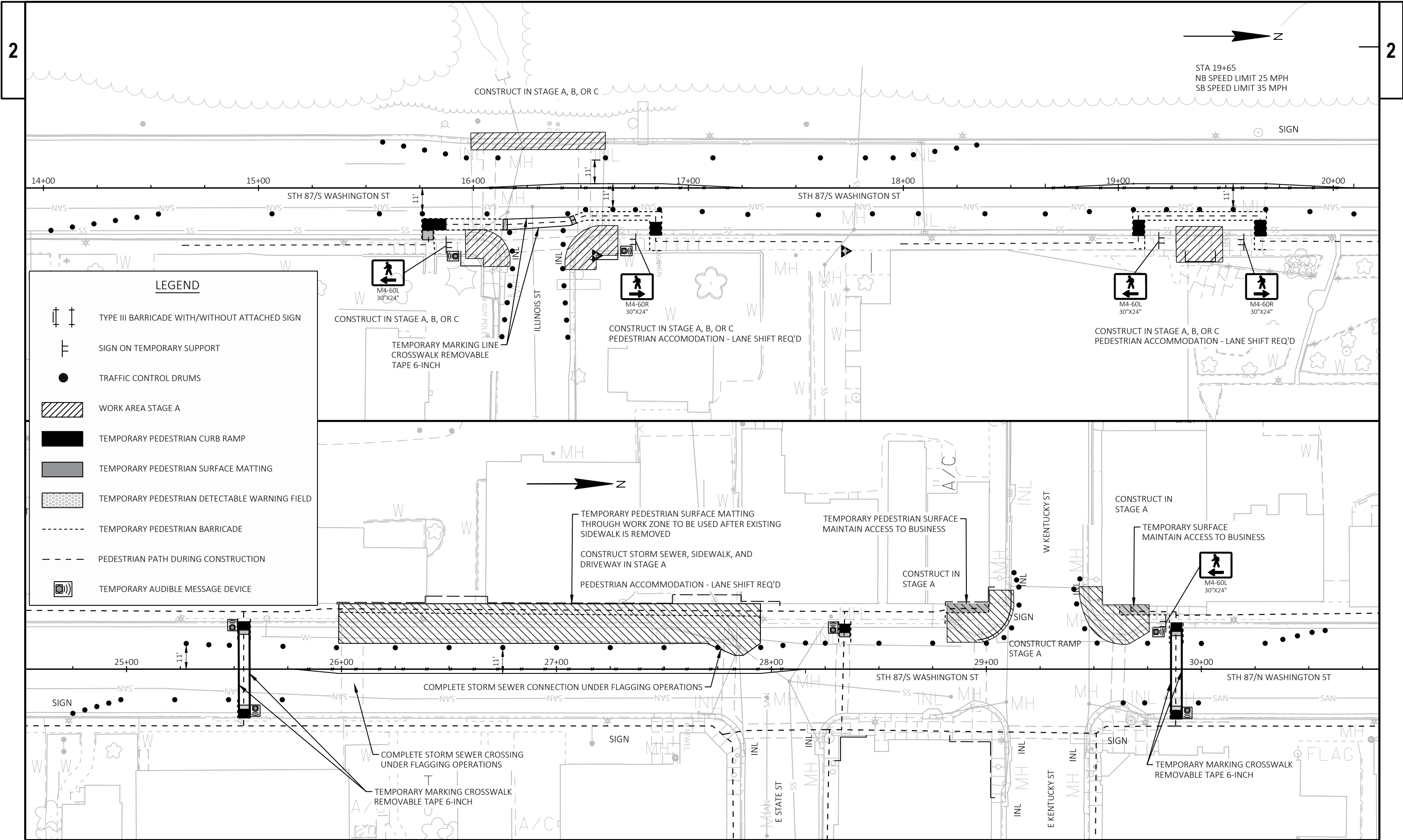
PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	PAVEMENT MARKING	SHEET	E
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PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	PAVEMENT MARKING	SHEET	E
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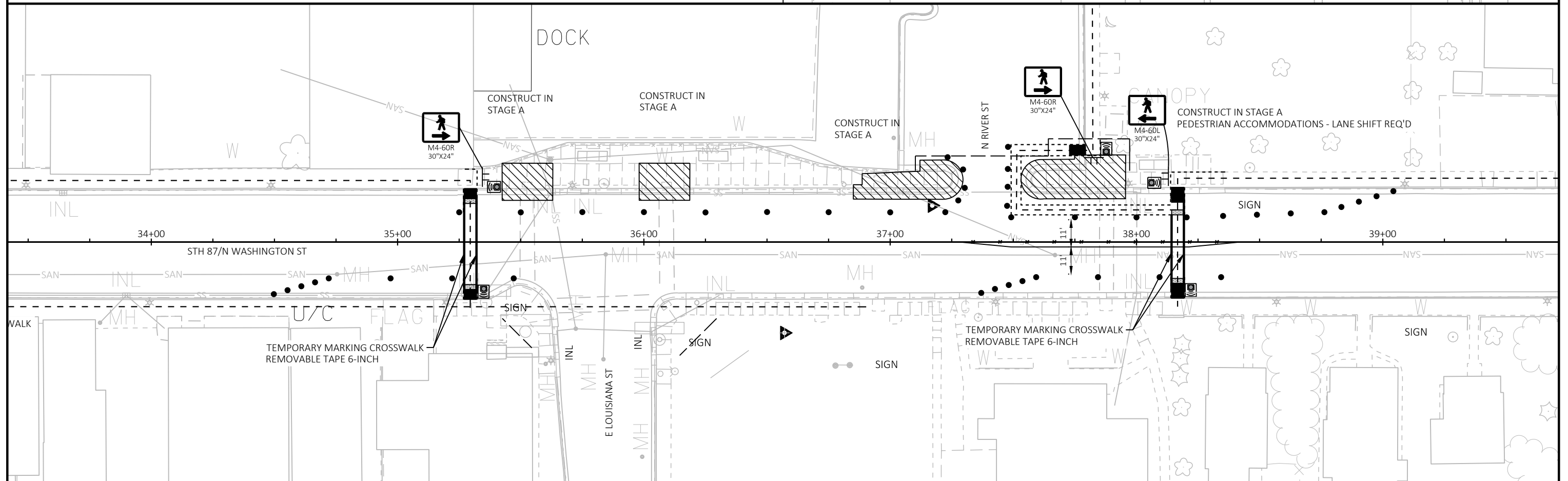




PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	PEDESTRIAN DETOUR STAGE A	SHEET	E
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LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUMS
- WORK AREA STAGE A
- TEMPORARY PEDESTRIAN CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MATTING
- TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- PEDESTRIAN PATH DURING CONSTRUCTION
- TEMPORARY AUDIBLE MESSAGE DEVICE



PROJECT NO: 8840-00-70

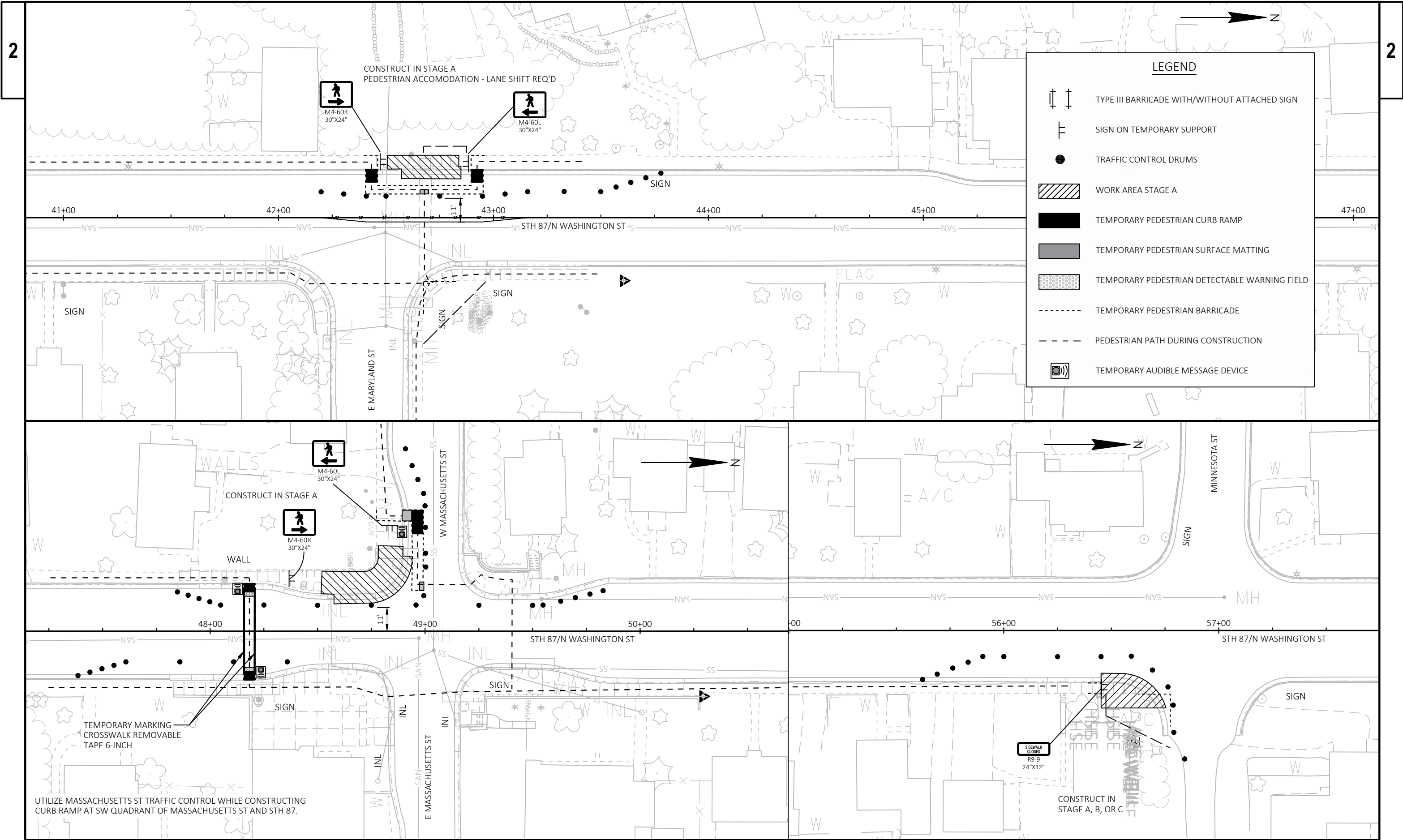
HWY: STH 87

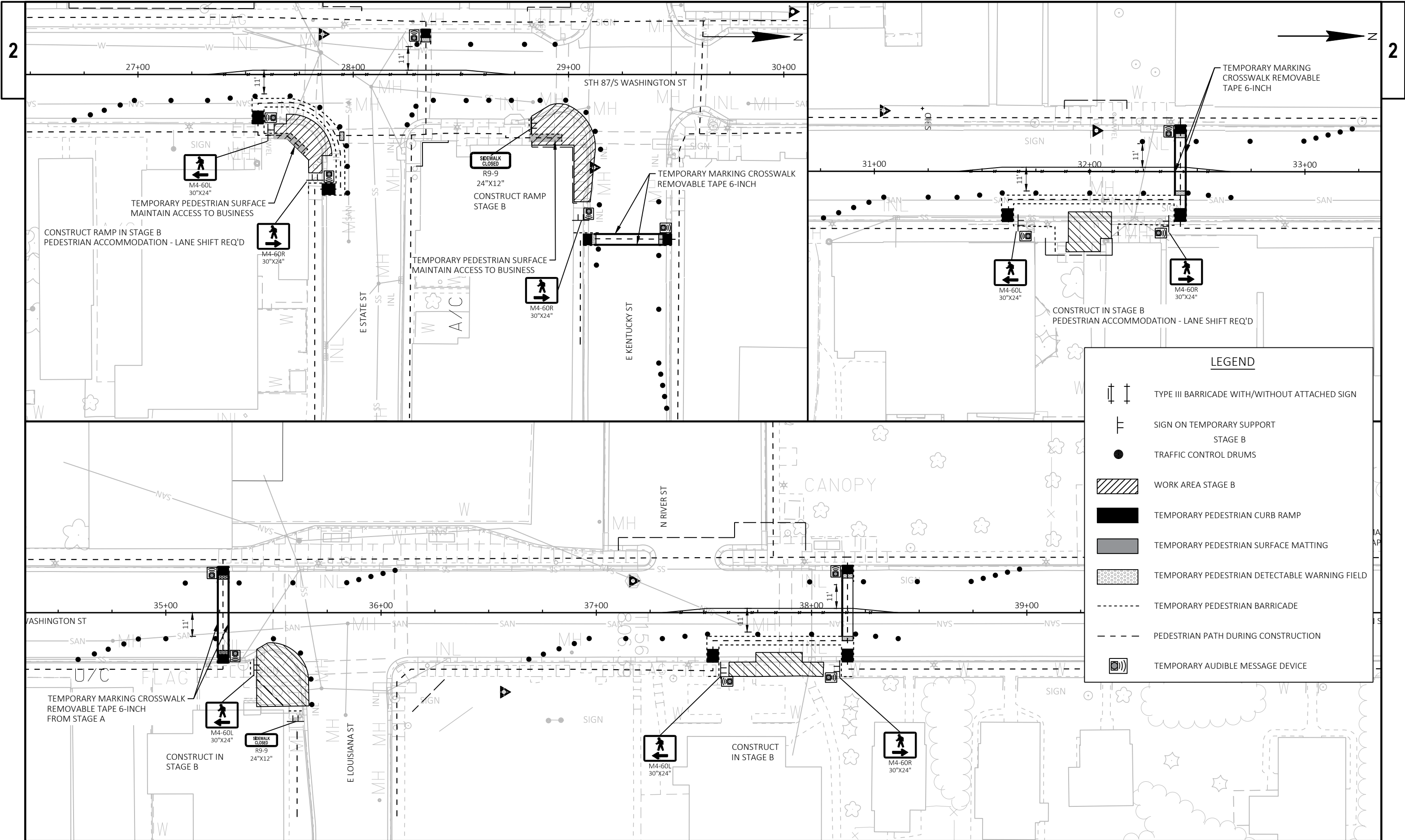
COUNTY: POLK

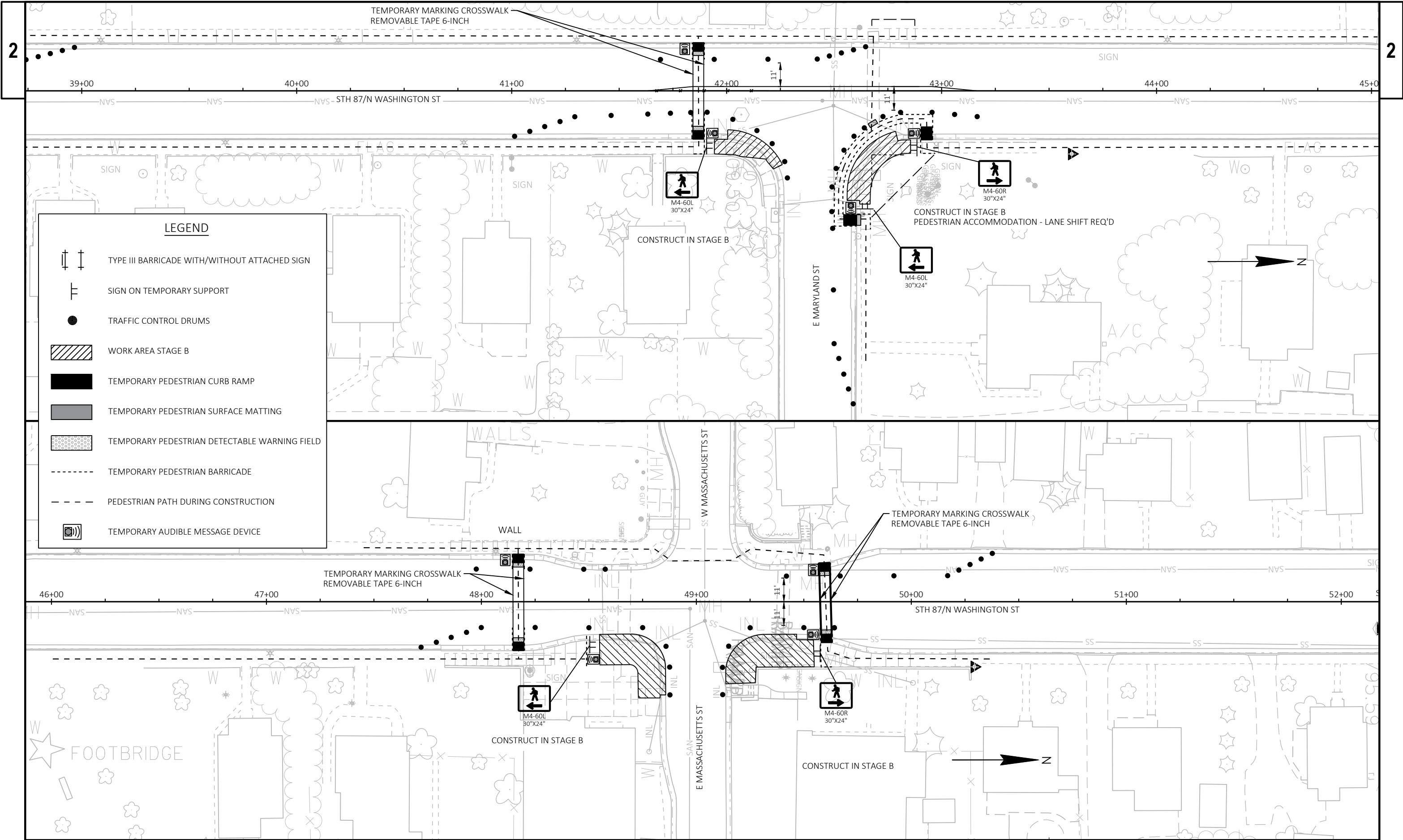
PEDESTRIAN DETOUR STAGE A

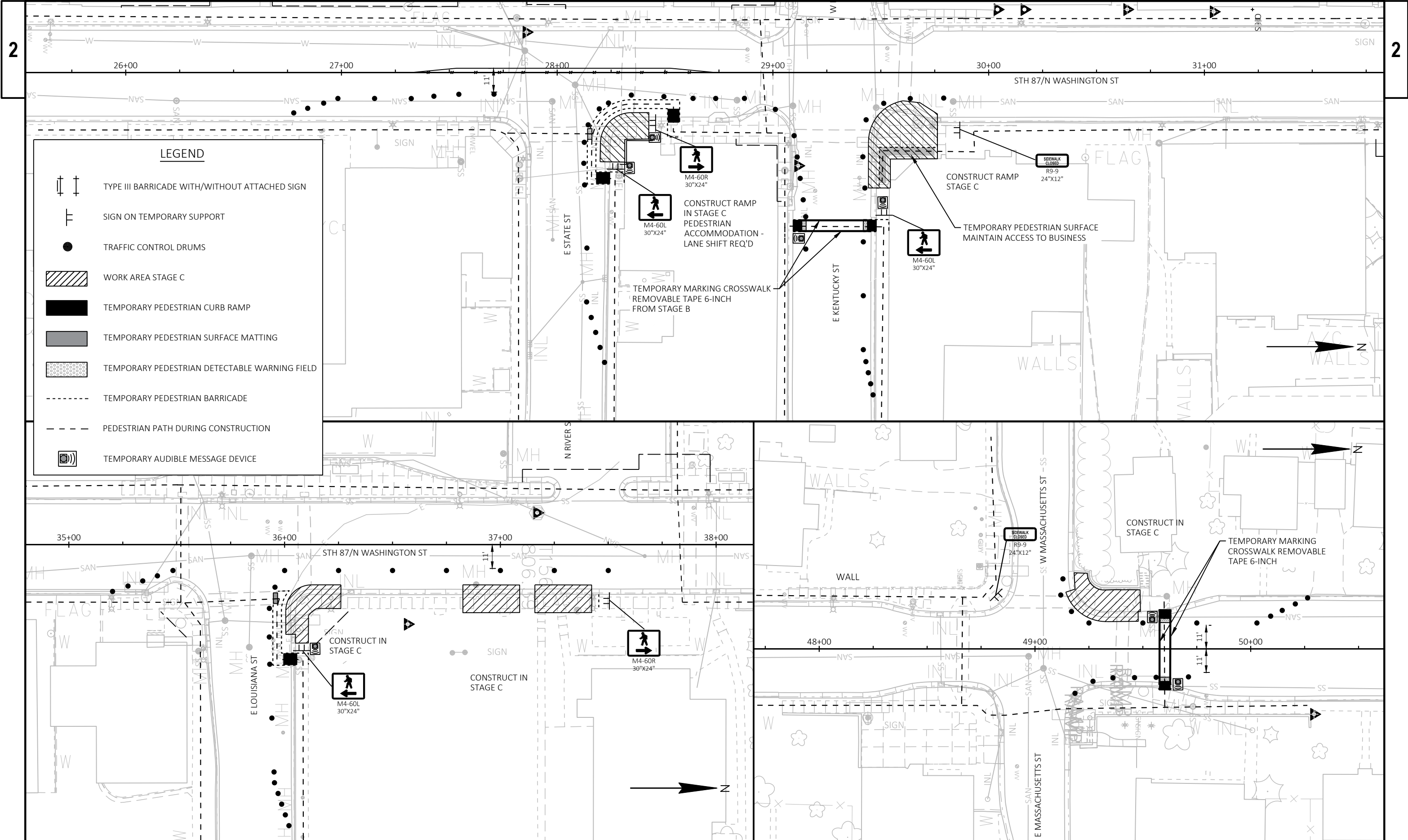
SHEET

E



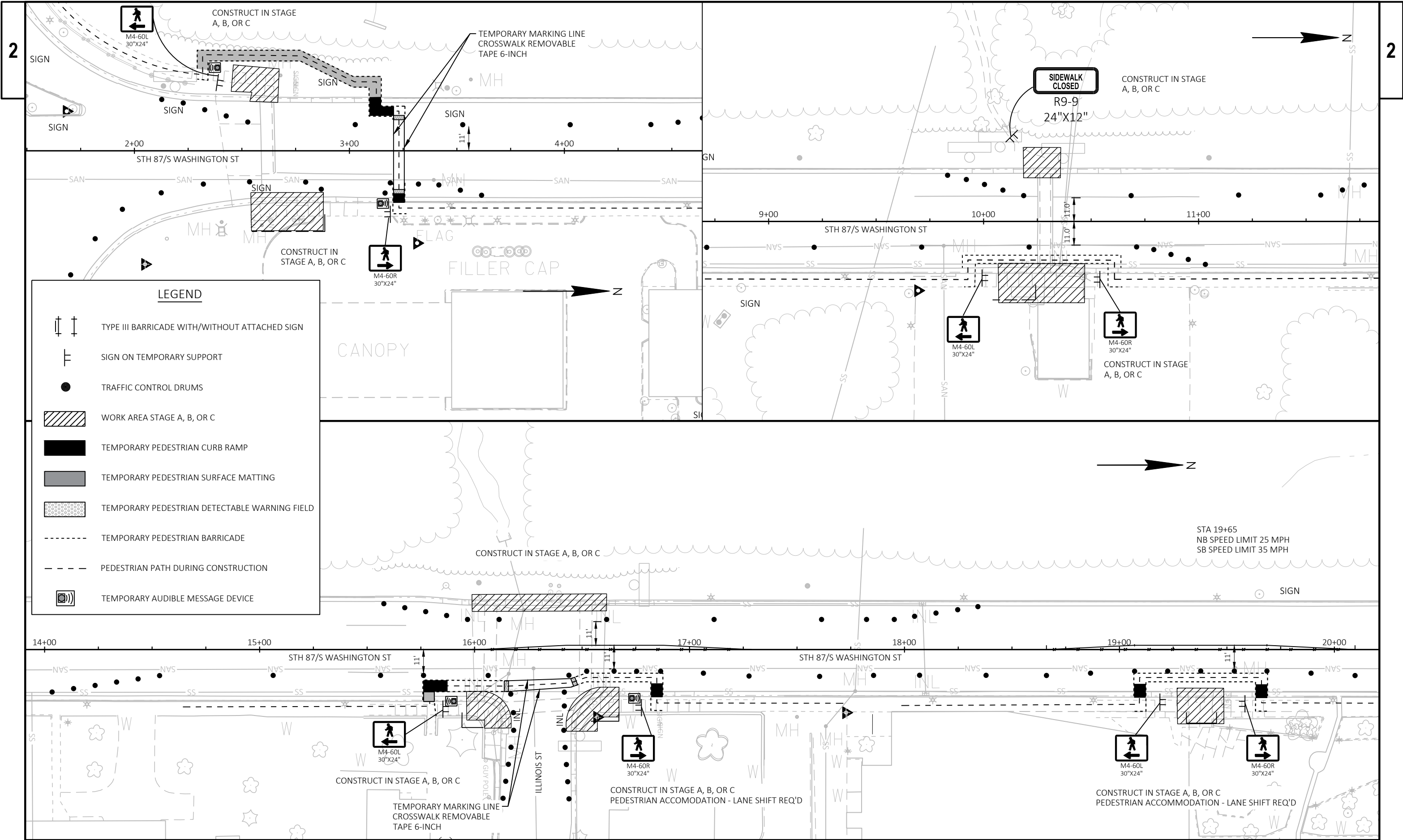






LEGEND

- TYPE III BARRICADE WITH/WITHOUT ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUMS
- WORK AREA STAGE C
- TEMPORARY PEDESTRIAN CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE MATTING
- TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- PEDESTRIAN PATH DURING CONSTRUCTION
- TEMPORARY AUDIBLE MESSAGE DEVICE



PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	PEDESTRIAN DETOUR STAGE A B OR C	SHEET E
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Estimate Of Quantities

8840-00-70					
Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	63.000	63.000
0004	204.0109.S	Removing Concrete Surface Partial Depth	SF	87.000	87.000
0006	204.0110	Removing Asphaltic Surface	SY	280.000	280.000
0008	204.0115	Removing Asphaltic Surface Butt Joints	SY	488.000	488.000
0010	204.0120	Removing Asphaltic Surface Milling	SY	26,650.000	26,650.000
0012	204.0150	Removing Curb & Gutter	LF	1,261.000	1,261.000
0014	204.0155	Removing Concrete Sidewalk	SY	1,029.000	1,029.000
0016	204.0195	Removing Concrete Bases	EACH	1.000	1.000
0018	204.0220	Removing Inlets	EACH	1.000	1.000
0020	204.0245	Removing Storm Sewer (size) 01. 12-Inch	LF	38.000	38.000
0022	204.0245	Removing Storm Sewer (size) 02. 42-Inch	LF	21.000	21.000
0024	205.0100	Excavation Common	CY	127.000	127.000
0026	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 8840-00-70	EACH	1.000	1.000
0028	213.0100	Finishing Roadway (project) 01. 8840-00-70	EACH	1.000	1.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	243.000	243.000
0032	450.4000	HMA Cold Weather Paving	TON	1,240.000	1,240.000
0034	455.0605	Tack Coat	GAL	3,255.000	3,255.000
0036	460.2000	Incentive Density HMA Pavement	DOL	3,170.000	3,170.000
0038	460.5225	HMA Pavement 5 LT 58-28 S	TON	4,938.000	4,938.000
0040	465.0105	Asphaltic Surface	TON	247.000	247.000
0042	465.0110	Asphaltic Surface Patching	TON	249.000	249.000
0044	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	5.000	5.000
0046	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	6.000	6.000
0048	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	1,256.000	1,256.000
0050	601.0600	Concrete Curb Pedestrian	LF	131.000	131.000
0052	602.0405	Concrete Sidewalk 4-Inch	SF	9,159.000	9,159.000
0054	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	340.000	340.000
0056	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	41.000	41.000
0058	602.0810	Concrete Driveway 6-Inch	SY	58.000	58.000
0060	608.0448	Storm Sewer Pipe Reinforced Concrete Class IV 48-Inch	LF	20.000	20.000
0062	611.0610	Inlet Covers Type BW	EACH	1.000	1.000
0064	611.0624	Inlet Covers Type H	EACH	2.000	2.000
0066	611.2007	Manholes 7-FT Diameter	EACH	1.000	1.000
0068	611.8110	Adjusting Manhole Covers	EACH	17.000	17.000
0070	611.8115	Adjusting Inlet Covers	EACH	10.000	10.000
0072	611.8120.S	Cover Plates Temporary	EACH	38.000	38.000
0074	618.0100	Maintenance and Repair of Haul Roads (project) 01. 8840-00-70	EACH	1.000	1.000
0076	619.1000	Mobilization	EACH	1.000	1.000
0078	624.0100	Water	MGAL	8.000	8.000
0080	625.0100	Topsoil	SY	170.000	170.000
0082	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0084	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0086	628.2008	Erosion Mat Urban Class I Type B	SY	170.000	170.000
0088	628.7005	Inlet Protection Type A	EACH	3.000	3.000
0090	628.7015	Inlet Protection Type C	EACH	59.000	59.000
0092	629.0210	Fertilizer Type B	CWT	0.200	0.200
0094	630.0140	Seeding Mixture No. 40	LB	8.000	8.000
0096	630.0200	Seeding Temporary	LB	5.000	5.000
0098	630.0500	Seed Water	MGAL	4.000	4.000

Estimate Of Quantities

8840-00-70

Line	Item	Item Description	Unit	Total	Qty
0100	637.2210	Signs Type II Reflective H	SF	1.500	1.500
0102	637.2230	Signs Type II Reflective F	SF	69.000	69.000
0104	642.5001	Field Office Type B	EACH	1.000	1.000
0106	643.0300	Traffic Control Drums	DAY	7,780.000	7,780.000
0108	643.0420	Traffic Control Barricades Type III	DAY	28.000	28.000
0110	643.0705	Traffic Control Warning Lights Type A	DAY	56.000	56.000
0112	643.0900	Traffic Control Signs	DAY	3,720.000	3,720.000
0114	643.3105	Temporary Marking Line Paint 4-Inch	LF	2,740.000	2,740.000
0116	643.3165	Temporary Marking Line Paint 6-Inch	LF	18,280.000	18,280.000
0118	643.3350	Temporary Marking Crosswalk Removable Tape 6-inch	LF	830.000	830.000
0120	643.5000	Traffic Control	EACH	1.000	1.000
0122	644.1440	Temporary Pedestrian Surface Matting	SF	1,905.000	1,905.000
0124	644.1601	Temporary Pedestrian Curb Ramp	DAY	754.000	754.000
0126	644.1605	Temporary Pedestrian Detectable Warning Field	SF	430.000	430.000
0128	644.1810	Temporary Pedestrian Barricade	LF	3,660.000	3,660.000
0130	644.1900.S	Temporary Audible Message Devices	DAY	672.000	672.000
0132	646.4020	Marking Line Epoxy 10-Inch	LF	5.000	5.000
0134	646.4720	Marking Line Same Day Epoxy 6-Inch	LF	9,370.000	9,370.000
0136	646.6120	Marking Stop Line Epoxy 18-Inch	LF	130.000	130.000
0138	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	1,334.000	1,334.000
0140	646.8120	Marking Curb Epoxy	LF	669.000	669.000
0142	646.8320	Marking Parking Stall Epoxy	LF	673.000	673.000
0144	646.9000	Marking Removal Line 4-Inch	LF	2,010.000	2,010.000
0146	650.4000	Construction Staking Storm Sewer	EACH	3.000	3.000
0148	650.4500	Construction Staking Subgrade	LF	195.000	195.000
0150	650.5000	Construction Staking Base	LF	195.000	195.000
0152	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	1,127.000	1,127.000
0154	650.8000	Construction Staking Resurfacing Reference	LF	5,681.000	5,681.000
0156	650.8501	Construction Staking Electrical Installations (project) 01. 8840-00-70	EACH	1.000	1.000
0158	650.9000	Construction Staking Curb Ramps	EACH	36.000	36.000
0160	650.9500	Construction Staking Sidewalk (project) 01. 8840-00-70	EACH	1.000	1.000
0162	650.9911	Construction Staking Supplemental Control (project) 01. 8840-00-70	EACH	1.000	1.000
0164	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	10.000	10.000
0166	652.0605	Conduit Special 2-Inch	LF	50.000	50.000
0168	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	2.000	2.000
0170	654.0102	Concrete Bases Type 2	EACH	2.000	2.000
0172	654.0105	Concrete Bases Type 5	EACH	1.000	1.000
0174	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	2.000	2.000
0176	657.0305	Poles Type 2	EACH	2.000	2.000
0178	657.0590	Trombone Arms 20-FT	EACH	1.000	1.000
0180	657.0595	Trombone Arms 25-FT	EACH	1.000	1.000
0182	658.0500	Pedestrian Push Buttons	EACH	2.000	2.000
0184	690.0150	Sawing Asphalt	LF	3,330.000	3,330.000
0186	690.0250	Sawing Concrete	LF	670.000	670.000
0188	740.0440	Incentive IRI Ride	DOL	4,304.000	4,304.000
0190	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0192	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	300.000	300.000
0194	SPV.0060	Special 01. Connect to Existing Storm Sewer Pipe	EACH	1.000	1.000
0196	SPV.0060	Special 02. Connect to Existing Storm Sewer Manhole	EACH	1.000	1.000

Estimate Of Quantities

8840-00-70

Line	Item	Item Description	Unit	Total	Qty
0198	SPV.0060	Special 03. Brick and Mortar Manhole	EACH	1.000	1.000
0200	SPV.0060	Special 04. Adjusting Water Valve Covers	EACH	17.000	17.000
0202	SPV.0060	Special 05. Relocate Existing Light Pole	EACH	1.000	1.000
0204	SPV.0060	Special 06. Inlets Special	EACH	2.000	2.000
0206	SPV.0060	Special 07. Rectangular Rapid Flashing Beacon (RRFB) System - STA 31+95 LT	EACH	1.000	1.000
0208	SPV.0060	Special 08. Rectangular Rapid Flashing Beacon (RRFB) System - STA 31+95 RT	EACH	1.000	1.000
0210	SPV.0090	Special 01. Storm Sewer Pipe 12-Inch	LF	43.000	43.000
0212	SPV.0090	Special 02. Storm Sewer Pipe 18-Inch	LF	174.000	174.000
0214	SPV.0165	Special 01. Removing Roadway Pavers	SF	630.000	630.000

204.0100 REMOVING CONCRETE PAVEMENT						
CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	10+11	-	10+23	RT	9	DRIVEWAY ENTRANCE
0010	26+40	-	26+64	LT	22	DRIVEWAY ENTRANCE
0010	27+55	-	27+88	LT	32	DRIVEWAY ENTRANCE
TOTAL 0010					63	

204.0110 REMOVING ASPHALTIC SURFACE						
CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	2+59	-	59+40	LT/RT	240	CURB REPLACEMENTS
0010	2+59	-	2+68	LT/RT	5	REMOVING ROADWAY PAVERS
0010	10+11	-	10+22	RT	5	ASPHALTIC DRIVEWAYS
0010	10+25	-	10+34	LI/RI	10	REMOVING ROADWAY PAVERS
0010	26+40	-	26+67	LT	7	ASPHALTIC DRIVEWAYS
0010	27+55	-	27+88	LT	7	ASPHALTIC DRIVEWAYS
0010	27+55	-	27+88	RT	6	ASPHALTIC SURFACE PATCHING
TOTAL 0010					280	

204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS		
CATEGORY	LOCATION	SY
0010	BEGIN PROJECT	50
0010	ILLINOIS ST	34
0010	E STATE ST	37
0010	W KENTUCKY ST	39
0010	E KENTUCKY ST	38
0010	E LOUISIANA ST	42
0010	N RIVER ST	31
0010	E MARYLAND ST	36
0010	W MASSACHUSETTS ST	28
0010	E MASSACHUSETTS ST	32
0010	MINNESOTA ST	36
0010	MINNESOTA ST (EAST)	36
0010	END PROJECT	49
TOTAL 0010		488

204.0109.S REMOVING CONCRETE SURFACE PARTIAL DEPTH				
CATEGORY	STATION	LOCATION	SF	REMARKS
0010	6+55	RT	7	MILLING CONCRETE GUTTER
0010	6+70	LT	11	MILLING CONCRETE GUTTER
0010	6+70	RT	6	MILLING CONCRETE GUTTER
0010	16+00	RI	7	MILLING CONCRETE GUTTER
0010	16+15	RT	5	MILLING CONCRETE GUTTER
0010	22+95	RT	12	MILLING CONCRETE GUTTER
0010	28+20	RT	12	MILLING CONCRETE GUTTER
0010	28+75	RT	16	MILLING CONCRETE GUTTER
0010	32+30	LT	11	MILLING CONCRETE GUTTER
TOTAL 0010			87	

204.0120 REMOVING ASPHALTIC SURFACE MILLING		
CATEGORY	LOCATION	SY
0010	USH 8 TO ILLINOIS ST	5,470
0010	ILLINOIS ST TO STATE ST	3,770
0010	STATE ST TO KENTUCKY ST	530
0010	KENTUCKY ST TO E LOUISIANA ST	2,200
0010	E LOUISIANA ST TO E MARYLAND ST	2,260
0010	E MARYLAND ST TO MASSACHUSETTS ST	2,230
0010	MASSACHUSETTS ST TO MINNESOTA ST	2,720
0010	MINNESOTA ST TO END OF PROJECT	980
TOTAL 0010		20,160
0020	USH 8 TO ILLINOIS ST	1,200
0020	ILLINOIS ST TO STATE ST	1,490
0020	STATE ST TO KENTUCKY ST	80
0020	KENTUCKY ST TO E LOUISIANA ST	740
0020	E LOUISIANA ST TO E MARYLAND ST	770
0020	E MARYLAND ST TO MASSACHUSETTS ST	710
0020	MASSACHUSETTS ST TO MINNESOTA ST	1,220
0020	MINNESOTA ST TO END OF PROJECT	280
TOTAL 0020		6,490
PROJECT TOTAL		26,650

204.0150 REMOVING CURB & GUTTER					
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	2+56		2+67	LT	11
0010	2+57	-	2+85	RT	29
0010	10+14	-	10+43	RT	29
0010	10+21	-	10+34	LT	13
0010	SW ILLINOIS ST			LT	15
0010	SE ILLINOIS ST			RT	18
0010	NW ILLINOIS ST			LT	20
0010	NE ILLINOIS ST			RT	19
0010	19+32	-	19+44	RT	12
0010	26+00	-	27+95	LT	195
0010	26+00	-	26+10	RI	10
0010	SE STATE ST			RT	26
0010	NE STATE ST			RT	33
0010	SW KENTUCKY ST			LT	43
0010	SE KENTUCKY ST			RT	46
0010	NW KENTUCKY ST			LT	42
0010	NE KENTUCKY ST			RT	47
0010	31+89	-	32+14	LT	24
0010	31+90	-	32+10	RI	20
0010	SW LOUISIANA ST			LT	17
0010	SE LOUISIANA ST			RT	37
0010	NW LOUISIANA ST			LT	18
0010	NE LOUISIANA ST			RT	37
0010	36+85	-	37+08	RI	23
0010	SW RIVER ST			LT	59
0010	SE RIVER ST			RT	20
0010	NW RIVER ST			LT	71
0010	NE RIVER ST			RT	22
0010	SE MARYLAND ST			RT	28
0010	NW MARYLAND ST			LT	28
0010	NE MARYLAND ST			RT	38
0010	SW MASSACHUSETTS ST			LT	44
0010	SE MASSACHUSETTS ST			RT	46
0010	NW MASSACHUSETTS ST			LT	35
0010	NE MASSACHUSETTS ST			RI	46
0010	50+27	-	50+44	LT	17
0010	SE MINNESOTA ST			RT	23
TOTAL 0010					1,261

					204.0155
					REMOVING
					CONCRETE
					SIDEWALK
CATEGORY	STATION	TO	STATION	LOCATION	SY
0010	2+47	-	2+65	LT	15
0010	2+58	-	2+86	RT	20
0010	10+11	-	10+46	RT	26
0010	SE ILLINOIS ST			RT	13
0010	NE ILLINOIS ST			RT	15
0010	19+33	-	19+43	RT	12
0010	25+99	-	27+95	LT	128
0010	25+99	-	26+10	RT	2
0010	SE STATE ST			RT	29
0010	NE STATE ST			RT	22
0010	SW KENTUCKY ST			LT	39
0010	SE KENTUCKY ST			RT	51
0010	NW KENTUCKY ST			LT	35
0010	NE KENTUCKY ST			RT	64
0010	31+89	-	32+15	LT	27
0010	31+96	-	32+14	RT	23
0010	SW LOUISIANA ST			LT	25
0010	SE LOUISIANA ST			RT	31
0010	NW LOUISIANA ST			LT	18
0010	NE LOUISIANA ST			RT	26
0010	SW RIVER ST			RT	26
0010	36+85	-	37+38	RT	25
0010	NE RIVER ST			LT	32
0010	NW RIVER ST			LT	41
0010	SE MARYLAND ST			RT	22
0010	NW MARYLAND ST			LT	24
0010	NE MARYLAND ST			RT	30
0010	SW MASSACHUSETTS ST			LT	54
0010	SE MASSACHUSETTS ST			RT	49
0010	NW MASSACHUSETTS ST			LT	37
0010	NE MASSACHUSETTS ST			RT	59
0010	SE MINNESOTA ST			RT	9
TOTAL 0010					1,029

					601.0600
					CONCRETE CURB
					PEDESTRIAN
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	S MIDBLOCK E			RT	19
0010	NE RIVER ST			RT	22
0010	NW RIVER ST			LT	15
0010	SW MASSACHUSETTS ST			LT	32
0010	SE MASSACHUSETTS ST			RT	18
0010	NW MASSACHUSETTS ST			LT	25
TOTAL 0010					131

					204.0220	204.0245.01	204.0245.02
					REMOVING	REMOVING	REMOVING
					STORM SEWER	STORM SEWER	STORM SEWER
					REMOVING	(SIZE) (01. 12-	(SIZE) (02. 42-
					INLETS	INCH)	INCH)
CATEGORY	STATION	TO	STATION	LOCATION	EACH	LF	LF
0010	27+49	-	27+85	LT	1	38	-
0010	27+74	-	27+85	LT	-	-	21
TOTAL 0010					1	38	21

		450.4000	455.0605	460.5225
		HMA COLD		
		WEATHER		HMA PAVEMENT
		PAVING	TACK COAT	5 LT 58-28 S
CATEGORY	LOCATION	TON	GAL	TON
0010	USH 8 TO ILLINOIS ST	253	664	1,010
0010	ILLINOIS ST TO STATE ST	173	457	692
0010	STATE ST TO KENTUCKY ST	28	73	110
0010	KENTUCKY ST TO E LOUISIANA ST	103	271	410
0010	E LOUISIANA ST TO E MARYLAND ST	106	279	423
0010	E MARYLAND ST TO MASSACHUSETTS ST	104	273	414
0010	MASSACHUSETTS ST TO MINNESOTA ST	127	334	507
0010	MINNESOTA ST TO END OF PROJECT	49	127	193
TOTAL 0010		943	2,478	3,759
0020	USH 8 TO ILLINOIS ST	55	144	218
0020	ILLINOIS ST TO STATE ST	68	179	271
0020	STATE ST TO KENTUCKY ST	4	9	14
0020	KENTUCKY ST TO E LOUISIANA ST	34	89	135
0020	E LOUISIANA ST TO E MARYLAND ST	35	92	140
0020	E MARYLAND ST TO MASSACHUSETTS ST	32	85	128
0020	MASSACHUSETTS ST TO MINNESOTA ST	56	146	222
0020	MINNESOTA ST TO END OF PROJECT	13	33	51
TOTAL 0020		297	777	1,179
PROJECT TOTAL		1,240	3,255	4,938

					205.0100	305.0120	624.0100
					EXCAVATION	BASE	
					COMMON	AGGREGATE	
						DENSE 1 1/4-	
CATEGORY	STATION	TO	STATION	LOCATION	CY	INCH TON	WATER MGAL
0010	CURB RAMPS/SIDEWALK**			ML	41	80	2
0010	2+59	-	2+64	ML	-	15	1
0010	10+26	-	10+31	ML	-	15	1
0010	26+00	-	27+95	ML	86	130	3
0010	50+27	-	50+44	LT	-	3	1
TOTAL 0010					127	243	8

**NOTE: EXCAVATION BELOW SIDEWALK AND DRIVEWAY BETWEEN STA 26+00 LT - STA 27+95 LT SHALL BE PAID AS EXCAVATION COMMON.

				602.0810
				CONCRETE
				DRIVEWAY
				6-INCH
CATEGORY	STATION	LOCATION	SY	
0010	26+54	LT	22	
0010	27+64	LT	36	
TOTAL 0010			58	

* 465.0105 465.0110 465.0120 SPV.0165.01 ASPHALTIC SPECIAL SURFACE (01. ASPHALTIC DRIVEWAYS REMOVING SURFACE AND FIELD ROADWAY PATCHING ENTRANCES PAVERS) CATEGORY STATION TO STATION LOCATION TON TON TON SF REMARKS									
0010	2+59	-	2+64	LT/RT	-	9	-	320	MAINLINE
0010	10+11	-	10+31	LT/RT	-	10	1	310	MAINLINE & ASPHALTIC DRIVEWAY
0010	26+00	-	27+95	LT & RT	47	-	-	-	STORM SEWER WORK
0010	26+40	-	26+67	LT	-	-	2	-	ASPHALTIC DRIVEWAY
0010	27+55	-	27+86	LT	-	-	2	-	ASPHALTIC DRIVEWAY
0010	31+89	-	32+01	RT	-	1	-	-	ASPHALTIC SIDEWALK PATCH
0010	2+58	-	59+40	LT & RT	-	53	-	-	CURB REPLACEMENT
0010	2+58	-	59+40	LT & RT	200	-	-	-	LANE REPAIR AS NEEDED
0010	2+58	-	59+40	LT & RT	-	100	-	-	FILLING POTHOLES AND TRAFFIC POP-
TOTAL 0010					247	173	5	630	

* ITEM SHOWN ELSEWHERE IN PLAN

608.0448 SPV.0090.01 SPV.0090.02 STORM SEWER PIPE SPECIAL (01. SPECIAL (02. REINFORCED CONCRETE STORM SEWER STORM SEWER INLET DISCHARGE SLOPE CLASS IV 48-INCH PIPE 12-INCH) PIPE 18-INCH) ELEVATION ELEVATION FT/FT CATEGORY FROM - TO LOCATION LF LF LF										
0010	1	-	2	LT	-	43	-	806.00	805.75	0.0058
0010	2	-	3	LT	-	-	174	805.25	804.25	0.0057
0010	EXIST	-	3	LT	12	-	-	802.39	801.75	0.0529
0010	3	-	EXIST	LT	8	-	-	801.75	801.32	0.0543
TOTAL 0010					20	43	174			

					601.0409	601.0411	650.5500
					CONCRETE	CONCRETE	CONSTRUCTION
					CURB &	CURB &	STAKING CURB
					GUTTER 30-	GUTTER 30-	GUTTER AND
					INCH TYPE A	INCH TYPE D	CURB & GUTTER
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	LF
0010	2+56	-	2+67	LT	3	9	12
0010	2+57	-	2+85	RT	3	26	29
0010	10+14	-	10+43	LI	-	29	29
0010	10+21		10+34	RT		13	13
0010	SW ILLINOIS ST			LT	-	15	-
0010	SE ILLINOIS ST			RT	-	18	18
0010	NW ILLINOIS ST			LT	-	20	-
0010	NE ILLINOIS ST			RI	-	19	19
0010	19+32	-	19+44	RT		12	
0010	26+00	-	27+95	LT	-	195	195
0010	26+00	-	26+10	RT	-	10	-
0010	SE STATE ST			LT	-	26	26
0010	NE STATE ST			RT	-	33	33
0010	SW KENTUCKY ST			LT		43	43
0010	SE KENTUCKY ST			RT	-	46	46
0010	NW KENTUCKY ST			LT	-	42	42
0010	NE KENTUCKY ST			RT	-	47	47
0010	31+89	-	32+14	LT	-	24	24
0010	31+90		32+10	RT		20	20
0010	SW LOUISIANA ST			LT	-	17	17
0010	SE LOUISIANA ST			RT	-	37	37
0010	NW LOUISIANA ST			LT	-	18	-
0010	NE LOUISIANA ST			RT	-	37	37
0010	36+85		37+08	RT		23	
0010	SW RIVER ST			LT	-	59	59
0010	SE RIVER ST			RT	-	20	-
0010	NW RIVER ST			LT	-	71	71
0010	NE RIVER ST			RT	-	22	22
0010	SE MARYLAND ST			RT		28	28
0010	NW MARYLAND ST			LT	-	28	28
0010	NE MARYLAND ST			RT	-	38	38
0010	SW MASSACHUSETTS ST			LT	-	44	44
0010	SE MASSACHUSETTS ST			RT	-	46	46
0010	NW MASSACHUSETTS ST			LI	-	35	35
0010	NE MASSACHUSETTS ST			RT	-	46	46
0010	50+27	-	50+44	LT	-	17	-
0010	SE MINNESOTA ST			RT	-	23	23
TOTAL 0010					6	1,256	1,127

					602.0405	602.0505	602.0605	611.8115	650.9000
					CONCRETE	CURB RAMP	CURB RAMP		
					DETECTABLE	DETECTABLE	DETECTABLE		CONSTRUCTION
					4-INCH	YELLOW	RADIAL YELLOW	INLET COVERS	STAKING CURB
CATEGORY	STATION	TO	STATION	LOCATION	SF	SF	SF	EACH	RAMPS
									EACH
0010	2+52	-	2+65	LT	120	10	-	-	1
0010	2+58	-	2+70	RT	170	10	-	-	1
0010	10+11		10+46	RT	230	10		1	1
0010	10+24	-	10+29	LT	25	10	-	-	1
0010	SE ILLINOIS ST			RT	114	10	-	-	1
0010	NE ILLINOIS ST			RT	127	10	-	-	1
0010	19+33	-	19+43	RT	110	-	-	-	-
0010	26+00		26+10	RT	13				
0010	26+00	-	27+95	LT	1,140	-	-	-	-
0010	SE STATE ST			RT	260	10	-	1	1
0010	NE STATE SE			RT	190	10	-	1	1
0010	SW KENTUCKY ST			LT	350	20	-	-	2
0010	SE KENTUCKY ST			RT	460	20		1	2
0010	NW KENTUCKY ST			LT	320	20	-	-	2
0010	NE KENTUCKY ST			RT	570	20	-	1	2
0010	31+96	-	32+11	LT	250	10	-	-	1
0010	31+96	-	32+14	RT	210	10	-	-	1
0010	SW LOUISIANA ST			LT	220	10	-	-	1
0010	SF LOUISIANA ST			RT	280	20	-	1	2
0010	NW LOUISIANA ST			LT	160	-	-	-	-
0010	NE LOUISIANA ST			RT	230	10	-	1	1
0010	SW RIVER ST			LT	240	10	-	-	1
0010	SE RIVER ST			RT	220	-	-	-	-
0010	NW RIVER ST			LT	360	20	-	-	2
0010	NE RIVER ST			RT	280	10	-	-	1
0010	SE MARYLAND ST			RT	200	-	20	-	1
0010	NW MARYLAND ST			LT	220	10			1
0010	NE MARYLAND ST			RT	250	10	-	-	1
0010	SW MASSACHUSETTS ST			LT	470	20	-	-	2
0010	SE MASSACHUSETTS ST			RT	430	20	-	2	2
0010	NW MASSACHUSETTS ST			LT	320	10	-	-	1
0010	NE MASSACHUSETTS ST			RT	530	10		1	1
0010	SF MINNESOTA ST			RT	90	-	21	-	1
TOTAL 0010					9,159	340	41	10	36

			*		*	
			465.0110	611.8110	611.8120.S	690.0150
			ASPHALTIC	ADJUSTING		
			SURFACE	MANHOLE	COVER PLATES	SAWING
			PATCHING	COVERS	TEMPORARY	ASPHALT
CATEGORY	STATION	LOCATION	TON	EACH	EACH	LF
0010	6+59	RT	2	1	1	40
0010	8+05	RT	2	1	1	40
0010	11+68	RT	2	1	1	40
0010	11+70	LT	2	1	1	40
0010	13+05	RT	2	1	1	40
0010	16+16	RT	2	1	1	40
0010	16+23	LT	2	1	1	40
0010	27+85	LT	2	1	1	40
0010	28+08	RT	2	1	1	40
0010	28+83	RT	2	1	1	40
0010	29+09	RT	2	1	1	40
0010	29+48	RT	2	1	1	40
0010	35+72	RT	2	1	1	40
0010	36+89	RT	2	1	1	40
0010	42+50	RT	2	1	1	40
0010	42+50	RT	2	1	1	40
0010	49+04	RT	2	1	1	40
TOTAL 0010			34	17	17	680
0020	3+39	RT	2	-	1	40
0020	5+41	RT	2	-	1	40
0020	9+81	RT	2	-	1	40
0020	13+05	RT	2	-	1	40
0020	16+27	RT	2	-	1	40
0020	19+54	RT	2	-	1	40
0020	22+75	RT	2	-	1	40
0020	25+17	RT	2	-	1	40
0020	26+24	RT	2	-	1	40
0020	27+98	RT	2	-	1	40
0020	29+83	RT	2	-	1	40
0020	32+06	RT	2	-	1	40
0020	34+75	RT	2	-	1	40
0020	35+85	RT	2	-	1	40
0020	37+67	RT	2	-	1	40
0020	42+45	RT	2	-	1	40
0020	45+80	RT	2	-	1	40
0020	48+97	RT	2	-	1	40
0020	52+49	LT	2	-	1	40
0020	54+24	LT	2	-	1	40
0020	57+03	LT	2	-	1	40
TOTAL 0020			42	0	21	840
TOTAL			76	17	38	1520

* ITEM SHOWN ELSEWHERE IN PLAN

		611.0610		611.0624		611.2007		650.4000		SPV.0060.01		SPV.0060.02		SPV.0060.03		SPV.0060.06		
										SPECIAL (01.		SPECIAL (02.		SPECIAL (03.		SPECIAL (06.		
								CONSTRUCTION		EXISTING		EXISTING		BRICK AND		INLET'S		
		INLET COVERS		INLET COVERS		MANHOLES 7-FT		STAKING STORM		STORM SEWER		STORM SEWER		MORTAR		SPECIAL)		
		TYPE BW		TYPE H		DIAMETER		SEWER		PIPE)		MANHOLE)		MANHOLE)		SPECIAL)		
CATEGORY	STRUCTURE	STATION	OFFSET*	LOCATION	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	RIM**	INVERT***	DEPTH****
																ELEVATION	ELEVATION	FT
0010	1	26+05	21.7	RT	-	1	-	1	-	-	-	-	1	810.76	806.00	4.26		
0010	2	26+05	21.1	LT	-	1	-	1	-	-	-	-	1	809.65	805.25	3.90		
0010	3	27+79	21.0	LT	1	-	1	1	-	-	-	-	-	809.15	801.75	6.90		
0010	-	27+75	28.1	LT	-	-	-	-	1	-	-	-	-	-	-	-	-	-
0010	-	27+85	10.2	LT	-	-	-	-	-	1	1	-	-	-	-	-	-	-
TOTAL 0010					1	2	1	3	1	1	1	1	2					

REMARKS:
*STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE
**RIM ELEVATION IS AT THE INLET COVER FLANGE LOCATION
***THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE
****DEPTH = RIM ELEVATION - TOP OF STRUCTURE BASE ELEVATION - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

		625.0100	628.2008	629.0210	630.0140	630.0200	630.0500
		EROSION MAT					
		URBAN CLASS I		FERTILIZER TYPE	SEEDING	SEEDING	
		TOPSOIL	TYPE B	B	MIXTURE NO. 40	TEMPORARY	SEED WATER
CATEGORY	LOCATION	SY	SY	CWT	LB	LB	MGAL
0010	CURB RAMPS	130	130	0.1	6	4	3
0010	UNDISTRIBUTED	40	40	0.1	2	1	1
TOTAL 0010		170	170	0.2	8	5	4

											*		
					643.0420				643.0705				643.0900
					TRAFFIC				TRAFFIC				TRAFFIC
					CONTROL				CONTROL				CONTROL
					BARRICADES				WARNING				CONTROL
					TYPE III				LIGHTS TYPE A				SIGNS
CATEGORY	LOCATION	DAYS	DEVICES	DAY	DAYS	DEVICES	DAY	DAYS	DEVICES	DAY			
0010	USH 8 EB	-	-	-	-	-	-	90	5	450			
0010	USH 8 WB	-	-	-	-	-	-	90	5	450			
0010	S WASHINGTON STS OF USH 8	-	-	-	-	-	-	90	4	360			
0010	EOP	-	-	-	-	-	-	90	4	360			
0010	SIDEROADS	-	-	-	-	-	-	90	11	990			
0010	MASSACHUSETTS ST CLOSURE	14	2	28	14	4	56	14	5	70			
TOTAL 0010				28	56			2,680					

* 643.0300 643.0900 643.3105 643.3350 644.1440 644.1601 644.1605 644.1810 646.9000 644.1900.S												
CATEGORY	STATION	LOCATION	TRAFFIC	TRAFFIC	TEMPORARY			TEMPORARY			MARKING	TEMPORARY
			CONTROL		MARKING	CROSSWALK	PEDESTRIAN	TEMPORARY	PEDESTRIAN	PEDESTRIAN		
			DRUMS	CONTROL	LINE PAINT 4-	REMOVABLE	SURFACE	PEDESTRIAN	PEDESTRIAN	PEDESTRIAN	REMOVAL	MESSAGE
			DAY	DAY	INCH	TAPE 6-INCH	MATting	CURB RAMP	FIELD	BARRICADE	LINE 4-INCH	DEVICES
			DAY	DAY	LF	LF	SF	DAY	SF	LF	LF	DAY
0010	2+55	USH 8	420	60	-	70	470	30	20	280	-	28
0010	10+25	MIDBLOCK	380	70	-	-	-	-	-	190	-	-
0010	16+25	ILLINOIS ST	630	60	260	60	23	30	20	210	260	28
0010	19+40	MIDBLOCK	210	60	290	-	-	30	-	180	290	-
0010	28+00	STATE ST	1,040	100	760	80	1,010	100	50	650	760	98
0010	29+25	KENTUCKY ST	840	130	-	150	310	100	70	270	-	98
0010	32+00	MIDBLOCK	630	90	480	80	70	84	40	490	220	84
0010	35+75	E LOUISIANA ST	730	100	-	80	-	70	50	200	-	70
0010	37+50	N RIVER ST	820	120	450	80	-	90	50	510	230	84
0010	42+50	E MARYLAND ST	770	100	500	80	-	90	40	420	250	56
0010	49+00	MASSACHUSETTS ST	1,110	120	-	150	22	130	90	240	-	126
0010	56+50	MINNESOTA ST	200	30	-	-	-	-	-	20	-	-
TOTAL 0010			7,780	1,040	2,740	830	1,905	754	430	3,660	2,010	672

* ITEM SHOWN ELSEWHERE IN PLAN

STATION	LOCATION	SIGN CODE	SIZE IN X IN	637.2210 SIGN TYPE II REFLECTIVE H SF		637.2230 SIGN TYPE II REFLECTIVE F SF		DESCRIPTION	COMMENTS
				SF	SF	SF	SF		
31+95	L	R10-25	9	12	0.75	-	-	PUSH BUTTON TO TURN ON WARNING LIGHTS	MOUNTED ON POLES TYPE 2, FACING NORTH
31+95	L	W16-7L	30	18	-	3.75	-	DIAGONAL ARROW	MOUNTED ON POLES TYPE 2, FACING NORTH
31+95	L	W16-7R	30	18	-	3.75	-	DIAGONAL ARROW	MOUNTED ON POLES TYPE 2, FACING SOUTH
31+95	L	W11-2	36	36	-	9.00	-	PEDESTRIAN	MOUNTED ON POLES TYPE 2, FACING NORTH
31+95	L	W11-2	36	36	-	9.00	-	PEDESTRIAN	MOUNTED ON POLES TYPE 2, FACING SOUTH
31+95	L	W11-2	36	36	-	9.00	-	PEDESTRIAN	MOUNTED ON TROMBONE ARM, FACING NORTH
31+95	RT	R10-25	9	12	0.75	-	-	PUSH BUTTON TO TURN ON WARNING LIGHTS	MOUNTED ON POLES TYPE 2, FACING NORTH
31+95	RT	W16-7L	30	18	-	3.75	-	DIAGONAL ARROW	MOUNTED ON POLES TYPE 2, FACING SOUTH
31+95	RT	W16-7R	30	18	-	3.75	-	DIAGONAL ARROW	MOUNTED ON POLES TYPE 2, FACING NORTH
31+95	RI	W11-2	36	36	-	9.00	-	PEDESTRIAN	MOUNTED ON POLES TYPE 2, FACING SOUTH
31+95	RT	W11-2	36	36	-	9.00	-	PEDESTRIAN	MOUNTED ON POLES TYPE 2, FACING NORTH
31+95	RT	W11-2	36	36	-	9.00	-	PEDESTRIAN	MOUNTED ON TROMBONE ARM, FACING SOUTH
TOTAL 0020				1.50	69.00				

646.8120 MARKING CURB EPOXY			646.8320 MARKING PARKING STALL EPOXY		
CATEGORY	LOCATION	LF	CATEGORY	STATION	TO STATION LOCATION LF
0020	ILLINOIS ST/STH 87	57	0020	ILLINOIS ST	STATE ST LT/RT 300
0020	26+35 - 26+71, DRIVEWAY	8	0020	STATE ST - KENTUCKY ST	LT/RT 24
0020	STATE ST/STH 87	61	0020	KENTUCKY ST - LOUISIANA ST	LT/RT 185
0020	KENTUCKY ST/STH 87	136	0020	LOUISIANA ST - N RIVER ST	LT/RT 44
0020	NORTH MIDBLOCK	30	0020	N RIVER ST - MARYLAND ST	LT/RT 120
0020	LOUISIANA ST/STH 87	88	TOTAL 0020		
0020	N RIVER ST/STH 87	79	673		
0020	MARYLAND ST/STH 87	71			
0020	MASSACHUSETTS ST/STH 87	139			
TOTAL 0020		669			

646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH LF				
CATEGORY	STATION	TO	STATION	LOCATION LF
0010	USH 8/STH 87			ML 89
0010	SOUTH MIDBLOCK			ML 88
0010	ILLINOIS ST/STH 87			ML 70
0010	STATE ST/STH 87			ML 79
0010	KENTUCKY ST/STH 87			ML 265
0010	NORTH MIDBLOCK			ML 80
0010	LOUISIANA ST/STH 87			ML 154
0010	N RIVER ST/STH 87			ML 139
0010	MARYLAND ST/STH 87			ML 185
0010	MASSACHUSETTS ST/STH 87			ML 185
TOTAL 0010				2,334

646.6120 MARKING STOP LINE EPOXY 18- INCH LF						646.4720 MARKING LINE SAME DAY EPOXY 6-INCH LF						646.4020 MARKING LINE EPOXY 10-INCH LF						643.3165 TEMPORARY MARKING LINE PAINT 6-INCH LF						REMARKS
CATEGORY	LOCATION	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF
0010	ML	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	MILLED SURFACE
0010	ML	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LOWER LIFT
0010	ML	130	9,360	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	FINISHED SURFACE
0010	ML	-	10	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	LOUISIANA ST
TOTAL 0010		130	9,370	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

				650.4500	650.5000	650.8000
				CONSTRUCTION		CONSTRUCTION
				STAKING	CONSTRUCTION	STAKING
				SUBGRADE	STAKING BASE	RESURFACING
STATION	TO	STATION	LOCATION	LF	LF	LF
2+59	-	59+40	PROJECT	-	-	5,681
26+00	-	27+95	LT	195	195	-
TOTAL 0010				195	195	5,681

CATEGORY	STATION	LOCATION	204.0195	654.0105	SPV.0060.05
			REMOVING	CONCRETE	SPECIAL (05.
			CONCRETE	BASES TYPE 5	RELOCATE
			BASES	EACH	EXISTING LIGHT
			EACH		POLE)
					EACH
0010	26+38	LT	1	1	1
TOTAL 0010			1	1	1

		652.0225	652.0605	653.0164	654.0102	657.0255	657.0305	657.0590	657.0595	658.0500	SPV.0060.07	SPV.0060.08
		CONDUIT RIGID		PULL BOXES		TRANSFORMER					SPECIAL (07.	SPECIAL (08.
		NONMETALLIC		NON-		BASES					RECTANGULAR	RECTANGULAR
		SCHEDULE 40 2-	CONDUIT	CONDUCTIVE	CONCRETE BASES	BREAKAWAY 11					RAPID FLASHING	RAPID FLASHING
		INCH	SPECIAL 2-INCH	24X42-INCH	TYPE 2	1/2-INCH BOLT	POLES TYPE 2	TROMBONE	TROMBONE	PEDESTRIAN	SYSTEM - STA	SYSTEM - STA
		LF	LF	EACH	EACH	EACH	EACH	ARMS 20-FT	ARMS 25-FT	PUSH BUTTONS	31+95 LT)	31+95 RT)
31+94.6	25' LT	5	25	1	1	1	1	1	-	1	1	-
31+94.6	27' RT	5	25	1	1	1	1	-	1	1	-	1
TOTAL 0020		10	50	2	2	2	2	1	1	2	1	1

		*			
		690.0150	690.0250		
		SAWING	SAWING		
		ASPHALT	CONCRETE		
CATEGORY	LOCATION	LF	LF	REMARKS	
0010	PROJECT	1,570	670	CURB/RAMP REPLACEMENTS	
0010	PROJECT	60	-	DRIVEWAYS	
0010	LT/RT	180	-	REMOVING ROADWAY PAVERS	
TOTAL 0010		1,810	670		

		SPV.0060.04	
		SPECIAL (04.	
		ADJUSTING	
		WATER VALVE	
		COVERS)	
CATEGORY	STATION	LOCATION	EACH
0020	2+66	RT	1
0020	15+87	LT	2
0020	21+15	LT	2
0020	25+64	LT	2
0020	28+88	LT	1
0020	29+53	LT	1
0020	32+20	LT	2
0020	35+95	LT	2
0020	37+90	LT	1
0020	39+50	LT	1
0020	42+35	LT	1
0020	48+40	LT	1
TOTAL 0020			17

NOTES:

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PURPOSE OF ALL TLE'S IS FOR GRADING AND SIDEWALK / DRIVEWAY CONSTRUCTION, UNLESS OTHERWISE NOTED.

SIGNS AND HYDRANT WITHIN THE TLE WILL NOT BE AFFECTED BY CONSTRUCTION.

R/W PROJECT NUMBER: 8840-00-20

EXHIBIT NUMBER: 1

TLE ACQUISITION EXHIBIT
ST. CROIX FALLS - GRANTSBURG
USH 8 TO 240' N OF MINNESOTA ST.
STH 87POLK COUNTY

PART OF GOVERNMENT LOT 3 OF SECTION 30, T-34-N, R-18-W,
CITY OF ST. CROIX FALLS, POLK COUNTY WISCONSIN

GOV'T LOT 3

PL

60'

PL

STH 87 (WASHINGTON ST.)

LOT 24

BLOCK 17 ORIGINAL PLAT OF CITY OF ST CROIX FALLS

CAROLINA ST. (VACATED)

TAX PARCEL NUMBER:
281-00496-0000

LOT 12

BLOCK 12 ORIGINAL PLAT OF CITY OF ST CROIX FALLS

LOT 13

CITY OF ST. CROIX FALLS
1.5' SIDEWALK EASEMENT
V. 97 P. 616, DOC. 590515

LOT 14

PL

NOTE:
STATE OF WISCONSIN HAS A PLE
OVER PARCELS 13 & 14
V. 596 P. 269, DOC. 503283

GN

SCALE, FEET
0 20 40

SCHEDULE OF LANDS & INTERESTS REQUIRED			
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
1	SIR SMOKE A LOT BBQ, LLC.	TLE	272

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

FILE NAME : 8840_TLE_EXHIBIT_1.DWG

PLOT DATE : 7/30/2025 3:42 PM

R/W PROJECT: R/W PROJ NO

[illegible]

NOTES:
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REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

PURPOSE OF ALL TLE's IS FOR GRADING AND SIDEWALK / DRIVEWAY CONSTRUCTION,
UNLESS OTHERWISE NOTED.

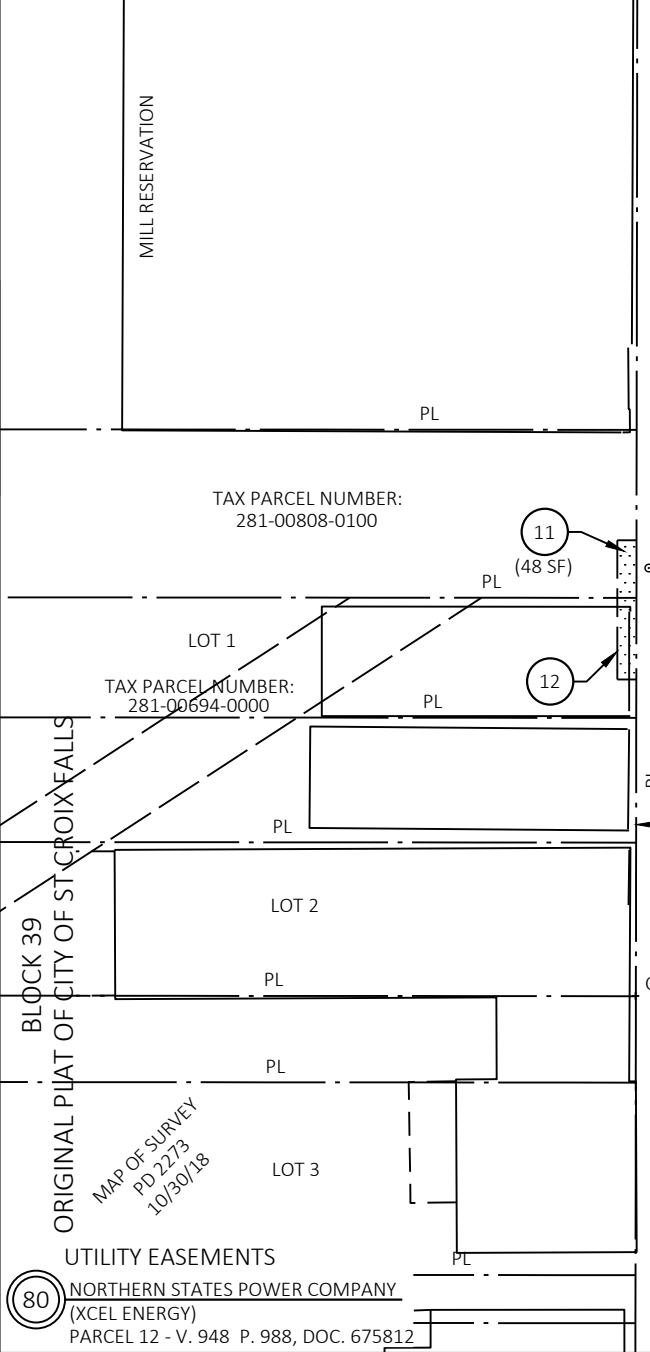
BUILDINGS WITHIN THE TLE's WILL NOT BE AFFECTED BY CONSTRUCTION.

R/W PROJECT NUMBER: 8840-00-20 EXHIBIT NUMBER: 5

TLE ACQUISITION EXHIBIT
ST. CROIX FALLS - GRANTSBURG
USH 8 TO 240' N OF MINNESOTA ST.

STH 87 POLK COUNTY

PART OF GOVERNMENT LOT 1 OF SECTION 30, T-34-N, R-18-W,
CITY OF ST. CROIX FALLS, POLK COUNTY WISCONSIN



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
18	TOP OF THE VALLEY PET RESORT, LLC	TLE	48
11	CITY OF ST CROIX FALLS	TLE	248
12	DEBRA C. SWANSON	TLE	68

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
80	NORTHERN STATES POWER COMPANY (XCEL ENERGY)	TEMPORARY RELEASE OF RIGHTS



NOTES:
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PURPOSE OF ALL TLE's IS FOR GRADING AND SIDEWALK / DRIVEWAY CONSTRUCTION,
UNLESS OTHERWISE NOTED.

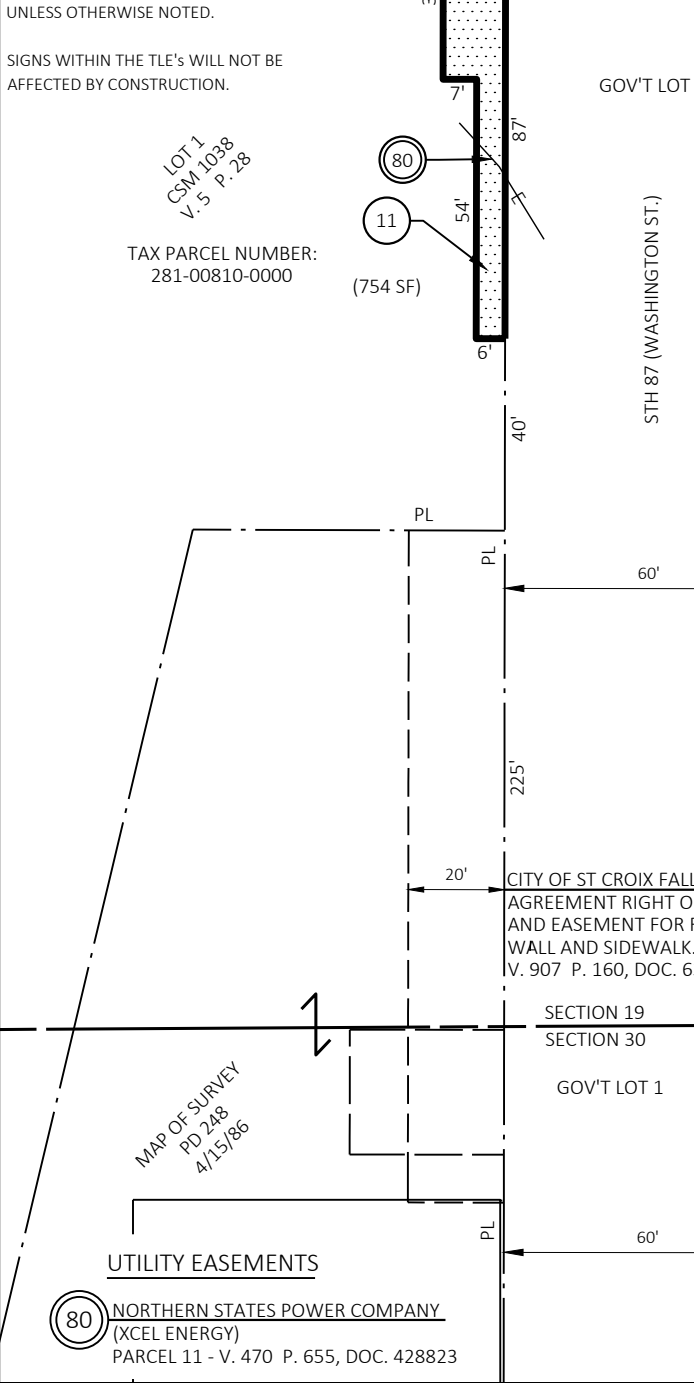
SIGNS WITHIN THE TLE's WILL NOT BE AFFECTED BY CONSTRUCTION.

R/W PROJECT NUMBER: 8840-00-20 EXHIBIT NUMBER: 6

TLE ACQUISITION EXHIBIT
ST. CROIX FALLS - GRANTSBURG
USH 8 TO 240' N OF MINNESOTA ST.

STH 87 POLK COUNTY

PART OF GOVERNMENT LOT 1 OF SECTION 30 & GOVERNMENT LOT 4 OF SECTION 19, ALL IN T-34-N, R-18-W, CITY OF ST. CROIX FALLS, POLK COUNTY WISCONSIN



SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
11	CITY OF ST CROIX FALLS	TLE	867
13	GLACIAL HILL PROPERTIES, LLC.	TLE	72

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
80	NORTHERN STATES POWER COMPANY (XCEL ENERGY)	TEMPORARY RELEASE OF RIGHTS



NOTES:
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REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

PURPOSE OF ALL TLE'S IS FOR GRADING AND SIDEWALK / DRIVEWAY CONSTRUCTION,
UNLESS OTHERWISE NOTED

R/W PROJECT NUMBER: 8840-00-20

EXHIBIT NUMBER: 7

TLE ACQUISITION EXHIBIT
ST. CROIX FALLS - GRANTSBURG
USH 8 TO 240' N OF MINNESOTA ST.

STH 87

POLK COUNTY

PART OF GOVERNMENT LOT 4 OF SECTION 19, T-34-N, R-18-W,
CITY OF ST. CROIX FALLS, POLK COUNTY WISCONSIN

UTILITY EASEMENTS

80 NORTHERN STATES POWER COMPANY
(XCEL ENERGY)
PARCEL 14 - NO RECORDED EASEMENT

BLOCK 48
ORIGINAL PLAT OF CITY OF ST CROIX FALLS

LOT 10

LOT 11

LOT 12

TAX PARCEL NUMBER:
281-00797-0000

14

3'

80

20'

15

LOT 24

TAX PARCEL NUMBER:
281-00787-0000

BLOCK 47
ORIGINAL PLAT OF CITY OF ST CROIX FALLS

ORIGINAL PLAT OF CITY OF ST CROIX FALLS

W MARYLAND ST
(UNIMPROVED)

BLOCK 44
ORIGINAL PLAT OF CITY
OF ST. CROIX FALLS

LOT 1

LOT 2

SCHEDULE OF LANDS
& INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE
PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO
THE DEPARTMENT

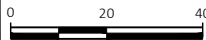
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
14	JONATHAN A. & CHERYL K. CERMIN	TLE	60
15	ALDEN ASSOCIATES, LLC.	TLE	308

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
80	NORTHERN STATES POWER COMPANY (XCEL ENERGY)	TEMPORARY RELEASE OF RIGHTS

GN

SCALE, FEET



FILE NAME : 8840_TLE_EXHIBIT_1.DWG

PLOT DATE : 7/30/2025 3:42 PM

R/W PROJECT: R/W PROJ NO

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UNLESS OTHERWISE NOTED

R/W PROJECT NUMBER: 8840-00-20

EXHIBIT NUMBER: 8

TLE ACQUISITION EXHIBIT
ST. CROIX FALLS - GRANTSBURG
USH 8 TO 240' N OF MINNESOTA ST.

STH 87

POLK COUNTY

PART OF GOVERNMENT LOT 3 OF SECTION 19, T-34-N, R-18-W,
CITY OF ST. CROIX FALLS, POLK COUNTY WISCONSIN

BLOCK 58
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS

LOT 9

GOV'T LOT 3

LOT 18

BLOCK 57
ORIGINAL PLAT OF CITY
OF ST CROIX FALLS

MINNESOTA ST

MINNESOTA ST
(UNIMPROVED)

BLOCK 51
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS

LOT 1

LOT 2

LOT 3

SCHEDULE OF LANDS
& INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE
PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO
THE DEPARTMENT

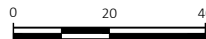
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
16	EVAN GATES	TLE	412

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

GN

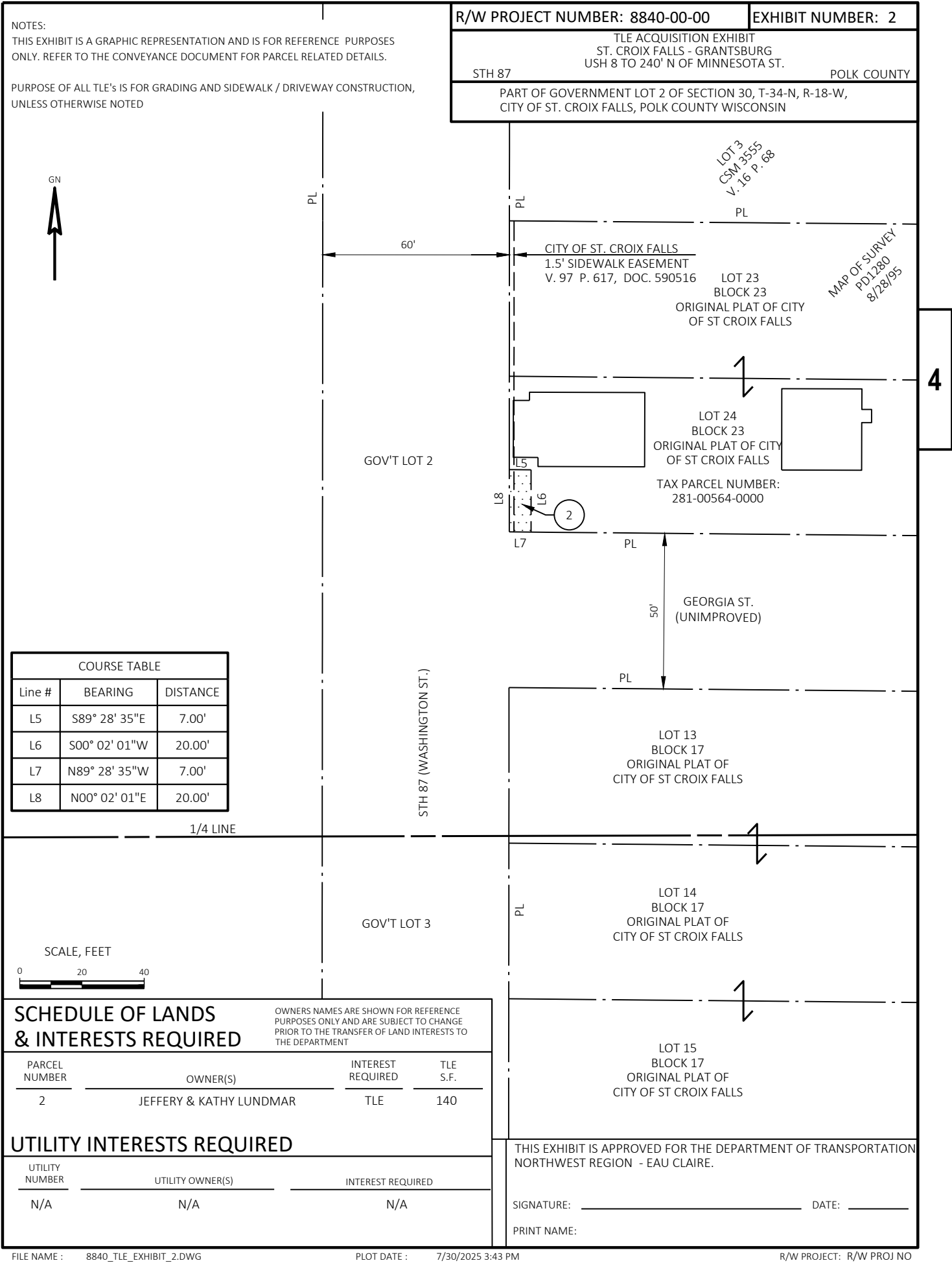
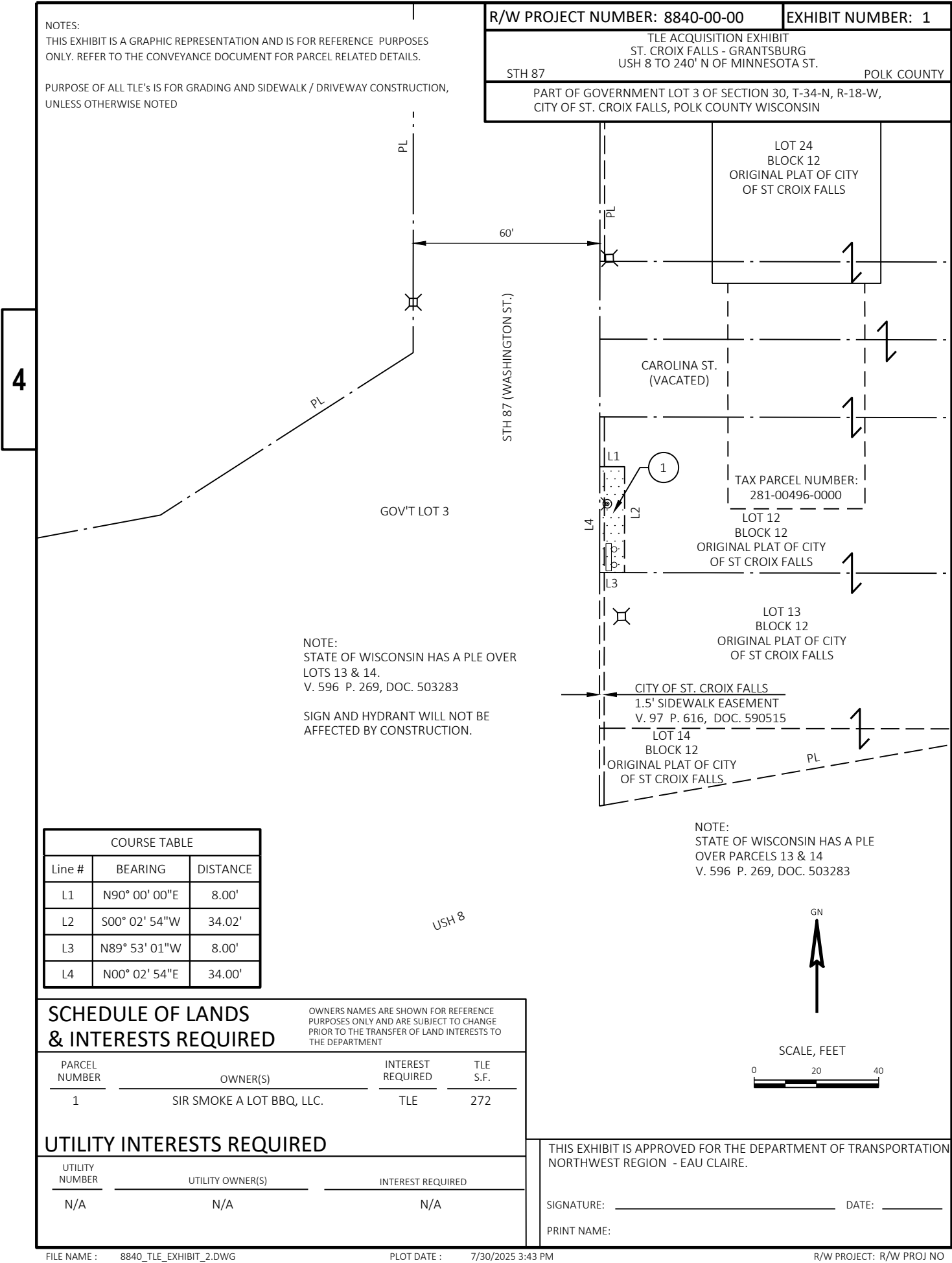
SCALE, FEET

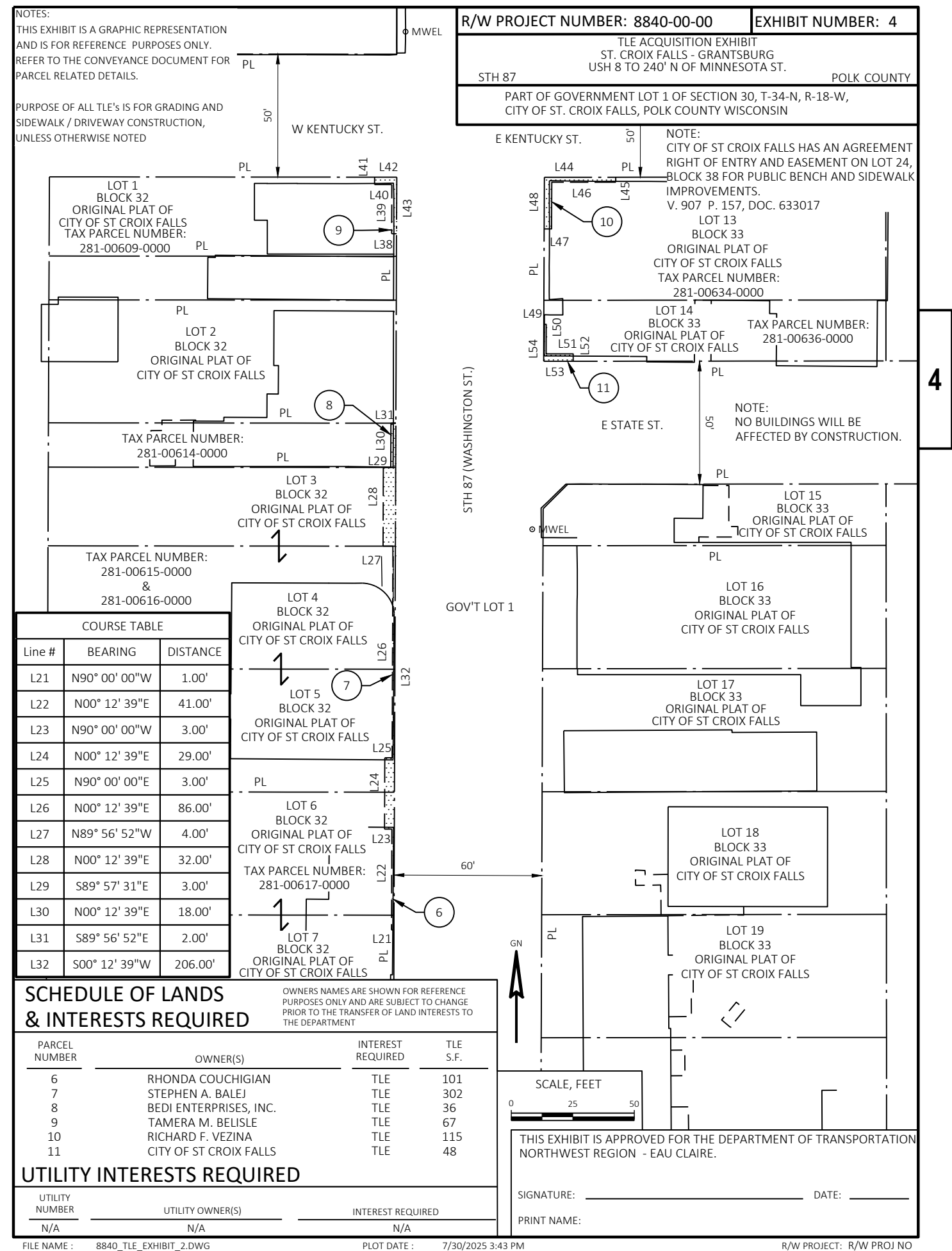
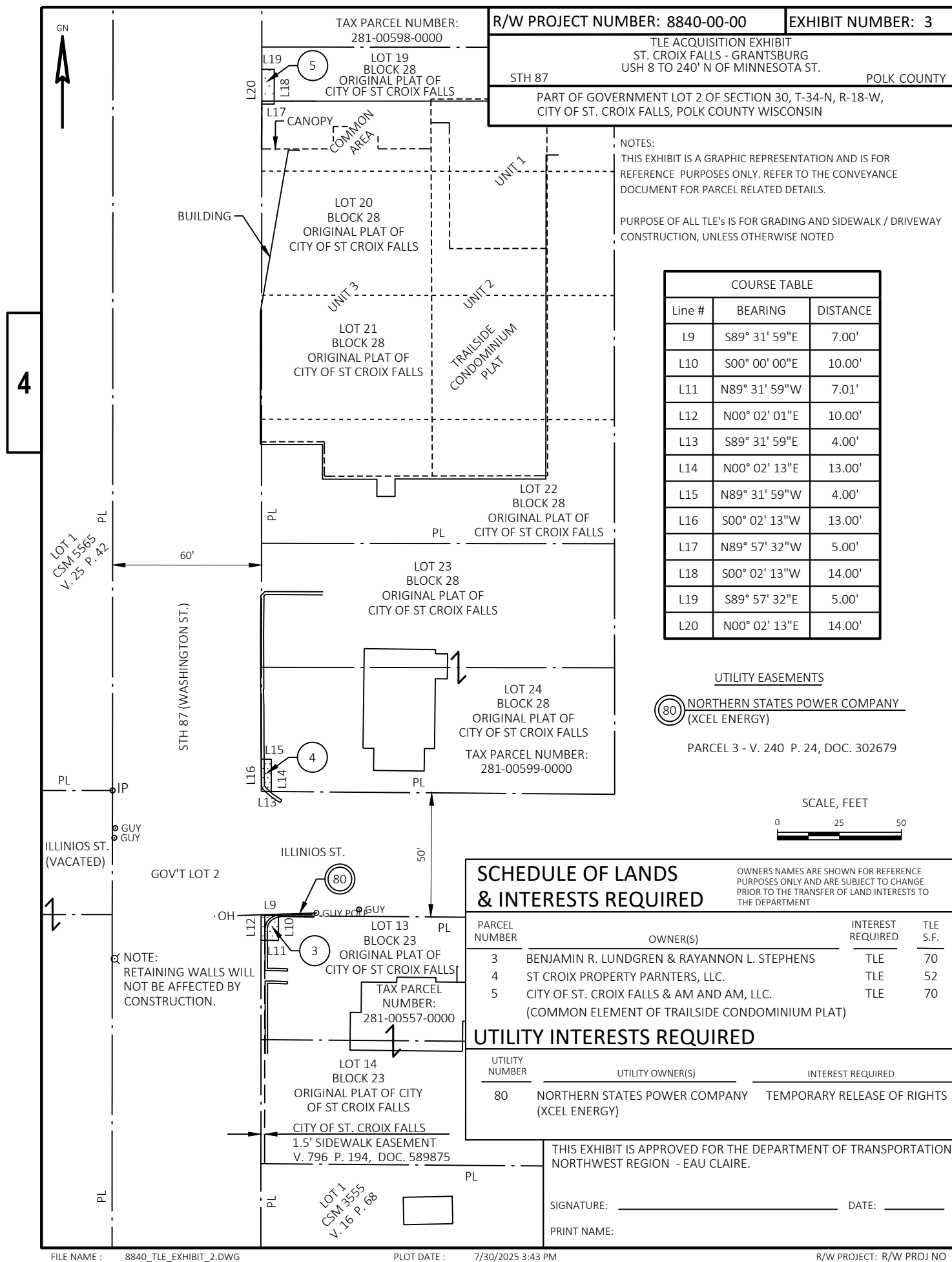


FILE NAME : 8840_TLE_EXHIBIT_1.DWG

PLOT DATE : 7/30/2025 3:42 PM

R/W PROJECT: R/W PROJ NO





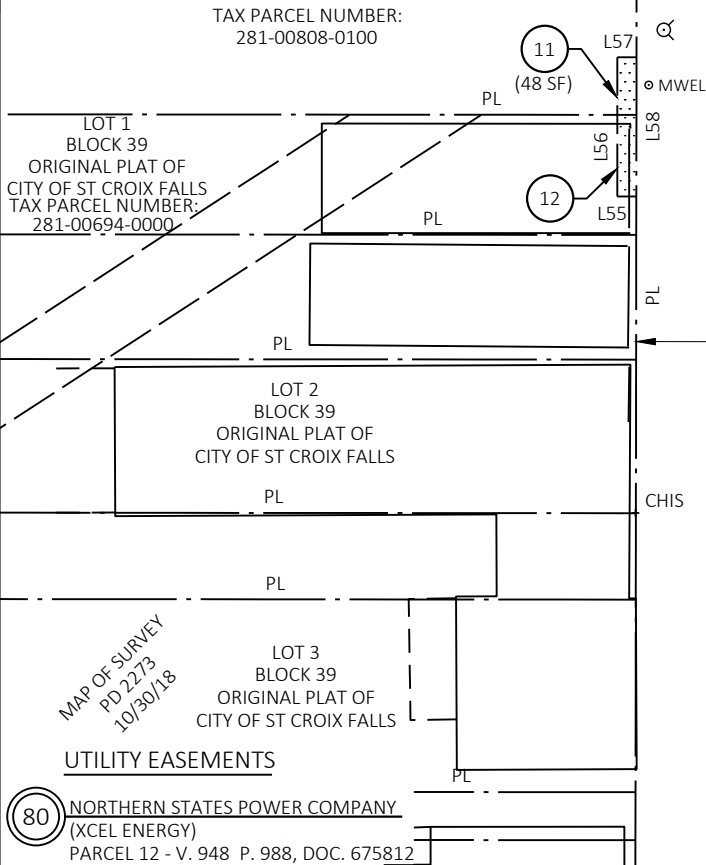
NOTES:
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REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

PURPOSE OF ALL TLE'S IS FOR GRADING AND SIDEWALK / DRIVEWAY CONSTRUCTION,
UNLESS OTHERWISE NOTED

COURSE TABLE		
Line #	BEARING	DISTANCE
L55	N89° 57' 06"W	3.98'
L56	N00° 00' 00"E	29.00'
L57	S89° 57' 06"E	4.02'
L58	S00° 04' 43"W	29.00'
L59	N90° 00' 00"E	8.00'
L60	S00° 04' 43"W	31.22'
L61	N90° 00' 00"W	8.00'
L62	N00° 04' 43"E	31.22'

R/W PROJECT NUMBER: 8840-00-00	EXHIBIT NUMBER: 5
TLE ACQUISITION EXHIBIT ST. CROIX FALLS - GRANTSBURG USH 8 TO 240' N OF MINNESOTA ST.	
STH 87	POLK COUNTY
PART OF GOVERNMENT LOT 1 OF SECTION 30, T-34-N, R-18-W, CITY OF ST. CROIX FALLS, POLK COUNTY WISCONSIN	

NOTE:
BUILDING WILL NOT BE
AFFECTED BY CONSTRUCTION.



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE
PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO
THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
7	STEPHEN A. BALEJ	TLE	202
11	CITY OF ST CROIX FALLS	TLE	250
12	DEBRA C. SWANSON	TLE	68

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
80	NORTHERN STATES POWER COMPANY (XCEL ENERGY)	TEMPORARY RELEASE OF RIGHTS



THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE.

SIGNATURE: _____ DATE: _____

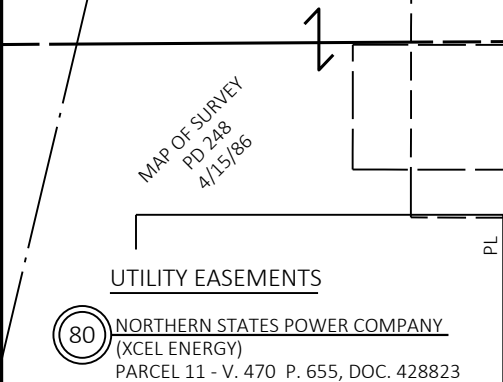
PRINT NAME: _____

NOTES:
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AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR
PARCEL RELATED DETAILS.

PURPOSE OF ALL TLE'S IS FOR GRADING AND
SIDEWALK / DRIVEWAY CONSTRUCTION,
UNLESS OTHERWISE NOTED

TAX PARCEL NUMBER:
281-00810-0000

COURSE TABLE		
Line #	BEARING	DISTANCE
L69	N00° 04' 43"E	12.00'
L70	S89° 56' 52"E	11.97'
L71	S44° 59' 20"W	16.95'
L72	N00° 04' 43"E	15.00'
L73	S44° 56' 05"E	21.21'
L74	N89° 56' 52"W	15.00'
L75	N89° 55' 17"W	6.00'
L76	N00° 04' 43"E	38.00'
L77	N89° 55' 17"W	7.00'
L78	N00° 04' 43"E	49.00'
L79	S89° 55' 17"E	13.00'
L80	S00° 04' 43"W	87.00'



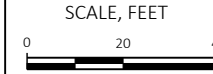
SCHEDULE OF LANDS & INTERESTS REQUIRED

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PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO
THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
11	CITY OF ST CROIX FALLS	TLE	867
13	GLACIAL HILL PROPERTIES, LLC.	TLE	72

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
80	NORTHERN STATES POWER COMPANY (XCEL ENERGY)	TEMPORARY RELEASE OF RIGHTS



THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE.

SIGNATURE: _____ DATE: _____

PRINT NAME: _____

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

PURPOSE OF ALL TLE's IS FOR GRADING AND SIDEWALK / DRIVEWAY CONSTRUCTION,
UNLESS OTHERWISE NOTED

R/W PROJECT NUMBER: 8840-00-00

EXHIBIT NUMBER: 7

TLE ACQUISITION EXHIBIT
ST. CROIX FALLS - GRANTSBURG
USH 8 TO 240' N OF MINNESOTA ST.

STH 87

POLK COUNTY

PART OF GOVERNMENT LOT 4 OF SECTION 19, T-34-N, R-18-W,
CITY OF ST. CROIX FALLS, POLK COUNTY WISCONSIN

UTILITY EASEMENTS

80 NORTHERN STATES POWER COMPANY
(XCEL ENERGY)
PARCEL 14 - NO RECORDED EASEMENT

LOT 10
BLOCK 48
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS

LOT 11
BLOCK 48
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS

LOT 12
BLOCK 48
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS
TAX PARCEL NUMBER:
281-00797-0000

14 L83
80 L82
L81 L84

W MARYLAND ST
(UNIMPROVED)

COURSE TABLE		
Line #	BEARING	DISTANCE
L81	N89° 55' 57"W	3.00'
L82	N00° 04' 03"E	20.00'
L83	S89° 55' 57"E	3.00'
L84	S00° 04' 03"W	20.00'
L85	N44° 52' 03"W	21.24'
L86	N00° 04' 03"E	14.16'
L87	S44° 52' 03"E	41.28'
L88	N89° 48' 09"W	14.16'

LOT 1
BLOCK 44
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS

LOT 2
BLOCK 44
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE
PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO
THE DEPARTMENT

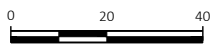
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
14	JONATHAN A. & CHERYL K. CERMIN	TLE	60
15	ALDEN ASSOCIATES, LLC.	TLE	313

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
80	NORTHERN STATES POWER COMPANY (XCEL ENERGY)	TEMPORARY RELEASE OF RIGHTS

GN

SCALE, FEET



THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE.

SIGNATURE: _____ DATE: _____

PRINT NAME: _____

NOTES:
THIS EXHIBIT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY.
REFER TO THE CONVEYANCE DOCUMENT FOR PARCEL RELATED DETAILS.

PURPOSE OF ALL TLE's IS FOR GRADING AND SIDEWALK / DRIVEWAY CONSTRUCTION,
UNLESS OTHERWISE NOTED

R/W PROJECT NUMBER: 8840-00-00

EXHIBIT NUMBER: 8

TLE ACQUISITION EXHIBIT
ST. CROIX FALLS - GRANTSBURG
USH 8 TO 240' N OF MINNESOTA ST.

STH 87

POLK COUNTY

PART OF GOVERNMENT LOT 3 OF SECTION 19, T-34-N, R-18-W,
CITY OF ST. CROIX FALLS, POLK COUNTY WISCONSIN

LOT 9
BLOCK 58
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS

MINNESOTA ST

LOT 1
BLOCK 51
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS

LOT 2
BLOCK 51
ORIGINAL PLAT OF
CITY OF ST CROIX FALLS

LOT 3
BLOCK 51
ORIGINAL PLAT
OF CITY OF
ST CROIX FALLS

COURSE TABLE		
Line #	BEARING	DISTANCE
L89	N89° 58' 08"W	10.00'
L90	N00° 01' 52"E	15.00'
L91	N45° 08' 56"E	21.17'
L92	S89° 43' 59"E	10.11'
L93	S26° 50' 54"W	33.50'

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE
PURPOSES ONLY AND ARE SUBJECT TO CHANGE
PRIOR TO THE TRANSFER OF LAND INTERESTS TO
THE DEPARTMENT

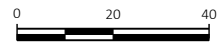
PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE S.F.
16	EVAN GATES	TLE	414

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
N/A	N/A	N/A

GN

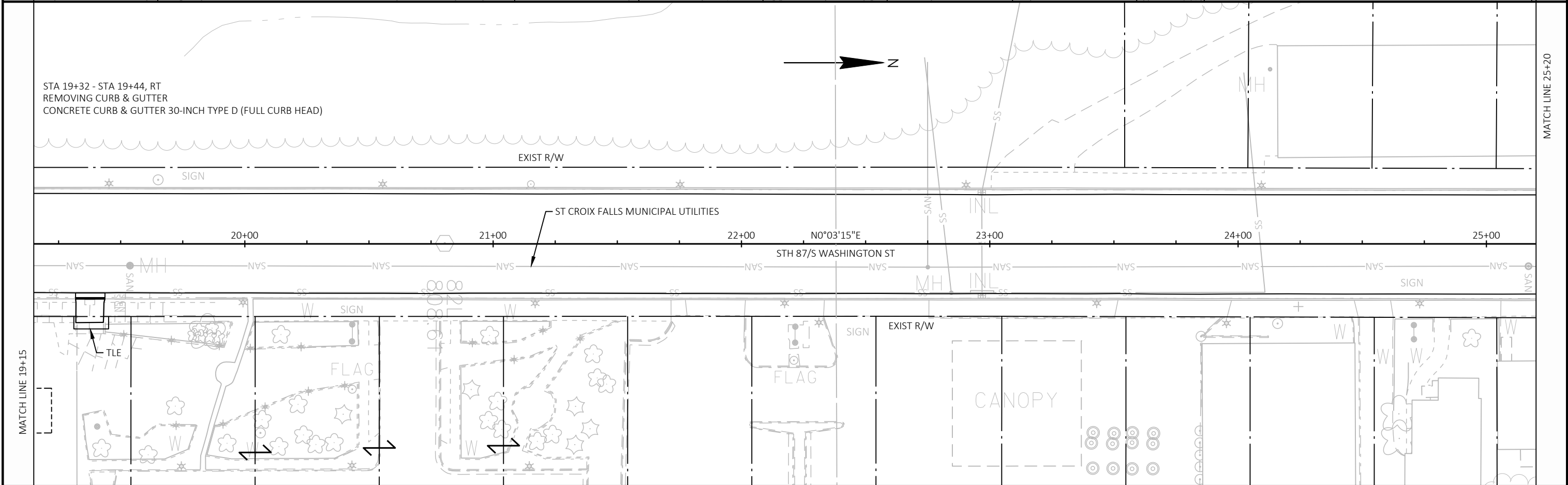
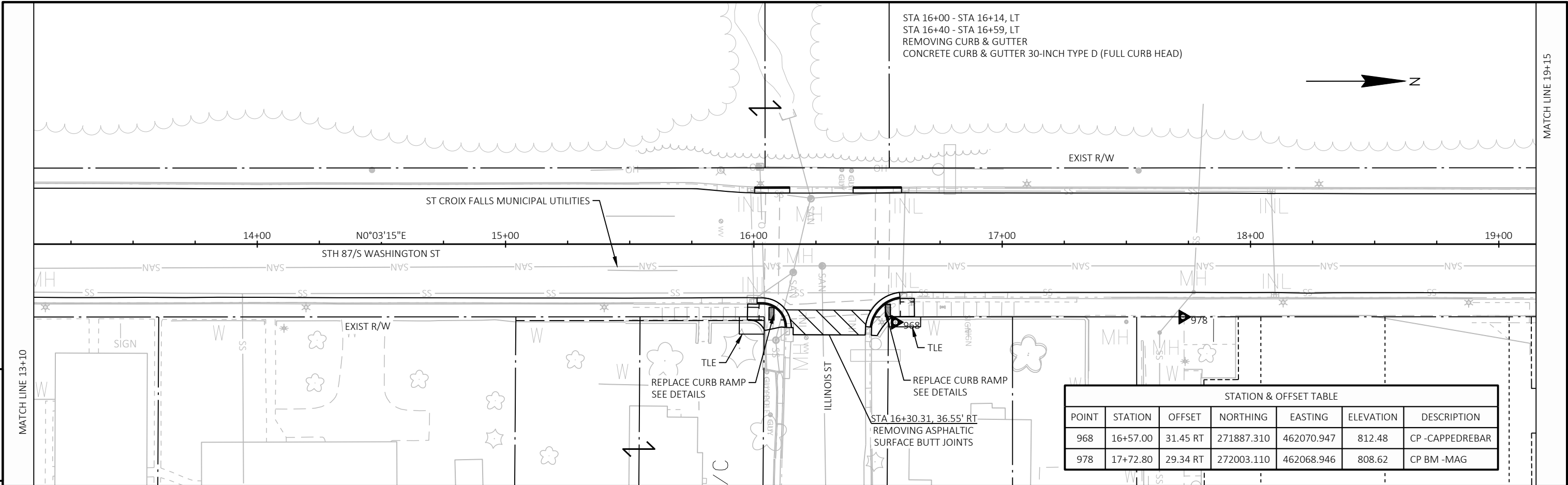
SCALE, FEET

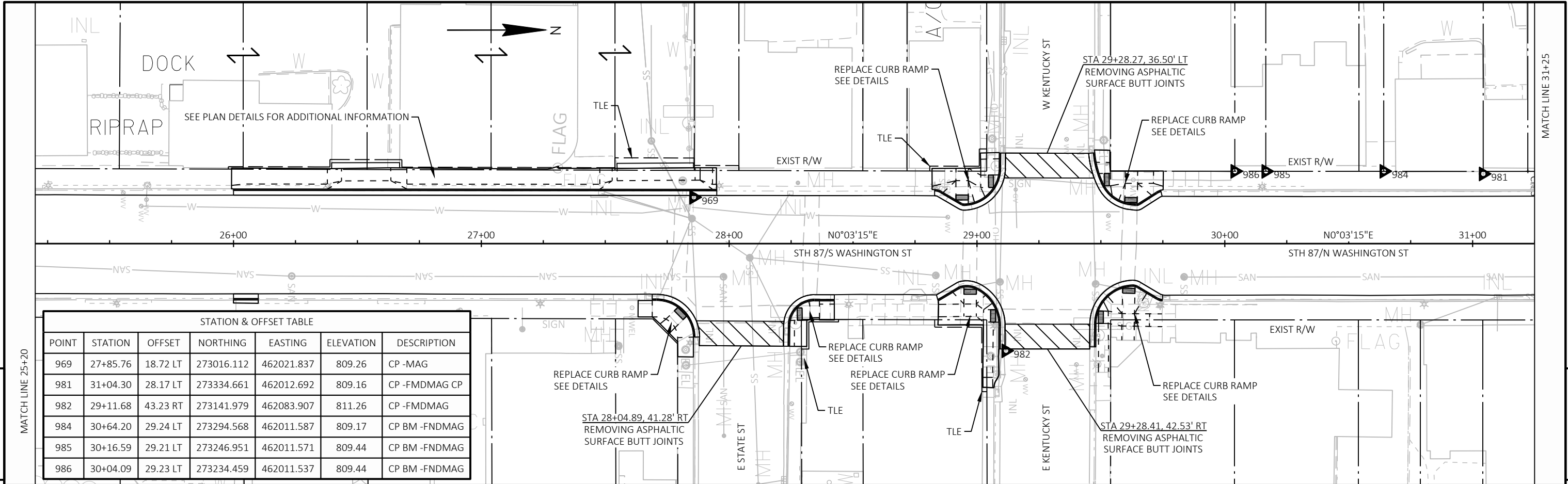


THIS EXHIBIT IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTHWEST REGION - EAU CLAIRE.

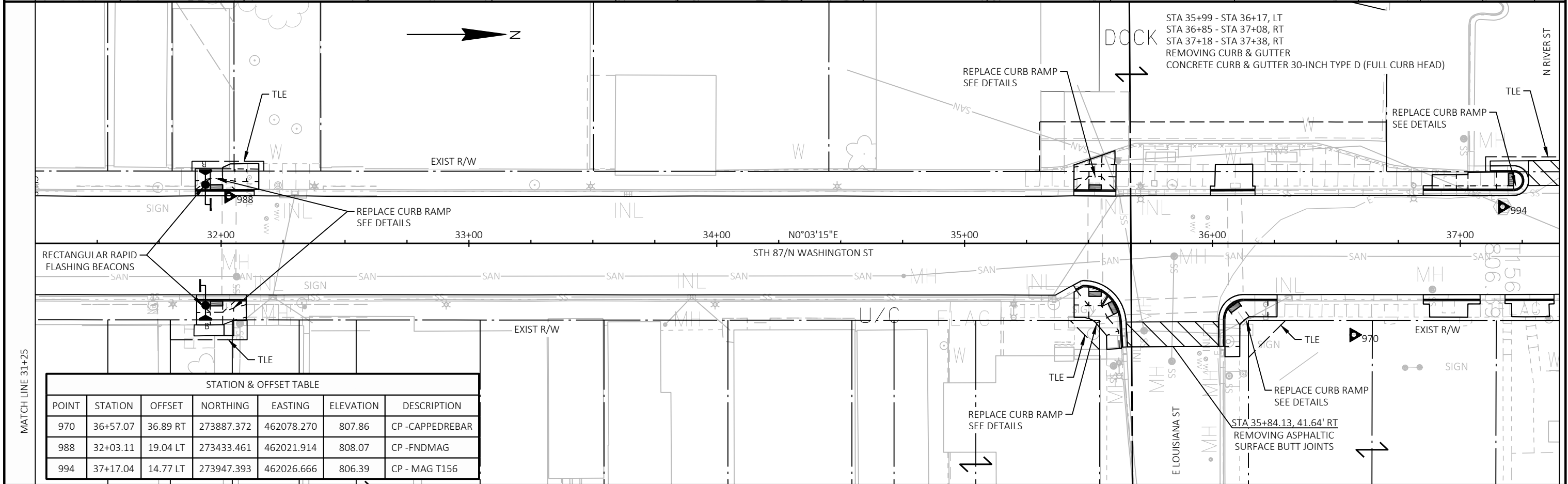
SIGNATURE: _____ DATE: _____

PRINT NAME: _____

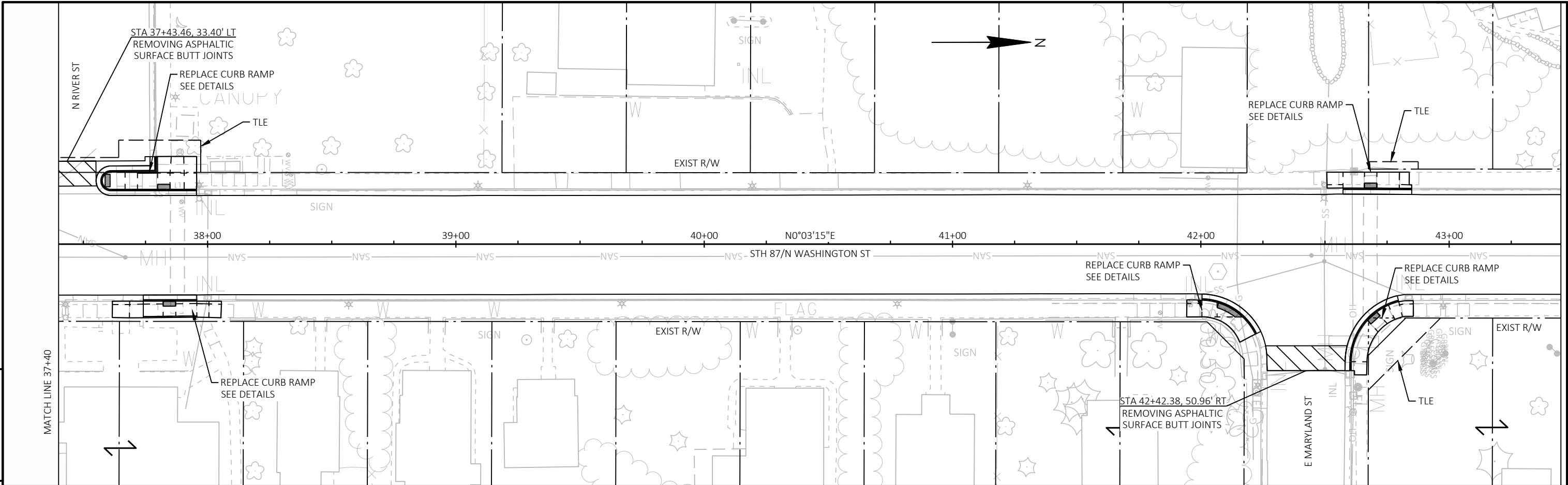




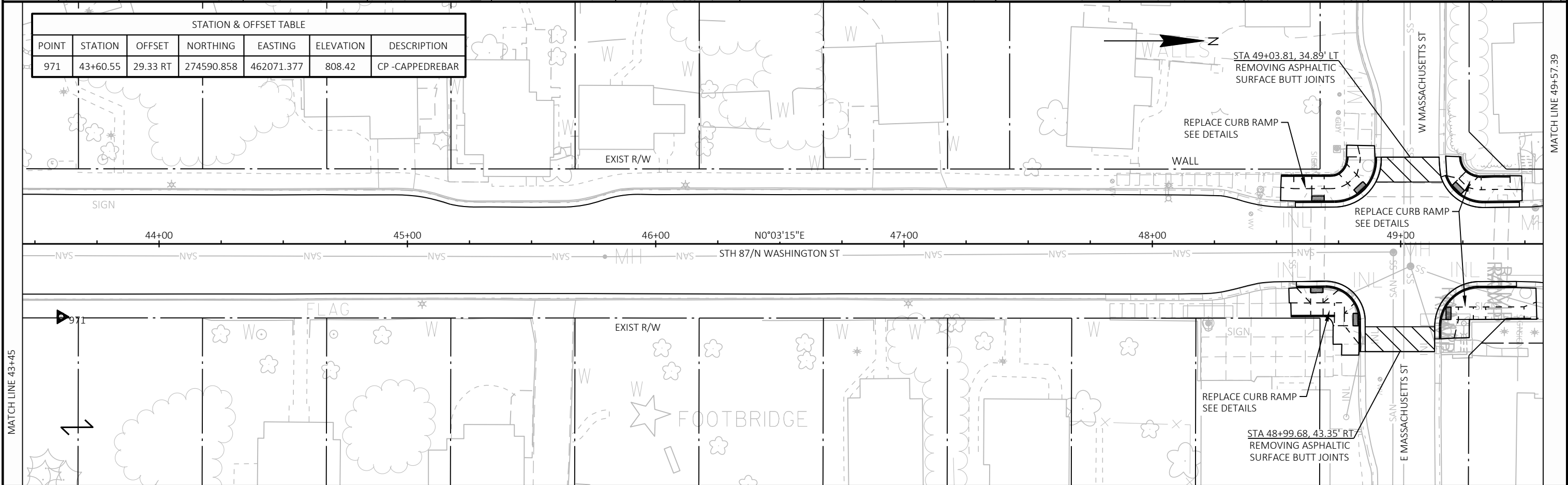
STATION & OFFSET TABLE						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
969	27+85.76	18.72 LT	273016.112	462021.837	809.26	CP -MAG
981	31+04.30	28.17 LT	273334.661	462012.692	809.16	CP -FMDMAG CP
982	29+11.68	43.23 RT	273141.979	462083.907	811.26	CP -FMDMAG
984	30+64.20	29.24 LT	273294.568	462011.587	809.17	CP BM -FNDMAG
985	30+16.59	29.21 LT	273246.951	462011.571	809.44	CP BM -FNDMAG
986	30+04.09	29.23 LT	273234.459	462011.537	809.44	CP BM -FNDMAG



STATION & OFFSET TABLE						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
970	36+57.07	36.89 RT	273887.372	462078.270	807.86	CP -CAPPEDREBAR
988	32+03.11	19.04 LT	273433.461	462021.914	808.07	CP -FNDMAG
994	37+17.04	14.77 LT	273947.393	462026.666	806.39	CP - MAG T156



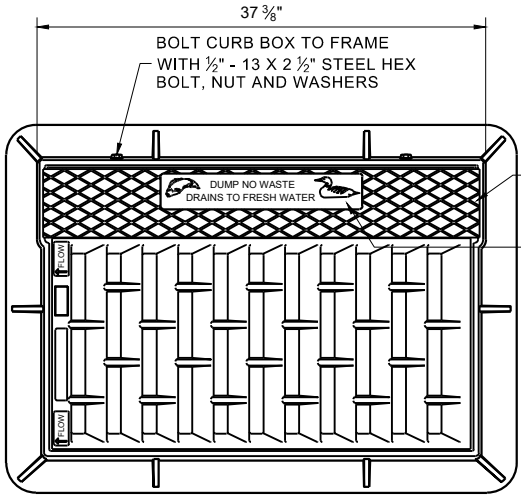
STATION & OFFSET TABLE						
POINT	STATION	OFFSET	NORTHING	EASTING	ELEVATION	DESCRIPTION
971	43+60.55	29.33 RT	274590.858	462071.377	808.42	CP -CAPPEDREBAR



PROJECT NO: 8840-00-70	HWY: STH 87	COUNTY: POLK	PLAN SHEETS	SHEET	E
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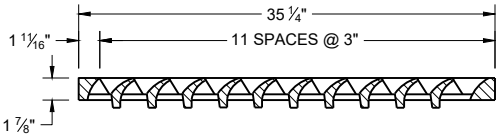
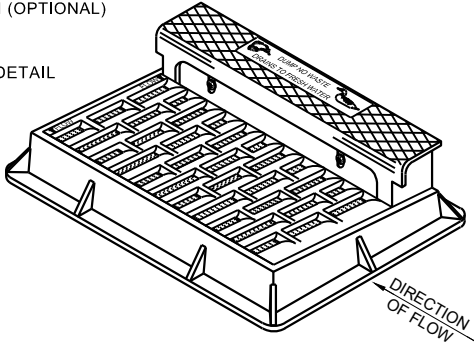
Standard Detail Drawing List

08A05-21A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-21E	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08D01-24A	CONCRETE CURB & GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-22A	CURB RAMPS TYPES 1 AND 1-A
08D05-22B	CURB RAMPS TYPES 2 AND 3
08D05-22C	CURB RAMPS TYPES 4A AND 4A1
08D05-22D	CURB RAMPS TYPE 4B AND 4B1
08D05-22E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-22F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-22G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B16-03	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09E01-15A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
13C19-03	HMA LONGITUDINAL JOINTS
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-10A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-05	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15C36-01	PARKING STALL MARKING
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D30-11A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D39-03	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

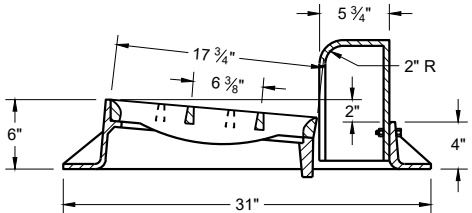
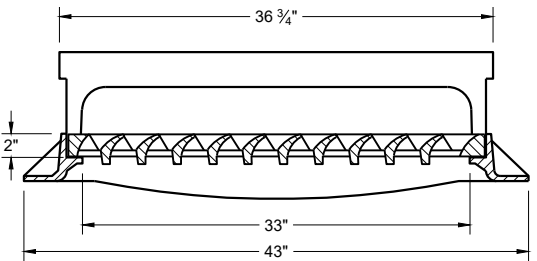
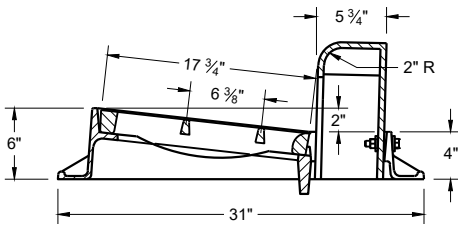
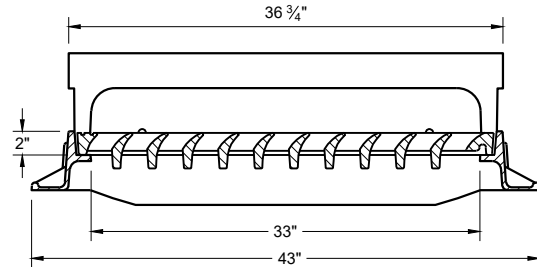


NOTE: EITHER CASTING IS ACCEPTABLE

TYPE "C" CHECKERED TOP DESIGN (OPTIONAL)
SEE LOGO DETAIL



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

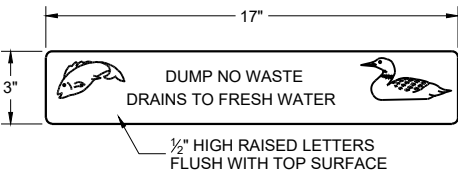


TYPE "H"

NOTE: EITHER CASTING IS ACCEPTABLE



SPECIAL GRATE FOR TYPE "H" COVER
(MEASURES 35" X 17 3/4" X 2")
(NOTED AS TYPE H-S ON DRAINAGE TABLE)



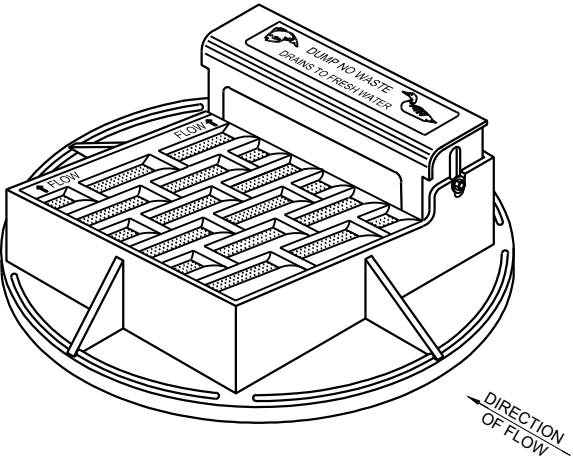
LOGO DETAIL

GENERAL NOTES

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

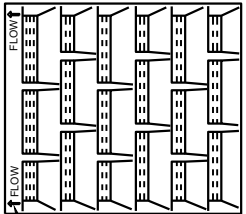
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

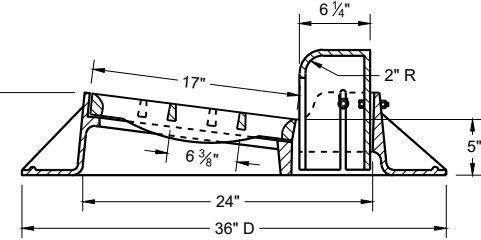
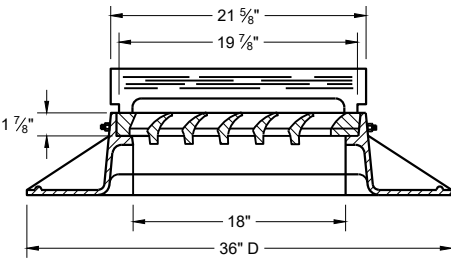
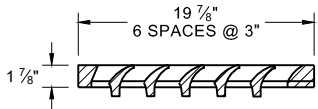


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

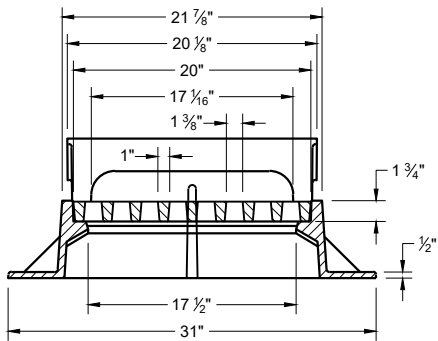
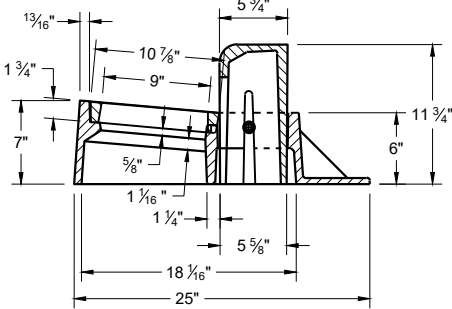
NOTE: EITHER CASTING IS ACCEPTABLE



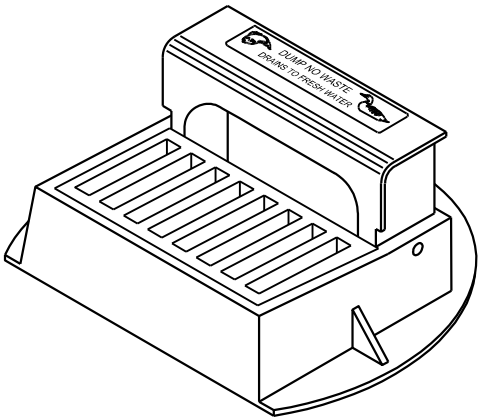
DIRECTION OF FLOW ARROWS



TYPE "A"



TYPE "Z"



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

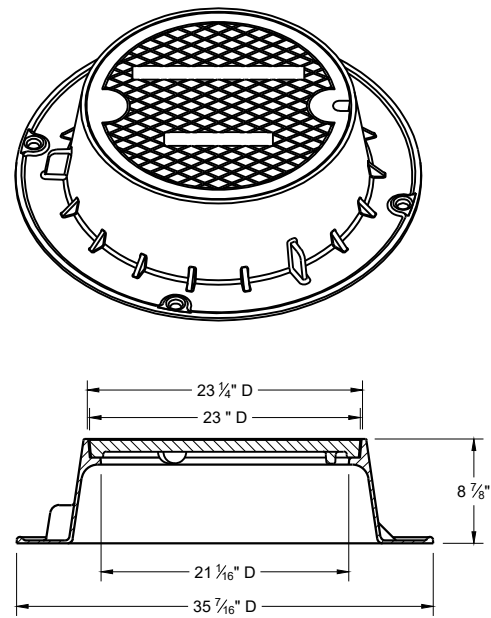
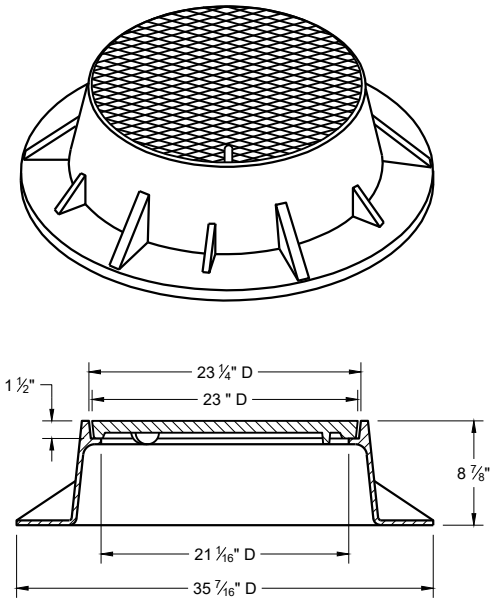
APPROVED
December 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

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.

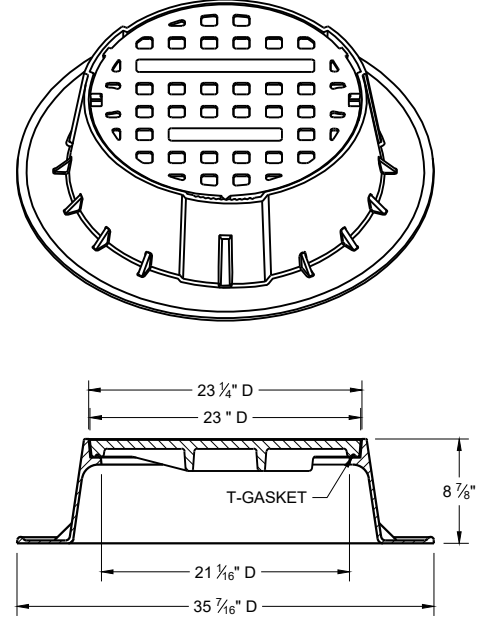
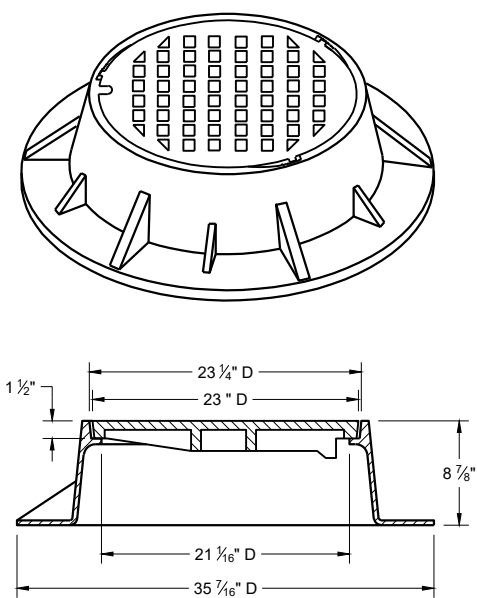
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



TYPE "J"

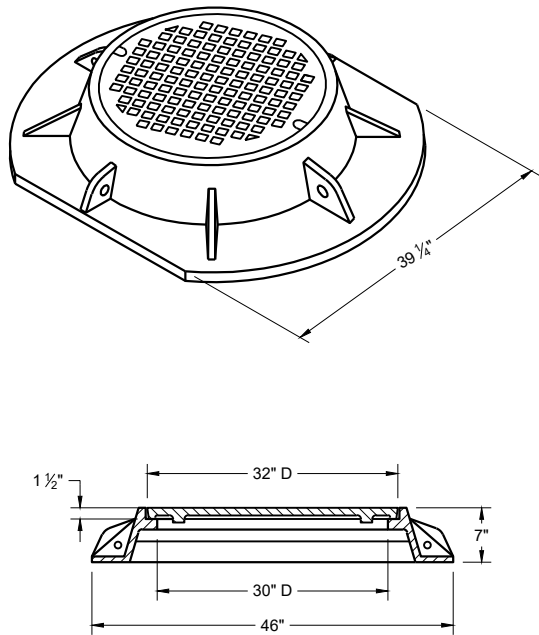
NOTE: EITHER CASTING IS ACCEPTABLE



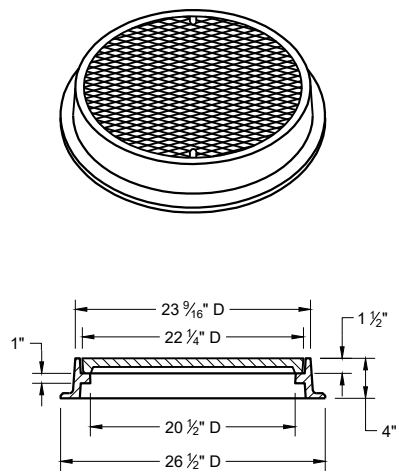
TYPE "J" SPECIAL

TYPE "B" NON-ROCKING SELF-SEAL LID (NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

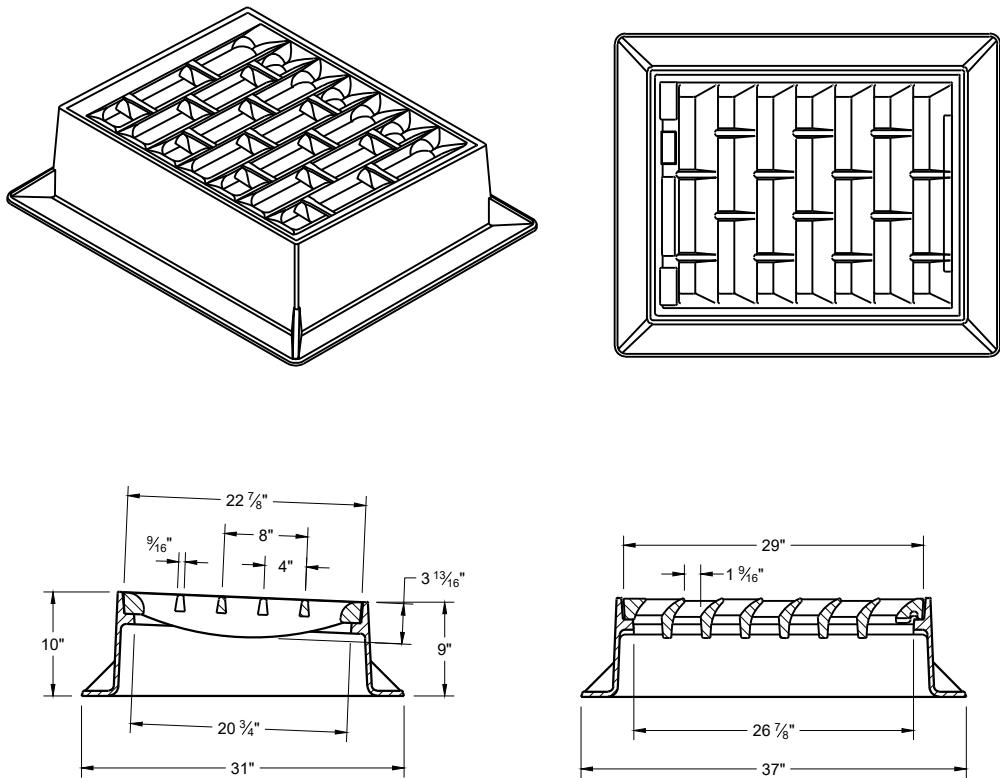
NOTE: EITHER CASTING IS ACCEPTABLE



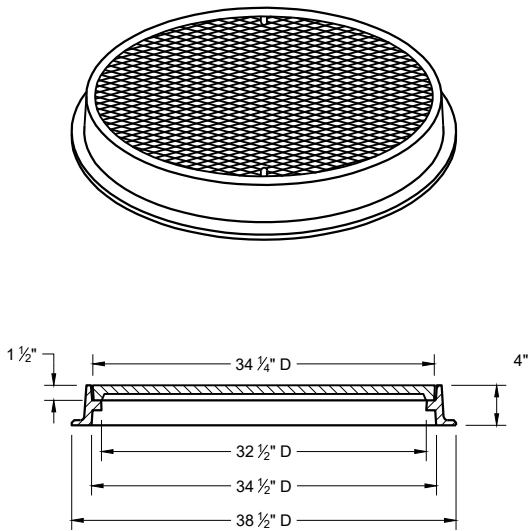
TYPE "K"



TYPE "L"



INLET COVER TYPE "BW"

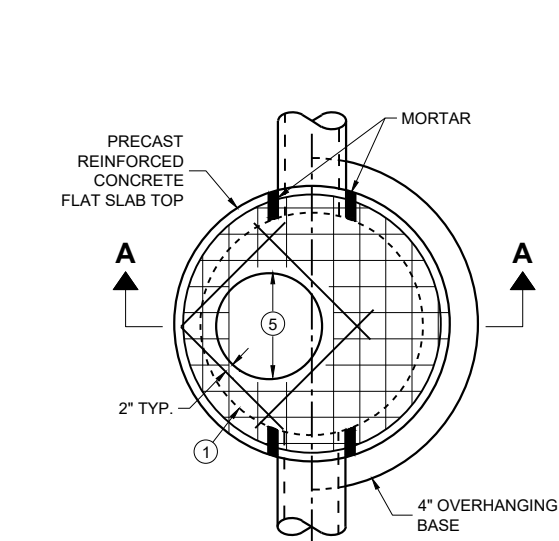


TYPE "M"

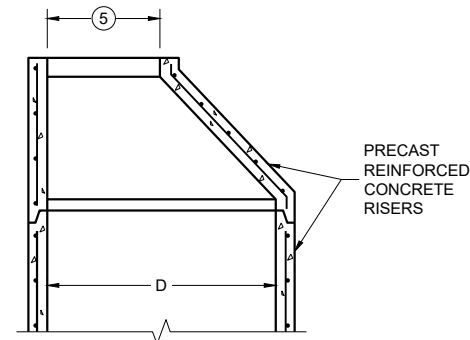
INLET COVERS TYPES BW
MANHOLE COVERS TYPES K,
J, J-S, L, AND M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

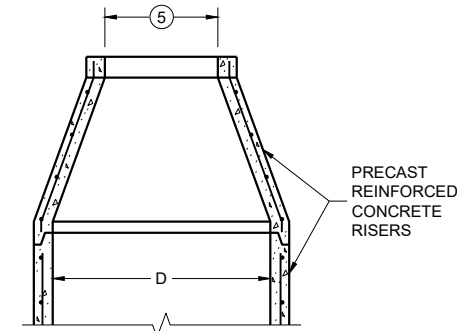
APPROVED
December 2023 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



PLAN VIEW
CIRCULAR OPENING



OPTIONAL PRECAST
REINFORCED CONCRETE
ECCENTRIC TOP



OPTIONAL PRECAST
REINFORCED CONCRETE
CONCENTRIC TOP

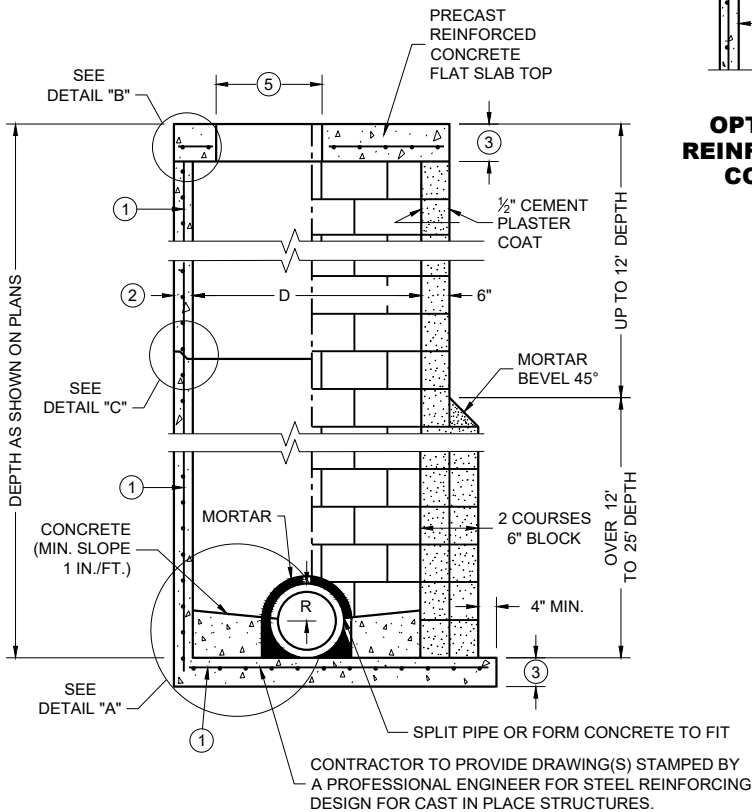
MANHOLE COVER OPENING MATRIX

MANHOLE COVER OPENING SIZE (FT.)	MANHOLE COVER TYPE	C	ALL JS	K	L	M
2 DIA.	5	X	X		X	
3 DIA.				X		X

PIPE MATRIX

MANHOLE SIZE (DIA.)	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES		MINIMUM WALL THICKNESS (IN)	MINIMUM PRECAST FLAT SLAB TOP AND BASE THICKNESS
	180° SEPARATION (IN)	90° SEPARATION (IN)		
3-FT	15	12	4	6
4-FT	24	18	4	6
5-FT	36	24	5	8
6-FT	42	36	6	8
7-FT	48	36/42 *	7	8
8-FT	60	42	8	8
9-FT	66	54	9	10
10-FT	72	60	10	10

*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES.
SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.

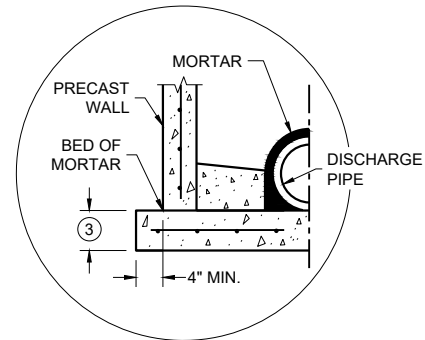


SECTION A - A

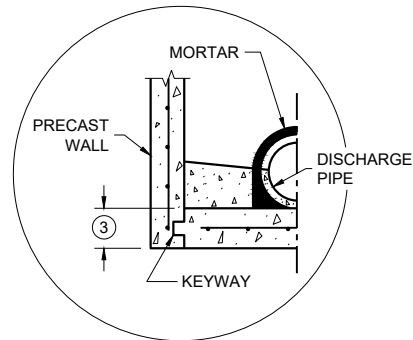
PRECAST REINFORCED
CONCRETE WITH
MONOLITHIC BASE

CONCRETE BLOCK WITH
CAST IN PLACE OR
PRECAST REINFORCED
CONCRETE BASE

1

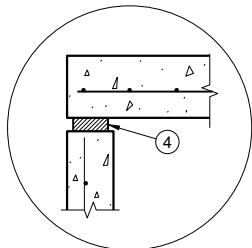


SEPARATE PRECAST REINFORCED
CONCRETE BASE OPTION

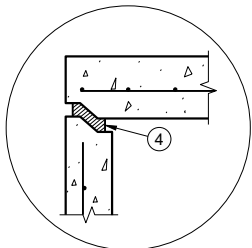


PRECAST REINFORCED CONCRETE
WITH INTEGRAL BASE OPTION

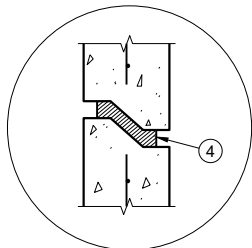
DETAIL "A"



TOP WITH PLAIN
END JOINT



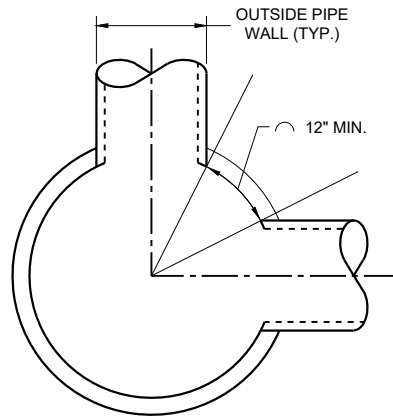
TOP WITH TONGUE
AND GROOVE JOINT



RISER WITH TONGUE
AND GROOVE JOINT

DETAIL "B"

DETAIL "C"



MINIMUM HORIZONTAL
PIPE SEPARATION
DETAIL "D"

GENERAL NOTES

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

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

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

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

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

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES. CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL IMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 3/8 INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

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

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

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

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

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

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

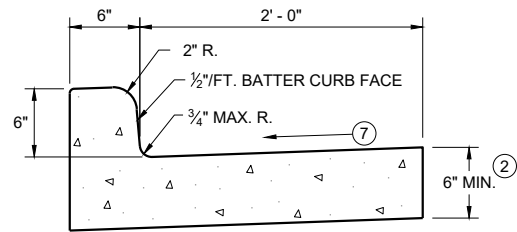
- 1 FOR PRECAST MANHOLES AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- 2 SEE PIPE MATRIX TABLE FOR MINIMUM WALL THICKNESS FOR PRECAST MANHOLES
- 3 SEE PIPE MATRIX TABLE FOR MINIMUM THICKNESS OF PRECAST FLAT SLAB TOPS AND BASES.
- 4 JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 OR RUBBER GASKETS CONFORMING TO ASTM C443.
- 5 SEE MANHOLE COVER OPENING MATRIX.

MANHOLES, 3-FT, 4-FT
5-FT, 6-FT, 7-FT, 8-FT, 9-FT
AND 10-FT DIAMETER

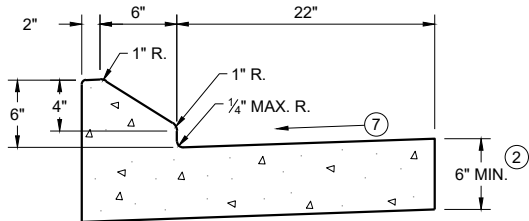
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

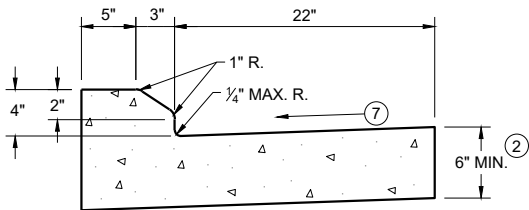
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT AND 10-FT DIAMETER



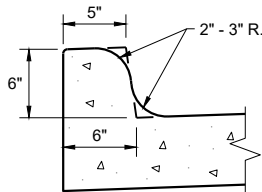
TYPES A^① & D



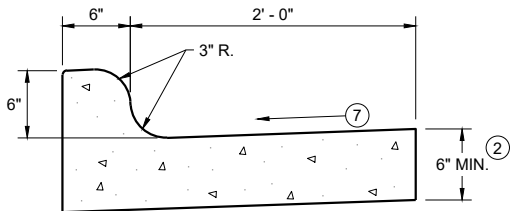
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

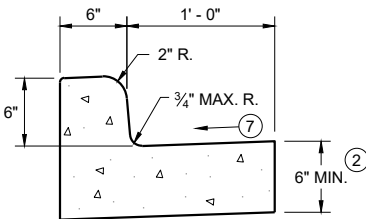


TYPES K^① & L
(OPTIONAL CURB SHAPE)



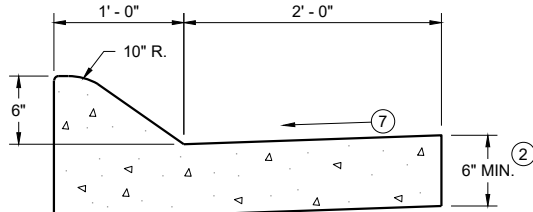
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

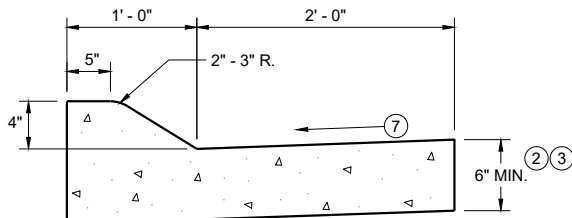


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

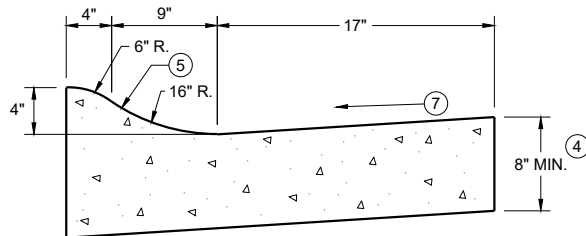


6" SLOPED CURB TYPES A^① & D



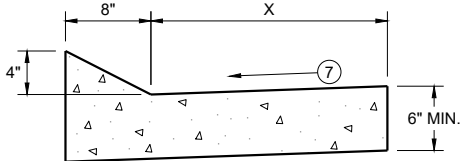
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T
CONCRETE CURB AND GUTTER 30"

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

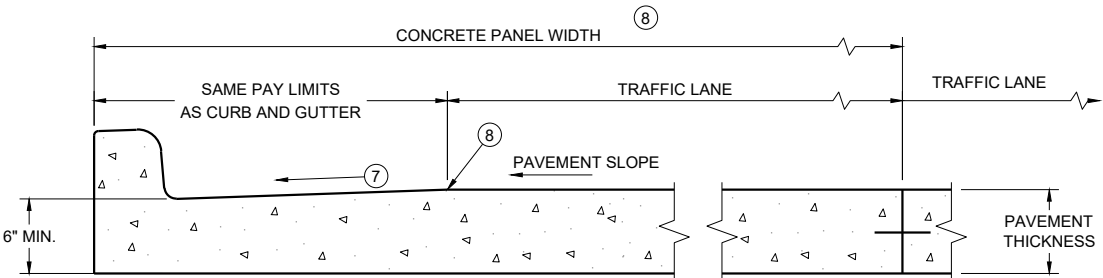


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

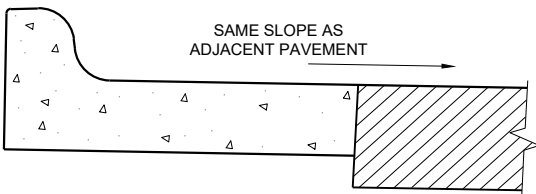
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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

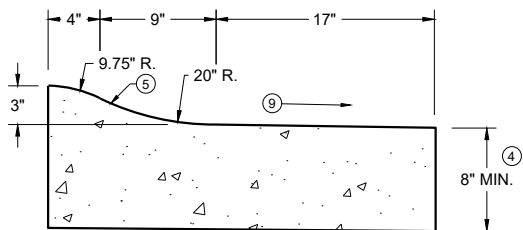


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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



3" SLOPED CURB TYPES R^① & T

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

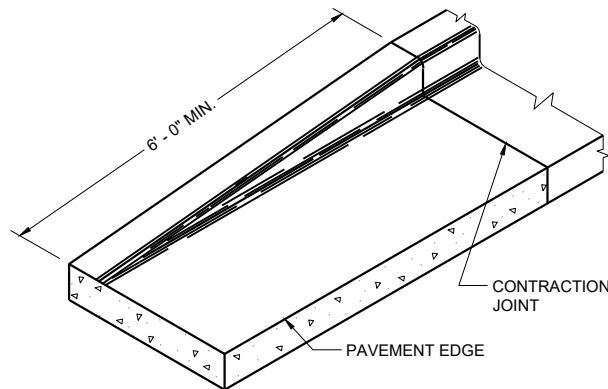
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

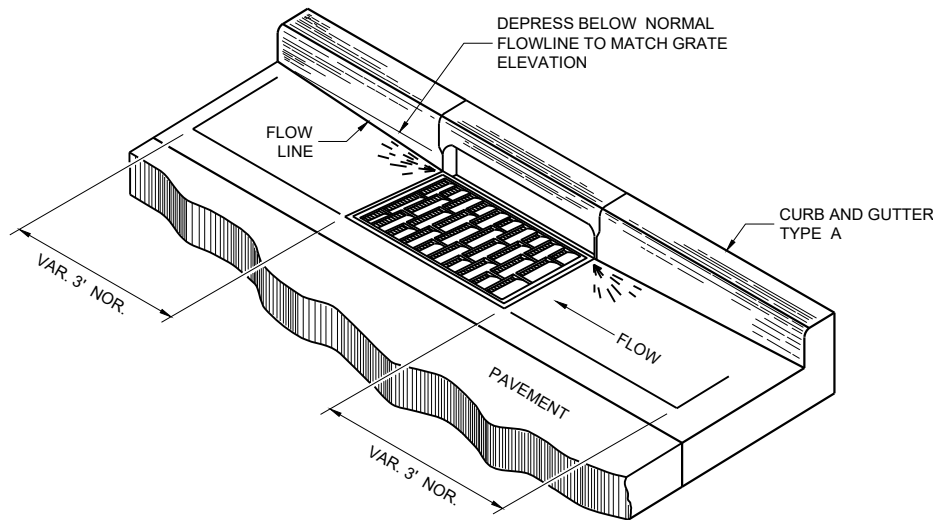
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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 SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY

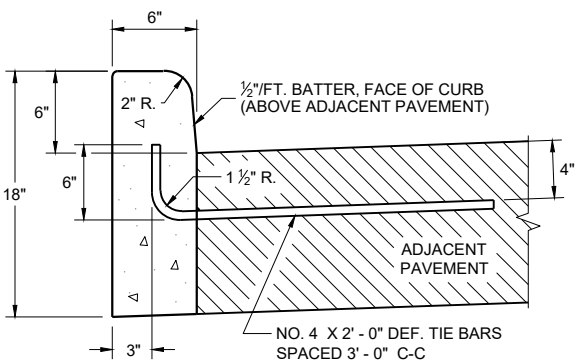


END SECTION CURB AND GUTTER

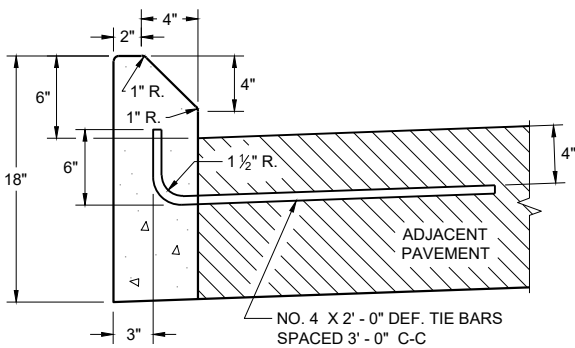


DETAIL OF CURB AND GUTTER AT INLETS

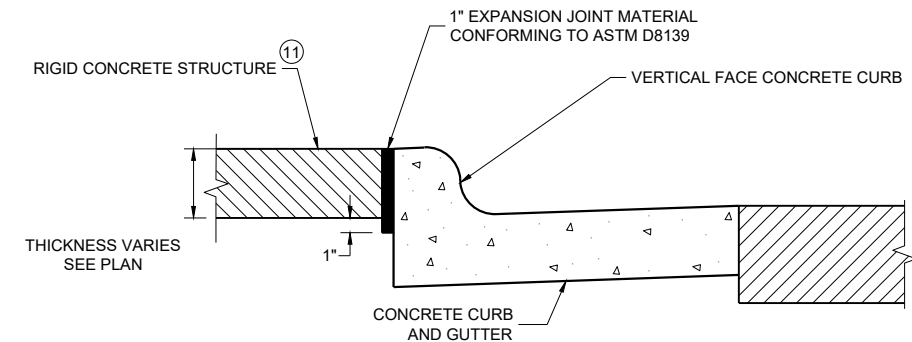
(TYPICAL H INLET COVER SHOWN)



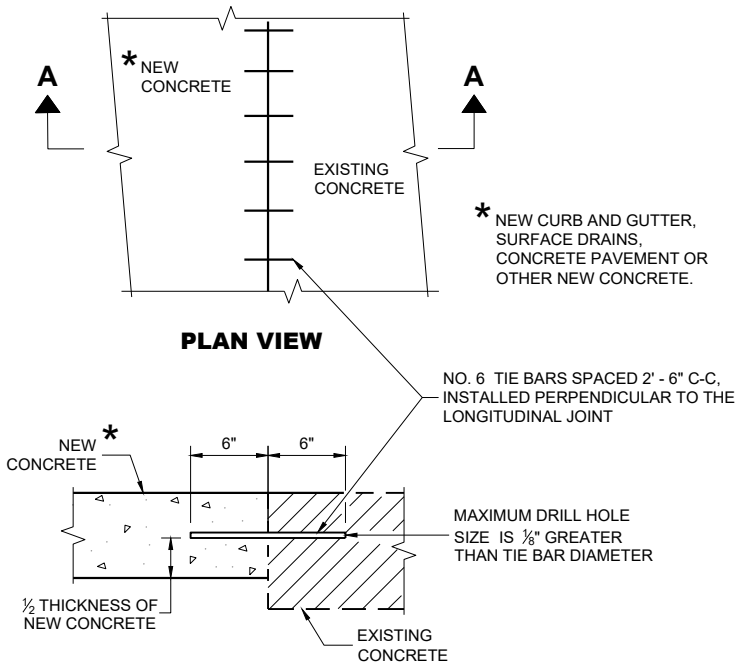
TYPES A^① & D



TYPES G^① & J
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE^⑪



SECTION A - A
TIE BARS DRILLED INTO EXISTING PAVEMENT

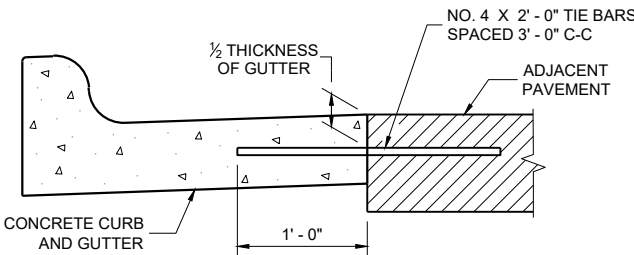
GENERAL NOTES

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

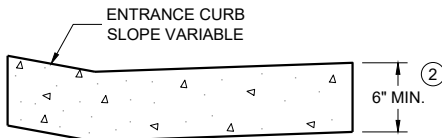
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑩ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.
- ⑪ PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.



TYPICAL TIE BAR LOCATION^①



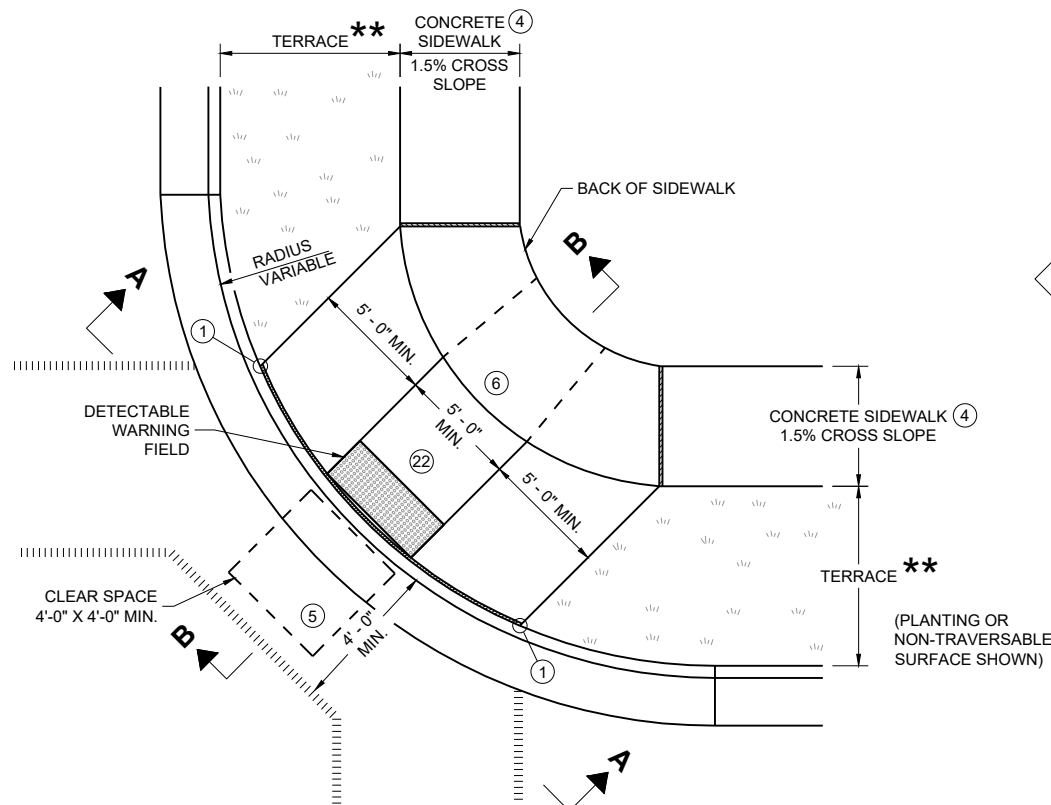
DRIVEWAY ENTRANCE CURB^⑩
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES
AND CURB AND GUTTER
APPLICATIONS

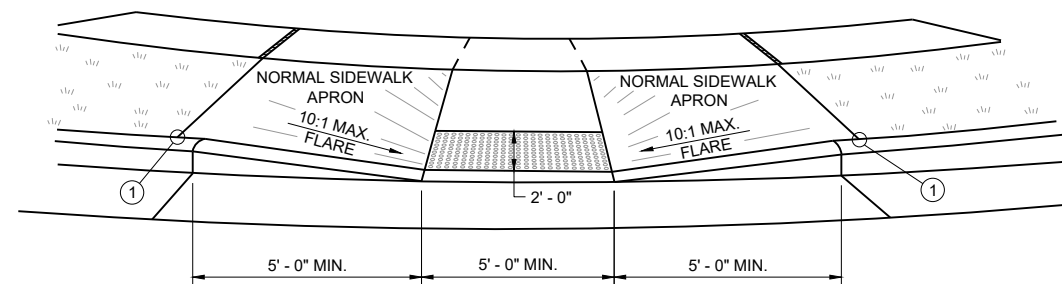
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR

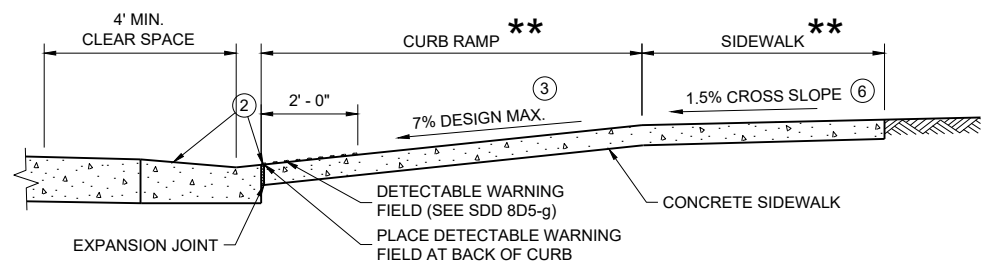
FHWA



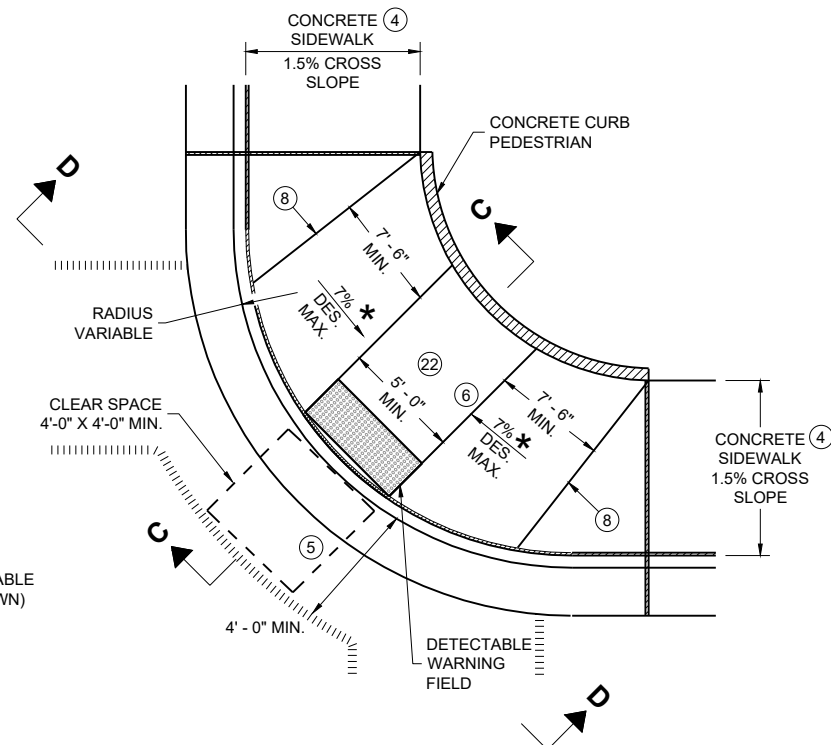
PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)



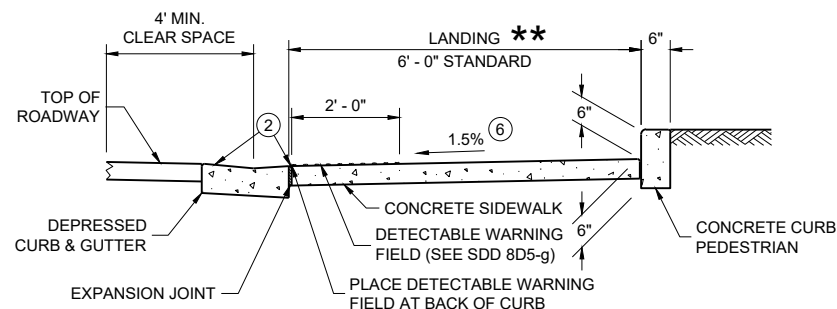
VIEW A - A FOR TYPE 1



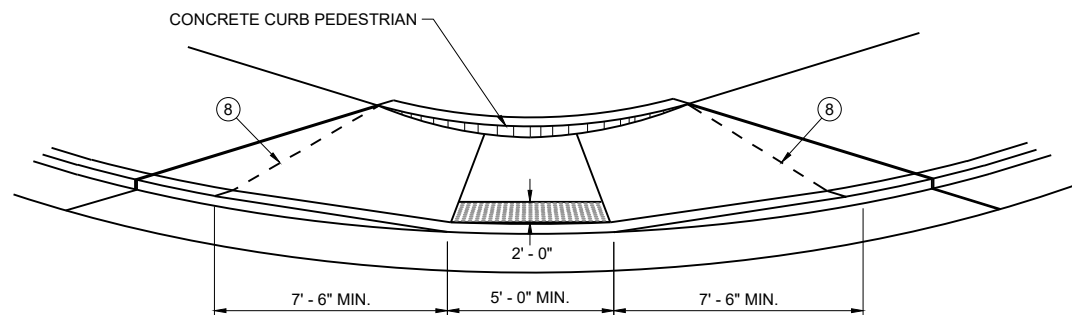
SECTION B - B FOR TYPE 1



PLAN VIEW
CURB RAMP TYPE 1 - A
(NO TERRACE)



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

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

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

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

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

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

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

- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A CLEAR SPACE IN THE STREET AND GUTTER AREA. WHEN THE GUTTER CROSS SLOPE EXCEEDS 2.1%, CONSTRUCT THE CLEAR SPACE IN THE STREET AREA AND THE 4 FOOT WIDTH IS MEASURED FROM THE FLANGE LINE. FOR RECONSTRUCTION AND MODERNIZATION PROJECTS THE CLEAR SPACE SLOPE PARALLEL TO THE CURBLINE SHOULD BE 2.1% MAX FOR CROSSINGS THAT ARE STOP AND YIELD CONTROLLED, AND 5% MAX FOR THOSE THAT ARE SIGNAL CONTROLLED. FOR PERPETUATION AND REHABILITATION PROJECTS THE SLOPE OF THE CLEAR SPACE PARALLEL TO THE CURBLINE WILL MATCH THE ROADWAY LONGITUDINAL SLOPE. THE SLOPE OF THE CLEAR SPACE PERPENDICULAR TO THE CURBLINE WILL MATCH THE ROADWAY CROSS SLOPE BUT SHOULD NOT EXCEED 5% UNLESS THE ROADWAY IS SUPERELEVATED (WHEN SUPERELEVATED THE ROADWAY CROSS SLOPE SHOULD MATCH THE SUPERELEVATION).
- ⑥ PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑰ A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.
- ⑳ THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

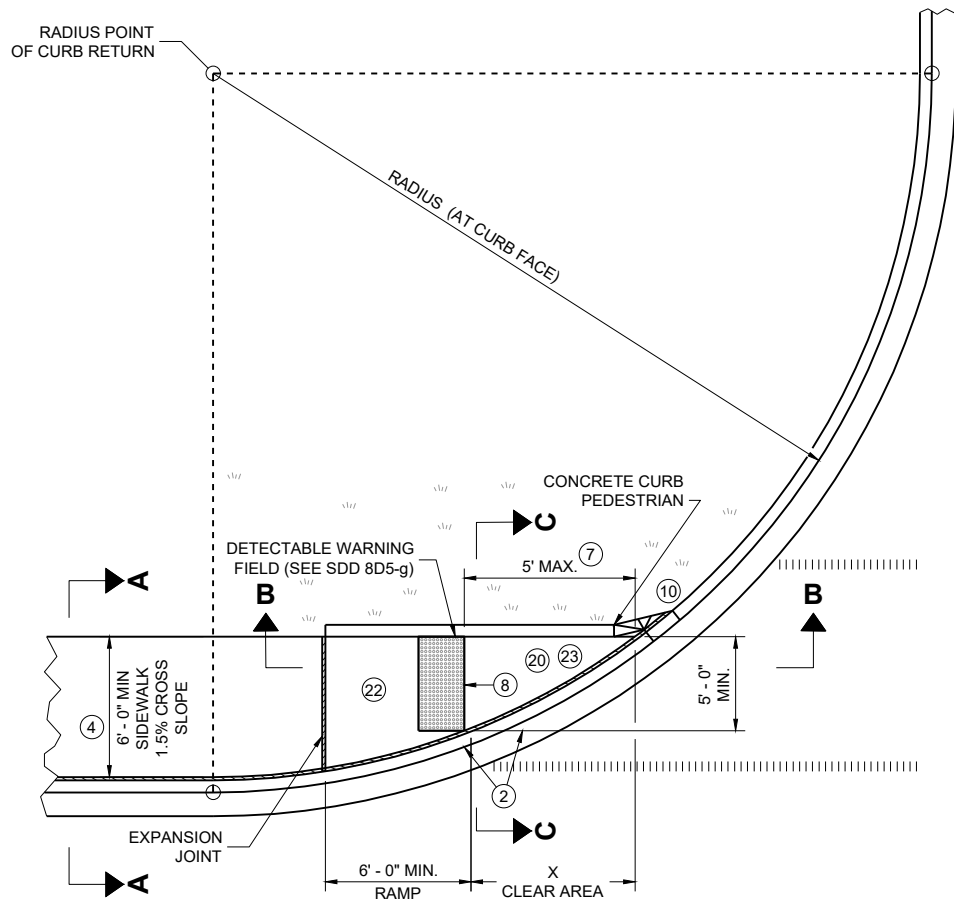
LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- * MAXIMUM 8.3%
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS

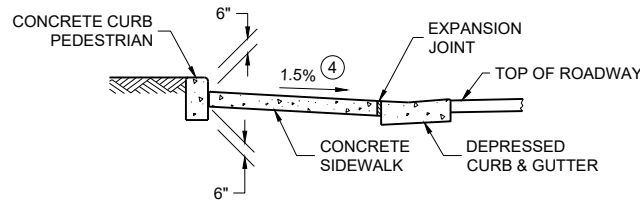
CURB RAMPS
TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

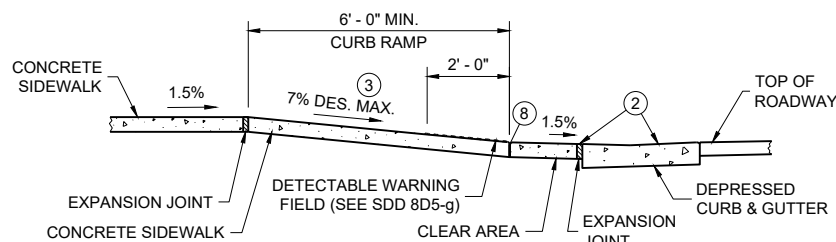
- 877-60780 775**



PLAN VIEW
CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A

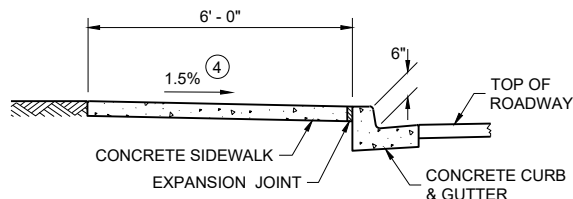


SECTION B - B FOR
TYPE 4A AND TYPE 4A1

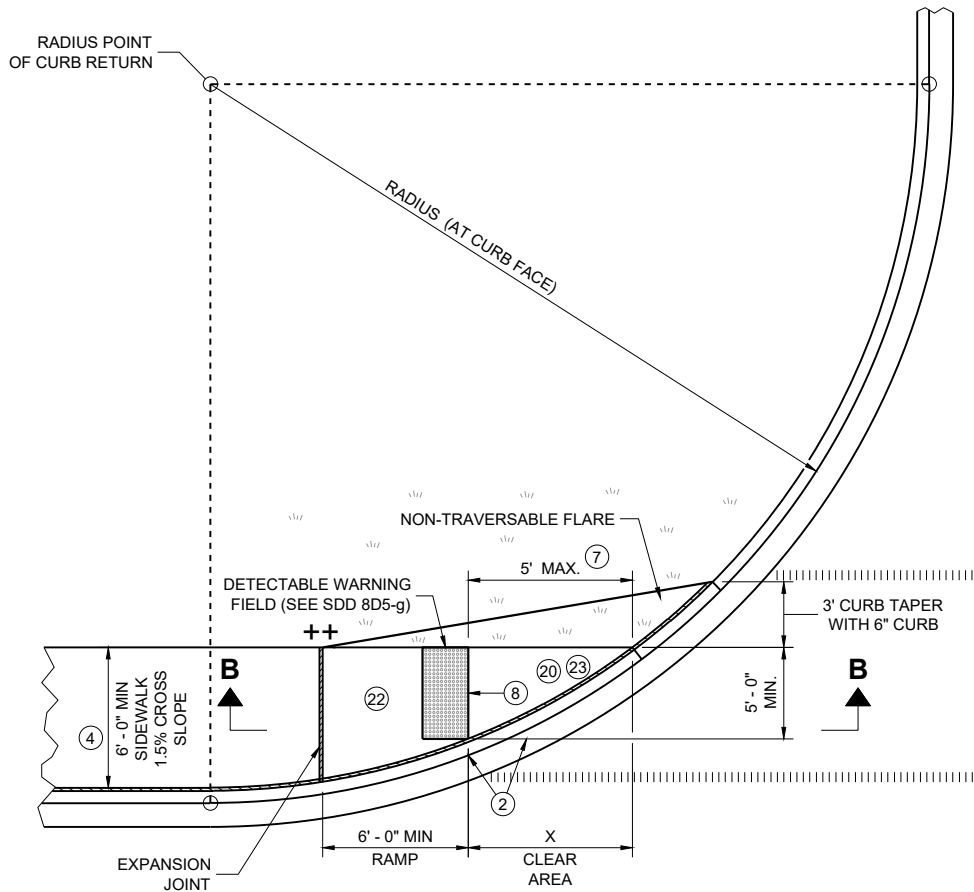
- LEGEND**
- 1/2" EXPANSION JOINT SIDEWALK
 - CONTRACTION JOINT SIDEWALK
 - PAVEMENT MARKING CROSSWALK (WHITE)
 - ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

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

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



PLAN VIEW
CURB RAMP TYPE 4A1

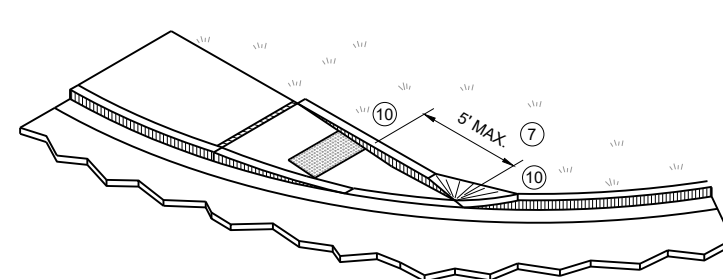
GENERAL NOTES

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

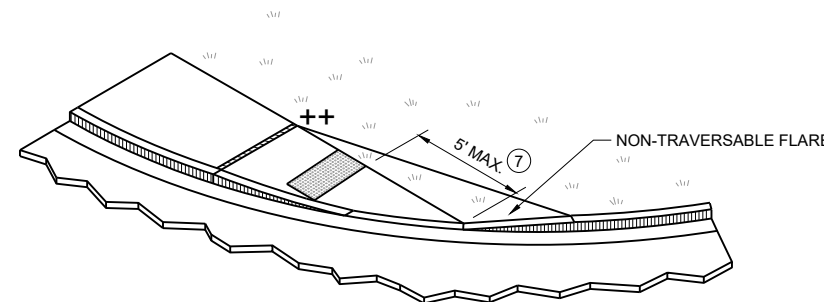
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

- 2 GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- 3 MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.
- 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 7 WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- 10 INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- 17 A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.
- 20 MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.
- 22 THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.
- 23 THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

**CURB RAMPS
TYPE 4A AND 4A1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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



LEGEND

 1/2" EXPANSION JOINT SIDEWALK

— — — — CONTRACTION JOINT SIDEWALK

||||||| PAVEMENT MARKING
CROSSWALK (WHITE)

* MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

++ CONSTRUCT 6" WEDGE TO AVOID
CONCRETE BREAKAGE

GENERAL NOTES

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

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

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

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

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

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

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

⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

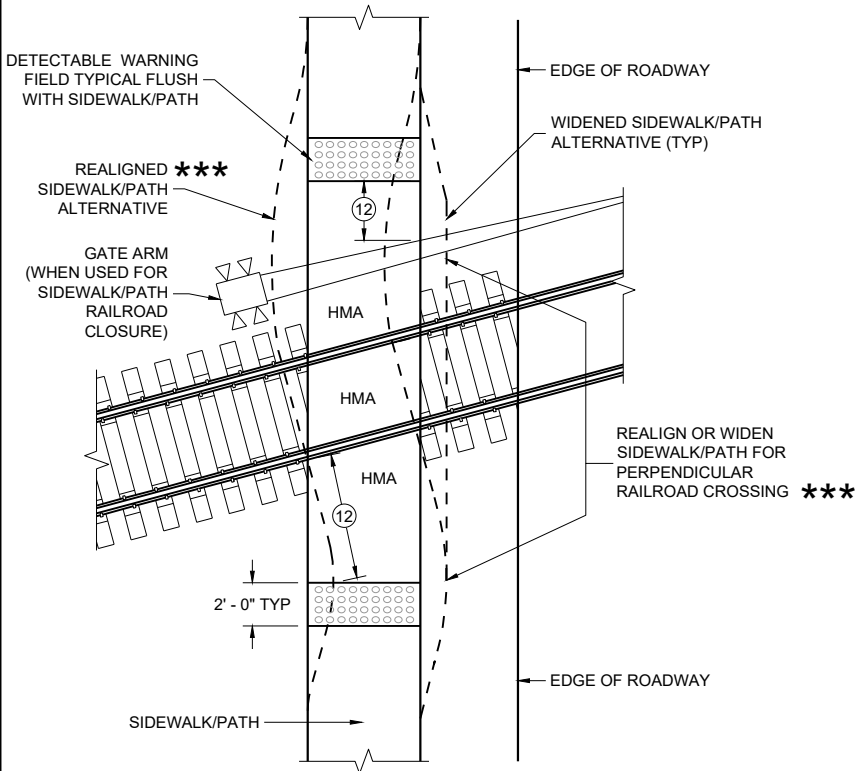
⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

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

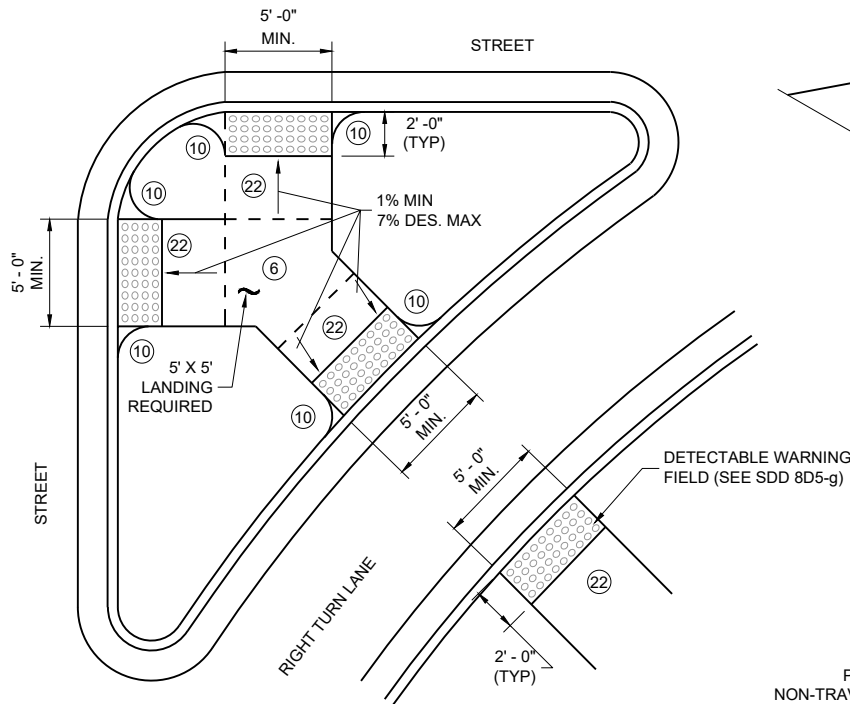
(20) MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.

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

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

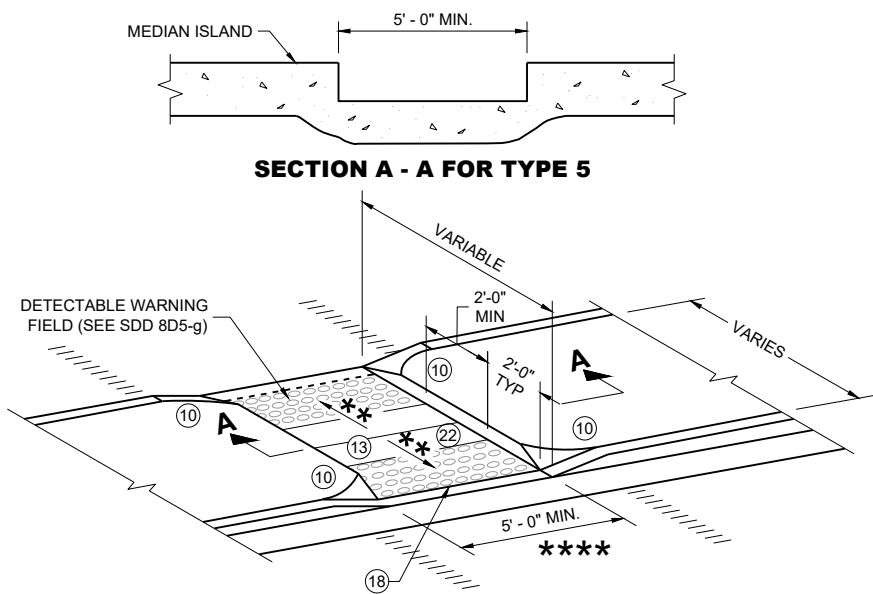


CURB RAMP TYPE 8
DETECTABLE WARNINGS
FOR SIDEWALKS OR SHARED USE PATHS
AT RAILROAD CROSSINGS

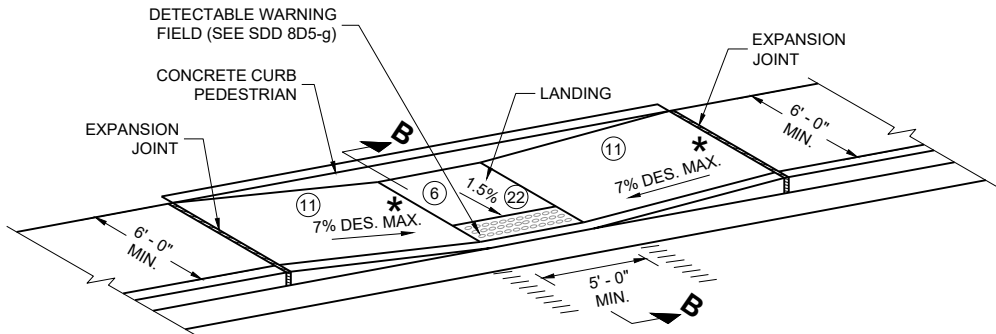


CURB RAMP TYPE 6
DETECTABLE WARNING AT ISLANDS

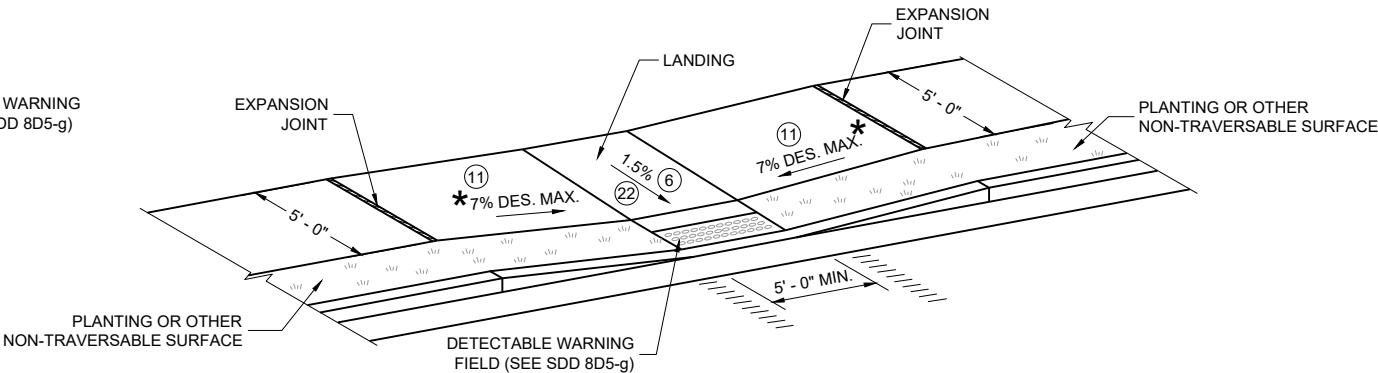
REFER TO GENERAL NOTES (2) AND (3)
FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 5
MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING



CURB RAMP TYPE 7A
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS



CURB RAMP TYPE 7B
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS

GENERAL NOTES

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

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

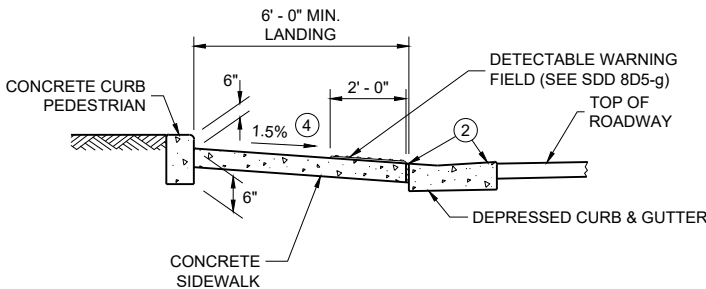
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1%.

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

- (2) GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.
- (10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- (11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- (12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK/PATH. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD TRACK IS 15 FEET MAXIMUM AND 12 FEET MINIMUM, 15 FEET TYPICAL FROM THE NEAREST RAIL.
- (13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.
- (17) A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.
- (18) WHEN THE DISTANCE BETWEEN THE BACK OF CURBS IS LESS THAN 6 FEET BUT THE FACE OF CURB TO FACE OF CURB DISTANCE IS 6 FEET OR GREATER THEN THE DETECTABLE WARNING FIELDS MAY BE MOVED SO THAT THE EDGE OF THE WARNING FIELD IS PLACED AT THE GUTTER FLOWLINE. MAINTAIN A MINIMUM OF TWO FEET BETWEEN DETECTABLE WARNING FIELD PANELS.
- (22) THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.

LEGEND

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- MAXIMUM 8.3%
- 1% MINIMUM (PROVIDE DRAINAGE)
- DETAILS TO BE DETERMINED BY ENGINEER
- FOR SHARED USE PATHS, WIDTH MUST BE AS WIDE AS THE CROSSWALK

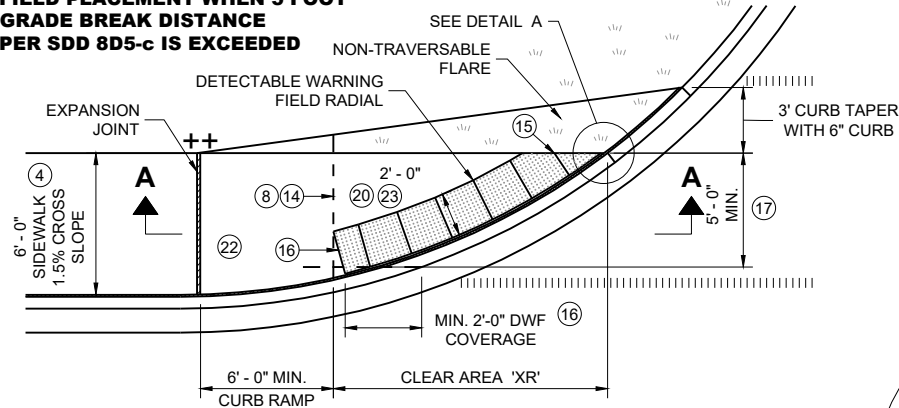


SECTION B - B FOR TYPE 7A

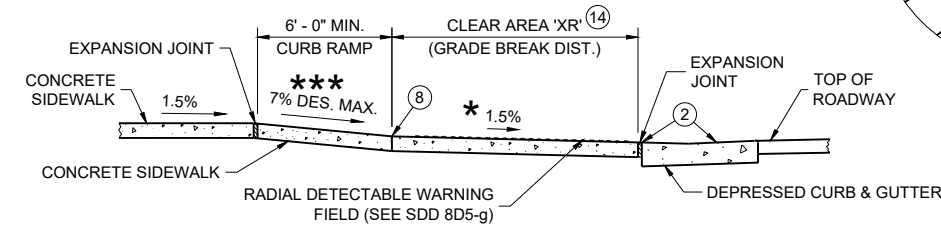
CURB RAMPS
TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

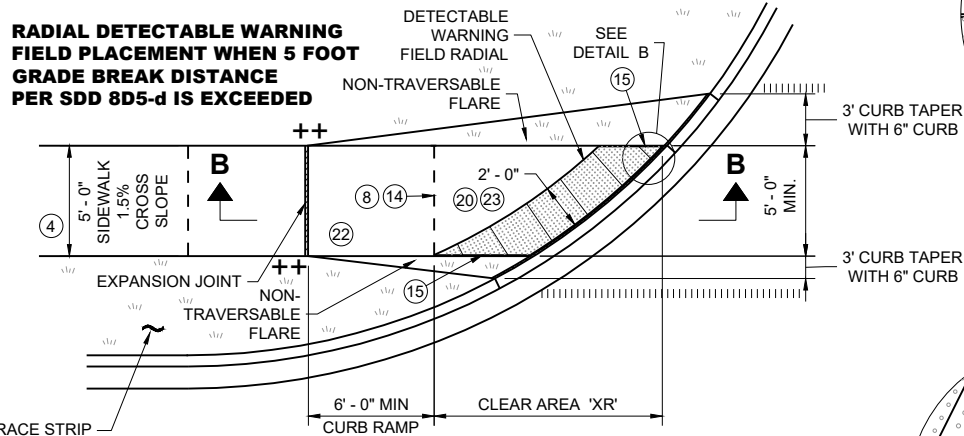


**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

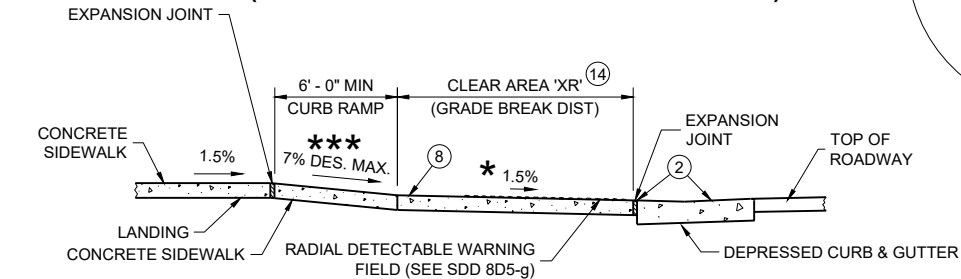


SECTION A - A FOR TYPE 4A1

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



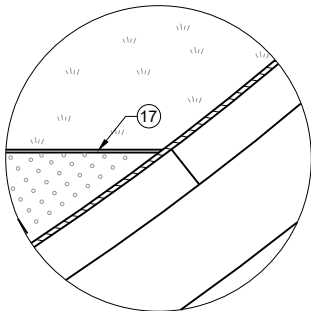
**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



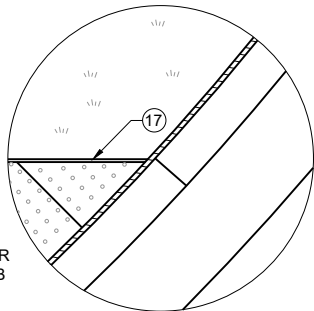
SECTION B - B FOR TYPE 4B1

LEGEND

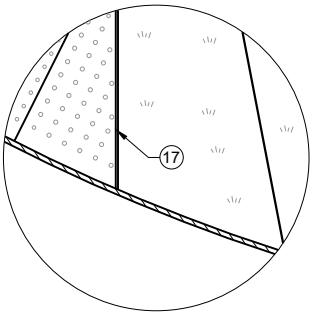
- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)
- ** WIDTH SHOWN ELSEWHERE IN THE PLANS
- *** MAXIMUM 8.3%
- ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



DETAIL A



DETAIL B



DETAIL C

GENERAL NOTES

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

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

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

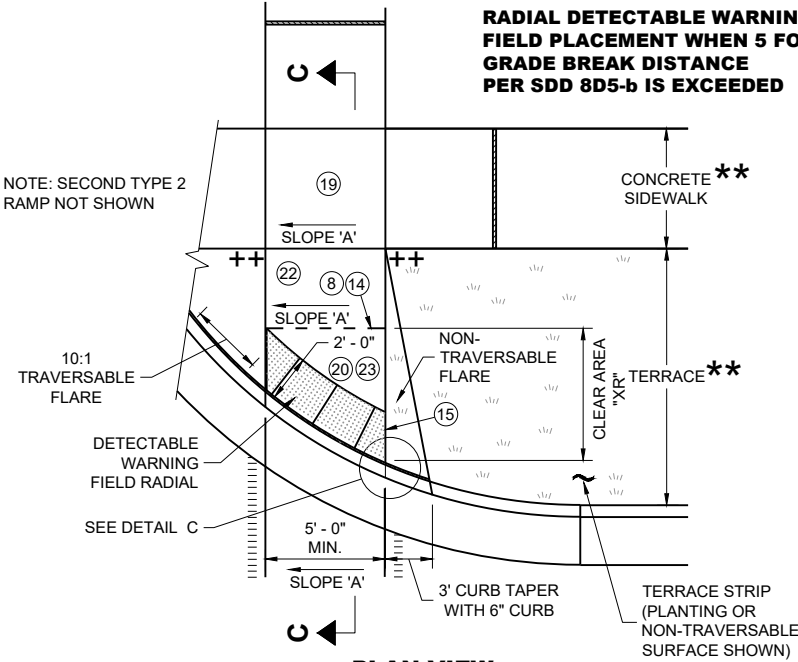
APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

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

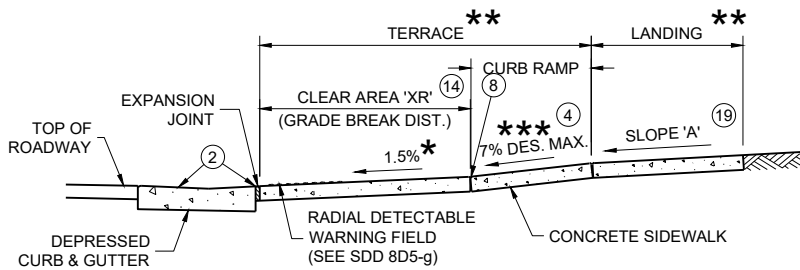
FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

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.

- 2 GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- 3 MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.
- 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 6 PROVIDE A 5 FOOT BY 5 FOOT LANDING. SLOPE PERPENDICULAR TO CURB SHALL BE 2.1% MAXIMUM. SLOPE PARALLEL TO CURB SHALL MATCH THE CURB AND GUTTER LONGITUDINAL SLOPE.
- 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- 14 CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
- 15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
- 16 USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
- 17 A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.
- 19 WHERE A LANDING SERVES TWO CURB RAMPS, THE LANDING SLOPE SHALL NOT EXCEED THE CROSS SLOPE AT THE BOTTOM OF THE RAMP OR WITHIN THE CROSSWALK PARALLEL TO THE DIRECTION OF TRAVEL.
- 20 MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.
- 22 THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.
- 23 THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.



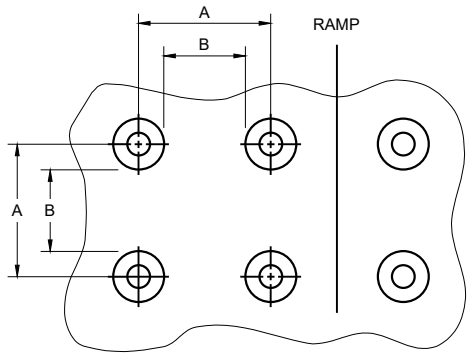
**PLAN VIEW
CURB RAMP TYPE 2
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)**



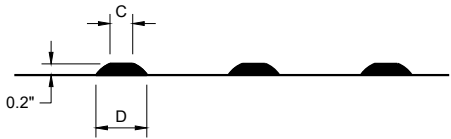
SECTION C - C FOR TYPE 2

	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.

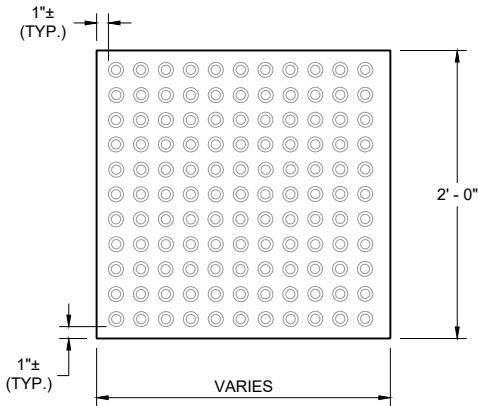


PLAN VIEW

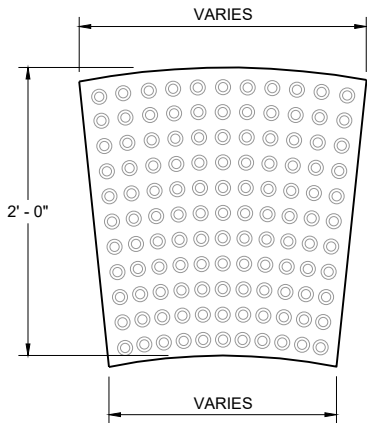


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

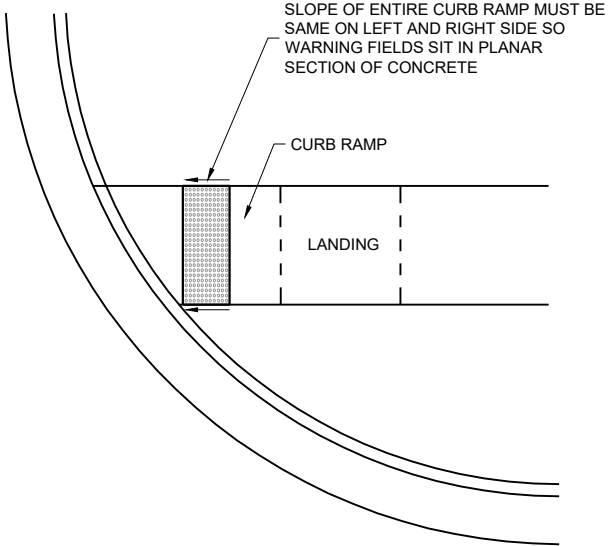


RECTANGULAR
PLATES

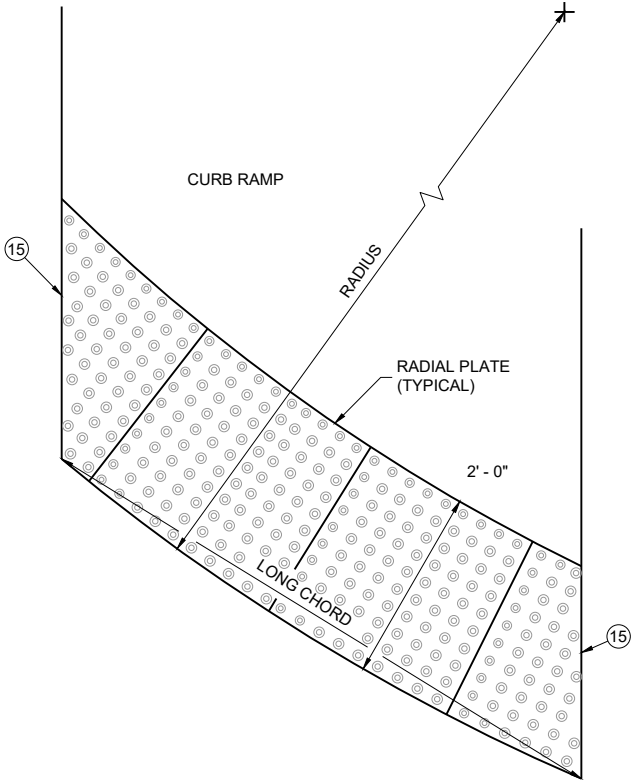


RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



DETECTABLE WARNING FIELD
PLANAR INSTALLATION



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

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.

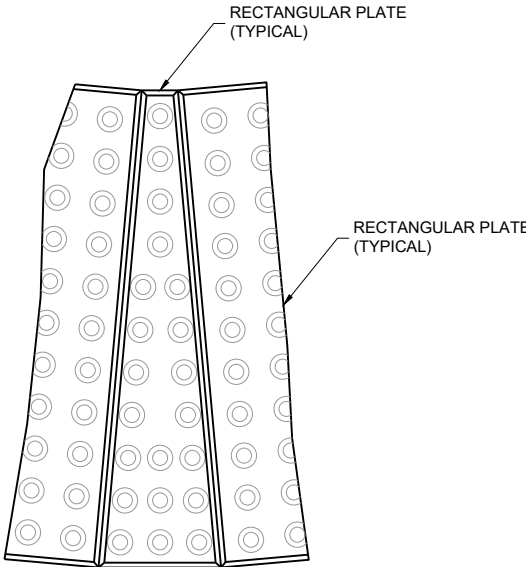
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



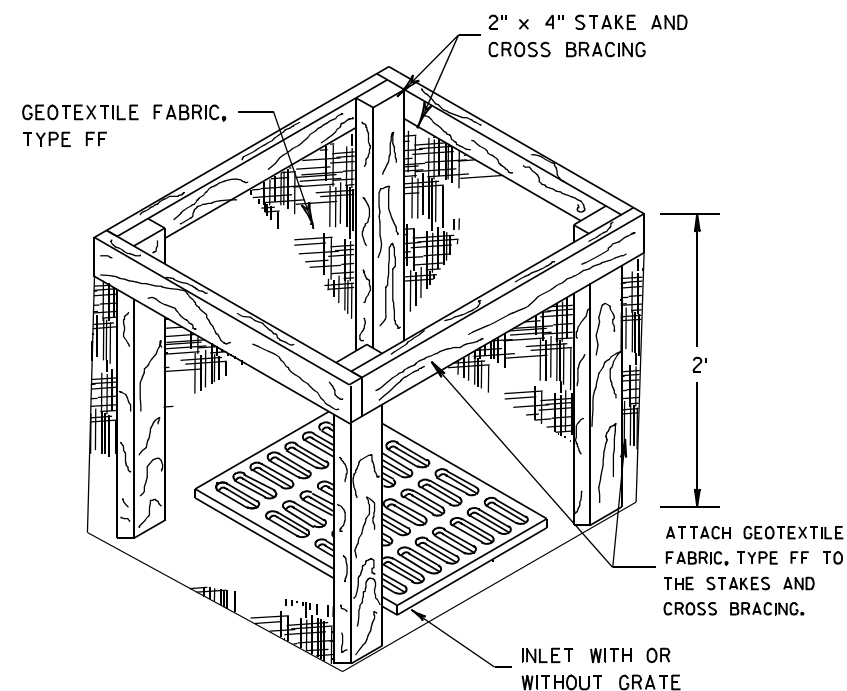
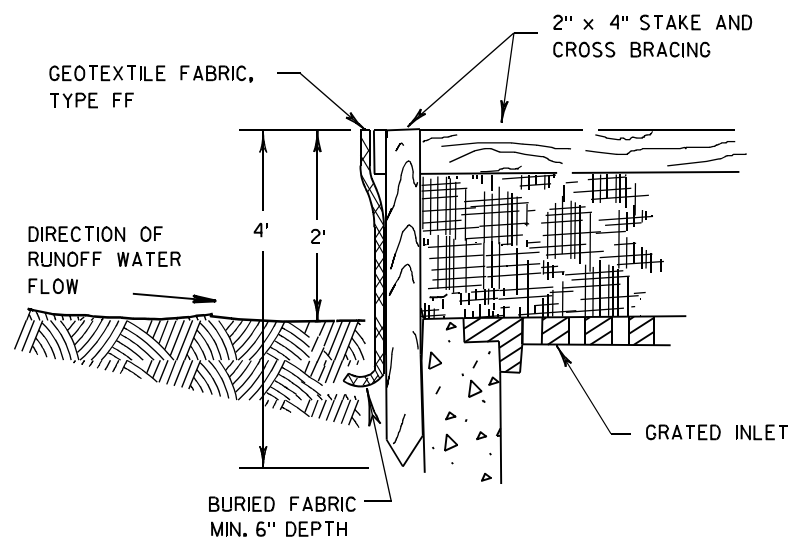
PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



INLET PROTECTION, TYPE A

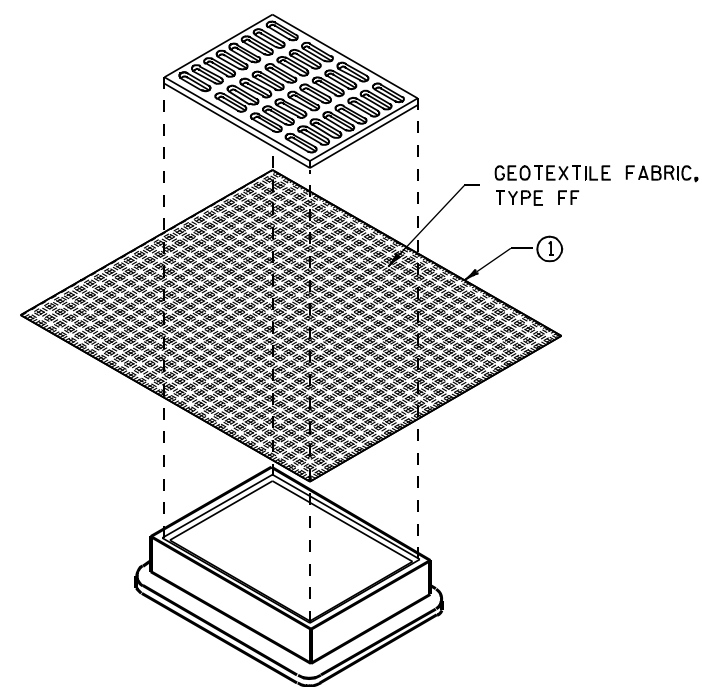
GENERAL NOTES

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.

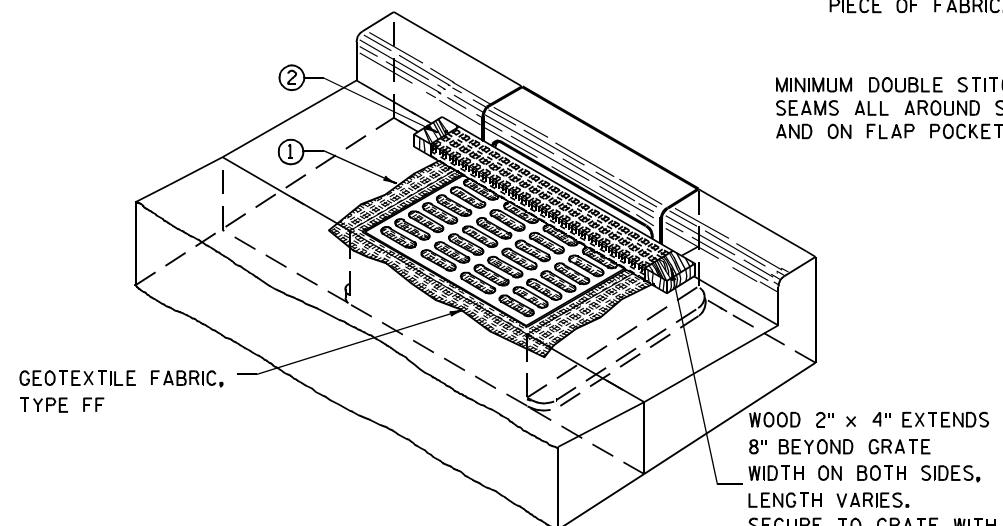
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.



**INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)**

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

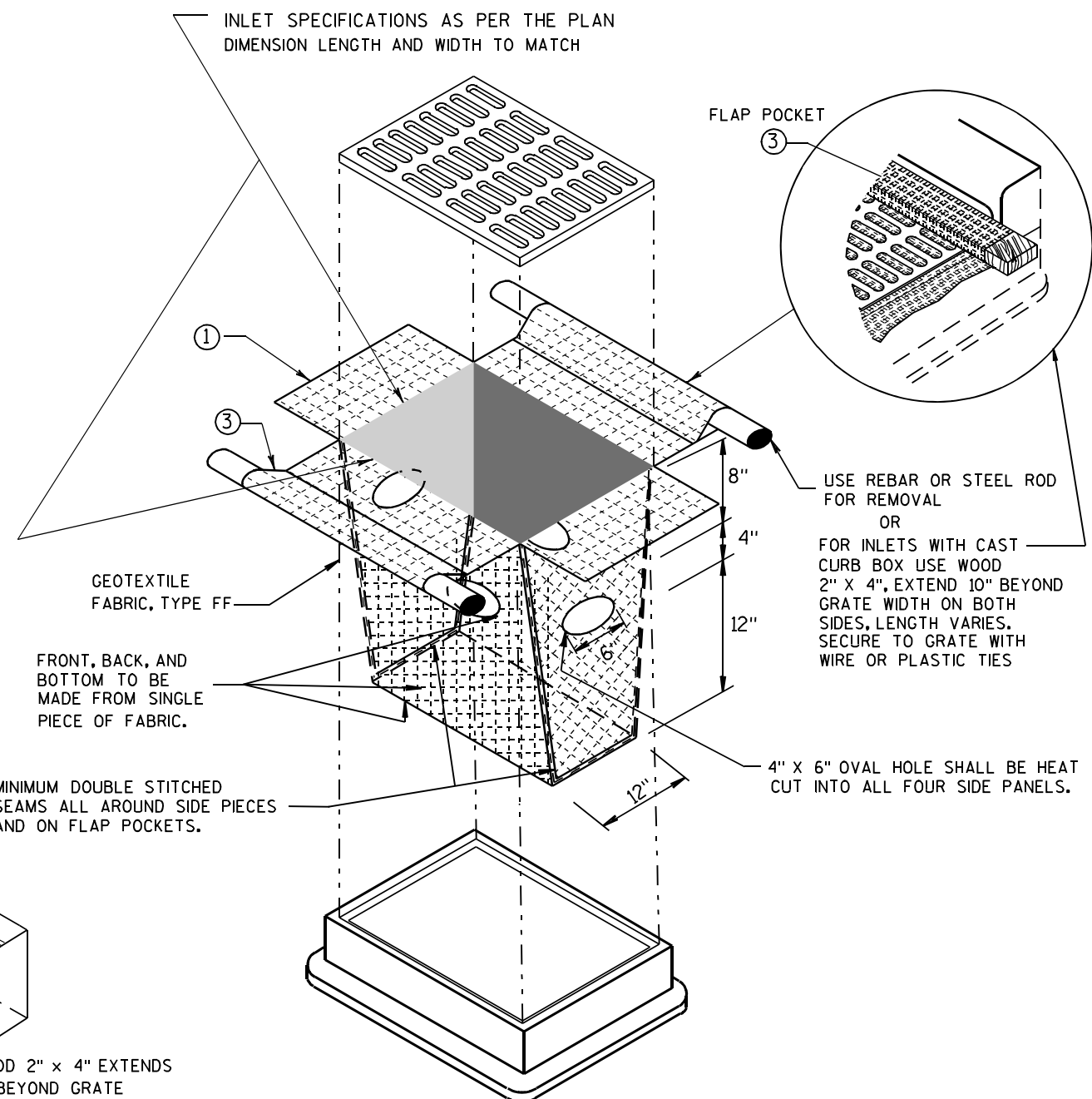
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

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.



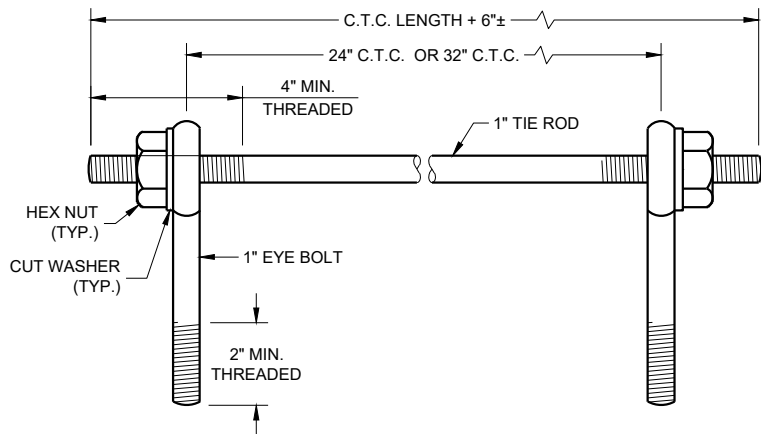
INLET PROTECTION, TYPE D

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

**INLET PROTECTION
TYPE A, B, C, AND D**

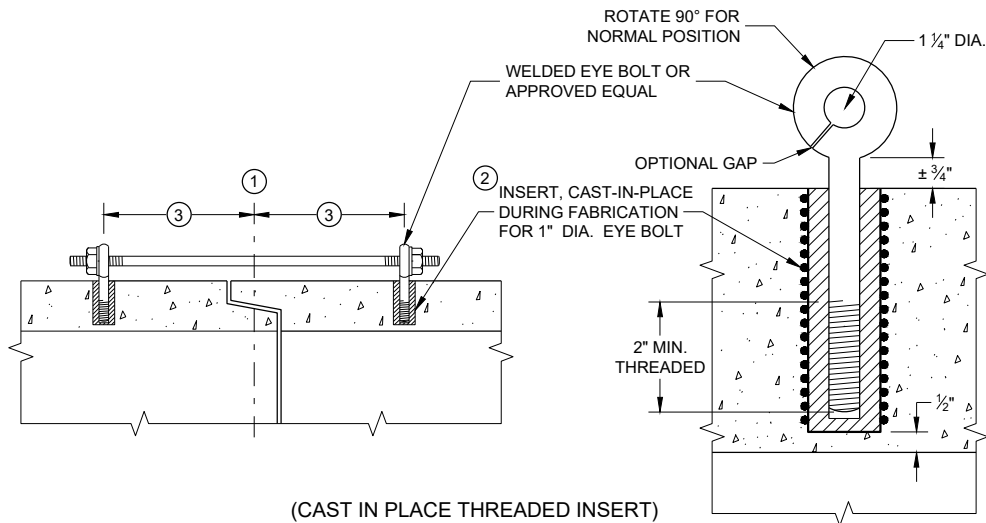
**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

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



EYE BOLTS AND TIE ROD

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



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

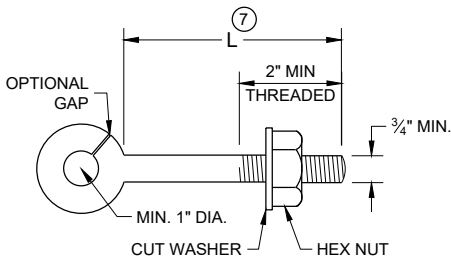
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

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

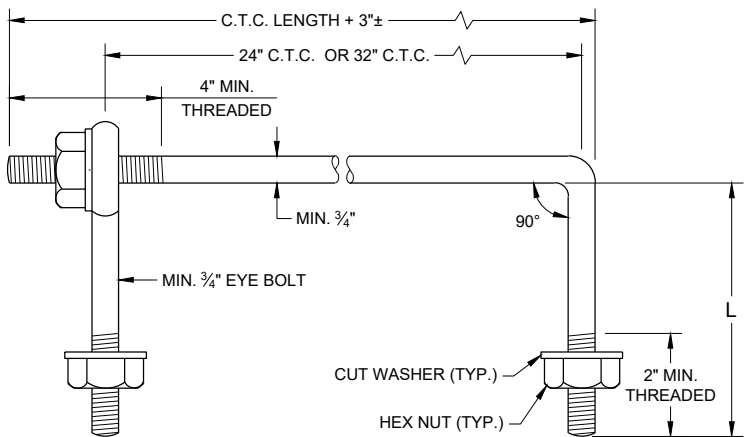
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- 1 CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- 2 THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- 3 HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
- 4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- 5 OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- 6 LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.
- 7 EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

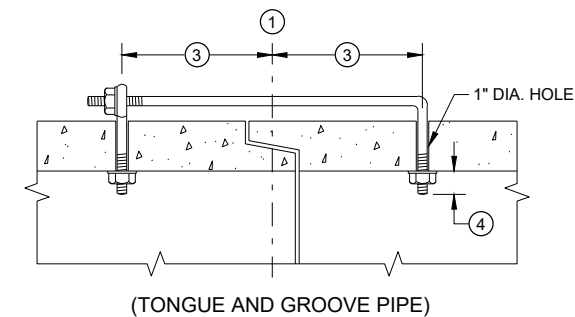


EYE BOLT 7

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

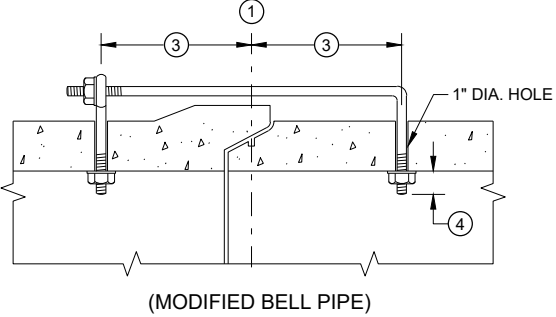


(TONGUE AND GROOVE PIPE)

LONGITUDINAL SECTION

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

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

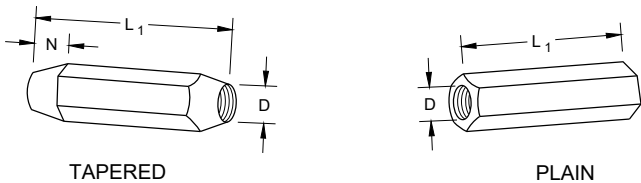


(MODIFIED BELL PIPE)

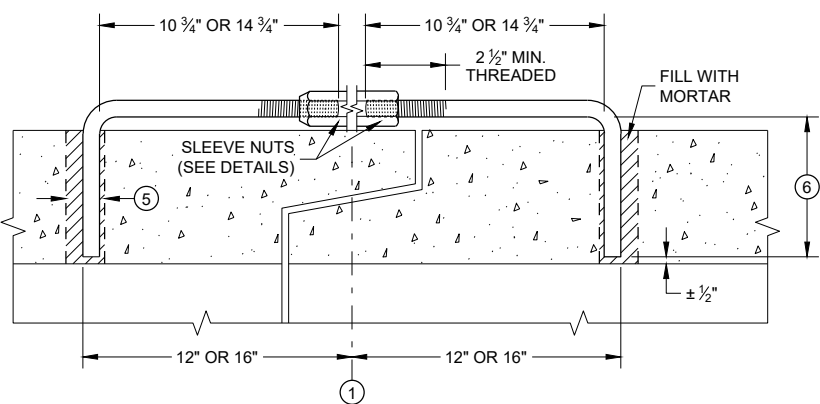
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
12 - 60	5/8	5/8	5	1/2
66 - 84	3/4	3/4	5	1/2
90 - 144	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES

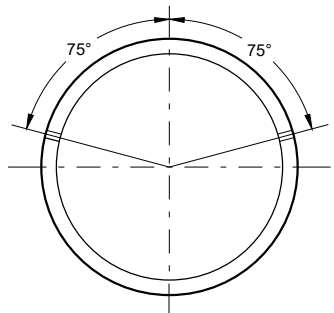


RIGHT AND LEFT THREADS
SLEEVE NUTS



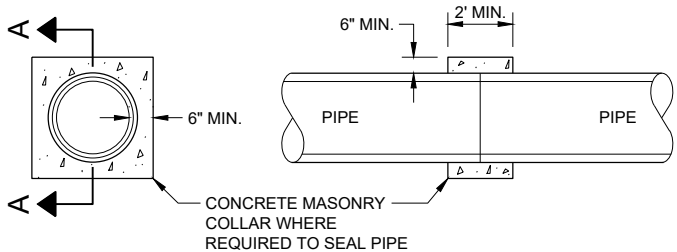
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



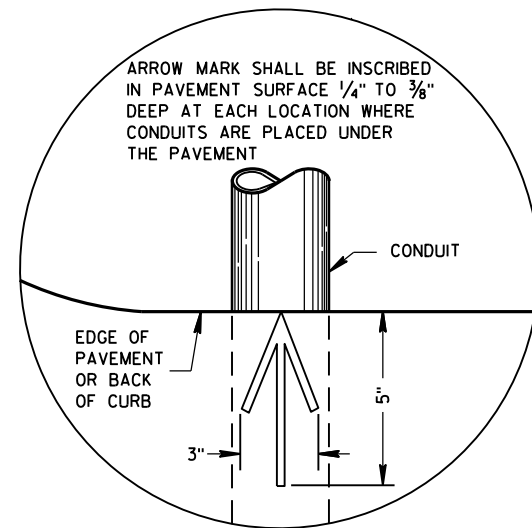
SECTION A - A

CONCRETE COLLAR DETAIL

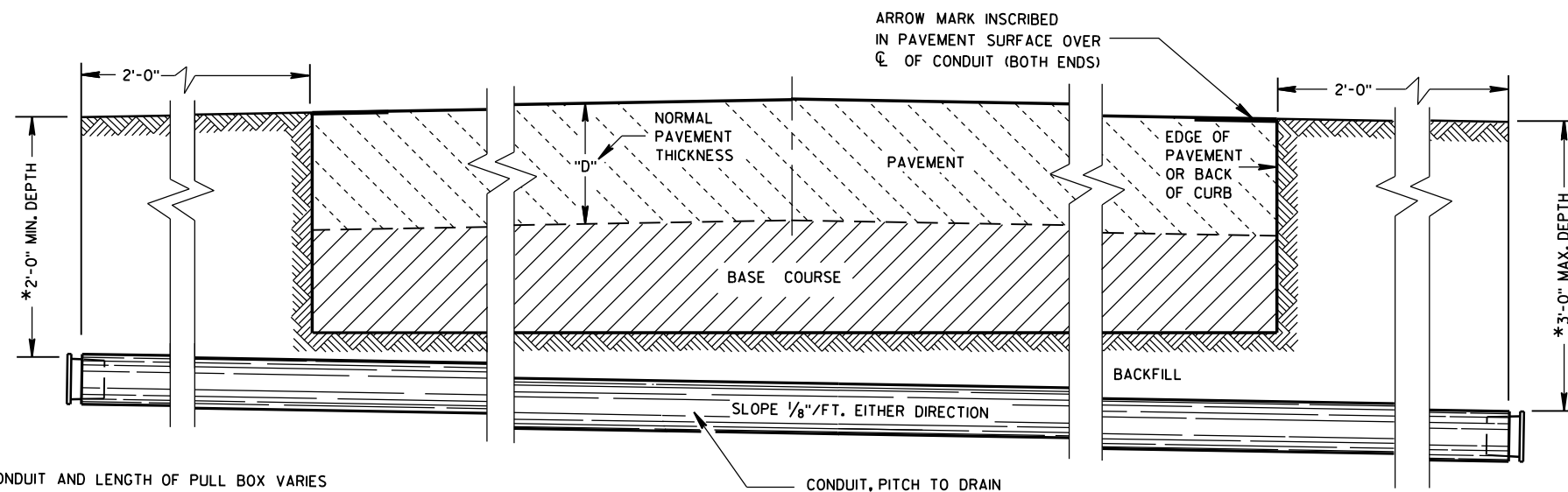
JOINT TIES FOR CONCRETE
PIPE AND CONCRETE
COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



PLAN VIEW
ARROW MARK



SIDE ELEVATION
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

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

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 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER
FHWA

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

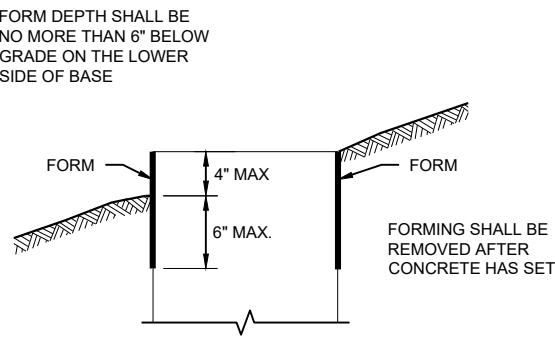
DIAMETER VARIES FROM TOP TO BOTTOM WITH THE
DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST
HEAVE



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

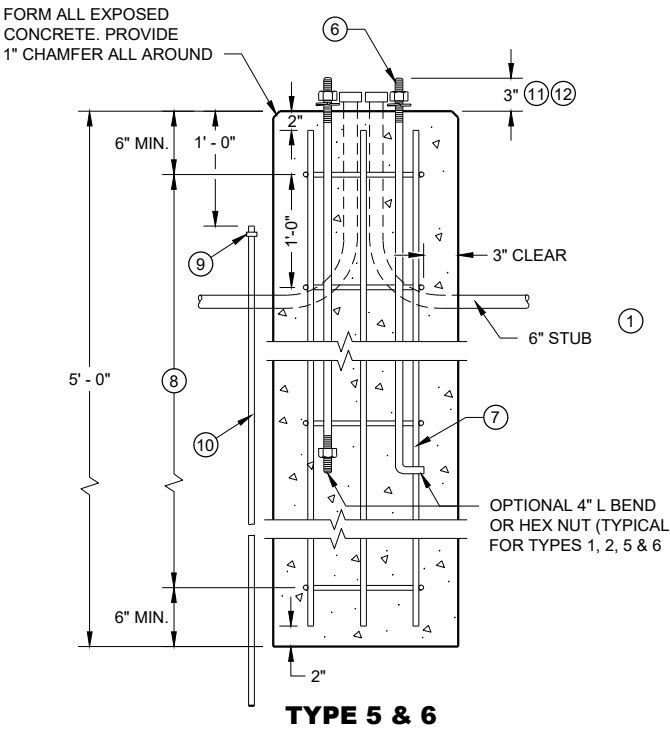
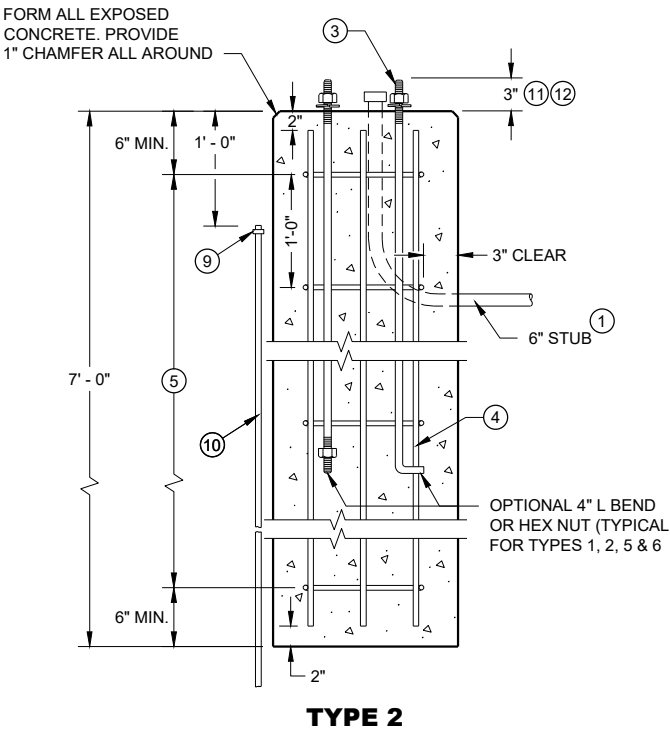
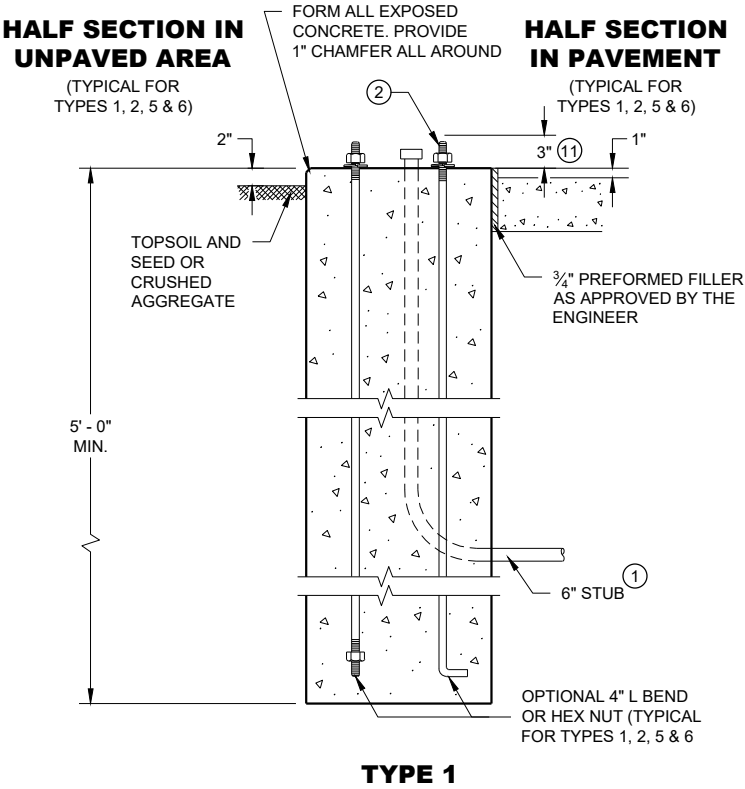
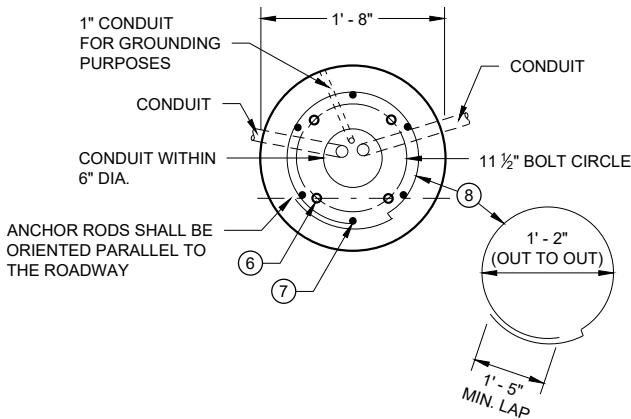
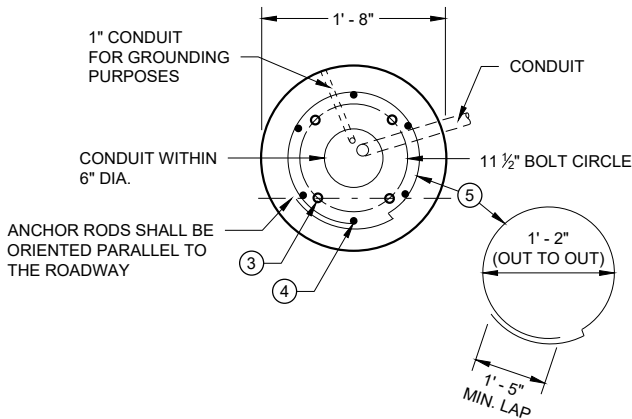
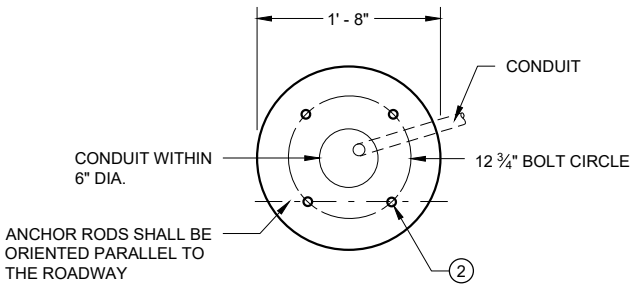


FHWA



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



CONCRETE BASES

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL 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 AT THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR 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 STEEL REINFORCEMENT @ 1' - 0" C - C.
- 9 EXOTHERMIC CONNECTION TO EQUIPMENT GROUNDING CONDUCTOR
- 10 5/8" DIA. X 8' - 0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED
- 11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/2" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- 12 FOR NON - BREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Ahmet Demirelek
DATE STATE ELECTRICAL ENGINEER
FHWA

GENERAL NOTES

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

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

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

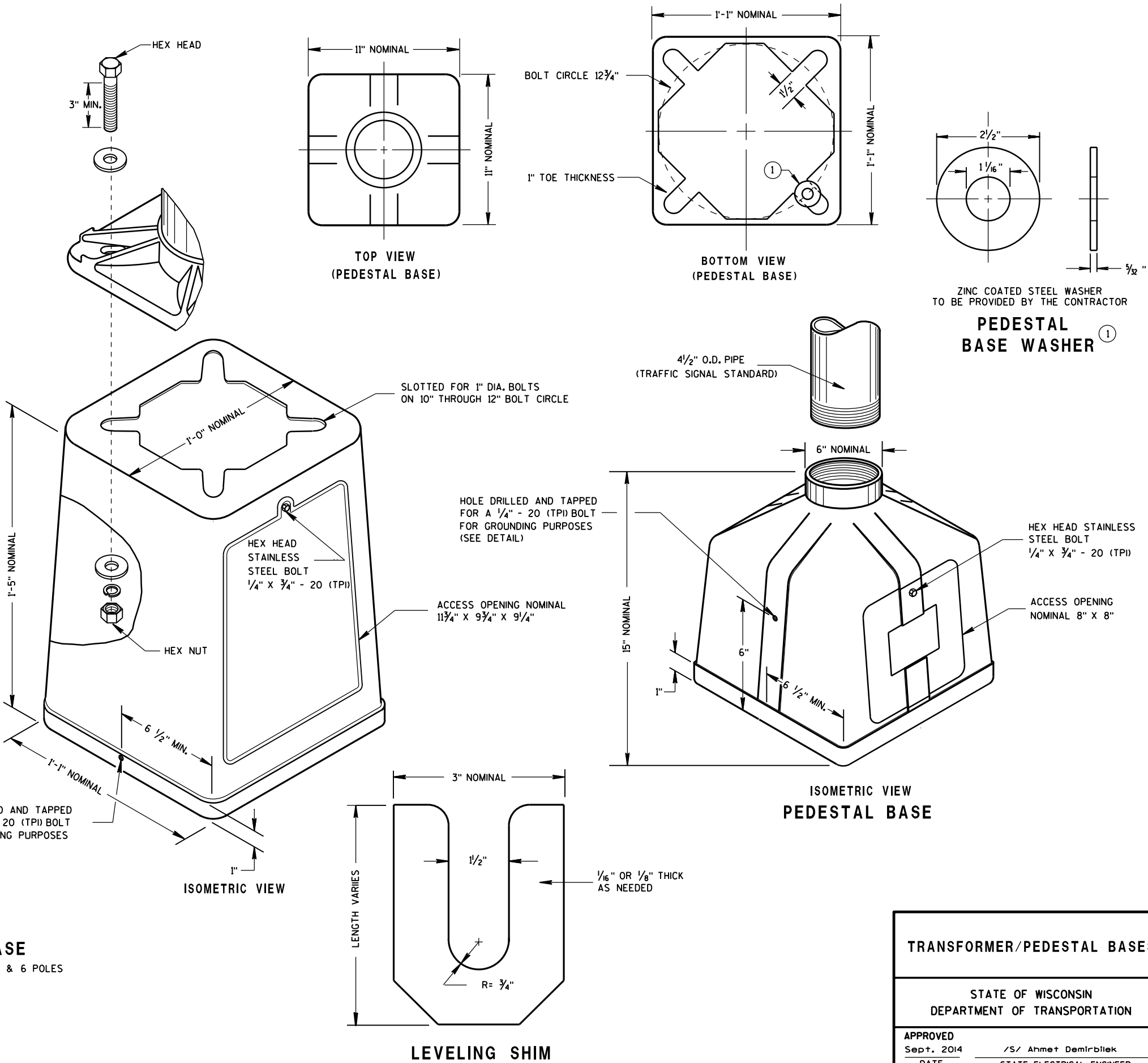
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

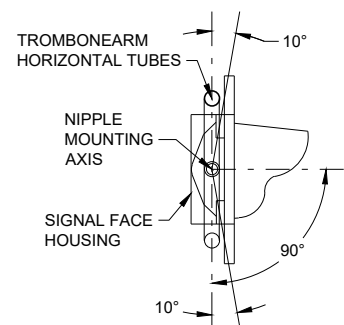
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

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

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

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

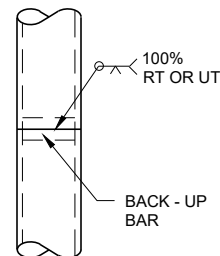
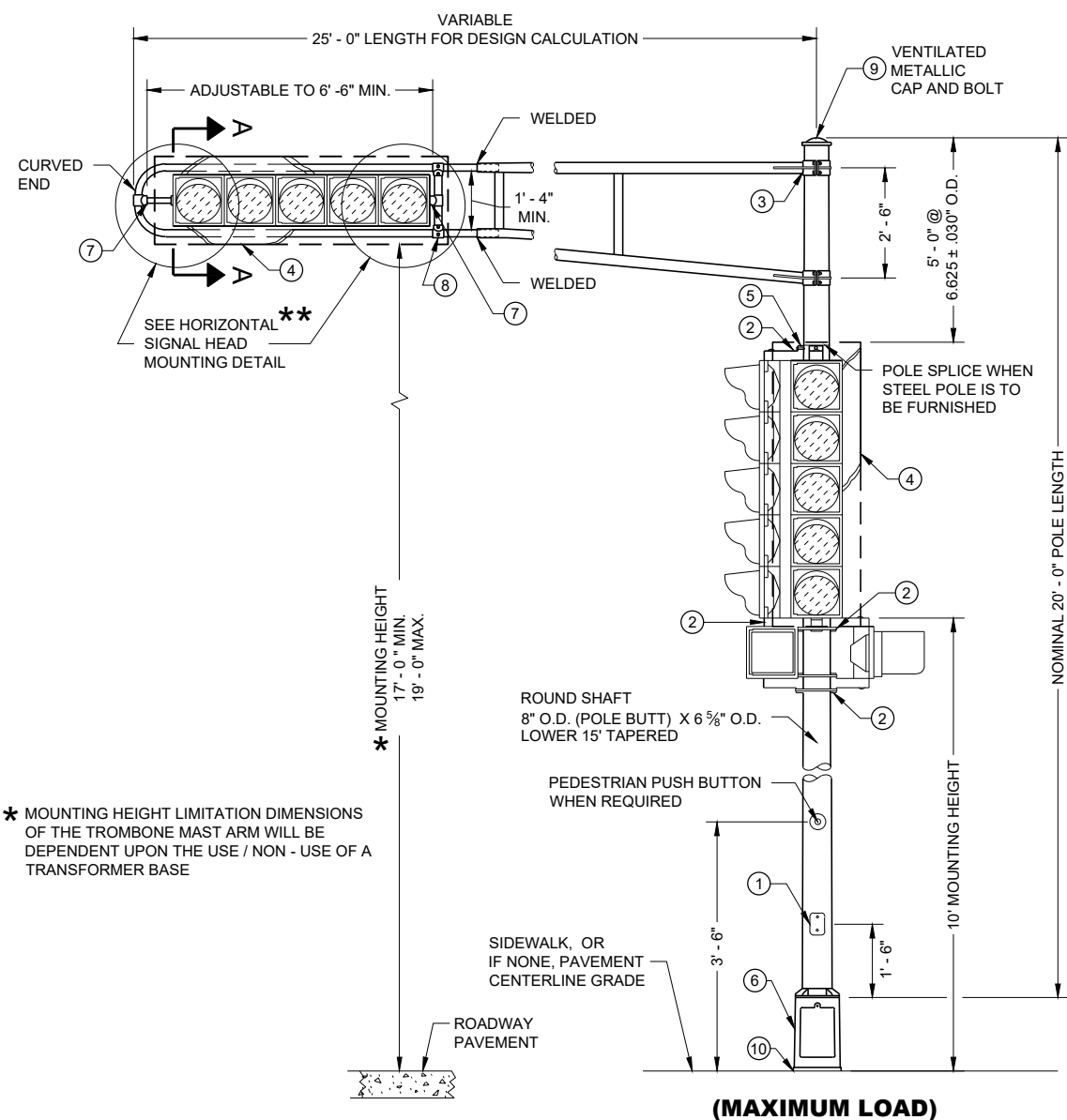


**SECTION A-A**

(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**

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

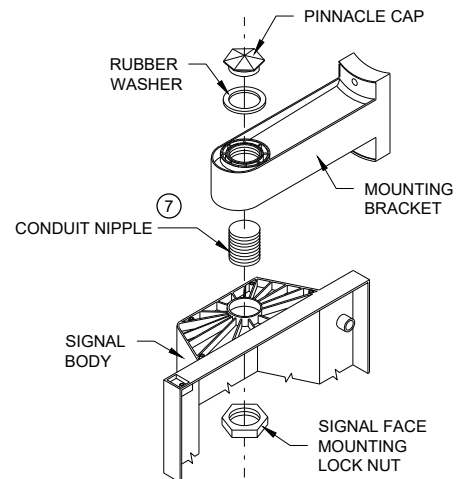
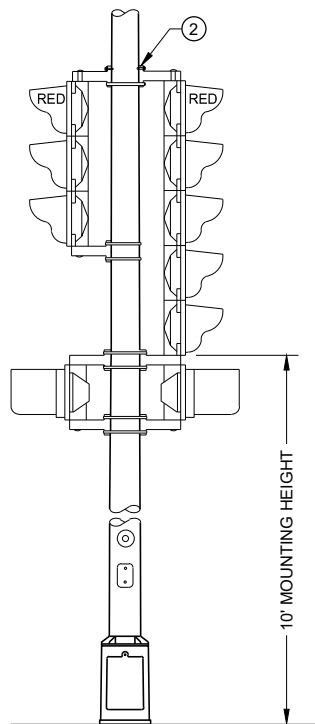
ROUND SHAFT
8" O.D. (POLE BUTT) X 6 5/8" O.D.
LOWER 15' TAPERED

PEDESTRIAN PUSH BUTTON
WHEN REQUIRED

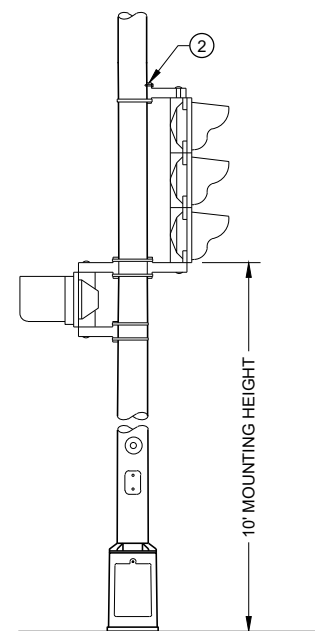
SIDEWALK, OR
IF NONE, PAVEMENT
CENTERLINE GRADE

ROADWAY
PAVEMENT

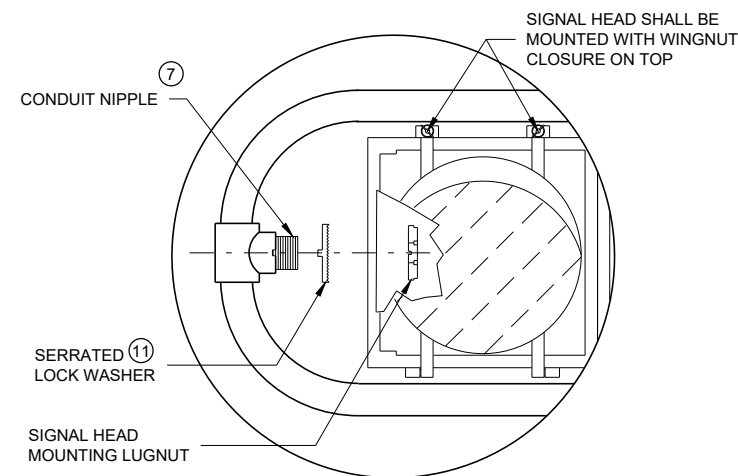
(MAXIMUM LOAD)

**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 MOUNTINGS FOR
TRAFFIC SIGNALS
TYPE 2**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

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

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

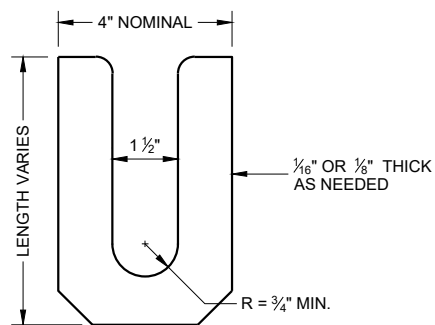
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

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

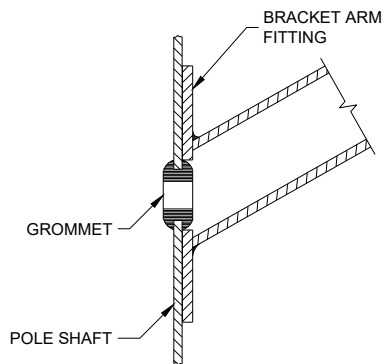
TYPE 2 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

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

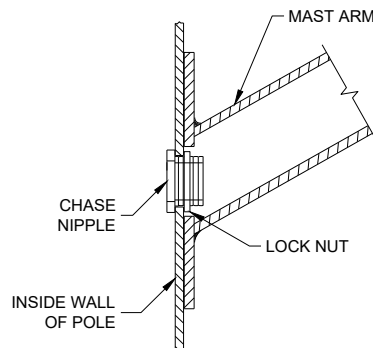
- ① 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) 1/4" X 3/4" - 20 TPI, STAINLESS STEEL, HEX HEAD BOLTS.
- ② SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.
- ③ GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
- ④ SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
- ⑤ POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.
- ⑥ CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
- ⑦ USE 1 1/2" 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 1/2" OPENING IN SIGNAL FACES AND BRACKET ENDS.
- ⑧ VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4" X 3/4" - 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) 1/4" X 3/4" - 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.



LEVELING SHIM
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



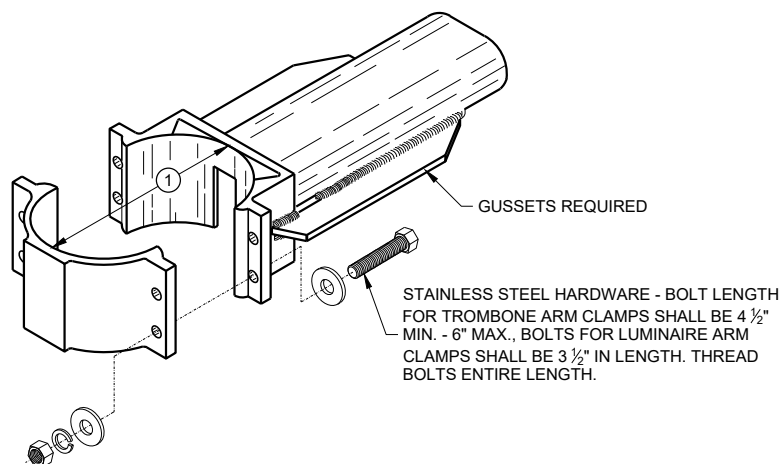
TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

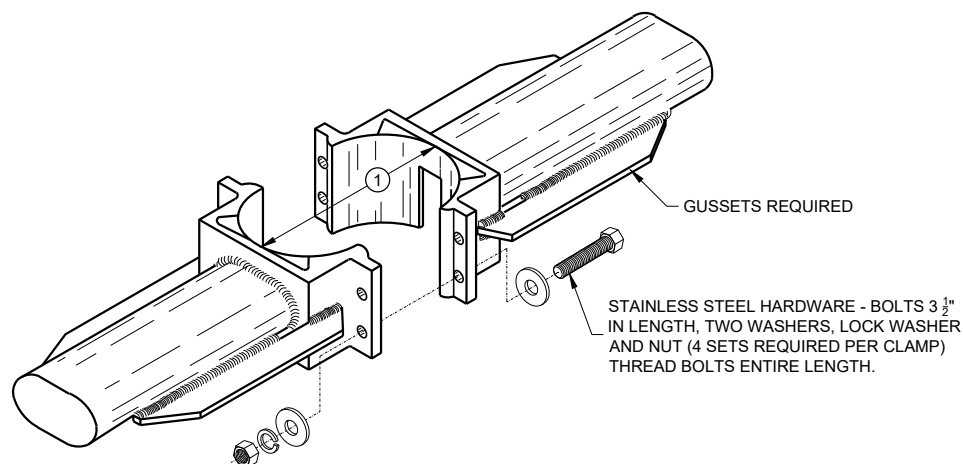
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- 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.

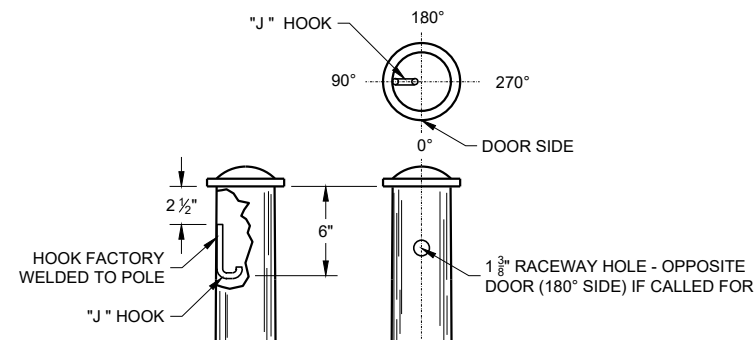
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



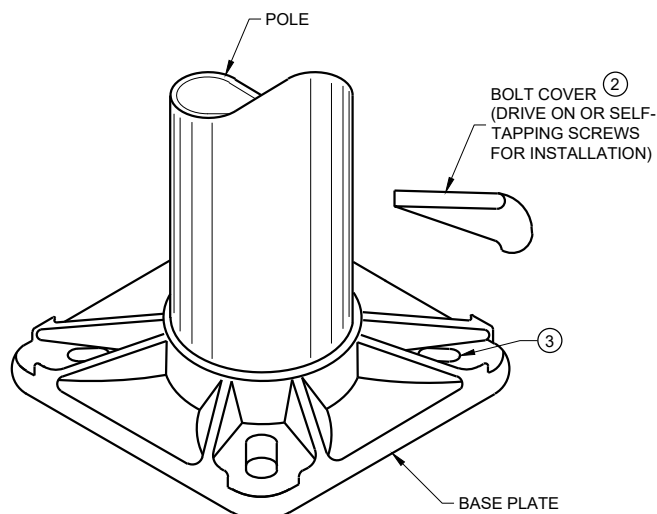
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



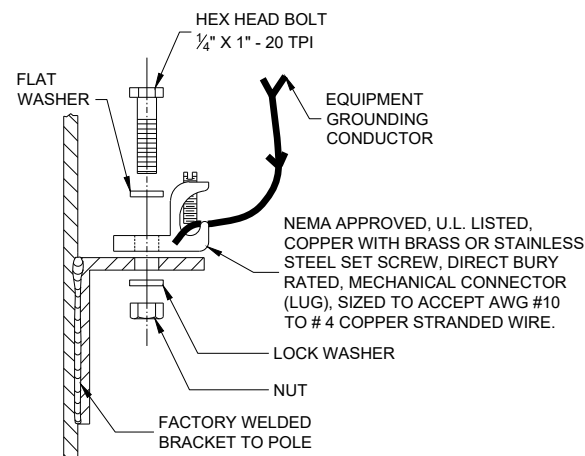
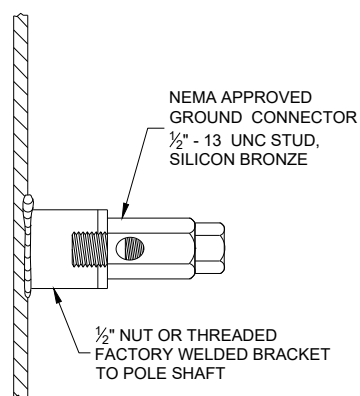
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS



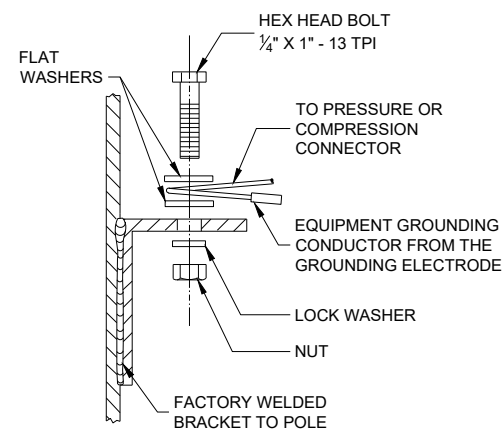
TYPICAL "J" HOOK LOCATION



BASE PLATE



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

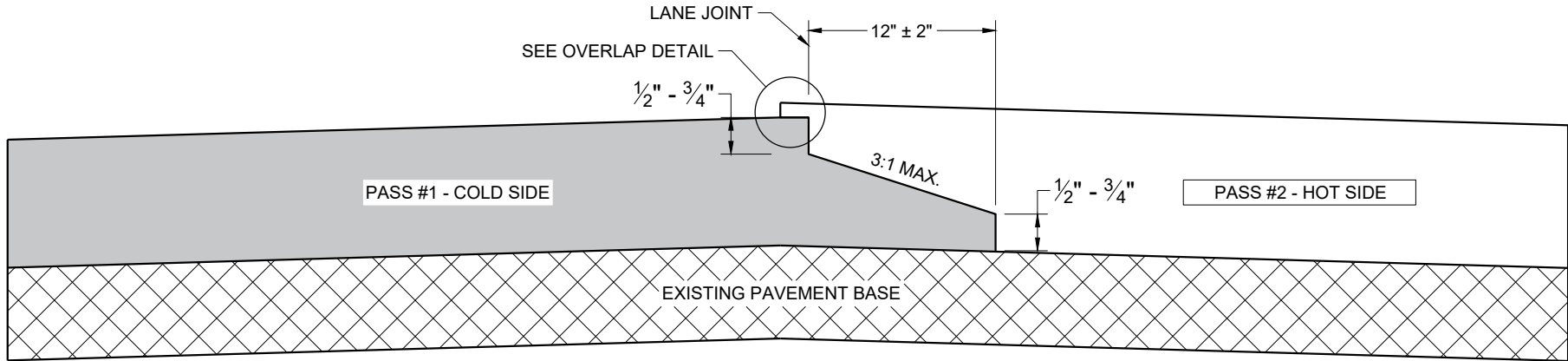


HARDWARE DETAILS FOR POLE MOUNTING

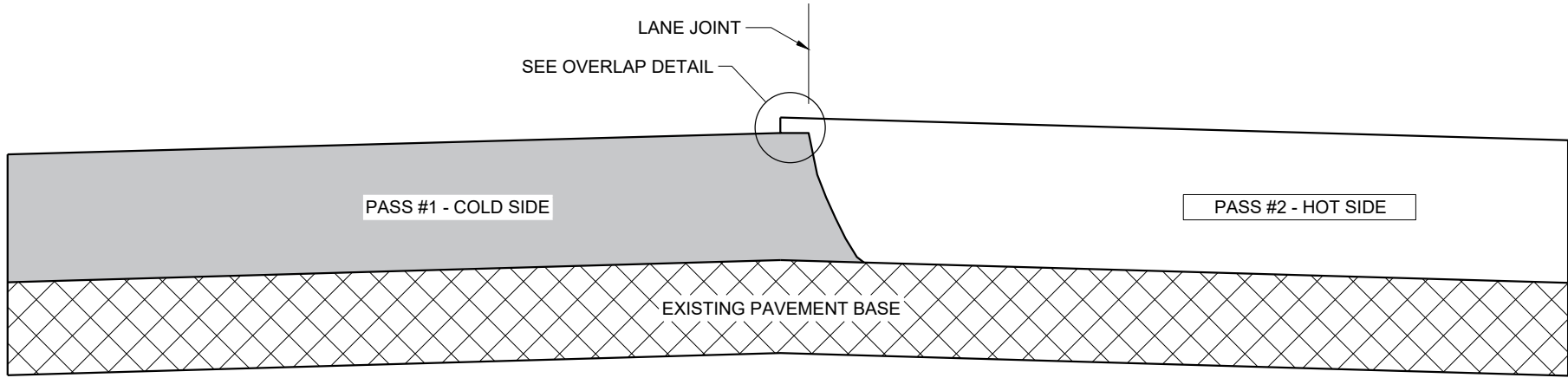
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER

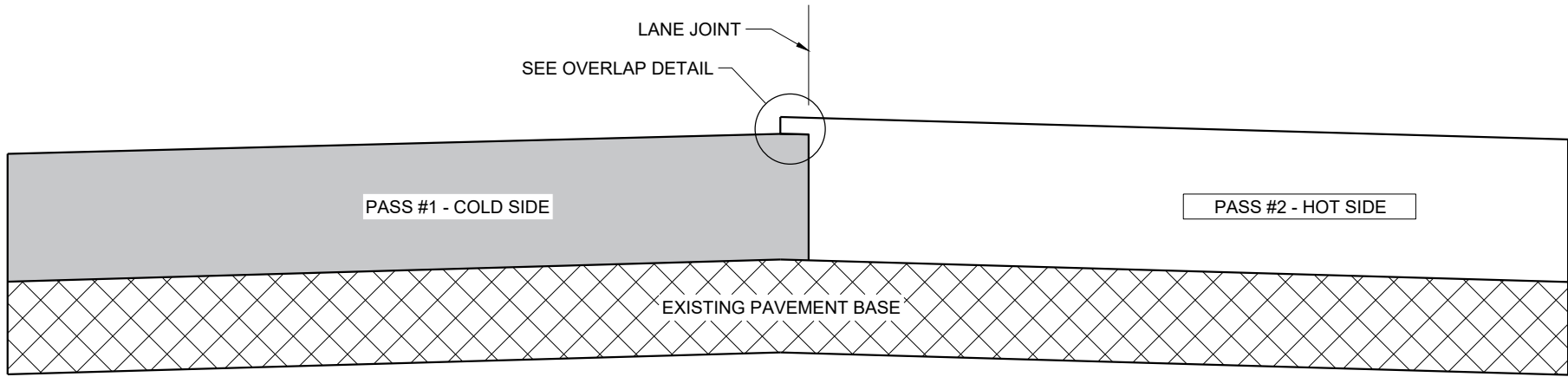
FHWA



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

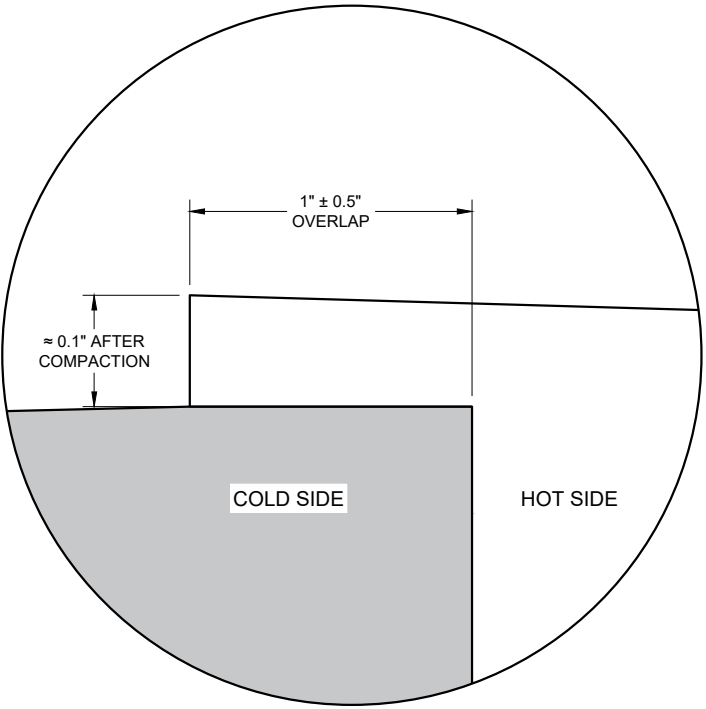
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY $1" \pm 0.5"$ AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY $0.1"$ AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO $2"$ FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.

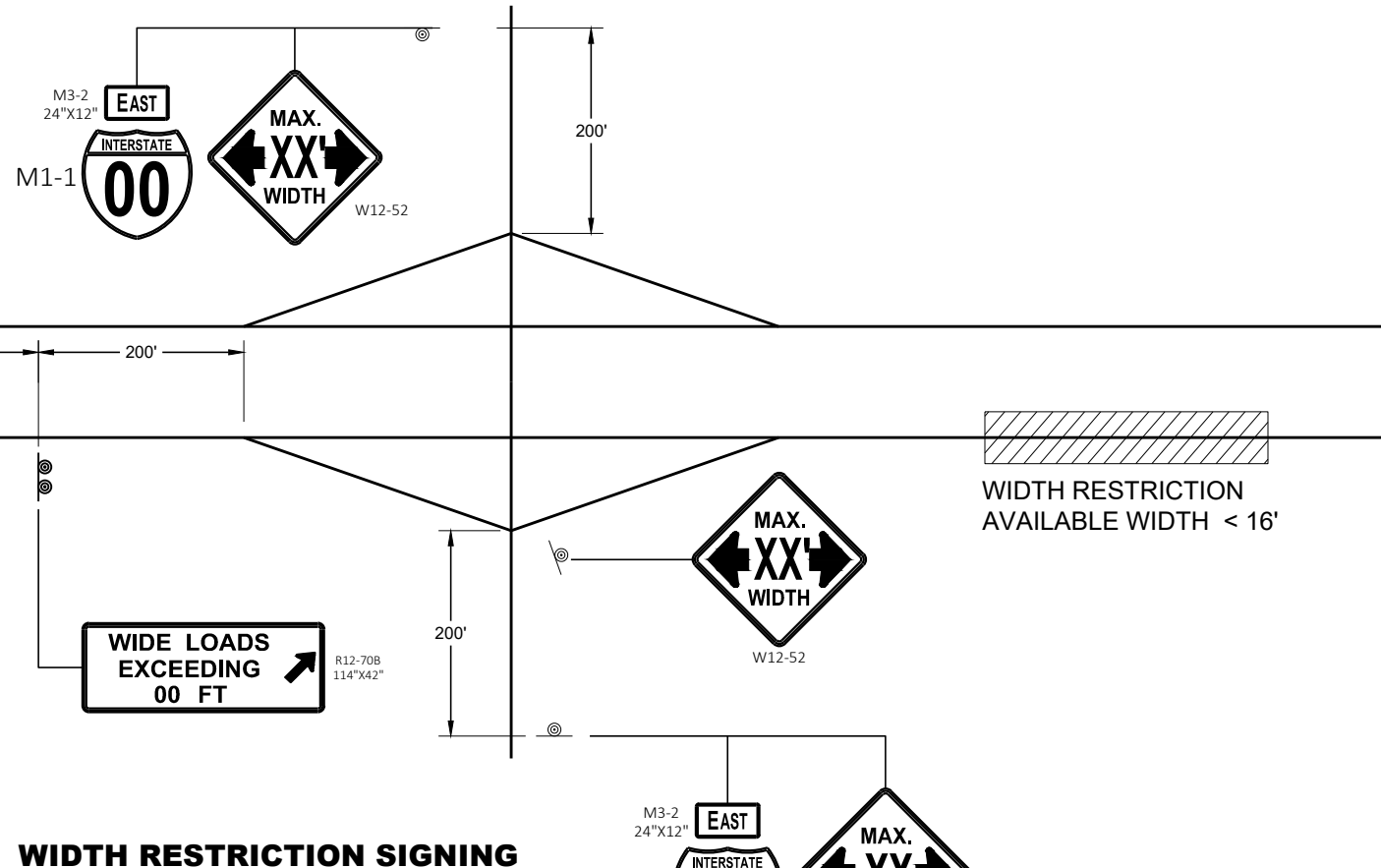


OVERLAP DETAIL (TYPICAL)

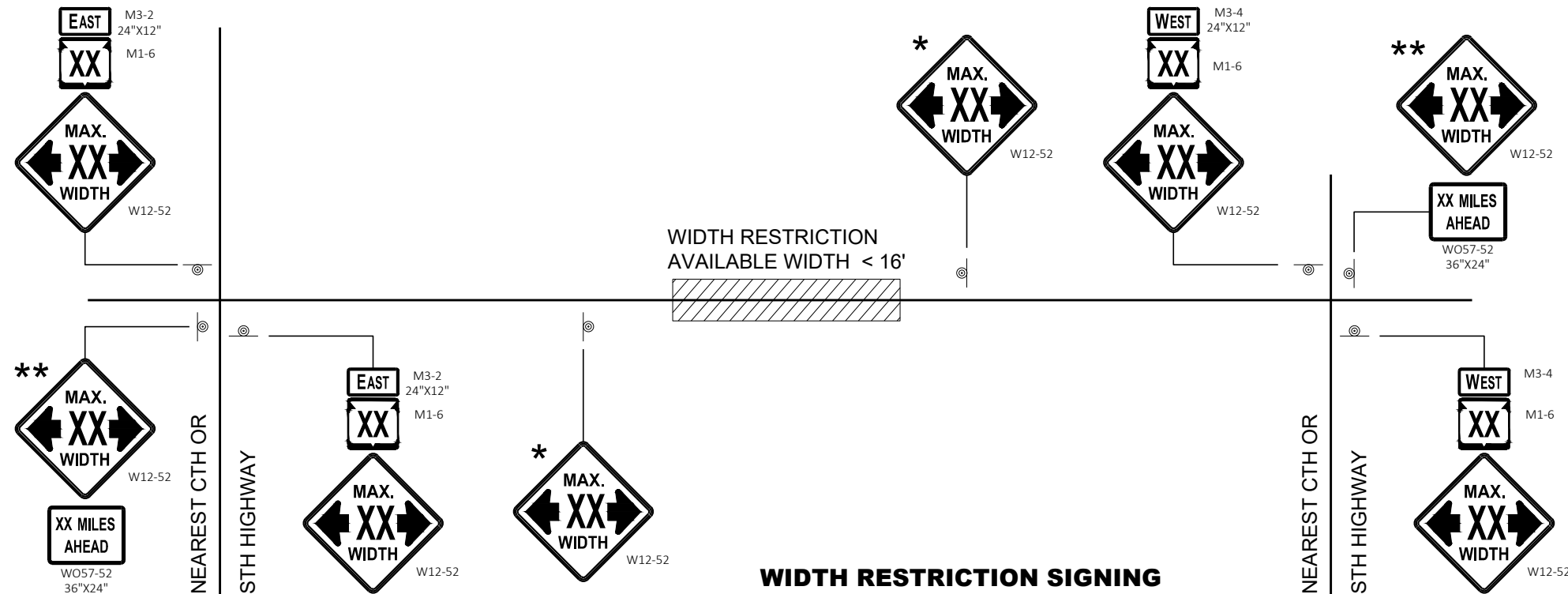
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER
FHWA



WIDTH RESTRICTION SIGNING



WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

- * PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.
- ** SIGN SHALL BE VISIBLE FROM ROADWAY.
- *** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

ADVANCED WIDTH
RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

GENERAL NOTES

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

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

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

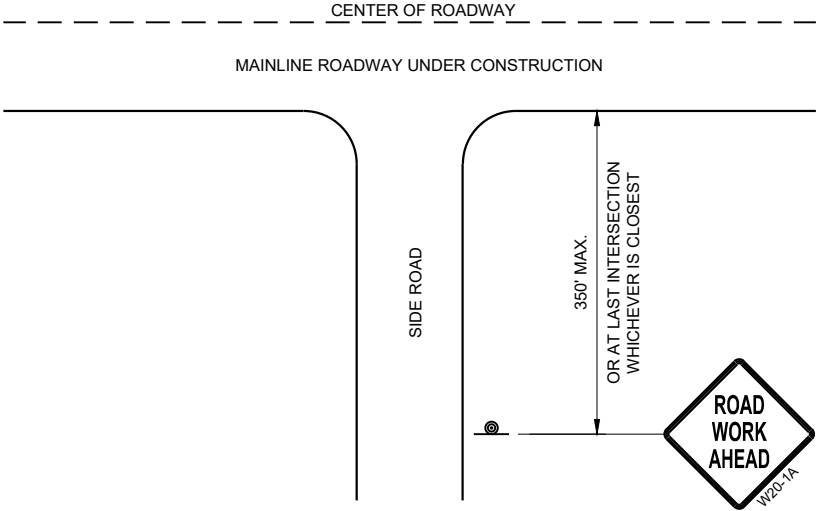
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

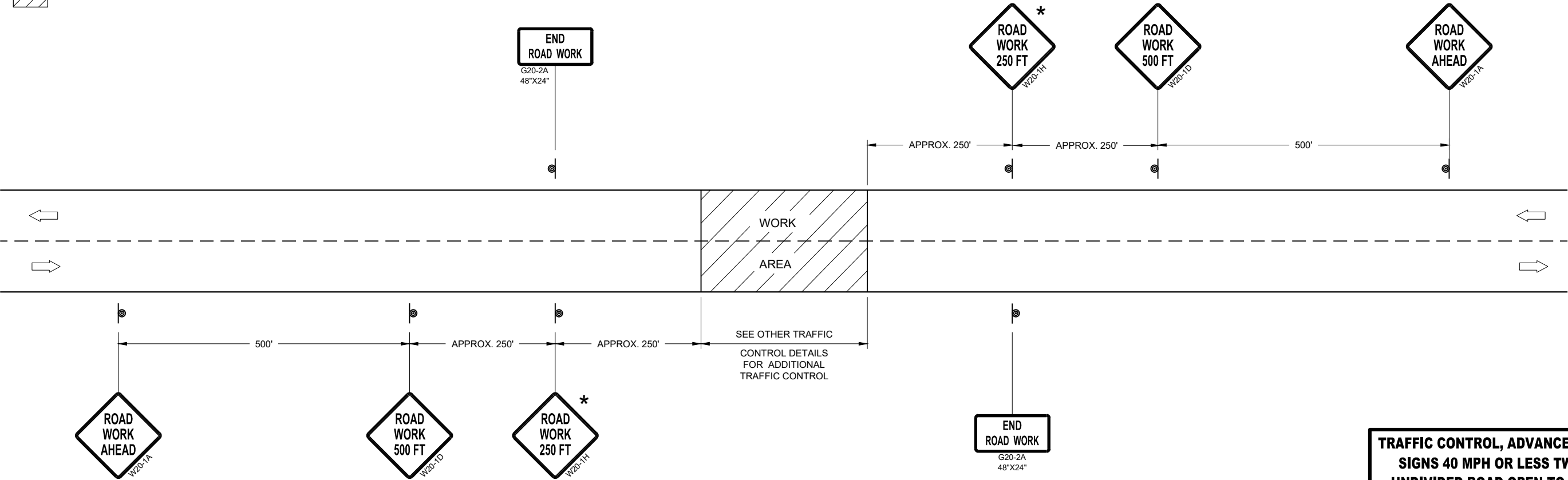
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

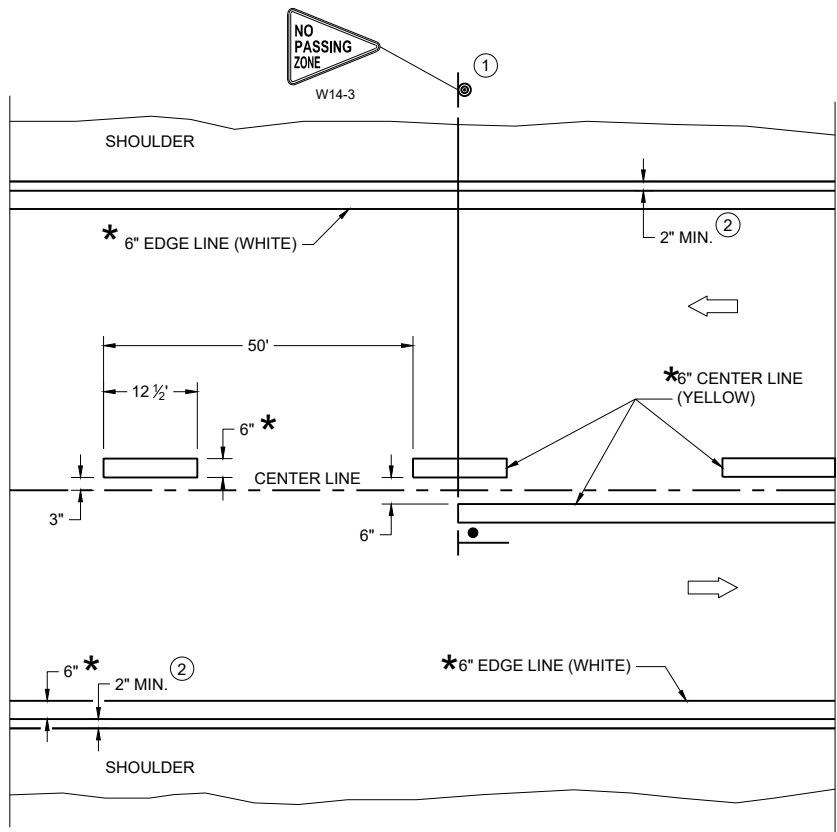


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

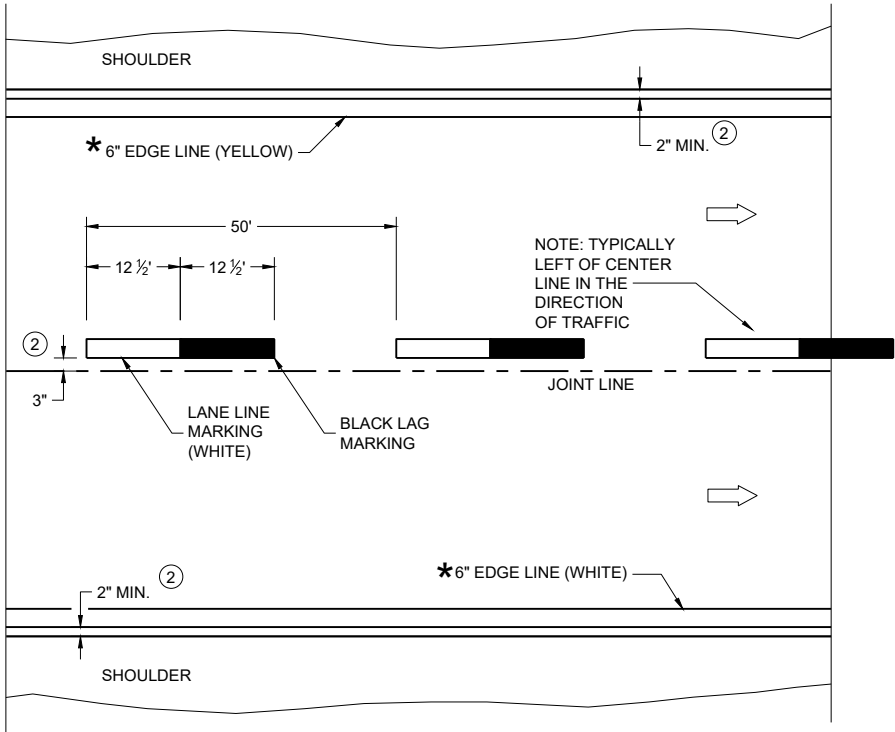
TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 40 MPH OR LESS TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

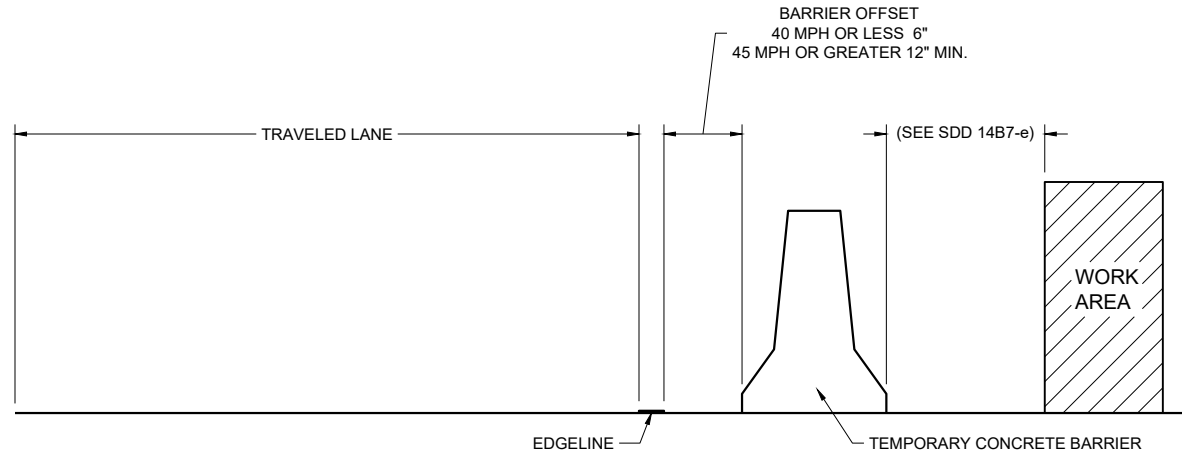
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- 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

PERMANENT LONGITUDINAL PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED December 2024 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	



TEMPORARY BARRIER OFFSET FROM EDGE LINE

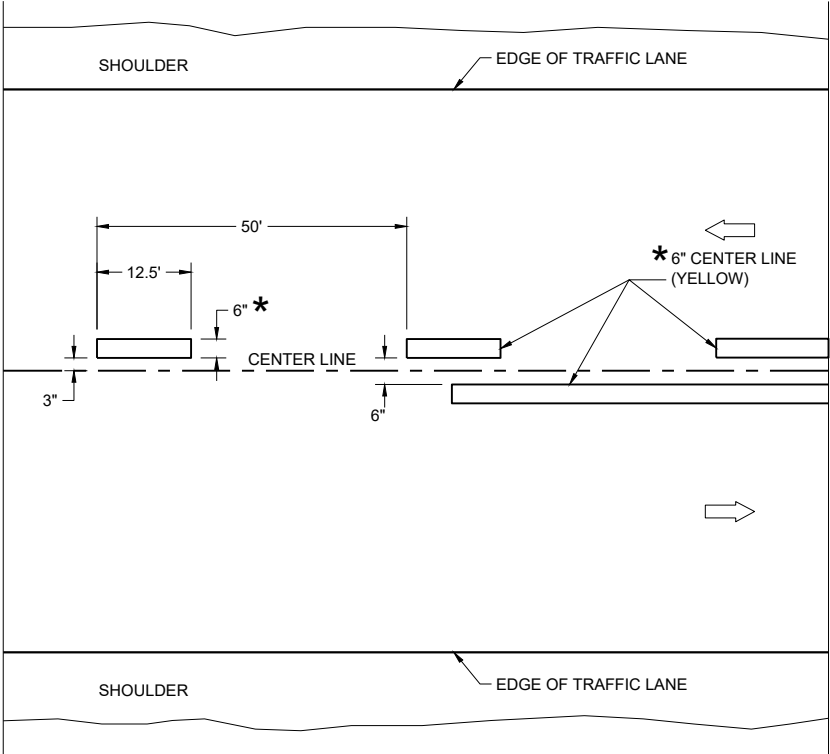
GENERAL NOTES

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

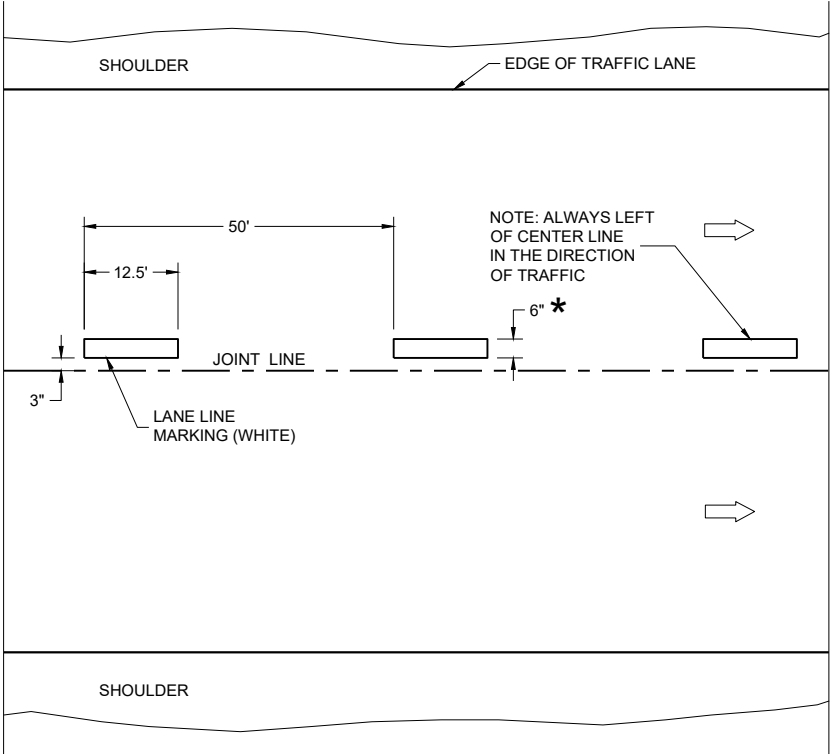
LEGEND

DIRECTION OF TRAFFIC

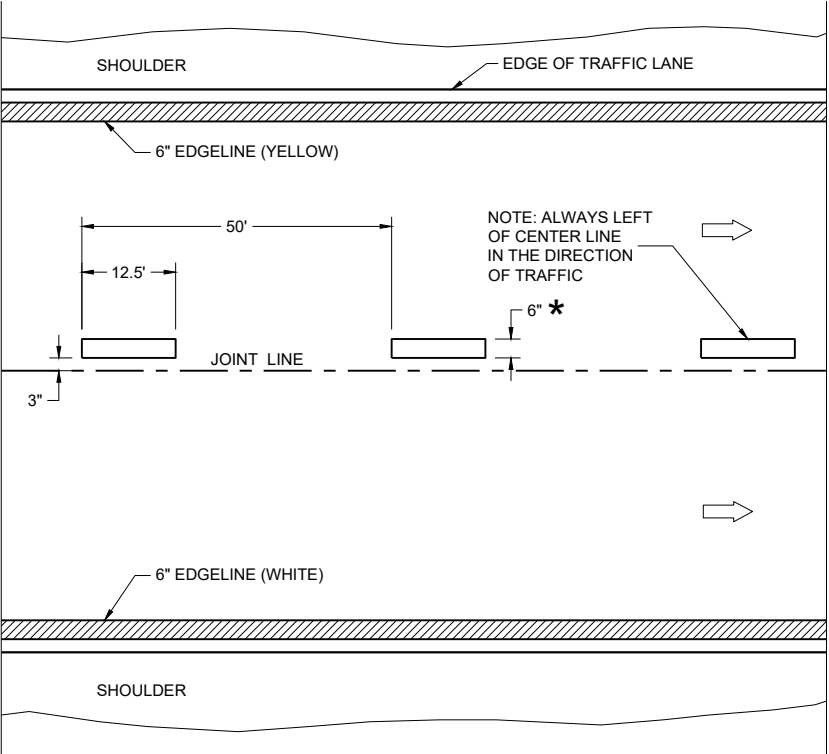
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



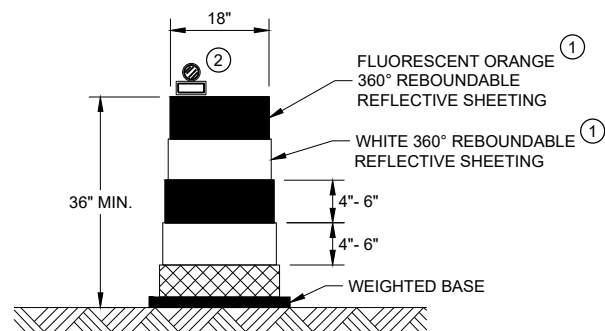
ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

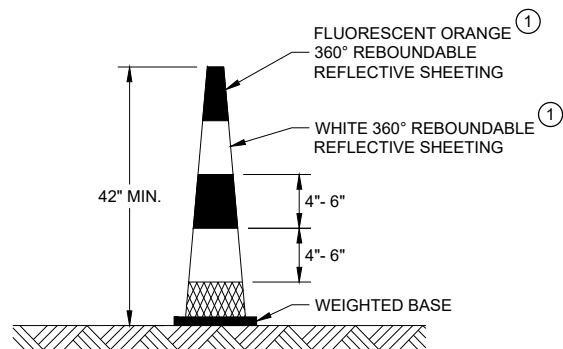
TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED December 2024 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	



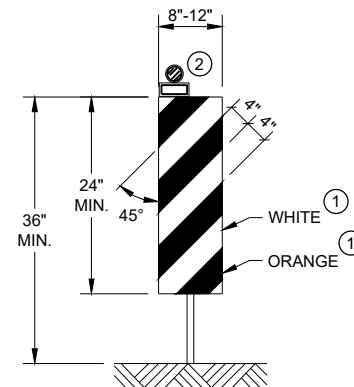
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



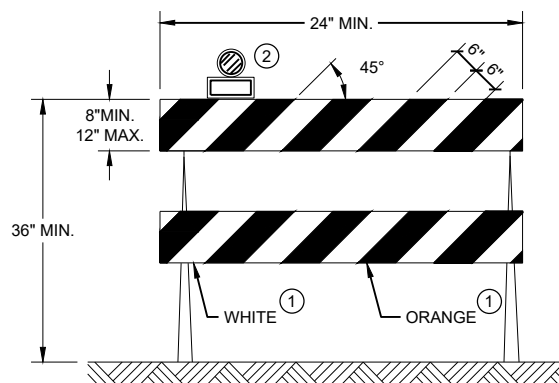
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



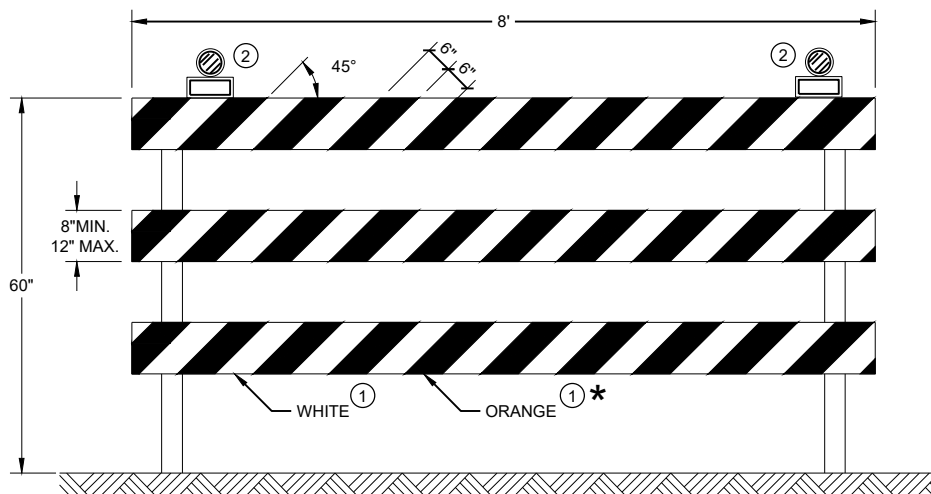
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

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

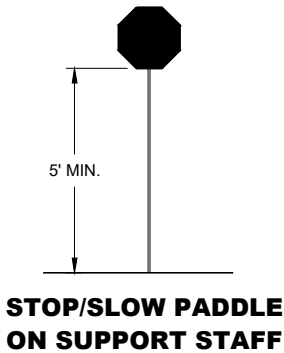
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- 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.

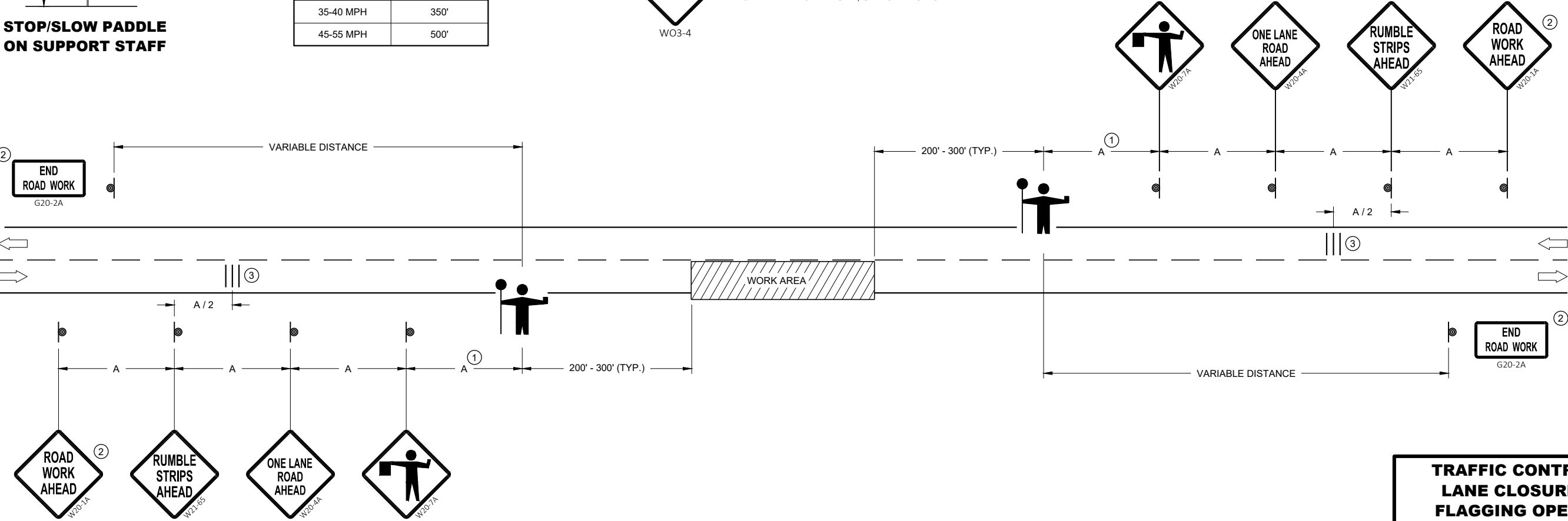


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

- V1

LEAD VEHICLE
- V2

MARKING VEHICLE
- V3

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

SIGN ON TEMPORARY SUPPORT
- 

DIRECTION OF TRAFFIC

GENERAL NOTES

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

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH

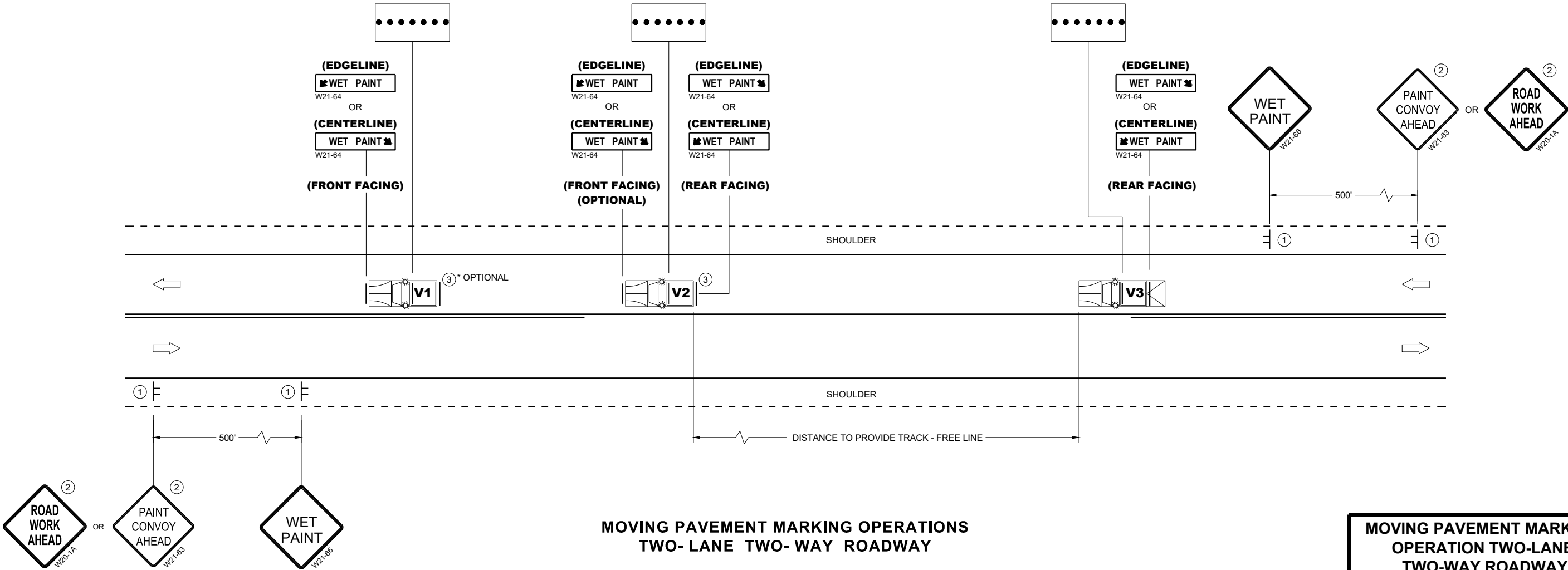
WORKERS SHALL NOT PERFORM WORK FROM ANY SHADOW OR PROTECTION VEHICLES.

UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.
- ③ V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.

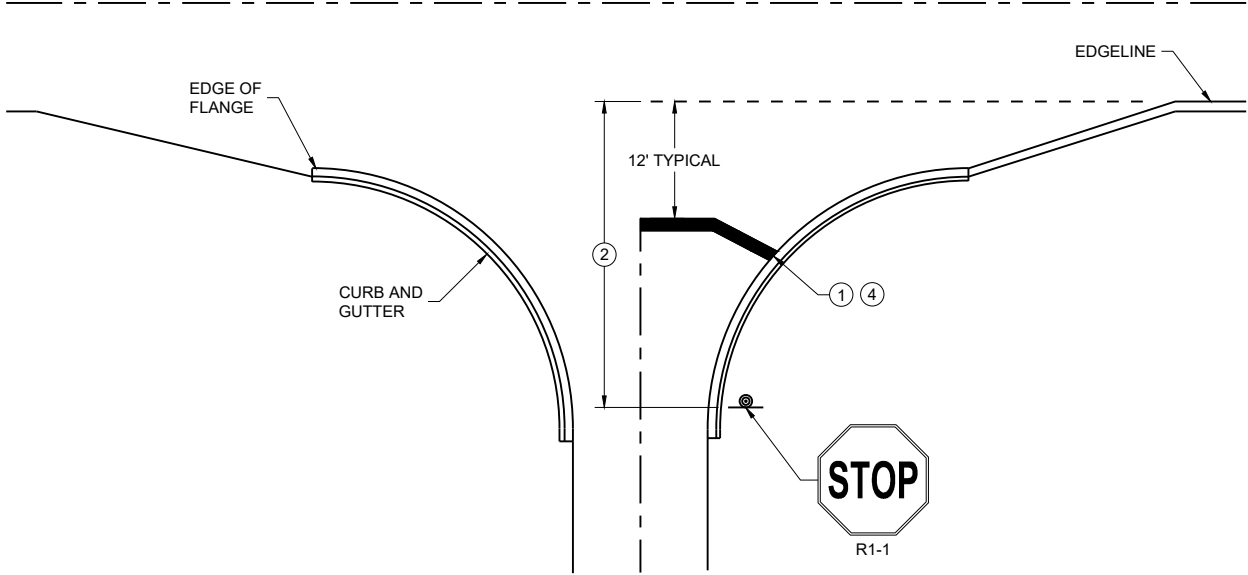


MOVING PAVEMENT MARKING
OPERATION TWO-LANE
TWO-WAY ROADWAY

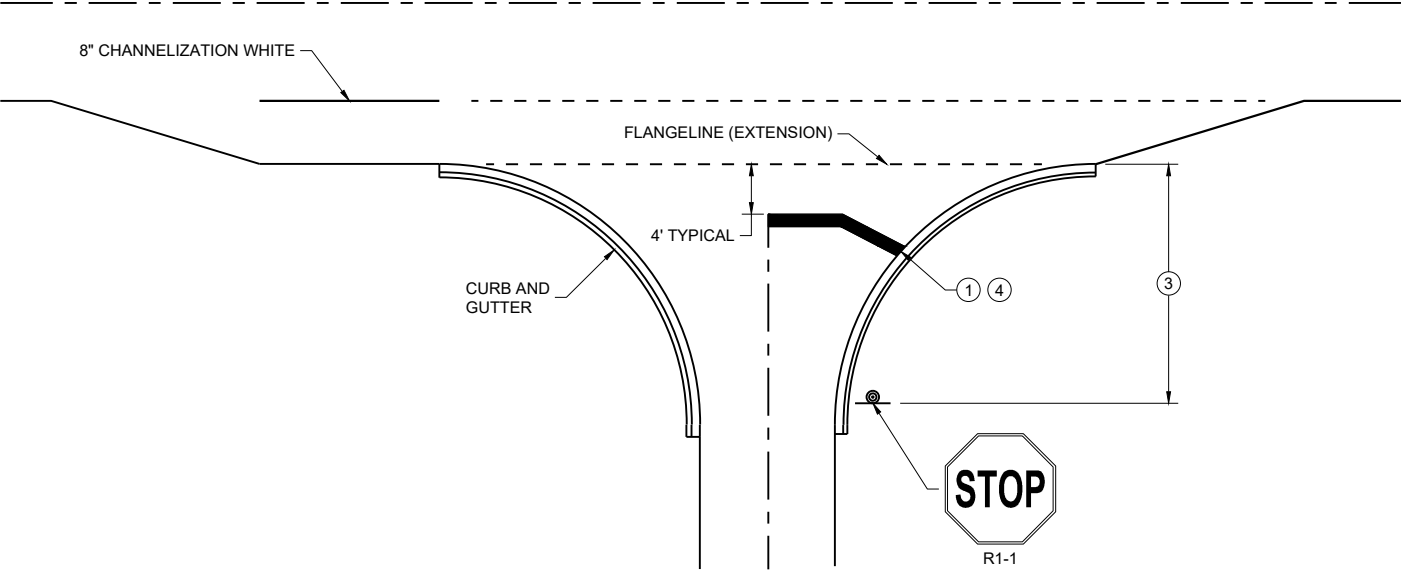
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 /S/ Andrew Heidtke
DATE STATE ELECTRICAL ENGINEER

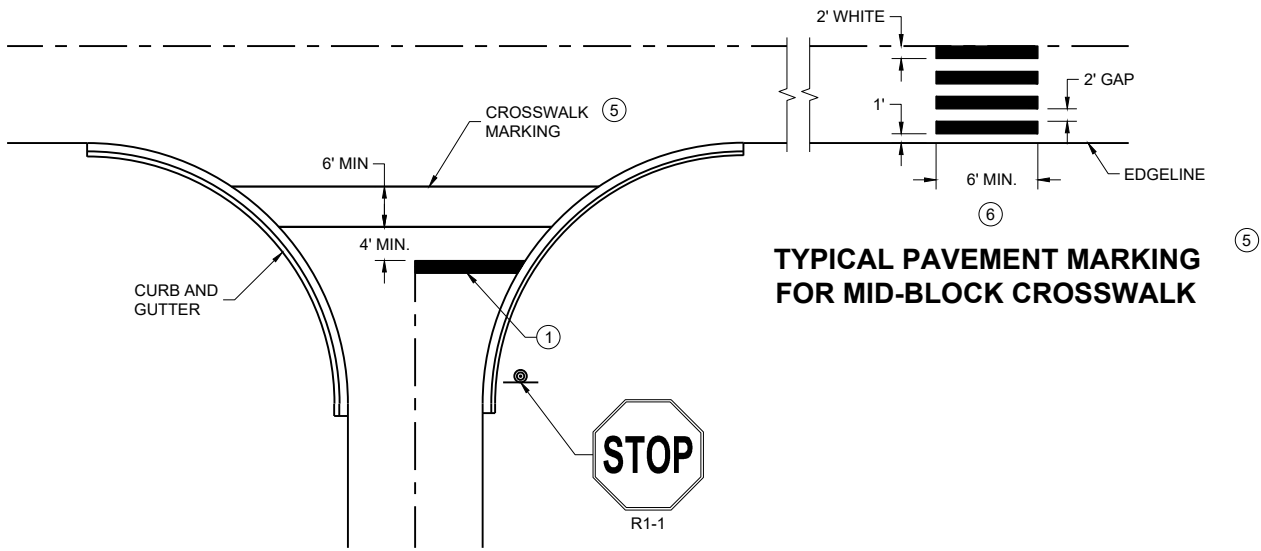
FHWA



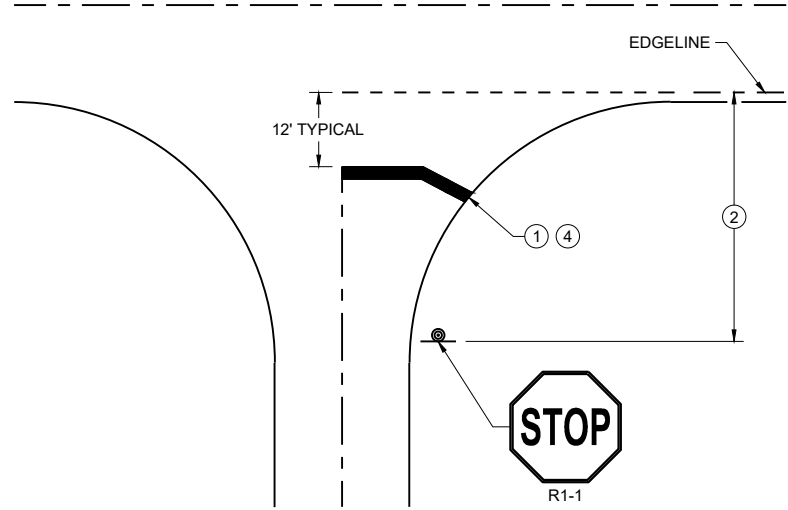
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDE ROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR
SIDE ROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

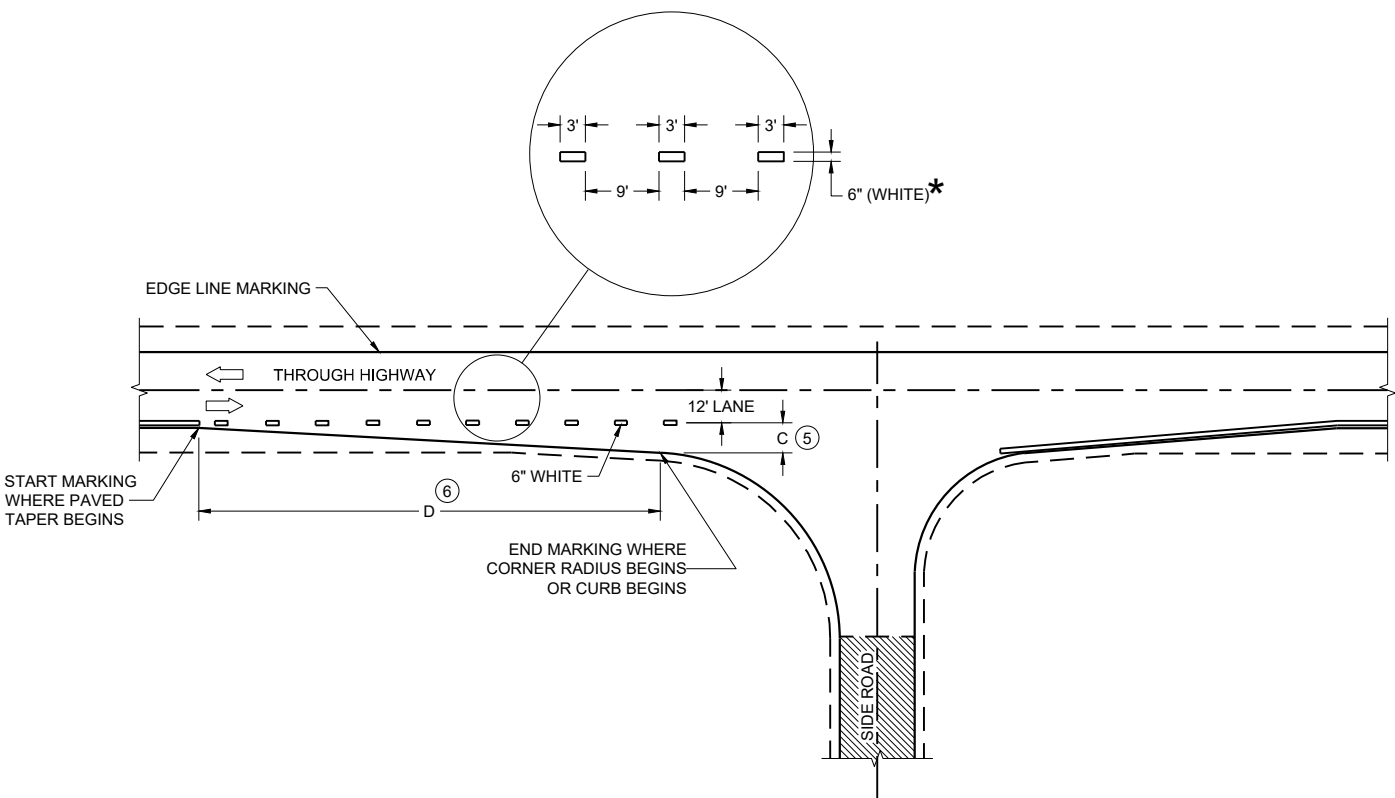
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
- ③ NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGE LINE EXTENSION.
- ④ MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- ⑤ LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES.
- ⑥ POSTED SPEED LIMITS OF 40 MPH OR GREATER USE A MINIMUM WIDTH OF 8' FOR MIDBLOCK CROSSWALKS

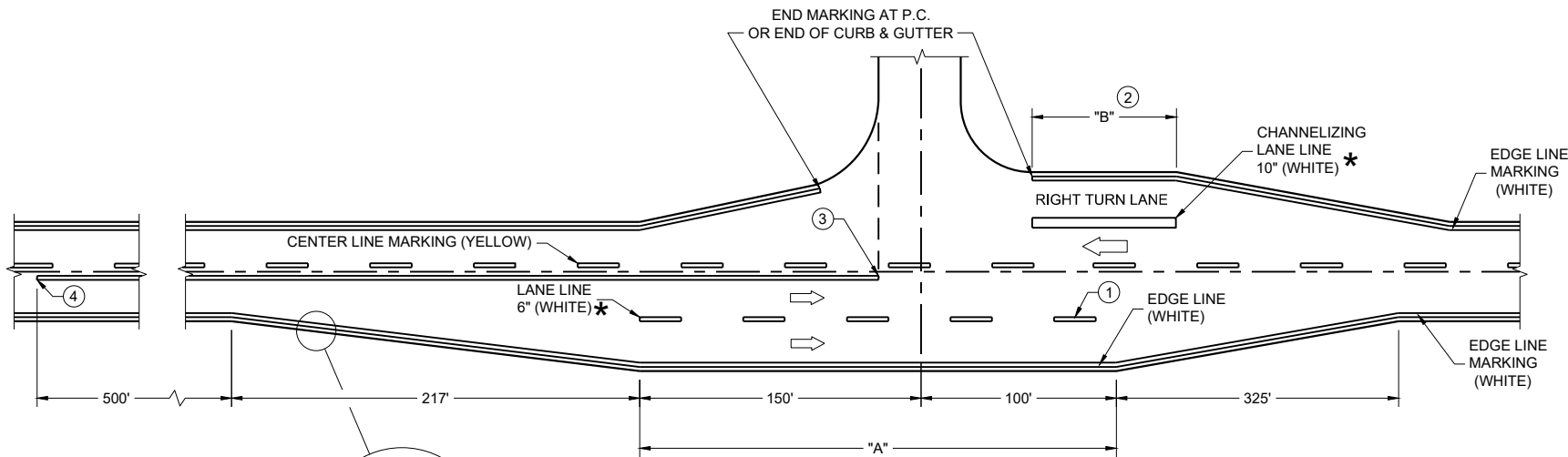
STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER
FHWA



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

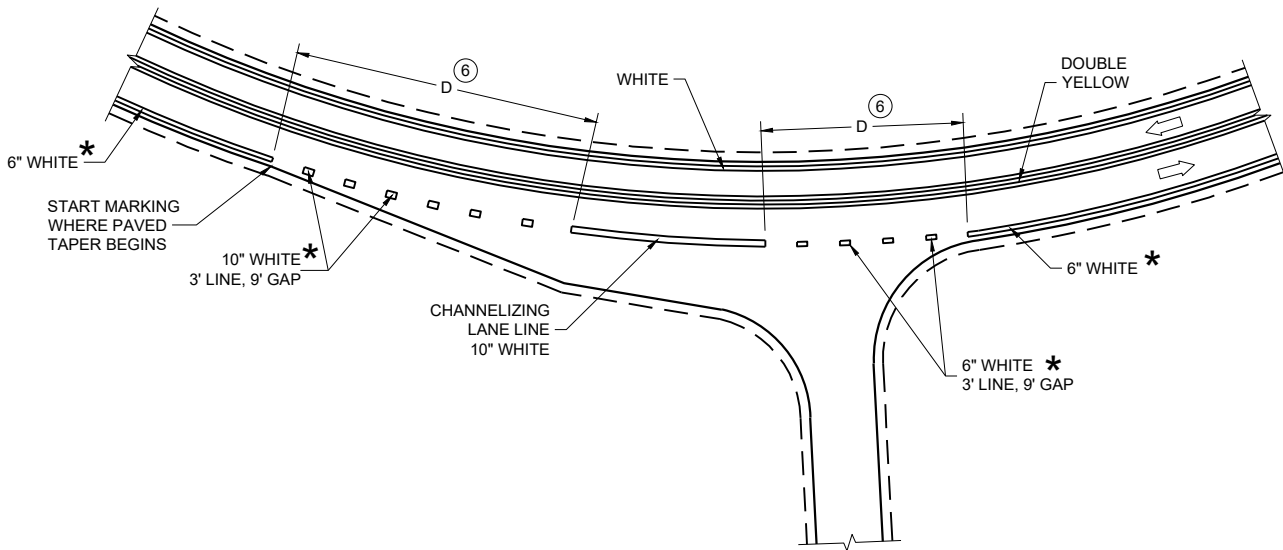
GENERAL NOTES

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

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

LEGEND

➡ DIRECTION OF TRAVEL



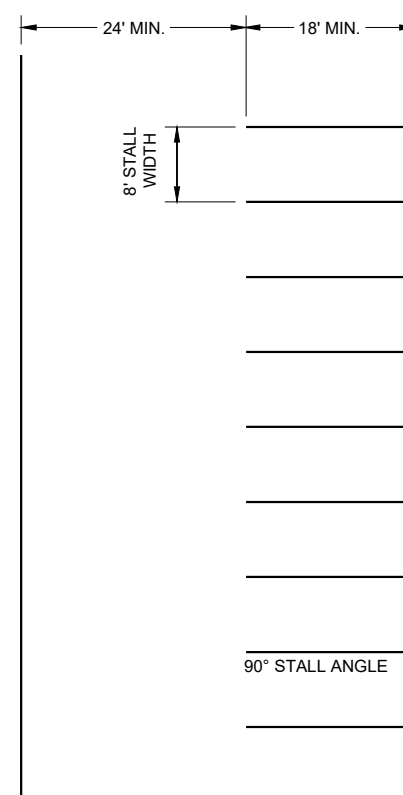
INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



(ANGLED PARKING IS NOT ALLOWED ON STATE HIGHWAYS
UNLESS A DESIGN JUSTIFICATION HAS BEEN COMPLETED.)



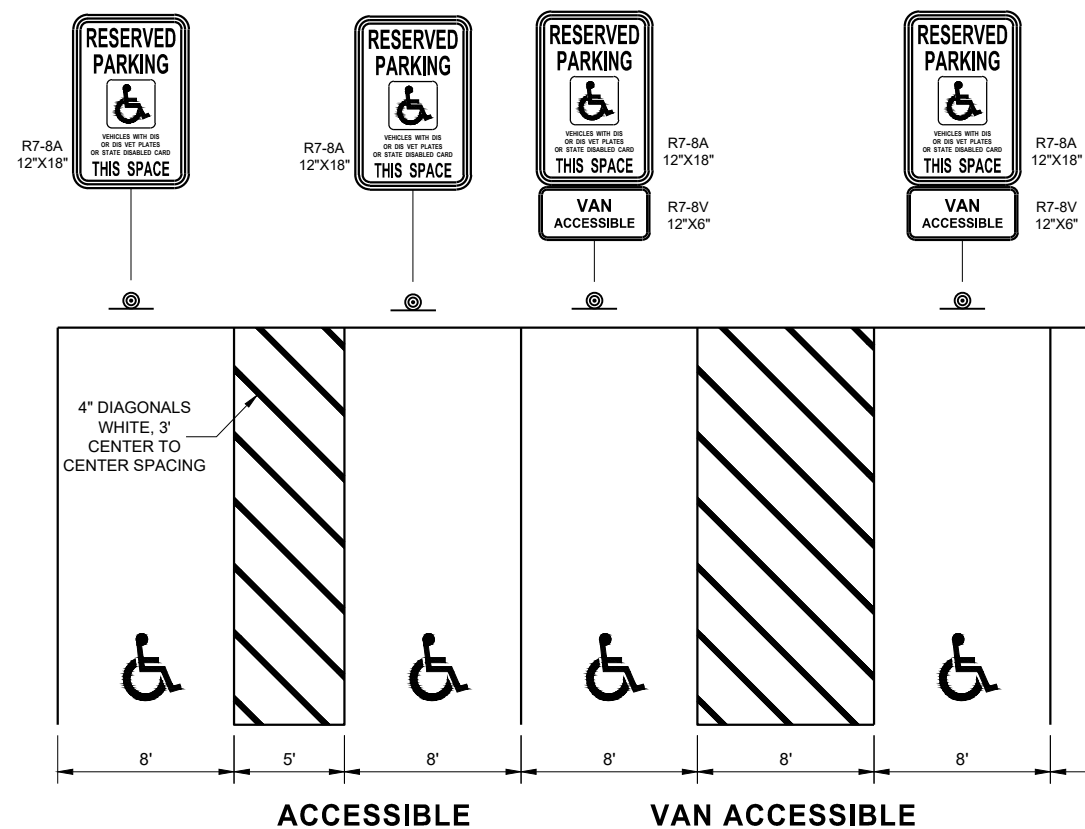
GENERAL NOTES

ALL LINES 4" WHITE (UNLESS OTHERWISE NOTED)

LAST PARKING STALL IS A MINIMUM OF 15' FROM THE CROSSWALK.

LEGEND

 SIGN ON PERMANENT SUPPORT



PARKING STALL MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

FHWA

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

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

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

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

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

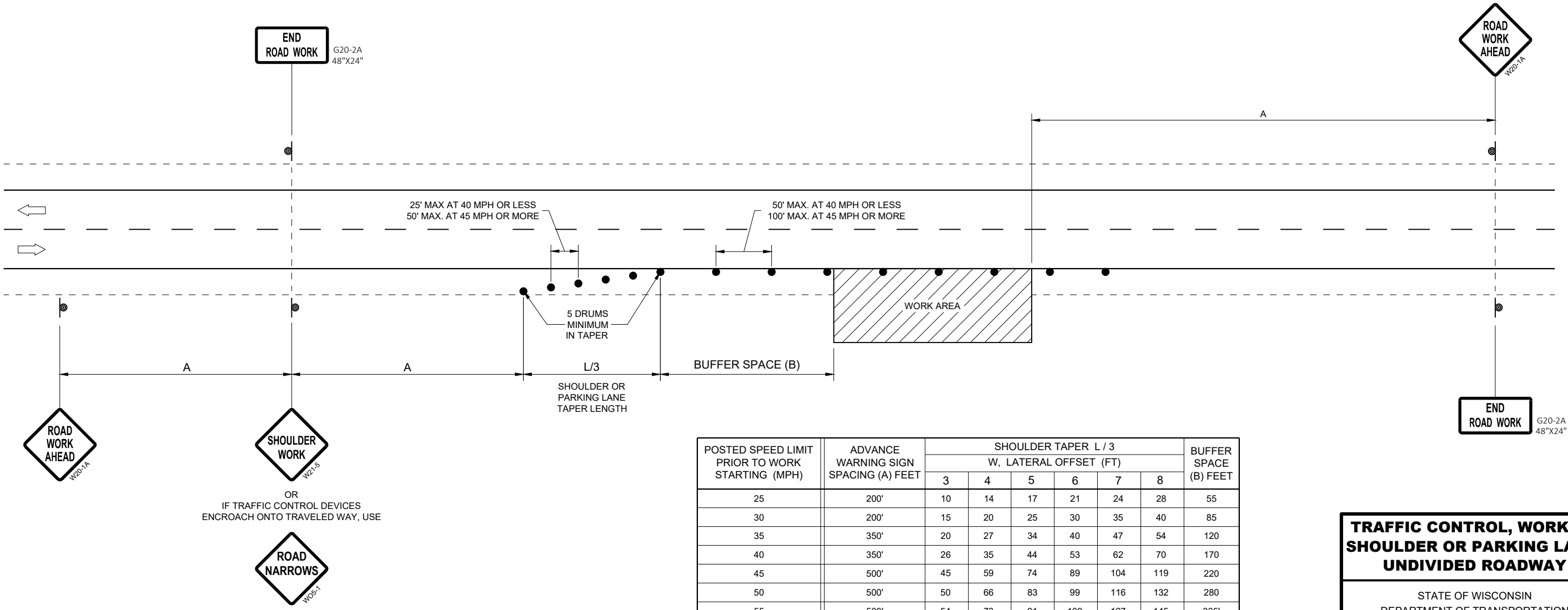
W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

6

6

SDD 15D28 - 04

SDD 15D28 - 04



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

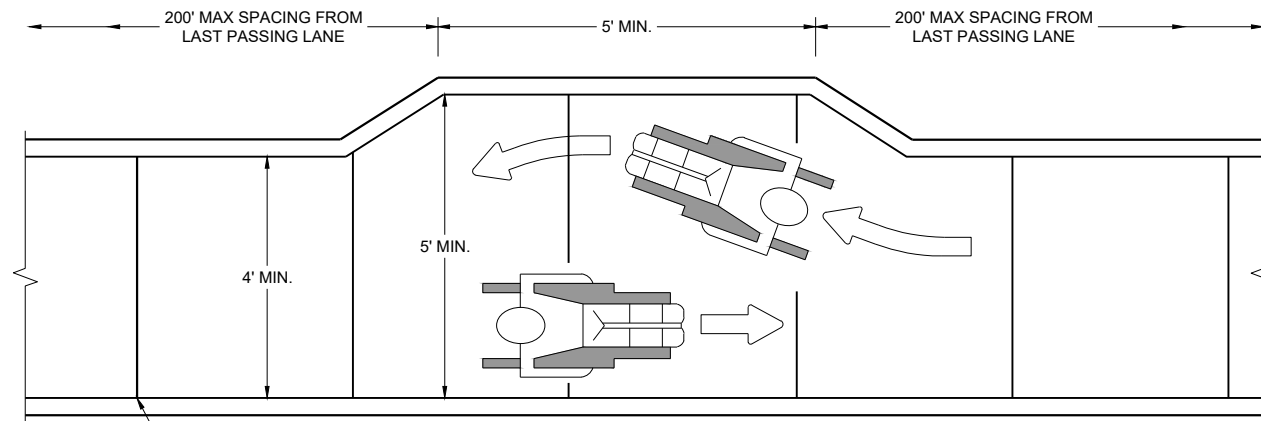
TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

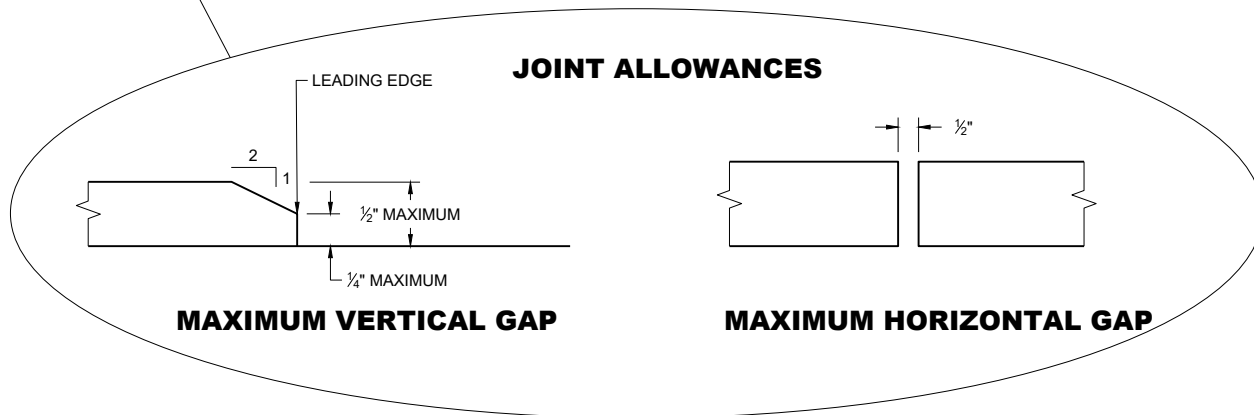
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER

FHWA

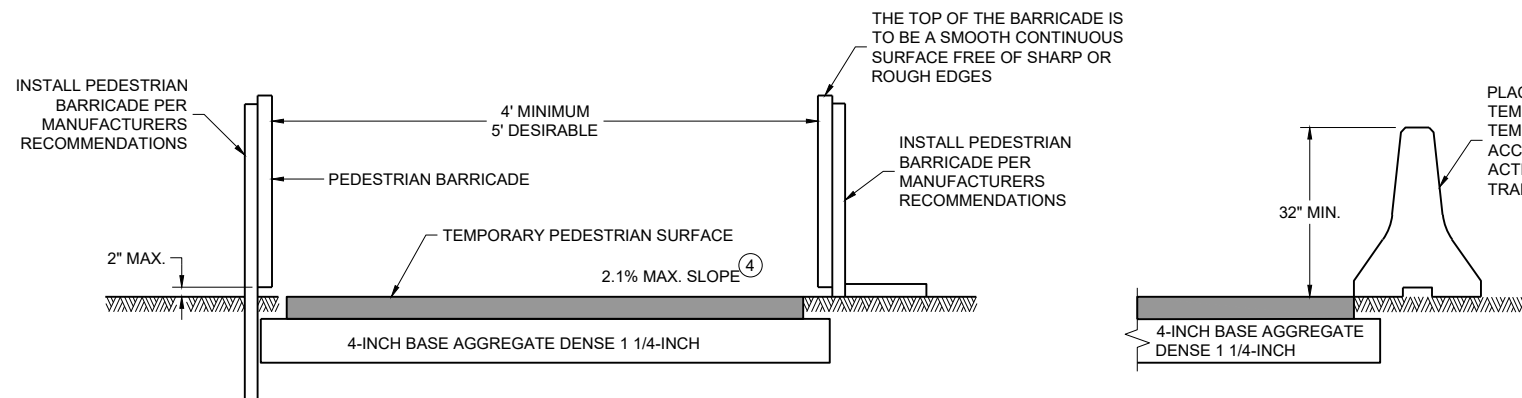


NARROW SIDEWALK PASSING DETAIL



MAXIMUM VERTICAL GAP

MAXIMUM HORIZONTAL GAP



TEMPORARY PEDESTRIAN ACCESS



LEGEND

TEMPORARY PEDESTRIAN BARRICADE



AUDIBLE MESSAGE DEVICE



TEMPORARY SIGN SUPPORT

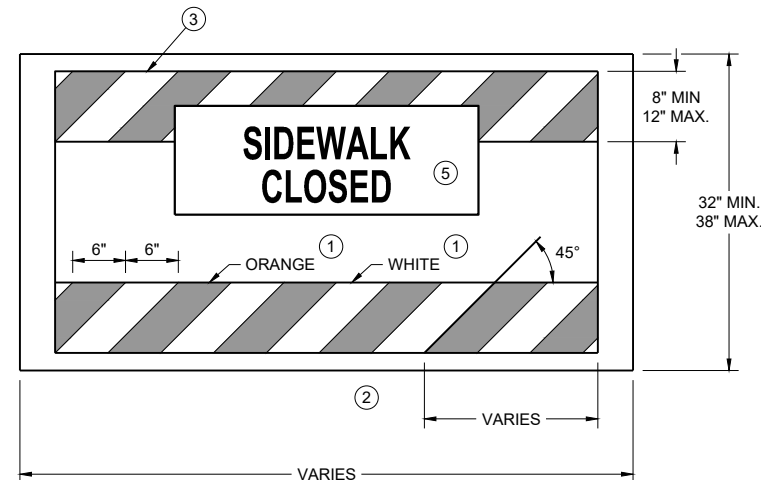


WORK AREA

GENERAL NOTES

BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
 - ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
 - ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
 - ★ USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.
 - ④ WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
- WHERE SIGNS FOR TEMPORARY PEDESTRIAN ACCOMMODATIONS ARE SHOWN BEING PLACED BEHIND TEMPORARY PEDESTRIAN BARRICADE, THE SIGNS MAY BE MOUNTED ON THE TEMPORARY PEDESTRIAN BARRICADE INSTEAD. A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE SHALL BE USED IF MOUNTED ON THE BARRICADE. THE TOP OF THE SIGN SHALL BE MOUNTED BELOW THE TOP OF THE BARRICADE TO ALLOW A CONTINUOUS HAND-TRAILING EDGE.



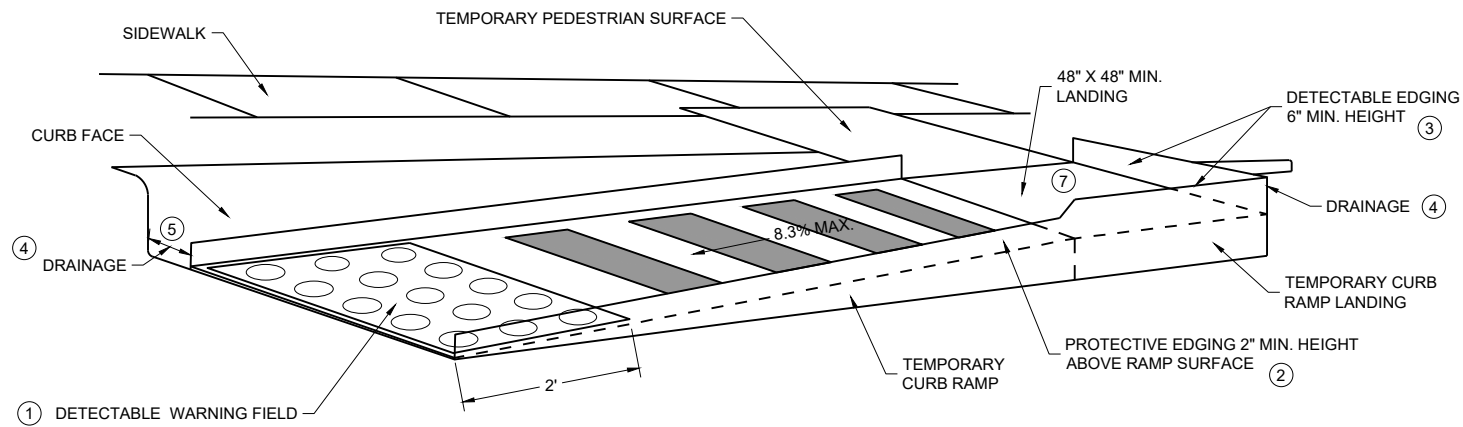
TEMPORARY PEDESTRIAN BARRICADE *



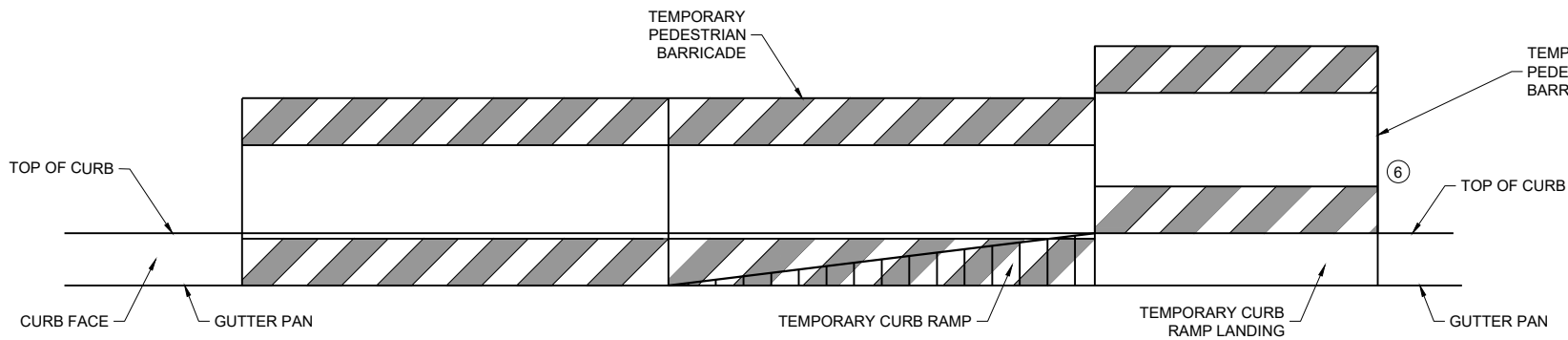
TEMPORARY PEDESTRIAN FLAGGING

TRAFFIC CONTROL,
PEDESTRIAN
ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

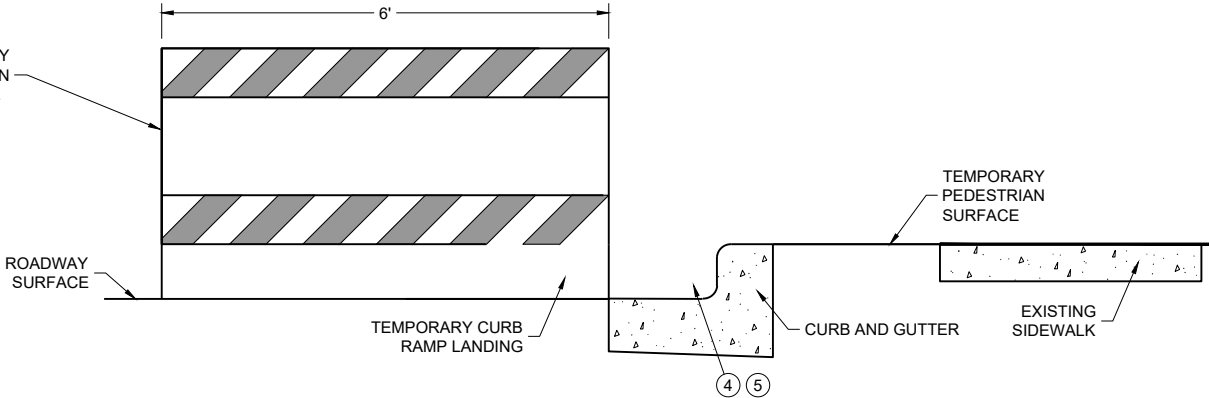


PERSPECTIVE VIEW



FRONT VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB



SIDE 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 1:48 (2.1%) MAX. CROSS-SLOPE.

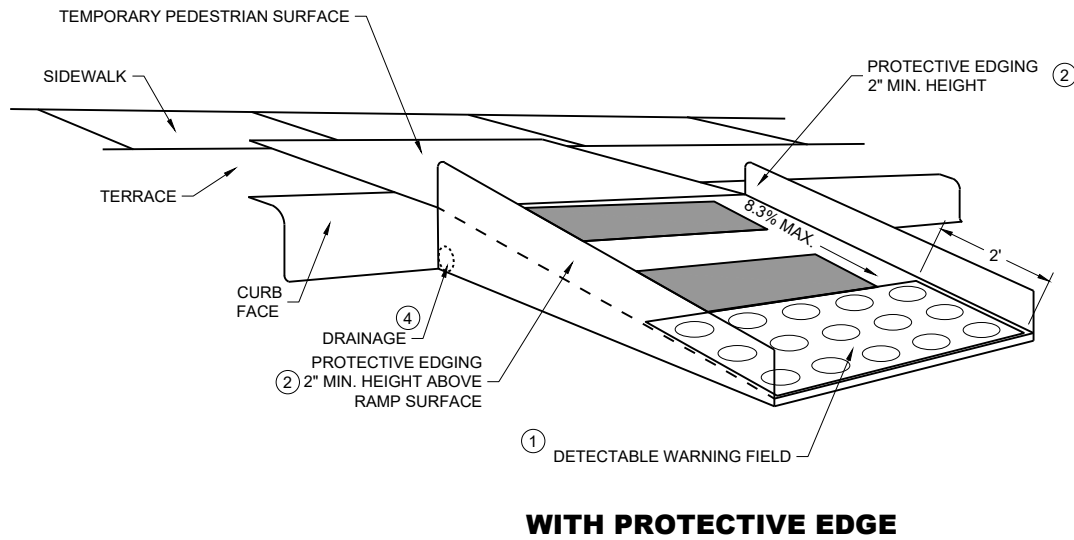
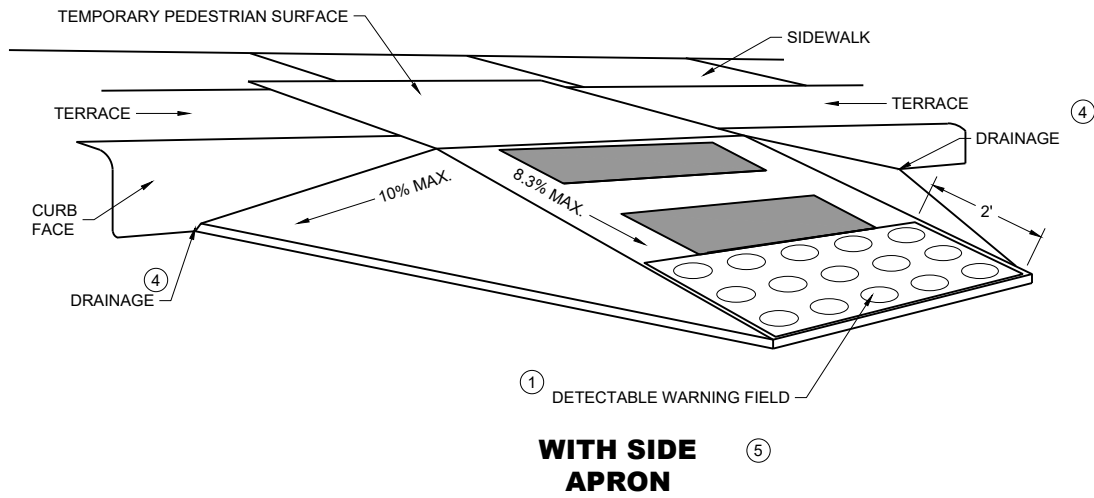
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

- 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.
- ⑦ LANDING TO BE SLOPED A MAXIMUM OF 2.1% IN ALL DIRECTIONS OF PEDESTRIAN TRAVEL.

TRAFFIC CONTROL,
PEDESTRIAN
ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



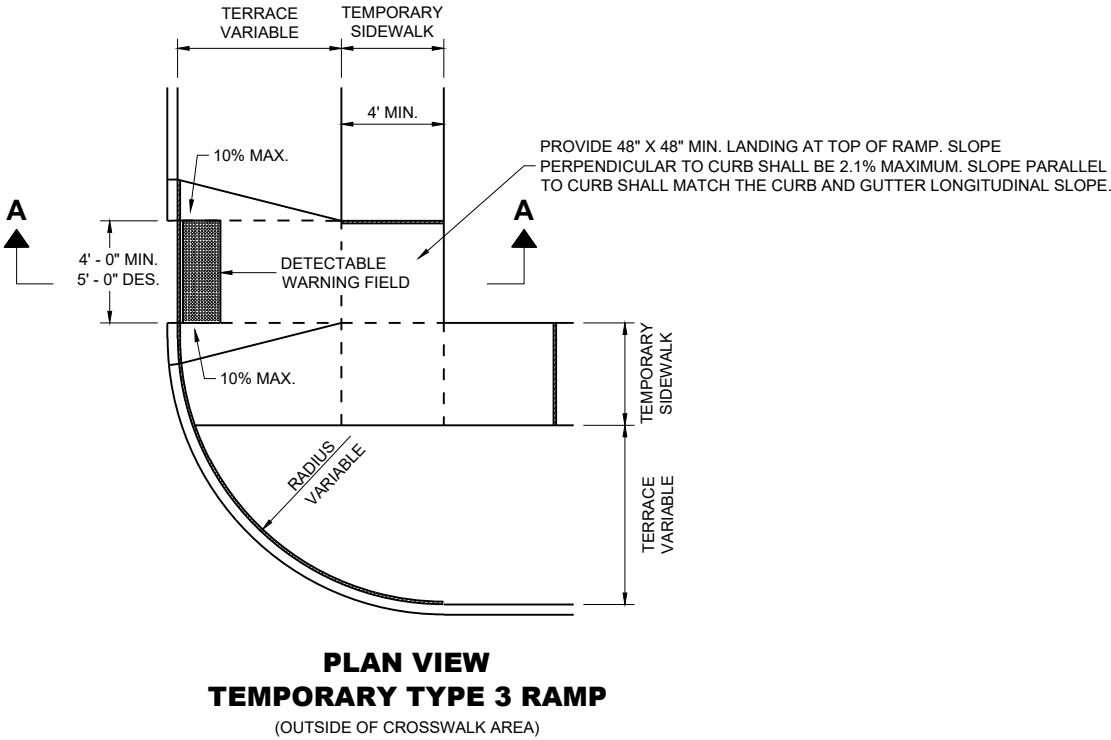
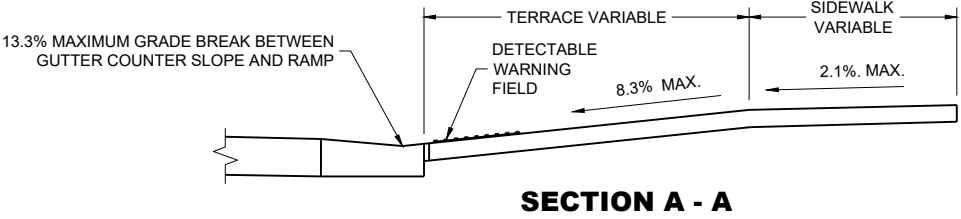
TEMPORARY CURB RAMP PERPENDICULAR TO CURB

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 1:48 (2.1%) 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.

GENERAL NOTES



TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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 1/2" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED $\frac{1}{2}$ ". LATERAL EDGES MAY BE VERTICAL UP TO $\frac{1}{4}$ " HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN $\frac{1}{4}$ " AND $\frac{1}{2}$ ".

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) 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.

	TRAFFIC CONTROL DRUM
	TYPE III BARRICADE
	TEMPORARY PEDESTRIAN BARRICADE
	TEMPORARY DETECTABLE WARNING FIELD
	WORK AREA
	TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

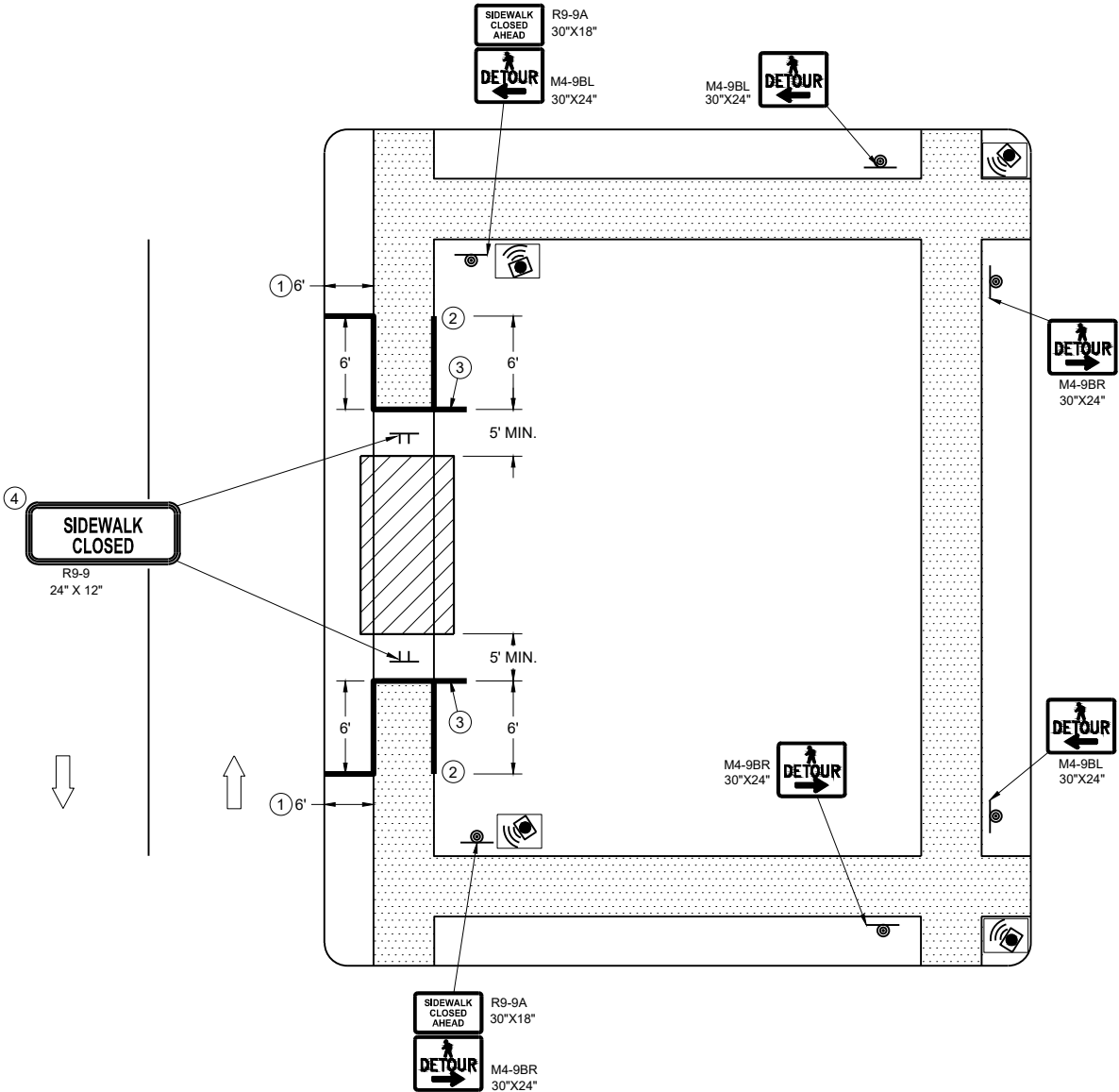
GENERAL NOTES

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

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

PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.

- IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
- 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.
- IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

LEGEND

- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY PEDESTRIAN SURFACE
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

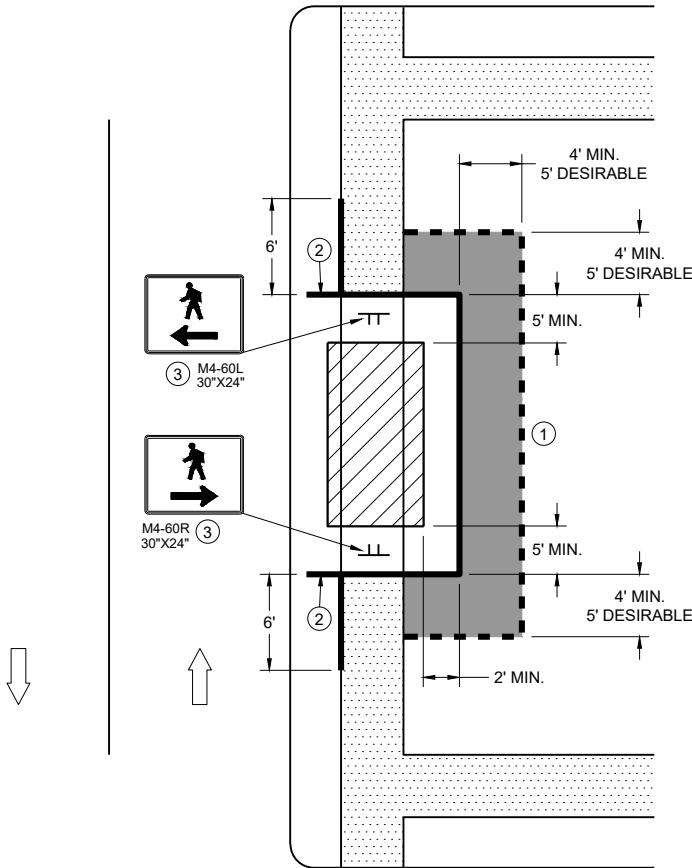
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

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 BYPASS
SINGLE SIDE

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

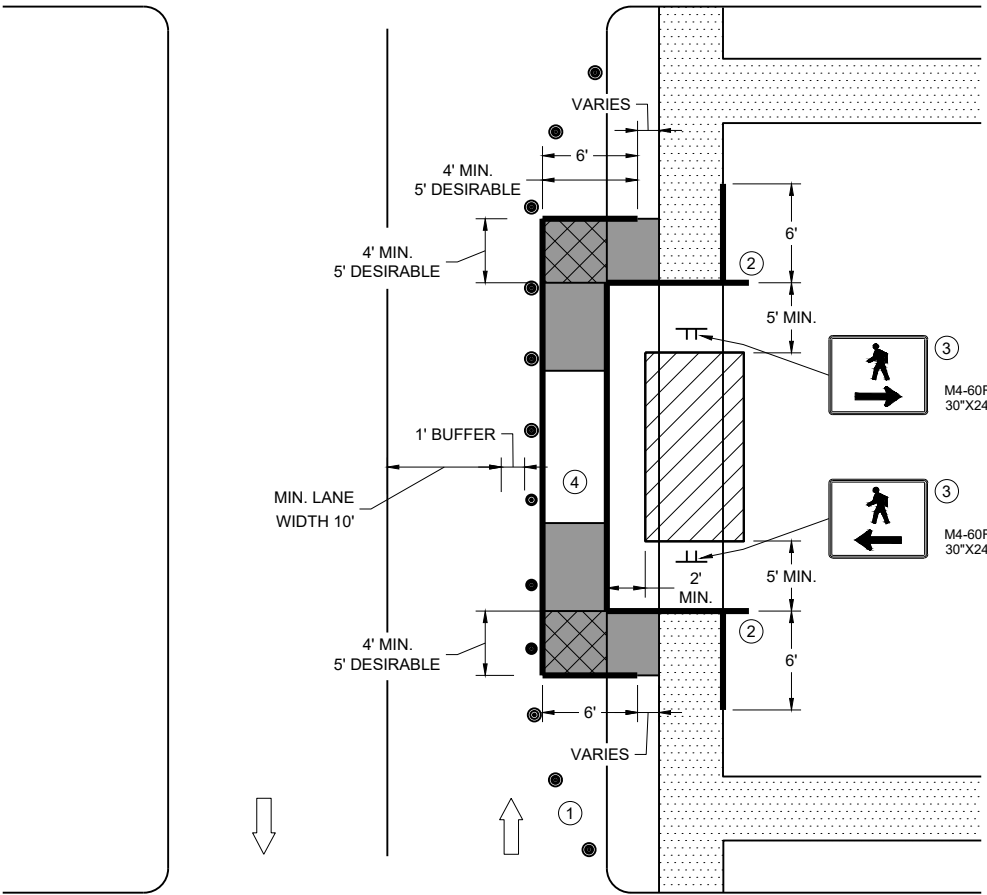
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

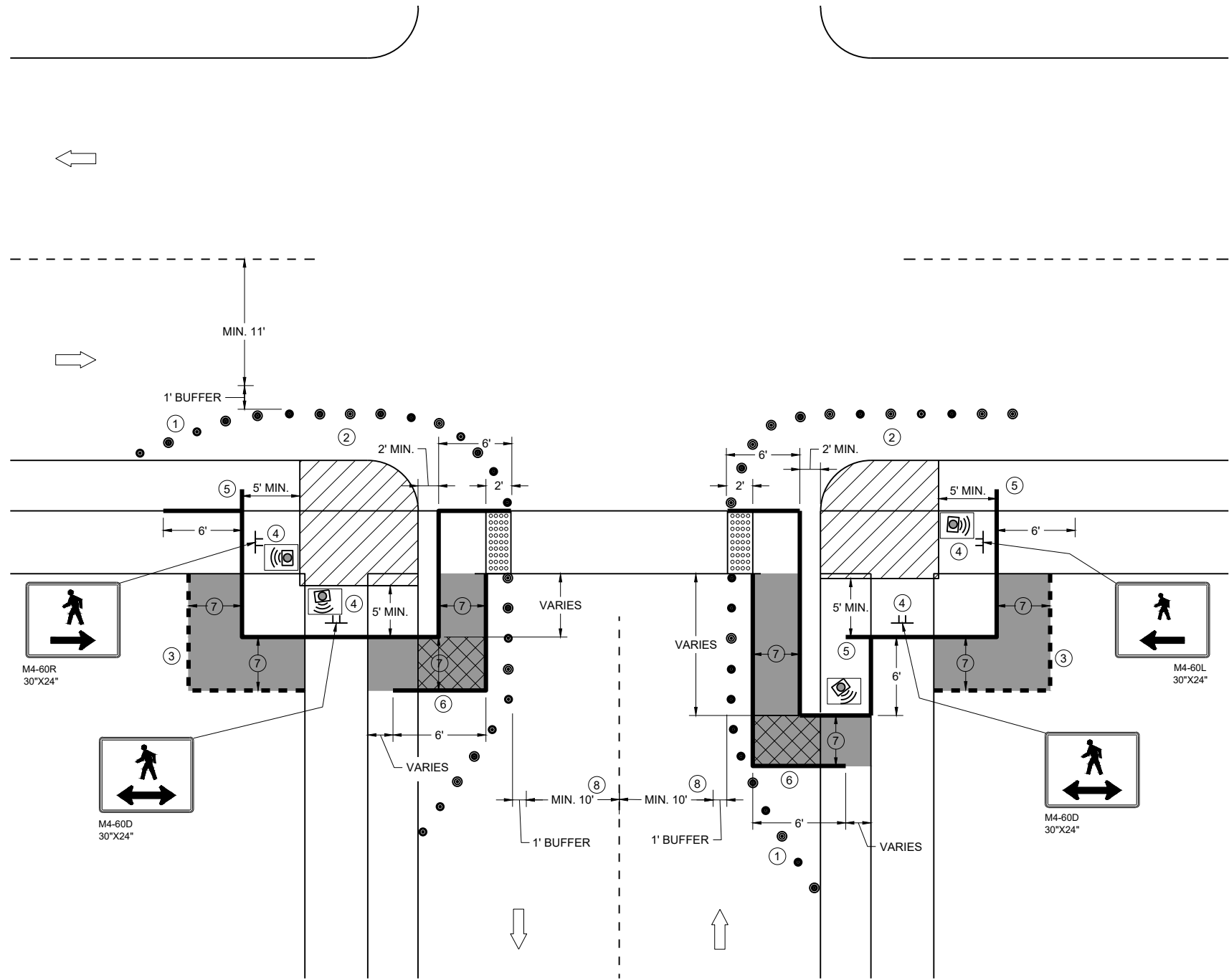
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
- ② PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
- ③ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
- ④ USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



SIDEWALK BYPASS, SINGLE SIDE

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



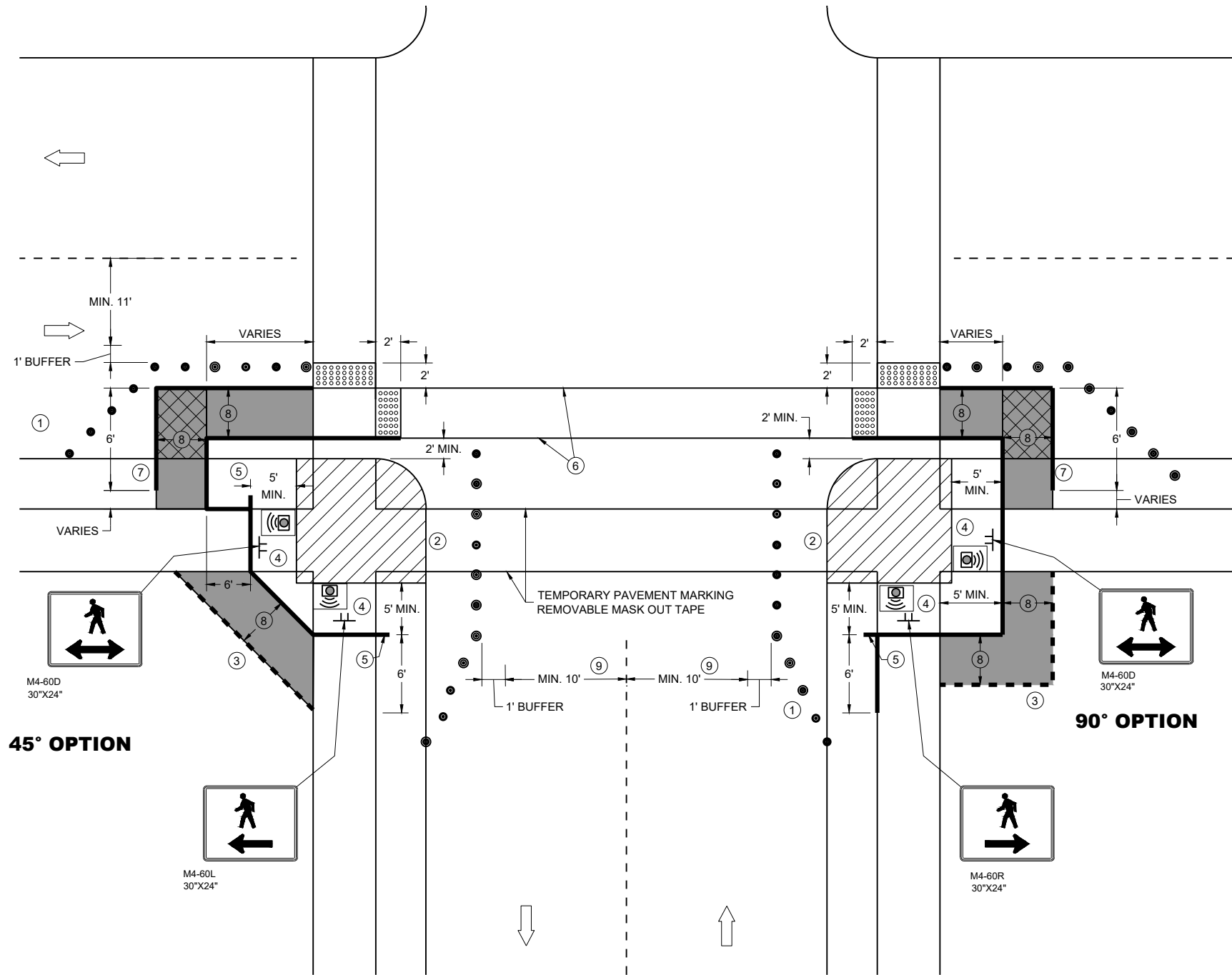
CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

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.
- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG
- WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
 - ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
 - ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
 - ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
 - ⑤ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
 - ⑥ 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
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
- ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
- ⑤ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
- ⑥ WHITE 6" TEMPORARY PAVEMENT MARKING
- ⑦ IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
- ⑧ 4 FEET MINIMUM, 5 FEET DESIRABLE
- ⑨ IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

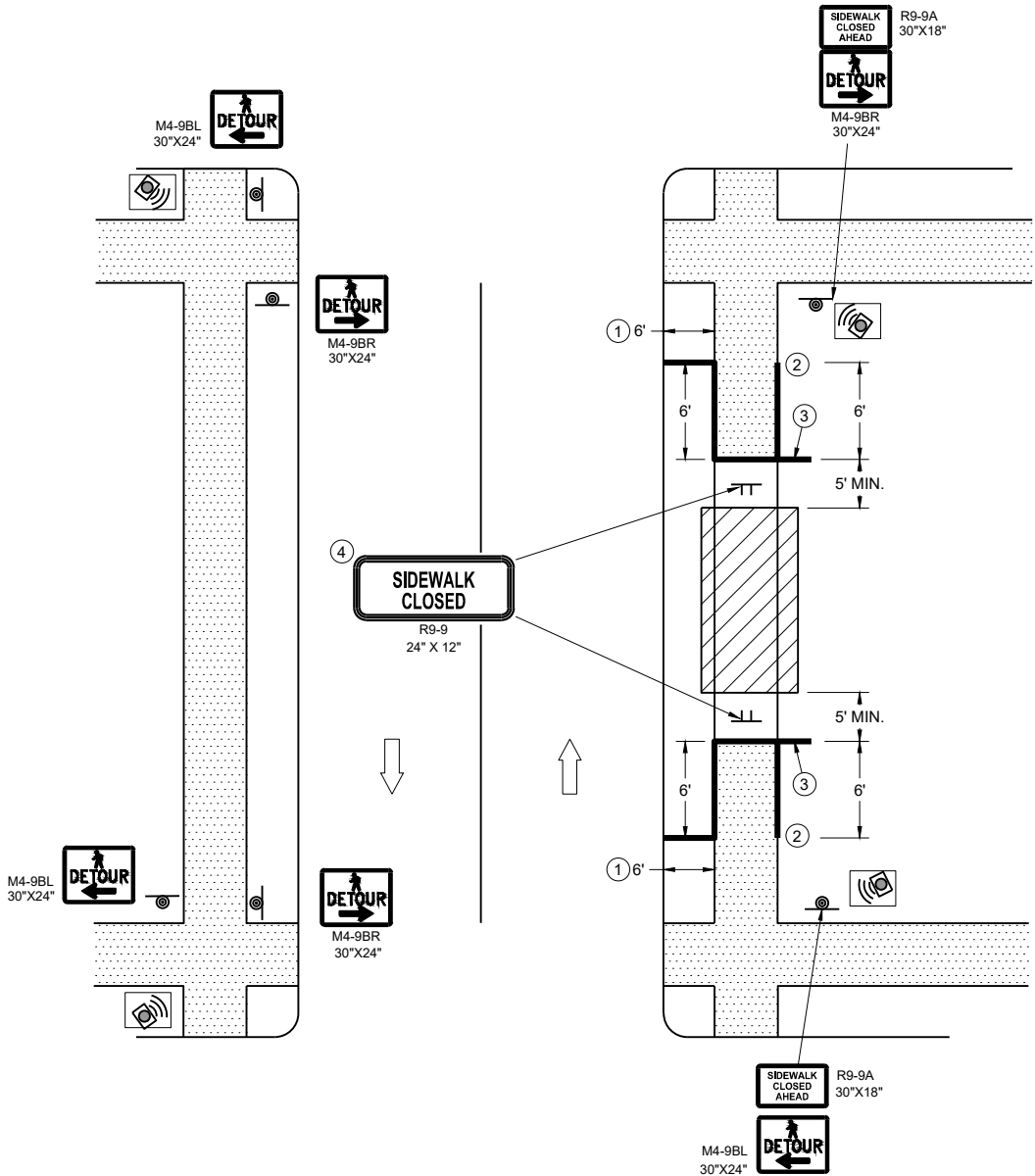
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

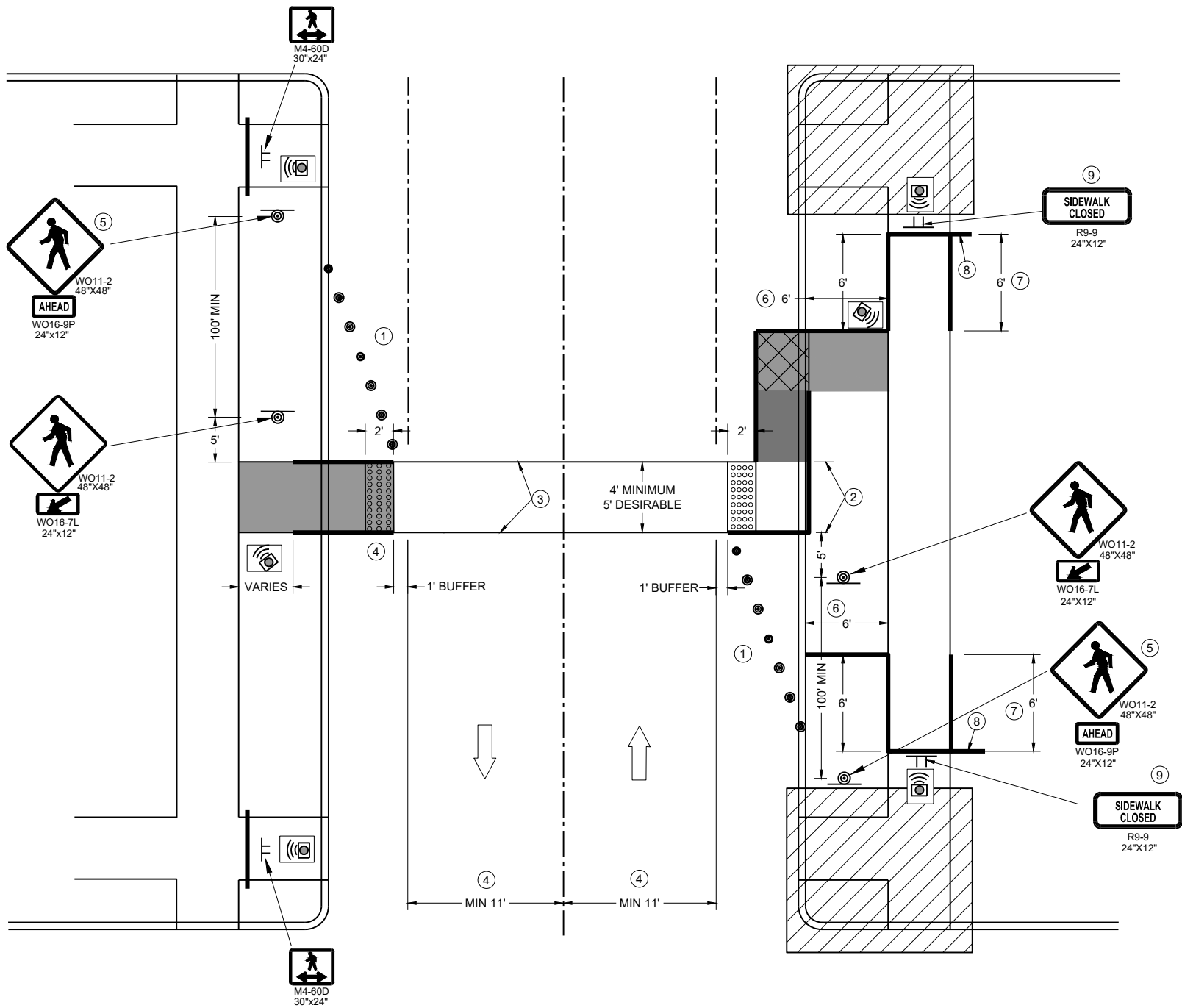
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.
- IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
 - 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.
 - IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
 - MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.

- ① SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② 4 FEET MINIMUM, 5 FEET DESIRABLE.
- ③ WHITE 6" TEMPORARY PAVEMENT MARKING.
- ④ IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMP MAY NEED TO BE UTILIZED.
- ⑤ IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
- ⑥ IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
- ⑦ 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.
- ⑧ IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ⑨ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

LEGEND

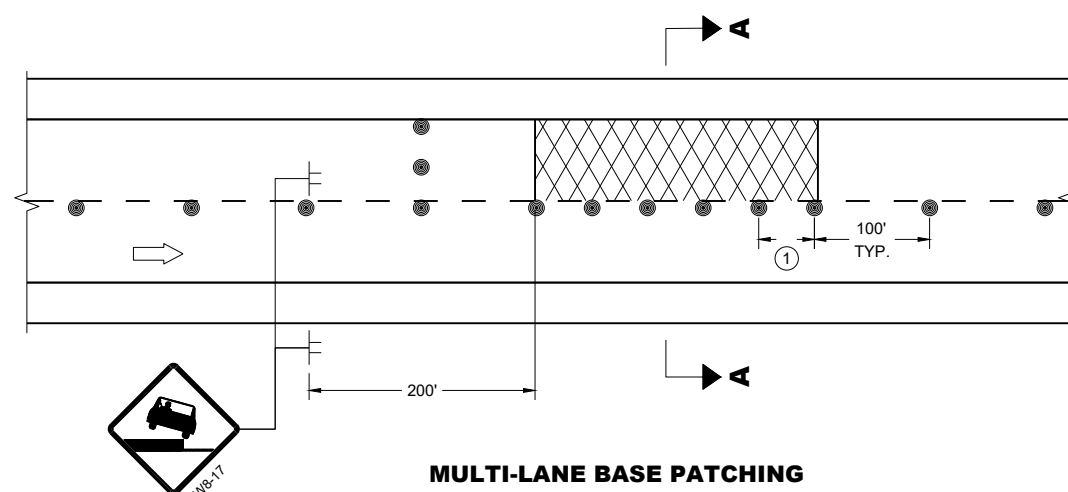
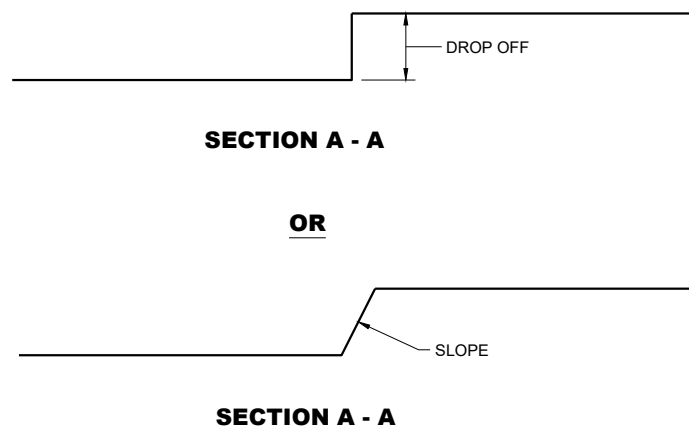
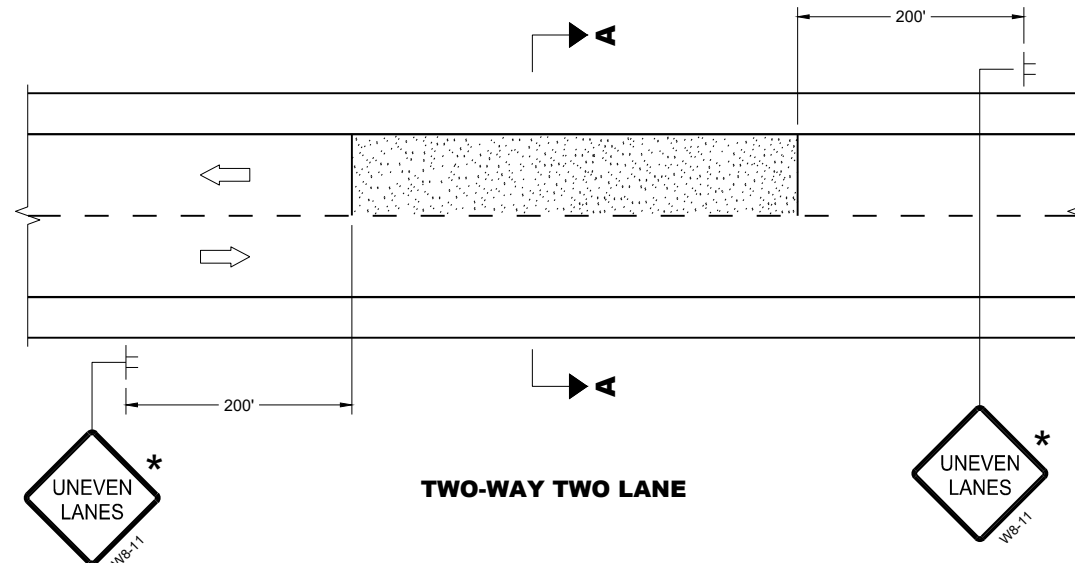
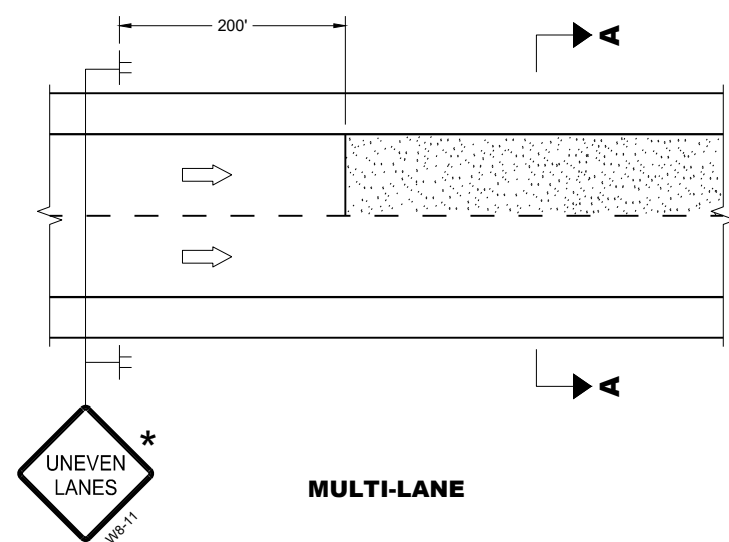
- TRAFFIC CONTROL DRUM
- SIGN ON TEMPORARY SUPPORT
- TEMPORARY CURB RAMP
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2025 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING
ADDITIONAL SIGNS.

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

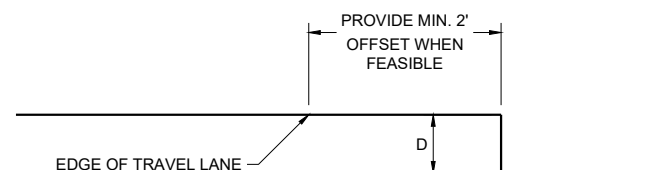
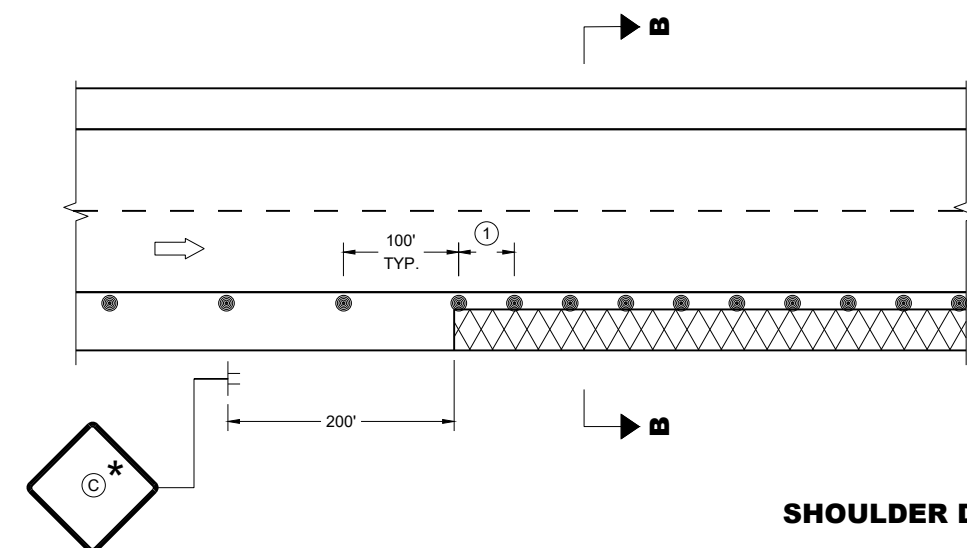
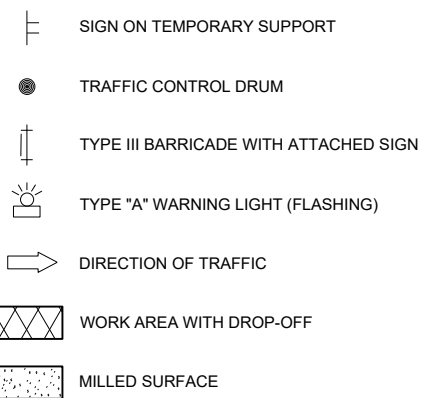
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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

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

① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND



SECTION B - B

SHOULDER DROP-OFFS

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	 WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	 W8-9A
PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT	

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2025
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

6 |

SDD 15D39-03

SDD 15D39-03

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THAT THE BACKGROUND IS ORANGE.

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

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

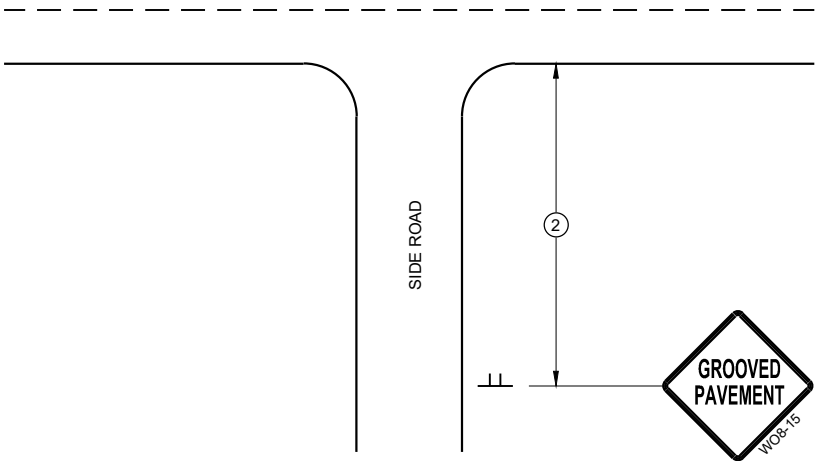
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

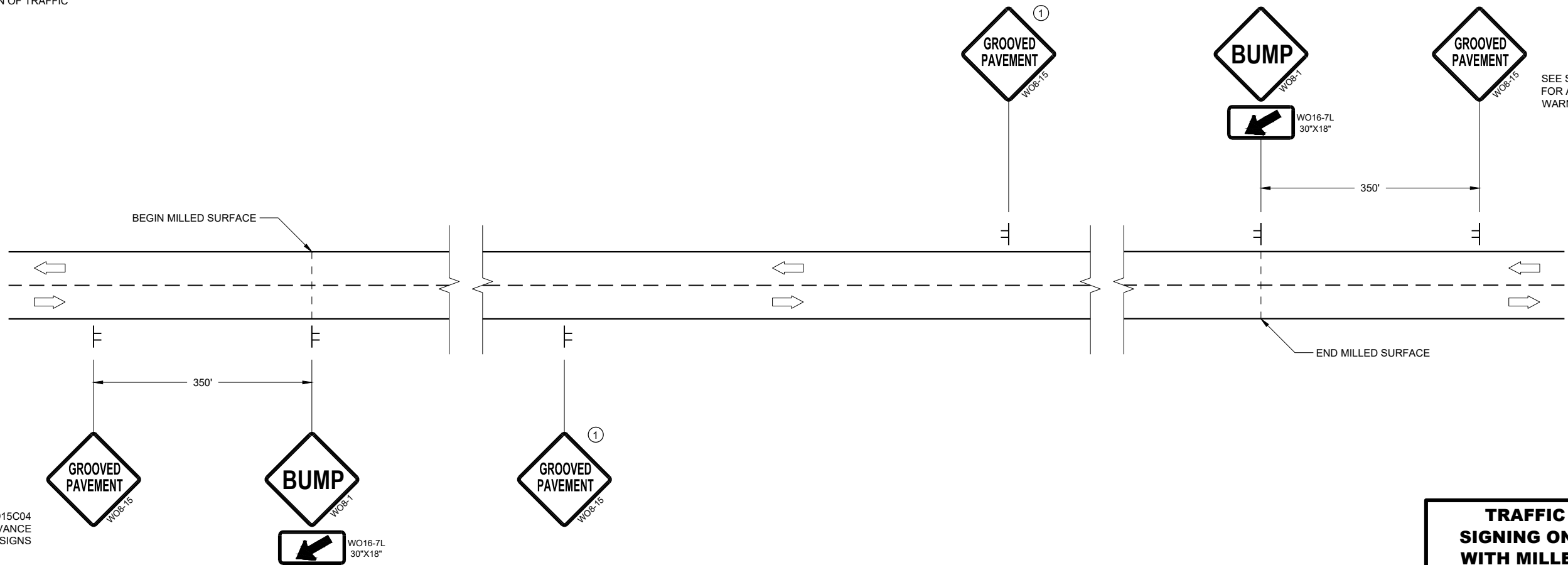
- ① PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



SEE SDD15C04
FOR ADVANCE
WARNING SIGNS

SEE SDD15C04
FOR ADVANCE
WARNING SIGNS

DETAIL FOR SIGNING ON MILLED SURFACES

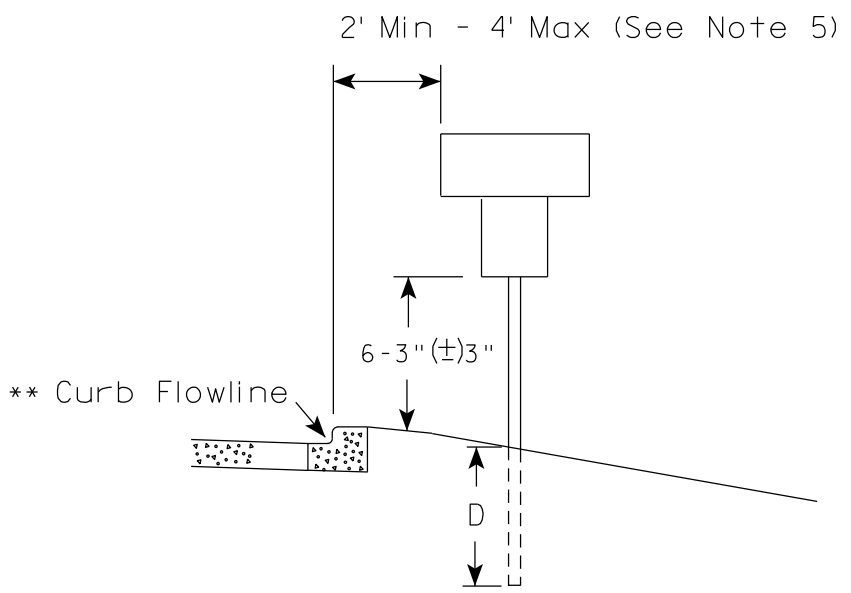
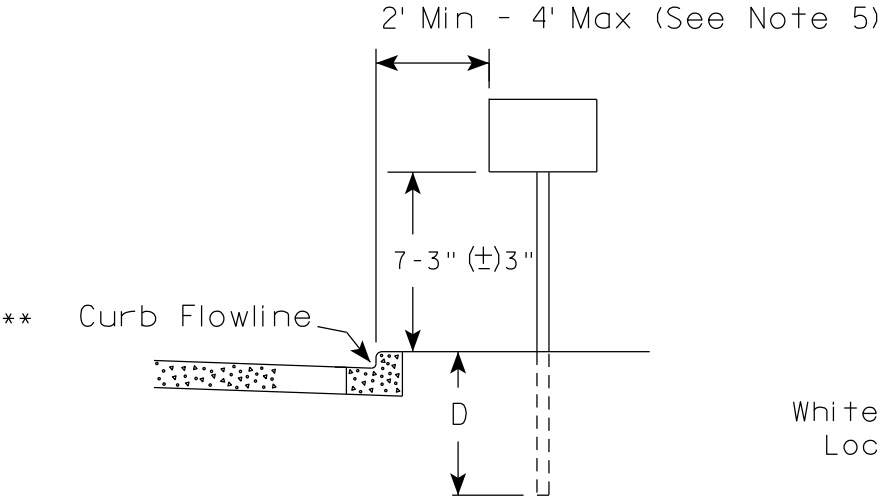
TRAFFIC CONTROL,
SIGNING ON ROADWAYS
WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

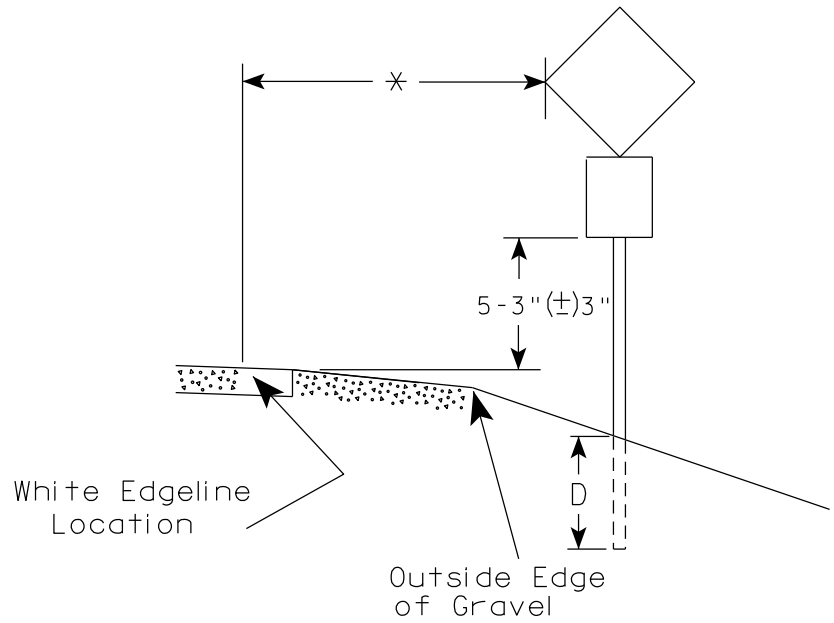
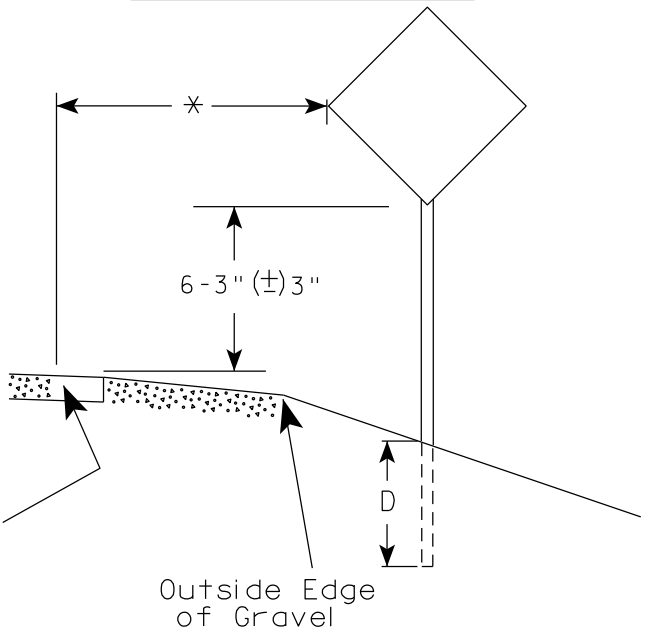
APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

URBAN AREA



RURAL AREA (See Note 2)



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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the 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.

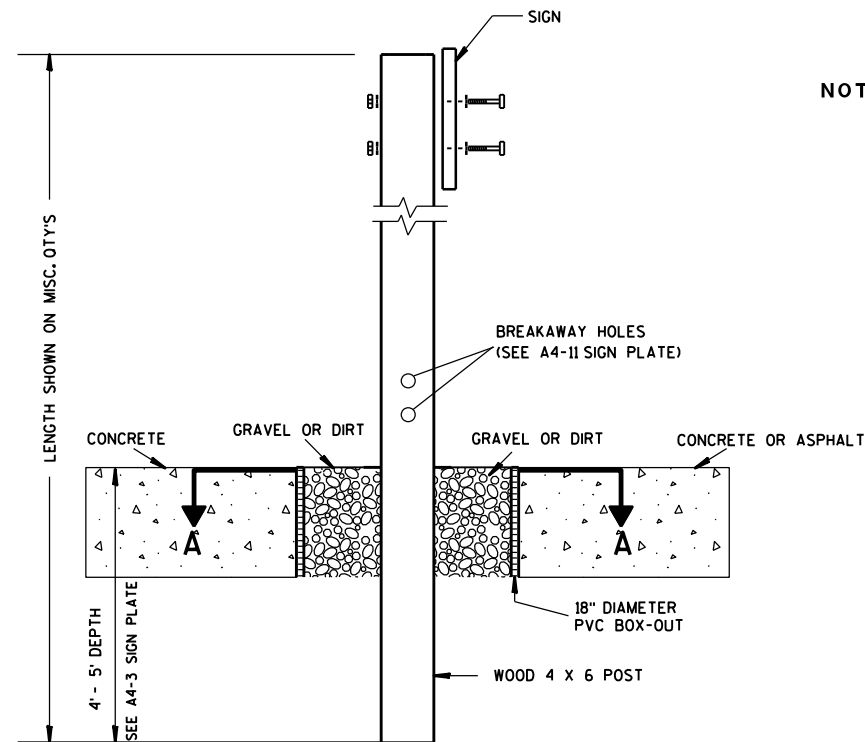
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED 
for State Traffic Engineer

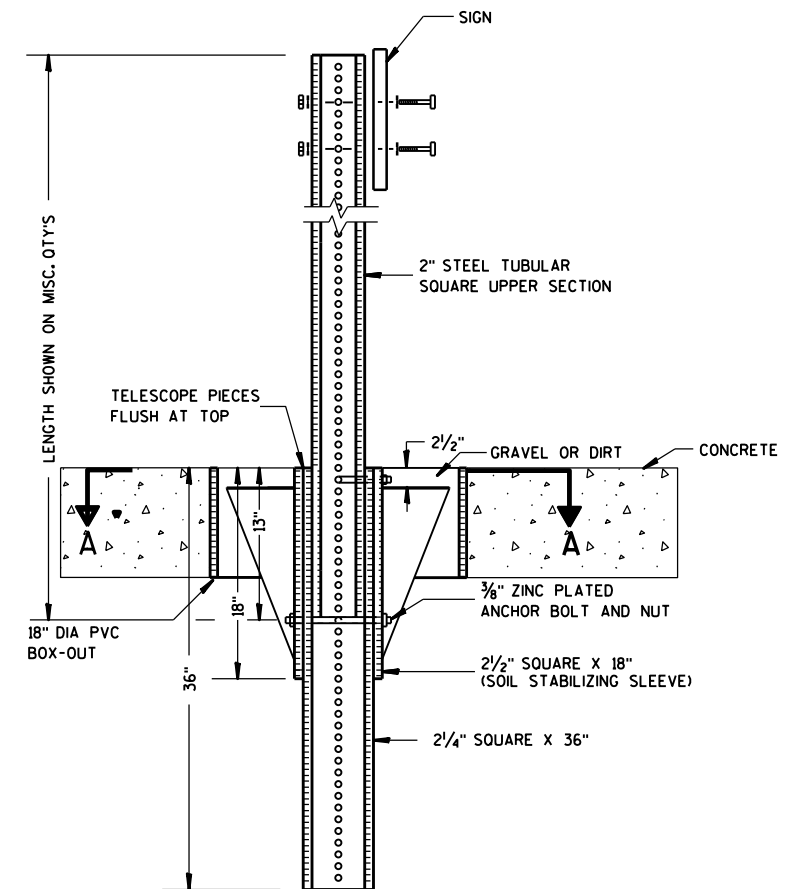
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

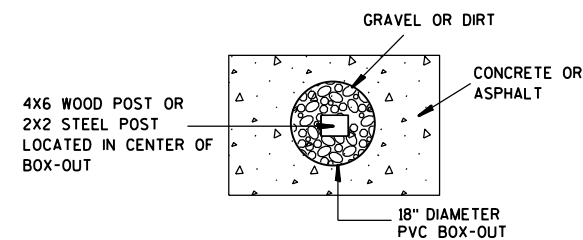
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

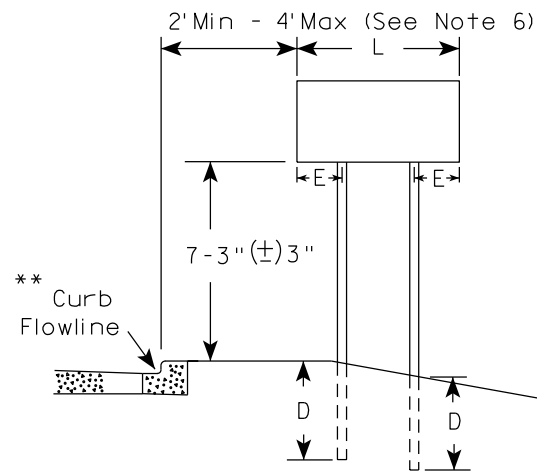
HWY:

COUNTY:

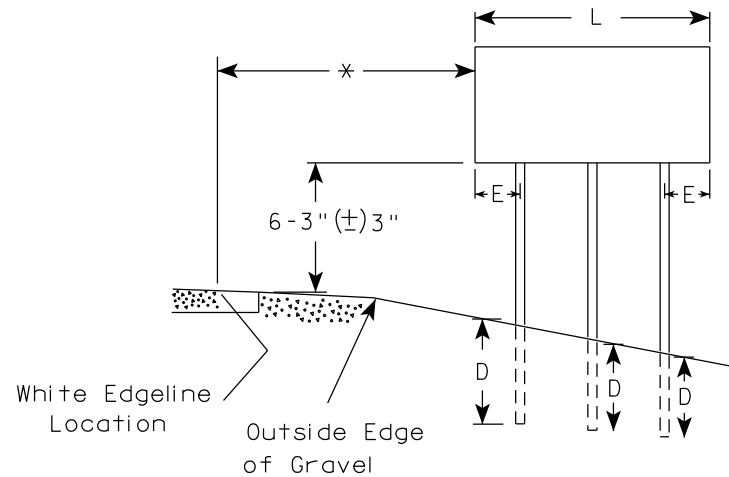
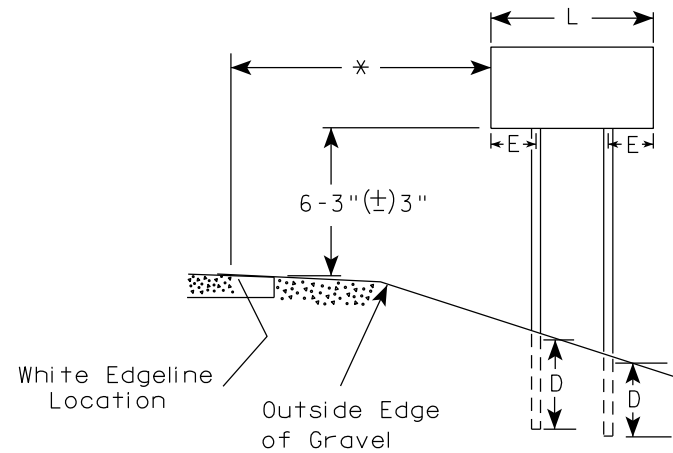
SHEET NO:

E

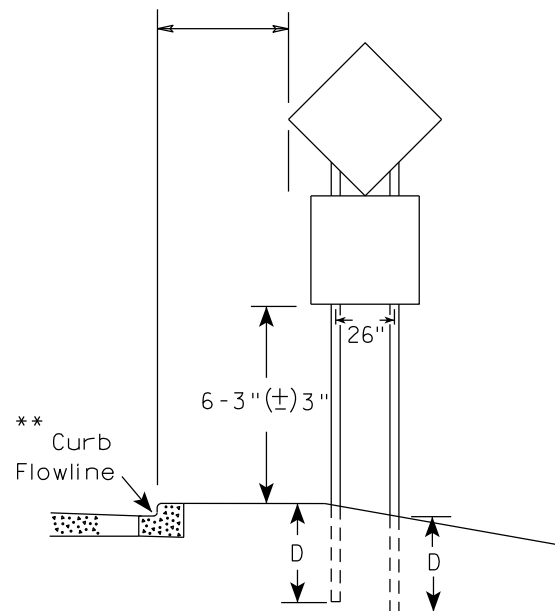
URBAN AREA



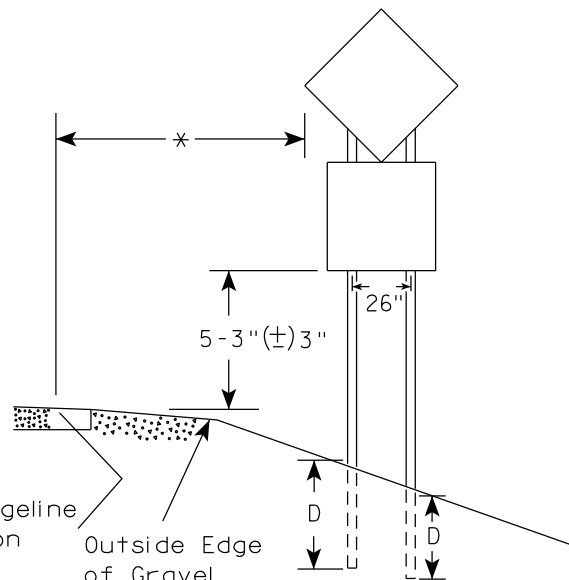
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

GENERAL NOTES

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

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

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

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

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"

POST EMBEDMENT DEPTH

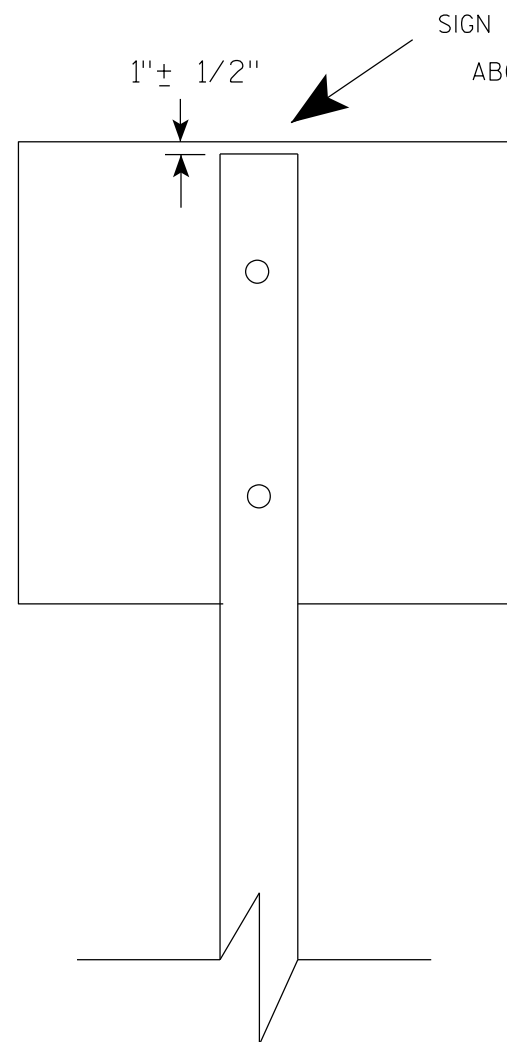
Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

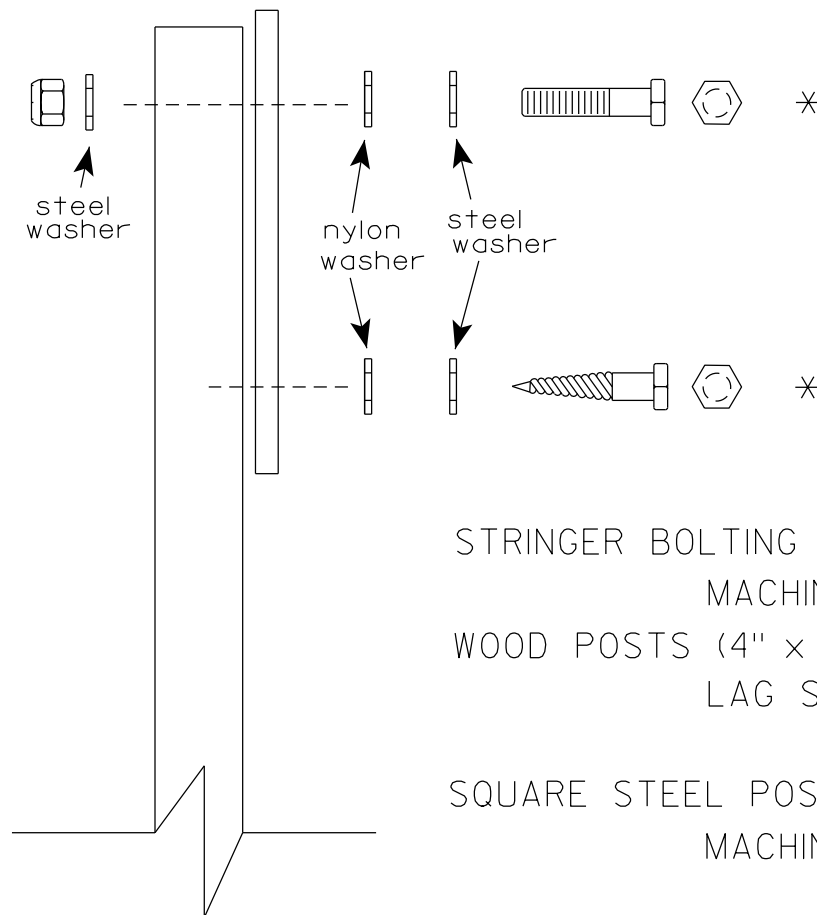
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16



SIGN SHALL BE MOUNTED TO PROJECT
ABOVE THE TOP OF THE POST



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

**2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**

4" x 10" x 10 GA. ———→
STEEL PLATE (CUT
AS SHOWN) WELDED
TO ALL FOUR CORNERS
OF TELESPAR TUBE

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

2 1/2" TELES PAR TUBE

4"

2 1/2"

10"

3 1/2"

16"

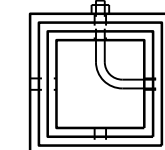
4" x 10" x 10 GA. STEEL PLATE (CUT AS SHOWN) WELDED TO ALL FOUR CORNERS OF TELES PAR TUBE

[illegible]

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY:

- Dimensions:**
 - Overall height: LENGTH SHOWN ON MISC. Q'TYS
 - Section A-A: 36" (total), 18" (upper), 12" (lower)
 - Section B-B: 1"
- Components:**
 - SIGN
 - SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
 - 2" STEEL TUBULAR SQUARE UPPER SECTION
 - ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C
 - ALL FOUR SIDES
 - $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT
 - $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
 - 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
 - 2 1/4" SQUARE X 36"
 - TELESCOPE PIECES FLUSH AT TOP

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



DIRECTION
OF TRAFFIC

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 NO. A4-9.9

PROJECT NO:

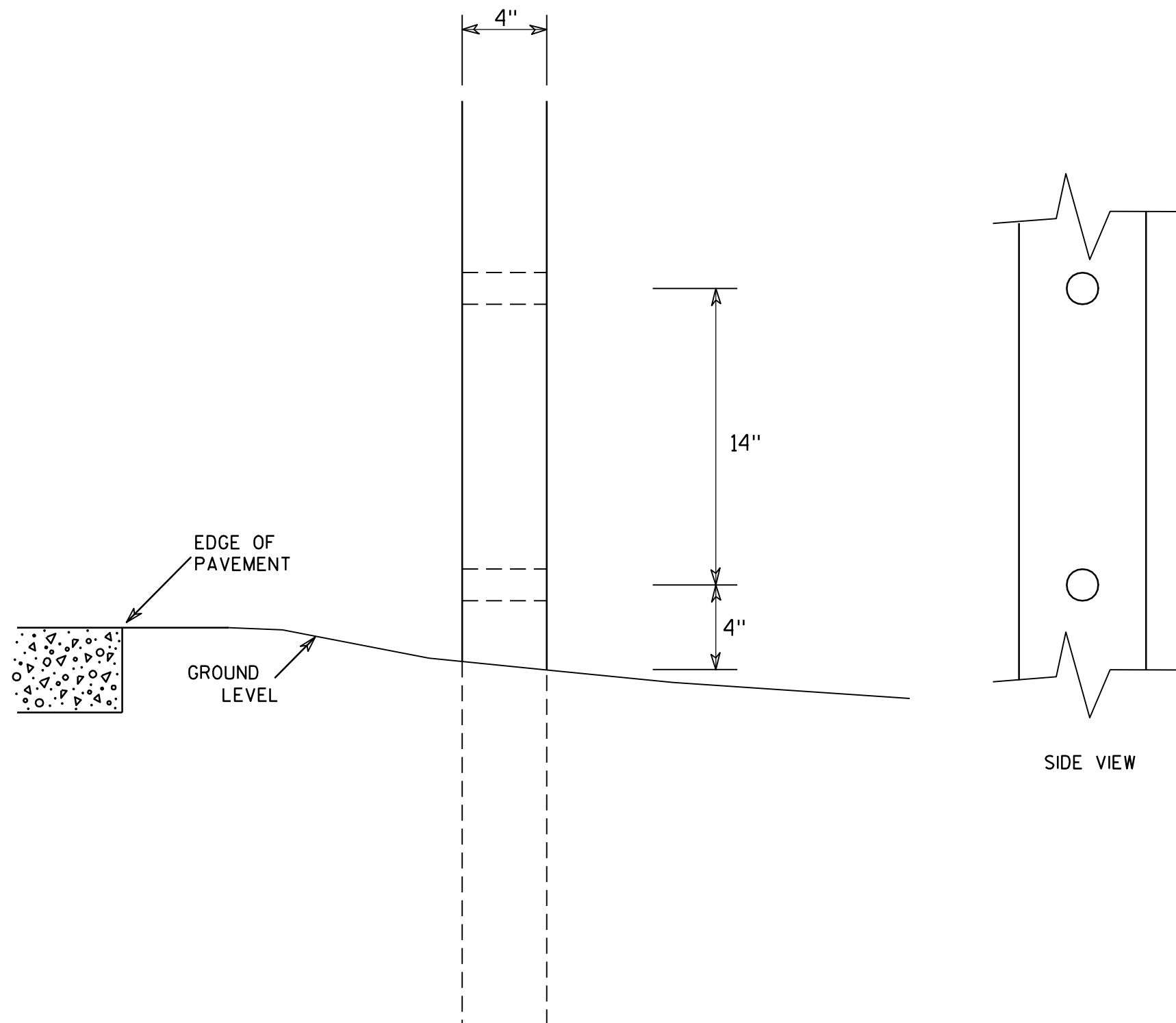
HWY:

COUNTY:

SHEET NO:

T

7



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

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:

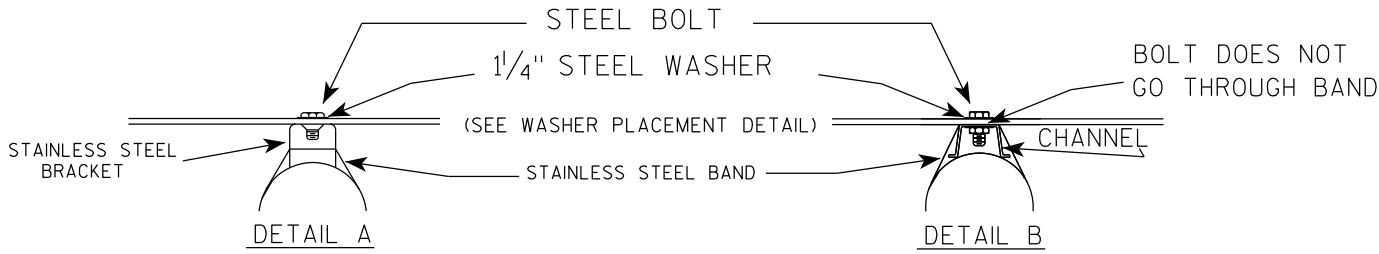
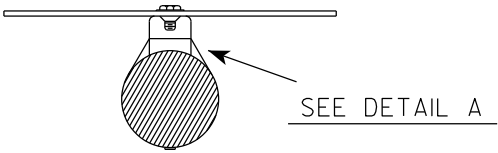
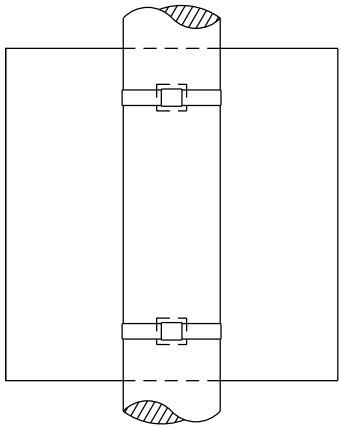
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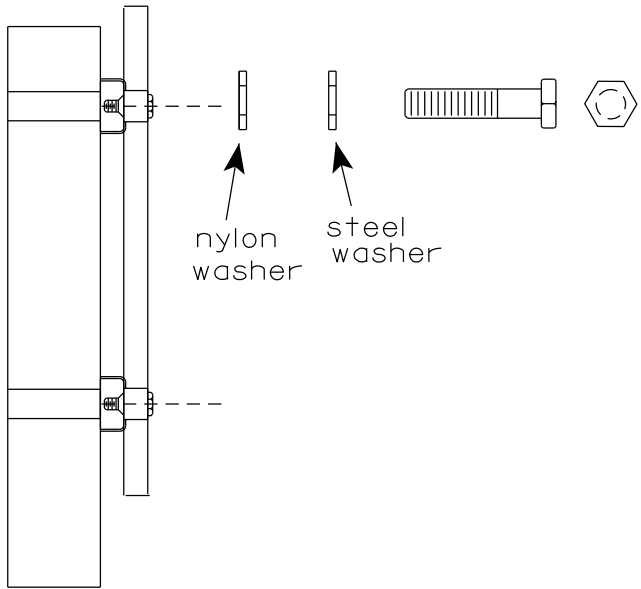
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

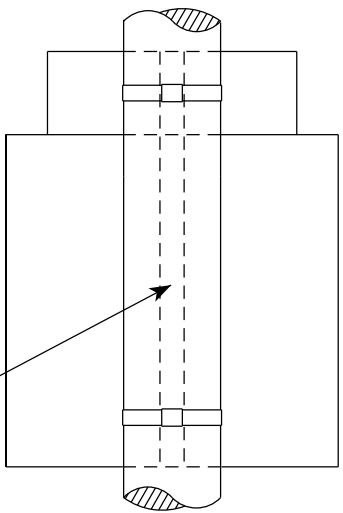


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" 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

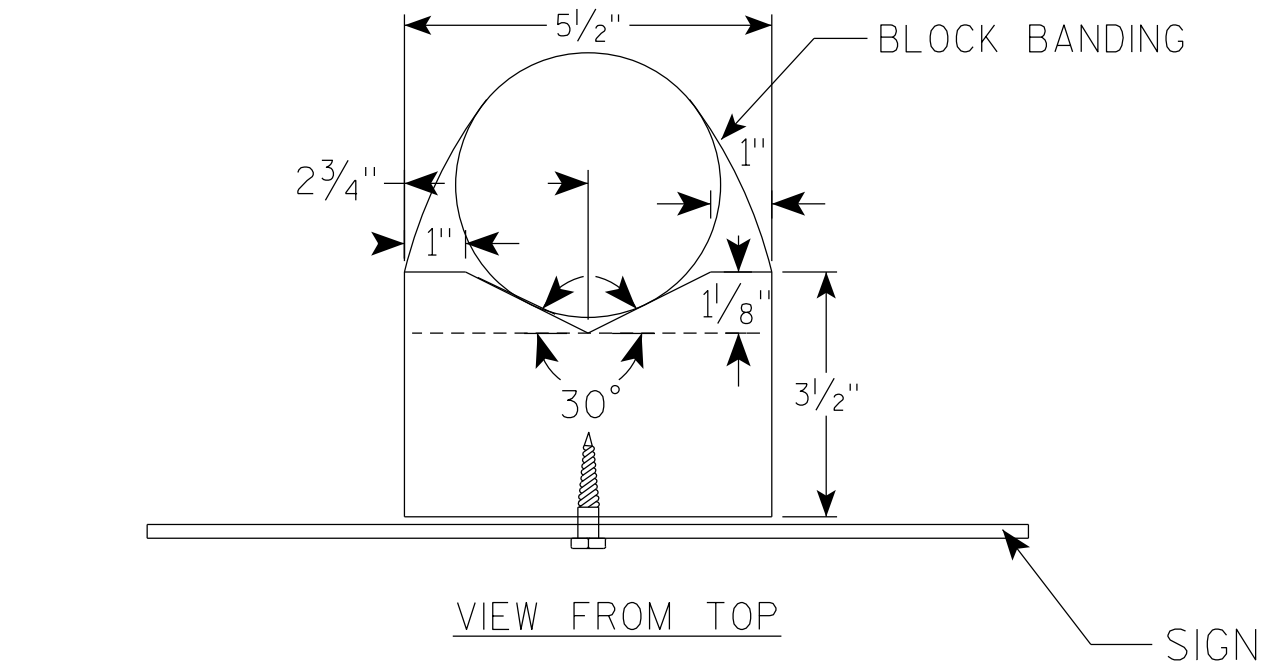
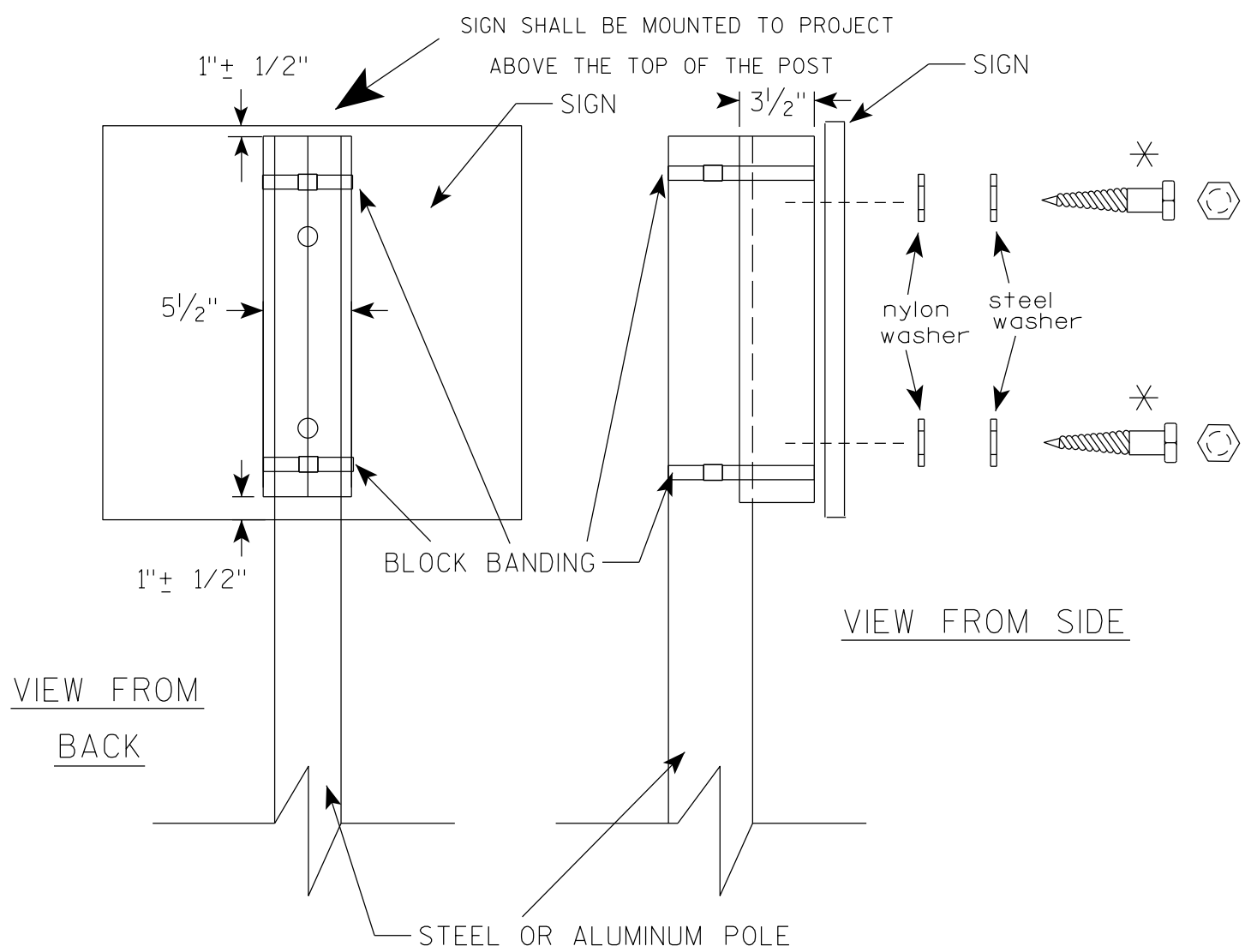


SEE DETAIL B

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

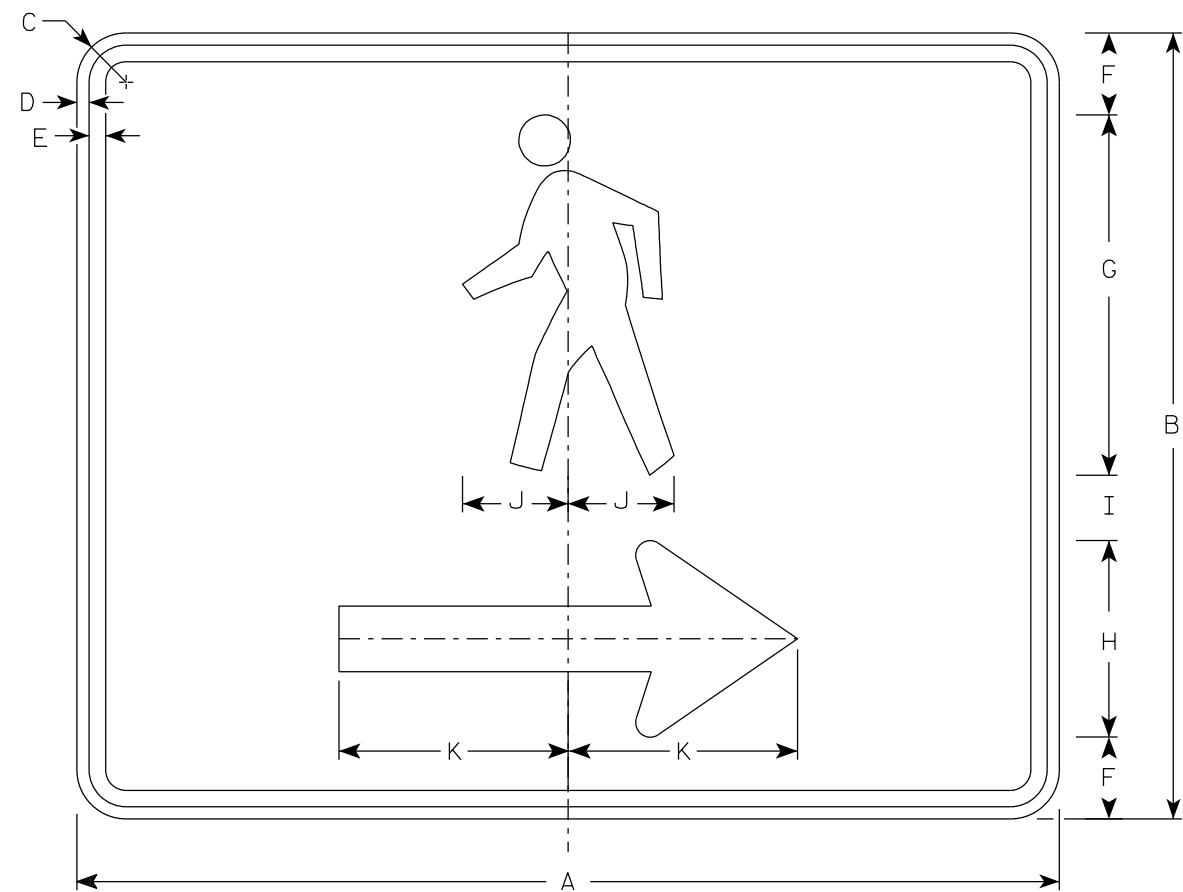


GENERAL NOTES

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, $\frac{3}{4}$ " 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 NORMALLY 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 $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

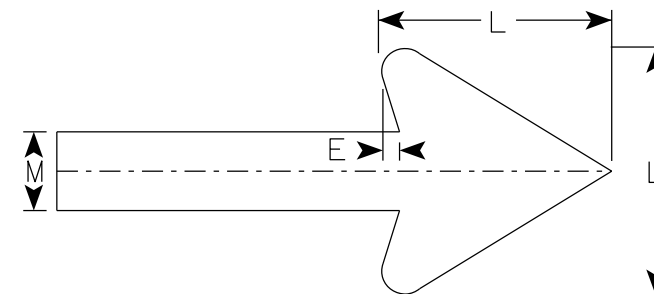
BLOCK BANDING DETAIL (V-BLOCK OPTION)	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/19/2022	PLATE NO. A5-10.3



M4-60R

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the arrow is reversed.

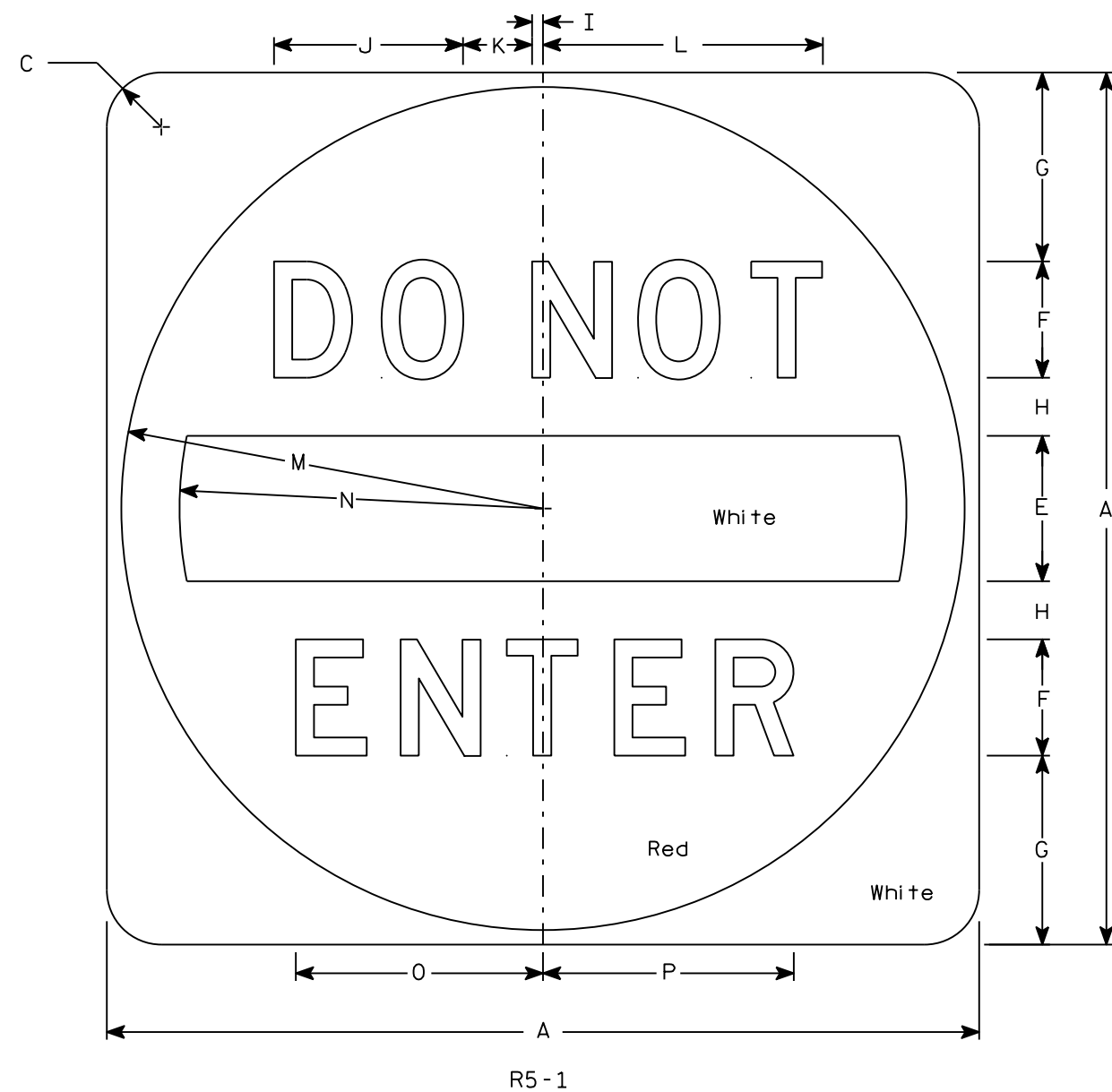


Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	7	6	2														5.00
2M	30	24	1 1/2	3/8	1/2	2 1/2	11	6	2	3 1/4	7	6	2														5.00
3																											
4																											
5																											

PROJECT NO:		HWY:		COUNTY:		SHEET NO:		E
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7



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - See detail
Message - White
3. Message Series - D

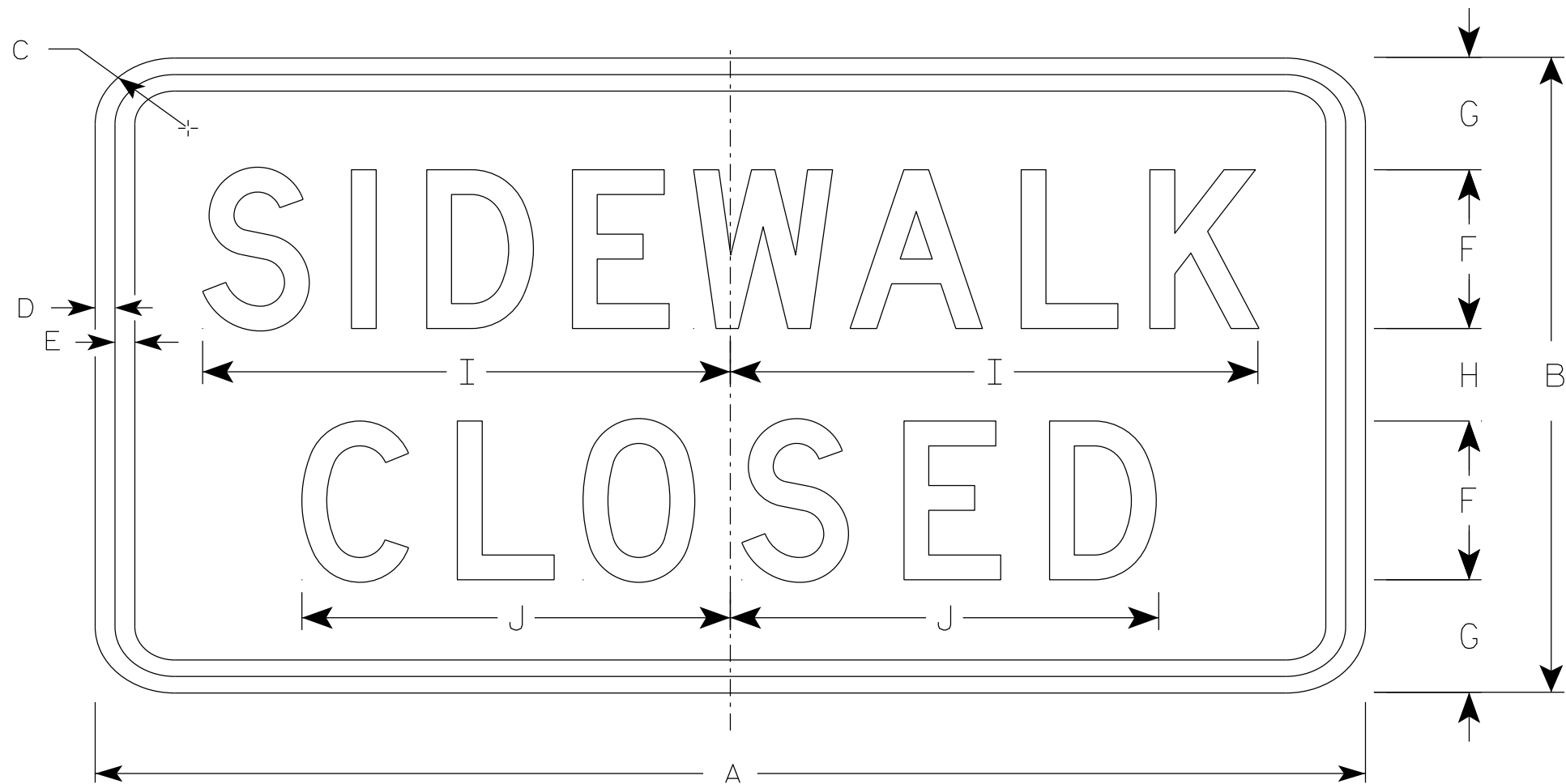
7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7⁄8		5	4	6 1⁄2	2	3⁄8	6 1⁄2	2 3⁄8	9 5⁄8	14 1⁄2	12 1⁄2	8 1⁄2	8 5⁄8											6.25
2M	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
3	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
4	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
5	48		3		8	6	11	3	5⁄8	9 3⁄4	3 5⁄8	14 1⁄2	23 1⁄2	20	12 3⁄4	12 7⁄8											16.0

STANDARD SIGN R5-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 3/15/18	PLATE NO. R5-1.16

PROJECT NO:	HWY:	COUNTY:	SHEET NO: E	
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\R51.DGN PLOT DATE : 15-MAR-2018 14:31 PLOT BY : **...plotuser...** PLOT NAME : PLOT SCALE : 5.914594:1.000000 WISDOT/CADDs SHEET 42				

7



R9-9

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
 - Background - White
 - Message - Black
- 3. Message Series - C
- 4. Use Size 2 for Sidewalks. Use Size 3 for Paths and Trails.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	1 1/2	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
2M	24	12	1 1/2	1/2	1/2	3	2 1/8	1 3/4	10	8 1/8																	2.0
3	30	18	1 1/2	1/2	1/2	4	3 1/2	3	12 1/2	10 1/4																	3.75
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

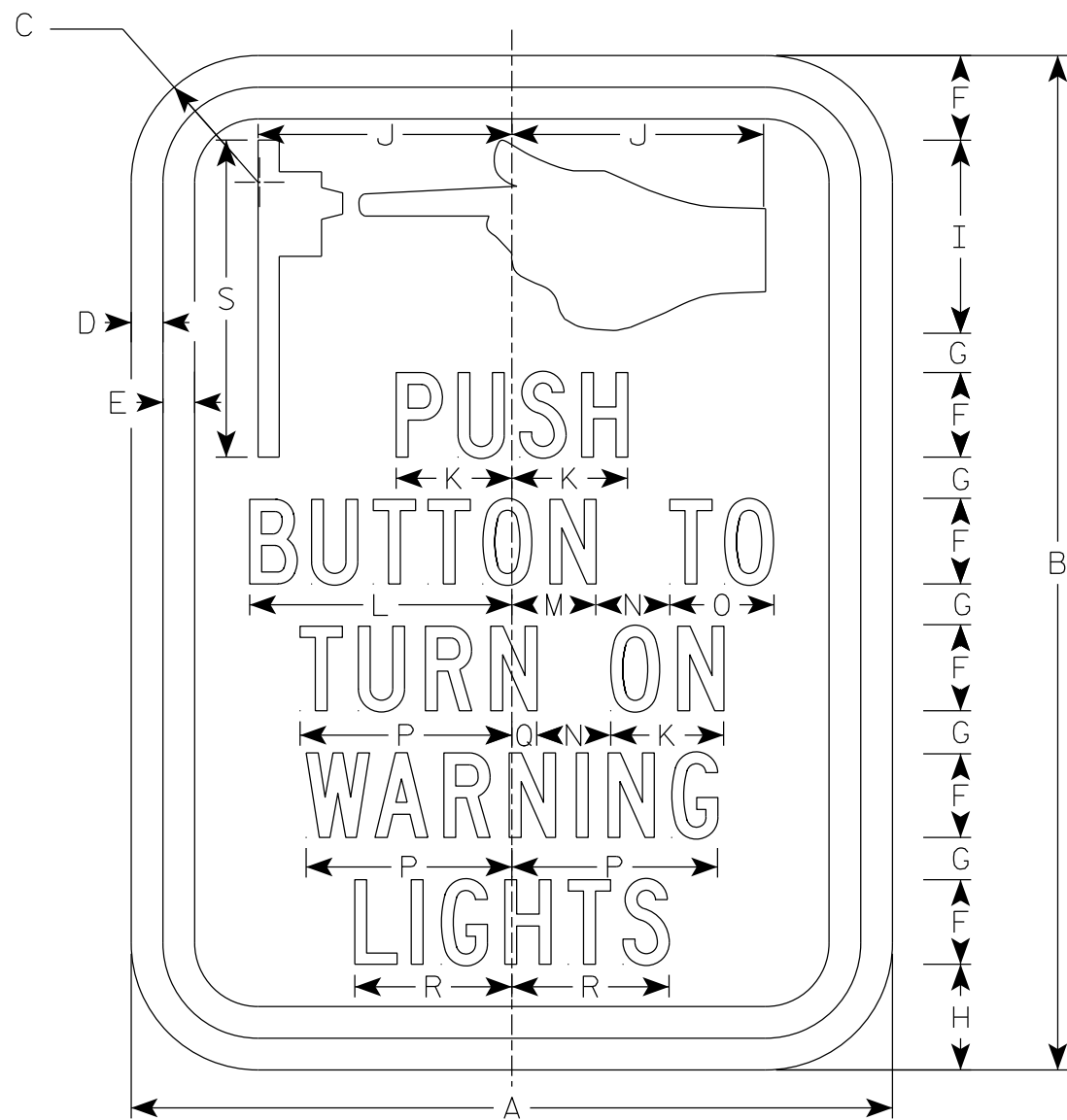
STANDARD SIGN
R9-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/24/24 PLATE NO. R9-9.7

7



R10-25

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
 - Background - White
 - Message - Black
- 3. Message Series - C
- 4. Size (1) comes as a decal only.

7

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	6	9	1 1/2	3/8	3/8	3/4	3/8	1	1 3/4	2	7/8	2 1/8	5/8	5/8	7/8	1 5/8	1/4	1 1/4	2 7/8								.38
2S	9	12	1 1/2	3/8	3/8	1	1/2	1 1/4	2 1/4	3	1 3/8	3 1/8	1	7/8	1 1/4	2 1/2	1/4	1 7/8	3 3/4								.75
2M	9	12	1 1/2	3/8	3/8	1	1/2	1 1/4	2 1/4	3	1 3/8	3 1/8	1	7/8	1 1/4	2 1/2	1/4	1 7/8	3 3/4								.75
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

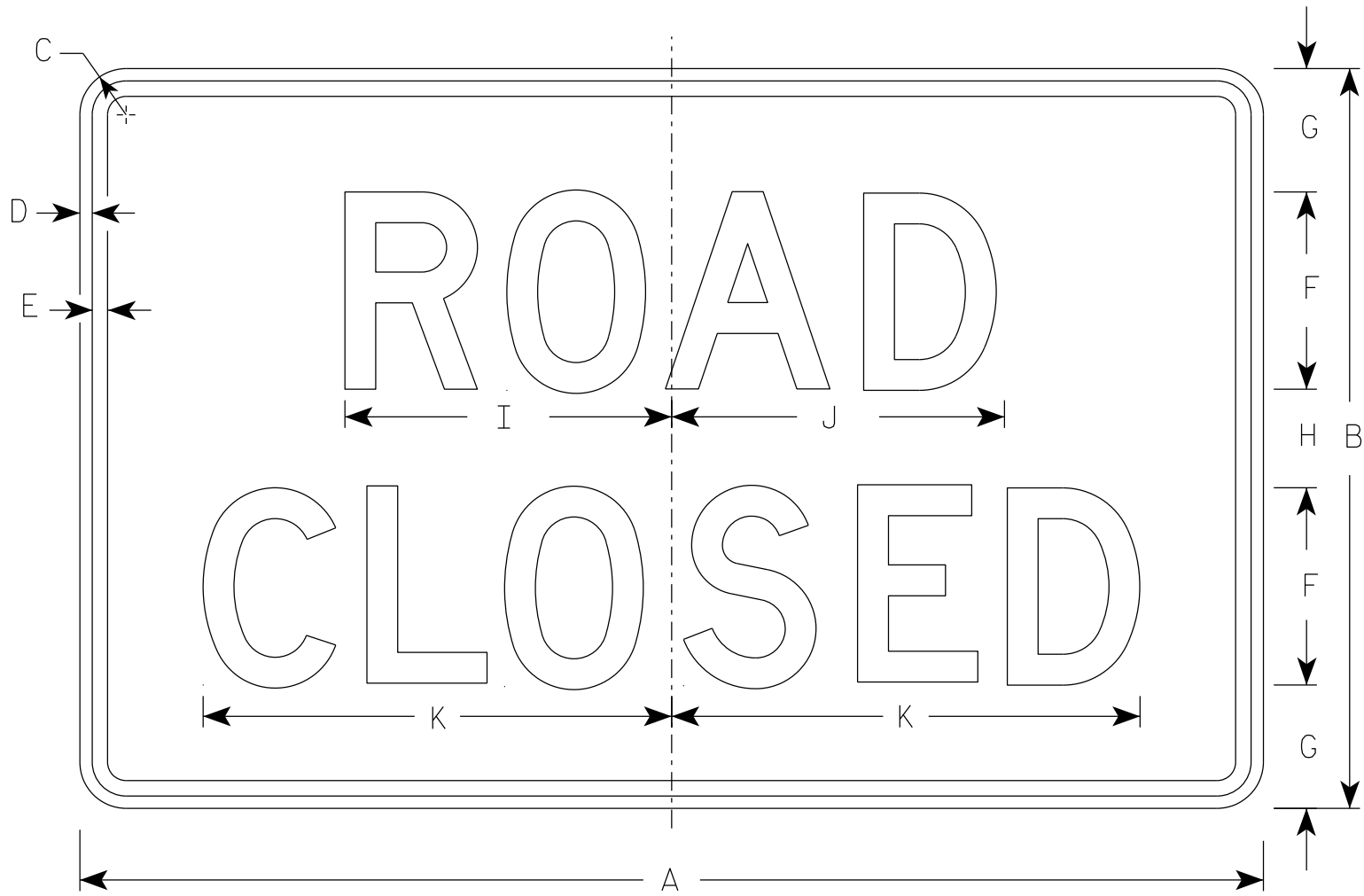
E

STANDARD SIGN
R10-25

WISCONSIN DEPT OF TRANSPORTATION

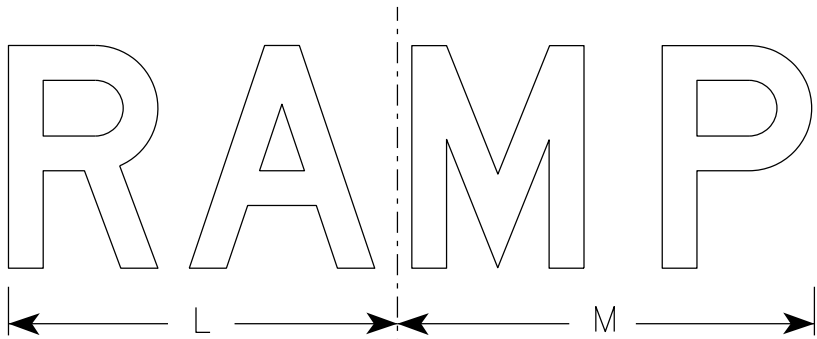
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R10-25.2

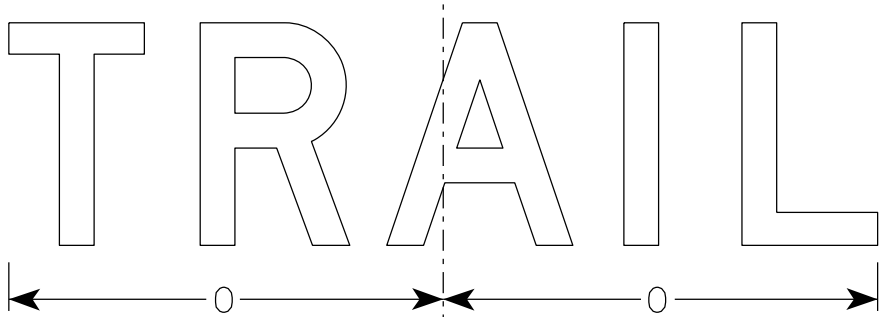


R11-2

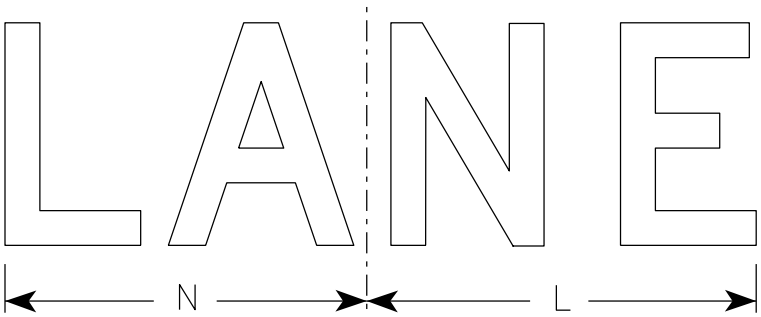
- NOTES
1. Sign is Type II - Type H Reflective
 2. Color:
Background - White
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. Modify the message as required.



R11-2R



R11-2T



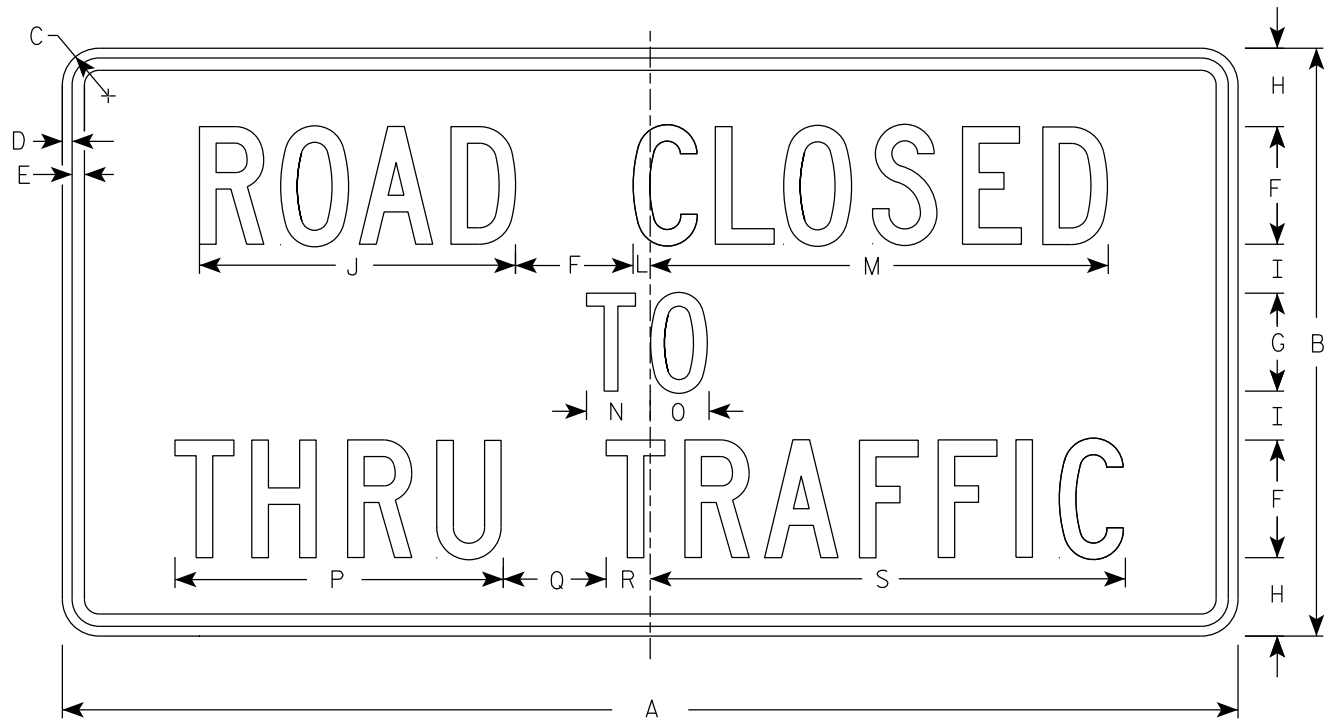
R11-2L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
2M	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
3	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
4	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0
5	48	30	1 7/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13	15 5/8												10.0

STANDARD SIGN R11-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 2/5/24	PLATE NO. R11-2.12

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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7



R11-4

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.

7

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	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 7/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

PROJECT NO:

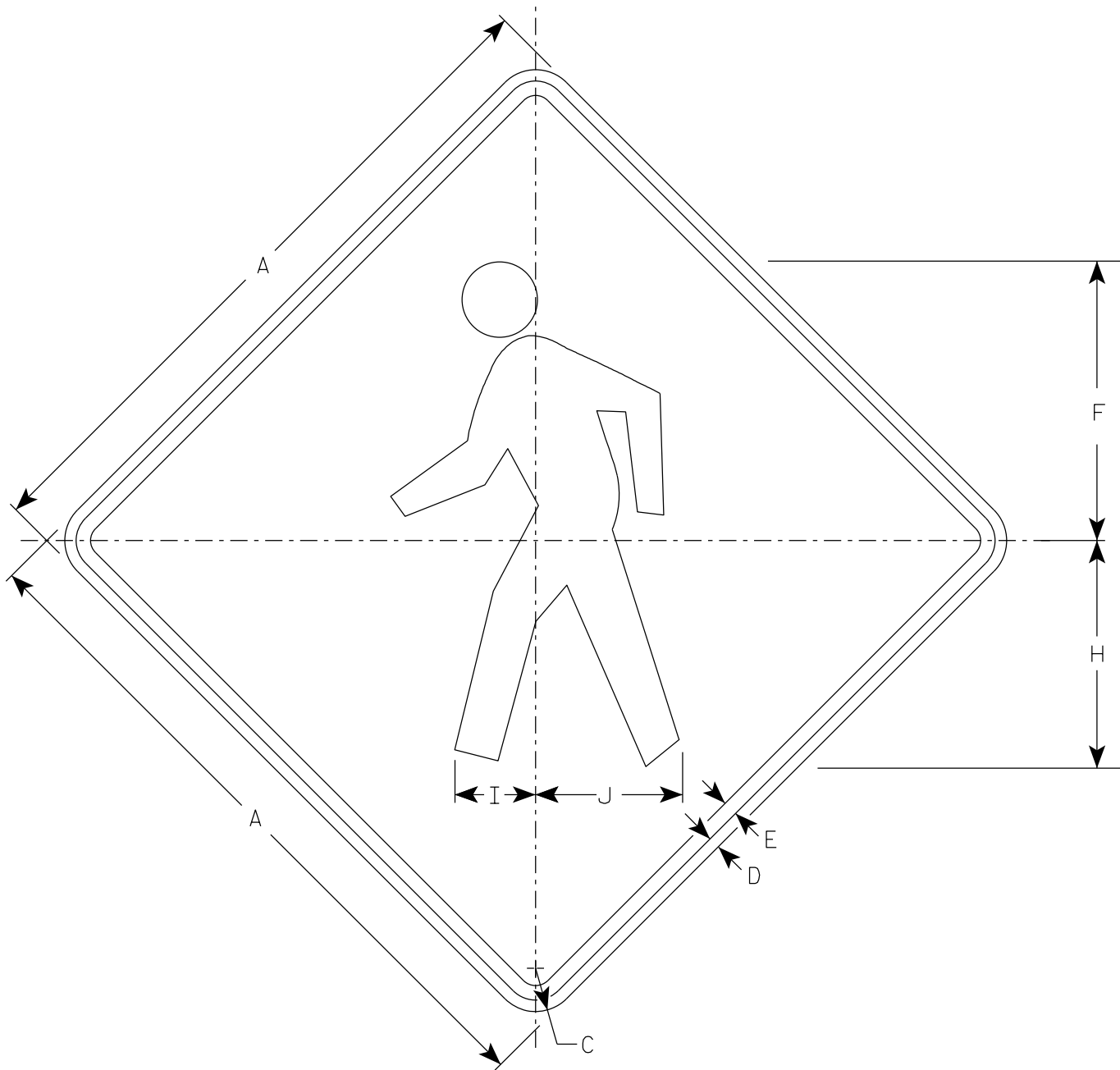
HWY:

COUNTY:

SHEET NO:

E

7



W11-2

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black

7

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 1/2	3/8	1/2	9 3/4		7 7/8	2 7/8	5 1/8																	4.0
2S	30		1 7/8	1/2	5/8	12 1/8		9 7/8	3 1/2	6 3/8																	6.25
2M	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
3	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
4	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

STANDARD SIGN
W11-2

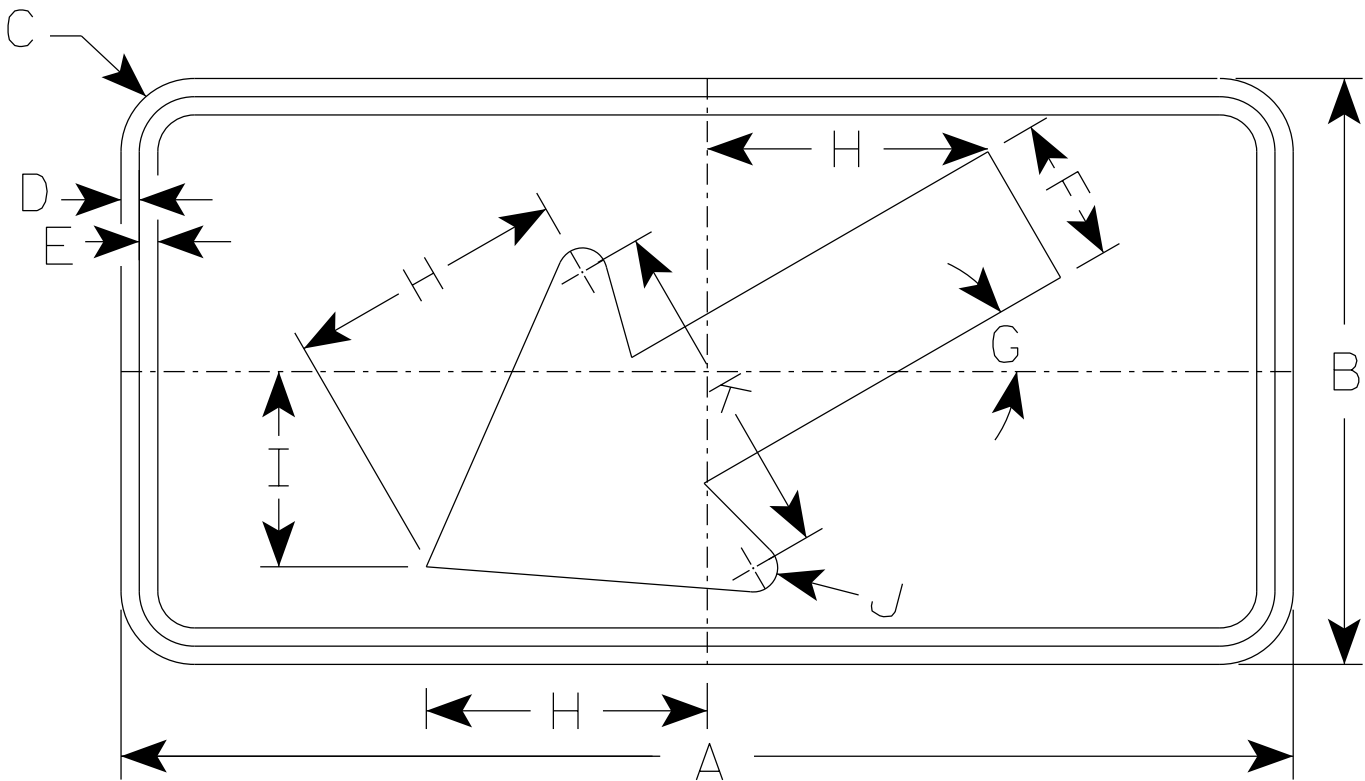
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/15/2023 PLATE NO. W11-2.9

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.



W16-7L

- * 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 1/2	3/8	3/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5																											

STANDARD SIGN

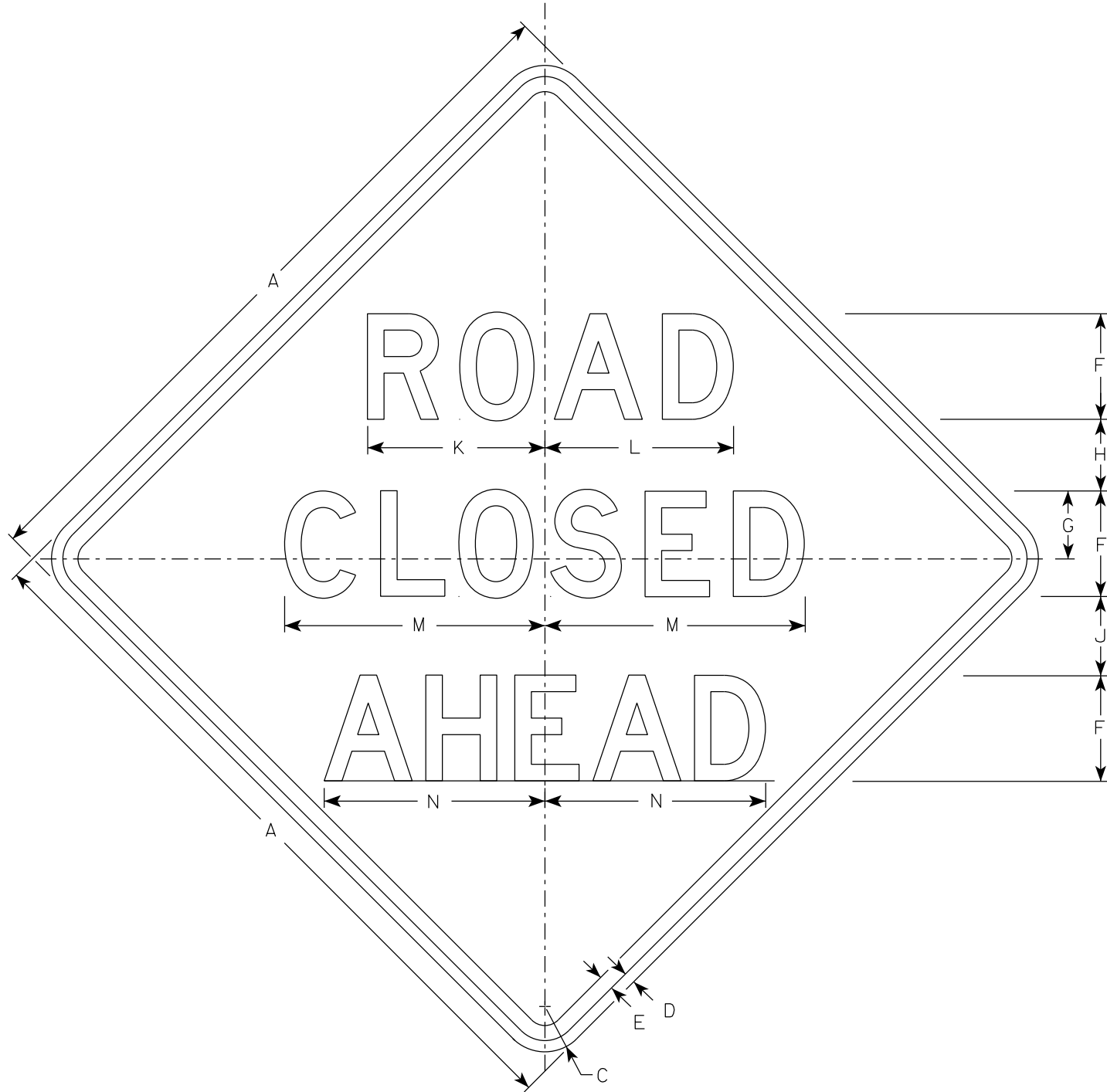
W16-7

WISCONSIN DEPT OF TRANSPORTATION

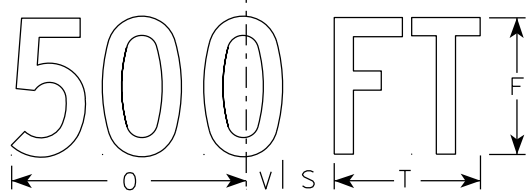
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/9/2024 PLATE NO. W16-7.9

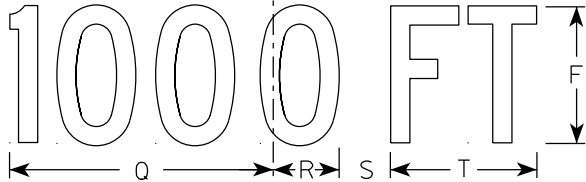
7



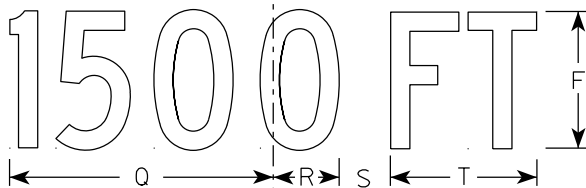
W20-3A



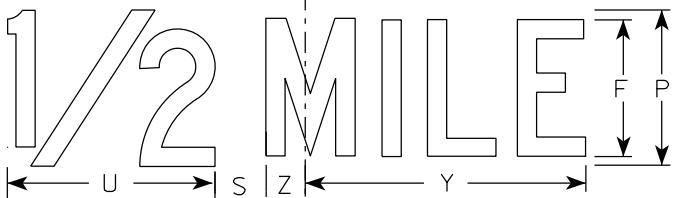
W20-3D



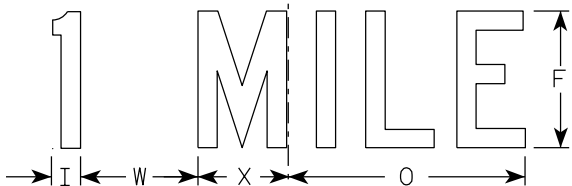
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - see note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

7

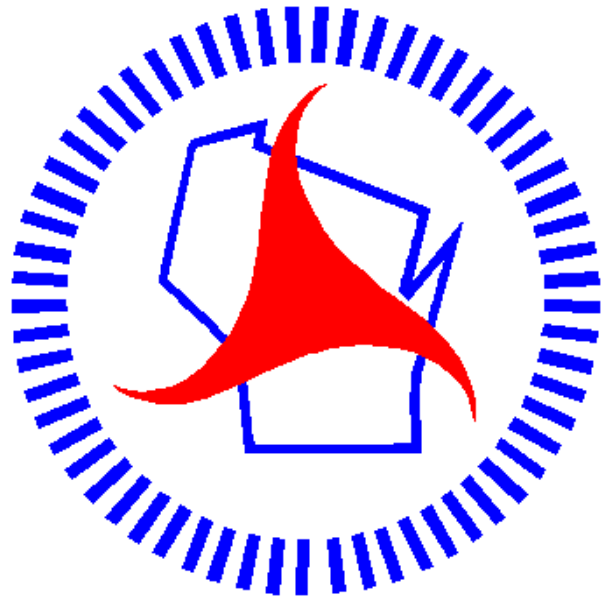
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	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		3	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		3	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		3	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 1/10/2024 PLATE NO. W20-3.8



Wisconsin Department of Transportation

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