

ORDER OF TYPICAL SECTION & DETAIL SHEETS

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7. PERMANENT SIGNING

8. LIGHTING PLAN

9. PAVEMENT MARKING

10. TRAFFIC CONTROL

11. DETOUR PLAN

STANDARD ABBREVIATIONS

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

GENERAL NOTES

- ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.
- ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION. ANY CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
- TYPICAL SECTIONS SHOW THE GENERAL FEATURES THROUGHOUT THE PROJECT. PAVEMENT SLOPES, TERRACE SLOPES, ETC., MAY VARY WITHIN THE LIMITS OF THE SECTION.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE SALVAGED TOPSOILED, FERTILIZED, AND SEEDED AS DIRECTED BY THE ENGINEER.
- WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT THE INTERSECTIONS.
- CURVE DATA IS BASED ON ARC DEFINITION.
- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
- INLET GRATE ELEVATIONS REFERRED TO ON INLET NOTES ARE GUTTER FLOW LINE ELEVATIONS.
- THE EXACT LOCATION OF PRIVATE AND COMMERCIAL ENTRANCES ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- PLAN ELEVATIONS = USGS DATUM 83.
- BEARINGS SHOWN ON THE PLAN ARE GRID BEARINGS TO THE NEAREST SECOND.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- THE CONTRACTOR SHALL TAKE CARE NOT TO DAMAGE MANHOLE COVERS, WATER VALVES AND OTHER UTILITIES IN THE EXISTING PAVEMENT DURING PAVEMENT REMOVAL. NECESSARY WORK TO PROTECT UTILITIES DURING PAVEMENT REMOVAL IS INCIDENTAL TO PAVEMENT REMOVAL ITEMS.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN CONCRETE PAVING REQUIRES DRIVEWAY TO BE CLOSED.
- TRANSVERSE CONCRETE JOINT DESIGN AND FIELD LAYOUT TO BE PAID FOR UNDER "CONCRETE PAVEMENT JOINT LAYOUT".

AREA CONTACTS

DESIGN CONTACT

ISG

ATTN: MR. WILL KRATT

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LA CROSSE, WI 54601

PHONE: 608-789-2034

WILL.KRATT@IS-GRP.COM

WisDNR: LA CROSSE COUNTY

DNR SERVICE CENTER

ATTN: MS. KAREN KALVELAGE

3550 MORMON COULEE RD

LA CROSSE, WI 54601

PHONE: 608-785-9115

KAREN.KALVELAGE@WISCONSIN.GOV

CITY OF LA CROSSE

ATTN: MR. MATT GALLAGER

400 LA CROSSE STREET

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UTILITY CONTACTS

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ATTN: MR. MARK GRAFF

400 LA CROSSE ST

LA CROSSE, WI 54601

608-789-7384

GRAFFM@CITYOFLACROSSE.ORG

CITY OF LA CROSSE - SEWER

ATTN: MR. STEVE ASP

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CENTURYLINK - COMMUNICATION LINE

ATTN: MR. TOM MURRAY

333 N FRONT ST

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TOM.L.MURRAY@CENTURYLINK.COM

CITY OF LA CROSSE - COMMUNICATION LINE

ATTN: MR. JIM SPEROPULOS

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LA CROSSE, WI 54601

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JSFEROPULOS@LACROSSECOUNTY.ORG

CHARTER COMMUNICATIONS - COMMUNICATION LINE

ATTN: MR. PERRY MCCLELLAN

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ONALASKA, WI 54650

608-317-6213

PERRY.MCCLELLAN@CHARTER.COM

XCEL ENERGY, INC. - GAS AND ELECTRIC

ATTN: MR. JAYMIE HOLTE

3215 COMMERCE ST

LA CROSSE, WI 54603

608-789-3698

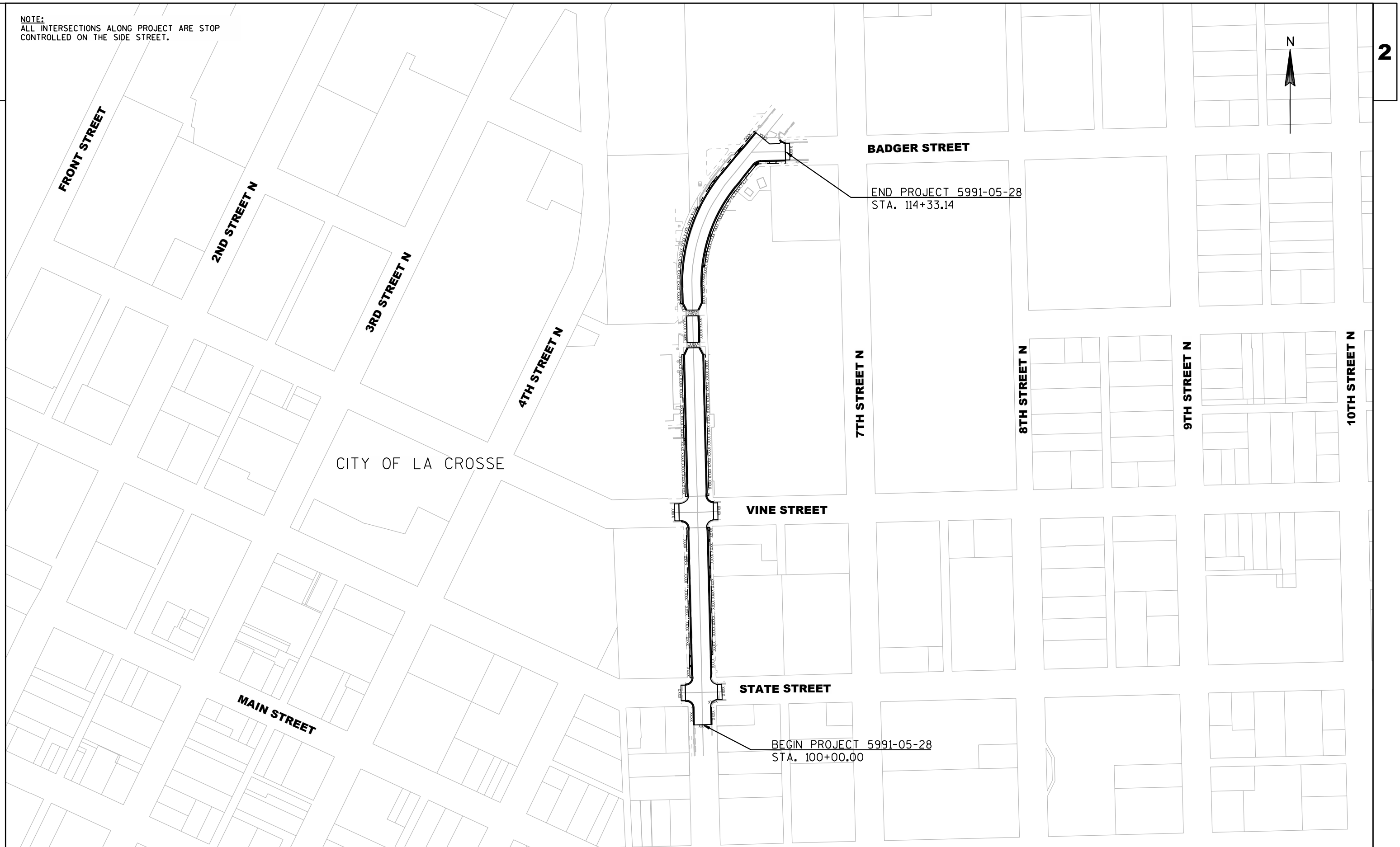
JAYMIE.L.HOLTE@XCELENERGY.COM

** Denotes utilities that are not Diggers Hotline members

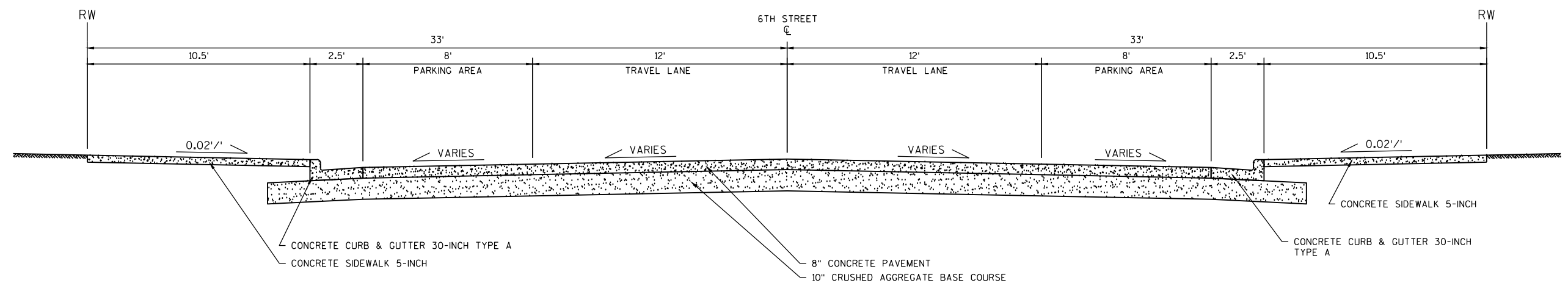
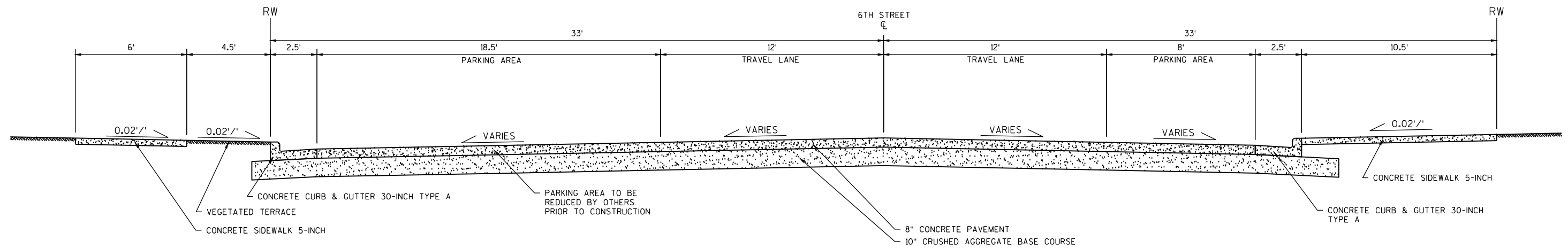


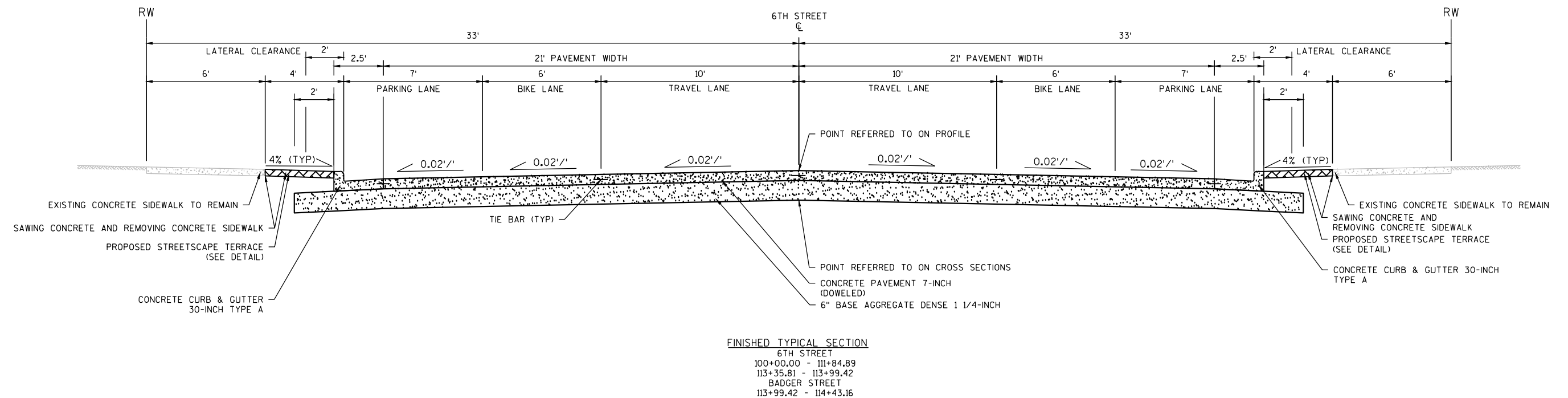
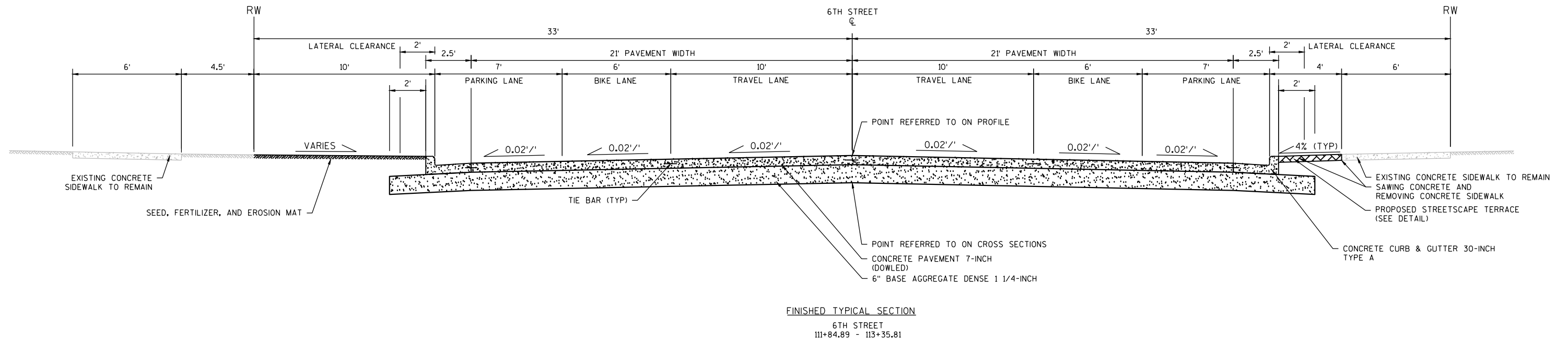
Dial 811 or (800)242-8511
www.DiggersHotline.com

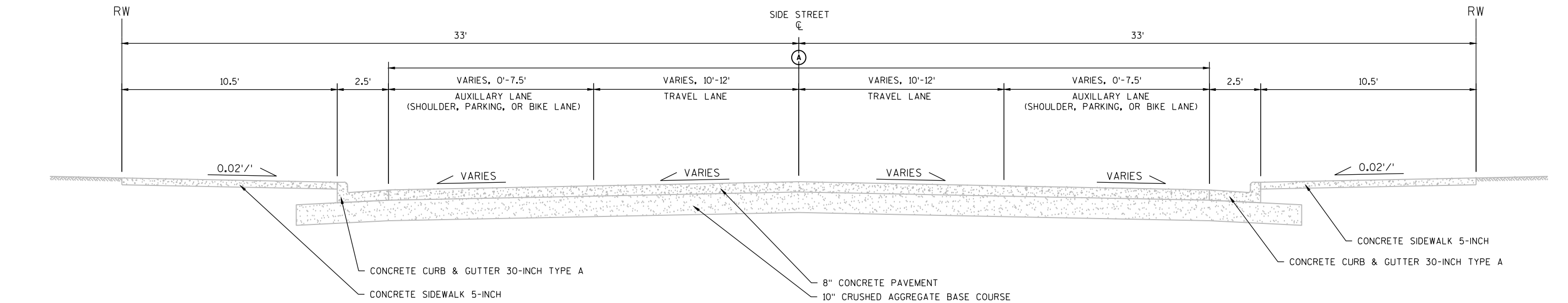
NOTE:
ALL INTERSECTIONS ALONG PROJECT ARE STOP
CONTROLLED ON THE SIDE STREET.



PROJECT NO:5991-05-28	HWY:6TH STREET	COUNTY:LA CROSSE	PROJECT OVERVIEW	SHEET	-----	E
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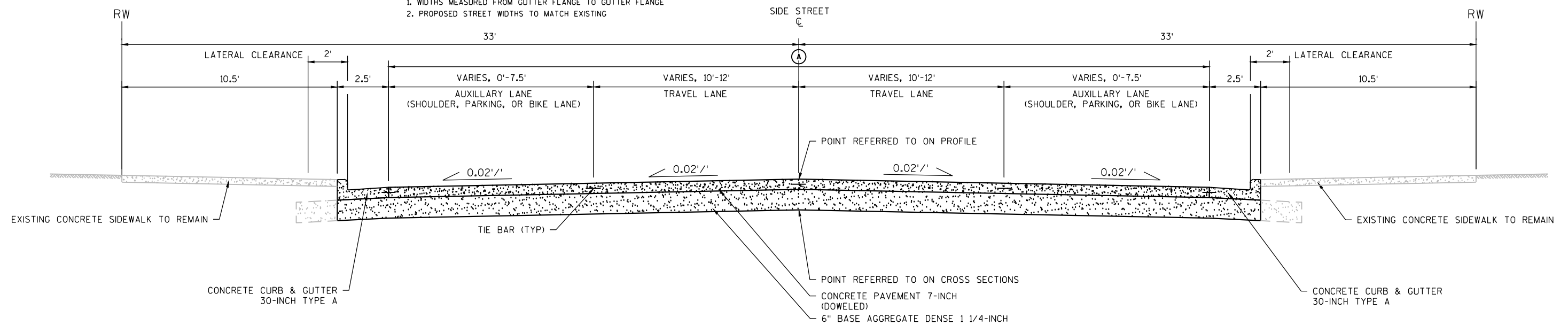




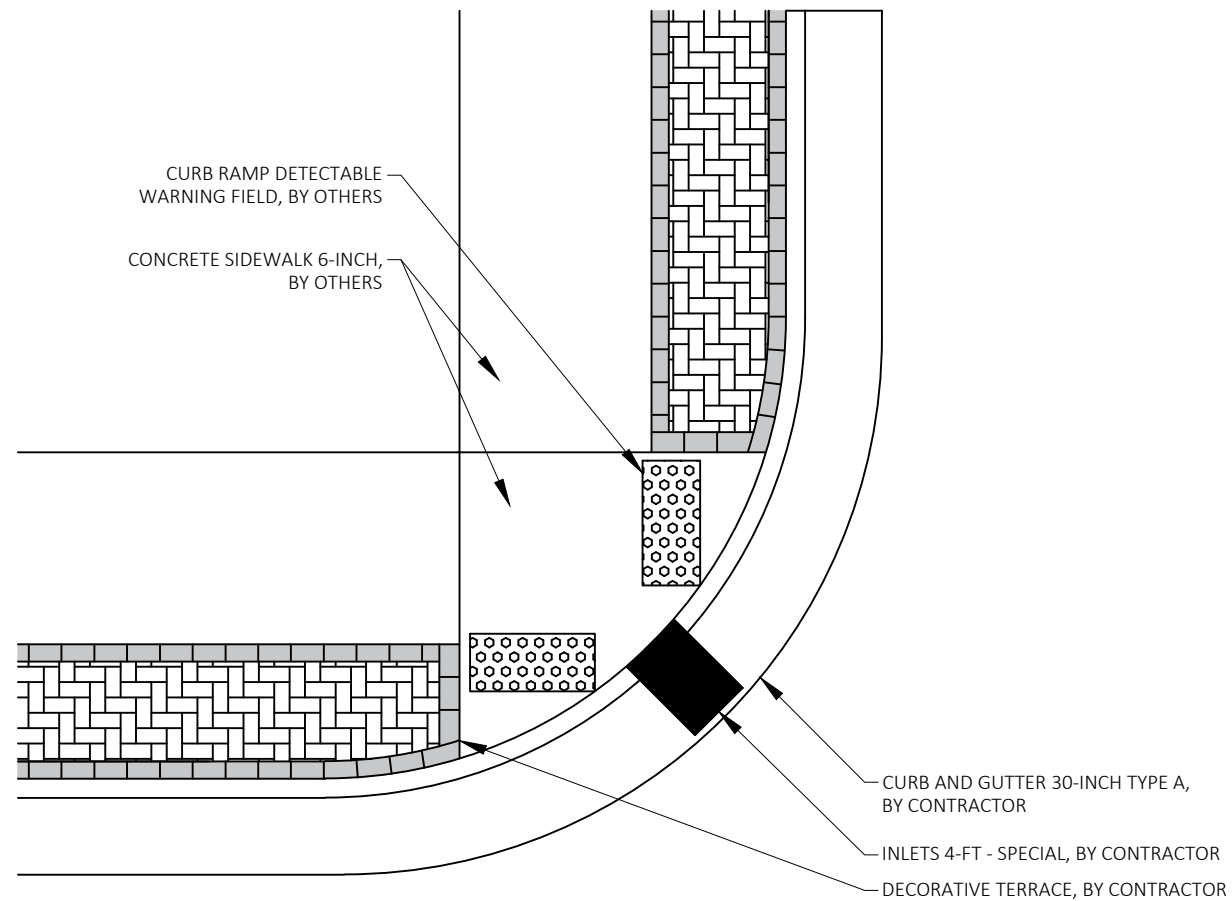
STREET NAME	(A)
STATE STREET	38'
VINE STREET	39'
PINE STREET	21.5'
BADGER STREET	35'

NOTES:
1. WIDTHS MEASURED FROM GUTTER FLANGE TO GUTTER FLANGE
2. PROPOSED STREET WIDTHS TO MATCH EXISTING

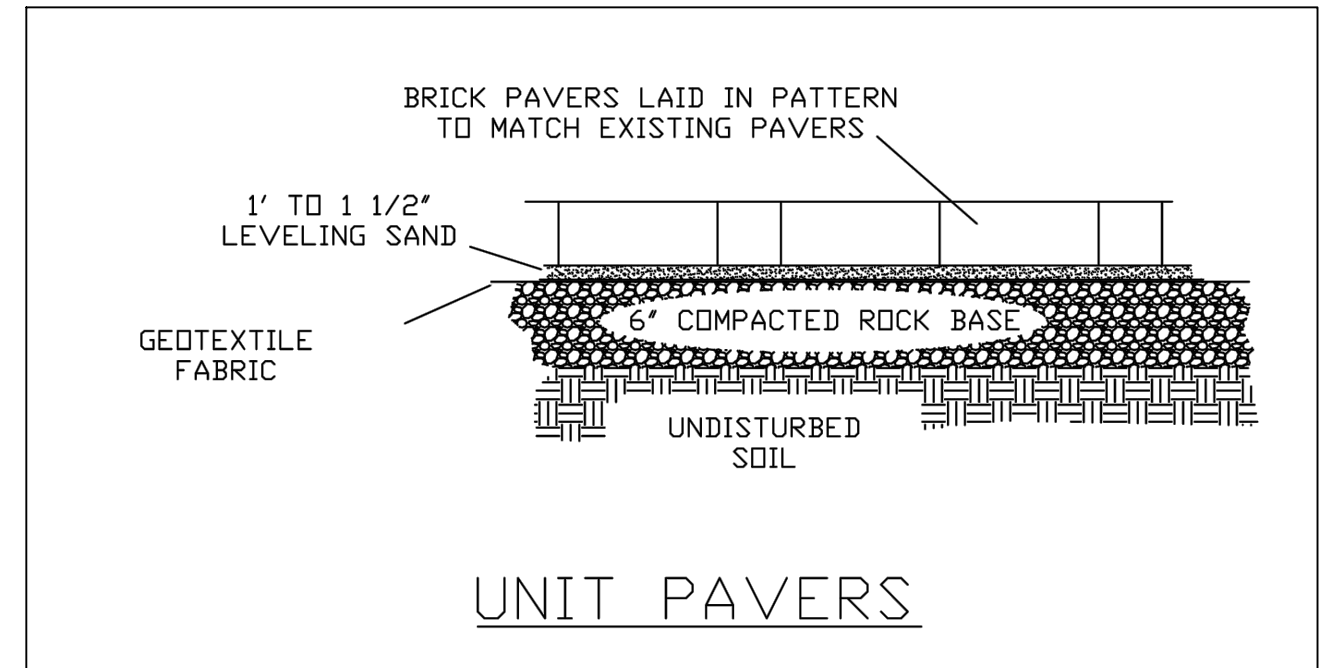
EXISTING TYPICAL SECTION
SIDE STREETS



FINISHED TYPICAL SECTION
SIDE STREETS

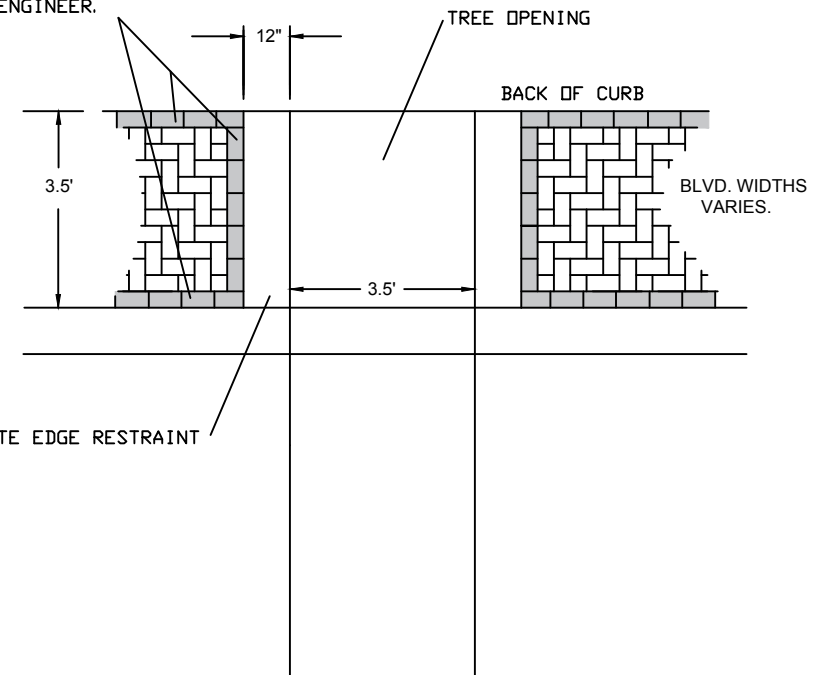


STREETSCAPING AT CORNERS DETAIL



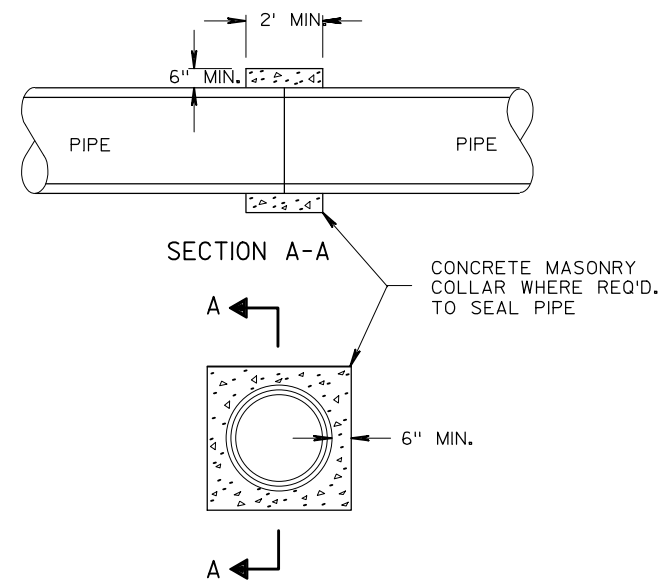
TREE OPENING & BRICK PAVER BOULEVARD DETAIL

ONE OR TWO COURSE OF CHARCOAL COLORED RUNNING BOND AS DIRECTED BY ENGINEER.

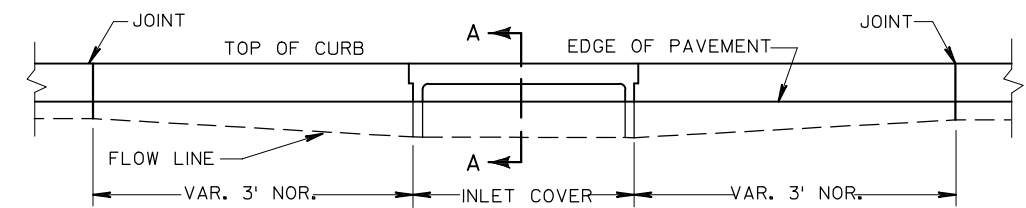


NOTE: BRICK PAVER DIMENSIONS TO BE VERIFIED BY INSTALLER AND APPROVED BY THE ENGINEER

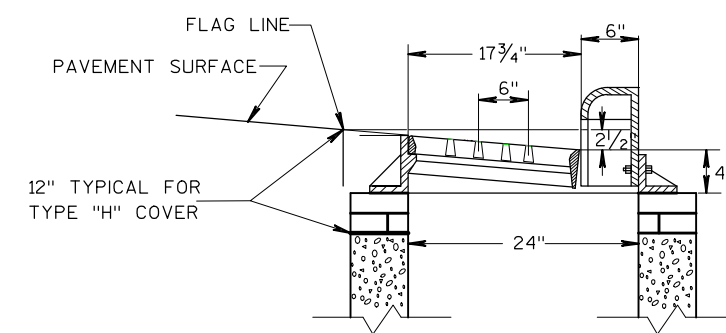
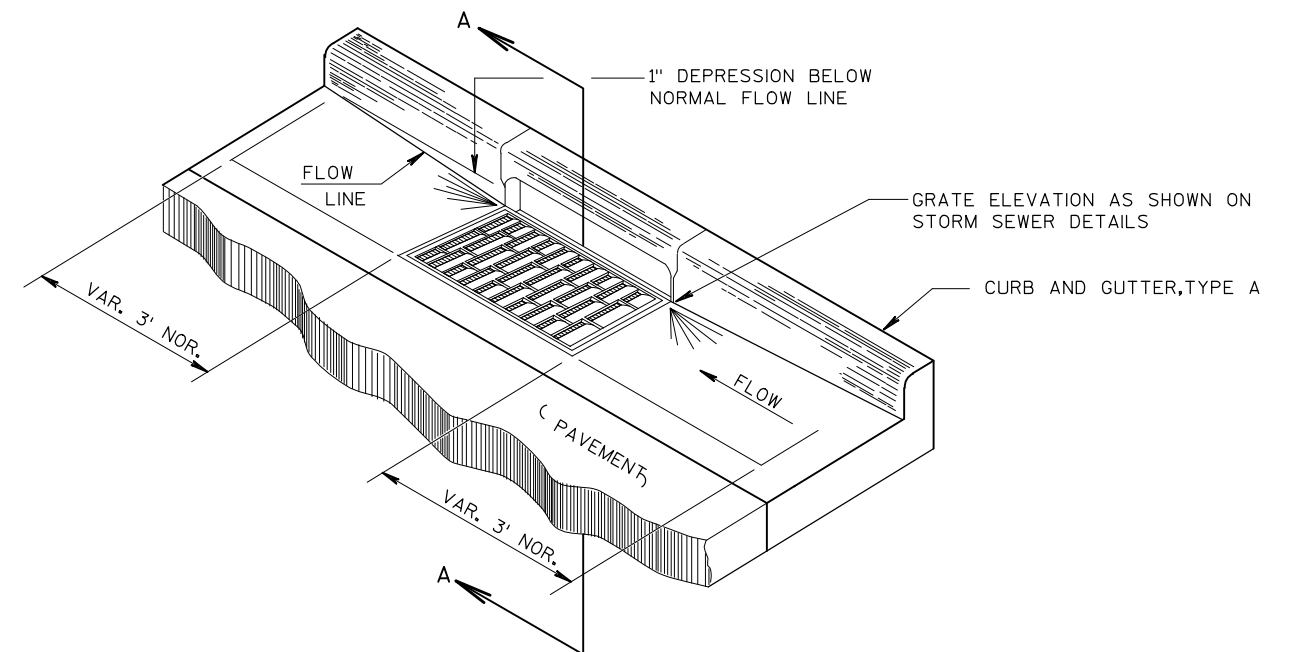
DECORATIVE TERRACE - CONCRETE EDGE RESTRAINT



CONCRETE COLLAR DETAIL



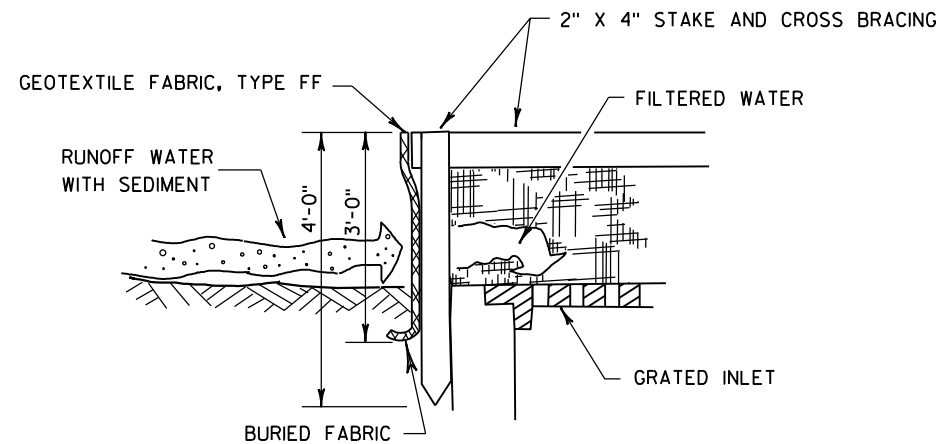
ELEVATION



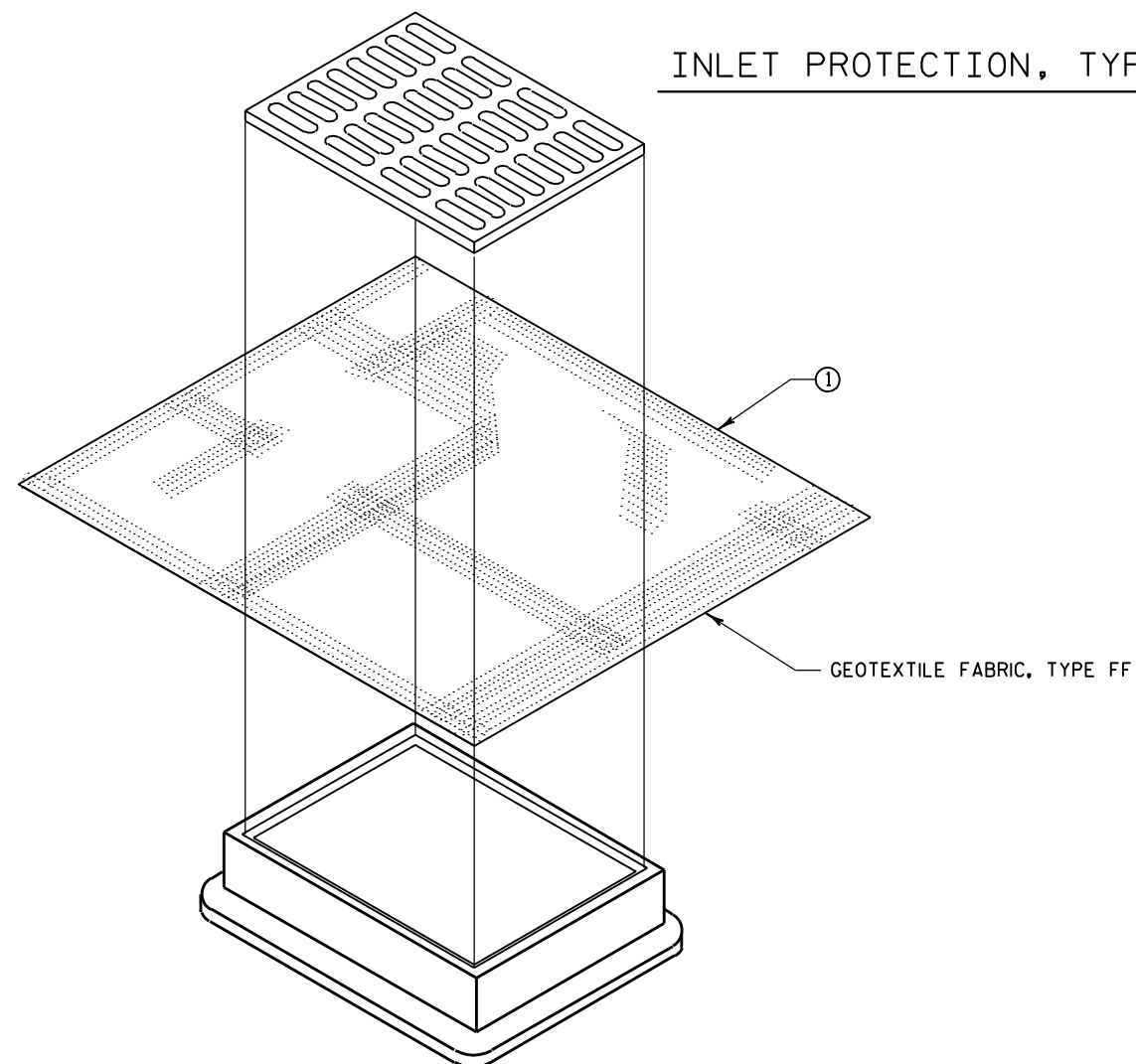
SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS
(TYPE 3-H INLET SHOWN)

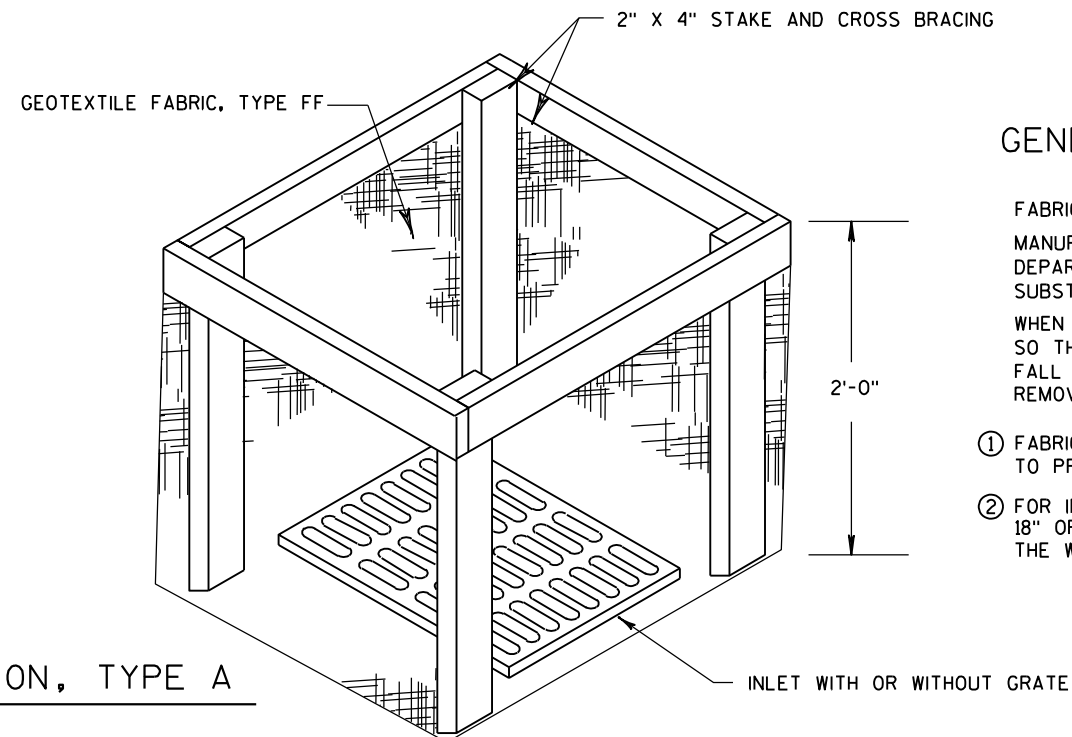
NOTE: ATTACH GEOTEXTILE FABRIC, TYPE FF TO THE TOP OF STAKES AND CROSS BRACINGS.



INLET PROTECTION, TYPE A

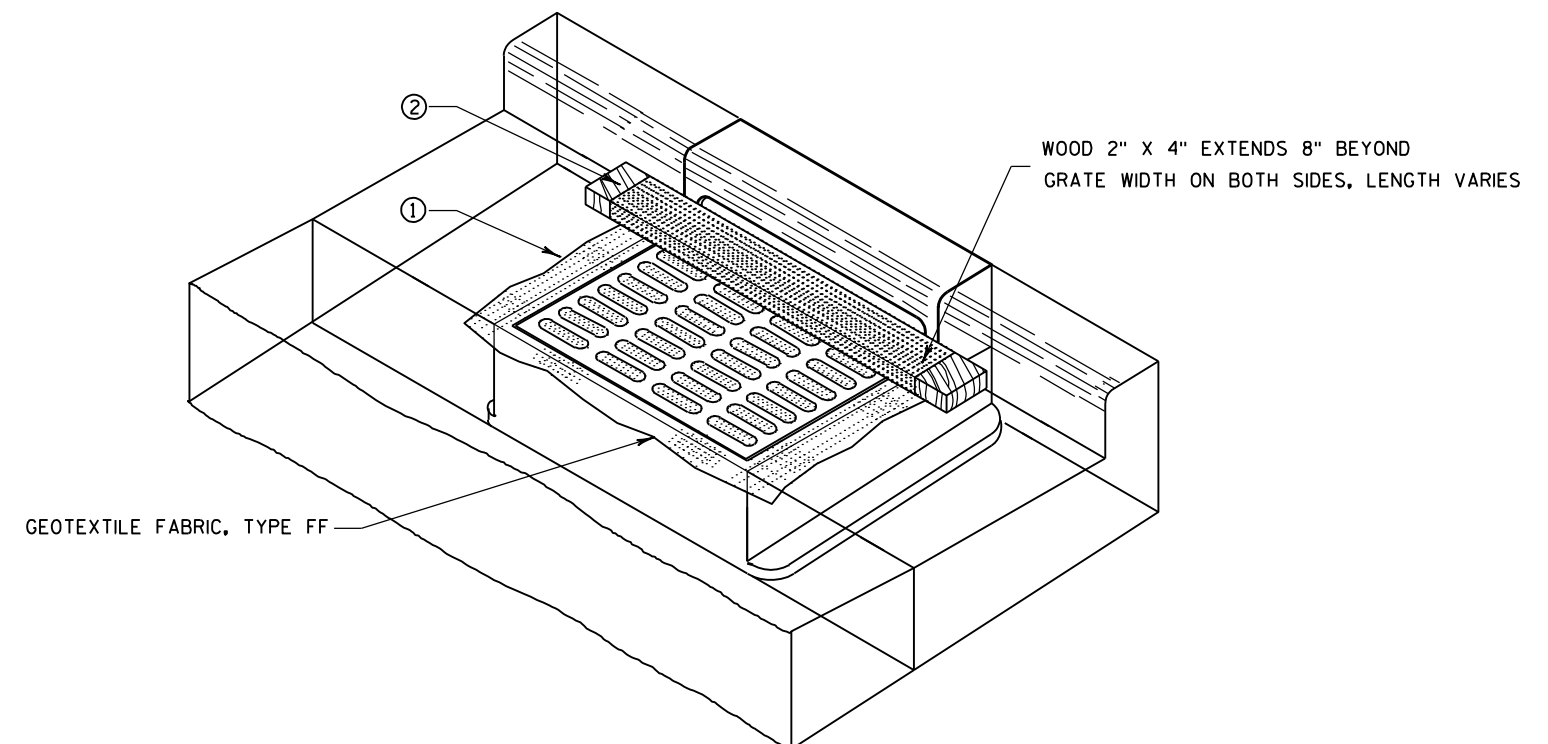


INLET PROTECTION, TYPE B (WITHOUT CURB BOX)
(CAN BE INSTALLED ON ANY INLET TYPE)



GENERAL NOTES:

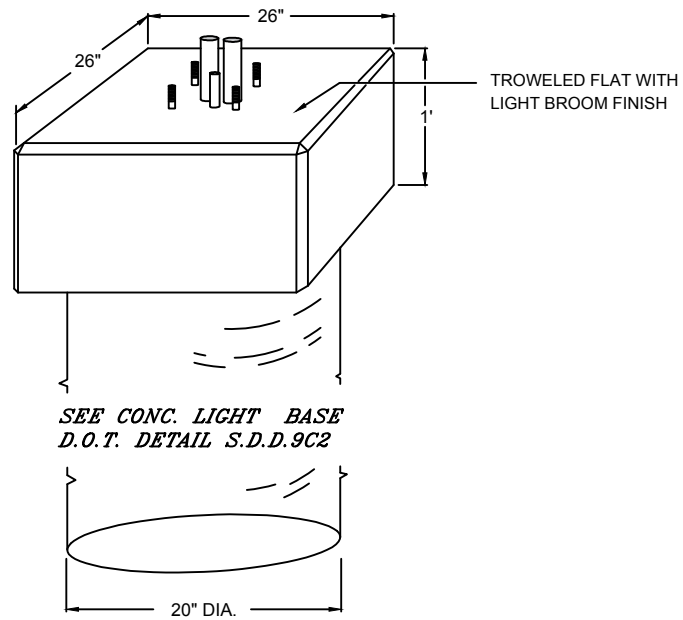
- FABRIC SHALL BE REPLACED AT THE ENGINEERS DISCRETION.
MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED FOR THE INLET PROTECTION TYPE SPECIFIED.
- WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
- ① FABRIC SIZE SHALL BE 8" (MIN) GREATER ON ALL SIDES OF THE INLET COVER TO PROVIDE A HAND HOLD WHEN MAINTENANCE OR REMOVAL IS REQUIRED.
 - ② FOR INLET PROTECTION, TYPE C, WITH A 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.



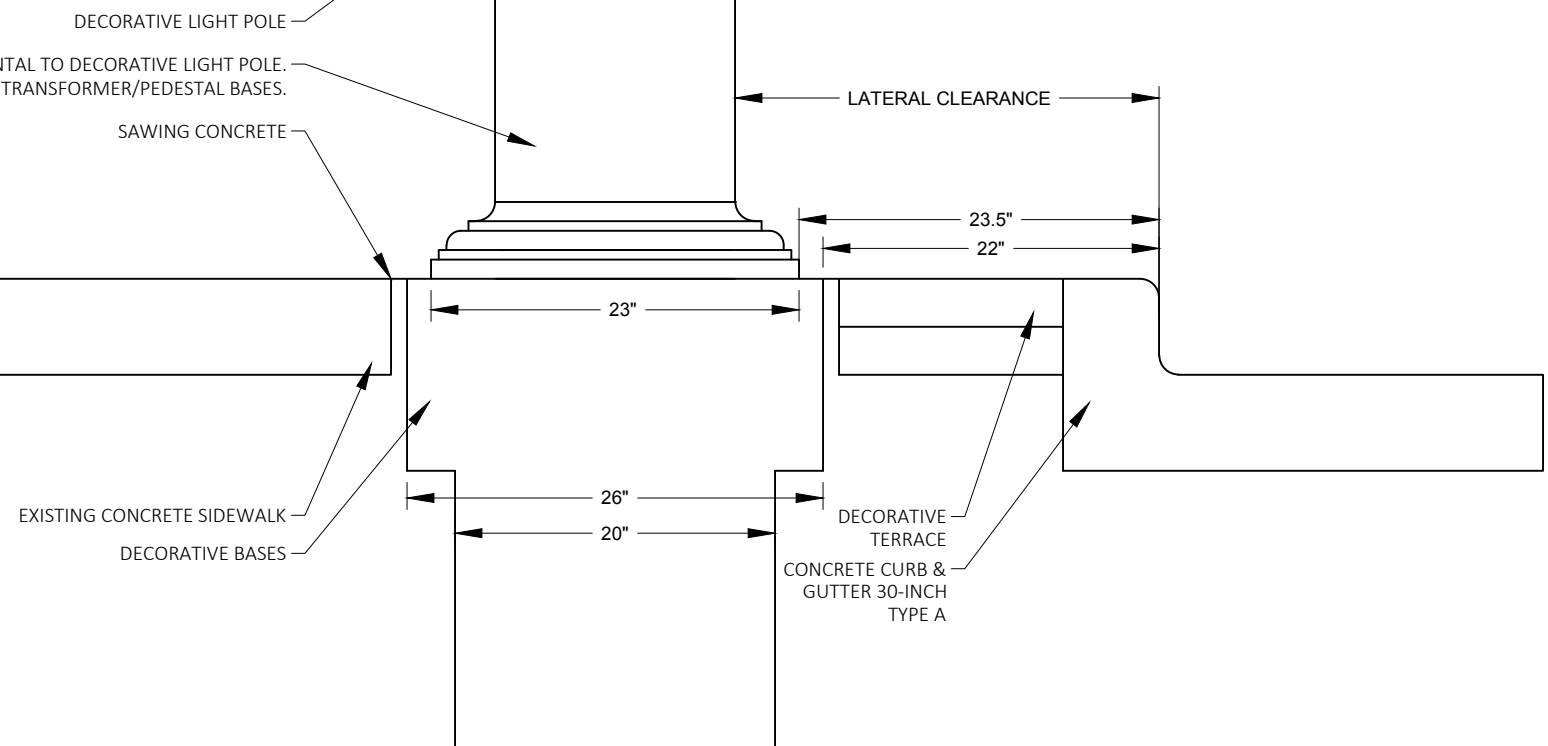
INLET PROTECTION, TYPE C (WITH CURB BOX)

DECORATIVE BASES

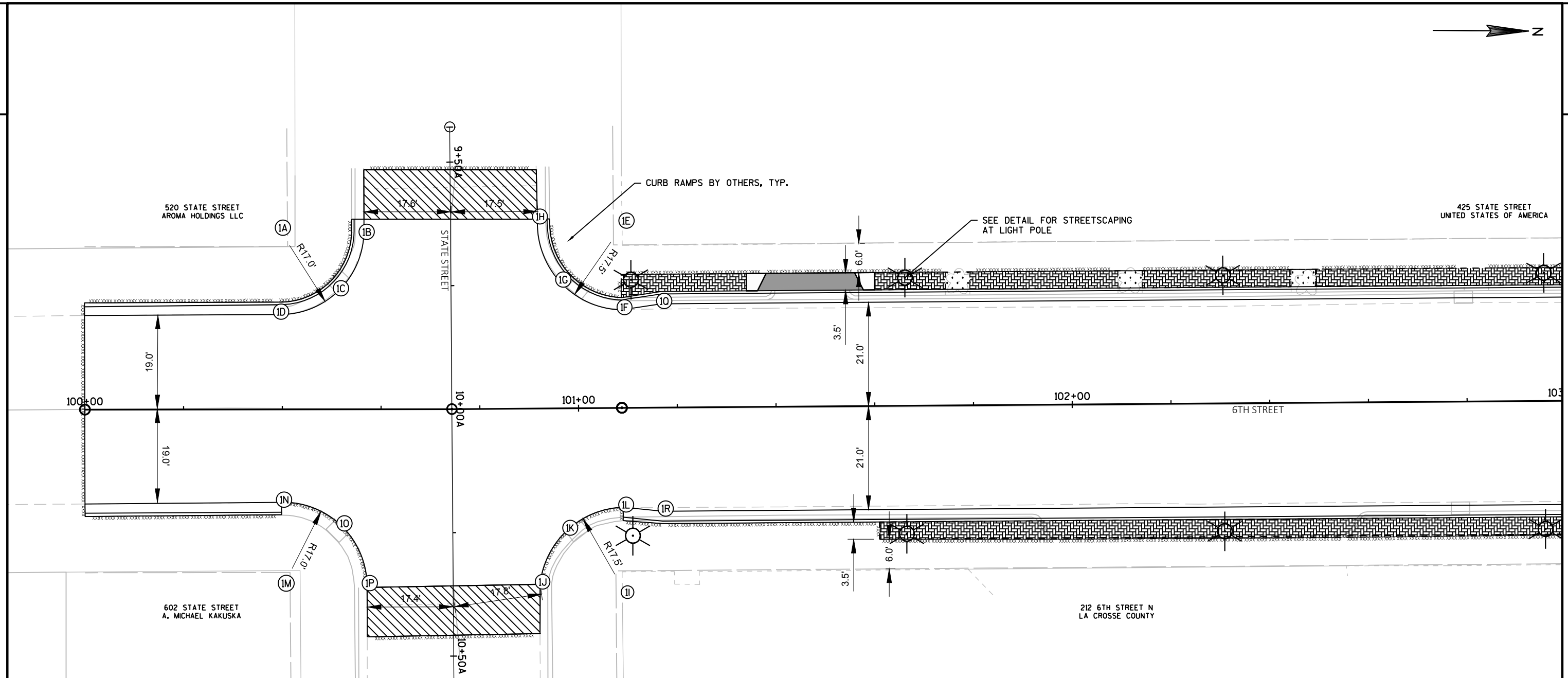
FORM ALL EXPOSED CONCRETE AND PROVIDE
1" CHAMFER AROUND TOP & ON THE CORNERS.



TRANSFORMER BASE (WITHIN CLAMSHELL COVER) INCIDENTAL TO DECORATIVE LIGHT POLE.
TRANSFORMER BASE SHALL CONFORM TO S.D.D. TRANSFORMER/PEDESTAL BASES.



DECORATIVE LIGHT POLE IN TERRACE DETAIL



LEGEND

.XXXX. SAWCUT

ASPHALTIC SURFACE

CONCRETE SIDEWALK 4-INCH

CONCRETE DRIVEWAY 6-INCH

DECORATIVE TERRACE

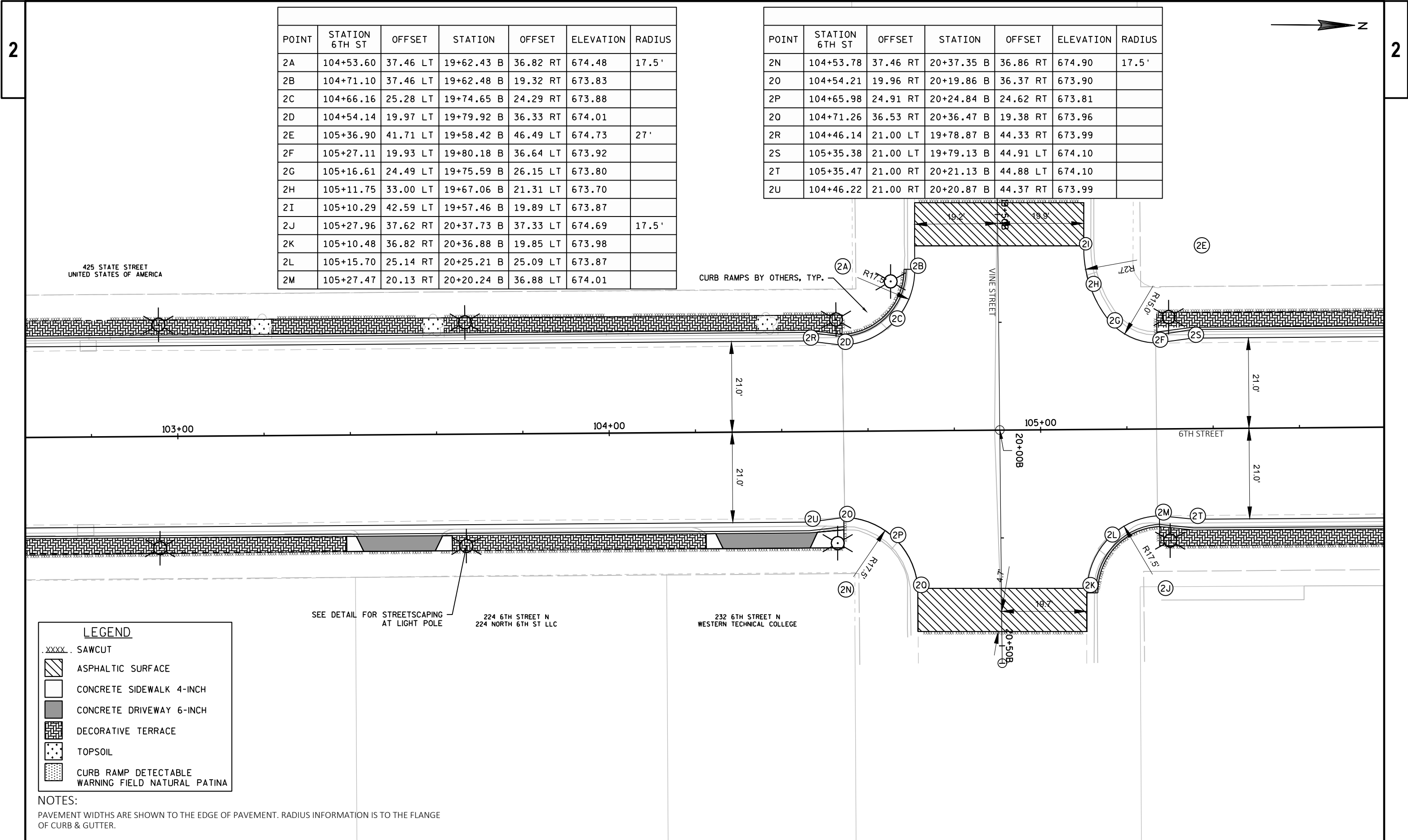
TOPSOIL

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

NOTES:
PAVEMENT WIDTHS ARE SHOWN TO THE EDGE OF PAVEMENT. RADIUS INFORMATION IS TO THE FLANGE OF CURB & GUTTER.

POINT	STATION 6TH ST	OFFSET	STATION	OFFSET	ELEVATION	RADIUS
1A	100+39.61	36.22 LT	9+63.58 A	34.51 RT	674.75	17'
1B	100+56.60	35.36 LT	9+64.54 A	17.52 RT	674.19	
1C	100+51.35	23.93 LT	9+75.94 A	22.84 RT	674.14	
1D	100+39.22	19.23 LT	9+80.57 A	34.99 RT	674.66	
1E	101+09.43	37.34 LT	9+62.66 A	35.10 LT	675.06	17.5'
1F	101+08.94	19.85 LT	9+80.16 A	34.62 LT	674.46	
1G	100+96.54	25.50 LT	9+74.50 A	22.22 LT	674.39	
1H	100+91.96	38.34 LT	9+61.67 A	17.63 LT	674.27	
1I	101+09.34	37.63 RT	10+37.63 A	35.01 LT	675.13	17.5'

POINT	STATION 6TH ST	OFFSET	STATION	OFFSET	ELEVATION	RADIUS
1J	100+91.96	35.58 RT	10+35.59 A	17.63 LT	674.42	
1K	100+97.60	24.72 RT	10+24.73 A	23.28 LT	674.39	
1L	101+08.96	20.13 RT	10+20.14 A	34.63 LT	674.41	
1M	100+40.11	35.81 RT	10+35.61 A	34.43 RT	674.90	17'
1N	100+39.78	18.81 RT	10+18.61 A	34.66 RT	674.67	
1O	100+51.99	23.65 RT	10+23.52 A	22.48 RT	674.18	
1P	100+57.11	35.75 RT	10+35.65 A	17.43 RT	674.22	
1Q	101+16.94	21.00 LT	9+79.00 A	42.61 LT	674.55	
1R	101+16.95	20.99 RT	10+21.00 A	42.63 LT	674.55	



POINT	STATION 6TH ST	OFFSET	STATION	OFFSET	ELEVATION	RADIUS
2A	104+53.60	37.46 LT	19+62.43 B	36.82 RT	674.48	17.5'
2B	104+71.10	37.46 LT	19+62.48 B	19.32 RT	673.83	
2C	104+66.16	25.28 LT	19+74.65 B	24.29 RT	673.88	
2D	104+54.14	19.97 LT	19+79.92 B	36.33 RT	674.01	
2E	105+36.90	41.71 LT	19+58.42 B	46.49 LT	674.73	27'
2F	105+27.11	19.93 LT	19+80.18 B	36.64 LT	673.92	
2G	105+16.61	24.49 LT	19+75.59 B	26.15 LT	673.80	
2H	105+11.75	33.00 LT	19+67.06 B	21.31 LT	673.70	
2I	105+10.29	42.59 LT	19+57.46 B	19.89 LT	673.87	
2J	105+27.96	37.62 RT	20+37.73 B	37.33 LT	674.69	17.5'
2K	105+10.48	36.82 RT	20+36.88 B	19.85 LT	673.98	
2L	105+15.70	25.14 RT	20+25.21 B	25.09 LT	673.87	
2M	105+27.47	20.13 RT	20+20.24 B	36.88 LT	674.01	

POINT	STATION 6TH ST	OFFSET	STATION	OFFSET	ELEVATION	RADIUS
2N	104+53.78	37.46 RT	20+37.35 B	36.86 RT	674.90	17.5'
2O	104+54.21	19.96 RT	20+19.86 B	36.37 RT	673.90	
2P	104+65.98	24.91 RT	20+24.84 B	24.62 RT	673.81	
2Q	104+71.26	36.53 RT	20+36.47 B	19.38 RT	673.96	
2R	104+46.14	21.00 LT	19+78.87 B	44.33 RT	673.99	
2S	105+35.38	21.00 LT	19+79.13 B	44.91 LT	674.10	
2T	105+35.47	21.00 RT	20+21.13 B	44.88 LT	674.10	
2U	104+46.22	21.00 RT	20+20.87 B	44.37 RT	673.99	

LEGEND

.XXXX.

SAWCUT

ASPHALTIC SURFACE

CONCRETE SIDEWALK 4-INCH

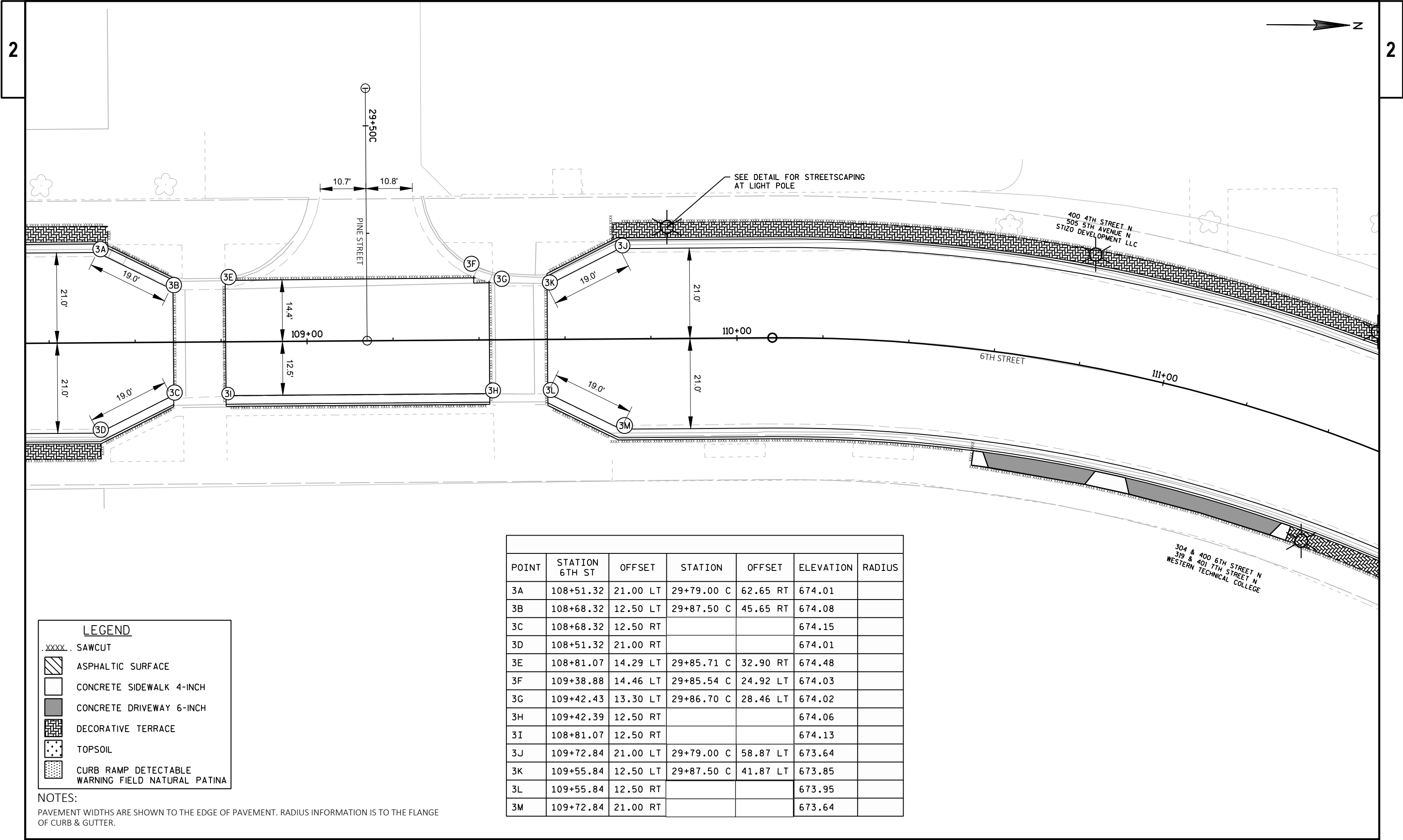
CONCRETE DRIVEWAY 6-INCH

DECORATIVE TERRACE

TOPSOIL

CURB RAMP DETECTABLE
WARNING FIELD NATURAL PATINA

NOTES:
PAVEMENT WIDTHS ARE SHOWN TO THE EDGE OF PAVEMENT. RADIUS INFORMATION IS TO THE FLANGE OF CURB & GUTTER.



LEGEND

.XXXX.

SAWCUT

ASPHALTIC SURFACE

CONCRETE SIDEWALK 4-INCH

CONCRETE DRIVEWAY 6-INCH

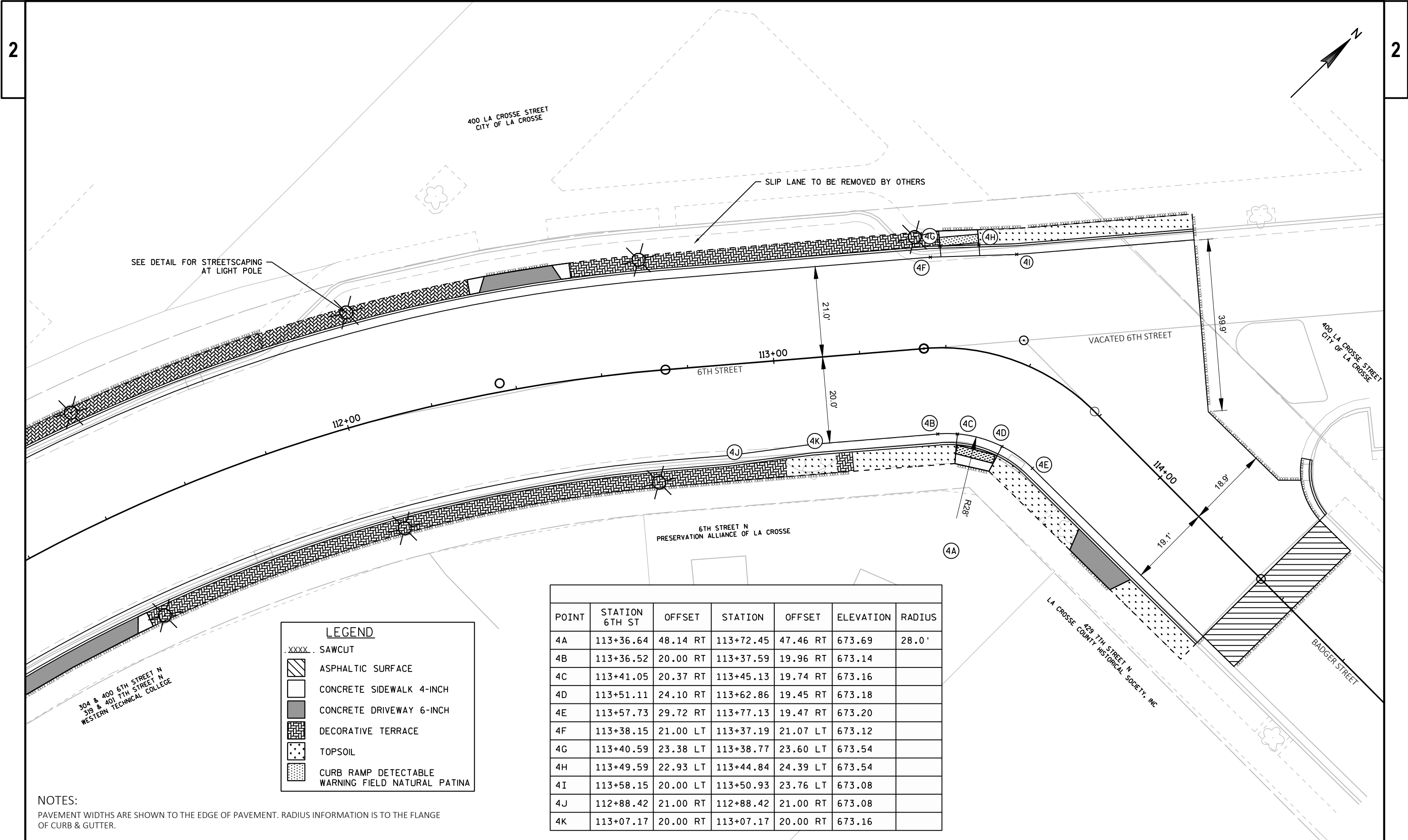
DECORATIVE TERRACE

TOPSOIL

CURB RAMP DETECTABLE
WARNING FIELD NATURAL PATINA

NOTES:
PAVEMENT WIDTHS ARE SHOWN TO THE EDGE OF PAVEMENT. RADIUS INFORMATION IS TO THE FLANGE OF CURB & GUTTER.

POINT	STATION 6TH ST	OFFSET	STATION	OFFSET	ELEVATION	RADIUS
3A	108+51.32	21.00 LT	29+79.00 C	62.65 RT	674.01	
3B	108+68.32	12.50 LT	29+87.50 C	45.65 RT	674.08	
3C	108+68.32	12.50 RT			674.15	
3D	108+51.32	21.00 RT			674.01	
3E	108+81.07	14.29 LT	29+85.71 C	32.90 RT	674.48	
3F	109+38.88	14.46 LT	29+85.54 C	24.92 LT	674.03	
3G	109+42.43	13.30 LT	29+86.70 C	28.46 LT	674.02	
3H	109+42.39	12.50 RT			674.06	
3I	108+81.07	12.50 RT			674.13	
3J	109+72.84	21.00 LT	29+79.00 C	58.87 LT	673.64	
3K	109+55.84	12.50 LT	29+87.50 C	41.87 LT	673.85	
3L	109+55.84	12.50 RT			673.95	
3M	109+72.84	21.00 RT			673.64	



LEGEND	
.XXXX.	SAWCUT
	ASPHALTIC SURFACE
	CONCRETE SIDEWALK 4-INCH
	CONCRETE DRIVEWAY 6-INCH
	DECORATIVE TERRACE
	TOPSOIL
	CURB RAMP DETECTABLE
	WARNING FIELD NATURAL PATINA

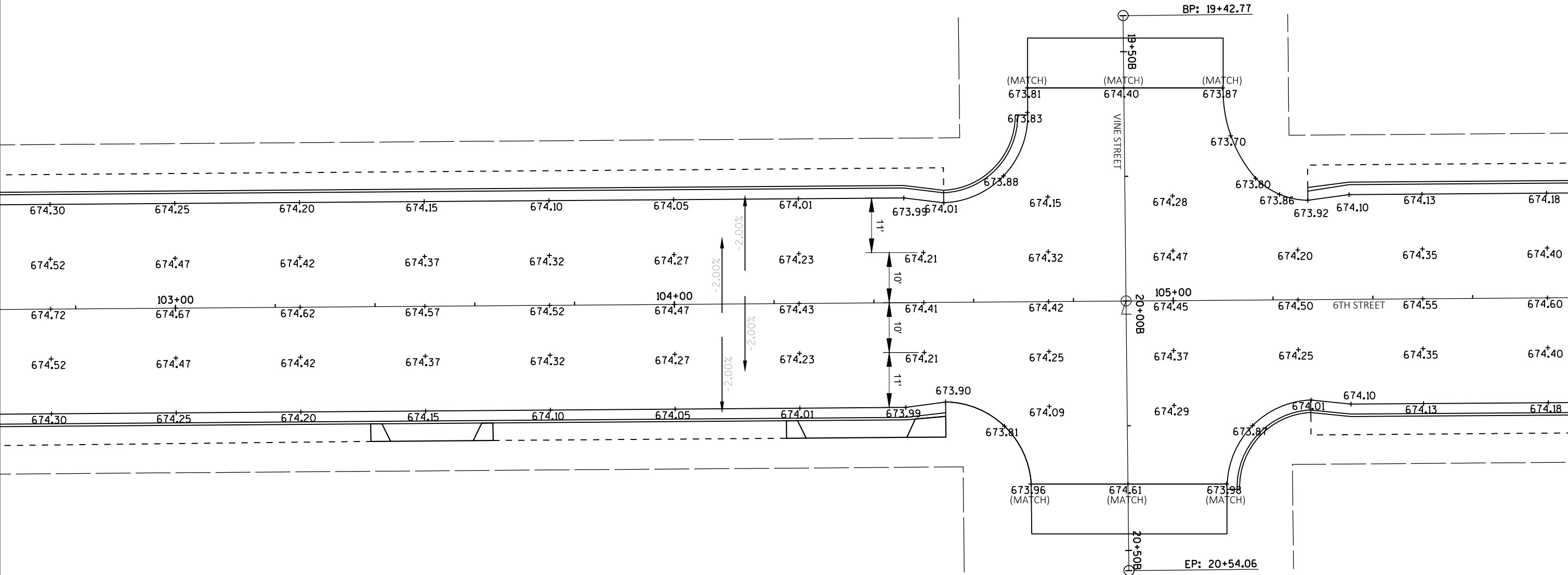
POINT	STATION 6TH ST	OFFSET	STATION	OFFSET	ELEVATION	RADIUS
4A	113+36.64	48.14 RT	113+72.45	47.46 RT	673.69	28.0'
4B	113+36.52	20.00 RT	113+37.59	19.96 RT	673.14	
4C	113+41.05	20.37 RT	113+45.13	19.74 RT	673.16	
4D	113+51.11	24.10 RT	113+62.86	19.45 RT	673.18	
4E	113+57.73	29.72 RT	113+77.13	19.47 RT	673.20	
4F	113+38.15	21.00 LT	113+37.19	21.07 LT	673.12	
4G	113+40.59	23.38 LT	113+38.77	23.60 LT	673.54	
4H	113+49.59	22.93 LT	113+44.84	24.39 LT	673.54	
4I	113+58.15	20.00 LT	113+50.93	23.76 LT	673.08	
4J	112+88.42	21.00 RT	112+88.42	21.00 RT	673.08	
4K	113+07.17	20.00 RT	113+07.17	20.00 RT	673.16	

NOTES:
PAVEMENT WIDTHS ARE SHOWN TO THE EDGE OF PAVEMENT. RADIUS INFORMATION IS TO THE FLANGE OF CURB & GUTTER.



SPOT ELEVATIONS ARE FINISHED GRADES AT THE CONSTRUCTION R/L AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25-FT INTERVALS, P.I.'S, AND MATCH POINTS. FINISHED GRADES AS SHOWN ON SIDE STREET INTERSECTIONS ARE APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER IN THE FIELD.

FILE NAME : W:\59910527\3D\SHEETS\PLAN\021201-PG.DWG PLOT DATE : 11/1/2017 10:40 AM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN = 20 FT WISDOT/CADDs SHEET 42

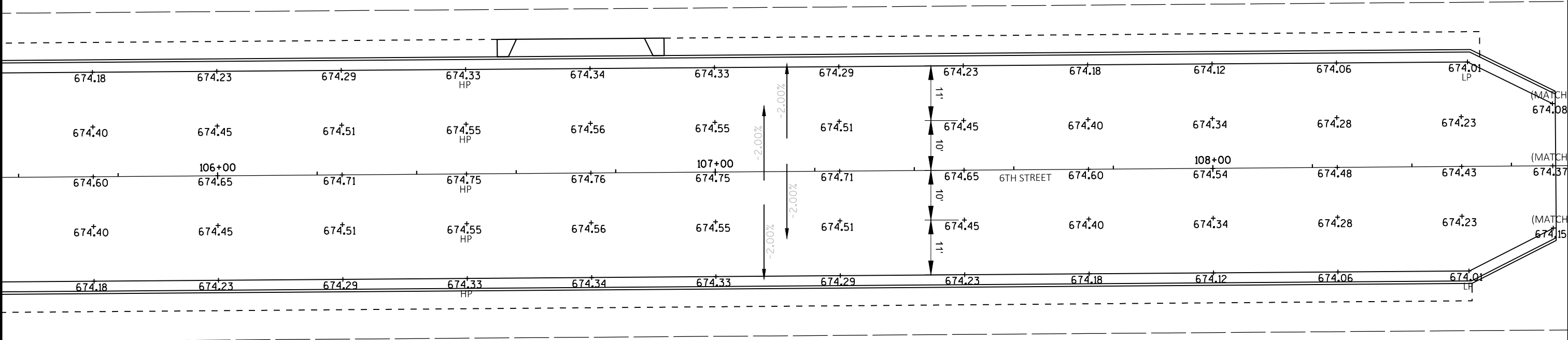


NOTES:

ALL DRIVEWAY APPROACHES SHALL BE CONCRETE DRIVEWAY 6-INCH (SEE DETAIL AND MISCELLANEOUS QUANTITIES).

PAVEMENT WIDTHS ARE SHOWN TO THE EDGE OF PAVEMENT. RADIUS INFORMATION IS TO THE FLANGE OF CURB & GUTTER.

SPOT ELEVATIONS ARE FINISHED GRADES AT THE CONSTRUCTION R/L AND EDGE OF PAVEMENT. SPOT ELEVATIONS ARE LOCATED AT 25-FT INTERVALS, PI'S, AND MATCH POINTS. FINISHED GRADES AS SHOWN ON SIDE STREET INTERSECTIONS ARE APPROXIMATE AND MAY BE ADJUSTED BY THE ENGINEER IN THE FIELD.

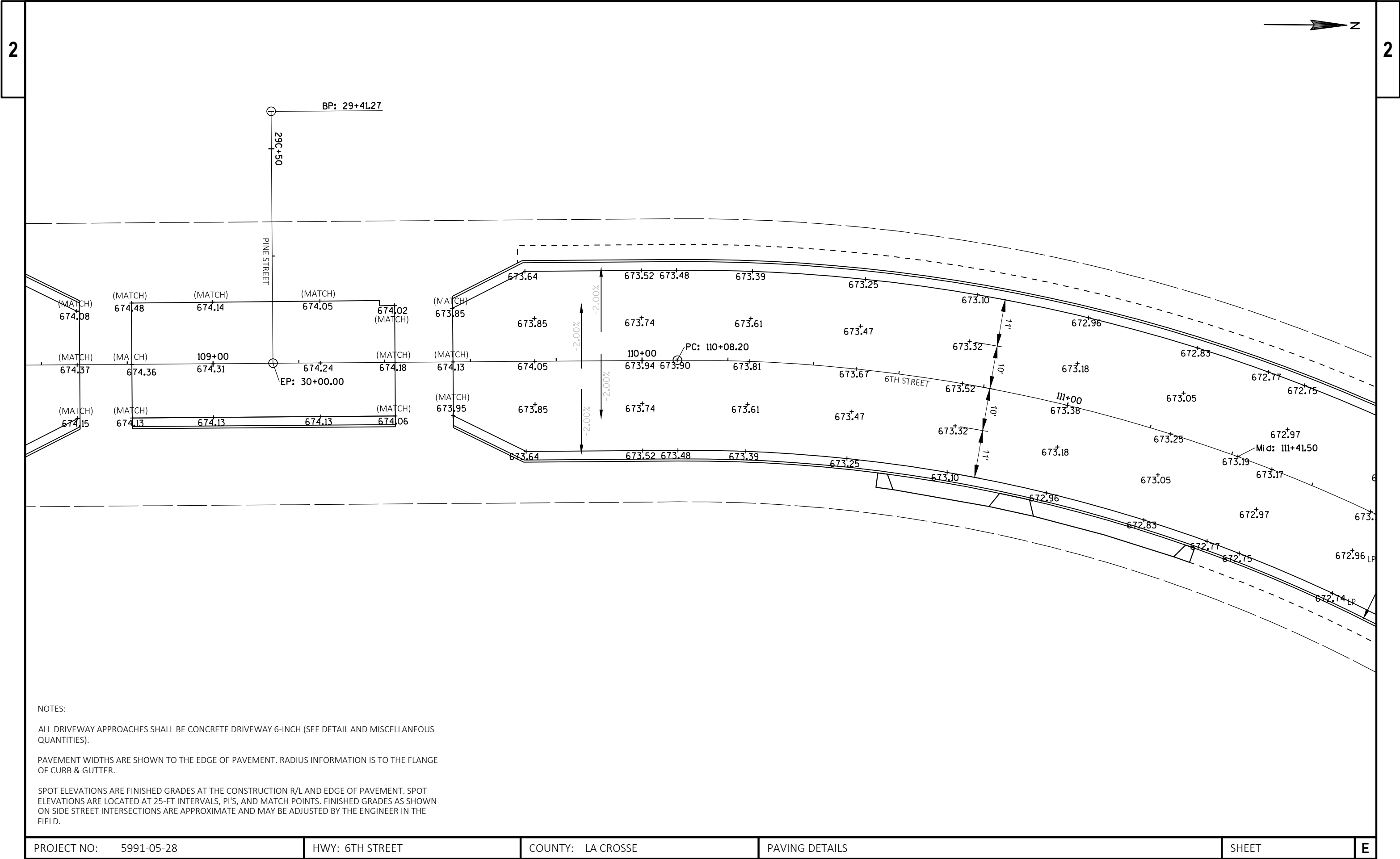


NOTES:

ALL DRIVEWAY APPROACHES SHALL BE CONCRETE DRIVEWAY 6-INCH (SEE DETAIL AND MISCELLANEOUS QUANTITIES).

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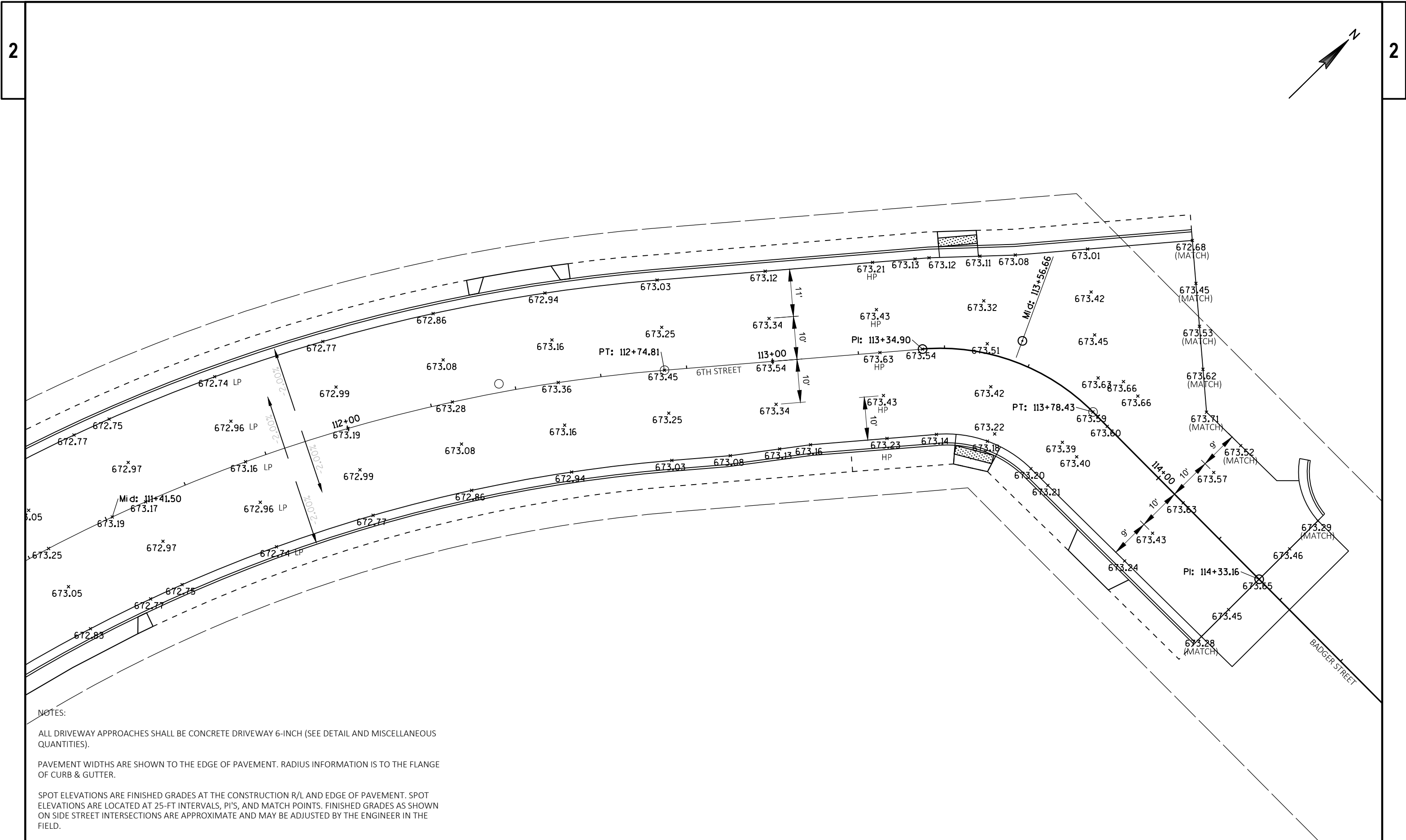
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PROJECT NO: 5991-05-28	HWY: 6TH STREET	COUNTY: LA CROSSE	PAVING DETAILS	SHEET	E
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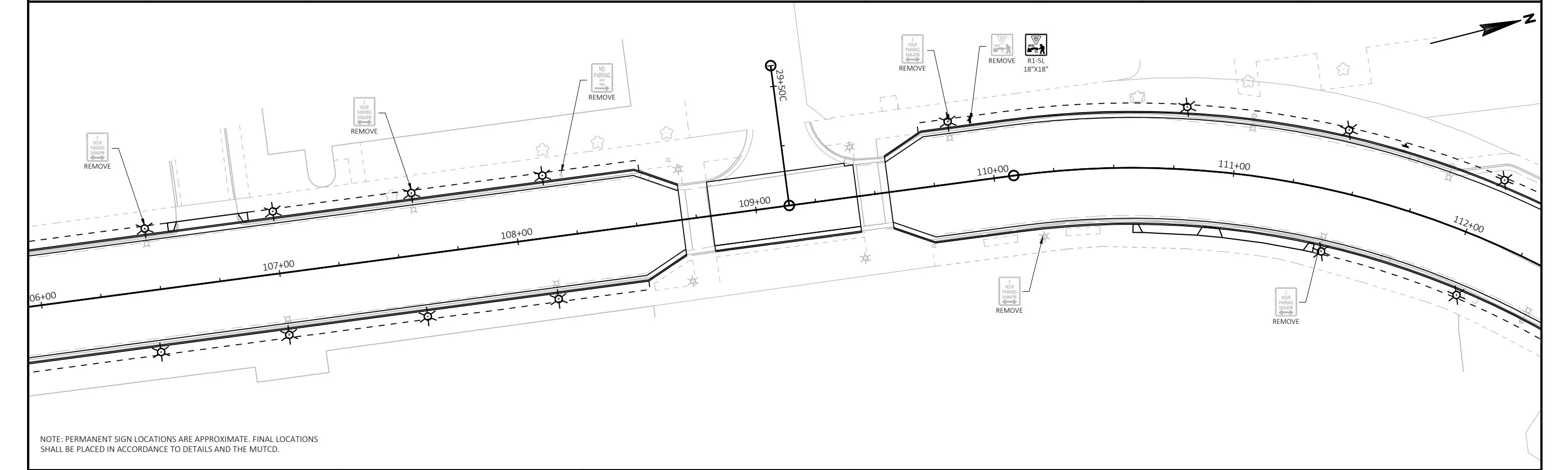
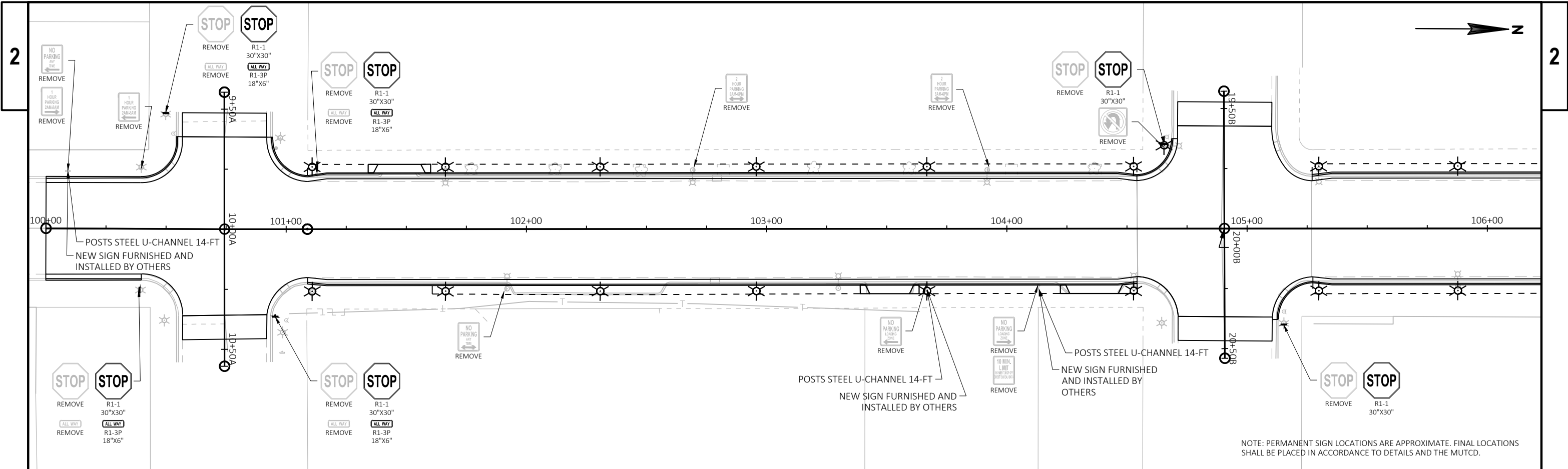


NOTES:

ALL DRIVEWAY APPROACHES SHALL BE CONCRETE DRIVEWAY 6-INCH (SEE DETAIL AND MISCELLANEOUS QUANTITIES).

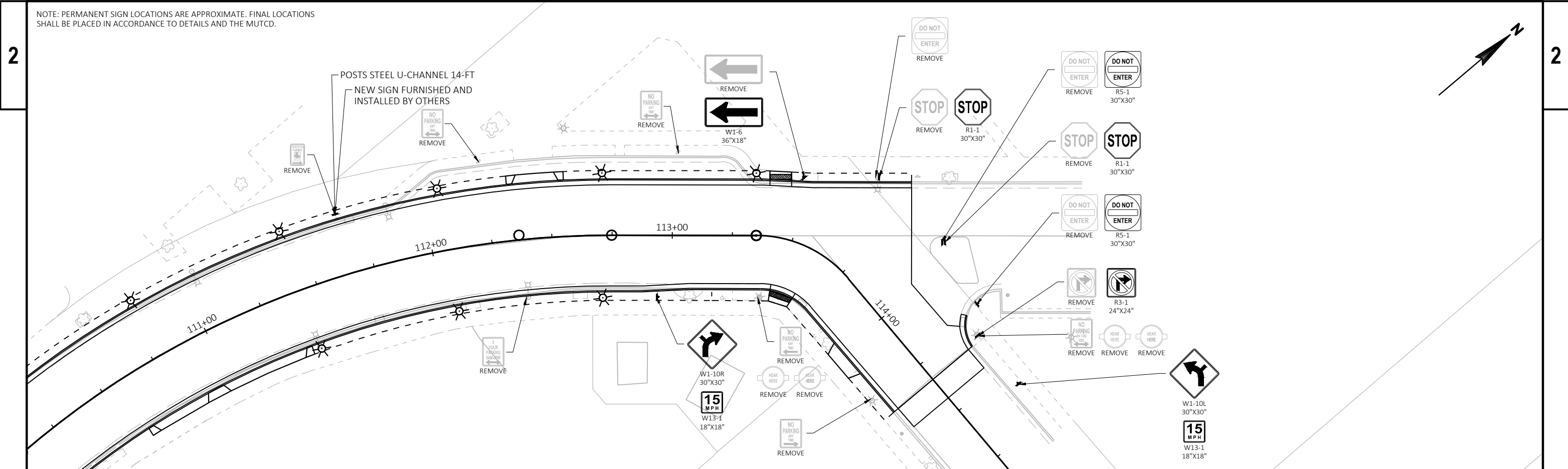
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NOTE: PERMANENT SIGN LOCATIONS ARE APPROXIMATE. FINAL LOCATIONS SHALL BE PLACED IN ACCORDANCE TO DETAILS AND THE MUTCD.


PROJECT NO: 5991-05-28	HWY: 6TH STREET	COUNTY: LA CROSSE	PERMANENT SIGNING	SHEET E
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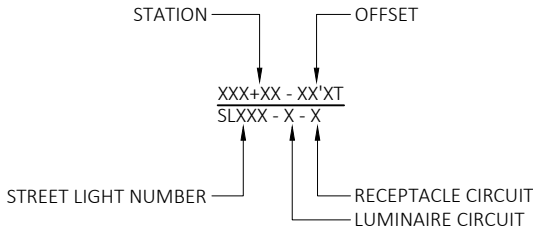


LIGHTING PLAN LEGEND

- -----

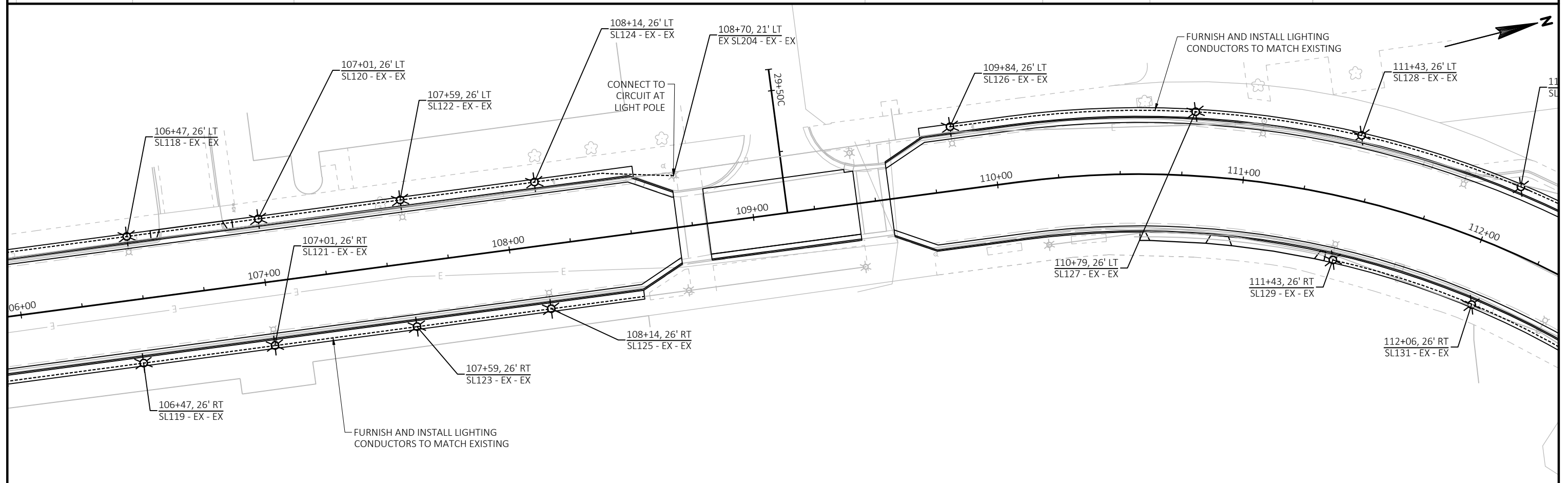


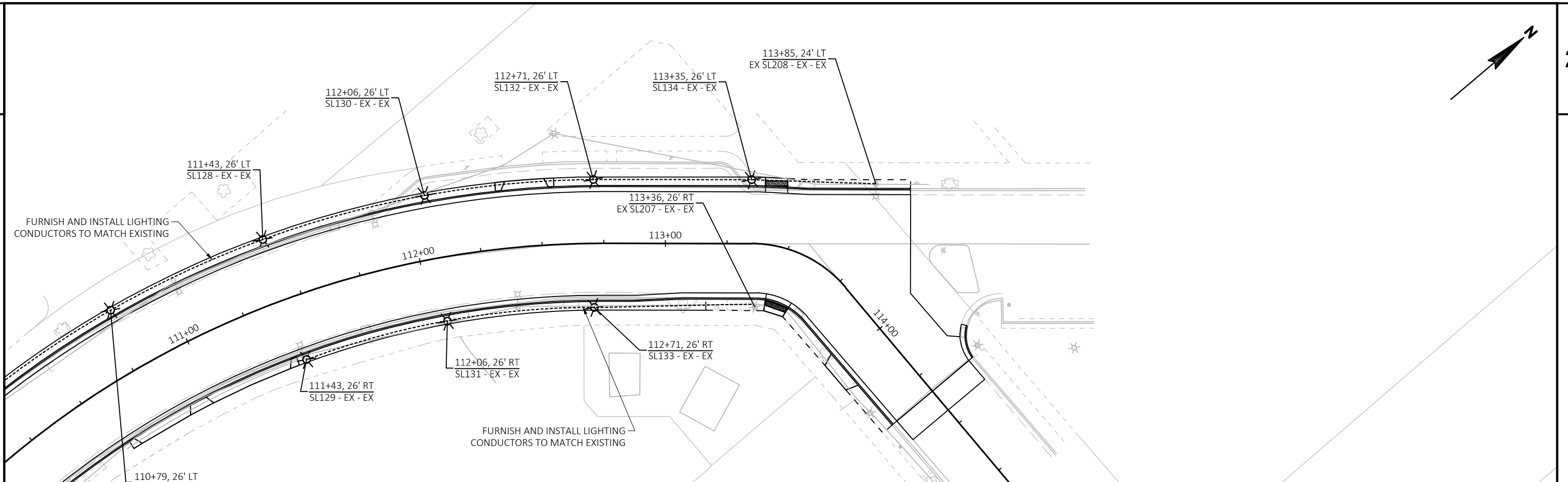

- PROPOSED CONDUIT- 2" UNLESS OTHERWISE NOTED)
- EXISTING CONDUIT- 2" UNLESS OTHERWISE NOTED)
- PROPOSED LIGHT POLE, POLE TOP LUMINAIRE
- EXISTING LIGHT POLE, POLE TOP LUMINAIRE

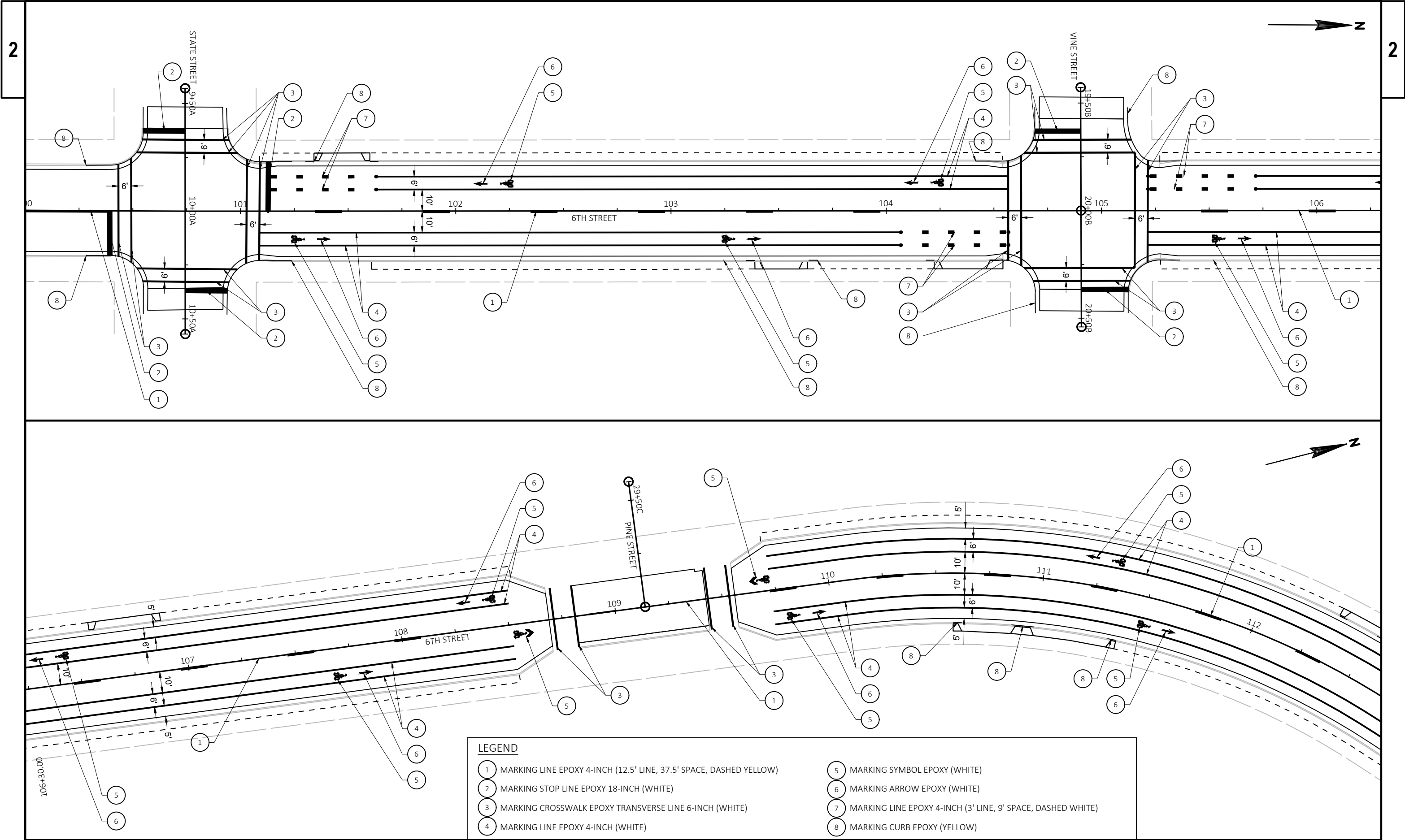


GENERAL STREET LIGHTING NOTES:

- 1) THE ENGINEER SHALL APPROVE THE FINAL LOCATION FOR ALL CONCRETE BASES IN THE FIELD PRIOR TO CONSTRUCTION.
- 2) THE LOCATION OF EXISTING AND PROPOSED UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. IN ADDITION, THERE MAY BE OTHER UTILITIES WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 3) CHECK FOR OVERHEAD UTILITY CONFLICTS PRIOR TO CONSTRUCTING CONCRETE BASES.
- 4) CONDUITS LIE WITHIN 1' OF CURB AND APPROXIMATELY 18" FROM TOP OF CURB (24" UNDER DRIVEWAYS)







PROJECT NO: 5991-05-28

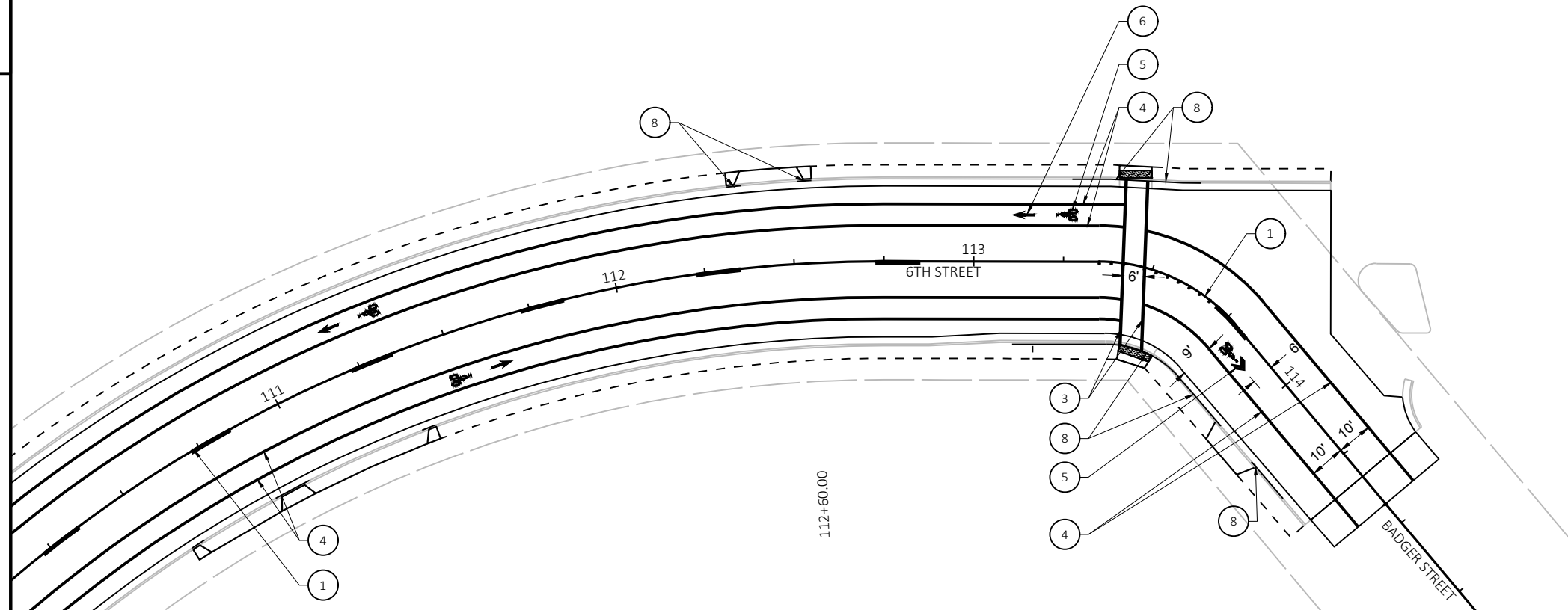
HWY: 6TH STREET

COUNTY: LA CROSSE

PAVEMENT MARKING

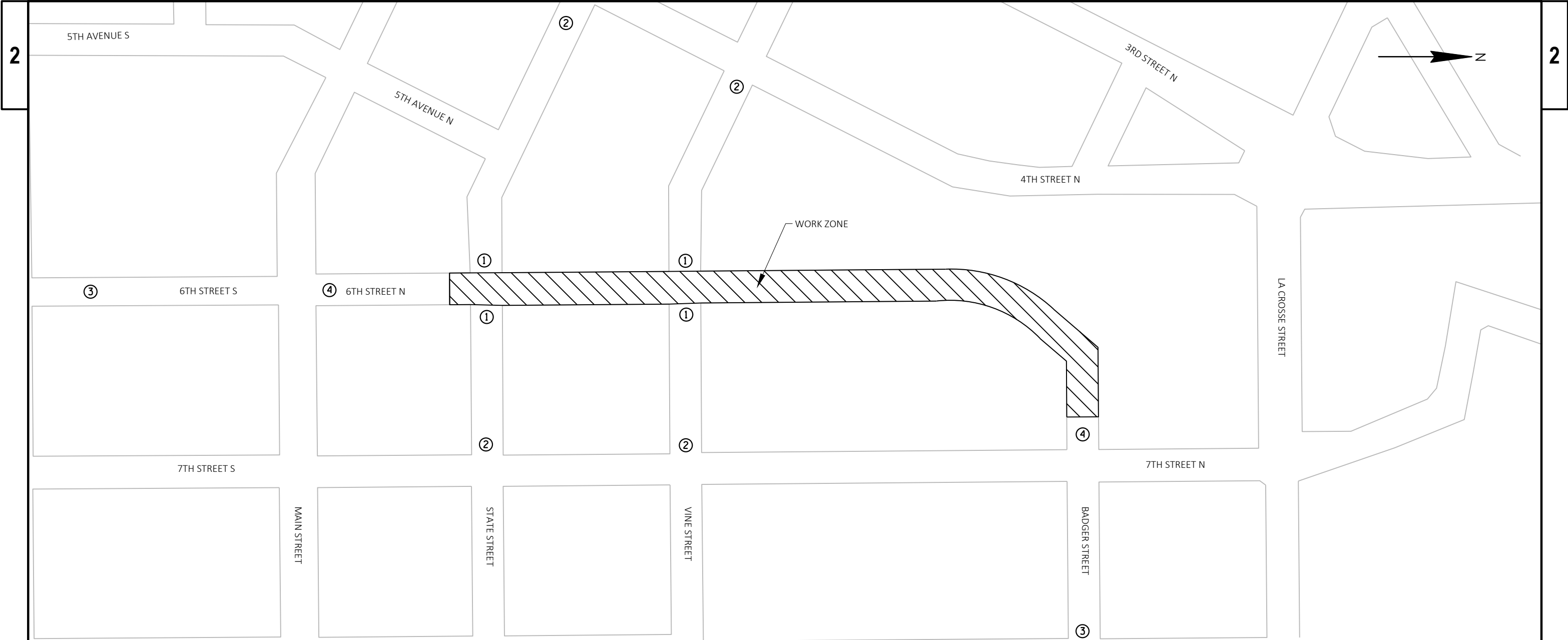
SHEET

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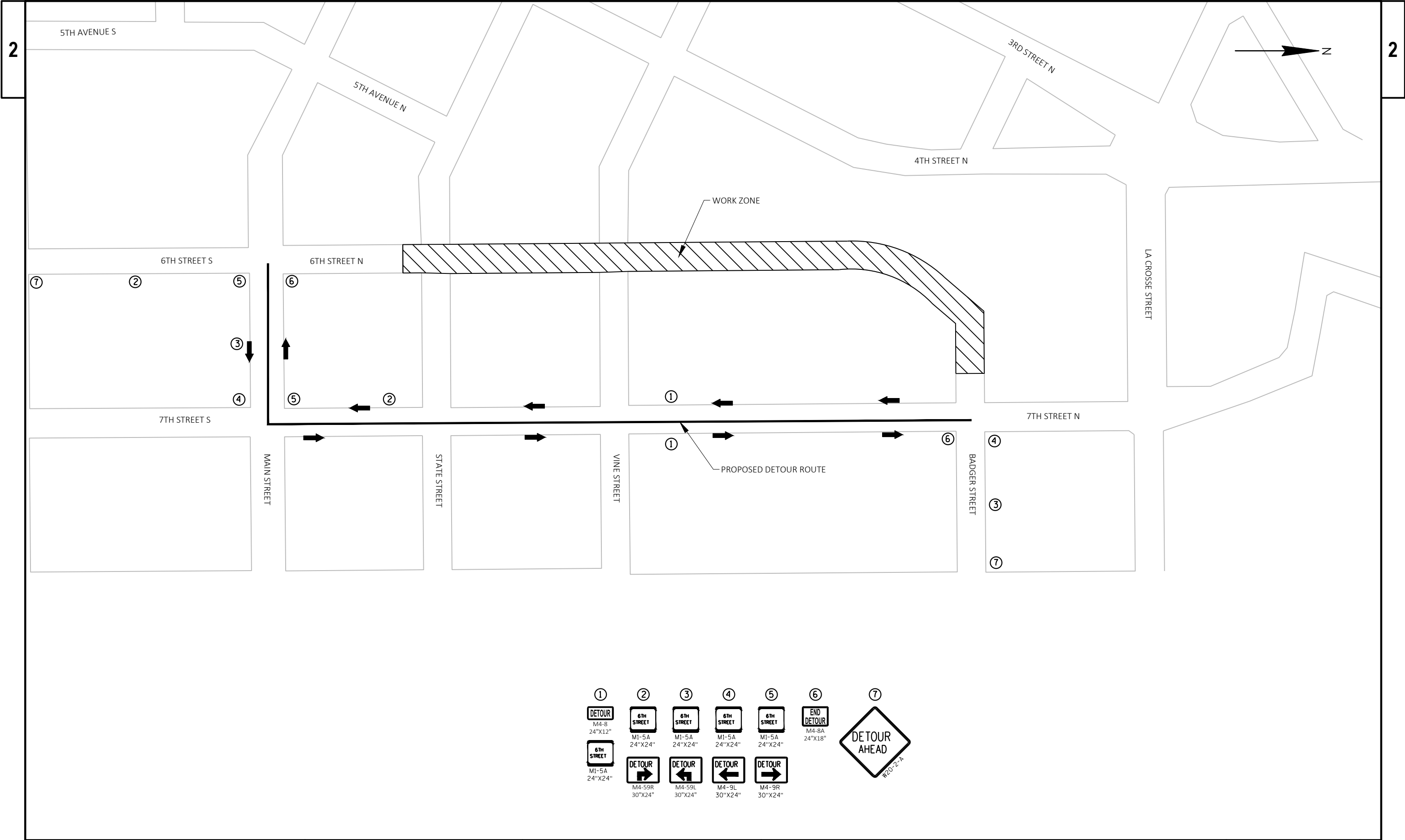


LEGEND

- 1 MARKING LINE EPOXY 4-INCH (12.5' LINE, 37.5' SPACE, DASHED YELLOW)
- 2 MARKING STOP LINE EPOXY 18-INCH (WHITE)
- 3 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE)
- 4 MARKING LINE EPOXY 4-INCH (WHITE)
- 5 MARKING SYMBOL EPOXY (WHITE)
- 6 MARKING ARROW EPOXY (WHITE)
- 7 MARKING LINE EPOXY 4-INCH (3' LINE, 9' SPACE, DASHED WHITE)
- 8 MARKING CURB EPOXY (YELLOW)



- ① 3-TYPE III BARRICADES
4-TYPE A LIGHTS
1-ROAD CLOSED MOUNTED ON A TYPE III BARRICADE.
SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 1 WHEN CROSS TRAFFIC IS NOT ALLOWED.
- ② 1-ROAD CLOSED AHEAD SIGN ON TEMPORARY SUPPORT
1-ROAD CLOSED 500' SIGN ON TEMPORARY SUPPORT
SEE S.D.D. "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL 1 WHEN CROSS TRAFFIC IS NOT ALLOWED.
- ③ 1-ROAD CLOSED AHEAD" SIGN ON TEMPORARY SUPPORT
1-ROAD CLOSED 1000' SIGN ON TEMPORARY SUPPORT
1-ROAD CLOSED 500' SIGN ON TEMPORARY SUPPORT
SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL B.
- ④ 3-TYPE III BARRICADES
4-TYPE A LIGHTS
1-ROAD CLOSED MOUNTED ON A TYPE III BARRICADE.
SEE S.D.D. "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL B.



①
DETOUR
M4-8
24"X12"
6TH STREET
M1-5A
24"X24"

②
6TH STREET
M1-5A
24"X24"
DETOUR
M4-59R
30"X24"

③
6TH STREET
M1-5A
24"X24"
DETOUR
M4-59L
30"X24"

④
6TH STREET
M1-5A
24"X24"
DETOUR
M4-9L
30"X24"

⑤
6TH STREET
M1-5A
24"X24"
DETOUR
M4-9R
30"X24"

⑥
END
DETOUR
M4-8A
24"X18"

⑦
DETOUR
AHEAD
W20-2-A

Estimate Of Quantities

5991-05-28

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Pavement	SY	6,212.000	6,212.000
0004	204.0150	Removing Curb & Gutter	LF	2,600.000	2,600.000
0006	204.0155	Removing Concrete Sidewalk	SY	737.000	737.000
0008	204.0195	Removing Concrete Bases	EACH	25.000	25.000
0010	204.0210	Removing Manholes	EACH	2.000	2.000
0012	204.0220	Removing Inlets	EACH	10.000	10.000
0014	204.9060.S	Removing (item description) 01. Light Pole Assembly	EACH	18.000	18.000
0016	205.0100	Excavation Common	CY	2,956.000	2,956.000
0018	213.0100	Finishing Roadway (project) 01. 5991-05-28	EACH	1.000	1.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	3,305.000	3,305.000
0022	415.0070	Concrete Pavement 7-Inch	SY	6,785.000	6,785.000
0024	415.0210	Concrete Pavement Gaps	EACH	4.000	4.000
0026	415.4100	Concrete Pavement Joint Filling	SY	7,143.000	7,143.000
0028	416.0160	Concrete Driveway 6-Inch	SY	77.000	77.000
0030	416.0260	Concrete Driveway HES 6-Inch	SY	30.000	30.000
0032	416.0620	Drilled Dowel Bars	EACH	58.000	58.000
0034	455.0605	Tack Coat	GAL	17.000	17.000
0036	465.0105	Asphaltic Surface	TON	60.000	60.000
0038	520.8000	Concrete Collars for Pipe	EACH	11.000	11.000
0040	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	2,596.000	2,596.000
0042	602.0405	Concrete Sidewalk 4-Inch	SF	229.000	229.000
0044	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	20.000	20.000
0046	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	80.000	80.000
0048	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	8.000	8.000
0050	611.0420	Reconstructing Manholes	EACH	1.000	1.000
0052	611.0430	Reconstructing Inlets	EACH	1.000	1.000
0054	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0056	611.2005	Manholes 5-FT Diameter	EACH	1.000	1.000
0058	611.3004	Inlets 4-FT Diameter	EACH	6.000	6.000
0060	611.8110	Adjusting Manhole Covers	EACH	4.000	4.000
0062	611.8115	Adjusting Inlet Covers	EACH	3.000	3.000
0064	611.8120.S	Cover Plates Temporary	EACH	29.000	29.000
0066	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5991-05-28	EACH	1.000	1.000
0068	619.1000	Mobilization	EACH	1.000	1.000
0070	624.0100	Water	MGAL	76.000	76.000
0072	625.0500	Salvaged Topsoil	SY	67.000	67.000
0074	628.1905	Mobilizations Erosion Control	EACH	7.000	7.000

Estimate Of Quantities

5991-05-28

Line	Item	Item Description	Unit	Total	Qty
0076	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0078	628.2008	Erosion Mat Urban Class I Type B	SY	67.000	67.000
0080	628.7005	Inlet Protection Type A	EACH	15.000	15.000
0082	628.7010	Inlet Protection Type B	EACH	1.000	1.000
0084	628.7015	Inlet Protection Type C	EACH	30.000	30.000
0086	628.7560	Tracking Pads	EACH	1.000	1.000
0088	628.7570	Rock Bags	EACH	14.000	14.000
0090	629.0210	Fertilizer Type B	CWT	0.100	0.100
0092	630.0140	Seeding Mixture No. 40	LB	2.000	2.000
0094	637.2210	Signs Type II Reflective H	SF	63.190	63.190
0096	637.2230	Signs Type II Reflective F	SF	17.000	17.000
0098	638.2602	Removing Signs Type II	EACH	45.000	45.000
0100	638.3000	Removing Small Sign Supports	EACH	12.000	12.000
0102	642.5001	Field Office Type B	EACH	1.000	1.000
0104	643.0300	Traffic Control Drums	DAY	500.000	500.000
0106	643.0420	Traffic Control Barricades Type III	DAY	1,802.000	1,802.000
0108	643.0705	Traffic Control Warning Lights Type A	DAY	2,403.000	2,403.000
0110	643.0900	Traffic Control Signs	DAY	4,305.000	4,305.000
0112	643.5000	Traffic Control	EACH	1.000	1.000
0114	645.0111	Geotextile Type DF Schedule A	SY	713.000	713.000
0116	646.1020	Marking Line Epoxy 4-Inch	LF	4,515.000	4,515.000
0118	646.5020	Marking Arrow Epoxy	EACH	13.000	13.000
0120	646.5220	Marking Symbol Epoxy	EACH	16.000	16.000
0122	646.6120	Marking Stop Line Epoxy 18-Inch	LF	129.000	129.000
0124	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	967.000	967.000
0126	646.8120	Marking Curb Epoxy	LF	551.000	551.000
0128	650.4000	Construction Staking Storm Sewer	EACH	11.000	11.000
0130	650.4500	Construction Staking Subgrade	LF	1,555.000	1,555.000
0132	650.7000	Construction Staking Concrete Pavement	LF	1,555.000	1,555.000
0134	650.8500	Construction Staking Electrical Installations (project) 01. 5991-05-28	LS	1.000	1.000
0136	650.9910	Construction Staking Supplemental Control (project) 01. 5991-05-28	LS	1.000	1.000
0138	650.9920	Construction Staking Slope Stakes	LF	1,555.000	1,555.000
0140	652.0325	Conduit Rigid Nonmetallic Schedule 80 2-Inch	LF	1,957.000	1,957.000
0142	655.0610	Electrical Wire Lighting 12 AWG	LF	3,627.000	3,627.000
0144	690.0150	Sawing Asphalt	LF	186.000	186.000
0146	690.0250	Sawing Concrete	LF	2,694.000	2,694.000
0148	715.0415	Incentive Strength Concrete Pavement	DOL	500.000	500.000
0150	999.1000.S	Seismograph	LS	1.000	1.000

Estimate Of Quantities

5991-05-28

Line	Item	Item Description	Unit	Total	Qty
0152	999.1500.S	Crack and Damage Survey	LS	1.000	1.000
0154	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	600.000	600.000
0156	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,200.000	1,200.000
0158	SPV.0060	Special 01. Adjusting Water Valves	EACH	19.000	19.000
0160	SPV.0060	Special 02. Manhole Covers Special	EACH	18.000	18.000
0162	SPV.0060	Special 03. Inlet Covers Special	EACH	7.000	7.000
0164	SPV.0060	Special 04. Replace Decorative Trench Grate	EACH	4.000	4.000
0166	SPV.0060	Special 05. Salvage Decorative Trench Grate	EACH	10.000	10.000
0168	SPV.0060	Special 06. Decorative Light Pole	EACH	32.000	32.000
0170	SPV.0060	Special 07. Move Decorative Light Pole Assembly	EACH	7.000	7.000
0172	SPV.0060	Special 08. Decorative Lighting Luminaire	EACH	32.000	32.000
0174	SPV.0060	Special 09. Posts Steel U-Channel 14-FT	EACH	12.000	12.000
0176	SPV.0060	Special 10. Decorative Bases	EACH	39.000	39.000
0178	SPV.0090	Special 01. Furnish and Install Equivalent Lighting Conductors	LF	13,782.000	13,782.000
0180	SPV.0105	Special 01. Concrete Pavement Joint Layout	LS	1.000	1.000
0182	SPV.0165	Special 01. Decorative Terrace	SF	6,353.000	6,353.000

REMOVING PAVEMENT

204.0100						
CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	100+00	-	104+54	LT/RT	2,004	MAINLINE
0010	105+27	-	108+69	LT/RT	1,511	MAINLINE
0010	108+81	-	109+42	LT/RT	173	MAINLINE
0010	109+42	-	113+99	LT/RT	2,038	MAINLINE
0010	9+62 A	-	9+80 A	LT/RT	88	STATE ST
0010	10+20 A	-	10+36 A	LT/RT	78	STATE ST
0010	113+78	-	114+33	LT/RT	225	BADGER ST
0010	101+38	-	101+56	LT	10	DRIVEWAY
0010	103+40	-	103+64	RT	12	DRIVEWAY
0010	104+19	-	104+50	RT	15	DRIVEWAY
0010	106+58	-	106+88	LT	16	DRIVEWAY
0010	110+60	-	110+89	RT	14	DRIVEWAY
0010	110+96	-	111+37	RT	20	DRIVEWAY
0010	13+97	-	114+10	RT	8	DRIVEWAY, BADGER
PROJECT TOTALS =					6,212	

REMOVING CURB & GUTTER

204.0150						
CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
0010	100+00	-	100+40	RT	40	
0010	100+00	-	100+57	LT	65	
0010	100+92	-	104+71	LT	394	
0010	101+09		104+54	RT	350	
0010	105+10	-	108+70	RT	368	
0010	105+27	-	108+70	LT	344	
0010	108+81	-	109+42	RT	61	
0010	108+81	-	109+39	LT	58	
0010	109+56	-	113+99	LT	462	
0010	109+56	-	114+33	RT	444	
0010	114+20	-	114+33	LT	14	
PROJECT TOTALS =					2600	

REMOVING LIGHTING SUMMARY

204.0195						
204.9060.S						
SPV.0060.07						
CATEGORY	STATION	LOCATION	REMOVING CONCRETE BASES	REMOVING LIGHT POLE ASSEMBLY	MOVE DECORATIVE LIGHT POLE	REMARKS
0010	100+98	LT	1	-	1	
0010	101+11	RT	1	-	1	
0010	101+66	LT	1	1	-	
0010	101+92	RT	1	1	-	
0010	102+69	LT	1	1	-	
0010	103+30	RT	1	1	-	
0010	103+92	LT	1	1	-	
0010	104+53	RT	1	1	-	
0010	104+65	RT	1	-	1	
0010	104+67	LT	1	1	-	
0010	105+15	RT	1	-	1	
0010	105+30	LT	1	1	-	
0010	105+88	RT	1	1	-	
0010	106+47	LT	1	1	-	
0010	107+01	RT	1	1	-	
0010	107+58	LT	1	1	-	
0010	108+14	RT	1	1	-	
0010	108+70	LT	1	-	1	
0010	109+84	LT	1	1	-	
0010	111+05	LT	1	1	-	
0010	111+43	RT	1	1	-	
0010	111+85	LT	1	1	-	
0010	112+38	RT	1	1	-	
0010	113+36	RT	1	-	1	
0010	113+85	LT	1	-	1	
PROJECT TOTALS =			25	18	7	

REMOVING CONCRETE SIDEWALK

204.0155						
CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	101+09	-	101+95	RT	40	
0010	101+09	-	101+39	LT	16	
0010	101+55	-	101+75	LT	10	
0010	101+79	-	102+09	LT	16	
0010	102+14	-	102+45	LT	16	
0010	102+49	-	102+79	LT	16	
0010	102+55	-	103+42	RT	41	
0010	102+84	-	103+17	LT	17	
0010	103+22	-	103+57	LT	18	
0010	103+61	-	104+25	RT	30	
0010	104+05	-	104+34	LT	15	
0010	104+39	-	104+54	LT	8	
0010	104+47	-	104+50	RT	2	
0010	105+27	-	108+54	RT	162	
0010	106+86	-	107+47	LT	31	
0010	107+52	-	108+99	LT	96	
0010	109+29	-	111+87	LT	152	
0010	110+58	-	110+62	RT	2	
0010	110+87	-	110+98	RT	5	
0010	111+35	-	111+39	RT	2	
0010	113+01	-	113+63	RT	14	
0010	113+41	-	113+99	LT	27	
0010	113+87	-	113+88	RT	1	
PROJECT TOTALS =					737	

REMOVING INLETS

204.0220				
CATEGORY	STATION	LOCATION	EACH	REMARKS
0010	100+52	LT 26'	1	
0010	101+00	RT 25'	1	
0010	101+01	LT 25'	1	
0010	102+79	RT 22'	1	
0010	102+79	LT 22'	1	
0010	104+64	RT 26'	1	
0010	104+65	LT 26'	1	
0010	105+16	RT 27'	1	
0010	111+71	LT 22'	1	
0010	111+71	RT 22'	1	
PROJECT TOTALS =			10	

EARTHWORK SUMMARY

STATION TO STATION	LOCATION	COMMON EXCAVATION (1)	UNEXPANDED FILL	EXPANDED FILL (2)	MASS ORDINATE +/- (3)	WASTE	BORROW (ITEM 208.0100)	COMMENT:
		CUT		FACTOR 1.30				
100+00 - 114+50	6TH/BADGER	2956	1	1	2956	2955		

- 1) COMMON EXCAVATION IS THE CUT. ITEM NUMBER 205.0100.
- 2) EXPANDED FILL FACTOR = 1.30; EXPANDED FILL = UNEXPANDED FILL * FILL FACTOR
- 3) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL ON THE PROJECT.
- 4) ALL QUANTITIES SHOWN IN CY.

FINISHING ROADWAY (PROJECT) 01. 5991-05-28

213.0100		
LOCATION	EACH	REMARKS
PROJECT 5991-05-28	1	MAINLINE
PROJECT TOTALS =	1	

BASE AGGREGATE DENSE 1 1/4-INCH

305.0120						
CATEGORY	STATION	TO	STATION	LOCATION	TON	REMARKS
0010	100+00	-	114+33	LT/RT	2769	MAINLINE - 6TH & BADGER
0010	9+52 A	-	9+62 A	LT/RT	18	ASPHALTIC SURFACE - STATE
0010	10+36 A	-	10+46 A	LT/RT	18	ASPHALTIC SURFACE - STATE
0010	19+47 B	-	19+57 B	LT/RT	20	ASPHALTIC SURFACE - VINE
0010	20+37 B	-	20+47 B	LT/RT	20	ASPHALTIC SURFACE - VINE
0010	114+33	-	114+43	LT/RT	19	ASPATLIC SURFACE - BADGER
0010	101+36	-	101+58	LT	2	CONCRETE DRIVEWAY
0010	103+41	-	103+61	RT	2	CONCRETE DRIVEWAY
0010	104+25	-	104+48	RT	2	CONCRETE DRIVEWAY
0010	106+59	-	106+88	LT	3	CONCRETE DRIVEWAY
0010	110+60	-	110+89	RT	3	CONCRETE DRIVEWAY
0010	110+96	-	111+37	RT	4	CONCRETE DRIVEWAY
0010	112+36	-	112+54	LT	2	CONCRETE DRIVEWAY
0010	113+95	-	114+12	RT	2	CONCRETE DRIVEWAY
0010	101+34	-	101+38	LT	1	CONCRETE SIDEWALK
0010	101+56	-	101+60	LT	1	CONCRETE SIDEWALK
0010	103+39	-	103+43	RT	1	CONCRETE SIDEWALK
0010	103+59	-	103+63	RT	1	CONCRETE SIDEWALK
0010	104+22	-	104+26	RT	1	CONCRETE SIDEWALK
0010	104+46	-	104+50	RT	1	CONCRETE SIDEWALK
0010	106+56	-	106+60	LT	1	CONCRETE SIDEWALK
0010	106+86	-	106+90	LT	1	CONCRETE SIDEWALK
0010	108+71	-	108+80	LT	3	CONCRETE SIDEWALK
0010	109+44	-	109+53	LT	3	CONCRETE SIDEWALK
0010	110+58	-	110+62	RT	1	CONCRETE SIDEWALK
0010	110+87	-	110+98	RT	1	CONCRETE SIDEWALK
0010	111+35	-	111+39	RT	1	CONCRETE SIDEWALK
0010	113+40	-	113+50	RT	1	CONCRETE SIDEWALK
0010	113+41	-	113+50	LT	1	CONCRETE SIDEWALK
0010	101+09	-	101+34	LT	4	DECORATIVE TERRACE
0010	101+60	-	101+74	LT	2	DECORATIVE TERRACE
0010	101+61	-	103+39	RT	24	DECORATIVE TERRACE
0010	101+79	-	102+09	LT	4	DECORATIVE TERRACE
0010	102+14	-	102+45	LT	4	DECORATIVE TERRACE
0010	102+50	-	103+17	LT	9	DECORATIVE TERRACE
0010	103+22	-	103+57	LT	5	DECORATIVE TERRACE
0010	103+62	-	104+34	LT	10	DECORATIVE TERRACE
0010	103+63	-	104+22	RT	8	DECORATIVE TERRACE
0010	104+39	-	104+54	LT	2	DECORATIVE TERRACE
0010	105+27	-	106+56	LT	17	DECORATIVE TERRACE
0010	105+27	-	108+52	RT	43	DECORATIVE TERRACE
0010	106+90	-	107+48	LT	8	DECORATIVE TERRACE
0010	107+53	-	108+71	LT	19	DECORATIVE TERRACE
0010	108+81	-	108+99	LT	6	DECORATIVE TERRACE
0010	109+29	-	109+43	LT	4	DECORATIVE TERRACE
0010	109+53	-	112+34	LT	42	DECORATIVE TERRACE
0010	111+39	-	113+01	RT	20	DECORATIVE TERRACE
0010	112+56	-	113+41	LT	11	DECORATIVE TERRACE
0010	UNDISTRIBUTED				160	
PROJECT TOTALS =					3305	

CONCRETE PAVEMENT 7-INCH

415.0070						
CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	100+00	-	108+69	LT/RT	3,980	MAINLINE
0010	108+81	-	109+42	LT/RT	173	MAINLINE
0010	109+42	-	113+99	LT/RT	2,038	MAINLINE
0010	9+62 A	-	9+80 A	LT/RT	88	STATE ST
0010	10+20 A	-	10+36 A	LT/RT	78	STATE ST
0010	19+57 B	-	19+80 B	LT/RT	116	VINE ST
0010	20+20 B	-	20+36 B	LT/RT	87	VINE ST
0010	113+78	-	114+33	LT/RT	225	BADGER ST
PROJECT TOTALS =					6,785	

CONCRETE PAVEMENT GAPS

415.0210			
CATEGORY	LOCATION	EACH	REMARKS
0010	UNDISTRIBUTED	4	
PROJECT TOTALS =		4	

CONCRETE PAVEMENT JOINT FILLING

415.4100						
CATEGORY	STATION	TO	STATION	LOCATION	SY	REMARKS
0010	100+00	-	114+00	LT/RT	3,980	MAINLINE
0010	9+62 A	-	9+80 A	LT/RT	173	STATE ST
0010	10+20 A	-	10+36 A	LT/RT	2,038	STATE ST
0010	19+57 B	-	19+79 B	LT/RT	88	VINE ST
0010	20+21 B	-	20+37 B	LT/RT	78	VINE ST
0010	29+66 C	-	29+88 C	LT/RT	116	PINE ST
0010	113+78	-	114+33	LT/RT	87	BADGER ST
0010	100+00	-	100+40	RT	12	CURB
0010	100+00	-	100+57	LT	19	CURB
0010	100+92	-	104+71	LT	110	CURB
0010	101+09	0	104+54	RT	97	CURB
0010	105+10	-	108+70	RT	103	CURB
0010	105+27	-	108+70	LT	96	CURB
0010	108+81	-	109+42	RT	17	CURB
0010	109+56	-	113+99	LT	129	CURB
PROJECT TOTALS =					7,143	

3

CONCRETE DRIVEWAY 6-INCH

416.0160						REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	SY	
0010	101+36	-	101+58	LT	8	
0010	103+41	-	103+61	RT	8	
0010	104+25	-	104+48	RT	9	
0010	106+59	-	106+88	LT	11	
0010	110+60	-	110+89	RT	10	
0010	110+96	-	111+37	RT	15	
0010	112+36	-	112+54	LT	7	
0010	113+95	-	114+12	RT	9	ON BADGER STREET
PROJECT TOTALS =					77	

DRILLED DOWEL BARS

416.0620					REMARKS
CATEGORY	STATION	LOCATION	EACH		
0010	100+00	LT & RT	28		
0010	113+99	LT & RT	30		
PROJECT TOTALS =				58	

ASPHALTIC PAVING ITEMS

455.0605						465.0105		REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	TACK COAT GAL	ASPHALTIC SURFACE TON		
0010	9+52 A	-	9+62 A	LT/RT	3	11		STATE ST
0010	10+36 A	-	10+46 A	LT/RT	3	11		STATE ST
0010	19+47 B	-	19+57 B	LT/RT	4	13		VINE ST
0010	20+37 B	-	20+47 B	LT/RT	4	13		VINE ST
0010	114+33	-	114+43	LT/RT	3	12		BADGER ST
PROJECT TOTALS =					17	60		

CONCRETE DRIVEWAY HES 6-INCH

416.0260				REMARKS
CATEGORY	LOCATION	SY		
0010	UNDISTRIBUTED	30		
PROJECT TOTALS =		30		

CONCRETE COLLARS FOR PIPE

520.8000					REMARKS
CATEGORY	STATION	LOCATION	EACH		
0010	100+52	LT	1		
0010	101+00	LT	1		
0010	102+78	RT	1		
0010	102+79	LT	1		
0010	111+70	LT	1		
0010	111+71	RT	1		
0010	114+04	RT	1		NORTHEAST PIPE
0010	114+04	RT	1		EAST PIPE
0010	114+04	RT	1		SOUTH PIPE
0010	114+04	RT	1		SOUTHWEST PIPE
0010	114+04	RT	1		WEST PIPE
PROJECT TOTALS =			11		

CONCRETE CURB & GUTTER 30-INCH TYPE A

601.0409						REMARKS
CATEGORY	STATION	TO	STATION	LOCATION	LF	
0010	100+00	-	100+40	RT	40	
0010	100+00	-	100+57	LT	65	
0010	100+92	-	104+71	LT	394	
0010	101+09	-	104+54	RT	346	
0010	105+10	-	108+70	RT	368	
0010	105+27	-	108+70	LT	344	
0010	108+81	-	109+39	LT	58	
0010	108+81	-	109+42	RT	61	
0010	109+56	-	113+99	LT	462	
0010	109+56	-	114+33	RT	444	
0010	114+20	-	114+33	LT	14	
PROJECT TOTALS =					2596	

3

CONCRETE SIDEWALK 4-INCH						
CATEGORY	STATION	TO	STATION	LOCATION	602.0405 SF	REMARKS
0010	101+34	-	101+38	LT	11	
0010	101+56	-	101+60	LT	12	
0010	103+39	-	103+43	RT	11	
0010	103+59	-	103+63	RT	11	
0010	104+22	-	104+26	RT	11	
0010	104+46	-	104+50	RT	28	
0010	106+56	-	106+60	LT	11	
0010	106+86	-	106+90	LT	11	
0010	110+58	-	110+62	RT	11	
0010	110+87	-	110+98	RT	32	
0010	111+35	-	111+39	RT	11	
0010	113+40	-	113+50	RT	37	
0010	113+41	-	113+50	LT	32	
PROJECT TOTALS =					229	

CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA

CATEGORY	STATION	LOCATION	602.0515 SF	REMARKS
0010	113+44	RT	10	
0010	113+45	LT	10	ON BADGER STREET
PROJECT TOTALS =			20	

RECONSTRUCTING INLETS

CATEGORY	STATION	LOCATION	611.0430 EACH	REMARKS
0010	104+64.58	LT 26.31'	1	REPLACE TOP AND RINGS
PROJECT TOTALS =			1	

STORM SEWER PIPE SUMMARY

			STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH 608.0312	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH 608.0324	REMARKS
CATEGORY	STATION	LOCATION	LF	LF	
0010	100+52	LT	8	-	FROM INTAKE
0010	101+01	LT	8	-	FROM INTAKE
0010	102+78	RT	8	-	FROM INTAKE
0010	102+79	LT	8	-	FROM INTAKE
0010	111+70	LT	8	-	FROM INTAKE
0010	111+71	RT	8	-	FROM INTAKE
0010	114+04	RT	8	-	NORTHEAST PIPE
0010	114+04	RT	8	-	EAST PIPE
0010	114+04	RT	-	8	SOUTH PIPE
0010	114+04	RT	8	-	SOUTHWEST PIPE
0010	114+04	RT	8	-	WEST PIPE
PROJECT TOTALS =			80	8	

3

INLET SUMMARY						
CATEGORY	STATION	LOCATION	#	INLET COVERS SPECIAL SPV.0060.03	INLETS 4-FT DIAMETER 611.3004	REMARKS
				EACH	EACH	
0010	100+51.55	LT 25.95'	101	1	1	REPLACE 6" OF RINGS AND CASTING
0010	101+00.55	LT 24.68'	102	1	1	
0010	102+78.49	RT 22.25'	105	1	1	
0010	102+79.39	LT 22.25'	104	1	1	
0010	105+15.70	RT 27.43'	-	1	-	
0010	111+70.46	LT 22.25'	109	1	1	
0010	111+71.29	RT 22.25'	110	1	1	
PROJECT TOTALS =				7	6	

ADJUSTING INLET COVERS				
CATEGORY	STATION	LOCATION	611.8115	REMARKS
			EACH	
0010	108+56.66	LT 20.76'	1	REPLACE RINGS, BADGER STREET
0010	113+70.60	RT 21.42'	1	
0010	114+23.95	LT 25.43'	1	
PROJECT TOTALS =			3	

WATER				
CATEGORY	LOCATION	MGAL	624.0100	REMARKS
0010	PROJECT	66		COMPACTION
0010	PROJECT	10		DUST CONTROL
PROJECT TOTALS =			76	

EROSION CONTROL MOBILIZATION				
LOCATION		MOBILIZATIONS EROSION CONTROL 628.1905	MOBILIZATIONS EMERGENCY EROSION 628.1910	REMARKS
		EACH	EACH	
PROJECT 5991-05-28		7	4	
PROJECT TOTALS =		7	4	

3

COVER PLATES TEMPORARY				
CATEGORY	STATION	LOCATION	611.8120.S	REMARKS
			EACH	
0010	100+51.6	LT 25.95'	1	INLET
0010	100+82.2	RT 33.5'	1	MANHOLE
0010	100+94.0	RT 19.0'	1	MANHOLE
0010	100+95.5	LT 4.8'	1	MANHOLE
0010	100+99.8	RT 25.12'	1	INLET
0010	101+00.6	LT 24.68'	1	INLET
0010	102+78.5	RT 22.25'	1	INLET
0010	102+79.4	LT 22.25'	1	INLET
0010	102+87.4	LT 4.7'	1	MANHOLE
0010	104+64.2	RT 25.79'	1	INLET
0010	104+64.6	LT 26.31'	1	INLET
0010	104+82.7	LT 4.1'	1	MANHOLE
0010	104+82.8	RT 33.2'	1	MANHOLE
0010	105+15.7	RT 27.43'	1	INLET
0010	108+69.6	LT 4.9'	1	MANHOLE
0010	109+21.4	LT 6.0'	1	MANHOLE
0010	110+75.9	LT 12.3'	1	MANHOLE
0010	110+99.9	LT 12.3'	1	MANHOLE
0010	111+49.9	LT 6.8'	1	MANHOLE
0010	111+70.5	LT 22.25'	1	INLET
0010	111+71.3	RT 22.25'	1	INLET
0010	112+21.3	LT 5.7'	1	MANHOLE
0010	113+44.3	LT 5.8'	1	MANHOLE
0010	114+03.8	RT 6.3'	1	MANHOLE
CAT 0010 TOTAL =			24	
0020	100+76.0	RT 0.3'	1	MANHOLE
0020	104+89.1	CL	1	MANHOLE
0020	109+03.0	CL	1	MANHOLE
0020	110+80.2	LT 0.2'	1	MANHOLE
0020	112+40.6	RT 3.6'	1	MANHOLE
CAT 0020 TOTAL =			5	
PROJECT TOTALS =			29	

MANHOLE SUMMARY

CATEGORY	STATION	LOCATION	#	REMOVING MANHOLES 204.0210 EACH	RECONSTRUCTING MANHOLES 611.0420 EACH	MANHOLES 4-FT DIAMETER 611.2004 EACH	MANHOLES 5-FT DIAMETER 611.2005 EACH	ADJUSTING MANHOLE COVERS 611.8110 EACH	MANHOLE COVERS SPECIAL SPV.0060.02 EACH	REMARKS
0010	100+82.2	RT 33.5'	4	-	-	-	-	-	1	6TH/STATE, STORM EAST, REPLACE 4" OF RINGS AND CASTING
0010	100+94.0	RT 19.0'	8	-	-	-	-	-	1	6TH/STATE, STORM NORTHEAST, REPLACE CASTING
0010	100+95.5	LT 4.8'	9	-	-	-	-	-	1	6TH/STATE, STORM NORTH, REPLACE 6" OF RINGS AND CASTING
0010	102+87.4	LT 4.7'	13	-	-	-	-	1	-	STORM, ADJUSTMENT ONLY
0010	104+82.7	LT 4.1'	15	-	-	-	-	-	1	6TH/VINE, STORM, REPLACE 6" OF RINGS AND CASTING
0010	104+82.8	RT 33.2'	16	-	-	-	-	-	1	6TH/VINE, STORM EAST, REPLACE 1' OF RINGS AND CASTING
0010	108+69.6	LT 4.9'	21	-	-	-	-	-	1	6TH/PINE, STORM SOUTH, REPLACE 1' OF RINGS AND CASTING
0010	109+21.4	LT 6.0'	23	-	-	-	-	-	1	6TH/PINE, STORM NORTH, REPLACE 4" OF RINGS AND CASTING
0010	110+75.9	LT 12.3'	25	-	-	-	-	-	1	STORM SOUTH 1, REPLACE 6" OF RINGS AND CASTING
0010	110+99.9	LT 12.3'	24	-	-	-	-	-	1	STORM SOUTH 2, REPLACE 6" OF RINGS AND CASTING
0010	111+49.9	LT 6.8'	26	-	-	-	-	-	1	STORM NORTH 1, REPLACE 1' OF RINGS AND CASTING
0010	112+21.3	LT 5.7'	27	-	-	-	-	-	1	STORM NORTH 2, REPLACE 6" OF RINGS AND CASTING
0010	113+44.3	LT 5.8'	28	-	-	-	-	-	1	6TH/BADGER, STORM WEST, REPLACE 1' OF RINGS AND CASTING
0010	114+03.8	RT 6.3'	30	1	-	-	1	-	1	6TH/BADGER, STORM EAST, REPLACE STRUCTURE AND CASTING
CAT 0010 TOTAL=				1	0	0	1	1	13	
0020	100+76.0	RT 0.3'	3	-	1	-	-	-	1	6TH/STATE, REPLACE TOP 2 FT OF STRUCTURE AND CASTING
0020	100+88.8	RT 35.1'	6	-	-	-	-	1	-	WATER
0020	100+89.1	LT 32.8'	7	-	-	-	-	1	-	WATER
0020	101+09.0	RT 10.6'		-	-	-	-	1	-	WATER
0020	104+89.1	CL	17	-	-	-	-	-	1	6TH/VINE, SANITARY, REPLACE CASTING
0020	109+03.0	CL	22	1	-	1	-	-	1	6TH/PINE, SANITARY, REPLACE STRUCTURE AND CASTING
0020	110+80.2	LT 0.2'	25	-	-	-	-	-	1	6TH/BADGER SANITARY, REPLACE 1' OF RINGS AND CASTING
0020	112+40.6	RT 3.6'		-	-	-	-	-	1	6TH, SANITARY, REPLACE 6" OF RINGS AND CASTING
CAT 0020 TOTAL =				1	1	1	0	3	5	
PROJECT TOTALS=				2	1	1	1	4	18	

INLET PROTECTION SUMMARY

CATEGORY	STATION	LOCATION	INLET PROTECTION TYPE A 628.7005 EACH	INLET PROTECTION TYPE B 628.7010 EACH	INLET PROTECTION TYPE C 628.7015 EACH	REMARKS
0010	100+51	RT 25'	1	-	2	*
0010	100+52	LT 26'	1	-	2	*
0010	101+00	RT 25'	1	-	2	*
0010	101+01	LT 25'	1	-	2	*
0010	102+78	RT 22'	1	1	1	*
0010	102+79	LT 22'	1	-	2	*
0010	104+64	RT 26'	1	-	2	*
0010	104+65	LT 26'	1	-	2	*
0010	105+13	LT 34'	1	-	2	*
0010	105+16	RT 27'	1	-	2	*
0010	108+57	LT 21'	1	-	2	*
0010	109+41	LT 16'	1	-	2	*
0010	111+70	LT 22'	1	-	2	*
0010	111+71	RT 22'	1	-	2	*
0010	113+71	RT 21'	1	-	2	BADGER, *
0010	114+24	LT 25'	-	-	1	BADGER, *
PROJECT TOTALS=			15	1	30	

* TYPE B & C TO BE PLACED AT START OF PROJECT. TYPE A WILL BE PLACED ONCE THE CURB IS REMOVED AND TYPE C WILL BE REPLACED AFTER THE NEW CURB IS INSTALLED

TRACKING PADS

CATEGORY	LOCATION	628.7560 EACH	REMARKS
0010	UNDISTRIBUTED	1	
PROJECT TOTALS=		1	

ROCK BAGS

CATEGORY	STATION	LOCATION	628.7570 EACH	REMARKS
0010	108+55	RT	1	
0010	108+62	RT	1	
0010	108+70	RT	1	
0010	108+87	RT	1	
0010	109+05	RT	1	
0010	109+19	RT	1	
0010	109+31	RT	1	
0010	109+42	RT	1	
0010	109+61	RT	1	
0010	109+69	RT	1	
0010	109+94	RT	1	
0010	110+05	RT	1	
0010	110+29	RT	1	
0010	110+43	RT	1	
PROJECT TOTALS=			14	

SALVAGED TOPSOIL, SEEDING, FERTILIZER, AND EROSION MAT

CATEGORY	STATION	TO	STATION	LOCATION	SALVAGED TOPSOIL 625.0500 SY	EROSION MAT URBAN CLASS I TYPE B 628.2008 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE TYPE NO. 40 630.0140 LB	REMARKS
0010	113+01		113+40	RT	16	16	*	*	6TH STREET
0010	113+50		113+99	LT	24	24	*	*	6TH STREET
0010	113+63		113+97	RT	14	14	*	*	BADGER STREET
0010	114+10		114+33	RT	12	12	*	*	BADGER STREET
0010	UNDISTRIBUTED			LT/RT	17	17	0.1	2	
PROJECT TOTALS=					67	67	0.1	2	

*DUE TO SMALL QUANTITY THESE LOCATION AMOUNTS ARE INCLUDED WITHIN THE UNDISTRIBUTED AMOUNT.

PERMANENT SIGNING SUMMARY (RT-NB)

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIGN MESSAGE	SIGN SIZE IN INCHES	REMOVING SIGNS TYPE II =I33 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	POSTS STEEL U-CHANNEL 14-FT SPV.0060.09 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	MOUNTED ON SAME POST AS SIGN NUMBER	REMARKS
0010	1+01	100+39	RT	R1-1	STOP	30x30	1			5.18		102	MOUNTED ON LP
0010	1+02	100+39	RT	R1-3P	ALL WAY	18x6	1			0.75		101	MOUNTED ON LP
0010	1+03	100+95	RT	R1-1	STOP	30x30	1	1	1	5.18		104	
0010	1+04	100+95	RT	R1-3P	ALL WAY	18x6	1			0.75		103	
0010	1+05	101+91	RT	R7-1B	NO PARKING ANY TIME (WITH DOUBLE ARROW)	12x18	1						MOUNTED ON LP
0010	1+06	103+66	RT	-	NO PARKING LOADING ZONE 8AM TO 9PM EXCEPT SAT. SUN. & HOL.	12x18	1	1	1				
0010	1+07	104+13	RT	-	NO PARKING LOADING ZONE 8AM TO 9PM EXCEPT SAT. SUN. & HOL.	12x18	1	1	1			108	
0010	1+08	104+13	RT	-	10 MIN. LIMIT PAYMENT DROP OFF CREDIT BUREAU DATA	12x18	1					107	
0010	1+09	105+15	RT	R1-1	STOP	30x30	1			5.18			MOUNTED ON LP
0010	2+01	110+18	RT	-	2 HOUR PARKING 8AM TO 6PM EXCEPT SAT. SUN. & HOL.	12x18	1						MOUNTED ON LP
0010	2+02	111+42	RT	-	2 HOUR PARKING 8AM TO 6PM EXCEPT SAT. SUN. & HOL.	12x18	1						MOUNTED ON LP
0010	3+01	112+37	RT	-	2 HOUR PARKING 8AM TO 6PM EXCEPT SAT. SUN. & HOL.	12x18	1						MOUNTED ON LP
0010	3+02	112+93	RT	W1-10R	HORIZONTAL CURVE WITH INTERSECTION (SYMBOL)	24x24			1		4.00	303	NEW SIGN
0010	3+03	112+93	RT	W13-1	15 MPH	18x18					2.25	302	NEW SIGN
0010	3+04	113+36	RT	R7-1L	NO PARKING (WITH LEFT ARROW)	12x18	1					306	MOUNTED ON LP
0010	3+05	113+36	RT	-	HEAR HERE	12x15	1					304	SAME BANDS AS HEAR HERE
0010	3+06	113+36	RT	-	HEAR HERE	12x15	1					305	SAME BANDS AS HEAR HERE
0010	3+07	114+23	RT	R7-1R	NO PARKING (WITH RIGHT ARROW)	12x18	1						MOUNTED ON LP

PAGE SUBTOTAL = 17 3 4 17.04 6

3

3

PERMANENT SIGNING SUMMARY (LT-SB)

CATEGORY	SIGN NUMBER	STATION	LOCATION	SIGN CODE	SIGN MESSAGE	SIGN SIZE IN INCHES	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	POSTS STEEL U-CHANNEL 14-FT SPV.0060.09 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	MOUNTED ON SAME POST AS SIGN NUMBER	REMARKS
0010	3+08	114+58	LT	W1-10L	HORIZONTAL CURVE WITH INTERSECTION (SYMBOL)	24x24			1		4.00	309	NEW SIGN
0010	3+09	114+58	LT	W13-1	15 MPH	18x18					2.25	308	NEW SIGN
0010	3+10	114+31	LT	R3-1	NO RIGHT TURN (SYMBOL)	24x24	1			4		314	MOUNTED ON LP
0010	3+11	114+31	LT	R7-53	NO PARKING THIS SIDE OF STREET	12x18	1					310	MOUNTED ON LP
0010	3+12	114+31	LT	-	HEAR HERE	12x15	1					311	SAME BANDS AS HEAR HERE
0010	3+13	114+31	LT	-	HEAR HERE	12x15	1					312	SAME BANDS AS HEAR HERE
0010	3+14	114+21	LT	R5-1	DO NOT ENTER (SYMBOL)	30x30	1	1	1	6.25			
0010	3+15	113+92	LT	R5-1	DO NOT ENTER (SYMBOL)	30x30	1	1	1	6.25		316	
0010	3+16	113+92	LT	R1-1	STOP	30x30	1			5.18		315	
0010	3+17	113+65	LT	R5-1	DO NOT ENTER (SYMBOL)	30x30	1					318	MOUNTED ON LP
0010	3+18	113+65	LT	R1-1	STOP	30x30	1			5.18		317	MOUNTED ON LP
0010	3+19	113+48	LT	W1-6	LEFT ARROW (SYMBOL, BLACK ON YELLOW)	36x18	1	1	1		4.50		
0010	3+20	113+02	LT	R7-1B	NO PARKING (SYMBOL WITH DOUBLE ARROW)	12x18	1	1					
0010	3+21	112+23	LT	R7-1B	NO PARKING (SYMBOL WITH DOUBLE ARROW)	12x18	1	1					
0010	3+22	111+66	LT	R7-8R	RESERVED PARKING HANDICAP (WITH RIGHT ARROW)	12x18	1	1	1			323	
0010	3+23	111+66	LT	-	VIOLATORS WILL BE TICKETED \$100 FORFEITURE CITY ORDINANCE 9.25(b)(3) WIS. STATUTE 46.505(2)	12x6	1					322	
0010	2+03	109+93	LT	R1-5L	YIELD HERE TO PEDESTRIANS (SYMBOLS)	18x18	1	1	1	2.25			
0010	2+04	109+85	LT	-	2 HOUR PARKING 8 AM TO 6PM EXCEPT SAT. SUN. & HOL.	12x18	1						MOUNTED ON LP
0010	2+05	108+22	LT	R7-1R	NO PARKING (WITH RIGHT ARROW)	12x18	1	1	1				
0010	2+06	107+59	LT	-	2 HOUR PARKING 8 AM TO 6PM EXCEPT SAT. SUN. & HOL.	12x18	1						MOUNTED ON LP
0010	2+07	106+47	LT	-	2 HOUR PARKING 8 AM TO 6PM EXCEPT SAT. SUN. & HOL.	12x18	1						MOUNTED ON LP
0010	1+10	104+66	LT	R1-1	STOP	30x30	1			5.18		111	MOUNTED ON LP
0010	1+11	104+66	LT	R3-4	NO U-TURN (SYMBOL)	24x24	1					110	MOUNTED ON LP
0010	1+12	103+92	LT	-	2 HOUR PARKING 8AM TO 6PM EXCEPT SAT. SUN. & HOL., 1 HOUR PARKING 2AM TO 8AM EVERYDAY	12x18	1						MOUNTED ON LP
0010	1+13	102+70	LT	-	2 HOUR PARKING 8AM TO 6PM EXCEPT SAT. SUN. & HOL., 1 HOUR PARKING 2AM TO 8AM EVERYDAY	12x18	1						MOUNTED ON LP
0010	1+14	101+13	LT	R1-1	STOP	30x30	1	1	1	5.18		115	
0010	1+15	101+13	LT	R1-3	4-WAY	18x6	1					114	REMOVE SIGN
0010	1+16	100+49	LT	R1-3P	ALL WAY	18x6				0.75			NEW SIGN
0010	1+17	100+49	LT	R1-1	STOP	30x30	1			5.18			MOUNTED ON LP
0010	1+18	100+49	LT	R1-3P	ALL WAY	18x6				0.75			NEW SIGN, MOUNT ON LP
0010	1+19	100+40	LT	-	15 MIN PARKING 8AM TO 6PM, EXCEPT SAT. SUN. & HOL. 1 HOUR PARKING 2AM TO 8AM EXCEPT SAT	12x18	1					120	MOUNTED ON LP
0010	1+20	100+40	LT	-	LEFT ARROW (SYMBOL)	12x6	1					119	MOUNTED ON LP
0010	1+21	100+09	LT	-	NO PARKING (SYMBOL WITH LEFT ARROW)	12x18	1	1	1			123	
0010	1+22	100+09	LT	-	15 MIN PARKING 8AM TO 6PM, EXCEPT SAT. SUN. & HOL. 1 HOUR PARKING 2AM TO 8AM EXCEPT SAT	12x18	1					121	
0010	1+23	100+09	LT	-	RIGHT ARROW (SYMBOL)	12x6	1					122	

PAGE SUBTOTAL =	28	9	8	46.15	11
PROJECT TOTALS =	45	12	12	63.19	17

PROJECT NO: 5991-05-28

HWY: 6TH STREET

COUNTY: LA CROSSE

MISCELLANEOUS QUANTITIES

SHEET

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3

FIELD OFFICE TYPE B			TRAFFIC CONTROL SUMMARY													
LOCATION		642.5001 EACH	REMARKS	CATEGORY		LOCATION		TRAFFIC CONTROL DRUMS 643.0300		TRAFFIC CONTROL BARRICADES TYPE III 643.0420		TRAFFIC CONTROL WARNING LIGHTS TYPE A 643.0705		TRAFFIC CONTROL SIGNS 643.0900		REMARKS
PROJECT 5991-05-28		1		0010	6TH ST SOUTH OF PROJECT		-	3	273	4	364	4	364			
PROJECT TOTALS =		1		0010	STATE ST NORTH OF PROJECT		-	3	273	4	364	3	273			
				0010	STATE ST SOUTH OF PROJECT		-	3	273	4	364	3	273			
				0010	VINE ST NORTH OF PROJECT		-	3	273	4	364	3	273			
				0010	VINE ST SOUTH OF PROJECT		-	3	273	4	364	3	273			
				0010	BADGER ST		-	3	273	4	364	3	273			
				0010	6TH ST SOUTH OF PROJECT		-	-	-	-	-	6	546			DETOUR SIGN
				0010	7TH ST AND MAIN ST INTERSECTION		-	-	-	-	-	8	728			DETOUR SIGN
				0010	7TH ST AND VINE ST INTERSECTION		-	-	-	-	-	4	364			DETOUR SIGN
				0010	BADGER ST		-	-	-	-	-	6	546			DETOUR SIGN
				0010	UNDISTRIBUTED		500		164	-	219	-	392			
				PROJECT TOTALS =			500		1802		2403		4305			

3

PAVEMENT MARKING SUMMARY										
MARKING LINE EPOXY 4-INCH 646.1020					MARKING STOP LINE EPOXY 18-INCH 646.6120		MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH 646.7420			
					3' LINE, 9' GAP					
					YELLOW	WHITE	WHITE			
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	LF	LF	LF	REMARKS
0010	100+00	-	100+39	LT/RT	10	-	-	-	-	
0010	100+39		101+09	LT/RT	-	-	-	21	187	
0010	101+09		104+57	LT/RT	90	1185	50	24	-	
0010	104+57		105+22	LT/RT	-	-	-	-	200	
0010	105+22		108+71	LT/RT	90	1220	50	-	-	
0010	108+71		108+81	LT/RT	-	-	-	-	58	
0010	108+81		109+43	LT/RT	20	-	-	-	-	
0010	109+43		109+53	LT/RT	-	-	-	-	58	
0010	109+53		113+42	LT/RT	100	1480	-	-	-	BADGER STREET
0010	113+42		113+48	LT/RT	-	-	-	-	94	BADGER STREET
0010	113+48		114+33	LT/RT	25	195	-	-	-	BADGER STREET
0010	9+52 A		9+73 A	LT/RT	-	-	-	20	88	
0010	10+27 A		10+46 A	LT/RT	-	-	-	20	87	
0010	19+47 B		19+73 B	LT/RT	-	-	-	22	98	
0010	20+27 B		20+47 B	LT/RT	-	-	-	22	97	
SUBTOTALS =					335	4080	100	129	967	
PROJECT SUBTOTALS =						4515		129	967	

PROJECT NO: 5991-05-28	HWY: 6TH STREET	COUNTY: LA CROSSE	MISCELLANEOUS QUANTITIES	SHEET	E
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PAVEMENT MARKING SUMMARY - BIKE LANE ARROWS AND SYMBOLS

CATEGORY	STATION	LOCATION	MARKING	MARKING	REMARKS
			ARROW	SYMBOL	
EACH	EACH		EPOXY	EPOXY	
			646.5020	646.5220	
0010	101+27	RT		1	BIKE LANE SYMBOL
0010	101+39	RT	1		BIKE LANE ARROW
0010	102+11	LT	1		BIKE LANE ARROW
0010	102+23	LT		1	BIKE LANE SYMBOL
0010	103+27	RT		1	BIKE LANE SYMBOL
0010	103+39	RT	1		BIKE LANE ARROW
0010	104+11	LT	1		BIKE LANE ARROW
0010	104+23	LT		1	BIKE LANE SYMBOL
0010	105+55	RT		1	BIKE LANE SYMBOL
0010	105+67	RT	1		BIKE LANE ARROW
0010	106+30	LT	1		BIKE LANE ARROW
0010	106+42	LT		1	BIKE LANE SYMBOL
0010	107+70	RT		1	BIKE LANE SYMBOL
0010	107+82	RT	1		BIKE LANE ARROW
0010	108+30	LT	1		BIKE LANE ARROW
0010	108+42	LT		1	BIKE LANE SYMBOL
0010	109+14	RT		1	SHARED BIKE LANE SYMBOL
0010	109+14	LT		1	SHARED BIKE LANE SYMBOL
0010	109+81	LT	1		BIKE LANE ARROW
0010	109+82	RT		1	BIKE LANE SYMBOL
0010	109+94	LT		1	BIKE LANE SYMBOL
0010	109+94	RT	1		BIKE LANE ARROW
0010	111+21	LT	1		BIKE LANE ARROW
0010	111+33	LT		1	BIKE LANE SYMBOL
0010	111+51	RT		1	BIKE LANE SYMBOL
0010	111+64	RT	1		BIKE LANE ARROW
0010	113+14	LT	1		BIKE LANE ARROW
0010	113+26	LT		1	BIKE LANE SYMBOL
0010	114+13	RT		1	SHARED BIKE LANE SYMBOL
PROJECT TOTALS =			13	16	

MARKING CURB EPOXY

CATEGORY	STATION	TO	STATION	LOCATION	646.8120	REMARKS
					LF	
0010	100+28	-	100+55	LT	48	STATE STREET, SW QUADRANT
0010	100+28	-	100+55	RT	48	STATE STREET, SE QUADRANT
0010	100+94	-	101+24	LT	49	STATE STREET, NW QUADRANT
0010	100+94	-	101+24	RT	49	STATE STREET, NE QUADRANT
0010	101+34	-	101+38	LT	4	DRIVEWAY
0010	101+56	-	101+60	LT	4	DRIVEWAY
0010	103+36	-	103+40	RT	16	DRIVEWAY
0010	103+64	-	103+68	RT	4	DRIVEWAY
0010	104+15	-	104+25	RT	10	DRIVEWAY
0010	104+42	-	104+69	LT	47	VINE STREET, SW QUADRANT
0010	104+48	-	104+69	RT	40	VINE STREET, SE QUADRANT
0010	105+12	-	105+37	LT	43	VINE STREET, NW QUADRANT
0010	105+12	-	105+37	RT	43	VINE STREET, NE QUADRANT
0010	110+58	-	110+62	RT	4	DRIVEWAY
0010	110+87	-	110+98	RT	11	DRIVEWAY
0010	111+35	-	111+39	RT	4	DRIVEWAY
0010	112+34	-	112+37	LT	4	DRIVEWAY
0010	112+52	-	112+56	LT	4	DRIVEWAY
0010	113+11		113+97	RT	68	CROSSWALK
0010	113+27	-	113+63	LT	37	CROSSWALK
0010	114+10		114+24	RT	14	BADGER STREET, DRIVEWAY
PROJECT TOTALS =					551	

CONSTRUCTION STAKING STORM SEWER

CATEGORY	STATION	LOCATION	650.4000	REMARKS
			EACH	
0010	100+51.55	LT 25.95'	1	INLET, 6TH STREET
0010	100+99.76	RT 25.12'	1	INLET, 6TH STREET
0010	101+00.55	LT 24.68'	1	INLET, 6TH STREET
0010	102+78.49	RT 22.25'	1	INLET, 6TH STREET
0010	102+79.39	LT 22.25'	1	INLET, 6TH STREET
0010	104+64.18	RT 25.79'	1	INLET, 6TH STREET
0010	104+64.58	LT 26.31'	1	INLET, 6TH STREET
0010	105+15.70	RT 27.43'	1	INLET, 6TH STREET
0010	111+70.46	LT 22.25'	1	INLET, 6TH STREET
0010	111+71.29	RT 22.25'	1	INLET, 6TH STREET
0010	114+03.80	RT 6.3'	1	MANHOLE, BADGER STREET
PROJECT TOTALS =			11	

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	CONSTRUCTION STAKING	CONSTRUCTION STAKING	CONSTRUCTION STAKING	REMARKS
					650.4500	650.7000	650.9920	
					LF	LF	LF	
0010	100+00	-	114+00	LT/RT	1400	1400	1400	6TH STREET
0010	9+62 A	-	9+80 A	LT/RT	18	18	18	STATE STREET
0010	10+20 A	-	10+36 A	LT/RT	16	16	16	STATE STREET
0010	19+57 B	-	19+79 B	LT/RT	22	22	22	VINE STREET
0010	20+21 B	-	20+37 B	LT/RT	16	16	16	VINE STREET
0010	29+67 C	-	29+88 C	LT/RT	21	21	21	PINE STREET
0010	113+81	-	114+43	LT/RT	62	62	62	BADGER STREET
PROJECT TOTALS =					1555	1555	1555	

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 5991-05-28

LOCATION	650.9910	REMARKS
	LS	
PROJECT 5991-05-28	1	
PROJECT TOTALS =	1	

CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 01. 5991-05-28

CATEGORY	LOCATION	650.8500	REMARKS
		LS	
0010	PROJECT 5991-05-28	1	
PROJECT TOTALS =		1	

LIGHTING SUMMARY

CATEGORY	FROM	TO	CONDUIT RIGID	FURNISH	REMARKS
			NONMETALLIC	AND	
			SCHEDULE 80 2-INCH	INSTALL	
			652.0325	SPV.0090.01	
			LF	LF	
0010	EX SL 201	- SL 101	22	192	
0010	SL 101	- SL 103	56	396	
0010	SL 103	- SL 105	55	390	
0010	SL 105	- SL 107	55	390	
0010	SL 107	- SL 109	71	486	
0010	SL 109	- SL 111	86	576	
0010	SL 111	- SL 113	17	162	
0010	EX SL 202	- SL 104	56	396	
0010	SL 104	- SL 106	55	390	
0010	SL 106	- SL 108	55	390	
0010	SL 108	- SL 110	71	486	
0010	SL 110	- SL 112	86	576	
0010	SL 112	- EX SL 203	23	198	
0010	SL 114	- SL 116	58	408	
0010	SL 116	- SL 118	59	414	
0010	SL 118	- SL 120	54	384	
0010	SL 120	- SL 122	58	408	
0010	SL 122	- SL 124	55	390	
0010	SL 124	- EX SL 204	57	402	
0010	EX SL 205	- SL 115	23	198	
0010	SL 115	- SL 117	58	408	
0010	SL 117	- SL 119	59	414	
0010	SL 119	- SL 121	54	384	
0010	SL 121	- SL 123	58	408	
0010	SL 123	- SL 125	55	390	
0010	SL 126	- SL 127	99	654	
0010	SL 127	- SL 128	64	444	
0010	SL 128	- SL 130	66	456	
0010	SL 130	- SL 132	65	450	
0010	SL 132	- SL 134	64	444	
0010	SL 134	- EX SL 208	50	360	
0010	SL 129	- SL 131	64	444	
0010	SL 131	- SL 133	64	444	
0010	SL 133	- EX SL 207	65	450	
			1957	13782	

SAWING SUMMARY							
					SAWING ASPHALT 690.0150	SAWING CONCRETE 690.0250	
CATEGORY	STATION	TO	STATION	LOCATION	LF	LF	REMARKS
0010	100+00	-		RT/LT	-	43	MAINLINE
0010	100+00	-	100+57	RT	-	70	
0010	100+00	-	100+57	LT	-	67	
0010	9+51 A	-		RT/LT	35	-	STATE STREET
0010	10+46 A	-		RT/LT	35	-	STATE STREET
0010	100+92	-	101+75	LT	-	97	
0010	100+92	-	104+54	RT	-	384	
0010	101+79	-	102+10	LT	-	30	
0010	102+14	-	102+45	LT	-	30	
0010	102+50	-	102+80	LT	-	30	
0010	102+85	-	103+17	LT	-	33	
0010	103+22	-	103+57	LT	-	35	
0010	103+62	-	104+00	LT	-	38	
0010	104+04	-	104+34	LT	-	30	
0010	104+39	-	104+71	LT	-	45	
0010	19+47 B	-		RT/LT	39	-	VINE STREET
0010	20+47 B	-		RT/LT	39	-	VINE STREET
0010	105+11	-	108+69	RT	-	377	
0010	105+27	-	107+46	LT	-	226	
0010	107+52	-	108+69	LT	-	123	
0010	108+69	-		RT/LT	-	30	MAINLINE
0010	108+81	-		RT/LT	-	29	MAINLINE
0010	108+81	-	109+42	RT	-	61	
0010	108+81	-	109+42	LT	-	63	PINE STREET
0010	109+42	-		RT/LT	-	28	MAINLINE
0010	109+56	-		RT/LT	-	31	MAINLINE
0010	109+56	-	113+16	RT	-	347	
0010	109+56	-	111+87	LT	-	254	
0010	112+37	-	112+52	LT	-	16	
0010	113+40	-	113+47	RT	-	8	
0010	113+40	-	113+99	LT	-	68	
0010	113+99	-		RT/LT	-	68	
0010	113+97	-	114+10	RT	-	13	BADGER STREET
0010	114+20	-	114+33	LT	-	20	BADGER STREET
0010	114+43	-		RT/LT	38	-	BADGER STREET
PROJECT TOTALS =					186	2694	

SEISMOGRAPH						
CATEGORY	STATION	TO	STATION	LOCATION	999.1000.S LS	REMARKS
0010	100+00	-	114+43	LT & RT	1	
PROJECT TOTALS =					<u>1</u>	

CRACK AND DAMAGE SURVEY						
CATEGORY	STATION	TO	STATION	LOCATION	999.1500.S LS	REMARKS
0010	100+00	-	114+43	LT & RT	1	
PROJECT TOTALS =					1	

ADJUSTING WATER VALVES				
CATEGORY	STATION	LOCATION	SPV.0060.01 EACH	REMARKS
0020	9+59 A	LT 13'	1	STATE STREET
0020	9+67 A	LT 21'	1	STATE STREET, CURB STOP
0020	102+54	RT 12.5'	1	6TH STREET
0020	103+94	RT 12.5'	1	6TH STREET
0020	104+43	RT 12'	1	6TH STREET
0020	19+61 B	LT 10.5'	1	VINE STREET
0020	19+67 B	LT 12'	1	VINE STREET
0020	20+31 B	LT 12'	1	VINE STREET
0020	20+35 B	LT 19'	1	VINE STREET
0020	108+64	RT 10'	1	6TH STREET
0020	108+66	LT 25'	1	6TH STREET
0020	108+70	RT 12'	1	6TH STREET
0020	109+34	RT 12'	1	6TH STREET
0020	109+71	RT 13'	1	6TH STREET
0020	109+76	RT 14'	1	6TH STREET
0020	109+79	RT 14'	1	6TH STREET
0020	113+20	RT 22.5'	1	6TH STREET
0020	113+20	RT 12'	1	6TH STREET
0020	113+80	RT 12'	1	6TH STREET
PROJECT TOTALS =			19	

TRENCH GRATE SUMMARY

CATEGORY	STATION	LOCATION	REPLACE DECORATIVE TRENCH GRATE SPV.0060.04	SALVAGE DECORATIVE TRENCH GRATE SPV.0060.05	REMARKS
			EACH	EACH	
0010	108+55	RT	-	1	
0010	108+62	RT	-	1	
0010	108+70	RT	-	1	
0010	108+87	RT	-	1	
0010	109+05	RT	-	1	
0010	109+19	RT	-	1	
0010	109+31	RT	-	1	
0010	109+42	RT	-	1	
0010	109+61	RT	-	1	
0010	109+69	RT	-	1	
0010	109+94	RT	1	-	
0010	110+05	RT	1	-	
0010	110+29	RT	1	-	
0010	110+43	RT	1	-	
PROJECT TOTALS =			4	10	

CONCRETE PAVEMENT JOINT LAYOUT

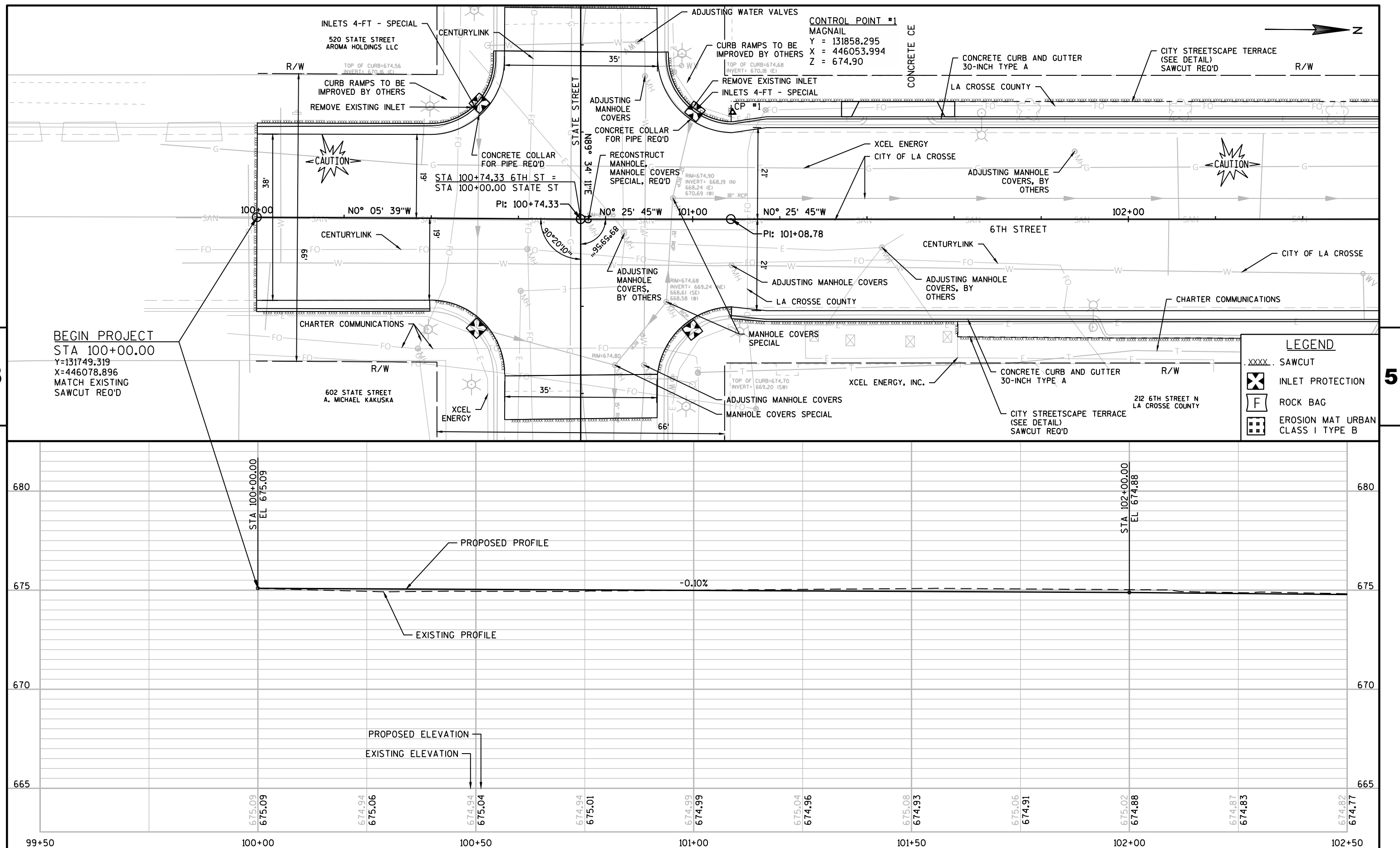
CATEGORY	LOCATION	SPV.0105.01 LS	REMARKS
0010	PROJECT 5991-05-28	1	
PROJECT TOTALS =		1	

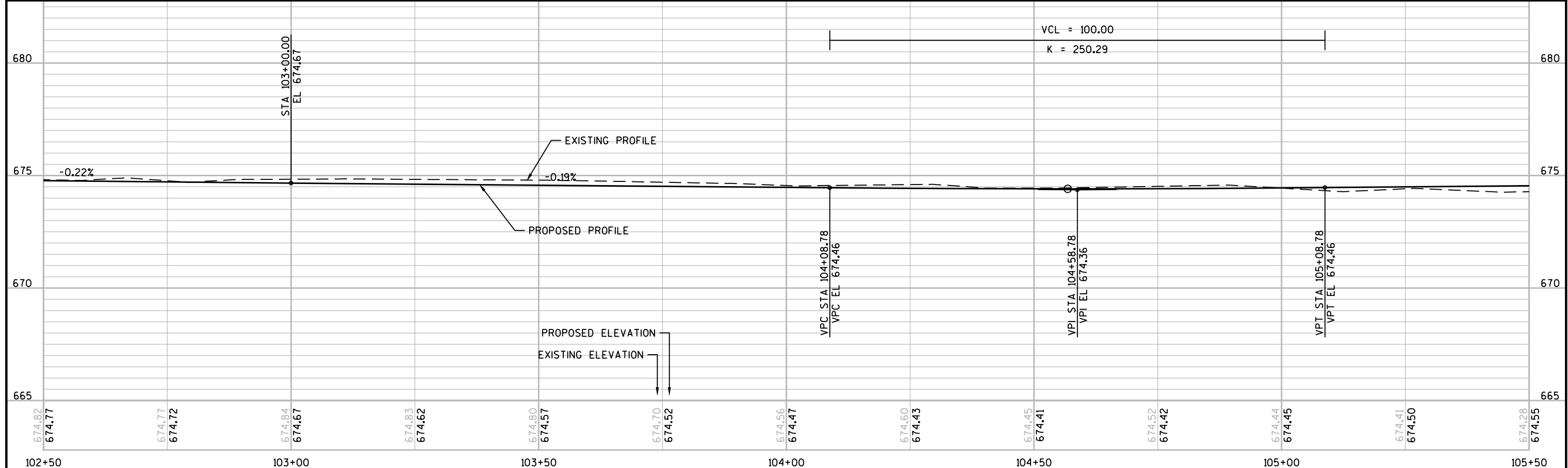
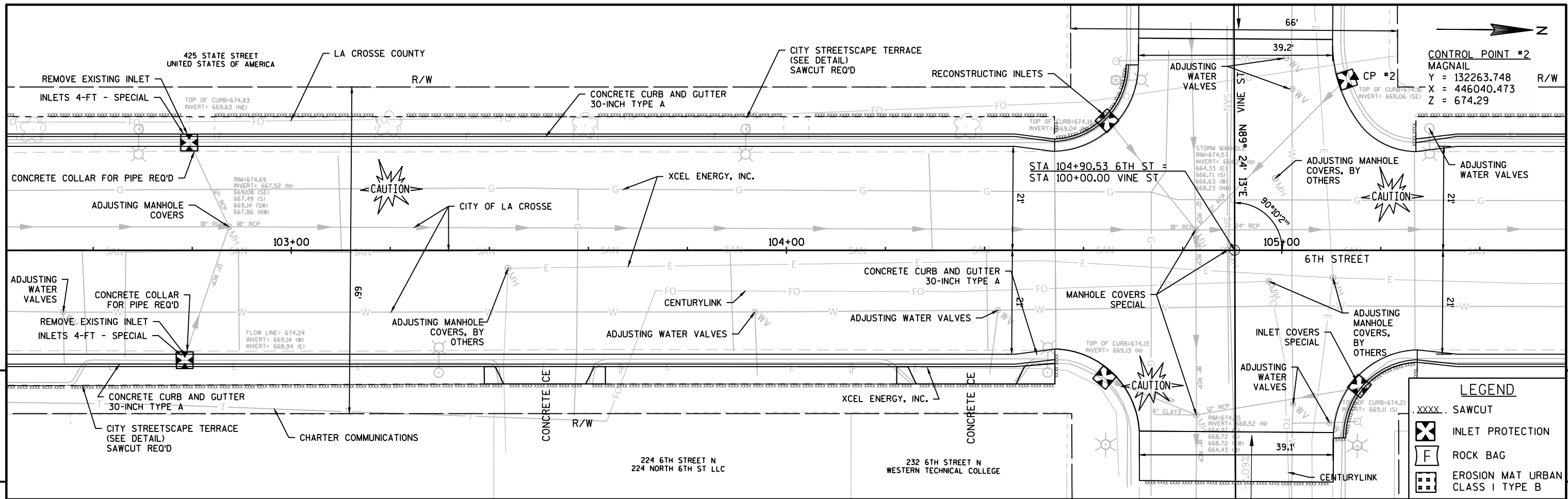
DECORATIVE TERRACE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	DECORATIVE TERRACE SPV.0165.01 SF	GEOTEXTILE TYPE DF SCHEDULE A 645.0111 SY	REMARKS
0010	101+09	-	101+34	LT	88	10	
0010	101+60	-	101+74	LT	49	6	
0010	101+61	-	103+39	RT	624	70	
0010	101+79	-	102+09	LT	103	12	
0010	102+14	-	102+45	LT	103	12	
0010	102+50	-	103+17	LT	232	26	
0010	103+22	-	103+57	LT	121	14	
0010	103+62	-	104+34	LT	251	28	
0010	103+63	-	104+22	RT	206	23	
0010	104+39	-	104+54	LT	51	6	
0010	105+27	-	106+56	LT	453	51	
0010	105+27	-	108+52	RT	1157	129	
0010	106+90	-	107+48	LT	203	23	
0010	107+53	-	108+71	LT	503	56	
0010	108+81	-	108+99	LT	148	17	
0010	109+29	-	109+43	LT	105	12	
0010	109+53	-	112+34	LT	1124	125	
0010	111+39	-	113+01	RT	535	60	
0010	112+56	-	113+41	LT	297	33	
PROJECT TOTALS =					6353	713	

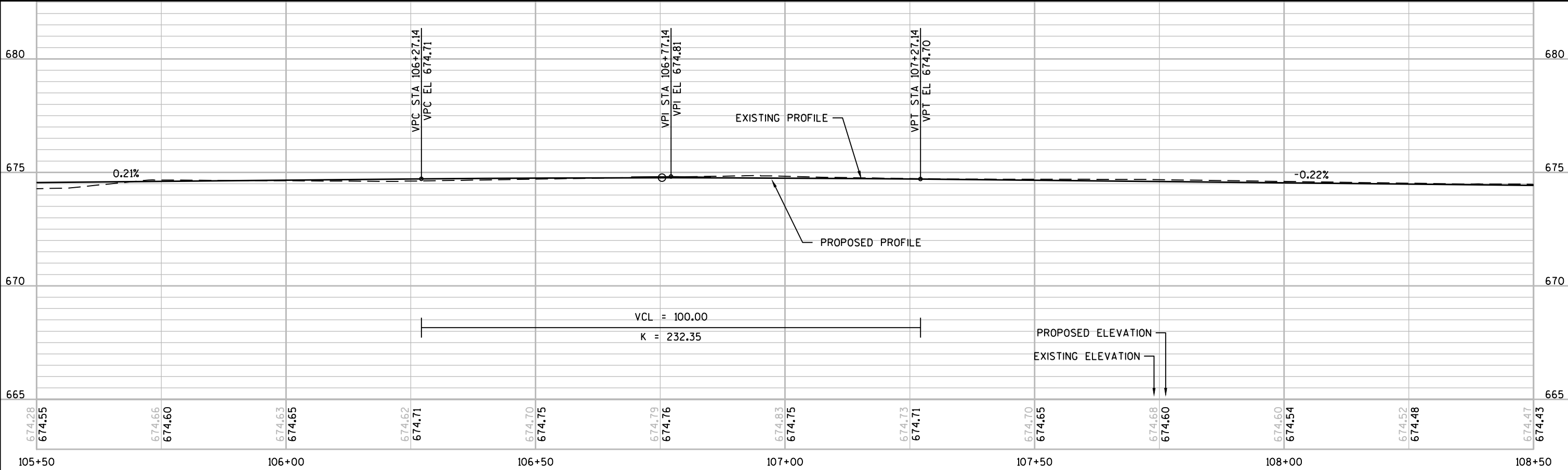
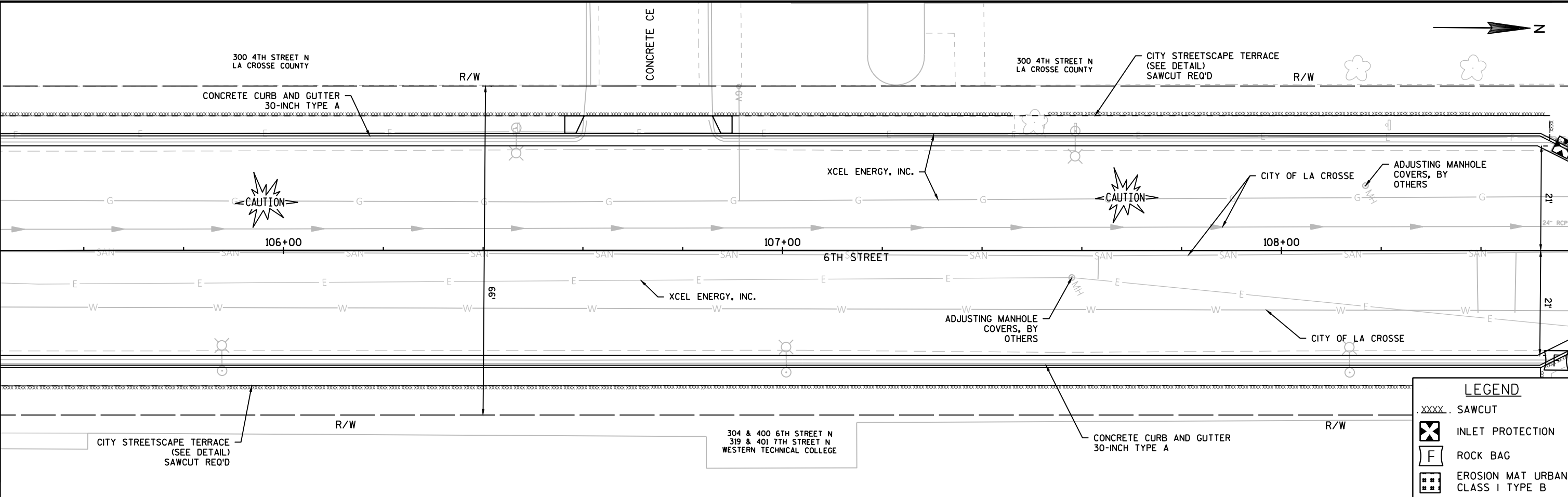
LIGHT POLE SUMMARY

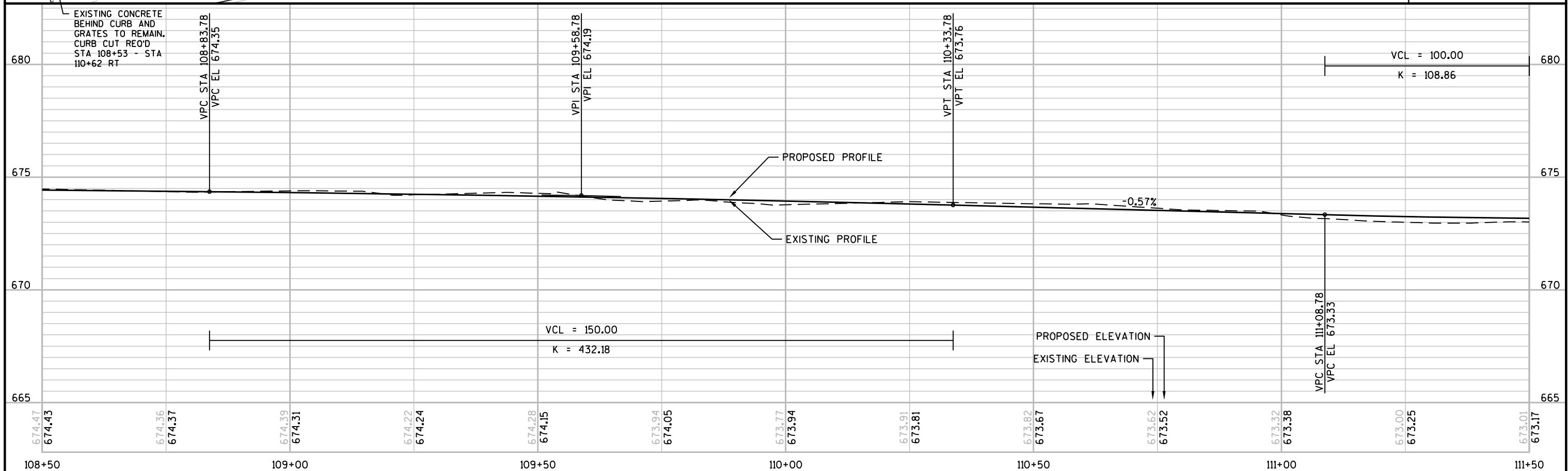
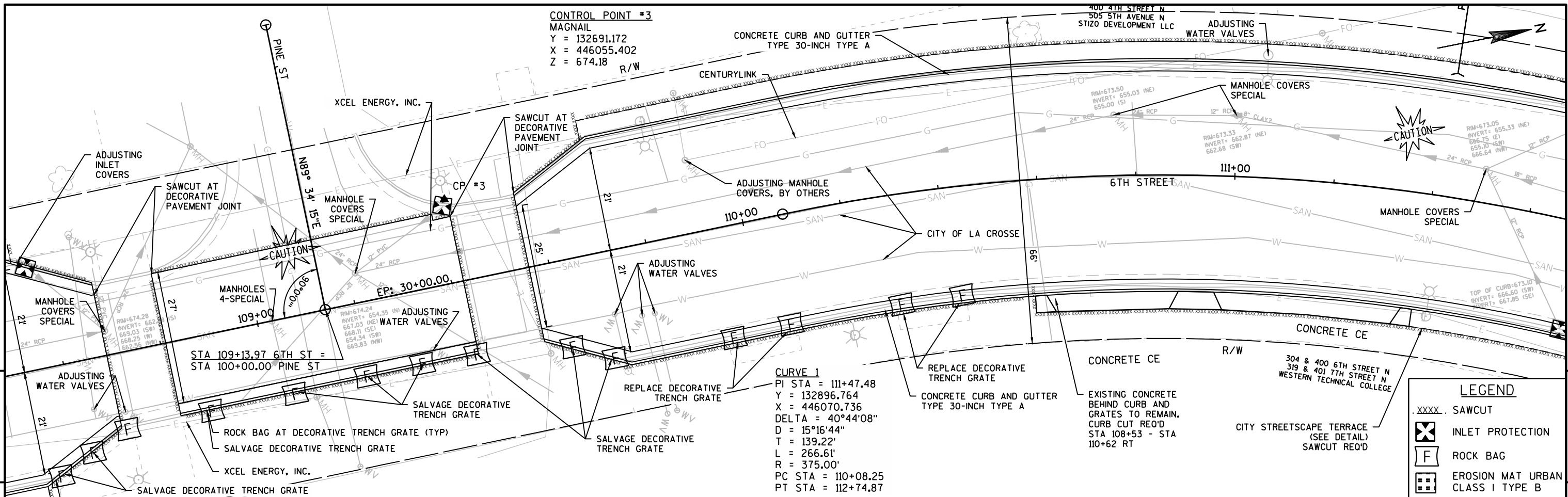
				MOVE		ELECTRICAL			
				DECORATIVE	DECORATIVE	DECORATIVE		WIRE	
				LIGHT POLE	LIGHT POLE	LIGHTING	DECORATIVE	LIGHTING	
				SPV.0060.06	SPV.0060.07	SPV.0060.08	SPV.0060.10	655.0610	
CATEGORY	STRUCTURE	STATION	LOCATION	EACH	EACH	EACH	EACH	LF	REMARKS
	I.D.								
0010	EX SL 201	100+98	LT	-	1	-	1	93	
0010	EX SL 202	101+11	RT	-	1	-	1	93	
0010	EX SL 203	104+64	RT	-	1	-	1	93	
0010	EX SL 204	108+70	LT	-	1	-	1	93	
0010	EX SL 205	109+42	RT	-	1	-	1	93	
0010	EX SL 207	102+69	RT	-	1	-	1	93	
0010	EX SL 208	101+92	LT	-	1	-	1	93	
0010	SL 101	101+11	LT	1	-	1	1	93	
0010	SL 103	101+66	LT	1	-	1	1	93	
0010	SL 105	102+31	LT	1	-	1	1	93	
0010	SL 107	102+96	LT	1	-	1	1	93	
0010	SL 109	103+67	LT	1	-	1	1	93	
0010	SL 111	104+53	LT	1	-	1	1	93	
0010	SL 113	104+65	LT	1	-	1	1	93	
0010	SL 114	105+30	LT	1	-	1	1	93	
0010	SL 116	105+88	LT	1	-	1	1	93	
0010	SL 118	106+47	LT	1	-	1	1	93	
0010	SL 120	107+01	LT	1	-	1	1	93	
0010	SL 122	107+59	LT	1	-	1	1	93	
0010	SL 124	108+14	LT	1	-	1	1	93	
0010	SL 126	109+84	LT	1	-	1	1	93	
0010	SL 127	110+79	LT	1	-	1	1	93	
0010	SL 128	111+43	LT	1	-	1	1	93	
0010	SL 130	112+07	LT	1	-	1	1	93	
0010	SL 132	112+71	LT	1	-	1	1	93	
0010	SL 134	113+35	LT	1	-	1	1	93	
0010	SL 133	112+71	RT	1	-	1	1	93	
0010	SL 131	112+07	RT	1	-	1	1	93	
0010	SL 129	111+43	RT	1	-	1	1	93	
0010	SL 125	108+14	RT	1	-	1	1	93	
0010	SL 123	107+59	RT	1	-	1	1	93	
0010	SL 121	107+01	RT	1	-	1	1	93	
0010	SL 119	106+47	RT	1	-	1	1	93	
0010	SL 117	105+88	RT	1	-	1	1	93	
0010	SL 112	104+53	RT	1	-	1	1	93	
0010	SL 110	103+67	RT	1	-	1	1	93	
0010	SL 108	102+96	RT	1	-	1	1	93	
0010	SL 106	102+31	RT	1	-	1	1	93	
0010	SL 104	101+66	RT	1	-	1	1	93	
PROJECT TOTALS =				32	7	32	39	3627	

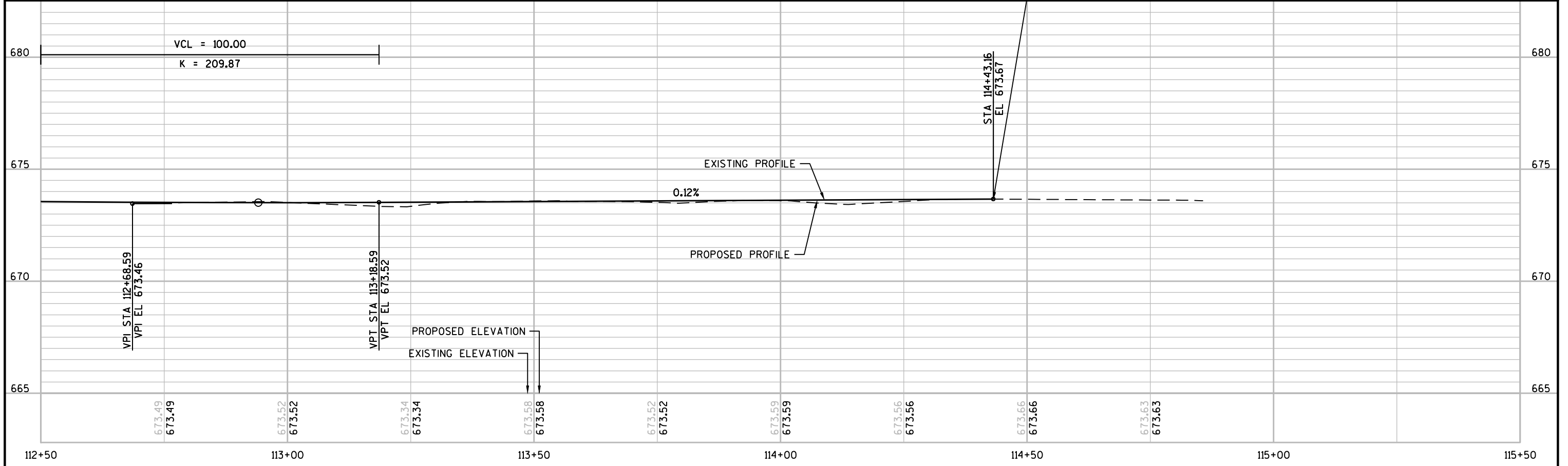
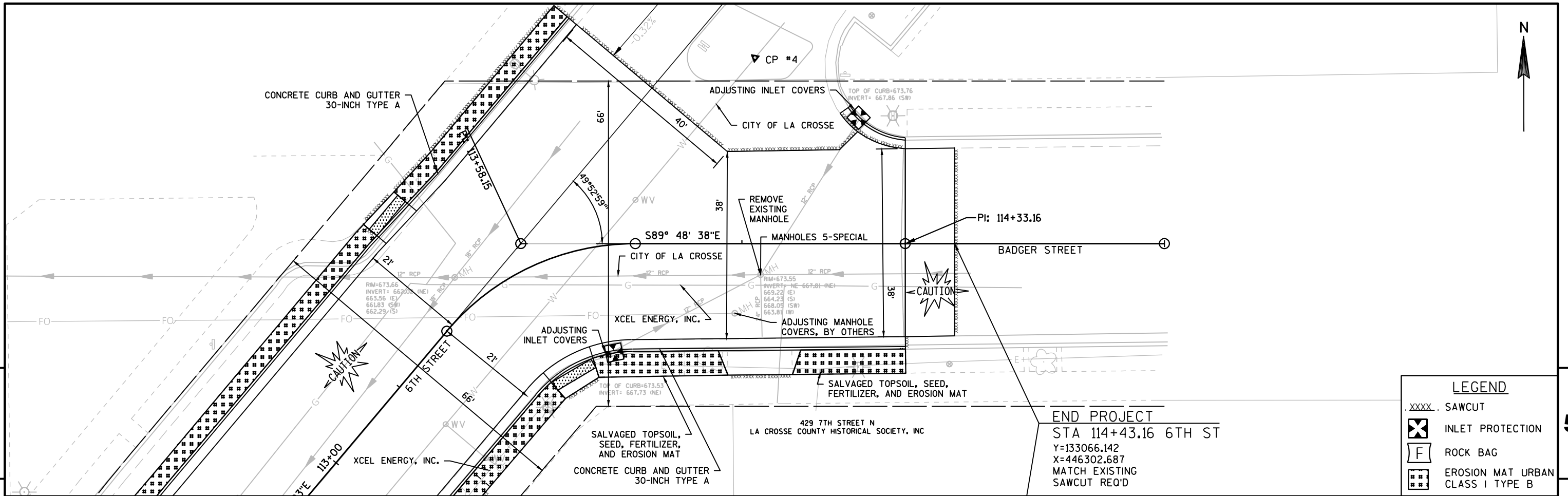




PROJECT NO:5991-05-28	HWY:6TH STREET	COUNTY:LA CROSSE	PLAN AND PROFILE: 6TH STREET	SHEET	E
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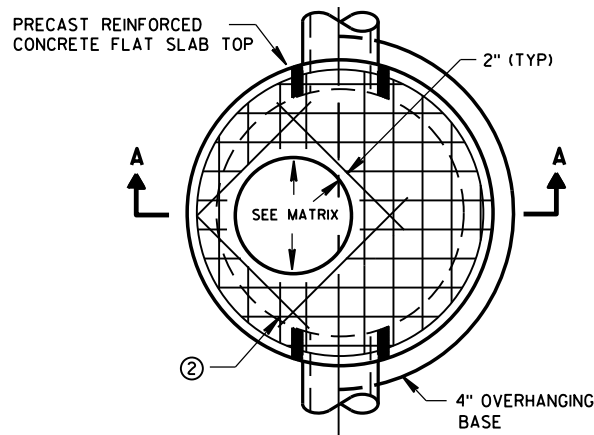




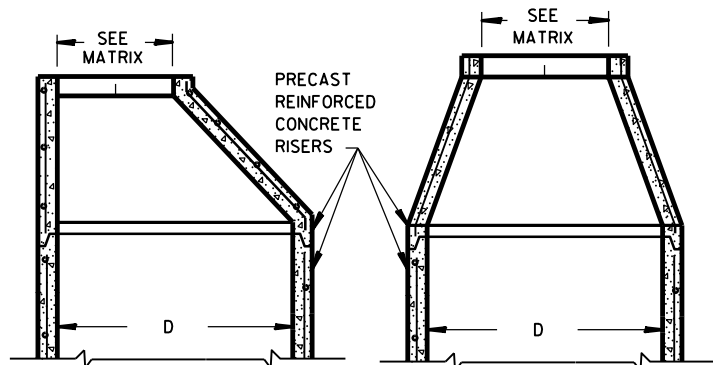


Standard Detail Drawing List

08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-10	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D18-01	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-11	PULL BOX
09C02-07	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09E01-14G	HARDWARE DETAILS FOR POLE MOUNTINGS
13C01-18	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C13-08	URBAN DOWELED CONCRETE PAVEMENT
13C18-05A	CONCRETE PAVEMENT JOINTING
13C18-05B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-05C	CONCRETE PAVEMENT JOINT TYPES
13C18-05D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-03	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C07-14E	PAVEMENT MARKING FOR BIKE LANES
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C29-05A	BICYCLE LANE MARKING
15C29-05B	PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS
15C33-02	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D30-03A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-03B	TRAFFIC CONTROL, TEMPORARY ADA COMPLIANT PEDESTRIAN ACCOMMODATION
15D30-03C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS

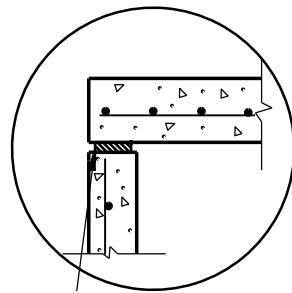


PLAN VIEW CIRCULAR OPENING

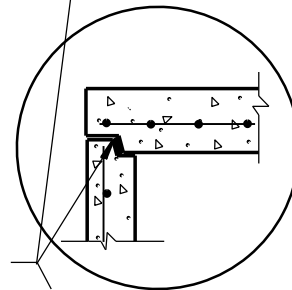


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

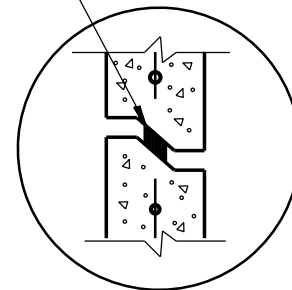
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT

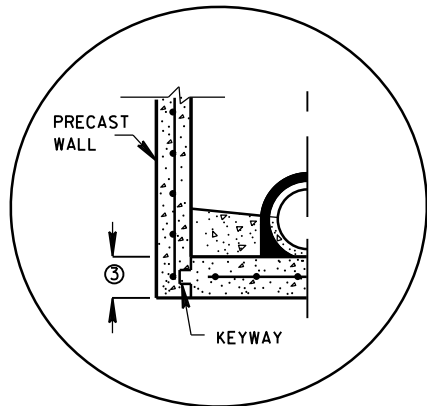


TOP WITH TONGUE AND GROOVE JOINT

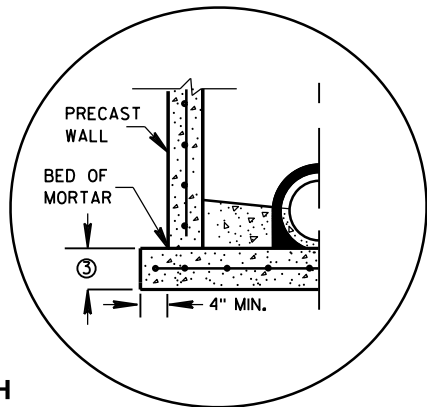


DETAIL "B"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

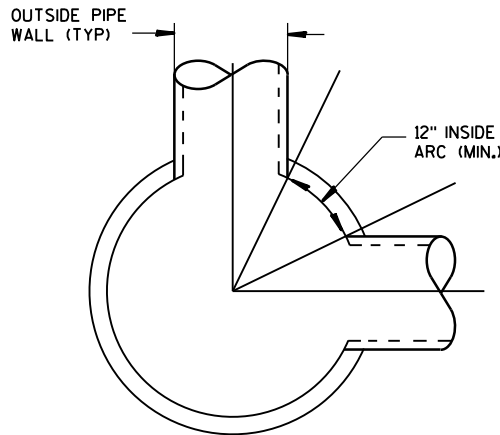


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

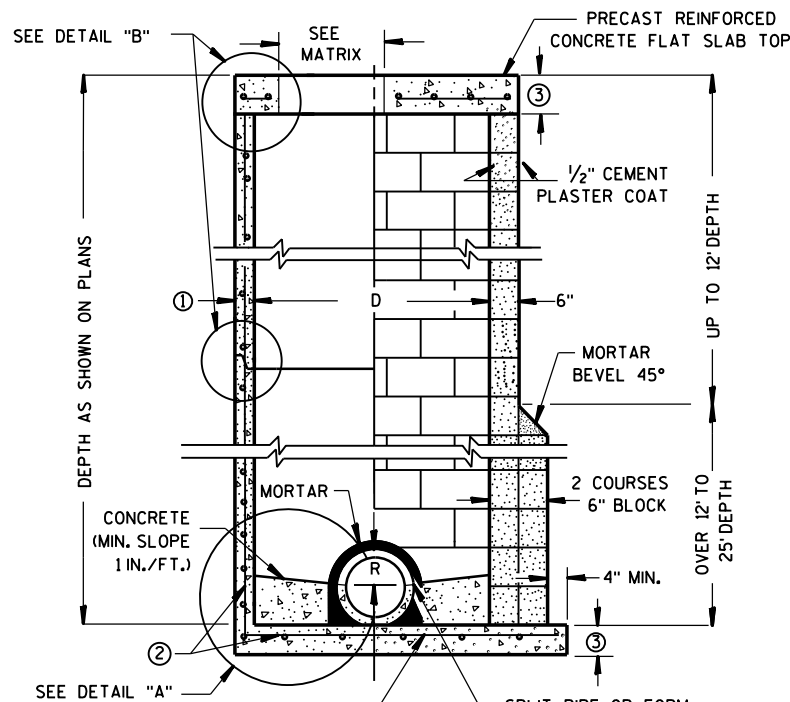


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

PRECAST REINFORCED CONCRETE BLOCK WITH CONCRETE WITH MONOLITHIC BASE CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

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

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

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND 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 DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2" 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.

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

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

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

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 "C".

- ① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.
- ② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.
- ③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

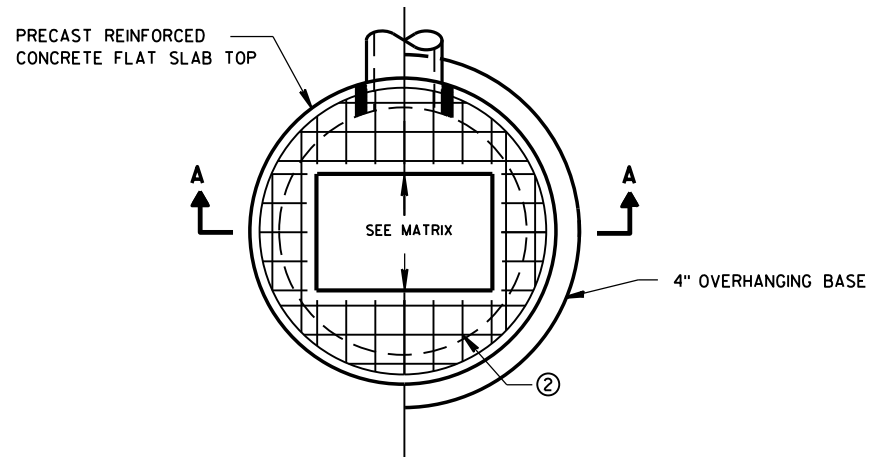
PIPE MATRIX

MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

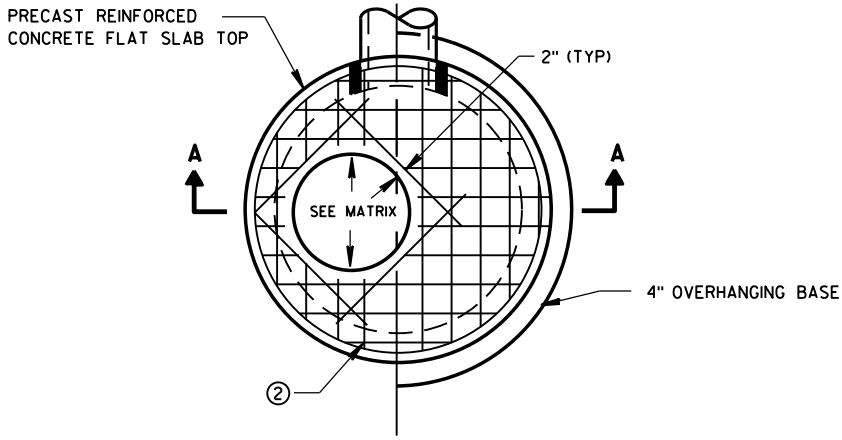
MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

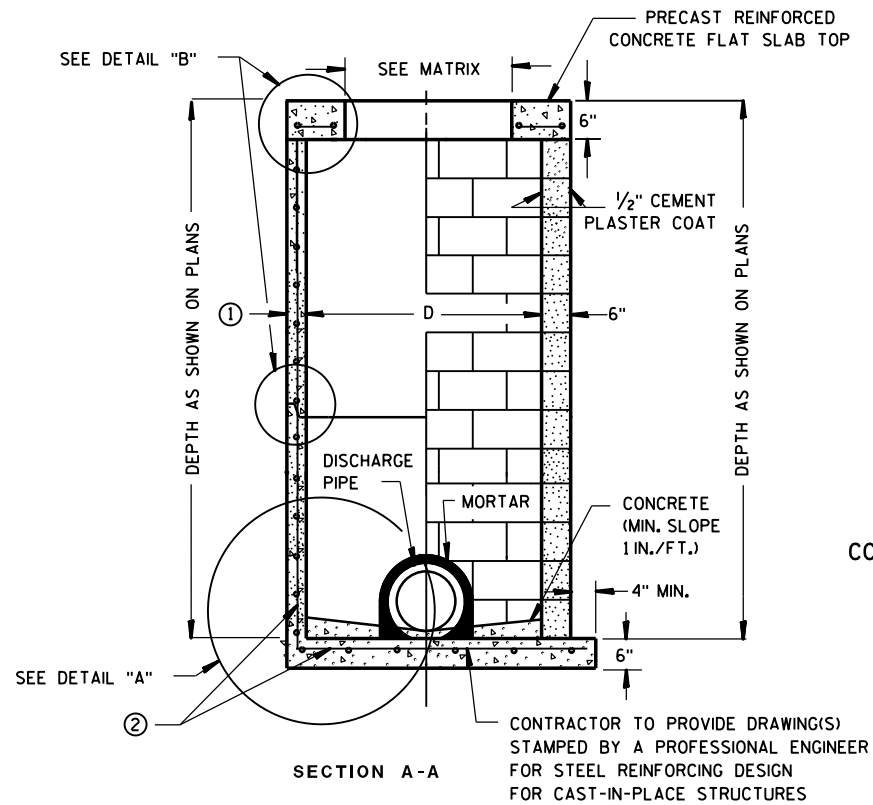
APPROVED
DATE Sept., 2016 /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA



PLAN VIEW RECTANGULAR OPENING



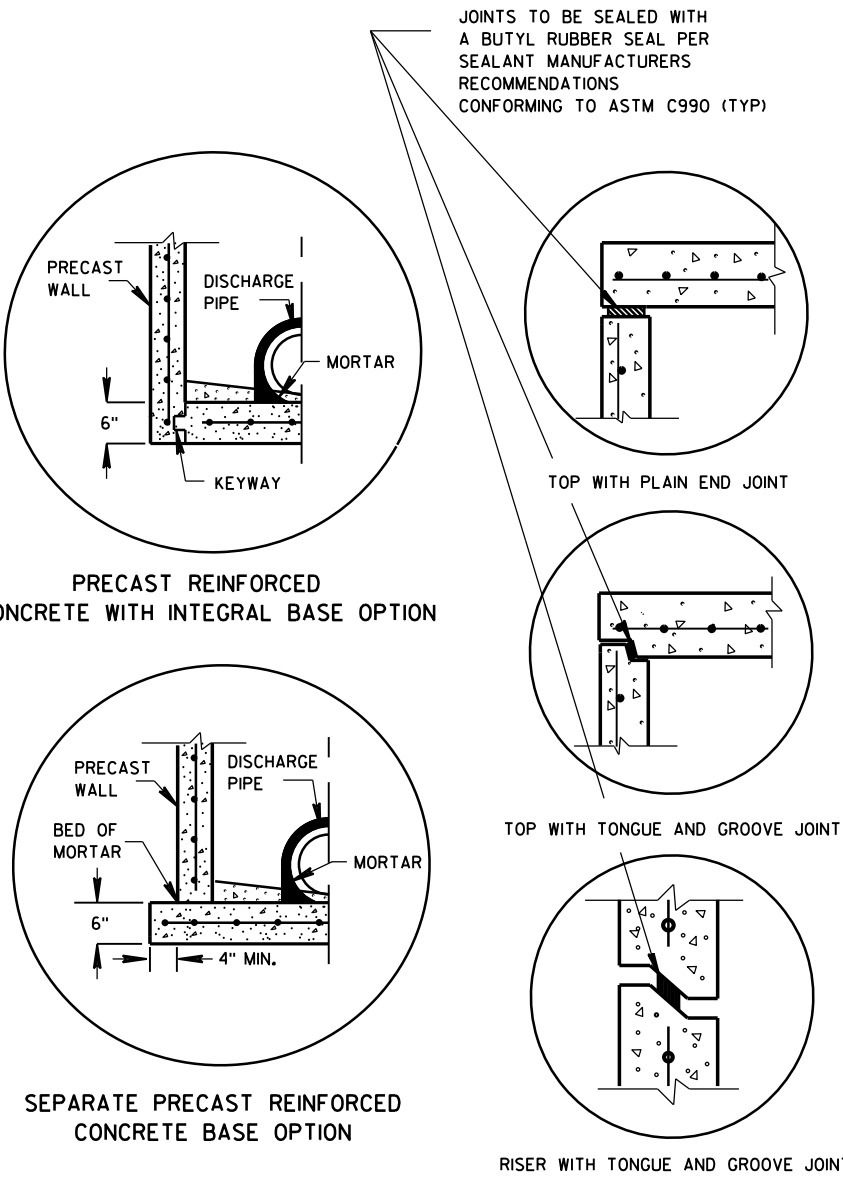
PLAN VIEW CIRCULAR OPENING



PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP



DETAIL "A"

DETAIL "B"

INLETS 3-FT AND 4-FT DIAMETER

GENERAL NOTES

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

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

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

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

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

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

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

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

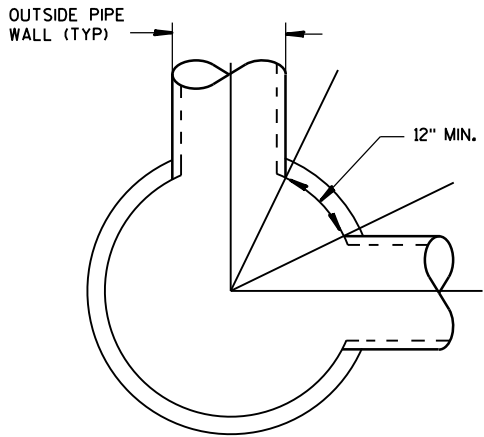
4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

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

- ① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.
- ② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

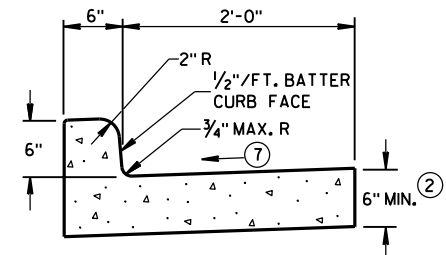
PIPE MATRIX

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

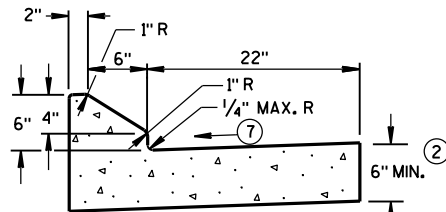
INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

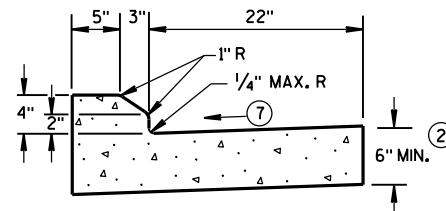
APPROVED
Sept., 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



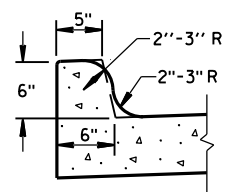
TYPES A^① & D



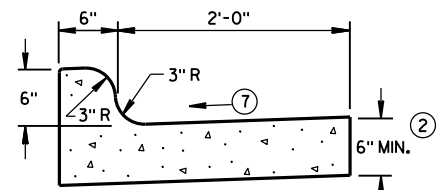
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

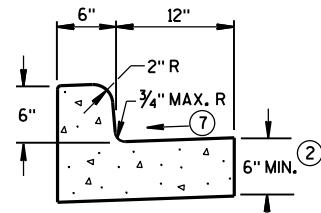


TYPES K^① & L
(OPTIONAL CURB SHAPE)



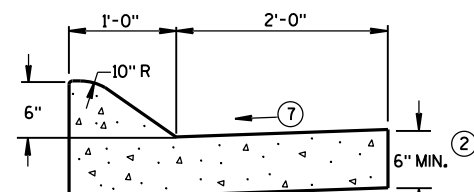
TYPES K^① & L

CONCRETE CURB & GUTTER 30"

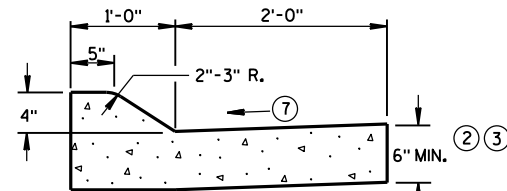


TYPES A^① & D

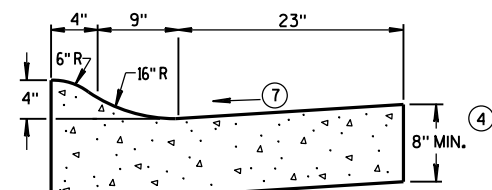
CONCRETE CURB & GUTTER 18"



6" SLOPED CURB TYPES A^① & D

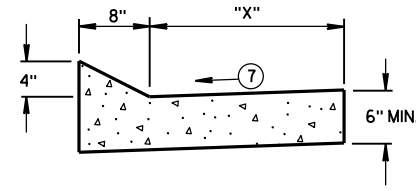


4" SLOPED CURB TYPES A^① & D



4" SLOPED CURB TYPES R^① & T^⑤

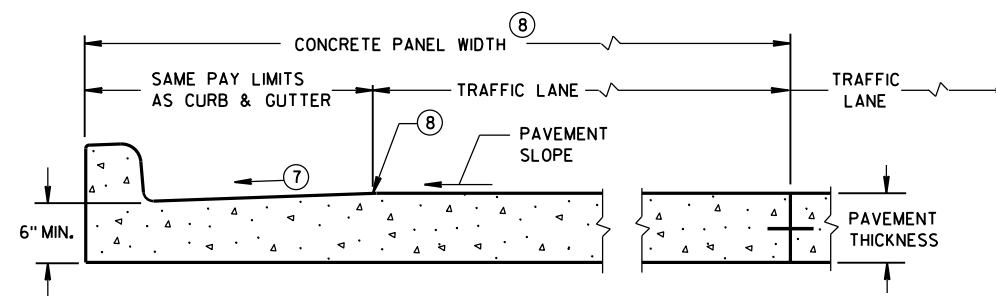
CONCRETE CURB & GUTTER 36"



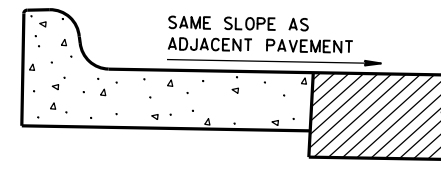
TYPES TBT & TBTT^①

CONCRETE CURB & GUTTER

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



PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB & GUTTER



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

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS 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 & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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 GUTTER 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 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.

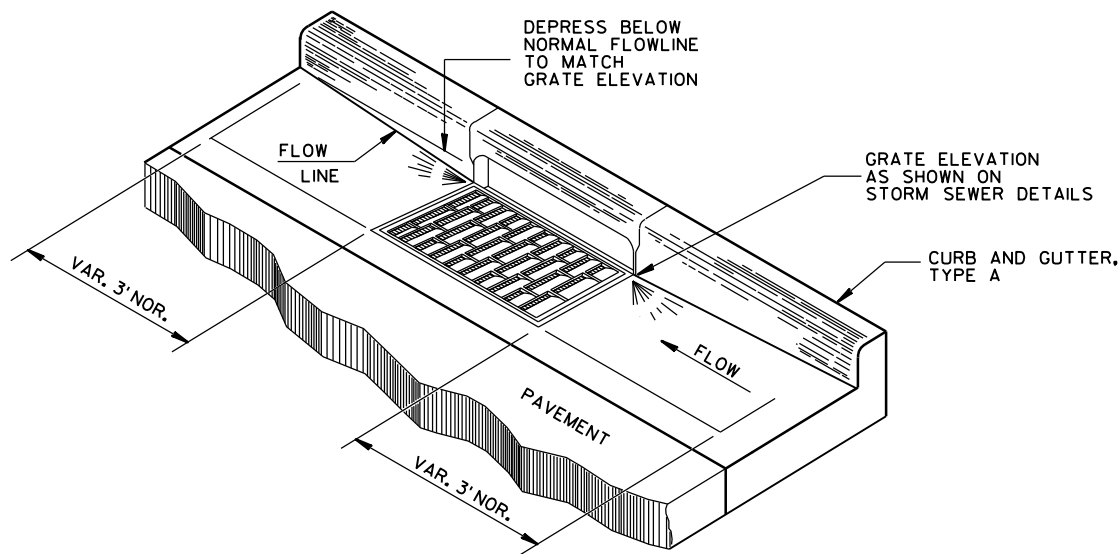
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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

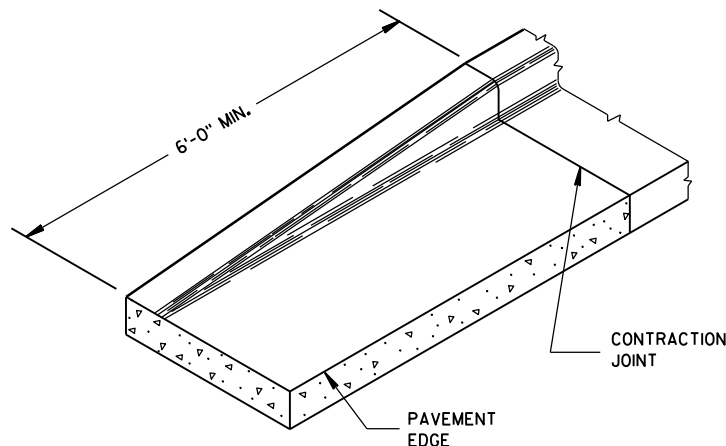
* BIKE LANE IS NOT SHOWN.

CONCRETE CURB & GUTTER

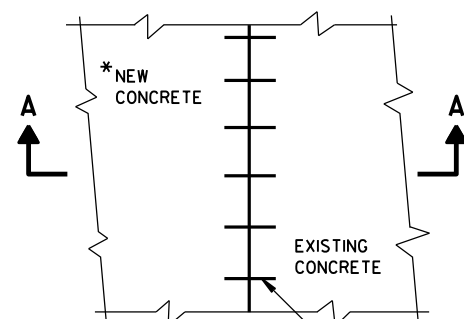
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



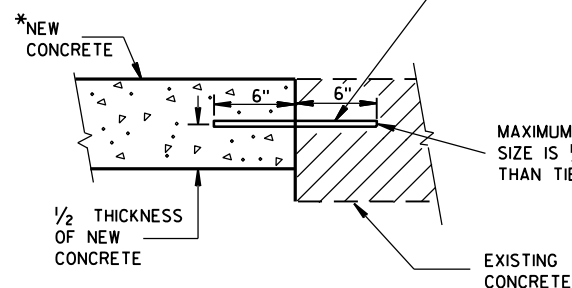
DETAIL OF CURB AND GUTTER AT INLETS
(TYPE H INLET COVER SHOWN)



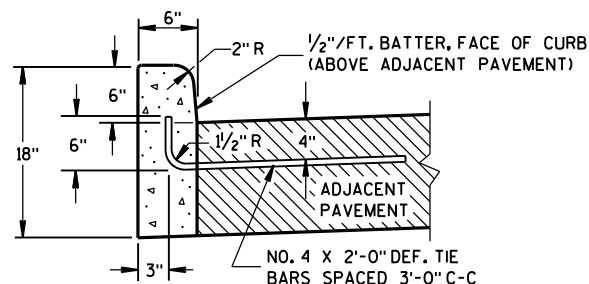
END SECTION CURB & GUTTER



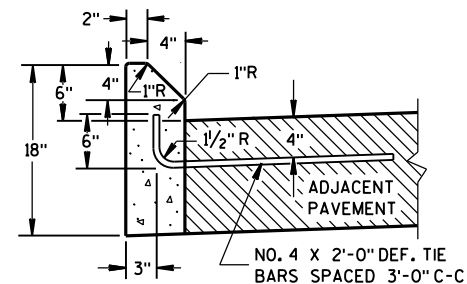
PLAN VIEW



TIE BARS DRILLED
INTO EXISTING PAVEMENT



TYPES A^① & D

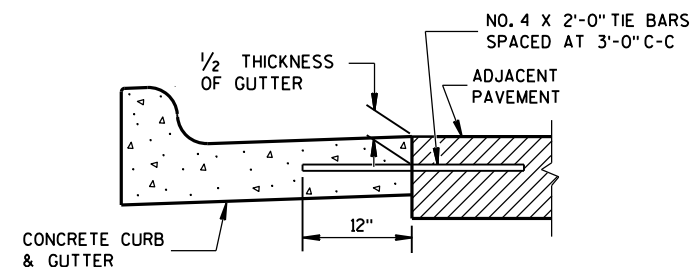


TYPES G^① & J

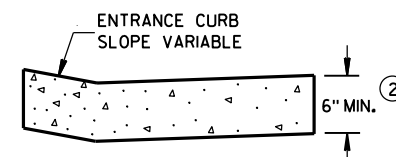
GENERAL NOTES

- DETAILS OF CONSTRUCTION, MATERIALS 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 GUTTER 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 REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

CONCRETE CURB

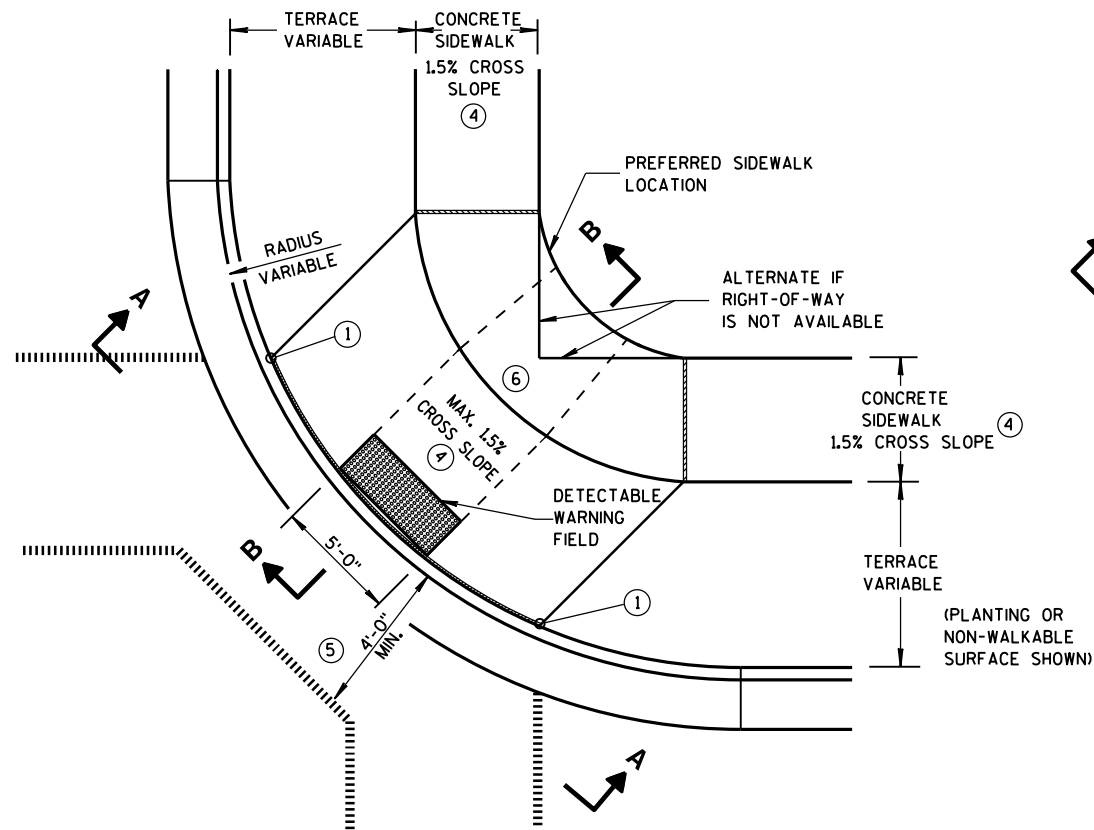


TYPICAL TIE BAR LOCATION^①

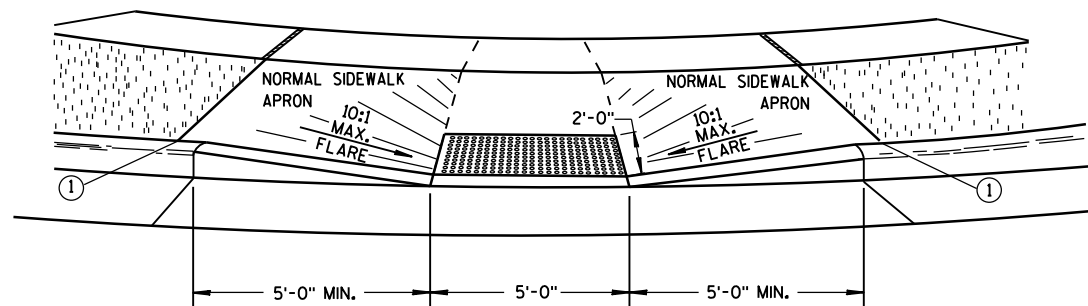


DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June, 2017 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA	

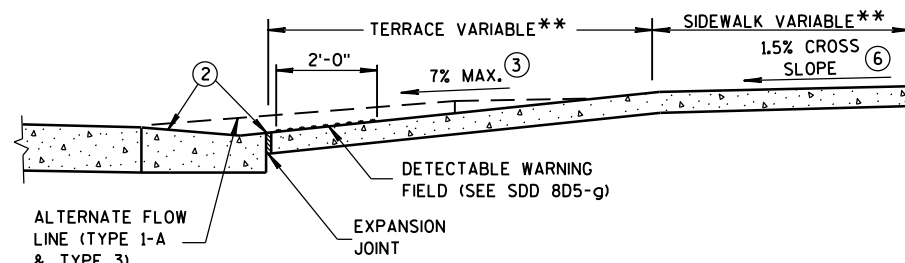


**PLAN VIEW
TYPE 1 RAMP**
(CENTER OF CORNER RADIUS)

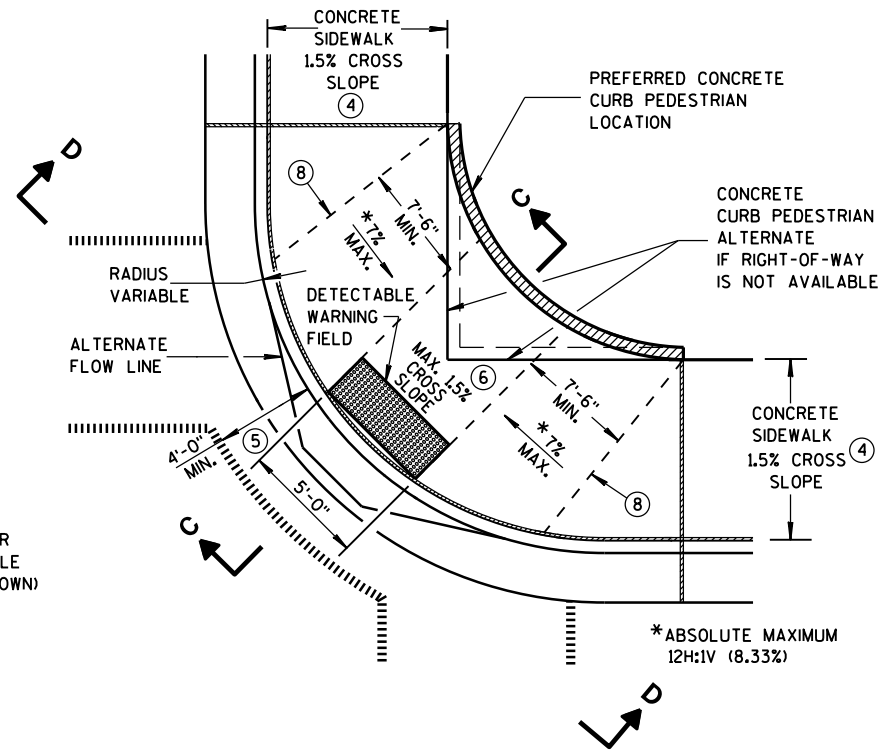


VIEW A-A

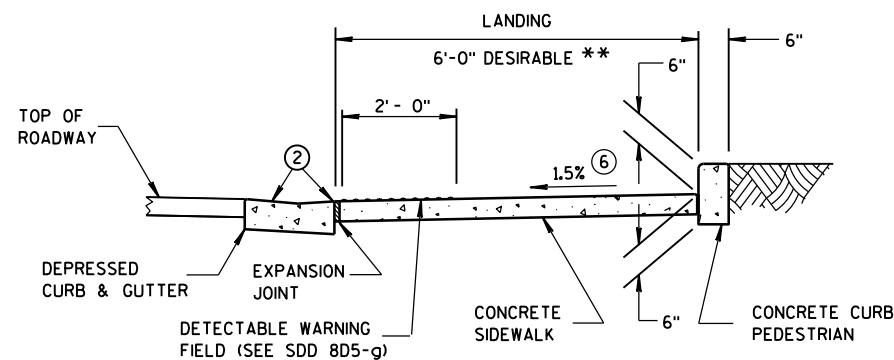
** WIDTH SHOWN ELSEWHERE
IN THE PLANS



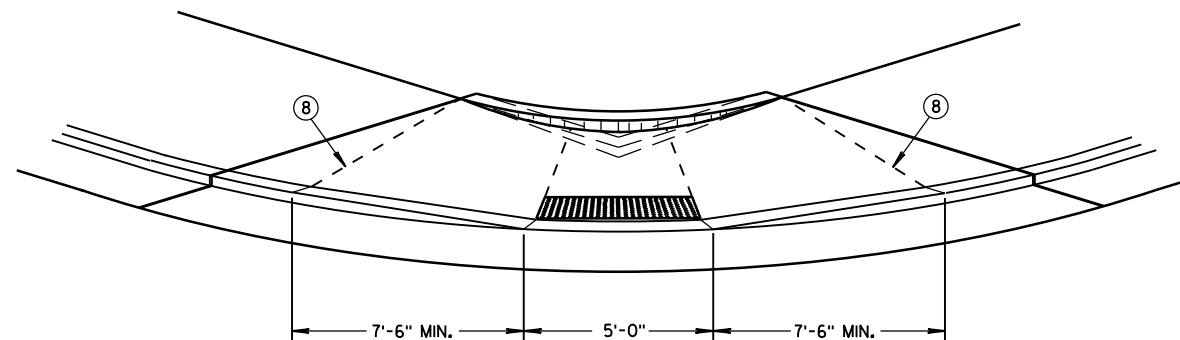
SECTION B-B



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



SECTION C-C



VIEW D-D

GENERAL NOTES

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

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

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

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF 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 LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

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

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

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

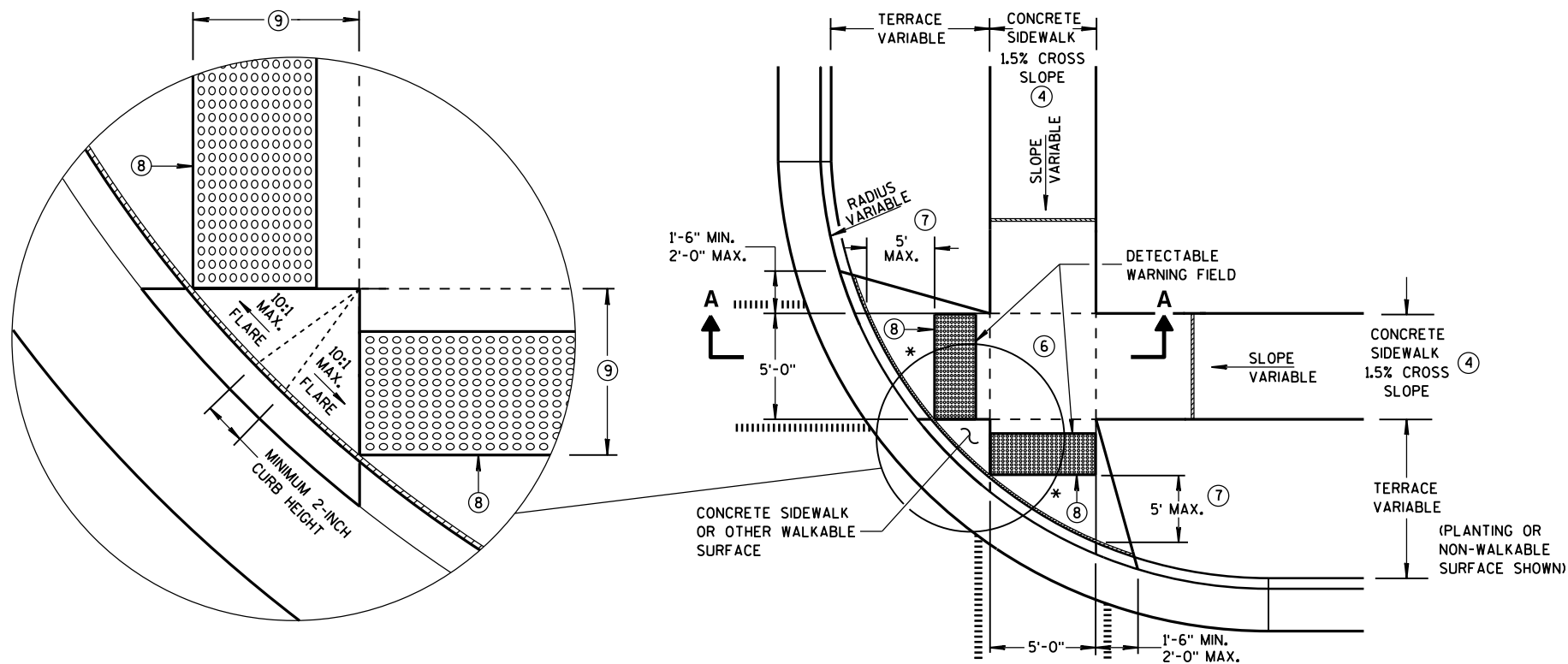
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

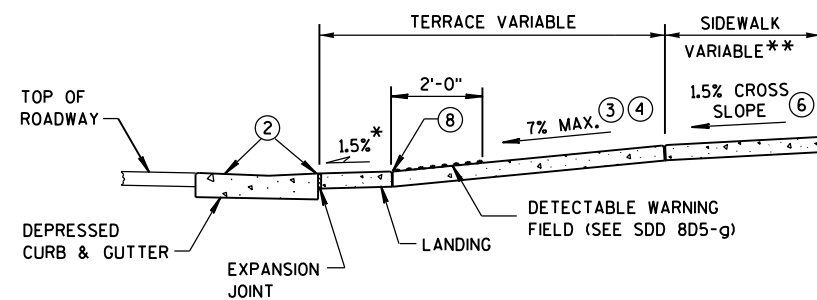
**CURB RAMPS
TYPES 1 AND 1-A**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



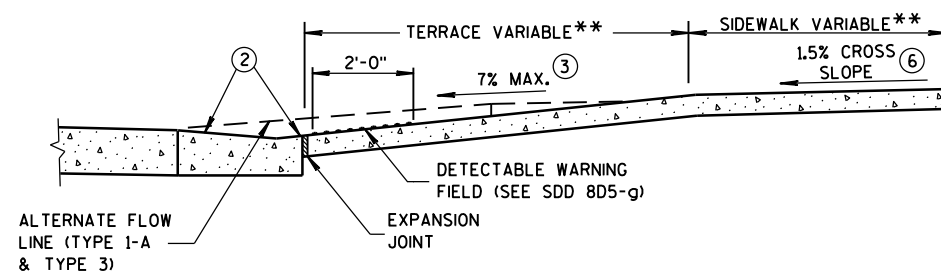
PLAN VIEW
TYPE 2 RAMP
(ON LINE WITH SIDEWALK)

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



SECTION A-A

** WIDTH SHOWN ELSEWHERE
IN THE PLANS



SECTION B-B

GENERAL NOTES

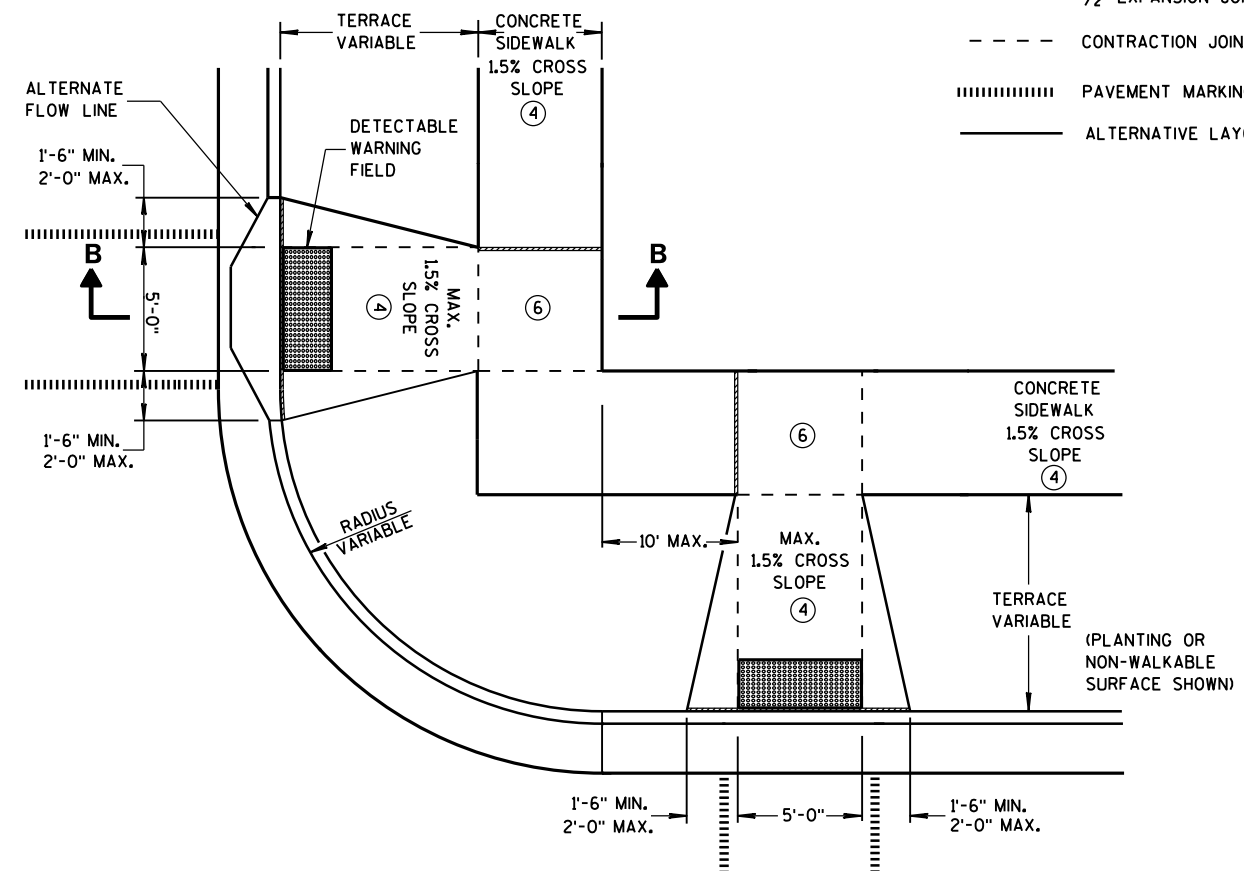
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ $\pm 0.5\%$ CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑨ WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

LEGEND

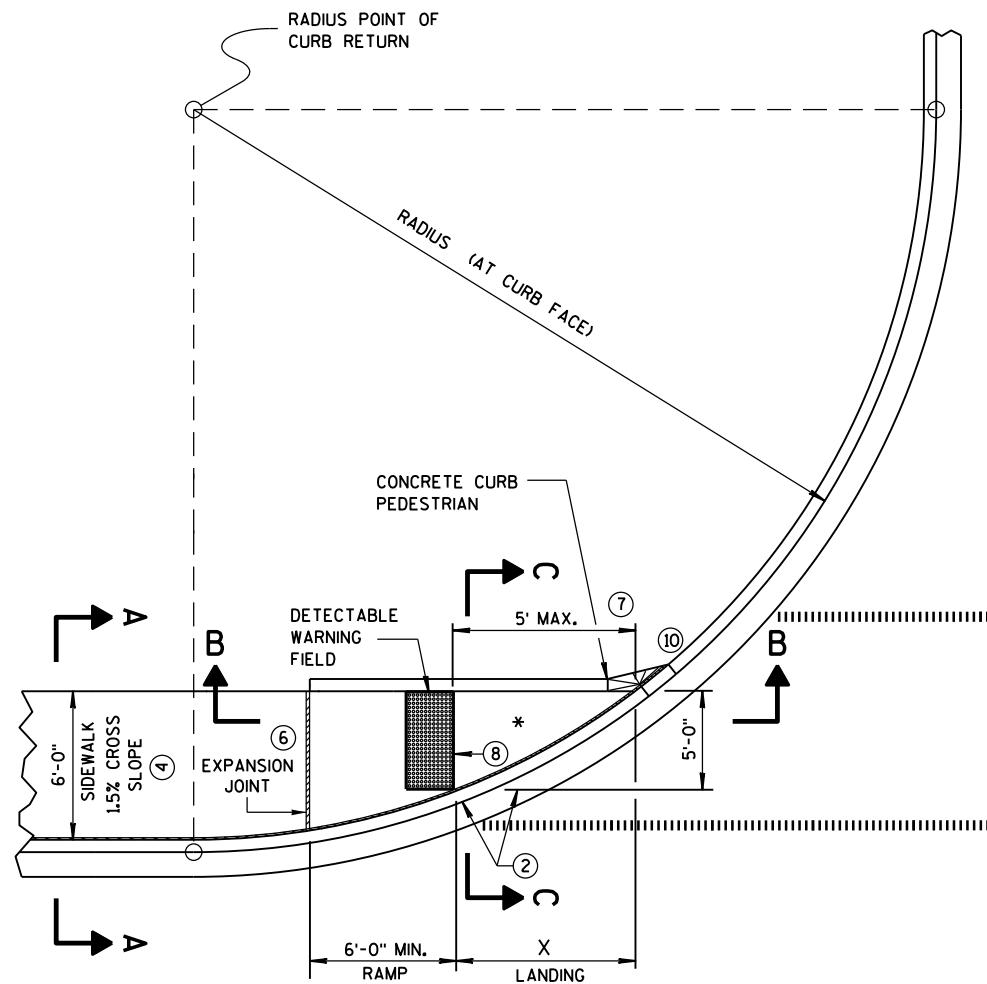
- | | |
|-------|------------------------------------|
| ===== | 1/2" EXPANSION JOINT-SIDEWALK |
| ----- | CONTRACTION JOINT FIELD LOCATED |
| | PAVEMENT MARKING CROSSWALK (WHITE) |
| ===== | ALTERNATIVE LAYOUT |



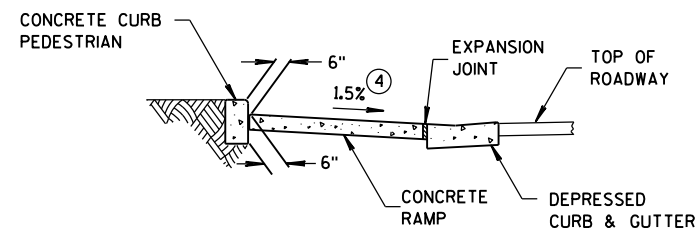
PLAN VIEW
TYPE 3 RAMP
(OUTSIDE OF CROSSWALK AREA)

CURB RAMPS TYPES 2 AND 3

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

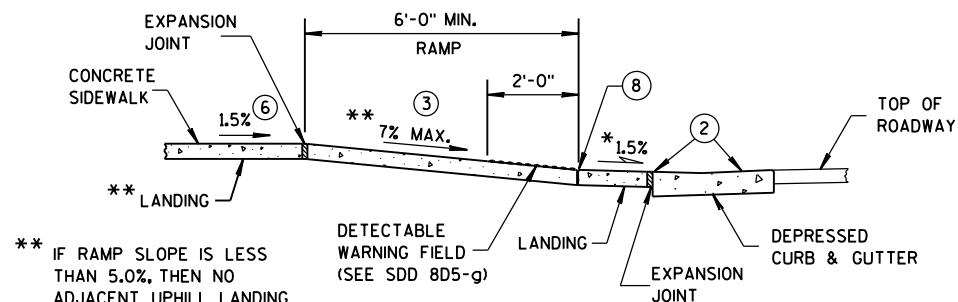


CURB RAMP TYPE 4A
PLAN VIEW



SECTION C-C FOR TYPE 4A

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

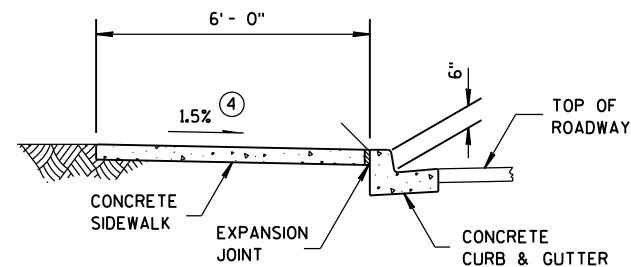


SECTION B-B FOR TYPE 4A

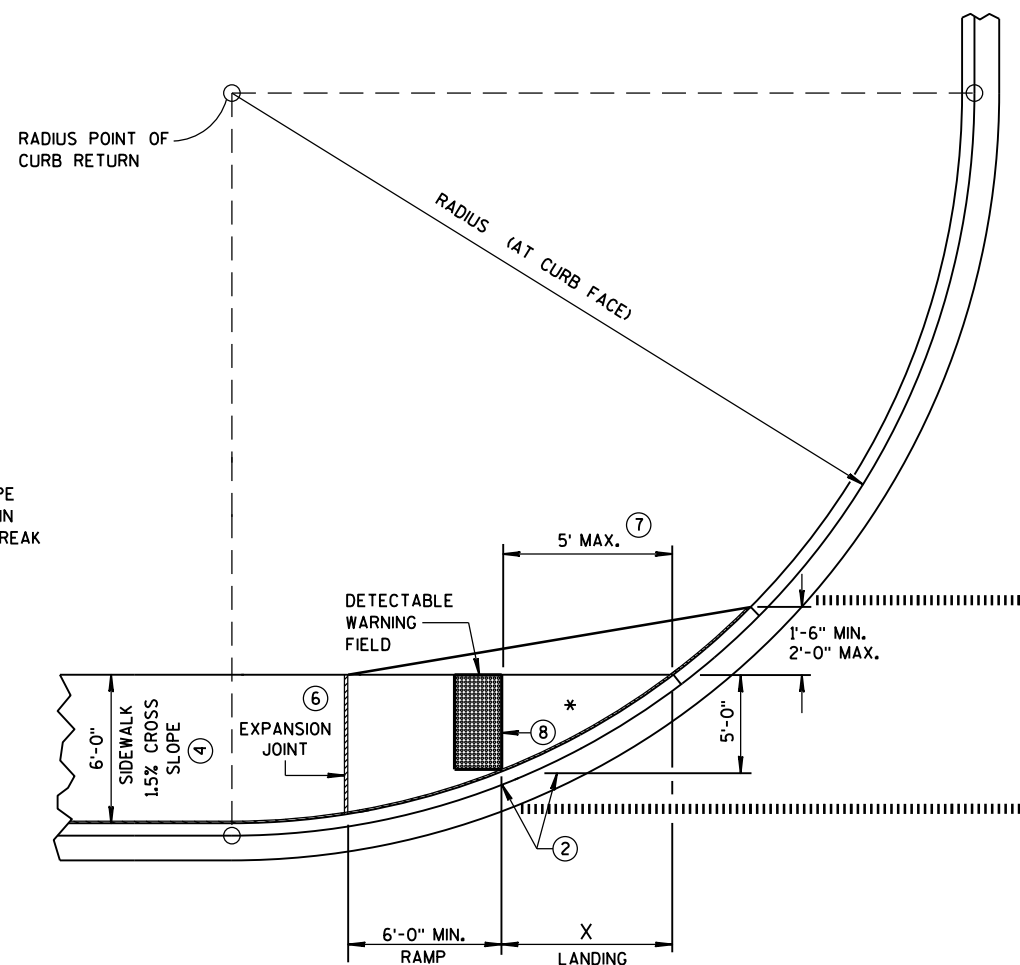
** IF RAMP SLOPE IS LESS
THAN 5.0%, THEN NO
ADJACENT UPHILL LANDING
IS REQUIRED

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

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A-A FOR TYPE 4A



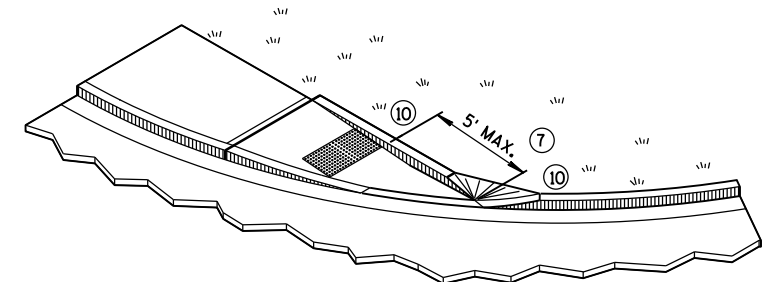
CURB RAMP TYPE 4A1
PLAN VIEW

GENERAL NOTES

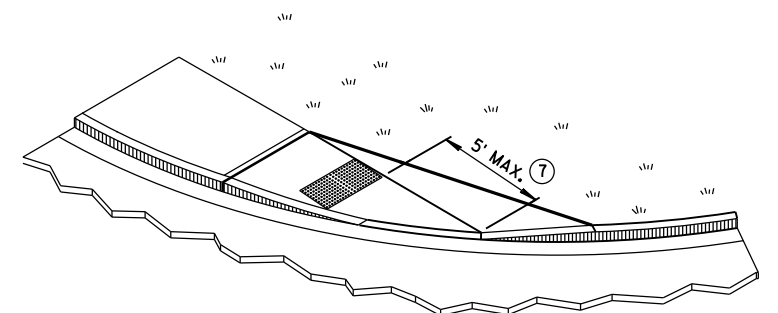
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



ISOMETRIC VIEW FOR TYPE 4A



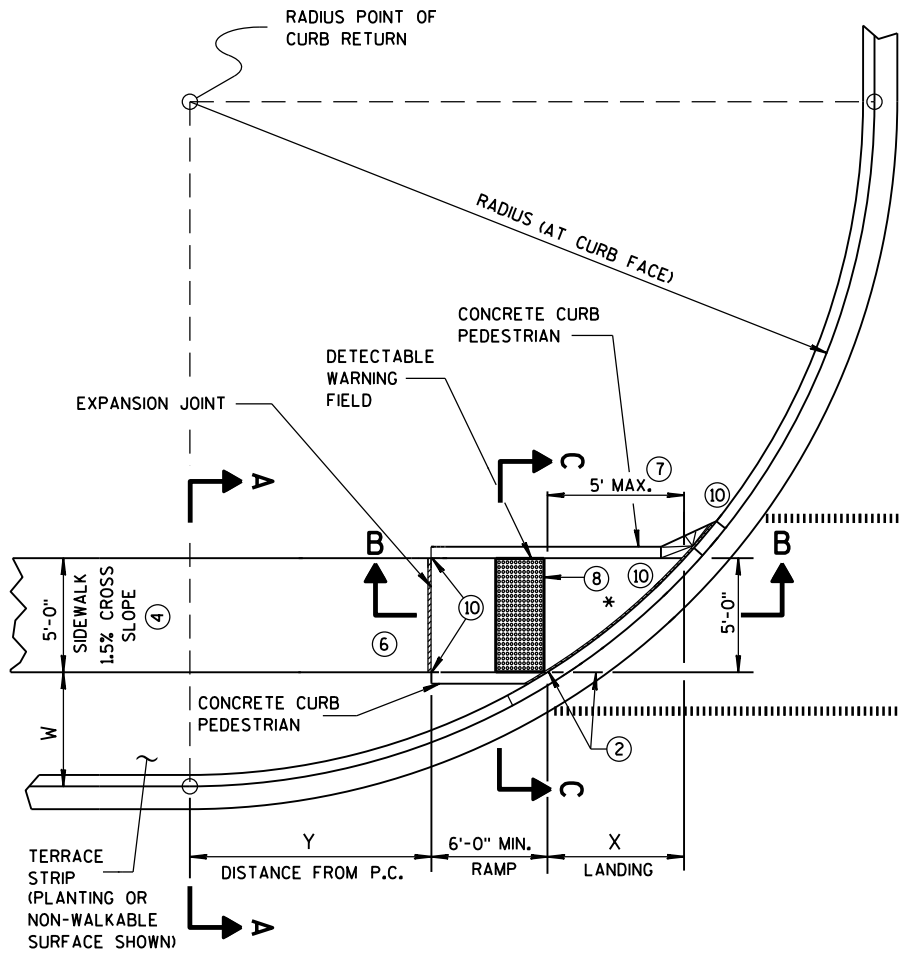
ISOMETRIC VIEW FOR TYPE 4A1

LEGEND

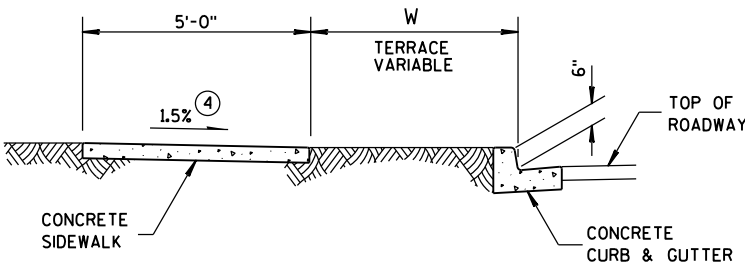
- ½" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPES 4A AND 4A1

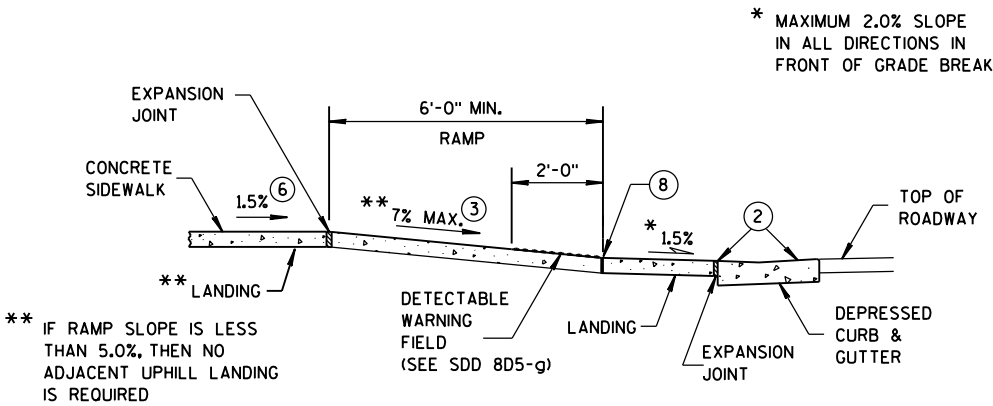
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**CURB RAMP TYPE 4B
PLAN VIEW**



SECTION A-A FOR TYPE 4B



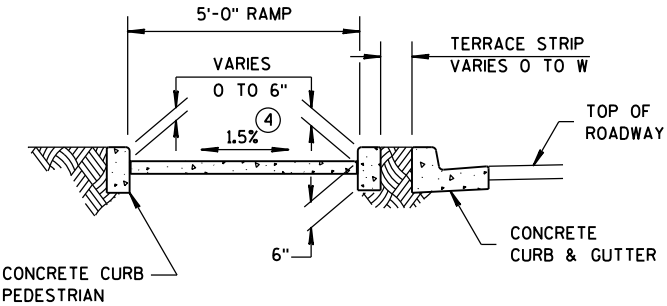
SECTION B-B FOR TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2'-10 1/4"	0'-5"	2'-1"	1'-4 1/2"	1'-5"	2'-1"	0'-10"	2'-7 1/2"	0'-3 1/4"	3'-0 1/4"						
15 FEET	4'-6 3/4"	2'-1 3/4"	3'-9"	3'-5 1/4"	3'-1 1/4"	4'-6"	2'-6 3/4"	5'-4 1/2"	2'-1"	6'-1"	1'-8"	6'-8 1/2"	1'-3 1/4"	7'-2 1/2"	0'-10 3/4"	7'-7 1/4"
20 FEET	5'-9 3/4"	3'-6 1/2"	4'-11 1/2"	5'-1 3/4"	4'-3 1/4"	6'-5 1/2"	3'-8 3/4"	7'-7"	3'-3"	8'-6 1/2"	2'-10"	9'-4 1/2"	2'-5 1/2"	10'-1 1/4"	2'-1 1/4"	10'-9"
30 FEET			6'-9 1/4"	7'-11 1/4"	6'-0 1/4"	9'-8"	5'-5"	11'-1 3/4"	4'-10 3/4"	12'-5 3/4"	4'-5 1/2"	13'-7 3/4"	4'-0 3/4"	14'-8 1/2"	3'-8 1/2"	15'-8 1/4"
40 FEET									6'-1 3/4"	15'-8 1/2"	5'-8"	17'-2"	5'-3"	18'-5 3/4"	4'-10 3/4"	19'-8 1/4"
50 FEET															5'-10 1/4"	23'-2"

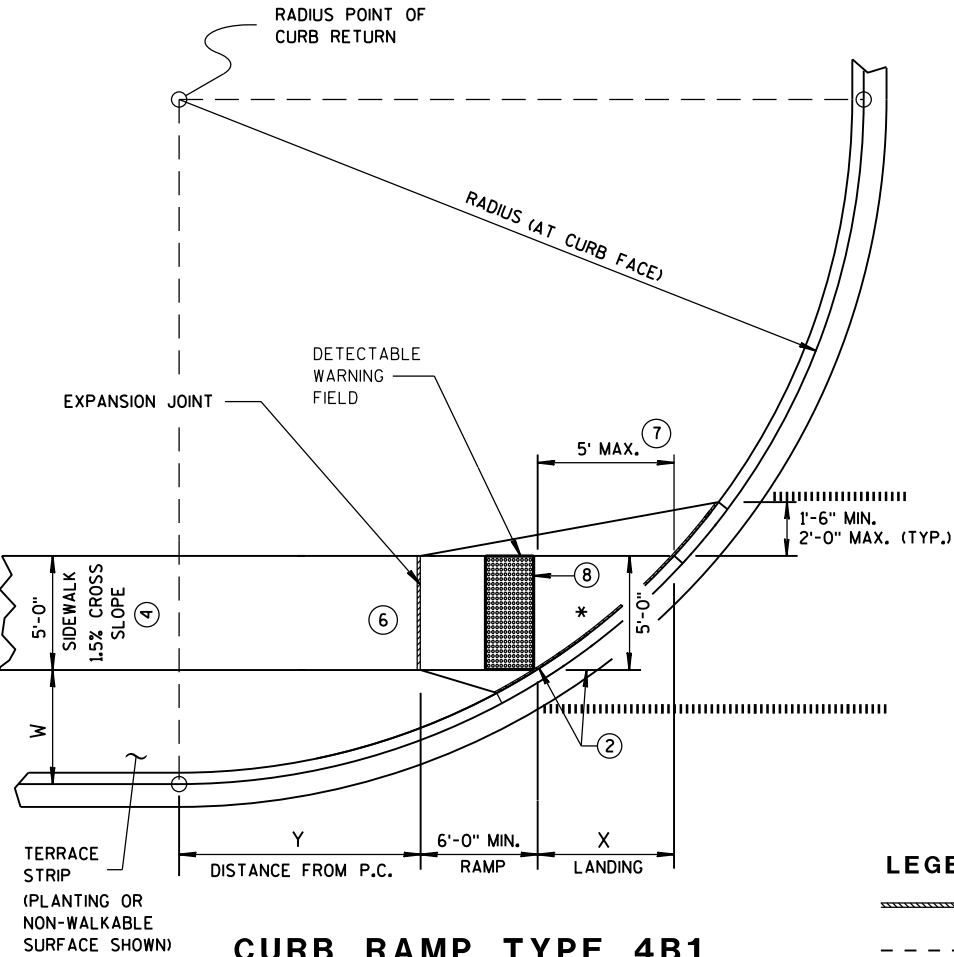
INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

GENERAL NOTES

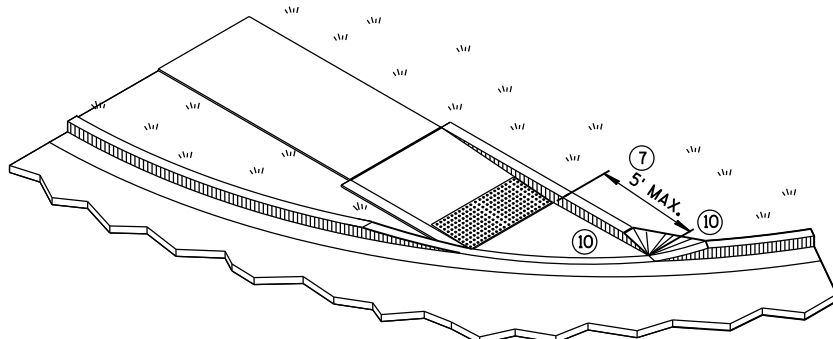
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS. DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



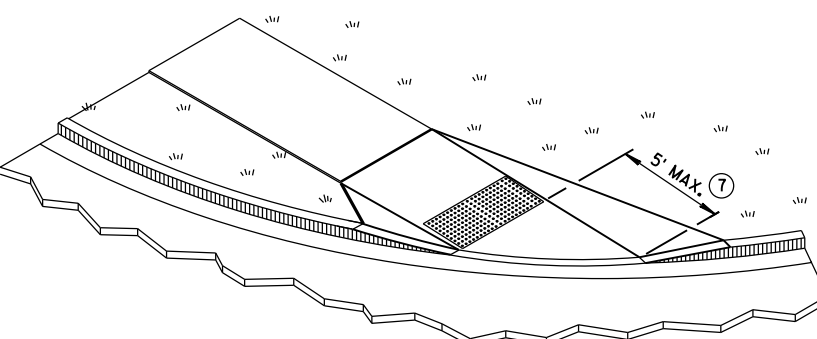
SECTION C-C FOR TYPE 4B



**CURB RAMP TYPE 4B1
PLAN VIEW**



ISOMETRIC VIEW FOR TYPE 4B



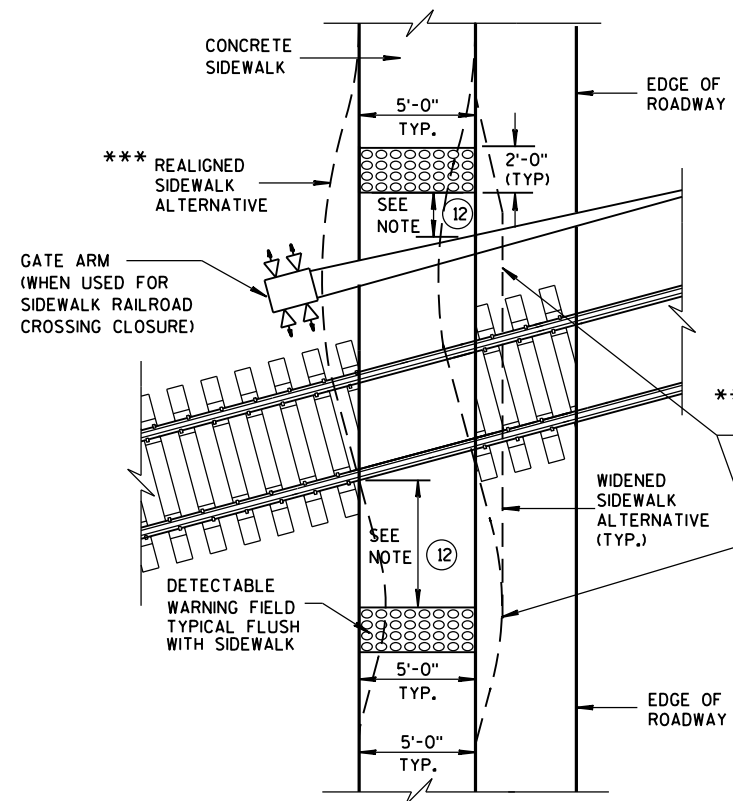
ISOMETRIC VIEW FOR TYPE 4B1

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

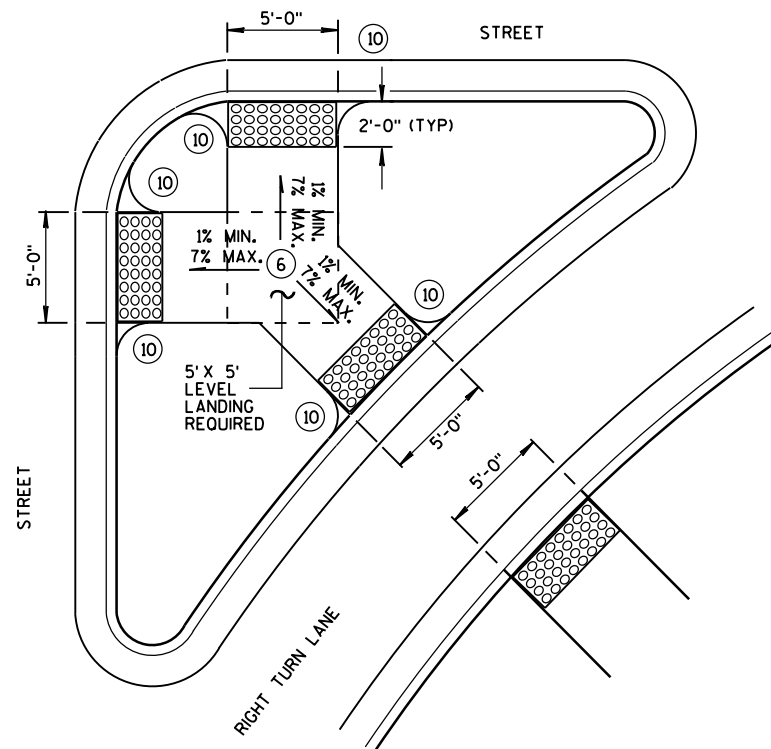
**CURB RAMPS
TYPE 4B AND 4B1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

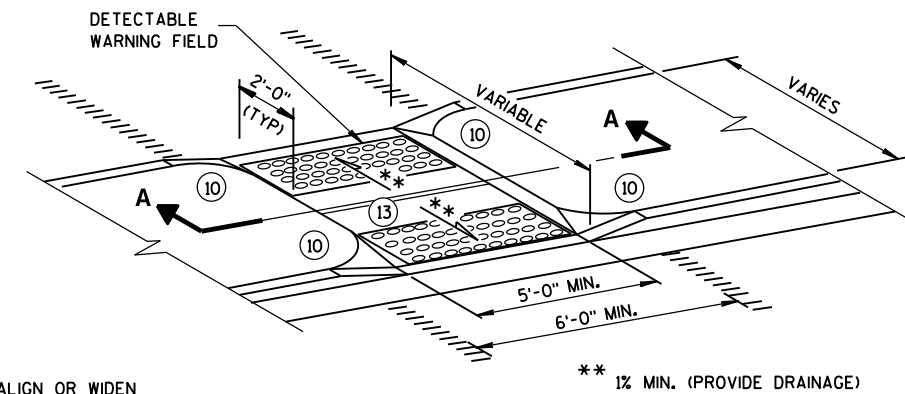


TYPE 8
DETECTABLE WARNINGS
AT RAILROAD CROSSING

REFER TO GENERAL NOTES ② AND ③
FOR ALL ISLAND CURB RAMP

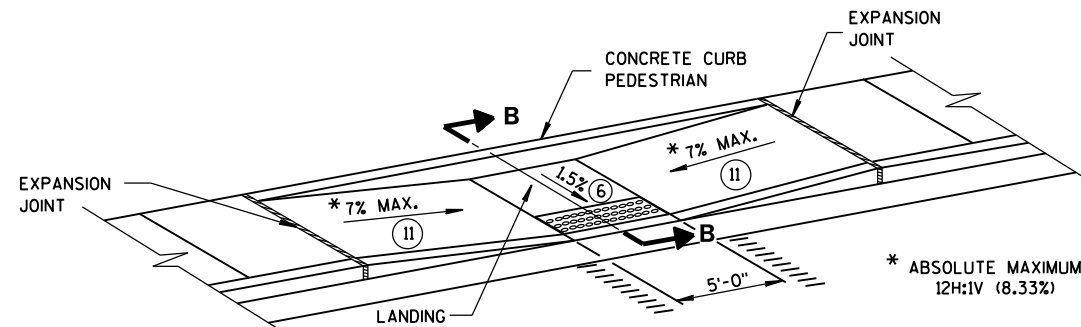


TYPE 6
DETECTABLE WARNING AT ISLANDS

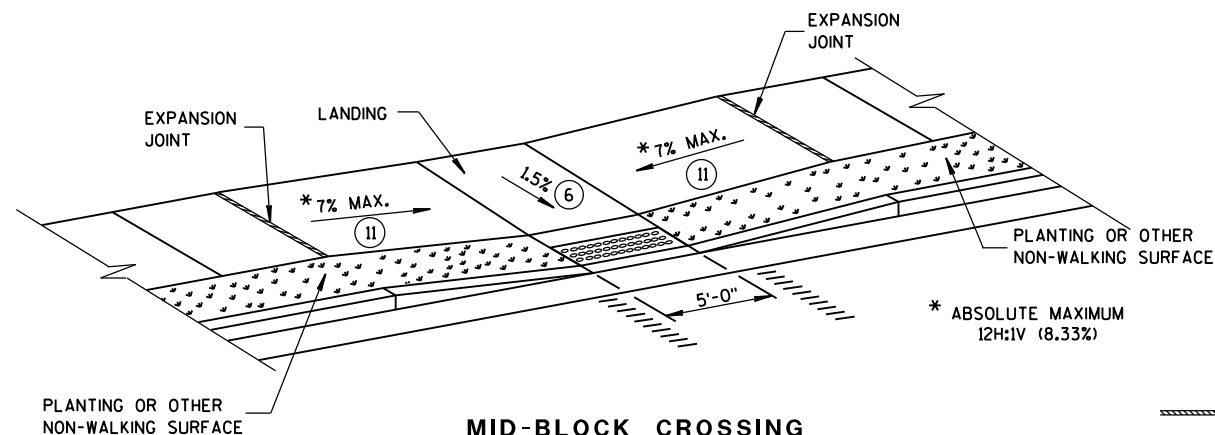


MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING
TYPE 5

*** DETAILS TO BE DETERMINED
BY DESIGNER



MID-BLOCK CROSSING
TYPE 7A



MID-BLOCK CROSSING
TYPE 7B

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

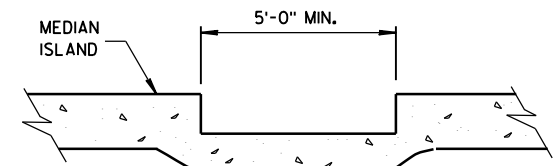
GENERAL NOTES

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

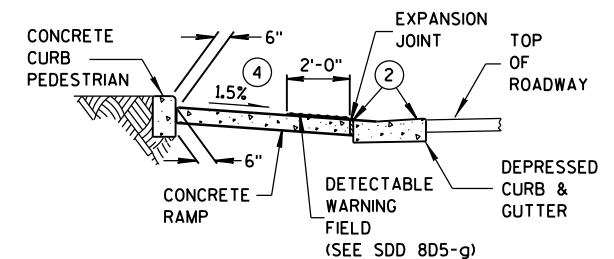
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- ⑪ SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- ⑫ THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 15 FEET ± 0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- ⑬ DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2-FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.



SECTION A-A



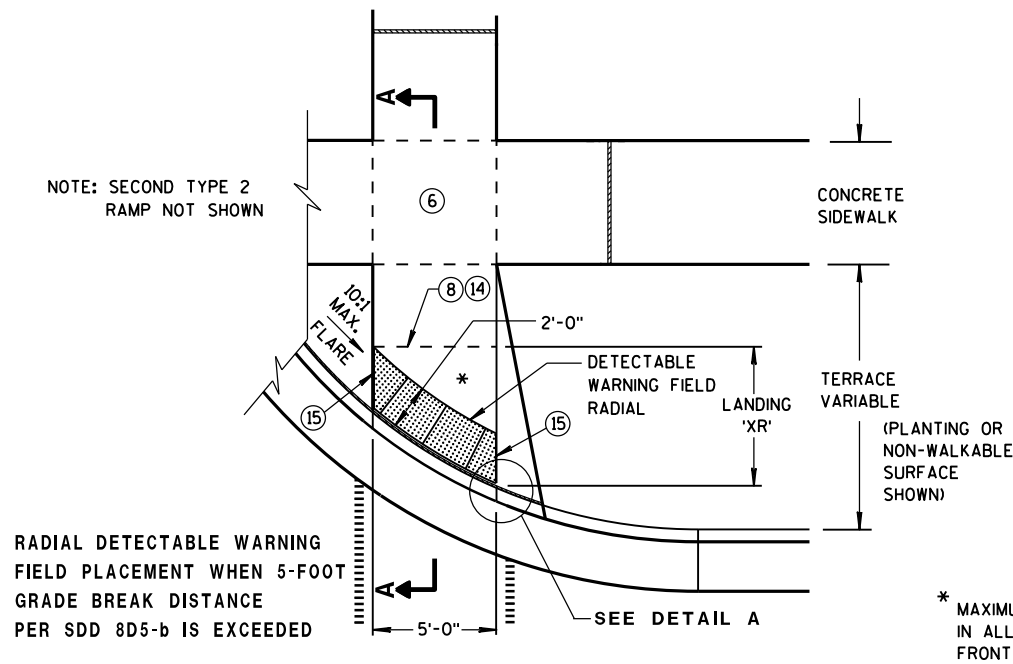
SECTION B-B

LEGEND

- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

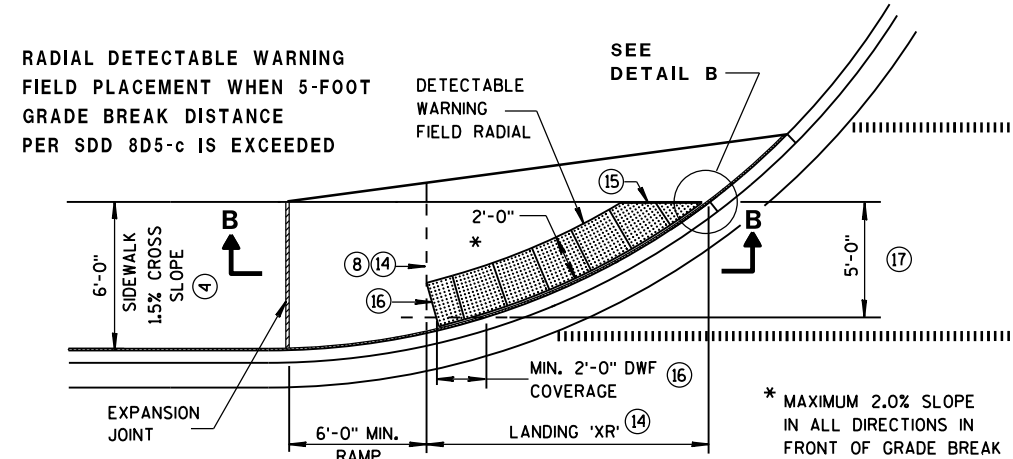
CURB RAMP
TYPES 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



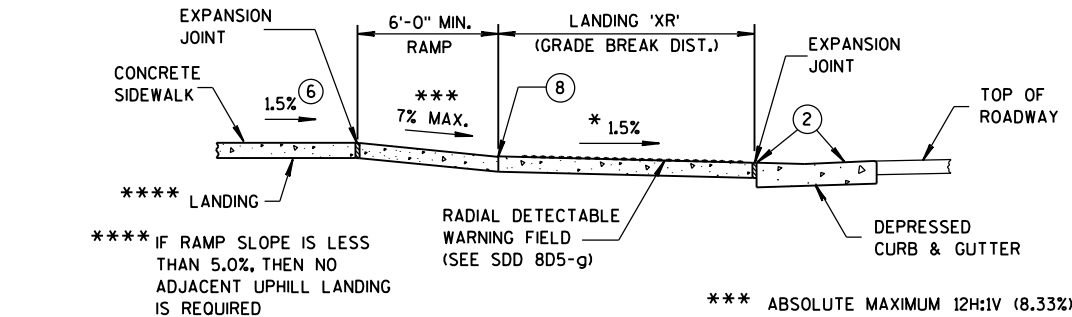
TYPE 2 RAMP
PLAN VIEW

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)
(ON LINE WITH SIDEWALK)

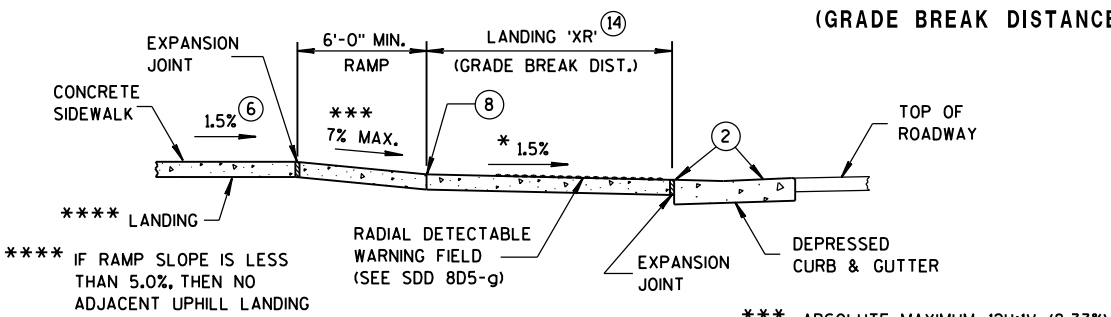
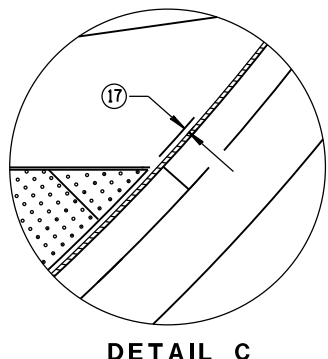
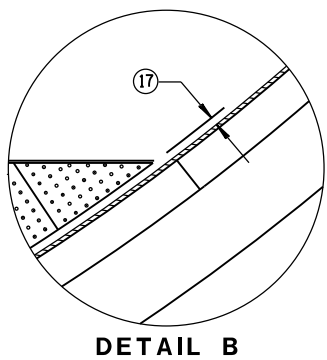
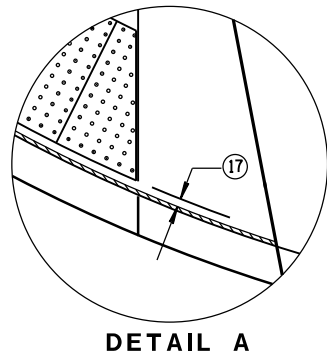
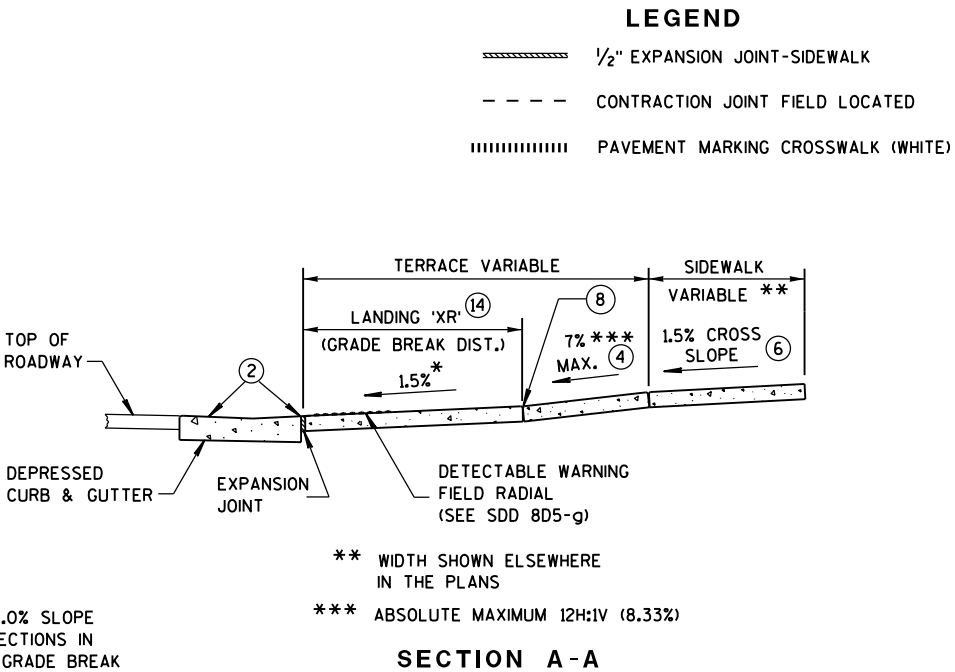


CURB RAMP TYPE 4A1
PLAN VIEW

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



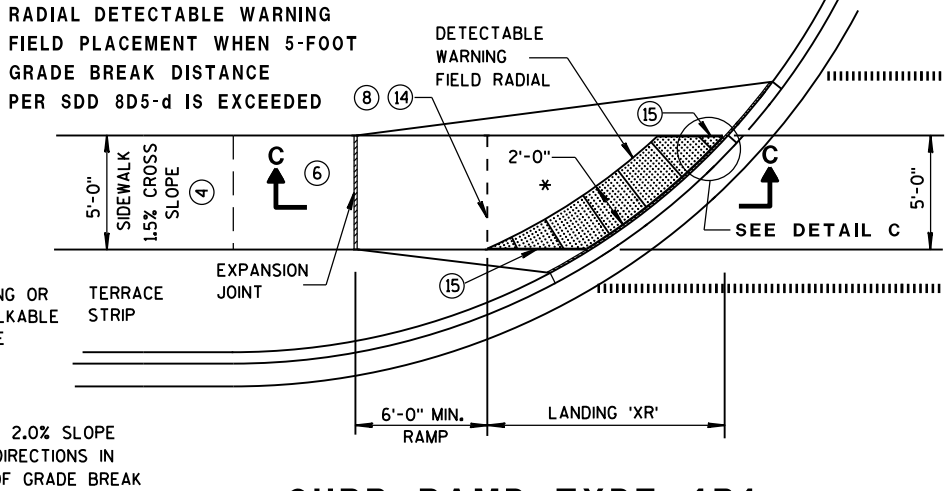
SECTION B-B FOR TYPE 4A1



SECTION C-C FOR TYPE 4B1

GENERAL NOTES

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETECTABLE WARNING FIELDS (DWFs) 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 FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
 - 3 ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
 - 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
 - 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
 - 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
 - 14 CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
 - 15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 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 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.



CURB RAMP TYPE 4B1
PLAN VIEW

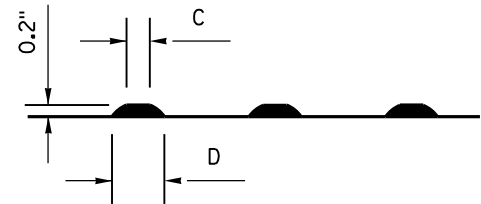
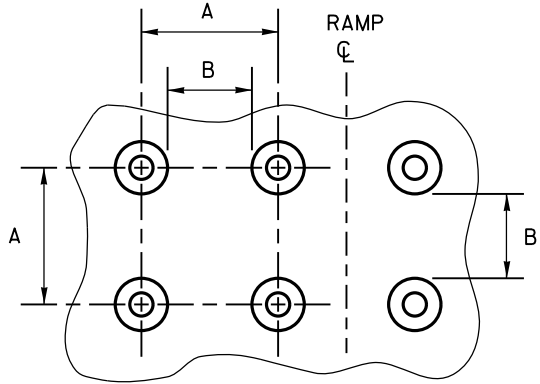
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

CURB RAMPS
RADIAL DETECTABLE WARNING
FIELD APPLICATIONS

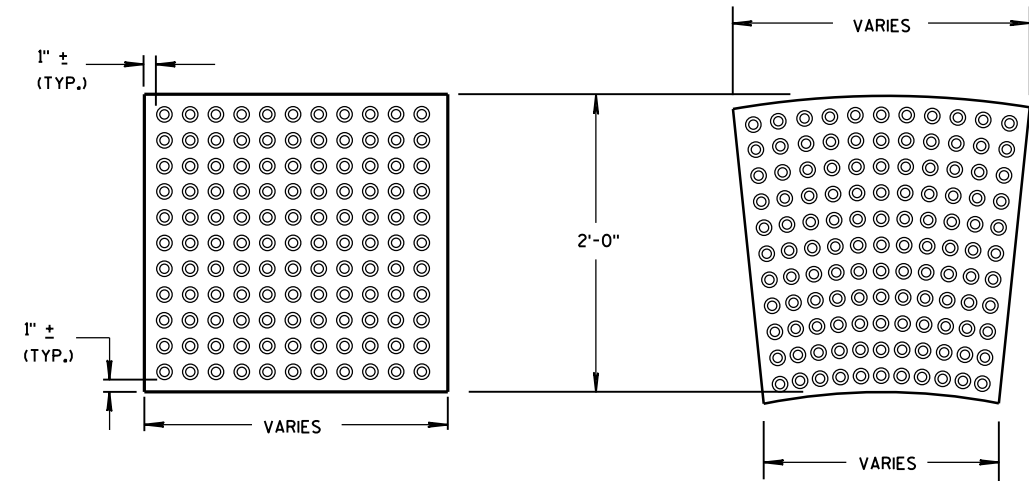
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	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.



TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



PLAN VIEW

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, 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 FIELD ARE PROHIBITED.

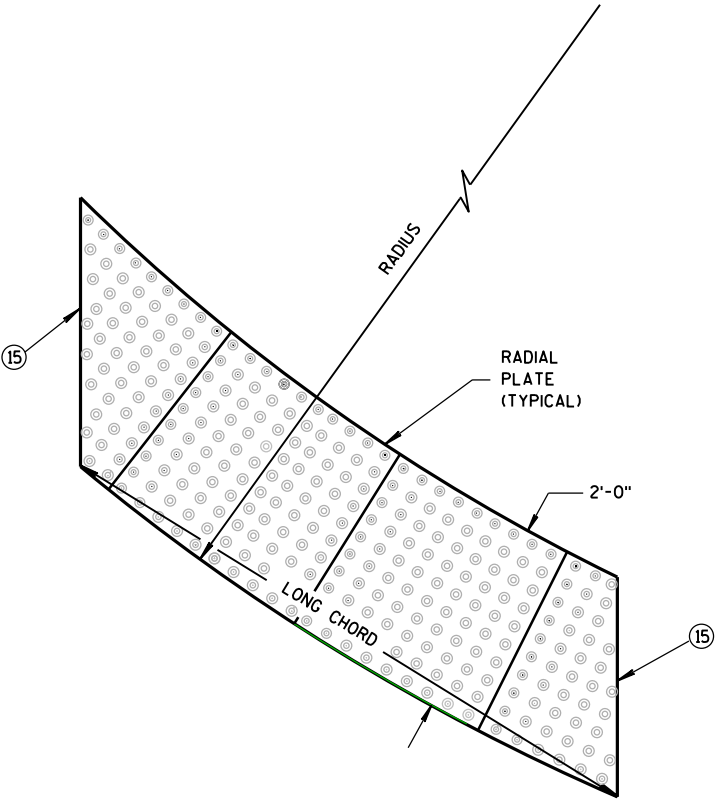
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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 WEDGES IN COMBINATION WITH SQUARE PANELS 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.

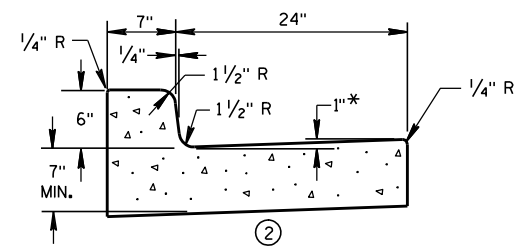
15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



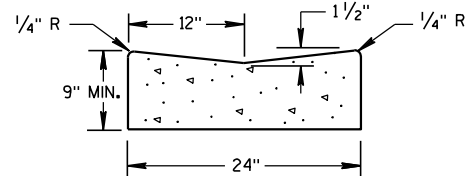
CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

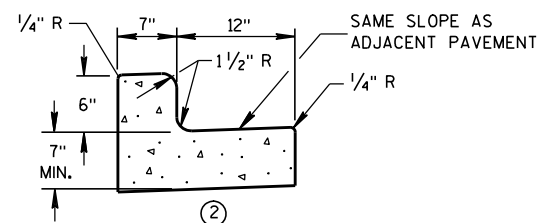
APPROVED
June, 2017 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR



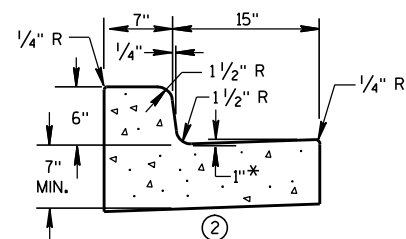
① CONCRETE CURB & GUTTER 31"



① CONCRETE GUTTER 24"

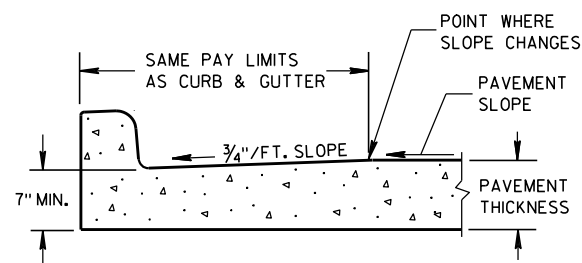


① CONCRETE CURB & GUTTER 19"

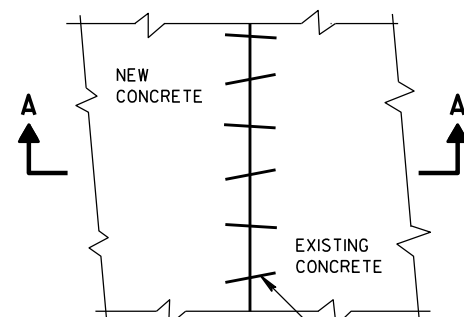


① CONCRETE CURB & GUTTER 22"

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



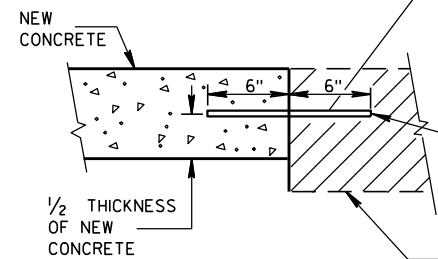
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB & GUTTER



PLAN VIEW

EXISTING AND NEW CONCRETE MAY BE CURB & GUTTER, SURFACE DRAIN, PAVEMENT OR OTHER CONCRETE STRUCTURE.

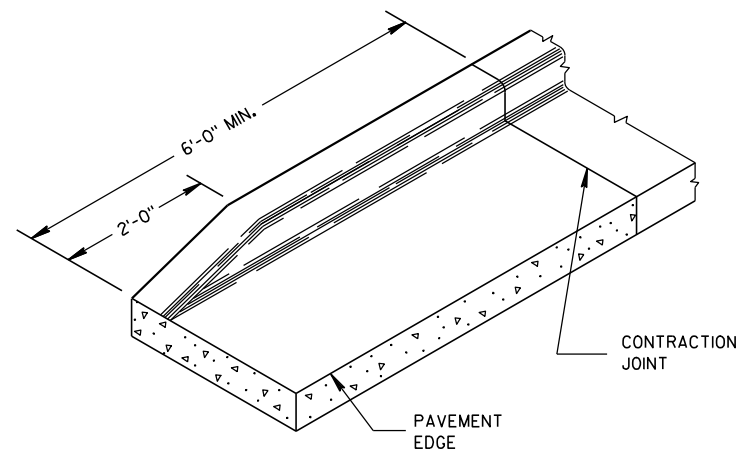
NO. 6 X 12" DEF. BARS SPACED 3'-0" C-C, INSTALLED ON 6:1 SKEW HORIZONTALLY. DIRECTION OF SKEW ALTERNATING AFTER EVERY ONE OR TWO BARS.



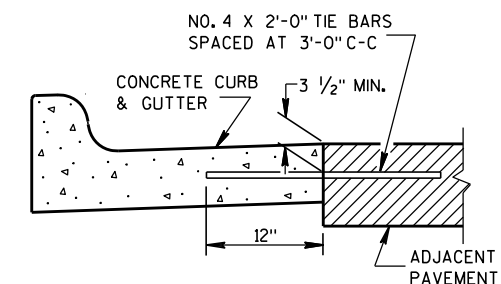
SECTION A-A
PAVEMENT TIES

THE HOLE FOR THE BAR SHALL BE DRILLED TO A DEPTH OF 7" AND TO A DIAMETER TO PROVIDE A TIGHT DRIVEN FIT.

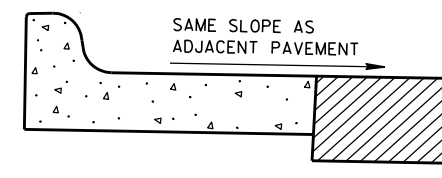
EXISTING CONCRETE



END SECTION CURB & GUTTER



① TYPICAL TIE BAR LOCATION



③ HIGH SIDE SECTION
(TYPICAL FOR ALL CURB & GUTTER)

GENERAL NOTES

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

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

- ① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUIRED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLAN.

CONCRETE GUTTER, CURB AND
GUTTER AND PAVEMENT TIES
(For Optional Use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/22/2010

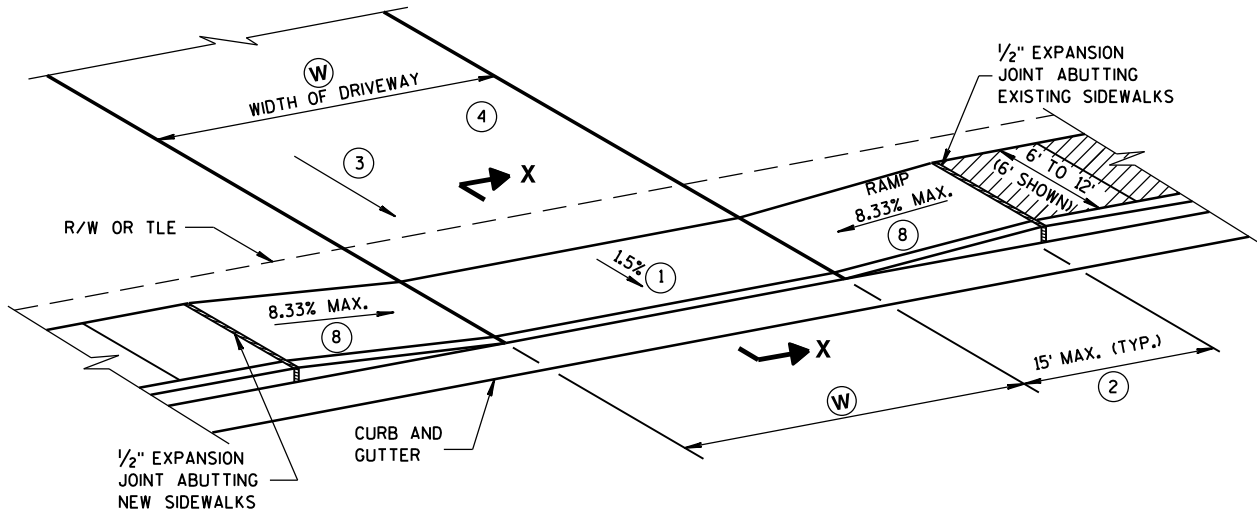
DATE

FHWA

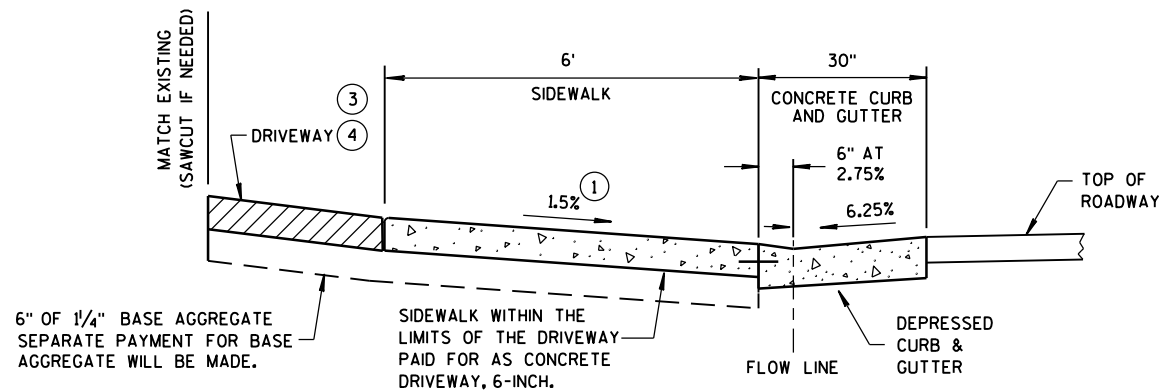
/S/ Jerry Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

GENERAL NOTES

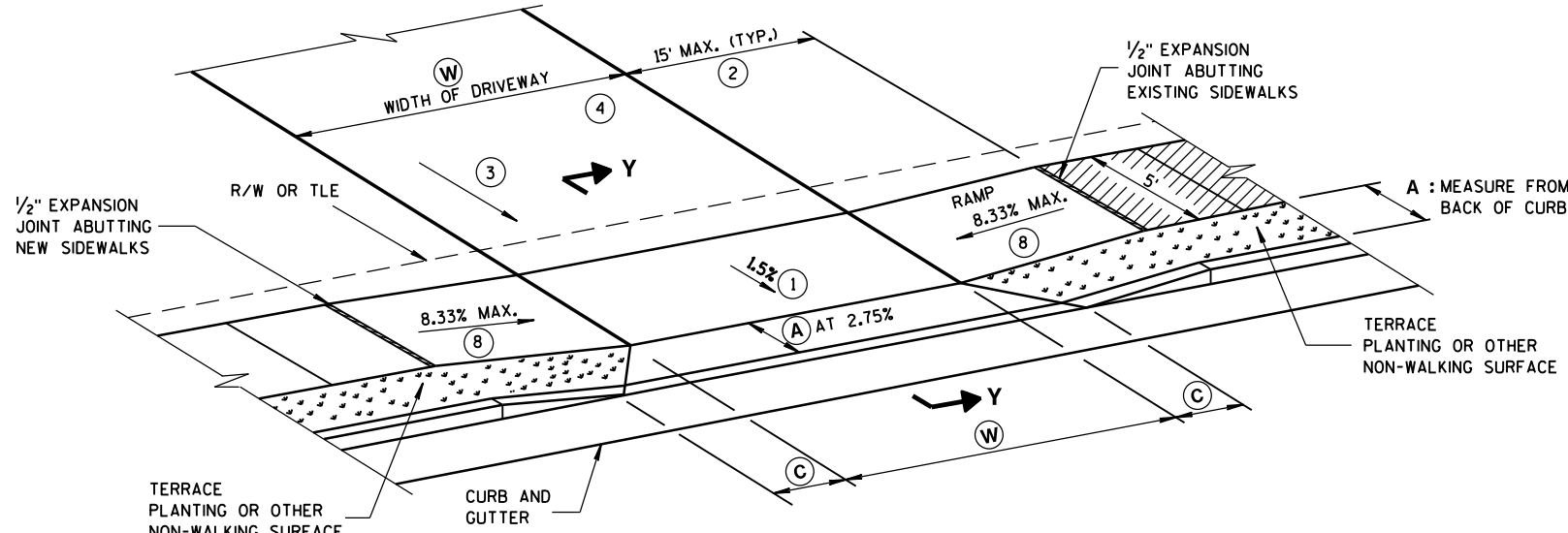
- 1 CONSTRUCTION TOLERANCE OF 0.5% ± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- 2 THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.
- 3 DRIVEWAY SLOPES: DESIRABLE MAXIMUM
10.5% UP AWAY FROM SIDEWALK (SAG)
8.5% DOWN AWAY FROM SIDEWALK (CREST)
ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG
- 4 DRIVEWAY TYPES
 - 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE
 - 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE
 - 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES)
- 5 PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.
- 6 (W) IS SHOWN ON PLAN AND PROFILE SHEETS.
- 7 OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.
- 8 SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.



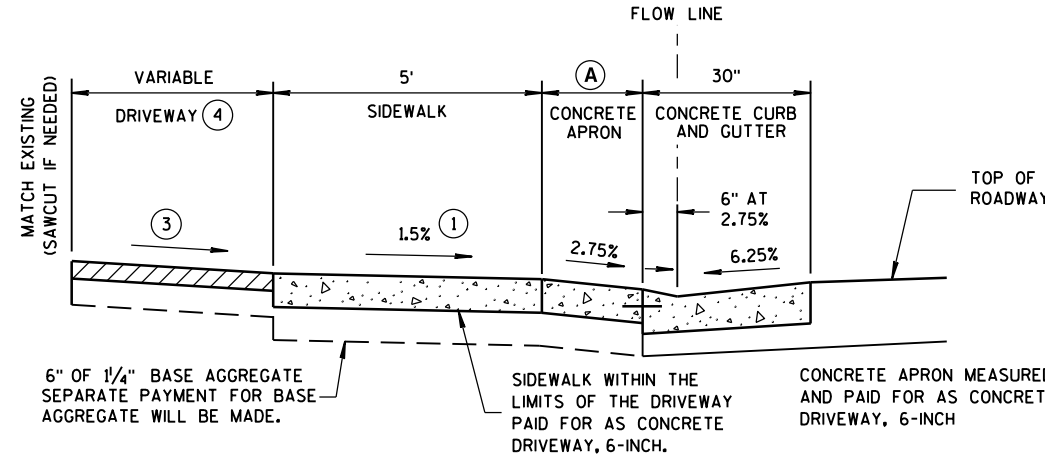
TYPE X
SIDEWALK ABUTS CURB & GUTTER
TERRACE VARIES 0 TO 3 FEET



SECTION X-X



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



NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

SECTION Y-Y
DRIVEWAY DETAIL
WITH CONCRETE CURB & GUTTER
(URBAN AND SUBURBAN)

TABLE Y

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

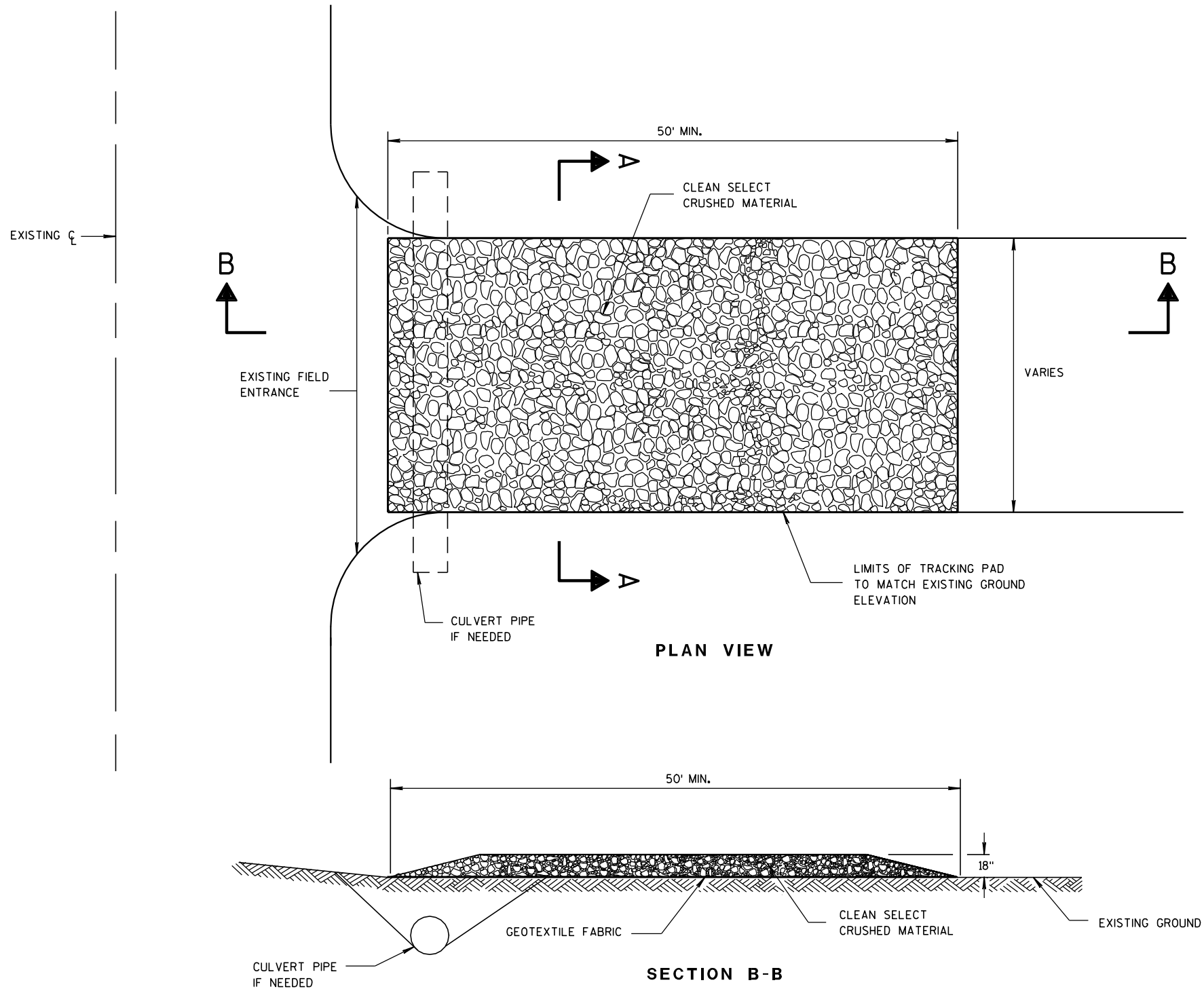
NOT TO SCALE

DRIVEWAY AND SIDEWALK
RAMPS
TYPES X & Y

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December, 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
FHWA UNIT SUPERVISOR

SD D 8 E 10-2



TRACKING PAD

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.

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

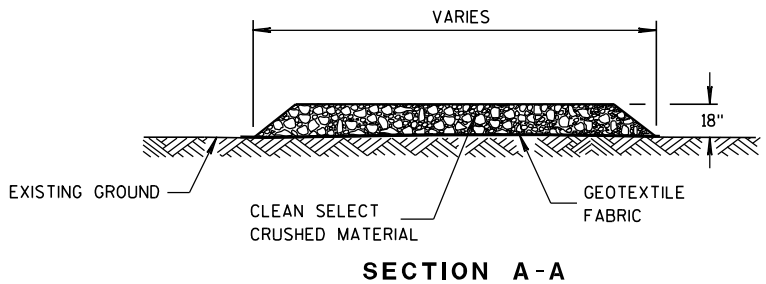
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

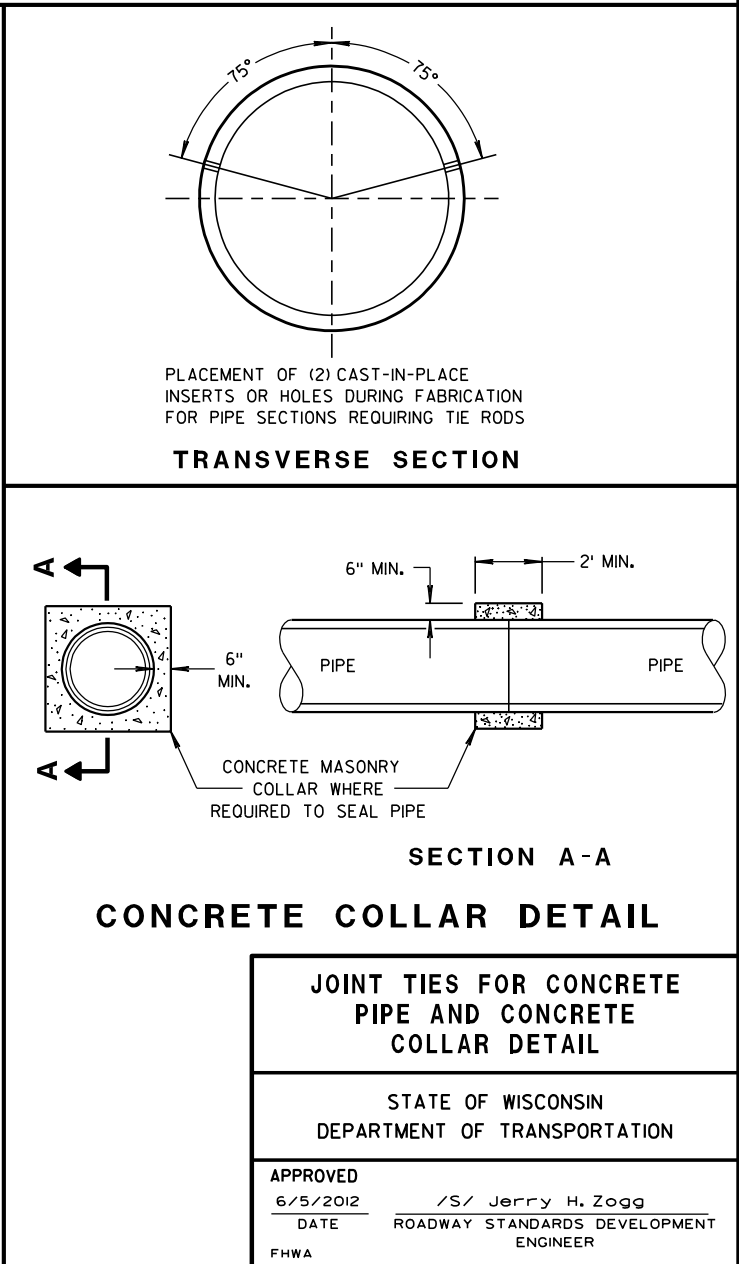
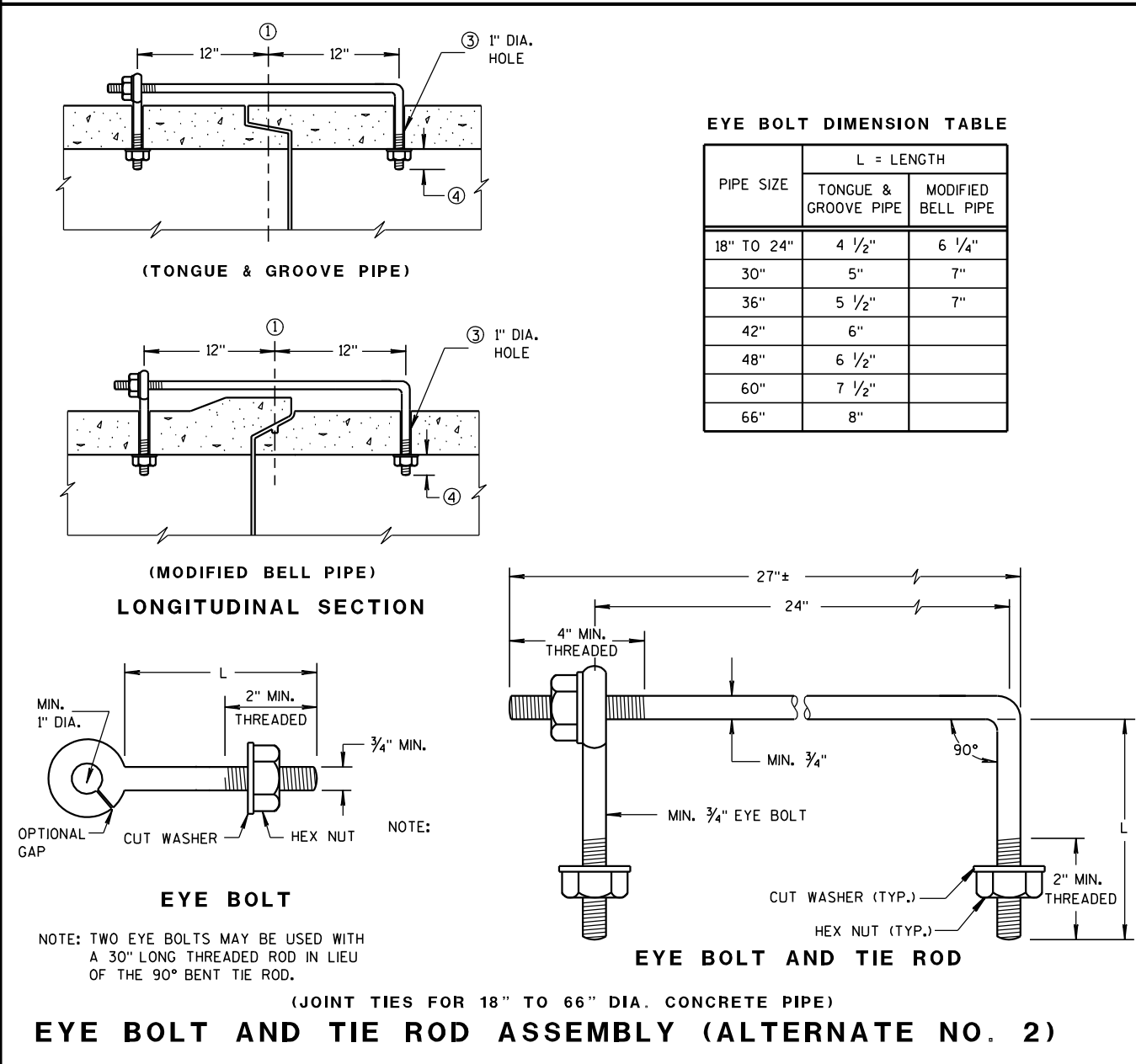
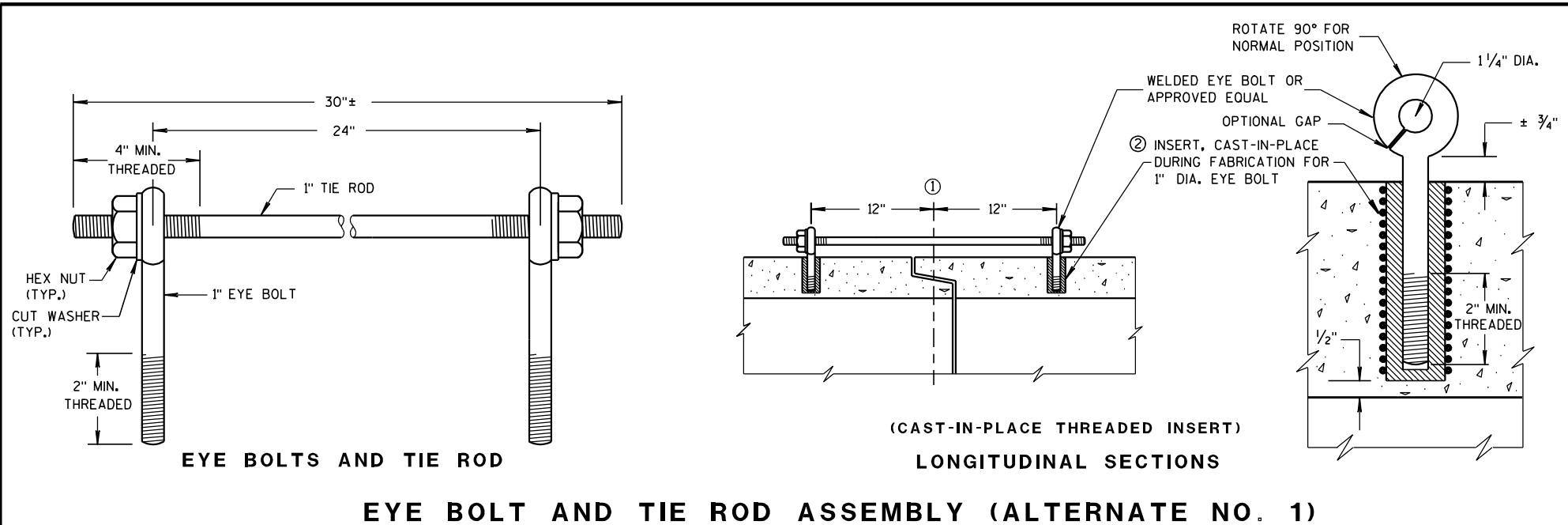
THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.

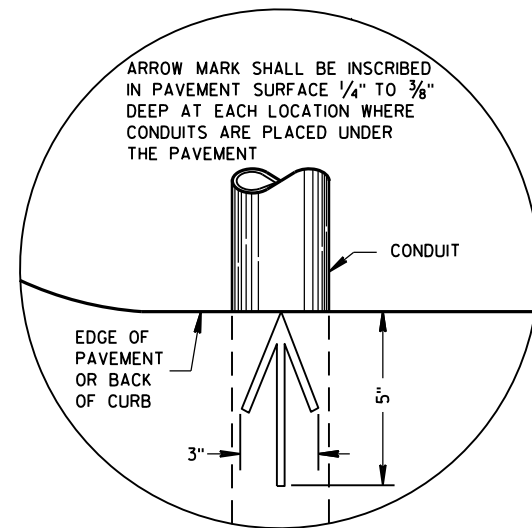


TRACKING PAD

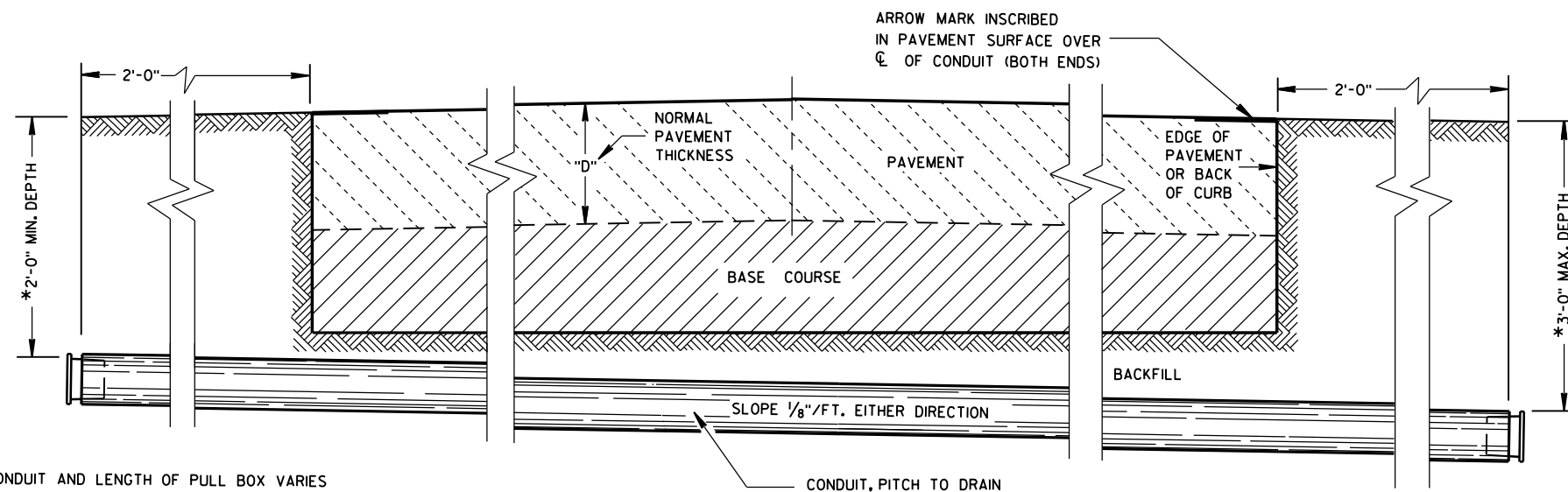
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011
DATE
/S/ Jerry H. Zogg
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

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
PIPE DIAMETER (INSIDE)	A	12	12	12	18	18	18	24	24	24
PIPE LENGTH **	B	24	30	36	24	30	36	36	42	48
WALL THICKNESS	C	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064
COVER	D	10 1/4	10 1/4	10 1/4	16 1/4	16 1/4	16 1/4	22 1/4	22 1/4	22 1/4
FRAME	E	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2	26 1/2	26 1/2	26 1/2
FRAME	F	8 1/2	8 1/2	8 1/2	14 1/2	14 1/2	14 1/2	20 1/2	20 1/2	20 1/2
FRAME	G	11 1/2	11 1/2	11 1/2	17 1/2	17 1/2	17 1/2	23 1/2	23 1/2	23 1/2
WEIGHT IN POUNDS *										
FRAME AND COVER		60	60	60	110	110	110	155	155	155

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

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

GENERAL NOTES

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

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

PULL BOXES LOCATED IN THE ROADWAYS SHALL HAVE LOCKING COVERS.

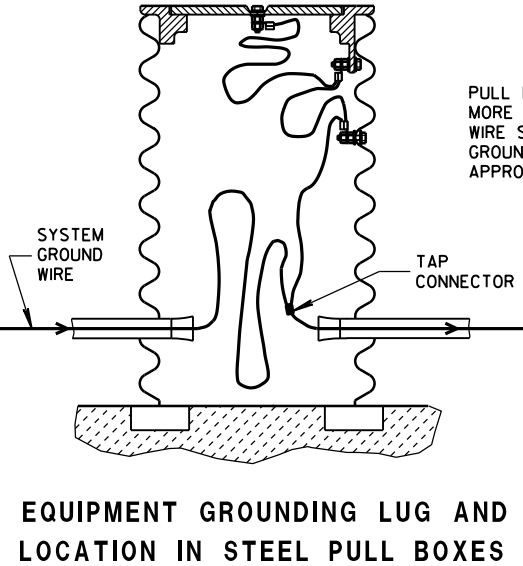
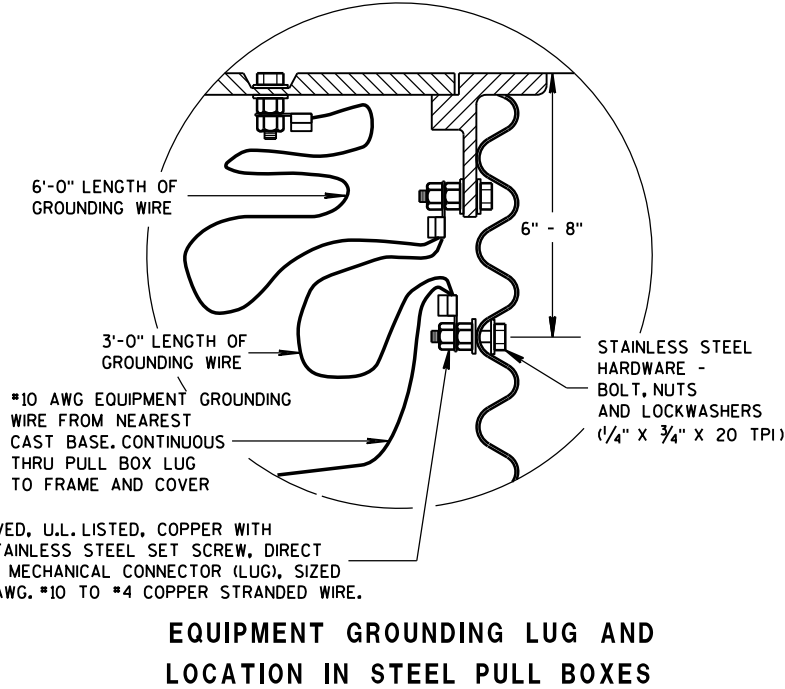
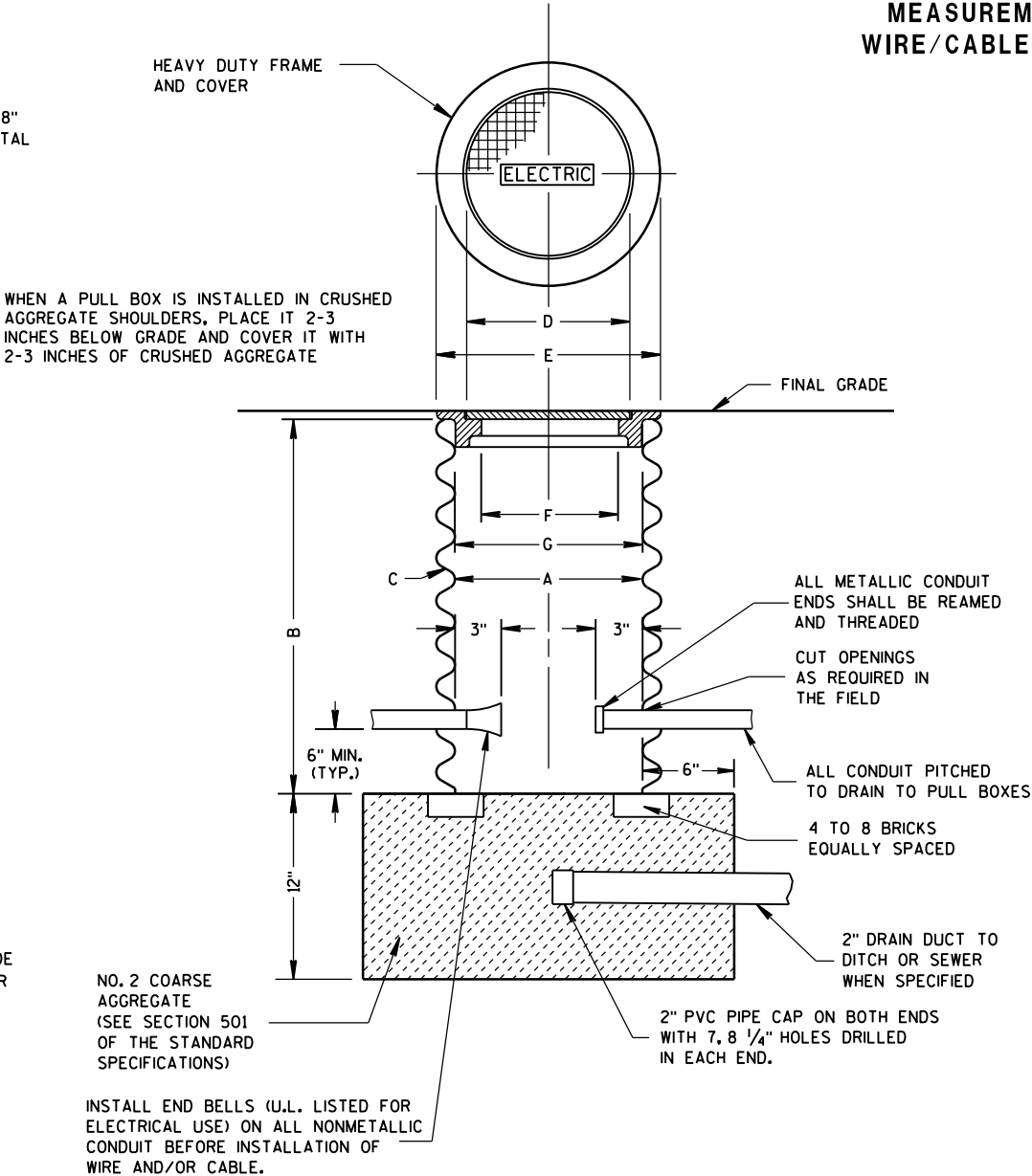
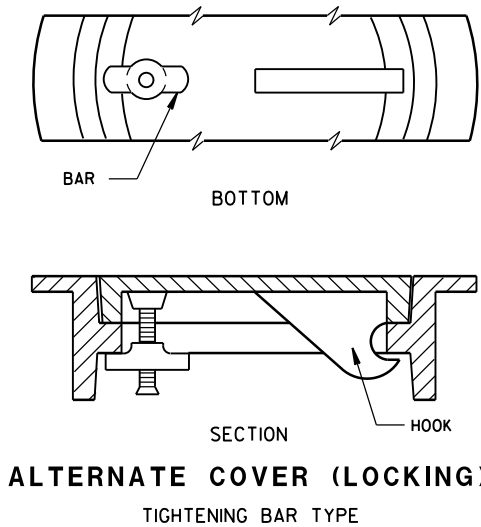
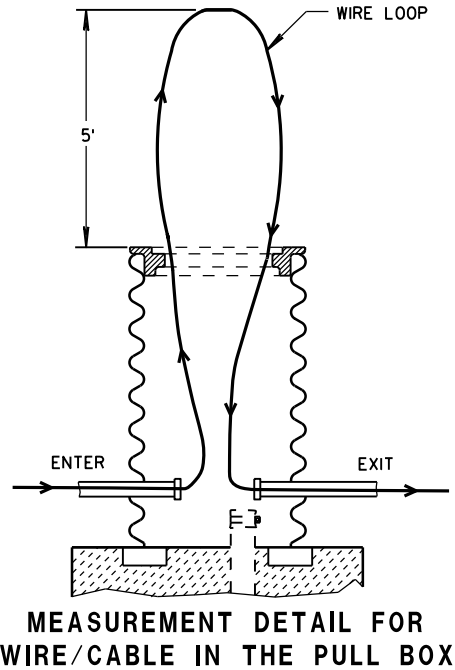
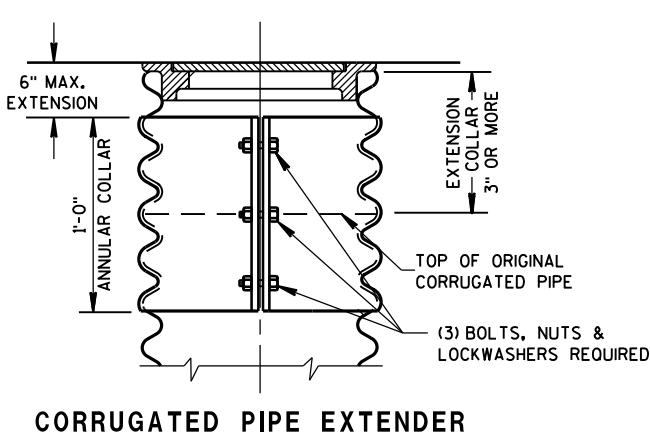
ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

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

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

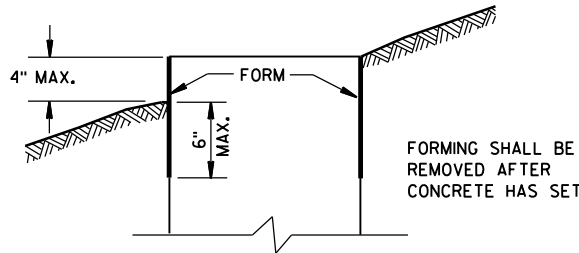
ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

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



PULL BOX	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2014 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER
FHWA	

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



FORMING DETAIL

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

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS 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 AS 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.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6 X 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 NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

GENERAL NOTES (CONTINUED)

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

ENDS OF CONDUIT INSTALLED BELOW GRADE FOR FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC.

WHEN REQUIRED TO CONNECT NONMETALLIC 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 1, TYPE 2, TYPE 5, AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER THE BASE OF THE TYPE 2 AND TYPE 5 BASES 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" "L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND END SHALL NOT BE THREADED.

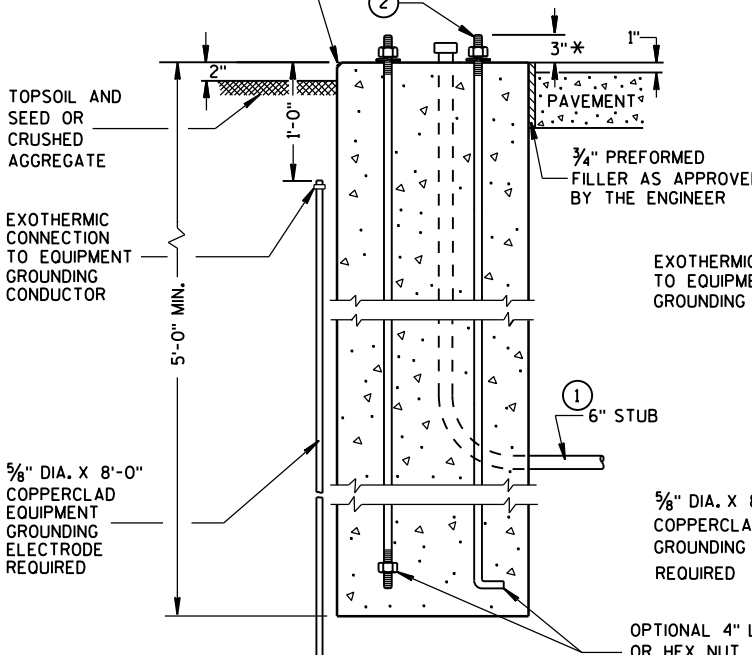
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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).

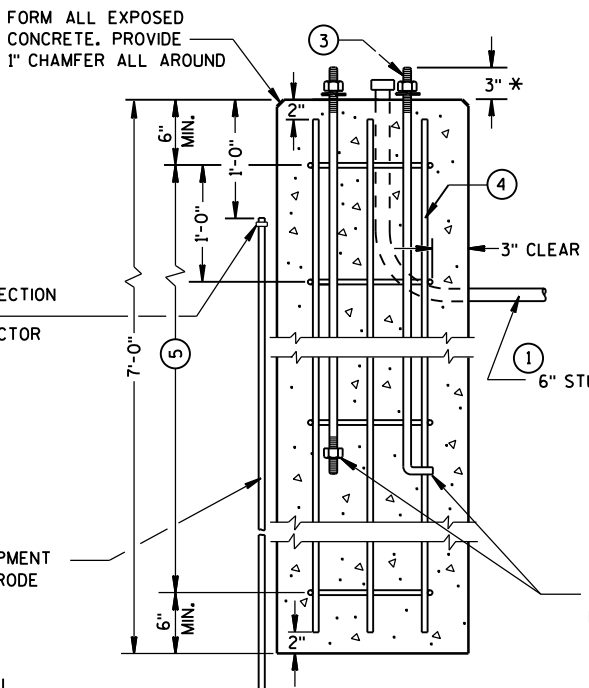
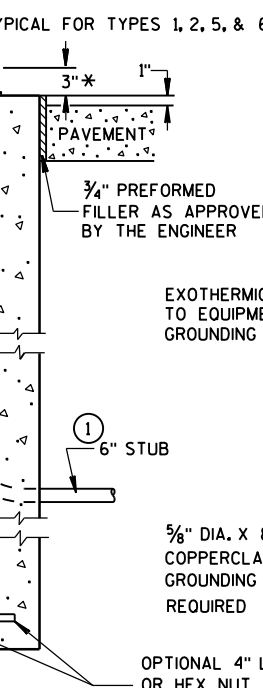
- 1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN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

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



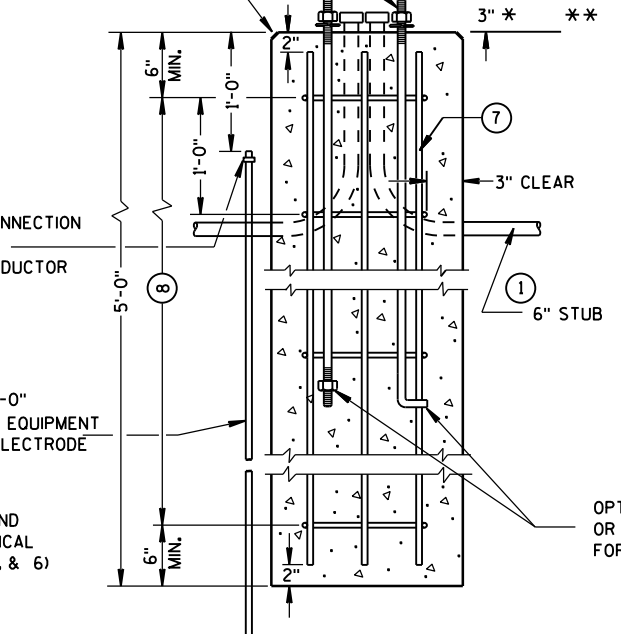
TYPE 1

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



TYPE 2

FORM ALL EXPOSED CONCRETE. PROVIDE 1" CHAMFER ALL AROUND



TYPE 5 & 6

CONCRETE BASES

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/4" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

** FOR NONBREAKAWAY 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 Sept. 2014 DATE	/S/ Ahmet Demirbilek 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 641.2.2 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.

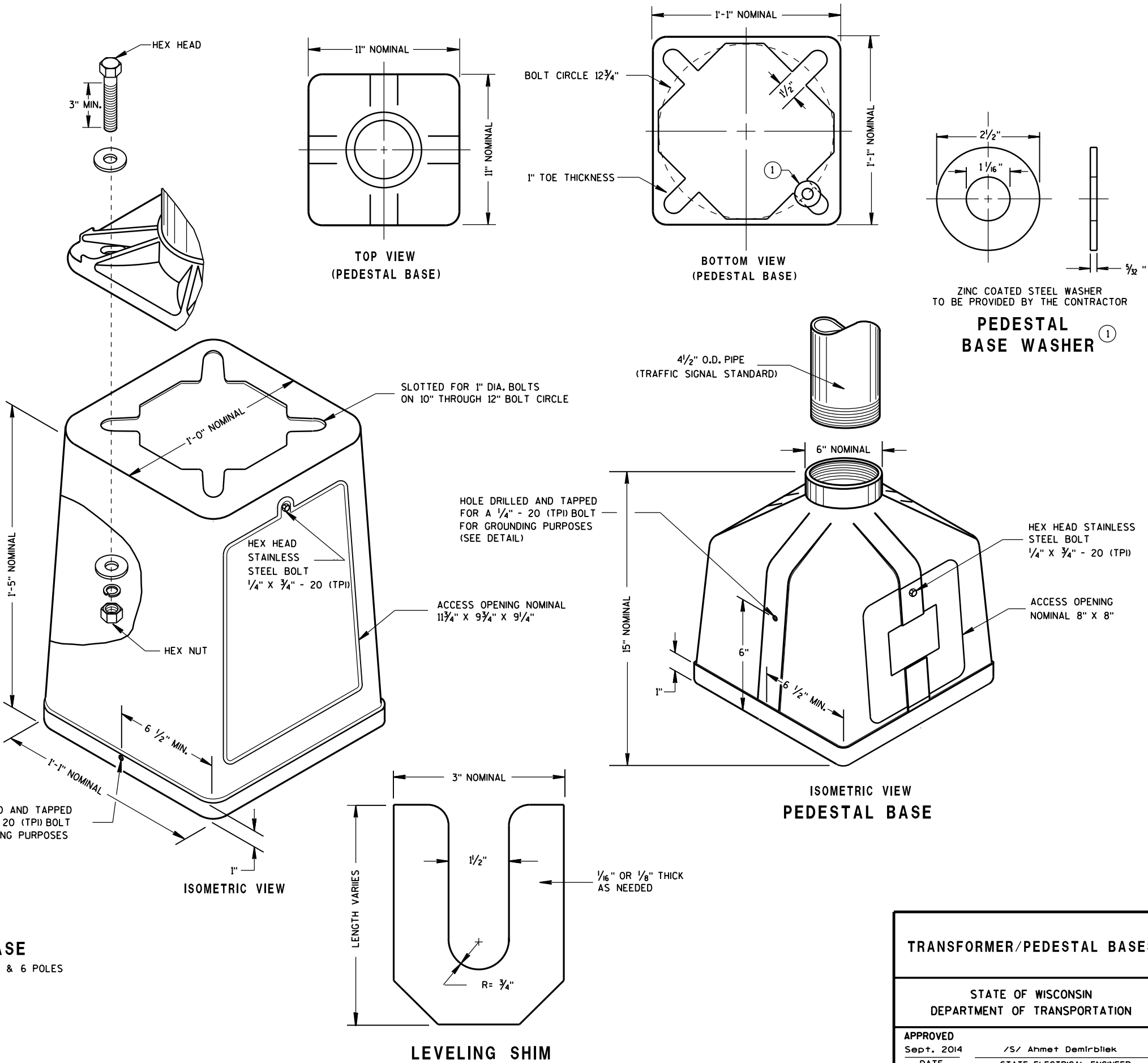
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

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.



TYPICAL MECHANICAL
CONNECTOR LUG
TO BE FURNISHED WITH EACH BASE

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

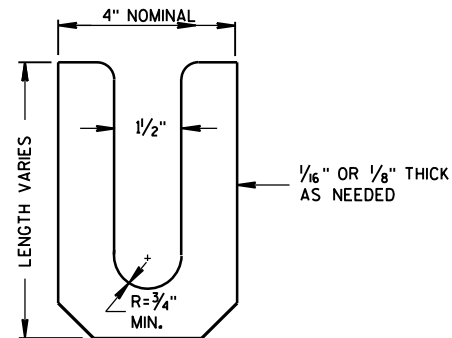
ISOMETRIC VIEW
PEDESTAL BASE

LEVELING SHIM

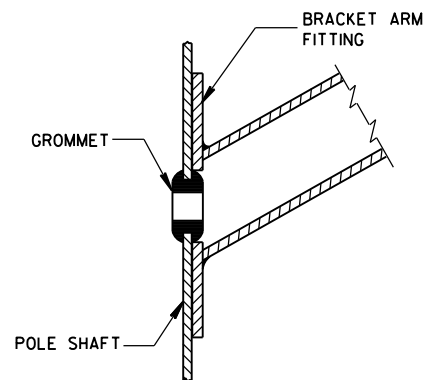
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

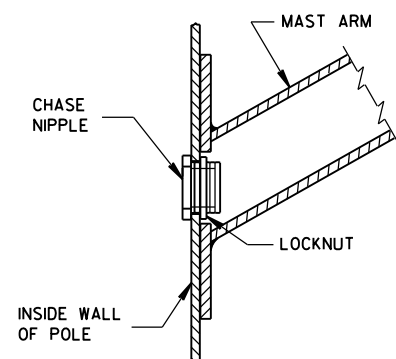
APPROVED
Sept. 2014 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGINEER
FHWA



LEVELING SHIM
SHALL BE ALUMINUM



**TYPICAL APPLICATION OF
GROMMET IN POLE SHAFT**



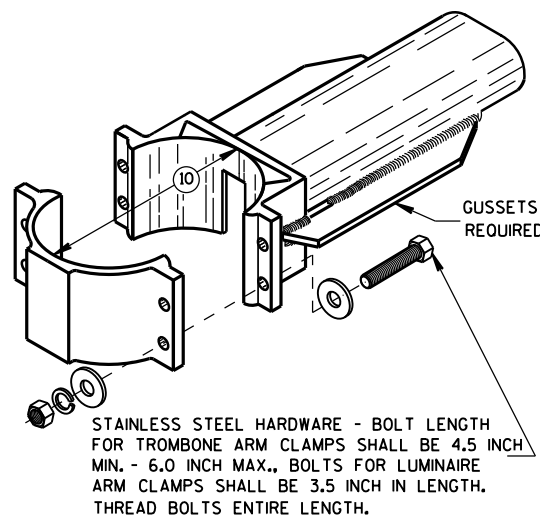
**TYPICAL APPLICATION OF
CHASE NIPPLE IN POLE SHAFT**

GENERAL NOTES

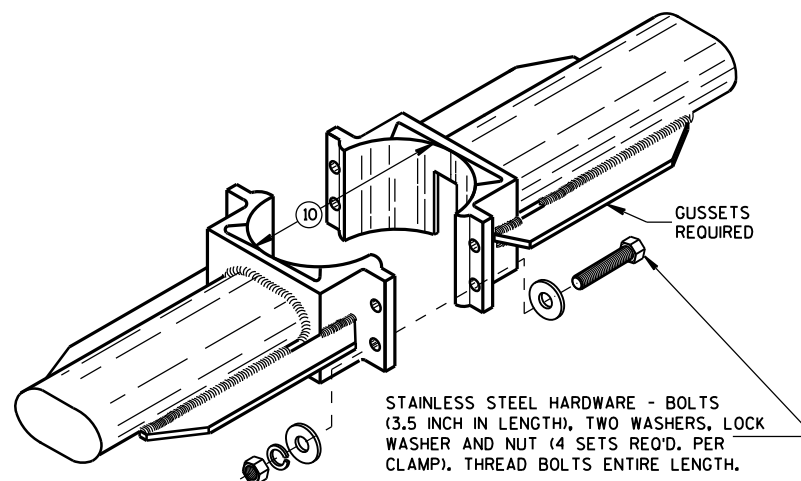
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- ⑩ 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP.
6.625" I.D. FOR TROMBONE MAST ARM CLAMP.
- ⑪ INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)
- ⑫ BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT
CIRCLE USING 1" DIAMETER ANCHOR RODS.
- ⑬ 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.

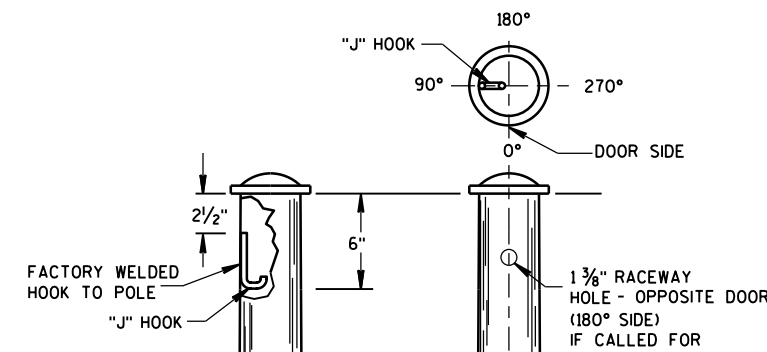
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE
AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



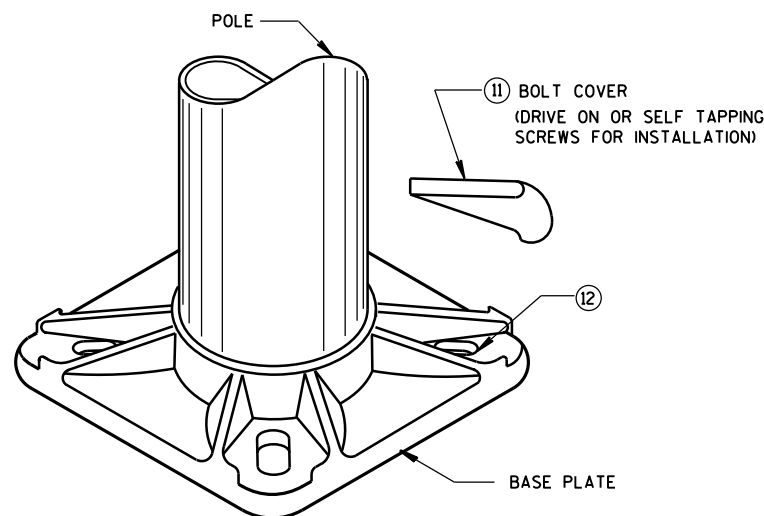
**TYPICAL TROMBONE MAST ARM AND SINGLE
LUMINAIRE MAST ARM MOUNTING CLAMP**



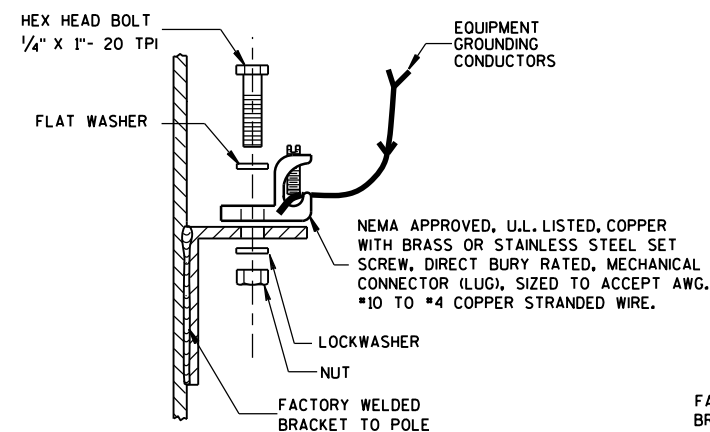
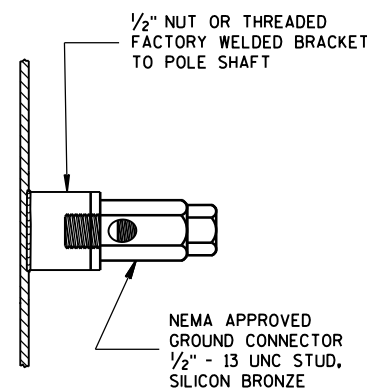
**TYPICAL LUMINAIRE MAST ARM
(DOUBLE) MOUNTING BRACKETS**



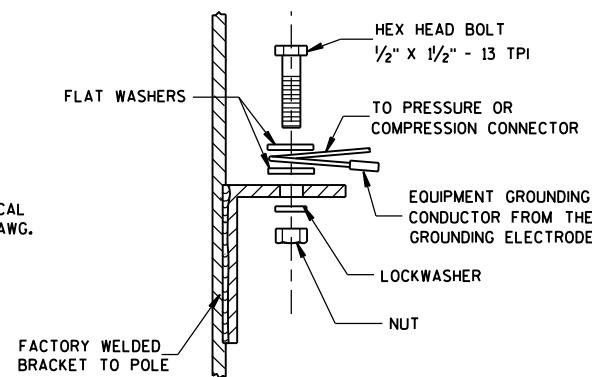
TYPICAL "J" HOOK LOCATION



BASE PLATE



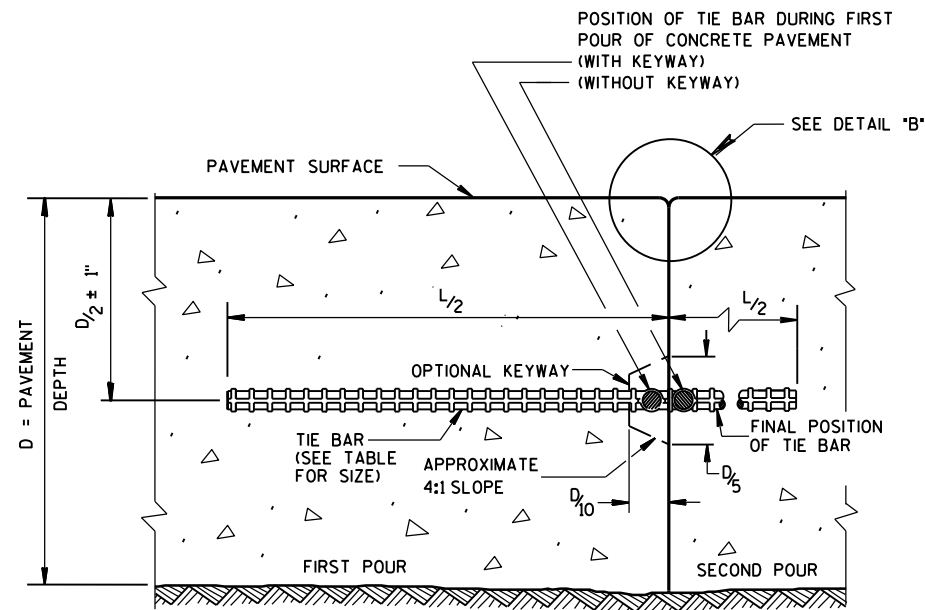
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL
BE STAINLESS STEEL



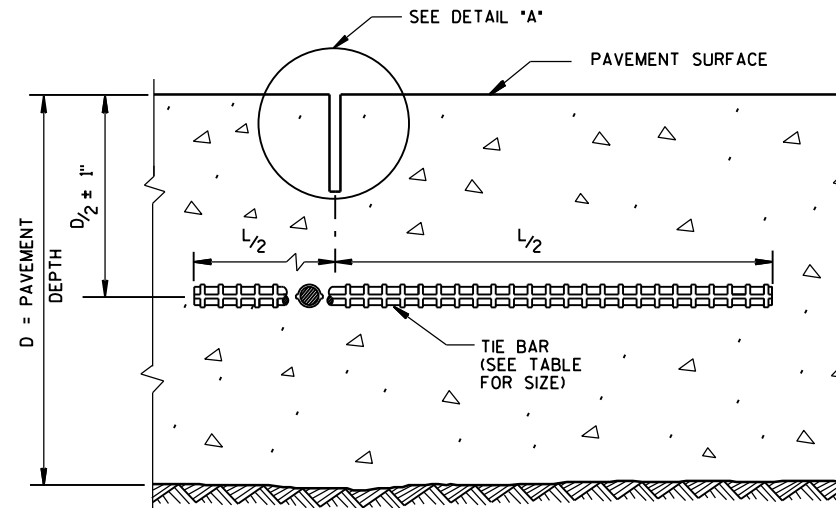
HARDWARE DETAILS FOR POLE MOUNTINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Feb. 2015
DATE /S/ Ahmet Demirbilek
STATE ELECTRICAL ENGINEER
FHWA



CONSTRUCTION JOINT



SAWED JOINT

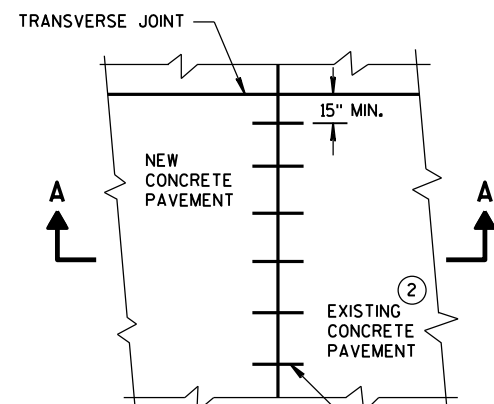
GENERAL NOTES

DO NOT SEAL OR FILL LONGITUDINAL JOINTS.

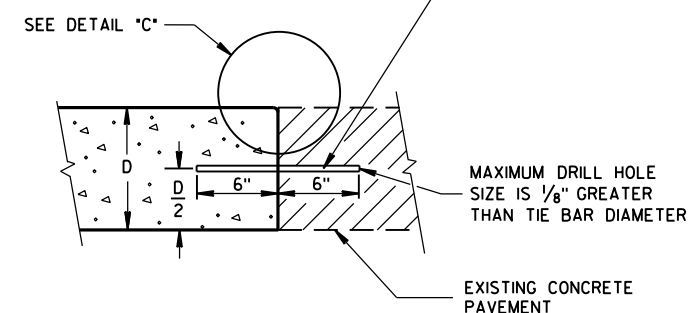
CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

- ① ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.
- ② PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



PLAN VIEW

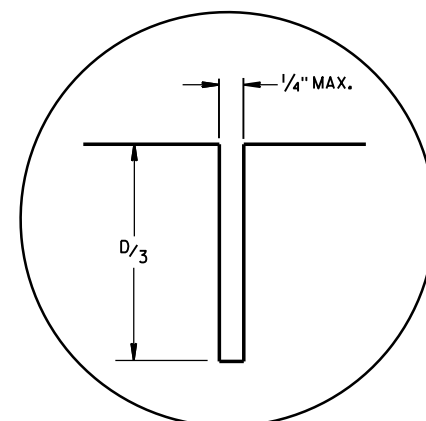


SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT

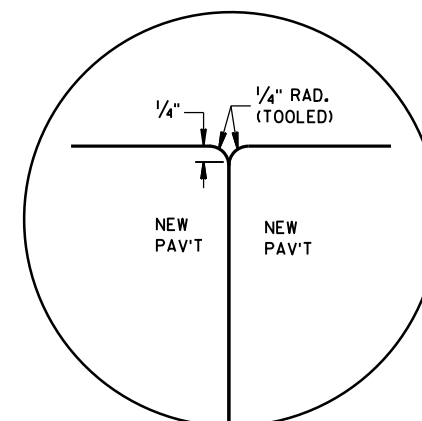
NO. 6 TIE BARS SPACED 30" C-C,
INSTALLED PERPENDICULAR
TO THE LONGITUDINAL JOINT. ①

MAXIMUM DRILL HOLE
SIZE IS 1/8" GREATER
THAN TIE BAR DIAMETER

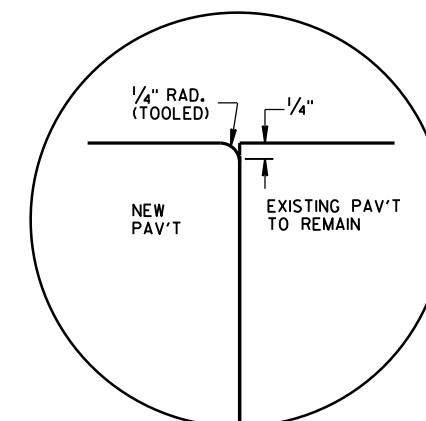
EXISTING CONCRETE
PAVEMENT



DETAIL "A"



DETAIL "B"



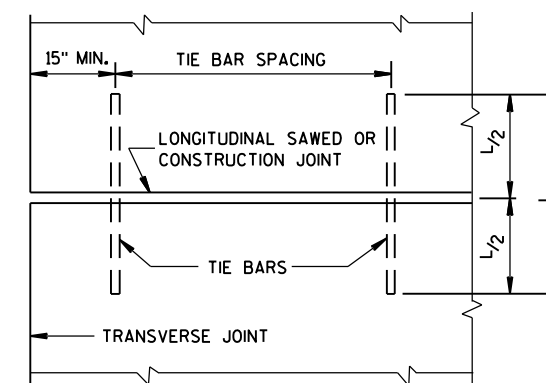
DETAIL "C"

TIE BAR TABLE

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

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

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



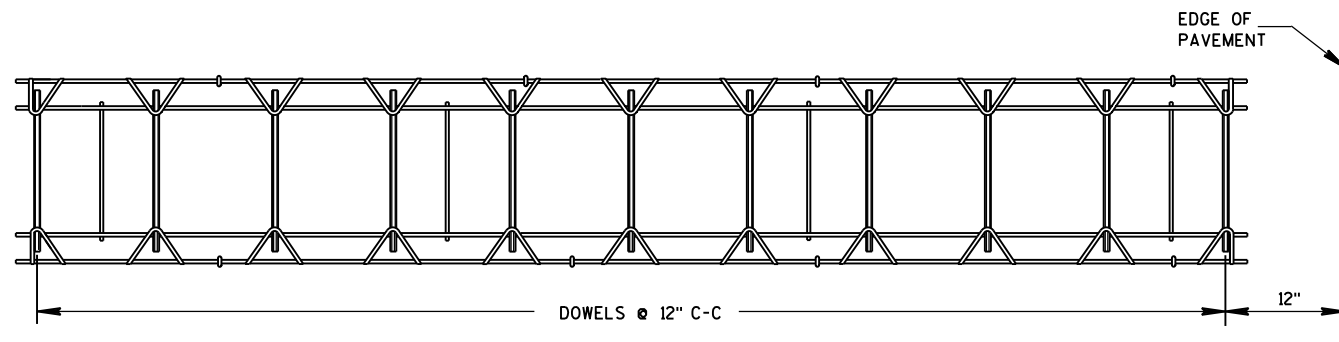
PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

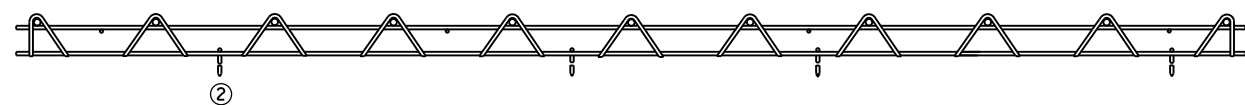
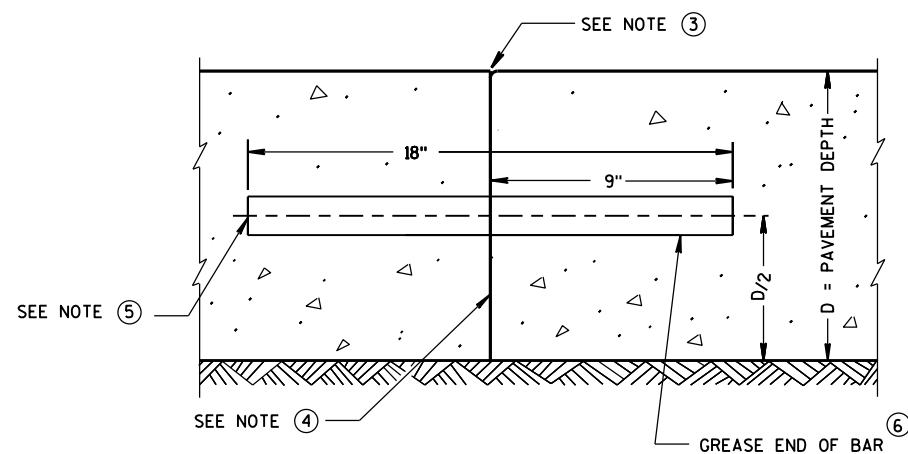
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June, 2015
DATE
FHWA

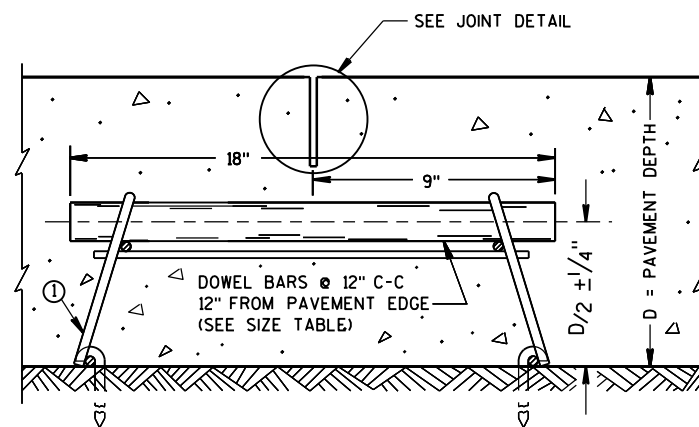
/S/ Peter Kemp, P.E.
PAVEMENT SUPERVISOR



PLAN VIEW

SIDE VIEW
CONTRACTION JOINT DOWEL ASSEMBLY ①

TRANSVERSE CONSTRUCTION JOINT



DOWELED CONTRACTION JOINT

PAVEMENT DEPTH, DOWEL BAR SIZE
AND JOINT SPACING TABLE

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

GENERAL NOTES

CONTRACTION JOINTS

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

DO NOT SEAL OR FILL CONTRACTION JOINTS.

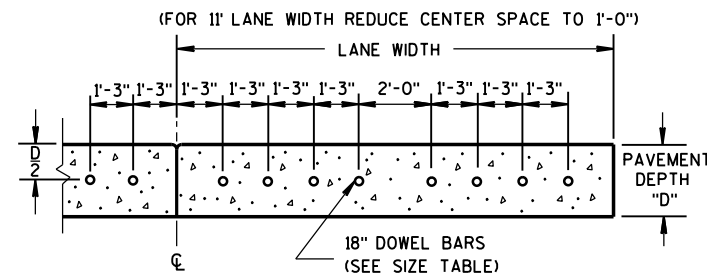
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

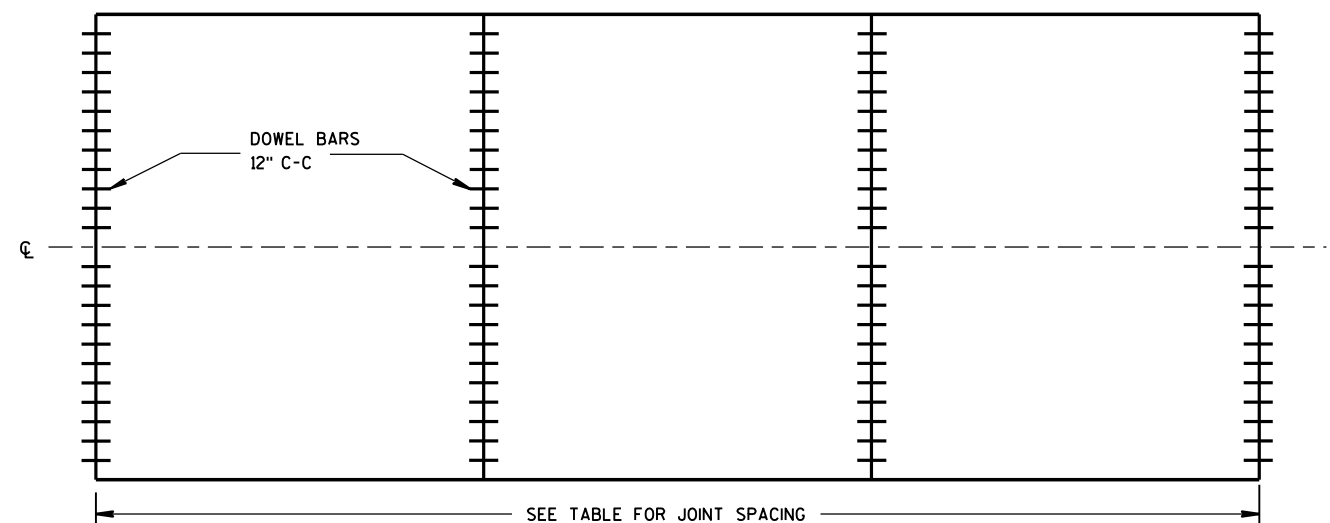
CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

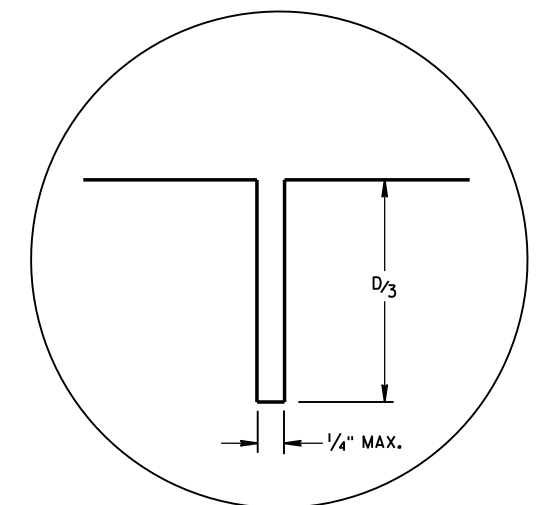
- ① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.
- ② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.
- ③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.
- ④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.
- ⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.
- ⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.
- ⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



CONTRACTION JOINT LOCATIONS



JOINT DETAIL

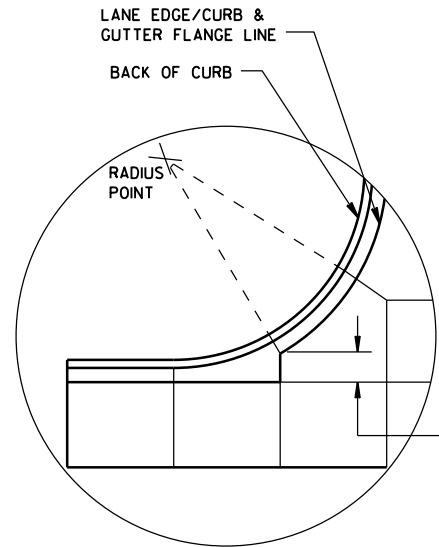
URBAN DOWELED
CONCRETE PAVEMENTSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

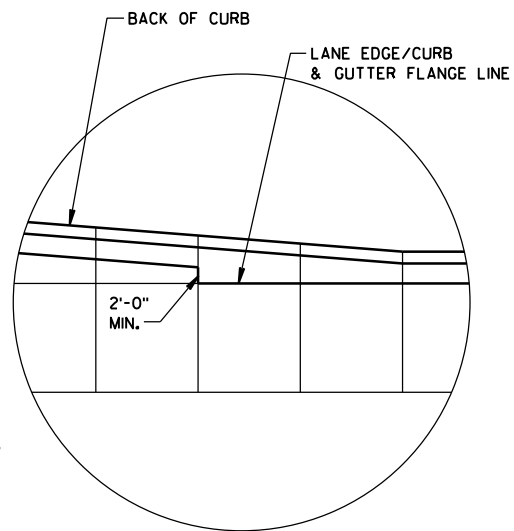
5/3/2013
DATE

FHWA

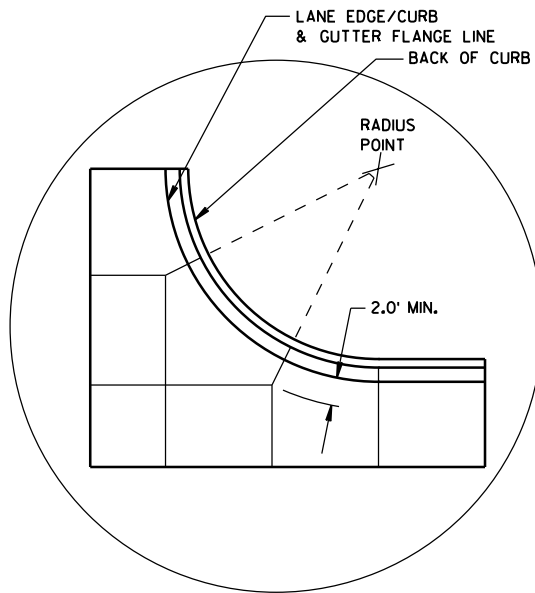
/S/ Deb Bischoff
PAVEMENT POLICY & DESIGN ENGINEER



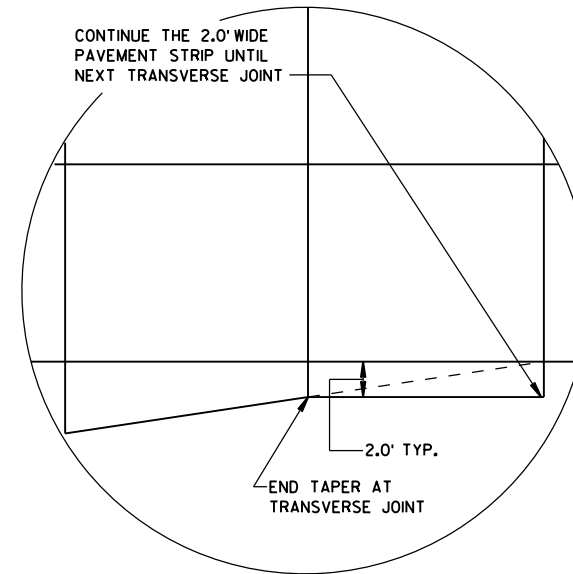
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G. MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

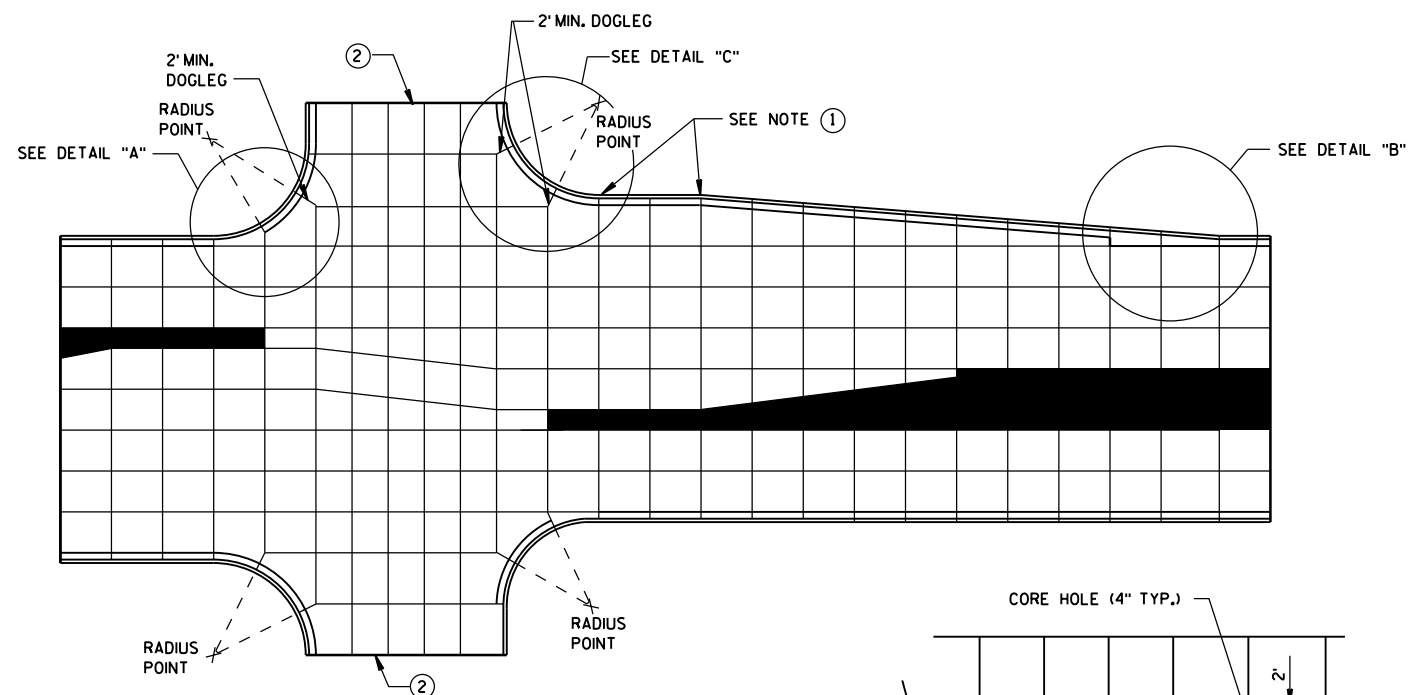
AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

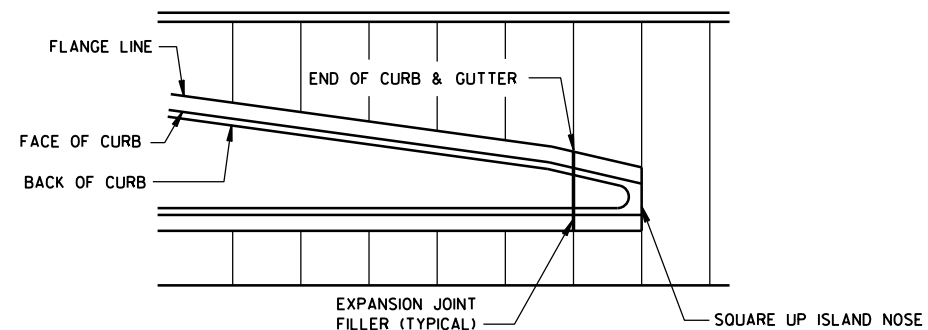
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

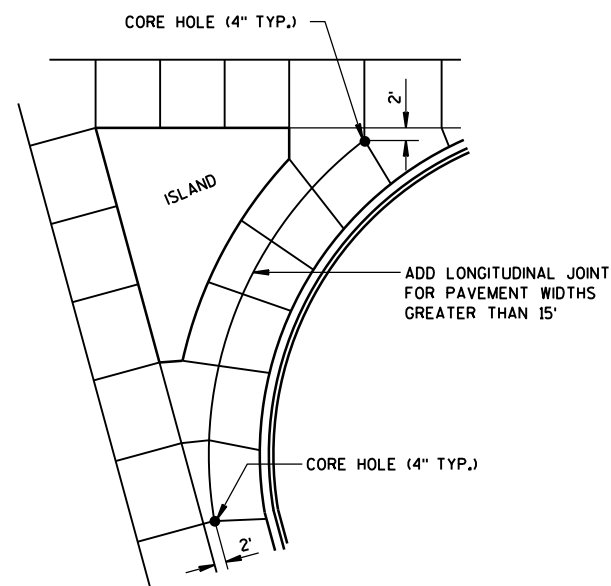
1. PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.
2. CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITH EDGE OF RADIUS.
3. THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



STANDARD INTERSECTION



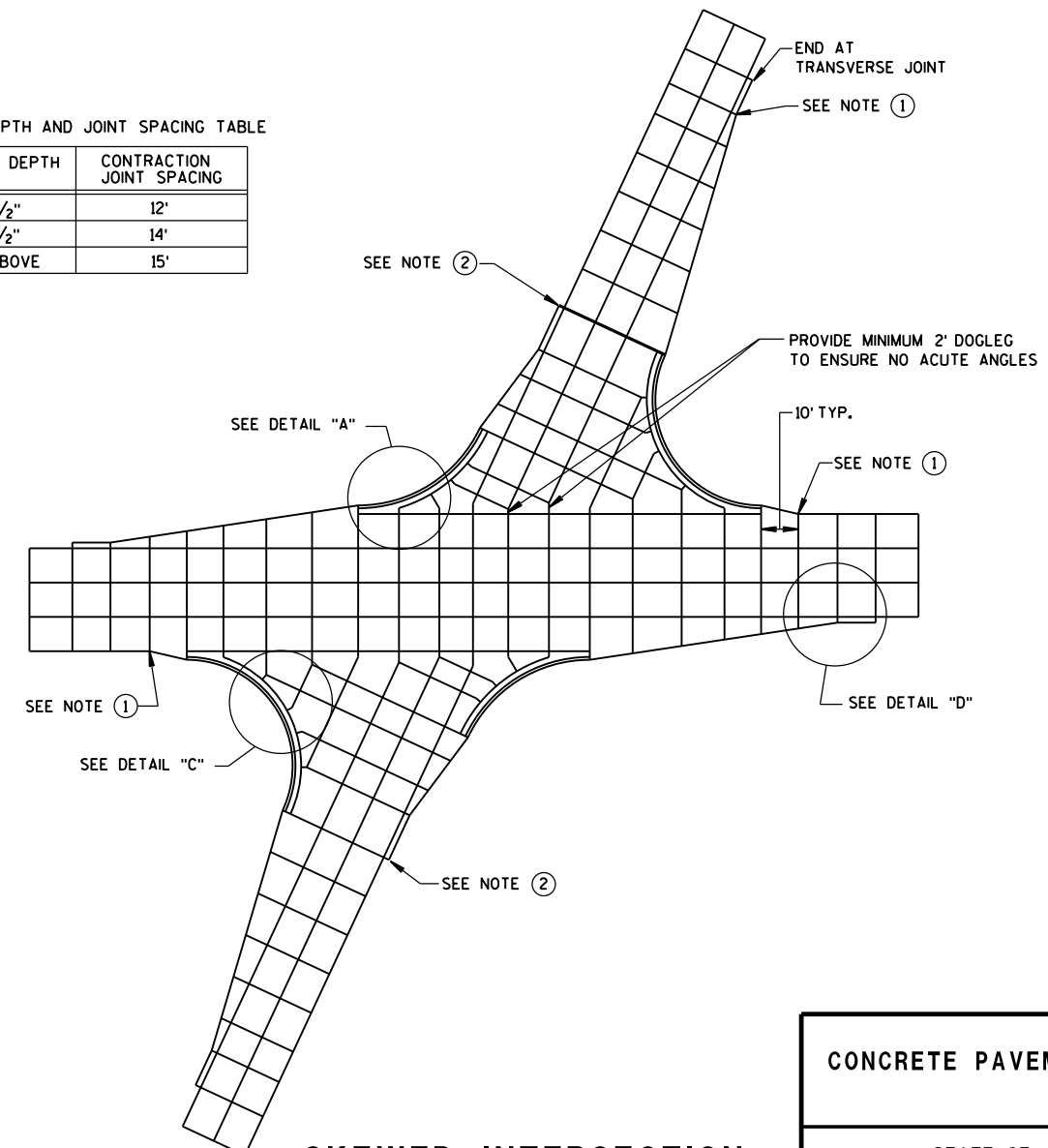
APPROACH TO MEDIAN



LARGE RIGHT TURN

PAVEMENT DEPTH AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



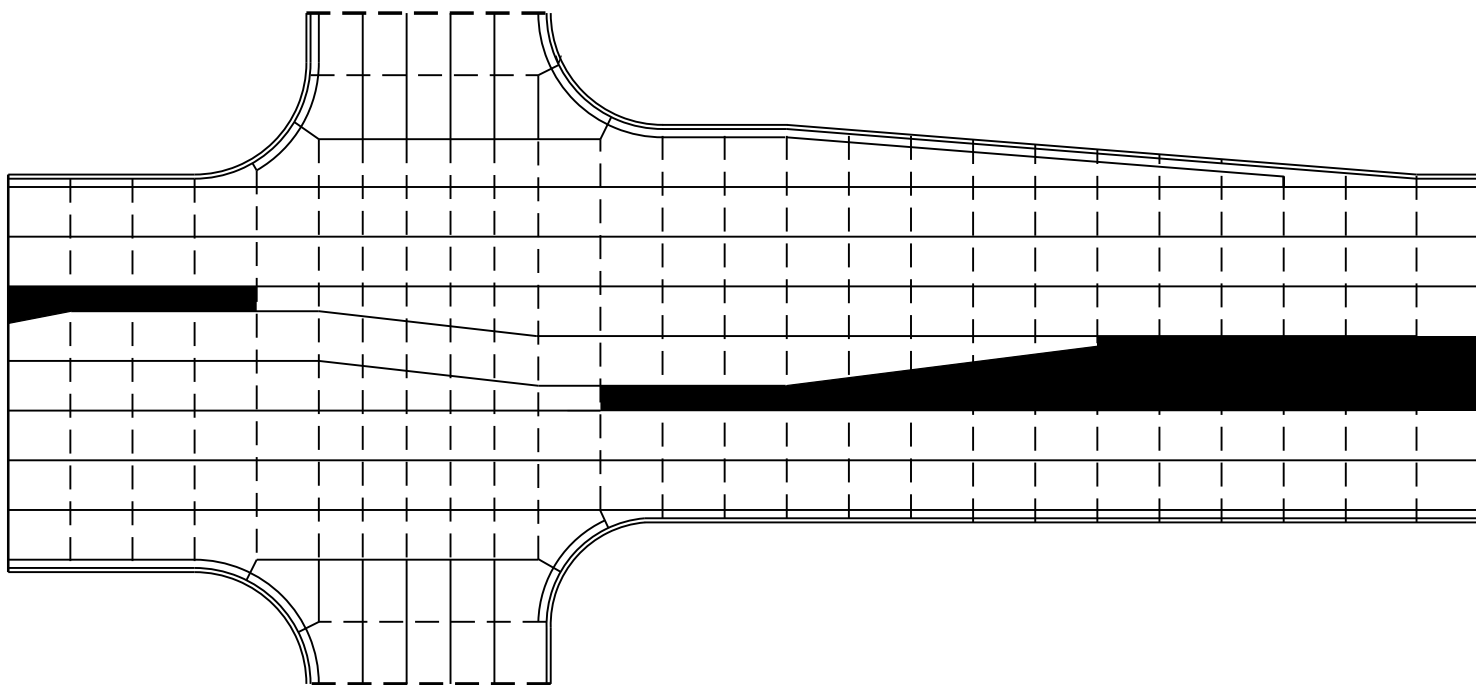
SKewed INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

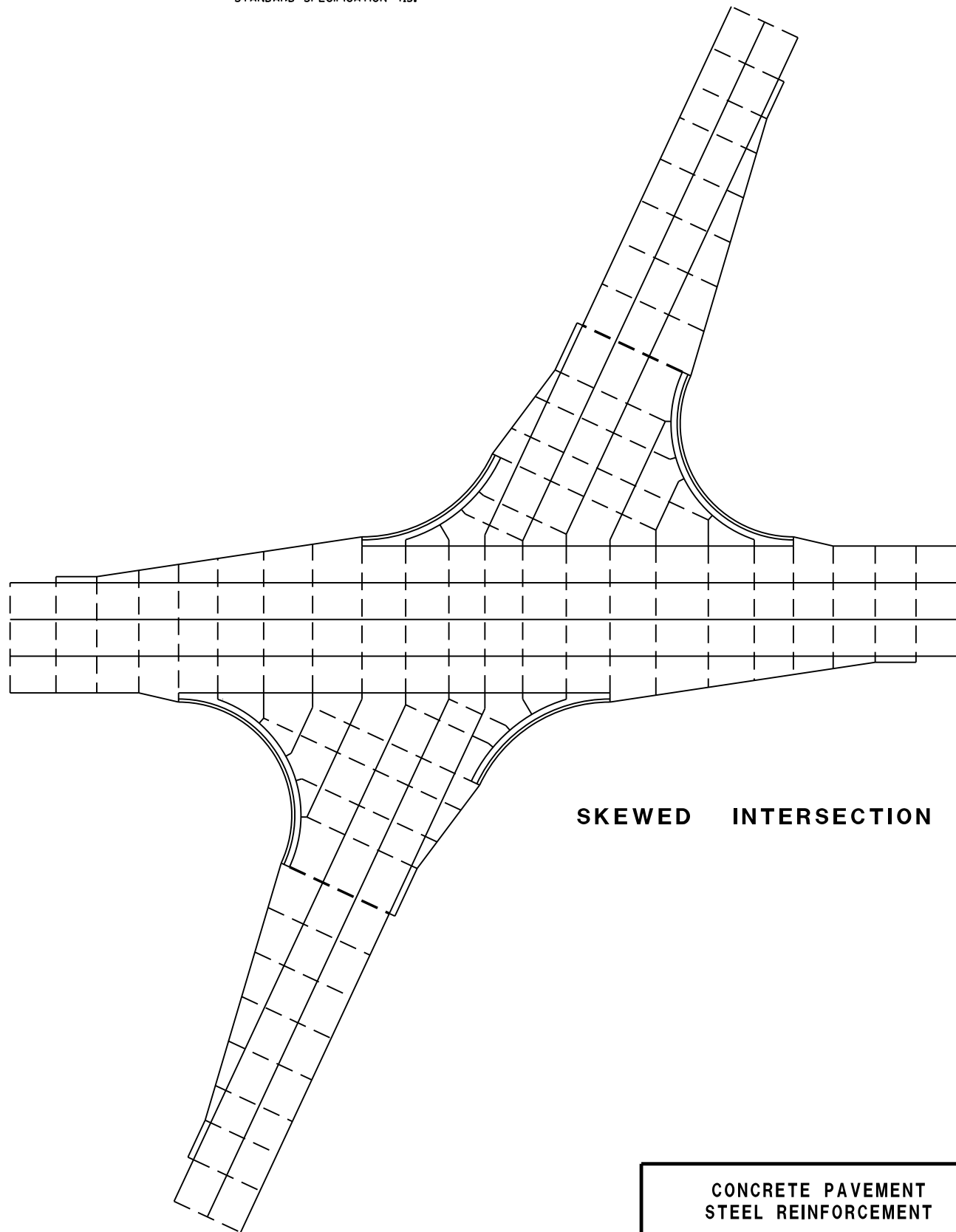
- POTENTIAL DOWELED EXPANSION JOINT
- - - DOWELED JOINT
- TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

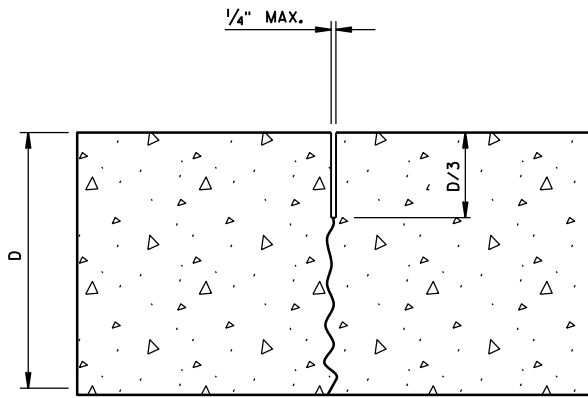
USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



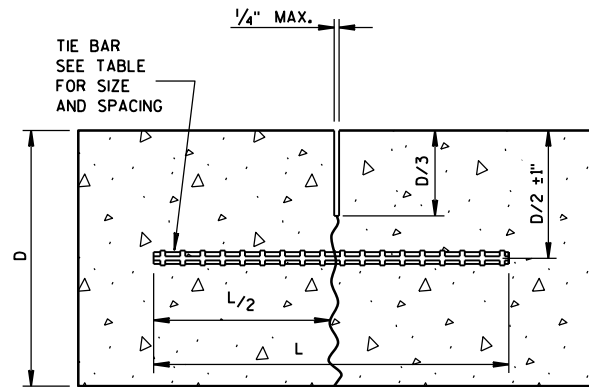
SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



UNDOWELED-TRANSVERSE



TIED LONGITUDINAL

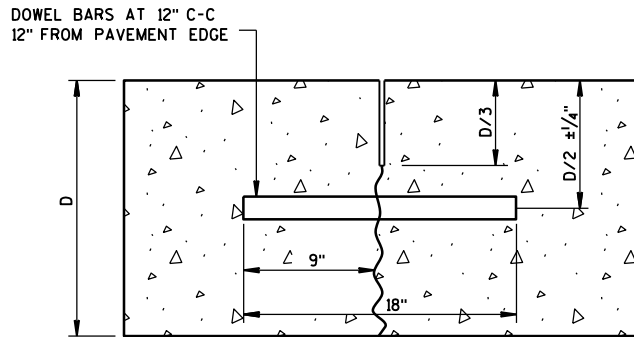
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

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

GENERAL NOTES

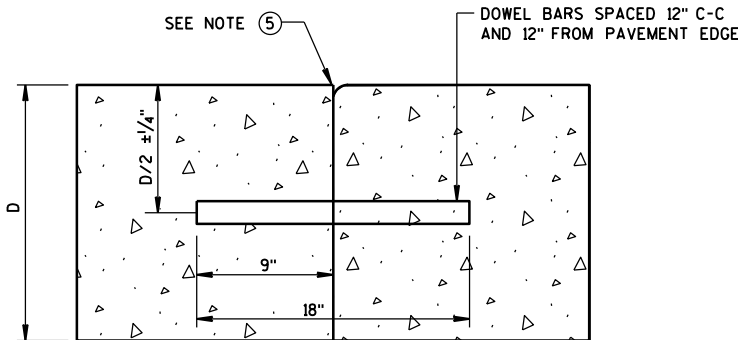
- ① USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATE THE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
- ② SPACE CONTRACTION JOINTS IN ACCORDANCE WITH 13C4, 13C11 OR 13C13.
- ③ LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
- ④ CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
- ⑤ IF JOINT IS FORMED, PROVIDE A 1/4-INCH RADIUS.
- ⑥ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



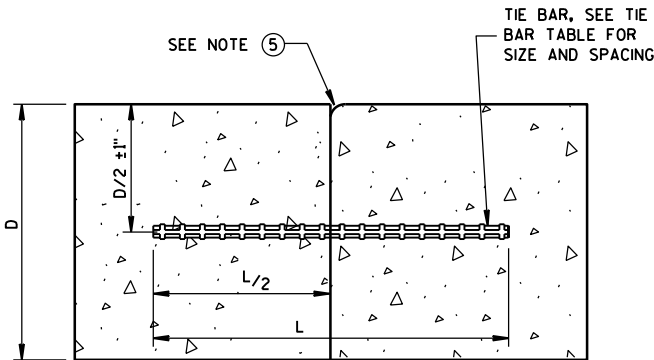
DOWELED-TRANSVERSE

CONTRACTION JOINTS

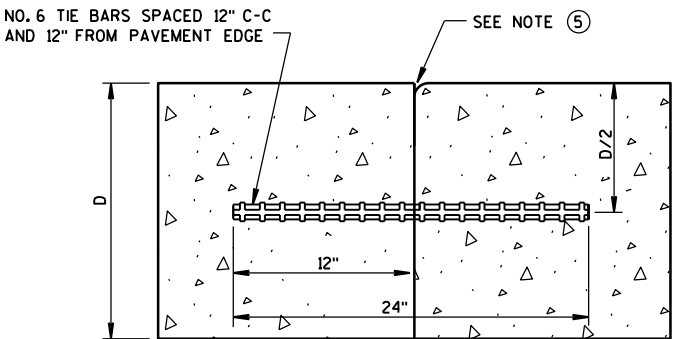
SEE NOTE ②



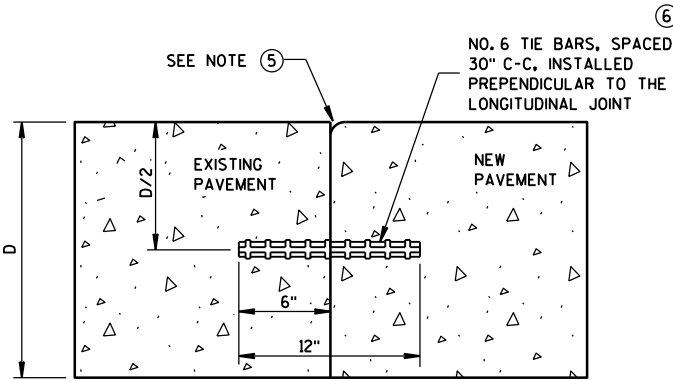
DOWELED TRANSVERSE ③



TIED LONGITUDINAL



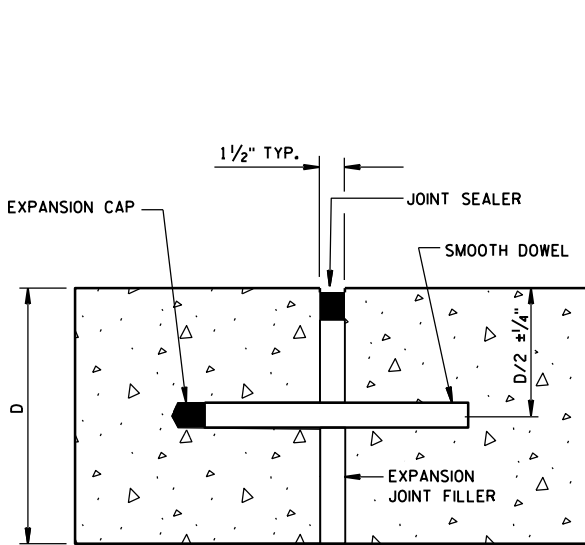
TIED TRANSVERSE ③
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



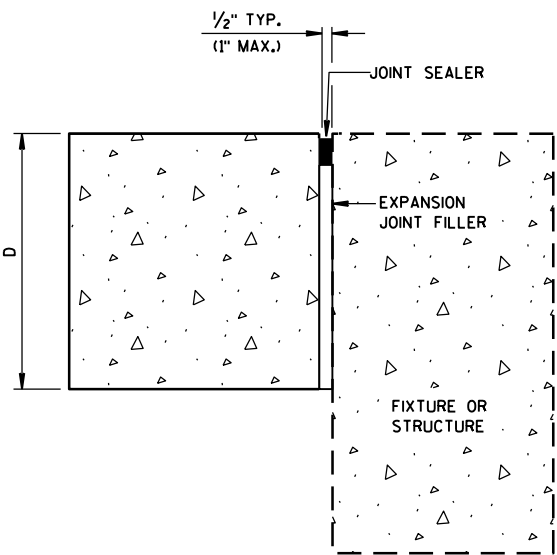
TIED LONGITUDINAL TO EXISTING

CONSTRUCTION JOINTS

SEE NOTE ④



DOWELED-TRANSVERSE
SEE NOTE ①

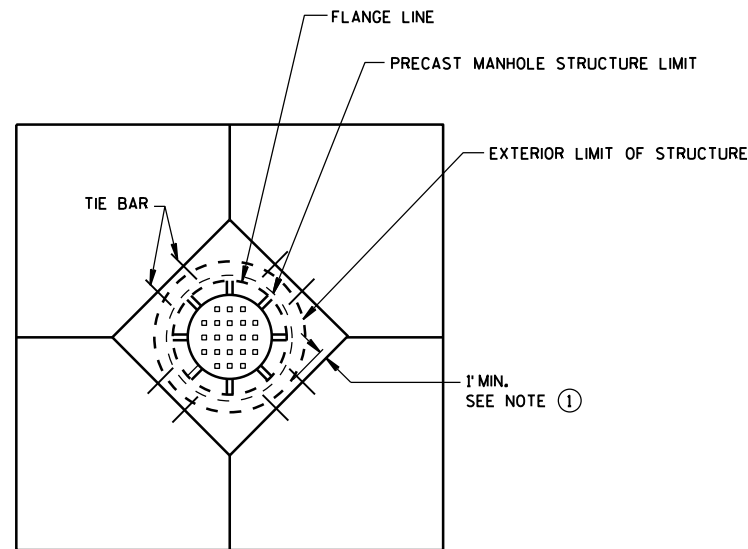


UNTIED-LONGITUDINAL

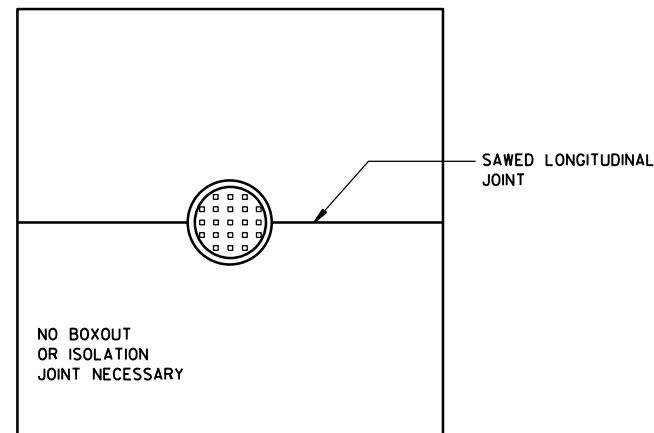
EXPANSION JOINTS

CONCRETE PAVEMENT
JOINT TYPES

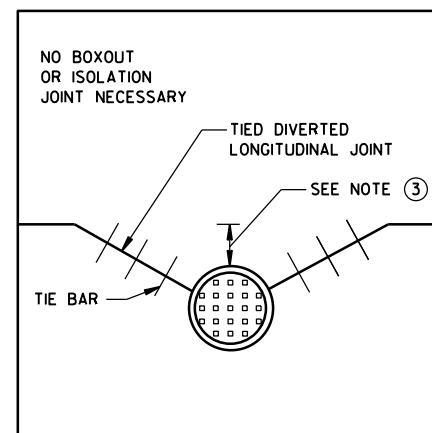
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



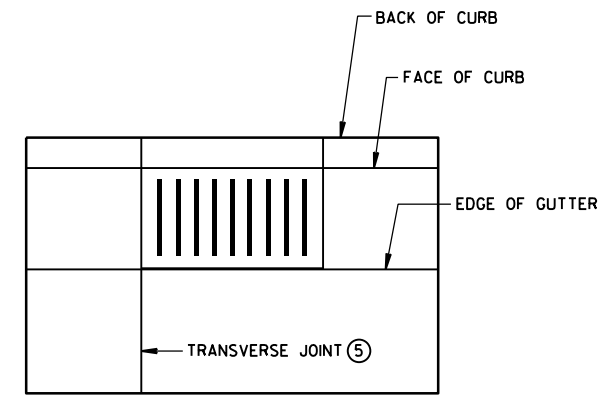
**DIAGONAL MANHOLE BOXOUT
FOR CONSTRUCTION JOINTS**



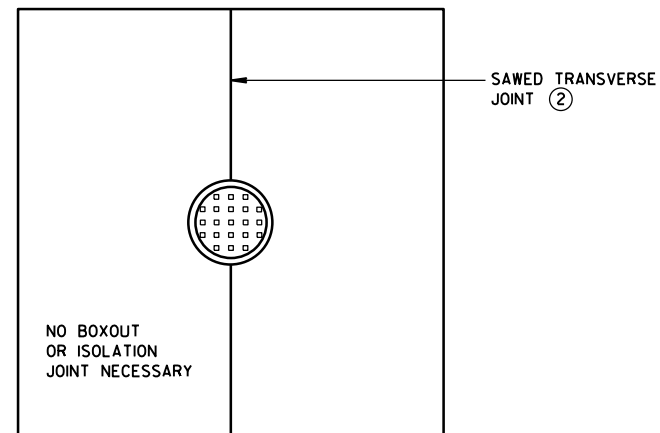
**MANHOLE WITH
LONGITUDINAL JOINT**



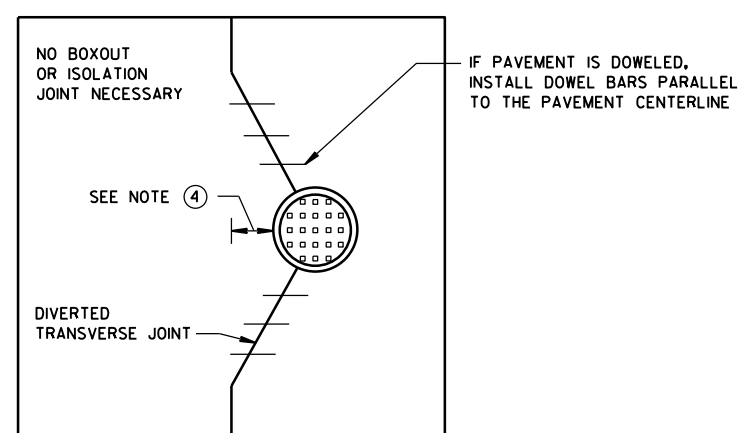
**MANHOLE WITH DIVERTED
LONGITUDINAL CONTRACTION JOINT**



**INLET WITH
TRANSVERSE JOINT**



**MANHOLE WITH
TRANSVERSE JOINT**



**MANHOLE WITH DIVERTED
TRANSVERSE CONTRACTION JOINT**

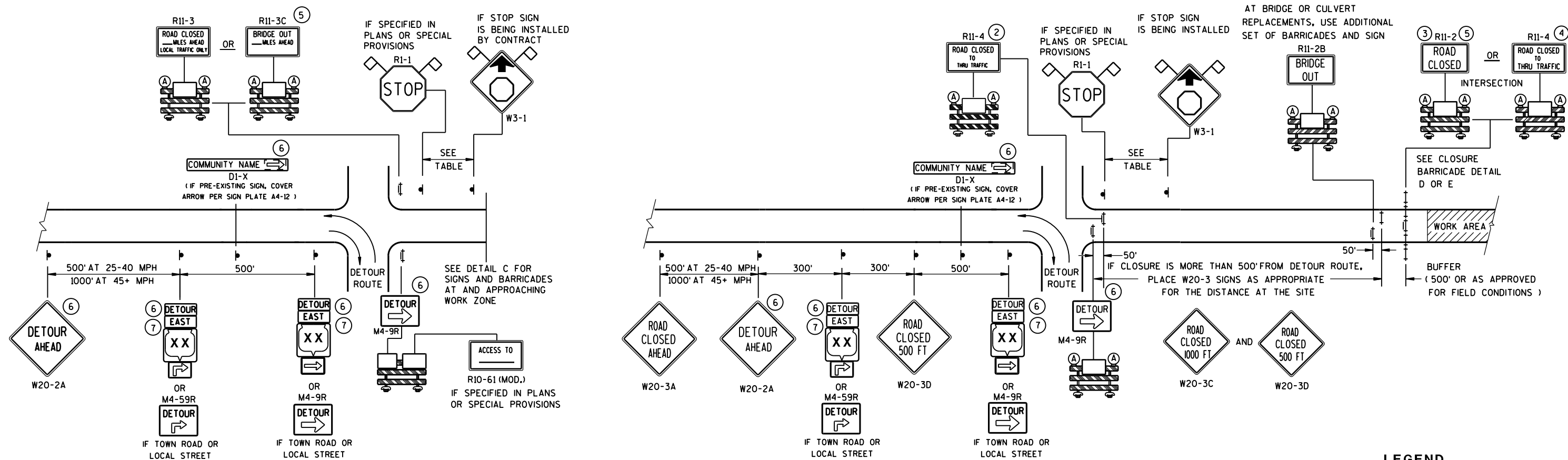
GENERAL NOTES

- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1-FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- ② ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- ③ IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ④ IF DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REBAR REINFORCEMENT AROUND THE MANHOLE.
- ⑤ ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.

**CONCRETE PAVEMENT
JOINTING AT UTILITY FIXTURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

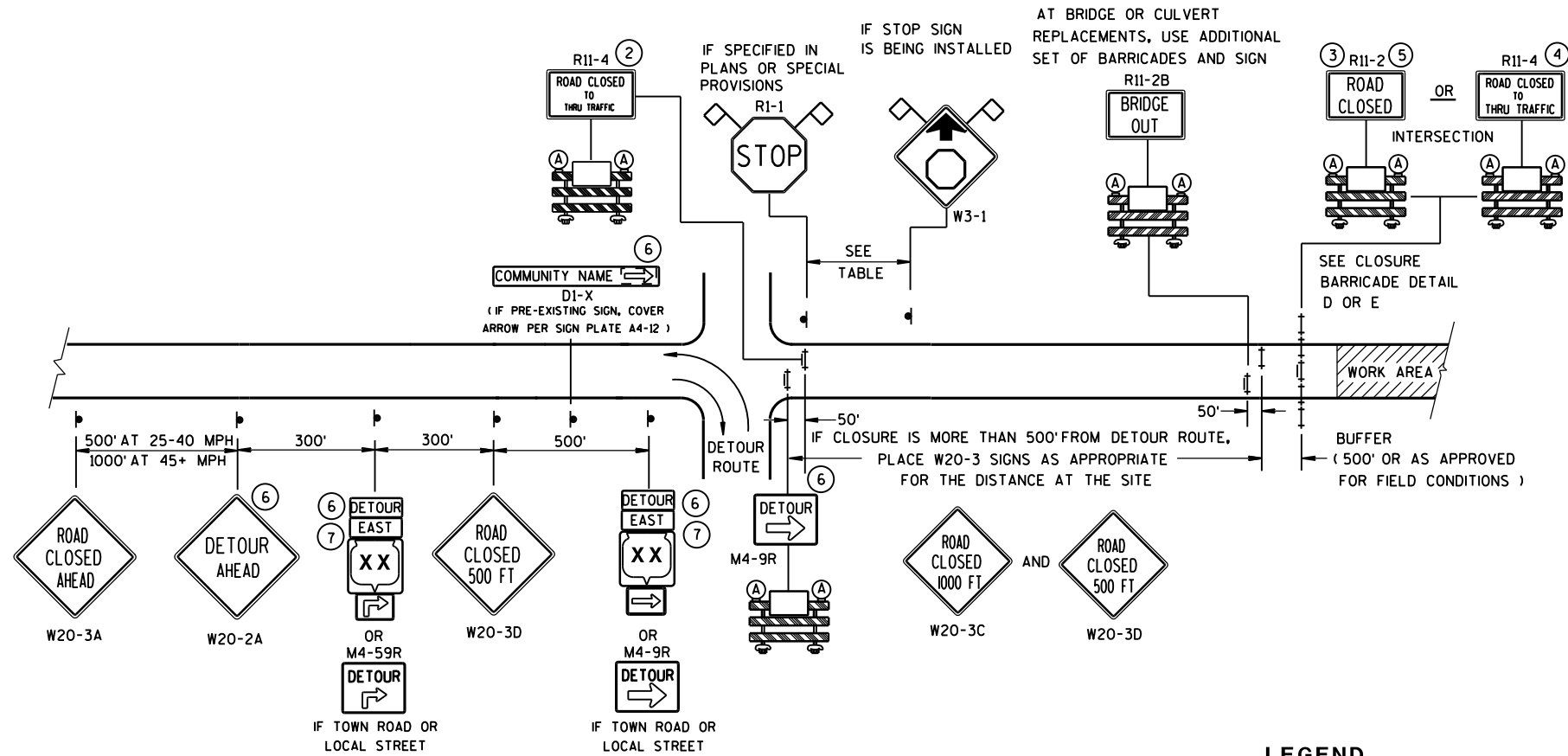
APPROVED
December, 2016 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPERVISOR
FHWA



DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

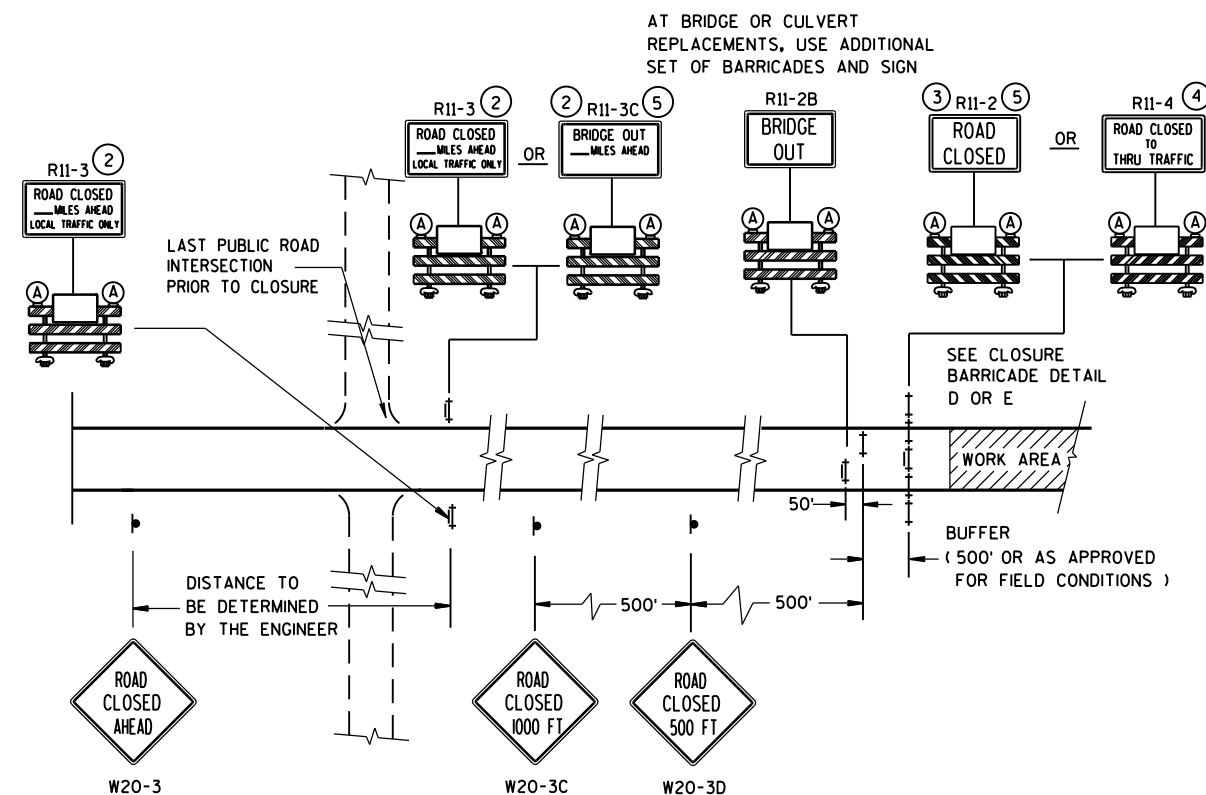
WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B














MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



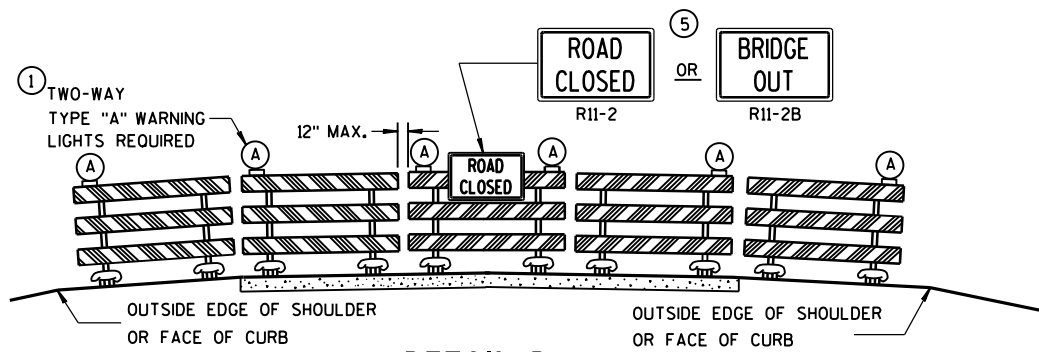
DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

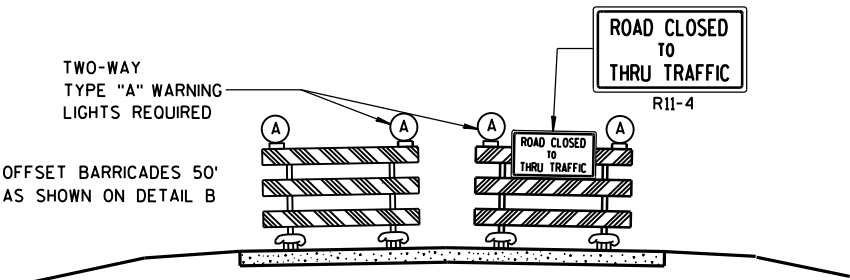
- ### LEGEND
-  SIGN ON PERMANENT SUPPORT
 TYPE III BARRICADE
 TYPE III BARRICADE WITH ATTACHED SIGN
 TYPE "A" WARNING LIGHT (FLASHING)
 WORK AREA
 M4-8
 M3-X
 OR  OR 
M1-4 M1-5A M1-6
 OR 
M05-1 M06-1
 FLAGS, 16" X 16" MIN., (ORANGE)

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

<p>BARRICADES AND SIGNS FOR MAINLINE CLOSURES</p>	
<p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p>	
<p><u>Sept. 2015</u></p> <p><u>DATE</u></p>	<p><u>/S/ Peter Amakobe Atepe</u></p> <p><u>STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER</u></p>



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

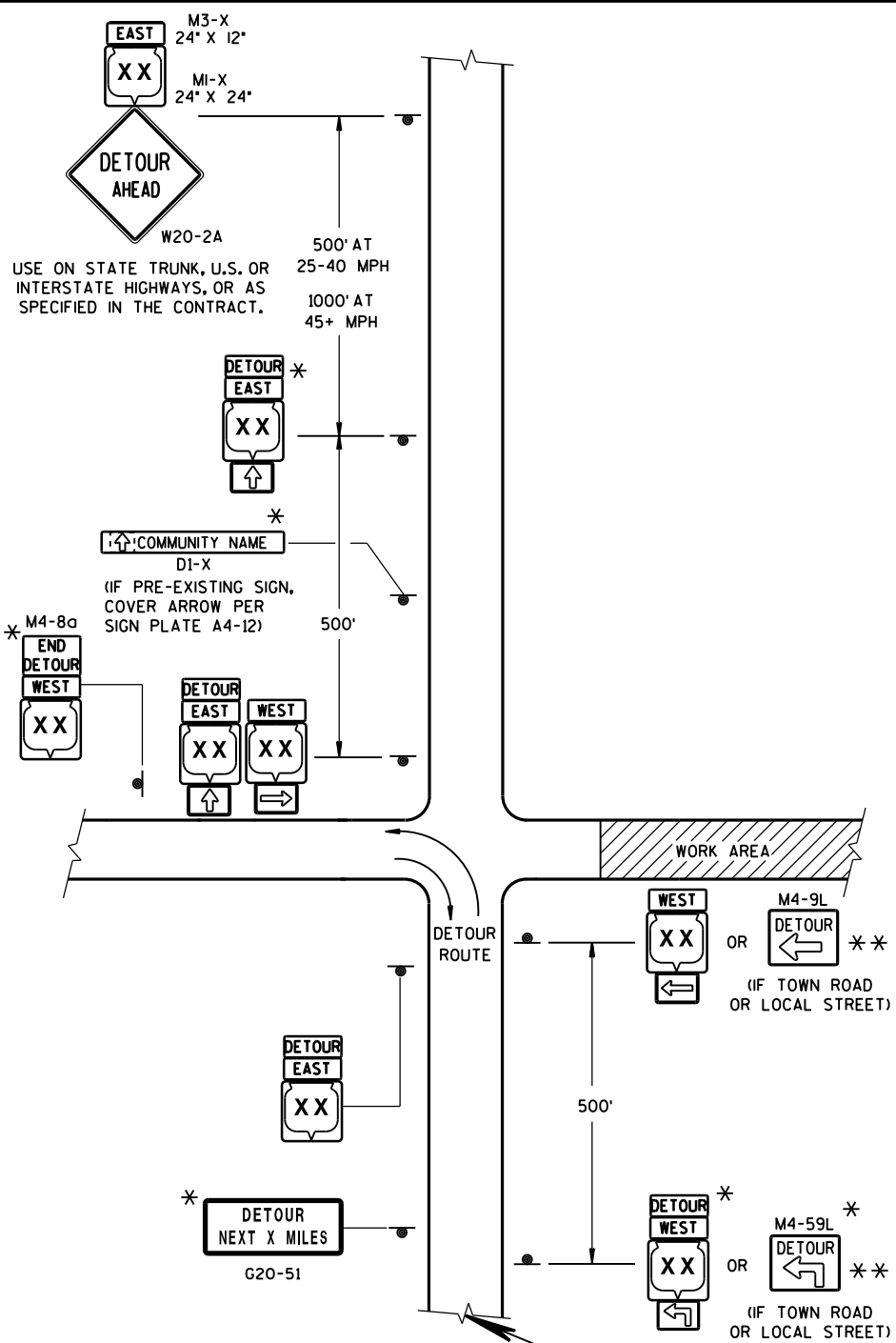
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
Sept. 2015 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



LEGEND

SIGN ON PERMANENT SUPPORT

WORK AREA

M4-8
M3-X

MI-4 MI-5A MI-6

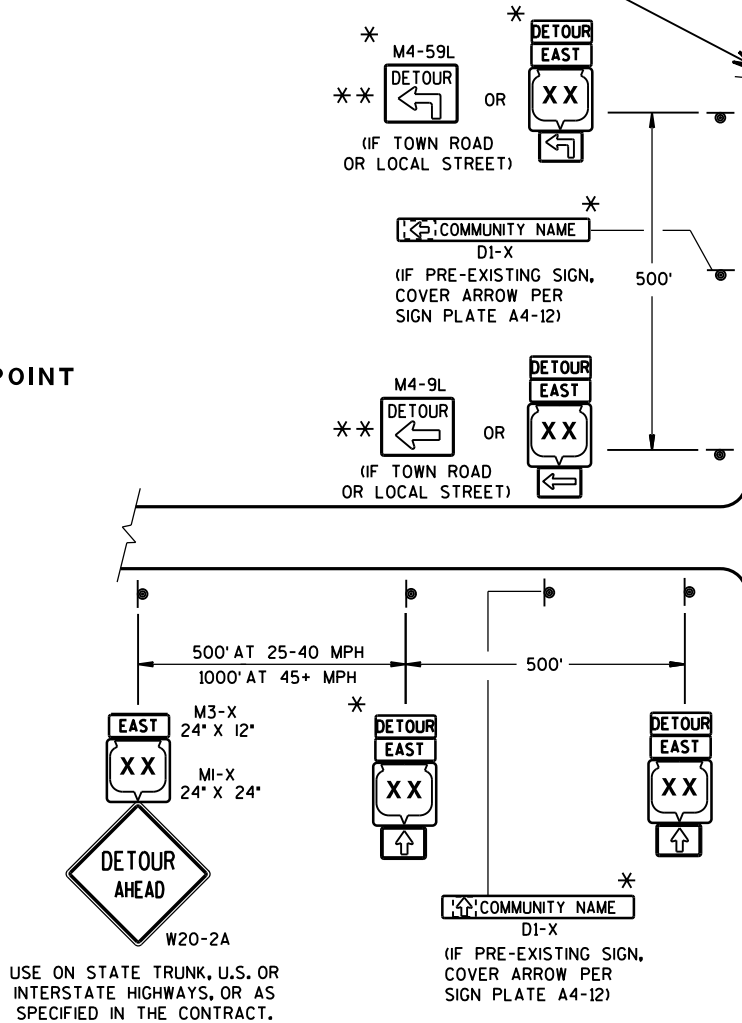
M05-1 M06-1 M06-1

SEE SPECIFIC PROJECT DETOUR
SIGNING DETAIL SHEETS AND
DETAIL A OR B ON SDD 15C2-SHEET "a"

THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.

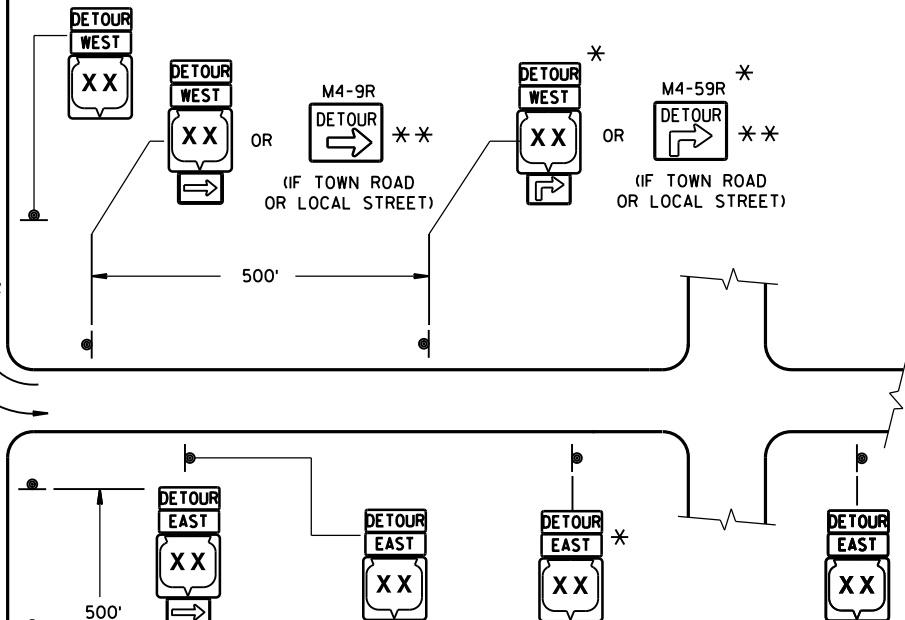
MATCH POINT

DETAIL F
DETOUR SIGNING



GENERAL NOTES

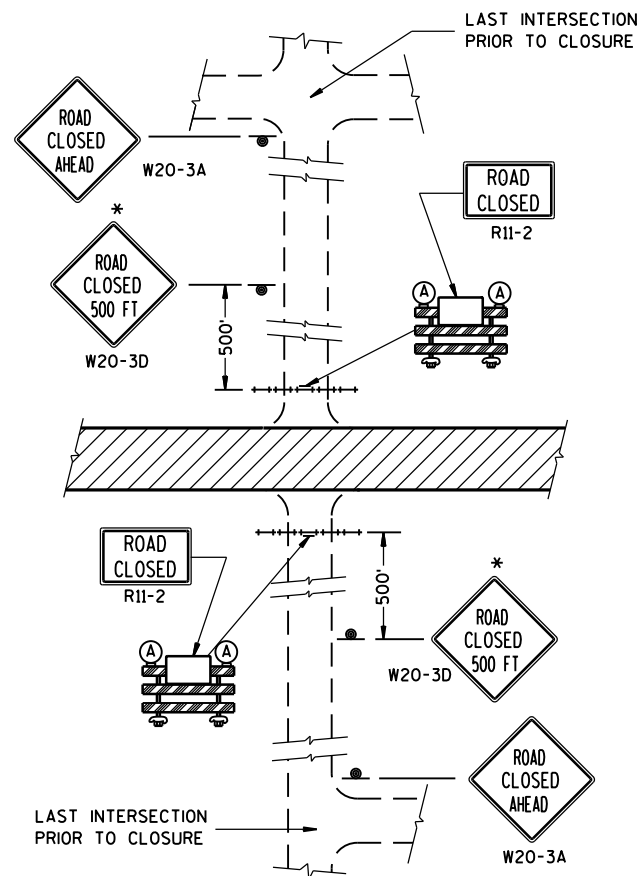
- THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS, MODIFY EXISTING SIGNS WHERE POSSIBLE.
- THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
- ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- SIGN SIZES SHALL BE AS FOLLOWS:
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M4-9 SHALL BE 30" X 24".
 - M4-8a SHALL BE 24" X 18".
 - G20-51 SHALL BE 60" X 24".
 - W20-2 SHALL BE 48" X 48".
 - D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



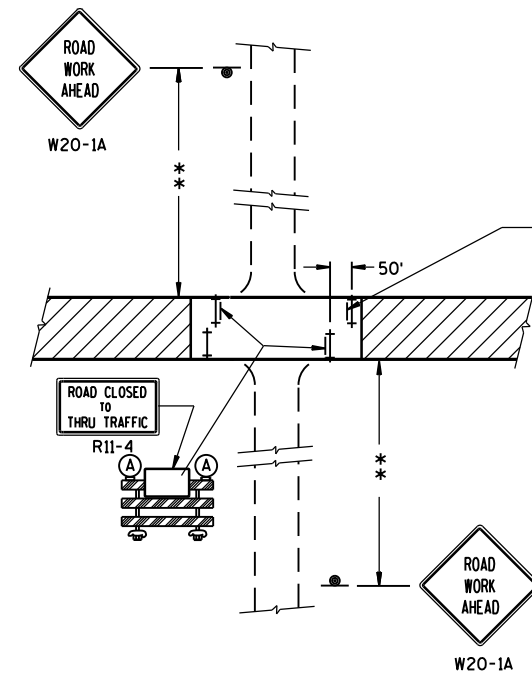
DETOUR SIGNING FOR
MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

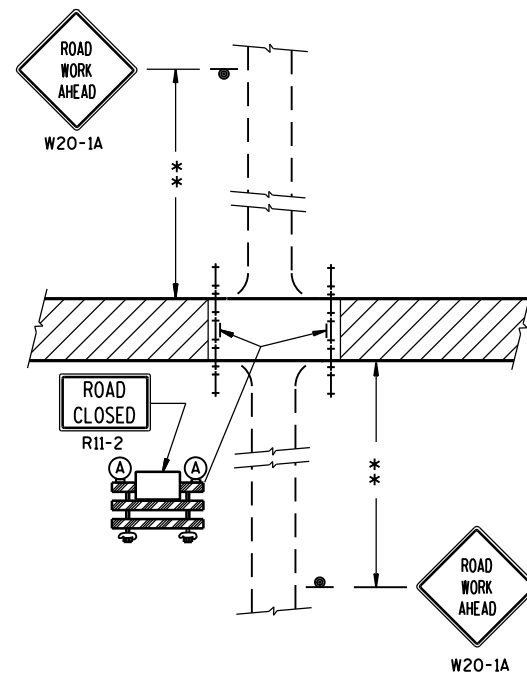
APPROVED
DATE Sept. 2015 /S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER
FHWA



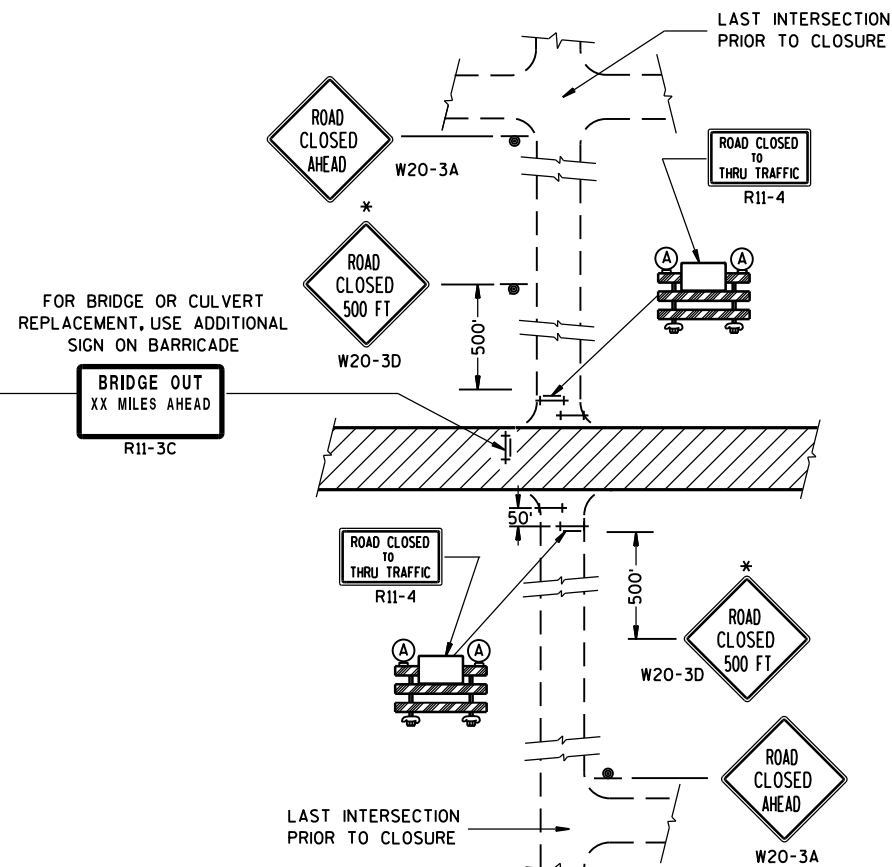
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED. CONTRACTOR, LOCAL BUSINESS AND RESIDENT ACCESS).



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT).



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

GENERAL NOTES

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

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3 AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-4 AND R11-3 SHALL BE 60" X 30".

*OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FT. OR LESS FROM THE WORK ZONE.

**500' MAX. OR AT LAST INTERSECTION WHICHEVER IS CLOSER.

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊢ TYPE III BARRICADE
- ⊢ TYPE III BARRICADE WITH ATTACHED SIGN
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- ▨ WORK AREA

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
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Sept. 2015

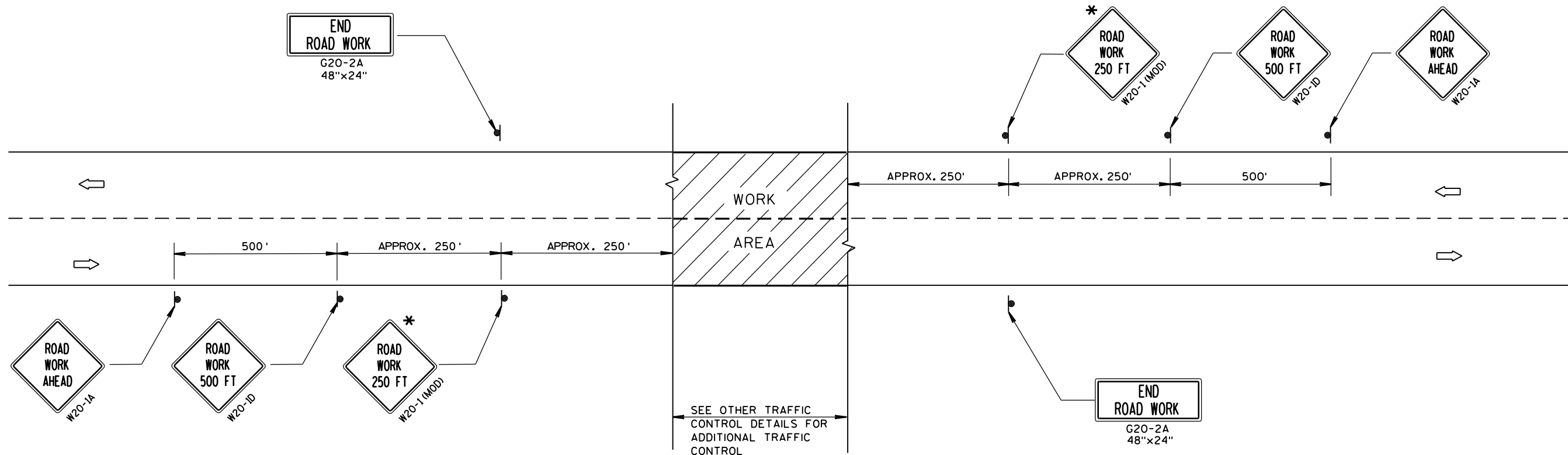
DATE

FHWA

/S/ Peter Amakobe Atepe

STATEWIDE WORK ZONE TRAFFIC

SAFETY ENGINEER



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

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

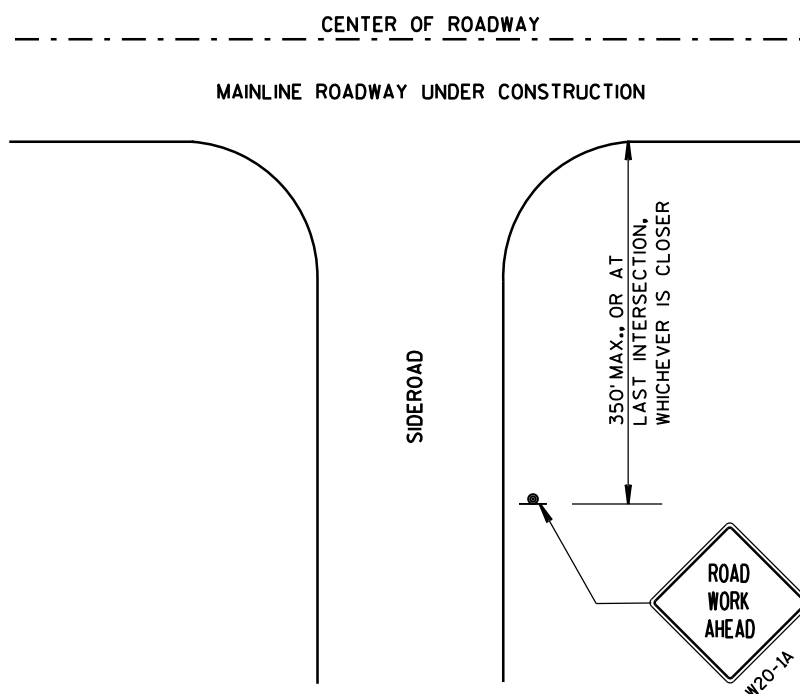
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 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 RE-ESTABLISHED.

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



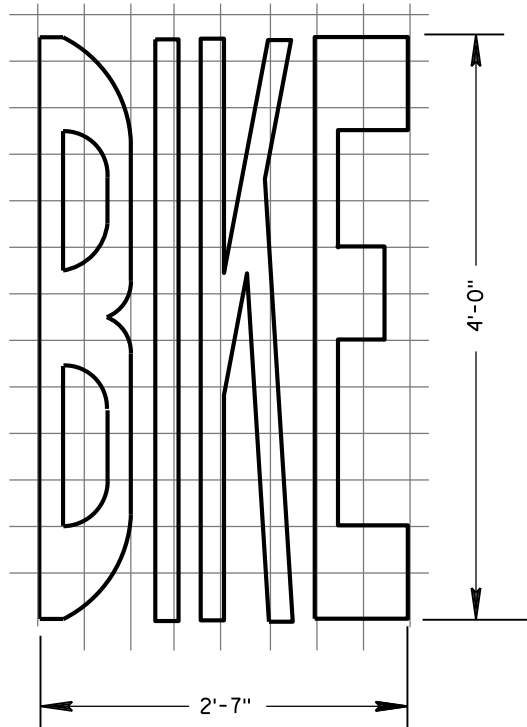
LEGEND

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

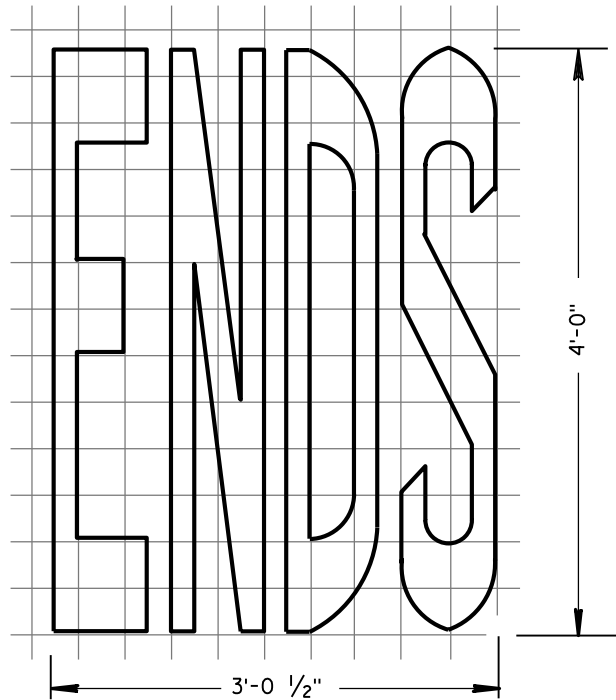
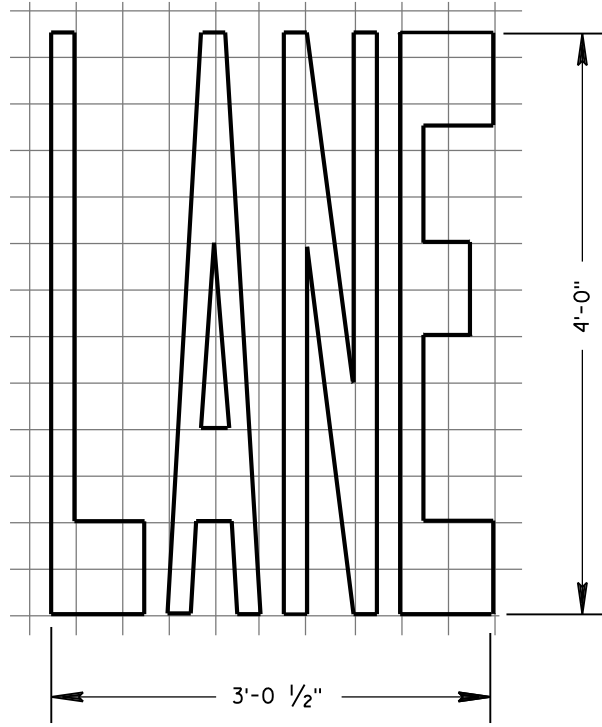
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 40 M.P.H.
OR LESS TWO-WAY UNDIVIDED
ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER



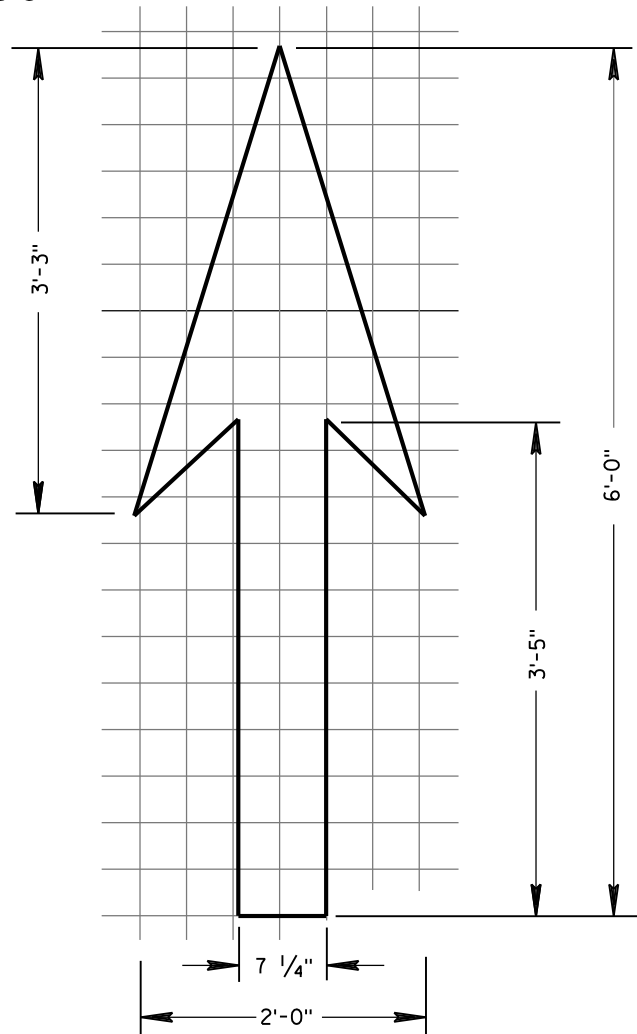
BIKE LANE WORDS



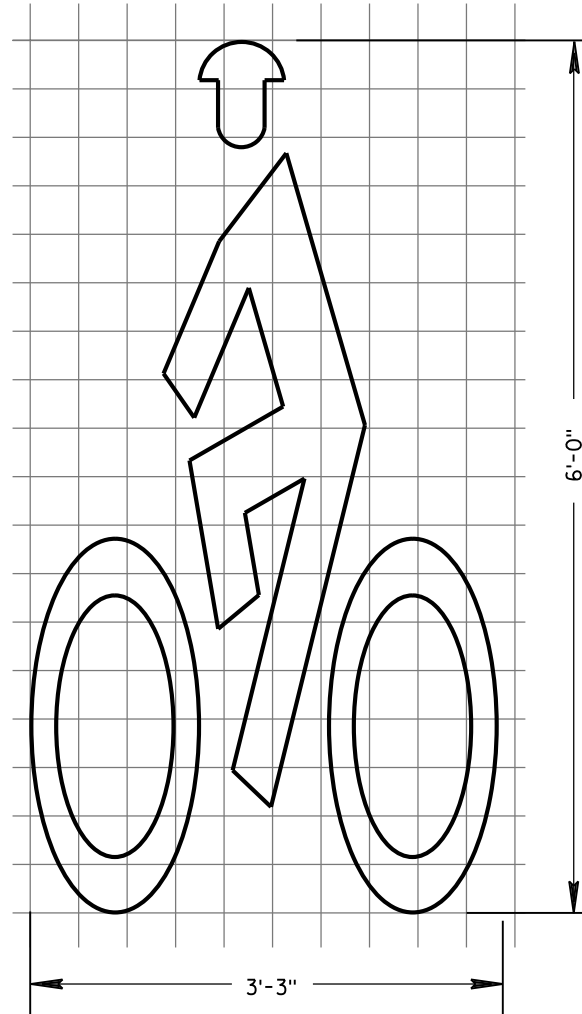
BIKE LANE WORDS

GENERAL NOTES

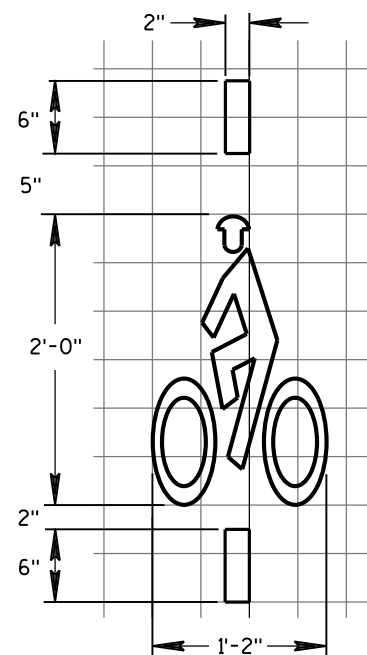
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



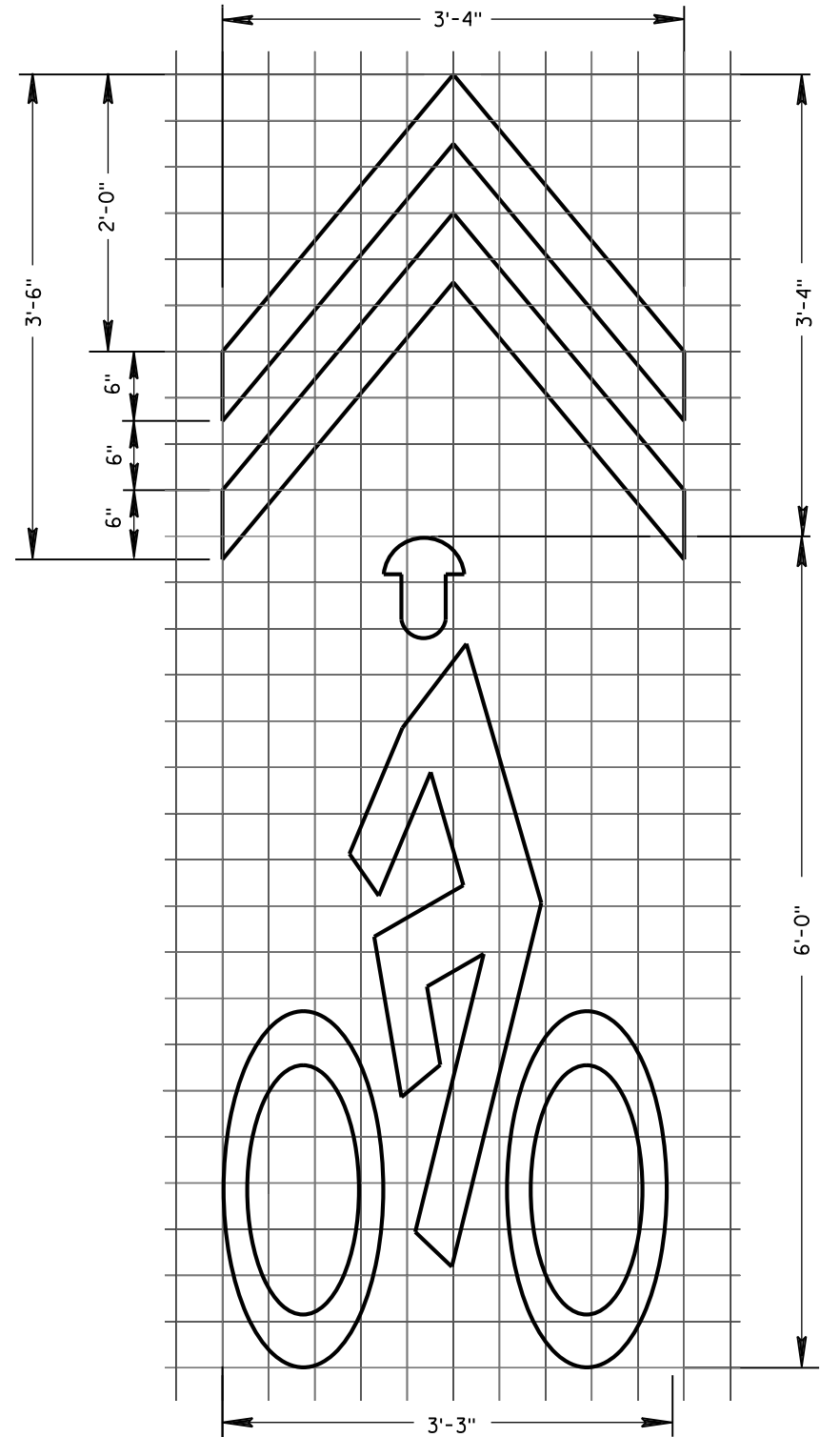
BIKE LANE ARROW



BIKE LANE SYMBOL



BICYCLE DETECTOR PAVEMENT MARKING

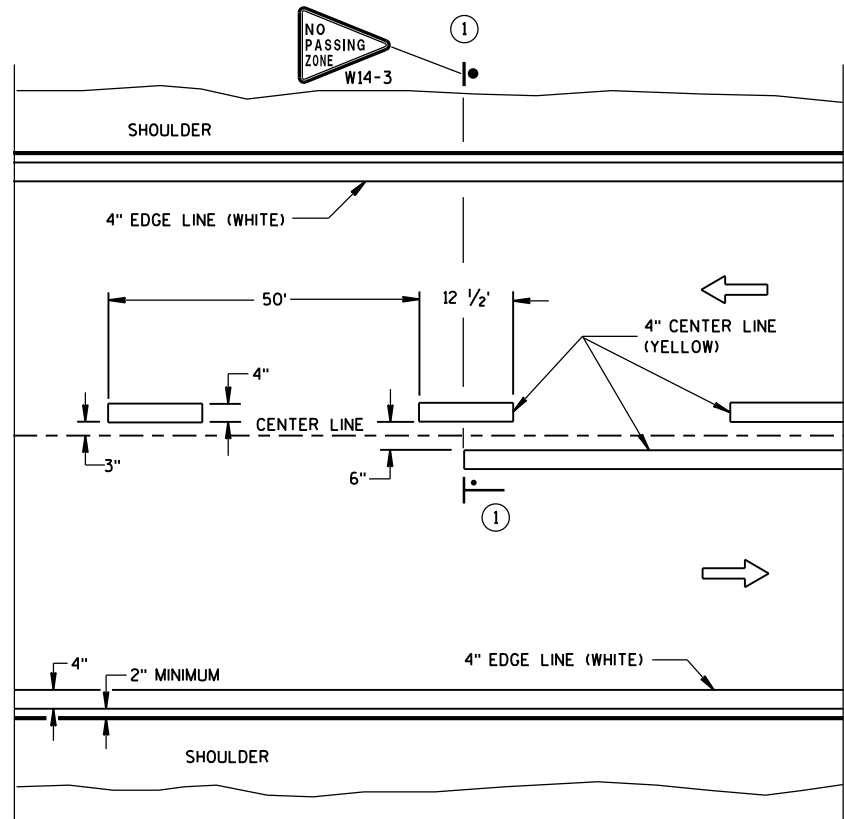


BIKE SYMBOL FOR SHARED LANE

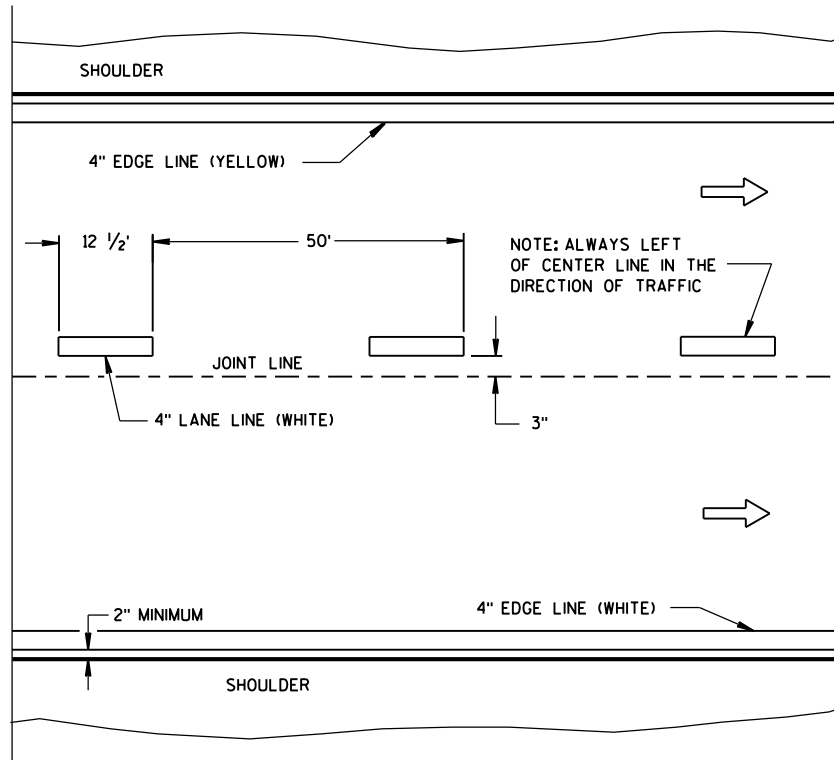
PAVEMENT MARKING FOR
BIKE LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

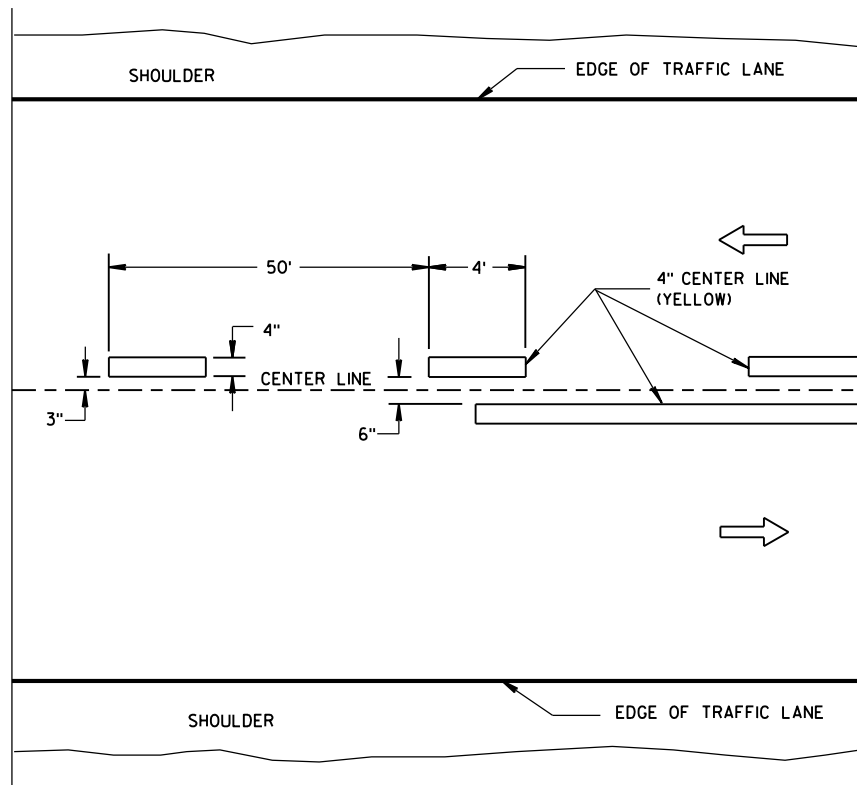


TWO WAY TRAFFIC

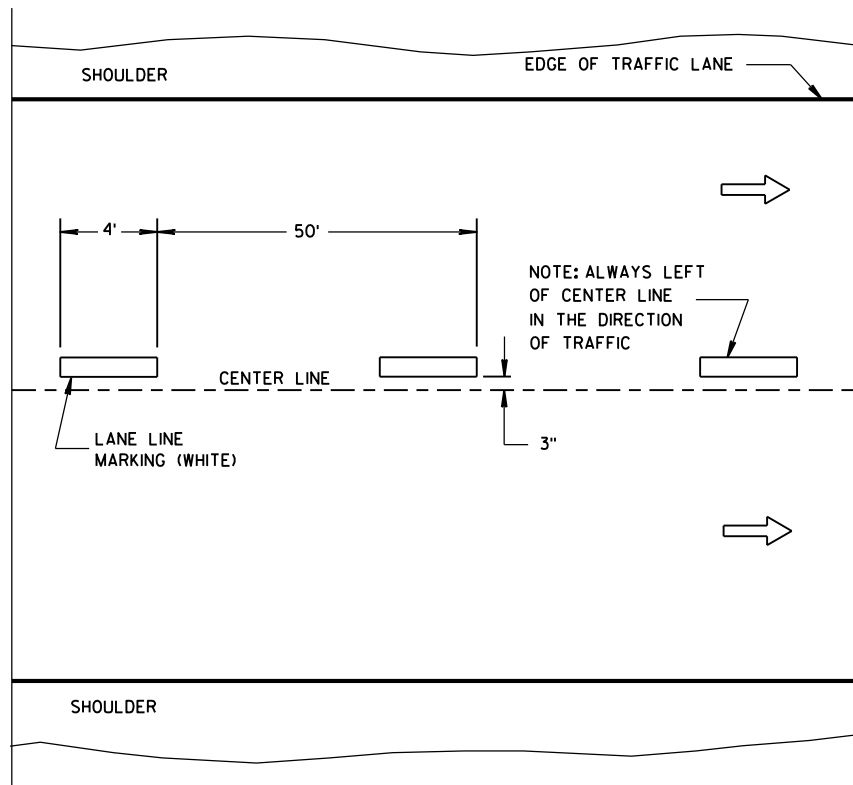


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

—•— "T" MARKING

● POST MOUNTED SIGN

LONGITUDINAL MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017 /S/ Matthew R. Rauch
DATE STATE SIGNING AND MARKING ENGINEER
FHWA

GENERAL NOTES

- ① DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.
- ② MINIMUM OF ONE PER BLOCK. MAXIMUM OF 250 FEET.
- ③ DOTTED LINES (3' LINE, 9' GAP) SHOULD BE USED 50 FEET TO 200 FEET IN ADVANCE OF AN INTERSECTION WHERE THERE IS NO RIGHT TURN ONLY LANE AND THERE IS HEAVY RIGHT TURN TRAFFIC OR THERE IS A NEAR-SIDE BUS STOP. AT OTHER INTERSECTIONS WHERE RIGHT TURN TRAFFIC IS LIGHT TO MODERATE, A SOLID LINE CAN BE USED UP TO THE INTERSECTION.
- ④ IF SIGNED AND/OR MARKED AS A BICYCLE FACILITY INCLUDE SECOND LINE OF LINE-SPACE MARKING, OTHERWISE DO NOT.
- ⑤ BIKE ACCOMODATION FOR CONCRETE PAVEMENT IS 5 FEET WIDE. BIKE ACCOMODATION FOR ASPHALT PAVEMENT IS A MINIMUM OF 4 FEET. USE 5 FEET AT ≥ 45 MPH.
- ⑥ OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FEET WIDE TURN LANE).
- ⑦ REFER TO CONTRACT PLANS FOR LANE WIDTH.

➔ DIRECTION OF TRAVEL

DESIGNATED BICYCLE LANE NO PARKING

4 LANE DIVIDED WITHOUT ISLAND

4 LANE DIVIDED WITH ISLAND

BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS (4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BICYCLE LANE MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

12-2016

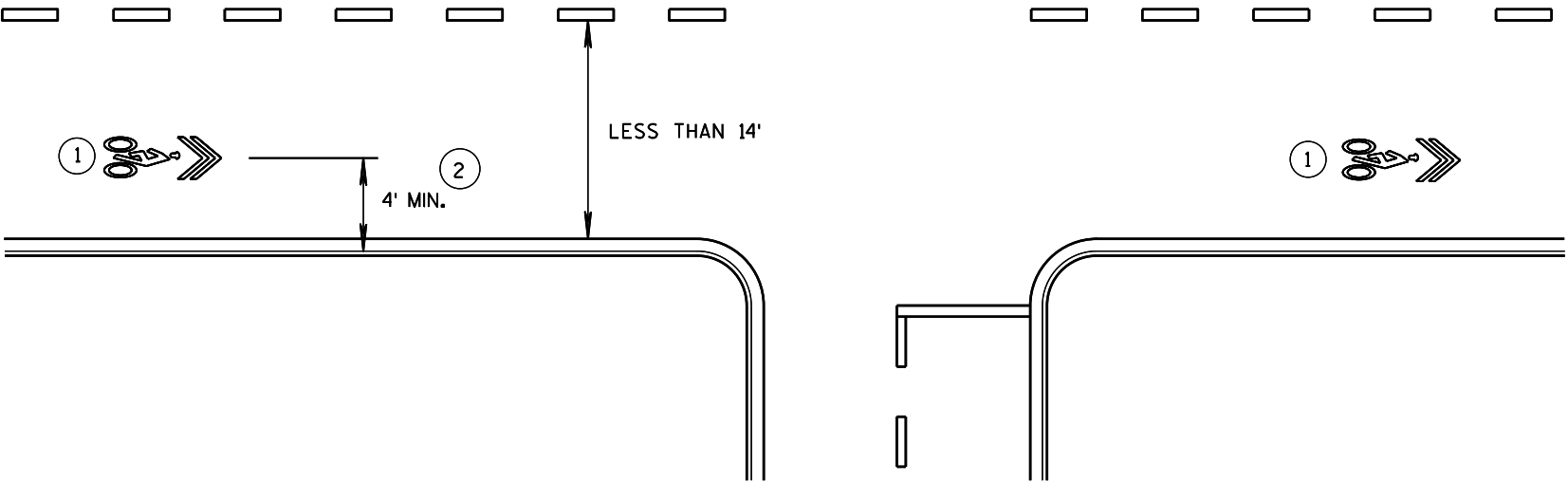
DATE

FHWA

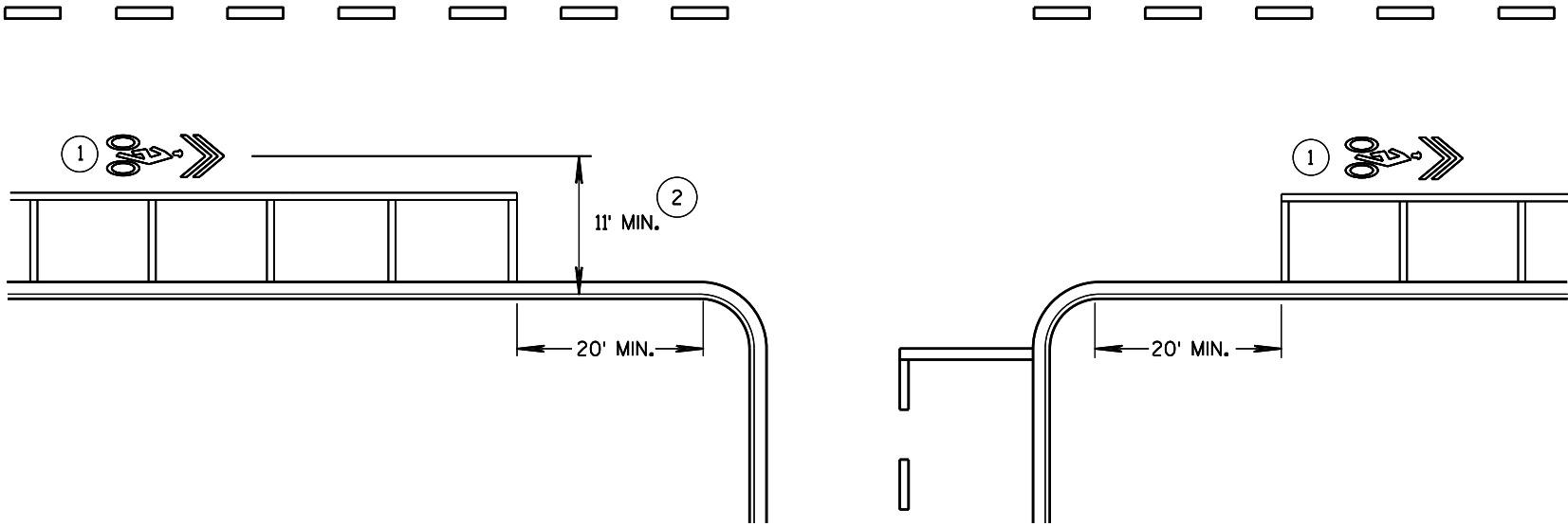
/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

GENERAL NOTES

- ① MINIMUM OF ONE PER BLOCK, MAXIMUM OF 250 FEET.
- ② OR TO EDGE OF PAVEMENT WITHOUT CURB.

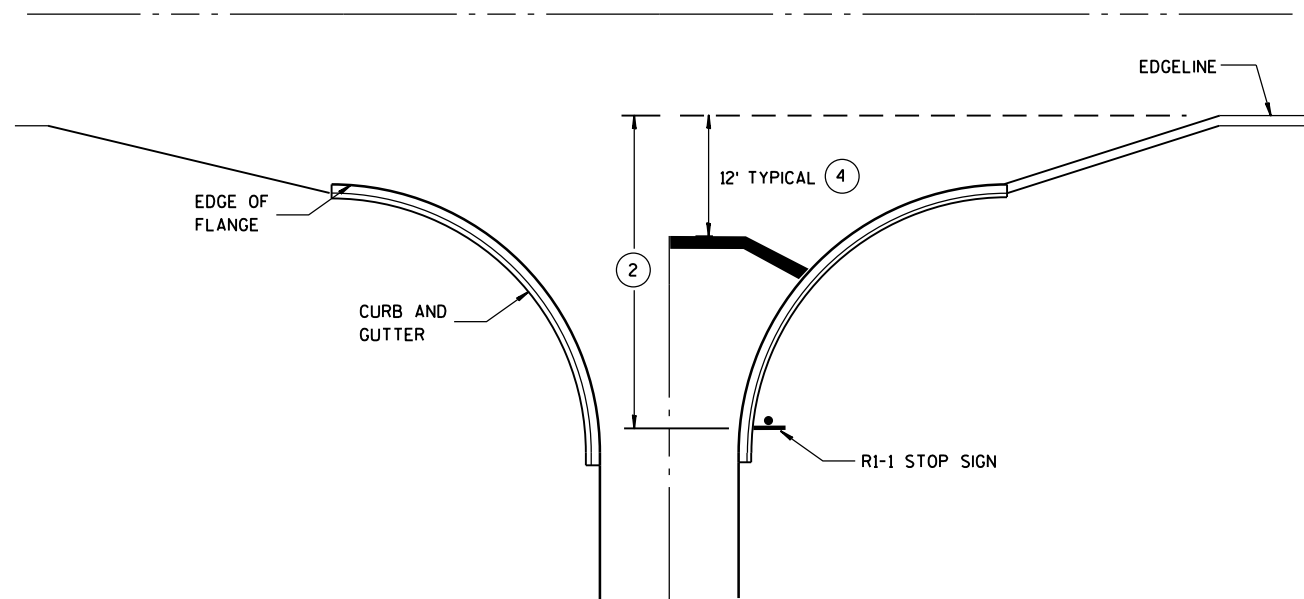


WITHOUT PARKING

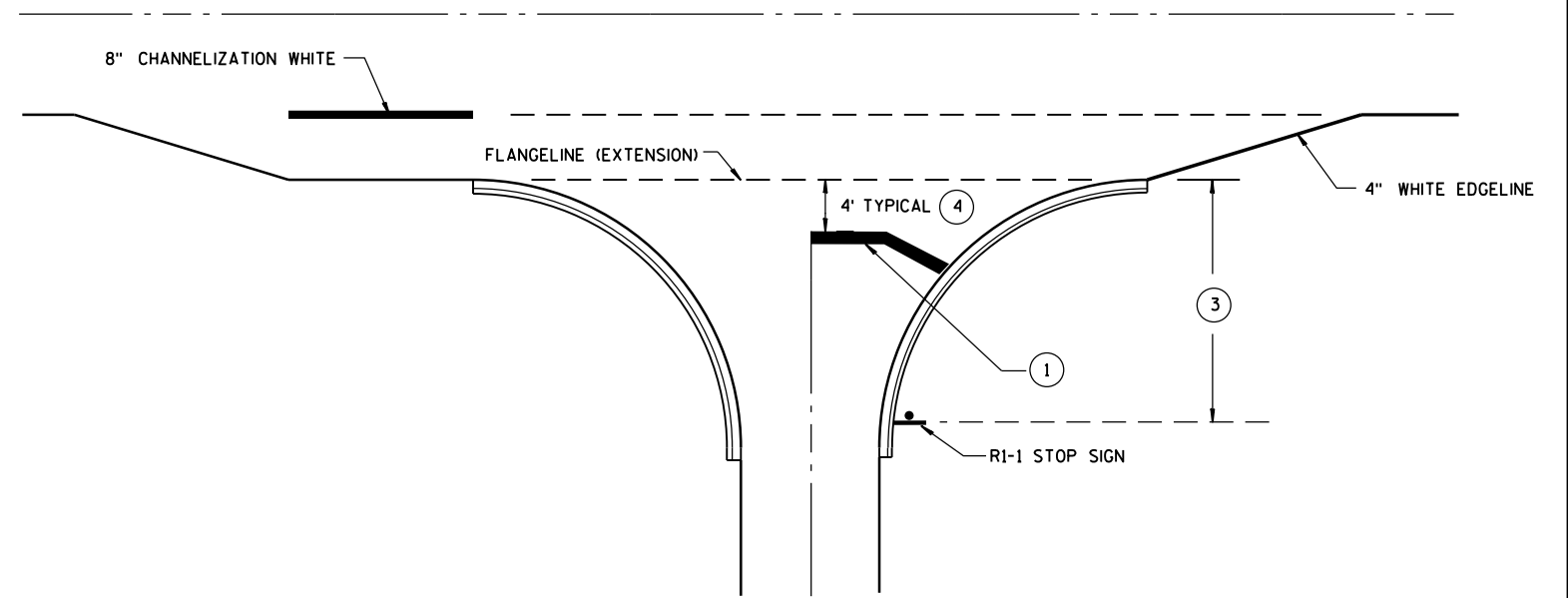


WITH PARKING

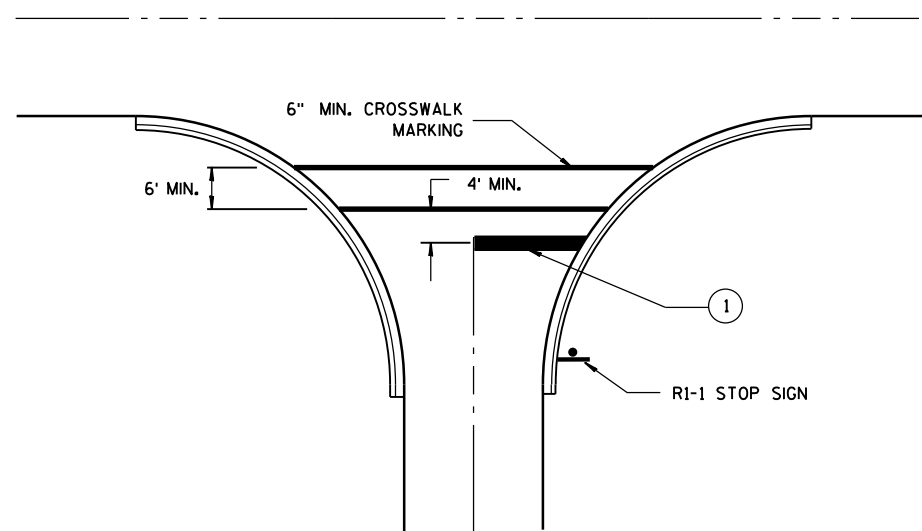
PAVEMENT MARKING FOR SHARED LANE 35 MPH OR LESS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12-2016 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	



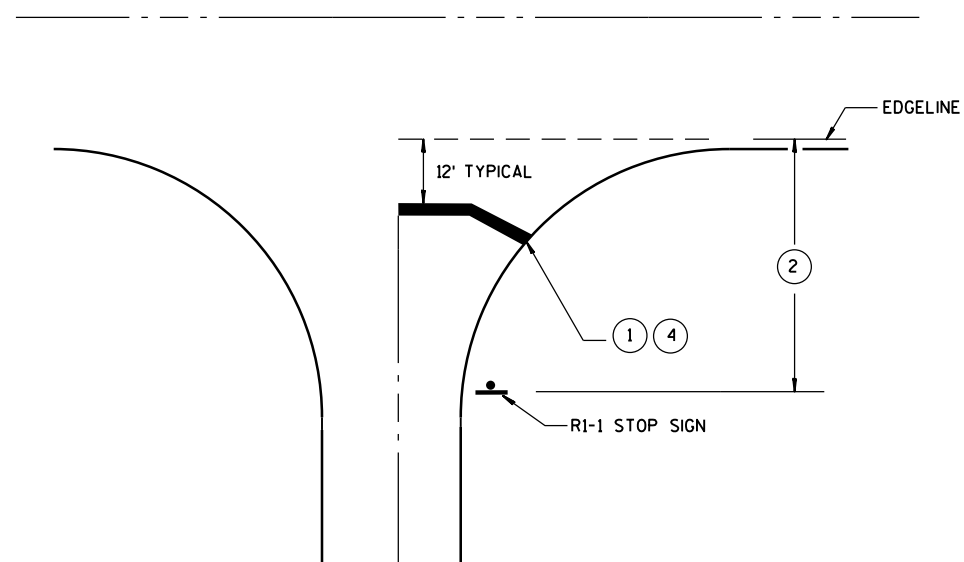
**TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING**



**TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER**

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES. (NO CLOSER THAN 4 FEET).

**STOP LINE AND CROSSWALK
PAVEMENT MARKING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

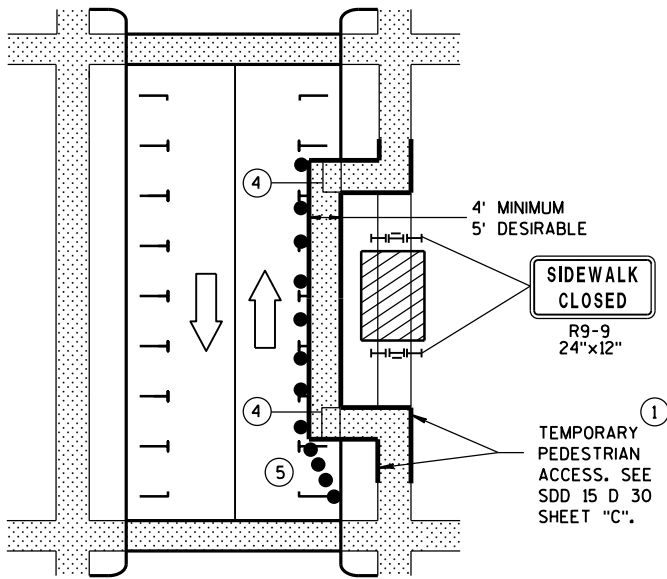
APPROVED

4-18-2016
DATE

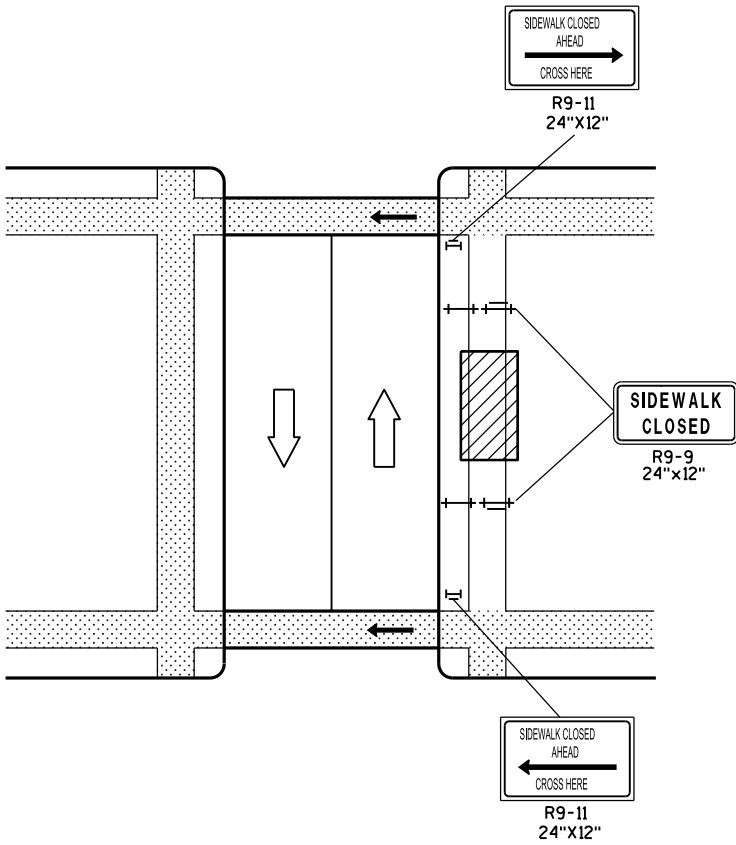
FHWA

/S/ Matthew R. Rauch
STATE SIGNING AND MARKING ENGINEER

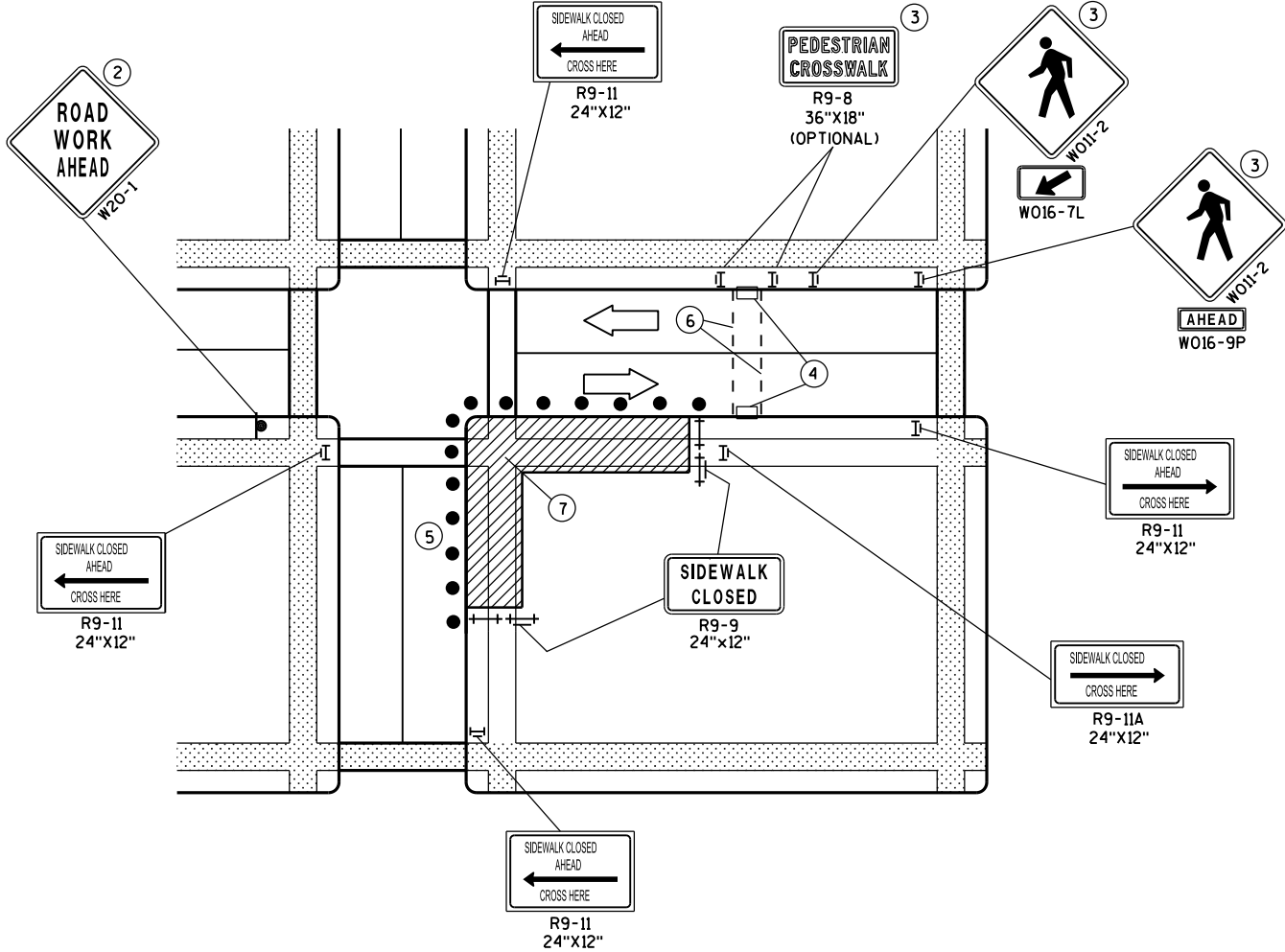
NOTE: MAY BE USED ON ROADWAY WITH POSTED SPEED OF LESS THAN 40 MPH.



MID-BLOCK SIDEWALK CLOSURE
IN PARKING LANE

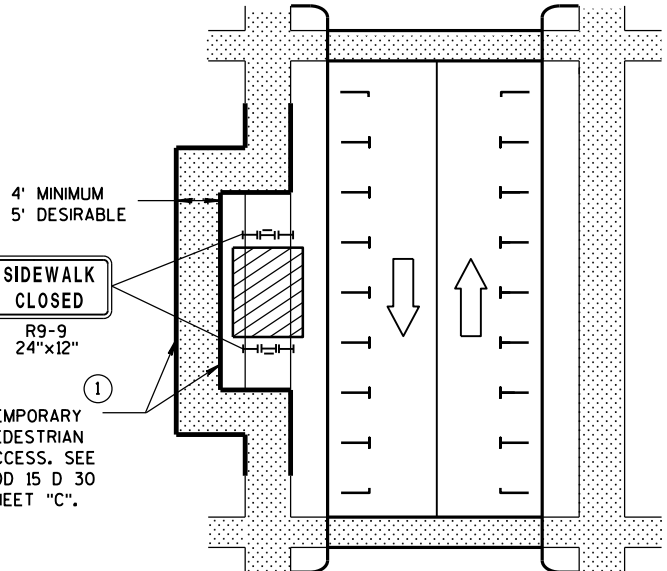


MID-BLOCK SIDEWALK CLOSURE



CORNER SIDEWALK CLOSURE WITH TEMPORARY CROSSWALK

NOTE: LAYOUT SAME AS ABOVE.



SIDEWALK DIVERSION

GENERAL NOTES

WHEN CLOSING OR RELOCATING CROSSWALKS OR SIDEWALKS, PROVIDE DETECABLE TEMPORARY FACILITIES AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH EXISTING PEDESTRIAN FACILITIES.

TEMPORARY TRAFFIC CONTROL DEVICES FOR PEDESTRIANS ARE SHOWN. OTHER DEVICES MAY BE NECESSARY TO CONTROL VEHICULAR TRAFFIC. STAGE WORK, AS NECESSARY, TO PROVIDE A TEMPORARY PEDESTRIAN ACCESS ROUTE AT ALL TIMES. FOR ROADWAYS WITH NO AVAILABLE DETOURS, MAINTAIN ONE OPEN SIDEWALK AT ALL TIMES.

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

FOR NIGHTTIME CLOSURE USE TYPE "A" FLASHING WARNING LIGHTS ON BARRICADES, SUPPORTING SIGNS AND CLOSING SIDEWALK. USE TYPE "C" STEADY BURN LIGHTS ON CHANNELIZING DEVICES SEPARATING THE WORK AREA FROM VEHICULAR TRAFFIC.

PEDESTRIAN TRAFFIC SIGNAL DISPLAY CONTROLLING CLOSED CROSSWALK SHALL BE COVERED OR DEACTIVATED.

POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

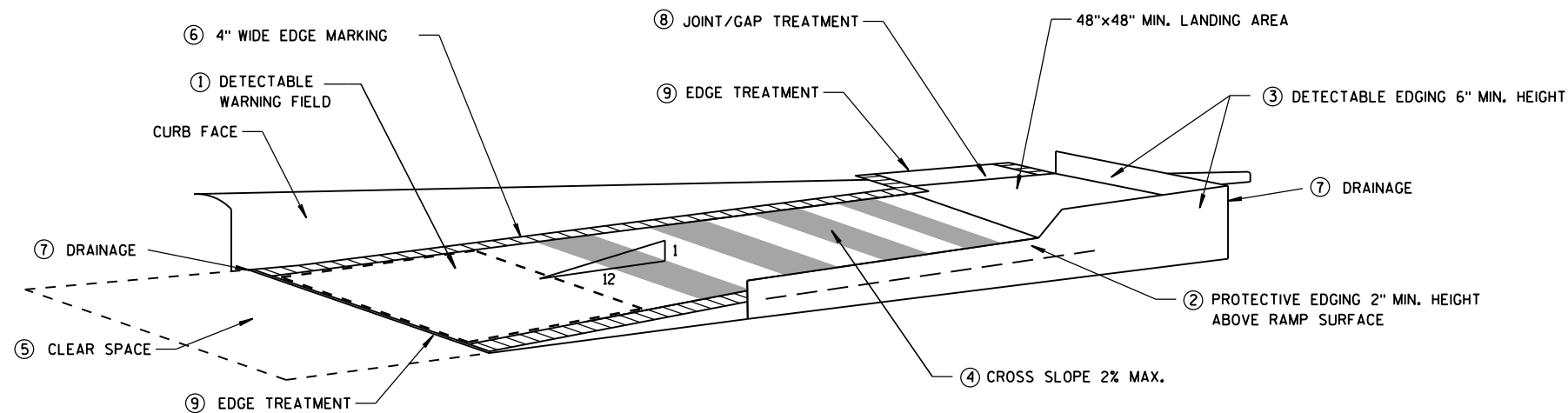
- 1 IF SIDEWALK CLOSURE AFFECTS AN ACCESSIBLE AND DETECTABLE FACILITY, MAINTAIN ACCESSIBILITY AND DETECTABILITY ALONG THE ALTERNATE PEDESTRIAN ROUTE.
- 2 "ROAD WORK AHEAD" SIGNS ARE NOT REQUIRED IF THE SIDEWALK CLOSURE OCCURS WITHIN A LARGER WORK ZONE WHERE ADVANCE WARNING SIGNS ARE ALREADY PRESENT, OR IF THE WORK AREA AND EQUIPMENT ARE MORE THAN 2 FEET BEHIND THE CURB.
- 3 IF TEMPORARY PEDESTRIAN CROSSWALK IS NOT PROVIDED, OMIT R9-8 AND W011-2 SIGN ASSEMBLIES. IF PROVIDED INCLUDE ON BOTH SIDES OF THE CROSSWALK.
- 4 TEMPORARY CURB RAMPS. SEE SDD 15 D 30 SHEET "B".
- 5 DRUMS OR BARRICADES AT 25 FOOT SPACING. STREET PARKING SHALL BE PROHIBITED FOR AT LEAST 50 FEET IN ADVANCE OF THE MID-BLOCK CROSSWALK.
- 6 TEMPORARY PAVEMENT MARKING FOR CROSSWALK LINES.
- 7 LIMIT WORK TO ONE QUADRANT AT A TIME TO MINIMIZE PEDESTRIAN DISRUPTION.

LEGEND

- SIGN ON PERMANENT SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- PEDESTRIAN CHANNELIZATION DEVICE
- TYPE II BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- TYPE III BARRICADE WITH/WITHOUT SIGN (ALL WITH ONE WARNING LIGHT, TYPE A, LOW-INTENSITY FLASHING)
- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

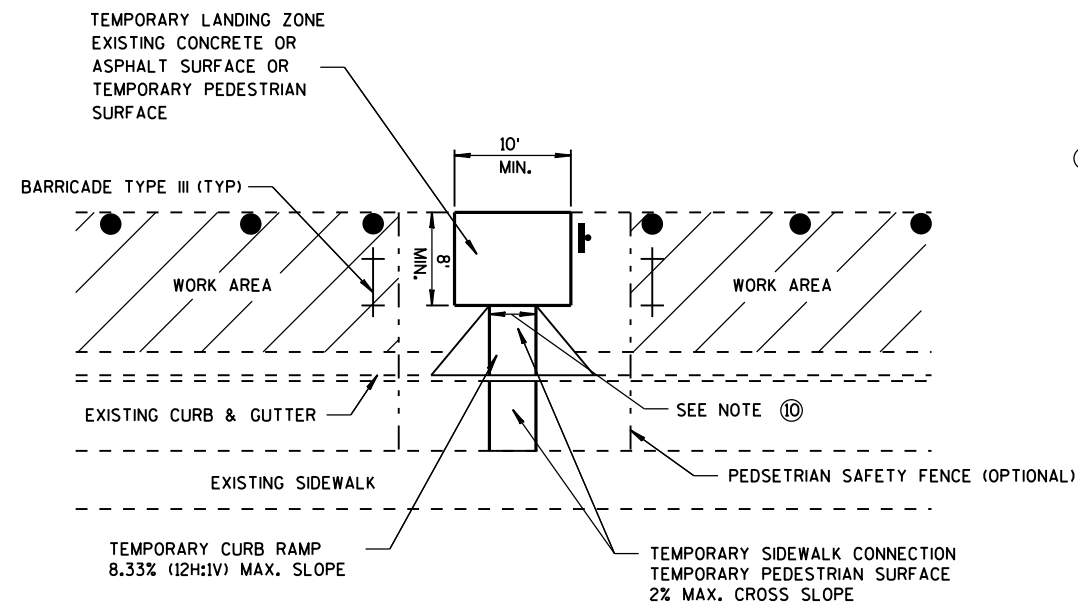
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



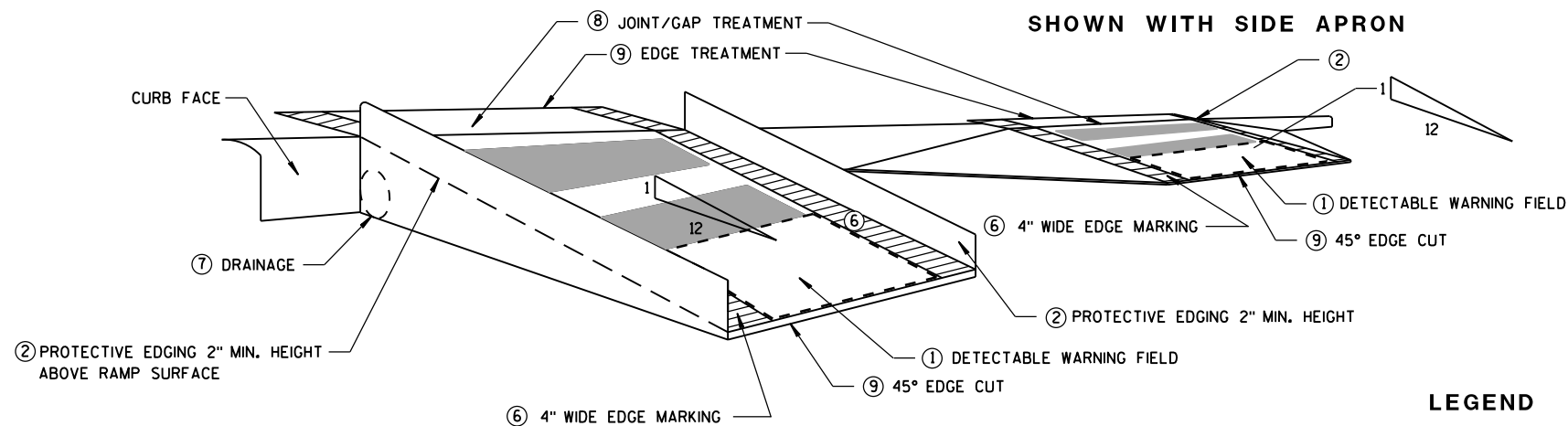
TEMPORARY CURB RAMP
PARALLEL TO CURB

GENERAL NOTES

- NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.
ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.
- 1 CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE. INSTALL CONTRASTING DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS. REFER TO SDD 8D5 SHEET "E".
 - 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 CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.
 - 5 CLEAR SPACE OF 48"x48" MIN. SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
 - 6 THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A YELLOW COLOR, 4" WIDE MARKING, UNLESS A CONTRASTING DETECTABLE WARNING FIELD IS PROVIDED.
 - 7 DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
 - 8 LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
 - 9 CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES SHALL BE VERTICAL UP TO 1/4" HIGH, AND BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
 - 10 5' WIDE MIN. WITH PEDESTRIAN SAFETY FENCE, 10' WIDE MIN. WITHOUT PEDESTRIAN SAFETY FENCE.



TEMPORARY BUS STOP PAD



SHOWN WITH PROTECTIVE EDGE

TEMPORARY CURB RAMP
PERPENDICULAR TO CURB

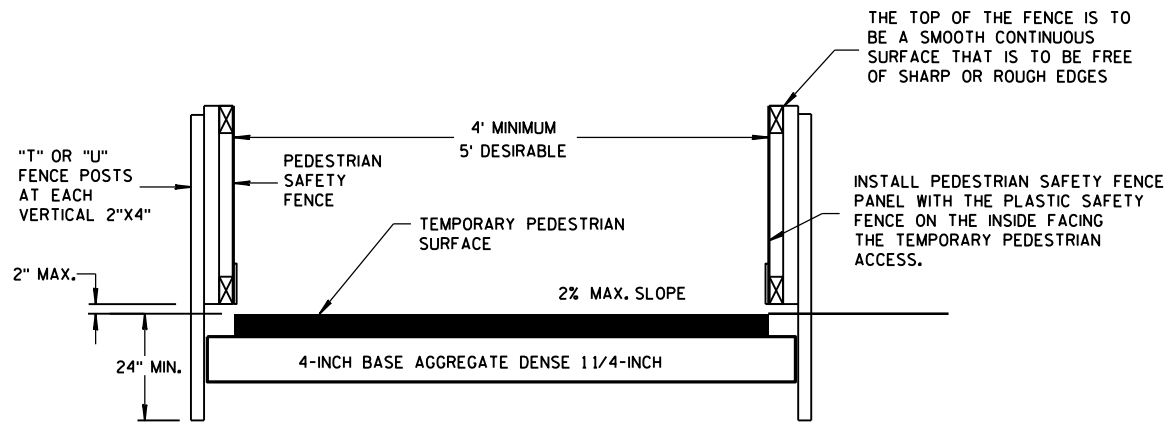
SHOWN WITH SIDE APRON

- LEGEND
- WORK AREA
 - TYPE III BARRICADE
 - TRAFFIC CONTROL DRUM

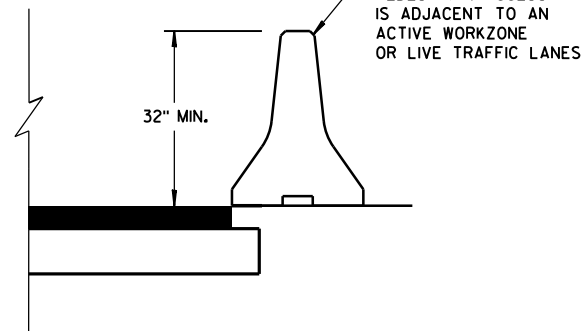
TRAFFIC CONTROL,
TEMPORARY ADA COMPLIANT
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE TRAFFIC
FHWA SAFETY ENGINEER

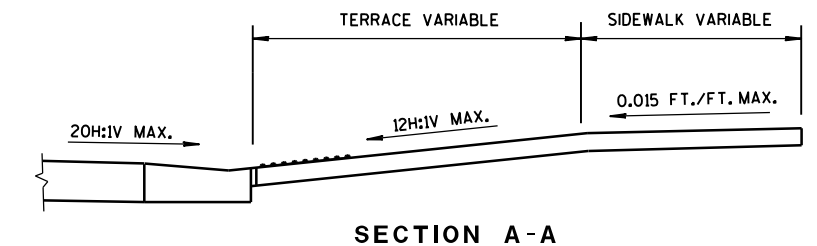


TEMPORARY PEDESTRIAN ACCESS

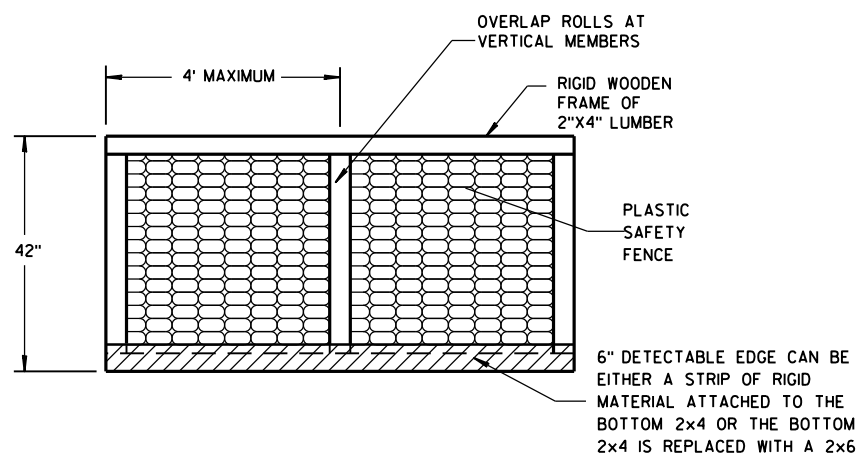


GENERAL NOTES

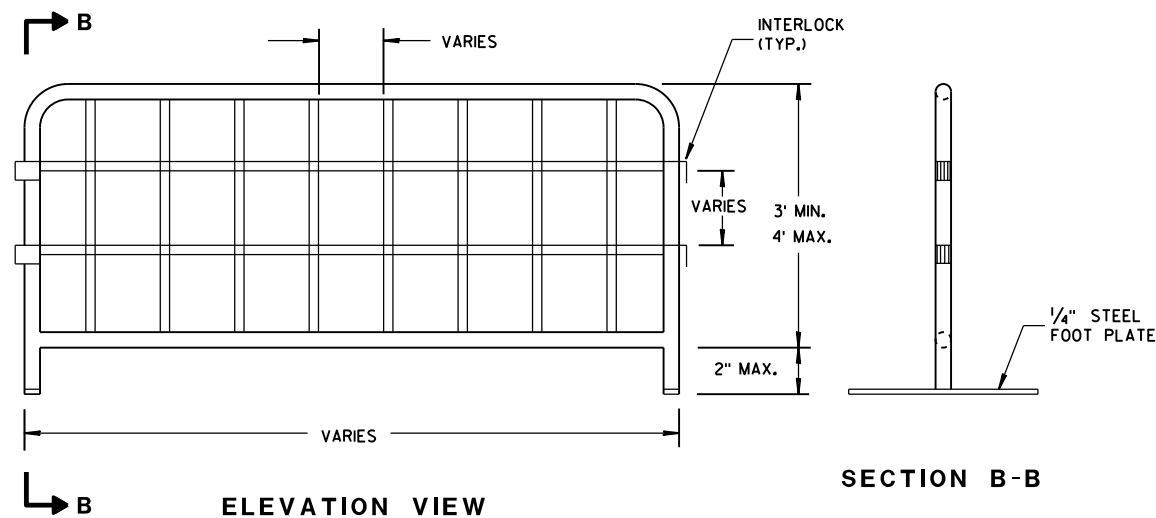
- INTERCHANGEABLE WITH THE PEDESTRIAN SAFETY FENCE.



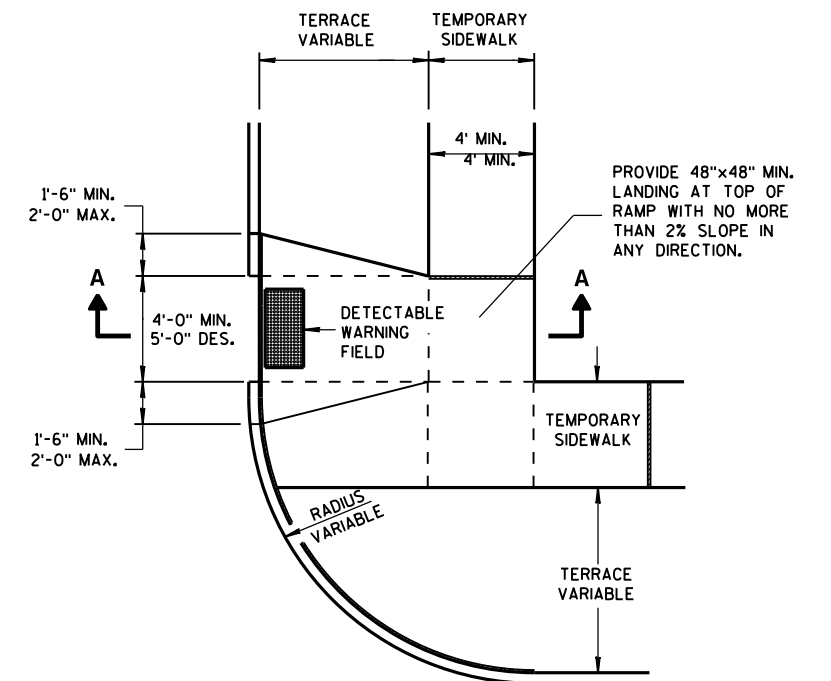
SECTION A-A



PEDESTRIAN SAFETY FENCE



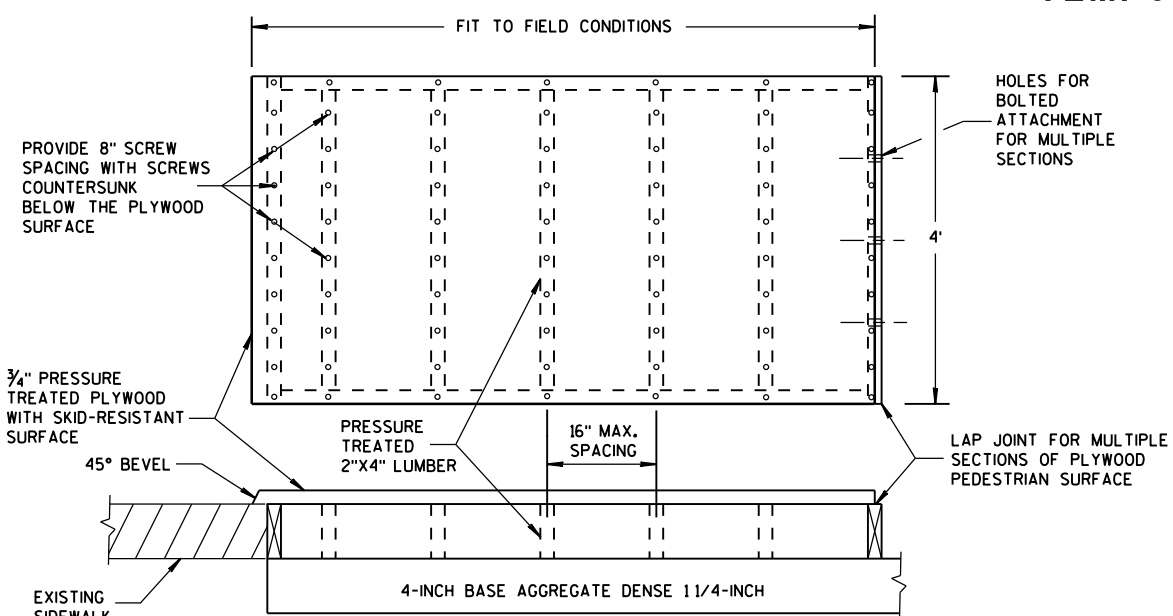
TEMPORARY PEDESTRIAN STEEL BARRICADE



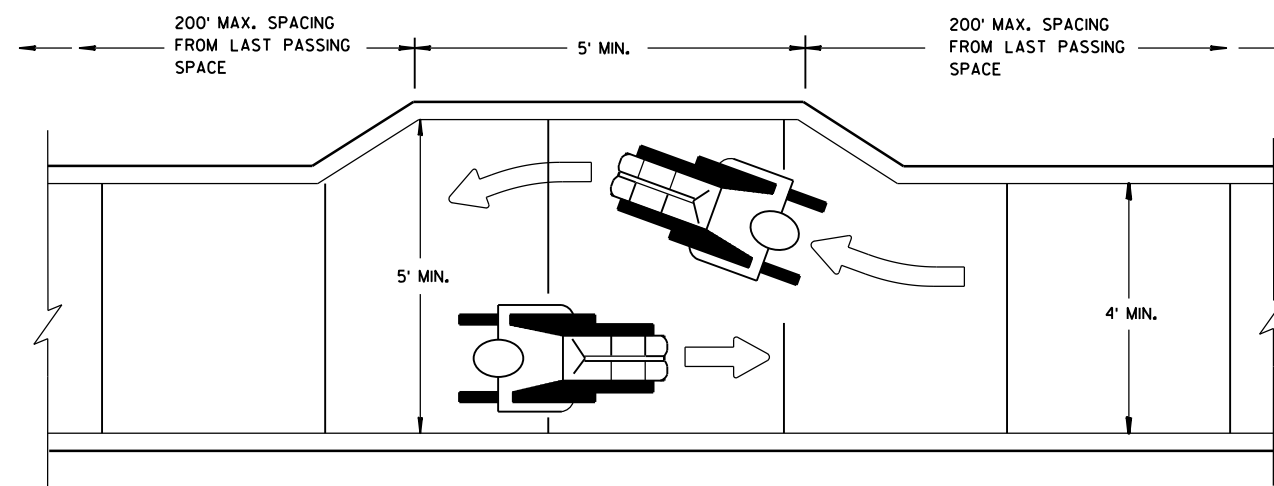
PLAN VIEW

TEMPORARY TYPE 3 RAMP

(OUTSIDE OF CROSSWALK AREA)



TEMPORARY PEDESTRIAN SURFACE PLYWOOD



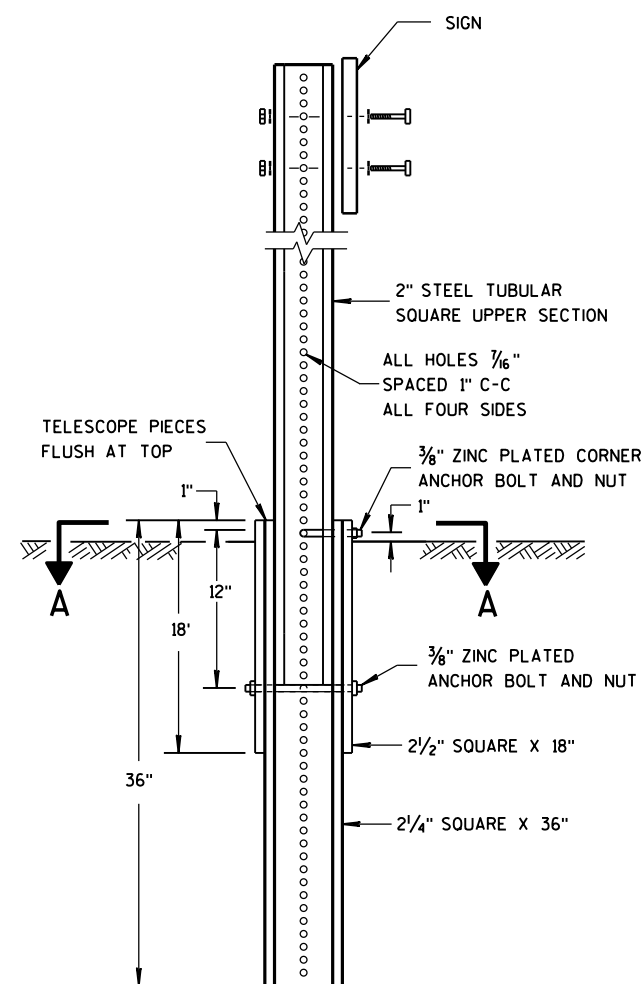
NARROW SIDEWALK PASSING DETAIL

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2016
DATE
FHWA

/S/ Peter Amakobe Atepe
STATEWIDE WORK ZONE TRAFFIC
SAFETY ENGINEER



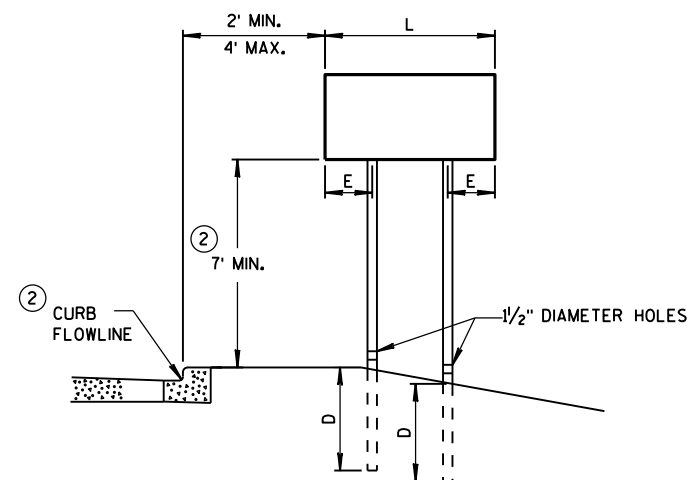
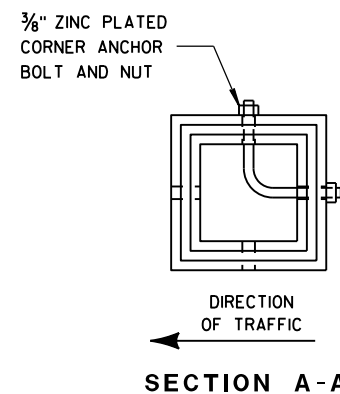
DETAIL OF TUBULAR STEEL SIGN POST

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ.FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

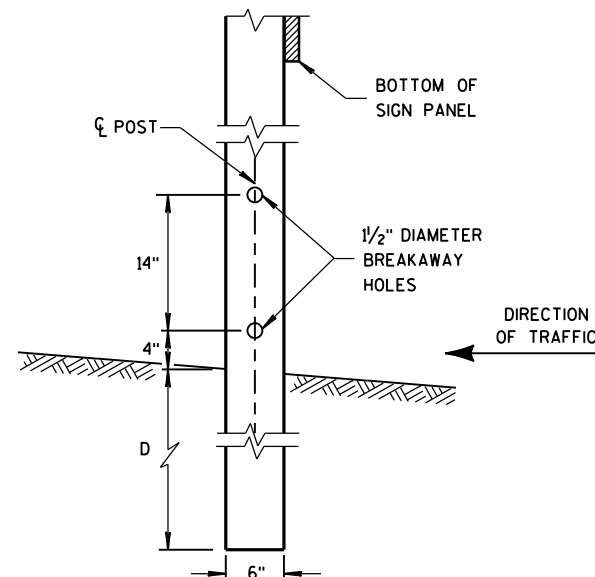


URBAN AREA

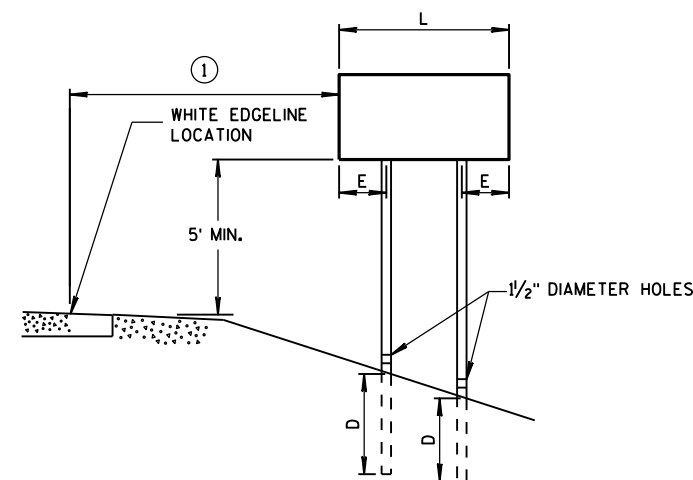
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

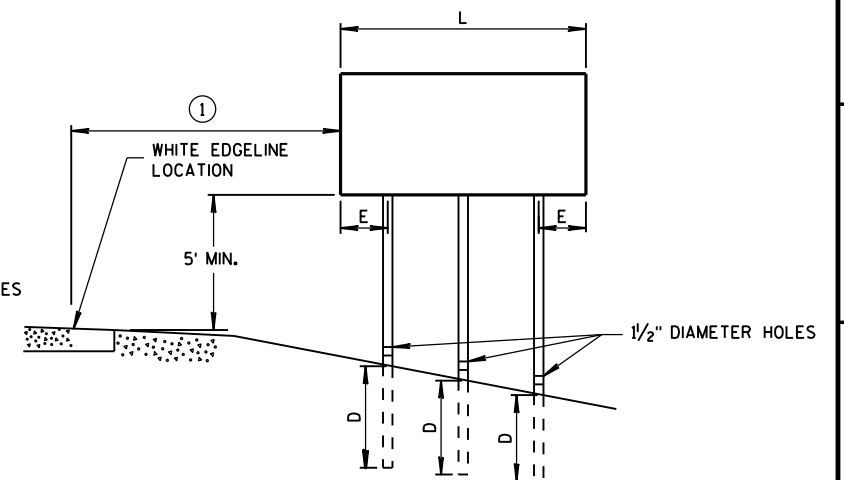
AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



4" x 6" WOOD POST MODIFICATION



RURAL AREA



GENERAL NOTES

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

- A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
- B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" x 3"
 - MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

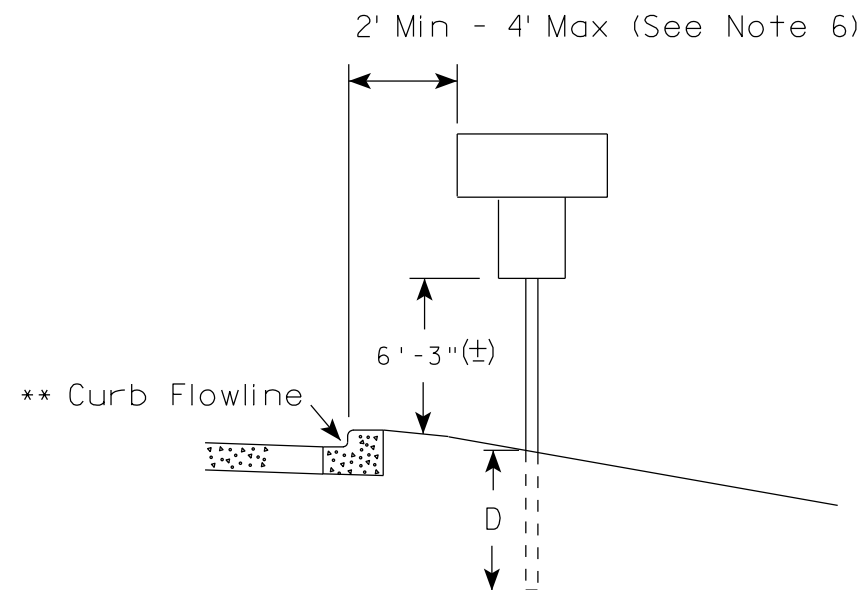
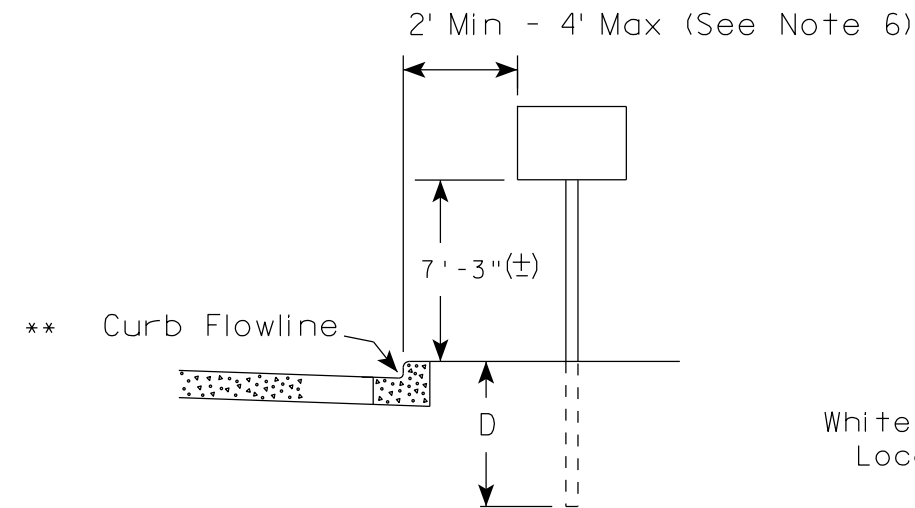
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" x 3-1/4" LENGTH W/ NUTS
 - RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

- 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 FOR ALL TYPE H SIGNS

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

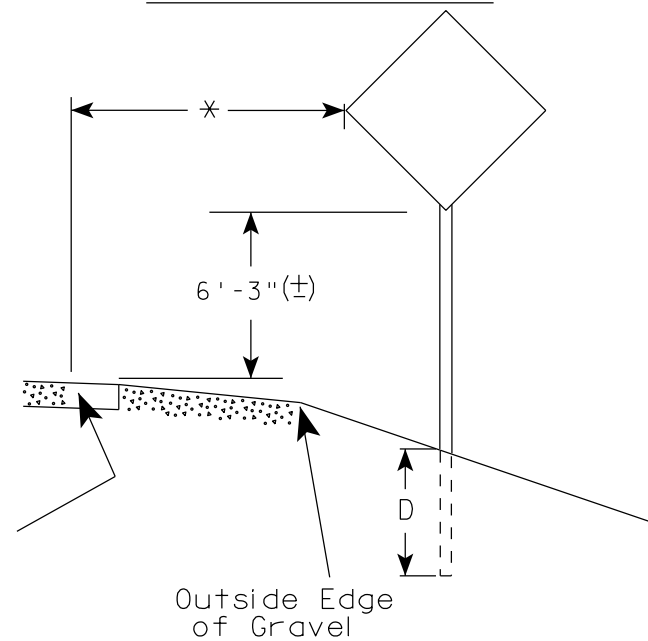
ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

URBAN AREA



White Edgeline
Location

RURAL AREA (See Note 2)



White Edgeline
Location

Outside Edge
of Gravel

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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), 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" (±).

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 7/23/15

PLATE NO. A4-3.20

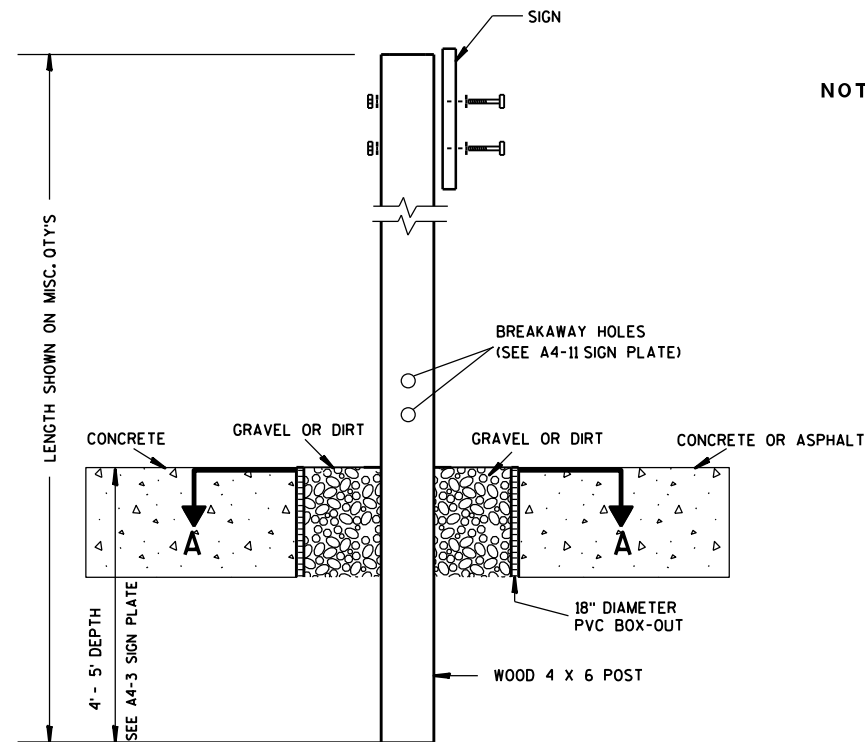
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

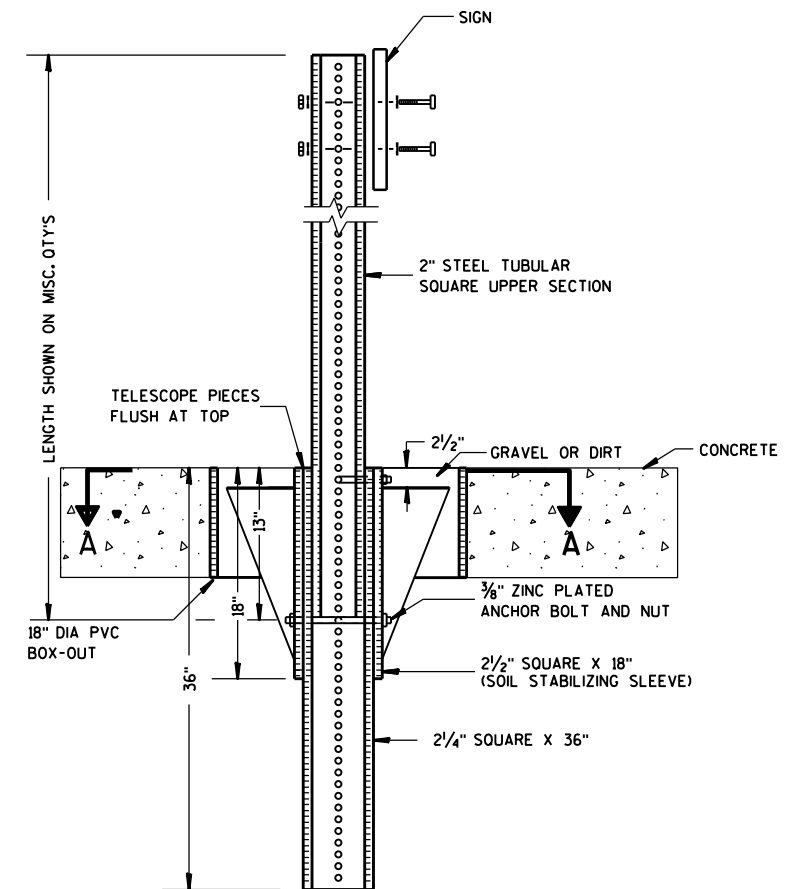
E



ELEVATION VIEW

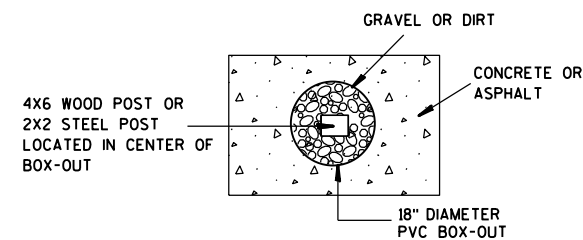
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

HWY:

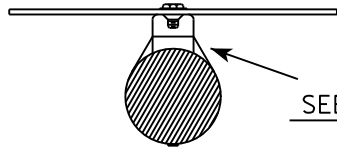
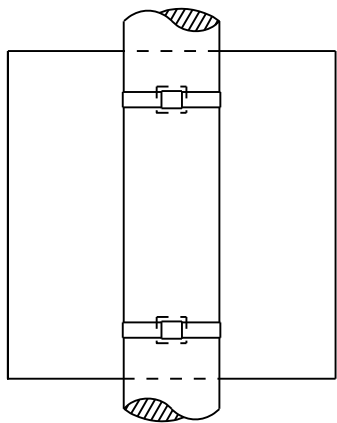
COUNTY:

SHEET NO:

E

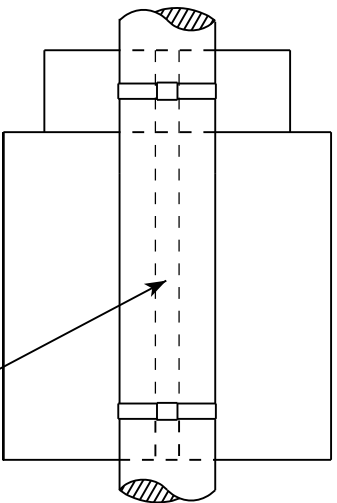
BANDING

SINGLE SIGN

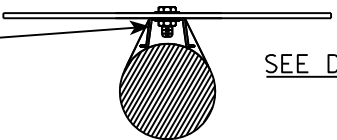


SEE DETAIL A

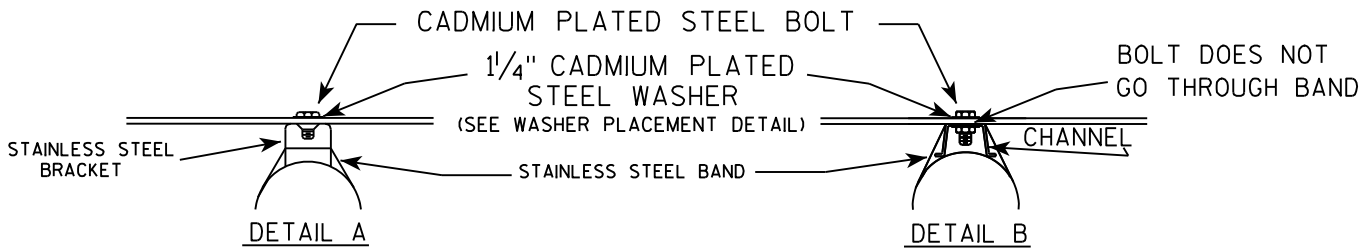
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



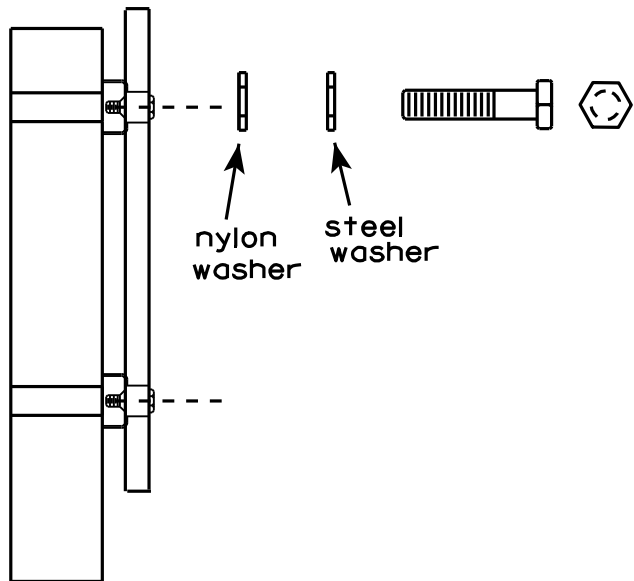
SEE DETAIL B



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 $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



nylon washer

steel washer

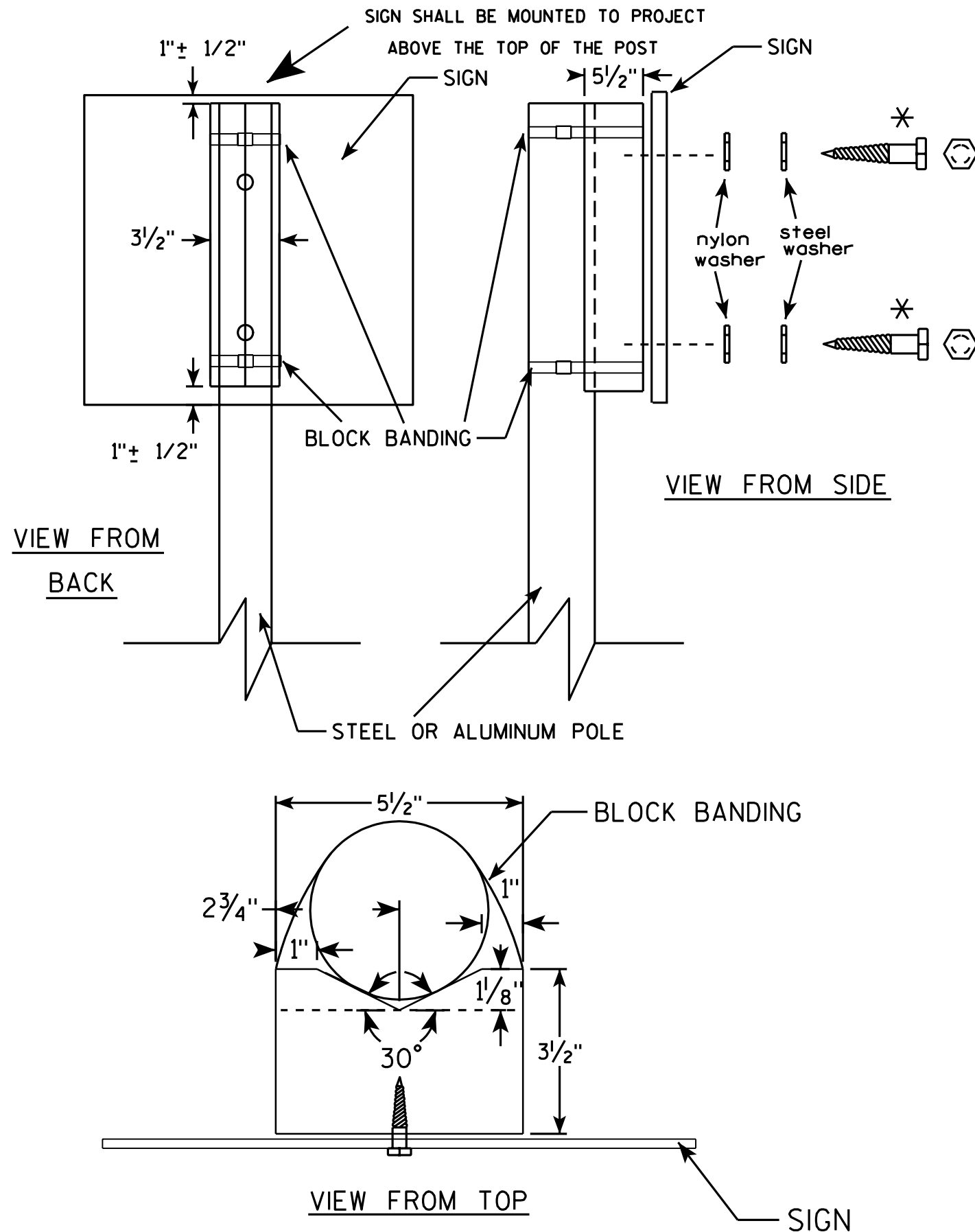
WASHERS (ALL POSTS) -
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3



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, 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, or
 - b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
 - c. 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 1 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE 3/8" X 2 1/2"

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

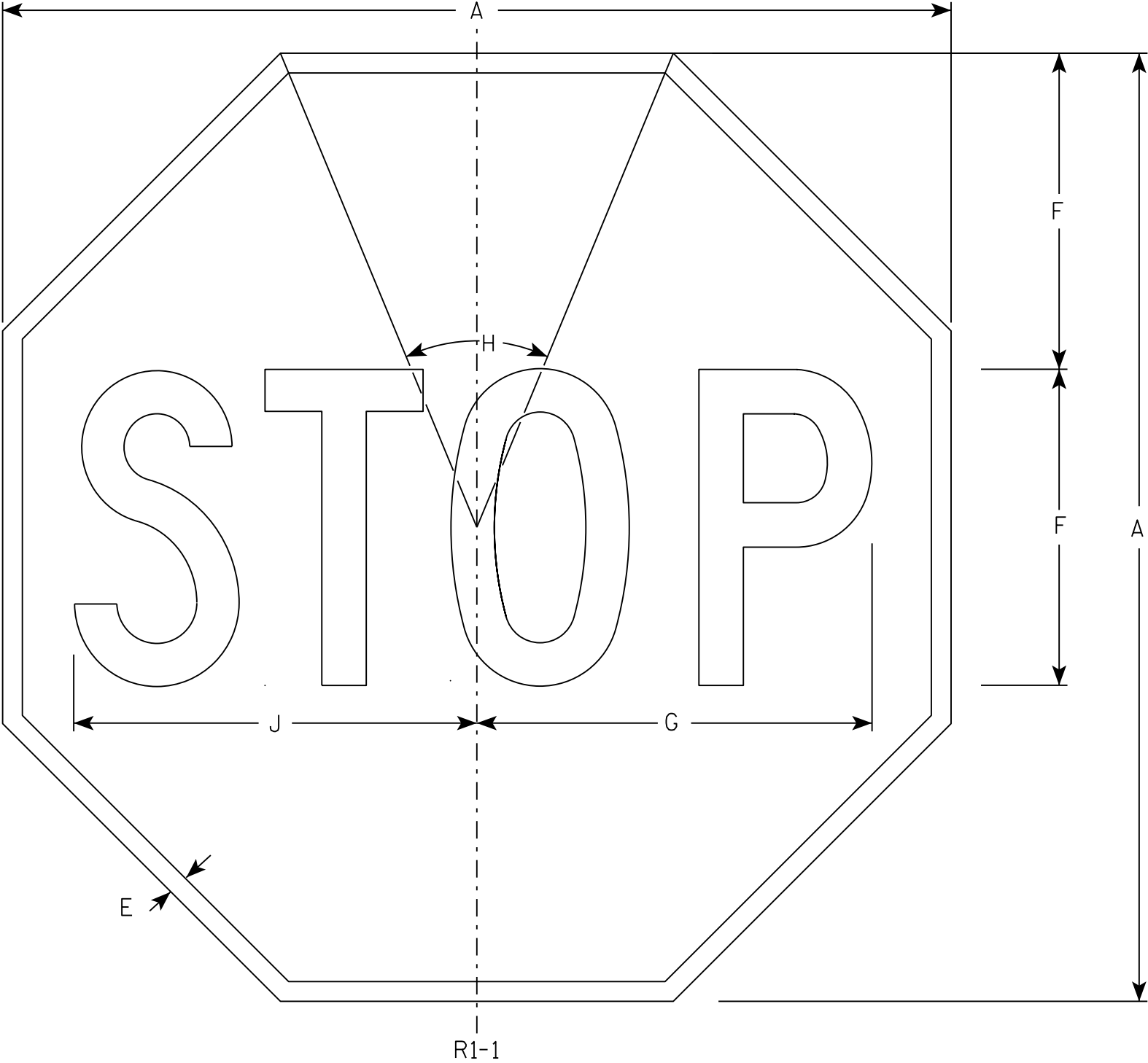
DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

SHEET NO:

E

7



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C

7

R1-1

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

STANDARD SIGN

R1 - 1

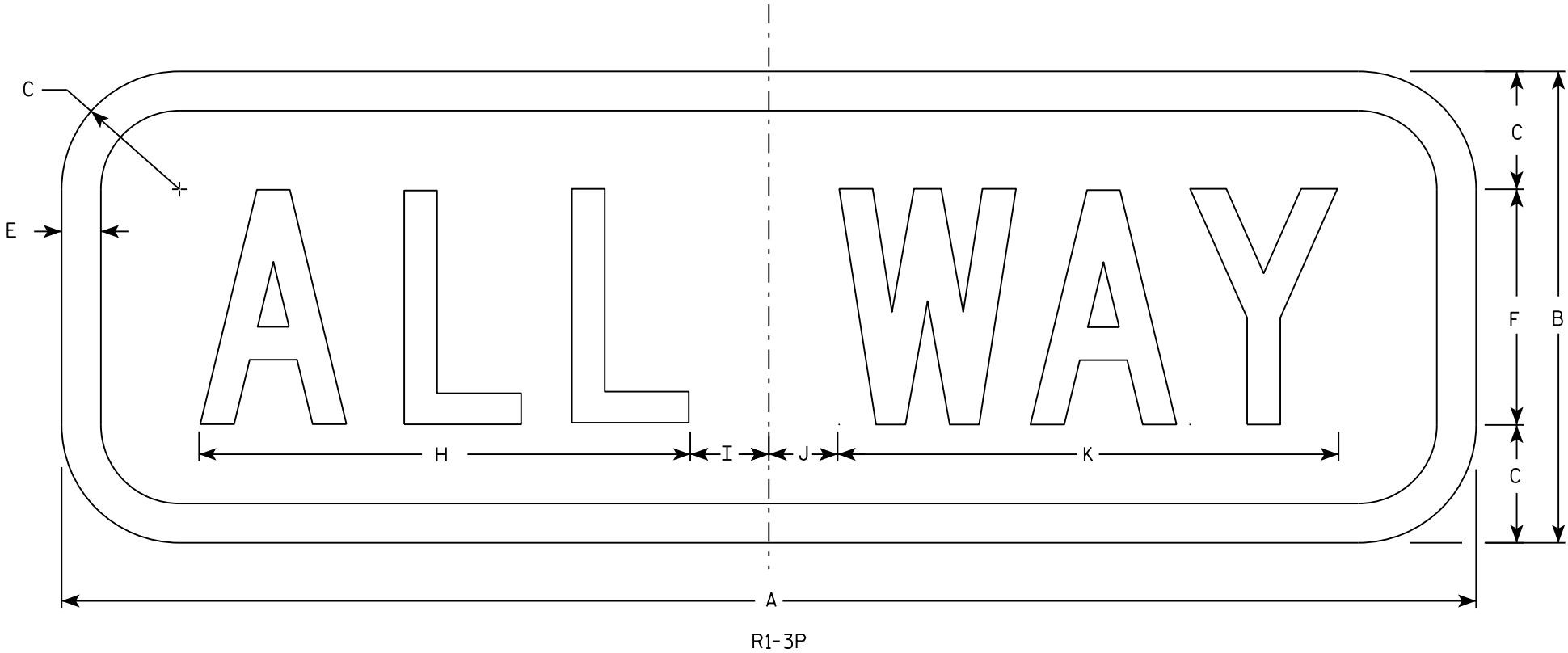
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C
- 4. For 30"x30" R1-1 use 18"x6" R1-3P sign
For 36"x36" R1-1 use 24"x9" R1-3P sign
For 48"x48" R1-1 use 30"x12" R1-3P sign



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																0.75
2S	18	6	1 1/2		1/2	3		6 1/4	1 1/4	7/8	6 3/8																1.5
2M	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
3	24	9	1 1/2		1/2	5		9 1/4	1 1/4	3/4	9 3/4																1.5
4	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5
5	30	12	2 1/4		5/8	6		11	2 1/4	1 1/2	11 3/4																2.5

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN

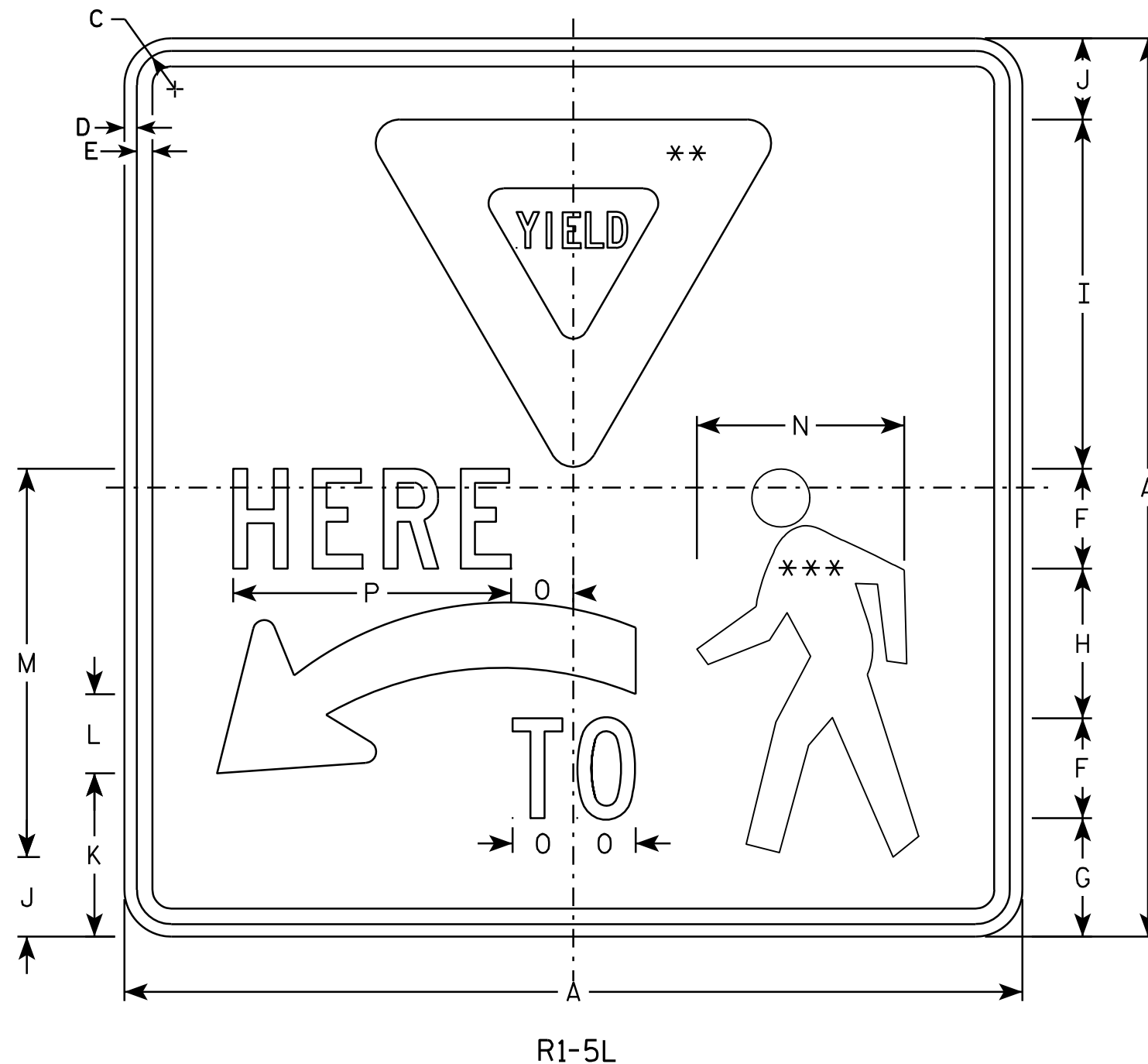
R1 - 3P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

for State Traffic Engineer

DATE 11/29/16 PLATE NO. R1-3P.3



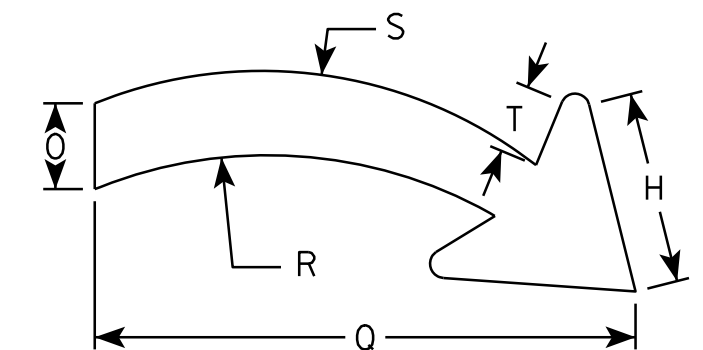
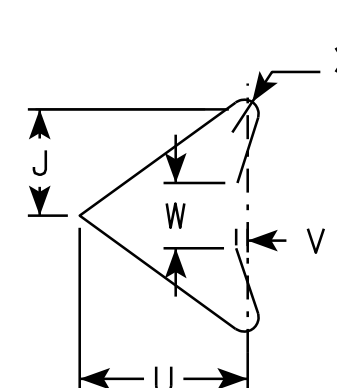
R1-5L

NOTES

1. All Signs Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - WHITE
Message - BLACK
YIELD SYMBOL - RED ON WHITE
PED SYMBOL - BLACK ON WHITE
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.

** INSERT R1-2 AND SIZE TO FIT

*** INSERT W11-2 AND SIZE TO FIT



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	18		1 1/8	3/8	3/8	2	2 3/8	3	7	1 5/8	3 1/4	1 5/8	7 3/4	4 1/8	1 1/4	5 5/8	1 3/8	14 1/4	13 3/4	1 1/8	2 5/8	1/8	1	1/2			2.25
2M	18		1 1/8	3/8	3/8	2	2 3/8	3	7	1 5/8	3 1/4	1 5/8	7 3/4	4 1/8	1 1/4	5 5/8	1 3/8	14 1/4	13 3/4	1 1/8	2 5/8	1/8	1	1/2			2.25
3	30		1 3/8	1/2	5/8	3	4	5 3/8	12	2 3/4	5 1/2	2 5/8	13	6 7/8	1 7/8	8 3/8	14	23 3/4	23	1 3/4	4 3/8	1/4	1 3/4	3/4			6.25
4	36		1 3/8	1/2	5/8	4	4 3/4	6	14	3 1/4	6 1/2	3 1/8	15	8 1/4	2 1/2	11 1/8	16 3/4	28 1/2	27 3/4	2 1/8	5 1/4	3/8	2	1			9.0
5																											

STANDARD SIGN R1-5L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 12/03/10 PLATE NO. R1-5L.3

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

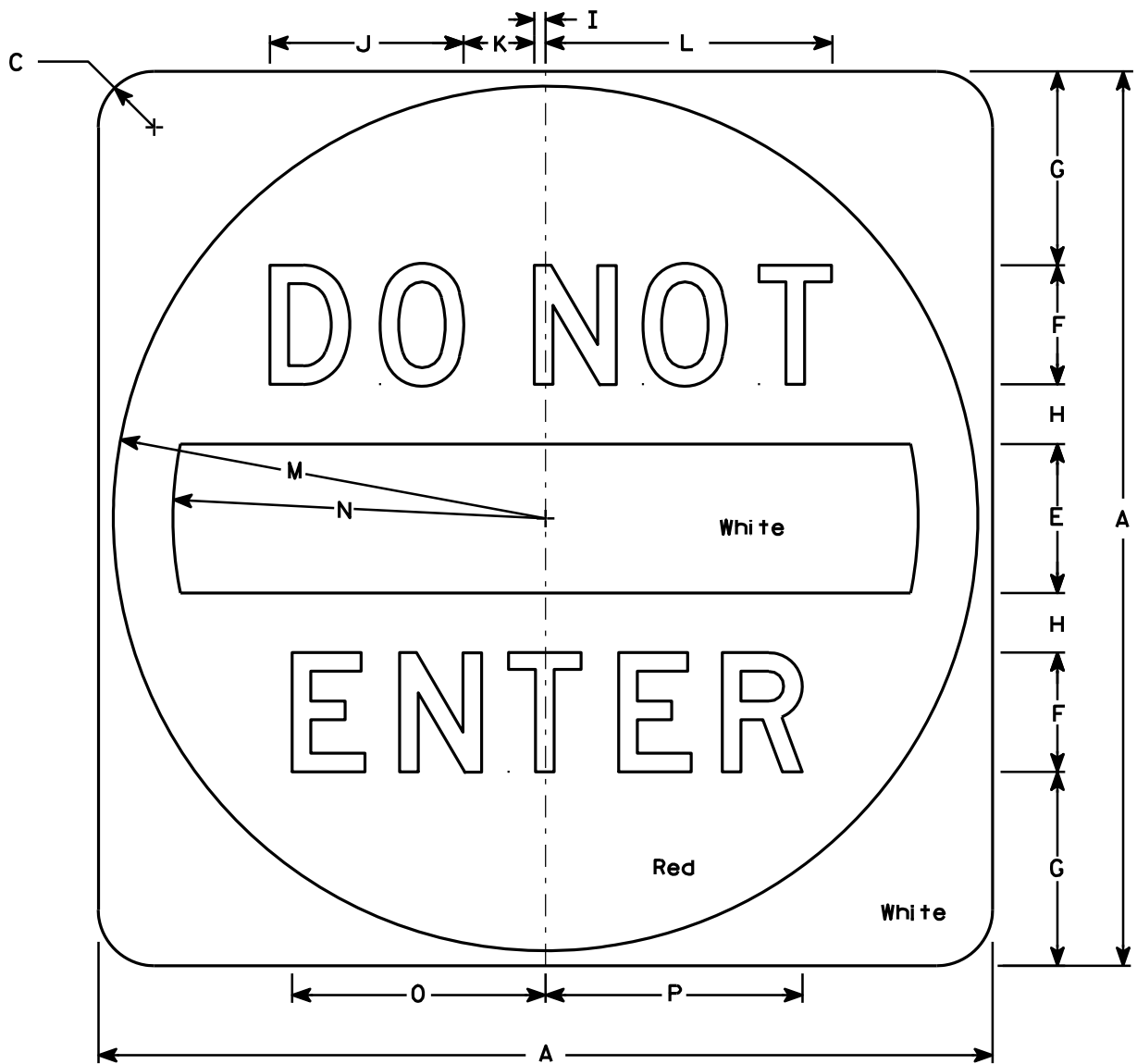
E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:

Background - See detail

Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the corners shall be rounded.



R5 - 1

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											6.26
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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN

R5 - 1

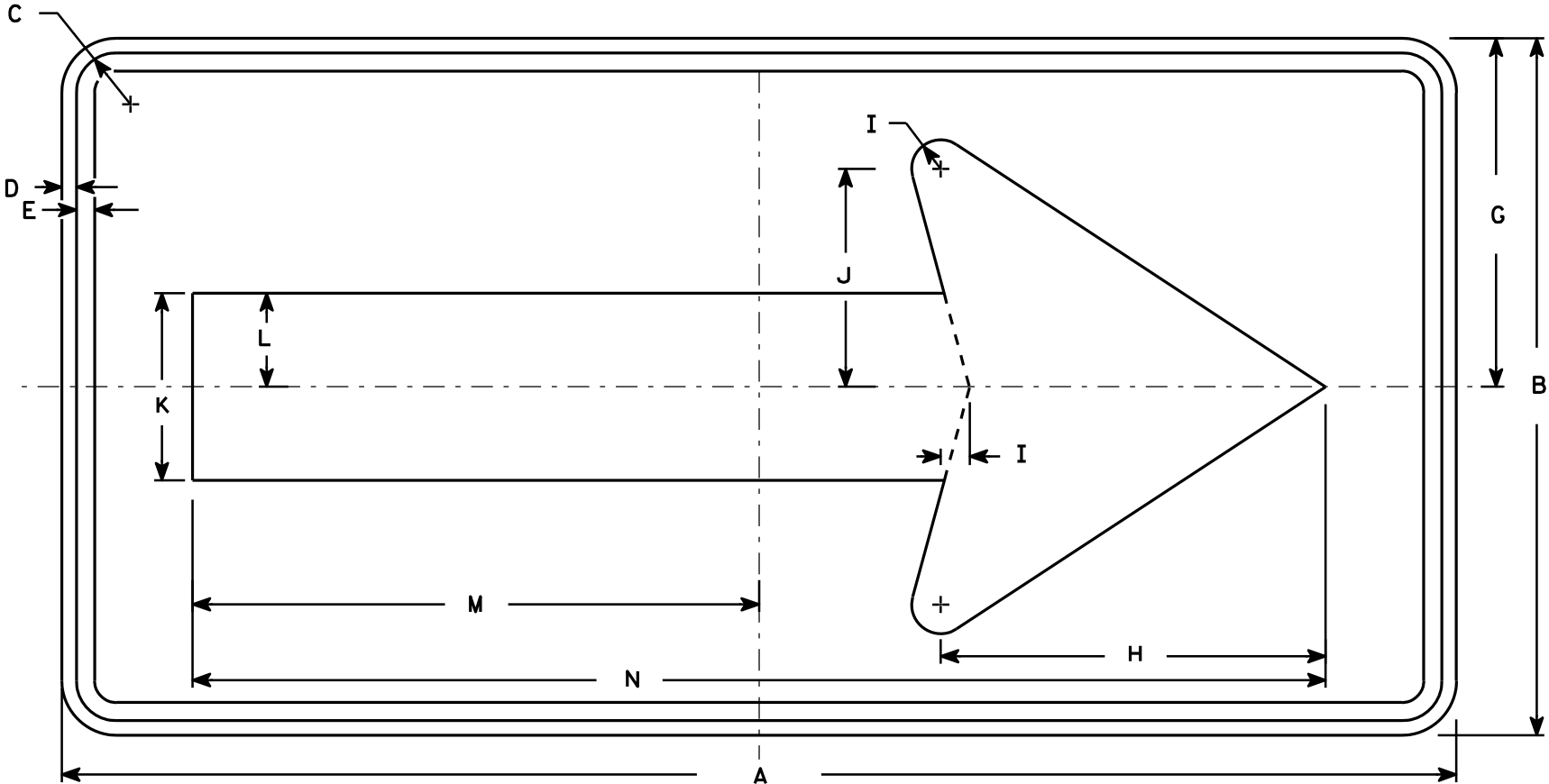
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1.15

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. 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.



W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

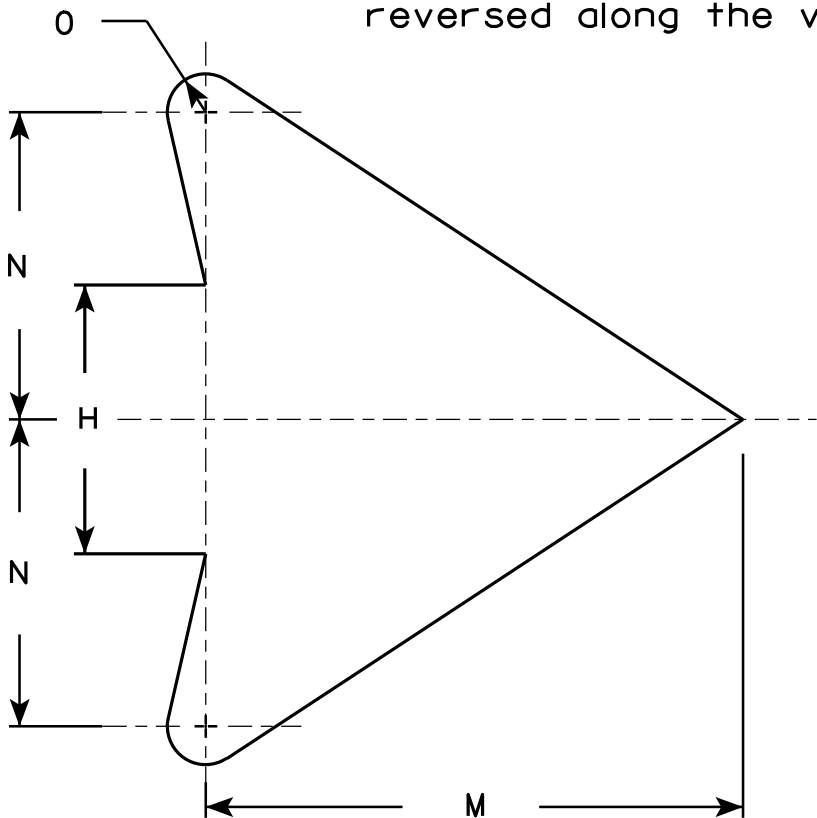
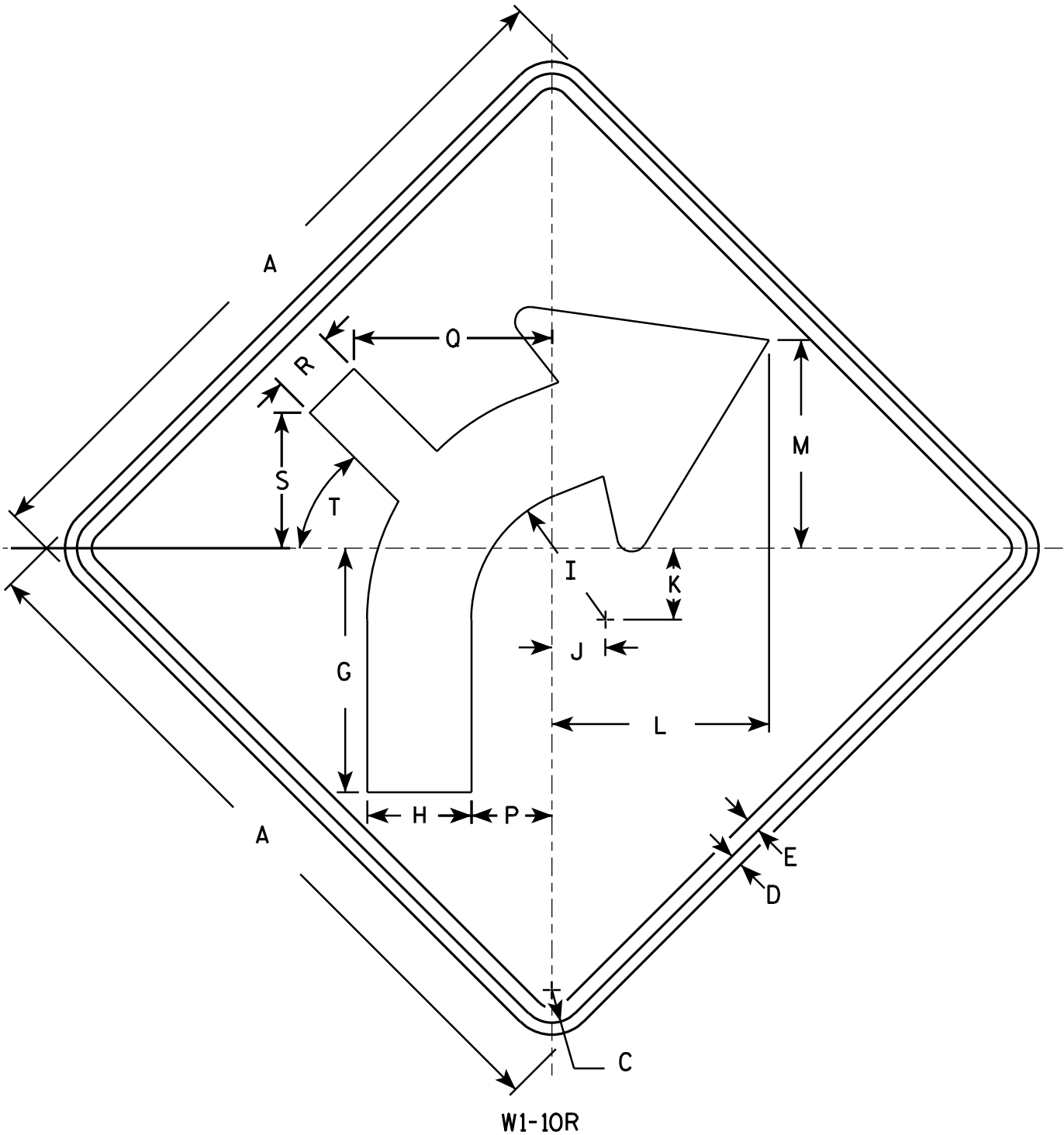
STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
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. W1-10L is the same as W1-10R except the arrow is reversed along the vertical centerline.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2	2 5/8	6 5/8	2 1/8	4 1/2	45°							4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8	3 3/8	8 3/8	2 5/8	5 3/4	45°							6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4	4	10	3 1/4	6 7/8	45°							9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4	4	10	3 1/4	6 7/8	45°							9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4	4	10	3 1/4	6 7/8	45°							9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1	5 3/8	13 1/4	4 1/4	9 1/8	45°							16.0

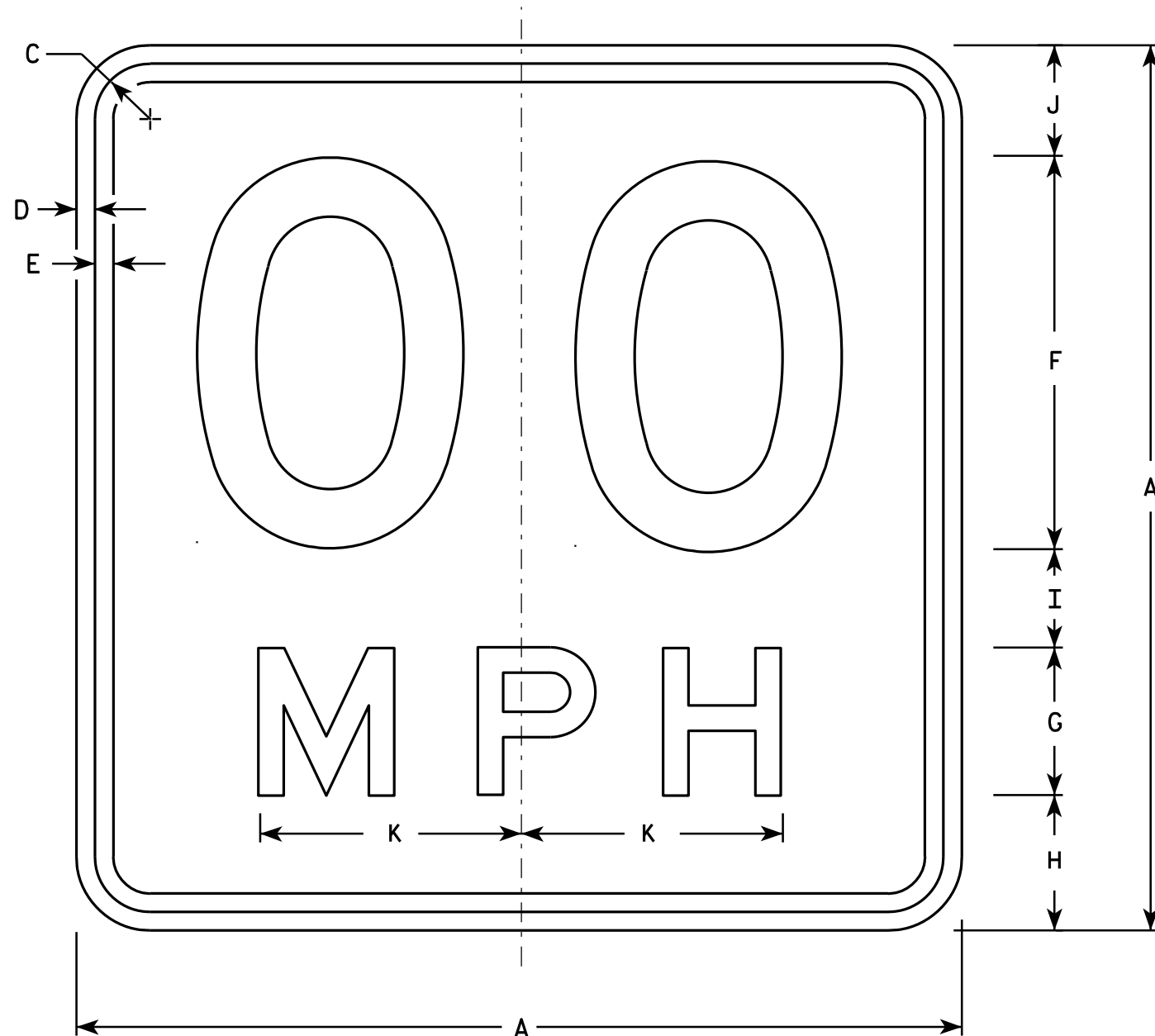
STANDARD SIGN
W1-10

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/17/12 PLATE NO. W1-10.3

PROJECT NO: HWY: COUNTY: SHEET NO: E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 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	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO:

HWY:

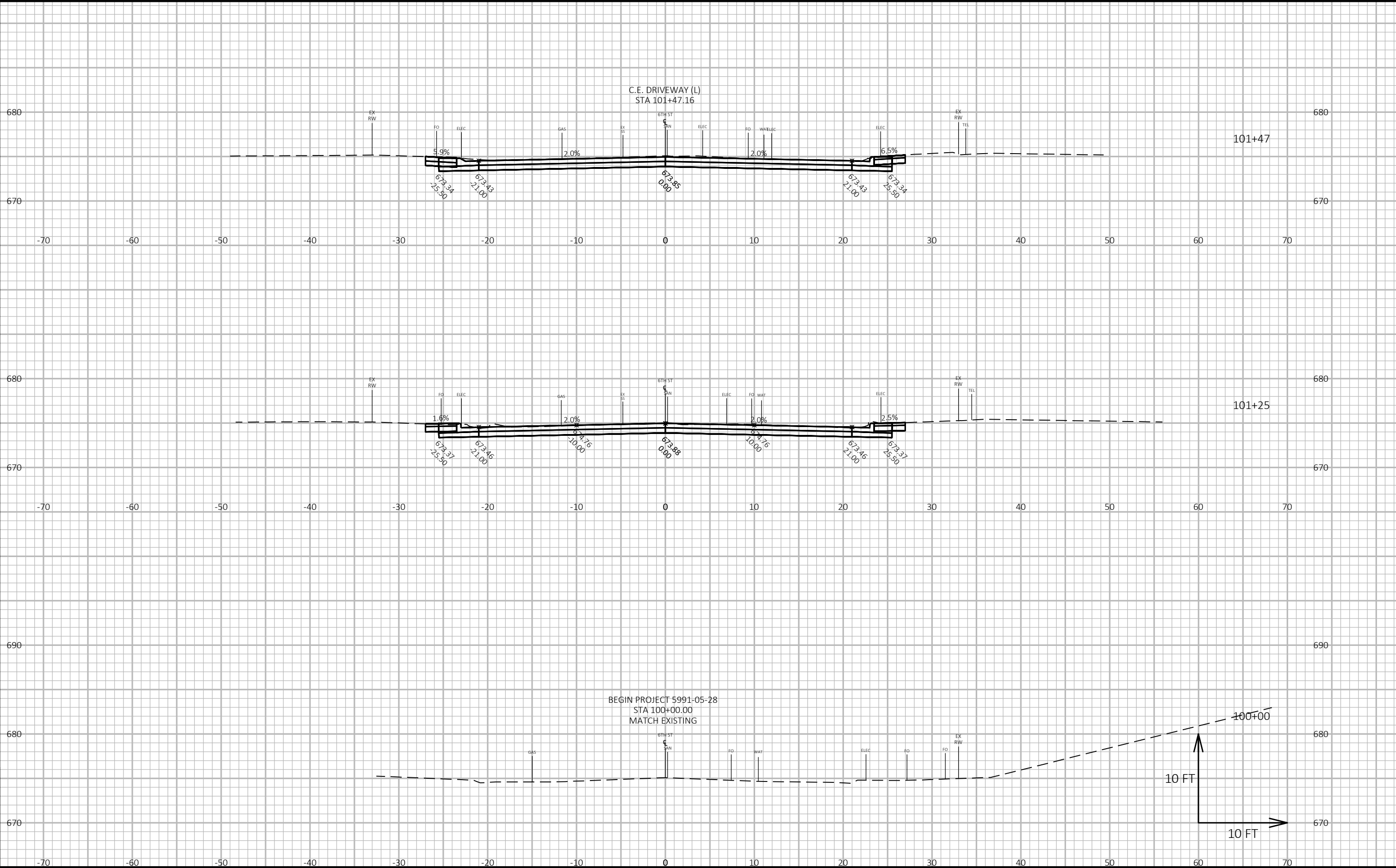
COUNTY:

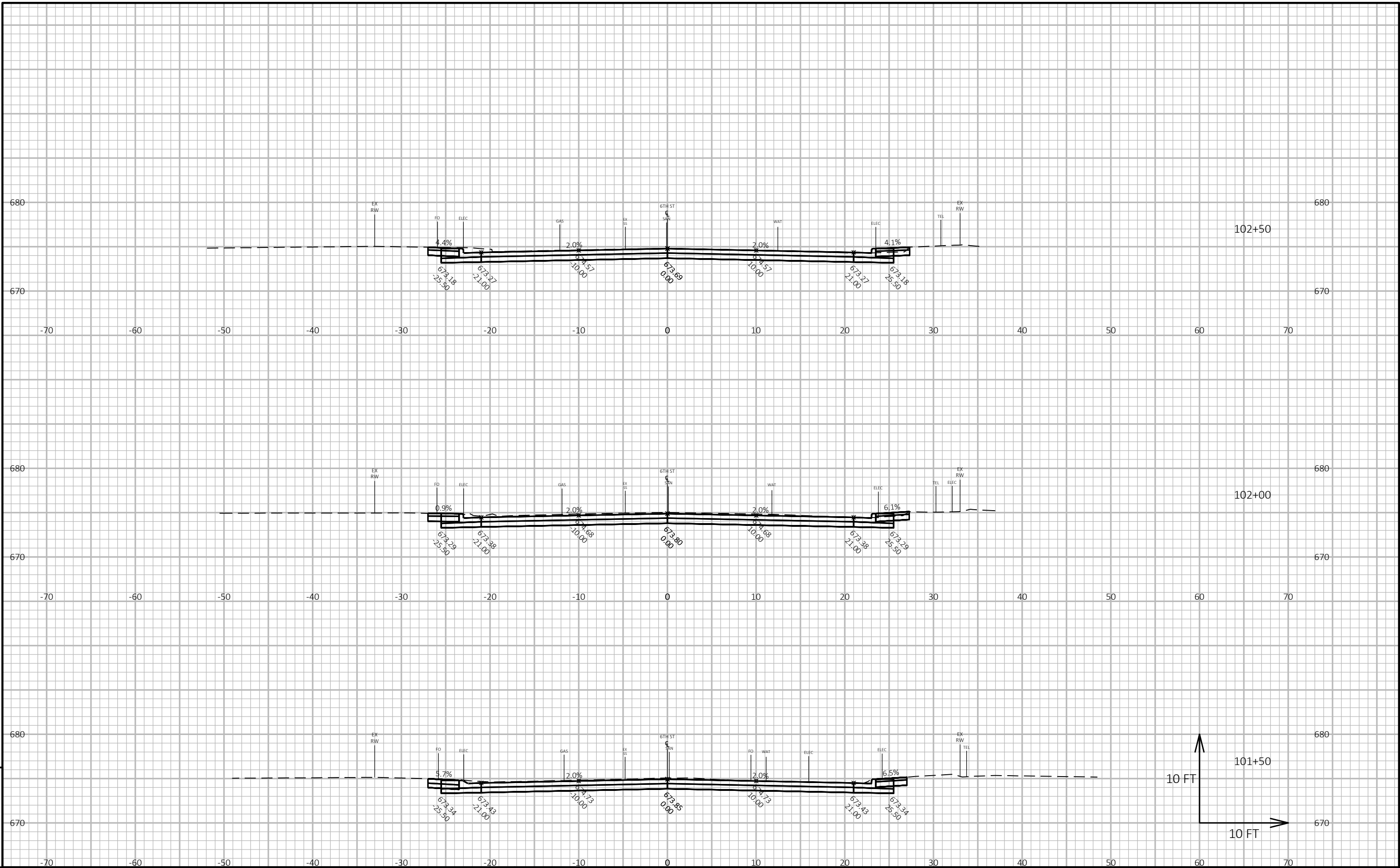
SHEET NO:

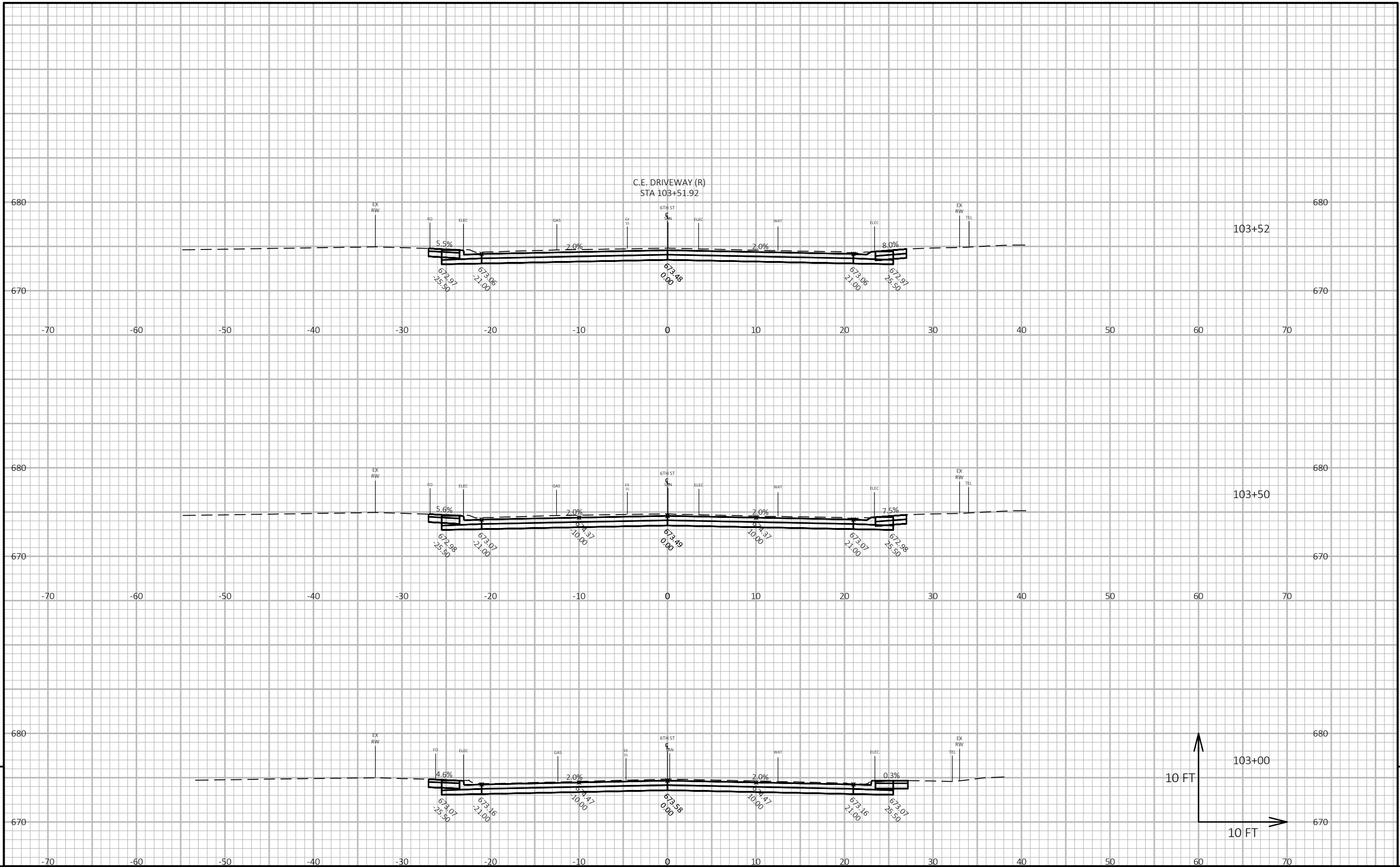
E

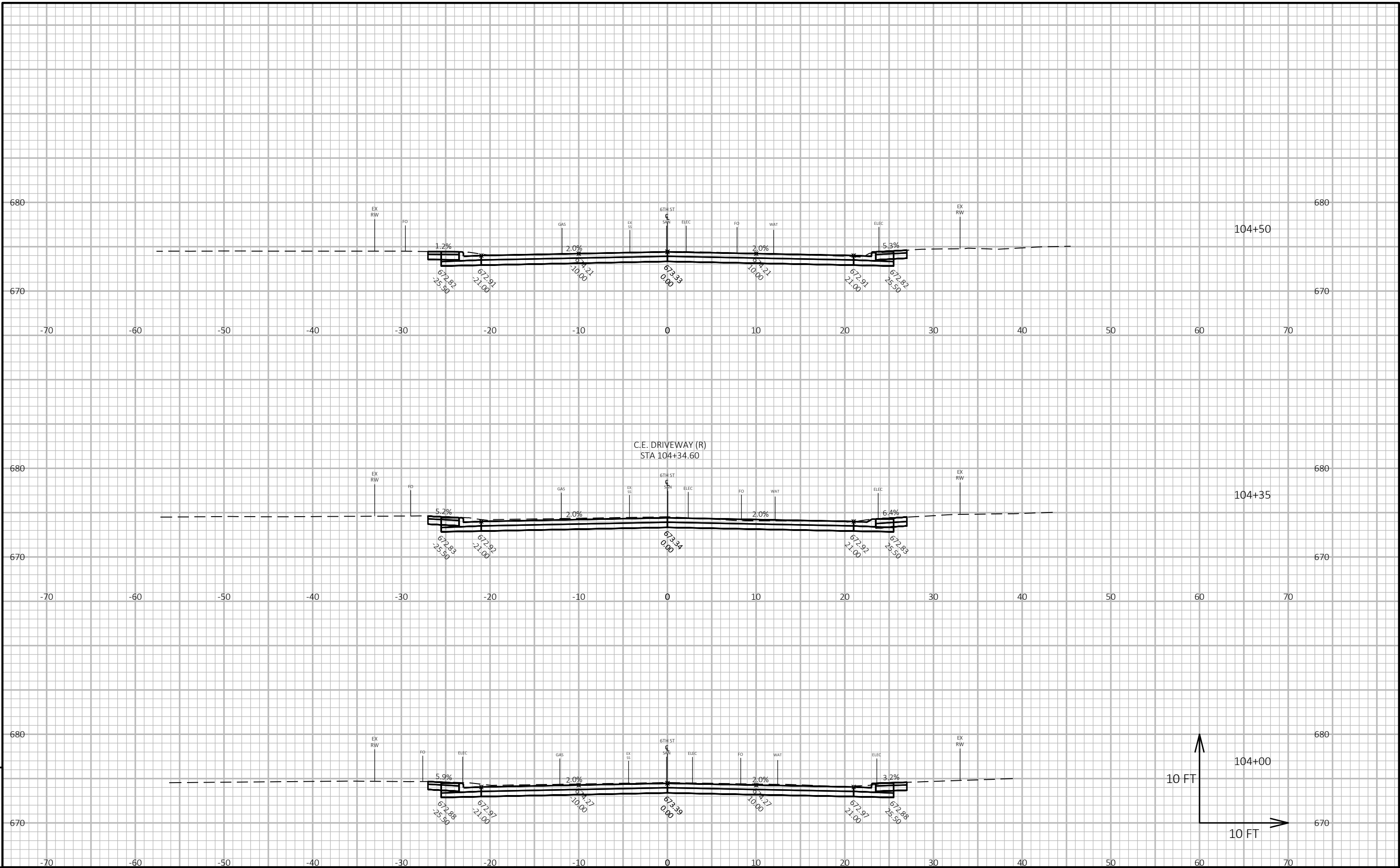
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY)		CUMULATIVE VOL (CY)		MASS ORDNATE
		CUT	FILL	CUT	FILL	CUT 1.00	EXPANDED FILL	
100+00	--	47.64	0.42	0	0.0	0	0.0	0
100+50	50.00	47.62	0.04	88	0.6	88	0.7	88
101+00	50.00	50.91	0.00	91	0.1	179	0.8	179
101+50	50.00	60.09	0.00	103	0.0	282	0.8	282
102+00	50.00	60.93	0.00	112	0.0	394	0.8	394
102+50	50.00	56.73	0.00	109	0.0	503	0.8	503
103+00	50.00	62.38	0.00	110	0.0	613	0.8	613
103+50	50.00	66.75	0.00	120	0.0	733	0.8	732
104+00	50.00	61.90	0.00	119	0.0	852	0.8	852
104+50	50.00	56.88	0.00	110	0.0	962	0.8	962
105+00	50.00	78.88	0.00	126	0.0	1088	0.8	1087
105+50	50.00	54.59	0.01	124	0.0	1211	0.8	1211
106+00	50.00	54.51	0.00	101	0.0	1312	0.8	1312
106+50	50.00	57.40	0.00	104	0.0	1416	0.8	1415
107+00	50.00	71.28	0.00	119	0.0	1535	0.8	1535
107+50	50.00	61.67	0.00	123	0.0	1658	0.8	1658
108+00	50.00	62.96	0.00	115	0.0	1774	0.8	1773
108+50	50.00	61.64	0.00	115	0.0	1889	0.8	1888
109+00	50.00	33.96	0.00	89	0.0	1978	0.8	1977
109+50	50.00	28.70	0.00	58	0.0	2036	0.8	2035
110+00	50.00	54.69	0.00	77	0.0	2113	0.8	2112
110+50	50.00	63.09	0.00	109	0.0	2222	0.8	2222
111+00	50.00	62.19	0.00	116	0.0	2339	0.8	2338
111+50	50.00	57.87	0.00	111	0.0	2449	0.8	2449
112+00	50.00	57.84	0.00	107	0.0	2557	0.8	2556
112+50	50.00	59.93	0.02	109	0.0	2666	0.9	2665
113+00	50.00	57.21	0.14	108	0.2	2774	1.1	2773
113+50	50.00	42.37	0.00	92	0.2	2866	1.3	2865
114+00	50.00	27.85	0.00	64	0.0	2930	1.3	2929
114+50	50.00	0.00	0.00	26	0.0	2956	1.3	2955
				2956	1.0			

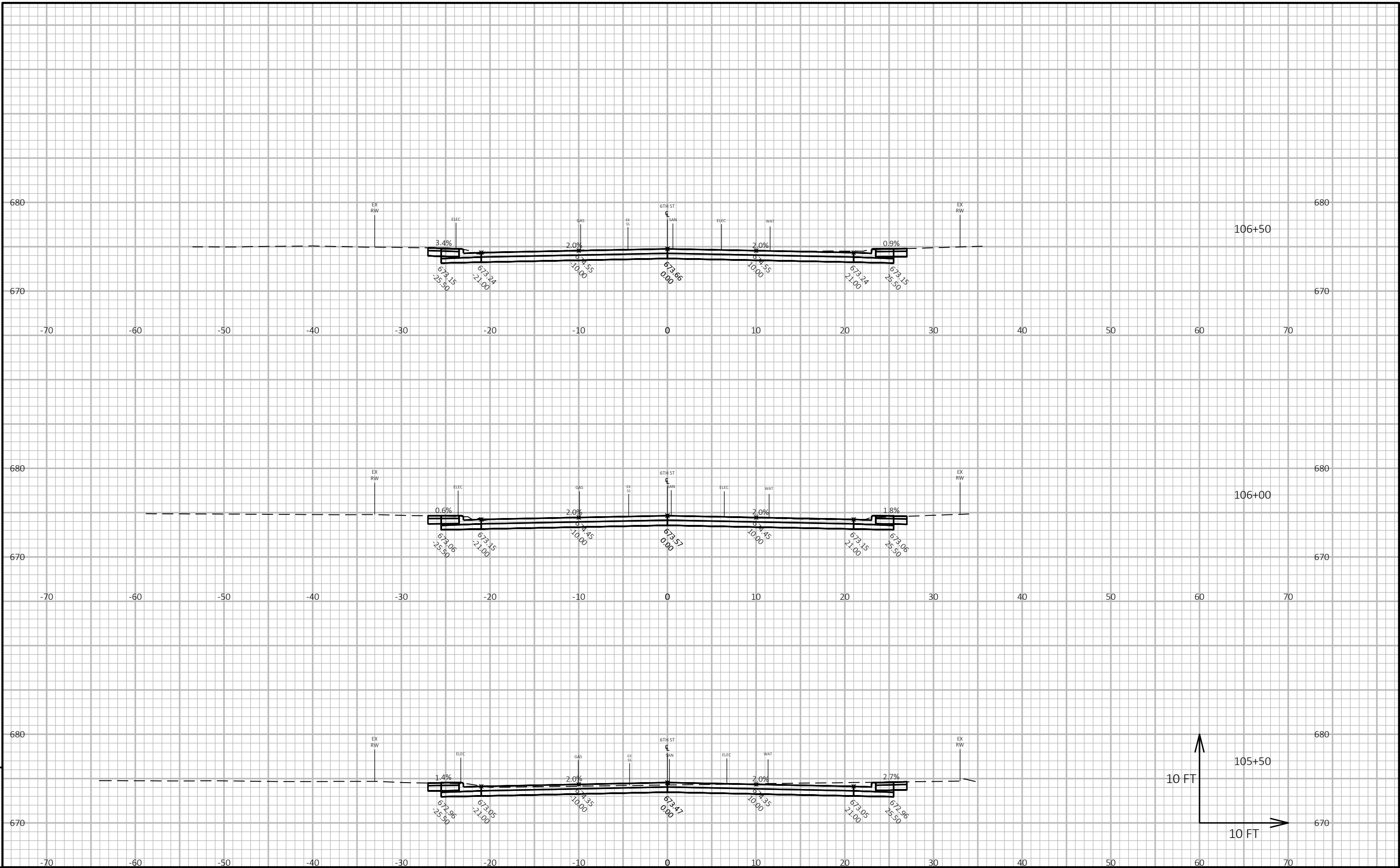
NOTE 1 - CUT	CUT INCLUDES EXISTING PAVEMENT. ASSUMED TO BE REUSED AS FILL OUSIDE THE 1:1 ROAD CORE.
NOTE 2 - FILL	VOLUME NEEDED TO BE FILLED.
NOTE 3 - MASS ORDINATE	(CUT) - (FILL*1.30)

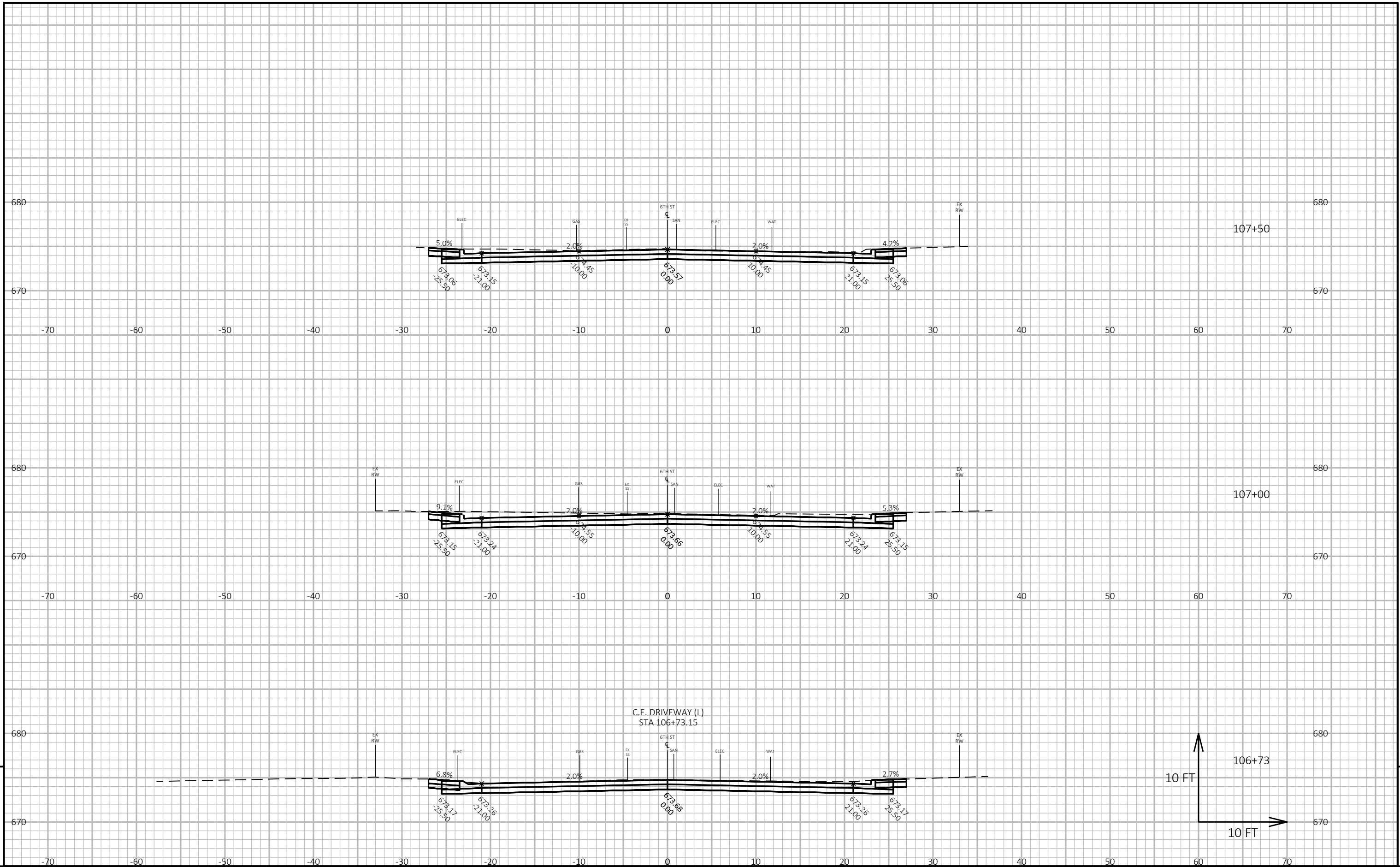


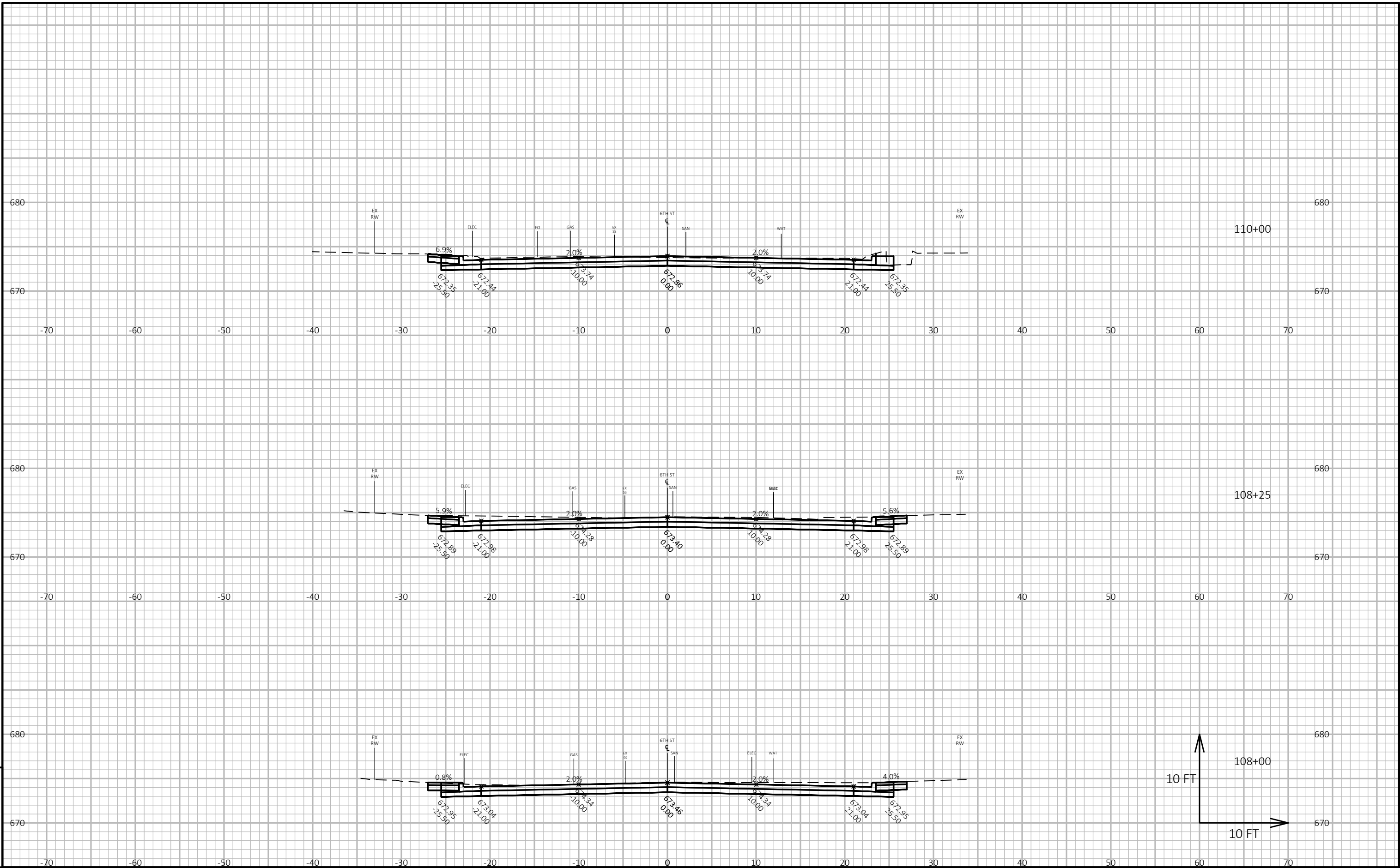


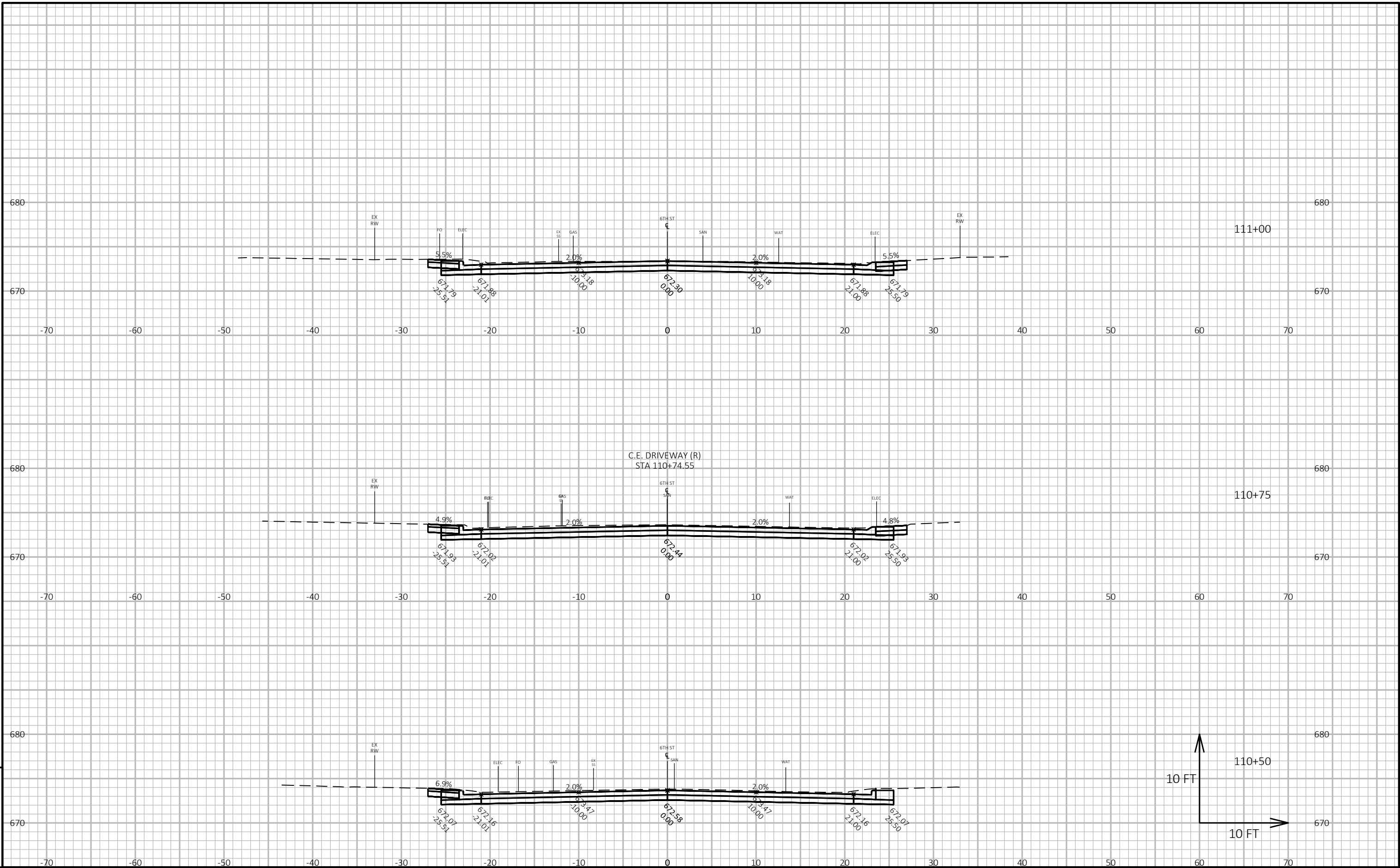


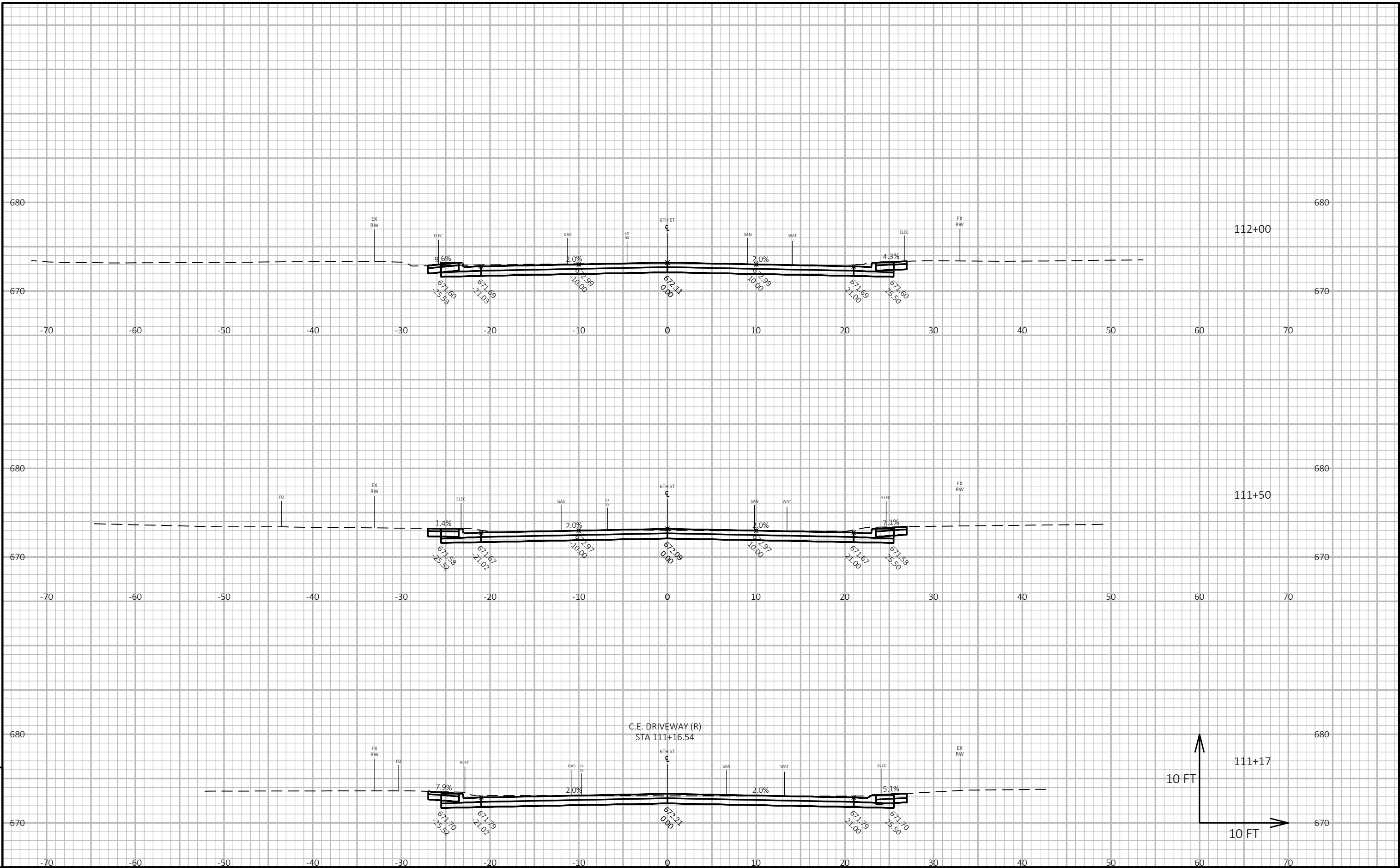


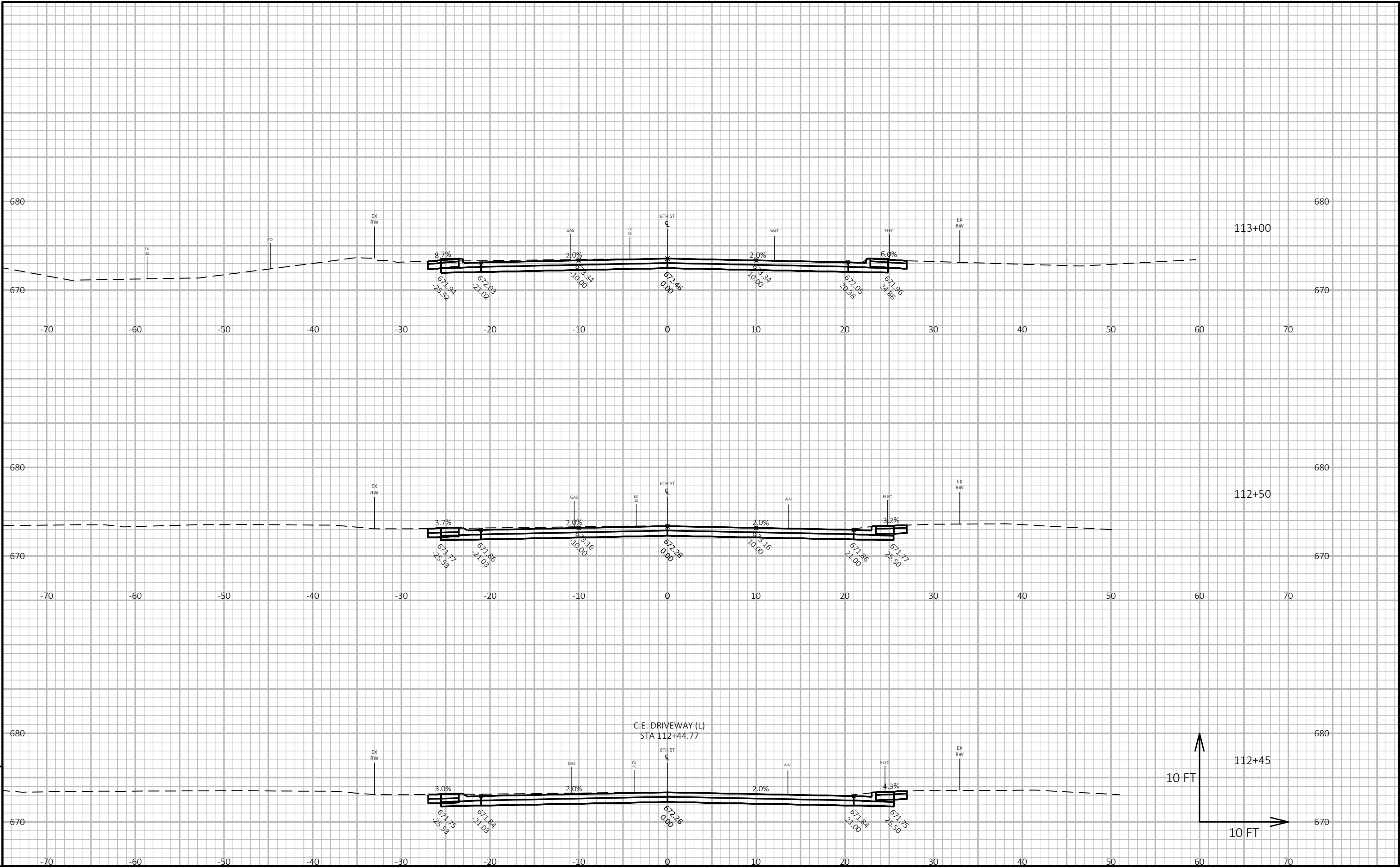


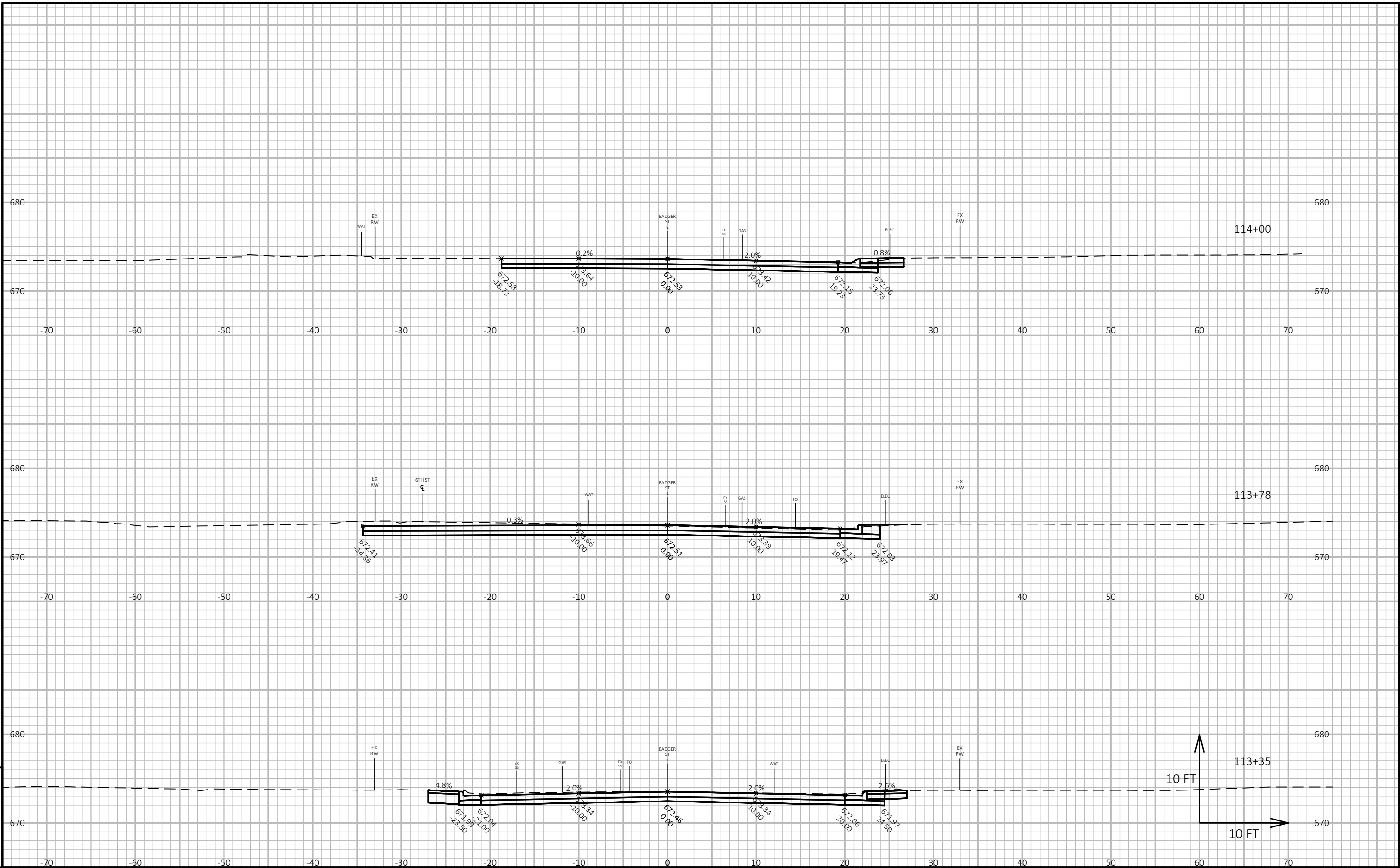


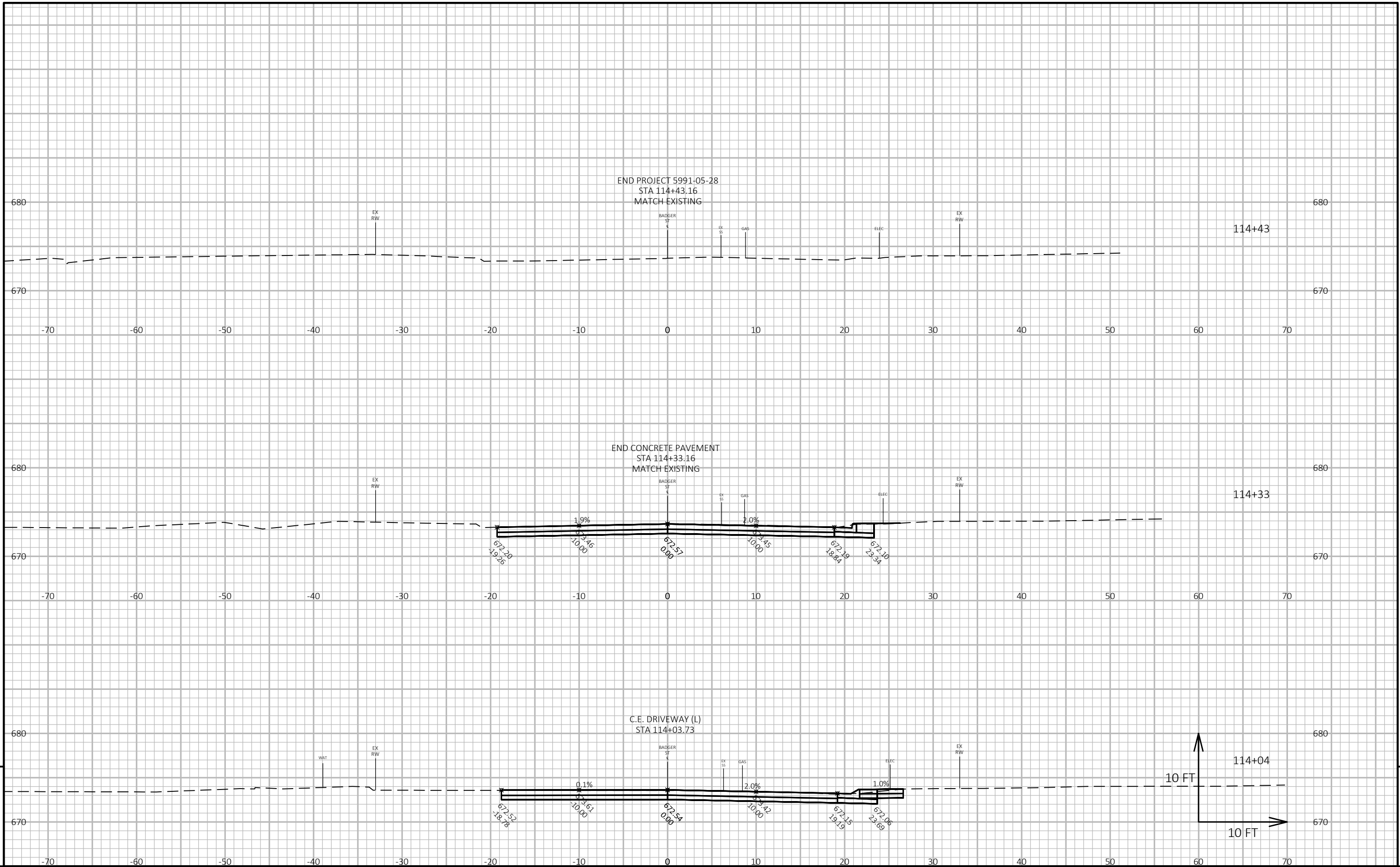












PROJECT NO: 5991-05-28	HWY: 6TH STREET	COUNTY: LA CROSSE	CROSS SECTIONS: BADGER STREET	SHEET	E
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Wisconsin Department of Transportation

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through innovation and exceptional service.

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