

WKE

WITH: N/A

PROJECT ID:
2703-08-71

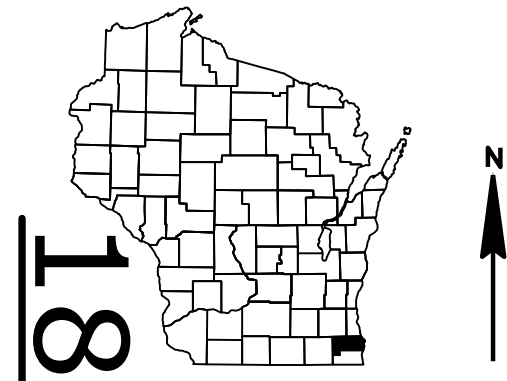
COUNTY:
RACINE

MARCH 2026

ORDER OF SHEETS

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

TOTAL SHEETS = 218



DESIGN DESIGNATION

A.A.D.T.	=	8900 (2026)
A.A.D.T.	=	9600 (2046)
D.H.V.	=	478
D.D.	=	48/52
T.	=	10.4
DESIGN SPEED	=	35 MPH
ESALS	=	1,500,000

CONVENTIONAL SYMBOLS

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

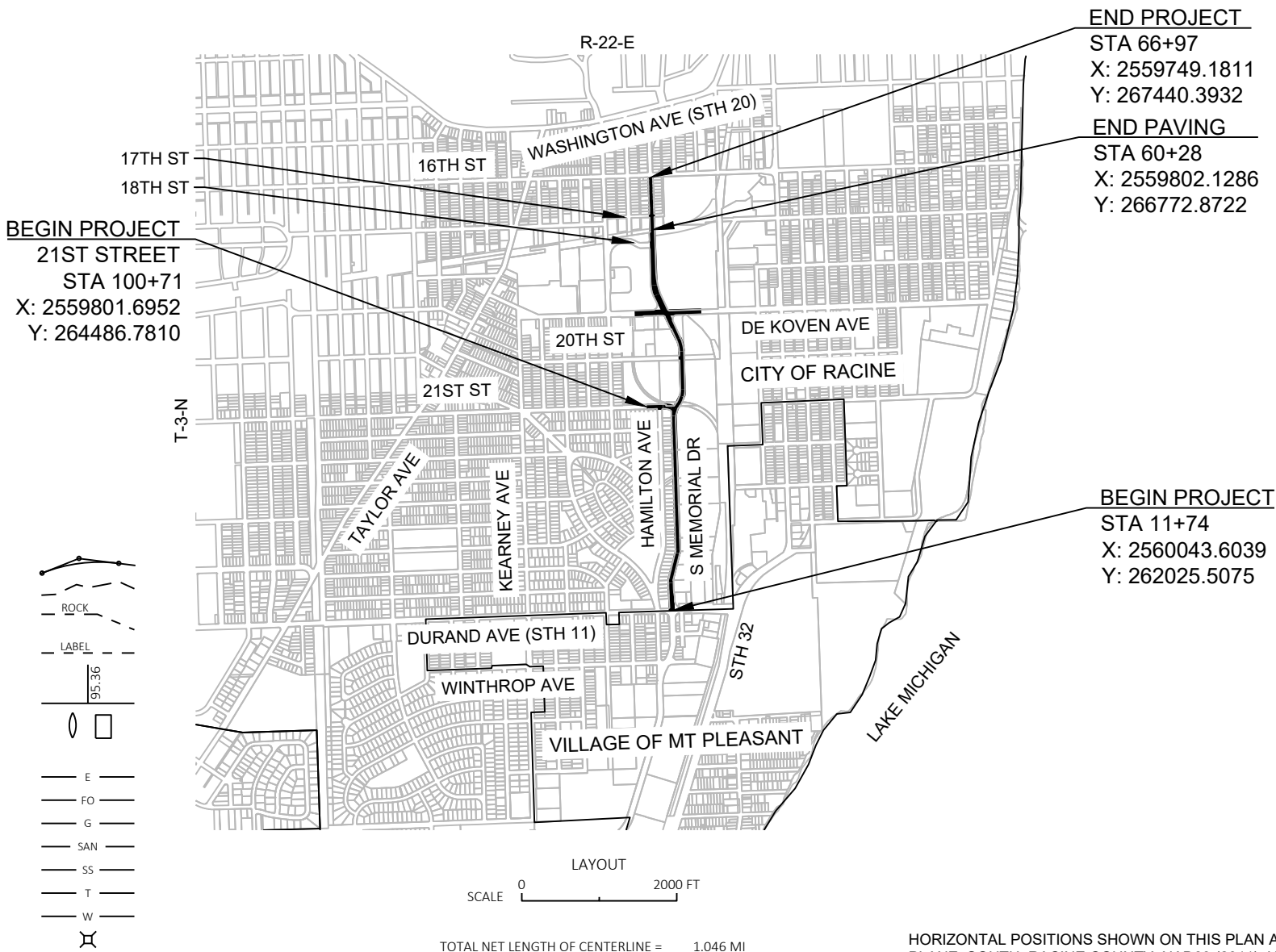
C RACINE, S MEMORIAL DR

DURAND AVE TO 17TH ST

LOCAL STREET

RACINE COUNTY

STATE PROJECT NUMBER
2703-08-71



END PROJECT

STA 66+97

X: 2559749.1811

Y: 267440.3932

END PAVING

STA 60+28

X: 2559802.1286

Y: 266772.8722

BEGIN PROJECT

STA 11+74

X: 2560043.6039

Y: 262025.5075

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN STATE PLANE, SOUTH, RACINE COUNTY, NAD83 (2011) U.S. SURVEY FEET

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012) VERTICAL DATUM

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2703-08-71	WISC 2026225	1

ACCEPTED FOR
CITY OF RACINE

DATE: 10/17/25 CITY ENGINEER
(Signature and Title of Official)

ORIGINAL PLANS PREPARED BY
BAXTER & WOODMAN
Consulting Engineers

DATE: 10/16/2025
(Professional Engineer Signature)

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	BAXTER & WOODMAN, INC
Designer	BAXTER & WOODMAN, INC
Project Manager	MICHAEL BAIRD
Regional Examiner	SE REGION
Regional Supervisor	AMY TAETSCH

APPROVED FOR THE DEPARTMENT
DATE: 10/20/2025
(Signature)

STANDARD ABBREVIATIONS

ABUT	ABUTMENT	LT	LEFT
AC	ACRE	LHF	LEFT HAND FORWARD
AGG	AGGREGATE	L	LENGTH OF CURVE
AH	AHEAD	LF	LINEAR FOOT
∠	ANGLE	LC	LONG CHORD OF CURVE
AADT	ANNUAL AVERAGE DAILY TRAFFIC	LS	LUMP SUM
AEW	APRON ENDWALL	MGAL	ONE THOUSAND GALLONS
ASPH	ASPHALTIC	MH	MANHOLE
BK	BACK	ML OR M/L	MATCH LINE
BC	BACK OF CURB	NOM	NOMINAL
BAD	BASE AGGREGATE DENSE	NC	NORMAL CROWN
BL OR B/L	BASE LINE	NB	NORTHBOUND
BM	BENCH MARK	NO	NUMBER
CB	CATCH BASIN	OD	OUTSIDE DIAMETER
CL OR C/L	CENTER LINE	PAVT	PAVEMENT
Δ	CENTRAL ANGLE OR DELTA	PLE	PERMANENT LIMITED EASEMENT
CE	COMMERCIAL ENTRANCE	PC	POINT OF CURVATURE
CONC	CONCRETE	PI	POINT OF INTERSECTION
CSW	CONCRETE SIDEWALK	PT	POINT OF TANGENCY
CONST	CONSTRUCTION	PCC	PORTLAND CEMENT CONCRETE
CP	CONTROL POINT	LB	POUND
CO	COUNTY	PSI	POUNDS PER SQUARE INCH
CTH	COUNTY TRUCK HIGHWAY	PE	PRIVATE ENTRANCE
CY	CUBIC YARD	PROJ	PROJECT
CP	CULVERT PIPE	PL	PROPERTY LINE
CPCA	CULVERT PIPE CORRUGATED ALUMINUM	PRW	PROPOSED RIGHT OF WAY
CPCPE	CULVERT PIPE CORRUGATED POLYETHYLENE	R	RADIUS
CPCPP	CULVERT PIPE CORRUGATED POLYPROPYLENE	RL OR R/L	REFERENCE LINE
CPCS	CULVERT PIPE CORRUGATED STEEL	REQD	REQUIRED
CPCSAC	CULVERT PIPE CORRUGATED STEEL ALUMINUM COATED	RT	RIGHT
CPCSPC	CULVERT PIPE CORRUGATED STEEL POLYMER COATED	RHF	RIGHT HAND FORWARD
CPRC	CULVERT PIPE REINFORCED CONCRETE	R/W	RIGHT OF WAY
	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL	RD	ROAD
CPRCHE	ELLIPTICAL	RDWY	ROADWAY
CPS	CULVERT PIPE SALVAGED	SHLDR	SHOULDER
CPT	CULVERT PIPE TEMPORARY	SW	SIDEWALK
C & G	CURB AND GUTTER	SB	SOUTHBOUND
D	DEGREE OF CURVE	SPECS	SPECIFICATIONS
DHV	DESIGN HOUR VOLUME	SF	SQUARE FEET
DIA	DIAMETER	SY	SQUARE YARD
DD	DIRECTIONAL DISTRIBUTION	SDD	STANDARD DETAIL DRAWINGS
DE	DRAINAGE EASEMENT	STH	STATE TRUNK HIGHWAY
DWY	DRIVEWAY	STA	STATION
EA	EACH	SSPC	STORM SEWER PIPE COMPOSITE
EB	EASTBOUND	SSCPE	STORM SEWER PIPE CORRUGATED POLYETHYLENE
		SSCPP	STORM SEWER PIPE CORRUGATED POLYPROPYLENE
EL OR ELEV	ELEVATION	SSPNRC	STORM SEWER PIPE NON-REINFORCED CONCRETE
EMB	EMBANKMENT	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
EW	ENDWALL	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
EAT	ENERGY ABSORBING TERMINAL		STORM SEWER PIPE REINFORCED CONCRETE HORIZONTAL
ESALS	EQUIVALENT SINGLE AXLE LOADS	SSPRCHE	ELLIPTICAL
EXC	EXCAVATION	SE	SUPERELEVATION
EBS	EXCAVATION BELOW SUBGRADE	SL OR S/L	SURVEY LINE
EXIST	EXISTING	TEMP	TEMPORARY
FERT	FERTILIZER	TI	TEMPORARY INTEREST
FE	FIELD ENTRANCE	TLE	TEMPORARY LIMITED EASEMENT
FL OR F/L	FLOW LINE	TC	TOP OF CURB
FT	FOOT	TL OR T/L	TRANSIT LINE
FTMS	FREE TRAFFIC MANAGEMENT SYSTEM	T	TRUCKS (PERCENT OF)
HES	HIGH EARLY STRENGTH	TYP	TYPICAL
HE	HIGHWAY EASEMENT	USH	UNITED STATES HIGHWAY
CWT	HUNDRED WEIGHT	VAR	VARIABLE
IN DIA	INCH DIAMETER	VC	VERTICAL CURVE
INL	INLET	VPC	VERTICAL POINT OF CURVATURE
ID	INSIDE DIAMETER	VPI	VERTICAL POINT OF INTERSECTION
INTERS	INTERSECTION	VPT	VERTICAL POINT OF TANGENCY
IH	INTERSTATE HIGHWAY	W	WEST
INV	INVERT	WB	WESTBOUND
JT	JOINT		

GENERAL NOTES

- 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.
- CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS, OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.
- NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
- RADIUS DIMENSIONS FOR THE CURB AND GUTTER ARE TO THE FLANGE LINE UNLESS OTHERWISE NOTED.
- CURVE DATA IS BASED ON THE RADIUS DEFINITION.
- PIPE ELEVATIONS, LENGTHS, LOCATIONS, AND INLET ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER TO FIT EXISTING FIELD CONDITIONS.
- CURB AND GUTTER PLAN GRADES ARE AT THE FLANGE LINE UNLESS OTHERWISE NOTED.
- THE CONTRACTOR'S PAVING OPERATION SHALL BE CONSISTENT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.
- SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.
- CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OR PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS. CONSTRUCT WORK ACROSS OR ON DRIVEWAYS IN STAGES IF NECESSARY TO MAINTAIN ACCESS AS INCIDENTAL TO THE CONTRACT.
- PRIOR TO ORDERING DRAINAGE PIPES, THE CONTRACTOR SHALL FIELD VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN WITH THE ENGINEER.
- BEARINGS SHOWN ON THE PLAN ARE GROUND BEARINGS TO THE NEAREST SECOND.

EROSION CONTROL NOTES

- RESTORE ANY DISTURBED SOIL OR GRADED AREAS WITHIN FOURTEEN (14) CALENDAR DAYS OF DISTURBANCE OR TEMPORARILY SEED AND EROSION MAT THE AREA WITHIN FOUR (4) DAYS OF ANY DISTURBANCE.
- STOCKPILE EXCESS MATERIALS ON UPLAND AREAS AWAY FROM WETLANDS, FLOODPLAINS AND WATERWAYS. STOCKPILED SOIL SHALL BE PROTECTED AGAINST EROSION. IF STOCKPILED MATERIAL IS LEFT FOR MORE THAN FOURTEEN (14) CALENDAR DAYS, SEED THE STOCKPILE WITH TEMPORARY SEED AND MULCHED EVERY THREE (3) DAYS AS THE MATERIAL IS BEING STOCKPILED.
- ALL ROADWAY OR CONSTRUCTION RELATED SWEEPING WILL BE DONE BY VACUUM ASSISTED SWEEPER.
- MANAGE ALL SAWCUT SLURRY BEFORE MOVING TO THE NEXT SAWCUT LOCATION (OR DISTANCE NO GREATER THAN 100' IN LENGTH FOR LONG LINEAR CUTS).
- QUANTITIES FOR EROSION CONTROL ITEMS HAVE BEEN INCLUDED IN THE PROJECT, BUT MAY NOT BE REPRESENTED ON THE PLAN. THE LOCATIONS AND TYPE OF EROSION CONTROL ITEMS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL ITEMS SHALL BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED OR UNTIL THE ENGINEER DETERMINES THAT THE ITEMS IS NO LONGER REQUIRED.

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
INTERSECTION DETAILS
HAZMAT SOILS
EROSION CONTROL
UTILITY AND STORM SEWER PLAN
CURB RAMP DETAILS
PAVEMENT REPAIR PLAN
PAVEMENT REPAIR DETAILS
FIBER OPTIC PLAN
TRAFFIC SIGNAL REMOVAL PLAN
TRAFFIC SIGNAL PLAN
PAVEMENT MARKING AND SIGNAGE PLAN
TRAFFIC CONTROL PLAN
DETOUR PLAN
ALIGNMENT DETAILS

DESIGN PROJECT LEADER

RYAN WALLACE
BAXTER & WOODMAN
115 S 84th ST, SUITE 220
MILWAUKEE, WI 53214
PHONE: (815) 3444-3309
EMAIL: rwallace@baxterwoodman.com

CITY OF RACINE

ARA MOLITOR
CITY ENGINEER
100 HUBBARD ST
RACINE, WI 53402
PHONE: (414) 228-5179
EMAIL: ara.molitor@cityofracine.org

WISDOT CONTACT

MICHAEL BAIRD
PROJECT MANAGER
141 NW BARSTOW ST
WAUKESHA, WI 53187
PHONE: (262) 548-5918
EMAIL: michael.baird@dot.wi.gov

RYDE RACINE TRANSIT

WILLIE MCDONALD
1900 KENTUCKY ST
RACINE, WI 53405
PHONE: (262) 619-2443
EMAIL: willie.mcDonald@cityofracine.org

DNR LIASON

WDNR SE REGION
ATTN: CRAIG WEBSTER
141 NW BARSTOW ST, ROOM 180
WAUKESHA, WI 53187
PHONE: (262) 574-2141
EMAIL: craig.webster@wisconsin.gov

UTILITIES CONTACTS

AT&T

TELEPHONE
MICHAEL VAN BOVEN
411 7TH STREET
RACINE, WI 53403
PHONE: (262) 676-3958
EMAIL: mv3658@att.net

CHARTER COMMUNICATIONS

CABLE TV
GERALD SCHULTZ
1320 B DR MARTIN LUTHER KING DR
MILWAUKEE, WI 53212
PHONE: (414) 232-7178
EMAIL: Gerald.Schultz@Charter.com

CITY OF RACINE

SANITARY/FIBER
ARA MOLITOR
100 HUBBARD ST
RACINE, WI 53402
PHONE: (414) 228-5179
EMAIL: ara.molitor@cityofracine.org

EVERSTREAM

FIBER OPTIC
ABBY STEIN
324 E WISCONSIN AVE, SUITE 730
MILWAUKEE, WI 53202
PHONE: (262) 442-9427
EMAIL: astein@everstream.net

RACINE WATER UTILITY

WATER MAIN/WATER SERVICES/HYDRANTS
CHAD REGALIA
100 HUBBARD ST
RACINE, WI 53402
PHONE: (262) 497-4611
EMAIL: chad.regalia@cityofracine.org

WE ENERGIES

ELECTRIC
JASON CHAPIN
7815 NORTH WESTERN AVE
RACINE, WI 53406
PHONE: (262) 884-6706
EMAIL: jason.chapin@we-energies.com

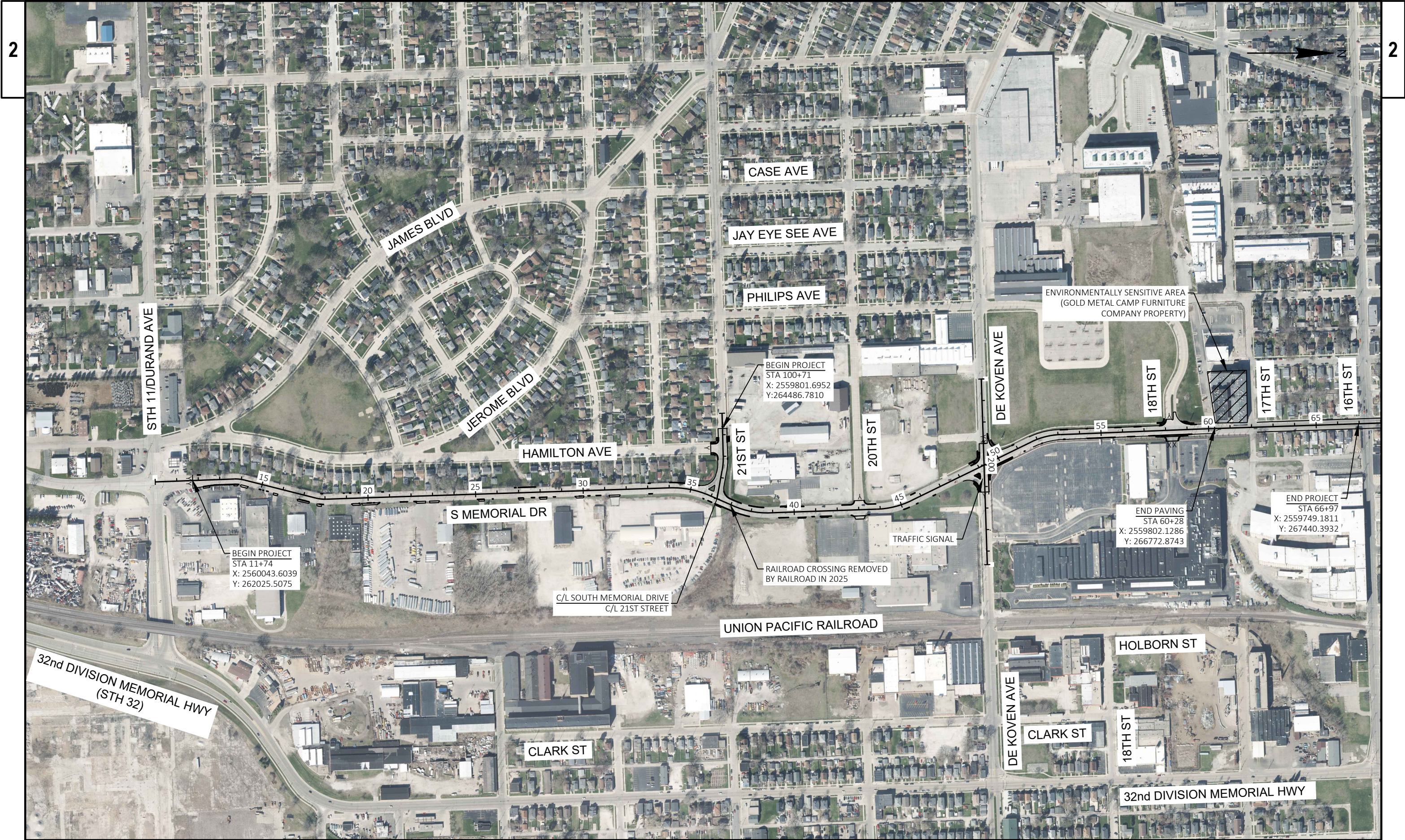
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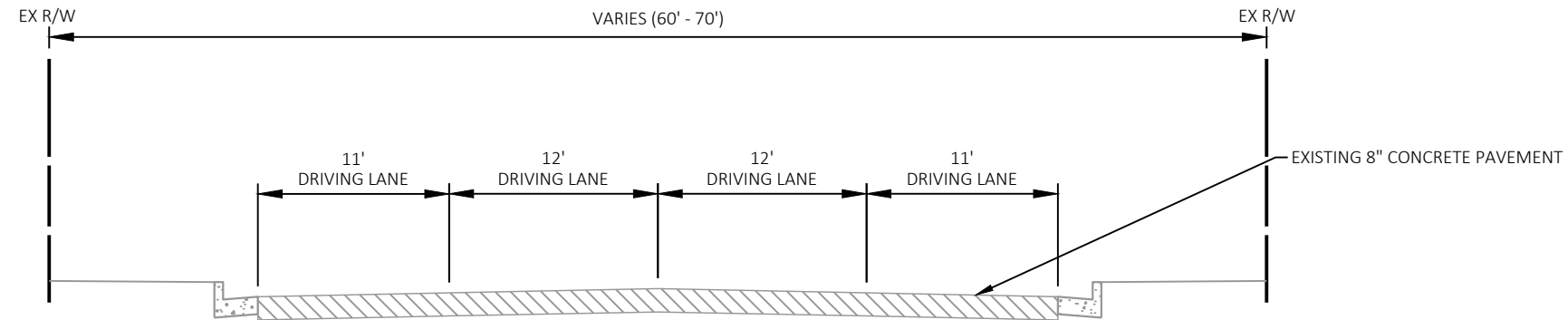
GAS
ANDY GLATZEL
500 SOUTH 116TH ST
WEST ALLIS, W1 53214
PHONE: (414) 588-4107
EMAIL: andrew.glatzel@we-energies.com

DIGGERSHOTLINE

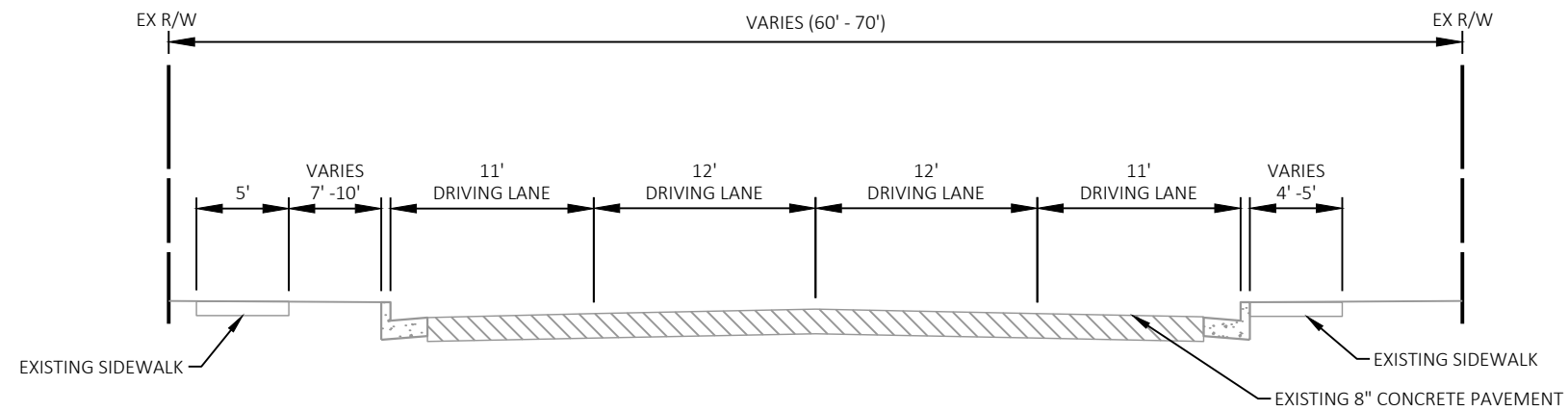
Dial 811 or (800)242-8511

www.DiggersHotline.com

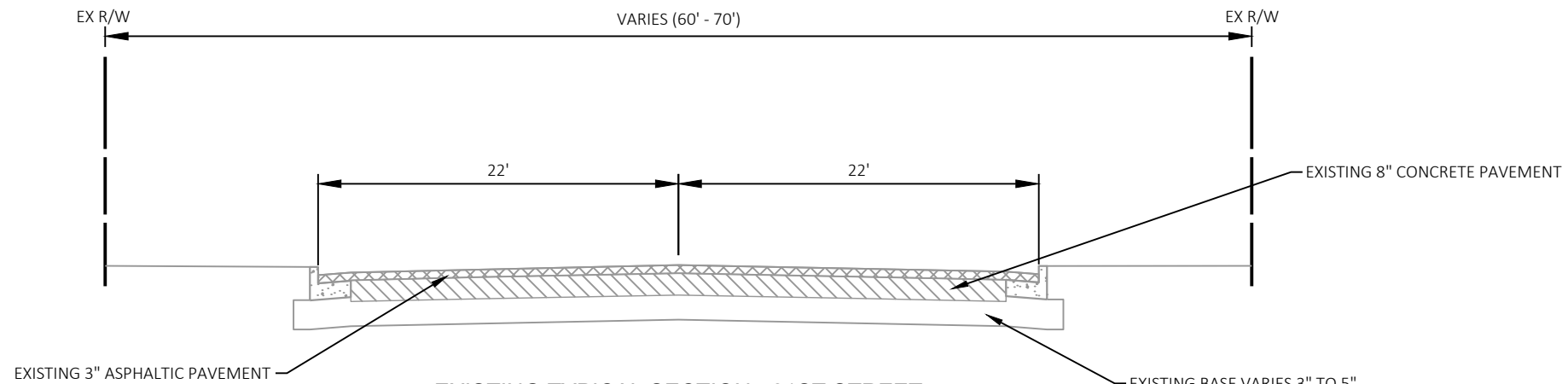




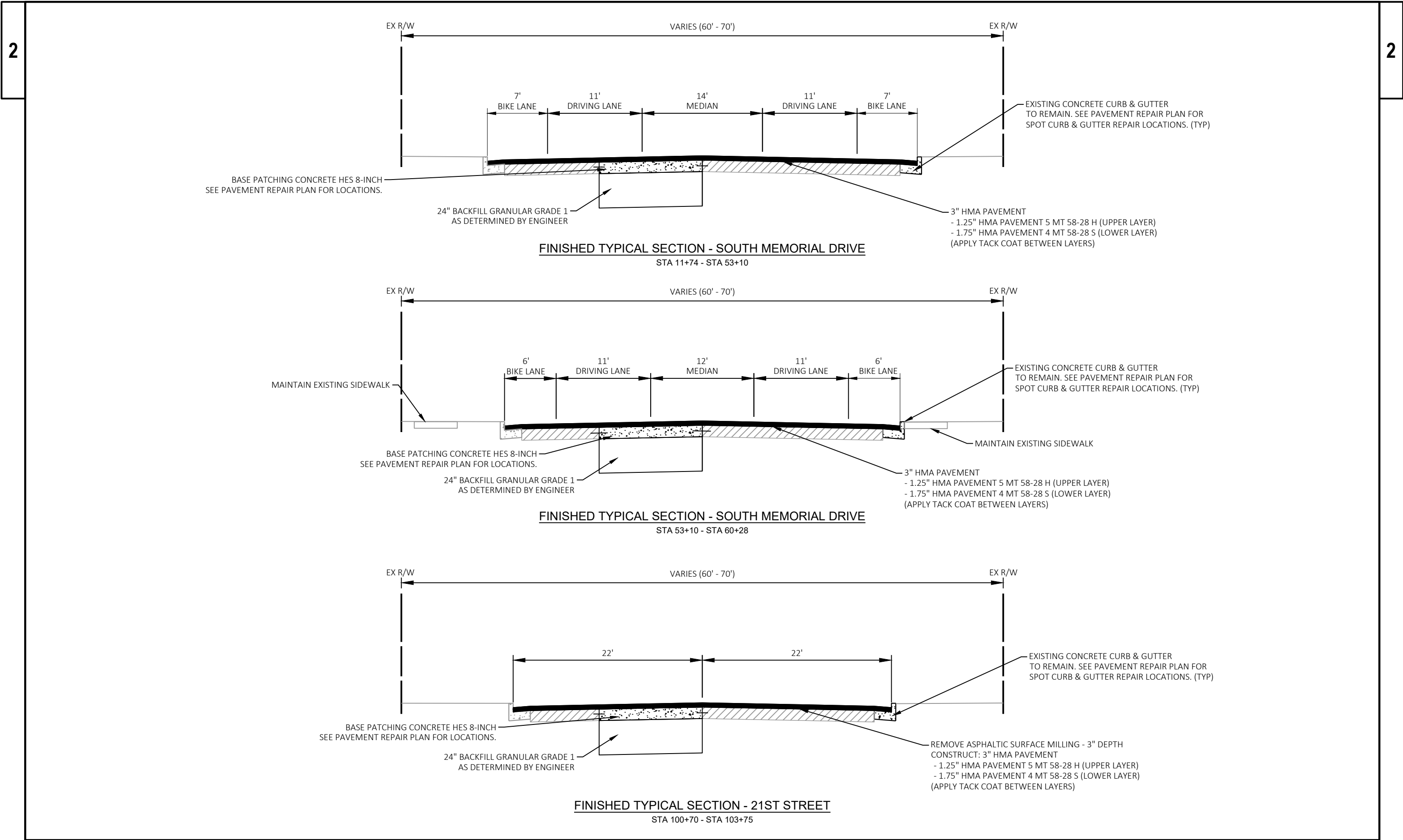
EXISTING TYPICAL SECTION - SOUTH MEMORIAL DRIVE
STA 11+74 - STA 53+10



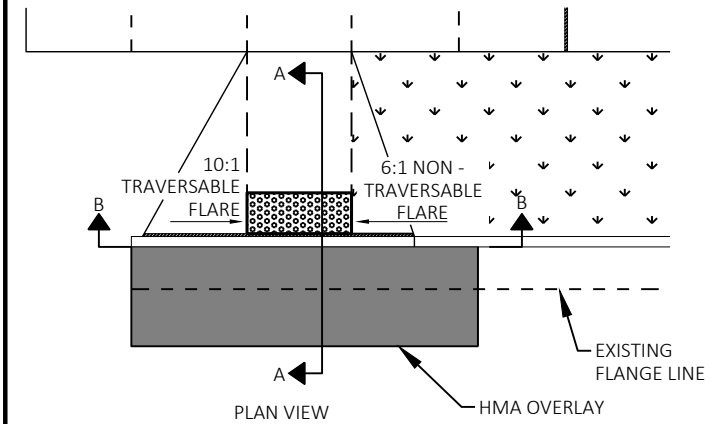
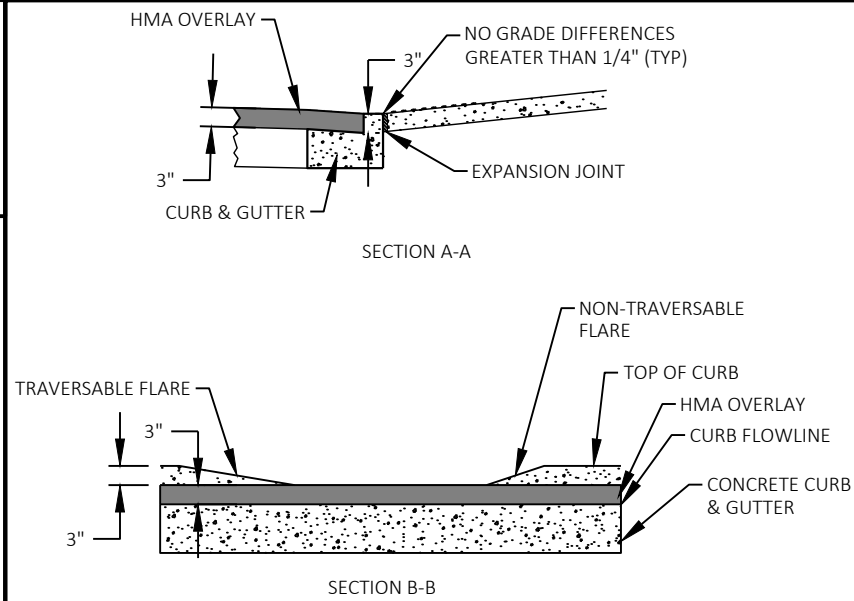
EXISTING TYPICAL SECTION - SOUTH MEMORIAL DRIVE
STA 53+10 - STA 60+28



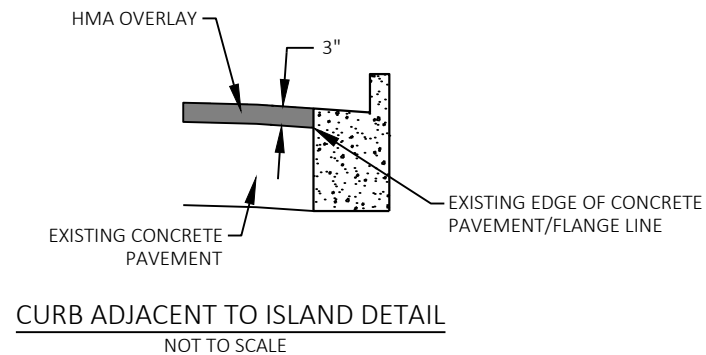
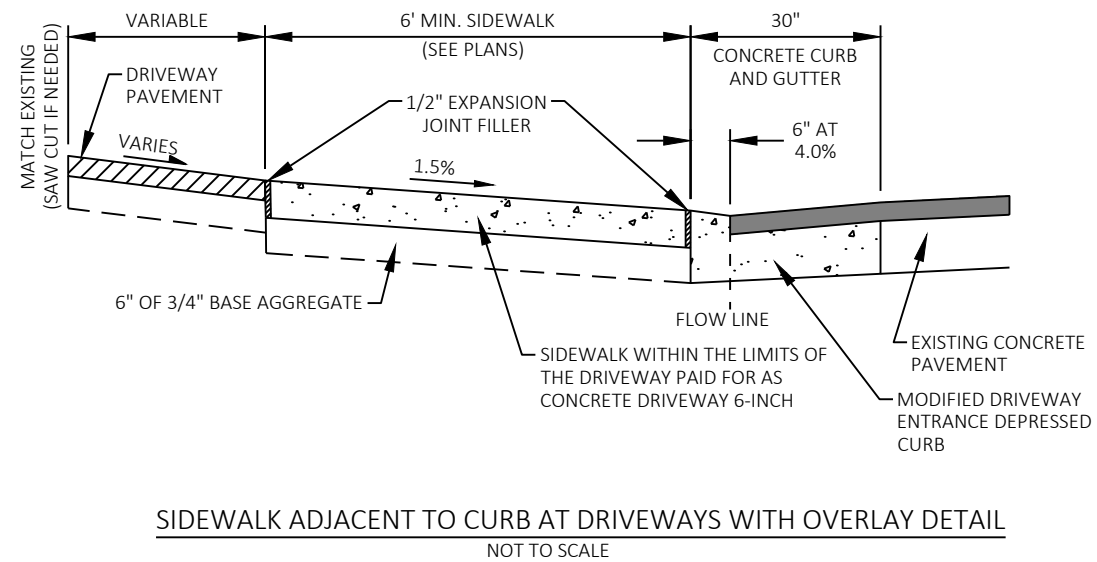
EXISTING TYPICAL SECTION - 21ST STREET
STA 100+70- STA 103+75



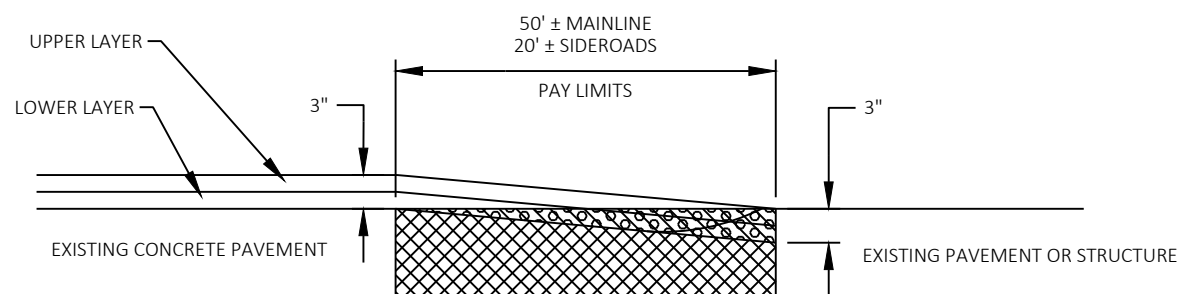
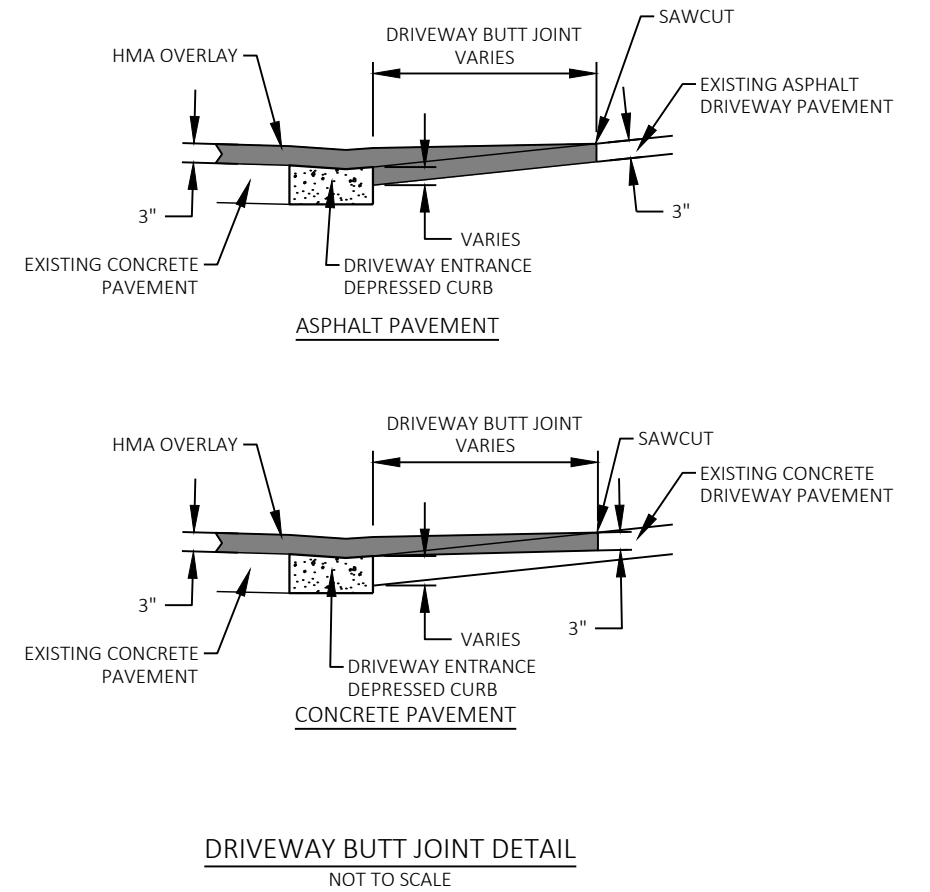
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CURB RAMP OVERLAY DETAIL
NOT TO SCALE

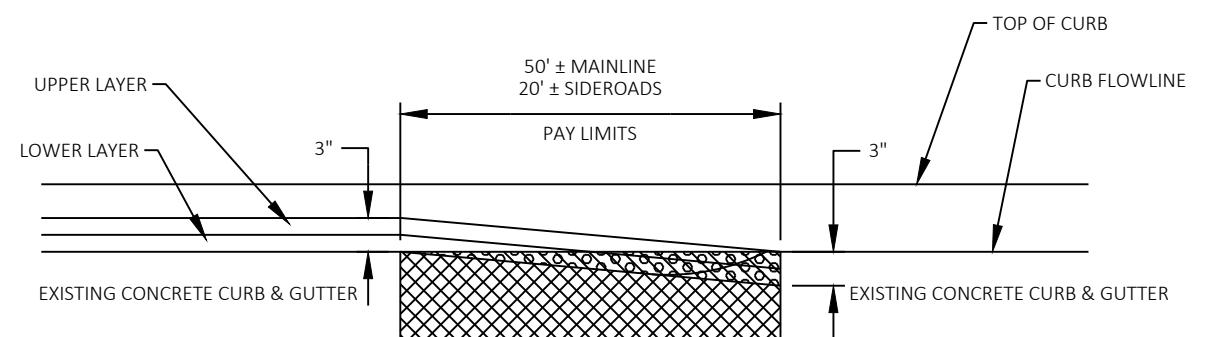


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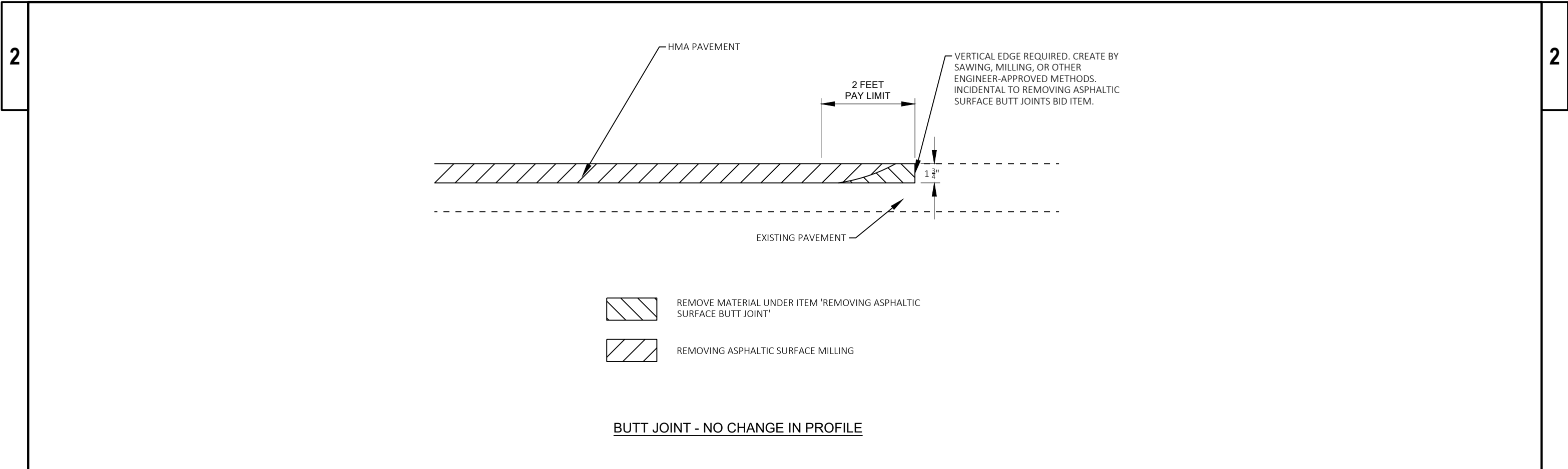
- REMOVING CONCRETE PAVEMENT BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)
- CONCRETE PAVEMENT WEDGING (FULL DEPTH REMOVAL OPTION)
- REMOVING CONCRETE PAVEMENT BUTT JOINTS (MILLING OPTION)

CONCRETE OVERLAY BUTT JOINT DETAIL
NOT TO SCALE

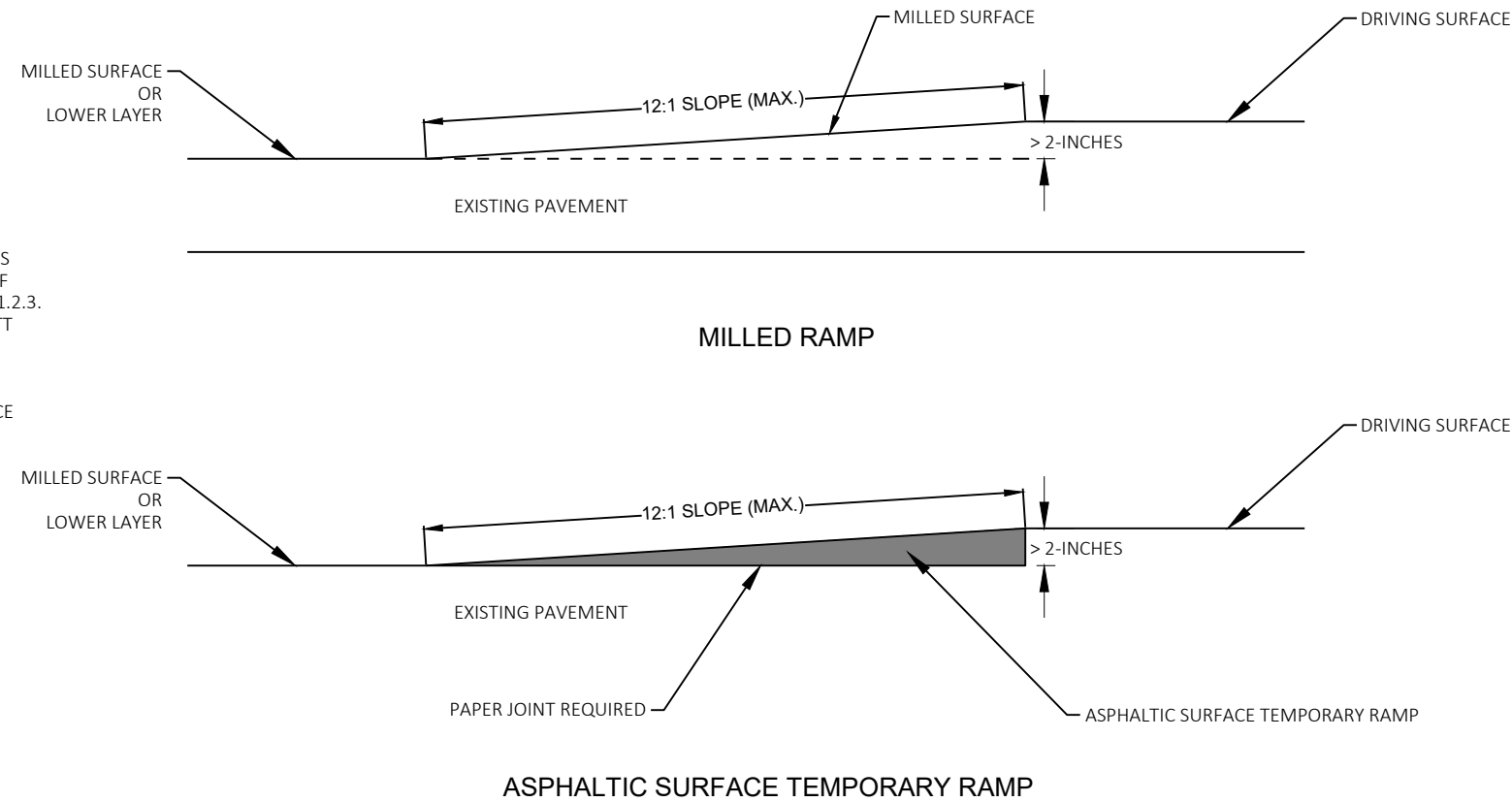


- REMOVING CONCRETE CURB BUTT JOINTS (FULL DEPTH REMOVAL OPTIONAL)
- CONCRETE CURB WEDGING (FULL DEPTH REMOVAL OPTION)
- REMOVING CONCRETE CURB BUTT JOINTS (MILLING OPTION)

CURB AND GUTTER OVERLAY BUTT JOINT DETAIL
NOT TO SCALE



- NOTES:
- THESE CONSTRUCTION DETAILS AND THE SPECIAL PROVISIONS SUPPLEMENT THE REQUIREMENTS FOR PROVIDING DROP-OFF PROTECTION AS STATED IN STANDARD SPECIFICATION 104.6.1.2.3.
 - MILLING RAMP PAID AS 'REMOVING ASPHALTIC SURFACE BUTT JOINTS' OR 'REMOVING PAVEMENT BUTT JOINTS'.
 - PAVING OF ASPHALTIC SURFACE TEMPORARY RAMP PAID AS 'ASPHALTIC SURFACE TEMPORARY'
 - REMOVAL OF RAMPS PAID AS 'REMOVING ASPHALTIC SURFACE BUTT JOINTS' OR 'REMOVING PAVEMENT BUTT JOINTS'.

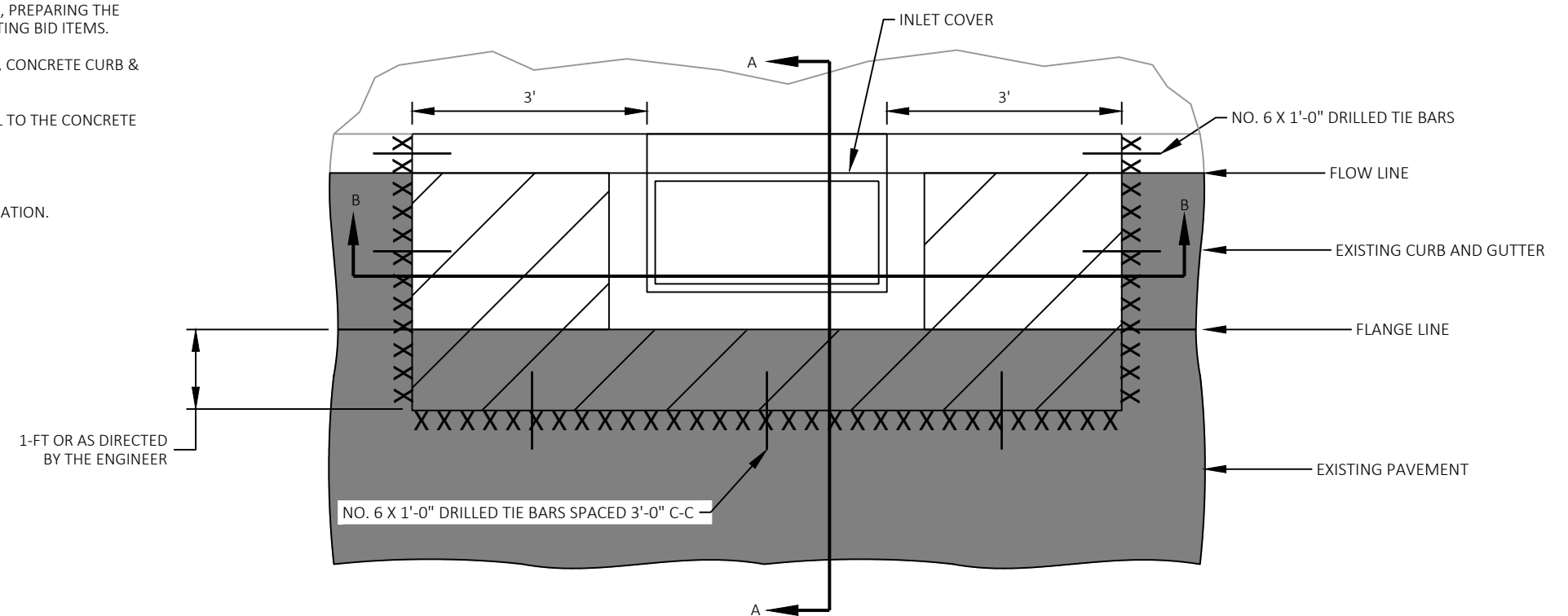


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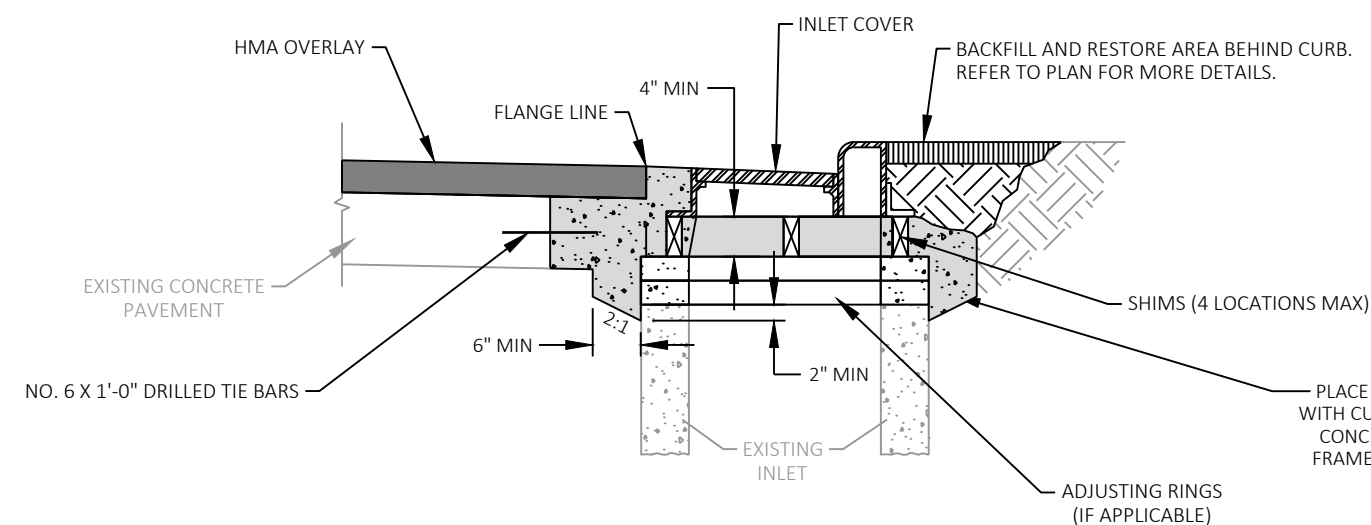
REFER TO PLAN DETAILS AND MISCELLANEOUS QUANTITIES FOR ADDITIONAL INFORMATION.



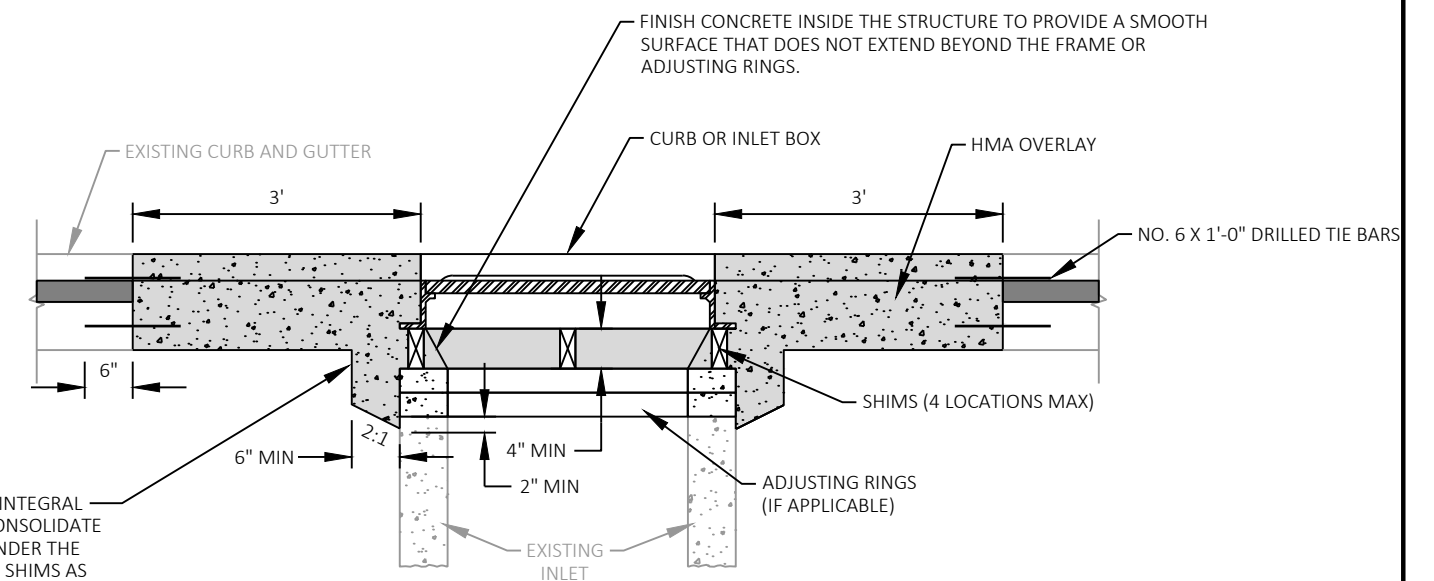
MONOLITHIC CONCRETE



PLAN VIEW



SECTION A-A



SECTION B-B

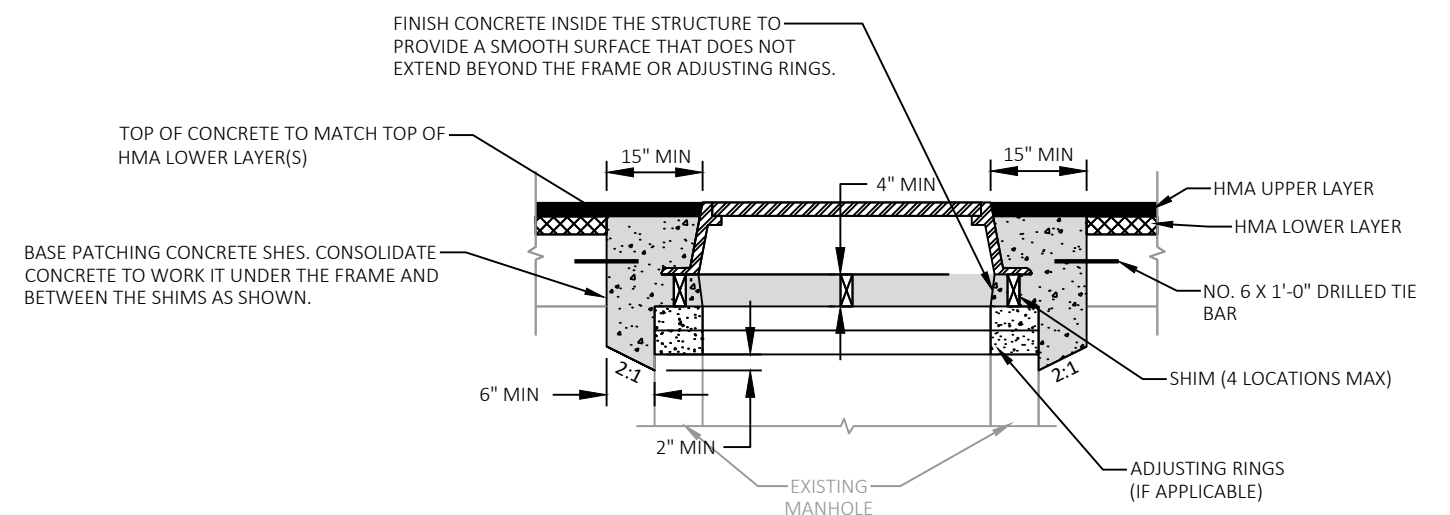
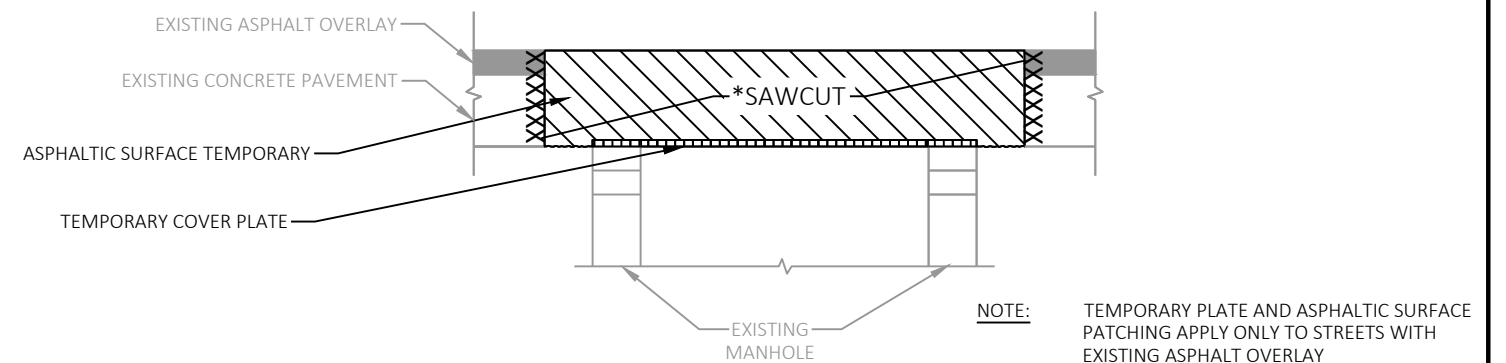
CATCH BASINS & INLETS - MONOLITHIC SHIM DETAIL

NOT TO SCALE

- A. SAWCUT EXISTING PAVEMENT FULL DEPTH.
- B. REMOVE AND STORE MANHOLE COVER.
- C. FURNISH AND INSTALL TEMPORARY COVER PLATE.
- D. BACKFILL USING ASPHALT SURFACE PATCHING.

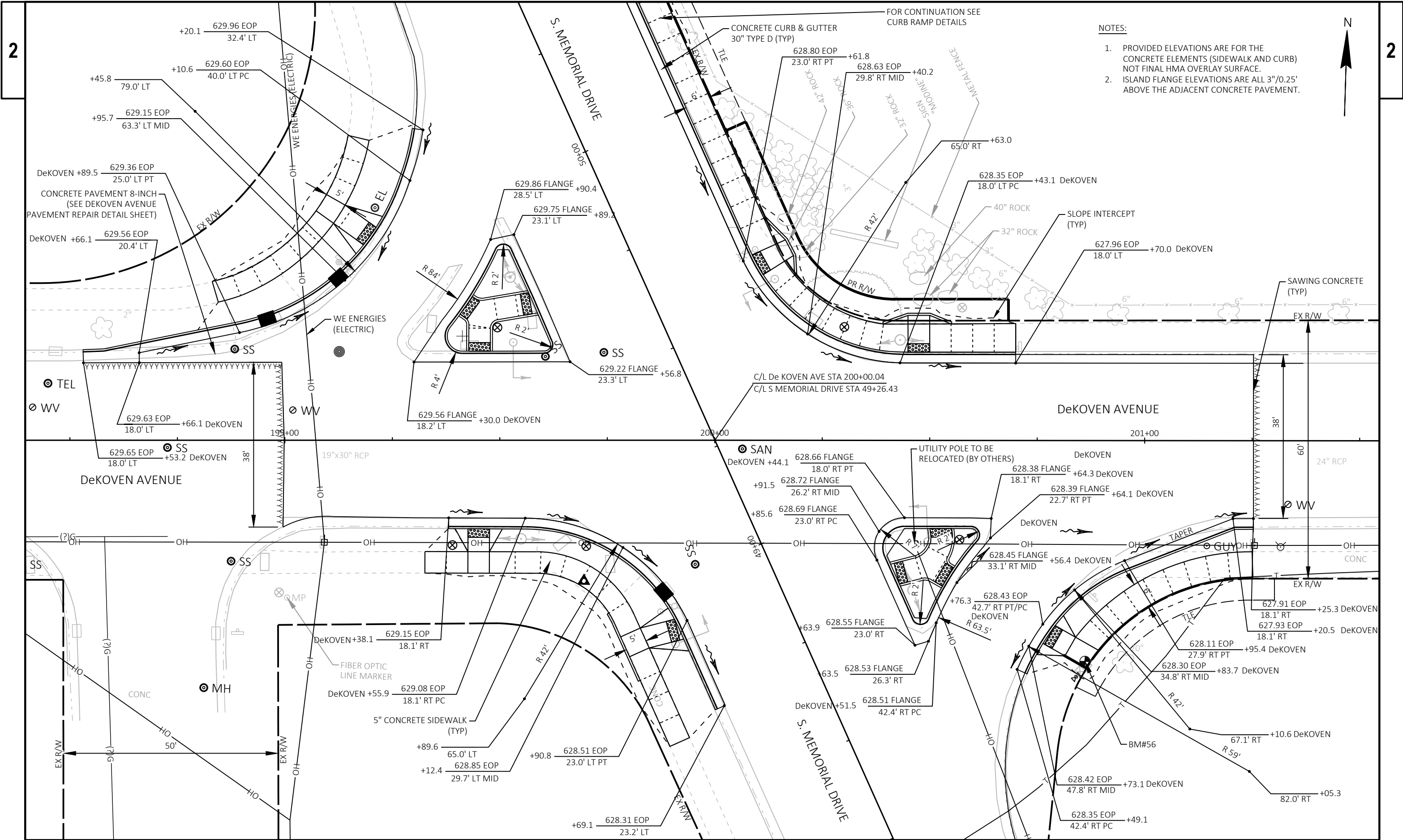
- A. REMOVE ASPHALTIC SURFACE PATCHING.
- B. EXCAVATE AROUND MANHOLE.
- C. ADJUST OR RECONSTRUCT MANHOLE AND RE-INSTALL MANHOLE FRAME AND COVER.
- D. POUR MONOLITHIC CONCRETE SHIM SO CONCRETE FILLS IN VOIDS BELOW THE CASTING BETWEEN THE SHIMS.
- E. PAVE UPPER LAYER HMA.

*SAWCUT WILL ONLY BE PAID ONCE. REMOVE ASPHALT SURFACE PATCHING MATERIAL TO THE ORIGINAL SAWCUT LIMITS.



STORM MANHOLE - MONOLITHIC SHIM

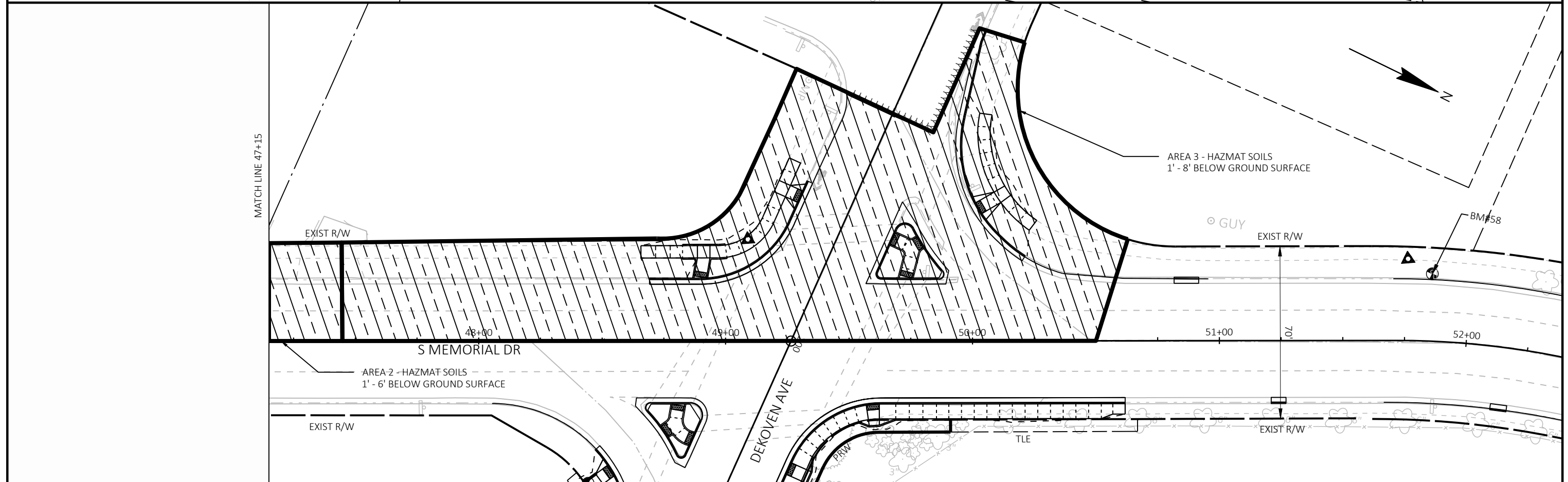
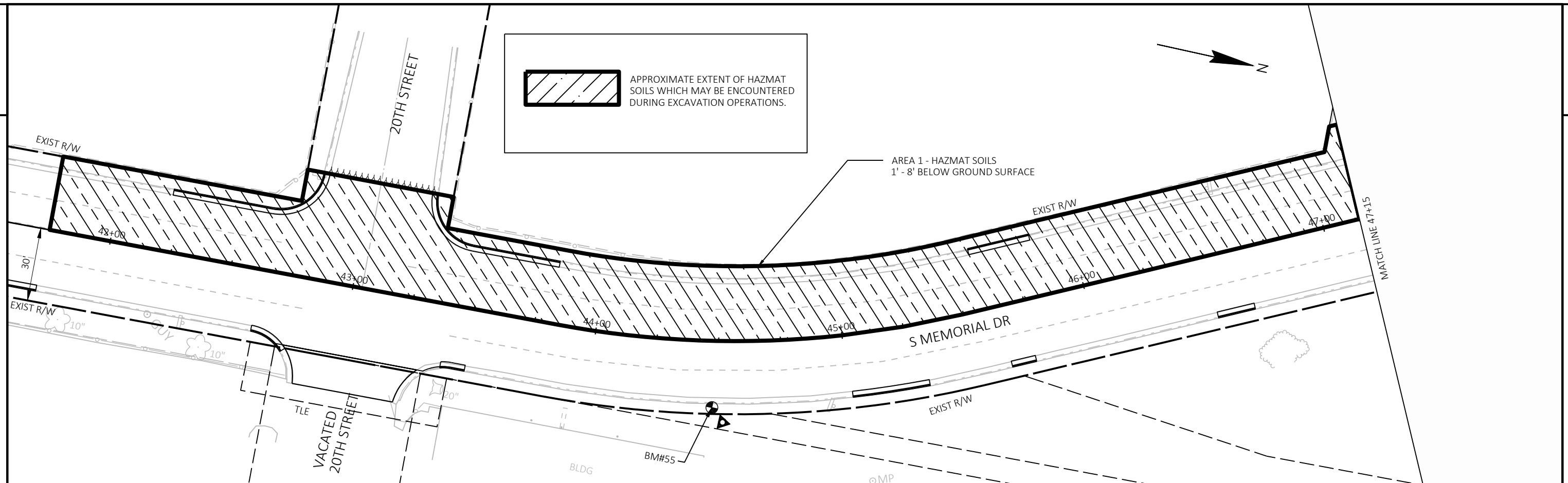
NOT TO SCALE



- NOTES:
1. PROVIDED ELEVATIONS ARE FOR THE CONCRETE ELEMENTS (SIDEWALK AND CURB) NOT FINAL HMA OVERLAY SURFACE.
 2. ISLAND FLANGE ELEVATIONS ARE ALL 3"/0.25' ABOVE THE ADJACENT CONCRETE PAVEMENT.

2

2 |



PROJECT NO:	2703-08-71
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HWY: S. MEMORIAL DRIVE

COUNTY: RACINE

HAZMAT SOILS

SHEET 12

■

FILE NAME : P:\RACNC\2325881-S.MEMORIAL DRIVE\CAD-C3D-2024\2325881-S MEMORIAL DR\SHEETS\OTHR\HAZMAT PLAN.DWG
LAYOUT NAME - Hazmat Plan S Memorial Dr

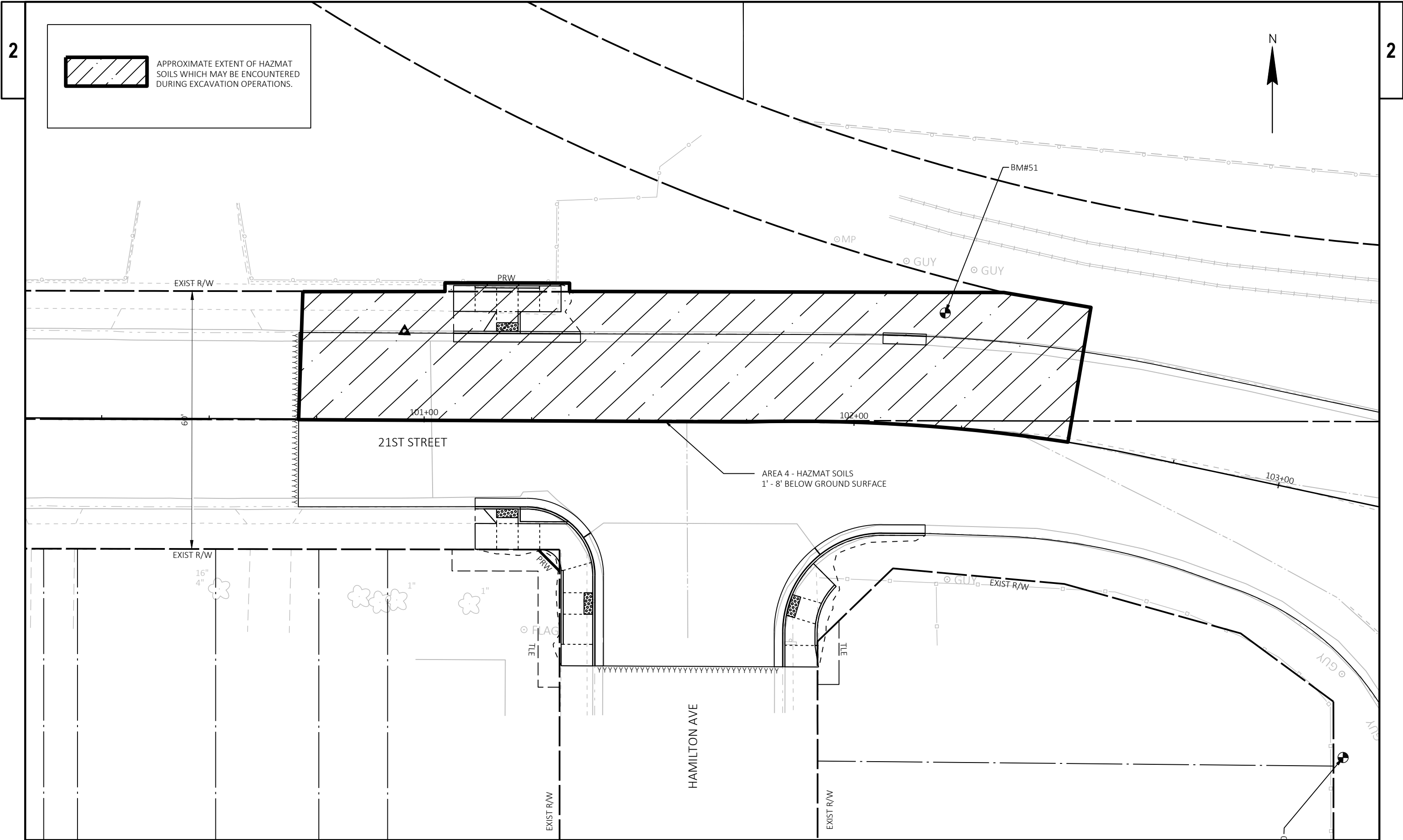
PLOT DATE : 10/29/2025 2:36 PM

PLOT BY : NATHAN HARVEY

PLOT NAME :

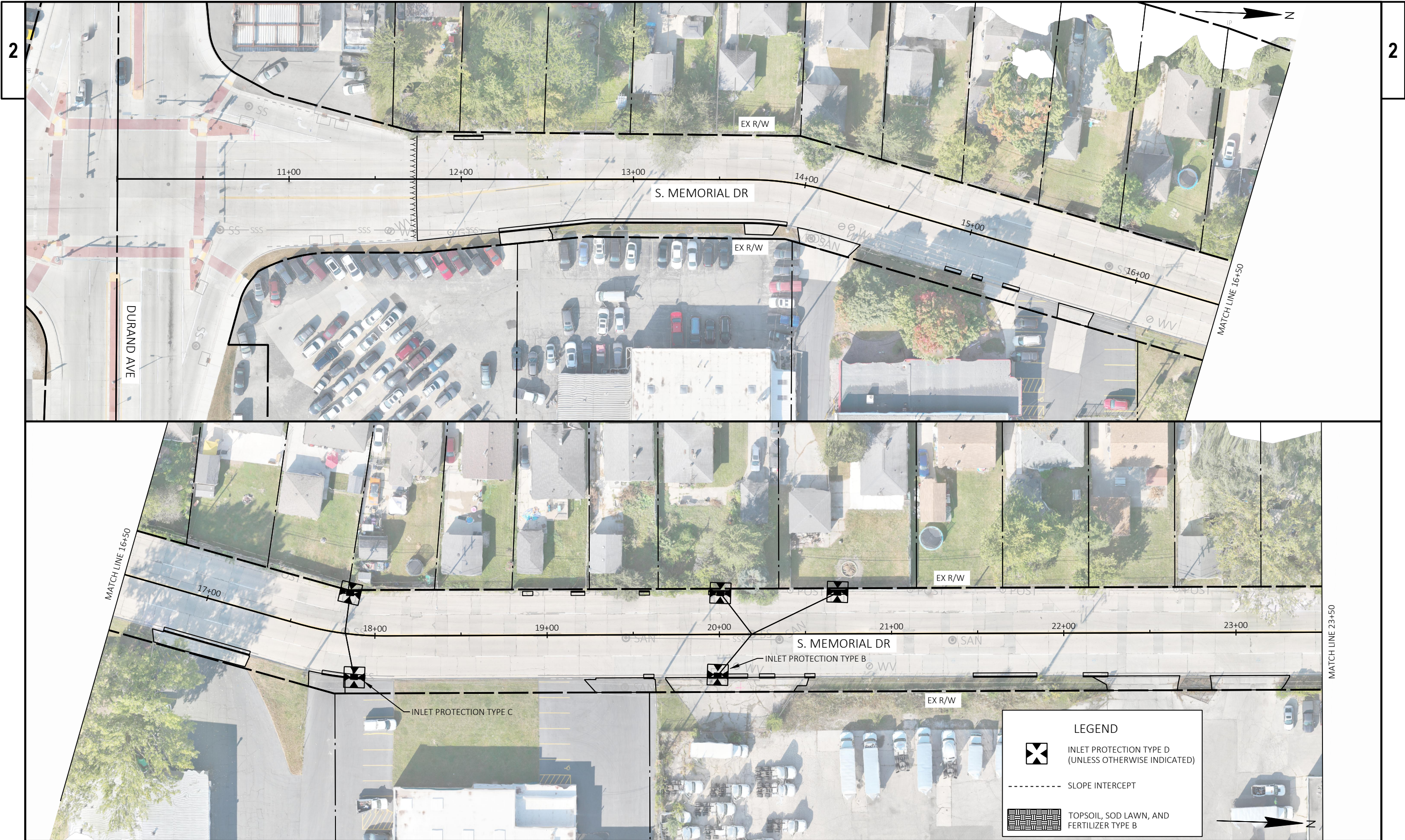
PLOT SCALE : 1 IN:40 FT

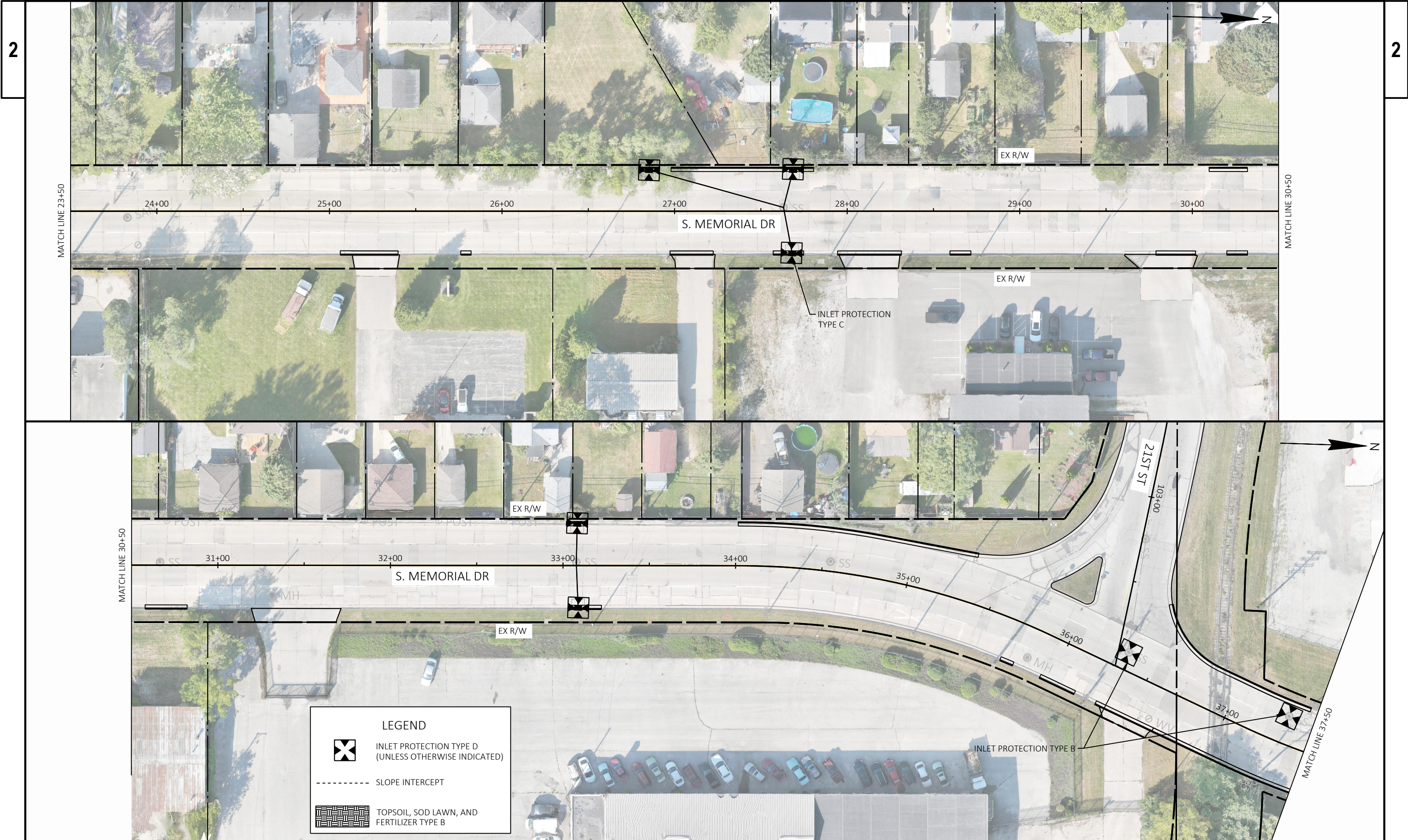
WISDOT/CADDS SHEET 44



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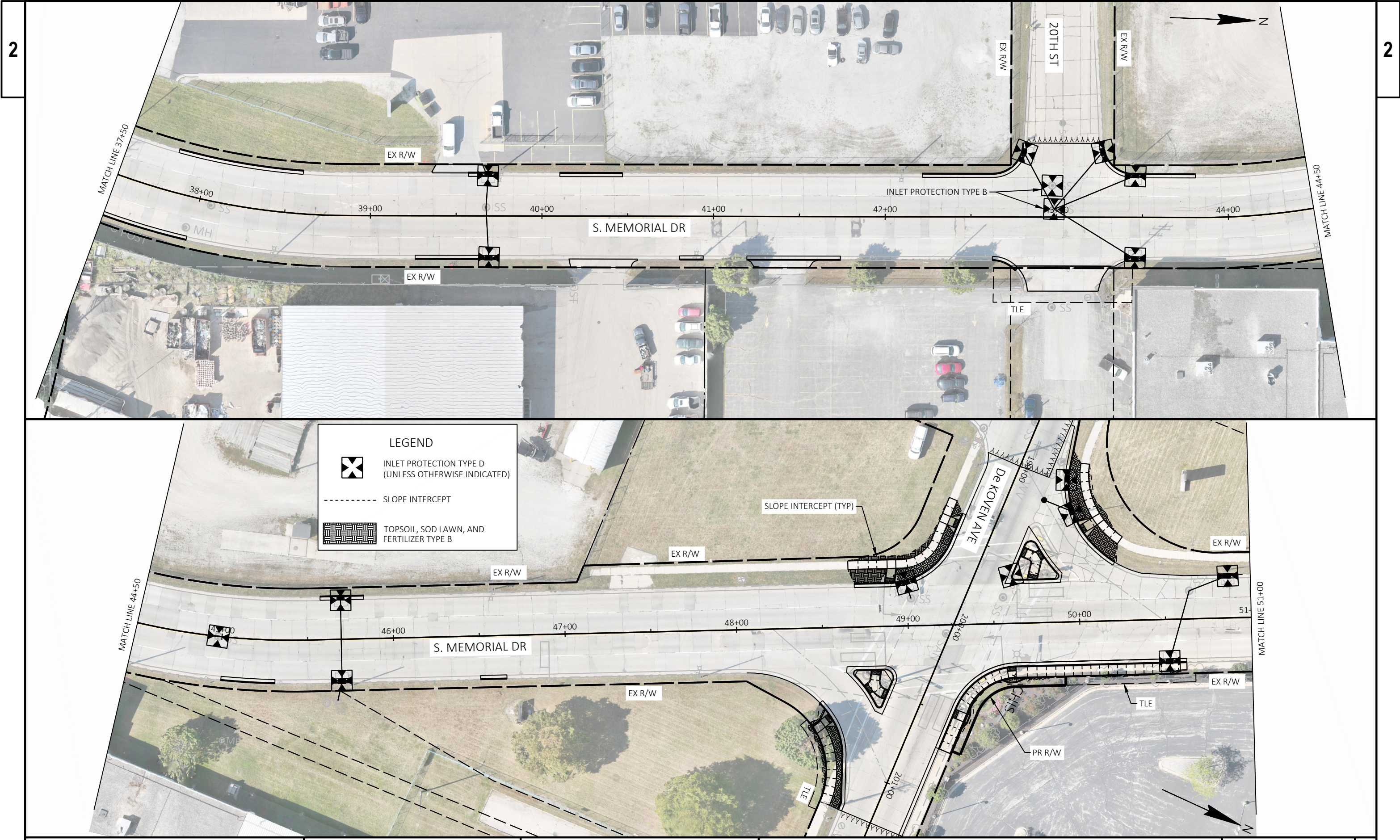


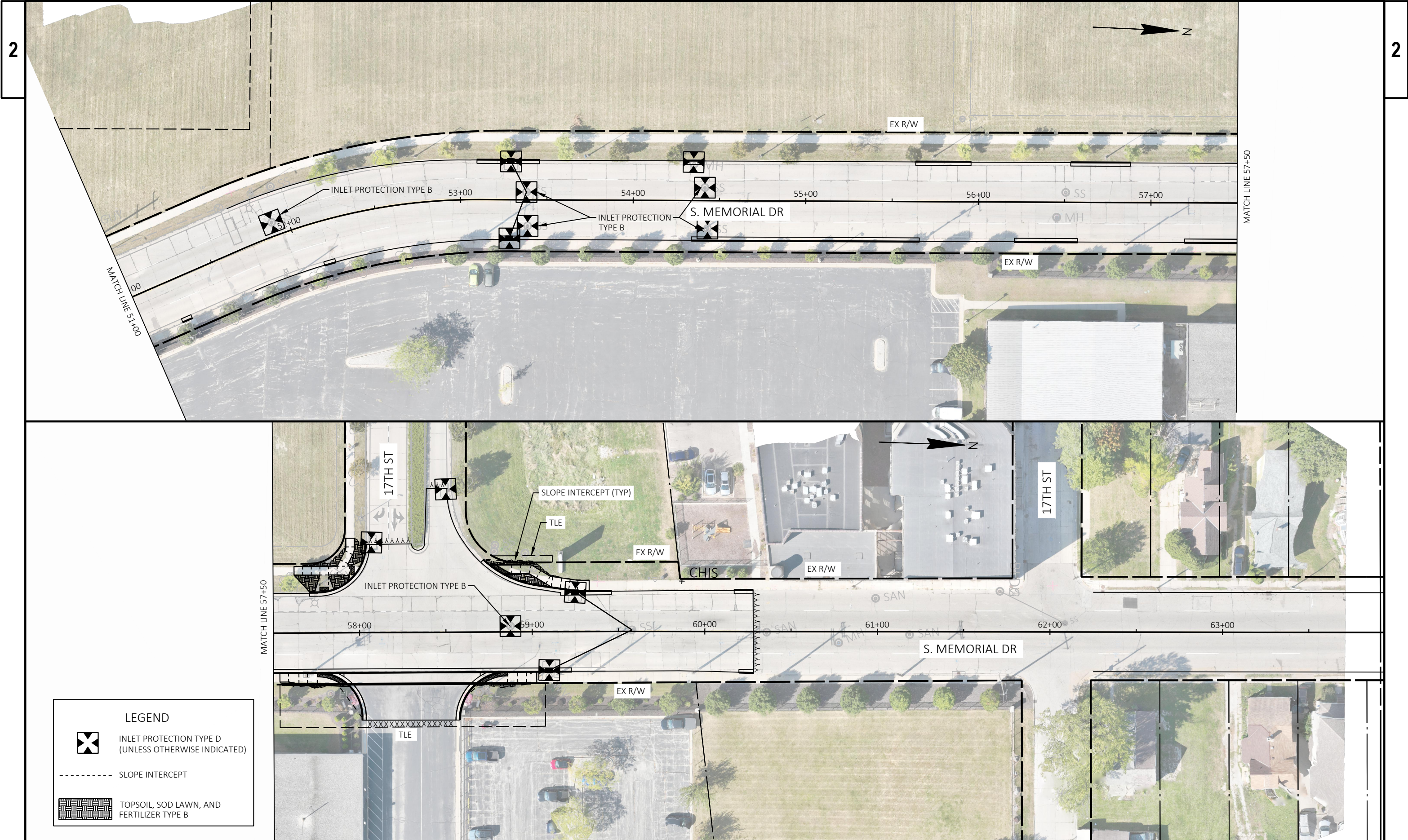
LEGEND

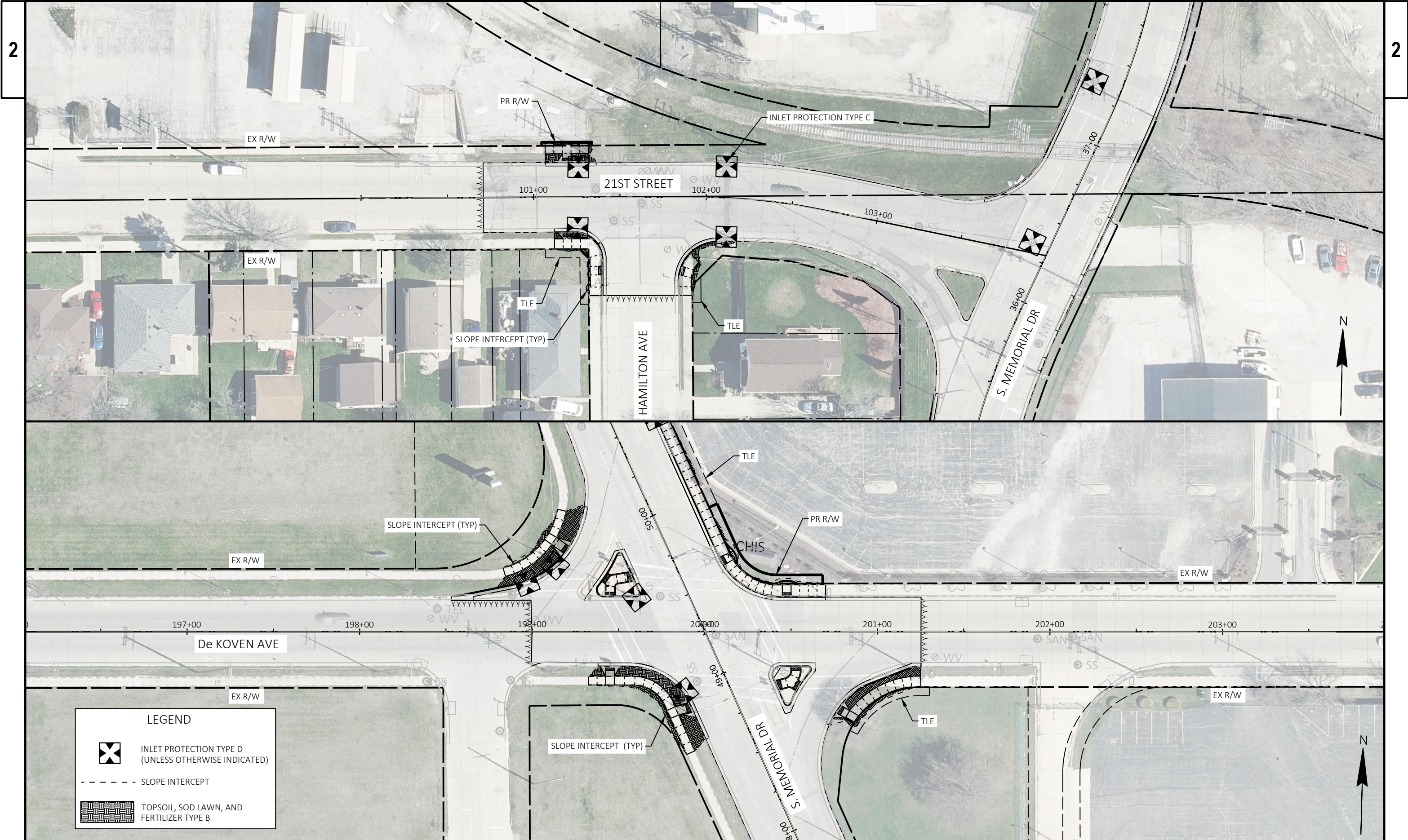
INLET PROTECTION TYPE D
(UNLESS OTHERWISE INDICATED)

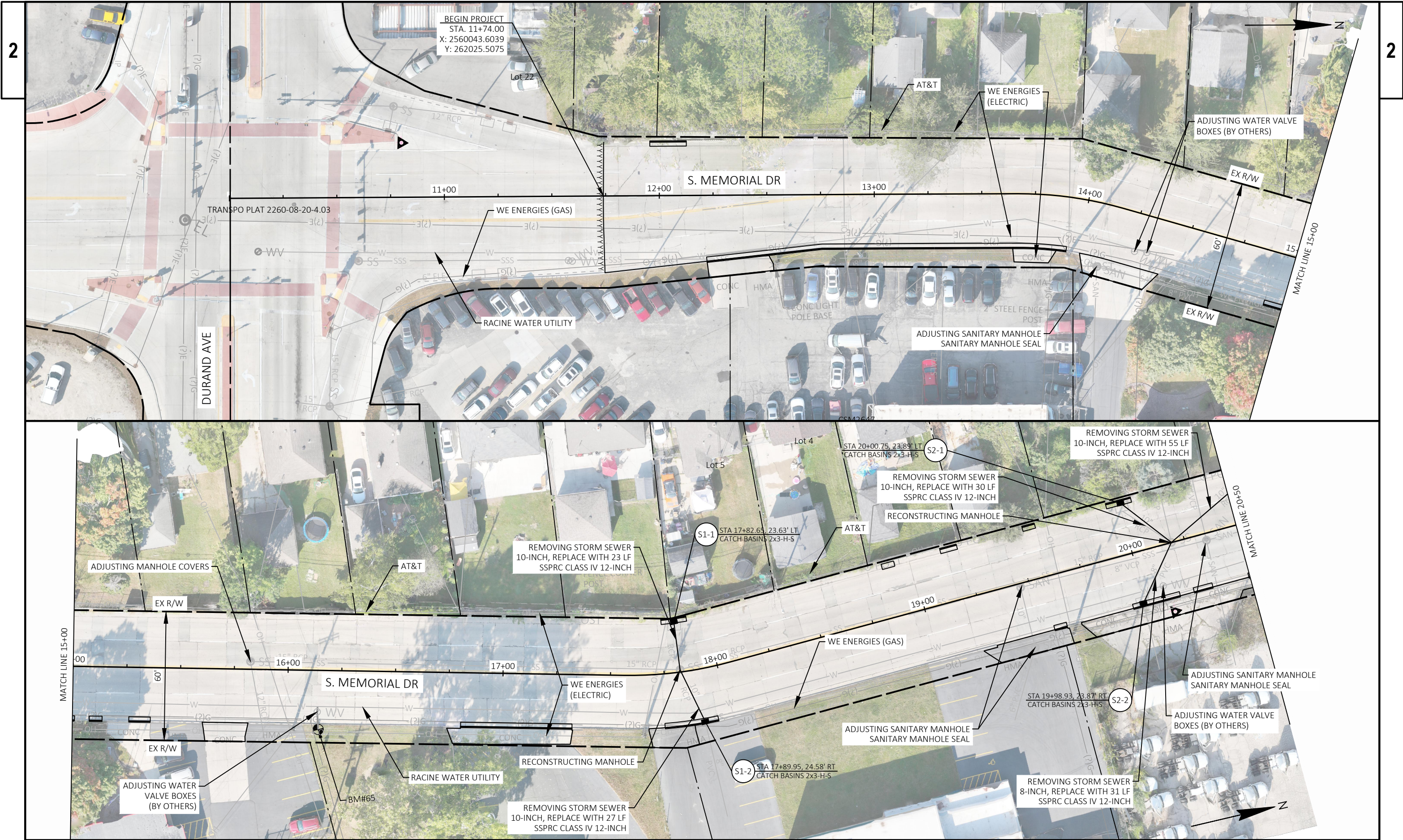
SLOPE INTERCEPT

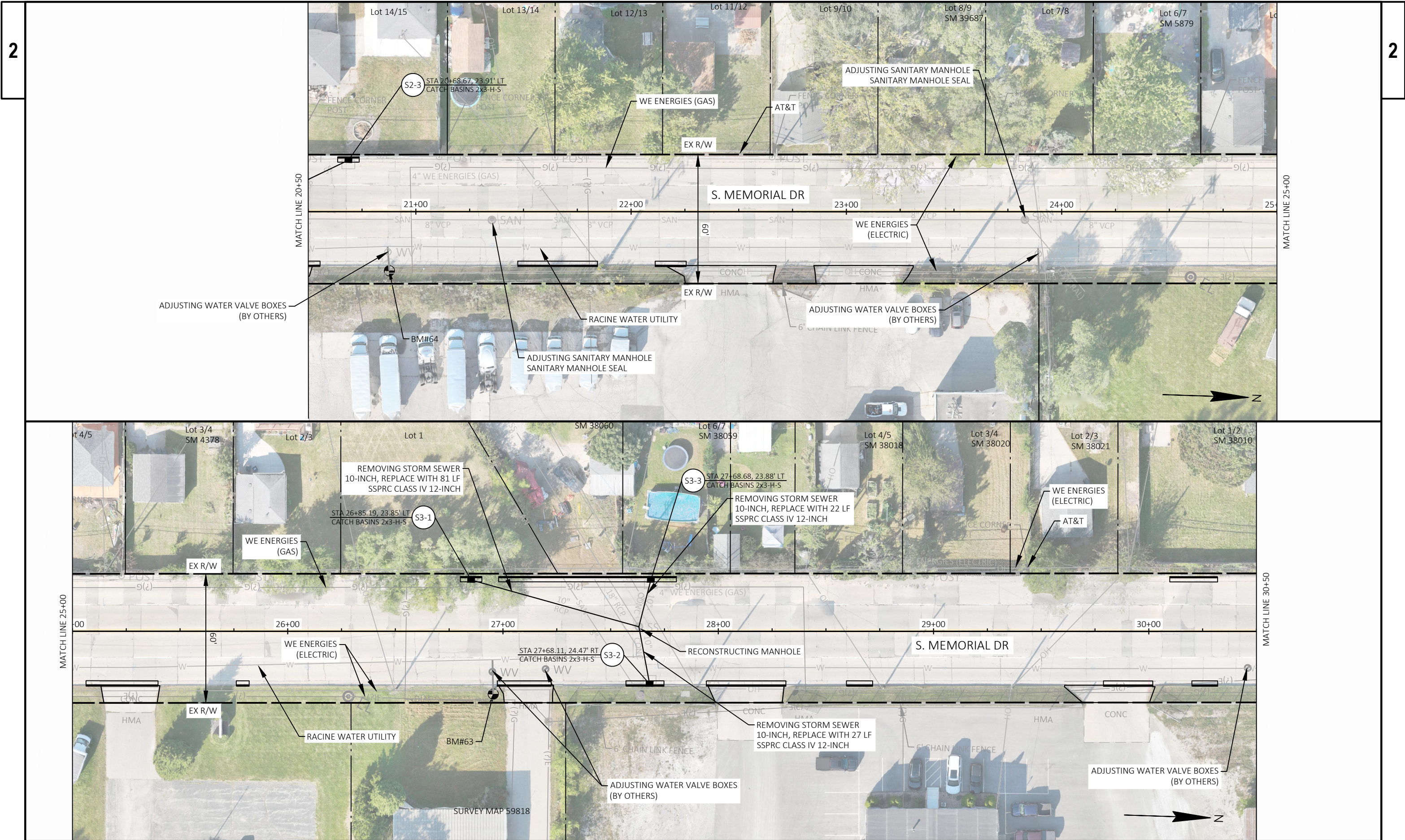
TOPSOIL, SOD LAWN, AND
FERTILIZER TYPE B

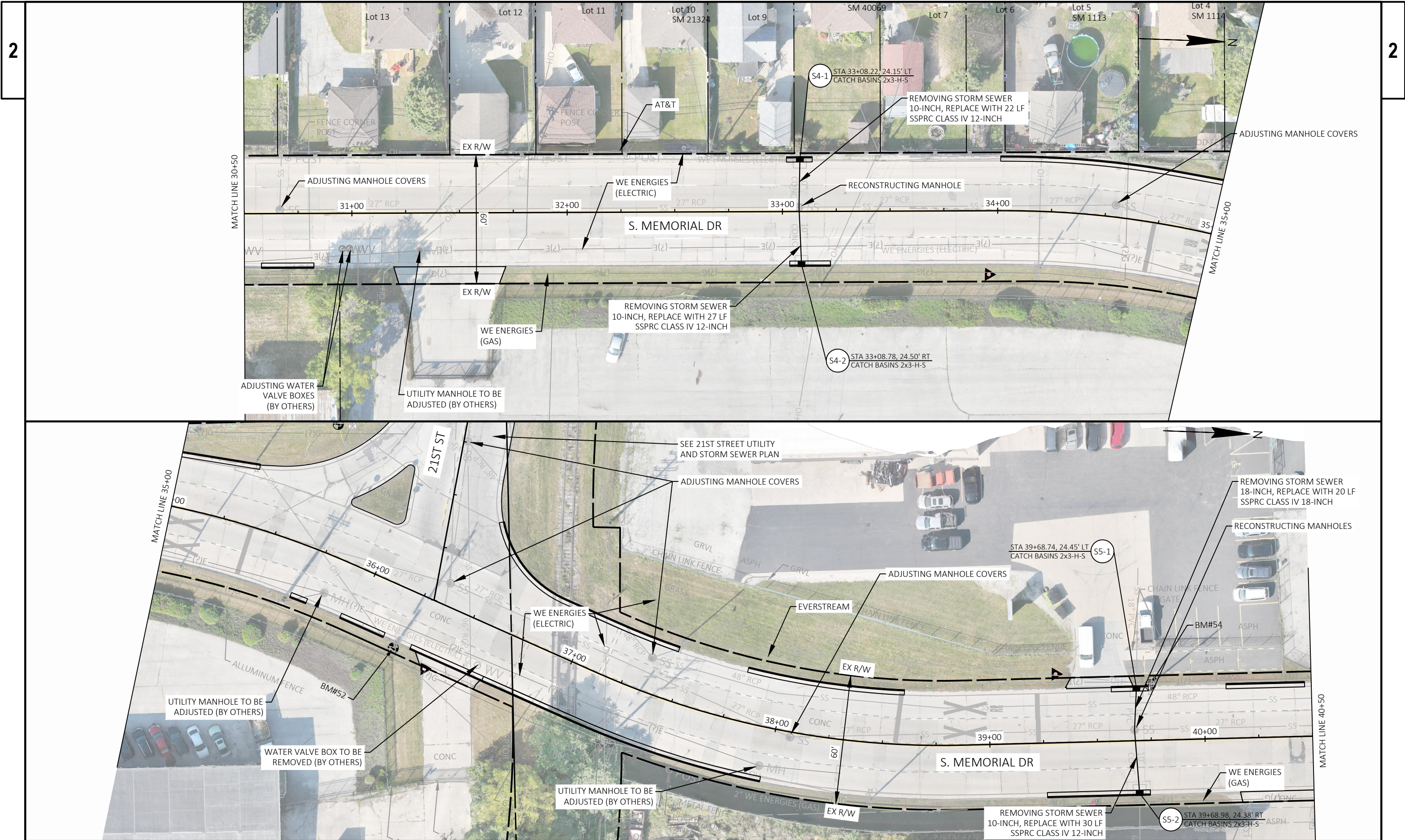


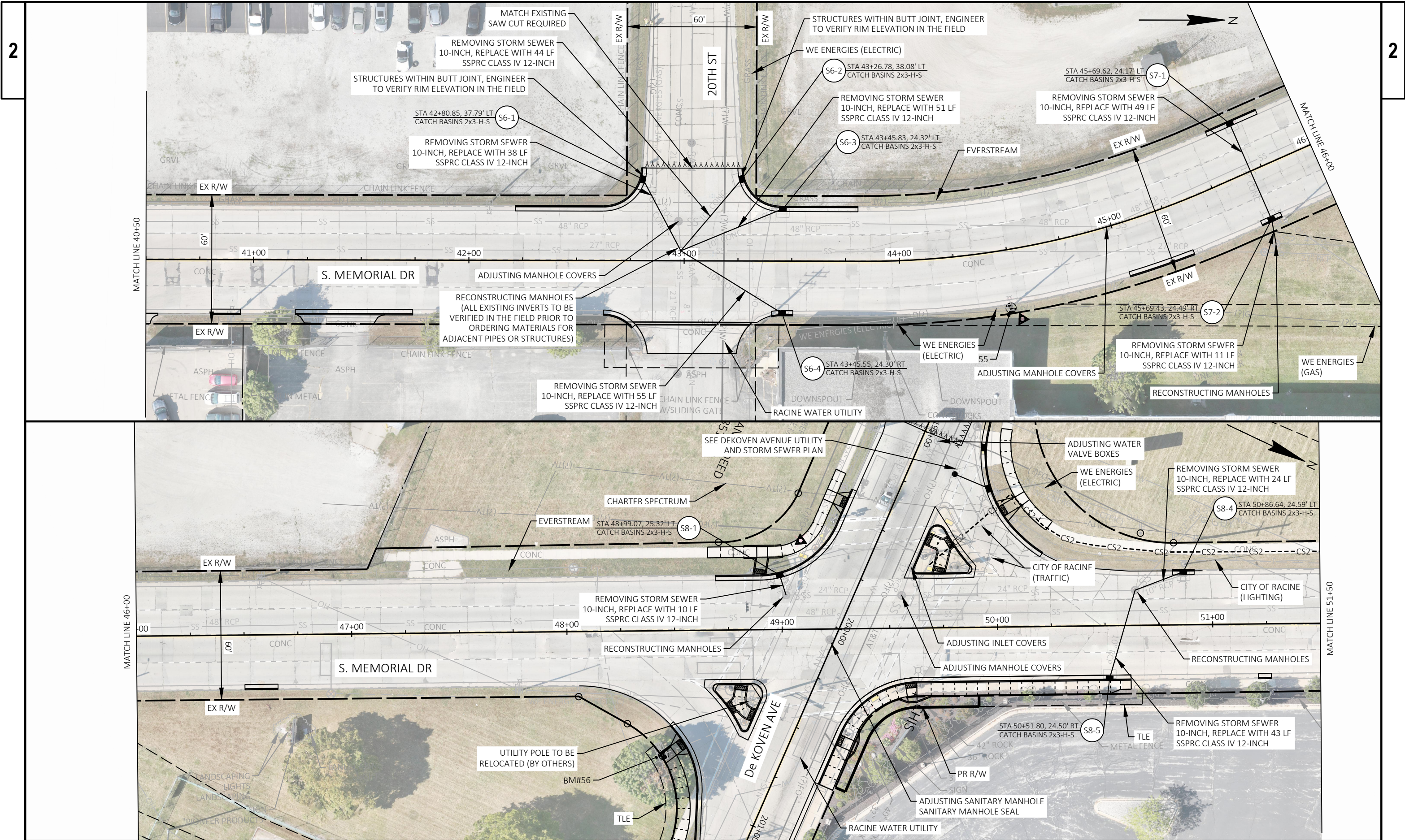








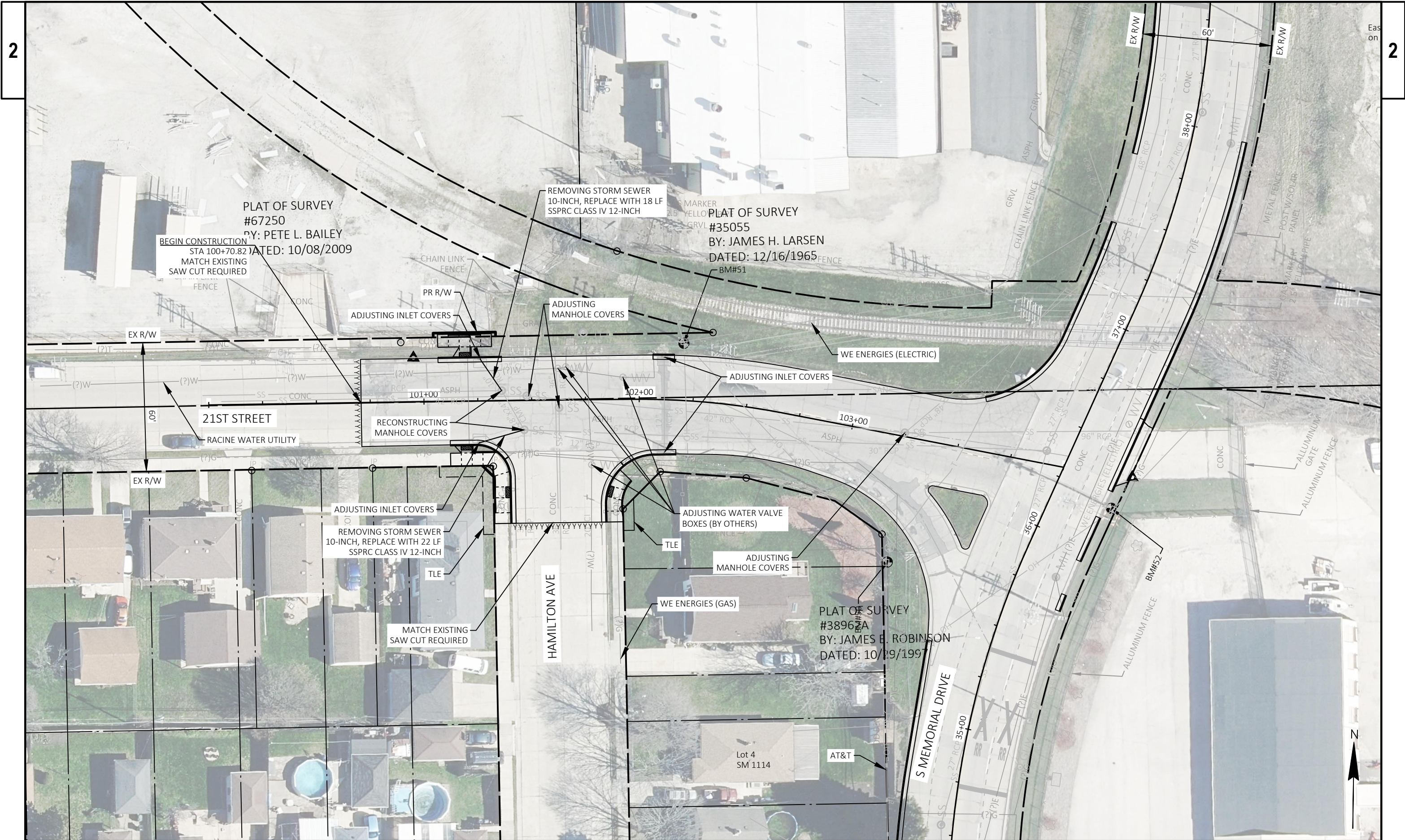


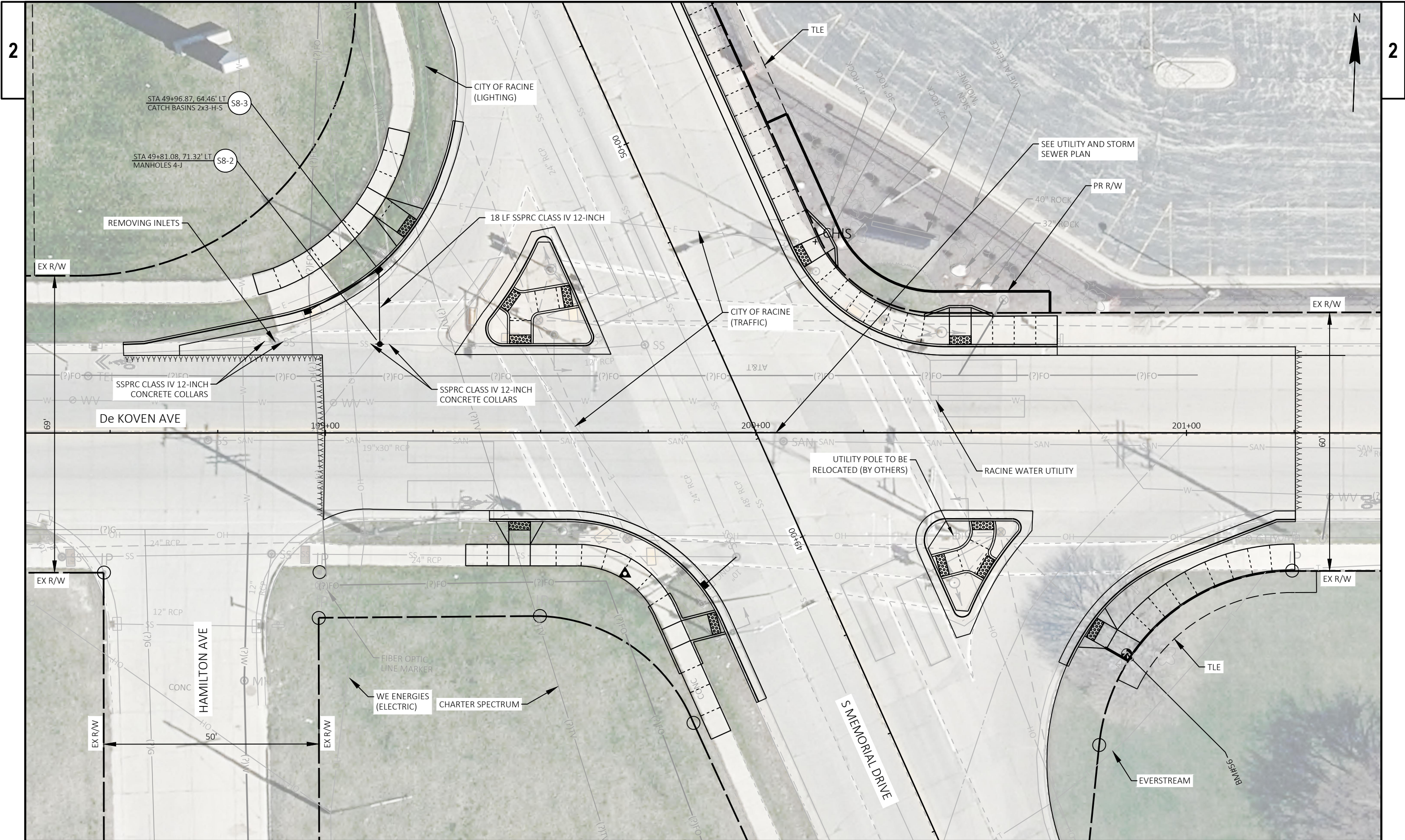


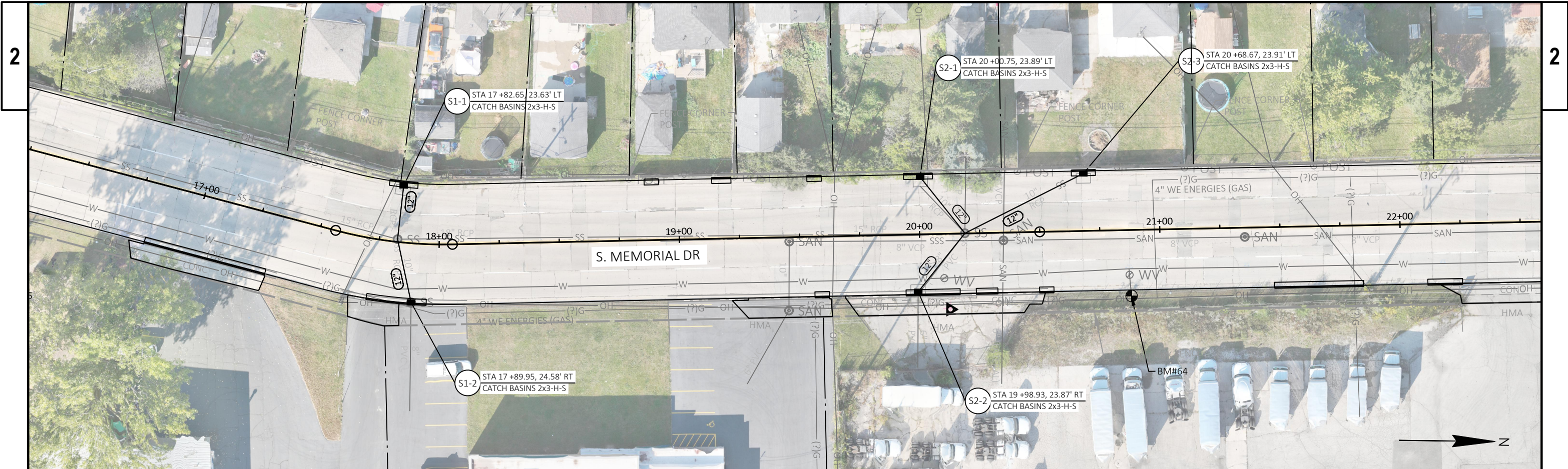
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SHEET 22

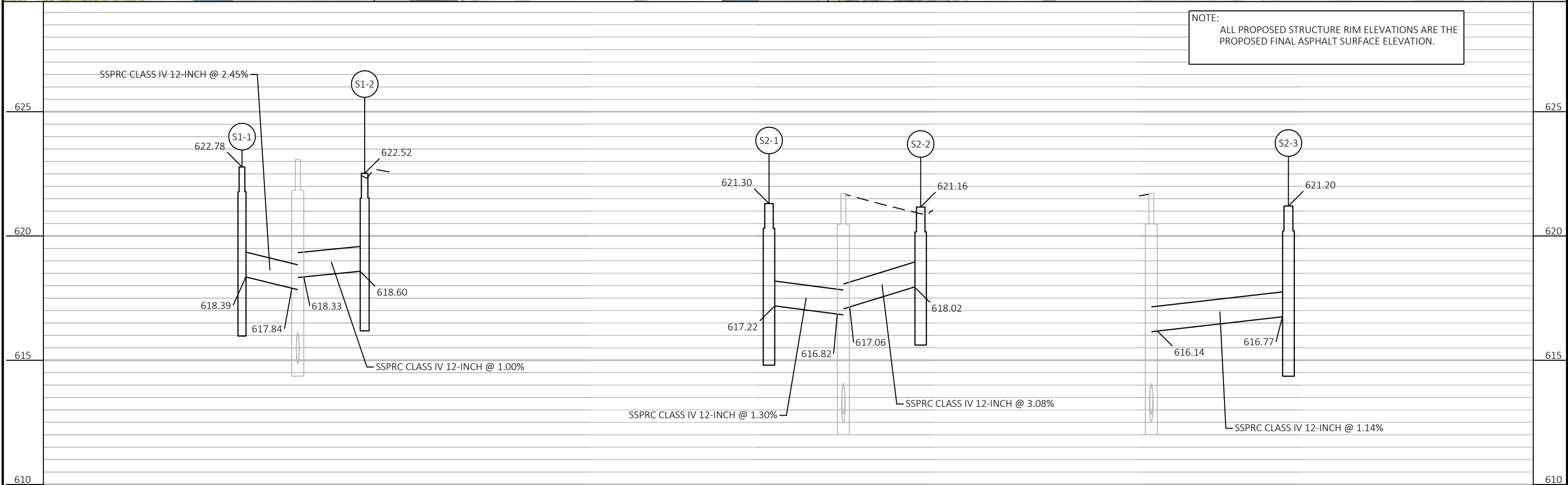
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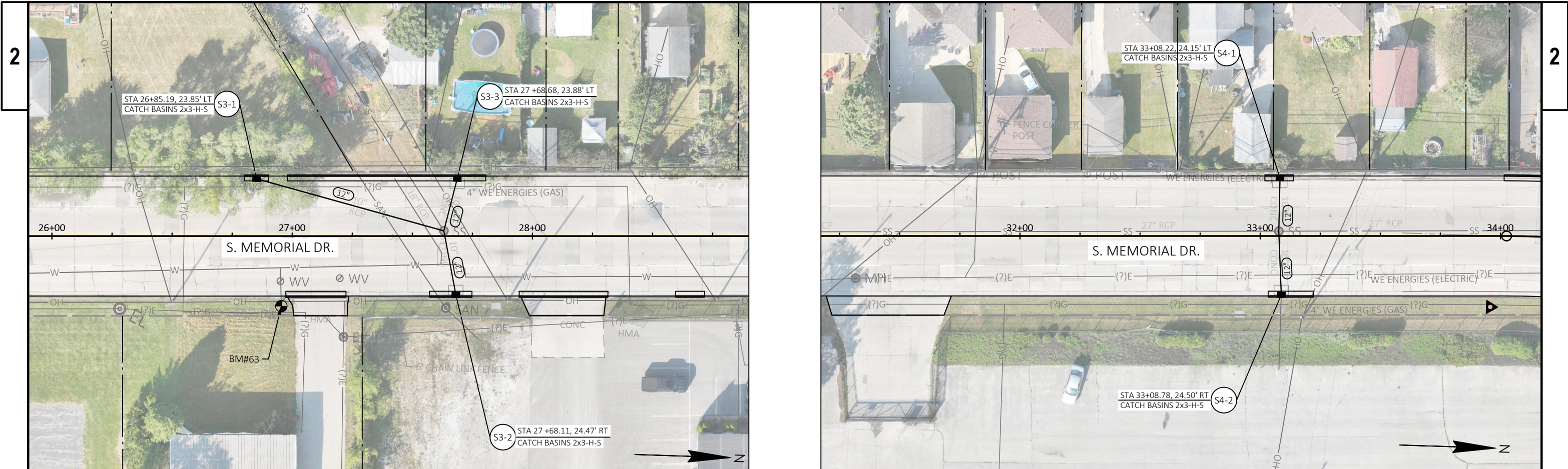




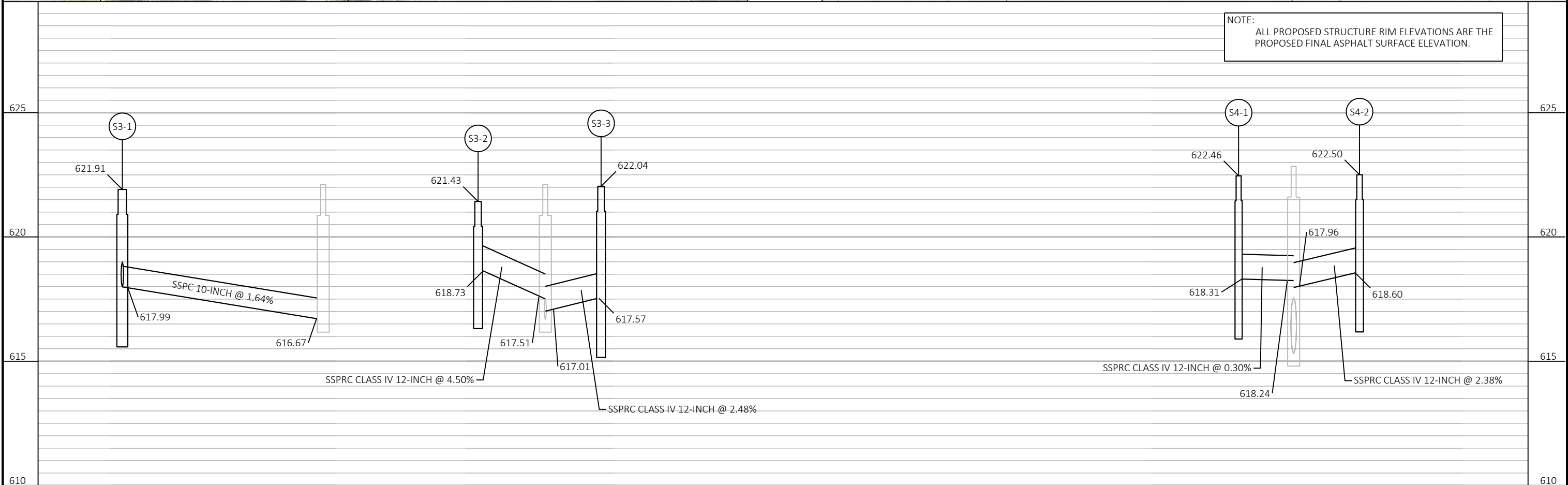


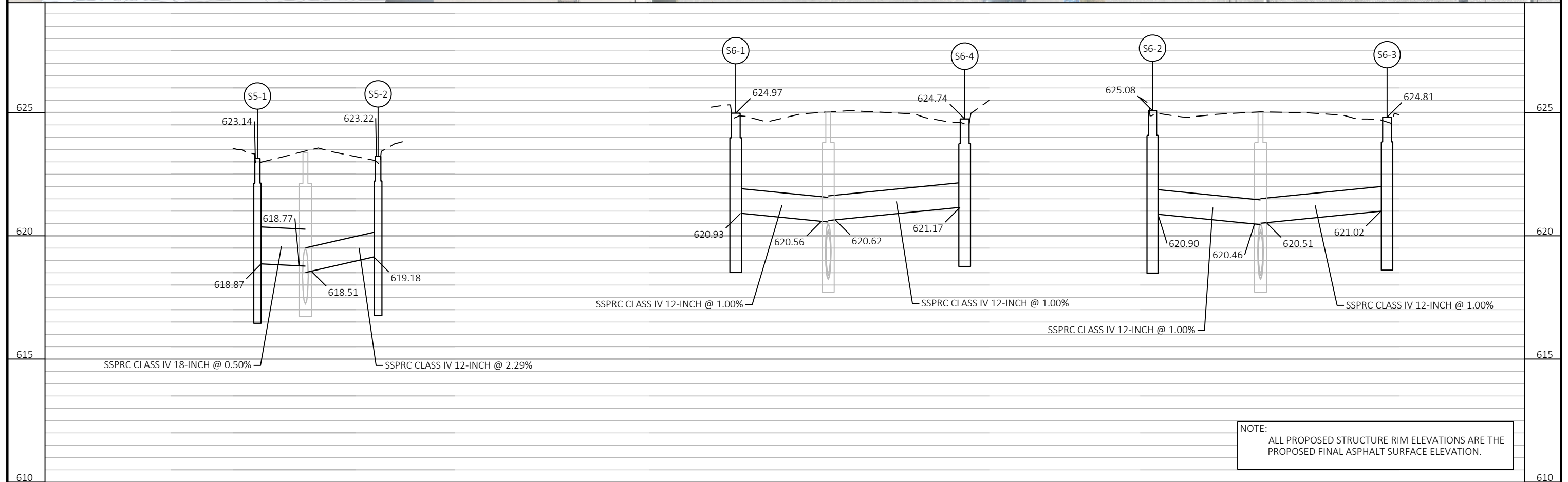
NOTE:
ALL PROPOSED STRUCTURE RIM ELEVATIONS ARE THE
PROPOSED FINAL ASPHALT SURFACE ELEVATION.



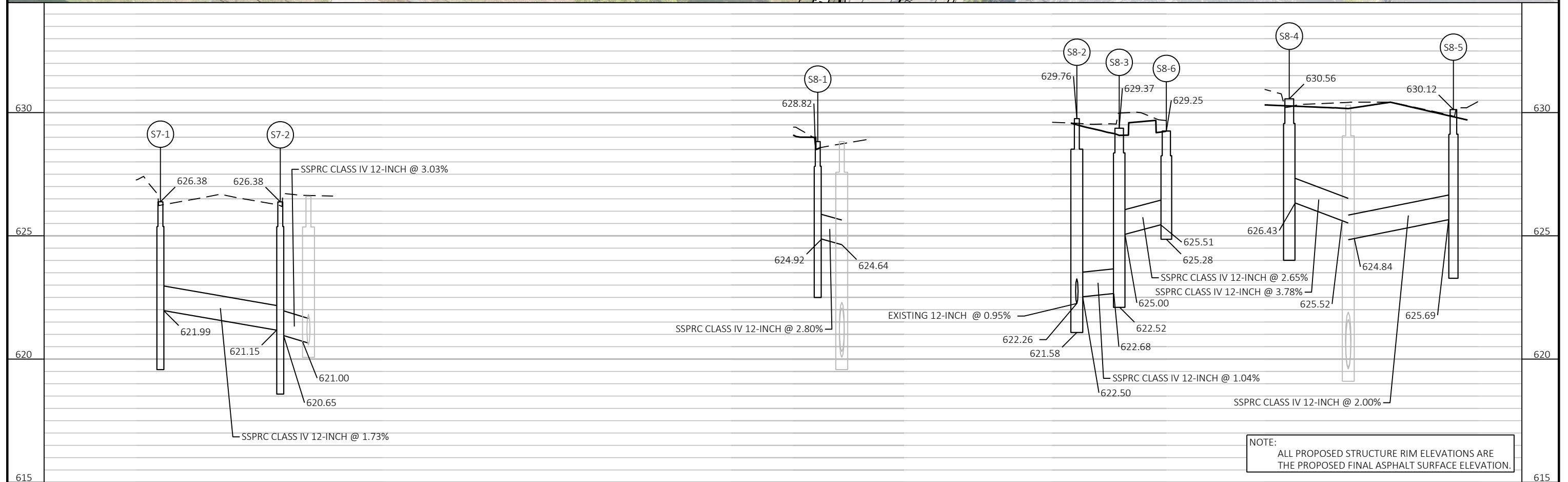
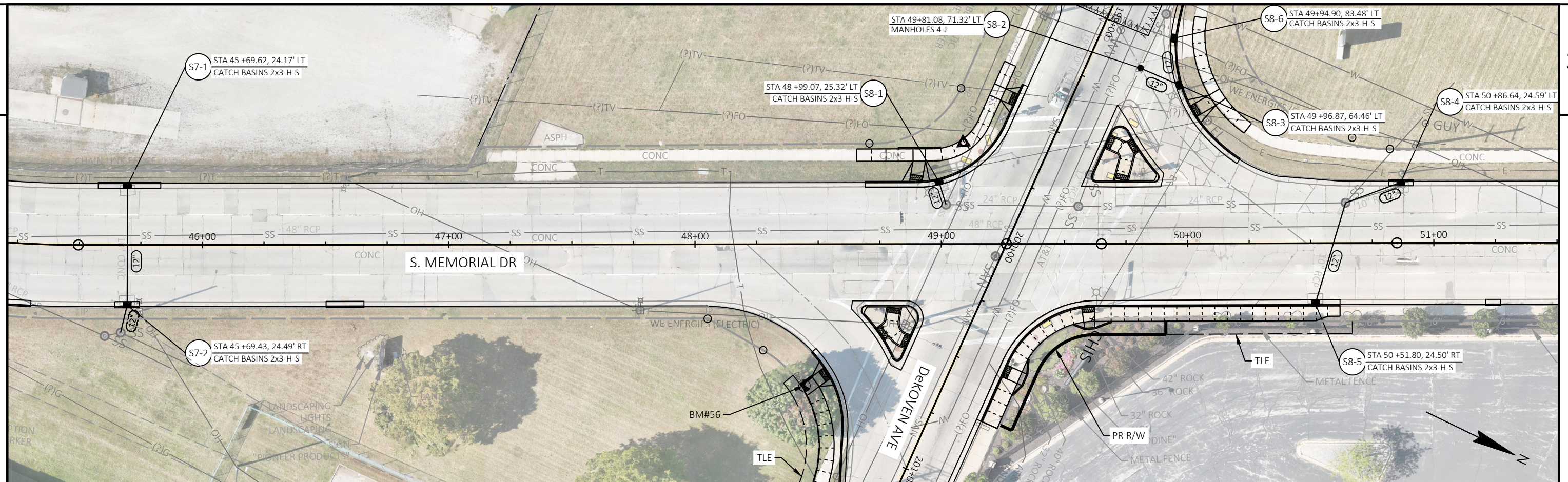


NOTE:
ALL PROPOSED STRUCTURE RIM ELEVATIONS ARE THE
PROPOSED FINAL ASPHALT SURFACE ELEVATION.





2



PROJECT NO:	2703-08-71
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HWY: S. MEMORIAL DRIVE

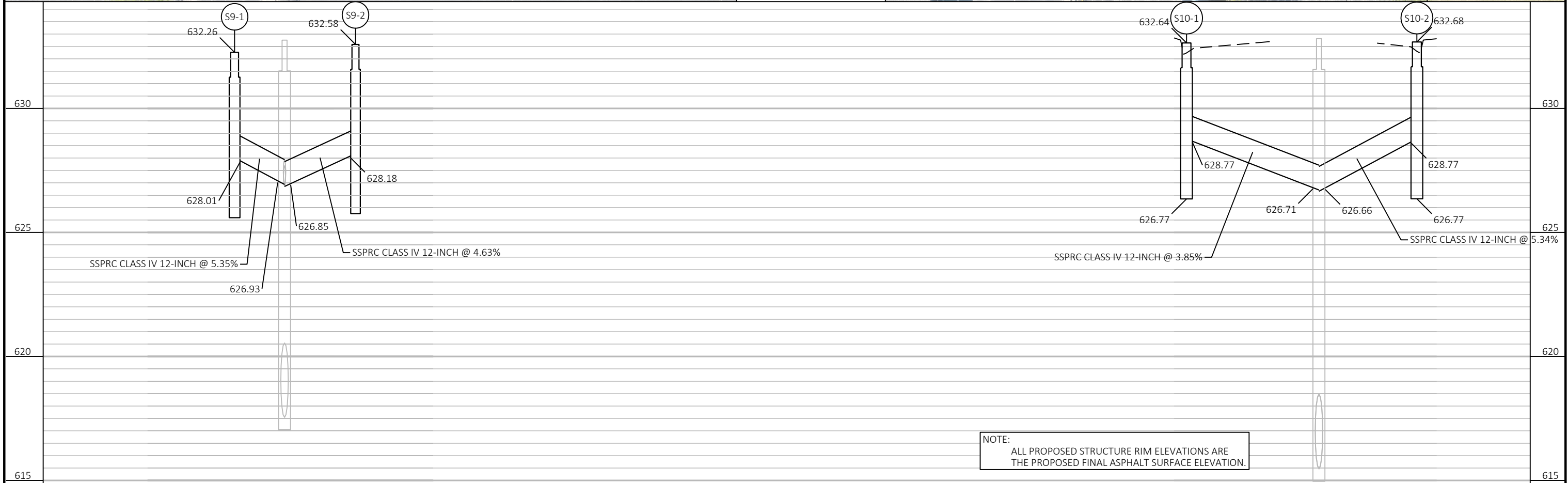
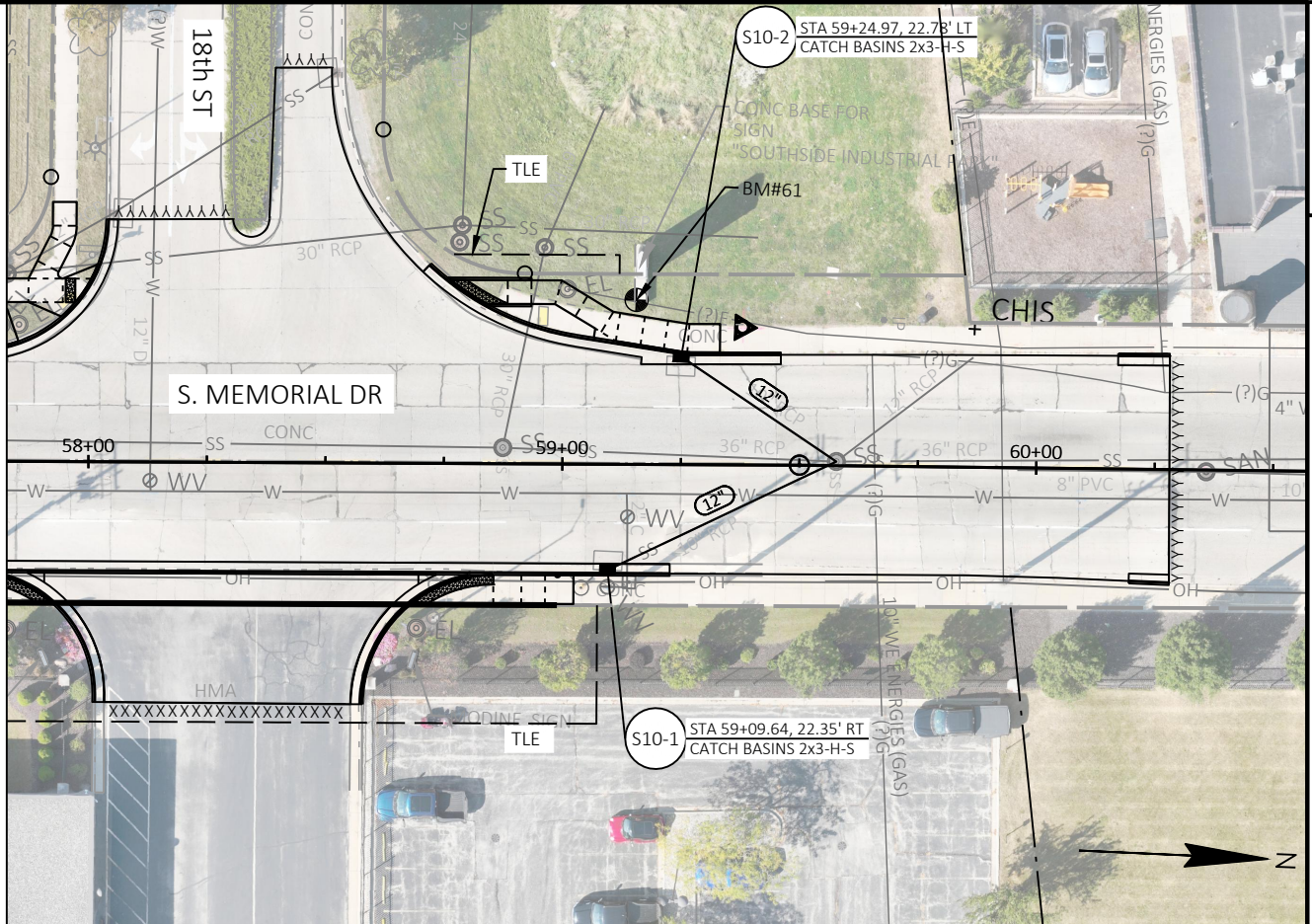
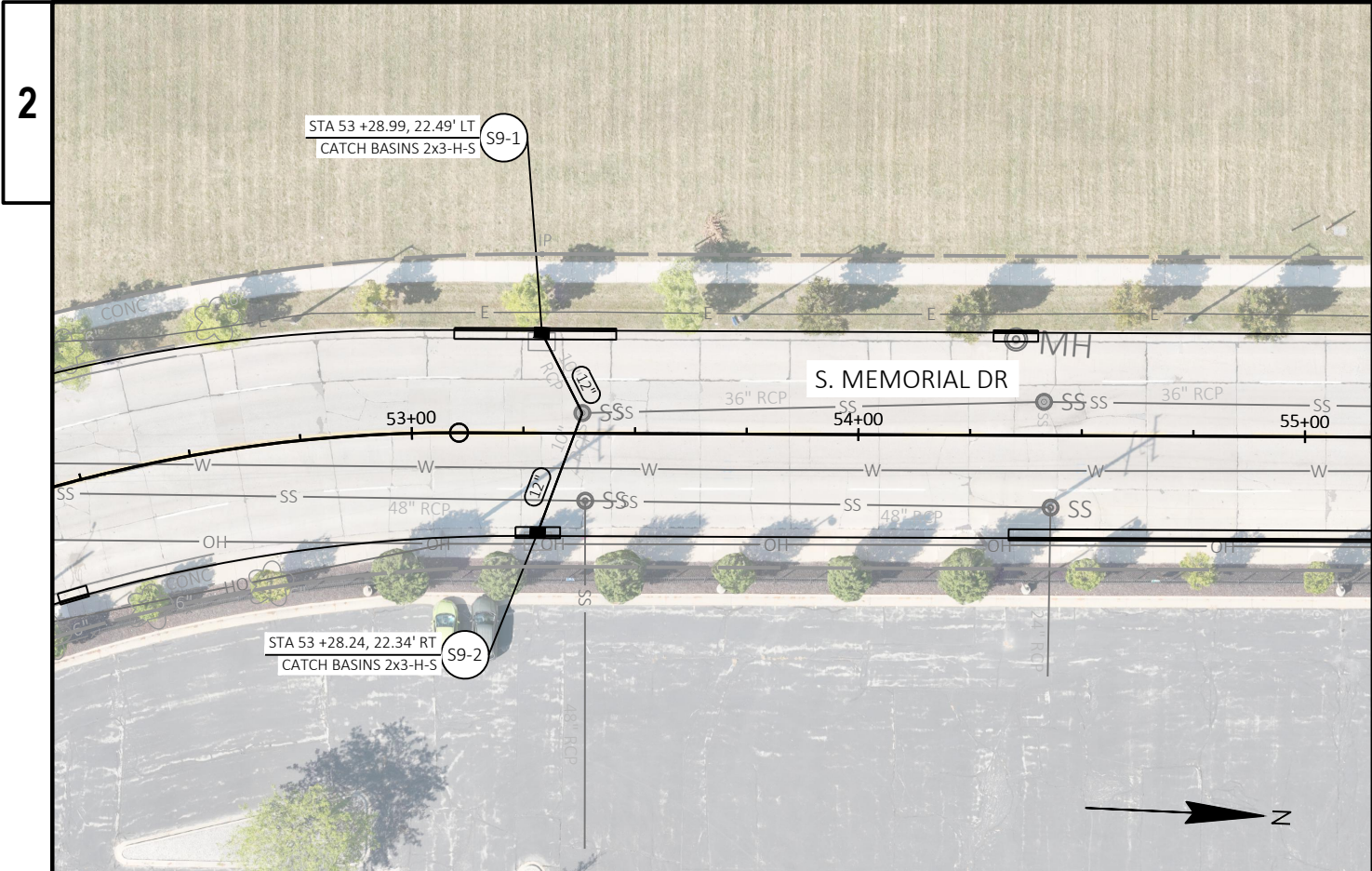
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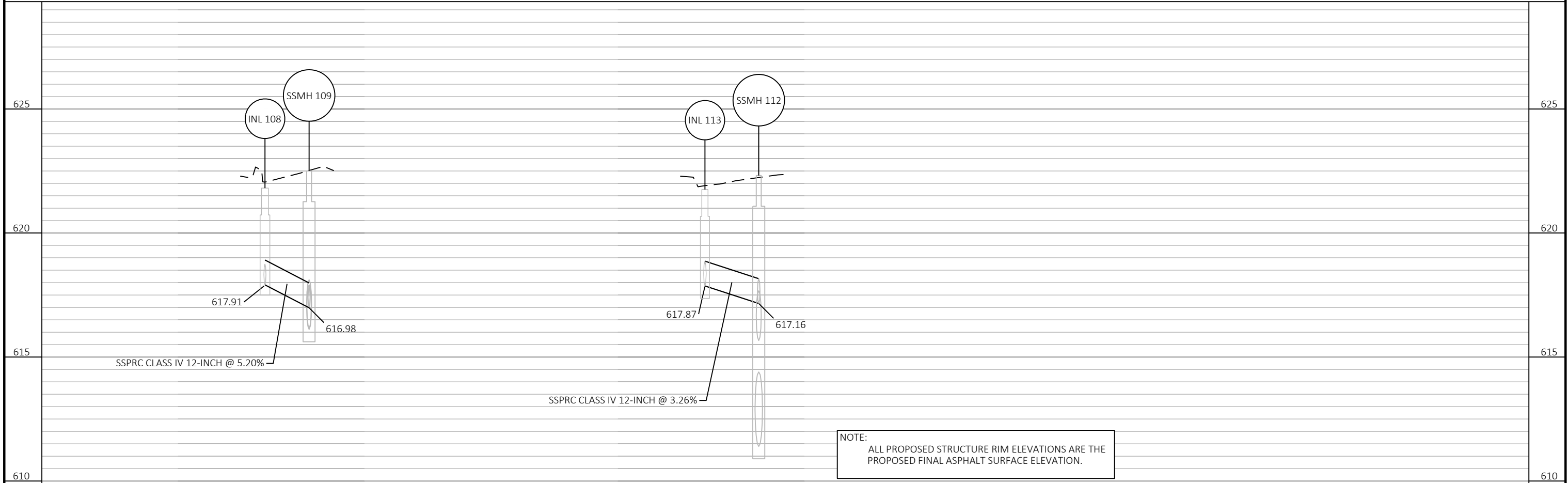
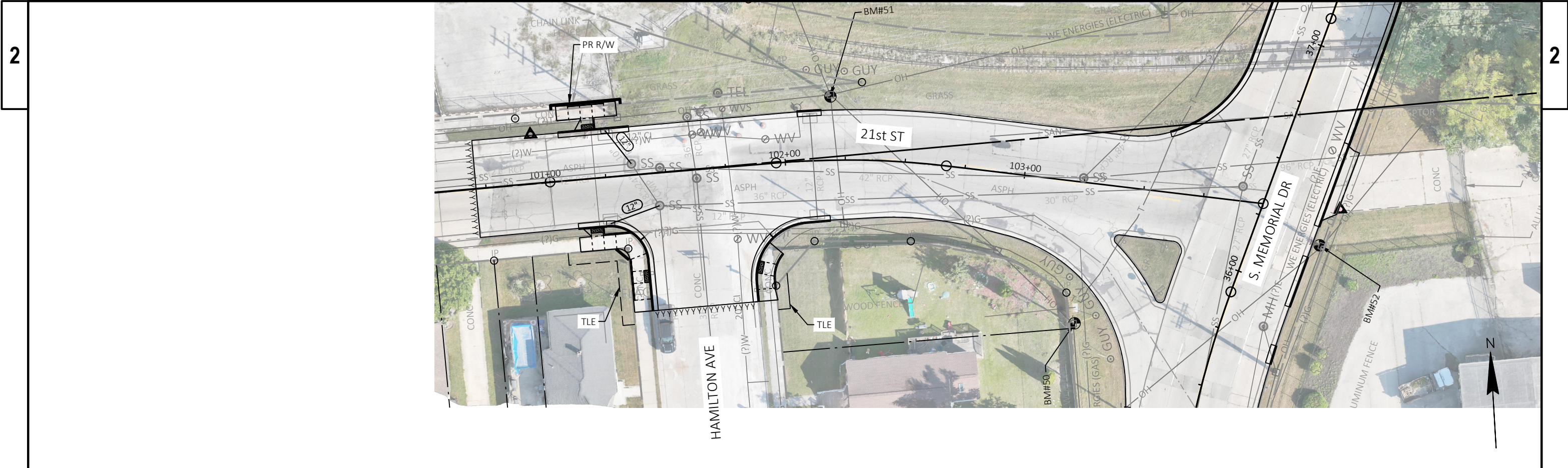
STORM SEWER PLAN AND PROFILE S. MEMORIAL DRIVE

SHEET

9

E





NOTE:
ALL PROPOSED STRUCTURE RIM ELEVATIONS ARE THE
PROPOSED FINAL ASPHALT SURFACE ELEVATION.

21ST STREET - N					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
A-1	101+06.71	18.07 LT	622.22	264505.87	2559837.13
A-2	101+26.27	18.14 LT	622.05	264506.43	2559856.69
A-3	101+36.22	18.18 LT	622.08	264506.72	2559866.63
A-4	101+13.69	20.60 LT	622.58	264508.57	2559844.05
A-5	101+16.69	20.61 LT	622.30	264508.66	2559847.05
A-6	101+21.69	20.62 LT	622.26	264508.80	2559852.05
A-7	101+06.66	25.17 LT	622.54	264512.97	2559836.90
A-8	101+11.66	25.19 LT	622.44	264513.11	2559841.90
A-9	101+16.66	25.21 LT	622.39	264513.25	2559846.90
A-10	101+21.66	25.22 LT	622.35	264513.40	2559851.89
A-11	101+26.66	25.24 LT	622.75	264513.54	2559856.89
A-12	101+31.66	25.26 LT	622.82	264513.68	2559861.89
A-13	101+06.61	31.16 LT	622.52	264518.96	2559836.70
A-14	101+11.61	31.19 LT	622.48	264519.11	2559841.70
A-15	101+11.61	30.69 LT	622.48	264518.61	2559841.72
A-16	101+16.61	30.71 LT	622.46	264518.75	2559846.71
A-17	101+16.61	31.21 LT	622.60	264519.25	2559846.70
A-18	101+21.61	30.70 LT	622.43	264518.87	2559851.71
A-19	101+21.61	31.22 LT	622.72	264519.39	2559851.70
A-20	101+26.61	30.74 LT	622.83	264519.04	2559856.71
A-21	101+26.61	31.24 LT	622.83	264519.54	2559856.69
A-22	101+31.61	31.25 LT	622.91	264519.66	2559861.69

- NOTES:
- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 - THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 - SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 - ALL STATION AND OFFSET INFORMATION REFERENCE 21ST STREET R/L.
 - ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, & FERTILIZER TYPE B.
 - PROVIDED ELEVATIONS ARE FOR CONCRETE ELEMENTS (SIDEWALK AND CURB, NOT FINAL HMA OVERLAY SURFACE.
 - GUTTER CROSS SLOPES IN PROPOSED CURB AND GUTTER IS 4.0% UNLESS OTHERWISE NOTED.

LEGEND

#

CURB RAMP TYPE

RES

RESTORATION (SEE NOTES)

SW5

CONCRETE SIDEWALK 5-INCH

PED

CONCRETE CURB PEDESTRIAN

LL

LEVEL LANDING

P6

6:1 PAVED FLARE (NON-WALKABLE SURFACE)

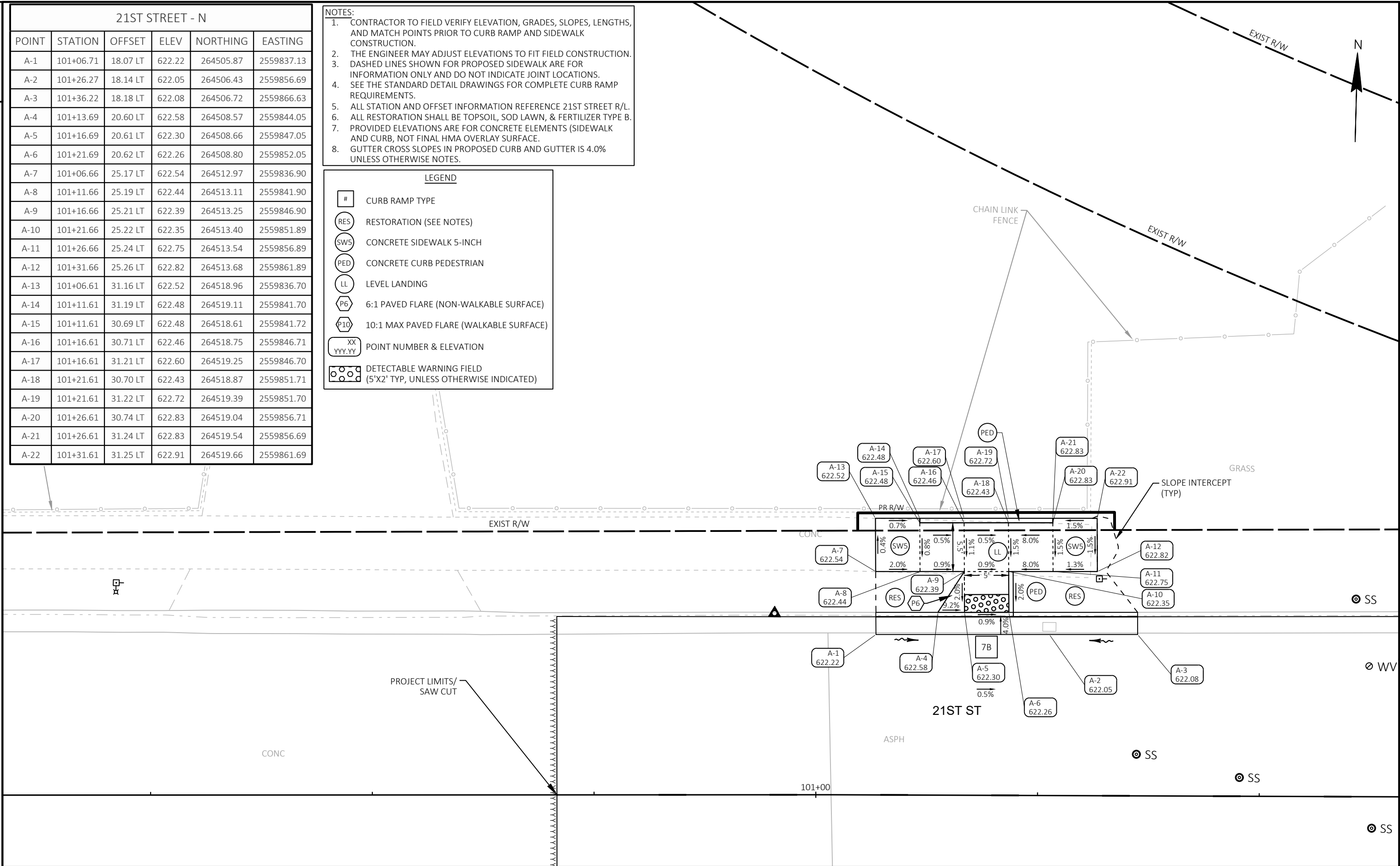
P10

10:1 MAX PAVED FLARE (WALKABLE SURFACE)

XX
YYY.YY

POINT NUMBER & ELEVATION

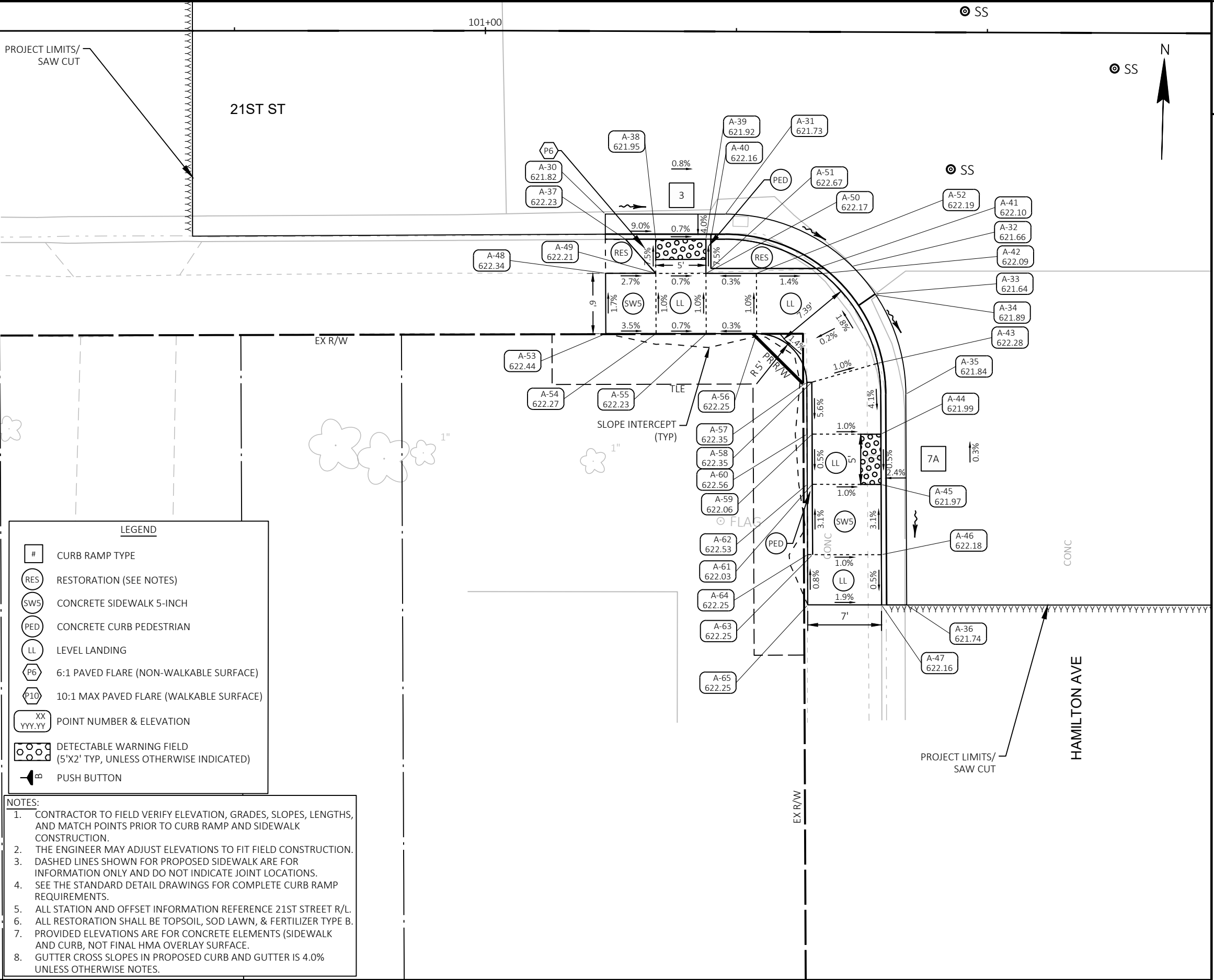
DETECTABLE WARNING FIELD
(5'X2' TYP, UNLESS OTHERWISE INDICATED)

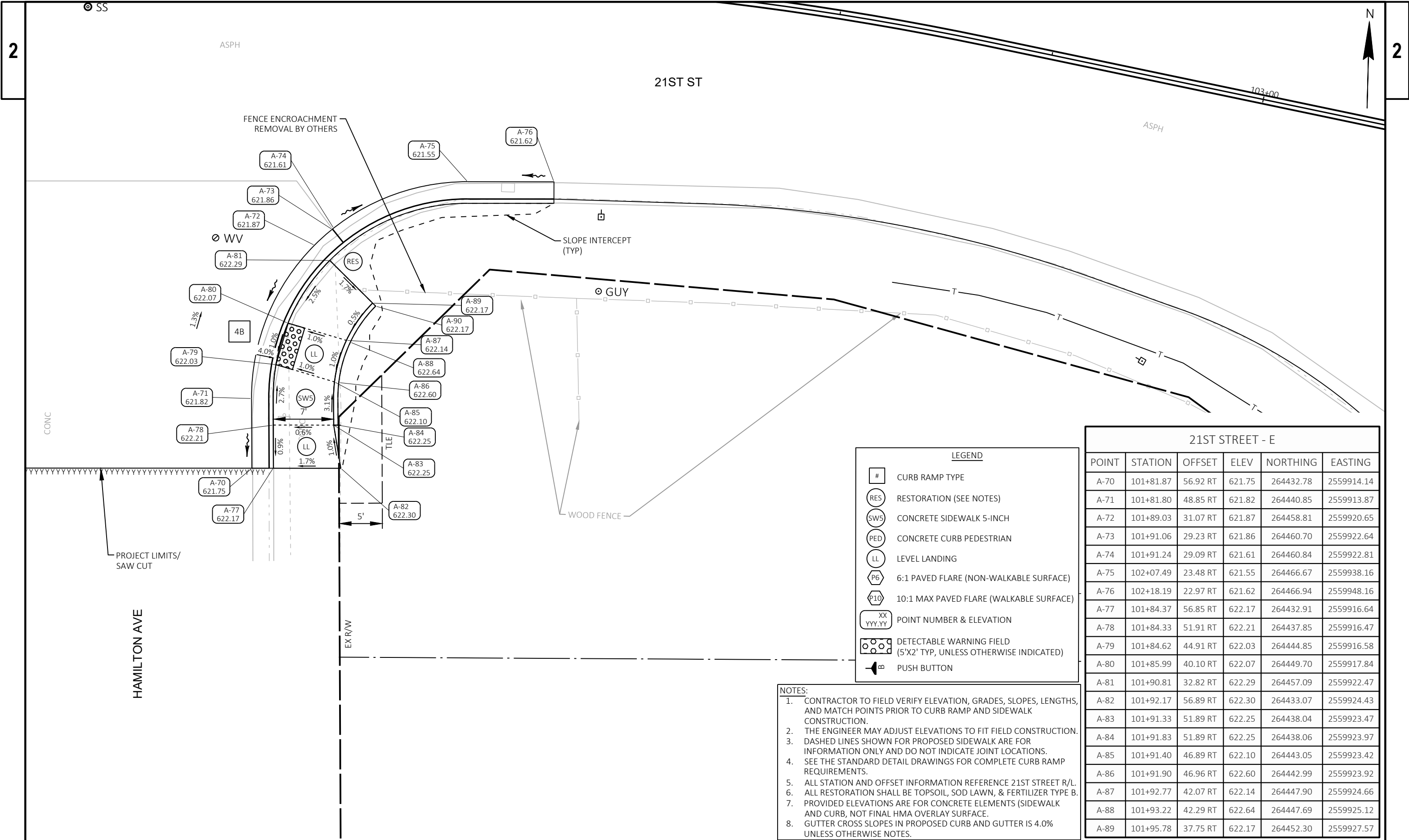


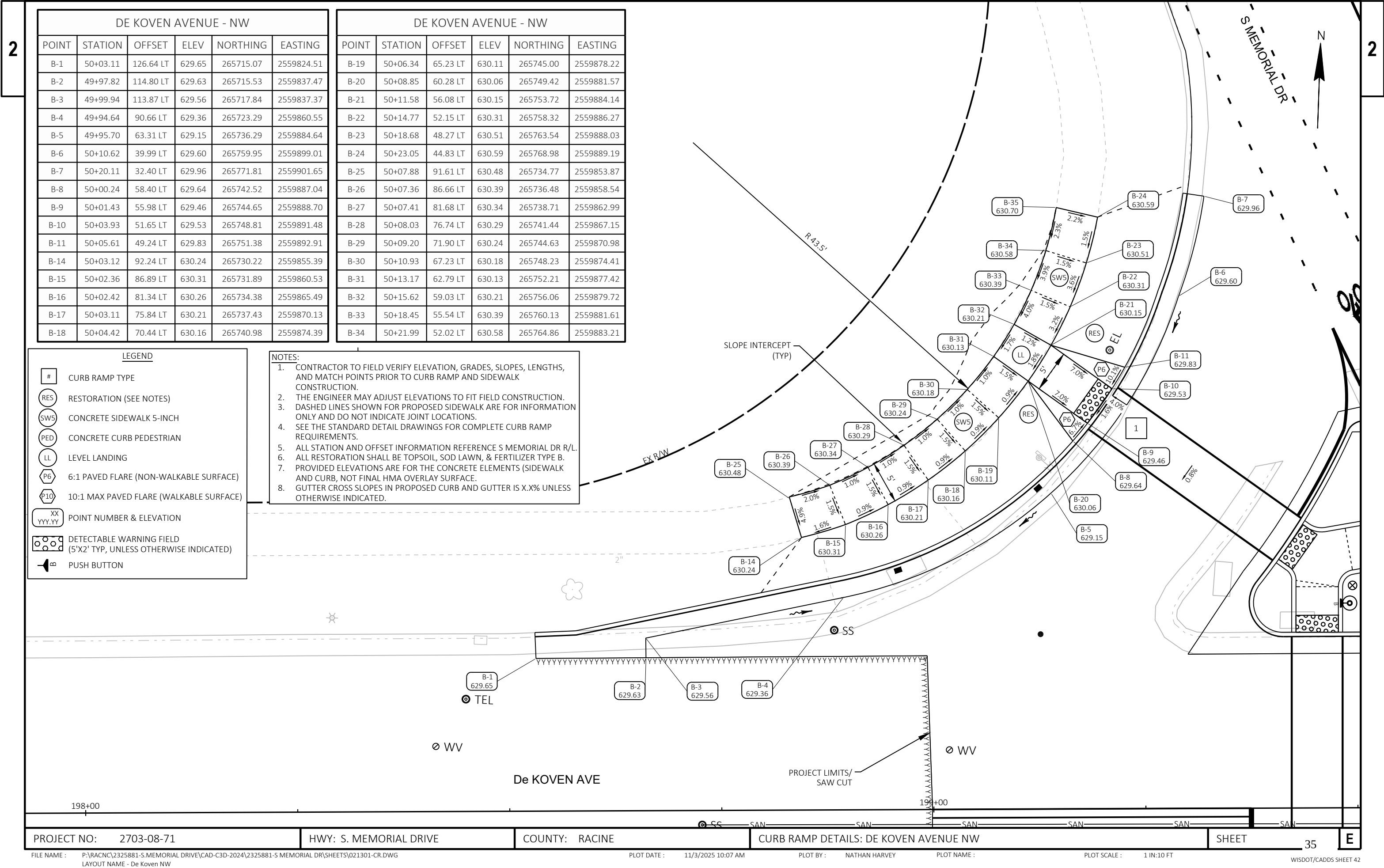
2

2

21ST STREET - W					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
A-30	101+12.01	18.22 RT	621.82	264469.72	2559843.33
A-31	101+23.95	18.23 RT	621.73	264470.01	2559855.27
A-32	101+36.60	23.34 RT	621.66	264465.22	2559868.04
A-33	101+38.90	26.09 RT	621.64	264462.53	2559870.41
A-34	101+38.96	26.18 RT	621.89	264462.44	2559870.48
A-35	101+42.00	36.05 RT	621.84	264452.65	2559873.76
A-36	101+42.17	57.04 RT	621.74	264431.67	2559874.45
A-37	101+14.04	20.73 RT	622.23	264467.27	2559845.42
A-38	101+17.03	20.71 RT	621.95	264467.36	2559848.41
A-39	101+22.03	20.70 RT	621.92	264467.50	2559853.41
A-40	101+22.53	20.69 RT	622.16	264467.51	2559853.91
A-41	101+32.99	23.56 RT	622.10	264464.91	2559864.44
A-42	101+33.65	24.06 RT	622.09	264464.43	2559865.12
A-43	101+39.17	32.99 RT	622.28	264455.63	2559870.85
A-44	101+39.53	40.04 RT	621.99	264448.59	2559871.39
A-45	101+39.57	45.04 RT	621.97	264443.60	2559871.56
A-46	101+39.63	52.04 RT	622.18	264436.60	2559871.79
A-47	101+39.67	57.04 RT	622.16	264431.60	2559871.95
A-48	101+12.08	24.12 RT	622.34	264463.82	2559843.56
A-49	101+17.05	24.11 RT	622.21	264463.96	2559848.52
A-50	101+22.05	24.10 RT	622.17	264464.10	2559853.52
A-51	101+22.55	23.59 RT	622.67	264464.62	2559854.01
A-52	101+27.08	24.08 RT	622.19	264464.24	2559858.54
A-53	101+12.10	30.12 RT	622.44	264457.83	2559843.72
A-54	101+17.11	30.11 RT	622.27	264457.97	2559848.73
A-55	101+22.10	30.09 RT	622.23	264458.11	2559853.72
A-56	101+27.13	30.08 RT	622.25	264458.25	2559858.74
A-57	101+32.14	34.91 RT	622.35	264453.54	2559863.87
A-58	101+32.64	34.89 RT	622.35	264453.57	2559864.37
A-59	101+32.68	40.06 RT	622.06	264448.40	2559864.55
A-60	101+32.18	40.07 RT	622.56	264448.39	2559864.05
A-61	101+32.72	45.06 RT	622.03	264443.41	2559864.71
A-62	101+32.22	45.07 RT	622.53	264443.39	2559864.21
A-63	101+32.78	52.06 RT	622.25	264436.41	2559864.94
A-64	101+32.27	52.07 RT	622.25	264436.39	2559864.44
A-65	101+32.32	57.07 RT	622.25	264431.40	2559864.61







DE KOVEN AVENUE - NW					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
B-1	50+03.11	126.64 LT	629.65	265715.07	2559824.51
B-2	49+97.82	114.80 LT	629.63	265715.53	2559837.47
B-3	49+99.94	113.87 LT	629.56	265717.84	2559837.37
B-4	49+94.64	90.66 LT	629.36	265723.29	2559860.55
B-5	49+95.70	63.31 LT	629.15	265736.29	2559884.64
B-6	50+10.62	39.99 LT	629.60	265759.95	2559899.01
B-7	50+20.11	32.40 LT	629.96	265771.81	2559901.65
B-8	50+00.24	58.40 LT	629.64	265742.52	2559887.04
B-9	50+01.43	55.98 LT	629.46	265744.65	2559888.70
B-10	50+03.93	51.65 LT	629.53	265748.81	2559891.48
B-11	50+05.61	49.24 LT	629.83	265751.38	2559892.91
B-14	50+03.12	92.24 LT	630.24	265730.22	2559855.39
B-15	50+02.36	86.89 LT	630.31	265731.89	2559860.53
B-16	50+02.42	81.34 LT	630.26	265734.38	2559865.49
B-17	50+03.11	75.84 LT	630.21	265737.43	2559870.13
B-18	50+04.42	70.44 LT	630.16	265740.98	2559874.39

DE KOVEN AVENUE - NW					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
B-19	50+06.34	65.23 LT	630.11	265745.00	2559878.22
B-20	50+08.85	60.28 LT	630.06	265749.42	2559881.57
B-21	50+11.58	56.08 LT	630.15	265753.72	2559884.14
B-22	50+14.77	52.15 LT	630.31	265758.32	2559886.27
B-23	50+18.68	48.27 LT	630.51	265763.54	2559888.03
B-24	50+23.05	44.83 LT	630.59	265768.98	2559889.19
B-25	50+07.88	91.61 LT	630.48	265734.77	2559853.87
B-26	50+07.36	86.66 LT	630.39	265736.48	2559858.54
B-27	50+07.41	81.68 LT	630.34	265738.71	2559862.99
B-28	50+08.03	76.74 LT	630.29	265741.44	2559867.15
B-29	50+09.20	71.90 LT	630.24	265744.63	2559870.98
B-30	50+10.93	67.23 LT	630.18	265748.23	2559874.41
B-31	50+13.17	62.79 LT	630.13	265752.21	2559877.42
B-32	50+15.62	59.03 LT	630.21	265756.06	2559879.72
B-33	50+18.45	55.54 LT	630.39	265760.13	2559881.61
B-34	50+21.99	52.02 LT	630.58	265764.86	2559883.21

LEGEND

#

CURB RAMP TYPE

RES

RESTORATION (SEE NOTES)

SW5

CONCRETE SIDEWALK 5-INCH

PED

CONCRETE CURB PEDESTRIAN

LL

LEVEL LANDING

P6

6:1 PAVED FLARE (NON-WALKABLE SURFACE)

P10

10:1 MAX PAVED FLARE (WALKABLE SURFACE)

XX
YYY.YY

POINT NUMBER & ELEVATION

DETECTABLE WARNING FIELD
(5'X2' TYP, UNLESS OTHERWISE INDICATED)

PUSH BUTTON

- NOTES:
1.

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

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

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

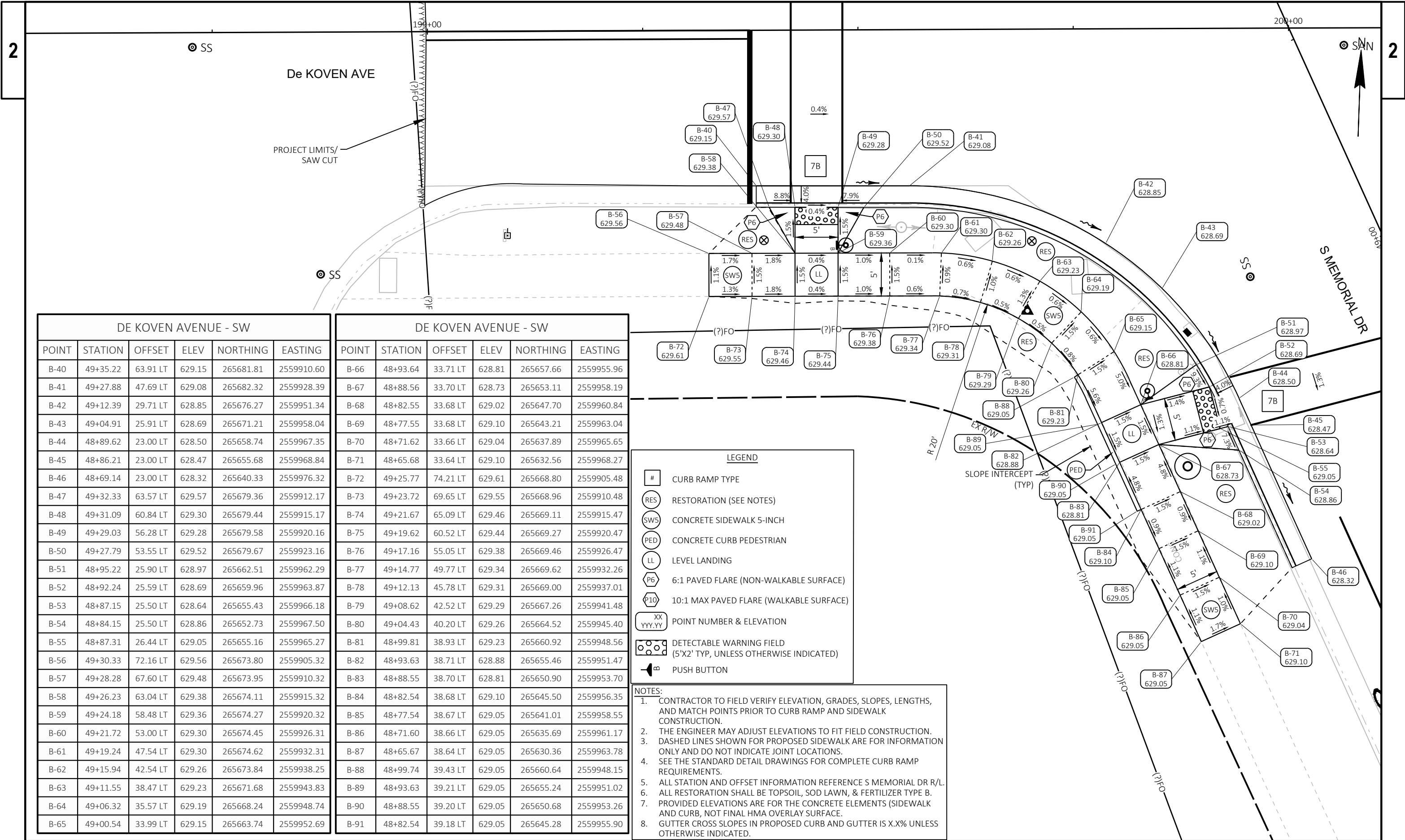
SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5.

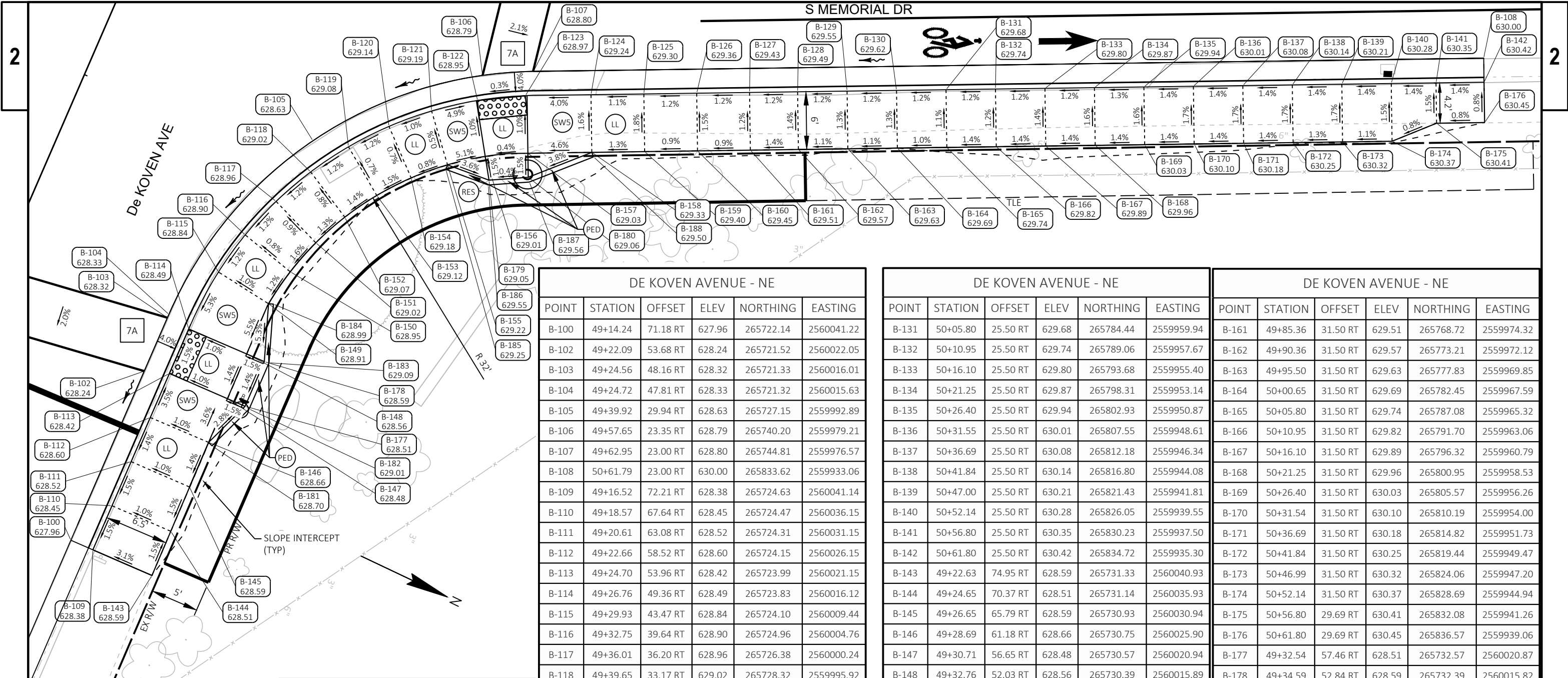
ALL STATION AND OFFSET INFORMATION REFERENCE S MEMORIAL DR R/L.
6.

ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, & FERTILIZER TYPE B.
7.

PROVIDED ELEVATIONS ARE FOR THE CONCRETE ELEMENTS (SIDEWALK AND CURB, NOT FINAL HMA OVERLAY SURFACE.
8.

GUTTER CROSS SLOPES IN PROPOSED CURB AND GUTTER IS X.X% UNLESS OTHERWISE INDICATED.





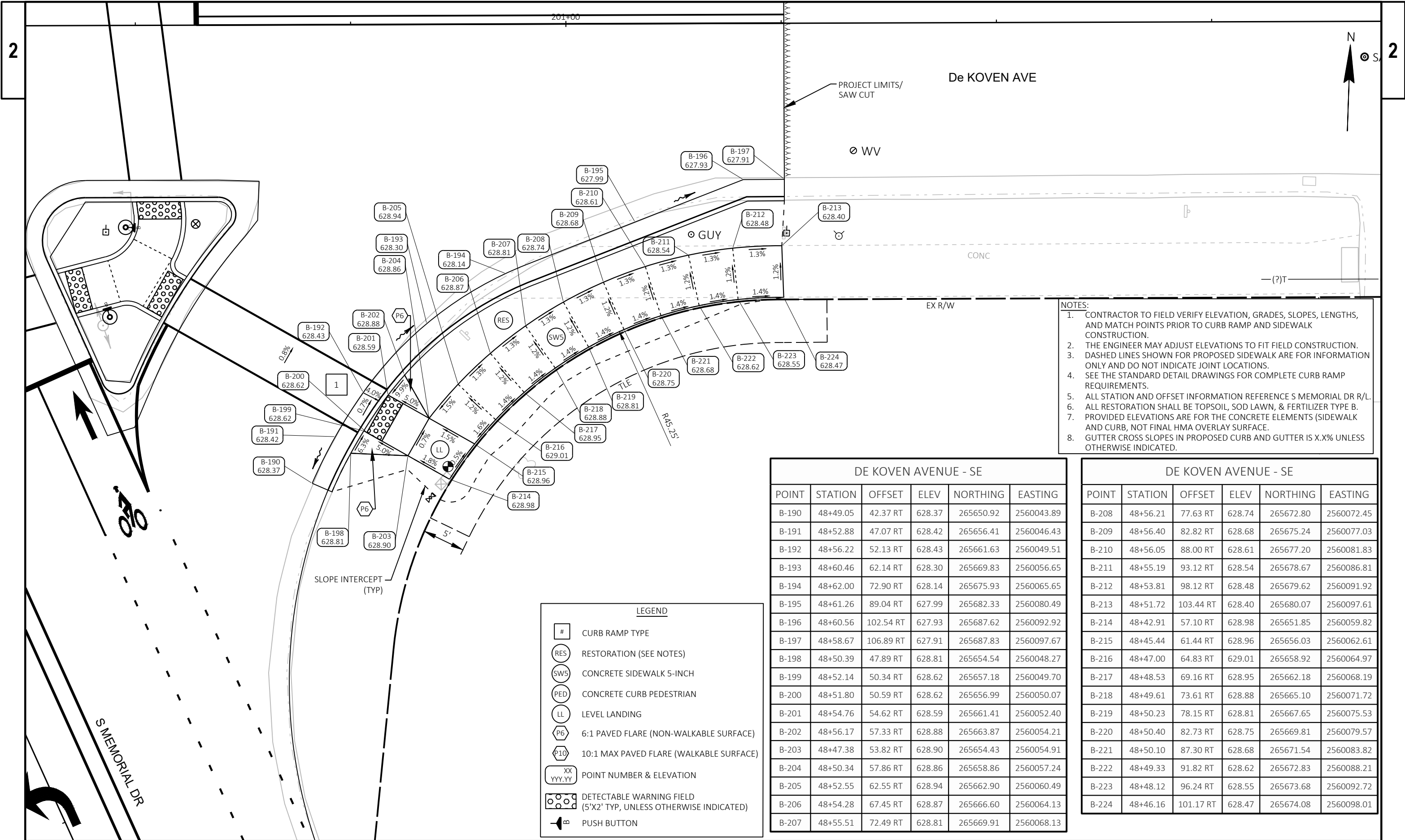
LEGEND	
#	CURB RAMP TYPE
RES	RESTORATION (SEE NOTES)
SW5	CONCRETE SIDEWALK 5-INCH
PED	CONCRETE CURB PEDESTRIAN
LL	LEVEL LANDING
P6	6:1 PAVED FLARE (NON-WALKABLE SURFACE)
P10	10:1 MAX PAVED FLARE (WALKABLE SURFACE)
XX YYY.YY	POINT NUMBER & ELEVATION
○ ○ ○ ○	DETECTABLE WARNING FIELD (5'X2' TYP, UNLESS OTHERWISE INDICATED)
⬇	PUSH BUTTON

- NOTES:
- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
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 - PROVIDED ELEVATIONS ARE FOR THE CONCRETE ELEMENTS (SIDEWALK AND CURB, NOT FINAL HMA OVERLAY SURFACE.
 - GUTTER CROSS SLOPES IN PROPOSED CURB AND GUTTER IS X.X% UNLESS OTHERWISE INDICATED.

DE KOVEN AVENUE - NE					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
B-100	49+14.24	71.18 RT	627.96	265722.14	2560041.22
B-102	49+22.09	53.68 RT	628.24	265721.52	2560022.05
B-103	49+24.56	48.16 RT	628.32	265721.33	2560016.01
B-104	49+24.72	47.81 RT	628.33	265721.32	2560015.63
B-105	49+39.92	29.94 RT	628.63	265727.15	2559992.89
B-106	49+57.65	23.35 RT	628.79	265740.20	2559979.21
B-107	49+62.95	23.00 RT	628.80	265744.81	2559976.57
B-108	50+61.79	23.00 RT	630.00	265833.62	2559933.06
B-109	49+16.52	72.21 RT	628.38	265724.63	2560041.14
B-110	49+18.57	67.64 RT	628.45	265724.47	2560036.15
B-111	49+20.61	63.08 RT	628.52	265724.31	2560031.15
B-112	49+22.66	58.52 RT	628.60	265724.15	2560026.15
B-113	49+24.70	53.96 RT	628.42	265723.99	2560021.15
B-114	49+26.76	49.36 RT	628.49	265723.83	2560016.12
B-115	49+29.93	43.47 RT	628.84	265724.10	2560009.44
B-116	49+32.75	39.64 RT	628.90	265724.96	2560004.76
B-117	49+36.01	36.20 RT	628.96	265726.38	2560000.24
B-118	49+39.65	33.17 RT	629.02	265728.32	2559995.92
B-119	49+43.61	30.61 RT	629.08	265730.76	2559991.88
B-120	49+47.85	28.54 RT	629.14	265733.67	2559988.16
B-121	49+52.31	26.98 RT	629.19	265736.99	2559984.81
B-122	49+57.10	25.95 RT	628.95	265740.84	2559981.78
B-123	49+62.07	25.52 RT	628.97	265745.13	2559979.22
B-124	49+68.86	25.49 RT	629.24	265751.26	2559976.19
B-125	49+74.36	25.49 RT	629.30	265756.20	2559973.77
B-126	49+79.86	25.49 RT	629.36	265761.14	2559971.35
B-127	49+85.36	25.50 RT	629.43	265766.08	2559968.93
B-128	49+90.36	25.50 RT	629.49	265770.57	2559966.73
B-129	49+95.51	25.50 RT	629.55	265775.19	2559964.47
B-130	50+00.65	25.50 RT	629.62	265779.81	2559962.20

DE KOVEN AVENUE - NE					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
B-131	50+05.80	25.50 RT	629.68	265784.44	2559959.94
B-132	50+10.95	25.50 RT	629.74	265789.06	2559957.67
B-133	50+16.10	25.50 RT	629.80	265793.68	2559955.40
B-134	50+21.25	25.50 RT	629.87	265798.31	2559953.14
B-135	50+26.40	25.50 RT	629.94	265802.93	2559950.87
B-136	50+31.55	25.50 RT	630.01	265807.55	2559948.61
B-137	50+36.69	25.50 RT	630.08	265812.18	2559946.34
B-138	50+41.84	25.50 RT	630.14	265816.80	2559944.08
B-139	50+47.00	25.50 RT	630.21	265821.43	2559941.81
B-140	50+52.14	25.50 RT	630.28	265826.05	2559939.55
B-141	50+56.80	25.50 RT	630.35	265830.23	2559937.50
B-142	50+61.80	25.50 RT	630.42	265834.72	2559935.30
B-143	49+22.63	74.95 RT	628.59	265731.33	2560040.93
B-144	49+24.65	70.37 RT	628.51	265731.14	2560035.93
B-145	49+26.65	65.79 RT	628.59	265730.93	2560030.94
B-146	49+28.69	61.18 RT	628.66	265730.75	2560025.90
B-147	49+30.71	56.65 RT	628.48	265730.57	2560020.94
B-148	49+32.76	52.03 RT	628.56	265730.39	2560015.89
B-149	49+35.10	46.83 RT	628.91	265730.22	2560010.19
B-150	49+37.40	43.53 RT	628.95	265730.84	2560006.22
B-151	49+40.10	40.55 RT	629.02	265731.96	2560002.36
B-152	49+43.14	37.93 RT	629.07	265733.55	2559998.67
B-153	49+46.49	35.69 RT	629.12	265735.57	2559995.19
B-154	49+50.10	33.92 RT	629.18	265738.04	2559992.02
B-155	49+53.89	32.61 RT	629.22	265740.88	2559989.17
B-156	49+57.83	31.78 RT	629.01	265744.05	2559986.70
B-157	49+62.27	31.50 RT	629.03	265747.93	2559984.51
B-158	49+68.86	31.49 RT	629.33	265753.90	2559981.58
B-159	49+74.36	31.49 RT	629.40	265758.84	2559979.16
B-160	49+79.86	31.49 RT	629.45	265763.78	2559976.74

DE KOVEN AVENUE - NE					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
B-161	49+85.36	31.50 RT	629.51	265768.72	2559974.32
B-162	49+90.36	31.50 RT	629.57	265773.21	2559972.12
B-163	49+95.50	31.50 RT	629.63	265777.83	2559969.85
B-164	50+00.65	31.50 RT	629.69	265782.45	2559967.59
B-165	50+05.80	31.50 RT	629.74	265787.08	2559965.32
B-166	50+10.95	31.50 RT	629.82	265791.70	2559963.06
B-167	50+16.10	31.50 RT	629.89	265796.32	2559960.79
B-168	50+21.25	31.50 RT	629.96	265800.95	2559958.53
B-169	50+26.40	31.50 RT	630.03	265805.57	2559956.26
B-170	50+31.54	31.50 RT	630.10	265810.19	2559954.00
B-171	50+36.69	31.50 RT	630.18	265814.82	2559951.73
B-172	50+41.84	31.50 RT	630.25	265819.44	2559949.47
B-173	50+46.99	31.50 RT	630.32	265824.06	2559947.20
B-174	50+52.14	31.50 RT	630.37	265828.69	2559944.94
B-175	50+56.80	29.69 RT	630.41	265832.08	2559941.26
B-176	50+61.80	29.69 RT	630.45	265836.57	2559939.06
B-177	49+32.54	57.46 RT	628.51	265732.57	2560020.87
B-178	49+34.59	52.84 RT	628.59	265732.39	2560015.82
B-179	49+58.19	34.25 RT	629.05	265745.46	2559988.77
B-180	49+62.28	34.00 RT	629.06	265749.03	2559986.75
B-181	49+29.04	61.54 RT	628.70	265731.21	2560026.07
B-182	49+32.95	57.75 RT	629.01	265733.08	2560020.95
B-183	49+35.08	52.97 RT	629.09	265732.89	2560015.72
B-184	49+35.60	46.87 RT	628.99	265730.69	2560010.01
B-185	49+53.72	33.07 RT	629.25	265740.92	2559989.66
B-186	49+58.11	34.76 RT	629.55	265745.61	2559989.26
B-187	49+62.38	34.49 RT	629.56	265749.34	2559987.15
B-188	49+69.03	31.96 RT	629.50	265754.26	2559981.92



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DE KOVEN AVENUE - SE					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
B-190	48+49.05	42.37 RT	628.37	265650.92	2560043.89
B-191	48+52.88	47.07 RT	628.42	265656.41	2560046.43
B-192	48+56.22	52.13 RT	628.43	265661.63	2560049.51
B-193	48+60.46	62.14 RT	628.30	265669.83	2560056.65
B-194	48+62.00	72.90 RT	628.14	265675.93	2560065.65
B-195	48+61.26	89.04 RT	627.99	265682.33	2560080.49
B-196	48+60.56	102.54 RT	627.93	265687.62	2560092.92
B-197	48+58.67	106.89 RT	627.91	265687.83	2560097.67
B-198	48+50.39	47.89 RT	628.81	265654.54	2560048.27
B-199	48+52.14	50.34 RT	628.62	265657.18	2560049.70
B-201	48+54.76	54.62 RT	628.59	265661.41	2560052.40
B-202	48+56.17	57.33 RT	628.88	265663.87	2560054.21
B-203	48+47.38	53.82 RT	628.90	265654.43	2560054.91
B-204	48+50.34	57.86 RT	628.86	265658.86	2560057.24
B-205	48+52.55	62.55 RT	628.94	265662.90	2560060.49
B-206	48+54.28	67.45 RT	628.87	265666.60	2560064.13
B-207	48+55.51	72.49 RT	628.81	265669.91	2560068.13

DE KOVEN AVENUE - SE					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
B-208	48+56.21	77.63 RT	628.74	265672.80	2560072.45
B-209	48+56.40	82.82 RT	628.68	265675.24	2560077.03
B-210	48+56.05	88.00 RT	628.61	265677.20	2560081.83
B-211	48+55.19	93.12 RT	628.54	265678.67	2560086.81
B-212	48+53.81	98.12 RT	628.48	265679.62	2560091.92
B-213	48+51.72	103.44 RT	628.40	265680.07	2560097.61
B-214	48+42.91	57.10 RT	628.98	265651.85	2560059.82
B-215	48+45.44	61.44 RT	628.96	265656.03	2560062.61
B-216	48+47.00	64.83 RT	629.01	265658.92	2560064.97
B-217	48+48.53	69.16 RT	628.95	265662.18	2560068.19
B-218	48+49.61	73.61 RT	628.88	265665.10	2560071.72
B-219	48+50.23	78.15 RT	628.81	265667.65	2560075.53
B-220	48+50.40	82.73 RT	628.75	265669.81	2560079.57
B-221	48+50.10	87.30 RT	628.68	265671.54	2560083.82
B-222	48+49.33	91.82 RT	628.62	265672.83	2560088.21
B-223	48+48.12	96.24 RT	628.55	265673.68	2560092.72
B-224	48+46.16	101.17 RT	628.47	265674.08	2560098.01

DE KOVEN AVENUE - SE ISLAND					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
B-230	48+63.88	23.00 RT	628.55	265655.76	2560019.97
B-231	48+70.11	23.00 RT	628.56	265661.35	2560017.25
B-232	48+85.58	23.00 RT	628.69	265675.26	2560010.47
B-233	48+91.45	26.20 RT	628.72	265681.94	2560010.77
B-234	48+91.97	32.86 RT	628.66	265685.33	2560016.54
B-235	48+85.64	46.97 RT	628.45	265685.82	2560031.99
B-236	48+83.57	51.22 RT	628.38	265685.82	2560036.72
B-237	48+79.51	49.20 RT	628.39	265681.29	2560036.68
B-238	48+78.38	47.06 RT	628.40	265679.34	2560035.25
B-239	48+73.22	37.86 RT	628.45	265670.66	2560029.24
B-240	48+63.47	26.25 RT	628.53	265656.81	2560023.08
B-241	48+77.84	25.50 RT	629.01	265669.40	2560016.11
B-242	48+78.35	25.50 RT	628.51	265669.86	2560015.88
B-243	48+83.42	25.50 RT	628.59	265674.42	2560013.66
B-244	48+83.93	25.50 RT	629.09	265674.87	2560013.44
B-245	48+87.46	36.81 RT	628.94	265683.00	2560022.05
B-246	48+87.25	37.27 RT	628.43	265683.02	2560022.56
B-247	48+85.19	41.86 RT	628.40	265683.18	2560027.59
B-248	48+84.99	42.32 RT	628.89	265683.20	2560028.10
B-249	48+76.96	38.99 RT	628.85	265674.52	2560028.61
B-250	48+76.66	38.58 RT	628.35	265674.08	2560028.38
B-251	48+73.86	34.44 RT	628.39	265669.74	2560025.88
B-252	48+73.57	34.03 RT	628.89	265669.30	2560025.65
B-253	48+76.94	30.69 RT	629.10	265670.87	2560021.17
B-254	48+75.96	32.28 RT	629.06	265670.68	2560023.03
B-255	48+82.93	31.30 RT	629.19	265676.52	2560019.09
B-256	48+83.84	34.87 RT	628.71	265678.90	2560021.90
B-257	48+79.13	38.59 RT	629.10	265676.30	2560027.31
B-258	48+77.43	30.78 RT	628.54	265671.35	2560021.03
B-259	48+75.88	32.96 RT	628.56	265670.91	2560023.67
B-260	48+83.27	26.35 RT	628.59	265674.66	2560014.49
B-261	48+82.40	31.42 RT	628.60	265676.10	2560019.43
B-262	48+83.44	35.17 RT	628.53	265678.68	2560022.35
B-263	48+85.33	36.64 RT	628.46	265681.01	2560022.84
B-264	48+76.82	38.47 RT	628.36	265674.16	2560028.22
B-265	48+77.46	38.00 RT	628.41	265674.54	2560027.51
B-266	48+79.52	38.28 RT	628.50	265676.51	2560026.86
B-267	48+83.30	41.21 RT	628.43	265681.19	2560027.83

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 9. ISLAND FLANGE ELEVATIONS ARE ALL 3"/0.25' ABOVE THE ADJACENT CONCRETE PAVEMENT.

LEGEND

#

CURB RAMP TYPE

RES

RESTORATION (SEE NOTES)

SW5

CONCRETE SIDEWALK 5-INCH

PED

CONCRETE CURB PEDESTRIAN

LL

LEVEL LANDING

P6

6:1 PAVED FLARE (NON-WALKABLE SURFACE)

P10

10:1 MAX PAVED FLARE (WALKABLE SURFACE)

XX
YYY.YY

POINT NUMBER & ELEVATION



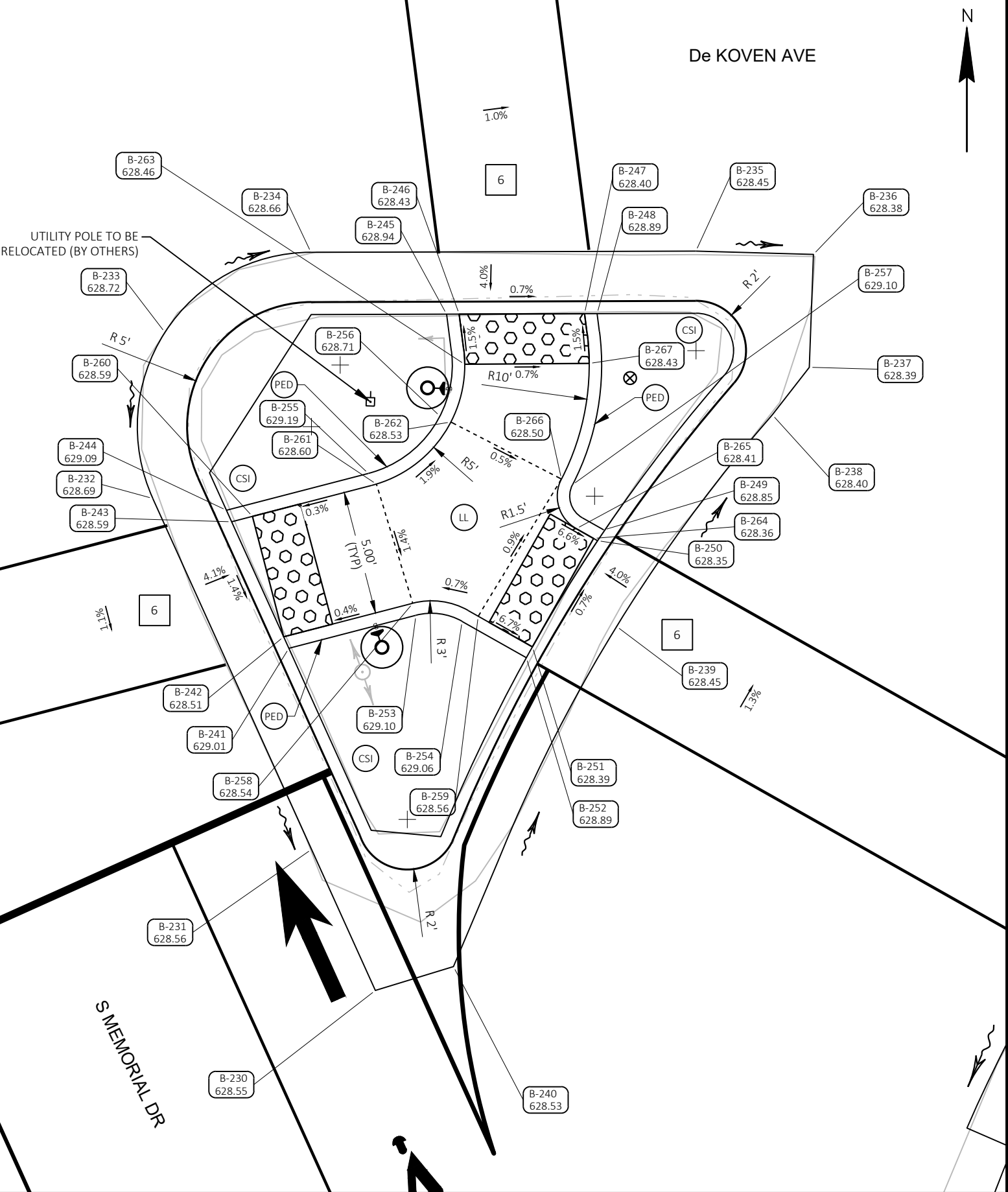
DETECTABLE WARNING FIELD
(5'X2' TYP, UNLESS OTHERWISE INDICATED)

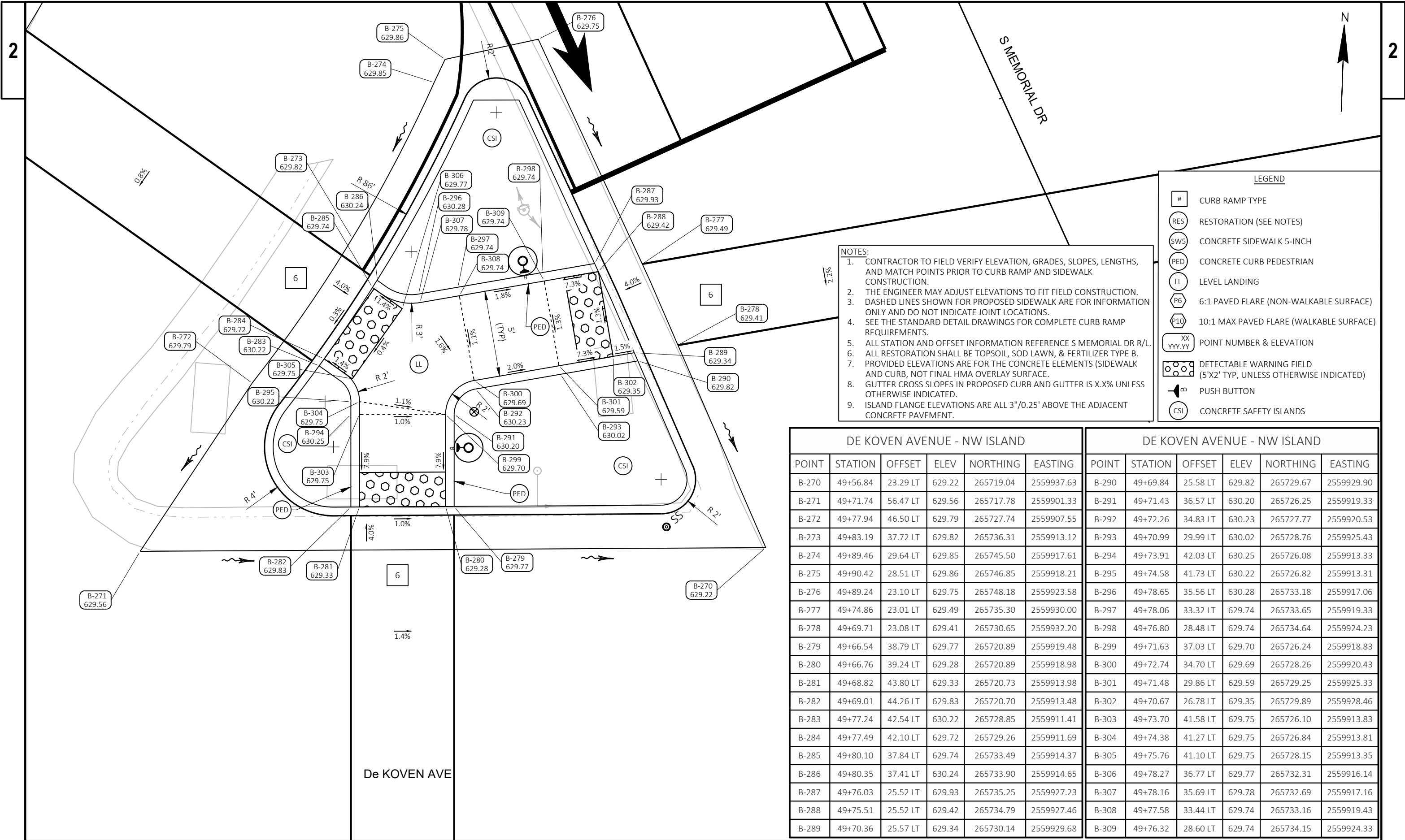


PUSH BUTTON

CSI

CONCRETE SAFETY ISLANDS

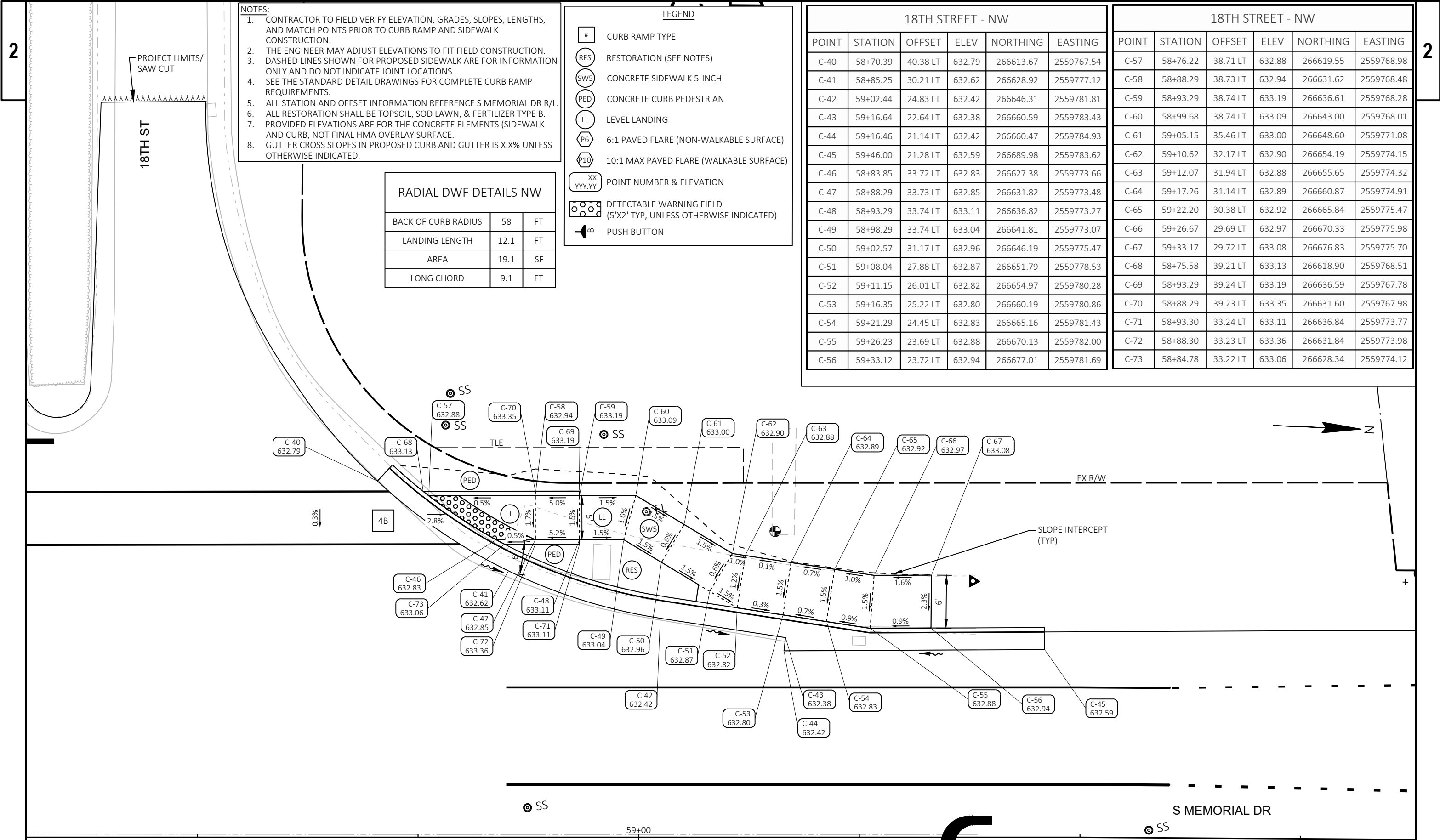




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LEGEND	
#	CURB RAMP TYPE
RES	RESTORATION (SEE NOTES)
SW5	CONCRETE SIDEWALK 5-INCH
PED	CONCRETE CURB PEDESTRIAN
LL	LEVEL LANDING
P6	6:1 PAVED FLARE (NON-WALKABLE SURFACE)
P10	10:1 MAX PAVED FLARE (WALKABLE SURFACE)
XX YYY.YY	POINT NUMBER & ELEVATION
	DETECTABLE WARNING FIELD (5'X2' TYP, UNLESS OTHERWISE INDICATED)
	PUSH BUTTON
CSI	CONCRETE SAFETY ISLANDS

DE KOVEN AVENUE - NW ISLAND						DE KOVEN AVENUE - NW ISLAND					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING	POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
B-270	49+56.84	23.29 LT	629.22	265719.04	2559937.63	B-290	49+69.84	25.58 LT	629.82	265729.67	2559929.90
B-271	49+71.74	56.47 LT	629.56	265717.78	2559901.33	B-291	49+71.43	36.57 LT	630.20	265726.25	2559919.33
B-272	49+77.94	46.50 LT	629.79	265727.74	2559907.55	B-292	49+72.26	34.83 LT	630.23	265727.77	2559920.53
B-273	49+83.19	37.72 LT	629.82	265736.31	2559913.12	B-293	49+70.99	29.99 LT	630.02	265728.76	2559925.43
B-274	49+89.46	29.64 LT	629.85	265745.50	2559917.61	B-294	49+73.91	42.03 LT	630.25	265726.08	2559913.33
B-275	49+90.42	28.51 LT	629.86	265746.85	2559918.21	B-295	49+74.58	41.73 LT	630.22	265726.82	2559913.31
B-276	49+89.24	23.10 LT	629.75	265748.18	2559923.58	B-296	49+78.65	35.56 LT	630.28	265733.18	2559917.06
B-277	49+74.86	23.01 LT	629.49	265735.30	2559930.00	B-297	49+78.06	33.32 LT	629.74	265733.65	2559919.33
B-278	49+69.71	23.08 LT	629.41	265730.65	2559932.20	B-298	49+76.80	28.48 LT	629.74	265734.64	2559924.23
B-279	49+66.54	38.79 LT	629.77	265720.89	2559919.48	B-299	49+71.63	37.03 LT	629.70	265726.24	2559918.83
B-280	49+66.76	39.24 LT	629.28	265720.89	2559918.98	B-300	49+72.74	34.70 LT	629.69	265728.26	2559920.43
B-281	49+68.82	43.80 LT	629.33	265720.73	2559913.98	B-301	49+71.48	29.86 LT	629.59	265729.25	2559925.33
B-282	49+69.01	44.26 LT	629.83	265720.70	2559913.48	B-302	49+70.67	26.78 LT	629.35	265729.89	2559928.46
B-283	49+77.24	42.54 LT	630.22	265728.85	2559911.41	B-303	49+73.70	41.58 LT	629.75	265726.10	2559913.83
B-284	49+77.49	42.10 LT	629.72	265729.26	2559911.69	B-304	49+74.38	41.27 LT	629.75	265726.84	2559913.81
B-285	49+80.10	37.84 LT	629.74	265733.49	2559914.37	B-305	49+75.76	41.10 LT	629.75	265728.15	2559913.35
B-286	49+80.35	37.41 LT	630.24	265733.90	2559914.65	B-306	49+78.27	36.77 LT	629.77	265732.31	2559916.14
B-287	49+76.03	25.52 LT	629.93	265735.25	2559927.23	B-307	49+78.16	35.69 LT	629.78	265732.69	2559917.16
B-288	49+75.51	25.52 LT	629.42	265734.79	2559927.46	B-308	49+77.58	33.44 LT	629.74	265733.16	2559919.43
B-289	49+70.36	25.57 LT	629.34	265730.14	2559929.68	B-309	49+76.32	28.60 LT	629.74	265734.15	2559924.33



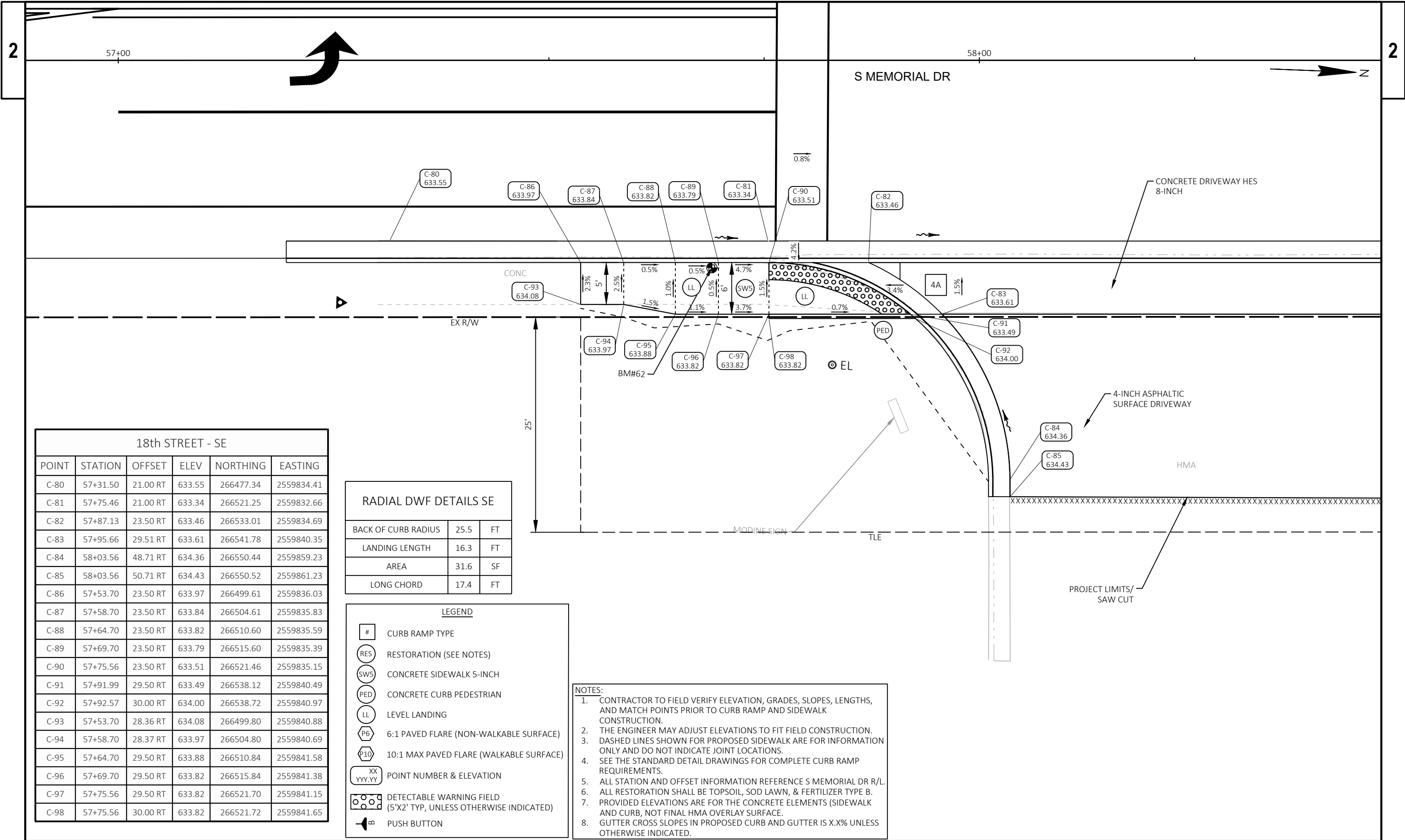
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RADIAL DWF DETAILS NW			
BACK OF CURB RADIUS	58	FT	
LANDING LENGTH	12.1	FT	
AREA	19.1	SF	
LONG CHORD	9.1	FT	

- LEGEND
- # CURB RAMP TYPE
 - RES RESTORATION (SEE NOTES)
 - SW5 CONCRETE SIDEWALK 5-INCH
 - PED CONCRETE CURB PEDESTRIAN
 - LL LEVEL LANDING
 - P6 6:1 PAVED FLARE (NON-WALKABLE SURFACE)
 - P10 10:1 MAX PAVED FLARE (WALKABLE SURFACE)
 - XX YY.YY POINT NUMBER & ELEVATION
 - DETECTABLE WARNING FIELD (5'X2' TYP, UNLESS OTHERWISE INDICATED)
 - PUSH BUTTON

18TH STREET - NW					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
C-40	58+70.39	40.38 LT	632.79	266613.67	2559767.54
C-41	58+85.25	30.21 LT	632.62	266628.92	2559777.12
C-42	59+02.44	24.83 LT	632.42	266646.31	2559781.81
C-43	59+16.64	22.64 LT	632.38	266660.59	2559783.43
C-44	59+16.46	21.14 LT	632.42	266660.47	2559784.93
C-45	59+46.00	21.28 LT	632.59	266689.98	2559783.62
C-46	58+83.85	33.72 LT	632.83	266627.38	2559773.66
C-47	58+88.29	33.73 LT	632.85	266631.82	2559773.48
C-48	58+93.29	33.74 LT	633.11	266636.82	2559773.27
C-49	58+98.29	33.74 LT	633.04	266641.81	2559773.07
C-50	59+02.57	31.17 LT	632.96	266646.19	2559775.47
C-51	59+08.04	27.88 LT	632.87	266651.79	2559778.53
C-52	59+11.15	26.01 LT	632.82	266654.97	2559780.28
C-53	59+16.35	25.22 LT	632.80	266660.19	2559780.86
C-54	59+21.29	24.45 LT	632.83	266665.16	2559781.43
C-55	59+26.23	23.69 LT	632.88	266670.13	2559782.00
C-56	59+33.12	23.72 LT	632.94	266677.01	2559781.69

18TH STREET - NW					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
C-57	58+76.22	38.71 LT	632.88	266619.55	2559768.98
C-58	58+88.29	38.73 LT	632.94	266631.62	2559768.48
C-59	58+93.29	38.74 LT	633.19	266636.61	2559768.28
C-60	58+99.68	38.74 LT	633.09	266643.00	2559768.01
C-61	59+05.15	35.46 LT	633.00	266648.60	2559771.08
C-62	59+10.62	32.17 LT	632.90	266654.19	2559774.15
C-63	59+12.07	31.94 LT	632.88	266655.65	2559774.32
C-64	59+17.26	31.14 LT	632.89	266660.87	2559774.91
C-65	59+22.20	30.38 LT	632.92	266665.84	2559775.47
C-66	59+26.67	29.69 LT	632.97	266670.33	2559775.98
C-67	59+33.17	29.72 LT	633.08	266676.83	2559775.70
C-68	58+75.58	39.21 LT	633.13	266618.90	2559768.51
C-69	58+93.29	39.24 LT	633.19	266636.59	2559767.78
C-70	58+88.29	39.23 LT	633.35	266631.60	2559767.98
C-71	58+93.30	33.24 LT	633.11	266636.84	2559773.77
C-72	58+88.30	33.23 LT	633.36	266631.84	2559773.98
C-73	58+84.78	33.22 LT	633.06	266628.34	2559774.12



18th STREET - SE					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
C-80	57+31.50	21.00 RT	633.55	266477.34	2559834.41
C-81	57+75.46	21.00 RT	633.34	266521.25	2559832.66
C-82	57+87.13	23.50 RT	633.46	266533.01	2559834.69
C-83	57+95.66	29.51 RT	633.61	266541.78	2559840.35
C-84	58+03.56	48.71 RT	634.36	266550.44	2559859.23
C-85	58+03.56	50.71 RT	634.43	266550.52	2559861.23
C-86	57+53.70	23.50 RT	633.97	266499.61	2559836.03
C-87	57+58.70	23.50 RT	633.84	266504.61	2559835.83
C-88	57+64.70	23.50 RT	633.82	266510.60	2559835.59
C-89	57+69.70	23.50 RT	633.79	266515.60	2559835.39
C-90	57+75.56	23.50 RT	633.51	266521.46	2559835.15
C-91	57+91.99	29.50 RT	633.49	266538.12	2559840.49
C-92	57+92.57	30.00 RT	634.00	266538.72	2559840.97
C-93	57+53.70	28.36 RT	634.08	266499.80	2559840.88
C-94	57+58.70	28.37 RT	633.97	266504.80	2559840.69
C-95	57+64.70	29.50 RT	633.88	266510.84	2559841.58
C-96	57+69.70	29.50 RT	633.82	266515.84	2559841.38
C-97	57+75.56	29.50 RT	633.82	266521.70	2559841.15
C-98	57+75.56	30.00 RT	633.82	266521.72	2559841.65

RADIAL DWF DETAILS SE		
BACK OF CURB RADIUS	25.5	FT
LANDING LENGTH	16.3	FT
AREA	31.6	SF
LONG CHORD	17.4	FT

LEGEND

#

CURB RAMP TYPE

RES

RESTORATION (SEE NOTES)

SW5

CONCRETE SIDEWALK 5-INCH

PED

CONCRETE CURB PEDESTRIAN

LL

LEVEL LANDING

P6

6:1 PAVED FLARE (NON-WALKABLE SURFACE)

P10

10:1 MAX PAVED FLARE (WALKABLE SURFACE)

XX
YY.YY

POINT NUMBER & ELEVATION

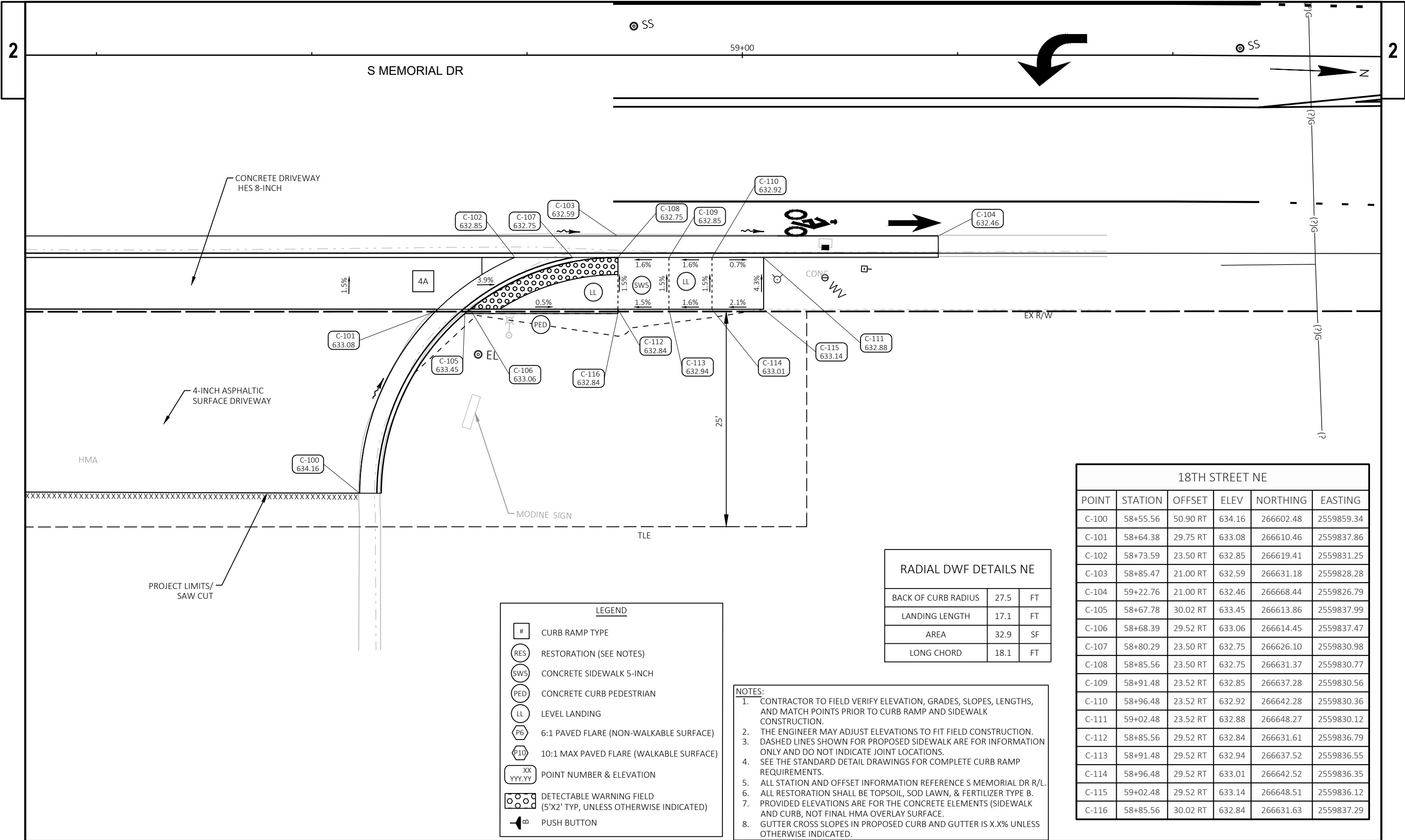
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DETECTABLE WARNING FIELD
(5'X2' TYP, UNLESS OTHERWISE INDICATED)

PB

PUSH BUTTON

- NOTES:
- CONTRACTOR TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS, AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION.
 - THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION.
 - DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOINT LOCATIONS.
 - SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
 - ALL STATION AND OFFSET INFORMATION REFERENCE S MEMORIAL DR R/L.
 - ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, & FERTILIZER TYPE B.
 - PROVIDED ELEVATIONS ARE FOR THE CONCRETE ELEMENTS (SIDEWALK AND CURB, NOT FINAL HMA OVERLAY SURFACE.
 - GUTTER CROSS SLOPES IN PROPOSED CURB AND GUTTER IS X.X% UNLESS OTHERWISE INDICATED.



18TH STREET NE					
POINT	STATION	OFFSET	ELEV	NORTHING	EASTING
C-100	58+55.56	50.90 RT	634.16	266602.48	2559859.34
C-101	58+64.38	29.75 RT	633.08	266610.46	2559837.86
C-102	58+73.59	23.50 RT	632.85	266619.41	2559831.25
C-103	58+85.47	21.00 RT	632.59	266631.18	2559828.28
C-104	59+22.76	21.00 RT	632.46	266668.44	2559826.79
C-105	58+67.78	30.02 RT	633.45	266613.86	2559837.99
C-106	58+68.39	29.52 RT	633.06	266614.45	2559837.47
C-107	58+80.29	23.50 RT	632.75	266626.10	2559830.98
C-108	58+85.56	23.50 RT	632.75	266631.37	2559830.77
C-109	58+91.48	23.52 RT	632.85	266637.28	2559830.56
C-110	58+96.48	23.52 RT	632.92	266642.28	2559830.36
C-111	59+02.48	23.52 RT	632.88	266648.27	2559830.12
C-112	58+85.56	29.52 RT	632.84	266631.61	2559836.79
C-113	58+91.48	29.52 RT	632.94	266637.52	2559836.55
C-114	58+96.48	29.52 RT	633.01	266642.52	2559836.35
C-115	59+02.48	29.52 RT	633.14	266648.51	2559836.12
C-116	58+85.56	30.02 RT	632.84	266631.63	2559837.29

RADIAL DWF DETAILS NE		
BACK OF CURB RADIUS	27.5	FT
LANDING LENGTH	17.1	FT
AREA	32.9	SF
LONG CHORD	18.1	FT

LEGEND

#

CURB RAMP TYPE

RES

RESTORATION (SEE NOTES)

SW5

CONCRETE SIDEWALK 5-INCH

PED

CONCRETE CURB PEDESTRIAN

LL

LEVEL LANDING

P6

6:1 PAVED FLARE (NON-WALKABLE SURFACE)

P10

10:1 MAX PAVED FLARE (WALKABLE SURFACE)

XX
YYY.YY

POINT NUMBER & ELEVATION

DETECTABLE WARNING FIELD
(5'X2' TYP, UNLESS OTHERWISE INDICATED)

PUSH BUTTON

- NOTES:
1.

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

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

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

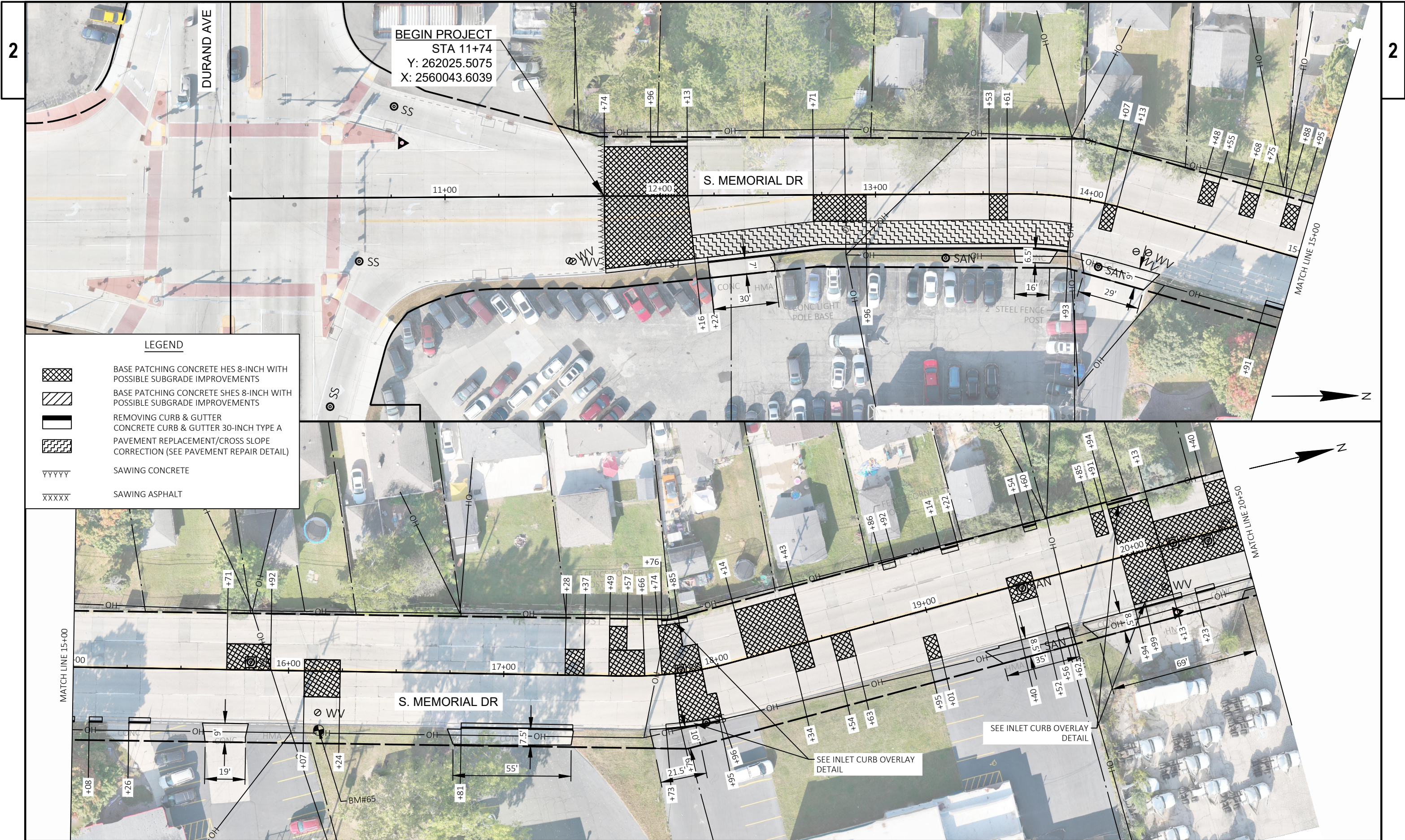
SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS.
5.

ALL STATION AND OFFSET INFORMATION REFERENCE S MEMORIAL DR R/L.
6.

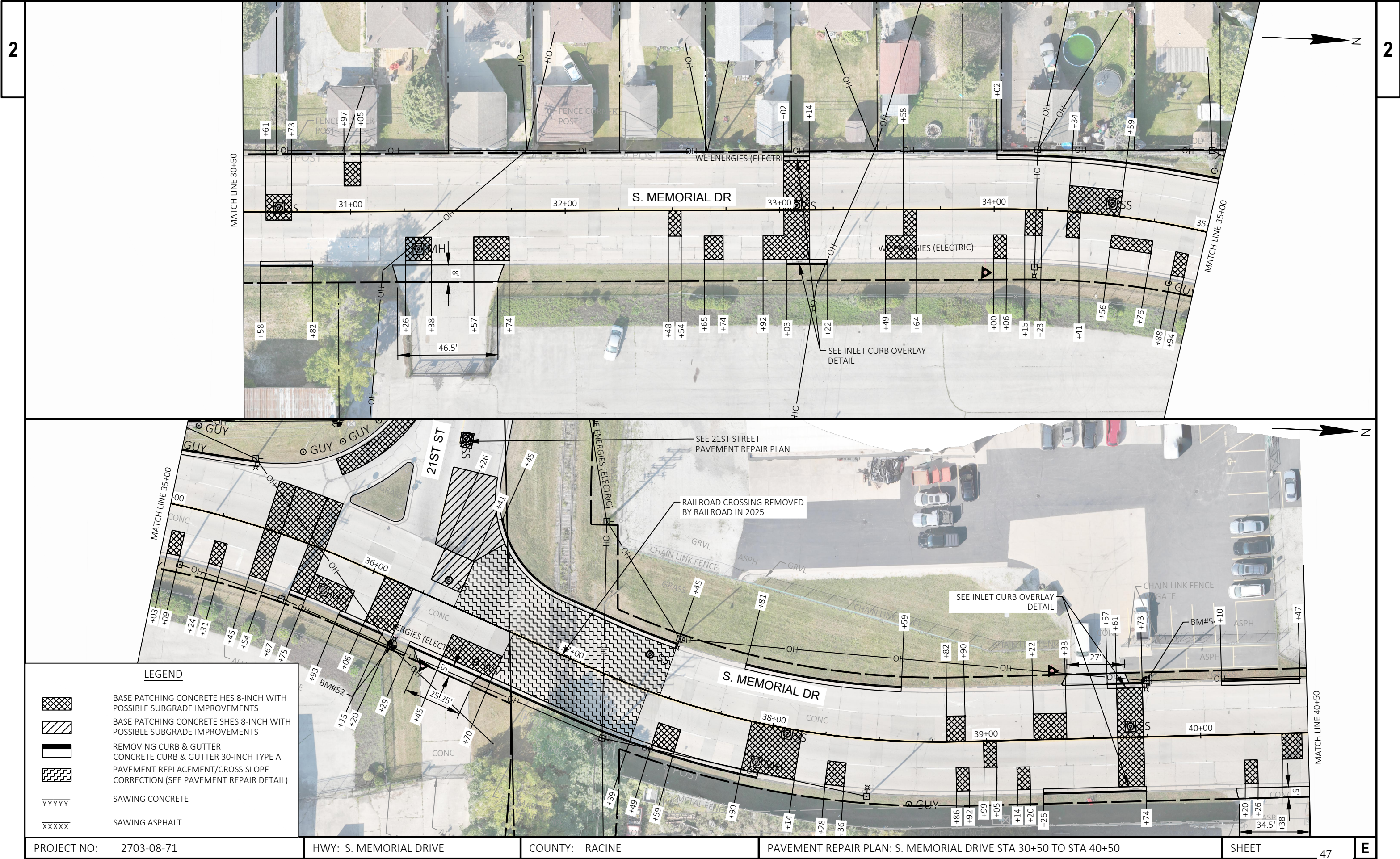
ALL RESTORATION SHALL BE TOPSOIL, SOD LAWN, & FERTILIZER TYPE B.
7.

PROVIDED ELEVATIONS ARE FOR THE CONCRETE ELEMENTS (SIDEWALK AND CURB, NOT FINAL HMA OVERLAY SURFACE.
8.

GUTTER CROSS SLOPES IN PROPOSED CURB AND GUTTER IS X.X% UNLESS OTHERWISE INDICATED.

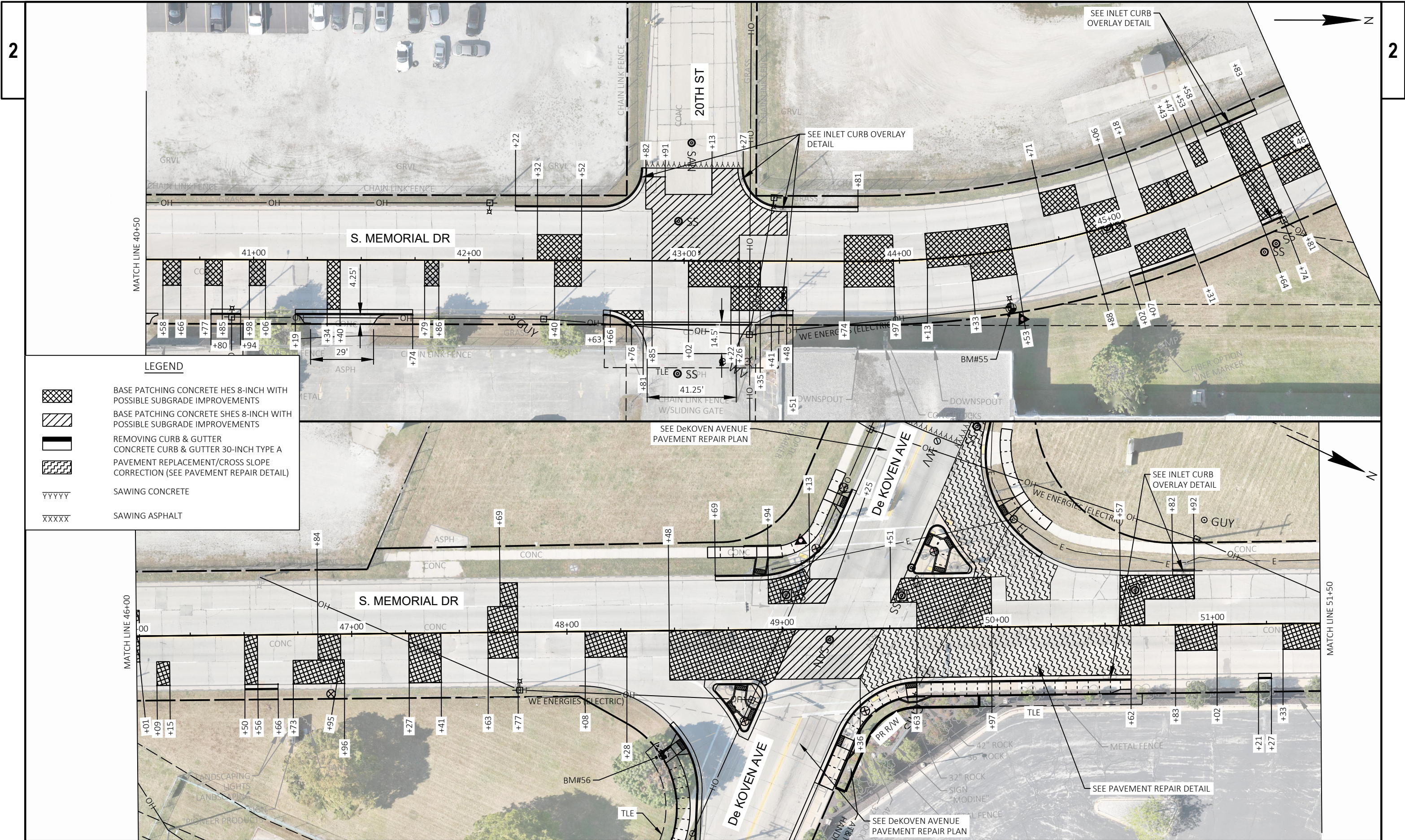


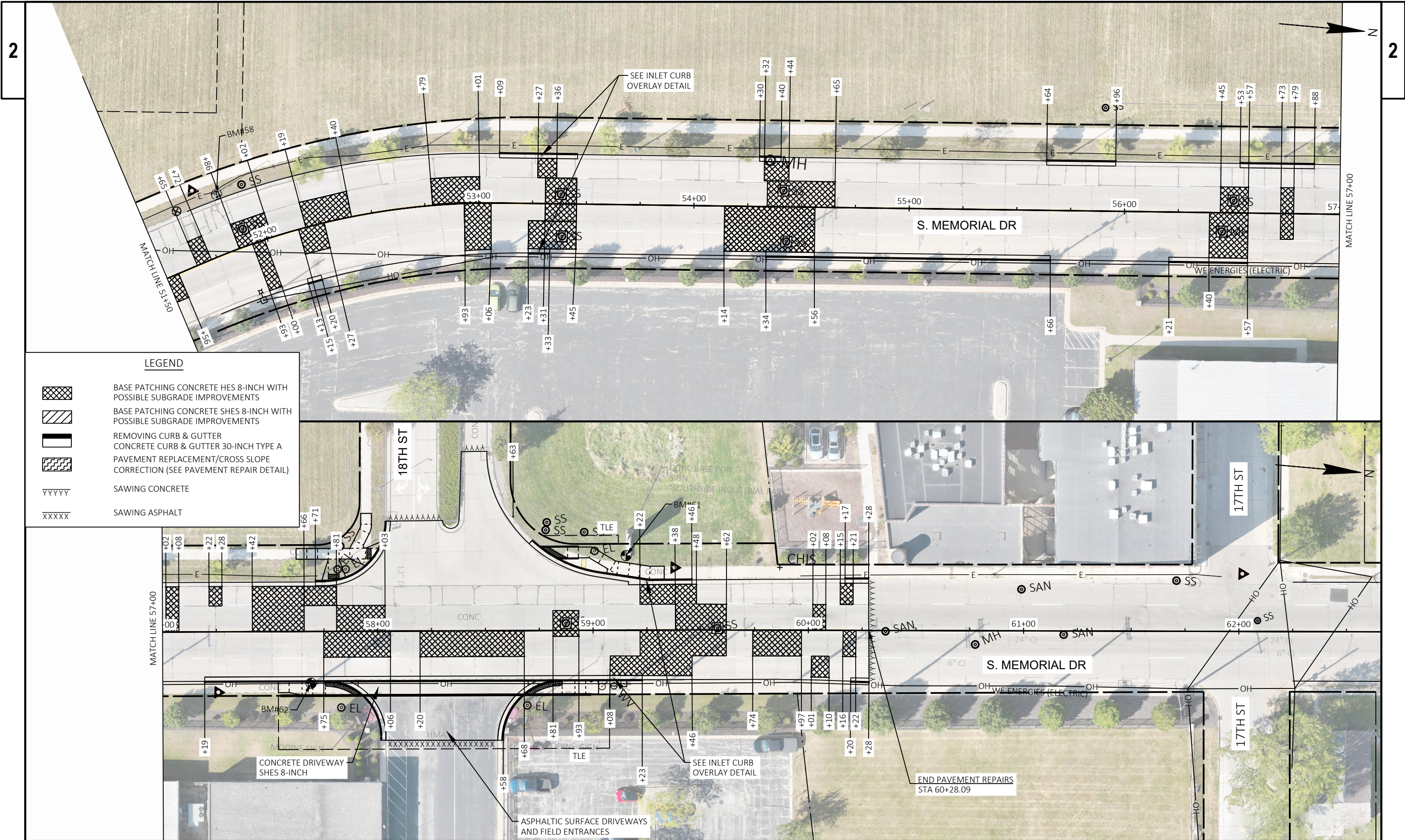


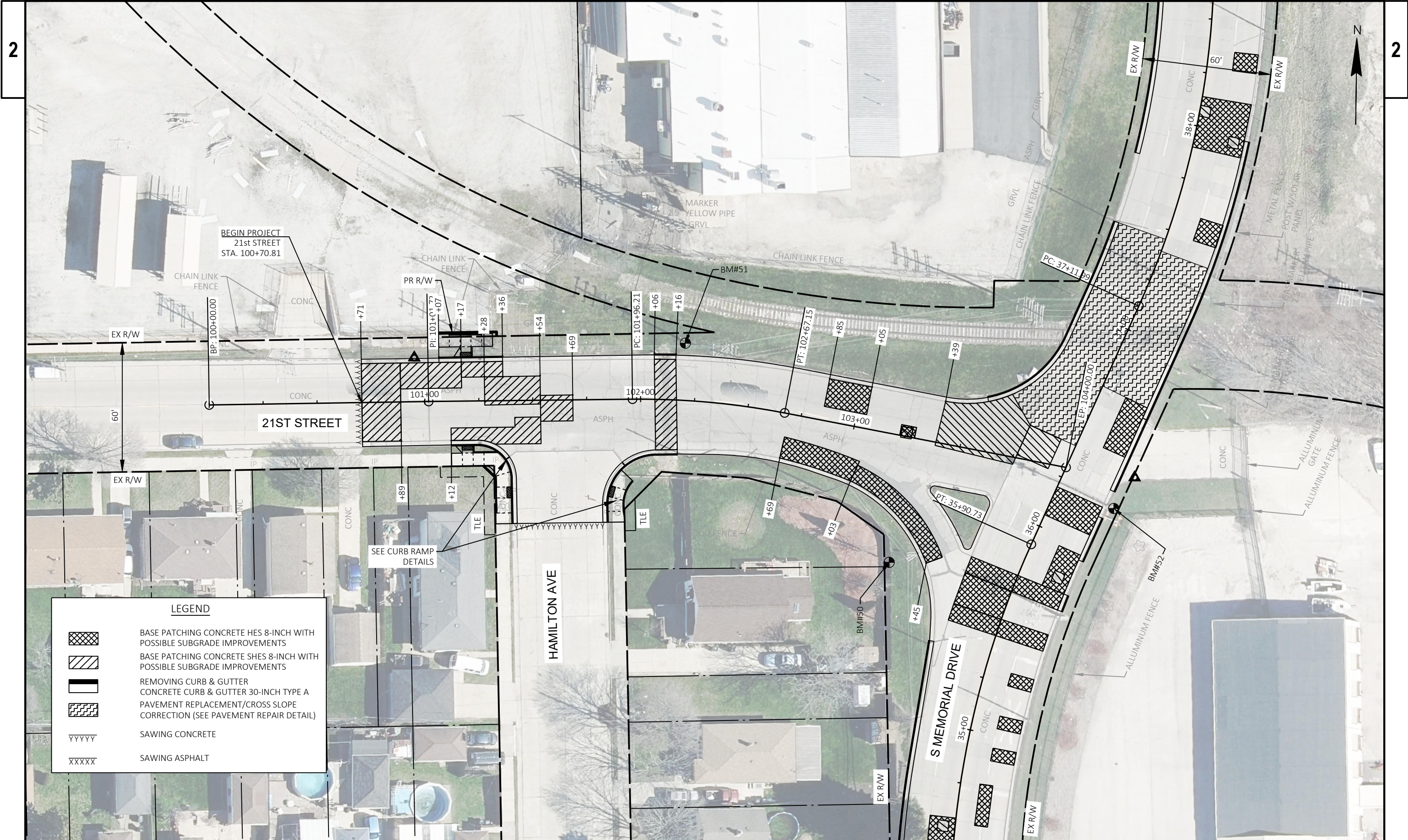


LEGEND

- BASE PATCHING CONCRETE HES 8-INCH WITH POSSIBLE SUBGRADE IMPROVEMENTS
- BASE PATCHING CONCRETE SHES 8-INCH WITH POSSIBLE SUBGRADE IMPROVEMENTS
- REMOVING CURB & GUTTER
CONCRETE CURB & GUTTER 30-INCH TYPE A
PAVEMENT REPLACEMENT/CROSS SLOPE CORRECTION (SEE PAVEMENT REPAIR DETAIL)
- SAWING CONCRETE
- SAWING ASPHALT

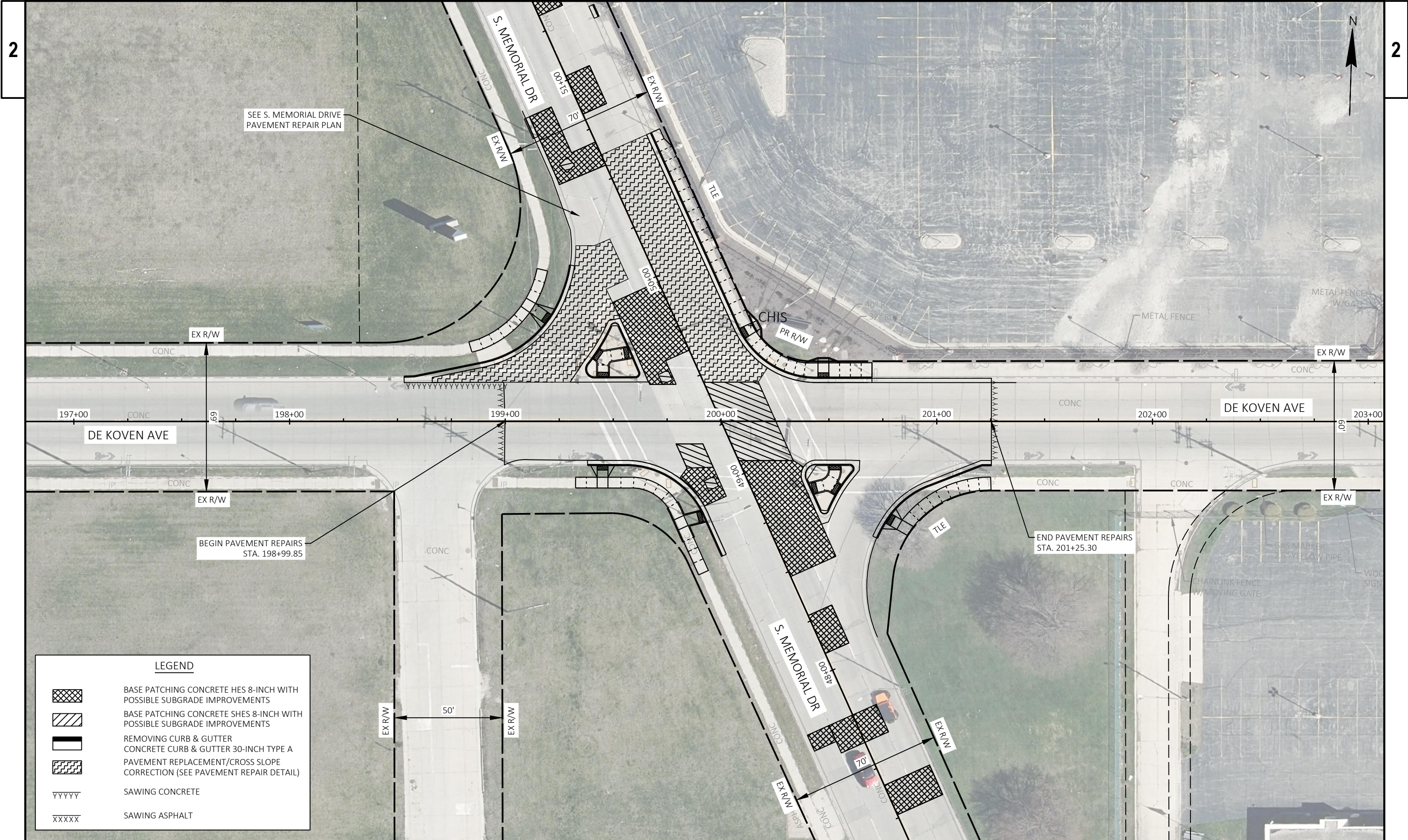






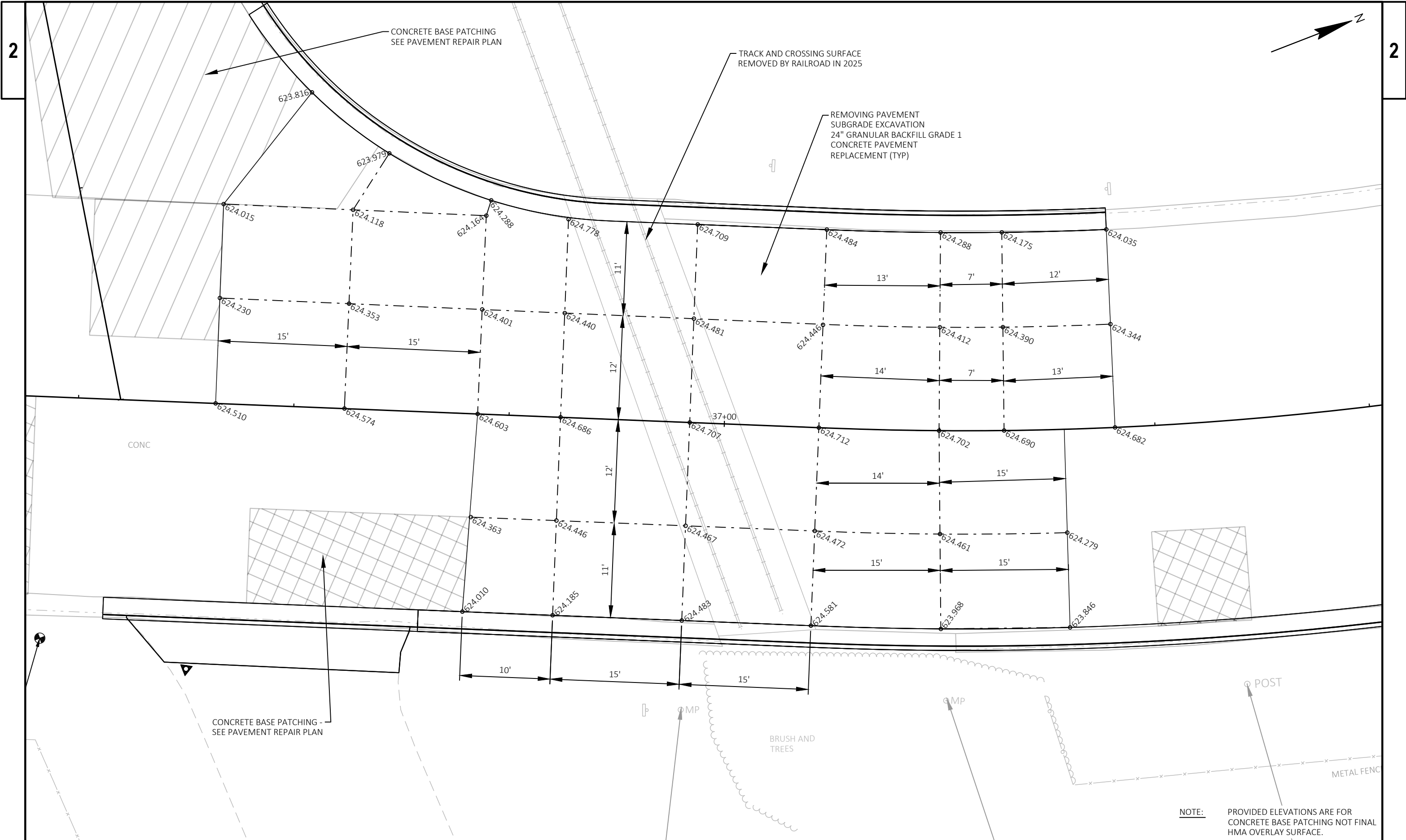
LEGEND

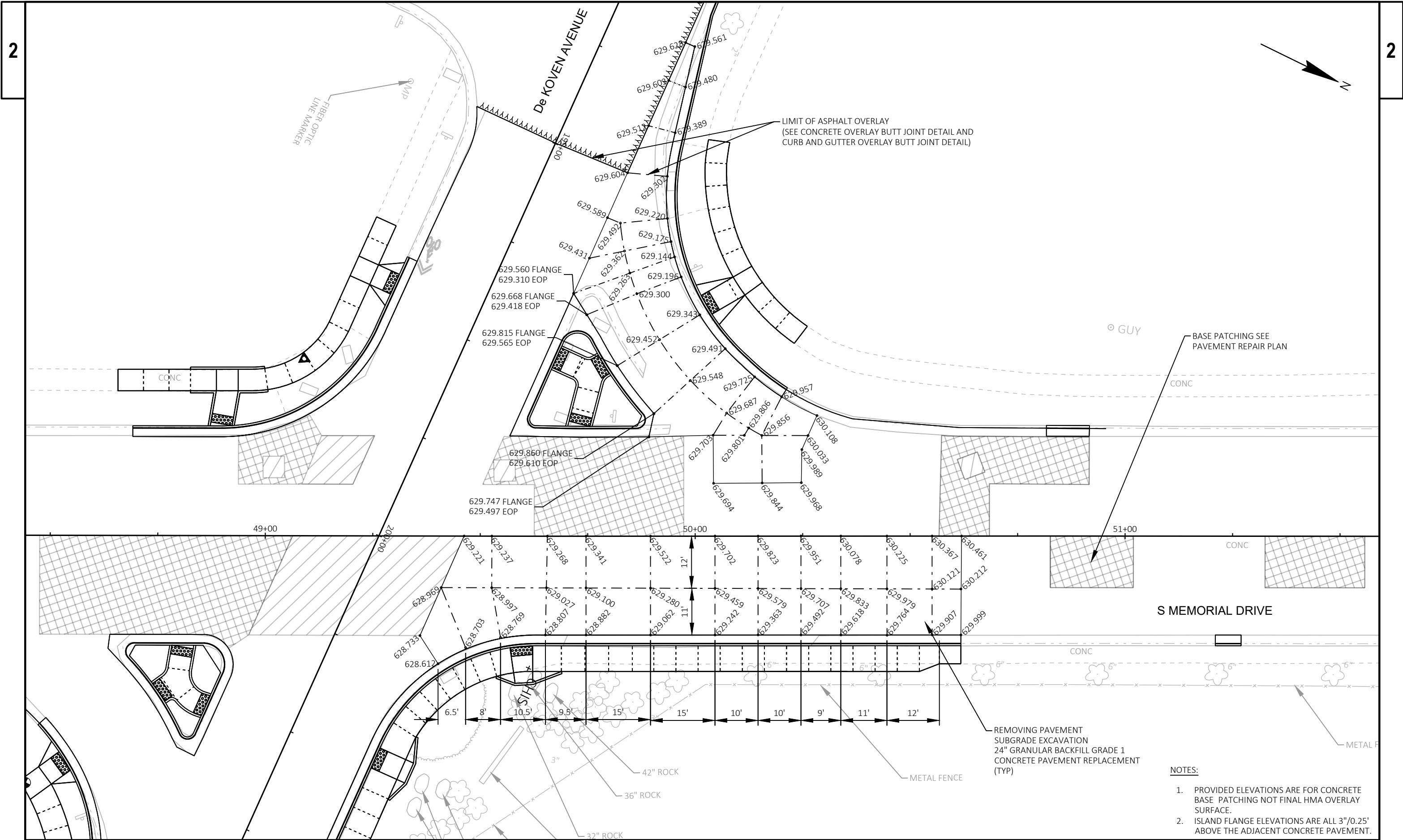
- BASE PATCHING CONCRETE HES 8-INCH WITH POSSIBLE SUBGRADE IMPROVEMENTS
- BASE PATCHING CONCRETE SHES 8-INCH WITH POSSIBLE SUBGRADE IMPROVEMENTS
- REMOVING CURB & GUTTER
- CONCRETE CURB & GUTTER 30-INCH TYPE A PAVEMENT REPLACEMENT/CROSS SLOPE CORRECTION (SEE PAVEMENT REPAIR DETAIL)
- SAWING CONCRETE
- SAWING ASPHALT

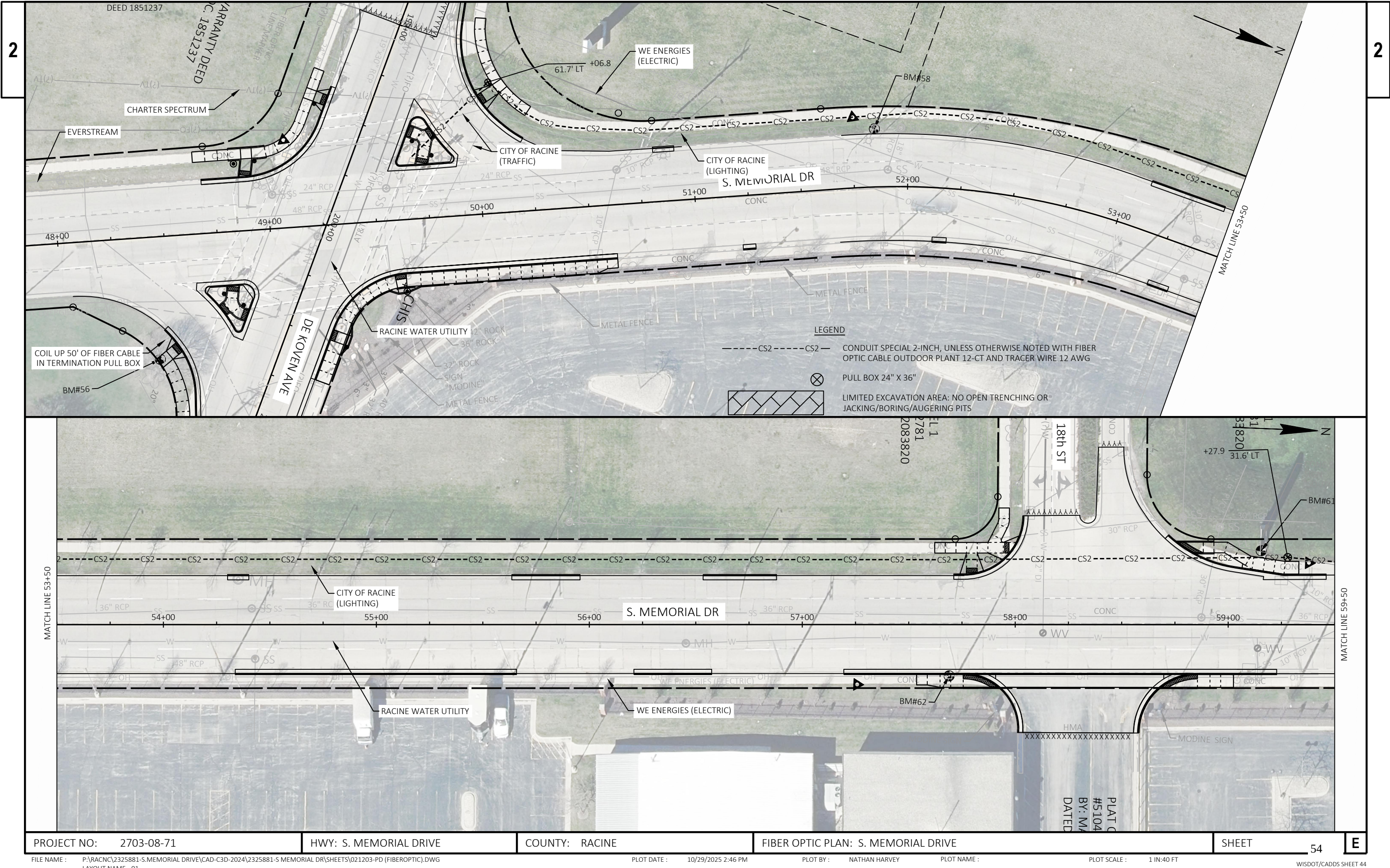


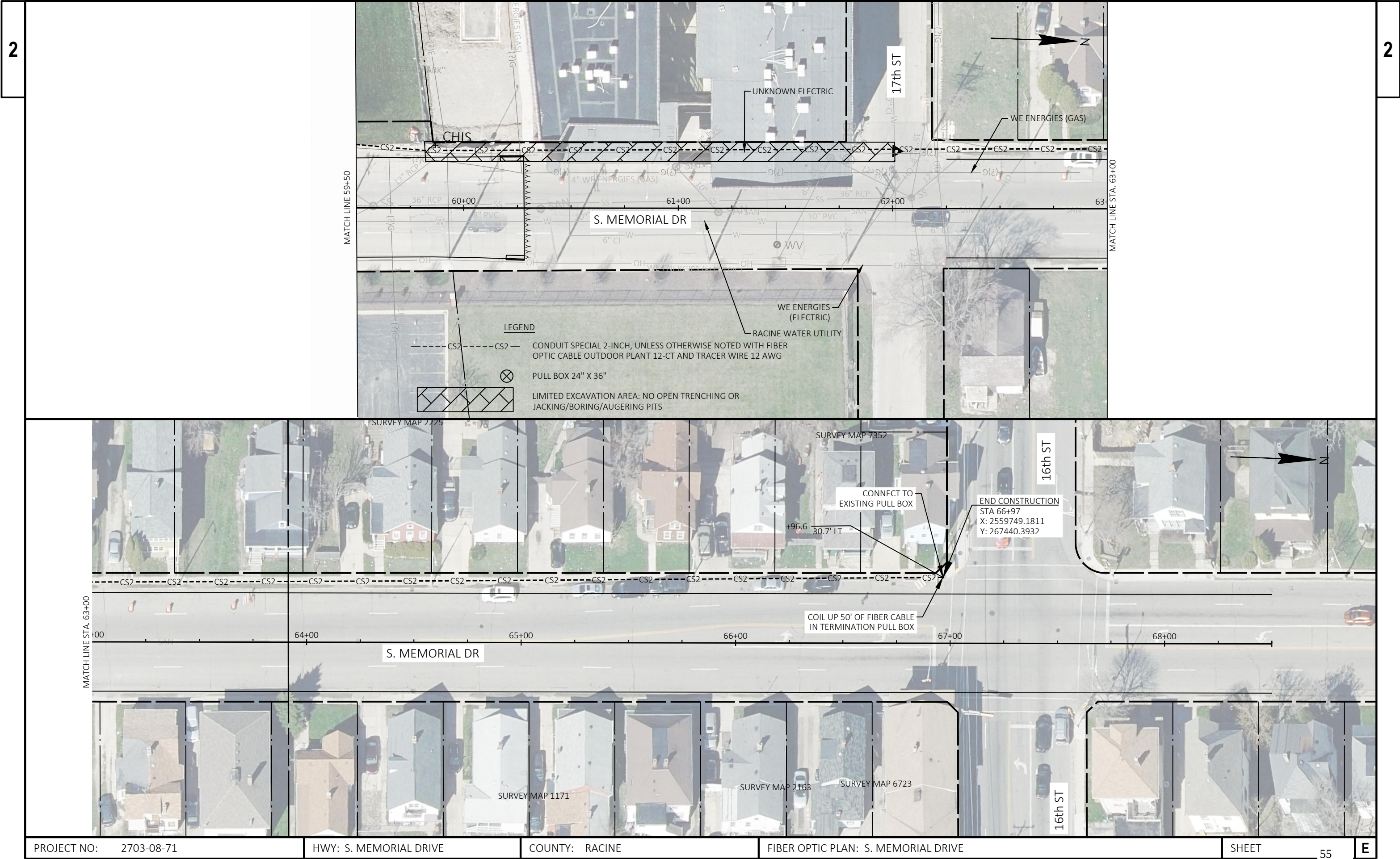
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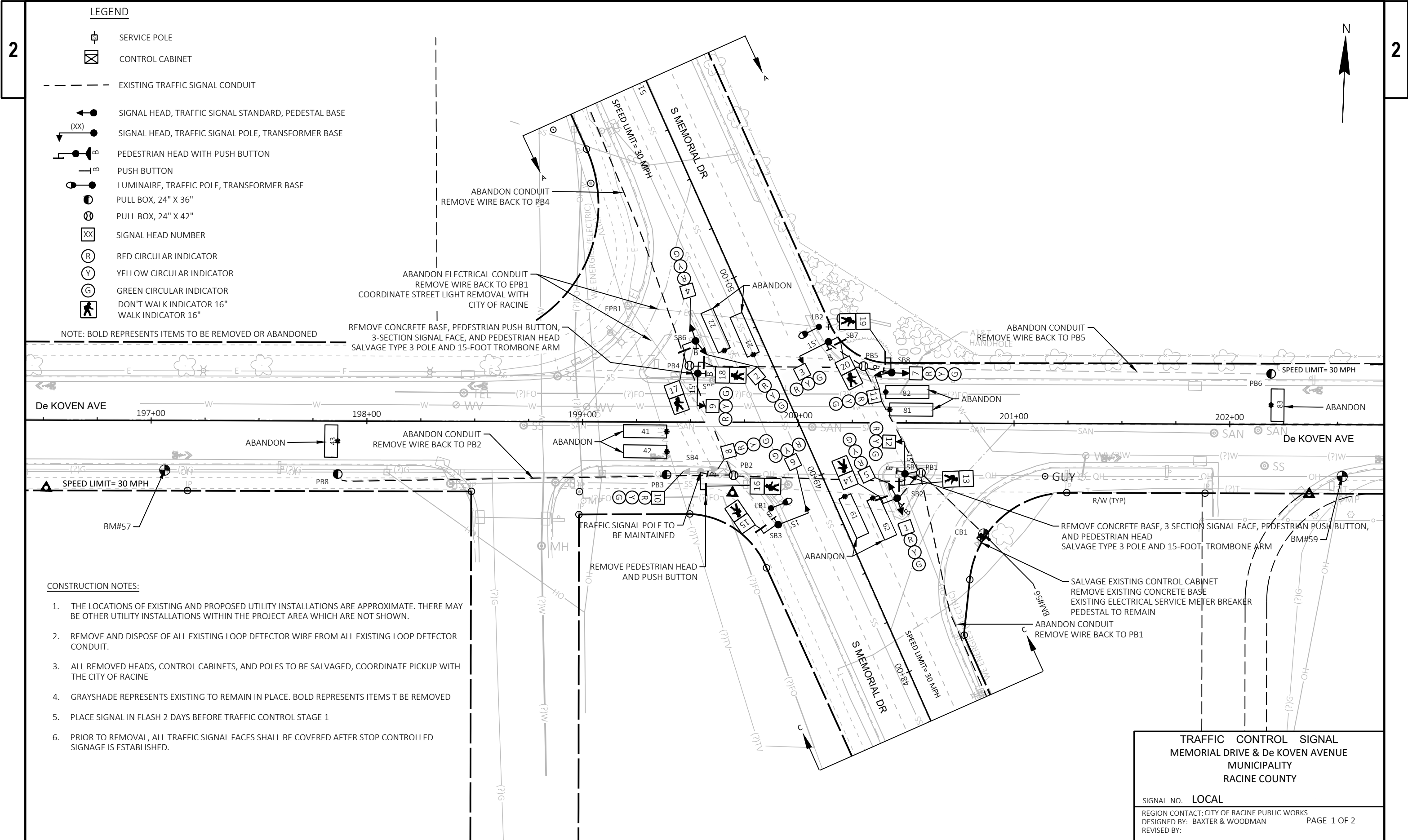
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LEGEND

- SERVICE POLE
- CONTROL CABINET
- EXISTING TRAFFIC SIGNAL CONDUIT
- SIGNAL HEAD, TRAFFIC SIGNAL STANDARD, PEDESTAL BASE
- SIGNAL HEAD, TRAFFIC SIGNAL POLE, TRANSFORMER BASE
- PEDESTRIAN HEAD WITH PUSH BUTTON
- PUSH BUTTON
- LUMINAIRE, TRAFFIC POLE, TRANSFORMER BASE
- PULL BOX, 24" X 36"
- PULL BOX, 24" X 42"
- SIGNAL HEAD NUMBER
- RED CIRCULAR INDICATOR
- YELLOW CIRCULAR INDICATOR
- GREEN CIRCULAR INDICATOR
- DON'T WALK INDICATOR 16"
- WALK INDICATOR 16"

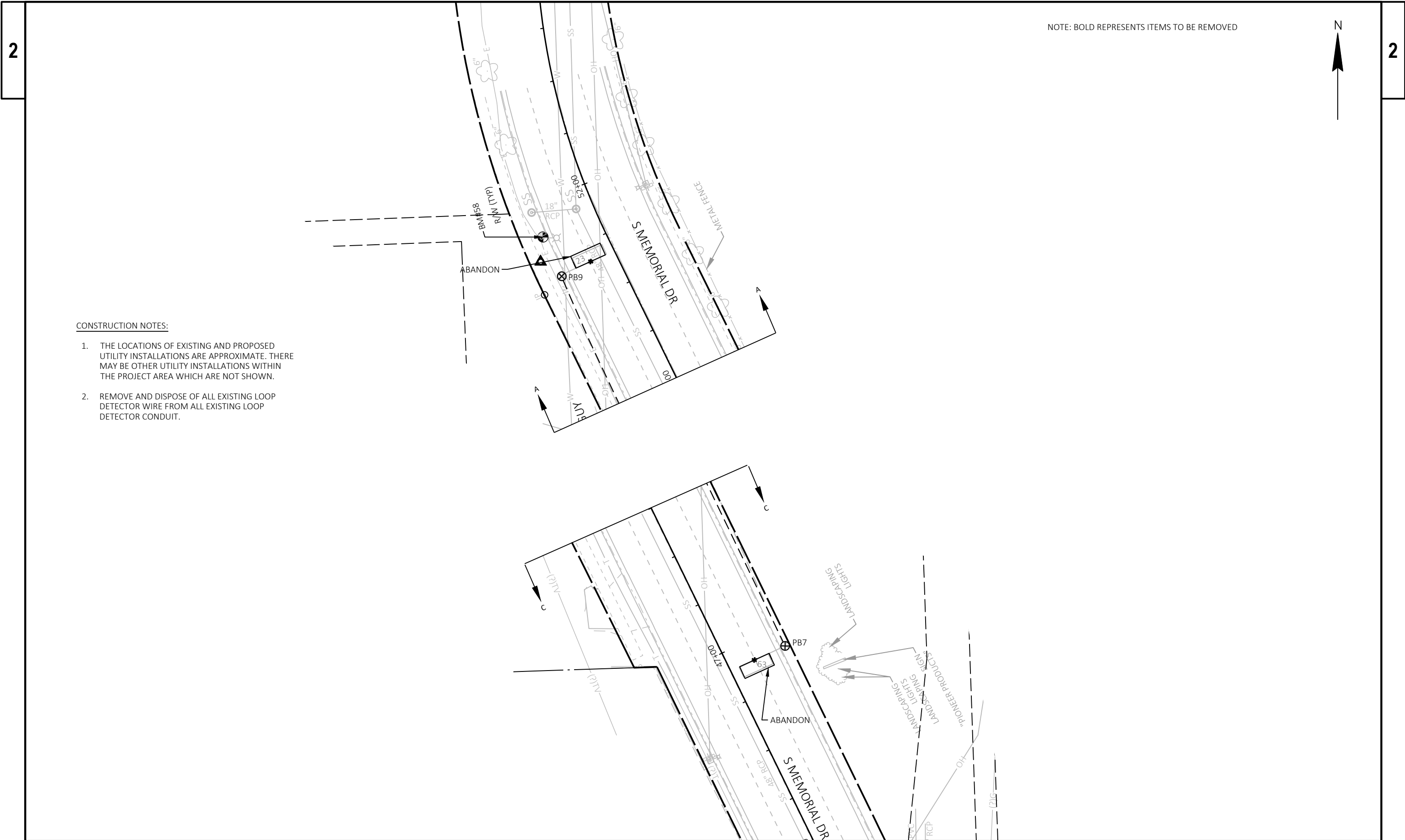
NOTE: BOLD REPRESENTS ITEMS TO BE REMOVED OR ABANDONED

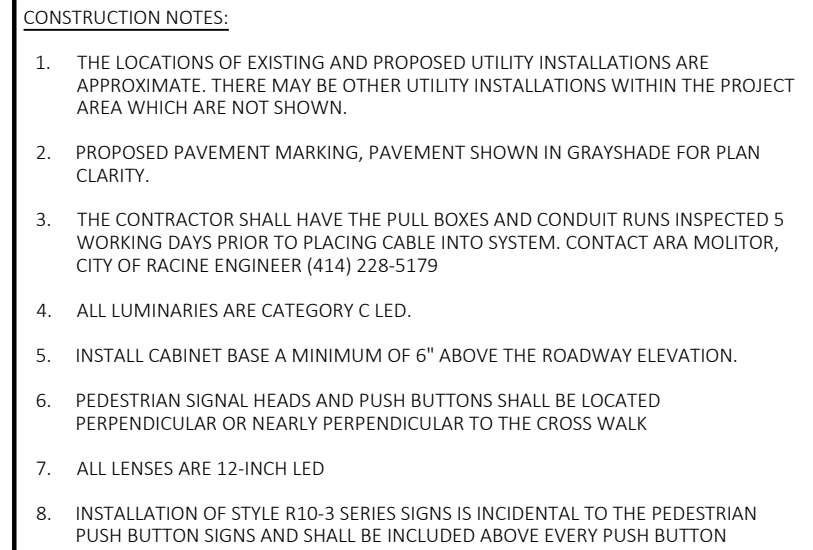
CONSTRUCTION NOTES:

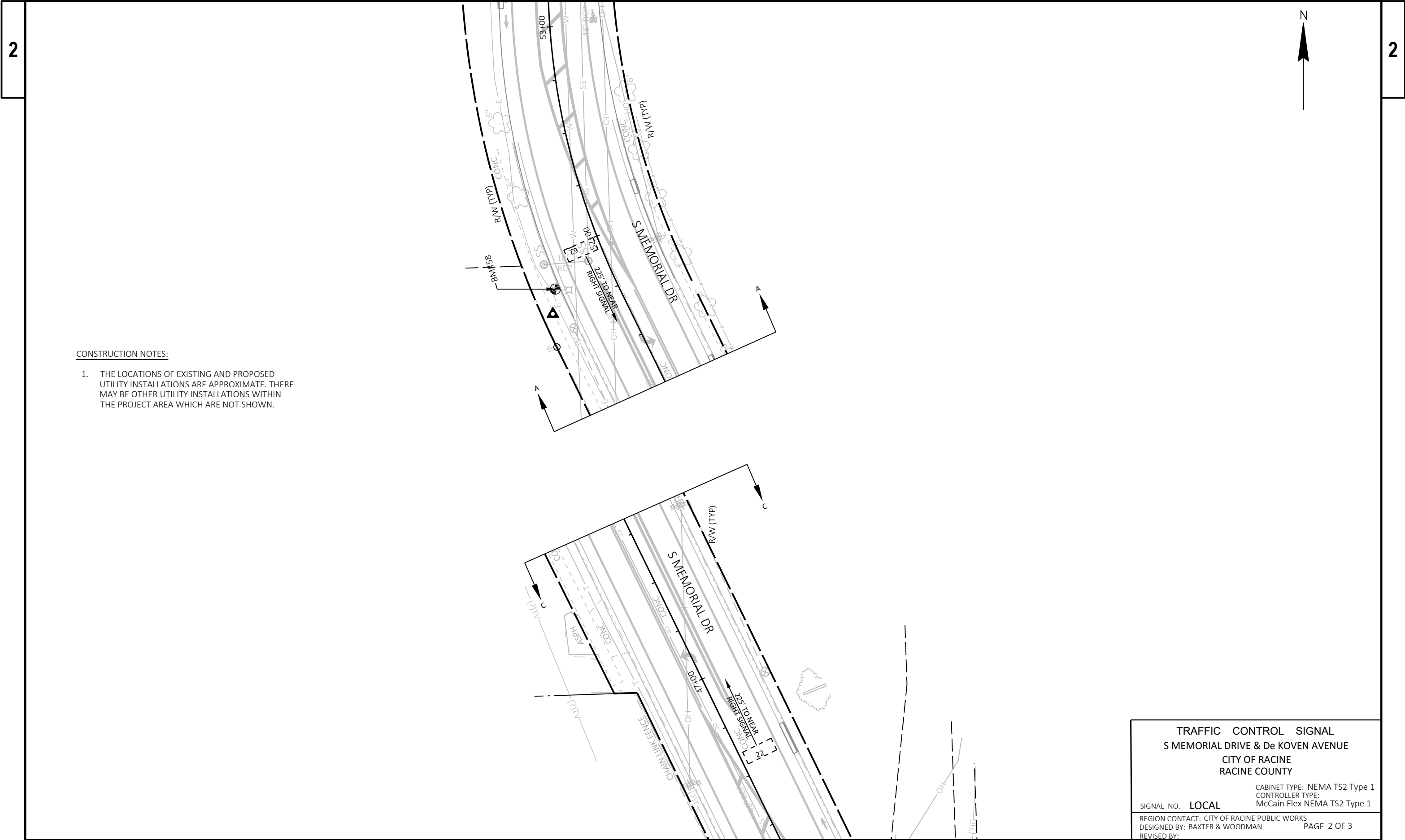
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.
- REMOVE AND DISPOSE OF ALL EXISTING LOOP DETECTOR WIRE FROM ALL EXISTING LOOP DETECTOR CONDUIT.
- ALL REMOVED HEADS, CONTROL CABINETS, AND POLES TO BE SALVAGED, COORDINATE PICKUP WITH THE CITY OF RACINE
- GRAYSHADE REPRESENTS EXISTING TO REMAIN IN PLACE. BOLD REPRESENTS ITEMS T BE REMOVED
- PLACE SIGNAL IN FLASH 2 DAYS BEFORE TRAFFIC CONTROL STAGE 1
- PRIOR TO REMOVAL, ALL TRAFFIC SIGNAL FACES SHALL BE COVERED AFTER STOP CONTROLLED SIGNAGE IS ESTABLISHED.

TRAFFIC CONTROL SIGNAL
MEMORIAL DRIVE & De KOVEN AVENUE
MUNICIPALITY
RACINE COUNTY

SIGNAL NO. LOCAL
REGION CONTACT: CITY OF RACINE PUBLIC WORKS
DESIGNED BY: BAXTER & WOODMAN
REVISED BY: PAGE 1 OF 2



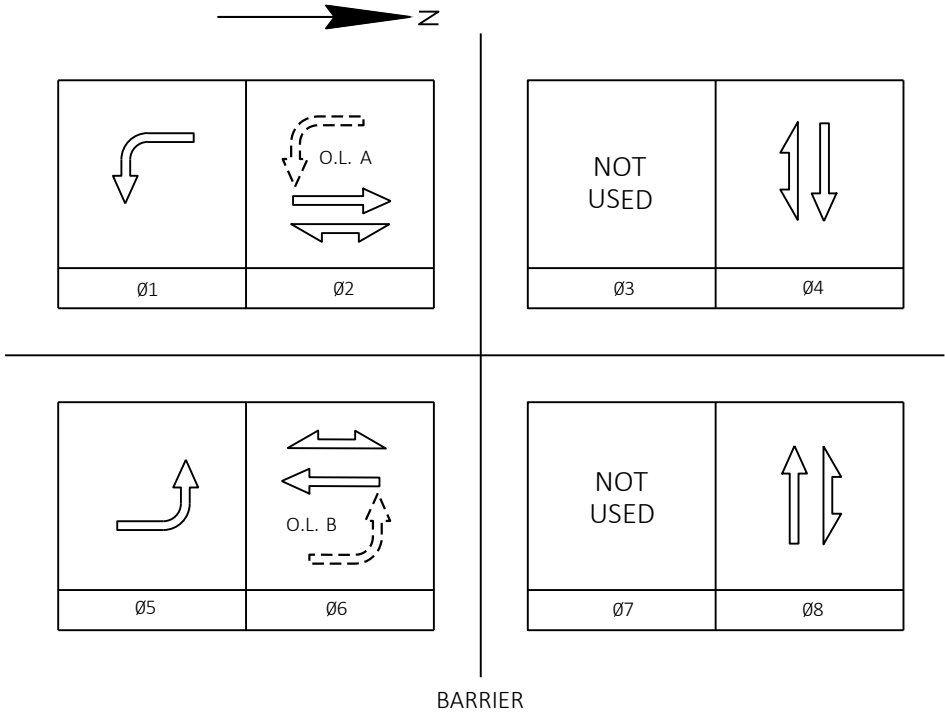




- CONSTRUCTION NOTES:
1. THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA WHICH ARE NOT SHOWN.

TRAFFIC CONTROL SIGNAL	
S MEMORIAL DRIVE & De KOVEN AVENUE	
CITY OF RACINE	
RACINE COUNTY	
CABINET TYPE: NEMA TS2 Type 1	
CONTROLLER TYPE:	
McCain Flex NEMA TS2 Type 1	
SIGNAL NO. LOCAL	
REGION CONTACT: CITY OF RACINE PUBLIC WORKS	
DESIGNED BY: BAXTER & WOODMAN	
REVISED BY:	
PAGE 2 OF 3	

	HEAD NUMBERS	F L A S H
Ø1	9,10	R
Ø2	1,2,3	R
.		
Ø4	14,15,16	R
Ø5	4,5	R
Ø6	6,7,8	R
.		
Ø8	11,12,13	R
.		
.		
Ø2 PED	23,24	
Ø4 PED	17,18	
Ø6 PED	19,20	
Ø8 PED	21,22	



CONTROLLER LOGIC				
PHASE NUMBER	PHASE LOCKING	DUAL ENTRY w /Ø	PHASE RECALL	PHASE ACTIVE
1		5		X
2	X	6	MIN	X
4		8		X
5		1		X
6	X	2	MIN	X
8		4		X

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

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

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

TYPE OF REMOTE COMMUNICATION	
NONE	
FIBER	X
CELL MODEM	
PHONE	

DETECTOR LOGIC

DETECTOR INPUT	3	1	7	5	11	9	15	13
DETECTOR #(S)	11	22	42	51	62	82		
ASSIGNED PHASE	1	2	4	5	6	8		
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH		
SWITCH	X		X	X		X		
EXTEND		X			X			
DELAY								

DETECTOR INPUT	19	17	23	21	27	25	31	29
DETECTOR #(S)								
ASSIGNED PHASE								
OPERATION MODE								
SWITCH								
EXTEND								
DELAY								

DETECTOR INPUT	4	2	8	6	12	10	16	14
DETECTOR #(S)	21	41	43	61	81	83		
ASSIGNED PHASE	1	2	4	5	6	8		
OPERATION MODE	VEH	VEH	VEH	VEH	VEH	VEH		
SWITCH	X	X		X	X			
EXTEND			X			X		
DELAY								

DETECTOR INPUT	20	18	24	22	28	26	32	30
DETECTOR #(S)								
ASSIGNED PHASE								
OPERATION MODE								
SWITCH								
EXTEND								
DELAY								

TRAFFIC CONTROL SIGNAL
S MEMORIAL DRIVE & De KOVEN AVENUE
CITY OF RACINE
RACINE COUNTY

CABINET TYPE: TS2 TYPE 1
CONTROLLER TYPE:
McCAIN FLEX NEMA TS2

SIGNAL NO.

REGION CONTACT: REGION CONTACT
DESIGNED BY: BAXTER & WOODMAN
REVISED BY:

PAGE 3 OF 3

Project ID:	2703-08-01
Intersection:	Memorial Drive & De Koven Ave

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

DATE:	9/16/2025
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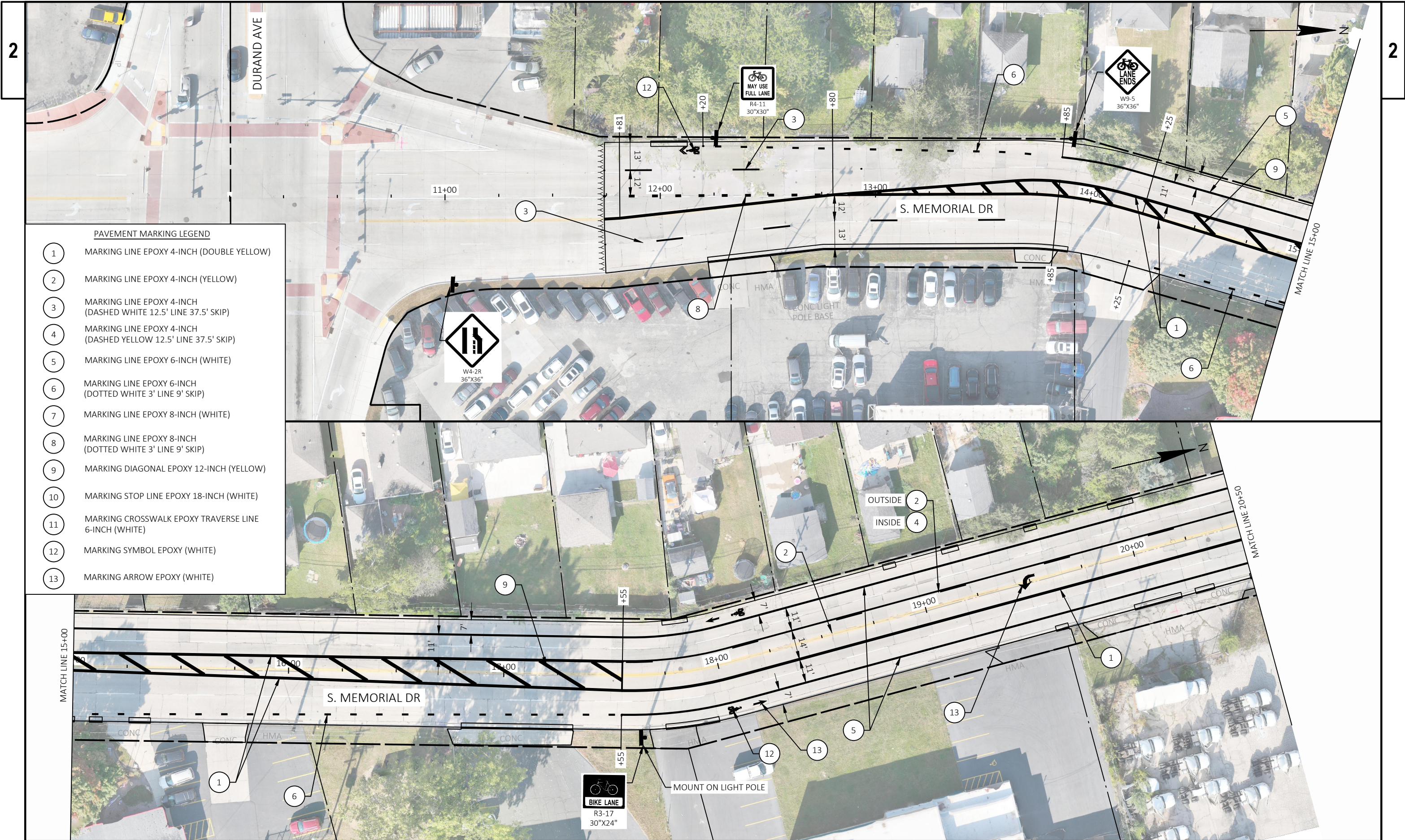
CB1 TO	# OF COND. AWG 14	HEAD NO.	SIGNAL INDICATION WIRE COLOR									PED BUTTON	OTHER
			RED	YELLOW	GREEN	<RED	<YELLOW>	<FL YELLOW>	<GREEN>	D/WALK	WALK		
SB1	12	16	RED	ORG	GRN								
		24								BLK	BLU		
		B										WHT/BLK & GRN/BLK	
SB2	15	1	RED	ORG	GRN								
		9				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
		17								BLK	BLU		
		B										WHT/BLK & BLU/BLK	
SB3	15	7	RED	ORG	GRN								
		8	RED	ORG	GRN								
		10				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
		18								BLK	BLU		
EXSB4	12	12	RED	ORG	GRN								
		14	RED/BLK	ORG/BLK	GRN/BLK								
		19								BLK	BLU		
SB5	12	13	RED	ORG	GRN								
		20								BLK	BLU		
		B										WHT/BLK & BLU/BLK	
SB6	15	4				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
		6	RED	ORG	GRN								
		21								BLK	BLU		
		B										WHT/BLK & BLU/BLK	
SB7	15	2	RED	ORG	GRN								
		3	RED	ORG	GRN								
		5				RED/BLK	ORG/BLK	BLK/WHT	GRN/BLK				
		22								BLK	BLU		
		B										WHT/BLK & BLU/BLK	
SB8	12	11	RED	ORG	GRN								
		15	RED/BLK	ORG/BLK	GRN/BLK								
		23								BLK	BLU		
		B										WHT/BLK & BLU/BLK	
PEDB1	2	B										BLK & WHT	
PEDB2	2	B										BLK & WHT	

EQUIPMENT GROUNDING CONDUCTOR 10 AWG GRN XLP	
FROM	TO
CB1	SB1
SB1	SB2
SB2	SB3
SB3	PEDB1
PEDB1	EXB1
EXB1	PEDB2
PEDB2	SB4
SB4	SB5
SB5	SB6
SB6	SB7
SB7	SB8
SB8	CB1

PULL BOX BONDING JUMPER 10 AWG GRN XLP	
FROM	TO
CB1	PB1
SB1	PB2
SB3	PB3
SB5	PB4
SB8	PB5

LIGHTING UF 12 AWG W/GROUND	
FROM	TO
CB1	SB3
CB1	SB7

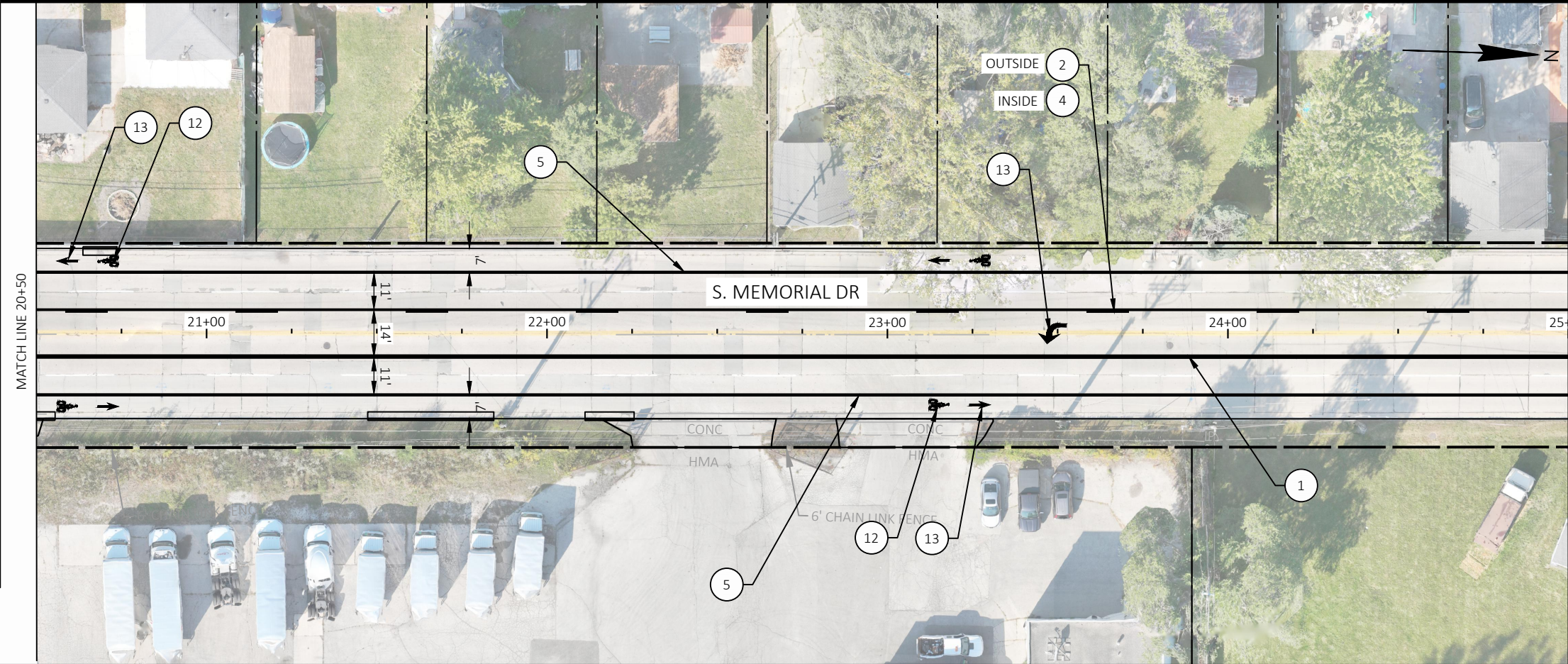
VIDEO DETECTION CABLE	
FROM	TO
CB1	SB7 (V1)
CB1	SB1 (V2)
CB1	SB3 (V3)
CB1	SB5 (V4)



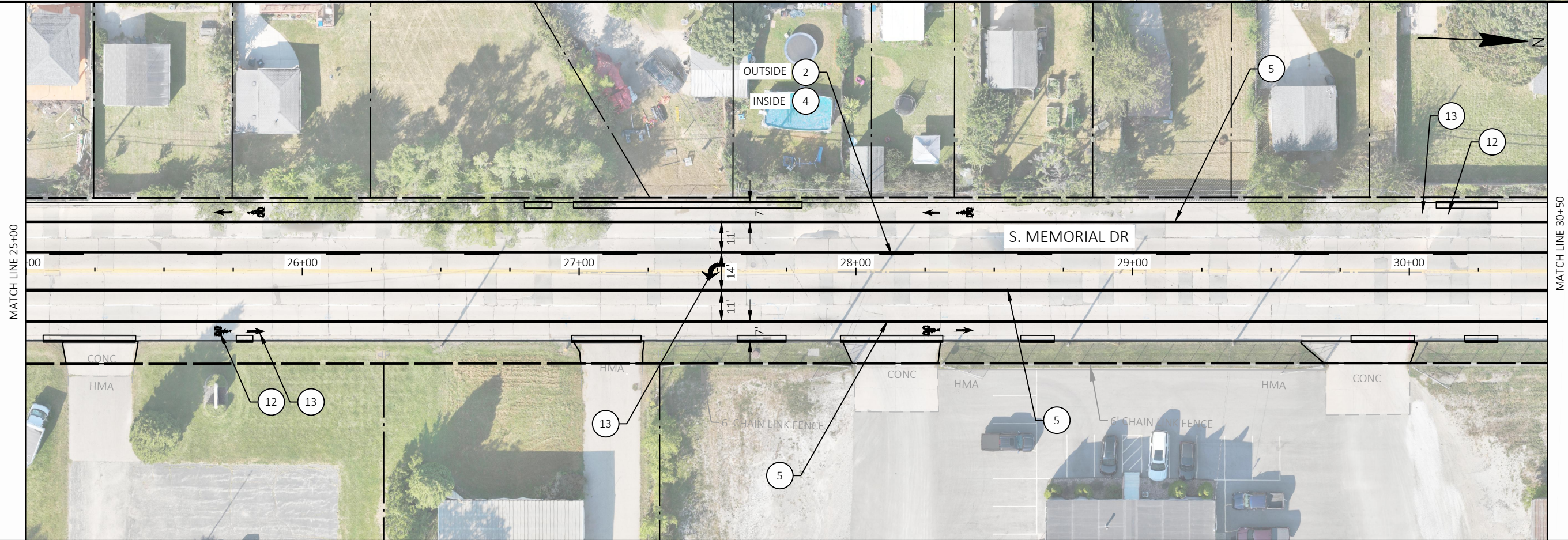
- PAVEMENT MARKING LEGEND**
- 1 MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
 - 2 MARKING LINE EPOXY 4-INCH (YELLOW)
 - 3 MARKING LINE EPOXY 4-INCH (DASHED WHITE 12.5' LINE 37.5' SKIP)
 - 4 MARKING LINE EPOXY 4-INCH (DASHED YELLOW 12.5' LINE 37.5' SKIP)
 - 5 MARKING LINE EPOXY 6-INCH (WHITE)
 - 6 MARKING LINE EPOXY 6-INCH (DOTTED WHITE 3' LINE 9' SKIP)
 - 7 MARKING LINE EPOXY 8-INCH (WHITE)
 - 8 MARKING LINE EPOXY 8-INCH (DOTTED WHITE 3' LINE 9' SKIP)
 - 9 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
 - 10 MARKING STOP LINE EPOXY 18-INCH (WHITE)
 - 11 MARKING CROSSWALK EPOXY TRAVERSE LINE 6-INCH (WHITE)
 - 12 MARKING SYMBOL EPOXY (WHITE)
 - 13 MARKING ARROW EPOXY (WHITE)

2

- 1 MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
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- 3 MARKING LINE EPOXY 4-INCH
(DASHED WHITE 12.5' LINE 37.5' SKIP)
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- 8 MARKING LINE EPOXY 8-INCH
(DOTTED WHITE 3' LINE 9' SKIP)
- 9 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- 10 MARKING STOP LINE EPOXY 18-INCH (WHITE)
- 11 MARKING CROSSWALK EPOXY TRAVERSE LINE
6-INCH (WHITE)
- 12 MARKING SYMBOL EPOXY (WHITE)
- 13 MARKING ARROW EPOXY (WHITE)



2



PROJECT NO:	2703-08-71
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HWY: S. MEMORIAL DRIVE

COUNTY: RACINE

PAVEMENT MARKING AND SIGNING: S. MEMORIAL DRIVE 20+50 TO STA 30+50

SHEET	63	E
-------	----	---

E

FILE NAME : P:\RACNC\2325881-S.MEMORIAL DRIVE\CAD-C3D-2024\2325881-S MEMORIAL DR\SHEETS\024501-PM.DWG
LAYOUT NAME - 02

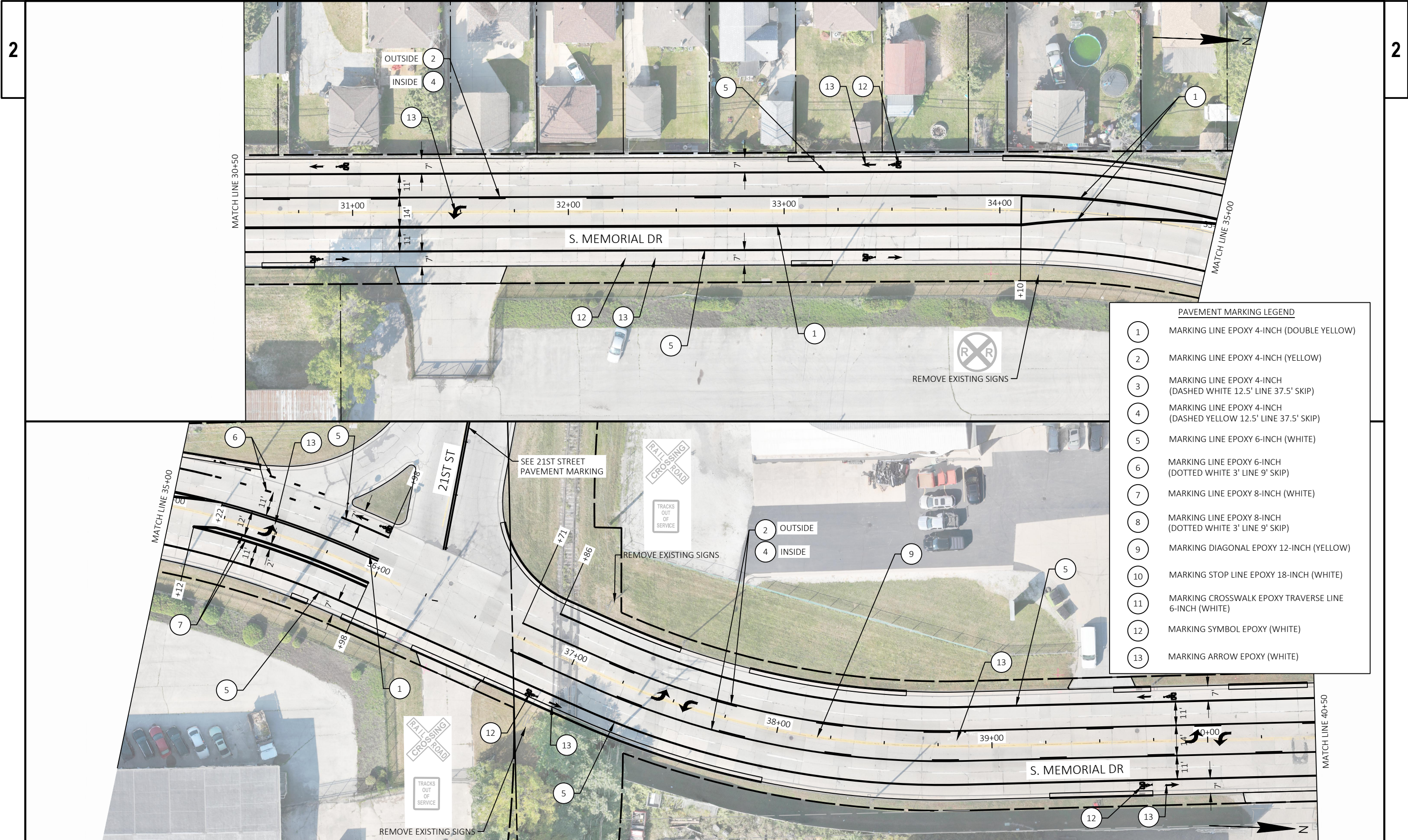
PLOT DATE : 1/21/2026 4:41 PM

PLOT BY : ELA LODZINSKI

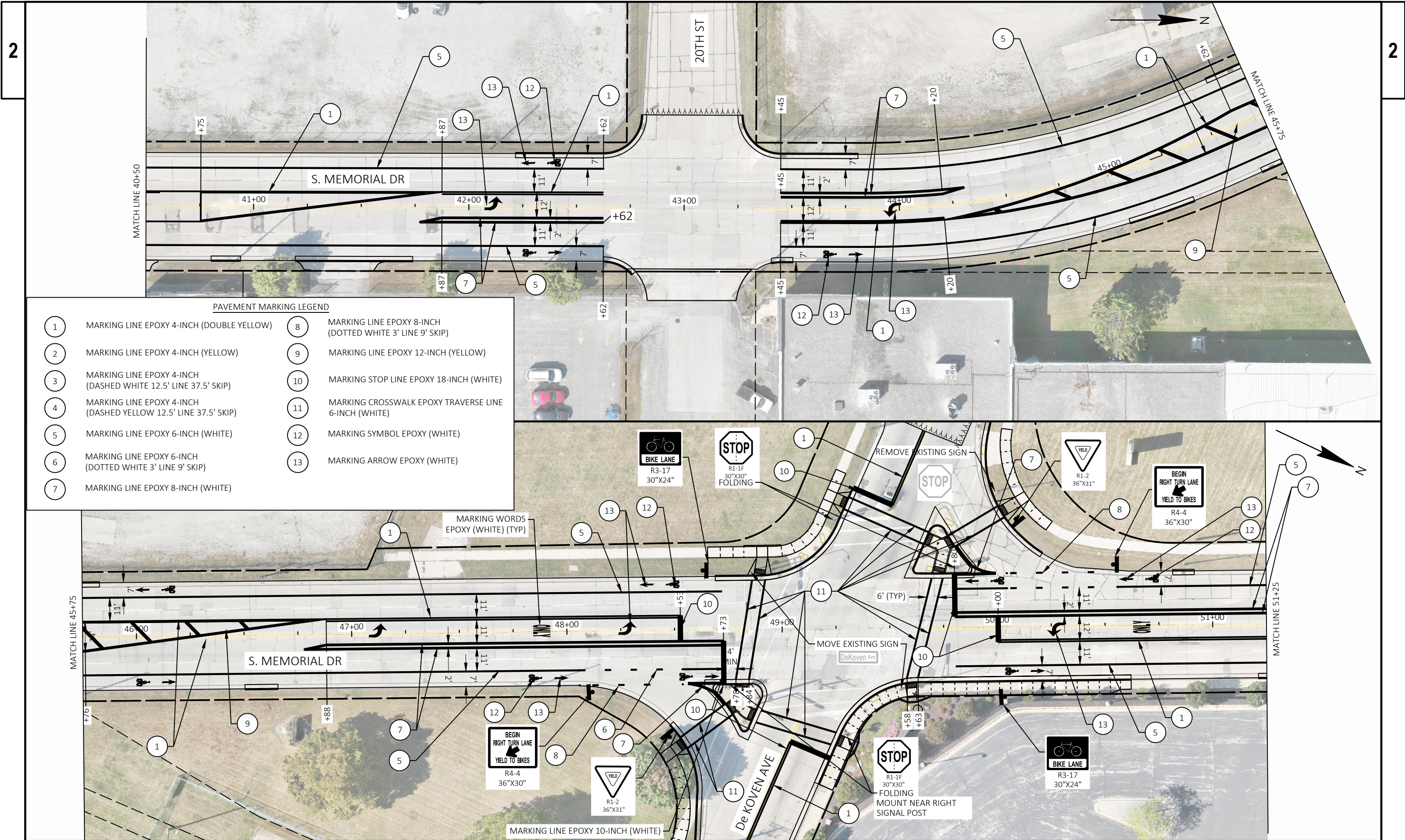
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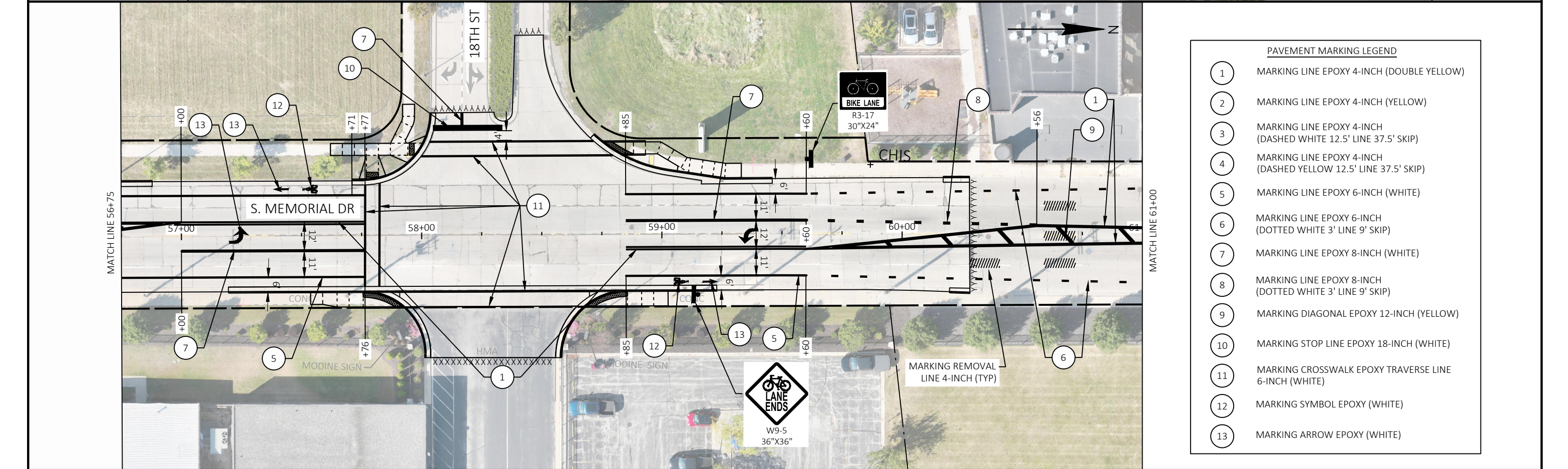
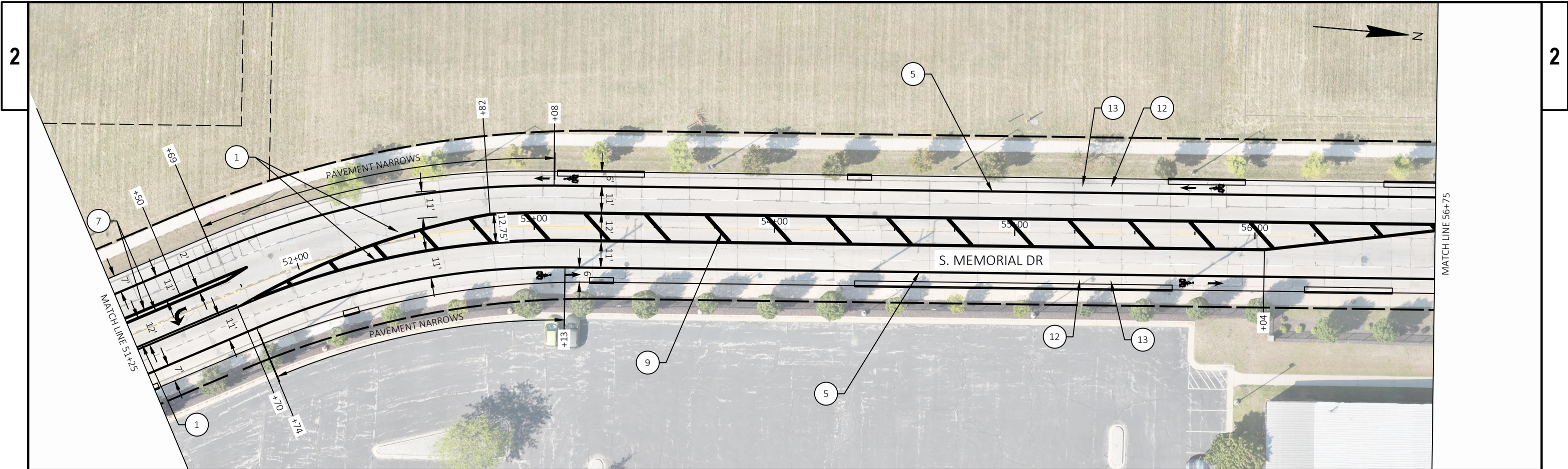
PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

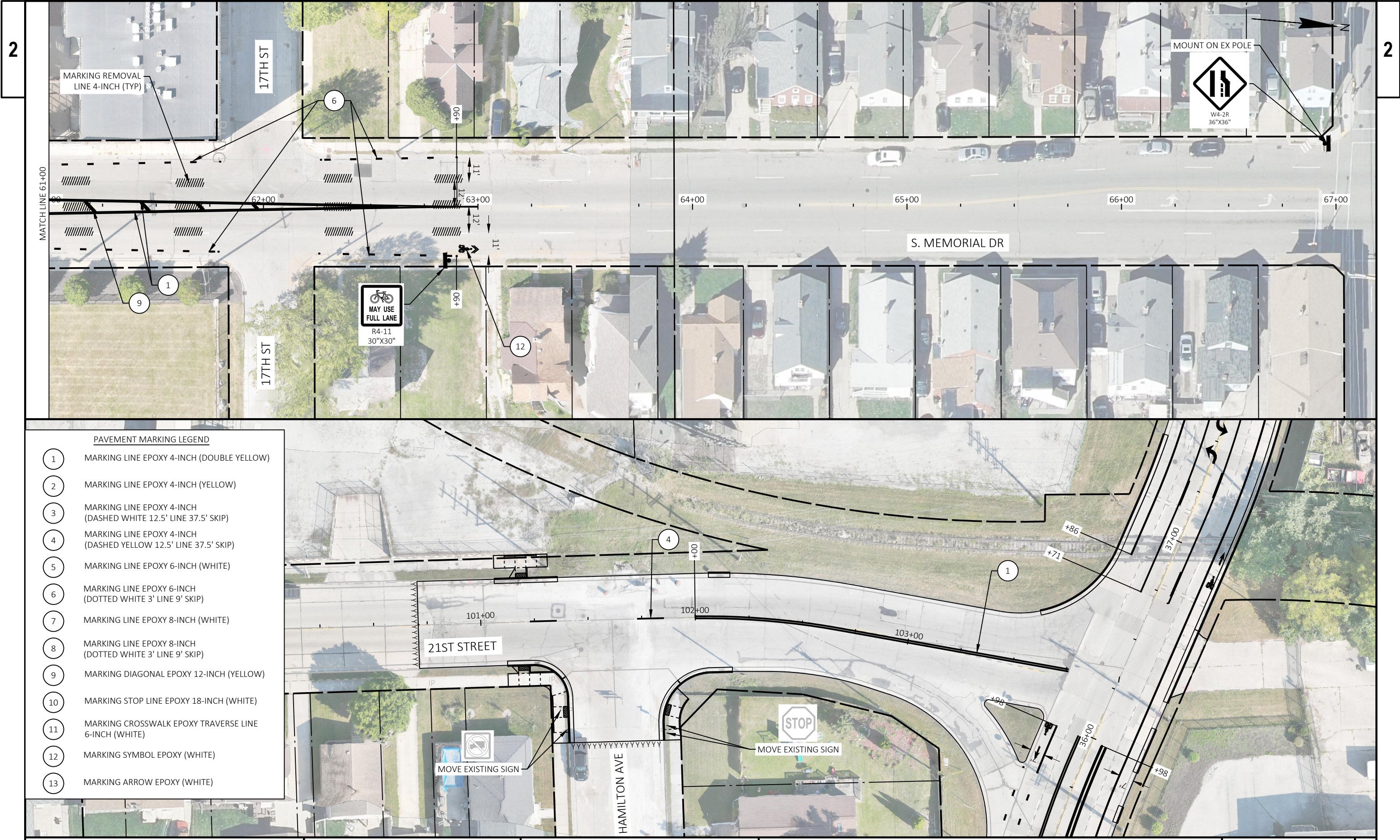


- PAVEMENT MARKING LEGEND
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 - 6 MARKING LINE EPOXY 6-INCH (DOTTED WHITE 3' LINE 9' SKIP)
 - 7 MARKING LINE EPOXY 8-INCH (WHITE)
 - 8 MARKING LINE EPOXY 8-INCH (DOTTED WHITE 3' LINE 9' SKIP)
 - 9 MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
 - 10 MARKING STOP LINE EPOXY 18-INCH (WHITE)
 - 11 MARKING CROSSWALK EPOXY TRAVERSE LINE 6-INCH (WHITE)
 - 12 MARKING SYMBOL EPOXY (WHITE)
 - 13 MARKING ARROW EPOXY (WHITE)





PAVEMENT MARKING LEGEND	
1	MARKING LINE EPOXY 4-INCH (DOUBLE YELLOW)
2	MARKING LINE EPOXY 4-INCH (YELLOW)
3	MARKING LINE EPOXY 4-INCH (DASHED WHITE 12.5' LINE 37.5' SKIP)
4	MARKING LINE EPOXY 4-INCH (DASHED YELLOW 12.5' LINE 37.5' SKIP)
5	MARKING LINE EPOXY 6-INCH (WHITE)
6	MARKING LINE EPOXY 6-INCH (DOTTED WHITE 3' LINE 9' SKIP)
7	MARKING LINE EPOXY 8-INCH (WHITE)
8	MARKING LINE EPOXY 8-INCH (DOTTED WHITE 3' LINE 9' SKIP)
9	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
10	MARKING STOP LINE EPOXY 18-INCH (WHITE)
11	MARKING CROSSWALK EPOXY TRAVERSE LINE 6-INCH (WHITE)
12	MARKING SYMBOL EPOXY (WHITE)
13	MARKING ARROW EPOXY (WHITE)



TRAFFIC CONTROL - SEQUENCE OF OPERATIONS

PRE STAGE 1:

- 1. PLACE PORTABLE CHANGEABLE MESSAGE SIGN (PCMS) AT THE PROJECT LIMITS AT LEAST 14 DAYS PRIOR TO STARTING DETOUR. FRAME A: "S MEMORIAL DR, TO CLOSE, AND FRAME B: "[DAY OF WEEK], [DATE]".
- 2. ESTABLISH DETOUR ROUTE.
- 3. INSTALL TEMPORARY EROSION CONTROL
- 4. PLACE DEKOVEN TRAFFIC SIGNAL INTO FLASHING MODE. INSTALL STOP SIGNS ON ALL APPROACHES. TURN OFF DEKOVEN TRAFFIC SIGNAL AND COVER TRAFFIC SIGNAL FACES.

STAGE 1:

- 1. FROM STH 11 (DURAND AVENUE) TO 16TH STREET, CLOSE THE SOUTH MEMORIAL DRIVE NORTHBOUND TRAVEL LANES AND INSIDE SOUTHBOUND TRAVEL LANE.
- 2. BASE PATCH CONCRETE ON NORTHBOUND SOUTH MEMORIAL DRIVE AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. REMOVE, PLATE, AND PLACE TEMPORARY ASPHALT FOR ALL MANHOLES TO BE ADJUSTED/RECONSTRUCTED WITH THE PATCHING AREA.
- 3. BASE PATCH CONCRETE WITHIN EAST HALF OF DEKOVEN AVENUE WITH OFF-PEAK/NIGHT LANE CLOSURES UNDER FLAGGING OPERATION. REMOVE, PLATE, AND PLACE TEMPORARY ASPHALT FOR ALL MANHOLES TO BE ADJUSTED/RECONSTRUCTED WITH THE PATCHING AREA.
- 4. DETOUR PEDESTRIANS PRIOR TO REMOVING CONCRETE CURB RAMPS IN ACCORDANCE WITH THE STANDARD DETAIL DRAWINGS AND CONSTRUCTION DETAILS. COMPLETE EACH CURB RAMP REPLACEMENT WITHIN 10 WORKING DAYS OF DETOURING PEDESTRIANS AT THAT LOCATION.
- 5. INSTALL TRAFFIC SIGNAL BASES AND CONDUIT ON EAST SIDE OF DEKOVEN INTERSECTION.

STAGE 2:

- 1. FROM 16TH STREET TO STH 11 (DURAND AVENUE), CLOSE THE SOUTH MEMORIAL DRIVE SOUTHBOUND TRAVEL LANES AND INSIDE NORTHBOUND TRAVEL LANE.
- 2. MILL THE EXISTING ASPHALTIC SURFACE OF 21ST STREET TO THE TOP OF THE EXISTING CONCRETE PAVEMENT.
- 3. BASE PATCH CONCRETE ON SOUTHBOUND SOUTH MEMORIAL DRIVE AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. REMOVE, PLATE, AND PLACE TEMPORARY ASPHALT FOR ALL MANHOLES TO BE ADJUSTED/RECONSTRUCTED WITH THE PATCHING AREA.

- 4. BASE PATCH CONCRETE ON 21ST STREET AND WITHIN WEST HALF OF DEKOVEN AVENUE WITH OFF-PEAK/NIGHT LANE CLOSURES UNDER FLAGGING OPERATION. REMOVE, PLATE, AND PLACE TEMPORARY ASPHALT FOR ALL MANHOLES TO BE ADJUSTED/RECONSTRUCTED WITH THE PATCHING AREA.
- 5. DETOUR PEDESTRIANS PRIOR TO REMOVING CONCRETE CURB RAMPS IN ACCORDANCE WITH THE STANDARD DETAIL DRAWINGS AND CONSTRUCTION DETAILS. COMPLETE EACH CURB RAMP REPLACEMENT WITHIN 10 WORKING DAYS OF DETOURING PEDESTRIANS AT THAT LOCATION.
- 6. INSTALL TRAFFIC SIGNAL BASES AND CONDUIT ON WEST SIDE OF DEKOVEN INTERSECTION.
- 7. PAVE LOWER LAYER OF HMA PAVEMENT ACROSS SOUTH MEMORIAL DRIVE SOUTHBOUND TRAVEL LANES.
- 8. PAVE LOWER LAYER OF HMA PAVEMENT ON 21ST STREET AND WITHIN WEST HALF OF DEKOVEN AVENUE WITH OFF-PEAK/NIGHT LANE CLOSURES UNDER FLAGGING OPERATION.

STAGE 3:

- 1. FROM STH 11 (DURAND AVENUE) TO 16TH STREET, CLOSE THE SOUTH MEMORIAL DRIVE NORTHBOUND TRAVEL LANES AND INSIDE SOUTHBOUND TRAVEL LANE.
- 2. PAVE LOWER LAYER OF HMA PAVEMENT ACROSS SOUTH MEMORIAL DRIVE NORTHBOUND TRAVEL LANES.
- 3. PAVE LOWER LAYER OF HMA PAVEMENT WITHIN EAST HALF OF DEKOVEN AVENUE WITH OFF-PEAK/NIGHT LANE CLOSURES UNDER FLAGGING OPERATION.

STAGE 4:

- 1. COMPLETE FINAL ADJUSTMENT/RECONSTRUCTION ON OF ALL MANHOLES UNDER FLAGGING OPERATIONS.
- 2. PAVE UPPER LAYER OF HMA PAVEMENT ACROSS ALL SOUTH MEMORIAL DRIVE NORTHBOUND AND SOUTHBOUND TRAVEL LANES UNDER FLAGGING OPERATION.
- 3. PAVE UPPER LAYER OF HMA PAVEMENT ACROSS ALL 21ST STREET AND DEKOVEN AVENUE EASTBOUND AND WESTBOUND TRAVEL LANES UNDER FLAGGING OPERATION.

GENERAL NOTES FOR CONSTRUCTION STAGING AND TRAFFIC CONTROL

- 1. A FLAGGER MAY BE REQUIRED WHERE CONSTRUCTION VEHICLES ENTER OR LEAVE "WORK/CLOSED" AREAS IF WARRANTED BY CONDITIONS AND/OR AS DIRECTED BY THE ENGINEER.
- 2. CONTRACTOR SHALL INSTALL PERMANENT SIGNS AND PERMANENT PAVEMENT MARKING WHEN APPROPRIATE DURING CONSTRUCTION STAGING AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- 3. ADEQUATE TURNING PROVISIONS SHALL BE MAINTAINED FOR ALL VEHICLES, INCLUDING TRUCKS.
- 4. BARRICADE STRIPES SHALL POINT DOWNWARD IN THE DIRECTION OF TRAFFIC FLOW.
- 5. THE CONTRACTOR SHALL ENSURE ADEQUATE DRAINAGE AND AVOID ANY PONDING OR STANDING WATER DURING STAGED CONSTRUCTION.
- 6. TEMPORARY MARKINGS SHALL BE TEMPORARY TAPE WHEN PLACED ON NEW OR EXISTING PAVEMENT SURFACES THAT ARE TO REMAIN IN PLACE FOLLOWING CONSTRUCTION. PAINT MAY BE USED ON EXISTING PAVEMENT OR LOWER HMA LAYERS THAT ARE TO BE REMOVED OR OVERLAID IN SUBSEQUENT STAGES.
- 7. TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.
- 8. MAINTAIN PEDESTRIAN ACCESS TO BUS STOPS ON THE EAST LEG OF DEKOVEN AVENUE, INCLUDING PROVIDING TEMPORARY STOP LOCATIONS AS INCIDENTAL TO TRAFFIC CONTROL.

TEMPORARY PEDESTRIAN ACCOMMODATION:

- 1. SEE TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION (SDD 15D30), FOR ADDITIONAL DETAILS FOR SIGNING AND DEVICES.
- 2. PROVIDE TEMPORARY CURB RAMP AND/OR TEMPORARY PEDESTRIAN SURFACE AS NECESSARY TO PROVIDE ACCESS WITH 3" ELEVATION DIFFERENCE AFTER PROPOSED CURB RAMPS ARE CONSTRUCTED BUT BEFORE ASPHALT IS PAVED.

21ST STREET AT HAMILTON AVENUE RAMPS

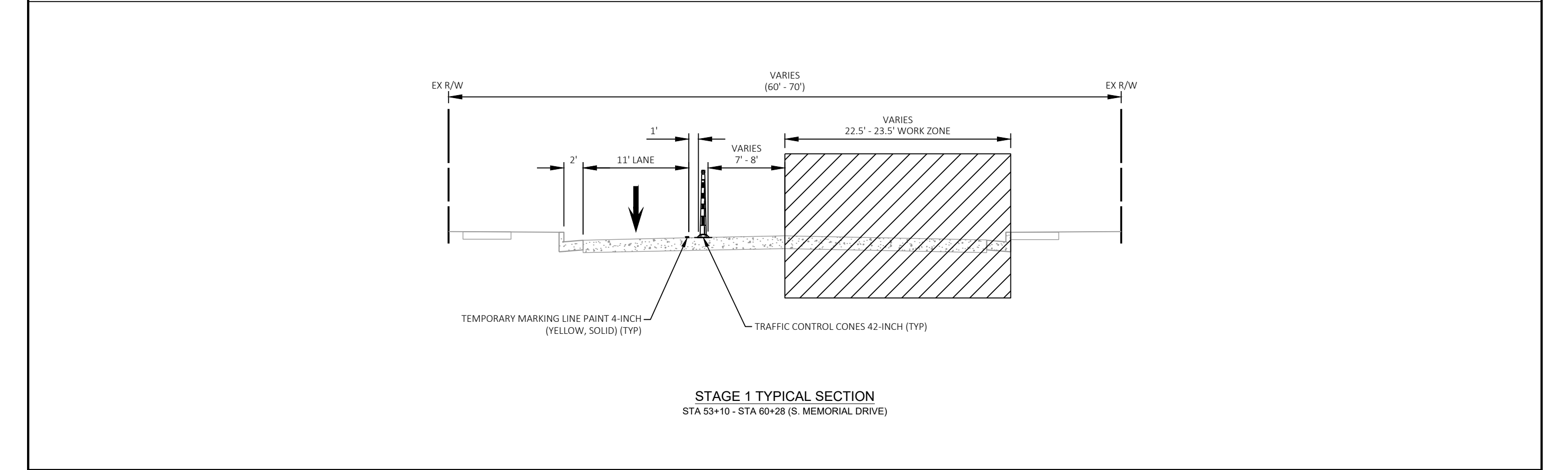
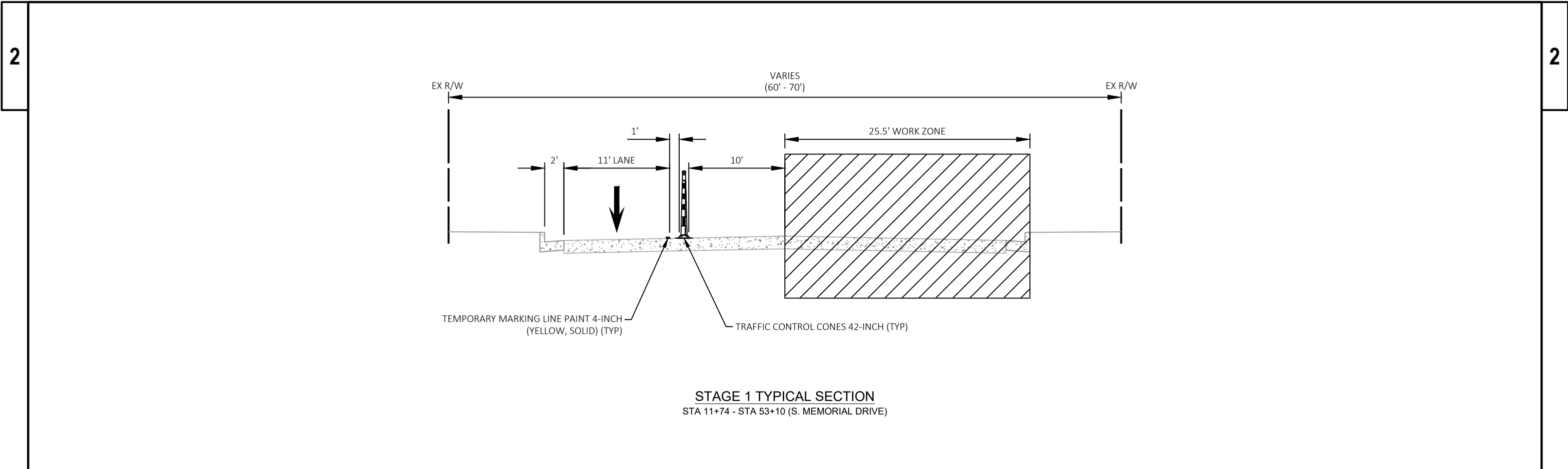
- 1. PROVIDE PEDESTRIAN DETOUR
- 2. IF PROVIDED, DETOUR TO UTILIZE PHILIPS AVENUE AND ARLINGTON AVENUE.

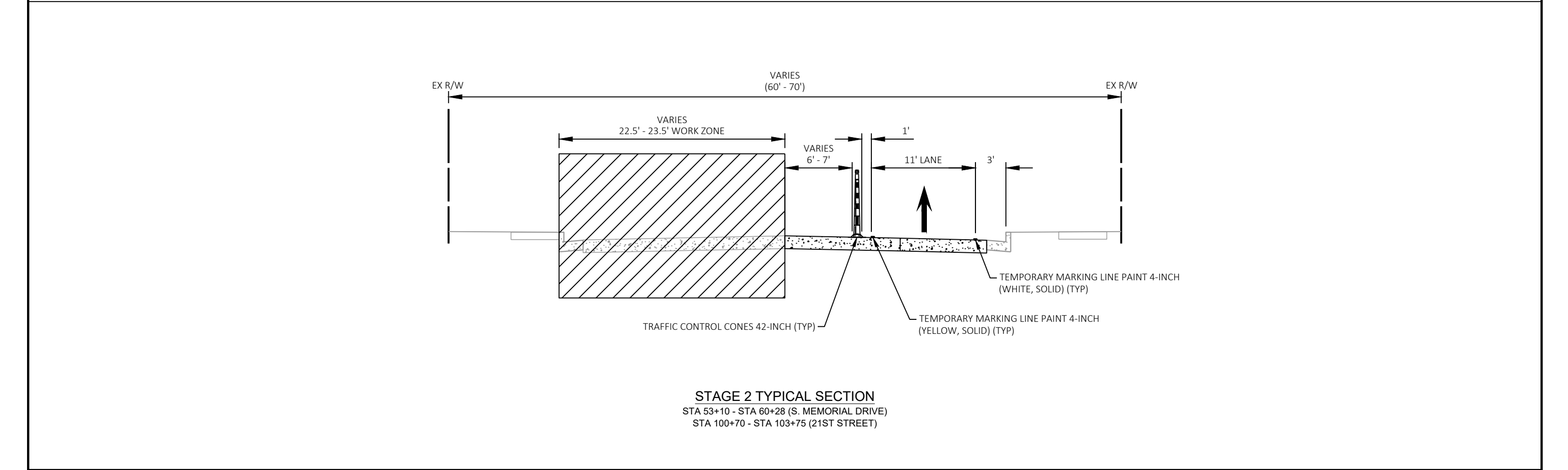
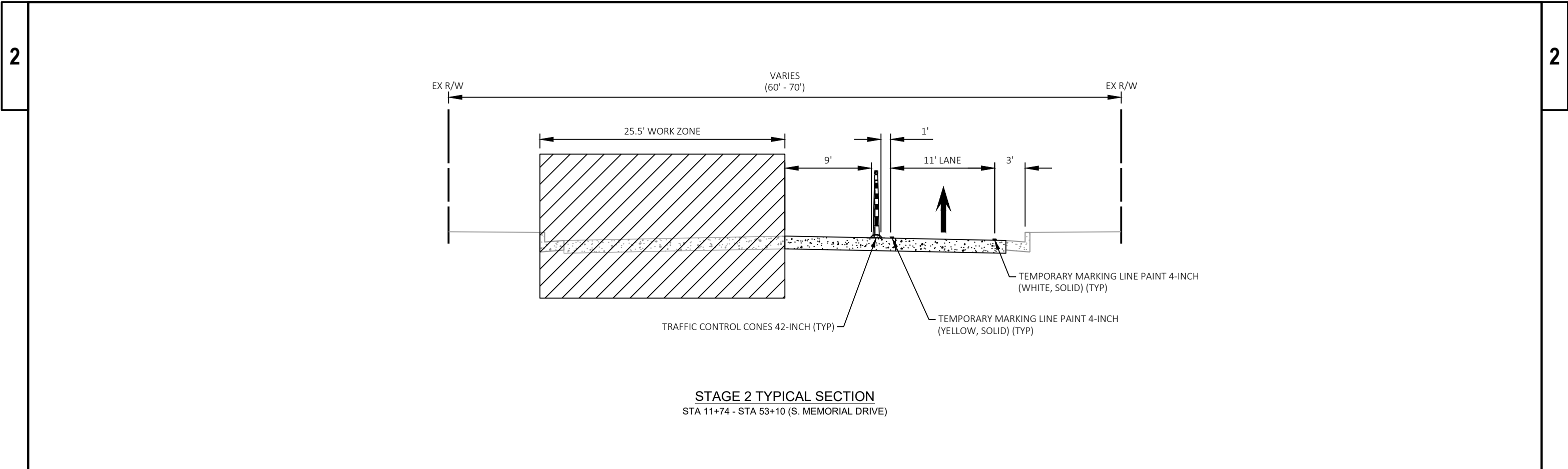
DEKOVEN AVENUE AT S MEMORIAL DRIVE RAMPS

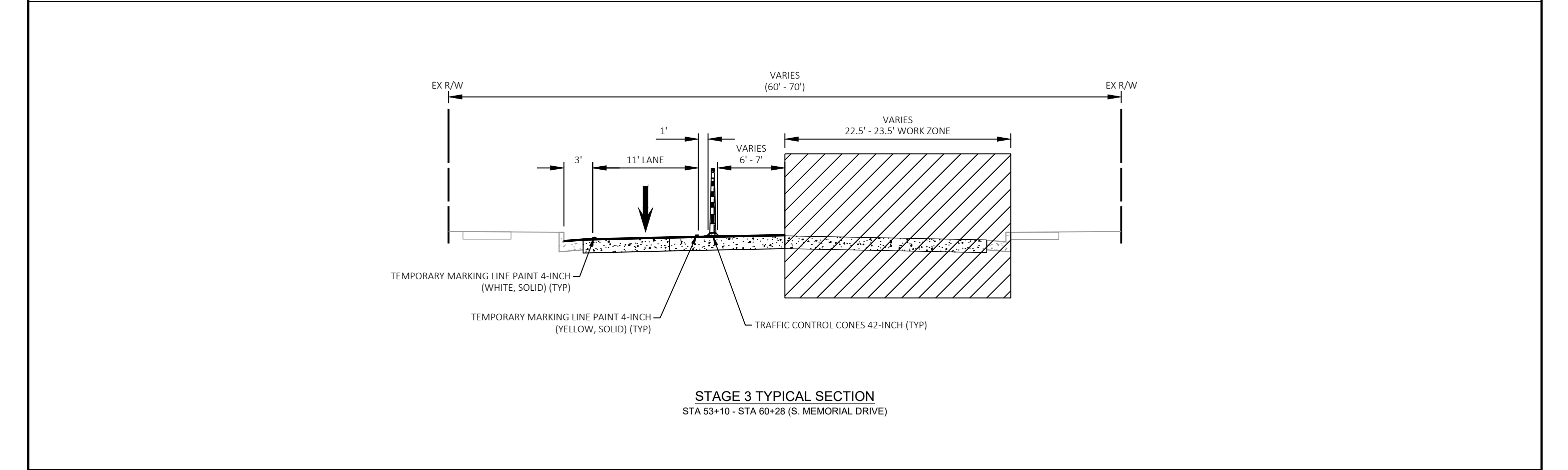
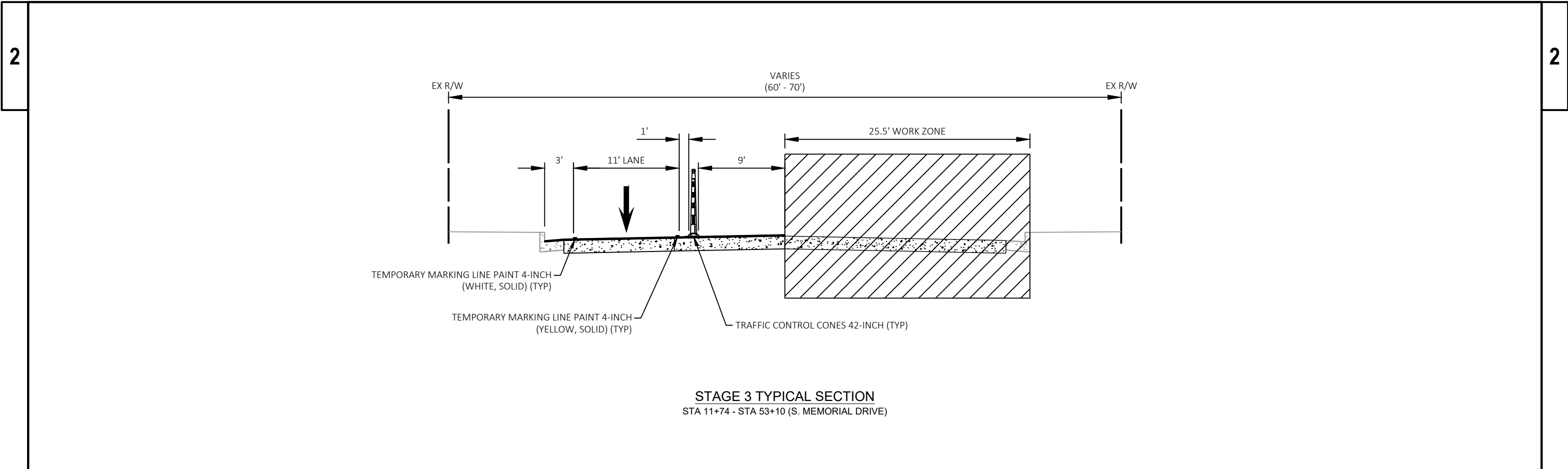
- 1. PROVIDE TEMPORARY CURB RAMPS CROSSING EAST LEG OF DEKOVEN
- 2. IF PROVIDED, DETOUR SHALL UTILIZE OPPOSITE SIDE OF DEKOVEN STARTING AT PHILIPS AVE OR CLARK STREET AND OPPOSITE SIDE OF S MEMORIAL DRIVE AT 17TH STREET
- 3. CLOSE CURB RAMPS AT ONLY ONE QUADRANT OF THE INTERSECTION AT A TIME. MAINTAIN CROSSINGS FOR OTHER 3 QUADRANTS.

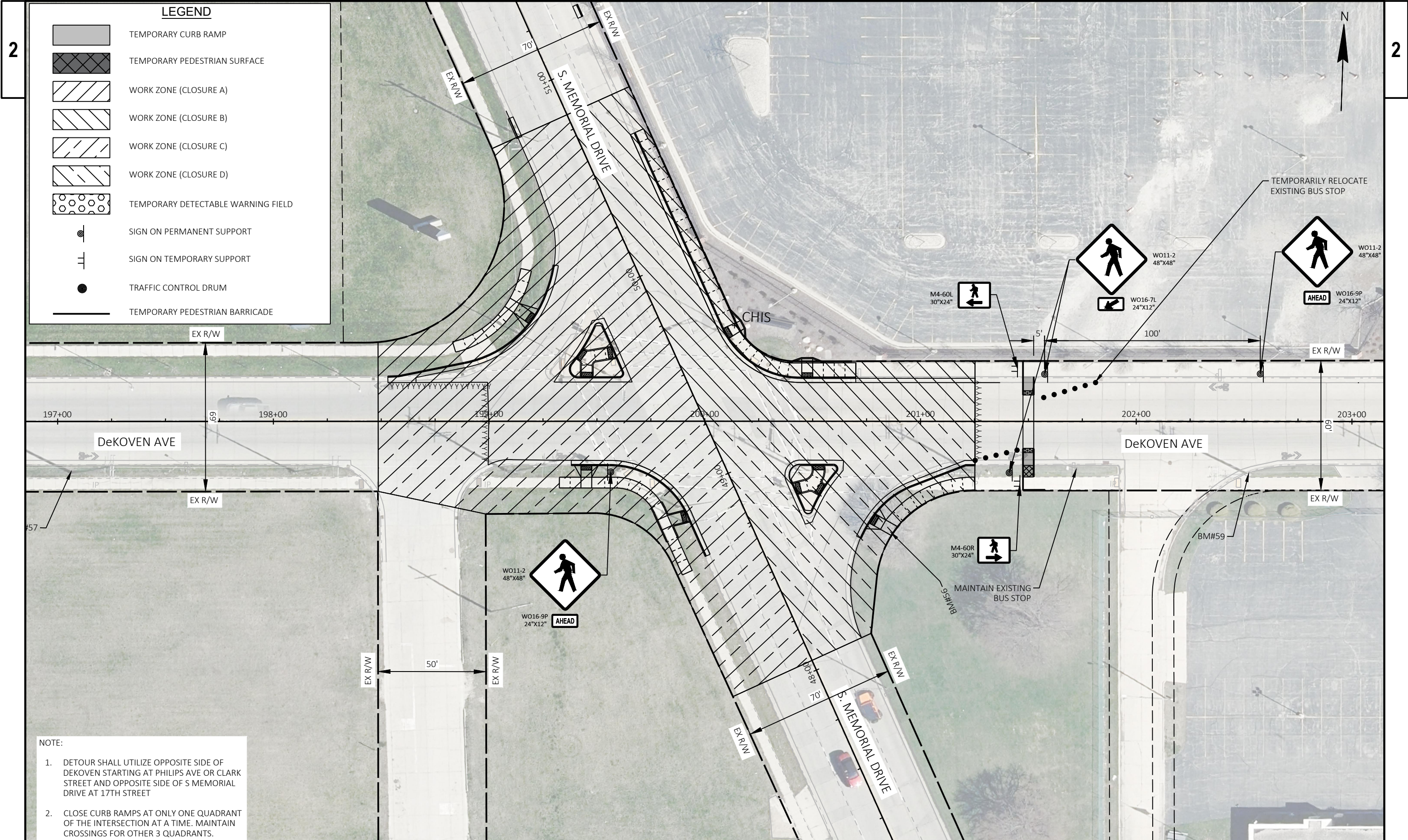
18TH STREET AT S MEMORIAL DRIVE RAMPS

- 1. PROVIDE PEDESTRIAN DETOUR
- 2. IF PROVIDED, DETOUR TO UTILIZE PHILIPS AVENUE, 17TH STREET, S MEMORIAL DRIVE.
- 3. PEDESTRIAN CROSSINGS SHALL BE MAINTAINED AT DEKOVEN AVENUE INTERSECTING DURING 18TH STREET INTERSECTION RAMP WORK







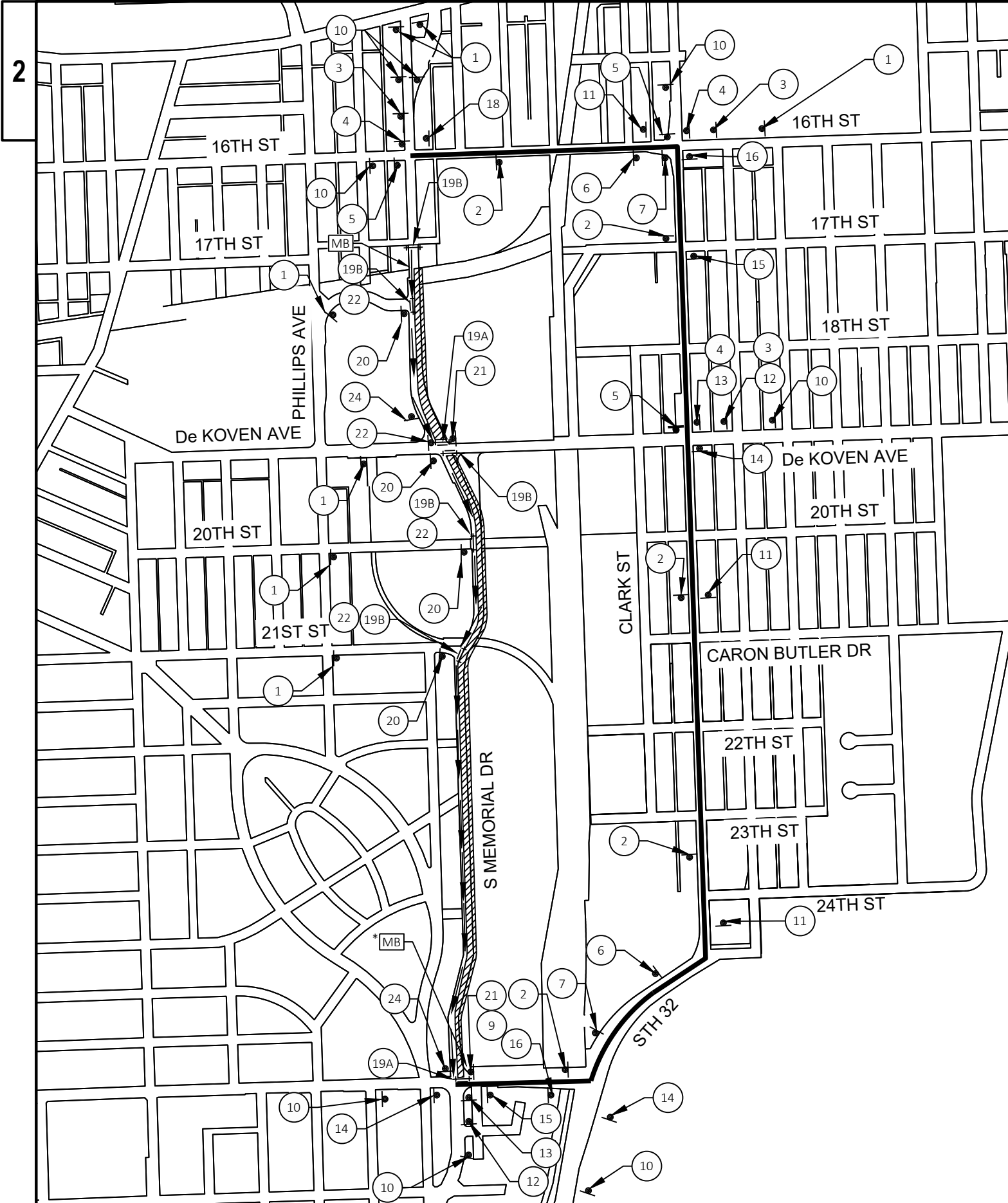


LEGEND

- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE
- WORK ZONE (CLOSURE A)
- WORK ZONE (CLOSURE B)
- WORK ZONE (CLOSURE C)
- WORK ZONE (CLOSURE D)
- TEMPORARY DETECTABLE WARNING FIELD
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TEMPORARY PEDESTRIAN BARRICADE

NOTE:

- DETOUR SHALL UTILIZE OPPOSITE SIDE OF DEKOVEN STARTING AT PHILIPS AVE OR CLARK STREET AND OPPOSITE SIDE OF S MEMORIAL DRIVE AT 17TH STREET
- CLOSE CURB RAMP AT ONLY ONE QUADRANT OF THE INTERSECTION AT A TIME. MAINTAIN CROSSINGS FOR OTHER 3 QUADRANTS.



LEGEND

ROAD CLOSED AHEAD W20-3A

DETOUR AHEAD W20-2A

R11-2 48"x30" ROAD CLOSED TYPE III BARRICADE 19A

R11-4 60"x30" ROAD CLOSED TO THRU TRAFFIC TYPE III BARRICADE 19B

R3-2 24"x24" 20

R3-1 24"x24" 21

R6-2R 24"x30" 22

R6-2L 24"x30" 23

R5-1 30"x30" 24

FRAME A FRAME B
S MEMORIAL DRIVE TO CLOSE [DAY OF WEEK] [DATE]
(IN PLACE 14 DAYS PRIOR TO STARTING DETOUR)
MB

FRAME A FRAME B
NORTH BOUND CLOSED FOLLOW DETOUR
(AT DURAND AVE FOR DURATION OF STAGES 1 & 3)
*MB

LEGEND

WORK ZONE

DETOUR ROUTE

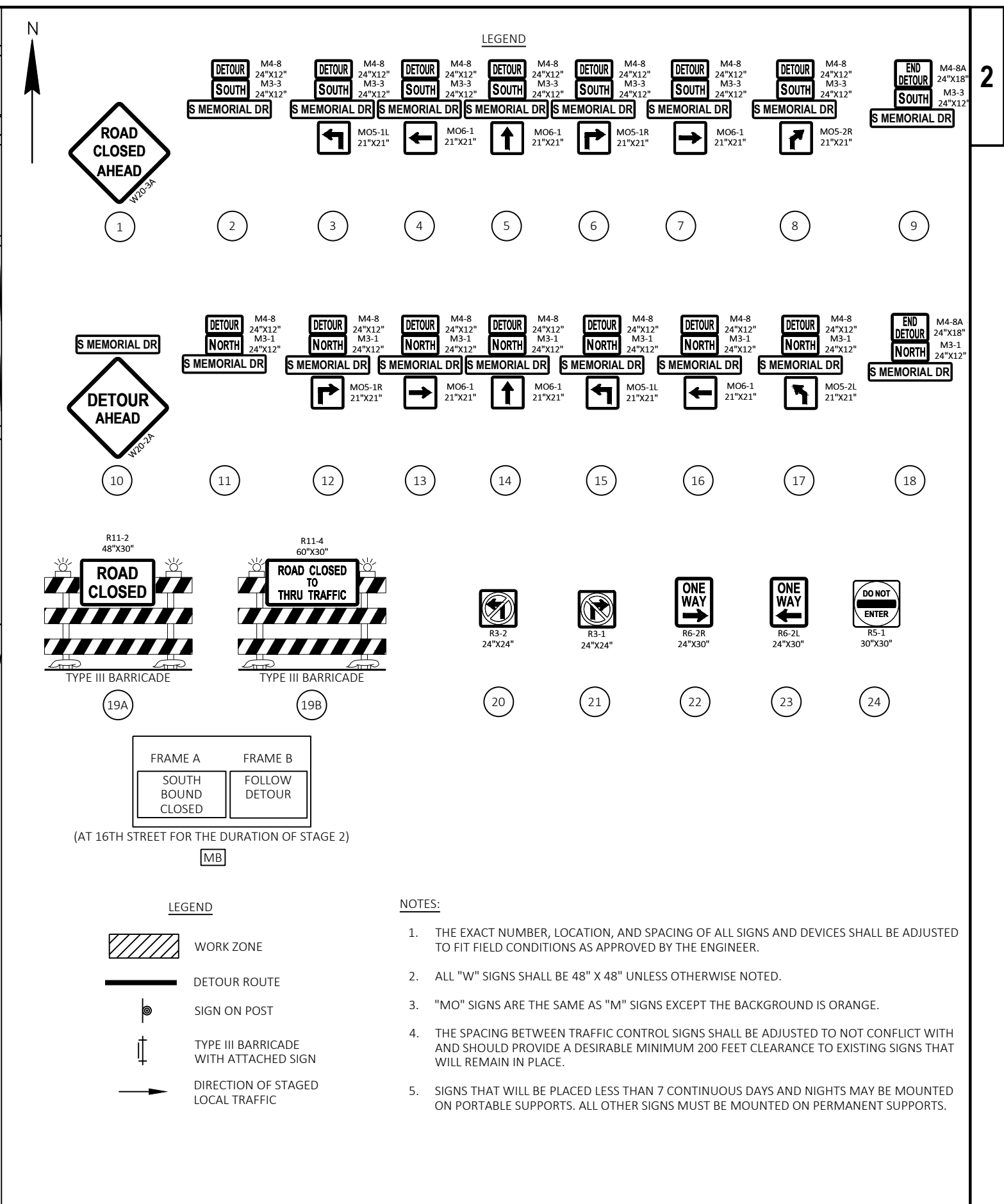
SIGN ON POST

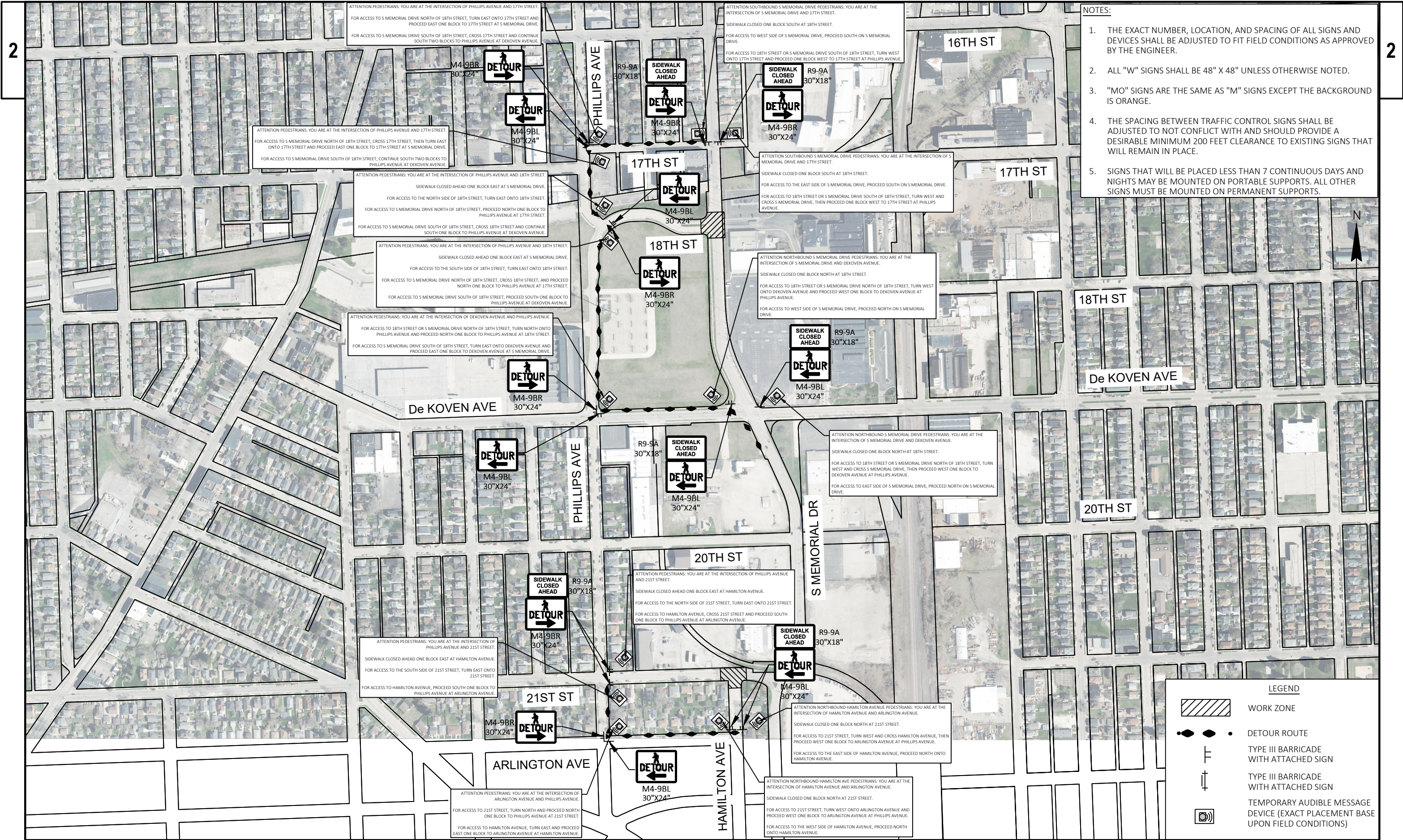
TYPE III BARRICADE WITH ATTACHED SIGN

DIRECTION OF STAGED LOCAL TRAFFIC

NOTES:

- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- ALL "W" SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.
- "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHALL BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
- SIGNS THAT WILL BE PLACED LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS. ALL OTHER SIGNS MUST BE MOUNTED ON PERMANENT SUPPORTS.





- NOTES:
1. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
 2. ALL "W" SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.
 3. "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
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 5. SIGNS THAT WILL BE PLACED LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS. ALL OTHER SIGNS MUST BE MOUNTED ON PERMANENT SUPPORTS.

- LEGEND
- WORK ZONE
 - DETOUR ROUTE
 - TYPE III BARRICADE WITH ATTACHED SIGN
 - TYPE III BARRICADE WITH ATTACHED SIGN
 - TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASE UPON FIELD CONDITIONS)

PROJECT NO: 2703-08-71

HWY: S. MEMORIAL DRIVE

COUNTY: RACINE

PEDESTRIAN DETOUR PLAN: 18TH STREET & 21ST STREET

SHEET

75

E

FILE NAME : P:\RACNC\2325881-S.MEMORIAL DRIVE\CAD-C3D-2024\2325881-S MEMORIAL DR\SHEETS\027001-DT (PED).DWG
LAYOUT NAME - 027001-dt (ped)

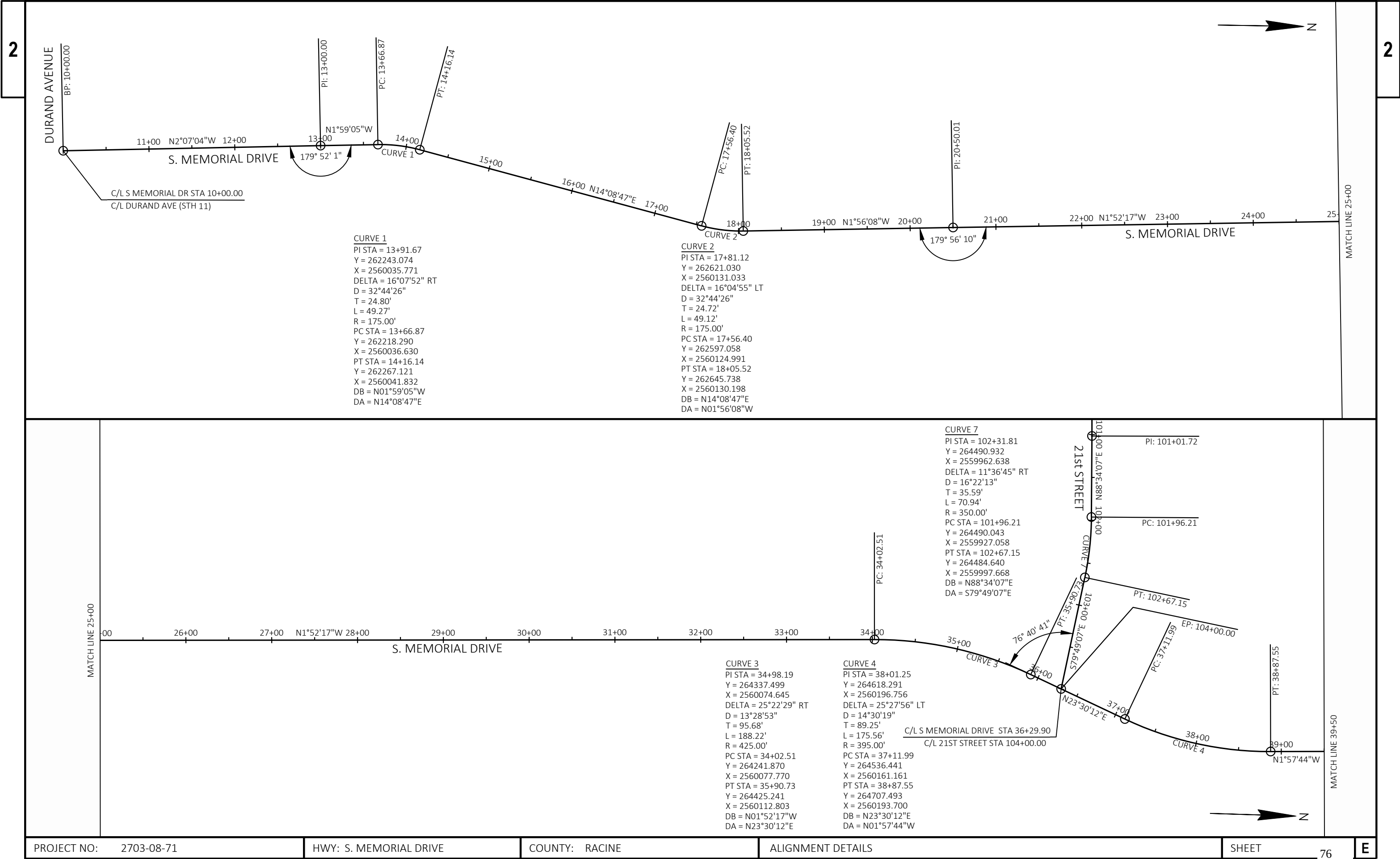
PLOT DATE : 1/22/2026 11:39 AM

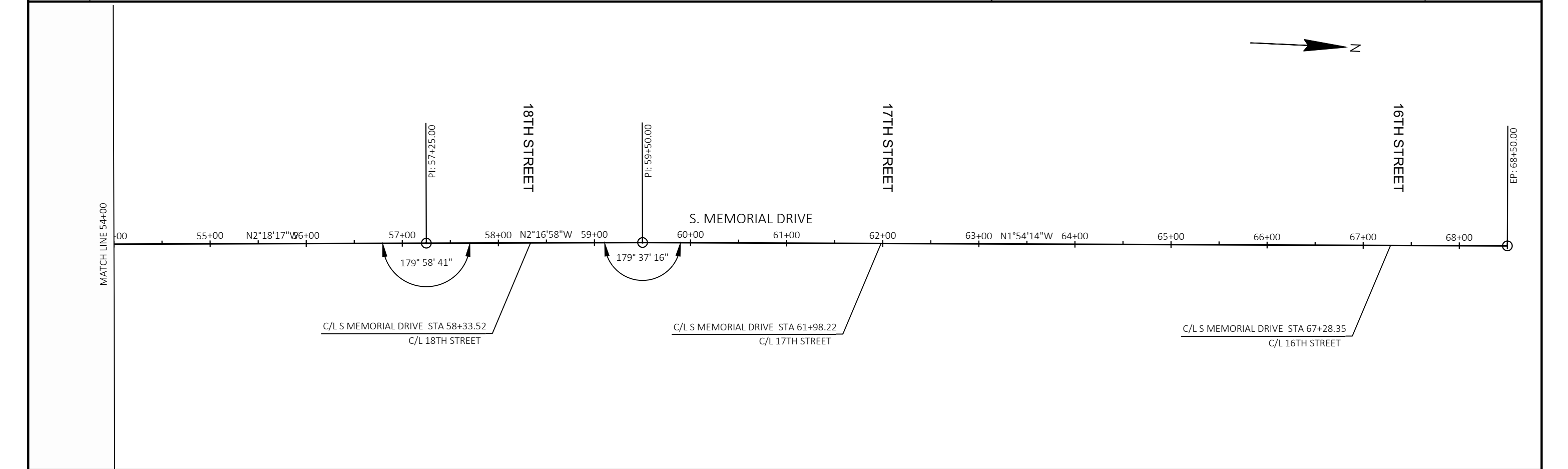
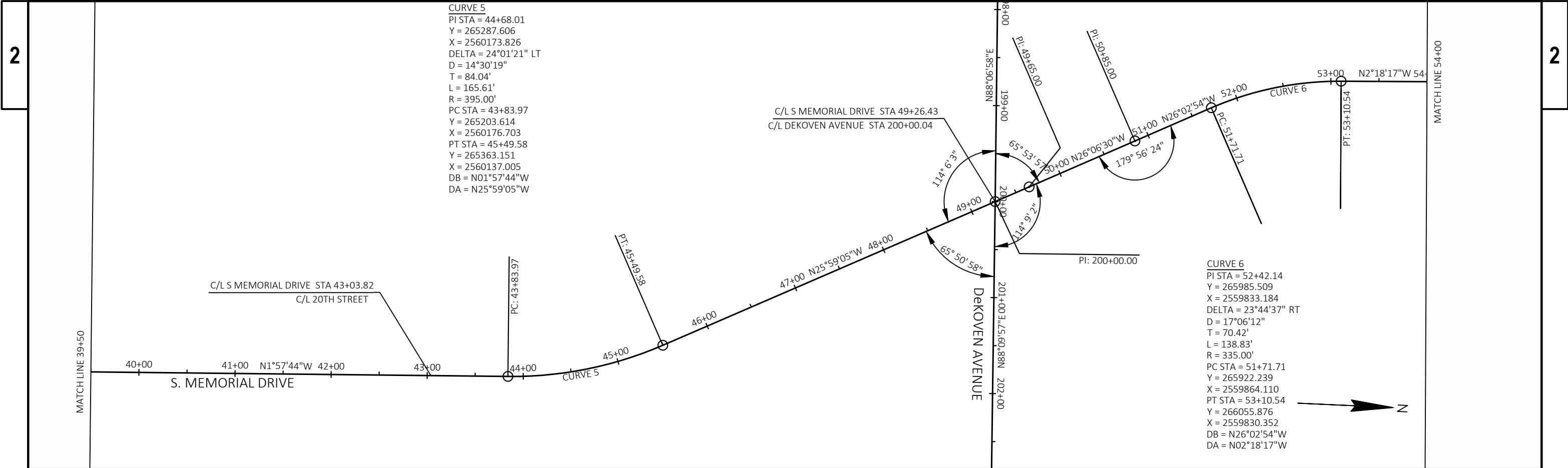
PLOT BY : ELA LODZINSKI

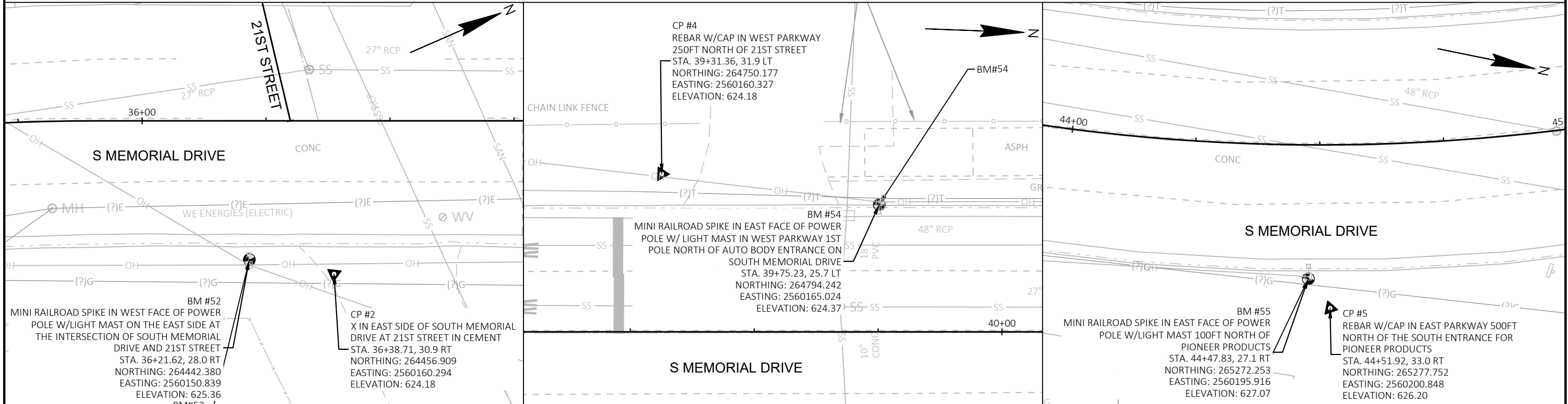
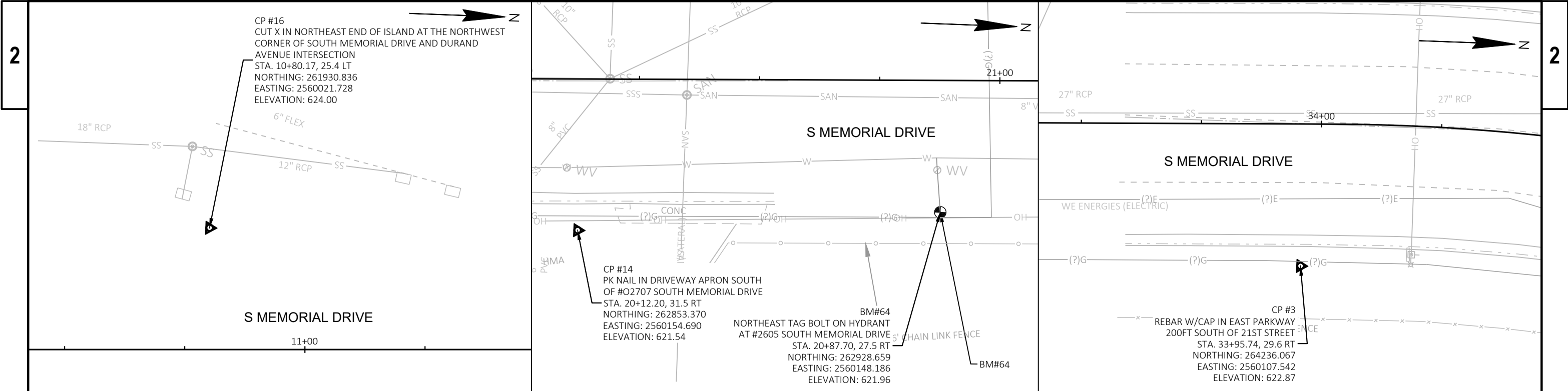
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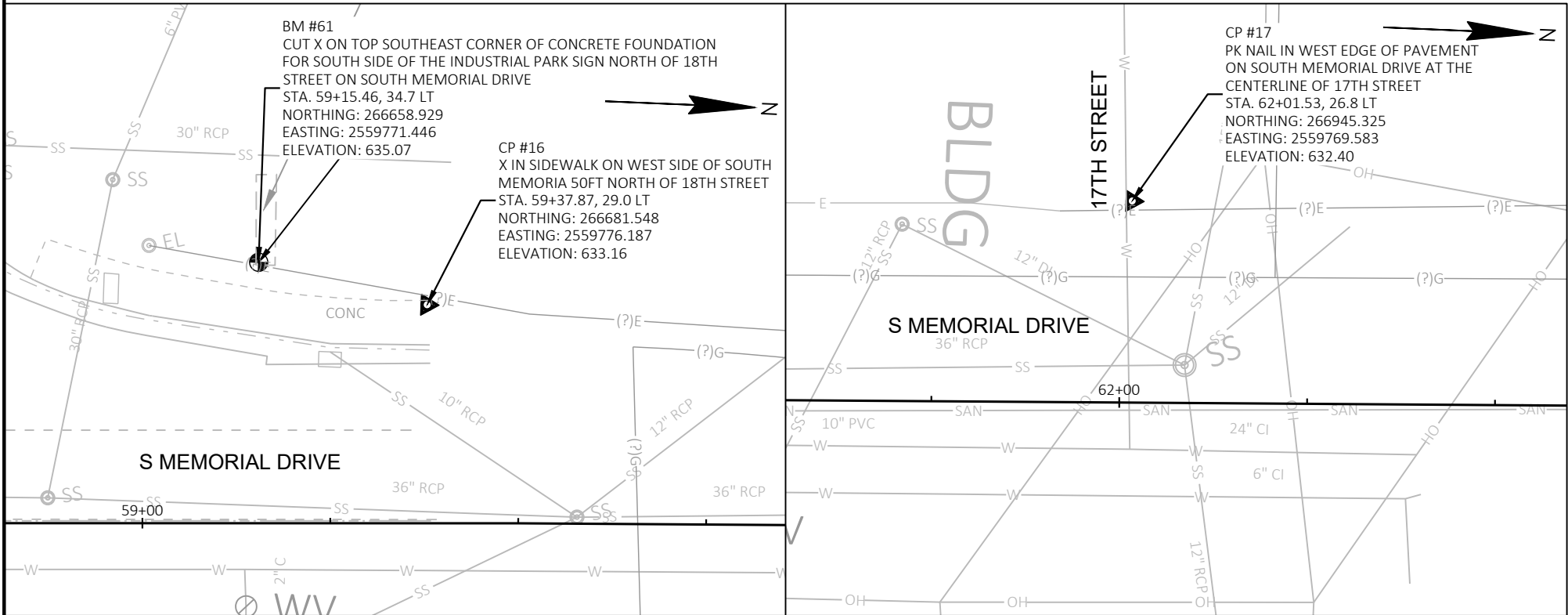
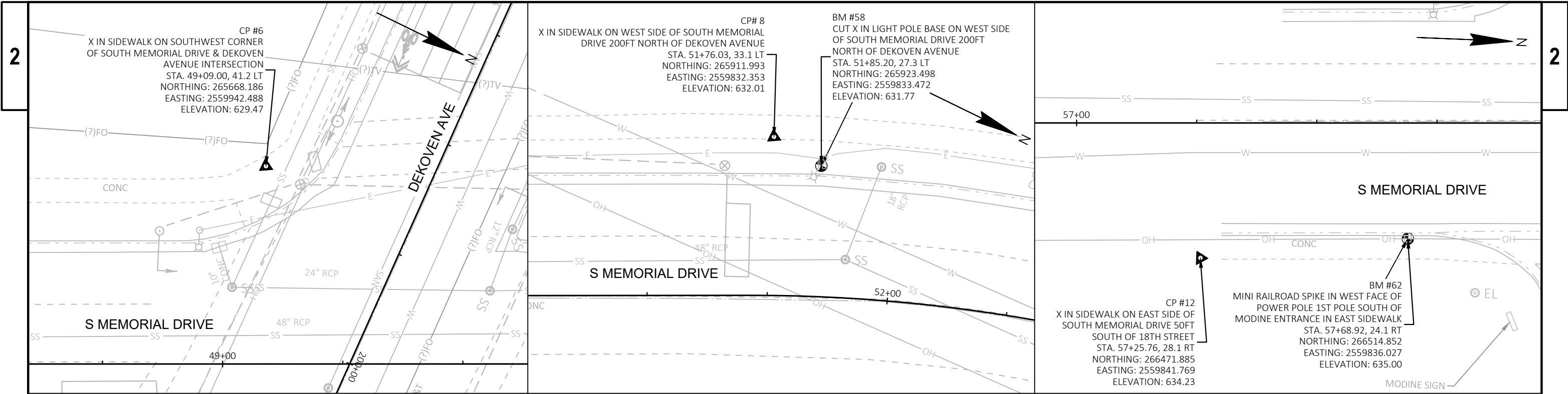
PLOT SCALE : 1 IN:400 FT

WISDOT/CADDs SHEET 42









Estimate Of Quantities

2703-08-71

Line	Item	Item Description	Unit	Total	Qty
0002	204.0100	Removing Concrete Pavement	SY	990.000	990.000
0004	204.0105	Removing Concrete Pavement Butt Joints	SY	1,860.000	1,860.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	239.000	239.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	1,975.000	1,975.000
0010	204.0150	Removing Curb & Gutter	LF	3,553.000	3,553.000
0012	204.0155	Removing Concrete Sidewalk	SY	490.000	490.000
0014	204.0195	Removing Concrete Bases	EACH	10.000	10.000
0016	204.0220	Removing Inlets	EACH	29.000	29.000
0018	204.0245	Removing Storm Sewer (size) 01. 8-Inch	LF	32.000	32.000
0020	204.0245	Removing Storm Sewer (size) 02. 10-Inch	LF	832.000	832.000
0022	204.0245	Removing Storm Sewer (size) 03. 12-Inch	LF	32.000	32.000
0024	204.0245	Removing Storm Sewer (size) 04. 18-Inch	LF	20.000	20.000
0026	204.9060.S	Removing (item description) 02. Loop Detector Wire and Lead-in Cable	EACH	1.000	1.000
0028	205.0100	Excavation Common	CY	4,200.000	4,200.000
0030	209.1500	Backfill Granular Grade 1	TON	7,140.000	7,140.000
0032	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 2703-08-71	EACH	1.000	1.000
0034	213.0100	Finishing Roadway (project) 01. 2703-08-71	EACH	1.000	1.000
0036	305.0110	Base Aggregate Dense 3/4-Inch	TON	130.000	130.000
0038	390.0100	Removing Pavement for Base Patching	CY	1,404.000	1,404.000
0040	390.0305	Base Patching Concrete HES	CY	1,200.000	1,200.000
0042	390.0405	Base Patching Concrete SHES	CY	214.000	214.000
0044	416.0610	Drilled Tie Bars	EACH	2,482.000	2,482.000
0046	416.0620	Drilled Dowel Bars	EACH	5,960.000	5,960.000
0048	416.1720	Concrete Pavement Replacement	SY	990.000	990.000
0050	455.0605	Tack Coat	GAL	3,894.000	3,894.000
0052	460.2000	Incentive Density HMA Pavement	DOL	2,735.000	2,735.000
0054	460.6224	HMA Pavement 4 MT 58-28 S	TON	2,738.000	2,738.000
0056	460.6425	HMA Pavement 5 MT 58-28 H	TON	1,955.000	1,955.000
0058	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	31.000	31.000
0060	465.0125	Asphaltic Surface Temporary	TON	68.000	68.000
0062	520.8000	Concrete Collars for Pipe	EACH	4.000	4.000
0064	601.0409	Concrete Curb & Gutter 30-Inch Type A	LF	3,516.000	3,516.000
0066	601.0600	Concrete Curb Pedestrian	LF	330.000	330.000
0068	602.0410	Concrete Sidewalk 5-Inch	SF	4,680.000	4,680.000
0070	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	180.000	180.000
0072	602.0605	Curb Ramp Detectable Warning Field Radial Yellow	SF	110.000	110.000
0074	602.0870	Concrete Driveway HES 8-Inch	SY	52.000	52.000
0076	602.2400	Concrete Safety Islands	SF	350.000	350.000
0078	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	923.000	923.000
0080	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	20.000	20.000
0082	611.0420	Reconstructing Manholes	EACH	15.000	15.000
0084	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0086	611.0639	Inlet Covers Type H-S	EACH	30.000	30.000
0088	611.1230	Catch Basins 2x3-FT	EACH	30.000	30.000
0090	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0092	611.8110	Adjusting Manhole Covers	EACH	23.000	23.000
0094	611.8115	Adjusting Inlet Covers	EACH	3.000	3.000
0096	611.8120.S	Cover Plates Temporary	EACH	50.000	50.000
0098	619.1000	Mobilization	EACH	1.000	1.000

Estimate Of Quantities

2703-08-71

Line	Item	Item Description	Unit	Total	Qty
0100	624.0100	Water	MGAL	150.000	150.000
0102	625.0100	Topsoil	SY	1,237.000	1,237.000
0104	627.0200	Mulching	SY	1,237.000	1,237.000
0106	628.1504	Silt Fence	LF	200.000	200.000
0108	628.1520	Silt Fence Maintenance	LF	200.000	200.000
0110	628.1905	Mobilizations Erosion Control	EACH	8.000	8.000
0112	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000
0114	628.7010	Inlet Protection Type B	EACH	15.000	15.000
0116	628.7015	Inlet Protection Type C	EACH	2.000	2.000
0118	628.7020	Inlet Protection Type D	EACH	43.000	43.000
0120	629.0210	Fertilizer Type B	CWT	0.800	0.800
0122	630.0200	Seeding Temporary	LB	36.000	36.000
0124	631.0300	Sod Water	MGAL	59.000	59.000
0126	631.1000	Sod Lawn	SY	1,237.000	1,237.000
0128	634.0811	Posts Tubular Steel 2x2-Inch X 11-FT	EACH	9.000	9.000
0130	634.0814	Posts Tubular Steel 2x2-Inch X 14-FT	EACH	2.000	2.000
0132	637.2230	Signs Type II Reflective F	SF	99.000	99.000
0134	637.2235	Signs Type II Reflective F Folding	SF	25.000	25.000
0136	638.2102	Moving Signs Type II	EACH	4.000	4.000
0138	638.2602	Removing Signs Type II	EACH	6.000	6.000
0140	642.5001	Field Office Type B	EACH	1.000	1.000
0142	643.0420	Traffic Control Barricades Type III	DAY	420.000	420.000
0144	643.0705	Traffic Control Warning Lights Type A	DAY	1,140.000	1,140.000
0146	643.0900	Traffic Control Signs	DAY	17,197.000	17,197.000
0148	643.1050	Traffic Control Signs PCMS	DAY	90.000	90.000
0150	643.1070	Traffic Control Cones 42-Inch	DAY	16,247.000	16,247.000
0152	643.3105	Temporary Marking Line Paint 4-Inch	LF	25,625.000	25,625.000
0154	643.3150	Temporary Marking Line Removable Tape 4-Inch	LF	20,500.000	20,500.000
0156	643.3305	Temporary Marking Crosswalk Paint 6-inch	LF	50.000	50.000
0158	643.5000	Traffic Control	EACH	1.000	1.000
0160	644.1410	Temporary Pedestrian Surface Asphalt	SF	27.000	27.000
0162	644.1430	Temporary Pedestrian Surface Plate	SF	27.000	27.000
0164	644.1601	Temporary Pedestrian Curb Ramp	DAY	124.000	124.000
0166	644.1605	Temporary Pedestrian Detectable Warning Field	SF	20.000	20.000
0168	644.1810	Temporary Pedestrian Barricade	LF	54.000	54.000
0170	644.1900.S	Temporary Audible Message Devices	DAY	444.000	444.000
0172	646.1020	Marking Line Epoxy 4-Inch	LF	23,851.000	23,851.000
0174	646.2020	Marking Line Epoxy 6-Inch	LF	12,181.000	12,181.000
0176	646.3020	Marking Line Epoxy 8-Inch	LF	1,577.000	1,577.000
0178	646.5020	Marking Arrow Epoxy	EACH	52.000	52.000
0180	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0182	646.5220	Marking Symbol Epoxy	EACH	37.000	37.000
0184	646.6120	Marking Stop Line Epoxy 18-Inch	LF	133.000	133.000
0186	646.7120	Marking Diagonal Epoxy 12-Inch	LF	705.000	705.000
0188	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	680.000	680.000
0190	646.8220	Marking Island Nose Epoxy	EACH	4.000	4.000
0192	646.9000	Marking Removal Line 4-Inch	LF	240.000	240.000
0194	650.4000	Construction Staking Storm Sewer	EACH	31.000	31.000
0196	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,516.000	3,516.000

Estimate Of Quantities

2703-08-71

Line	Item	Item Description	Unit	Total	Qty
0198	650.7000	Construction Staking Concrete Pavement	LF	500.000	500.000
0200	650.8000	Construction Staking Resurfacing Reference	LF	423.000	423.000
0202	650.8501	Construction Staking Electrical Installations (project) 01. 2703-08-71	EACH	1.000	1.000
0204	650.9000	Construction Staking Curb Ramps	EACH	30.000	30.000
0206	650.9500	Construction Staking Sidewalk (project) 01. 2703-08-71	EACH	1.000	1.000
0208	650.9911	Construction Staking Supplemental Control (project) 01. 2703-08-71	EACH	1.000	1.000
0210	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	171.000	171.000
0212	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	442.000	442.000
0214	652.0605	Conduit Special 2-Inch	LF	1,763.000	1,763.000
0216	652.0615	Conduit Special 3-Inch	LF	222.000	222.000
0218	653.0135	Pull Boxes Steel 24x36-Inch	EACH	2.000	2.000
0220	653.0140	Pull Boxes Steel 24x42-Inch	EACH	5.000	5.000
0222	653.0905	Removing Pull Boxes	EACH	9.000	9.000
0224	654.0101	Concrete Bases Type 1	EACH	5.000	5.000
0226	654.0102	Concrete Bases Type 2	EACH	2.000	2.000
0228	654.0120	Concrete Bases Type 10-Special	EACH	2.000	2.000
0230	654.0217	Concrete Control Cabinet Bases Type 9 Special	EACH	1.000	1.000
0232	655.0210	Cable Traffic Signal 3-14 AWG	LF	395.000	395.000
0234	655.0230	Cable Traffic Signal 5-14 AWG	LF	492.000	492.000
0236	655.0240	Cable Traffic Signal 7-14 AWG	LF	174.000	174.000
0238	655.0260	Cable Traffic Signal 12-14 AWG	LF	685.000	685.000
0240	655.0270	Cable Traffic Signal 15-14 AWG	LF	725.000	725.000
0242	655.0515	Electrical Wire Traffic Signals 10 AWG	LF	1,024.000	1,024.000
0244	655.0610	Electrical Wire Lighting 12 AWG	LF	2,866.000	2,866.000
0246	657.0100	Pedestal Bases	EACH	5.000	5.000
0248	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	2.000	2.000
0250	657.0305	Poles Type 2	EACH	2.000	2.000
0252	657.0352	Poles Type 10-Special	EACH	2.000	2.000
0254	657.0405	Traffic Signal Standards Aluminum 3.5-FT	EACH	2.000	2.000
0256	657.0420	Traffic Signal Standards Aluminum 13-FT	EACH	1.000	1.000
0258	657.0425	Traffic Signal Standards Aluminum 15-FT	EACH	2.000	2.000
0260	657.0536	Monotube Arms 35-FT-Special	EACH	1.000	1.000
0262	657.0541	Monotube Arms 40-FT-Special	EACH	1.000	1.000
0264	657.0585	Trombone Arms 15-FT	EACH	2.000	2.000
0266	657.0830	Luminaire Arms Steel Type 10 Special Pole Clamp 15-FT	EACH	2.000	2.000
0268	658.0173	Traffic Signal Face 3S 12-Inch	EACH	12.000	12.000
0270	658.0174	Traffic Signal Face 4S 12-Inch	EACH	4.000	4.000
0272	658.0416	Pedestrian Signal Face 16-Inch	EACH	8.000	8.000
0274	658.5070	Signal Mounting Hardware (location) 01. Memorial at DeKoven	EACH	1.000	1.000
0276	659.1125	Luminaires Utility LED C	EACH	2.000	2.000
0278	678.0200	Fiber Optic Splice Enclosure	EACH	4.000	4.000
0280	678.0300	Fiber Optic Splice	EACH	2.000	2.000
0282	690.0150	Sawing Asphalt	LF	526.000	526.000
0284	690.0250	Sawing Concrete	LF	19,970.000	19,970.000
0286	740.0440	Incentive IRI Ride	DOL	2,427.000	2,427.000
0288	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	800.000	800.000
0290	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,800.000	1,800.000
0292	SPV.0060	Special 01. Adjust Sanitary Manhole	EACH	7.000	7.000
0294	SPV.0060	Special 02. Sanitary Manhole Seal	EACH	7.000	7.000

Estimate Of Quantities

2703-08-71					
Line	Item	Item Description	Unit	Total	Qty
0296	SPV.0060	Special 03. Traffic Signal Cabinet and Controller	EACH	1.000	1.000
0298	SPV.0060	Special 04. Accessible Pedestrian Push Button System	EACH	1.000	1.000
0300	SPV.0060	Special 05. Video Vehicle Detection System	EACH	1.000	1.000
0302	SPV.0060	Special 06. Emergency Vehicle Preemption System	EACH	1.000	1.000
0304	SPV.0060	Special 07. Remove and Salvage Traffic Signal	EACH	1.000	1.000
0306	SPV.0075	Special 01. Street Sweeping	HRS	50.000	50.000
0308	SPV.0090	Special 01. Furnish and Install 12 SM Fiber Optic Communications	LF	2,188.000	2,188.000
0310	SPV.0195	Special 01. Management of Solid Waste	TON	1,252.000	1,252.000
0312	SPV.0195	Special 02. Management of Hazardous Solid Waste	TON	13.000	13.000

ASPHALT ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	*	*		*	*	*	*	REMARKS
					204.0105	204.0115	204.0120	455.0605	460.6224	460.6425	465.0125	
					REMOVING CONCRETE PAVEMENT BUTT JOINTS	REMOVING ASPHALTIC SURFACE BUTT JOINTS	REMOVING ASPHALTIC SURFACE MILLING	TACK COAT	HMA PAVEMENT 4 MT 58-28 S	HMA PAVEMENT 5 MT 58-28 H	ASPHALTIC SURFACE TEMPORARY	CONSTRUCTION STAKING RESURFACING REFERENCE
					SY	SY	SY	GAL	TON	TON	TON	LF
0010	11+74	-	35+00	S. MEMORIAL DRIVE	304	-	-	1818	1273	909	-	-
0010	35+00	-	37+50	S. MEMORIAL DRIVE	-	-	-	302	212	151	-	-
0010	37+50	-	48+00	S. MEMORIAL DRIVE	112	-	-	240	168	120	-	-
0010	50+75	-	66+97	S. MEMORIAL DRIVE	355	-	135	767	537	384	-	94
0010	100+70	-	104+00	21ST STREET	172	10	1840	271	190	136	-	329
0010	48+00	-	50+75	DeKOVEN AVENUE	293	-	-	396	277	198	-	-
0010				UNDISTRIBUTED	-	-	-	-	-	-	14	-
TOTAL CAT 0010					1236	10	1975	3794	2657	1898	14	423

CONCRETE PATCHING

CATEGORY	STATION	TO	STATION	LOCATION	204.0100	205.0100	209.1500	*	390.0305	*	*	416.0620	416.1720	624.0100	650.7000	*	REMARKS
					REMOVING CONCRETE PAVEMENT	EXCAVATION COMMON	BACKFILL GRANULAR GRADE 1	390.0100	BASE PATCHING CONCRETE HES	BASE PATCHING CONCRETE SHES	416.0610	DRILLED DOWEL BARS	CONCRETE PAVEMENT REPLACEMENT	WATER	CONSTRUCTION STAKING CONCRETE PAVEMENT	690.0250	
					SY	CY	TON	CY	CY	CY	EACH	EACH	SY	MGAL	LF	LF	
0010	11+74	-	35+00	S. MEMORIAL DRIVE	-	1,330	2,261	421	421	-	344	2019	-	46	177	5,608	
0010	35+00	-	37+50	S. MEMORIAL DRIVE	465	478	813	157	151	6	133	610	465	17	104	1,397	
0010	37+50	-	48+00	S. MEMORIAL DRIVE	-	755	1,284	248	206	42	276	1161	-	26	-	3,281	
0010	50+75	-	66+97	S. MEMORIAL DRIVE	-	642	1,092	204	204	-	272	998	-	22	-	2,846	
0010	100+70	-	104+00	21ST STREET	-	330	561	105	22	83	144	403	-	12	-	1,102	
0010	48+00	-	50+75	DeKOVEN AVENUE	524	661	1,124	215	190	25	241	761	524	23	210	2,062	
TOTAL CAT 0010					990	4,200	7,140	1,350	1,200	160	1,410	5,960	990	150	500	16,300	

CONCRETE SIDEWALK ITEMS

CATEGORY	STREET	QUADRANT	204.0155	305.0110	601.0600	602.0410	602.0505	602.0605	602.2400	650.9000	*	REMARKS
			REMOVING CONCRETE SIDEWALK	BASE AGGREGATE DENSE 3/4-INCH	CONCRETE CURB PEDESTRIAN	CONCRETE SIDEWALK 5-INCH	CURB RAMP DETECTABLE WARNING FIELD YELLOW	CURB RAMP DETECTABLE WARNING FIELD RADIAL YELLOW	CONCRETE SAFETY ISLANDS	CONSTRUCTION STAKING CURB RAMPS	690.0250	
			SY	TON	LF	SF	SF	SF	SF	EACH	LF	
0010	21ST STREET	NORTH	16	5	20	172	10	-	-	1	6	
0010	HAMILTON AVE	SOUTHWEST	34	9	47	352	20	-	-	2	12	
0010	HAMILTON AVE	SOUTHEAST	13	5	15	164	10	-	-	1	6	
0010	DEKOVEN AVE	NORTHWEST	46	8	-	326	10	-	-	1	10	
0010	DEKOVEN AVE	SOUTHWEST	62	13	42	521	20	-	-	2	10	
0010	DEKOVEN AVE	NORTHEAST	95	26	36	1,053	20	-	-	2	11	
0010	DEKOVEN AVE	SOUTHEAST	20	9	-	339	10	-	-	1	6	
0010	DEKOVEN AVE	SOUTHEAST ISLAND	-	7	35	254	30	-	145	3	-	
0010	DEKOVEN AVE	NORTHWEST ISLAND	-	9	41	339	30	-	203	3	-	
0010	18TH STREET	SOUTHWEST	31	9	-	359	20	-	-	2	10	
0010	18TH STREET	NORTHWEST	32	8	29	304	-	19	-	1	6	
0010	18TH STREET	SOUTHEAST	16	5	18	190	-	32	-	1	5	
0010	18TH STREET	NORTHEAST	19	5	18	198	-	33	-	1	6	
0010	16TH STREET	NORTHWEST	100	3	27	100	-	20	-	1	6	
TOTAL CAT 0010			490	130	330	4,680	180	110	350	30	100	

* QUANTITIES SHOWN IN OTHER TABLES

DRIVEWAY ITEMS													
				*		*	*	*				*	
				204.0105	204.0115	455.0605	460.6224	460.6425	465.0120	602.0870	690.0150	690.0250	
				REMOVING CONCRETE	REMOVING ASPHALTIC	TACK COAT	HMA PAVEMENT 4	HMA PAVEMENT 5	ASPHALTIC SURFACE	CONCRETE	SAWING	SAWING	
				PAVEMENT BUTT JOINTS	SURFACE BUTT JOINTS	GAL	MT 58-28 S	MT 58-28 H	DRIVEWAYS AND FIELD	DRIVEWAY HES	ASPHALT	CONCRETE	REMARKS
CATEGORY	STATION	OFFSET	LOCATION	SY	SY		TON	TON	ENTRANCES	8-INCH	LF	LF	
0010	12+36.27	29.18	R	15	11	4	4	2	-	-	27	34	
0010	13+77.35	25.00	R	14	-	2	2	1	-	-	16	21	
0010	14+28.28	25.00	R	34	-	5	4	3	-	-	-	67	
0010	15+71.09	25.00	R	20	-	3	2	2	-	-	18	40	
0010	17+06.55	25.00	R	50	-	7	5	4	-	-	55	59	
0010	17+76.25	25.00	R	-	24	4	5	2	-	-	43	-	
0010	19+43.57	25.00	R	-	36	5	7	3	-	-	76	-	
0010	20+10.36	25.00	R	73	-	11	8	6	-	-	69	83	
0010	22+45.79	25.00	R	42	-	6	5	3	-	-	41	51	
0010	23+07.97	25.00	R	41	-	6	4	3	-	-	40	46	
0010	25+26.69	25.00	R	24	-	4	3	2	-	-	-	52	
0010	27+09.86	25.00	R	-	22	3	4	2	-	-	48	-	
0010	28+12.94	25.00	R	31	-	5	3	3	-	-	-	66	
0010	29+80.83	25.00	R	34	-	5	4	3	-	-	-	73	
0010	31+45.39	25.00	R	44	-	7	5	4	-	-	-	99	
0010	36+48.04	25.00	R	18	-	3	2	2	-	-	-	60	
0010	39+51.68	-25.00	L	17	-	3	2	2	-	-	-	27	
0010	40+35.71	25.00	R	21	-	3	2	2	-	-	-	75	
0010	41+40.62	25.00	R	19	-	3	2	2	-	-	-	69	
0010	43+03.98	28.50	R	75	-	11	8	6	-	-	41	55	
0010	58+30.58	29.51	R	52	136	-	-	-	31	52	52	69	
TOTAL CAT 0010				624	229	100	81	57	31	52	526	1,046	

CURB & GUTTER ITEMS										
					204.0150	416.0610	601.0409	650.5500	690.0250	
					REMOVING CURB	DRILLED TIE BARS	CONCRETE CURB & GUTTER	CONSTRUCTION STAKING	SAWING	
					& GUTTER		30-INCH TYPE A	CURB GUTTER AND CURB &	CONCRETE	
CATEGORY	STATION	TO	STATION	LOCATION	LF	EACH	LF	GUTTER	LF	REMARKS
0010	11+74	-	35+00	S. MEMORIAL DRIVE	913	164	913	913	661	
0010	35+00	-	37+50	S. MEMORIAL DRIVE	310	25	310	310	94	
0010	37+50	-	48+00	S. MEMORIAL DRIVE	484	132	484	484	465	
0010	50+75	-	66+97	S. MEMORIAL DRIVE	750	209	750	750	712	
0010	100+70	-	104+00	21ST STREET	152	37	152	152	130	
0010	48+00	-	50+75	DeKOVEN AVENUE	621	70	584	584	240	
				UNDISTRIBUTED	323	54	323	323	222	
TOTAL CAT 0010					3553	691	3516	3516	2524	

LAWN RESTORATION										
					625.0100	627.0200	629.0210	630.0200	631.0300	631.1000
					TOPSOIL	MULCHING	FERTILIZER TYPE B	SEEDING	SOD WATER	SOD LAWN
					SY	SY	CWT	TEMPORARY	MGAL	SY
CATEGORY	STATION	TO	STATION	LOCATION				LB		
0010	11+74	-	35+00	S. MEMORIAL DRIVE	203	203	0.13	6	10	203
0010	35+00	-	37+50	S. MEMORIAL DRIVE	69	69	0.05	2	4	69
0010	37+50	-	48+00	S. MEMORIAL DRIVE	108	108	0.07	3	5	108
0010	50+75	-	66+97	S. MEMORIAL DRIVE	238	238	0.15	7	11	238
0010	100+70	-	104+00	21ST STREET	64	64	0.04	2	3	64
0010	48+00	-	50+75	DeKOVEN AVENUE	308	308	0.20	9	14	308
0010				UNDISTRIBUTED	247	247	0.16	7	12	247
TOTAL CAT 0010					1237	1237	0.80	36	59	1237

* QUANTITIES SHOWN IN OTHER TABLES

EROSION CONTROL													
CATEGORY	STATION	TO	STATION	LOCATION	628.1504	628.1520	628.1905	628.1910	628.7010	628.7015	628.7020	SPV.0075.01	REMARKS
					SILT FENCE LF	SILT FENCE MAINTENANCE LF	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	INLET PROTECTION TYPE B EACH	INLET PROTECTION TYPE C EACH	INLET PROTECTION TYPE D EACH	SPECIAL (01. STREET SWEEPING) HRS	
0010	11+74	-	35+00	S. MEMORIAL DRIVE	-	-	-	-	1	1	9	-	
0010	35+00	-	37+50	S. MEMORIAL DRIVE	-	-	-	-	2	-	-	-	
0010	37+50	-	48+00	S. MEMORIAL DRIVE	-	-	-	-	3	-	8	-	
0010	50+75	-	66+97	S. MEMORIAL DRIVE	-	-	-	-	6	-	8	-	
0010	100+70	-	104+00	21ST STREET	-	-	-	-	-	-	4	-	
0010	48+00	-	50+75	DeKOVEN AVENUE	-	-	-	-	-	-	5	-	
0010				UNDISTRIBUTED	200	200	-	-	3	1	9	50	
0010				PROJECT 2703-07-71	-	-	8	4	-	-	-	-	
TOTAL CAT 0010					200	200	8	4	15	2	43	50	

PERMANENT SIGNING														
SIGN NO.	STATION	OFFSET	SIGN CODE	SIGN MESSAGE	SIGN SIZE			634.0811	634.0814	637.2230	637.2235	638.2102	638.2602	MOUNT ON POST
					W	x	H	POSTS TUBULAR STEEL 2X2-INCH X 11-FT	POSTS TUBULAR STEEL 2X2-INCH X 14-FT	SIGNS TYPE II REFLECTIVE F	SIGNS TYPE II REFLECTIVE F FOLDING	MOVING SIGNS TYPE II	REMOVING SIGNS TYPE II	
					[IN.]	x	[IN.]	EACH	EACH	SF	SF	EACH	EACH	REMARKS
1	11+03	40.7' RT	W4-2R		36	x	36	-	1	9.00	-	-	-	X MOUNT ON LIGHT POLE
2	12+26	26.7' LT	R4-11		30	x	30	1	-	6.25	-	-	-	
3	13+89	27.2' LT	W9-5		36	x	36	-	1	9.00	-	-	-	
4	17+63	28.8' RT	R3-17		30	x	24	-	-	5.00	-	-	-	
5	34+19	26.9' RT	W10-1					-	-	-	-	-	1	
6	36+92	33.6' RT	R15-1					-	-	-	-	-	1	
7	36+92	33.6' RT	R8-9					-	-	-	-	-	1	
8	37+05	30.2' LT	R15-1					-	-	-	-	-	1	
9	37+05	30.2' LT	R8-9					-	-	-	-	-	1	
10	48+10	28.3' RT	R4-4		36	x	30	1	-	7.50	-	-	-	
11	48+46	48.1' RT	R1-2		36	x	31	1	-	7.75	-	-	-	X MOUNT ON EXISTING SB MOUNT ON EXISTING SB MOUNT ON EXISTING SB
12	48+65	27.6' LT	R3-17		30	x	24	1	-	5.00	-	-	-	
13	48+76	25.6' RT	R1-1		30	x	30	-	-	-	6.25	-	-	
14	49+24	50.8' LT	R1-1		30	x	30	-	-	-	6.25	-	-	
15	49+30	50.2' RT	R1-1		30	x	30	-	-	-	6.25	-	-	
16	49+81	27.7' LT	R1-1	DEKOVEN AVE DEKOVEN AVE	30	x	30	-	-	-	6.25	-	-	X MOUNT ON EXISTING SB
17	48+86	26.8' LT						-	-	-	-	1	-	
18	49+55	27.9' RT						-	-	-	-	1	-	
19	50+01	61.7' LT	R1-1					-	-	-	-	-	1	
20	50+10	48.7' LT	R1-2		36	x	31	1	-	7.75	-	-	-	
21	50+01	32.5' RT	R3-17		30	x	24	1	-	5.00	-	-	-	X MOUNT ON EX LIGHT POLE
22	50+55	28.4' LT	R4-4		36	x	30	1	-	7.50	-	-	-	
23	59+13	24.9' RT	W9-5		36	x	36	-	-	9.00	-	-	-	
24	59+62	31.4' LT	R3-17		30	x	24	1	-	5.00	-	-	-	
25	62+85	25.3' RT	R4-11		30	x	30	1	-	6.25	-	-	-	
26	66+97	29.4' LT	W4-2R		36	x	36	-	-	9.00	-	-	-	X MOUNT ON EX POLE MOVED FROM OFFSET 42.0' RT MOVED FROM OFFSET 51.4' RT
27	101+39	51.0' RT (21ST ST)	R5-2					-	-	-	-	1	-	
28	101+86	53.7' RT (21ST ST)	R1-1					-	-	-	-	1	-	
TOTAL CAT 0010								9	2	99	25	4	6	

* QUANTITIES SHOWN IN OTHER TABLES

FIBER OPTIC ITEMS												
CATEGORY	STATION	TO	STATION	LOCATION	650.8501	652.0605	653.0135	*	678.0200	678.0300	SPV.0090.01	REMARKS
					CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS EACH	CONDUIT SPECIAL 2-INCH LF	PULL BOXES STEEL 24X36-INCH EACH	655.0610	FIBER OPTIC SPLICE ENCLOSURE EACH	FIBER OPTIC SPLICE EACH	SPECIAL (01. FURNISH AND INSTALL 12 SM FIBER OPTIC COMMUNICATIONS CABLE) LF	
0010	11+74	-	35+00	S. MEMORIAL DRIVE	-	-	-	-	-	-	-	
0010	35+00	-	37+50	S. MEMORIAL DRIVE	-	-	-	-	-	-	-	
0010	37+50	-	48+00	S. MEMORIAL DRIVE	-	-	-	-	-	-	-	
0010	50+75	-	66+97	S. MEMORIAL DRIVE	-	1,763	2	2,188	4	2	2,188	
0010	100+70	-	104+00	21ST STREET	-	-	-	-	-	-	-	
0010	48+00	-	50+75	DeKOVEN AVENUE	1	-	-	-	-	-	-	
TOTAL CAT 0010					1	1,763	2	2,188	4	2	2,188	

STORM SEWER REMOVALS - STRUCTURES

CATEGORY	STATION	OFFSET	LOCATION	204.0220	REMARKS
				REMOVING INLETS EACH	
0010	14+11.11	29.43	R	-	
0010	15+82.41	-3.56	L	-	
0010	17+82.66	-23.63	L	1	
0010	17+82.53	-1.16	L	-	
0010	17+89.95	24.58	R	1	
0010	20+00.75	-23.89	L	1	
0010	19+45.70	1.85	R	-	
0010	19+44.98	30.55	R	-	
0010	19+98.89	24.94	R	1	
0010	20+18.87	-0.07	L	-	
0010	20+68.67	-23.91	L	1	
0010	20+34.87	3.26	R	-	
0010	21+35.31	3.88	R	-	
0010	23+82.92	3.72	R	-	
0010	26+85.19	-23.85	L	1	
0010	27+63.11	-2.15	L	-	
0010	27+68+68	-23.88	L	1	
0010	27+68.11	24.47	R	1	
0010	30+66.52	-1.72	L	-	
0010	33+08.22	-24.15	L	1	
0010	33+07.72	-1.99	L	-	
0010	33+08.78	24.50	R	1	
0010	34+54.42	-5.58	L	-	
0010	36+33.71	-10.35	L	-	
0010	37+34.37	-16.24	L	-	
0010	38+07.15	2.37	R	-	
0010	39+67.38	-5.04	L	-	
0010	39+68.74	-24.45	L	1	
0010	39+68.98	24.38	R	1	
0010	42+80.85	-37.79	L	1	
0010	42+97.33	-18.38	L	-	
0010	42+98.44	-4.66	L	-	
0010	43+26.78	-38.08	L	1	
0010	43+45.83	-24.32	L	1	
0010	43+45.55	24.30	R	1	
0010	44+97.83	0.11	R	-	

STORM SEWER REMOVALS - STRUCTURES (CONTINUED)

CATEGORY	STATION	OFFSET	LOCATION	204.0220	REMARKS
				REMOVING INLETS EACH	
0010	45+69.62	-24.17	L	1	
0010	45+69.43	24.49	R	1	
0010	48+99.07	-25.32	L	1	
0010	49+21.99	5.00	R	-	
0010	49+55.63	-15.25	L	-	
0010	49+60.31	-28.05	L	-	
0010	49+91.58	-93.26	L	-	
0010	49+95.16	-89.12	L	1	
0010	50+51.80	24.50	R	1	
0010	50+64.17	-16.35	L	-	
0010	50+86.64	-24.59	L	1	
0010	51+90.81	-7.99	L	-	
0010	53+28.99	-22.49	L	1	
0010	53+28.30	22.17	R	1	
0010	53+38.14	-4.53	L	-	
0010	53+38.86	15.08	R	-	
0010	54+35.17	-21.47	L	1	
0010	54+41.51	-7.54	L	-	
0010	54+43.10	16.13	R	-	
0010	56+50.56	-5.70	L	-	
0010	56+45.33	8.79	R	-	
0010	58+87.40	-3.37	L	-	
0010	59+09.64	22.35	R	1	
0010	59+24.98	-22.77	L	1	
0010	59+57.80	-0.86	L	-	
0010	101+26.27	-19.50	L	1	
0010	101+25.46	19.41	R	1	
0010	101+36.13	-4.68	L	-	
0010	101+46.40	13.63	R	-	
0010	101+47.75	-2.11	L	-	
0010	101+62.68	3.55	R	-	
0010	102+10.97	-19.75	L	-	
0010	102+12.55	24.45	R	-	
0010	103+24.51	-1.75	L	-	
TOTAL CAT 0010				29	

* QUANTITIES SHOWN IN OTHER TABLES

PAVEMENT MARKING REMOVAL

					646.9000 MARKING REMOVAL LINE 4-INCH	
CATEGORY	STATION	TO	STATION	LOCATION	LF	REMARKS
0010	11+74	-	35+00	S. MEMORIAL DRIVE	-	
0010	35+00	-	37+50	S. MEMORIAL DRIVE	-	
0010	37+50	-	48+00	S. MEMORIAL DRIVE	-	
0010	50+75	-	66+97	S. MEMORIAL DRIVE	240	
0010	100+70	-	104+00	21ST STREET	-	
0010	48+00	-	50+75	DeKOVEN AVENUE	-	
TOTAL CAT 0010					240	

PAVEMENT MARKINGS

					646.1020				646.2020		646.3020		646.5020			646.5120		646.5220		646.6120		646.7120		646.7420		646.8220		
					MARKING LINE EPOXY 4-INCH				MARKING LINE EPOXY 6-INCH		MARKING LINE EPOXY 8-INCH		MARKING ARROW EPOXY			MARKING WORD EPOXY		MARKING SYMBOL EPOXY		MARKING STOP LINE EPOXY 18-INCH		MARKING DIAGONAL EPOXY 12-INCH		MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH		MARKING ISLAND NOSE EPOXY		
					YELLOW	YELLOW	YELLOW	WHITE	WHITE	WHITE	WHITE	YELLOW	WHITE	WHITE BIKE LANE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	YELLOW		
					SOLID	SOLID	DASHED 12.5' LINE, 37.5' GAP	DASHED 12.5' LINE, 37.5' GAP	SOLID	DOTTED 3' LINE, 9' GAP	SOLID	DOTTED 3' LINE, 9' GAP	TYPE 2	TYPE 2	WHITE BIKE LANE	ONLY	BIKE	SHARROW										
CATEGORY	STATION	TO	STATION	LOCATION	LF	DOUBLE LF	LF	LF	LF	LF	LF	LF	ARROW EACH	ARROW EACH	ARROW EACH	WORD EACH	SYMBOL EACH	SYMBOL EACH	LF	LF	LF	LF	LF	LF	LF	LF	REMARKS	
0010	11+74	-	36+00	S. MEMORIAL DRIVE	1,654	13,462	414	92	3,974	157	160	26	4	1	15	-	15	1	-	302	-	-	-	-	-	-		
0010	36+00	-	36+70	S. MEMORIAL DRIVE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0010	36+70	-	42+65	S. MEMORIAL DRIVE	821	584	202	-	5,160	-	170	-	4	1	5	-	5	-	-	-	-	-	-	-	-	-		
0010	42+65	-	43+45	S. MEMORIAL DRIVE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
0010	43+45	-	48+90	S. MEMORIAL DRIVE	-	2,032	-	-	1,008	24	597	-	-	3	6	1	6	-	32	97	145	2						
0010	48+90	-	49+55	S. MEMORIAL DRIVE	-	212	-	-	-	-	-	-	-	-	-	-	-	-	40	-	153	-						
0010	49+55	-	57+85	S. MEMORIAL DRIVE	-	2,590	-	-	1,541	26	519	-	-	3	8	1	8	-	32	251	234	2						
0010	57+85	-	58+85	S. MEMORIAL DRIVE	-	-	-	-	-	-	6	-	-	-	-	-	-	-	29	-	148	-						
0010	58+85	-	63+00	S. MEMORIAL DRIVE	-	1,403	-	-	150	142	75	24	-	1	1	-	1	1	-	55	-	-	-	-	-			
0010	100+70	-	104+00	21ST STREET	-	352	-	33	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
0010	DeKOVEN AVENUE				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SUBTOTAL CAT 0010					2,475	20,635	616	125	11,833	348	1,527	50	8	9	35	2	35	2	133	705	680	4						
TOTAL CAT 0010					23,851				12,181		1,577		52		2		37		133		705		680		4			

* QUANTITIES SHOWN IN OTHER TABLES

STORM SEWER ADJUSTMENTS												
				*	*	*	*				*	
				390.0100 REMOVING PAVEMENT FOR BASE PATCHING	390.0405 BASE PATCHING CONCRETE SHES	416.0610 DRILLED TIE BARS	465.0125 ASPHALTIC SURFACE TEMPORARY	611.0420 RECONSTRUCTING MANHOLES	611.8110 ADJUSTING MANHOLE COVERS	611.8115 ADJUSTING INLET COVERS	611.8120.S COVER PLATES TEMPORARY	
CATEGORY	STATION	OFFSET	LOCATION	CY	CY	EACH	TON	EACH	EACH	EACH	EACH	REMARKS
0010	14+11.11	29.43	R	1.2	1.2	8	1.2	-	1	-	1	
0010	15+82.41	-3.56	L	1.2	1.2	8	1.2	-	1	-	1	
0010	17+82.66	-23.63	L	-	-	-	-	-	-	-	-	
0010	17+82.53	-1.16	L	1.2	1.2	8	1.2	1	-	-	1	
0010	17+89.95	24.58	R	-	-	-	-	-	-	-	-	
0010	20+00.75	-23.89	L	-	-	-	-	-	-	-	-	
0010	19+45.70	1.85	R	1.2	1.2	8	1.2	-	1	-	1	
0010	19+44.98	30.55	R	1.2	1.2	8	1.2	-	1	-	1	
0010	19+98.89	24.94	R	-	-	-	-	-	-	-	-	
0010	20+18.87	-0.07	L	1.2	1.2	8	1.2	1	-	-	1	
0010	20+68.67	-23.91	L	-	-	-	-	-	-	-	-	
0010	20+34.87	3.26	R	1.2	1.2	8	1.2	-	1	-	1	
0010	21+35.31	3.88	R	1.2	1.2	8	1.2	-	1	-	1	
0010	23+82.92	3.72	R	1.2	1.2	8	1.2	-	1	-	1	
0010	26+85.19	-23.85	L	-	-	-	-	-	-	-	-	
0010	27+63.11	-2.15	L	1.2	1.2	8	1.2	1	-	-	1	
0010	27+68+68	-23.88	L	-	-	-	-	-	-	-	-	
0010	27+68.11	24.47	R	-	-	-	-	-	-	-	-	
0010	30+66.52	-1.72	L	1.2	1.2	8	1.2	1	-	-	1	
0010	33+08.22	-24.15	L	-	-	-	-	-	-	-	-	
0010	33+07.72	-1.99	L	1.2	1.2	8	1.2	1	-	-	1	
0010	33+08.78	24.50	R	-	-	-	-	-	-	-	-	
0010	34+54.42	-5.58	L	1.2	1.2	8	1.2	-	1	-	1	
0010	36+33.71	-10.35	L	1.2	1.2	8	1.2	-	1	-	1	
0010	37+34.37	-16.24	L	1.2	1.2	8	1.2	-	1	-	1	
0010	38+07.15	2.37	R	1.2	1.2	8	1.2	-	1	-	1	
0010	39+67.38	-5.04	L	1.2	1.2	8	1.2	1	-	-	1	
0010	39+68.74	-24.45	L	-	-	-	-	-	-	-	-	
0010	39+68.98	24.38	R	-	-	-	-	-	-	-	-	
0010	42+80.85	-37.79	L	-	-	-	-	-	-	-	-	
0010	42+97.33	-18.38	L	1.2	1.2	8	1.2	-	1	-	1	
0010	42+98.44	-4.66	L	1.2	1.2	8	1.2	1	-	-	1	
0010	43+26.78	-38.08	L	-	-	-	-	-	-	-	-	
0010	43+45.83	-24.32	L	-	-	-	-	-	-	-	-	
0010	43+45.55	24.30	R	-	-	-	-	-	-	-	-	
0010	44+97.83	0.11	R	-	-	8	-	-	1	-	1	

* QUANTITIES SHOWN IN OTHER TABLES

STORM SEWER ADJUSTMENTS (CONTINUED)												
CATEGORY	STATION	OFFSET	LOCATION	* 390.0100 REMOVING PAVEMENT FOR BASE PATCHING CY	* 390.0405 BASE PATCHING CONCRETE SHES CY	* 416.0610 DRILLED TIE BARS EACH	* 465.0125 ASPHALTIC SURFACE TEMPORARY TON	611.0420 RECONSTRUCTING MANHOLES EACH	611.8110 ADJUSTING MANHOLE COVERS EACH	611.8115 ADJUSTING INLET COVERS EACH	* 611.8120.S COVER PLATES TEMPORARY EACH	REMARKS
0010	45+69.62	-24.17	L	-	-	-	-	-	-	-	-	
0010	45+69.43	24.49	R	-	-	-	-	-	-	-	-	
0010	48+99.07	-25.32	L	-	-	-	-	-	-	-	-	
0010	49+21.99	5.00	R	1.2	1.2	8	1.2	-	1	-	1	
0010	49+55.63	-15.25	L	1.2	1.2	8	1.2	-	1	-	1	
0010	49+60.31	-28.05	L	-	-	7	-	-	-	1	-	
0010	49+91.58	-93.26	L	1.2	1.2	8	1.2	1	-	-	1	
0010	49+95.16	-89.12	L	-	-	-	-	-	-	-	-	
0010	50+51.80	24.50	R	-	-	-	-	-	-	-	-	
0010	50+64.17	-16.35	L	1.2	1.2	8	1.2	1	-	-	1	
0010	50+86.64	-24.59	L	-	-	-	-	-	-	-	-	
0010	51+90.81	-7.99	L	1.2	1.2	8	1.2	-	1	-	1	
0010	53+28.99	-22.49	L	-	-	-	-	-	-	-	-	
0010	53+28.30	22.17	R	-	-	-	-	-	-	-	-	
0010	53+38.14	-4.53	L	1.2	1.2	8	1.2	1	-	-	1	
0010	53+38.86	15.08	R	1.2	1.2	8	1.2	-	1	-	1	
0010	54+35.17	-21.47	L	-	-	-	-	-	-	-	-	
0010	54+41.51	-7.54	L	1.2	1.2	8	1.2	1	-	-	1	
0010	54+43.10	16.13	R	1.2	1.2	8	1.2	-	1	-	1	
0010	56+50.56	-5.70	L	1.2	1.2	8	1.2	-	1	-	1	
0010	56+45.33	8.79	R	1.2	1.2	8	1.2	-	1	-	1	
0010	58+87.40	-3.37	L	1.2	1.2	8	1.2	-	1	-	1	
0010	59+09.64	22.35	R	-	-	-	-	-	-	-	-	
0010	59+24.98	-22.77	L	-	-	-	-	-	-	-	-	
0010	59+57.80	-0.86	L	1.2	1.2	8	1.2	1	-	-	1	
0010	101+26.27	-19.50	L	-	-	-	-	-	-	-	-	
0010	101+25.46	19.41	R	-	-	-	-	-	-	-	-	
0010	101+36.13	-4.68	L	1.2	1.2	8	1.2	1	-	-	1	
0010	101+46.40	13.63	R	1.2	1.2	8	1.2	1	-	-	1	
0010	101+47.75	-2.11	L	1.2	1.2	8	1.2	-	1	-	1	
0010	101+62.68	3.55	R	1.2	1.2	8	1.2	-	1	-	1	
0010	102+10.97	-19.75	L	-	-	7	-	-	-	1	-	
0010	102+12.55	24.45	R	-	-	7	-	-	-	1	-	
0010	103+24.51	-1.75	L	1.2	1.2	8	1.2	1	-	-	1	
0010			UNDISTRIBUTED	-	-	-	-	-	-	-	5	
TOTAL CAT 0010				45	45	325	45	15	23	3	43	

* QUANTITIES SHOWN IN OTHER TABLES

STORM SEWER ITEMS - STRUCTURES

CATEGORY	STATION	OFFSET	LOCATION	611.0530	611.0639	611.1230	611.2004	650.4000	REMARKS
				MANHOLE COVERS TYPE J EACH	INLET COVERS TYPE H-S EACH	CATCH BASINS 2X3-FT EACH	MANHOLES 4-FT DIAMETER EACH	CONSTRUCTION STAKING STORM SEWER EACH	
0010	14+11.11	29.43	R	-	-	-	-	-	
0010	15+82.41	-3.56	L	-	-	-	-	-	
0010	17+82.66	-23.63	L	-	1	1	-	1	
0010	17+82.53	-1.16	L	-	-	-	-	-	
0010	17+89.95	24.58	R	-	1	1	-	1	
0010	20+00.75	-23.89	L	-	1	1	-	1	
0010	19+45.70	1.85	R	-	-	-	-	-	
0010	19+44.98	30.55	R	-	-	-	-	-	
0010	19+98.89	24.94	R	-	1	1	-	1	
0010	20+18.87	-0.07	L	-	-	-	-	-	
0010	20+68.67	-23.91	L	-	1	1	-	1	
0010	20+34.87	3.26	R	-	-	-	-	-	
0010	21+35.31	3.88	R	-	-	-	-	-	
0010	23+82.92	3.72	R	-	-	-	-	-	
0010	26+85.19	-23.85	L	-	1	1	-	1	
0010	27+63.11	-2.15	L	-	-	-	-	-	
0010	27+68+68	-23.88	L	-	1	1	-	1	
0010	27+68.11	24.47	R	-	1	1	-	1	
0010	30+66.52	-1.72	L	-	-	-	-	-	
0010	33+08.22	-24.15	L	-	1	1	-	1	
0010	33+07.72	-1.99	L	-	-	-	-	-	
0010	33+08.78	24.50	R	-	1	1	-	1	
0010	34+54.42	-5.58	L	-	-	-	-	-	
0010	36+33.71	-10.35	L	-	-	-	-	-	
0010	37+34.37	-16.24	L	-	-	-	-	-	
0010	38+07.15	2.37	R	-	-	-	-	-	
0010	39+67.38	-5.04	L	-	-	-	-	-	
0010	39+68.74	-24.45	L	-	1	1	-	1	
0010	39+68.98	24.38	R	-	1	1	-	1	
0010	42+80.85	-37.79	L	-	1	1	-	1	
0010	42+97.33	-18.38	L	-	-	-	-	-	
0010	42+98.44	-4.66	L	-	-	-	-	-	
0010	43+26.78	-38.08	L	-	1	1	-	1	
0010	43+45.83	-24.32	L	-	1	1	-	1	
0010	43+45.55	24.30	R	-	1	1	-	1	
0010	44+97.83	0.11	R	-	-	-	-	-	

* QUANTITIES SHOWN IN OTHER TABLES

STORM SEWER ITEMS - STRUCTURES (CONTINUED)

CATEGORY	STATION	OFFSET	LOCATION	611.0530 MANHOLE COVERS TYPE J EACH	611.0639 INLET COVERS TYPE H-S EACH	611.1230 CATCH BASINS 2X3-FT EACH	611.2004 MANHOLES 4-FT DIAMETER EACH	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	REMARKS
0010	45+69.62	-24.17	L	-	1	1	-	1	
0010	45+69.43	24.49	R	-	1	1	-	1	
0010	48+99.07	-25.32	L	-	1	1	-	1	
0010	49+21.99	5.00	R	-	-	-	-	-	
0010	49+55.63	-15.25	L	-	-	-	-	-	
0010	49+60.31	-28.05	L	-	-	-	-	-	
0010	49+91.58	-93.26	L	1	-	-	1	1	
0010	49+94.90	-83.48	L	-	1	1	-	1	
0010	49+95.16	-89.12	L	-	1	1	-	1	
0010	50+51.80	24.50	R	-	1	1	-	1	
0010	50+64.17	-16.35	L	-	-	-	-	-	
0010	50+86.64	-24.59	L	-	1	1	-	1	
0010	51+90.81	-7.99	L	-	-	-	-	-	
0010	53+28.99	-22.49	L	-	1	1	-	1	
0010	53+28.30	22.17	R	-	1	1	-	1	
0010	53+38.14	-4.53	L	-	-	-	-	-	
0010	53+38.86	15.08	R	-	-	-	-	-	
0010	54+35.17	-21.47	L	-	1	1	-	1	
0010	54+41.51	-7.54	L	-	-	-	-	-	
0010	54+43.10	16.13	R	-	-	-	-	-	
0010	56+50.56	-5.70	L	-	-	-	-	-	
0010	56+45.33	8.79	R	-	-	-	-	-	
0010	58+87.40	-3.37	L	-	-	-	-	-	
0010	59+09.64	22.35	R	-	1	1	-	1	
0010	59+24.98	-22.77	L	-	1	1	-	1	
0010	59+57.80	-0.86	L	-	-	-	-	-	
0010	101+26.27	-19.50	L	-	1	1	-	1	
0010	101+25.46	19.41	R	-	1	1	-	1	
0010	101+36.13	-4.68	L	-	-	-	-	-	
0010	101+46.40	13.63	R	-	-	-	-	-	
0010	101+47.75	-2.11	L	-	-	-	-	-	
0010	101+62.68	3.55	R	-	-	-	-	-	
0010	102+10.97	-19.75	L	-	-	-	-	-	
0010	102+12.55	24.45	R	-	-	-	-	-	
0010	103+24.51	-1.75	L	-	-	-	-	-	
TOTAL CAT 0010				1	30	30	1	31	

* QUANTITIES SHOWN IN OTHER TABLES

STORM SEWER REMOVALS - PIPES

CATEGORY	STATION	OFFSET	LOCATION	204.0245.01	204.0245.02	204.0245.03	204.0245.04	REMARKS
				REMOVING STORM SEWER (01. 8-INCH)	REMOVING STORM SEWER (02. 10-INCH)	REMOVING STORM SEWER (03. 12-INCH)	REMOVING STORM SEWER (04. 18-INCH)	
				LF	LF	LF	LF	
0010	17+82.58	-12.39	L	-	23	-	-	
0010	17+86.50	11.67	R	-	27	-	-	
0010	20+08.90	11.90	R	32	-	-	-	
0010	20+09.81	-11.98	L	-	30	-	-	
0010	20+43.78	-11.98	L	-	55	-	-	
0010	27+24.25	-13.00	L	-	81	-	-	
0010	27+65.61	11.16	R	-	27	-	-	
0010	27+65.89	-13.02	L	-	23	-	-	
0010	33+07.97	-13.07	L	-	22	-	-	
0010	33+08.25	11.26	R	-	27	-	-	
0010	39+67.44	-12.36	L	-	-	-	20	
0010	39+68.18	9.67	R	-	30	-	-	
0010	42+89.65	-21.23	L	-	38	-	-	
0010	43+12.61	-21.37	L	-	44	-	-	
0010	43+22.00	9.82	R	-	55	-	-	
0010	43+22.14	-14.49	L	-	51	-	-	
0010	45+68.10	30.06	R	-	12	-	-	
0010	45+69.53	0.16	L/R	-	49	-	-	
0010	49+00.51	-20.65	L	-	10	-	-	
0010	50+57.98	4.07	R	-	43	-	-	
0010	50+75.42	-20.47	L	-	24	-	-	
0010	53+33.22	8.82	R	-	29	-	-	
0010	53+33.57	-13.51	L	-	20	-	-	
0010	59+33.72	10.77	R	-	54	-	-	
0010	59+41.39	-11.79	L	-	40	-	-	
0010	101+31.20	-12.09	L	-	18	-	-	
0010	101+35.93	16.52	R	-	-	-	-	
0010	199+12.87	-29.54	L	-	-	32	-	
TOTAL CAT 0010				32	832	32	20	

STORM SEWER ITEMS - PIPES

CATEGORY	STATION	OFFSET	LOCATION	520.8000	608.0412	608.0418	REMARKS
				CONCRETE COLLARS FOR PIPE EACH	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	
0010	17+82.58	-12.39	L	-	23	-	
0010	17+86.50	11.67	R	-	27	-	
0010	20+08.90	11.90	R	-	31	-	
0010	20+09.81	-11.98	L	-	30	-	
0010	20+43.78	-11.98	L	-	55	-	
0010	27+24.25	-13.00	L	-	81	-	
0010	27+65.61	11.16	R	-	27	-	
0010	27+65.89	-13.02	L	-	23	-	
0010	33+07.97	-13.07	L	-	22	-	
0010	33+08.25	11.26	R	-	27	-	
0010	39+67.44	-12.36	L	-	-	20	
0010	39+68.18	9.67	R	-	30	-	
0010	42+89.65	-21.23	L	-	38	-	
0010	43+12.61	-21.37	L	-	44	-	
0010	43+22.00	9.82	R	-	55	-	
0010	43+22.14	-14.49	L	-	51	-	
0010	45+68.10	30.06	R	-	12	-	
0010	45+69.53	0.16	L/R	-	49	-	
0010	49+00.51	-20.65	L	-	10	-	
0010	49+94.90	-83.48	L	-	20	-	
0010	50+57.98	4.07	R	-	43	-	
0010	50+75.42	-20.47	L	-	24	-	
0010	53+33.22	8.82	R	-	29	-	
0010	53+33.57	-13.51	L	-	20	-	
0010	59+33.72	10.77	R	-	54	-	
0010	59+41.39	-11.79	L	-	40	-	
0010	101+31.20	-12.09	L	-	18	-	
0010	101+35.93	16.52	R	-	22	-	
0010	199+12.87	-29.54	L	4	18	-	
TOTAL CAT 0010				4	923	20	

* QUANTITIES SHOWN IN OTHER TABLES

SANITARY MANHOLE ADJUSTMENTS										
			*	*	*	*	*			
			390.0100	390.0405	416.0610	465.0125	611.8120.S	SPV.0060.01	SPV.0600.02	
			REMOVING PAVEMENT FOR BASE PATCHING	BASE PATCHING CONCRETE SHES	DRILLED TIE BARS	ASPHALTIC SURFACE TEMPORARY	COVER PLATES TEMPORARY	SPECIAL (01. ADJUST SANITARY MANHOLES)	SPECIAL (02. SANITARY MANHOLE SEAL)	
CATEGORY	STATION	OFFSET	CY	CY	EACH	TON	EACH	EACH	EACH	REMARKS
0020	14+11	29.4' RT	1.2	1.2	8	1.2	1	1	1	LOCATED IN DRIVEWAY
0020	19+45	30.5' RT	1.2	1.2	8	1.2	1	1	1	LOCATED IN DRIVEWAY
0020	19+46	1.8" RT	1.2	1.2	8	1.2	1	1	1	
0020	20+35	3.3' RT	1.2	1.2	8	1.2	1	1	1	
0020	21+35	3.9' RT	1.2	1.2	8	1.2	1	1	1	
0020	23+83	3.7' RT	1.2	1.2	8	1.2	1	1	1	
0020	49+22	5.0" RT	1.2	1.2	8	1.2	1	1	1	
TOTAL CAT 0020			9	9	56	9	7	7	7	

SOLID WASTE MANAGEMENT							
CATEGORY	STATION	TO	STATION	LOCATION	SPV.0195.01	SPV.0195.02	REMARKS
					SPECIAL (01. MANAGEMENT OF	SPECIAL (02. MANAGEMENT OF	
					SOLID WASTE)	HAZARDOUS SOLID WASTE)	
					TON	TON	
0010	41+75	-	47+15	S. MEMORIAL DRIVE	522	-	
0010	47+15	-	47+45	S. MEMORIAL DRIVE	-	13	
0010	47+45	-	50+50	S. MEMORIAL DRIVE	556	-	
0010	100+71	-	102+50	21ST STREET	174	-	
TOTAL CAT 0010					1252	13	

* QUANTITIES SHOWN IN OTHER TABLES

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TRAFFIC CONTROL																									
							643.0420		643.0705		* 643.0900		643.1050		643.1070		643.3105		643.3150		643.3305 TEMPORARY MARKING		643.5000		
							TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL SIGNS PCMS		TRAFFIC CONTROL CONES 42-INCH		TEMPORARY MARKING LINE PAINT 4-INCH WHITE YELLOW		TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE YELLOW		CROSSWALK PAINT 6-INCH		TRAFFIC CONTROL		
CATEGORY	STAGE	DAYS	STATION	TO	STATION	LOCATION	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	LF	LF	LF	LF	LF		EACH	REMARKS	
0010	PRESTAGE	14	11+74	-	35+00	S. MEMORIAL DRIVE	-	-	-	-	56	784	1	14	-	-	-	-	-	-	-	-	-	PCMS IN PLACE 14 DAYS PRIOR TO STARTING DETOUR	
			35+00	-	37+50	S. MEMORIAL DRIVE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
			37+50	-	48+00	S. MEMORIAL DRIVE	-	-	-	-	16	224	-	-	-	-	-	-	-	-	-	-	-		
			50+75	-	66+97	S. MEMORIAL DRIVE	-	-	-	-	92	1288	1	14	-	-	-	-	-	-	-	-	-		-
			100+70	-	104+00	21ST STREET	-	-	-	-	3	42	-	-	-	-	-	-	-	-	-	-	-		-
			48+00	-	50+75	DeKOVEN AVENUE	-	-	-	-	21	294	-	-	-	-	-	-	-	-	-	-	-		-
			SUBTOTAL PRESTAGE							-	-			2632	28			-	-	-	-	-	-		-
0010	STAGE 1	25	11+74	-	35+00	S. MEMORIAL DRIVE	1	25	2	50	56	1400	1	25	94	2350	-	2325	-	-	-	-	-		
			35+00	-	37+50	S. MEMORIAL DRIVE	-	-	-	-	-	-	11	275	-	250	-	250	-	-	-	-	-		
			37+50	-	48+00	S. MEMORIAL DRIVE	1	-	2	50	16	400	-	-	43	1075	-	1050	-	-	-	-	-		
			50+75	-	66+97	S. MEMORIAL DRIVE	2	-	4	100	92	2300	-	-	50	1250	-	1225	-	-	-	-	-		
			100+70	-	104+00	21ST STREET	1	-	2	50	3	75	-	-	1	25	-	-	-	-	-	-	-		
			48+00	-	50+75	DeKOVEN AVENUE	2	-	4	100	21	525	-	-	12	300	-	275	-	-	50	-	-		
			SUBTOTAL STAGE 1							25	350			4700	25	5275	-	5125	-	-	50	-	-		
0010	STAGE 2	31	11+74	-	35+00	S. MEMORIAL DRIVE	1	31	2	62	56	1,736	-	-	94	2914	2325	2325	-	-	-	-			
			35+00	-	37+50	S. MEMORIAL DRIVE	-	-	-	-	-	-	11	341	250	250	-	250	-	-	-	-			
			37+50	-	48+00	S. MEMORIAL DRIVE	1	31	2	62	10	310	-	-	43	1333	1050	1050	-	-	-	-			
			50+75	-	66+97	S. MEMORIAL DRIVE	2	62	4	124	81	2,511	1	31	50	1550	1225	1225	-	-	-	-			
			100+70	-	104+00	21ST STREET	2	62	4	124	2	62	-	-	1	31	-	-	-	-	-	-			
			48+00	-	50+75	DeKOVEN AVENUE	2	62	4	124	18	558	-	-	12	372	275	275	-	-	-	-			
			SUBTOTAL STAGE 2							248	496			5177	31	6541	5125	5125	-	-	-	-			
0010	STAGE 3	6	11+74	-	35+00	S. MEMORIAL DRIVE	1	6	2	12	56	336	1	6	94	564	2325	2325	-	-	-	-			
			35+00	-	37+50	S. MEMORIAL DRIVE	-	-	-	-	-	-	11	66	250	250	-	250	-	-	-				
			37+50	-	48+00	S. MEMORIAL DRIVE	1	6	2	12	16	96	-	-	43	258	1050	1050	-	-	-				
			50+75	-	66+97	S. MEMORIAL DRIVE	2	12	4	24	92	552	-	-	50	300	1225	1225	-	-	-				
			100+70	-	104+00	21ST STREET	1	6	2	12	3	18	-	-	1	6	-	-	-	-	-				
			48+00	-	50+75	DeKOVEN AVENUE	2	12	4	24	21	126	-	-	12	72	275	275	-	-	-				
			SUBTOTAL STAGE 3							42	84			1128	6	1266	5125	5125	-	-	-	-			
0010	STAGE 4	15	11+74	-	35+00	S. MEMORIAL DRIVE	1	15	2	30	56	840	-	-	94	1410	-	-	4650	4650	-	-			
			35+00	-	37+50	S. MEMORIAL DRIVE	-	-	-	-	-	-	11	165	-	-	500	500	-	-					
			37+50	-	48+00	S. MEMORIAL DRIVE	1	15	2	30	16	240	-	-	43	645	-	-	2100	2100	-	-			
			50+75	-	66+97	S. MEMORIAL DRIVE	2	30	4	60	92	1380	-	-	50	750	-	-	2450	2450	-	-			
			100+70	-	104+00	21ST STREET	1	15	2	30	3	45	-	-	1	15	-	-	-	-	-	-			
			48+00	-	50+75	DeKOVEN AVENUE	2	30	4	60	21	315	-	-	12	180	-	-	550	550	-	-			
			SUBTOTAL STAGE 4							105	210			2820	-	3165	-	-	10250	10250	-	-			
0010	PROJECT 2703-08-71						-	-			-	-	-	-	-	-	-	-	-	1					
TOTAL CAT 0010							420	1140			16457	90	16247	25625	20500	50	1								

* QUANTITIES SHOWN IN OTHER TABLES

PROJECT NO: 2703-08-71	HWY: S. MEMORIAL DRIVE	COUNTY: RACINE	MISCELLANEOUS QUANTITIES	SHEET 95	E
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SIGNAL POLES

		657.0100	657.0255	657.0305	657.0352	657.0405	657.0420	657.0425	657.0536	657.0541	657.0585	657.0830	659.1125	SPV.0060.04	SPV.0060.06	REMARKS
		PEDESTAL BASES EACH	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE EACH	POLES TYPE 2 EACH	POLES TYPE 10-SPECIAL EACH	TRAFFIC SIGNAL STANDARDS ALUMINUM 3.5-FT EACH	TRAFFIC SIGNAL STANDARDS ALUMINUM 13-FT EACH	TRAFFIC SIGNAL STANDARDS ALUMINUM 15-FT EACH	MONOTUBE ARMS 35-FT-SPECIAL EACH	MONOTUBE ARMS 40-FT-SPECIAL EACH	TROMBONE ARMS 15-FT EACH	LUMINAIRE ARMS STEEL TYPE 10 SPECIAL POLE CLAMP 15-FT EACH	LUMINAIRES UTILITY LED C EACH	SPECIAL (04. ACCESSIBLE PEDESTRIAN PUSH BUTTON SYSTEM) EACH	SPECIAL (06. EMERGENCY VEHICLE PREEMPTION SYSTEM) EACH	
CATEGORY	SIGNAL BASE NO.															
0010	S MEMORIAL DR & DE KOVEN AVE	-	-	-	-	-	-	-	-	-	-	-	-	1	1	
0010	SB1	-	1	1	-	-	-	-	-	-	1	-	-	-	-	
0010	SB2	1	-	-	-	-	-	1	-	-	-	-	-	-	-	
0010	SB3	-	-	-	1	-	-	-	1	-	-	1	1	-	-	
0010	SB5	-	1	1	-	-	-	-	-	-	1	-	-	-	-	
0010	SB6	1	-	-	-	-	-	1	-	-	-	-	-	-	-	
0010	SB7	-	-	-	1	-	-	-	-	1	-	1	1	-	-	
0010	SB8	1	-	-	-	-	1	-	-	-	-	-	-	-	-	
0010	PEDB1	1	-	-	-	1	-	-	-	-	-	-	-	-	-	
0010	PEDB2	1	-	-	-	1	-	-	-	-	-	-	-	-	-	
TOTAL CAT 0010		5	2	2	2	2	1	2	1	1	2	2	2	1	1	

SIGNAL FACES

TRAFFIC SIGNAL CABINET

		658.0173 TRAFFIC SIGNAL FACE 3S 12-INCH EACH	658.0174 TRAFFIC SIGNAL FACE 4S 12-INCH EACH	658.0416 PEDESTRIAN SIGNAL FACE 16-INCH EACH	REMARKS
CATEGORY	SIGNAL BASE NO.	SIGNAL HEAD NO.			
0010	SB1	16	1	-	-
0010		24	-	-	1
0010	SB2	1	1	-	-
0010		9	-	1	-
0010		17	-	-	1
0010	SB3	7	1	-	-
0010		8	1	-	-
0010		10	-	1	-
0010		18	-	-	1
0010	EXSB4	12	1	-	-
0010		14	1	-	-
0010		19	-	-	1
0010	SB5	13	1	-	-
0010		20	-	-	1
0010	SB6	4	-	1	-
0010		6	1	-	-
0010		21	-	-	1
0010	SB7	2	1	-	-
0010		3	1	-	-
0010		5	-	1	-
0010		22	-	-	1
0010	SB8	5	1	-	-
0010		13	1	-	-
0010		21	-	-	1
TOTAL CAT 0010			12	4	8

CATEGORY	TO	SPV.0060.03 SPECIAL (03. TRAFFIC SIGNAL CABINET AND CONTROLLER) EACH	REMARKS
0010	S. MEMORIAL DR & De KOVEN AVE	1	
TOTAL CAT 0010		1	

VIDEO VEHICLE DETECTION SYSTEM

		SPV.0060.05 SPECIAL (05. VIDEO VEHICLE DETECTION SYSTEM) EACH	REMARKS
CATEGORY	LOCATION		
0010	S. MEMORIAL DR & De KOVEN AVE	1	
TOTAL CAT 0010		1	

* QUANTITIES SHOWN IN OTHER TABLES

REMOVING TRAFFIC SIGNALS

SPV.0060.07 SPECIAL (07. REMOVE AND SALVAGE TRAFFIC SIGNAL)			
CATEGORY	LOCATION	EACH	REMARKS
0010	S. MEMORIAL DR & De KOVEN AVE	1	
TOTAL CAT 0010		1	

LOOP DETECTOR AND LEAD IN CABLE

204.9060.S.02 REMOVING (02. LOOP DETECTOR WIRE & LEAD-IN CABLE)			
CATEGORY	LOCATION	EACH	REMARKS
0010	S. MEMORIAL DR & De KOVEN AVE	1	
TOTAL CAT 0010		1	

REMOVING CONCRETE BASES

204.0195 REMOVING CONCRETE BASES			
CATEGORY	SIGNAL BASE NO.	EACH	REMARKS
0010	SB1	1	
0010	SB2	1	
0010	SB3	1	
0010	SB5	1	
0010	SB6	1	
0010	SB7	1	
0010	SB8	1	
0010	LB1	1	
0010	LB2	1	
0010	CB1	1	
TOTAL CAT 0010		10	

REMOVING PULL BOXES

653.0905 REMOVING PULL BOXES			
CATEGORY	LOCATION	EACH	REMARKS
0010	PB1	1	
0010	PB2	1	
0010	PB3	1	
0010	PB4	1	
0010	PB5	1	
0010	PB6	1	
0010	PB6	1	
0010	PB8	1	
0010	PB9	1	
TOTAL CAT 0010		9	

* QUANTITIES SHOWN IN OTHER TABLES

S. MEMORIAL DR & De KOVEN AVE
CITY OF RACINE
RACINE COUNTY

PAGE 1 OF 4

CONDUIT						
CATEGORY	FROM	TO	652.0225	652.0235	652.0615	REMARKS
			CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	CONDUIT SPECIAL 3-INCH	
			LF	LF	LF	
0010	CB1	PB1	10	10	-	
0010	PB1	PB2	-	102	-	
0010	PB2	SB1	10	-	-	
0010	PB2	SB2	15	-	-	
0010	PB2	PB3	-	180	-	
0010	PB3	SB3	32	-	-	
0010	PB3	EXSB4	-	-	-	REUSE EXISTING CONDUIT
0010	PB3	PEDB1	-	-	-	REUSE EXISTING CONDUIT
0010	PB3	PEDB2	-	-	-	REUSE EXISTING CONDUIT
0010	PB3	PB4	-	-	110	
0010	PB4	SB5	6	-	-	
0010	PB4	SB6	11	-	-	
0010	PB4	PB5	-	150	-	
0010	PB5	SB7	65	-	-	
0010	PB5	SB8	22	-	-	
0010	PB5	PB2	-	-	112	
TOTAL CAT 0010			171	442	222	

PULL BOXES				
CATEGORY	PULL BOX NO.	LOCATION	653.0140	REMARKS
			PULL BOXES STEEL 24X42-INCH EACH	
0010	PB1	48+47.26, 48.23' RT	1	
0010	PB2	48+82.06, 42.42' RT	1	
0010	PB3	49+15.27, 38.37' LT	1	
0010	PB4	49+69.97, 29.72' LT	1	
0010	PB5	49+38.06, 38.55' RT	1	
TOTAL CAT 0010			5	

CONCRETE BASES						
CATEGORY	SIGNAL BASE NO.	LOCATION	654.0101	654.0102	654.0120	654.0217
			CONCRETE BASES TYPE 1 EACH	CONCRETE BASES TYPE 2 EACH	CONCRETE BASES TYPE 10-SPECIAL EACH	CONCRETE CONTROL CABINET BASES TYPE 9 SPECIAL EACH
0010	SB1	48+85.08, 34.89' RT	-	1	-	-
0010	SB2	48+76.33, 28.92' RT	1	-	-	-
0010	SB3	48+84.87, 31.69' LT	-	-	1	-
0010	SB5	49+69.32, 36.62' LT	-	1	-	-
0010	SB6	49+77.89, 29.26' LT	1	-	-	-
0010	SB7	49+62.26, 33.71' RT	-	-	1	-
0010	SB8	49+32.04, 57.84' RT	1	-	-	-
0010	PEDB1	48+94.78, 32.35' LT	1	-	-	-
0010	PEDB2	49+24.64, 57.28' LT	1	-	-	-
0010	CB1	48+39.61, 50.04' RT	-	-	-	1
TOTAL CAT 0010			5	2	2	1

SIGNAL MOUNTING HARDWARE			
CATEGORY	LOCATION	658.5070.01	REMARKS
		SIGNAL MOUNTING HARDWARE (01. S MEMORIAL DR & DE KOVEN AVE) EACH	
0010	S. MEMORIAL DR & De KOVEN AVE	1	
TOTAL CAT 0010		1	

* QUANTITIES SHOWN IN OTHER TABLES

S. MEMORIAL DR & De KOVEN AVE
CITY OF RACINE
RACINE COUNTY

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TRAFFIC SIGNAL CABLE & WIRE 1

CATEGORY	FROM	TO	655.0230	655.0240	REMARKS
			CABLE TRAFFIC SIGNAL 5-14 AWG	CABLE TRAFFIC SIGNAL 7-14 AWG	
0010	SB1	HEAD 16	40	-	
0010	SB1	HEAD 24	15	-	
0010	SB2	HEAD 1	22	-	
0010	SB2	HEAD 9	-	22	
0010	SB2	HEAD 17	15	-	
0010	SB3	HEAD 7	65	-	
0010	SB3	HEAD 8	15	-	
0010	SB3	HEAD 10	-	65	
0010	SB3	HEAD 18	15	-	
0010	EXSB4	HEAD 12	-	-	REUSE EXISTING WIRE
0010	EXSB4	HEAD 14	-	-	REUSE EXISTING WIRE
0010	EXSB4	HEAD 19	15	-	
0010	SB5	HEAD 13	40	-	
0010	SB5	HEAD 20	15	-	
0010	SB6	HEAD 4	-	22	
0010	SB6	HEAD 6	22	-	
0010	SB6	HEAD 21	15	-	
0010	SB7	HEAD 2	65	-	
0010	SB7	HEAD 3	65	-	
0010	SB7	HEAD 5	-	65	
0010	SB7	HEAD 20	15	-	
0010	SB8	HEAD 11	19	-	
0010	SB8	HEAD 15	19	-	
0010	SB8	HEAD 23	15	-	
TOTAL CAT 0010			492	174	

TRAFFIC SIGNAL CABLE & WIRE 3

CATEGORY	FROM	TO	655.0210	655.0260	655.0270	*	REMARKS
			CABLE TRAFFIC SIGNAL 3-14 AWG	CABLE TRAFFIC SIGNAL 12-14 AWG	CABLE TRAFFIC SIGNAL 15-14 AWG	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	
0010	CB1	SB1	-	80	-	-	
0010	CB1	SB2	-	-	87	-	
0010	CB1	SB3	-	-	203	208	
0010	CB1	EXSB4	-	190	-	-	
0010	CB1	SB5	-	252	-	-	
0010	CB1	SB6	-	-	255	-	
0010	CB1	SB7	-	-	180	180	
0010	CB1	SB8	-	163	-	-	
0010	CB1	PEDB1	195	-	-	-	
0010	CB1	PEDB2	200	-	-	-	
TOTAL CAT 0010			395	685	725	388	

TRAFFIC SIGNAL CABLE & WIRE 2

CATEGORY	FROM	TO	655.0515	REMARKS
			ELECTRICAL WIRE TRAFFIC SIGNALS 10 AWG	
0010	CB1	SB1	82	
0010	SB1	SB2	41	
0010	SB2	SB3	165	
0010	SB3	SB4	62	
0010	SB4	SB5	108	
0010	SB5	SB6	33	
0010	SB6	SB7	152	
0010	SB7	SB8	87	
0010	SB8	CB1	165	
0010	PB1	CB1	20	
0010	PB2	SB1	22	
0010	PB3	EXSB4	30	
0010	PB3	PEDB1	-	
0010	PB3	PEDB2	-	
0010	PB4	SB5	21	
0010	PB5	SB8	36	
TOTAL CAT 0010			1024	

TRAFFIC SIGNAL CABLE & WIRE 4

CATEGORY	FROM	TO	*	REMARKS
			655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	
0010	SB3	LUMIN	145	
0010	SB7	LUMIN	145	
TOTAL CAT 0010			290	

* QUANTITIES SHOWN IN OTHER TABLES

S. MEMORIAL DR & De KOVEN AVE
CITY OF RACINE
RACINE COUNTY

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PROJECT NO: 2703-08-71

HWY: S. MEMORIAL DRIVE

COUNTY: RACINE

MISCELLANEOUS QUANTITIES

SHEET

99

E

TEMPORARY PEDESTRIAN ACCOMMODATIONS																		
CATEGORY	STAGE	DAYS	STATION	TO	STATION	LOCATION	* 643.0900		644.1410	644.1430	644.1601		644.1605		644.1810	644.1900.S		REMARKS
							TRAFFIC CONTROL	SIGNS	PEDESTRIAN SURFACE	PEDESTRIAN SURFACE	TEMPORARY PEDESTRIAN	TEMPORARY PEDESTRIAN	TEMPORARY PEDESTRIAN	TEMPORARY PEDESTRIAN	TEMPORARY AUDIBLE			
							EACH	DAY	ASPHALT	PLATE	CURB RAMP	DETECTABLE WARNING FIELD	BARRICADE	MESSAGE DEVICES				
									SF	SF	EACH	DAY	SF	LF	EACH	DAY		
0010	PRESTAGE	14	100+70	-	104+00	21ST STREET	-	-	-	-	-	-	-	-	-	-	-	
			48+00	-	50+75	DeKOVEN AVENUE	-	-	-	-	-	-	-	-	-	-	-	-
SUBTOTAL PRESTAGE								-	-	-	-	-	-	-		-		
0010	STAGE 1	25	100+70	-	104+00	21ST STREET	6	150	-	-	-	-	-	-	5	125		
			48+00	-	50+75	DeKOVEN AVENUE	14	350	27	27	2	50	20	54	7	175		
SUBTOTAL STAGE 1									27	27	50	20	54					
0010	STAGE 2	31	100+70	-	104+00	21ST STREET	6	186	-	-	-	-	-	-	5	155		
			48+00	-	50+75	DeKOVEN AVENUE	14	434	-	-	2	62	-	-	7	217		
SUBTOTAL STAGE 2								620	-	-	62	-	-			372		
0010	STAGE 3	6	100+70	-	104+00	21ST STREET	6	36	-	-	-	-	-	-	5	30		
			48+00	-	50+75	DeKOVEN AVENUE	14	84	-	-	2	12	-	-	7	42		
SUBTOTAL STAGE 3								120	-	-	12	-	-			72		
0010	STAGE 4	15	100+70	-	104+00	21ST STREET	-	-	-	-	-	-	-	-	-	-		
			48+00	-	50+75	DeKOVEN AVENUE	-	-	-	-	-	-	-	-	-	-		
SUBTOTAL STAGE 4								-	-	-	-	-	-		-			
TOTAL CAT 0010								740	27	27	124	20	54		444			

* QUANTITIES SHOWN IN OTHER TABLES

S. MEMORIAL DR & De KOVEN AVE
CITY OF RACINE
RACINE COUNTY

TRANSPORTATION PROJECT PLAT NO: 2703-08-01 - 4.01

THAT PART OF THE NE ¼ OF THE SE ¼ AND THE SE ¼ OF THE NE ¼ OF SECTION 20, T 3 N, R 23 E, CITY OF RACINE, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER SOUTH MEMORIAL DRIVE RACINE DURAND AVENUE TO 17TH STREET RACINE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 62.22, WISCONSIN STATUTES, THE CITY OF RACINE HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF RACINE, PURSUANT TO THE PROVISIONS OF SUBSECTION 62.22, WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED							
PARCEL NUMBER	OWNER(S)	INTEREST(S) REQUIRED	FEE R/W REQUIRED (S.F.)			TLE S.F.	PLE S.F.
			NEW	EXISTING	TOTAL		
1	Investments Wagner Real Estate, LLC	FEE	58	---	58	---	---
2	Kyle T Price	FEE, TLE	13	---	13	248	---
3	Lori L Cottingham II	TLE	---	---	---	62	---

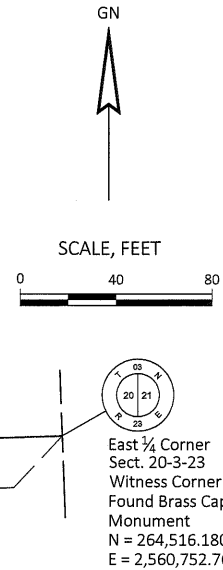
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

Document # 2708513
RACINE COUNTY REGISTER OF DEEDS
August 28, 2025 9:34 AM
Katie Pope
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: \$23.00
Pages: 2

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 2703-08-01 - 4.01
SHEET 1 OF 2

TLE Station & Offset Table		
Point No.	Station	Offset
200	101+96.97	46.07' Rt.
201	101+97.15	60.90' Rt.
202	101+91.99	60.95' Rt.
203	101+32.00	62.06' Rt.
204	101+27.00	62.10 Rt.
205	101+26.78	35.10' Rt.
206	101+06.77	35.22' Rt.
207	101+06.74	30.22' Rt.

R/W	Line	Course	Table
100-101	N01°53'21"W		60.00'
101-102	N88°13'23"E		623.52'
102-103	N01°46'37"W		2.00'
103-104	N88°13'23"E		28.96'
104-105	S01°46'37"E		2.00'
105-106	N88°13'23"E		101.03'
106-107	S13°38'44"E		625.99'
107-108	N86°36'06"W		40.10'
108-109	S44°02'34"W		24.43'
109-110	S01°53'55"E		77.82'
110-111	S88°06'39"W		60.00'
111-112	N01°53'21"W		94.18'
112-113	N46°49'59"W		7.08'
113-100	S88°13'23"W		50.98'



Center of Section
Sect. 20-3-23
Found Brass Cap Monument
N = 264,434.110
E = 2,558,113.830

Found Monument Table			
Point No.	Northing	Easting	Description
10000	264456.608	2559941.040	1" Iron Pipe
10001	264454.189	2559981.030	1" Iron Pipe
10002	264444.075	2560022.093	1" Iron Pipe
30018	264458.040	2559863.459	1" Iron Pipe
30019	264456.374	2559807.412	1" Iron Pipe
30020	264454.509	2559751.273	1" Iron Pipe
30021	264514.941	2559819.679	Chiseled "X"
30022	264558.782	2559919.545	3/4" Rod w/ Cap

CURVE 1
PI Sta = 102+31.81
Y = 264490.932
X = 2559962.638
Delta = 11°36'45" Rt.
D = 16°22'13"
T = 35.59'
L = 70.94'
R = 350.00'
PC Sta = 101+96.21
Y = 264490.043
X = 2559927.058
PT Sta = 102+67.15
Y = 264484.640
X = 2559997.668
DB = N88°34'07"E
DA = S79°49'07"E

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
--	--	--
--	--	--

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE, SOUTH, RACINE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY AND PERMANENT EASEMENT MONUMENTS WILL BE TYPE 2 (TYPICALLY ¾" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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

FOR ADDITIONAL INFORMATION, REFER TO TITLE SHEET, SHEET 2 OF 2 OF THIS DOCUMENT.

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.



STATE OF WISCONSIN

CITY OF RACINE

TRANSPORTATION PROJECT PLAT TITLE SHEET

2703-08-01

RACINE

DURAND AVENUE TO 17TH STREET

SOUTH MEMORIAL DRIVE

RACINE

4

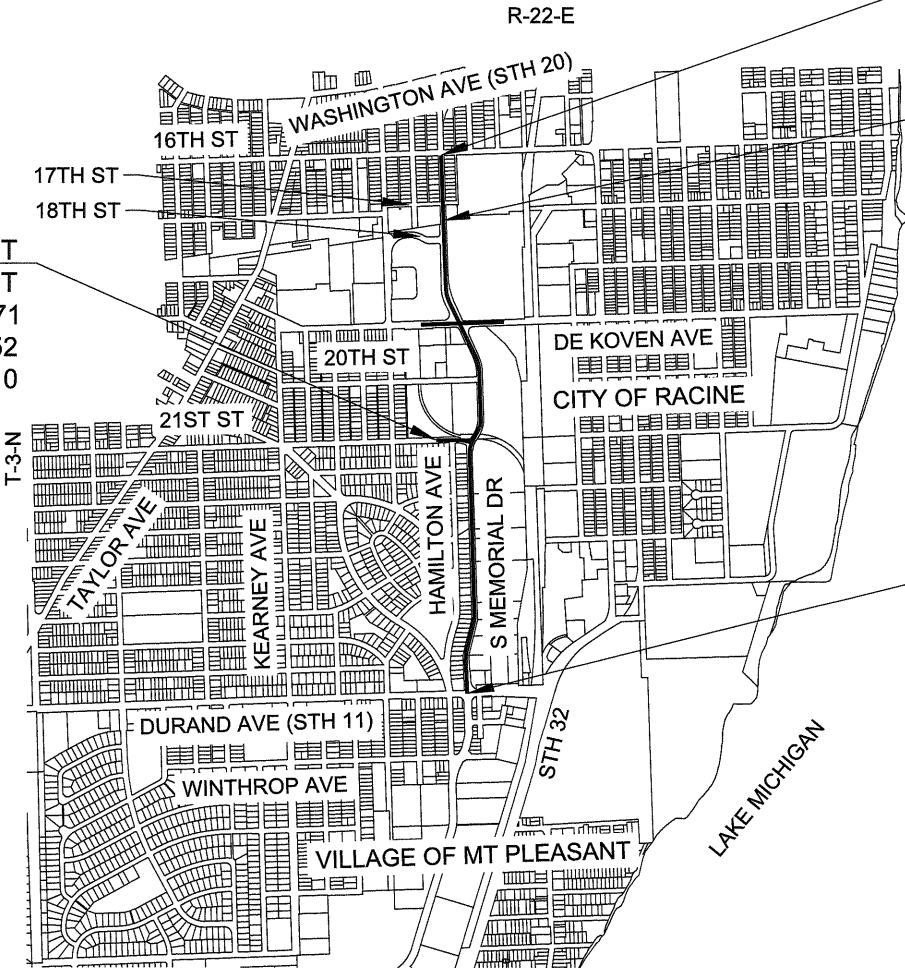
4

CONVENTIONAL SYMBOLS			
SECTION LINE		SECTION CORNER SYMBOL	
QUARTER LINE		NEW REFERENCE LINE	
SIXTEENTH LINE		NEW R/W LINE	
EXISTING R/W OR HE LINE		PROPERTY LINE	
LOT, TIE & OTHER MINOR LINES		EXISTING CENTERLINE	
CORPORATE LIMITS		NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	
TEMPORARY LIMITED EASEMENT AREA		EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	
BUILDING		TO BE REMOVED	
BRIDGE		CULVERT	
		PARALLEL OFFSETS	

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

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

CONVENTIONAL UTILITY SYMBOLS			
WATER		W	
GAS		G	
TELEPHONE		T	
OVERHEAD TRANSMISSION LINES		OH	
ELECTRIC		E	
CABLE TELEVISION		TV	
FIBER OPTIC		FO	
SANITARY SEWER		SAN	
STORM SEWER		SS	
COMBINED SEWER		SSS	
ELECTRIC TOWER		ET	
TRANSMISSION STRUCTURES		TS	
		COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE			
TELEPHONE POLE			
PEDESTAL (LABEL TYPE)			
(TV, TEL, ELEC, ETC.)			



END PROJECT
STA 66+97
X: 267440.3932
Y: 2559749.1811
END PAVING
STA 60+28
X: 266772.8722
Y: 2559802.1286

BEGIN PROJECT
STA 11+74
X: 2560043.6039
Y: 262025.5075

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 2703-08-01

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE COORDINATES , SOUTH, RACINE COUNTY, NAD83(2011) , IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

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

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

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

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

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

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

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN SE REGION RACINE

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

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE TPP DETAIL PAGES.

RELOCATION ORDER	SOUTH MEMORIAL DRIVE	RACINE	DURAND AVENUE TO 17TH STREET	RACINE COUNTY
------------------	----------------------	--------	------------------------------	---------------

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 62.22, WISCONSIN STATUTES, THE CITY OF RACINE HEREBY ORDERS THAT:

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

	R/W	Curve	Table	
Point No.	LCB	LCH	R	L
C-1	S 59°03'06" E	27.14'	25.00'	28.68'
C-2	S 56°37'09" W	48.25'	45.00'	50.92'
C-3	S 14°05'10" W	15.84'	45.00'	15.92'
C-4	N 56°59'58" W	43.47'	40.00'	45.95'
C-5	N 30°58'43" E	107.05'	63.75'	127.06'

R/W	Line	Course	Table
150-151	N 63°48'15" E		69.82'
151-152	S 26°11'45" E		15.53'
152-153	S 26°11'45" E		75.76'
153-154	N 63°53'48" E		5.00'
154-155	N 26°12'07" E		29.16'
156-157	N 88°03'05" E		26.32'
157-158	S 01°54'26" E		5.00'
158-159	N 88°04'00" E		120.23'
159-160	S 01°56'00" E		60.00'
160-161	S 88°06'39" W		58.43'
161-169	S 87°57'17" W		5.73'
170-163	S 03°56'02" W		25.90'
163-164	S 63°33'40" W		70.45'
164-165	N 26°26'20" W		66.23'
166-167	S 87°41'21" W		51.38'
167-168	N 36°36'02" W		97.20'

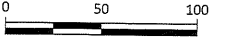
Point No.	Station	Offset
150	50+82.22	38.13' Lt.
151	50+82.23	31.69' Rt.
152	50+66.80	31.72' Rt.
153	49+91.04	31.83' Rt.
154	49+91.04	36.83' Rt.
155	49+61.97	36.89' Rt.
156	49+39.23	51.69' Rt.
157	200+68.29	32.88' Lt.
158	200+68.30	27.88' Lt.
159	201+88.53	28.09' Lt.
160	201+88.63	32.02' Rt.
161	201+30.21	32.08' Rt.
162	48+39.72	53.24' Rt.
163	48+05.12	30.25' Rt.
164	48+04.60	40.32' Lt.
165	48+70.82	40.85' Lt.
166	199+49.80	42.58' Rt.
167	198+98.42	43.01' Rt.
168	198+43.33	36.54' Lt.
169	201+24.47	32.10' Rt.
170	48+27.60	43.04' Rt.

Northeast Corner
Sect. 20-3-23
Found Racine County
Brass Cap Monument
N = 267,167.520
E = 2,560,659.020

Document # **2708553**
 RACINE COUNTY REGISTER OF DEEDS
 August 28, 2025 2:10 PM
Karin L. Pope
 KARIE POPE
 RACINE COUNTY
 REGISTER OF DEEDS
 Fee Amount: \$25.00
 Pages: 1

GN

SCALE, FEET



FILE NAME : P:\RACNC\2325881-S.MEMORIAL DRIVE\CAD-C3D-2024\2325881-S MEMORIAL DR\RW\DWG\040101-RP-TPP.DWG
APPRAISAL PLAT DATE : _____

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
0000	0000	0000
0000	0000	0000

Point No.	Northing	Easting	Description
10098	265675.940	2560161.418	1" IRON PIPE
10102	265825.071	2559869.133	3/4" IRON ROD
10107	265656.272	2559871.821	3/4" IRON ROD
10108	265658.062	2559922.930	3/4" IRON ROD
30010	265673.896	2560097.358	1" IRON PIPE
30012	265606.109	2560052.238	3/4" IRON ROD

A circular professional seal for a Wisconsin Land Surveyor. The outer ring contains the text "WISCONSIN" at the top and "LAND SURVEYOR" at the bottom, separated by two five-pointed stars. The center of the seal contains the text "ANTHONY E. BIANCHIN", "S-2938", and "CRYSTAL LAKE, IL".

103

TRANSPORTATION PROJECT PLAT NO: 2703-08-01 - 4.03

THAT PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 20, T 3 N, R 23 E, CITY OF RACINE, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER SOUTH MEMORIAL DRIVE RACINE DURAND AVENUE TO 17TH STREET RACINE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 62.22, WISCONSIN STATUTES, THE CITY OF RACINE HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
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SCHEDULE OF LANDS & INTERESTS REQUIRED								
PARCEL NUMBER	OWNER(S)	INTEREST(S) REQUIRED	FEE R/W REQUIRED (S.F.)			TLE S.F.	PLE S.F.	TAX PARCEL ID NUMBER
			NEW	EXISTING	TOTAL			
4	Modine Manufacturing	FEE, TLE	435	---	---	3,759	---	276-00-00-16-848-000

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

Northeast Corner
Sect. 20-3-23
Found Racine County
Brass Cap Monument
N = 267,167.520
E = 2,560,659.020

Document # 2708557
RACINE COUNTY REGISTER OF DEEDS
August 28, 2025 2:21 PM
KARIE POPE
RACINE COUNTY
REGISTER OF DEEDS
Fee Amount: \$25.00
Pages: 1

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER: 2703-08-01 - 4.03

Found Monument Table			
Point No.	Northing	Easting	Description
31000	266,531.547	2,559,665.421	1" Iron Pipe

TLE Station & Offset Table		
Point No.	Station	Offset
350	59+07.47	54.78, Rt.
351	57+53.69	54.84, Rt.

R/W Curve Table				
Point No.	LCB	LCH	R	L
C-7	N 47°05'28" W	28.18'	20.00'	31.27'
C-8	N 42°54'14" E	42.56'	30.00'	47.36'

R/W	Line	Course	Table
300-301	N 87°41'43" E		69.95'
301-302	S 02°18'26" E		17.54'
302-303	S 02°18'26" E		153.78'
303-304	S 02°18'26" E		26.68'
304-305	S 87°41'43" W		70.00'
305-306	N 02°18'26" W		46.82'
307-308	N 10°41'04" W		70.84'
309-300	N 02°18'26" W		33.10'

R/W Station & Offset Table		
Point No.	Station	Offset
300	59+24.98	40.18, Lt.
301	59+25.01	29.77, Rt.
302	59+07.48	29.78, Rt.
303	57+53.70	29.84, Rt.
304	57+25.01	29.85, Rt.
305	57+25.00	40.15, Lt.
306	57+71.80	40.17, Lt.
307	57+91.79	60.03, Lt.
308	58+61.87	70.38, Lt.
309	58+91.88	40.17, Lt.

UTILITY INTERESTS REQUIRED		
UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
--	--	--
--	--	--

NOTES:

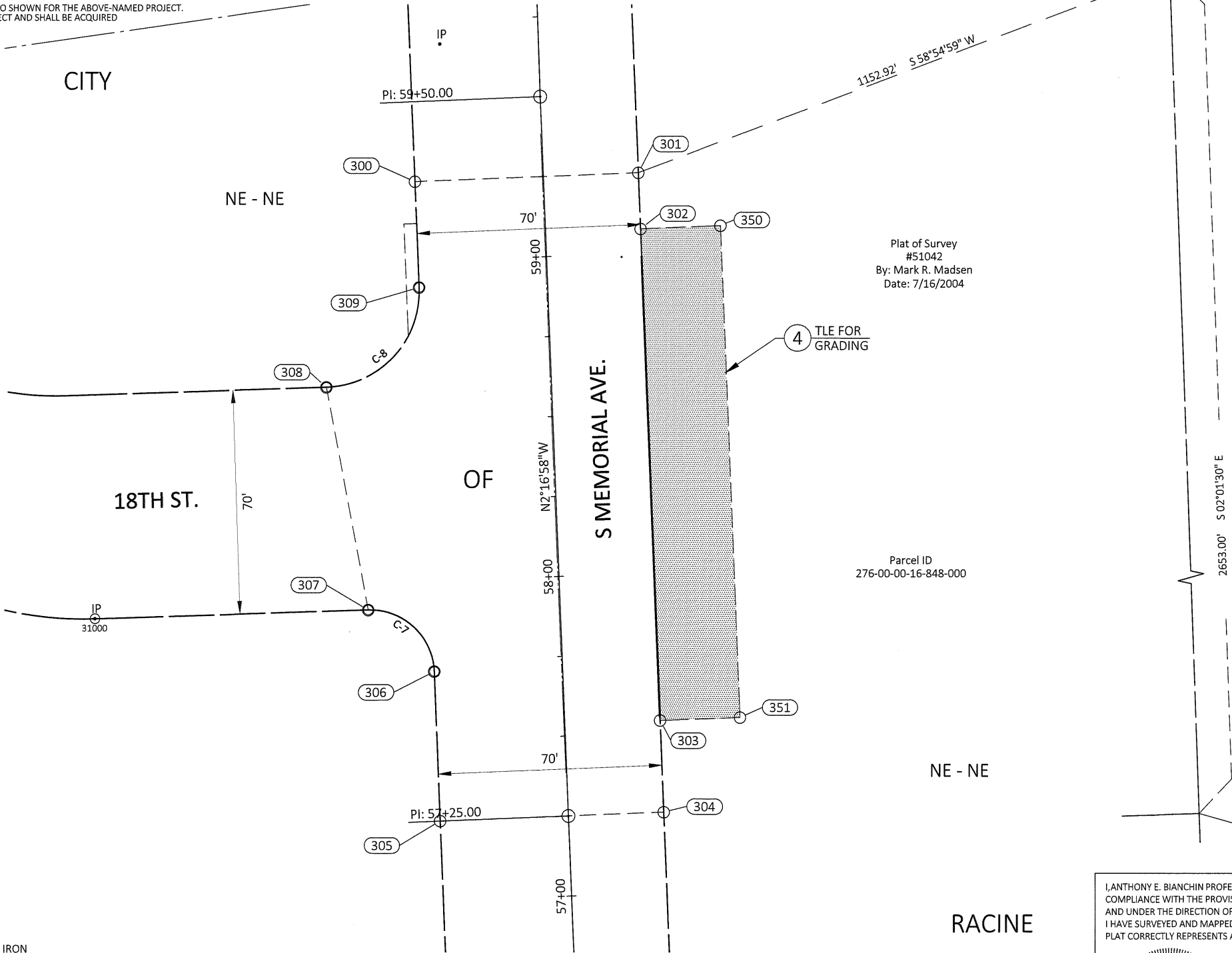
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE, SOUTH, RACINE COUNTY, NAD83(2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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

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

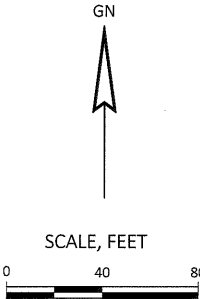
FOR ADDITIONAL INFORMATION, REFER TO TITLE SHEET, SHEET 2 OF 2 OF THIS DOCUMENT.

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.



Plat of Survey
#51042
By: Mark R. Madsen
Date: 7/16/2004

Parcel ID
276-00-00-16-848-000



East 1/4 Corner
Sect. 20-3-23
Witness Corner
Found Brass Cap Monument
N = 264,516.180
E = 2,560,752.760

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



SIGNATURE: *Anthony E. Bianchin* DATE: 06/30/25
PRINT NAME: ANTHONY E. BIANCHIN
REGISTRATION NUMBER: S-2938

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF RACINE

SIGNATURE: *Jeff Hintz* DATE: 06/29/25
PRINT NAME: Jeff Hintz

TRANSPORTATION PROJECT PLAT NO: 2703-08-01 - 4.04

THA PART OF THE SE ¼ OF THE NE ¼ OF SECTION 20, T 3 N, R 23 E, CITY OF RACINE, RACINE COUNTY, WISCONSIN.

RELOCATION ORDER SOUTH MEMORIAL DRIVE RACINE DURAND AVENUE TO 17TH STREET RACINE COUNTY

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

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SUBSECTION 62.22, WISCONSIN STATUTES, THE CITY OF RACINE HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE-NAMED PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY THE CITY FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE CITY OF RACINE, PURSUANT TO THE PROVISIONS OF SUBSECTION 62.22, WISCONSIN STATUTES.

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

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTEREST(S) REQUIRED	FEE R/W REQUIRED (S.F.)			TLE S.F.	PLE S.F.	TAX PARCEL ID NUMBER
			NEW	EXISTING	TOTAL			
5	Pioneer Products, Inc	TLE	---	---	---	1,618	---	276-00-00-16-857-001

R/W	Line	Course	Table
400-401	N 64°02'55" E		60.00'
401-404	S 25°57'05" E		48.46'
405-406	S 01°58'25" E		39.15'
406-407	S 01°59'20" E		80.91'
407-408	S 02°00'16" E		63.21'
408-409	S 87°59'44" W		60.00'
409-410	N 02°00'16" W		73.32'
410-411	N 01°59'20" W		60.10'
411-412	N 01°58'25" W		49.88'
413-400	N 25°57'05" W		48.46'

R/W Station & Offset Table		
Point No.	Station	Offset
400	46+00.02	30.00', Lt.
401	45+99.98	30.00', Rt.
404	45+51.52	29.98', Rt.
405	43+83.29	29.67', Rt.
406	43+44.14	29.68', Rt.
407	42+63.23	29.72', Rt.
408	42+00.00	29.76', Rt.
409	41+99.98	30.24', Lt.
410	42+73.30	30.29', Lt.
411	43+33.40	30.32', Lt.
412	43+83.28	30.33', Lt.
413	45+51.56	30.02', Lt.

R/W Curve Table				
Point No.	LCB	LCH	R	L
C-9	S 13°57'45" E	179.38'	15.53'	15.53'
412-413	S 13°57'45" E	179.38'	431.75'	180.70'

TLE Station & Offset Table		
Point No.	Station	Offset
452	43+43.91	49.68' Rt.
453	42+63.00	49.72' Rt.

NOTES:

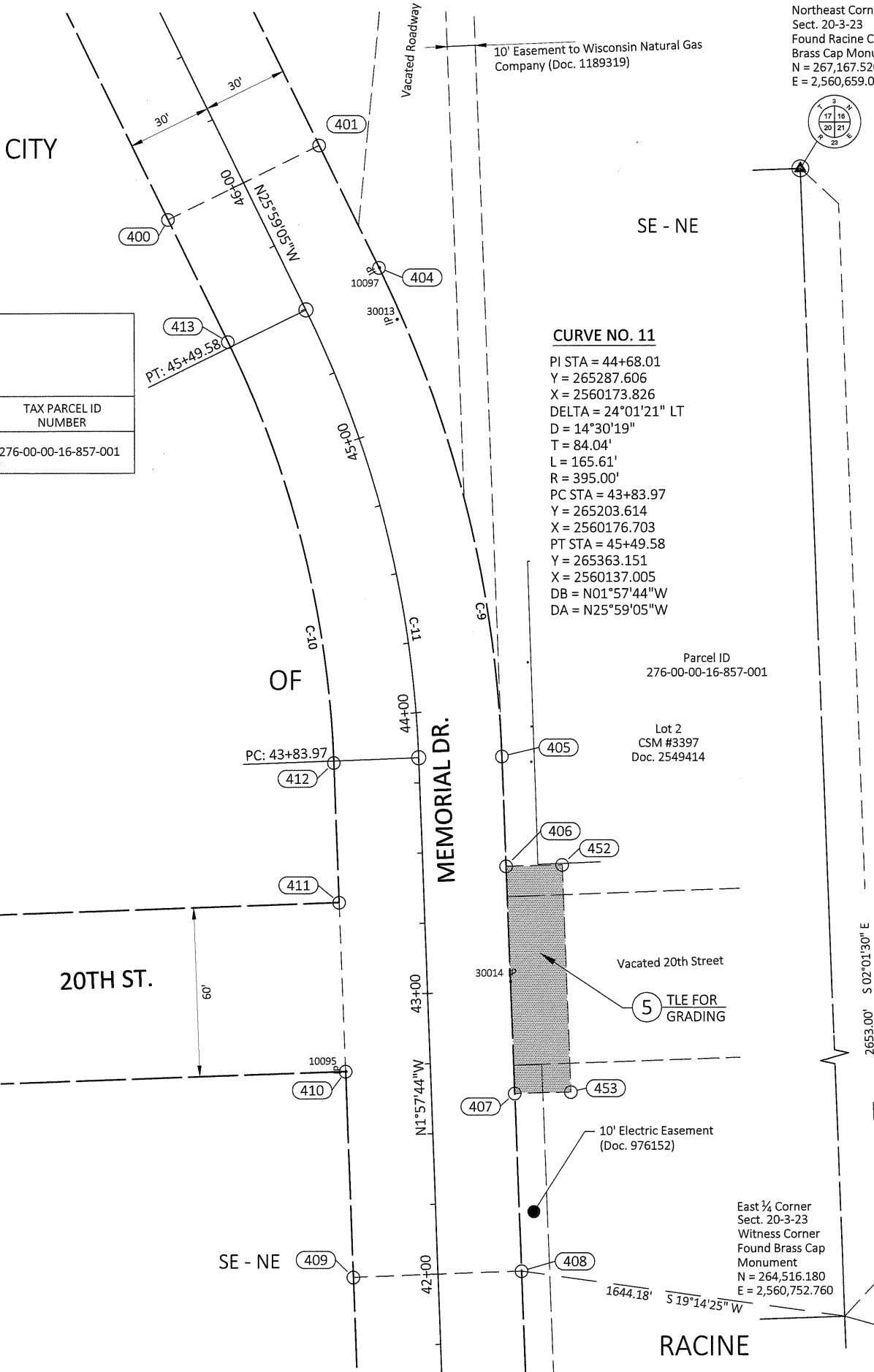
POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN STATE PLANE, SOUTH, RACINE COUNTY, NAD83(2011). IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

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FOR ADDITIONAL INFORMATION, REFER TO TITLE SHEET, SHEET 2 OF 2 OF THIS DOCUMENT.

FOUND MONUMENT INFORMATION SHOWN REPRESENTS TYPE AND LOCATION OF EXISTING MONUMENTS WITHOUT OPINION AS TO THEIR VALIDITY AND USE AS A PROPERTY CORNER.



CURVE NO. 11

PI STA = 44+68.01
Y = 265287.606
X = 2560173.826
DELTA = 24°01'21" LT
D = 14°30'19"
T = 84.04'
L = 165.61'
R = 395.00'
PC STA = 43+83.97
Y = 265203.614
X = 2560176.703
PT STA = 45+49.58
Y = 265363.151
X = 2560137.005
DB = N01°57'44"W
DA = N25°59'05"W

Found Monument Table			
Point No.	Northing	Easting	Description
10095	265,092.025	2,560,150.389	1 1/2" Iron Pipe
10097	265,378.038	2,560,163.310	1" Iron Pipe
30013	265,359.654	2,560,169.581	2 1/4" Iron Pipe
30014	265,123.863	2,560,209.248	Chiseled "X"

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER(S)	INTEREST REQUIRED
--	--	--
--	--	--

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



SIGNATURE: [Signature] DATE: 06/30/25
PRINT NAME: ANTHONY E. BIANCHIN
REGISTRATION NUMBER: S-2938

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE CITY OF RACINE

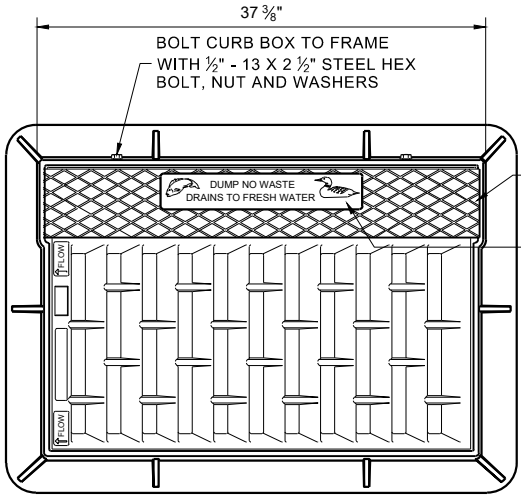
SIGNATURE: [Signature] DATE: 06/27/25
PRINT NAME: Scott Hintz

Standard Detail Drawing List

08A05-22A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-22B	INLET COVERS TYPE B, B-A, C, MS, MS-A, DW & WM
08A09-03	CATCH BASINS 2X3-FT AND 2.5X3-FT
08B09-04	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT, 8-FT, 9-FT, 10-FT DIAMETER
08D01-24A	CONCRETE CURB & GUTTER
08D01-24B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D05-22A	CURB RAMPS TYPES 1 AND 1-A
08D05-22B	CURB RAMPS TYPES 2 AND 3
08D05-22C	CURB RAMPS TYPES 4A AND 4A1
08D05-22D	CURB RAMPS TYPES 4B AND 4B1
08D05-22E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-22F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-22G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D20-02	DRIVEWAYS WITH CURB & GUTTER RETURNS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B04-13	PULL BOX
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-10	CONCRETE CONTROL CABINET BASES
09C15-02	CONCRETE BASE TYPE 10 SPECIAL
09C16-01	CONCRETE BASE TYPE 10 SPECIAL EXTENSION
09D02-03	SIGNAL CONTROL CABINET
09E01-15A	POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
09E03-06	NON-FREEWAY LIGHTING UNIT POLE WIRING
09E06-05	TRAFFIC SIGNAL STANDARD POLY BRACKET MOUNTINGS (TYPICAL) 13 FT. OR 15 FT.
09E07-06	TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS
09E08-09F	TYPE 10 SPECIAL POLE 35' MONOTUBE ARM
09E08-09G	TYPE 10 SPECIAL POLE 40' MONOTUBE ARM
09E08-09K	GENERAL NOTES, HARDWARE DETAILS FOR TYPE 9, 10, 9/10 SPECIAL,12 & 13 POLES W/ MONOTUBE ARMS
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-17A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-17C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C13-11	URBAN DOWELED CONCRETE PAVEMENT
13C14-07A	BASE PATCHING CONCRETE
13C14-07B	BASE PATCHING CONCRETE
13C14-07C	BASE PATCHING CONCRETE
13C18-08A	CONCRETE PAVEMENT JOINTING
13C18-08B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-08C	CONCRETE PAVEMENT JOINT TYPES
13C18-08D	CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES
13C18-08E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
13C18-08F	CONCRETE PAVEMENT INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER
13C19-03	HMA LONGITUDINAL JOINTS
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-16B	PAVEMENT MARKING WORDS
15C07-16C	PAVEMENT MARKING ARROWS
15C07-16E	PAVEMENT MARKING FOR BIKE LANES
15C08-24A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-24B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-24C	PAVEMENT MARKING (TURN LANES)
15C08-24D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-09A	MEDIAN ISLAND PAVEMENT MARKINGS
15C18-09B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C18-09C	MEDIAN PAVEMENT MARKINGS DOUBLE ARROW WARNING SIGN PLACEMENT

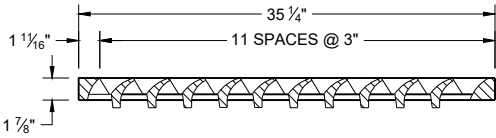
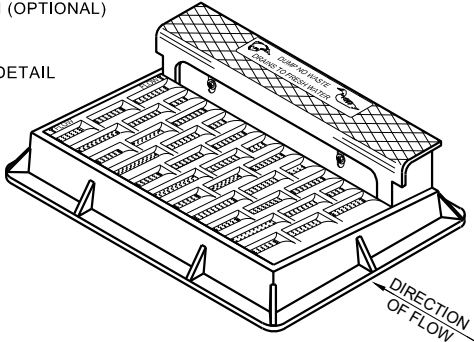
Standard Detail Drawing List

15C19-10A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-10B	MOVING PAVEMENT MARKING OPERATION MULTI-LANE UNDIVIDED ROADWAY
15C29-08A	BICYCLE LANE MARKING
15D30-11A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11E	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11F	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11G	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11H	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11I	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11J	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11K	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-11L	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D46-01	TRAFFIC CONTROL, ONE - WAY SIGNING

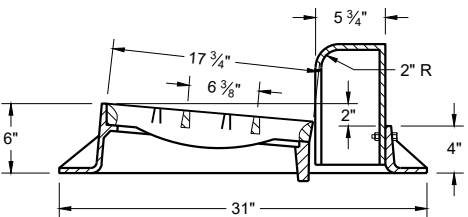
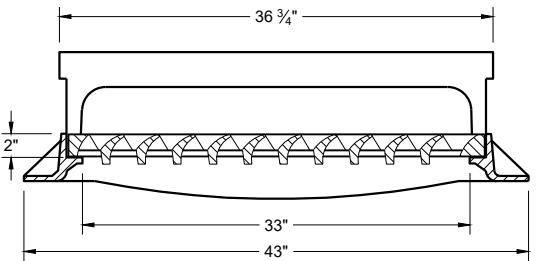
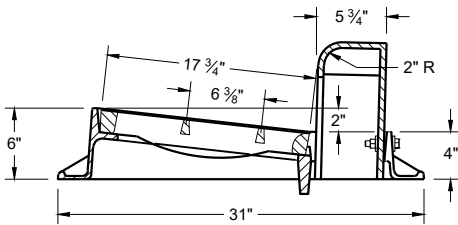
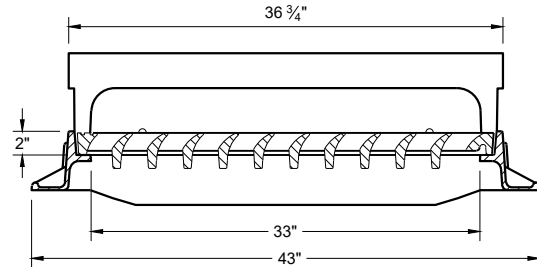


NOTE: EITHER CASTING IS ACCEPTABLE

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



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

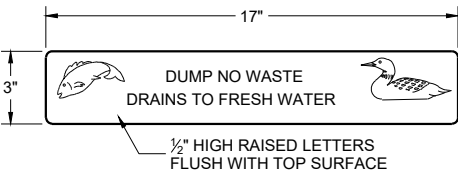


TYPE "H"

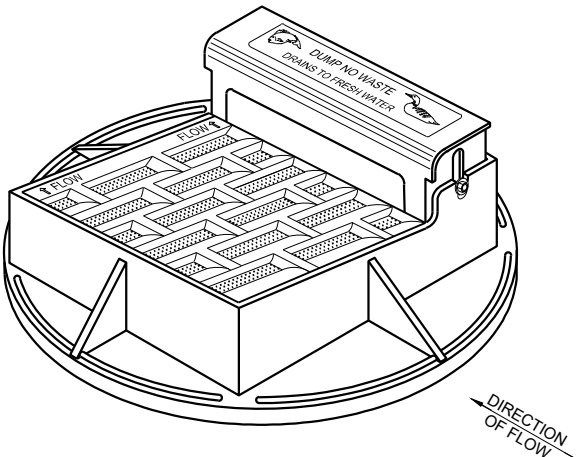
NOTE: EITHER CASTING IS ACCEPTABLE



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

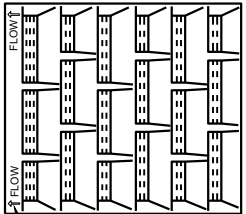


LOGO DETAIL

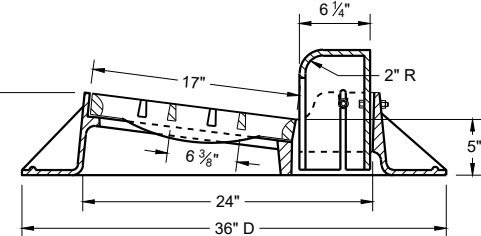
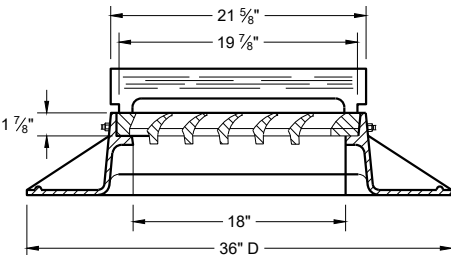
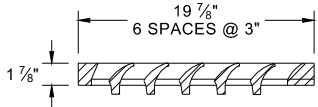


NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

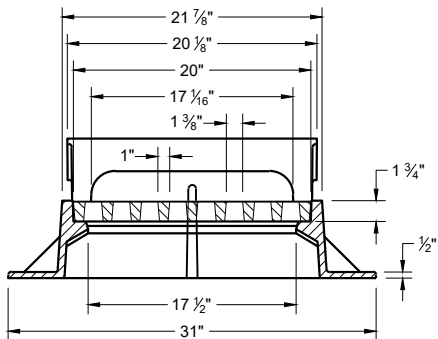
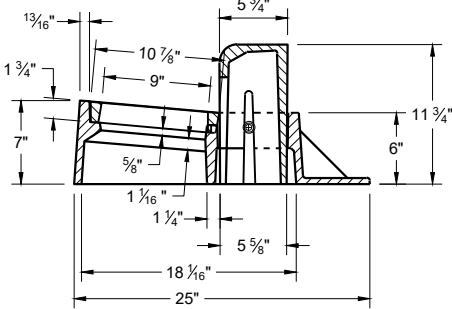
NOTE: EITHER CASTING IS ACCEPTABLE



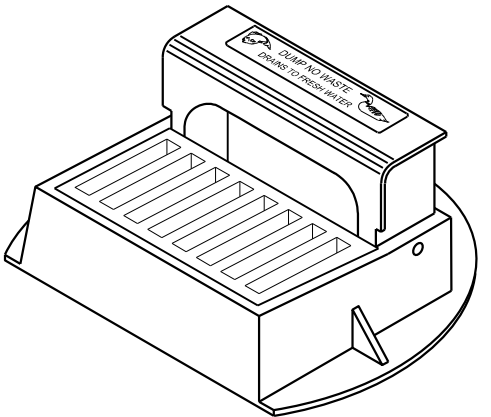
DIRECTION OF FLOW ARROWS



TYPE "A"



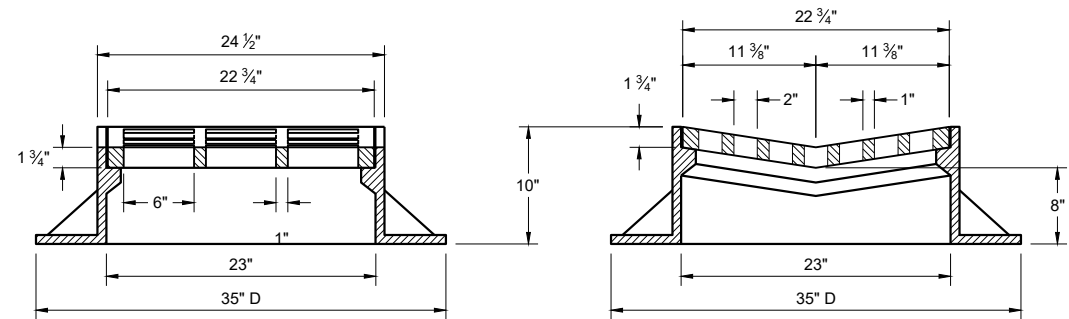
TYPE "Z"



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

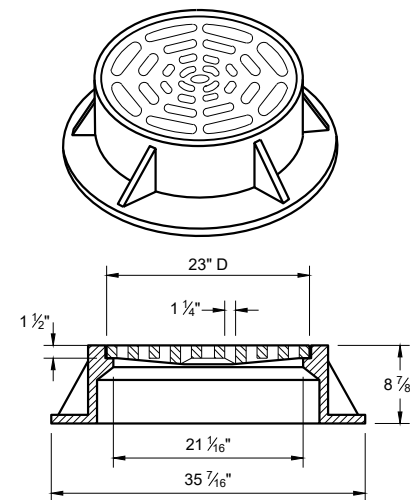
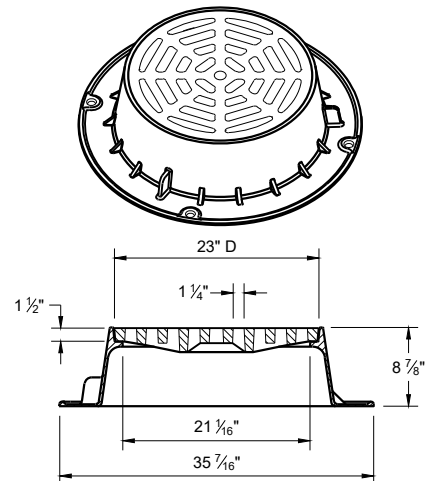
APPROVED
February 2025
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
UNIT SUPERVISOR
FHWA



TYPE "B"

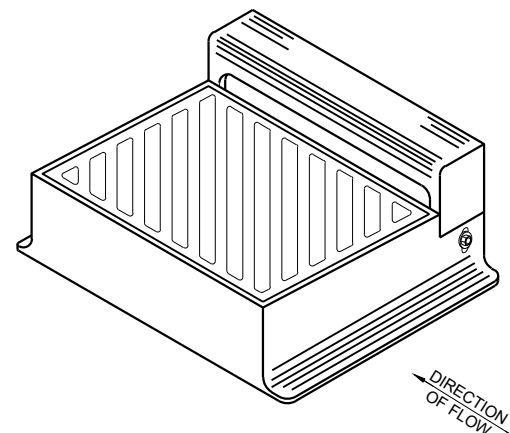
**ALTERNATIVE GRATE FOR
TYPE "B" COVER**

USE WHERE PEDESTRIAN OF BICYCLE TRAFFIC IS POSSIBLE
NOTED AS TYPE B - A ON THE DRAINAGE TABLE

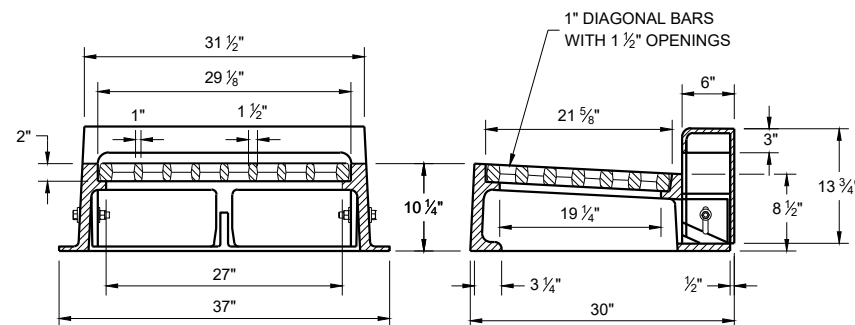


TYPE "C"

NOTE: EITHER CASTING IS ACCEPTABLE



DIAGONAL SLOTS SHALL BE ORIENTED TO THE
DIRECTION OF FLOW AS ILLUSTRATED.
GRATES ARE MANUFACTURED TO BE REVERSIBLE.



TYPE "WM"

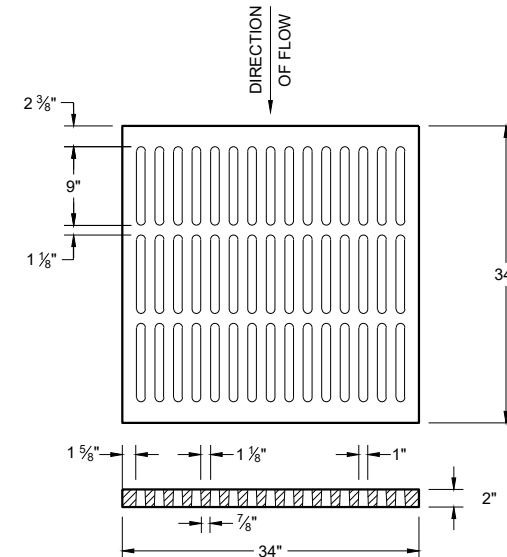
NOTE: CURB BOX HEIGHT ADJUSTABLE 6" - 9"

GENERAL NOTES

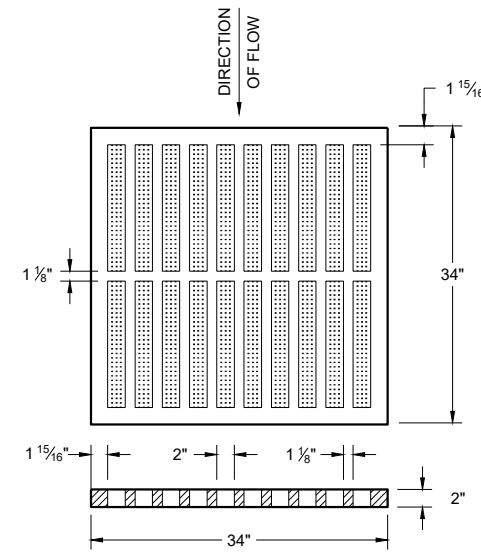
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

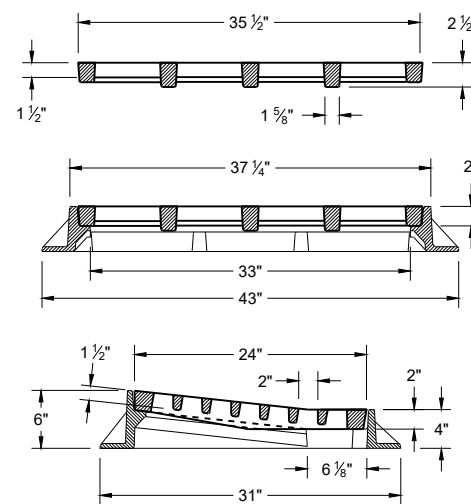
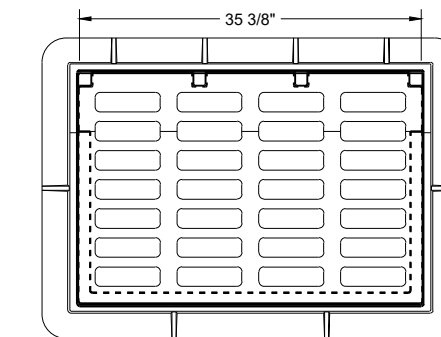
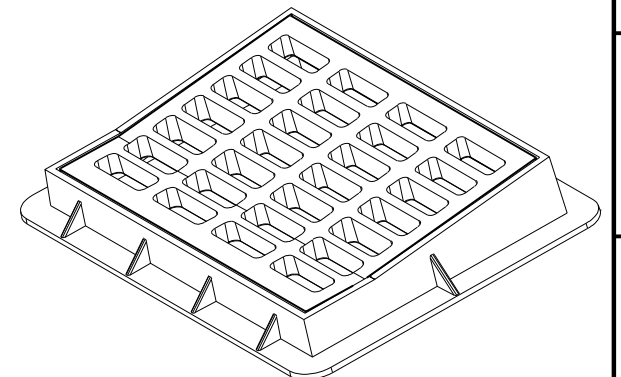
ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



ALTERNATIVE TYPE "MS"
USE WHERE PEDESTRIAN OF BICYCLE
TRAFFIC IS PERMITTED
**NOTED AS TYPE MS-A ON THE
DRAINAGE TABLE**



TYPE "MS"
USE ON FREEWAYS AND EXPRESSWAYS
**NOTED AS TYPE MS ON THE
DRAINAGE TABLE**



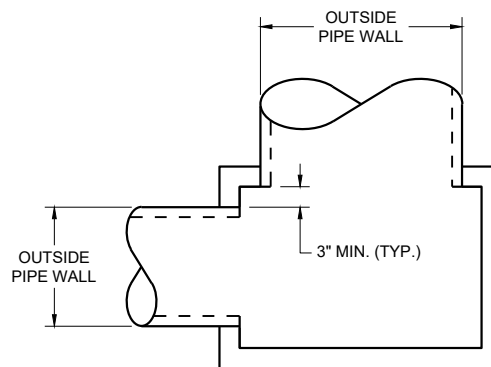
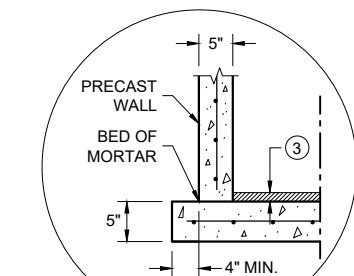
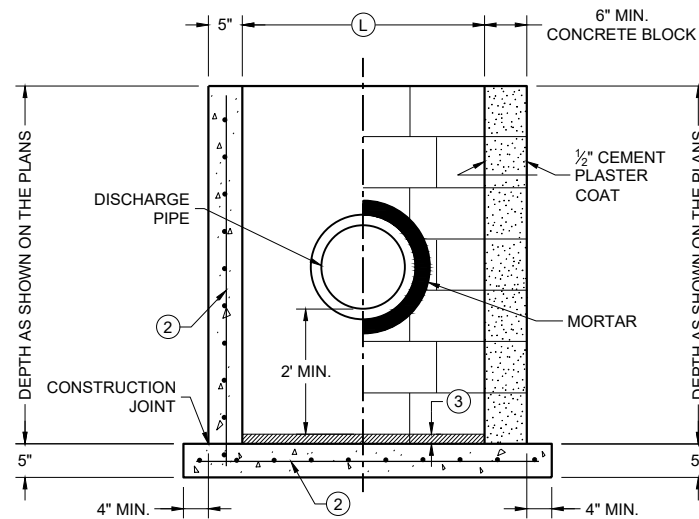
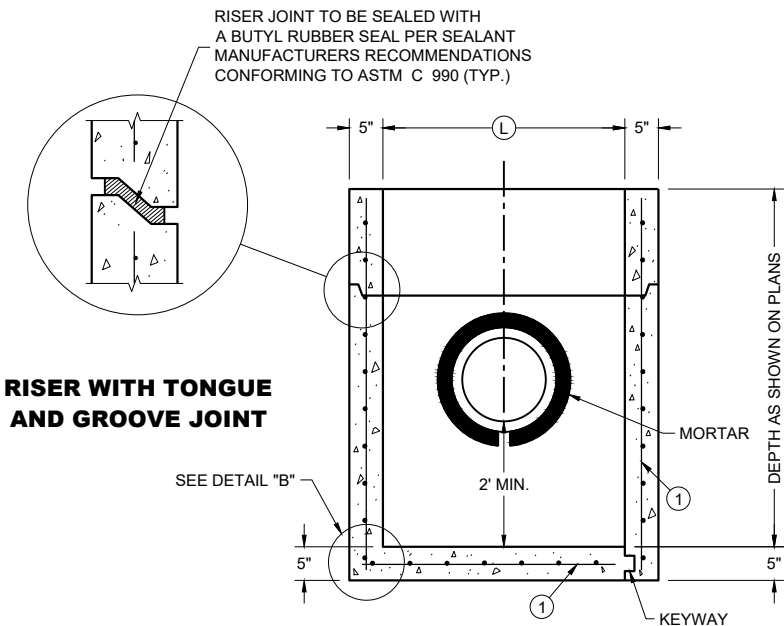
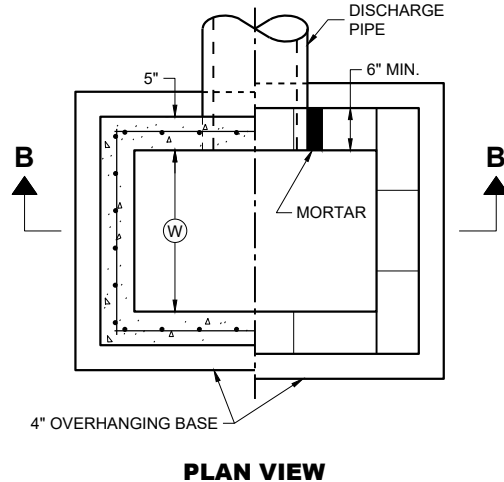
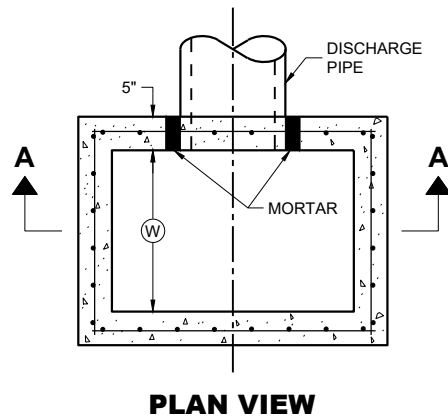
TYPE "DW"

NOTES: FOR USE IN A SUMP CONDITION. THIS OPTION IS
ONLY TO BE USED IF NO OTHER INLETS ARE APPLICABLE.

**INLET COVERS
TYPES B, B-A, C,
MS, MS-A ,DW AND WM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN 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 PRECAST CATCH BASIN UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES 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.

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND 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.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

- FOR PRECAST CATCH BASINS AND REINFORCED CONCRETE BASES PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.
- CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.
- 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER MATRIX

CATCH BASIN SIZE	WIDTH (W) (FT.)	LENGTH (L) (FT.)	INLET COVER TYPE	
			F	ALL H'S
2 X 3-FT	2	3		X
2.5 X 3-FT	2.5	3	X	

PIPE MATRIX

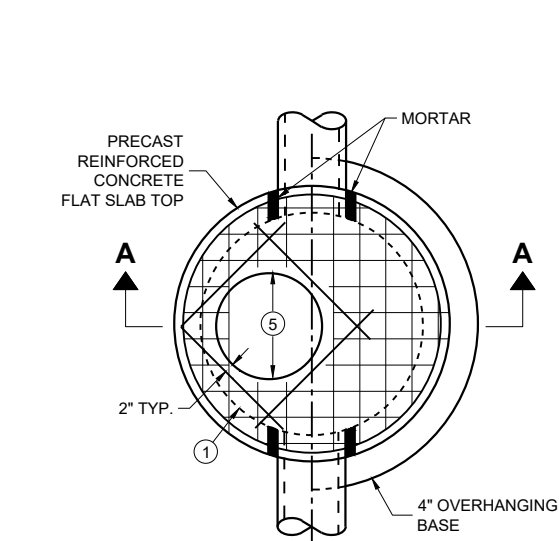
CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER (IN)	
	WIDTH (W) (IN)	LENGTH (L) (IN)
2 X 3-FT	12	24
2.5 X 3-FT	18	24

CATCH BASINS 2 X 3-FT AND 2.5 X 3-FT

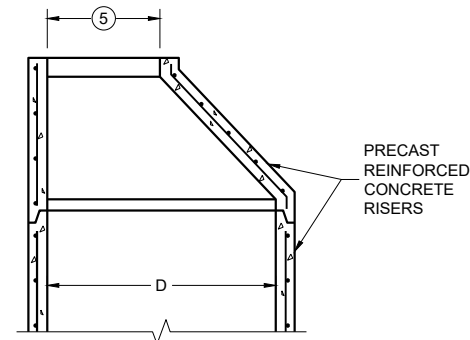
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2023 /S/ RODNEY TAYLOR
DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA

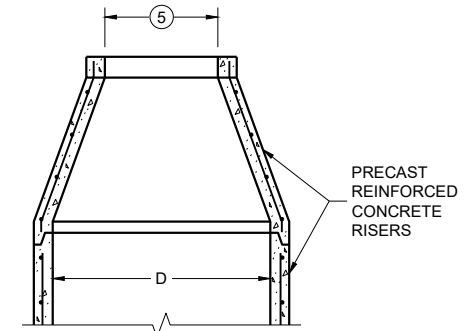
CATCH BASINS 2X3-FT AND 2.5X3-FT



PLAN VIEW
CIRCULAR OPENING



OPTIONAL PRECAST
REINFORCED CONCRETE
ECCENTRIC TOP



OPTIONAL PRECAST
REINFORCED CONCRETE
CONCENTRIC TOP

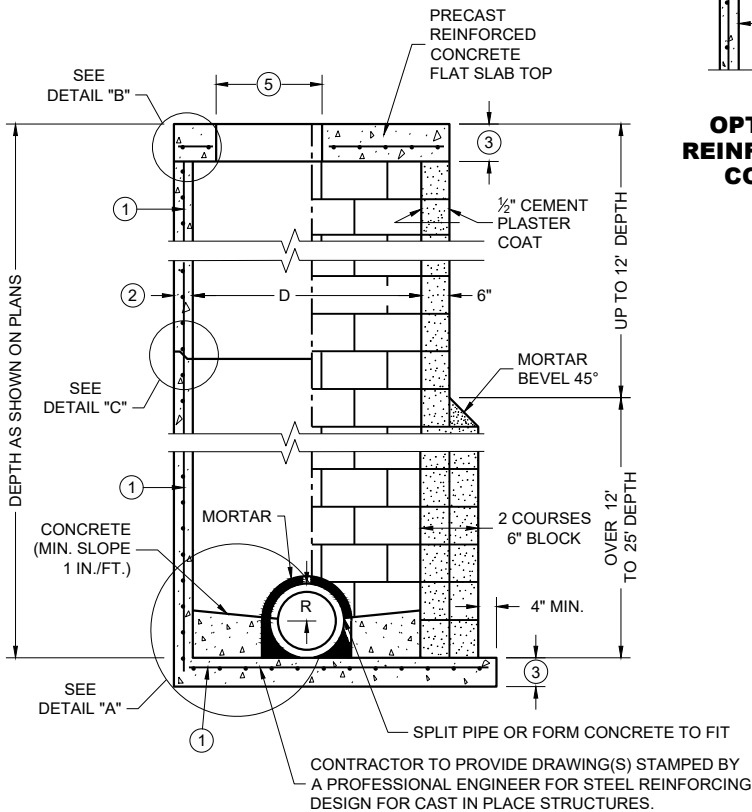
MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

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

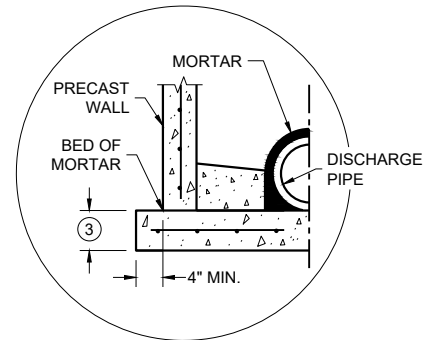
*A 36" PIPE AND A 42" PIPE CAN BE PLACED WITHIN 90 DEGREES.
SEE MINIMUM HORIZONTAL PIPE SEPARATION DETAIL.



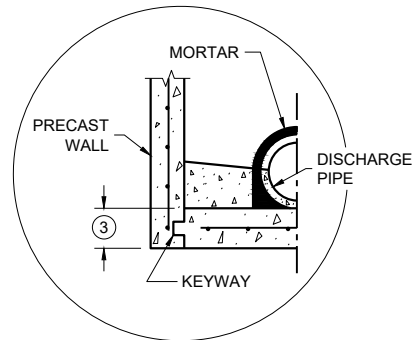
SECTION A - A

PRECAST REINFORCED
CONCRETE WITH
MONOLITHIC BASE

CONCRETE BLOCK WITH
CAST IN PLACE OR
PRECAST REINFORCED
CONCRETE BASE ①

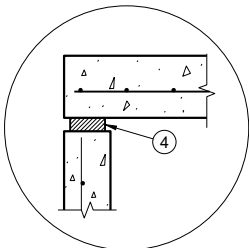


SEPARATE PRECAST REINFORCED
CONCRETE BASE OPTION

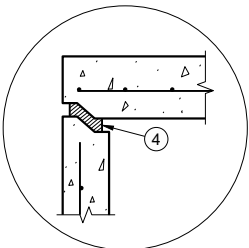


PRECAST REINFORCED CONCRETE
WITH INTEGRAL BASE OPTION

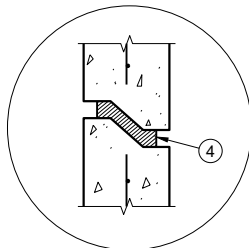
DETAIL "A"



TOP WITH PLAIN
END JOINT



TOP WITH TONGUE
AND GROOVE JOINT



RISER WITH TONGUE
AND GROOVE JOINT

DETAIL "B"

DETAIL "C"

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

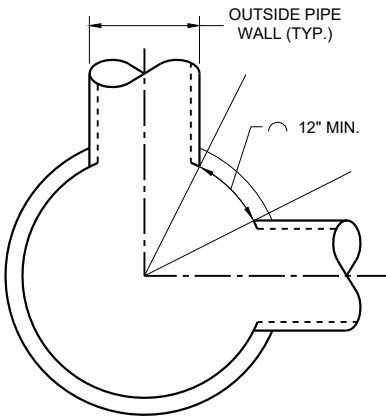
PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

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

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

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

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



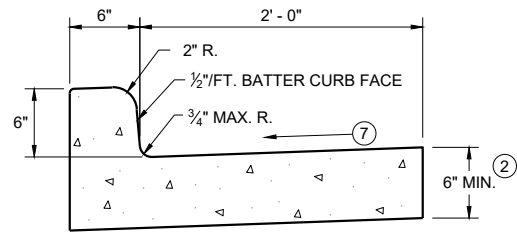
MINIMUM HORIZONTAL
PIPE SEPARATION

DETAIL "D"

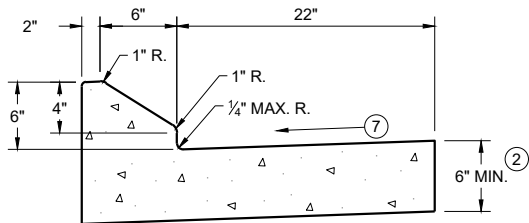
MANHOLES, 3-FT, 4-FT
5-FT, 6-FT, 7-FT, 8-FT, 9-FT
AND 10-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

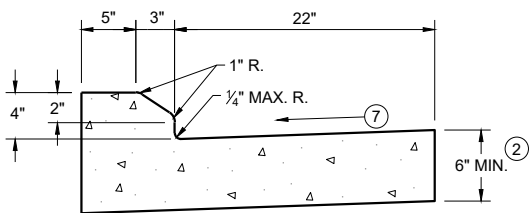
APPROVED
December 2023 /S/ Rodney Taylor
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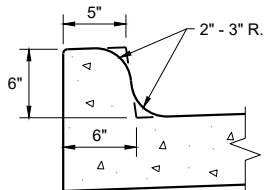
TYPES A^① & D



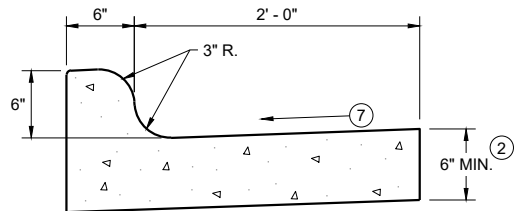
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

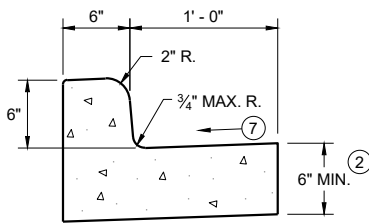


TYPES K^① & L
(OPTIONAL CURB SHAPE)



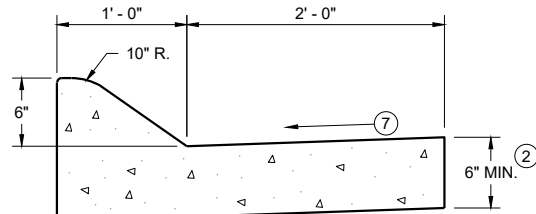
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

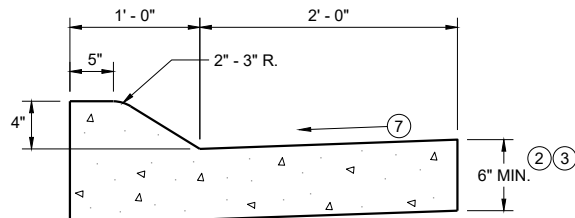


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

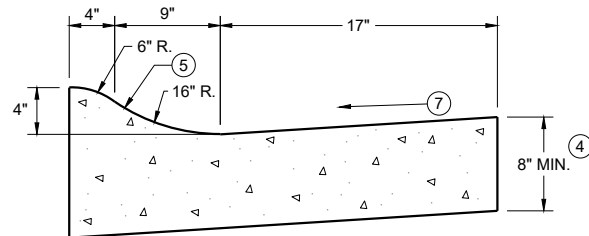


6" SLOPED CURB TYPES A^① & D



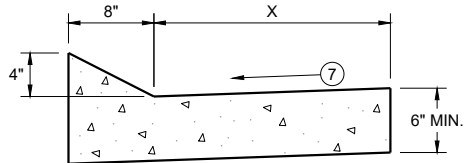
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



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

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

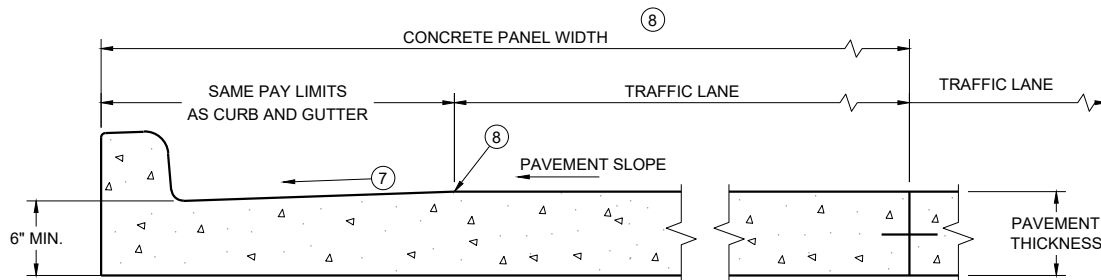


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

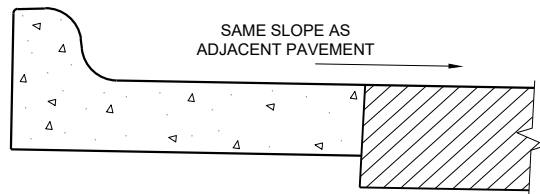
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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

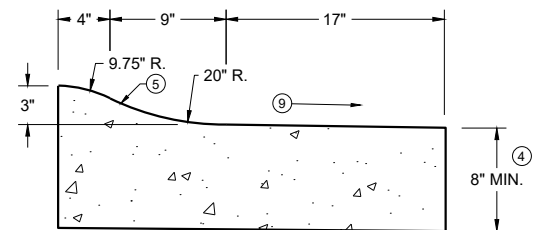


PARTIAL SECTION OF PAVEMENT
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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



3" SLOPED CURB TYPES R^① & T

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

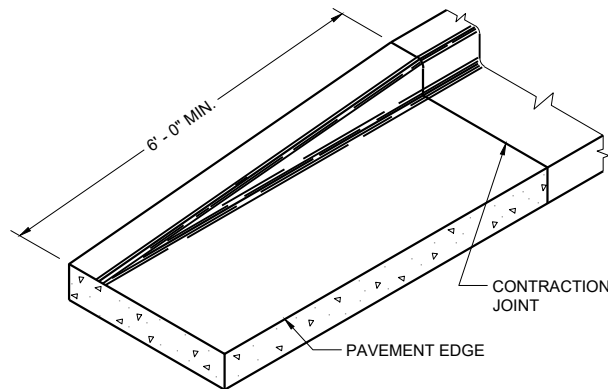
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

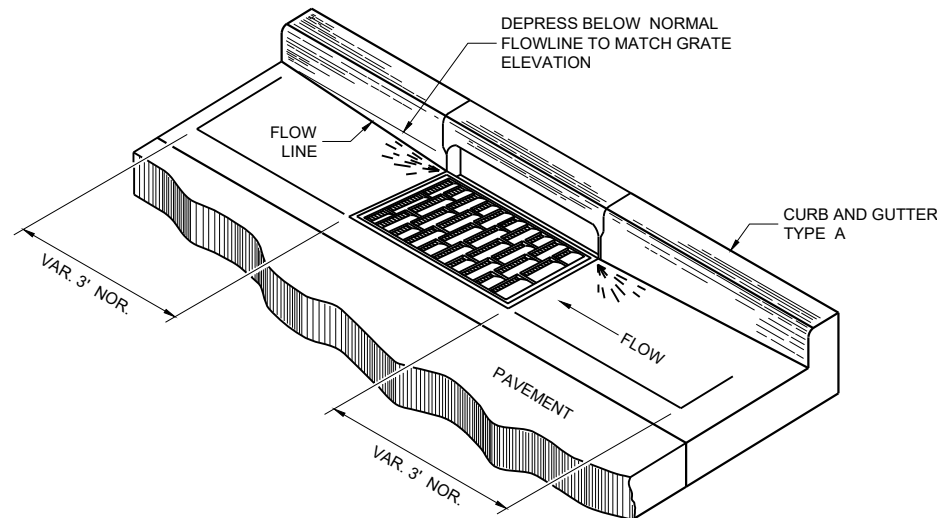
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ SLOPE TO BE REVERSE SLOPE MATCHING THE SLOPE OF THE PAVEMENT AND THE CIRCULATORY ROADWAY

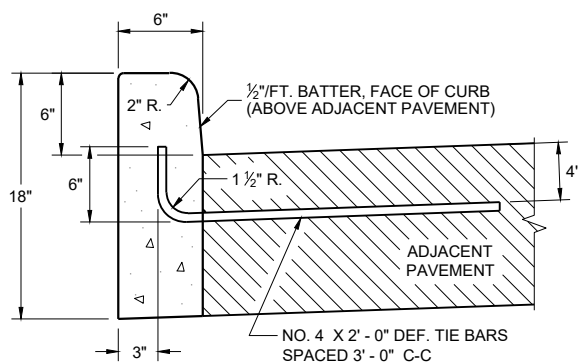


END SECTION CURB AND GUTTER

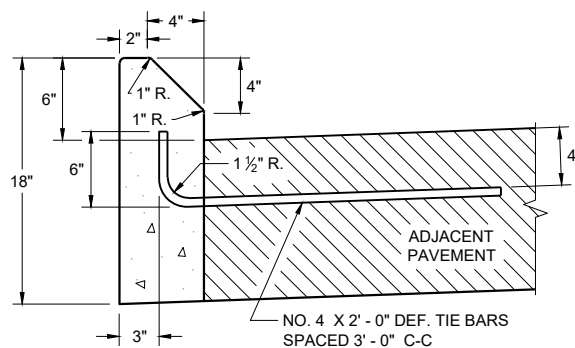


DETAIL OF CURB AND GUTTER AT INLETS

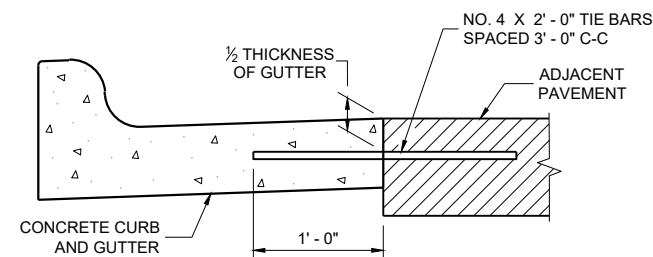
(TYPICAL H INLET COVER SHOWN)



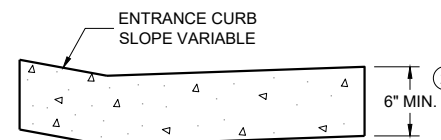
TYPES A ① & D



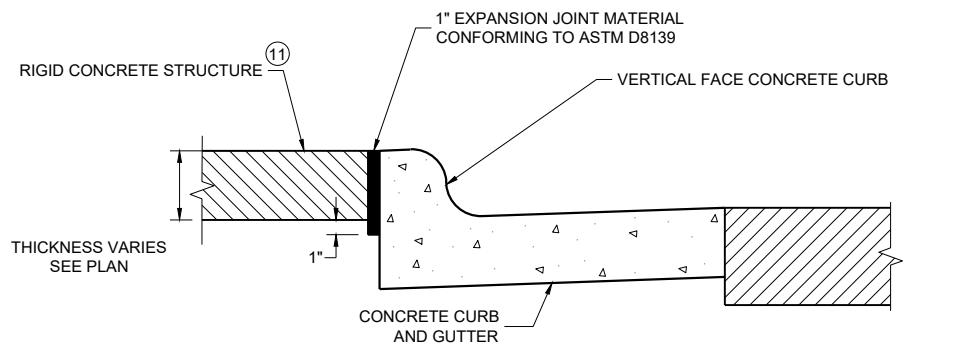
**TYPES G ① & J
CONCRETE CURB**



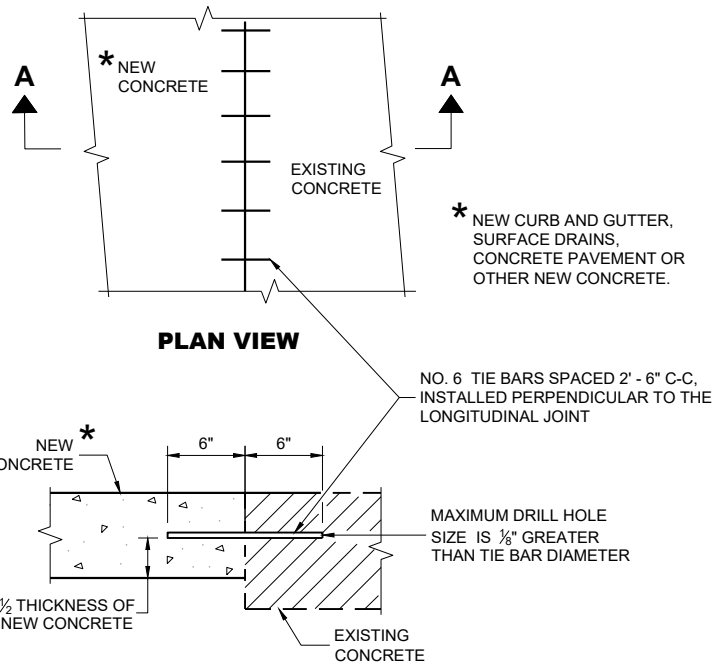
TYPICAL TIE BAR LOCATION ①



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



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE ⑪



**SECTION A - A
TIE BARS DRILLED INTO EXISTING PAVEMENT**

GENERAL NOTES

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

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

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

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

6

SDD 08D01-24b

6

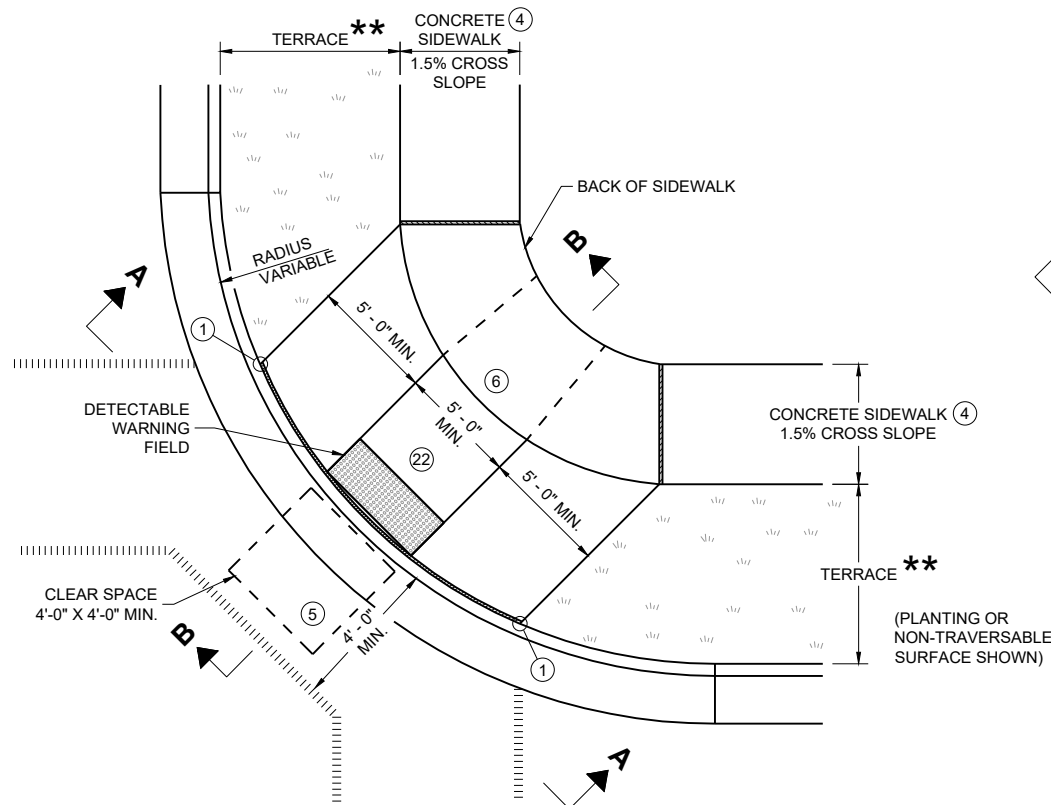
SDD 08D01-24b

**CONCRETE CURB, TIES
AND CURB AND GUTTER
APPLICATIONS**

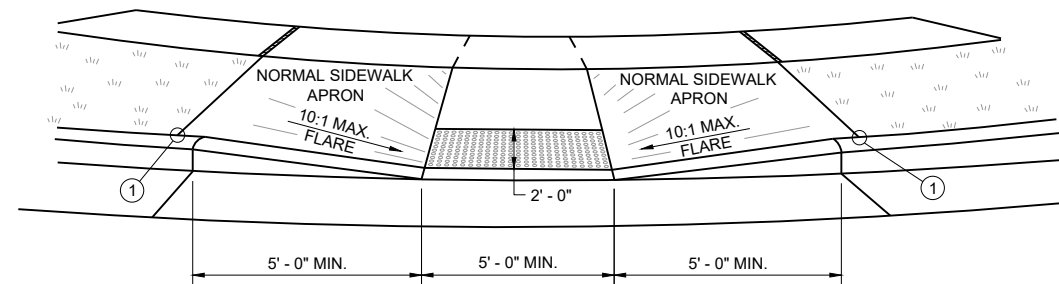
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

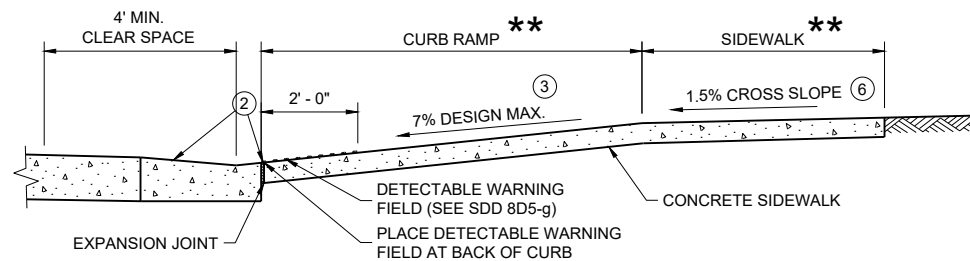
FHWA



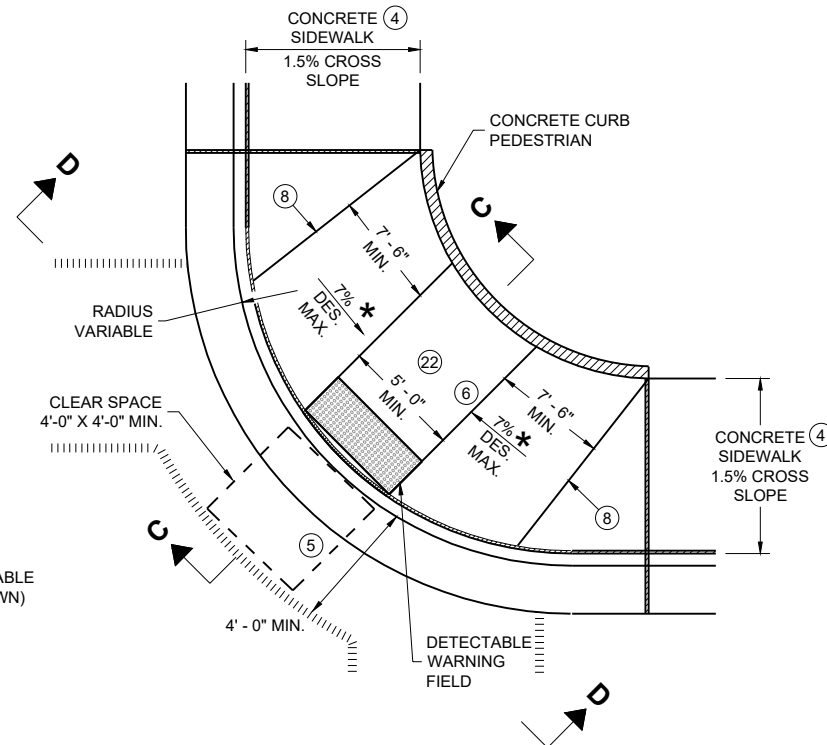
PLAN VIEW
CURB RAMP TYPE 1
(CENTER OF CORNER RADIUS)



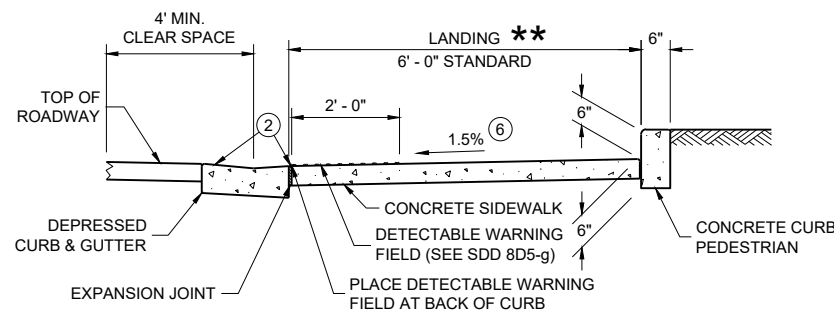
VIEW A - A FOR TYPE 1



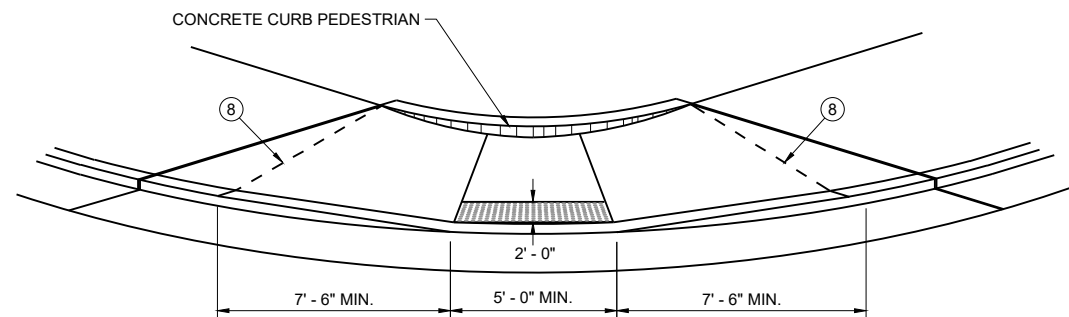
SECTION B - B FOR TYPE 1



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



SECTION C - C FOR TYPE 1 - A



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

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

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

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

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

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

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

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

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

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

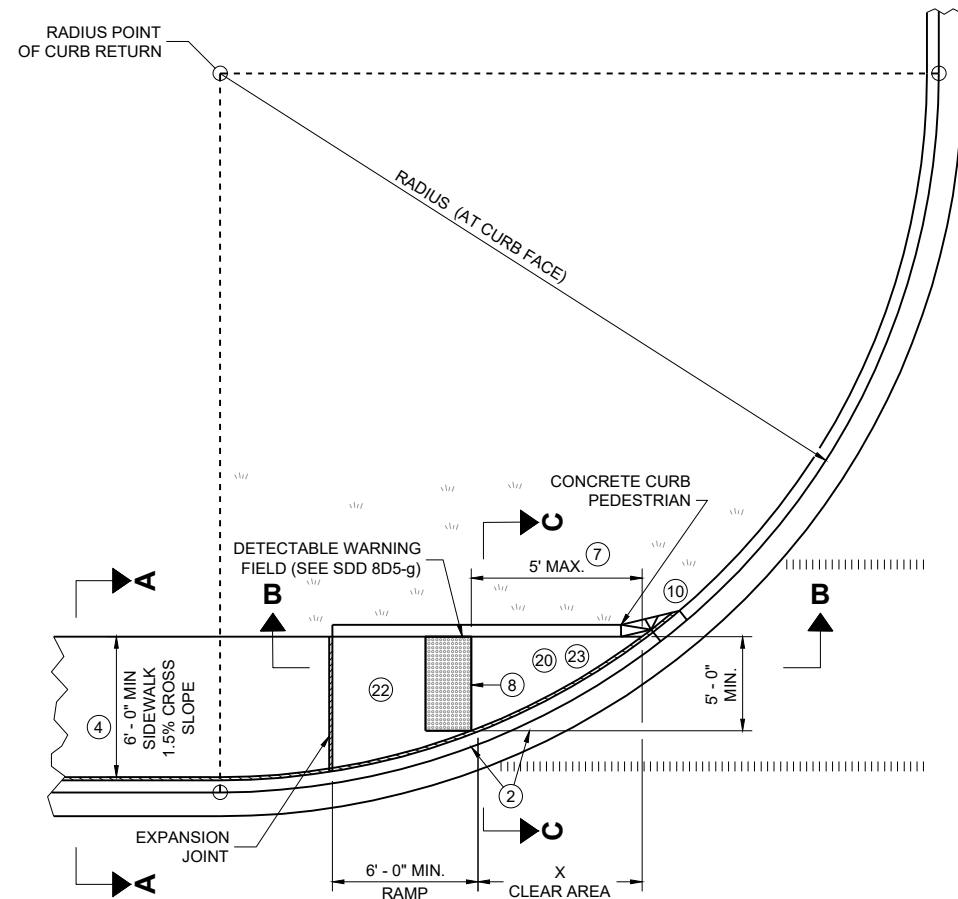
LEGEND

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

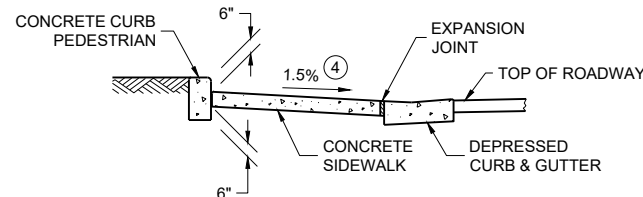
CURB RAMPS
TYPE 1 AND 1-A

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

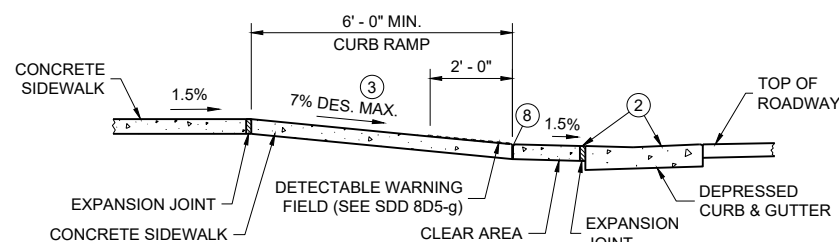




PLAN VIEW
CURB RAMP TYPE 4A



SECTION C - C FOR TYPE 4A

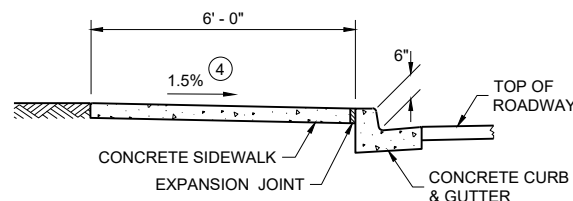


SECTION B - B FOR
TYPE 4A AND TYPE 4A1

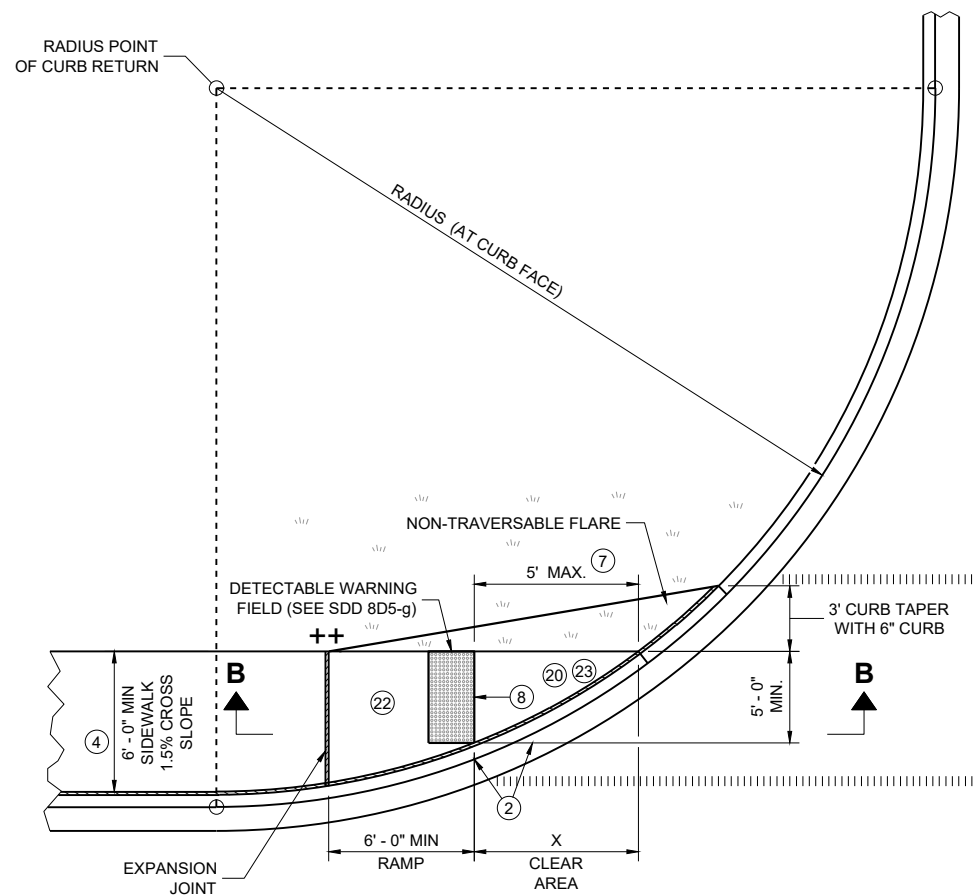
- LEGEND**
- 1/2" EXPANSION JOINT SIDEWALK
 - CONTRACTION JOINT SIDEWALK
 - PAVEMENT MARKING CROSSWALK (WHITE)
 - ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

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

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A



PLAN VIEW
CURB RAMP TYPE 4A1

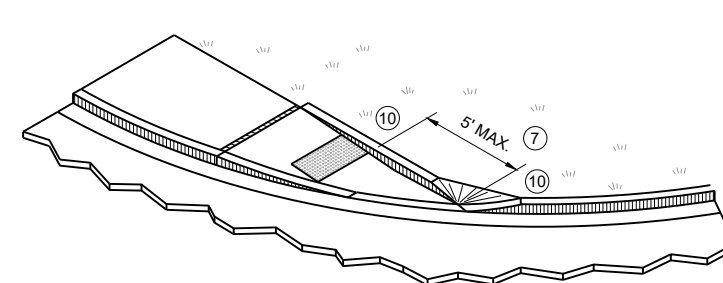
GENERAL NOTES

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

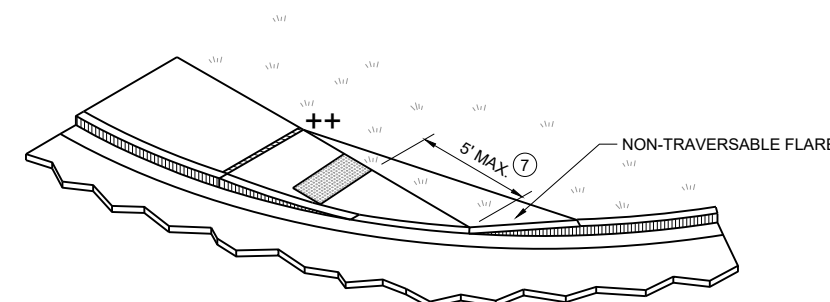
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

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



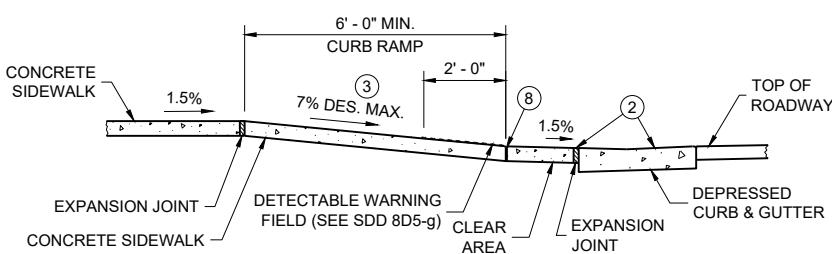
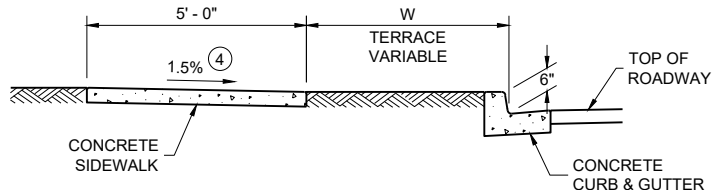
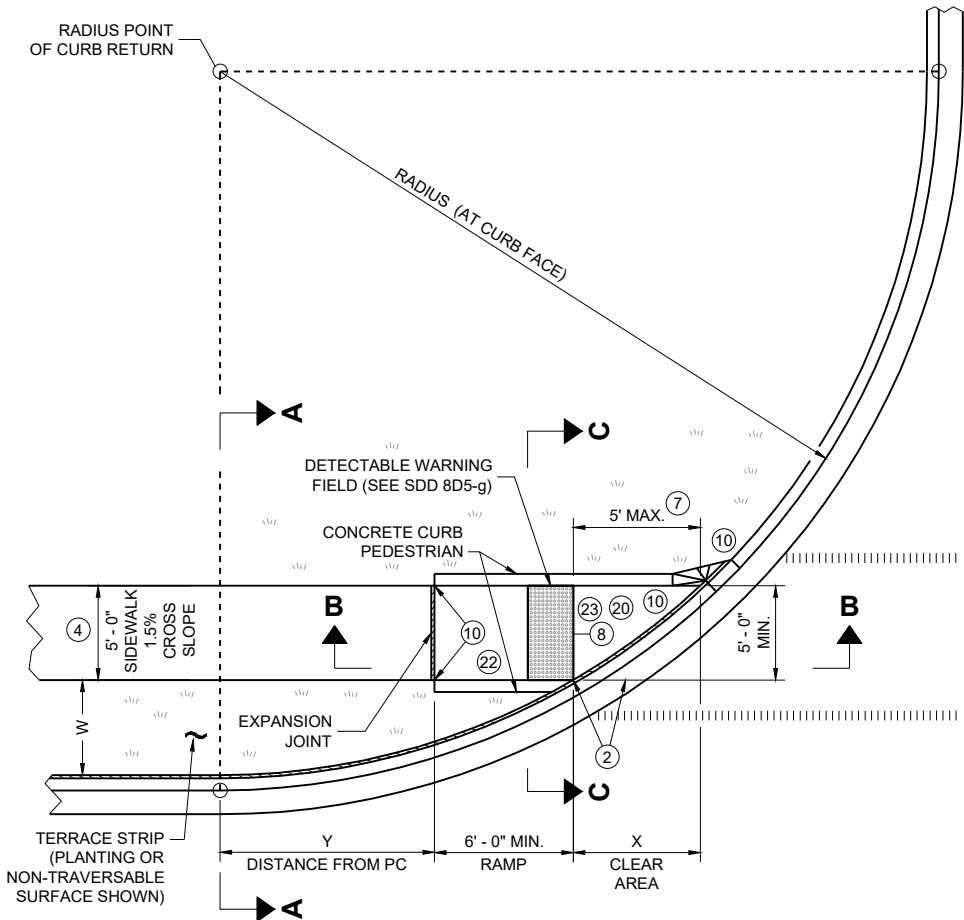
ISOMETRIC VIEW FOR TYPE 4A



ISOMETRIC VIEW FOR TYPE 4A1

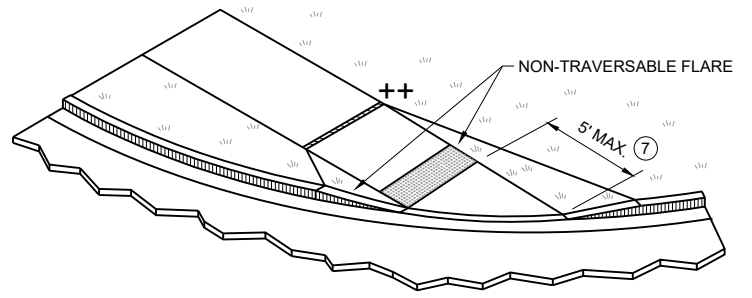
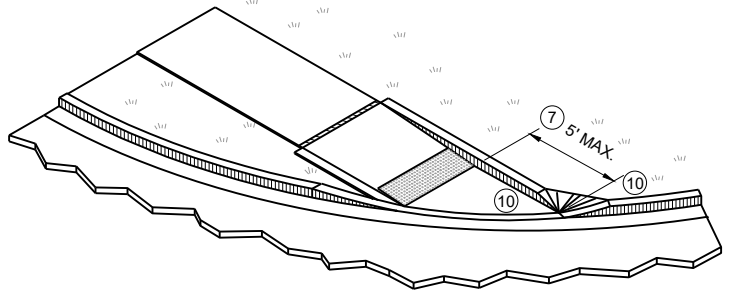
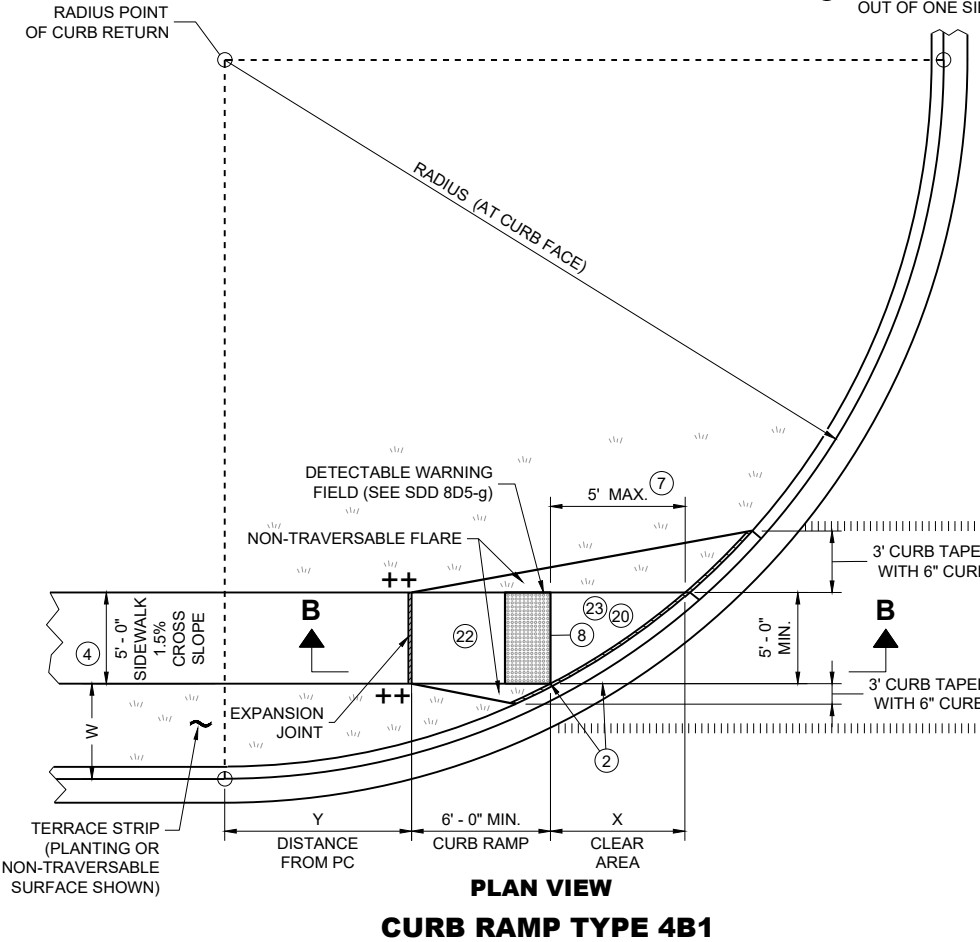
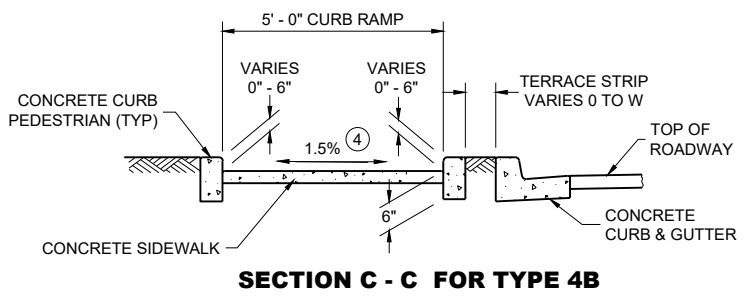
**CURB RAMPS
TYPE 4A AND 4A1**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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 3/4"	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			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									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															4' - 10 3/4"	19' - 8 1/4"

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



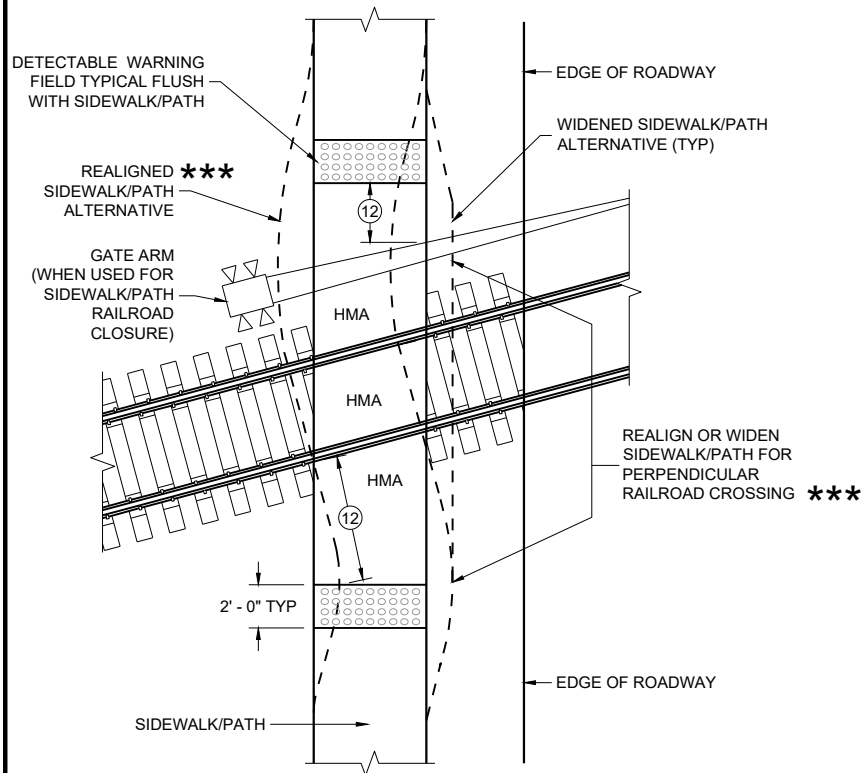
- LEGEND**
- 1/2" EXPANSION JOINT SIDEWALK
 - CONTRACTION JOINT SIDEWALK
 - PAVEMENT MARKING CROSSWALK (WHITE)
 - * MAXIMUM 2.1% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK
 - ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE

GENERAL NOTES

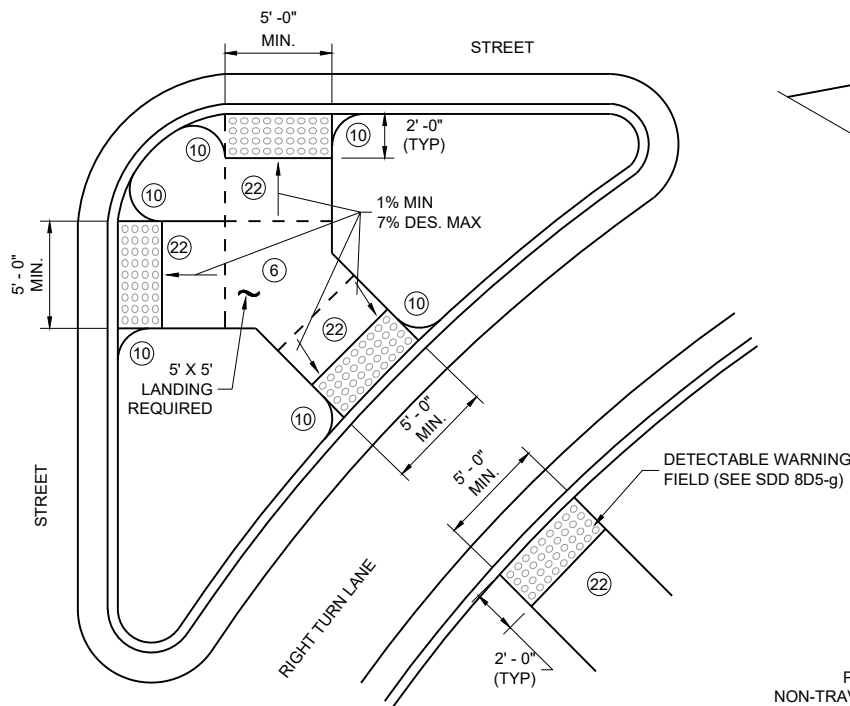
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF CURB RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- GRADE CHANGE BETWEEN GUTTER COUNTER SLOPE AND THE CURB RAMP SLOPE IS DESIRABLY 11% OR LESS AND SHALL NOT EXCEED 13.3%. TYPICAL GUTTER COUNTER SLOPE IS 4% BUT MAY BE MODIFIED TO FIT FIELD CONDITIONS. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5%, DESIRABLY 7% OR LESS, AND SHALL NOT EXCEED A MAXIMUM OF 8.3%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- MAXIMUM 8.3% CURB RAMP SLOPE IS ALLOWABLE WITH GUTTER COUNTER SLOPE OF 5% MAXIMUM AND A 13.3% MAXIMUM GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- 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.
- A MAXIMUM 2-INCH CONCRETE BORDER IS PERMITTED ALONG ALL SIDES OF THE DETECTABLE WARNING FIELD SURFACE.
- MAXIMUM 1.5% DESIGN MAXIMUM AND 2.1% PROWAG MAXIMUM RUNNING SLOPE ON CLEAR AREA. CROSS SLOPE OF CLEAR AREA SHALL MATCH THE CROSS SLOPE OF THE ADJACENT CROSSWALK.
- THE ENTIRE RAMP SHALL BE A PLANAR SURFACE. DO NOT WARP THE RUNNING SLOPE OR CROSS SLOPE OF THE RAMP. WARPING OF THE SIDEWALK CROSS SLOPE SHALL TAKE PLACE BETWEEN THE LANDING AND MATCH POINT.
- THE CLEAR AREA BETWEEN THE BOTTOM OF RAMP AND BACK OF CURB SHALL BE SLOPED SO THAT WATER DRAINS OUT OF ONE SIDE OR BOTH SIDES OF THE CURB OPENING.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

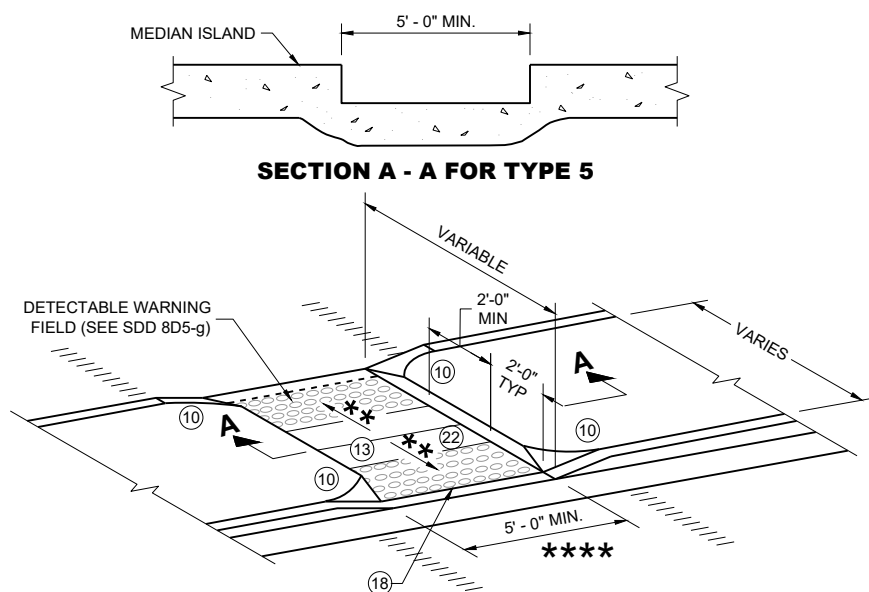


CURB RAMP TYPE 8
DETECTABLE WARNINGS
FOR SIDEWALKS OR SHARED USE PATHS
AT RAILROAD CROSSINGS

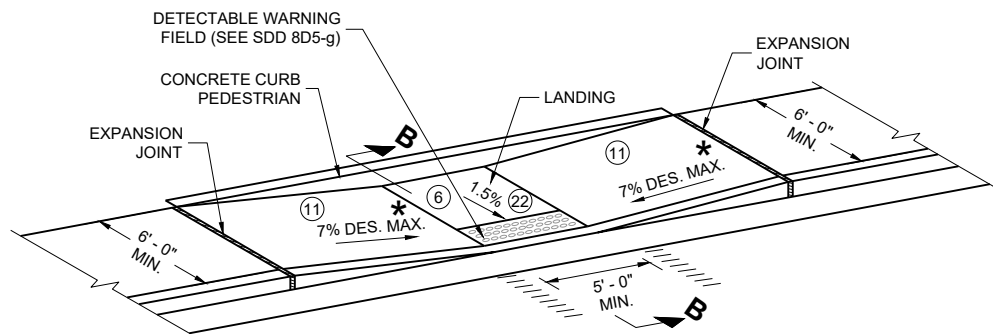


CURB RAMP TYPE 6
DETECTABLE WARNING AT ISLANDS

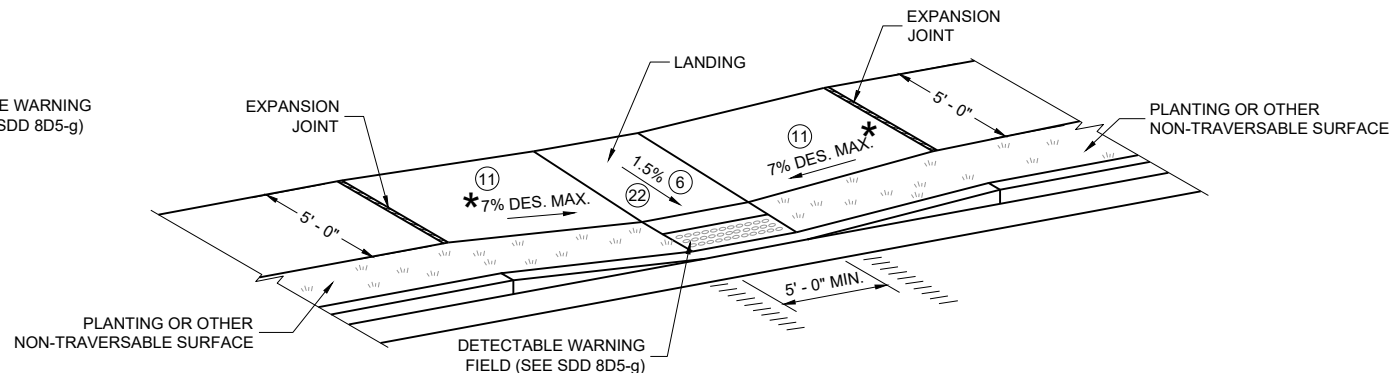
REFER TO GENERAL NOTES (2) AND (3)
FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 5
MEDIAN ISLAND
NON-ELEVATED PEDESTRIAN CROSSING



CURB RAMP TYPE 7A
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS



CURB RAMP TYPE 7B
FOR INTERSECTIONS AND
MID BLOCK CROSSINGS

GENERAL NOTES

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

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

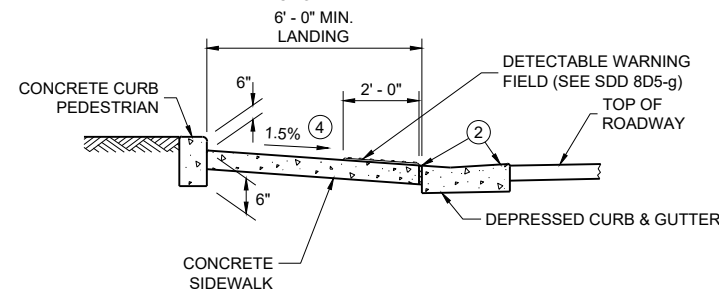
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2.1%.

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

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

LEGEND

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

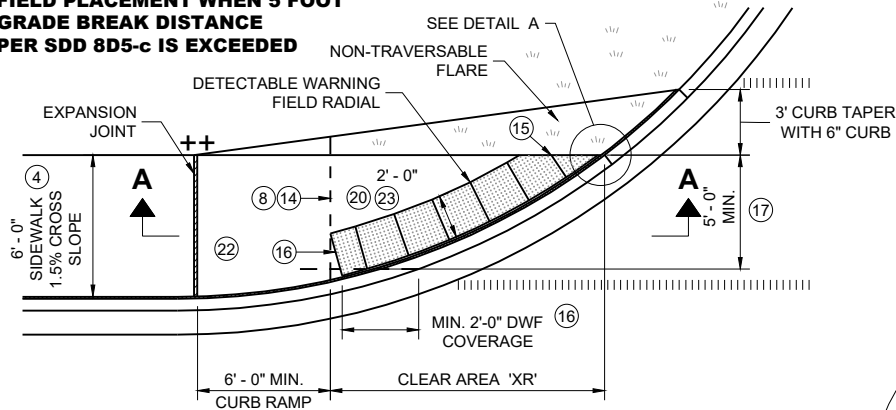


SECTION B - B FOR TYPE 7A

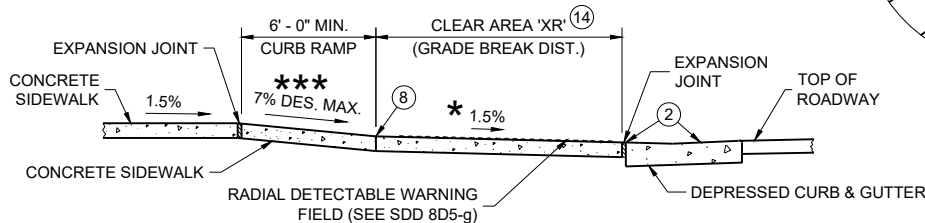
CURB RAMPS
TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

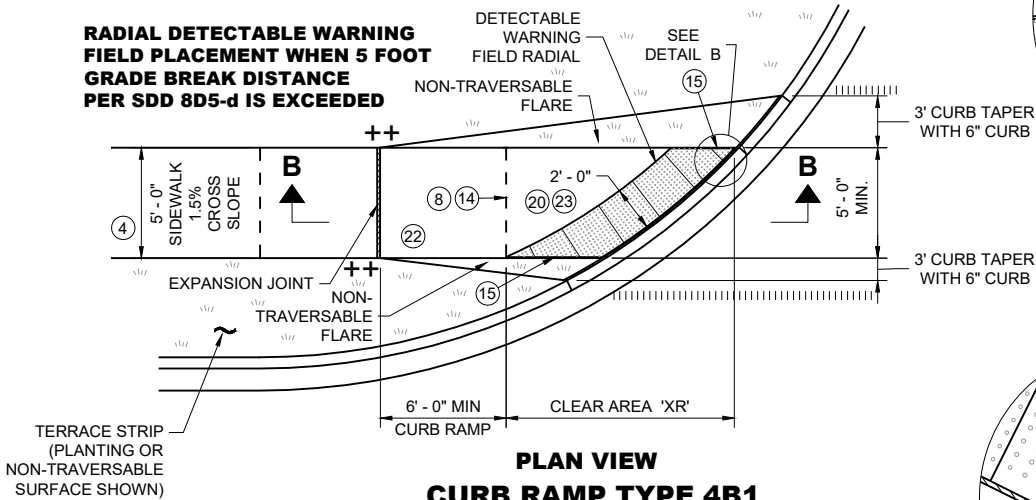


**PLAN VIEW
CURB RAMP TYPE 4A1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

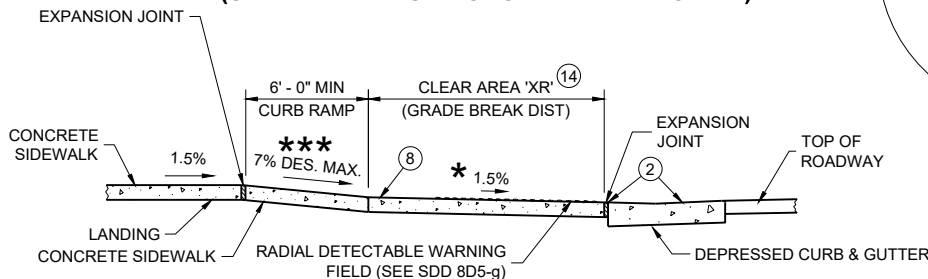


SECTION A - A FOR TYPE 4A1

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

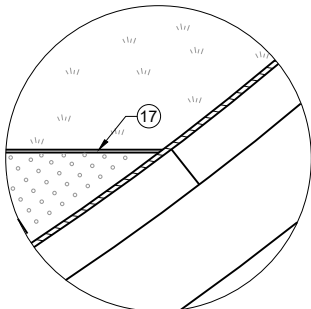


**PLAN VIEW
CURB RAMP TYPE 4B1
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

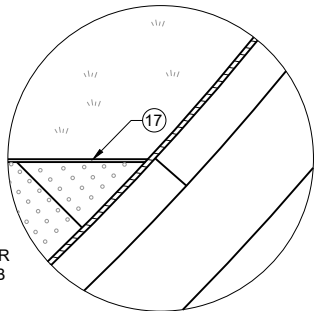


SECTION B - B FOR TYPE 4B1

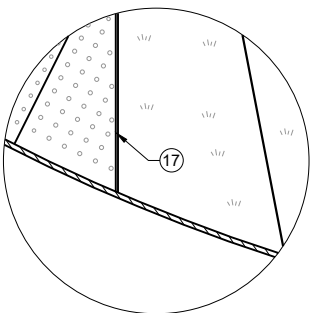
- LEGEND**
- 1/2" EXPANSION JOINT SIDEWALK
 - CONTRACTION JOINT SIDEWALK
 - PAVEMENT MARKING CROSSWALK (WHITE)
 - ** WIDTH SHOWN ELSEWHERE IN THE PLANS
 - *** MAXIMUM 8.3%
 - ++ CONSTRUCT 6" WEDGE TO AVOID CONCRETE BREAKAGE



DETAIL A



DETAIL B



DETAIL C

GENERAL NOTES

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

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

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

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

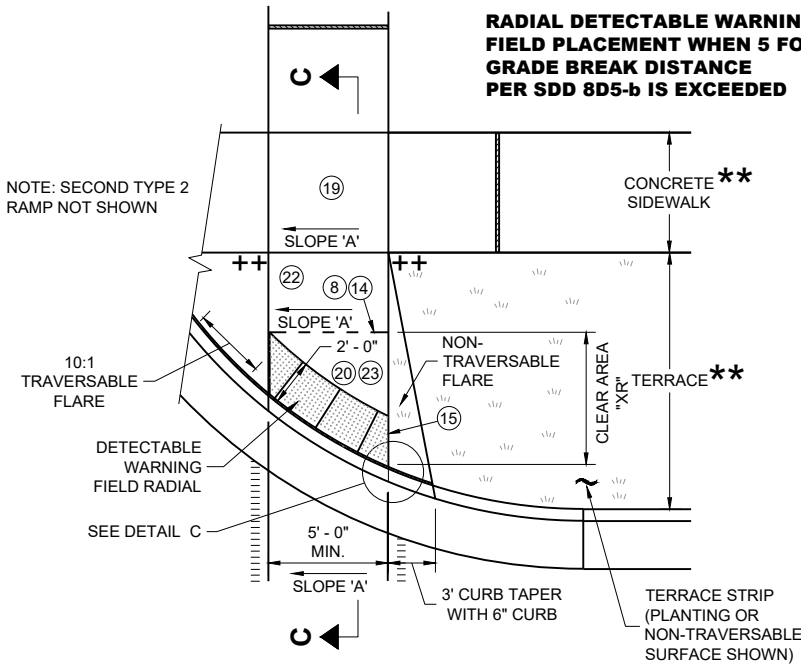
REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

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

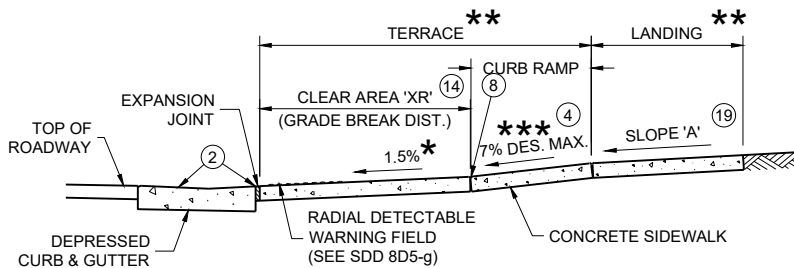
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

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



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



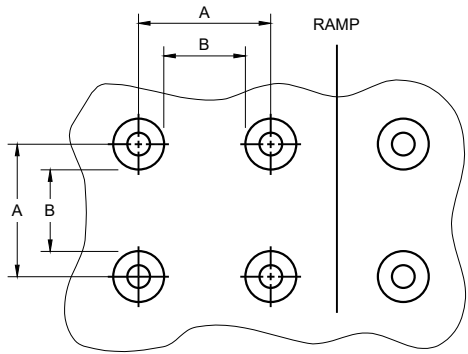
SECTION C - C FOR TYPE 2

**CURB RAMPS
RADIAL DETECTABLE WARNING**

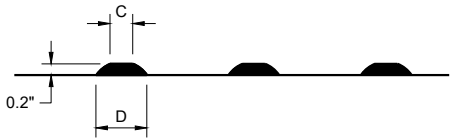
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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

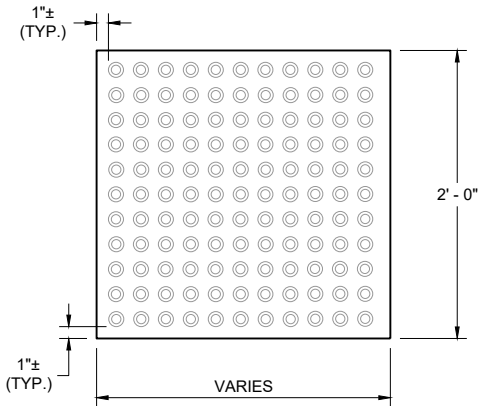


PLAN VIEW

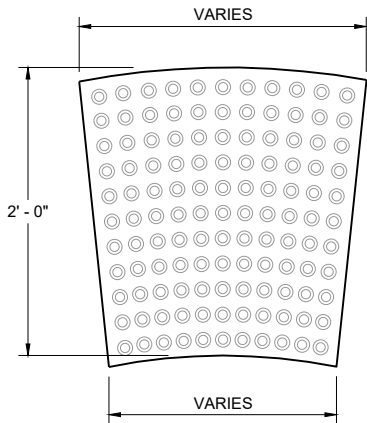


ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL

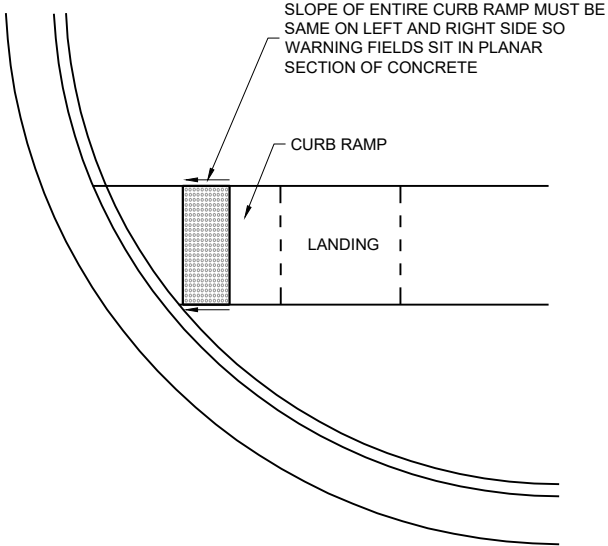


RECTANGULAR
PLATES

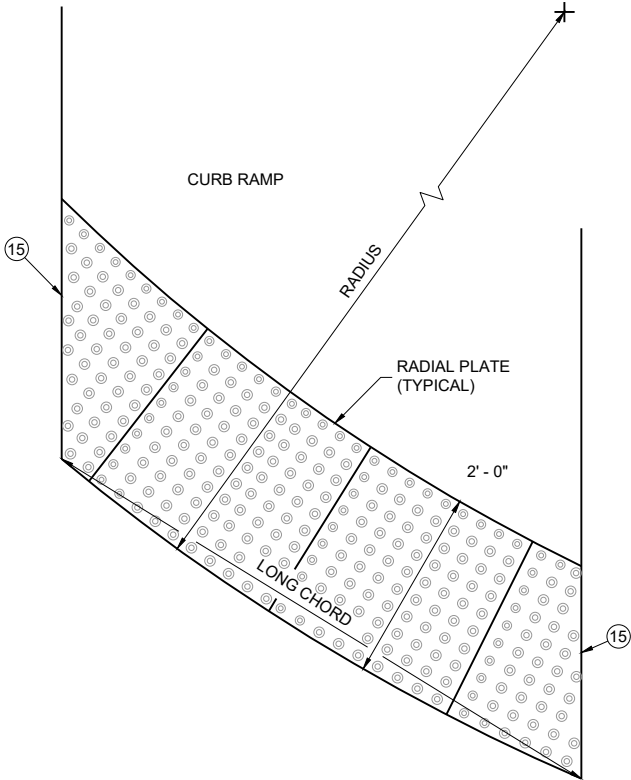


RADIAL
PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)



DETECTABLE WARNING FIELD
PLANAR INSTALLATION



PLAN VIEW
RADIAL DETECTABLE
WARNING FIELD ATTRIBUTES

GENERAL NOTES

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

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

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

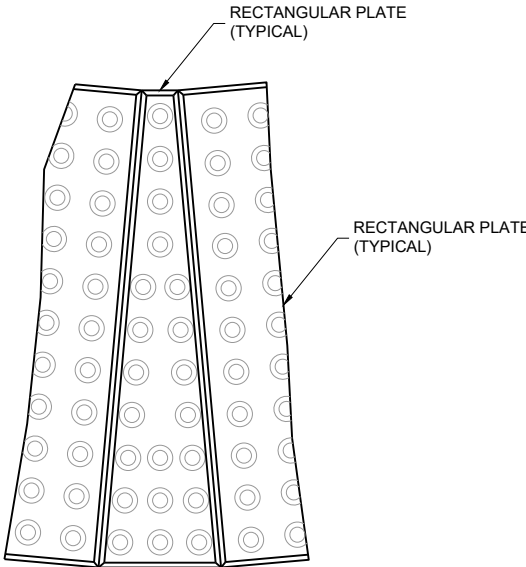
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

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

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

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

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



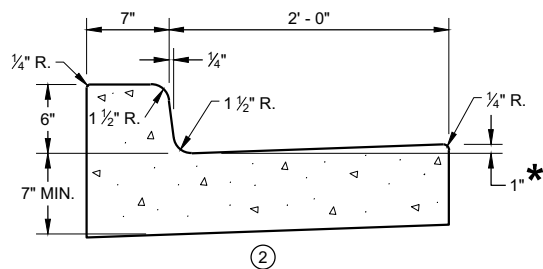
PLAN VIEW
RADIAL WEDGE PLATE
CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

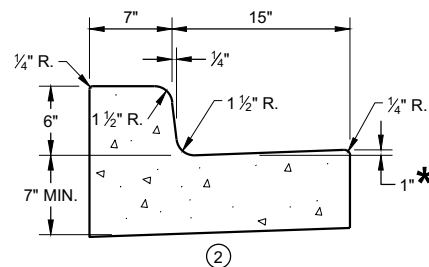
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

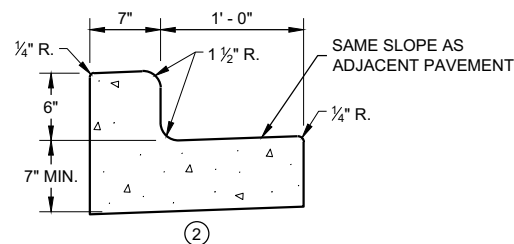
FHWA 120



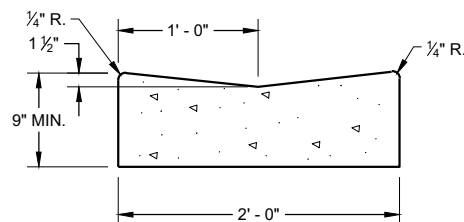
CONCRETE CURB AND GUTTER 31" ①



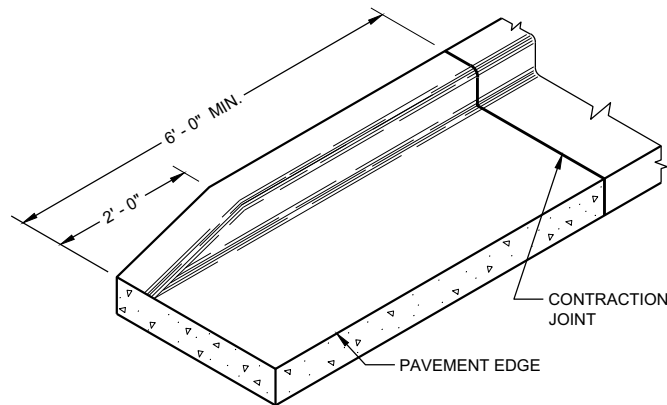
CONCRETE CURB AND GUTTER 22" ①



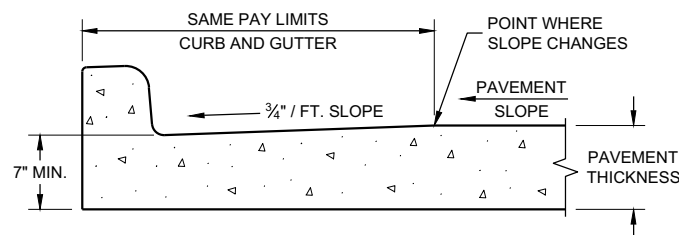
CONCRETE CURB AND GUTTER 19" ①



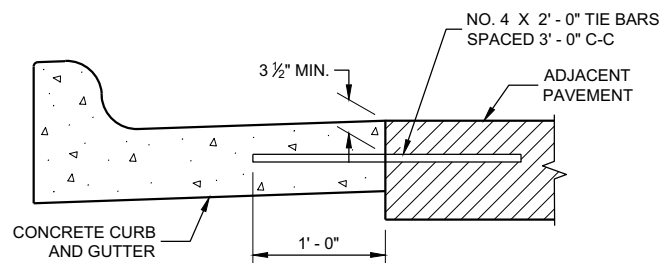
CONCRETE GUTTER 24" ①



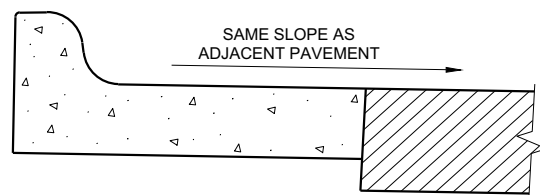
END SECTION CURB AND GUTTER



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



TYPICAL TIE BAR LOCATION ①



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

GENERAL NOTES

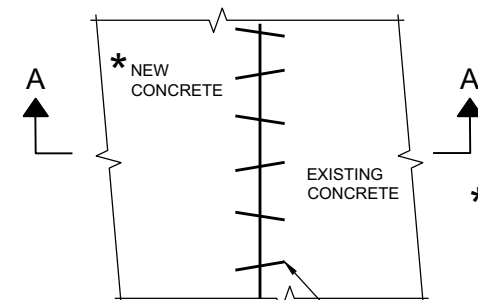
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

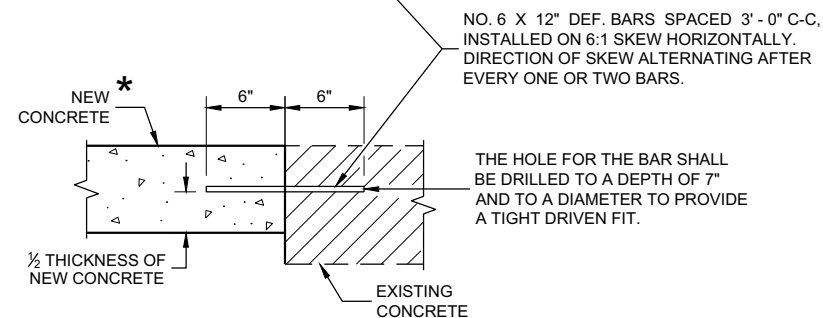
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

- ① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE 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 PLANS



PLAN VIEW



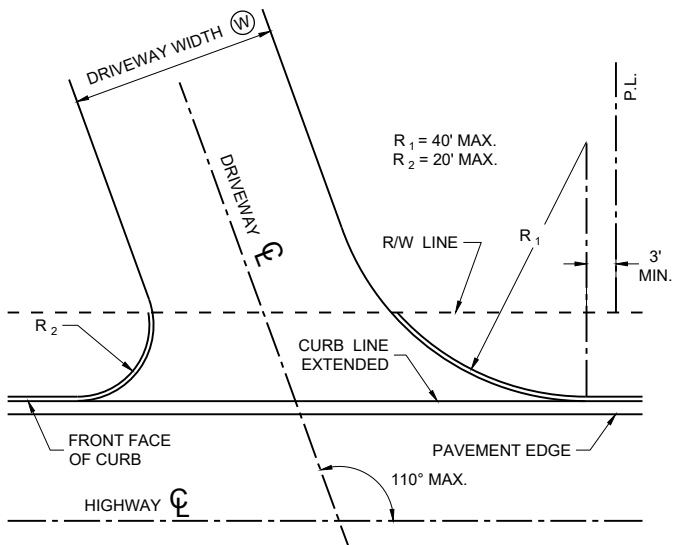
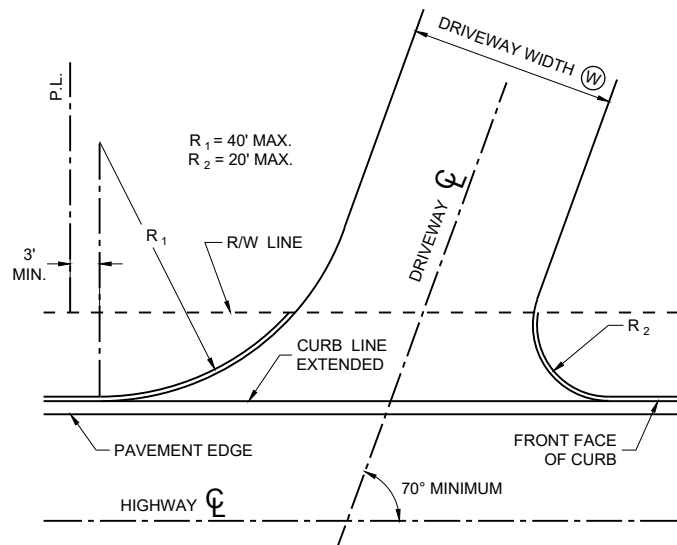
SECTION A - A

PAVEMENT TIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER 121
FHWA



**SKewed DRIVEWAY DETAILS
(COMMERCIAL AND NON-COMMERCIAL)
SIDEWALK NOT SHOWN**

GENERAL NOTES

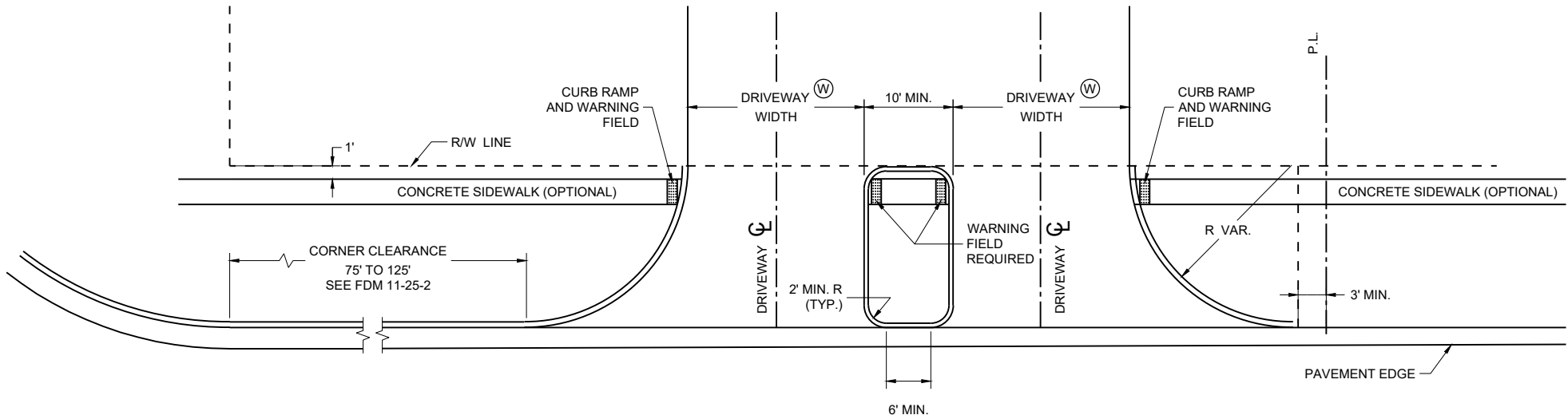
A MAXIMUM RADIUS OF 10 FEET SHALL BE USED FOR NON-COMMERCIAL PRIVATE ENTRANCES. RADII FOR COMMERCIAL DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER BASED ON TRAFFIC AND DRIVEWAY PERMIT RESTRICTIONS.

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

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

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

Ⓜ : 12' MIN. - 24' MAX. RESIDENTIAL AND
NON-COMMERCIAL (PE & FE)
16' MIN. - 35' MAX. COMMERCIAL (CE)



**DRIVEWAY LOCATION AND SPACING DETAILS
SIDEWALK SHOWN**

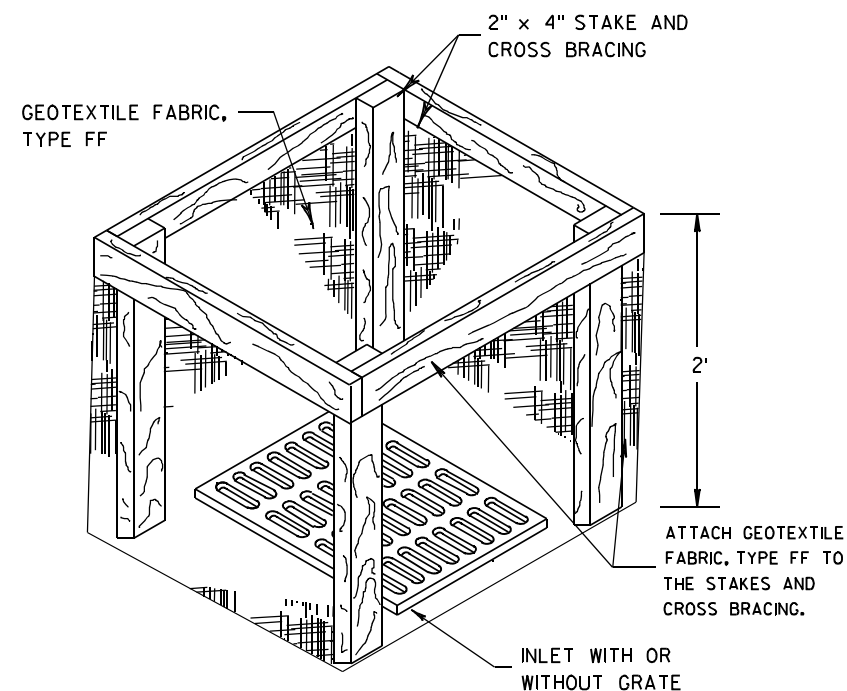
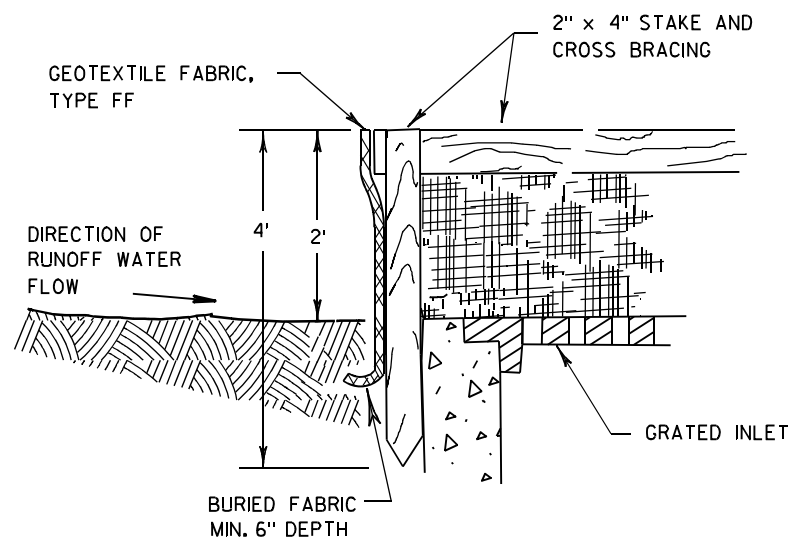
DRIVEWAYS WITH CURB AND GUTTER RETURNS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2025 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA 122	



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/S/ Beth Conn----- CHIEF ROADWAY DEVELOP 123 INEER
FHWA	



INLET PROTECTION, TYPE A

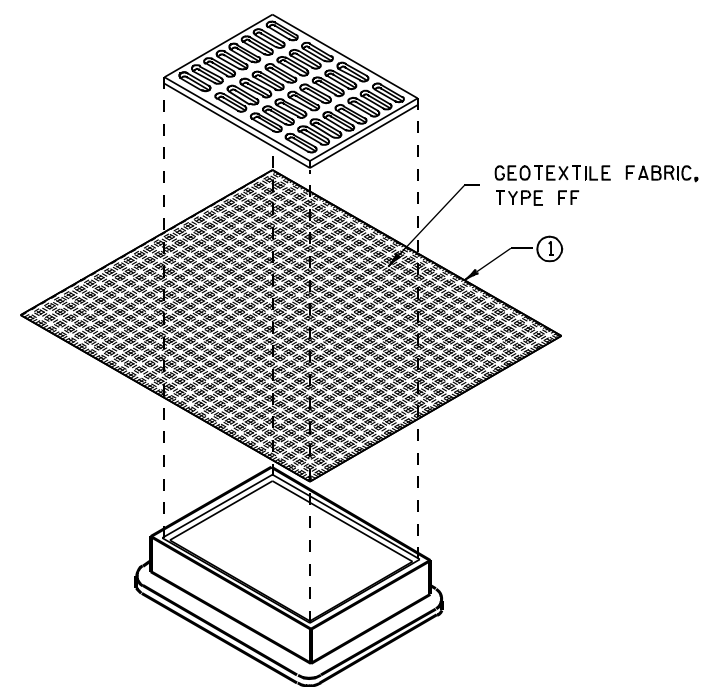
GENERAL NOTES

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

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

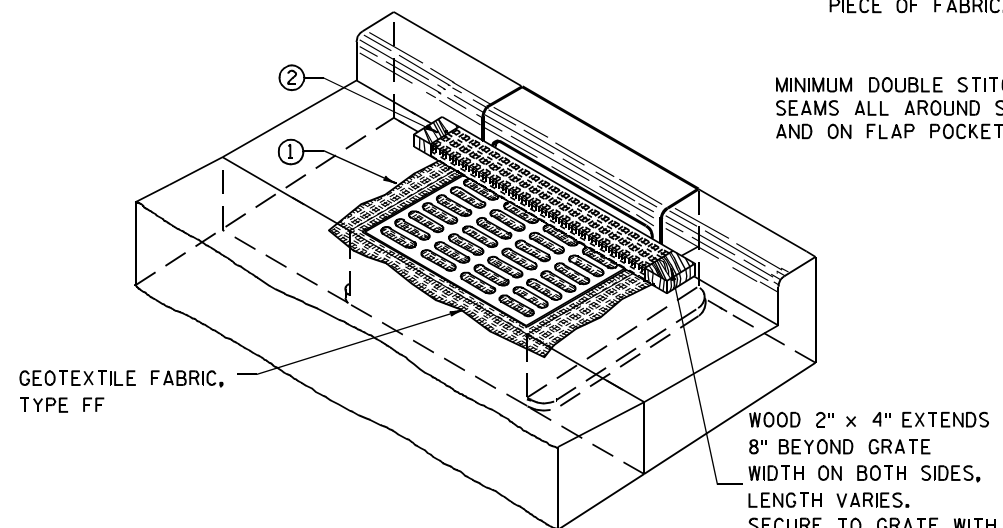
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- ① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- ② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- ③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

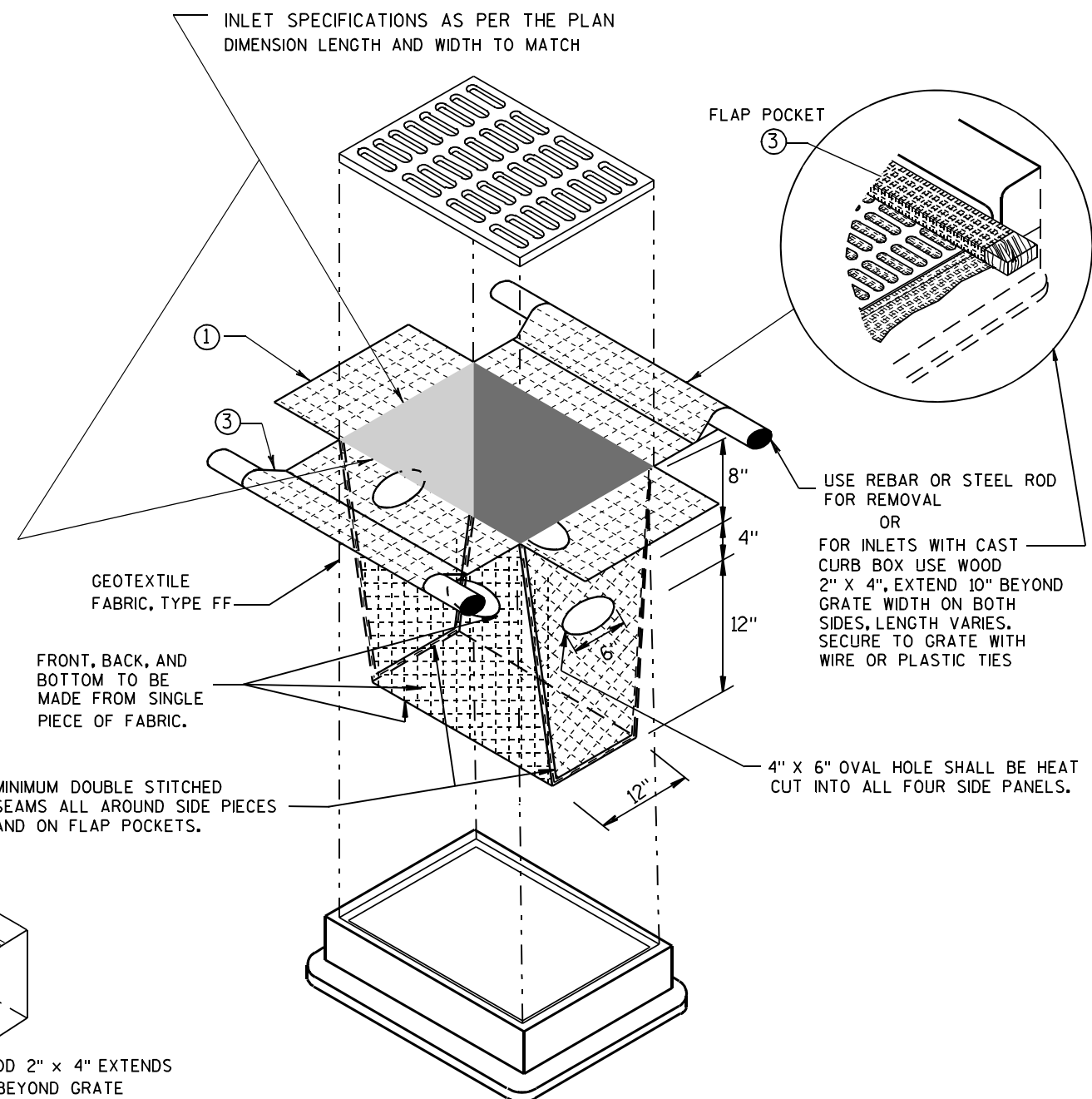
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



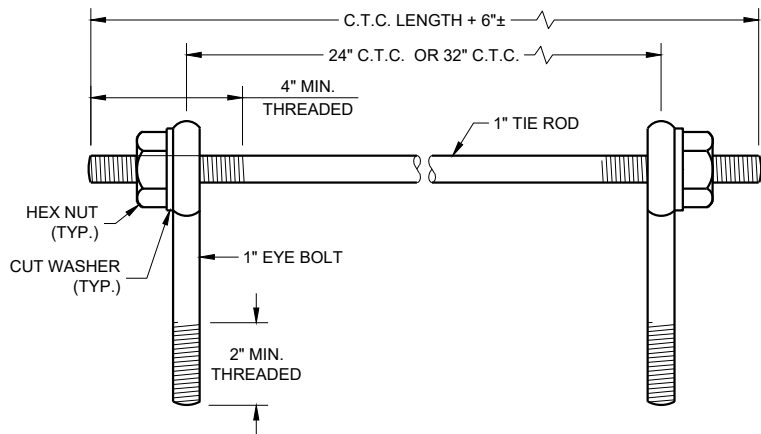
INLET PROTECTION, TYPE D

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

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

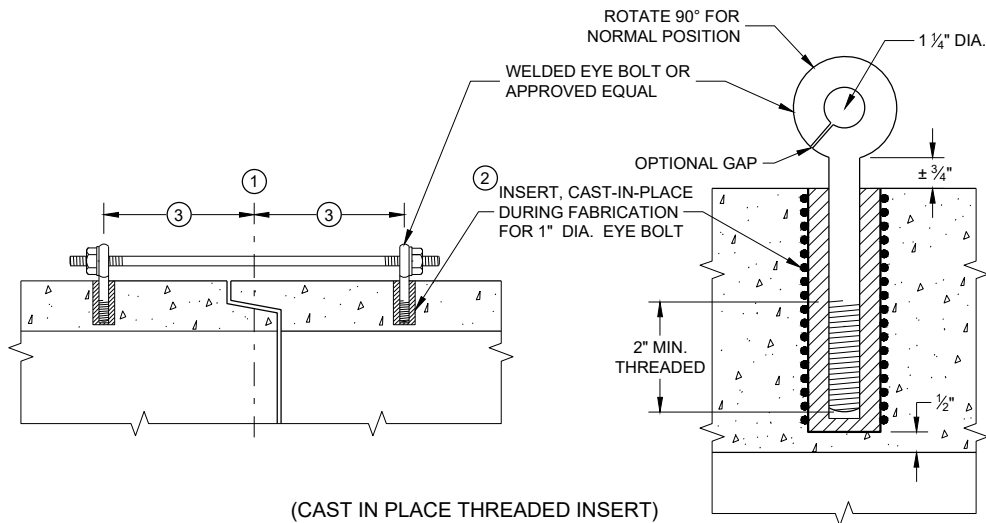
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/16/02 /S/ Beth Connolly
DATE 124
FHWA CHIEF ROADWAY DEVELOPMENT ENGINEER



EYE BOLTS AND TIE ROD

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



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

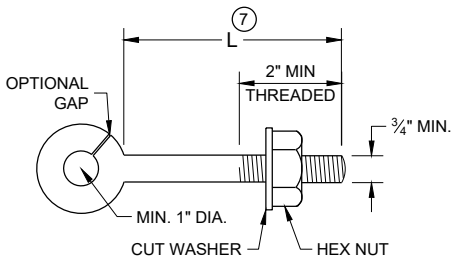
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

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

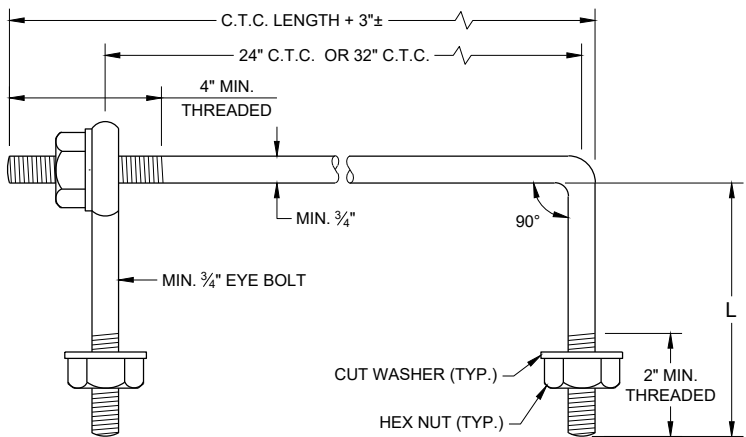
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

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

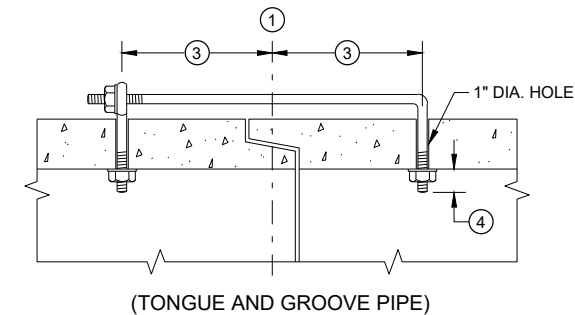


EYE BOLT 7

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



EYE BOLT AND TIE ROD

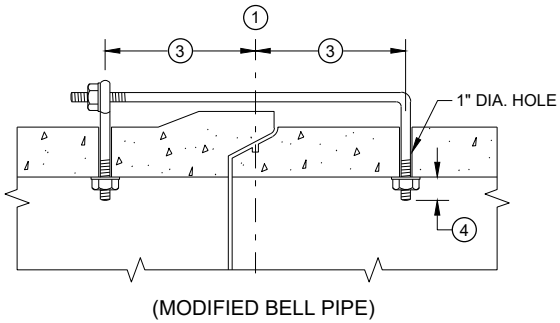


(TONGUE AND GROOVE PIPE)

LONGITUDINAL SECTION

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

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

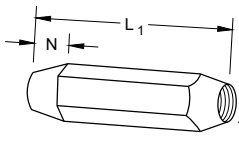


(MODIFIED BELL PIPE)

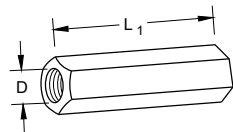
ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES

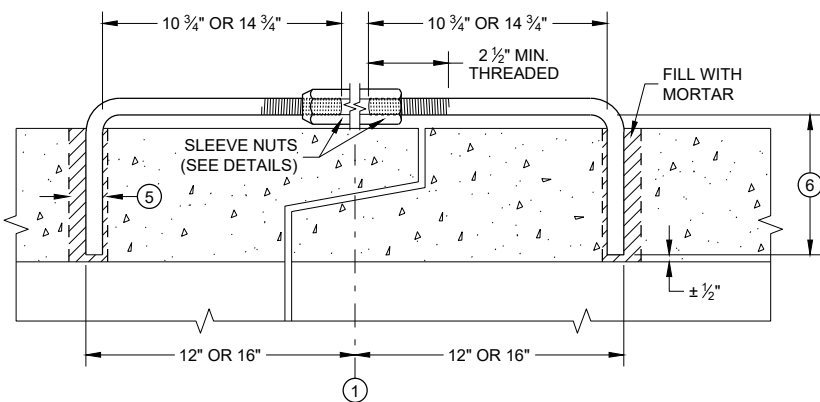


TAPERED



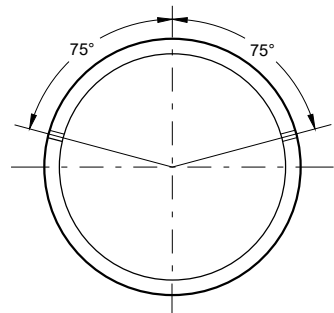
PLAIN

RIGHT AND LEFT THREADS
SLEEVE NUTS



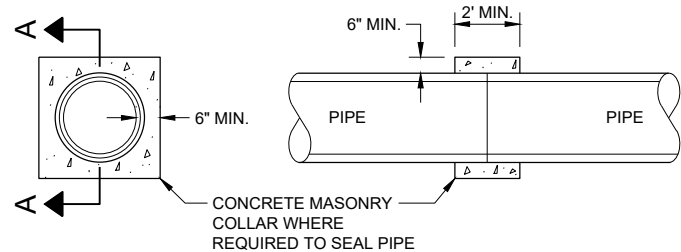
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



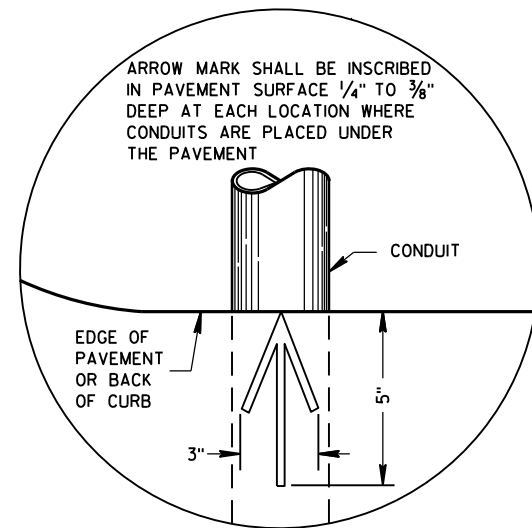
SECTION A - A

CONCRETE COLLAR DETAIL

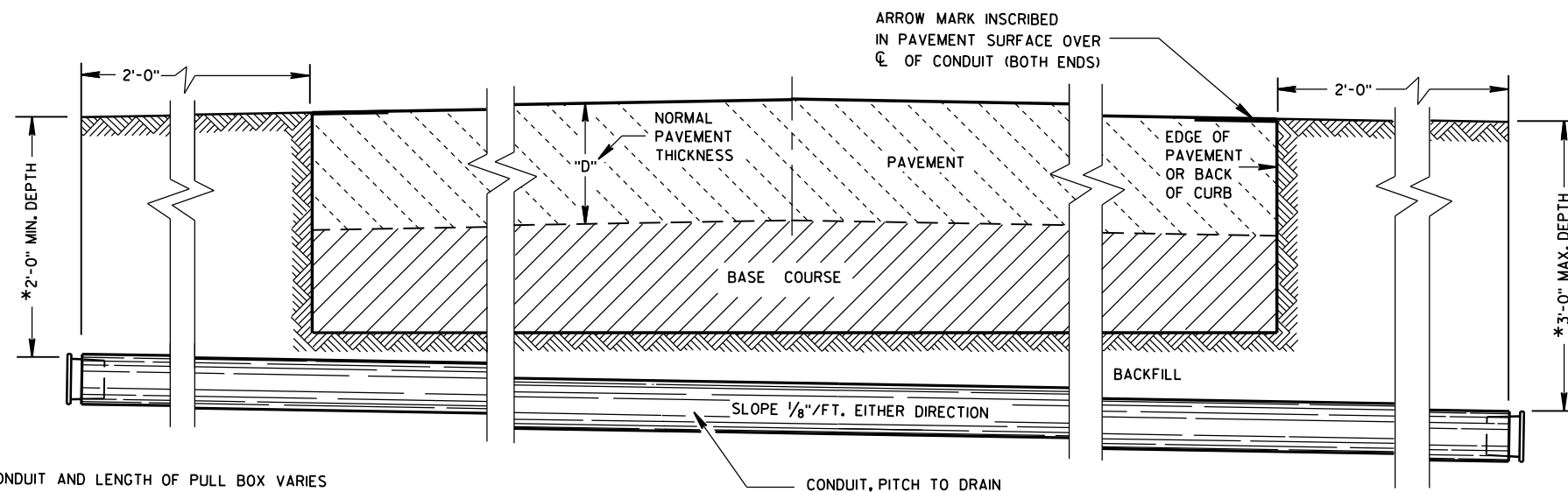
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER 125
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.

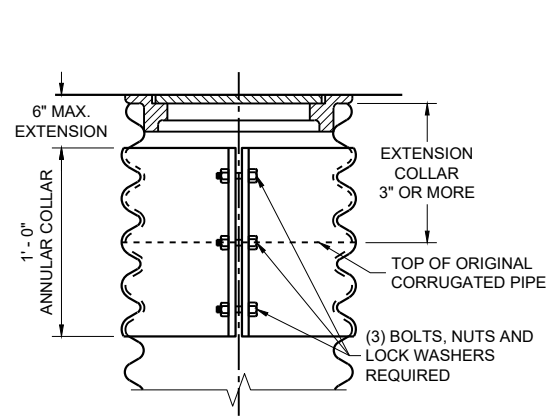
ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

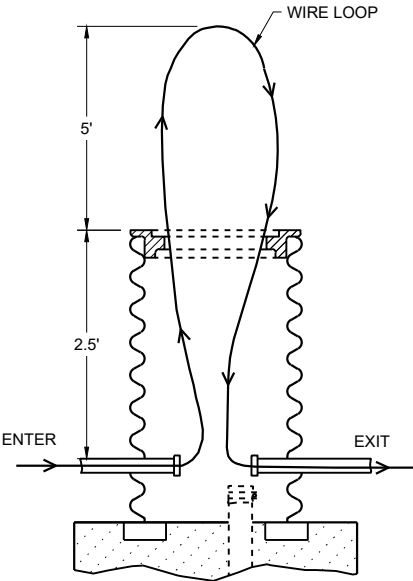
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL 126
FHWA

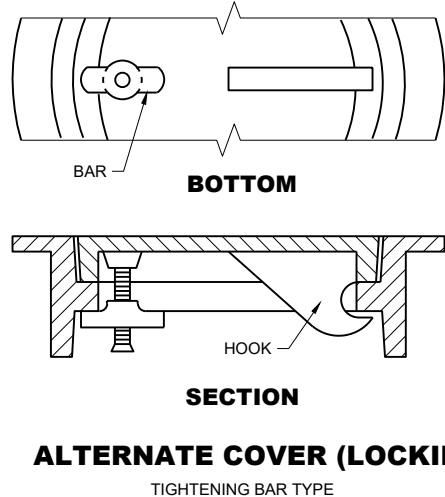
CORRUGATED PIPE EXTENDER



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX



ALTERNATE COVER (LOCKING)



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.

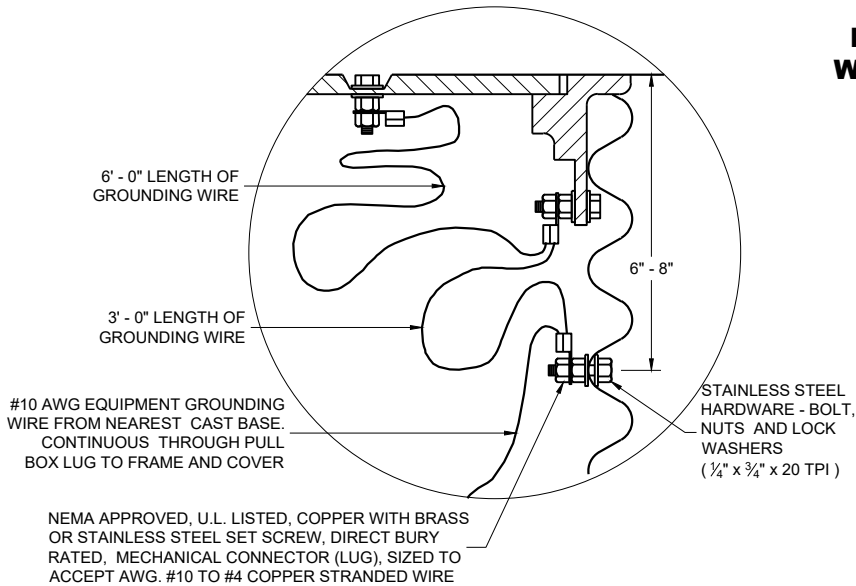
TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		CORRUGATED STEEL PIPE								
		12	12	12	18	18	18	24	24	24
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

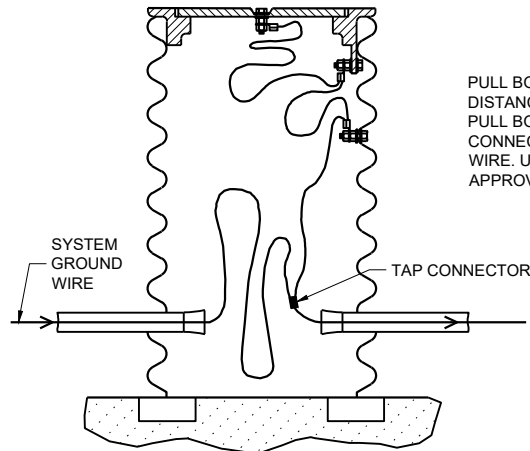
*THE ACTUAL WEIGHT OF THE MANHOLE FRAME AND COVER MAY VARY WITHIN 5 PERCENT PLUS OR MINUS OF THE WEIGHTS SHOWN.

** 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.

EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES

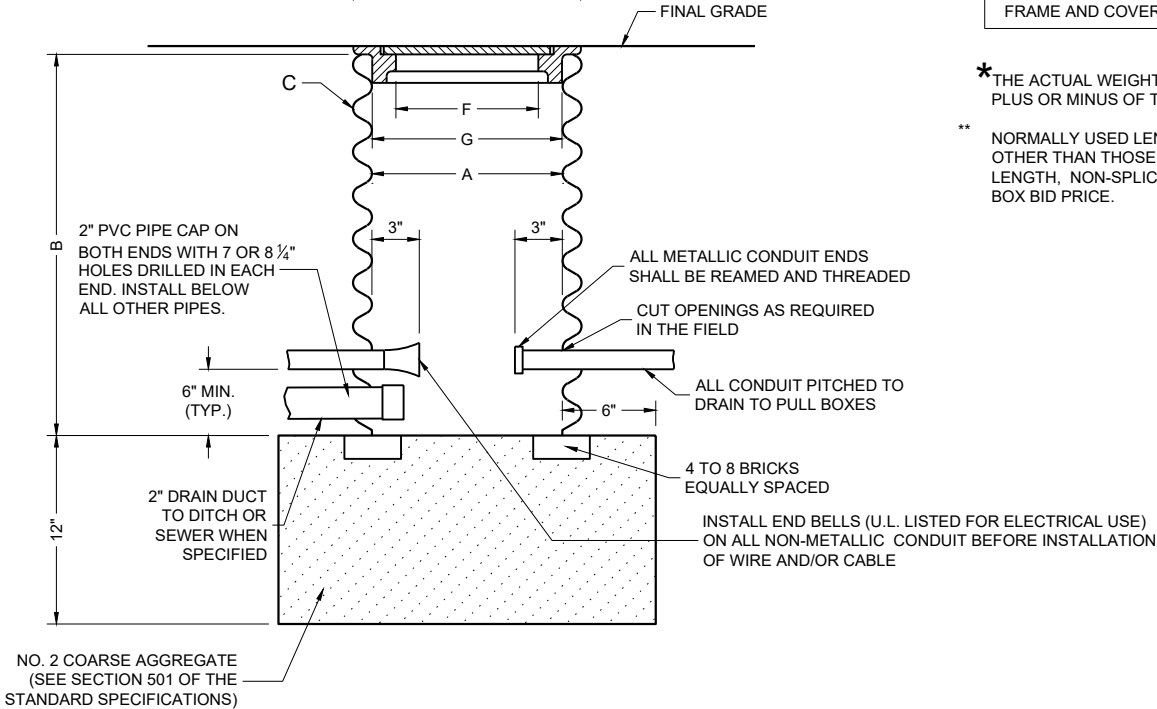


EQUIPMENT GROUNDING LUG AND LOCATION IN STEEL PULL BOXES



PULL BOX TO NEAREST BASE DISTANCE MORE THAN 20 FEET. PULL BOX GROUND WIRE SHALL CONNECT AT SYSTEM GROUNDING WIRE. USE DEPARTMENT APPROVED TAP CONNECTOR.

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



PULL BOX

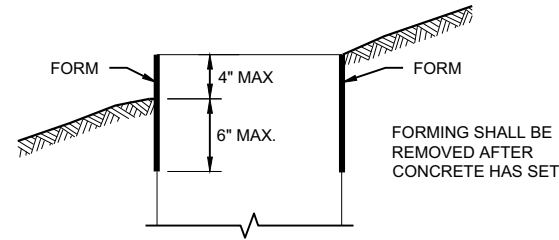
PULL BOX

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 /S/ Ahmet Demirbilek
DATE 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

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

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

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

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

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

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

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

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

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

GENERAL NOTES

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

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

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

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

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

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

WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

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

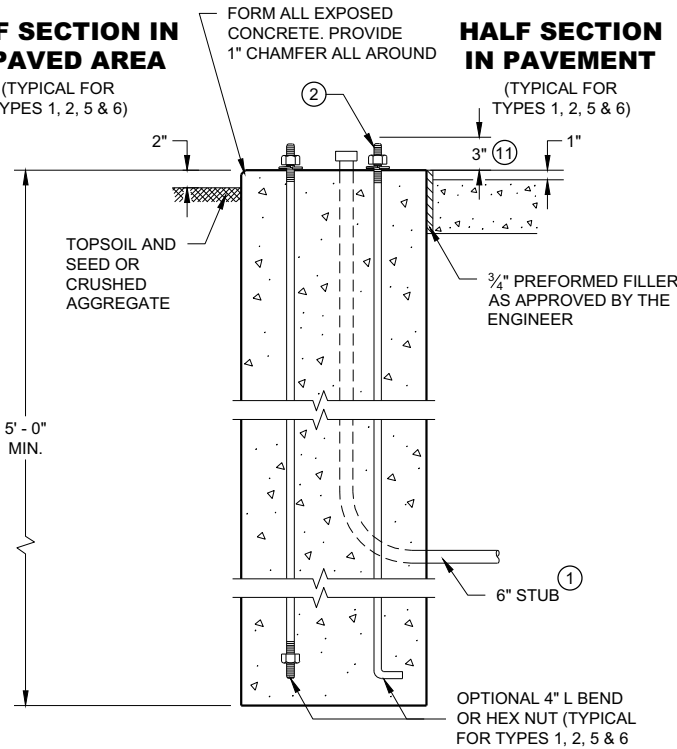
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

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

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

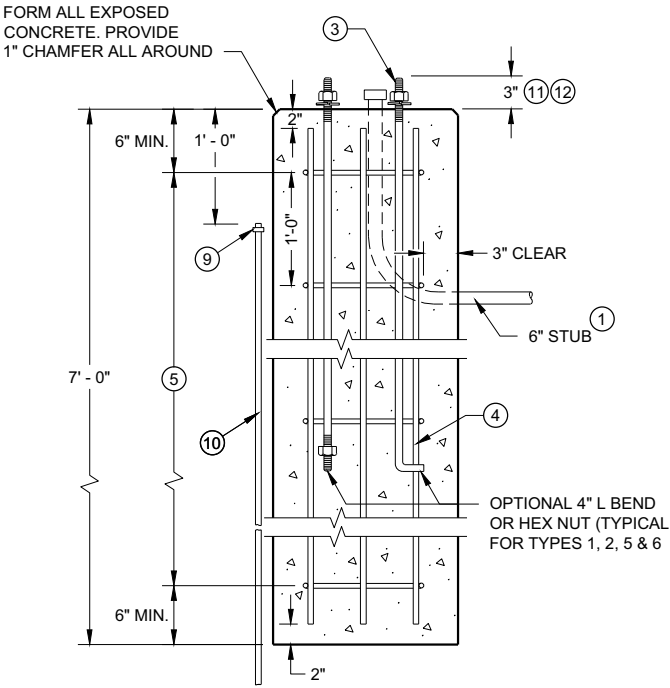
- 1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.
- 2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.
- 3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.
- 4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.
- 5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.
- 6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.
- 7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.
- 8 (5) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.
- 9 EXOTHERMIC CONNECTION TO EQUIPMENT GROUNDING CONDUCTOR
- 10 5/8" DIA. X 8' - 0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED
- 11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 3/4" OR LONGER THAN 3 1/2" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
- 12 FOR NON - BREAKAWAY INSTALLATIONS, 4 1/2" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA



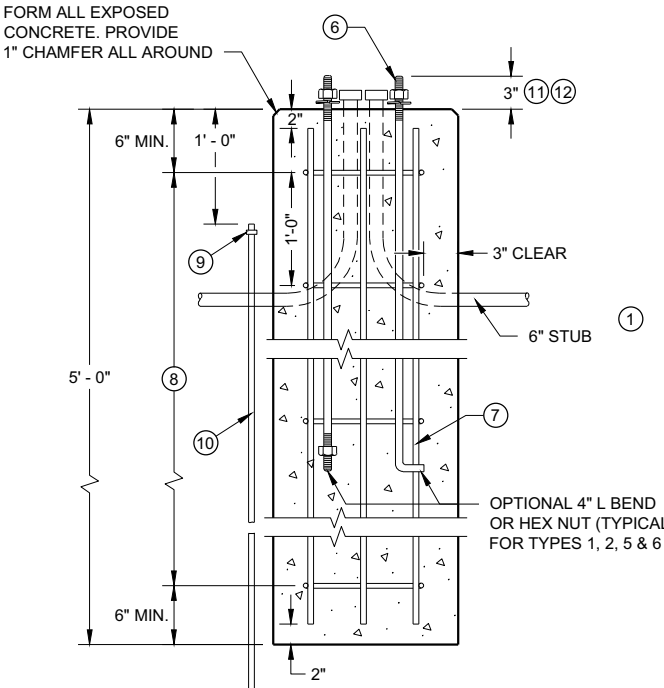
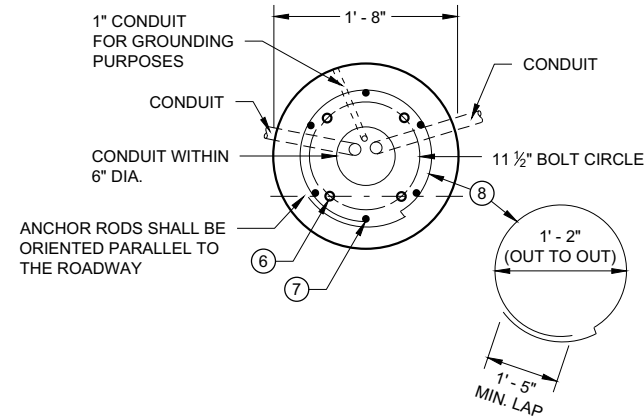
TYPE 1

HALF SECTION IN PAVEMENT



TYPE 2

CONCRETE BASES



TYPE 5 & 6

GENERAL NOTES

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

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

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

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

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

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

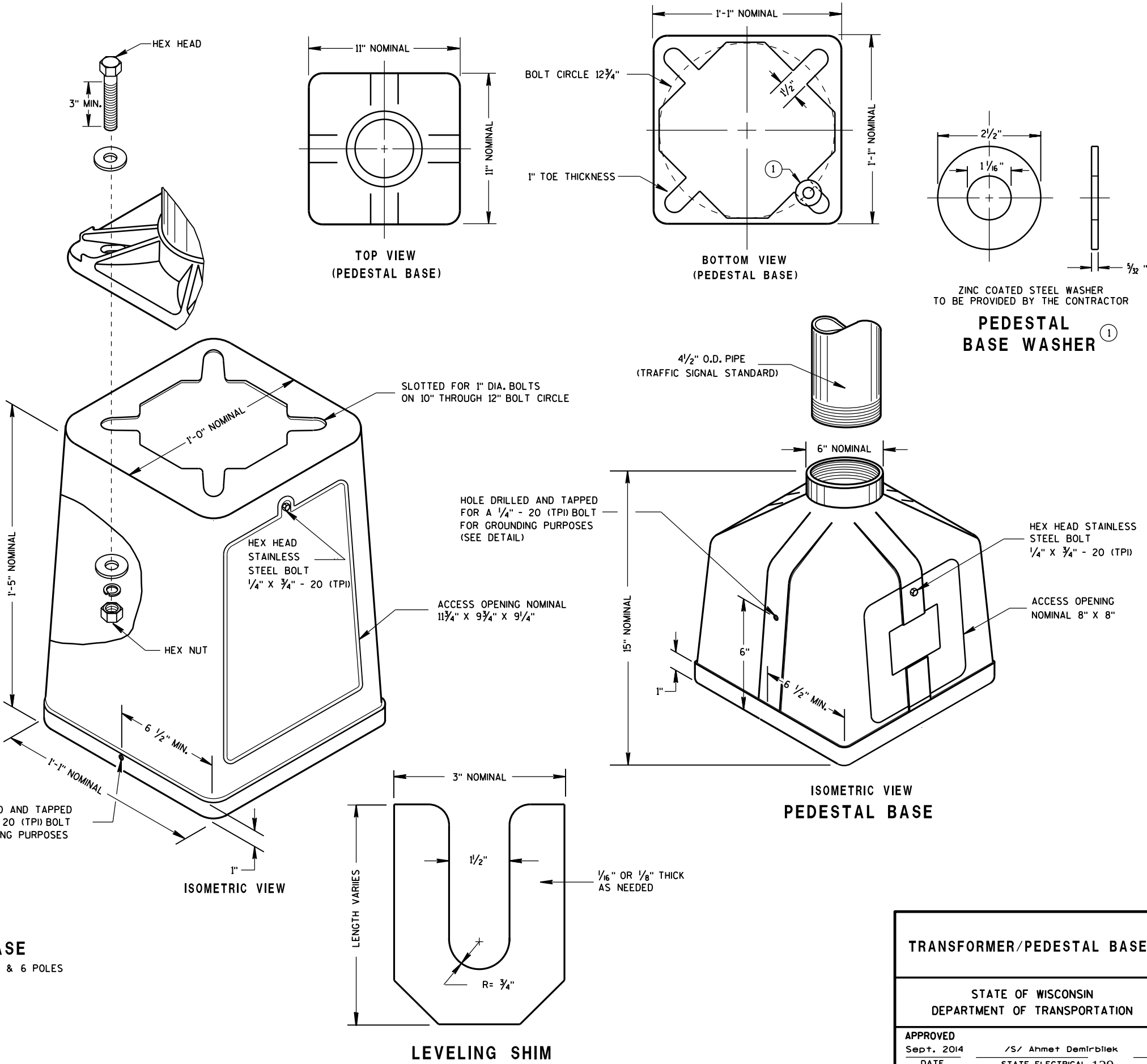
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

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

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

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

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



6

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S.D.D. 9 C 3-4

S.D.D. 9 C 3-4

TYPICAL MECHANICAL CONNECTOR LUG TO BE FURNISHED WITH EACH BASE

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

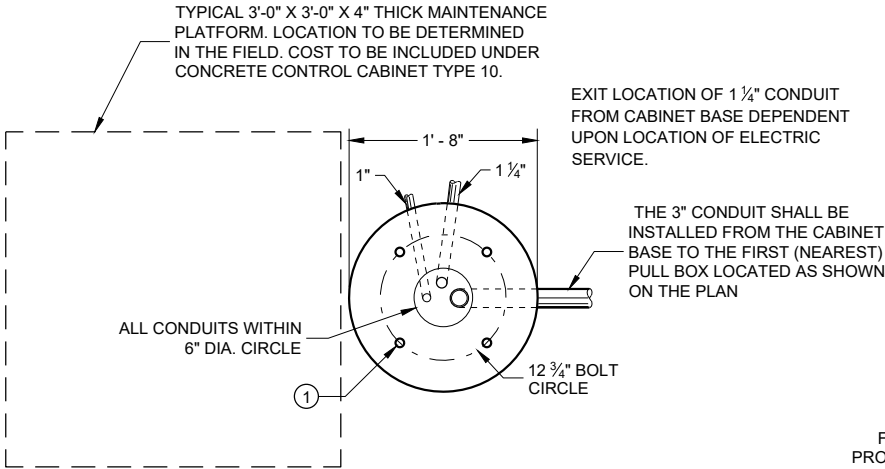
TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

APPROVED Sept. 2014 DATE /S/ Ahmet Demirbilek STATE ELECTRICAL 129 FHWA

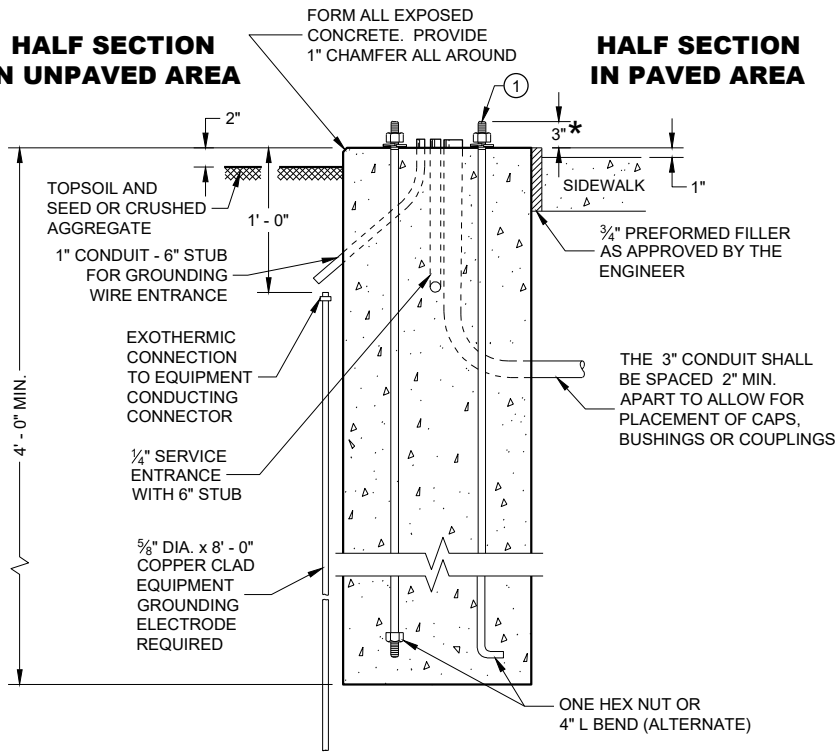
CONTROL CABINET BASE TYPE	DIMENSIONS				CUBIC YARD CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65*

* INCLUDES MAINTENANCE PLATFORM.



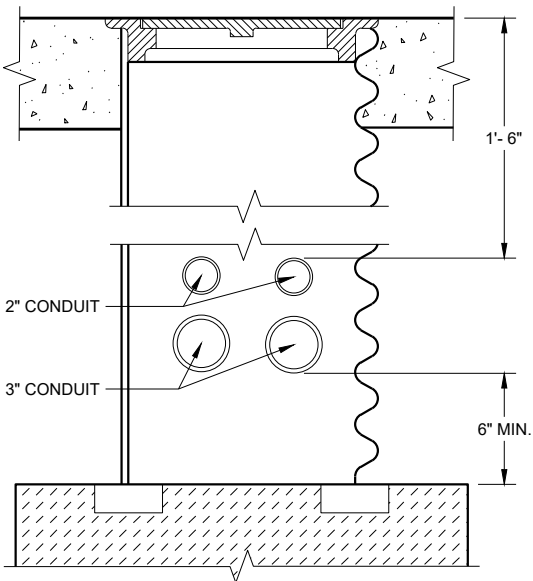
**HALF SECTION
IN UNPAVED AREA**

**HALF SECTION
IN PAVED AREA**



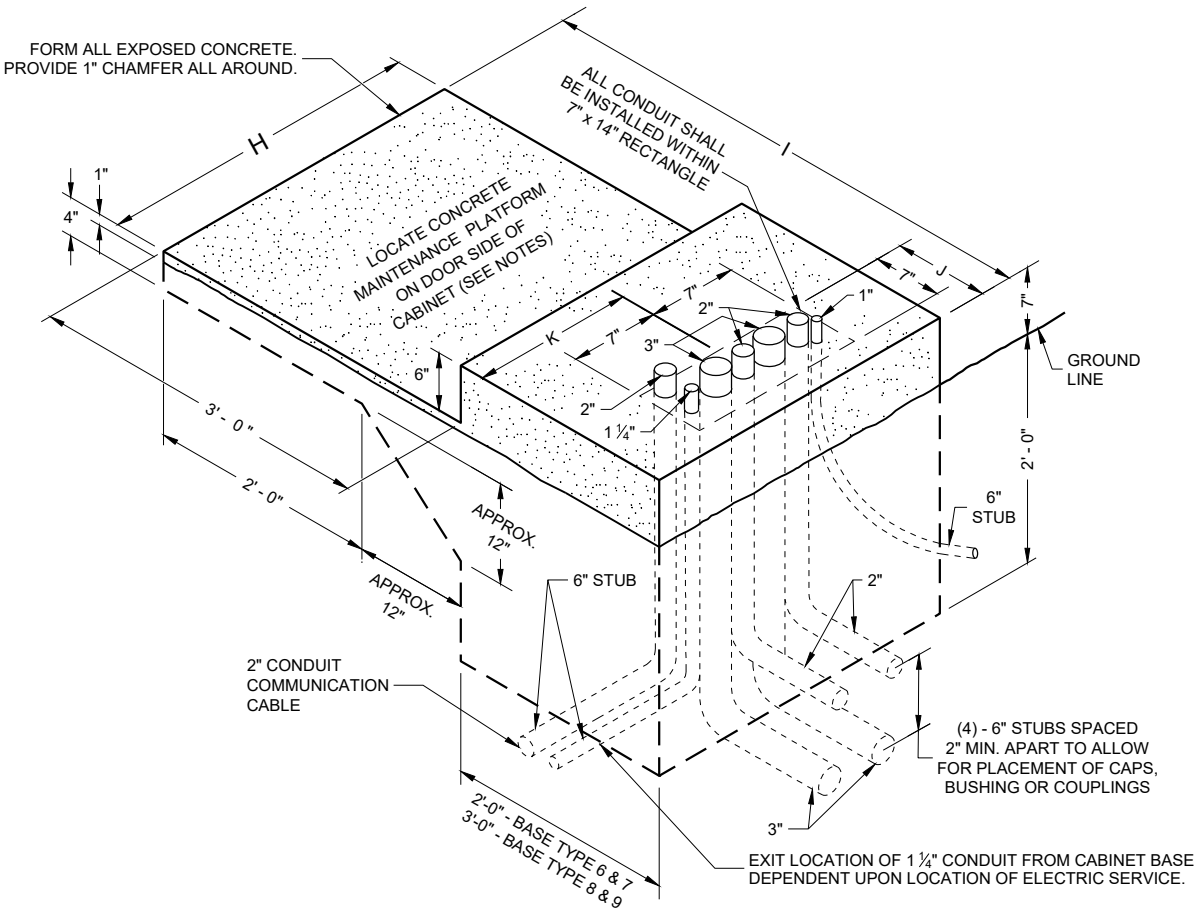
TYPE 10

* 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.



CONDUIT LOCATIONS IN 24" X 36" PULL BOX

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

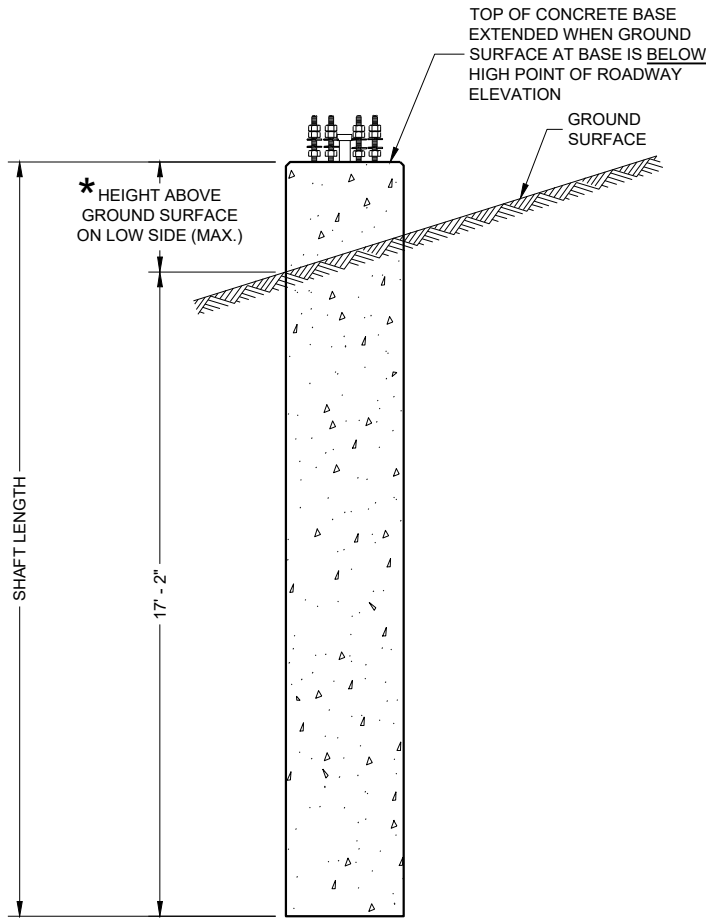


6

6 |

REINFORCEMENT AND CONCRETE QUANTITIES
ADJUSTED FOR EXTENDED TYPE 10 SPECIAL CONCRETE BASE

HEIGHT INCREASE REQUIRED	* HEIGHT ABOVE GROUND SURFACE ON LOW SIDE (MAX.)	SHAFT LENGTH	LENGTH OF #8 VERTICAL REINF.	NO. OF #5 HOOPS	CU. YD. OF CONCRETE	LBS. OF HOOP BAR STEEL	LBS. OF VERTICAL STEEL
>0" TO 6"	10"	18' - 0"	17' - 7"	25	4.7	241	563
>6" TO 1' - 0"	1' - 4"	18' - 6"	18' - 1"	25	4.8	241	579
>1' - 0" TO 1' - 6"	1' - 10"	19' - 0"	18' - 7"	26	5.0	251	595
>1' - 6" TO 2 - 0"	2' - 4"	19' - 6"	19' - 1"	27	5.1	260	611



CONCRETE BASE TYPE 10 SPECIAL (EXTENDED)

CONCRETE BASE TYPE 10
SPECIAL EXTENSION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGI 132

FHWA

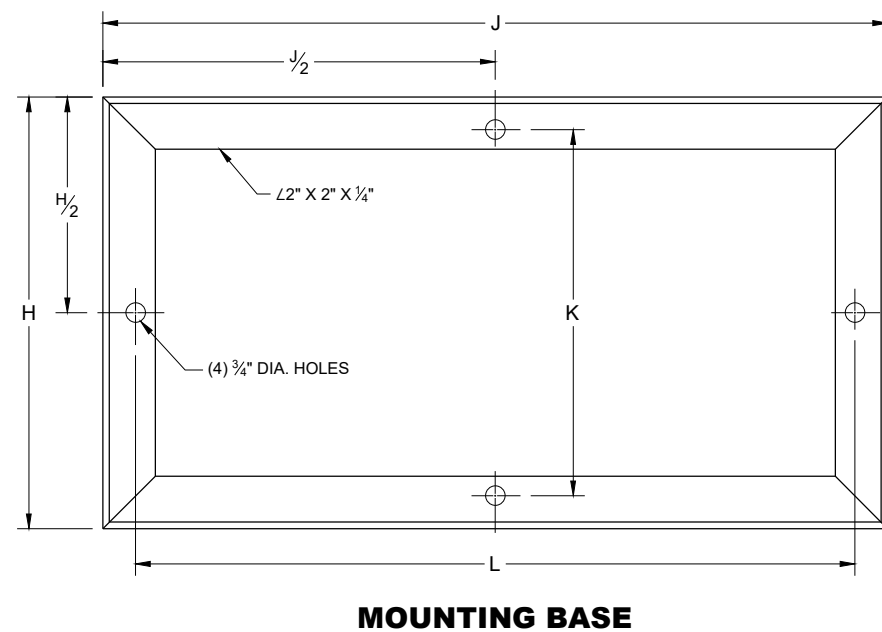
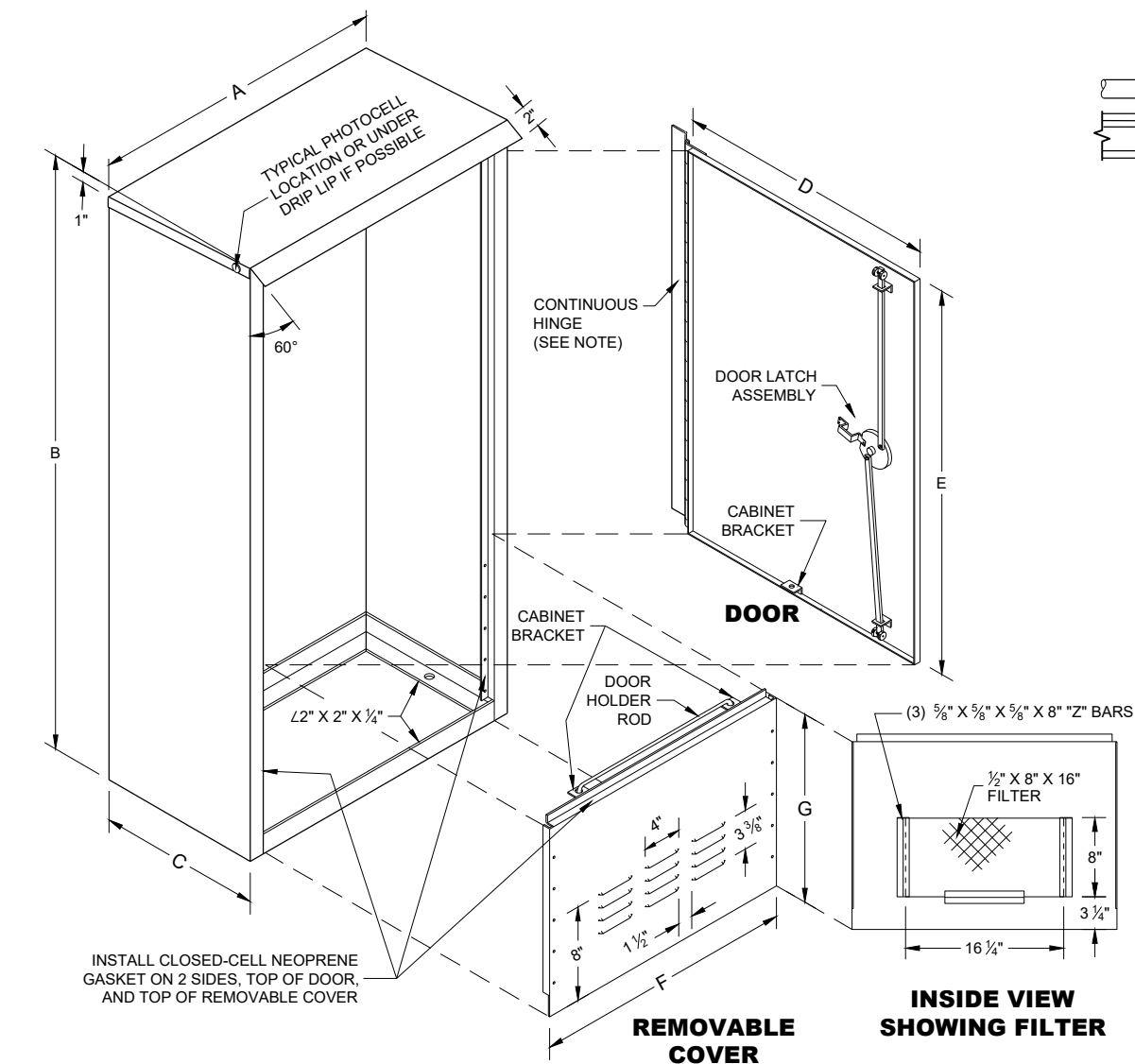
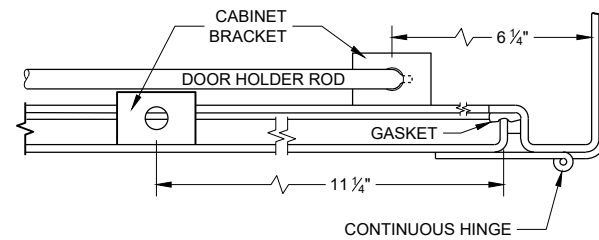
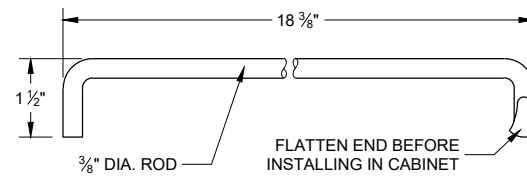


TABLE OF DIMENSIONS (INCHES)

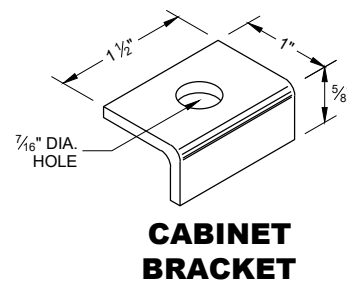
MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 3/4	8 3/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2



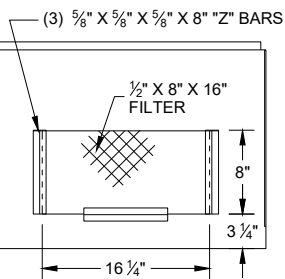
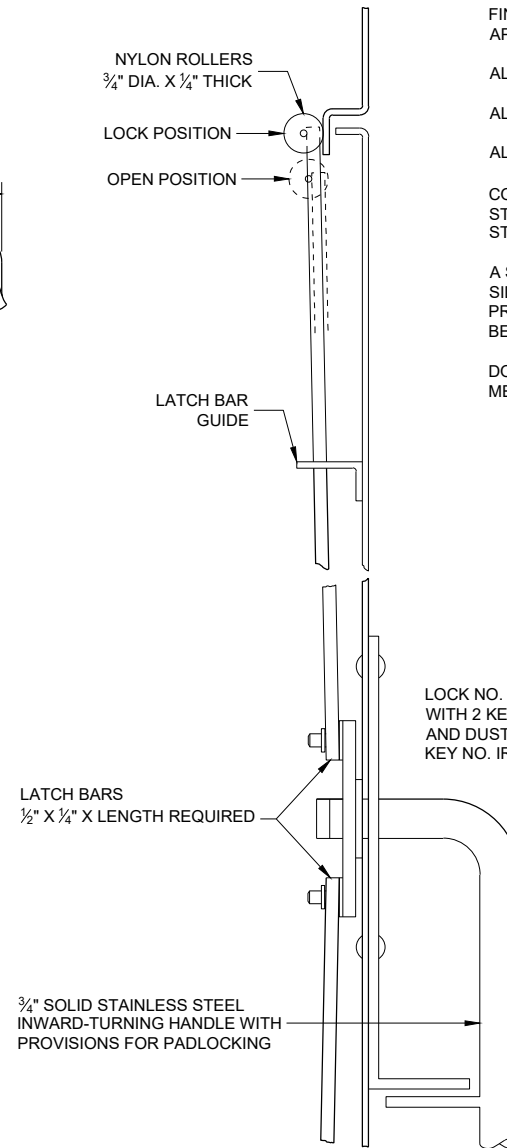
HINGE AND DOOR HOLDER



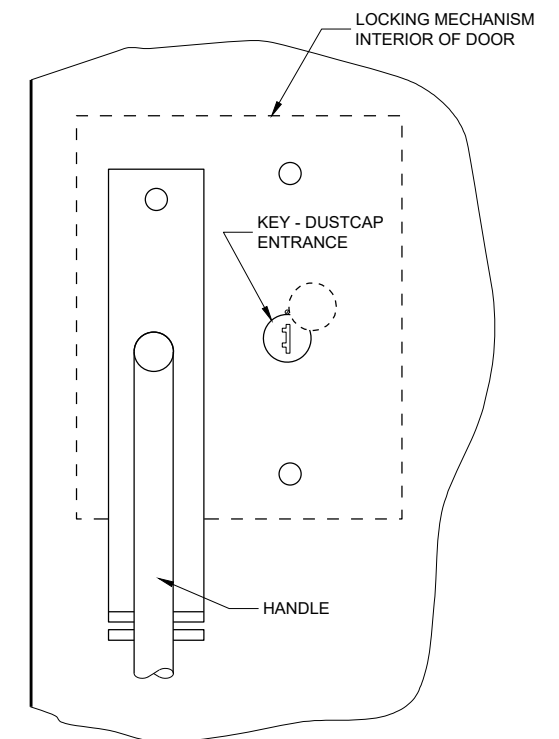
HOLDER ROD



CABINET BRACKET

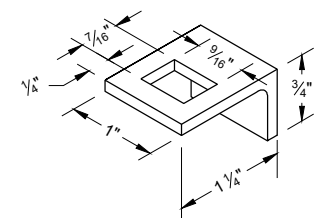
INSIDE VIEW
SHOWING FILTER

SIDE VIEW



FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

GENERAL NOTES

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

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

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

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

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

ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/2\"/>

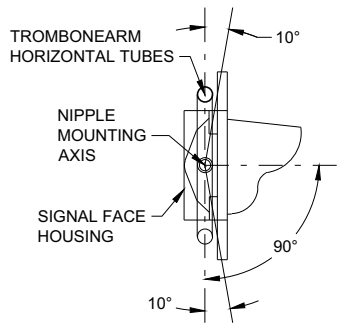
A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH - NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

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

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2014 /S/ Ahmet Demerbilek
DATE STATE ELECTRICAL ENGI 133
FHWA

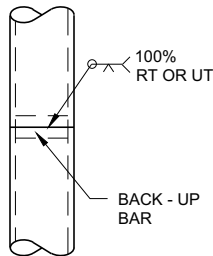


SECTION A-A

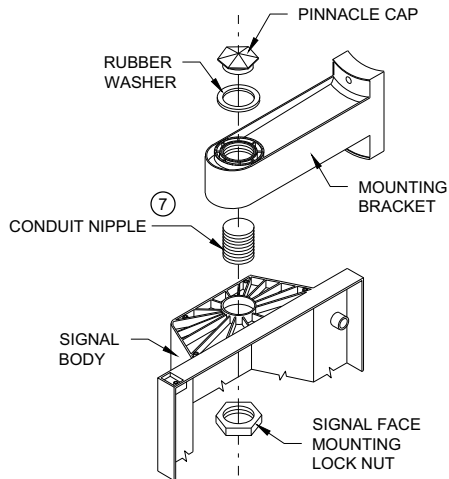
(10 DEGREES TILT REQUIREMENT OF FACE(S) IN THE TROMBONE MOUNTING)

FOR MANUFACTURERS USE ONLY

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



POLE SPLICE DETAIL



SIGNAL FACE MOUNTING DETAIL
(BANDED)

GENERAL NOTES

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

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

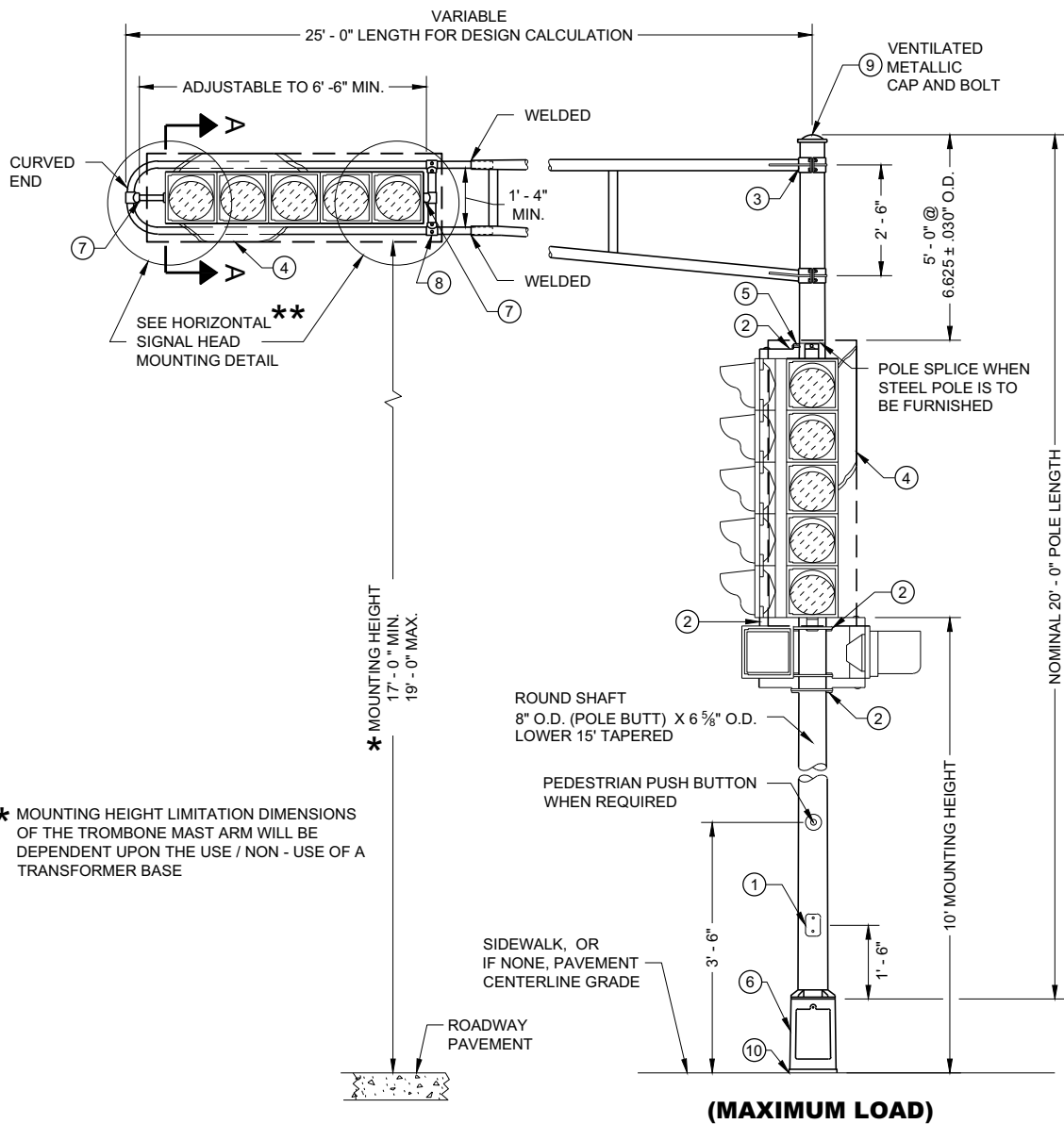
SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

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

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

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

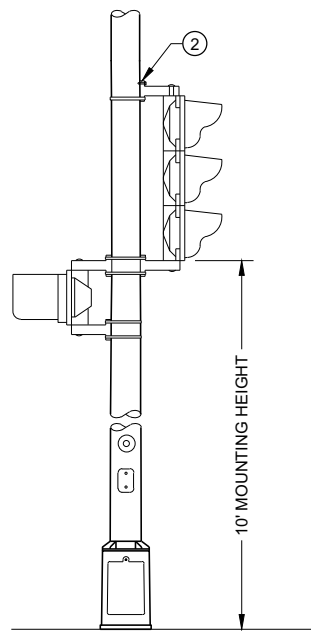
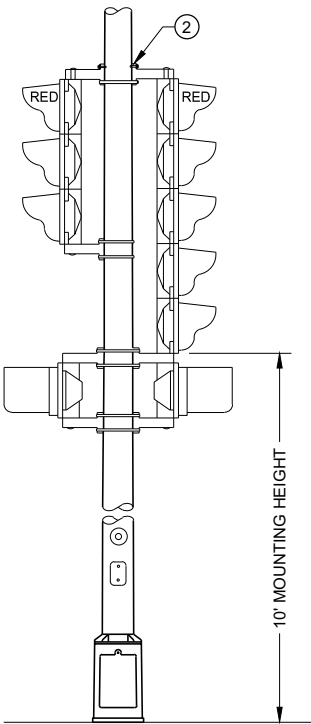
- 1 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) 1/4" X 3/4" - 20 TPI, STAINLESS STEEL, HEX HEAD BOLTS.
- 2 SIGNAL FACE MOUNTING BRACKETS. MOUNT WITH CAP SCREWS AND BANDING.
- 3 GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 3/8" HOLE IN POLE SHAFT FOR WIRING.
- 4 SECURELY MOUNT DULL BLACK POLYCARBONATE BACKPLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURER'S RECOMMENDATIONS.
- 5 POLE MOUNTED SIGNAL FACES SHALL REQUIRE ONE OR MORE MOUNTING SPACERS UNDER THE TOP MOUNTING BRACKET(S) AS REQUIRED, TO PLUMB THE SIGNAL FACES.
- 6 CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.
- 7 USE 1 1/2" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 1/2" OPENING IN SIGNAL FACES AND BRACKET ENDS.
- 8 VERTICAL STRUT (ADJUSTABLE). ONE (1) SET SCREW (1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD) INTO EACH ARM MEMBER IF STRUT IS THE SLIDING TYPE.
- 9 FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.
- 10 SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND THE TRANSFORMER BASE.
- 11 USE SERRATED LOCK WASHERS WITH NOTCHES BETWEEN END TEE AND SIGNAL HEAD.



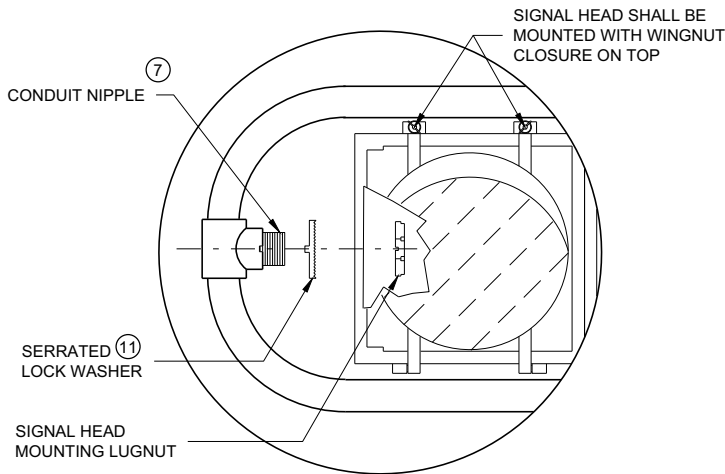
* MOUNTING HEIGHT LIMITATION DIMENSIONS OF THE TROMBONE MAST ARM WILL BE DEPENDENT UPON THE USE / NON - USE OF A TRANSFORMER BASE

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

TYPE 2 POLE MOUNTING CONFIGURATION



TYPICAL MOUNTING OF 3 SECTION SIGNAL FACE

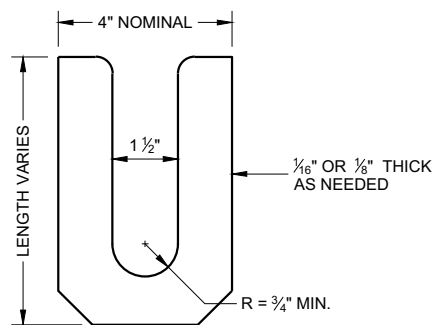


HORIZONTAL SIGNAL HEAD MOUNTING DETAIL

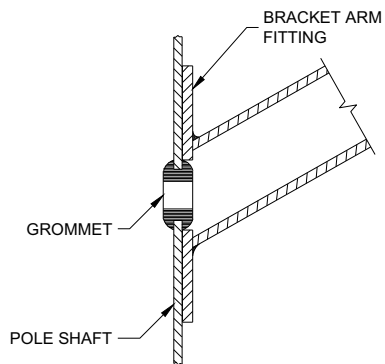
** SIGNAL HEAD ATTACHMENT ALSO APPLIES TO MOUNTING AT CROSS BAR

POLE MOUNTINGS FOR TRAFFIC SIGNALS TYPE 2

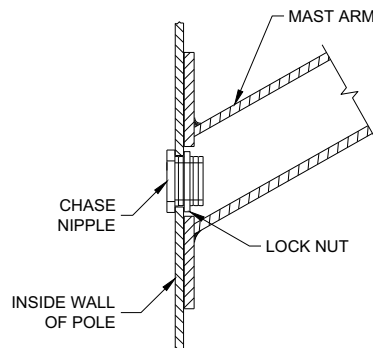
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION 134



LEVELING SHIM
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



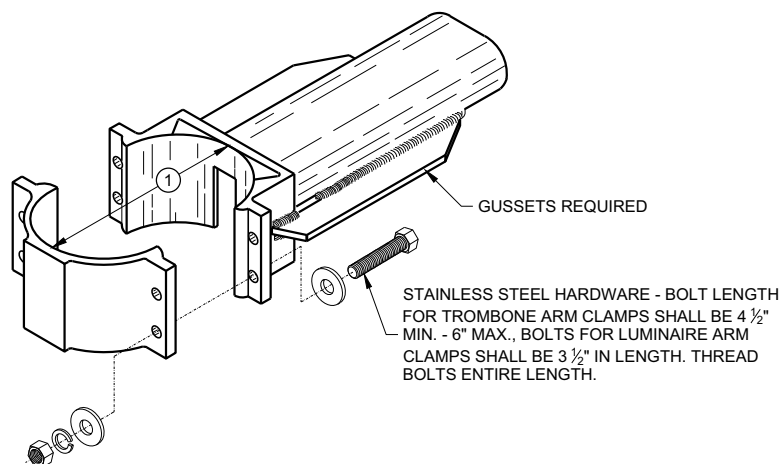
TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

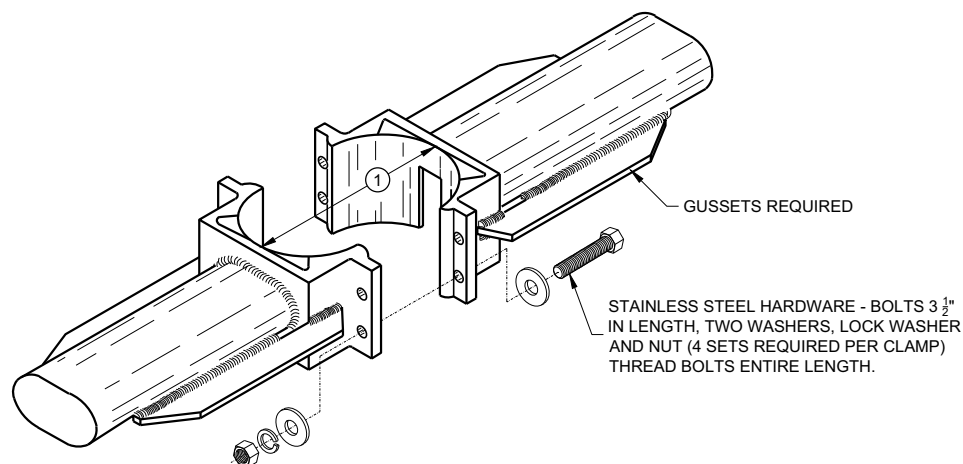
CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

- 1 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.
- 2 INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)
- 3 BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.
- 4 LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

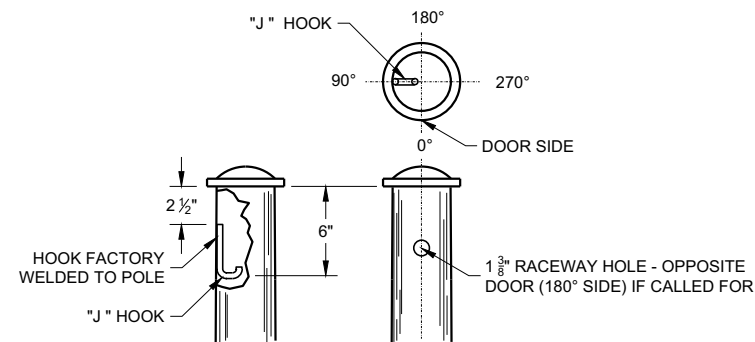
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



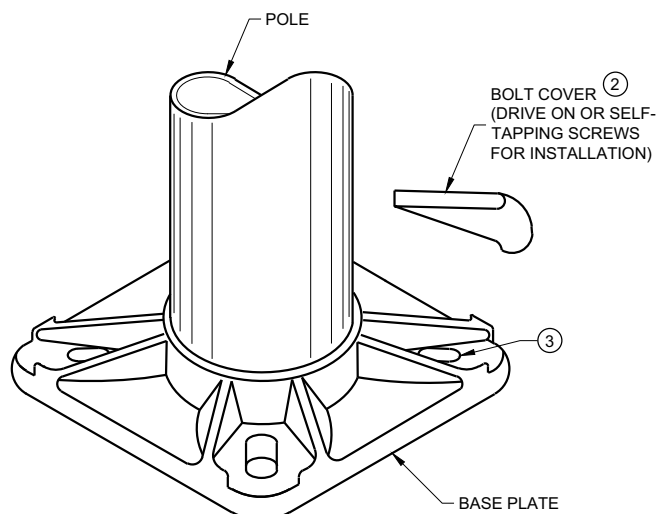
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



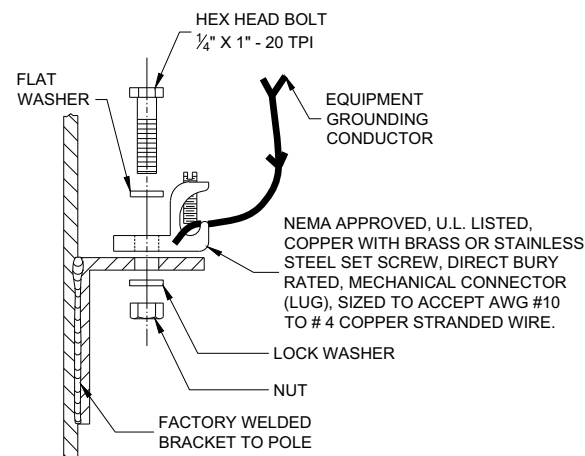
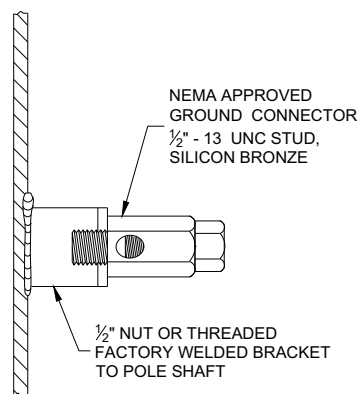
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS



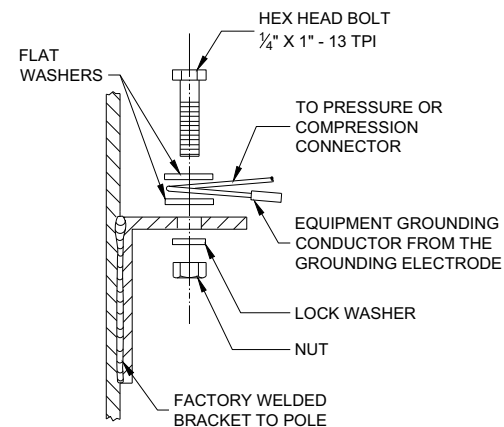
TYPICAL "J" HOOK LOCATION



BASE PLATE



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



HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

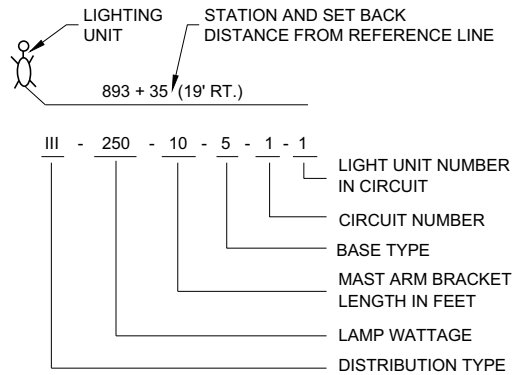
APPROVED
November 2018 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGI 135
FHWA

GENERAL NOTES

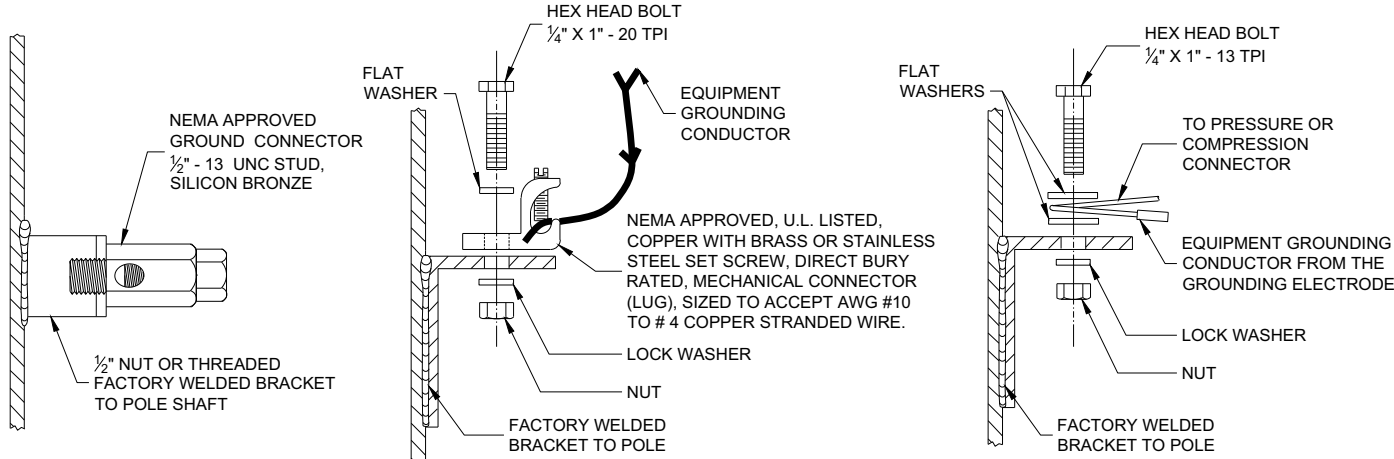
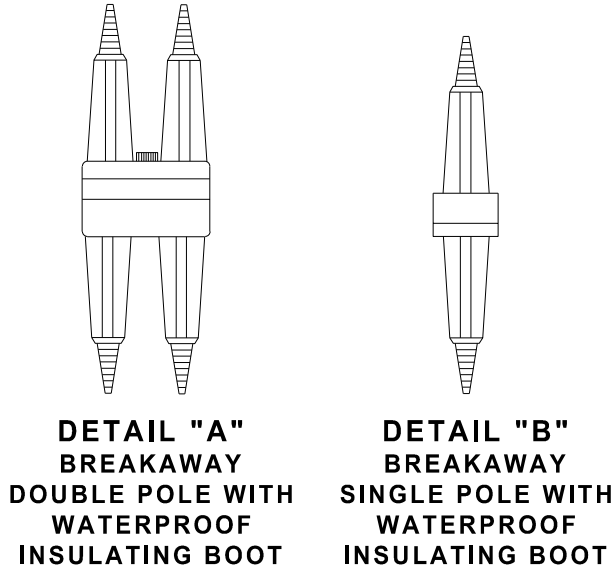
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

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



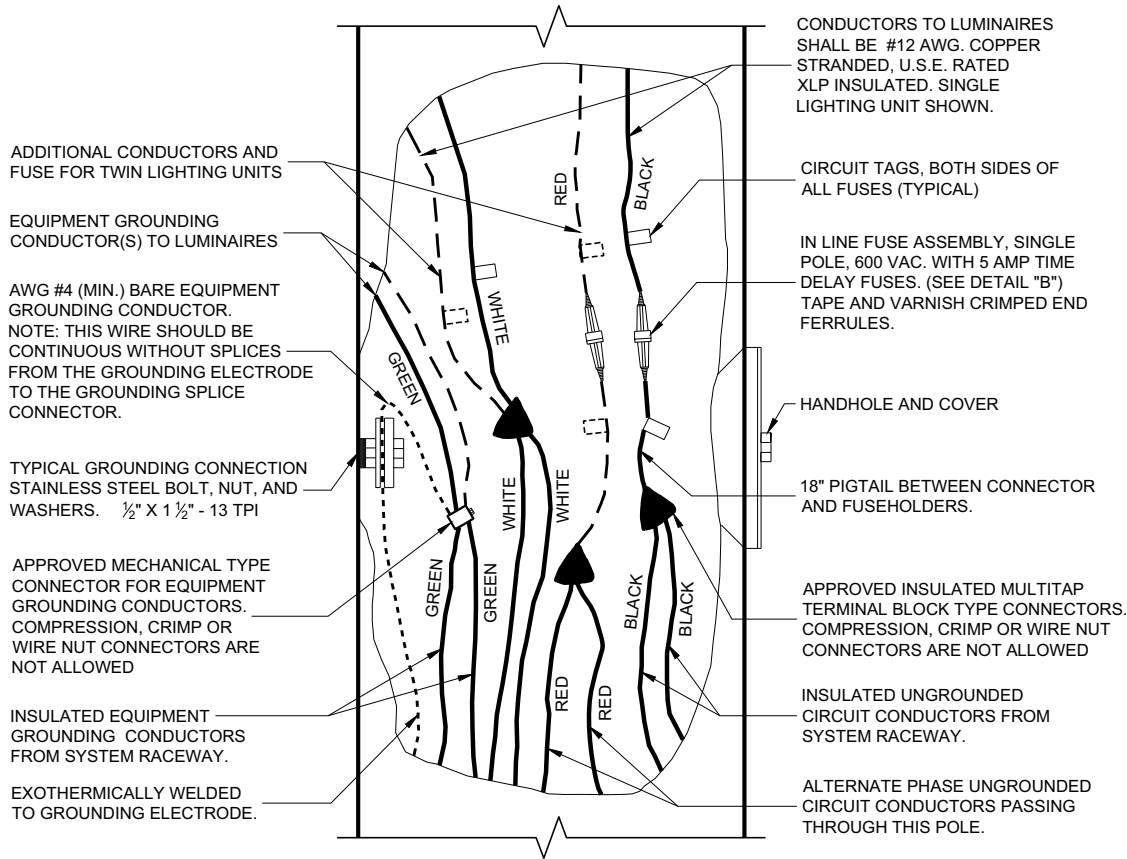
LIGHTING UNIT CODE
(TYPICAL)



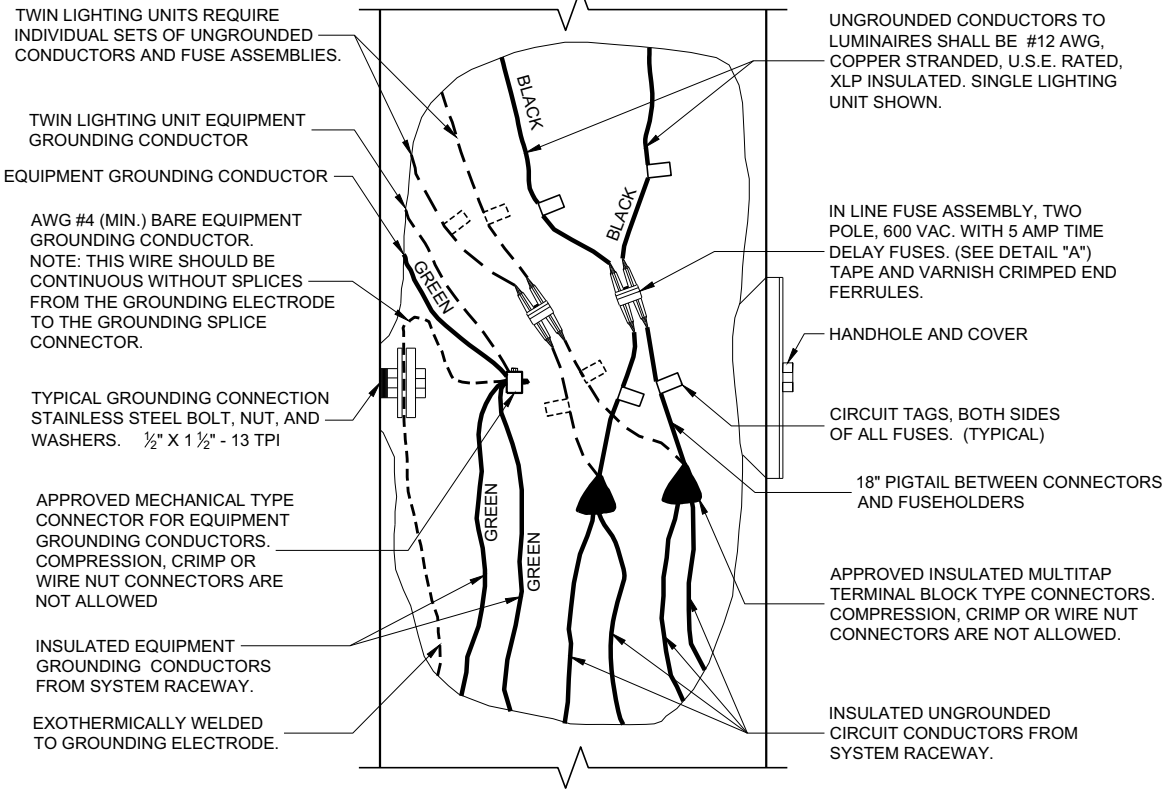
TYPICAL GROUNDING CONNECTIONS
NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

6

SDD 09E03 - 06



3 WIRE - 120, 240 OR 480 VAC (UNGROUNDED CONDUCTORS)
WITH GROUNDING CONDUCTOR AND
EQUIPMENT GROUNDING CONDUCTOR



2 WIRE - 240 OR 480 VAC (UNGROUNDED CONDUCTORS)
WITH EQUIPMENT GROUNDING CONDUCTOR

6

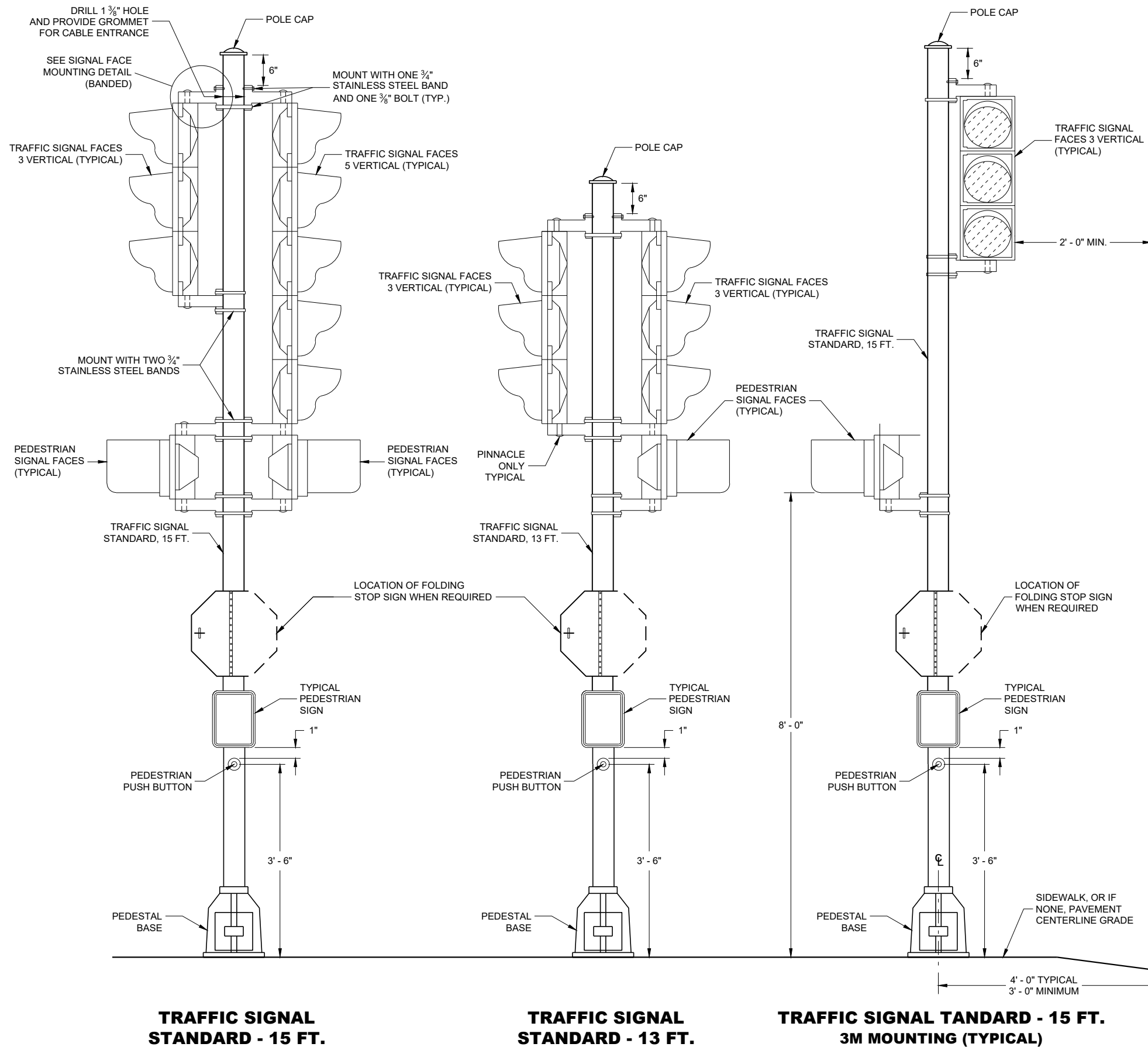
SDD 09E03 - 06

NON - FREEWAY LIGHTING UNIT
POLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Ahmet Demirelek
DATE STATE ELECTRICAL ENGI 136

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GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIAL PROVISIONS.

POLYCARBONATE MOUNTING BRACKETS SHALL BE USED.

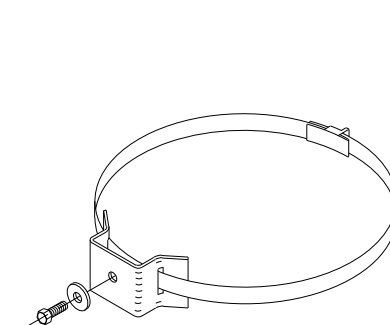
LENGTH AND LOCATION OF TRAFFIC SIGNAL STANDARDS SHALL BE AS SHOWN ON THE PLANS.

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

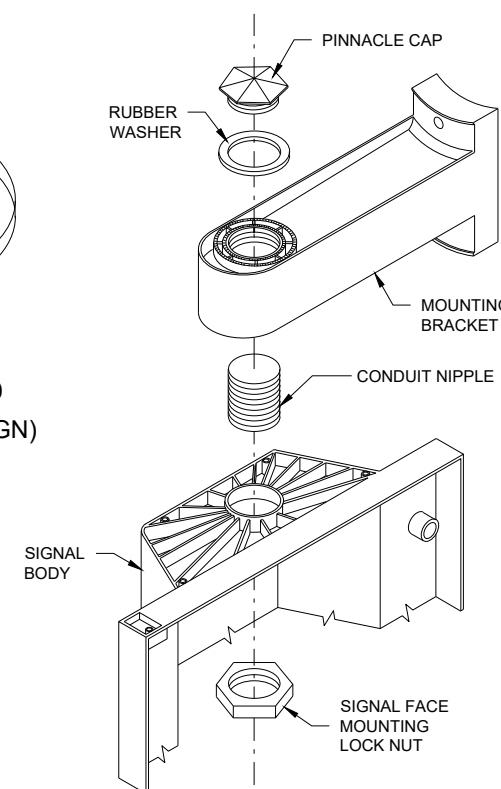
FOLDING STOP SIGNS SHALL BE IN ACCORDANCE WITH THE MUTCD AND/OR THE LATEST WISCONSIN SUPPLEMENT. THE SIGNS SHALL BE SIZED AND LOCATED AS CALLED FOR IN THE PLANS.

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/4" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.



TYPICAL SIGN MOUNTING BAND
(TOP AND BOTTOM OF SIGN)

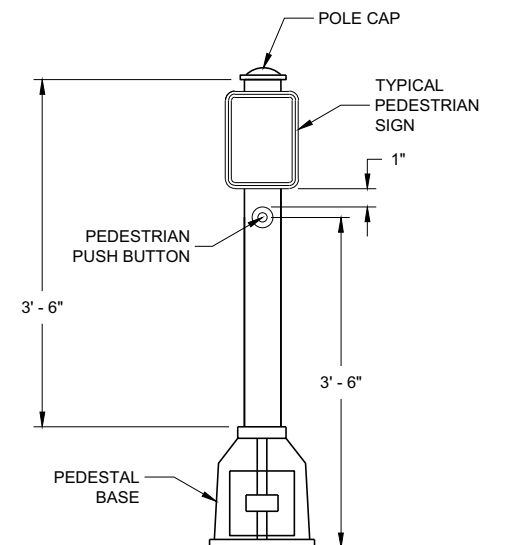
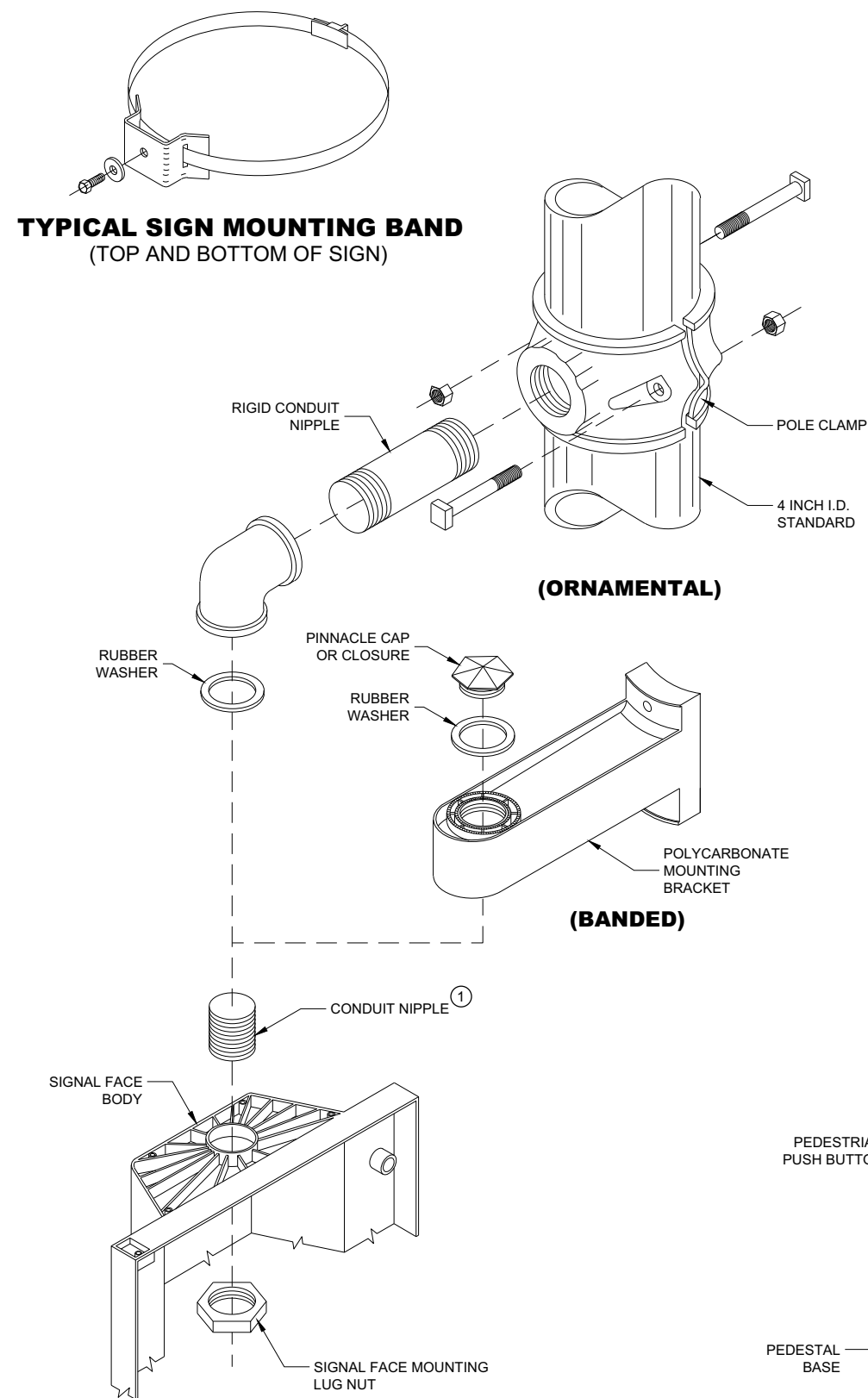


SIGNAL FACE MOUNTING DETAIL
(BANDED)

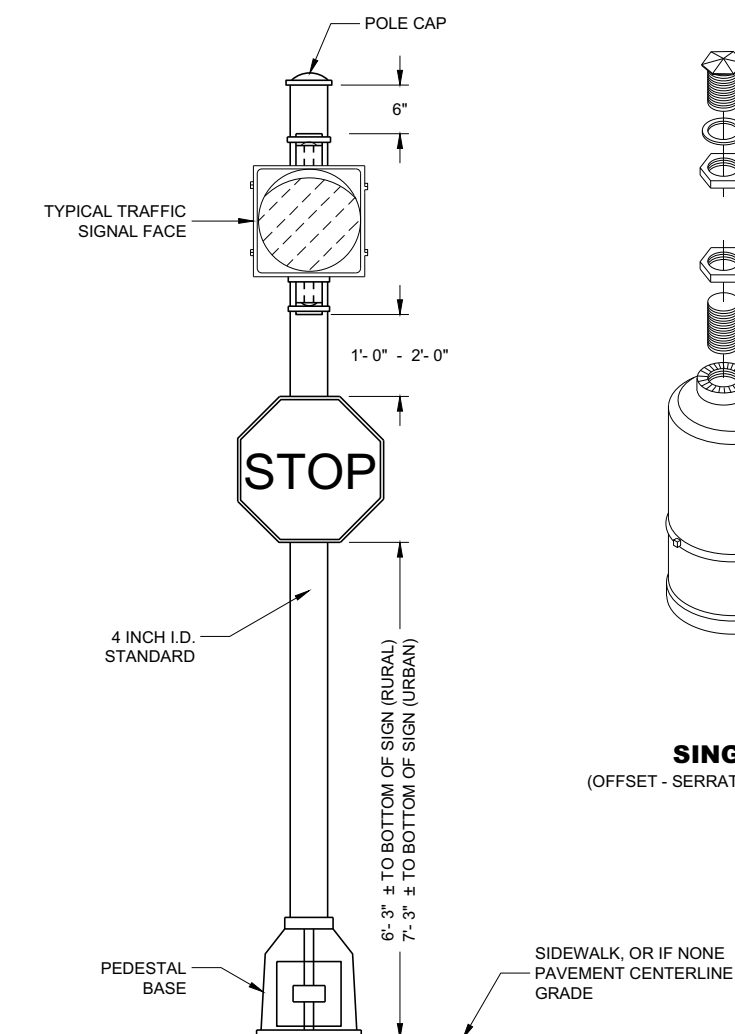
**TRAFFIC SIGNAL STANDARD
POLY BRACKET MOUNTINGS
(TYPICAL) 13 FT. OR 15 FT.**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/28/2013 DATE /S/ Ahmet Demirelek
STATE ELECTRICAL ENGI 137
FHWA



**PEDESTRIAN PUSH BUTTON
TYPICAL MOUNTING**



STANDARD FLASHER
10 FOOT, 13 FOOT OR 15 FOOT AS REQUIRED

GENERAL NOTES

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

SEE THE SIGNAL PLAN FOR REQUIRED SIGNAL FACE SIZES.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS, UNLESS APPROVED BY THE ENGINEER IN THE FIELD.

ALL PEDESTAL BASES SHALL BE MOUNTED ON CONCRETE BASE - TYPE 1.

FOR APPROVED MOUNTING HARDWARE, SEE THE CONTRACT SPECIFICATIONS.

POLYCARBONATE SIGNAL FACE MOUNTING BRACKETS SHALL BE USED UNLESS ORNAMENTAL POLE CLAMPS ARE SPECIFIED.

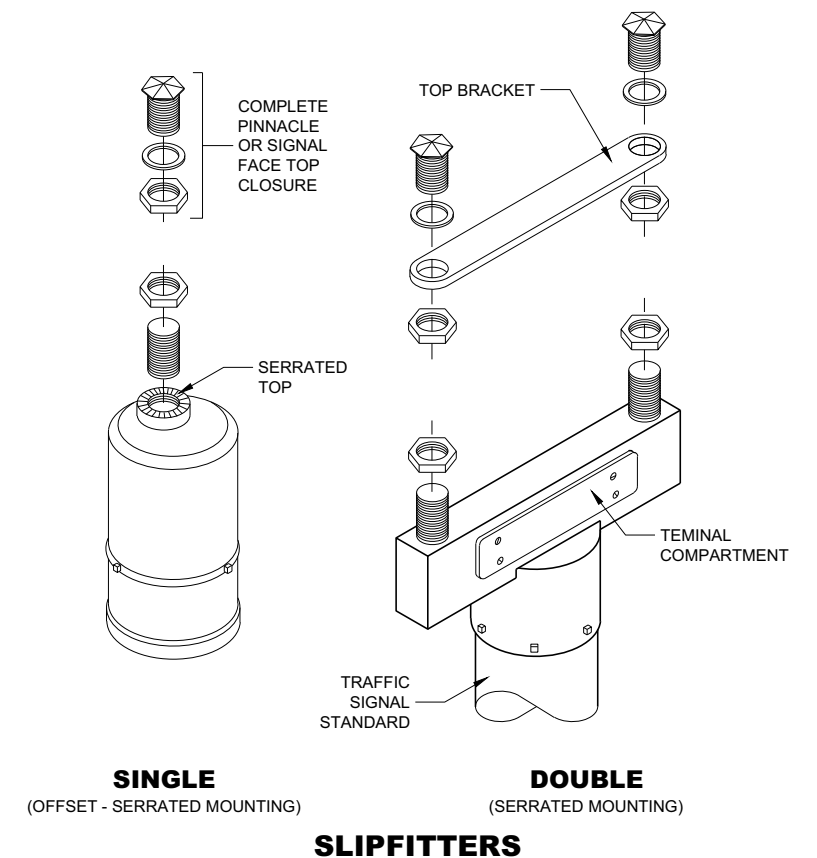
LENGTH OF TRAFFIC STANDARDS SHALL BE AS SHOWN ON THE PLANS.

MOUNTINGS AND BRACKETS SHALL BE AS SHOWN ON THE PLANS OR DESCRIBED IN THE SPECIAL PROVISIONS (BY THE REGION TRAFFIC ENGINEER).

PEDESTRIAN SIGNS SHALL BE AS DESIGNATED IN THE PLANS.

FURNISH AND INSTALL VENTILATED, CAST, METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) 1/2" X 3/4" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

- ① USE 1 1/2" ID NIPPLES ZINC-COATED RIGID METAL CONDUIT, LONG ENOUGH TO ACCOMMODATE FULL DEPTH THREADING INTO THE HEAD MOUNTING LOCK NUT IN ORDER TO TIGHTEN THE FACE, BUT THAT DO NOT INTERFERE WITH REFLECTOR CLOSURE. THREAD THE NIPPLE INTO THE MOUNTING BRACKET/ELBOW UNTIL TIGHT. USE APPROVED PINNACLE TYPE HARDWARE FROM A DEPARTMENT APPROVED MANUFACTURER TO CLOSE THE UNUSED 1 1/2" OPENING IN SIGNAL FACES AND BRACKET ENDS.

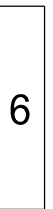


SLIPFITTERS

TRAFFIC SIGNAL STANDARD PEDESTRIAN AND FLASHER TYPICAL MOUNTING DETAILS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGI 138
FHWA



**TYPE 10 SPECIAL POLE
40' MONOTUBE ARM**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020 /S/ Ahmet Demirbilek
DATE STATE ELECTRICAL ENGI 140

FWHA

GENERAL NOTES

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

POLE TYPES 9 AND 10 ARE FOR ARM LENGTHS 15 FOOT TO 30 FOOT.

POLE TYPES 9 SPECIAL AND 10 SPECIAL ARE FOR ARM LENGTHS 35 FOOT, 40 FOOT, AND 45 FOOT.

POLE TYPES 12 AND 13 ARE FOR ARM LENGTHS 35 FOOT TO 55 FOOT.

MONOTUBE POLES AND ARMS SHALL BE GALVANIZED STEEL.

RING STIFFENED BUILT UP BOX TYPE OF ATTACHMENT FOR TRAFFIC SIGNAL ARM.

ONE PIECE POLE CONSTRUCTION (NO WELDED POLE SECTIONS).

STANDARD STRAIGHT ARM DESIGN (3% ± RISE).

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

PROVIDE WIREWAY THRU POLE WALL AND ARM CONNECTION PLATES. PROVIDE ROUND, SMOOTH INSIDE SURFACE.

MANUFACTURER'S SUBMITTED POLE DESIGNS AND DRAWINGS SHALL BE SIGNED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND CERTIFIED AS BEING IN COMPLIANCE WITH THE AASHTO "LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNAL 2015 1ST EDITION (INCLUDING INTERIM REVISIONS)" AND ALL PERTINENT WISDOT SPECIFICATIONS AND DRAWINGS FOR THE LIGHTING STRUCTURES AS FOLLOWS:

CATEGORY III FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 AND TYPE 10 STRUCTURES.

CATEGORY II FATIGUE LOADS OF TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE 9 SPECIAL AND TYPE 10 SPECIAL STRUCTURES. IN LIEU OF DESIGNING FOR GALLOPING, A VIBRATION DAMPER MITIGATION DEVICE IS REQUIRED TO BE SUPPLIED AND INSTALLED AT THE END OF THE MAST ARM.

CATEGORY II FATIGUE FATIGUE LOADS OF GALLOPING, TRUCK GUSTS (AT 45 MPH VEHICLE VELOCITY) AND NATURAL WIND GUSTS FOR DESIGN OF TYPE12 AND TYPE 13 STRUCTURES.

115 MPH (700 YEAR MRI BASIC WIND SPEED).

SECURE THE OPENING BELOW THE BASE PLATE WITH STAINLESS STEEL OR GALVANIZED STEEL MESH AND SECURE THE MESH WITH ¾" STAINLESS STEEL BANDING AROUND THE LEVELING NUTS.

INDENT PRINT (NOMINAL ½" HIGH) THE POLE LENGTH AND FIRST TWO LETTERS OF THE MANUFACTURERS NAME ON TWO SIDES OF THE BASE PLATE 180 DEGREES APART, BEFORE GALVANIZING. THE ARM SHALL BE IDENTIFIED WITH THE SAME INFORMATION BY INDENT PRINT.

SIGNAL FACE SHALL BE MOUNTED 6 INCHES (NOMINAL) FROM THE END OF THE MONOTUBE ARM OR AS SHOWN ON THE PLAN CONSTRUCTION DETAIL OR A S DIRECTED BY THE PROJECT ENGINEER/ELECTRICAL OPERATIONS PERSONNEL. MOUNT ALL LIKE HEAD AT SAME ELEVATION.

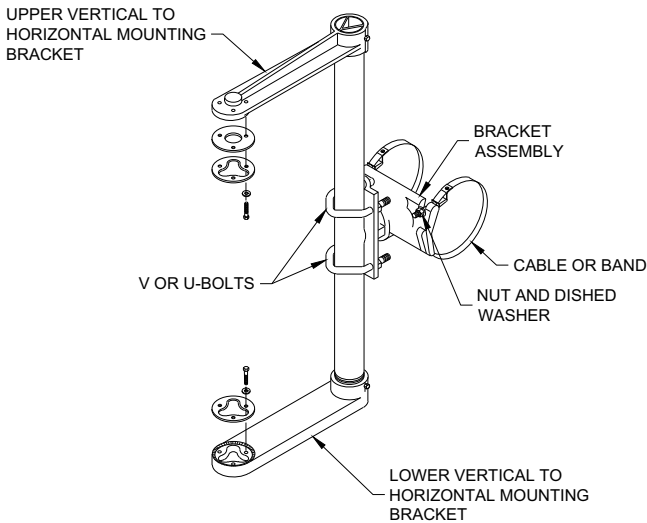
SIGN MOUNTING BRACKETS SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 637 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.

- ① DESIGN FOR MAXIMUM ALLOWABLE HAND HOLE WITH COVER ASSEMBLY WITH TWO ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLTS.
- ② SIGNAL MOUNTING BRACKETS FOR POLE MOUNTING, MOUNT WITH CAP SCREW AND BANDING (SEE SPECIFICATION SECTION 658).
- ③ SECURELY MOUNT BACK PLATES, PROJECTING 5" BEYOND ALL SIDES OF THE SIGNAL FACE HOUSING, PER MANUFACTURERS RECOMMENDATIONS.
- ④ THE TOP OF THE POLE SHAFT AND THE MONOTUBE ARM SHALL BE EQUIPPED WITH A REMOVABLE, VENTILATED CAP HELD SECURELY IN PLACE WITH SET SCREWS.
- ⑤ FACTORY WELDED BRACKET FOR GROUNDING LUG, OPPOSITE HAND HOLD, (LUG AND HARDWARE PAID UNDER SEPARATE ITEM). PROVIDE HOLE IN BRACKET FOR ¼" X ¾" - 20 TPI STAINLESS STEEL HEX HEAD BOLT.
- ⑥ FACTORY WELDED "J" HOOK FOR STRAIN RELIEF FOR POLE LUMINAIRE WIRE.
- ⑦ INSTALL STRUCTURAL IDENTIFICATION PLAQUES.

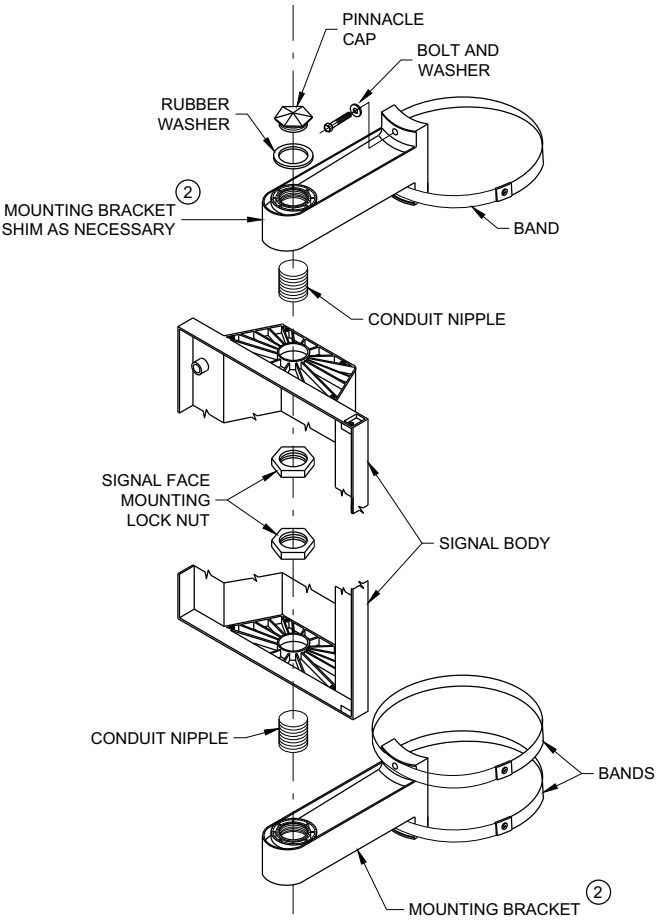
STRUCTURAL IDENTIFICATION PLAQUES SHALL BE PLACED ON THE POLES IN THE SAME DIRECTION AS THE ARM.

MOUNTING HEIGHT SHALL BE 6' - 0" ABOVE THE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL BE OBSTRUCTED.

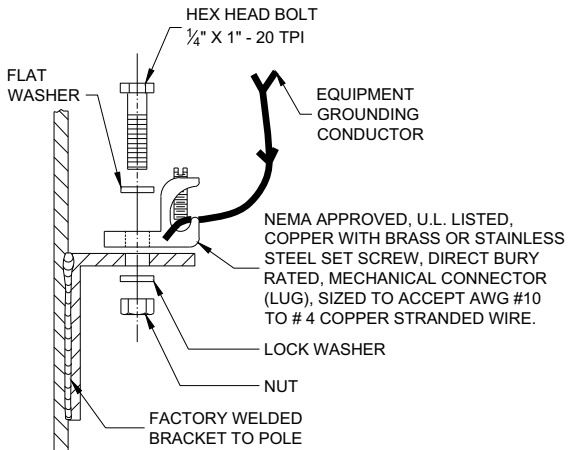
- ⑧ FACTORY DRILLED ½" DRAIN HOLE 2" FROM FLANGE CONNECTION PLATE.



SIGNAL FACE MOUNTING BRACKET
DETAIL FOR MONOTUBE ARM
(MOUNT PER MANFACTURER'S RECOMMENDATION)

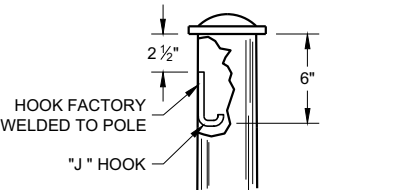


SIGNAL FACE VERTICAL
MOUNTING DETAIL

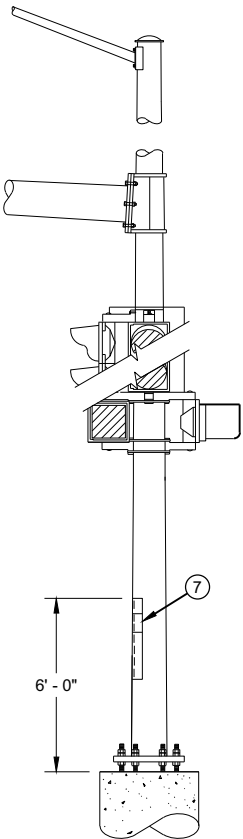


TYPICAL GROUNDING
CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

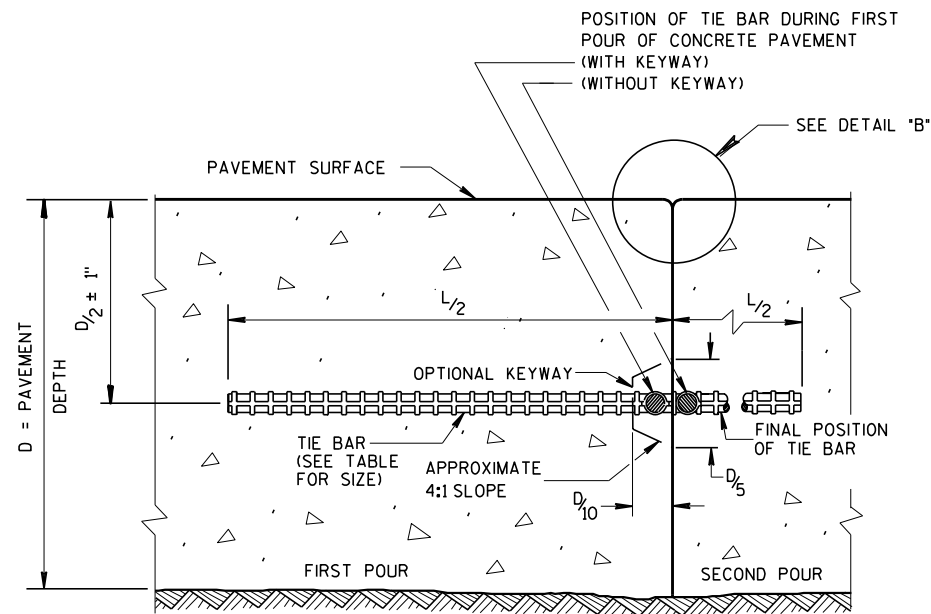


TYPICAL "J" HOOK
WIRE SUPPORT

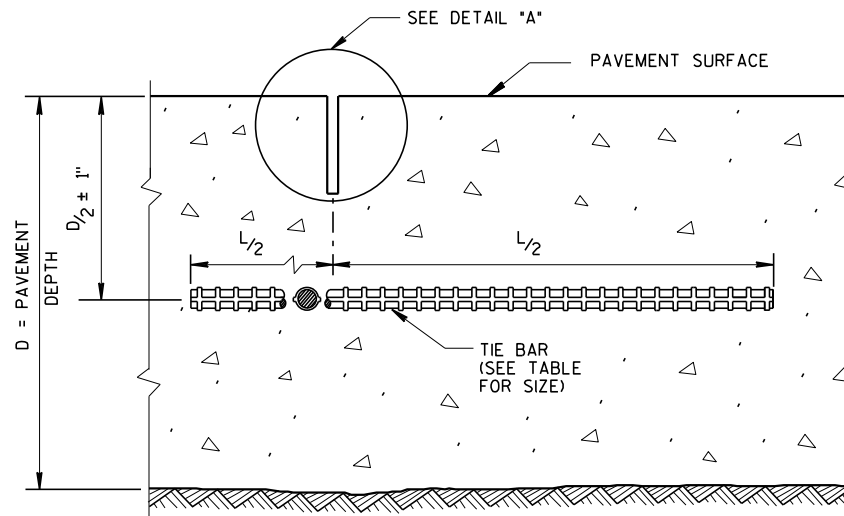


STRUCTURAL IDENTIFICATION
PLAQUE PLACEMENT

GENERAL NOTES AND HARDWARE FOR TYPES 9,10, 9/10 SPECIAL, 12 AND 13 POLES WITH MONOTUBE ARMS		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED August 2020 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER	141
FHWA		



CONSTRUCTION JOINT



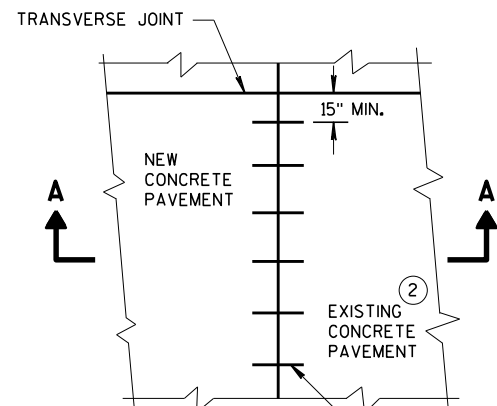
SAWED JOINT

GENERAL NOTES

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

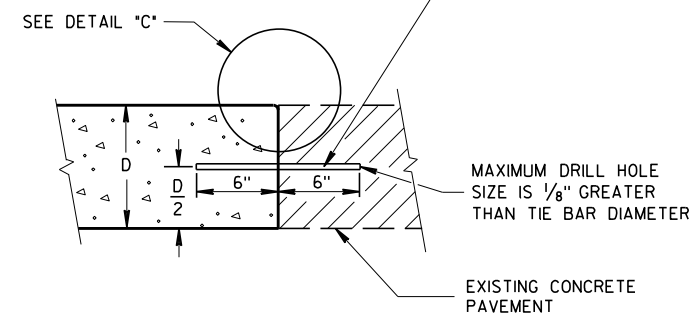
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

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

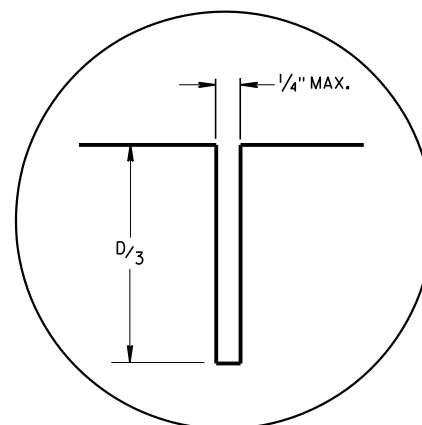


PLAN VIEW

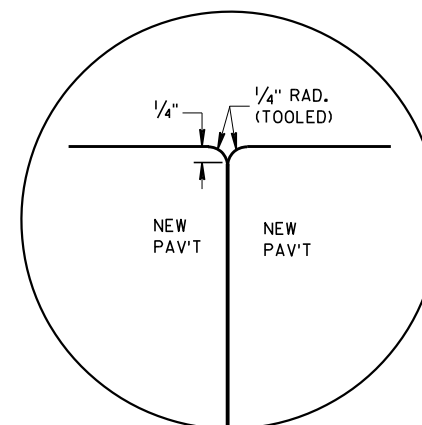
NO. 6 TIE BARS SPACED 30" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT. ①



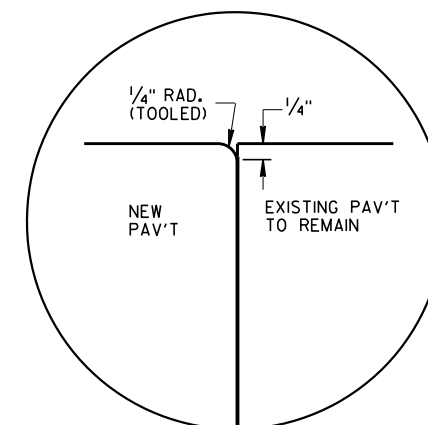
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT
TIE BARS ANCHORED
INTO EXISTING PAVEMENT



DETAIL "A"



DETAIL "B"



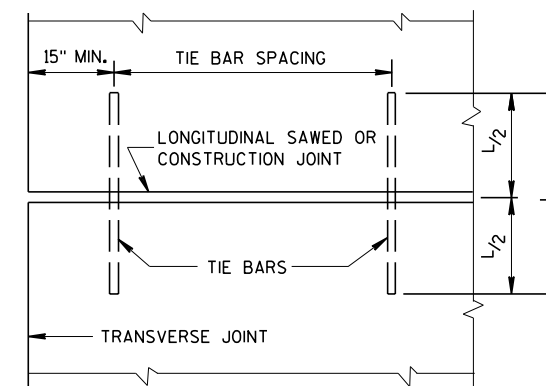
DETAIL "C"

TIE BAR TABLE

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

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

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

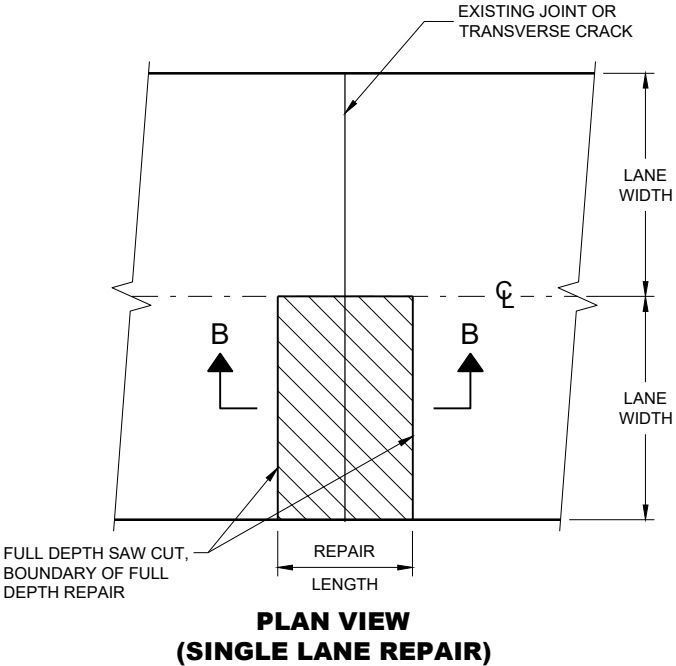
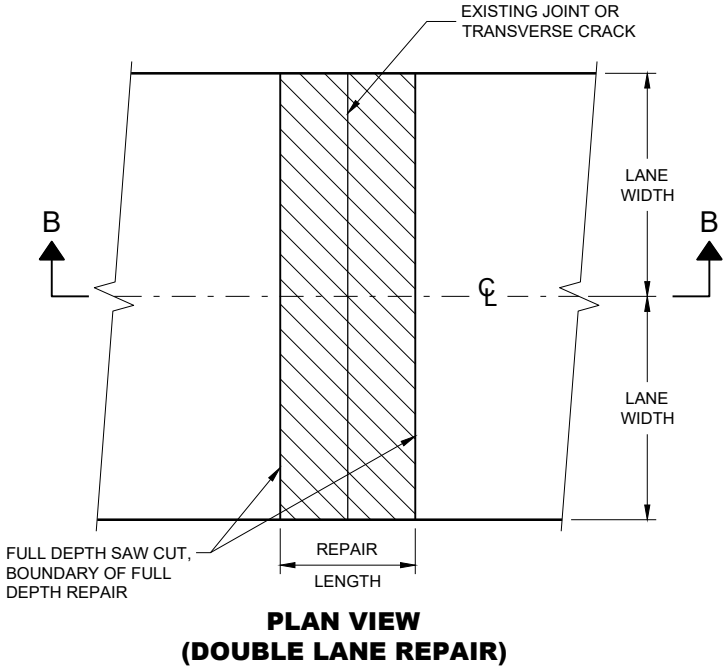


PLAN VIEW
SHOWING LOCATION OF TIE BARS

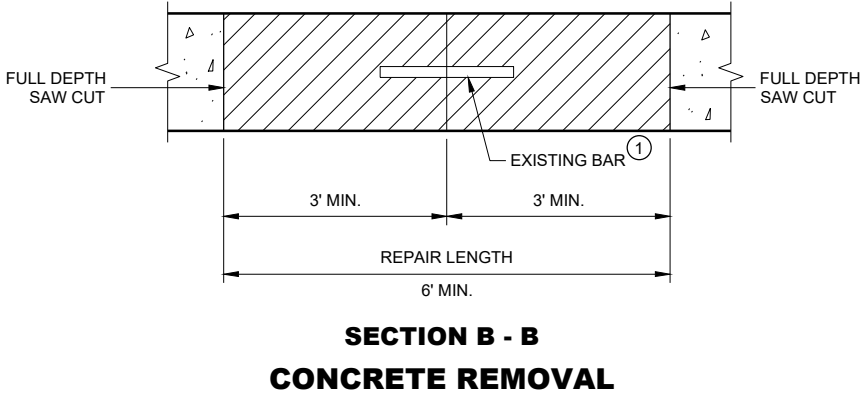
CONCRETE PAVEMENT
LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Peter Kern
DATE PAVEMENT SUPE 142
FHWA



FULL DEPTH CONCRETE PAVEMENT REMOVAL



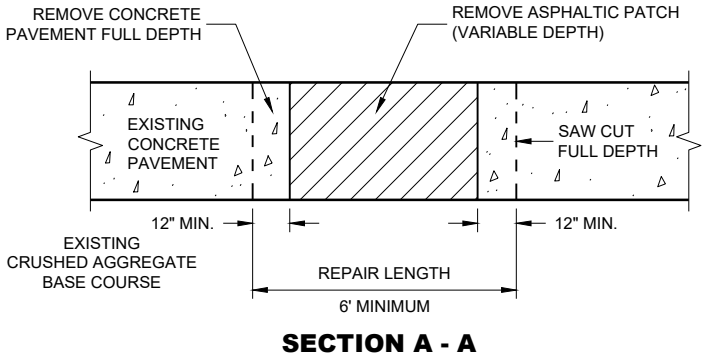
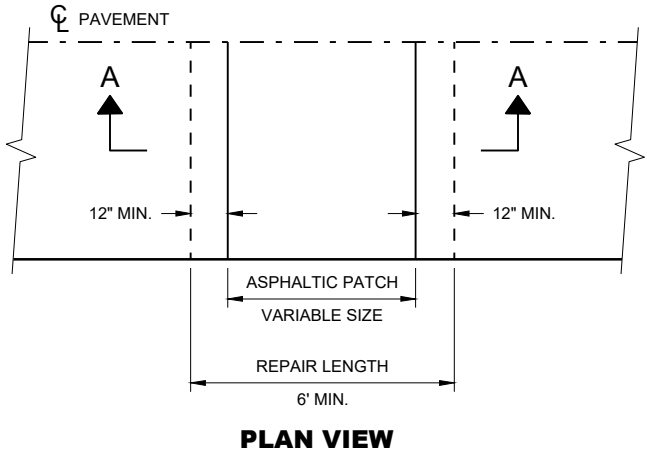
GENERAL NOTES

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

PROVIDE A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

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

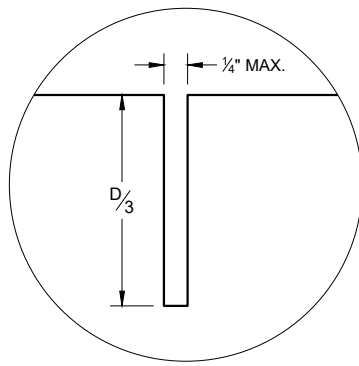
① DOWEL BARS MAY NOT BE PRESENT.



HMA PATCH REMOVAL

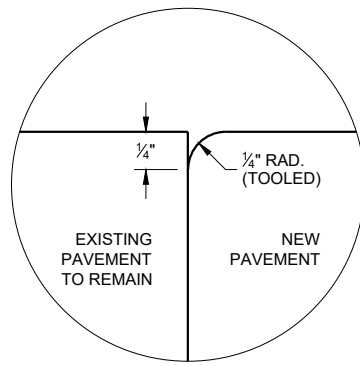
**CONCRETE PAVEMENT
REPAIR AND REPLACEMENT**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 143

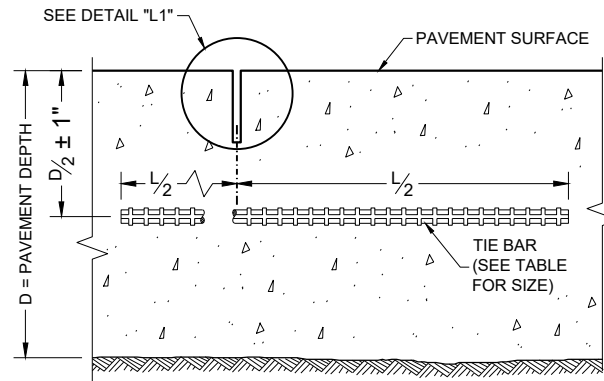


C1

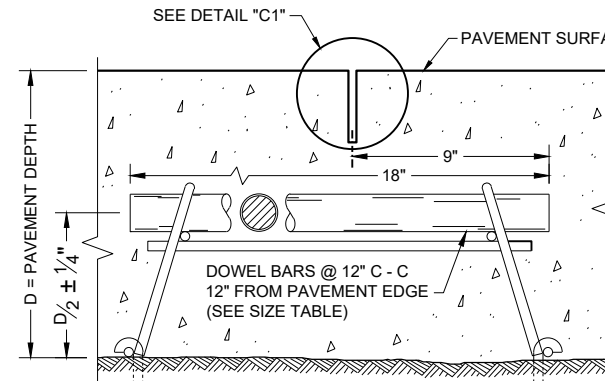
TRANSVERSE JOINTS



C2



**SECTION C - C
SAWED LONGITUDINAL JOINT**



**SECTION F - F
DOWELED CONTRACTION JOINT**

GENERAL NOTES

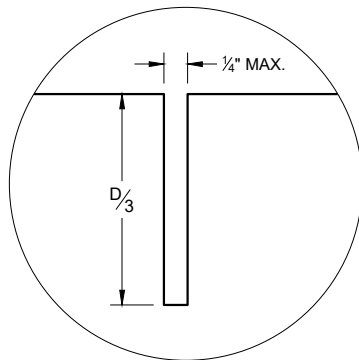
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

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

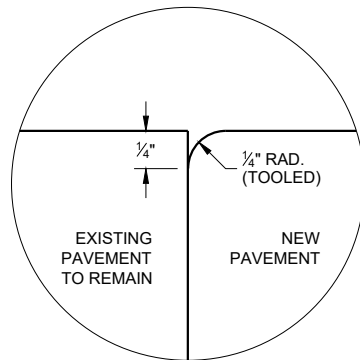
ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

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

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

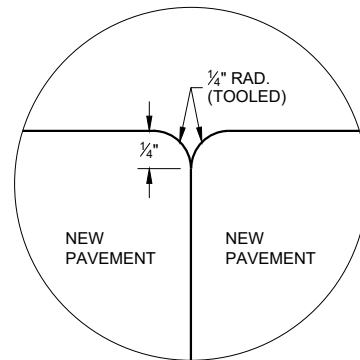


L1

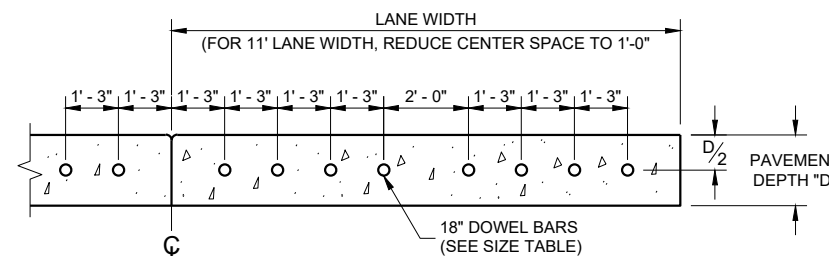


L2

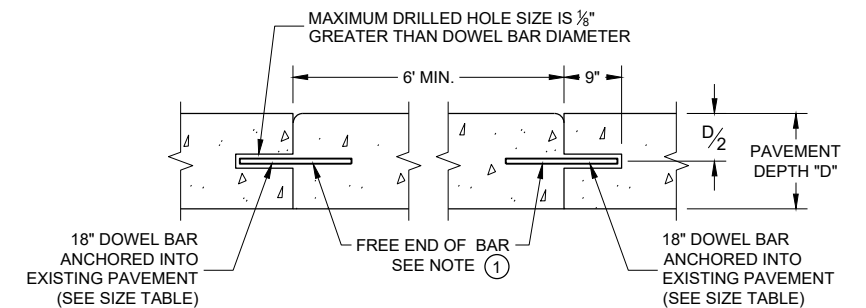
LONGITUDINAL JOINTS



L3



**SECTION E - E
DRILLED DOWEL BAR CONSTRUCTION JOINT**



SECTION D - D

TIE BAR TABLE

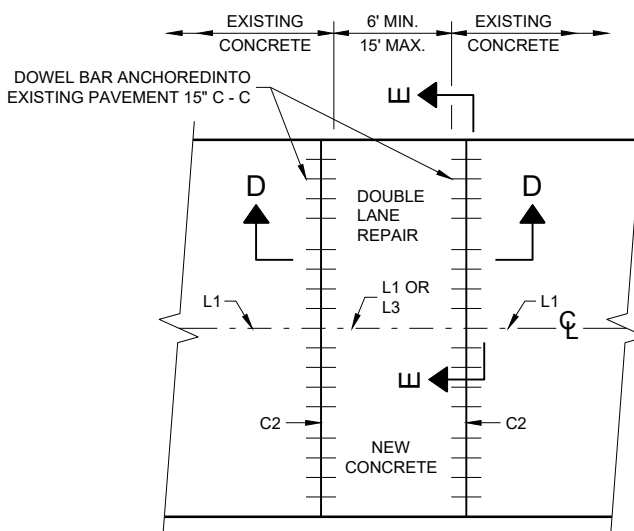
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* 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.

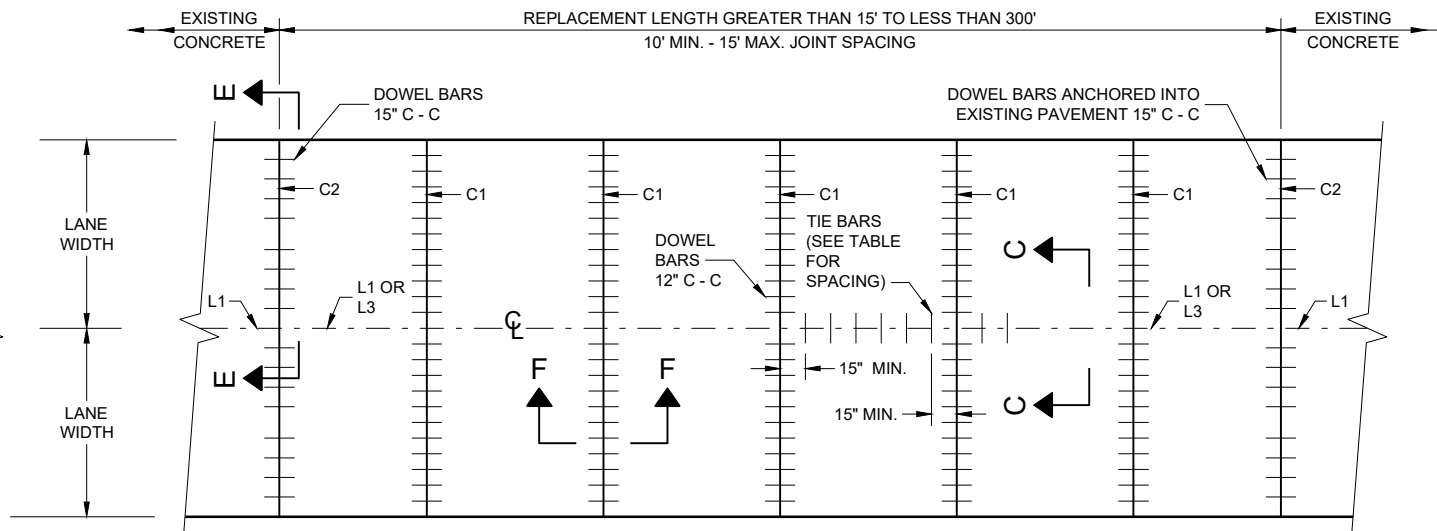
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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



PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPAIR

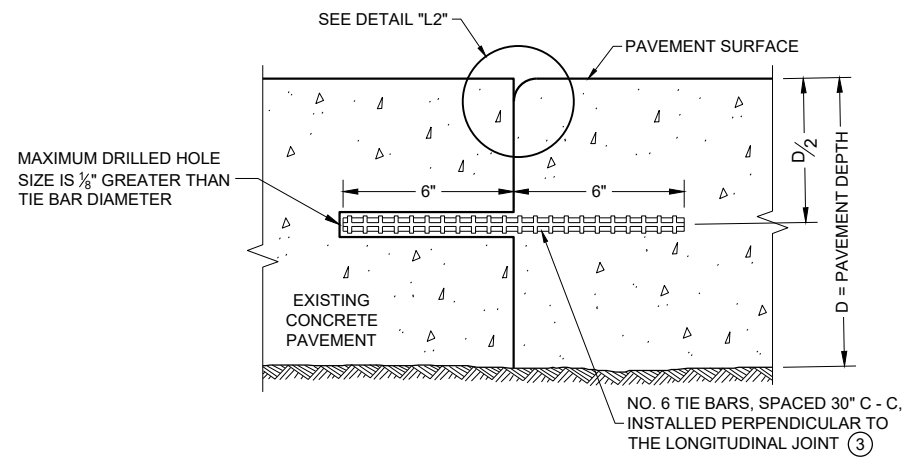


PLAN VIEW

MULTILANE CONCRETE PAVEMENT REPLACEMENT

**CONCRETE PAVEMENT
REPAIR AND REPLACEMENT**

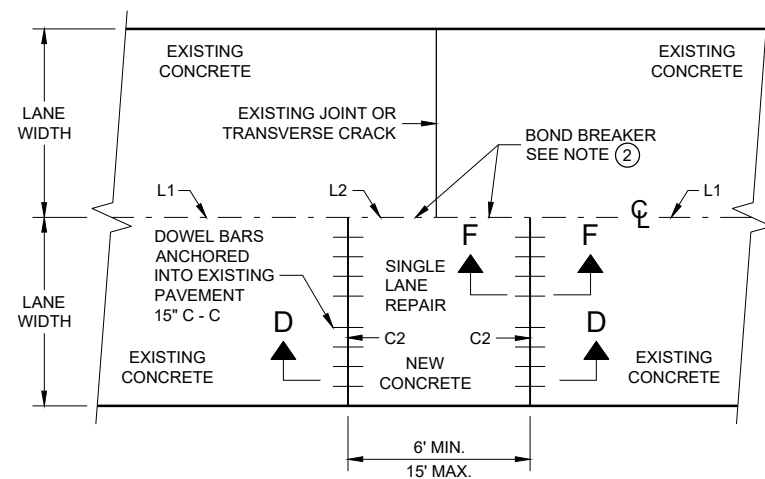
STATE OF WISCONSIN
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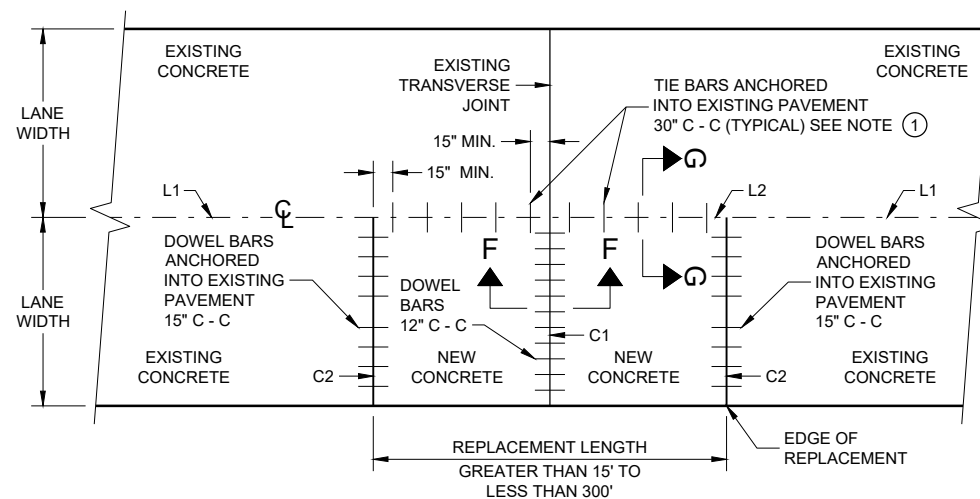
SECTION G - G
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

- ① WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
- ② USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
- ③ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW
SINGLE LANE CONCRETE PAVEMENT REPAIR

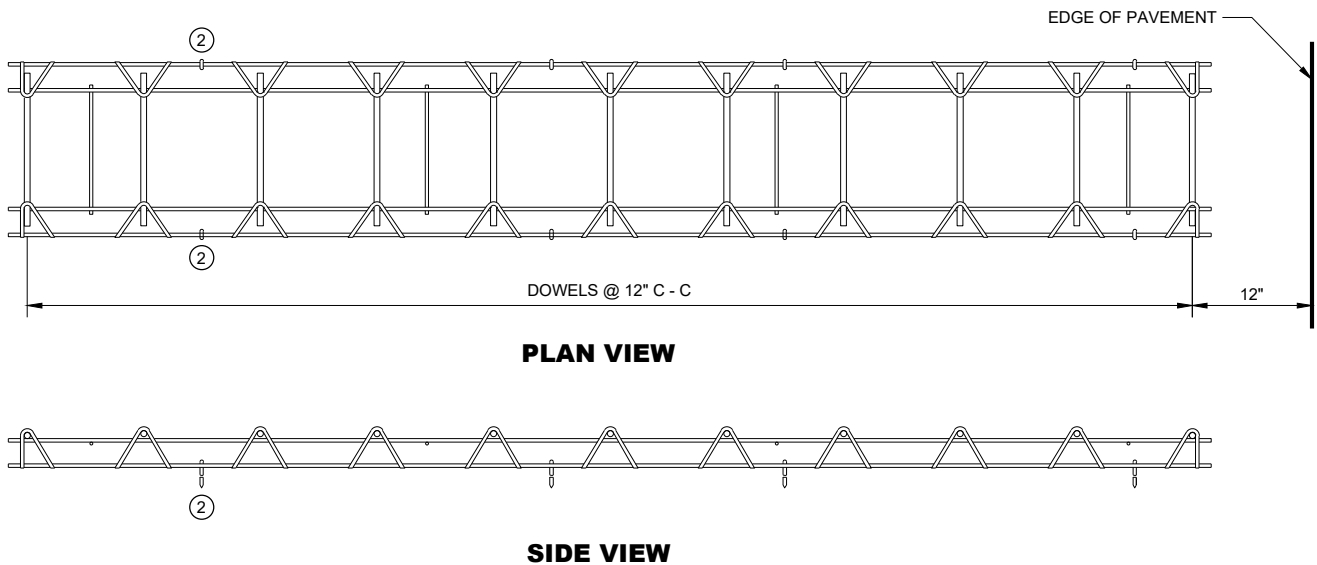


PLAN VIEW
SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

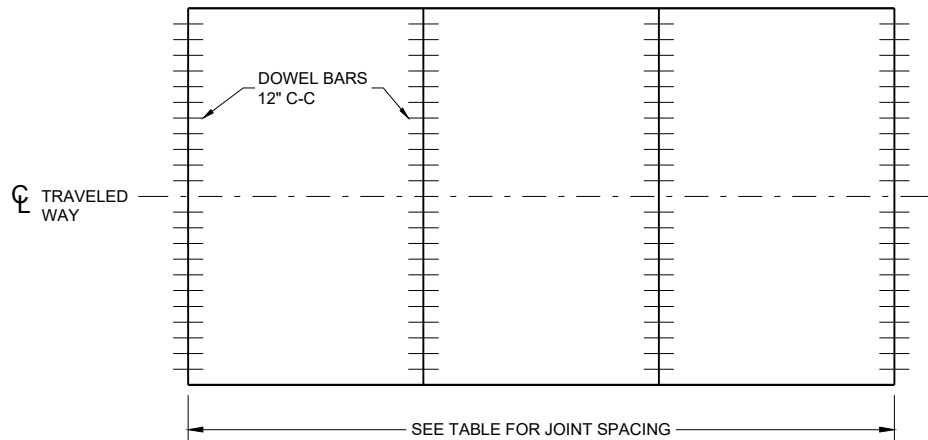
CONCRETE REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

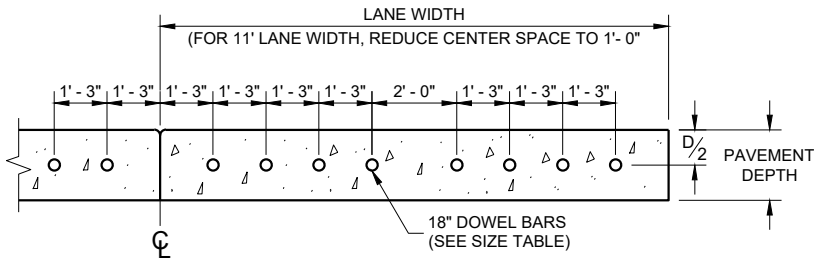
APPROVED
November 2022 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR 145
FHWA



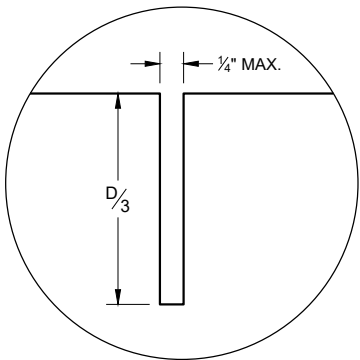
CONTRACTION JOINT DOWEL ASSEMBLY ①



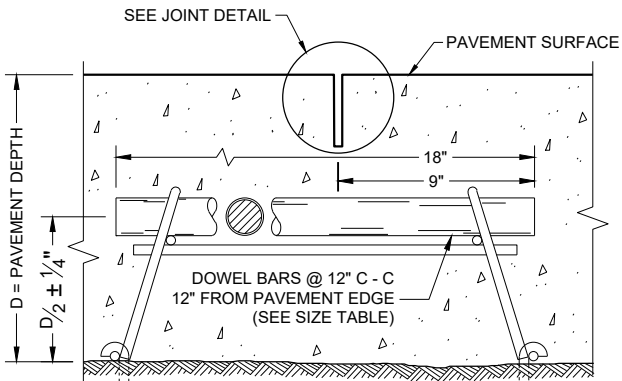
CONTRACTION JOINT LOCATIONS



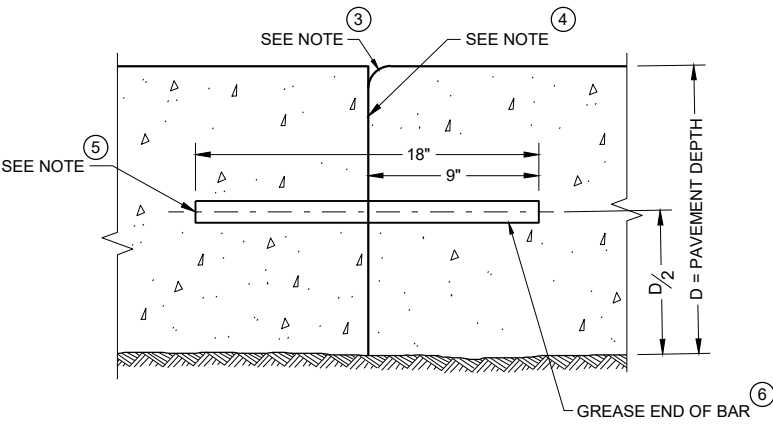
DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦



JOINT DETAIL



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT

GENERAL NOTES

CONTRACTION JOINTS

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

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

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

CONSTRUCTION JOINTS

LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO THE 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 CONSTRUCTION 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" 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 THE "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 AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8" GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.

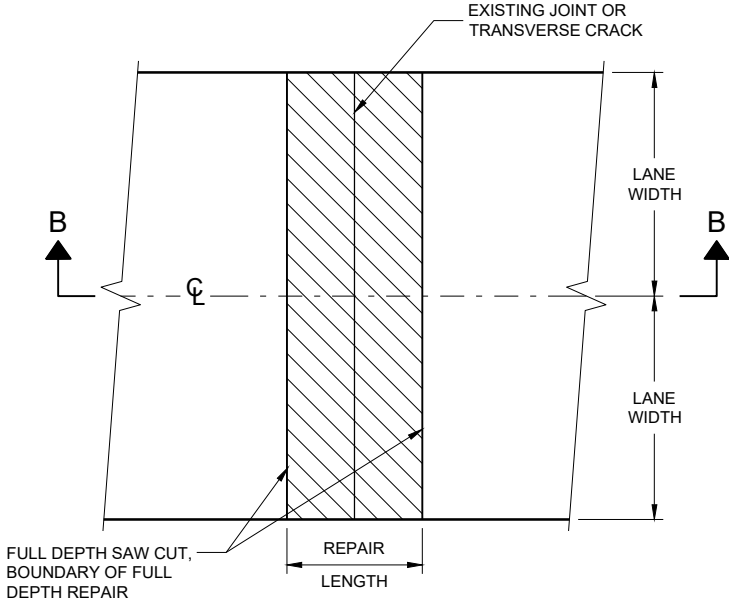
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

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

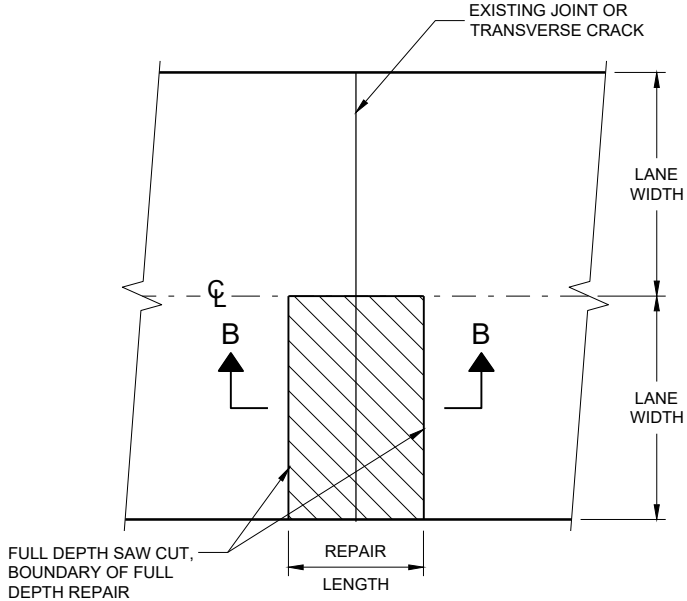
URBAN DOWELED CONCRETE PAVEMENT

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November 2022 /S/ Peter Kemp P.E.
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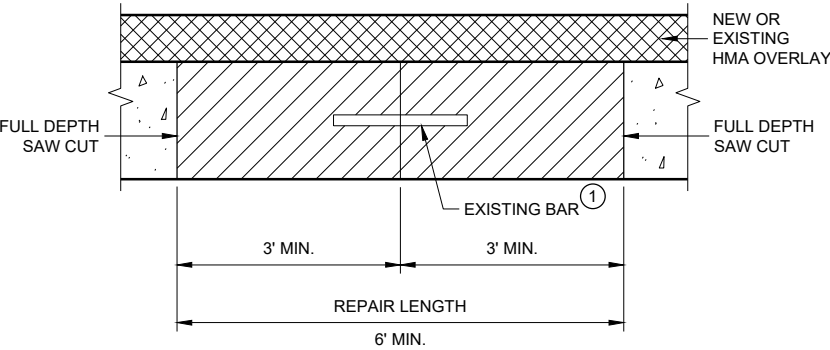


PLAN VIEW
DOUBLE LANE REPAIR



PLAN VIEW
SINGLE LANE REPAIR

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION B - B
CONCRETE REMOVAL

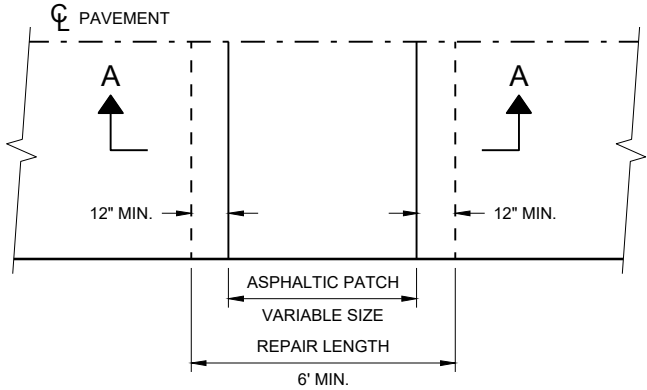
GENERAL NOTES

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

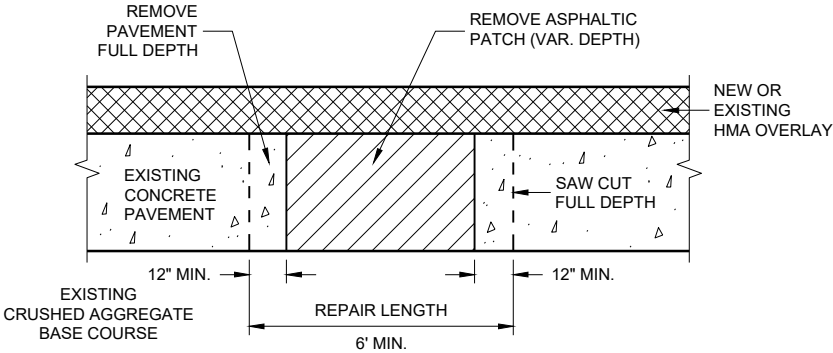
PROVIDE A 6 FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREA TO ADJACENT TRANSVERSE JOINT OR CRACK.

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

① DOWEL BARS MAY NOT BE PRESENT.



PLAN VIEW

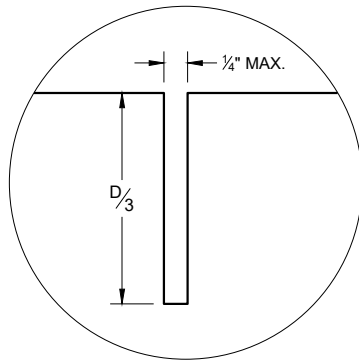


SECTION A - A

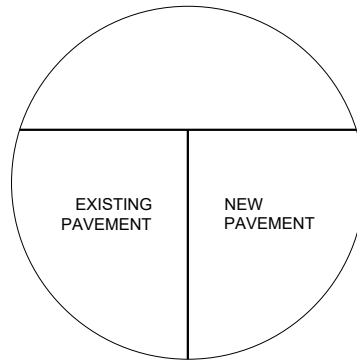
HMA PATCH REMOVAL

BASE PATCHING CONCRETE

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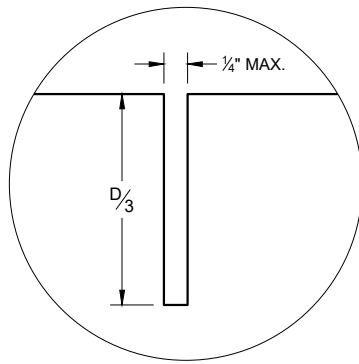


C1

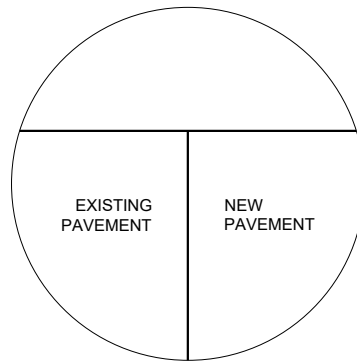


C2

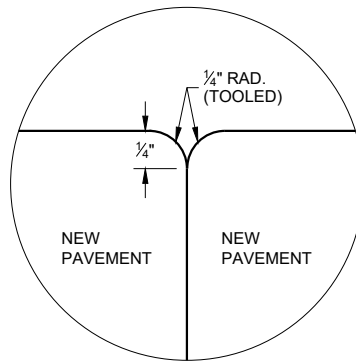
TRANSVERSE JOINTS



L1

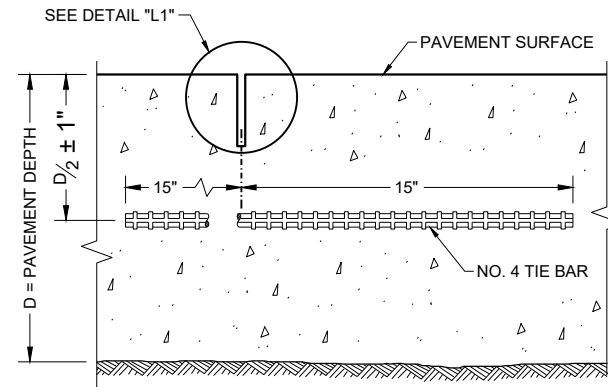


L2

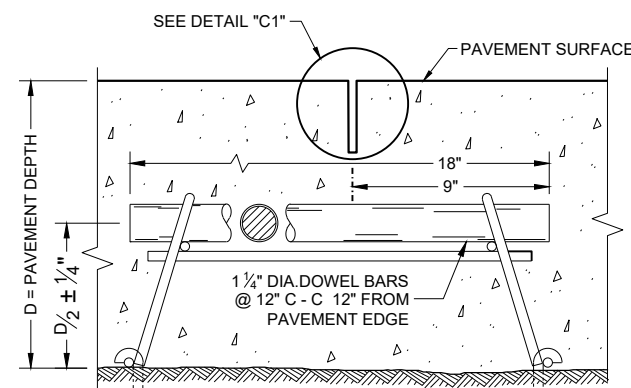


L3

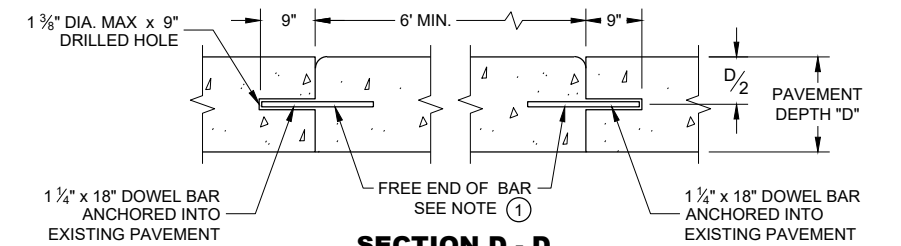
LONGITUDINAL JOINTS



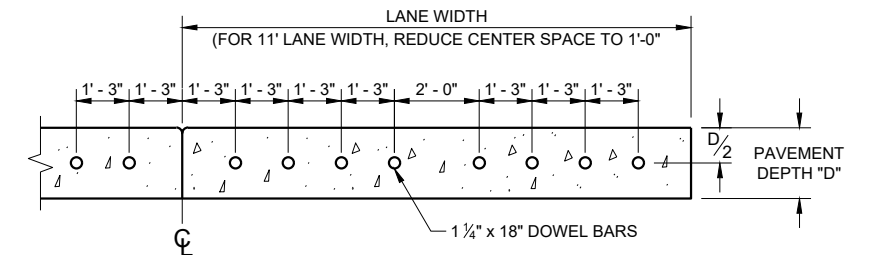
SECTION C - C
SAWED LONGITUDINAL JOINT



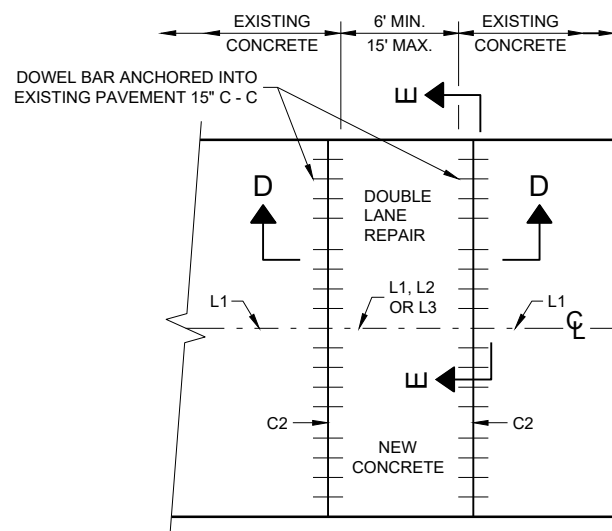
SECTION F - F
CONTRACTION JOINT



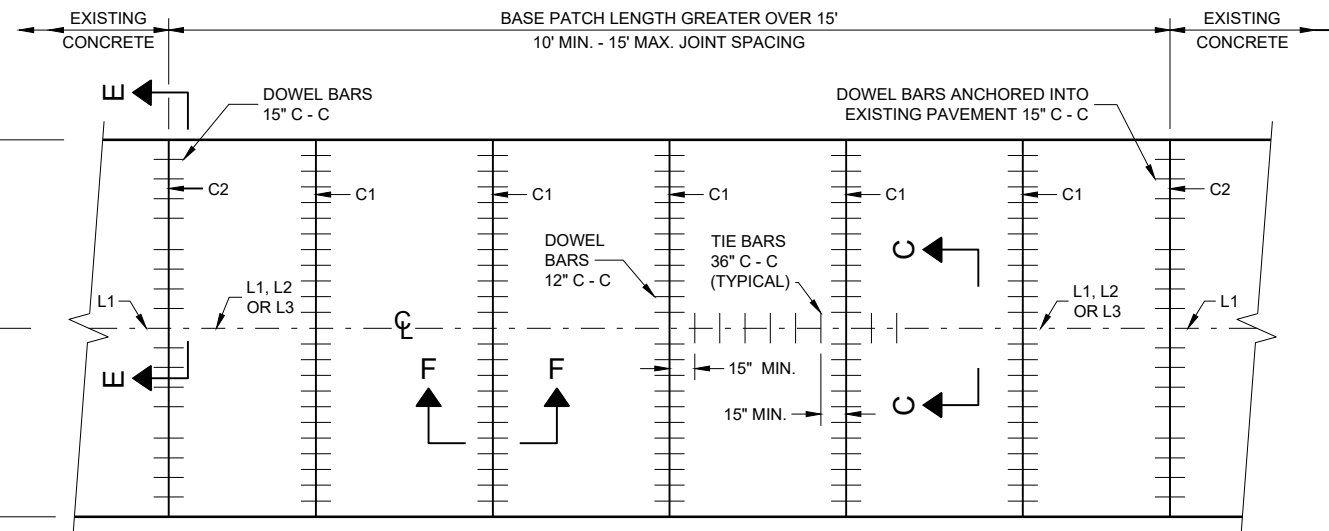
SECTION D - D



SECTION E - E
SPACING OF DOWEL BARS
ANCHORED INTO EXISTING PAVEMENT



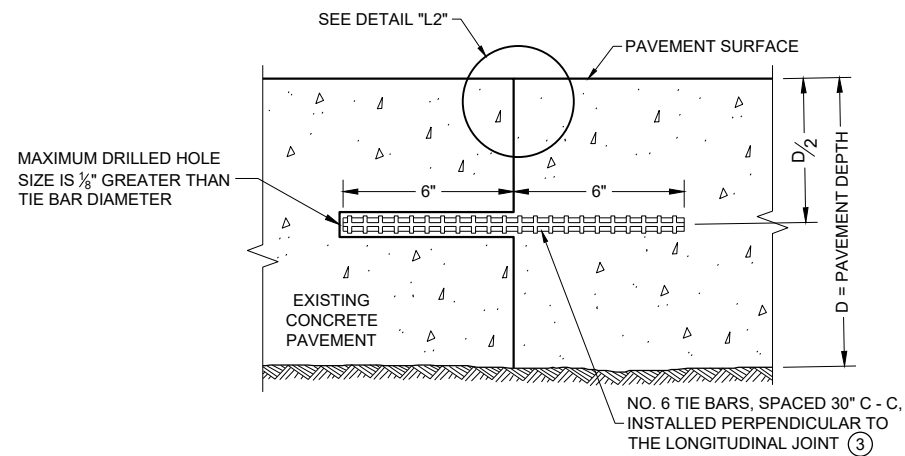
PLAN VIEW
MULTILANE CONCRETE BASE PATCH
15' MAXIMUM LENGTH



PLAN VIEW
MULTILANE CONCRETE BASE PATCH
GREATER THAN 15' IN LENGTH

BASE PATCHING CONCRETE

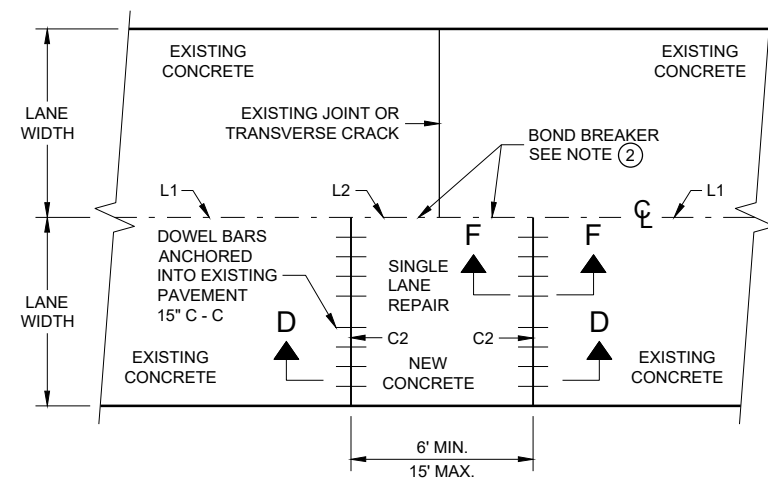
STATE OF WISCONSIN
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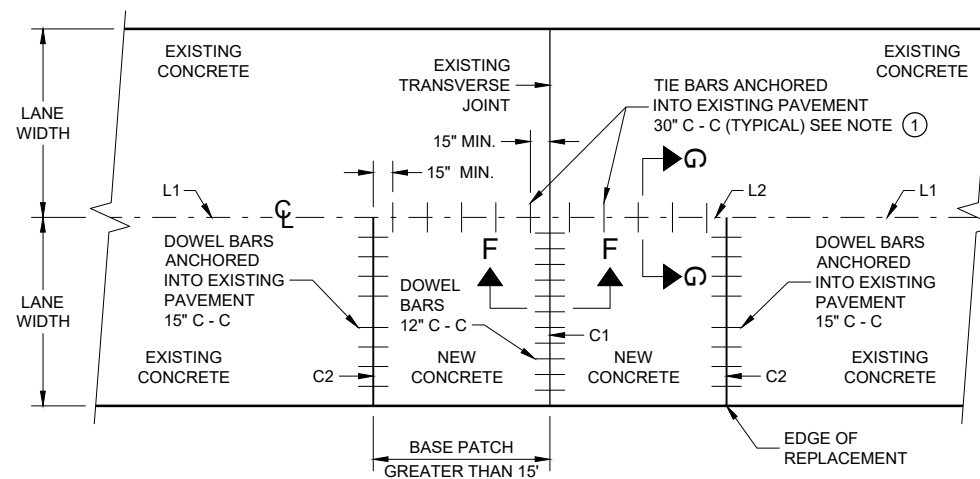
SECTION G - G
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

- ① WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.
- ② USE AN ENGINEER APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.
- ③ ANCHOR TIE BARS INTO DRILLED HOES WITH AN EPOXY.



PLAN VIEW
SINGLE LANE CONCRETE BASE PATCH
15' MAXIMUM LENGTH



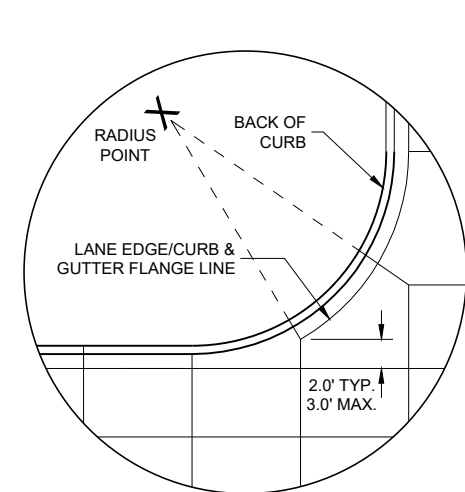
PLAN VIEW
SINGLE LANE CONCRETE BASE PATCH
GREATER THAN 15' LENGTH

BASE PATCHING CONCRETE

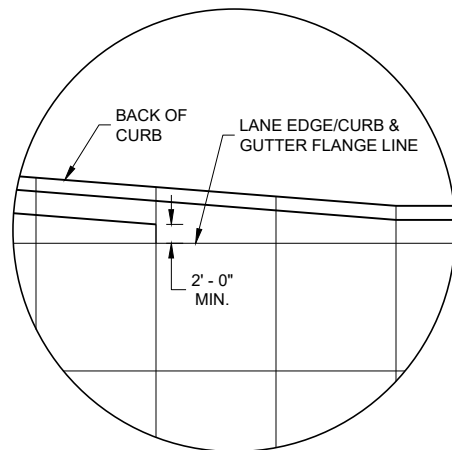
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Peter Kemp, P.E.
DATE PAVEMENT SUPERVISOR 149

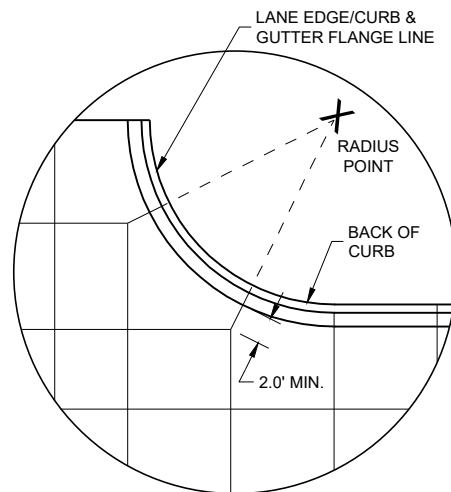
FHWA



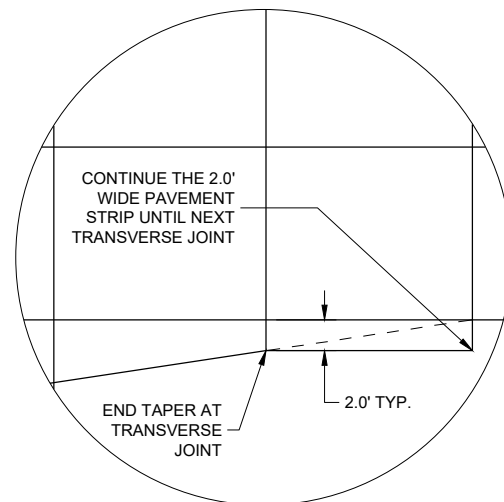
DETAIL "A"



DETAIL "B"



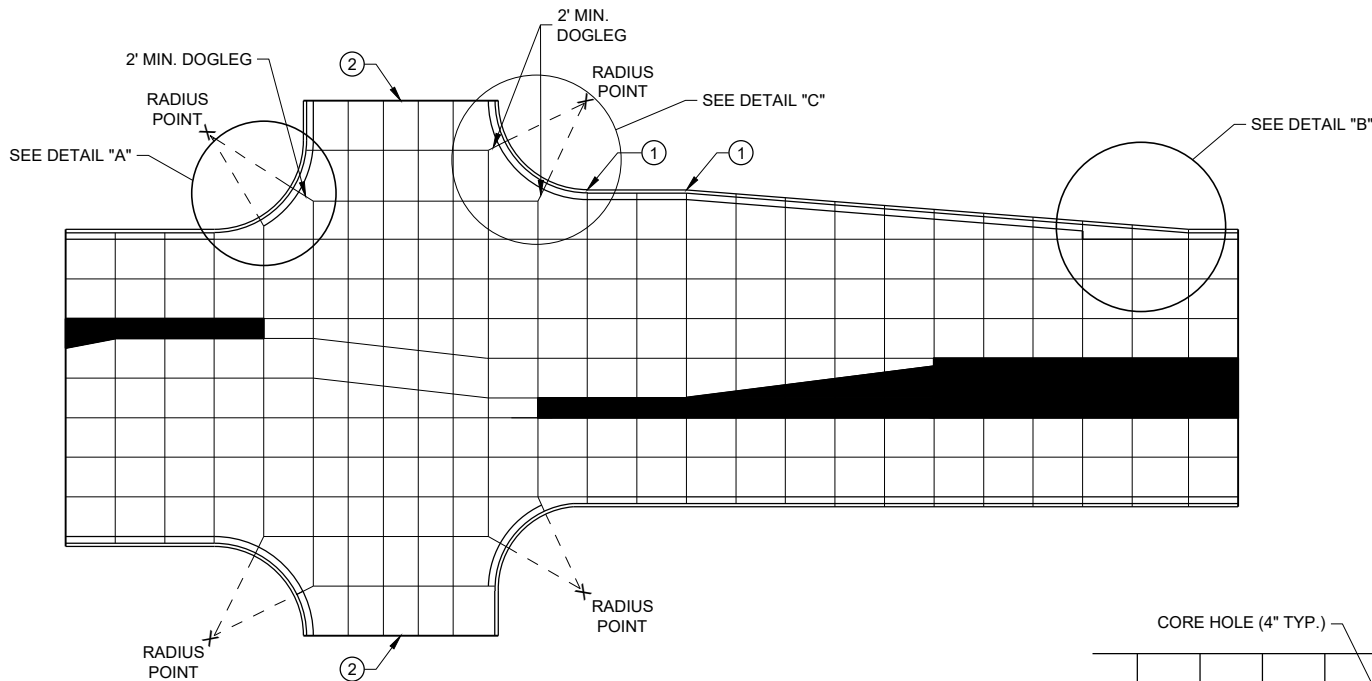
DETAIL "C"



DETAIL "D"

GENERAL NOTES

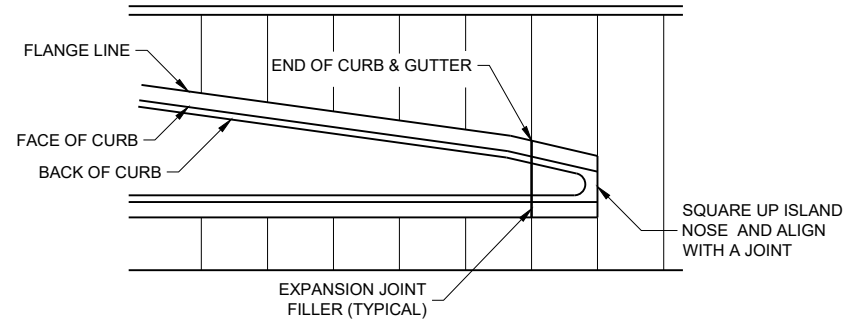
- THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.
- ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.
- CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.
- ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER 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.



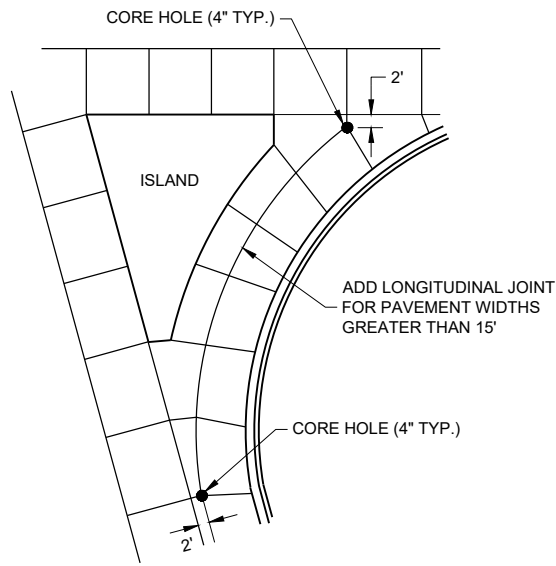
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

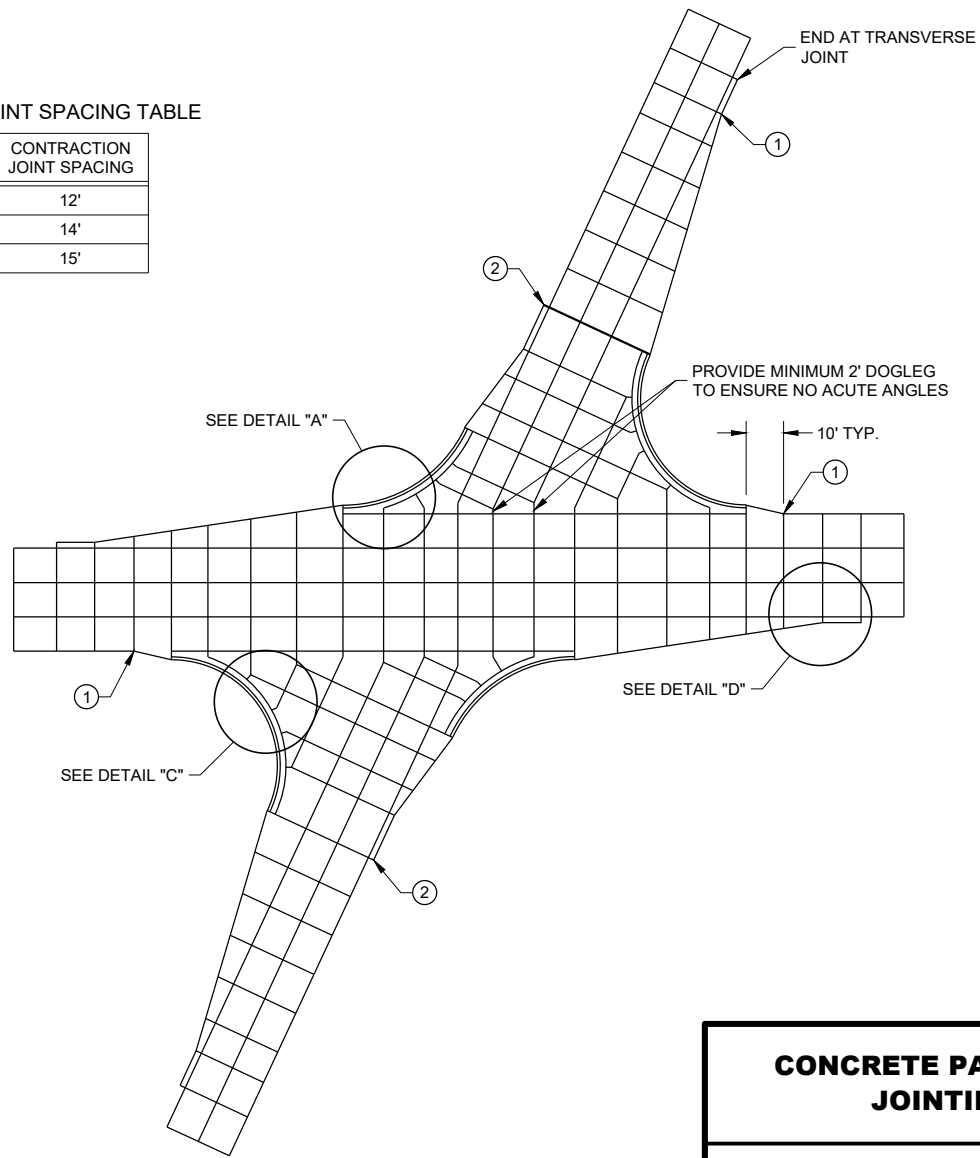
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 1/2"	12'
7", 7 1/2"	14'
8" & ABOVE	15'



APPROACH TO MEDIAN



LARGE RIGHT TURN



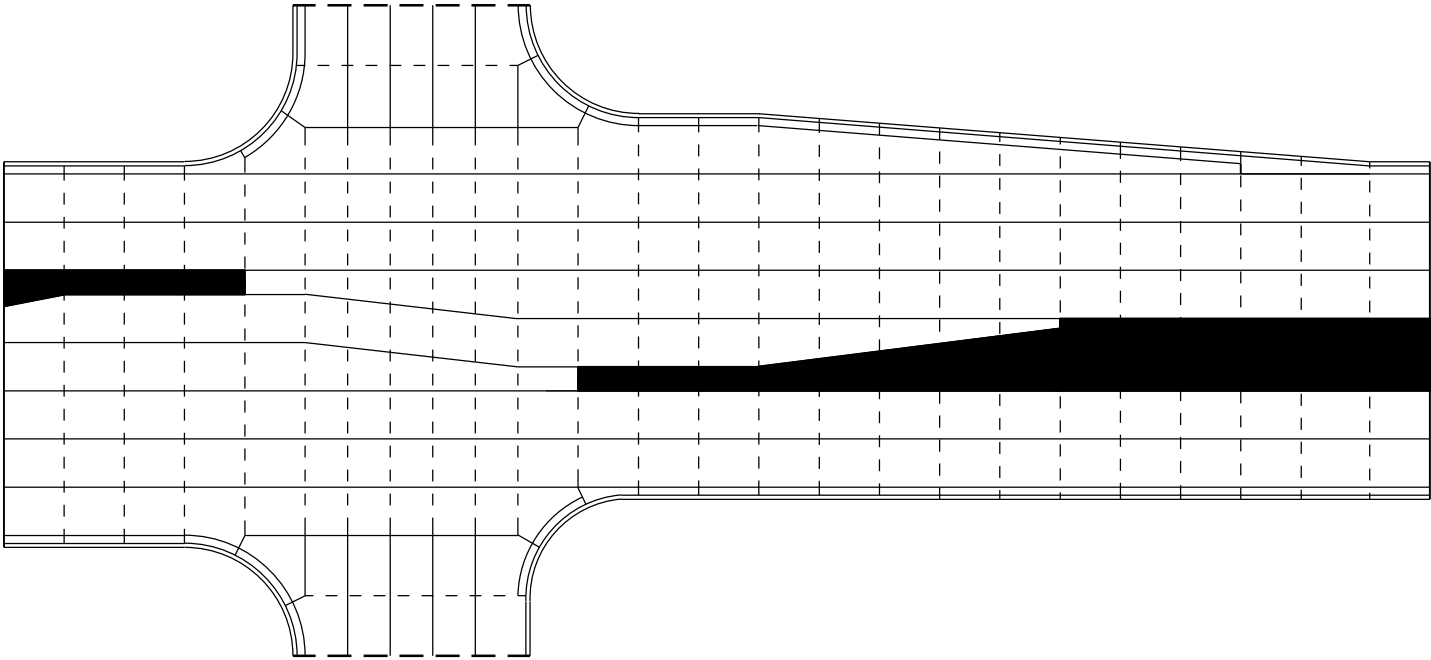
SKEWED INTERSECTION

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
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LEGEND

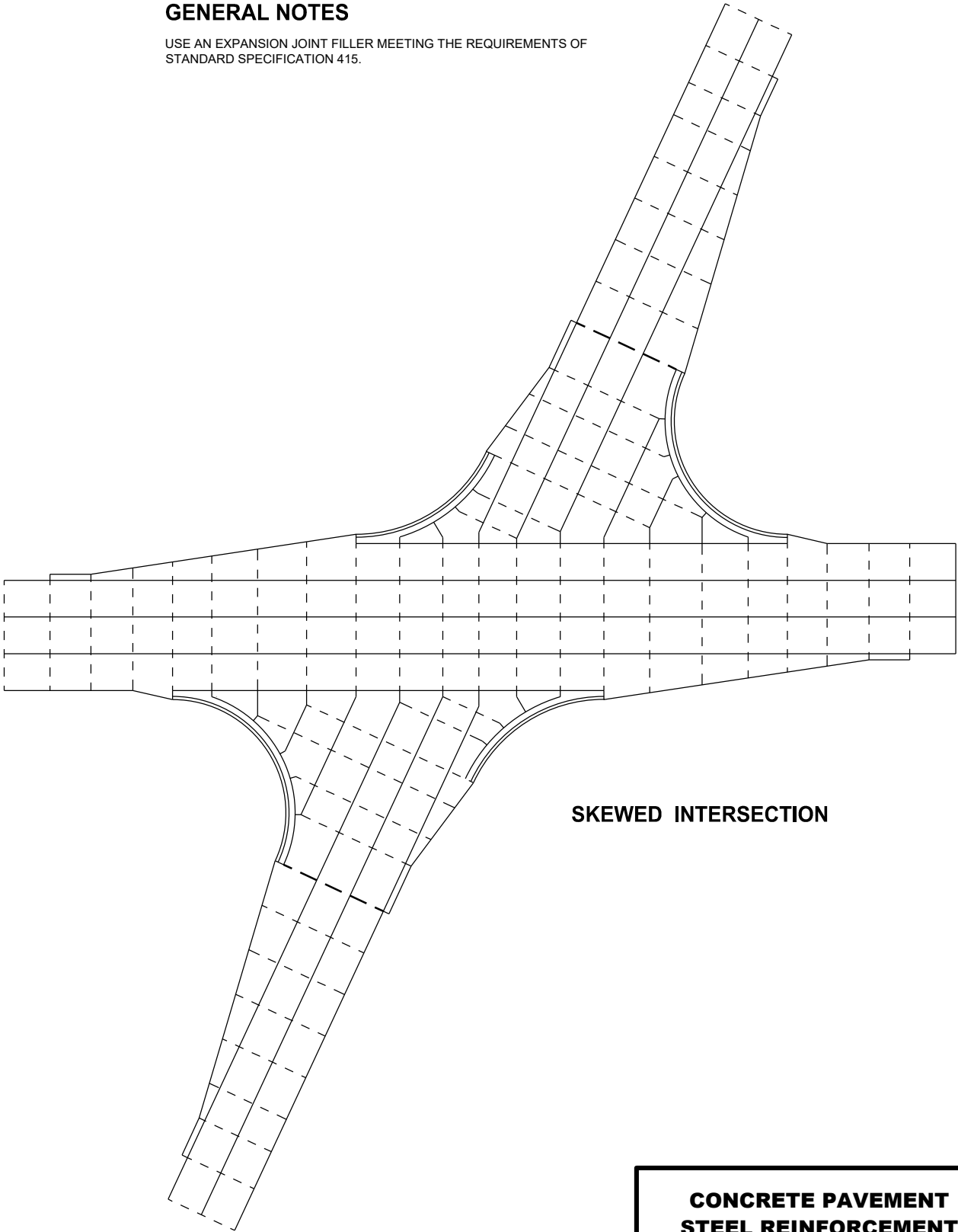
- POTENTIAL DOWELED EXPANSION JOINT
- DOWELED JOINT
- TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

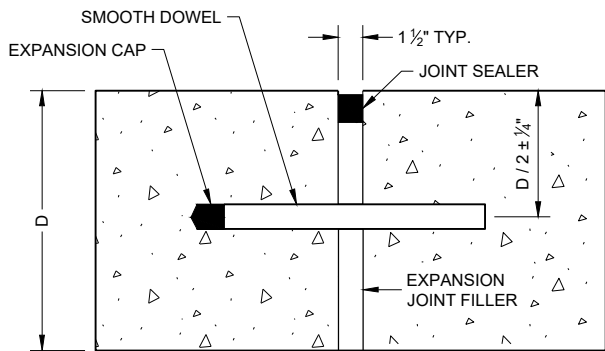
USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



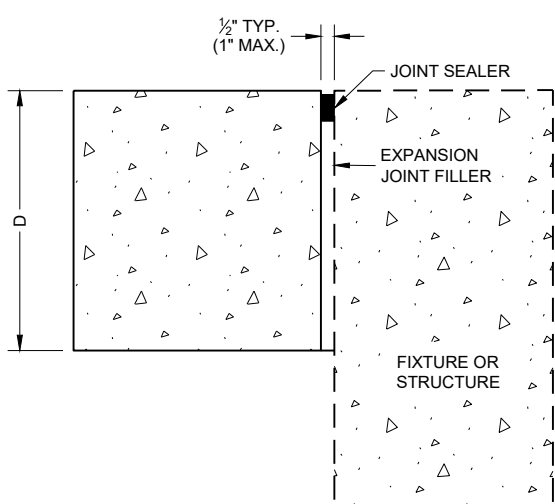
SKEWED INTERSECTION

CONCRETE PAVEMENT
STEEL REINFORCEMENT

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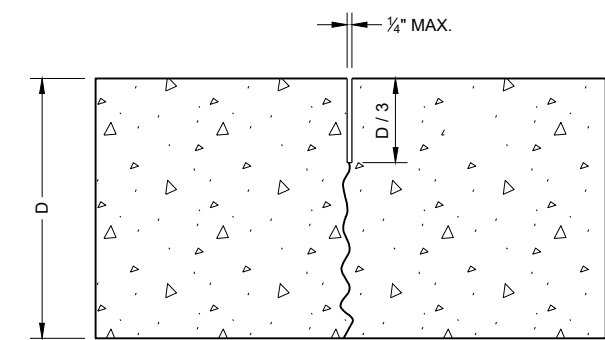


DOWELED TRANSVERSE ①

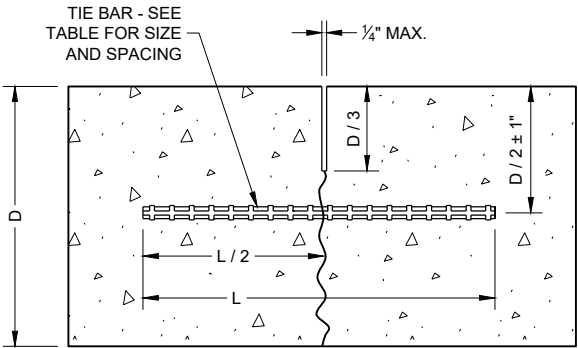


UNTIED - LONGITUDINAL

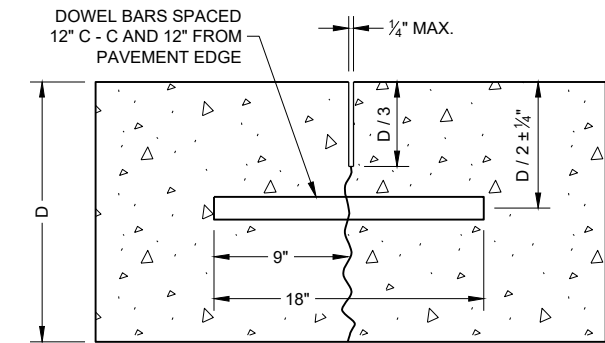
EXPANSION JOINTS



UNDOWELED TRANSVERSE



TIED LONGITUDINAL



DOWELED TRANSVERSE

CONTRACTION JOINTS ②

TIE BAR TABLE

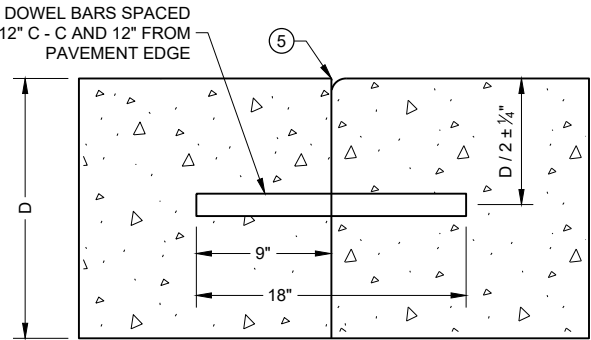
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

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

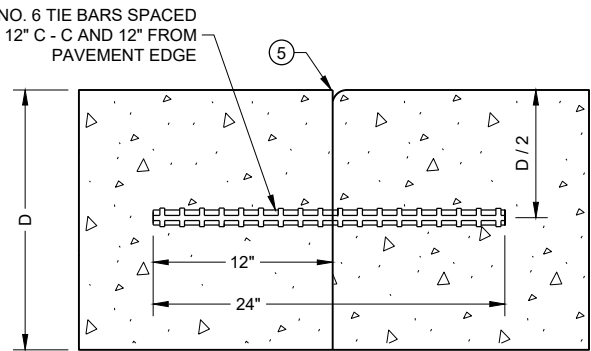
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

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 SDD 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" RADIUS.
- ⑥ ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

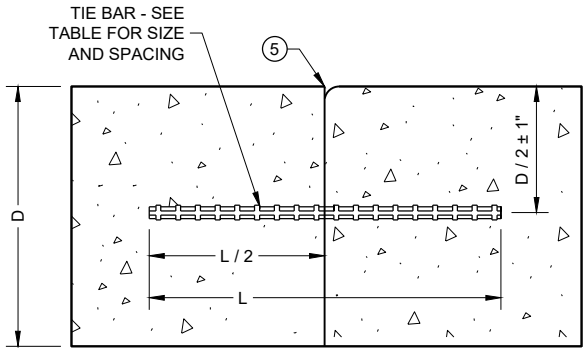


DOWELED TRANSVERSE ③

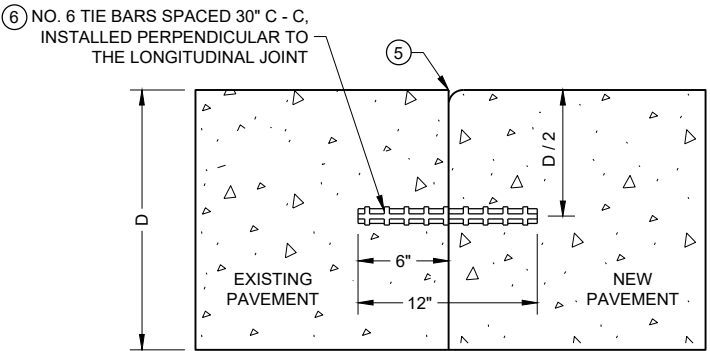


TIED TRANSVERSE ③
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)

CONSTRUCTION JOINTS ④



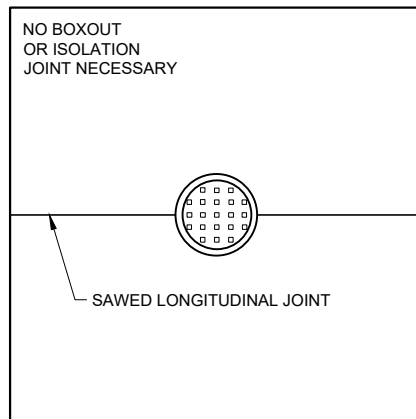
TIED LONGITUDINAL



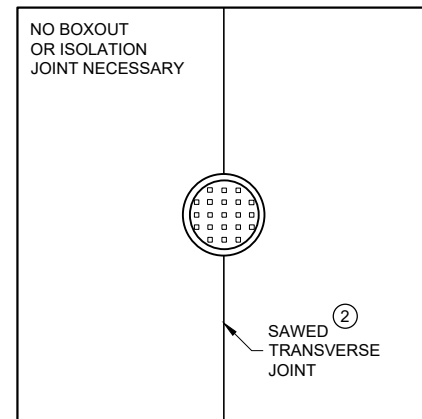
TIED LONGITUDINAL TO EXISTING

**CONCRETE PAVEMENT
JOINT TYPES**

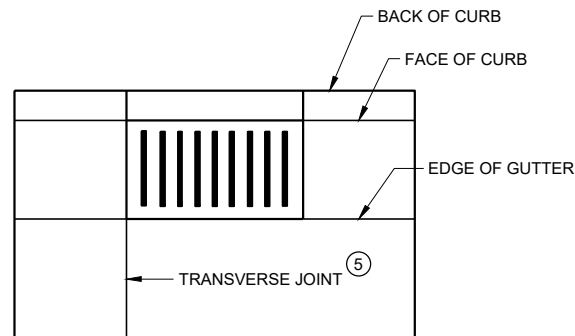
STATE OF WISCONSIN
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MANHOLE WITH
LONGITUDINAL JOINT



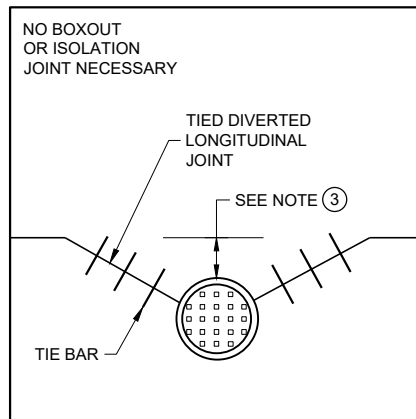
MANHOLE WITH
TRANSVERSE JOINT



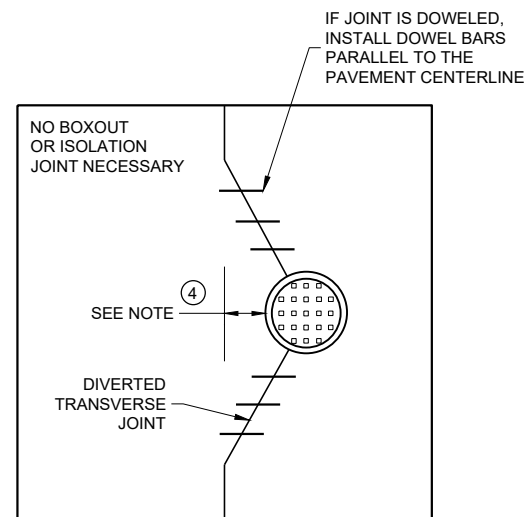
INLET WITH
TRANSVERSE JOINT

GENERAL NOTES

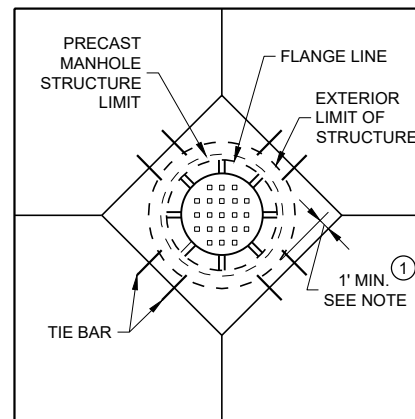
- ① USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
- ② ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
- ③ IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE 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 REINFORCEMENT REBAR AROUND THE MANHOLE.
- ④ IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 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 REINFORCEMENT REBAR AROUND THE MANHOLE.
- ⑤ ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED
LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED
TRANSVERSE CONTRACTION JOINT



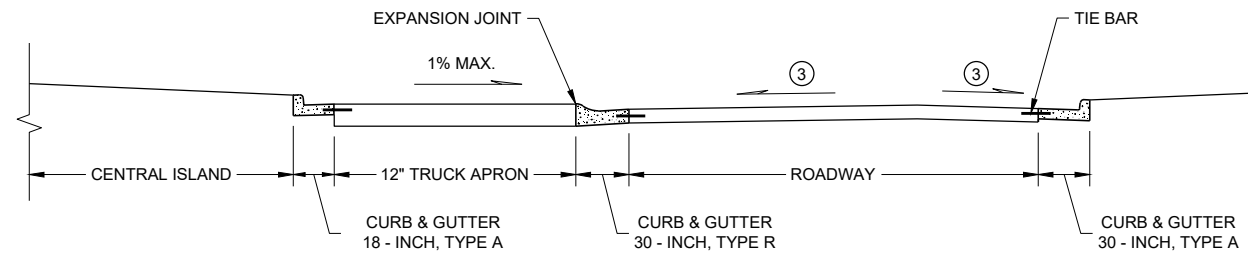
DIAGONAL MANHOLE BOXOUT
FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

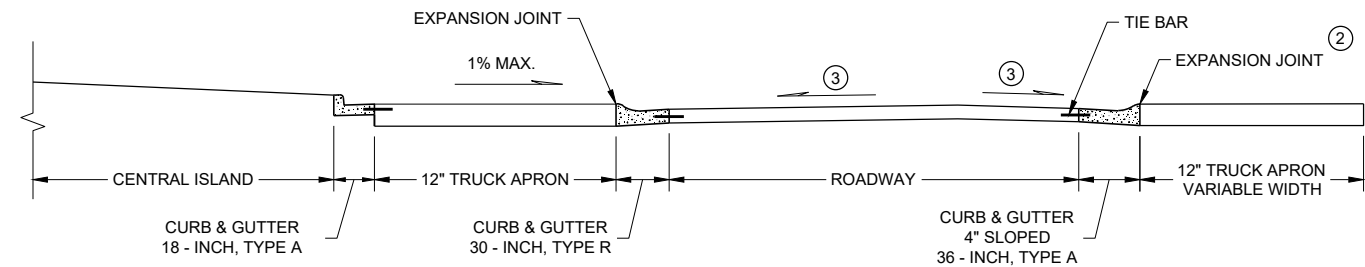
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May 2023 /S/ Peter Kemp P.E.
DATE PAVEMENT SUPERVISOR 153

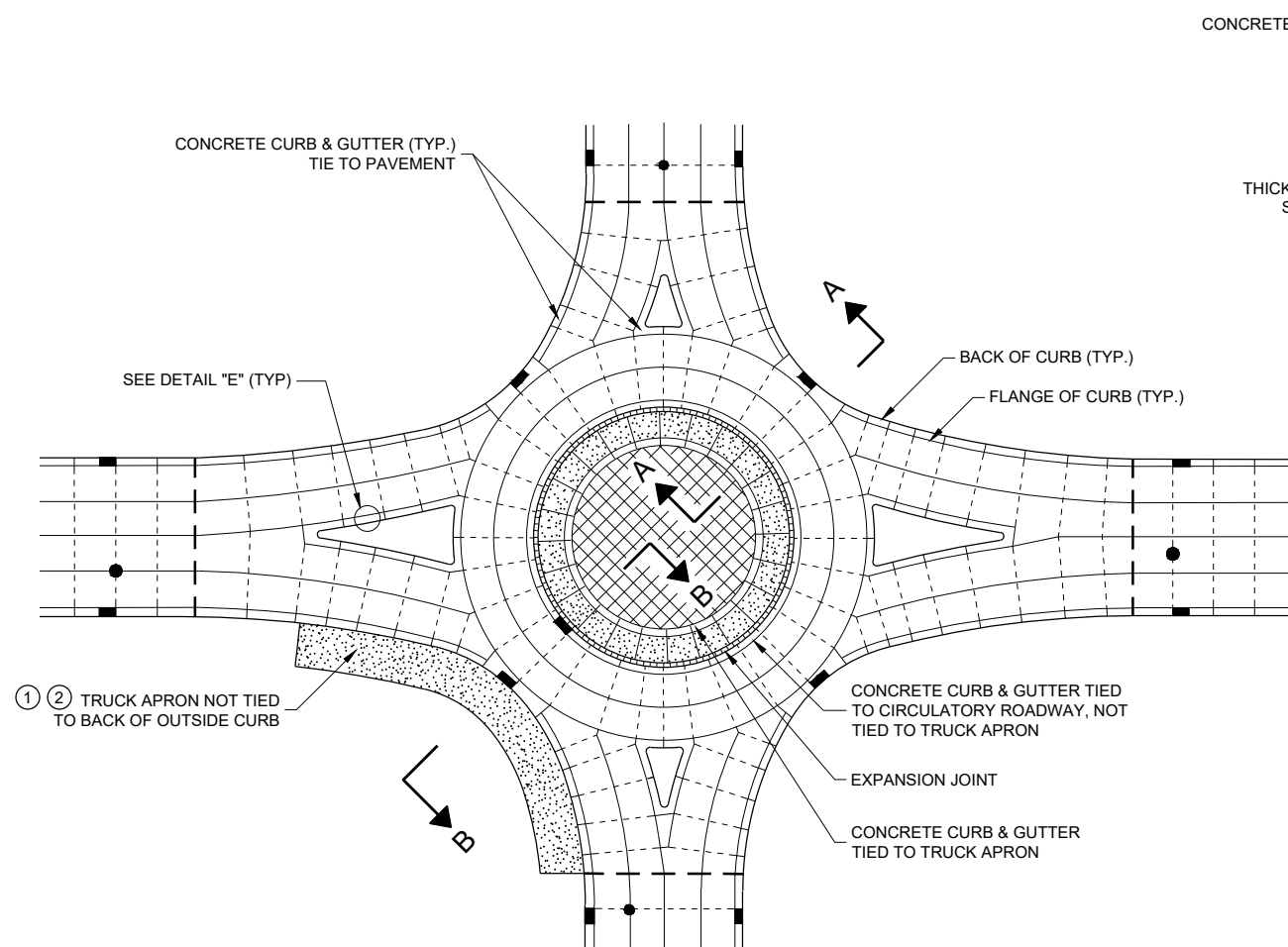
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SECTION A - A



SECTION B - B

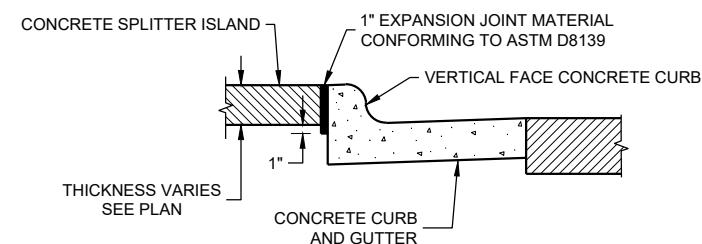


ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS

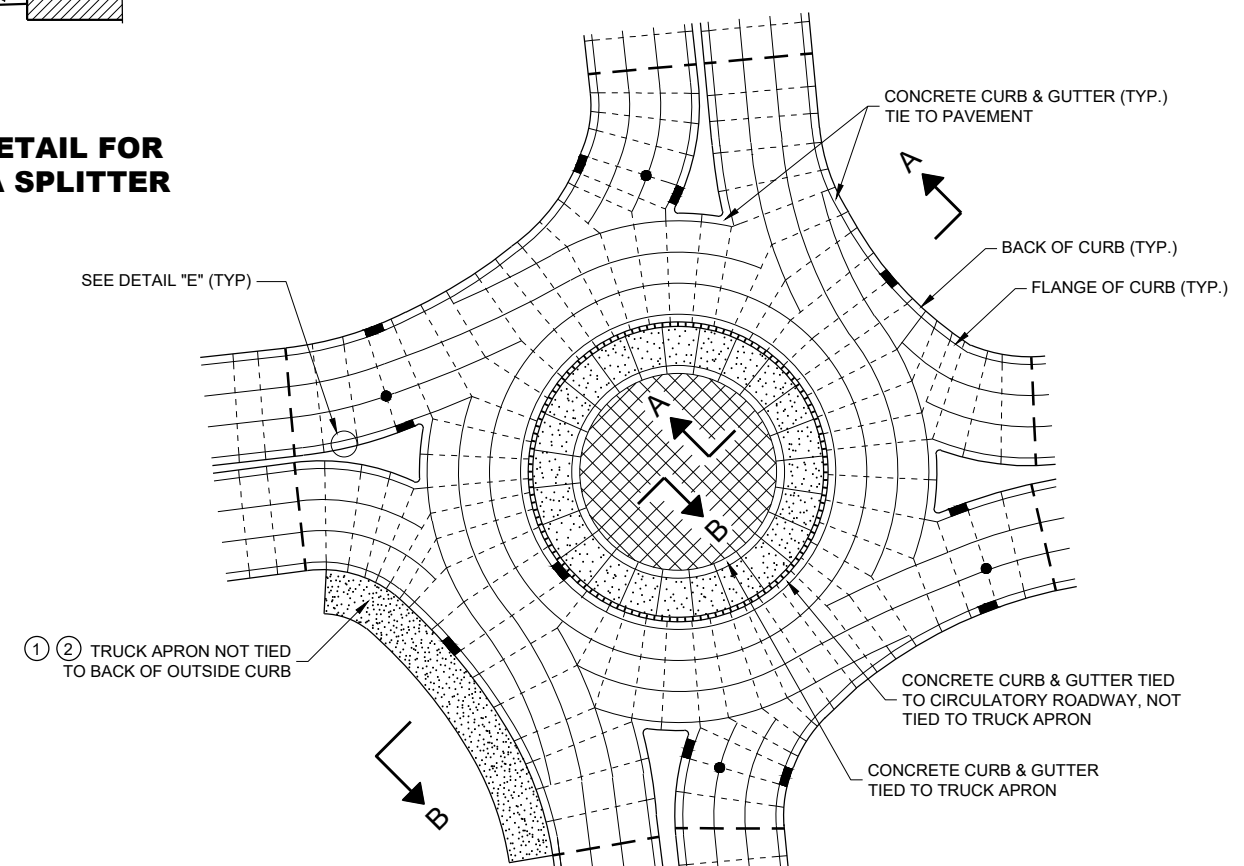
GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 - SHEET "a"
USE EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.
DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

- ① DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMMODATE TRACKING OF OVERSIZE / OVERWEIGHT VEHICLES.
- ② TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON IS LESS THAN 3 FEET.
- ③ CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.



DETAIL 'E'
EXPANSION JOINT DETAIL FOR
VERTICAL CURB AT A SPLITTER
ISLAND



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

LEGEND

-----	DOWELED JOINT		TRUCK APRON
————	TIED JOINT		CENTRAL ISLAND
=====	EXPANSION JOINT		UTILITY STRUCTURES
- - - -	POTENTIAL DOWELED EXPANSION JOINT		

CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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DATE PAVEMENT SUPERVISOR 154
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LEGEND

DOWELED JOINT

———

TIED JOINT

=====

EXPANSION JOINT

— — —

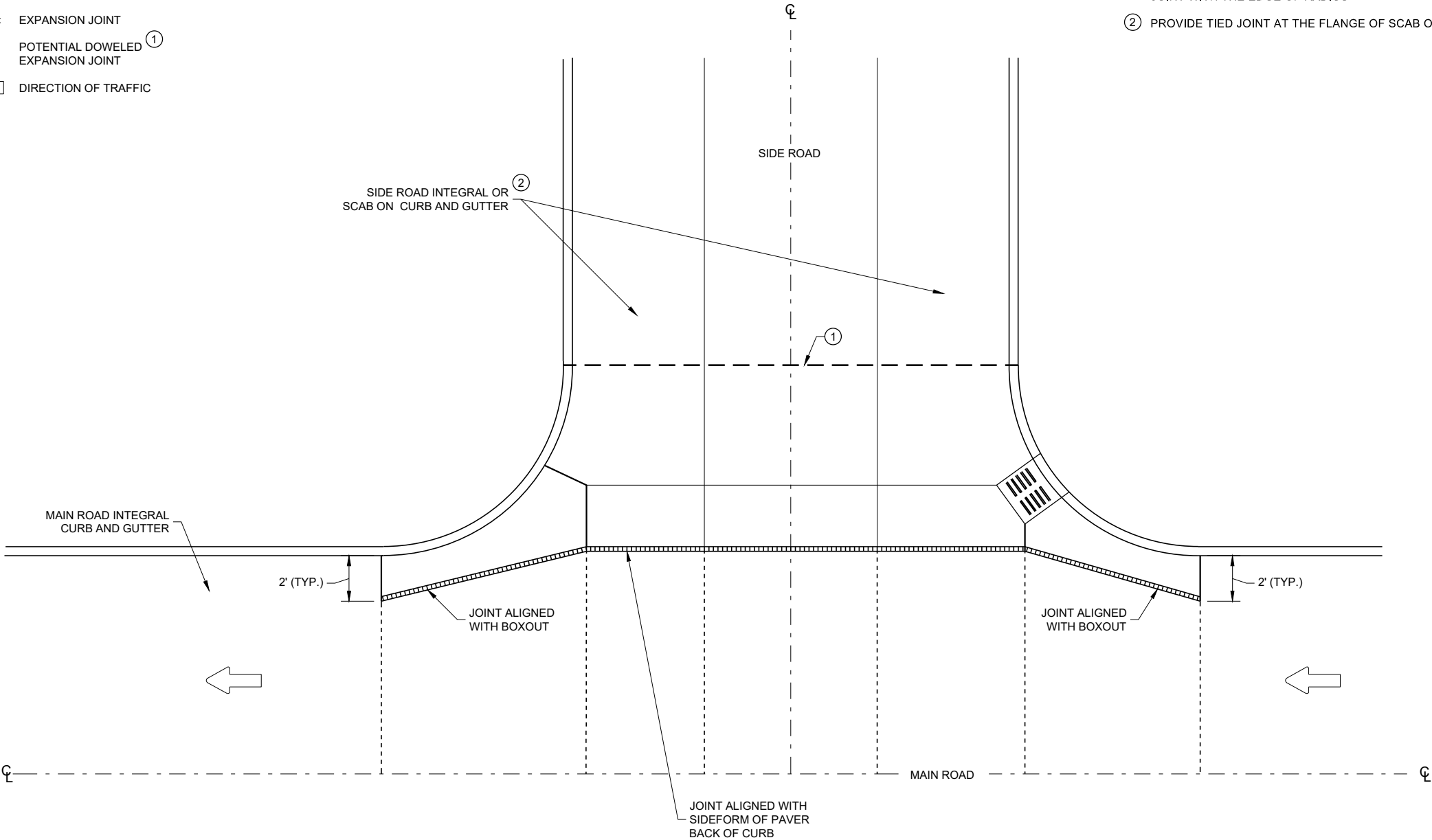
POTENTIAL DOWELED
EXPANSION JOINT ①

←

DIRECTION OF TRAFFIC

GENERAL NOTES

- ① 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 THE EDGE OF RADIUS.
- ② PROVIDE TIED JOINT AT THE FLANGE OF SCAB ON CURB IF SCAB ON CURB AND GUTTER IS USE.

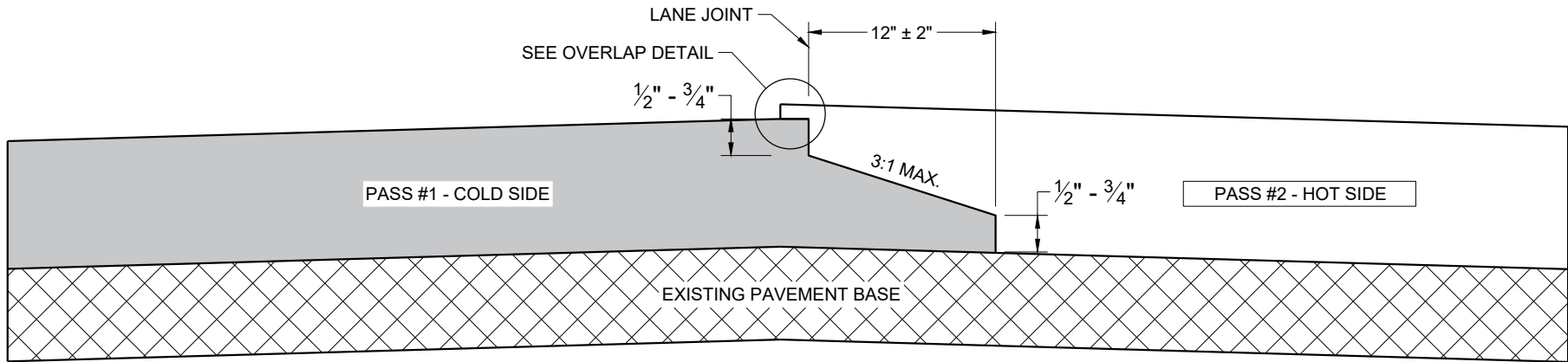


INTERSECTION BOXOUT FOR INTEGRAL CURB AND GUTTER

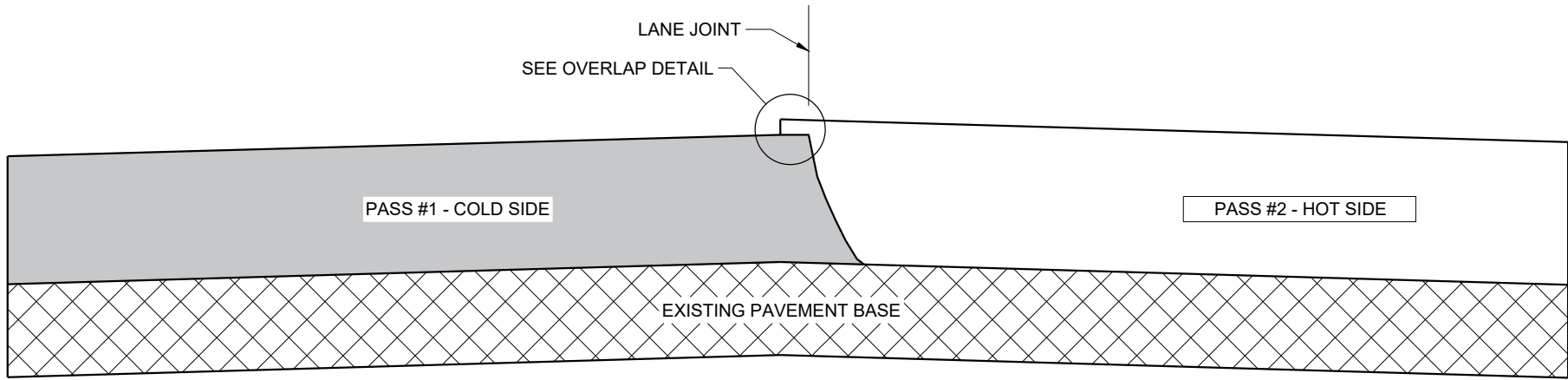
CONCRETE PAVEMENT
INTERSECTION BOXOUT FOR
INTEGRAL CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

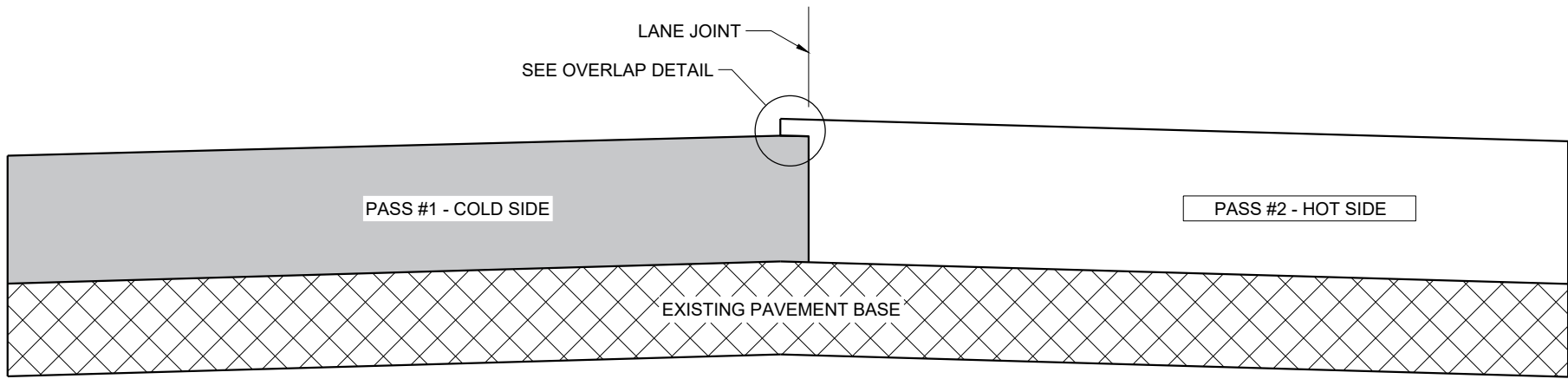
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DATE PAVEMENT SUPERVISOR 155
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TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

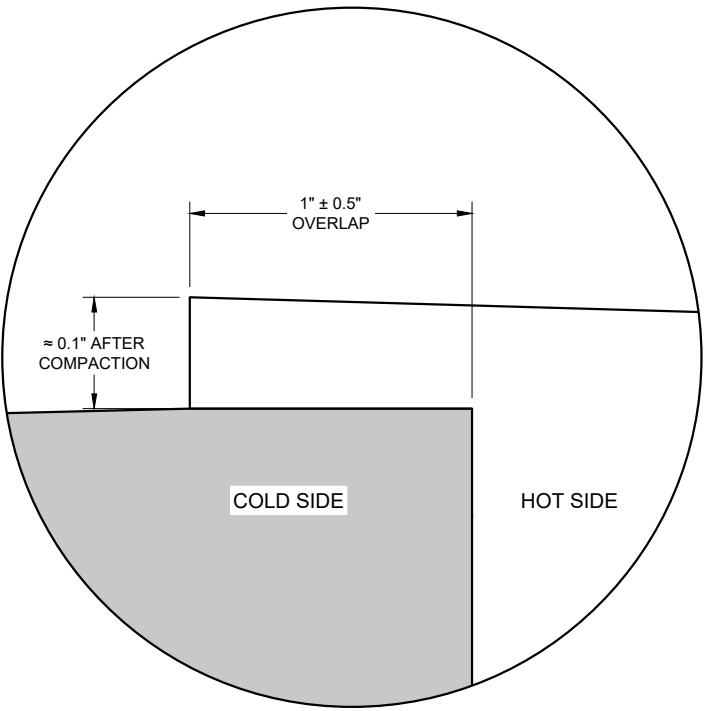
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



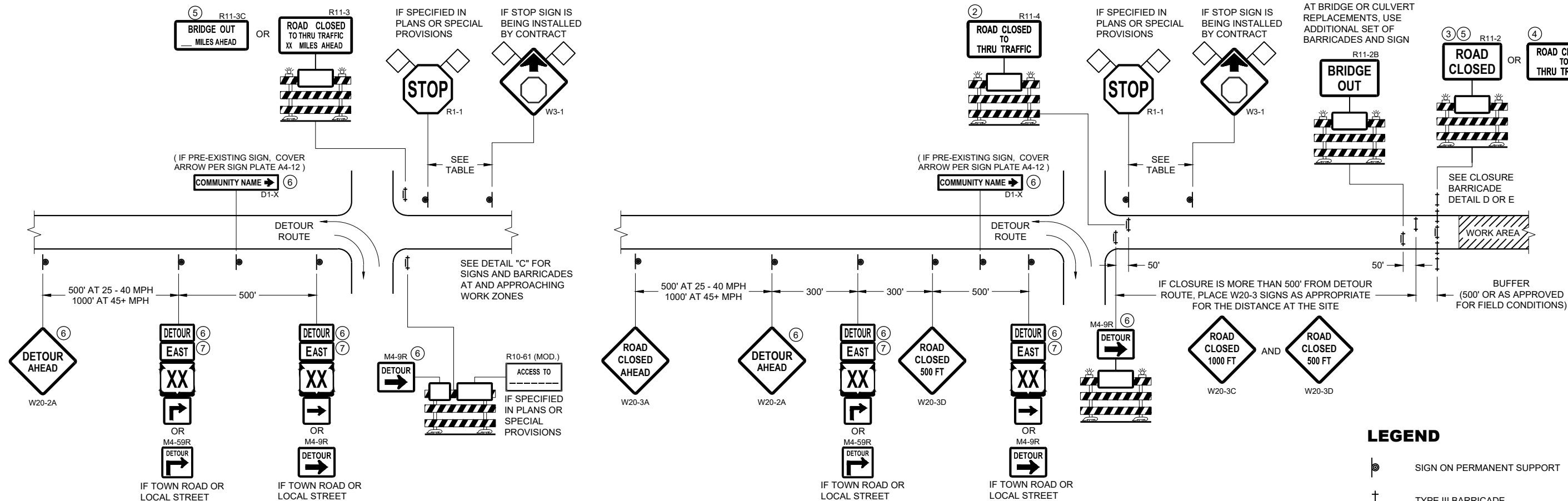
OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

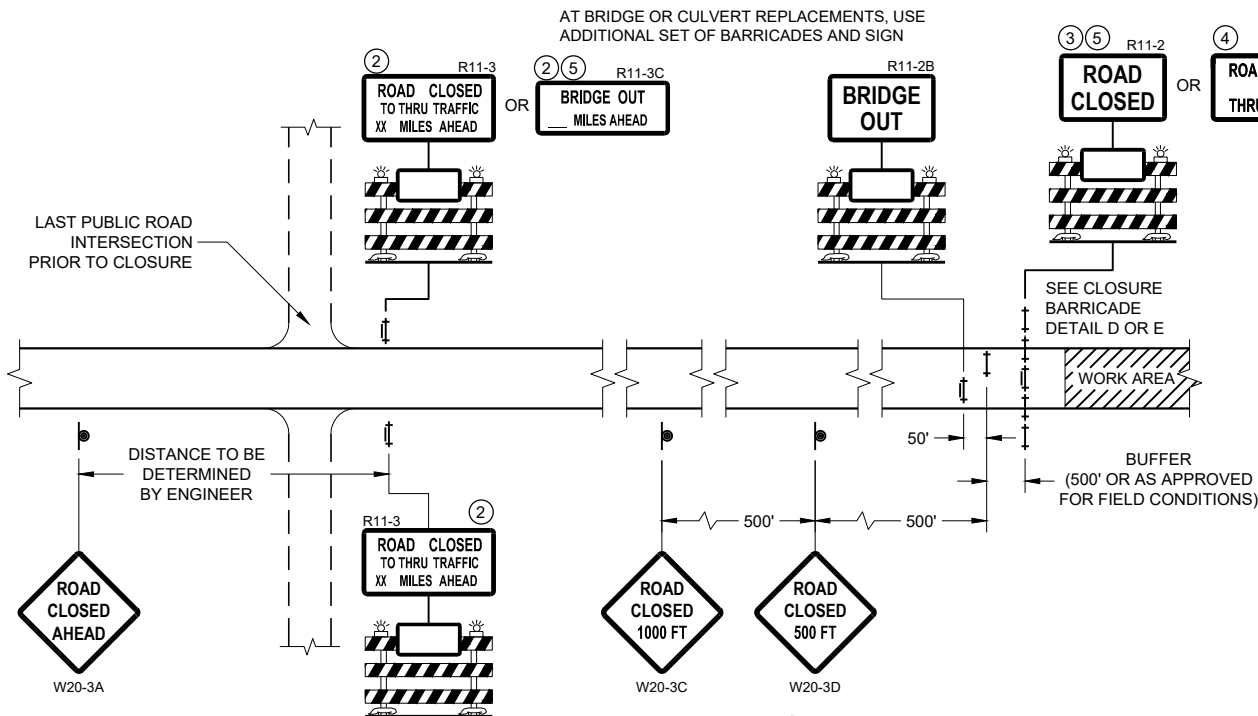
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN 156

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DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)

DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

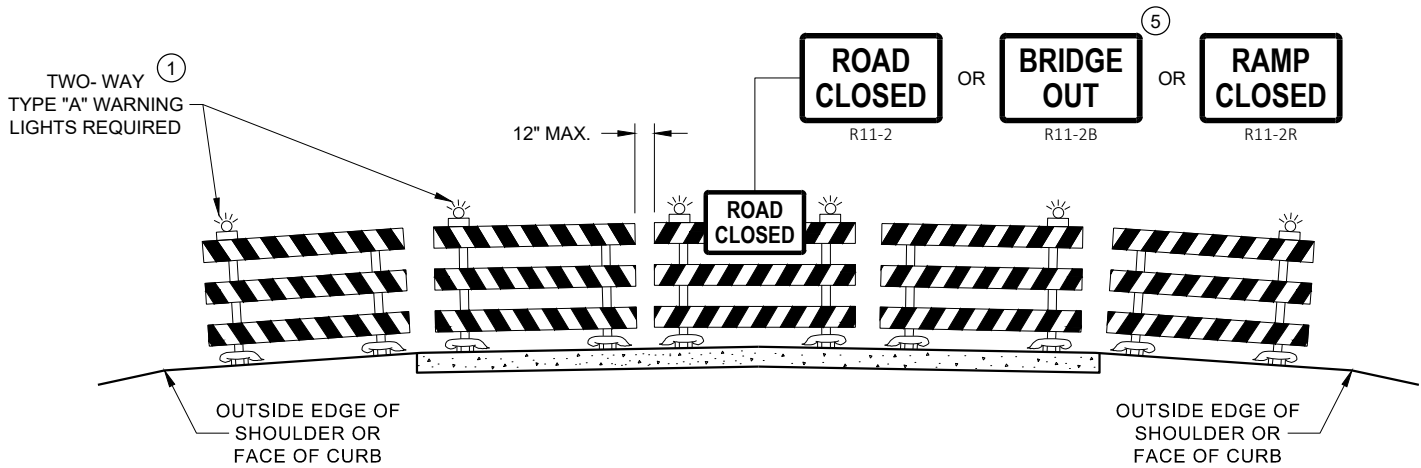
LEGEND

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

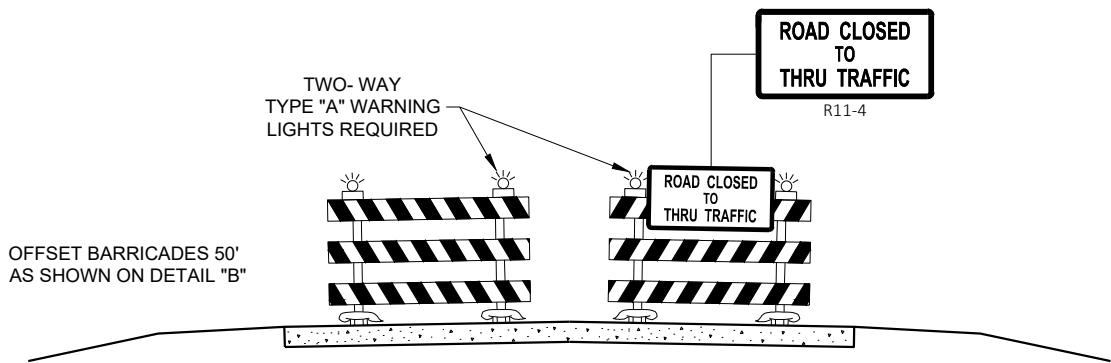
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 157
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DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

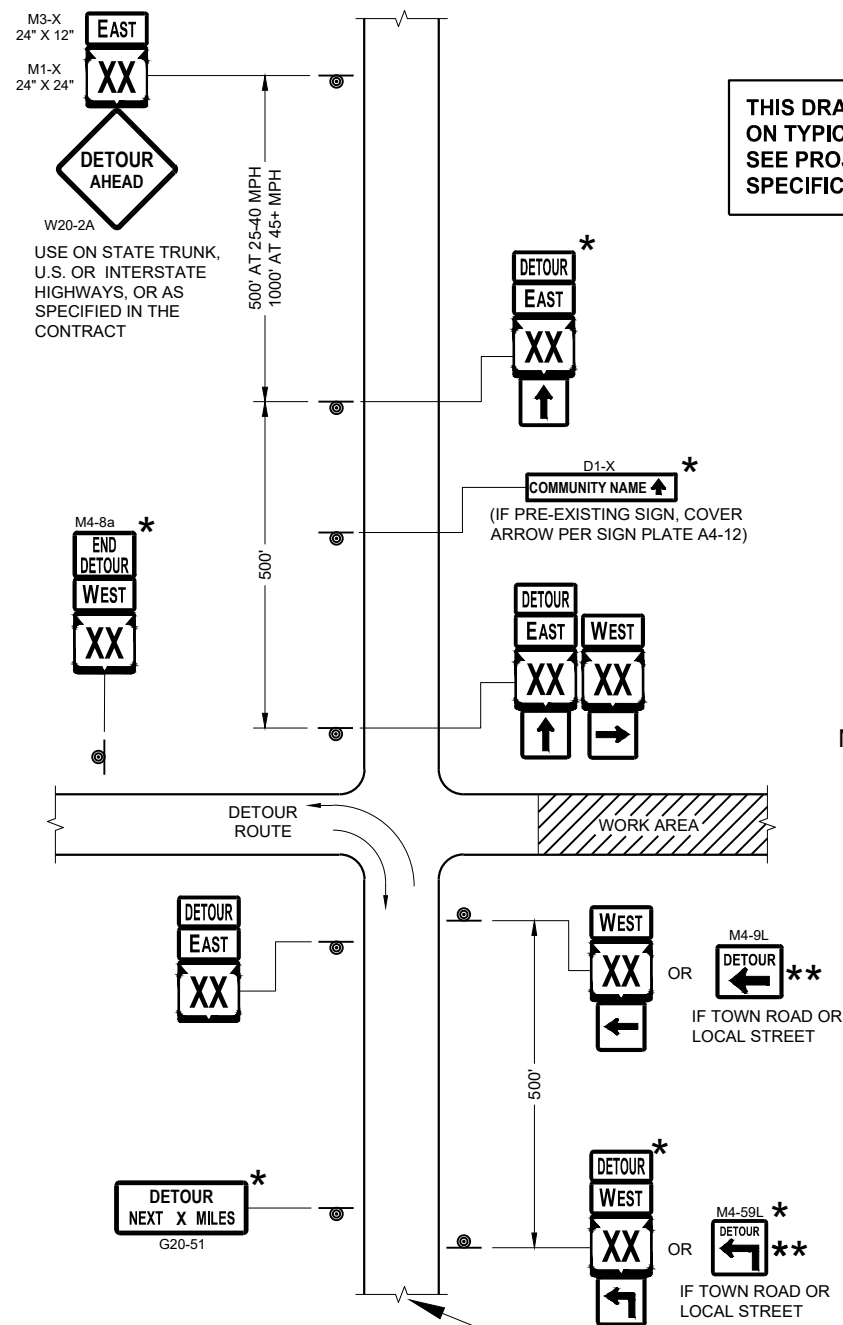
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS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

BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 158

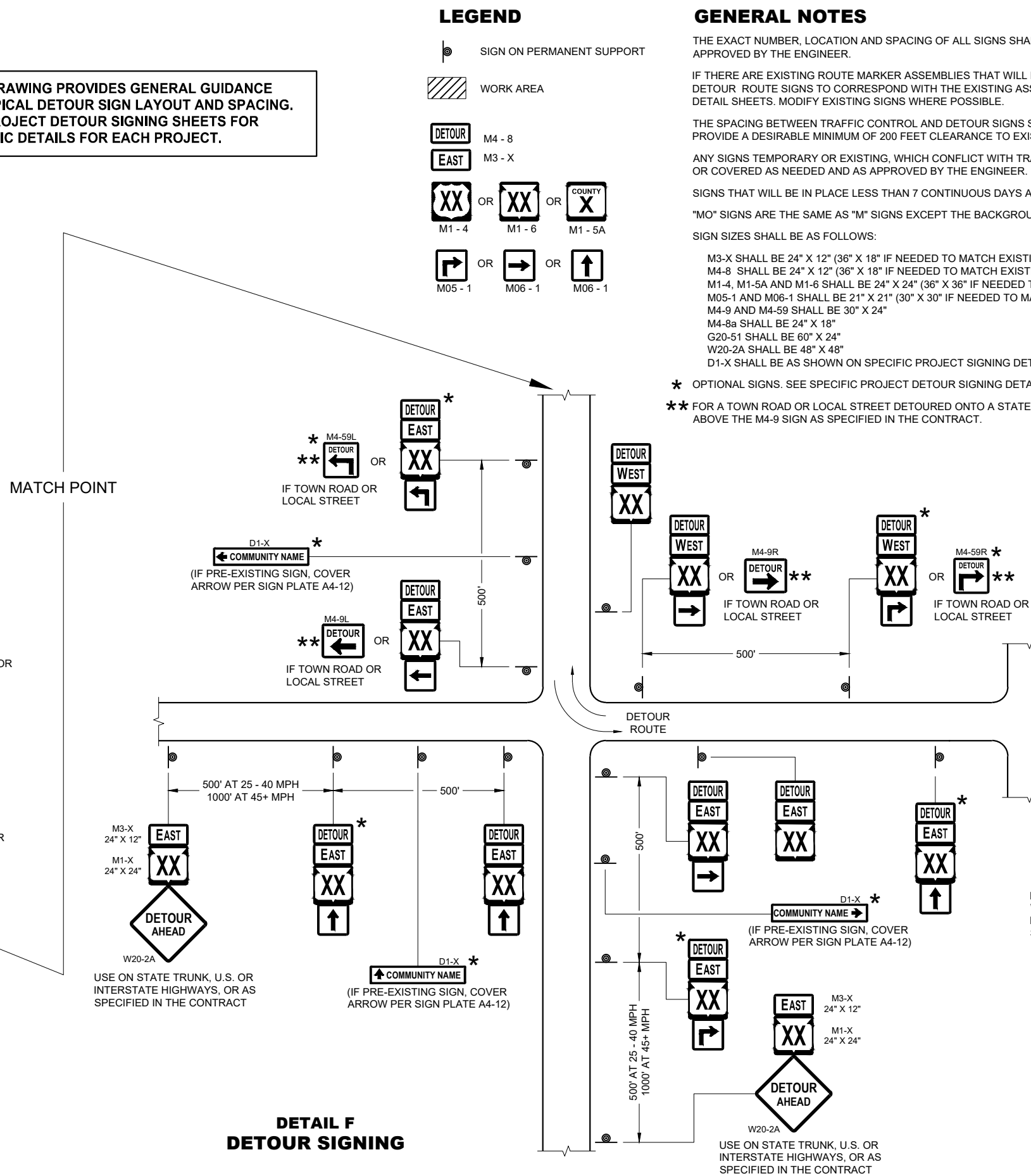
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**THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.**

SEE SPECIFIC PROJECT DETOUR
SIGNING DETAIL SHEETS AND
DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

SDD 15C02 - 09c



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" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
M4-9 AND M4-59 SHALL BE 30" X 24"
M4-8a SHALL BE 24" X 18"
G20-51 SHALL BE 60" X 24"
W20-2A SHALL BE 48" X 48"
D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

**** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.**

PLACE SIGNS BEYOND INTERSECTIONS
WITH STATE OR COUNTY TRUNK
HIGHWAYS OR AT 4 MILE MAXIMUM
SPACING (4 BLOCKS IF URBAN AREA)

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

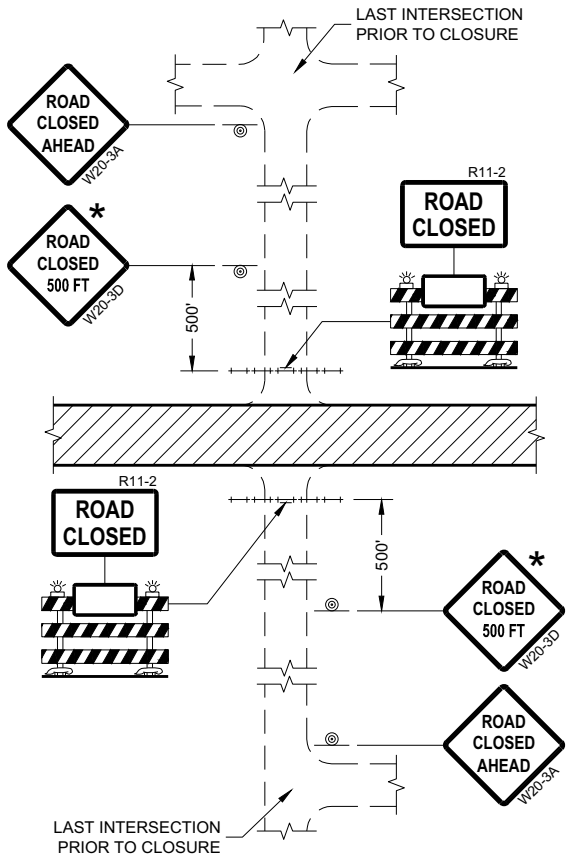
APPROVED
May 2023
 DATE

/S/ Andrew Heidtke
 WORK ZONE ENGINEER

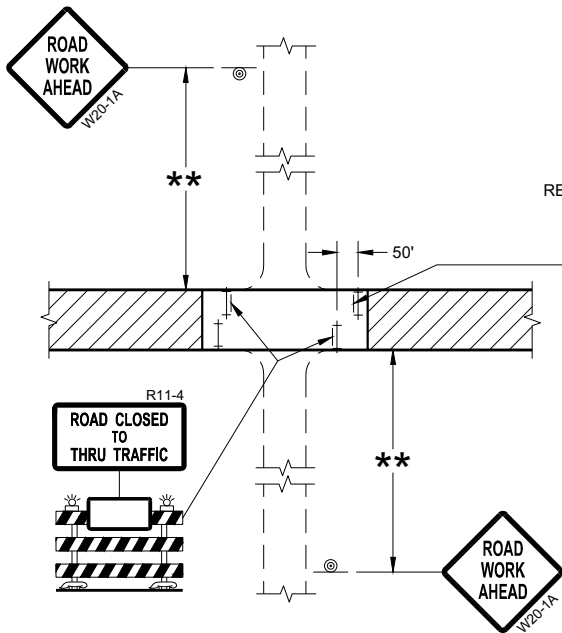
159

FHWA

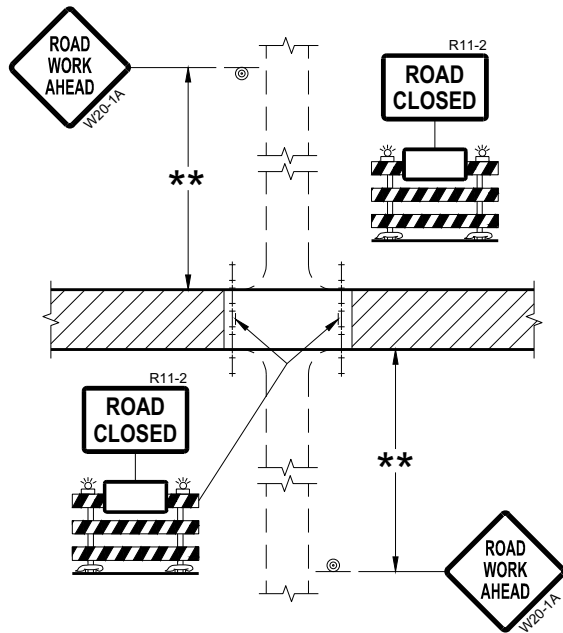
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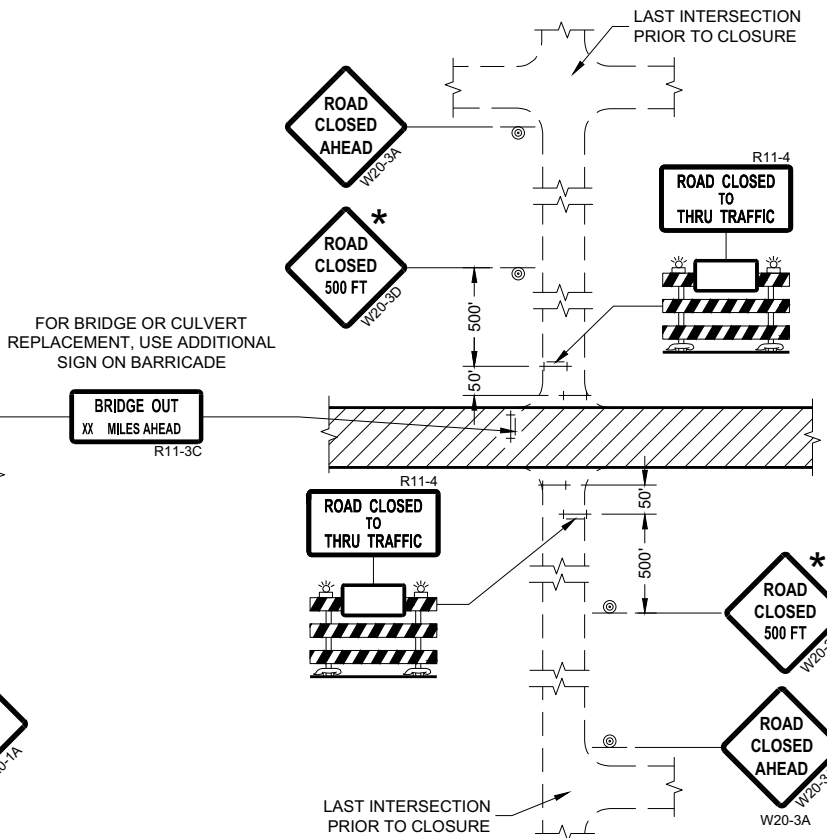
DETAIL 1
(NO ACCESS TO PROJECT)



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



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 (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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

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

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

- * OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- ** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

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July 2018 /S/ Andrew Heidtke
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GENERAL NOTES

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

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

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

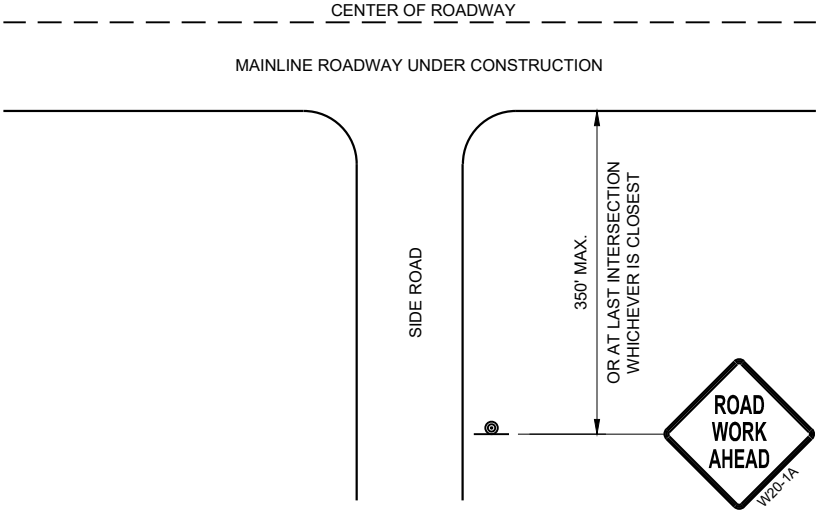
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

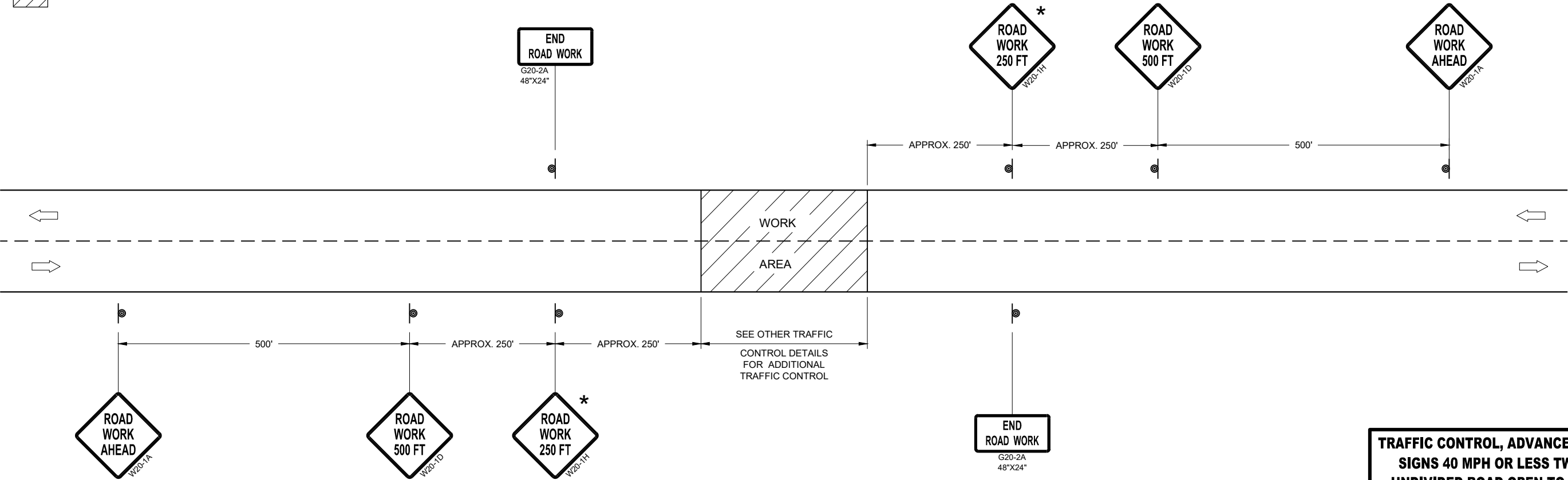
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



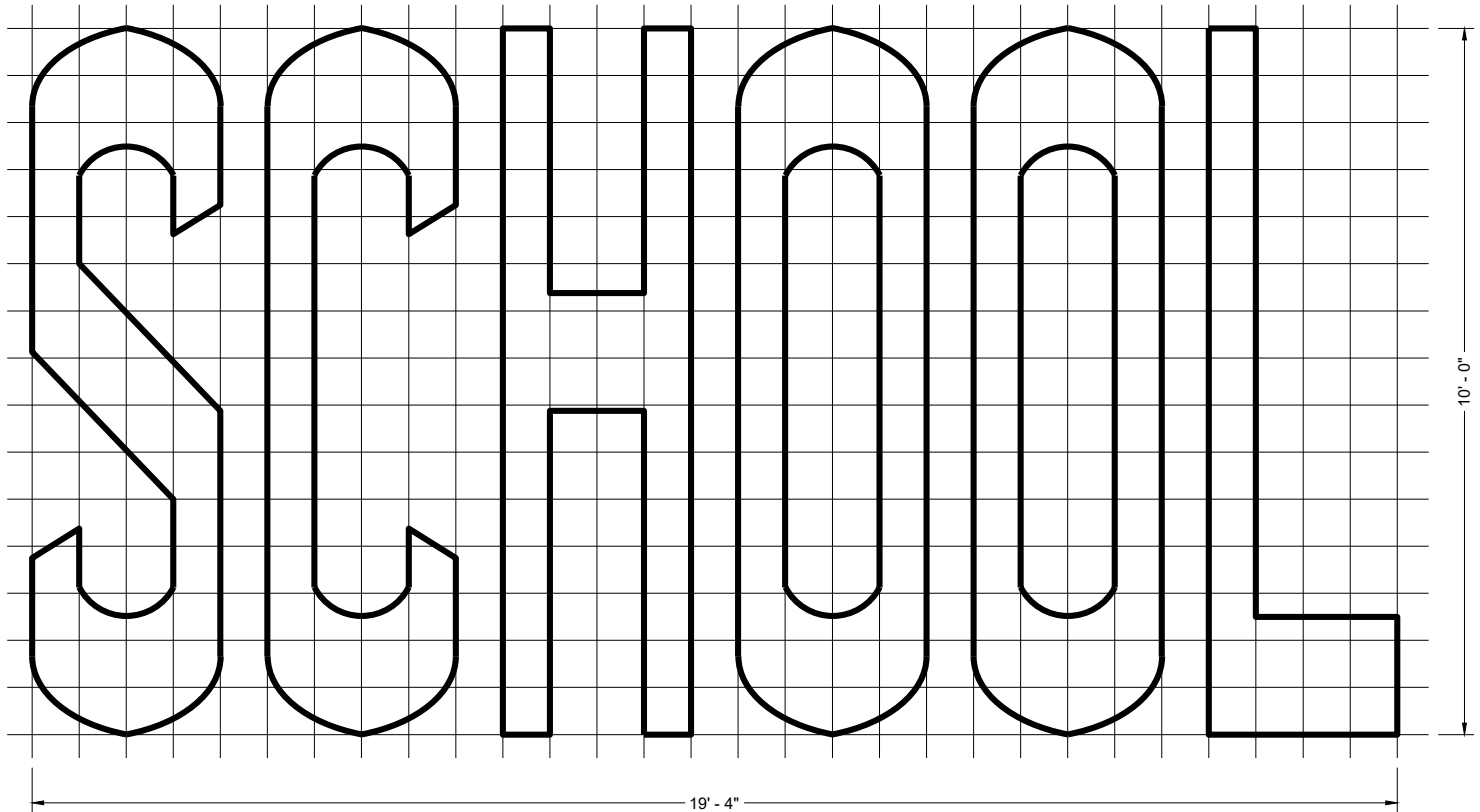
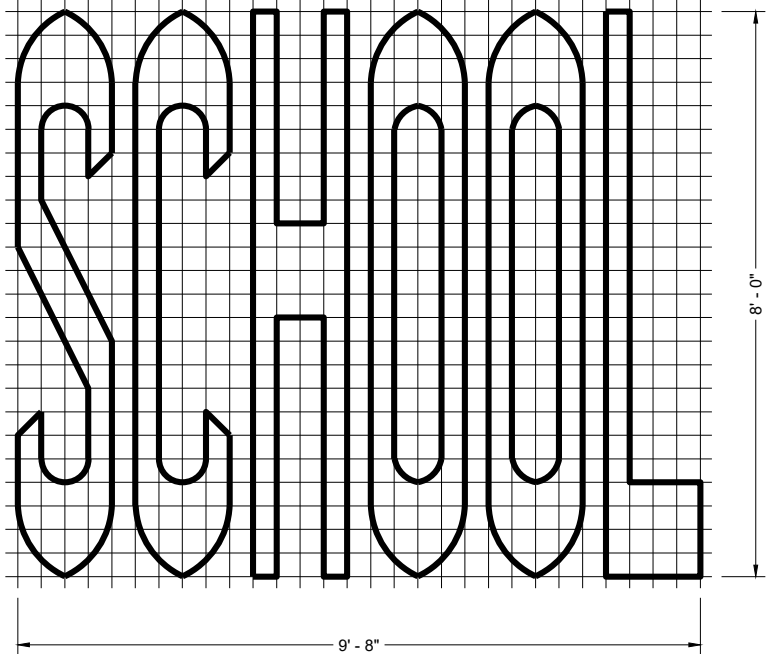
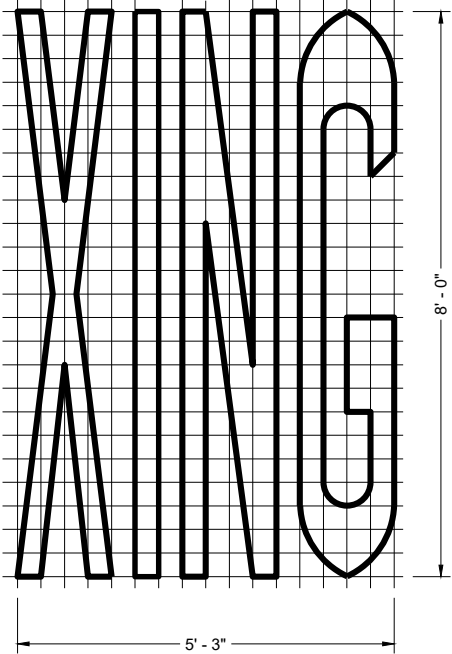
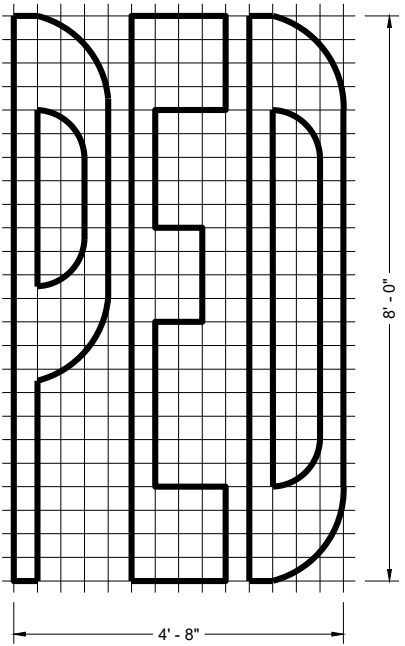
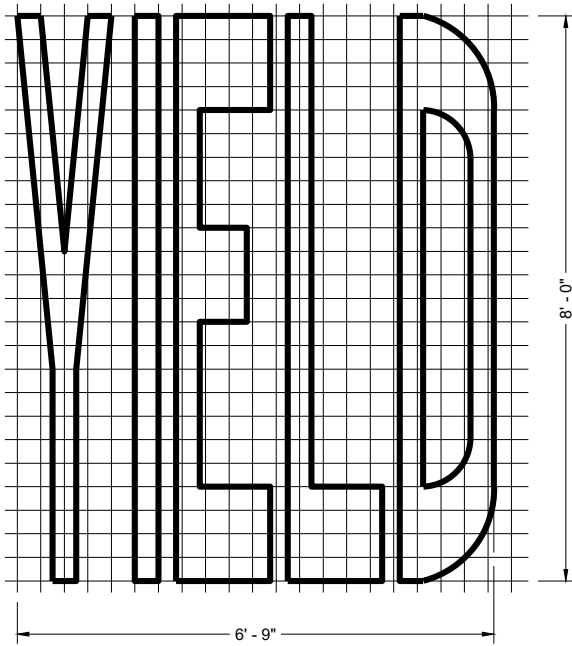
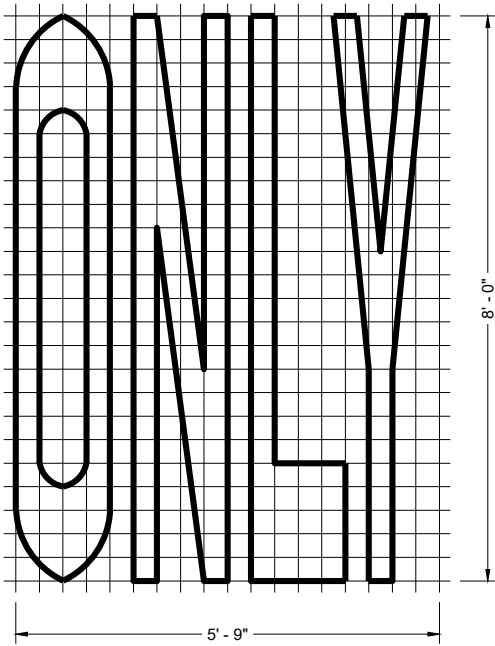
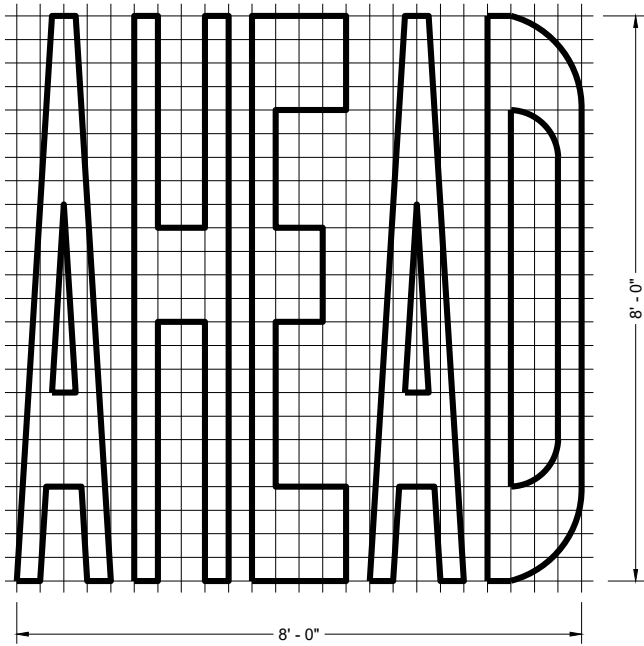
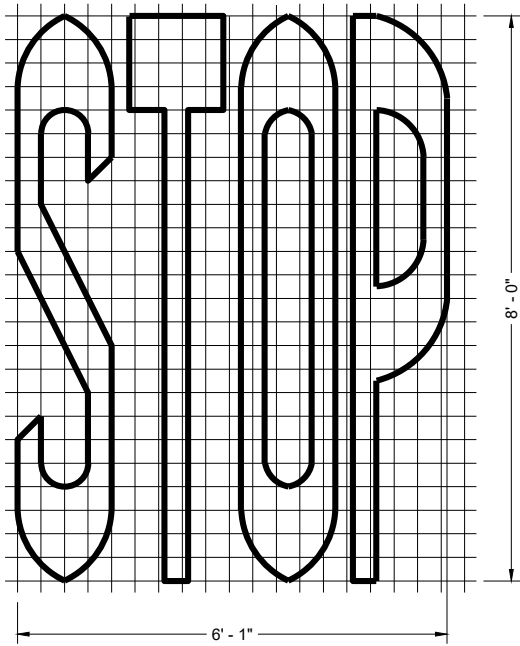
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 161

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SINGLE LANE

TWO - LANE

GENERAL NOTES

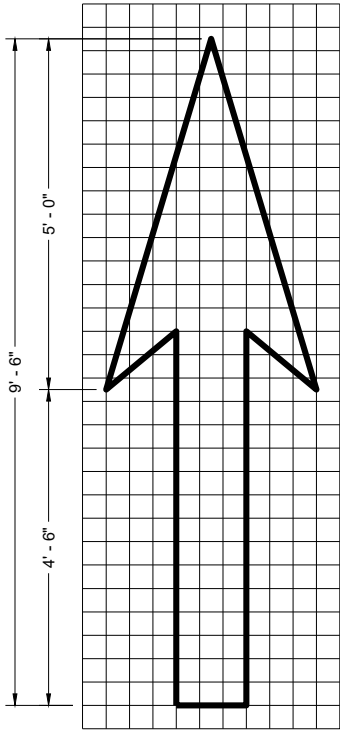
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING WORDS

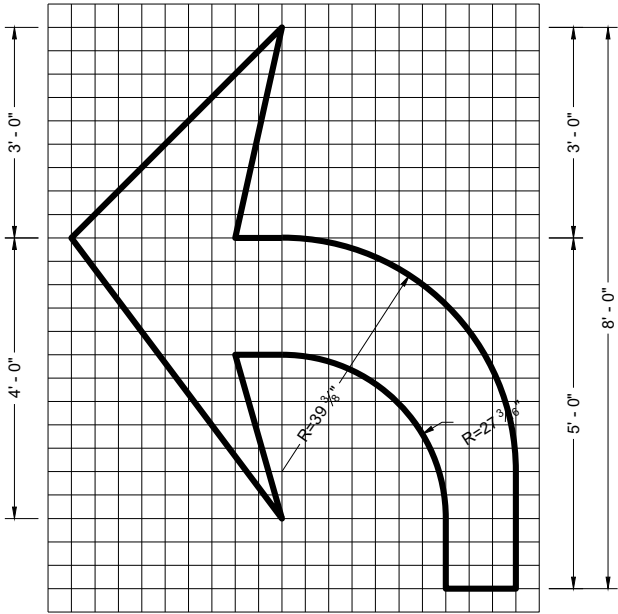
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DEPARTMENT OF TRANSPORTATION

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November 2024 /S/ Jeannie Silver
DATE STATE SIGNING AND MARKING ENGINEER

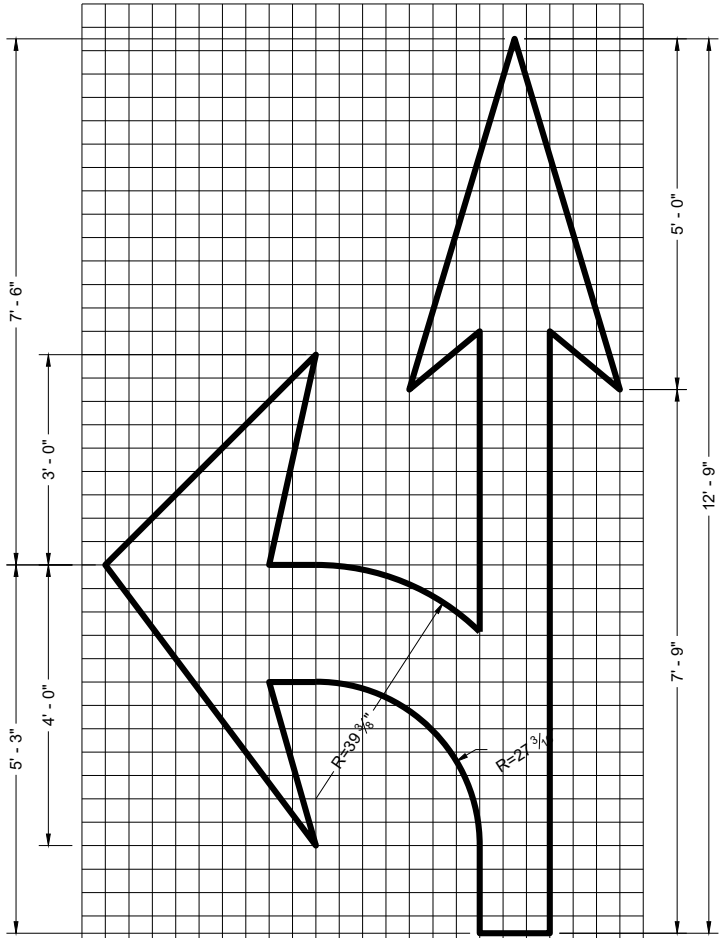
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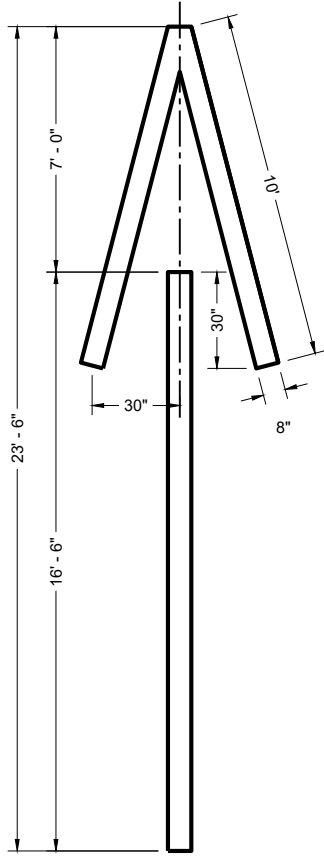
TYPE 1



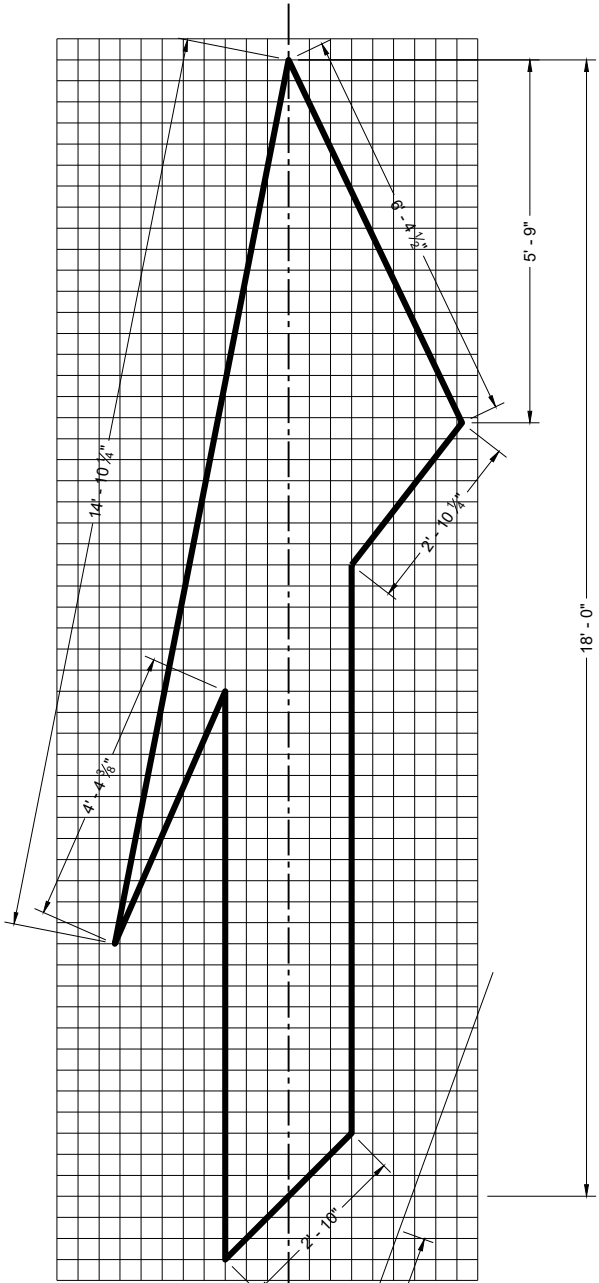
TYPE 2



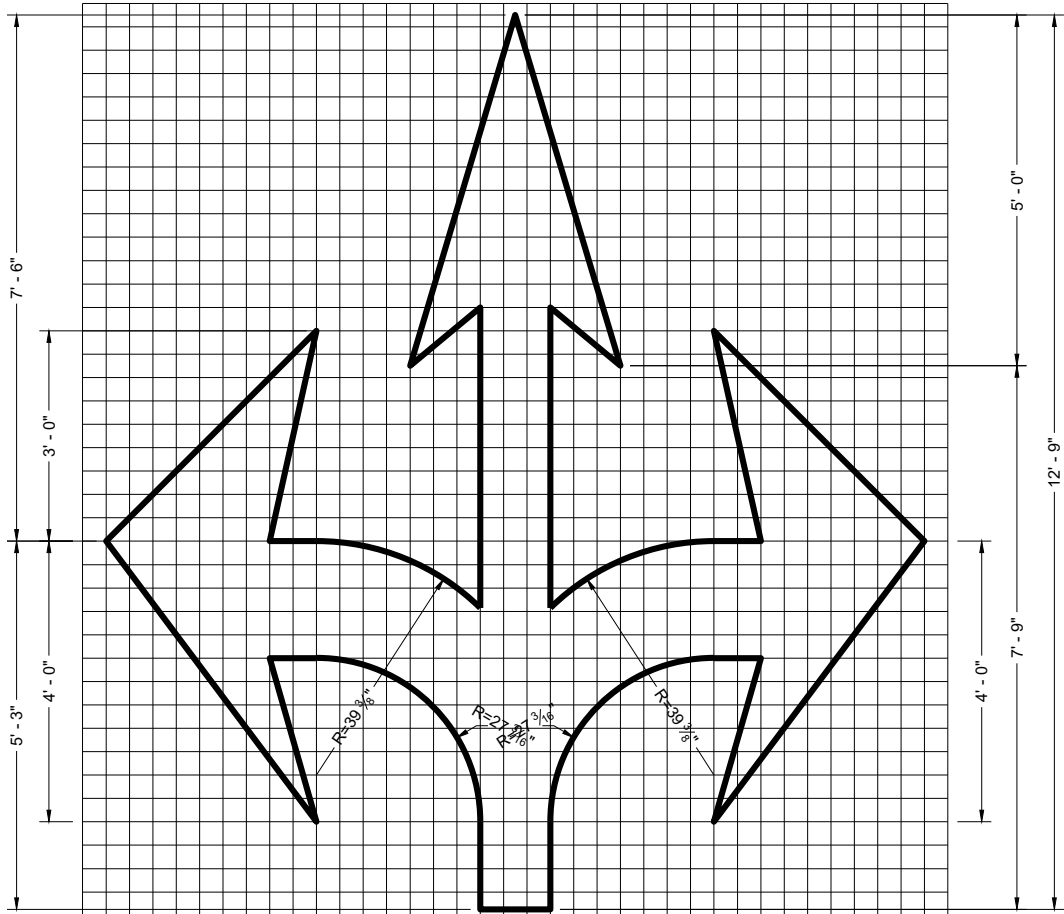
TYPE 3



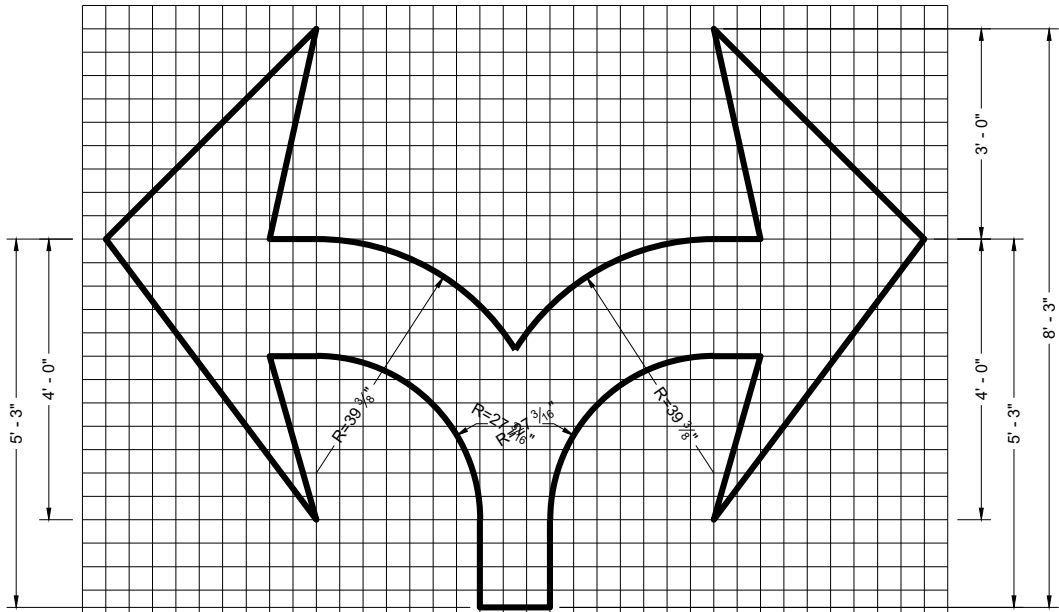
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

GENERAL NOTES

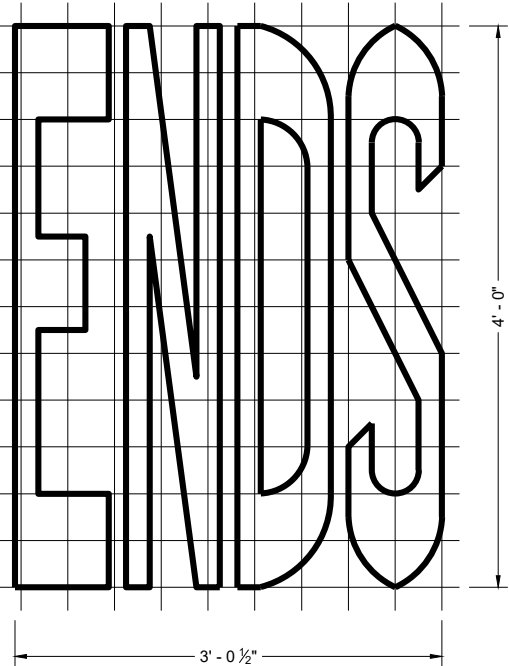
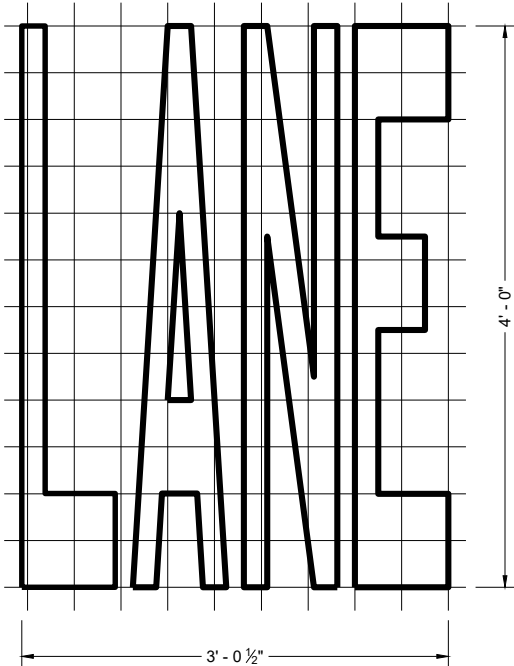
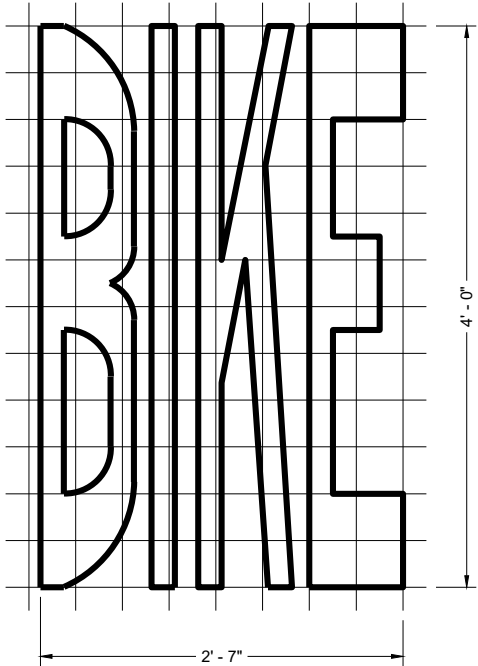
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

PAVEMENT MARKING ARROWS

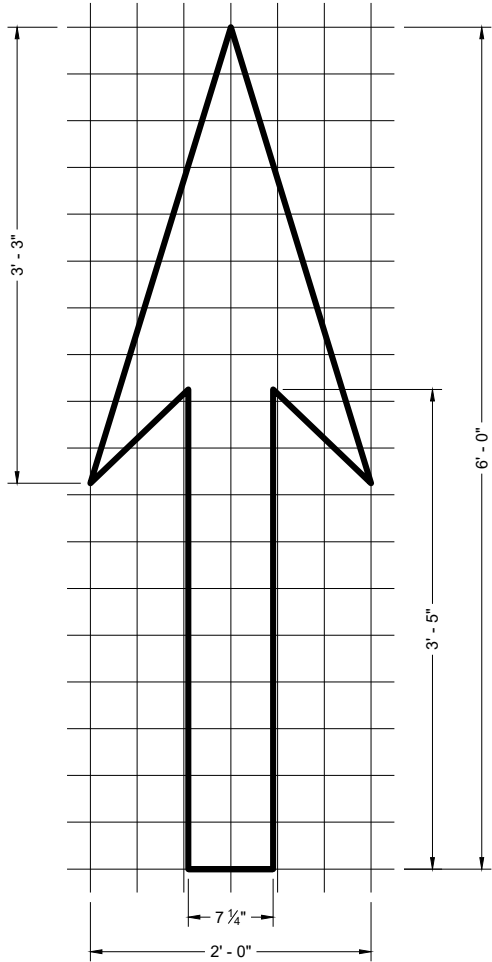
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2024 /S/ Jeannie Silver
DATE STATE SIGNING AND MARKING ENGINEER

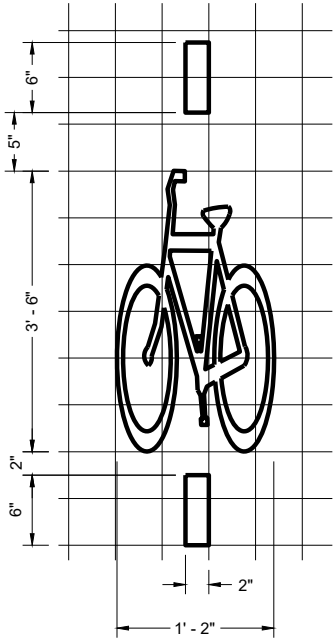
FHWA



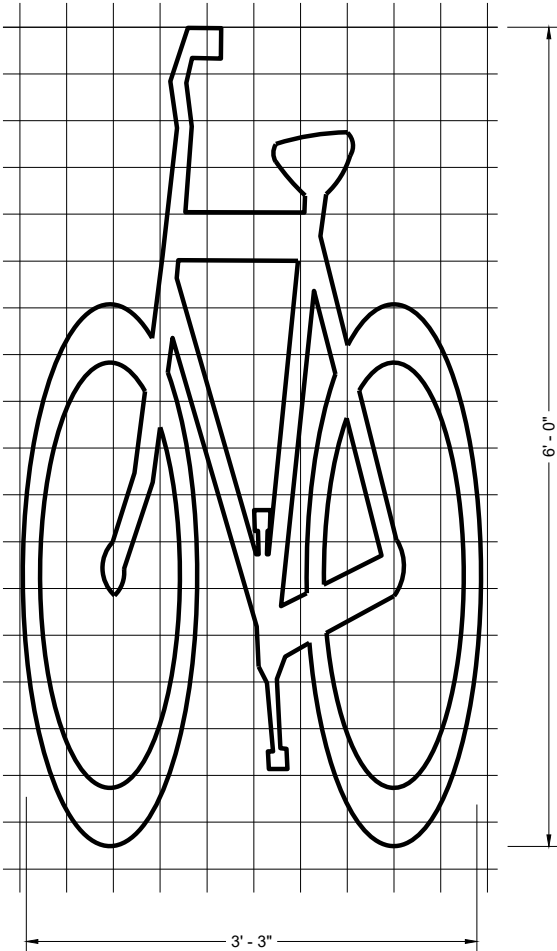
BIKE LANE WORDS



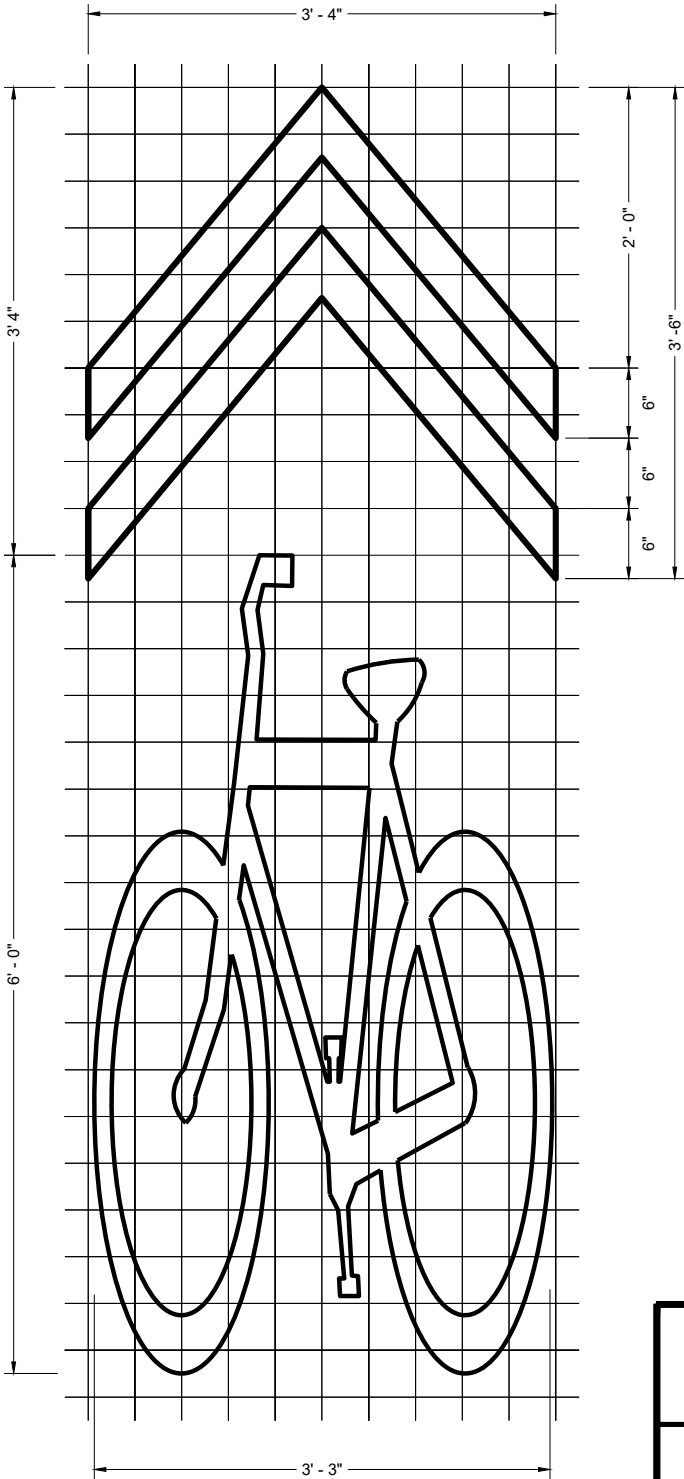
BIKE LANE ARROW



BICYCLE DETECTOR PAVEMENT MARKING



BIKE LANE SYMBOL

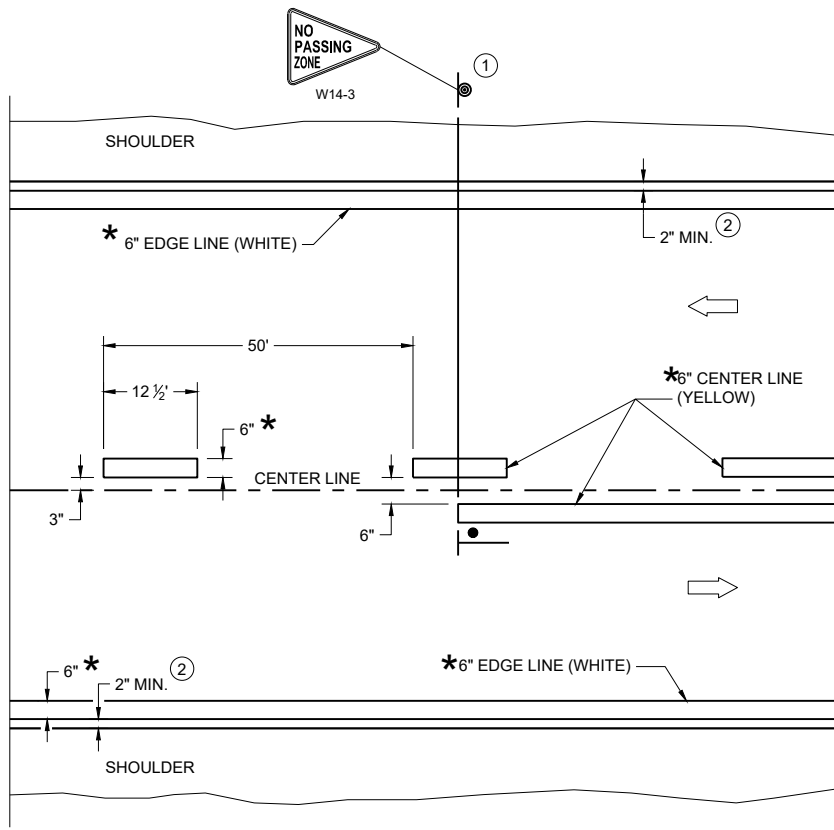


BIKE LANE SYMBOL FOR SHARED LANE

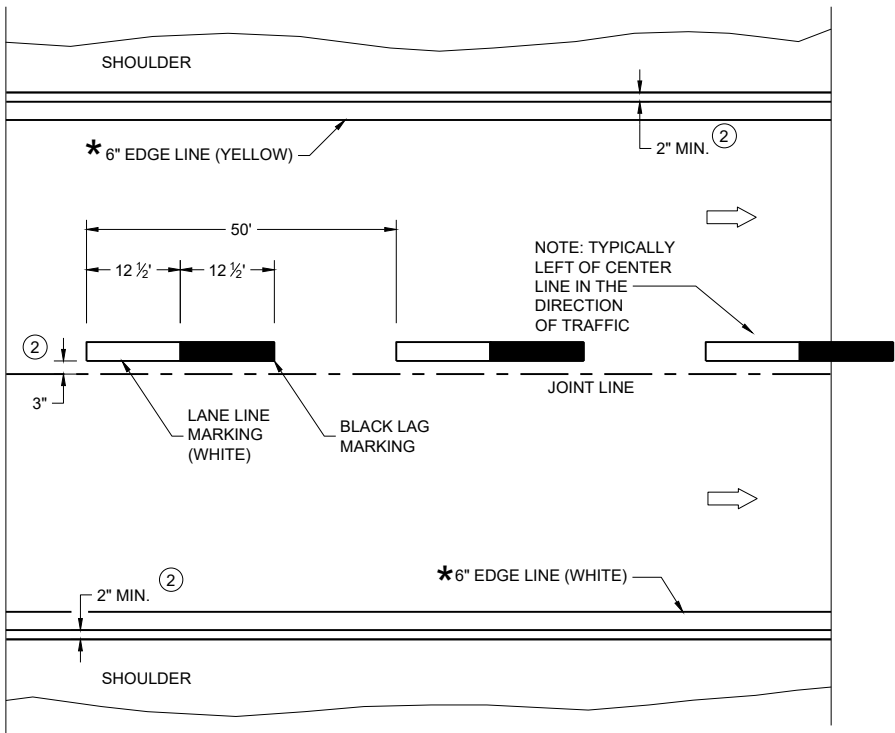
GENERAL NOTES

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

PAVEMENT MARKING FOR BIKE LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2024 DATE	/S/ Jeannie Silver STATE SIGNING AND MARKING ENGINEER
FHWA 164	



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

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

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

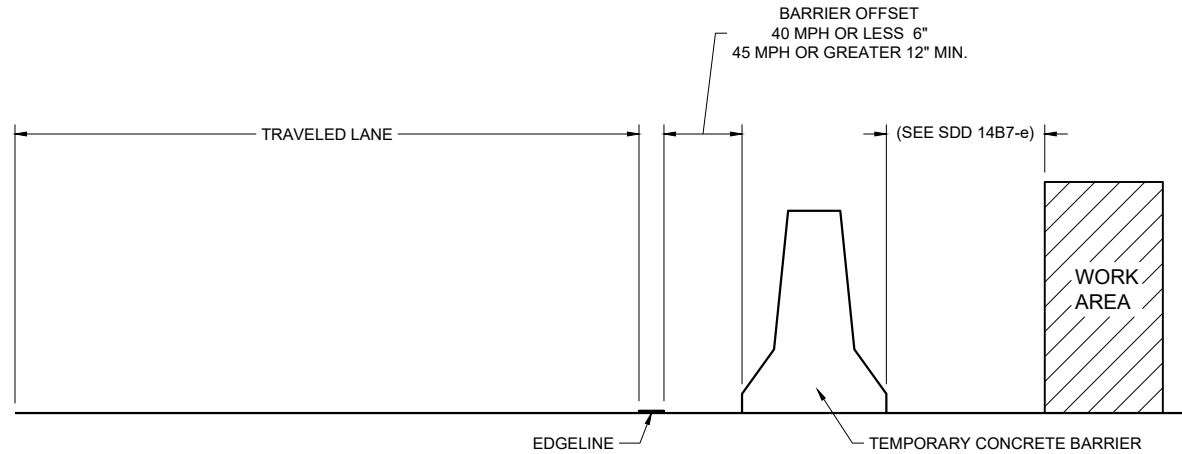
LEGEND

- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2024 /S/ Jeannie Silver
DATE Statewide Pavement Marking Engineer



TEMPORARY BARRIER OFFSET FROM EDGE LINE

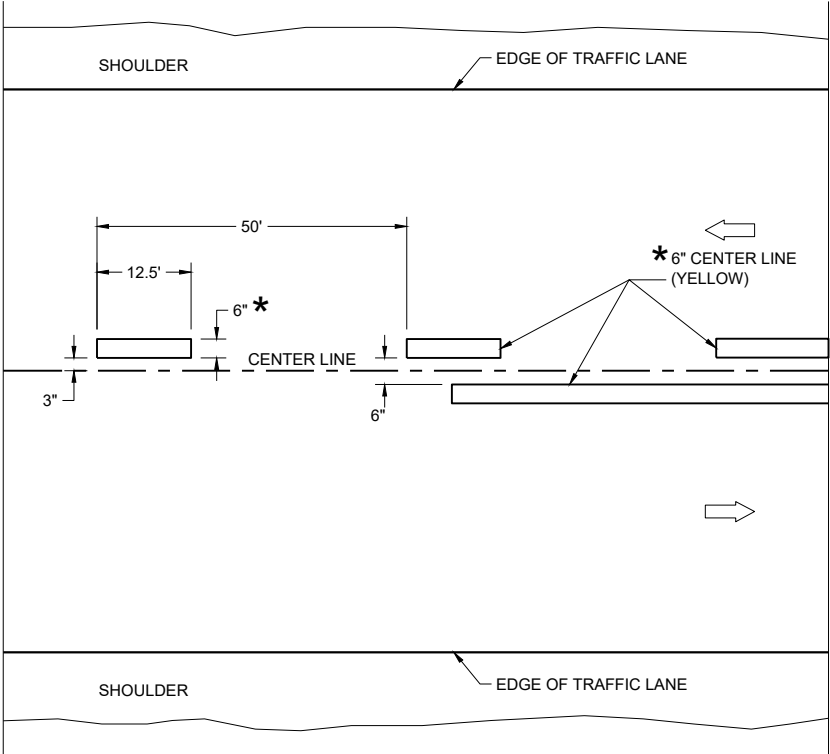
GENERAL NOTES

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

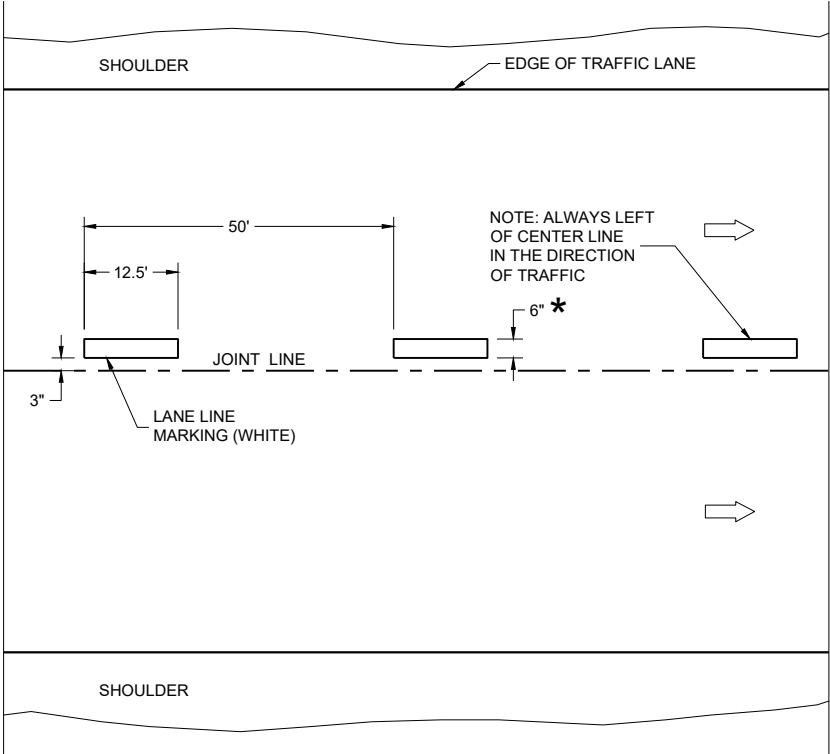
LEGEND

➡ DIRECTION OF TRAFFIC

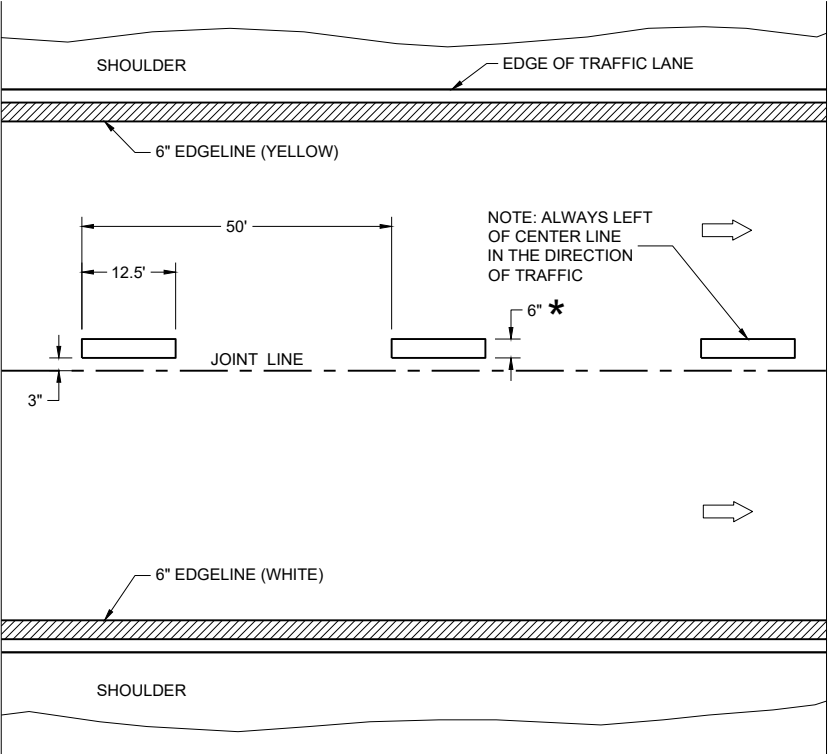
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



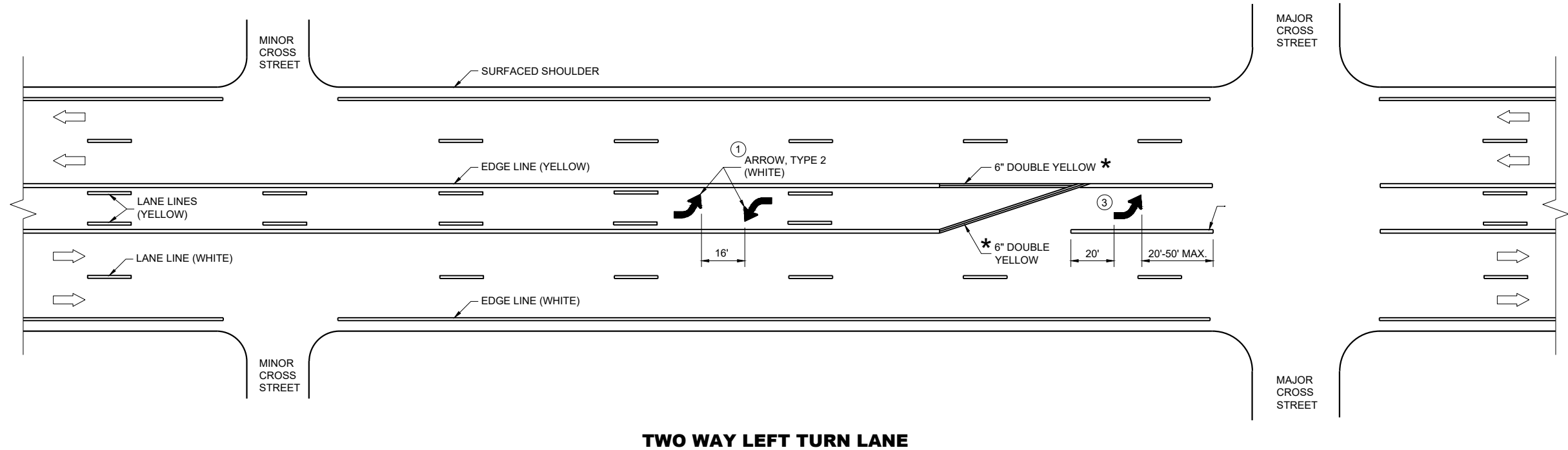
ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED December 2024 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	166



GENERAL NOTES

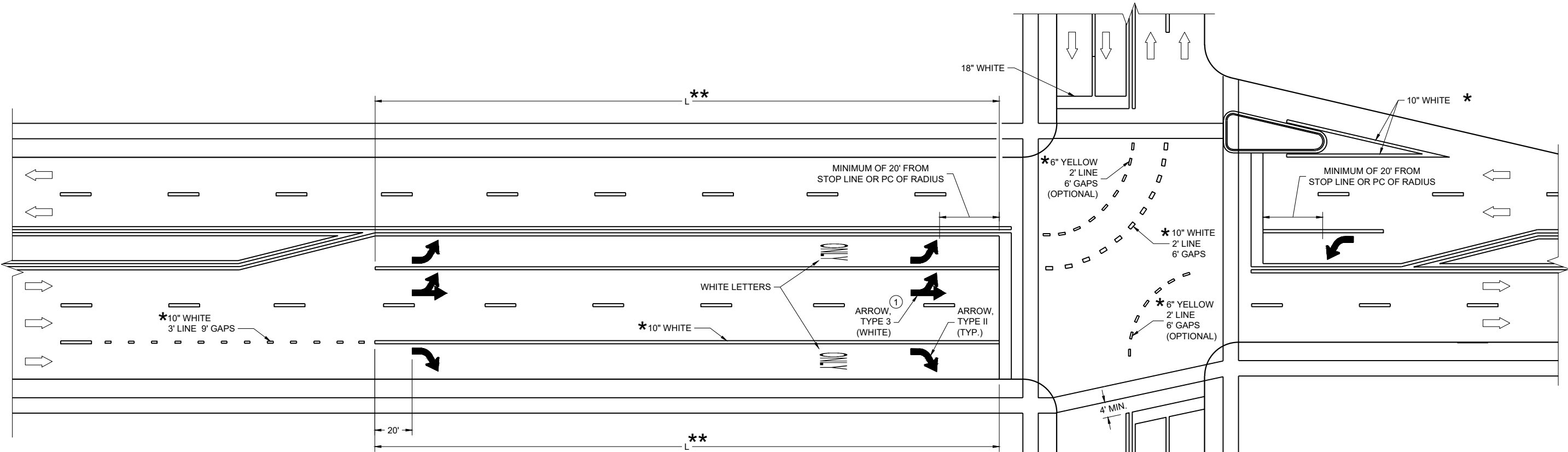
- ① A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ② 10" WHITE
- ③ TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

➡ DIRECTION OF TRAFFIC

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING
(TURN LANES)

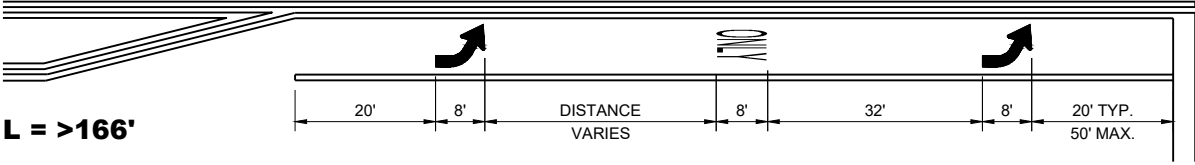
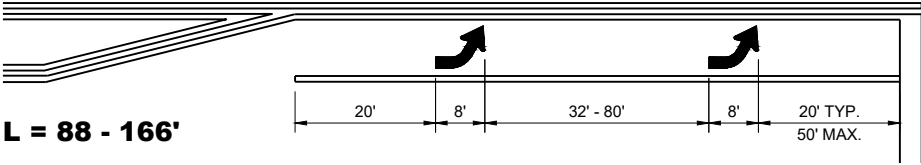
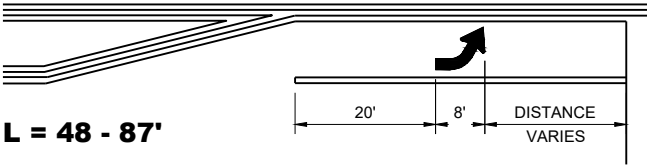
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



GENERAL NOTES

① QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

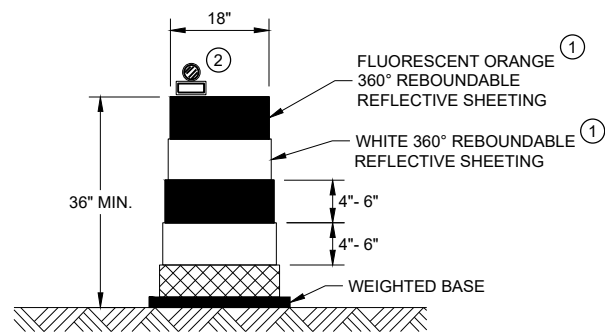
➡ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

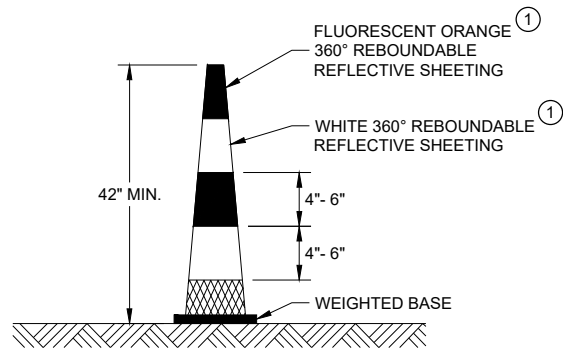
PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



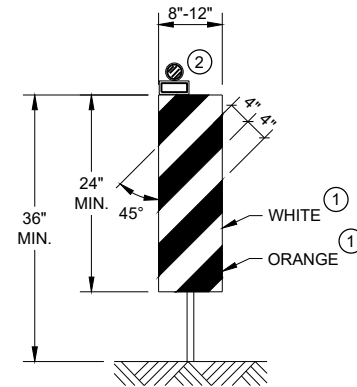
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



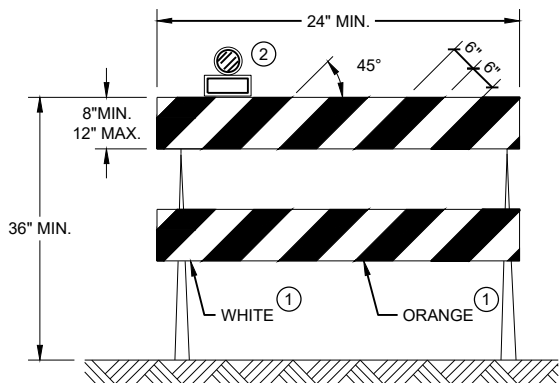
42" CONE

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



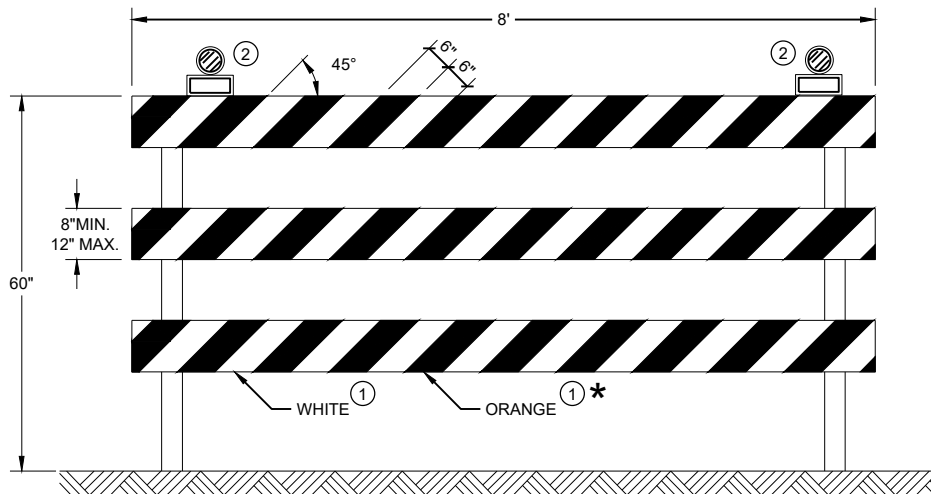
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 169
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LEGEND

-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

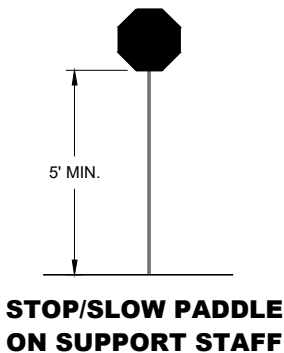
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

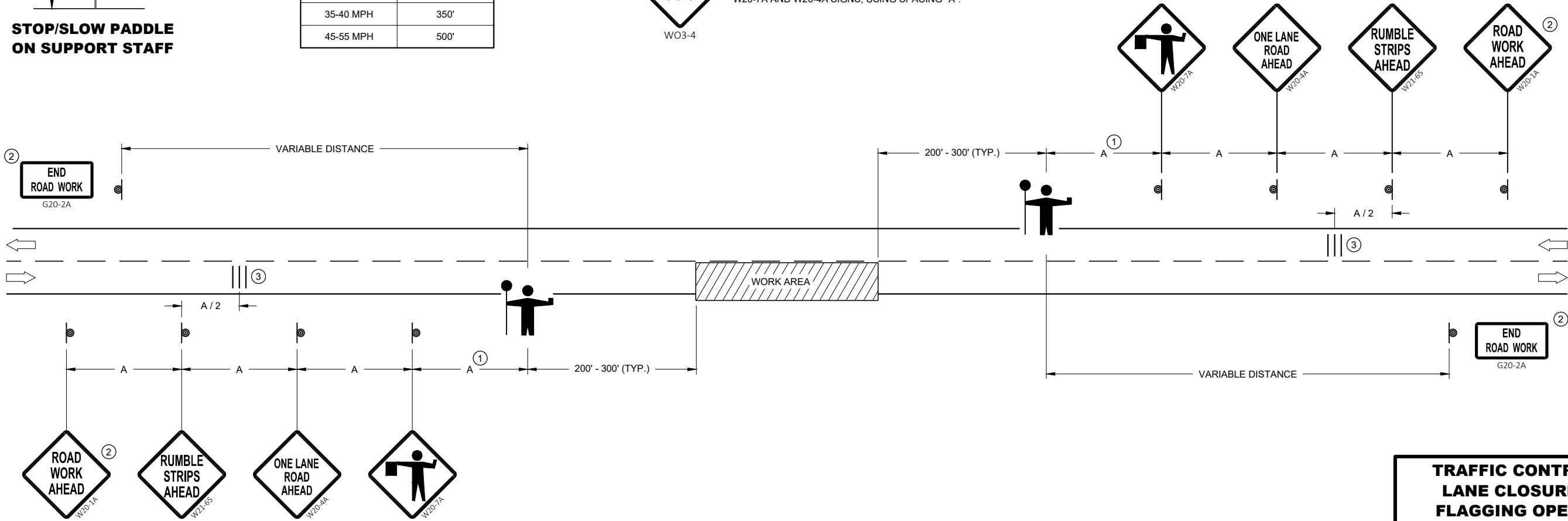


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

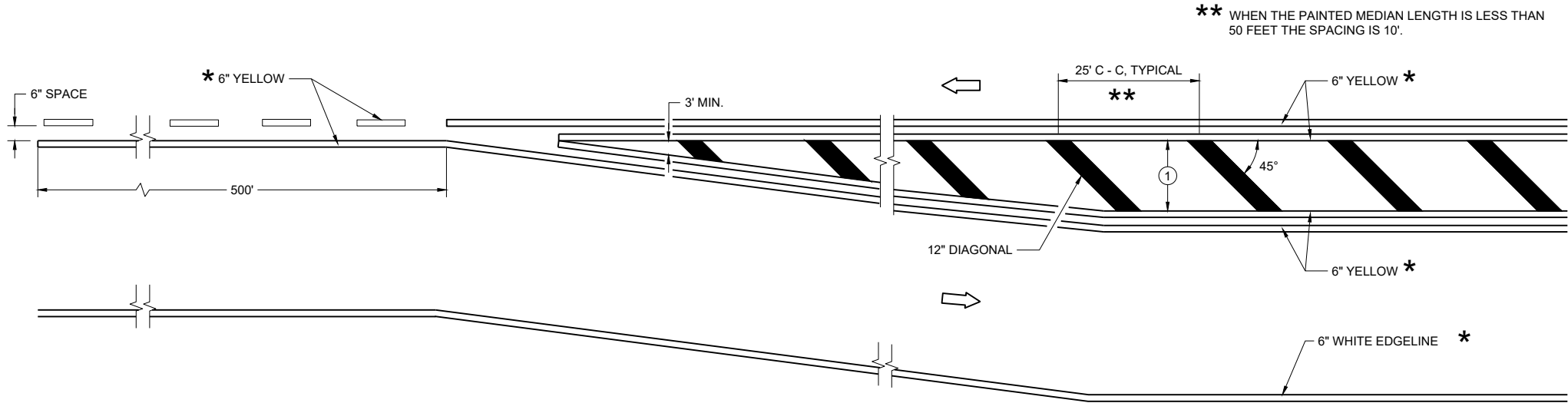
SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



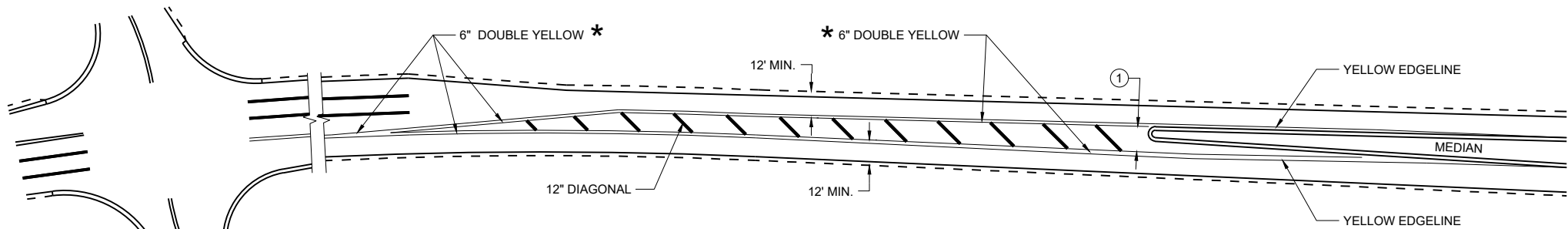
USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



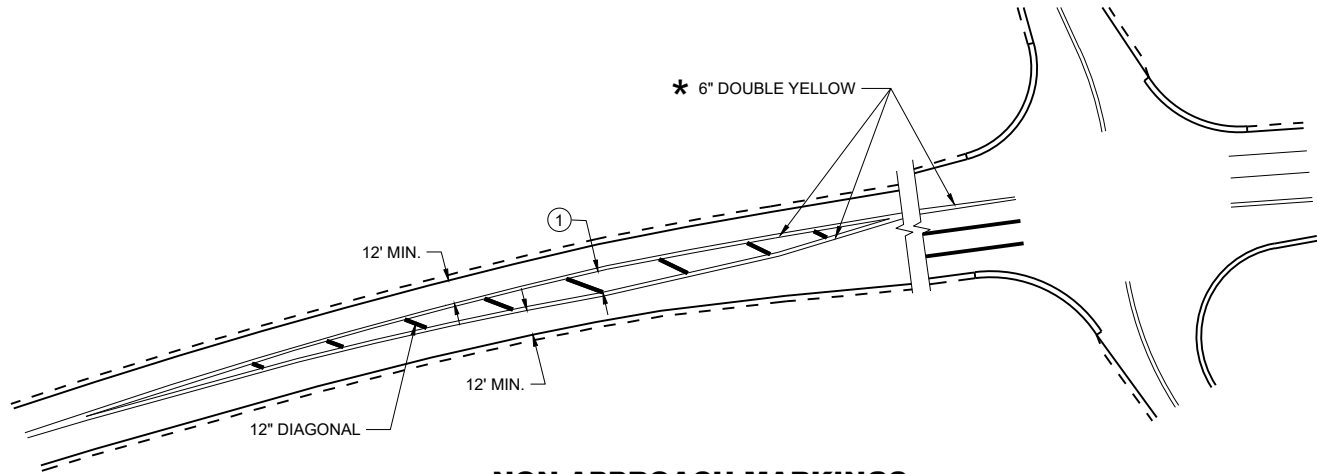
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 170
FHWA	



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

GENERAL NOTES

- ① DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

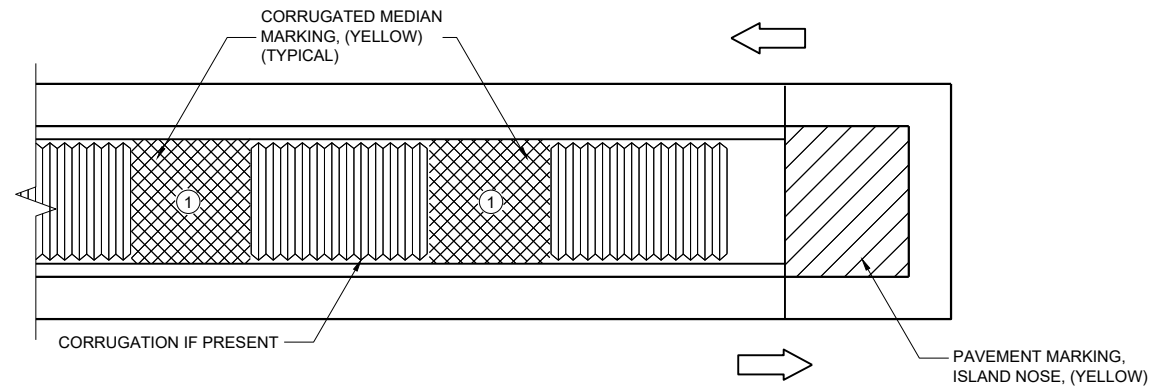
DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

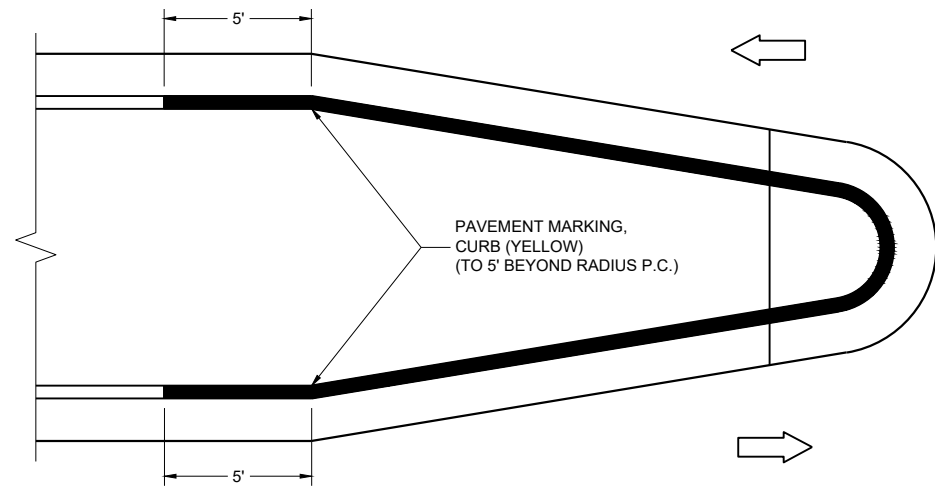
MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

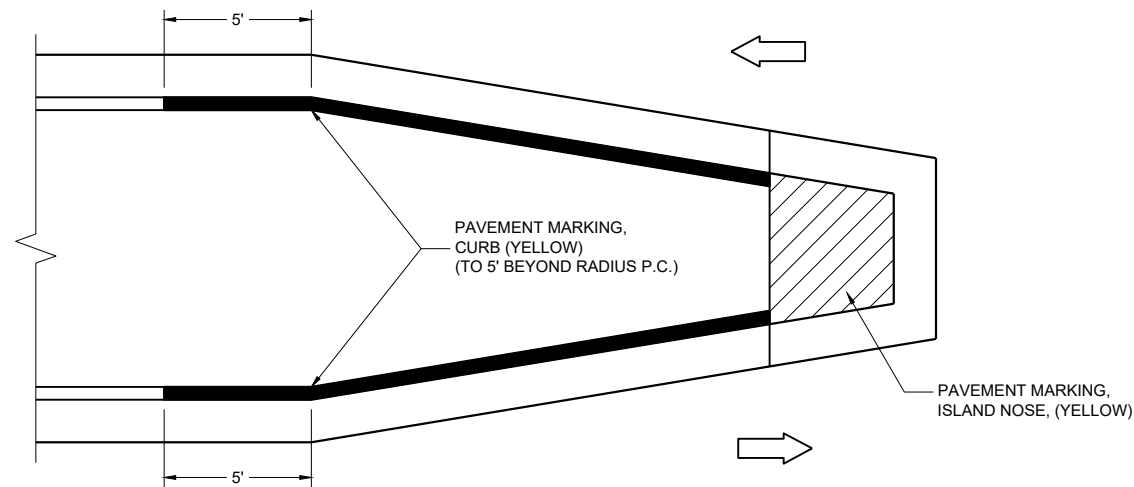
APPROVED
August 2024 /S/ Jeannie Silver
DATE Statewide Pavement Marking Engineer



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

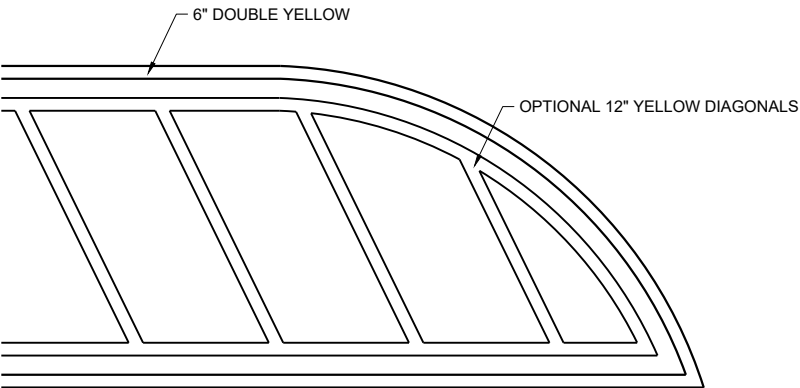
TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

① APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL



FLUSH MEDIAN ISLAND NOSE

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED August 2024 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA 172	

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED

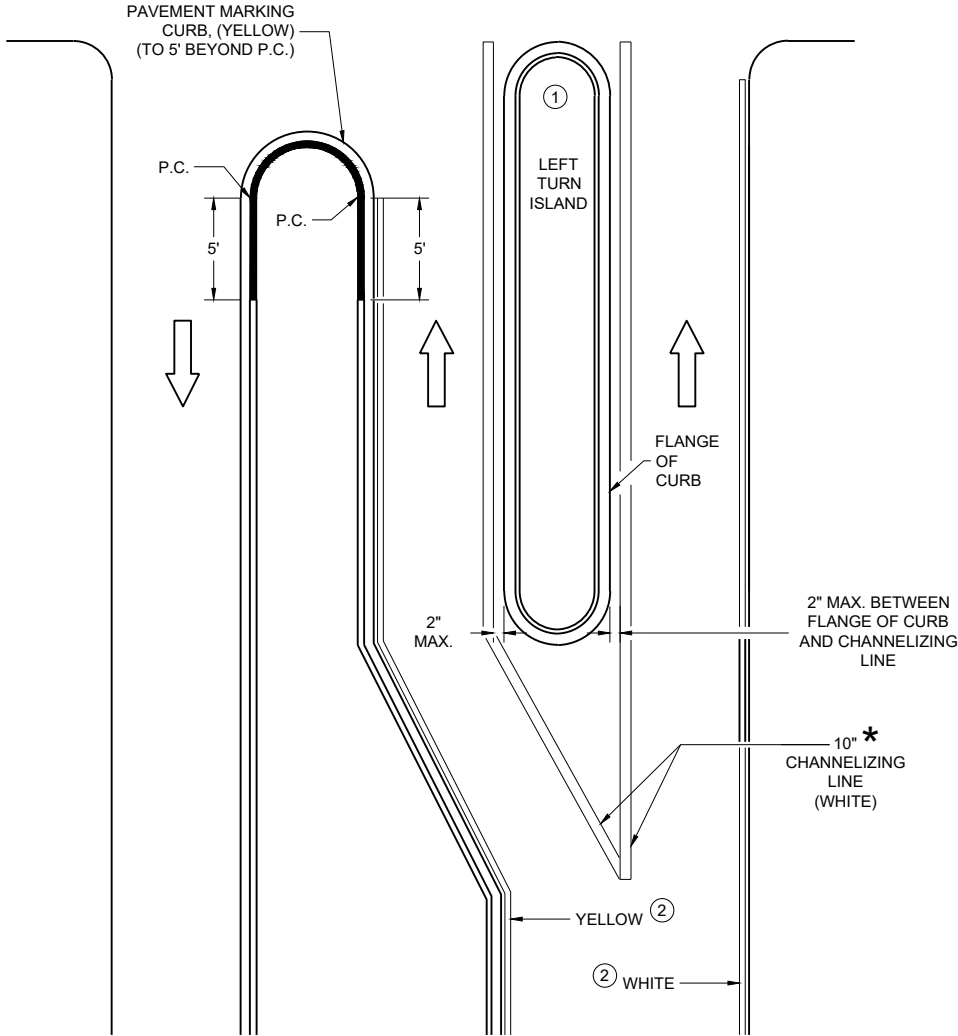
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

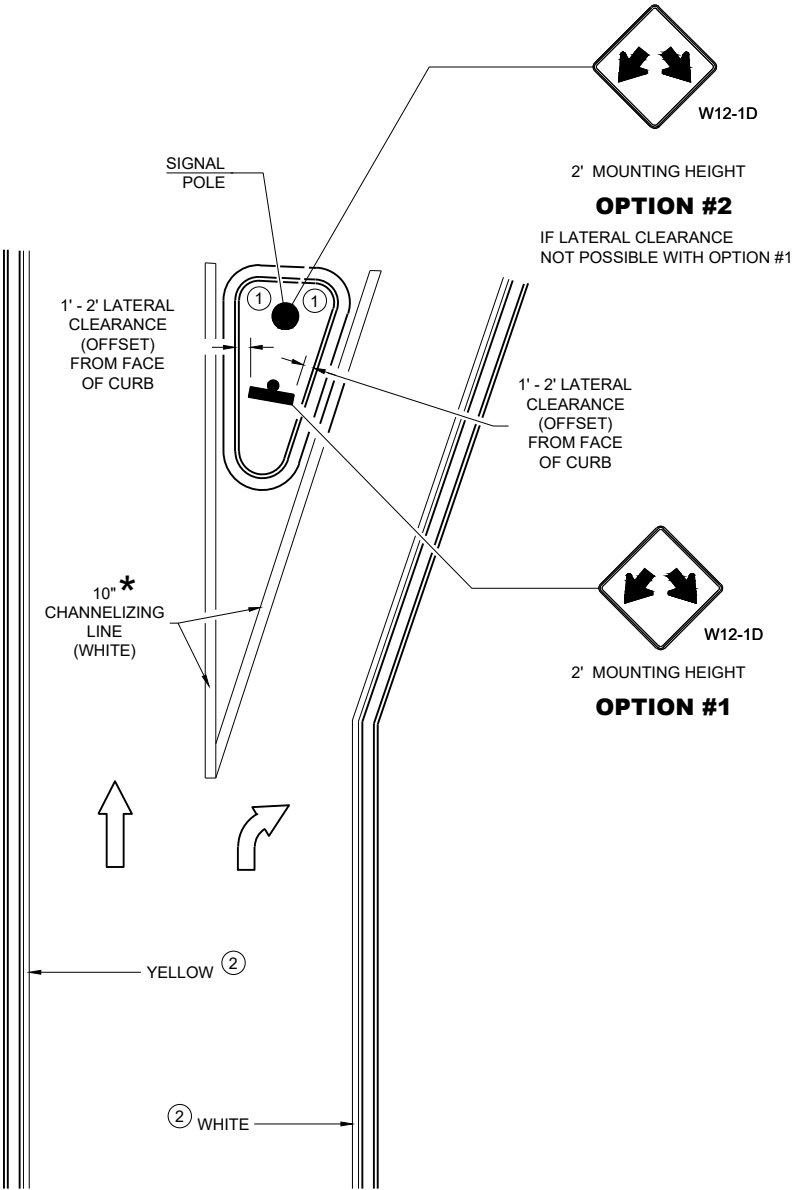
APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

- ① MARK CURB NOSES YELLOW.
- ② MARK ACCORDING TO TABLE.
- ③ CHEVRON MAY BE OMITTED IF LESS THAN 4" WIDE

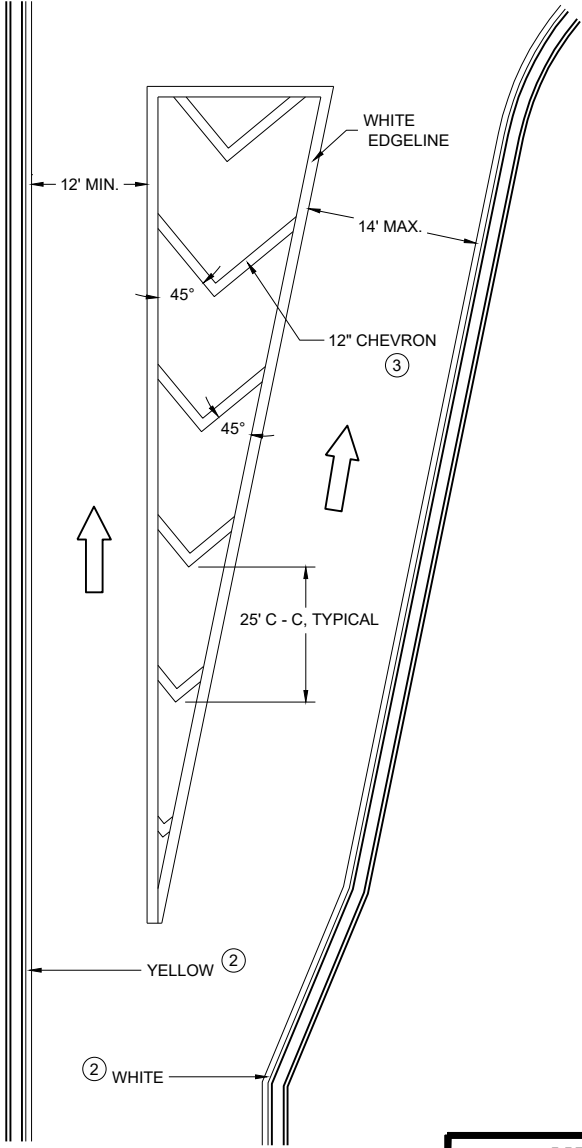
DIRECTION OF TRAVEL



LEFT TURN & MEDIAN ISLAND



RIGHT TURN ISLAND



TURN LANE DETAIL

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2024 /S/ Jeannie Silver
DATE Statewide Pavement Marking Engineer

FHWA 173

LEGEND

- V1

LEAD VEHICLE
- V2

MARKING VEHICLE
- V3

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

SIGN ON TEMPORARY SUPPORT
- 

DIRECTION OF TRAFFIC

GENERAL NOTES

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

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

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

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

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

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

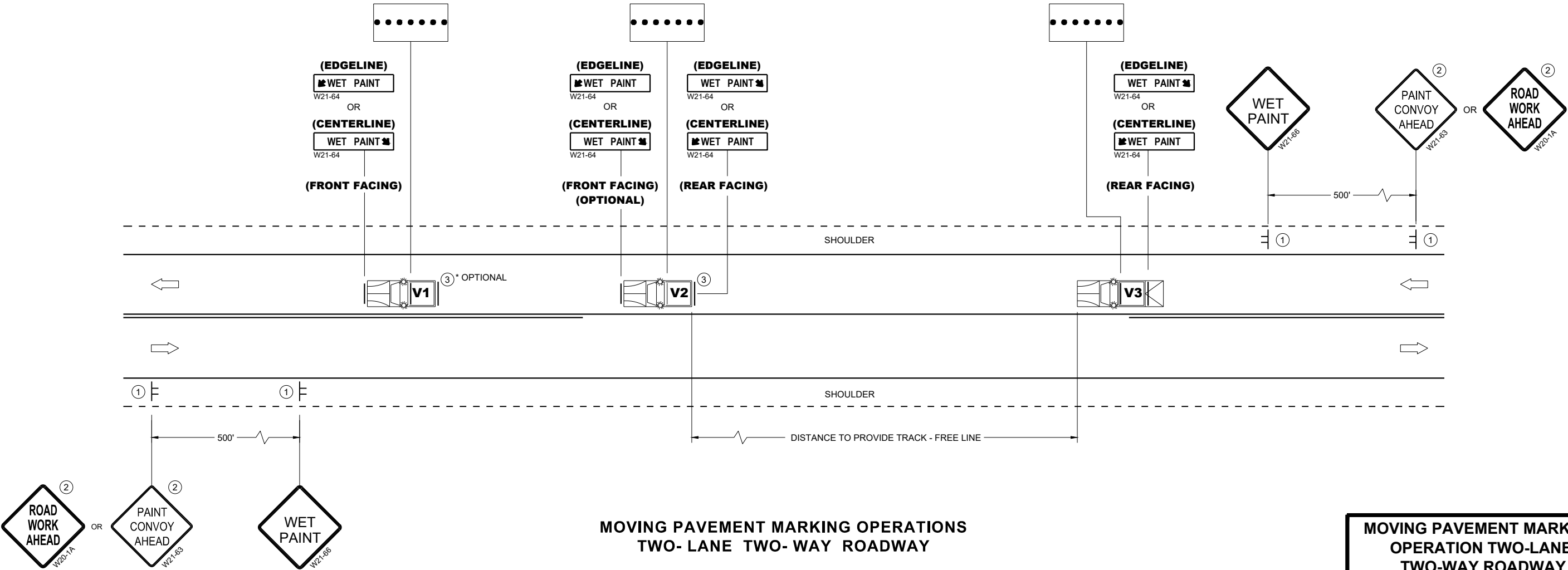
WORKERS SHALL NOT PERFORM WORK FROM ANY SHADOW OR PROTECTION VEHICLES.

UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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

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

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



MOVING PAVEMENT MARKING
OPERATION TWO-LANE
TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

LEGEND

- V1

LEAD VEHICLE
- V2

MARKING VEHICLE
- V3

SHADOW VEHICLE
- 

TRUCK MOUNTED ATTENUATOR (TMA)
- 

SIGN ON TEMPORARY SUPPORT
- 

DIRECTION OF TRAFFIC
- 

ARROW PANEL (CAUTION)

GENERAL NOTES

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

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

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

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

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

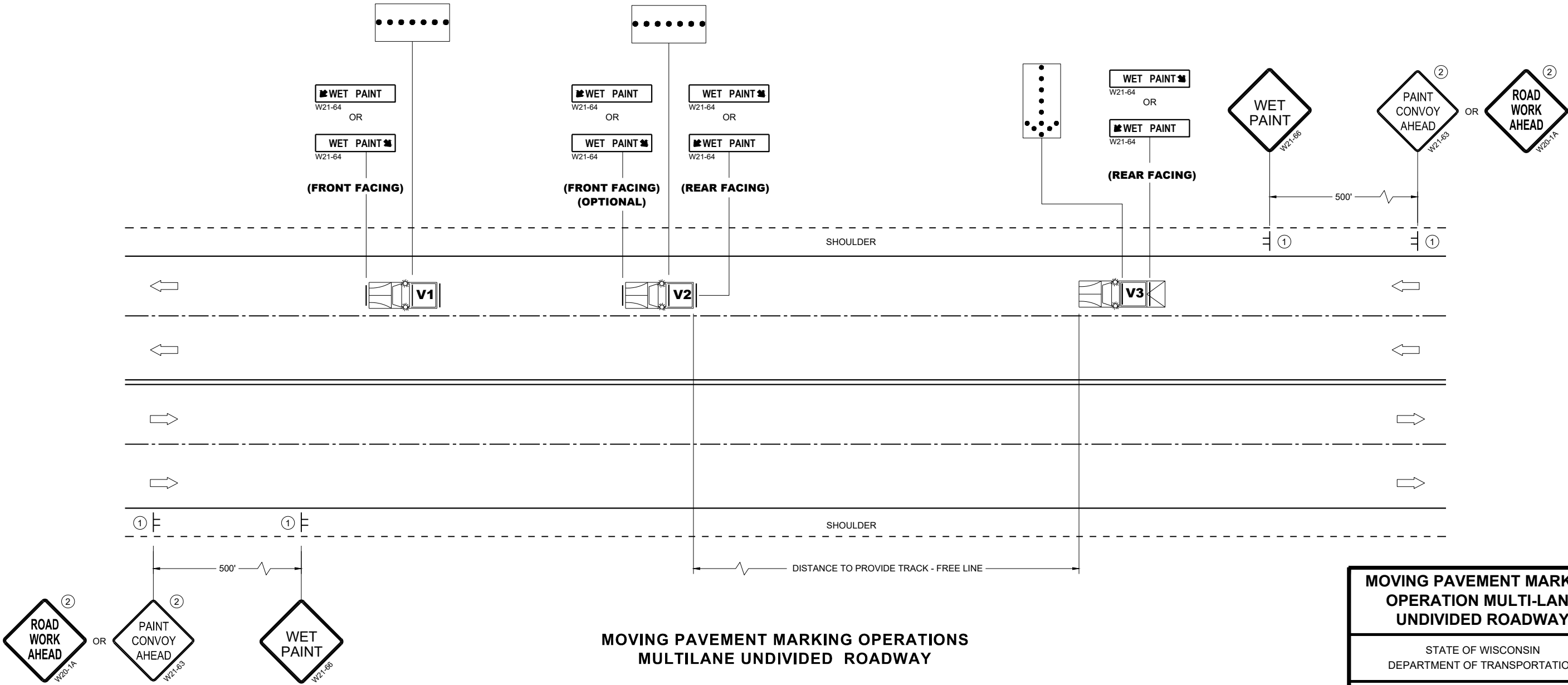
WORKERS SHALL NOT PERFORM WORK FROM ANY SHADOW OR PROTECTION VEHICLES.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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

CONES SHALL HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

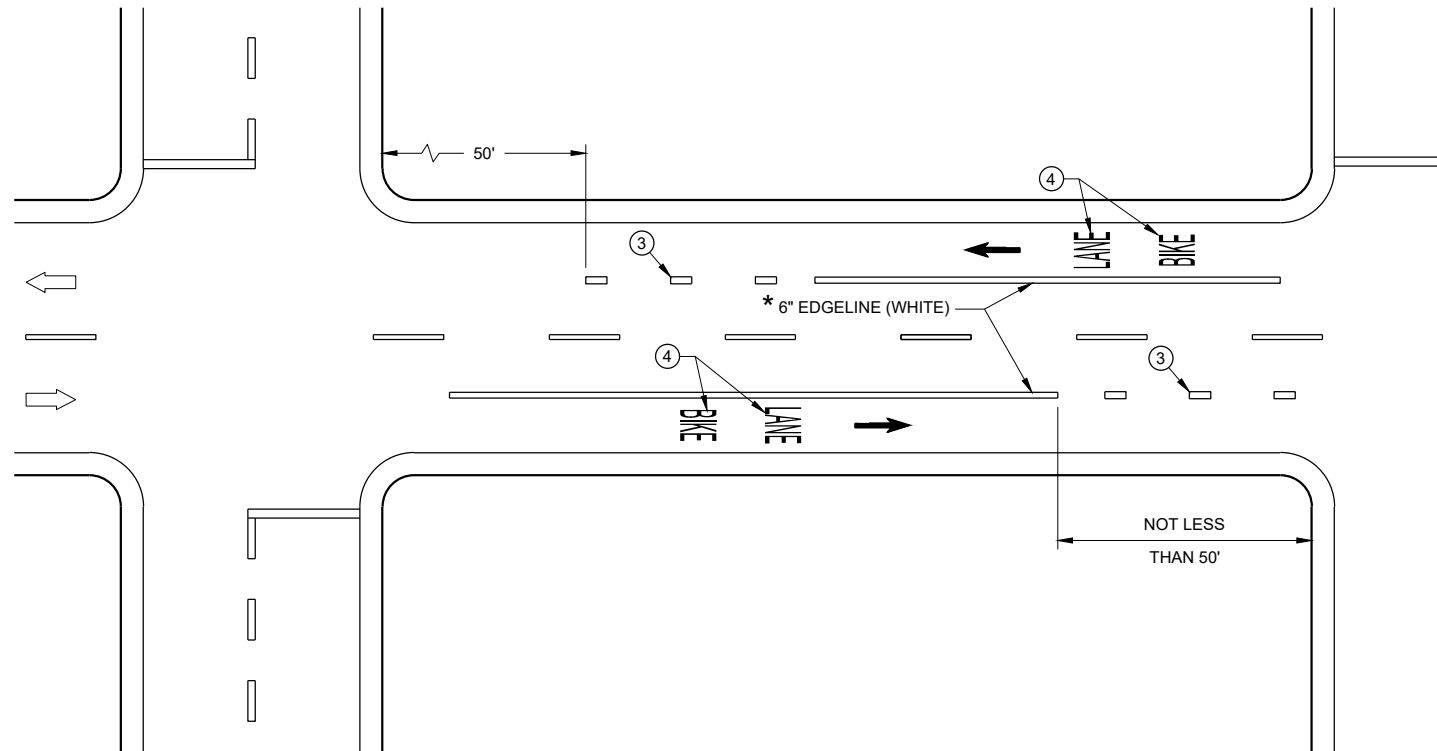


MOVING PAVEMENT MARKING OPERATIONS
MULTILANE UNDIVIDED ROADWAY

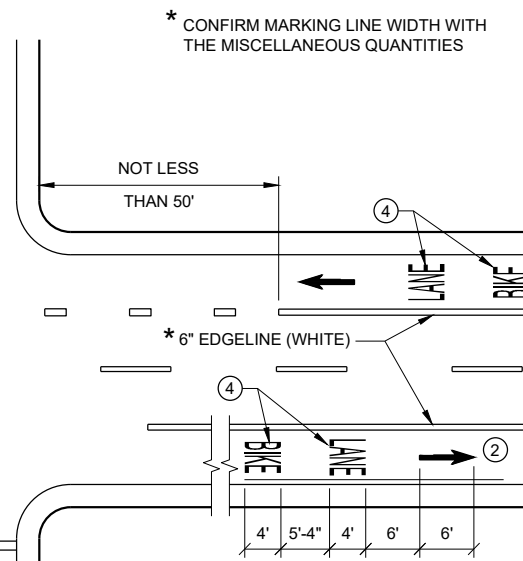
MOVING PAVEMENT MARKING
OPERATION MULTI-LANE
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

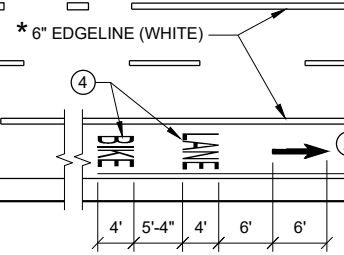
APPROVED
November 2025 /S/ Andrew Heidtke
DATE STATE ELECTRICAL ENGINEER
FHWA



DESIGNATED BIKE LANE - NO PARKING



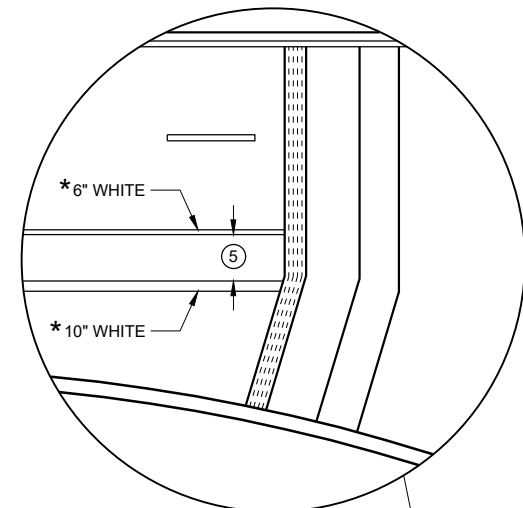
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



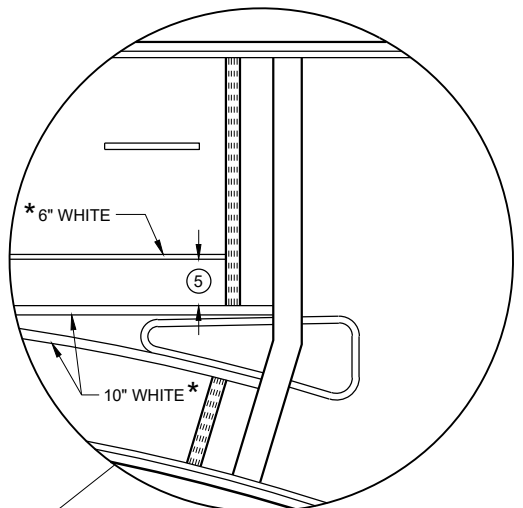
GENERAL NOTES

- 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 BIKE SYMBOLS OR WORDS MAY BE USED.
- 5 BIKE ACCOMMODATION IS TYPICAL 5 FEET WIDE AND MINIMUM OF 4 FEET FROM A LONGITUDINAL JOINT. USE 5 FEET AT ≥ 45 MPH.
- 6 OMIT THESE MARKINGS FOR WIDER TURN LANE APPLICATIONS (MINIMUM OF 15 FOOT WIDE TURN LANE).
- 7 REFER TO CONTRACT PLANS FOR LANE WIDTH.

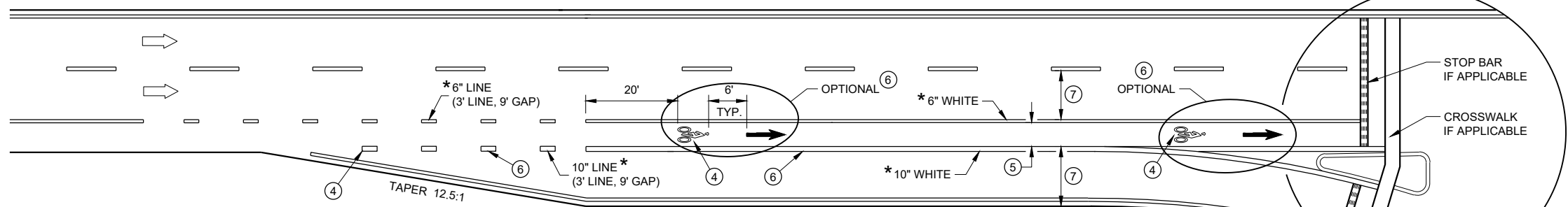
DIRECTION OF TRAVEL



4 LANE DIVIDED WITHOUT ISLAND



4 LANE DIVIDED WITH ISLAND

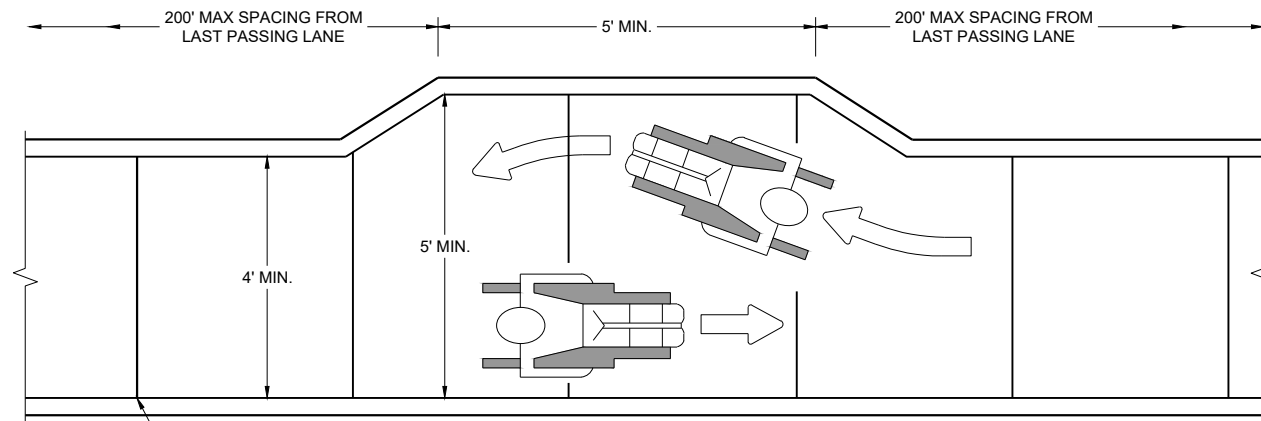
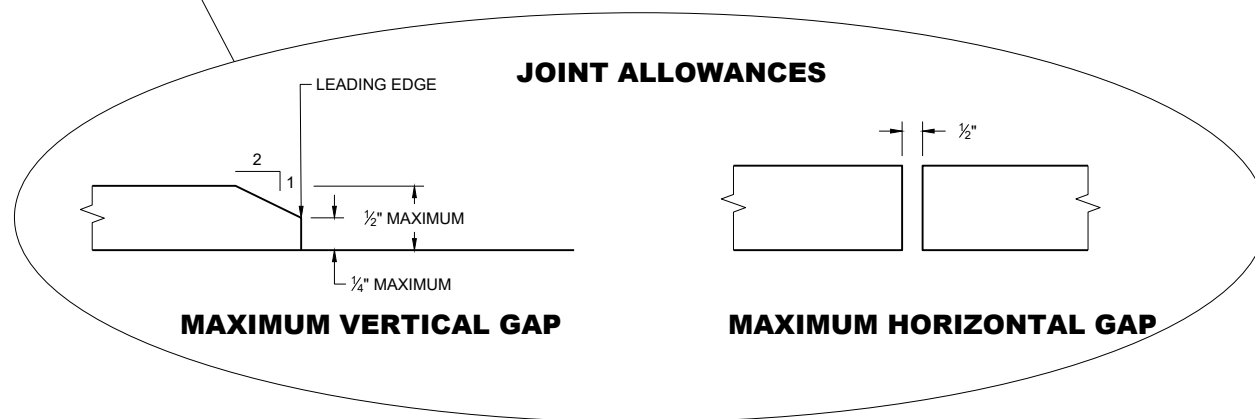
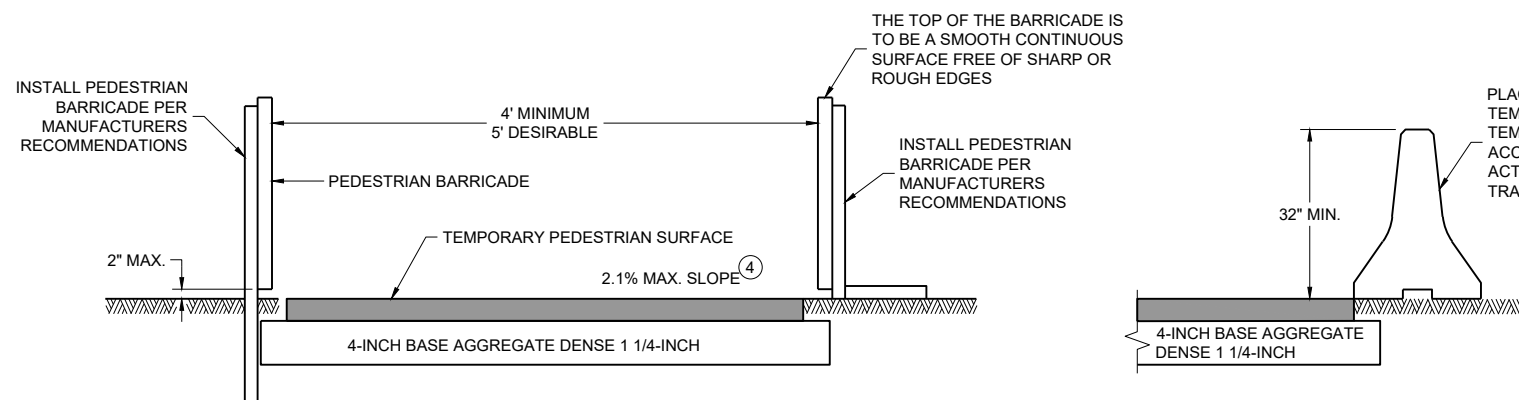


BIKE LANE - FOR 2-LANE ROADWAYS AND 4-LANE DIVIDED ROADWAYS (4-LANE DIVIDED WITH RIGHT TURN LANE SHOWN)

BIKE LANE MARKING

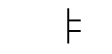
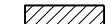
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Matthew Rauch
DATE STATE SIGNING AND MAP ENGINEER 176
FHWA

**NARROW SIDEWALK PASSING DETAIL****MAXIMUM VERTICAL GAP****MAXIMUM HORIZONTAL GAP****TEMPORARY PEDESTRIAN ACCESS**

PLACE CONCRETE BARRIER
TEMPORARY PRECAST IF
TEMPORARY PEDESTRIAN
ACCESS IS ADJACENT TO AN
ACTIVE WORK ZONE OR LIVE
TRAFFIC LANE

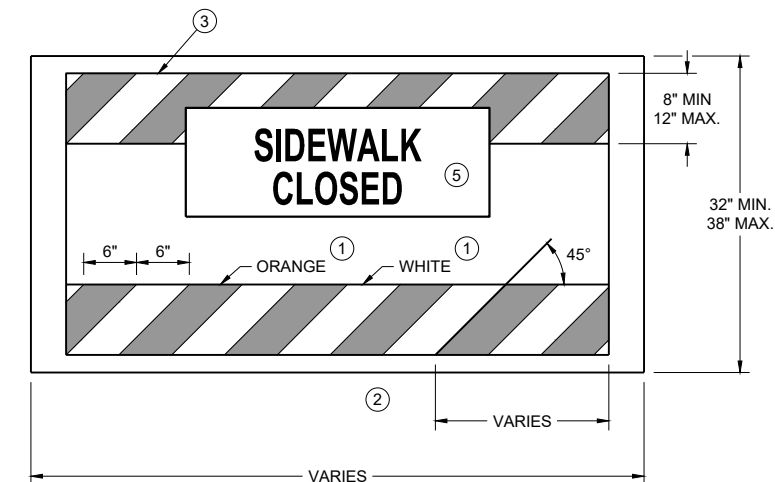
LEGEND

-  TEMPORARY PEDESTRIAN BARRICADE
-  AUDIBLE MESSAGE DEVICE
-  TEMPORARY SIGN SUPPORT
-  WORK AREA

GENERAL NOTES

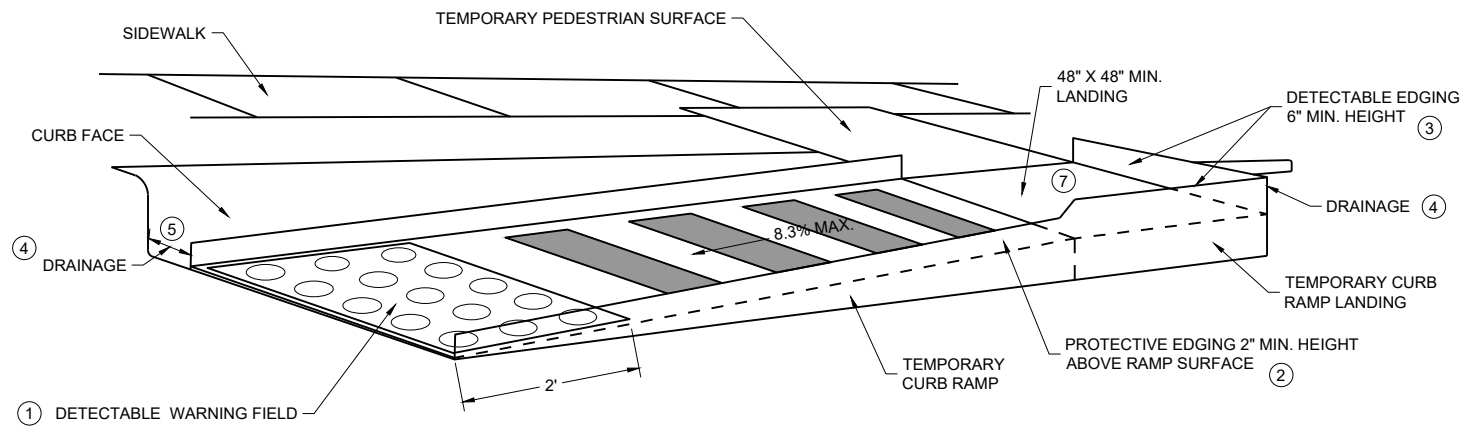
BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
- ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
- ★ USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.
- ④ WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
- ⑤ WHERE SIGNS FOR TEMPORARY PEDESTRIAN ACCOMMODATIONS ARE SHOWN BEING PLACED BEHIND TEMPORARY PEDESTRIAN BARRICADE, THE SIGNS MAY BE MOUNTED ON THE TEMPORARY PEDESTRIAN BARRICADE INSTEAD. A CORRUGATED POLYPROPYLENE OR POLYETHYLENE PLASTIC SIGN BASE SHALL BE USED IF MOUNTED ON THE BARRICADE. THE TOP OF THE SIGN SHALL BE MOUNTED BELOW THE TOP OF THE BARRICADE TO ALLOW A CONTINUOUS HAND-TRAILING EDGE.

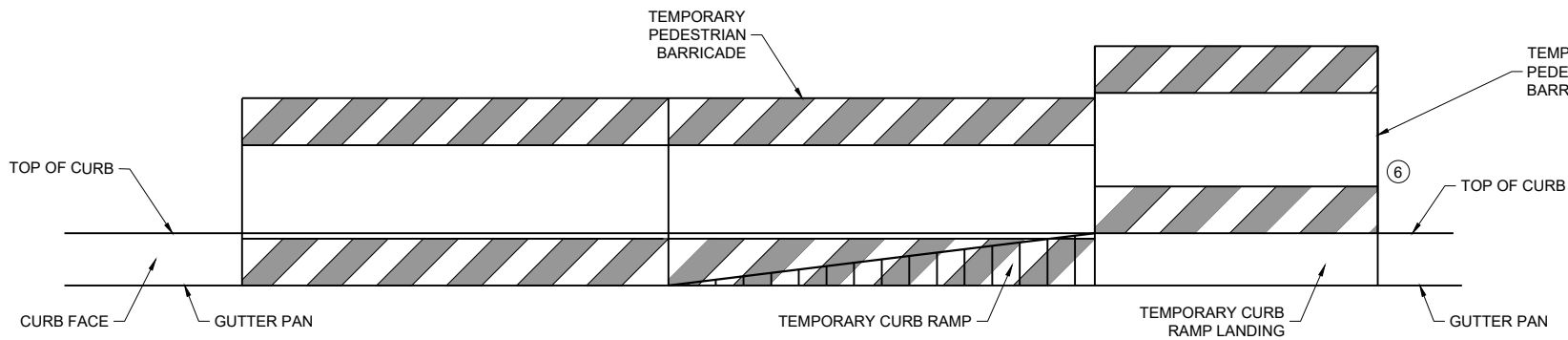
**TEMPORARY PEDESTRIAN BARRICADE *****TEMPORARY PEDESTRIAN FLAGGING**

**TRAFFIC CONTROL,
PEDESTRIAN
ACCOMMODATION**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

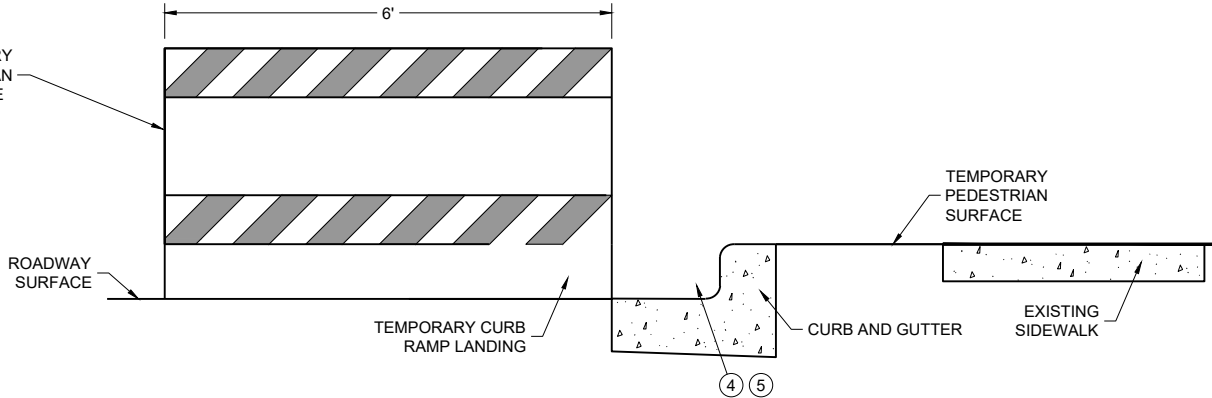


PERSPECTIVE VIEW



FRONT VIEW

TEMPORARY CURB RAMP PARALLEL TO CURB



SIDE VIEW

GENERAL NOTES

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

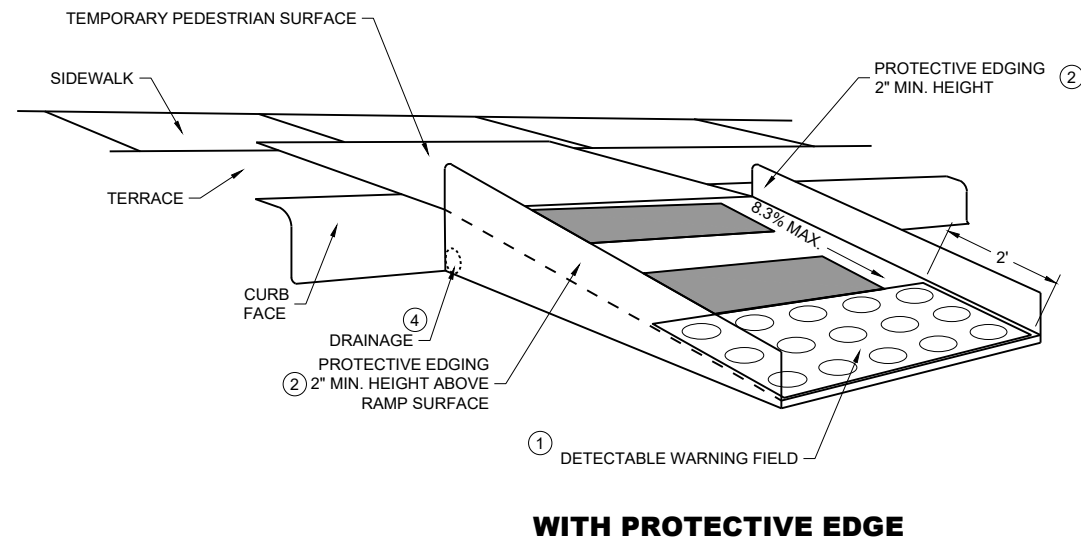
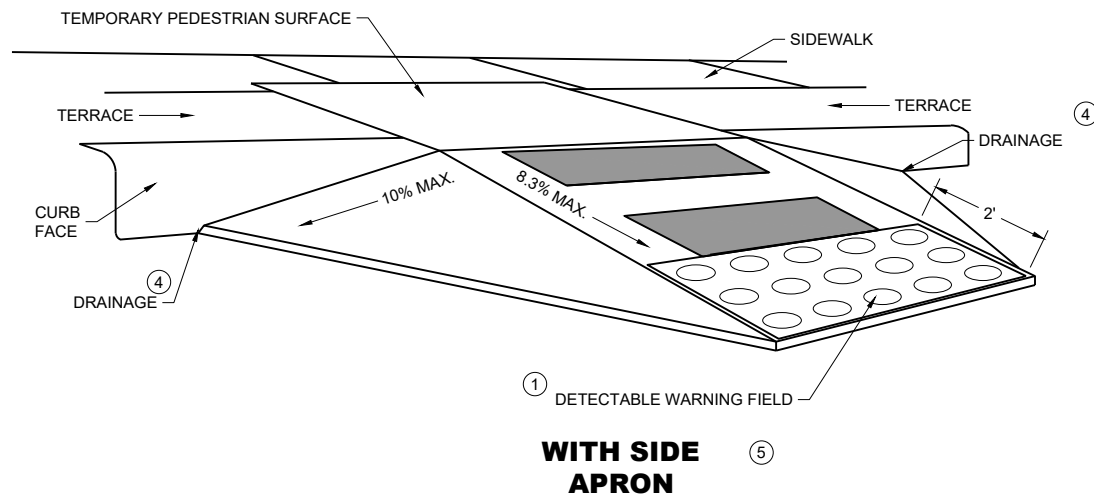
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP. LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

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

- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑤ ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
- ⑥ IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.
- ⑦ LANDING TO BE SLOPED A MAXIMUM OF 2.1% IN ALL DIRECTIONS OF PEDESTRIAN TRAVEL.

TRAFFIC CONTROL,
PEDESTRIAN
ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



TEMPORARY CURB RAMP PERPENDICULAR TO CURB

GENERAL NOTES

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

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

CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

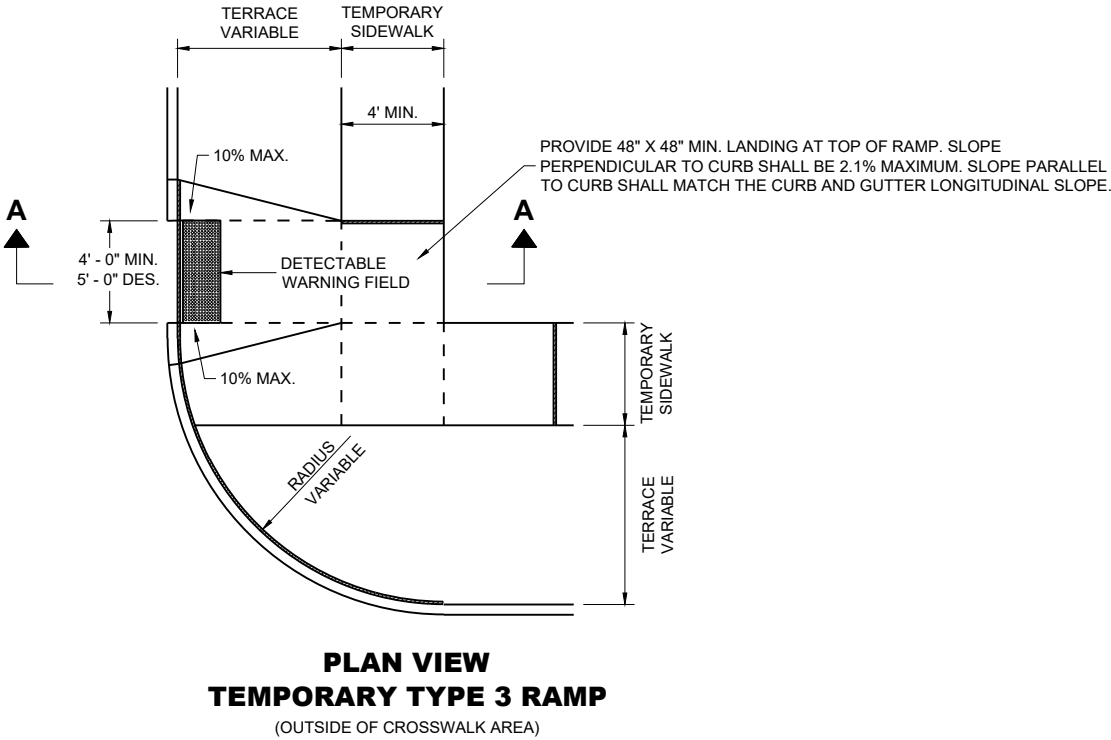
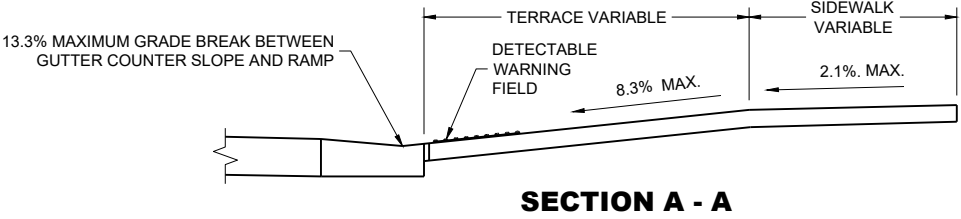
CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".

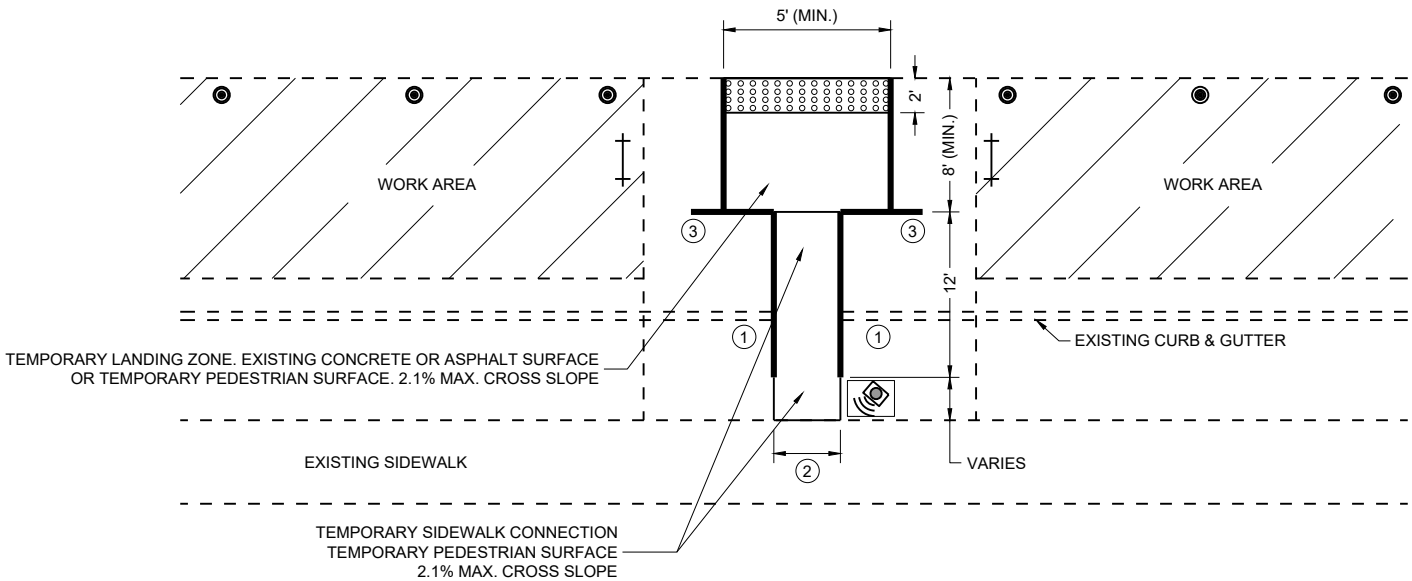
- (1) INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS
- (2) PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- (3) DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- (4) DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- (5) CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

GENERAL NOTES

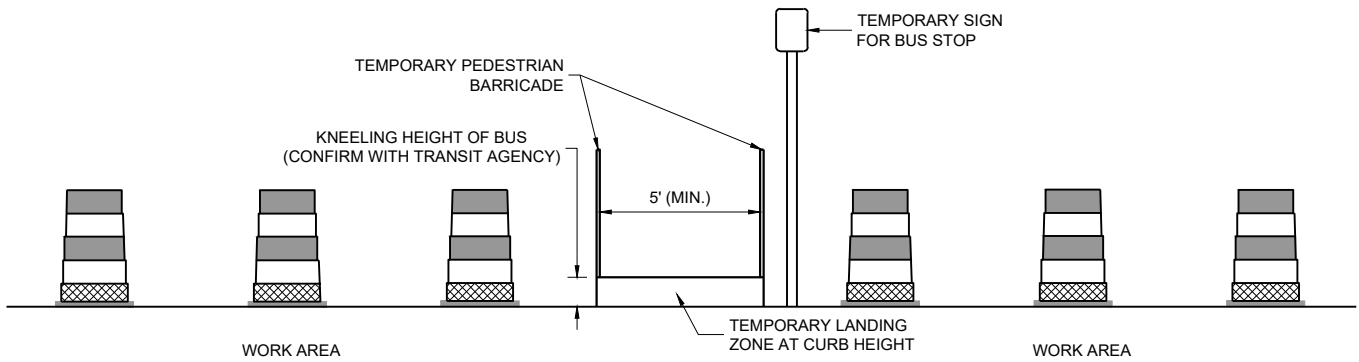


TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW



PROFILE VIEW
TEMPORARY BUS STOP PAD

GENERAL NOTES

- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.
- PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN ½" WIDTH.
- CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED ½". LATERAL EDGES MAY BE VERTICAL UP TO ¼" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN ¼" AND ½".
- CURB RAMPS AND LANDINGS SHALL HAVE A 1:48 (2.1%) MAX. CROSS-SLOPE.

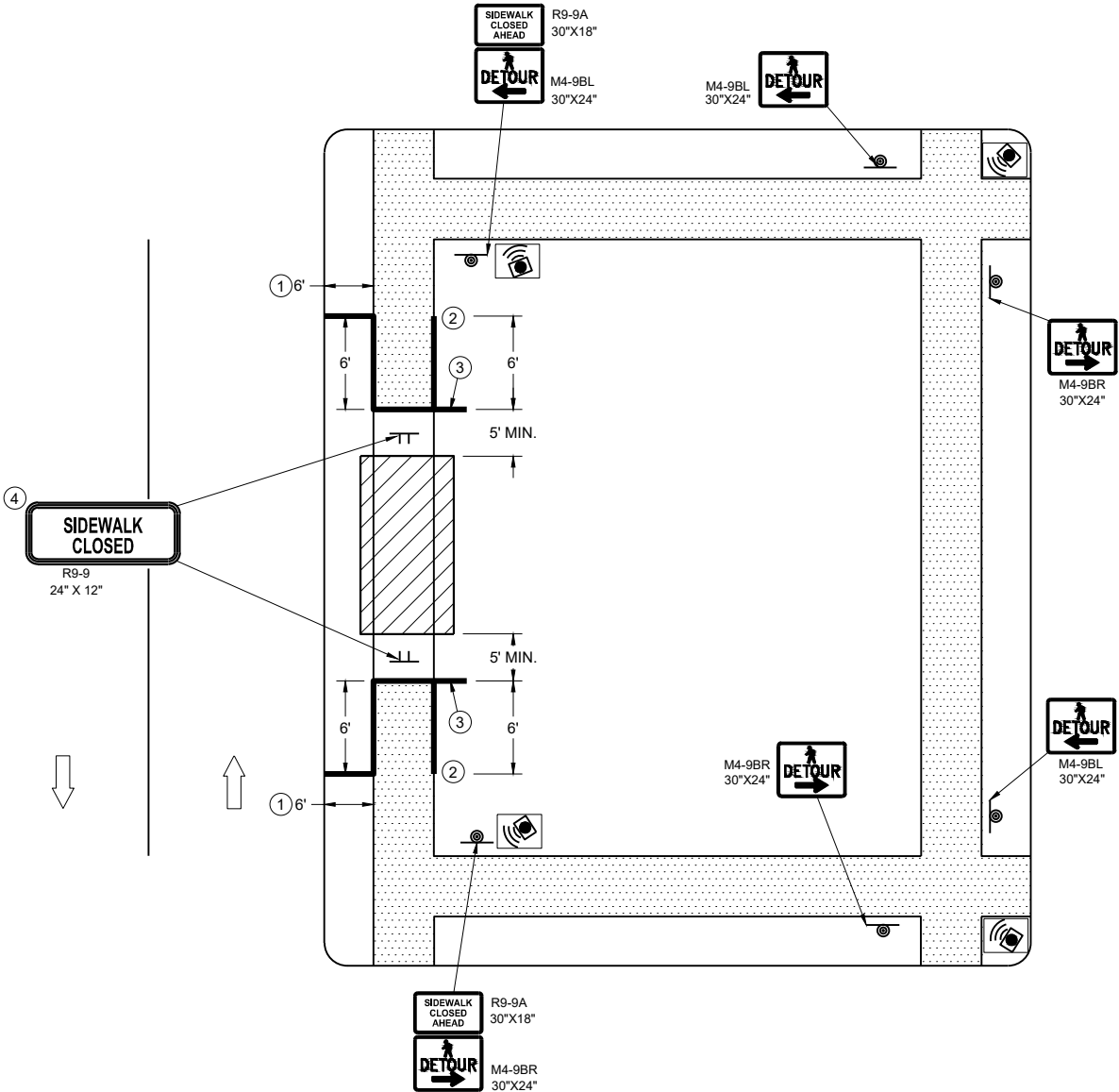
- ① DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ② 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.
- ③ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.

LEGEND

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

LEGEND

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



SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE

GENERAL NOTES

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

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

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

- ① IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
- ② PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
- ③ IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ④ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.

LEGEND

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

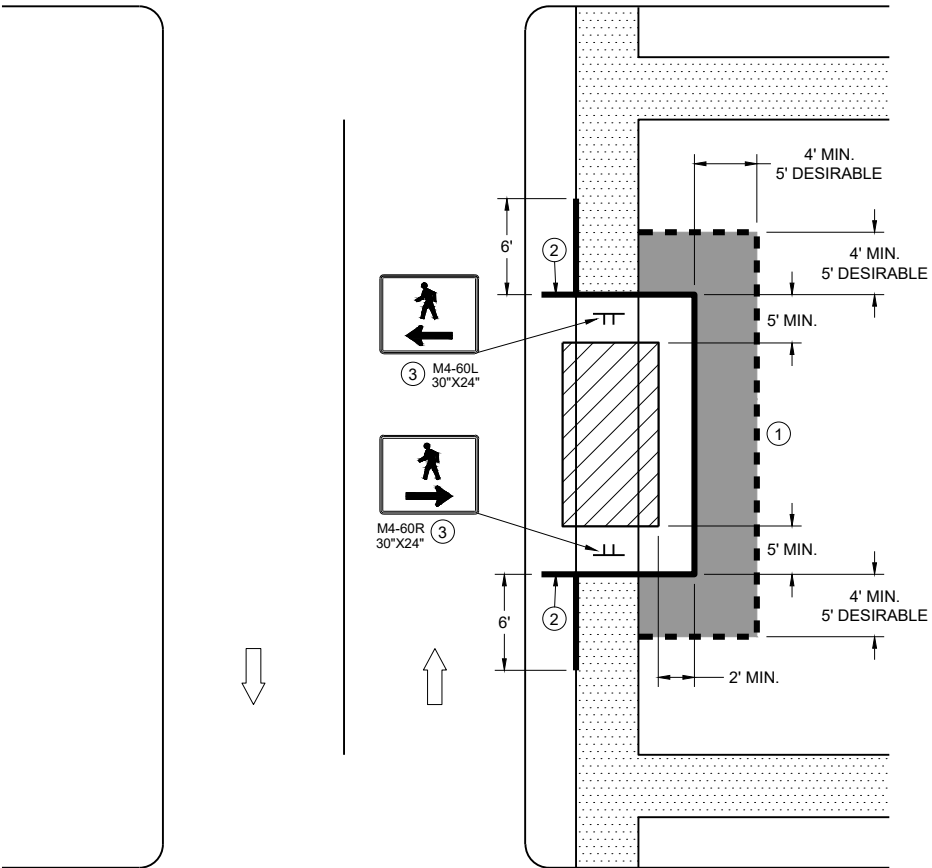
GENERAL NOTES

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

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

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

- ① USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ② IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ③ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



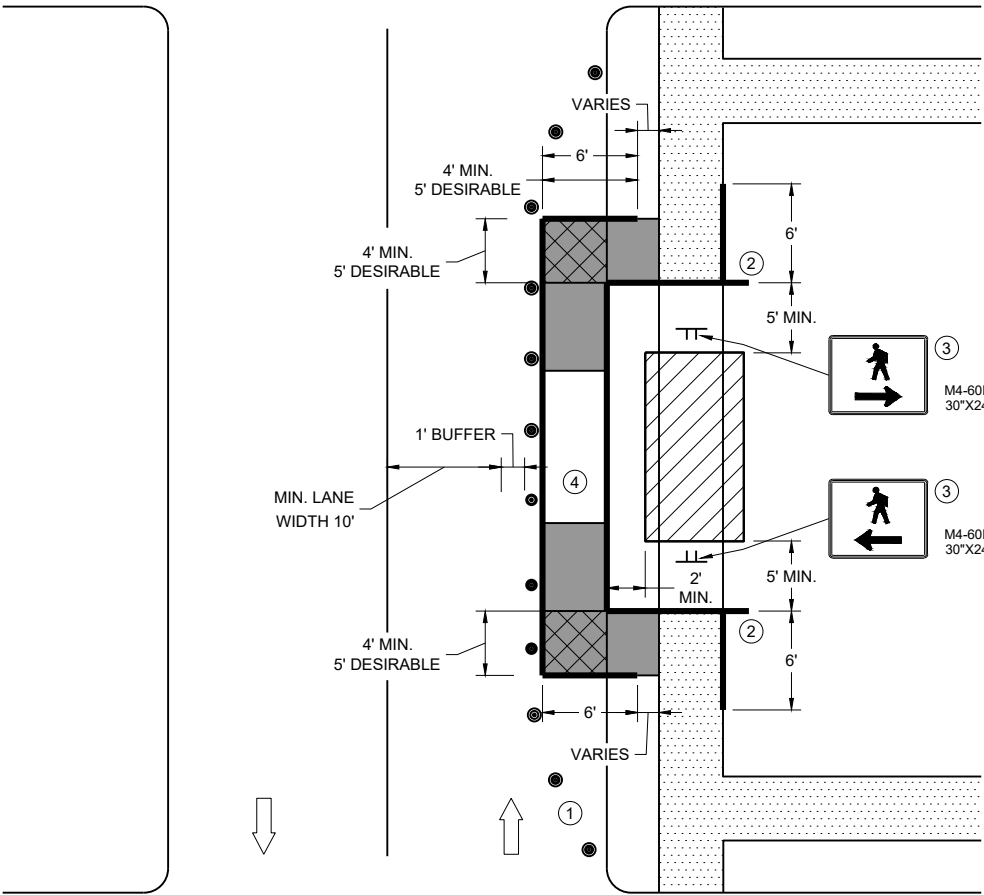
SIDEWALK BYPASS
SINGLE SIDE

LEGEND

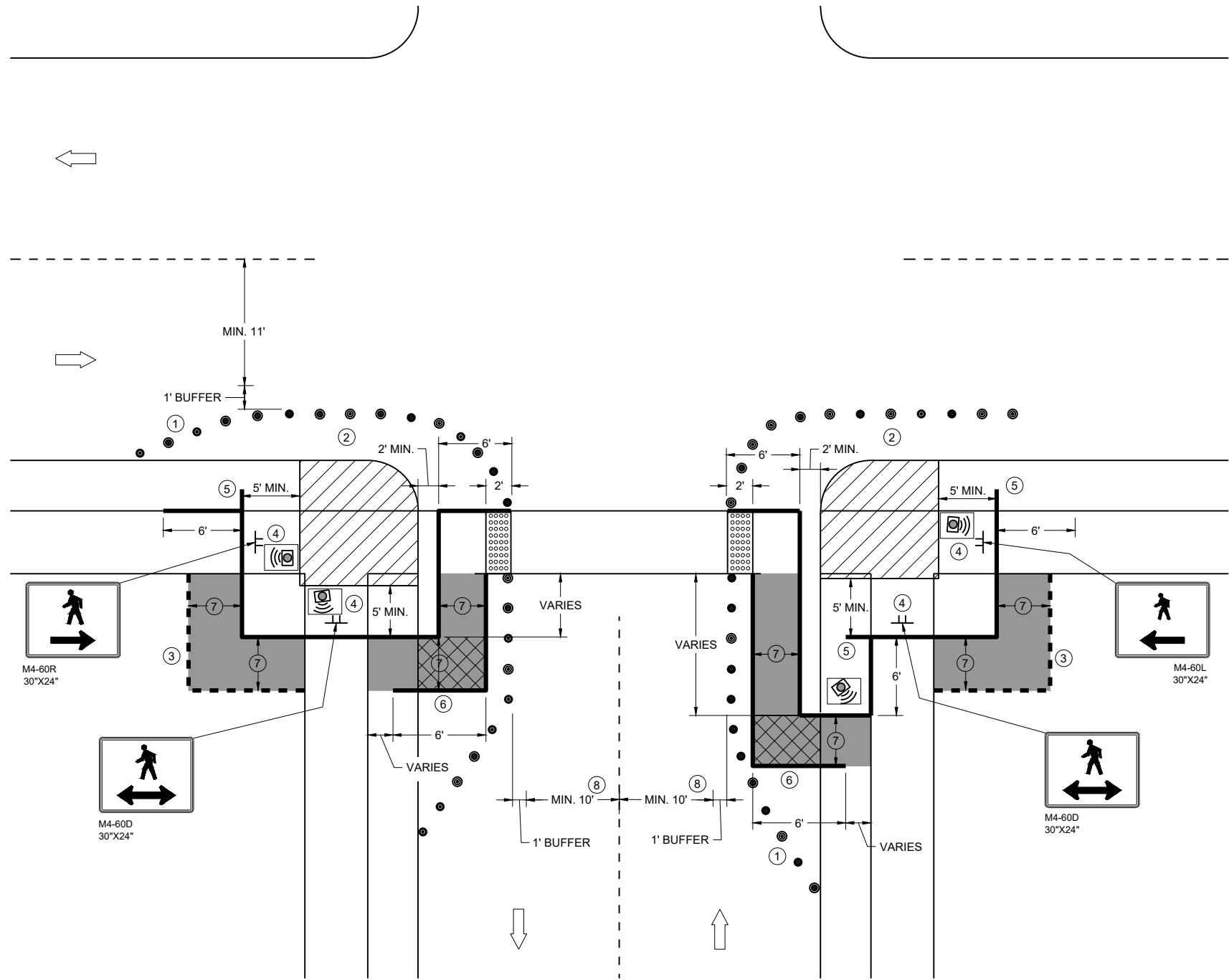
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- UNDER PEDESTRIAN TRAFFIC
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

GENERAL NOTES

- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
 - PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
 - MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
 - USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE. WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.



SIDEWALK BYPASS, SINGLE SIDE



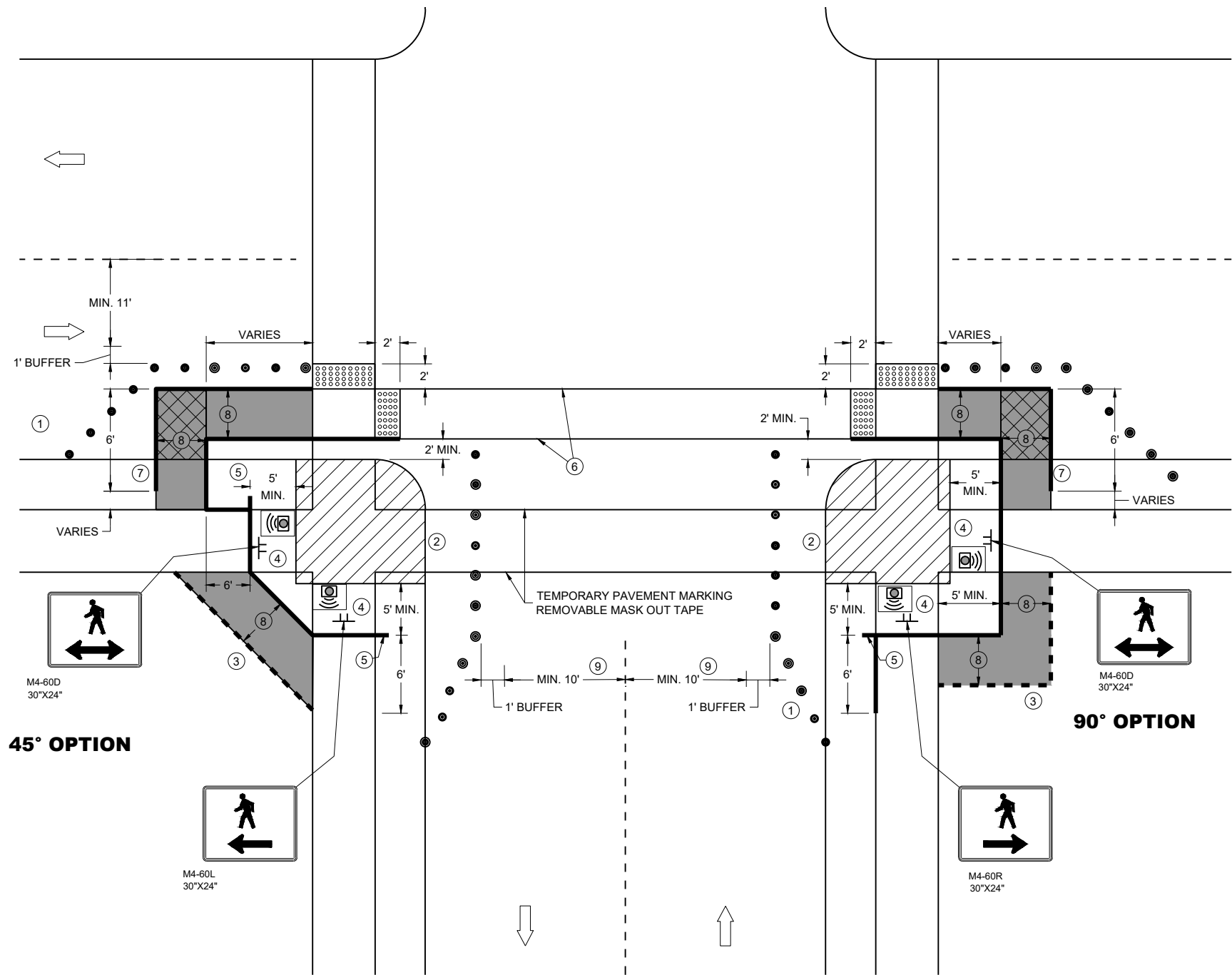
CURB RAMP PEDESTRIAN TRAFFIC CONTROL
SIDEWALK ON SINGLE SIDE

GENERAL NOTES

- IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.
- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG
- WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- WHEN THE TEMPORARY PEDESTRIAN ACCESS ROUTE RUNS PARALLEL ON THE ROADWAY SURFACE, THE MAXIMUM CROSS SLOPE WILL MATCH THE EXISTING ROADWAY CROSS SLOPE.
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
 - ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
 - ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
 - ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
 - ⑤ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
 - ⑥ IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
 - ⑦ 4 FEET MINIMUM, 5 FEET DESIRABLE
 - ⑧ IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

LEGEND

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



CURB RAMP PEDESTRIAN TRAFFIC CONTROL

GENERAL NOTES

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

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

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

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

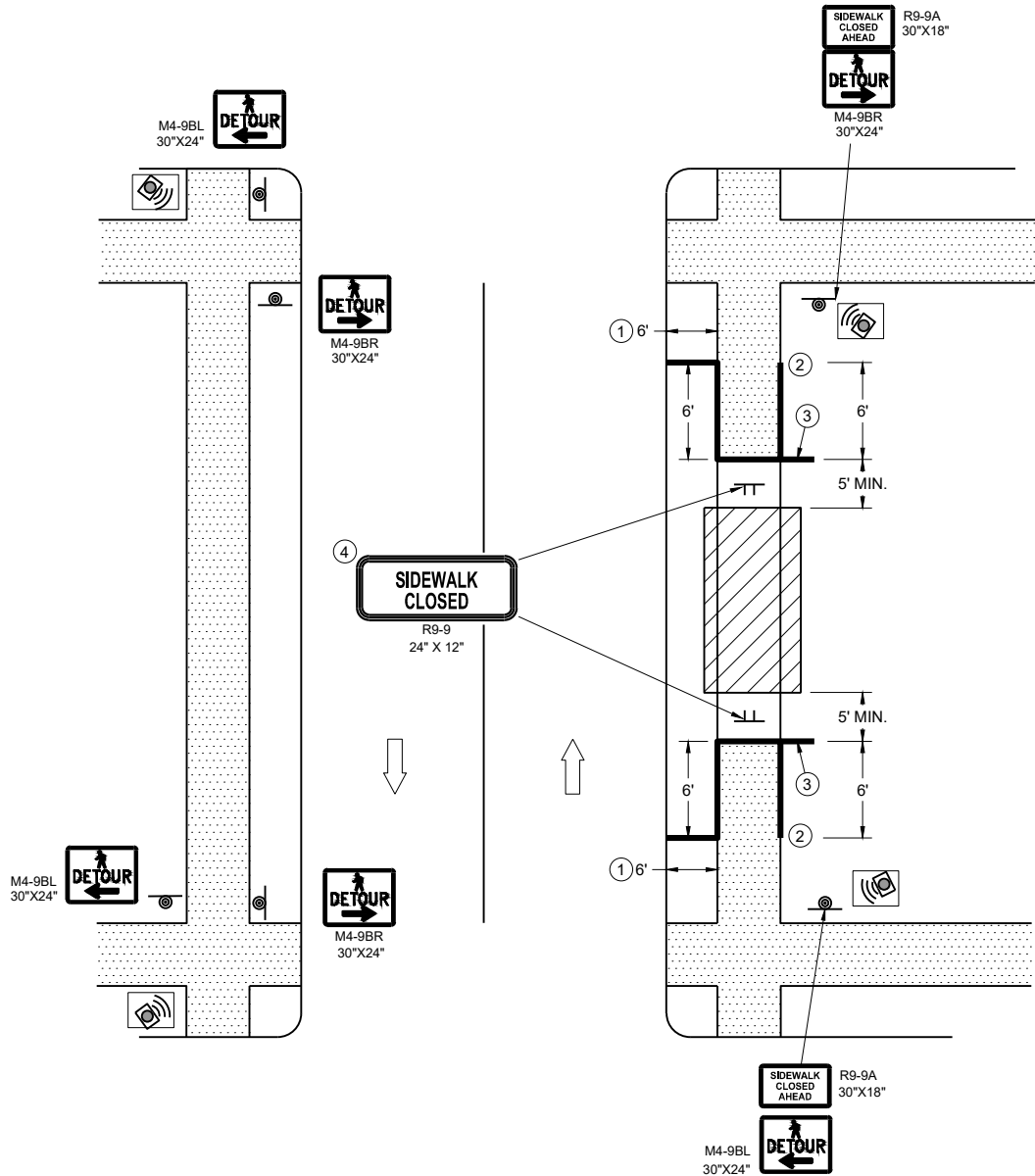
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
- ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE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

LEGEND

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

LEGEND

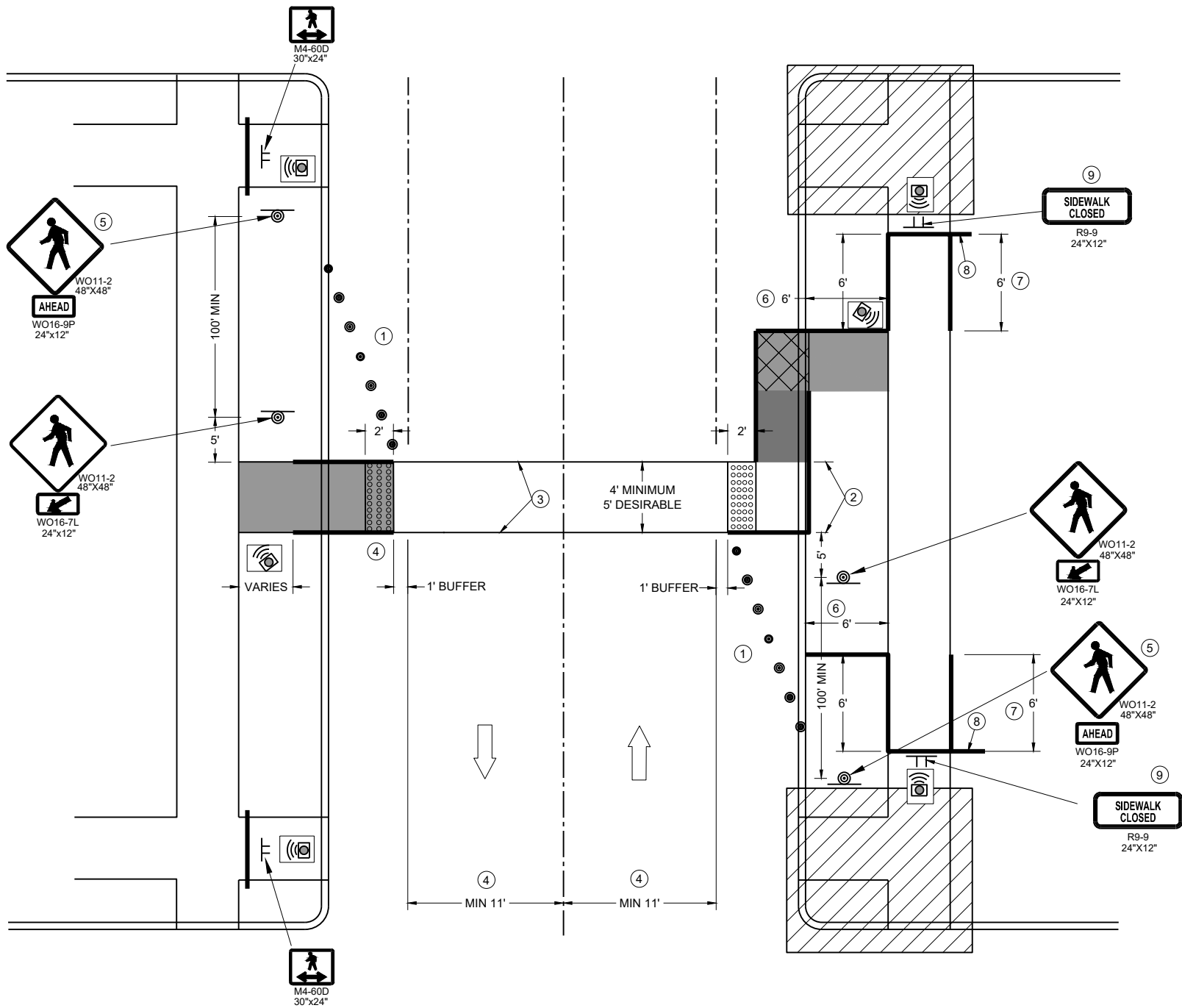
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- UNDER PEDESTRIAN TRAFFIC
- WORK AREA
- TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC
- TEMPORARY AUDIBLE MESSAGE DEVICE (EXACT PLACEMENT BASED UPON FIELD CONDITIONS)



SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES

GENERAL NOTES

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



TEMPORARY PEDESTRIAN CROSSING

GENERAL NOTES

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

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

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

LEGEND

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

TRAFFIC CONTROL,
PEDESTRIAN ACCOMMODATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- NEW SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

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

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

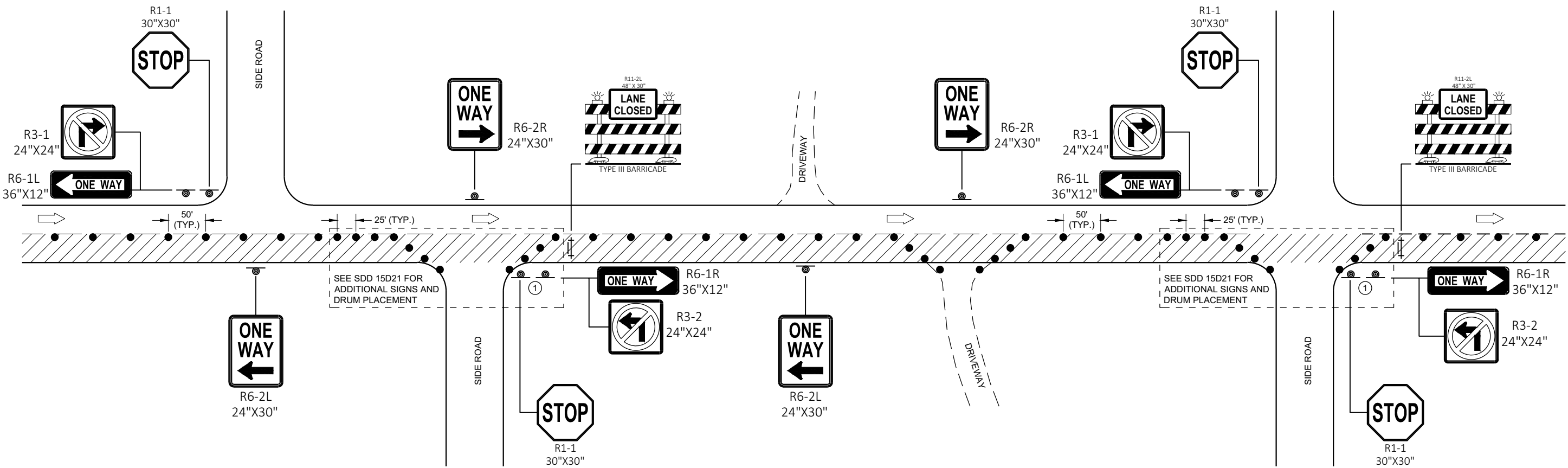
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

① IF WORK OPERATIONS ALLOWS, MOVE R1-1, R6-1R, AND R3-2 CLOSER TO INTERSECTION.

6



6

TRAFFIC CONTROL
ONE - WAY SIGNING

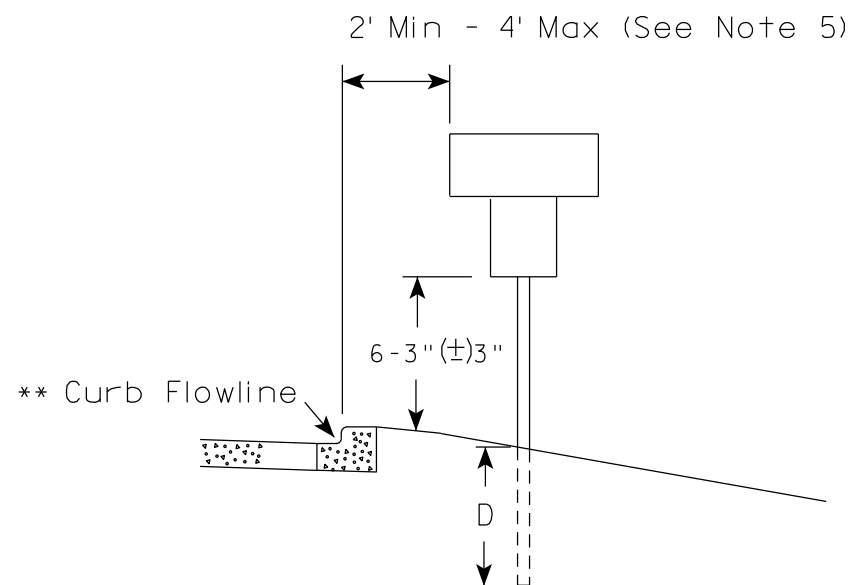
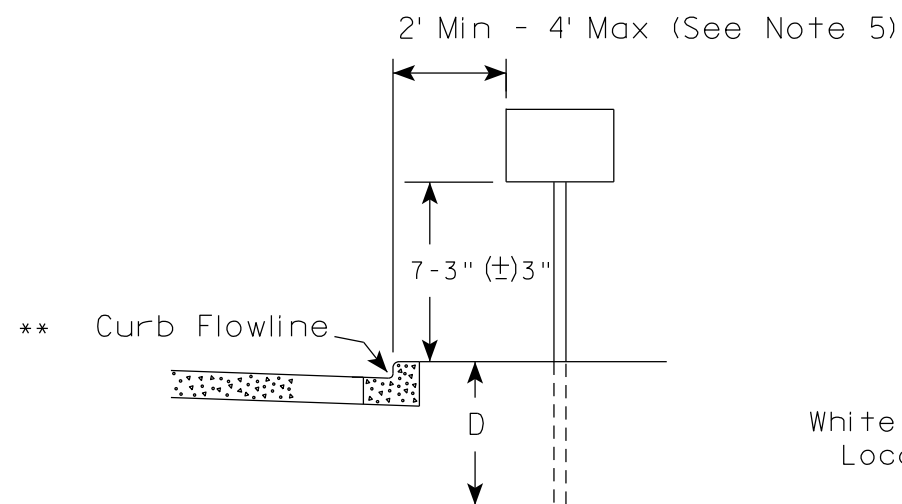
TRAFFIC CONTROL
ONE-WAY SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 189

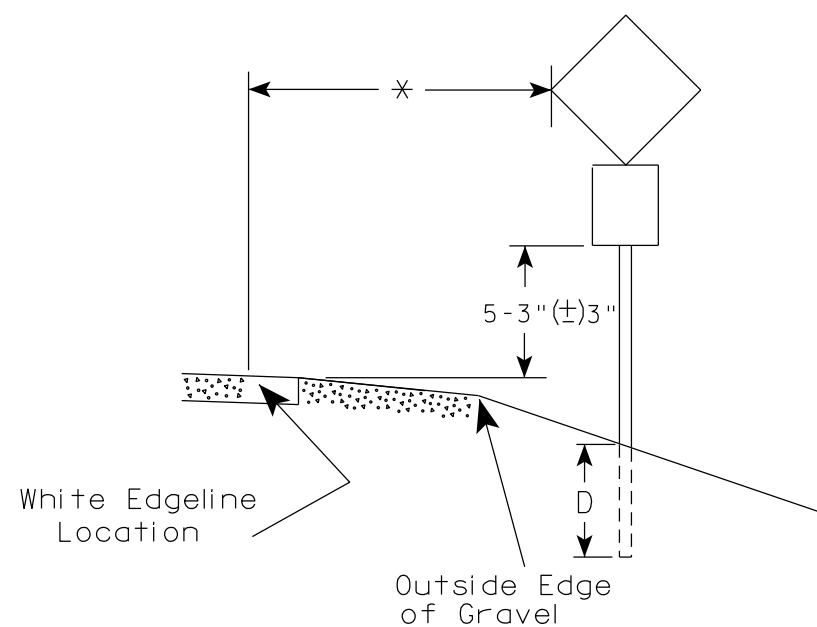
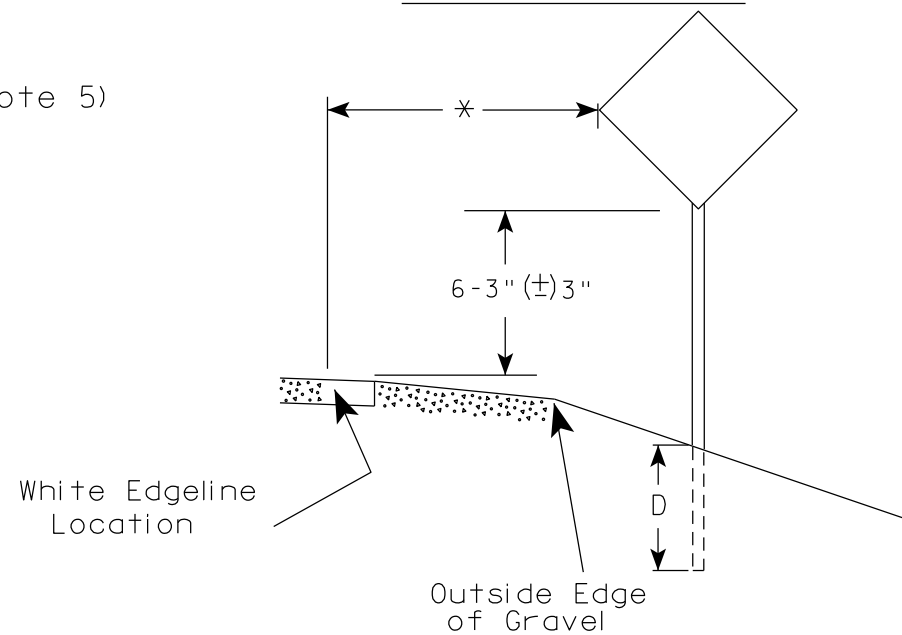
FHWA

URBAN AREA



* * 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.

RURAL AREA (See Note 2)



* 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

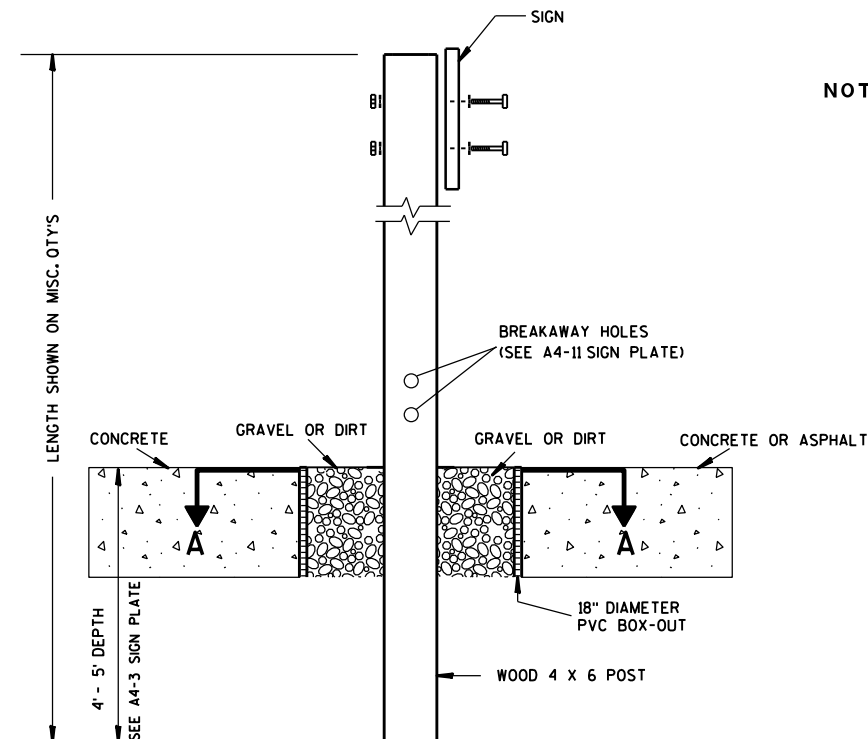
- Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
- If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

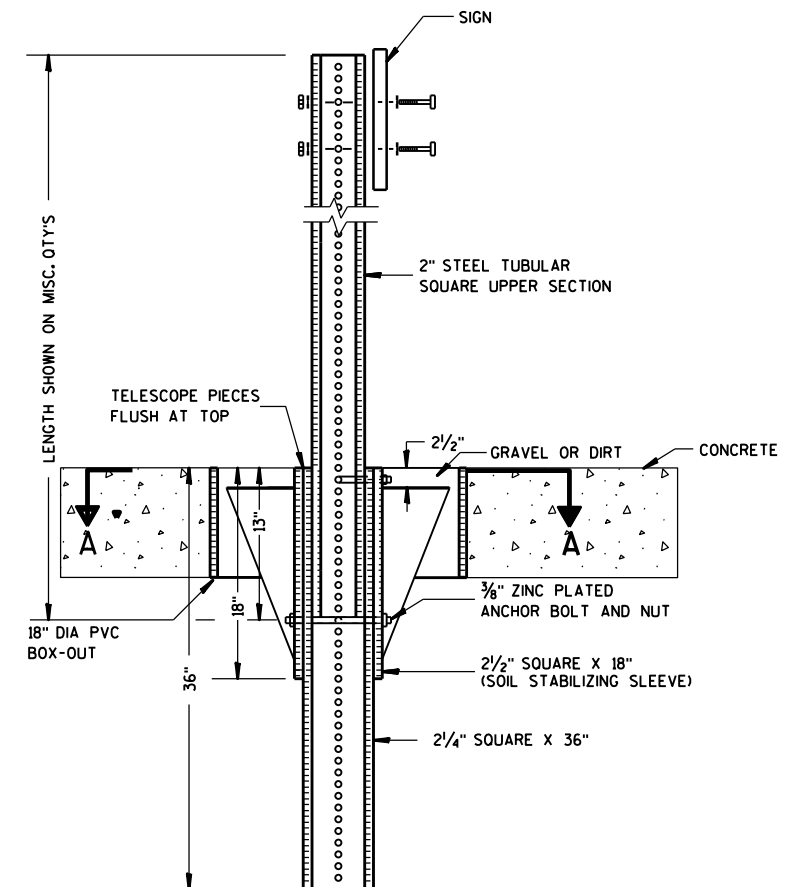
DATE 12/6/23 PLATE NO. A4-3.23



ELEVATION VIEW

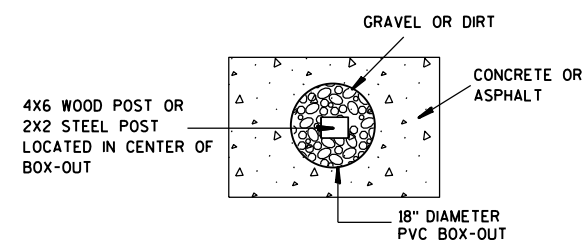
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 PLAT 191 A4-3B.1

PROJECT NO:

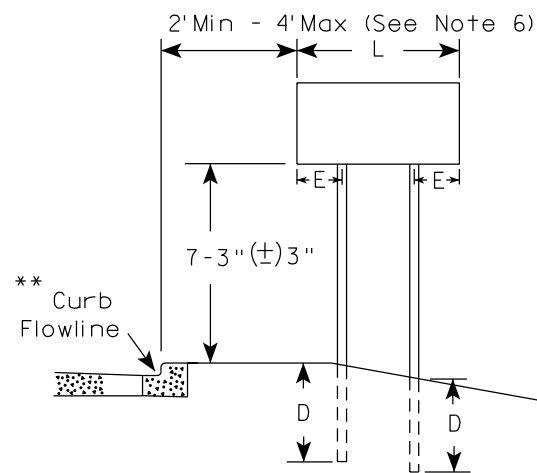
HWY:

COUNTY:

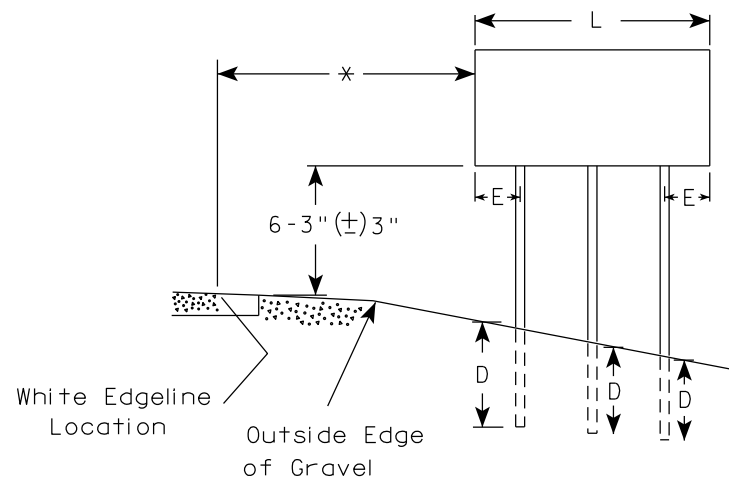
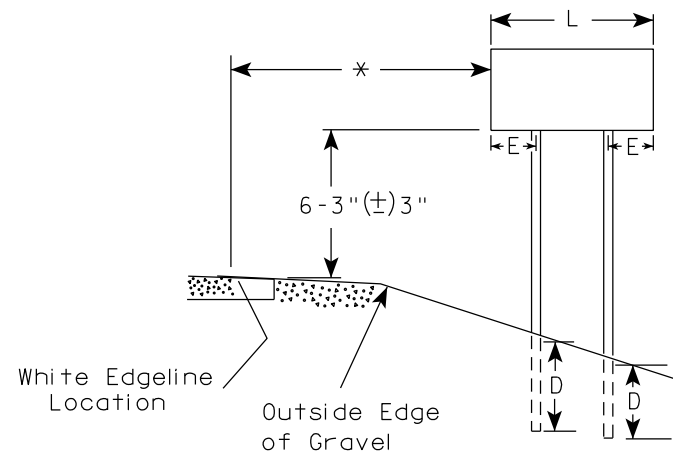
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E

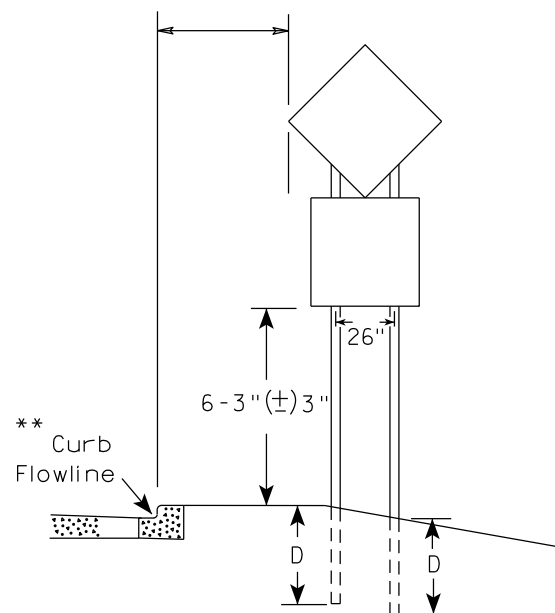
URBAN AREA



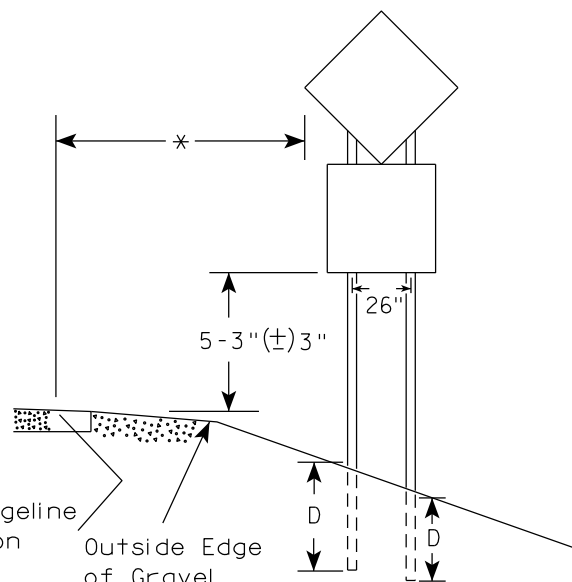
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

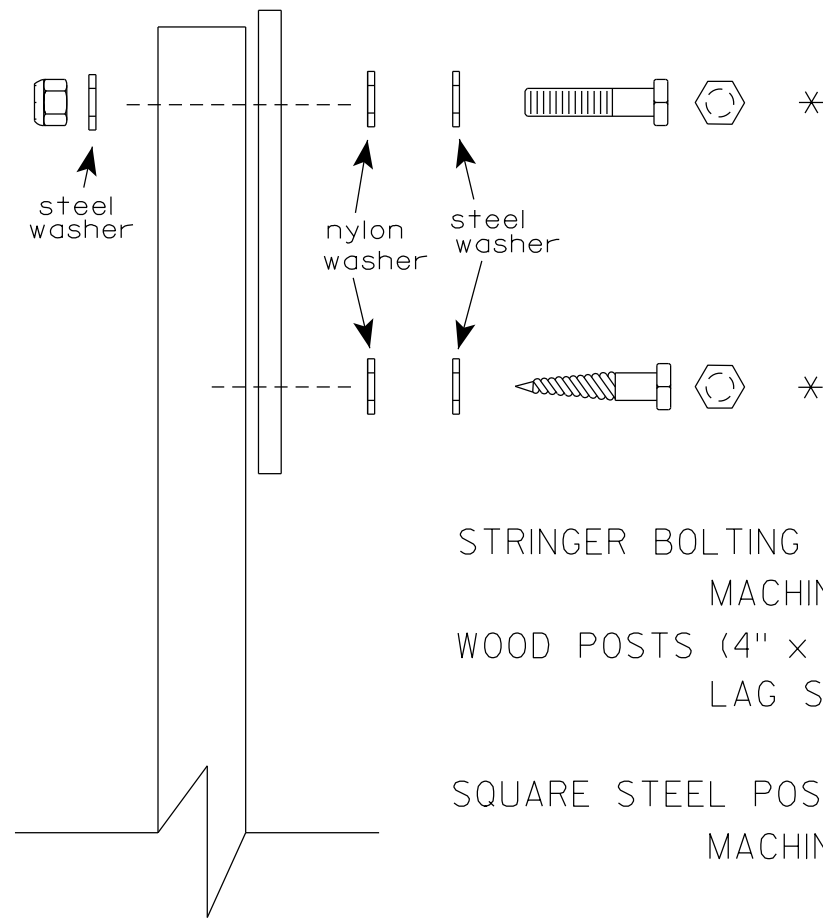
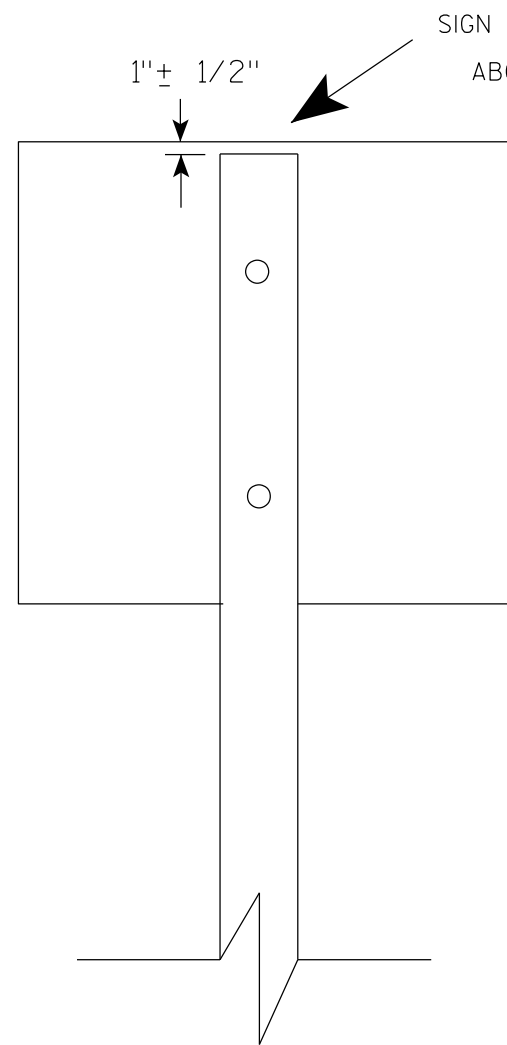
DATE 12/6/23 PLATE NO. A4-4.16

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

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

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

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



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

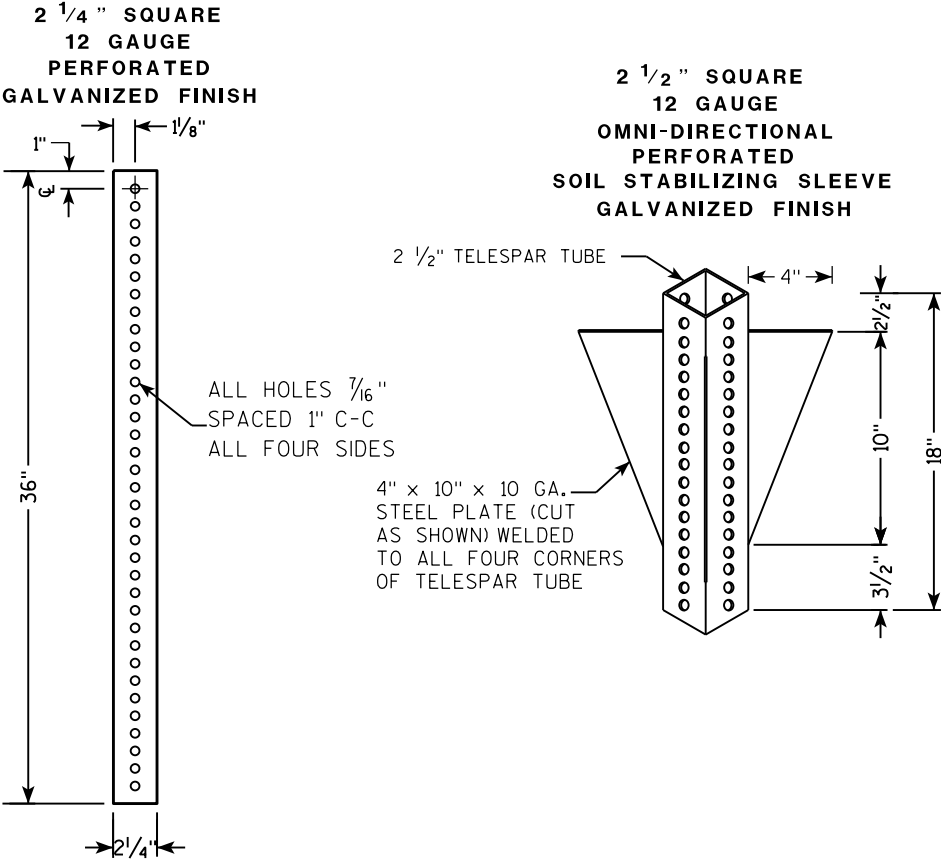
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (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 $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

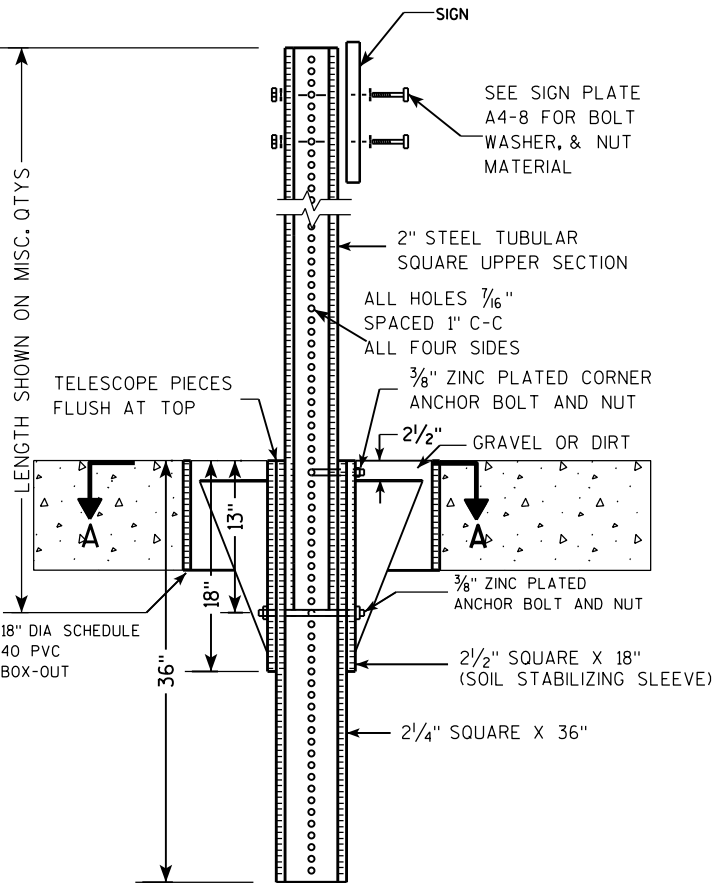
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

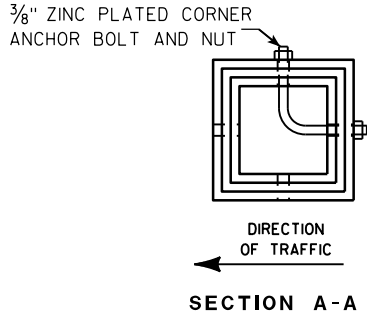
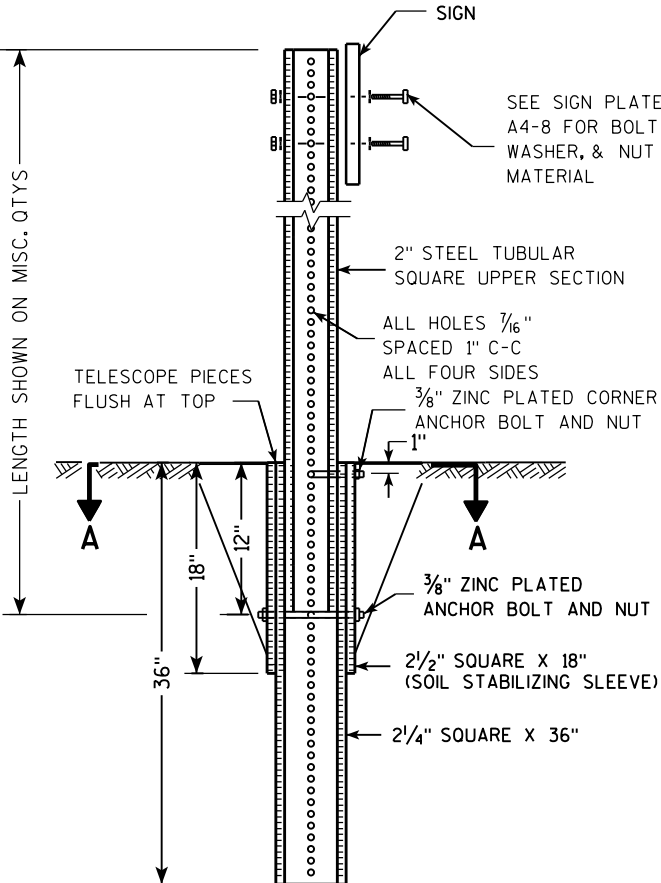
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

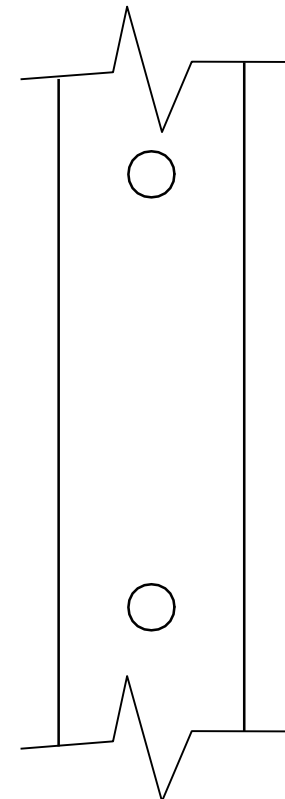
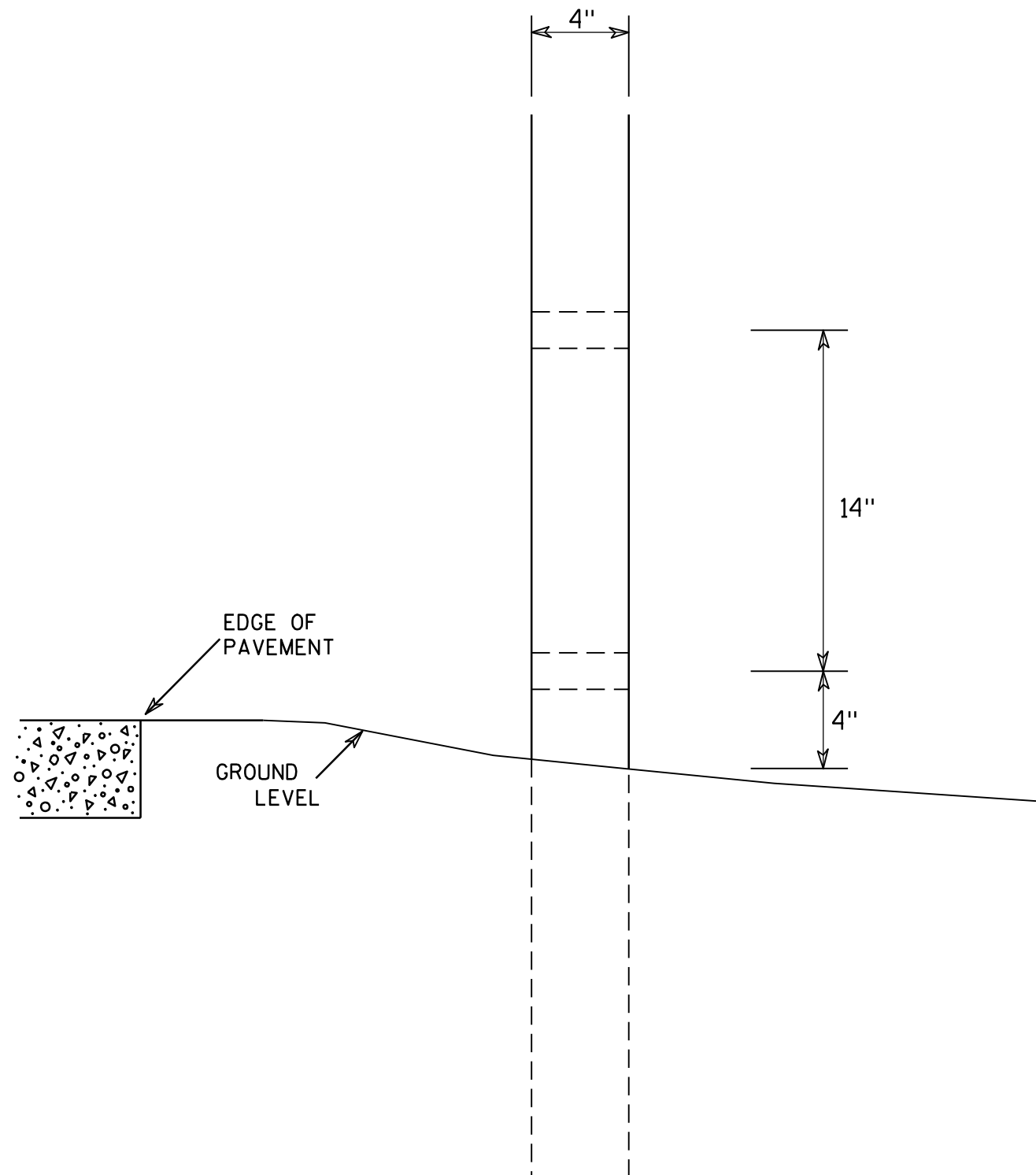
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLAT 194 14-9.9



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

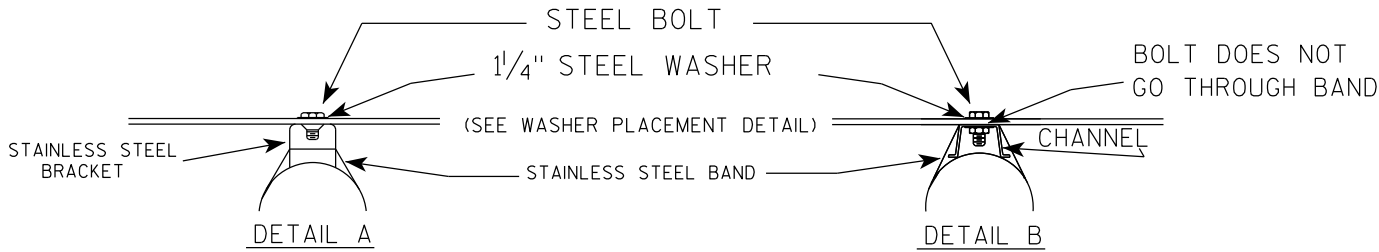
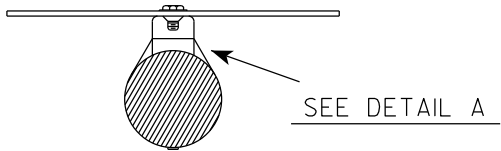
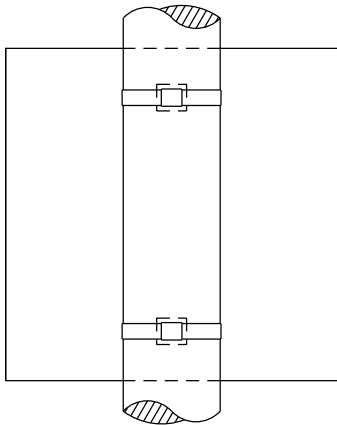
COUNTY:

SHEET NO: 195

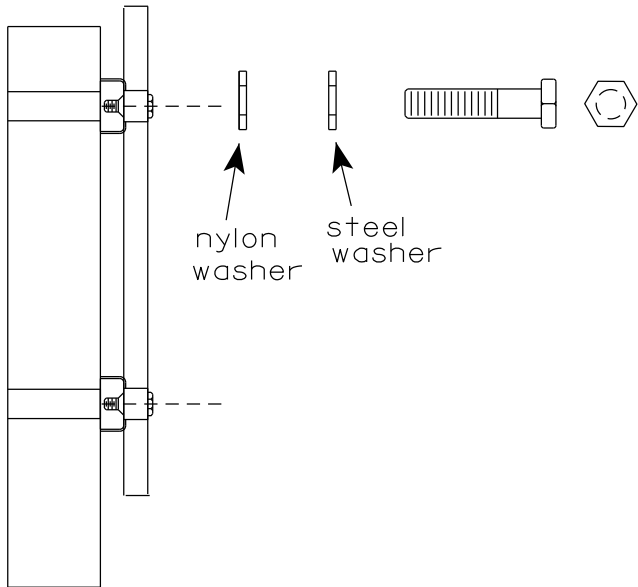
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

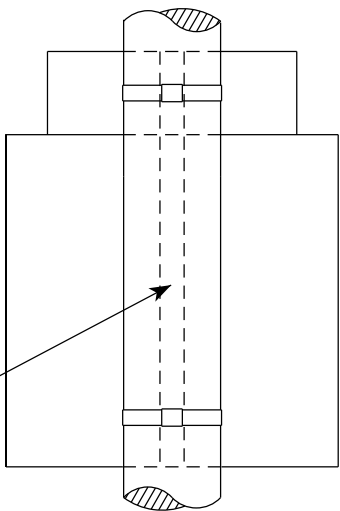


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY

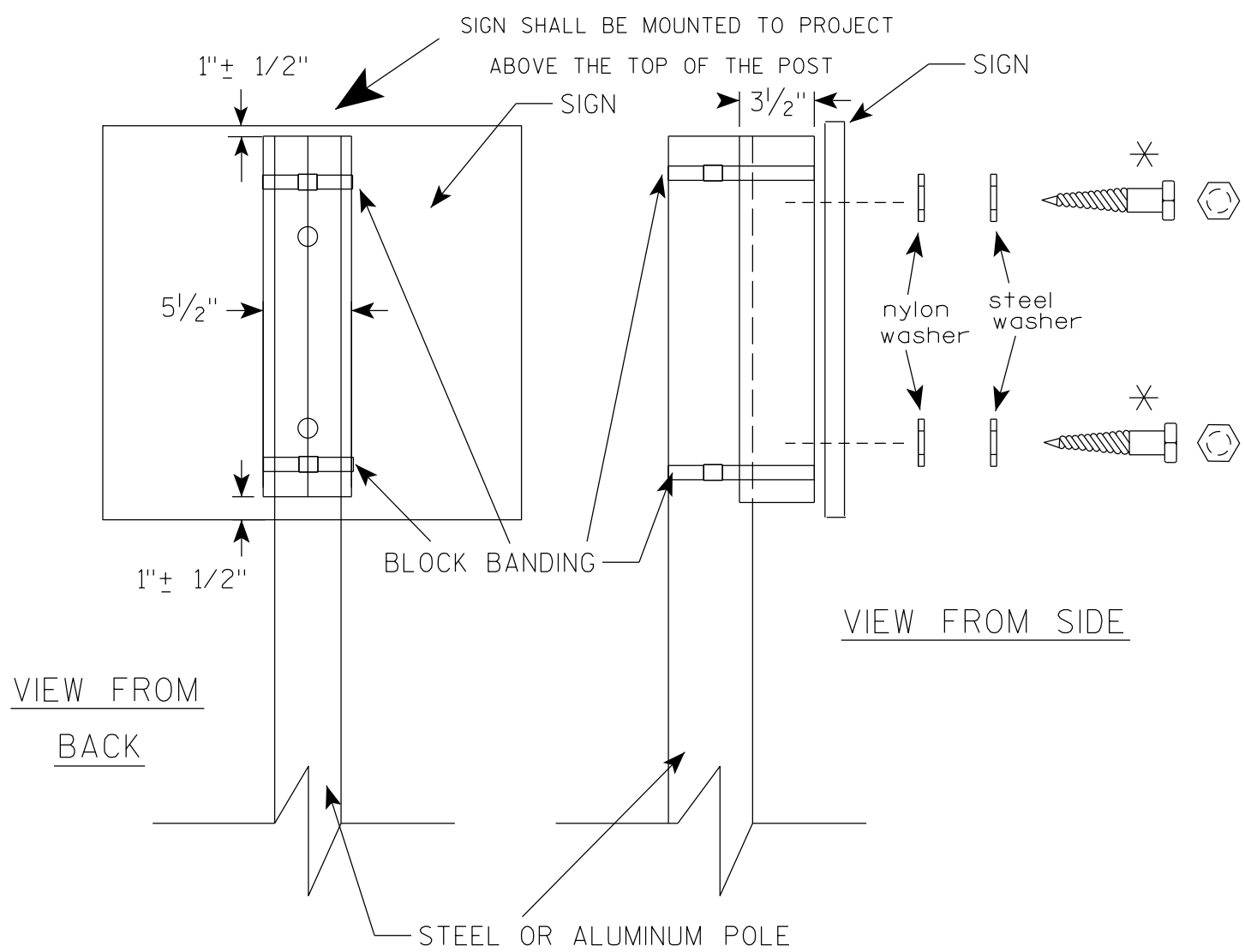


SEE DETAIL B

STANDARD SIGN
SIGN BANDING DETAILS

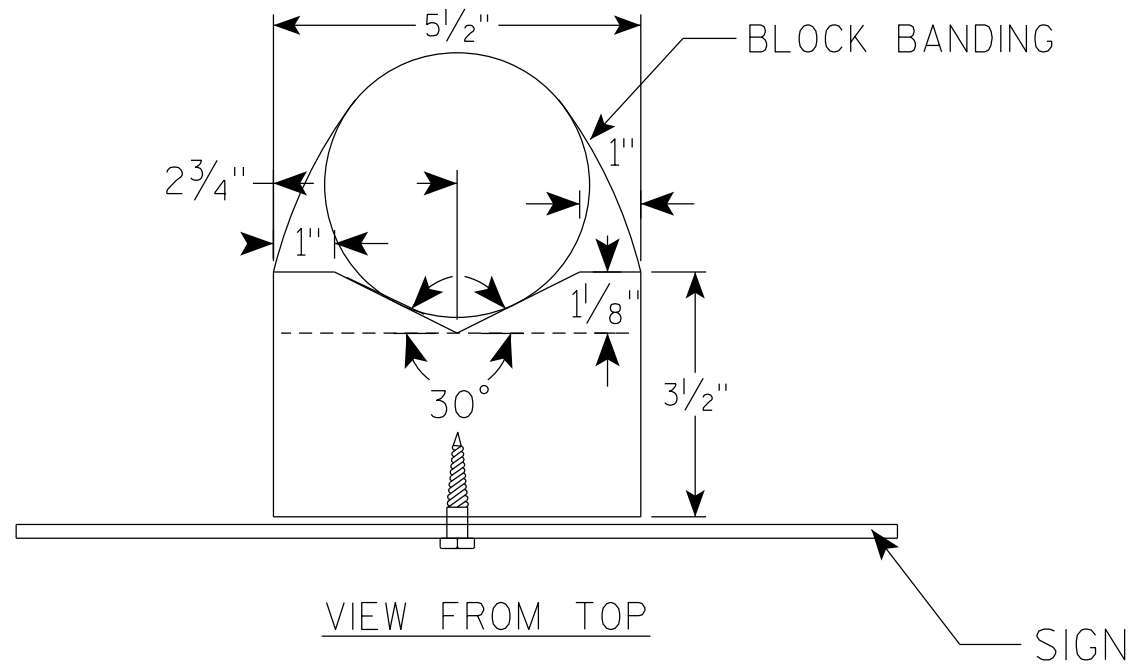
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

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

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 197

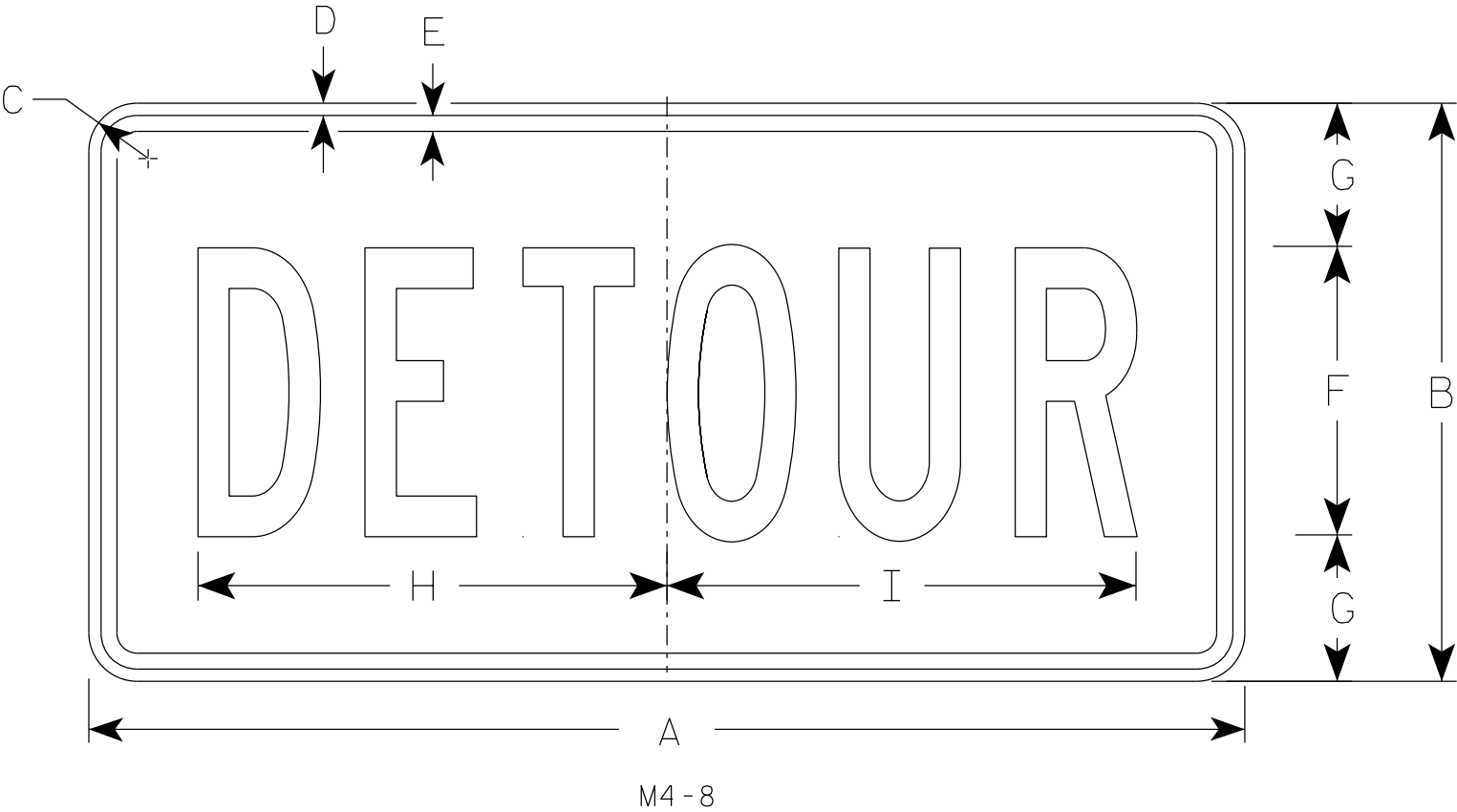
E

7

7

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

STANDARD SIGN

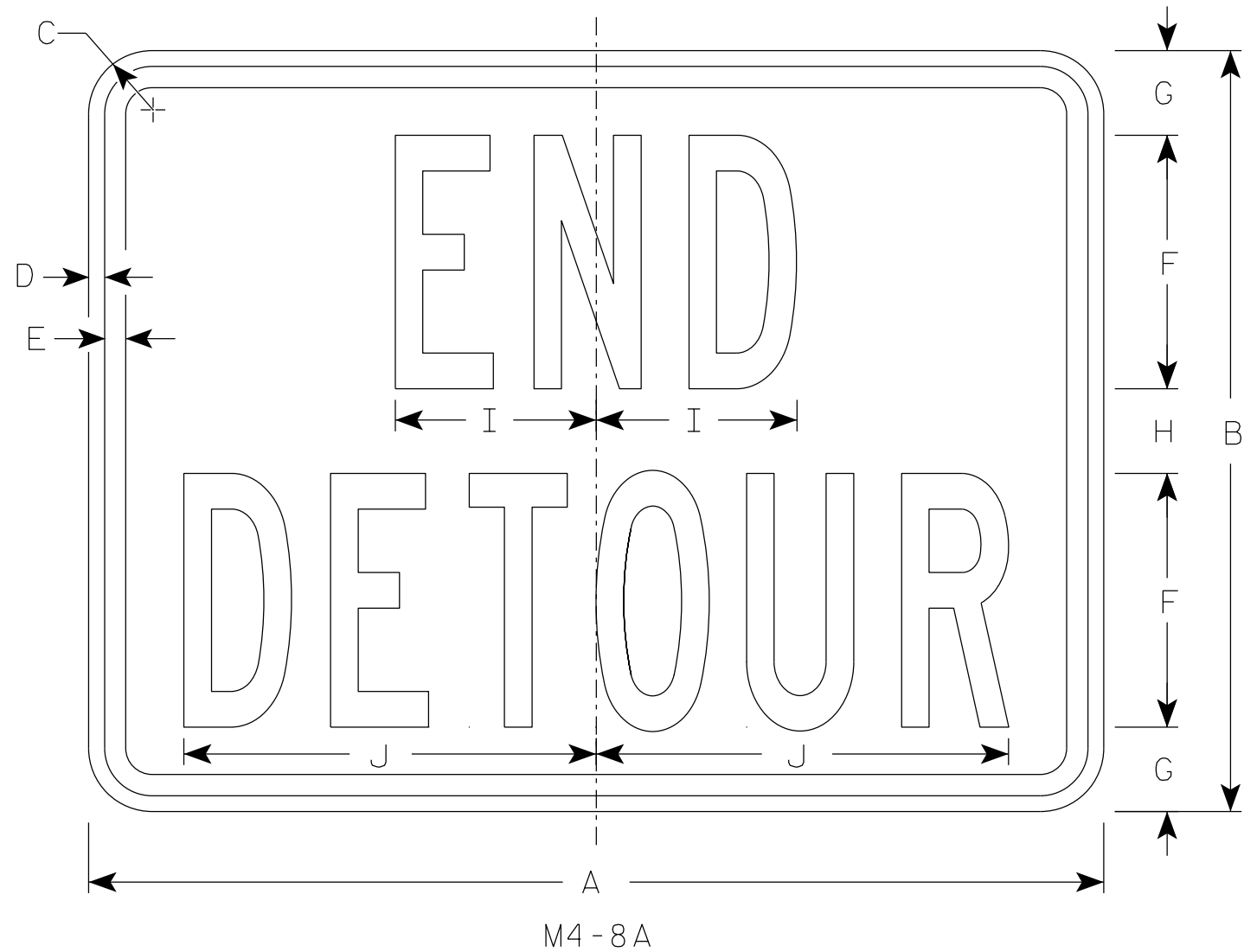
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

7



NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
2M	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
5	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0

STANDARD SIGN

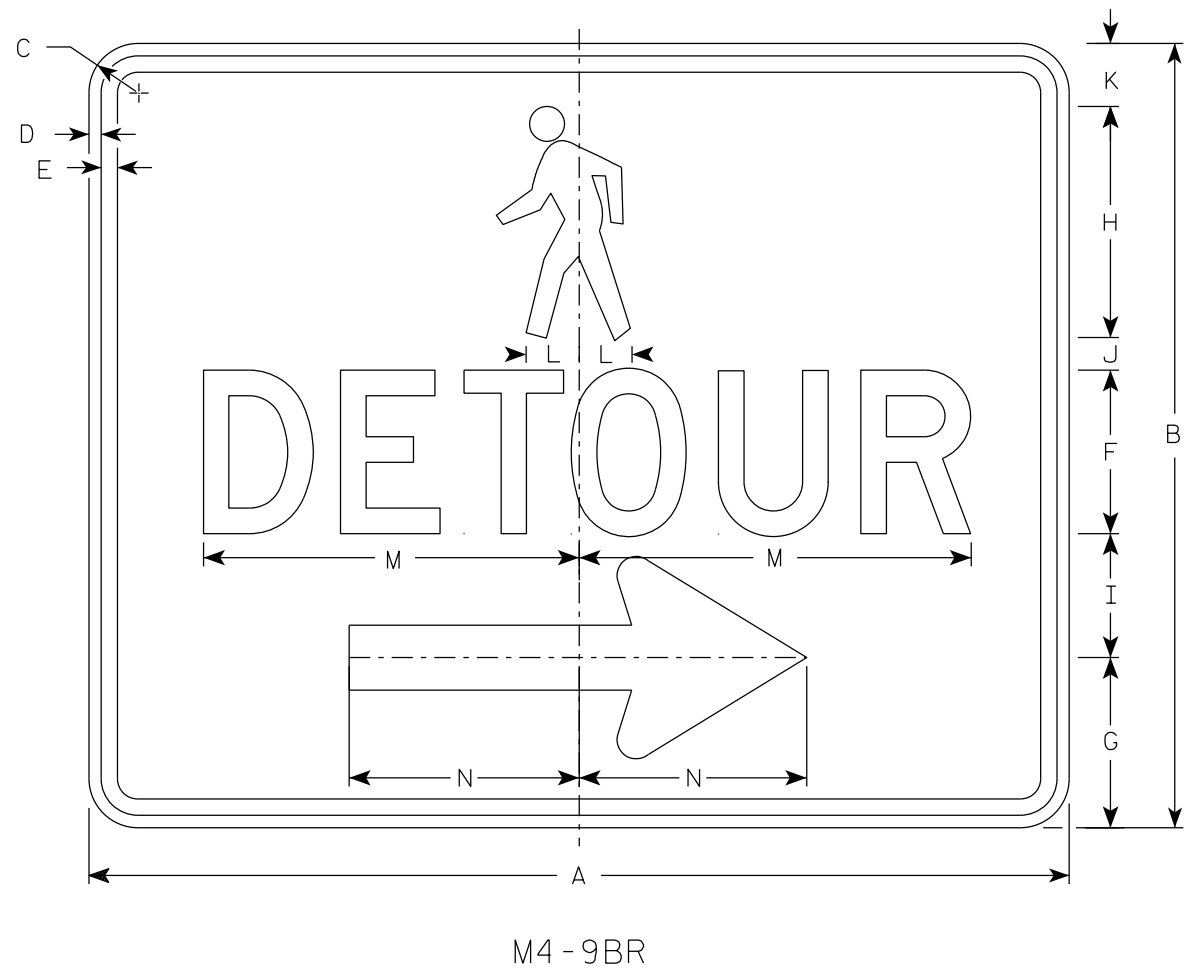
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

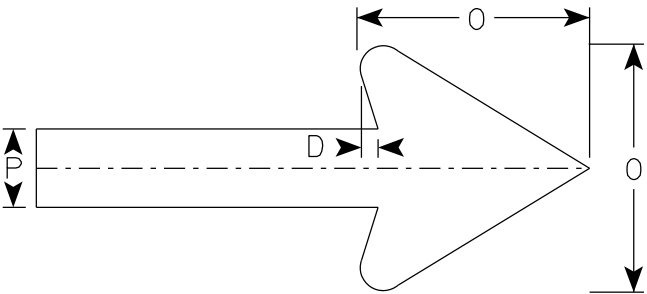
7



M4-9BR

NOTES

- 1. Sign is Type II-Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M4-9BL is the same as M4-9BR except the arrow is reversed.



Arrow Detail

7

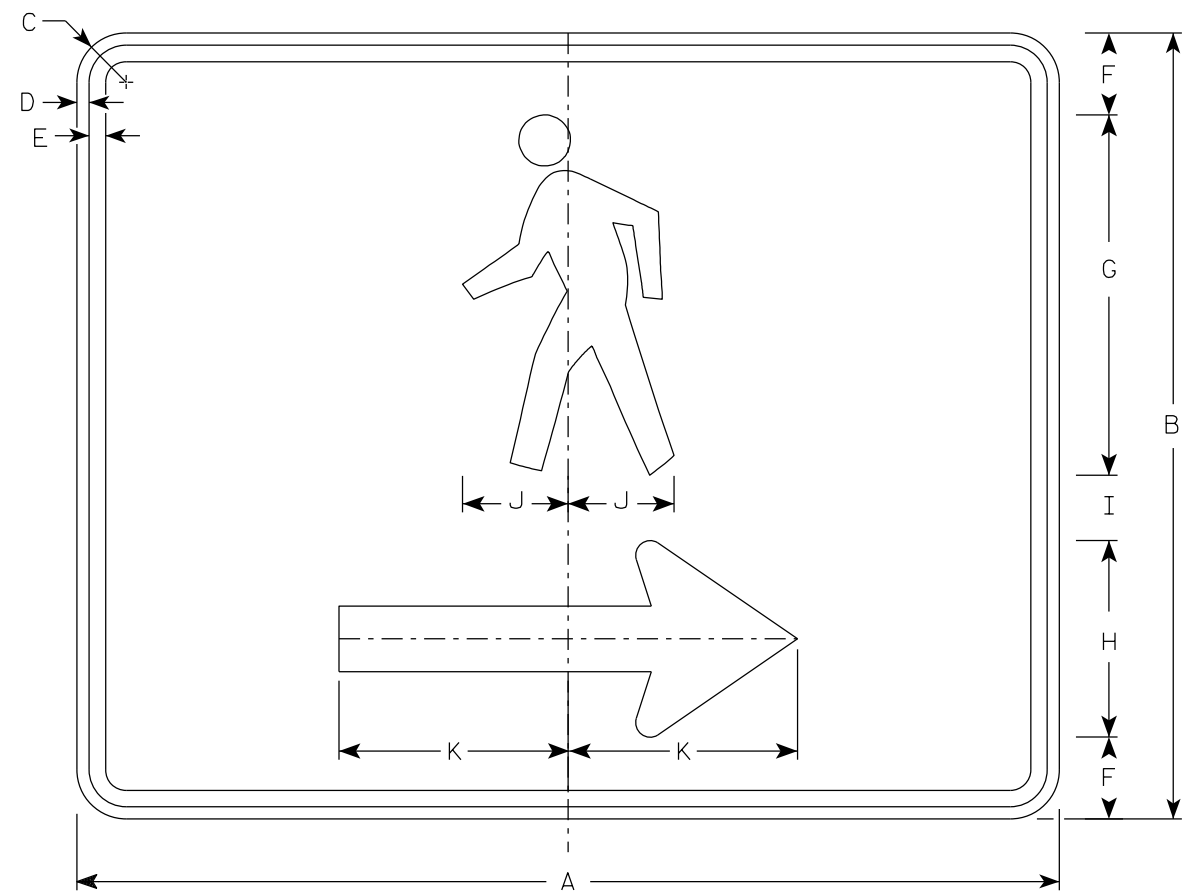
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
2M	30	24	1 1/2	3/8	1/2	5	5 1/4	7 1/8	3 3/4	1	1 1/8	1 5/8	11 3/4	7	6	2											5.0
3																											
4																											
5																											

STANDARD SIGN
M4-9B L&R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

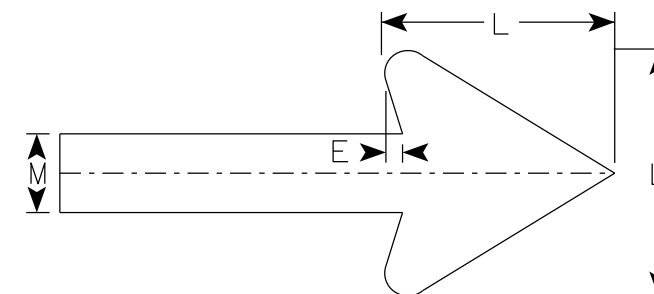
DATE 2/9/2023 PLATE NO. M4-9B.4



M4-60R

NOTES

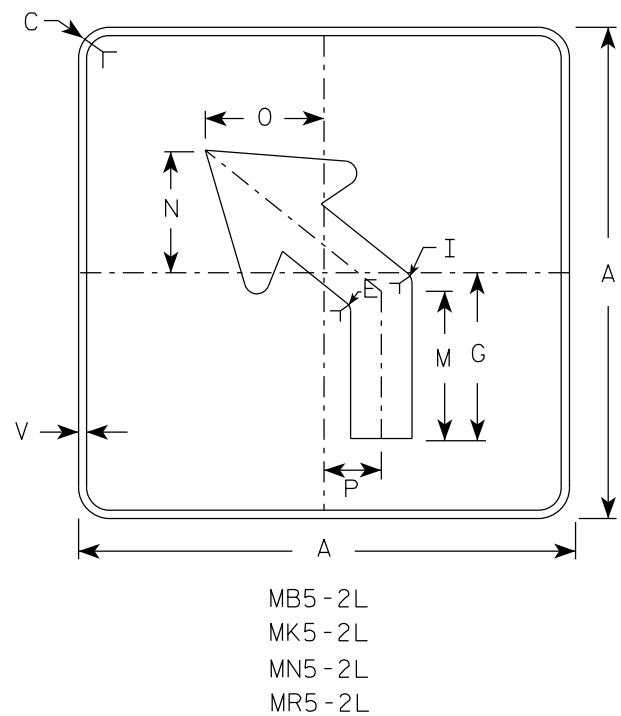
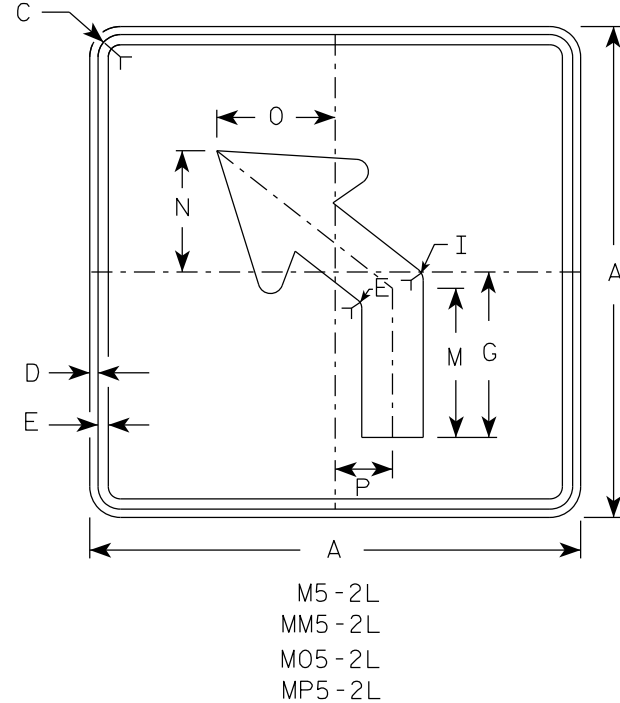
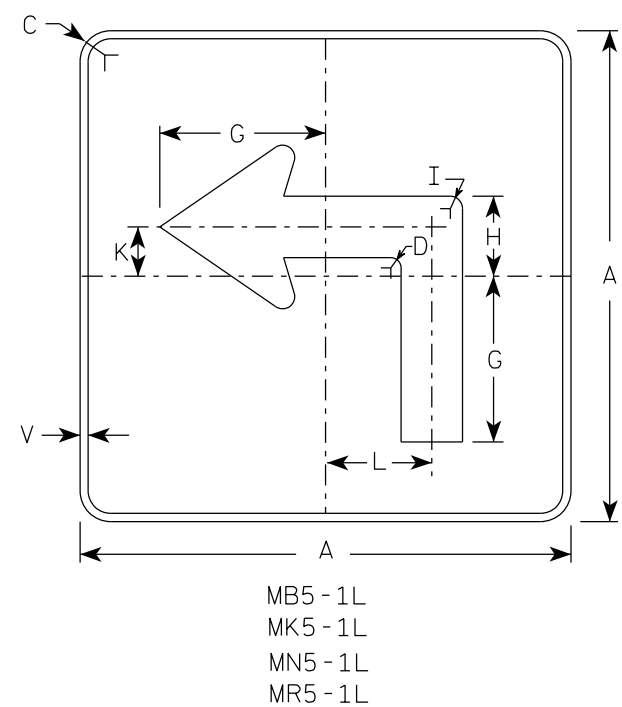
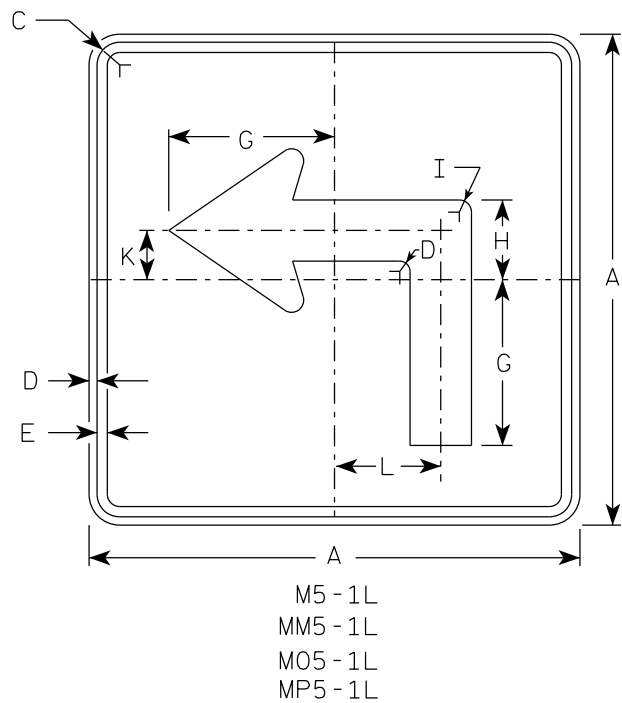
1. Sign is Type II- Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M4-60L is the same as M4-60R except the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



Arrow Detail

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

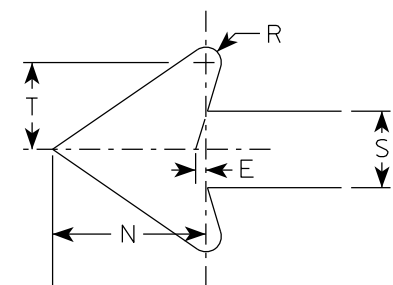
PROJECT NO:	HWY:	COUNTY:	SHEET NO: 201	E
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NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 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.
- | | | |
|-----------|-------|---|
| M5-1 and | M5-2 | Background - White |
| | | Message - Black |
| MB5-1 and | MB5-2 | Background - Blue |
| | | Message - White |
| MK5-1 and | MK5-2 | Background - Green |
| | | Message - White |
| MM5-1 and | MM5-2 | Background - White |
| | | Message - Green |
| MN5-1 and | MN5-2 | Background - Brown |
| | | Message - White |
| M05-1 and | M05-2 | Background - Orange - Type F Reflective |
| | | Message - Black |
| MP5-1 and | MP5-2 | Background - White |
| | | Message - Blue |
| MR5-1 and | MR5-2 | Background - Brown |
| | | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

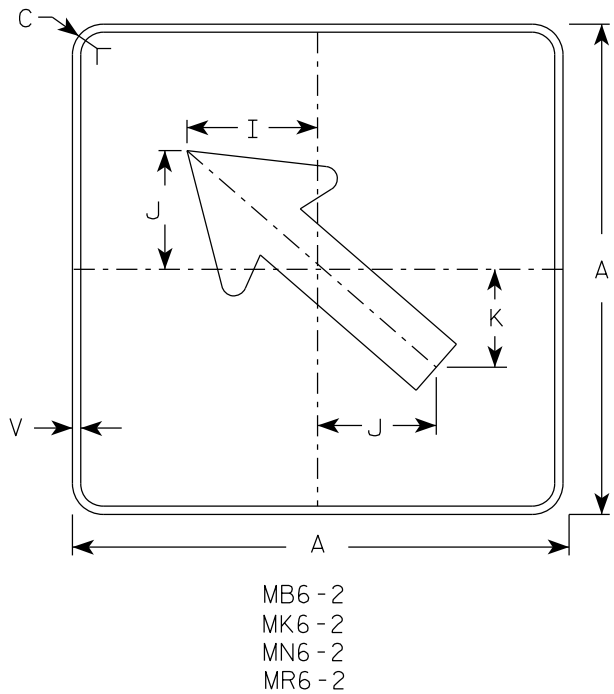
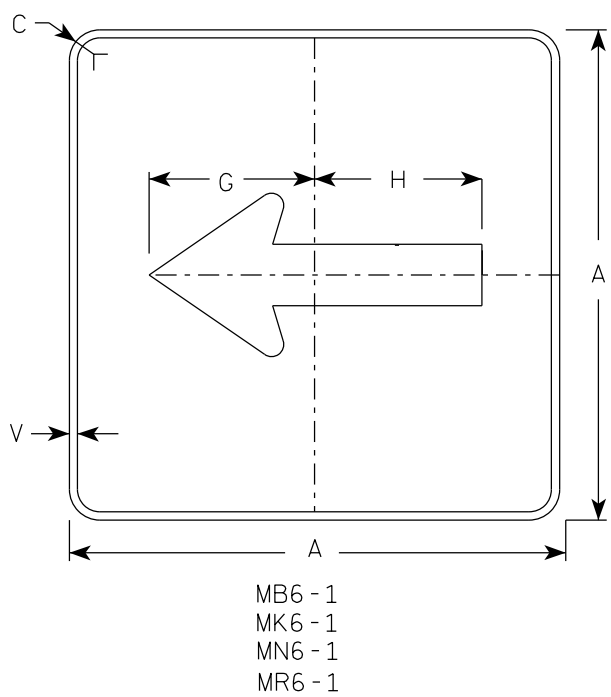
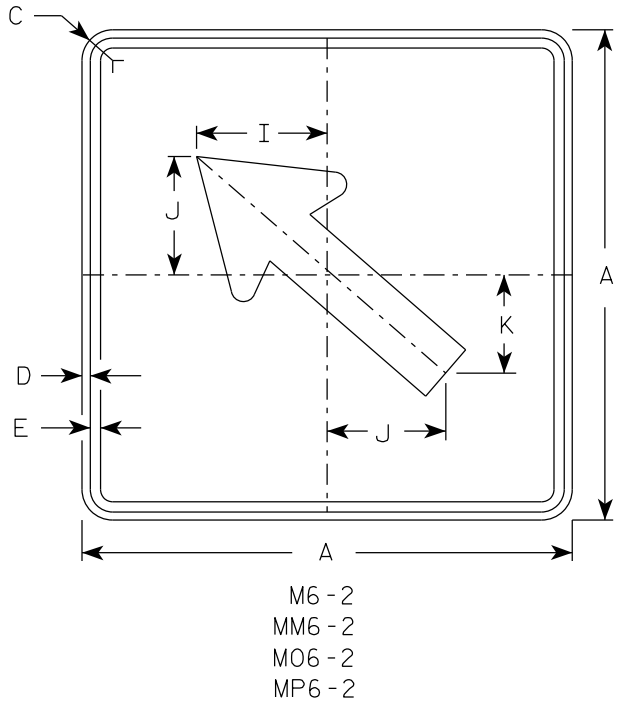
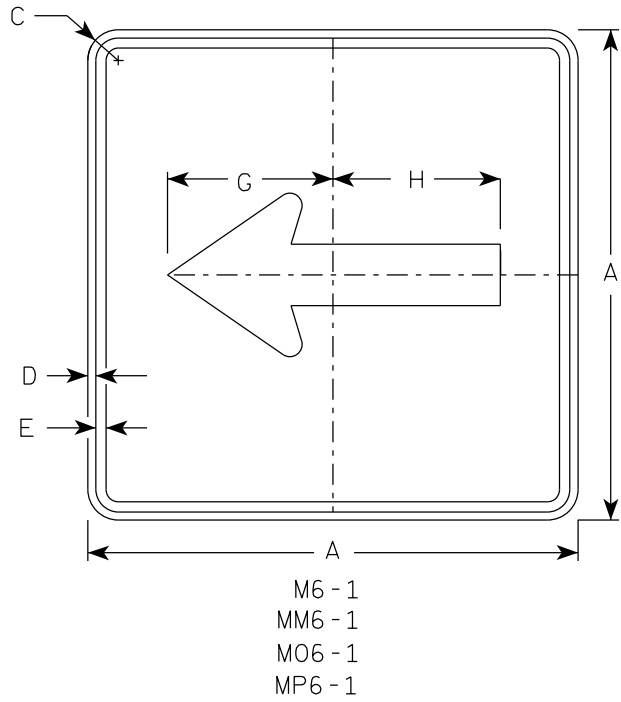
STANDARD SIGN

M5-1 & M5-2

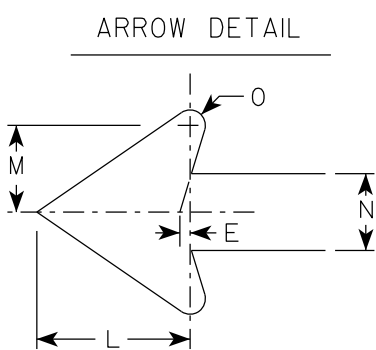
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15



- NOTES**
- Signs are Type II - Type H Reflective except as Shown
 - Color:
Background - See note 4
Message - See note 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.
 - M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

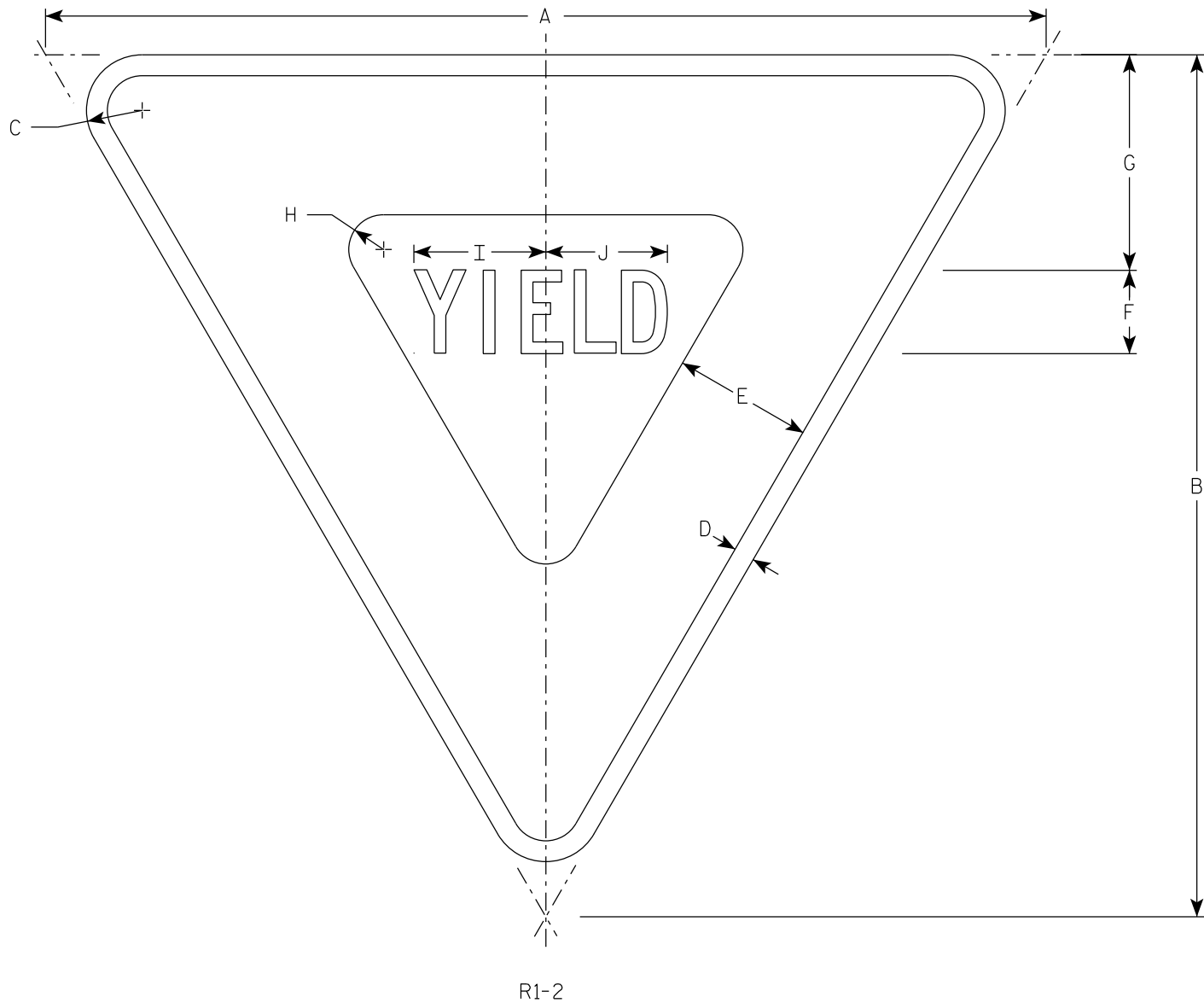
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

7



NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - See note 4
- 3. Message Series - C
- 4. The border strip and word message are reflectorized red.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	2	5⁄8	4	2 1⁄2	6 3⁄8	7⁄8	4	3 5⁄8																	2.71
2S	36	31	2	3⁄4	5	3	7 3⁄4	1 1⁄4	4 3⁄4	4 3⁄8																	3.88
2M	48	42	3	1	6	4	9 3⁄4	2	6 1⁄4	5 7⁄8																	7.00
3	48	42	3	1	6	4	9 3⁄4	2	6 1⁄4	5 7⁄8																	7.00
4	48	42	3	1	6	4	9 3⁄4	2	6 1⁄4	5 7⁄8																	7.00
5	60	52	3	1 1⁄2	8	5	13	2 1⁄2	7 7⁄8	7 1⁄4																	10.83
6																											
7	18	15 1⁄2	1	3⁄8	2 1⁄2	1 1⁄2	3 7⁄8	5⁄8	2 3⁄8	2 1⁄4																	0.97

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 204

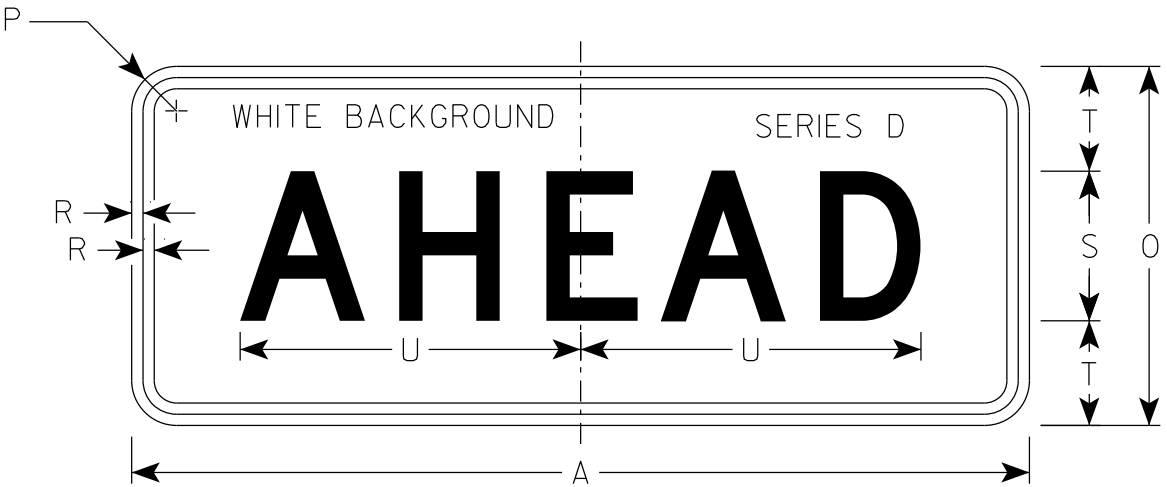
E



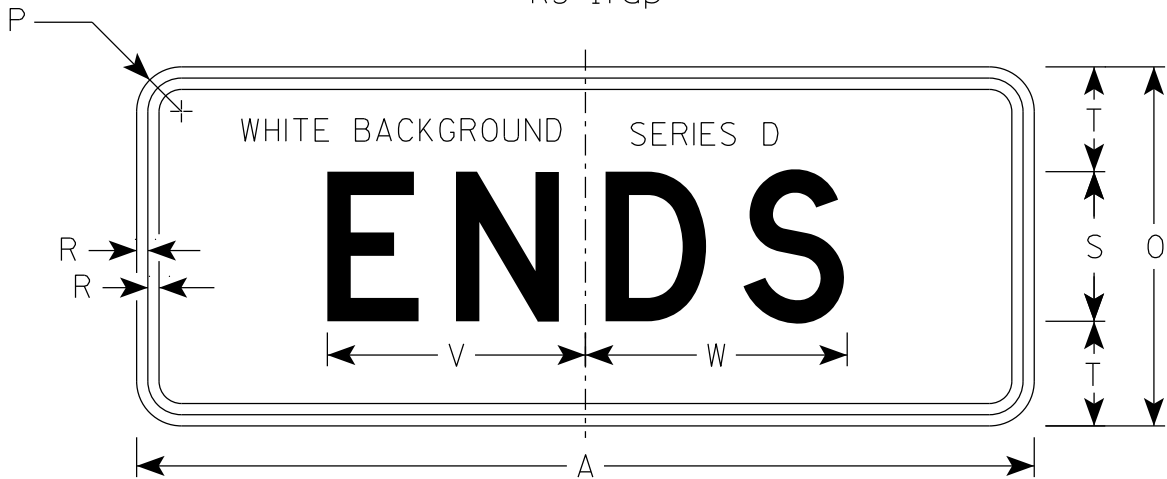
R3-17

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - AS SHOWN
Message - BLACK
- 3. Message Series - C or as noted



R3-17ap



R3-17bp

																												R3-17	R3-17ap	R3-17bp
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.	Area sq. ft.	Area sq. ft.	
1																														
2S	30	24	1 1/2	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/2	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5	
2M	30	24	1 1/2	3/8	1/2	2	4	4 1/8	7 7/8	6 3/8	9 1/2	2 5/8	7/8	13	12	1 1/2	3 3/8	3/8	5	3 1/2	11 3/8	8 5/8	8 3/4	2 3/8	15 5/8	8	5.0	2.5	2.5	
3																														
4																														
5																														

STANDARD SIGN

R3-17 & R3-17a&bp

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-17.3

7



R4-11

NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - C

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7⁄8	1⁄2	5⁄8	4	3 1⁄8	10	2 1⁄2	3 7⁄8	8 5⁄8	8 3⁄4	8 1⁄2	1 1⁄4	1 3⁄4	7 7⁄8		10 3⁄8	2	1	11 1⁄4						6.25
2M	30		1 7⁄8	1⁄2	5⁄8	4	3 1⁄8	10	2 1⁄2	3 7⁄8	8 5⁄8	8 3⁄4	8 1⁄2	1 1⁄4	1 3⁄4	7 7⁄8		10 3⁄8	2	1	11 1⁄4						6.25
3																											
4																											
5																											

STANDARD SIGN

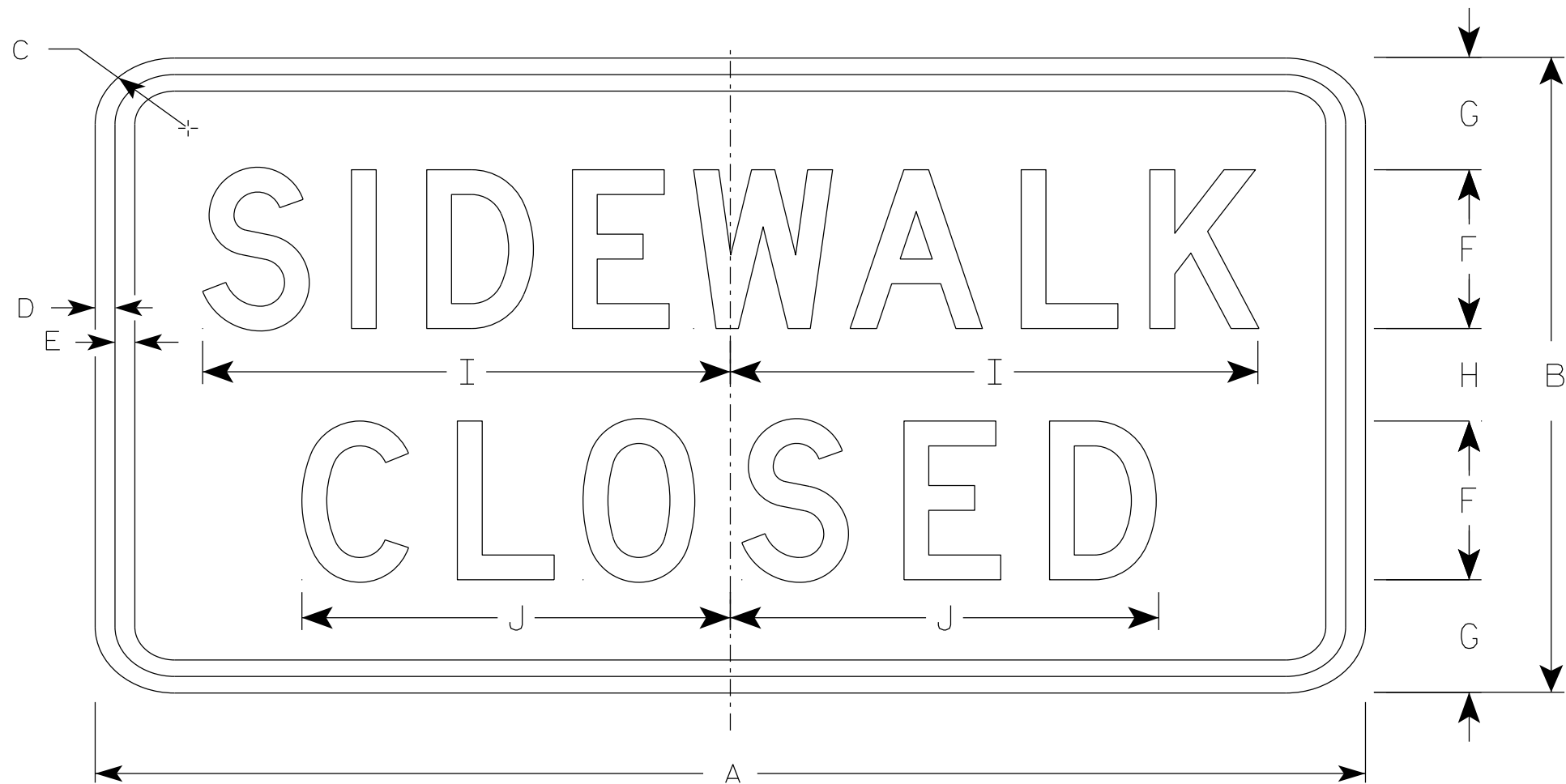
R4-11

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/17/23 PLATE NO. R4-11.2

7



R9-9

NOTES

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

7

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 207

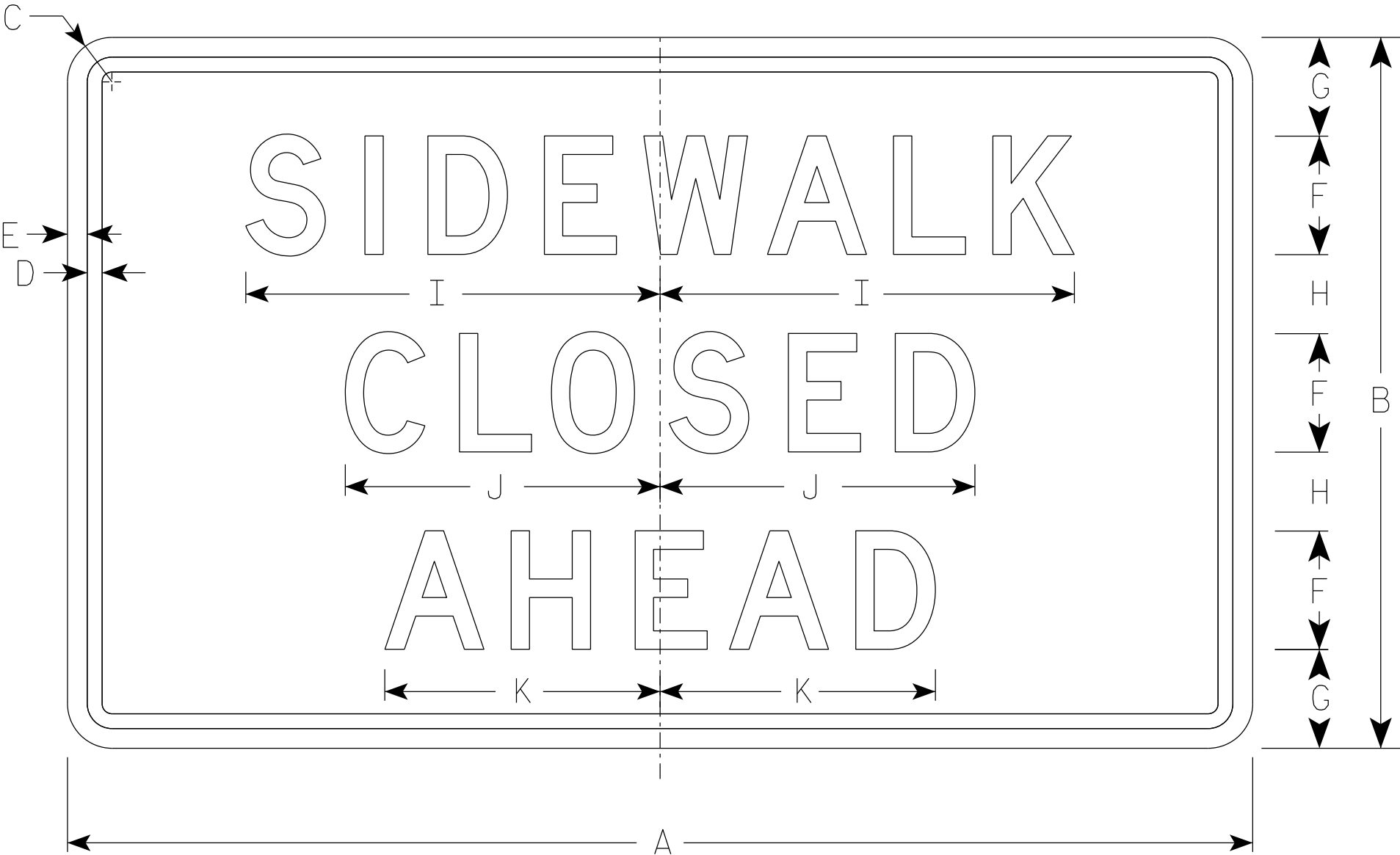
E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:

Background - White

Message - Black
3. Message Series - D



R9-9A

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
2M	30	18	1 1/2	3/8	1/2	3	2 1/2	2	10 1/2	8	7																3.75
3																											
4																											
5																											

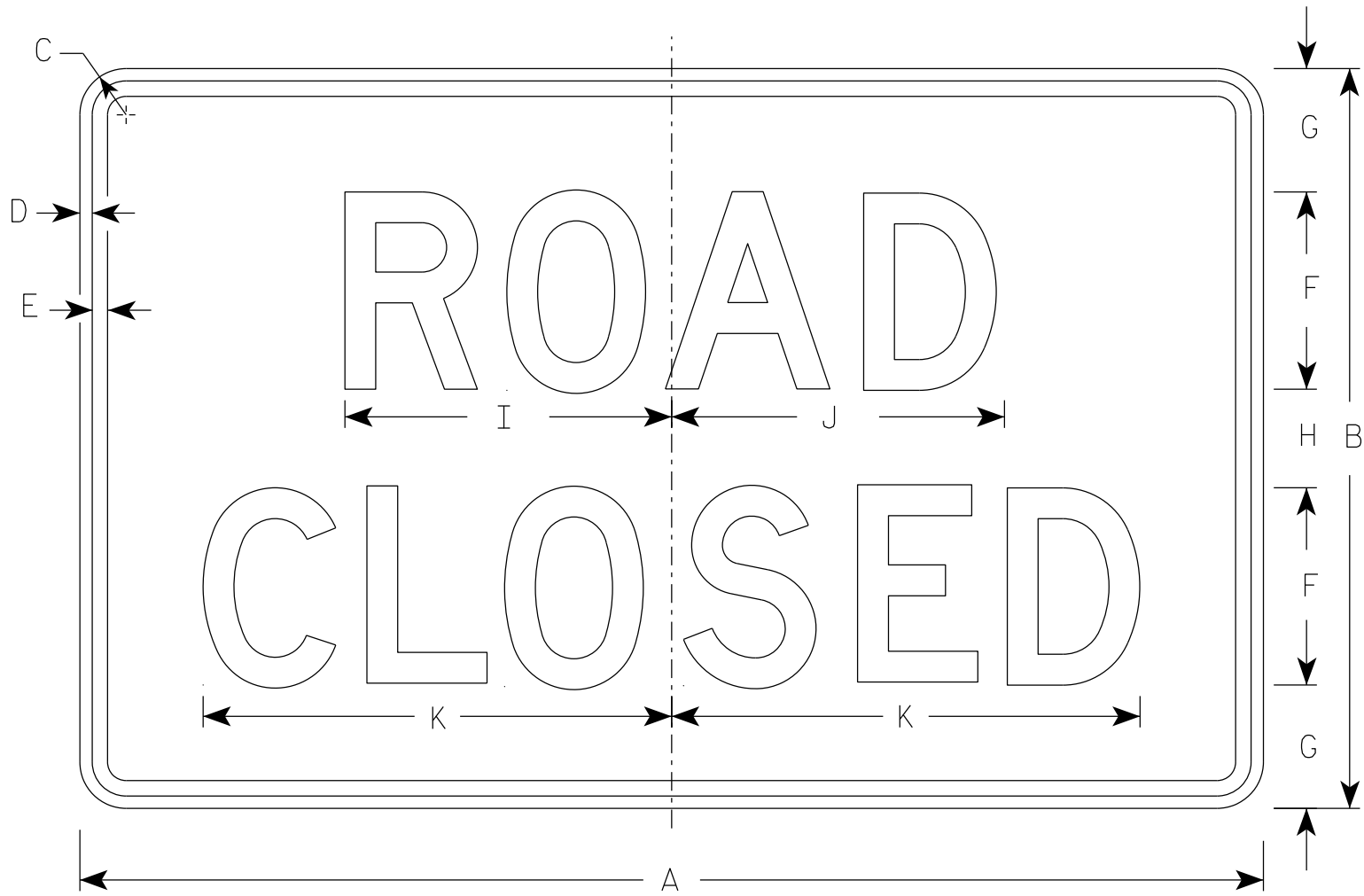
PROJECT NO:

HWY:

COUNTY:

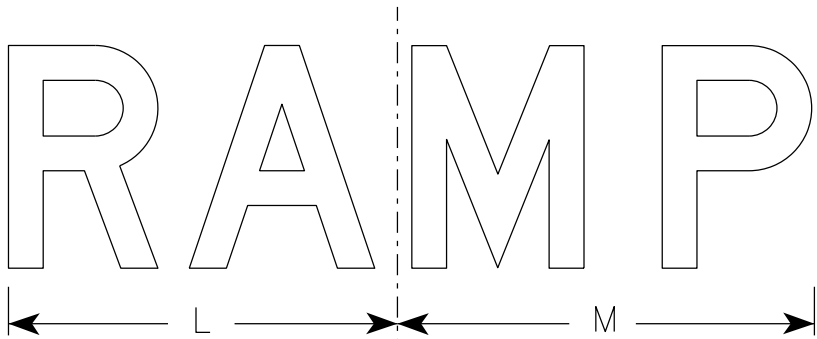
SHEET NO: 208

E

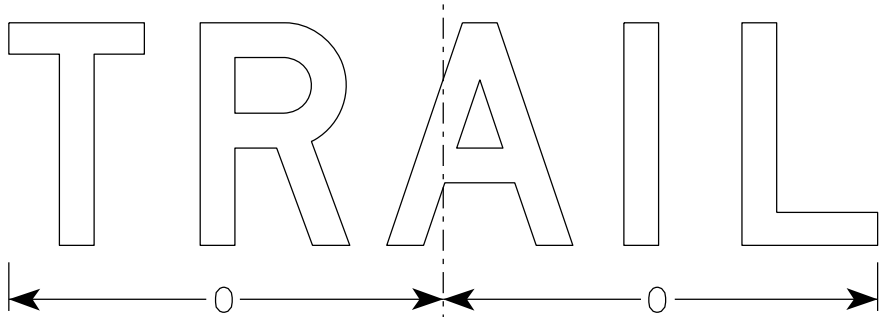


R11-2

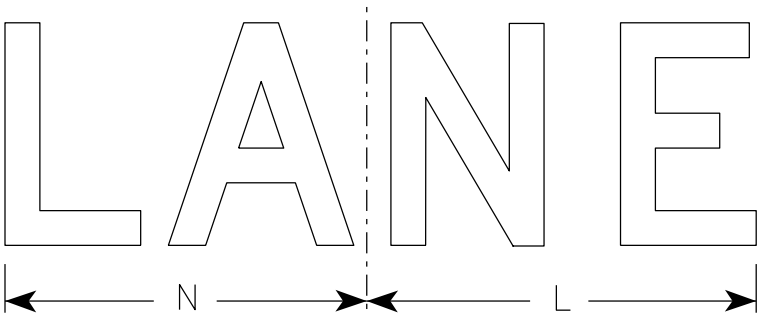
- NOTES
1. Sign is Type II - Type H Reflective
 2. Color:
Background - White
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
 5. Modify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



R11-2R



R11-2T



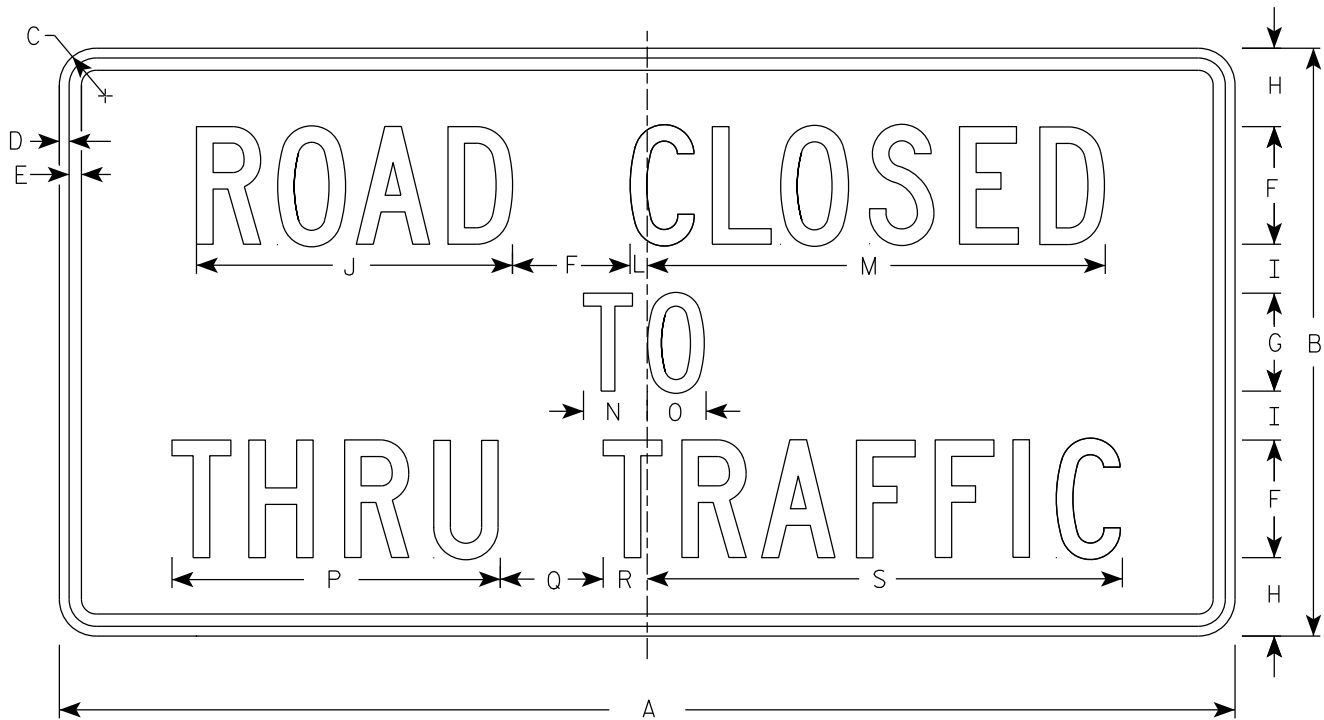
R11-2L

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

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

NOTES

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



R11-4

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 7⁄8	1⁄2	5⁄8	6	5	4	2 1⁄2	16 1⁄8		7⁄8	23 3⁄8	3 1⁄4	3	16 3⁄4	5 1⁄4	2 1⁄4	24 1⁄4								12.5
2M	60	30	1 7⁄8	1⁄2	5⁄8	6	5	4	2 1⁄2	16 1⁄8		7⁄8	23 3⁄8	3 1⁄4	3	16 3⁄4	5 1⁄4	2 1⁄4	24 1⁄4								12.5
3																											
4																											
5																											

STANDARD SIGN

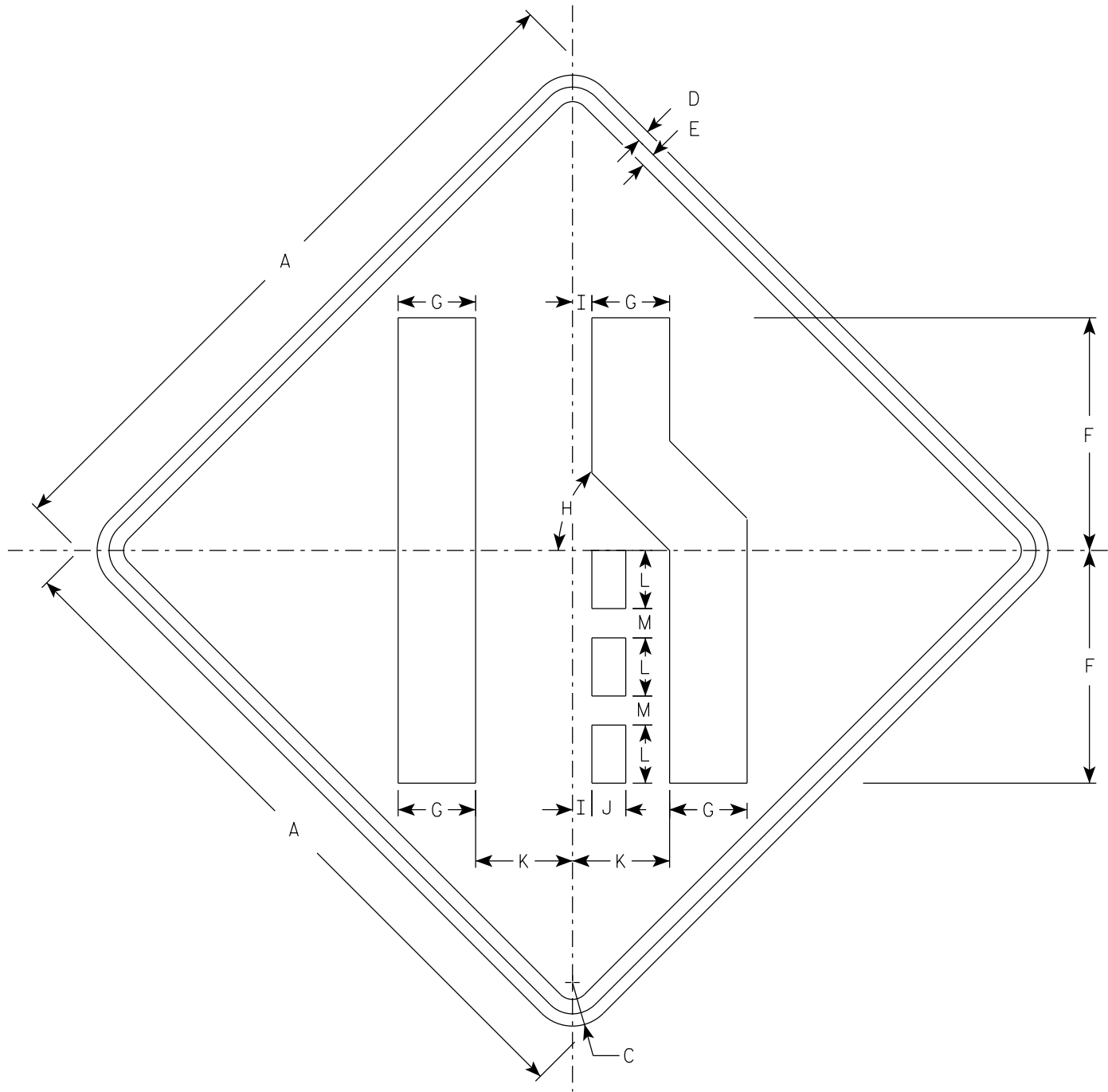
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-4.4

7



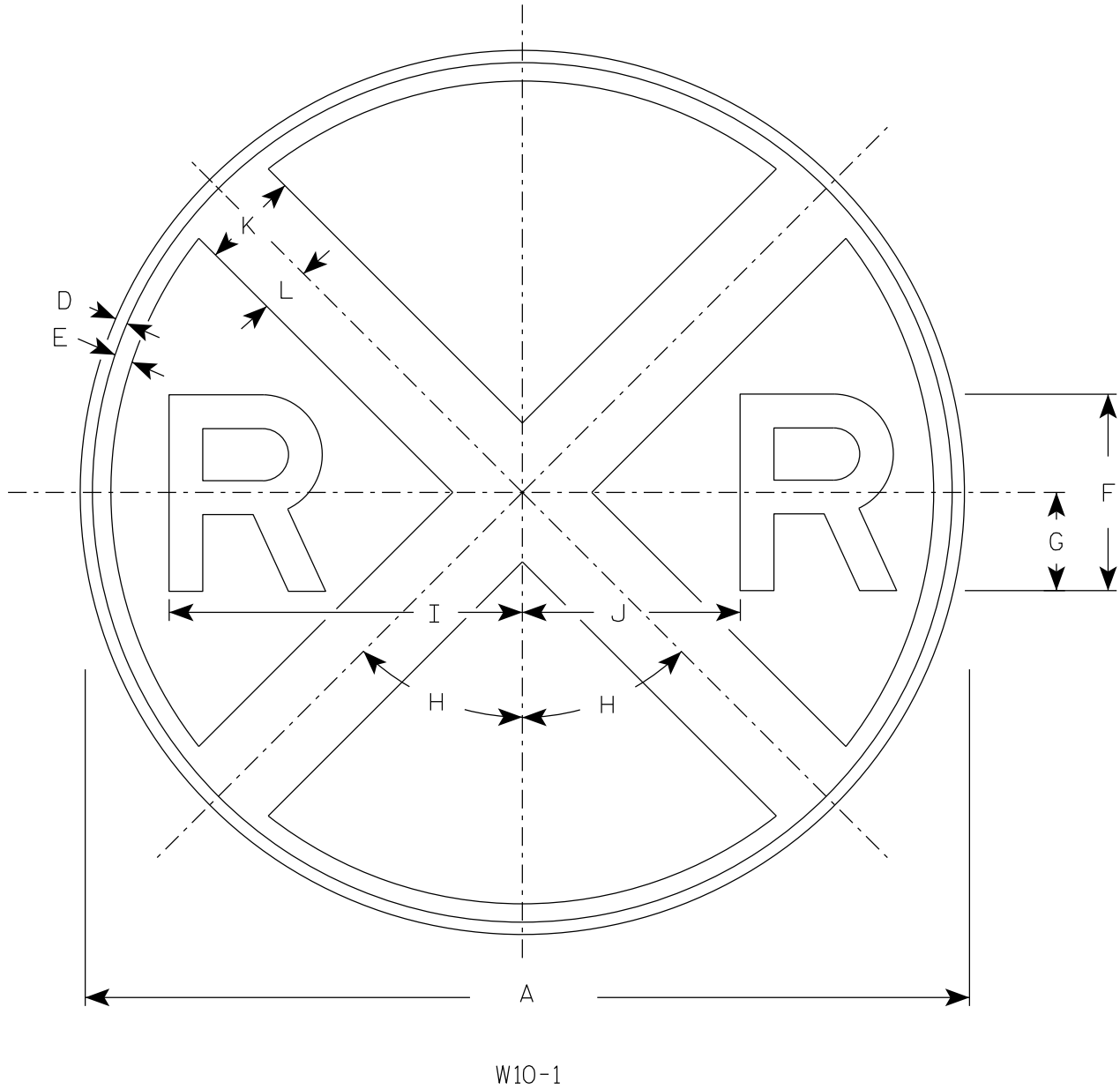
W4-2R

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. W4-2L is the same as W4-2R except the symbol is reversed along the vertical centerline.

7

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



NOTES

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

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30			3/8	5/8	7	3 1/2	45°	12 3/8	7 1/8	3	1 1/2															4.91
2S	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
2M	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
3	36			5/8	3/4	8	4	45°	14 3/8	8 5/8	4	2															7.07
4	48			3/4	1 1/4	10	5	45°	18 3/8	11 5/8	5	2 1/2															12.57
5																											

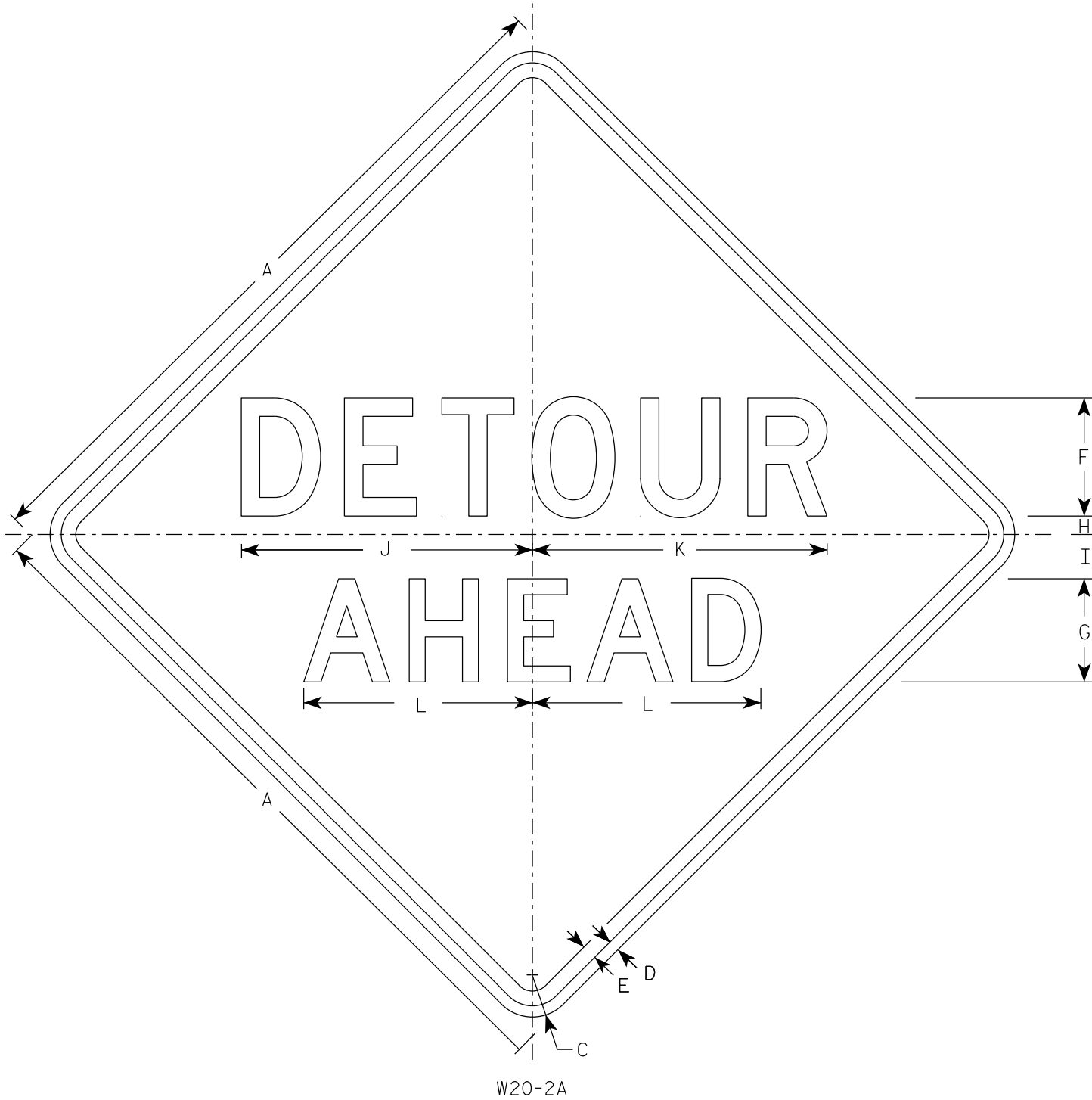
STANDARD SIGN

W10-1

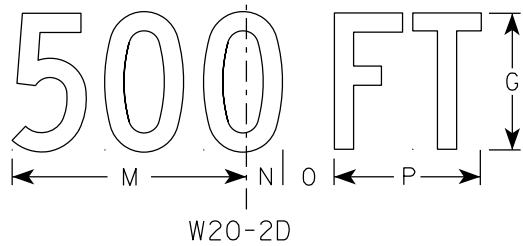
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

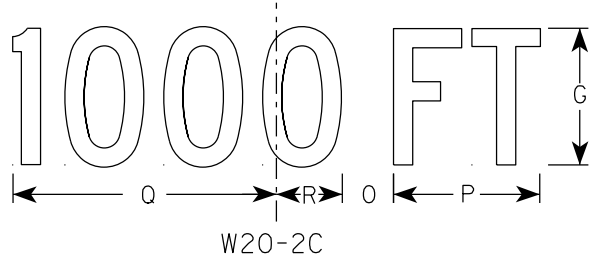
DATE 3/27/24 PLATE NO. W10-1.9



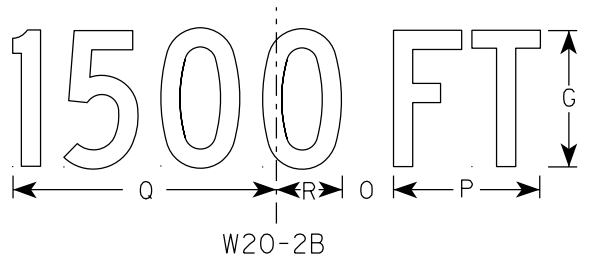
W20-2A



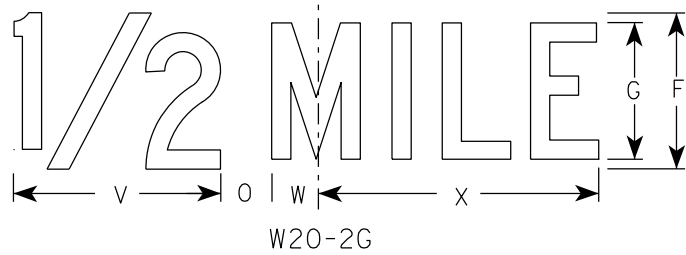
W20-2D



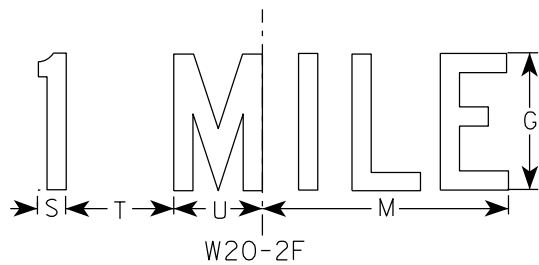
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	w	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

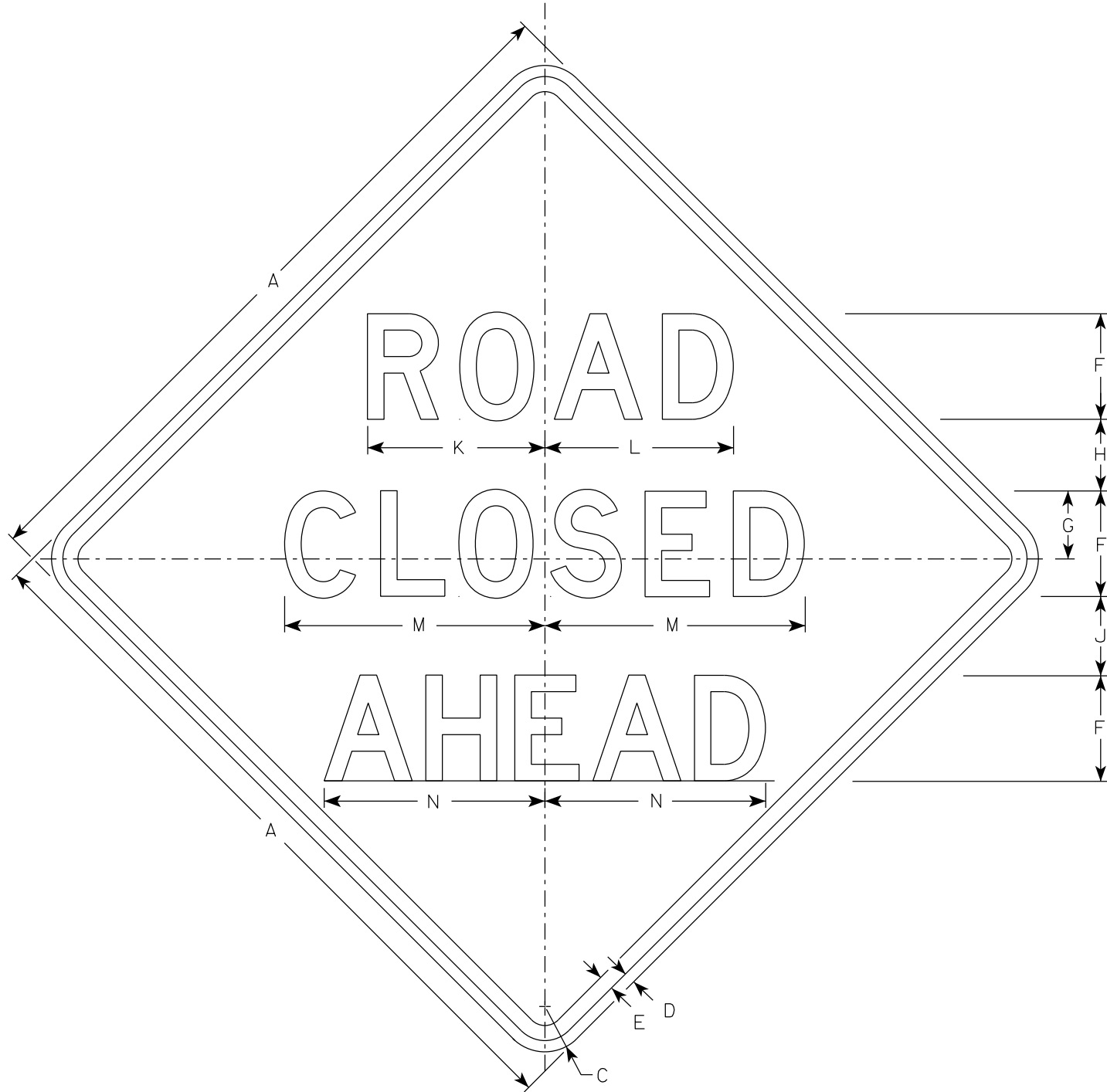
STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

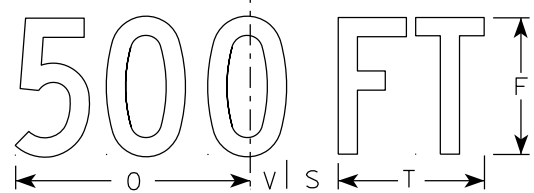
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-2.7

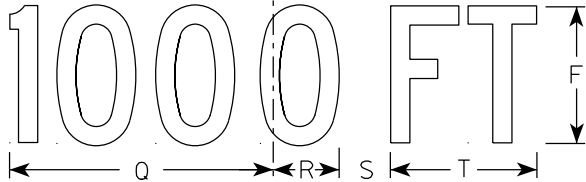
7



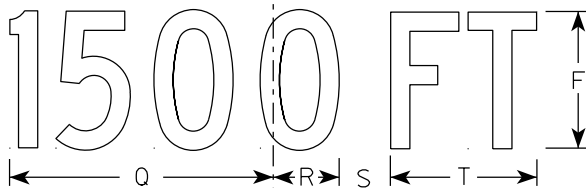
W20-3A



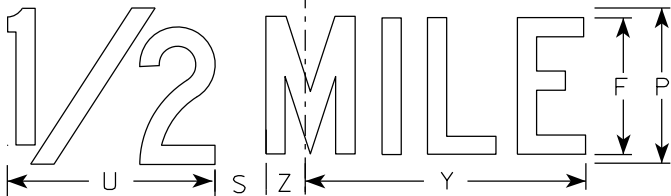
W20-3D



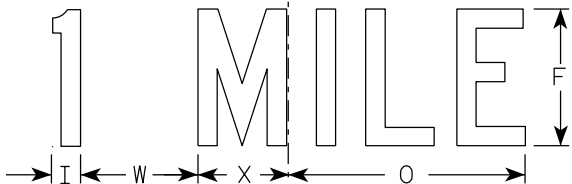
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

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

7

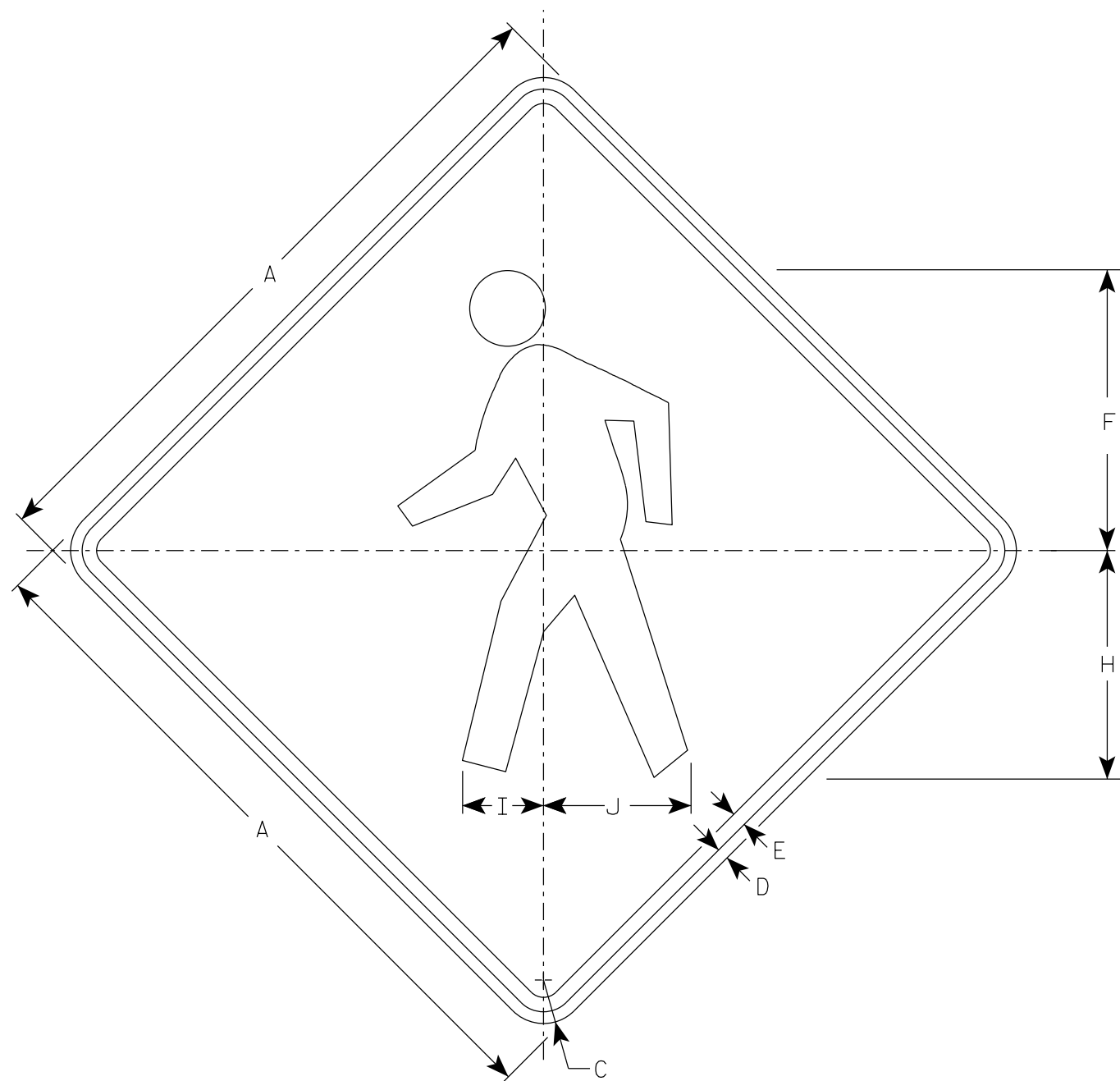
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	v	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		3	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8



NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	14 1/2		11 7/8	4 1/4	7 5/8																	9.0
2S	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
2M	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
3	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
4	48		3	3/4	1	19 3/8		15 3/4	5 5/8	10 1/4																	16.0
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 215

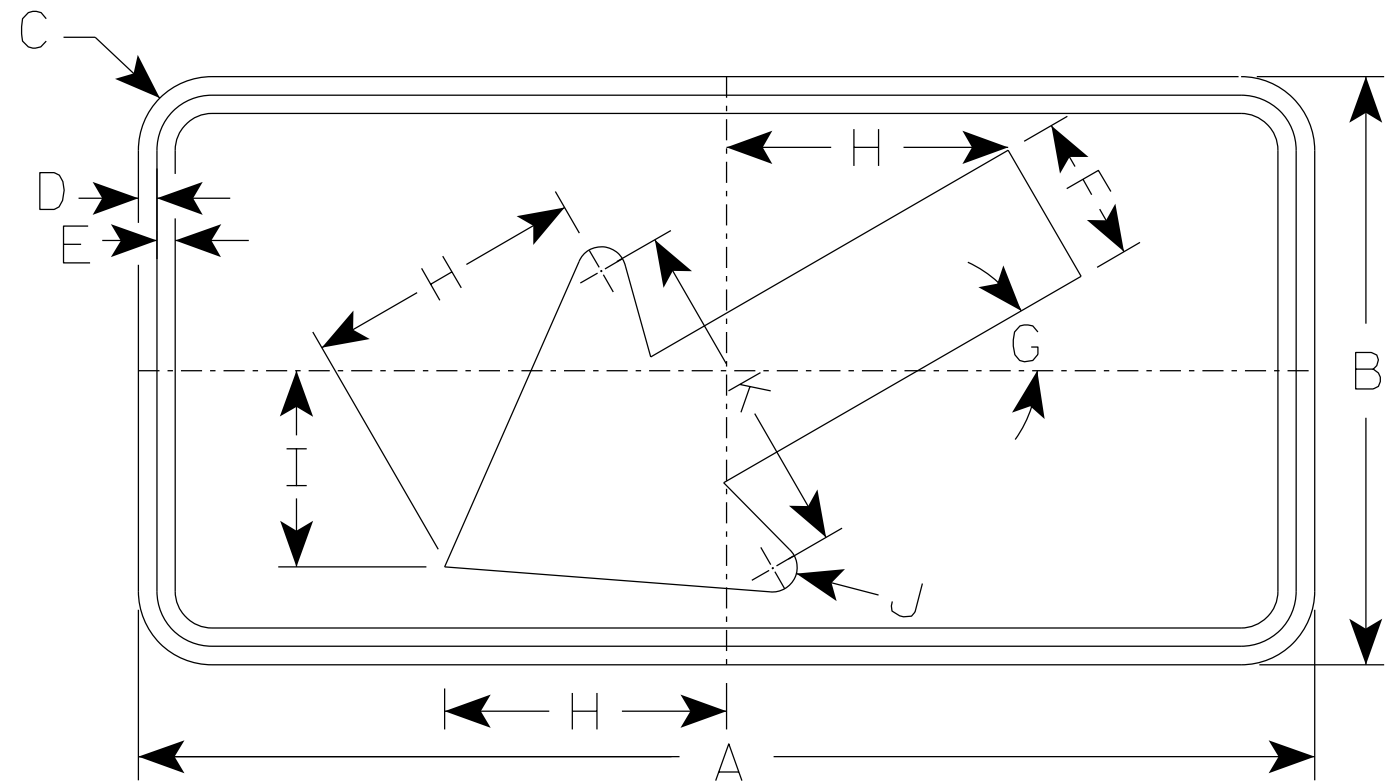
E

STANDARD SIGN
W011-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W011-2.2



W016-7L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded but corners shall be rounded when base material is metal.
4. W016-7R is the same as W016-L except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2	3/8	1/2	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2S	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
2M	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
3	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
4	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0
5	48	24	1 7/8	1/2	5/8	6	30°	11 1/2	8	1	14																8.0

PROJECT NO:			HWY:			COUNTY:			SHEET NO: 216										E
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STANDARD SIGN
W016-7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W016-7.3

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W016-9P

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	18	1 1/2	3/8	1/2	7	5 1/2	2 3/4	24 1/2																		3.75
2S	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
2M	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
3	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
4	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0
5	48	24	1 7/8	1/2	5/8	10	7	6 1/8	35 3/4																		8.0

STANDARD SIGN
W016-9P

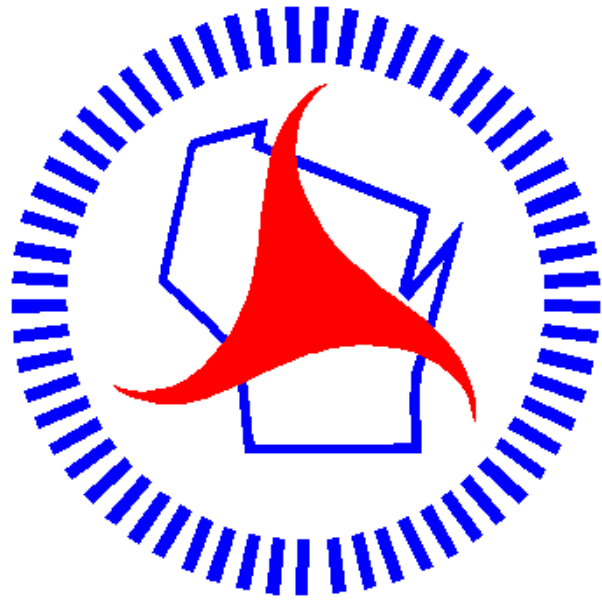
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch
for State Traffic Engineer

DATE 2/1/2024 PLATE NO. W016-9P.8

PROJECT NO: HWY: COUNTY: SHEET NO: 217 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0169P.dgn PLOT DATE : 1-FEB 2024 10:20 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : \$\$.....plotscale.....\$\$ WISDOT/CADDS SHEET 42



Wisconsin Department of Transportation

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