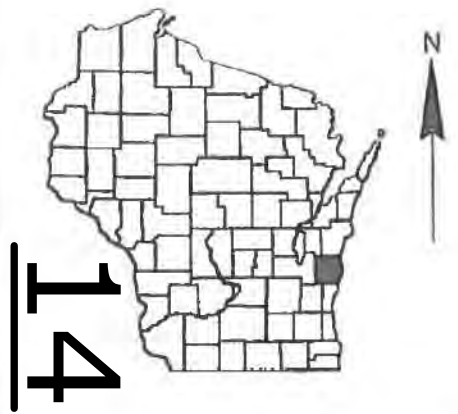


PROJECT ID: 4995-00-28  
COUNTY: SHEBOYGAN

NE AUG 2014  
WITH: 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 = 38		



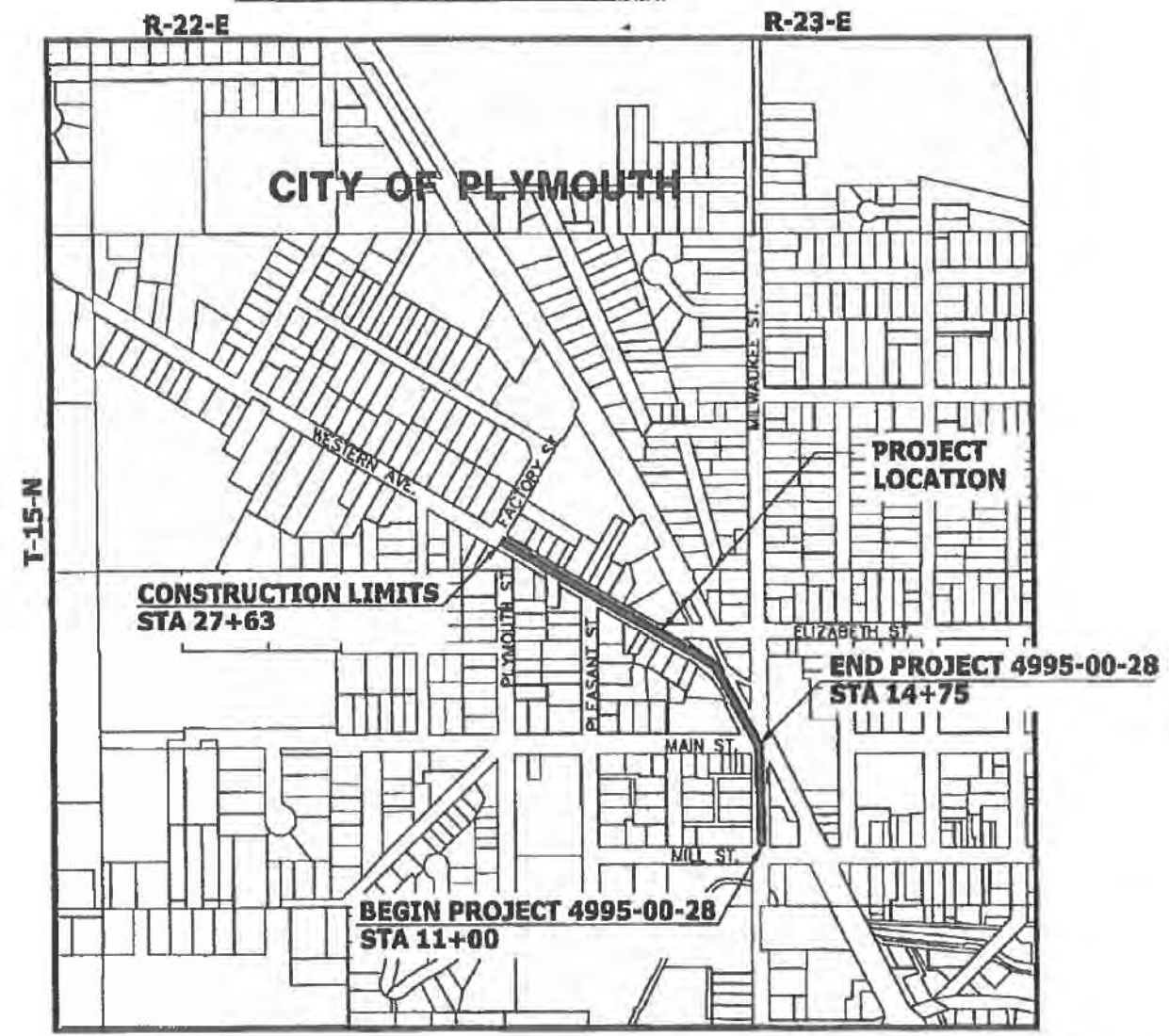
DESIGN DESIGNATION - N. MILWAUKEE STREET

A.D.T. 2011	= 5,900
A.D.T. 2032	= 6,800
D.H.V.	= 4.8
O.D.	= 58/41
T.	= 4.0
DESIGN SPEED	= 30 MPH
ESALS	803,000

CONVENTIONAL SYMBOLS	
PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
MARSH AREA	STORM SEWER
WOODED OR SHRUB AREA	TELEPHONE
	WATER
	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
C. PLYMOUTH, MILWAUKEE ST.  
MILL ST. - MAIN ST.  
LOCAL STREET  
SHEBOYGAN COUNTY

STATE PROJECT NUMBER  
4995-00-28



LAYOUT  
SCALE 0 0.088 MI

TOTAL NET LENGTH OF CENTERLINE = 0.071 MI (URBAN)

Horizontal datum is based on the Wisconsin State Plane  
Coordinate System Grid, south zone (NAD-27). All bearings are  
referred to grid north.

Coordinates shown on plan are grid coordinates.

Combination scale and sea level reduction factor: 0.99990716

Elevations are based on NGVD 1929.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4995-00-28	WISC 2014304	1

ACCEPTED FOR

CITY of PLYMOUTH  
4/11/14  
(Date) *[Signature]*  
Director of Public Works

ORIGINAL PLANS PREPARED BY  
KAPUR & ASSOCIATES, INC.  
CONSULTING ENGINEERS  
MILWAUKEE, WISCONSIN  
414.331.6665

WISCONSIN  
TODD G. MUELLER  
E-37108  
SHEBOYGAN  
WISCONSIN  
PROFESSIONAL ENGINEER  
4/8/14  
(Date) *[Signature]*  
(Signature)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY  
Surveyor Kapur & Assoc., Inc.  
Designer Kapur & Assoc., Inc.  
Management Consultant SEH, INC.  
C.D. Examiner

APPROVED FOR THE DEPARTMENT  
DATE: 4/9/2014  
*[Signature]*  
Management Consultant Signature

E

PROJECT SEQUENCING NOTES

AFTER BIDS ARE RECEIVED AND A CONTRACTOR IS SELECTED, ENGINEER WILL SET BENCHMARKS AND DO STAKING NECESSARY TO ESTABLISH PRIMARY LINE AND GRADE FOR CONTRACTOR’S USE. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER INSTALLATION AND MAINTENANCE OF ALL EROSION CONTROL MEASURES PER WDNR TECHNICAL STANDARDS.

THE TIMING AND SEQUENCE OF CONSTRUCTION IS SCHEDULED AS FOLLOWS:

1. INLET FILTER PROTECTION TO BE INSTALLED AND MAINTAINED IN LOCATIONS AS INDICATED IN PROJECT PLANS.
2. IF ANY PORTION OF THE SITE IS LEFT UNDISTURBED/UNWORKED FOR A PERIOD OF 30 DAYS IT SHALL BE TEMPORARILY STABILIZED WITH A TEMPORARY SEED AND MULCH.
3. FINAL SITE STABILIZATION SHALL CONSIST OF PLACEMENT OF TOPSOIL, SEED, AND MULCH PER PROJECT PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING SEED FOR PROPER GERMINATION IN A MANNER TO AVOID SEDIMENTATION AND RUNOFF.
4. INLET FILTER PROTECTION SHALL NOT BE REMOVED UNTIL SITE IS CONSIDERED 80% STABILIZED WITH DESIRABLE PLANT SPECIES IN AREAS STABILIZED.
5. OVER NIGHT STORAGE OF EQUIPMENT SHALL BE PLACED IN STAGING AREAS OUTSIDE OF AREA WETLANDS, WATERWAYS AND FLOODPLAIN LIMITS AS APPROVED BY THE LOCAL COMMUNITY.
6. WE DO NOT ANTICIPATE THE NEED FOR DEWATERING (NON–TRENCH) WITH PROPOSED CONSTRUCTION ACTIVITIES, HOWEVER IF DEWATERING IS NEEDED THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE STANDARDS.
7. CONTRACTOR SHALL ENSURE THAT AREA STREETS ARE CLEAN BY THE END OF EACH WORK DAY. THIS IS NOT JUST AN EROSION CONTROL ISSUE BUT A SAFETY ISSUE AS WELL.
8. CONTRACTOR SHALL PROVIDE WASTE MANAGEMENT RECEPTACLES FOR PROPER GARBAGE/WASTE HANDLING. SITE LITTERING IS NOT TOLERATED.
9. IN THE EVENT OF A RELEASE OF A REPORTABLE SPILL, THE DNR SHALL BE CONTACTED AT PHONE 800–943–0003 FOR APPROPRIATE NOTIFICATION.
10. CONCRETE WASTE MANAGEMENT PROCEDURES AND PRACTICES SHALL BE IMPLEMENTED. PERFORM WASHOUT OF CONCRETE TRUCKS OFF–SITE. DO NOT WASH OUT CONCRETE TRUCKS INTO STORM DRAIN, OPEN DITCHES, STREETS, STREAMS, OR OTHER NATURAL AREAS.
11. CONTRACTOR SHALL COMPLETE WEEKLY AND RAIN EVENT EROSION CONTROL INSPECTIONS THROUGHOUT THE DURATION OF CONSTRUCTION UNTIL THE SITE IS CONSIDERED 80% STABILIZED. A RAIN EVENT CONSISTS OF ANY RAIN EVENT OF 0.5” OR GREATER. EROSION CONTROL INSPECTION REPORTS AND THE CONTRACTORS DAILY LOG BOOK SHALL BE KEPT IN AN ACCESSIBLE LOCATION AT THE PROJECT SITE.

GENERAL NOTES

THE INFORMATION IN THIS PLAN SET REPRESENTS THE BEST INFORMATION AVAILABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL INFORMATION IN THE FIELD.

THE LOCATIONS OF UTILITIES, AS NOTED ON THE PLANS ARE APPROXIMATE, THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS INDICATED FOR REMOVAL BY THE ENGINEER.

ALL HOLES OR OPENINGS BELOW SUBGRADE RESULTING FROM THE ABANDONMENT OR REMOVAL OF EXISTING STRUCTURES OR FROM THE GRUBBING OF TREES OR STUMPS SHALL BE BACKFILLED WITH GRANULAR BACKFILL.

ANY SIGNS OR FENCES REMOVED, RELOCATED DUE TO CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL LOCATION UNLESS RELOCATED. ALL SIGN REMOVAL, RELOCATION, AND/OR INSTALLATION COST SHALL BE INCIDENTAL TO CONTRACT.

ALL SIGN RELOCATIONS, NEW SIGN INSTALLATIONS, AND SIGNAL INSTALLATIONS SHALL BE LOCATED IN ACCORDANCE WITH THE WISCONSIN DOT FDM MANUAL, OR AS DIRECTED BY THE ENGINEER.

TOPSOIL OF 6” MIN. SEED, FERTILIZE, AND MULCH TO INCLUDE ALL AREAS DISTURBED DURING CONSTRUCTION. CONTRACTOR TO WATER AND MAINTAIN RESTORATION AREAS UNTIL AFTER GRASS REQUIRES MOWING.

UTILITIES

FOR WATER, SANITARY SEWER AND STORM SEWER CONTACT  
PLYMOUTH UTILITIES  
900 CTH PP  
PLYMOUTH, WISCONSIN 53073  
BILL IMMICH (920) 893–1471

FOR CABLE TV CONTACT  
TIME WARNER CABLE  
1320 N. DR. MARTIN LUTHER KING JR. DR.  
MILWAUKEE, WI 53212  
STEVE CRAMER  
(414) 277–4045

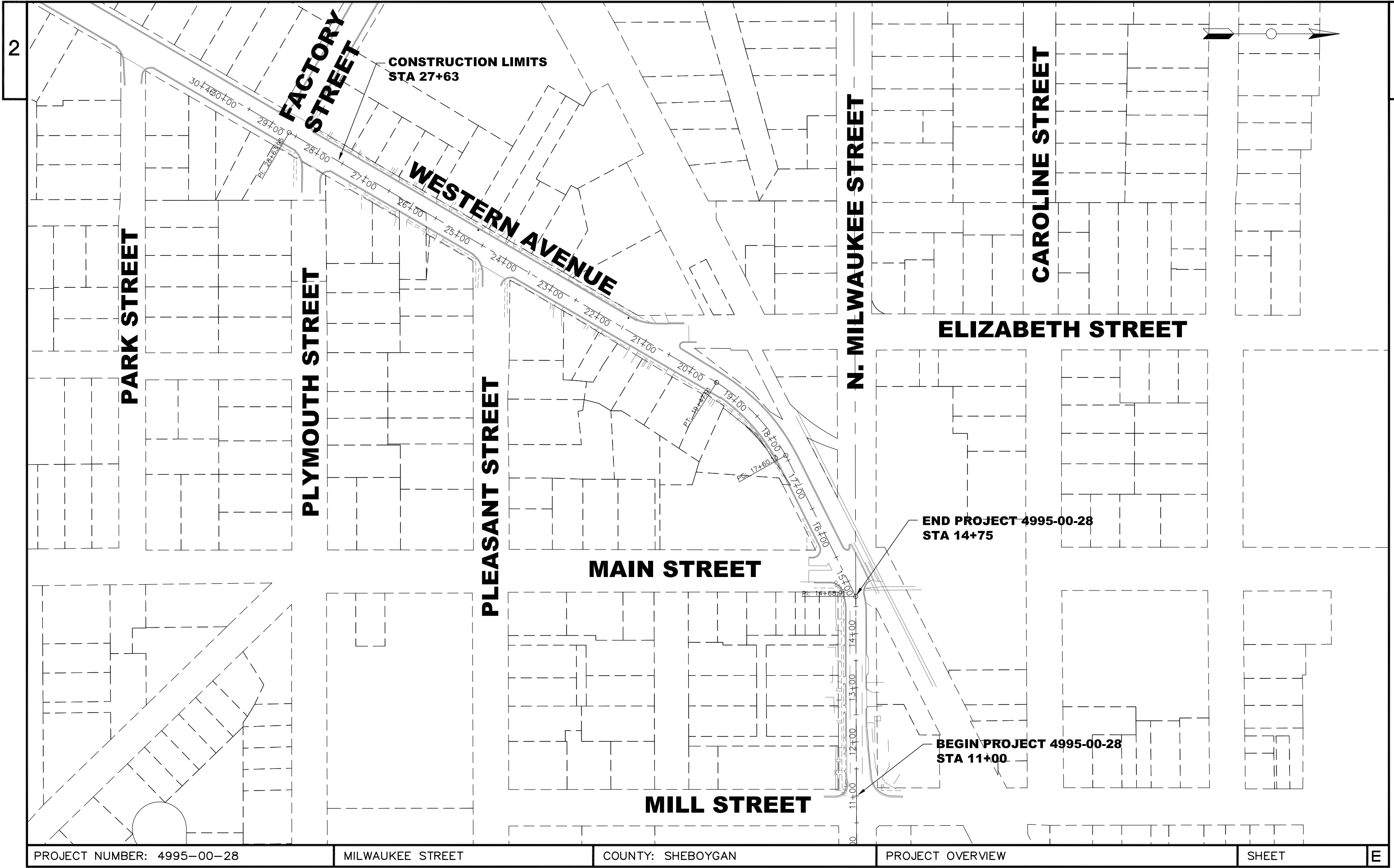
FOR ELECTRIC CONTACT  
PLYMOUTH UTILITIES  
900 CTH PP  
PLYMOUTH, WISCONSIN 53073  
JIM PETERSON (920) 893–1471

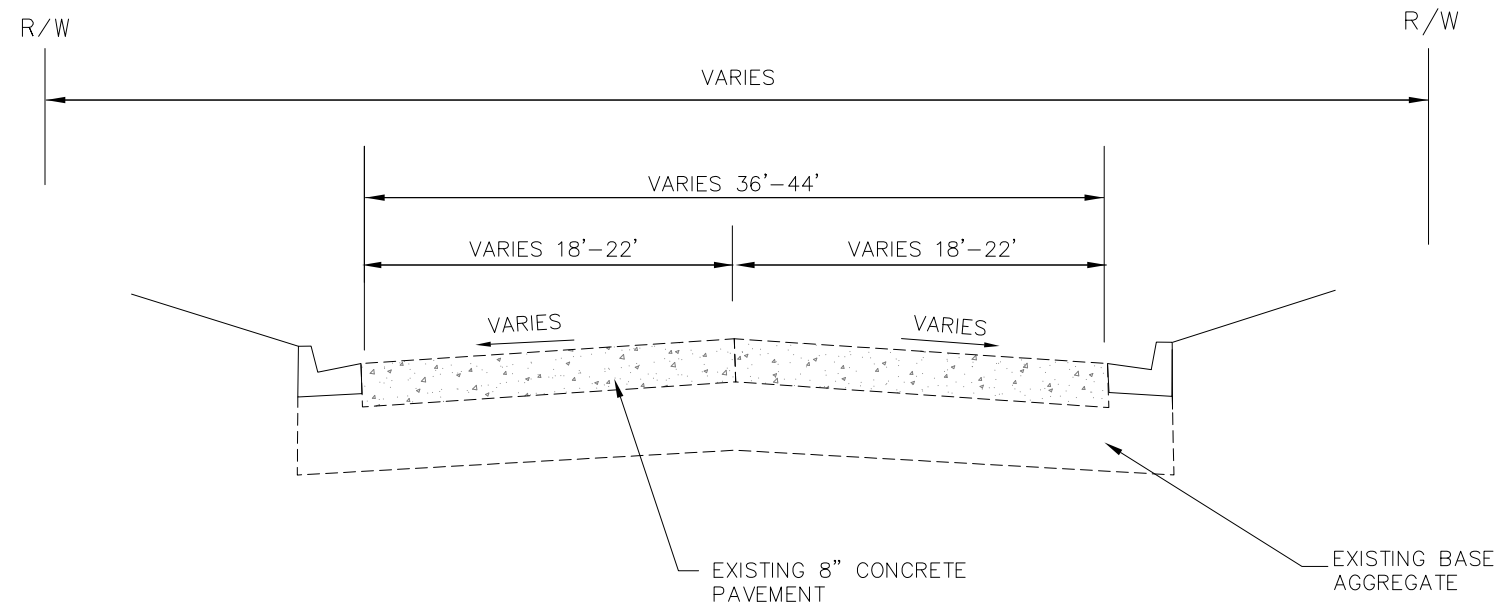
WISCONSIN PUBLIC SERVICE–GAS  
P.O. BOX 329  
SHEBOYGAN, WI 53082–0329  
MIKE LOWTHER (920) 451–3743

FRONTIER TELEPHONE OPERATIONS  
118 DIVISION STREET  
PLYMOUTH, WI 53073  
RYAN OSNESS (920) 893–7455



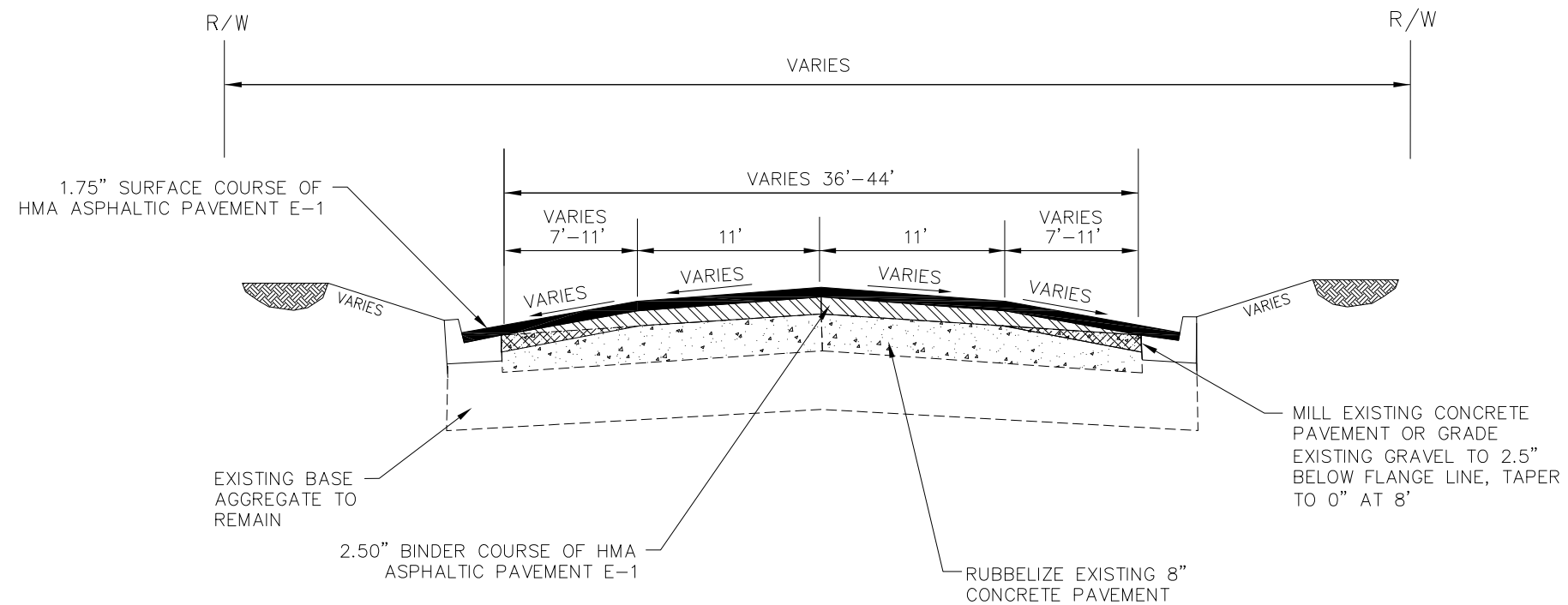
REGISTER'S HOTLINE TICKETS:  
20132605241, 20132605250





**N. MILWAUKEE STREET EXISTING TYPICAL SECTION**

SCALE: NTS

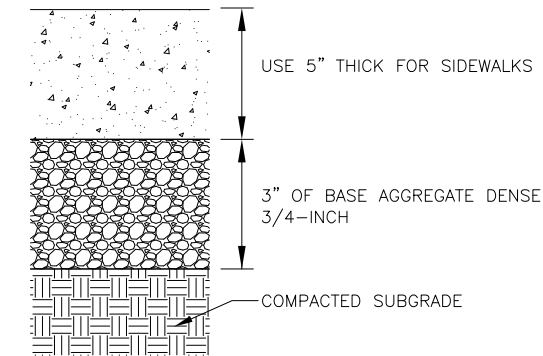


**N. MILWAUKEE STREET PROPOSED TYPICAL SECTION**

**ASPHALTIC OVERLAY AREA**

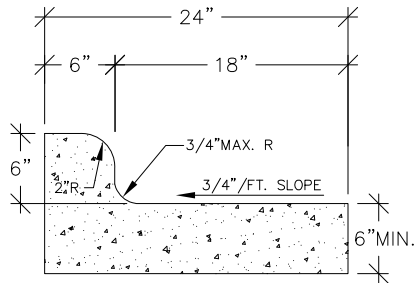
**STA 11+00 TO STA 27+63**

SCALE: NTS

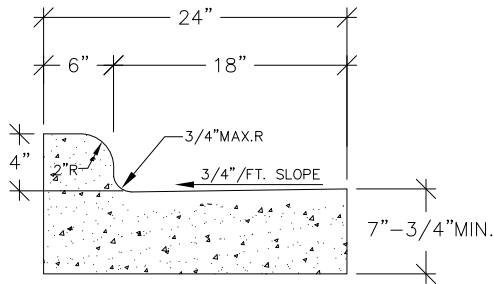


NOTE: ALL CONTROL JOINTS FOR CONCRETE PAVEMENT SHALL BE SAWCUT

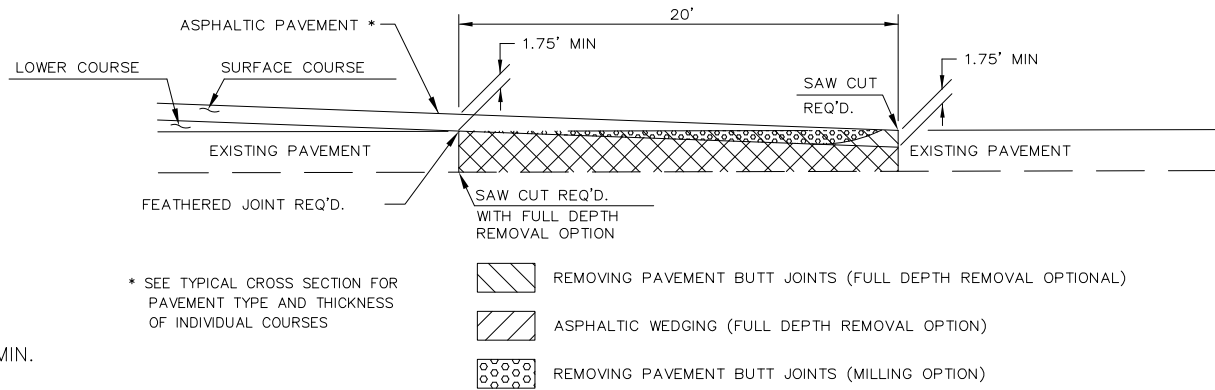
**CONCRETE SIDEWALK**  
SCALE: NTS



**CONCRETE CURB & GUTTER 24-INCH**  
SCALE: NTS

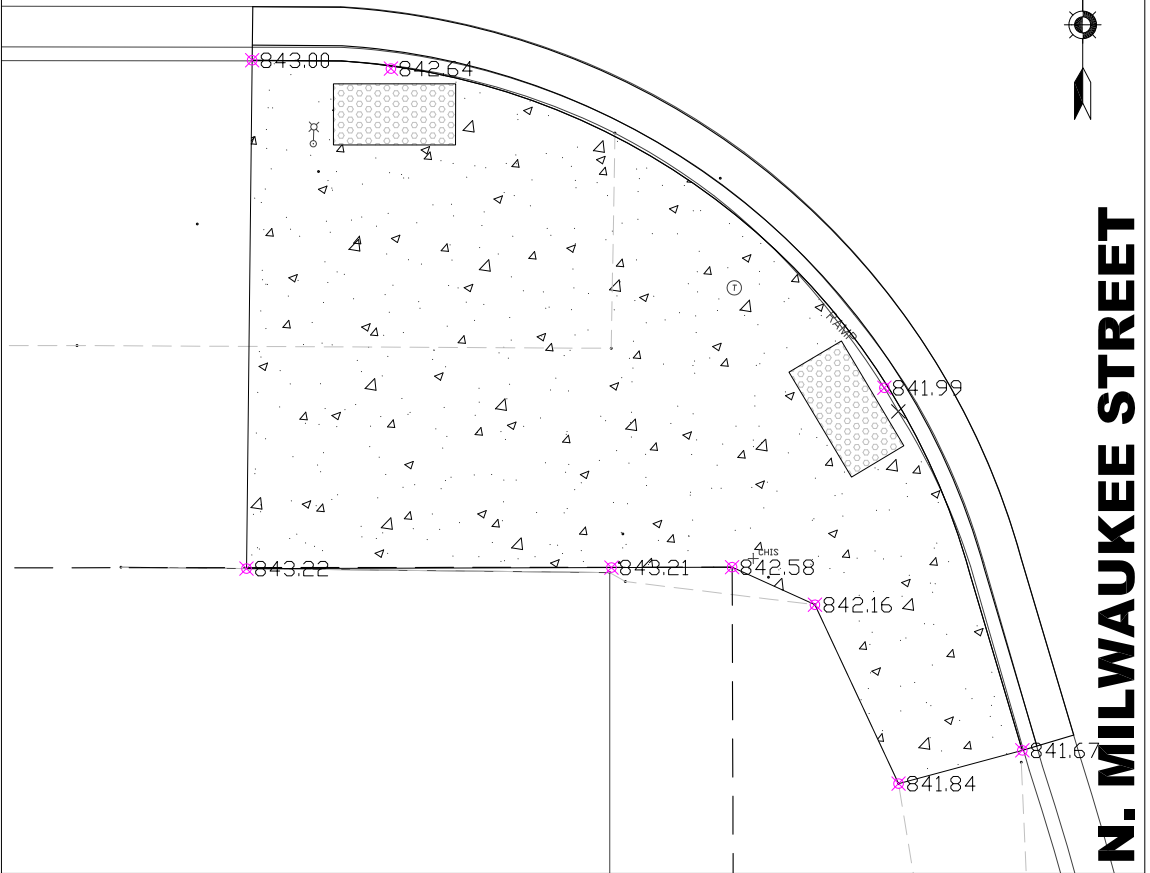


**CONCRETE CURB & GUTTER 24-INCH SPECIAL**  
SCALE: NTS

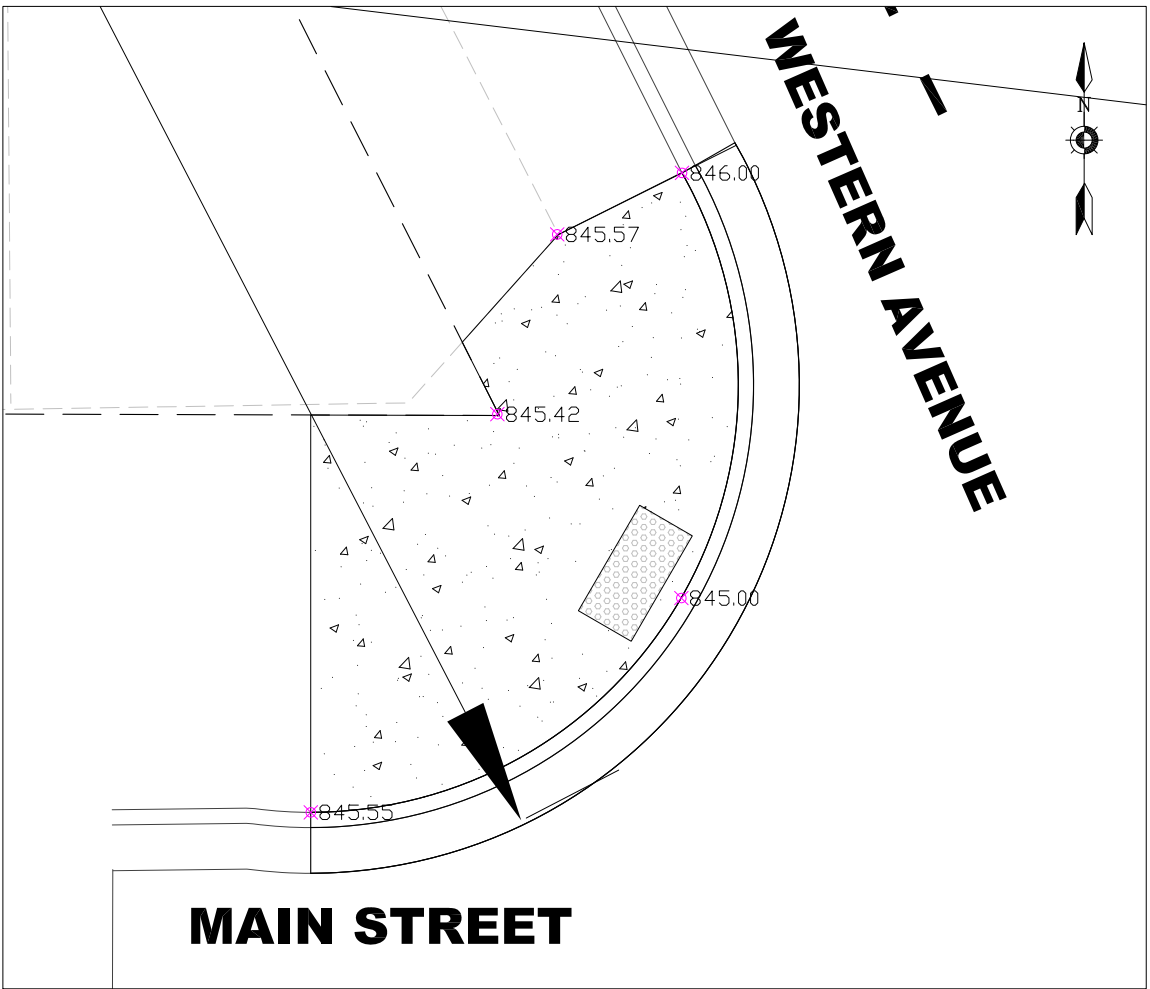


**REMOVING PAVEMENT BUTT JOINTS**  
SCALE: NTS

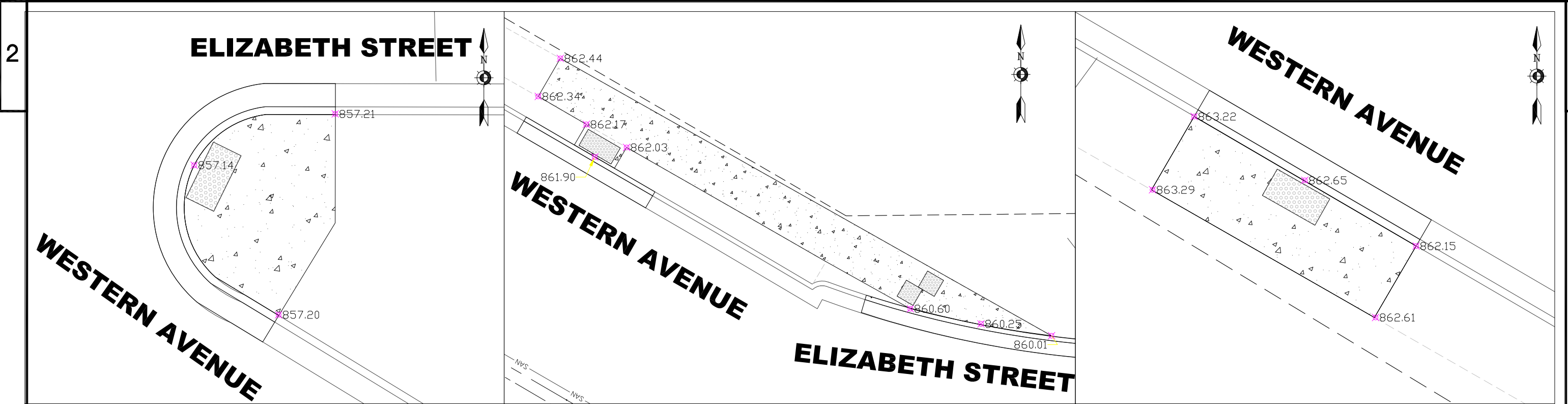
**MAIN STREET**



**ADA RAMPS (TYPE 1A) @ STA 15+00 LT**  
SCALE: NTS



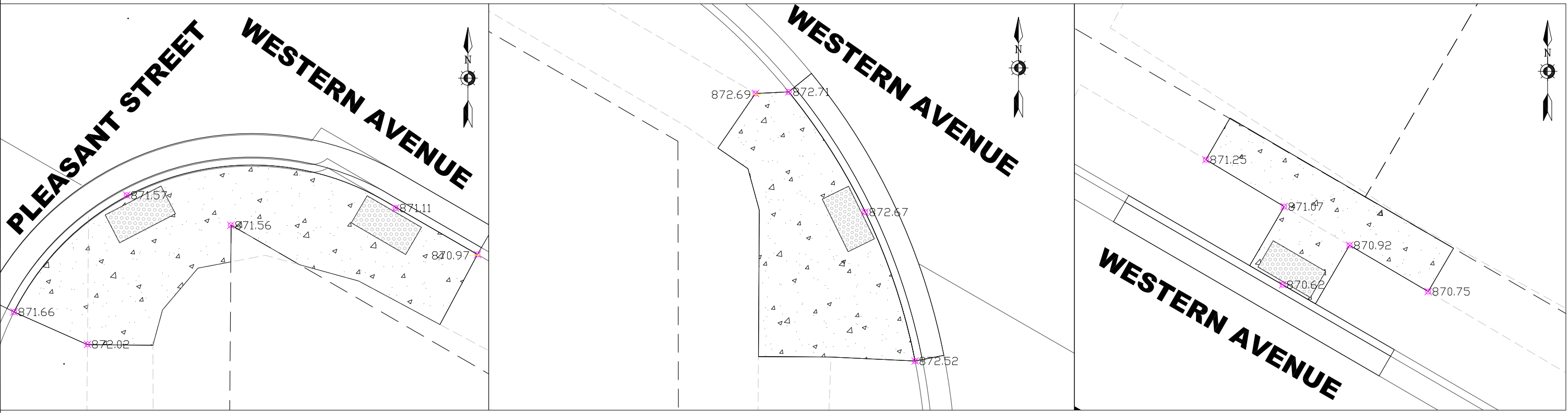
**ADA RAMP (TYPE 1A) @ STA 15+75 LT**  
SCALE: NTS



ADA RAMP (TYPE 1A) @ STA 20+50 RT  
SCALE: NTS

ADA RAMPS (TYPE 7B & 4B) @ STA 21+25 RT  
SCALE: NTS

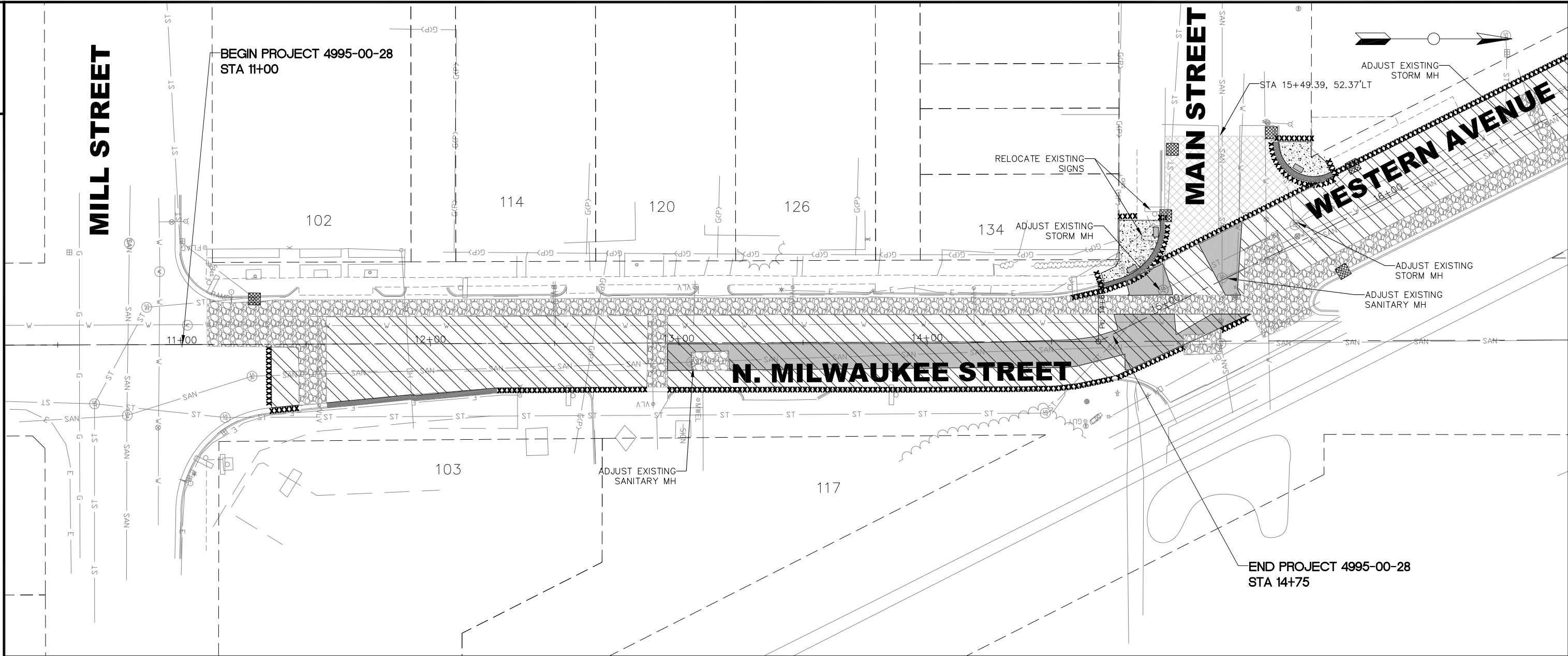
ADA RAMP (TYPE 7A) @ STA 21+50 LT  
SCALE: NTS



ADA RAMPS (TYPE 1A) @ STA 23+80 LT  
SCALE: NTS

ADA RAMP (TYPE 1A) @ STA 24+40 LT  
SCALE: NTS

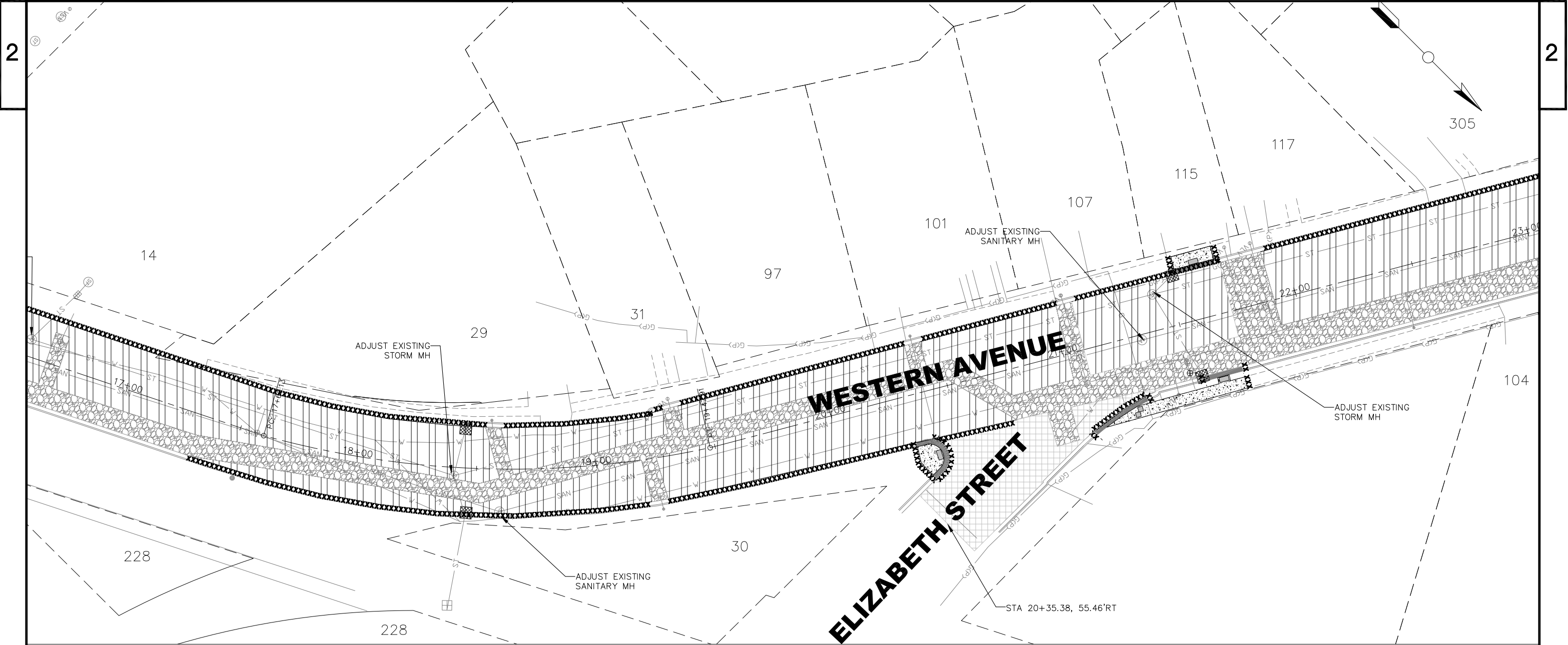
ADA RAMP (TYPE 7B) @ STA 23+65 RT  
SCALE: NTS



**NOTE:**  
20' OF REMOVING  
PAVEMENT BUTT JOINTS  
AT PROJECT LIMITS





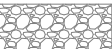




**LEGEND:**

- INLET PROTECTION, TYPE C
- SAWING CONCRETE/SAWING ASPHALT
- REMOVING PAVEMENT BUTT JOINTS
- REMOVING ASPHALTIC SURFACE
- PREP EXISTING AGGREGATE FOR PAVING (PREPARE FOUNDATION FOR ASPHALTIC PAVING) & OVERLAY EXISTING AGGREGATE WITH 4.25" HMA E-1
- RUBBLIZE AND OVERLAY WITH 4.25" HMA E-1
- NEW CONCRETE SIDEWALK (SEE DETAIL SHEET 4)
- REMOVE AND REPLACE EXISTING 24" CURB & GUTTER
- DETECTABLE WARNING FIELD



**NOTE:**  
20' OF REMOVING  
PAVEMENT BUTT JOINTS  
AT PROJECT LIMITS

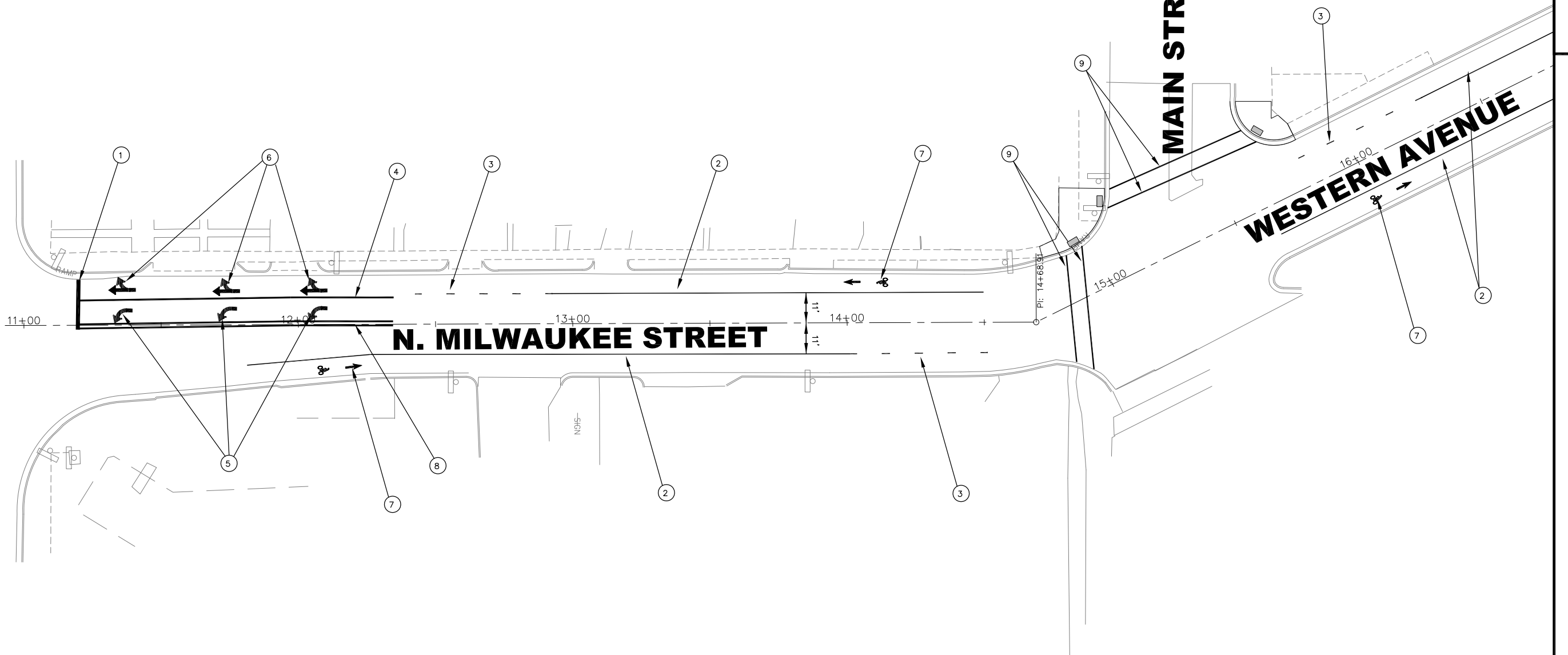
**LEGEND:**

-  INLET PROTECTION, TYPE C
-  SAWING CONCRETE/SAWING ASPHALT
-  REMOVING PAVEMENT BUTT JOINTS
-  REMOVING ASPHALTIC SURFACE
-  PREP EXISTING AGGREGATE FOR PAVING (PREPARE FOUNDATION FOR ASPHALTIC PAVING) & OVERLAY EXISTING AGGREGATE WITH 4.25" HMA E-1
-  RUBBLIZE AND OVERLAY WITH 4.25" HMA E-1
-  NEW CONCRETE SIDEWALK (SEE DETAIL SHEET 4)
-  REMOVE AND REPLACE EXISTING 24" CURB & GUTTER
-  DETECTABLE WARNING FIELD



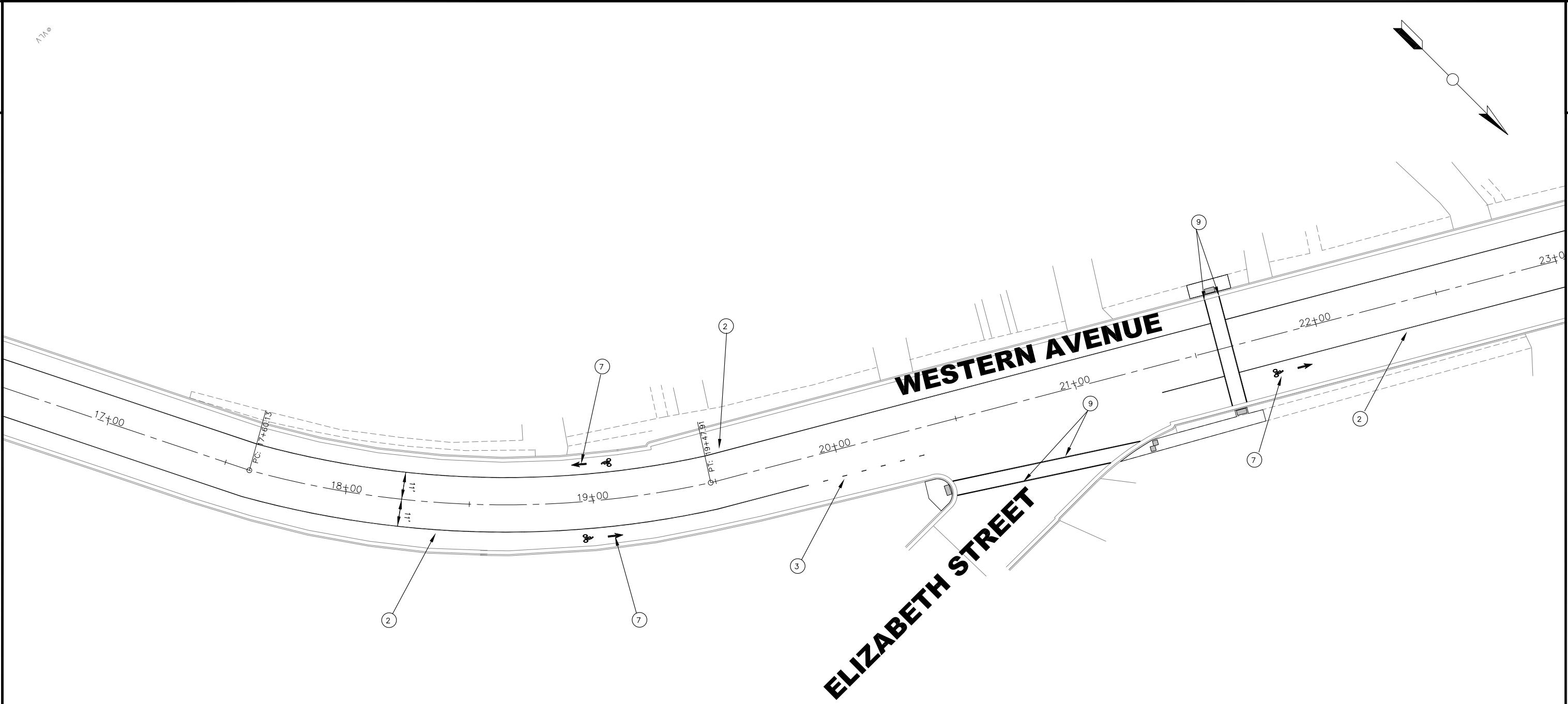
MILL STREET


MAIN STREET

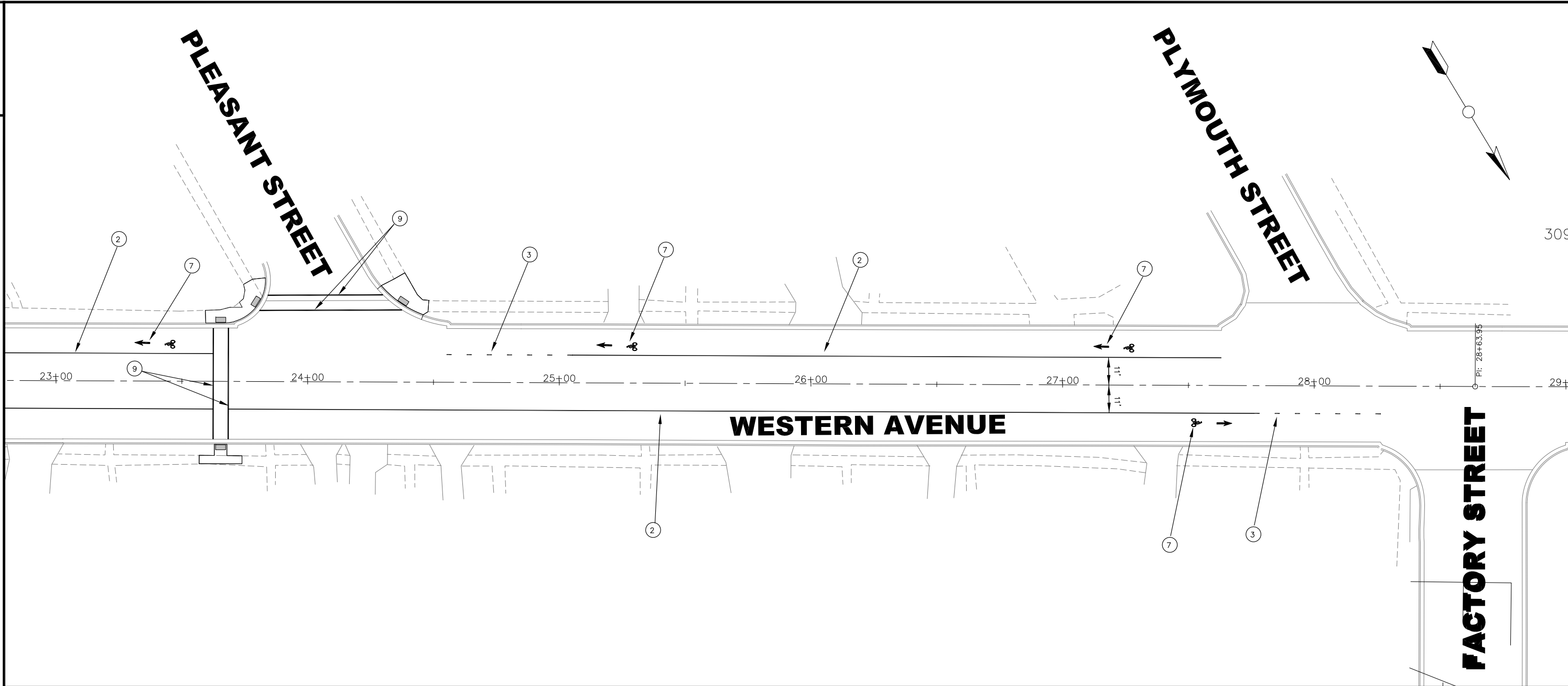


LEGEND

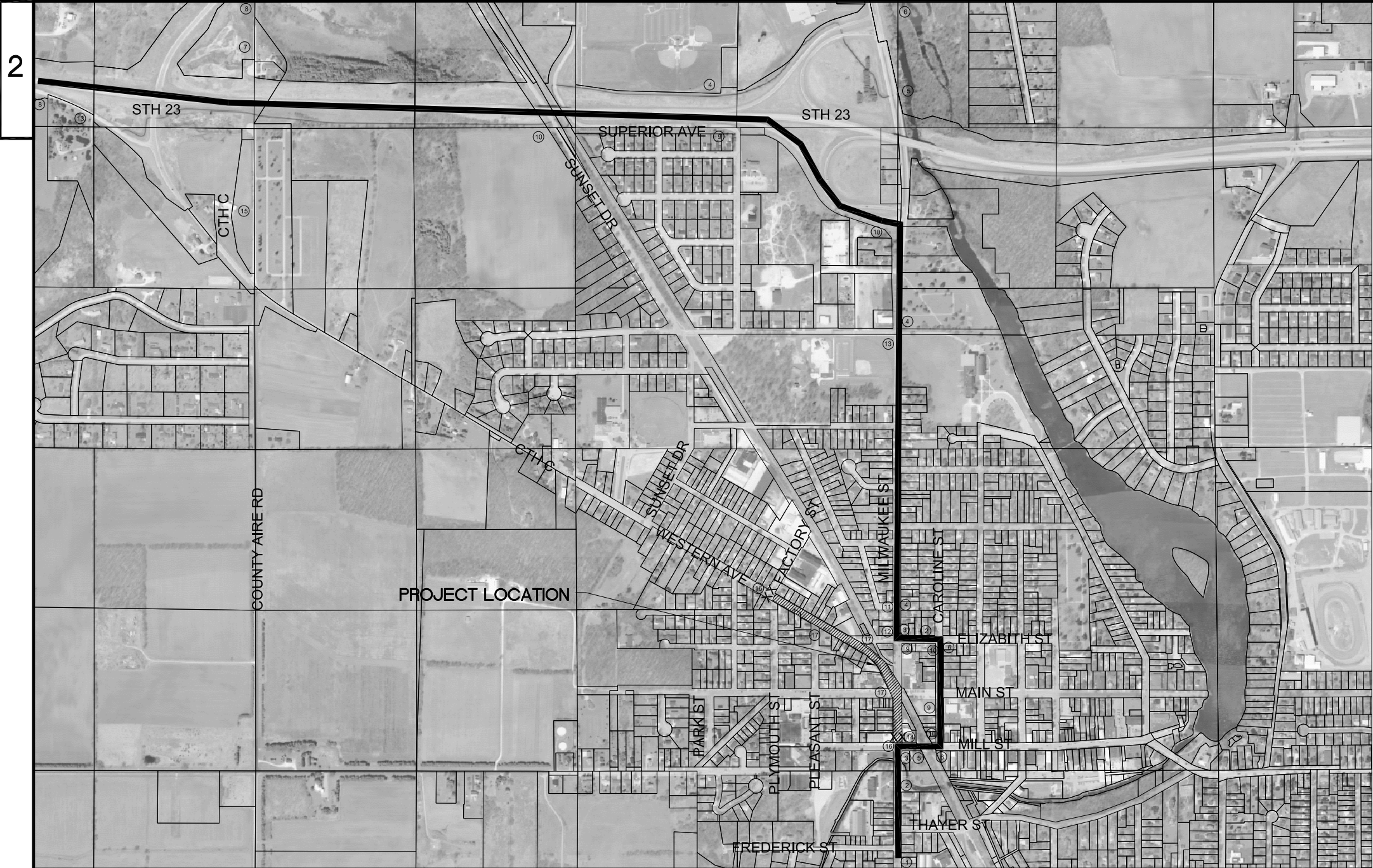
- ① PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
- ② PAVEMENT MARKING EPOXY 4-INCH (WHITE)
- ③ PAVEMENT MARKING EPOXY 4-INCH (WHITE 2' LINE, 6' GAP)
- ④ PAVEMENT MARKING EPOXY 8-INCH (WHITE)
- ⑤ PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
- ⑥ PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
- ⑦ ← & PAVEMENT MARKING SYMBOL & ARROW BIKE LANE EPOXY (WHITE)
- ⑧ PAVEMENT MARKING EPOXY 4-INCH DOUBLE (YELLOW)
- ⑨ PAVEMENT MARKING CROSSWALK EPOXY 6-INCH



- LEGEND**
- ① PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
  - ② PAVEMENT MARKING EPOXY 4-INCH (WHITE)
  - ③ PAVEMENT MARKING EPOXY 4-INCH (WHITE 2' LINE, 6' GAP)
  - ④ PAVEMENT MARKING EPOXY 8-INCH (WHITE)
  - ⑤ PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
  - ⑥ PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
  - ⑦ ←  PAVEMENT MARKING SYMBOL & ARROW BIKE LANE EPOXY (WHITE)
  - ⑧ PAVEMENT MARKING EPOXY 4-INCH DOUBLE (YELLOW)
  - ⑨ PAVEMENT MARKING CROSSWALK EPOXY 6-INCH



- LEGEND
- ① PAVEMENT MARKING STOP LINE EPOXY 18-INCH (WHITE)
  - ② PAVEMENT MARKING EPOXY 4-INCH (WHITE)
  - ③ PAVEMENT MARKING EPOXY 4-INCH (WHITE 2' LINE, 6' GAP)
  - ④ PAVEMENT MARKING EPOXY 8-INCH (WHITE)
  - ⑤ PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
  - ⑥ PAVEMENT MARKING ARROWS EPOXY TYPE 3 (WHITE)
  - ⑦ ← ↗ PAVEMENT MARKING SYMBOL & ARROW BIKE LANE EPOXY (WHITE)
  - ⑧ PAVEMENT MARKING EPOXY 4-INCH DOUBLE (YELLOW)
  - ⑨ PAVEMENT MARKING CROSSWALK EPOXY 6-INCH



GENERAL NOTES:  
ALL EXISTING SIGN MESSAGES THAT CONFLICT WITH TRAFFIC CONTROL DETOUR SIGNS SHALL BE COVERED OR REMOVED.

SEE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" FOR SIGN SPACING AND LOCATIONS.

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

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

ALL M3 SERIES SIGNS (NORTH, EAST, SOUTH, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

LEGEND:

DETOUR  
M4-R  
24"x36"  
30"x36"

END  
DETOUR  
M4-SA  
24"x36"

NORTH  
M3-1  
24"x36"

SOUTH  
M3-2  
24"x36"

Left Arrow  
M5-L  
21"x21"

Right Arrow  
M5-R  
21"x21"

Left Arrow  
M6-1  
21"x21"

Up Arrow  
M6-2  
21"x21"

Right Arrow  
M6-3  
21"x21"

DETOUR AHEAD  
M4-9R  
30"x24"  
30"x36"

DETOUR  
M4-9R  
30"x24"

ROAD CLOSED  
1 MILE AHEAD  
LOCAL TRAFFIC ONLY  
R11-3A  
60"x30"

COUNTY  
M1-SA  
24"x24"

1 DETOUR AHEAD  
NORTH  
COUNTY C

2 DETOUR NORTH  
COUNTY C  
Right Arrow

3 DETOUR NORTH  
COUNTY C  
Right Arrow

4 DETOUR NORTH  
COUNTY C  
Up Arrow

5 DETOUR NORTH  
COUNTY C  
Left Arrow

6 DETOUR NORTH  
COUNTY C  
Left Arrow

7 END DETOUR NORTH  
COUNTY C

16 SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" DETAIL "D"

17 SEE SDD "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" DETAIL "4"

8 DETOUR AHEAD  
SOUTH  
COUNTY C

9 DETOUR SOUTH  
COUNTY C  
Right Arrow

10 DETOUR SOUTH  
COUNTY C  
Right Arrow

11 DETOUR SOUTH  
COUNTY C  
Left Arrow

12 DETOUR SOUTH  
COUNTY C  
Left Arrow

13 DETOUR SOUTH  
COUNTY C  
Up Arrow

14 END DETOUR SOUTH  
COUNTY C

15 ROAD CLOSED 1 MILE AHEAD LOCAL TRAFFIC ONLY  
DETOUR  
Right Arrow

Work Zone Hatched Box

WORK ZONE

Thick Black Line

DETOUR ROUTE

XXXX

ROAD CLOSED TO THRU TRAFFIC

PROJECT NUMBER: 4995-00-28

MILWAUKEE STREET

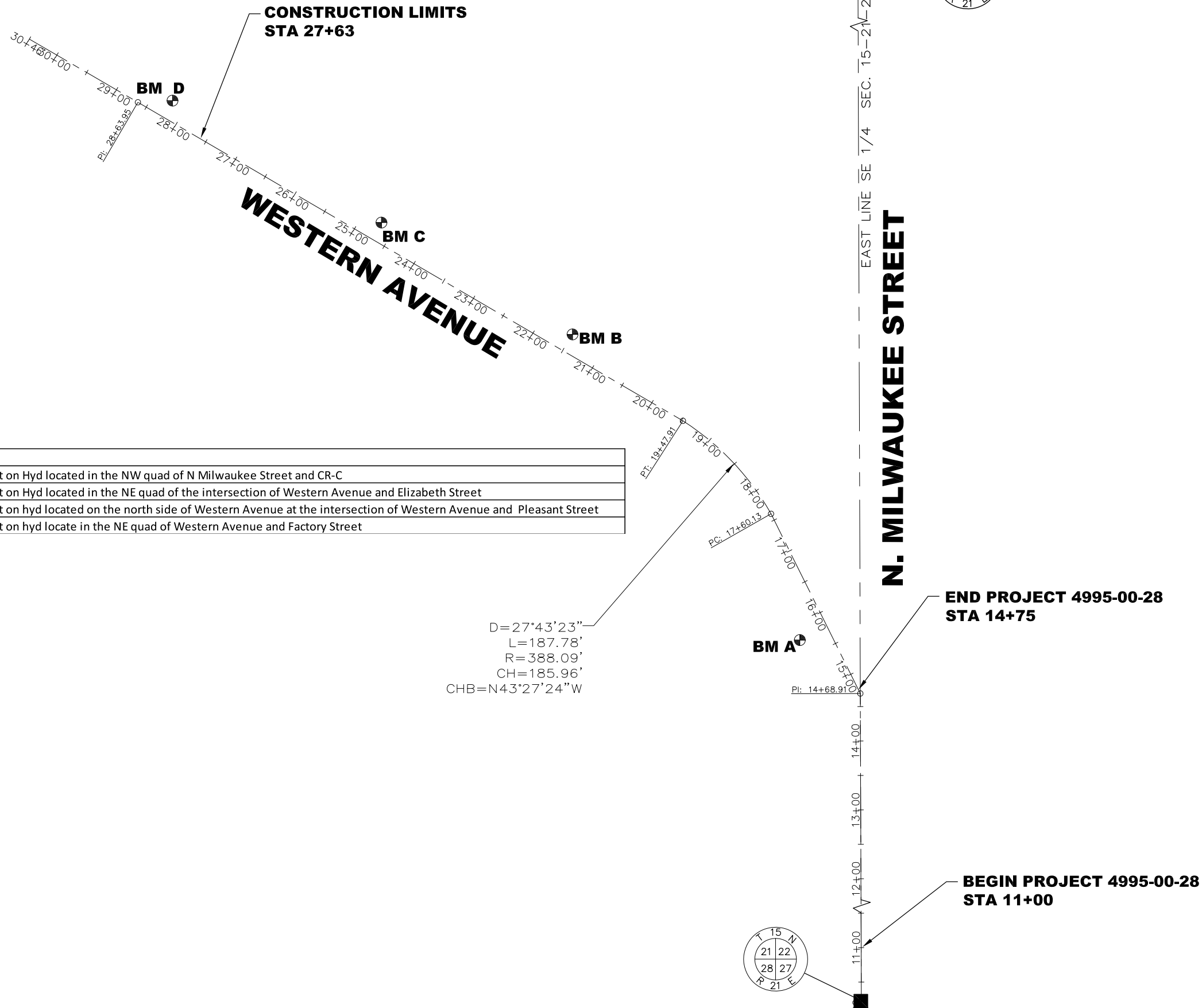
COUNTY: SHEBOYGAN

DETOUR PLAN

SHEET

E

BM #	ELEVATION	DESCRIPTION
BMA	847.37	NW Flange bolt on Hyd located in the NW quad of N Milwaukee Street and CR-C
BM B	864.18	NW Flange bolt on Hyd located in the NE quad of the intersection of Western Avenue and Elizabeth Street
BM C	875.39	NW Flange bolt on hyd located on the north side of Western Avenue at the intersection of Western Avenue and Pleasant Street
BM D	877.42	NW Flange bolt on hyd locate in the NE quad of Western Avenue and Factory Street



DATE 19JUN14		E S T I M A T E O F Q U A N T I T I E S			
LINE				4995-00-28	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	204.0105	REMOVING PAVEMENT BUTT JOINTS	SY	275.000	275.000
0020	204.0109.S	REMOVING CONCRETE SURFACE PARTIAL DEPTH	SF	15,600.000	15,600.000
0030	204.0110	REMOVING ASPHALTIC SURFACE	SY	330.000	330.000
0040	204.0150	REMOVING CURB & GUTTER	LF	350.000	350.000
0050	204.0155	REMOVING CONCRETE SIDEWALK	SY	155.000	155.000
0060	205.0100	EXCAVATION COMMON **P**	CY	250.000	250.000
0070	211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01. 4995-00-28	LS	1.000	1.000
0080	305.0110	BASE AGGREGATE DENSE 3/4-INCH	TON	30.000	30.000
0090	311.0110	BREAKER RUN	TON	440.000	440.000
0100	335.0100	RUBBLING **P**	SY	4,750.000	4,750.000
0110	455.0115	ASPHALTIC MATERIAL PG64-22	TON	130.000	130.000
0120	455.0605	TACK COAT	GAL	200.000	200.000
0130	460.1101	HMA PAVEMENT TYPE E-1	TON	2,090.000	2,090.000
0140	460.2000	INCENTIVE DENSITY HMA PAVEMENT	DOL	1,340.000	1,340.000
0150	602.0410	CONCRETE SIDEWALK 5-INCH	SF	1,400.000	1,400.000
0160	602.0505	CURB RAMP DETECTABLE WARNING FIELD YELLOW	SF	88.000	88.000
0170	611.8110	ADJUSTING MANHOLE COVERS	EACH	11.000	11.000
0180	619.1000	MOBILIZATION	EACH	1.000	1.000
0190	624.0100	WATER	MGAL	5.000	5.000
0200	625.0100	TOPSOIL	SY	50.000	50.000
0210	627.0200	MULCHING	SY	50.000	50.000
0220	628.7015	INLET PROTECTION TYPE C	EACH	14.000	14.000
0230	629.0210	FERTILIZER TYPE B	CWT	0.100	0.100
0240	630.0140	SEEDING MIXTURE NO. 40	LB	1.000	1.000
0250	642.5201	FIELD OFFICE TYPE C	EACH	1.000	1.000
0260	643.0100	TRAFFIC CONTROL (PROJECT) 01. 4995-00-28	EACH	1.000	1.000
0270	643.0420	TRAFFIC CONTROL BARRICADES TYPE III	DAY	585.000	585.000
0280	643.0705	TRAFFIC CONTROL WARNING LIGHTS TYPE A	DAY	1,540.000	1,540.000
0290	643.2000	TRAFFIC CONTROL DETOUR (PROJECT) 01. 4995-00-28	EACH	1.000	1.000
0300	643.3000	TRAFFIC CONTROL DETOUR SIGNS	DAY	3,700.000	3,700.000
0310	645.0140	GEOTEXTILE FABRIC TYPE SAS	SY	800.000	800.000
0320	646.0106	PAVEMENT MARKING EPOXY 4-INCH	LF	2,730.000	2,730.000
0330	646.0126	PAVEMENT MARKING EPOXY 8-INCH	LF	115.000	115.000
0340	647.0166	PAVEMENT MARKING ARROWS EPOXY TYPE 2	EACH	3.000	3.000
0350	647.0176	PAVEMENT MARKING ARROWS EPOXY TYPE 3	EACH	3.000	3.000
0360	647.0336	PAVEMENT MARKING SYMBOLS BIKE SHARED LANE EPOXY	EACH	10.000	10.000
0370	647.0566	PAVEMENT MARKING STOP LINE EPOXY 18-INCH	LF	19.000	19.000
0380	647.0766	PAVEMENT MARKING CROSSWALK EPOXY 6-INCH	LF	625.000	625.000
0390	650.8000	CONSTRUCTION STAKING RESURFACING REFERENCE	LF	1,665.000	1,665.000
0400	650.9910	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 01. 4995-00-28	LS	1.000	1.000
0410	690.0150	SAWING ASPHALT	LF	80.000	80.000
0420	690.0250	SAWING CONCRETE	LF	2,250.000	2,250.000
0430	ASP.1TOA	ON-THE-JOB TRAINING APPRENTICE AT \$5.00/HR	HRS	150.000	150.000
0440	ASP.1TOG	ON-THE-JOB TRAINING GRADUATE AT \$5.00/HR	HRS	300.000	300.000
0450	SPV.0060	SPECIAL 01. ADJUSTING WATER VALVE BOXES	EACH	16.000	16.000
0460	SPV.0090	SPECIAL 01. CONCRETE CURB AND GUTTER 24-INCH	LF	145.000	145.000

DATE 19JUN14		E S T I M A T E O F Q U A N T I T I E S			
LINE					4995-00-28
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0470	SPV. 0090	SPECIAL 02. CONCRETE CURB AND GUTTER	LF	205.000	205.000
		24-INCH SPECIAL			

REMOVALS														
		204.0105				204.0109.S		204.0110		204.0150		204.0155		335.0100
		REMOVING PAVEMENT				REMOVING CONCRETE		REMOVING		REMOVING		REMOVING CONCRETE		RUBBLIZING
		BUTT JOINTS				SURFACE PARTIAL DEPTH		ASPHALTIC SURFACE		CURB & GUTTER		SIDEWALK		
LOCATION	STATION	TO	STATION	OFFSET	SY	SF		SY		LF		SY		SY
N. MILWAUKEE ST.	11+36	-	--	RT	28	--		--		--		--		--
N. MILWAUKEE ST.	11+58	-	12+27	RT	--	--		--		69		--		--
N. MILWAUKEE ST.	12+95	-	15+42	C/L	--	--		330		--		--		--
N. MILWAUKEE ST.	14+81	-	15+14	LT	--	--		--		39		37		--
MAIN ST.	15+12	-	15+67	LT	70	--		--		--		--		--
N. MILWAUKEE ST.	15+66	-	15+83	LT	--	--		--		32		22		--
WESTERN AVE.	20+31	-	20+43	RT	--	--		--		26		11		--
ELIZABETH ST.	20+43	-	20+89	RT	66	--		--		--		--		--
WESTERN AVE.	21+04	-	21+29	RT	--	--		--		25		--		--
WESTERN AVE.	21+04	-	21+71	RT	--	--		--		--		31		--
WESTERN AVE.	21+54	-	21+71	LT	--	--		--		17		11		--
WESTERN AVE.	21+54	-	21+71	RT	--	--		--		17		--		--
WESTERN AVE.	23+57	-	23+77	RT	--	--		--		21		7		--
WESTERN AVE.	23+59	-	23+85	LT	--	--		--		36		19		--
PLEASANT ST.	23+84	-	24+34	LT	61	--		--		--		--		--
WESTERN AVE.	24+28	-	24+48	LT	--	--		--		21		17		--
WESTERN AVE.	27+63	-	--	C/L	50	--		--		--		--		--
PROJECT AREA	11+00	-	27+63	RT/LT	--	15,600		--		--		--		4,750
UNDISTRIBUTED	11+00	-	27+63	C/L	--	--		--		47		--		--
TOTAL					275	15,600		330		350		155		4,750

EARTHWORK QUANTITIES

-----FOR INFORMATION ONLY-----								205.0100
								EXCAVATION COMMON -
		CUT		FILL (UNADJUSTED)		NET FILL (UNADJUSTED)		UNDISTRIBUTED
LOCATION	STATION TO	STATION	OFFSET	CY	CY	CY		CY
UNDISTRUBUTED	11+00	-	27+63	--	--	--		250
TOTAL								250

AGGREGATE AND PAVEMENT

		305.0110		311.0110		455.0115		455.0605		460.1101
		BASE AGGREGATE		BREAKER RUN -		ASPHALTIC MATERIAL		TACK COAT		HMA PAVEMENT
		DENSE 3/4-INCH		UNDISTRIBUTED		PG 64-22				TYPE E-1
LOCATION	STATION TO	STATION	OFFSET	TON	TON	TON		GAL		TON
PROJECT AREA	11+00	-	27+63	C/L	--	--	130	200		2,090
UNDISTRIBUTED	11+00	-	27+63	C/L	30	440	--	--		--
TOTAL					30	440	130	200		2,090

CURB & GUTTER AND SIDEWALK

		602.0410		602.0505		SPV.0090.01		SPV.0090.02	
		CONCRETE		CURB RAMP		CONCRETE		CONCRETE	
		SIDEWALK		DETECTABLE WARNING		CURB & GUTTER		CURB & GUTTER	
		5-INCH		FIELD YELLOW		24-INCH		24-INCH SPECIAL	
LOCATION	STATION TO	STATION	OFFSET	SF	SF	LF		LF	
N. MILWAUKEE ST.	11+58	-	12+27	RT	--	--	69	--	
N. MILWAUKEE ST.	14+81	-	15+14	LT	335	16	--	39	
N. MILWAUKEE ST.	15+66	-	15+83	LT	195	8	--	32	
WESTERN AVE.	20+31	-	20+43	RT	96	8	--	26	
WESTERN AVE.	21+04	-	21+71	RT	280	16	17	25	
WESTERN AVE.	21+54	-	21+71	LT	91	8	17	--	
WESTERN AVE.	23+57	-	23+77	RT	85	8	21	--	
WESTERN AVE.	23+59	-	23+85	LT	177	16	--	36	
WESTERN AVE.	24+28	-	24+48	LT	141	8	--	21	
UNDISTRIBUTED	11+00	-	27+63	C/L	--	--	21	26	
TOTAL					1,400	88	145	205	

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED

EROSION CONTROL

		624.0100		628.7015	
		WATER		INLET PROTECTION	
				TYPE C	
LOCATION	STATION	OFFSET	MGAL	EACH	
N. MILWAUKEE ST.	11+29	LT	--	1	
MAIN ST.	15+15	LT	--	1	
MAIN ST.	15+28	LT	--	1	
MAIN ST.	15+70	LT	--	1	
WESTERN AVE.	15+70	RT	--	1	
WESTERN AVE.	15+92	LT	--	1	
WESTERN AVE.	18+45	LT	--	1	
WESTERN AVE.	18+46	RT	--	1	
WESTERN AVE.	21+52	LT	--	1	
WESTERN AVE.	21+53	RT	--	1	
PLEASANT ST.	23+82	LT	--	1	
PLEASANT ST.	24+24	LT	--	1	
WESTERN AVE.	24+33	RT	--	1	
WESTERN AVE.	24+63	LT	--	1	
PROJECT AREA	--	C/L	5	--	
TOTAL			5	14	

GEOTEXTILE FABRIC

		645.0140	
		GEOTEXTILE FABRIC	
		TYPE SAS -	
		UNDISTRIBUTED	
LOCATION	STATION TO	STATION OFFSET	SY
UNDISTRIBUTED	11+00	- 27+63 C/L	800
TOTAL			800

RESTORATION

		625.0100		627.0200		629.0210		630.0140	
		TOPSOIL		MULCHING		FERTILIZER		SEEDING MIXTURE	
						TYPE B		NO. 40	
LOCATION	STATION TO	STATION OFFSET	SY	SY	CWT	LB			
PROJECT AREA	11+00	- 27+63 C/L	50	50	0.1	1			
TOTAL			50	50	0.1	1			

MOBILIZATION AND TRAFFIC CONTROL

		619.1000	643.0100	643.0420	643.0705	643.2000	643.3000
		MOBILIZATION	TRAFFIC CONTROL	TRAFFIC CONTROL	TRAFFIC CONTROL	TRAFFIC CONTROL	TRAFFIC CONTROL
			(4995-00-28)	BARRICADES	WARNING LIGHTS	DETOUR	DETOUR SIGNS
				TYPE III	TYPE A	(4995-00-28)	
PROJECT ID	DESCRIPTION	EACH	EACH	DAY	DAY	EACH	DAY
4995-00-28	N. MILWAUKEE ST.	1	1	585	1,540	1	3,700
TOTAL		1	1	585	1,540	1	3,700

PAVEMENT MARKING

		646.0106		646.0106		646.0126		647.0166		647.0176		647.0336		647.0566		647.0766	
		PAVEMENT MARKING		PAVEMENT MARKING		PAVEMENT MARKING		PAVEMENT MARKING		PAVEMENT MARKING		PAVEMENT MARKING		PAVEMENT MARKING		PAVEMENT MARKING	
		EPOXY 4-INCH		EPOXY 4-INCH		EPOXY 8-INCH		ARROWS EXPOXY		ARROWS EXPOXY		SYMBOL BIKE SHARED		STOP LINE EPOXY		CROSSWALK	
		WHITE		YELLOW		WHITE		TYPE 2		TYPE 3		LANE EPOXY		18-INCH		EPOXY 6-INCH	
LOCATION	STATION TO	STATION OFFSET	LF	LF	LF	EACH	EACH	EACH	EACH	EACH	LF	LF	LF	LF	LF	LF	LF
N. MILWAUKEE ST.	11+19	- 12+35	LT	--	230	115	3	3	--	19	--	--	19	--	--	--	--
N. MILWAUKEE ST.	11+81	- 14+51	RT	235	--	--	--	--	1	--	--	--	--	--	--	--	--
N. MILWAUKEE ST.	12+35	- 14+50	LT	174	--	--	--	--	1	--	--	--	--	--	--	--	--
N. MILWAUKEE ST.	14+75	- 14+96	C/L	--	--	--	--	--	--	--	--	--	--	--	--	86	--
MAIN ST.	15+11	- 15+70	LT	--	--	--	--	--	--	--	--	--	--	--	--	113	--
WESTERN AVE.	15+63	- 20+34	RT	443	--	--	--	--	2	--	--	--	--	--	--	--	--
WESTERN AVE.	15+81	- 21+38	LT	515	--	--	--	--	1	--	--	--	--	--	--	--	--
ELIZABETH ST.	20+42	- 21+20	RT	--	--	--	--	--	--	--	--	--	--	--	--	142	--
WESTERN AVE.	21+59	- 21+65	C/L	--	--	--	--	--	--	--	--	--	--	--	--	91	--
WESTERN AVE.	21+33	- 23+62	RT	219	--	--	--	--	1	--	--	--	--	--	--	--	--
WESTERN AVE.	21+44	- 23+62	LT	219	--	--	--	--	1	--	--	--	--	--	--	--	--
WESTERN AVE.	23+62	- 23+69	C/L	--	--	--	--	--	--	--	--	--	--	--	--	90	--
WESTERN AVE.	23+69	- 28+26	RT	423	--	--	--	--	1	--	--	--	--	--	--	--	--
PLEASANT ST.	23+81	- 24+37	LT	--	--	--	--	--	--	--	--	--	--	--	--	103	--
WESTERN AVE.	24+55	- 27+63	LT	272	--	--	--	--	2	--	--	--	--	--	--	--	--
TOTAL			2,500	230	115	3	3	10	19	625							

ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED

SAWING ASPHALT AND CONCRETE

					690.0150	690.0250
					SAWING	SAWING
					ASPHALT	CONCRETE
LOCATION	STATION	TO	STATION	OFFSET	LF	LF
N. MILWAUKEE ST.	11+36	-	15+29	RT	56	310
N. MILWAUKEE ST.	14+58	-	15+83	LT	24	197
WESTERN AVE.	15+83	-	21+02	LT	--	505
WESTERN AVE.	17+33	-	20+74	RT	--	398
WESTERN AVE.	21+09	-	23+96	LT	--	336
WESTERN AVE.	21+09	-	21+47	RT	--	53
WESTERN AVE.	23+57	-	23+77	RT	--	15
WESTERN AVE.	24+07	-	27+63	LT	--	436
TOTAL					80	2,250

PREPARE FOUNDATION

		211.0100
		PREPARE FOUNDATION
		FOR ASPHALTIC PAVING
		(4995-00-28)
PROJECT ID	DESCRIPTION	LS
4995-00-28	N. MILWAUKEE ST.	1
TOTAL		1

MANHOLES AND WATER VALVE BOXES

			611.8110	SPV.0060.01
			ADJUSTING	ADJUSTING WATER
			MANHOLE COVERS	VALVE BOXES
LOCATION	STATION	OFFSET	EACH	EACH
N. MILWAUKEE ST.	11+36	LT	--	1
N. MILWAUKEE ST.	13+05	RT	1	--
N. MILWAUKEE ST.	15+01	LT	1	--
N. MILWAUKEE ST.	15+17	RT	--	1
N. MILWAUKEE ST.	15+25	LT	1	--
N. MILWAUKEE ST.	15+26	RT	--	1
WESTERN AVE.	15+37	RT	--	2
WESTERN AVE.	15+45	RT	--	1
WESTERN AVE.	15+51	LT	--	1
WESTERN AVE.	15+61	LT	1	--
WESTERN AVE.	16+55	LT	1	--
WESTERN AVE.	18+41	RT	1	--
WESTERN AVE.	18+60	RT	1	--
WESTERN AVE.	20+88	RT	--	1
WESTERN AVE.	20+93	RT	--	1
WESTERN AVE.	20+98	RT	--	1
WESTERN AVE.	21+33	RT	1	--
WESTERN AVE.	21+42	LT	1	--
WESTERN AVE.	21+49	RT	--	1
WESTERN AVE.	23+97	RT	--	1
WESTERN AVE.	24+02	RT	--	1
WESTERN AVE.	24+07	RT	--	1
WESTERN AVE.	24+11	LT	1	--
WESTERN AVE.	24+31	RT	1	--
WESTERN AVE.	24+71	RT	--	1
WESTERN AVE.	27+25	RT	--	1
TOTAL	CATEGORY 0020		11	16

CONSTRUCTION STAKING

				650.8000
				CONSTRUCTION STAKING
				RESURFACING
				REFERENCE
LOCATION	STATION	TO	STATION	OFFSET
N. MILWAUKEE ST.	11+00	-	27+63	C/L
TOTAL				1,665

CONSTRUCTION STAKING

		650.9910
		CONSTRUCTION STAKING
		SUPPLEMENTAL CONTROL
		(4995-00-28)
PROJECT ID	DESCRIPTION	LS
4995-00-28	N. MILWAUKEE ST.	1
TOTAL		1

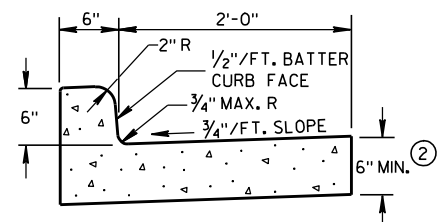
FIELD OFFICE

		642.5201
		FIELD OFFICE
		TYPE C
PROJECT ID	DESCRIPTION	EACH
4995-00-28	N. MILWAUKEE ST.	1
TOTAL		1

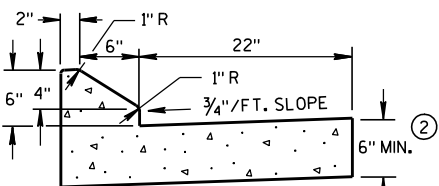
ALL ITEMS ARE CATEGORY 0010 UNLESS OTHERWISE SPECIFIED

Standard Detail Drawing List

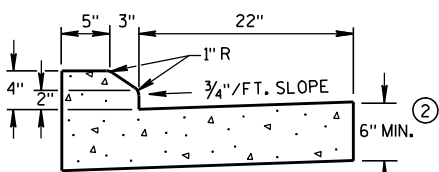
08D01-17	CONCRETE CURB, CONCRETE CURB AND GUTTER AND TIES
08D05-15A	CURB RAMPS TYPES 1 AND 1-A
08D05-15B	CURB RAMPS TYPES 2 AND 3
08D05-15C	CURB RAMPS TYPES 4A AND 4A1
08D05-15D	CURB RAMPS TYPE 4B AND 4B1
08D05-15E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08E10-02	INLET PROTECTION TYPE A, B, C AND D
15C02-05A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-05C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-02	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C05-02	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C07-12C	PAVEMENT MARKING ARROWS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C29-03E	PAVEMENT MARKING FOR BIKE LANES
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING



TYPES A &amp; D ①

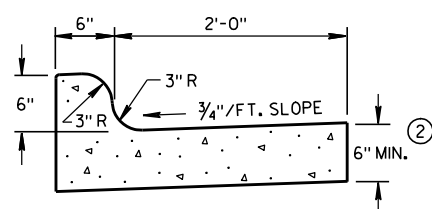


6" SLOPED CURB TYPES G &amp; J ①

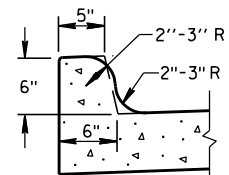
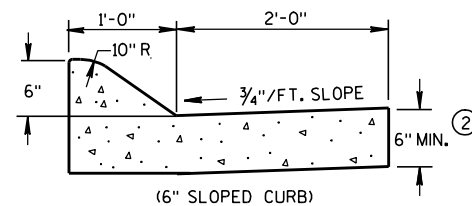


4" SLOPED CURB TYPES G &amp; J ①

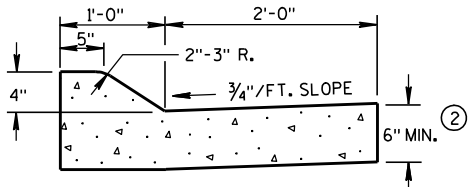
CONCRETE CURB &amp; GUTTER 30"



TYPES K &amp; L ①

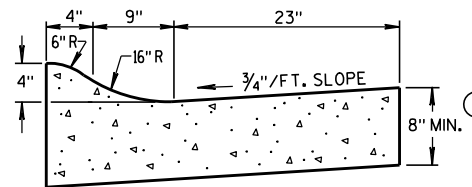
OPTIONAL CURB SHAPE  
FOR TYPES K & L ①

(6" SLOPED CURB)

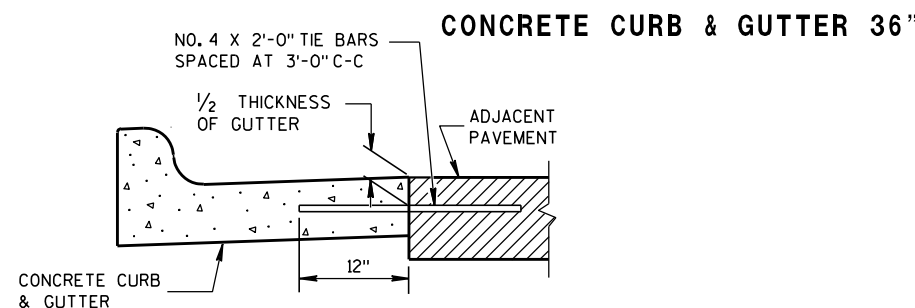


(4" SLOPED CURB)

TYPES A &amp; D ①

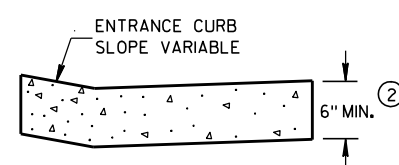


4" SLOPED CURB TYPES R &amp; T ① ④



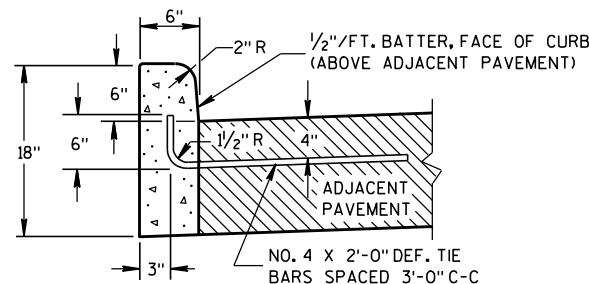
CONCRETE CURB &amp; GUTTER 36"

TYPICAL TIE BAR LOCATION ①



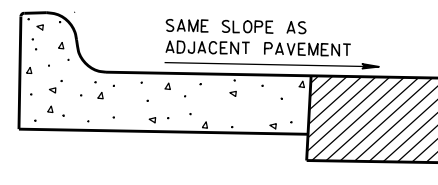
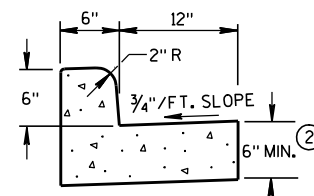
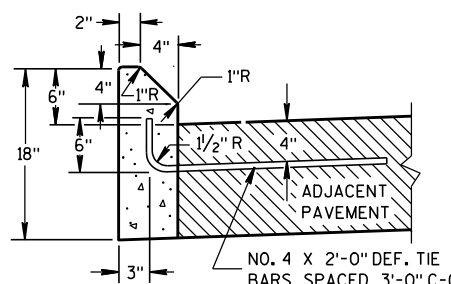
DRIVEWAY ENTRANCE CURB

(WHEN DIRECTED BY THE ENGINEER)



TYPES A &amp; D ①

CONCRETE CURB

REVERSE SLOPE GUTTER ⑤  
(TYPICAL FOR ALL CURB & GUTTER TYPES)TYPES A & D  
CONCRETE CURB & GUTTER 18"

TYPES G &amp; J ①

## GENERAL NOTES

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

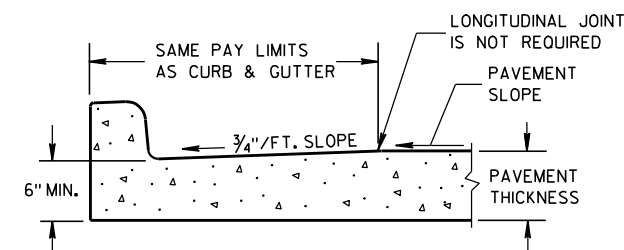
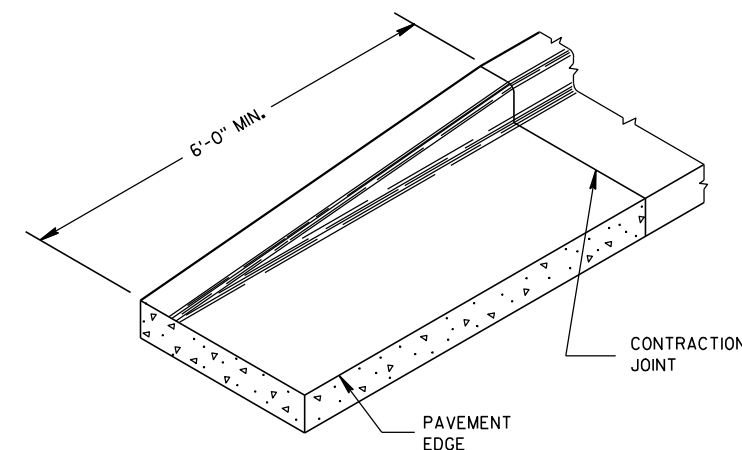
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

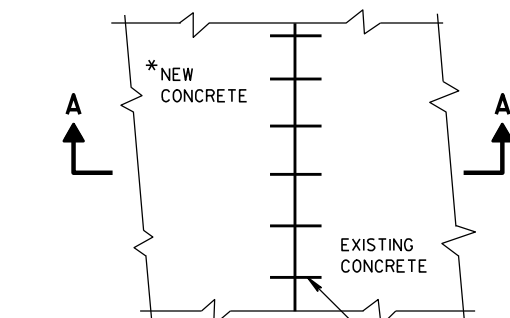
WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTER TYPES A, G, K AND R.
- 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 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.
- ④ THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑤ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

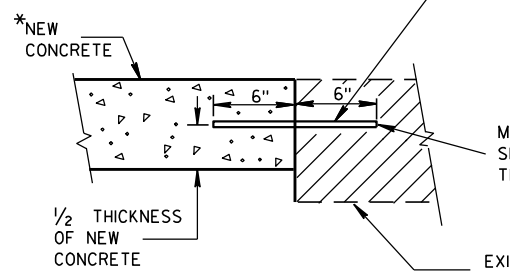
PARTIAL SECTION OF PAVEMENT  
WITH INTEGRAL CURB & GUTTER

END SECTION CURB &amp; GUTTER



PLAN VIEW

\* NEW CURB & GUTTER,  
SURFACE DRAINS,  
CONCRETE PAVEMENT  
OR OTHER NEW CONCRETE.

SECTION A-A  
TIE BARS DRILLED  
INTO EXISTING PAVEMENT

NO. 6 TIE BARS SPACED 2'-6" C-C,  
INSTALLED PERPENDICULAR  
TO THE LONGITUDINAL JOINT.

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

EXISTING  
CONCRETE

CONCRETE CURB, CONCRETE  
CURB & GUTTER AND TIES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

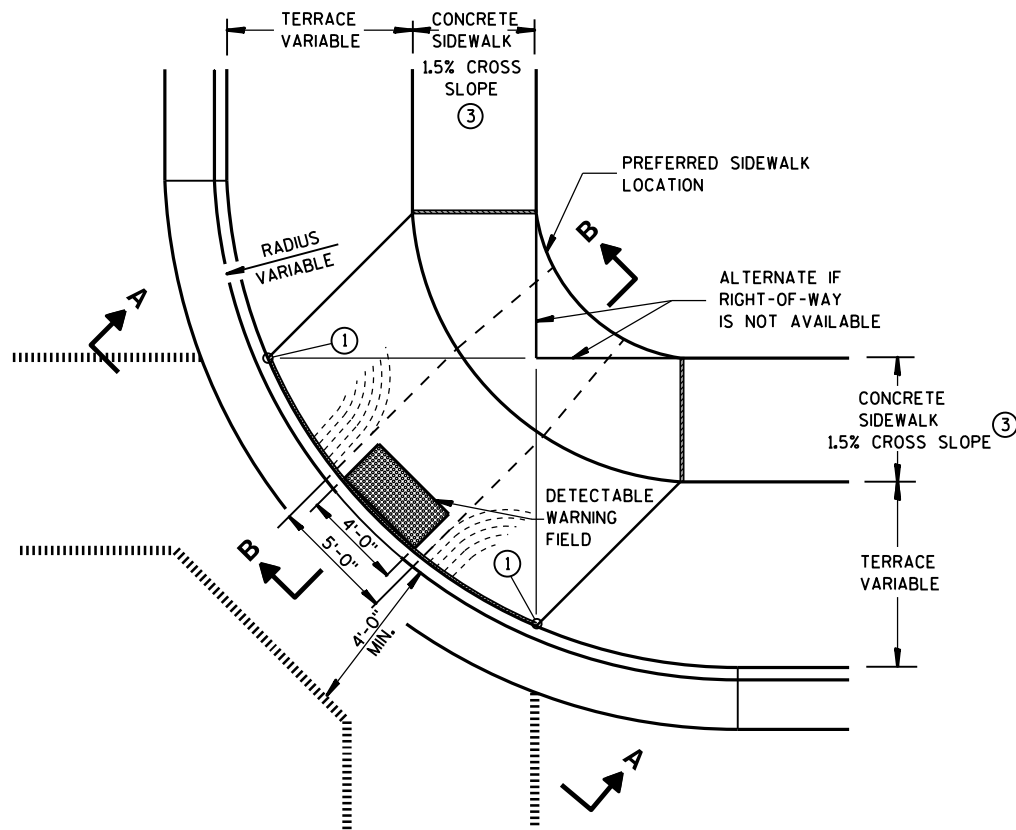
APPROVED

9/4/08

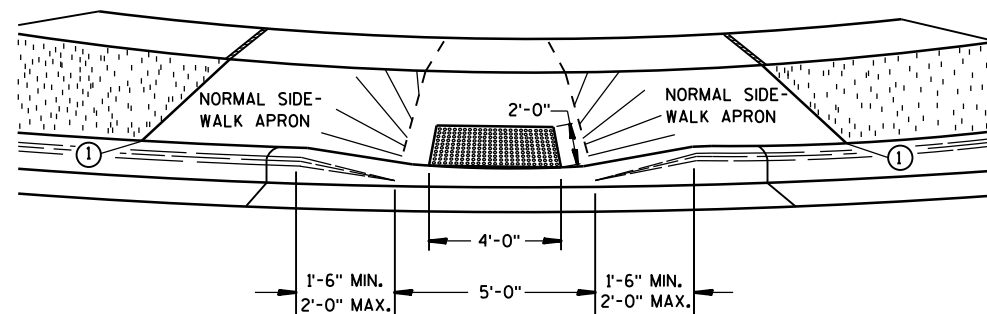
DATE

FHWA

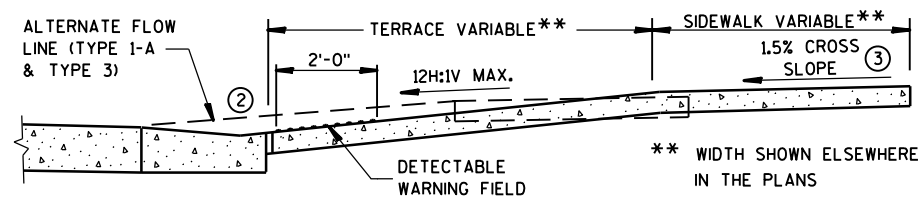
/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER



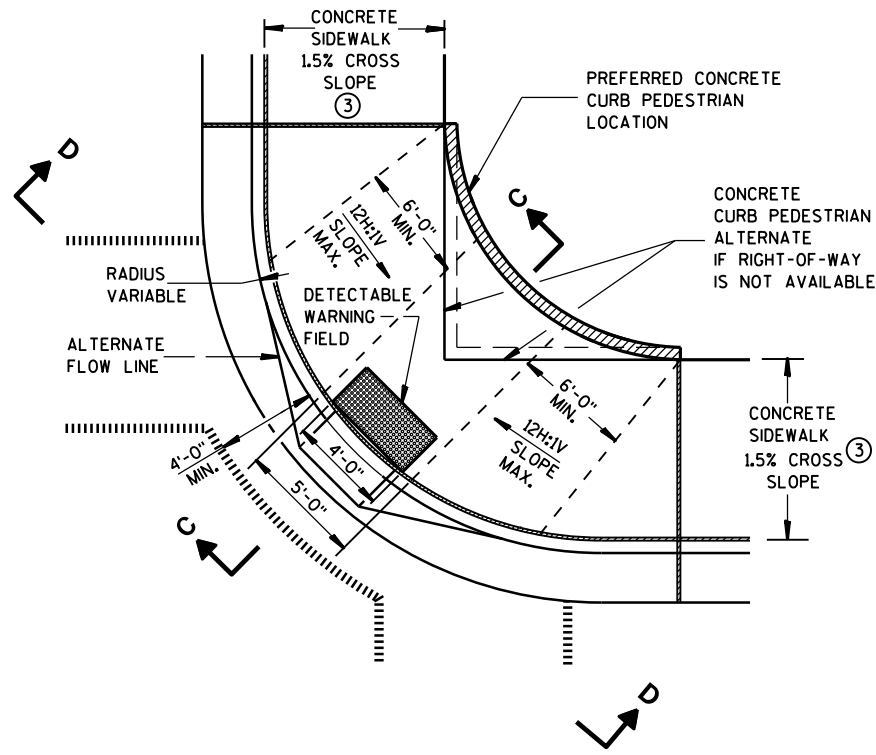
**PLAN VIEW  
TYPE 1 RAMP**  
(CENTER OF CORNER RADIUS)



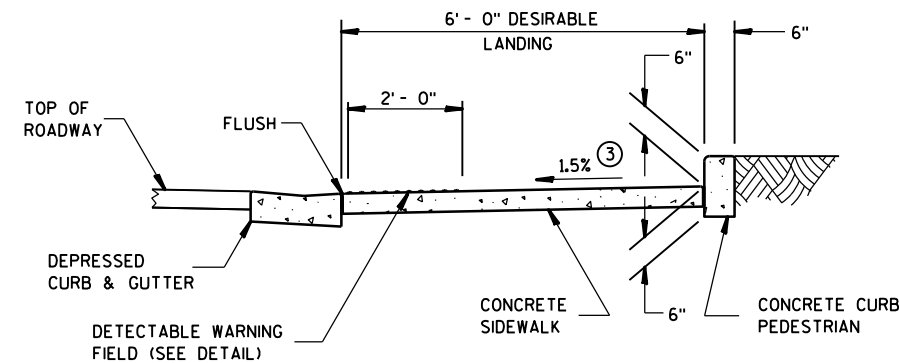
**VIEW A-A**



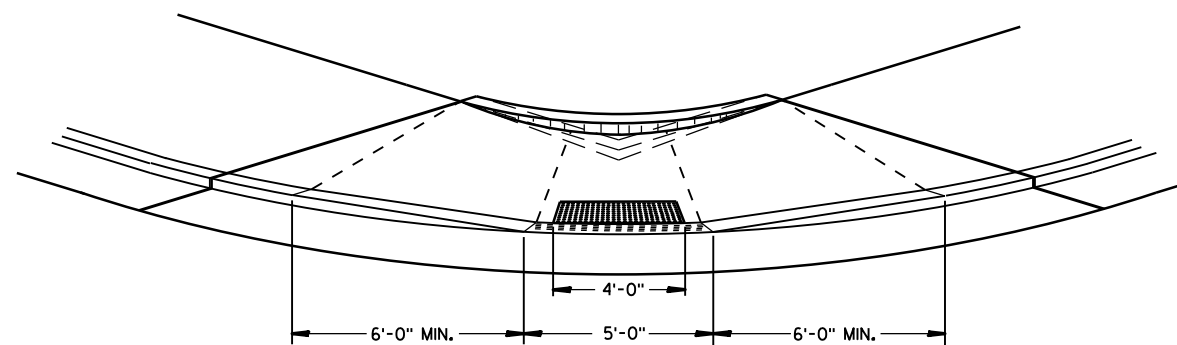
**SECTION B-B**



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



**SECTION C-C**



**VIEW D-D**

## GENERAL NOTES

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

RAMPS SHALL BE BUILT AT 12H:1V OR FLATTER. WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

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

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

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

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

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

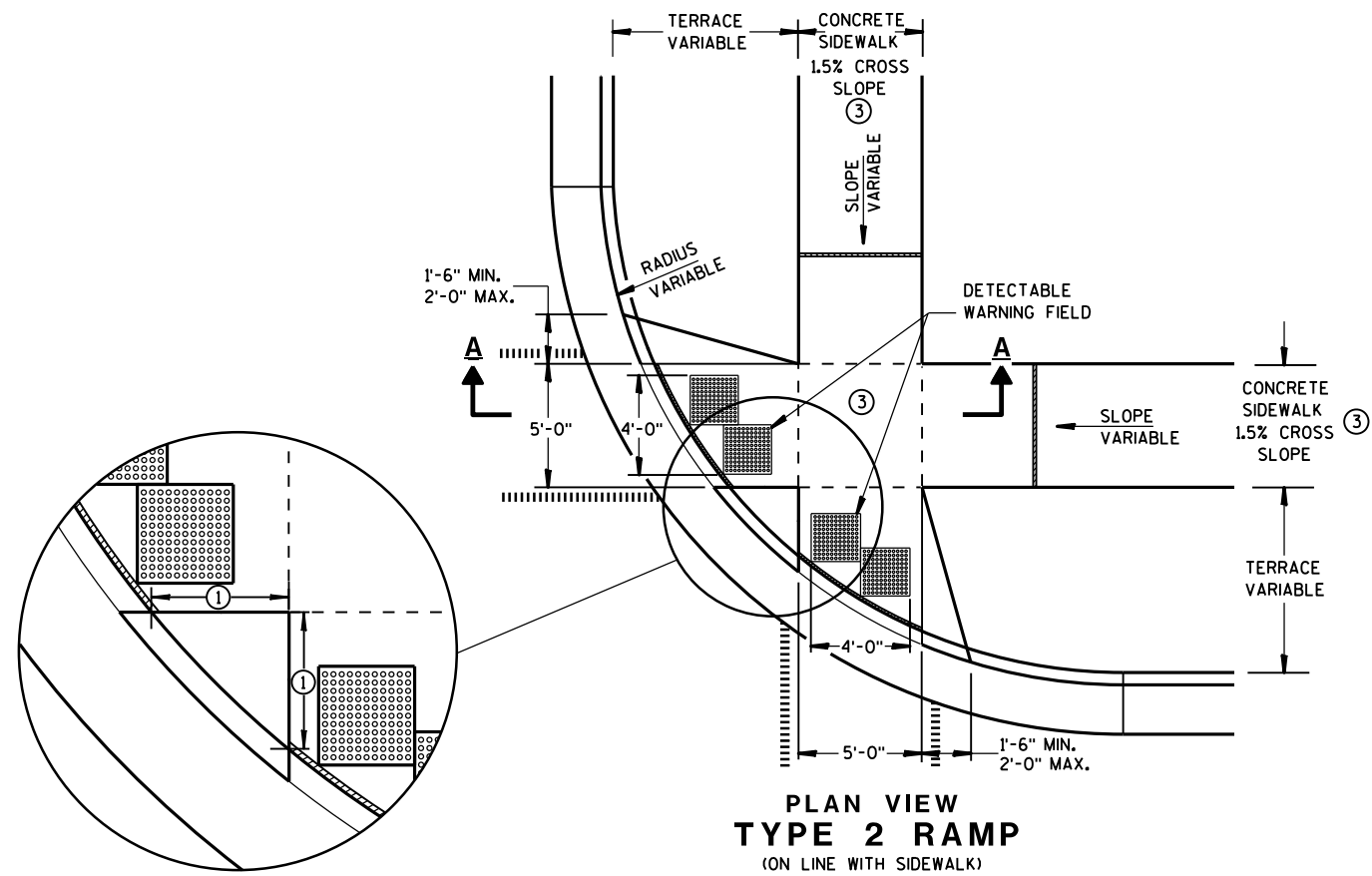
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③  $\pm 0.5\%$  CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

## LEGEND

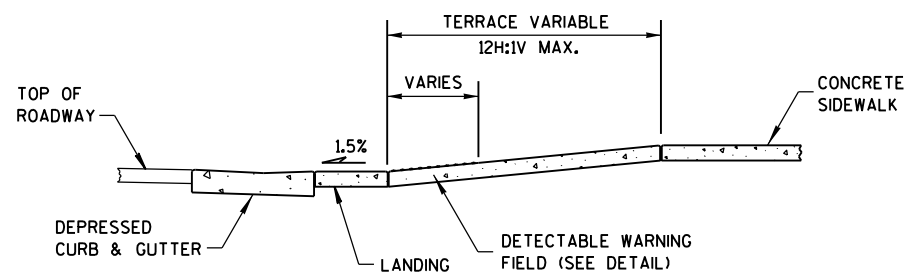
- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT

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

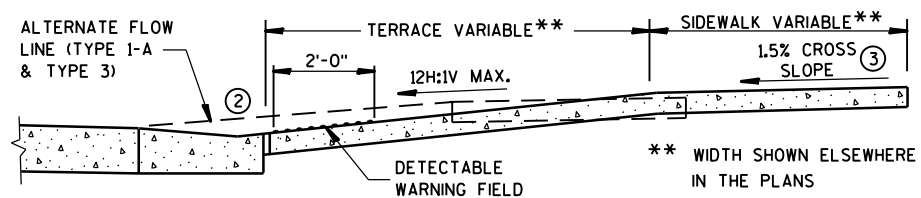
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**PLAN VIEW  
TYPE 2 RAMP**  
(ON LINE WITH SIDEWALK)



**SECTION A-A**



**SECTION B-B**

## GENERAL NOTES

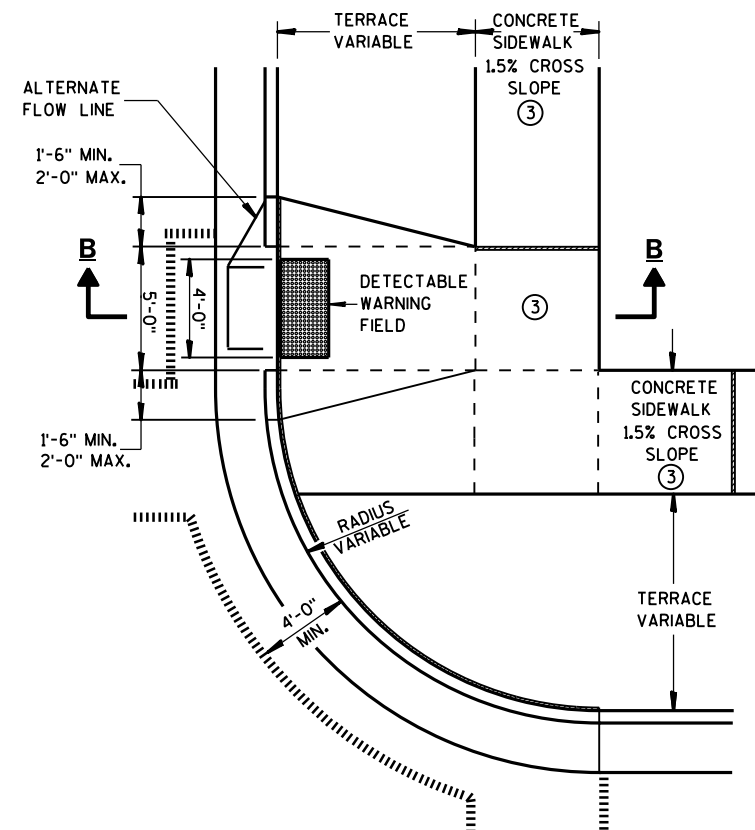
USE THE TYPE 3 RAMP ONLY WHEN A TYPE 1 OR TYPE 2 CANNOT BE ACHIEVED BECAUSE OF FIELD CONDITIONS.

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

- ① WHEN THIS DISTANCE IS LESS THAN 6'-0" IT MAY BE DIFFICULT TO ACHIEVE A 12H:1V SLOPE, OR FLATTER, ON THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 12H:1V SLOPE, OR FLATTER, ON RAMP. 2" MINIMUM CURB HEIGHT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. PROVIDE DRAINAGE AWAY FROM CURB RAMP AT GUTTER FLAG INTERFACE.
- ③  $\pm 0.5\%$  CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

## LEGEND

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



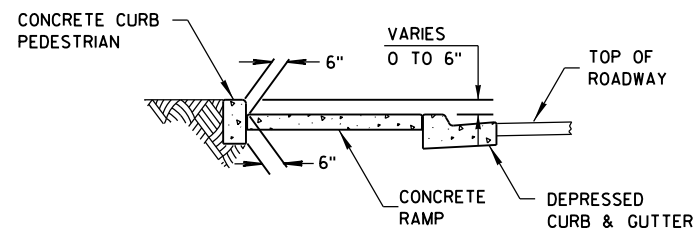
**PLAN VIEW  
TYPE 3 RAMP**  
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS  
TYPES 2 AND 3**

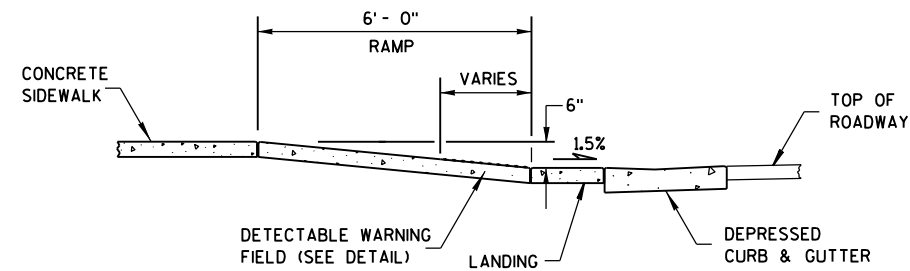
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**CURB RAMP TYPE 4A**  
**PLAN VIEW**



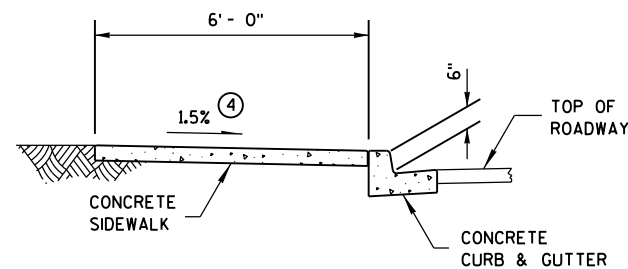
**SECTION C-C FOR TYPE 4A**



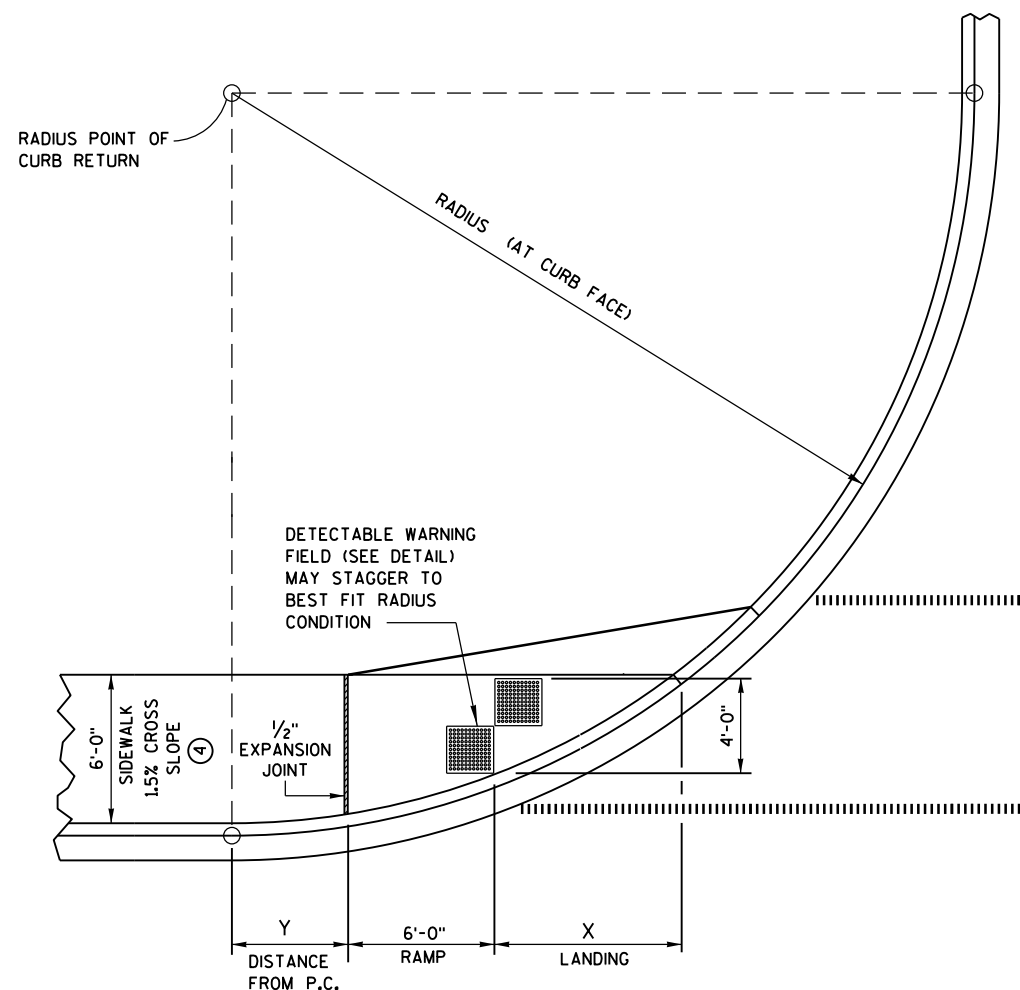
SECTION B-B FOR TYPE 4A

<b>RADIUS (AT CURB FACE)</b>	<b>X</b>	<b>Y</b>
<b>20 FEET</b>	6'-1 $\frac{3}{4}$ "	2'-7 $\frac{1}{4}$ "
<b>30 FEET</b>	7'-11 $\frac{3}{4}$ "	4'-8 $\frac{1}{4}$ "
<b>40 FEET</b>	9'-5 $\frac{1}{4}$ "	6'-5"
<b>50 FEET</b>	10'-8 $\frac{3}{4}$ "	7'-11 $\frac{1}{4}$ "
<b>60 FEET</b>	11'-10 $\frac{1}{4}$ "	9'-3 $\frac{1}{2}$ "

## INTERMEDIATE RADII CAN BE INTERPOLATED



**SECTION A-A FOR TYPE 4A**



**CURB RAMP TYPE 4A1**  
**PLAN VIEW**

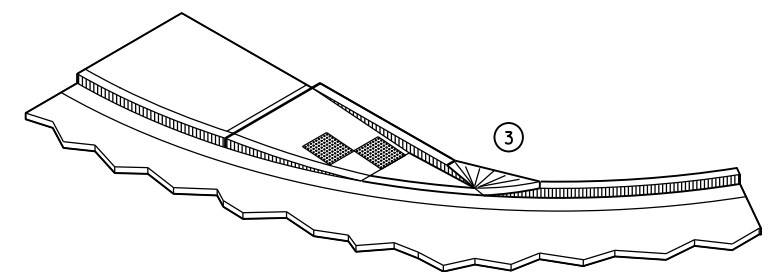
## GENERAL NOTES

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

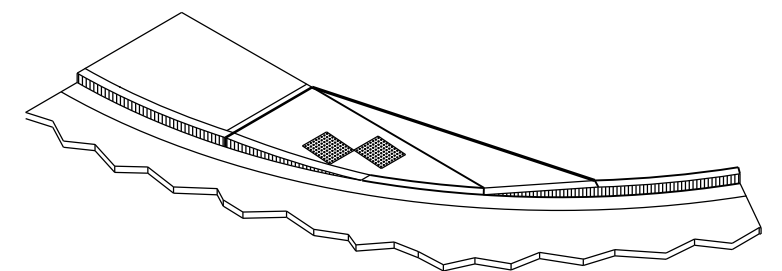
RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

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

- ③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.)  
DO NOT MARK TRANSITION NOSE.
- ④  $\pm 0.5\%$  CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.





ISOMETRIC VIEW FOR TYPE 4A



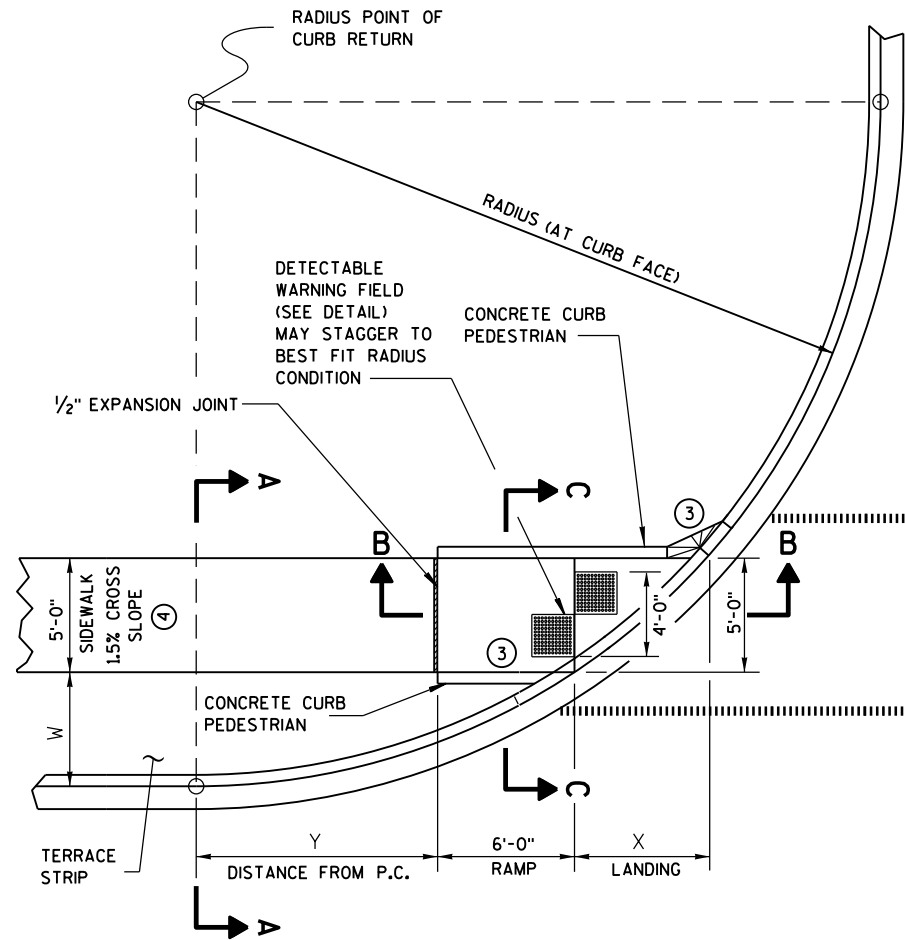
**ISOMETRIC VIEW FOR TYPE 4A1**

## LEGEND

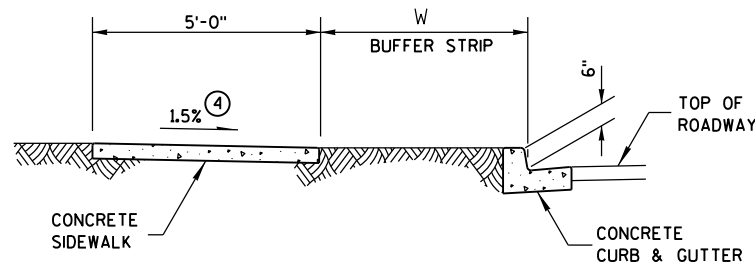
-  1/2" EXPANSION JOINT-SIDEWALK  
 CONTRACTION JOINT FIELD LOCATED  
 PAVEMENT MARKING CROSSWALK (WHITE)

## CURB RAMPS TYPES 4A AND 4A1

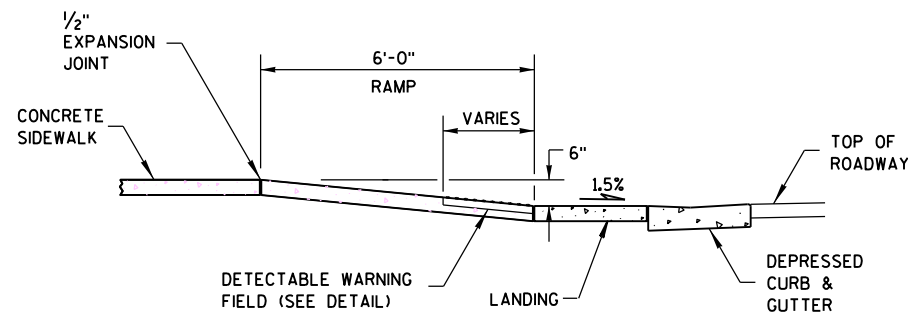
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**CURB RAMP TYPE 4B  
PLAN VIEW**



**SECTION A-A FOR TYPE 4B**



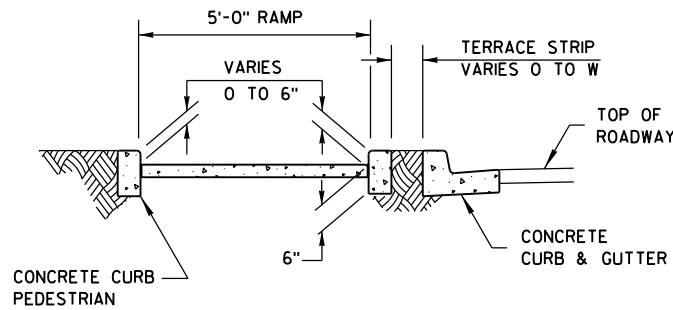
**SECTION B-B FOR TYPE 4B**

**LEGEND**

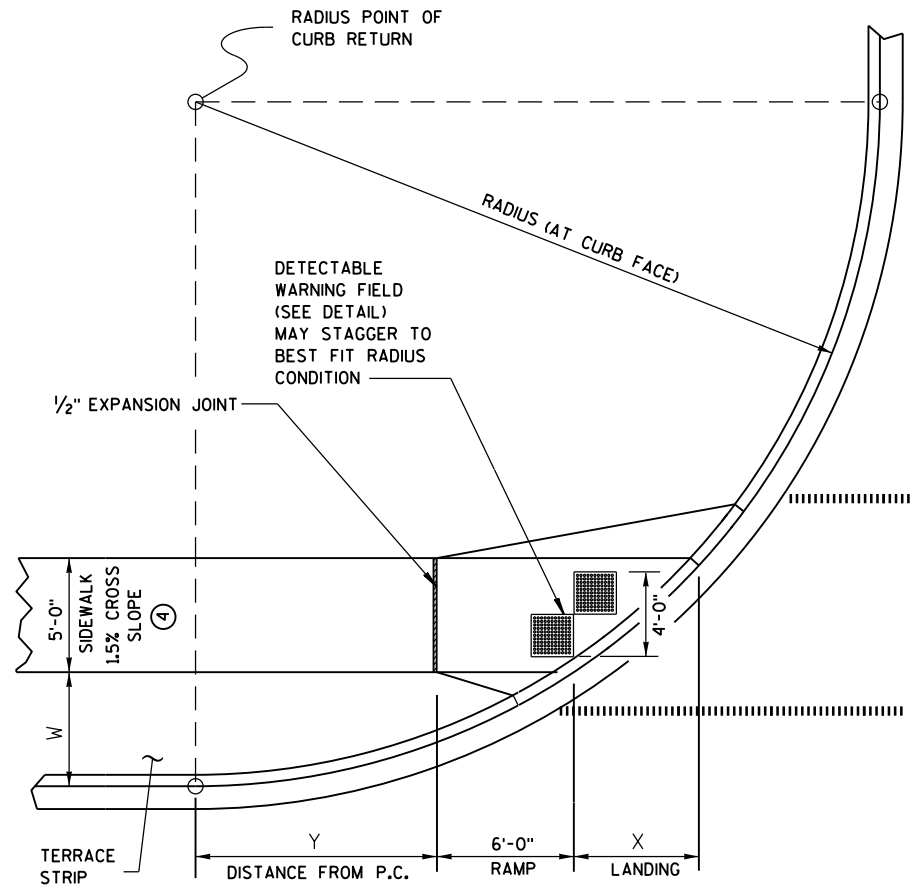
- 1/2" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ===== PAVEMENT MARKING CROSSWALK (WHITE)

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y
20 FEET	5'-5 1/2"	4'-6 1/2"	4'-8 1/2"	6'-0"	4'-1"	7'-2 3/4"	3'-7"	8'-3 1/2"	3'-1 1/2"	9'-2 1/2"
30 FEET	7'-3 3/4"	7'-1"	6'-5 1/2"	8'-11 1/2"	5'-9 1/4"	10'-7"	5'-2 1/2"	12'-0"	4'-8 3/4"	13'-3 1/4"
40 FEET	8'-9 1/2"	9'-2 1/2"	7'-10"	11'-5 1/4"	7'-1"	13'-4 1/2"	6'-5 3/4"	15'-3/4"	5'-11 1/2"	16'-7 1/4"
50 FEET	10'-3/4"	11'-3/4"	9'-1/4"	13'-7 1/4"	8'-2 1/2"	15'-9 1/2"	7'-6 1/2"	17'-9"	6'-11 3/4"	19'-6 1/4"
60 FEET	11'-2 1/2"	12'-8 3/4"	10'-3/4"	15'-6 1/2"	9'-2 1/4"	17'-11 3/4"	8'-5 3/4"	20'-1 3/4"	7'-10 1/2"	22'-1 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



**SECTION C-C FOR TYPE 4B**



**CURB RAMP TYPE 4B1  
PLAN VIEW**

**GENERAL NOTES**

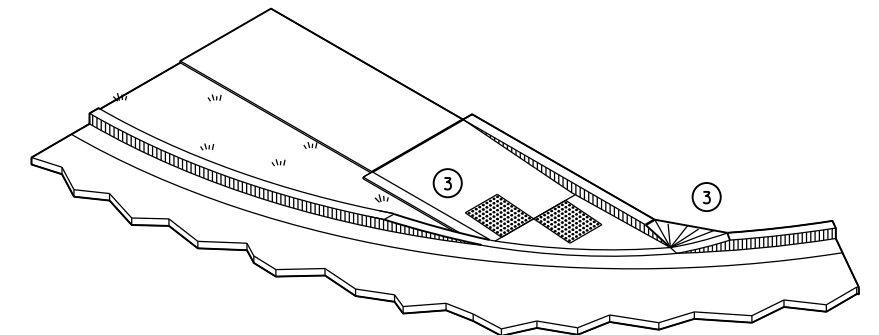
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.

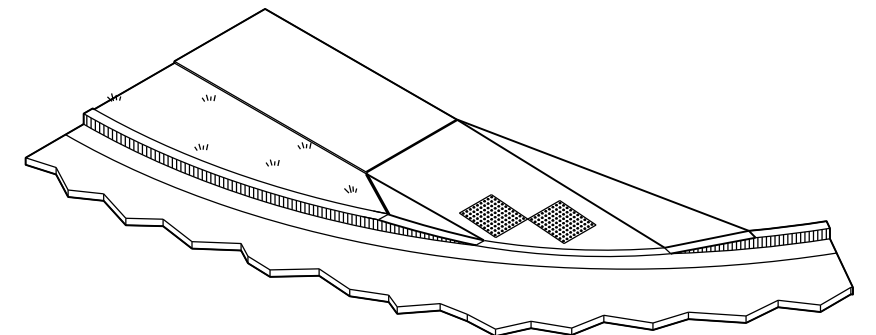
DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

③ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.

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



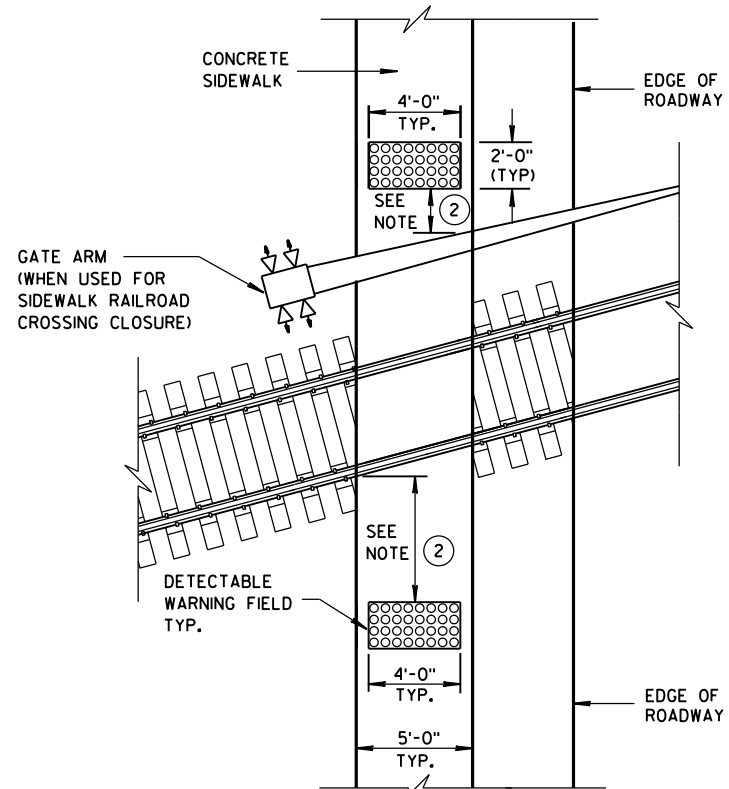
**ISOMETRIC VIEW FOR TYPE 4B**



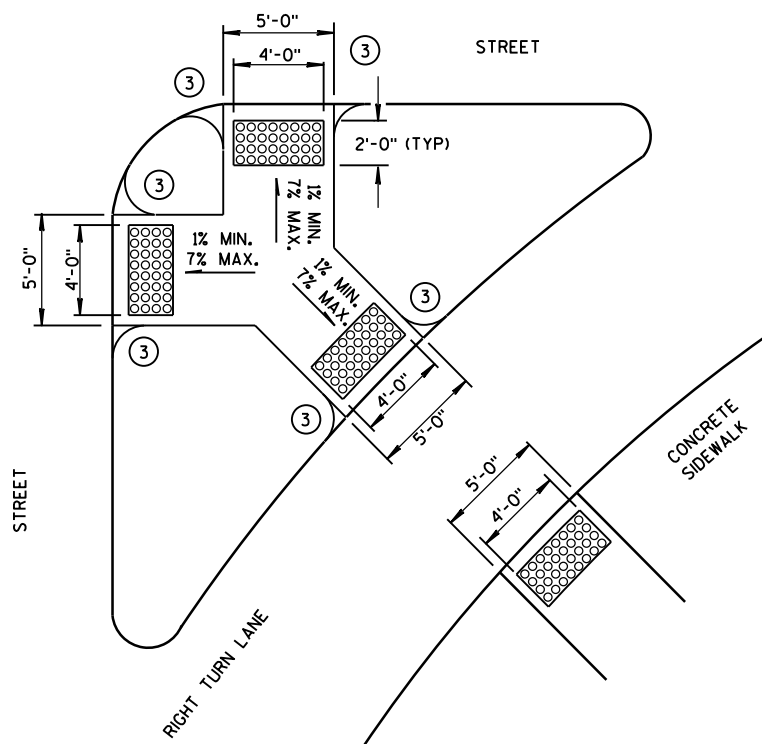
**ISOMETRIC VIEW FOR TYPE 4B1**

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

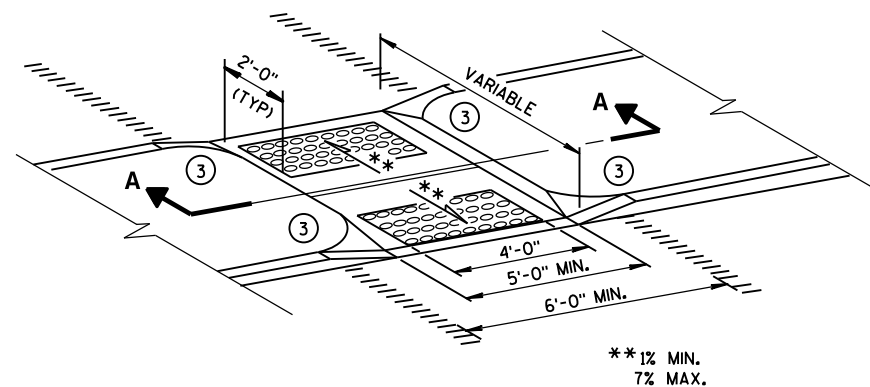
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



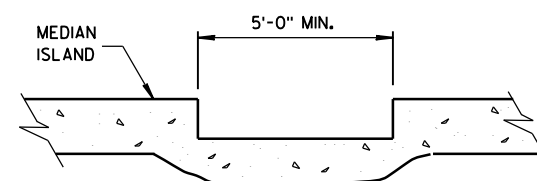
**TYPE 8**  
**DETECTABLE WARNINGS**  
**AT RAILROAD CROSSING**



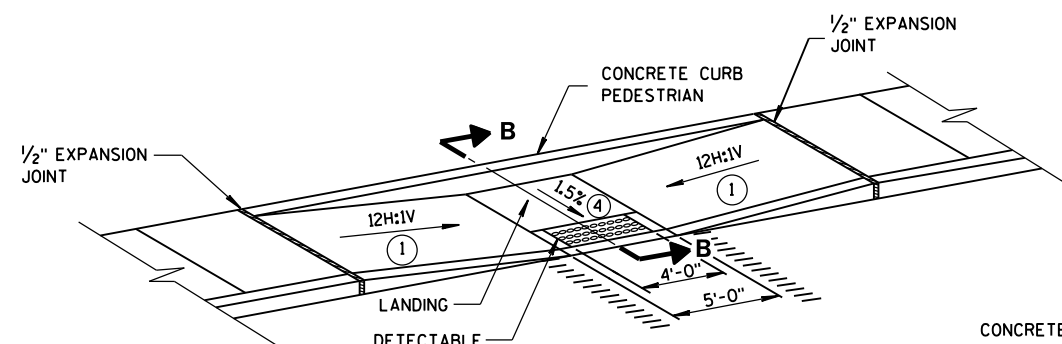
**TYPE 6**  
**DETECTABLE WARNING AT ISLANDS**



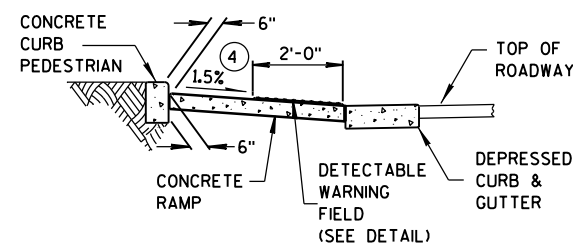
**MEDIAN ISLAND**  
**NON-ELEVATED CROSSING**  
**TYPE 5**



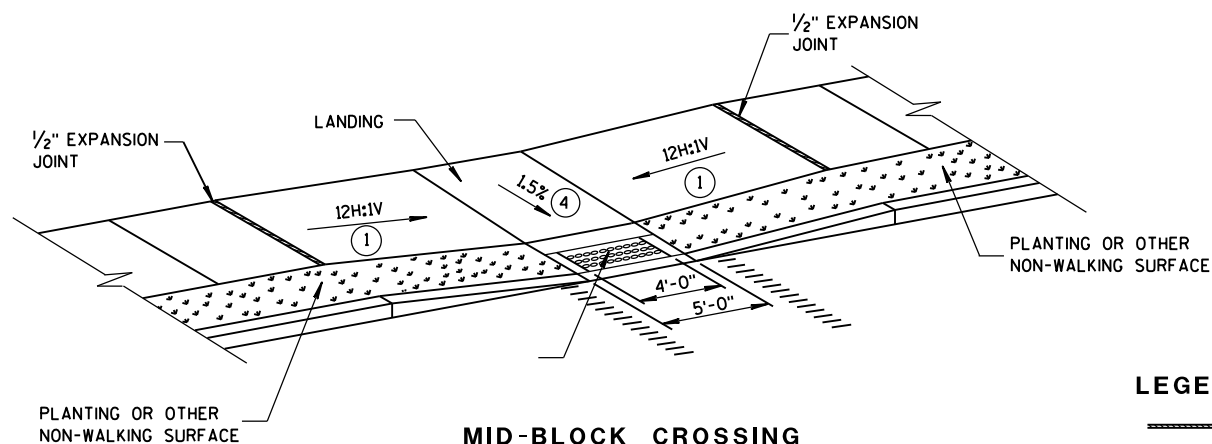
**SECTION A-A**



**MID-BLOCK CROSSING**  
**TYPE 7A**



**SECTION B-B**



**MID-BLOCK CROSSING**  
**TYPE 7B**

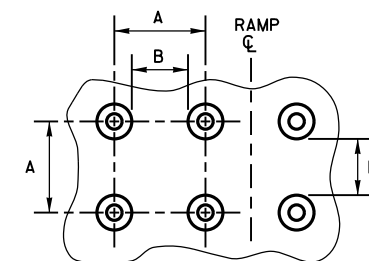
NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

## GENERAL NOTES

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

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

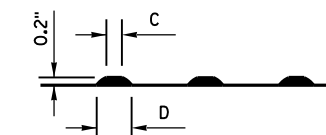
- 1 SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- 2 THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET  $\pm$  0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- 3 INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS.) DO NOT MARK TRANSITION NOSE.
- 4  $\pm$ 0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.



**PLAN VIEW**

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

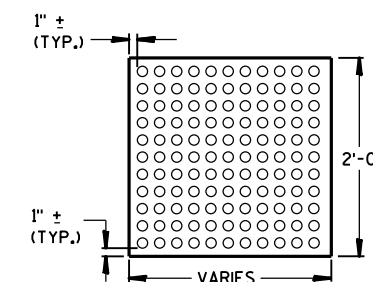
\* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



**ELEVATION VIEW**

## TRUNCATED DOMES

### DETECTABLE WARNING PATTERN DETAIL



**PLAN VIEW**  
**DETECTABLE WARNING**  
**FIELD (TYPICAL)**

## LEGEND

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

**CURB RAMPS**  
**TYPES 5, 6, 7A, 7B & 8**

**STATE OF WISCONSIN**  
**DEPARTMENT OF TRANSPORTATION**

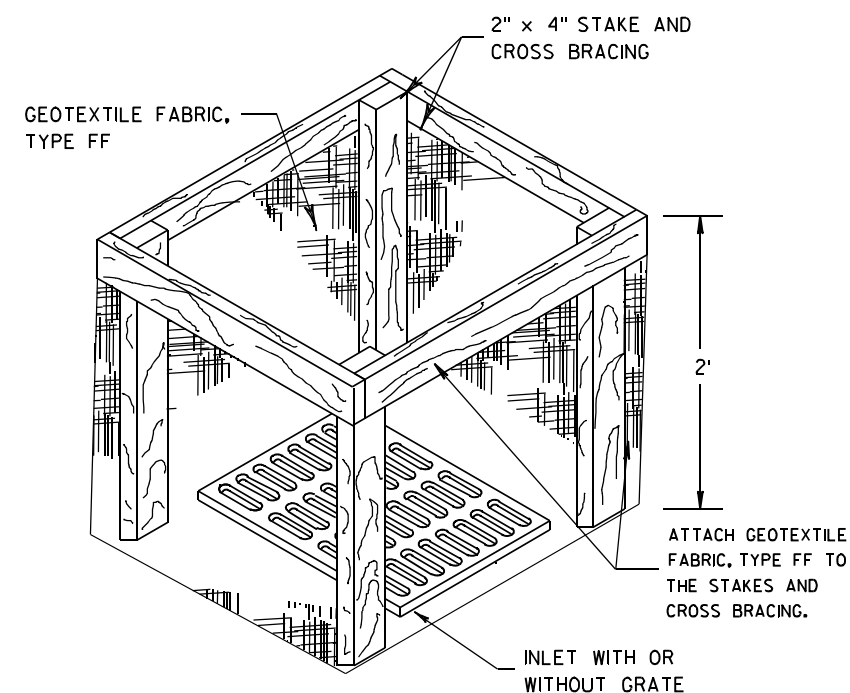
**APPROVED**

2-6-2013  
DATE

FHWA

/S/ Jerry H. Zogg

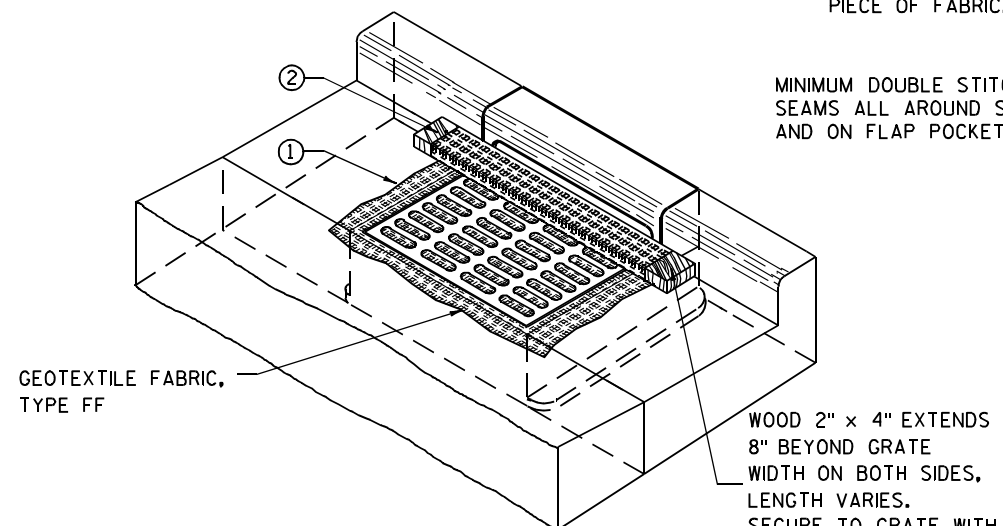
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER



## GENERAL NOTES

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 C (WITH CURB BOX)

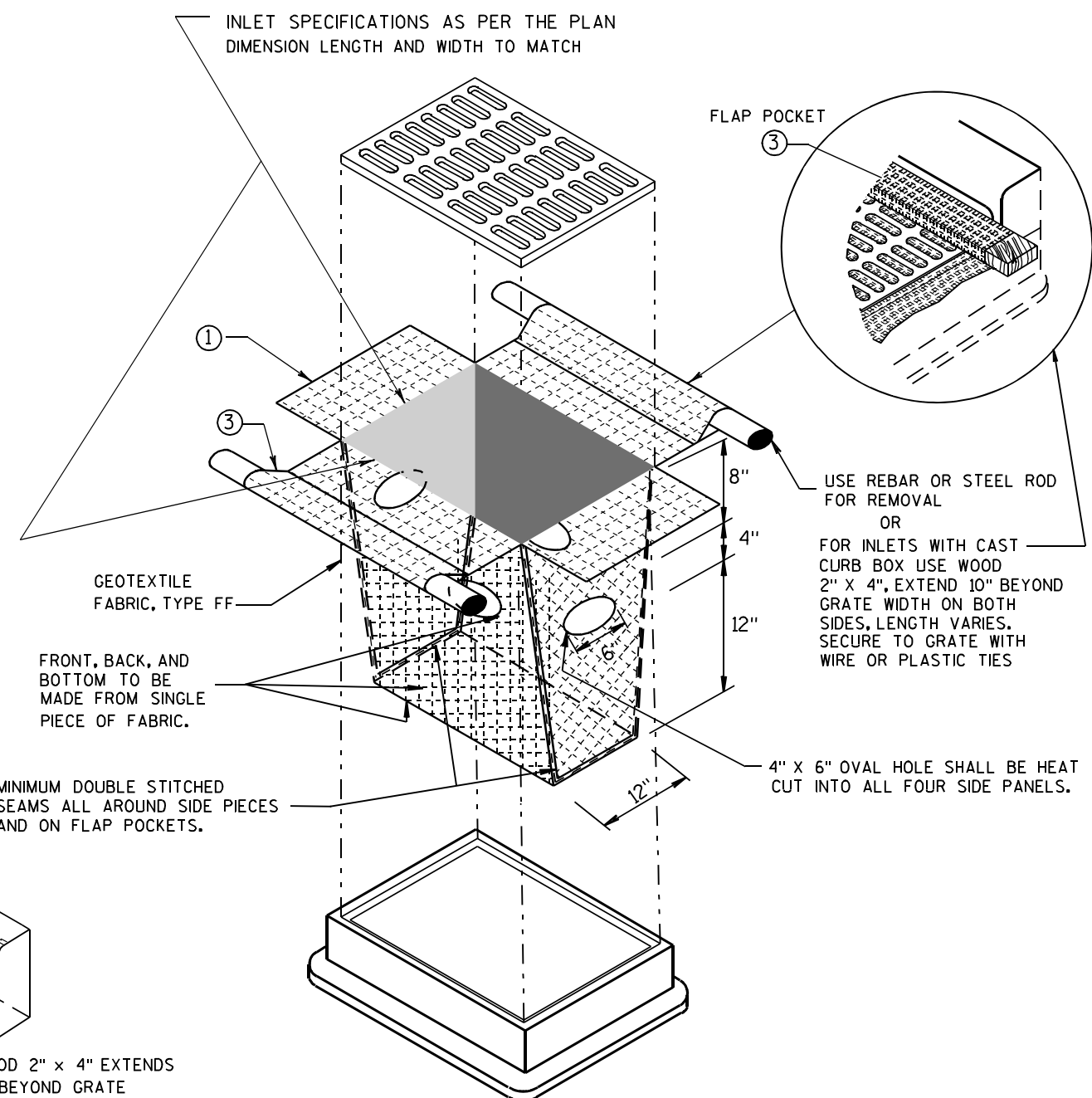
## INSTALLATION NOTES

## TYPE B & C

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

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



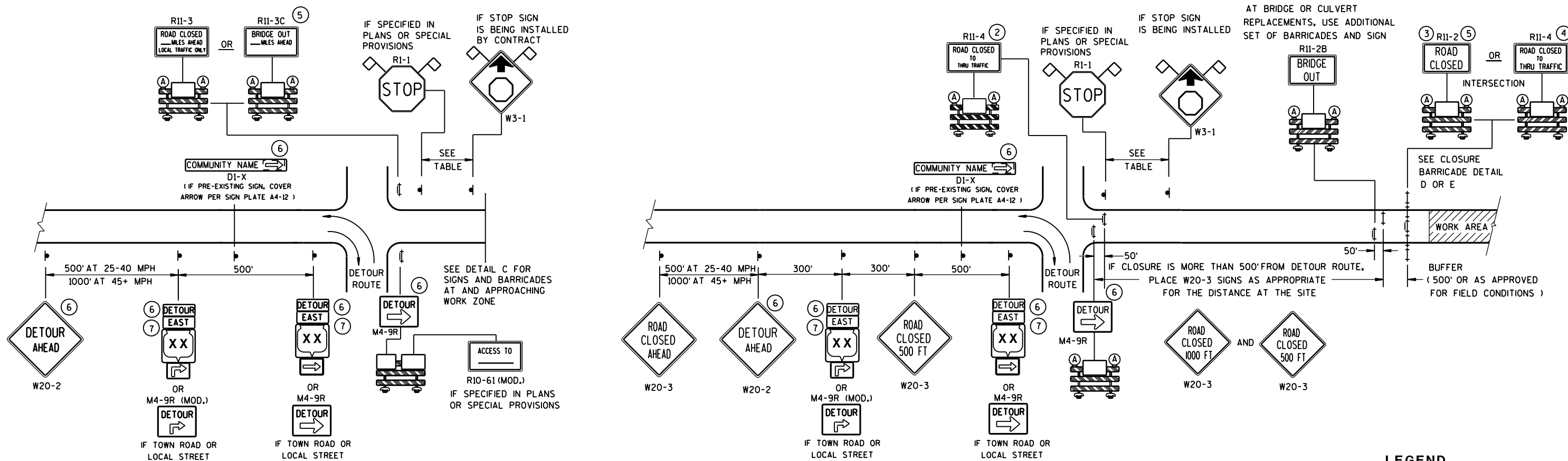
## INLET PROTECTION, TYPE D

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

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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



LEGEND

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

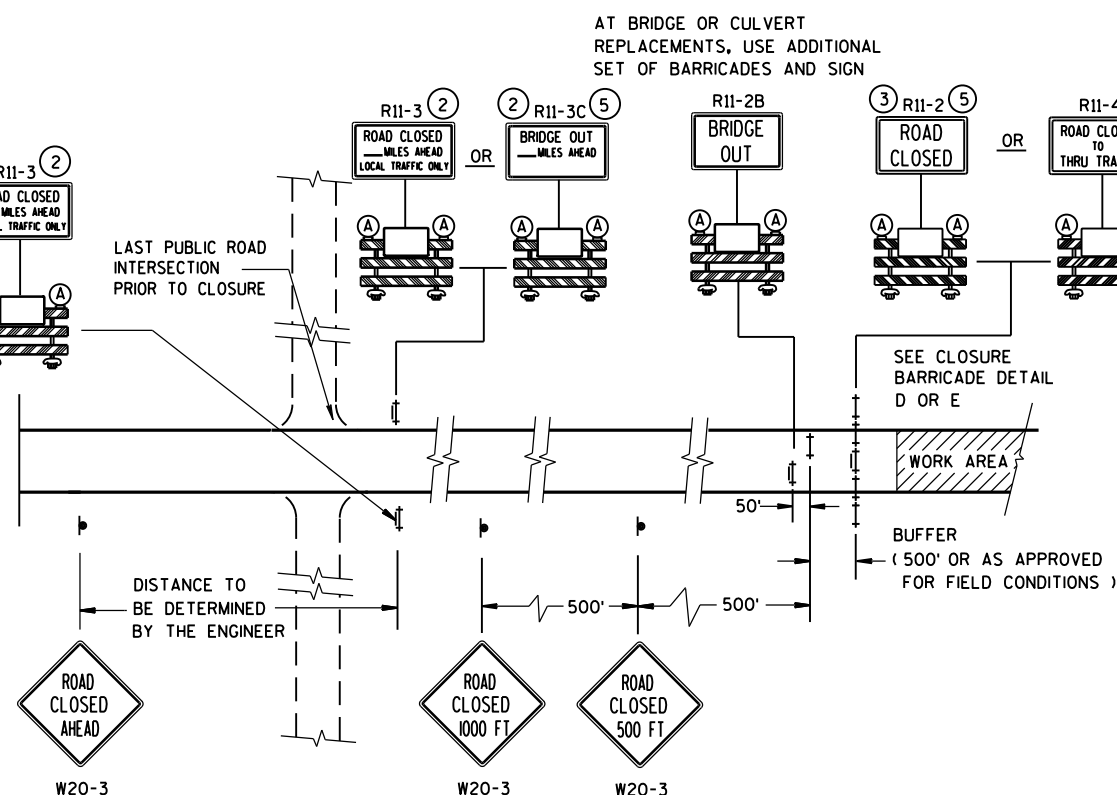
WORK AREA

DETOUR EAST M4-8 M3-X  
XX OR COUNTY XX OR XX  
M1-4 M1-5A M1-6

M05-1 OR M06-1

FLAGS, 16" X 16" MIN., (ORANGE)

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

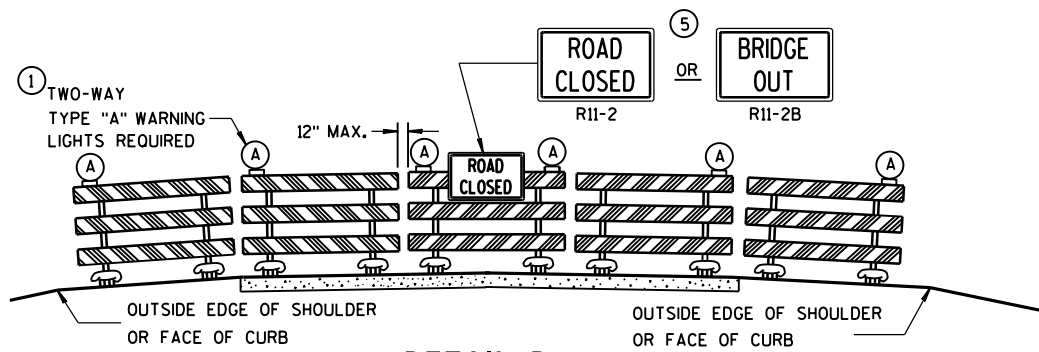


SEE SDD 15C2-SHEET "b"  
FOR GENERAL NOTES  
AND FOOTNOTES ① THROUGH ⑦

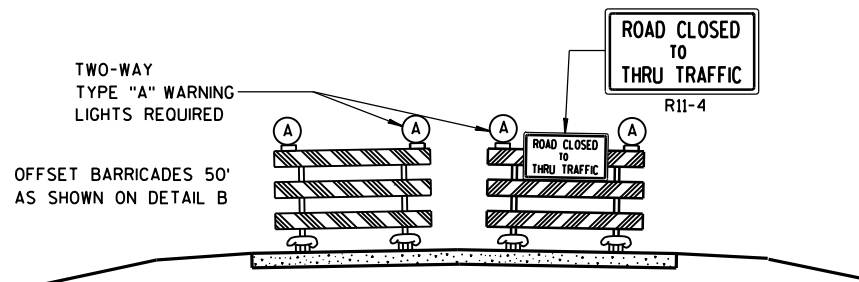
BARRICADES AND SIGNS  
FOR  
MAINLINE CLOSURES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

8/2013 /S/ Travis Feltes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA



**DETAIL D**  
**ROAD CLOSURE BARRICADE DETAIL**  
APPROACH VIEW



**DETAIL E**  
**LANE CLOSURE BARRICADE DETAIL**  
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

**GENERAL NOTES**

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

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

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

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

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

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

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

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

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

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

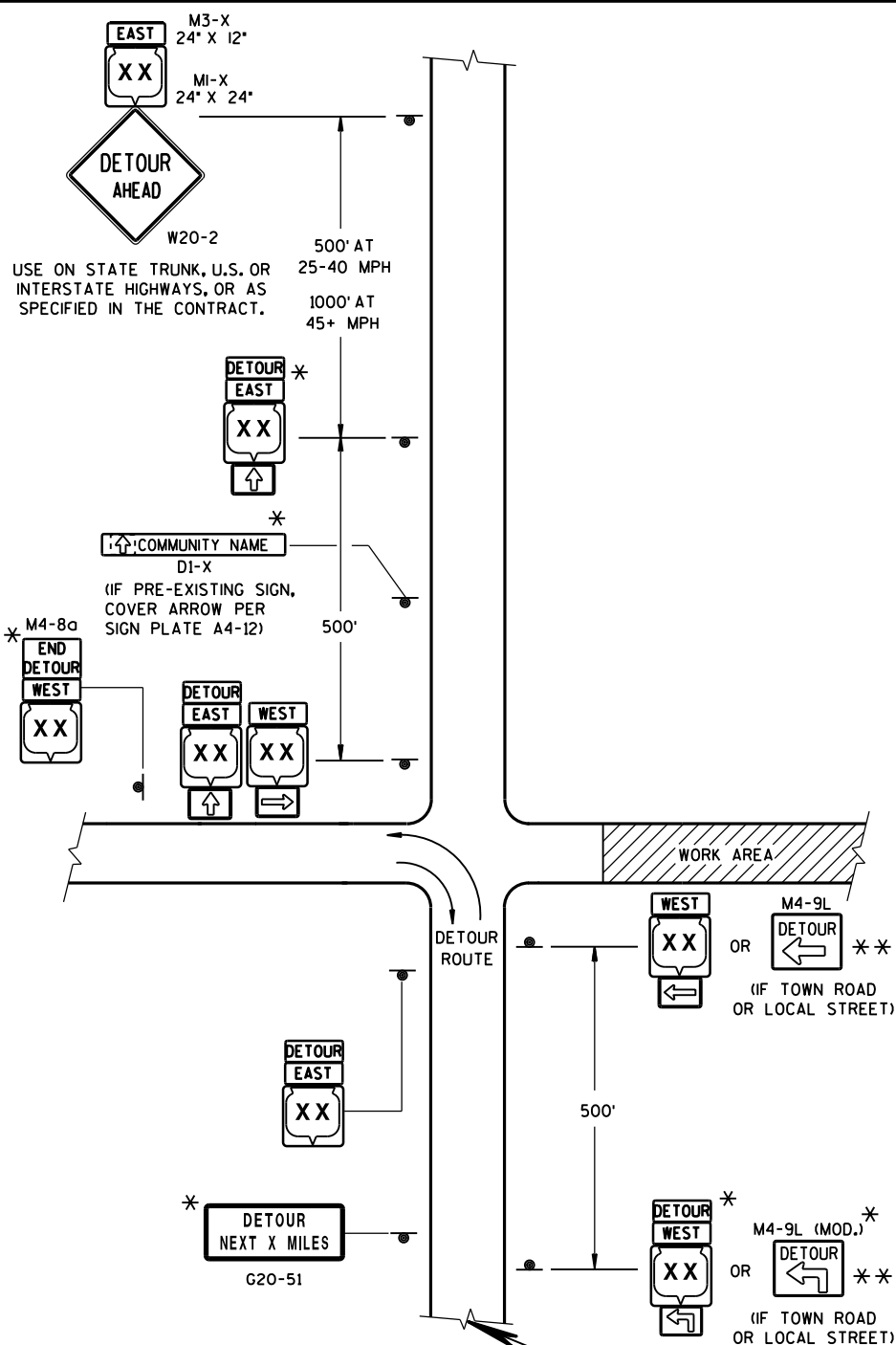
- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36"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

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

**BARRICADES AND SIGNS  
FOR  
MAINLINE CLOSURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

8/2013 /S/ Travis Feltes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA



**LEGEND**

SIGN ON PERMANENT SUPPORT

WORK AREA

M4-8  
M3-X

MI-4    MI-5A    MI-6

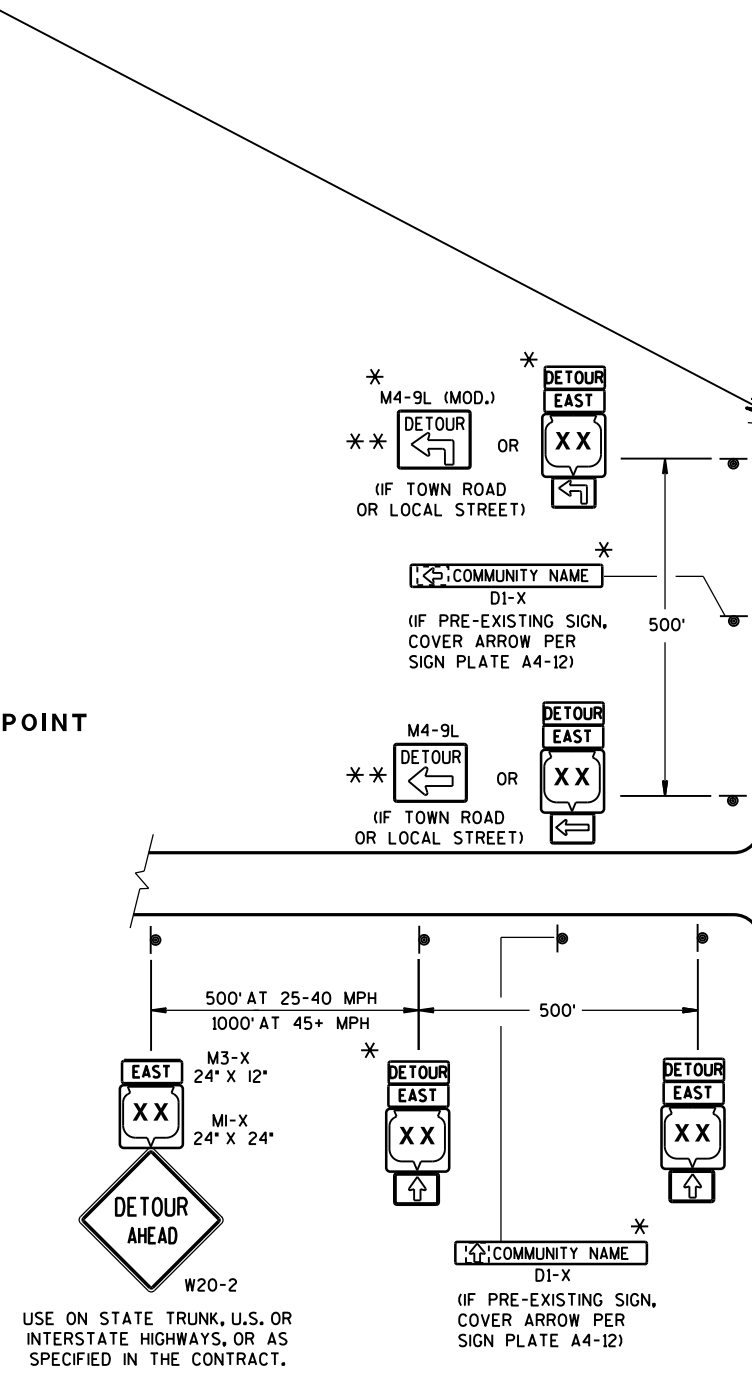
M05-1    M06-1    M06-1

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

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

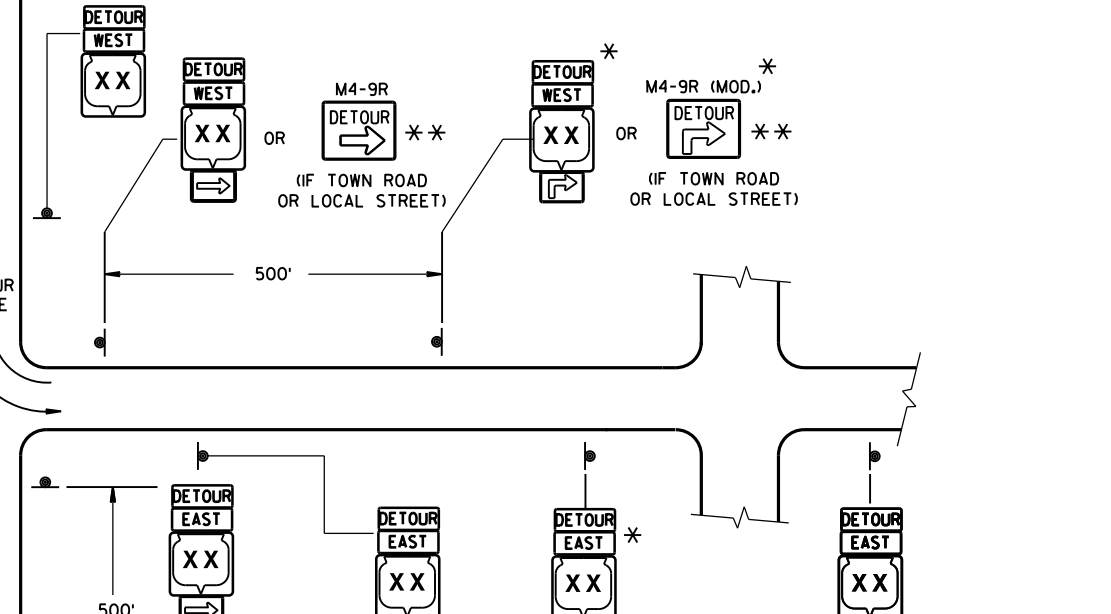
MATCH POINT

DETAIL F  
DETOUR SIGNING



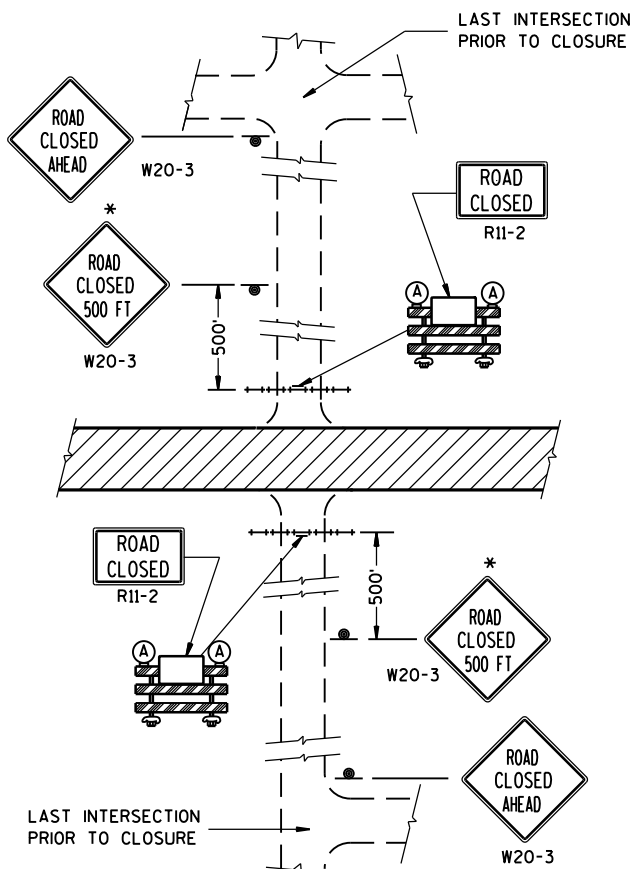
**GENERAL NOTES**

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

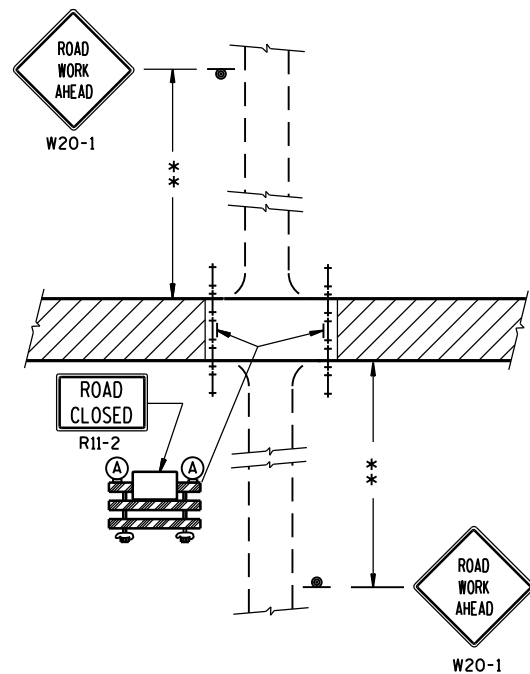


PLACE SIGNS BEYOND INTERSECTIONS WITH  
STATE OR COUNTY TRUNK HIGHWAYS OR  
AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF  
URBAN AREA.)

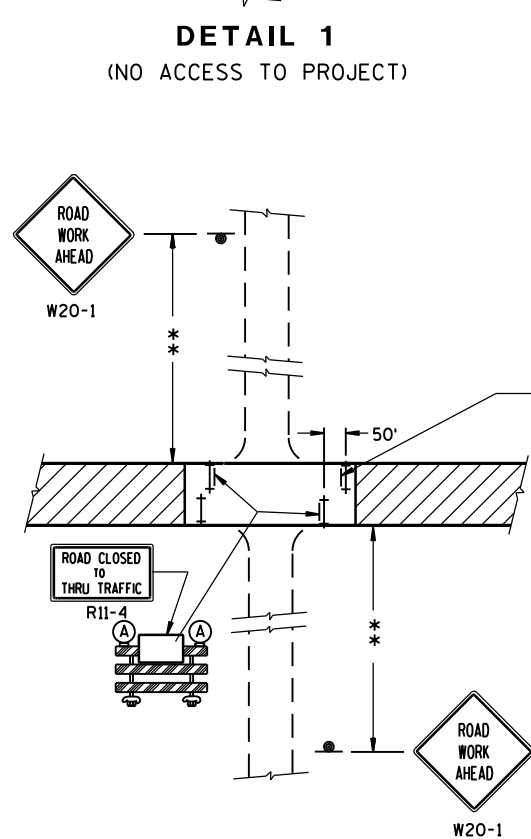
DETOUR SIGNING FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 8/2013	/S/ Travis Feltes
DATE	STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



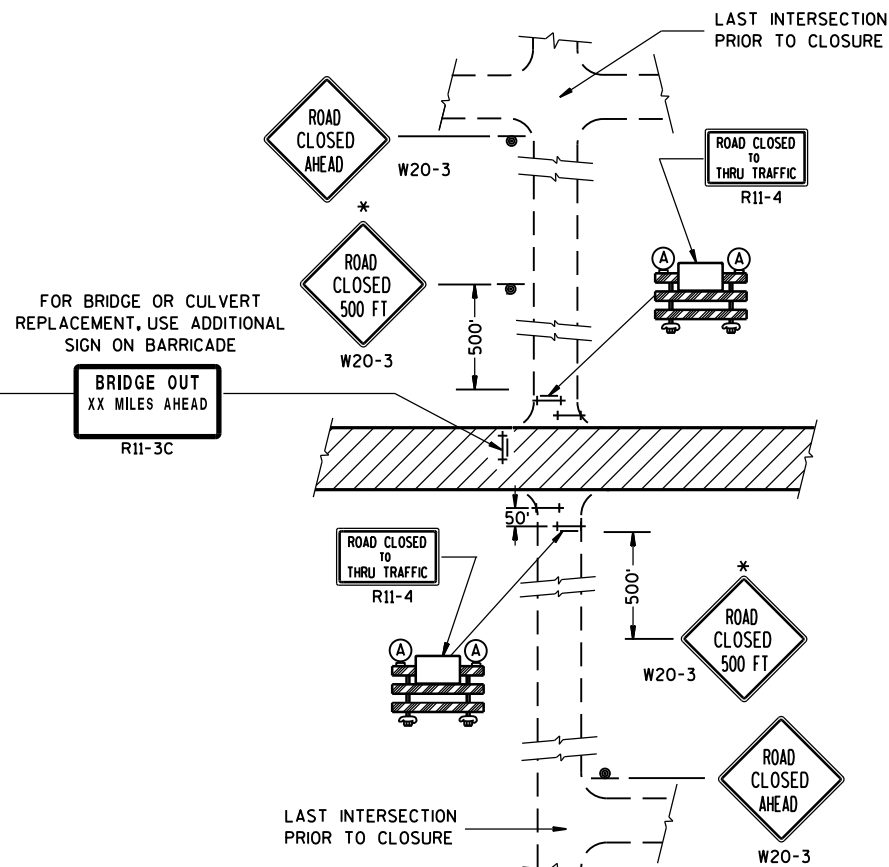
**DETAIL 1**  
(NO ACCESS TO PROJECT)



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



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



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

## GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

R11-2 SHALL BE 48" X 30".

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

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

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

## LEGEND

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

## BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

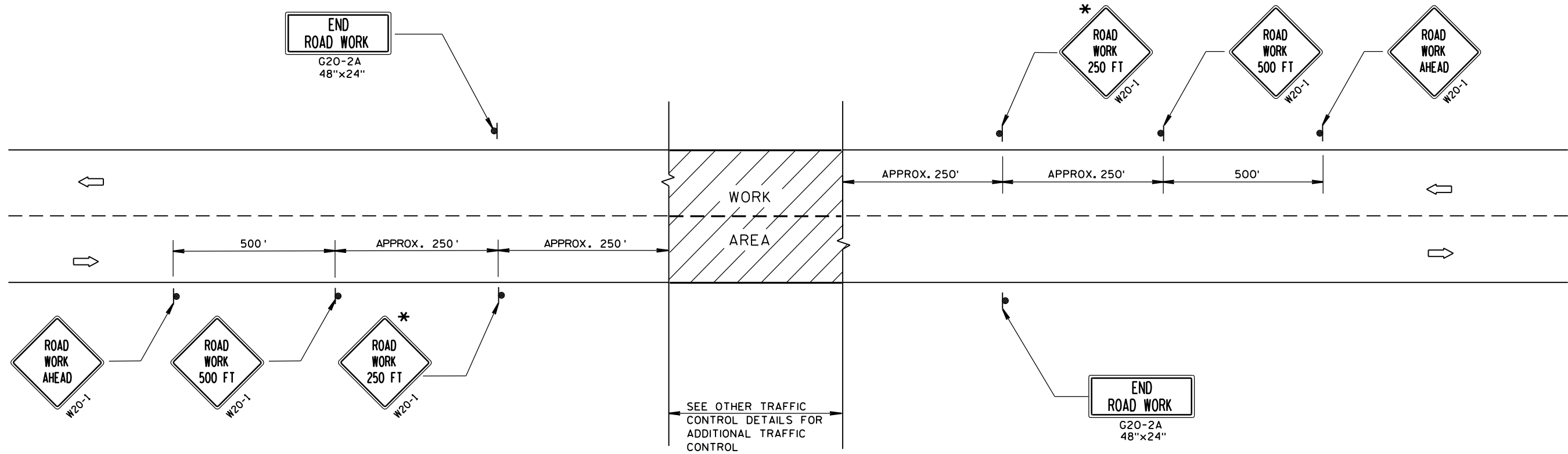
8/2013

DATE

FHWA

/S/ Travis Feltes

STATE TRAFFIC ENGINEER OF DESIGN



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

## GENERAL NOTES

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

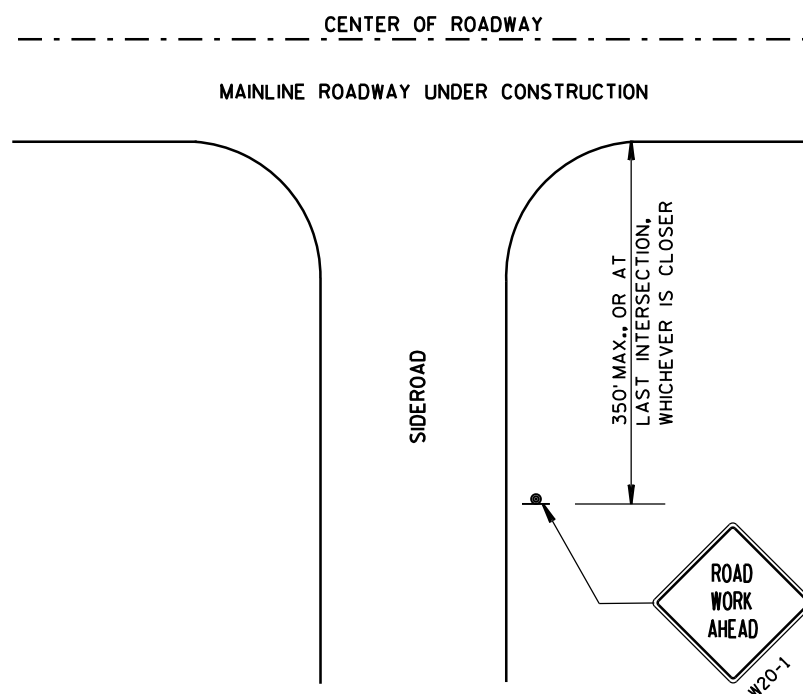
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

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

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



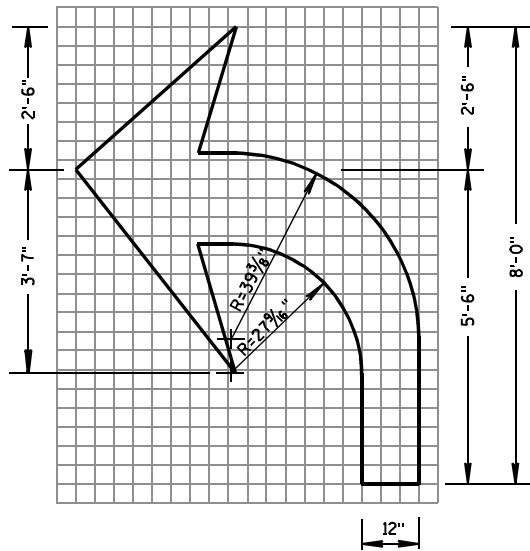
## LEGEND

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

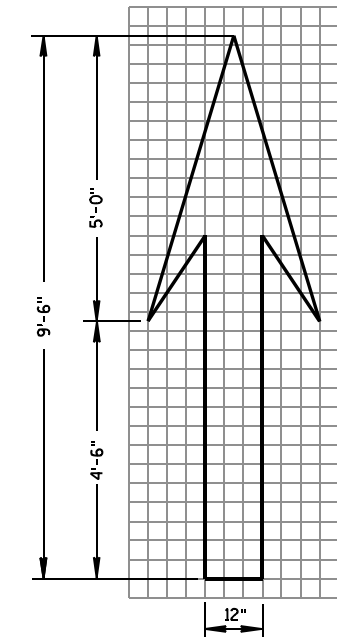
TRAFFIC CONTROL, ADVANCE  
WARNING SIGNS 40 M.P.H.  
OR LESS TWO-WAY UNDIVIDED  
ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

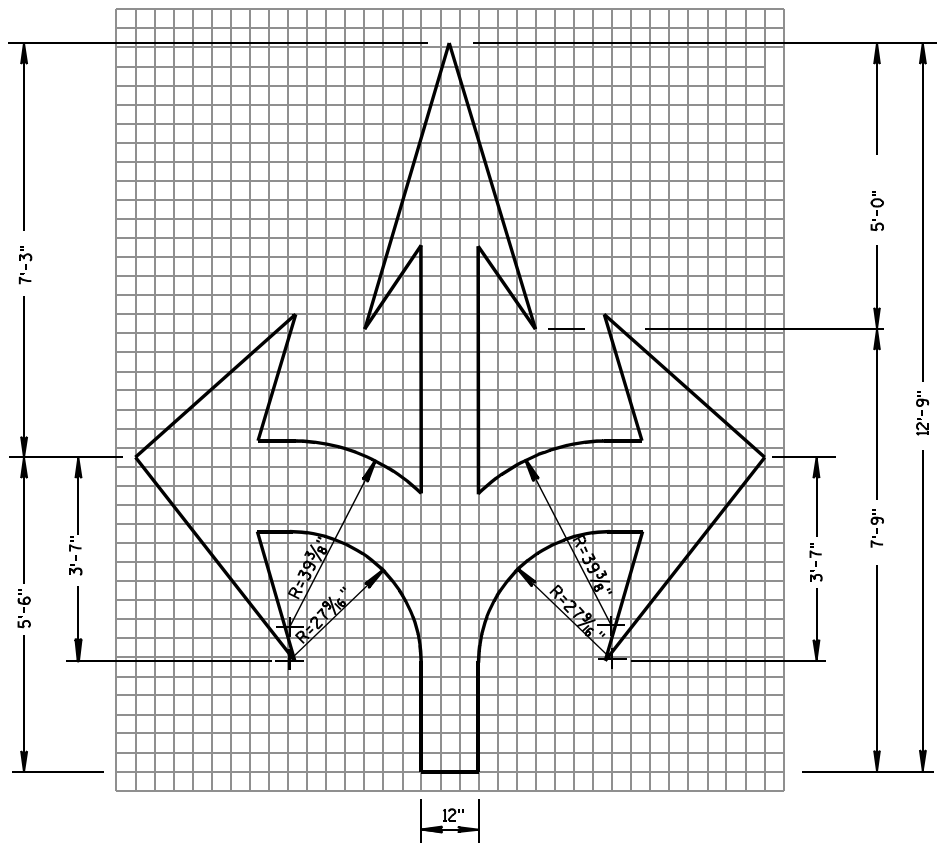
APPROVED  
8/2013 /S/ Travis Feltes  
DATE STATE TRAFFIC ENGINEER OF DESIGN  
FHWA



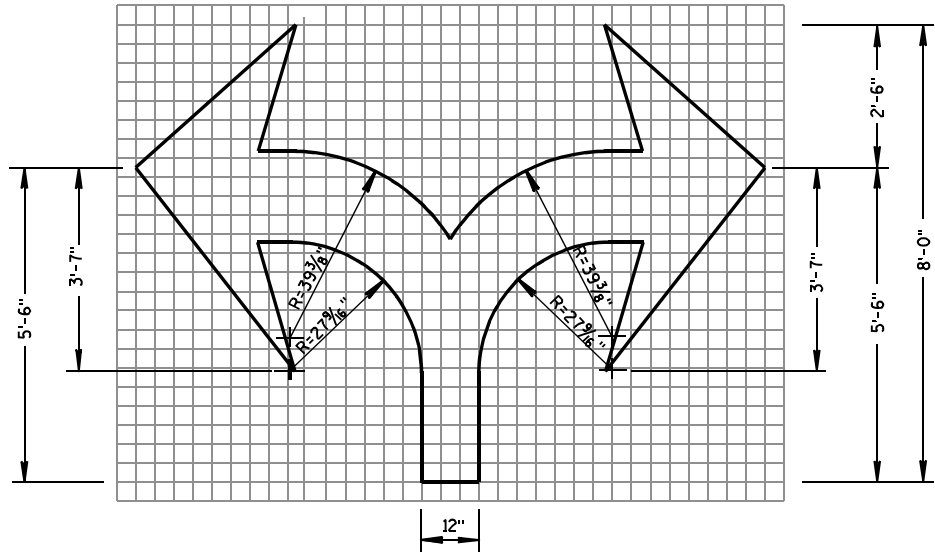
TYPE 2



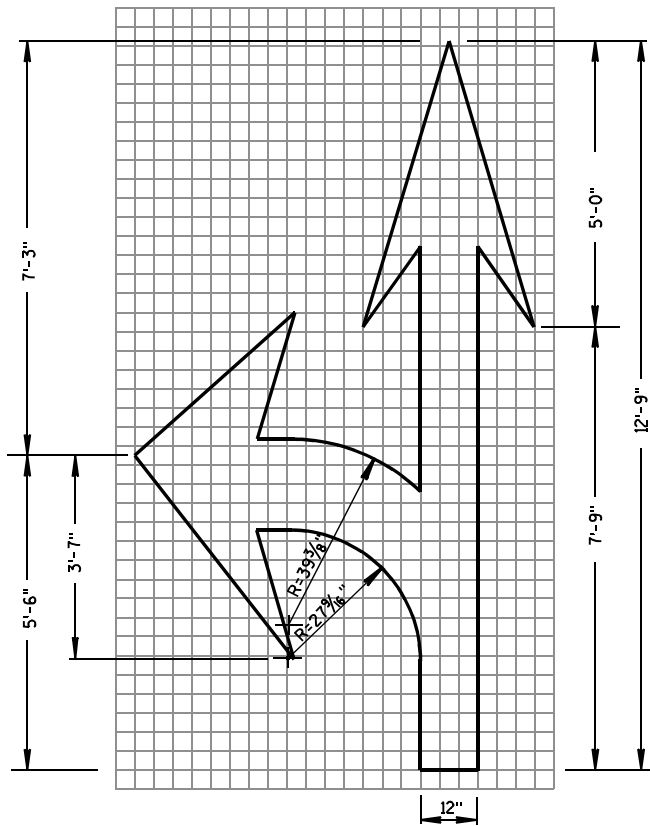
TYPE 1



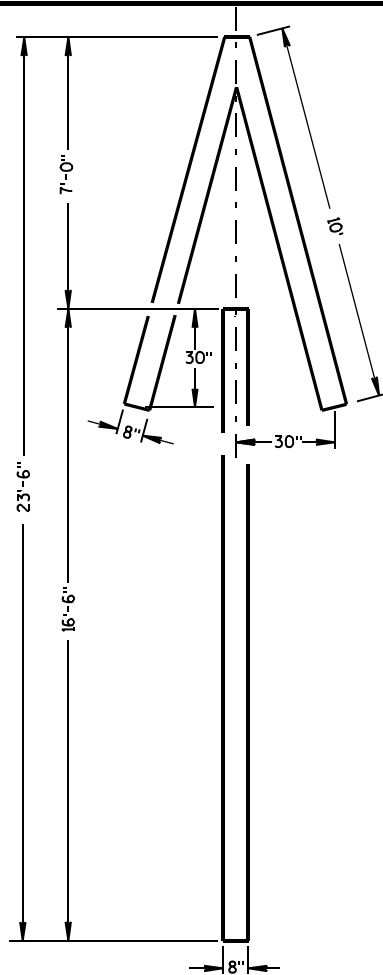
TYPE 6



TYPE 7



TYPE 3

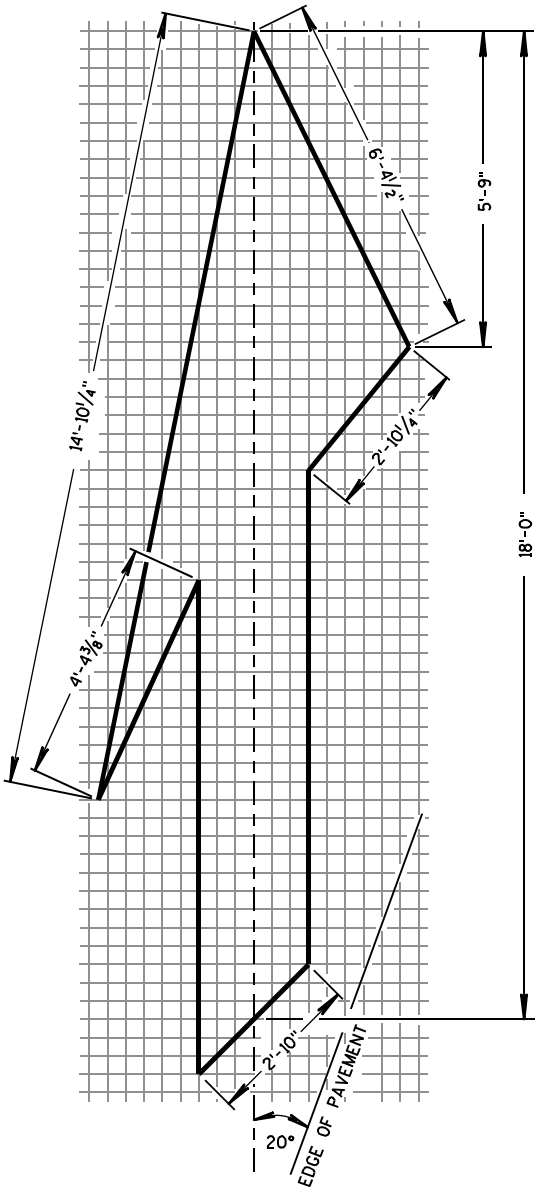


TYPE 4

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.

ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



TYPE 5 LANE DROP ARROW

PAVEMENT MARKING ARROWS

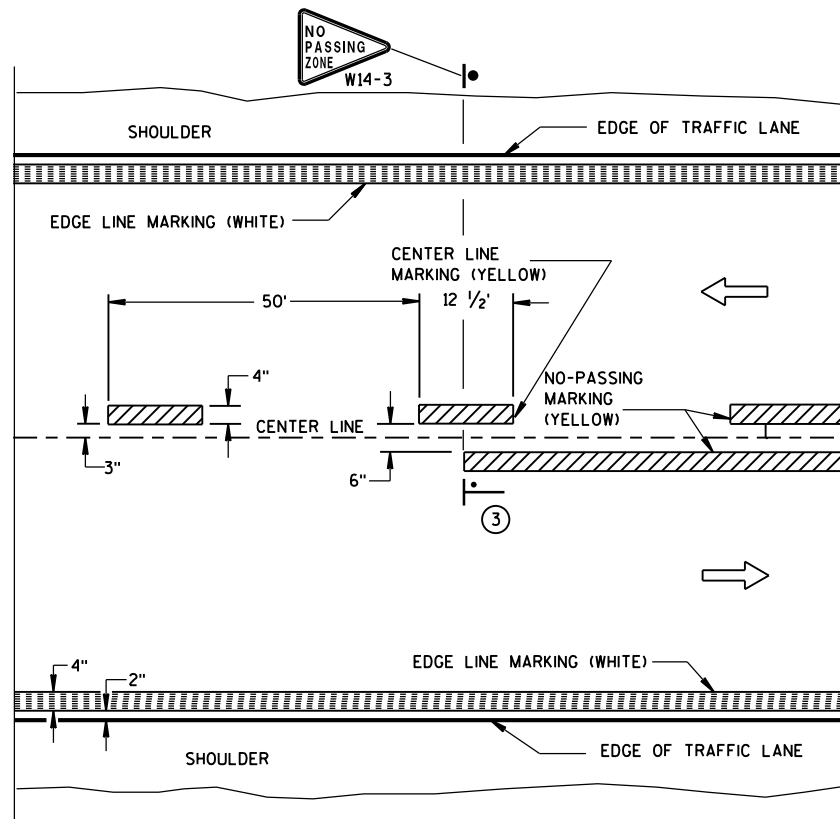
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

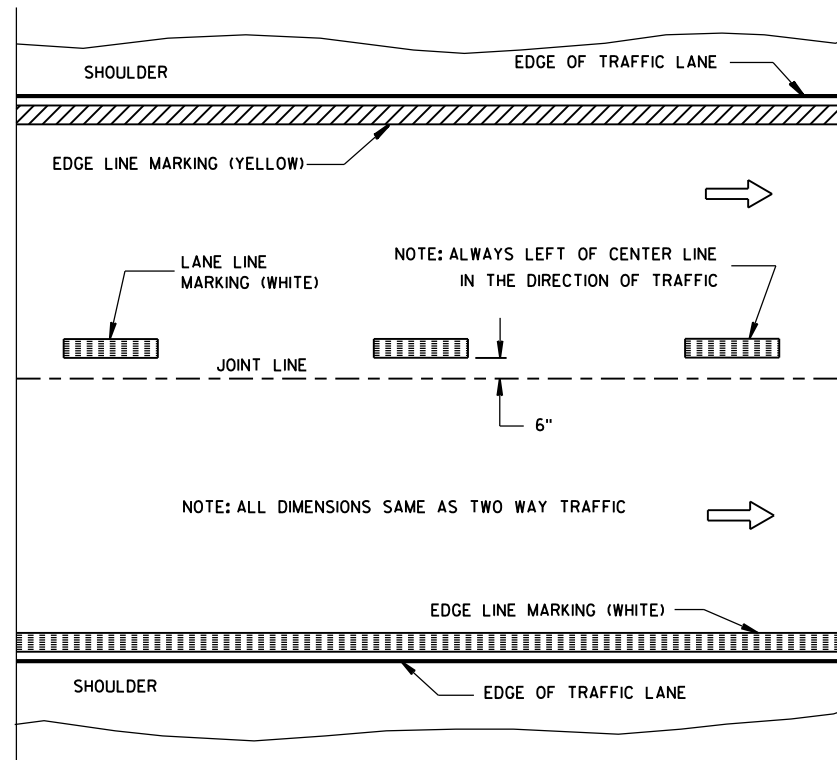
7/1/11  
DATE

/S/ Thomas N. Notbohm  
STATE TRAFFIC ENGINEER OF DESIGN

FHWA

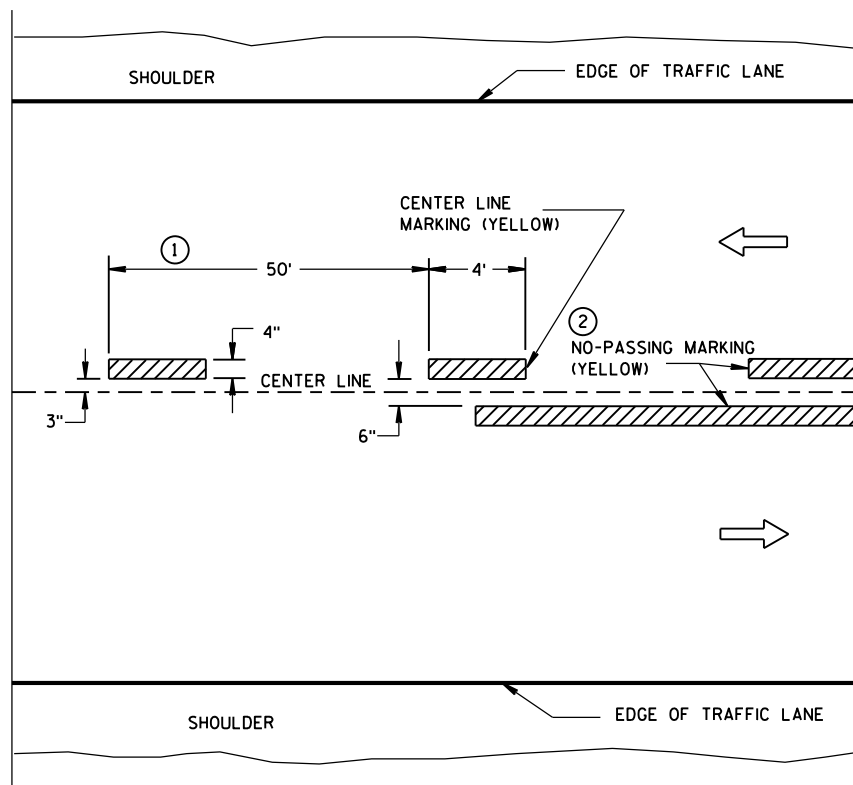


TWO WAY TRAFFIC

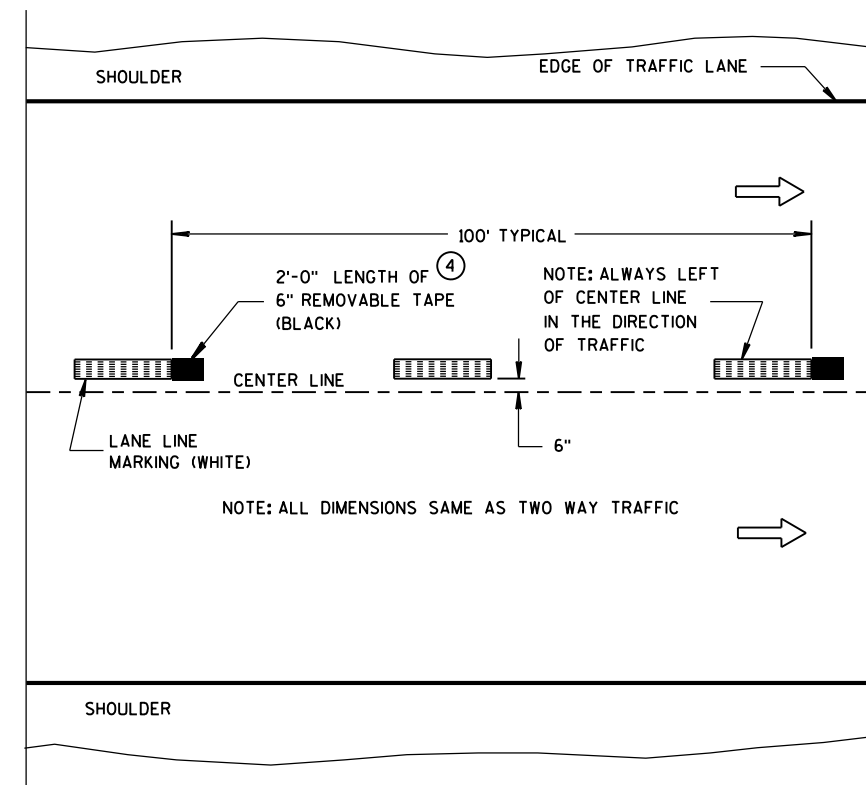


ONE WAY TRAFFIC

## PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

**TEMPORARY (INTERMEDIATE) PAVEMENT MARKING**  
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

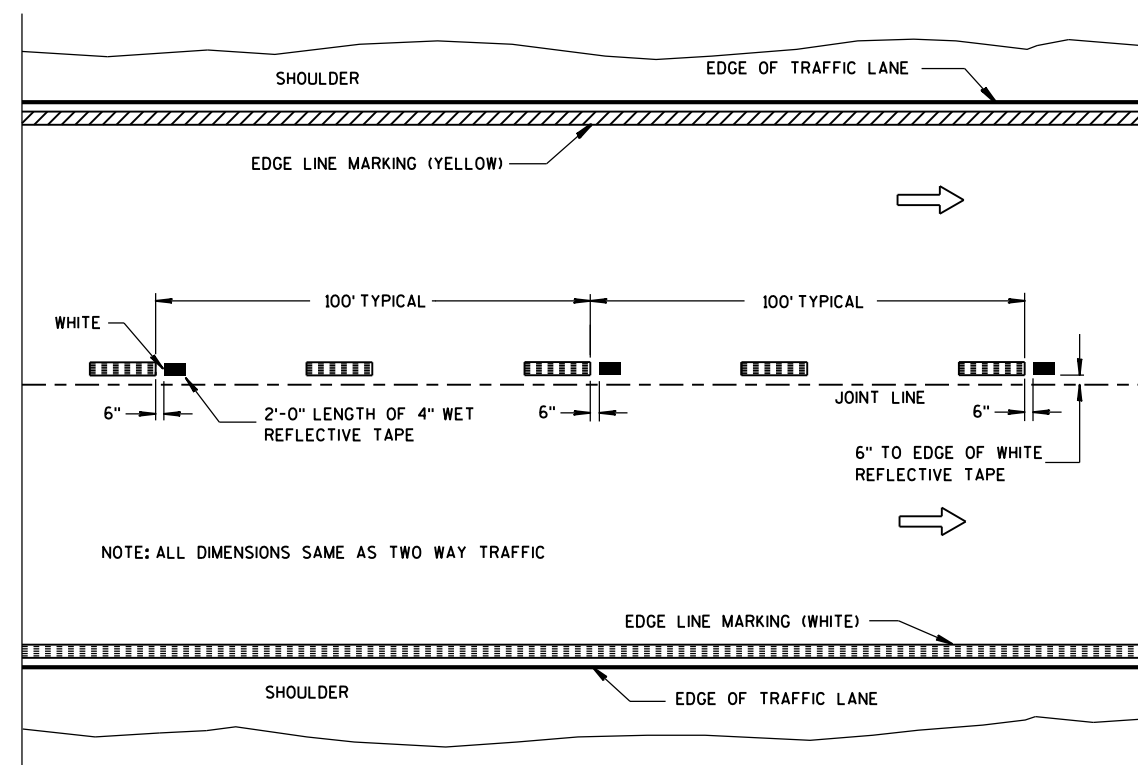
## GENERAL NOTES

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

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

## NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



**WET REFLECTIVE TAPE SUPPLEMENT TO  
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE**

## LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING  
(MAINLINE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013  
DATE

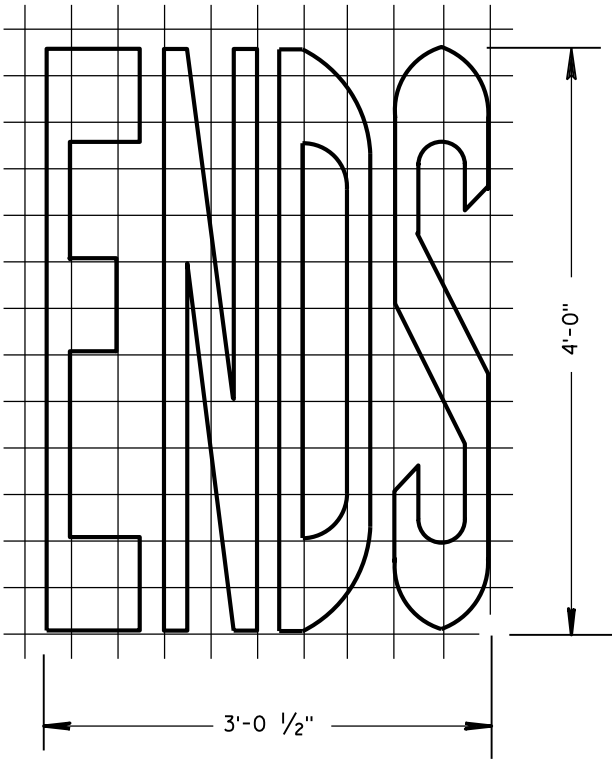
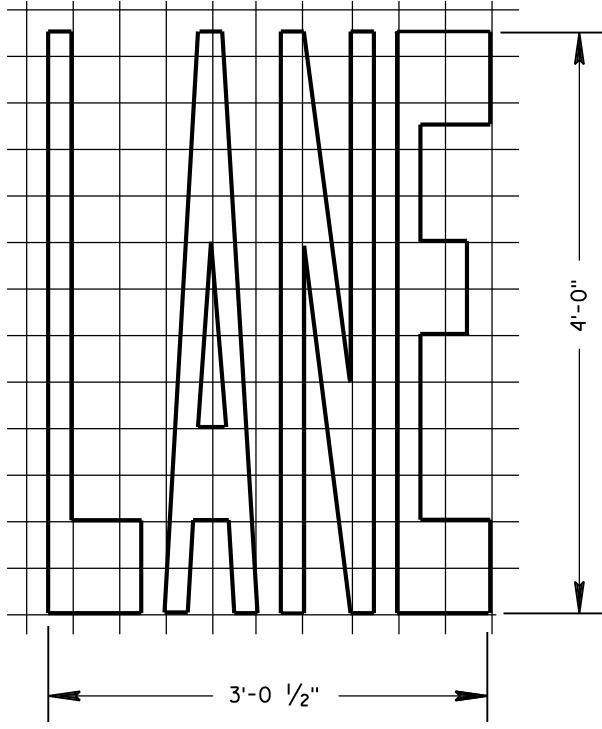
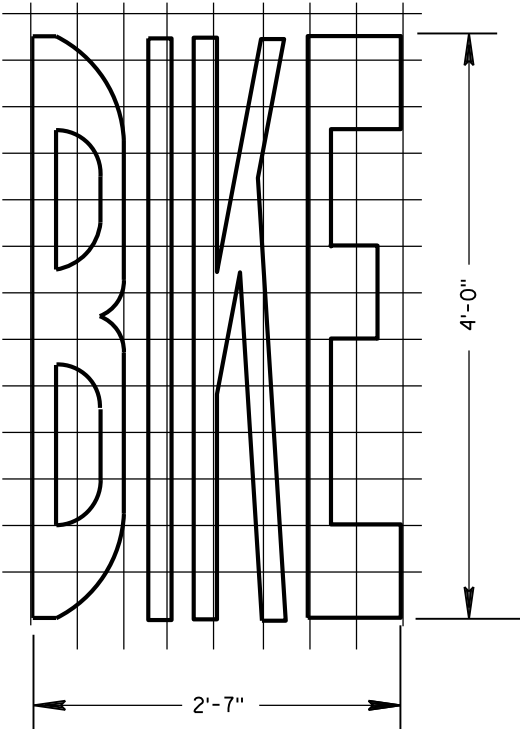
FHWA

/S/ Travis Fettes  
STATE TRAFFIC ENGINEER

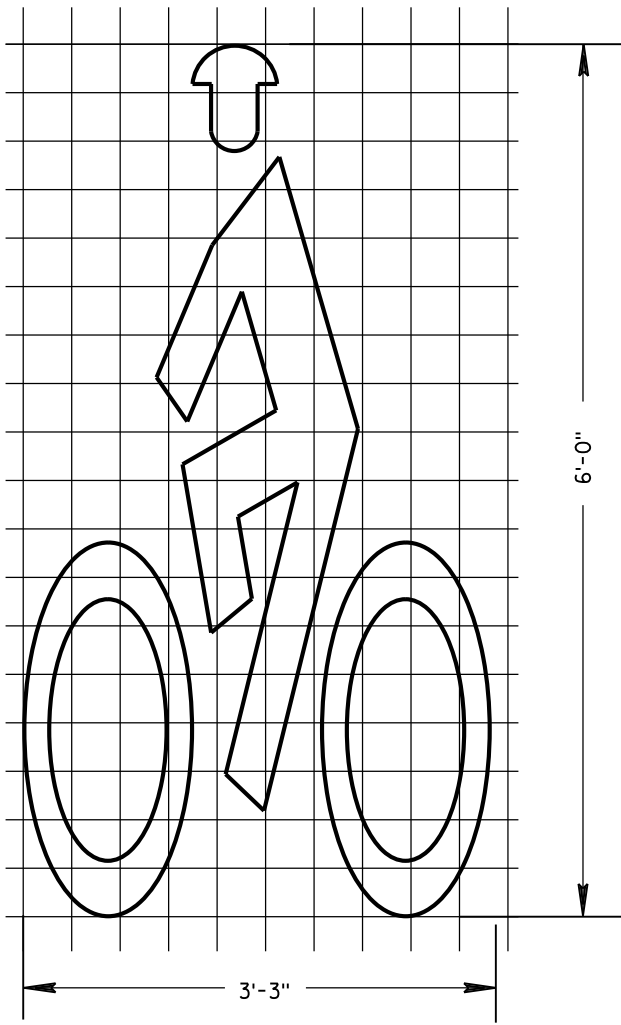
GENERAL NOTES

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.

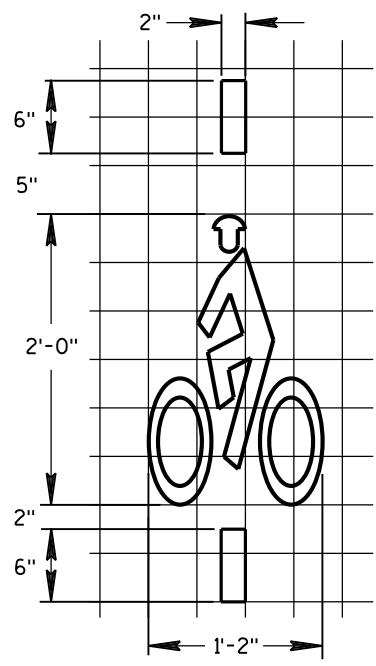
ALL LETTERS, ARROWS AND SYMBOLS SHALL BE IN CONFORMANCE WITH REQUIREMENTS INCLUDED IN "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKING" BOOK BY THE FEDERAL HIGHWAY ADMINISTRATION. ALL LETTERS, ARROWS AND SYMBOLS SHALL BE WHITE AND REFLECTORIZED. SMALL DIFFERENCES IN DIMENSIONS WITHIN THE TOLERANCES OF THAT BOOK ARE ACCEPTABLE.



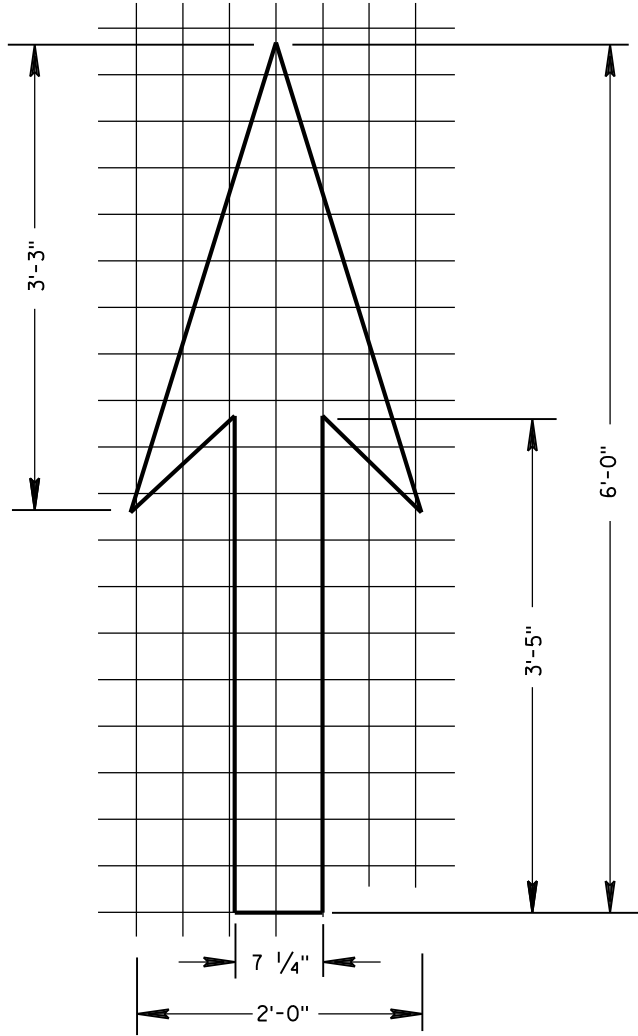
BIKE LANE WORDS



BIKE LANE SYMBOL

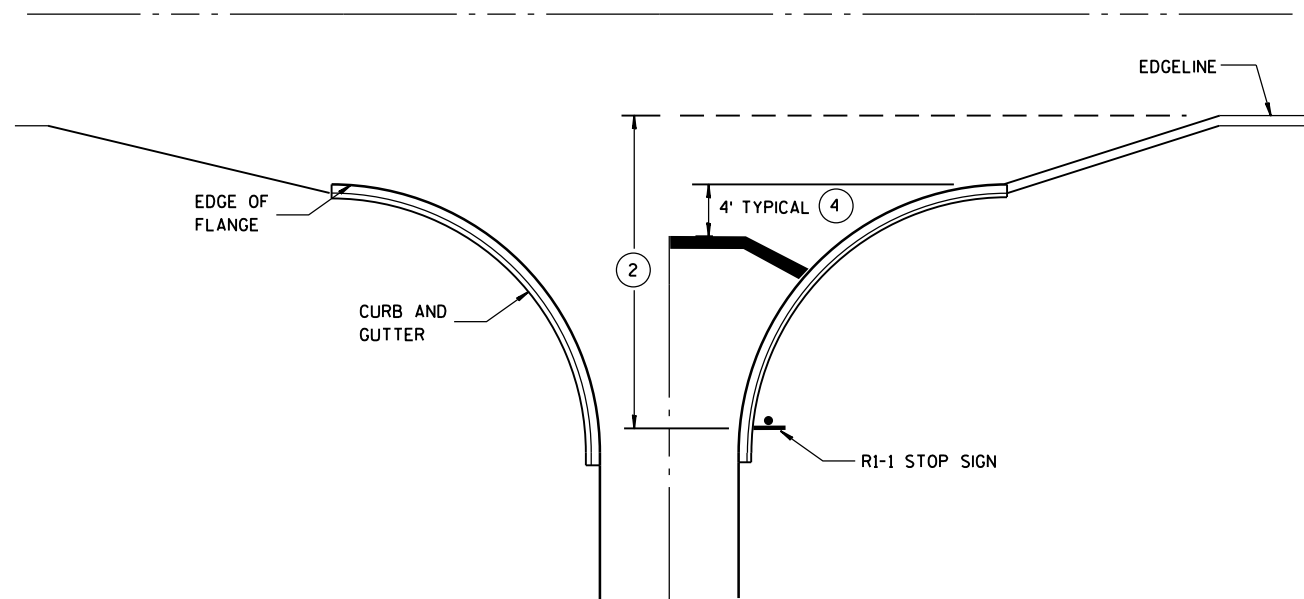


BICYCLE DETECTOR PAVEMENT MARKING

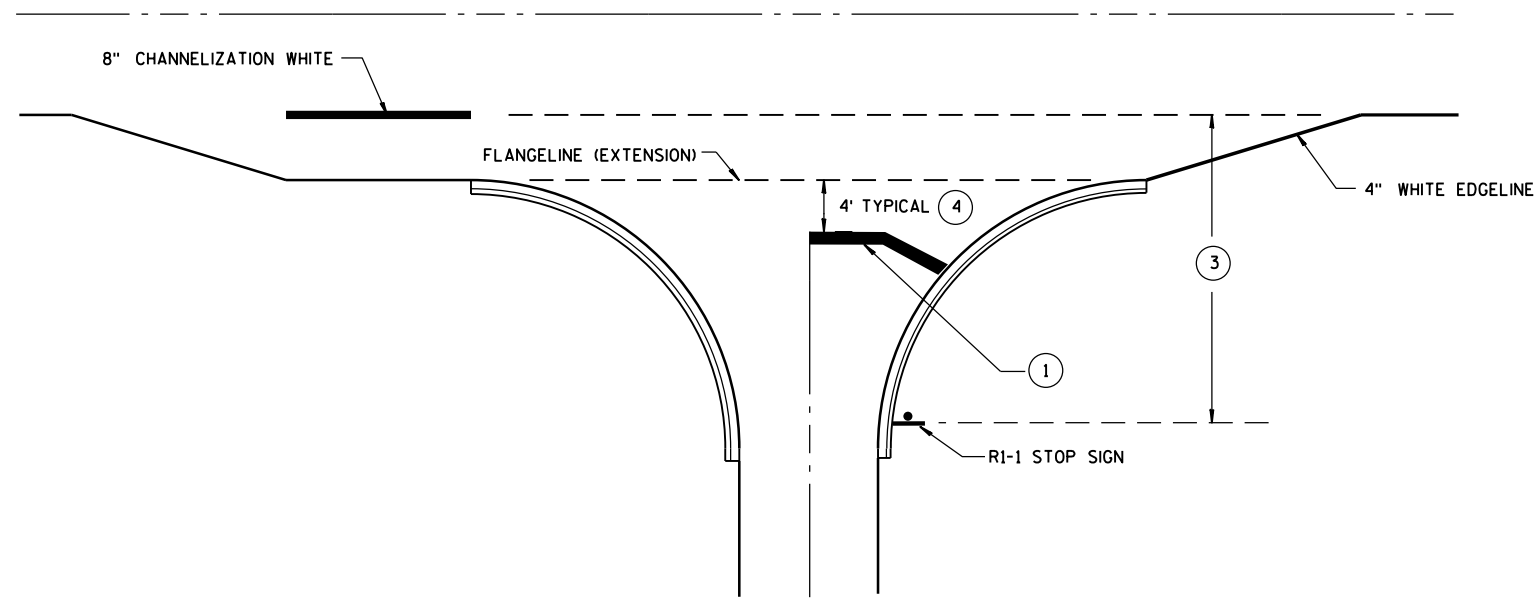


BIKE LANE ARROW

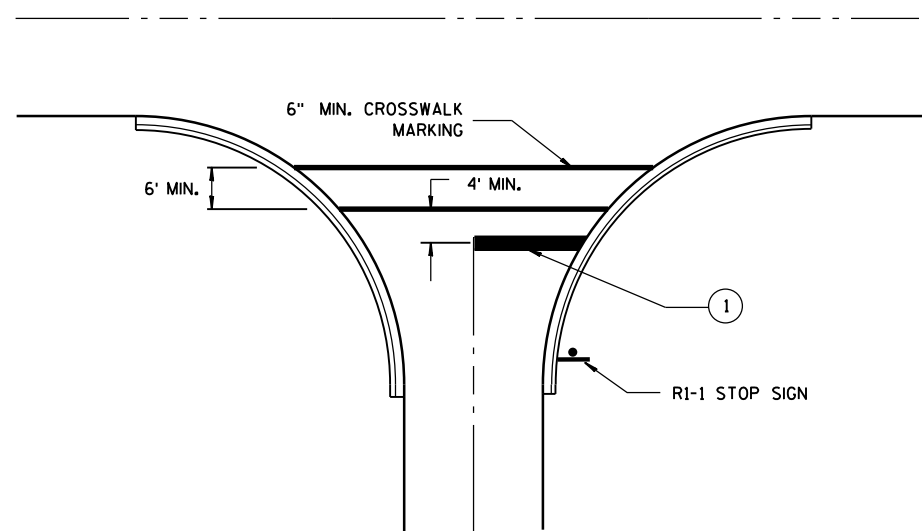
PAVEMENT MARKING FOR BIKE LANES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-30-2013 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER
FHWA	



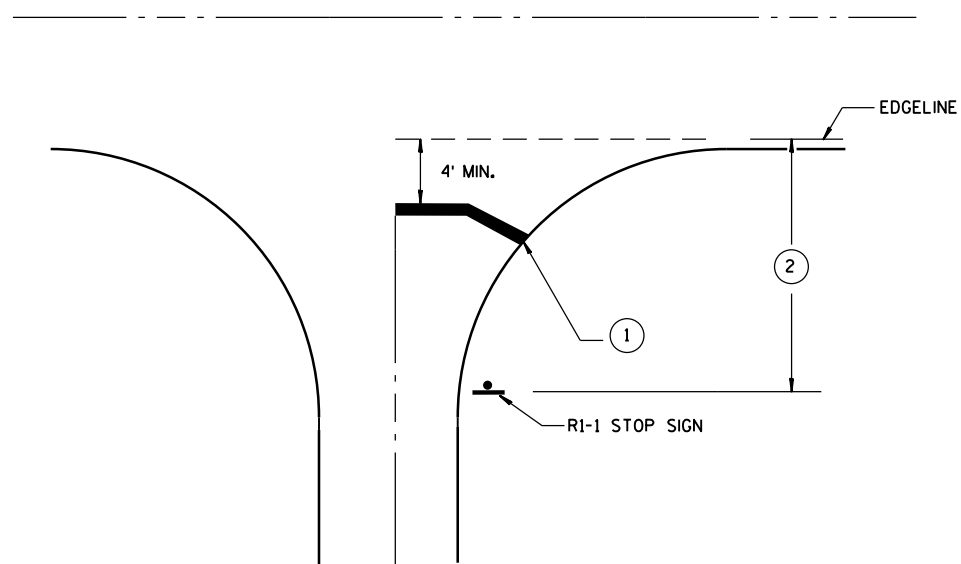
**TYPICAL STOP LINE PAVEMENT MARKING  
WITH CURB AND GUTTER**



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



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



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

### GENERAL NOTES

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

### STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

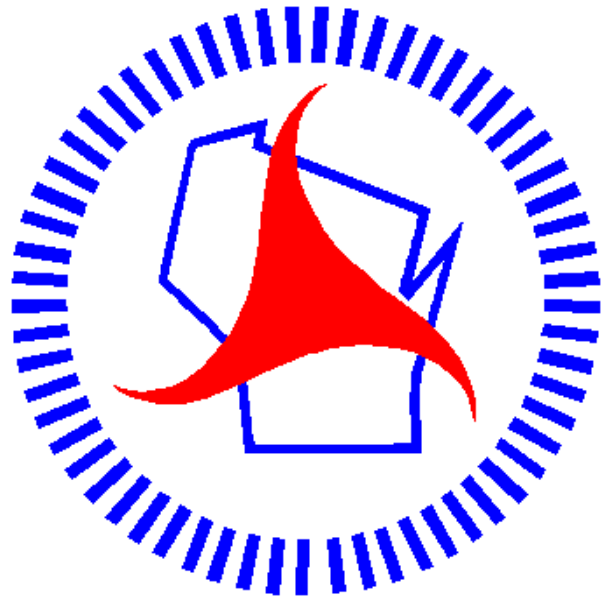
APPROVED

4/30/2013  
DATE

FHWA

/S/ Travis Fettes  
STATE TRAFFIC ENGINEER

## Notes



## *Wisconsin Department of Transportation*

Dedicated people creating transportation solutions  
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>