

WKE

May 11, 2021

PROJECT ID:
WITH: 1030-07-78

1030-07-77

COUNTY:

MILWAUKEE

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.	0	Cross Sections

TOTAL SHEETS = 66



DESIGN DESIGNATION

A.A.D.T.	2018	=	104000
A.A.D.T.		=	
D.H.V.		=	
D.D.		=	
T.		=	
DESIGN SPEED		=	70 MPH
ESALS		=	

CONVENTIONAL SYMBOLS

<u>PLAN</u>	
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	

<u>PROFILE</u>	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
<u>UTILITIES</u>	
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

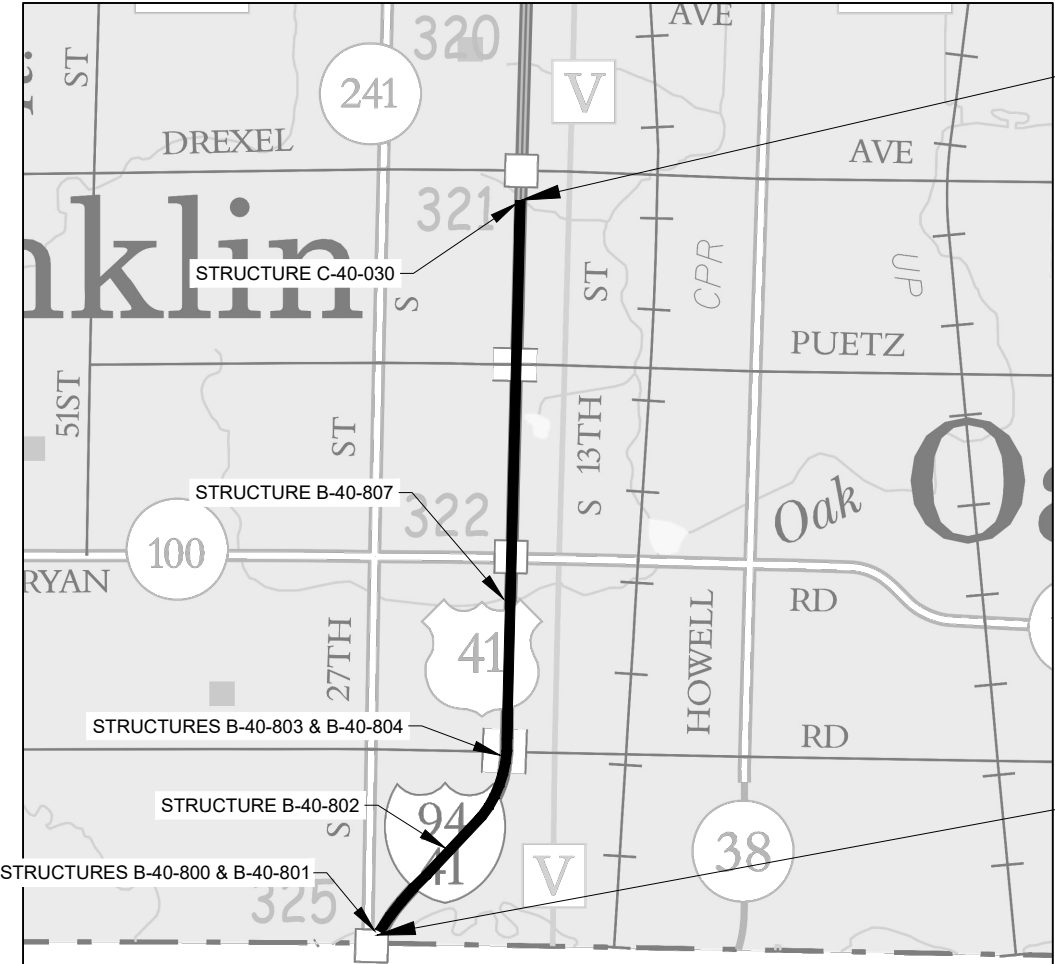
IH 41 NORTH SOUTH FREEWAY

MILWAUKEE CO LINE TO STH 100

IH 41

MILWAUKEE COUNTY

STATE PROJECT NUMBER
1030-07-77



GENERAL NOTES

THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

EROSION CONTROL BMP'S ARE AT SUGGESTED LOCATIONS. THE ACTUAL LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S ECIP AND BY THE ENGINEER. EROSION CONTROL BMP'S SHALL BE MAINTAINED UNTIL THE ENGINEER DETERMINES THAT THE BMP IS NO LONGER REQUIRED.

INLET PROTECTION IS REQUIRED AT ALL INLETS AS PER DETAIL OR AS DIRECTED BY THE ENGINEER.

ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- PROJECT OVERVIEW
- CONSTRUCTION DETAILS
- PLAN DETAILS
- TRAFFIC CONTROL
- ALIGNMENT LAYOUT

OTHER CONTACTS

WISCONSIN DEPARTMENT OF TRANSPORTATION

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WISCONSIN DEPARTMENT OF NATURAL RESOURCES

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CELL: (414) 507-4946
kristina.betzold@wisconsin.gov

MILWAUKEE COUNTY TRANSIT SYSTEM (MCTS)

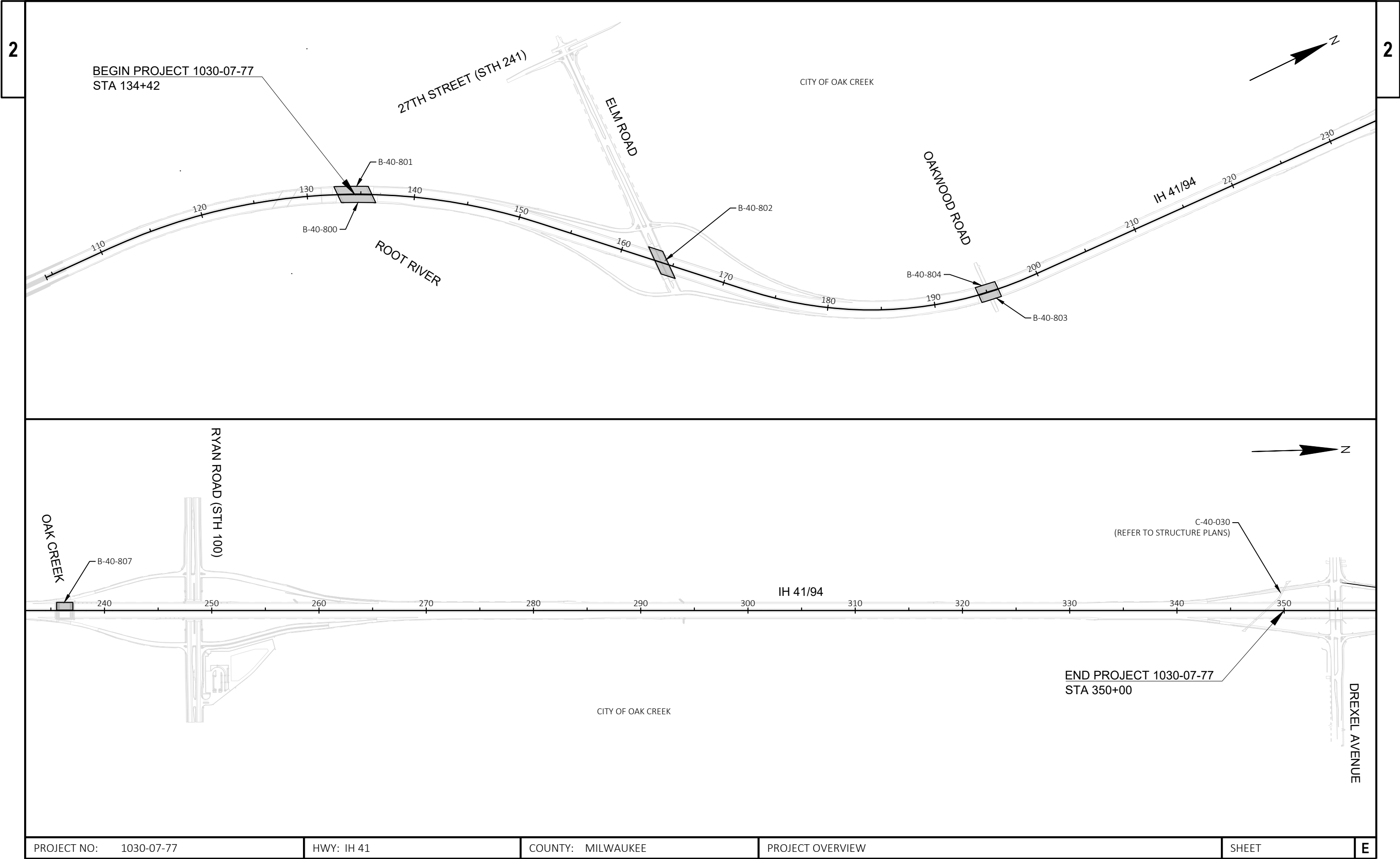
1942 N 17TH ST
MILWAUKEE, WI 53205

MELANIE FLYNN
COORDINATOR OF STREET SUPERVISION (ROUTES)
PHONE: (414) 343-1764
mflynn@mcts.org

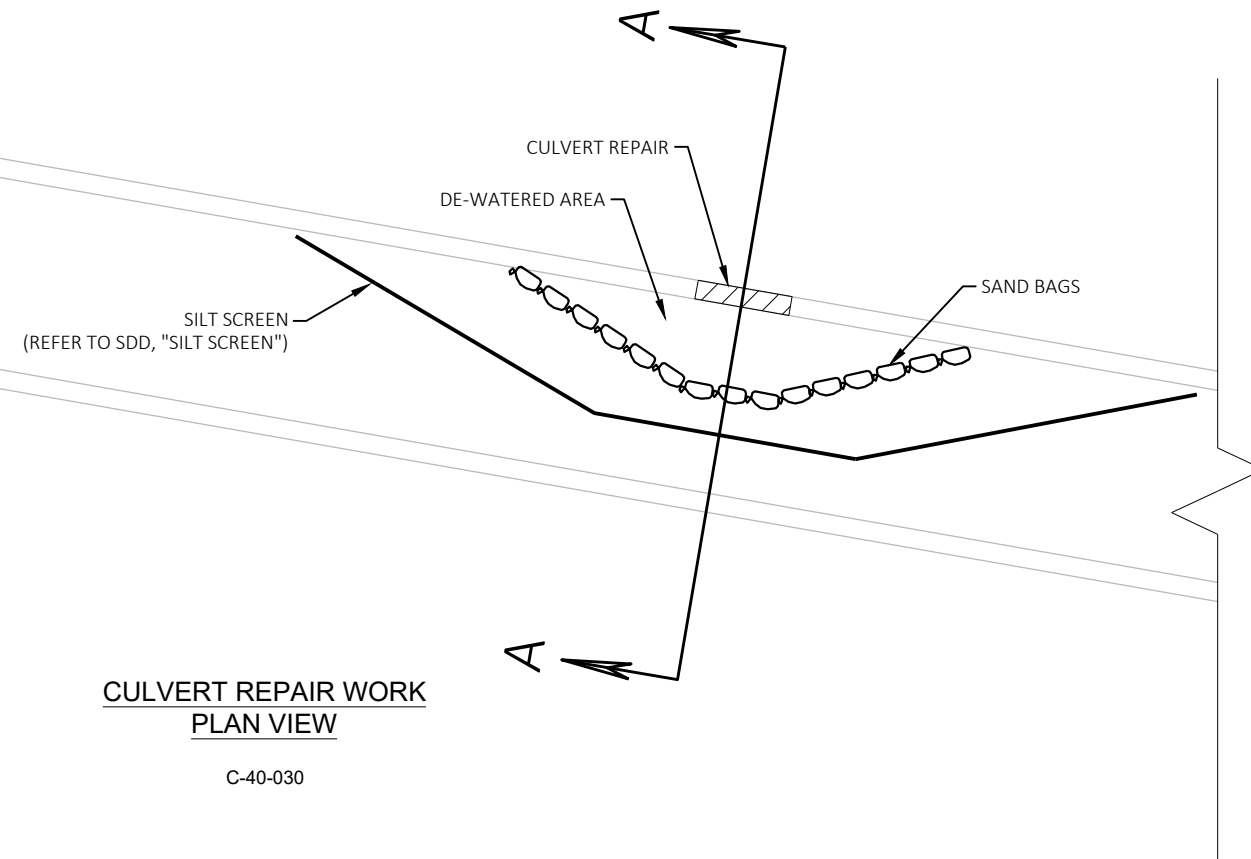
DAVID LOCHER
TRANSPORTATION SPECIALIST
PHONE: (414) 343-1727
dlocher@mtcs.org



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

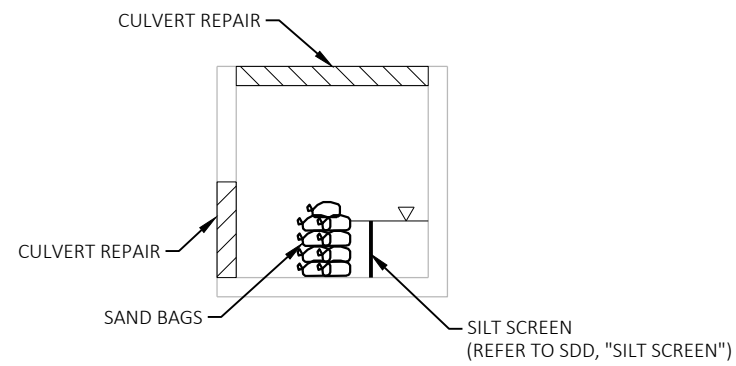


PROJECT NO: 1030-07-77	HWY: IH 41	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET	E
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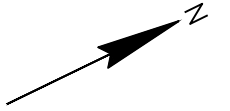
CULVERT REPAIR WORK
PLAN VIEW

C-40-030



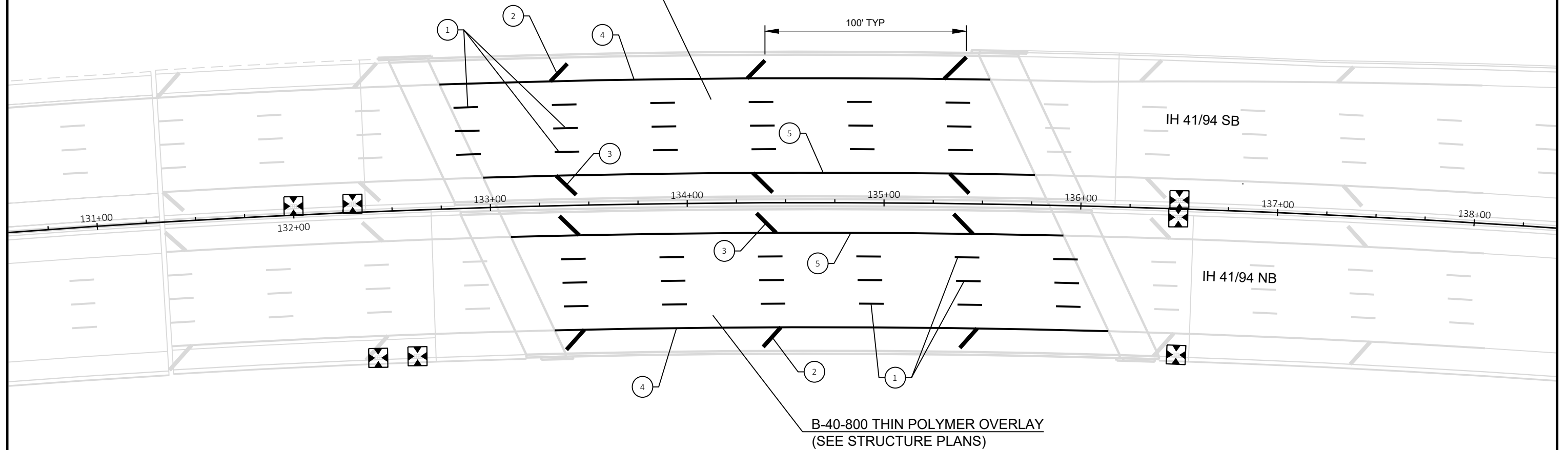
CULVERT REPAIR WORK
SECTION A-A

C-40-030









ROOT RIVER

B-40-801 THIN POLYMER OVERLAY
(SEE STRUCTURE PLANS)



LEGEND

-  INLET PROTECTION TYPE D
-  MARKING CONTRAST EPOXY 4-INCH
(DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
-  MARKING DIAGONAL EPOXY 12-INCH (WHITE)
-  MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
-  MARKING LINE EPOXY 4-INCH (WHITE)
-  MARKING LINE EPOXY 4-INCH (YELLOW)

PROJECT NO: 1030-07-77

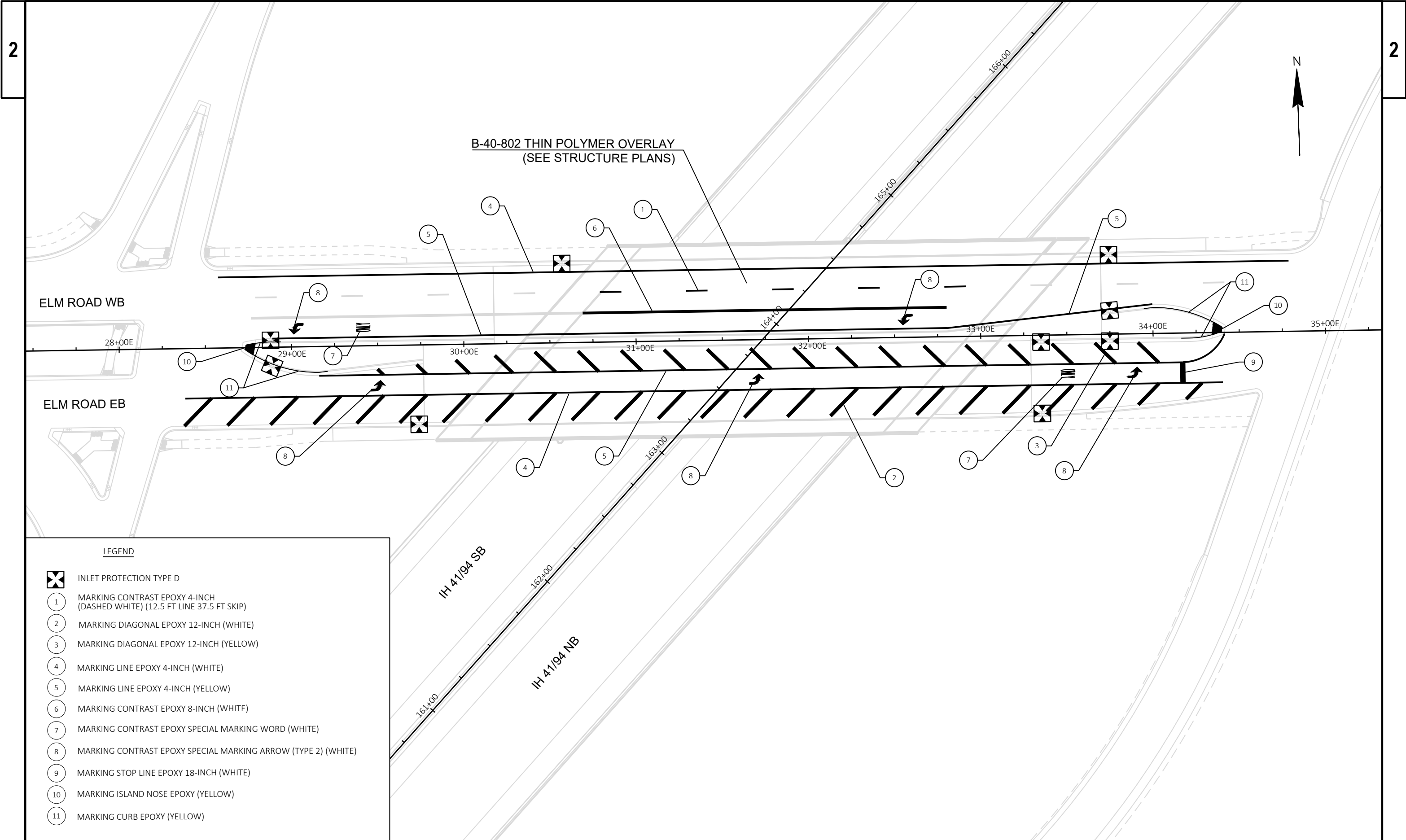
HWY: IH 41

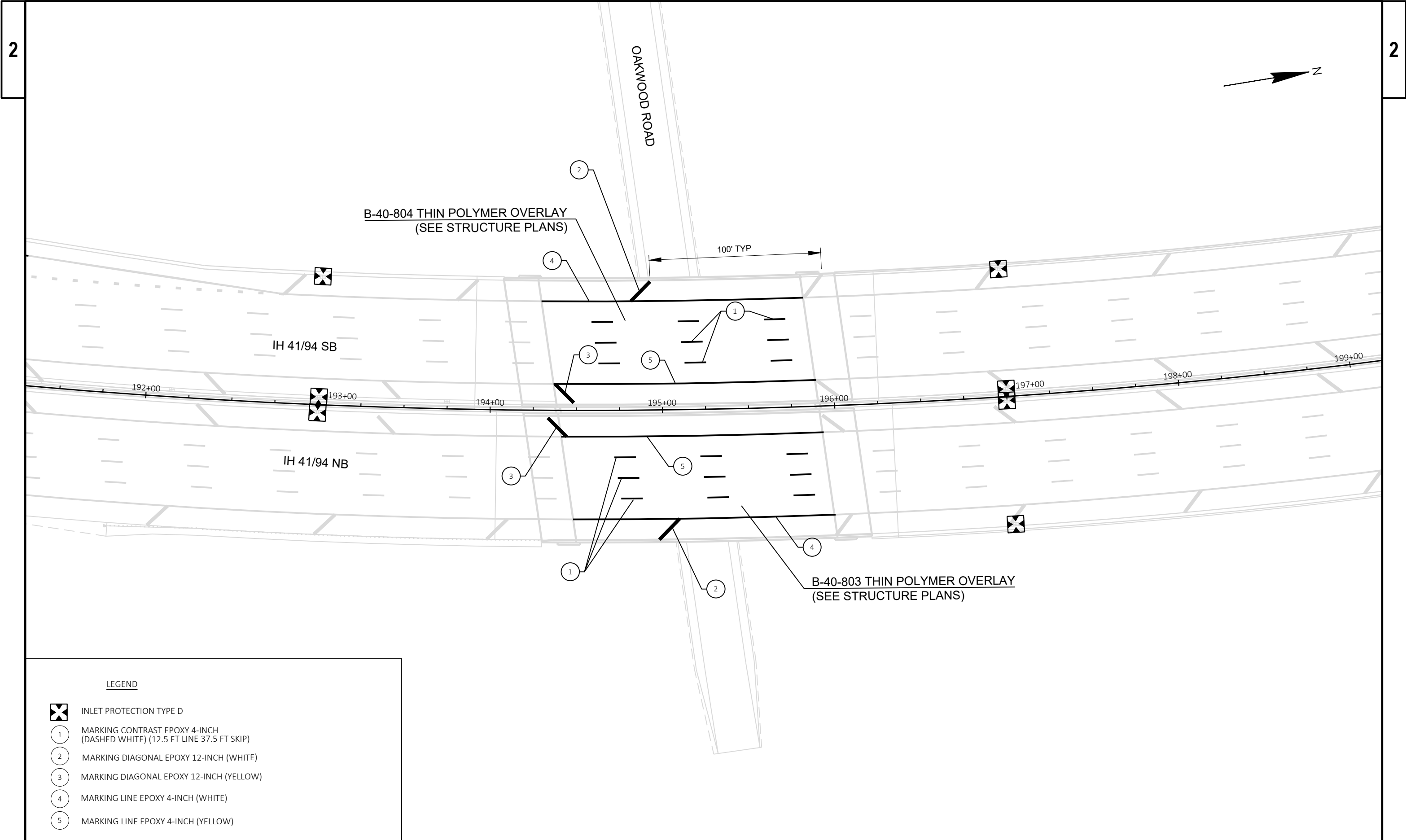
COUNTY: MILWAUKEE

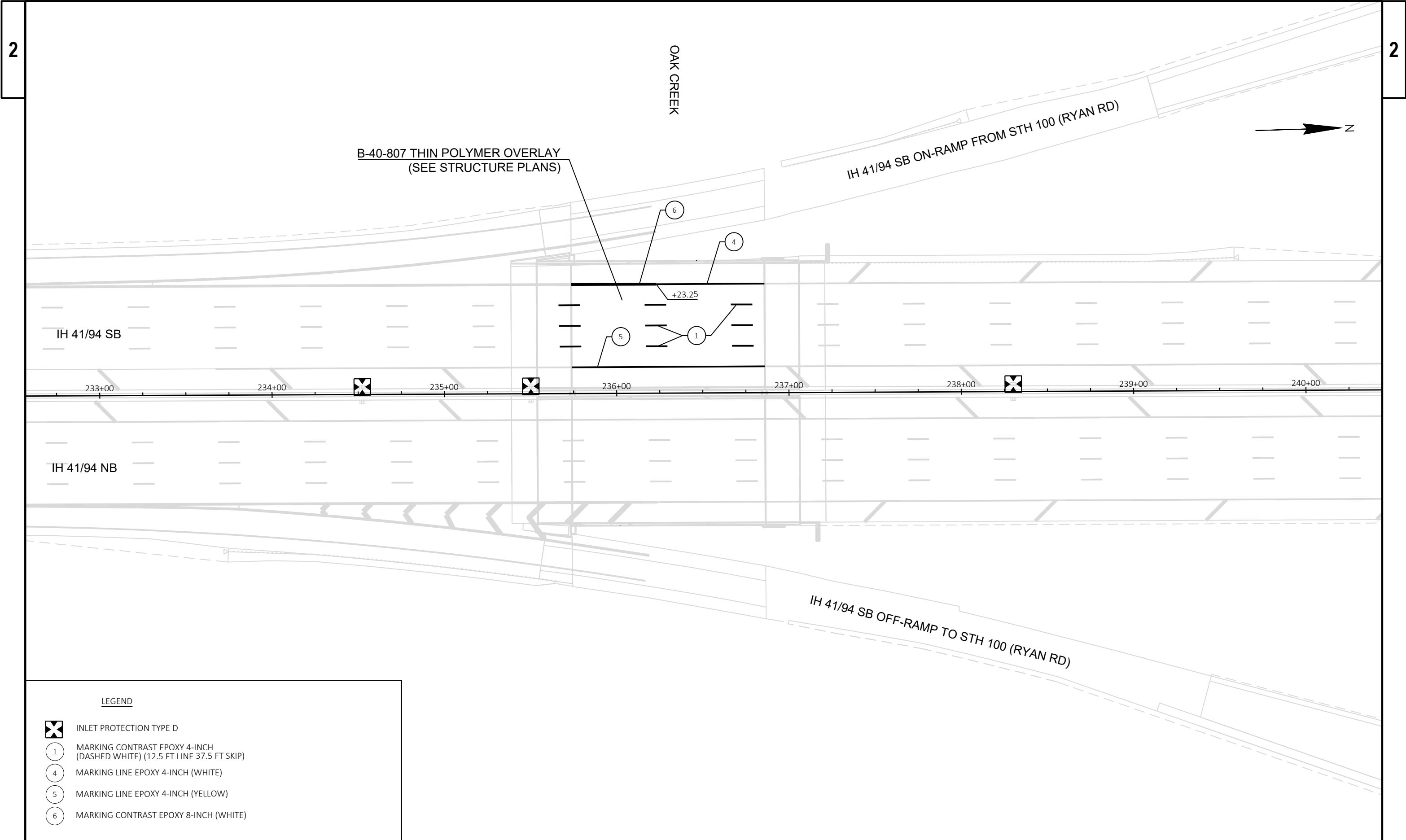
PLAN DETAILS: B-40-800/801

SHEET






E







LEGEND

-  INLET PROTECTION TYPE D
-  MARKING CONTRAST EPOXY 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
-  MARKING LINE EPOXY 4-INCH (WHITE)
-  MARKING LINE EPOXY 4-INCH (YELLOW)
-  MARKING CONTRAST EPOXY 8-INCH (WHITE)

PROJECT NO: 1030-07-77

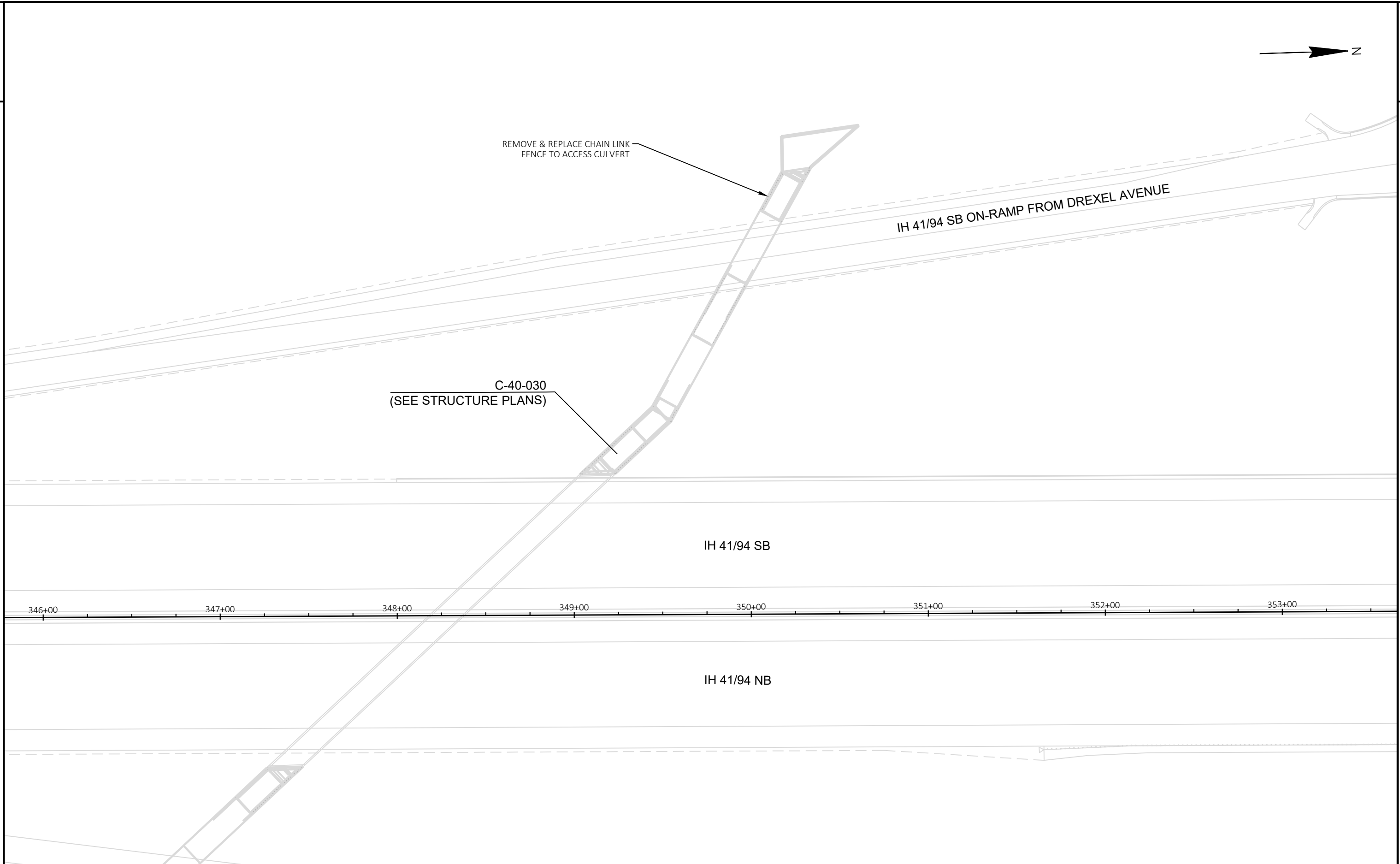
HWY: IH 41

COUNTY: MILWAUKEE

PLAN DETAILS: B-40-807

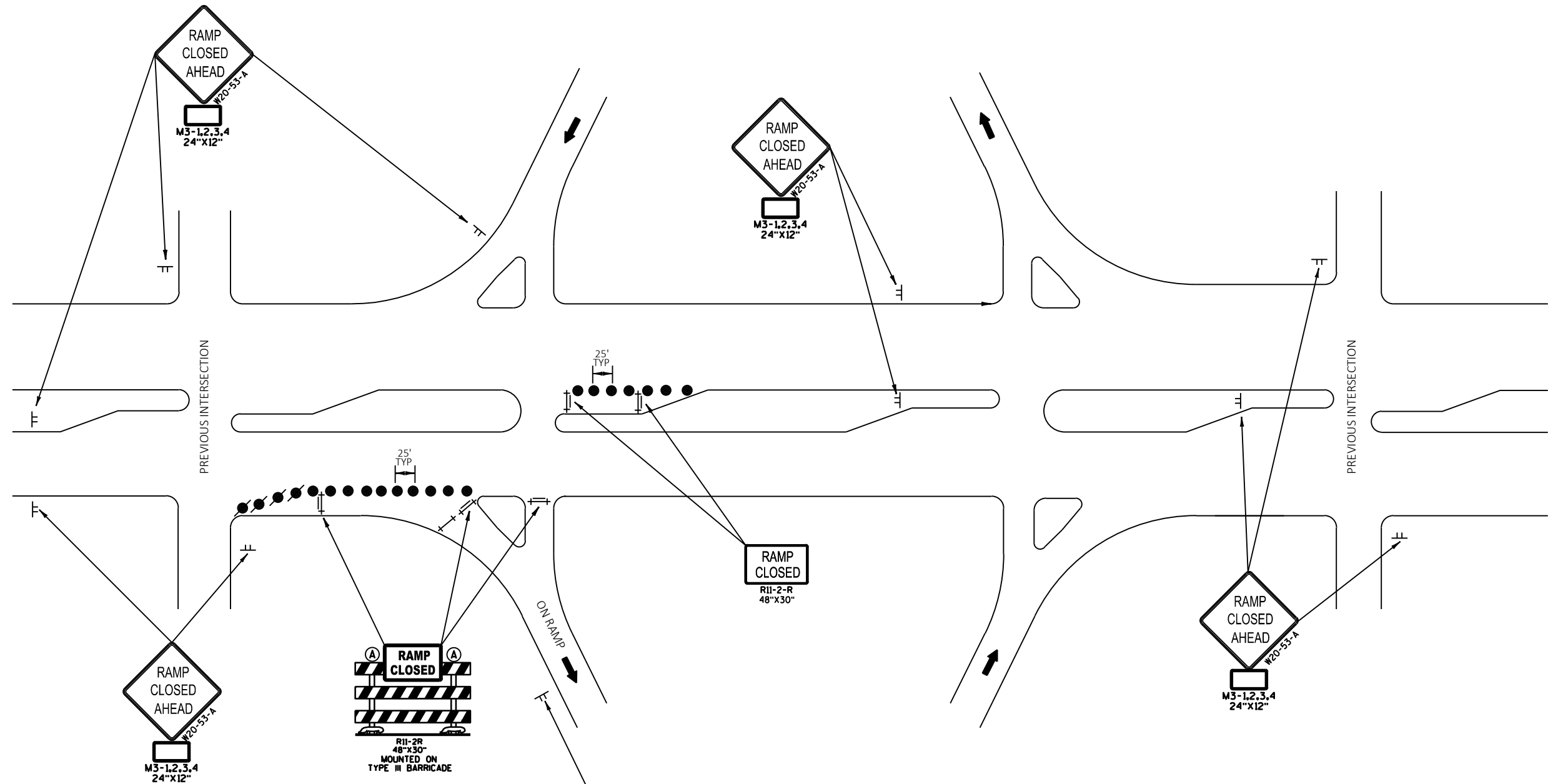
SHEET

E



PROJECT NO: 1030-07-77	HWY: IH 41	COUNTY: MILWAUKEE	PLAN DETAILS: C-40-030	SHEET	E
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**LEGEND**

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- † TYPE III BARRICADE
- †† TYPE III BARRICADE WITH 2 TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- † SIGN ON TEMPORARY SUPPORT
- ➔ DIRECTION OF TRAFFIC

TRAFFIC CONTROL NOTES

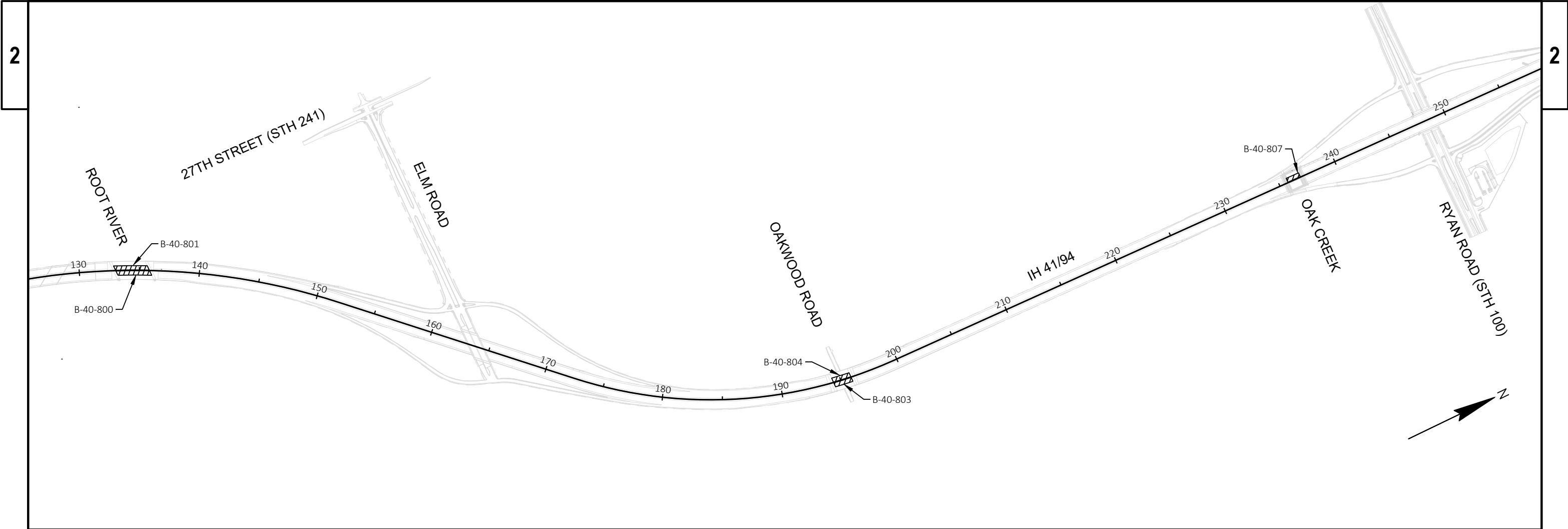
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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

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

SHORT TERM DEFINED AS 7 DAYS/NIGHTS OR LESS. FOR NIGHT TIME OPERATIONS ALL DRUMS IN TAPERS SHALL HAVE WARNING LIGHT, TYPE C (STEADY BURN). MAY BE APPLIED TO ARTERIALS OR LOCAL ROADS.

**TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
SHORT TERM ONLY**



GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "TYPICAL THREE-LANE CLOSURE ON FREEWAY, SHORT-TERM."

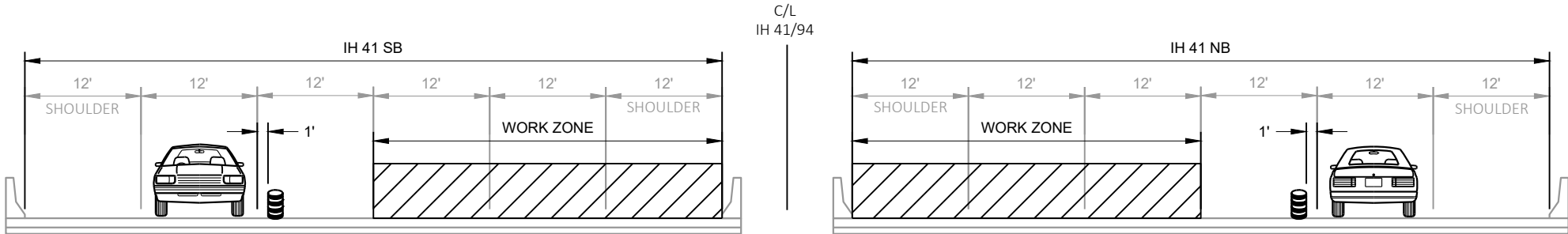
STAGE 1:

A THIN POLYMER OVERLAY (TPO) IS APPLIED ON THE TWO INSIDE LANES AND SHOULDER OF IH 41/94 (BOTH DIRECTIONS).

ALL WORK COMPLETED DURING STAGE 1 IS NIGHT TIME WORK.

TRAFFIC:

IN THIS STAGE, THE FOLLOWING MOVEMENTS ARE CLOSED:
-THE THREE INSIDE LANES OF IH 41/94



TYPICAL SECTION

IH 41/94 - STAGE 1

B-40-800, B-40-801, B-40-803, B-40-804, B-40-807

PROJECT NO: 1030-07-77

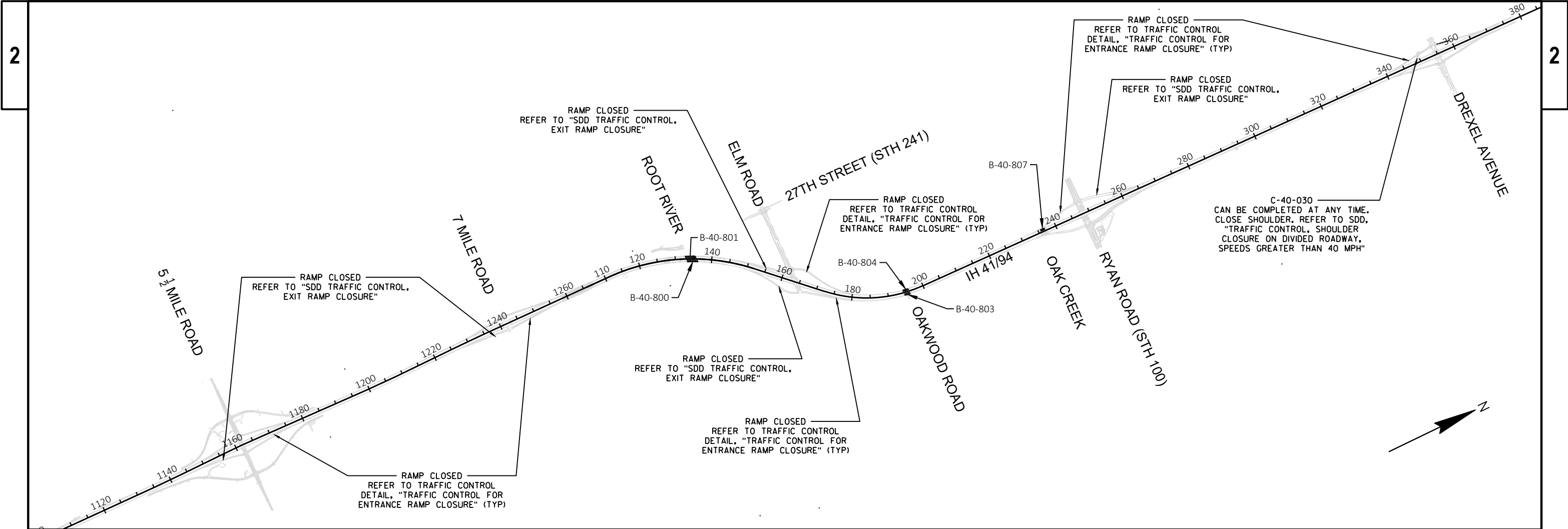
HWY: IH 41

COUNTY: MILWAUKEE

TRAFFIC CONTROL - STAGE 1 OVERVIEW

SHEET

E



GENERAL NOTES:

REFER TO CONSTRUCTION DETAIL, "TYPICAL THREE-LANE CLOSURE ON FREEWAY, SHORT-TERM."

STAGE 2:

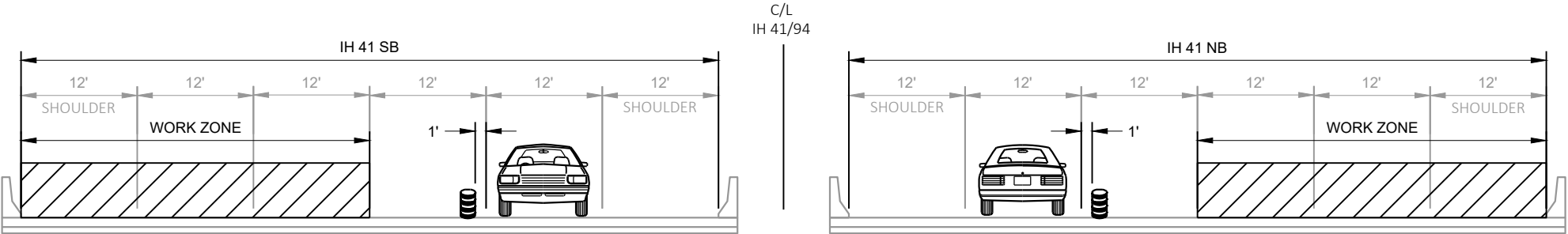
A THIN POLYMER OVERLAY (TPO) IS APPLIED ON THE TWO OUTSIDE LANES AND SHOULDER OF IH 41/94 (BOTH DIRECTIONS).

CULVERT REPAIR WORK (CAN BE COMPLETED AT ANY TIME).

ALL WORK COMPLETED DURING STAGE 2 IS NIGHT TIME WORK.

TRAFFIC:

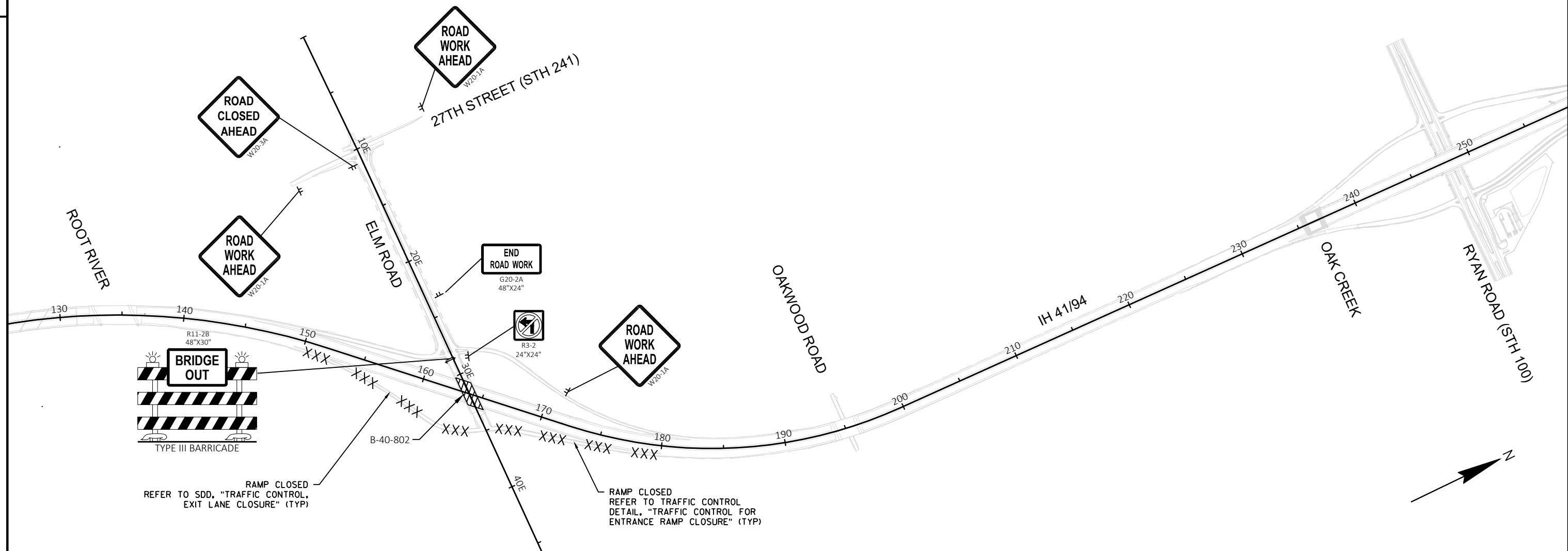
- IN THIS STAGE, THE FOLLOWING MOVEMENTS ARE CLOSED:
- THE THREE OUTSIDE LANES OF IH 41/94
 - THE IH 41 SB ON-RAMP FROM DREXEL AVENUE
 - THE IH 41 SB ON AND OFF-RAMPS FROM STH 100/RYAN ROAD
 - THE IH 41 NB & SB ON AND OFF-RAMPS FROM ELM ROAD
 - THE IH 41 NB ON AND OFF-RAMPS FROM 7 MILE ROAD
 - THE IH 41 NB ON AND OFF-RAMPS FROM 5 1/2 MILE ROAD



TYPICAL SECTION

IH 41/94 - STAGE 2

B-40-800, B-40-801, B-40-803, B-40-804, B-40-807



GENERAL NOTES:

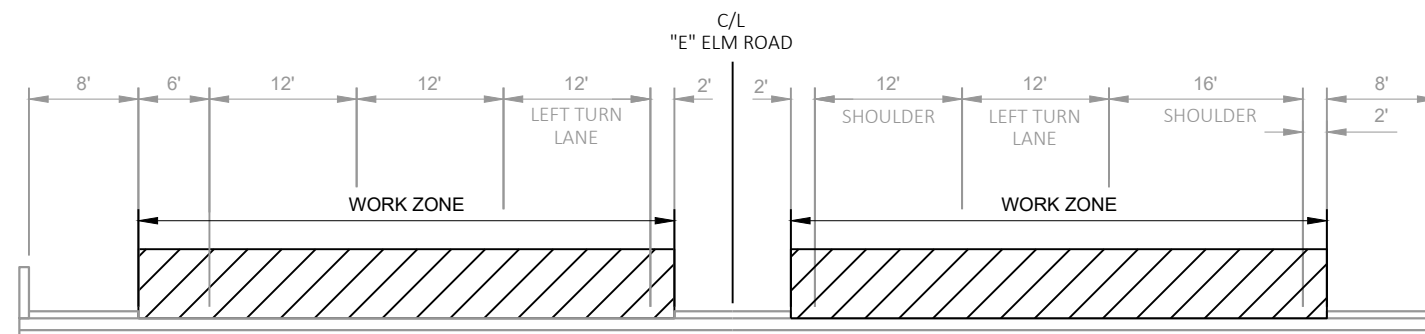
REFER TO SDD, "BARRICADES AND SIGNS FOR MAINLINE CLOSURES" AND SDD, "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES."

STAGE 3:

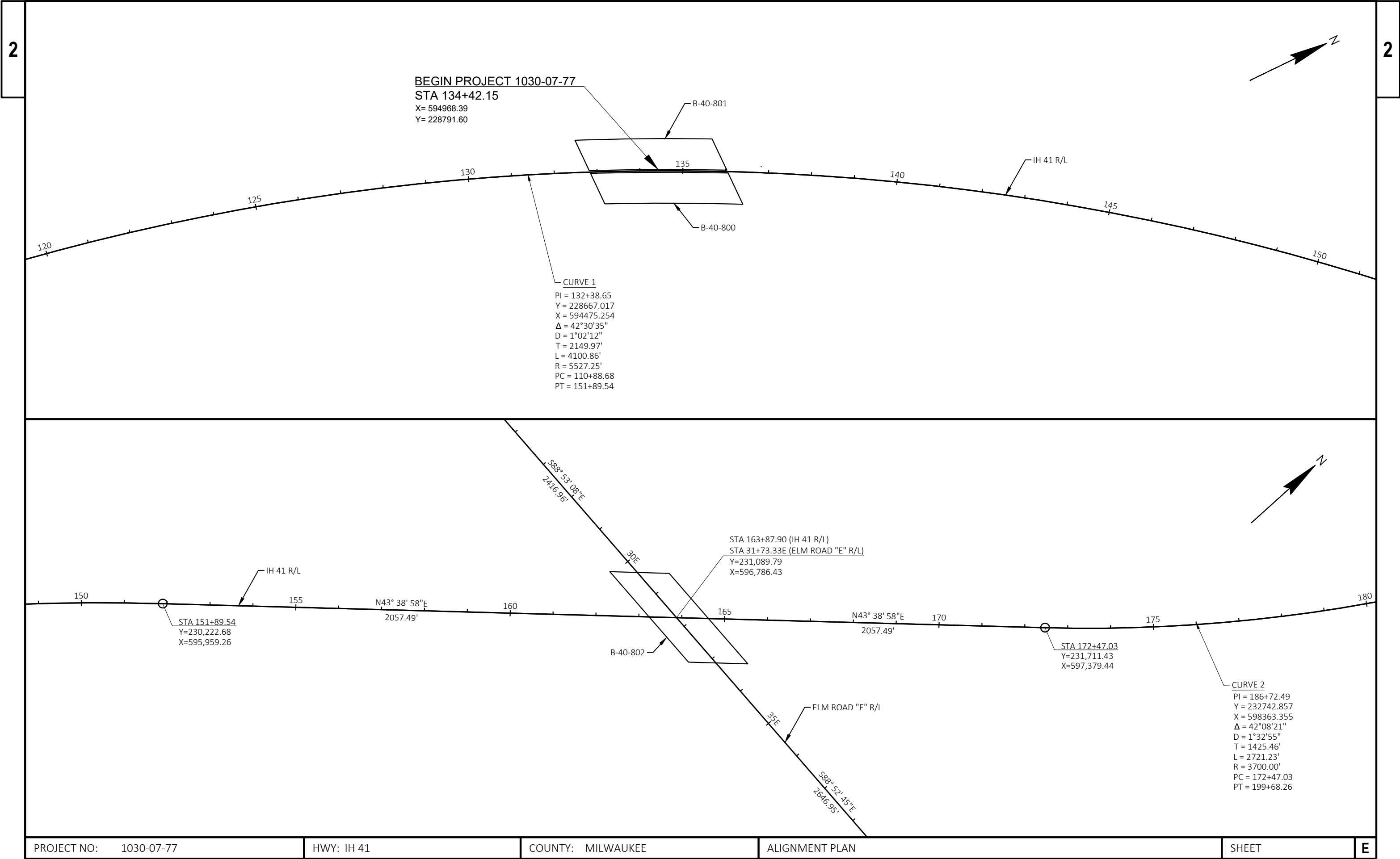
A THIN POLYMER OVERLAY (TPO) IS APPLIED ON ELM ROAD.
ALL WORK COMPLETED DURING STAGE 3 IS NIGHT TIME WORK.

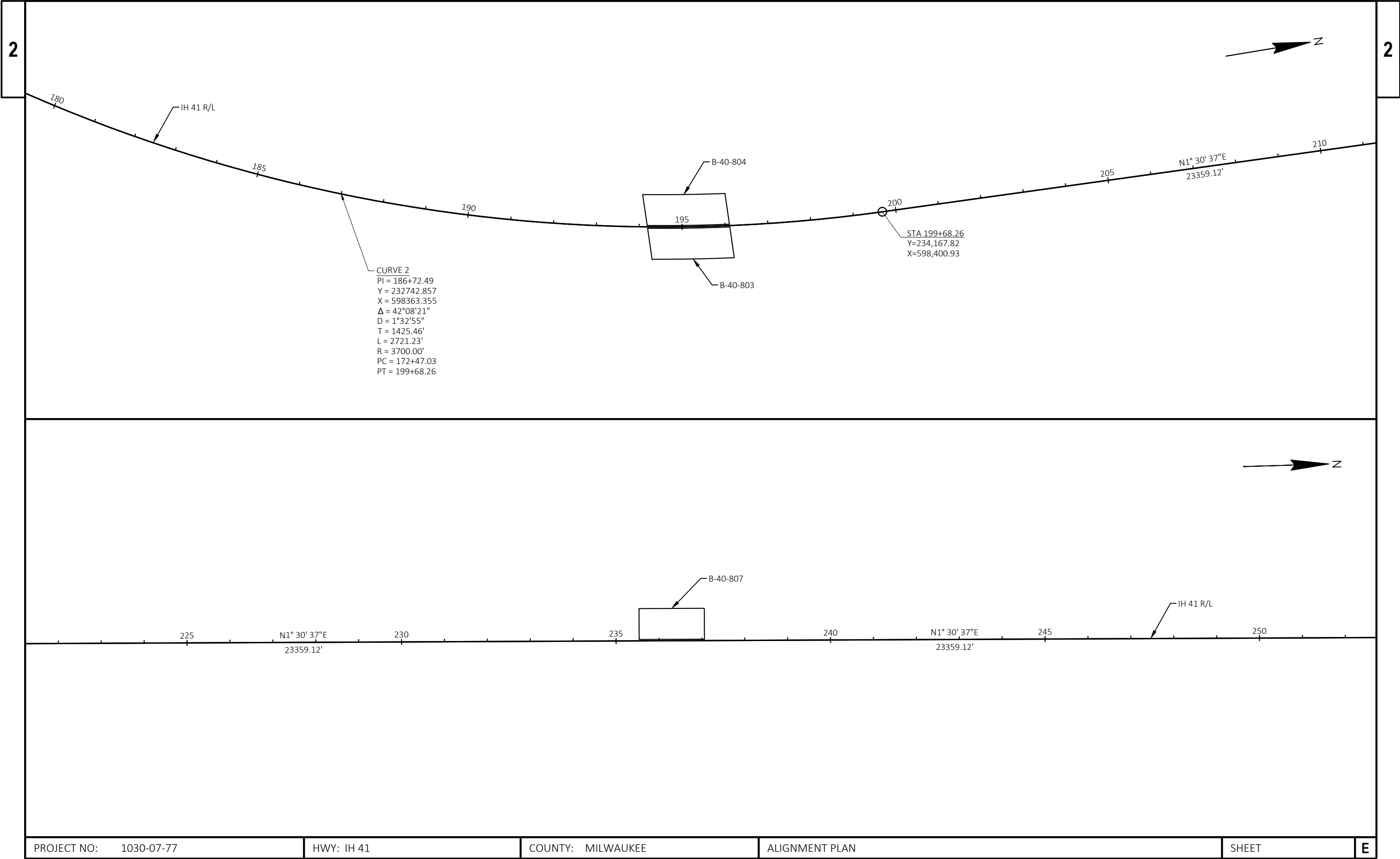
TRAFFIC:

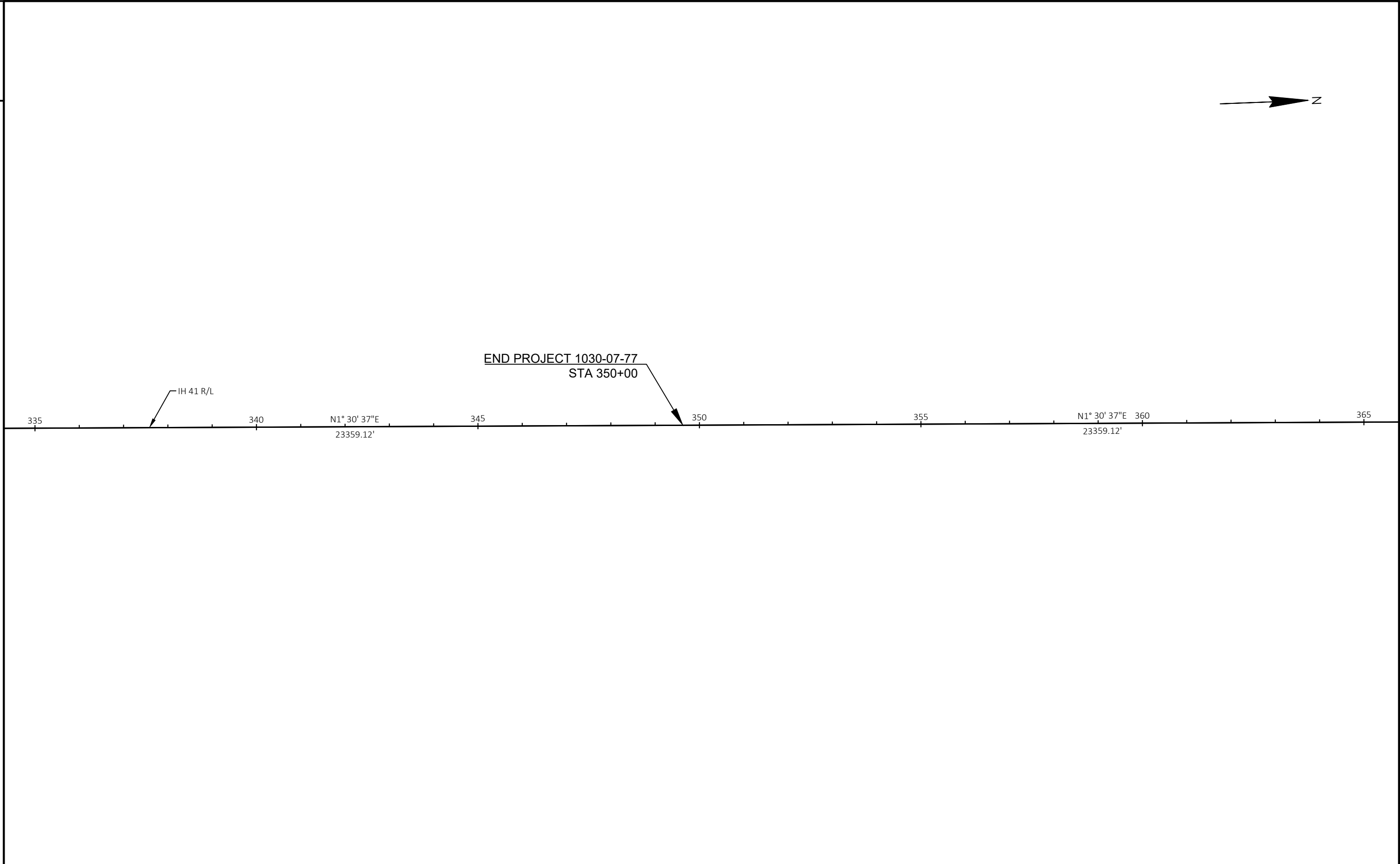
IN THIS STAGE, THE FOLLOWING MOVEMENTS ARE CLOSED:
-ELM ROAD
-THE IH 41 NB OFF-RAMP TO ELM ROAD
-THE IH 41 NB ON-RAMP FROM ELM ROAD



TYPICAL SECTION
ELM ROAD - STAGE 3
B-40-802







PROJECT NO: 1030-07-77	HWY: IH 41	COUNTY: MILWAUKEE	ALIGNMENT PLAN	SHEET	E
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Estimate Of Quantities By Plan Sets

1030-07-77					
Line	Item	Item Description	Unit	Total	Qty
0002	204.0170	Removing Fence	LF	20.000	20.000
0004	213.0100	Finishing Roadway (project) 0001. 1030-07-77	EACH	1.000	1.000
0014	509.5100.S	Polymer Overlay	SY	8,914.000	8,914.000
0016	616.0206	Fence Chain Link 6-FT	LF	20.000	20.000
0018	619.1000	Mobilization	EACH	0.700	0.700
0020	628.1550	Silt Screen	LF	45.000	45.000
0022	628.1905	Mobilizations Erosion Control	EACH	2.000	2.000
0024	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0026	628.7020	Inlet Protection Type D	EACH	33.000	33.000
0028	642.5401	Field Office Type D	EACH	0.700	0.700
0030	643.0300	Traffic Control Drums	DAY	7,104.000	7,104.000
0032	643.0420	Traffic Control Barricades Type III	DAY	603.000	603.000
0034	643.0705	Traffic Control Warning Lights Type A	DAY	1,205.000	1,205.000
0036	643.0715	Traffic Control Warning Lights Type C	DAY	1,335.000	1,335.000
0038	643.0800	Traffic Control Arrow Boards	DAY	101.000	101.000
0040	643.0900	Traffic Control Signs	DAY	1,315.000	1,315.000
0042	643.0920	Traffic Control Covering Signs Type II	EACH	18.000	18.000
0044	643.1050	Traffic Control Signs PCMS	DAY	30.000	30.000
0046	643.4100.S	Traffic Control Interim Lane Closure	EACH	20.000	20.000
0048	643.5000	Traffic Control	EACH	0.700	0.700
0050	646.1020	Marking Line Epoxy 4-Inch	LF	4,031.000	4,031.000
0060	646.6120	Marking Stop Line Epoxy 18-Inch	LF	12.000	12.000
0062	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,067.000	1,067.000
0064	646.8120	Marking Curb Epoxy	LF	120.000	120.000
0066	646.8220	Marking Island Nose Epoxy	EACH	2.000	2.000
0068	646.9000	Marking Removal Line 4-Inch	LF	3,722.000	3,722.000
0070	646.9100	Marking Removal Line 8-Inch	LF	634.000	634.000
0072	646.9200	Marking Removal Line Wide	LF	262.000	262.000
0074	646.9300	Marking Removal Special Marking	EACH	2.000	2.000
0076	649.0155	Temporary Marking Line Removable Contrast Tape 4-Inch	LF	5,144.000	5,144.000
0078	649.0255	Temporary Marking Line Removable Contrast Tape 8-Inch	LF	262.000	262.000
0080	649.0550	Temporary Marking Arrow Removable Tape	EACH	5.000	5.000
0084	SPV.0060	Special 0001. Traffic Control Close-Open Freeway Entrance Ramp	EACH	9.000	9.000
0086	SPV.0060	Special 0002. Marking Contrast Epoxy Special Marking Word	EACH	2.000	2.000
0088	SPV.0060	Special 0003. Marking Contrast Epoxy Special Marking Arrow	EACH	5.000	5.000
0090	SPV.0060	Special 0004. Sand Bags	EACH	300.000	300.000

Estimate Of Quantities By Plan Sets

1030-07-77					
Line	Item	Item Description	Unit	Total	Qty
0092	SPV.0075	Special 0001. Pavement Cleanup Project 1030-07-77	HRS	20.000	20.000
0096	SPV.0090	Special 0001. Marking Line Contrast Epoxy 4-Inch	LF	850.000	850.000
0098	SPV.0090	Special 0002. Marking Line Contrast Epoxy 8-Inch	LF	262.000	262.000
0100	SPV.0105	Special 0001. Survey Project 1030-07-77	LS	1.000	1.000
0102	SPV.0165	Special 4000. Mortar Surface Repair	SF	30.000	30.000

EROSION CONTROL

		628.7020 INLET PROTECTION TYPE D EACH		
CATEGORY	LOCATION	STATION	LOCATION	
1000	IH 41/94	132+00	4.8' LT	1
		132+30	4.8' LT	1
		132+43	74' RT	1
		132+63	74' RT	1
		136+50	4.8' RT	1
		136+50	4.8' LT	1
		136+49	74' RT	1
		28+88	4' LT	1
		28+89	11' RT	1
		29+74	46' RT	1
		30+57	46' LT	1
		33+36	45' RT	1
		33+35	4' RT	1
		33+75	14' LT	1
		33+75	4' RT	1
		33+74	47' LT	1
		193+03	75' LT	1
		193+00	4.8' RT	1
		193+00	4.8' LT	1
		197+00	4.5' LT	1
		197+00	3' RT	1
		197+00	74' RT	1
		197+00	74' LT	1
		234+50	4' LT	1
		235+50	4' LT	1
		238+30	4' LT	1
UNDISTRIBUTED				7
TOTAL:				33

EROSION CONTROL

		628.1550	628.1905	628.1910	SPV.0060.0004
		SILT SCREEN LF	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	SAND BAGS EACH
CATEGORY	LOCATION				
1000	C-30-004	45	2	2	300

FENCING ITEMS

		204.0170 REMOVING FENCE LF	616.0206 FENCE CHAIN LINK 6-FT LF
CATEGORY	LOCATION		
1000	IH 41/94 SB ON RAMP FROM DREXEL AVENUE	20	20
TOTAL:		20	20

MOBILIZATION

		619.1000 MOBILIZATION EACH
CATEGORY	LOCATION	
1000	PROJECT	0.7
TOTAL:		0.7

TRAFFIC CONTROL

		643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	643.5000 TRAFFIC CONTROL EACH
CATEGORY	LOCATION		
1000	PROJECT	30	0.7

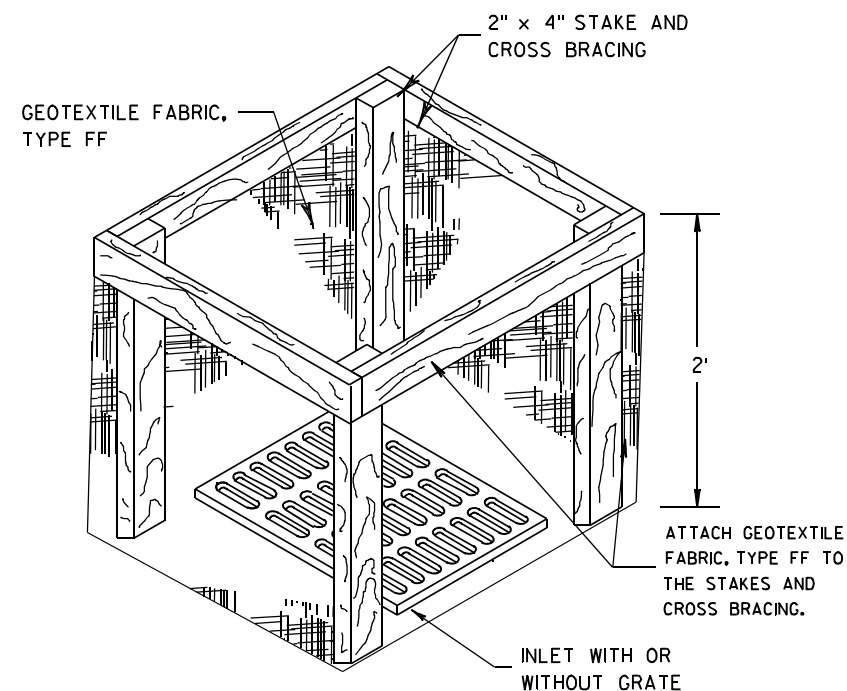
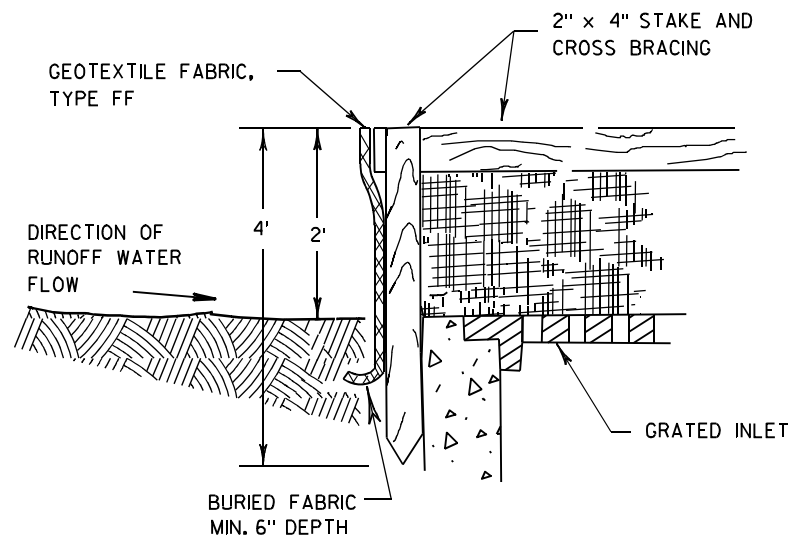
TRAFFIC CONTROL																												
				643.0300		643.0420		643.0705		643.0715		643.0800		643.0900		643.0920			643.4100.S		649.0155		649.0255		649.0550		SPV.0060.0001	
				TRAFFIC		TRAFFIC		TRAFFIC		TRAFFIC		TRAFFIC		TRAFFIC		TRAFFIC			TRAFFIC		TEMPORARY		TEMPORARY		TEMPORARY		TRAFFIC CONTROL	
				CONTROL		CONTROL		CONTROL		CONTROL		CONTROL		CONTROL		CONTROL			CONTROL		REMOVEABLE		CONTRAST TAPE		MARKING ARROW		CLOSE-OPEN	
				CONTROL		BARRICADES		WARNING LIGHTS		WARNING LIGHTS		ARROW		CONTROL		COVERING SIGNS			INTERIM LANE		4-INCH		8-INCH		REMOVABLE TAPE		ENTRANCE RAMP	
				DRUMS		TYPE III		TYPE A		TYPE C		BOARDS		SIGNS		TYPE II			CLOSURE		YELLOW		WHITE					
CATEGORY	STAGE	LOCATION	DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS	*EACH	DAYS	CYCLES	SIGNS	EACH	EACH	LF	LF	LF	EACH	EACH				
1000	1	B-40-807	2	142	284	10	20	20	40	51	102	4	8	22	44	--	--	--	2	113	75	--	--	--				
	1	B-40-804	2	162	324	6	12	12	24	51	102	4	8	19	38	--	--	--	2	153	75	--	--	--				
	1	B-40-803	2	180	360	18	36	36	72	51	102	4	8	24	48	--	--	--	2	153	75	--	--	--				
	1	B-40-801	2	236	472	15	30	30	60	51	102	4	8	23	46	--	--	--	2	281	150	--	--	--				
	1	B-40-800	2	286	572	19	38	38	76	51	102	4	8	28	56	--	--	--	2	281	150	--	--	--				
	SUBTOTAL STAGE 1				2,012		136		272		510		40		232		0			10	981	525	0	0	0			
	2	B-40-807	2	212	424	10	20	20	40	51	102	4	8	22	44	--	--	--	2	--	138	50	--	--				
		Service Ramps	2	114	228	12	24	24	48	4	8		0	37	74	2	1	2	--	--	--	--	--	1				
	2	B-40-804	2	148	296	6	12	12	24	51	102	4	8	19	38	--	--	--	2	--	228	--	--	--				
		Service Ramps	2	137	274	13	26	26	52	4	8		0	38	76	2	1	2	--	--	--	--	--	1				
	2	B-40-803	2	180	360	18	36	36	72	51	102	4	8	24	48	--	--	--	2	--	228	--	--	--				
		Service Ramps	2	89	178	19	38	38	76	4	8		0	52	104	2	1	2	--	--	--	--	--	2				
	2	B-40-801	2	217	434	15	30	30	60	51	102	4	8	23	46	--	--	--	2	--	431	--	--	--				
		Service Ramps	2	179	358	22	44	44	88	8	16		0	61	122	2	1	2	--	--	--	--	--	2				
	2	B-40-800	2	315	630	19	38	38	76	51	102	4	8	28	56	--	--	--	2	--	431	--	--	--				
		Service Ramps	2	174	348	23	46	46	92	4	8		0	70	140	2	2	4	--	--	--	--	--	2				
	SUBTOTAL STAGE 2				3,530		314		628		558		40		748		12			10	0	1,456	50	0	8			
	3	B-40-802	2	--	--	3	6	6	12	--	--	--	--	7	14	--	--	--	--	894	1288	212	5	--				
		Elm Road Ramps	2	63	126	13	26	26	52	--	--	--	--	25	50	2	1	2	0	--	--	--	--	1				
	SUBTOTAL STAGE 3				126		32		64		0		0		64		2			0	894	1,288	212	5	1			
	N/A	C-40-030	1	15	15	--	--	--	--	--	--	1	1	8	8	--	--	--	--	--	--	--	--	--				
	UNDISTRIBUTED				1421		121		241		267		20		263		4											
TOTAL:				7104		603		1205		1335		101		1315		18			20	5144	262	5	9					

* FOR INFORMATION ONLY

PAVEMENT MARKINGS																
		646.1020	646.6120	646.7120	646.8120	646.8220	646.9000	646.9100	646.9200	646.9300	SPV.0060.0002	SPV.0060.0003	SPV.0090.0001	SPV.0090.0002		
		MARKING LINE EPOXY 4-INCH	MARKING STOP LINE EPOXY 18-INCH	MARKING LINE DIAGONAL EPOXY 12-INCH	MARKING CURB EPOXY	MARKING ISLAND NOSE EPOXY	MARKING REMOVAL LINE 4-INCH	MARKING REMOVAL LINE 8-INCH	MARKING REMOVAL LINE WIDE	MARKING REMOVAL SPECIAL MARKING	MARKING CONTRAST SPECIAL MARKING WORD EPOXY WHITE	MARKING CONTRAST SPECIAL MARKING ARROW TYPE 2 EPOXY WHITE	MARKING CONTRAST EPOXY 4-INCH 12.5 FT LINE 37.5 SKIP DASHED WHITE	MARKING CONTRAST EPOXY 8-INCH WHITE		
CATEGORY	LOCATION	YELLOW LF	WHITE LF	WHITE LF	YELLOW LF	WHITE LF	YELLOW LF	YELLOW EACH	LF	LF	LF	EACH	EACH	EACH	LF	LF
1000	B-40-800	281	281	--	45	45	--	--	787	90	--	--	--	--	225	--
	B-40-801	281	281	--	45	45	--	--	787	90	--	--	--	--	225	--
	B-40-802	894	1225	12	295	528	120	2	1022	390	212	2	2	5	63	212
	B-40-803	153	153	--	16	16	--	--	419	32	--	--	--	--	113	--
	B-40-804	153	153	--	16	16	--	--	419	32	--	--	--	--	113	--
	B-40-807	113	63	--	--	--	--	--	289	--	50	--	--	--	113	50
	SUBTOTAL	1875	2156	12	417	650	120	2	3722	634	262	2	2	5	850	262
TOTAL:		4,031		12	1,067		120	2	3,722	634	262	2	2	5	850	262

Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E12-01	SILT SCREEN
15B03-15A	FENCE CHAIN LINK
15B03-15B	FENCE CHAIN LINK
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C07-15B	PAVEMENT MARKING WORDS
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-08B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-04	MEDIAN ISLAND MARKING
15C18-05B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS



INLET PROTECTION, TYPE A

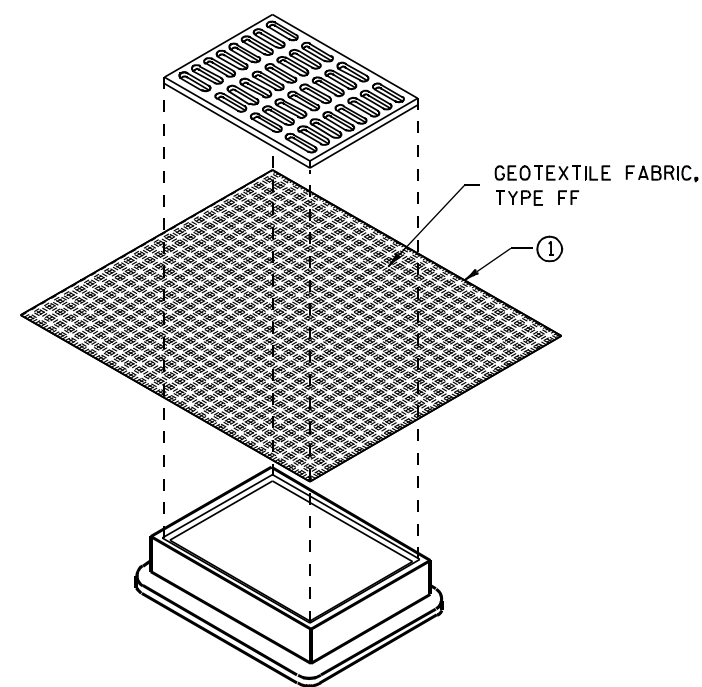
GENERAL NOTES

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

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

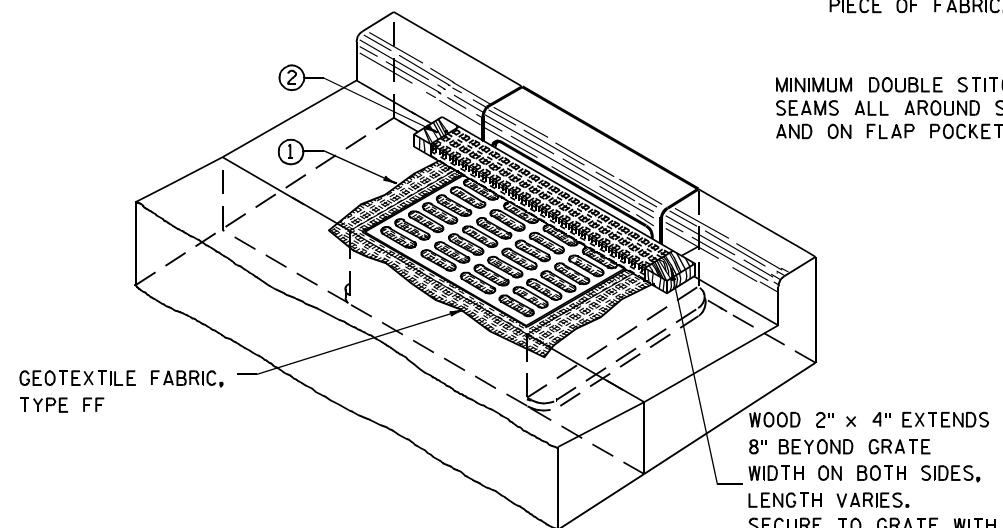
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

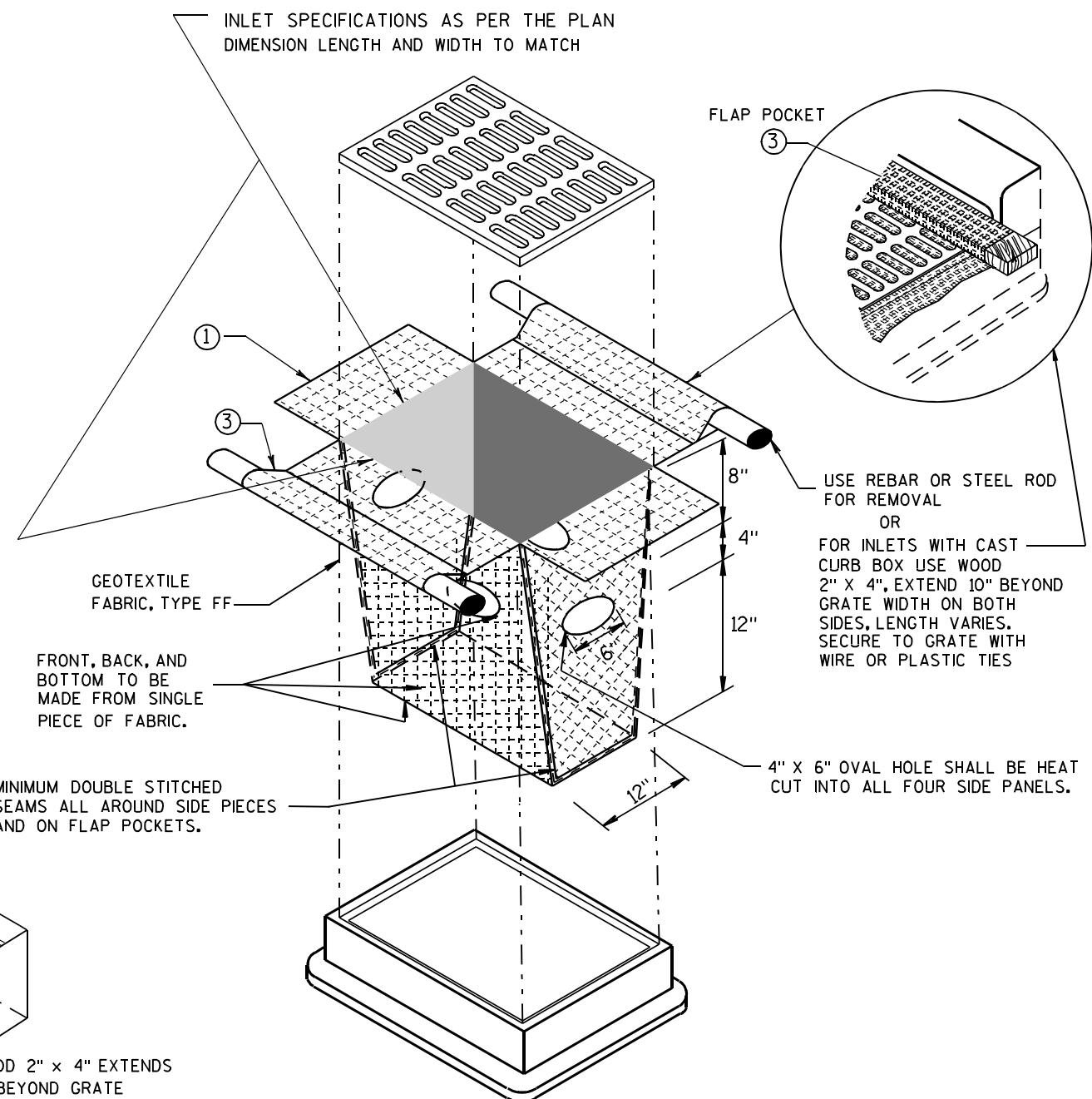
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



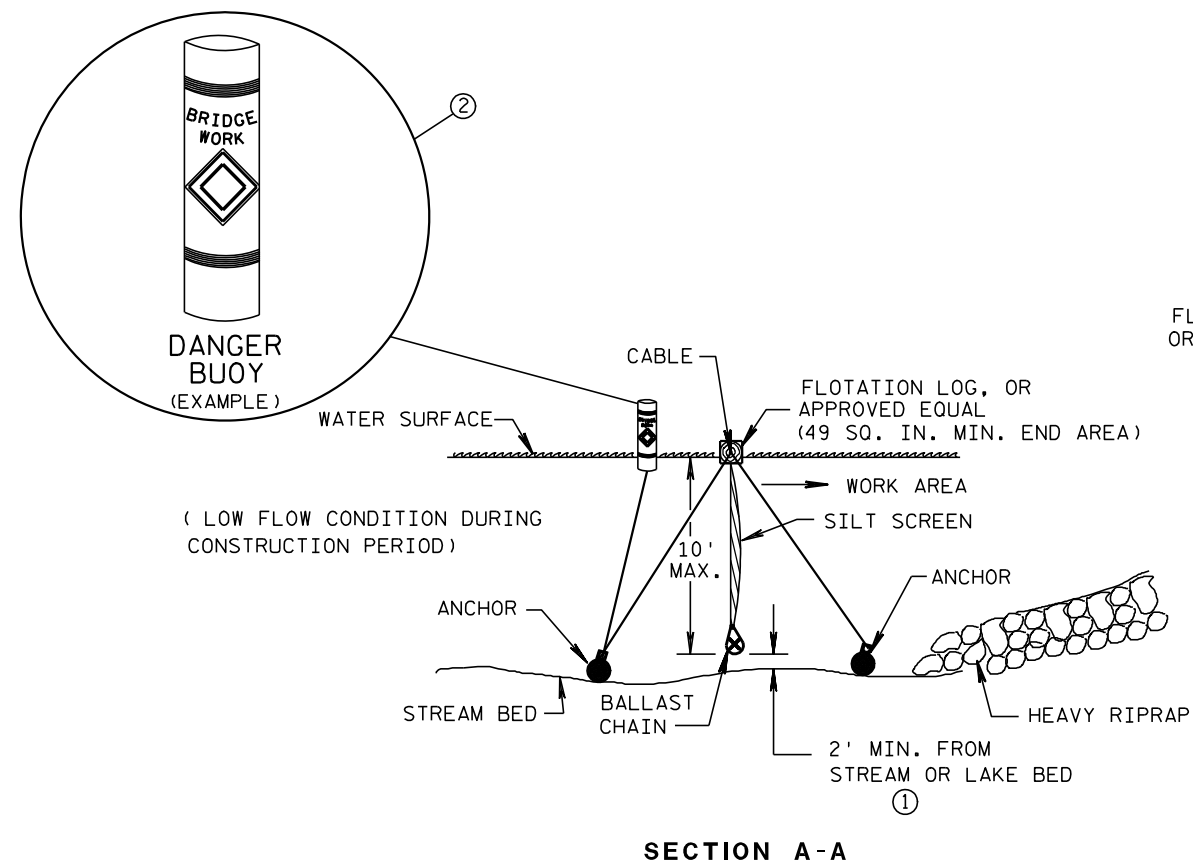
INLET PROTECTION, TYPE D

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

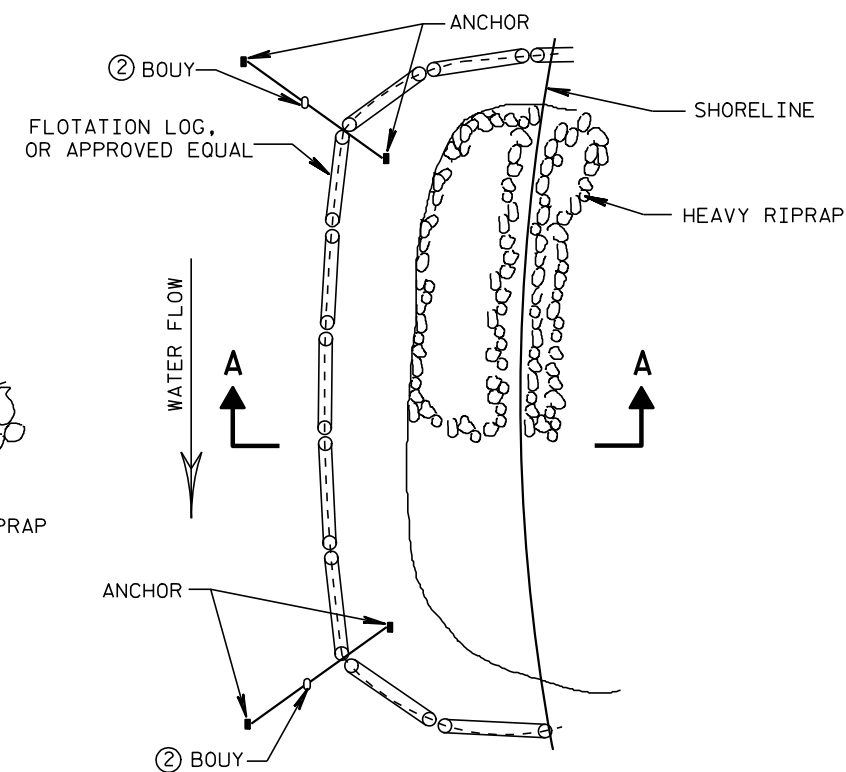
INLET PROTECTION TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



SILT SCREEN PLACEMENT DETAIL



GENERAL NOTES

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

- ① 2' MINIMUM SHALL BE MAINTAINED DURING CONSTRUCTION PERIOD.
- ② USE AS DIRECTED BY COAST GUARD OR DNR PERMIT WHEN WORKING IN NAVIGABLE WATERWAYS.

SILT SCREEN

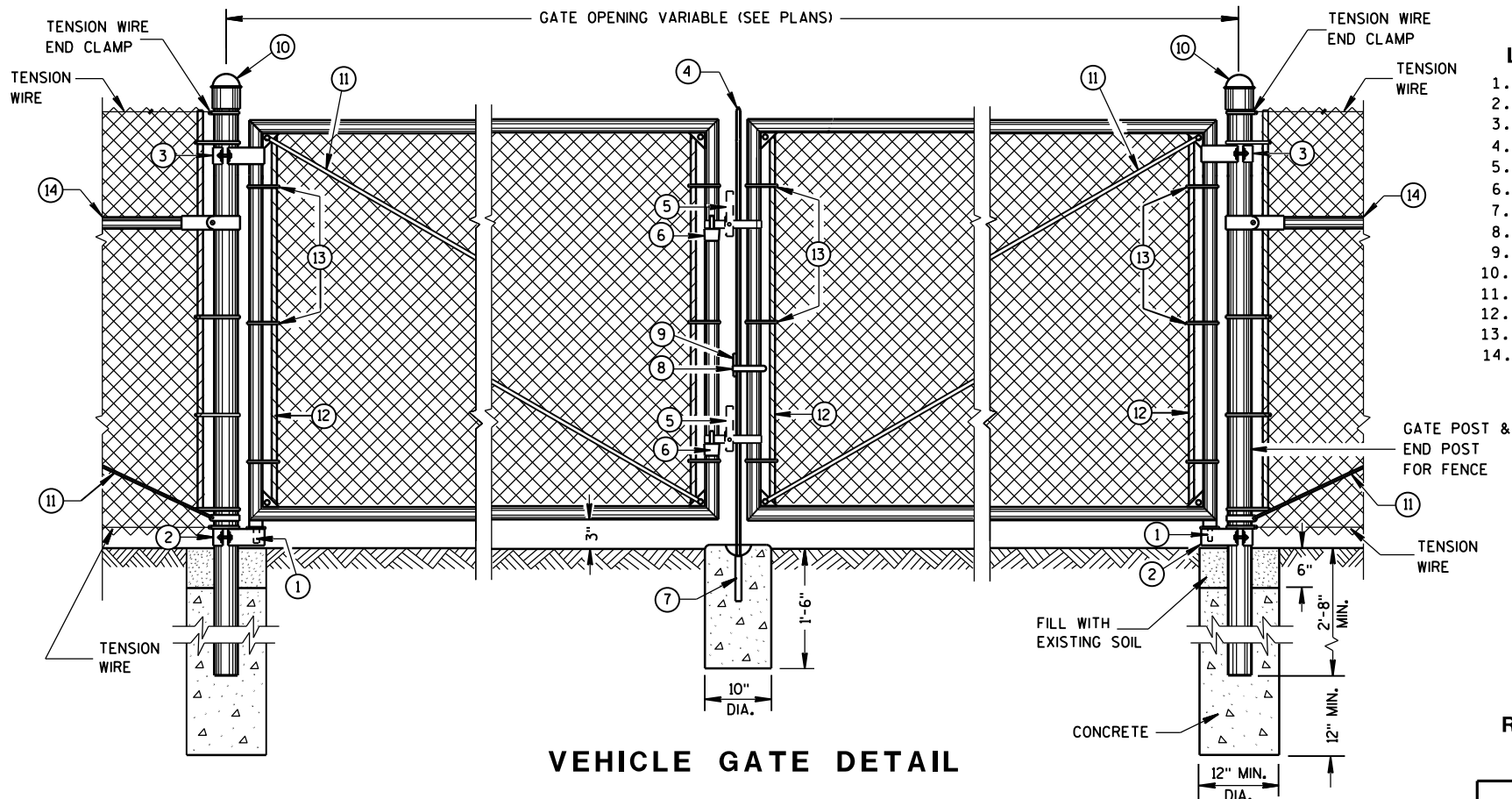
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

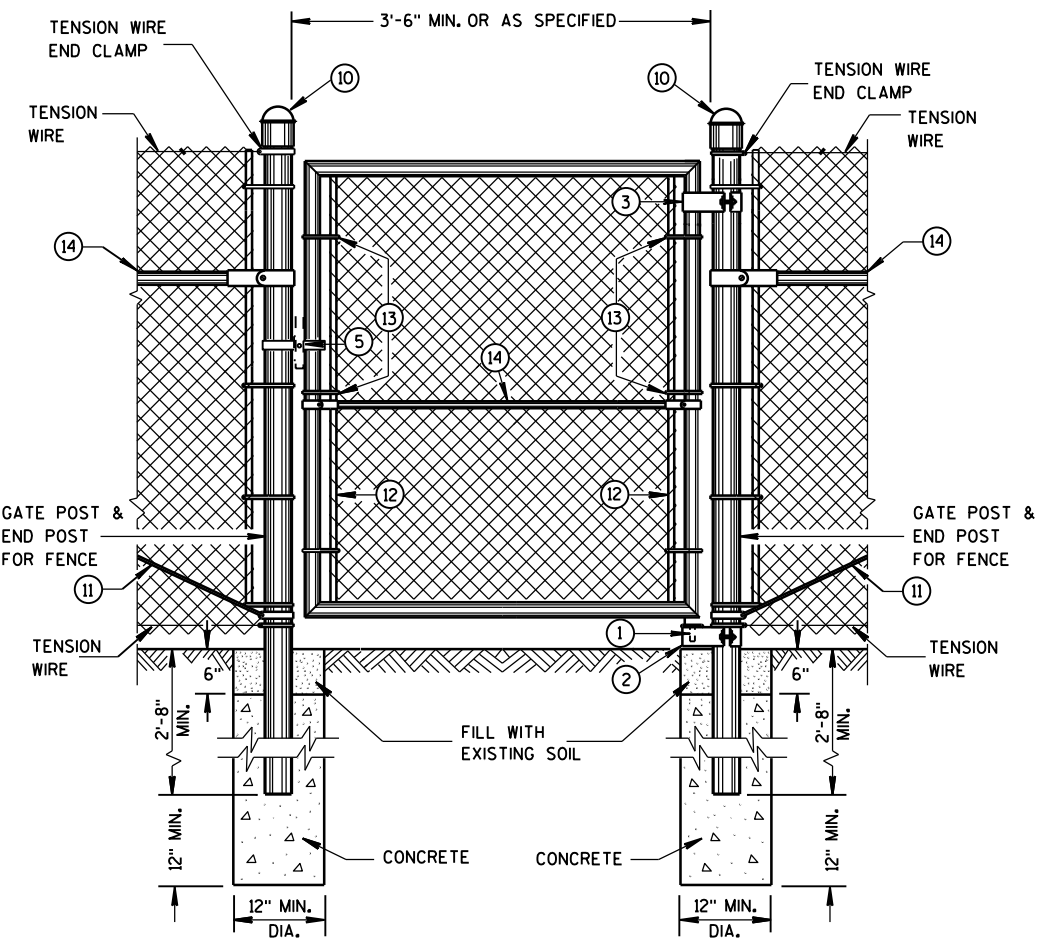
6/04/02
DATE

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



VEHICLE GATE DETAIL



PEDESTRIAN GATE DETAIL

LEGEND

- 1. STRAIGHT PLUG
- 2. BOTTOM HINGE
- 3. TOP HINGE
- 4. PLUNGER ROD
- 5. FULCRUM LATCH
- 6. FORK CATCH *
- 7. PLUNGER ROD CATCH
- 8. LOCK KEEPER GUIDE
- 9. LOCK KEEPER
- 10. DOME TOPS
- 11. TRUSS RODS
- 12. TENSION BAR
- 13. TENSION BANDS
- 14. BRACE RAIL

*NOT REQUIRED ON SINGLE SWING PEDESTRIAN GATE

GENERAL NOTES

FENCE POSTS INSTALLED ON CONCRETE WALLS SHALL BE ANCHORED INTO EMBEDDED METAL SLEEVES OR CORED HOLE BY FILLING THE ANNULAR SPACE WITH PEA GRAVEL FOLLOWED BY AN EPOXY RESIN ADHESIVE. THE EPOXY RESIN ADHESIVE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 235, CLASS A, B OR C.

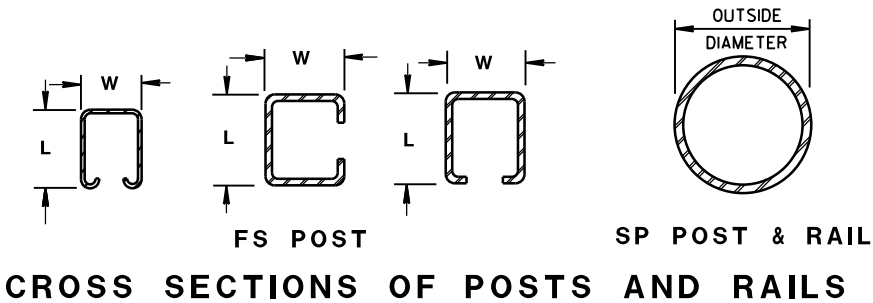
USE FENCE FABRIC KNUCKLED AT BOTH SELVAGES.

FOR LEAF GATES GREATER THAN 8 FEET WIDE, INSTALL INTERIOR VERTICAL BRACE RAIL AT 8 FOOT INTERVALS.

FOR FABRIC HEIGHTS GREATER THAN 8 FEET, INSTALL INTERIOR HORIZONTAL BRACE RAILS TO LEAF GATE.

MAXIMUM SAG FOR OUTER GATE MEMBER SHALL NOT EXCEED THE GREATER OF 1% OF THE LEAF GATE WIDTH OR 2 INCHES.

USE TYPE 2, CLASS 3, MARCELLED/CRIMPED, TENSION WIRE PER ASTM A 817.



ROLLED-FORMED STEEL FENCE POST
(2.0 OZ./SQ. FT. COATING)

POST TYPE	LENGTH (L) INCH	WIDTH (W) INCH	WEIGHT LBS/FT
FS1	1.625	1.25	1.35
FS2†	1.875	1.625	1.850
FS2	1.875	1.625	2.400
FS3	2.250	1.700	2.780

ROUND STEEL FENCE POST
(1.8 OZ./SQ. FT. COATING)

POST TYPE	OUTSIDE DIMENSION INCH	WALL THICKNESS INCH	WEIGHT LBS/FT
SP1	1.660	0.140	2.270
SP2	1.900	0.145	2.720
SP3	2.375	0.154	3.650
SP4	2.875	0.203	5.800
SP5	4.000	0.226	9.120
SP6	6.625	0.280	18.990
SP7	8.625	0.322	28.580

REQUIRED FENCE POST SIZES

USE	FABRIC HEIGHTS FEET	POST TYPE
TERMINAL POSTS **	LESS THAN OR EQUAL TO 6 FT.	SP3
	GREATER THAN OR EQUAL TO 6 FT.	SP4
LINE POSTS	LESS THAN OR EQUAL TO 6 FT.	SP2
	LESS THAN OR EQUAL TO 8 FT.	SP3
	GREATER THAN OR EQUAL TO 8 FT.	SP4
	LESS THAN OR EQUAL TO 8 FT.	FS2 OR FS2†
	GREATER THAN OR EQUAL TO 8 FT.	FS3

REQUIRED POST
SIZE FOR GATES

USE	LEAF WIDTHS FEET	POST TYPE
GATES	LESS THAN OR EQUAL TO 6 FT.	SP4
	LESS THAN OR EQUAL TO 13 FT.	SP5
	LESS THAN OR EQUAL TO 18 FT.	SP6
	LESS THAN OR EQUAL TO 23 FT.	SP7

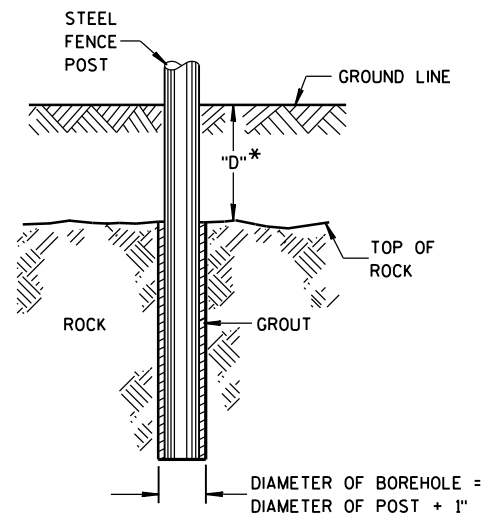
BRACE RAIL TYPES

USE	TYPE
BRACE RAIL	SP1 OR FS1

** INCLUDES END, CORNER, ANGLE, INTERSECTION AND INTERMEDIATE BRACED POSTS

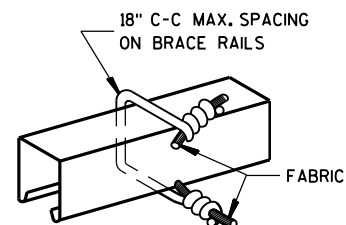
FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



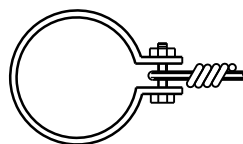
* IF "D" IS LESS THAN 2'-6",
DRILL ROCK AND INSTALL GROUT

ROCK INSTALLATION OF LINE POST

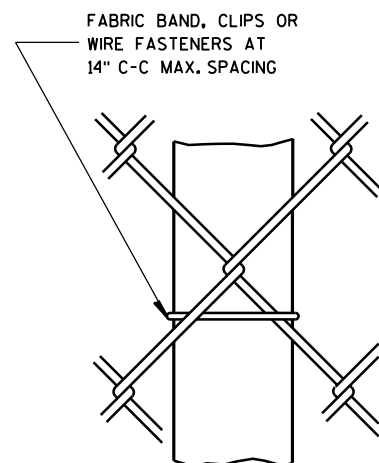


BRACE RAIL FABRIC FASTENER

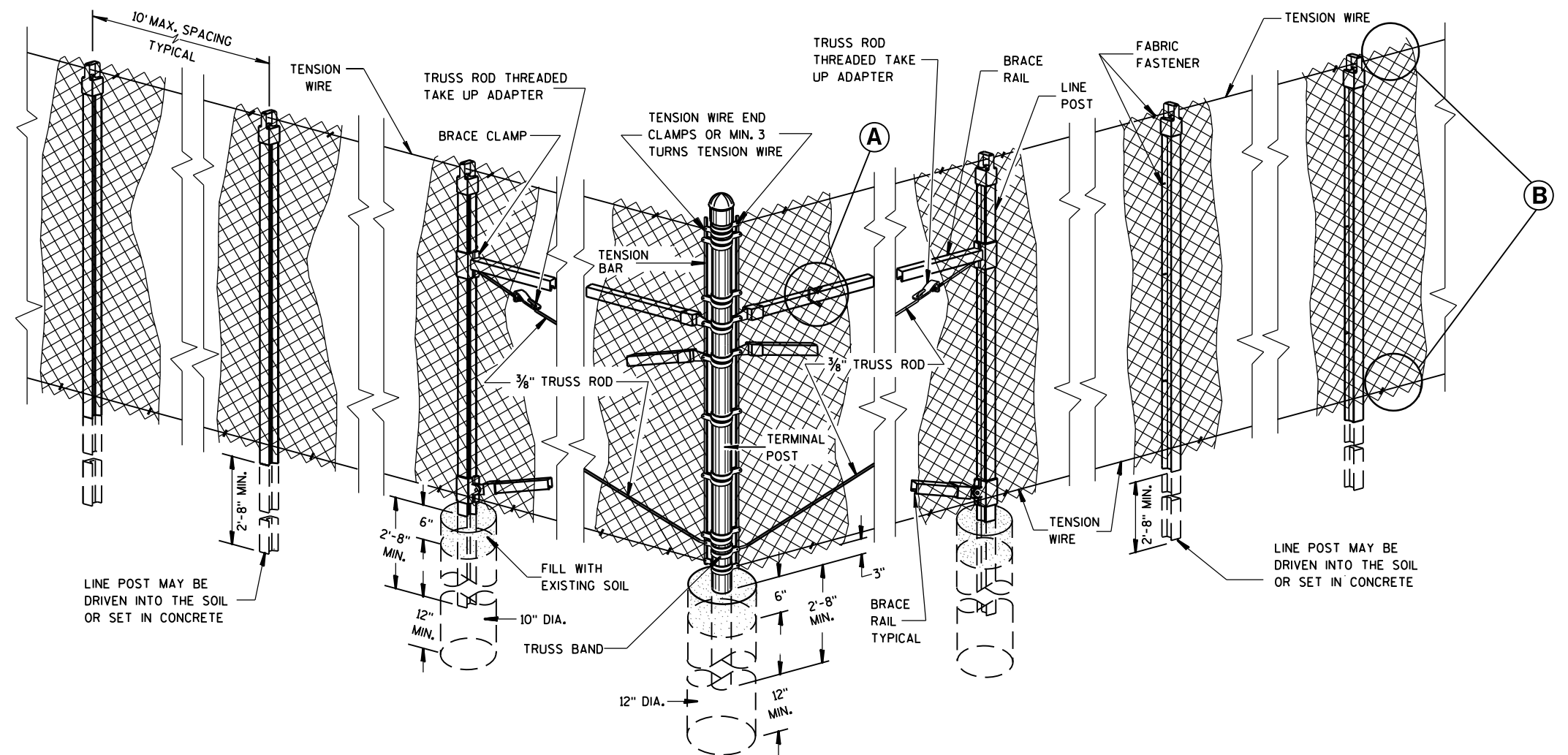
(A)



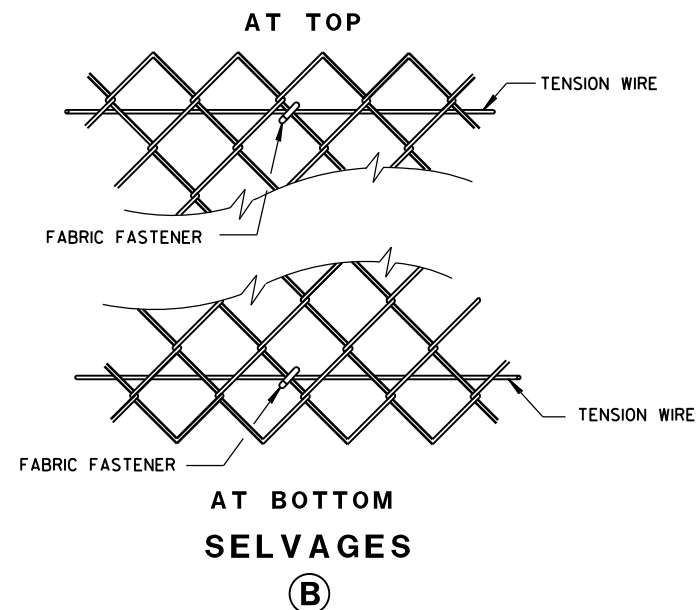
TENSION WIRE END CLAMP



LINE POST FABRIC FASTENER



END, CORNER, ANGLE INTERSECTION & INTERMEDIATE BRACED POSTS

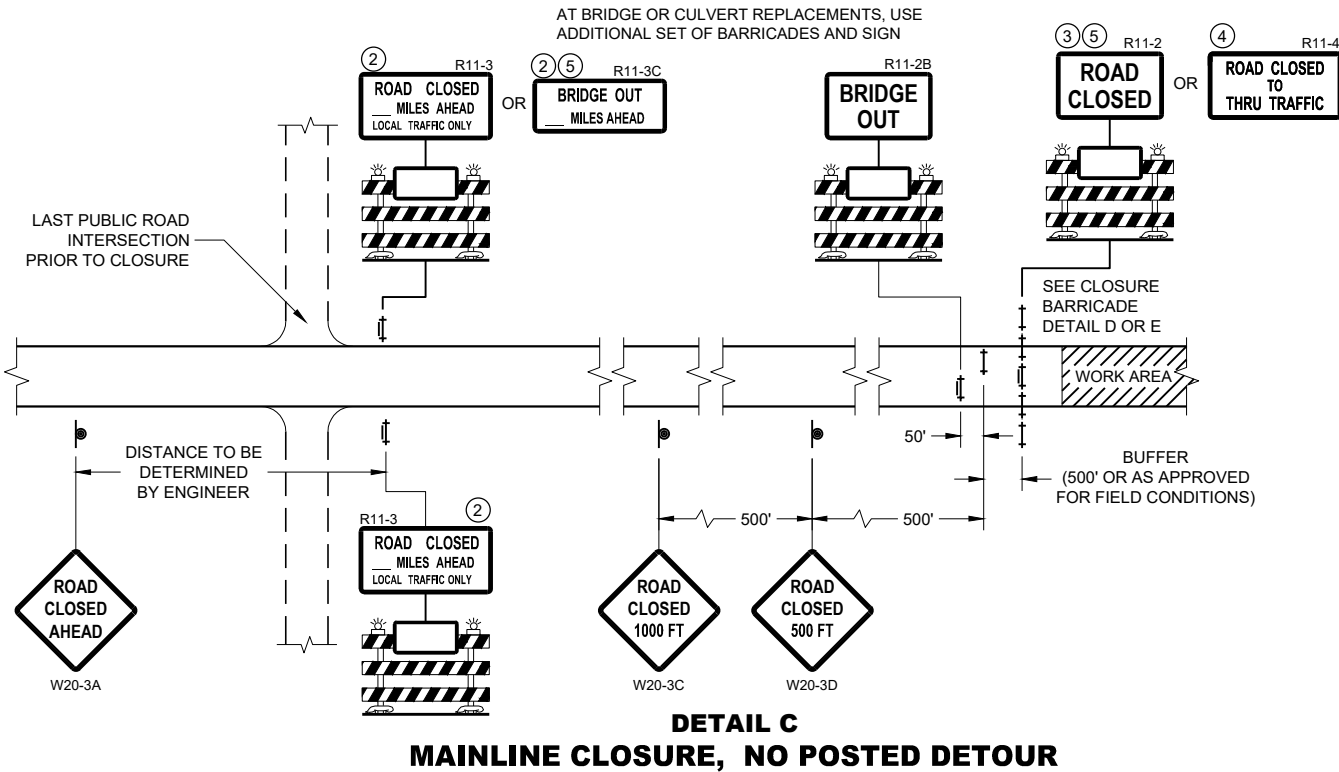
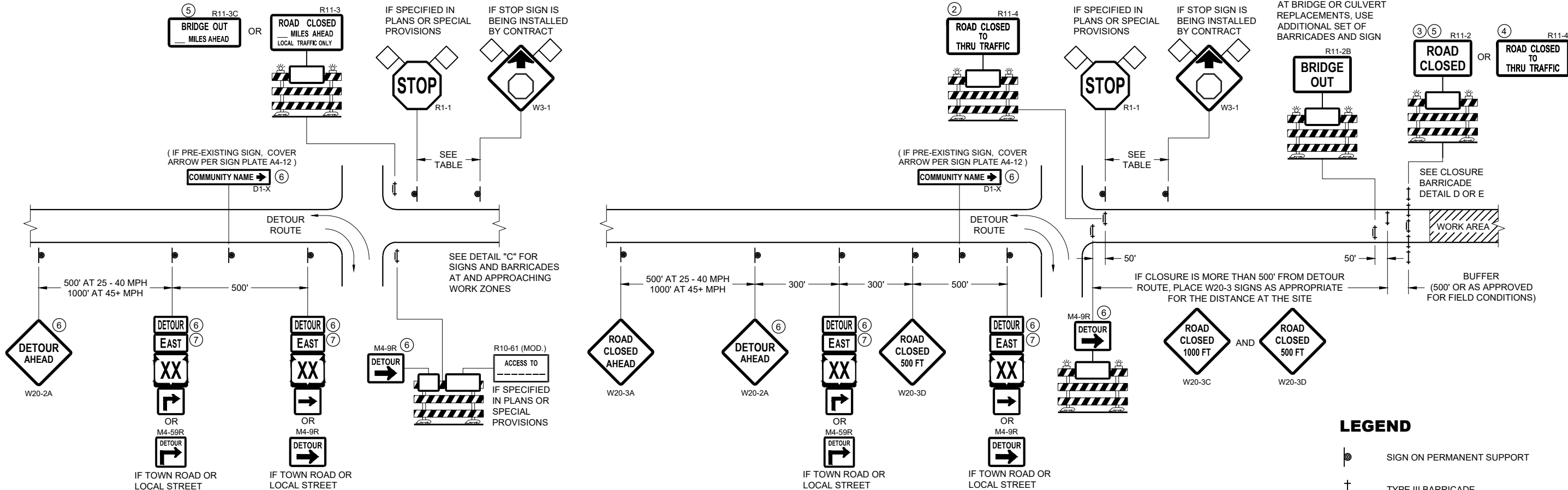


FENCE CHAIN LINK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
FEB. 2015
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

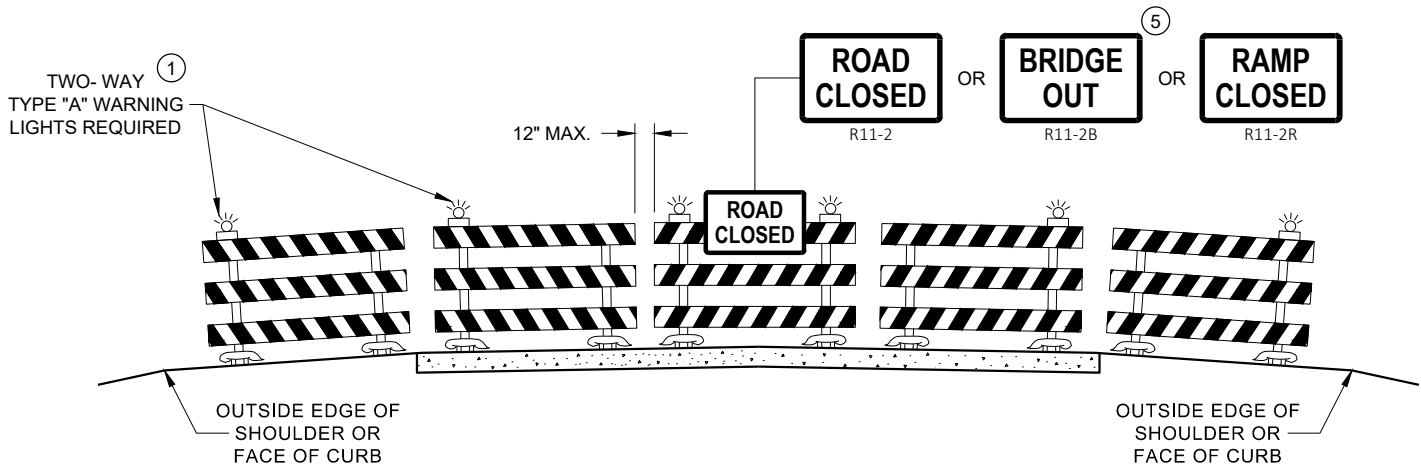


BARRICADES AND SIGNS FOR MAINLINE CLOSURES

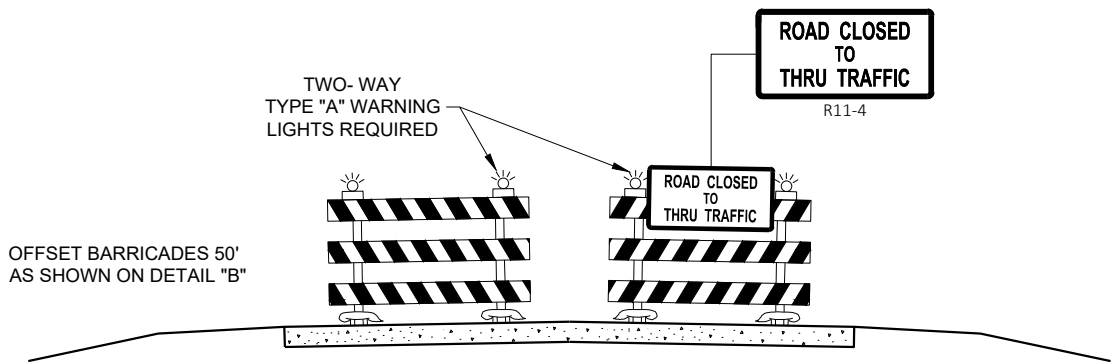
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

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

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

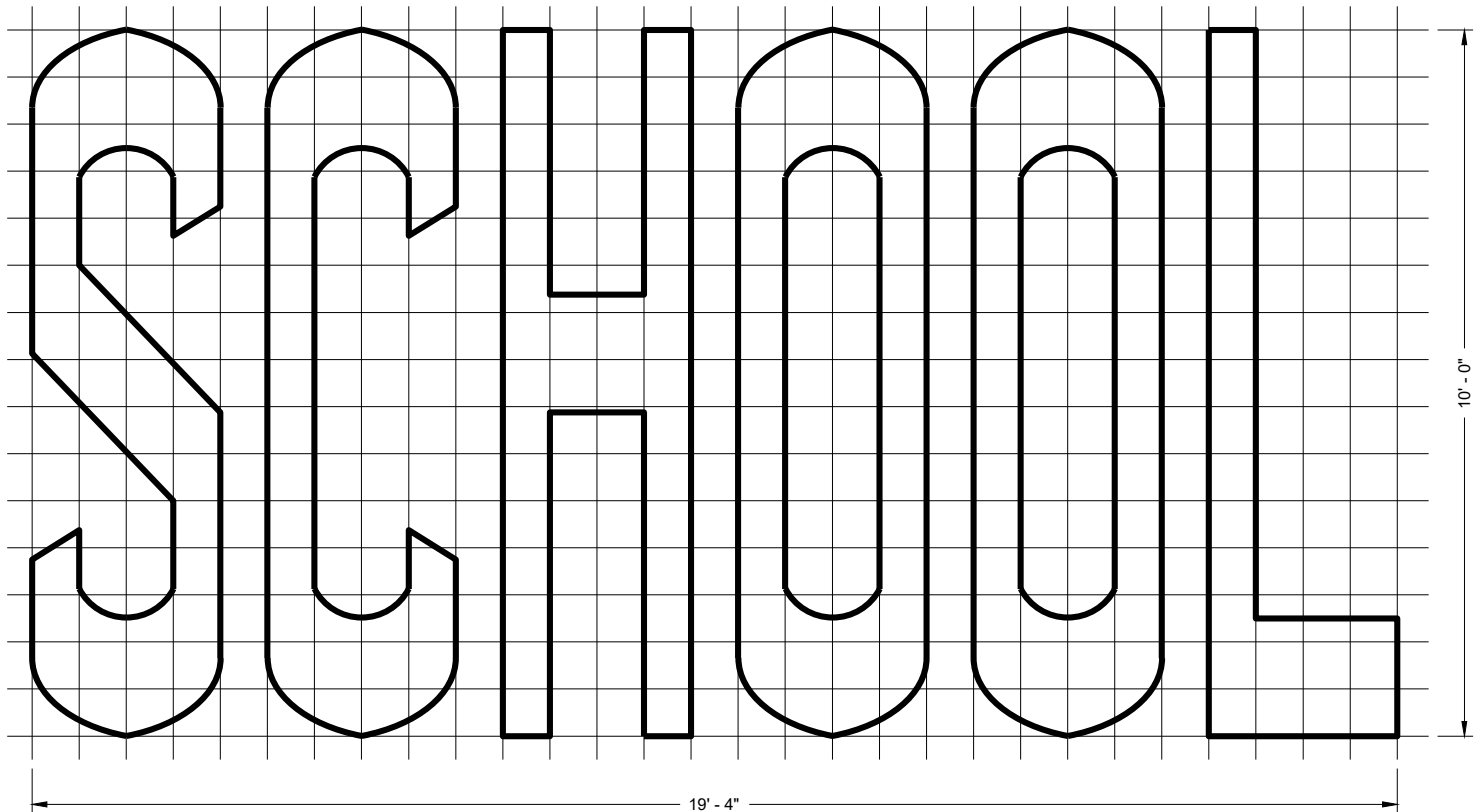
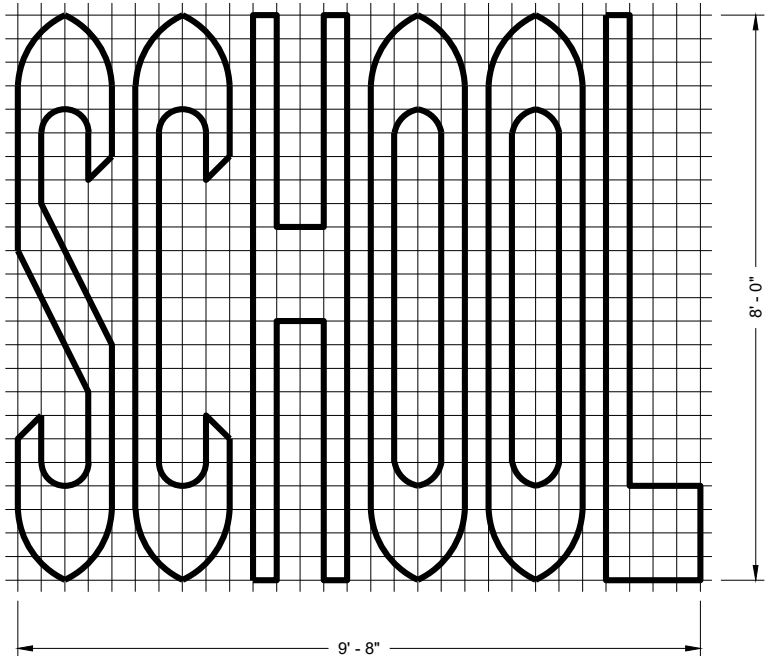
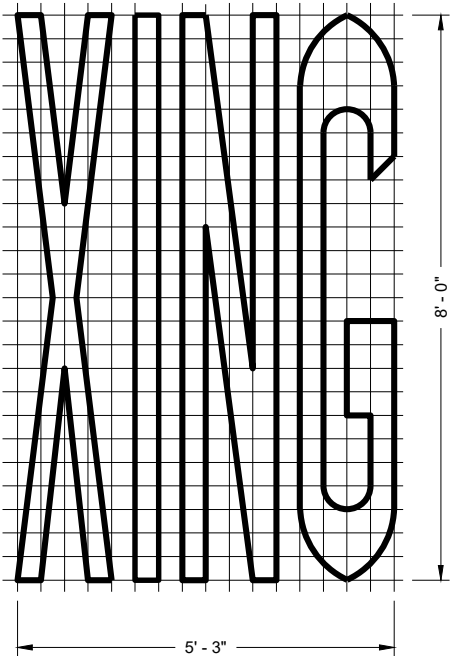
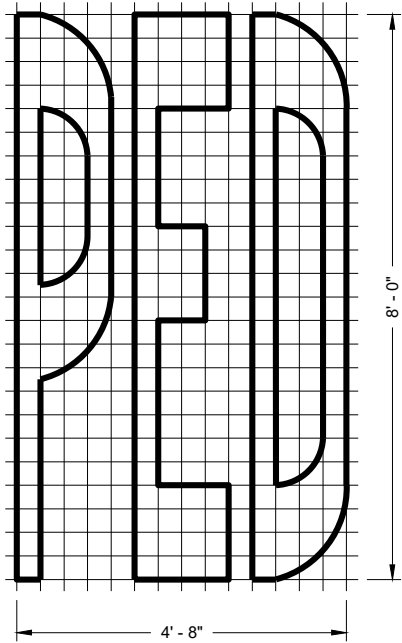
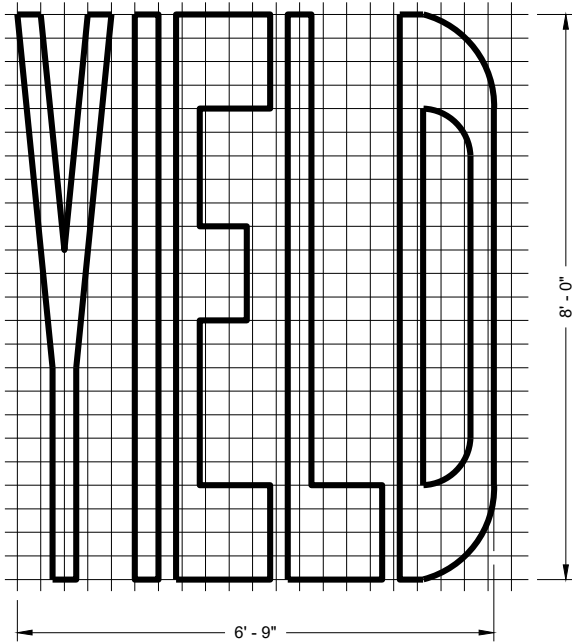
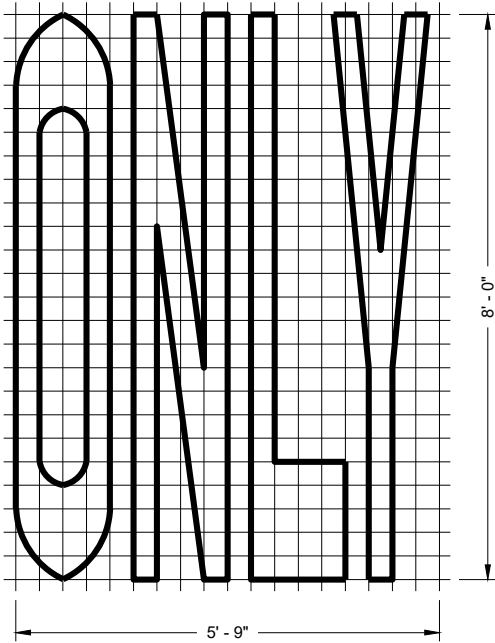
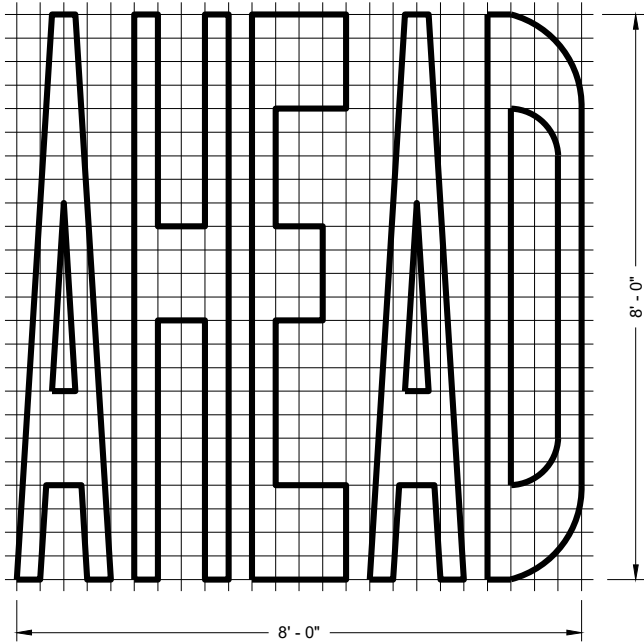
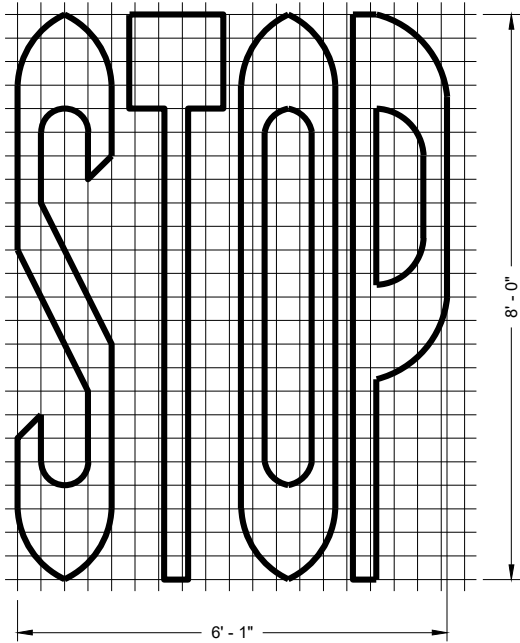
- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- 2 THESE SIGNS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

BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



SINGLE LANE

TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

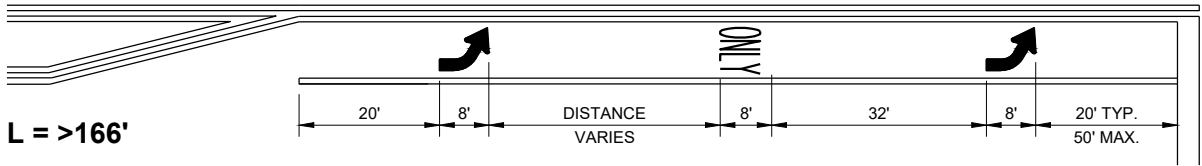
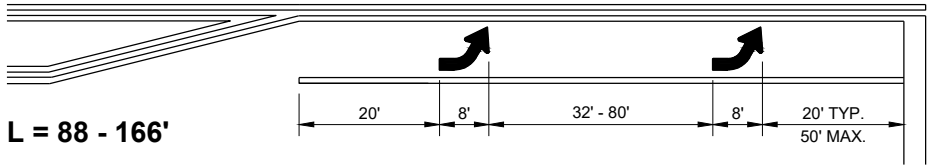
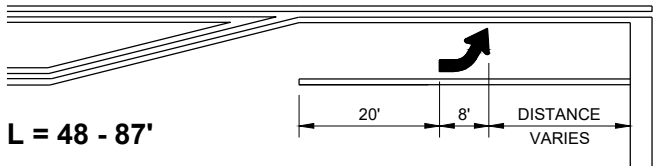
APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

FHWA

TURN LANE OPTIONS

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



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

GENERAL NOTES

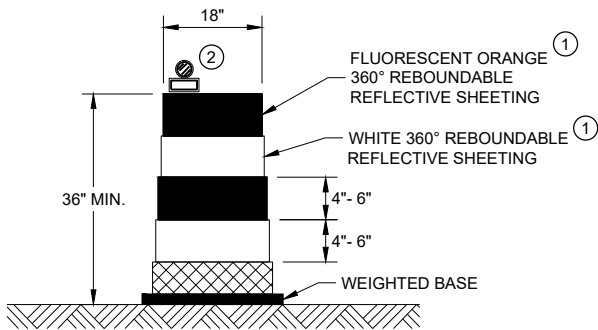
- ① 8" WHITE
- ② QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

➡ DIRECTION OF TRAFFIC

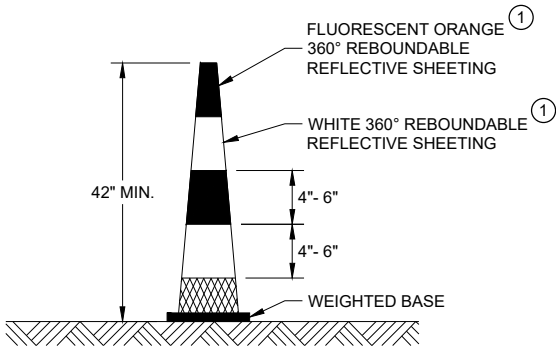
L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

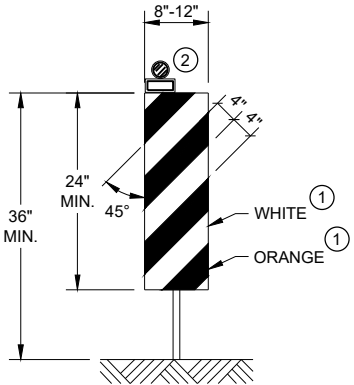


DRUM



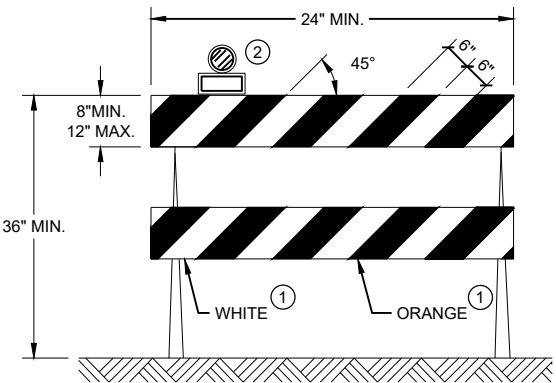
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



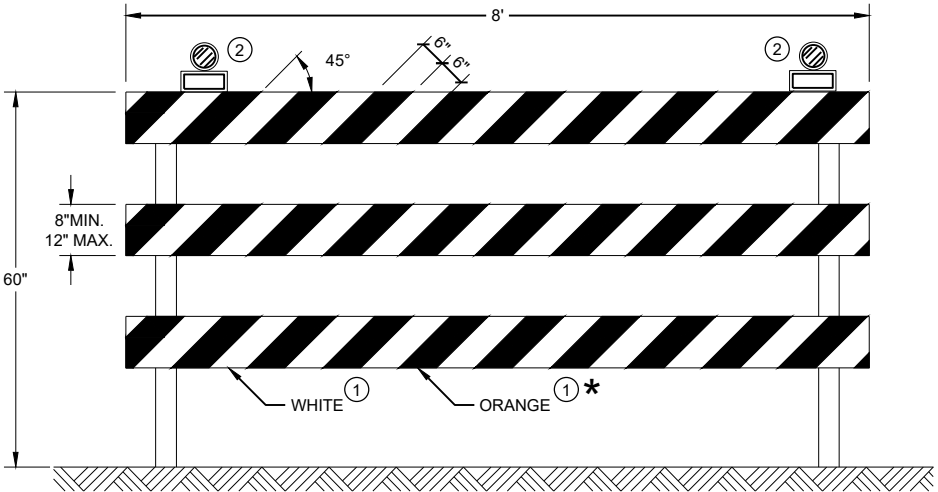
VERTICAL PANEL

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.

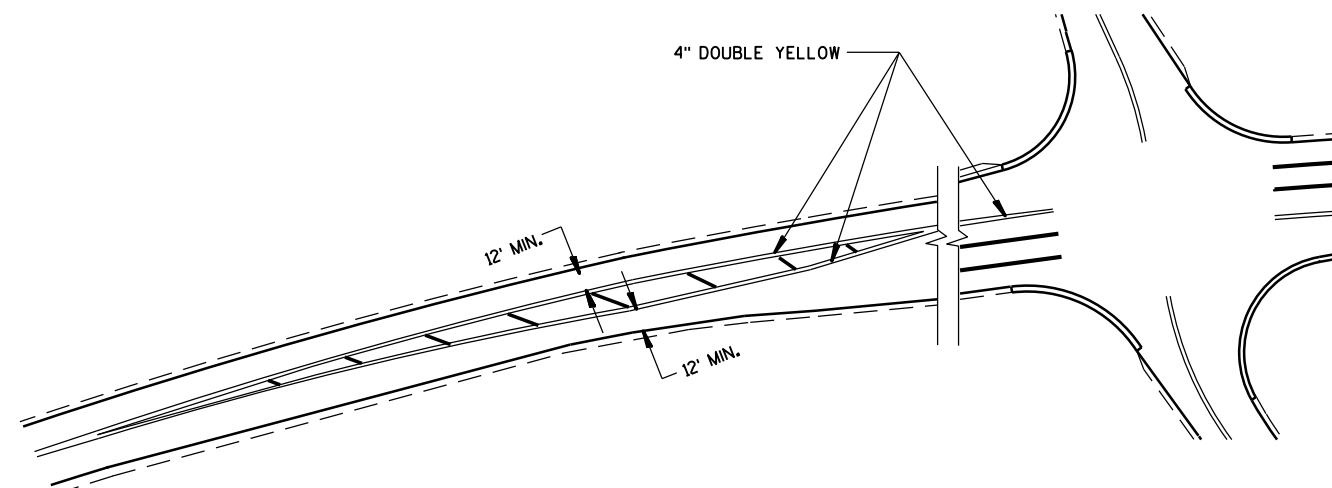
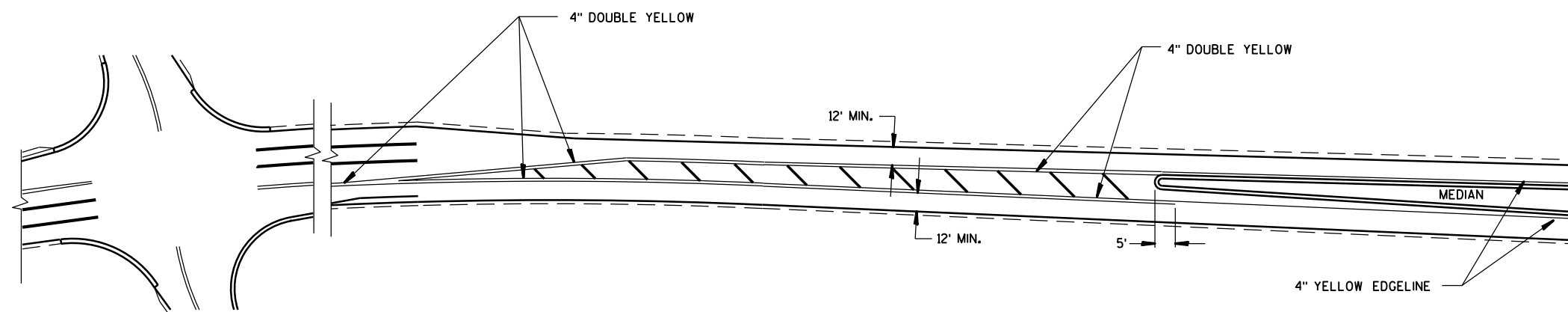
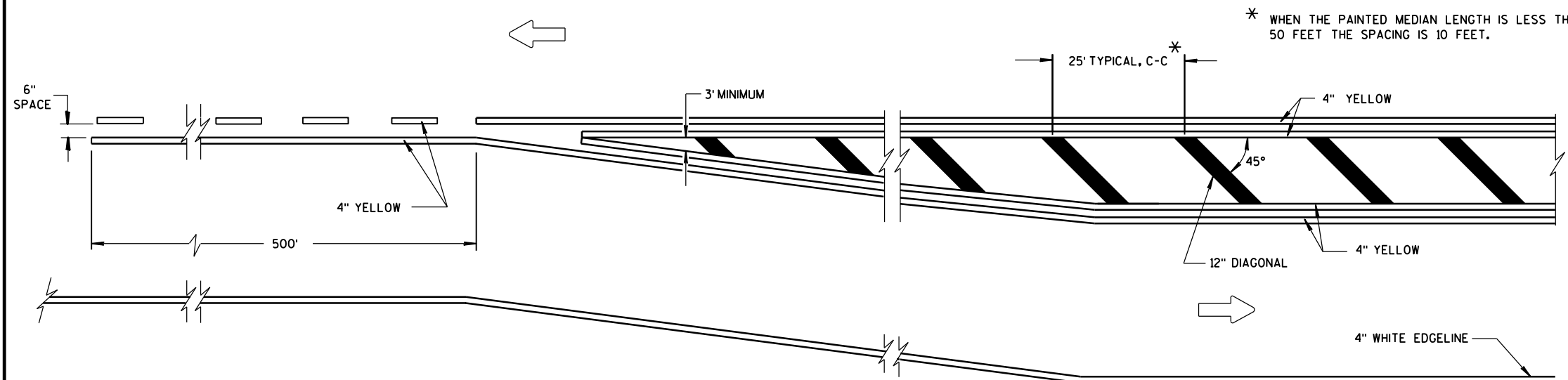
GENERAL NOTES

- 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.

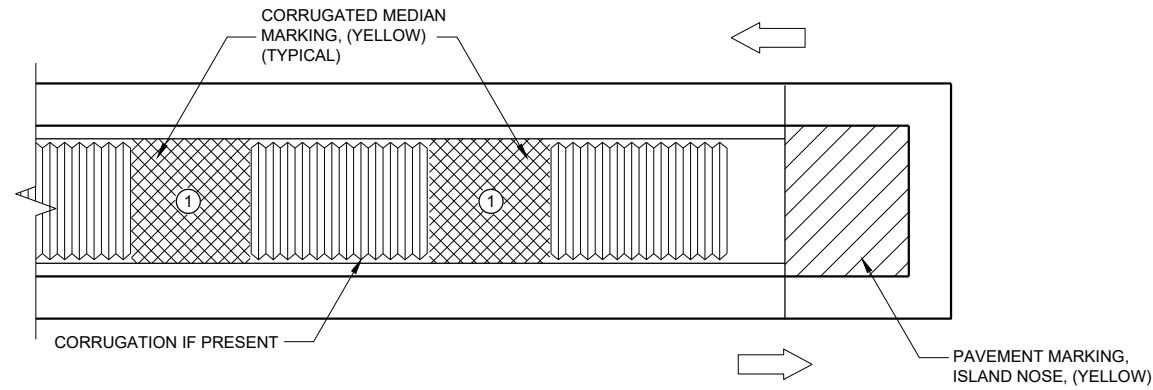
CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

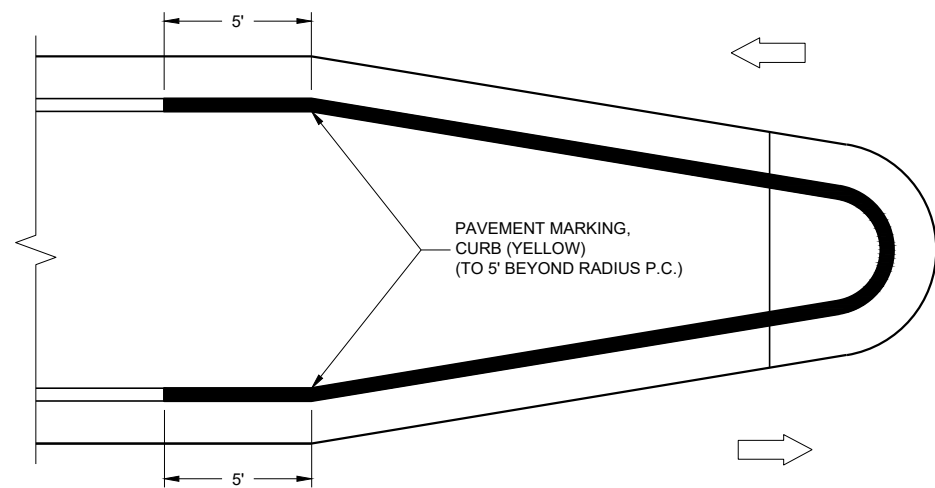
APPROVED
November 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



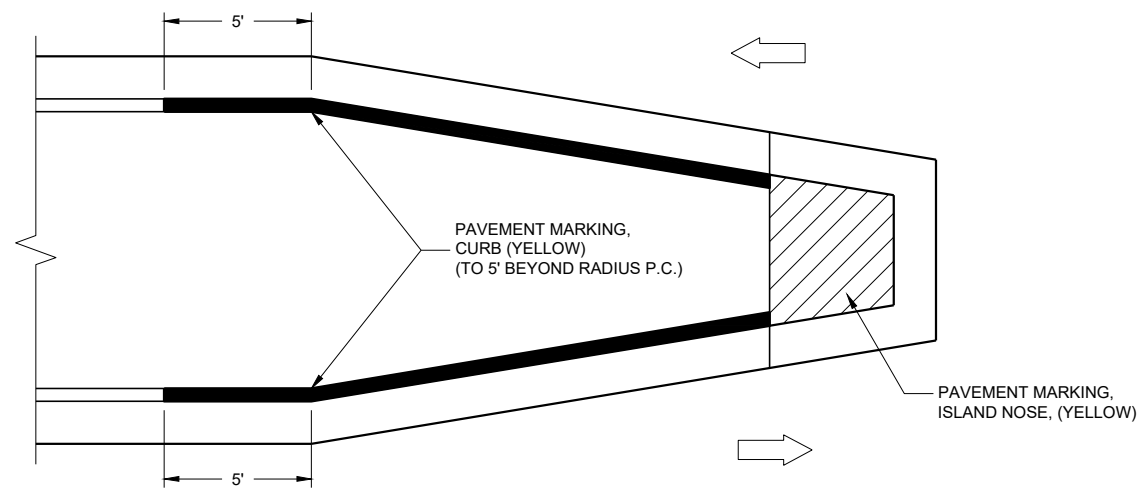
<p>MEDIAN ISLAND MARKING</p>	
<p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p>	
<p>APPROVED June 2017 DATE</p>	<p><u>/s/ Matthew Rauch</u> STATE SIGNING AND MARKING ENGINEER</p>
<p>FHWA</p>	



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

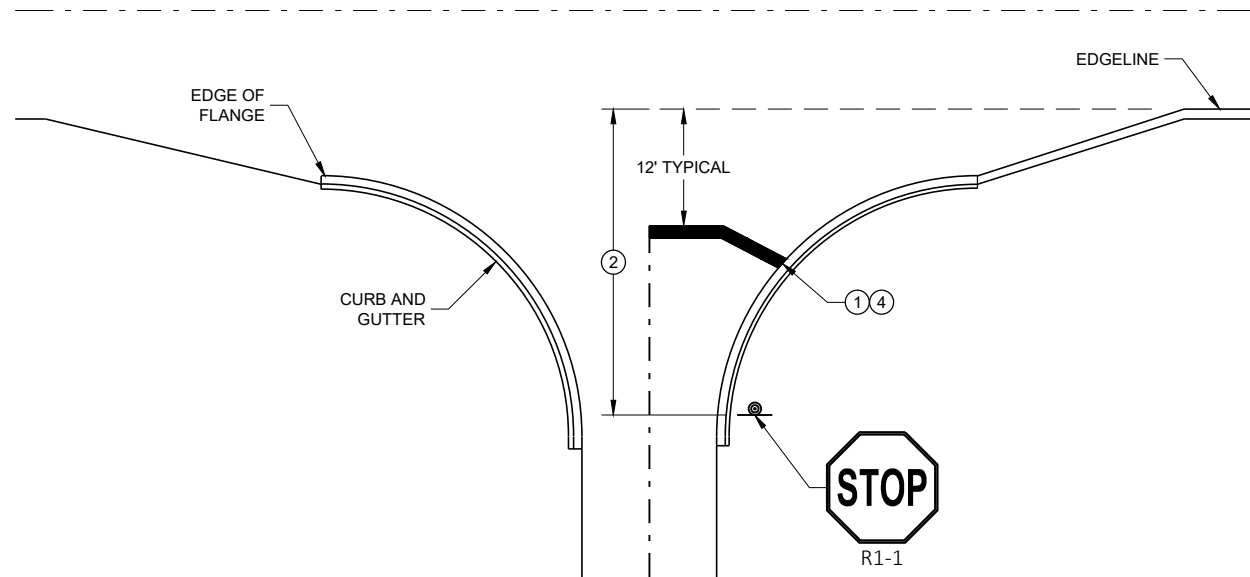
**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

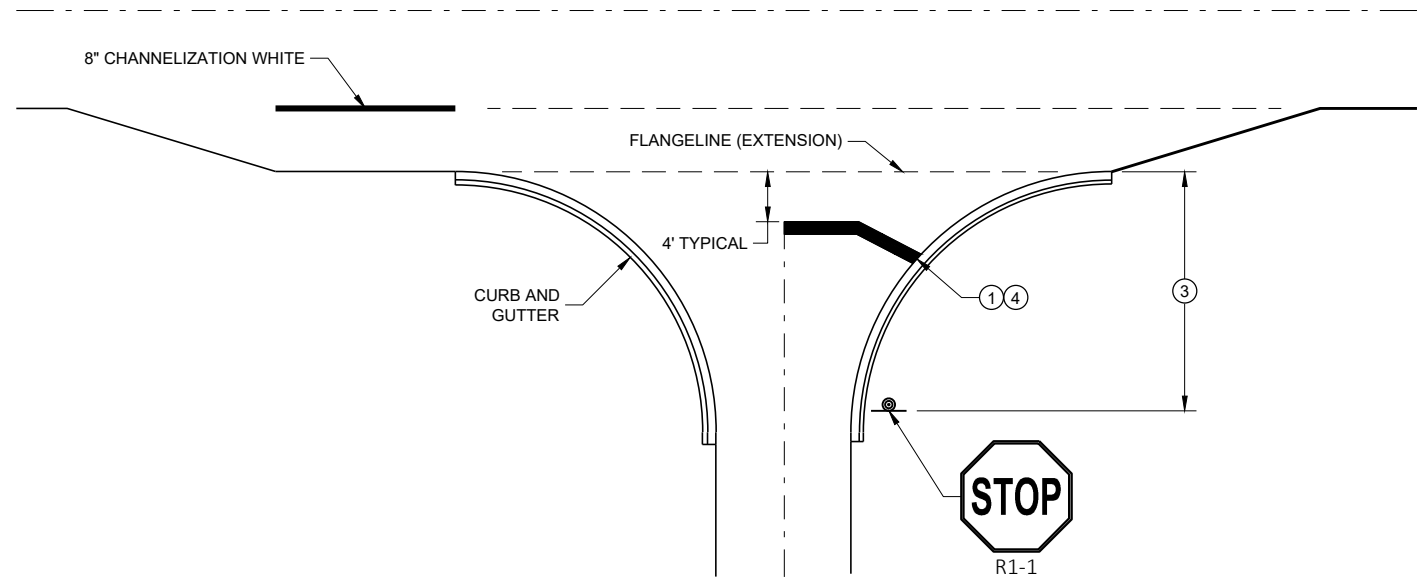
WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE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

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

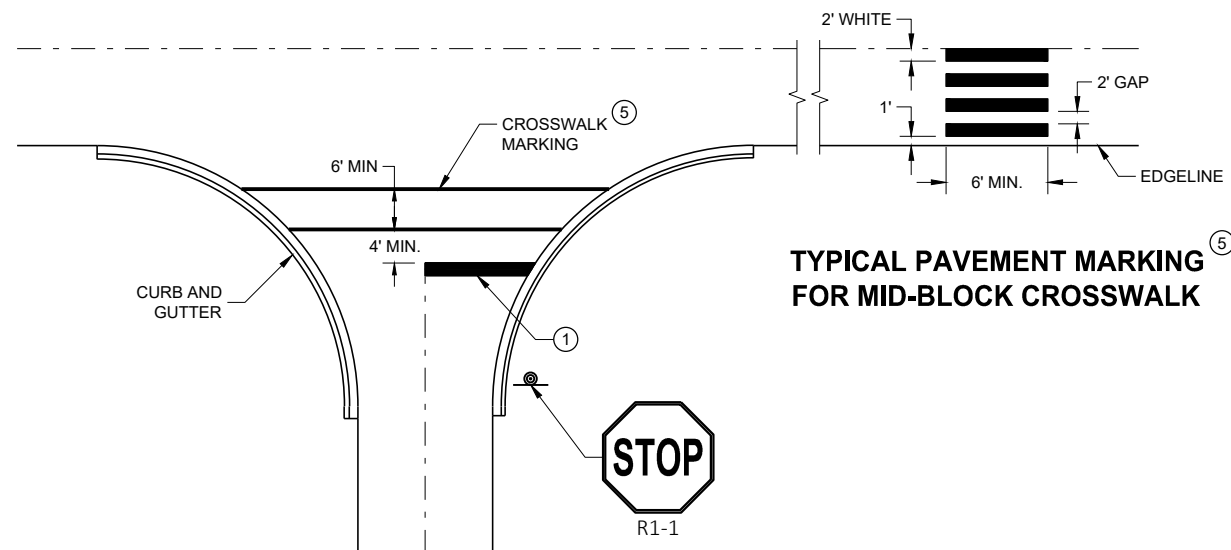
PAVEMENT MARKINGS, MEDIAN ISLAND NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED February 2021 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	



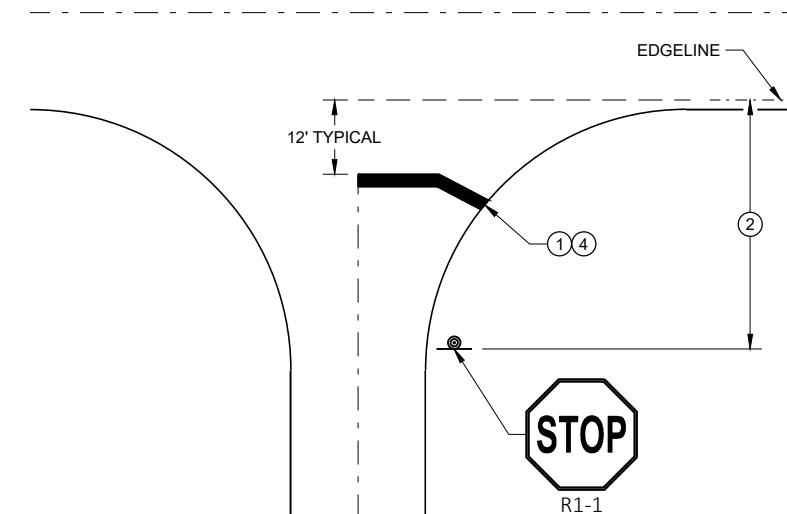
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR
SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

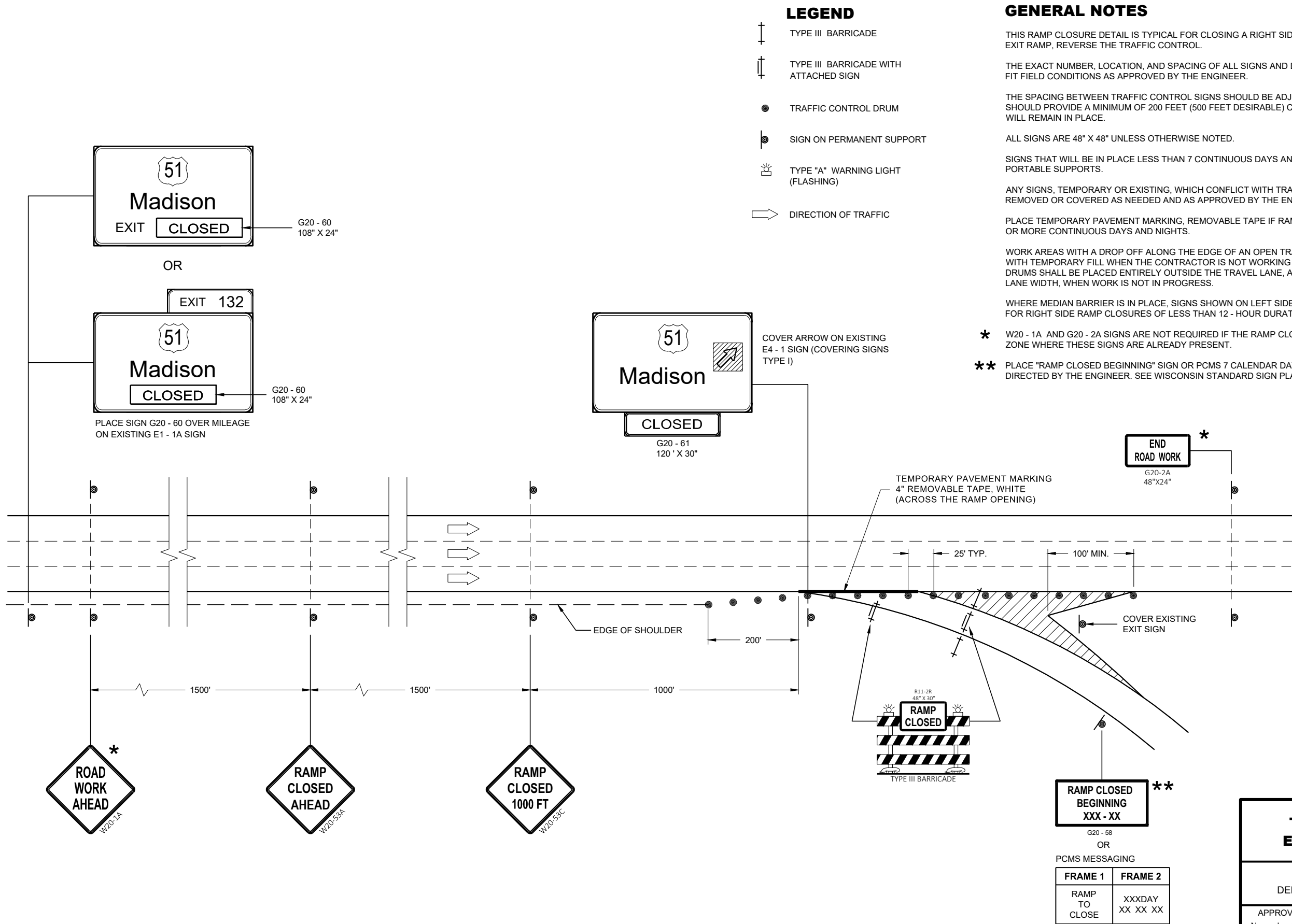
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE LOCATION.

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

STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MARKING
ENGINEER
FHWA



LEGEND

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

GENERAL NOTES

- THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- THE SPACING BETWEEN 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.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- 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.
- PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.
- WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.
- WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.
- * W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.
- ** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

TRAFFIC CONTROL, EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE /S/ Andrew Heidtke
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT SHOULDER. FOR CLOSING THE LEFT SHOULDER, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

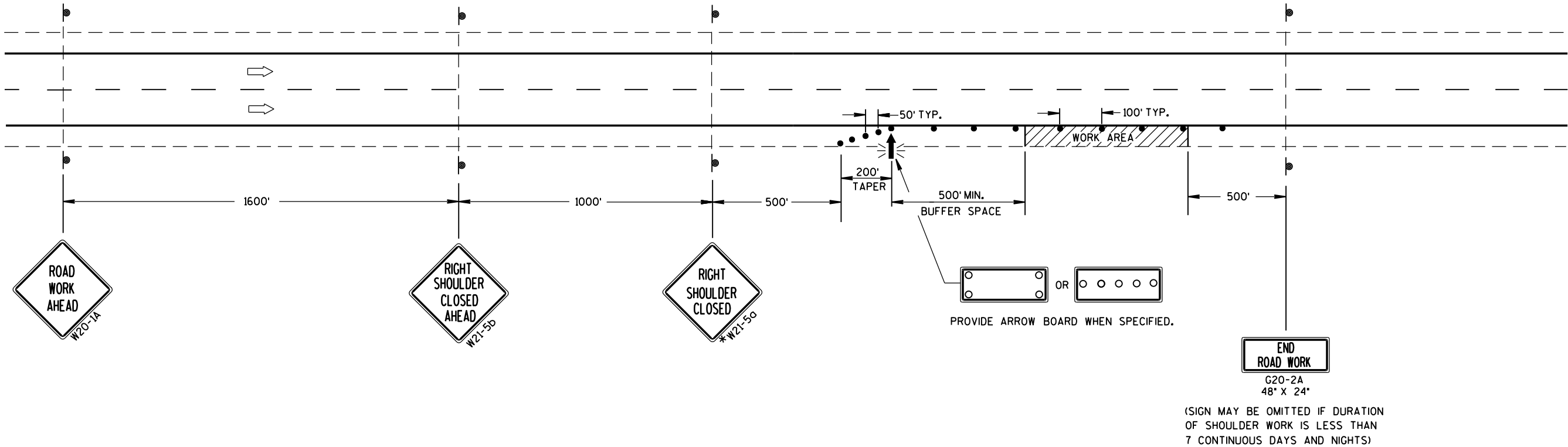
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

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

WHEN A 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.

*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL
SHOULDER CLOSURE ON DIVIDED
ROADWAY, SPEEDS GREATER
THAN 40 MPH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

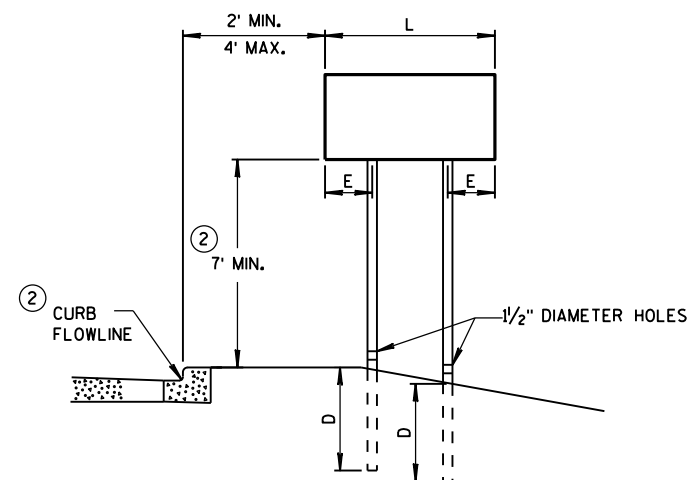
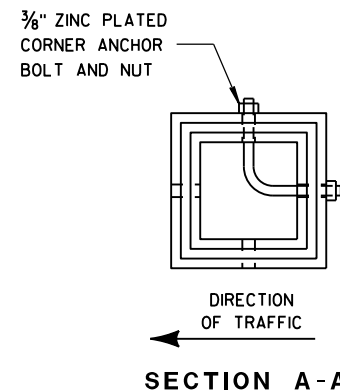


DETAIL OF TUBULAR
STEEL SIGN POST

TUBULAR STEEL POSTS

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

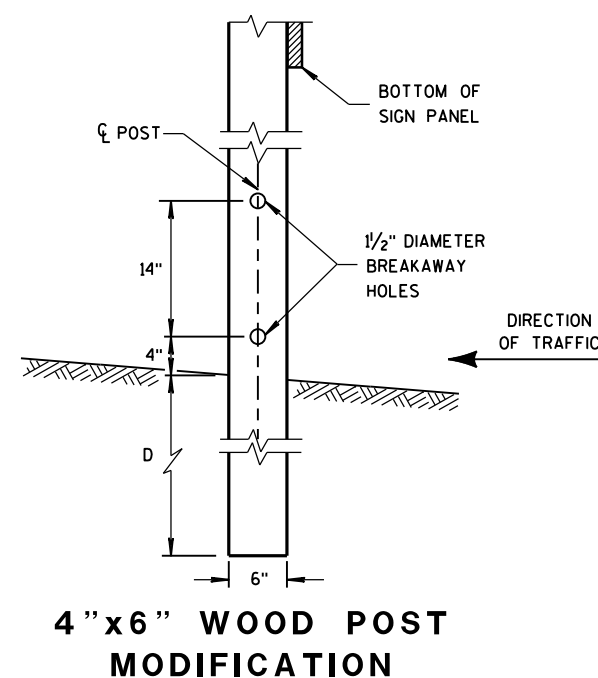
SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL
BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).
SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED
ON TUBULAR STEEL POSTS.



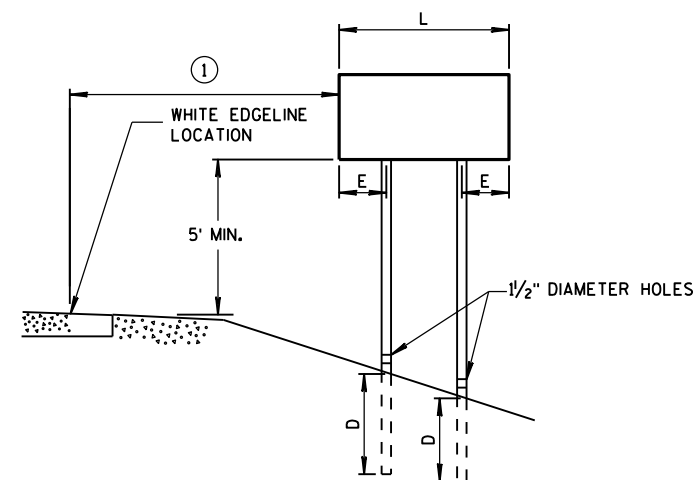
URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

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



4 "x6 " WOOD POST
MODIFICATION



RURAL AREA

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

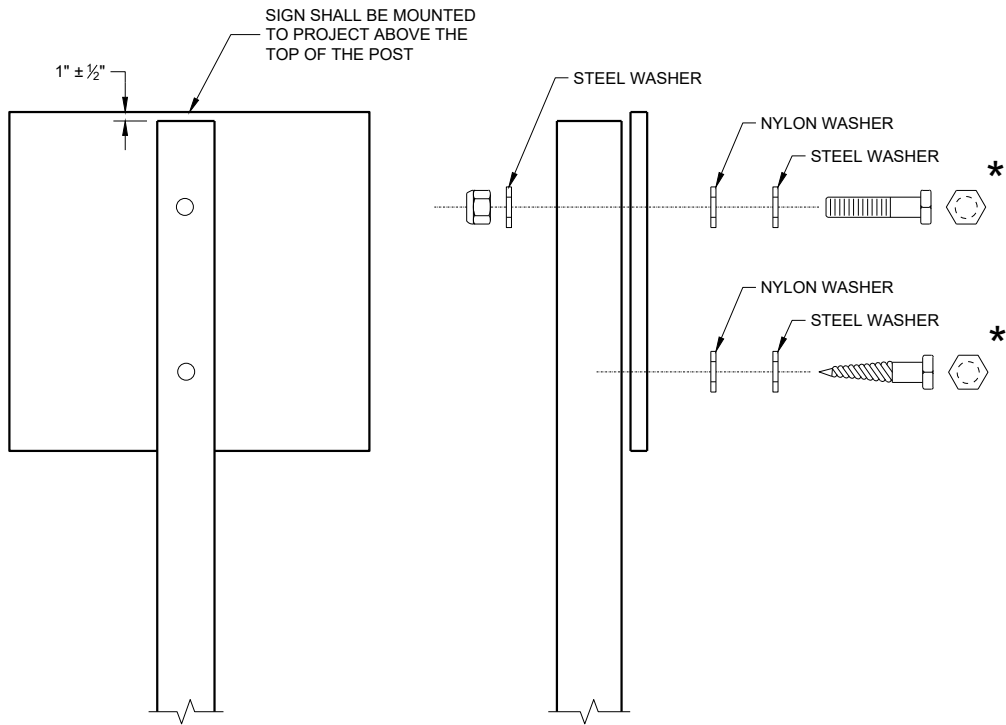
SEE NOTE ③

GENERAL NOTES

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

TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

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

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

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

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - 3/8" x 3 1/4" LENGTH W/NUTS
RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM
BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH,
GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 1/4" O.D. x 3/8" I.D. x 1/16" STEEL
1 1/4" O.D. x 3/8" I.D. x 0.080 NYLON

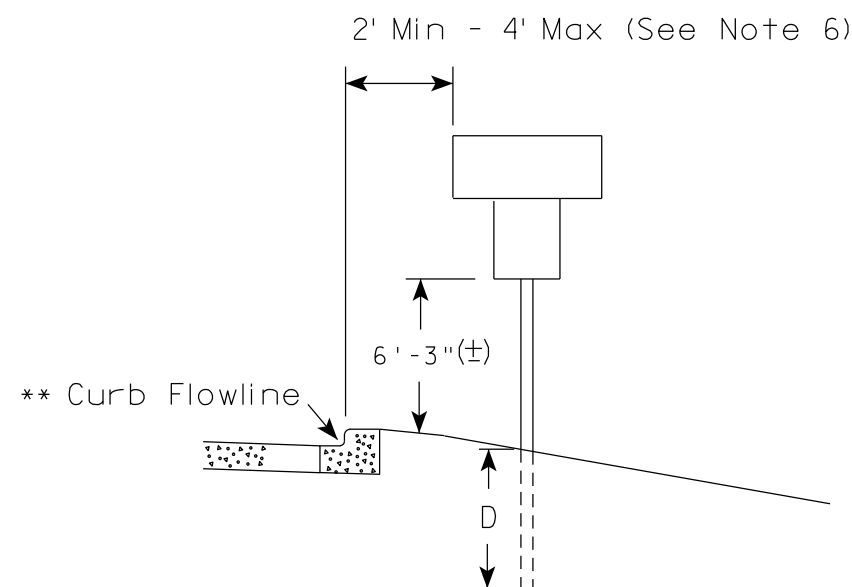
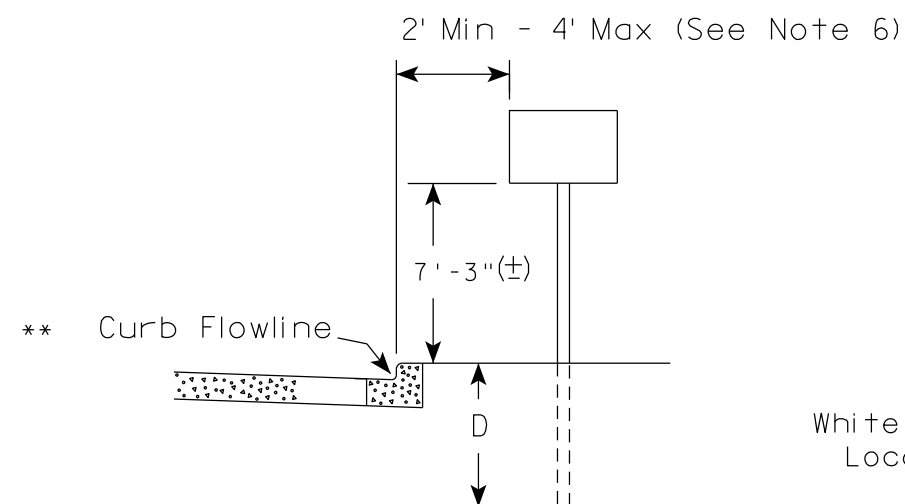
* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION
PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM
SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH
THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER
THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

ATTACHMENT OF SIGNS
TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

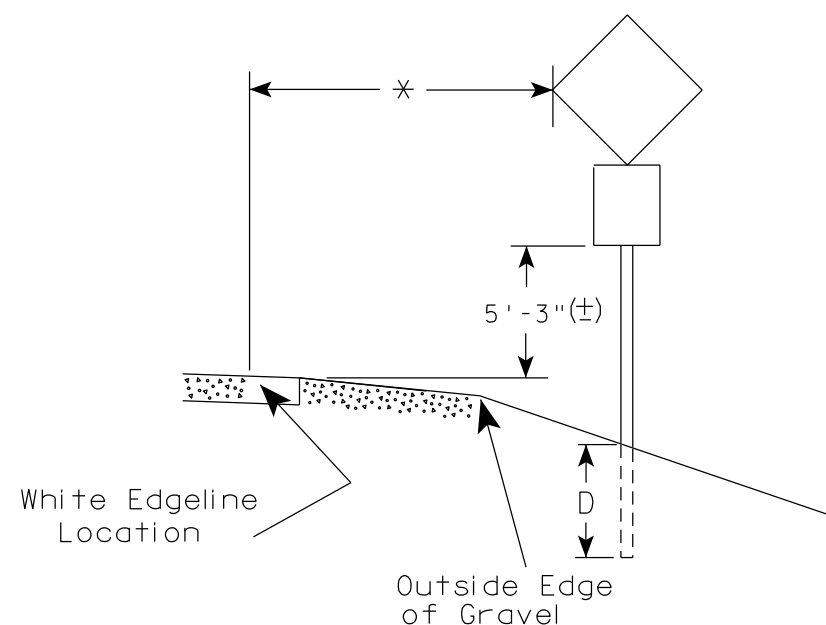
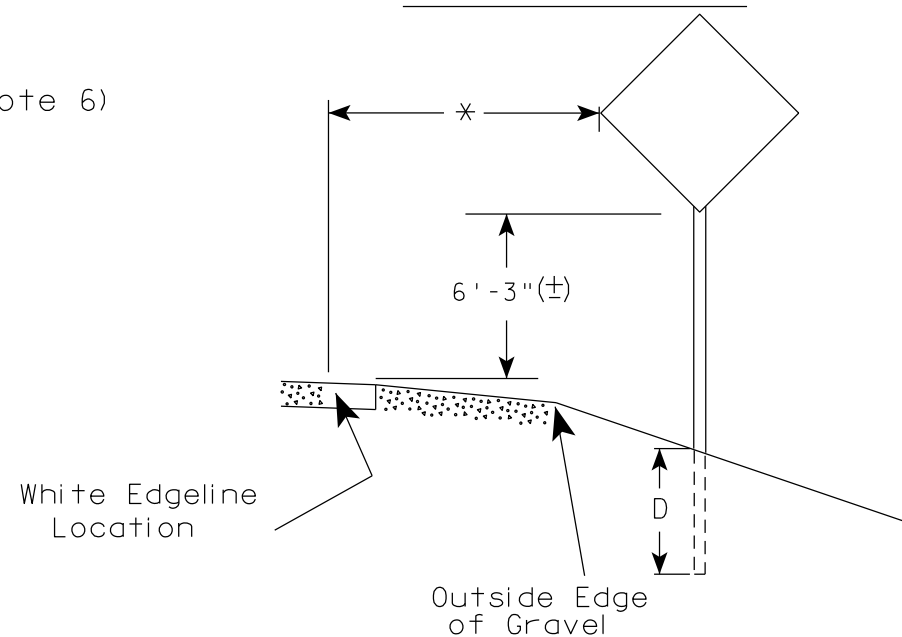
APPROVED
June 2017 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA

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

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as 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 5/13/2020 PLATE NO. A4-3.22

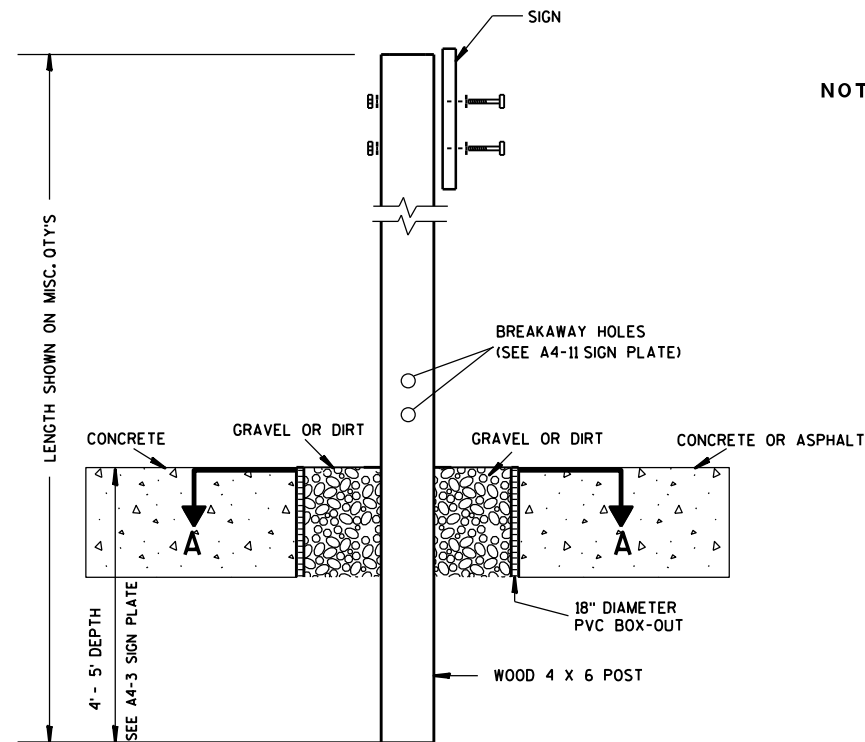
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

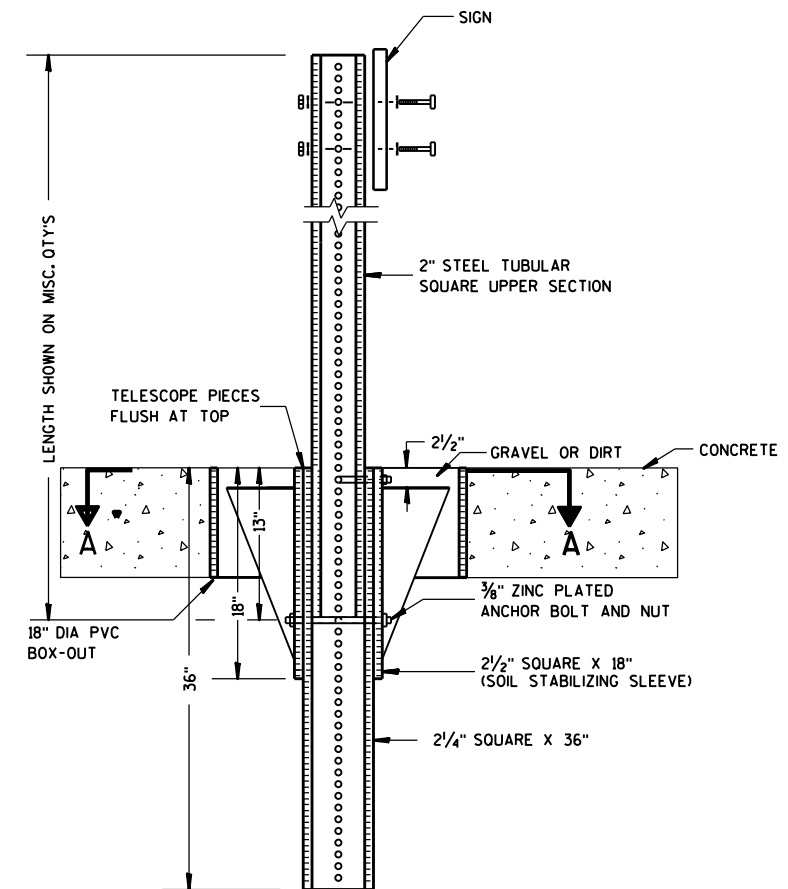
E



ELEVATION VIEW

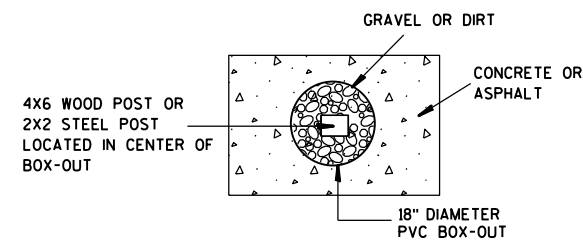
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

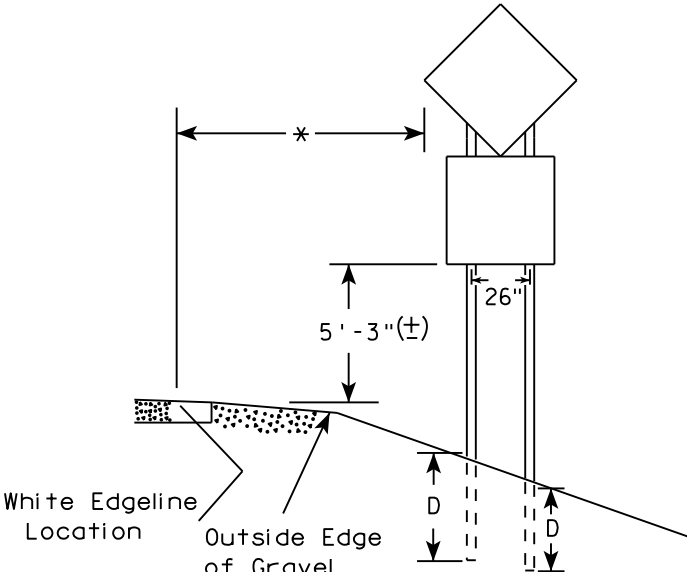
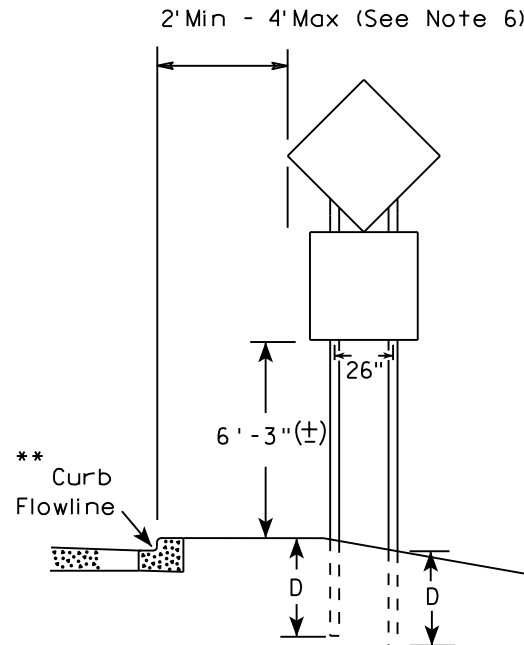
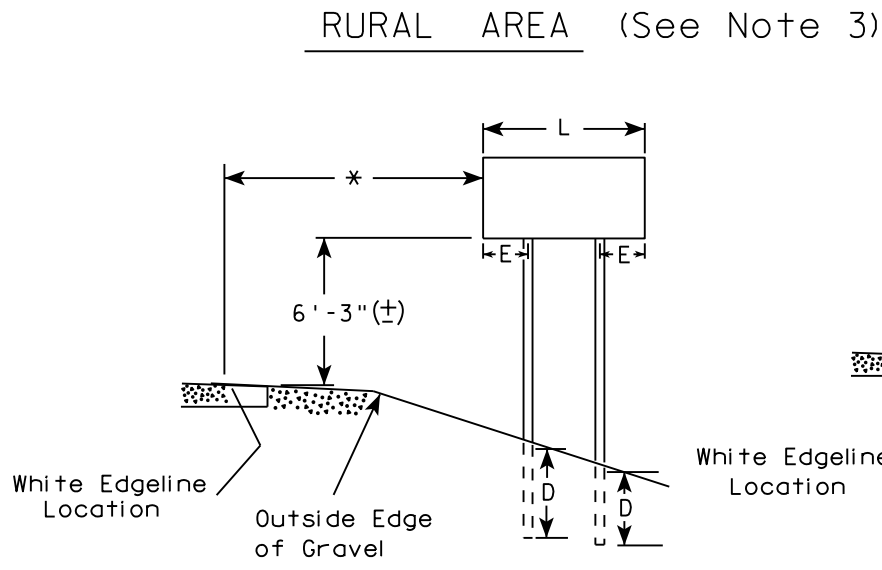
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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

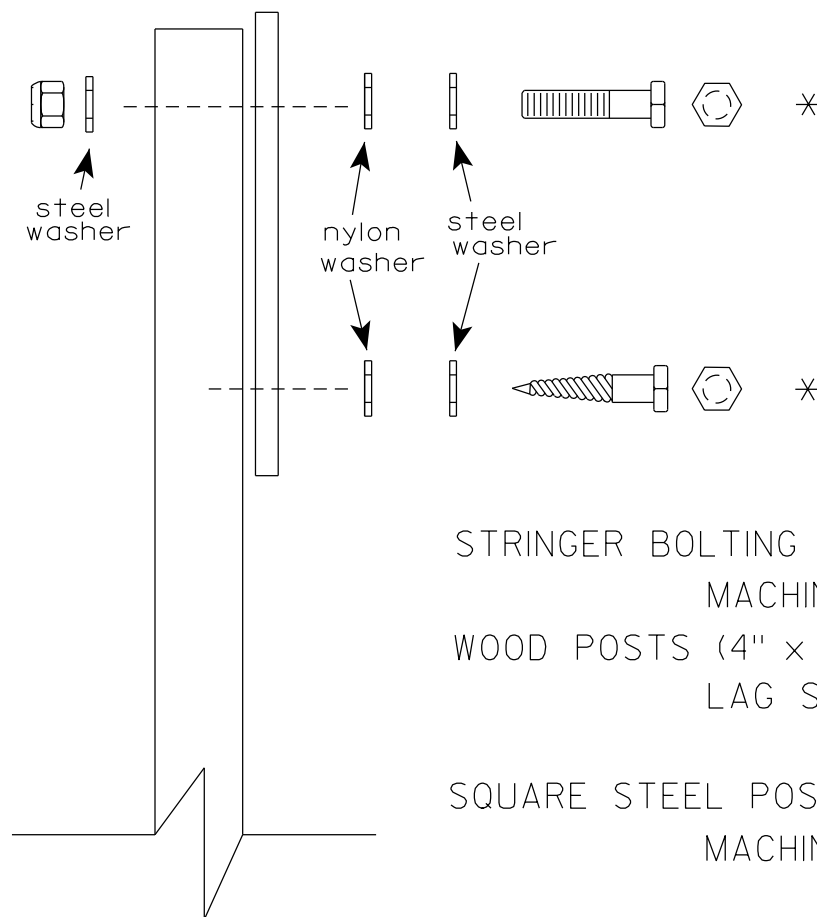
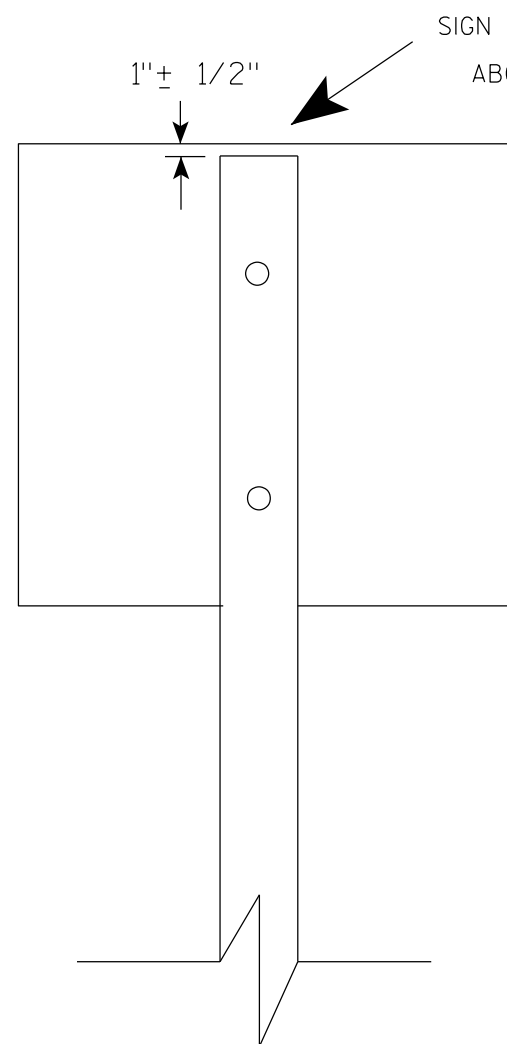
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

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

- * 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.
- ** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.
- *** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.



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.

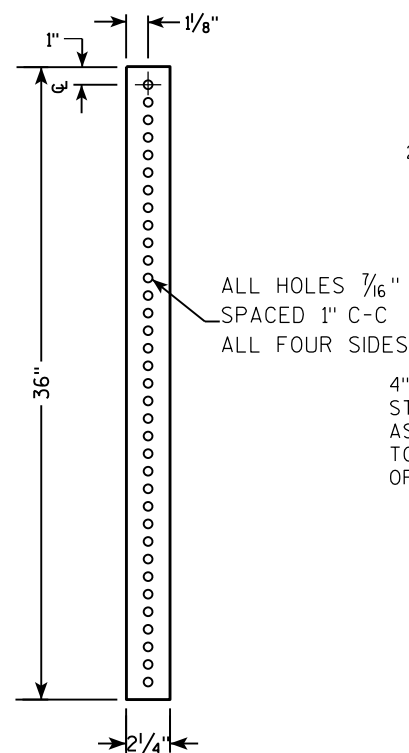
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- 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

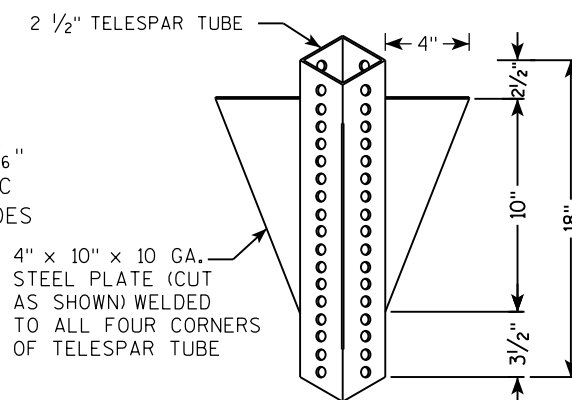
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require 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

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



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

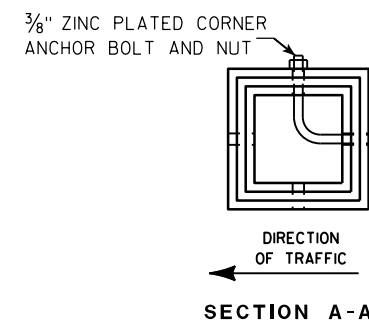


TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY:

- SIGN**: Indicated at the top of the post.
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL**: Reference to sign plate details.
- 2" STEEL TUBULAR SQUARE UPPER SECTION**: The main vertical support.
- ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES**: Specification for the upper section's holes.
- $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT**: Detail of the corner fastener.
- 2 $\frac{1}{2}$ " GRAVEL OR DIRT**: Material filling the base around the anchor bolts.
- 3 $\frac{1}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT**: Detail of the anchor bolt.
- 2 $\frac{1}{2}$ " SQUARE X 18" (SOIL STABILIZING SLEEVE)**: Sleeve around the lower section.
- 2 $\frac{1}{4}$ " SQUARE X 36"**: The lower section of the post.
- TELESCOPE PIECES FLUSH AT TOP**: Note about the connection between sections.
- 18" DIA SCHEDULE 40 PVC BOX-OUT**: The base container for gravel/dirt.
- Dimensions**:
 - Total height: 36"
 - Upper section length: 18"
 - Lower section length: 36"
 - Gravel/dirt layer thickness: 2 $\frac{1}{2}$ "
 - Anchor bolt offset from center: 13"

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY:

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



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch

for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

PROJECT NO:

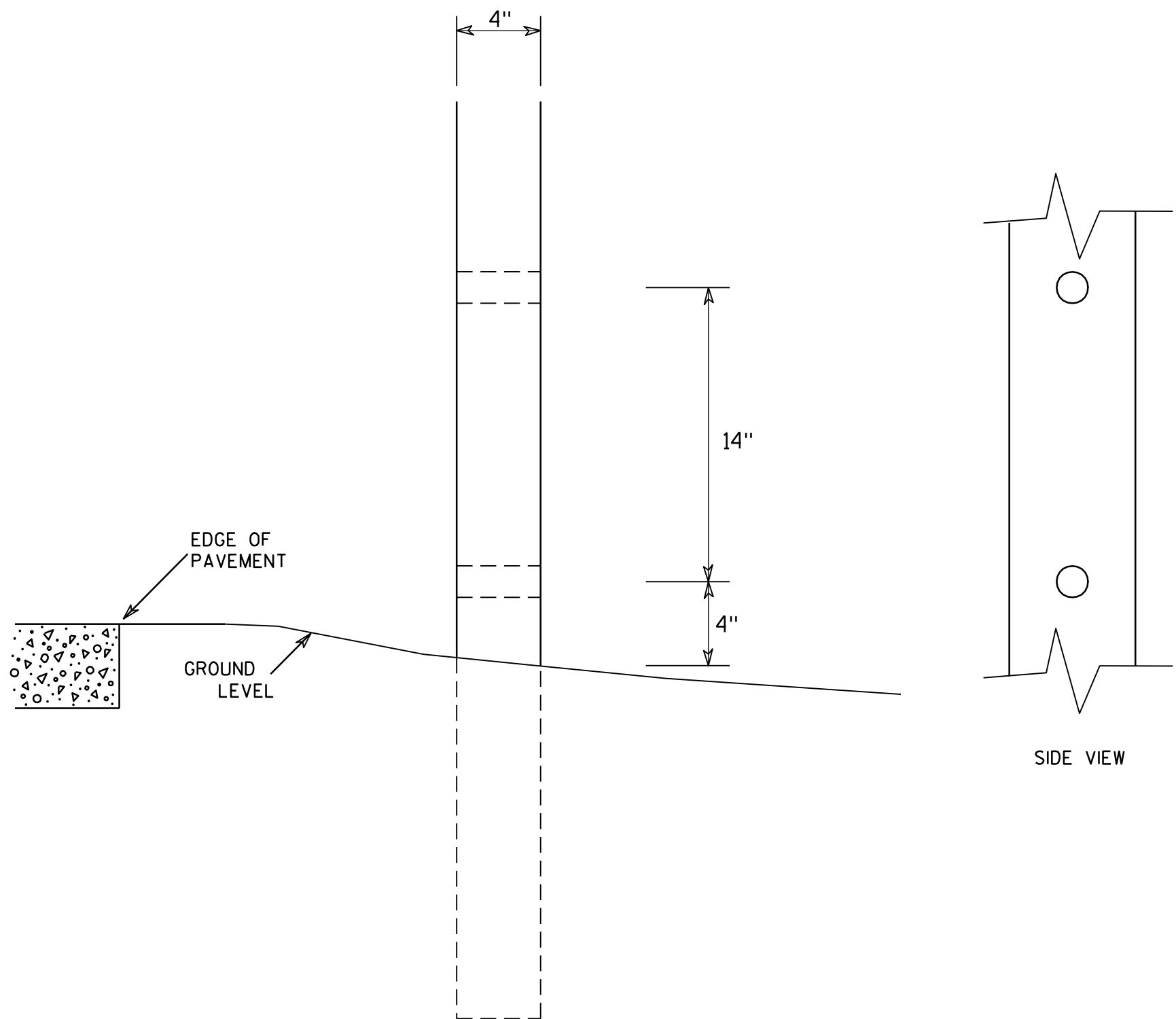
HWY:

COUNTY:

SHEET NO:

T

7



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

4 X 6 WOOD POST
MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

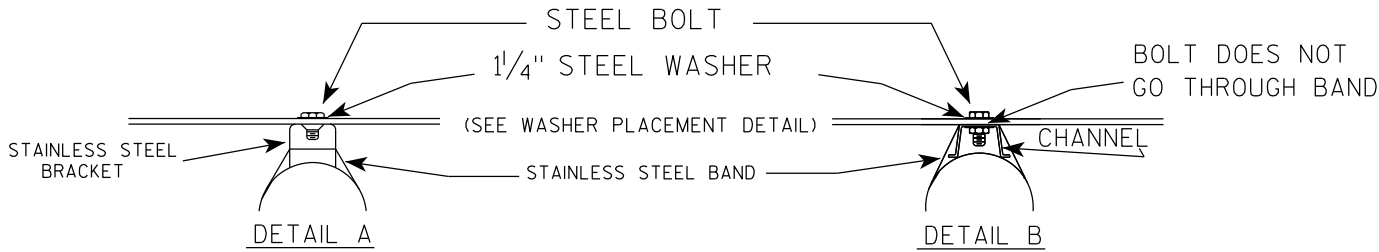
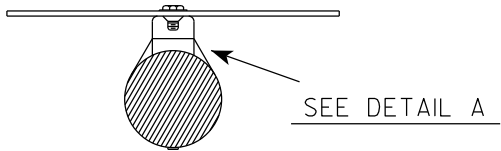
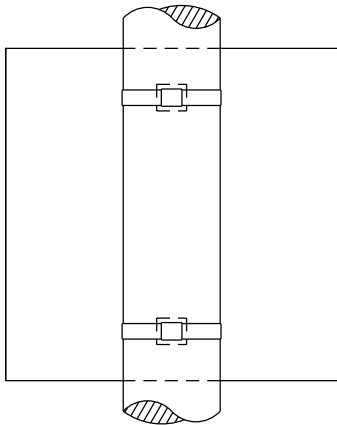
COUNTY:

SHEET NO:

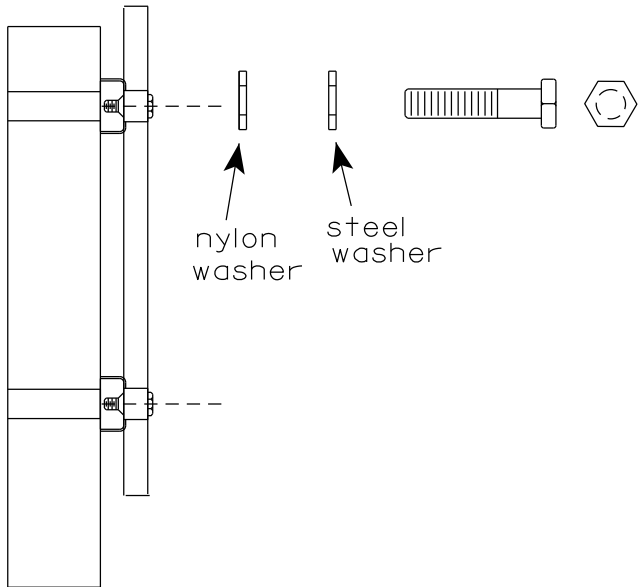
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

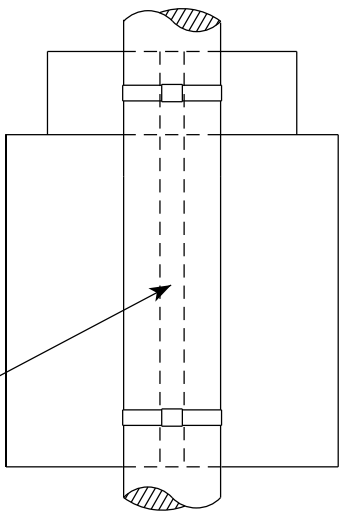


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

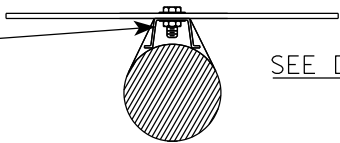
GENERAL NOTES

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



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

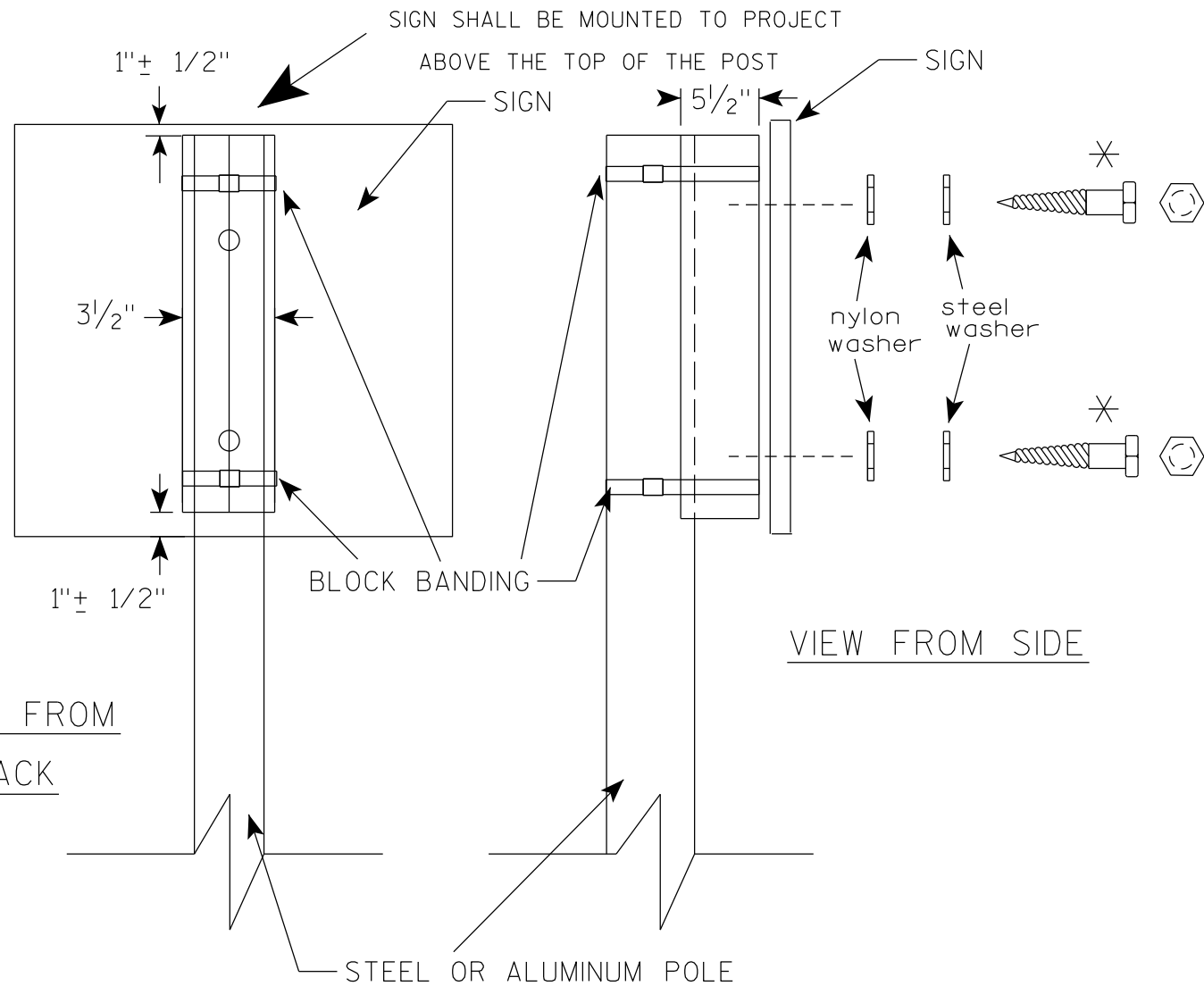


STANDARD SIGN
SIGN BANDING DETAILS

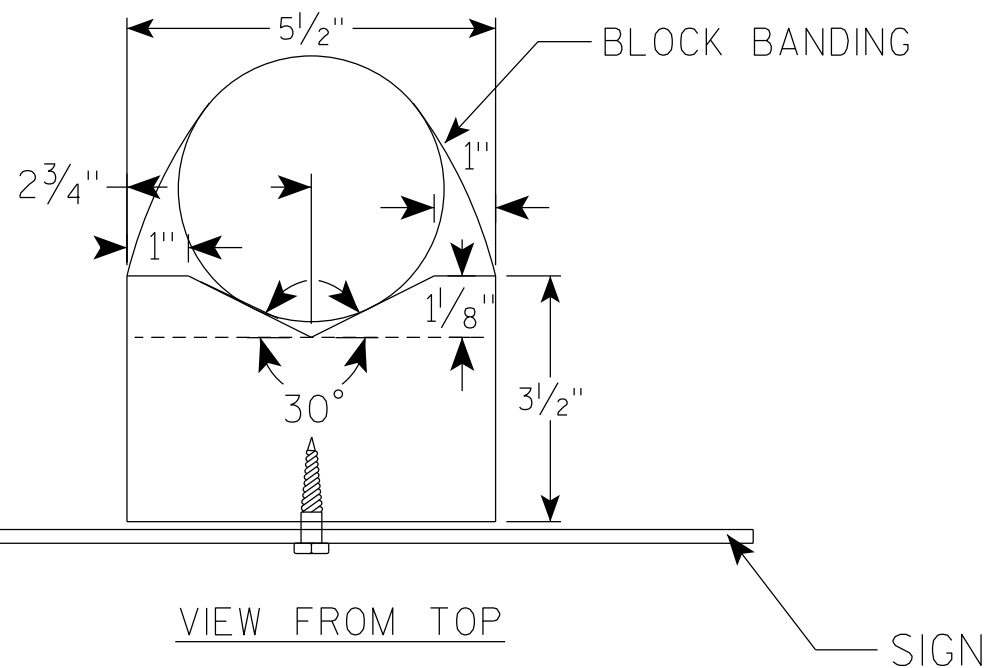
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4

VIEW FROM
BACK



VIEW FROM SIDE



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 $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $1\frac{1}{4}$ " 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

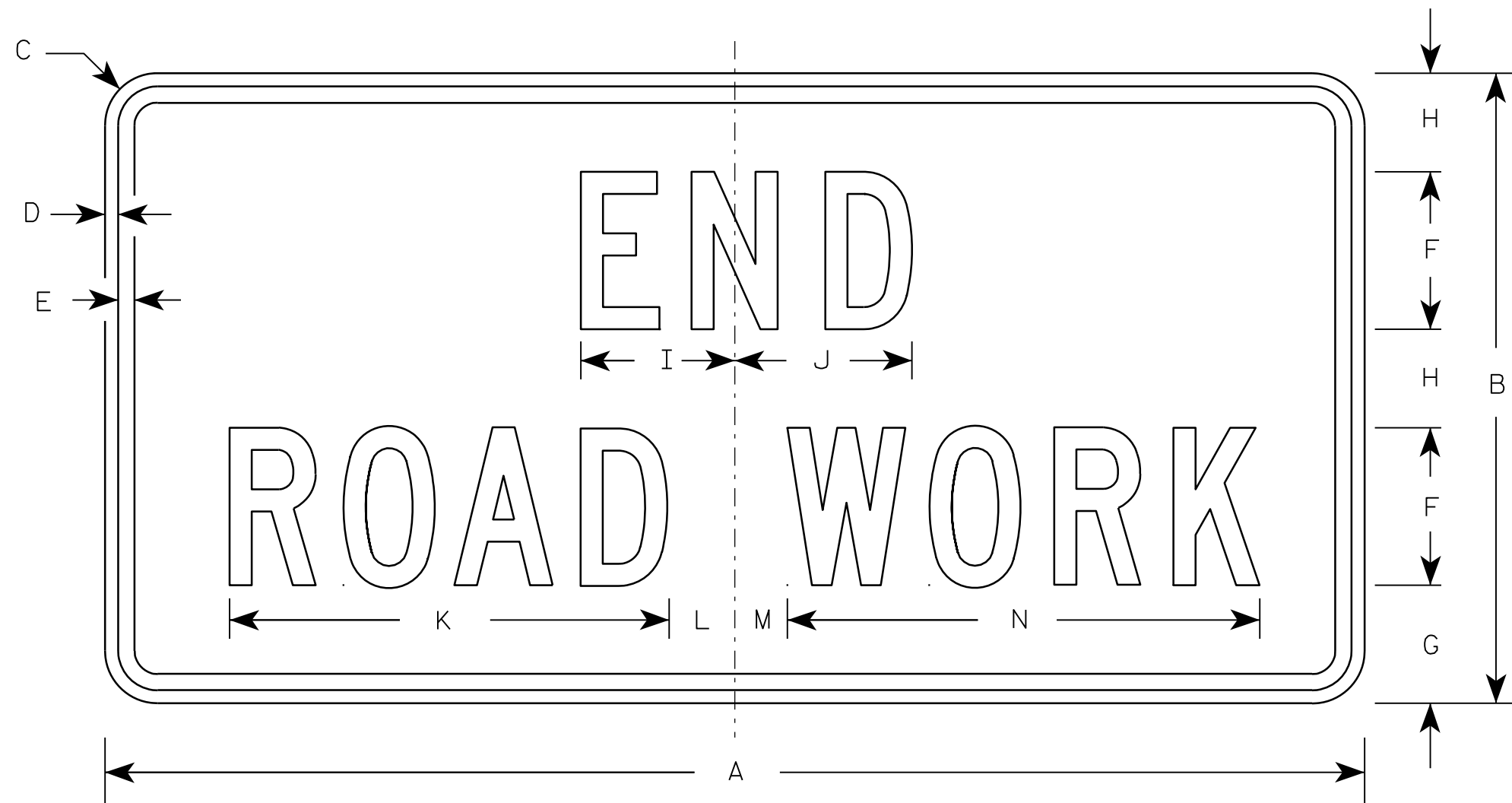
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:

SHEET NO:

E

7



G20-2A

NOTES

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

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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. m.
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN

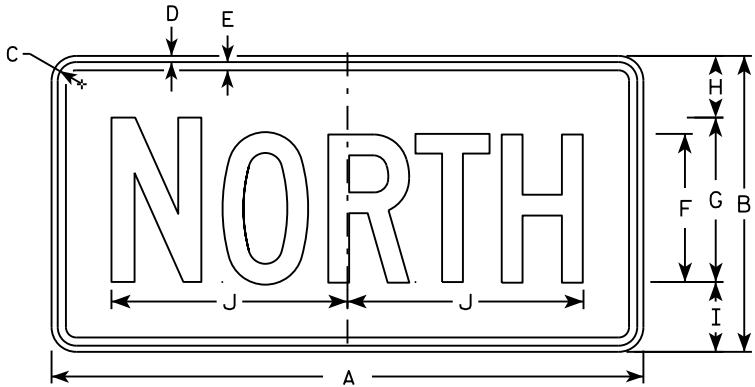
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

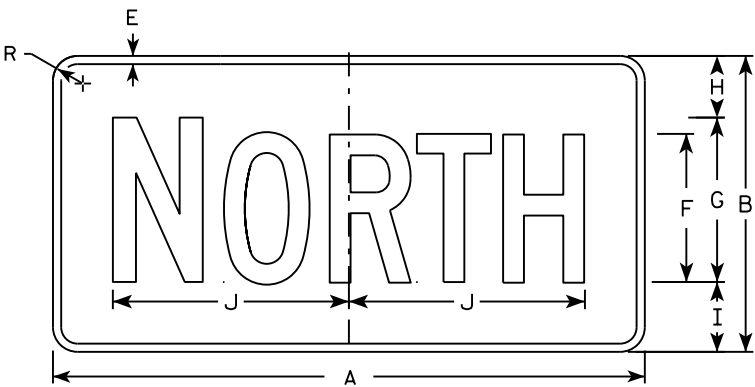
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

7



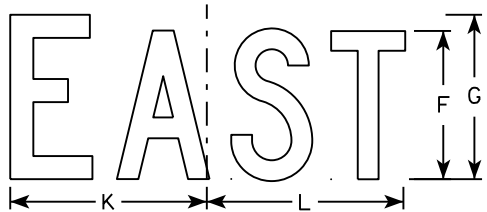
M3-1
MM3-1
MP3-1



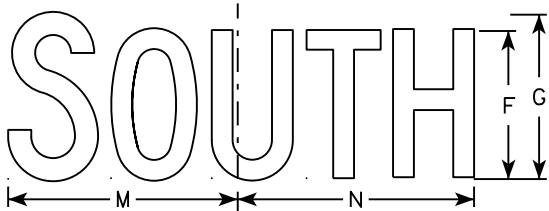
MB3-1
MK3-1
MN3-1



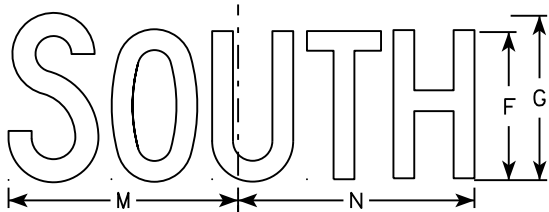
M3-2
MM3-2
MP3-2



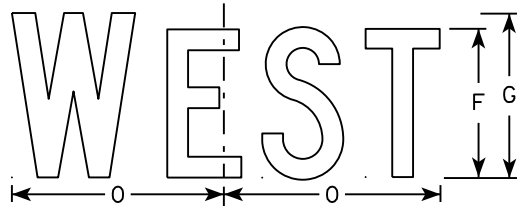
MB3-2
MK3-2
MN3-2



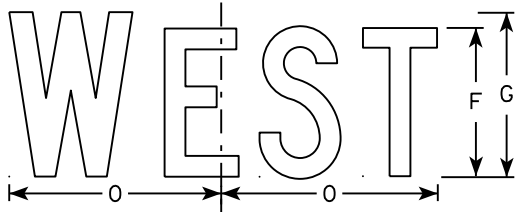
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

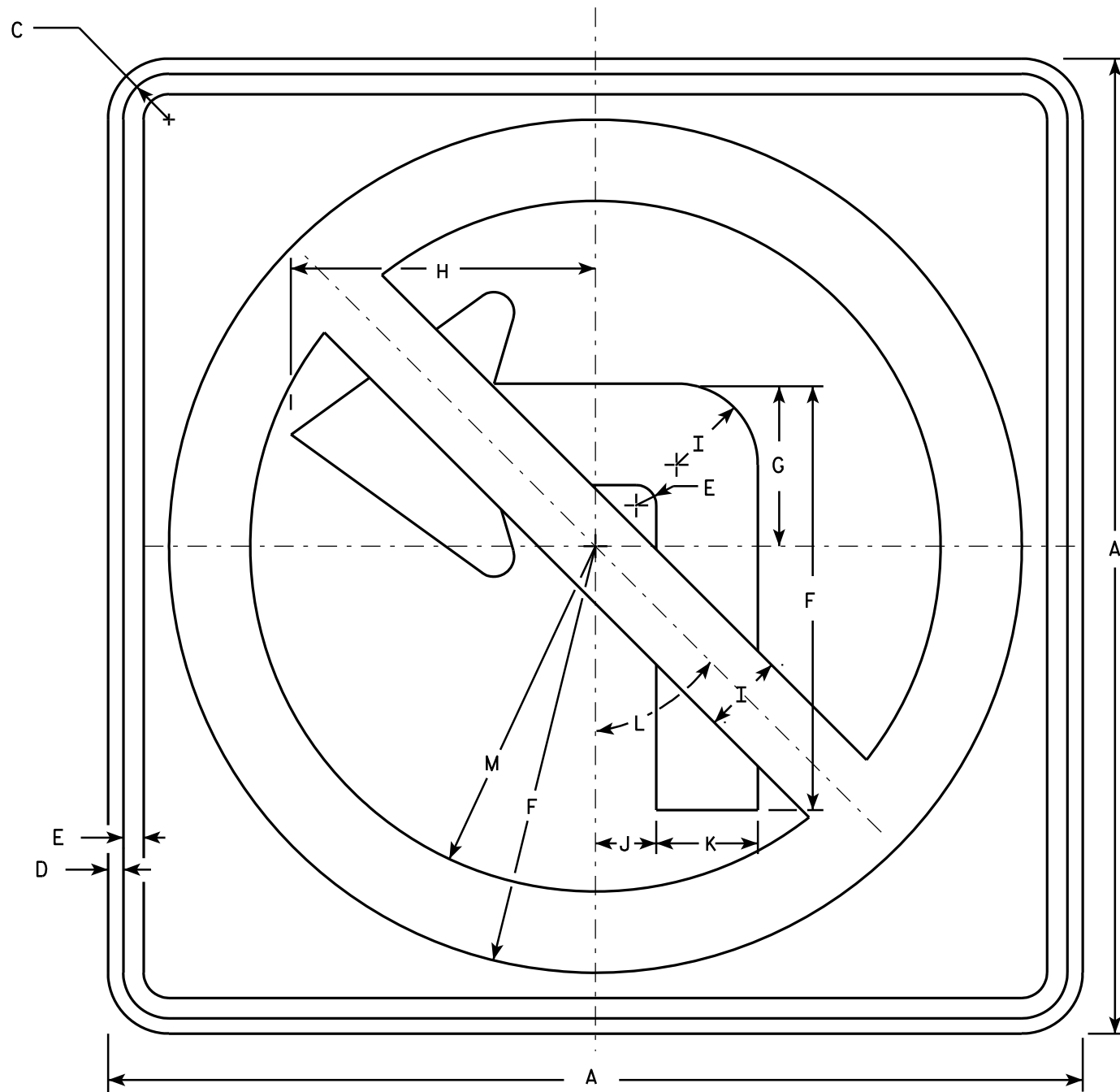
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thru M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

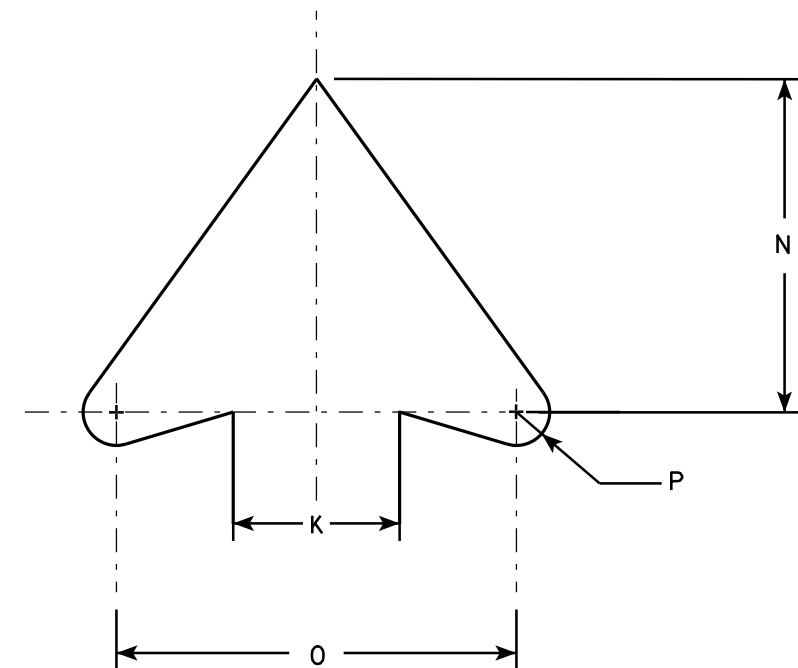
DATE 10/15/15 PLATE NO. M3-1.14



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

STANDARD SIGN R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

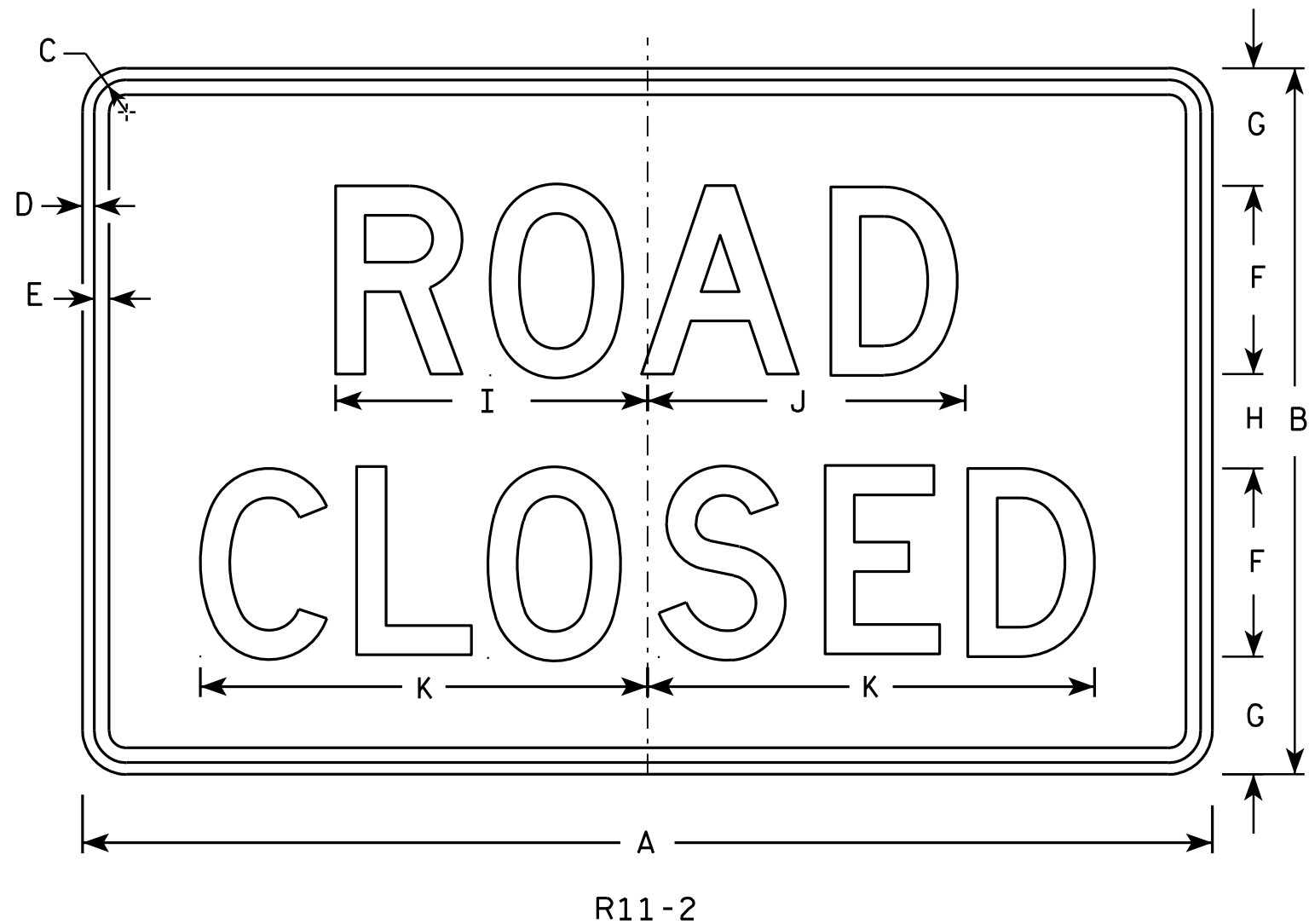
PROJECT NO:

HWY:

COUNTY:

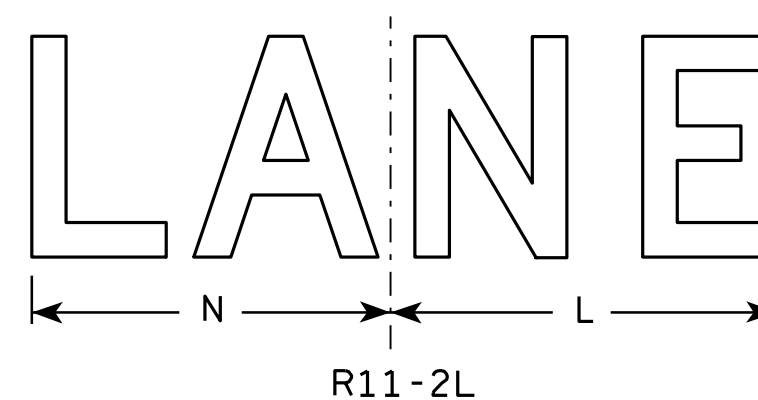
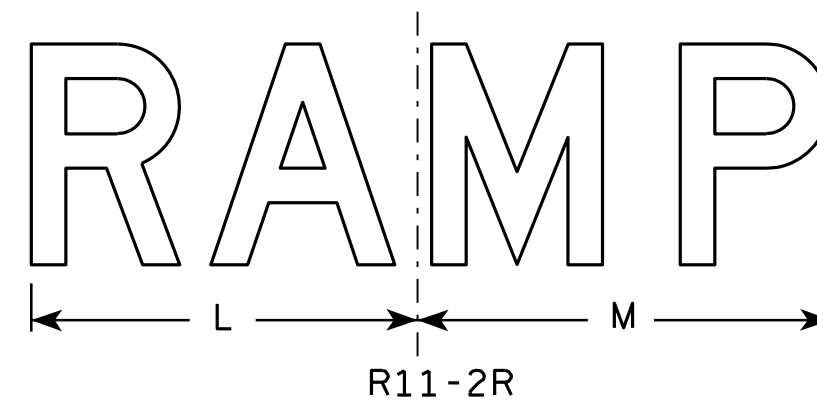
SHEET NO:

E



NOTES

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



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

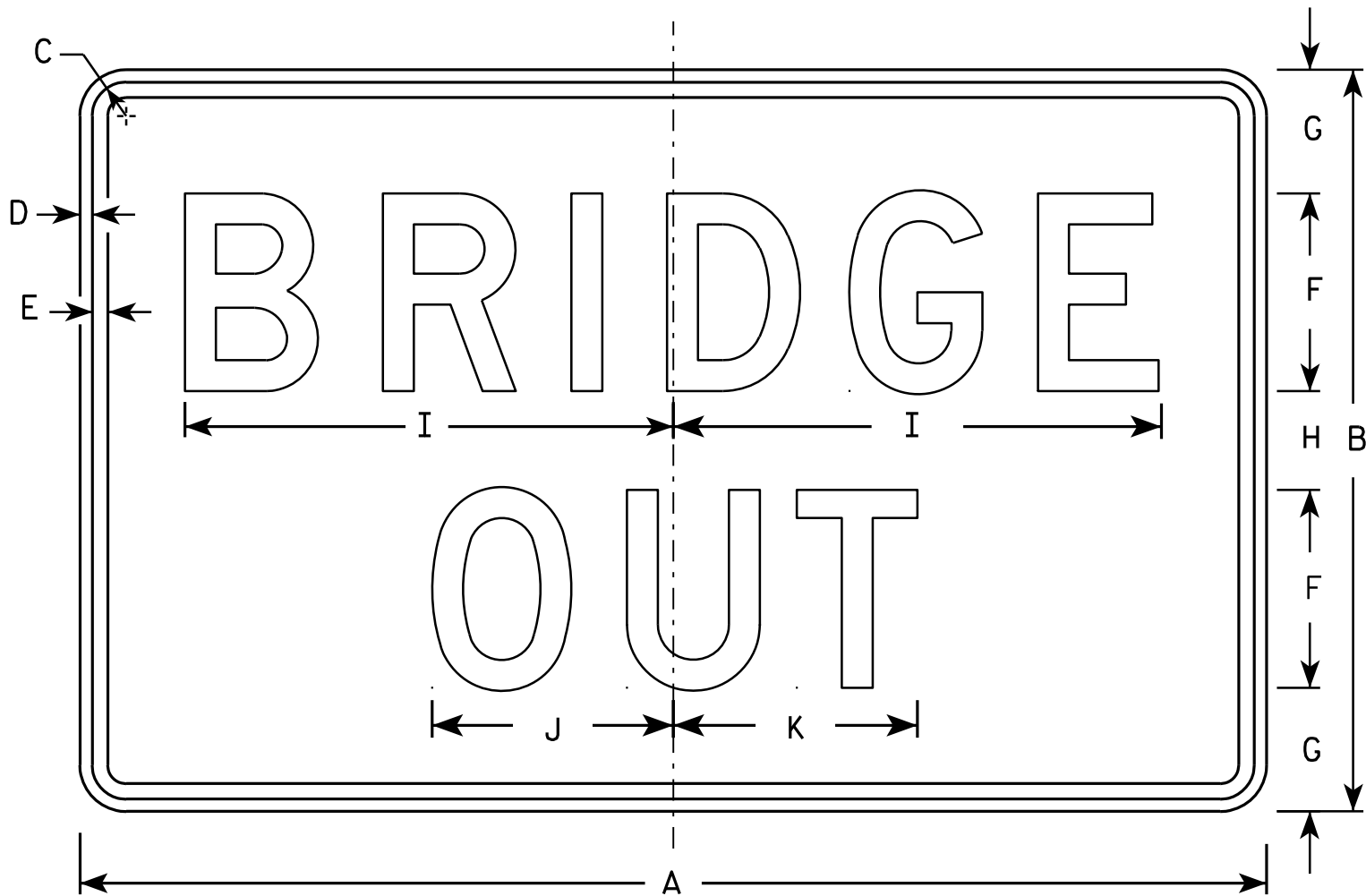
STANDARD SIGN R11-2

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E

NOTES

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



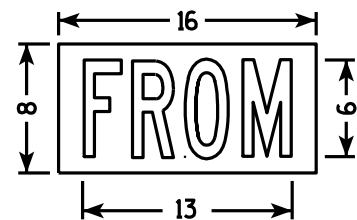
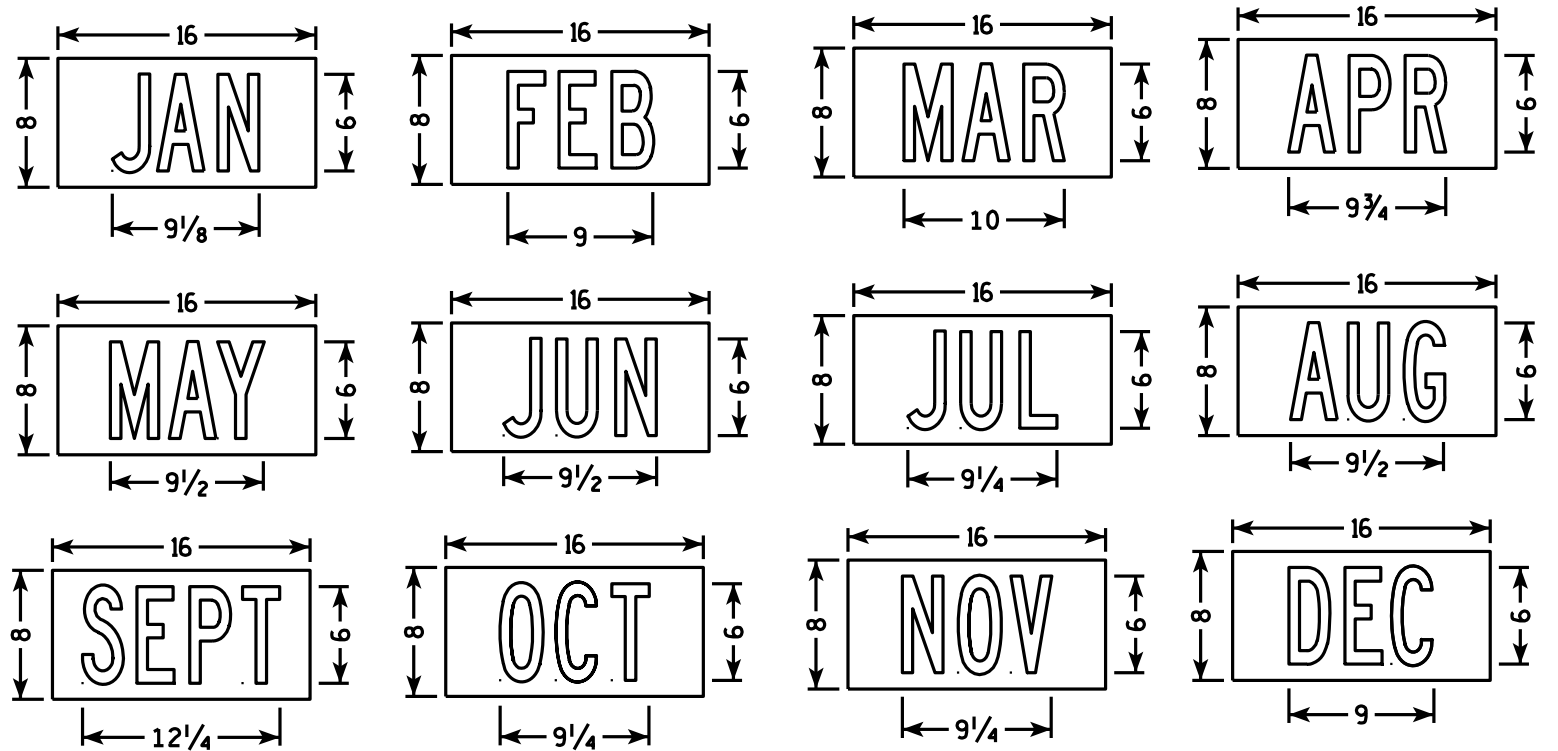
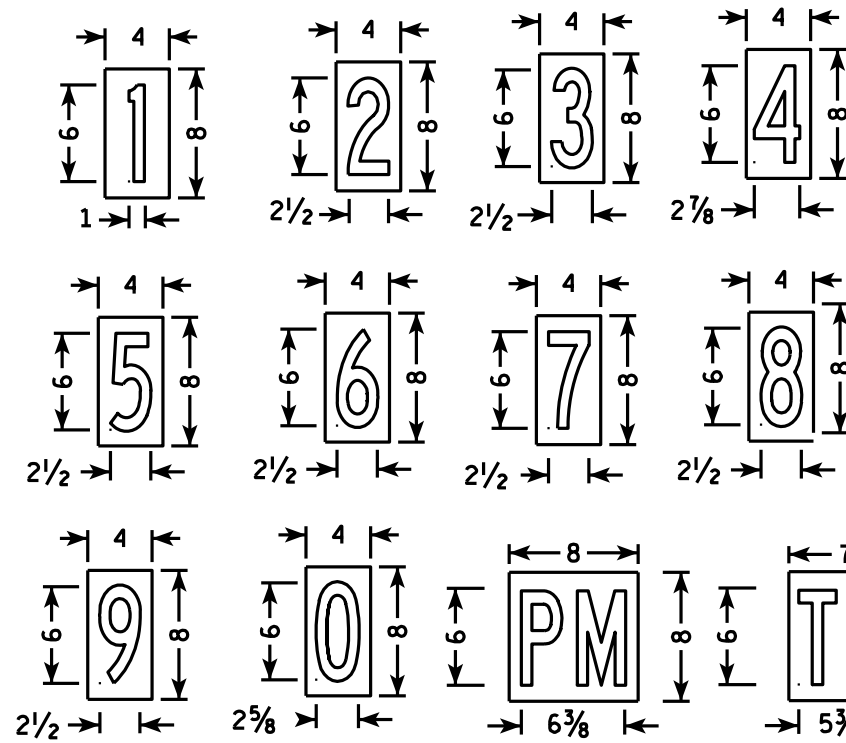
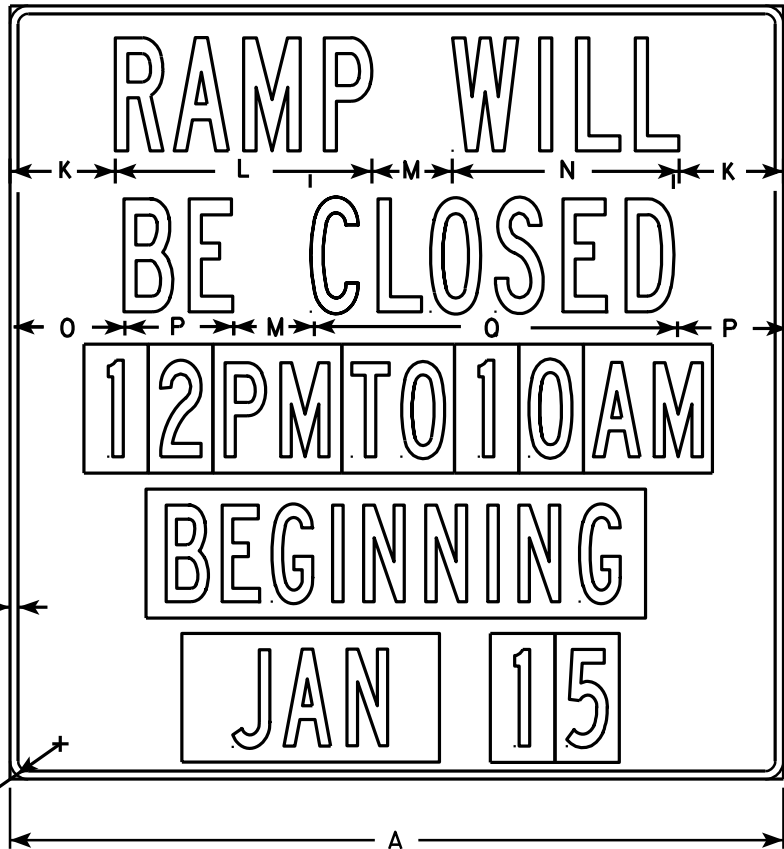
R11-2B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	19 3/4	9 3/4	9 7/8																10.0

PROJECT NO:

SHEET NO:

E



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - B
4. Message plaques consist of Type H Reflective sheeting with the appropriate non-reflective black message applied to .040 aluminum and screwed to the base sign.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
2M	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2										16.0
3																											
4																											
5																											

STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

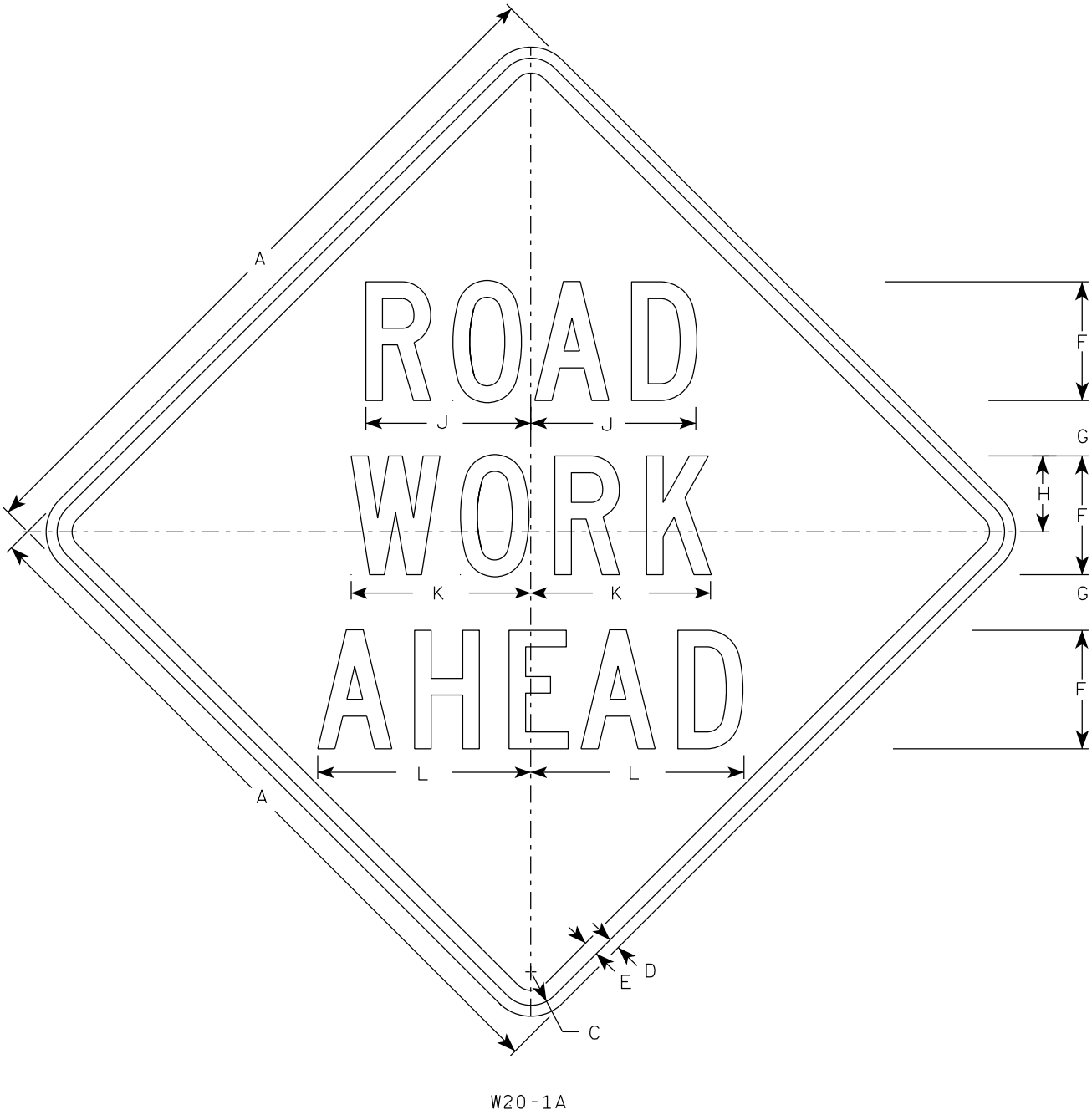
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-51.4

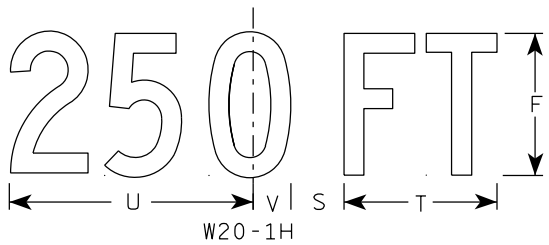
PROJECT NO: HWY: COUNTY: SHEET NO: E

NOTES

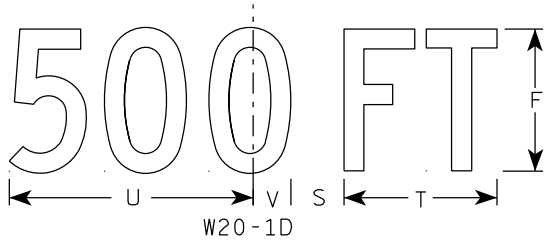
1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



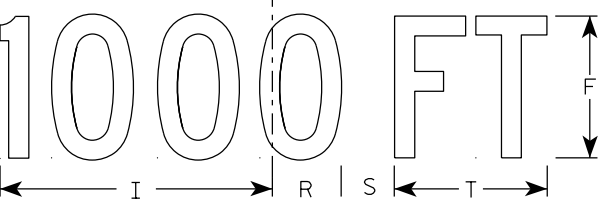
W20-1A



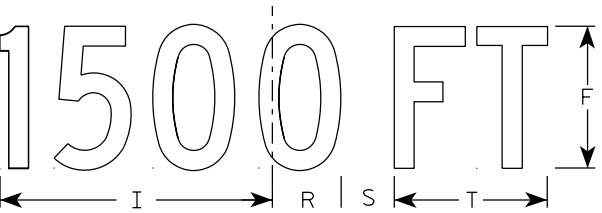
W20-1H



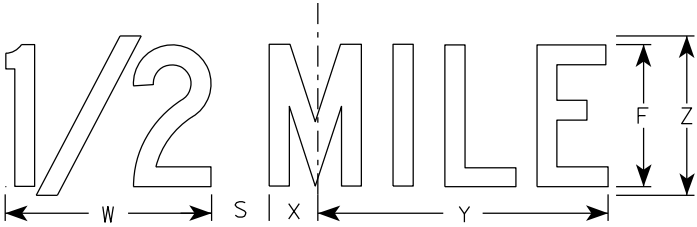
W20-1D



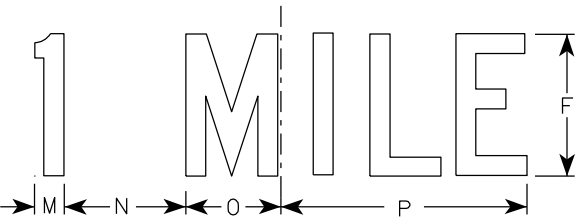
W20-1C



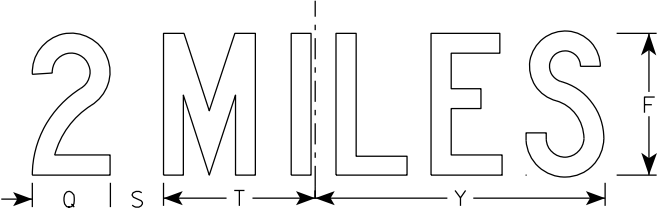
W20-1B



W20-1G



W20-1F



W20-1E

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	A _{req} sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

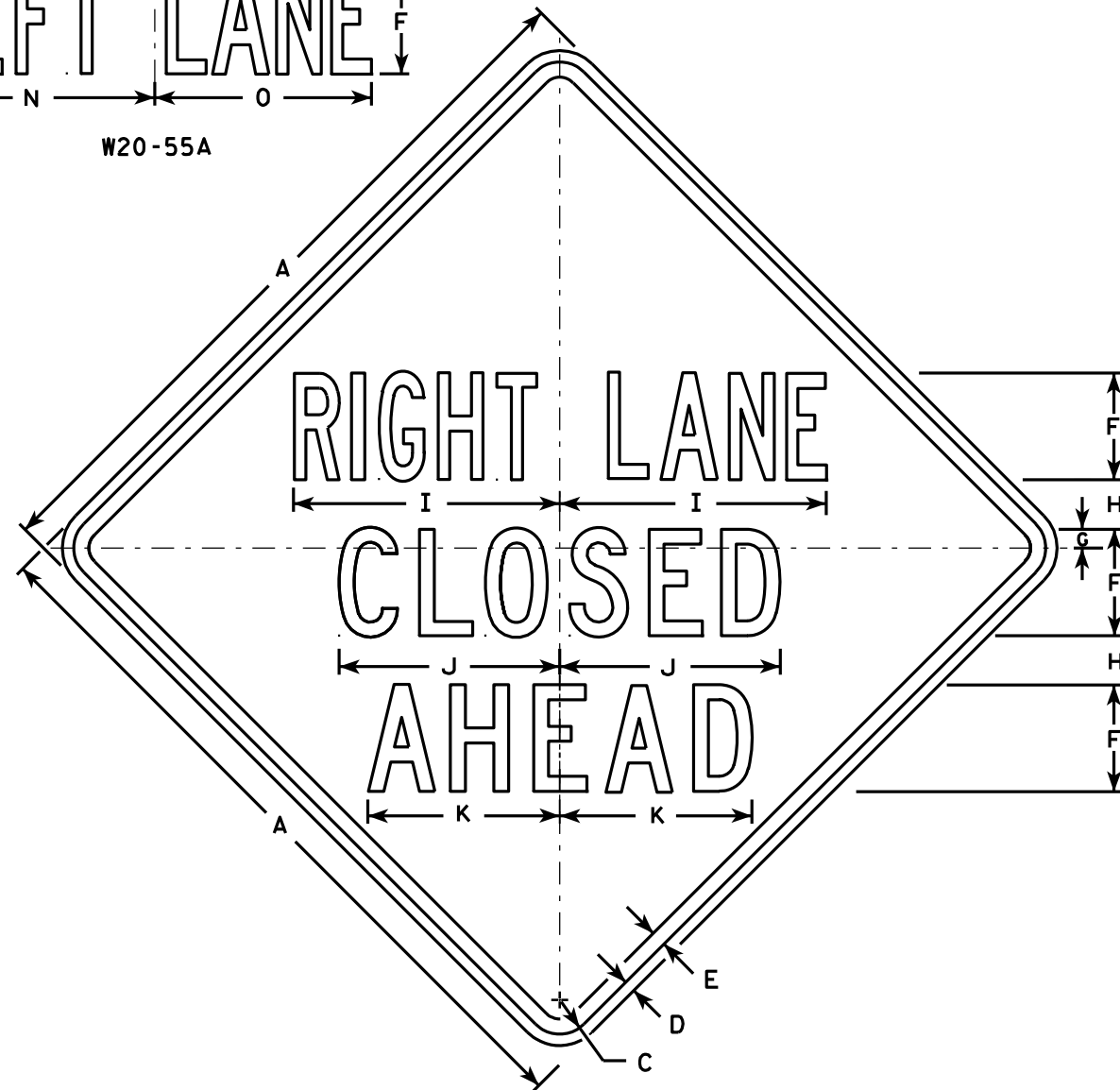
DATE 3/25/2020 PLATE NO. W20-1.11

CENTER LANE

W20-56A

LEFT LANE

W20-55A



W20-5A

500 FT

W20-5D

1000 FT

W20-5C

1500 FT

W20-5B

1/2 MILE

W20-5G

1 MILE

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. "----- LANE" is Series B.
All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

PROJECT NO:

HWY:

COUNTY:

STANDARD SIGN
W20-5A, B, C, D, F & G

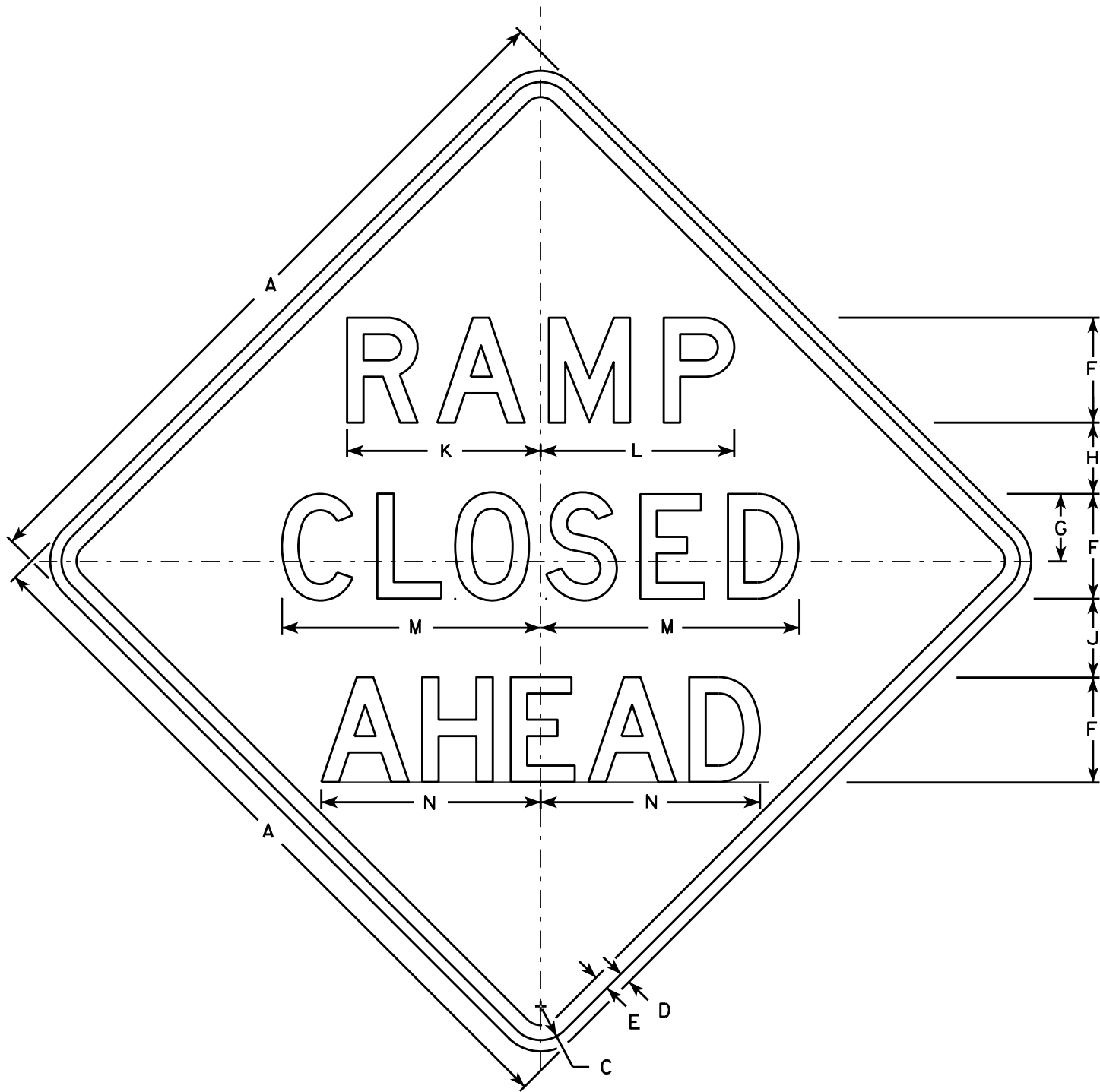
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

SHEET NO:

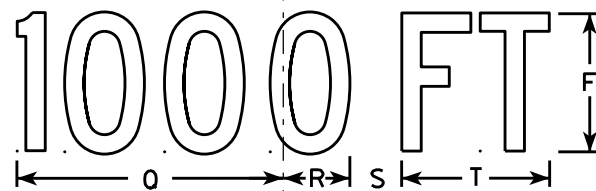
E



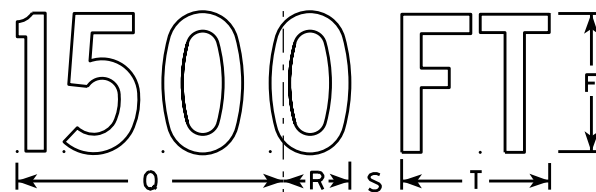
W20-53A



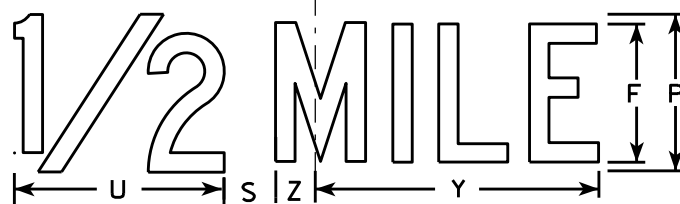
W20-53D



W20-53C



W20-53B



W20-53G



W20-53F

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	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
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/27/15 PLATE NO. W20-53.1

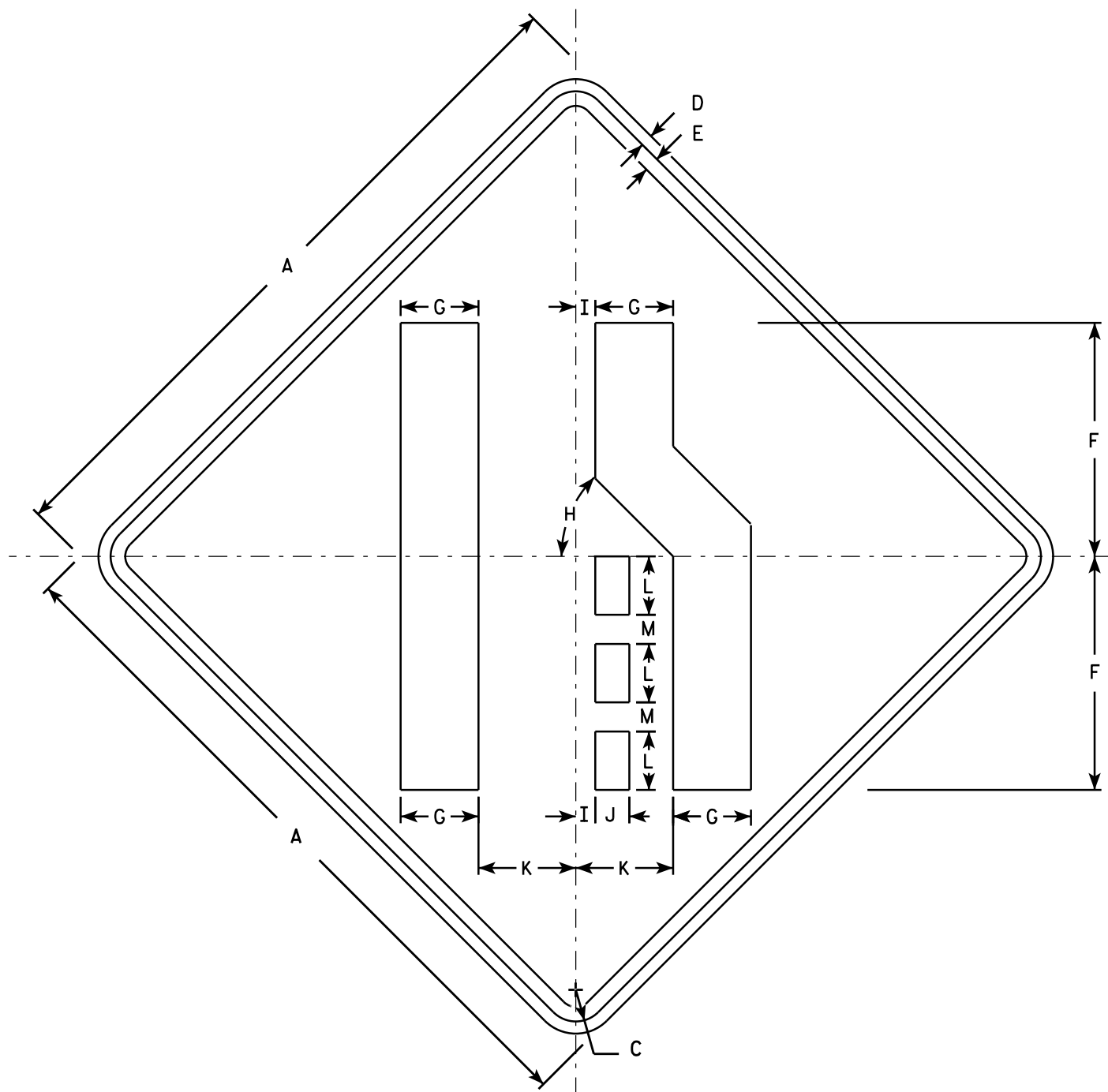
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

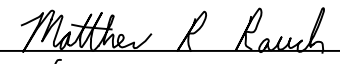
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5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

STANDARD SIGN

W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED



For State Traffic Engineer

DATE 11/20/13

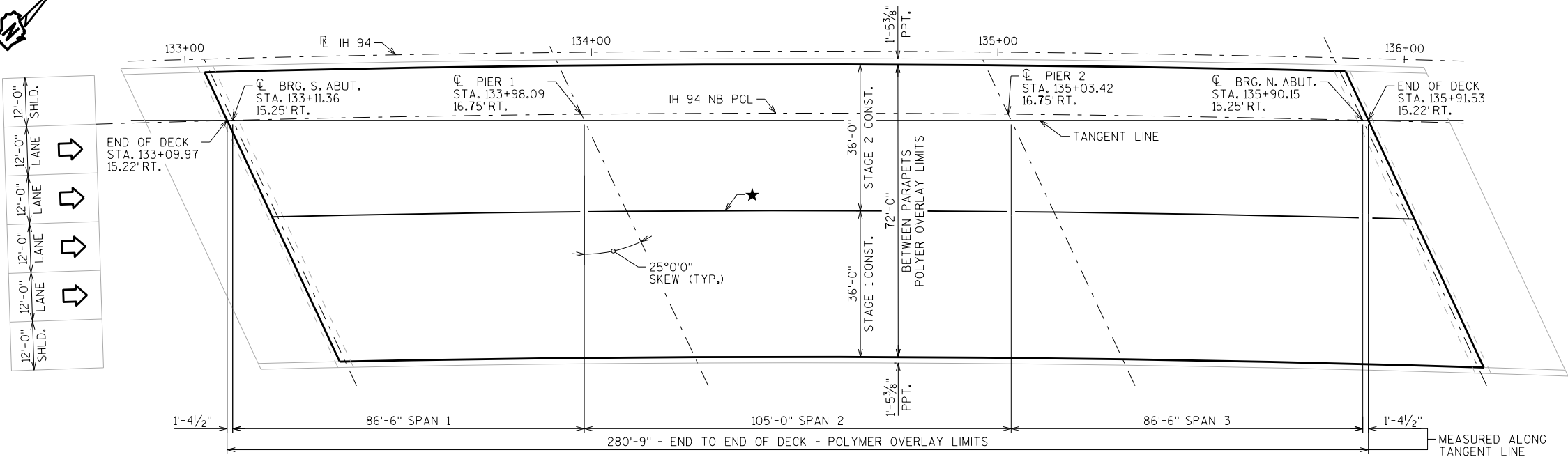
PLATE NO. W04-2.1

DESIGN DATA

LIVE LOAD:
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.43
OPERATING RATING FACTOR: RF = 1.85
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

GENERAL NOTES

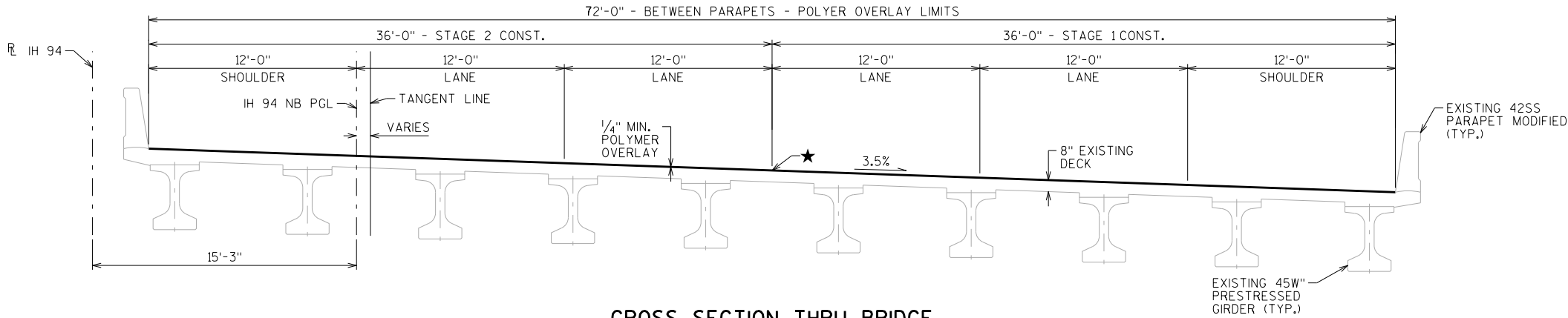
DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



PLAN

3 SPAN 45W" PRESTRESSED GIRDERS

★ CONSTRUCTION JOINT LOCATION. SEE ROADWAY PLANS FOR STAGING DETAILS



CROSS SECTION THRU BRIDGE

(LOOKING NORTH)

TOTAL ESTIMATED QUANTITIES



BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509,5100.S	POLYMER OVERLAY	SY	2,249

TRAFFIC VOLUME

IH 41/49 (NB)
ADT = 119,500 (2038)
R.D.S. = 70 M.P.H.

STRUCTURE DESIGN CONTACTS:

PETER ROMENS (608) 261-6123
LAURA SHADEWALD (608) 267-9592

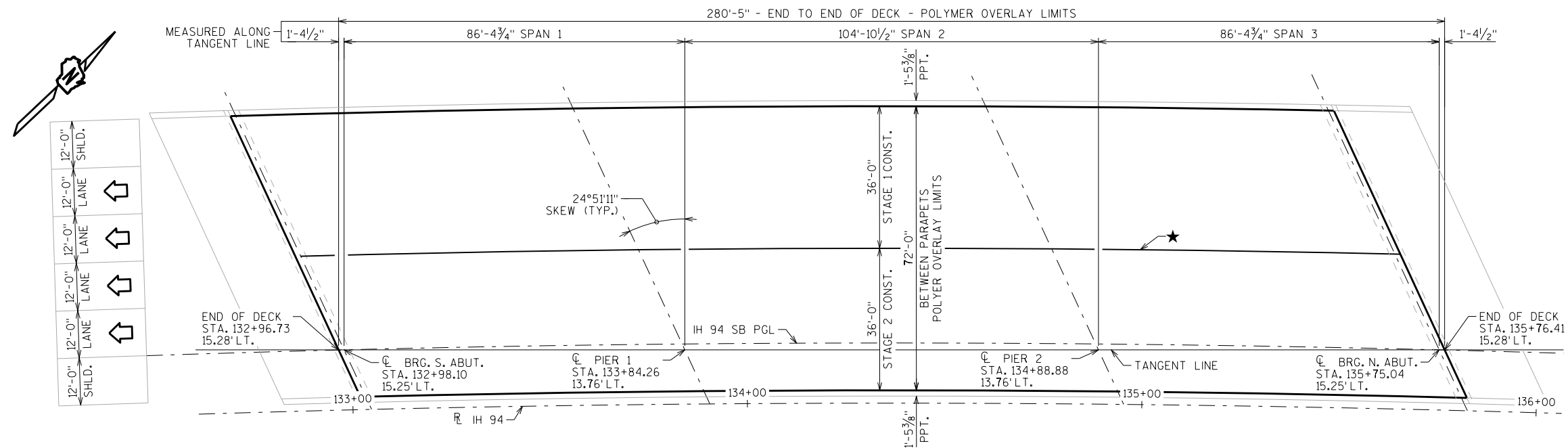
NO.	DATE	REVISION	BY
 BUREAU OF STRUCTURES			
ACCEPTED  LLS 3/12/21 CHIEF STRUCTURES DESIGN ENGINEER DATE			
STRUCTURE B-40-800			
IH 94 NORTHBOUND OVER ROOT RIVER			
COUNTY	MILWAUKEE	CITY	OAK CREEK
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	PJR	DESIGNED CK'D.	IFC
DRAWN BY			PLANS CK'D.
POLYMER OVERLAY			SHEET 1 OF 1

LIST OF DRAWINGS

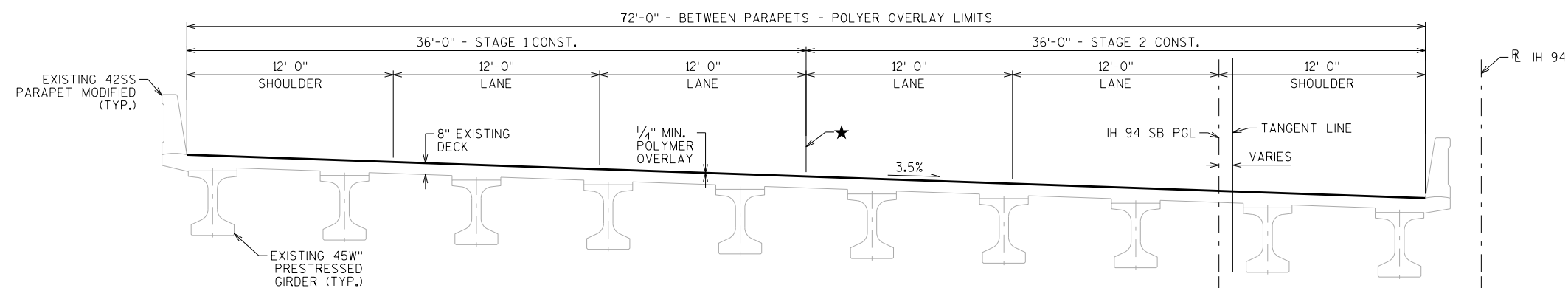
1. POLYMER OVERLAY

DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.43
OPERATING RATING FACTOR: RF = 1.86
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



★ CONSTRUCTION JOINT LOCATION. SEE
ROADWAY PLANS FOR STAGING DETAILS





(LOOKING NORTH)

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	2,242

1. POLYMER OVERLAY

ADT = 119,500 (2038)
R.D.S. = 70 M.P.H.

PETER ROMENS (608) 261-6123
LAURA SHADEWALD (608) 267-9592

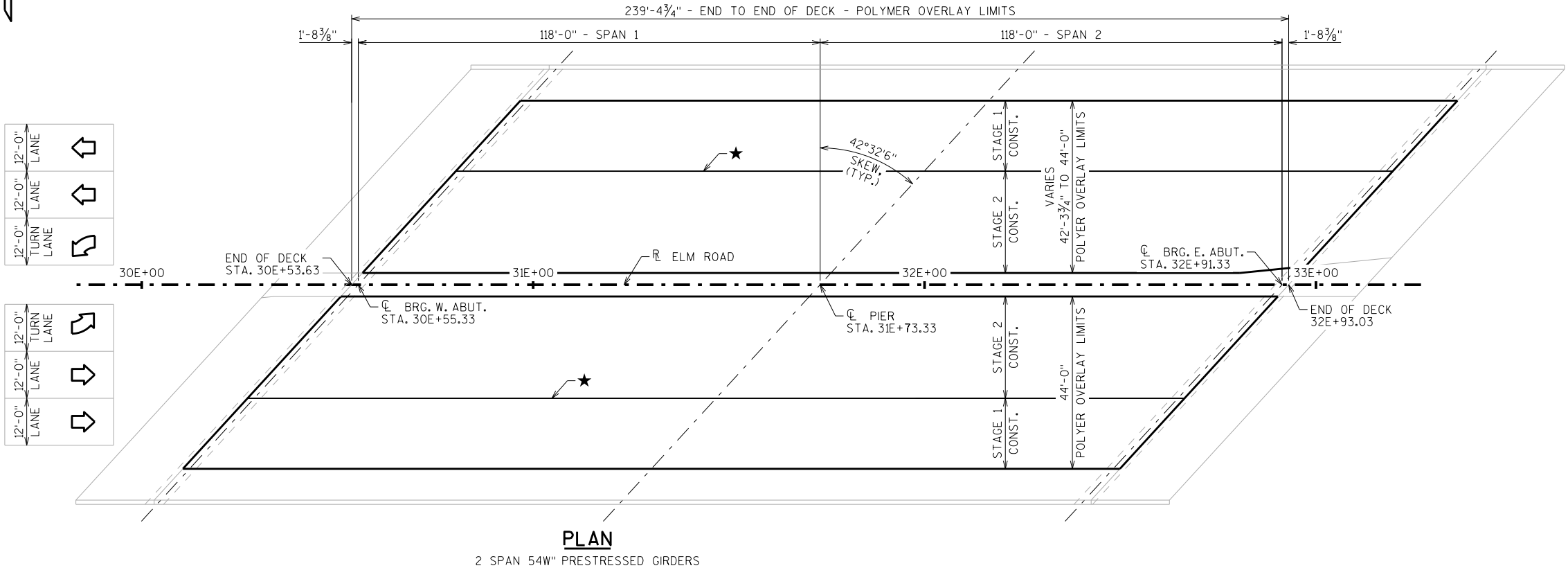
NO.	DATE	REVISION			BY
		BUREAU OF STRUCTURES			
ACCEPTED  L.L.S.		3/12/21			
CHIEF STRUCTURES DESIGN ENGINEER			DATE		
STRUCTURE B-40-801					
IH 94 SOUTHBOUND OVER ROOT RIVER					
COUNTY		MILWAUKEE		CITY	
				OAK CREEK	
DESIGN SPEC. REHABILITATION N/A					
DESIGNED BY		DESIGNED CK'D.		DRAWN BY	
PJR		IFC		PJR	
				PLANS CK'D.	
				IFC	
POLYMER OVERLAY				SHEET 1 OF 1	

DESIGN DATA

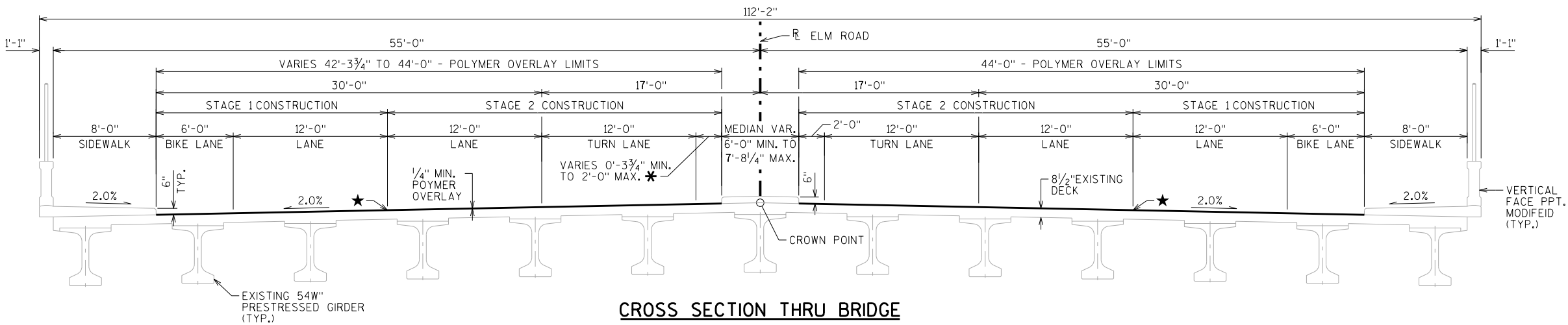
LIVE LOAD:
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF = 1.23
OPERATING RATING FACTOR: RF = 1.59
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".



★ CONSTRUCTION JOINT LOCATION. SEE ROADWAY PLANS FOR STAGING DETAILS



TRAFFIC VOLUME


ELM ROAD
ADT = 15,570 (2035)
R.D.S. = 40 M.P.H.

STRUCTURE DESIGN CONTACTS:

PETER ROMENS (608) 261-6123
LAURA SHADEWALD (608) 267-9592

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	2,339

NO.	DATE	REVISION	BY
 BUREAU OF STRUCTURES			
ACCEPTED		DATE	
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE B-40-802			
ELM ROAD OVER IH 41/94			
COUNTY	MILWAUKEE	CITY	OAK CREEK
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
PJR		IFC	IFC
POLYMER OVERLAY			SHEET 1 OF 1

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HL-93
INVENTORY RATING: RF = 1.19
OPERATIONAL RATING: RF = 1.54
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

TRAFFIC VOLUME

OAKWOOD RD.	IH 94
A.D.T. = 3,900 (2035)	A.D.T. = 115,000 (2035)
R.D.S. = 40 M.P.H.	R.D.S. = 70 M.P.H.

CURVE DATA

P.I. STA. 186+72.49
Δ = 42°08'21"LT
D = 1°32'55"
R = 3,700.00
T = 1,425.46'
L = 2,721.23'
E = 265.09'
S.E. = 4.7%
P.C. STA. 172+47.03
P.T. STA. 199+68.26

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	628

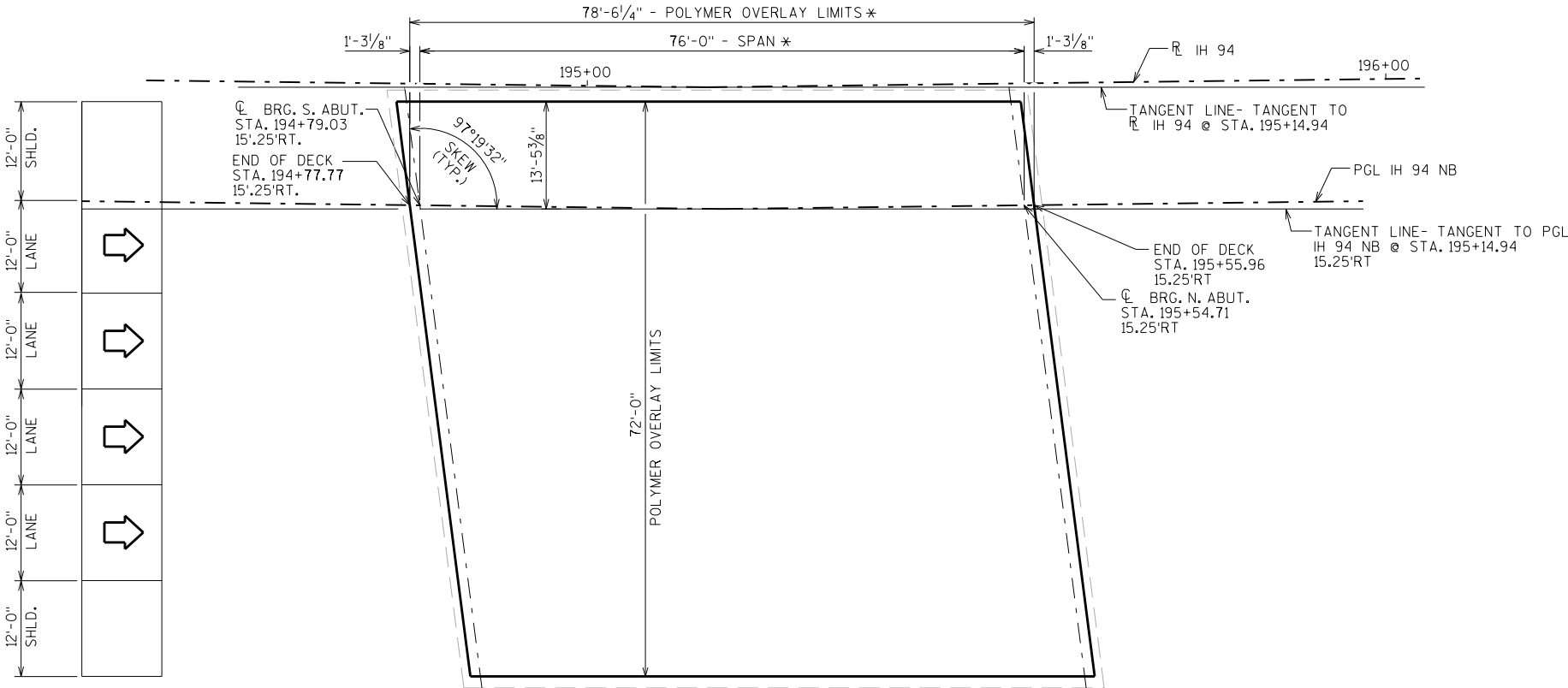
LIST OF DRAWINGS

1. POLYMER OVERLAY

STRUCTURE DESIGN CONTACTS:

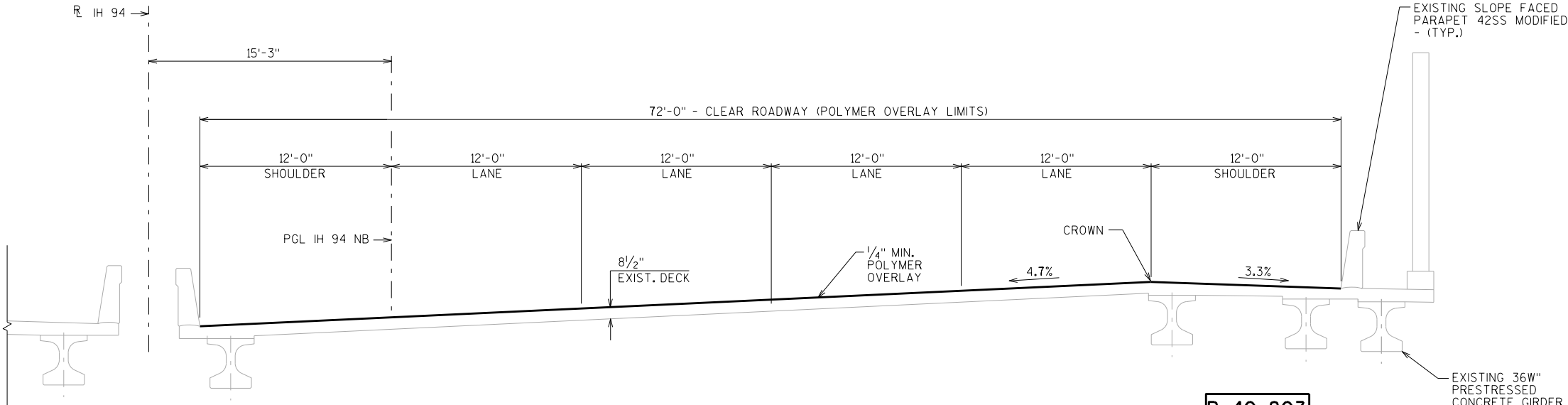
PETER ROMENS	(608) 261-6123
LAURA SHADEWALD	(608) 267-9592

NO.	DATE	REVISION	BY
<div><div><div><div><div><div></div><div>BUREAU OF STRUCTURES</div></div></div><div><div><div></div><div>3/12/21</div></div></div></div><div>ACCEPTED</div><div>CHIEF STRUCTURES DESIGN ENGINEER</div><div>DATE</div></div></div>			
STRUCTURE B-40-803			
IH 94 WB/IH 41NB OVER OAKWOOD ROAD			
COUNTY	MILWAUKEE	CITY	OAK CREEK
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	DESIGNED CK'D.	IFC	DRAWN BY
PJR			MJH
POLYMER OVERLAY			SHEET 1 OF 1



PLAN

SINGLE SPAN 36W" PRESTRESSED GIRDER BRIDGE



CROSS SECTION THRU BRIDGE

LOOKING NORTH

* MEASURED ALONG TANGENT LINE



STATE PROJECT NUMBER

1030-07-77

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HL-93
INVENTORY RATING: RF = 1.22
OPERATIONAL RATING: RF = 1.58
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS.

GENERAL NOTES

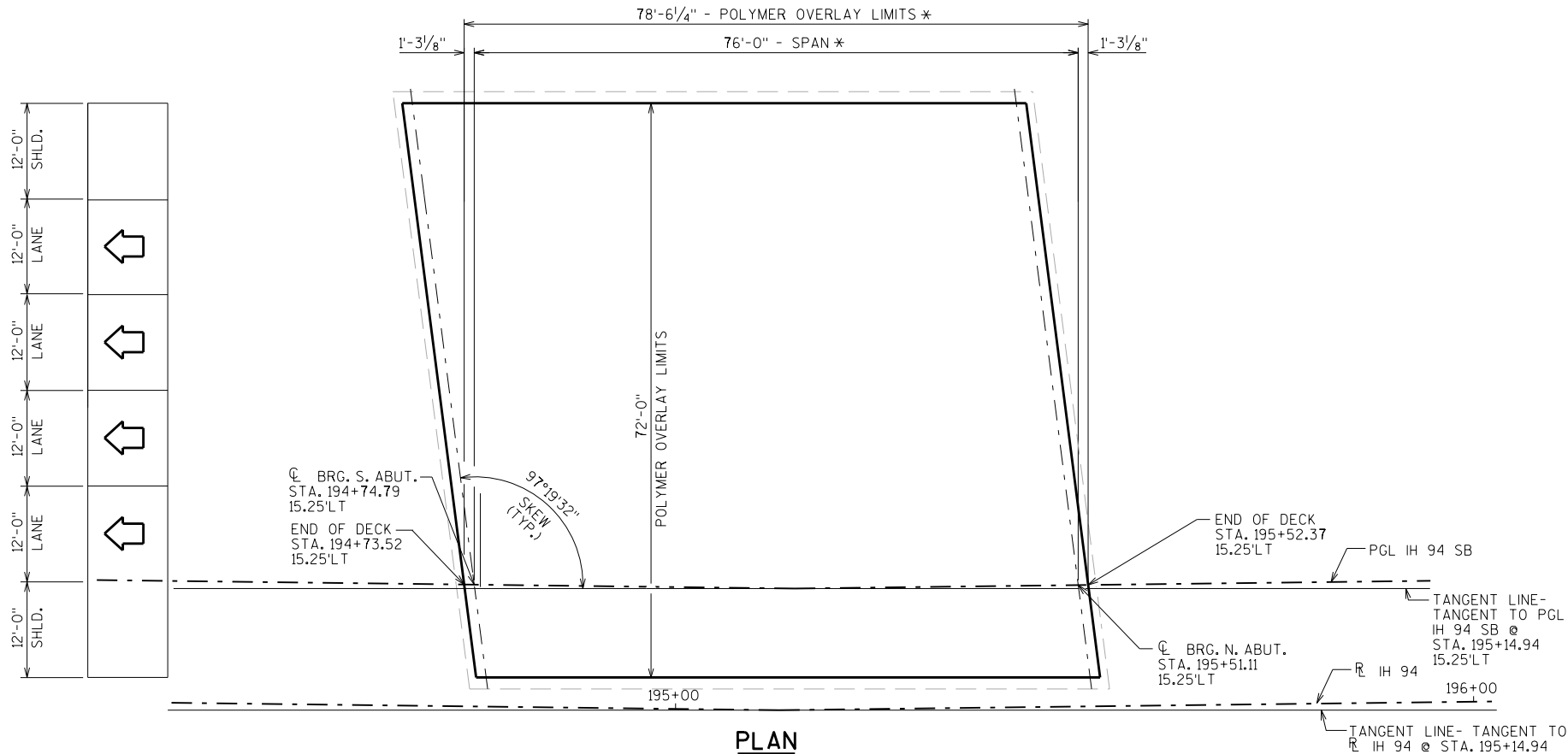
DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

TRAFFIC VOLUME

OAKWOOD RD. IH 94
A.D.T. = 3,900 (2035) A.D.T. = 115,000 (2035)
R.D.S. = 40 M.P.H. R.D.S. = 70 M.P.H.

CURVE DATA

P.I. STA. 186+72.49
Δ = 42°08'21"LT
D = 1°32'55"
R = 3,700.00
T = 1,425.46'
L = 2,721.23'
E = 265.09'
S.E. = 4.7%
P.C. STA. 172+47.03
P.T. STA. 199+68.26



PLAN

SINGLE SPAN 36W" PRESTRESSED GIRDER BRIDGE

TOTAL ESTIMATED QUANTITIES

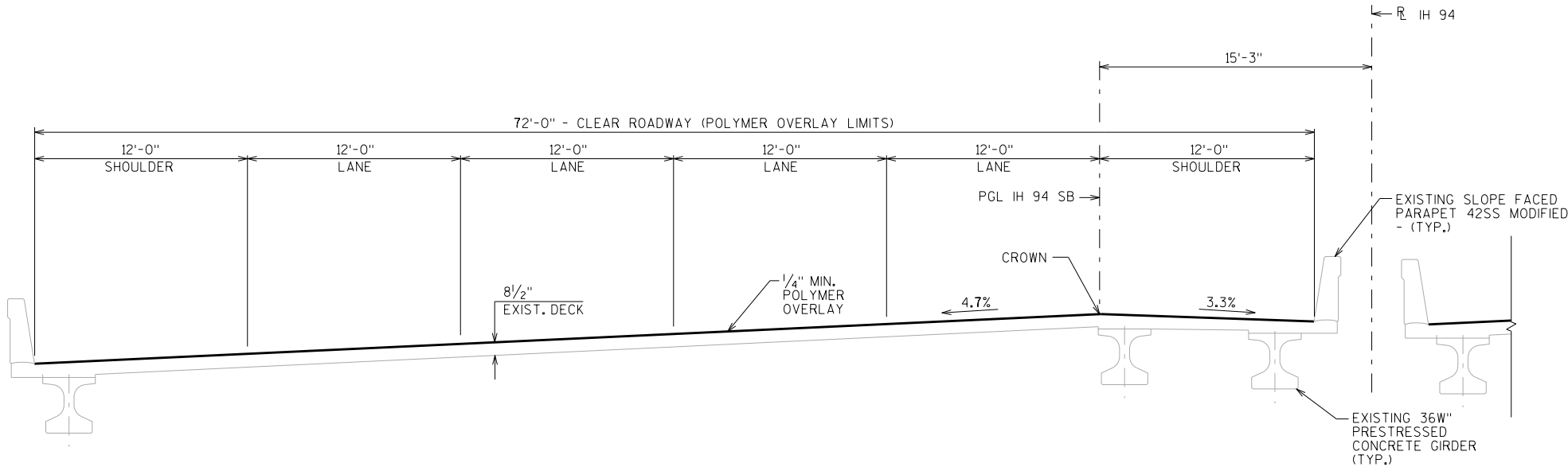
BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	628

LIST OF DRAWINGS

1. POLYMER OVERLAY

STRUCTURE DESIGN CONTACTS:

PETER ROMENS (608) 261-6123
LAURA SHADEWALD (608) 267-9592



CROSS SECTION THRU BRIDGE

LOOKING NORTH

* MEASURED ALONG TANGENT LINE

I.D. 1030-07-07E

DATE: JULY 2020

DESIGN DATA

LIVE LOAD:

DESIGN RATING: HL-93
INVENTORY RATING: RF = 1.48
OPERATIONAL RATING: RF = 1.92
WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV): 250 KIPS.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".

TRAFFIC VOLUME

IH 94
A.D.T. = 162,000 (2035)
R.D.S. = 70 M.P.H.

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	828

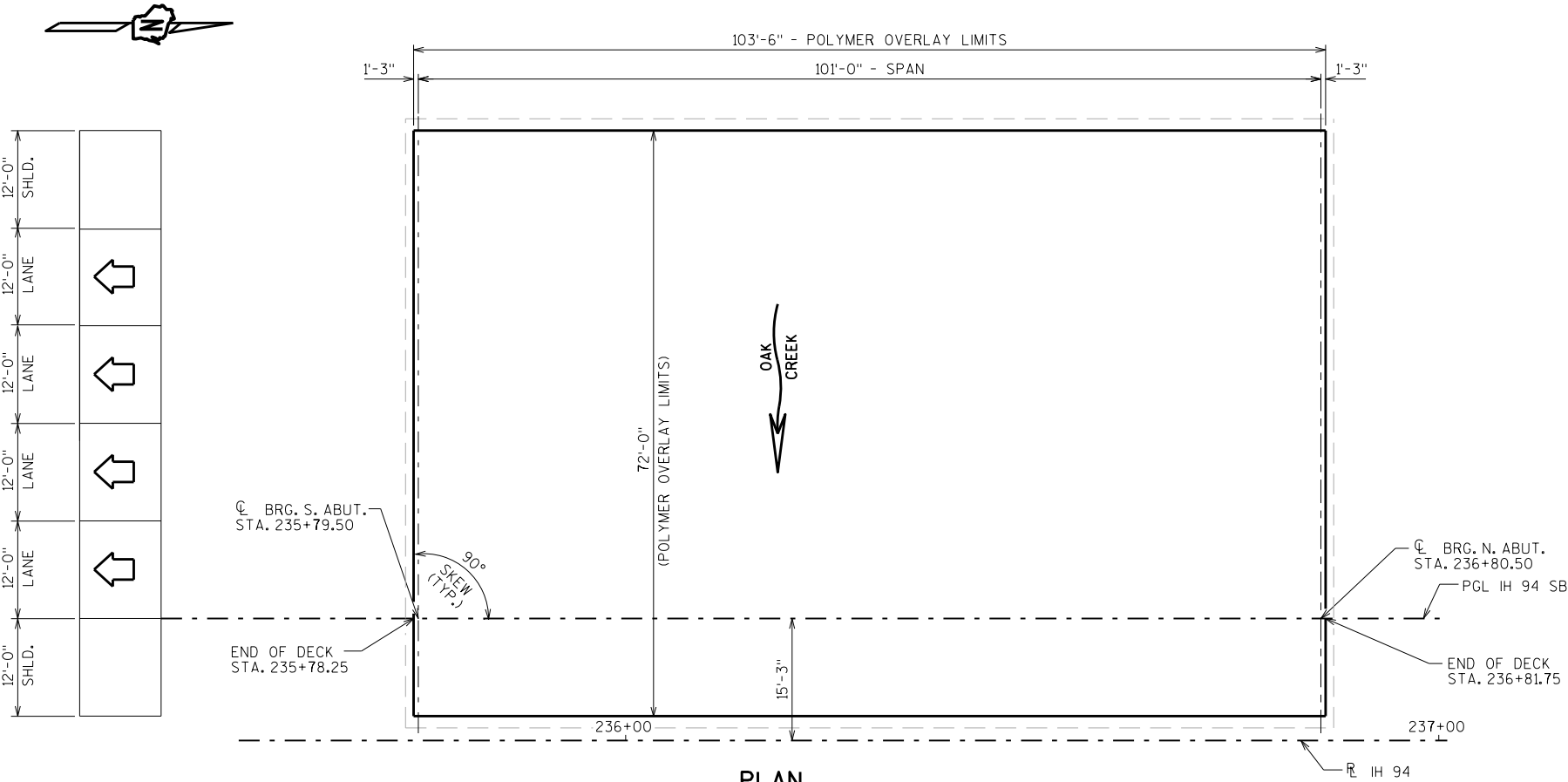
LIST OF DRAWINGS

1. POLYMER OVERLAY

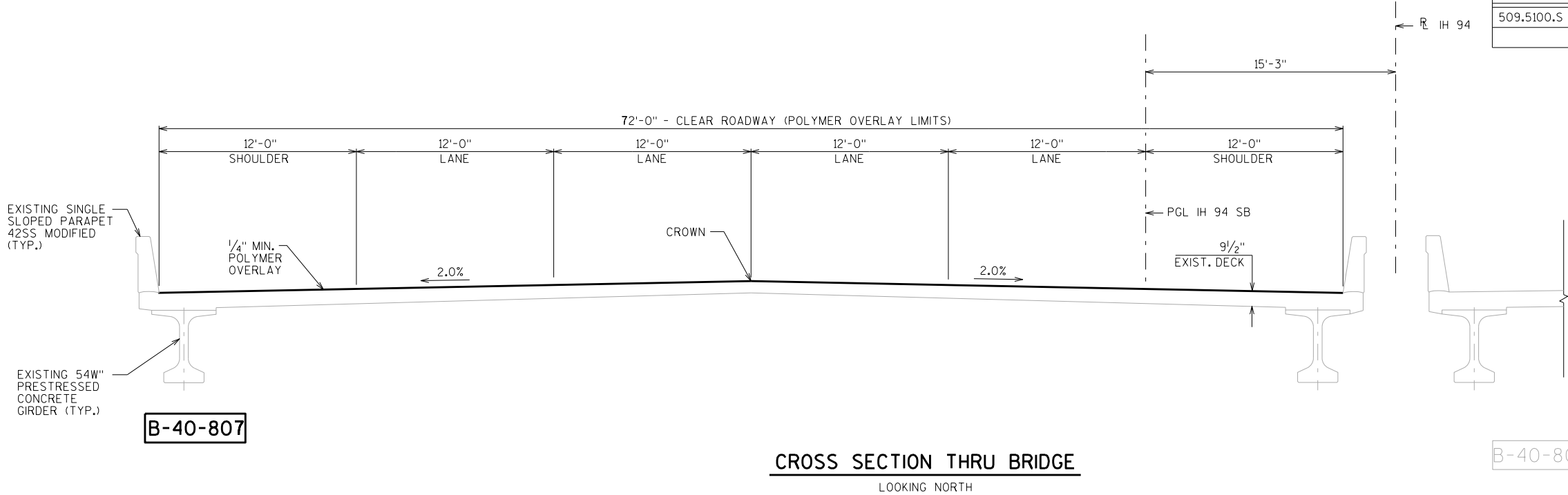
STRUCTURE DESIGN CONTACTS:

PETER ROMENS (608) 261-6123
LAURA SHADEWALD (608) 267-9592

NO.	DATE	REVISION	BY
<div><div><div><div><div><div></div><div>WISCONSIN</div></div></div><div><div><div></div></div><div>DEPARTMENT OF TRANSPORTATION</div></div></div><div><div><div>BUREAU OF</div><div>STRUCTURES</div></div><div><div>ACCEPTED</div><div><i>[Signature]</i></div><div>LLS</div><div>3/12/21</div></div><div>CHIEF STRUCTURES DESIGN ENGINEER</div><div>DATE</div></div></div></div> <div>STRUCTURE B-40-807</div> <div>IH 94 SB OVER OAK CREEK</div> <div><div>COUNTY</div><div>MILWAUKEE</div><div>CITY</div><div>OAK CREEK</div></div> <div><div>DESIGN SPEC.</div><div>REHABILITATION N/A</div></div> <div><div>DESIGNED BY</div><div>PJR</div><div>DESIGNED CK'D.</div><div>IFC</div><div>DRAWN BY</div><div>MJH</div><div>PLANS CK'D.</div><div>PJR</div></div> <div><div>POLYMER OVERLAY</div><div>SHEET 1 OF 1</div></div>			



PLAN
SINGLE SPAN 54W" PRESTRESSED GIRDER BRIDGE

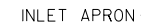


CROSS SECTION THRU BRIDGE
LOOKING NORTH

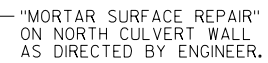
B-40-807

B-40-806

"MORTAR SURFACE REPAIR" ITEM SHALL APPLY TO ALL SURFACE REPAIRS WHICH CANNOT BE CONVENTIONALLY POURED WITH CONCRETE FROM ABOVE. SEE SPECIAL PROVISIONS FOR REQUIREMENTS.



PLAN





LOOKING EAST

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
SPV.0165	MORTAR SURFACE REPAIR	SF	30

1. GENERAL PLAN

PETER ROMENS (608) 261-6123
LAURA SHADEWALD (608) 267-9592

NO.		DATE		REVISION		BY	
				BUREAU OF STRUCTURES  LLS 3/12/21			
ACCEPTED				CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE C-40-030							
IH 41/94 OVER N. BRANCH OAK CREEK TRIBUTARY							
COUNTY				CITY		OAK CREEK	
DESIGN SPEC. REHABILITATION N/A							
DESIGNED BY		DESIGNED CK'D.		DRAWN BY		PLANS CK'D.	
PJR		MWB		PJR		MWB	
GENERAL PLAN				SHEET 1 OF 1			

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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

WKE PROJECT ID: 1030-07-78 COUNTY: MILWAUKEE

May 11, 2021

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 = 78



DESIGN DESIGNATION	STH 100 (RYAN ROAD)	IH 41 NB OFF-RAMP TO STH 100	IH 41 SB ON-RAMP FROM STH 100
A.A.D.T. 2015	= 28300	= 4200	= 4900
A.A.D.T. 2035	= 33380	=	=
D.H.V.	= 2800	=	=
D.D.	= 51/49	=	=
T.	= 16%	=	=
DESIGN SPEED	= 50 MPH	=	=
ESALS	=	=	=

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

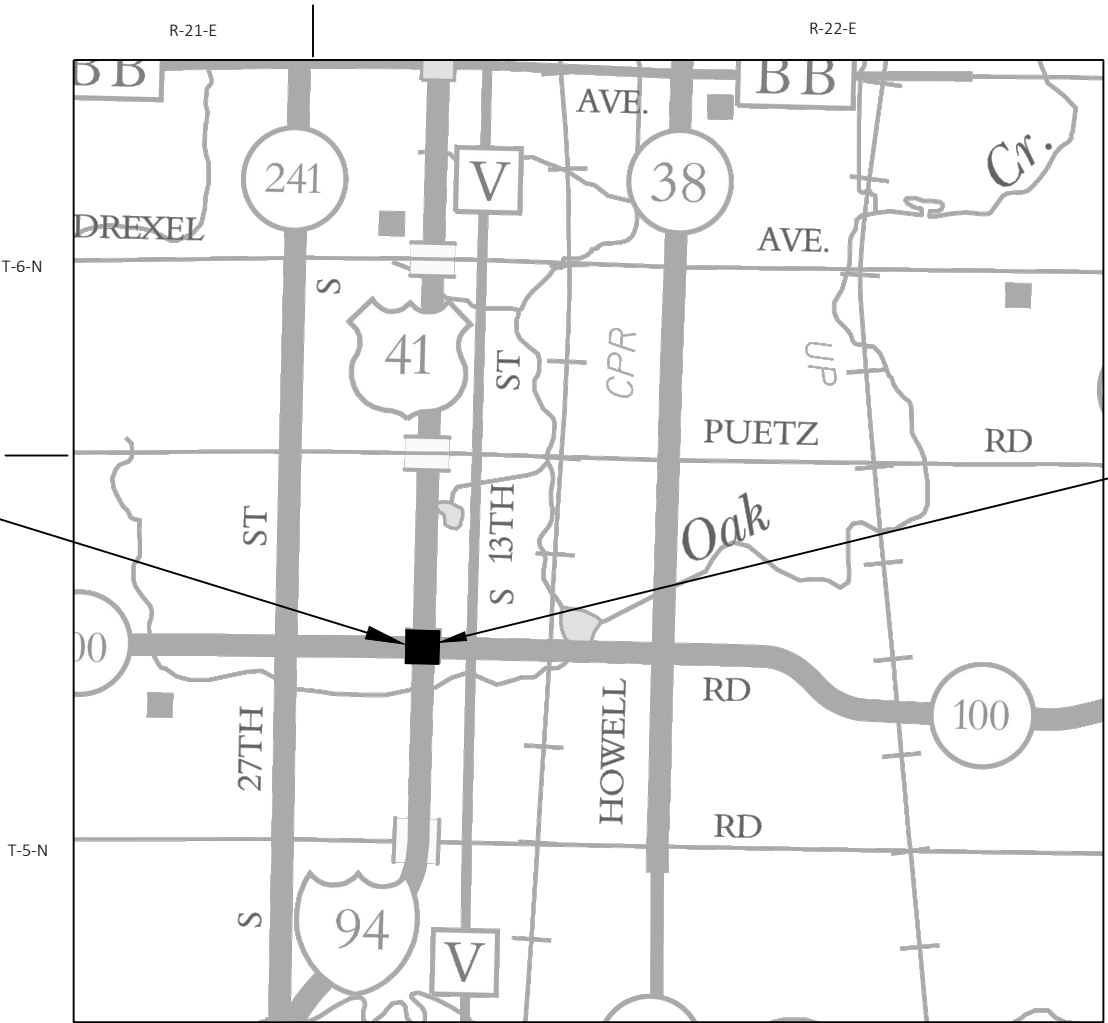
PLAN OF PROPOSED IMPROVEMENT

IH 41 NORTH SOUTH FREEWAY

STH 100 (RYAN RD) BRIDGES

IH 41
MILWAUKEE COUNTY

STATE PROJECT NUMBER
1030-07-78



PROJECT LOCATION
STA 248+31.48 "IH 94"
X=598529.11
Y=239029.35

STRUCTURES
B-40-805
B-40-808
B-40-809

LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 0.000 MI

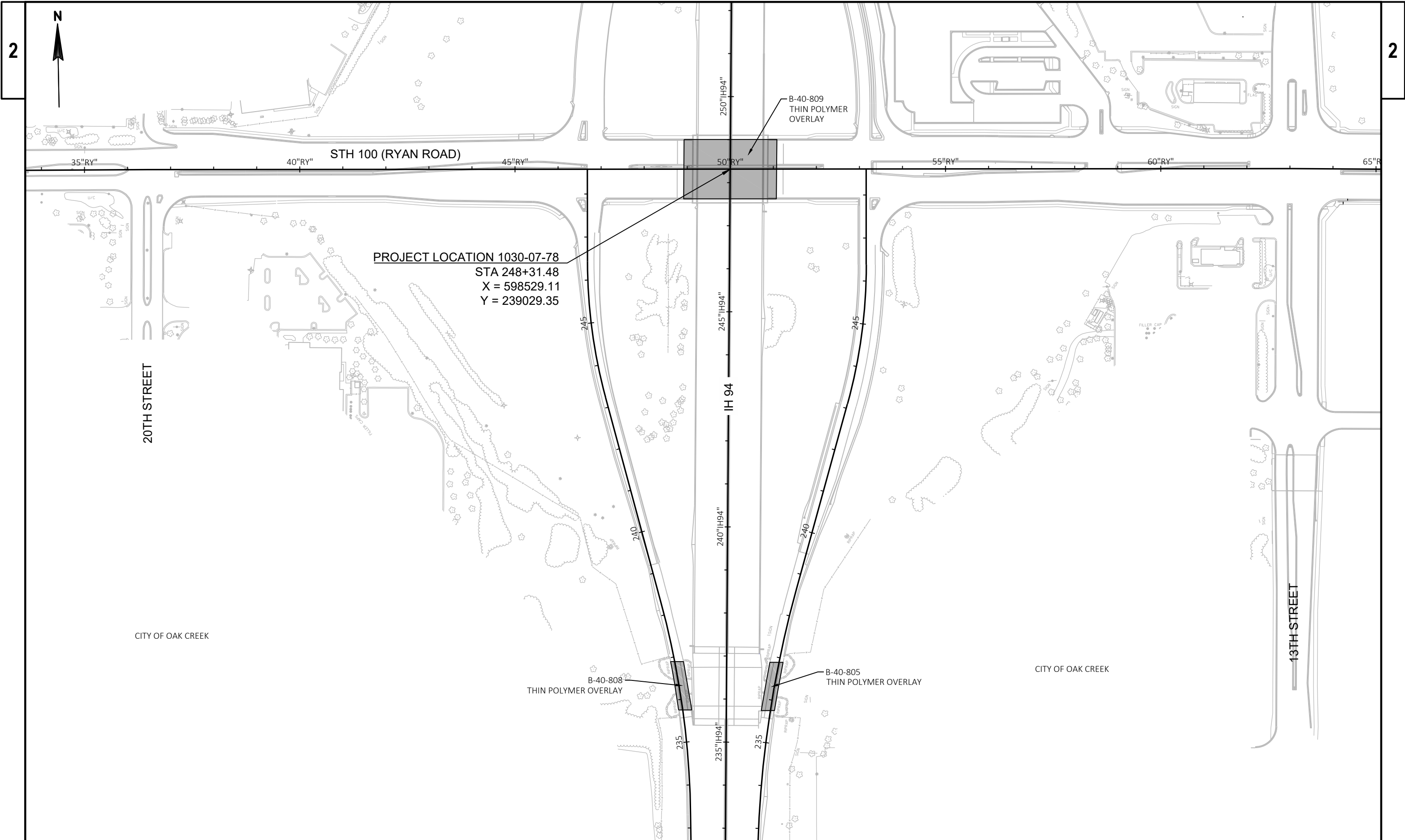
HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, MILWAUKEE COUNTY, NAD83 (2007), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES.

ELEVATIONS ARE REFERENCED TO NAVD 88 (2007). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1030-07-78		

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	
Surveyor	WISDOT
Designer	EVAN LIMBERATOS, P.E.
Project Manager	
Regional Examiner	
Regional Supervisor	WAFA ELQAO, P.E.
APPROVED FOR THE DEPARTMENT	
DATE: 10/29/2020	<i>Evan Limberatos</i> (Signature)

2	<div>GENERAL NOTES</div> <div>NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPERATELY.</div>				2
	<div>ORDER OF SECTION 2 DETAIL SHEETS</div> <div>GENERAL NOTES PROJECT OVERVIEW PLAN DETAILS TRAFFIC CONTROL ALIGNMENT LAYOUT</div>				
	<div>OTHER CONTACTS</div> <div><div><div>WISDOT DESIGN</div><div>EVAN LIMBERATOS - PROJECT MANAGER 141 NW BARSTOW ST. WAUKESHA, WI 53187 0798 PHONE: (262) 548-8797 CELL: (414) 750-3362 EVAN.LIMBERATOS@DOT.WI.GOV</div></div><div><div>MILWAUKEE COUNTY TRANSIT SYSTEM</div><div>MS. MELANIE FLYNN 1942 N. 17TH ST. MILWAUKEE, WI 53205 PHONE: (414) 343-1764 MFLYNN@MCTS.ORG</div></div><div><div>WISCONSIN DNR</div><div>MS. KRISTINA BETZOLD 2300 N DR. MARTIN LUTHER KING DRIVE MILWAUKEE, WI 53212 PHONE: (414) 507-4946 KRISTINA.BETZOLD@WISCONSIN.GOV</div></div><div><div>WISCONSIN COACH LINES, INC.</div><div>MR. TOM DIECKELMAN 1520 ARCADIAN AVENUE WAUKESHA, WI 53186 PHONE: (262) 542-8861 EXT. 140 TOM.DIECKELMAN@COACHUSA.COM</div></div></div> <div><div><div>DIGGERSHOTLINE</div><div>Dial 811 or (800) 242-8511</div><div>www.DiggersHotline.com</div></div></div>				
PROJECT NO: 1030-07-78		HWY: IH 41	COUNTY: MILWAUKEE	GENERAL NOTES	SHEET: E



PROJECT NO: 1030-07-78	HWY: IH 41	COUNTY: MILWAUKEE	PROJECT OVERVIEW	SHEET	E
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LEGEND



INLET PROTECTION TYPE D



MARKING LINE EPOXY 4-INCH (YELLOW)



MARKING LINE EPOXY 4-INCH (WHITE)

*MARKING LINE CONTRAST EPOXY 4-INCH (DASHED WHITE)
(12.5 FT LINE 37.5 FT SKIP)

*MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)



MARKING WORDS EPOXY (WHITE)



MARKING ARROWS EPOXY (TYPE 2) (WHITE)



MARKING ARROWS EPOXY (TYPE 3) (WHITE)

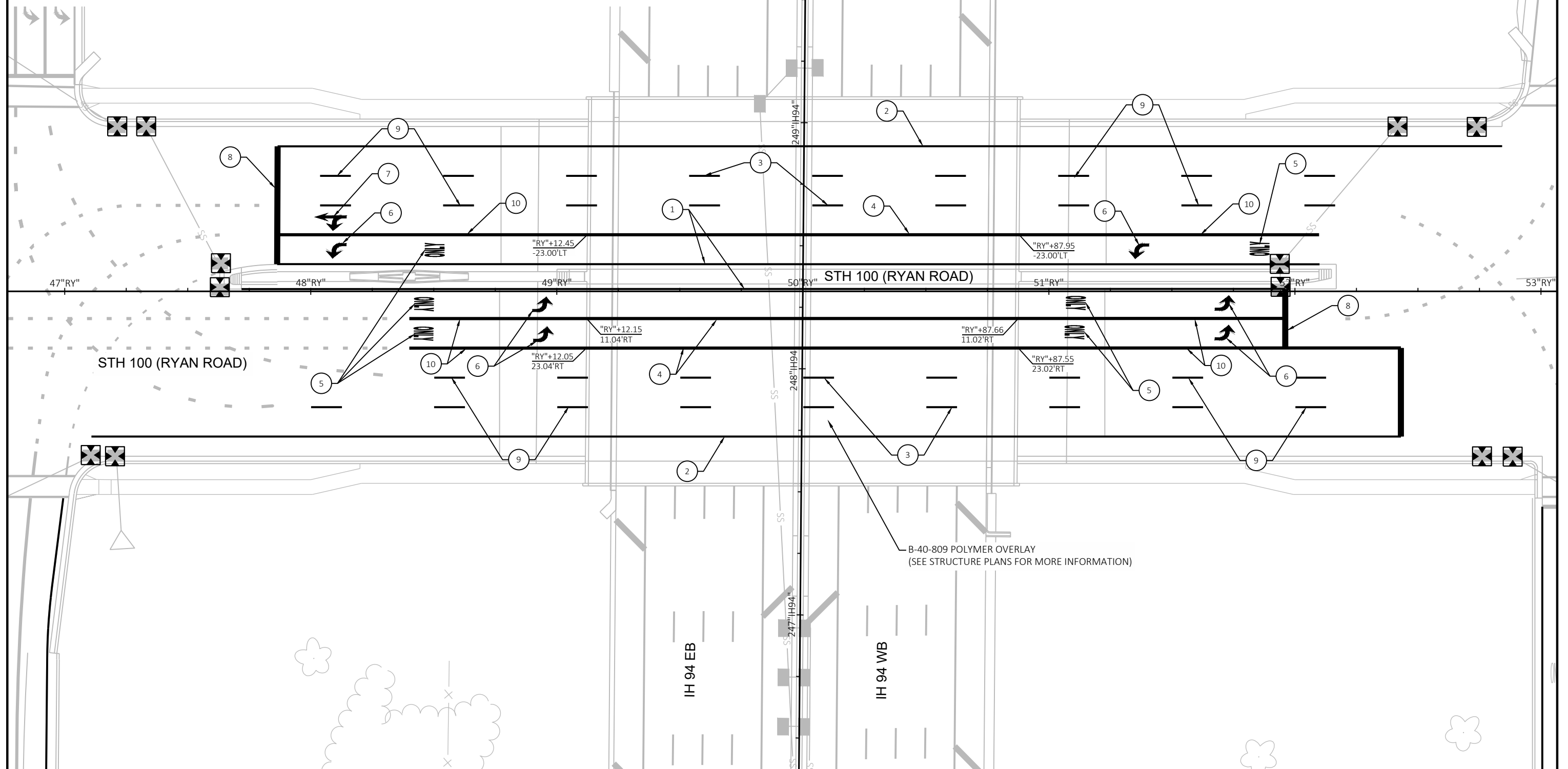


MARKING STOP LINE EPOXY 18-INCH (WHITE)

MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 4-INCH (DASHED WHITE)
(12.5 FT LINE 37.5 FT SKIP)

MARKING REPLACE LINE CONTRAST WET REFLECTIVE EPOXY 8-INCH (WHITE)

*NOTE: PLACE OVER POLYMER OVERLAY



PROJECT NO: 1030-07-78

HWY: IH 41

COUNTY: MILWAUKEE

PLAN DETAIL

SHEET

E

FILE NAME : N:\PDS\C3D\10300708\SHEETPLAN\021201_PD.DWG
LAYOUT NAME - 021201

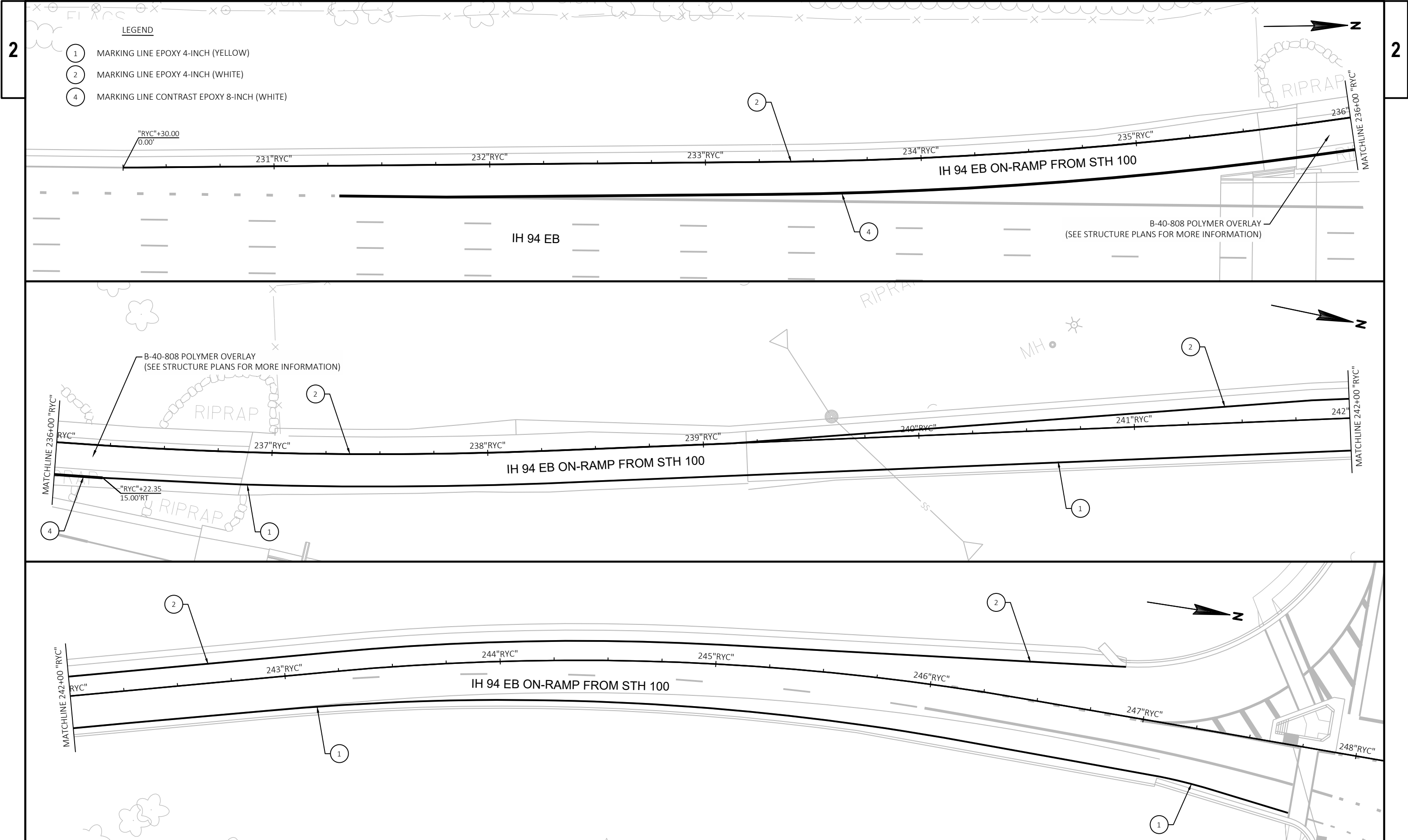
PLOT DATE : 10/21/2020 2:47 PM

PLOT BY : JOHANSEN, AMANDA A

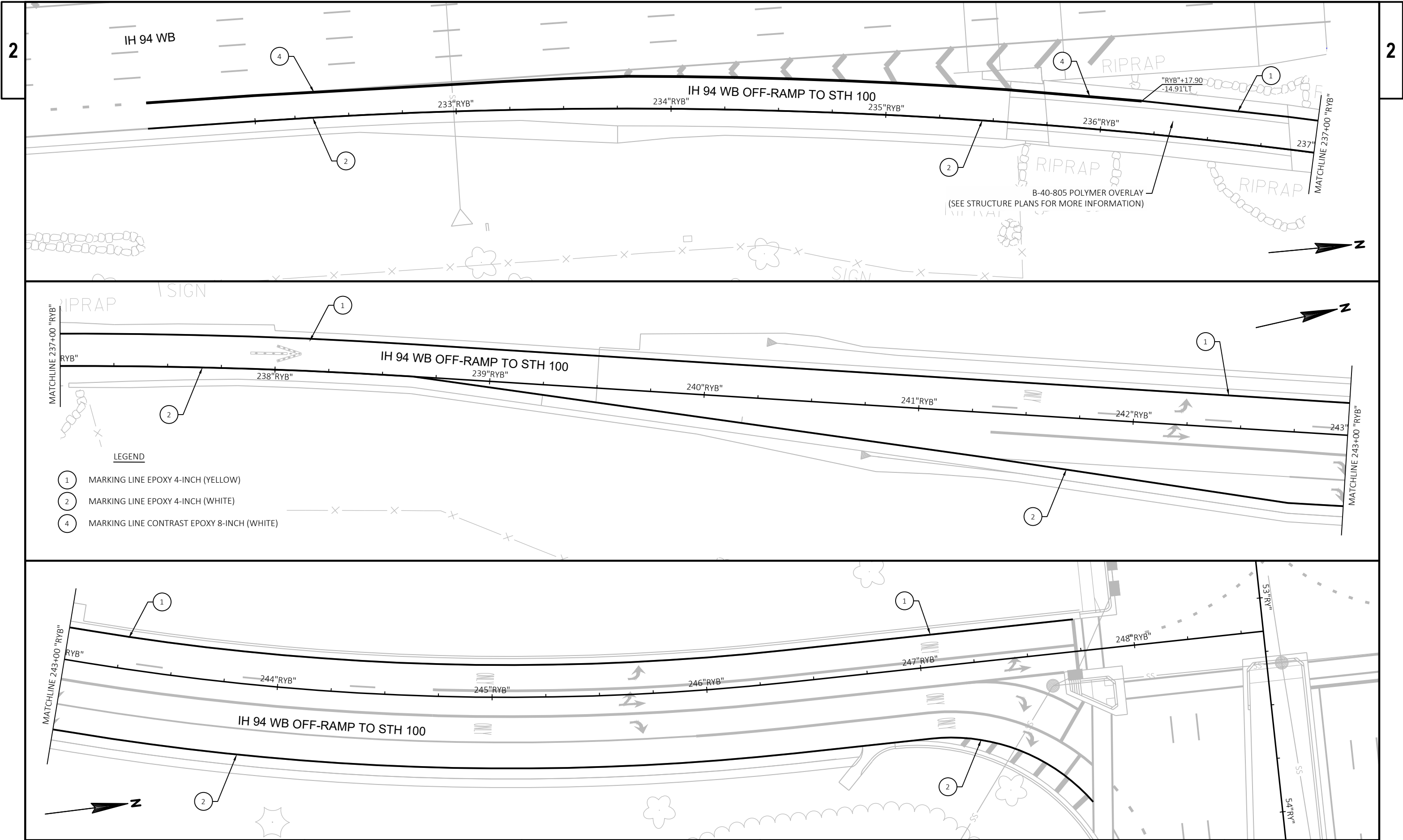
PLOT NAME :

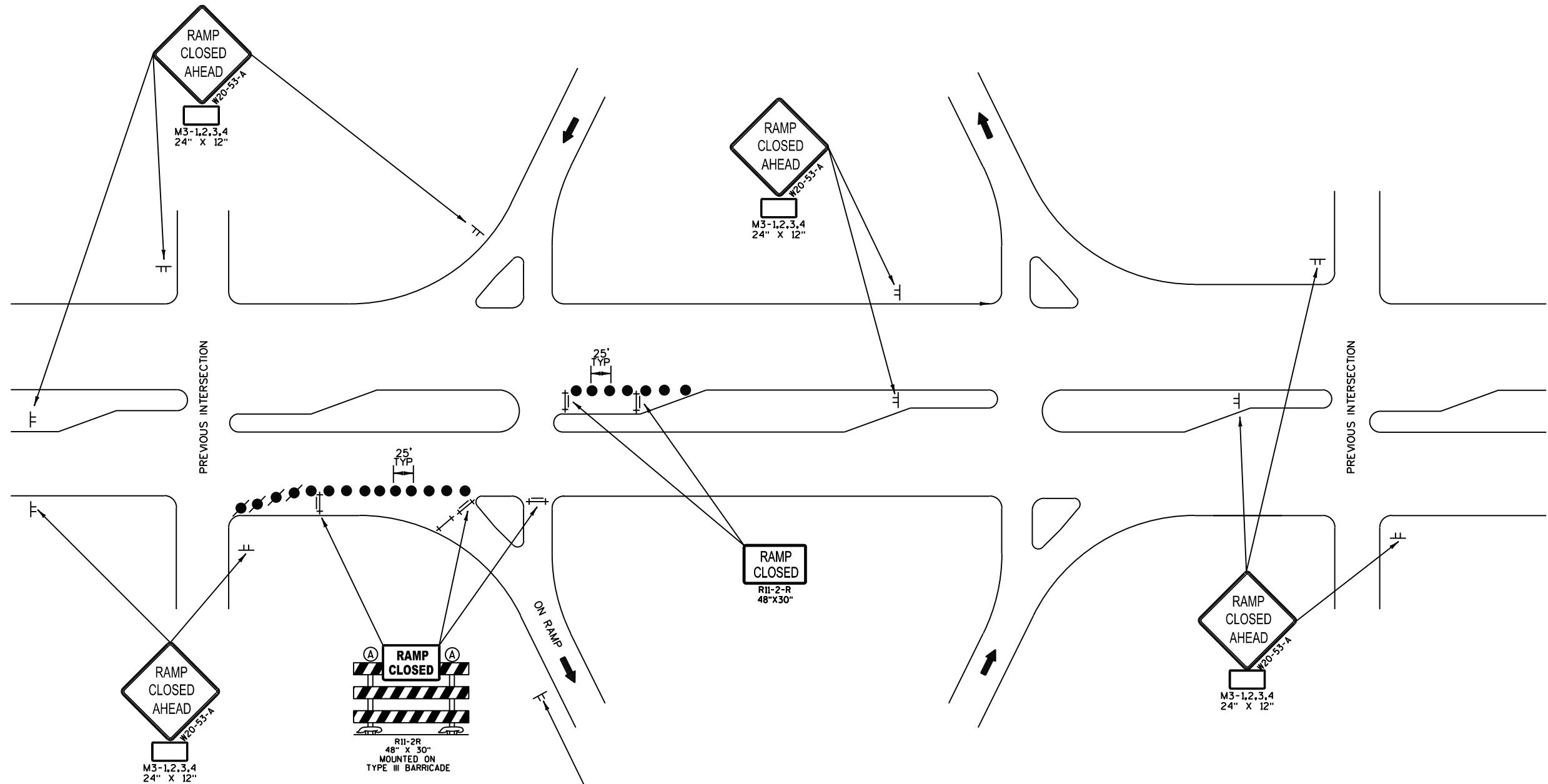
PLOT SCALE : 1 IN=40 FT

WISDOT/CADDs SHEET 42



- LEGEND
- 1 MARKING LINE EPOXY 4-INCH (YELLOW)
 - 2 MARKING LINE EPOXY 4-INCH (WHITE)
 - 4 MARKING LINE CONTRAST EPOXY 8-INCH (WHITE)



**LEGEND**

- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL WITH TYPE "C" STEADY BURN LIGHT
- † TYPE III BARRICADE
- †† TYPE III BARRICADE WITH 2 TYPE "A" WARNING LIGHT (FLASHING)
- SIGN ON PERMANENT SUPPORT
- † SIGN ON TEMPORARY SUPPORT
- ➔ DIRECTION OF TRAFFIC

TRAFFIC CONTROL NOTES

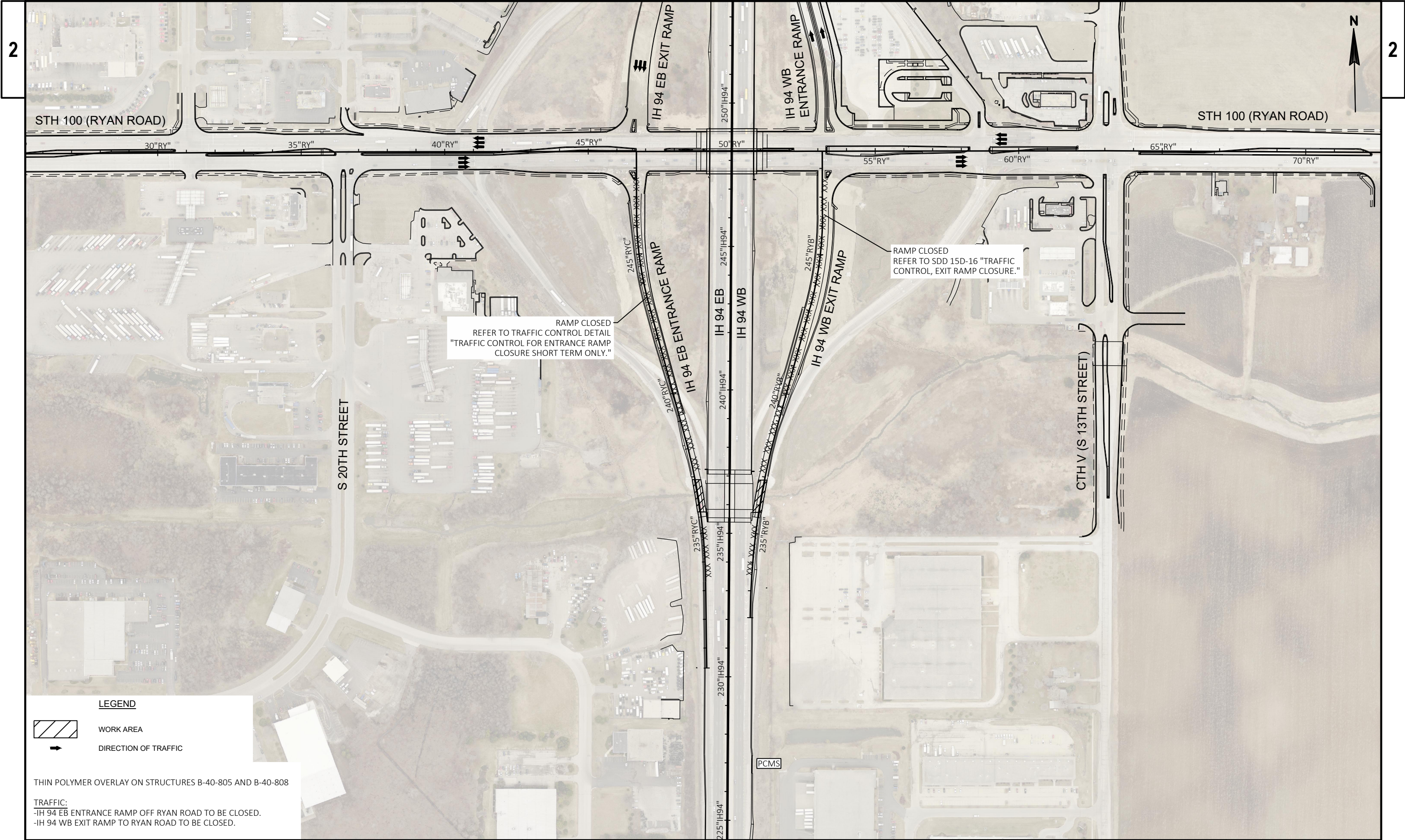
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

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

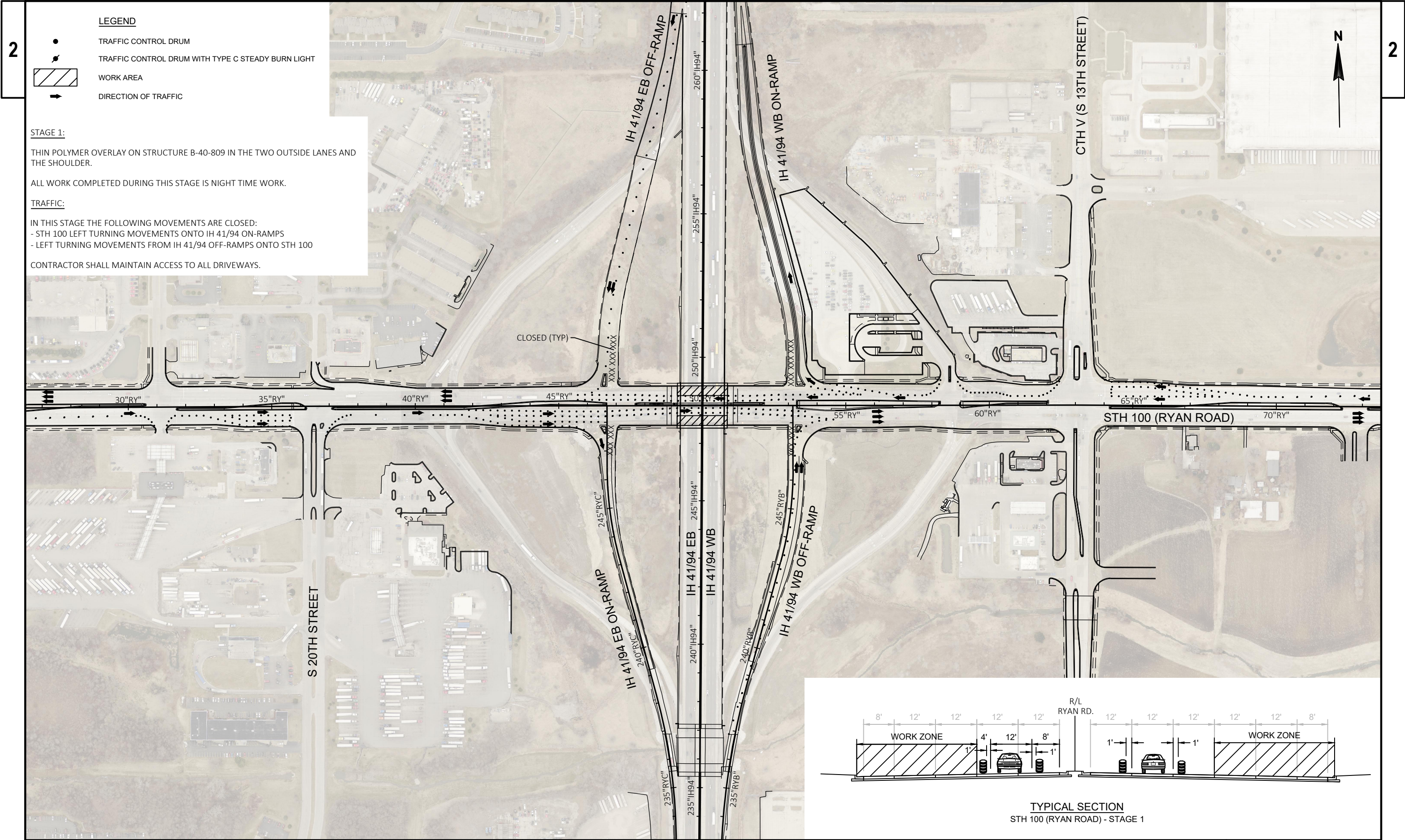
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

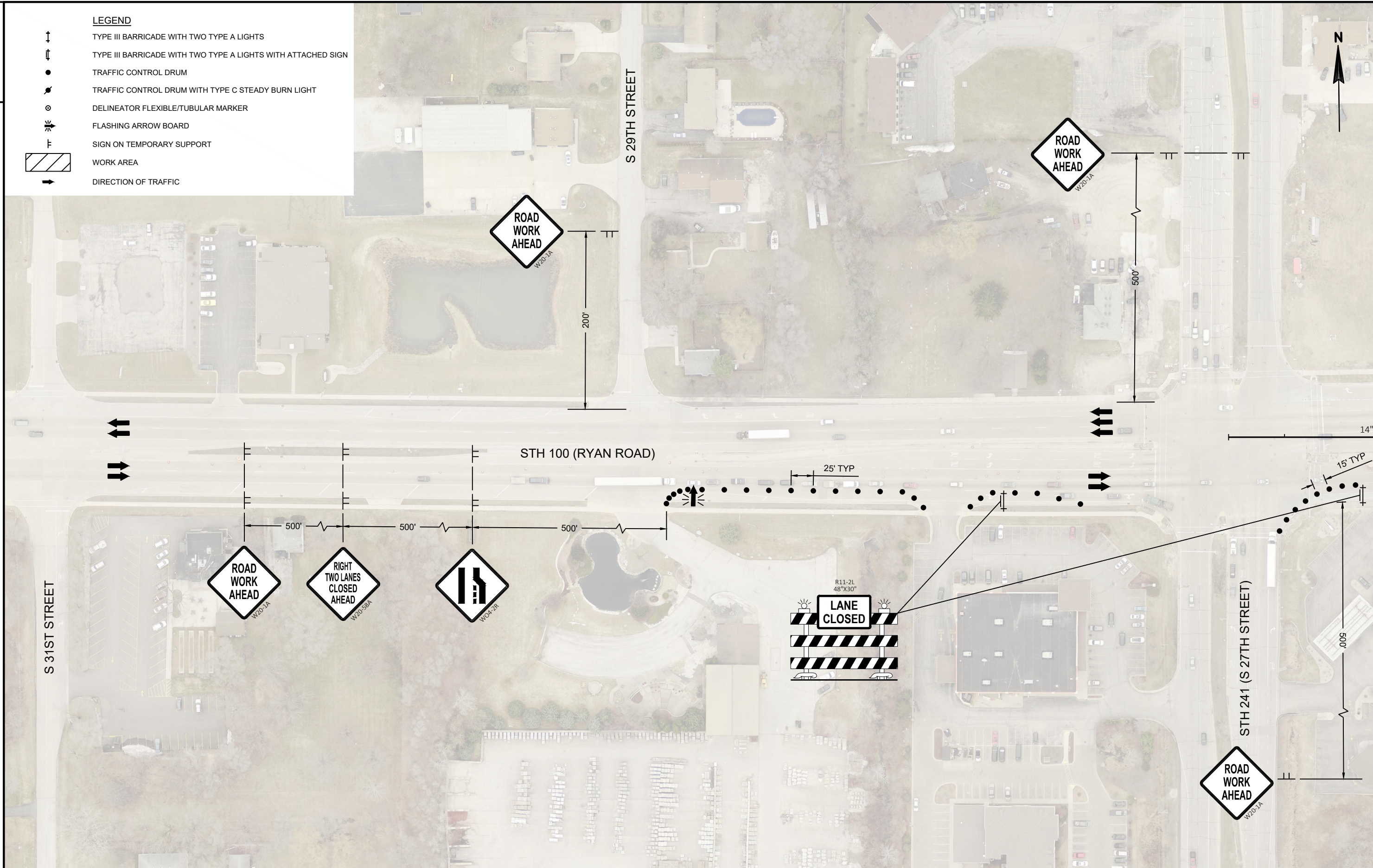
SHORT TERM DEFINED AS 7 DAYS/NIGHTS OR LESS. FOR NIGHT TIME OPERATIONS ALL DRUMS IN TAPERS SHALL HAVE WARNING LIGHT, TYPE C (STEADY BURN). MAY BE APPLIED TO ARTERIALS OR LOCAL ROADS.

TRAFFIC CONTROL FOR ENTRANCE RAMP CLOSURE
SHORT TERM ONLY



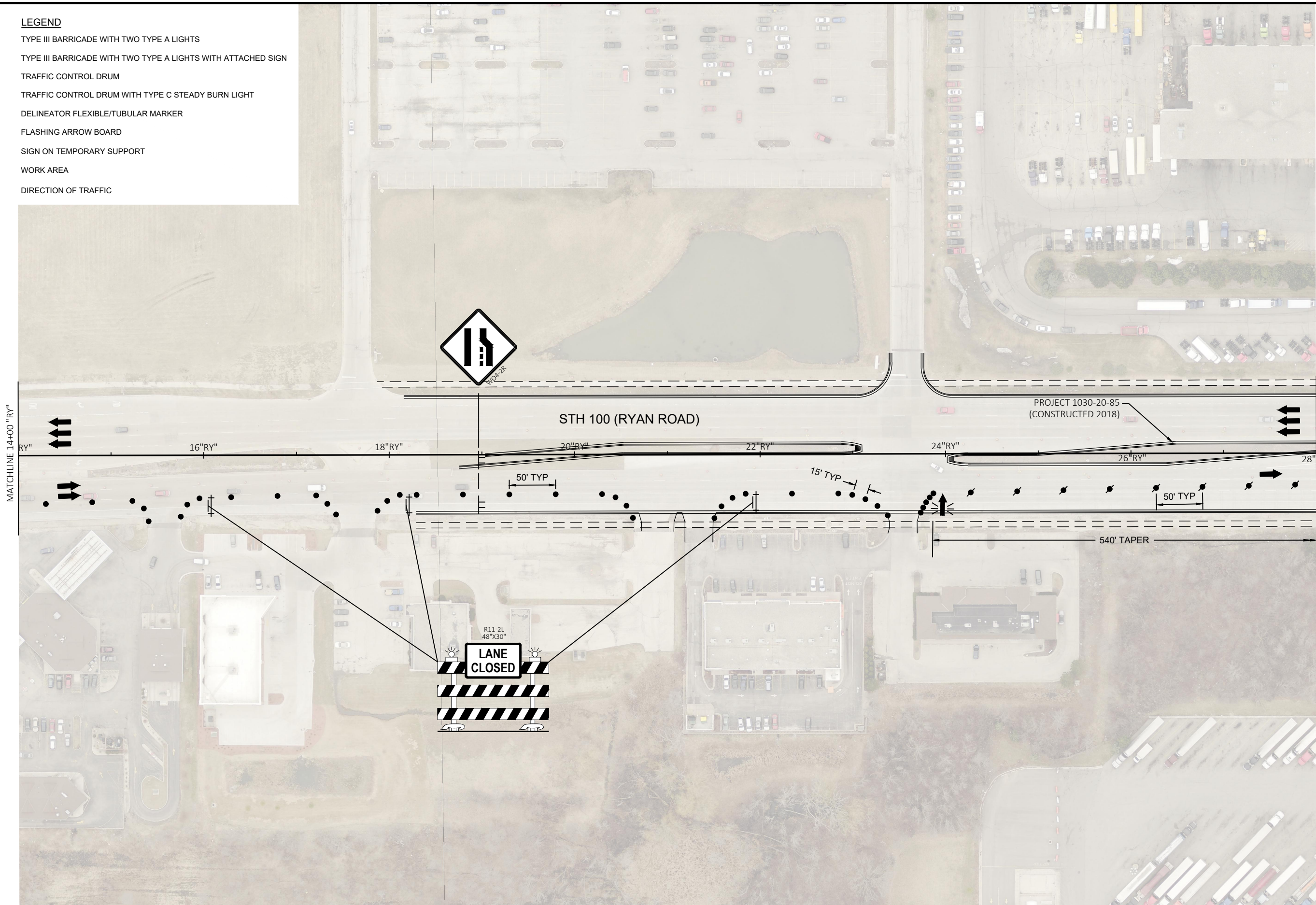
PROJECT NO: 1030-07-78	HWY: IH 94	COUNTY: MILWAUKEE	TRAFFIC CONTROL - RAMP STRUCTURES	SHEET	E
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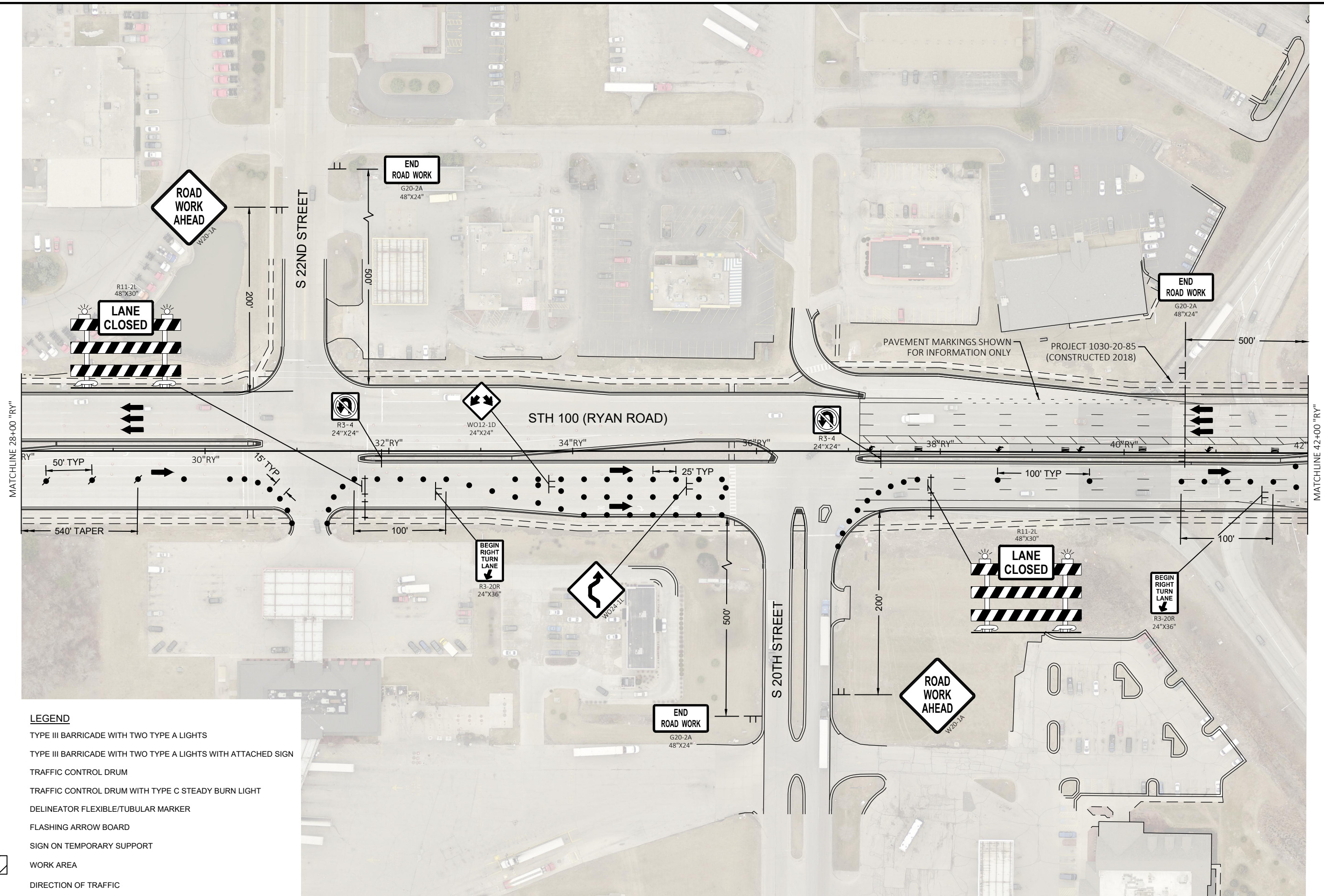













LEGEND

- TYPE III BARRICADE WITH TWO TYPE A LIGHTS
- TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- FLASHING ARROW BOARD
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- DIRECTION OF TRAFFIC



**LEGEND**

-  TYPE III BARRICADE WITH TWO TYPE A LIGHTS
-  TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
-  DELINEATOR FLEXIBLE/TUBULAR MARKER
-  FLASHING ARROW BOARD
-  SIGN ON TEMPORARY SUPPORT
-  WORK AREA
-  DIRECTION OF TRAFFIC

PROJECT NO: 1030-07-78

HWY: IH 41

COUNTY: MILWAUKEE

TRAFFIC CONTROL - STAGE 1

SHEET

E

TYPE III BARRICADE WITH TWO TYPE A LIGHTS

TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

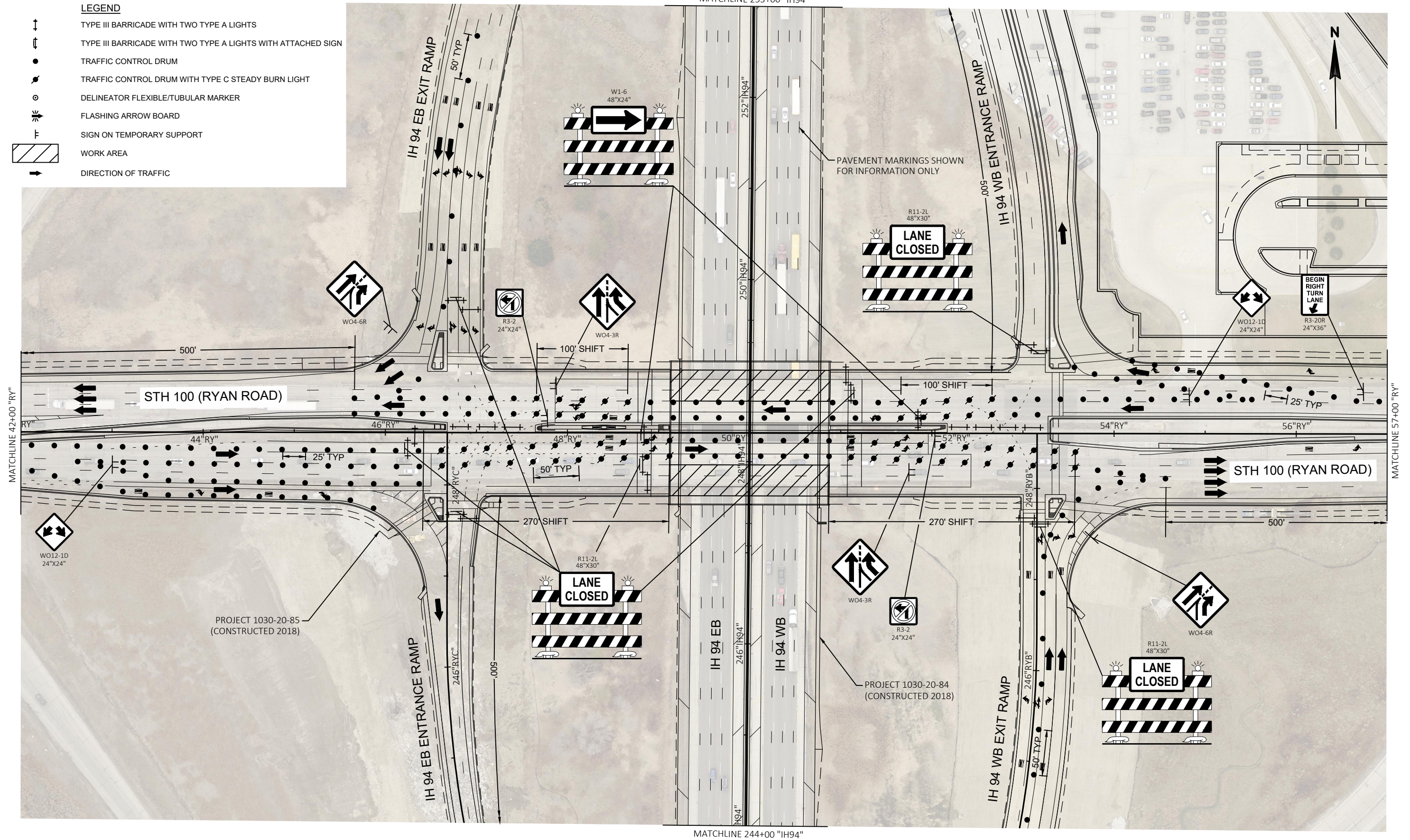
DELINEATOR FLEXIBLE/TUBULAR MARKER

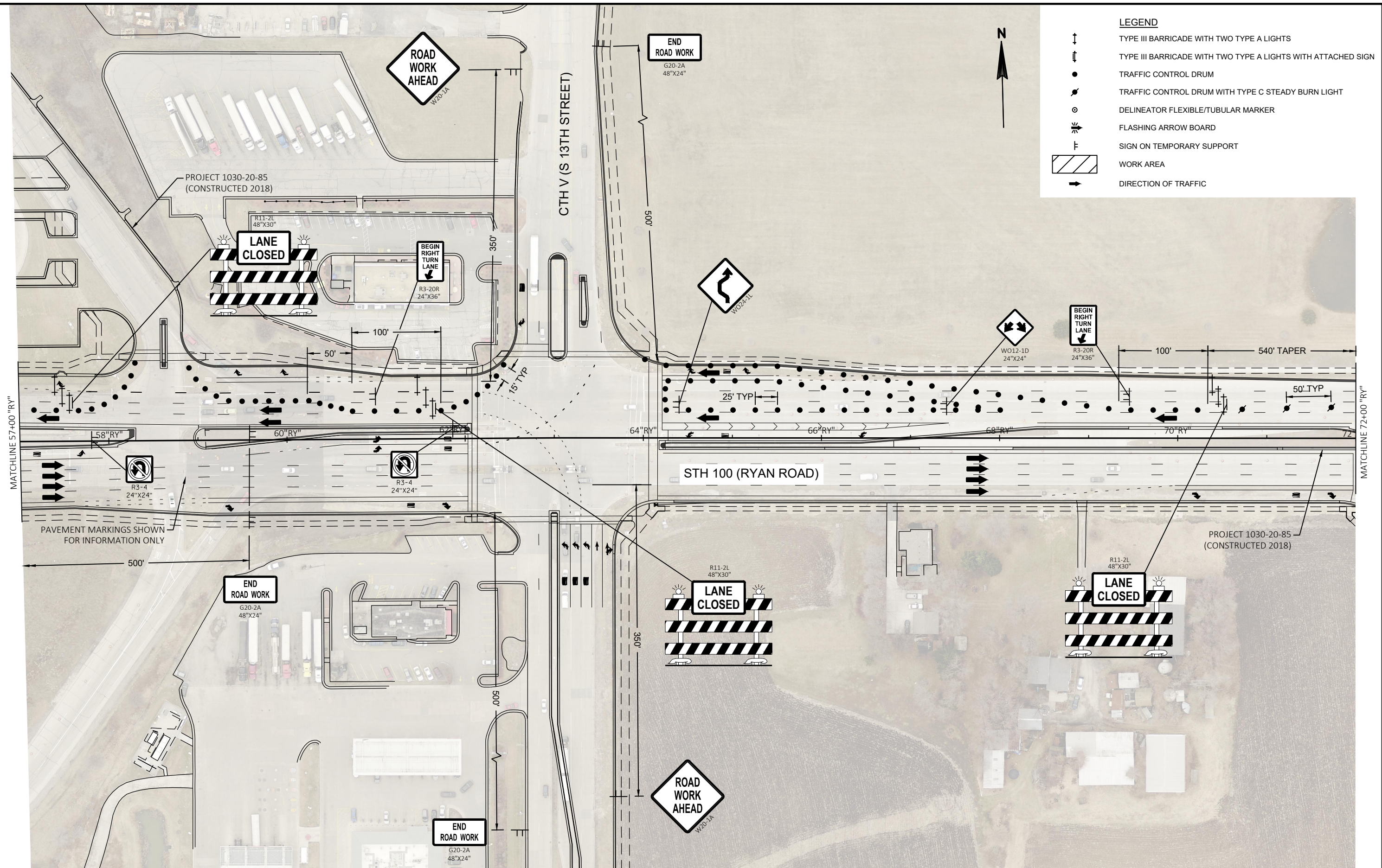
FLASHING ARROW BOARD

SIGN ON TEMPORARY SUPPORT










WORK AREA

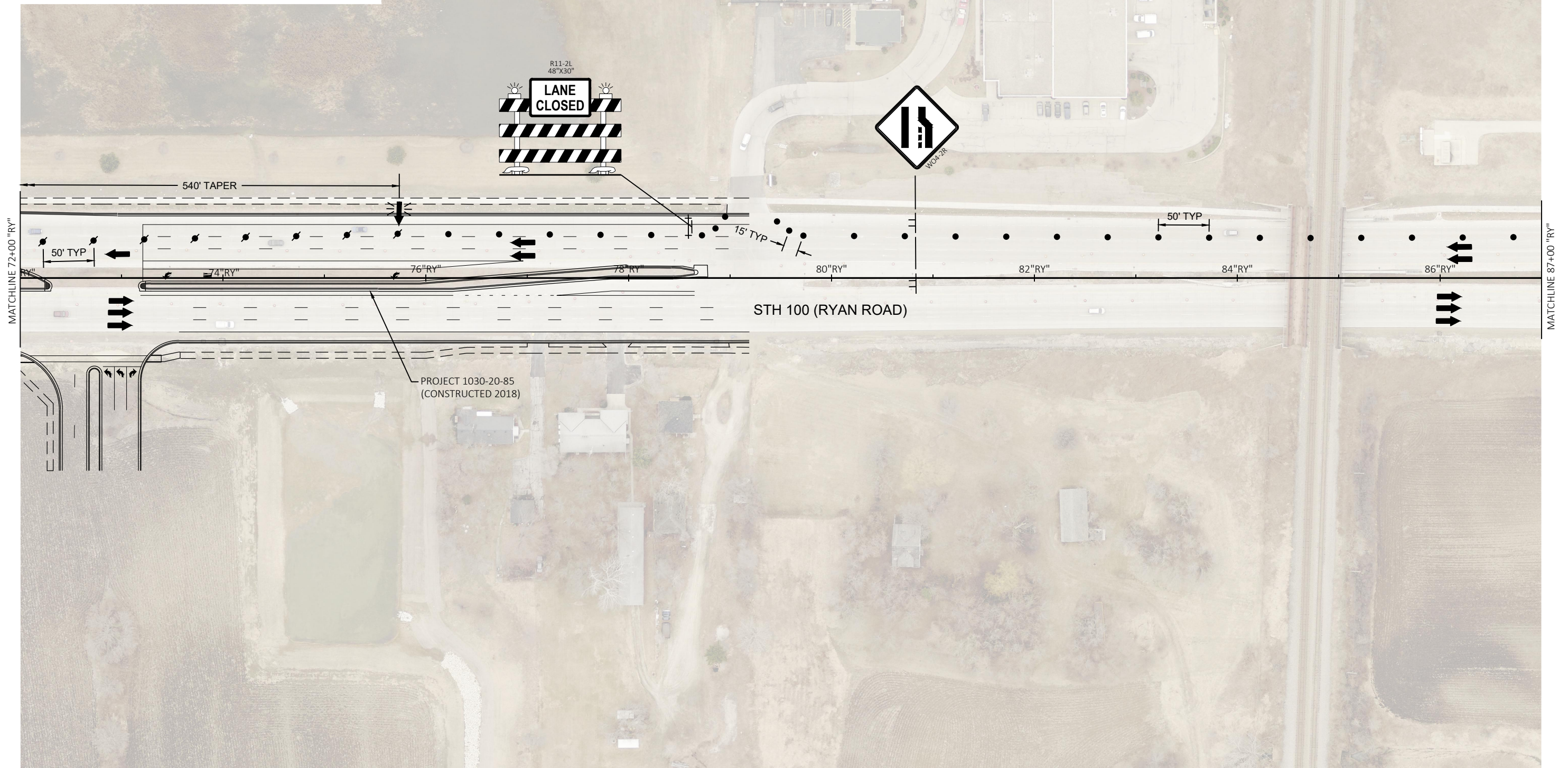
DIRECTION OF TRAFFIC





LEGEND

-  TYPE III BARRICADE WITH TWO TYPE A LIGHTS
-  TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
-  DELINEATOR FLEXIBLE/TUBULAR MARKER
-  FLASHING ARROW BOARD
-  SIGN ON TEMPORARY SUPPORT
-  WORK AREA
-  DIRECTION OF TRAFFIC



PROJECT NO: 1030-07-78

HWY: IH 41

COUNTY: MILWAUKEE

TRAFFIC CONTROL - STAGE 1

SHEET

E

TYPE III BARRICADE WITH TWO TYPE A LIGHTS

TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN

TRAFFIC CONTROL DRUM

TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT

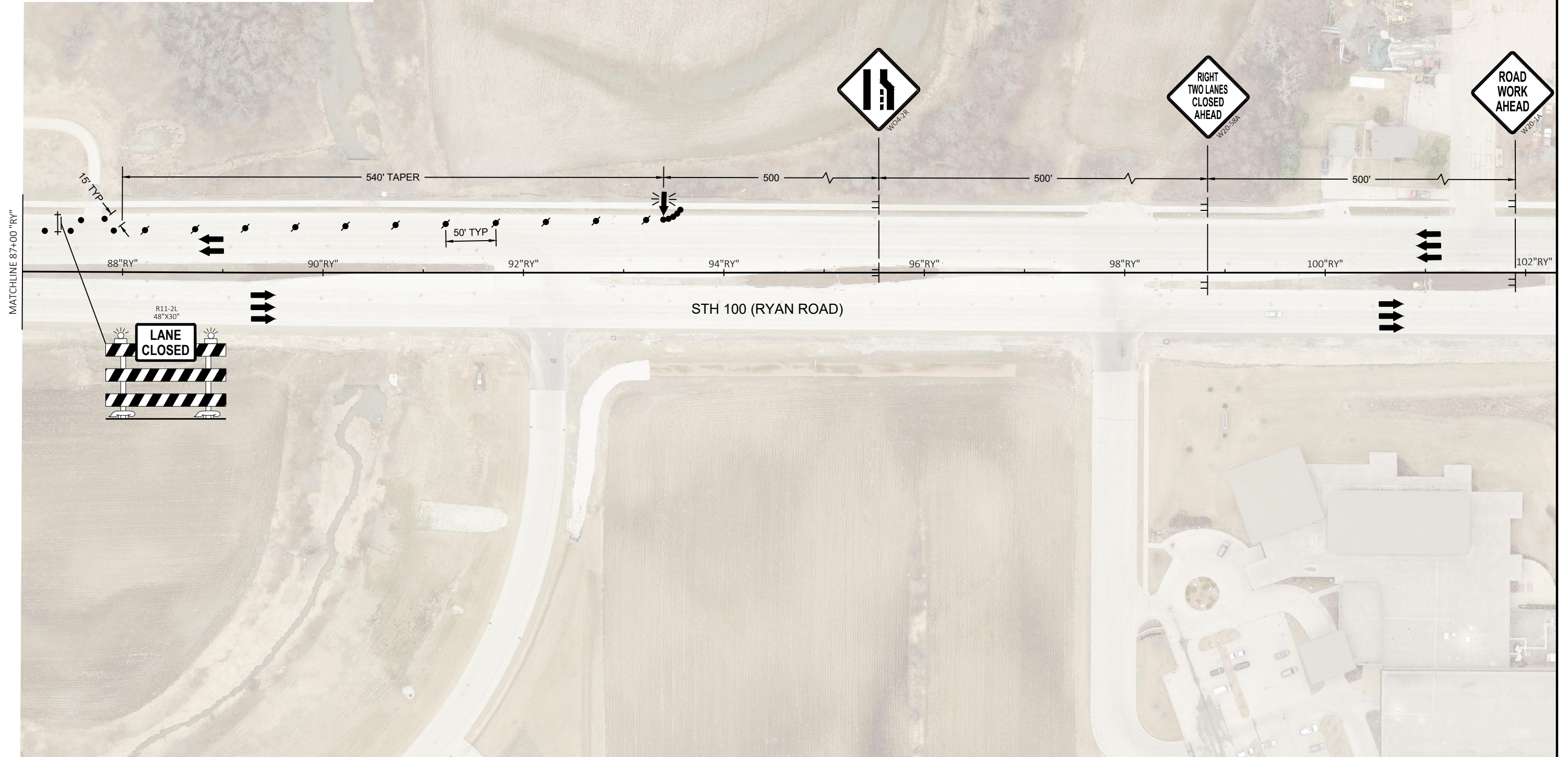
DELINEATOR FLEXIBLE/TUBULAR MARKER

FLASHING ARROW BOARD

SIGN ON TEMPORARY SUPPORT

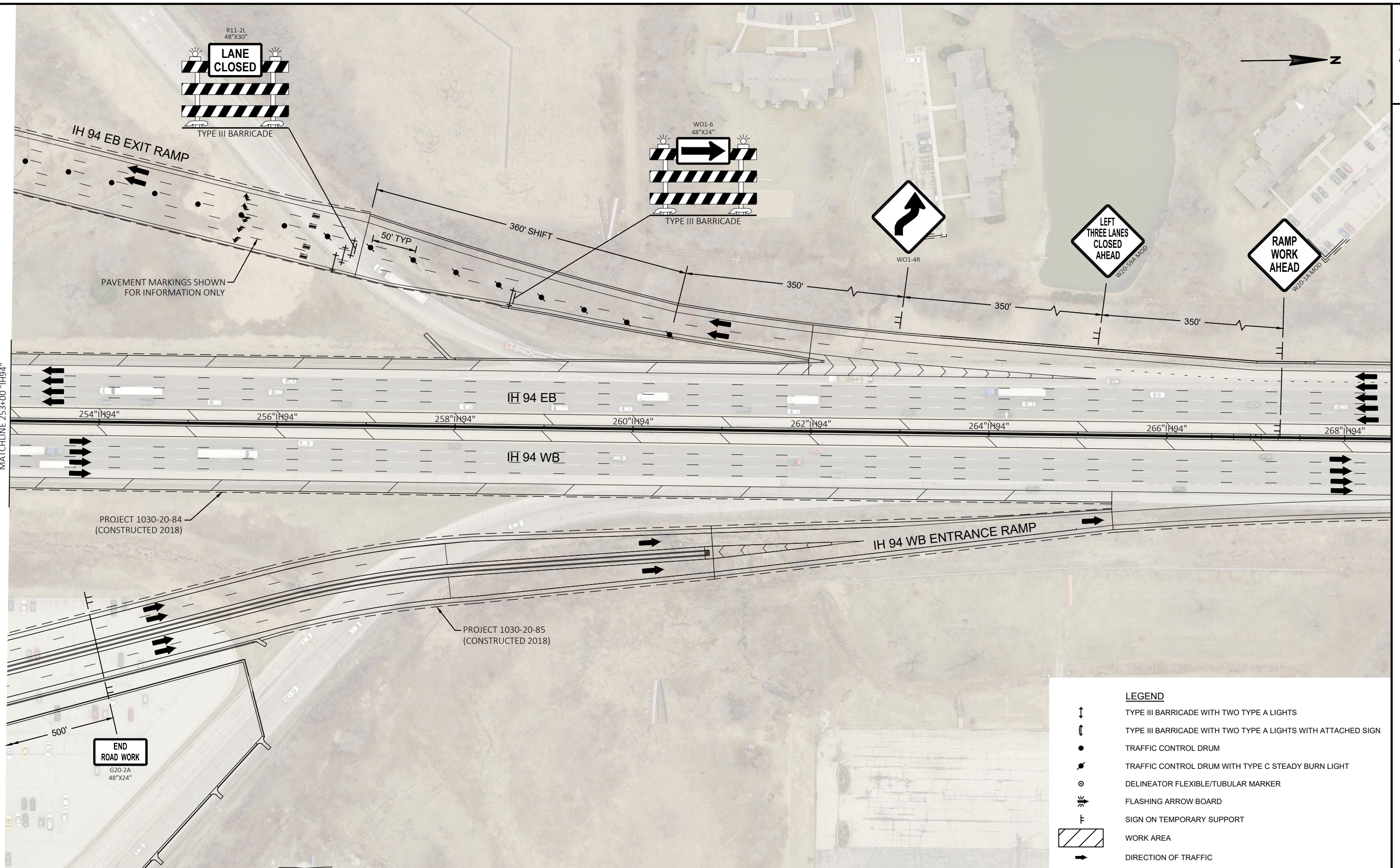
WORK AREA

DIRECTION OF TRAFFIC





MATCHLINE 253+00 "IH94"



PROJECT NO: 1030-07-78

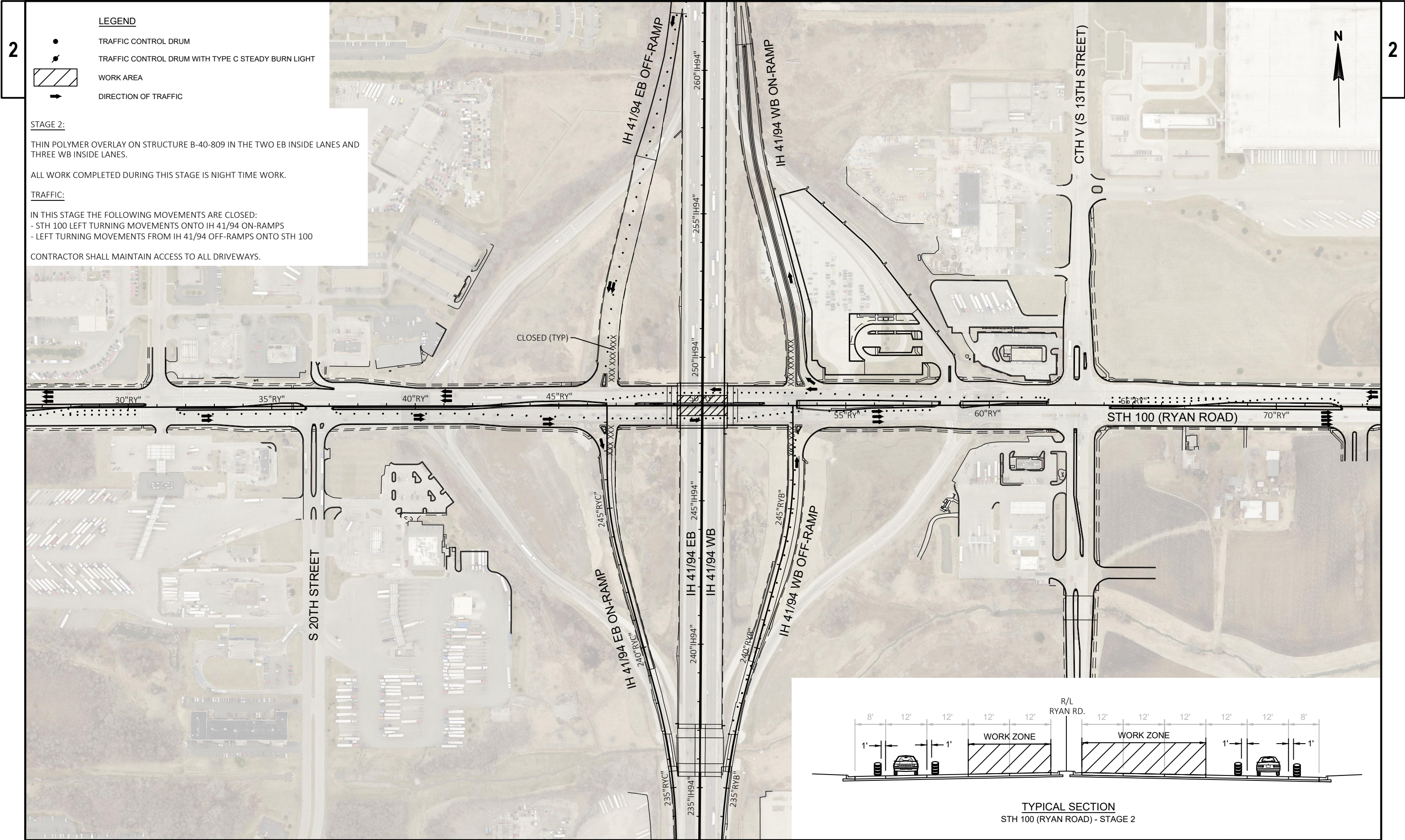
HWY: IH 41

COUNTY: MILWAUKEE

TRAFFIC CONTROL - STAGE 1

SHEET

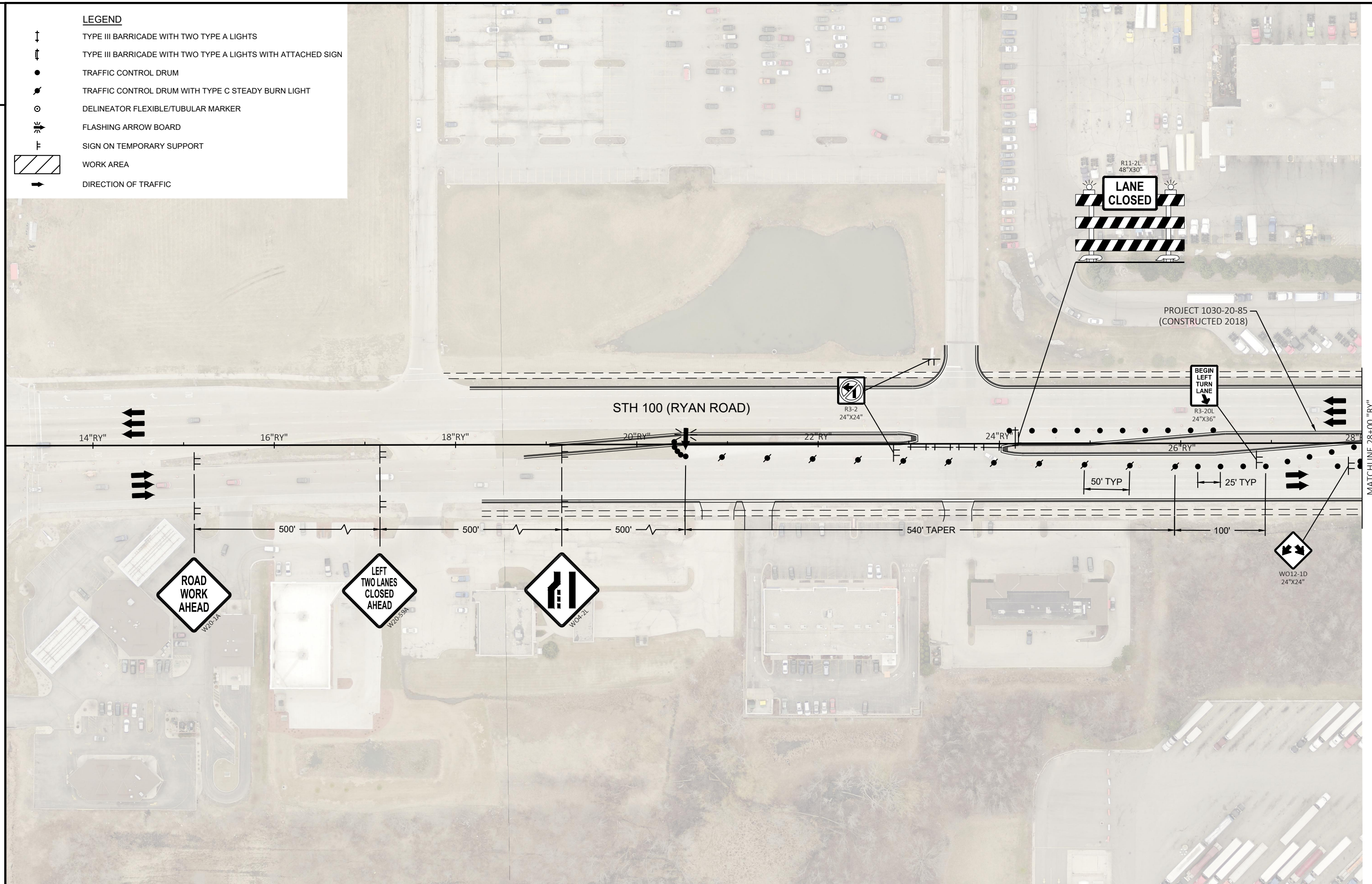
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PROJECT NO: 1030-07-78	HWY: IH 41	COUNTY: MILWAUKEE	TRAFFIC CONTROL - STAGE 2 OVERVIEW	SHEET	E
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LEGEND

- ↑ ↓ TYPE III BARRICADE WITH TWO TYPE A LIGHTS
- ↑ ↓ TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- ⚡ FLASHING ARROW BOARD
- ⌞ SIGN ON TEMPORARY SUPPORT
- ▨ WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO: 1030-07-78

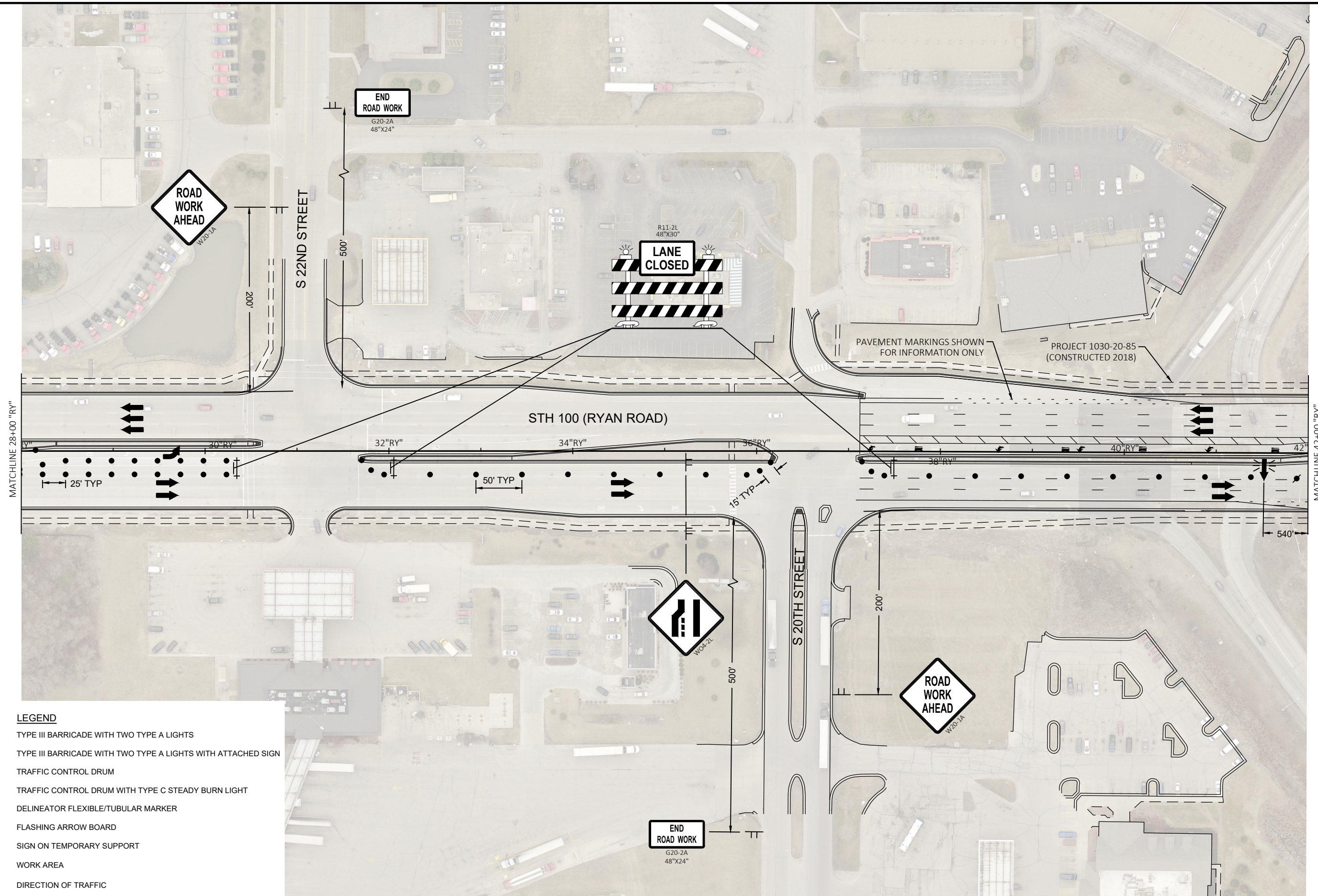
HWY: IH 41










COUNTY: MILWAUKEE

TRAFFIC CONTROL - STAGE 2

SHEET

E

**LEGEND**

-  TYPE III BARRICADE WITH TWO TYPE A LIGHTS
-  TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
-  DELINEATOR FLEXIBLE/TUBULAR MARKER
-  FLASHING ARROW BOARD
-  SIGN ON TEMPORARY SUPPORT
-  WORK AREA
-  DIRECTION OF TRAFFIC

PROJECT NO: 1030-07-78

HWY: IH 41

COUNTY: MILWAUKEE

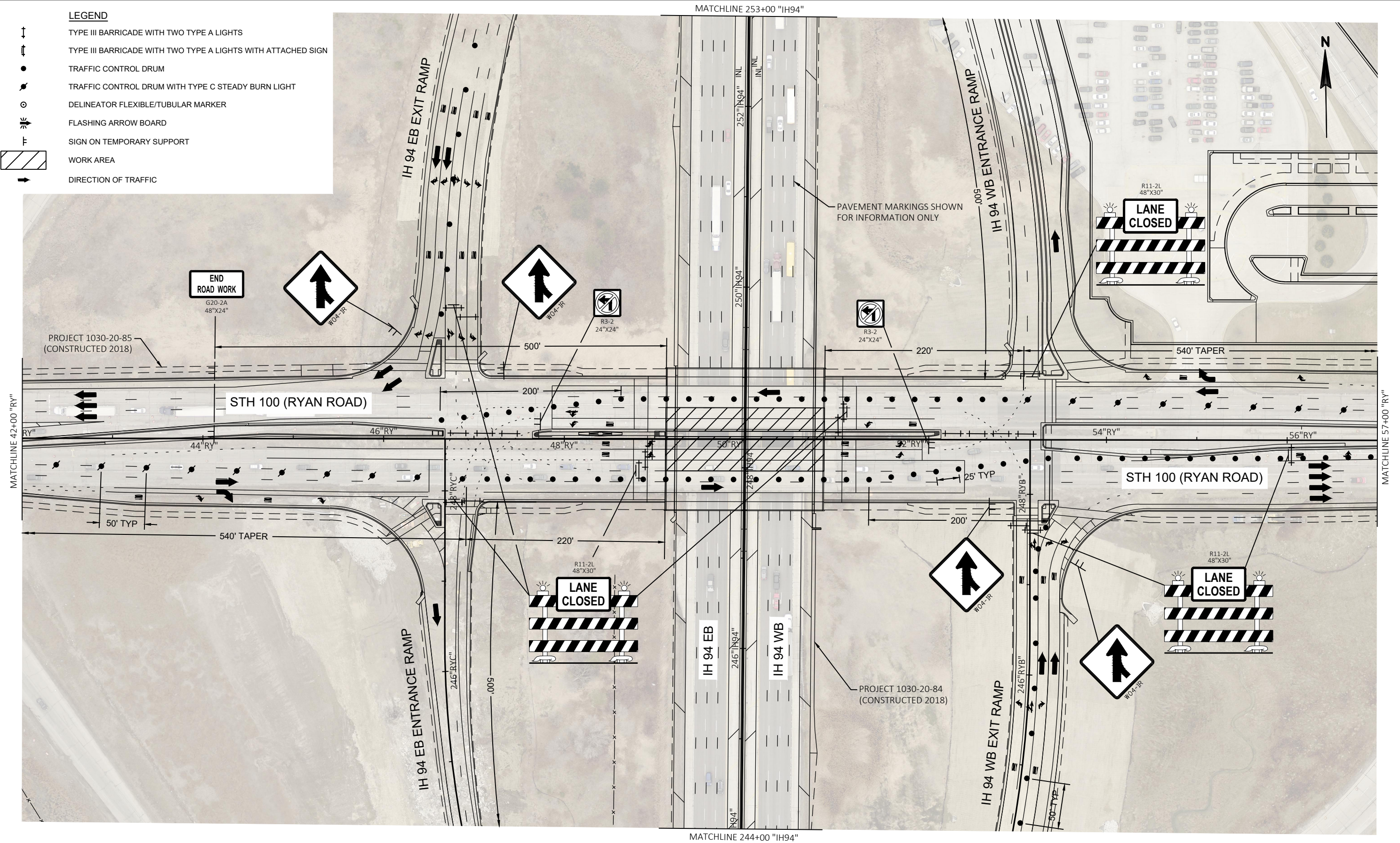
TRAFFIC CONTROL - STAGE 2

SHEET

E

LEGEND

- ↑ TYPE III BARRICADE WITH TWO TYPE A LIGHTS
- ↑ TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- ⚡ FLASHING ARROW BOARD
- ⊥ SIGN ON TEMPORARY SUPPORT
- ▨ WORK AREA
- DIRECTION OF TRAFFIC



PROJECT NO: 1030-07-78

HWY: IH 41

COUNTY: MILWAUKEE

TRAFFIC CONTROL - STAGE 2

SHEET

E

FILE NAME : N:\PDS\C3D\10300708\SHEETPLAN\025002_TC.DWG
LAYOUT NAME - 025013

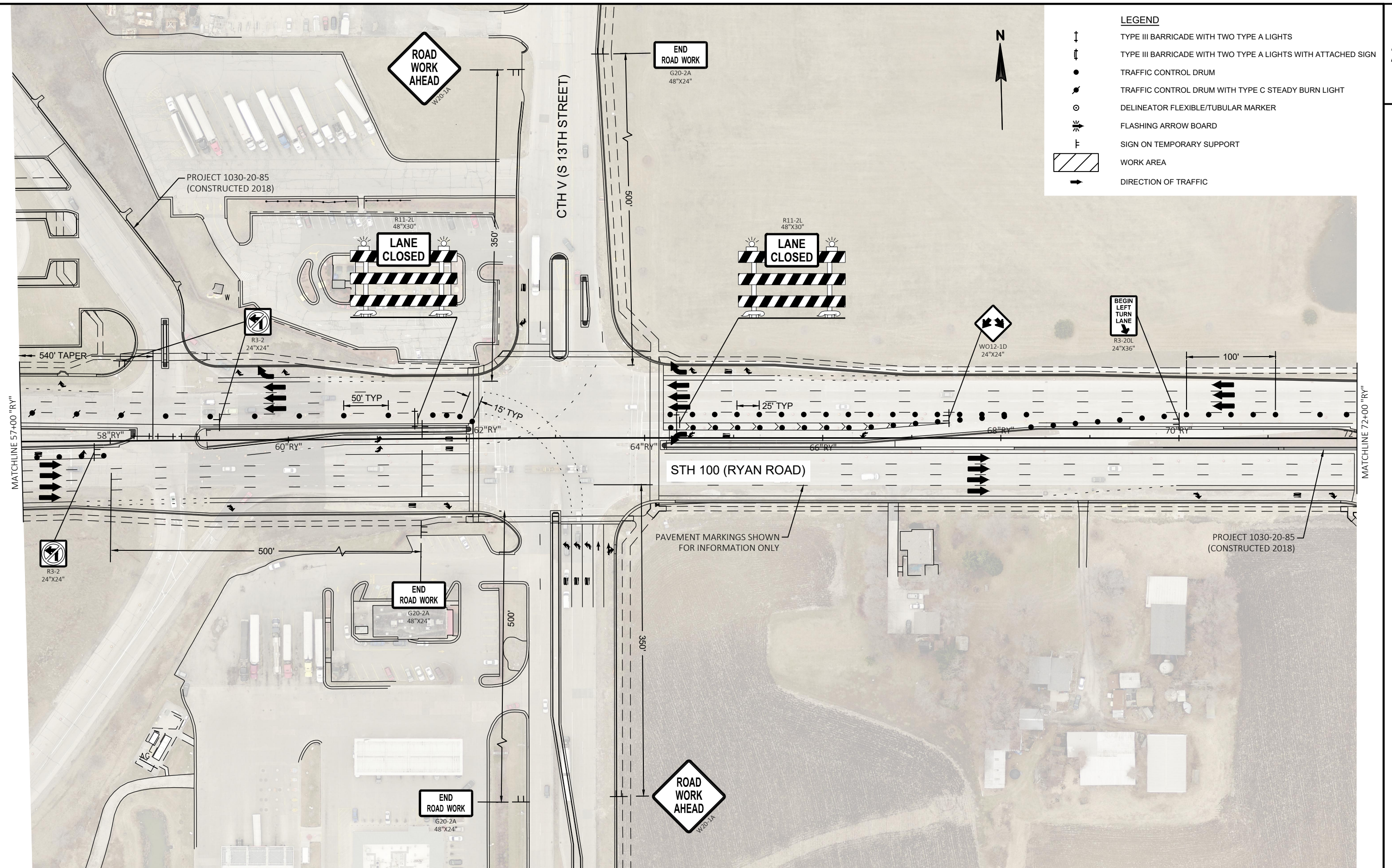
PLOT DATE : 9/16/2020 7:01 AM

PLOT BY : JOHANSEN, AMANDA A

PLOT NAME :

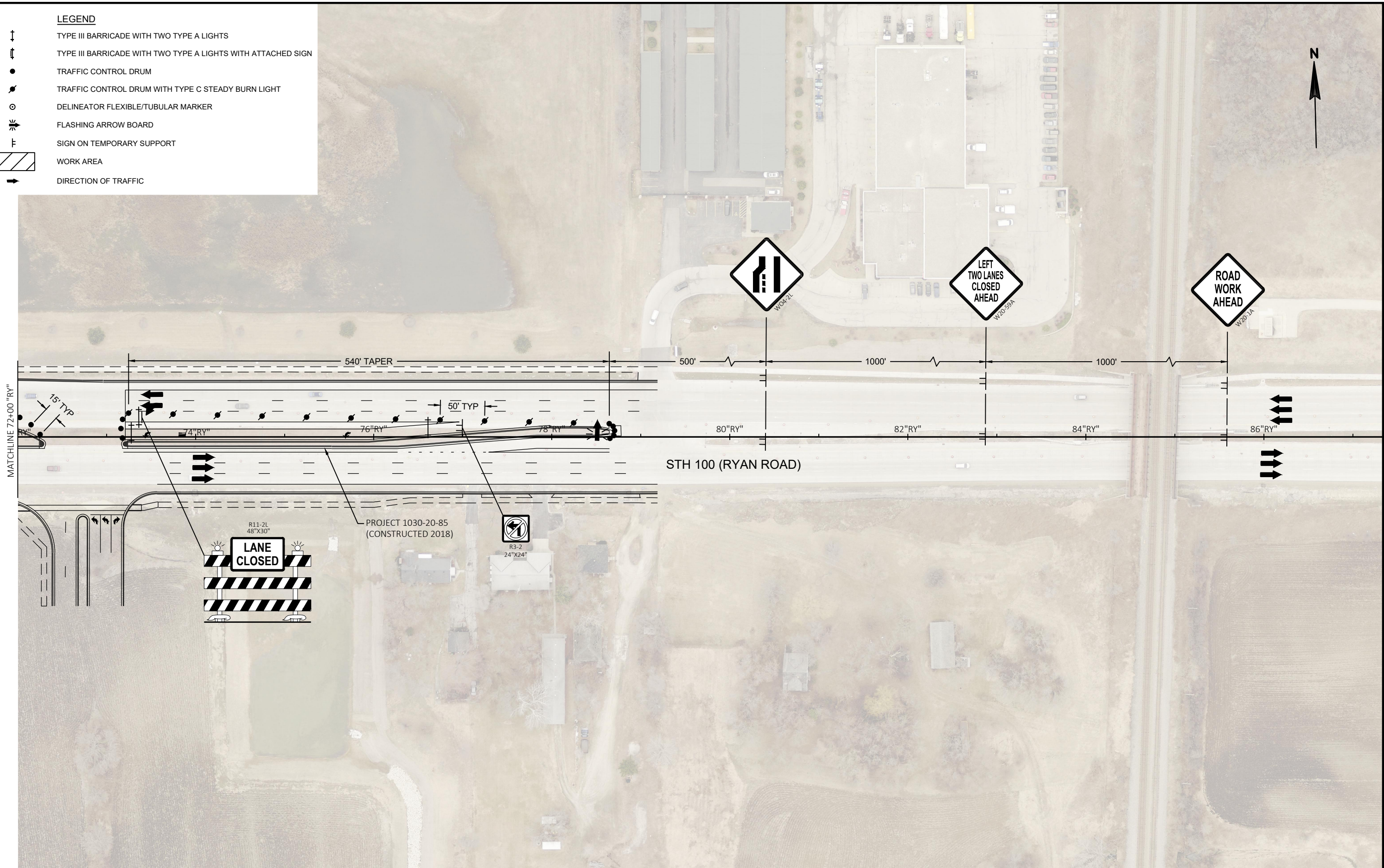
PLOT SCALE : 1 IN:100 FT

WISDOT/CADDs SHEET 42



LEGEND

- ↑ ↓ TYPE III BARRICADE WITH TWO TYPE A LIGHTS
- ↑ ↓ TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- ⚡ FLASHING ARROW BOARD
- ⊥ SIGN ON TEMPORARY SUPPORT
- ▨ WORK AREA
- ➔ DIRECTION OF TRAFFIC



PROJECT NO: 1030-07-78

HWY: IH 41








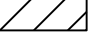

COUNTY: MILWAUKEE

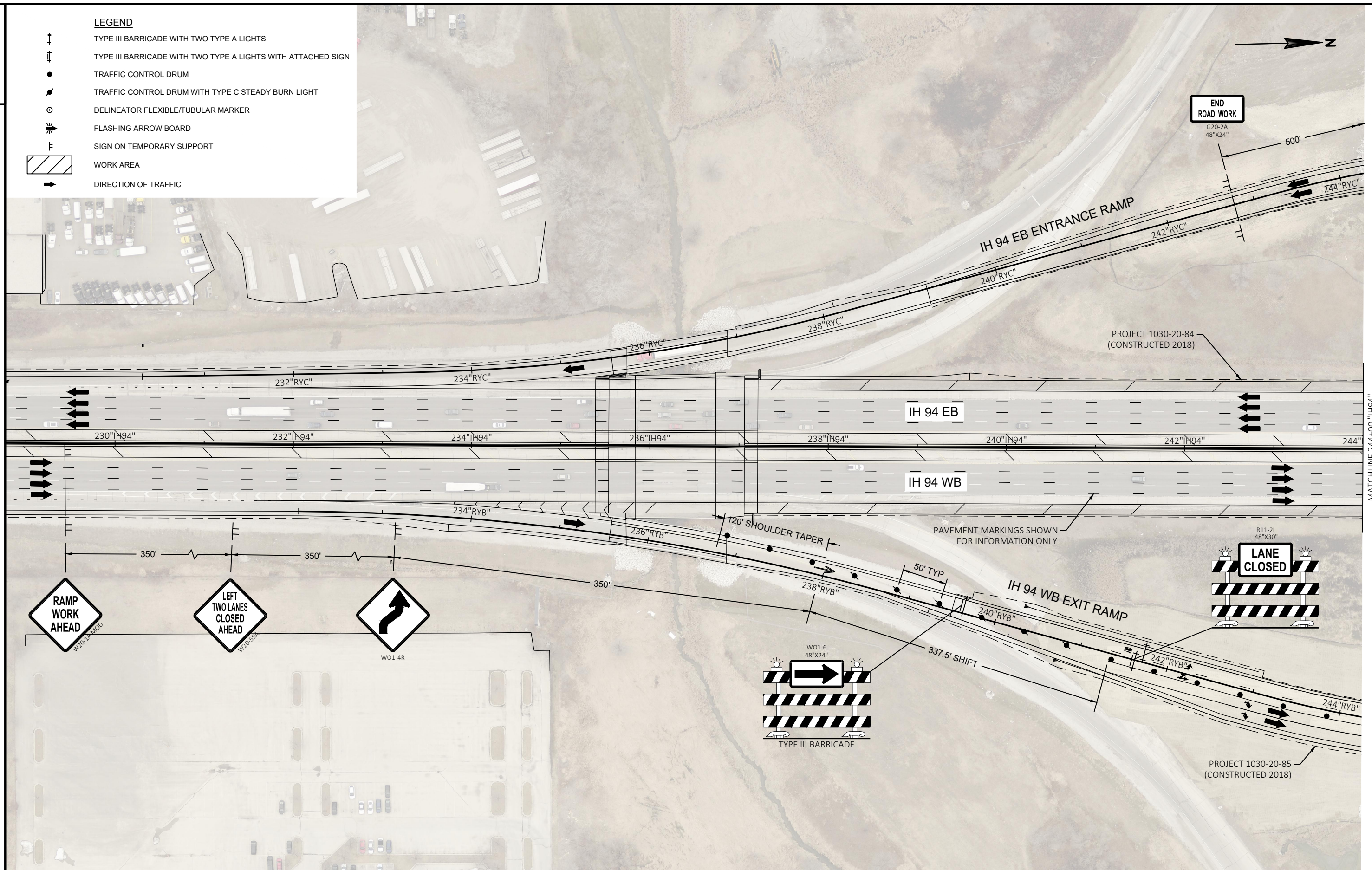
TRAFFIC CONTROL - STAGE 2

SHEET

E

LEGEND

-  TYPE III BARRICADE WITH TWO TYPE A LIGHTS
-  TYPE III BARRICADE WITH TWO TYPE A LIGHTS WITH ATTACHED SIGN
-  TRAFFIC CONTROL DRUM
-  TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
-  DELINEATOR FLEXIBLE/TUBULAR MARKER
-  FLASHING ARROW BOARD
-  SIGN ON TEMPORARY SUPPORT
-  WORK AREA
-  DIRECTION OF TRAFFIC



PROJECT NO: 1030-07-78

HWY: IH 41

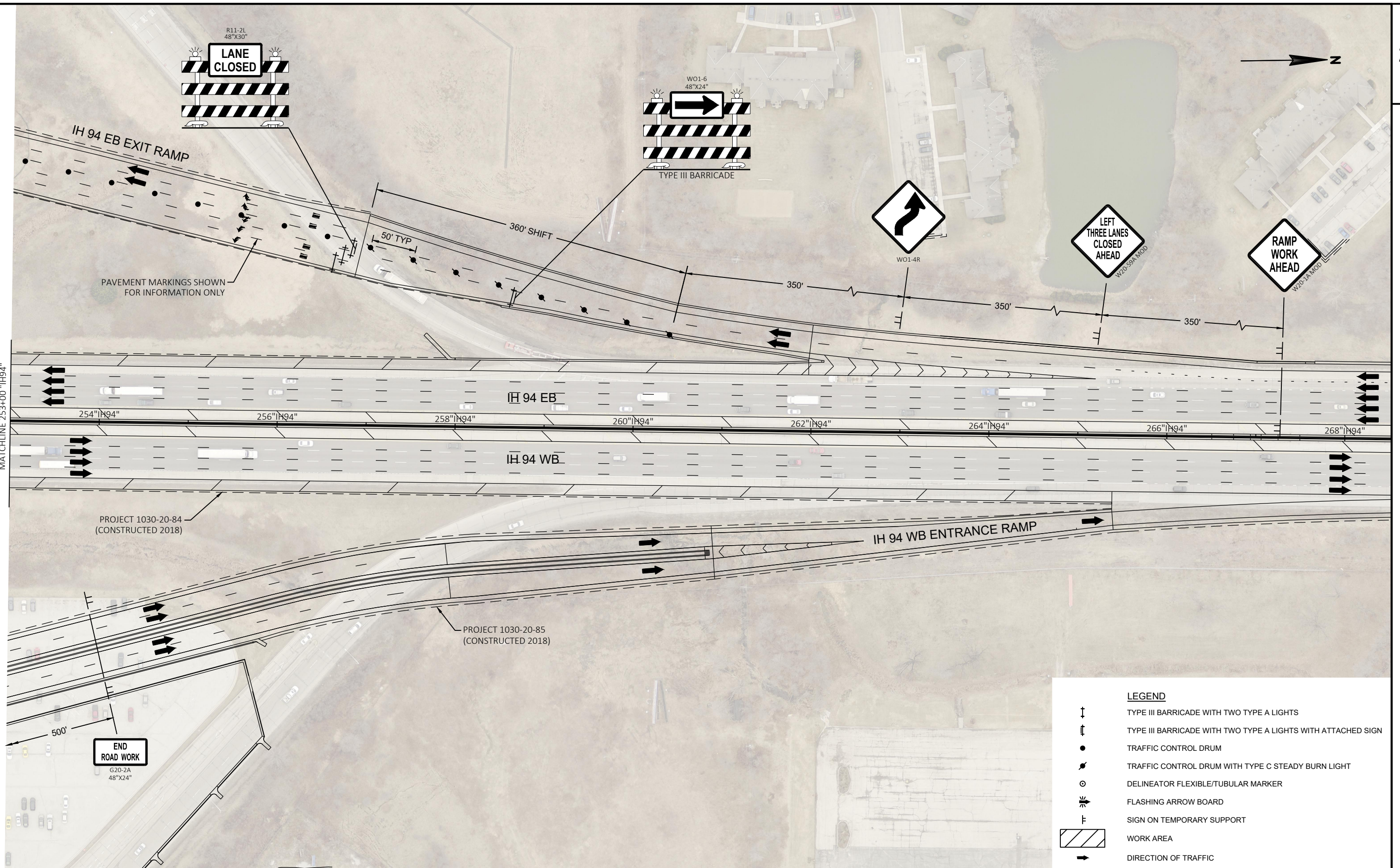
COUNTY: MILWAUKEE

TRAFFIC CONTROL - STAGE 2

SHEET

E

MATCHLINE 253+00 "IH94"



PROJECT NO: 1030-07-78

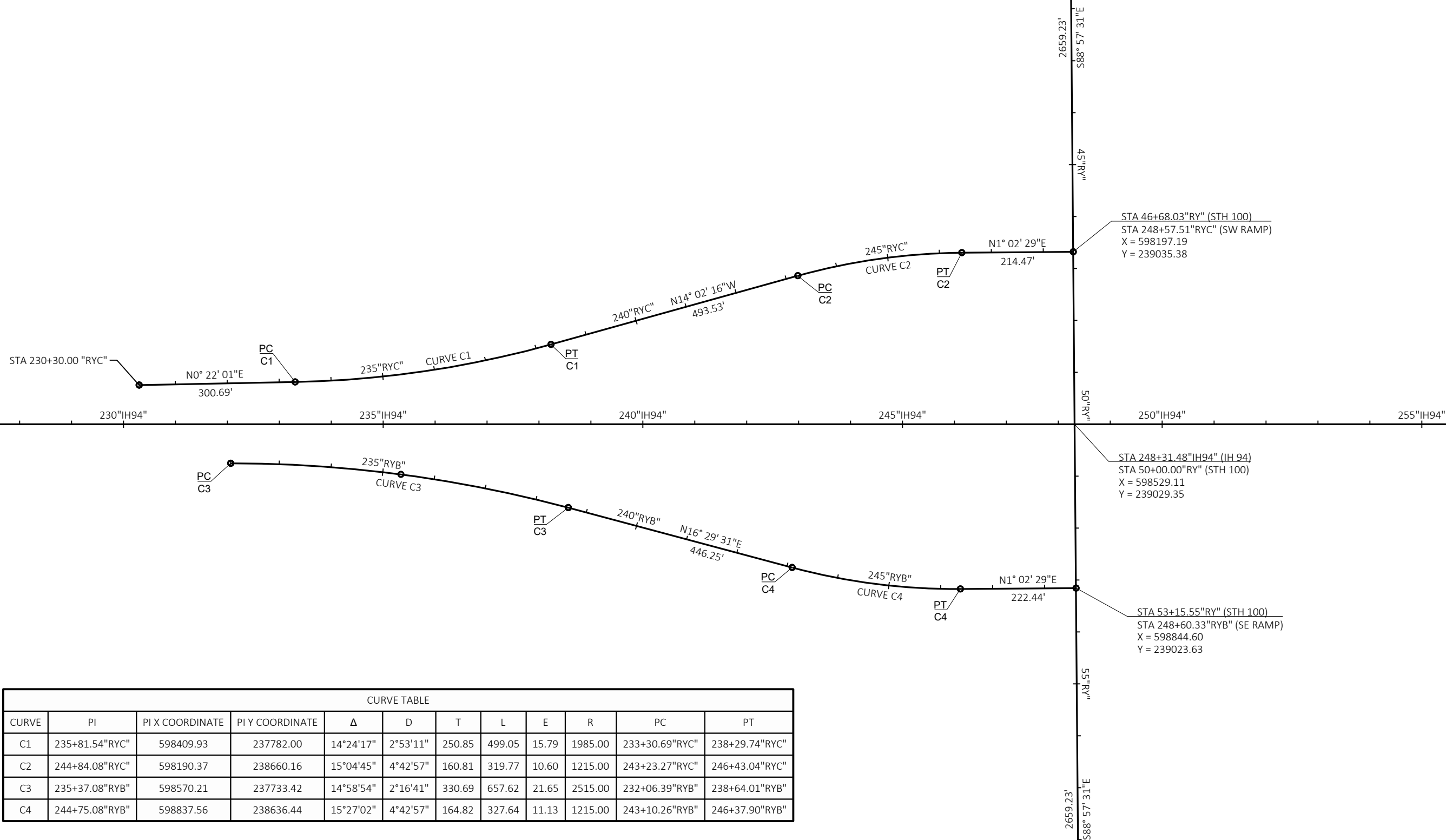
HWY: IH 41

COUNTY: MILWAUKEE

TRAFFIC CONTROL - STAGE 2

SHEET

E



Estimate Of Quantities By Plan Sets

1030-07-78					
Line	Item	Item Description	Unit	Total	Qty
0006	213.0100	Finishing Roadway (project) 0002. 1030-07-78	EACH	1.000	1.000
0008	509.0301	Preparation Decks Type 1	SY	8.000	8.000
0010	509.0302	Preparation Decks Type 2	SY	4.000	4.000
0012	509.0310.S	Sawing Pavement Deck Preparation Areas	LF	80.000	80.000
0014	509.5100.S	Polymer Overlay	SY	3,259.000	3,259.000
0018	619.1000	Mobilization	EACH	0.300	0.300
0026	628.7020	Inlet Protection Type D	EACH	15.000	15.000
0028	642.5401	Field Office Type D	EACH	0.300	0.300
0030	643.0300	Traffic Control Drums	DAY	2,508.000	2,508.000
0032	643.0420	Traffic Control Barricades Type III	DAY	253.000	253.000
0034	643.0705	Traffic Control Warning Lights Type A	DAY	505.000	505.000
0036	643.0715	Traffic Control Warning Lights Type C	DAY	445.000	445.000
0038	643.0800	Traffic Control Arrow Boards	DAY	18.000	18.000
0040	643.0900	Traffic Control Signs	DAY	529.000	529.000
0042	643.0920	Traffic Control Covering Signs Type II	EACH	3.000	3.000
0044	643.1050	Traffic Control Signs PCMS	DAY	10.000	10.000
0048	643.5000	Traffic Control	EACH	0.300	0.300
0050	646.1020	Marking Line Epoxy 4-Inch	LF	7,478.000	7,478.000
0052	646.1546.S	Marking Replace Line Contrast Wet Reflective Epoxy 4-Inch	LF	288.000	288.000
0054	646.3546.S	Marking Replace Line Contrast Wet Reflective Epoxy 8-Inch	LF	609.000	609.000
0056	646.5020	Marking Arrow Epoxy	EACH	7.000	7.000
0058	646.5120	Marking Word Epoxy	EACH	6.000	6.000
0060	646.6120	Marking Stop Line Epoxy 18-Inch	LF	108.000	108.000
0068	646.9000	Marking Removal Line 4-Inch	LF	1,231.000	1,231.000
0070	646.9100	Marking Removal Line 8-Inch	LF	638.000	638.000
0076	649.0155	Temporary Marking Line Removable Contrast Tape 4-Inch	LF	731.000	731.000
0078	649.0255	Temporary Marking Line Removable Contrast Tape 8-Inch	LF	647.000	647.000
0082	SPV.0035	Special 4000. Rapid Set Deck Repair	CY	2.000	2.000
0084	SPV.0060	Special 0001. Traffic Control Close-Open Freeway Entrance Ramp	EACH	3.000	3.000
0094	SPV.0075	Special 0002. Pavement Cleanup Project 1030-07-78	HRS	20.000	20.000
0096	SPV.0090	Special 0001. Marking Line Contrast Epoxy 4-Inch	LF	150.000	150.000
0098	SPV.0090	Special 0002. Marking Line Contrast Epoxy 8-Inch	LF	1,485.000	1,485.000

PAVEMENT MARKINGS

				646.1020		646.1546.S		646.3546.S		646.5020		646.5120	646.6120	646.9000	646.9100	SPV.0090.0001	SPV.0090.0002
				MARKING LINE		MARKING REPLACE LINE		MARKING REPLACE LINE		MARKING ARROWS		MARKING	STOP LINE	MARKING	MARKING	MARKING LINE	MARKING LINE
				EPOXY 4-INCH		CONTRAST WET REFLECTIVE EPOXY 4-INCH		CONTRAST WET REFLECTIVE EPOXY 8-INCH		EPOXY		WORDS	EPOXY	REMOVAL	REMOVAL	CONTRAST EPOXY 4-INCH	CONTRAST EPOXY 8-INCH
				YELLOW	WHITE	12.5 FT LINE 37.5 SKIP DASHED WHITE		WHITE		TYPE 2	TYPE 3	EPOXY	18-INCH	LINE	LINE	12.5 FT LINE 37.5 SKIP DASHED WHITE	8-INCH
CATEGORY	LOCATION	STATION TO STATION		LF	LF	LF		LF		EACH	EACH	EACH	LF	LF	LF	LF	LF
1000	RYAN ROAD	47+10	52+85 LT	424	498	150		248		2	1	2	48	426	176	75	176
	RYAN ROAD	47+10	52+85 RT	424	532	138		361		4	--	4	60	426	351	75	351
	IH 94 EB ON RAMP	231+30	247+75	1148	1661	--		--		--	--	--	--	178	50	--	494
	IH 94 WB OFF RAMP	231+55	247+73	1152	1639	--		--		--	--	--	--	201	61	--	464
SUBTOTAL				3148	4330	288		609		6	1	6	108	1231	638	150	1485
TOTAL:				7,478		288		609		7		6	108	1231	638	150	1,485

EROSION CONTROL

CATEGORY	LOCATION	STATION	LOCATION	628.7020
				INLET PROTECTION TYPE D EACH
1000	RYAN ROAD	47+13.04	67' RT	1
		47+19.04	67' RT	1
		47+21.03	67' LT	1
		47+31.03	67' LT	1
		47+62.50	11.05' LT	1
		47+63.03	3.05' LT	1
		51+93.15	2.95' LT	1
		51+95.30	12.52' LT	1
		52+40.35	67.0' LT	1
		52+78.48	67.0' RT	1
		52+71.53	67' LT	1
		52+86.52	67' RT	1
		UNDISTRIBUTED		3
		TOTAL:		15

MOBILIZATION

CATEGORY	PROJECT	619.1000
		MOBILIZATION EACH
1000	1030-07-78	0.3
TOTAL:		0.3

TRAFFIC CONTROL																					
			643.0300		643.0420		643.0705		643.0715		643.0800		643.0900		649.0155		649.0255		SPV.0060.0001		
			TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TRAFFIC CONTROL		TEMPORARY MARKING LINE		TRAFFIC CONTROL				
			DRUMS		BARRICADES		WARNING LIGHTS		WARNING LIGHTS		ARROW BOARDS		SIGNS		REMOVEABLE CONTRAST TAPE		CLOSE-OPEN FREEWAY				
CATEGORY	STAGE	LOCATION	* DAYS	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	4-INCH LF	8-INCH LF	ENTRANCE RAMP	EACH		
1000	1	STH 100 (RYAN ROAD)	2	526	1052	30	60	60	120	100	200	4	8	65	130	631	--	--			
	1	IH 94 EB EXIT RAMP	2	23	46	6	12	12	24	8	16	--	--	8	16	--	--	--			
	1	IH 94 WB ENTRANCE RAMP	2	--	--	2	4	4	8	--	--	--	--	2	4	--	--	--			
	1	IH 94 EB ENTRANCE RAMP	2	--	--	2	4	4	8	--	--	--	--	2	4	--	--	--			
	1	IH 94 WB EXIT RAMP	2	24	48	5	10	10	20	6	12	--	--	8	16	--	--	--			
	2	STH 100 (RYAN ROAD)	2	252	504	26	52	52	104	44	88	3	6	49	98	100	647	--			
	2	IH 94 EB EXIT RAMP	2	23	46	6	12	12	24	8	16	--	--	8	16	--	--	--			
	2	IH 94 WB ENTRANCE RAMP	2	--	--	2	4	4	8	--	--	--	--	3	6	--	--	--			
	2	IH 94 EB ENTRANCE RAMP	2	--	--	2	4	4	8	--	--	--	--	3	6	--	--	--			
	2	IH 94 WB EXIT RAMP	2	23	46	5	10	10	20	6	12	--	--	8	16	--	--	--			
		IH 94 EB ENT. RAMP CLOSURE	3	40	120	6	18	12	36	4	12	--	--	26	78	--	--	3			
		IH 94 WB EXIT RAMP CLOSURE	3	48	144	4	12	8	24	--	--	--	--	11	33	--	--	--			
	UNDISTRIBUTED				502		51		101		89		4		106						
TOTAL:				2508		253		505		445		18		529		731		647		3	
* FOR INFORMATION ONLY																					

TRAFFIC CONTROL

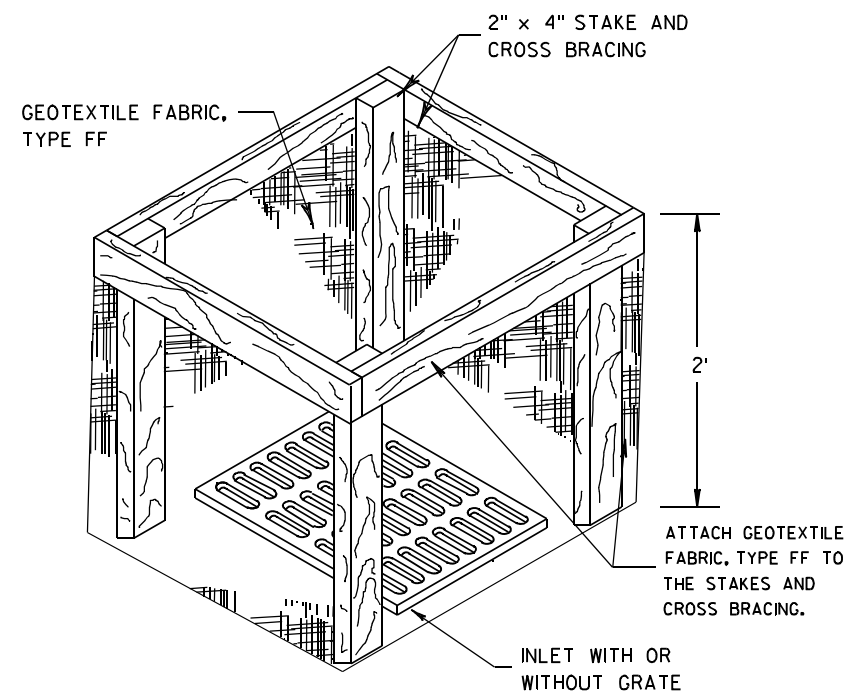
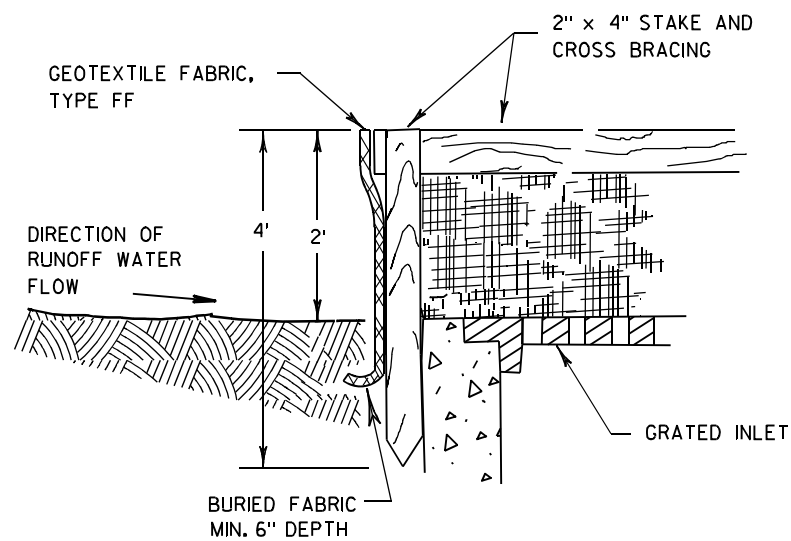
643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II SIGNS				
CATEGORY	LOCATION	CYCLES	EACH	EACH
1000	IH 94 WB EXT RAMP CLOSURE	3	1	3
TOTAL:			3	

TRAFFIC CONTROL

643.1050 TRAFFIC CONTROL SIGNS PCMS				643.5000 TRAFFIC CONTROL
CATEGORY	LOCATION	DAY		EACH
1000	PROJECT	10		0.3

Standard Detail Drawing List

08E10-02	INLET PROTECTION TYPE A, B, C AND D
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-08B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C31-03C	PAVEMENT MARKING FOR PARALLEL ON-RAMP AND PARALLEL OFF-RAMP
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-05A	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D22-04	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D23-06A	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D23-06B	TRAFFIC CONTROL, INTERSECTION WITHIN TWO LANE CLOSURE
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D40-01	TRAFFIC CONTROL, LANE SHIFT, MULTILANE DIVIDED OR ONE WAY ROAD



INLET PROTECTION, TYPE A

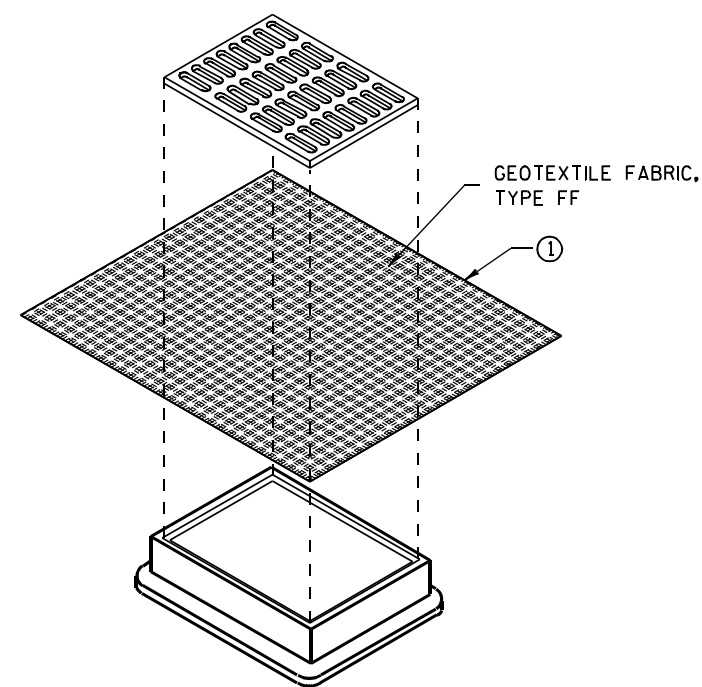
GENERAL NOTES

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

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

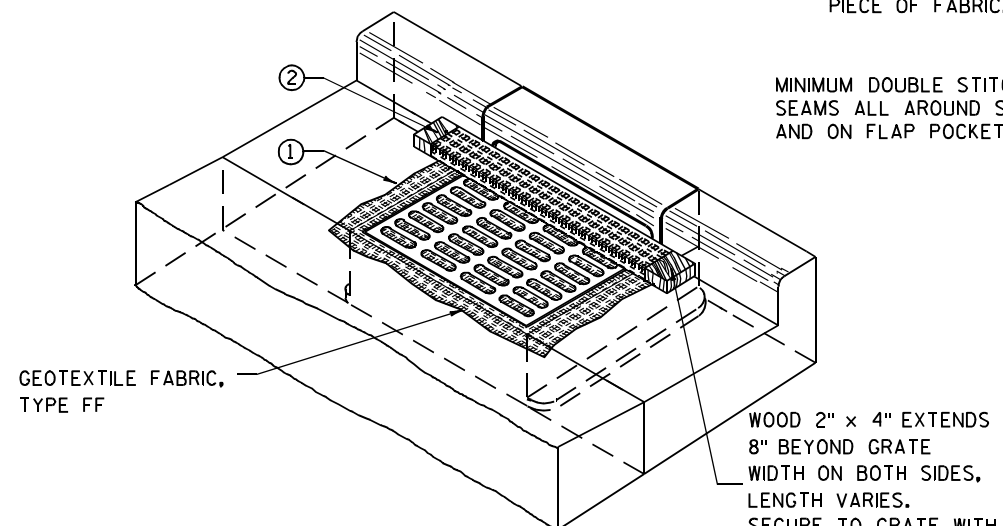
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

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



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

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

INSTALLATION NOTES

TYPE B & C

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

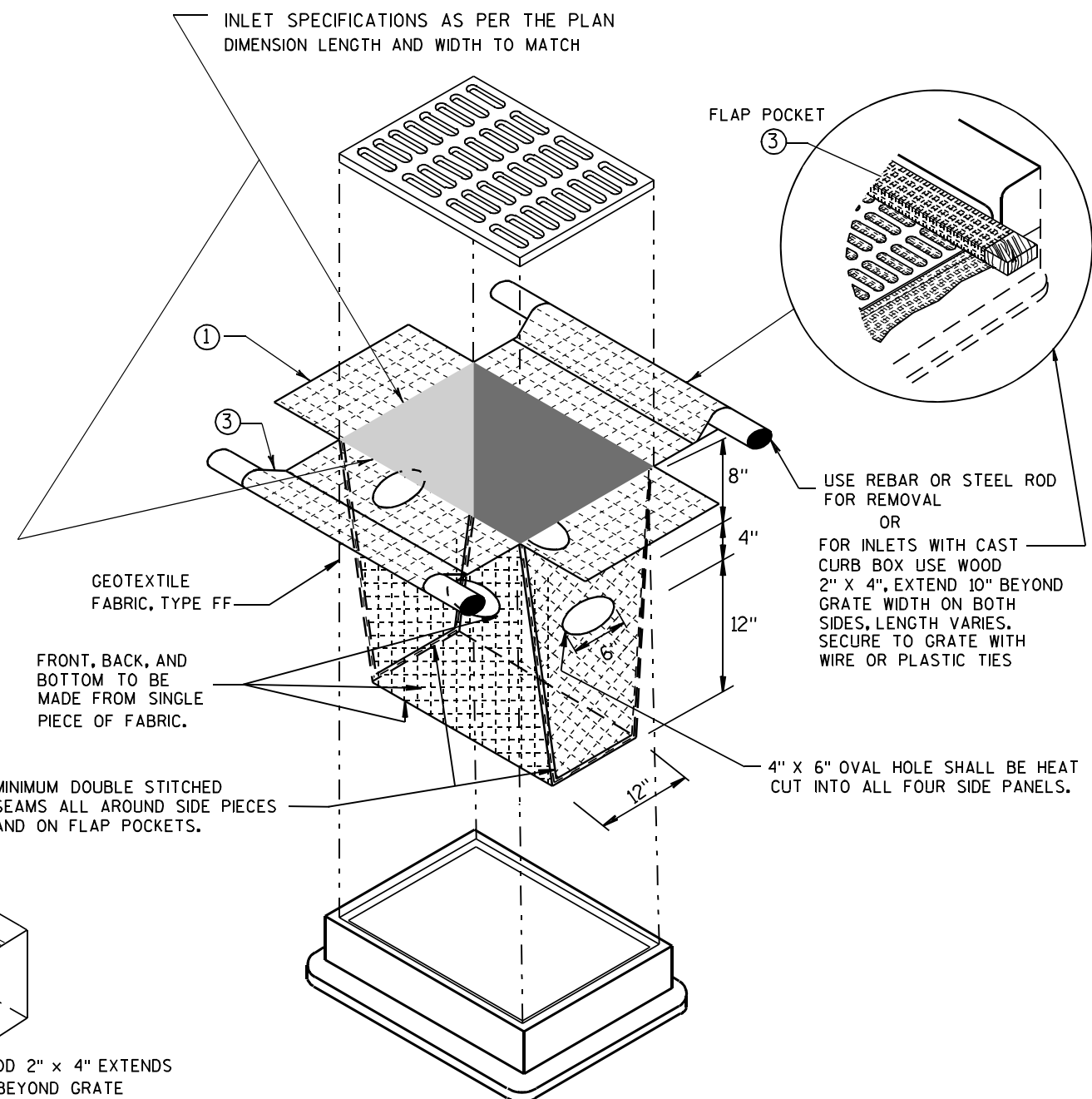
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

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

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

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



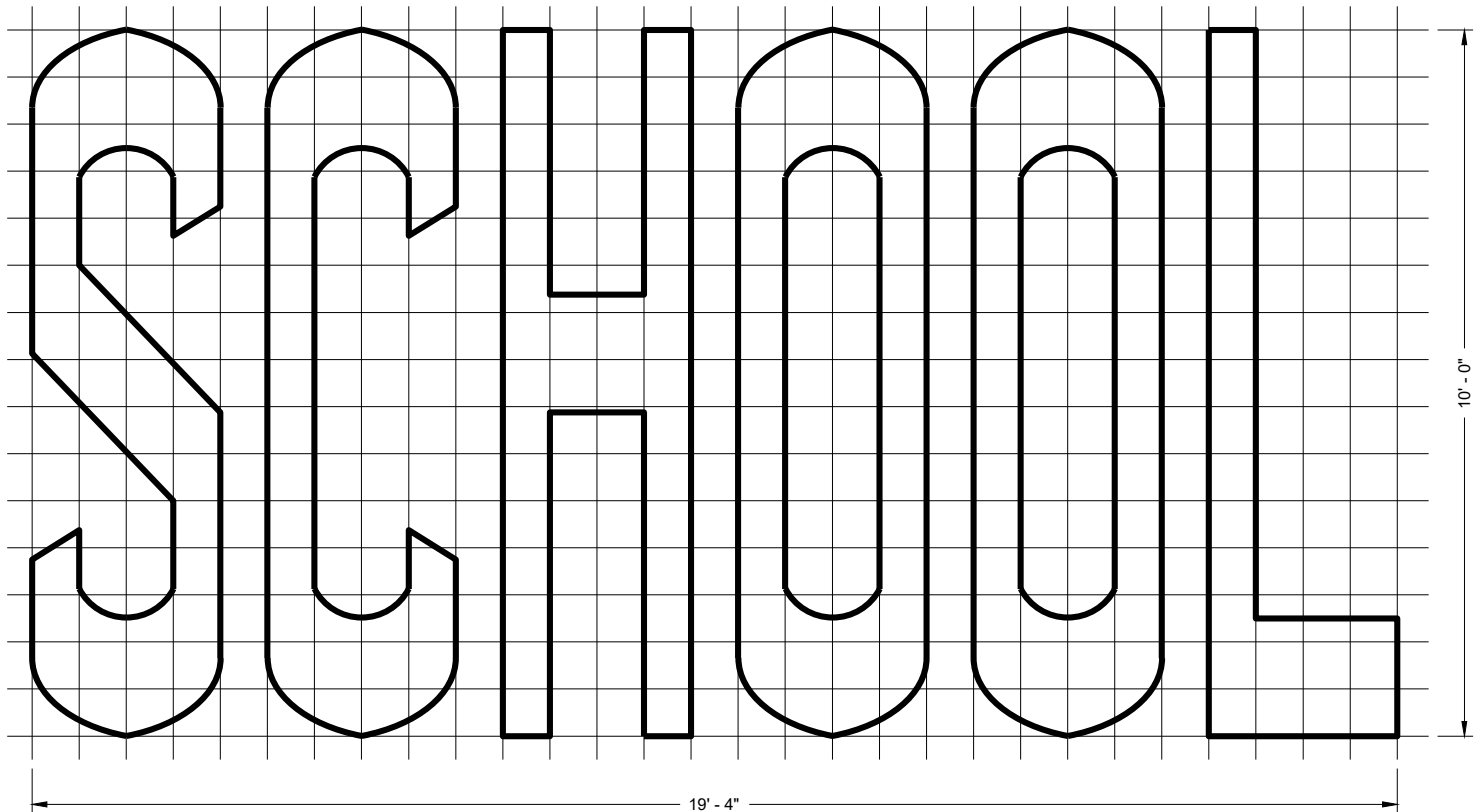
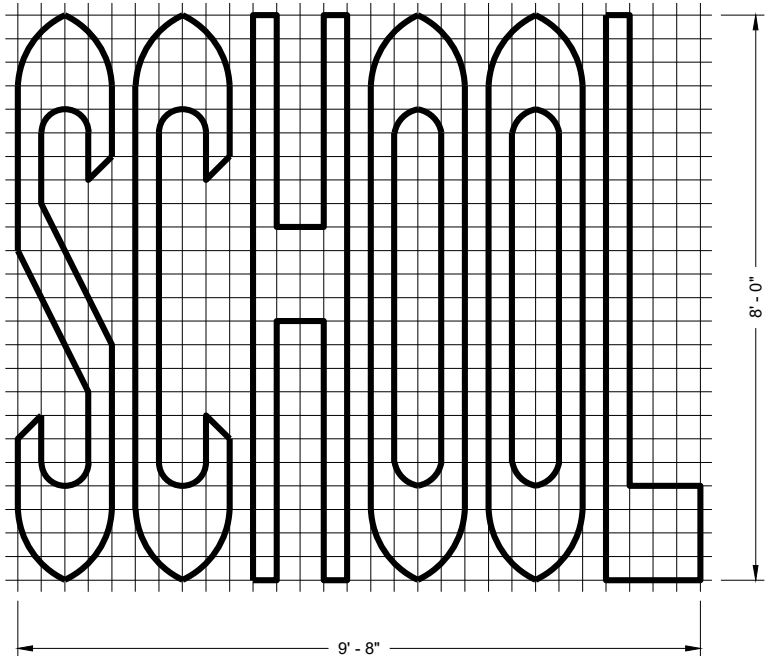
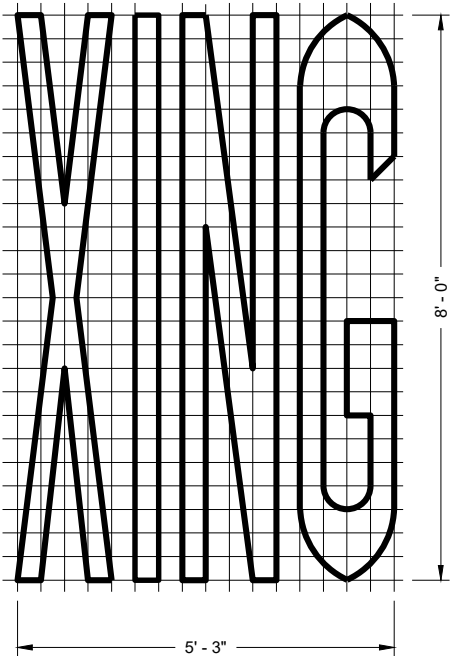
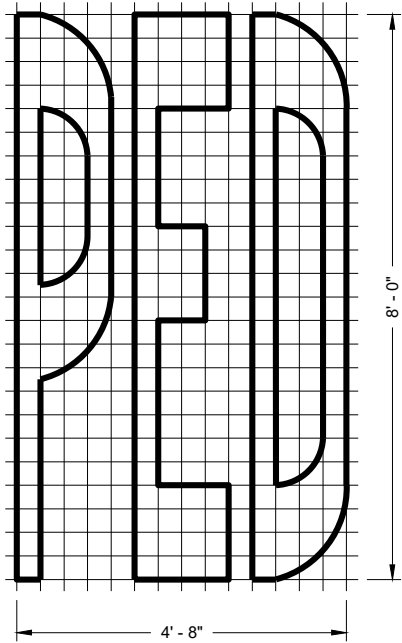
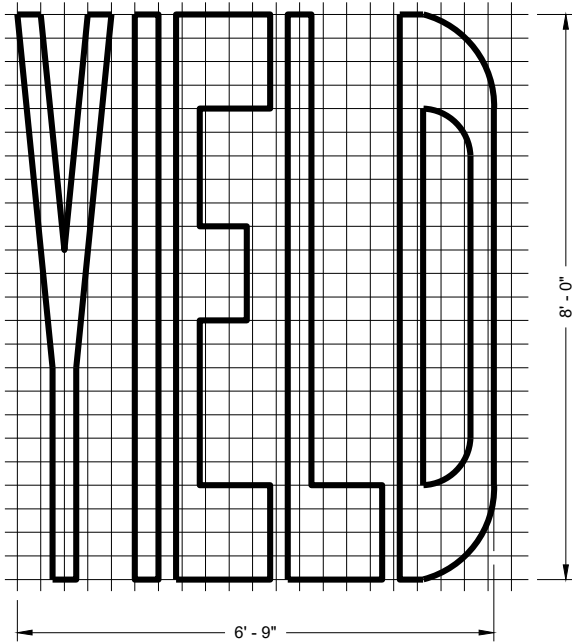
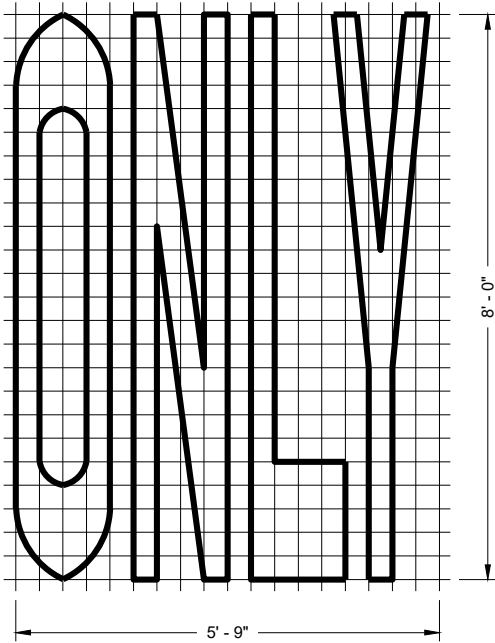
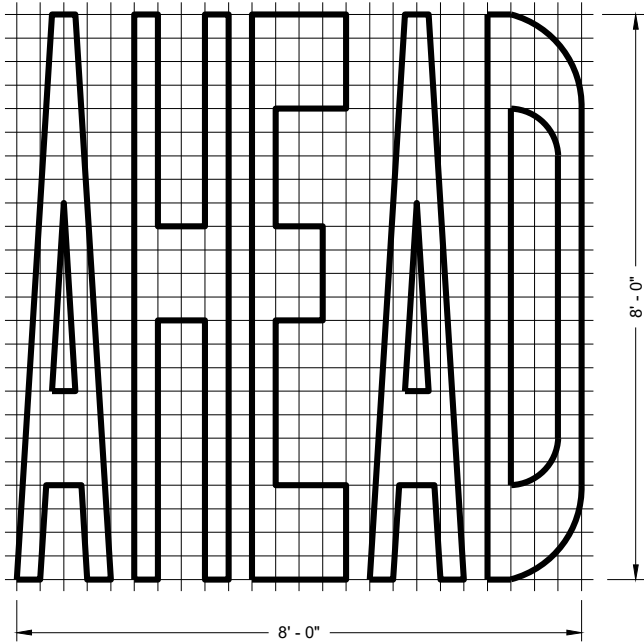
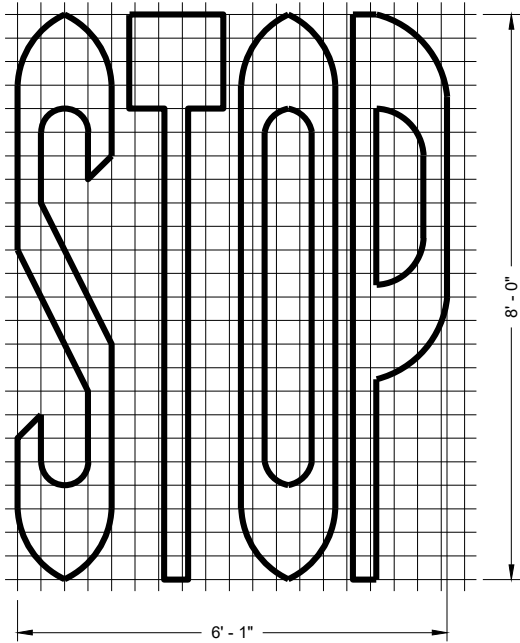
INLET PROTECTION, TYPE D

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



SINGLE LANE

TWO - LANE

GENERAL NOTES

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

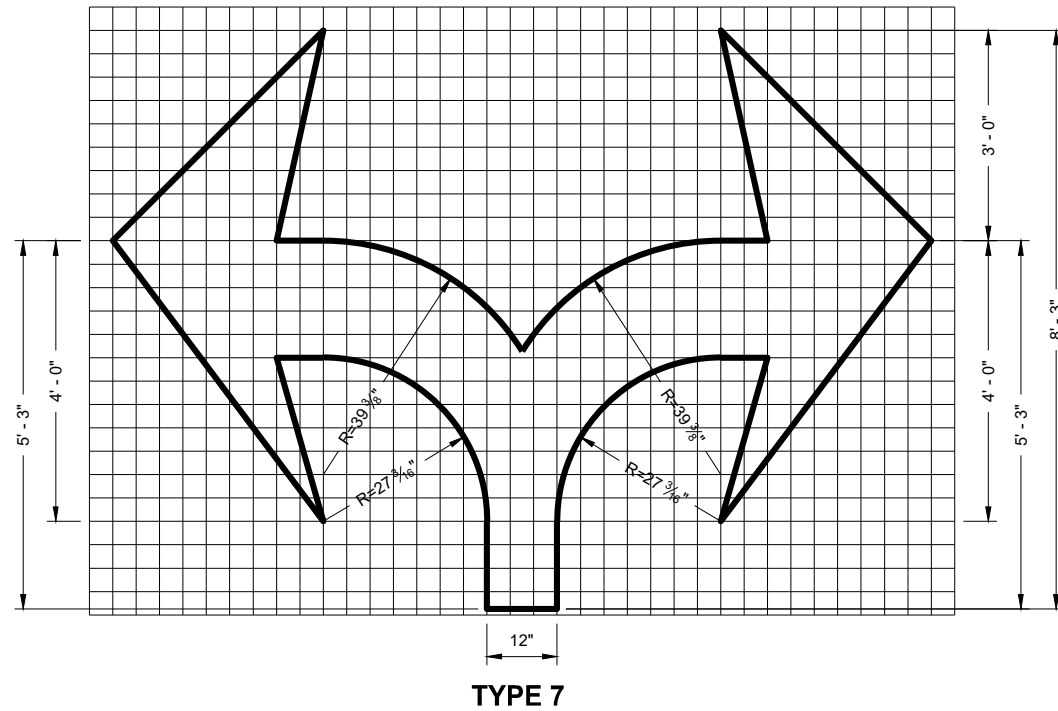
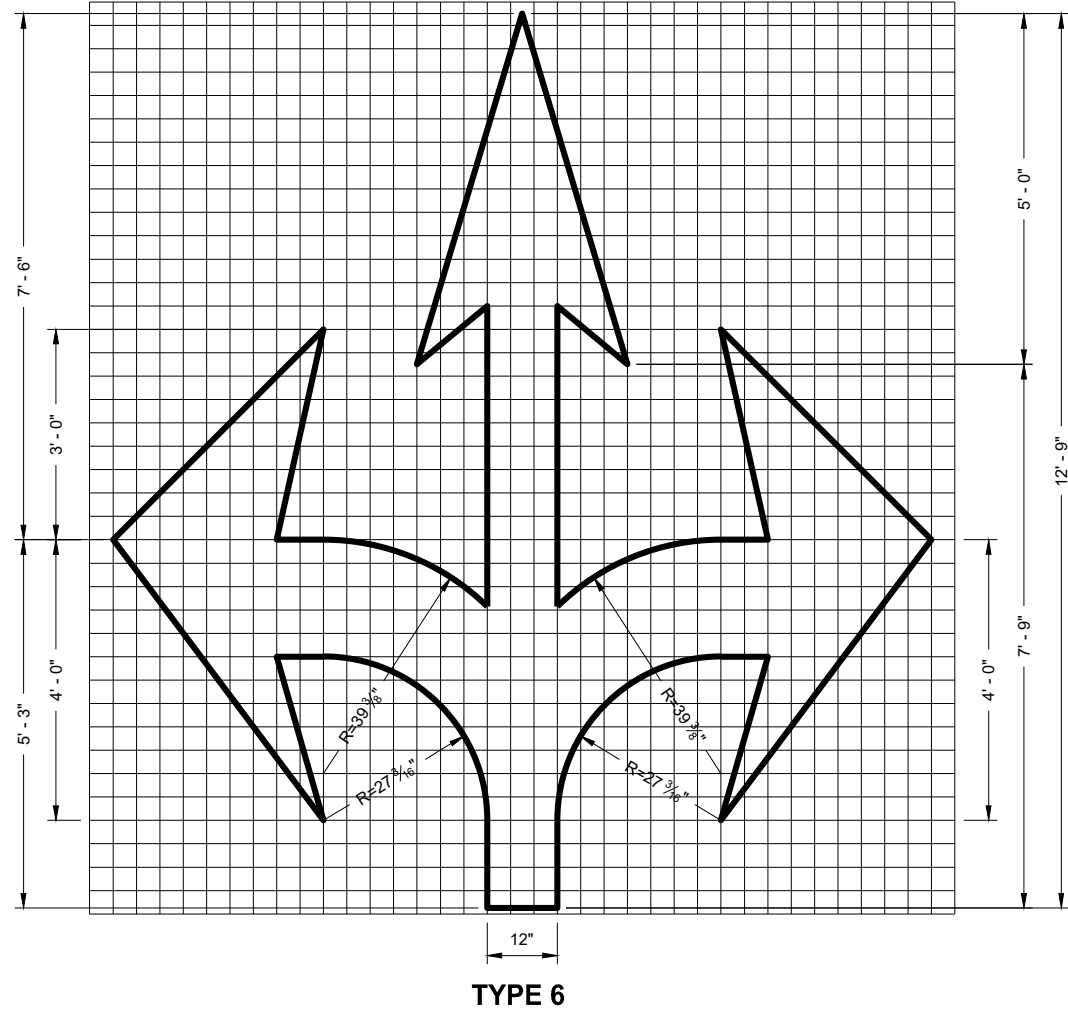
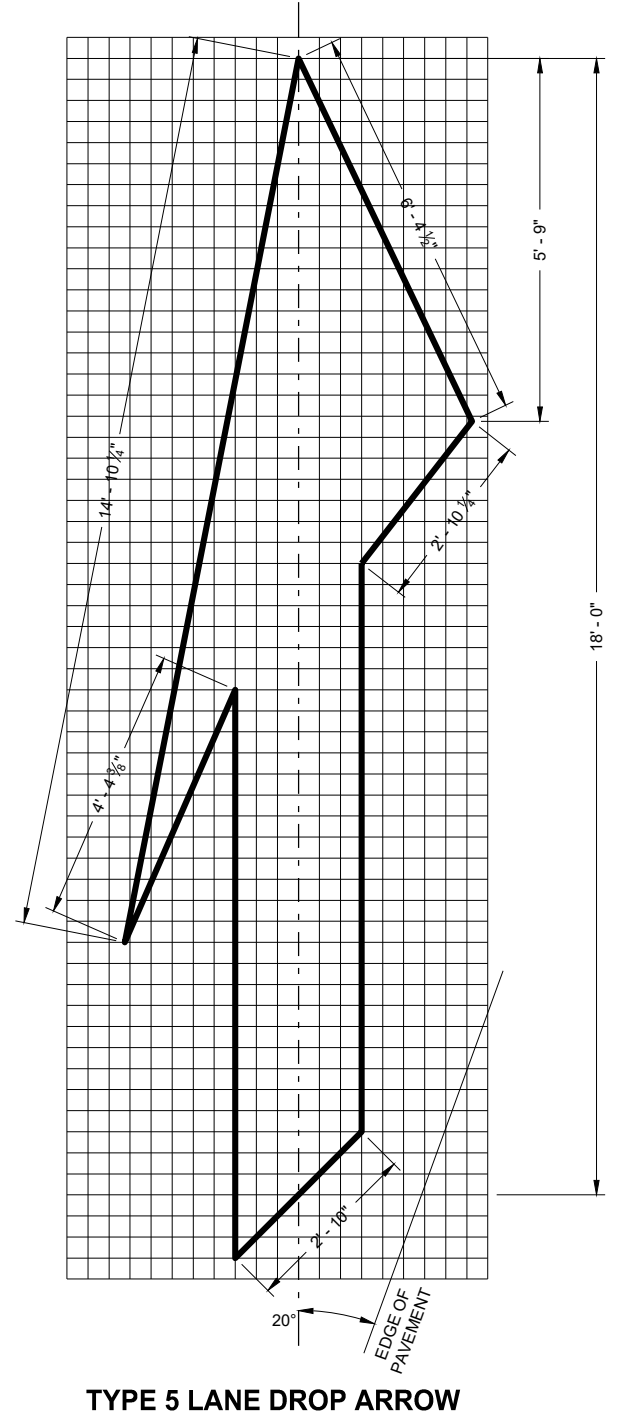
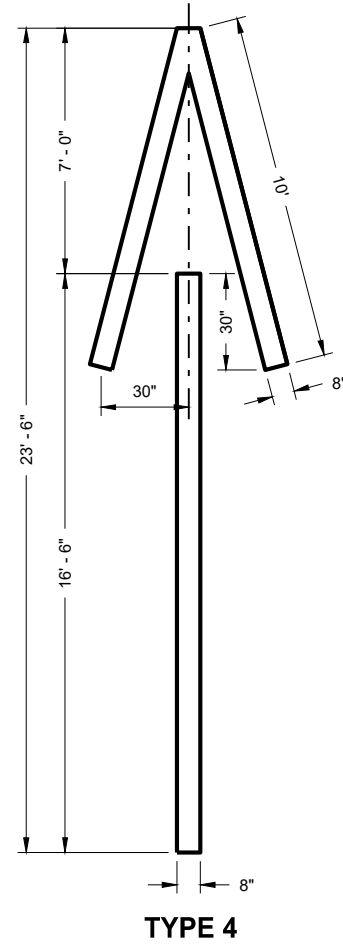
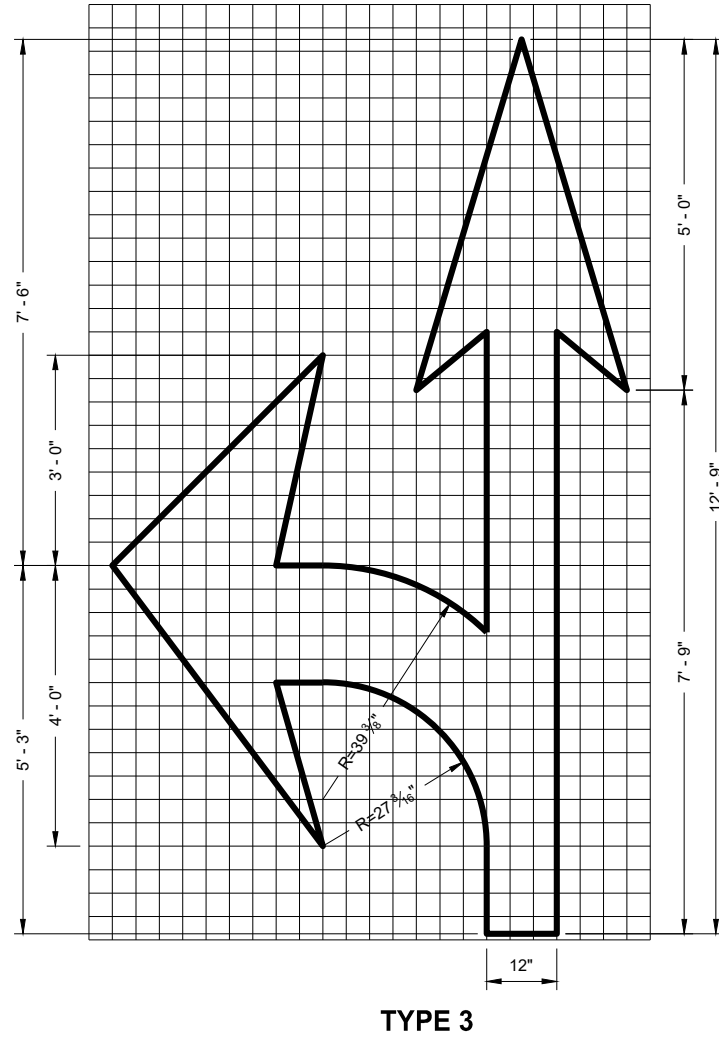
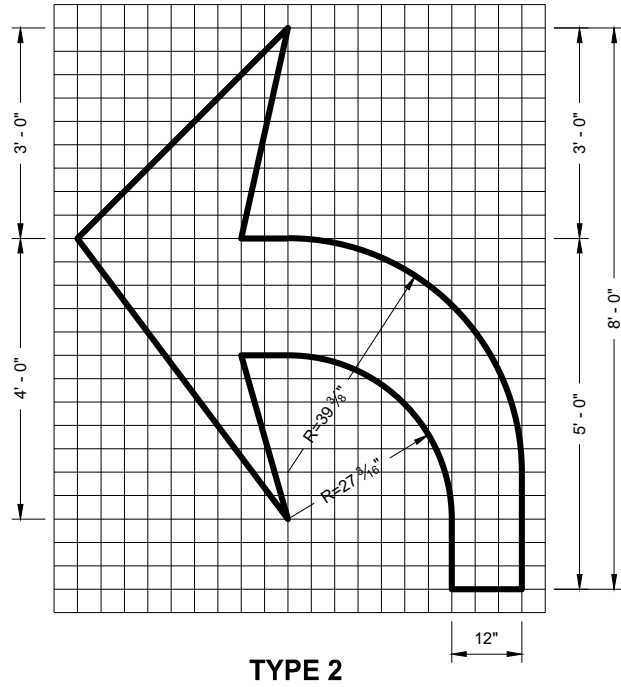
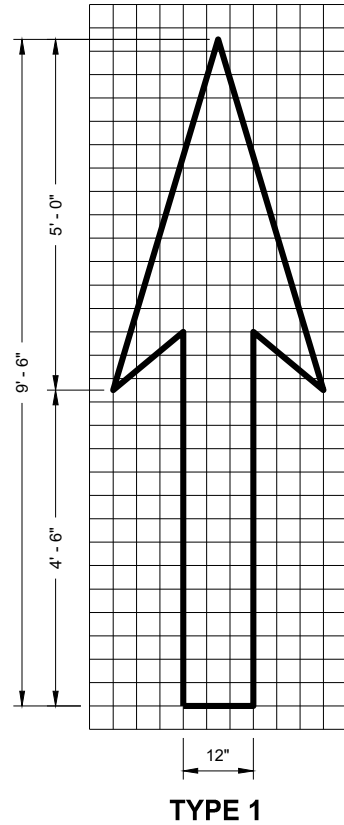
PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

FHWA



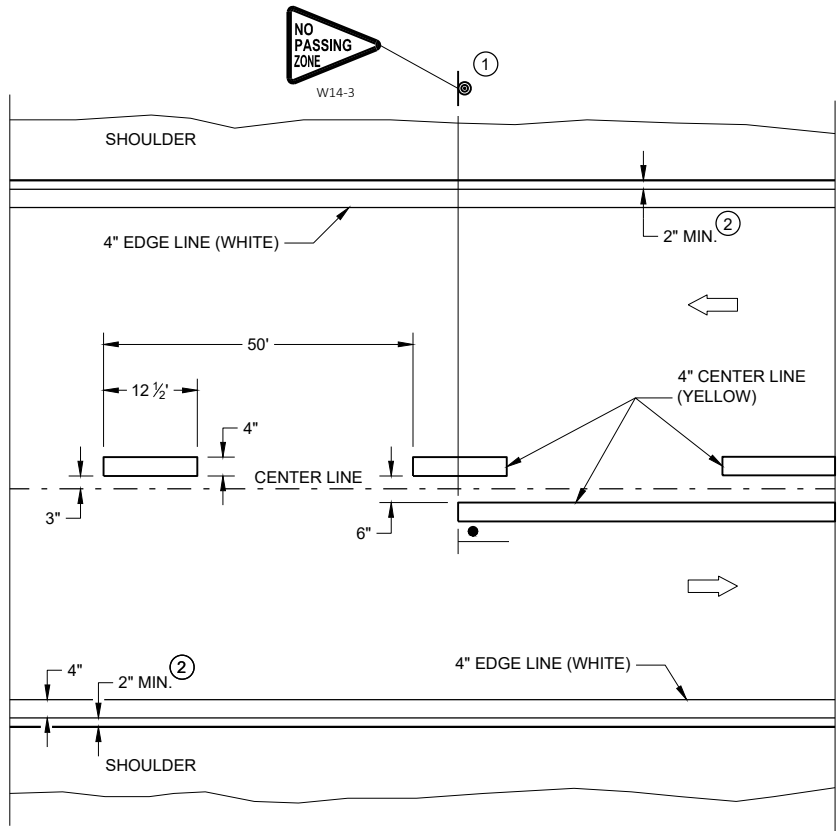
GENERAL NOTES

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.

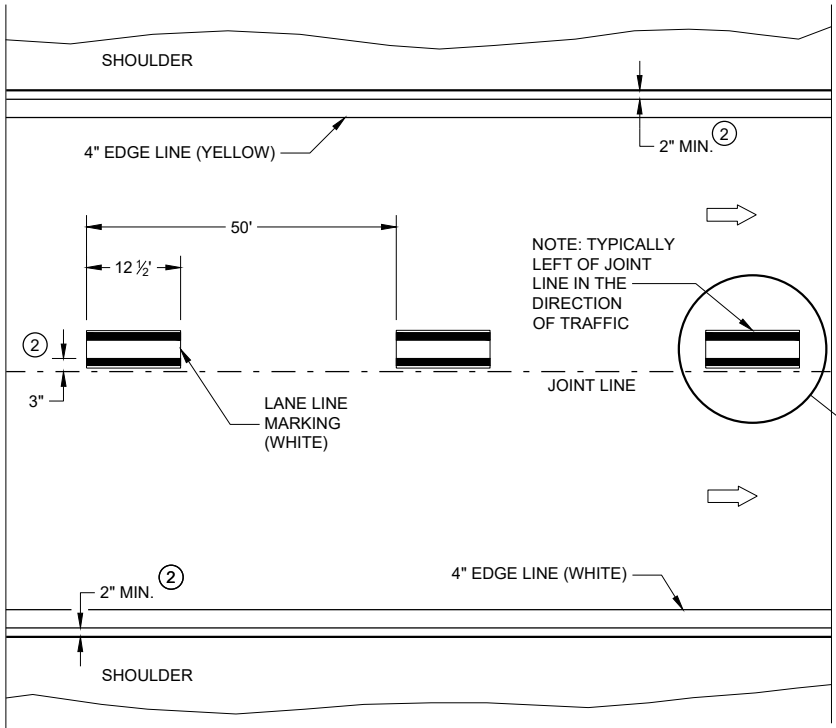
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE
/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER
FHWA

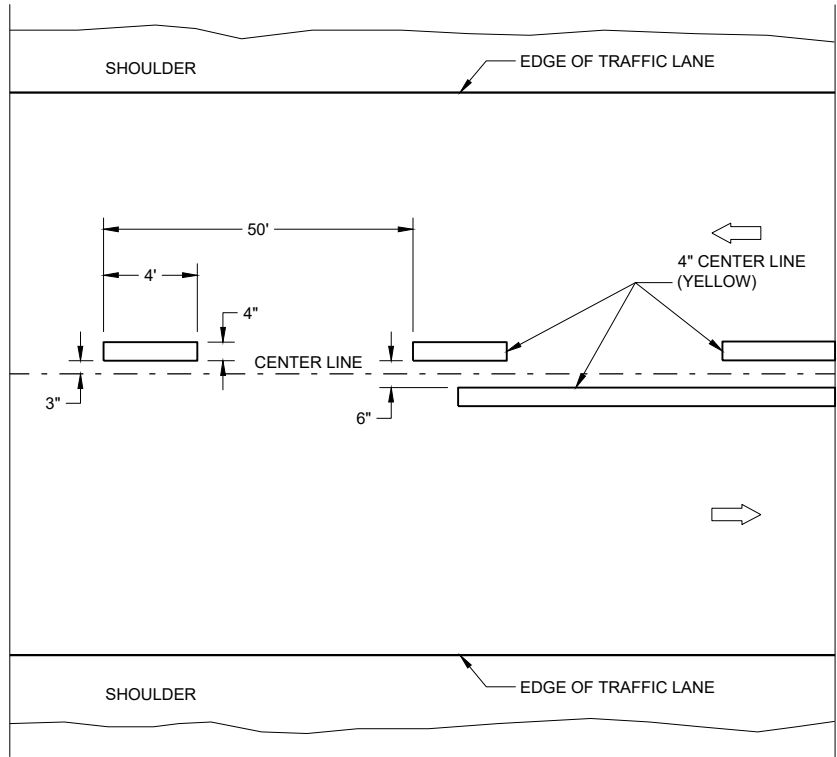


TWO WAY TRAFFIC

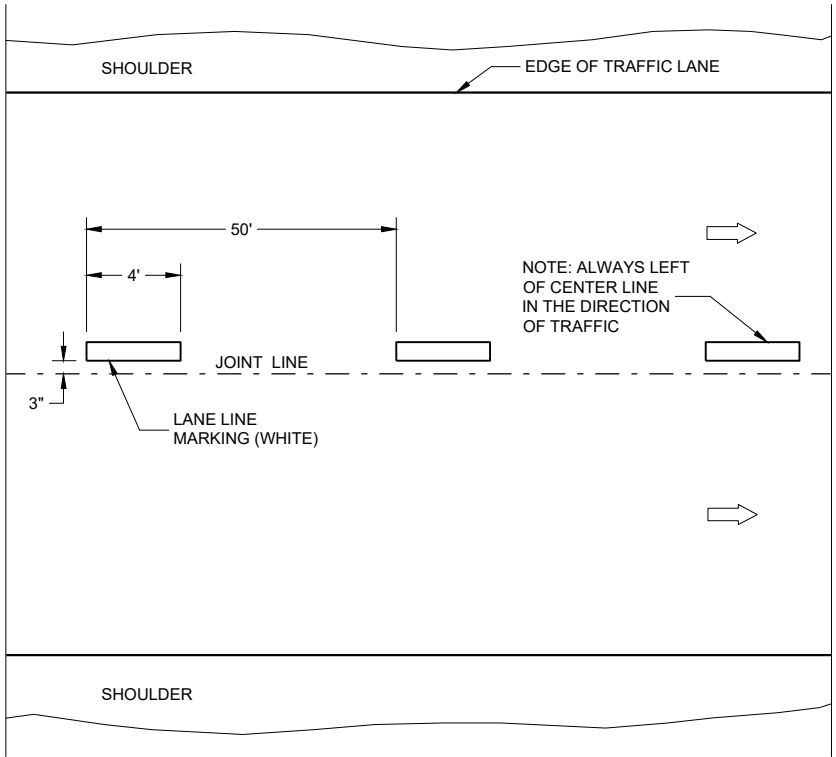


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

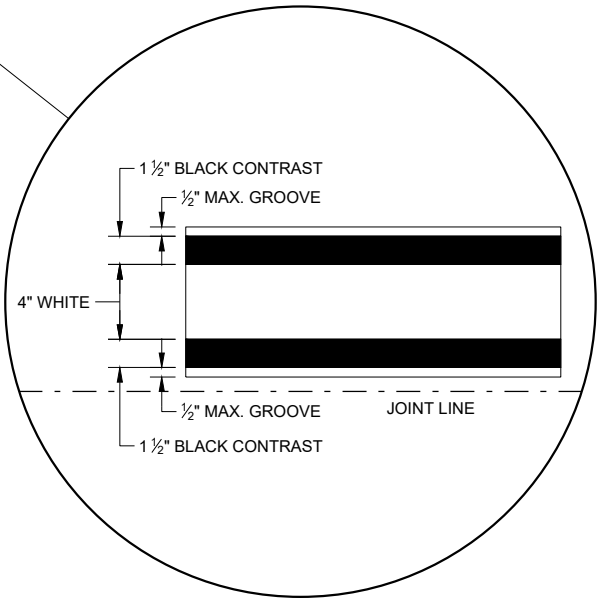
GENERAL NOTES

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

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 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



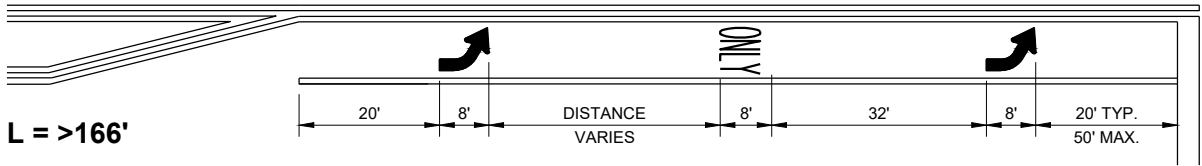
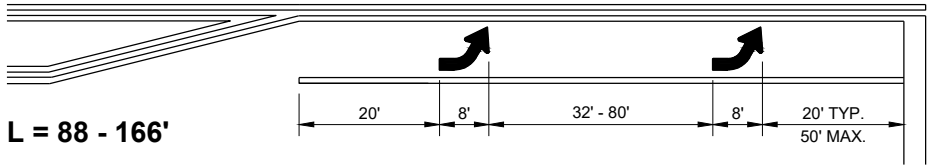
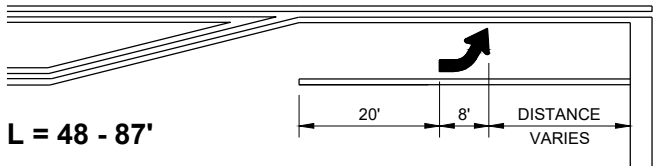
LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND MARKING
ENGINEER
FHWA

TURN LANE OPTIONS

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



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

GENERAL NOTES

- ① 8" WHITE
- ② QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

➡ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



VERTICAL PANEL

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



TYPE III BARRICADE

* 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 <u>November 2020</u> DATE	<u>/S/ Andrew Heidtke</u> WORK ZONE ENGINEER

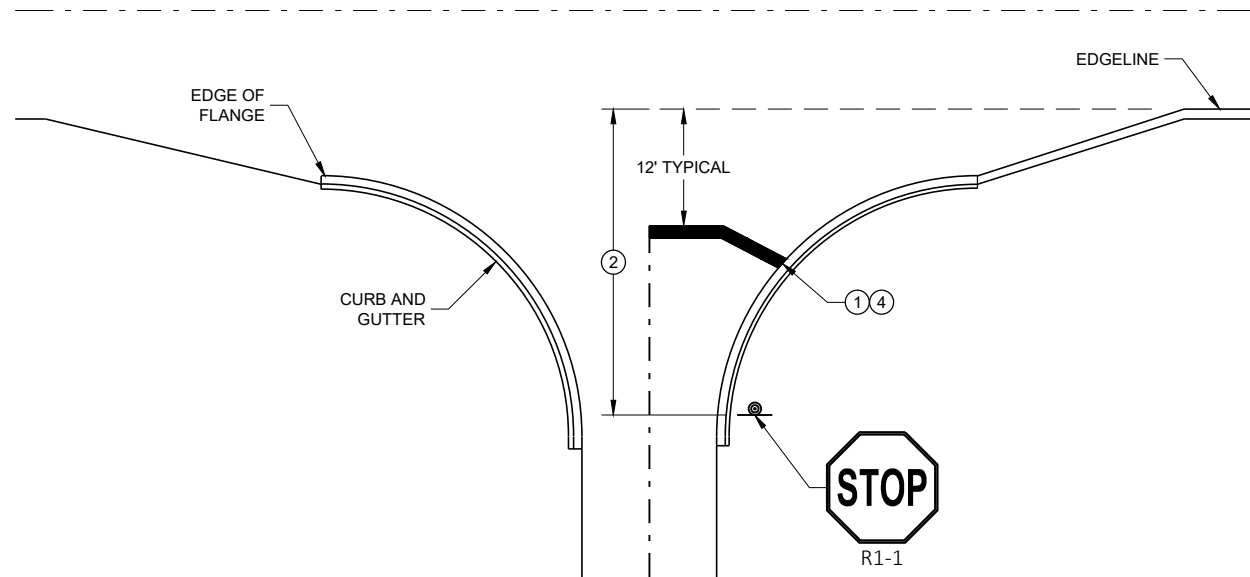
① 1/2 LENGTH OF FULL WIDTH ACCELERATION LANE.



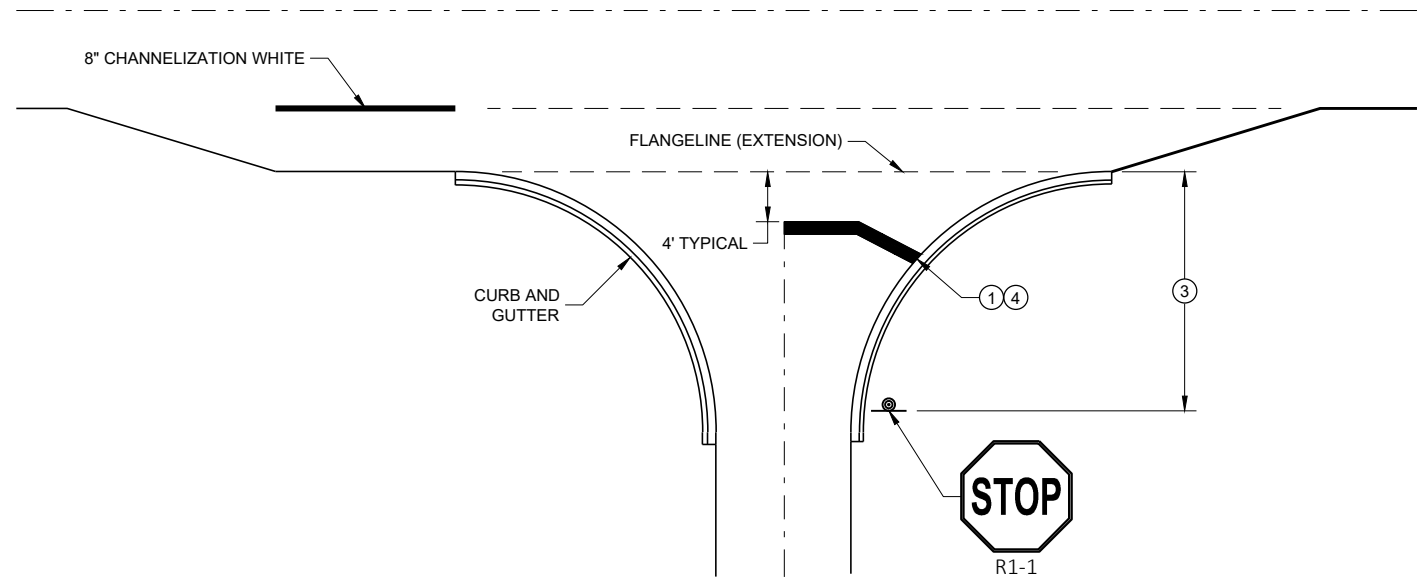
APPROVED
Sept., 2017
DATE

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

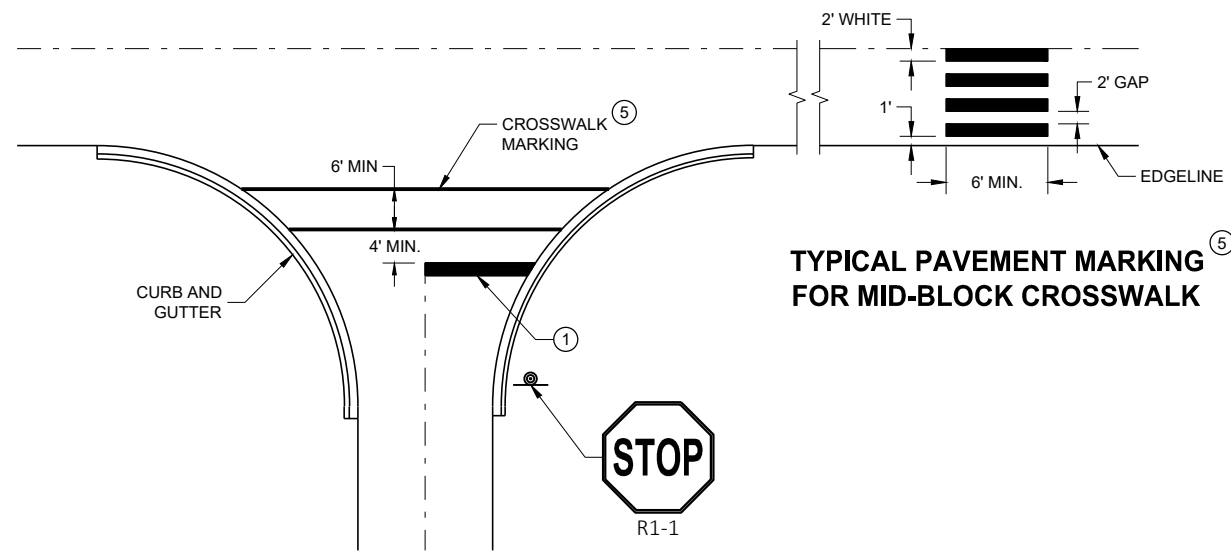
FHWA



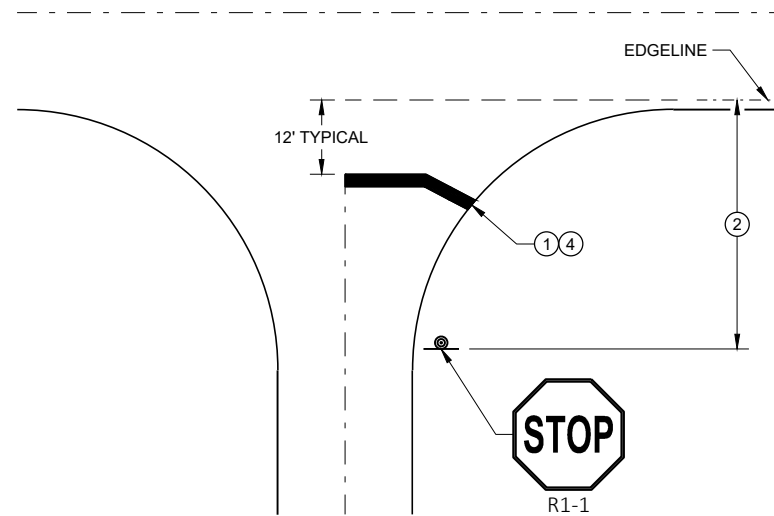
TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR
SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

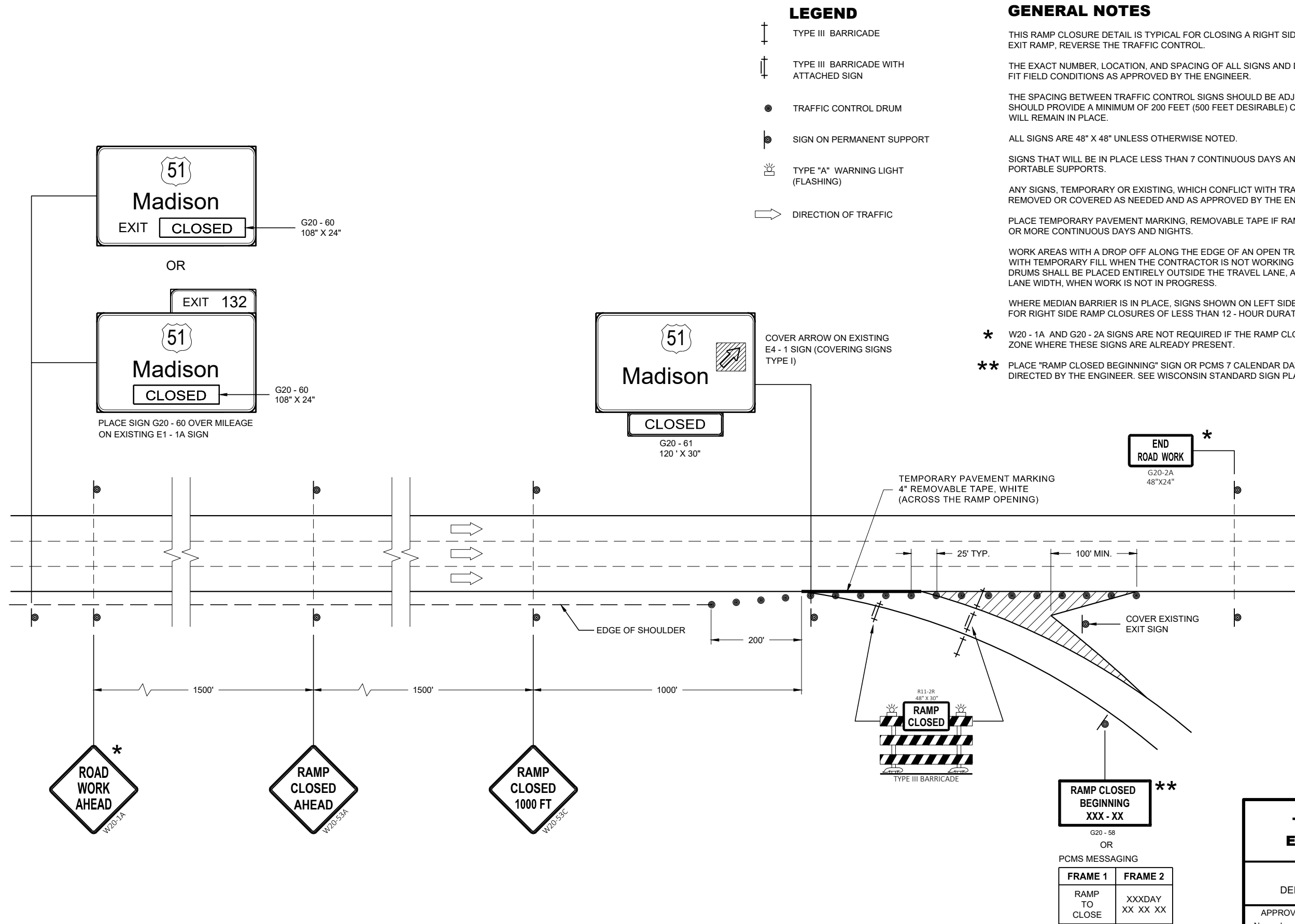
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE LOCATION.

- 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE.
- NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
- MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE /S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER
FHWA



LEGEND

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

GENERAL NOTES

- THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- THE SPACING BETWEEN 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.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- 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.
- PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF RAMP CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.
- WORK AREAS WITH A DROP OFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN WORK IS NOT IN PROGRESS.
- WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12 - HOUR DURATION.
- * W20 - 1A AND G20 - 2A SIGNS ARE NOT REQUIRED IF THE RAMP CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.
- ** PLACE "RAMP CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

TRAFFIC CONTROL, EXIT RAMP CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2018 DATE	/S/ Andrew Heidtke ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45MPH, USE SDD 15D12.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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

W20-1A, G20-1 AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

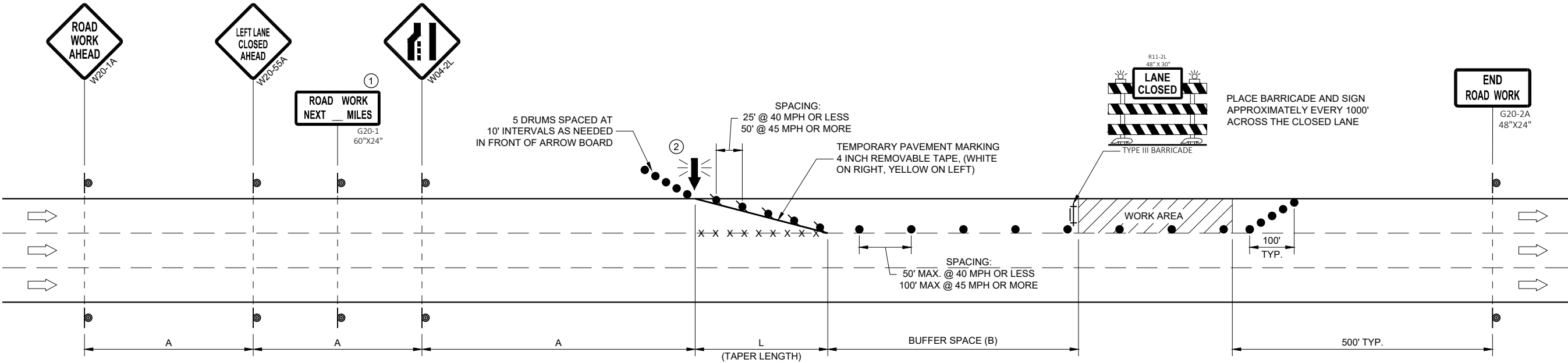
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROW BOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

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.

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

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

- ① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.
- ② WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO PLACE THE ARROW BOARD AS SHOWN, PLACE THE ARROW BOARD AT THE END OF THE TAPER.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'

TRAFFIC CONTROL, SINGLE LANE CLOSURE, DIVIDED NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

LEGEND

- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

FOR WORK ON ROADWAYS WITH SPEEDS GREATER THAN 45 MPH, USE SDD 15D14.

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON TEMPORARY SUPPORTS.

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

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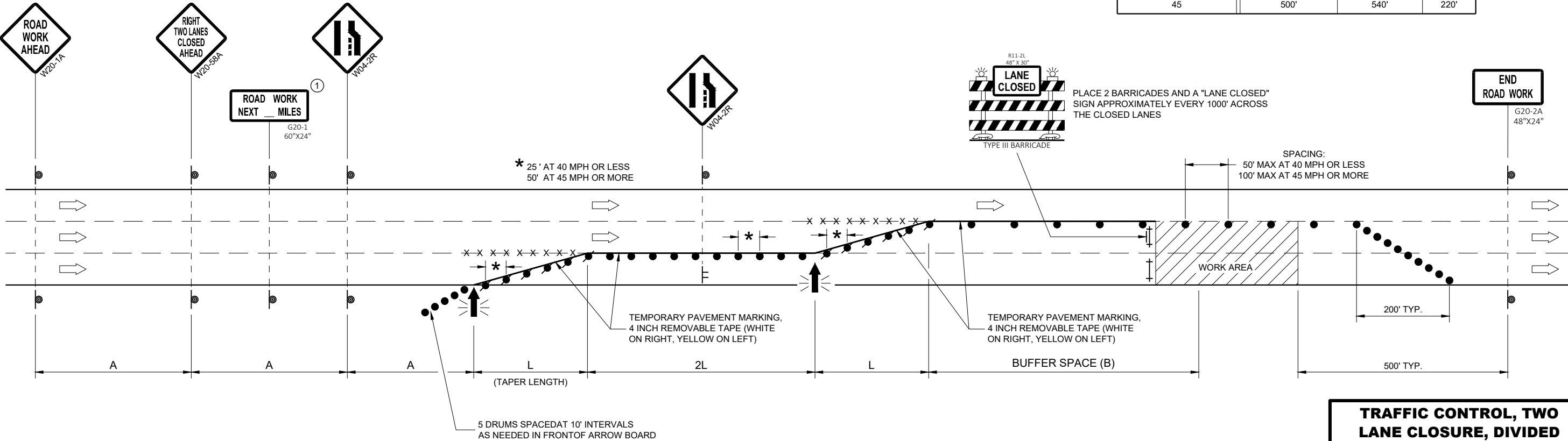
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY REESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

① OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	TAPER LENGTH (12 FT. LANE) (L) FEET	BUFFER SPACE (B) FEET
25	200'	125'	55'
30	200'	180'	85'
35	350'	245'	120'
40	350'	320'	170'
45	500'	540'	220'



TRAFFIC CONTROL, TWO
LANE CLOSURE, DIVIDED
NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2020

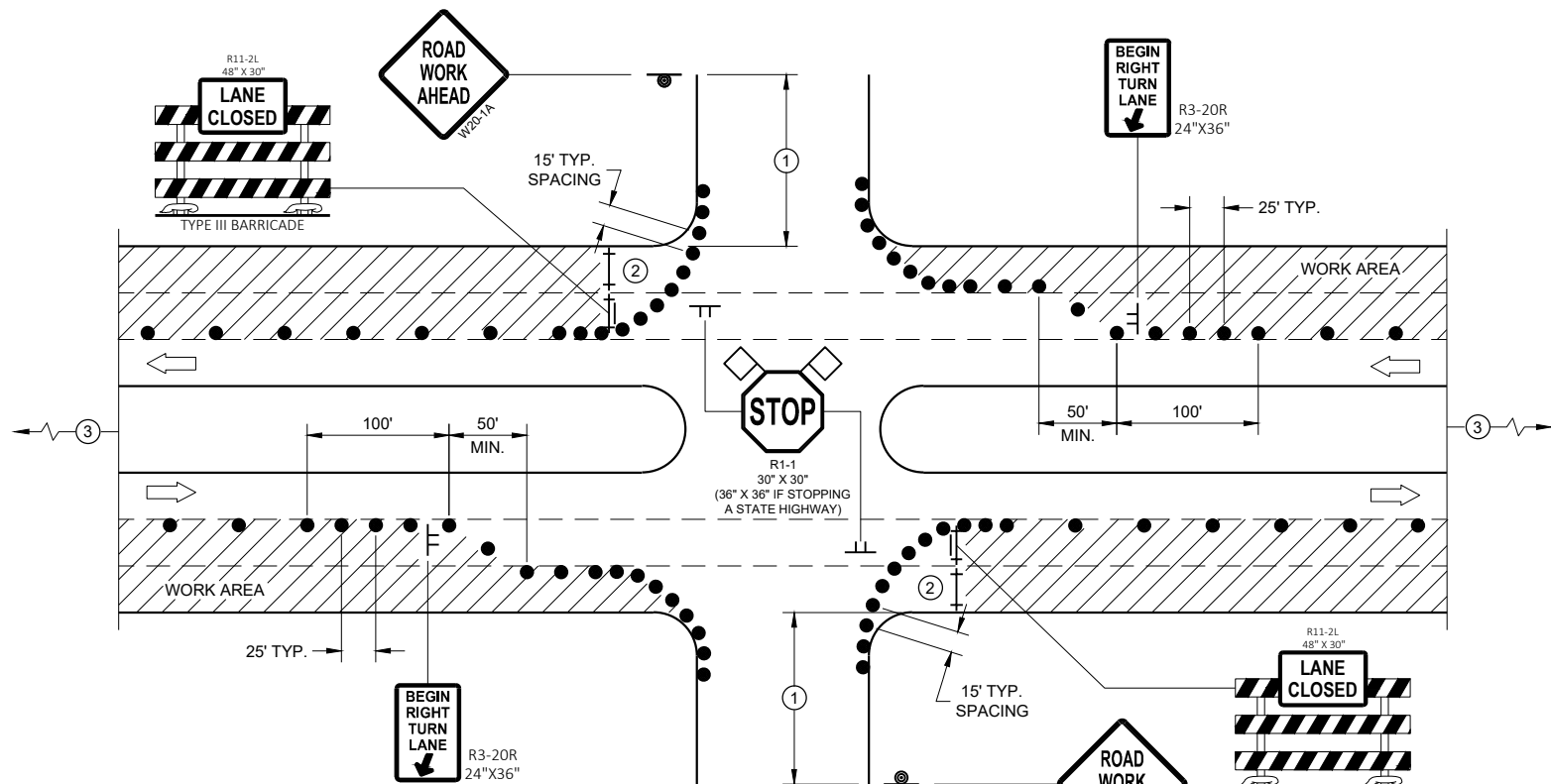
DATE

FHWA

/S/ Andrew Heidtke

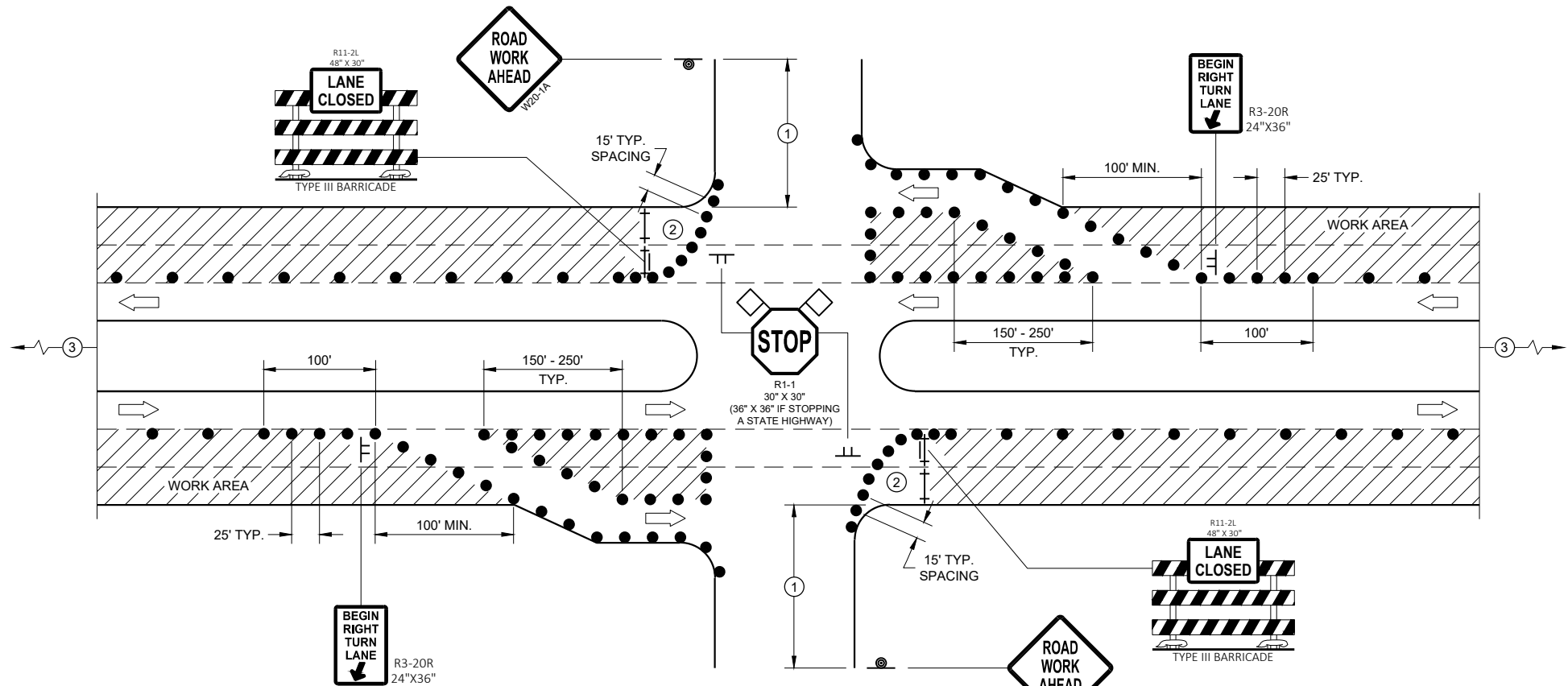
STATEWIDE WORK ZONE TRAFFIC

SAFETY ENGINEER



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

**FOR RIGHT TWO LANES
CLOSED AT INTERSECTION**



**FOR RIGHT TWO LANES CLOSED AT
INTERSECTION (WITH RIGHT TURN BAY OPEN)**

GENERAL NOTES

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

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

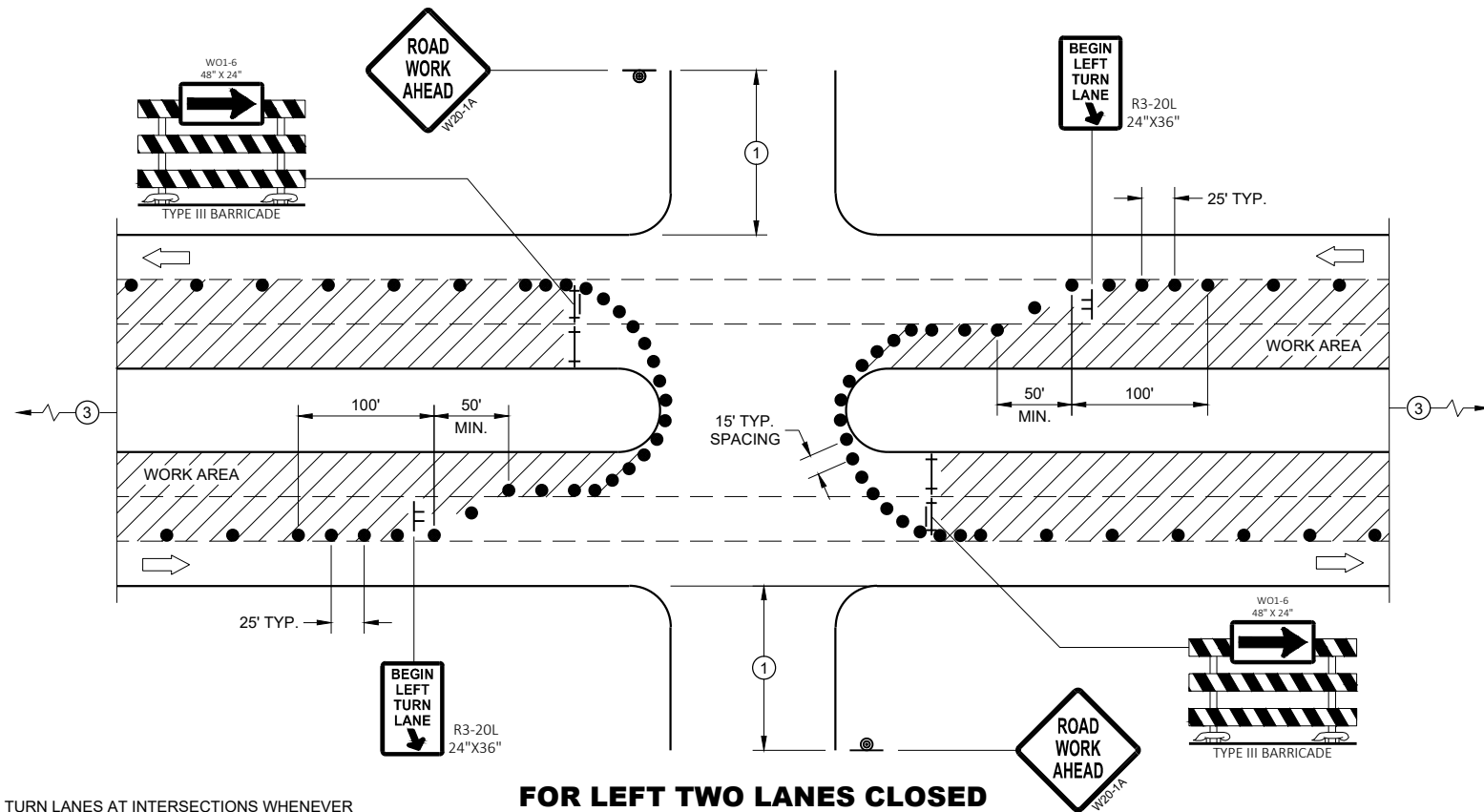
- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ② ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

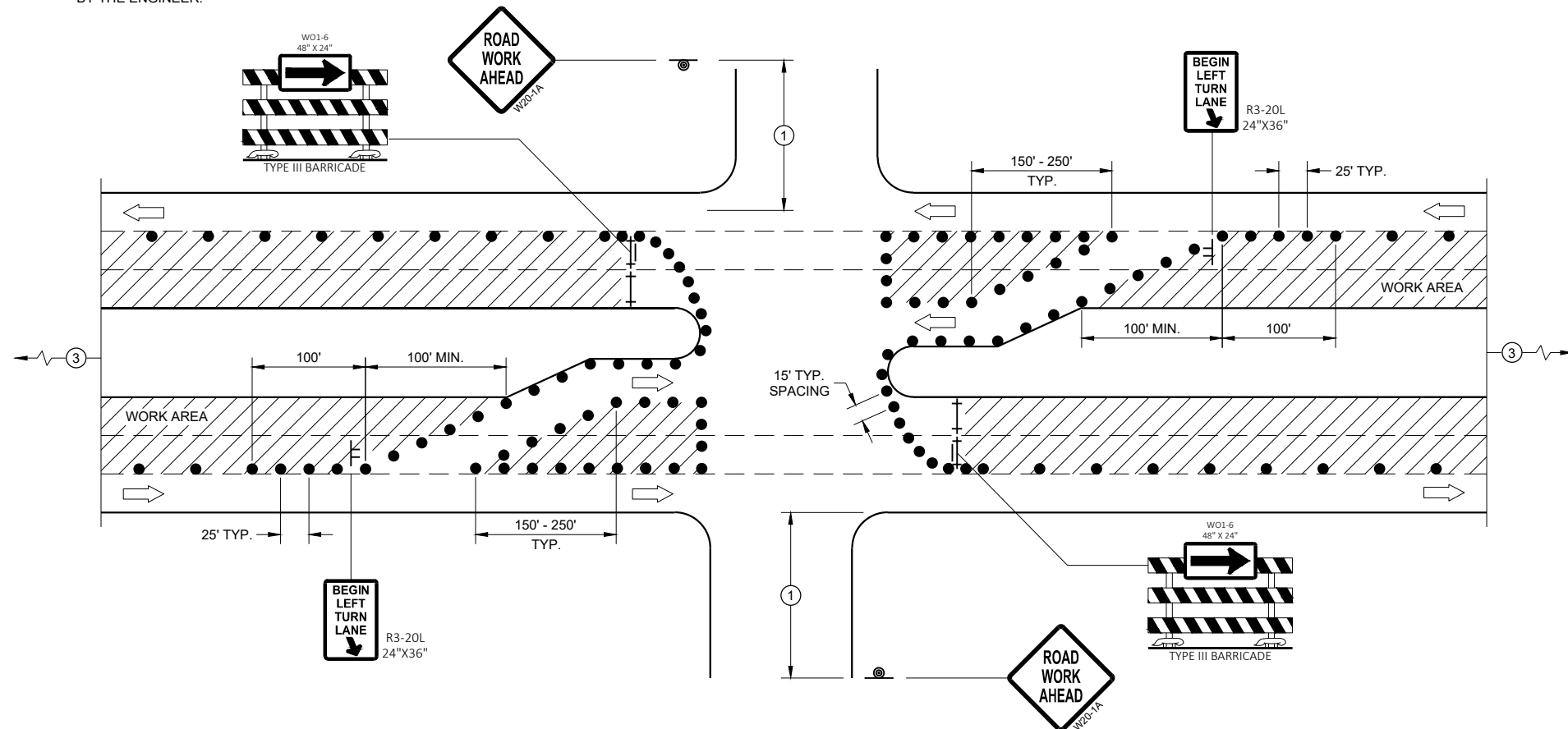
**TRAFFIC CONTROL,
INTERSECTION WITHIN
TWO RIGHT LANE CLOSURE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK



FOR LEFT TWO LANES CLOSED AT INTERSECTION OR MEDIAN BREAK (WITH LEFT TURN BAY OPEN)

GENERAL NOTES

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

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

- 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.
- ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS
- SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

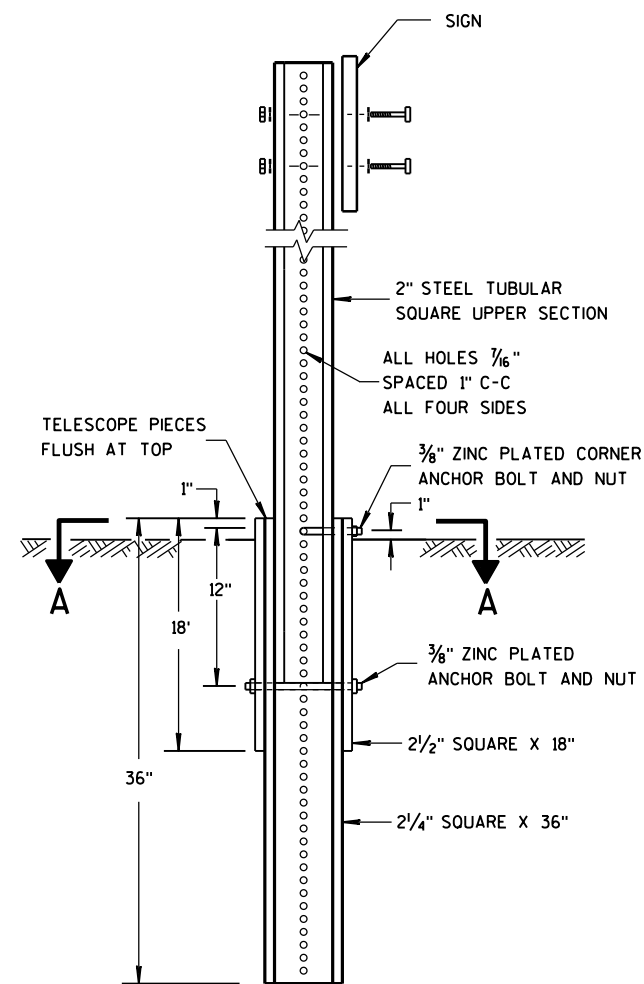
LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN TWO LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



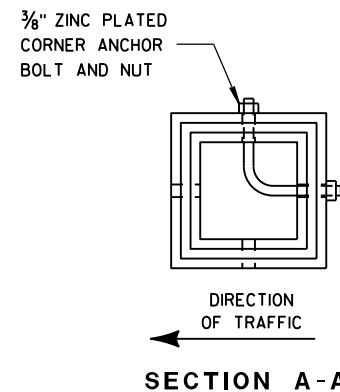
DETAIL OF TUBULAR
STEEL SIGN POST

TUBULAR STEEL POSTS

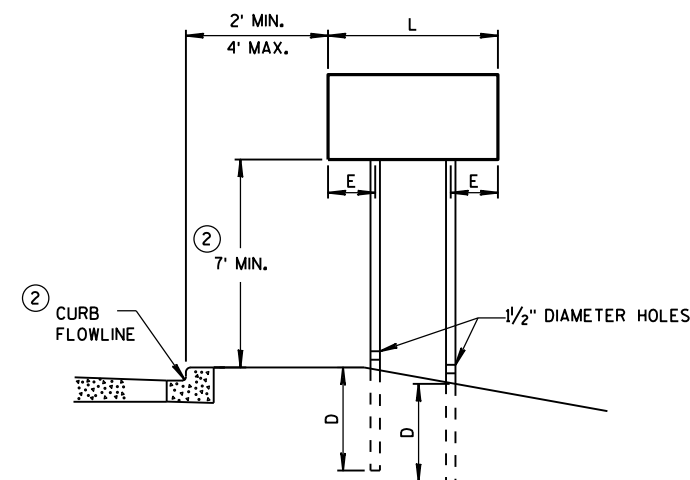
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

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

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



SECTION A-A

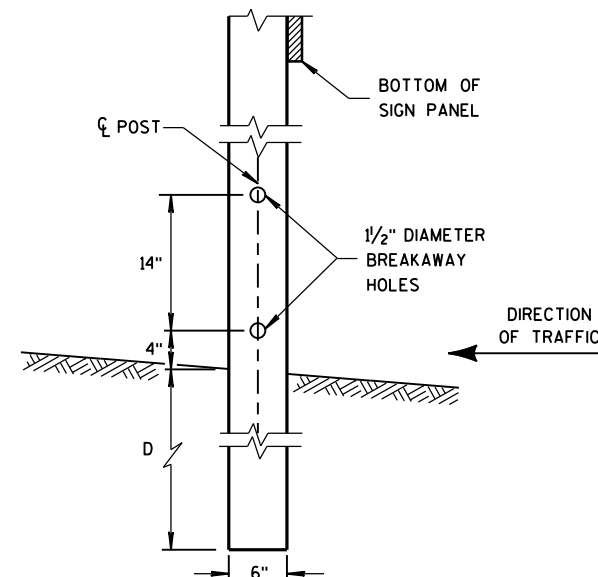


URBAN AREA

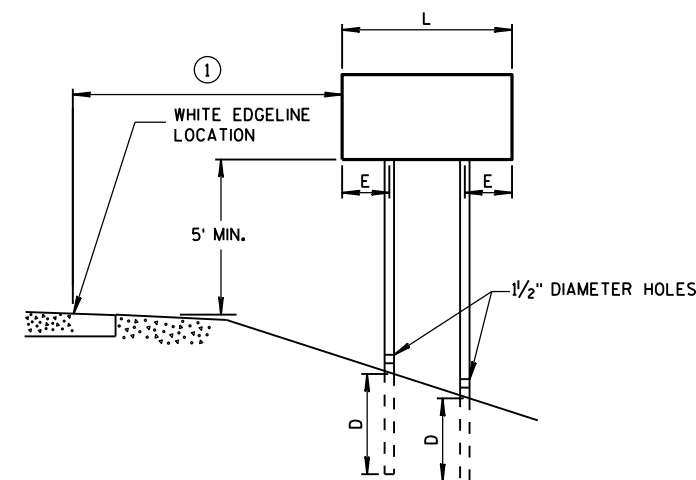
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

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



4 "x6 " WOOD POST
MODIFICATION



RURAL AREA

4 " X 6 " WOOD POST

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

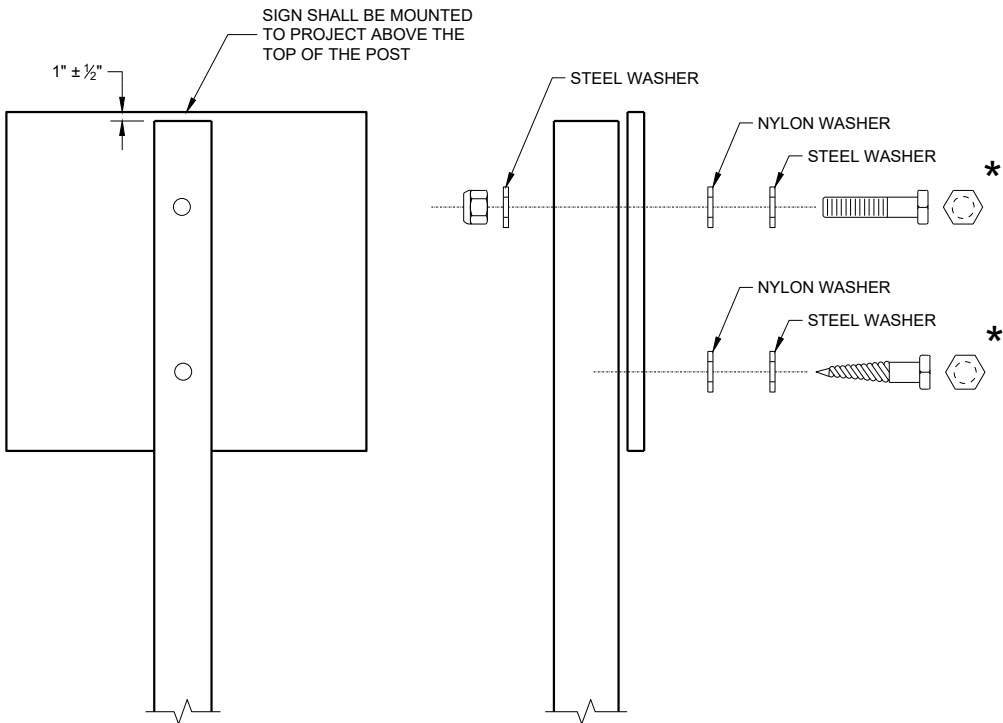
SEE NOTE ③

GENERAL NOTES

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

TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

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

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

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

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - 3/8" x 3 1/4" LENGTH W/NUTS
RIVETS - 3/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM
BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH,
GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 1/4" O.D. x 3/8" I.D. x 1/16" STEEL
1 1/4" O.D. x 3/8" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER
THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

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

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR SHIFTING RIGHT LANE - REVERSE FOR SHIFTING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

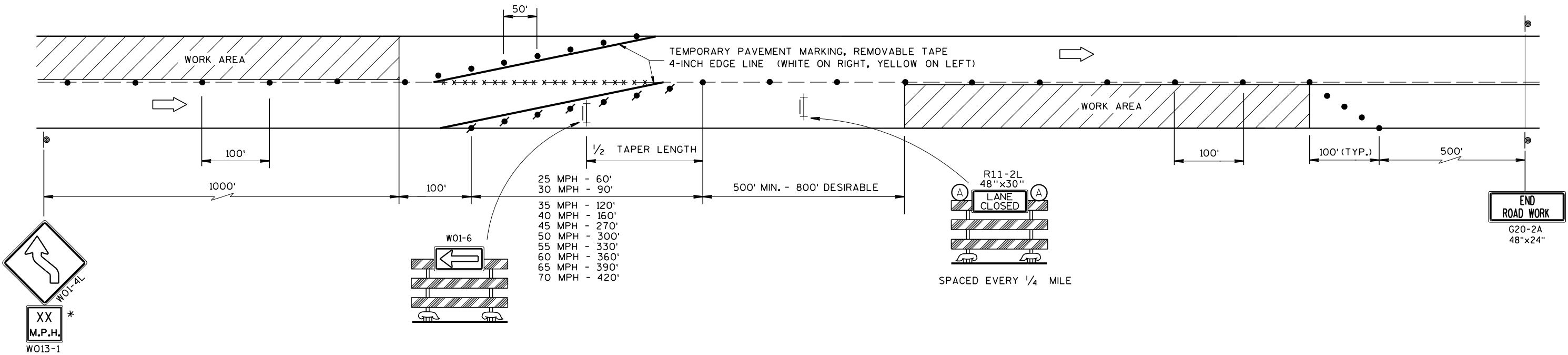
FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

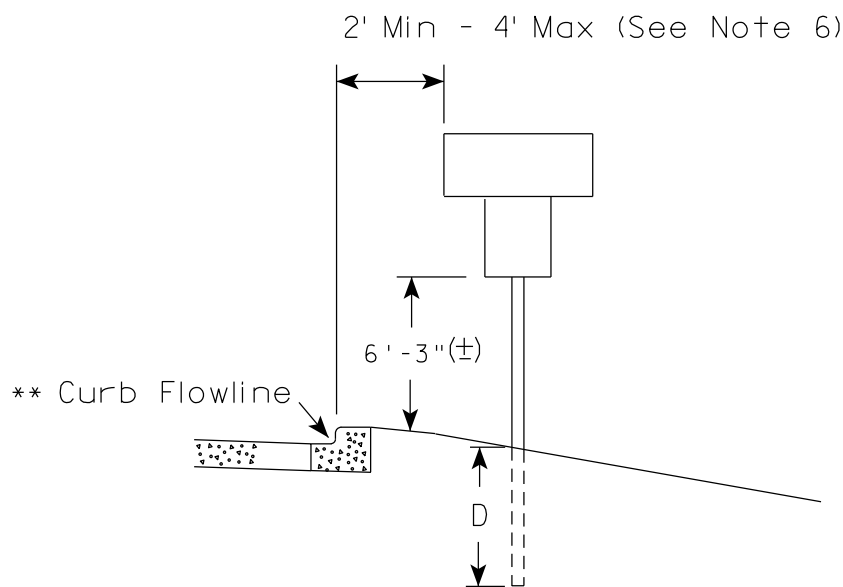


LANE SHIFT MULTI-LANE DIVIDED OR ONE WAY ROAD

* USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED

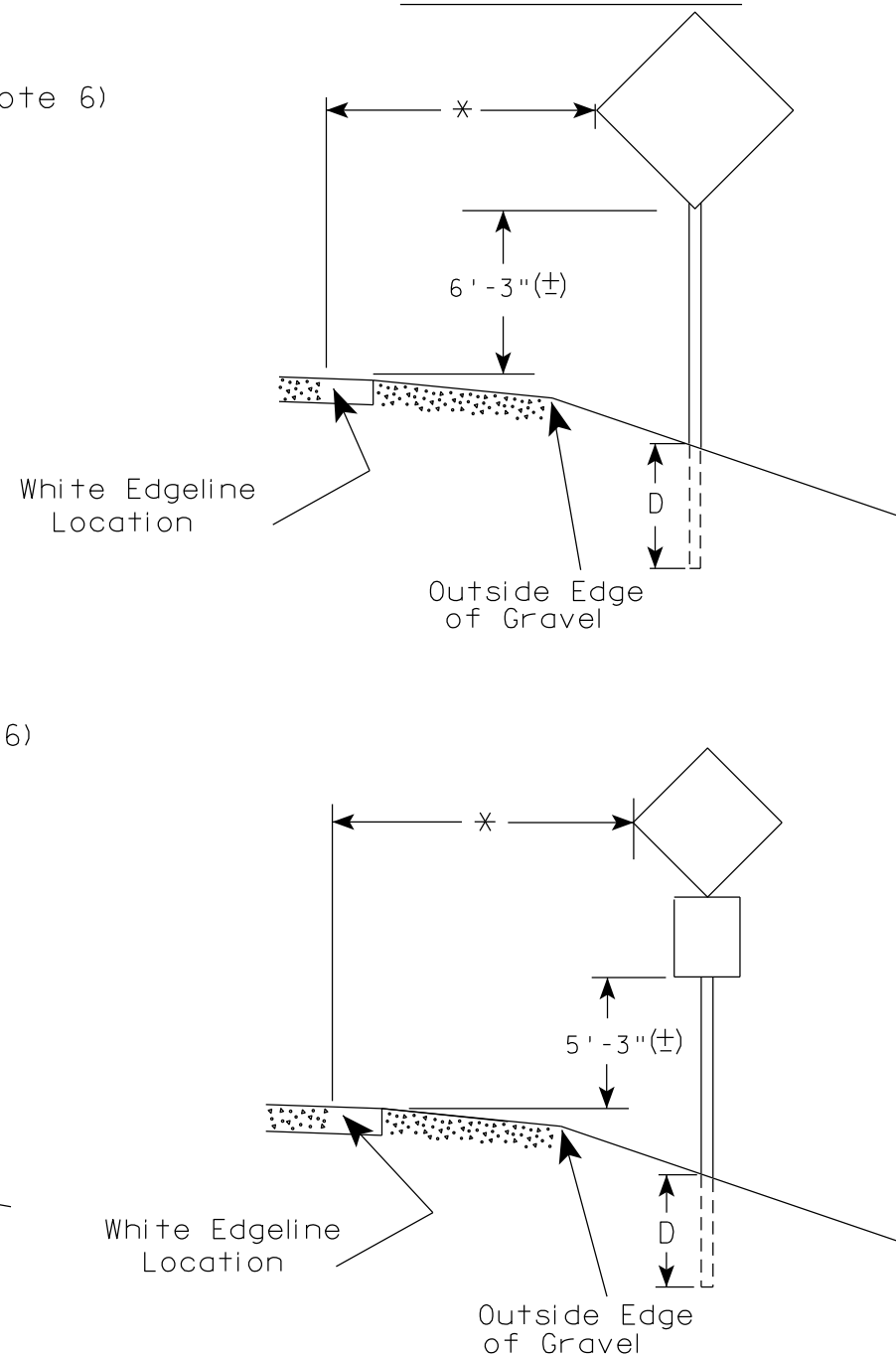
TRAFFIC CONTROL, LANE SHIFT, MULTI-LANE DIVIDED OR ONE WAY ROAD	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2018 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

7



* 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.

7



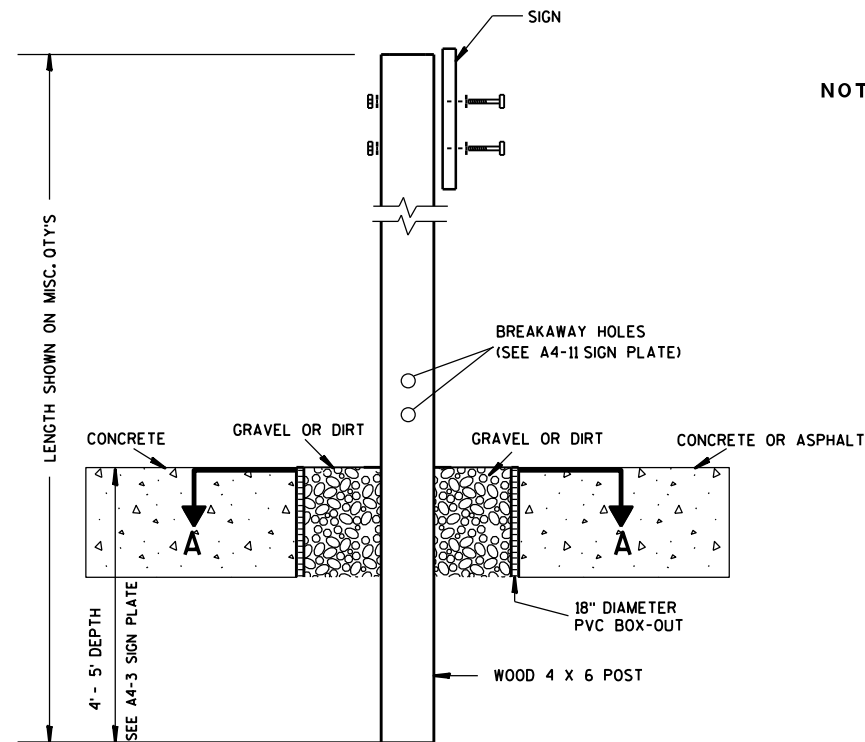
TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

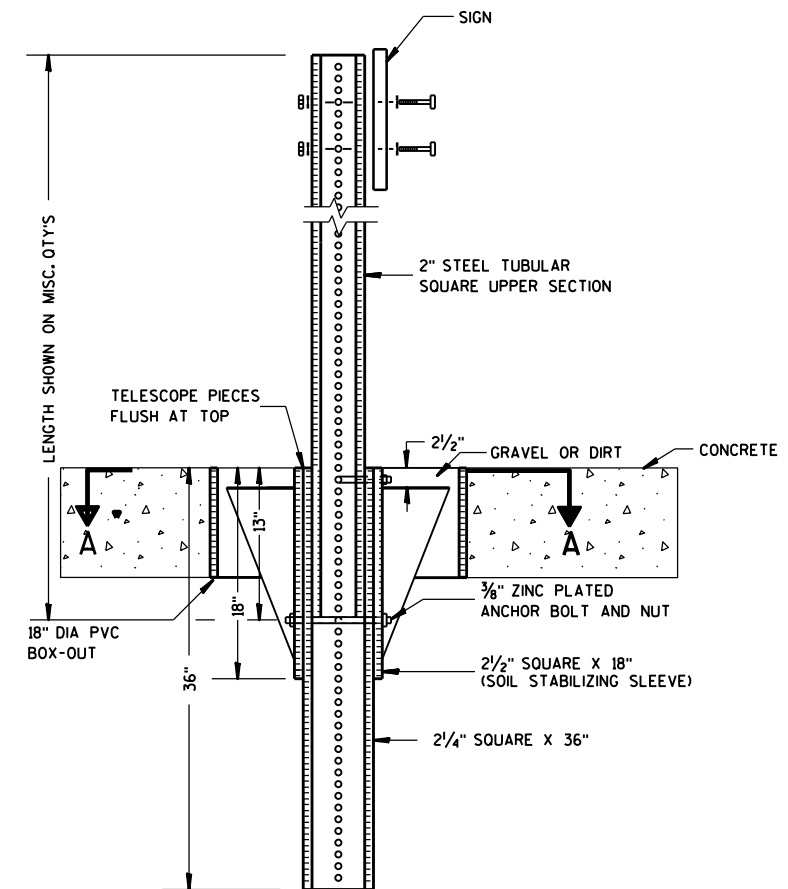
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (\pm). The Chevron sign (W1-8), Roundabout Chevron panel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



ELEVATION VIEW

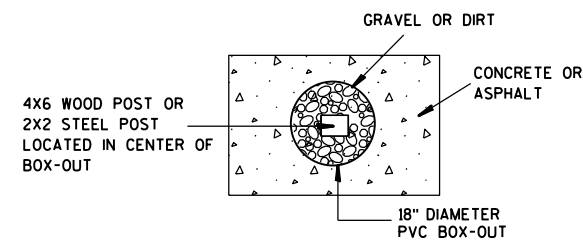
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

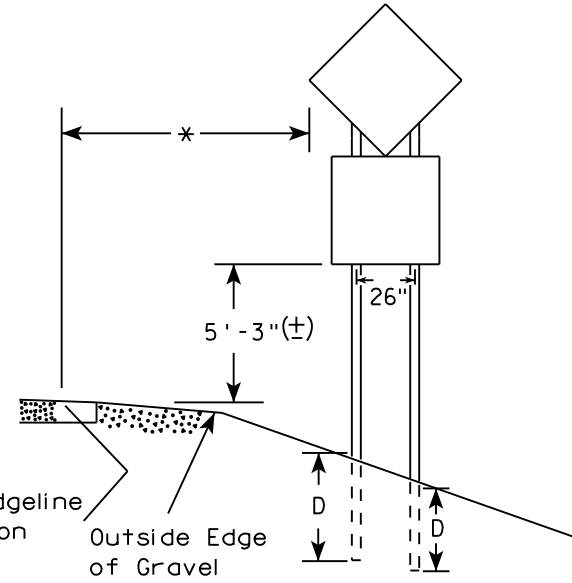
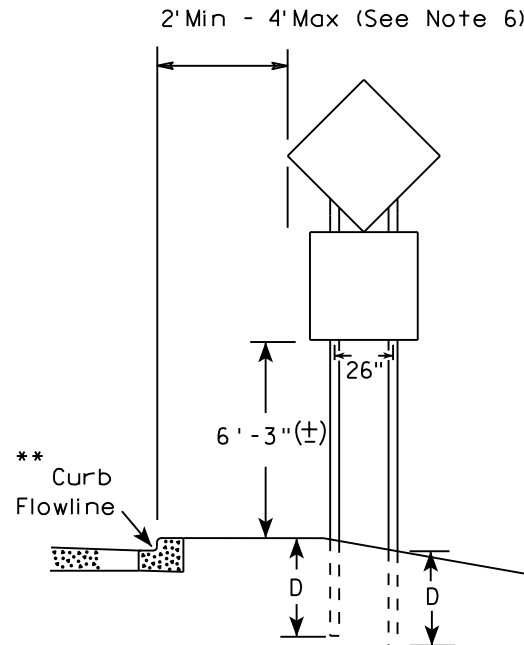
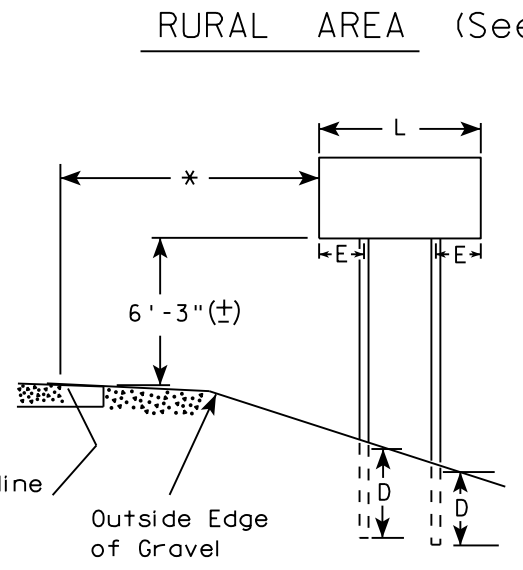
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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

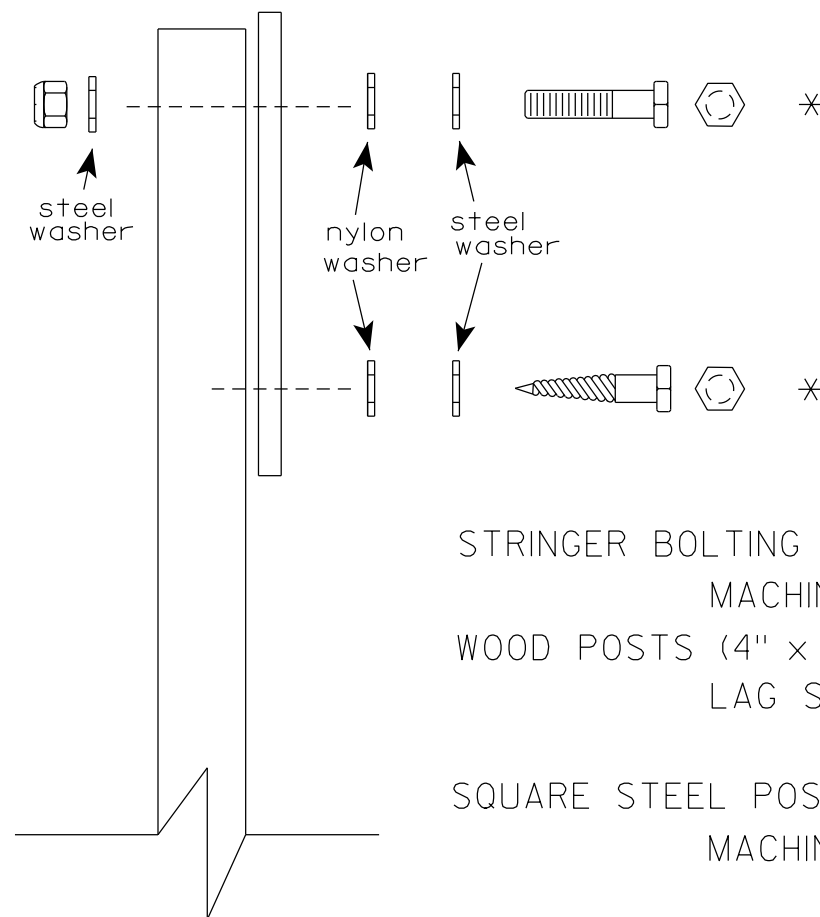
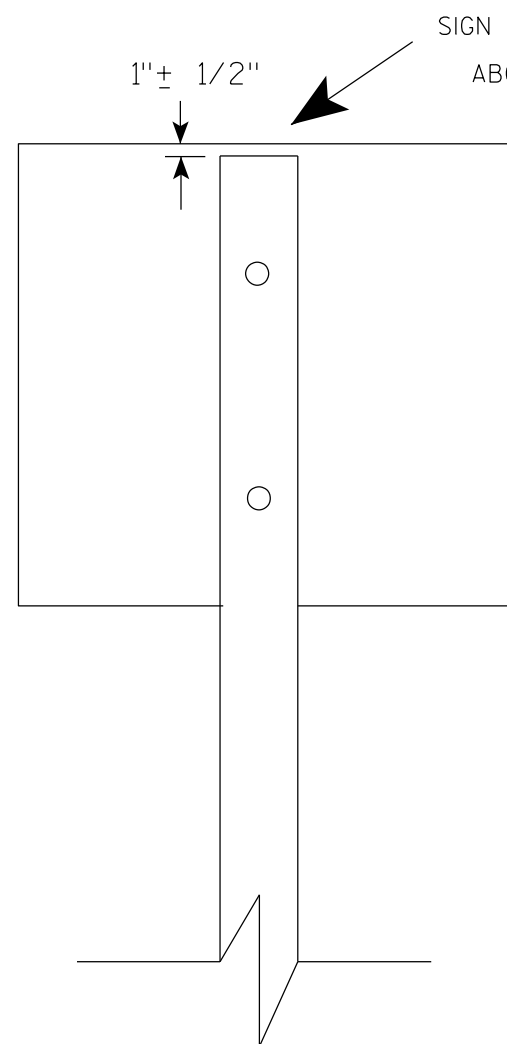
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

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

- * 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.
- ** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.
- *** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.



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).

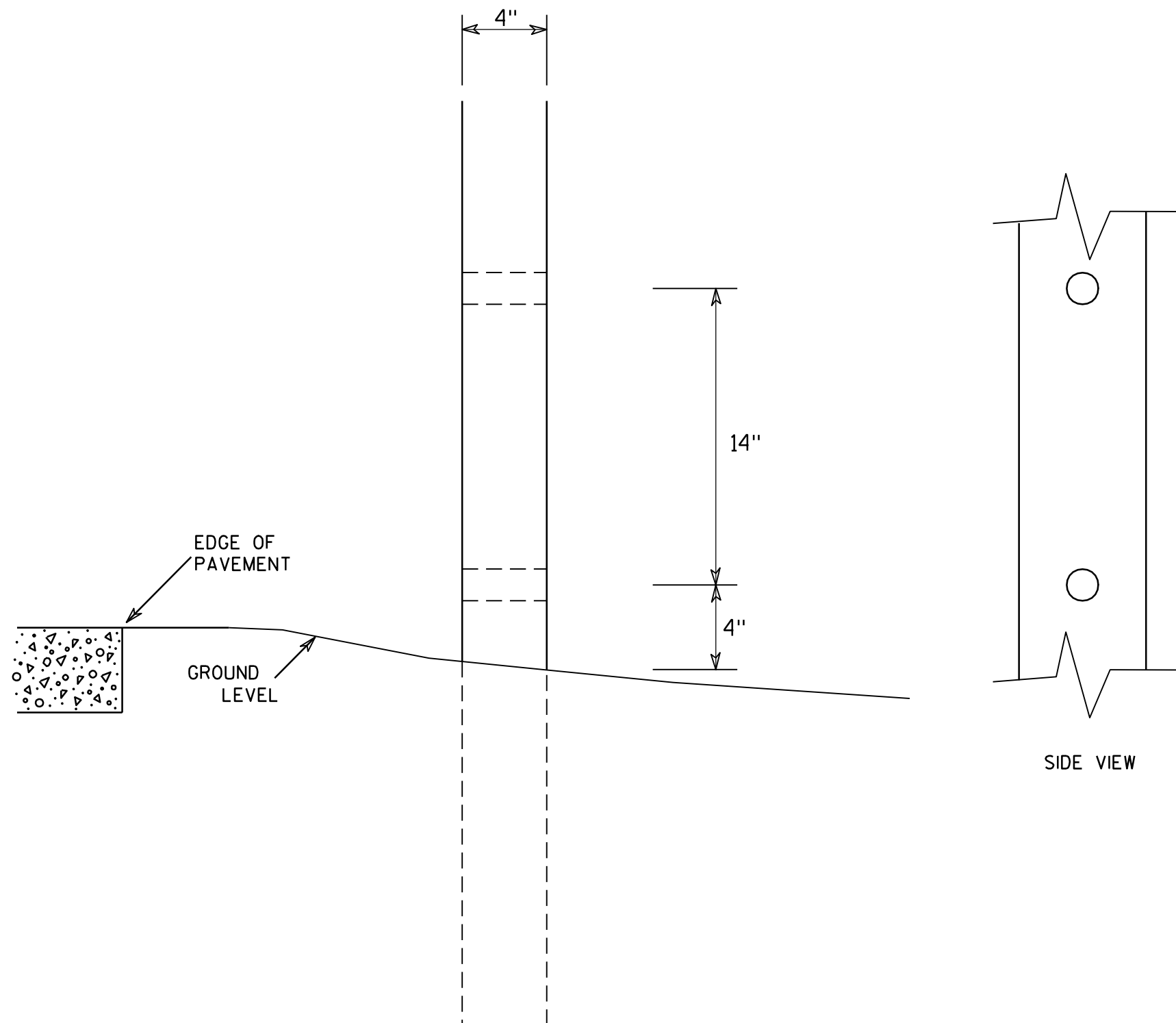
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

7



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

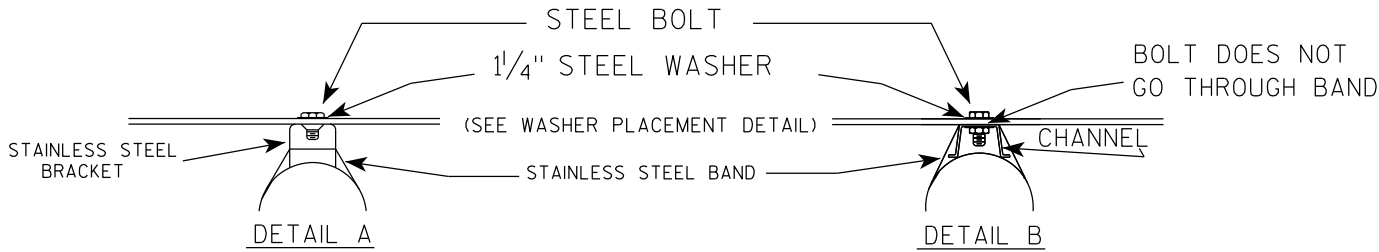
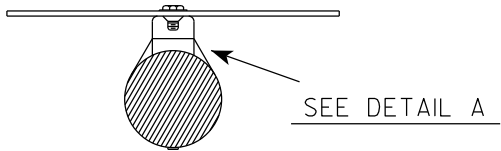
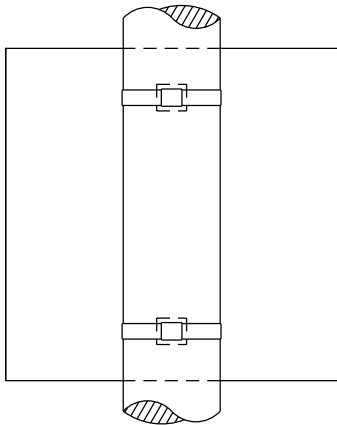
COUNTY:

SHEET NO:

E

BANDING

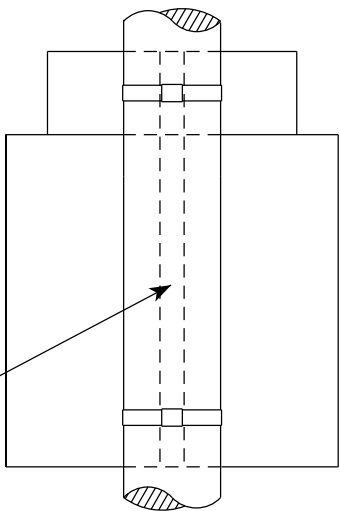
SINGLE SIGN



GENERAL NOTES

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

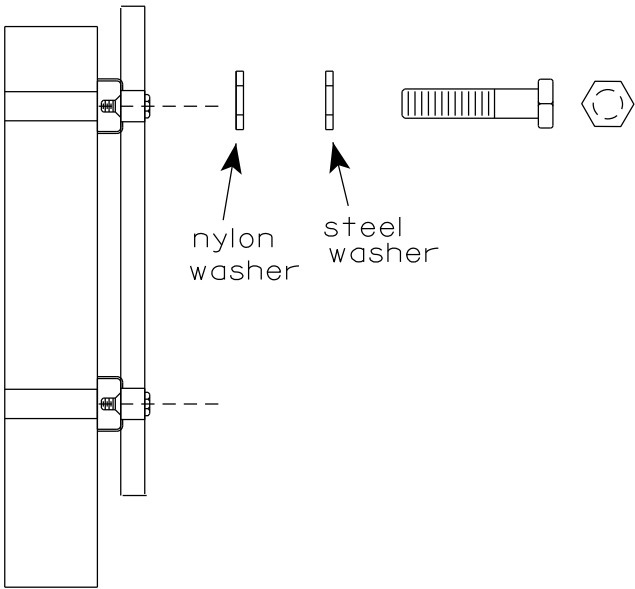
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET

SEE DETAIL B

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

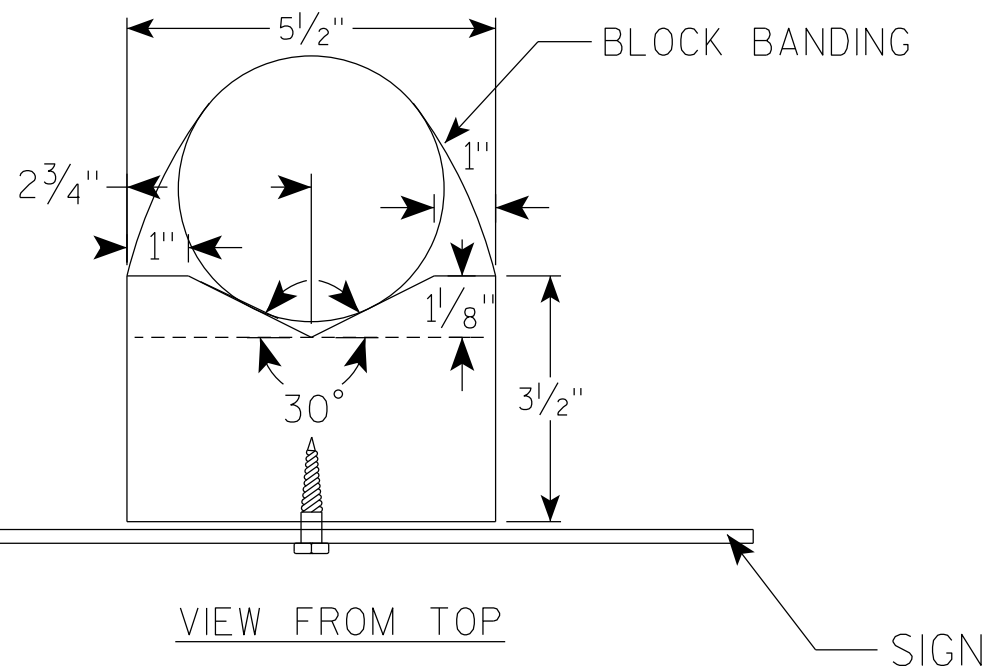
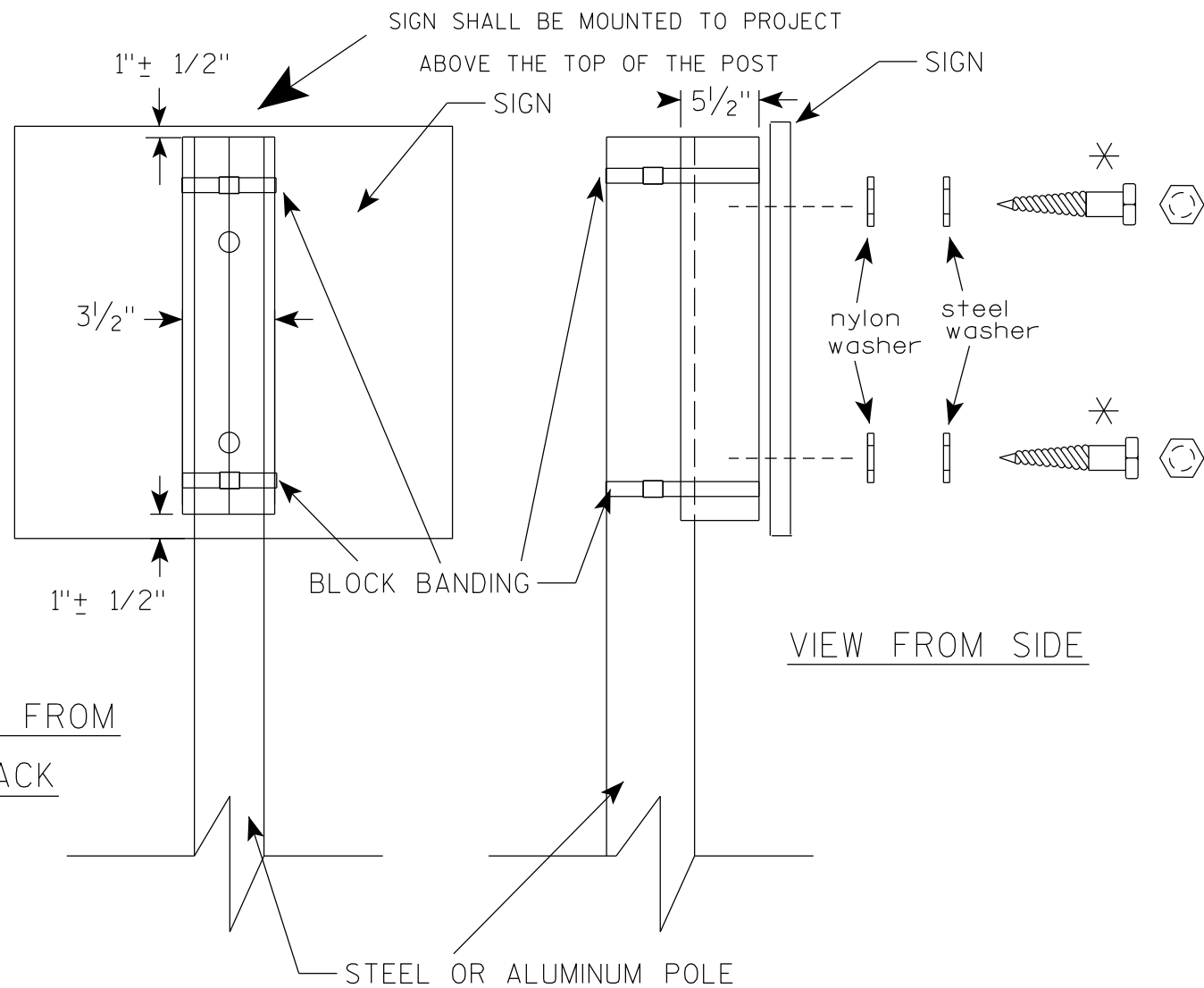
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

VIEW FROM
BACK



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 $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $1\frac{1}{4}$ " 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

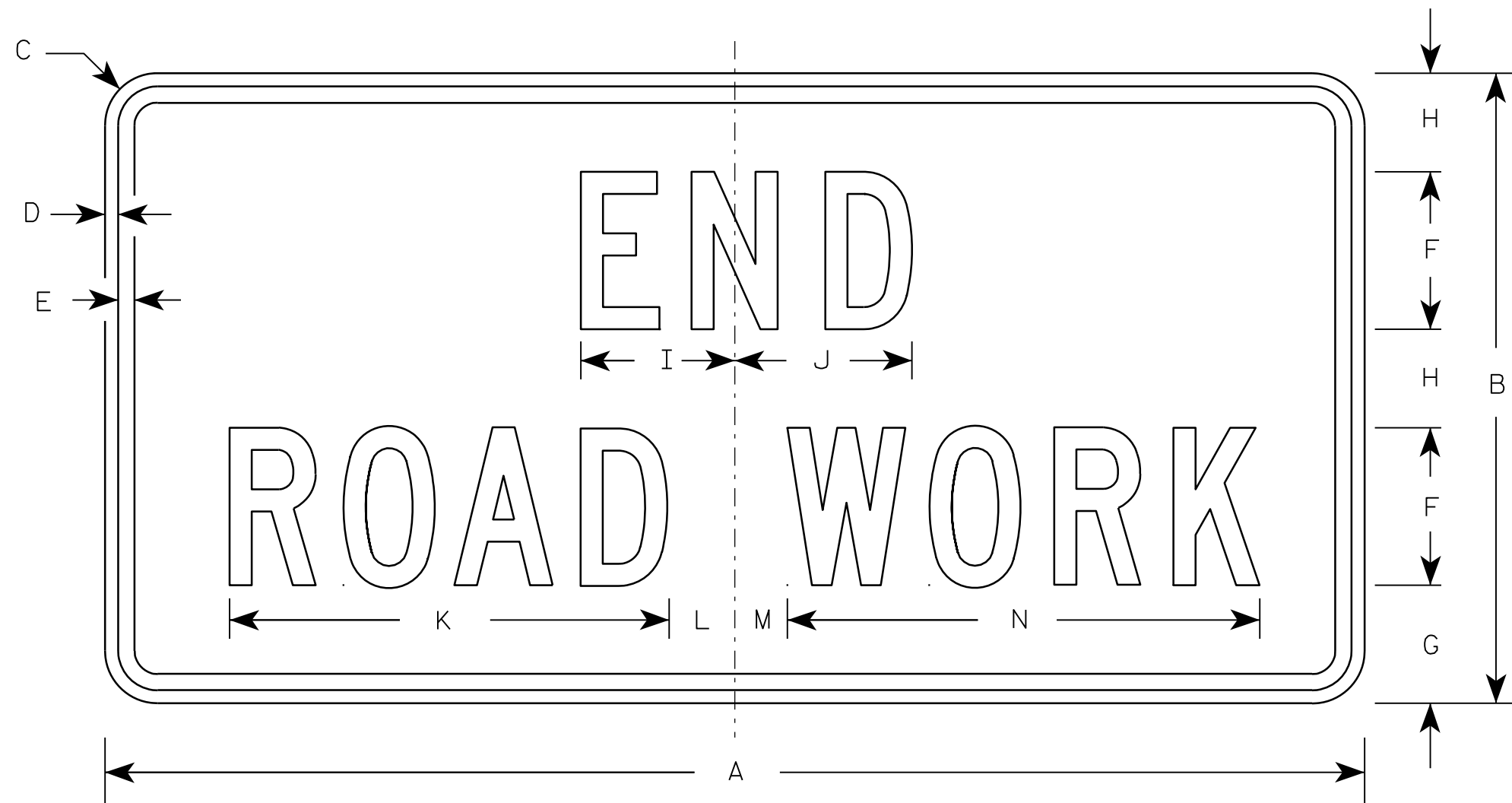
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:

SHEET NO:

E

7



G20-2A

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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. m.
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

NOTES

- Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Orange
Message - Black
- Message Series - C
- 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

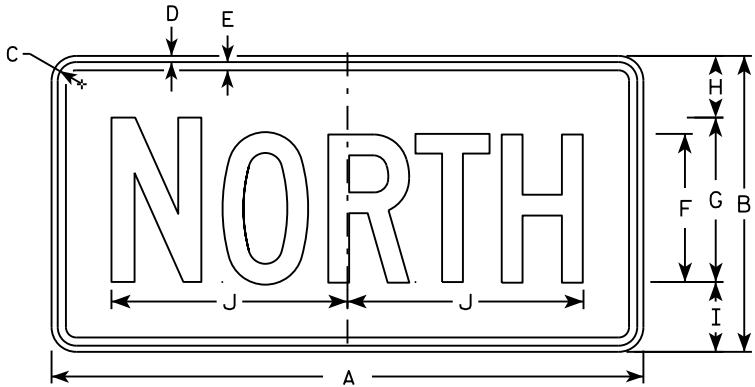
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

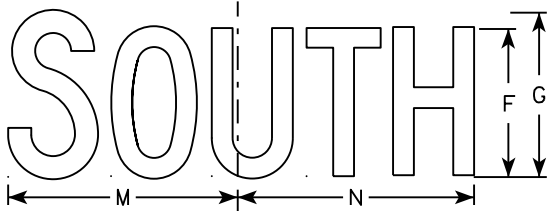
E



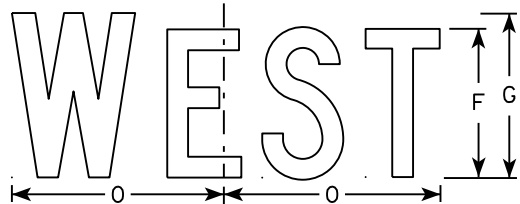
M3-1
MM3-1
MP3-1



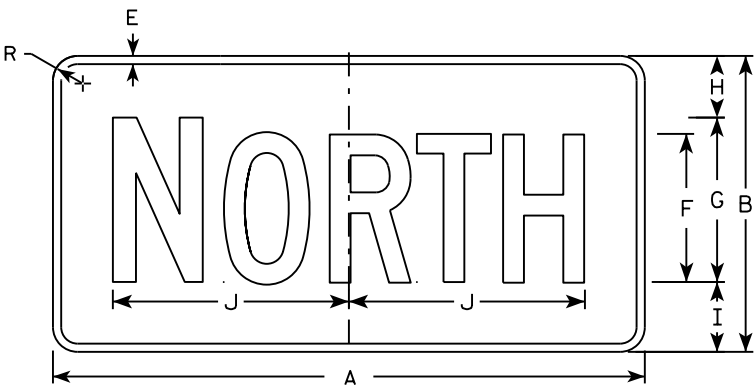
M3-2
MM3-2
MP3-2



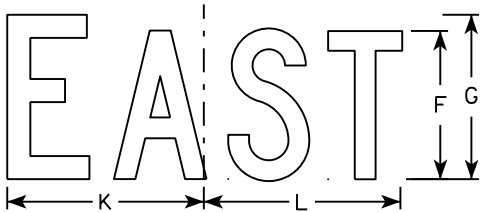
M3-3
MM3-3
MP3-3



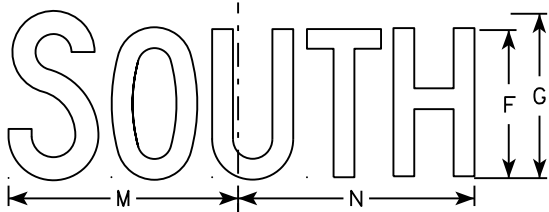
M3-4
MM3-4
MP3-4



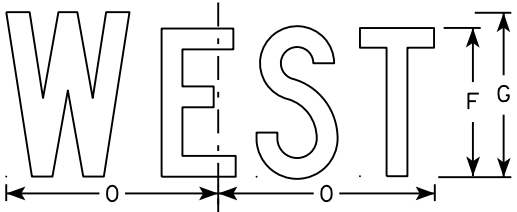
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

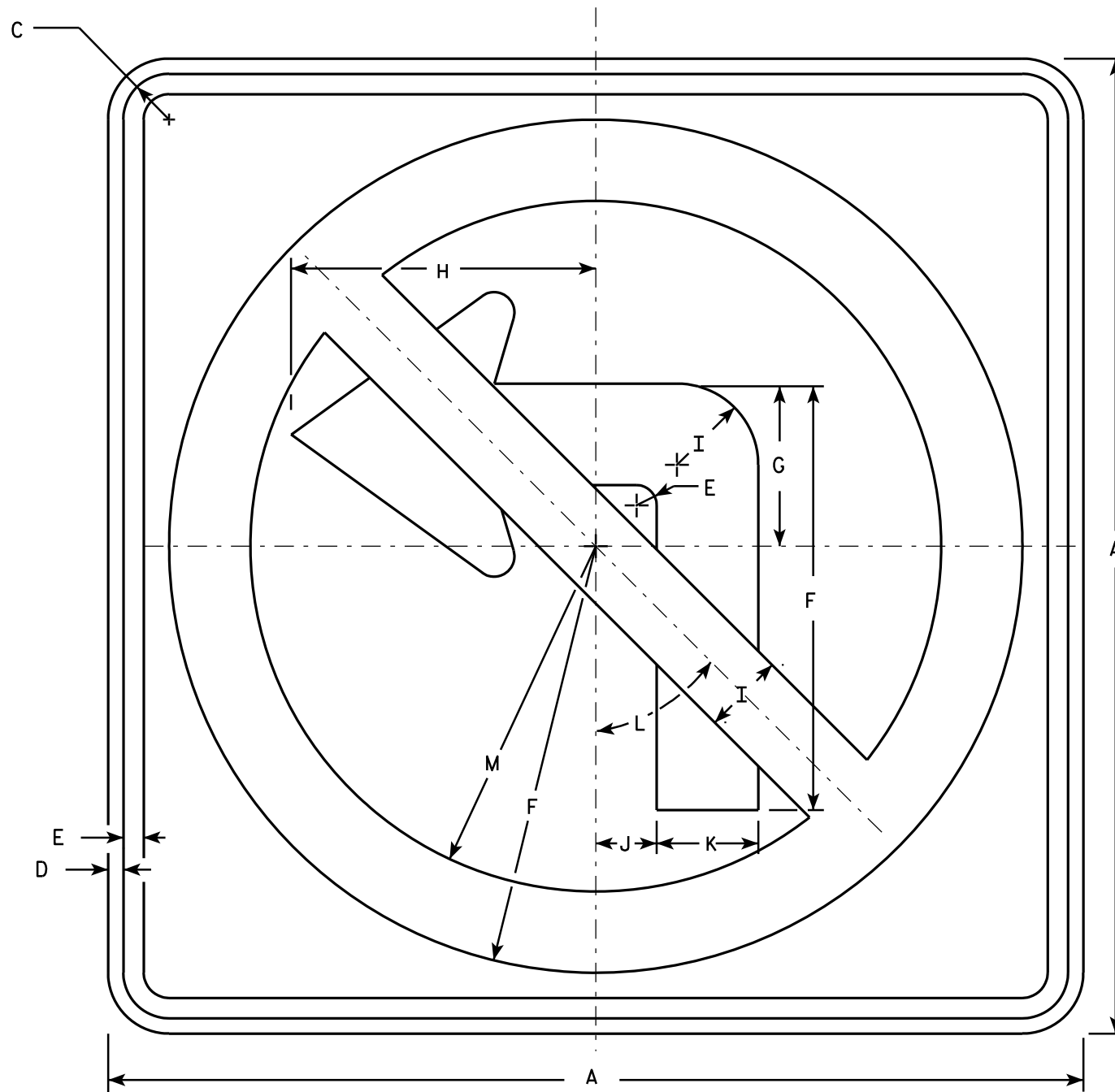
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thru M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

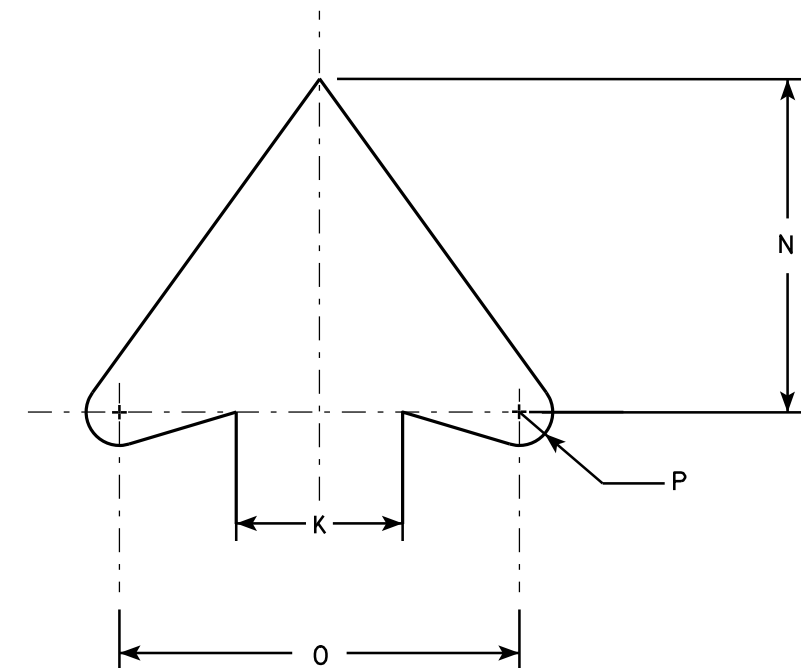
DATE 10/15/15 PLATE NO. M3-1.14



R3-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

STANDARD SIGN R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

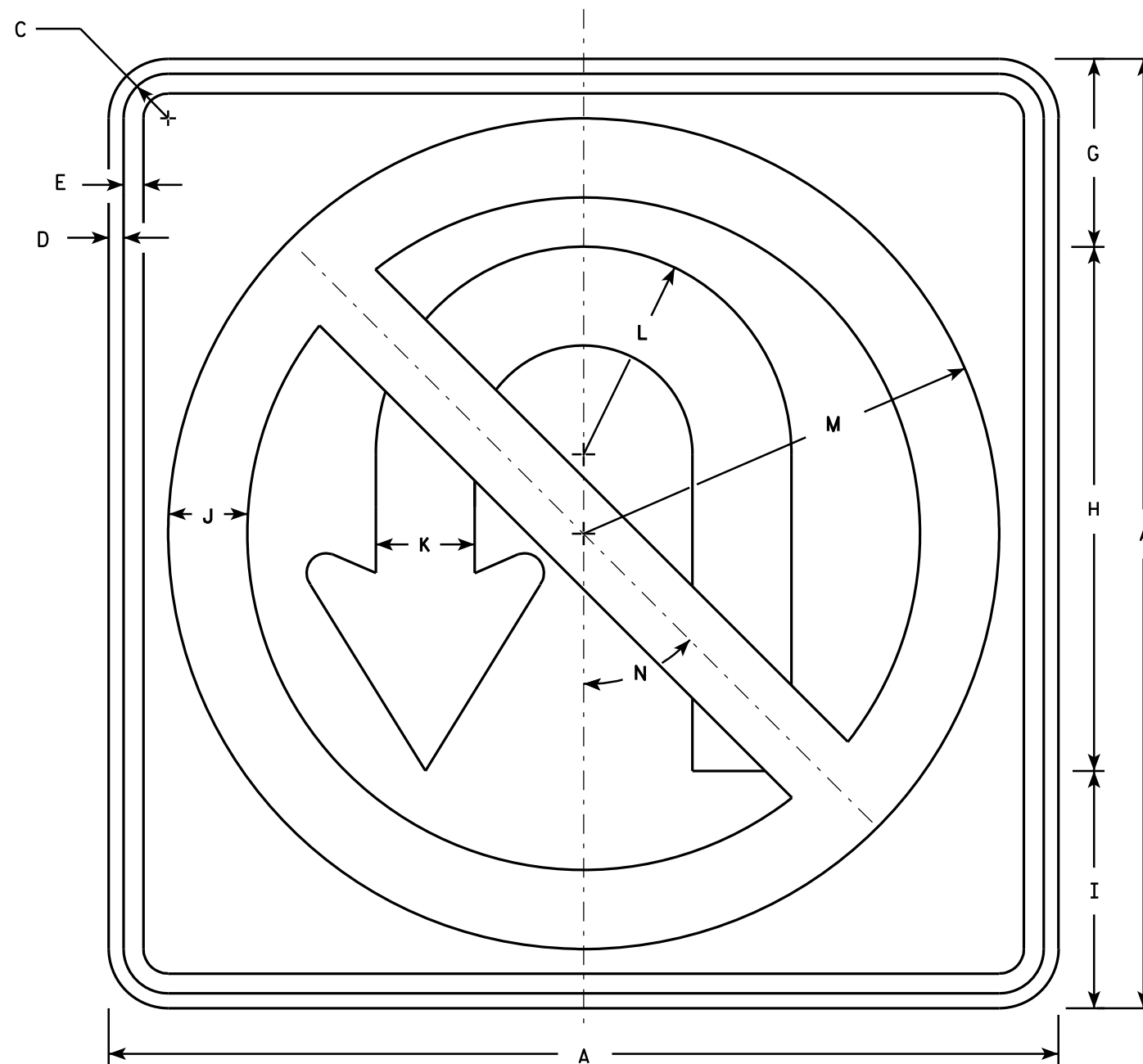
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

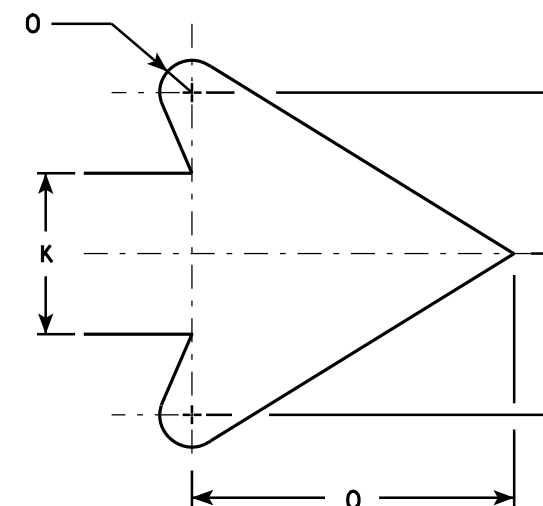
E



R3-4

NOTES

- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White
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.
- Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.

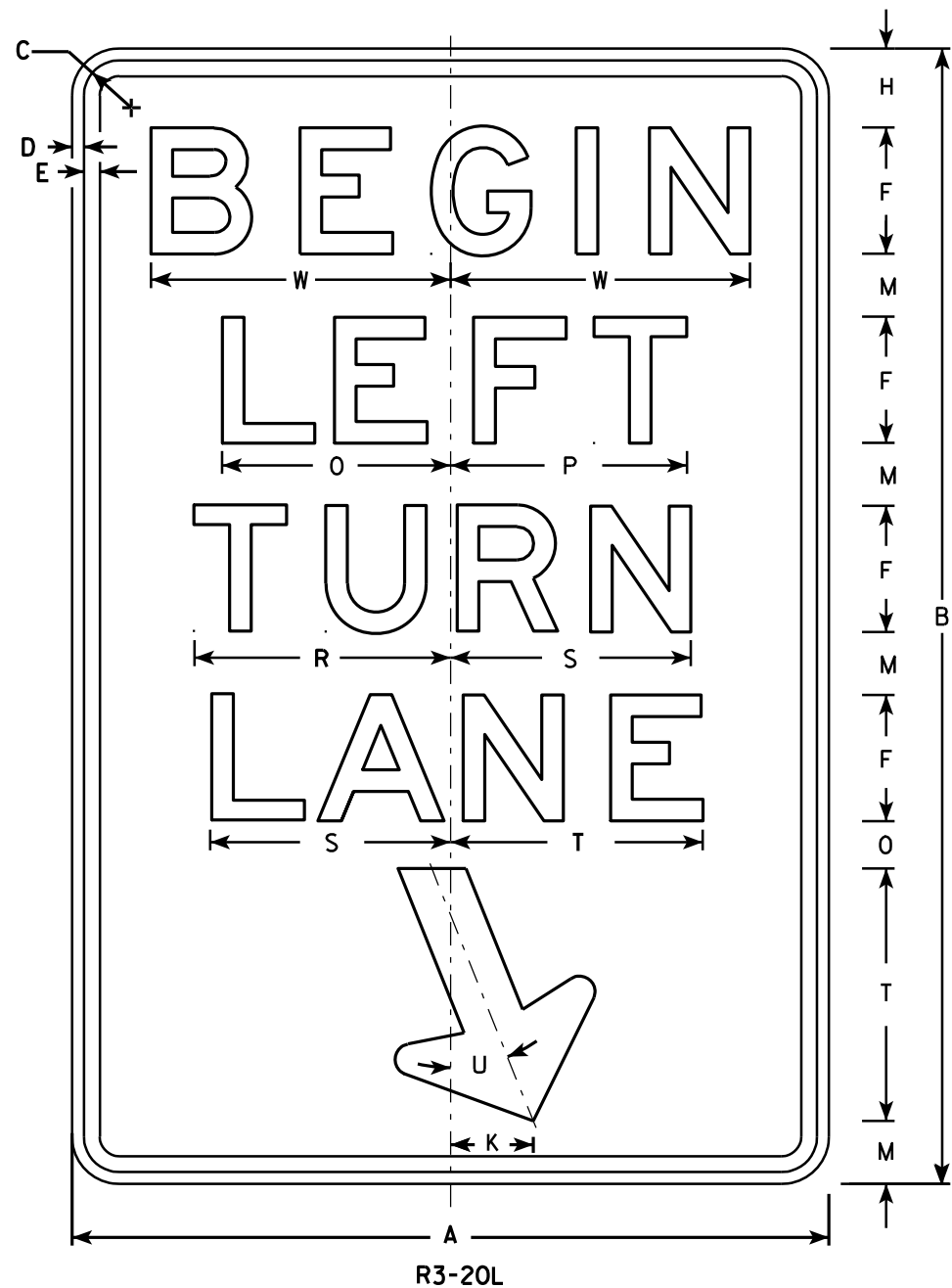


ARROW DETAIL

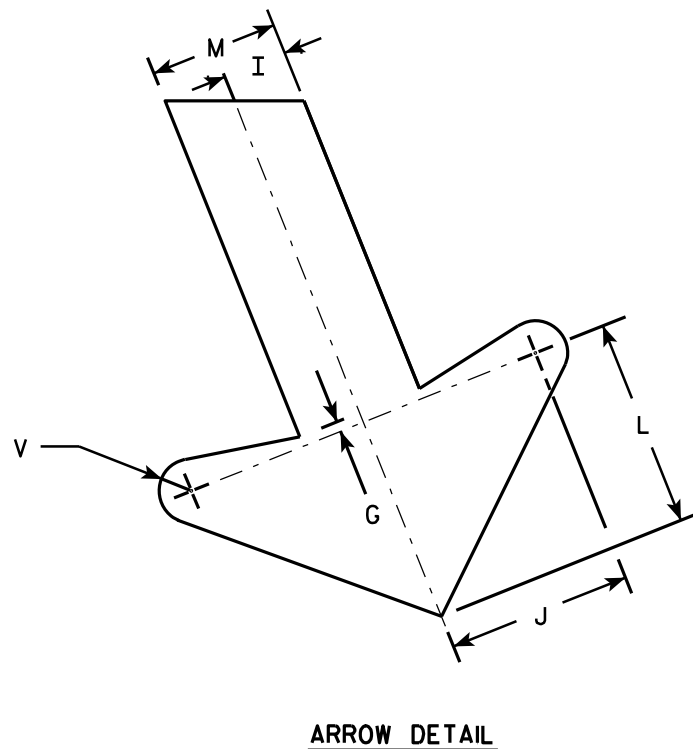
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

STANDARD SIGN	
R3-4	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 12/08/10	PLATE NO. R3-4.11

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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- NOTES**
- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 - 2. Color:
Background - White
Message - Black
 - 3. Message Series - E
 - 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



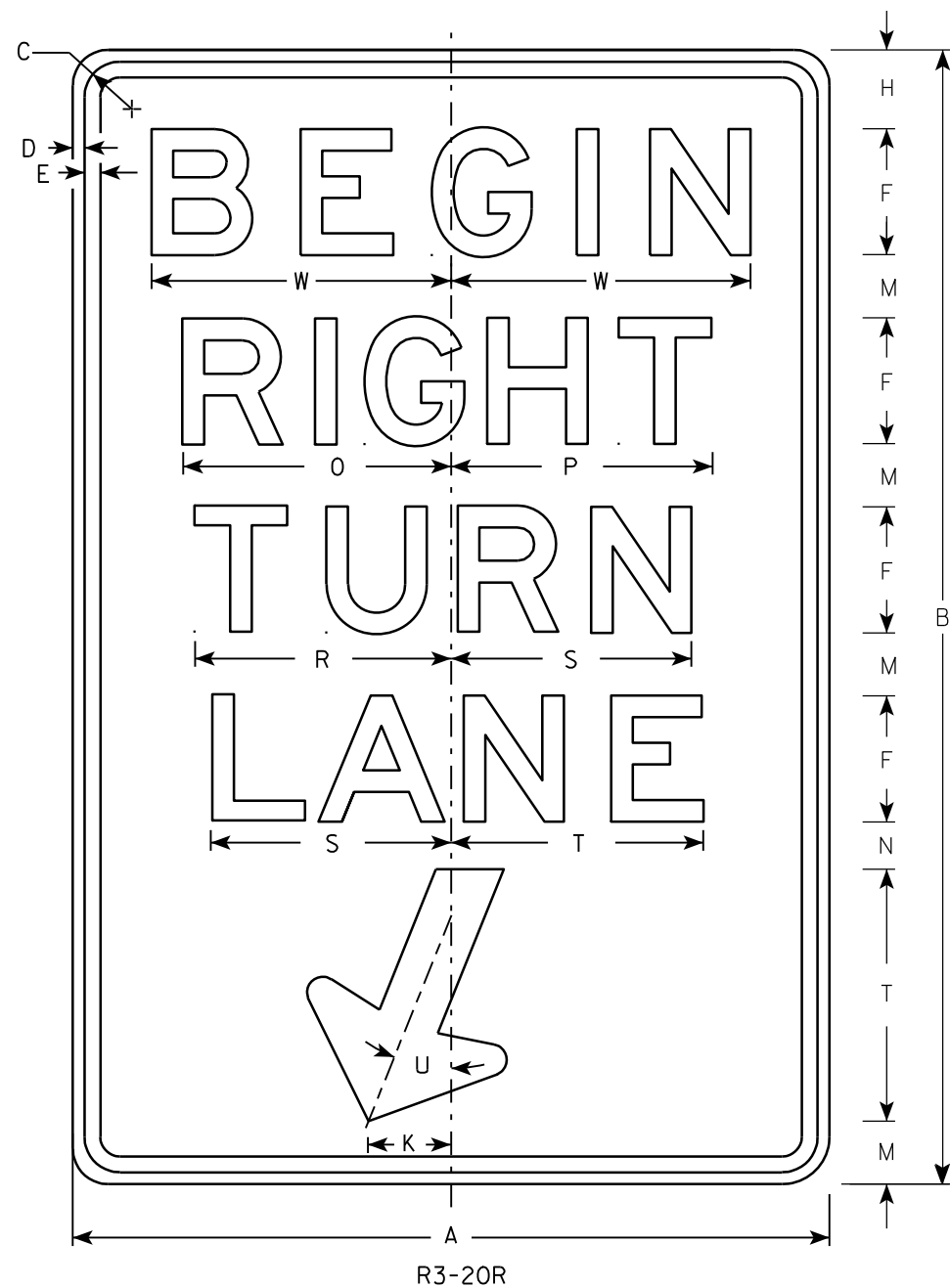
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

STANDARD SIGN
R3-20L

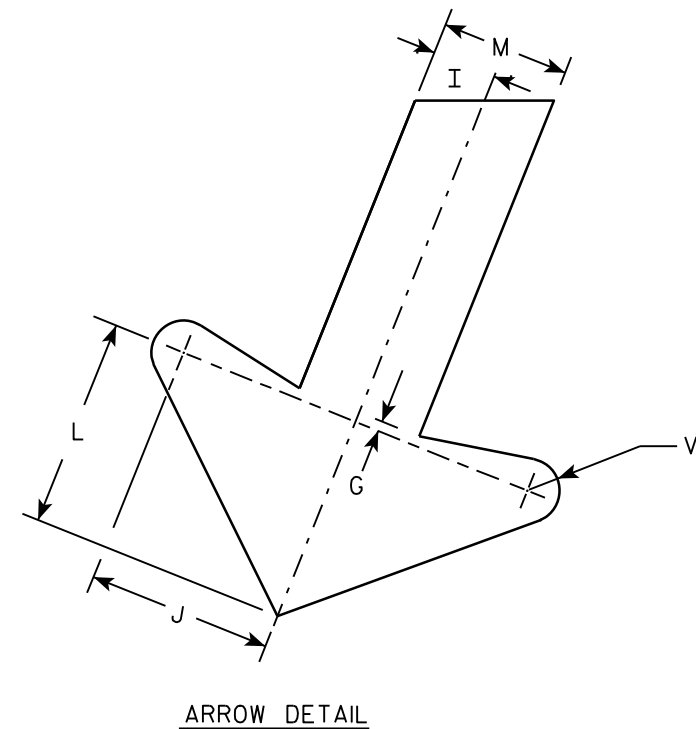
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7



- NOTES
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - White
Message - Black
 3. Message Series - E
 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



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	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	8 1/2	8 1/4		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	12 3/4	12 1/2		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

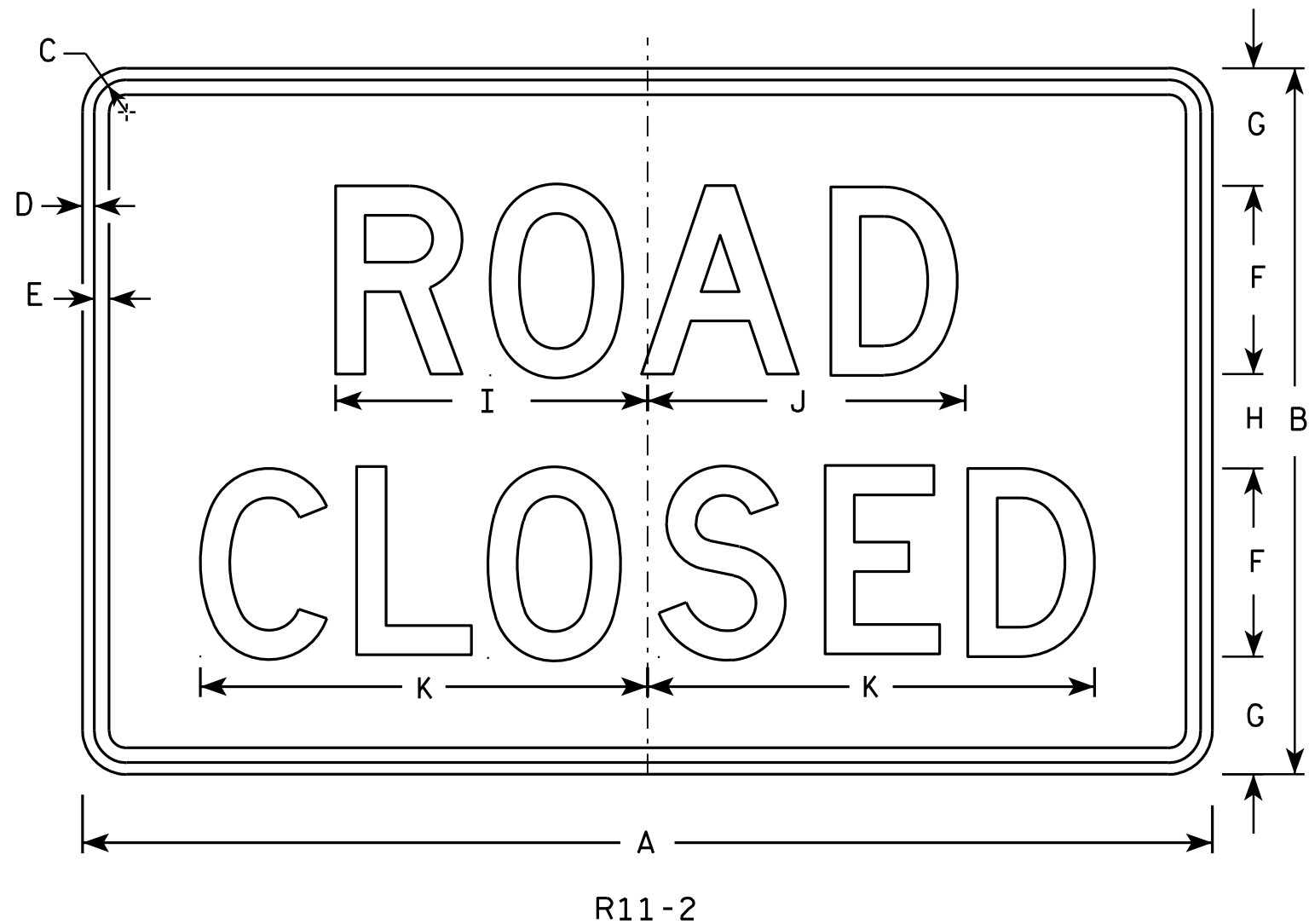
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
R3-20R

WISCONSIN DEPT OF TRANSPORTATION

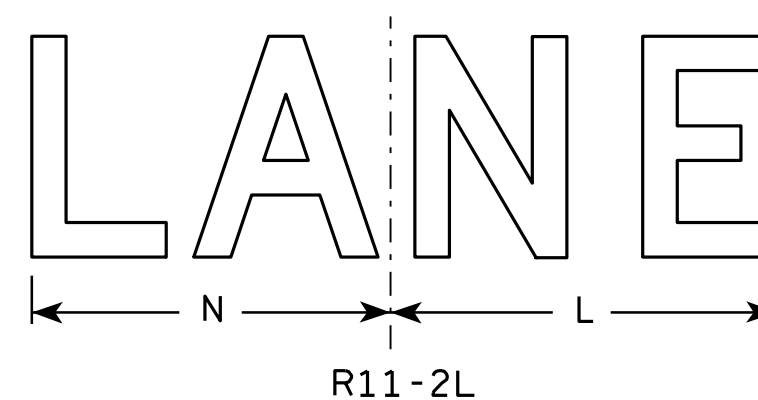
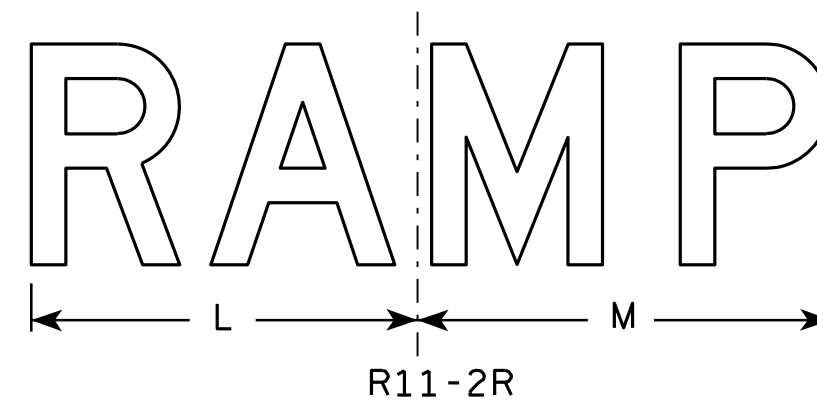
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20R.6



NOTES

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

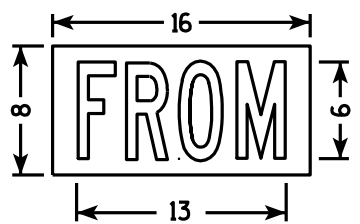
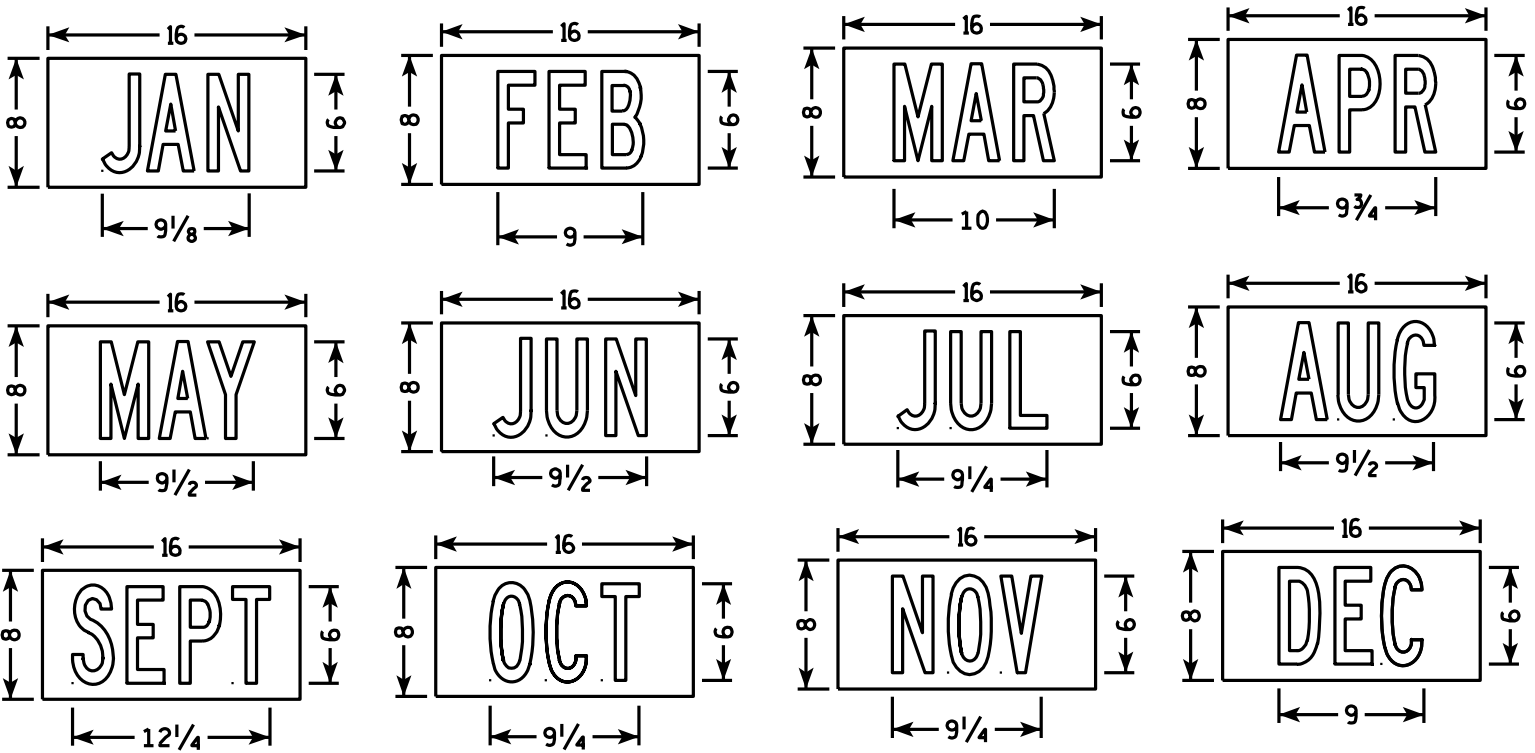
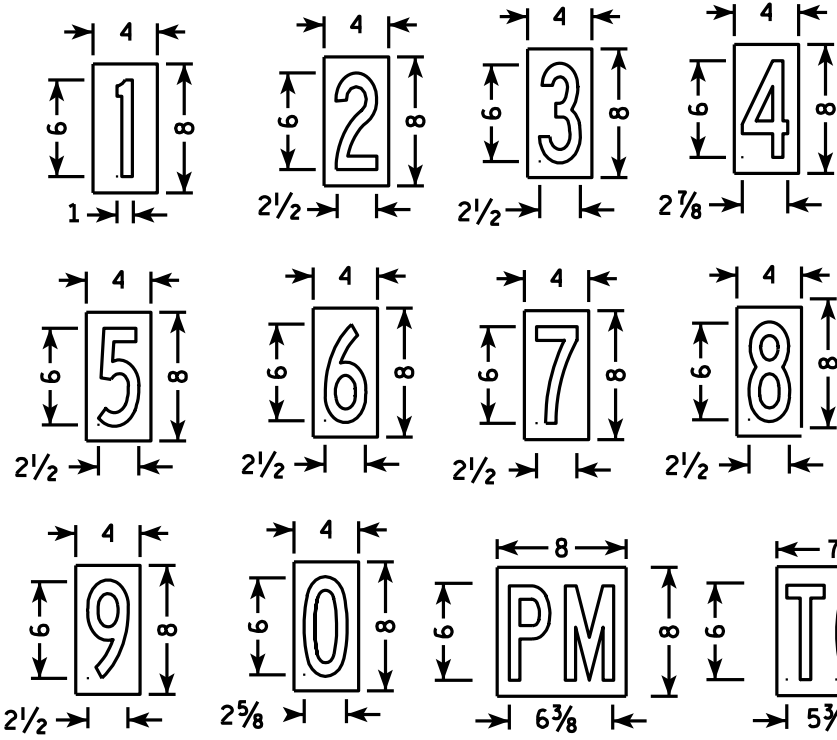
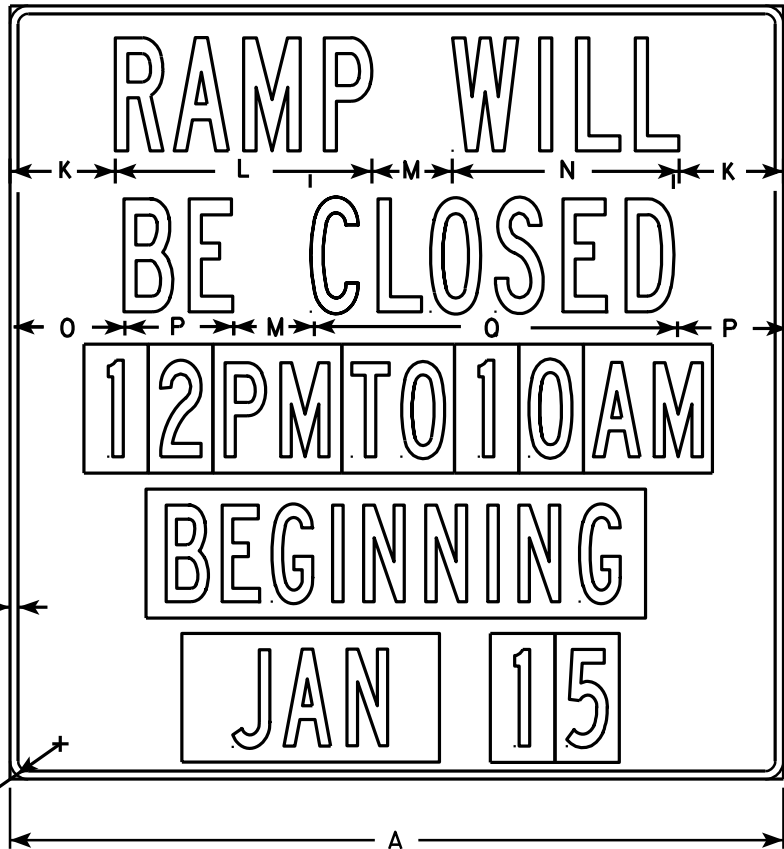


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
2M	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
3	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13				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

STANDARD SIGN R11-2

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - White
Message - Black
- 3. Message Series - B
- 4. Message plaques consist of Type H Reflective sheeting with the appropriate non-reflective black message applied to .040 aluminum and screwed to the base sign.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2									16.0	
2M	48		2 1/4	1/2		2	6	7	3		6 1/2	15 7/8	5	14 1/8	6 7/8	6 3/4	22 1/2									16.0	
3																											
4																											
5																											

STANDARD SIGN
R11-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-51.4

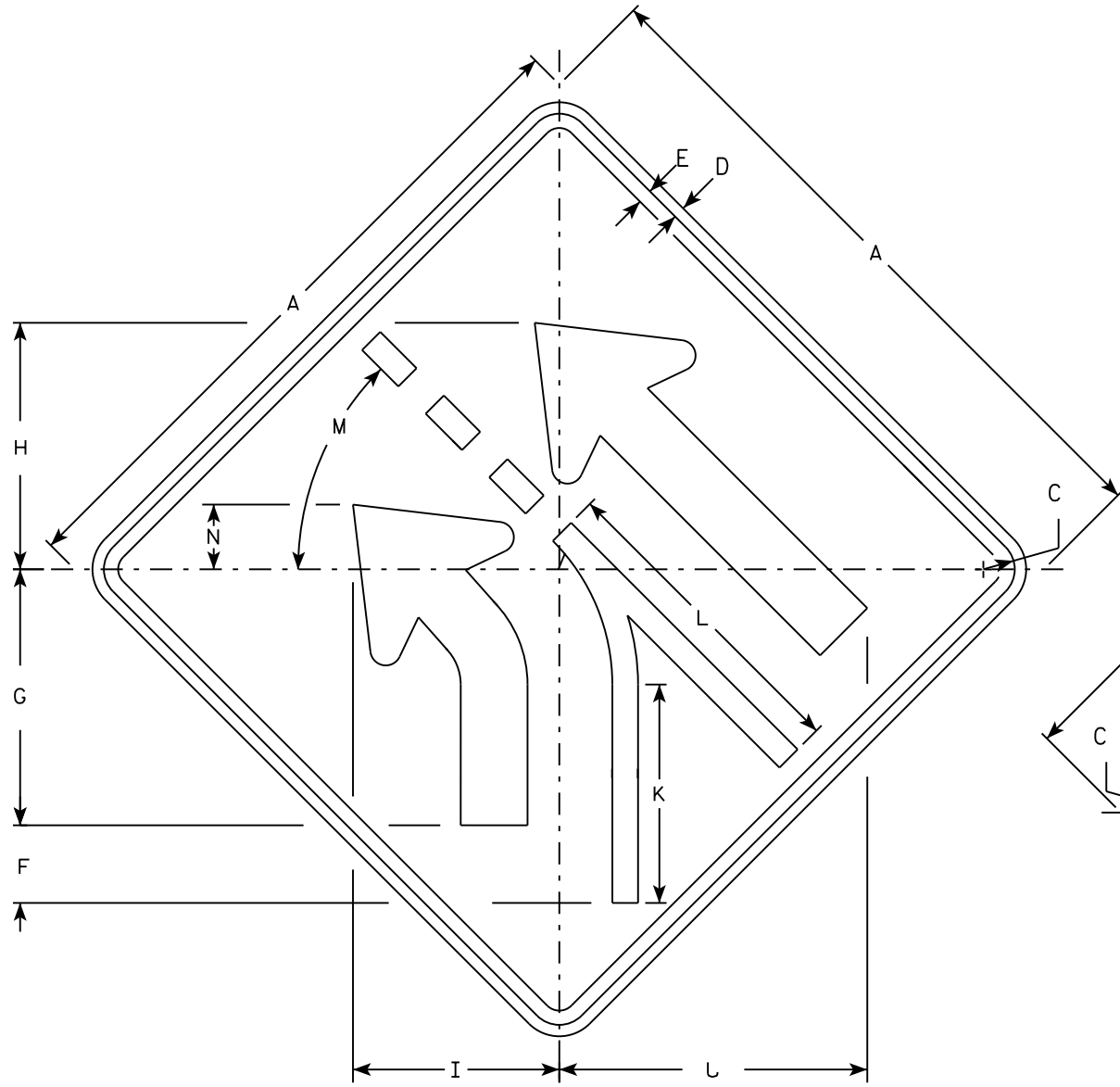
PROJECT NO:

HWY:

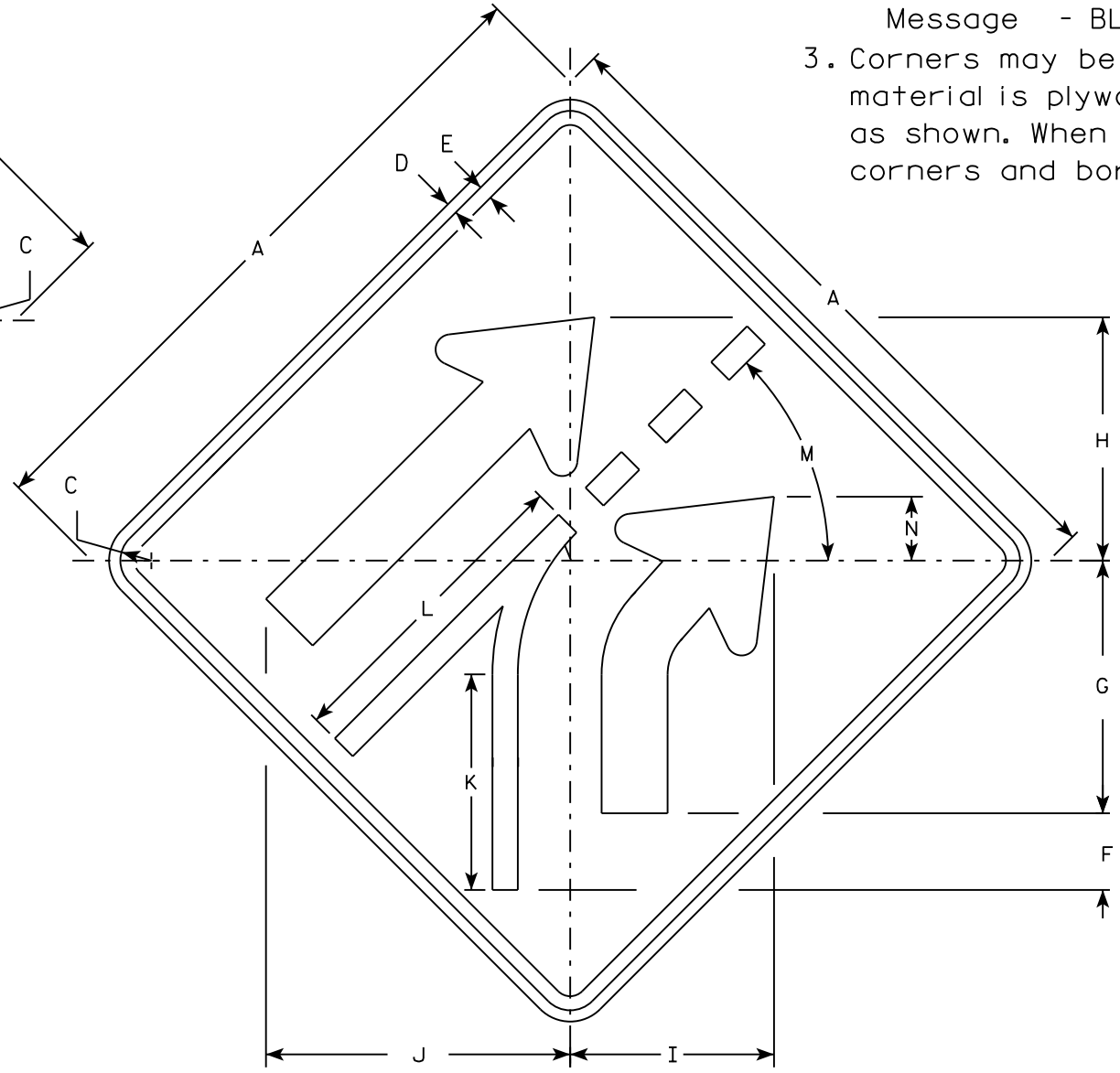
COUNTY:

SHEET NO:

E



W4-6L



W4-6R

* Scale and Rotate W4-3 and make modifications.

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - YELLOW
Message - BLACK
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

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 3/8	1/2	5/8	3 3/8	11 1/4	10 3/4	9	13 1/2	9 1/2	14	45°	2 7/8													6.25
2S	36		1 5/8	5/8	3/4	4	13 1/2	13	10 7/8	16 1/4	11 1/2	16 7/8	45°	3 3/8													9.0
2M	36		1 5/8	5/8	3/4	4	13 1/2	13	10 7/8	16 1/4	11 1/2	16 7/8	45°	3 3/8													9.0
3																											
4	48		2 1/4	3/4	1	5 3/8	18	17 1/4	14 1/2	21 5/8	15 1/4	22 1/2	45°	4 1/2													16.0
5	48		2 1/4	3/4	1	5 3/8	18	17 1/4	14 1/2	21 5/8	15 1/4	22 1/2	45°	4 1/2													16.0

STANDARD SIGN

W4-6

WISCONSIN DEPT OF TRANSPORTATION

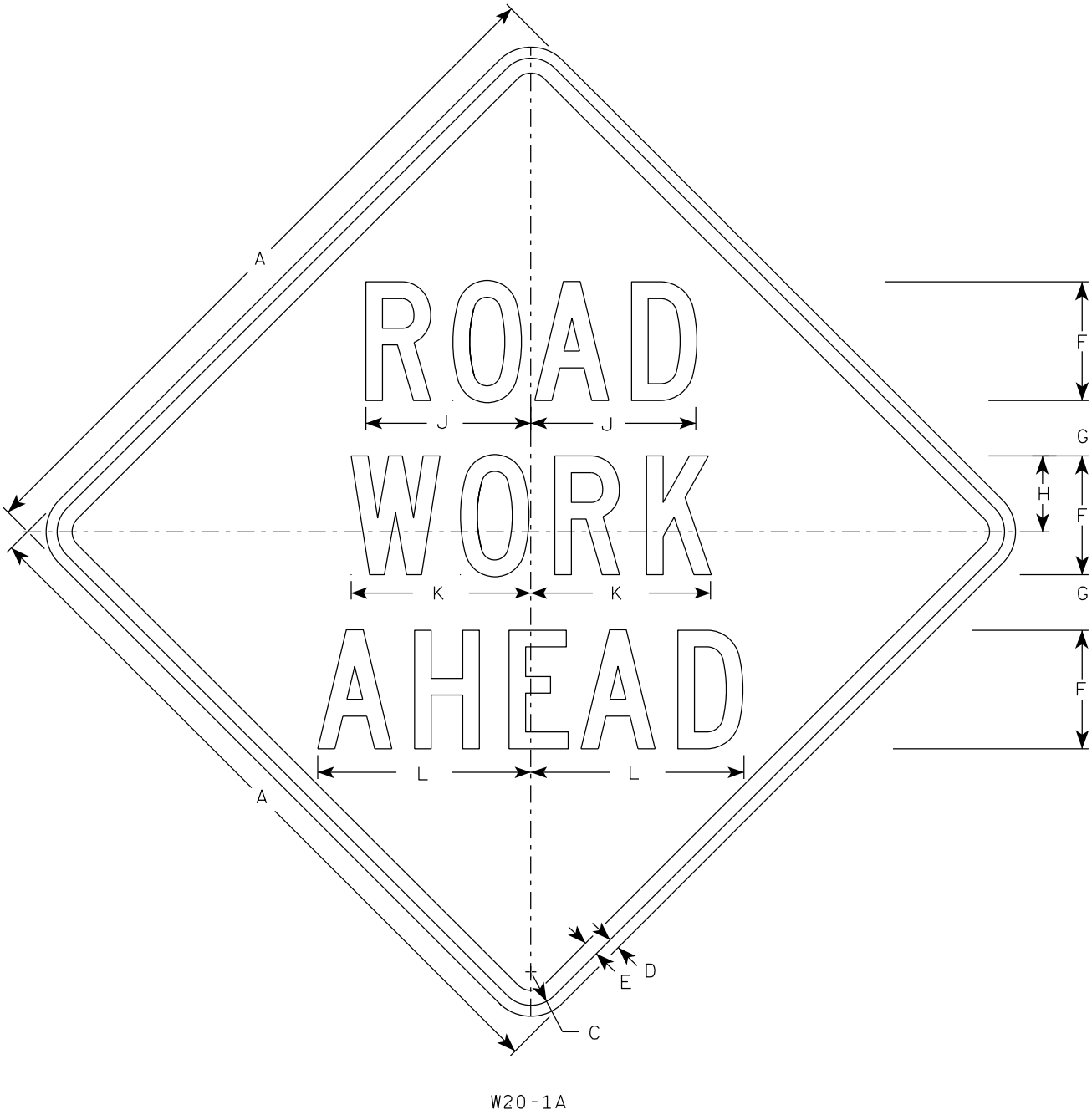
APPROVED *Matthew R. Rauch*

for State Traffic Engineer

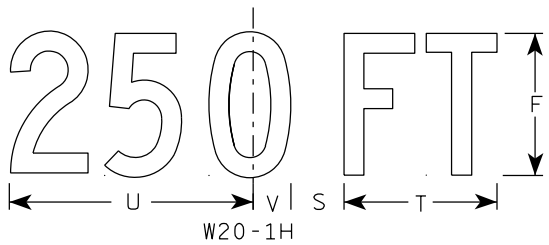
DATE 2/9/16 PLATE NO. W4-6.4

NOTES

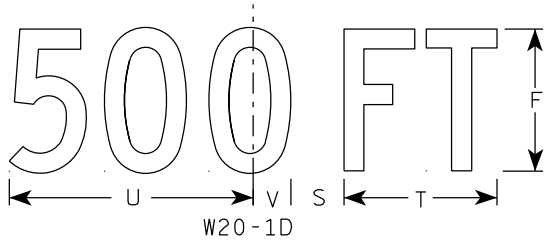
1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



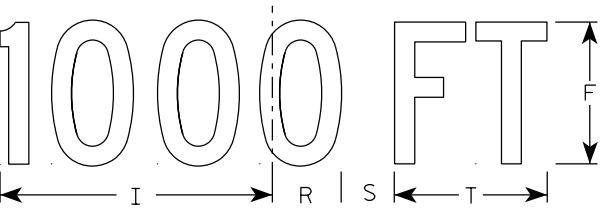
W20-1A



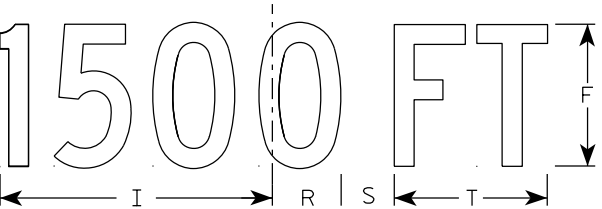
W20-1H



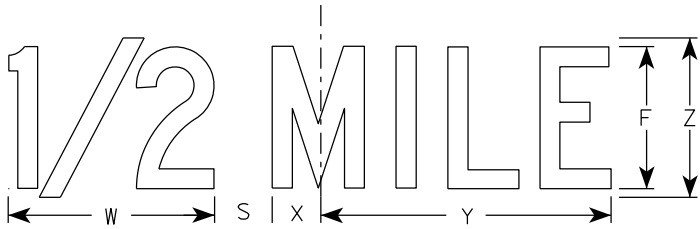
W20-1D



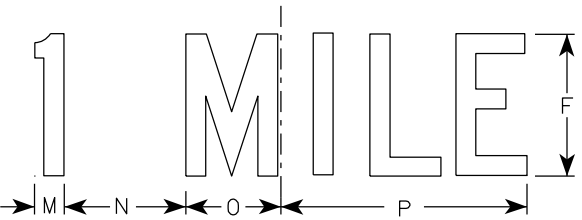
W20-1C



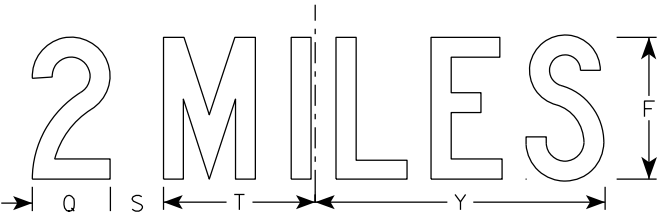
W20-1B



W20-1G



W20-1F



W20-1E

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	A _{req} sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

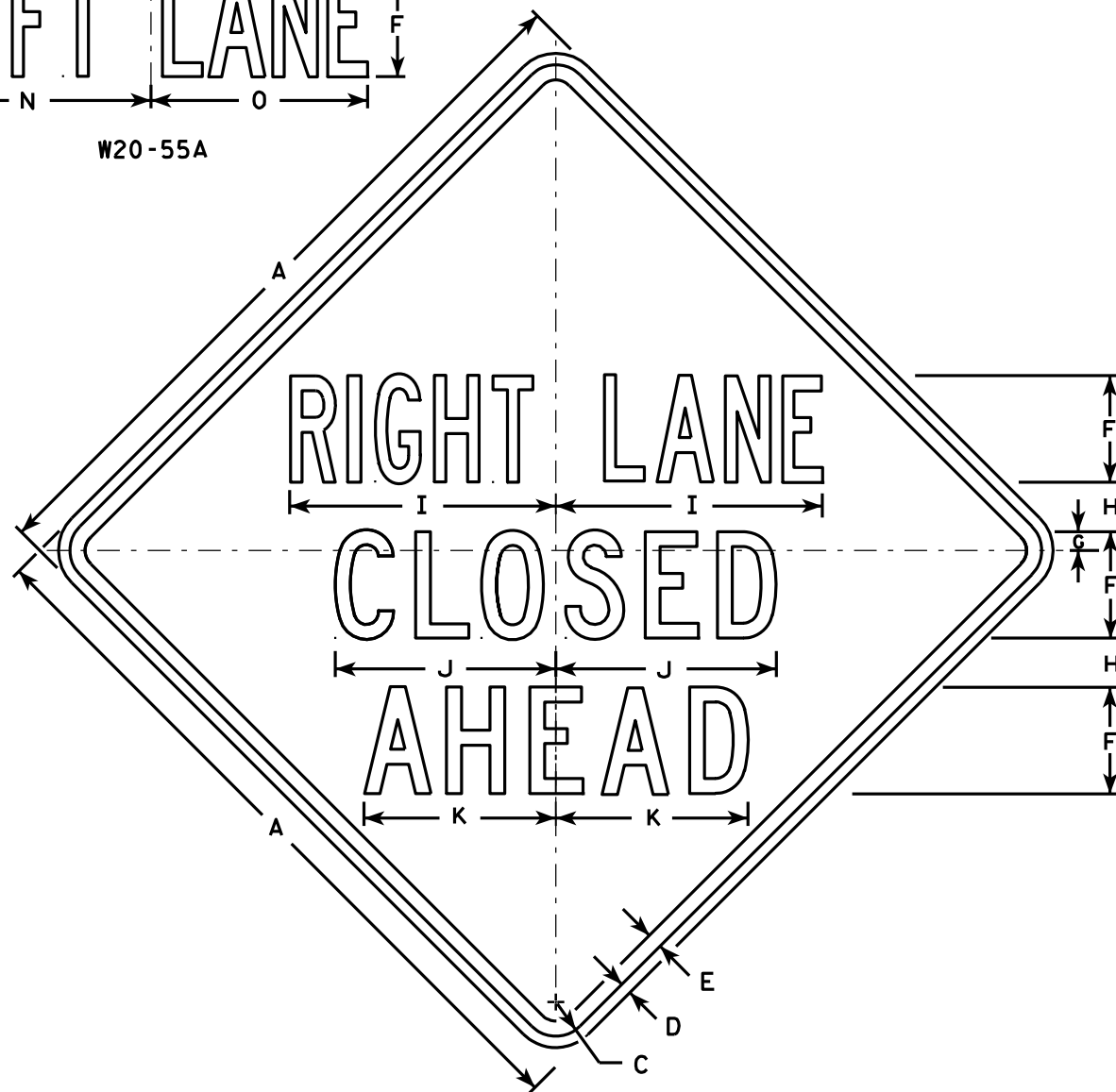
DATE 3/25/2020 PLATE NO. W20-1.11

CENTER LANE

W20-56A

LEFT LANE

W20-55A



W20-5A

500 FT

W20-5D

1000 FT

W20-5C

1500 FT

W20-5B

1/2 MILE

W20-5G

1 MILE

W20-5F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. "----- LANE" is Series B.
All other copy is Series C.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

PROJECT NO:

HWY:

COUNTY:

STANDARD SIGN
W20-5A, B, C, D, F & G

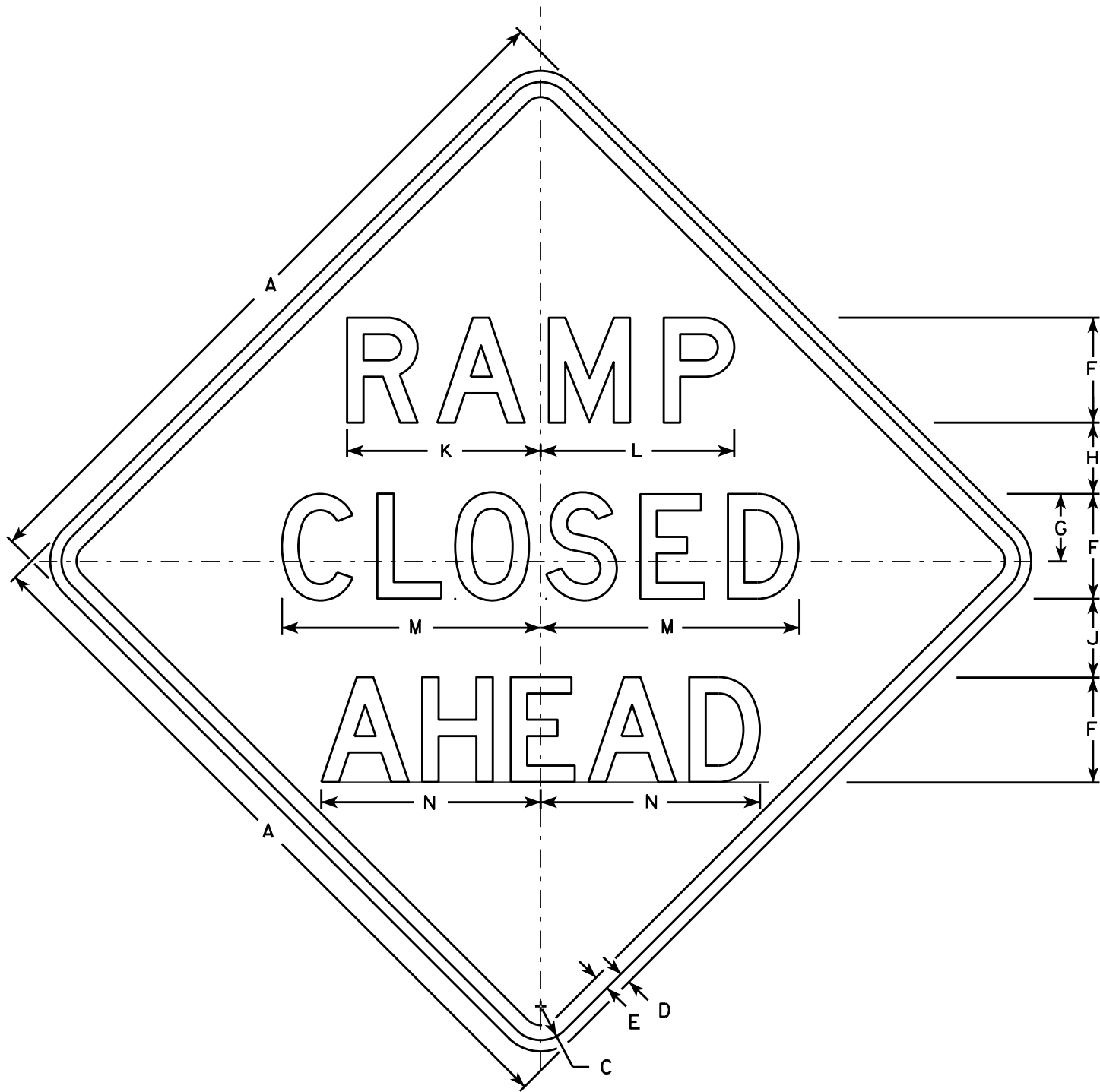
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

SHEET NO:

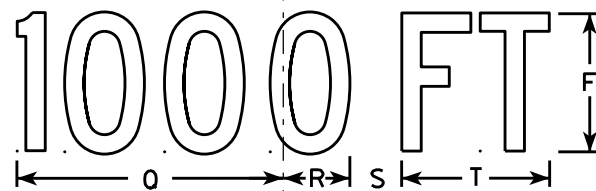
E



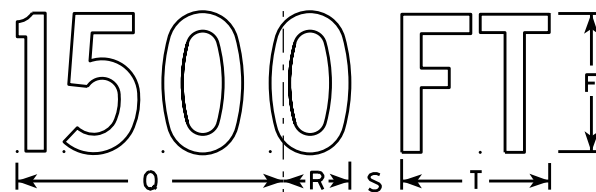
W20-53A



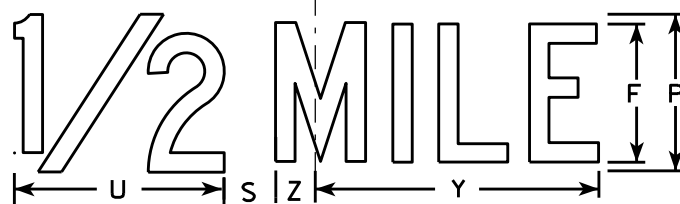
W20-53D



W20-53C



W20-53B



W20-53G



W20-53F

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	9 1/4	9 1/4	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	12 7/8	12 7/8	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
W20-53A,B,C,D,F,G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/27/15 PLATE NO. W20-53.1

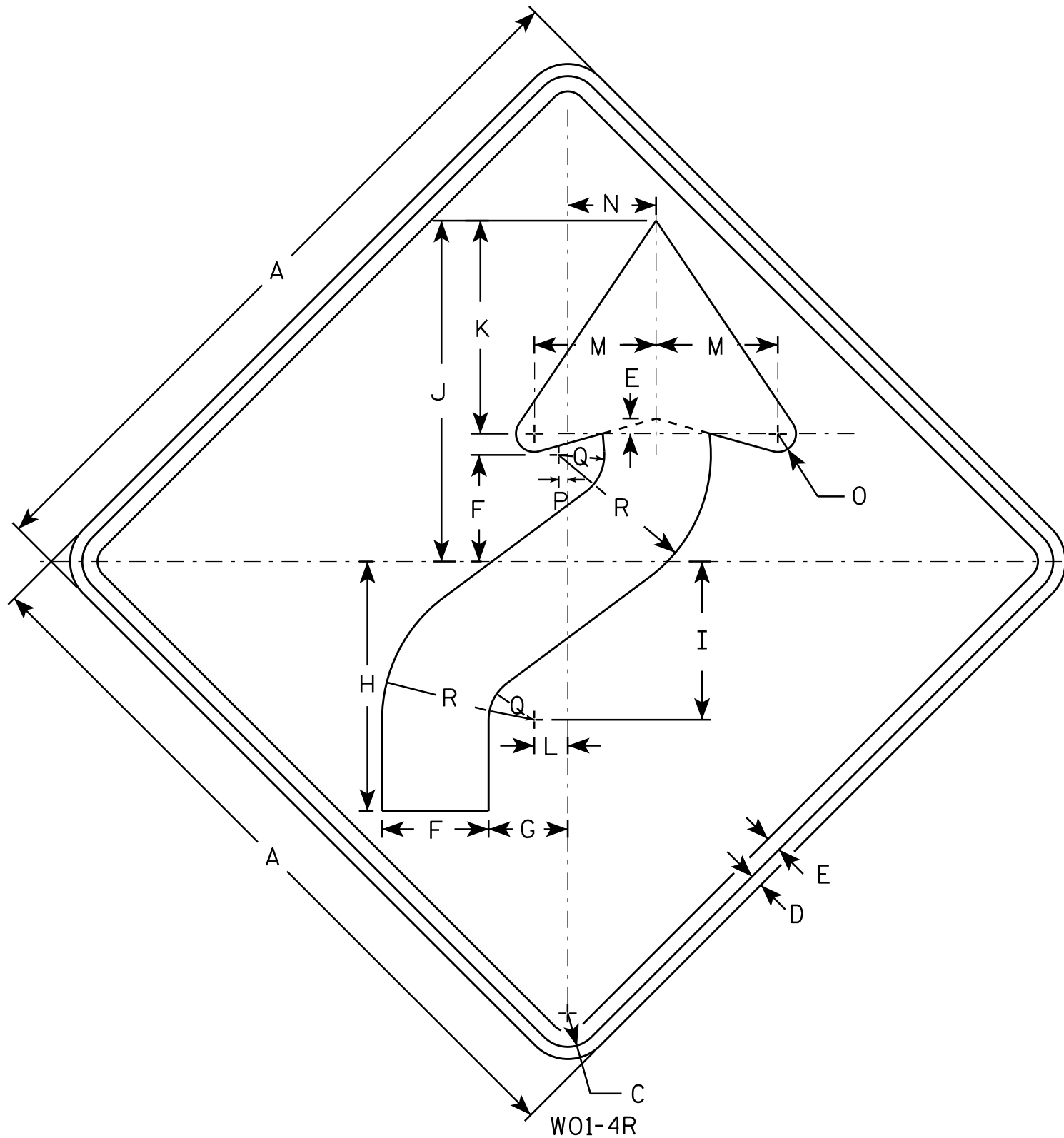
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - 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. W01-4L is the same as W01-4R 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	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-4.1

PROJECT NO:

HWY:

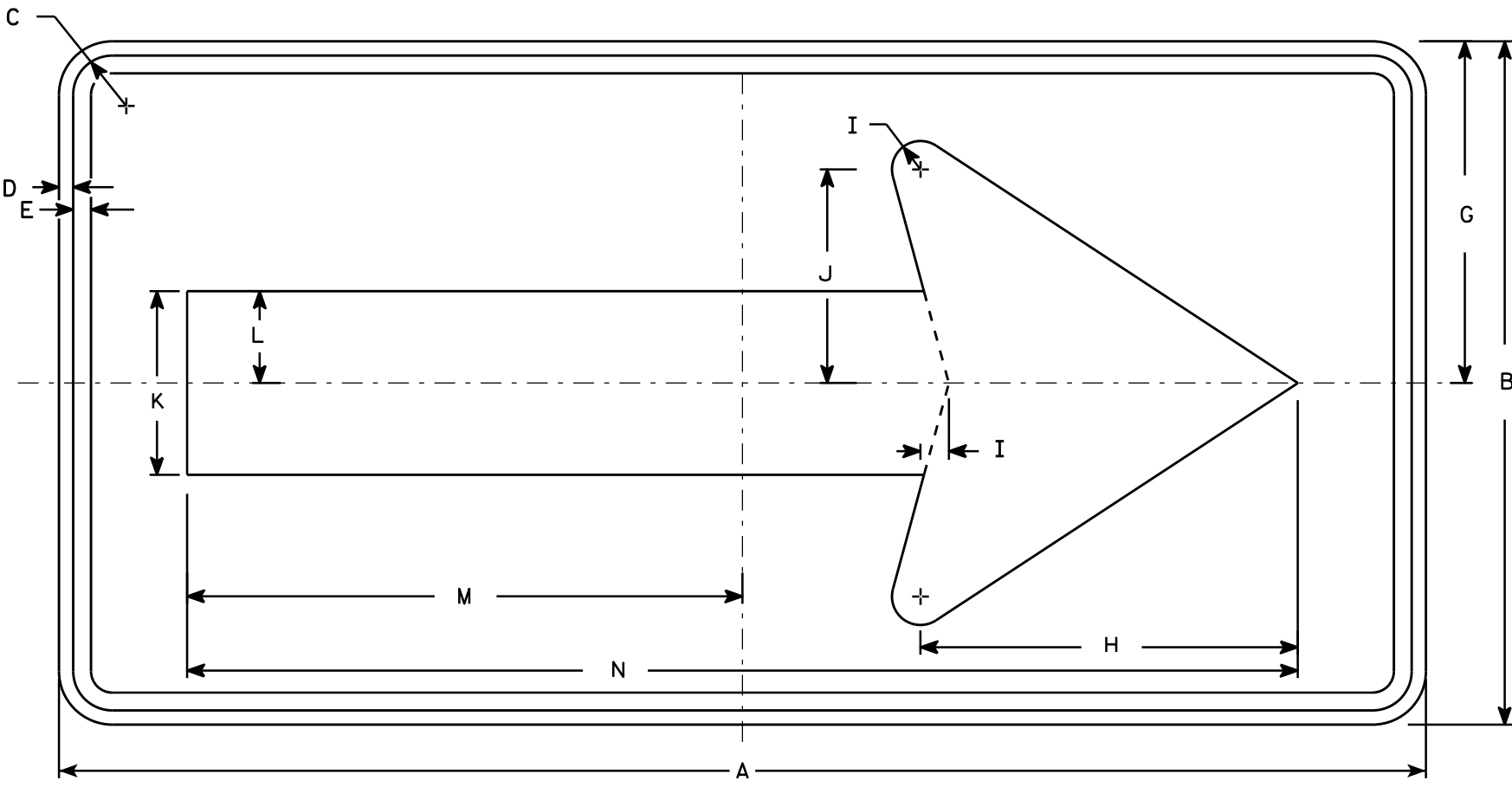
COUNTY:

SHEET NO:

E

NOTES

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



W01-6

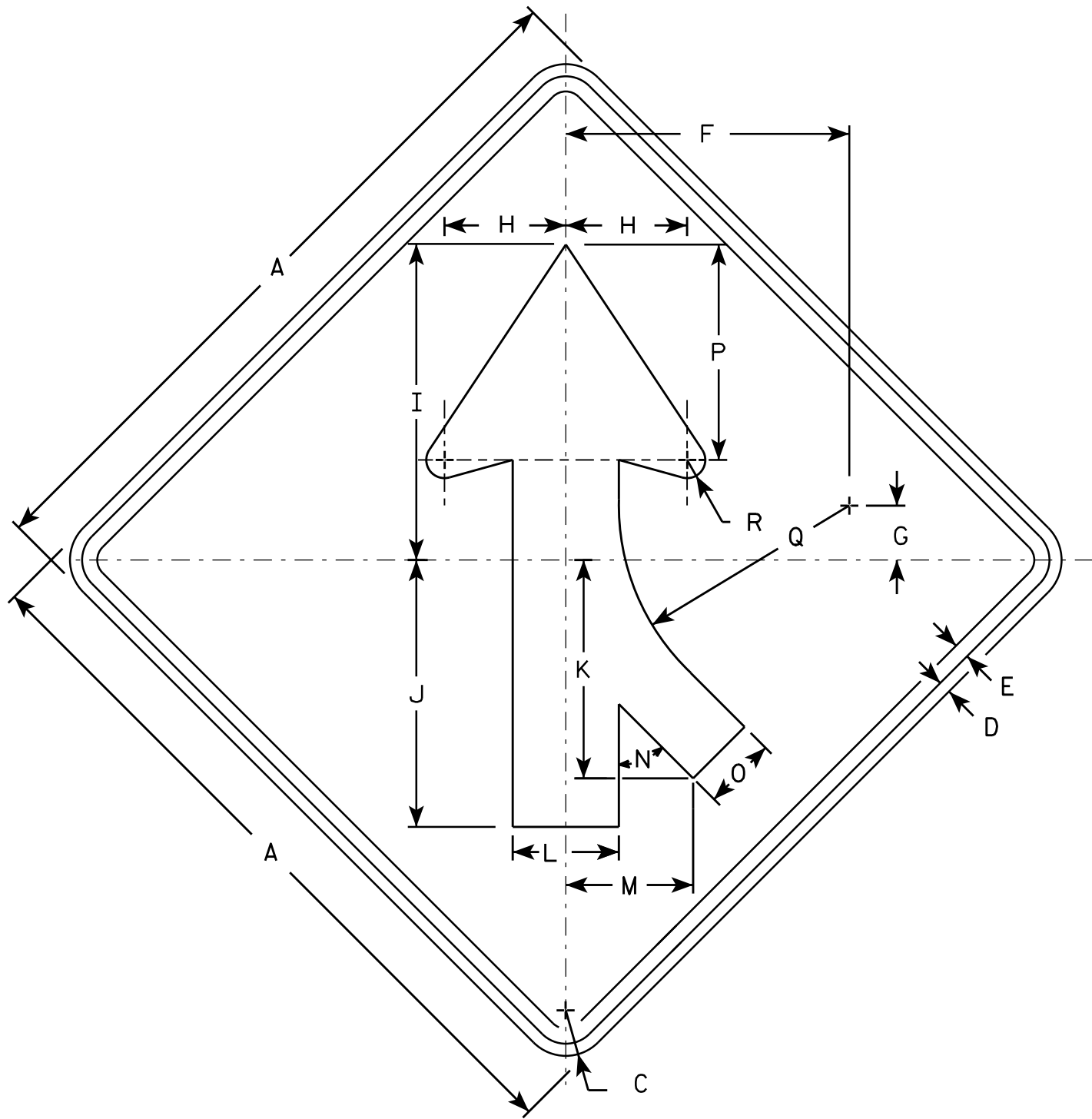
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4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

STANDARD SIGN
W01-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1



W04-1R

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. W4-1L is the same as W4-1R 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	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

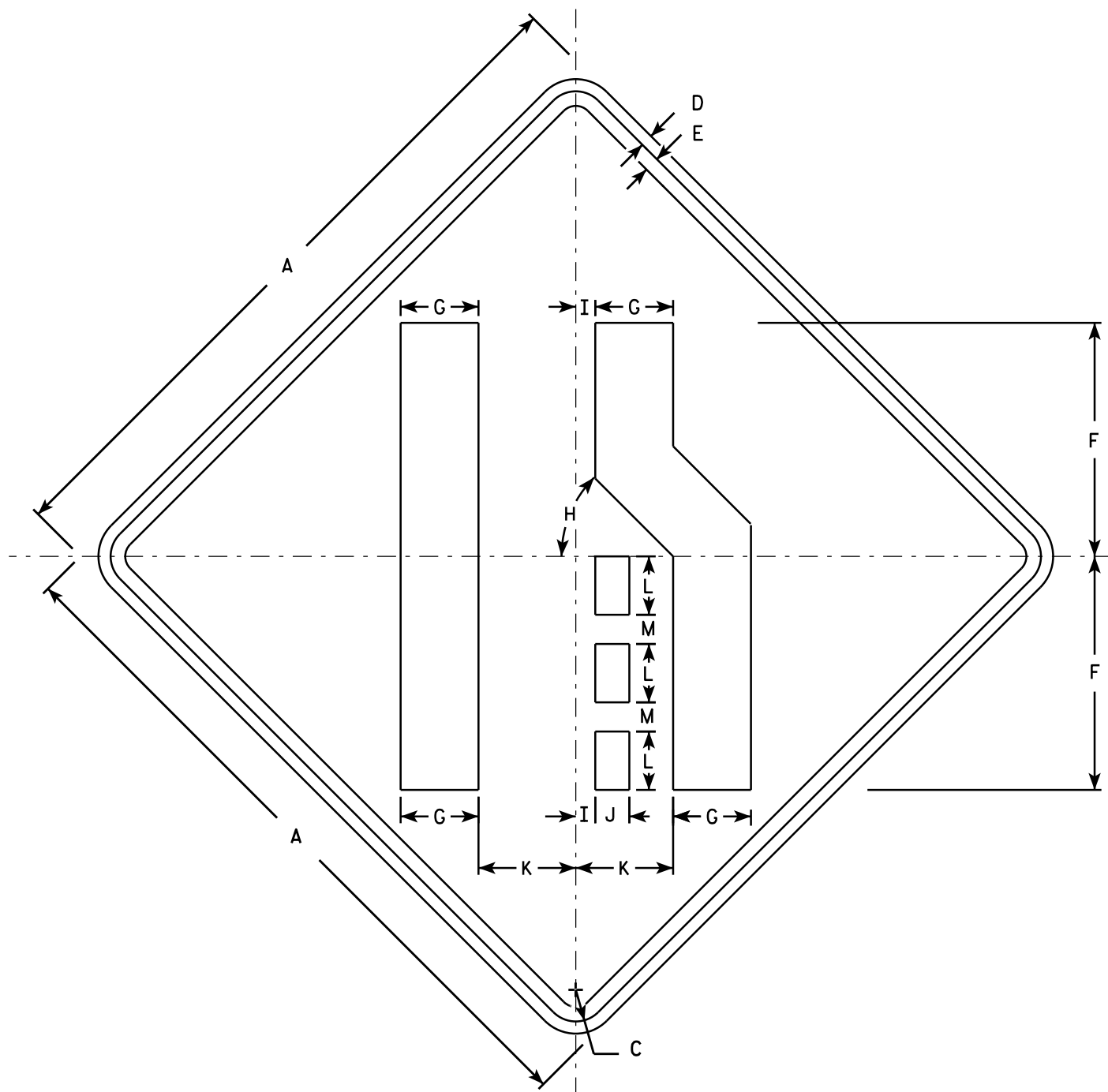
STANDARD SIGN

W04-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-1.1



W04-2R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-2L is the same as W04-2R except the symbol 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	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN

W04-2

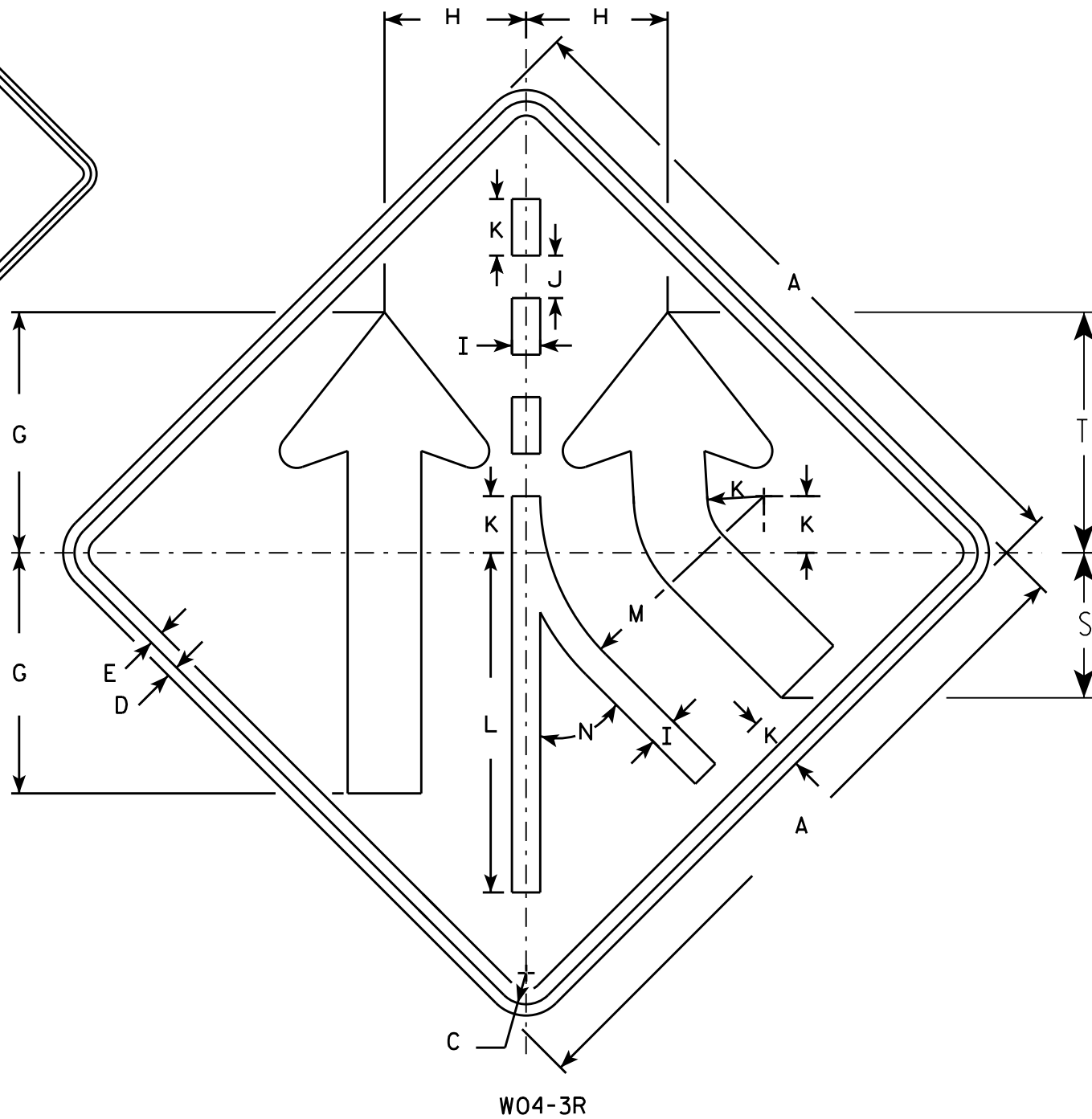
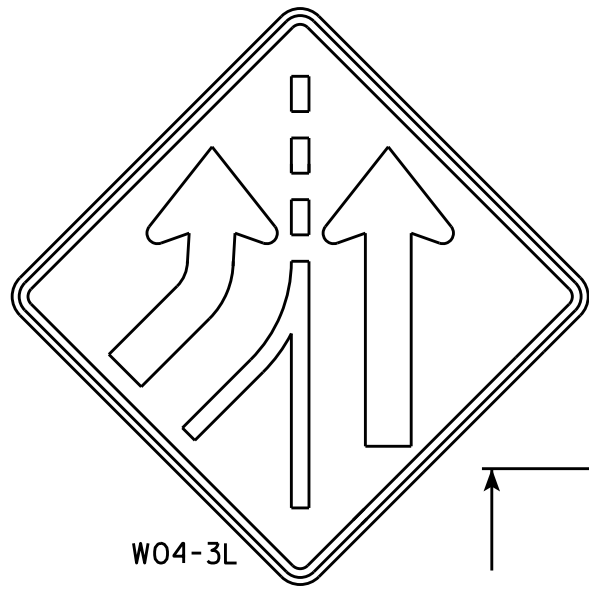
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
For State Traffic Engineer

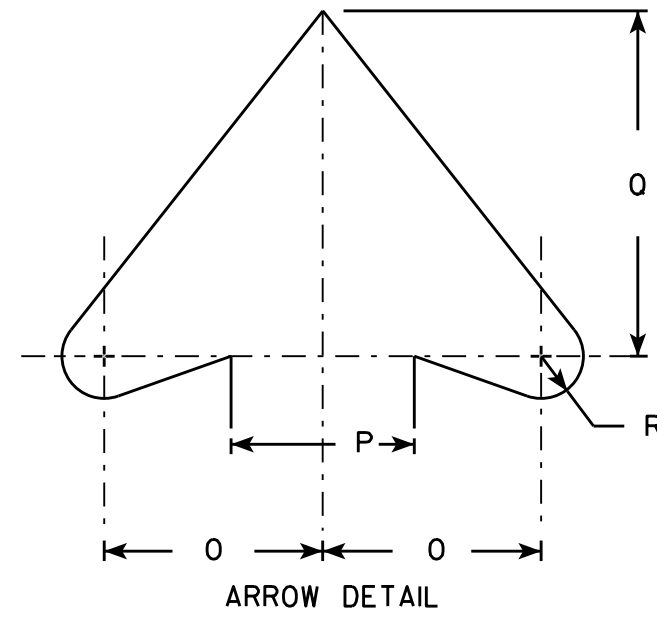
DATE 11/20/13

PLATE NO. W04-2.1



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W04-3 L is the same as W04-3 R 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	36		1 5/8	5/8	3/4		12 3/4	7 1/2	1 1/2	2 1/4	3	18	11 7/8	45°	4 5/8	4	7 3/8	7/8	7 3/4	12 3/4							9.0
2S	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
2M	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
3	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
4	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0
5	48		2 1/4	3/4	1		17	10	2	3	4	24	15 3/4	45°	6 1/4	5 1/2	9 7/8	1 1/4	10 1/4	17							16.0

PROJECT NO:

SHEET NO:

E

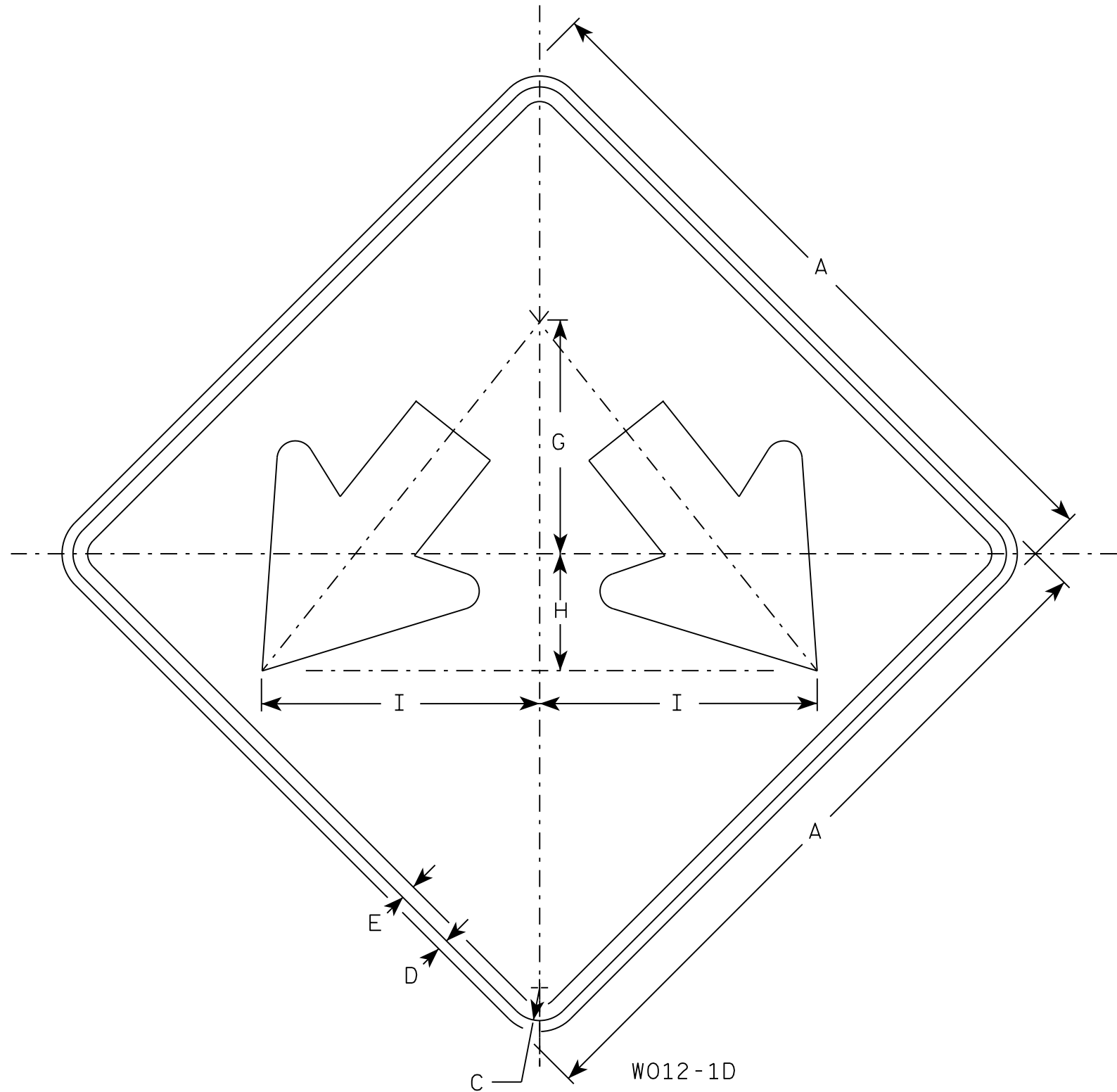
STANDARD SIGN

W0433

WISCONSIN DEPT OF TRANSPORTATION

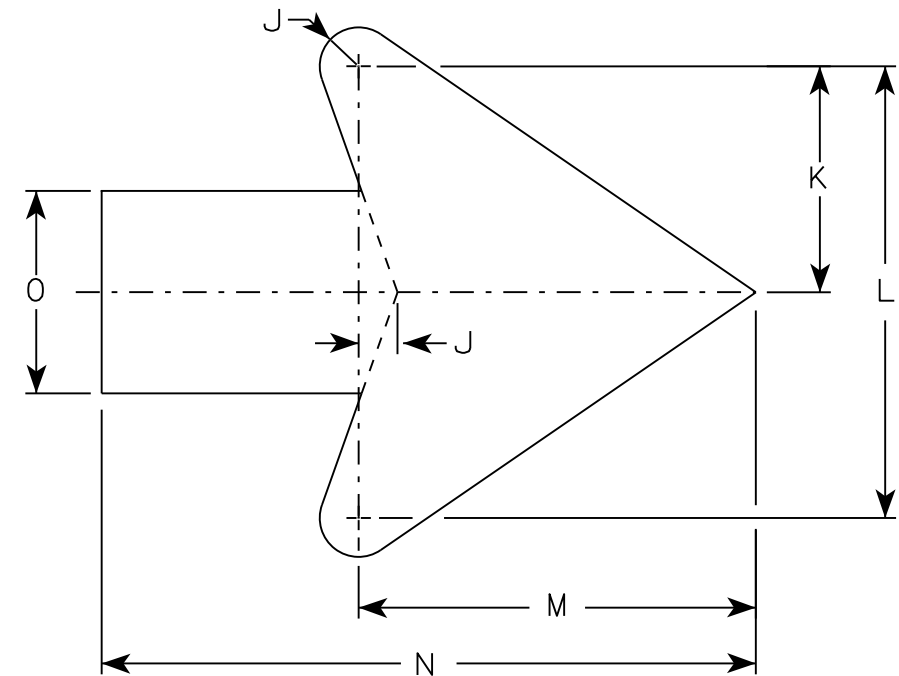
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-3.1



NOTES

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



Arrow Detail

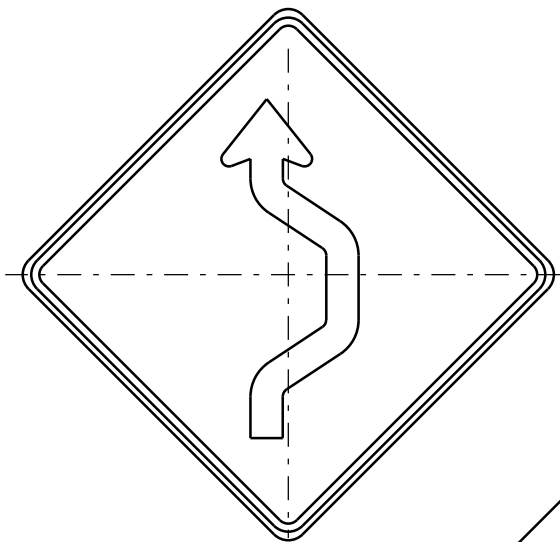
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0

STANDARD SIGN
W012-1D

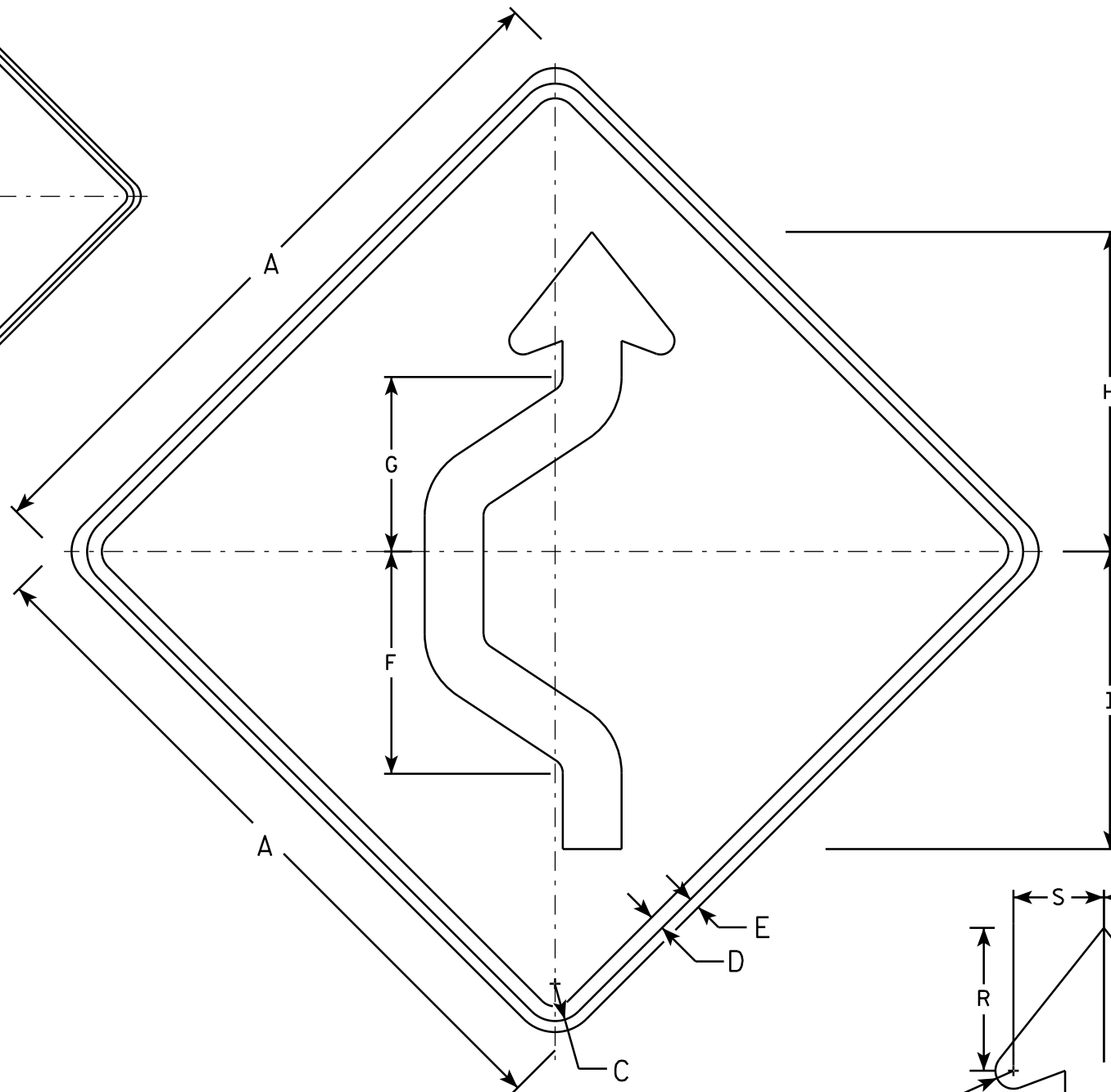
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

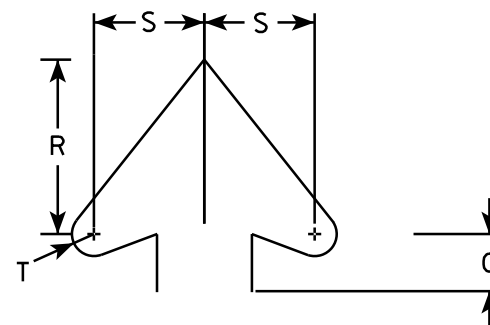
DATE 7/28/16 PLATE NO. W012-1D.2



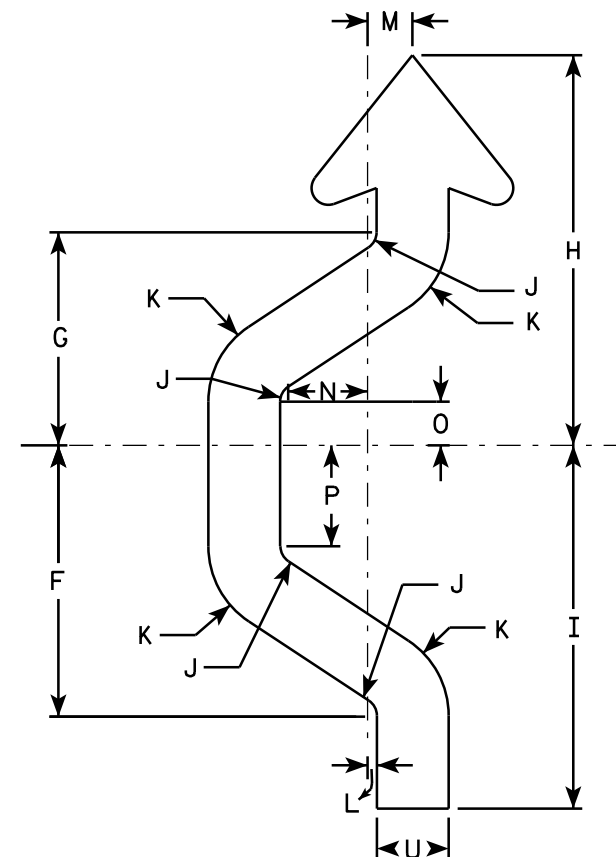
W024-1R



W024-1L



Arrowhead Detail



Arrow Detail

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W024-1R is the same as W024-1L except 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	36		1 3/8	5/8	1/2	11 3/8	8 7/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 7/8	4 1/4		5 1/2	3 1/2	5/8	3						9
2S	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
2M	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
3	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
4	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
5	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16

STANDARD SIGN
W024-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/25/2013 PLATE NO. W024-1.1

DESIGN DATA

LIVE LOAD:

INVENTORY RATING FACTOR: RF = 1.20
OPERATING RATING FACTOR: RF = 1.55
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

MATERIAL PROPERTIES:

CONCRETE MASONRY: _____ f'c = 4,000 P.S.I.
DECK REPAIR _____

TRAFFIC VOLUME

IH 94 WB (RAMP RYB) OVER OAK CREEK
ADT = 4100 (2035)

GENERAL NOTES



DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".
AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.
PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER.
DECK PREPARATION REPAIRS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

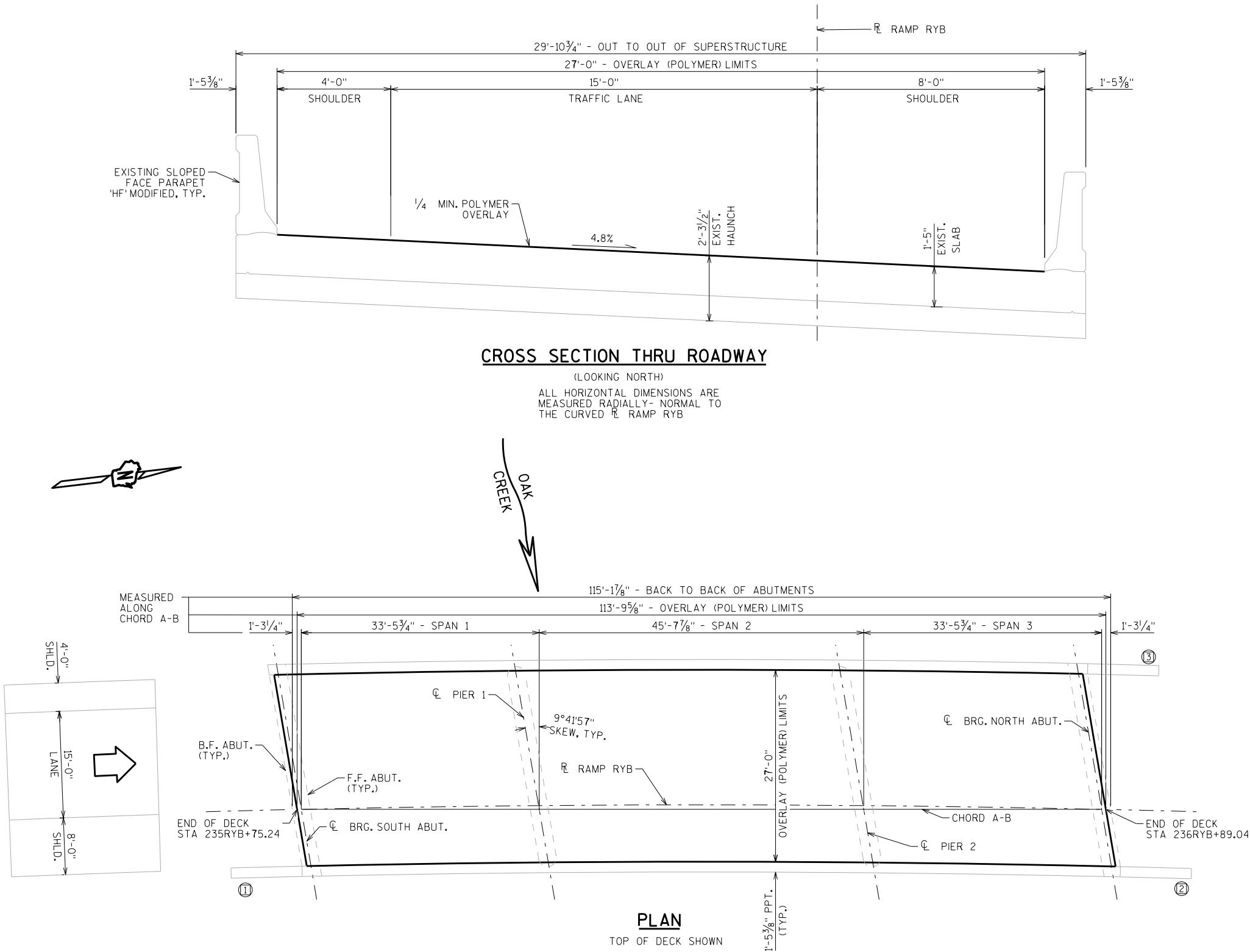
CURVE DATA

R RAMP RYB
P.I. = 235RYB+37.09
Δ = 14°58'54" RT
D = 2°16'41"
T = 330.69
L = 657.62
R = 2515
P.C. = 232RYB+6.39
P.T. = 238RYB+64.01

STRUCTURE DESIGN CONTACTS:

BRETT FOLLETT (608) 266-0214
AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY
 BUREAU OF STRUCTURES			
ACCEPTED 		DMB	3/12/21
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
STRUCTURE B-40-805			
IH 94 WB (RAMP RYB) OVER OAK CREEK			
COUNTY	MILWAUKEE	CITY	OAK CREEK
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	BAF	DESIGNED CK'D.	EMK
DRAWN BY	BAF	PLANS CK'D.	EMK
POLYMER OVERLAY			SHEET 1 OF 1



TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.0301	PREPARATION DECKS TYPE 1	SY	4
509.0302	PREPARATION DECKS TYPE 2	SY	2
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	40
509.5100.S	POLYMER OVERLAY	SY	342
☆ SPV.0035	RAPID SET DECK REPAIR	CY	1

ALL ITEMS ARE CATEGORY 2000

LIST OF DRAWINGS

1. POLYMER OVERLAY

⊙ INDICATES WING NUMBER
☆ BID ITEM INCLUDES CONCRETE FOR PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2

DESIGN DATA

LIVE LOAD:

INVENTORY RATING FACTOR: RF = 1.20
OPERATING RATING FACTOR: RF = 1.55
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

MATERIAL PROPERTIES:

CONCRETE MASONRY:
DECK REPAIR _____ f'c = 4,000 P.S.I.

TRAFFIC VOLUME

IH 94 EB (RAMP RYC) OVER OAK CREEK
ADT = 4900 (2035)

GENERAL NOTES

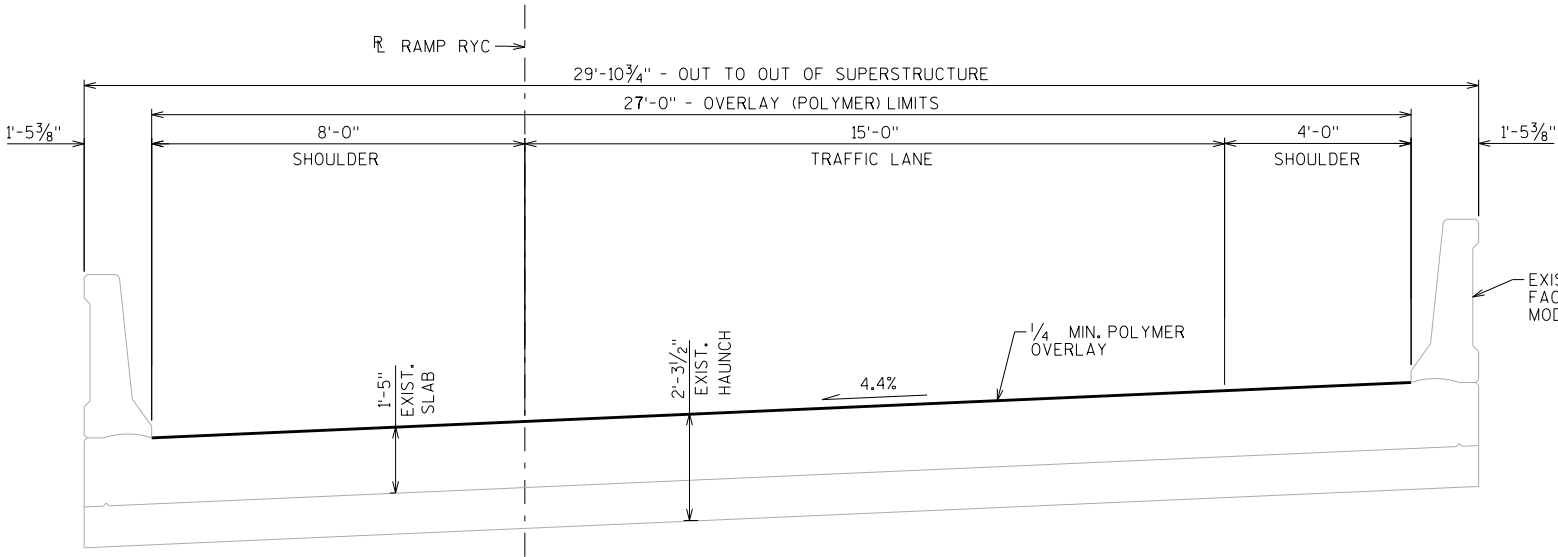
DRAWINGS SHALL NOT BE SCALED.
DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.
DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM "POLYMER OVERLAY".
AREAS OF "PREPARATION DECKS TYPE 1" SHALL BE DEFINED BY A SAW CUT.
PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2 ARE BASED ON THE PLANS AND AS DETERMINED BY THE ENGINEER.
DECK PREPARATION REPAIRS SHALL BE FILLED WITH "RAPID SET DECK REPAIR".

CURVE DATA

RAMP RYC
P.I. = 235RYC+81.54
Δ = 14°24'17.26" LT
D = 2°53'11.17"
T = 250.85
L = 499.05
R = 1985
P.C. = 233RYC+30.69
P.T. = 238RYC+29.74

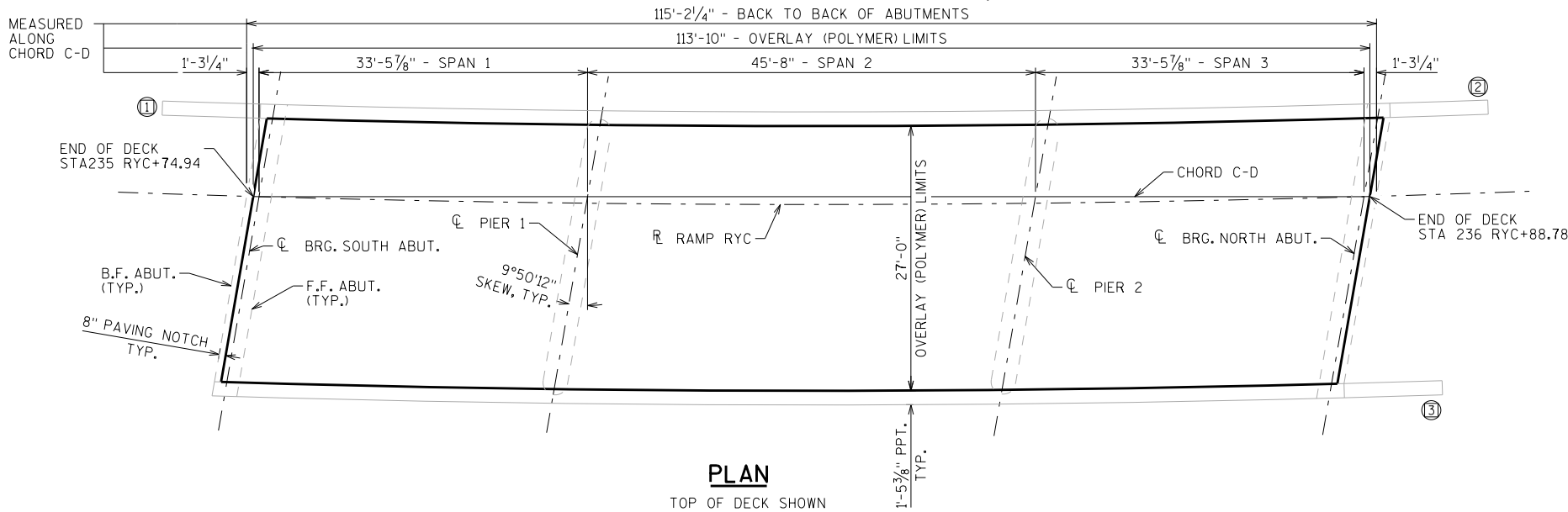
STRUCTURE DESIGN CONTACTS:
BRETT FOLLETT (608) 266-0214
AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY
<div><div><div><div><div><div></div><div>WISCONSIN</div></div><div><div><div></div></div></div><div>DEPARTMENT OF TRANSPORTATION</div></div><div><div><div><div><div></div><div>BUREAU OF</div></div><div>STRUCTURES</div></div><div>ACCEPTED <i>[Signature]</i> DMB 3/12/21 CHIEF STRUCTURES DESIGN ENGINEER DATE</div></div></div><div>STRUCTURE B-40-808</div><div>IH 94 EB (RAMP RYC) OVER OAK CREEK</div><div>COUNTY MILWAUKEE CITY OAK CREEK</div><div>DESIGN SPEC. REHABILITATION N/A</div><div>DESIGNED BY BAF DESIGNED CK'D. EMK DRAWN BY BAF PLANS CK'D. EMK</div><div>POLYMER OVERLAY</div><div>SHEET 1 OF 1</div></div></div></div>			

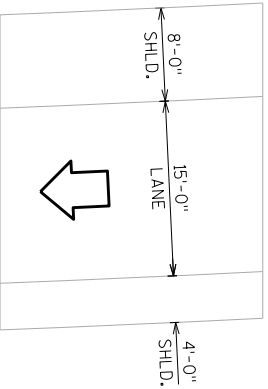


CROSS SECTION THRU ROADWAY

(LOOKING NORTH)
ALL HORIZONTAL DIMENSIONS ARE MEASURED RADially- NORMAL TO THE CURVED RAMP RYC



PLAN
TOP OF DECK SHOWN



TOTAL ESTIMATED QUANTITIES

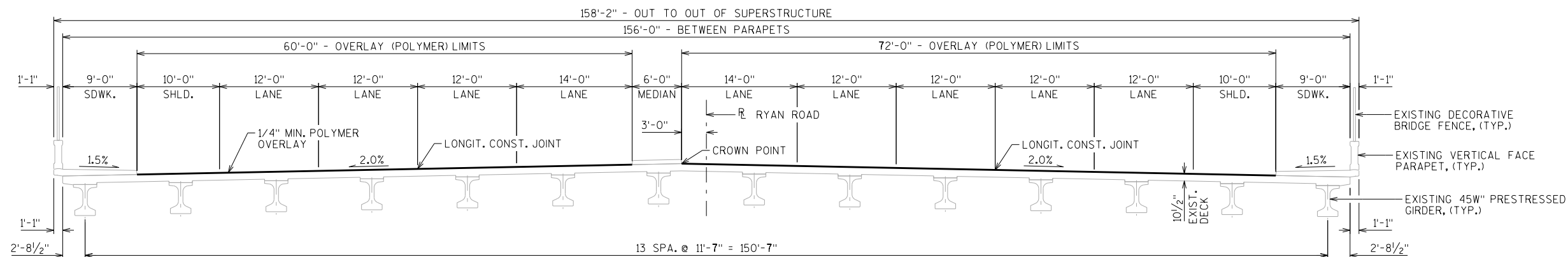
BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.0301	PREPARATION DECKS TYPE 1	SY	4
509.0302	PREPARATION DECKS TYPE 2	SY	2
509.0310.S	SAWING PAVEMENT DECK PREPARATION AREAS	LF	40
509.5100.S	POLYMER OVERLAY	SY	342
☆ SPV.0035	RAPID SET DECK REPAIR	CY	1

ALL ITEMS ARE CATEGORY 2010

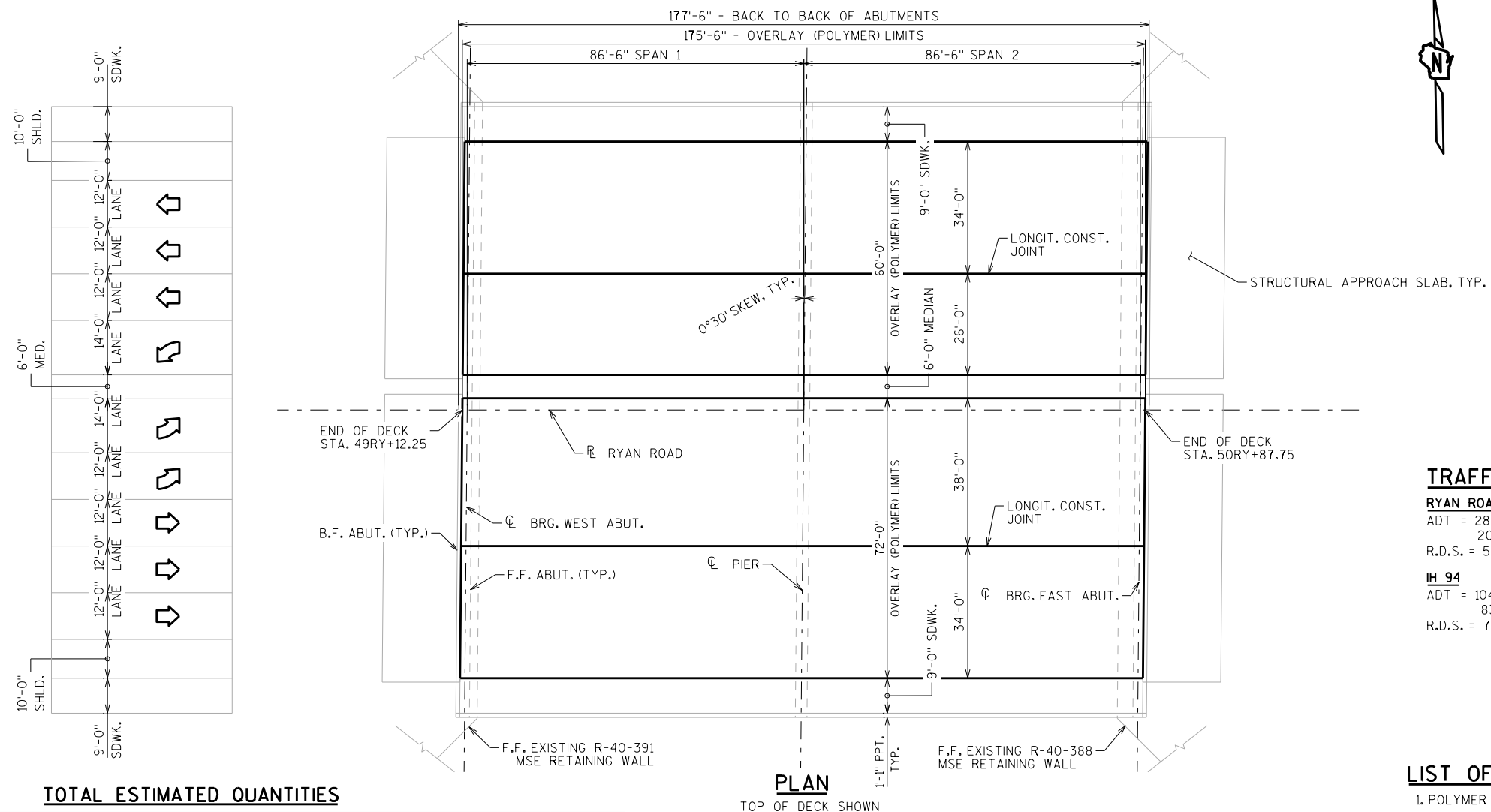
⊙ INDICATES WING NUMBER
☆ BID ITEM INCLUDES CONCRETE FOR PREPARATION DECKS TYPE 1 AND PREPARATION DECKS TYPE 2

LIST OF DRAWINGS

1. POLYMER OVERLAY



CROSS SECTION THRU ROADWAY
(LOOKING EAST)



LIVE LOAD:
INVENTORY RATING FACTOR: RF = 1.08
OPERATING RATING FACTOR: RF = 1.65
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 250(KIPS)

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DECK SURFACE PREPARATION IS INCLUDED IN THE BID ITEM
"POLYMER OVERLAY"

RYAN ROAD
ADT = 28700 (EB) (2015)
20100 (WB) (2015)
R.D.S. = 50 M.P.H.



IH 94
ADT = 104000 (NB) (2018)
83800 (SB) (2018)
R.D.S. = 70 M.P.H.

1. POLYMER OVERLAY

BID ITEM NUMBER	BID ITEMS	UNIT	TOTALS
509.5100.S	POLYMER OVERLAY	SY	2575

ALL ITEMS ARE CATEGORY 2020

STRUCTURE DESIGN CONTACTS:
BRETT FOLLETT (608) 266-0214
AARON BONK (608) 261-0261

NO.	DATE	REVISION	BY
		BUREAU OF STRUCTURES	
ACCEPTED			3/12/21
	CHIEF	STRUCTURES DESIGN ENGINEER	DATE
STRUCTURE B-40-809			
RYAN ROAD OVER IH 94			
COUNTY	MILWAUKEE	CITY	OAK CREEK
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	BAF	DESIGNED CK'D.	EMK
		DRAWN BY	BAF
POLYMER OVERLAY		PLANS CK'D.	EMK
		SHEET 1 OF 1	



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

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