

WKE

Nov 8, 2022

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
2695-05-71	WISC 2023027	1

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

T CEDARBURG, CEDAR SAUK ROAD

CTH Y - NORTHWOOD DRIVE

LOCAL STREET
OZAUKEE COUNTY

STATE PROJECT NUMBER
2695-05-71

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 = 34



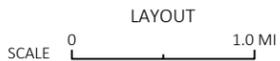
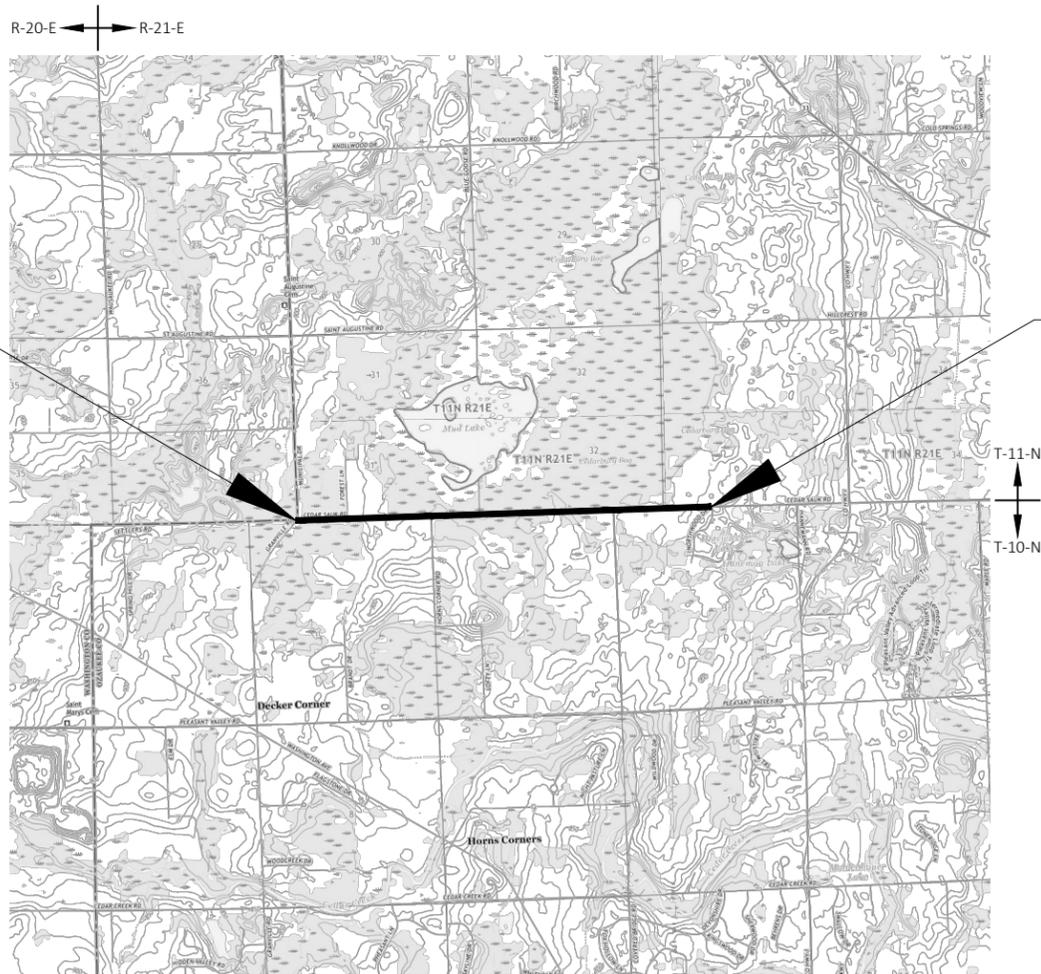
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DESIGN DESIGNATION 2695-05-01

A.A.D.T.	2023	=	750
A.A.D.T.	2043	=	820
D.H.V.		=	82
D.D.		=	0.5
T.		=	5.0%
DESIGN SPEED		=	45 / 55 MPH
ESALS		=	58,400

BEGIN PROJECT
STA 15+17.60
Y = 504,465.36
X = 2,489,642.47

END PROJECT
STA 134+55.00



TOTAL NET LENGTH OF CENTERLINE = 2.261 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN STATE PLANE COORDINATE SYSTEM (SPC), SOUTH ZONE, NAD 83, IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GROUND COORDINATES, GROUND BEARINGS, AND GROUND DISTANCES.

COORDINATES MAY BE CONVERTED FROM GROUND TO GRID BASED UPON THE GROUND TO GRID SCALE FACTOR OF .99989382.

ELEVATIONS ARE REFERENCED TO NGVD 29.

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

ACCEPTED FOR
TOWN OF CEDARBURG
Date: *[Signature]*
(Signature)
DIRECTOR OF PUBLIC WORKS

ORIGINAL PLANS PREPARED BY
raSmith
W62 N588 Washington Ave., Ste. 201
Cedarburg, WI 53012-2074
(262) 781-1000
rasmith.com

WISCONSIN PROFESSIONAL ENGINEER
[Signature]
MICHAEL C. GASPER
E-39041
PORT WASHINGTON, WISCONSIN
7/20/2022
DATE: _____ (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY
Surveyor _____ N/A
Designer _____ raSMITH
Project Manager _____ GREG HAFEMAN, PE
Regional Examiner _____ REGIONAL EXAMINER
Regional Supervisor _____ JEFF BOHEN, PE

APPROVED FOR THE DEPARTMENT
DATE: 7/25/2022 *[Signature]*
(Signature)

E

PROJECT ID:

2695-05-71

COUNTY:

OZAUKEE

WITH: N/A

GENERAL NOTES

- NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
- EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE EARTHWORK, EBS IS MEASURED AND PAID FOR AS EXCAVATION COMMON. EXACT LOCATIONS OF EBS WILL BE DETERMINED BY THE ENGINEER.
- SEED, INSTALL EROSION MAT, MULCH AND FERTILIZE ALL SALVAGED TOPSOILED AREAS WITHIN 7 WORKING DAYS AFTER GRADING WORK IS COMPLETED.
- DISTURBED AREAS SHALL BE FERTILIZED, SEEDED AND MULCHED OR FERTILIZED AND SODDED AS DIRECTED BY THE ENGINEER.
- A SAWED JOINT WILL BE REQUIRED WHERE NEW PAVEMENT IS TO MEET AN EXISTING PAVED SURFACE.
- EXACT LOCATION OF ALL DRIVEWAY ENTRANCES AND MATCH POINTS TO BE REVIEWED AND APPROVED BY THE ENGINEER.
- SIDEROAD INTERSECTIONS ARE TO MATCH EXISTING PAVEMENT GEOMETRICS. SIDEROAD MATCH POINTS ARE TO BE REVIEWED AND APPROVED BY THE ENGINEER.
- 4-INCH HMA PAVEMENT SHALL BE CONSTRUCTED WITH AN 1.75-INCH UPPER LAYER AND AN 2.25-INCH LOWER LAYER.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- TACK COAT HAS BEEN ESTIMATED AT AN APPLICATION OF 0.06 GAL./S.Y. AND SHALL BE PLACED BETWEEN THE LAYERS OF ASPHALTIC PAVEMENT, AND ABOVE EXISTING ASPHALT PAVEMENT TO BE OVERLAID.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING DIGGER'S HOTLINE, AND FOR CONTACTING ANY UTILITIES NOT ON DIGGER'S HOTLINE.
- CONTRACTOR MUST CONTACT THE PROJECT ENGINEER AND SEWRPC (ROB MERRY); AT LEAST TWO WEEKS PRIOR TO WORK NEAR ANY SECTION CORNER MONUMENT.
- TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

ORDER OF SECTION 2 SHEETS

- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- TRAFFIC CONTROL

STANDARD ABBREVIATIONS

CL	CENTERLINE
CLEAR	CLEARANCE
DWY	DRIVEWAY
EB	EASTBOUND
ELEV	ELEVATION
EX	EXISTING
MAX	MAXIMUM
NB	NORTHBOUND
NOR	NORMAL
PC	POINT OF CURVATURE
PCC	POINT OF CONTINUING CURVATURE
PI	POINT OF INFLECTION
PNT	POINT
PRC	POINT OF REVERSE CURVATURE
PROP	PROPOSED
PT	POINT OF TANGENCY
REQ'D	REQUIRED
RL	REFERENCE LINE
R/W	RIGHT OF WAY
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWING
SI	SLOPE INTERCEPT
TLE	TEMPORARY LIMITED EASEMENT
TYP	TYPICAL
VAR	VARIES
WB	WESTBOUND

DESIGN CONTACT

RASMITH
 MICHAEL GASPER, PE
 PROJECT ENGINEER
 W62 N588 WASHINGTON AVE, STE 201
 CEDARBURG, WI 53012-2074
 PHONE: 262-317-3345
 EMAIL: michael.gasper@rasmith.com

TOWN CONTACT

TOWN OF CEDARBURG
 ADAM MONTICELLI
 DIRECTOR OF PUBLIC WORKS
 1293 WASHINGTON AVENUE
 CEDARBURG, WI 53012-9304
 PHONE: 262-377-4509
 EMAIL: amonticelli@town.cedarburg.wi.us

WISDOT CONTACT

WISCONSIN DEPARTMENT OF TRANSPORTATION
 GREG HAFEMAN, PE
 SE REGION LOCAL PROGRAM PROJECT MANAGER
 141 NW BARSTOW STREET
 WAUKESHA, WI 53188
 PHONE: 262-548-8677
 EMAIL: greg.hafeman@dot.wi.gov

DNR CONTACT

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
 KRISTINA BETZOLD
 TRANSPORTATION AND ENVIRONMENTAL LIAISON
 1027 W ST. PAUL AVENUE
 MILWAUKEE, WI 53233-2641
 PHONE: 414-343-9346
 EMAIL: kristina.betzold@wi.gov

OTHER AGENCIES

SOUTHEAST WISCONSIN REGIONAL PLANNING COMMISSION
 ROB MERRY
 CHIEF SURVEYOR
 W239 N1812 ROCKWOOD DRIVE
 PO BOX 1607
 WAUKESHA, WI 53187-1607
 PHONE: 262-953-4289
 EMAIL: rmerry@sewrpc.org

OTHER AGENCIES

SOUTHEAST WISCONSIN REGIONAL PLANNING COMMISSION
 ANDREW TRAEGER
 CONSTRUCTION COORDINATOR
 W239 N1812 ROCKWOOD DRIVE
 PO BOX 1607
 WAUKESHA, WI 53187-1607
 PHONE: 262-953-4296
 EMAIL: atraeger@sewrpc.org

OTHER AGENCIES

OZAUKEE COUNTY
 JON EDGREN
 PUBLIC WORKS DIRECTOR/HIGHWAY COMMISSIONER
 410 S SPRING STREET
 PO BOX 994
 PORT WASHINGTON, WI 53074-0994
 PHONE: 262-284-8331
 EMAIL: jedgren@co.ozaukee.wi.us

UTILITIES

COMMUNICATIONS

AT&T
 DEAN HERRO
 435 S 95TH STREET
 MILWAUKEE, WI 53214-1226
 PHONE: 262.226.9639
 EMAIL: dh2572@att.com

COMMUNICATIONS

CHARTER COMMUNICATIONS
 JOHN BALDE
 1320 N DR. MARTIN LUTHER KING, JR. DRIVE
 MILWAUKEE, WI 53212
 PHONE: 414-908-1333
 EMAIL: john.balde@charter.com
 EMAIL: wis.engineering@charter.com

ELECTRIC TRANSMISSION

ATC
 CHRIS DAILEY
 PO BOX 47
 WAUKESHA, WI 53187-0047
 PHONE: 262-506-6884
 EMAIL: cdailey@atcllc.com

ELECTRIC

WE ENERGIES – ELECTRICITY
 JOE FELLEZ
 W140 N9100 LILLY ROAD
 MENOMONEE FALLS, WI 53051
 PHONE: 262-502-6831
 EMAIL: joseph.fellenz@we-energies.com
 EMAIL: We-Utility-relocations@we-energies.com

GAS

WE ENERGIES – GAS/PETROLEUM
 BRADLEY ENGNATH
 500 S 116TH STREET
 WEST ALLIS, WI 53214
 PHONE: 414-944-5767
 EMAIL: bradley.engnath@we-energies.com
 EMAIL: We-Utility-relocations@we-energies.com

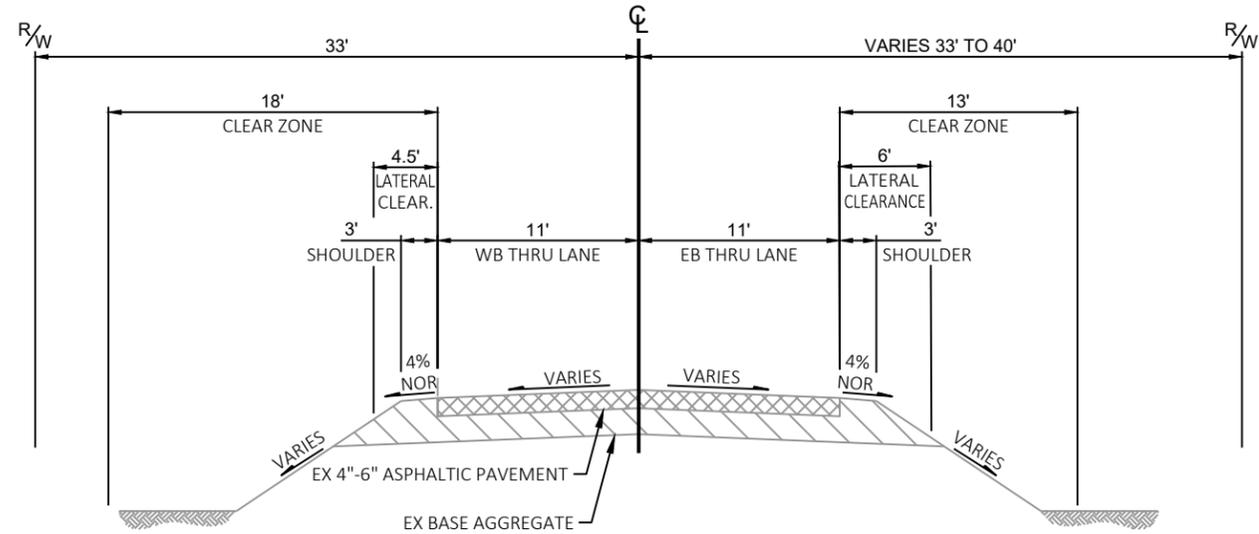


Dial **811** or (800)242-8511

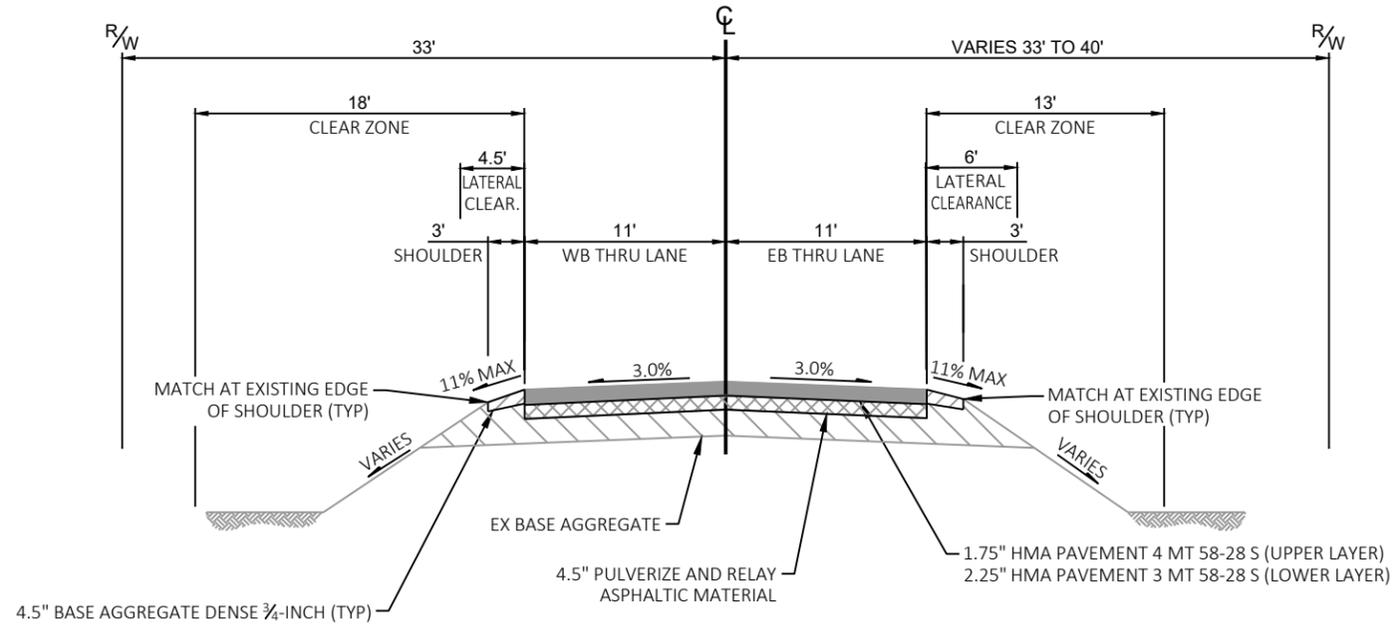
www.DiggersHotline.com



PROJECT NO: 2695-05-71	HWY: LOCAL STREET	COUNTY: OZAUKEE	PROJECT OVERVIEW	SHEET	E
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EXISTING TYPICAL SECTION
CEDAR SAUK ROAD

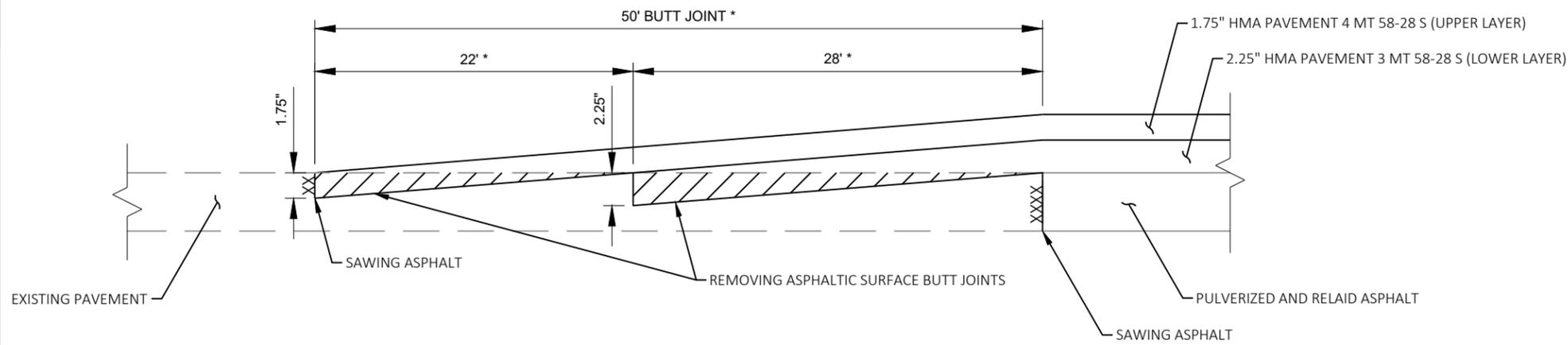


FINISHED TYPICAL SECTION
CEDAR SAUK ROAD
STA 15+17.60 TO STA 134+55.00

NOTES

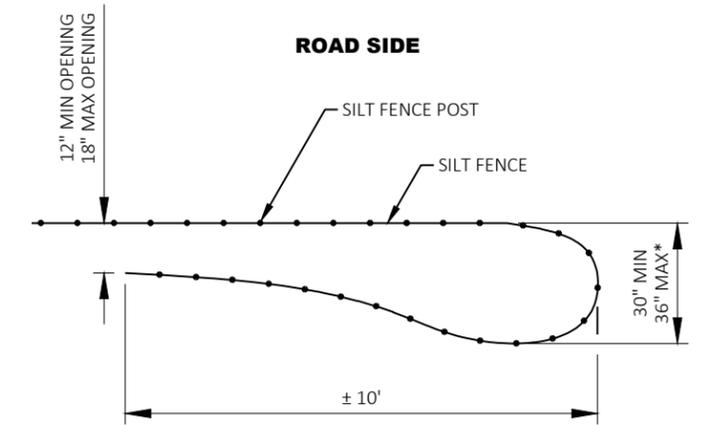
DO NOT EXCEED ROLLOVER RATES GREATER THAN 8% BETWEEN PAVED AND AGGREGATE SHOULDERS.

PROJECT NO: 2695-05-71	HWY: LOCAL STREET	COUNTY: OZAUKEE	TYPICAL SECTIONS	SHEET	E
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BUTT JOINTS AT MATCH POINTS

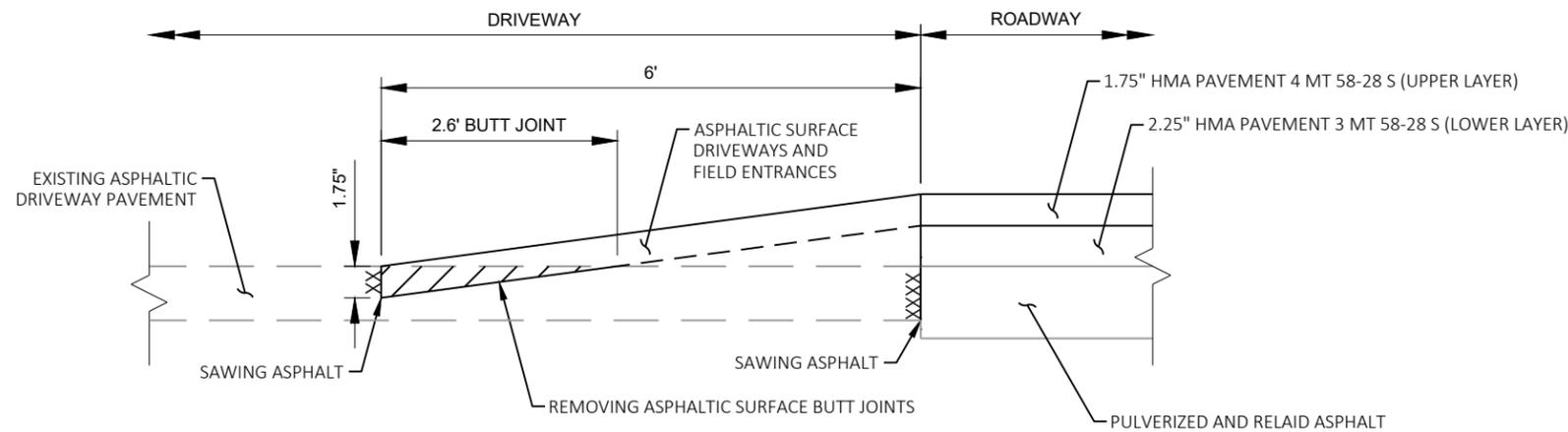
* BUTT JOINT LENGTH VARIES AT SIDEROADS (SEE PLAN SHEETS)



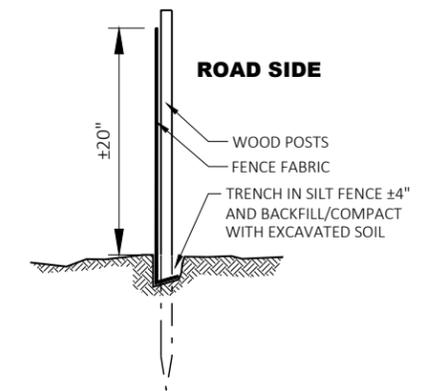
SILT FENCE TURN-AROUND DETAIL

LOCATIONS SHOWN ON EROSION CONTROL PLANS OR AS DIRECTED BY THE ENGINEER

* KEEP LOOP WITHIN GRAVEL SHOULDER.



BUTT JOINTS AT ASPHALT DRIVEWAYS



SILT FENCE TRENCH AND POLE DETAIL



2

2

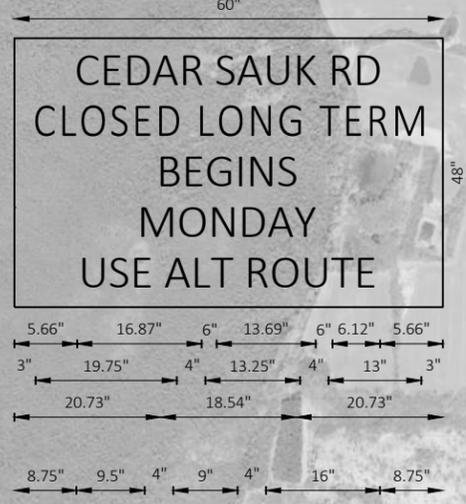
LEGEND

- TYPE II / III BARRICADE WITH 2 TYPE "A" LIGHTS
- TYPE II / III BARRICADE WITH ATTACHED SIGN AND TWO TYPE "A" LIGHTS
- SIGN ON PERMANENT SUPPORT
- WORK AREA

- 1 ROAD WORK AHEAD
W20-1A
- 2 ROAD CLOSED AHEAD
W20-3A
- 3 END ROAD WORK
G20-2A
48" X 24"
- 4 ROAD CLOSED TO THRU TRAFFIC
R11-4
60" X 30"
- 5 CEDAR SAUK RD TO CLOSE LONG TERM BEGINS MONDAY USE ALT ROUTE
60" X 48"

SIGN NOTES:

1. SIGN IS TYPE II - TYPE F REFLECTIVE
2. COLOR:
BACKGROUND - ORANGE
MESSAGE - BLACK
3. MESSAGE SERIES - B
4. CORNERS MAY BE SQUARE OR ROUNDED WHEN BASE MATERIAL IS PLYWOOD BUT BORDERS SHALL BE ROUNDED AS SHOWN. WHEN BASE MATERIAL IS METAL, THE CORNERS AND BORDERS SHALL BE ROUNDED.
5. REPLACE "MONDAY" WITH APPROPRIATE DAY OF WEEK.
6. PAID AS TRAFFIC CONTROL SIGN FIXED MESSAGE.



NOTES

1. CLOSE CEDAR SAUK ROAD TO THROUGHOUT TRAFFIC.
2. MAINTAIN ACCESS TO DRIVEWAYS AND FIELDS AT ALL TIMES.
3. REFERENCE THE FOLLOWING STANDARD DETAIL DRAWINGS:
 - BARRICADES AND SIGNS FOR MAINLINE CLOSURES
 - BARRICADES AND SIGNS FOR VARIOUS CLOSURES
 - BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

PROJECT NO: 2695-05-71	HWY: LOCAL STREET	COUNTY: OZAUKEE	TRAFFIC CONTROL	SHEET	E
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Estimate Of Quantities

2695-05-71

Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	725.000	725.000
0004	205.0100	Excavation Common	CY	3,540.000	3,540.000
0006	213.0100	Finishing Roadway (project) 01. 2695-05-71	EACH	1.000	1.000
0008	305.0110	Base Aggregate Dense 3/4-Inch	TON	710.000	710.000
0010	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,930.000	1,930.000
0012	311.0110	Breaker Run	TON	3,480.000	3,480.000
0014	325.0100	Pulverize and Relay	SY	29,000.000	29,000.000
0016	455.0605	Tack Coat	GAL	1,786.000	1,786.000
0018	460.2000	Incentive Density HMA Pavement	DOL	4,350.000	4,350.000
0020	460.6223	HMA Pavement 3 MT 58-28 S	TON	3,700.000	3,700.000
0022	460.6224	HMA Pavement 4 MT 58-28 S	TON	2,910.000	2,910.000
0024	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	68.000	68.000
0026	618.0100	Maintenance And Repair of Haul Roads (project) 01. 2695-05-71	EACH	1.000	1.000
0028	619.1000	Mobilization	EACH	1.000	1.000
0030	624.0100	Water	MGAL	41.000	41.000
0032	628.1504	Silt Fence	LF	500.000	500.000
0034	628.1520	Silt Fence Maintenance	LF	500.000	500.000
0036	628.1905	Mobilizations Erosion Control	EACH	1.000	1.000
0038	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0040	630.0200	Seeding Temporary	LB	15.000	15.000
0042	642.5001	Field Office Type B	EACH	1.000	1.000
0044	643.0300	Traffic Control Drums	DAY	885.000	885.000
0046	643.0420	Traffic Control Barricades Type III	DAY	826.000	826.000
0048	643.0705	Traffic Control Warning Lights Type A	DAY	1,652.000	1,652.000
0050	643.0900	Traffic Control Signs	DAY	1,239.000	1,239.000
0052	643.1000	Traffic Control Signs Fixed Message	SF	40.000	40.000
0054	643.5000	Traffic Control	EACH	1.000	1.000
0056	646.1020	Marking Line Epoxy 4-Inch	LF	38,900.000	38,900.000
0058	646.6120	Marking Stop Line Epoxy 18-Inch	LF	15.000	15.000
0060	648.0100	Locating No-Passing Zones	MI	2.260	2.260
0062	650.8000	Construction Staking Resurfacing Reference	LF	11,940.000	11,940.000
0064	650.9911	Construction Staking Supplemental Control (project) 01. 2695-05-71	EACH	1.000	1.000
0066	690.0150	Sawing Asphalt	LF	710.000	710.000
0068	740.0440	Incentive IRI Ride	DOL	8,968.000	8,968.000
0070	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	200.000	200.000
0072	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	350.000	350.000
0074	SPV.0060	Special 01. Section Corner Monuments	EACH	9.000	9.000

<u>EXCAVATION COMMON</u>			<u>FINISHING ROADWAY</u>			<u>MAINTENANCE AND REPAIR OF HAUL ROADS</u>			<u>MOBILIZATION</u>		
205.0100	213.0100	618.0110	619.1000								
CATEGORY	LOCATION	CY	CATEGORY	PROJECT	EACH	CATEGORY	PROJECT	EACH	CATEGORY	PROJECT	EACH
0010	UNDISTRIBUTED	3,540	0010	2695-05-71	1	0020	2695-05-71	1	0010	2695-05-71	1
TOTAL		3,540	TOTAL		1	TOTAL		1	TOTAL		1

3

3

BASE & PAVING ITEMS

CATEGORY	LOCATION	STATION TO	STATION	204.0115	325.0100	305.0110	305.0120	311.0110	455.0605	460.2000	460.6223	460.6224	645.0120	624.0100
				REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	PULVERIZE AND RELAY SY	BASE AGGREGATE DENSE		BREAKER RUN TON	TACK COAT GAL	INCENTIVE DENSITY HMA PAVEMENT	HMA PAVEMENT		ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	WATER MGAL
						¾-INCH TON	1¼-INCH TON			3 MT 58-28 S TON	4 MT 58-28 S TON			
0010	CEDAR SAUK ROAD	15+18 TO	20+00	149	1,099	30	--	--	74	170	143	121	--	0.5
		20+00 TO	25+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		25+00 TO	30+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		30+00 TO	35+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		35+00 TO	40+00	3	1,223	30	--	--	75	180	154	120	7	0.5
		40+00 TO	45+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		45+00 TO	50+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		50+00 TO	55+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		55+00 TO	60+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		60+00 TO	65+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		65+00 TO	70+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		70+00 TO	75+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		75+00 TO	80+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		80+00 TO	85+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		85+00 TO	90+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		90+00 TO	95+00	6	1,223	30	--	--	76	180	154	120	13	0.5
		95+00 TO	100+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		100+00 TO	105+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		105+00 TO	110+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		110+00 TO	115+00	9	1,223	30	--	--	77	180	154	120	20	0.5
		115+00 TO	120+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		120+00 TO	125+00	7	1,223	30	--	--	76	180	154	120	15	0.5
		125+00 TO	130+00	--	1,223	30	--	--	73	180	154	120	--	0.5
		130+00 TO	134+55	128	995	20	--	--	69	160	132	108	13	0.3
	FOREST LANE			134	--	--	--	--	8	20	12	13	--	--
	HORNS CORNERS ROAD			132	--	--	--	--	8	20	12	13	--	--
	COVERED BRIDGE ROAD			157	--	--	--	--	9	20	13	15	--	--
	UNDISTRIBUTED			--	--	--	1,930	3,480	--	--	--	--	--	29.2
TOTALS				725	29,000	710	1,930	3,480	1,786	4,350	3700	2910	68	41.0

<u>EROSION CONTROL</u>						
CATEGORY	LOCATION	628.1504	628.1520	628.1905	628.1910	630.0200
		SILT FENCE MAINTENANCE		MOBILIZATIONS EROSION CONTROL		SEEDING TEMPORARY
		LF	LF	EACH	EACH	LB
0010	STA 55+05 TO STA 86+56 LT	3,170	3,170	--	--	--
	WASTE PILE	400	400	--	--	15
	UNDISTRIBUTED	900	900	1	3	--
TOTALS		4,470	4,470	1	3	15

<u>FIELD OFFICE TYPE B</u>		
CATEGORY	PROJECT	642.5001
		EACH
0010	2695-05-71	1
TOTAL		1

<u>CONSTRUCTION STAKING</u>			
CATEGORY	LOCATION	650.8000	650.9911
		REFERENCE	SUPPLEMENTAL CONTROL
		LF	2695-05-71
0010	CEDAR SAUK ROAD	11,940	--
	UNDISTRIBUTED	--	1
TOTAL		11,940	1

PROJECT NO: 2695-05-71	HWY: LOCAL STREET	COUNTY: OZAUKEE	MISCELLANEOUS QUANTITIES	SHEET	E
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TRAFFIC CONTROL

CATEGORY	LOCATION	643.0300		643.0420		643.0705		643.0900		643.1000	643.5000
		DRUMS		BARRICADES		WARNING LIGHTS		SIGNS		FIXED	TRAFFIC
		EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY	MESSAGE	CONTROL
0010	WEST LIMITS	--	--	2	118	4	236	6	354	20.0	--
	EAST LIMITS	--	--	4	236	8	472	6	354	20.0	--
	FOREST LANE	--	--	2	118	4	236	3	177	--	--
	HORNS CORNERS ROAD	--	--	2	118	4	236	3	177	--	--
	COVERD BRIDGE ROAD	--	--	2	118	4	236	3	177	--	--
	UNDISTRIBUTED	15	885	2	118	4	236	--	--	--	1
	TOTALS		885		826		1,652		1,239	40.0	1

SAWING ASPHALT

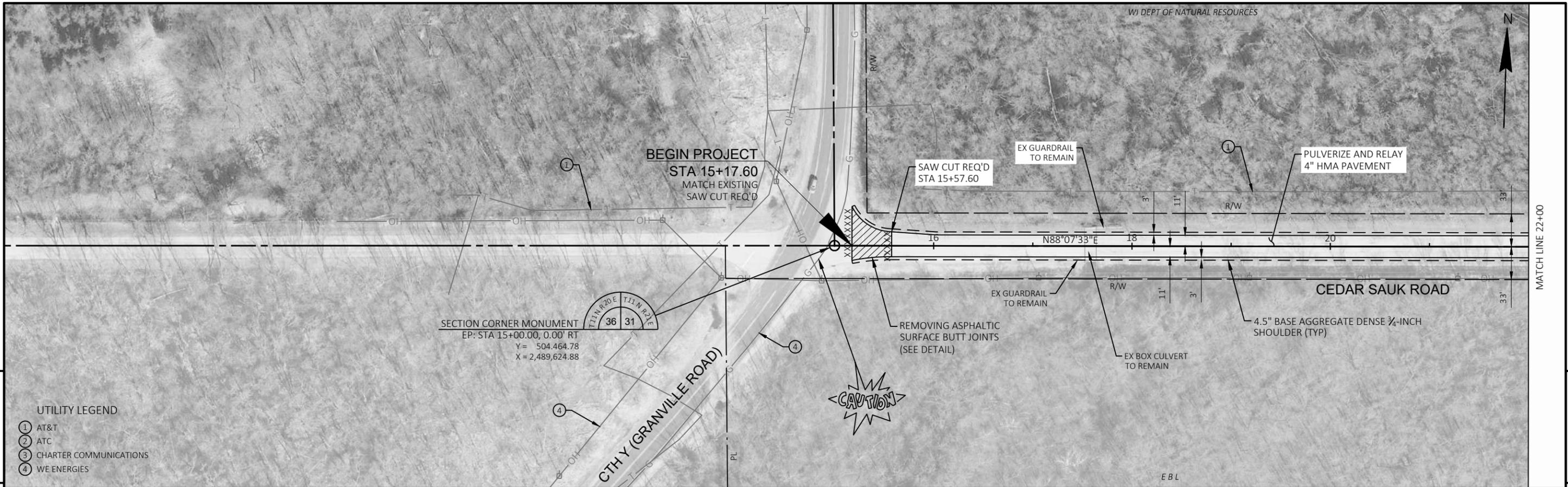
CATEGORY	LOCATION	STATION TO STATION		LF
		START	END	
0010	CEDAR SAUK ROAD	15+18 TO	20+00	79
		20+00 TO	25+00	--
		25+00 TO	30+00	--
		30+00 TO	35+00	--
		35+00 TO	40+00	33
		40+00 TO	45+00	--
		45+00 TO	50+00	--
		50+00 TO	55+00	--
		55+00 TO	60+00	--
		60+00 TO	65+00	--
		65+00 TO	70+00	--
		70+00 TO	75+00	--
		75+00 TO	80+00	--
		80+00 TO	85+00	--
		85+00 TO	90+00	--
		90+00 TO	95+00	58
		95+00 TO	100+00	--
		100+00 TO	105+00	--
		105+00 TO	110+00	--
		110+00 TO	115+00	83
		115+00 TO	120+00	--
		120+00 TO	125+00	64
		125+00 TO	130+00	--
		130+00 TO	134+55	57
	FOREST LANE			109
	HORNS CORNERS ROAD			114
	COVERED BRIDGE ROAD			113
	UNDISTRIBUTED			--
	TOTALS			710

PAVEMENT MARKING

CATEGORY	LOCATION	STATION TO STATION		646.1020		646.6120	648.0100
		START	END	MARKING LINE		MARKING	LOCATING
				EPOXY	EPOXY	STOP LINE	NO-PASSING
0010	CEDAR SAUK ROAD	15+18 TO	20+00	965	965	15	0.09
		20+00 TO	25+00	1,000	625	--	0.10
		25+00 TO	30+00	908	625	--	0.10
		30+00 TO	35+00	1,000	625	--	0.10
		35+00 TO	40+00	1,000	625	--	0.10
		40+00 TO	45+00	1,000	625	--	0.10
		45+00 TO	50+00	1,000	625	--	0.10
		50+00 TO	55+00	908	625	--	0.10
		55+00 TO	60+00	1,000	625	--	0.10
		60+00 TO	65+00	1,000	625	--	0.10
		65+00 TO	70+00	1,000	625	--	0.10
		70+00 TO	75+00	1,000	625	--	0.09
		75+00 TO	80+00	1,000	625	--	0.09
		80+00 TO	85+00	1,000	625	--	0.09
		85+00 TO	90+00	1,000	625	--	0.09
		90+00 TO	95+00	1,000	625	--	0.09
		95+00 TO	100+00	1,000	625	--	0.09
		100+00 TO	105+00	1,000	625	--	0.09
		105+00 TO	110+00	912	625	--	0.09
		110+00 TO	115+00	1,000	625	--	0.09
		115+00 TO	120+00	1,000	625	--	0.09
		120+00 TO	125+00	1,000	625	--	0.09
		125+00 TO	130+00	1,000	625	--	0.09
		130+00 TO	134+55	910	569	--	0.09
	FOREST LANE			--	--	--	--
	HORNS CORNERS ROAD			--	--	--	--
	COVERED BRIDGE ROAD			--	--	--	--
	UNDISTRIBUTED			7	6	--	--
	SUBTOTALS			23,610	15,290		
	TOTALS			38,900		15	2.26

SECTION CORNER MONUMENTS

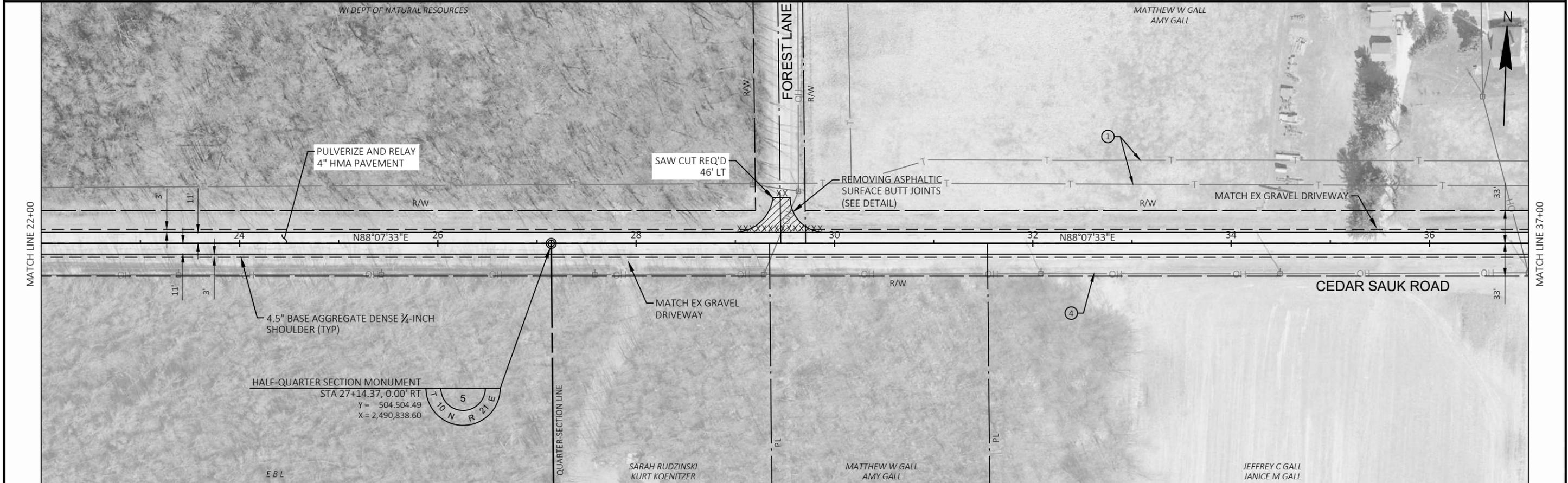
CATEGORY	LOCATION	STATION	DESCRIPTION	SPV.0060.01
				EACH
0010	CEDAR SAUK ROAD	27+14.37	0.00' RT SOUTH HALF-QUARTER SECTION, T10N, R21E, SEC 5	1
		42+63.52	0.00' RT NORTH HALF-QUARTER SECTION, T11N, R21E, SEC 31	1
		53+54.28	0.00' RT SOUTH HALF-SECTION CORNER, T10N, R21E, SECS 5 & 4	1
		68+99.22	0.00' RT NORTH HALF-SECTION CORNER, T11N, R21E, SECS 31 & 32	1
		79+92.84	0.00' RT SOUTH HALF-QUARTER SECTION, T10N, R21E, SEC 4	1
		95+34.73	0.00' RT NORTH HALF-QUARTER SECTION, T11N, R21E, SEC 32	1
		106+31.13	0.00' RT SOUTH HALF-SECTION CORNER, T10N, R21E, SECS 4 & 3	1
		121+71.20	0.00' RT NORTH HALF-SECTION CORNER, T11N, R21E, SECS 32 & 33	1
		132+80.01	0.00' RT SOUTH HALF-SECTION CORNER, T10N, R21E, SEC 3	1
	TOTALS			9



- UTILITY LEGEND
- ① AT&T
 - ② ATC
 - ③ CHARTER COMMUNICATIONS
 - ④ WE ENERGIES

5

5



PROJECT NO: 2695-05-71	HWY: LOCAL STREET	COUNTY: OZAUKEE	PLAN SHEETS	SHEET	E
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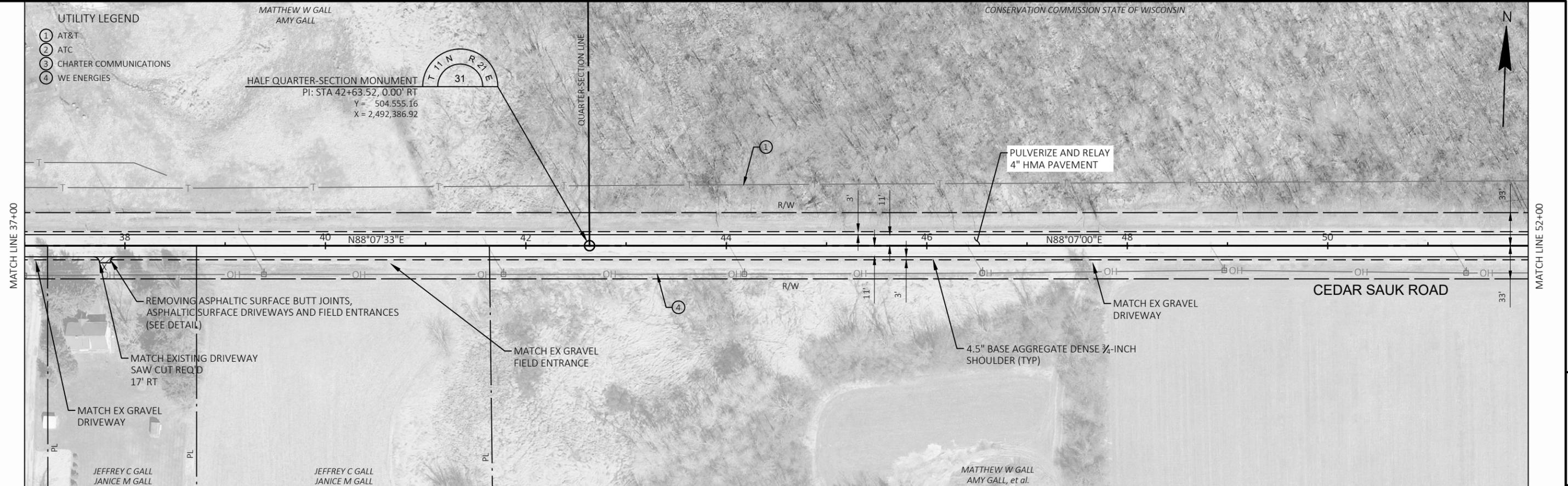
- UTILITY LEGEND**
- ① AT&T
 - ② ATC
 - ③ CHARTER COMMUNICATIONS
 - ④ WE ENERGIES

MATTHEW W GALL
AMY GALL

HALF QUARTER-SECTION MONUMENT
 PI: STA 42+63.52, 0.00' RT
 Y = 504,555.16
 X = 2,492,386.92



CONSERVATION COMMISSION STATE OF WISCONSIN



5

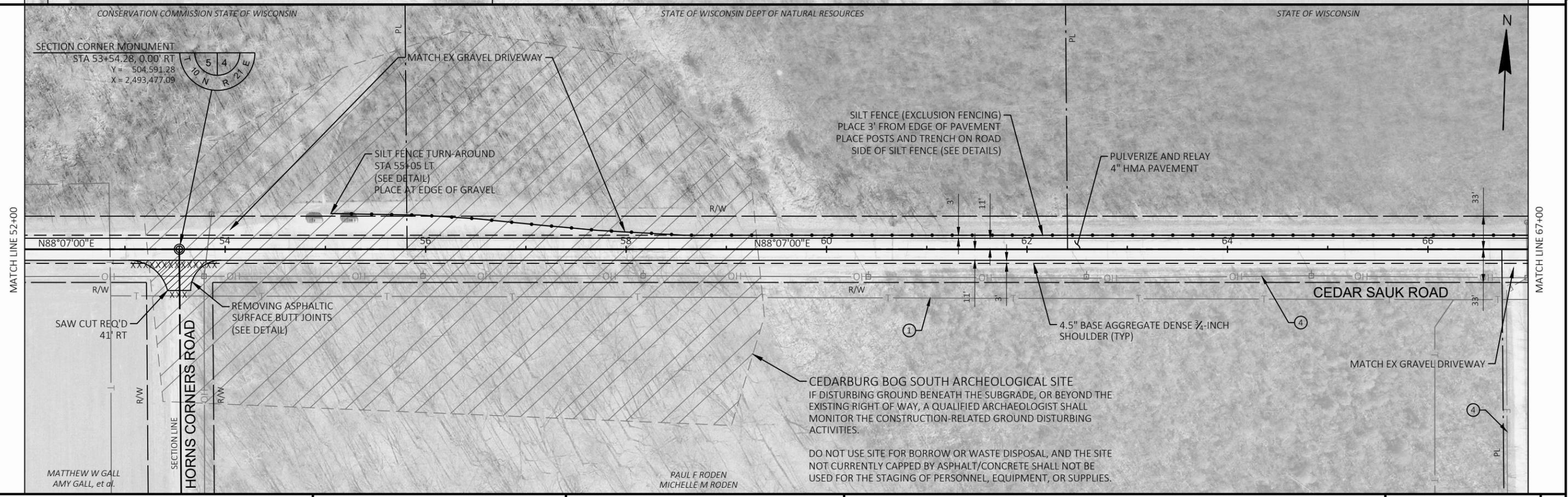
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SECTION CORNER MONUMENT
 STA 53+54.28, 0.00' RT
 Y = 504,591.28
 X = 2,493,477.09

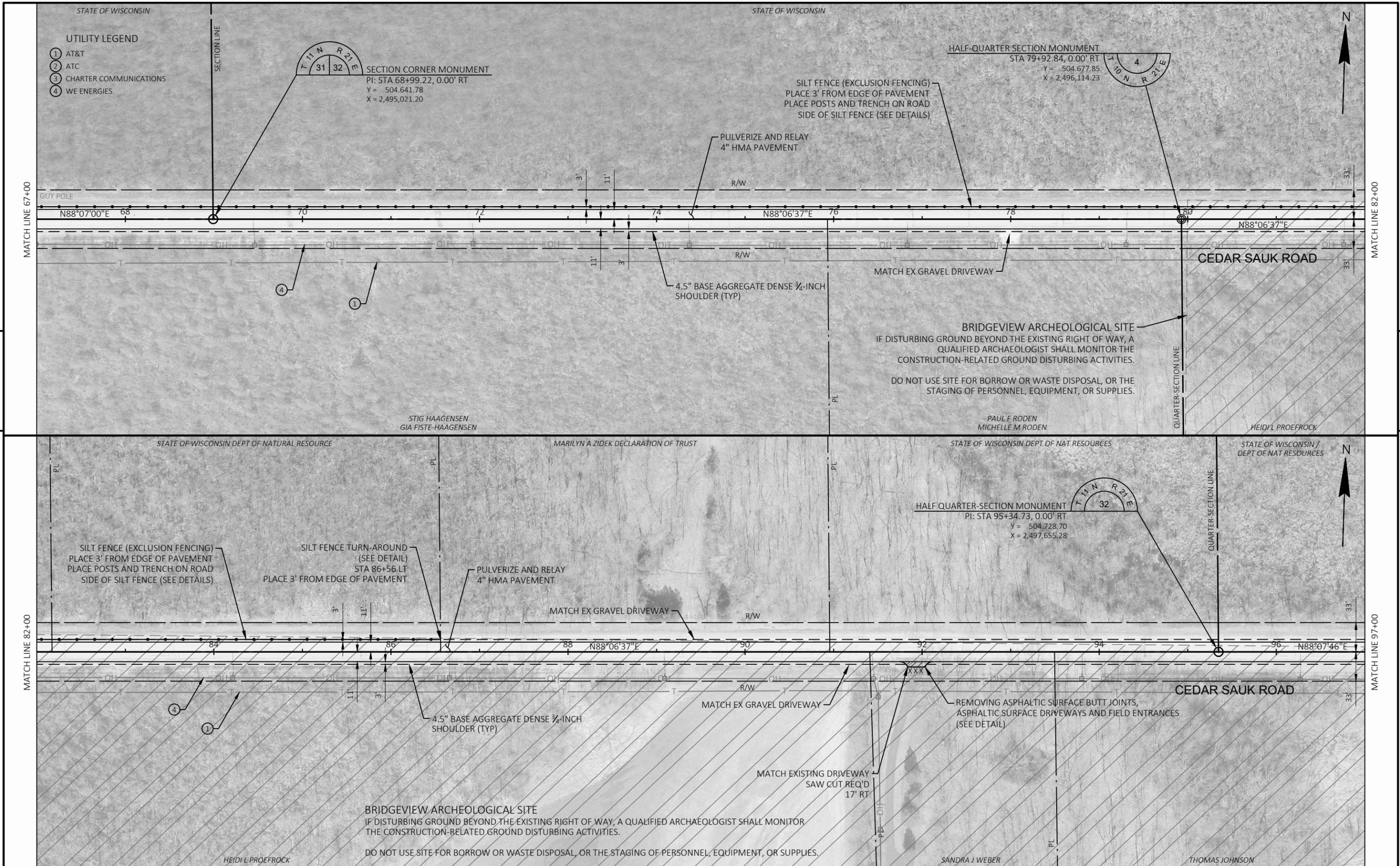


STATE OF WISCONSIN DEPT OF NATURAL RESOURCES

STATE OF WISCONSIN



PROJECT NO: 2695-05-71	HWY: LOCAL STREET	COUNTY: OZAUKEE	PLAN SHEETS	SHEET	E
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PROJECT NO: 2695-05-71	HWY: LOCAL STREET	COUNTY: OZAUKEE	PLAN SHEETS	SHEET	E
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- UTILITY LEGEND**
- ① AT&T
 - ② ATC
 - ③ CHARTER COMMUNICATIONS
 - ④ WE ENERGIES

STATE OF WISCONSIN /
DEPT OF NAT RESOURCES

STATE OF WISCONSIN DEPT OF NATURAL RESOURCES

STATE OF WISCONSIN DEPT OF NATURAL RESOURCES



SECTION CORNER MONUMENT
 STA 106+31.13, 0.00' RT
 Y = 504,764.48
 X = 2,498,751.09

PULVERIZE AND RELAY
4" HMA PAVEMENT

4.5" BASE AGGREGATE DENSE 3/4-INCH
SHOULDER (TYP)

SAW CUT REQ'D
48' RT

REMOVING ASPHALTIC
SURFACE BUTT JOINTS
(SEE DETAIL)

MATCH EX GRAVEL DRIVEWAY

BRIDGEVIEW ARCHEOLOGICAL SITE
 IF DISTURBING GROUND BEYOND THE EXISTING RIGHT OF WAY, A QUALIFIED ARCHAEOLOGIST SHALL MONITOR
 THE CONSTRUCTION-RELATED GROUND DISTURBING ACTIVITIES.
 DO NOT USE SITE FOR BORROW OR WASTE DISPOSAL, OR THE STAGING OF PERSONNEL, EQUIPMENT, OR SUPPLIES.

5

5

STATE OF WISCONSIN DEPT OF NATURAL RESOURCES

BRETT A COTTRELL
AMANDA M COTTRELL

MARK A IMIG AND KAY L IMIG
2013 REVOCABLE TRUST

SECTION CORNER MONUMENT
 PI: STA 121+71.20, 0.00' RT
 Y = 504,814.75
 X = 2,500,290.34

PULVERIZE AND RELAY
4" HMA PAVEMENT

MATCH EX GRAVEL DRIVEWAY

REMOVING ASPHALTIC SURFACE BUTT JOINTS,
ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
(SEE DETAIL)

MATCH EXISTING DRIVEWAY
SAW CUT REQ'D
17' RT

MATCH EXISTING DRIVEWAY
SAW CUT REQ'D
17' RT

4.5" BASE AGGREGATE DENSE 3/4-INCH
SHOULDER (TYP)

REMOVING ASPHALTIC SURFACE BUTT JOINTS,
ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
(SEE DETAIL)

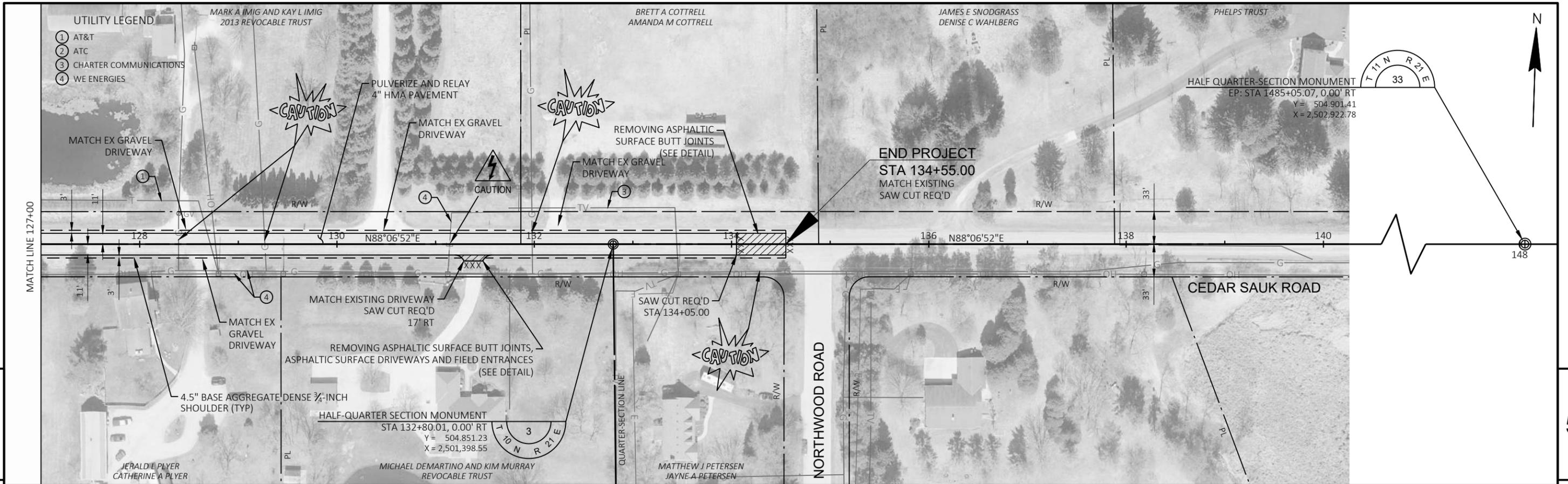
MATCH EX GRAVEL DRIVEWAY

ZACHARIAH A BECKER
DANIELLE R BECKER

PETER E PAVALKO
HELEN N PAVALKO

JERALD L PLYER
CATHERINE A PLYER

PROJECT NO: 2695-05-71	HWY: LOCAL STREET	COUNTY: OZAUKEE	PLAN SHEETS	SHEET	E
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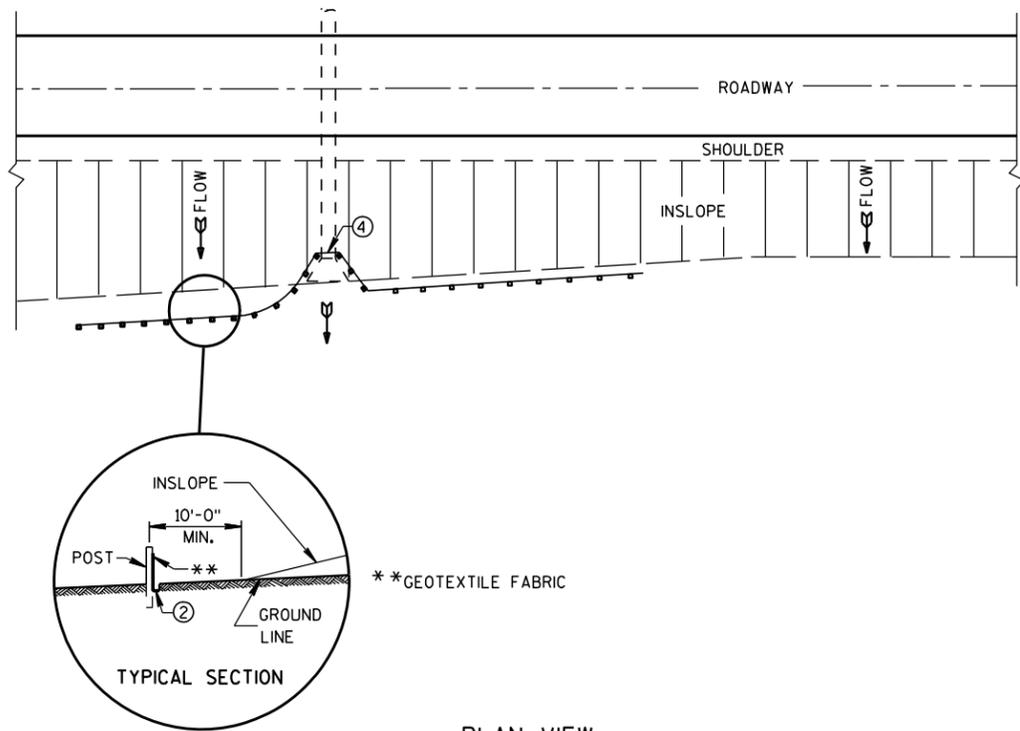
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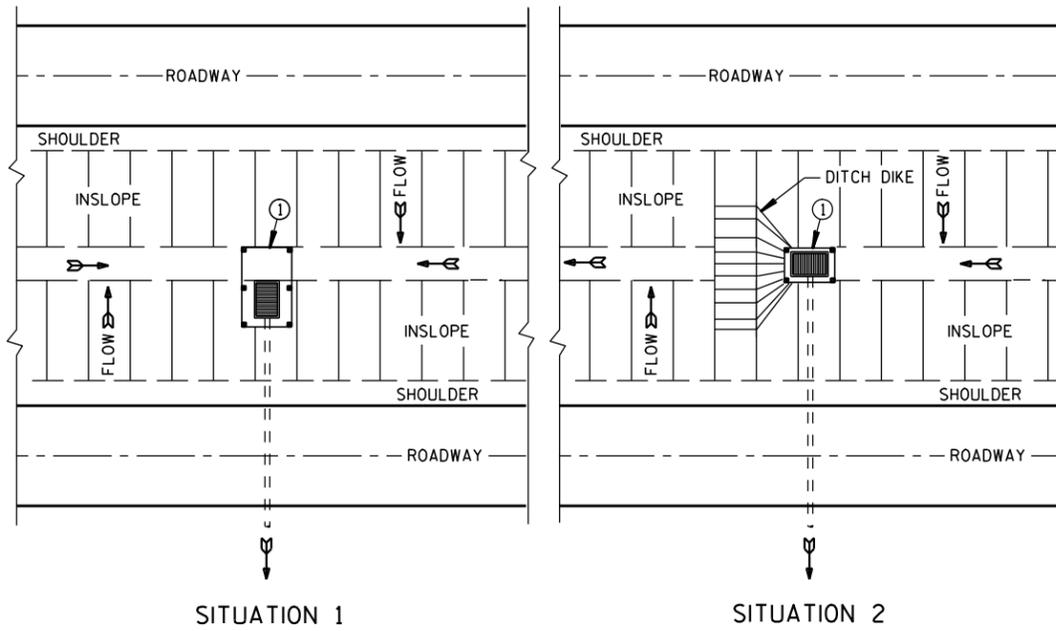
PROJECT NO: 2695-05-71	HWY: LOCAL STREET	COUNTY: OZAUKEE	PLAN SHEETS	SHEET	E
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Standard Detail Drawing List

08E09-06	SILT FENCE
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-21A	LONGITUDINAL MARKING (MAINLINE)
15C08-21D	PAVEMENT MARKING (TURN LANES)
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING



PLAN VIEW
TYPICAL APPLICATION OF SILT FENCE

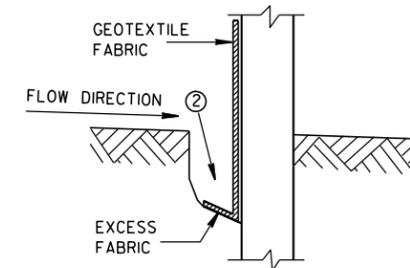


SITUATION 1 SITUATION 2
PLAN VIEW
SILT FENCE AT MEDIAN SURFACE DRAINS

GENERAL NOTES

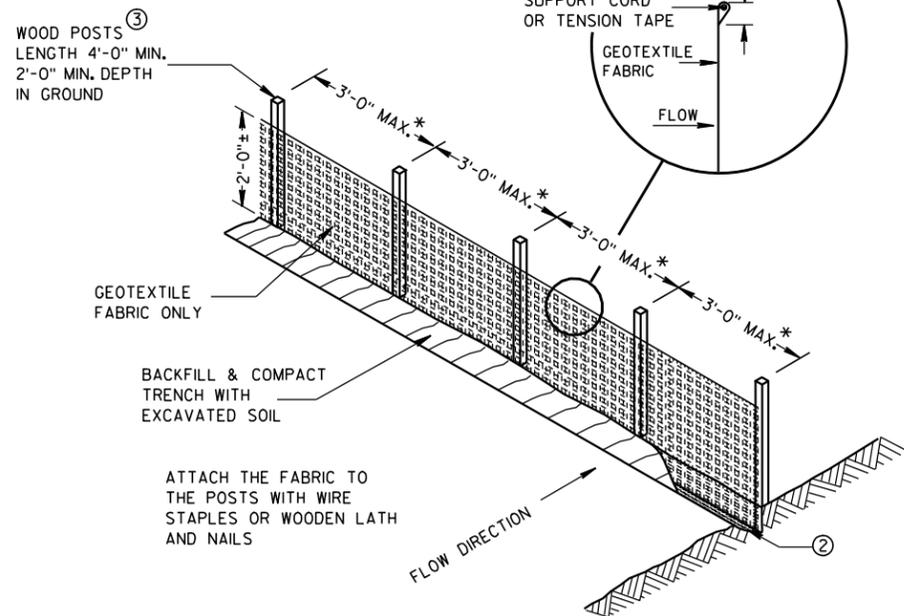
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



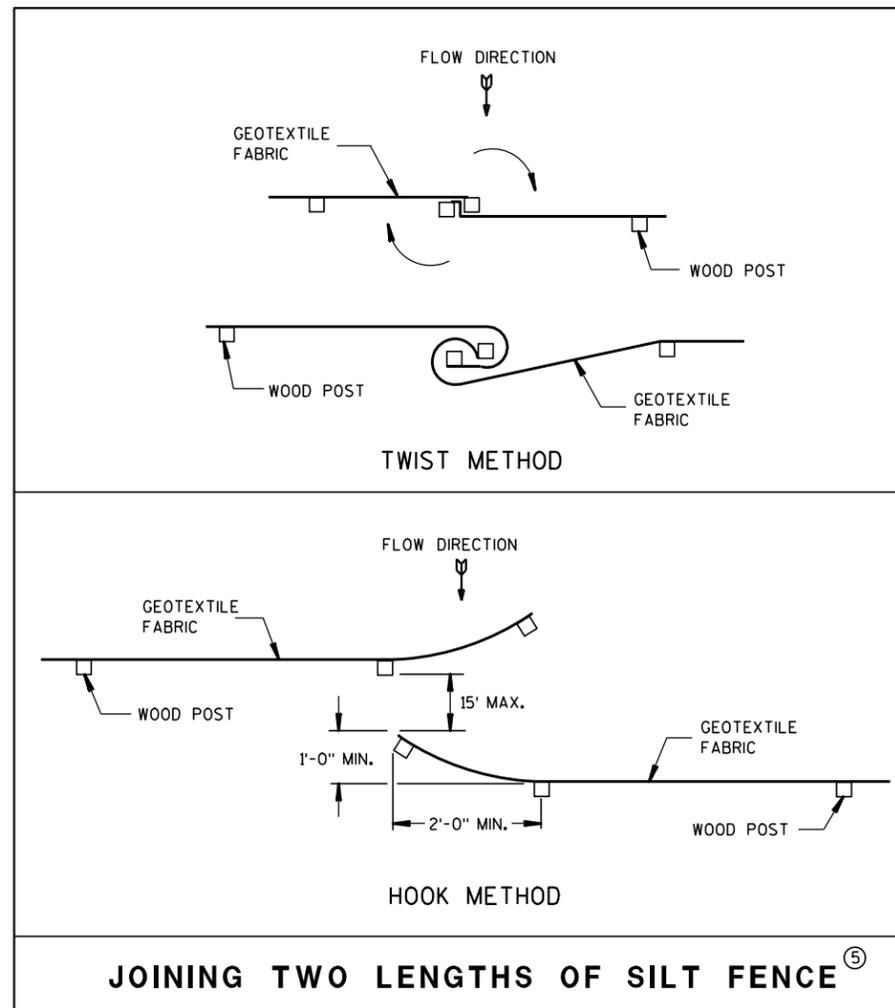
TRENCH DETAIL

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

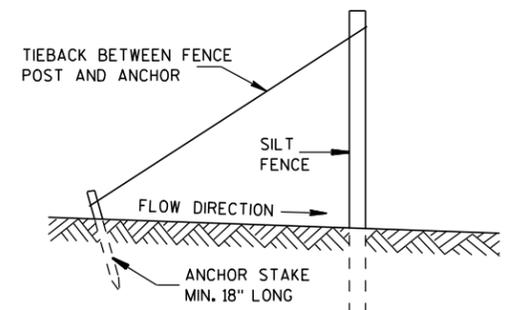


SILT FENCE

* NOTE: 8'-0" POST SPACING ALLOWED IF A WOVEN GEOTEXTILE FABRIC IS USED.



JOINING TWO LENGTHS OF SILT FENCE

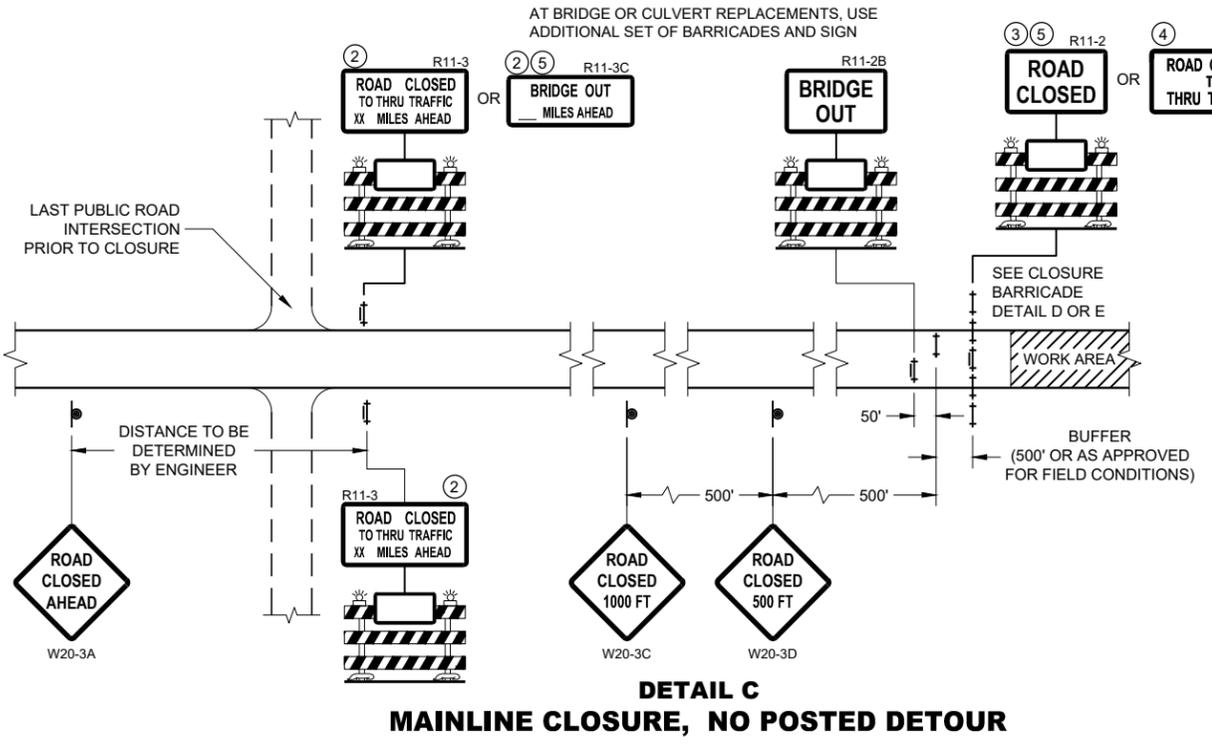
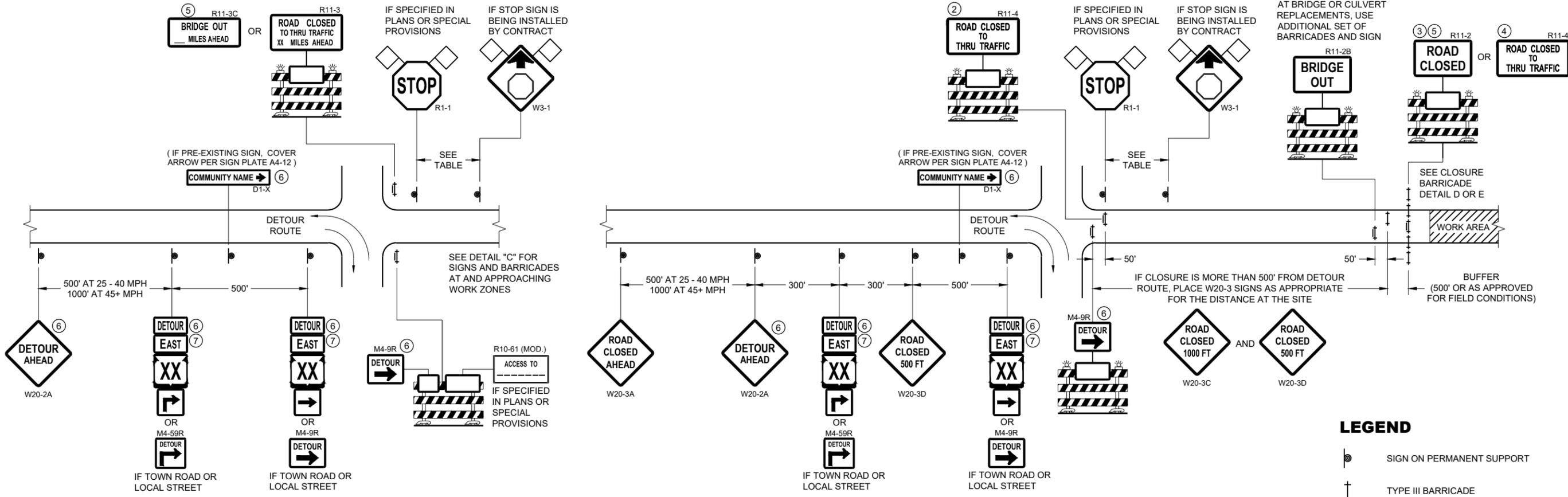


SILT FENCE TIE BACK
(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 /S/ Beth Canestra
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



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

LEGEND

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

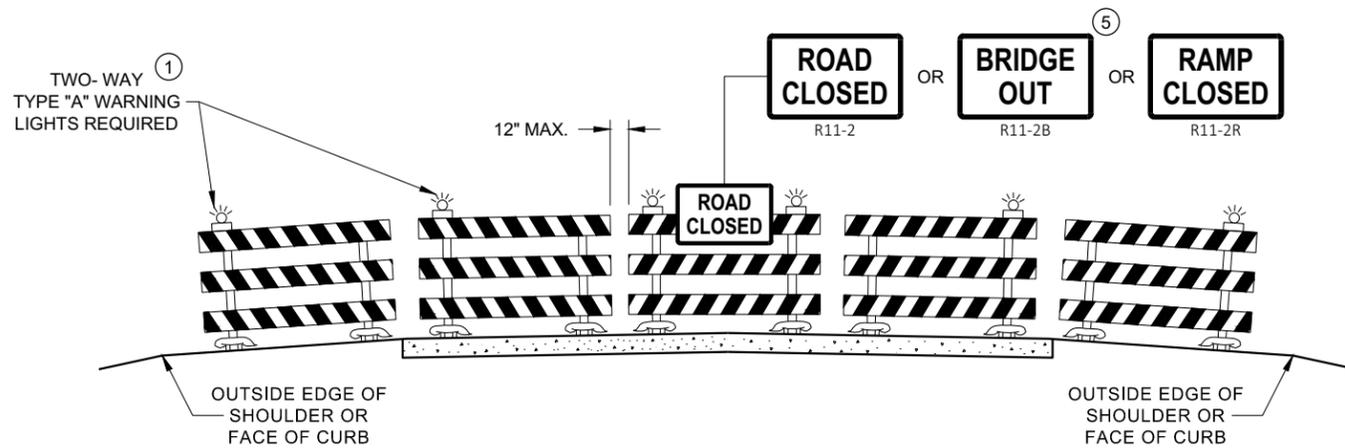
SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦

**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

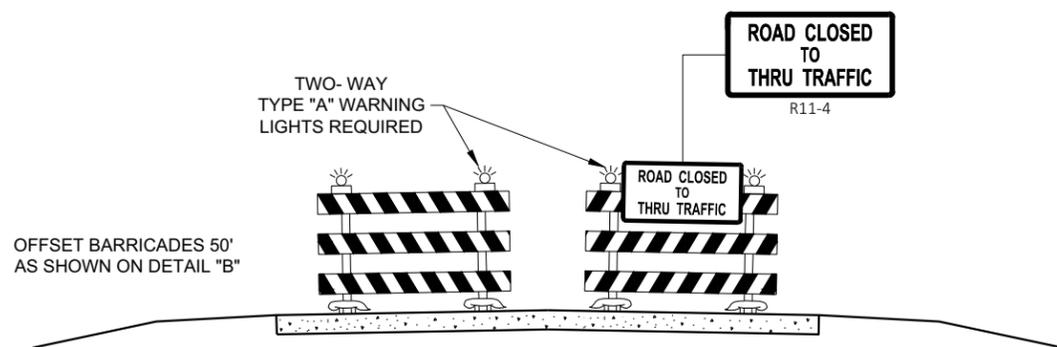
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE 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"

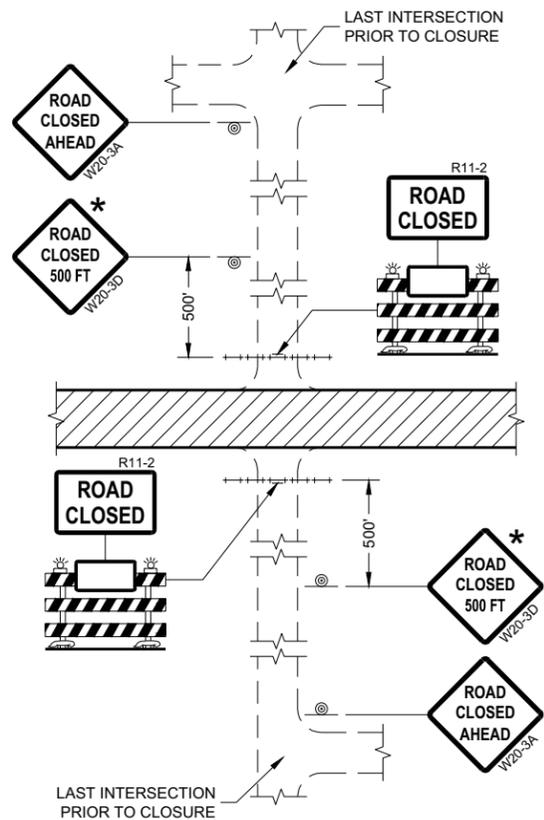
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS 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**

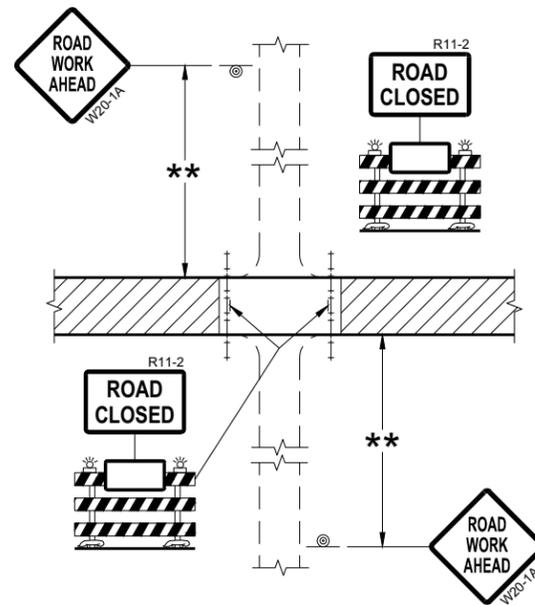
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

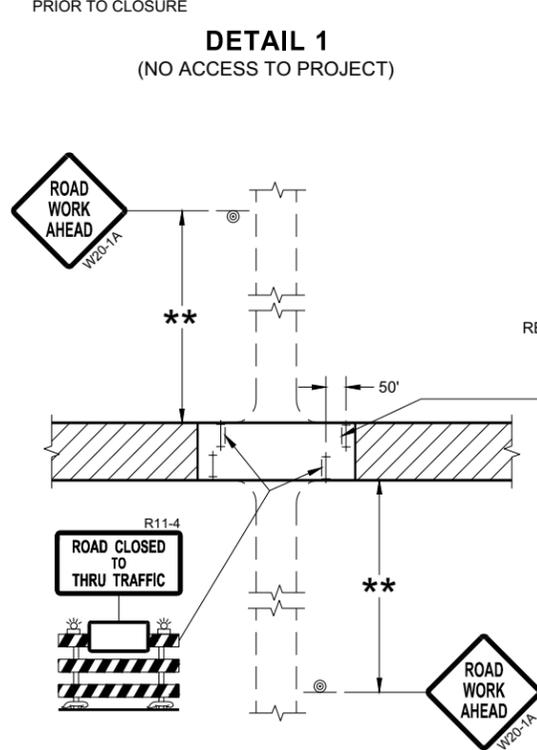
FHWA



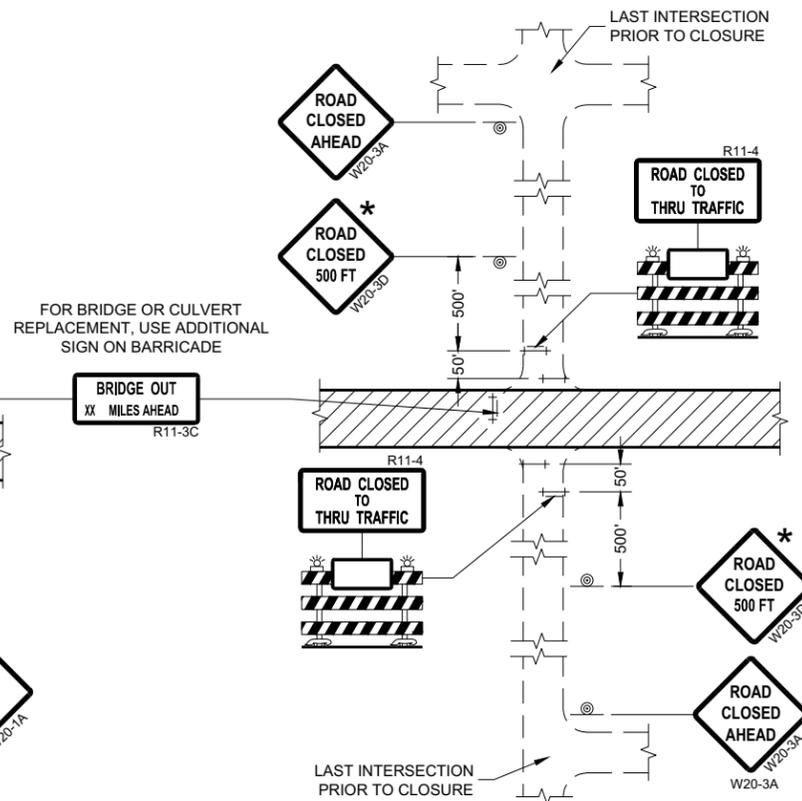
DETAIL 1
(NO ACCESS TO PROJECT)



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



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



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

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

**BARRICADES AND SIGNS
FOR
SIDEROAD CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

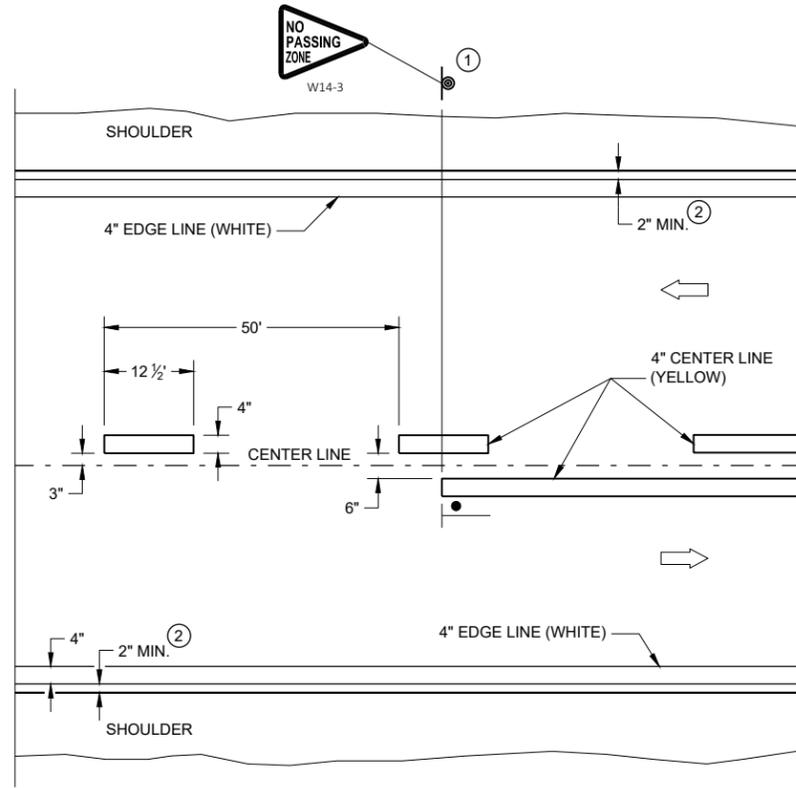
GENERAL NOTES

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

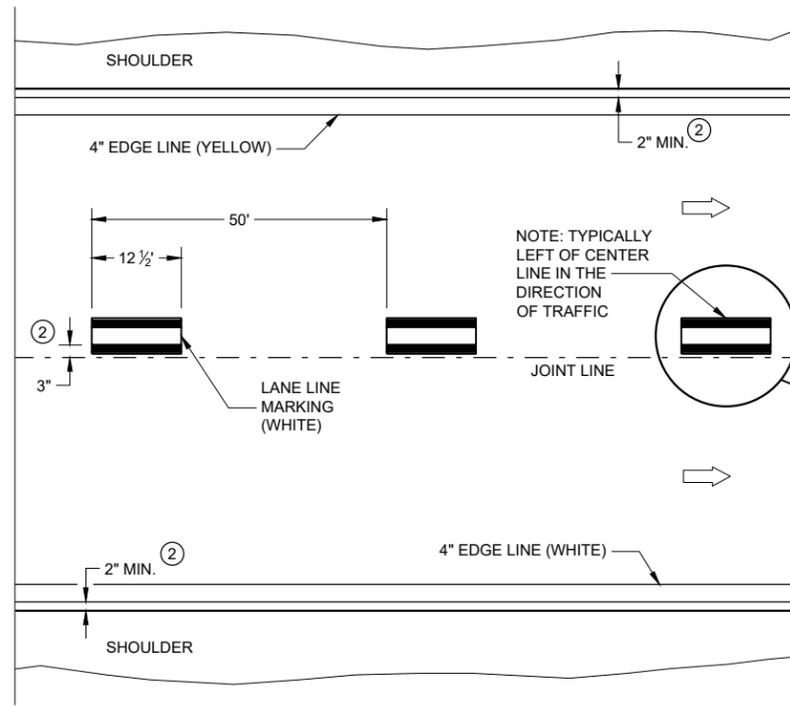
- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

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

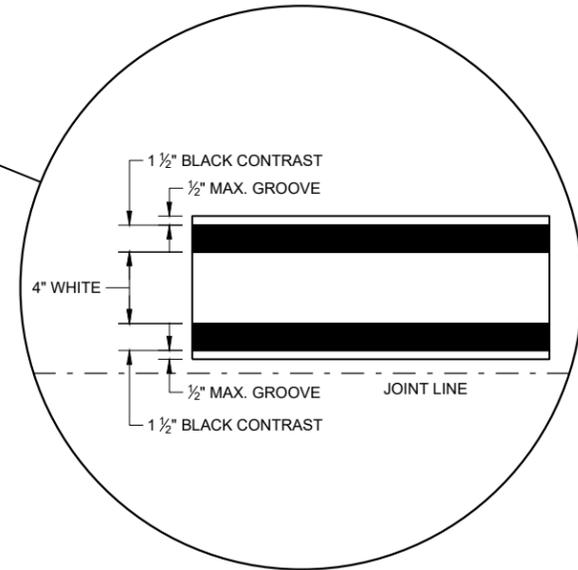


TWO WAY TRAFFIC



ONE WAY TRAFFIC

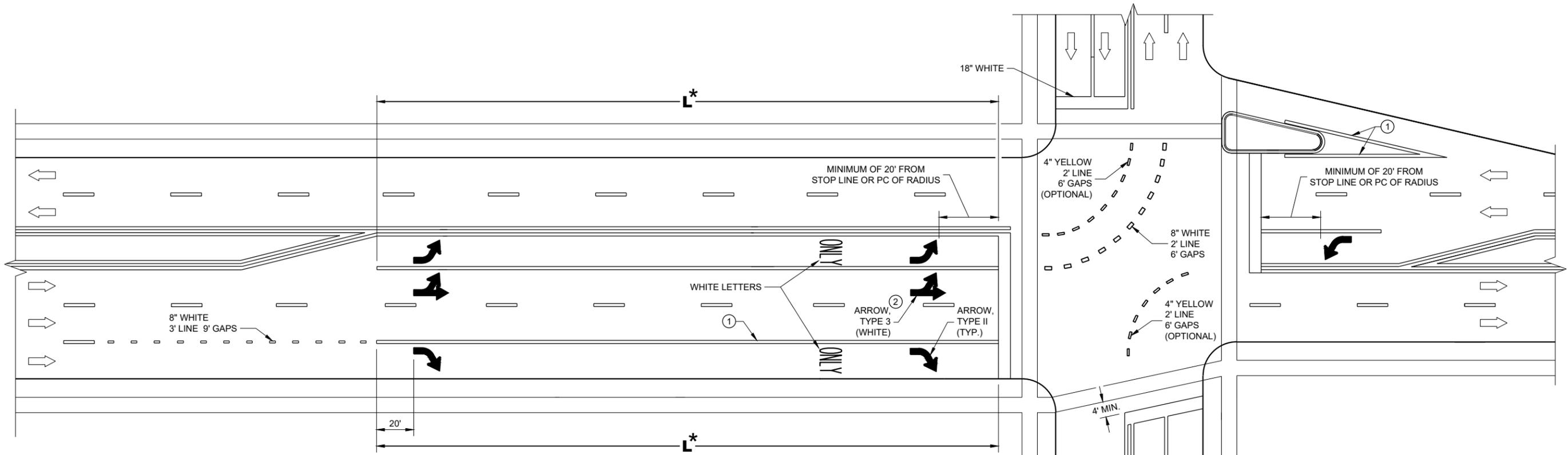
PERMANENT PAVEMENT MARKING



6

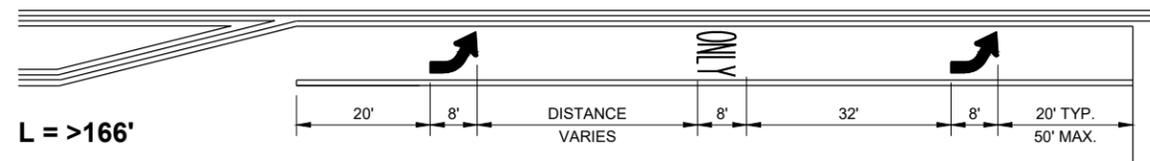
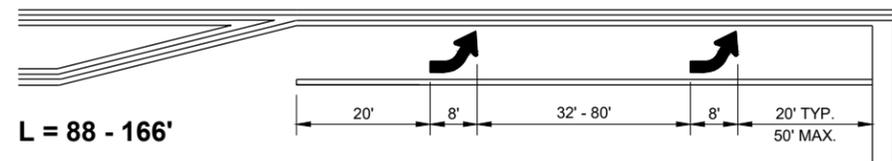
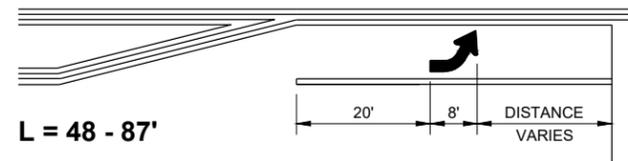
6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Jeannie Silver STATEWIDE SIGNING AND MARKING ENGINEER
<small>FHWA</small>	



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

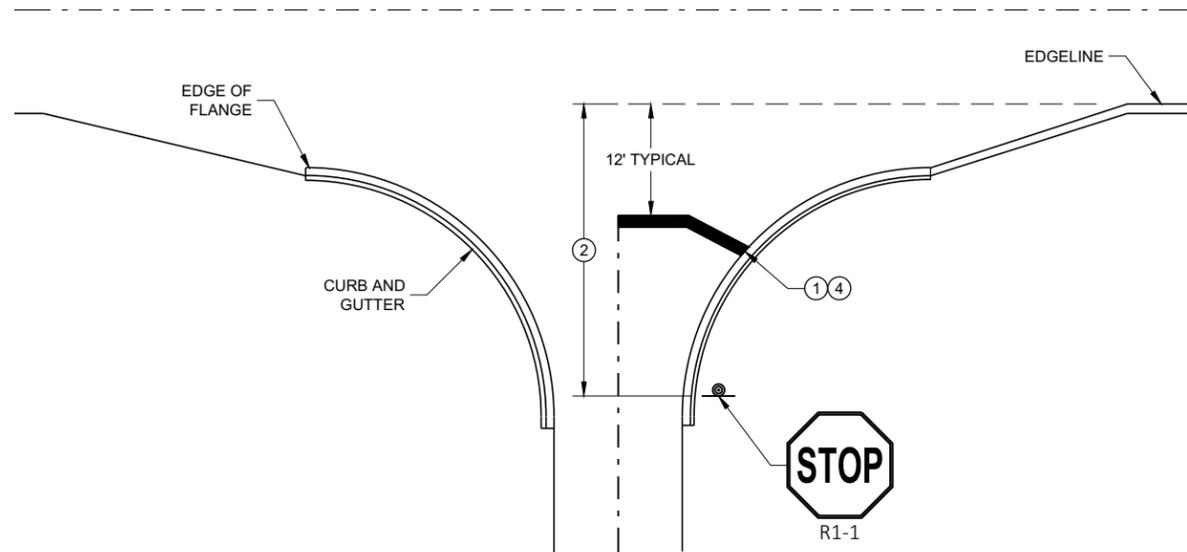
PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

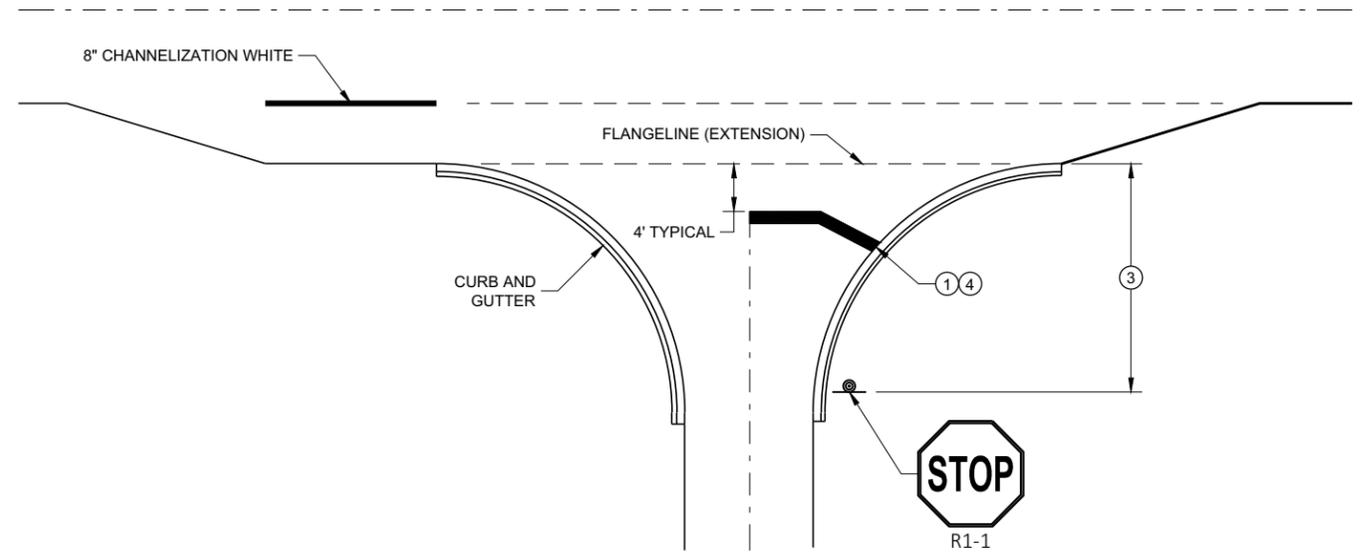
GENERAL NOTES

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

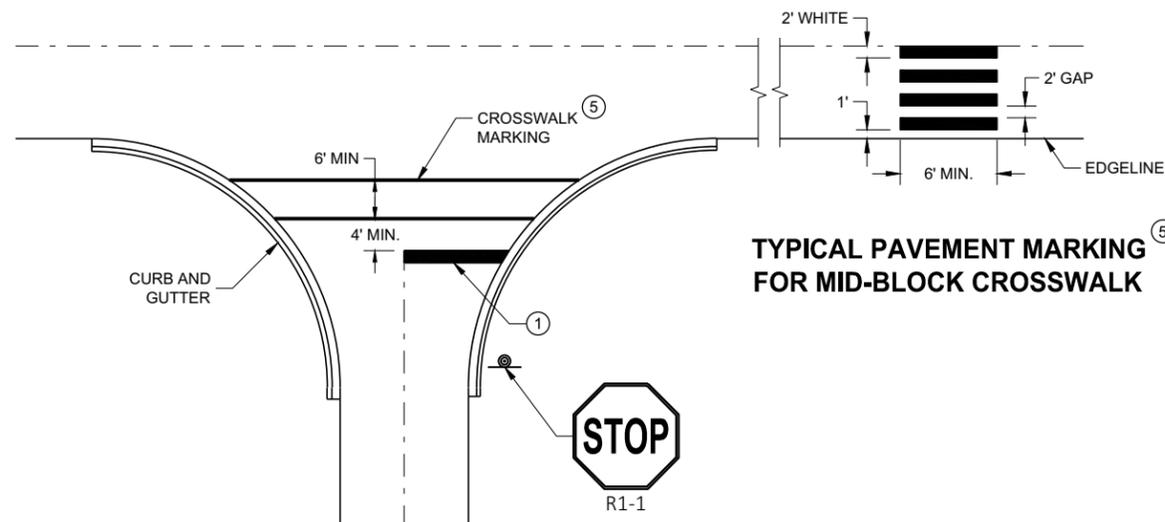
- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
- ③ NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE 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.



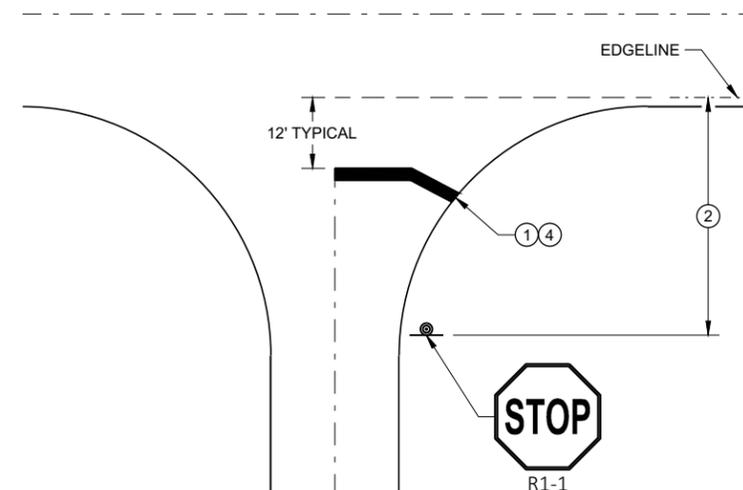
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



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

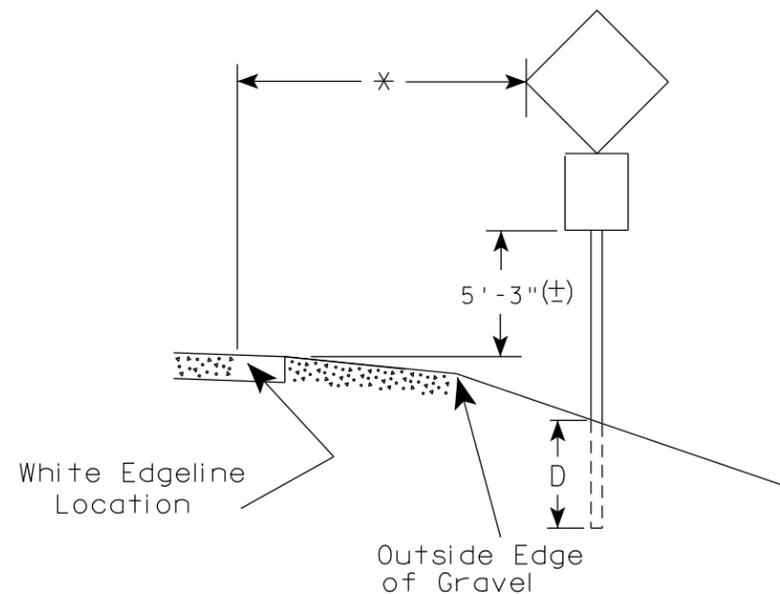
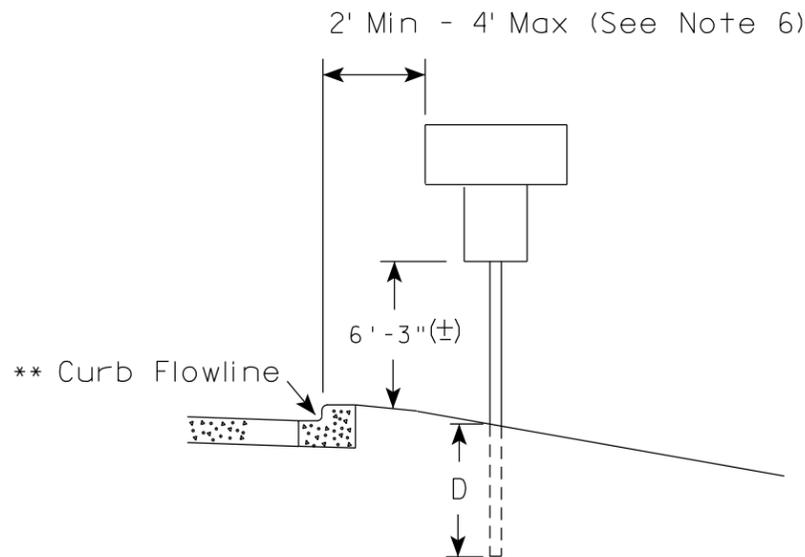
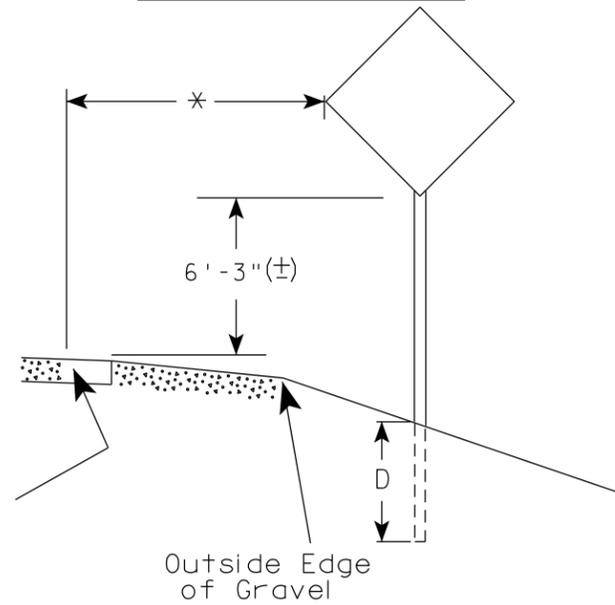
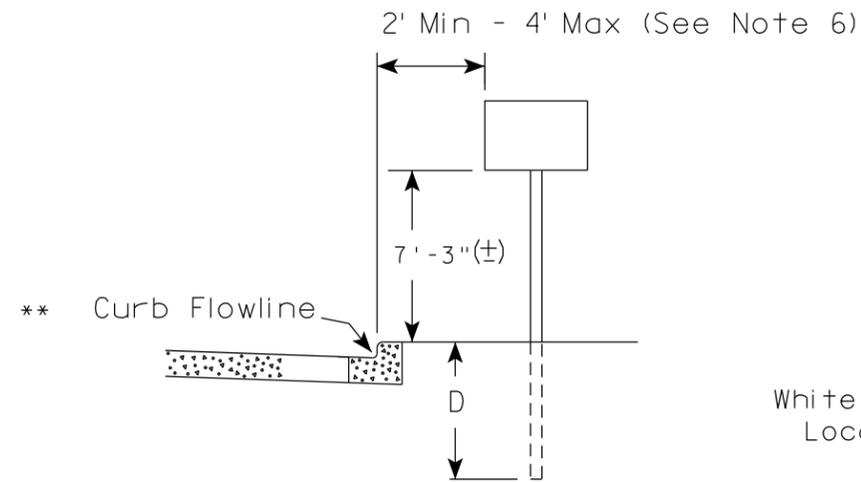
STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

URBAN AREA

RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

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

- GENERAL NOTES**
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
 2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). 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.

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

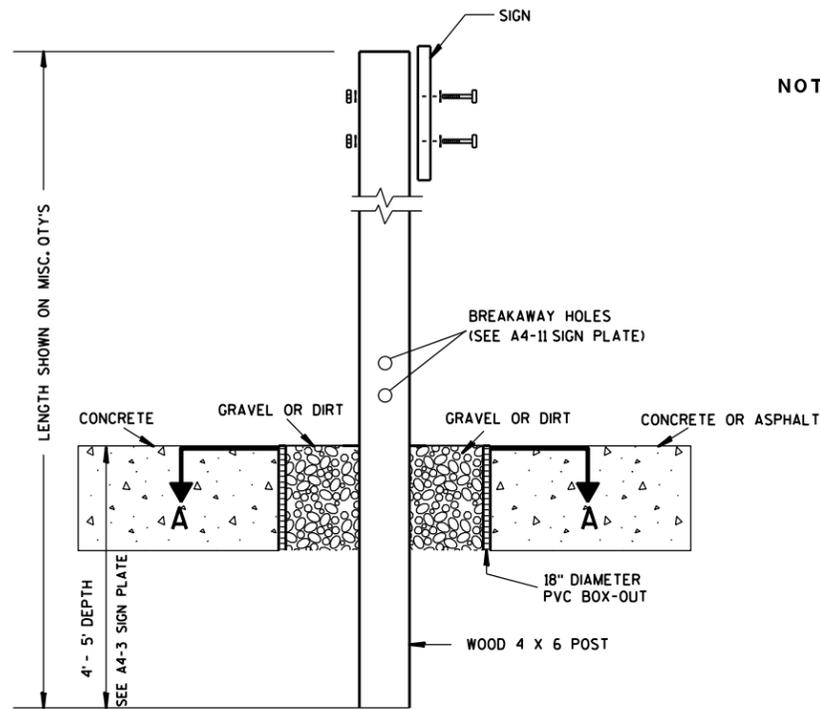
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

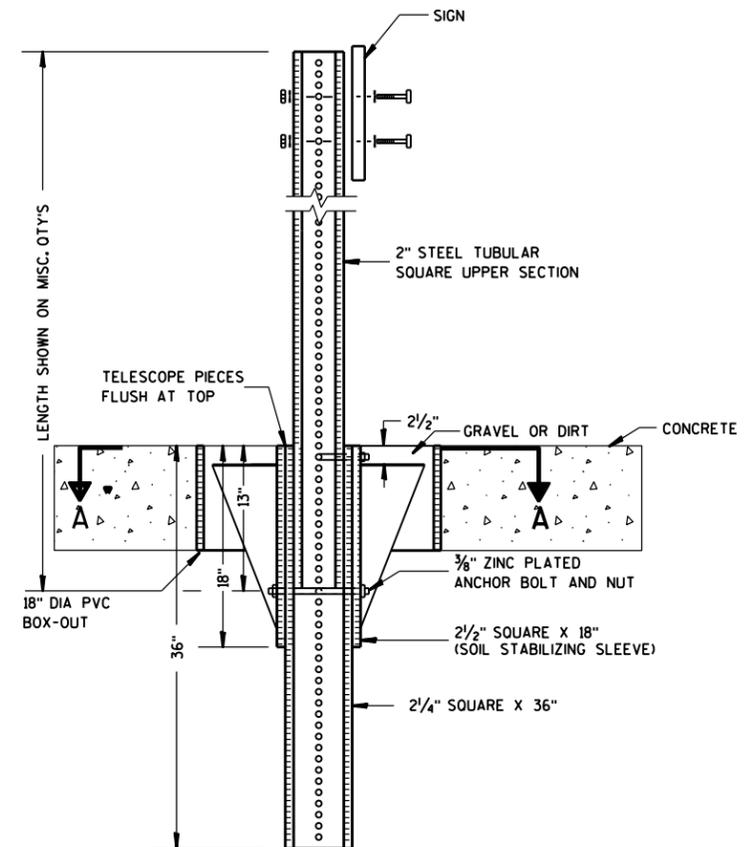
DATE 5/13/2020 PLATE NO. A4-3.22



ELEVATION VIEW

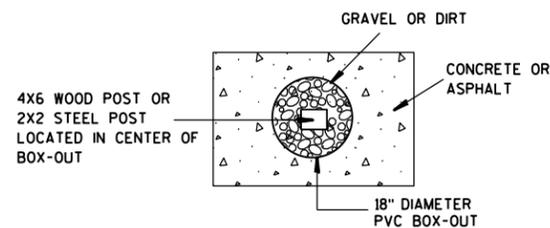
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

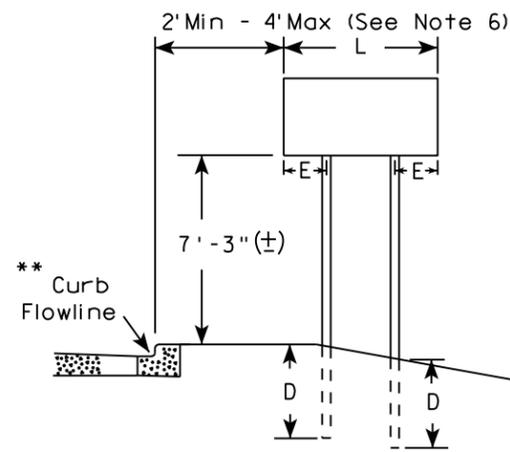
FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B	
<small>WISCONSIN DEPT OF TRANSPORTATION</small>	
APPROVED <i>Matthew R. Rauch</i> <small>for State Traffic Engineer</small>	
<small>DATE 1/27/14</small>	<small>PLATE NO. A4-3B.1</small>

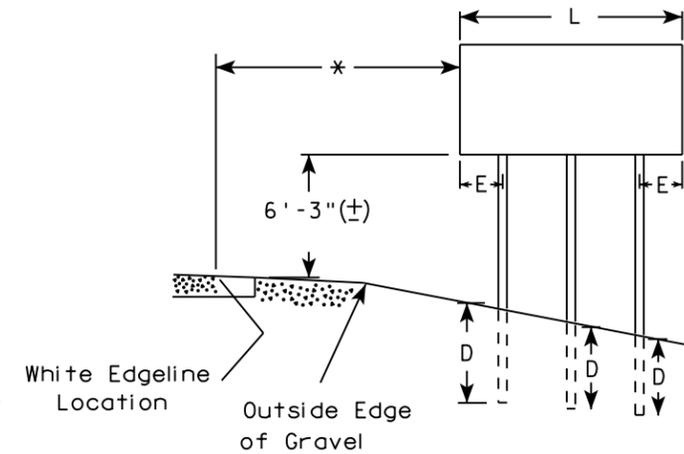
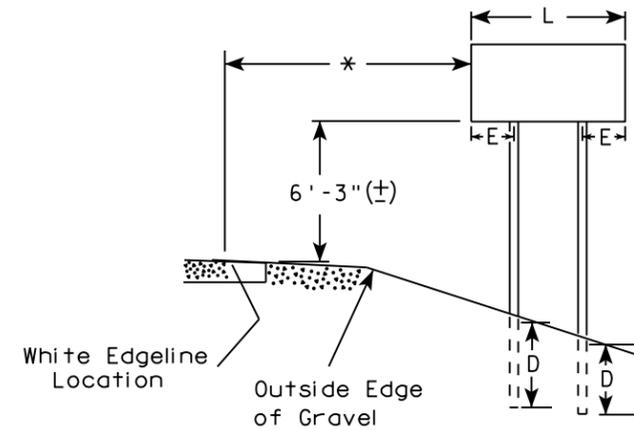
GENERAL NOTES

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" (±).

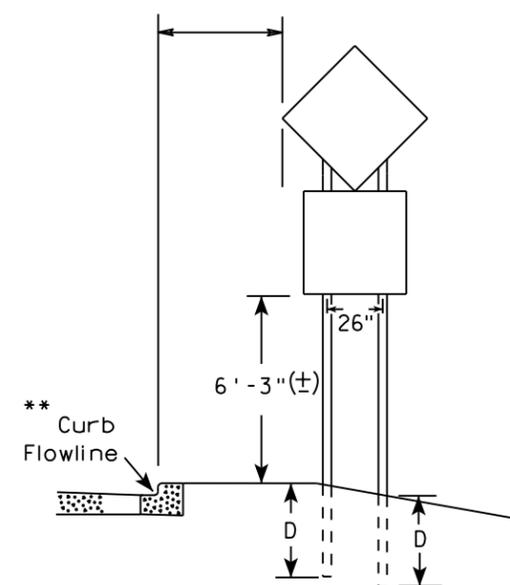
URBAN AREA



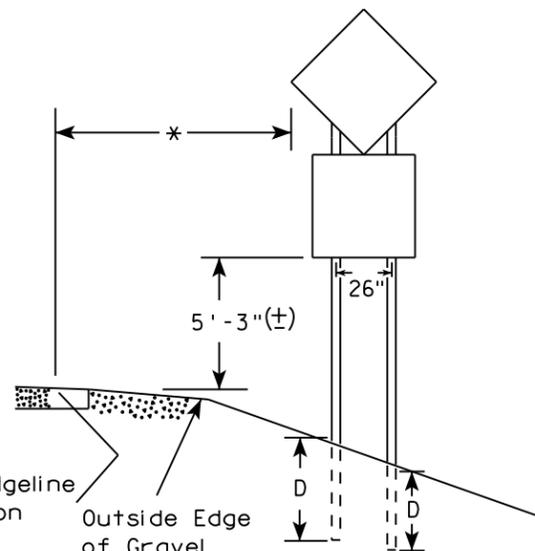
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

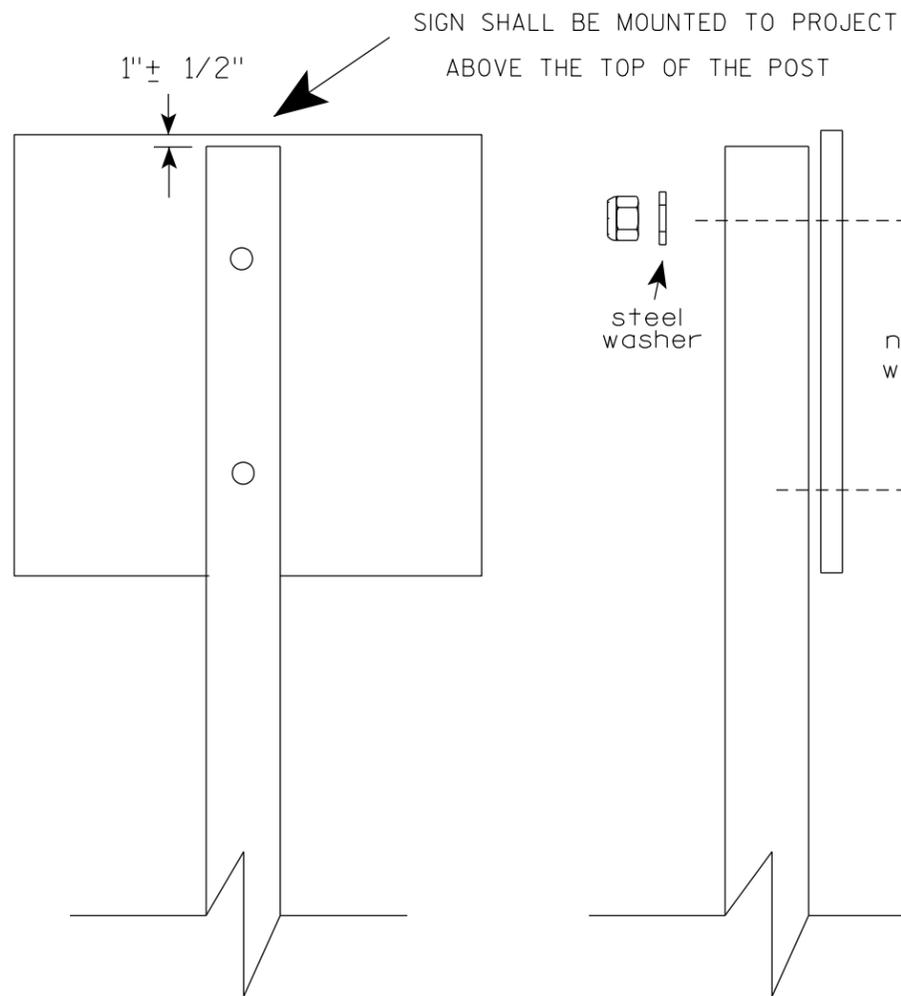
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION
 APPROVED *Matthew R. Rauch*
 For State Traffic Engineer
 DATE 8/21/17 PLATE NO. A4-4.15



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)

MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 3/8" I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS
TO POSTS

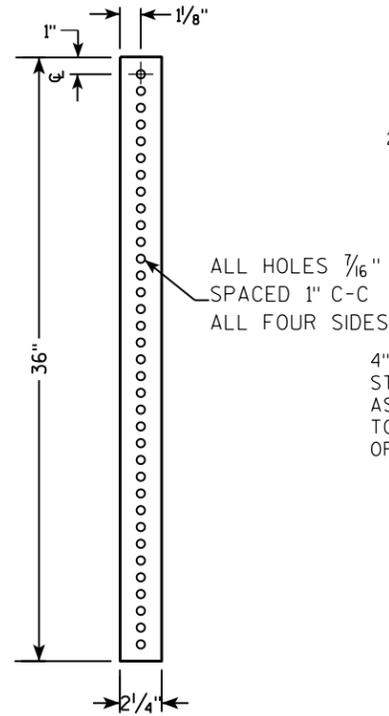
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Rauch*
For State Traffic Engineer

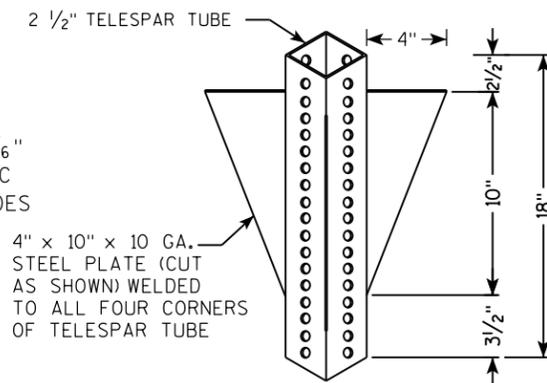
DATE 4/1/2020 PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

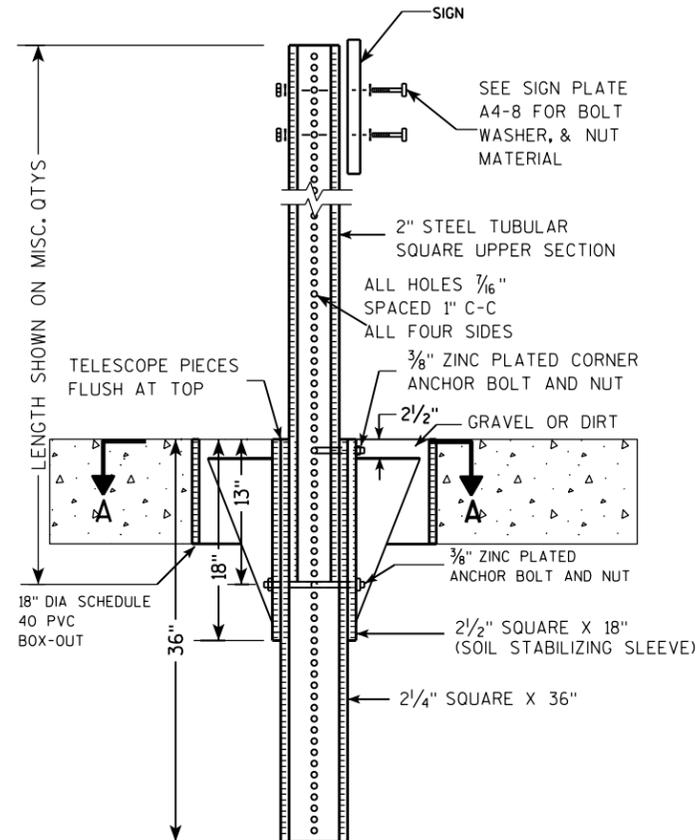
**2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



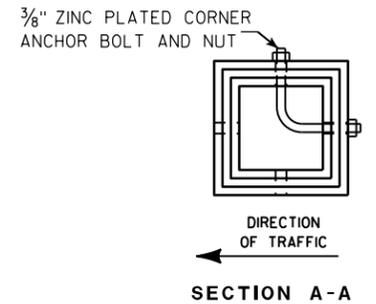
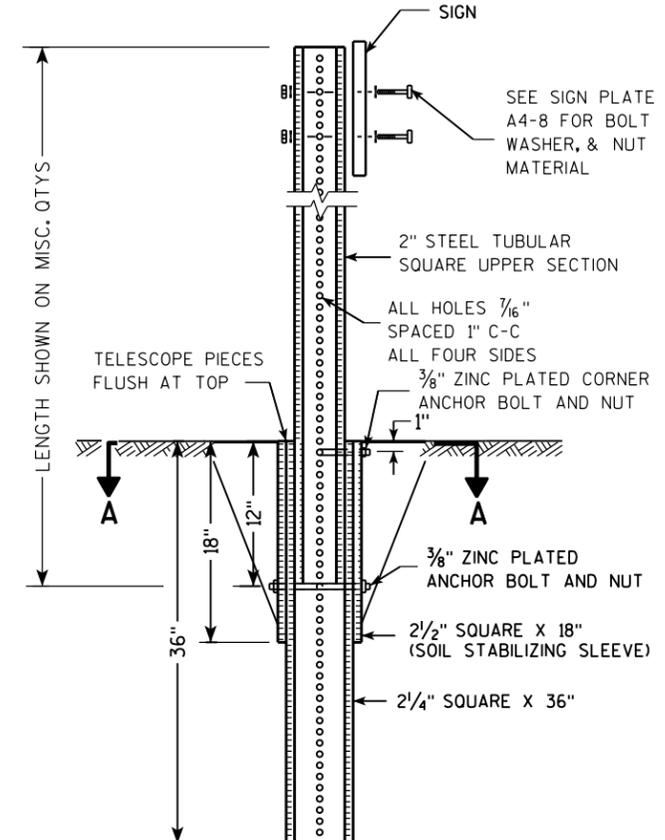
**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**



**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

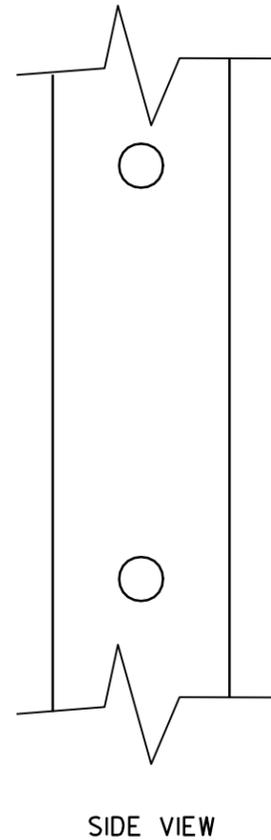
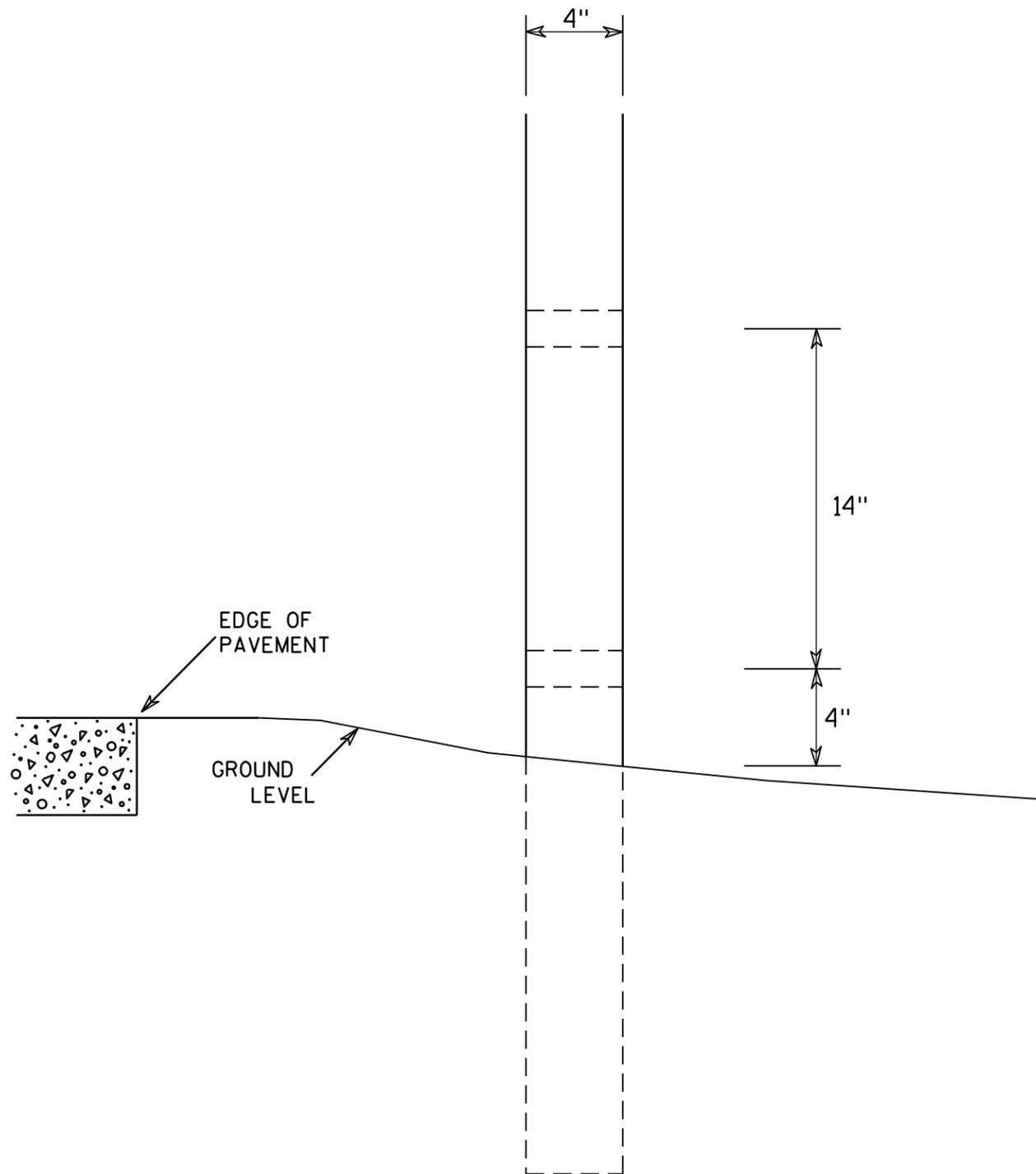
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



GENERAL NOTES

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

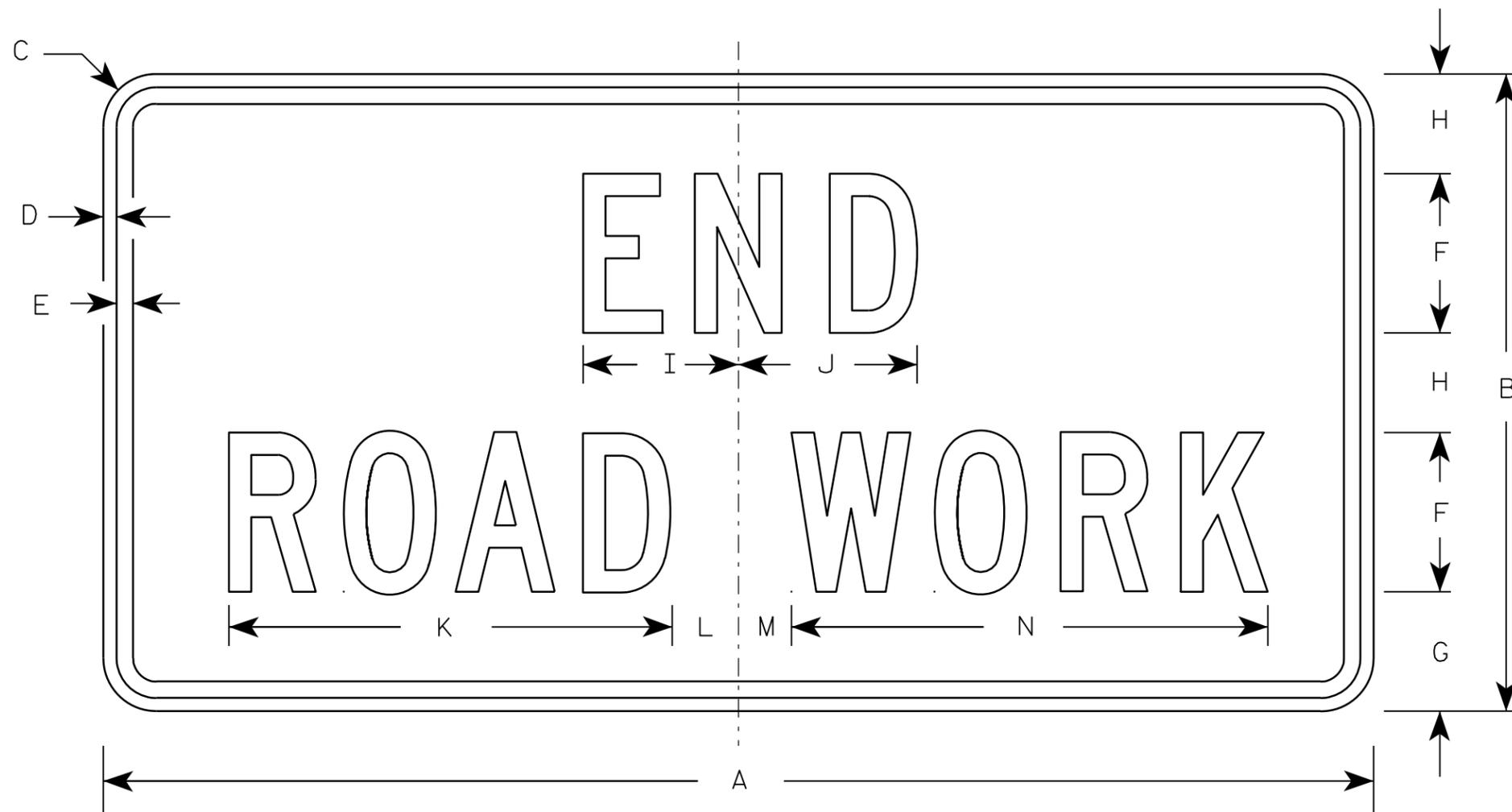
7

7

4 X 6 WOOD POST MODIFICATIONS	
<i>WISCONSIN DEPT OF TRANSPORTATION</i>	
APPROVED	 <small>for State Traffic Engineer</small>
DATE <u>3/27/97</u>	PLATE NO. <u>A4-11.2</u>

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.



G20-2A

7

7

Metric equivalent for this sign is:

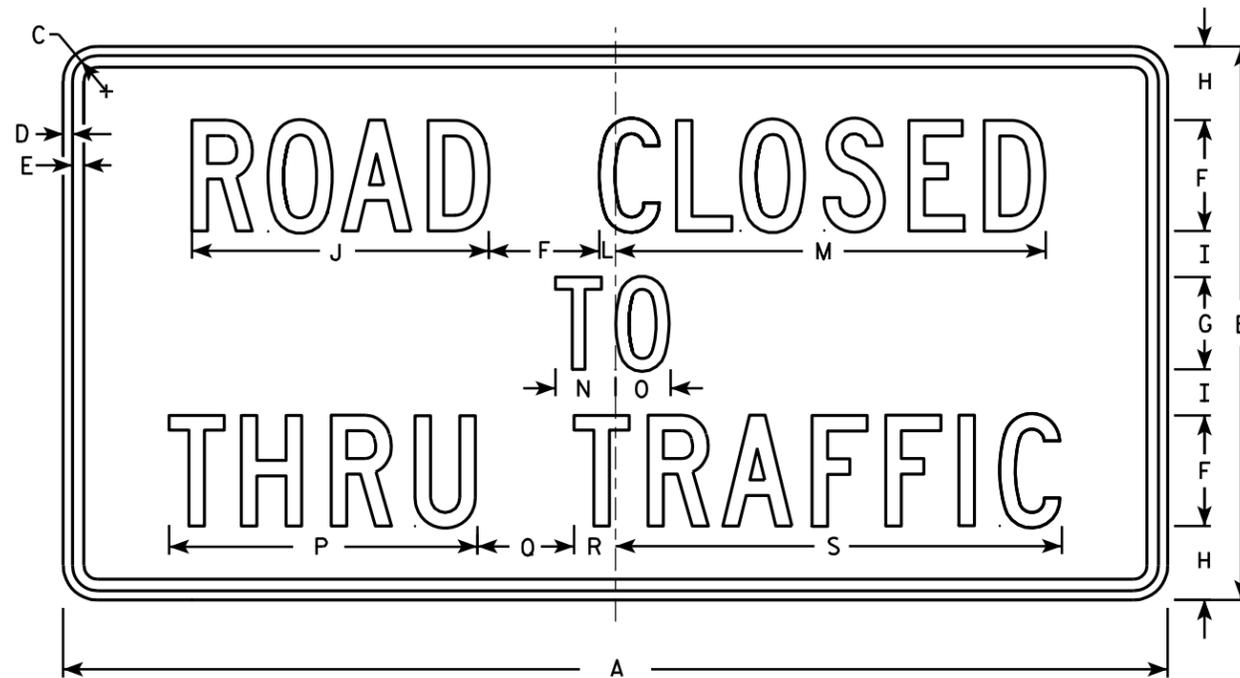
SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

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	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 9/30/09	PLATE NO. G20-2A.8

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 - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



R11-4

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	2 1/2	16 1/8		7/8	23 3/8	3 1/4	3	16 3/4	5 1/4	2 1/4	24 1/4								12.5
3																											
4																											
5																											

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

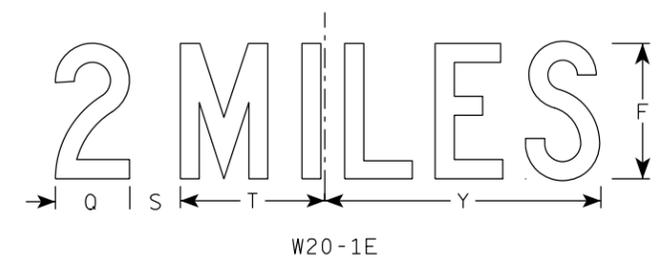
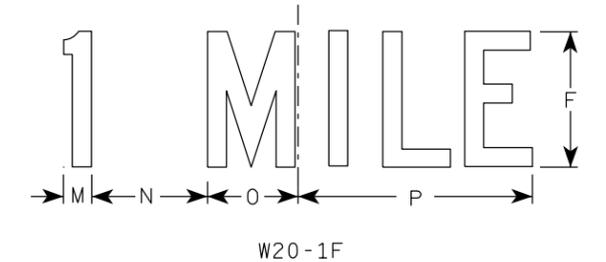
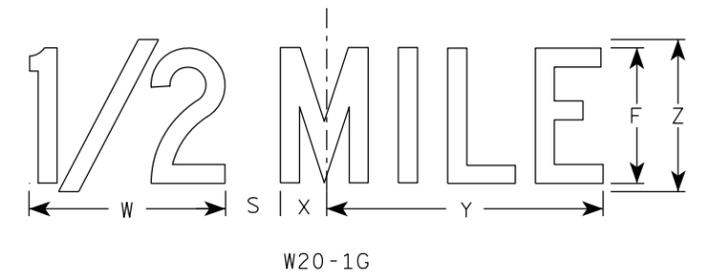
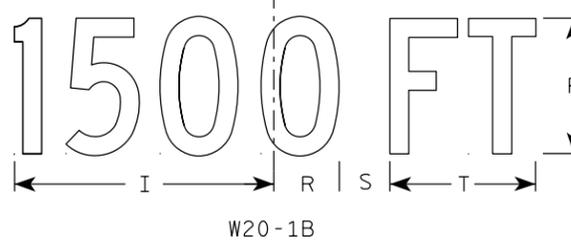
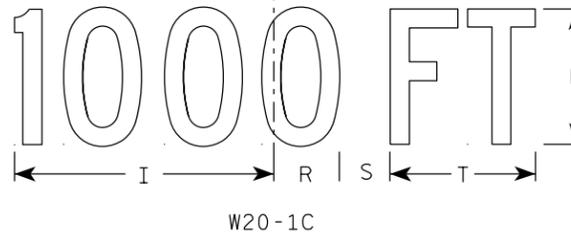
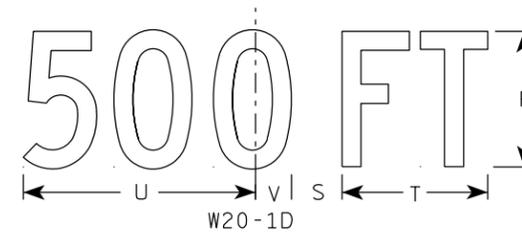
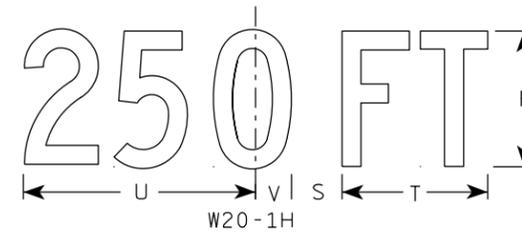
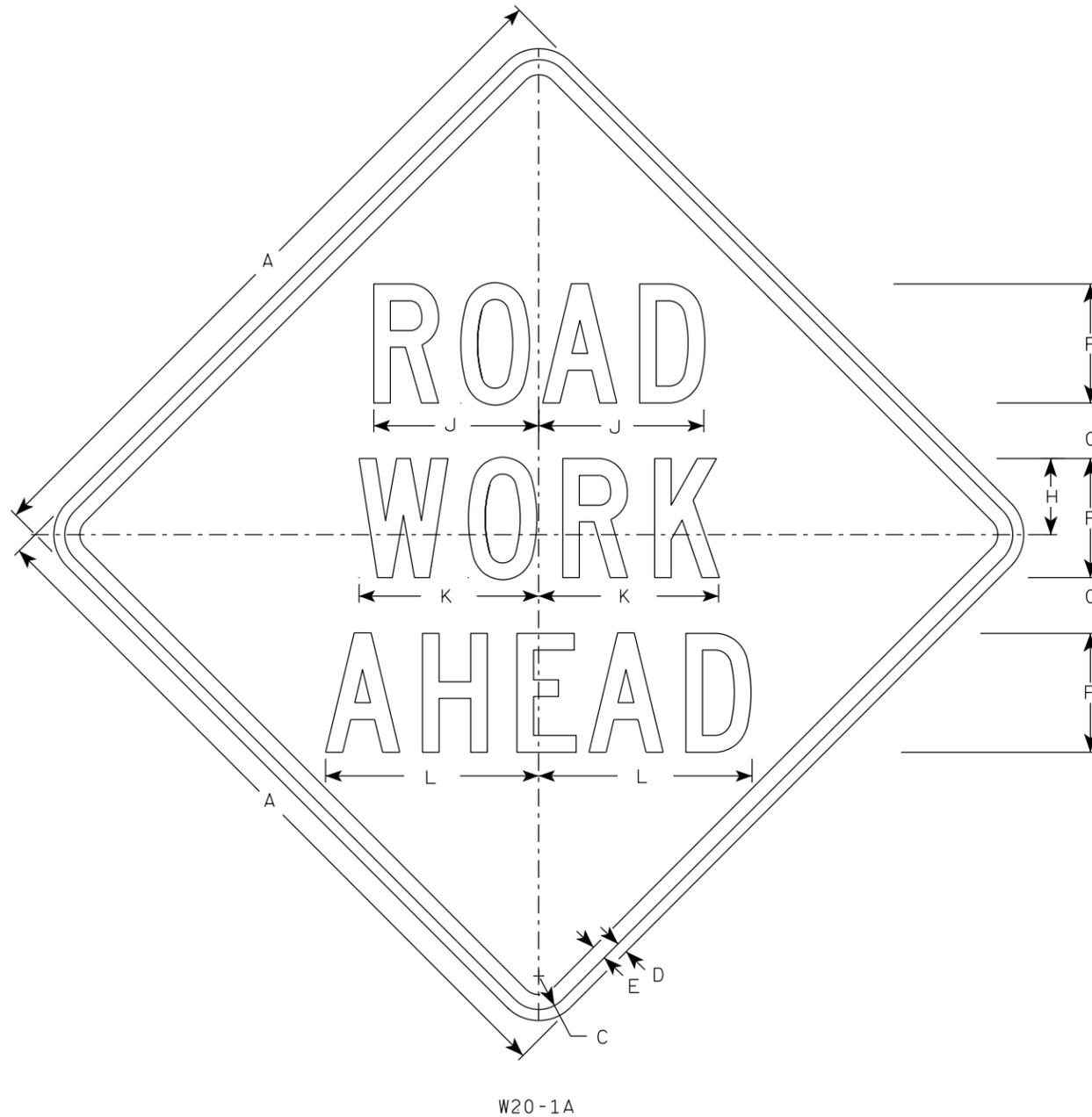
APPROVED *Matthew R. Raush*
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-4.3

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.



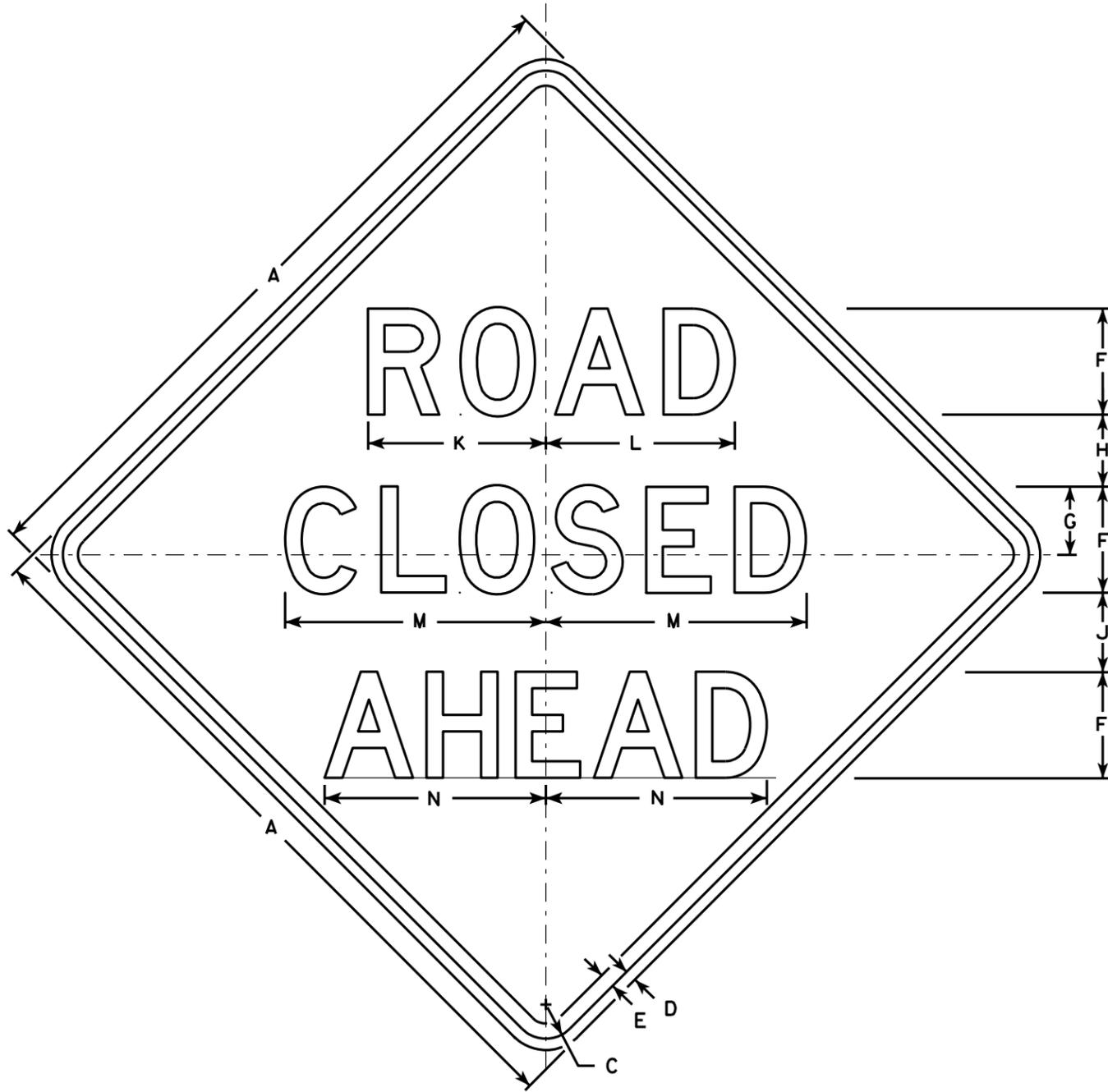
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	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

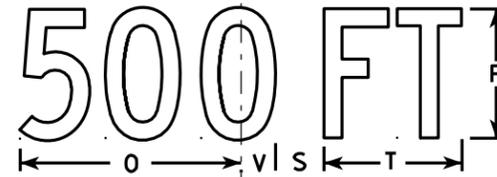
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

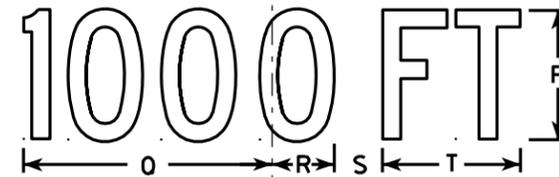
DATE 3/25/2020 PLATE NO. W20-1.11



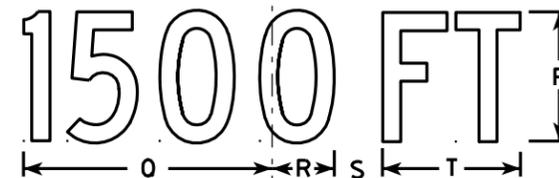
W20-3A



W20-3D



W20-3C



W20-3B



W20-3G



W20-3F

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.

7

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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	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

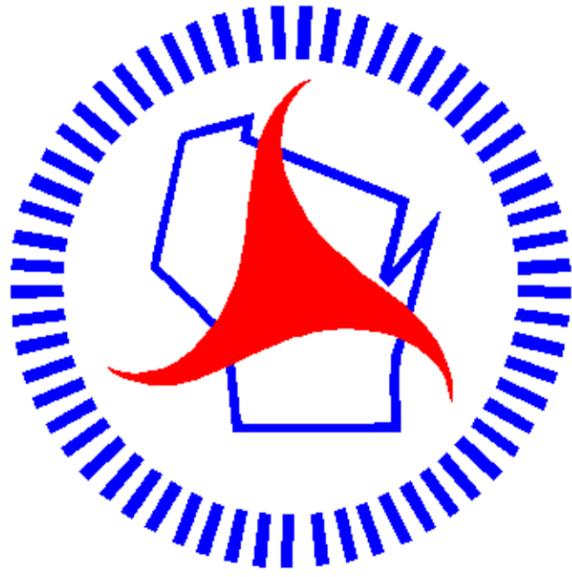
STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

Notes



Wisconsin Department of Transportation

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