SUP

OCTOBER 2024

PROJECT ID: 8864-00-70

WITH: N/A

COUNTY: POLK

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 = 48

N

DESIGN DESIGNATION

A.A.D.T.	2024	=	1600
A.A.D.T.	2044	=	1700
D.H.V.		=	-
D.D.		=	-
T.		=	5%
DESIGN SPEED		=	55 MPH
ESALS		=	102,200

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	955.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE	300 FEET	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
		TELEPHONE	T
MARSH AREA		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
WOODED OR SHRUB AREA		TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

DRESSER - AMERY

VIEW LANE TO STH 65

CTH F

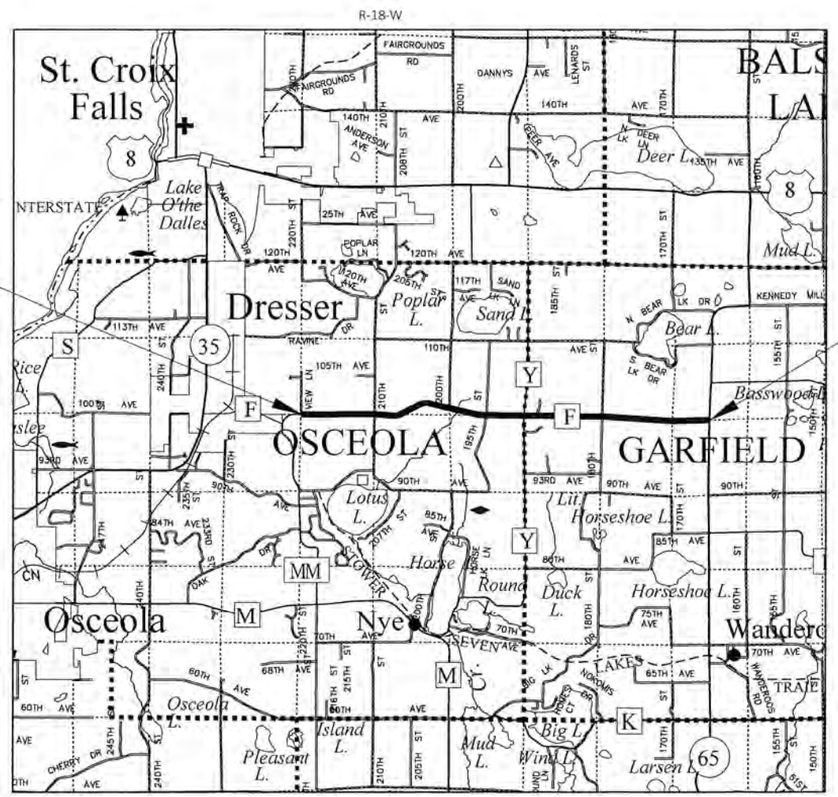
POLK COUNTY

STATE PROJECT NUMBER
8864-00-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8864-00-70	WISC 2025021	1

BEGIN PROJECT
STA 516+00.00
Y = 252592.273
X = 470685.983

END PROJECT
STA 804+21.44
Y = 252208.047
X = 499175.274



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 5.459 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), POLK COUNTY, NAD83 (2011), 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 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID XX.

ACCEPTED FOR
POLK COUNTY

Date: 11Jul24 John W. Kehl
(Signature and Title of Official)

Original Plans Prepared by

SEH
Building a Better World for All of Us®

Short Elliott Hendrickson Inc.
326 S Main Street Suite 100
Rice Lake, WI 54868
715.236.4000 | Main
www.sehinc.com

WISCONSIN
VANCE P. POWERS
E-36761-6
DALLAS
WIS.
PROFESSIONAL ENGINEER

(Signature) 24Jul24 (Date)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	SEH
Designer	SEH
Project Manager	PAULA GROOM, PE
Regional Examiner	TOU YANG, PE
Regional Supervisor	TOU YANG, PE

APPROVED FOR THE DEPARTMENT

DATE: 7/24/24 Paula Groom
(Signature)

E

UTILITIES CONTACTS

BRIGHTSPEED

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MILLTOWN WI 54858
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XCEL ENERGY-DISTRIBUTION

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AMERY WI 54001
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ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
TRAFFIC CONTROL
ALIGNMENT

DESIGN PROJECT MANAGER

SEH
VANCE POWERS
326 S MAIN STREET STE 100
RICE LAKE WI 54868
PHONE: 715-409-9115
EMAIL: VPOWERS@SEHINC.COM

POLK COUNTY HIGHWAY DEPT

JOSH KELCH
900 PHEASANT LANE
BALSAM LAKE WI 54810
PHONE: 715-485-8723
EMAIL: JOSH.KELCH@POLKCOUNTYWI.GOV

WISCONSIN DNR LIAISON

AMY CRONK
DNR NORTHERN REGION HQ
810 W MAPLE STREET
SPOONER WI 54801
PHONE: 715-635-4229
EMAIL: AMY.CRONK@WISCONSIN.GOV

GENERAL NOTES

CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY OPERATIONS, OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LBS/SY/IN.

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE, HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

EROSION CONTROL FEATURES AS SHOWN IN THE PLANS ARE AT APPROXIMATE LOCATIONS. EXACT LOCATIONS WILL BE DETERMINED BY THE CONTRACTOR'S EROSION CONTROL IMPLEMENTATION PLAN (ECIP) AND APPROVED BY THE ENGINEER. MAINTAIN EROSION CONTROL MEASURES UNTIL SUCH A TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NECESSARY.

THE PROPOSED SHOULDER WIDTH SHOWN IN THE TYPICAL SECTIONS ARE MINIMUM WIDTH. PERPETUATE EXISTING SHOULDERS THAT ARE WIDER THAN WHAT IS SHOWN IN THE TYPICAL SECTIONS.

THE CONTRACTOR'S PAVING OPERATION SHALL BE CONSISTENT WITH THE TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.

SAWCUTS, AS SHOWN ON THE PLANS, ARE SUGGESTED LOCATIONS AND MAY BE ADJUSTED AT THE DISCRETION OF THE ENGINEER TO BETTER SUIT FIELD CONDITIONS.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PAVING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAYS SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER OPERATIONS ARE COMPLETED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

TRAFFIC CONTROL DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

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

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIPTURF:	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPETURF:			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT:												
ASPHALT:	.70 - .95											
CONCRETE:	.80 - .95											
BRICK:	.70 - .80											
DRIVES, WALKS:	.75 - .85											
ROOFS:	.75 - .95											
GRAVEL ROADS, SHOULDERS:	.40 - .60											

TOTAL PROJECT AREA = 43.6 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 0 ACRES

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

2

2

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	PROJECT OVERVIEW	SHEET 3	E

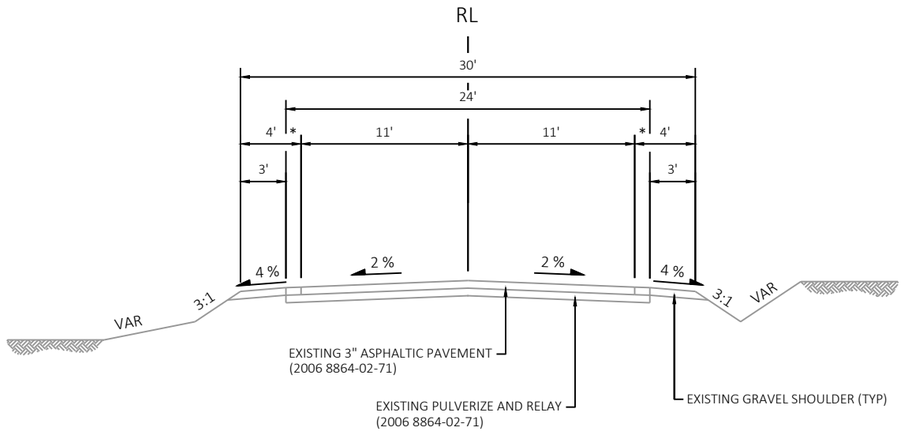
FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\020201_PO.DWG
LAYOUT NAME - 01

PLOT DATE : 7/22/2024 9:12 AM PLOT BY : ANNIE JEROME PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 44

SUPERELEVATION TABLE

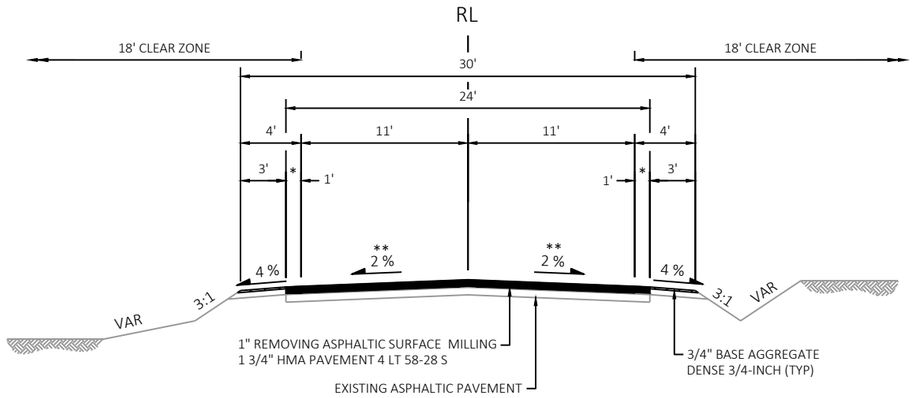
Station	Description	Left Outside Shoulder	Left Outside Lane	Right Outside Shoulder	Right Outside Lane
516+00.00'	Begin Alignment	-4.00%	-2.00%	-4.00%	-2.00%
525+08.18'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
525+61.51'	End Normal Crown	-4.00%	-2.00%	-2.00%	-2.00%
526+14.85'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
526+68.18'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
527+21.51'	Low Shoulder Match	-4.00%	-4.00%	4.00%	4.00%
527+74.85'	Begin Full Super	-6.00%	-6.00%	6.00%	6.00%
529+59.68'	End Full Super	-6.00%	-6.00%	6.00%	6.00%
533+29.63'	Begin Full Super	6.00%	6.00%	-6.00%	-6.00%
534+72.97'	End Full Super	6.00%	6.00%	-6.00%	-6.00%
535+26.31'	Low Shoulder Match	4.00%	4.00%	4.00%	4.00%
535+79.64'	Reverse Crown	2.00%	2.00%	-4.00%	-2.00%
536+32.97'	Level Crown	0.00%	0.00%	-4.00%	-2.00%
536+86.31'	Begin Normal Crown	-2.00%	-2.00%	-4.00%	-2.00%
537+39.64'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
538+19.83'	End Normal Shoulder	4.00%	2.00%	4.00%	2.00%
538+72.83'	End Normal Crown	-2.00%	-2.00%	-4.00%	-2.00%
539+25.83'	Level Crown	0.00%	0.00%	-4.00%	-2.00%
539+78.83'	Begin Full Super	2.00%	2.00%	-4.00%	-2.00%
539+78.83'	Reverse Crown	2.00%	2.00%	-4.00%	-2.00%
544+58.86'	End Full Super	2.00%	2.00%	4.00%	2.00%
544+58.86'	Reverse Crown	2.00%	2.00%	-4.00%	-2.00%
545+11.86'	Level Crown	0.00%	0.00%	-4.00%	-2.00%
545+64.86'	Begin Normal Crown	-2.00%	-2.00%	-4.00%	-2.00%
546+17.86'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
552+37.74'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
552+91.07'	End Normal Crown	-4.00%	-2.00%	-2.00%	-2.00%
553+44.40'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
553+97.74'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
554+08.40'	Begin Full Super	-4.00%	-2.40%	2.40%	2.40%
556+27.77'	End Full Super	-4.00%	-2.40%	2.40%	2.40%
558+38.44'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
558+91.77'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
559+45.10'	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-2.00%
559+98.44'	Begin Normal Shoulder	4.00%	2.00%	4.00%	2.00%
565+53.44'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
566+06.60'	End Normal Crown	-2.00%	-2.00%	-4.00%	-2.00%
566+59.76'	Level Crown	0.00%	0.00%	-4.00%	-2.00%
567+12.92'	Reverse Crown	2.00%	2.00%	-4.00%	-2.00%
567+60.76'	Begin Full Super	3.80%	3.80%	-4.00%	-3.80%
570+12.84'	End Full Super	3.80%	3.80%	-4.00%	-3.80%
570+60.68'	Reverse Crown	2.00%	2.00%	-4.00%	-2.00%
571+13.84'	Level Crown	0.00%	0.00%	-4.00%	-2.00%
571+67.00'	Begin Normal Crown	-2.00%	-2.00%	-4.00%	-2.00%
572+20.16'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
578+76.71'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
579+30.04'	End Normal Crown	-4.00%	-2.00%	-2.00%	-2.00%
579+83.37'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
580+36.71'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
580+90.04'	Low Shoulder Match	-4.00%	-4.00%	4.00%	4.00%
581+43.37'	Begin Full Super	-6.00%	-6.00%	6.00%	6.00%
587+10.21'	End Full Super	-6.00%	-6.00%	6.00%	6.00%
587+63.54'	Low Shoulder Match	4.00%	4.00%	4.00%	4.00%
588+16.88'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
588+70.21'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
589+23.54'	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-2.00%
589+76.88'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
598+36.03'	End Normal Shoulder	4.00%	2.00%	4.00%	2.00%
598+91.36'	End Normal Crown	-2.00%	-2.00%	-4.00%	-2.00%
599+44.70'	Level Crown	0.00%	0.00%	-4.00%	-2.00%
599+98.03'	Reverse Crown	2.00%	2.00%	-4.00%	-2.00%
600+51.36'	Low Shoulder Match	4.00%	4.00%	-4.00%	-4.00%
601+04.70'	Begin Full Super	6.00%	6.00%	6.00%	6.00%
608+46.74'	End Full Super	6.00%	6.00%	-6.00%	-6.00%
609+00.07'	Low Shoulder Match	4.00%	4.00%	-4.00%	-4.00%
609+53.40'	Reverse Crown	2.00%	2.00%	-4.00%	-2.00%



EXISTING TYPICAL SECTION

STA 516+00 - STA 804+21.44

*LEFT AND RIGHT PAVED SHOULDER WIDTH EQUALS 2' AT
STA 580+43 - STA 587+45
STA 600+08 - STA 608+68



FINISHED TYPICAL SECTION

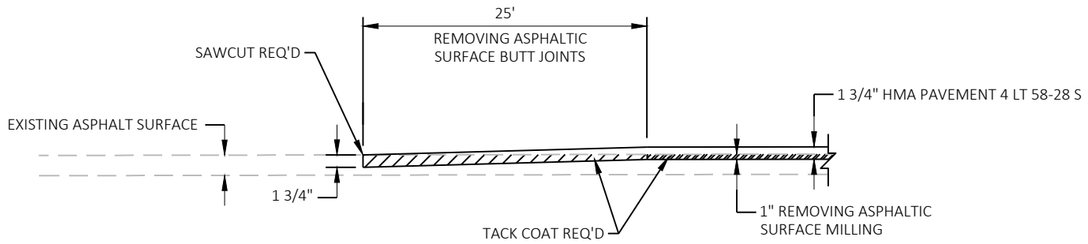
STA 516+00 - STA 804+21.44

*LEFT AND RIGHT PAVED SHOULDER WIDTH EQUALS 2' AT
STA 580+43 - STA 587+45
STA 600+08 - STA 608+68

** SEE SUPERELEVATION TABLE

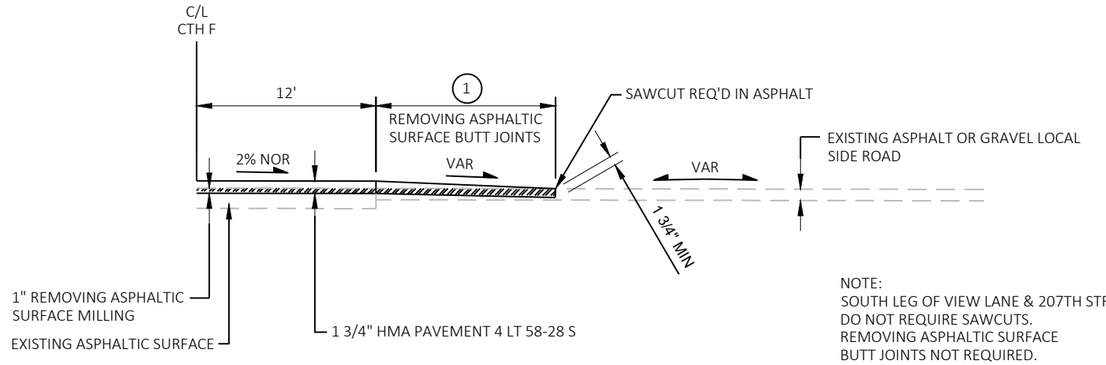
SUPERELEVATION TABLE (CONT'D)

Station	Description	Left Outside Shoulder	Left Outside Lane	Right Outside Shoulder	Right Outside Lane
610+06.74'	Level Crown	0.00%	0.00%	-4.00%	-2.00%
610+60.07'	Begin Normal Crown	2.00%	2.00%	4.00%	2.00%
611+13.40'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
639+42.43'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
639+95.77'	End Normal Crown	-4.00%	-2.00%	-2.00%	-2.00%
640+49.10'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
641+02.43'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
641+55.77'	Low Shoulder Match	-4.00%	-4.00%	4.00%	4.00%
642+09.10'	Begin Full Super	-6.00%	-6.00%	6.00%	6.00%
644+08.32'	End Full Super	6.00%	6.00%	6.00%	6.00%
644+61.36'	Low Shoulder Match	-4.00%	-4.00%	4.00%	4.00%
645+14.69'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
645+68.02'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
646+21.36'	Begin Normal Crown	-4.00%	-2.00%	-2.00%	-2.00%
646+74.69'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
774+99.63'	End Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
775+52.79'	End Normal Crown	-4.00%	-2.00%	-2.00%	-2.00%
776+05.95'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
776+59.11'	Reverse Crown	4.00%	2.00%	2.00%	2.00%
777+06.95'	Begin Full Super	-4.00%	-3.80%	3.80%	3.80%
779+80.41'	End Full Super	-4.00%	-3.80%	3.80%	3.80%
780+28.25'	Reverse Crown	-4.00%	-2.00%	2.00%	2.00%
780+81.41'	Level Crown	-4.00%	-2.00%	0.00%	0.00%
781+34.57'	Begin Normal Crown	4.00%	2.00%	2.00%	2.00%
781+87.73'	Begin Normal Shoulder	-4.00%	-2.00%	-4.00%	-2.00%
804+91.02'	End Alignment	-4.00%	-2.00%	-4.00%	-2.00%



BUTT JOINT

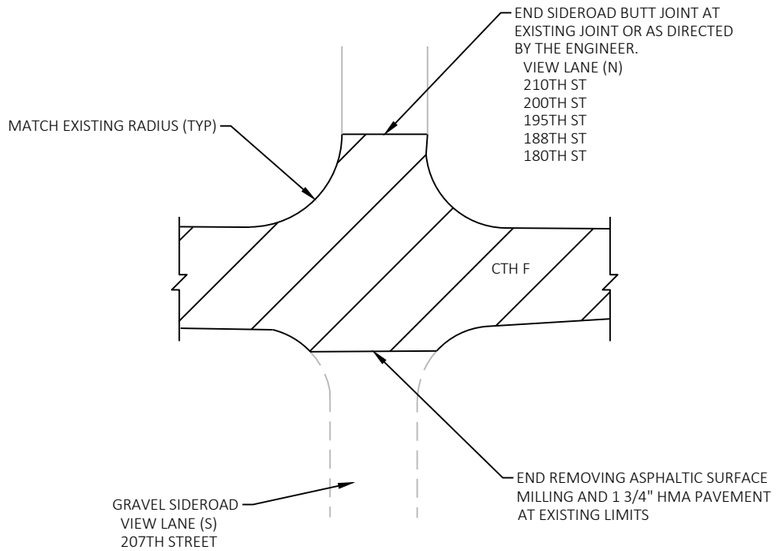
CTH F
STA 516+00
STA 804+21.44



SIDE ROAD BUTT JOINT

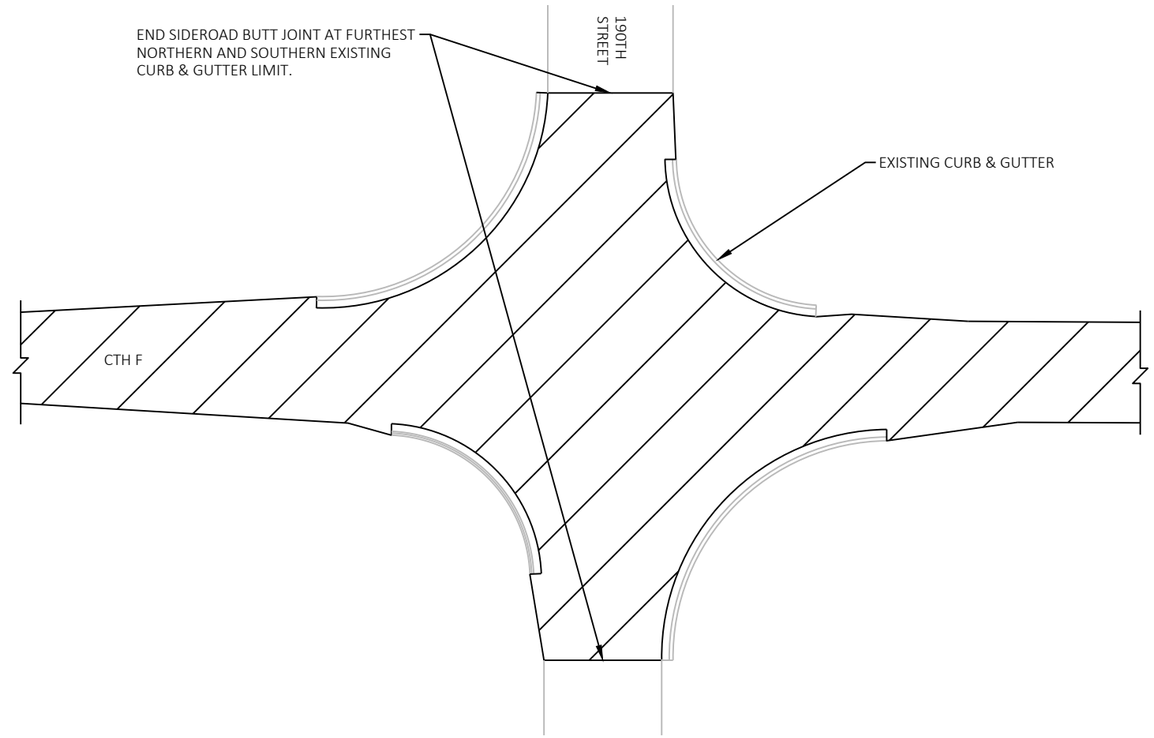
NOTE:
SOUTH LEG OF VIEW LANE & 207TH STREET
DO NOT REQUIRE SAWCUTS.
REMOVING ASPHALTIC SURFACE
BUTT JOINTS NOT REQUIRED.

(1) 25' NORMAL, EXISTING JOINT, OR LIMITS OF CURB & GUTTER. THE EXACT DISTANCE WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. EXISTING GRAVEL SIDEROADS DO NOT REQUIRE A SAWCUT AND BUTT JOINT.



RURAL INTERSECTION PAVING LIMITS

WITH NO CURB & GUTTER



RURAL INTERSECTION PAVING LIMITS

WITH CURB & GUTTER
190TH STREET

2

2

ROAD WORK AHEAD W20-1A

VIEW LANE

520+00

530+00

540+00

550+00

560+00

CTH F

570+00

210TH STREET

ROAD WORK AHEAD W20-1A

580+00

590+00

600+00

610+00

207TH STREET

620+00

200TH STREET

ROAD WORK AHEAD W20-1A

630+00

640+00

650+00

195TH STREET

ROAD WORK AHEAD W20-1A

660+00

670

MATCHLINE STA 670+00

N

BEGIN PROJECT
STA 516+00.00

USE SDD "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 45 MPH
OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
AND "TRAFFIC CONTROL, SIGNING ON ROADS WITH MILLED SURFACES"
AND "TRAFFIC CONTROL, FOR LANE CLOSURE WITH FLAGGING OPERATION"

MATCHLINE STA 670+00

+00

680+00

690+00

700+00

710+00

720+00

730+00

CTH F

740+00

750+00

760+00

770+00

780+00

790+00

800+00

STH 65

190TH STREET

188TH STREET

180TH STREET

ROAD WORK AHEAD W20-1A

ROAD WORK AHEAD W20-1A

ROAD WORK AHEAD W20-1A

END ROAD WORK
G20-2A
48"X24"

ROAD WORK AHEAD W20-1A

USE SDD "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 45 MPH
OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC"
AND "TRAFFIC CONTROL, SIGNING ON ROADS WITH MILLED SURFACES"
AND "TRAFFIC CONTROL, FOR LANE CLOSURE WITH FLAGGING OPERATION"

N

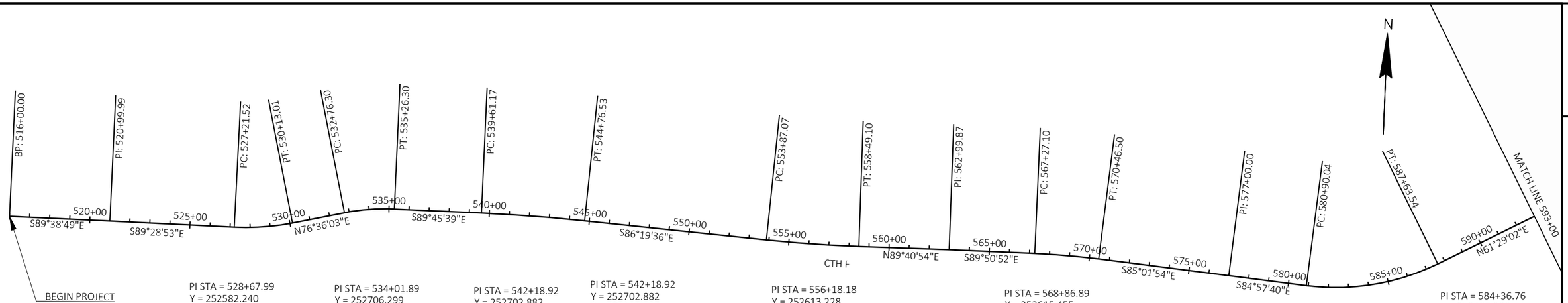
END PROJECT
STA 804+21.44

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	TRAFFIC CONTROL	SHEET 6	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\025100_TC.DWG
LAYOUT NAME - 01

PLOT DATE : 7/22/2024 9:13 AM PLOT BY : ANNIE JEROME PLOT NAME : PLOT SCALE : 1 IN:1000 FT

WISDOT/CADDS SHEET 44



BEGIN PROJECT
STA 516+00.00
Y = 252592.273
X = 470685.983

PI STA = 528+67.99
Y = 252582.240
X = 471953.928
DELTA = 13°55'04" LT
D = 4°46'29"
T = 146.47'
L = 291.50'
R = 1200.00'
PC STA = 527+21.52
Y = 252583.565
X = 471807.466
PT STA = 530+13.01
Y = 252616.181
X = 472096.410
DB = S89°28'53"E
DA = N76°36'03"E

PI STA = 534+01.89
Y = 252706.299
X = 472474.705
DELTA = 13°38'18" RT
D = 5°27'19"
T = 125.59'
L = 250.00'
R = 1050.26'
PC STA = 532+76.30
Y = 252677.194
X = 472352.531
PT STA = 535+26.30
Y = 252705.774
X = 472600.298
DB = N76°36'03"E
DA = S89°45'39"E

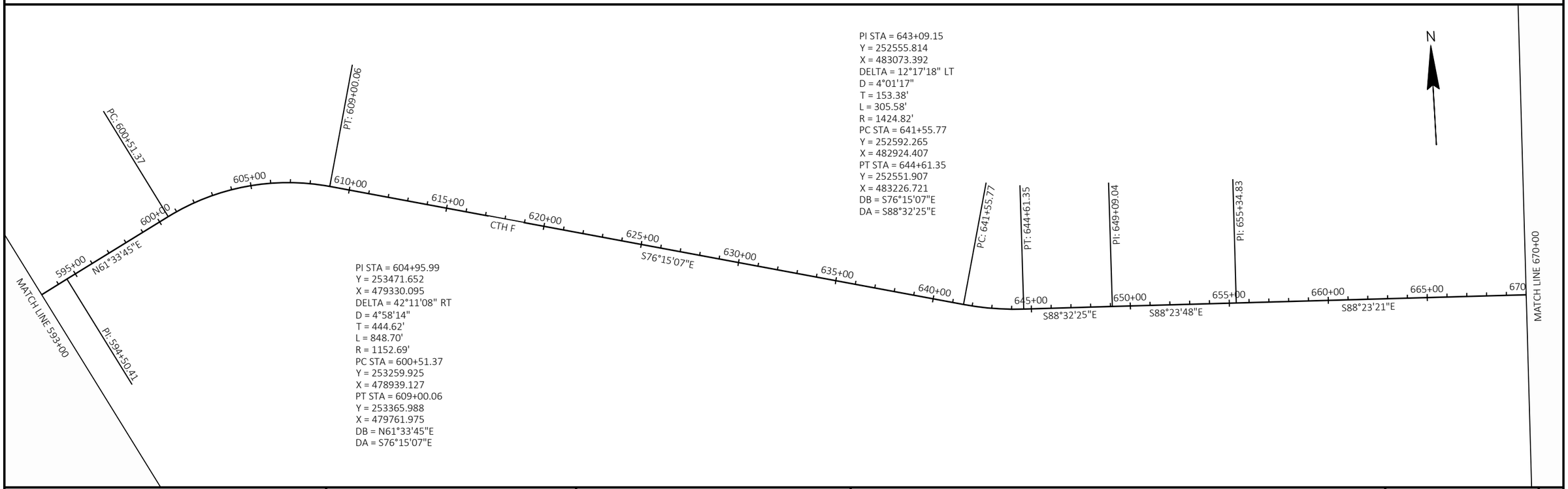
PI STA = 542+18.92
Y = 252702.882
X = 473292.916
DELTA = 3°26'02" RT
D = 0°39'59"
T = 257.75'
L = 515.36'
R = 8598.68'
PC STA = 539+61.17
Y = 252703.959
X = 473035.163
PT STA = 544+76.53
Y = 252686.369
X = 473550.141
DB = S89°45'39"E
DA = S86°19'36"E

PI STA = 542+18.92
Y = 252702.882
X = 473292.916
DELTA = 3°26'02" RT
D = 0°39'59"
T = 257.75'
L = 515.36'
R = 8598.68'
PC STA = 539+61.17
Y = 252703.959
X = 473035.163
PT STA = 544+76.53
Y = 252686.369
X = 473550.141
DB = S89°45'39"E
DA = S86°19'36"E

PI STA = 556+18.18
Y = 252613.228
X = 474689.450
DELTA = 3°59'29" LT
D = 0°51'50"
T = 231.11'
L = 462.03'
R = 6632.17'
PC STA = 553+87.07
Y = 252628.034
X = 474458.816
PT STA = 558+49.10
Y = 252614.512
X = 474920.556
DB = S86°19'36"E
DA = N89°40'54"E

PI STA = 568+86.89
Y = 252615.455
X = 475958.339
DELTA = 4°48'58" RT
D = 1°30'28"
T = 159.80'
L = 319.41'
R = 3800.00'
PC STA = 567+27.10
Y = 252615.880
X = 475798.542
PT STA = 570+46.50
Y = 252601.616
X = 476117.537
DB = S89°50'52"E
DA = S85°01'54"E

PI STA = 584+36.76
Y = 252480.308
X = 477502.488
DELTA = 33°33'18" LT
D = 4°58'56"
T = 346.71'
L = 673.49'
R = 1150.00'
PC STA = 580+90.04
Y = 252510.761
X = 477157.114
PT STA = 587+63.54
Y = 252645.831
X = 477807.140
DB = S84°57'40"E
DA = N61°29'02"E

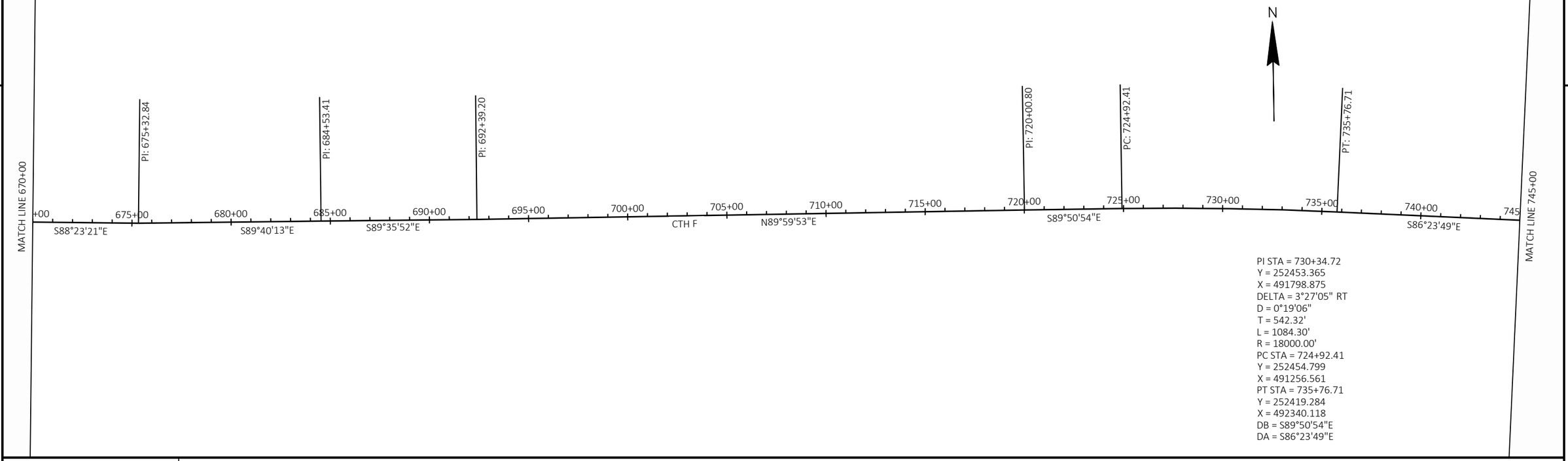


PI STA = 643+09.15
Y = 252555.814
X = 483073.392
DELTA = 12°17'18" LT
D = 4°01'17"
T = 153.38'
L = 305.58'
R = 1424.82'
PC STA = 641+55.77
Y = 252592.265
X = 482924.407
PT STA = 644+61.35
Y = 252551.907
X = 483226.721
DB = S76°15'07"E
DA = S88°32'25"E

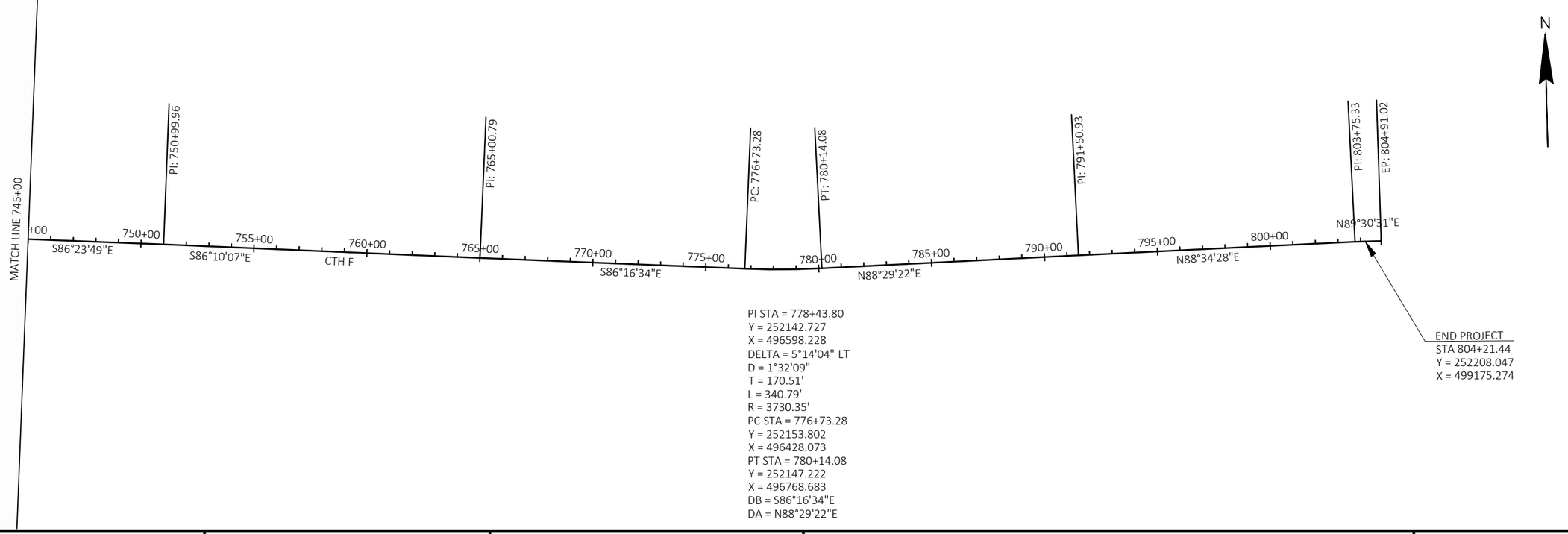
PI STA = 604+95.99
Y = 253471.652
X = 479330.095
DELTA = 42°11'08" RT
D = 4°58'14"
T = 444.62'
L = 848.70'
R = 1152.69'
PC STA = 600+51.37
Y = 253259.925
X = 478939.127
PT STA = 609+00.06
Y = 253365.988
X = 479761.975
DB = N61°33'45"E
DA = S76°15'07"E

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	ALIGNMENT	SHEET 7	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\027201_AD.DWG
LAYOUT NAME - 01
PLOT DATE : 7/22/2024 9:13 AM
PLOT BY : ANNIE JEROME
PLOT NAME :
PLOT SCALE : 1 IN:500 FT



PI STA = 730+34.72
Y = 252453.365
X = 491798.875
DELTA = 3°27'05" RT
D = 0°19'06"
T = 542.32'
L = 1084.30'
R = 18000.00'
PC STA = 724+92.41
Y = 252454.799
X = 491256.561
PT STA = 735+76.71
Y = 252419.284
X = 492340.118
DB = S89°50'54"E
DA = S86°23'49"E



PI STA = 778+43.80
Y = 252142.727
X = 496598.228
DELTA = 5°14'04" LT
D = 1°32'09"
T = 170.51'
L = 340.79'
R = 3730.35'
PC STA = 776+73.28
Y = 252153.802
X = 496428.073
PT STA = 780+14.08
Y = 252147.222
X = 496768.683
DB = S86°16'34"E
DA = N88°29'22"E

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	ALIGNMENT	SHEET 8	E

Estimate Of Quantities

8864-00-70

Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	1,700.000	1,700.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	80,037.000	80,037.000
0006	213.0100	Finishing Roadway (project) 01. 8864-00-70	EACH	1.000	1.000
0008	305.0110	Base Aggregate Dense 3/4-Inch	TON	1,490.000	1,490.000
0010	455.0605	Tack Coat	GAL	5,150.000	5,150.000
0012	460.2000	Incentive Density HMA Pavement	DOL	5,020.000	5,020.000
0014	460.5224	HMA Pavement 4 LT 58-28 S	TON	7,994.000	7,994.000
0016	465.0105	Asphaltic Surface	TON	100.000	100.000
0018	618.0100	Maintenance and Repair of Haul Roads (project) 01. 8864-00-70	EACH	1.000	1.000
0020	619.1000	Mobilization	EACH	1.000	1.000
0022	628.1504	Silt Fence	LF	3,342.000	3,342.000
0024	628.1520	Silt Fence Maintenance	LF	3,342.000	3,342.000
0026	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	6.000	6.000
0028	637.2210	Signs Type II Reflective H	SF	72.000	72.000
0030	638.2602	Removing Signs Type II	EACH	4.000	4.000
0032	638.3000	Removing Small Sign Supports	EACH	2.000	2.000
0034	642.5001	Field Office Type B	EACH	1.000	1.000
0036	643.0900	Traffic Control Signs	DAY	1,830.000	1,830.000
0038	643.3105	Temporary Marking Line Paint 4-Inch	LF	28,850.000	28,850.000
0040	646.2020	Marking Line Epoxy 6-Inch	LF	96,121.000	96,121.000
0042	646.6120	Marking Stop Line Epoxy 18-Inch	LF	75.000	75.000
0044	648.0100	Locating No-Passing Zones	MI	5.459	5.459
0046	650.8000	Construction Staking Resurfacing Reference	LF	28,850.000	28,850.000
0048	650.9911	Construction Staking Supplemental Control (project) 01. 8864-00-70	EACH	1.000	1.000
0050	690.0150	Sawing Asphalt	LF	319.000	319.000
0052	740.0440	Incentive IRI Ride	DOL	21,856.000	21,856.000
0054	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	300.000	300.000
0056	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000

3

REMOVING ASPHALTIC SURFACE BUTT JOINTS

CATEGORY	STATION	TO	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMARKS
0010	516+00	-	804+21	LT & RT	1,700	
				TOTAL 0010	1,700	

REMOVING ASPHALTIC SURFACE MILLING

CATEGORY	STATION	TO	STATION	LOCATION	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
0010	516+00	-	804+21	LT & RT	80,037	
				TOTAL 0010	80,037	

FINISHING ROADWAY

CATEGORY	STATION	TO	STATION	LOCATION	213.0100.01 FINISHING ROADWAY 8864-00-70 EACH	REMARKS
0010	516+00	-	804+21	R/L	1	
				TOTAL 0010	1	

BASE AGGREGATE

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4- NC TON	REMARKS
0010	516+00	-	804+21	LT & RT	1460	
0010	525+00	-	537+00	SUPERELEVATION	5	SHOULDER CORRECTION IN WEDGING AREAS
0010	579+00	-	588+00	SUPERELEVATION	5	SHOULDER CORRECTION IN WEDGING AREAS
0010	599+00	-	611+00	SUPERELEVATION	10	SHOULDER CORRECTION IN WEDGING AREAS
0010	641+00	-	646+00	SUPERELEVATION	5	SHOULDER CORRECTION IN WEDGING AREAS
0010	776+00	-	779+00	SUPERELEVATION	5	SHOULDER CORRECTION IN WEDGING AREAS
				TOTAL 0010	1,490	

HMA ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON	460.5224 HMA PAVEMENT 4 LT 58-28 S TON	REMARKS
0010	516+00	-	804+21	LT & RT	4800		7844	
0010	516+00	-	804+21	UNDISTRIBUTED		100		POST MILLING REPAIRS
0010	525+00	-	537+00	SUPERELEVATION	70		30	WEDGING
0010	579+00	-	588+00	SUPERELEVATION	70		30	WEDGING
0010	599+00	-	611+00	SUPERELEVATION	80		40	WEDGING
0010	641+00	-	646+00	SUPERELEVATION	70		30	WEDGING
0010	776+00	-	779+00	SUPERELEVATION	60		20	WEDGING
				TOTAL 0010	5,150	100	7,994	

MOBILIZATION

CATEGORY	STATION	TO	STATION	LOCATION	619.1000 MOBILIZATION EACH	REMARKS
0010	516+00	-	804+21	R/L	1	
				TOTAL 0010	1	

3

3

SILT FENCE

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	REMARKS
0010	533+65	-	537+60	LT	409	409	
0010	559+10	-	563+30	RT	431	431	
0010	559+50	-	560+52	LT	114	114	
0010	560+97	-	563+35	LT	264	264	
0010	581+58	-	587+38	LT	577	577	
0010	590+24	-	591+16	LT	95	95	
0010	612+68	-	613+21	LT	58	58	
0010	617+02	-	622+05	LT	513	513	
0010	622+69	-	625+79	LT	324	324	
0010	UNDISTRIBUTED	-			557	557	
0010		-					
				TOTAL 0010	3,342	3,342	

SIGNING ITEMS

CATEGORY	SIGN NO	MESSAGE	SIGN CODE	SIGN WXH INCHES	634.0614 POSTS WOOD 4X6-INCH X 14-FT EACH	637.2210 SIGNS TYPE II REFLECTIVE H SF	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH	REMARKS
0010	1-1	CURVES					1	1	
		35 MPH					1		
0010	1-2	CURVES	W1-4L	36X36	1	9			
		50 MPH	W13-1	18X18		3			
0010	1-3	CURVES					1	1	
		35 MPH					1		
0010	1-4	CURVES	W1-4L	36X36	1	9			
		50 MPH	W13-1	18X18		3			
0010	3-1	CURVE	WI-2L	36X36	1	9			
		50 MPH	W13-1	18X18		3			
0010	3-2	CURVE	W1-2R	36X36	1	9			
		50 MPH	W13-1	18X18		3			
0010	3-3	CURVE	WI-2R	36X36	1	9			
		50 MPH	W13-1	18X18		3			
0010	4-1	CURVE	W1-2L	36X36	1	9			
		50 MPH	W13-1	18X18		3			
				TOTAL 0010	6	72	4	2	

FIELD OFFICE

CATEGORY	STATION	TO	STATION	LOCATION	642.5001 FIELD OFFICE TYPE B EACH	REMARKS
0010	516+00	-	804+21	R/L	1	
				TOTAL 0010	1	

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	MISCELLANEOUS QUANTITIES	SHEET 11	E

TRAFFIC CONTROL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	643.0900 TRAFFIC CONTROL SIGNS DAY	DAYS	REMARKS
0010	516+00	-	804+21	R/L	1,830	50	
				TOTAL 0010	1,830		

MARKING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	646.2020 MARKING LINE 6-INCH WHITE	YELLOW	YELLOW SKIP	646.6120 MARKING STOP LINE EPOXY 18-INCH	648.0100 LOCATING NO-PASSING ZONES PAINT 4-INCH	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH	REMARKS
								LF	MI	LF	
0010	516+00	-	804+21	LT & RT	56,240	36,576	3305		5.459	28,850	
0010	674+50	-	676+00	LT & RT				75			
				TOTAL 0010		96,121		75	5.459	28,850	

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9911.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL 8864-00-70 EACH	REMARKS
0010	516+00	-	804+21	R/L	28,850	1	
				TOTAL 0010	28,850	1	

SAWING

CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
0010	516+00	-		LT & RT	27	BEGIN PROJECT
	516+50	-		LT & RT	23	VIEW LANE (N LEG)
	568+27	-		LT & RT	49	210TH STREET
	622+36	-		LT & RT	23	200TH STREET
	649+09	-		LT & RT	44	195TH STREET
	675+36	-		LT & RT	64	190TH STREET
	684+53	-		LT & RT	22	188TH STREET
	729+54	-		LT & RT	43	180TH STREET
	804+21	-		LT & RT	24	END PROJECT
				TOTAL 0010	319	

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 13	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 01
PLOT DATE : 7/22/2024 9:14 AM
PLOT BY : ANNIE JEROME
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

5

LEGEND

- (A) MARKING LINE EPOXY 6-INCH (WHITE)
- (B) MARKING LINE EPOXY 6-INCH (YELLOW)
- (C) MARKING LINE EPOXY 6-INCH (YELLOW SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- PROPOSED SIGN MOUNTED ON POST
- SILT FENCE

MATCH LINE 544+00

PT: 544+76.53

XCEL ENERGY

BRIGHTSPEED

PC: 553+87.07

11'

11'

544+00

546+00

548+00

550+00

552+00

554+00

556+00

558

S86°19'36"E

CTH F

LAKELAND COMMUNICATIONS

MATCH LINE 558+00

N

MATCH LINE 558+00

PT: 558+49.10

PI: 562+99.87

Wetland 4
Shallow Marsh (SM)

Upland 4

Upland 3

560+00

562+00

564+00

566+00

568+00

570+00

572

N89°40'54"E

S89°50'52"E

S85°01'54"E

CTH F

XCEL ENERGY

LAKELAND COMMUNICATIONS

PC: 567+27.10

210TH STREET

END CONSTRUCTION
SAWCUT REQ'D
SEE RURAL INTERSECTION
PAVING LIMITS DETAIL

BRIGHTSPEED

PT: 570+46.50

END CONSTRUCTION
SAWCUT REQ'D
SEE RURAL INTERSECTION
PAVING LIMITS DETAIL

MATCH LINE 572+00

N

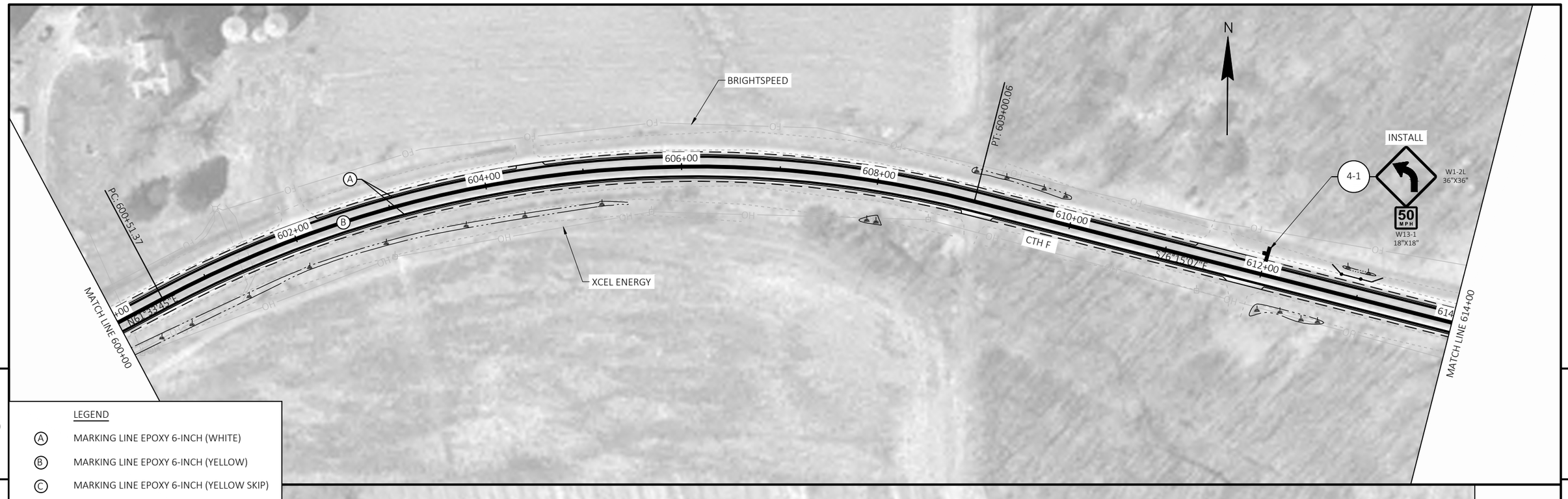
5

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 14	E

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 15	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 03

PLOT DATE : 7/22/2024 9:15 AM PLOT BY : ANNIE JEROME PLOT NAME : PLOT SCALE : 1 IN:100 FT

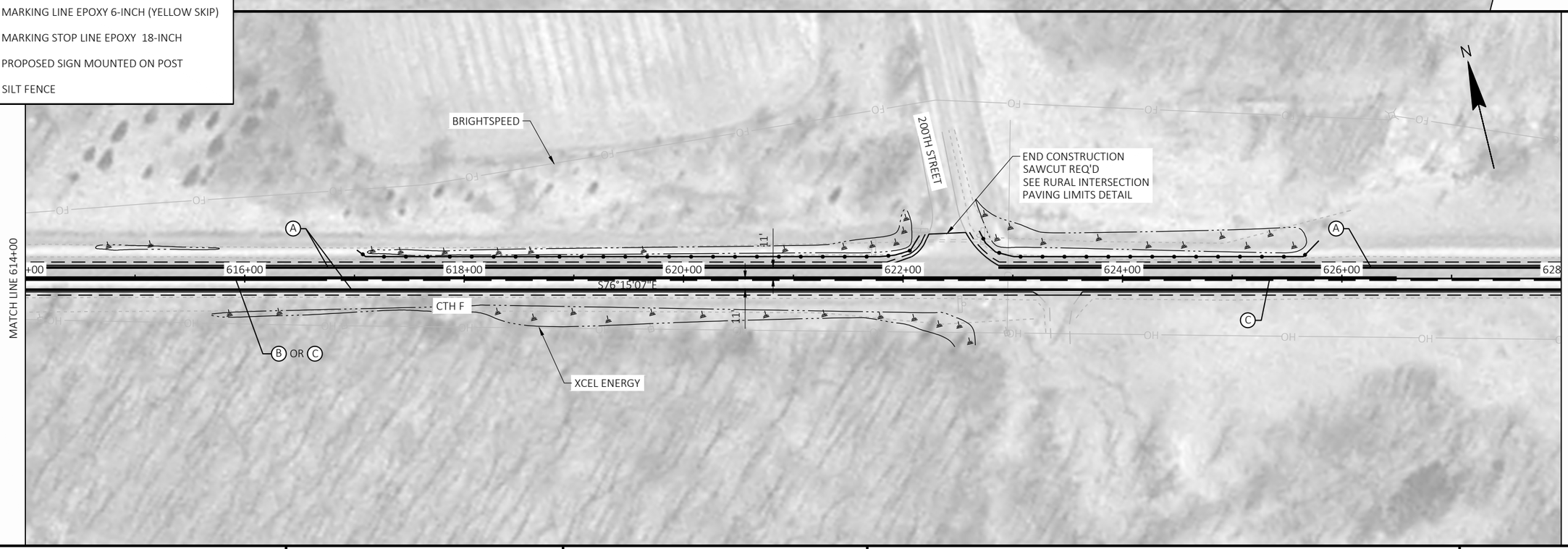


5

5

LEGEND

- (A) MARKING LINE EPOXY 6-INCH (WHITE)
- (B) MARKING LINE EPOXY 6-INCH (YELLOW)
- (C) MARKING LINE EPOXY 6-INCH (YELLOW SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- PROPOSED SIGN MOUNTED ON POST
- SILT FENCE



PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 16	E

5

LEGEND

- (A) MARKING LINE EPOXY 6-INCH (WHITE)
- (B) MARKING LINE EPOXY 6-INCH (YELLOW)
- (C) MARKING LINE EPOXY 6-INCH (YELLOW SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- PROPOSED SIGN MOUNTED ON POST
- SILT FENCE

N

MATCH LINE 628+00

630+00

632+00

634+00

636+00

638+00

640+00

642

MATCH LINE 642+00

BRIGHTSPEED

PC: 641+55.77

A

C

11'

CTH F

S76°15'07"E

B OR C

XCEL ENERGY

MATCH LINE 642+00

644+00

646+00

648+00

650+00

652+00

654+00

656

MATCH LINE 656+00

PT: 644+61.35

195TH STREET

PI: 649+09.04

PI: 655+34.83

END CONSTRUCTION
SAWCUT REQ'D
SEE RURAL INTERSECTION
PAVING LIMITS DETAIL

BRIGHTSPEED

S88°32'25"E

S88°23'48"E

S88°23'21"E

CAUTION

CTH F

XCEL ENERGY

END CONSTRUCTION
SAWCUT REQ'D
SEE RURAL INTERSECTION
PAVING LIMITS DETAIL

5

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 17	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 05

PLOT DATE : 7/22/2024 9:15 AM PLOT BY : ANNIE JEROME PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

5

LEGEND

- (A) MARKING LINE EPOXY 6-INCH (WHITE)
- (B) MARKING LINE EPOXY 6-INCH (YELLOW)
- (C) MARKING LINE EPOXY 6-INCH (YELLOW SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- PROPOSED SIGN MOUNTED ON POST
- SILT FENCE

MATCH LINE 656+00

+00

658+00

660+00

662+00

664+00

666+00

668+00

670

MATCH LINE 670+00

11'

11'

S88°23'21"E

CTH F

CAUTION

BRIGHTSPEED

N

END CONSTRUCTION
SAWCUT REQ'D
SEE RURAL INTERSECTION
PAVING LIMITS DETAIL

190TH STREET

PI 675+32.84

+00

672+00

674+00

676+00

678+00

680+00

682+00

MATCH LINE 683+00

S88°23'21"E

S89°40'13"E

CTH F

CAUTION

CAUTION

BRIGHTSPEED

XCEL ENERGY

END CONSTRUCTION
SAWCUT REQ'D
SEE RURAL INTERSECTION
PAVING LIMITS DETAIL

5

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 18	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 06

PLOT DATE : 7/22/2024 9:15 AM PLOT BY : ANNIE JEROME PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

5

LEGEND

- (A) MARKING LINE EPOXY 6-INCH (WHITE)
- (B) MARKING LINE EPOXY 6-INCH (YELLOW)
- (C) MARKING LINE EPOXY 6-INCH (YELLOW SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- PROPOSED SIGN MOUNTED ON POST
- SILT FENCE

5

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 19	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 07

PLOT DATE : 7/22/2024 9:15 AM PLOT BY : ANNIE JEROME PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

5

LEGEND

- (A) MARKING LINE EPOXY 6-INCH (WHITE)
- (B) MARKING LINE EPOXY 6-INCH (YELLOW)
- (C) MARKING LINE EPOXY 6-INCH (YELLOW SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- PROPOSED SIGN MOUNTED ON POST
- SILT FENCE

MATCH LINE 712+00

+00

714+00

716+00

718+00

720+00

722+00

724+00

726

MATCH LINE 726+00

A

B OR C

C

11'

11'

PI: 720+00.80

PC: 724+92.41

N89°59'53"E

S89°50'54"E

CTH F

BRIGHTSPEED

XCEL ENERGY

N

MATCH LINE 726+00

+00

728+00

730+00

732+00

734+00

736+00

738+00

740

MATCH LINE 740+00

180TH STREET

END CONSTRUCTION
SAWCUT REQ'D
SEE RURAL INTERSECTION
PAVING LIMITS DETAIL

XCEL ENERGY

PT: 735+76.71

S88°23'45"E

CTH F

B OR C

BRIGHTSPEED

END CONSTRUCTION
SAWCUT REQ'D
SEE RURAL INTERSECTION
PAVING LIMITS DETAIL

PRIVATE AG WASTE CONDUIT

5

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 20	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 08

PLOT DATE : 7/22/2024 9:15 AM PLOT BY : ANNIE JEROME PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

- (A) MARKING LINE EPOXY 6-INCH (WHITE)
- (B) MARKING LINE EPOXY 6-INCH (YELLOW)
- (C) MARKING LINE EPOXY 6-INCH (YELLOW SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- PROPOSED SIGN MOUNTED ON POST
- SILT FENCE

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 21	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 09

PLOT DATE : 7/22/2024 9:15 AM PLOT BY : ANNIE JEROME PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

5

5

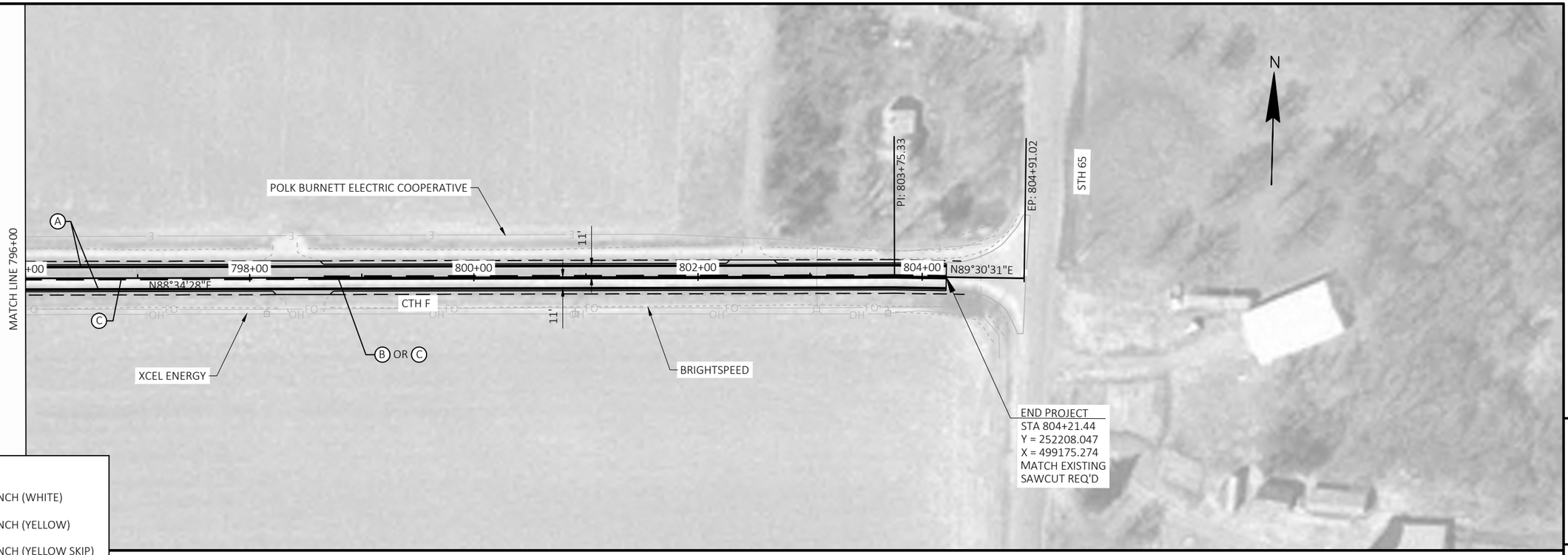
LEGEND

- (A) MARKING LINE EPOXY 6-INCH (WHITE)
- (B) MARKING LINE EPOXY 6-INCH (YELLOW)
- (C) MARKING LINE EPOXY 6-INCH (YELLOW SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- PROPOSED SIGN MOUNTED ON POST
- SILT FENCE

PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 22	E

FILE NAME : X:\PT\P\POLPW\173214\5-FINAL-DSGN\50-FINAL-DSGN\40-TRANSHWY\C3D\88640000\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 10

PLOT DATE : 7/22/2024 9:15 AM PLOT BY : ANNIE JEROME PLOT NAME : PLOT SCALE : 1 IN:100 FT



5

5

LEGEND

- (A) MARKING LINE EPOXY 6-INCH (WHITE)
- (B) MARKING LINE EPOXY 6-INCH (YELLOW)
- (C) MARKING LINE EPOXY 6-INCH (YELLOW SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- PROPOSED SIGN MOUNTED ON POST
- SILT FENCE

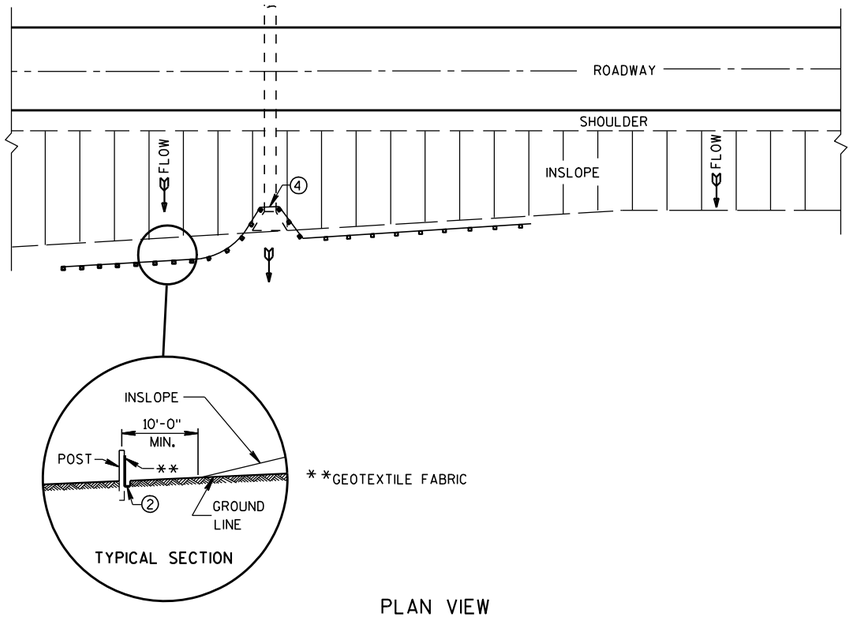
PROJECT NO: 8864-00-70	HWY: CTH F	COUNTY: POLK	EROSION CONTROL, PERMANENT SIGNING, PAVEMENT MARKING AND PLAN	SHEET 23	E

Standard Detail Drawing List

08E09-06	SILT FENCE
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-09A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

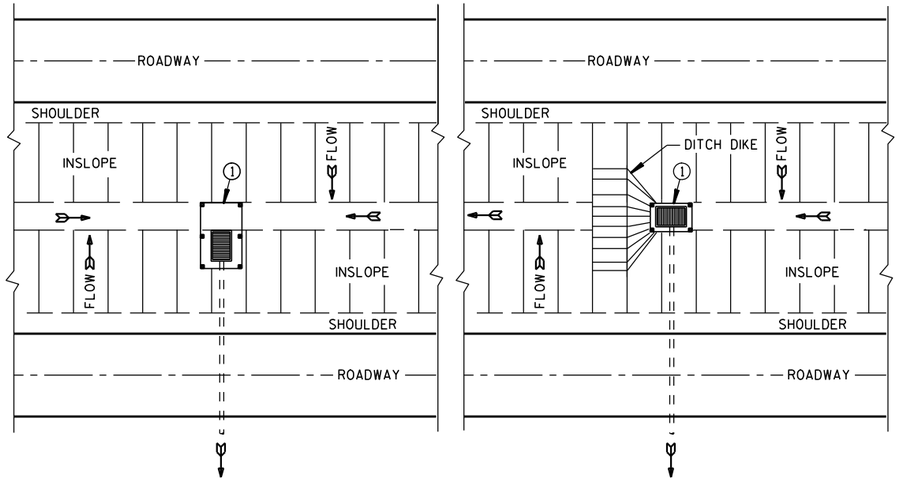
6

6



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



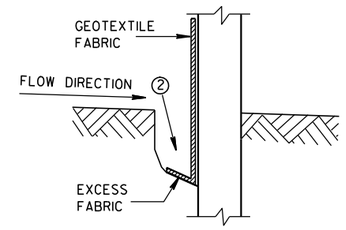
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

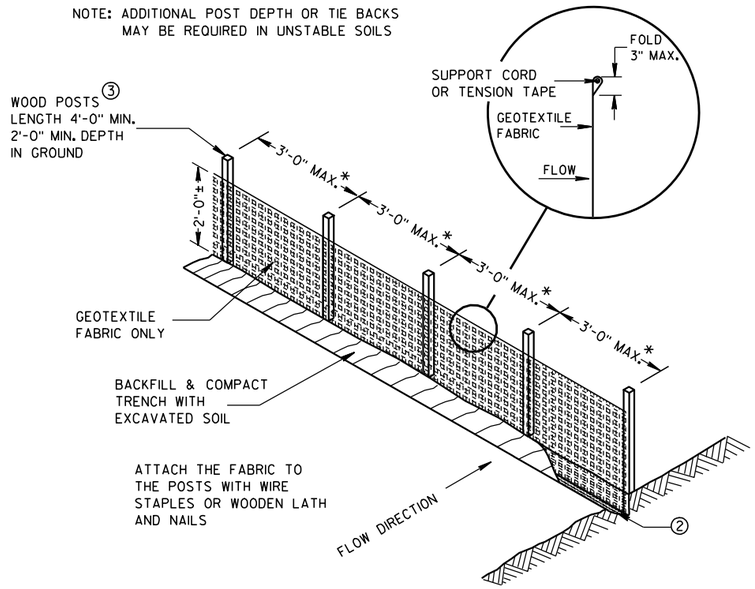
GENERAL NOTES

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

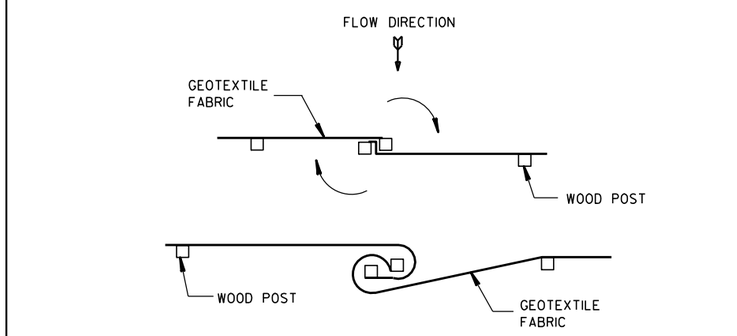
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" 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.



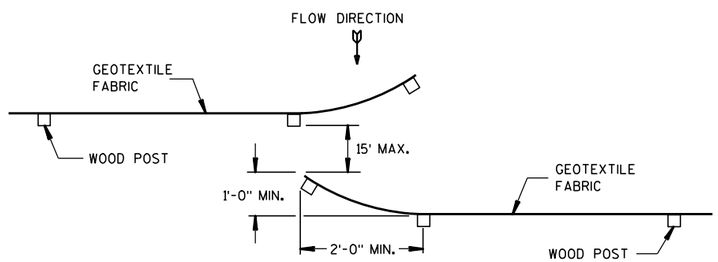
TRENCH DETAIL



SILT FENCE

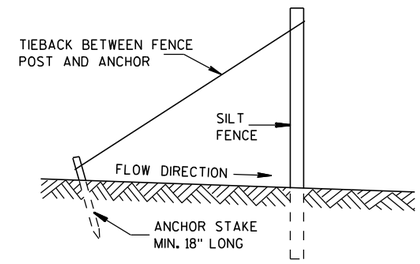


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6

GENERAL NOTES

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

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

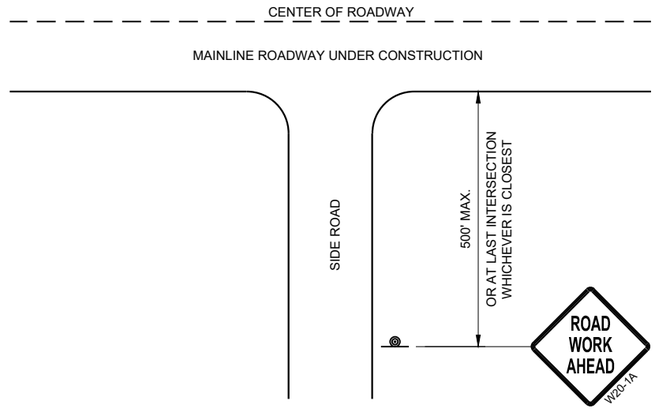
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



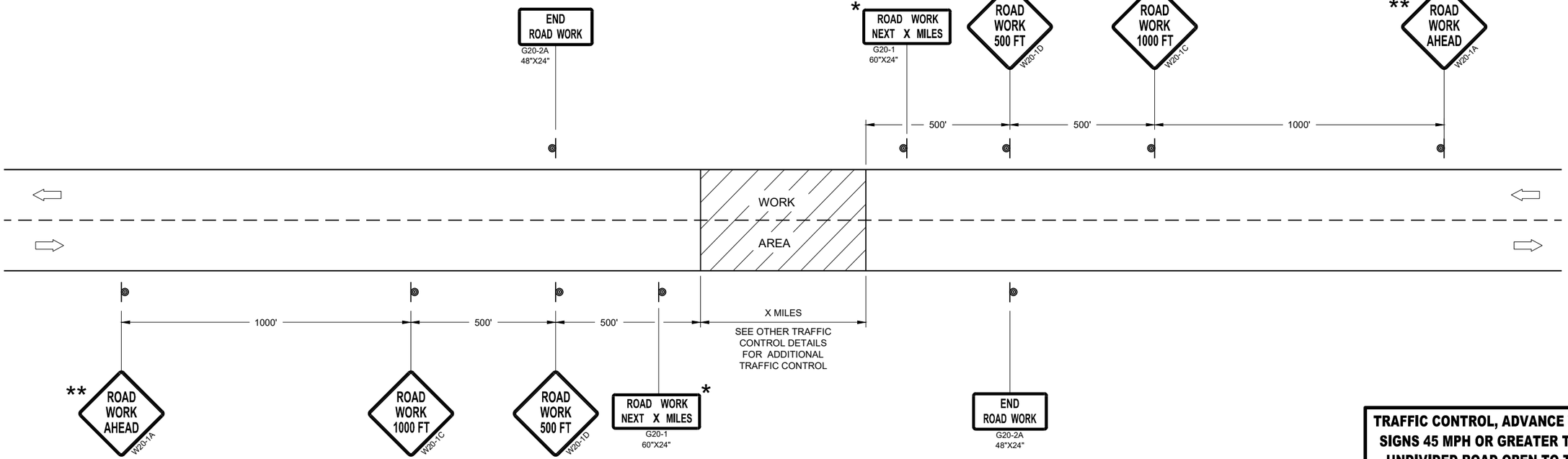
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

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.

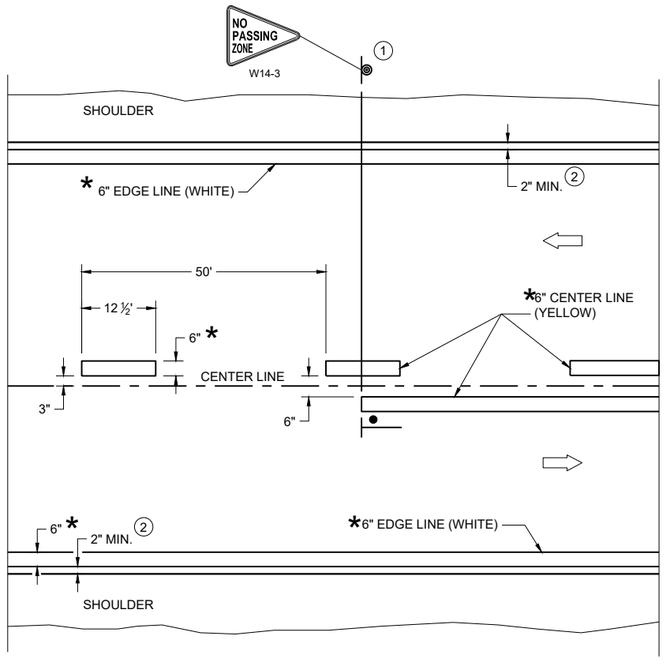
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

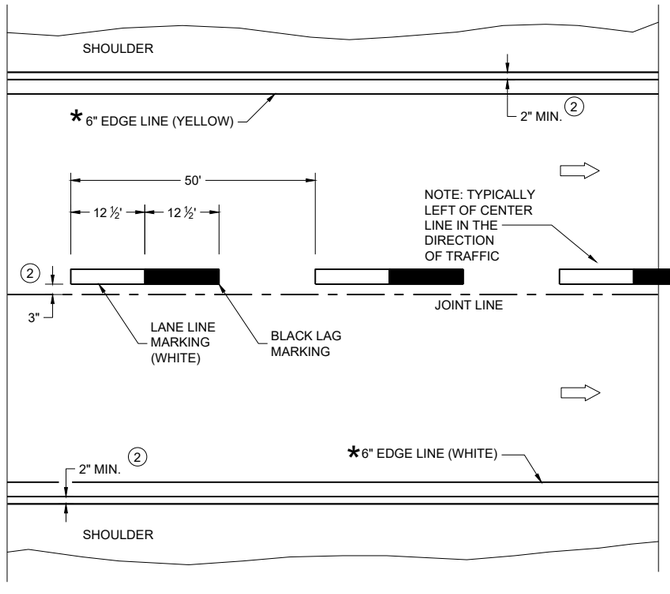
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

6

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

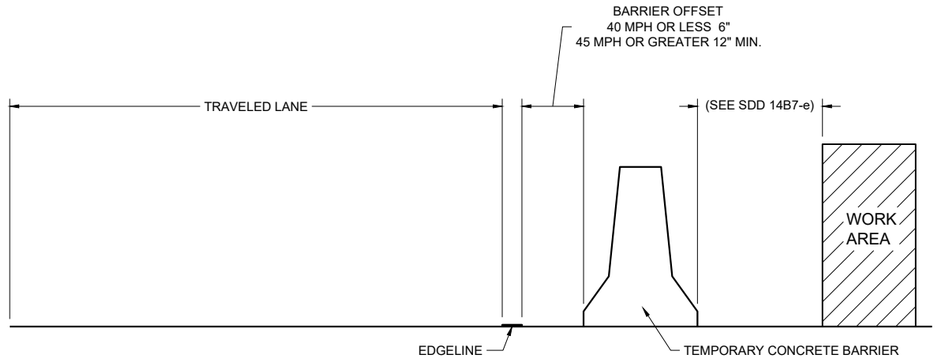
APPROVED

May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

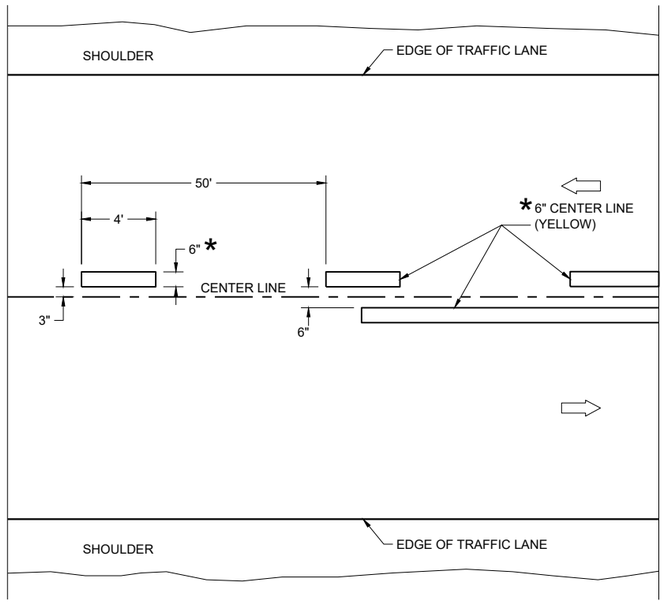
GENERAL NOTES

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

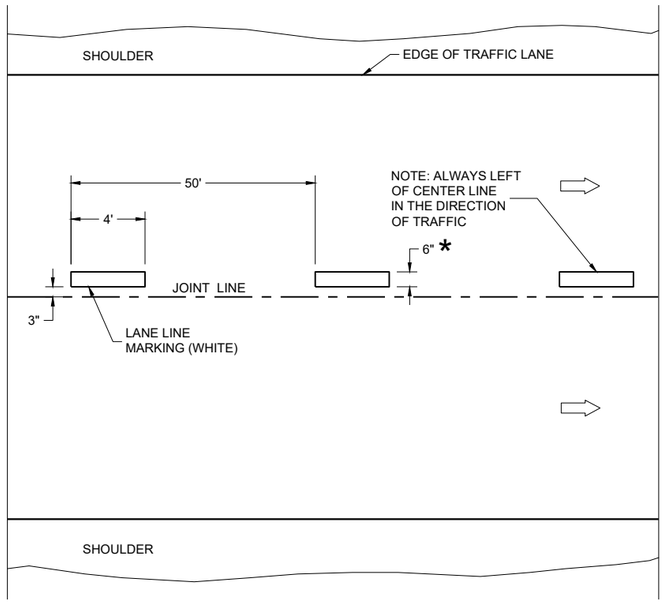
LEGEND

DIRECTION OF TRAFFIC

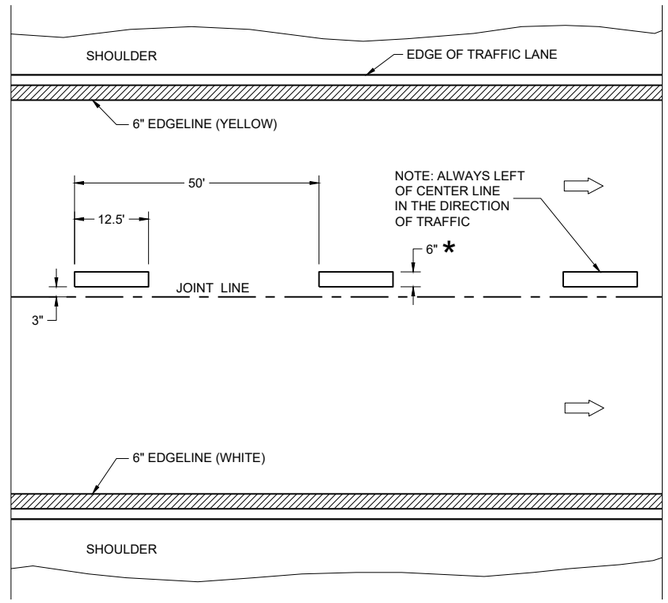
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA

6

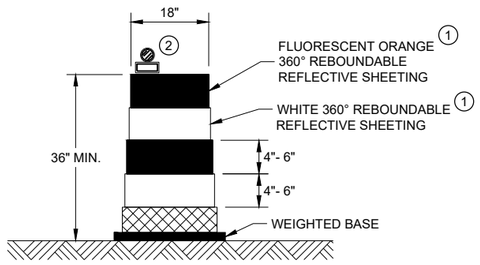
SDD 15C08-23b

6

SDD 15C08-23b

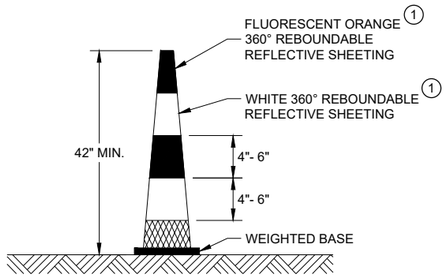
GENERAL NOTES

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.



DRUM

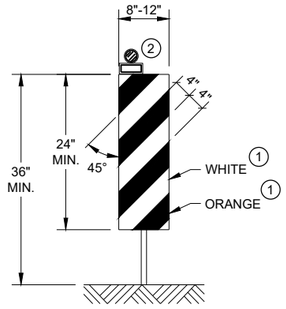
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

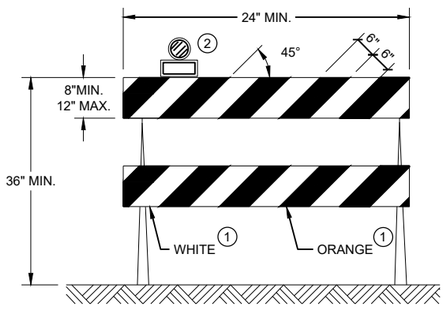
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



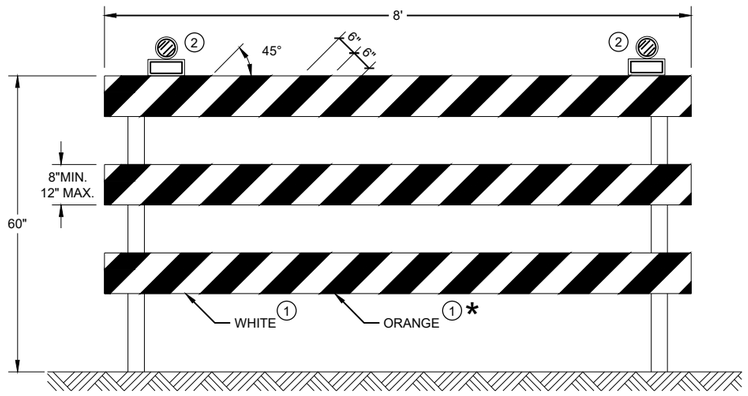
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C11 - 10b

6

SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

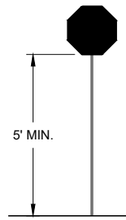
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



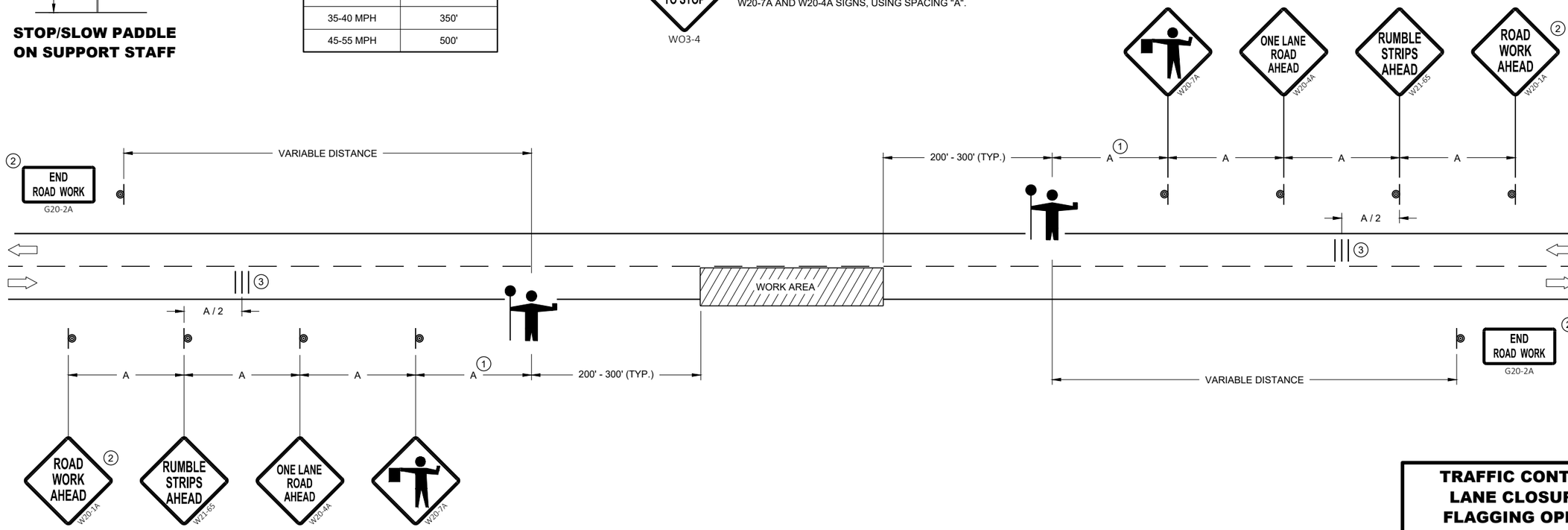
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15C12 - 09a

SDD 15C12 - 09a

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

GENERAL NOTES

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

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

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

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

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

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

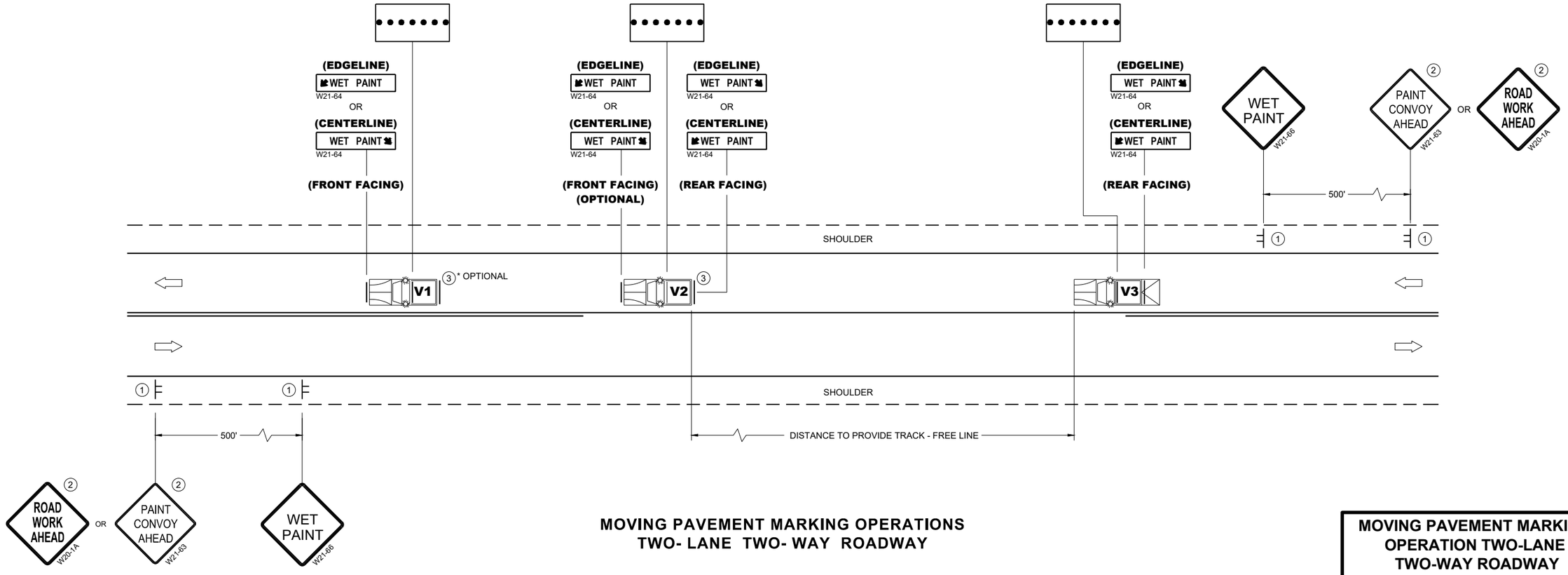
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

(1) SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES AND AFTER EVERY MAJOR INTERSECTION.

(2) IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.

(3) V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.



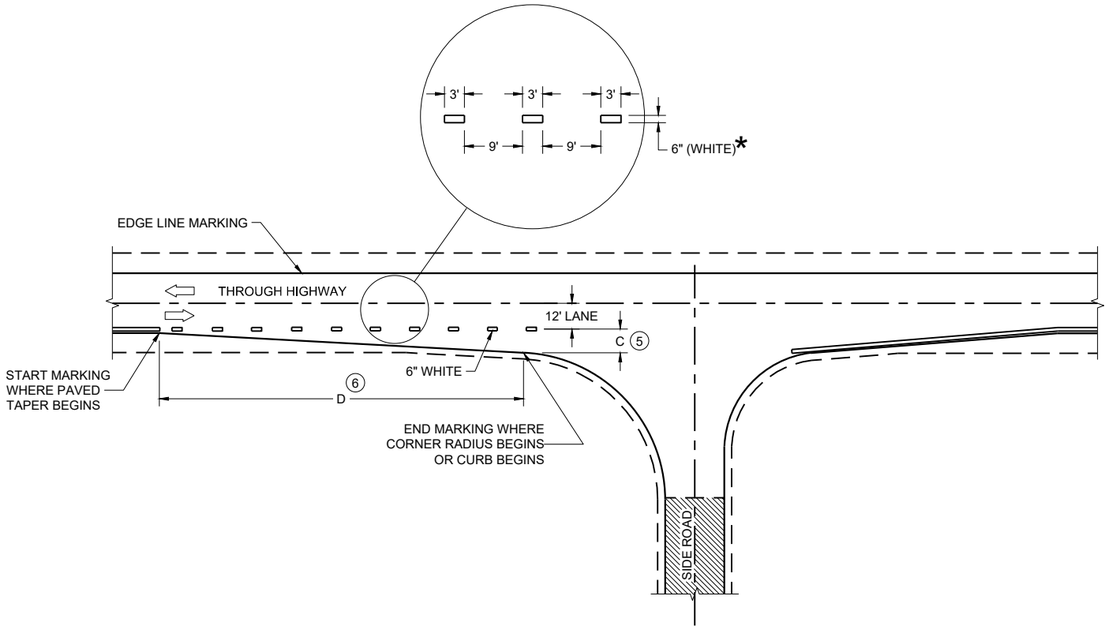
MOVING PAVEMENT MARKING OPERATIONS TWO- LANE TWO- WAY ROADWAY

MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

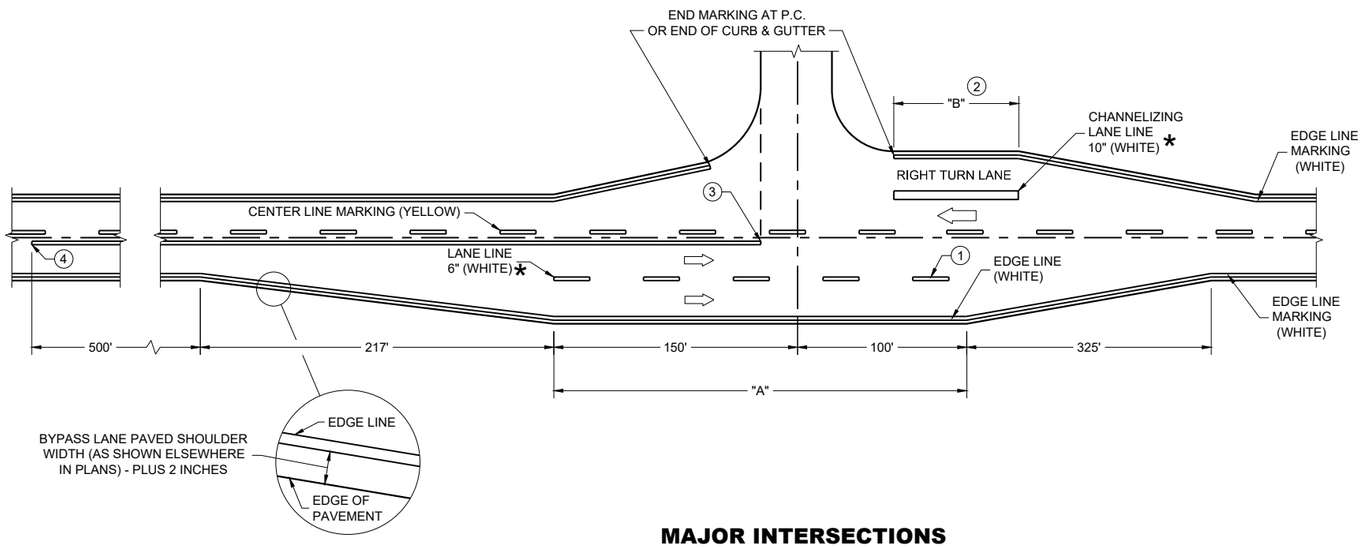
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2024
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

6
SDD 15C19-9a



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

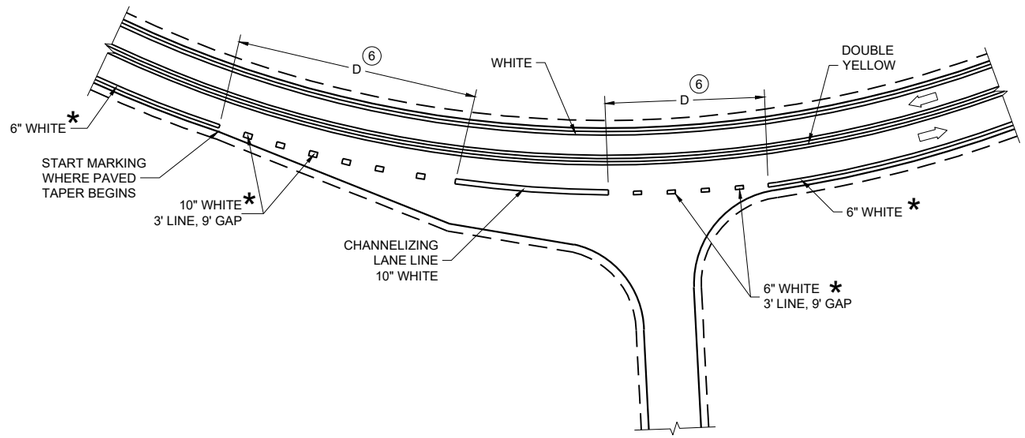
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES THROUGH DRIVEWAYS.

1. WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
2. WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
3. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
5. WHEN DISTANCE "C" IS LESS THAN 4 FEET, OMIT DOTTED EXTENSION.
6. WHEN DISTANCE "D" IS LESS THAN 50 FEET, OMIT DOTTED EXTENSION.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

DRAWING NOT TO SCALE. ALL SIGNS AND POSTS ON THIS SHEET SHALL BE PAID FOR WITH 'TRAFFIC CONTROL SIGNS' BID ITEM. ALL SIDE ROADS WHICH ARE UNDER CONSTRUCTION OF CURB AND GUTTER AND/OR GRADING SHALL BE ADEQUATELY SIGNED.

ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

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

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

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 INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

SEE 15C34 FOR ADDITIONAL TRAFFIC CONTROL SIGNING WHEN CENTERLINE PAVEMENT MAKINGS ARE MISSING. 'DO NOT PASS' SIGNS MUST BE INSTALLED ON THE SAME DAY AS MILLING OPERATIONS.

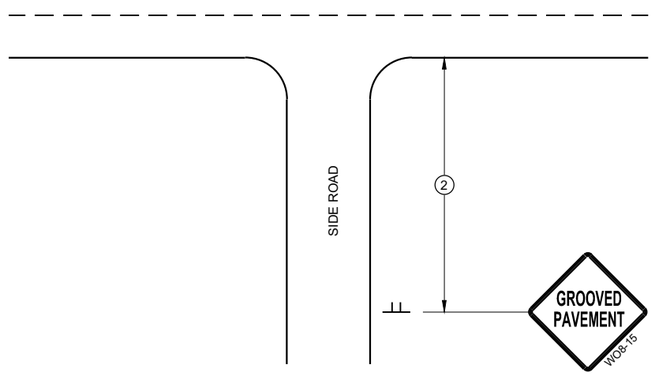
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

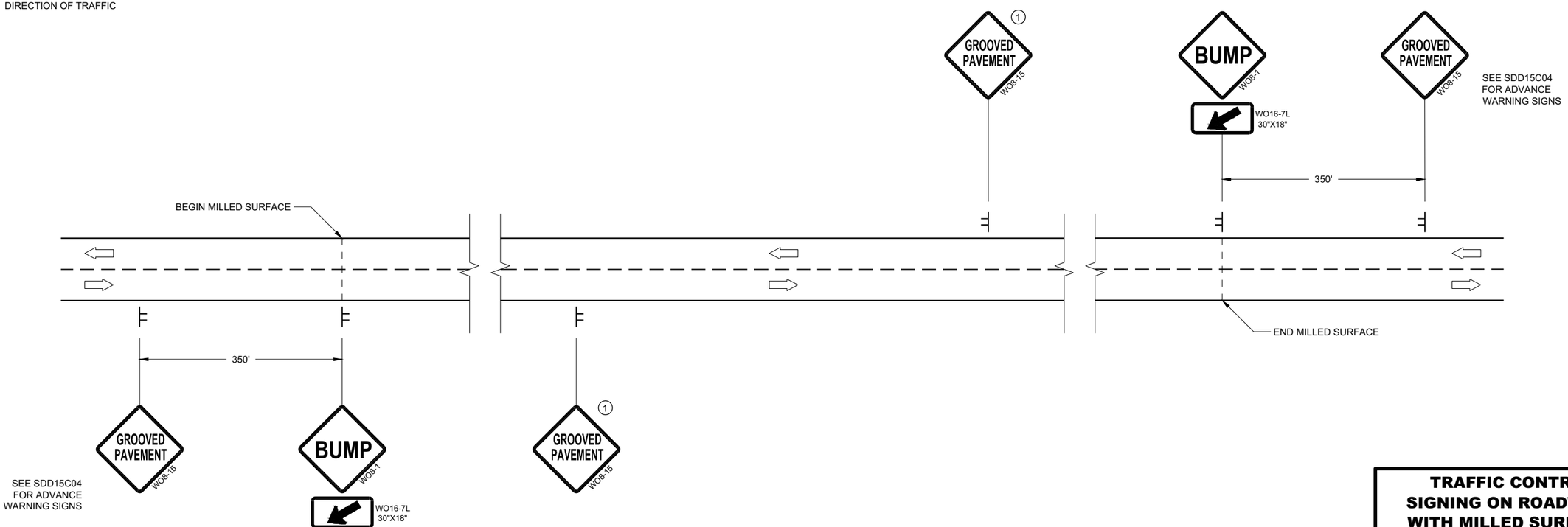
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

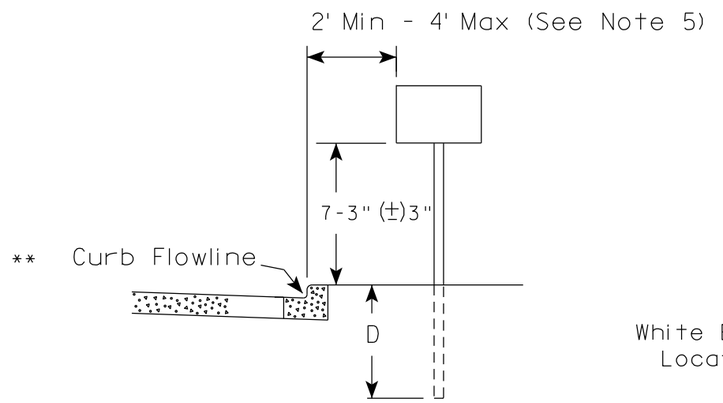
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

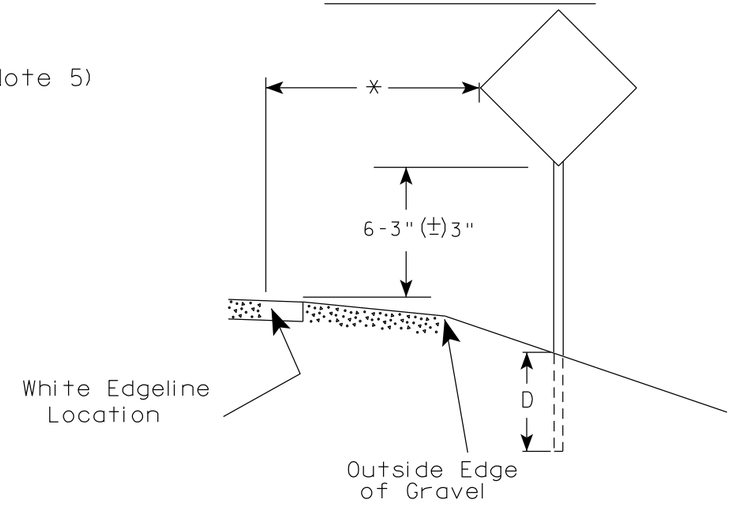
FHWA

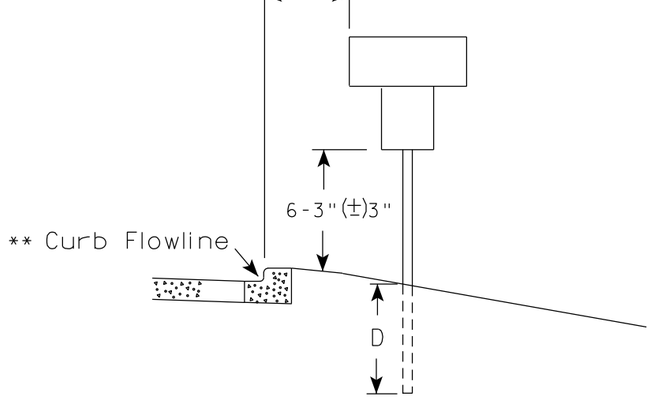
6
SDD 15D44 - 02

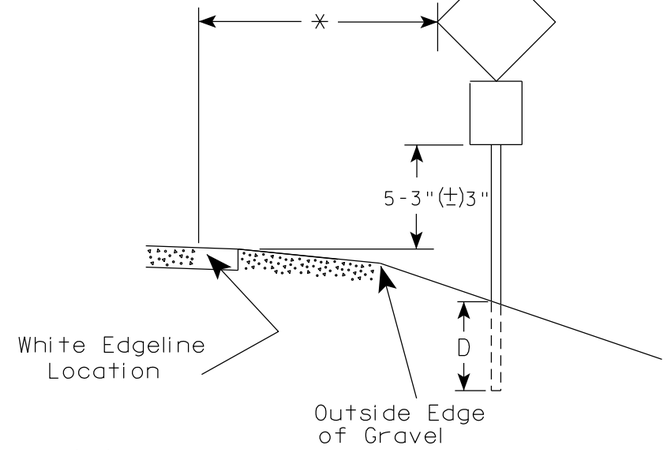
URBAN AREA



RURAL AREA (See Note 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. 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.

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" (±) 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".
3. For expressways and freeways, mounting height is 7'- 3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±) 3".
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directd by the Engineer.

POST EMBEDMENT DEPTH

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

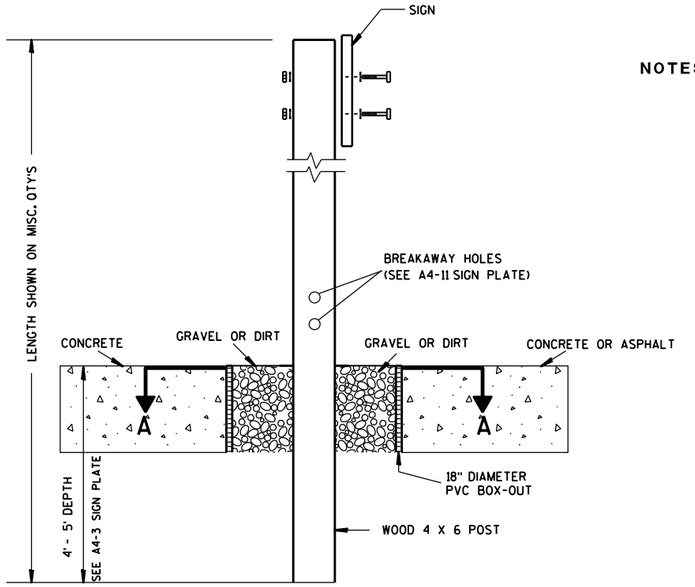
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-3.23

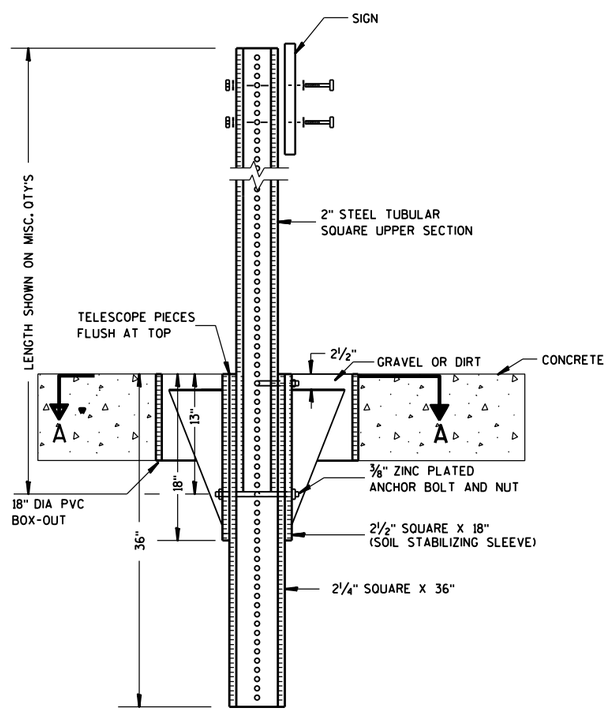
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 34	E



ELEVATION VIEW

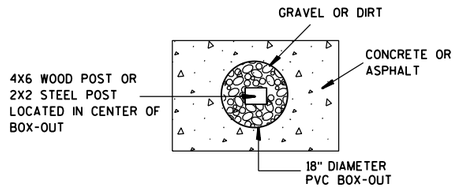
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

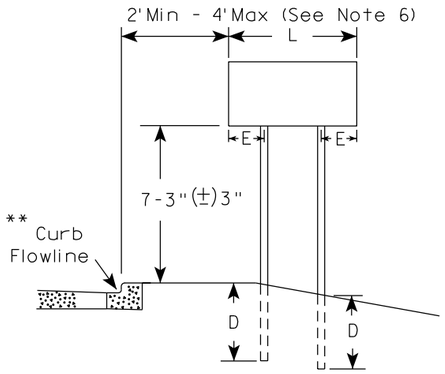
APPROVED Matthew R Rauch
for State Traffic Engineer

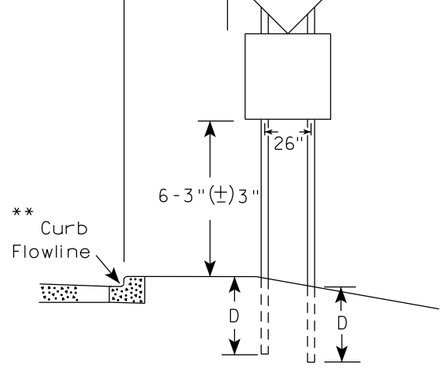
DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

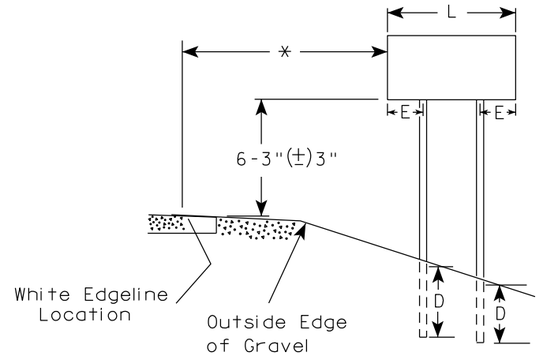
URBAN AREA

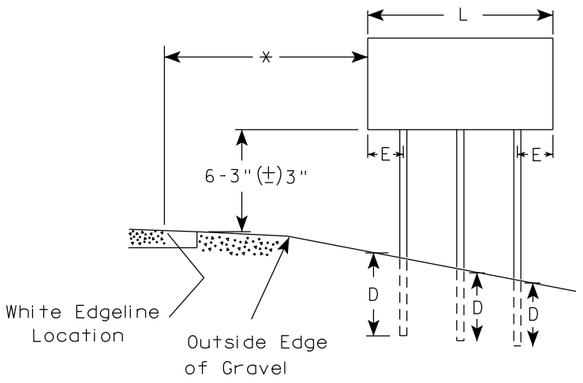


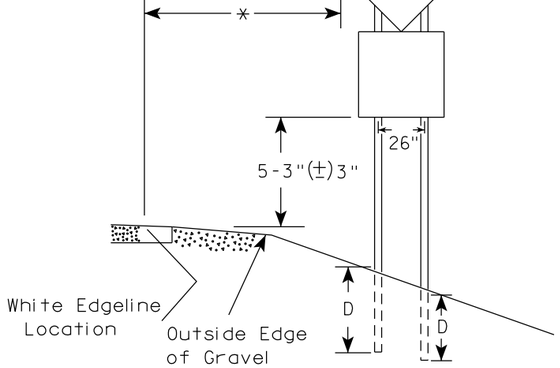


48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)







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"

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" (±) 3" or 6'-3" (±) 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" (±) 3" or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±) 3".

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

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

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

POST EMBEDMENT DEPTH

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

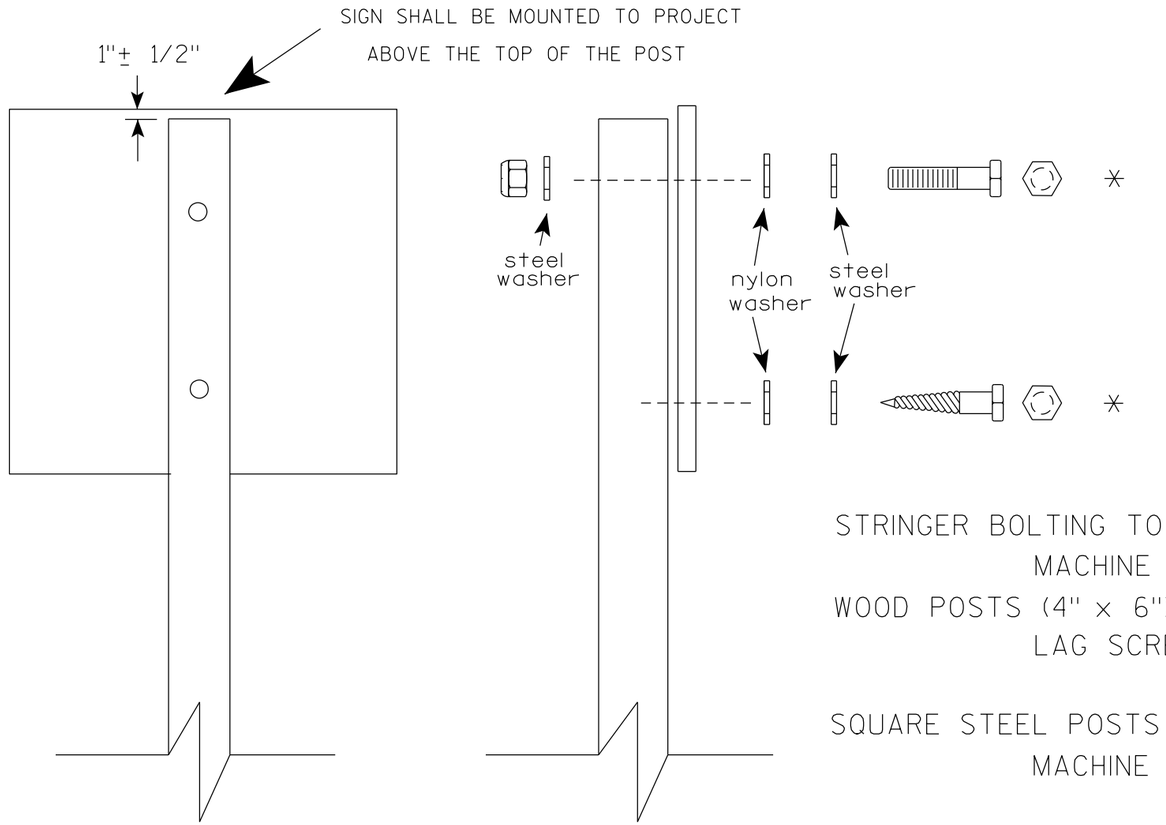
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/6/23 PLATE NO. A4-4.16

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 36	E



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

PROJECT NO:

SHEET NO: 37 E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A48.DGN PLOT DATE : 01-APRIL-2020 PLOT BY : dotc4c

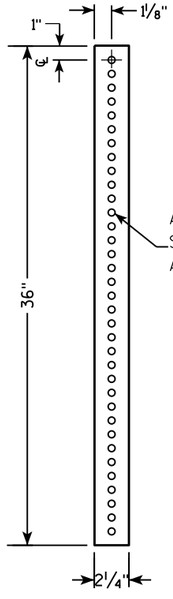
WISDOT/CADDS SHEET 42

7

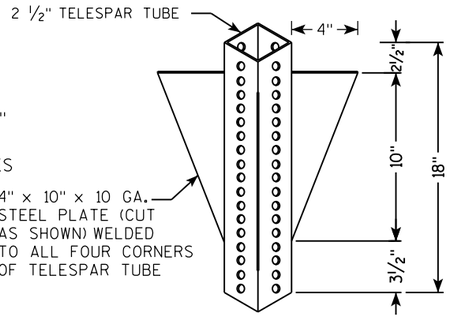
7

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

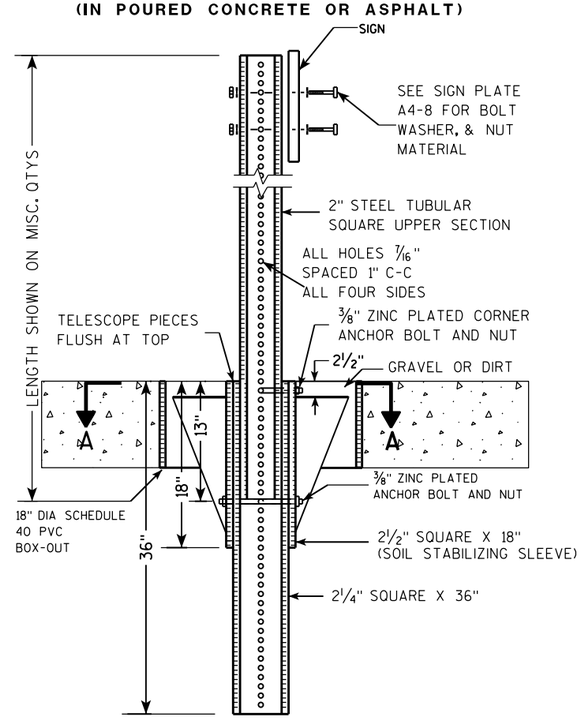
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



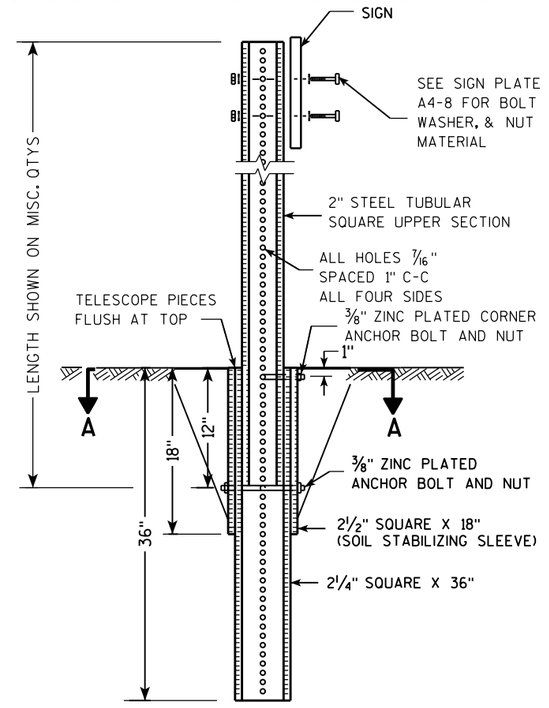
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

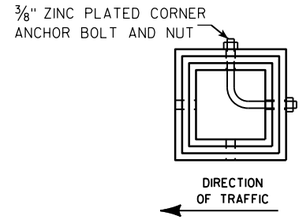


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

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

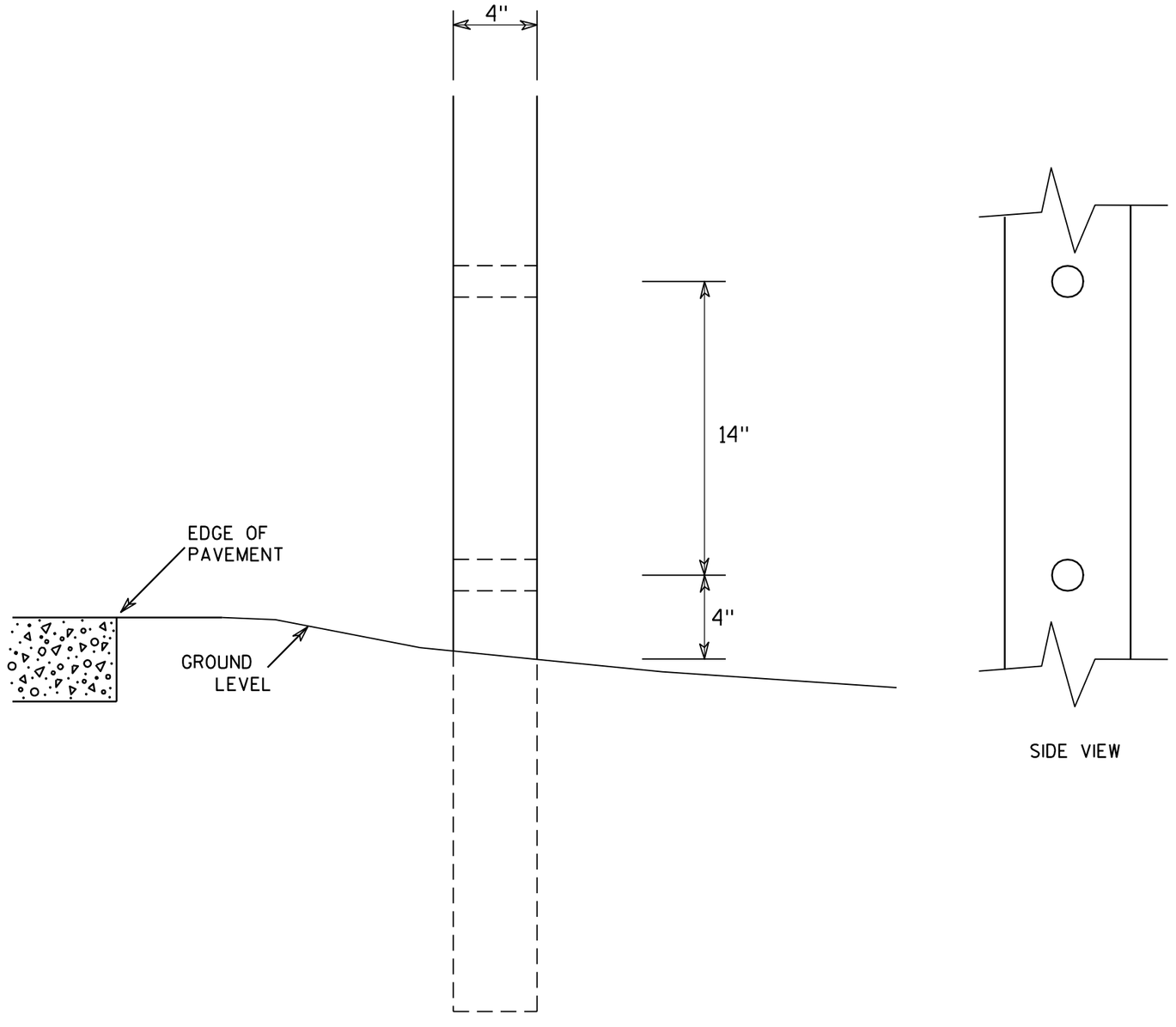
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000
WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

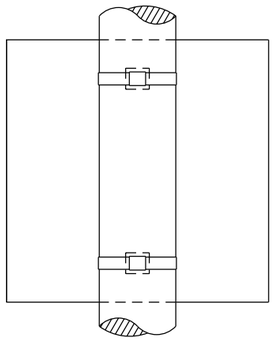
APPROVED Chester J Spang
for State Traffic Engineer

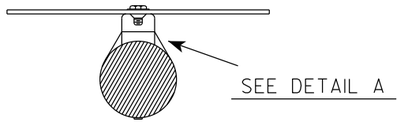
DATE 3/27/97 PLATE NO. A4-11.2

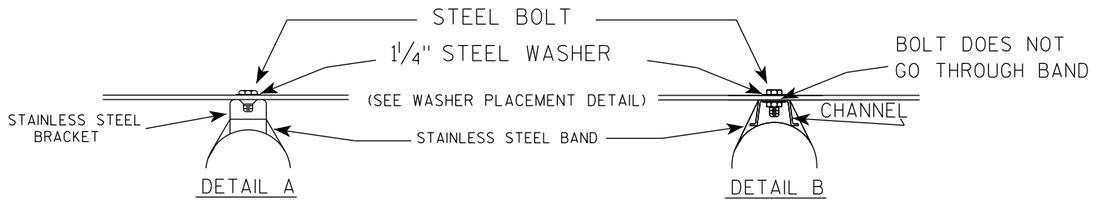
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 39	E

BANDING

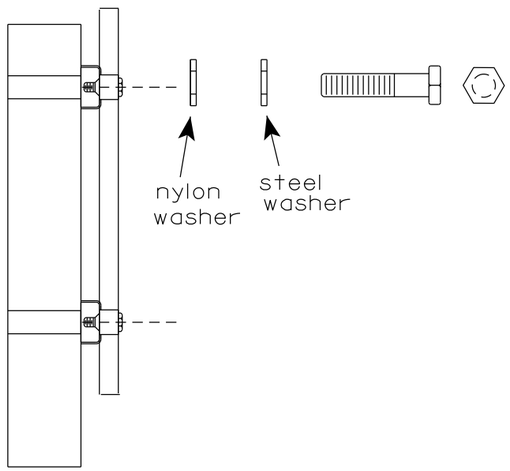
SINGLE SIGN







WASHER PLACEMENT

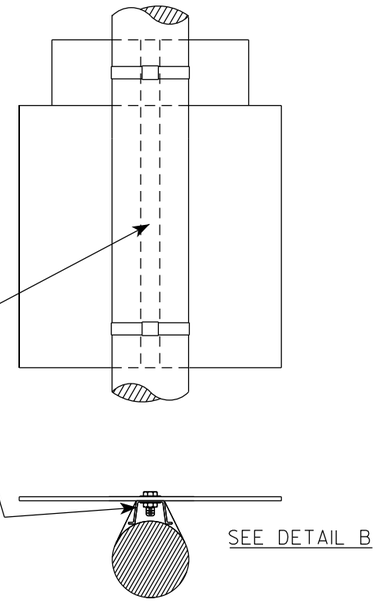


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

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 ¾" 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



STANDARD SIGN
SIGN BANDING DETAILS

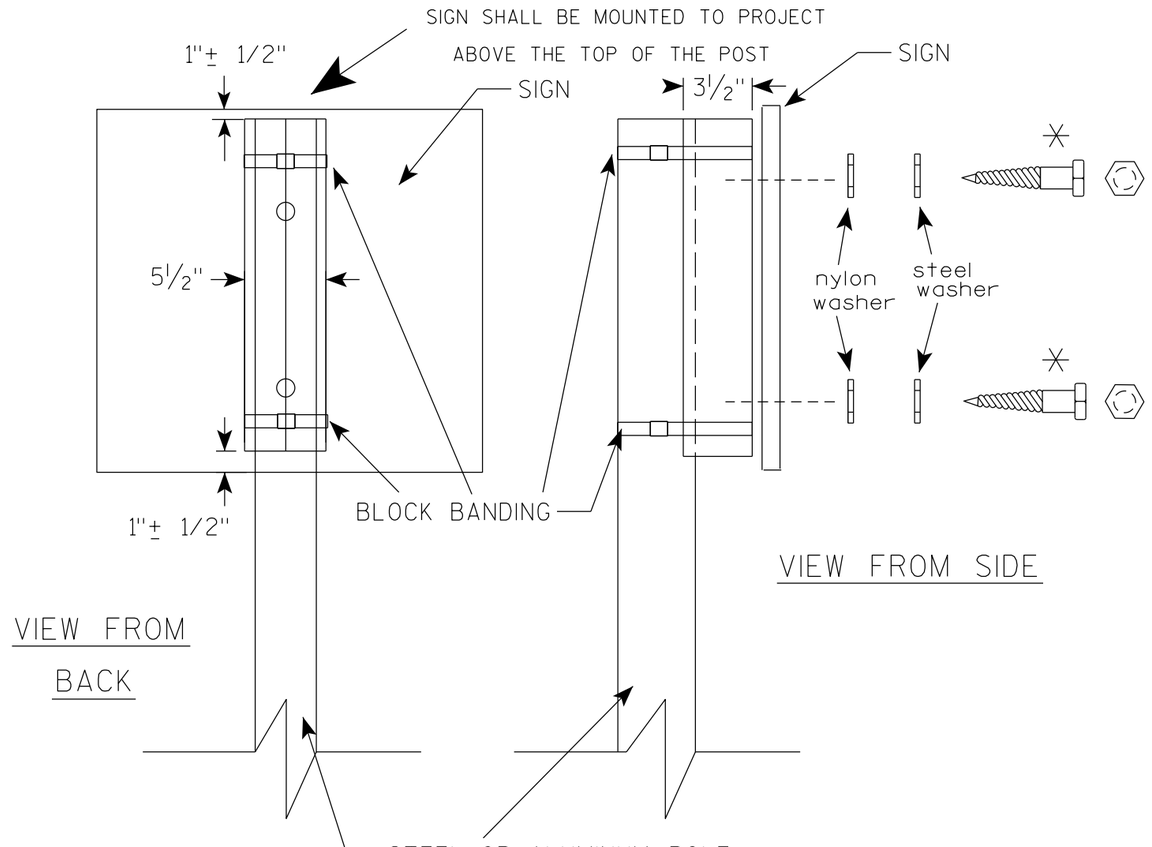
WISCONSIN DEPT OF TRANSPORTATION

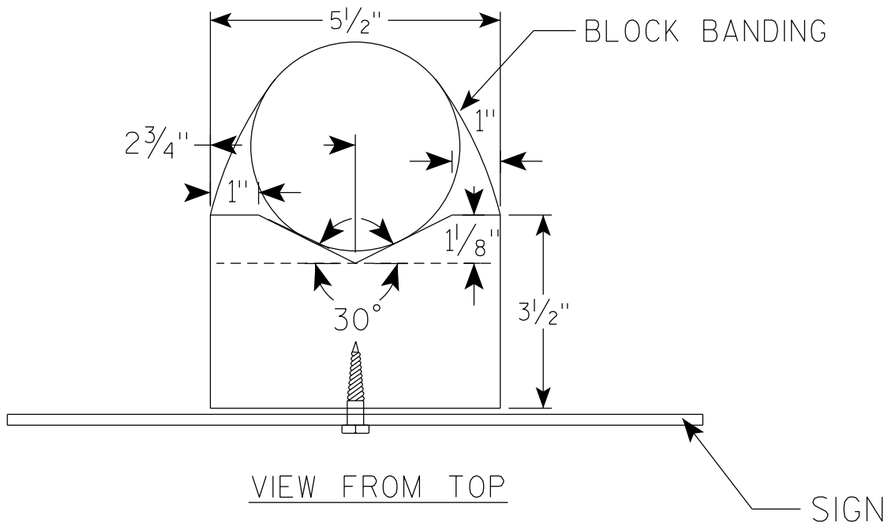
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 40	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$





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, ¾" 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 NORNALLY 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 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

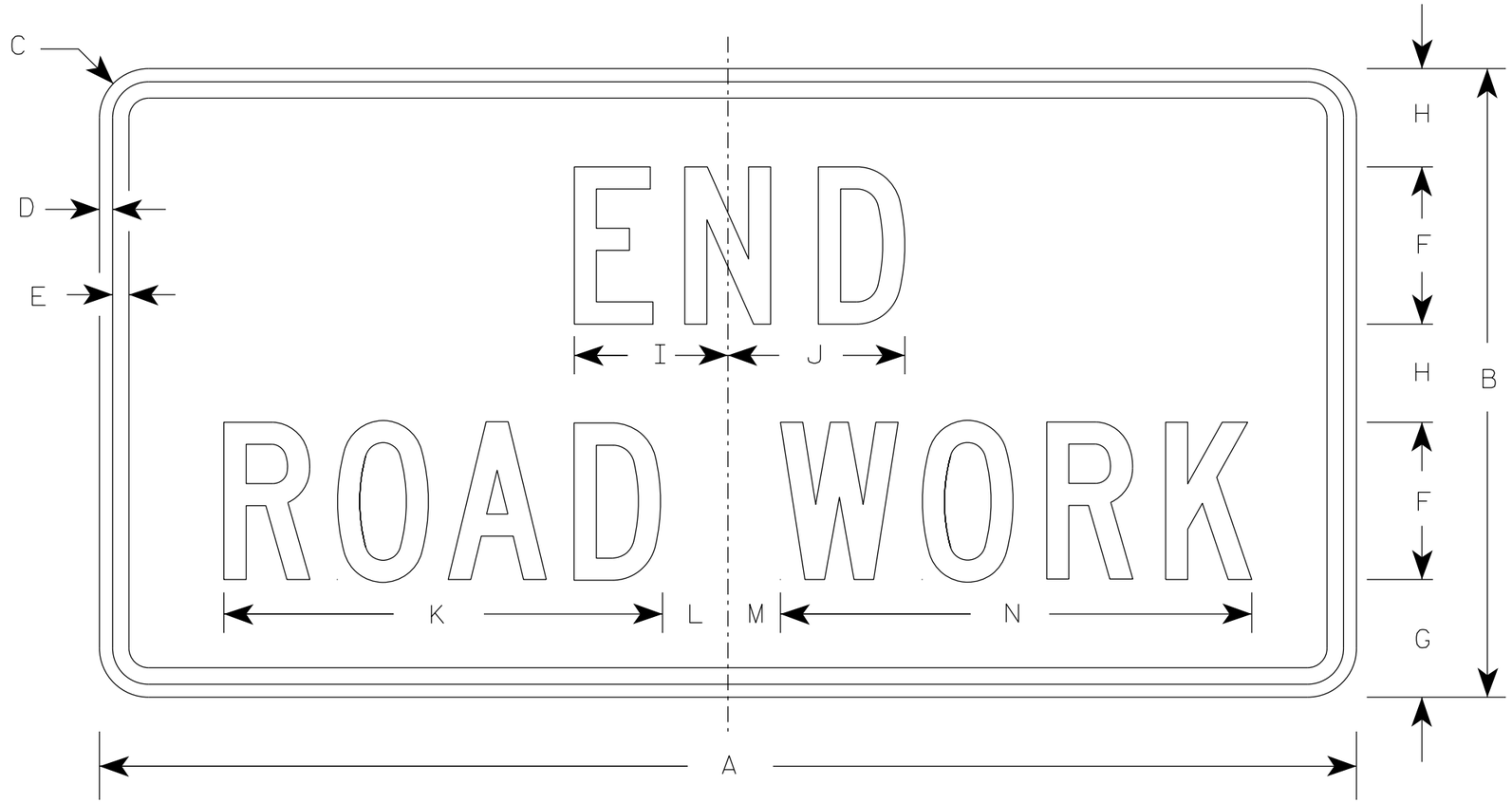
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 41 E



G20-2A

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	18	1 1/2	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
2	48	24	1 7/8	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
2M	48	24	1 7/8	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
3	48	24	1 7/8	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
4	48	24	1 7/8	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
5	48	24	1 7/8	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

STANDARD SIGN

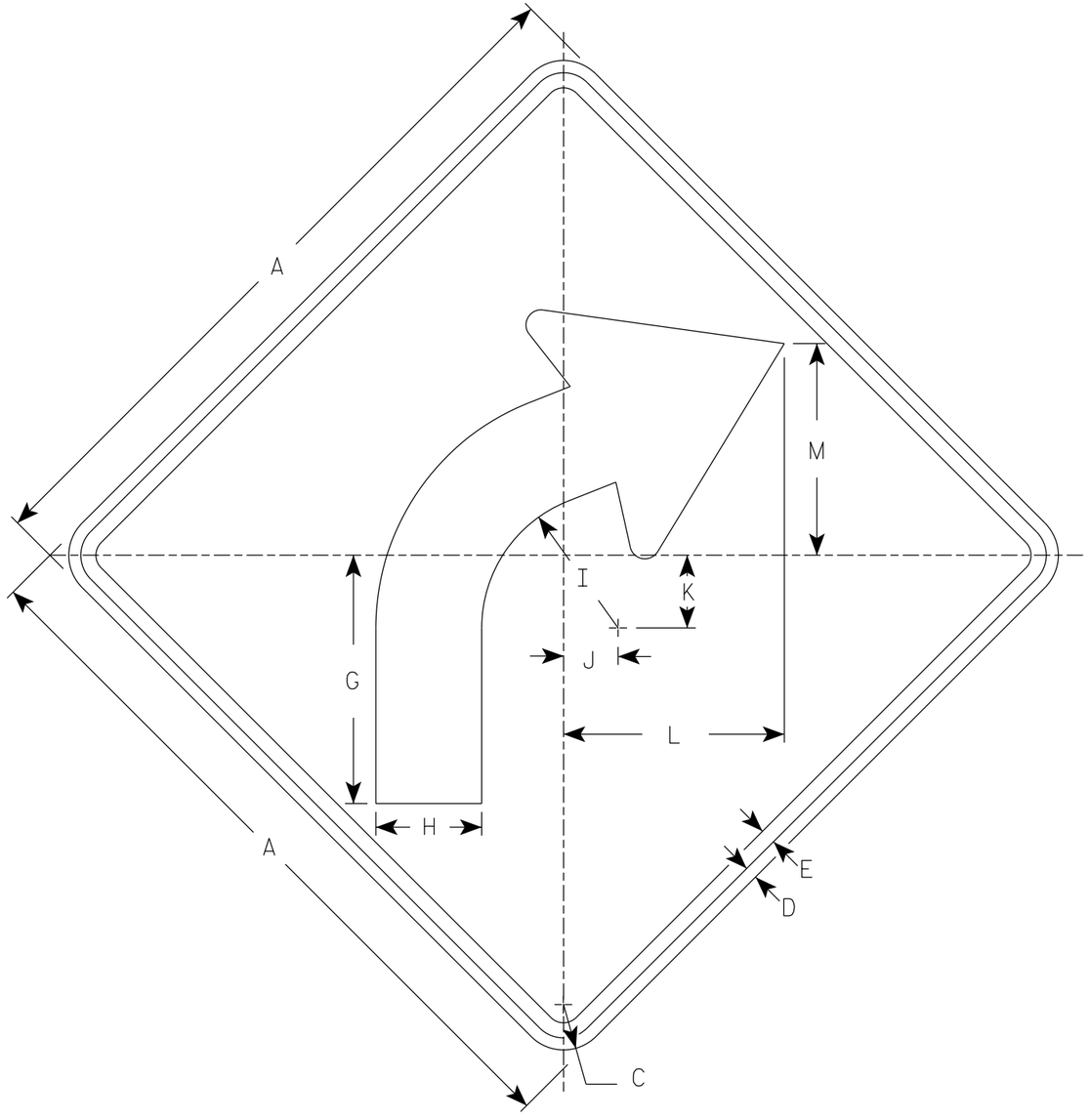
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-2A.10

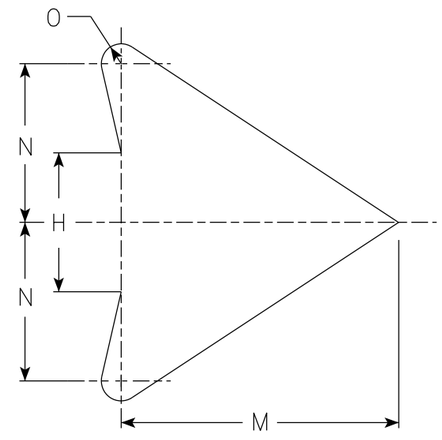
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 42 E



W1-2R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



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 1/2	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 7/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		2 1/4	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		3	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

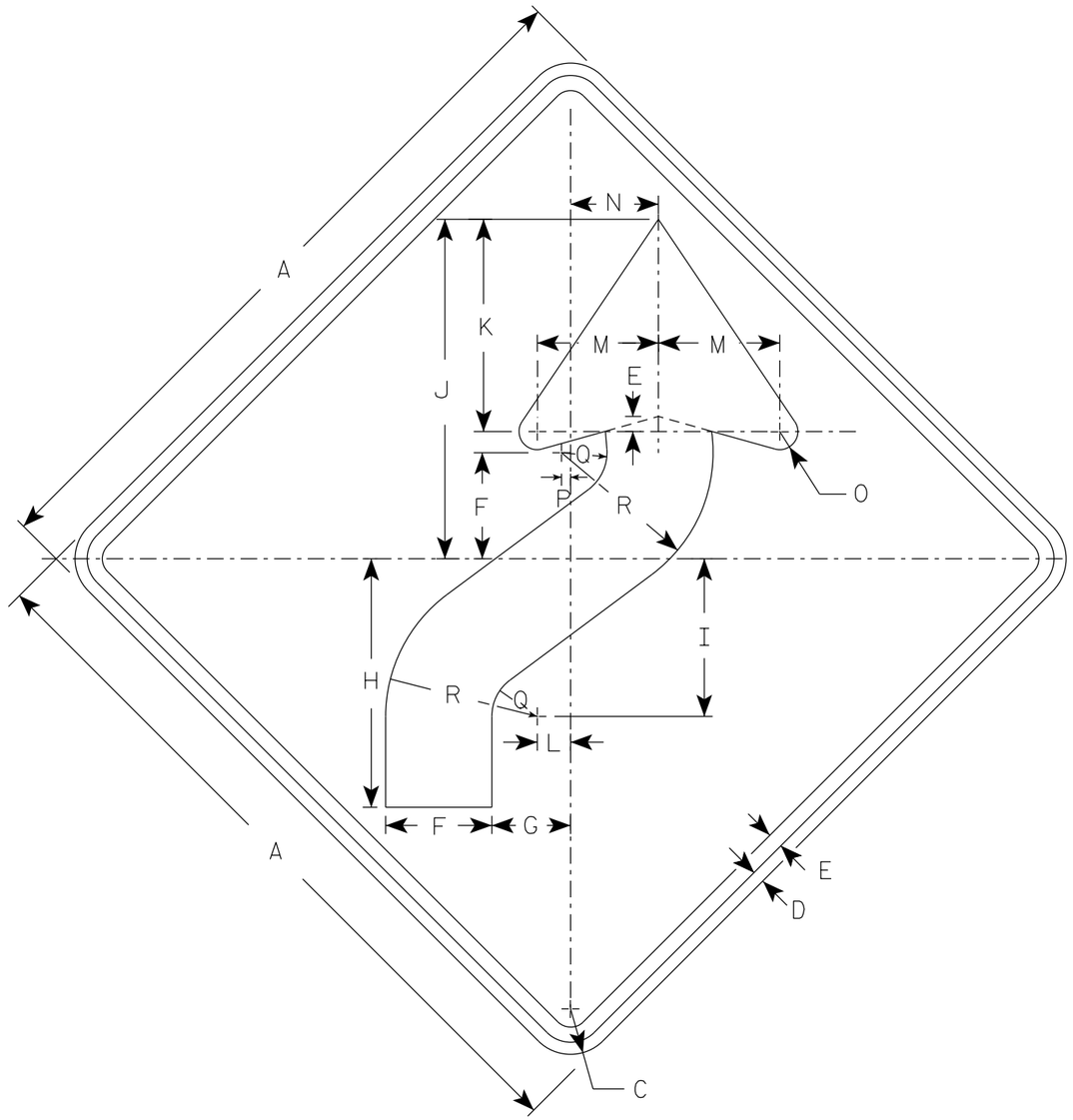
STANDARD SIGN
W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/23/2023 PLATE NO. W1-2.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 43	E



W1-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. W1-4L is the same as W1-4R 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	24		1 1/2	3/8	1/2	3 1/2	2 5/8	8 1/4	5 1/4	11 1/4	7	1 1/8	4	3	5/8	1/4	1 1/2	5									4.0
2S	30		1 7/8	1/2	5/8	4 3/8	3 1/4	10 1/4	6 1/2	14	8 3/4	1 3/8	5	3 5/8	3/4	3/8	1 7/8	6 1/4									6.25
2M	36		2 1/4	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
3	36		2 1/4	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
4	36		2 1/4	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
5	48		3	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

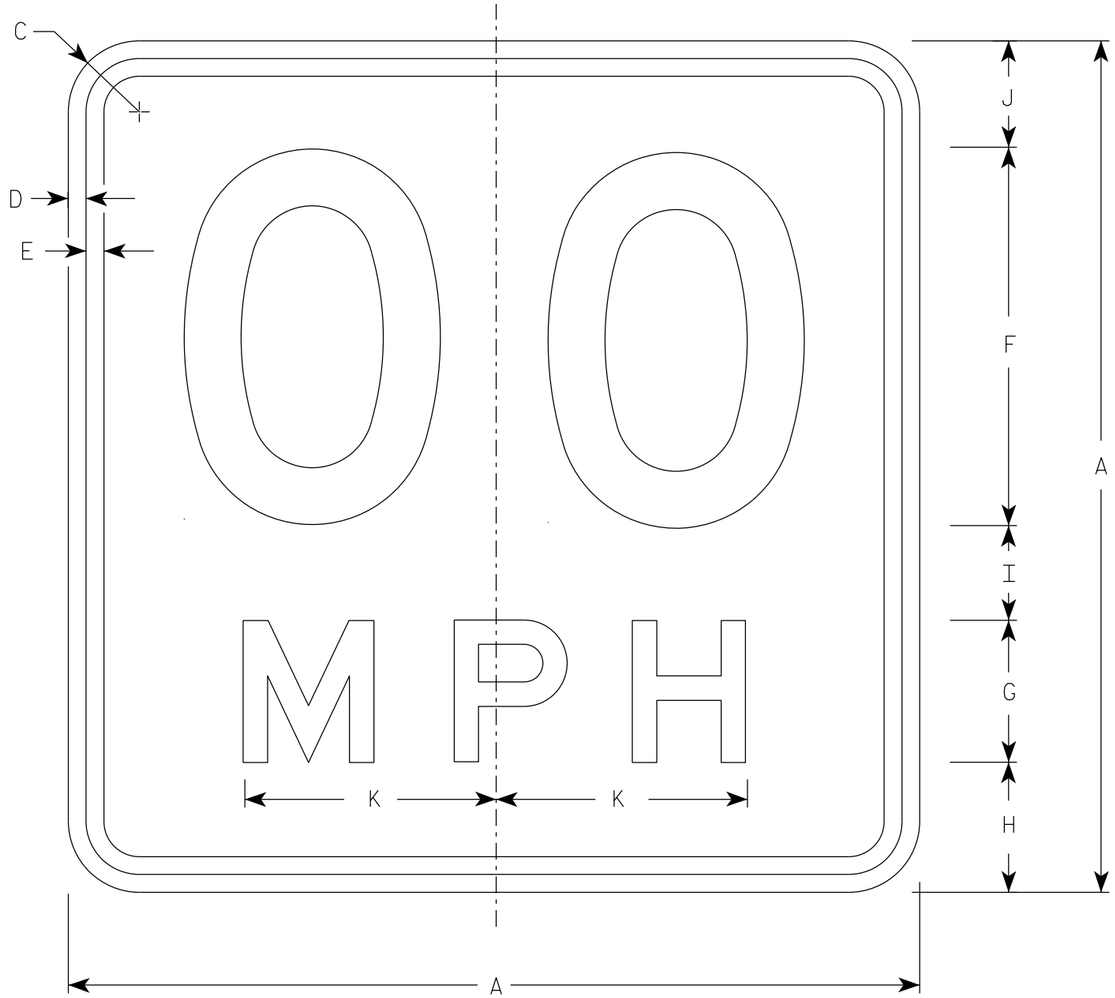
STANDARD SIGN
W1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 3/23/2023 PLATE NO. W1-4.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



W13-1

* For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 5
4. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
5. Line 1 is Series D
   Line 2 is Series E

	SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
	1	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2S	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
*	2M	18		1 1/2	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
	3	24		1 1/2	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
	4	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
	5	36		2 1/4	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

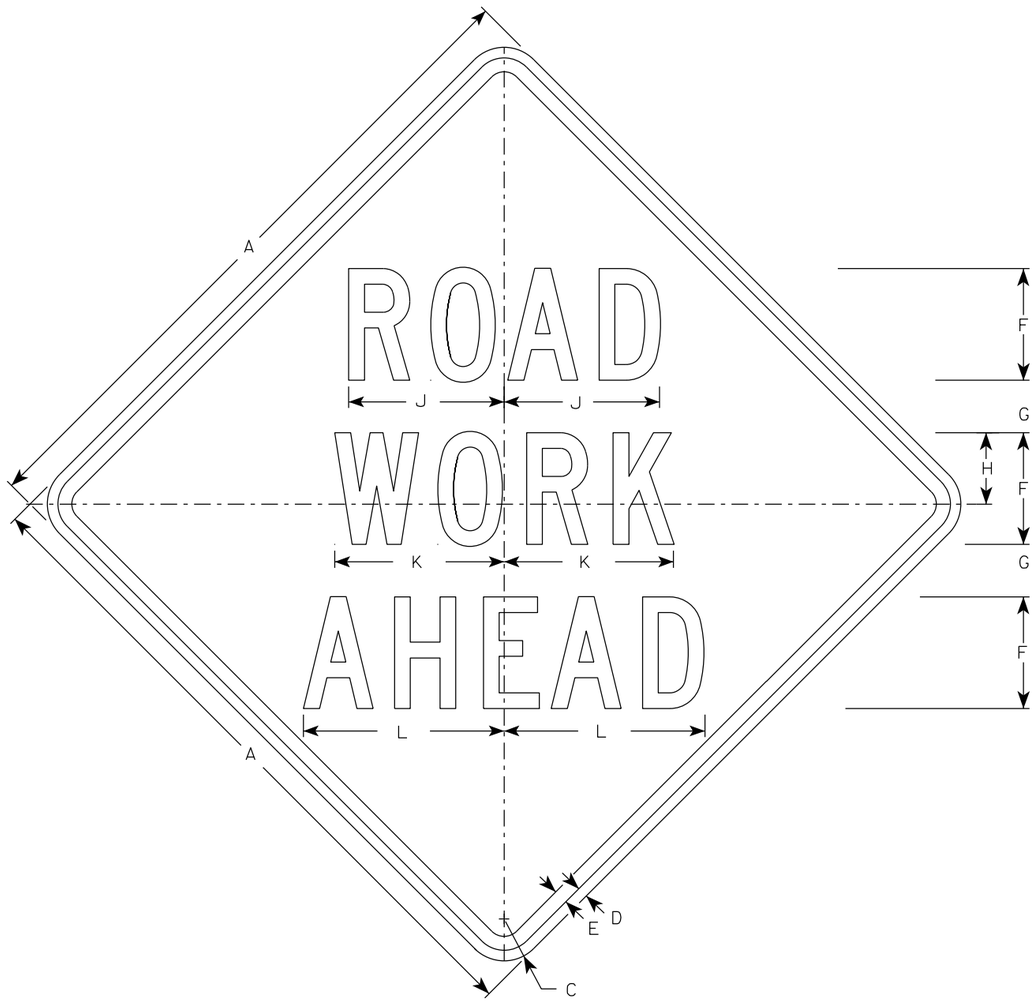
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/8/2024 PLATE NO. W13-1.17

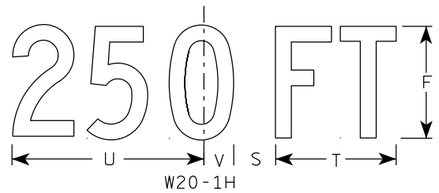
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

NOTES

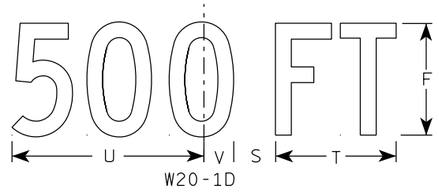
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A

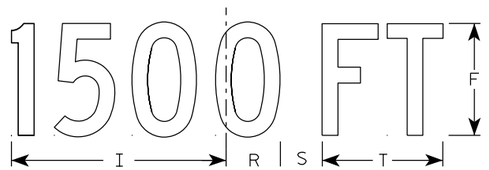


W20-1H

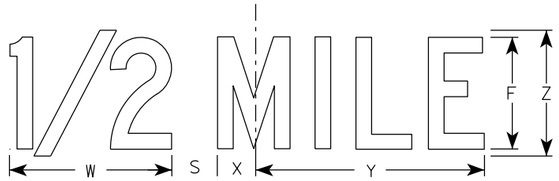


W20-1D

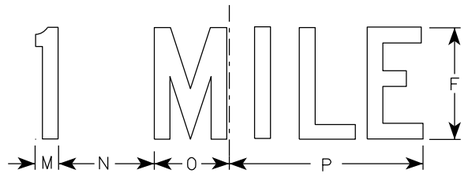
W20-1C



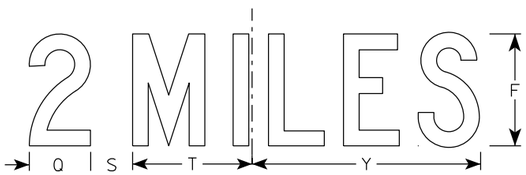
W20-1B



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	Area sq. ft.
1	36		2 1/4	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		3	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		3	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		3	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		3	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		3	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 1/10/2024 PLATE NO. W20-1.12

PROJECT NO:

SHEET NO: 46 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 10-JAN 2024 11:16 PLOT BY : dotc4c

WISDOT/CADDS SHEET 42

7

7

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov