LAX | JANUARY 2025

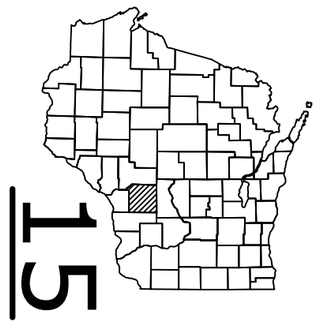
PROJECT ID: 7605-06-62
WITH: N/A

COUNTY: MONROE

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 = 288



DESIGN DESIGNATION 7605-05-32

A.A.D.T.	2024	=	5200
A.A.D.T.	2044	=	5800
D.H.V.		=	673
D.D.		=	60/40
T.		=	16.3%
DESIGN SPEED		=	60 MPH
ESALS		=	1,300,000

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'EB')
- EXISTING CULVERT
- PROPOSED CULVERT (Box or Pipe)
- COMBUSTIBLE FLUIDS (CAUTION)
- MARSH AREA
- WOODED OR SHRUB AREA

PROFILE
- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (95.36)
- CULVERT (Profile View)

UTILITIES
- ELECTRIC (E)
- FIBER OPTIC (FO)
- GAS (G)
- SANITARY SEWER (SAN)
- STORM SEWER (SS)
- TELEPHONE (T)
- WATER (W)
- UTILITY PEDESTAL
- POWER POLE
- TELEPHONE POLE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

SPARTA - TOMAH

C SPARTA E LIMIT TO EMERSON ROAD

STH 21

MONROE COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7605-06-62	WISC 2025156	1

STATE PROJECT NUMBER
7605-06-62

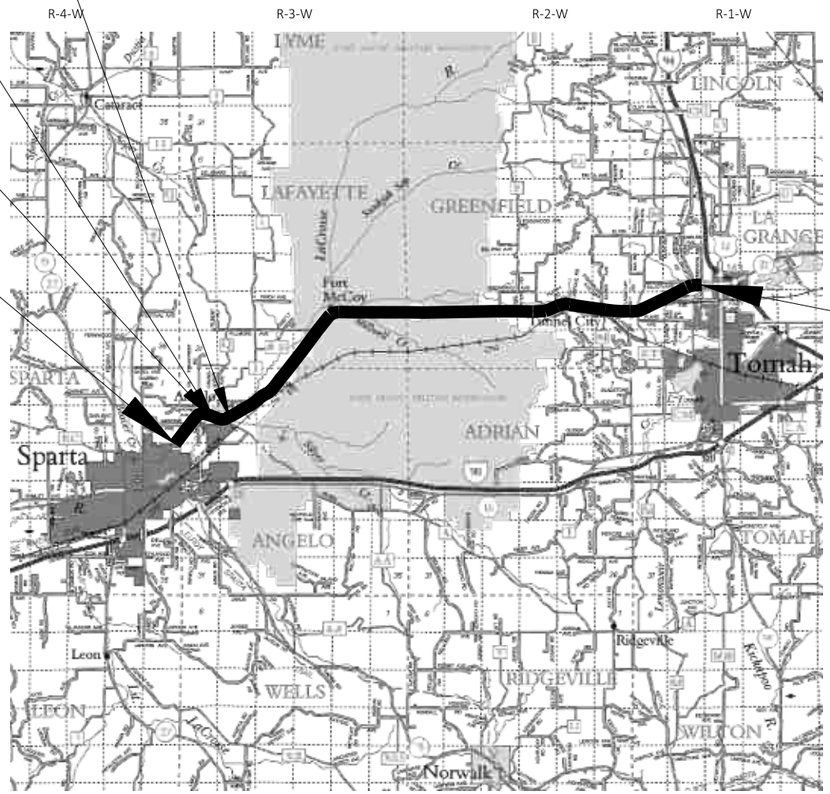
STRUCTURE B-41-0203
EXCEPTION TO NET C/L
STA. 130+64 - STA. 132+12

STRUCTURE B-41-0197
EXCEPTION TO NET C/L
STA. 101+18 - STA. 102+66

STRUCTURE B-41-0196
EXCEPTION TO NET C/L
STA. 93+85 - STA. 94+76

BEGIN PROJECT
STA 31+96
Y = 384153.302
X = 630755.383

END PROJECT
STA 860+37
Y = 406488.102
X = 703970.027



LAYOUT
SCALE 0 2 4 MI

TOTAL NET LENGTH OF CENTERLINE = 15.616 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MONROE 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 12A.

ORIGINAL PLANS PREPARED BY

WSP
831 Critter Court
Suite 400
Onalaska, WI 54650
Phone: (608) 519-1455

WISCONSIN
RYAN B McKANE
E-37609
HOLMEN, WI
PROFESSIONAL ENGINEER

07/15/2024 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WSP USA
Designer	WSP USA
Project Manager	NATHAN SCHUMAKER
Regional Examiner	REGIONAL EXAMINER
Regional Supervisor	BRIAN MEYER

APPROVED FOR THE DEPARTMENT

DATE: 7/16/2024 Nathaniel Schumaker (Signature)

E

GENERAL NOTES

- ALL RADII ARE MEASURED TO EDGE OF PAVEMENT UNLESS OTHERWISE SHOWN OR NOTED ON THE PLAN.
- ALL SIGN LOCATIONS SHALL BE REVIEWED BY THE ENGINEER PRIOR TO INSTALLATION. ANY CONFLICTING SIGNS SHALL BE COVERED OR REMOVED.
- TYPICAL SECTIONS SHOW THE GENERAL FEATURES THROUGHOUT THE PROJECT. PAVEMENT SLOPES, TERRACE SLOPES, ETC., MAY VARY WITHIN THE LIMITS OF THE SECTION.
- NO TREES OR SHRUBS SHALL BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE BEEN DESIGNATED FOR REMOVAL BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED, FERTILIZED, SEEDED, AND MULCHED OR E-MAT AS DIRECTED BY THE ENGINEER.
- WHEN PORTIONS OF EXISTING ASPHALTIC SURFACES ARE TO BE REMOVED TO ACCOMMODATE NEW CONSTRUCTION, THE LINE OF SUCH REMOVAL SHALL BE NEATLY DELINEATED WITH A SAW CUT JOINT THROUGH THE ASPHALTIC SURFACE SO THAT REMOVAL OF THE ASPHALT SHALL BE ACCOMPLISHED WITHOUT DAMAGE TO REMAINING PORTIONS. THE LOCATION OF SAW JOINTS AND THE AMOUNT REMOVED AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.
- CROSS SLOPES AS SHOWN ON THE TYPICAL SECTION WILL VARY AT THE INTERSECTIONS.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE ARE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- WHEN THE QUANTITY OF BASE AGGREGATE IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYER SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.
- APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED SURFACES AND 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS.
- STH 21 WITHIN FORT McCOY CONTAINMENT (APPROXIMATELY CTH BB TO FIREWORKS AVE) IS LOCATED IN AN EASEMENT WITH FORT McCOY AND NOT HIGHWAY ROW.
- MATERIALS AND EQUIPMENT CAN NOT BE STORED OFF OF ROADWAY SURFACE WITHIN FORT McCOY CONTAINMENT WITHOUT APPROVAL FROM FORT MCCOY DPW.

AREA CONTACTS

WISDOT PROJECT MANAGER
NATHANIEL SCHUMAKER
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
(608) 789-5538
NATHANIEL.SCHUMAKER@DOT.WI.GOV

WDNR
KAREN KALVELAGE
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
(608)-785-9115
KAREN.KALVELAGE@WISCONSIN.GOV

DESIGN CONTACT
WSP USA
RYAN MCKANE, PE
831 CRITTER COURT
ONALASKA, WI 54650
(608) 385-5307
RYAN.MCKANE@WSP.COM

STANDARD ABBREVIATIONS

AC	ACRE
AGG	AGGREGATE
AH	AHEAD
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ASPH	ASPHALTIC
AVG	AVERAGE
BK	BACK
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
BR	BRIDGE
CL or C/L	CENTER LINE
CE	COMMERCIAL ENTRANCE
CONC	CONCRETE
CO	COUNTY
CTH	COUNTY TRUNK HIGHWAY
CR	CREEK
CABC	CRUSHED AGGREGATE BASE COURSE
CWT	HUNDREDWEIGHT
CY or CUYD	CUBIC YARD
CULV	CULVERT
CP	CULVERT PIPE
C & G	CURB AND GUTTER
D	DEGREE OF CURVE
DIA	DIAMETER
DISCH	DISCHARGE
E	EAST
EB	EASTBOUND
EL or ELEV	ELEVATION
EW	ENDWALL
ENT	ENTRANCE
EXC	EXCAVATION
EX	EXISTING
FERT	FERTILIZER
FE	FIELD ENTRANCE
FL or F/L	FLOW LINE
FT	FOOT
HE	HIGHWAY EASEMENT
HMA	HOT MIX ASPHALT
INL	INLET
INV	INVERT
JCT	JUNCTION
LT	LEFT
L	LENGTH OF CURVE
LIN FT or LF	LINEAR FOOT
LS	LUMP SUM
NC	NORMAL CROWN
NGS	NATIONAL GEODETIC SURVEY
N	NORTH
NB	NORTHBOUND
NO	NUMBER
PT	POINT
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PCC	PORTLAND CEMENT CONCRETE
LB	POUND
PE	PRIVATE ENTRANCE
R	RADIUS
RL or R/L	REFERENCE LINE
RT	RIGHT
R/W	RIGHT-OF-WAY
RD	ROAD
SHLDR	SHOULDER
SB	SOUTHBOUND
SF or SQ FT	SQUARE FEET
SY or SQ YD	SQUARE YARD
SDD	STANDARD DETAIL DRAWINGS
STH	STATE TRUNK HIGHWAYS
SE	SUPERELEVATION
T	TANGENT
TEMP	TEMPORARY
TWLTL	TWO-WAY LEFT-TURN LANE
UG	UNDERGROUND
USH	UNITED STATES HIGHWAY
V	VELOCITY OR DESIGN SPEED
VC	VERTICAL CURVE
WB	WESTBOUND
YD	YARD

ORDER OF TYPICAL SECTION & DETAIL SHEETS

1. GENERAL NOTES
2. PROJECT OVERVIEW
3. TYPICAL SECTIONS
4. CONSTRUCTION DETAILS
5. INTERSCTION DETAILS
6. PAVING DETAILS
7. EROSION CONTROL DETAILS
8. PAVEMENT MARKING AND PERMANET SIGNING
9. TRAFFIC CONTROL STAGING
10. DETOUR PLAN
11. ALIGNMENT DETAILS & SURVEY CONTROL

2

UTILITY CONTACTS

ALLIANT ENERGY - ELECTRICITY
TYLER DONOVAN
338 E STATE ST.
MAUSTON, WI 53948
(608) 847-1302
TYLERDONOVAN@ALLIANTENERGY.COM

BRIGHTSPEED OF MIDWEST WI - COMMUNICATION LINE
TOM MURRAY
1905 WARD AVENUE
LA CROSSE, WI 54601
(608) 780-0895
TOM.L.MURRAY@BRIGHTSPEED.COM

BRIGHTSPEED OF WESTERN WI - COMMUNICATION LINE
TOM MURRAY
1905 WARD AVENUE
LA CROSSE, WI 54601
(608) 780-0895
TOM.L.MURRAY@BRIGHTSPEED.COM

LEMONWEIR VALLEY TELEPOHONE CO
BEN GRILLEY
124 US HWY 12/16
CAMP DOUGLAS, WI 54618
(608) 427-6515
BEN.GRILLEY@GETLYNXX.COM

MEDIACOM WISCONSIN LLC - COMMUNICATION LINE
ERIC LARSON
1504 2nd ST. SE
PO BOX 110
WASECA, MN 56093
(845) 587-0789
ELARSON@MEDIACOMCC.COM

NORTHERN NATURAL GAS COMPANY - GAS/PETROLEUM
SCOTT MCPHAIL
5557 COUNTY D
PLATTEVILLE, WI 53818
(402) 530-2805
SCOTT.MCPPHAIL@NNGCO.COM

OAKDALE ELECTRIC COOPERATIVE - ELECTRICITY
MATT RIGGS
489 OAKWOOD ST.
TOMAH, WI 54660
(608) 372-8828
MRIGGS@OAKDALEREC.COM

SPECTRUM - COMMUINCATIONS LINE
PERRY McCLELLAN
1228 12th AVE S
ONALASKA, WI 54650
(608) 317-6213
PERRY.MCCLELLAN@CHARTER.COM

WE ENERGIES - GAS/PETROLEUM
JEREMY SLOWINSKI
1921 8TH ST. SOUTH
WISCONSIN RAPIDS, WI 54494
(715) 421-7251
JEREMY.SLOWINSKI@WE-ENERGIES.COM

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(608) 487-0444
NATHAN.J.ABBOTT@XCELENERGY.COM

XCEL ENERGY - ELECTRICITY-TRANSMISSION
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414 NICOLLET MALL 5TH FLOOR
MINNEAPOLIS, MN 55401
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LA CROSSE WI 54602
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FORT MCCOY CONTACTS

FORT MCCOY - UTILITIES
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FORT MCCOY, WI 54656
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NATHAN.J.SOBOJINSKI.CIV@MAIL.MIL

FORT MCCOY - DEPARTMENT OF PUBLIC WORKS
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FORT MCCOY, WI 54656
(608) 388-9184
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DIGGERS HOTLINE
Dial 811 or (800) 242-8511
www.DiggersHotline.com

RUNOFF COEFFICIENT TABLE

A	HYDROLOGIC SOIL GROUP											
	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 STRIP- TURF	.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 SLOPE: TURF			.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 = 125 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 4.0 ACRES

2

1" MILL AND 2" HMA OVERLAY LIMITS
STA. 31+96 TO 336+50

STRUCTURE B-41-0196
EXCEPTION TO NET C/L
STA. 93+85 - STA. 94+76

HANSEN CREEK

CTH D

CTH I

GENERAL AVE

GLENWOOD AVE

GENTRY RD

GLENWOOD AVE

50+00

100+00

ENVIRONMENTALLY SENSITIVE AREA

STRUCTURE B-41-0197
EXCEPTION TO NET C/L
STA. 101+18 - STA. 102+66

LA CROSSE RIVER

GOODWATER AVE

150+00

CTH A

SILVER CREEK

GOODVIEW AVE

GOODVIEW AVE

200+00

GILLETTE AVE

GINGER RD

250+00

CTH BB

300+00

BUCKLEY CT

BYPASS RD

S A ST

350+00

S E ST

S H ST

S J ST

S K ST

SOUTH M STREET

SOUTH M STREET

400+00

YARD RD

STILLWELL CREEK

450+00

S 10TH AVE

16TH CT

BEGIN PROJECT
STA 31+96
Y = 384153.302
X = 630755.383

STRUCTURE B-41-0203
EXCEPTION TO NET C/L
STA. 130+64 - STA. 132+12

4" MILL AND 4" HMA OVERLAY LIMITS
STA 336+50 TO STA. 497+00

SCALE, FEET 0 0.25 MI 0.5 MI

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END PROJECT
STA 860+37

ELLSWORTH RD

MUD CREEK

850+00

EMERSON RD

4" MILL AND
4" HMA OVERLAY LIMITS
STA 336+50 TO STA. 497+00

S 10TH AVE

X RD

16TH CT

450+00

500+00

550+00

FIREWORKS AVE

600+00

CTH E

FLAVIN RD

650+00

FLAGPOLE RD

700+00

ELDER RD

FISHER RD

CTH M

750+00

FLAGSTAFF RD

CTH M

CTH ET

FLINT AVE

800+00

FLINT AVE

ENVIRONMENTALLY SENSITIVE AREA

1" MILL AND 2" HMA OVERLAY LIMITS
STA. 497+00 TO 860+37

SCALE, FEET 0 0.25 MI 0.5 MI

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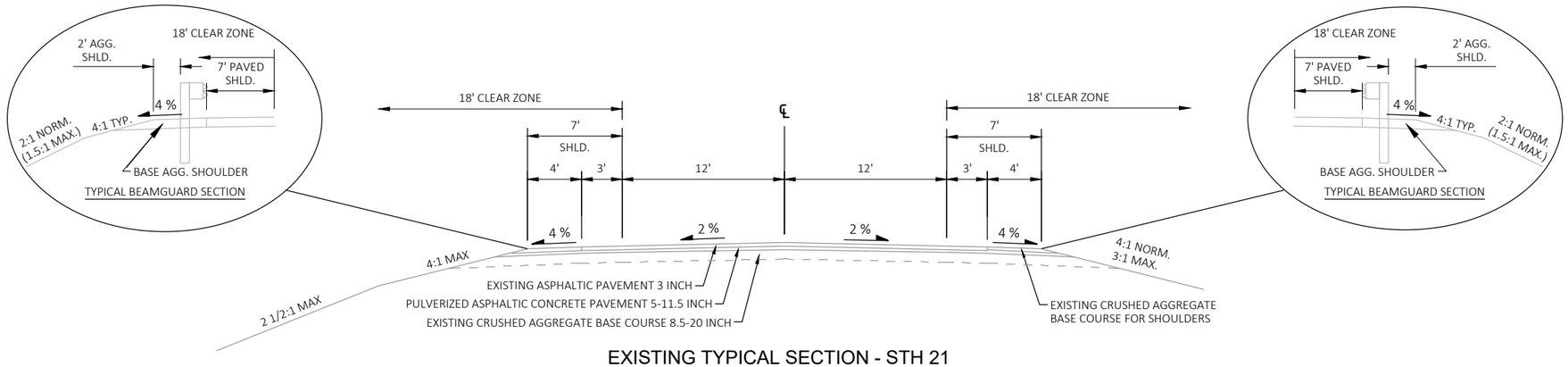
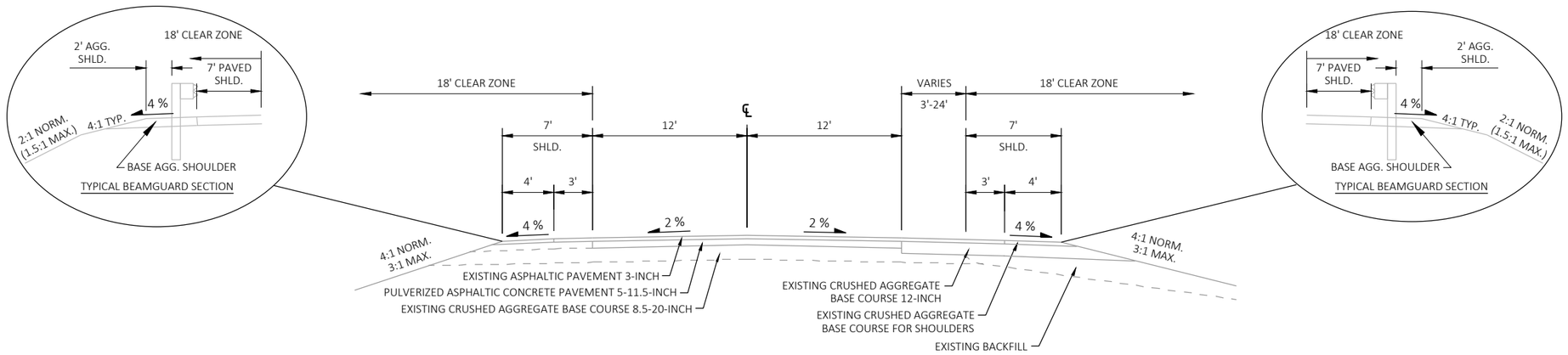
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PROJECT OVERVIEW	SHEET 4	E

2



EXISTING TYPICAL SECTION - STH 21

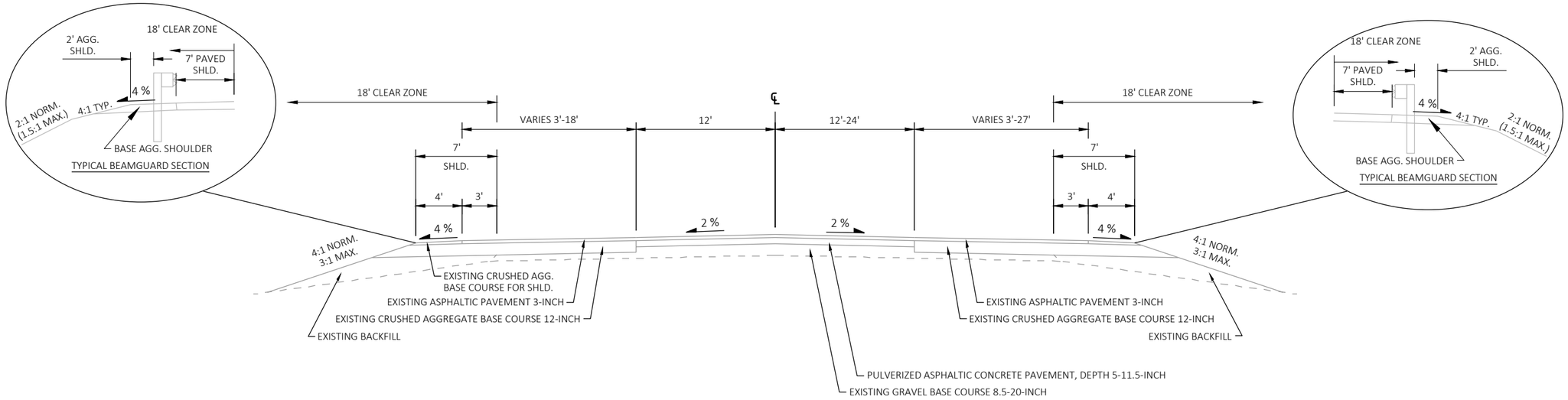
STA 34+52 - 85+00
STA 92+70 - 93+85
STA 108+02 - 122+26
STA 128+24 - 129+86
STA 133+36 - 341+14
STA 359+37 - 392+72
STA 433+54 - 471+97
STA 502+61 - 534+27
STA 534+53 - 665+96
STA 676+46 - 860+37
(SUPER ELEV. VARIES)



EXISTING TYPICAL SECTION - STH 21

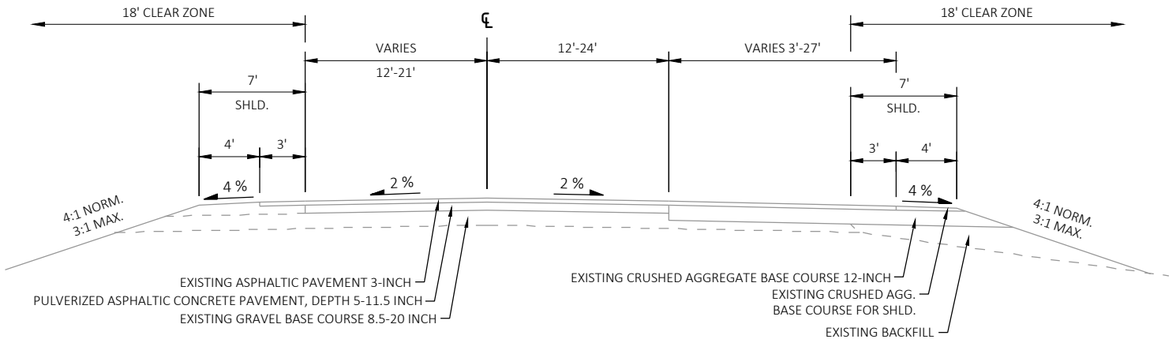
STA 31+96 - 34+52
STA 85+00 - 92+70
STA 94+76 - 101+18
STA 665+96 - 676+46
(SUPER ELEV. VARIES)

2



EXISTING TYPICAL SECTION - STH 21

STA 102+66 - 108+02
STA 122+26 - 128+24
STA 129+86 - 130+64
STA 132+12 - 133+36
(SUPER ELEV. VARIES)

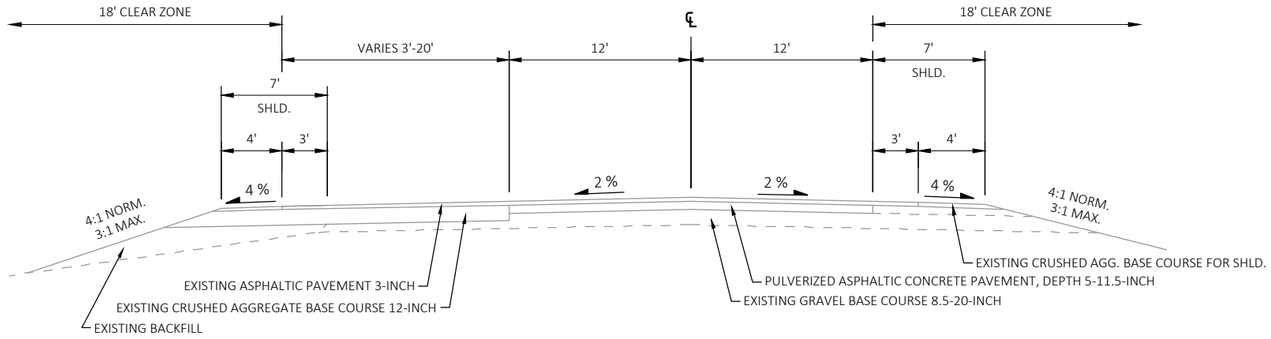


EXISTING TYPICAL SECTION - STH 21

STA 400+08 - 412+72

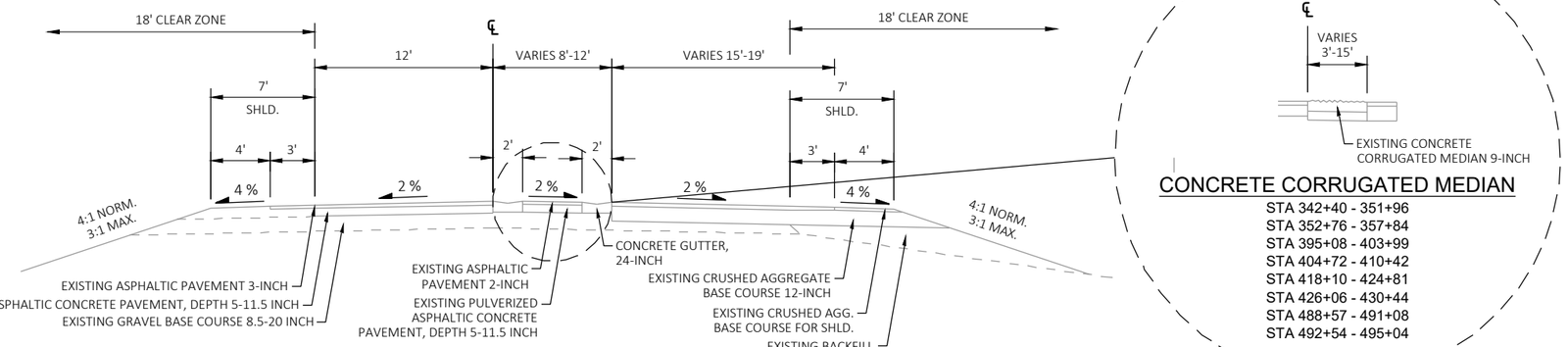
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 6	E

2



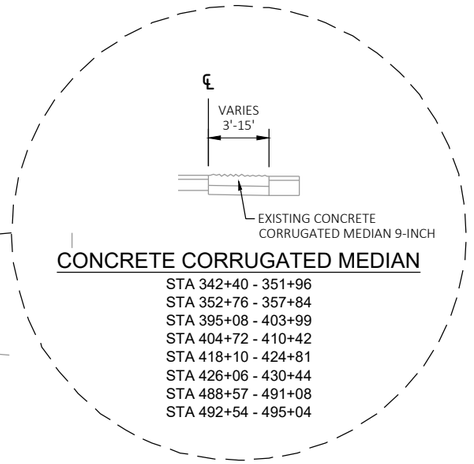
EXISTING TYPICAL SECTION - STH 21

STA 481+86 - 483+00



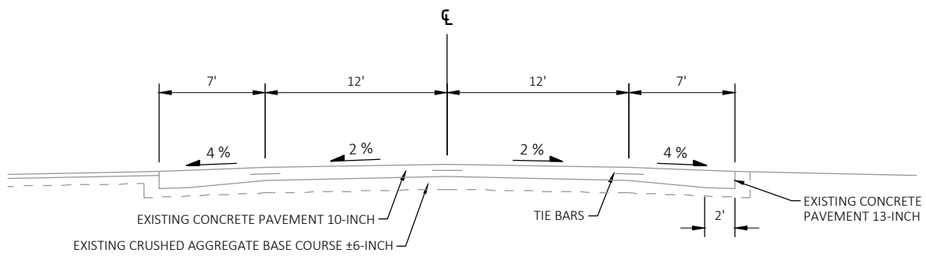
EXISTING TYPICAL SECTION - STH 21

STA 341+14 - 359+37
STA 392+72 - 400+08
STA 412+72 - 433+54
STA 471+97 - 481+86
STA 483+00 - 491+68
STA 491+92 - 502+61



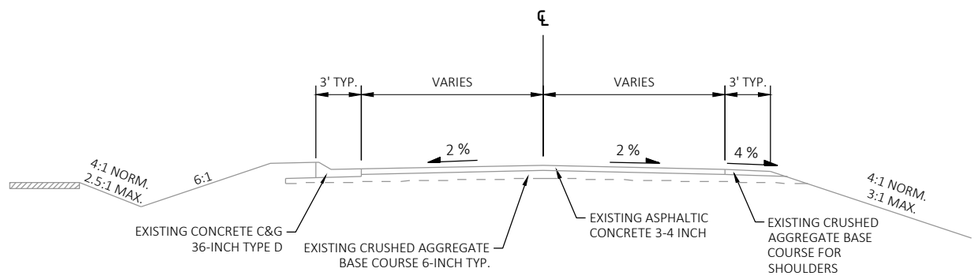
CONCRETE CORRUGATED MEDIAN

STA 342+40 - 351+96
STA 352+76 - 357+84
STA 395+08 - 403+99
STA 404+72 - 410+42
STA 418+10 - 424+81
STA 426+06 - 430+44
STA 488+57 - 491+08
STA 492+54 - 495+04



EXISTING TYPICAL SECTION - STH 21

STA 491+68 - 491+92
STA 534+27 - 534+53
(TANK CROSSING)

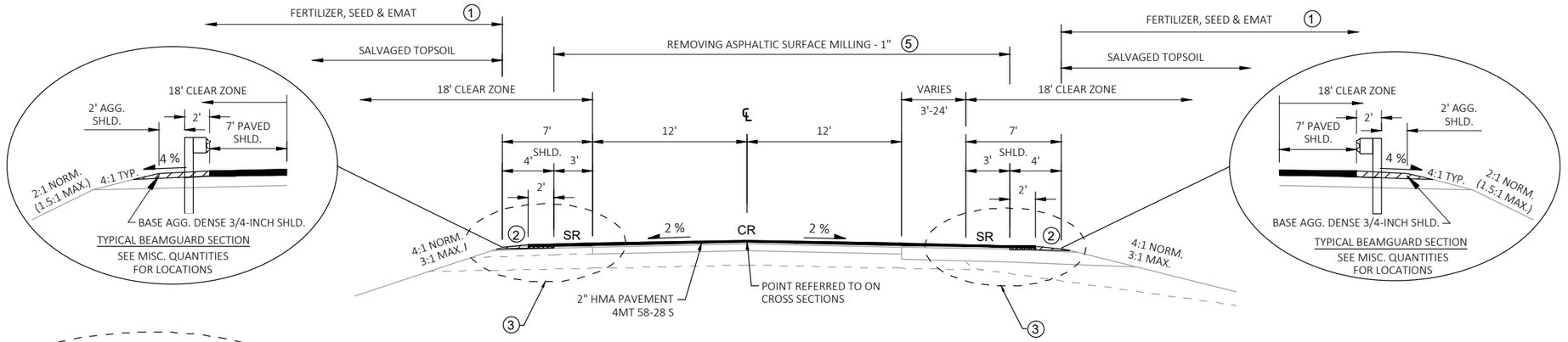


EXISTING TYPICAL SECTION - SIDE ROADS

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 7	E

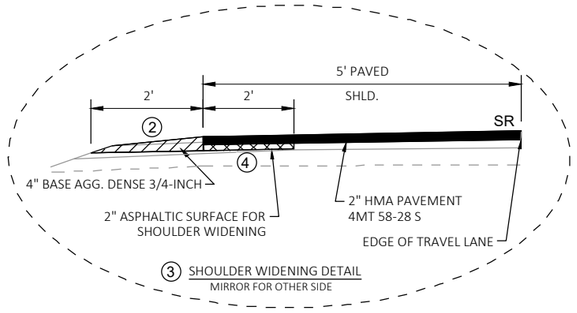
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\020301_TS.DWG
LAYOUT NAME - Existing 3

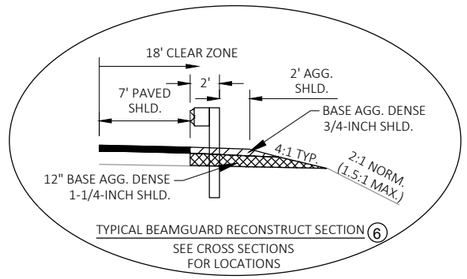
PLOT DATE : 11/20/2024 8:59 AM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

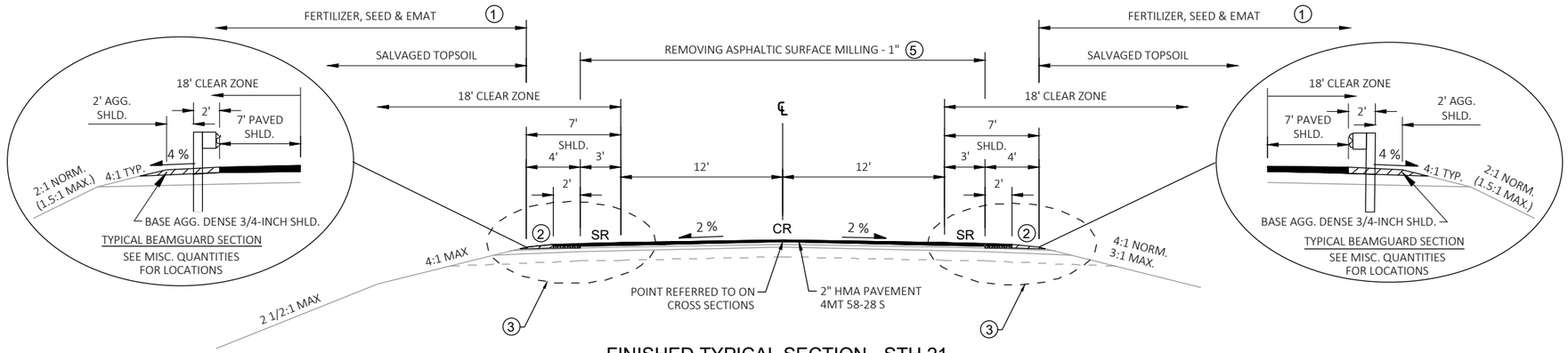


FINISHED TYPICAL SECTION - STH 21

STA 31+96 - 34+52
STA 85+00 - 92+70
STA 94+76 - 101+18
STA 665+96 - 676+46







FINISHED TYPICAL SECTION - STH 21

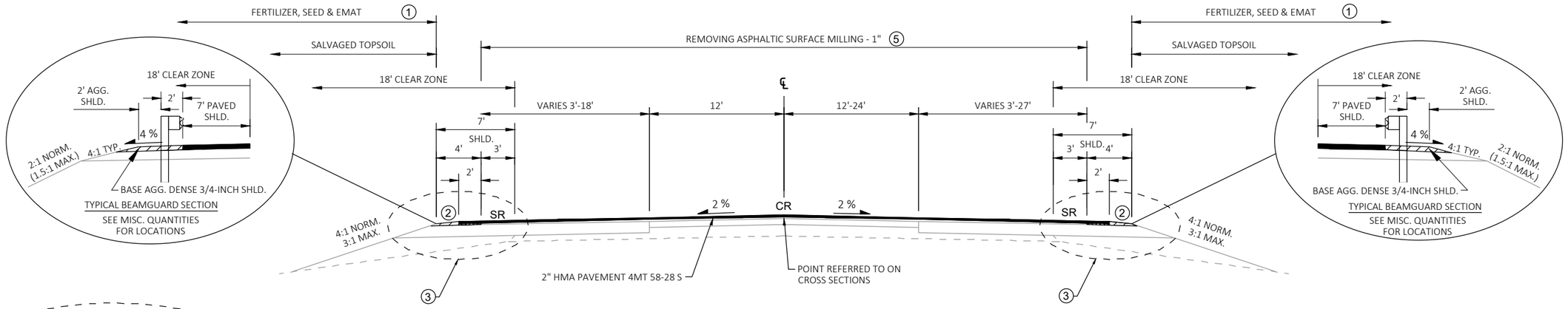
STA 34+52 - 85+00
STA 92+70 - 93+85
STA 108+02 - 122+26
STA 128+24 - 129+86
STA 133+36 - 336+50
STA 502+61 - 534+27
STA 534+53 - 665+96
STA 676+46 - 860+36

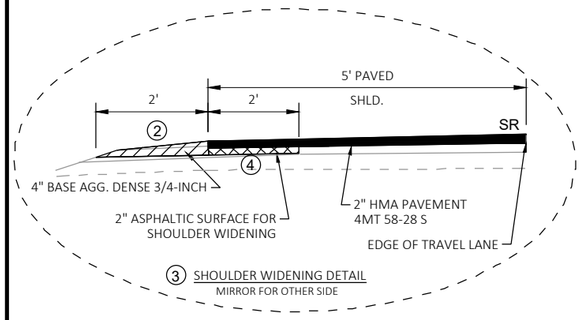
1. RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE
2. ROUND SHOULDERS TO MATCH EXISTING SLOPES, 6% TYP.
3. SEE SHOULDER WIDENING DETAIL
4. PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
5. PREPARE FOUNDATION FOR ASPHALTIC PAVING
6. SHOULDER RECONSTRUCTION SECTION FOR BEAMGUARD

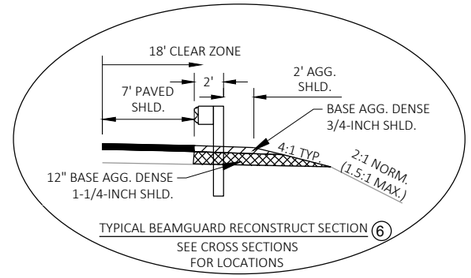
CR = CENTERLINE RUMBLE STRIPS
SR = SHOULDER RUMBLE STRIPS

NOTES:
- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS
- USE BUTT JOINTS WHEN MATCHING INTO EXISTING TANK CROSSINGS

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 8	E

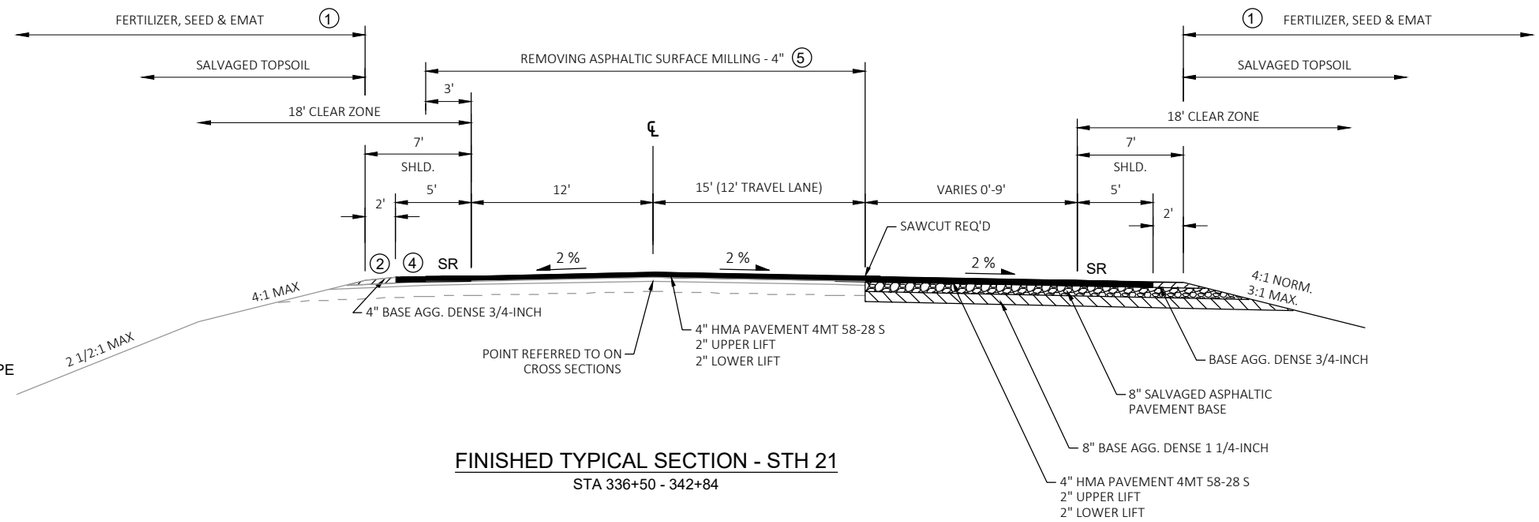






FINISHED TYPICAL SECTION - STH 21

STA 102+66 - 108+02
STA 122+26 - 128+24
STA 129+86 - 130+64
STA 132+12 - 133+36



FINISHED TYPICAL SECTION - STH 21

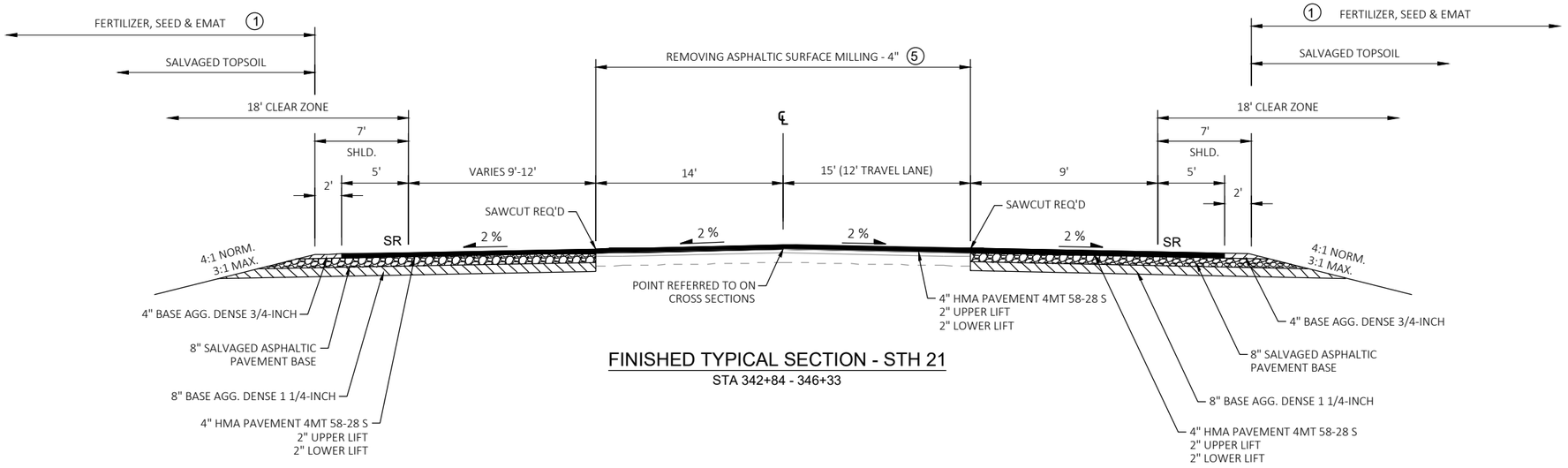
STA 336+50 - 342+84

① RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE
② ROUND SHOULDERS TO MATCH EXISTING SLOPES, 6% TYP.
③ SEE SHOULDER WIDENING DETAIL
④ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
⑤ PREPARE FOUNDATION FOR ASPHALTIC PAVING
⑥ SHOULDER RECONSTRUCTION SECTION FOR BEAMGUARD

CR = CENTERLINE RUMBLE STRIPS
SR = SHOULDER RUMBLE STRIPS

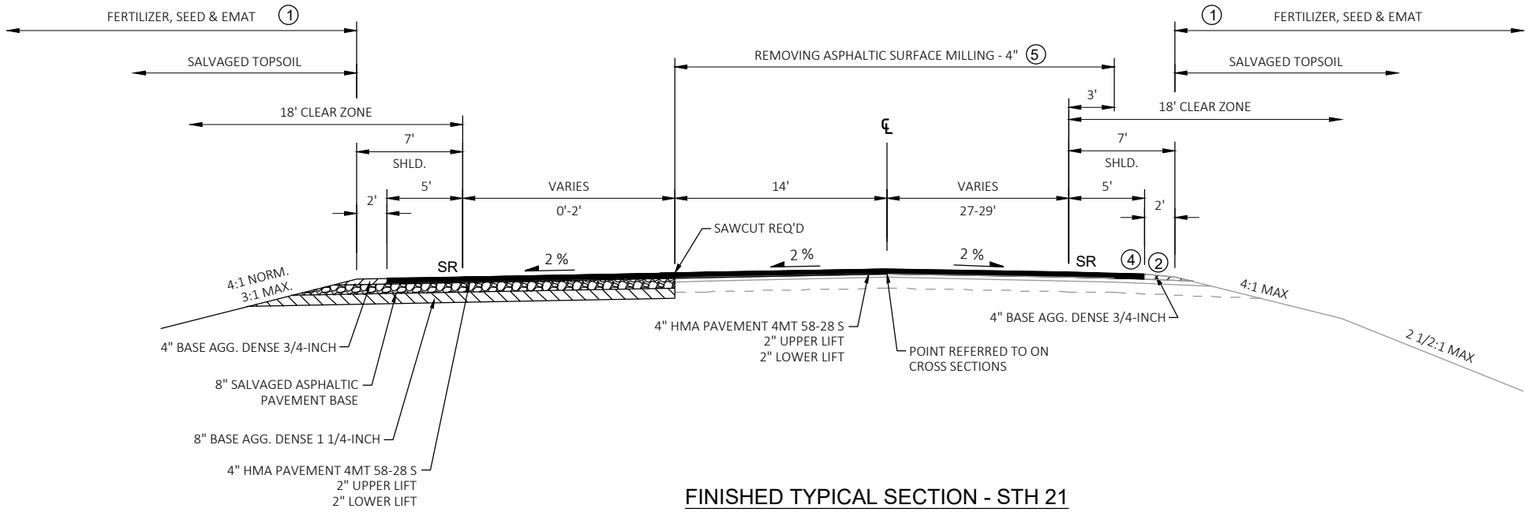
NOTES:
- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS
- USE BUTT JOINTS WHEN MATCHING INTO EXISTING TANK CROSSINGS

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 9	E



FINISHED TYPICAL SECTION - STH 21

STA 342+84 - 346+33



FINISHED TYPICAL SECTION - STH 21

STA 346+33 - 347+90

① RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE

② ROUND SHOULDERS TO MATCH EXISTING SLOPES, 6% TYP.

④ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

⑤ PREPARE FOUNDATION FOR ASPHALTIC PAVING

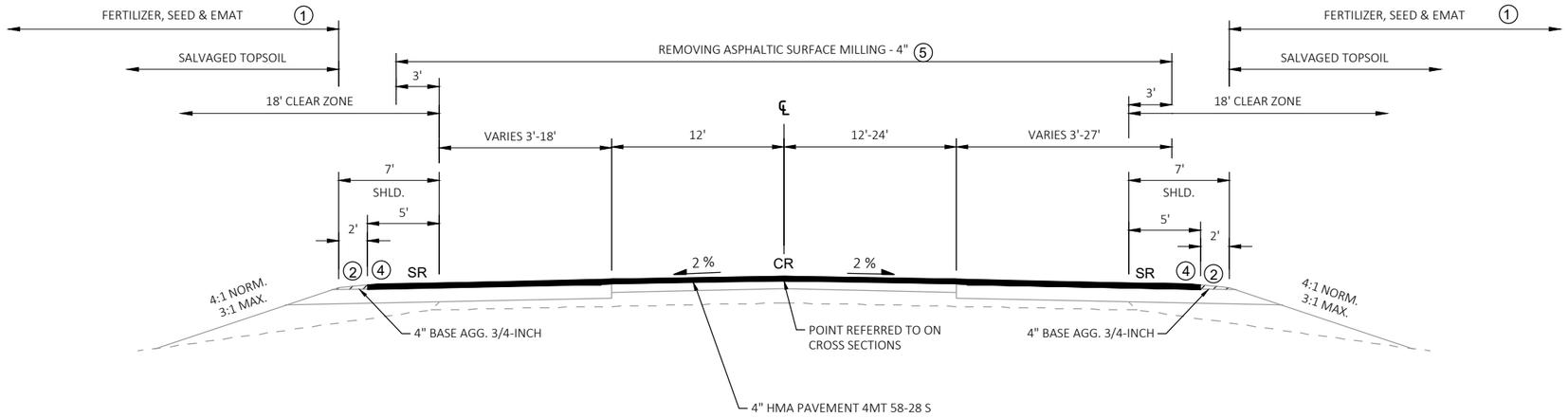
CR = CENTERLINE RUMBLE STRIPS

SR = SHOULDER RUMBLE STRIPS

NOTES:

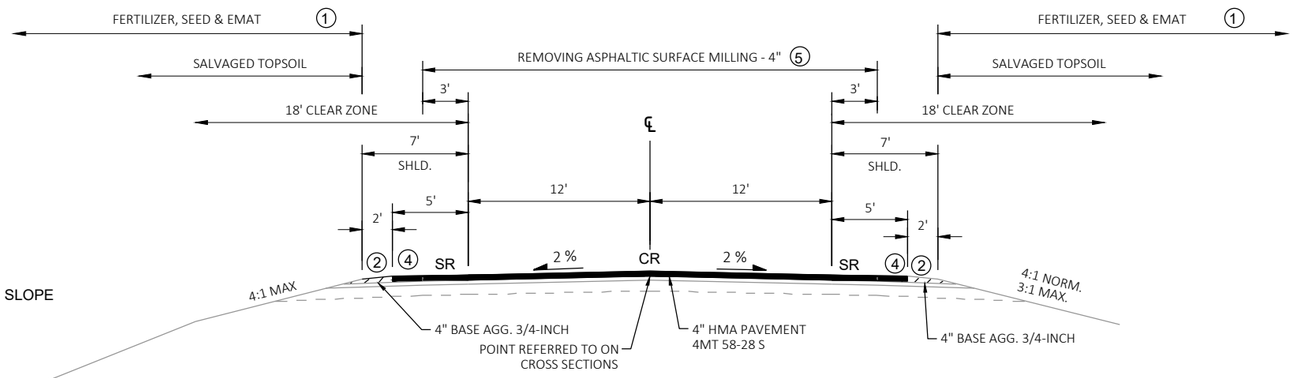
- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS
- USE BUTT JOINTS WHEN MATCHING INTO EXISTING TANK CROSSINGS

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 10	E



FINISHED TYPICAL SECTION - STH 21

STA 347+90 - 358+02
STA 418+80 - 426+06
STA 430+44 - 433+54



FINISHED TYPICAL SECTION - STH 21

STA 358+02 - 378+00
▲ STA 413+00 - 416+80
STA 433+54 - 471+97

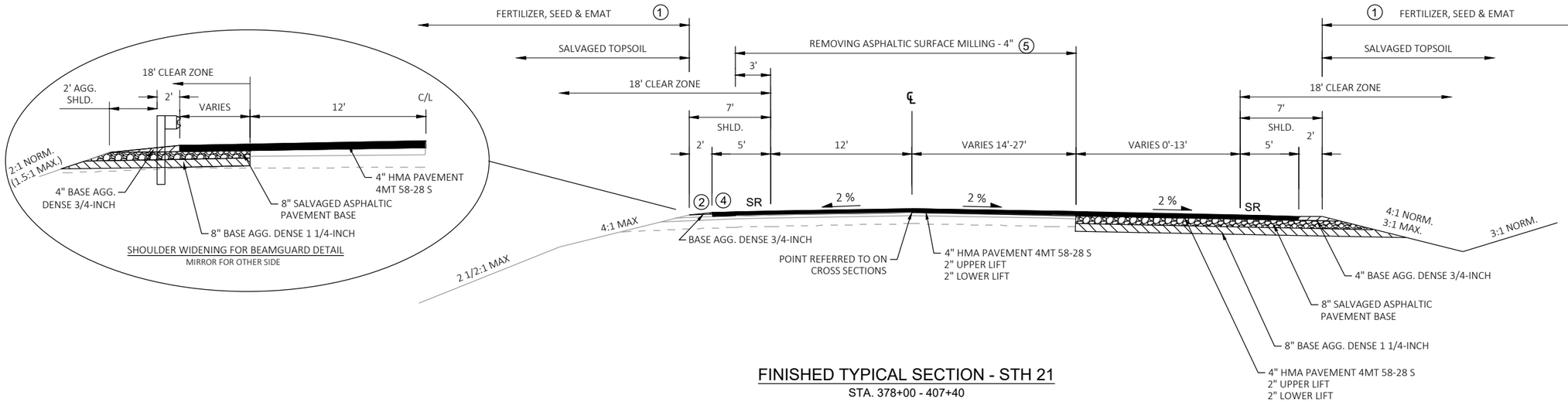
① RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE
② ROUND SHOULDERS TO MATCH EXISTING SLOPES, 6% TYP.
④ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
⑤ PREPARE FOUNDATION FOR ASPHALTIC PAVING

CR = CENTERLINE RUMBLE STRIPS
SR = SHOULDER RUMBLE STRIPS

NOTES:
- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS
- USE BUTT JOINTS WHEN MATCHING INTO EXISTING TANK CROSSINGS

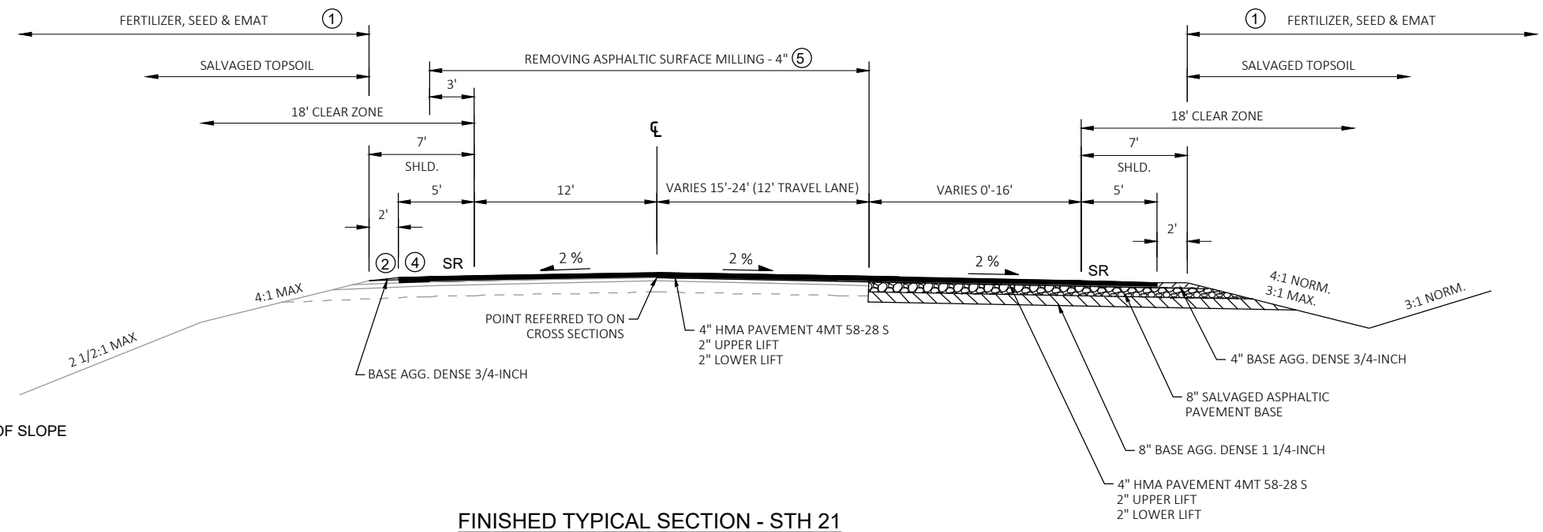
▲ RAILROAD CROSSING LOCATED WITHIN THIS SEGMENT. TRANSITION SUPERELEVATION TO MATCH EXISTING CROSSING MATERIAL

2



FINISHED TYPICAL SECTION - STH 21

STA. 378+00 - 407+40



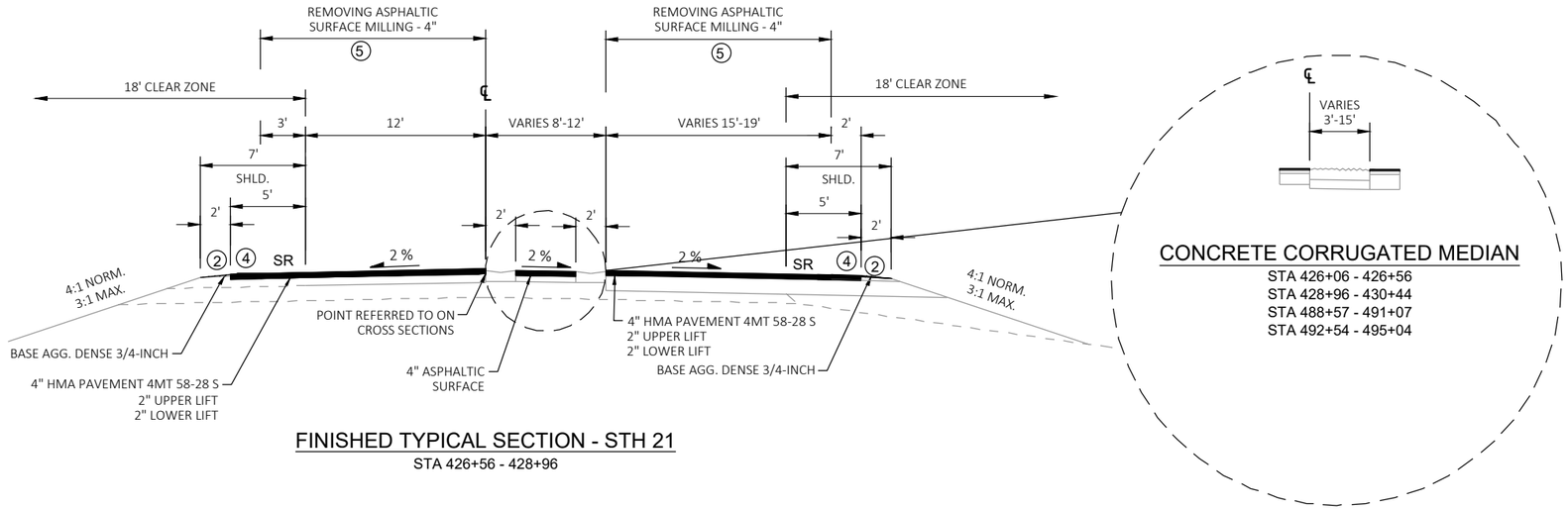
FINISHED TYPICAL SECTION - STH 21

STA 407+40 - 413+00
STA 416+80 - 418+80

① RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE
② ROUND SHOULDERS TO MATCH EXISTING SLOPES, 6% TYP.
④ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
⑤ PREPARE FOUNDATION FOR ASPHALTIC PAVING

CR = CENTERLINE RUMBLE STRIPS
SR = SHOULDER RUMBLE STRIPS

NOTES:
- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS
- USE BUTT JOINTS WHEN MATCHING INTO EXISTING TANK CROSSINGS

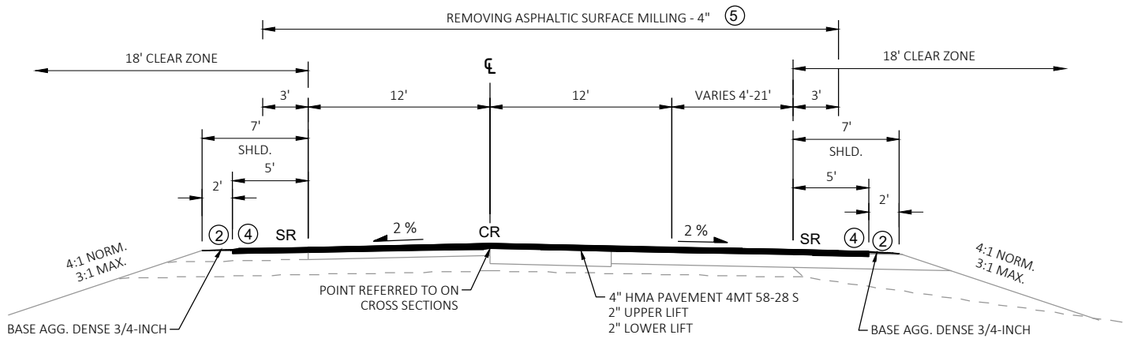


FINISHED TYPICAL SECTION - STH 21

STA 426+56 - 428+96

CONCRETE CORRUGATED MEDIAN

STA 426+06 - 426+56
STA 428+96 - 430+44
STA 488+57 - 491+07
STA 492+54 - 495+04



FINISHED TYPICAL SECTION - STH 21

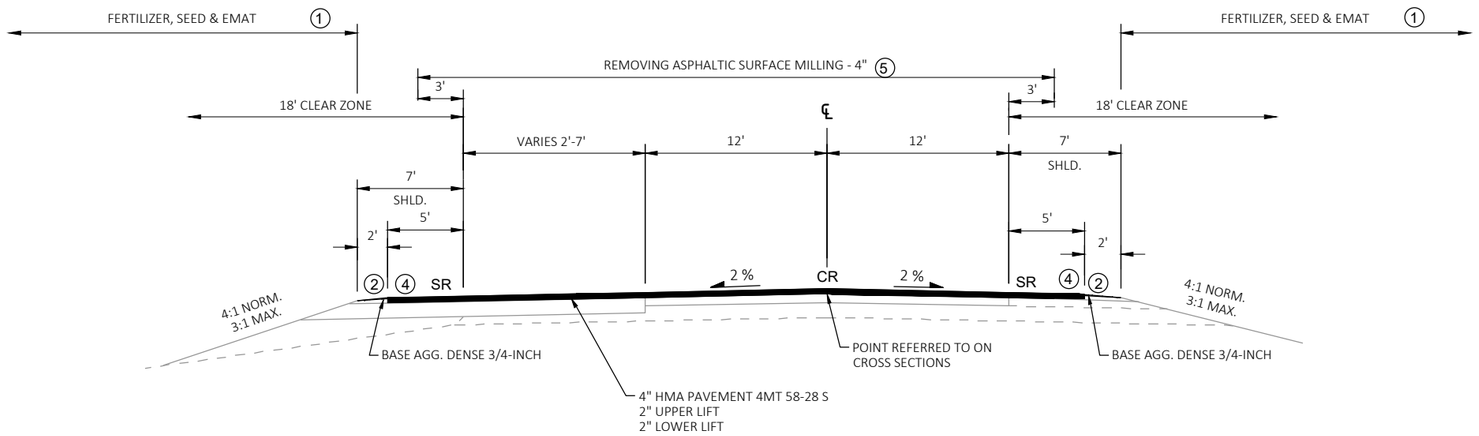
STA 471+97 - 481+86

① RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE
② ROUND SHOULDERS TO MATCH EXISTING SLOPES, 6% TYP.
④ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
⑤ PREPARE FOUNDATION FOR ASPHALTIC PAVING

CR = CENTERLINE RUMBLE STRIPS
SR = SHOULDER RUMBLE STRIPS

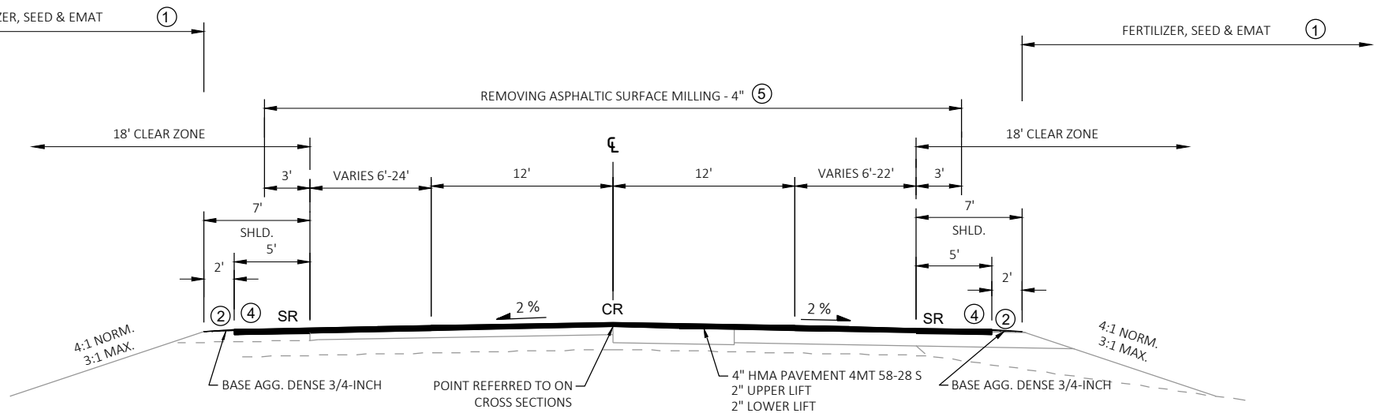
NOTES:
- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS
- USE BUTT JOINTS WHEN MATCHING INTO EXISTING TANK CROSSINGS

2



FINISHED TYPICAL SECTION - STH 21

STA 481+86 - 483+00



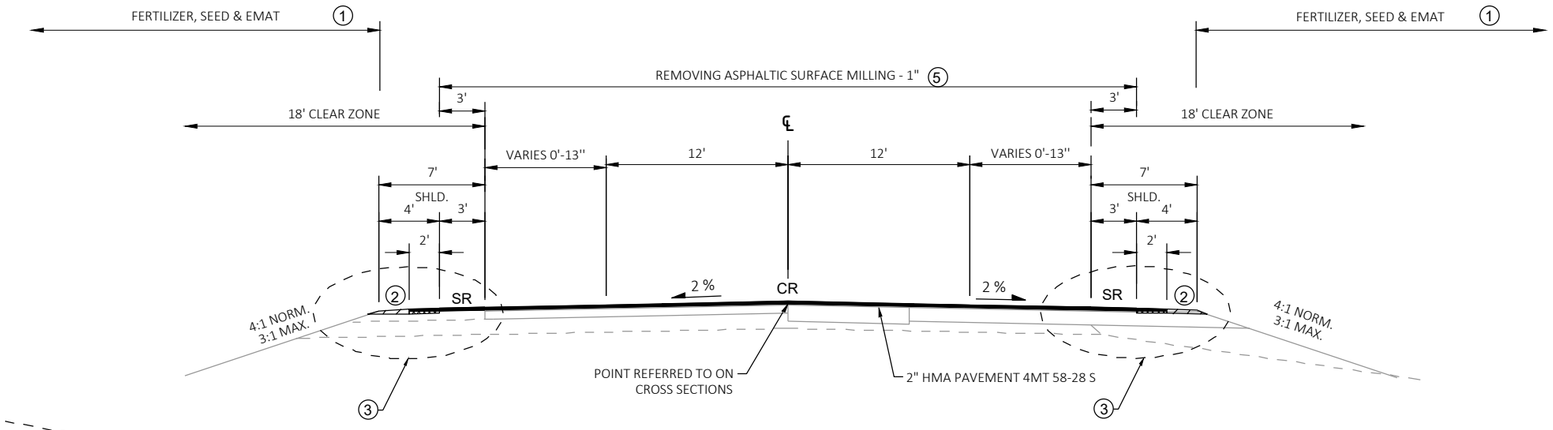
FINISHED TYPICAL SECTION - STH 21

STA 483+00 - 488+57
STA 491+07 - 491+68
STA 491+92 - 492+54
STA 495+04 - 497+00

① RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE
② ROUND SHOULDERS TO MATCH EXISTING SLOPES, 6% TYP.
④ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
⑤ PREPARE FOUNDATION FOR ASPHALTIC PAVING

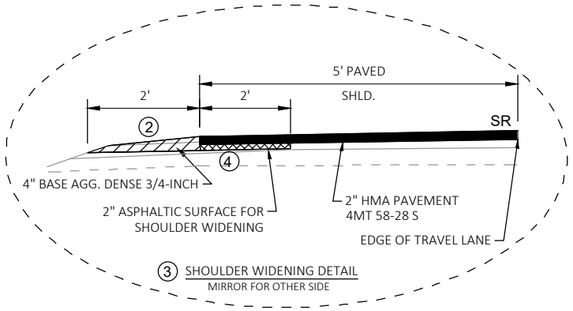
CR = CENTERLINE RUMBLE STRIPS
SR = SHOULDER RUMBLE STRIPS

NOTES:
- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS
- USE BUTT JOINTS WHEN MATCHING INTO EXISTING TANK CROSSINGS



FINISHED TYPICAL SECTION - STH 21

STA 497+00 - 502+61

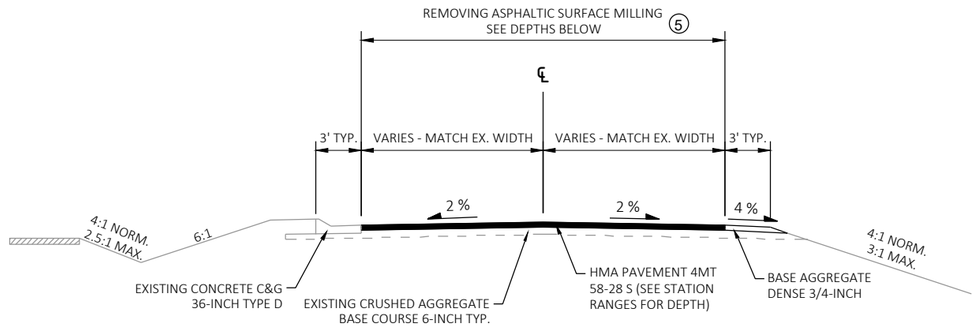


③ SHOULDER WIDENING DETAIL
MIRROR FOR OTHER SIDE

① RESTORATION ITEMS TO EXTEND 5-FT BEYOND DAYLIGHT OF SLOPE
② ROUND SHOULDERS TO MATCH EXISTING SLOPES, 6% TYP.
③ SEE SHOULDER WIDENING DETAIL
④ PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS
⑤ PREPARE FOUNDATION FOR ASPHALTIC PAVING

CR = CENTERLINE RUMBLE STRIPS
SR = SHOULDER RUMBLE STRIPS

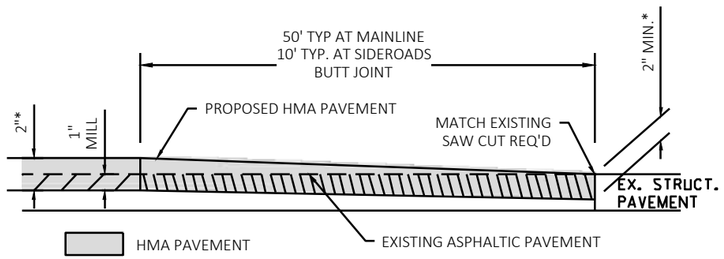
NOTES:
- SEE PLAN SHEETS FOR SUPERELEVATION LOCATIONS
- USE BUTT JOINTS WHEN MATCHING INTO EXISTING TANK CROSSINGS



FINISHED TYPICAL SECTION - SIDE ROADS

STA 31+96 - 336+50 - 2-INCH DEPTH
STA 336+50 - 497+00 - 4-INCH DEPTH
STA 497+00 - 860+37 - 2-INCH DEPTH

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TYPICAL SECTIONS	SHEET 15	E

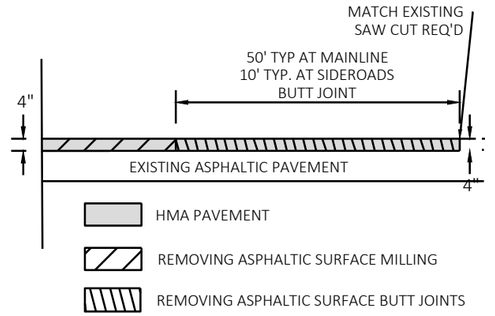


NOTE:
SAWCUTS IN THESE LOCATIONS ARE INCIDENTAL TO REMOVING ASPHALTIC SURFACE BUTT JOINTS ITEM.
*PROPOSED TOTAL HMA OVERLAY THICKNESS

BUTT JOINTS MAINLINE - 1-INCH MILL SECTIONS

PROJECT LIMITS, STRUCTURES & TANK CROSSINGS

LOCATIONS
STA 31+96
STA 93+34
STA 95+26
STA 100+64
STA 103+33
STA 130+15
STA 132+63
STA 534+27
STA 534+53
STA 860+37

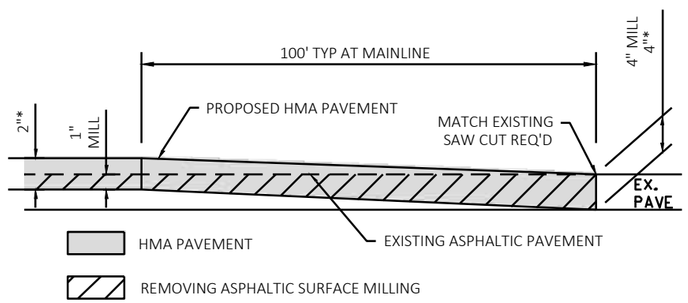


NOTE: SAWCUTS IN THESE LOCATIONS ARE INCIDENTAL TO REMOVING ASPHALTIC SURFACE BUTT JOINTS ITEM.

BUTT JOINTS IN FORT MCCOY SECTION

TANK CROSSINGS AND RR X-ING

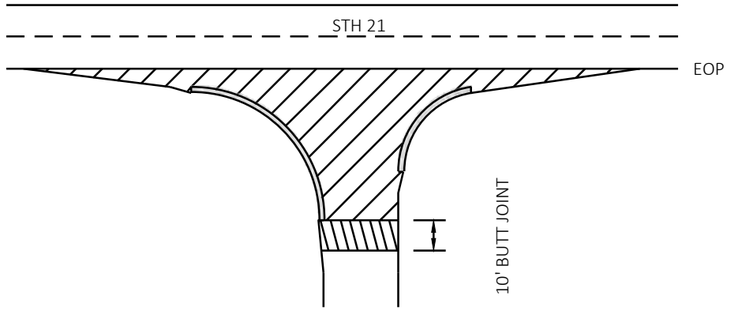
STA 382+79
STA 383+03
STA 413+57
STA 414+79
STA 491+68
STA 491+92



NOTE:
SAWCUTS IN THESE LOCATIONS ARE INCIDENTAL TO REMOVING ASPHALTIC SURFACE MILLING ITEM.
*PROPOSED TOTAL HMA OVERLAY THICKNESS

TRANSITION DETAIL MAINLINE - 1" TO 4" MILL

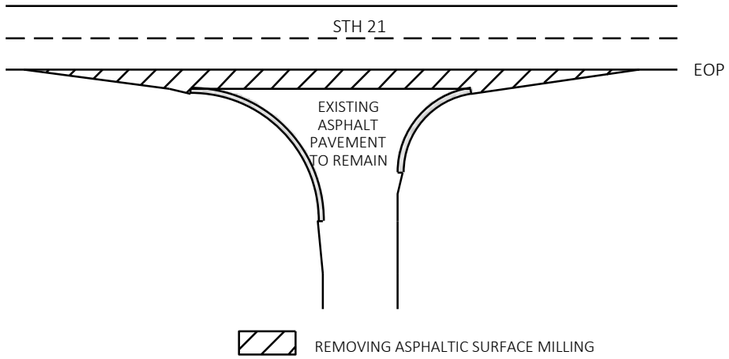
STA 336+50
STA 497+00



LOCATIONS
CTH Q
CTH I
CTH A
CTH BB
BUCKLEY CT
S A ST/BYPSS RD
S J ST
SOUTH MAIN ST
SOUTH 10TH/16TH CT
X RD
CTH E
CTH M
CTH ET
FLINT AVE SOUTH

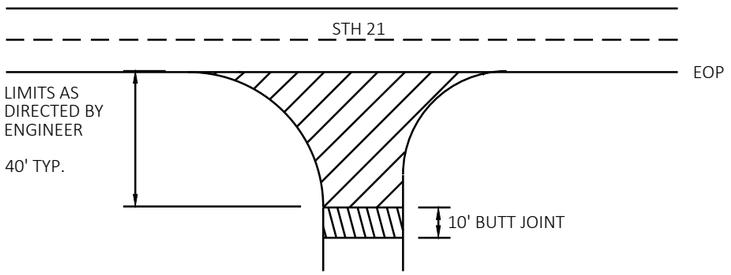
NOTES:
1. SAWCUTS IN THESE LOCATIONS ARE INCIDENTAL TO REMOVING ASPHALTIC SURFACE BUTT JOINTS ITEM.
2. WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED.

SIDE ROADS
WITH CURB AND GUTTER



NOTES:
1. SAWCUTS IN THESE LOCATIONS ARE INCIDENTAL TO REMOVING ASPHALTIC MILLING ITEM.

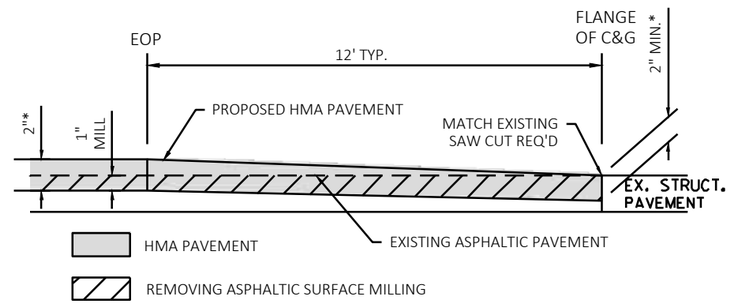
SIDE ROADS
ELLSWORTH RD



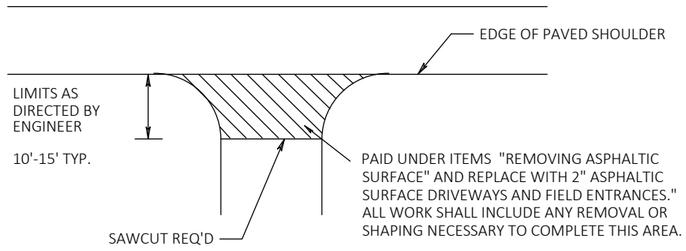
LOCATIONS
GENTRY RD
GLENWOOD AVE
GENERAL AVE
OLD WISCONSIN 21
GOODWATER AVE
GOODVIEW AVE
GILLETTE AVE
GINGER AVE
S E ST
S H ST
S K ST
YARD RD
FIREWORK AVE
FLAVIN RD
FLAGPOLE RD
ELDER RD/FISHER RD
FLAGSTAFF RD
FLINT AVE NORTH

NOTES:
1. SAWCUTS IN THESE LOCATIONS ARE INCIDENTAL TO REMOVING ASPHALTIC SURFACE BUTT JOINTS ITEM.
2. WHEN MATCHING TO AN UNPAVED SURFACE BUTT JOINT IS NOT REQUIRED.

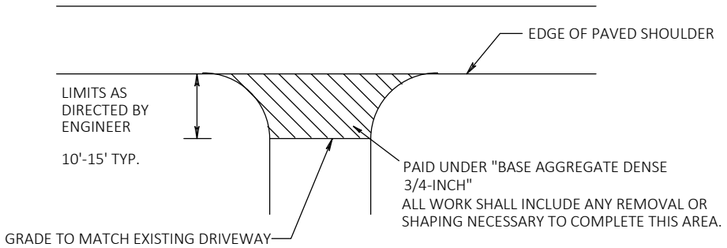
SIDE ROADS
WITHOUT CURB AND GUTTER



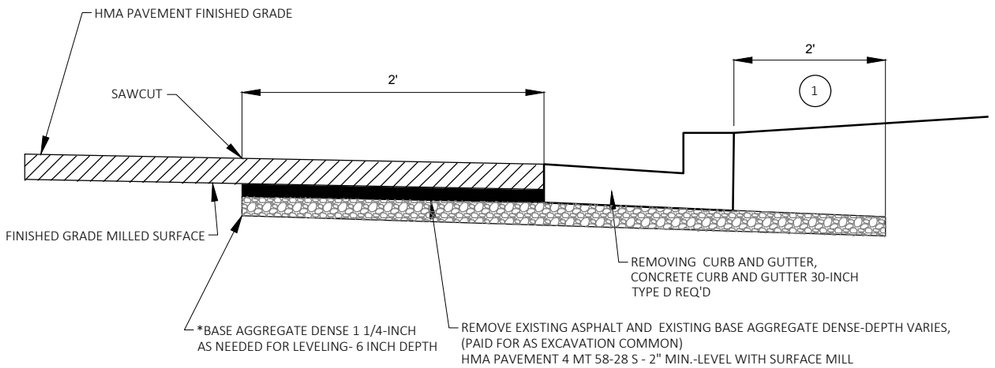
NOTE:
SAWCUTS IN THESE LOCATIONS ARE INCIDENTAL TO REMOVING ASPHALTIC MILLING ITEM.
*PROPOSED TOTAL HMA OVERLAY THICKNESS



RURAL ASPHALT DRIVEWAY DETAIL

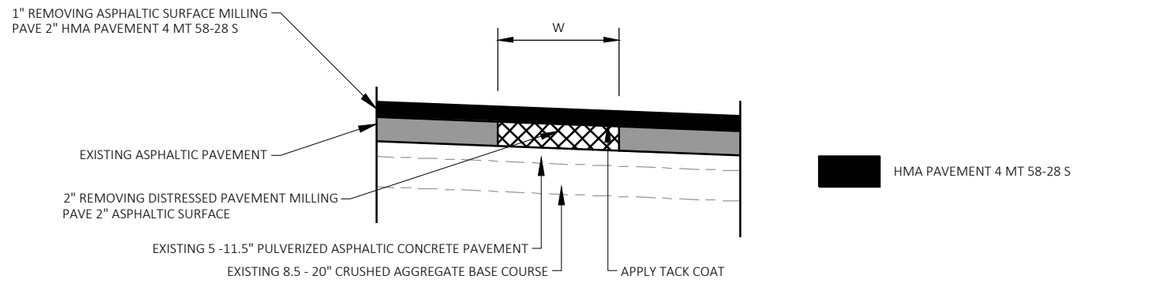


RURAL GRAVEL DRIVEWAY DETAIL

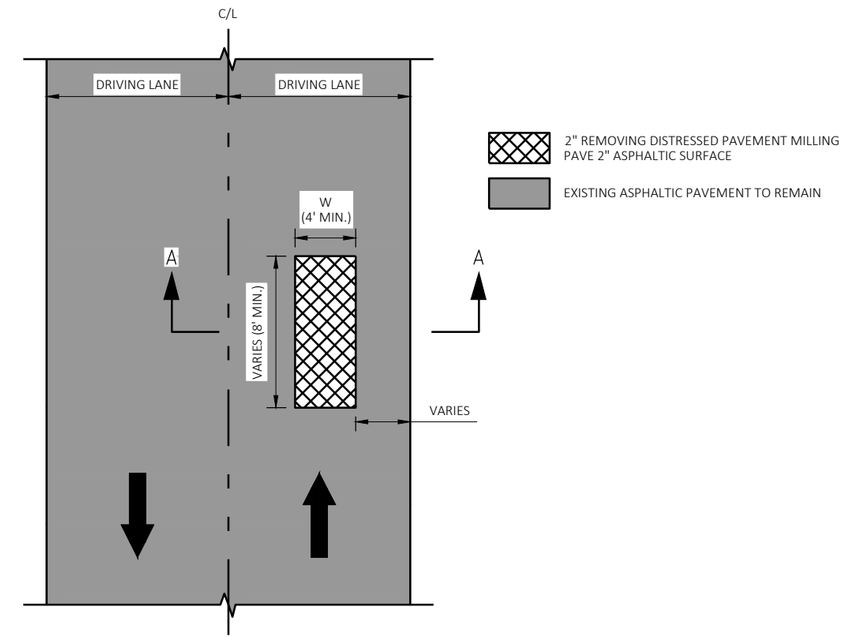


CURB & GUTTER REMOVAL AND REPLACE DETAIL

(1) EROSION MAT CLASS 1 TYPE B, FERTILIZER TYPE B, AND SEEDING MIXTURE No. 20 REQ'D



SECTION A-A



PLAN VIEW - MILLED SURFACE

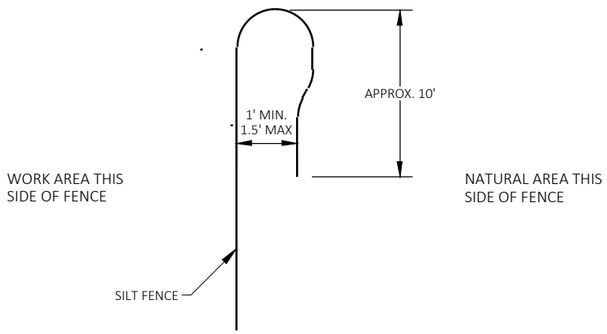
REMOVING DISTRESSED PAVEMENT MILLING DETAIL

EXACT LOCATIONS AND WIDTHS TO BE DETERMINED BY THE FIELD ENGINEER.

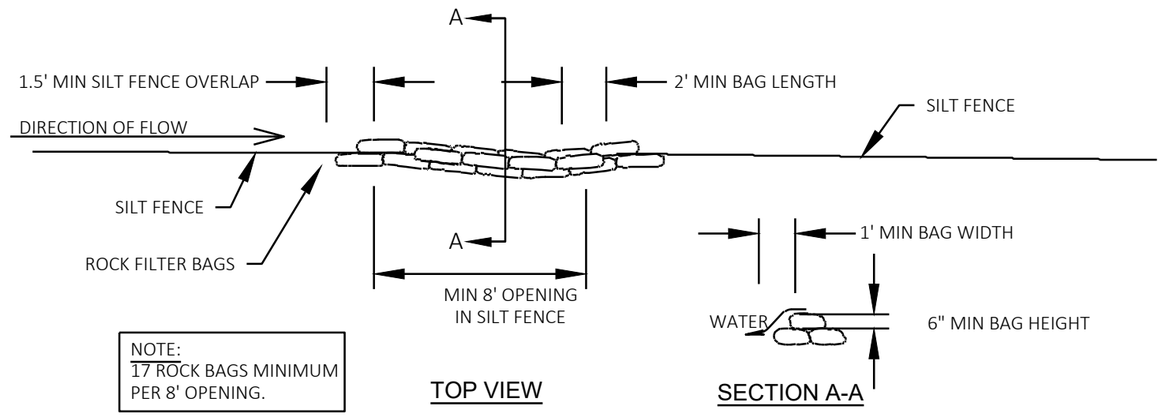
2

THIS VIEW
INTENTIONALLY
LEFT BLANK

POSTS TO BE ON OUTSIDE OF J-HOOK AT ENDS OF SILT FENCE AND ANY ACCESS OPENINGS NEEDED.



SILT FENCE 'J-HOOKS' DETAIL



ROCK BAGS USED FOR SILT FENCE RELIEF

2

NOTES

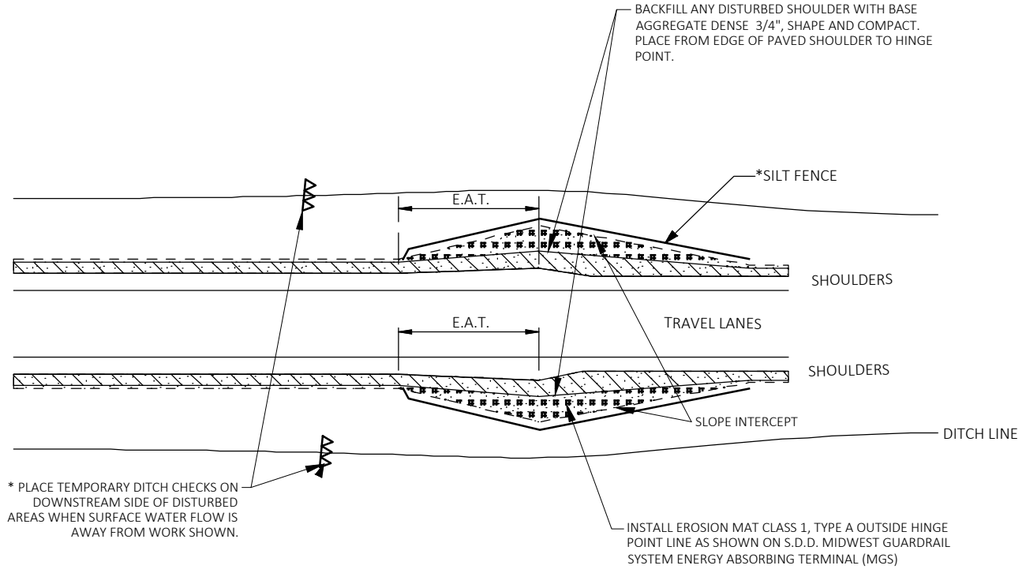
DETAILS OF CONSTRUCTION AND EROSION CONTROL DEVICES NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE WISCONSIN DOT STANDARD DETAILS.

SPECIAL CONSTRUCTION, EROSION CONTROL AND RESTORATION DETAILS PROVIDED IN THE SITE SPECIFIC BEAM GUARD DETAIL.

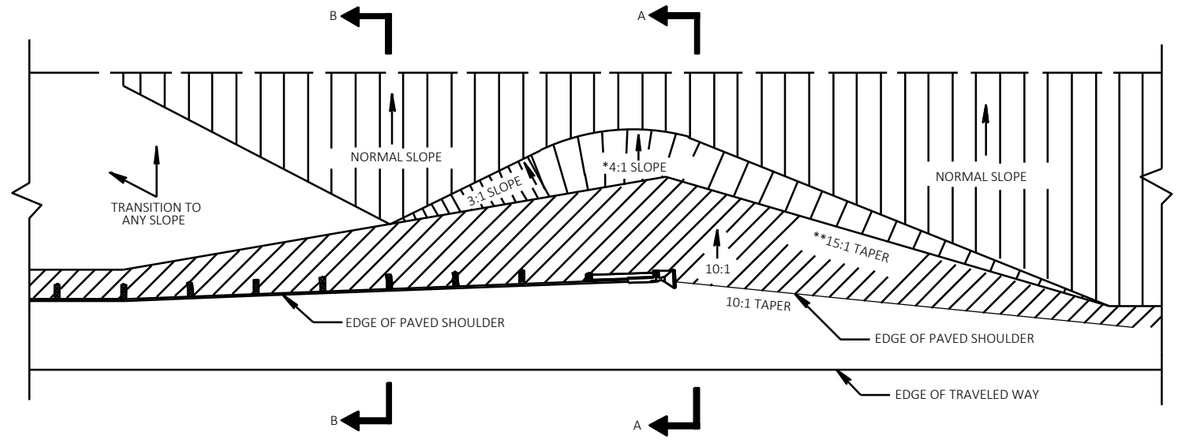
*TYPICAL EROSION CONTROL DEVICE INSTALLATION. SEE MISCELLANEOUS QUANTITIES FOR QUANTITIES PER LOCATION. ANY EROSION CONTROL DEVICES NOT SHOWN ON THIS DETAIL WILL BE SHOWN ON THE BEAM GUARD DETAILS. EROSION CONTROL AND CONSTRUCTION REQUIRED AT EACH SITE WILL VARY.

LEGEND

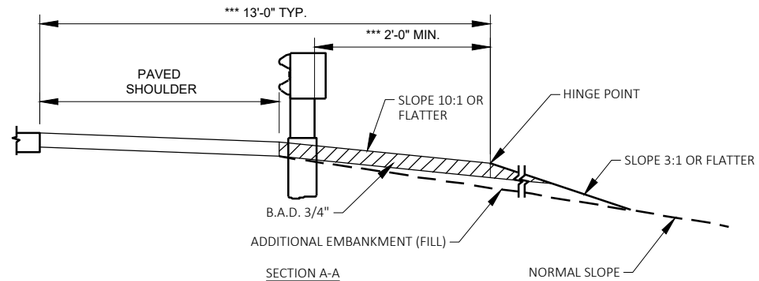
######	EROSION MAT CLASS I, TYPE B
	SILT FENCE
	SLOPE INTERCEPT
	TEMPORARY DITCH CHECK
	BASE AGGREGATE DENSE 3/4"
	LIMITS OF CONSTRUCTION



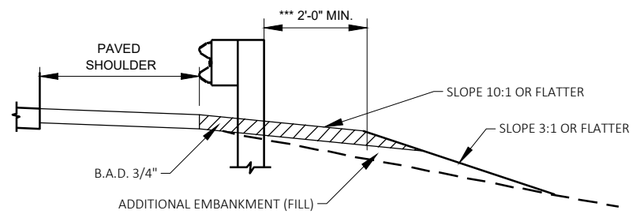
TYPICAL DETAIL FOR CONSTRUCTION, EROSION CONTROL & RESTORATION
AT MGS AND SPBG ENERGY ABSORBING TERMINAL INSTALLATIONS



PLAN VIEW



SECTION A-A



SECTION B-B

FILL AREA AT BEAMGURAD

NOTES

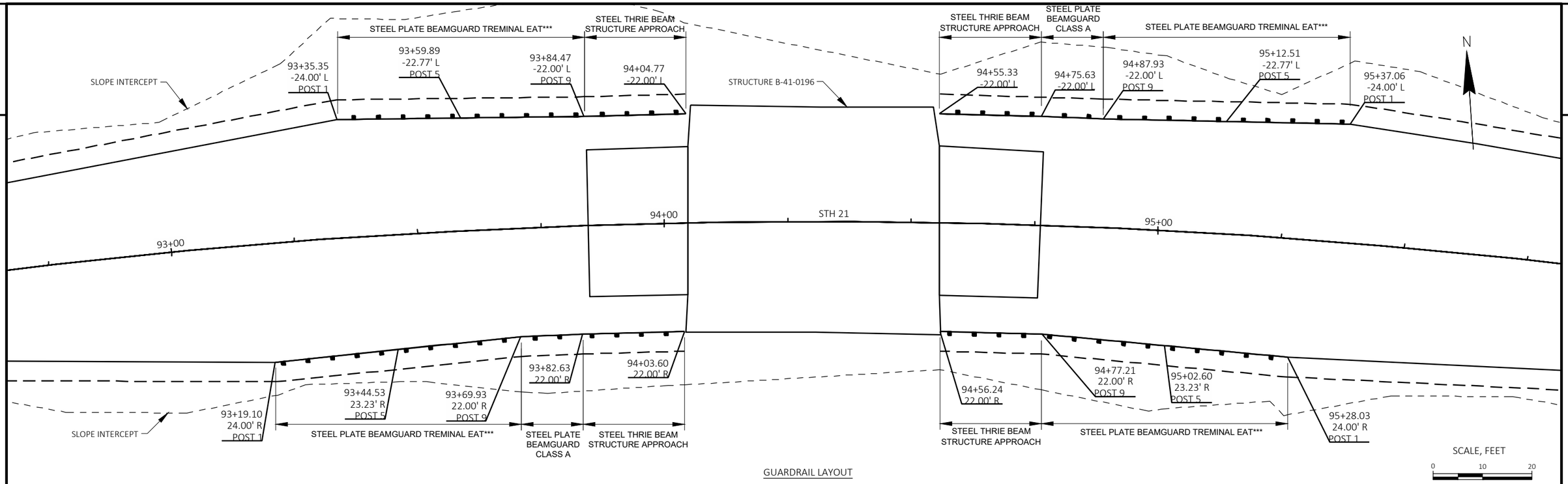
* LOCATIONS NOTED AS "MODIFIED GRADING" MAY HAVE A 3:1 SLOPE BEYOND THE CLEAR ZONE HINGE POINT.

** TAPER MAY BE REDUCED TO 10:1 AS APPROVED BY THE ENGINEER

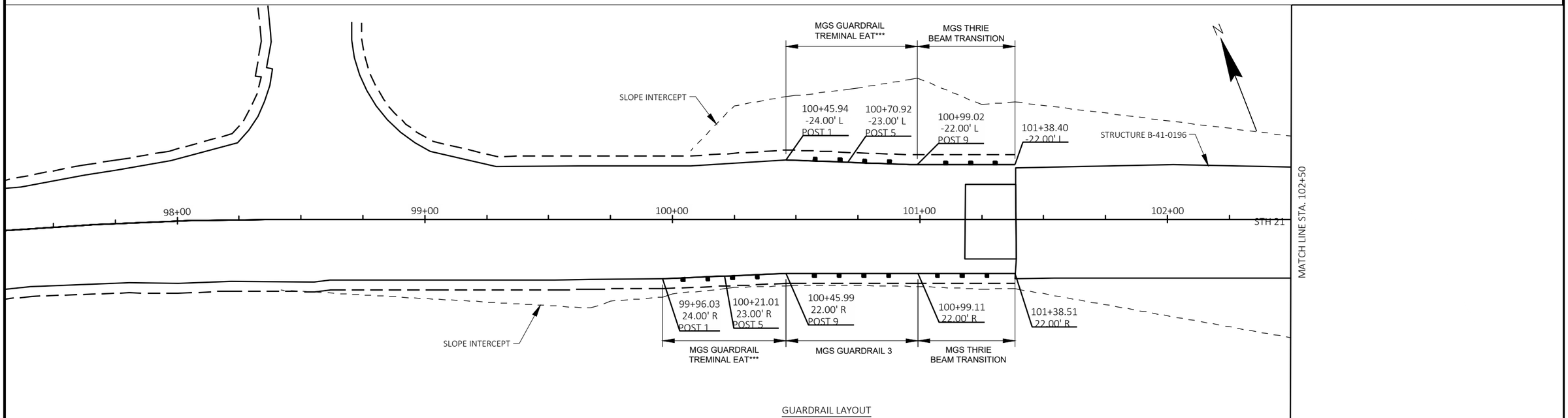
*** LOCATIONS NOTED AS "MODIFIED GRADING SECTION" MAY HAVE SHOULDER HINGE POINT OFFSET AT THE E.A.T. REDUCED FROM 5' TO 2' WITH 3:1 GRADING BEYOND THE SHOULDER HINGE POINT

ALL AREAS BEYOND THE AGGREGATE SHOULDER HINGE POINT SHALL BE SEEDED AND FERTILIZED

BARRIER SYSTEM GRADING SHAPING FINISHING



GUARDRAIL LAYOUT



GUARDRAIL LAYOUT

NOTES:
*** MODIFIED GRADING REQ'D SEE CONSTRUCTION DETAIL FOR BARRIER SYSTEM GRADING, SHAPING AND FINISHING

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CONSTRUCTION DETAILS	SHEET 21	E

2

STRUCTURE B-41-0196

MATCH LINE STA. 102+50

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL 3

MGS GUARDRAIL TREMINAL EAT***

102+65.96 -22.00' L

103+05.33 -22.00' L

SLOPE INTERCEPT

107+08.46 -22.00' L POST 9

107+33.44 -23.00' L POST 5

107+58.42 -24.00' L POST 1

103+00 STH 21 104+00 105+00 106+00 107+00 108+00

102+66.34 22.00' R

103+05.71 22.00' R

SLOPE INTERCEPT

107+08.84 22.00' R POST 9

107+33.82 23.00' R POST 5

107+58.80 24.00' R POST 1

108+51.59 17.00' R

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL 3

MGS GUARDRAIL TREMINAL EAT***

GUARDRAIL LAYOUT

SCALE, FEET

0 20 40

2

MGS GUARDRAIL TREMINAL EAT***

MGS THRIE BEAM TRANSITION

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL 3

MGS GUARDRAIL TREMINAL EAT***

133+29.47 -24.00' L POST 1

SLOPE INTERCEPT

129+76.13 -24.00' L POST 1

130+01.11 -23.00' L POST 5

130+26.09 -22.00' L POST 9

130+68.59 -22.00' L

STRUCTURE B-41-0203

131+87.01 -22.00' L

132+26.38 -22.00' L

132+79.51 -22.00' L POST 9

133+04.49 -23.00' L POST 5

129+00 130+00 131+00 132+00 STH 21 133+00 134+00

SLOPE INTERCEPT

129+46.96 24.00' R POST 1

129+71.94 23.00' R POST 5

129+96.92 22.00' R POST 9

130+50.05 22.00' R

130+89.42 22.00' R

132+06.90 22.00' R

132+46.28 22.00' R POST 9

132+74.38 23.00' R POST 5

132+99.36 24.00' R POST 1

134+04.61 17.00' R

MGS GUARDRAIL TREMINAL EAT***

MGS GUARDRAIL 3

MGS THRIE BEAM TRANSITION

MGS THRIE BEAM TRANSITION

MGS GUARDRAIL TREMINAL EAT***

GUARDRAIL LAYOUT

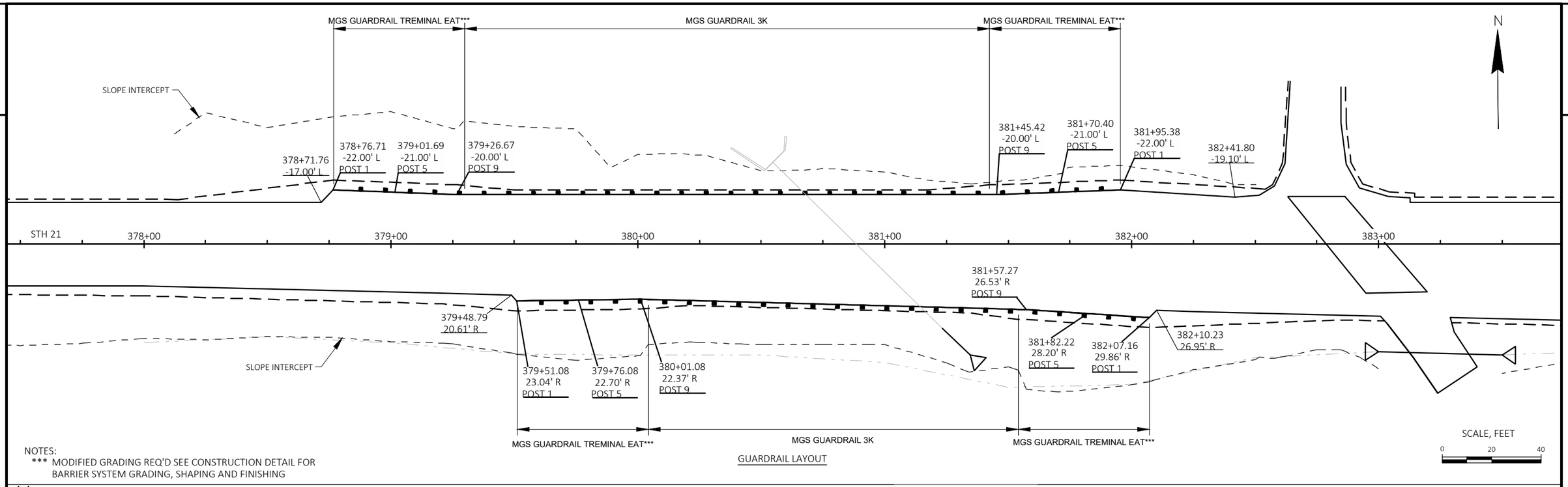
SCALE, FEET

0 20 40

NOTES:

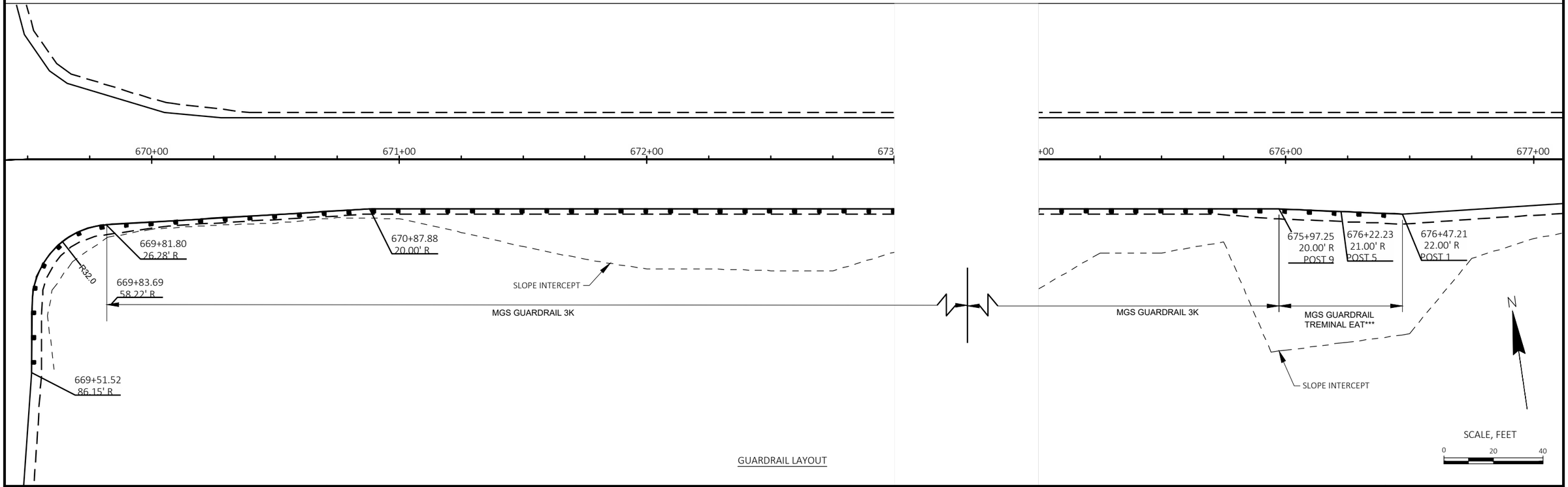
*** MODIFIED GRADING REQ'D SEE CONSTRUCTION DETAIL FOR BARRIER SYSTEM GRADING, SHAPING AND FINISHING

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CONSTRUCTION DETAILS	SHEET 22	E



NOTES:
*** MODIFIED GRADING REQ'D SEE CONSTRUCTION DETAIL FOR BARRIER SYSTEM GRADING, SHAPING AND FINISHING

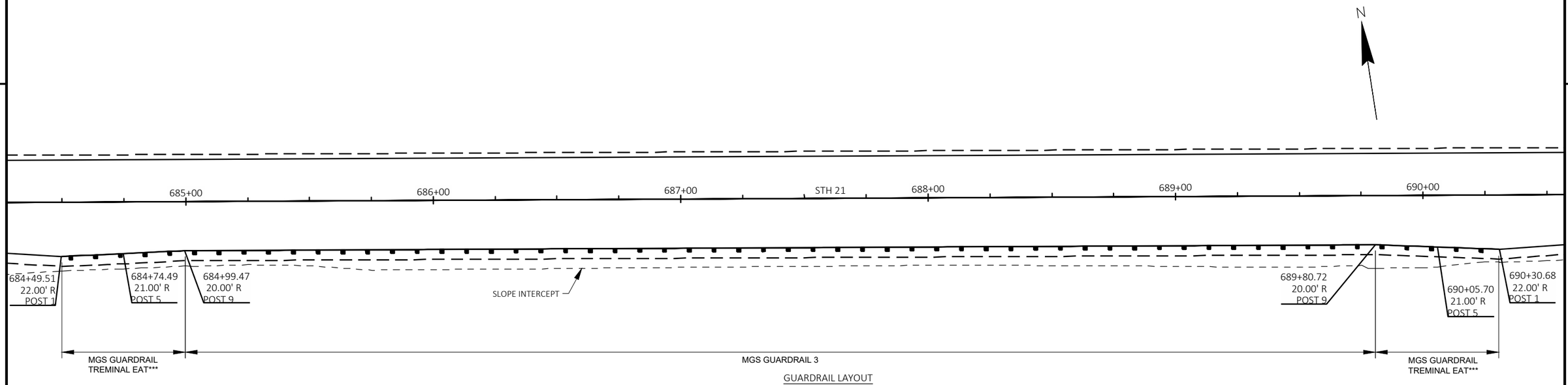
GUARDRAIL LAYOUT



GUARDRAIL LAYOUT

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CONSTRUCTION DETAILS	SHEET 23	E

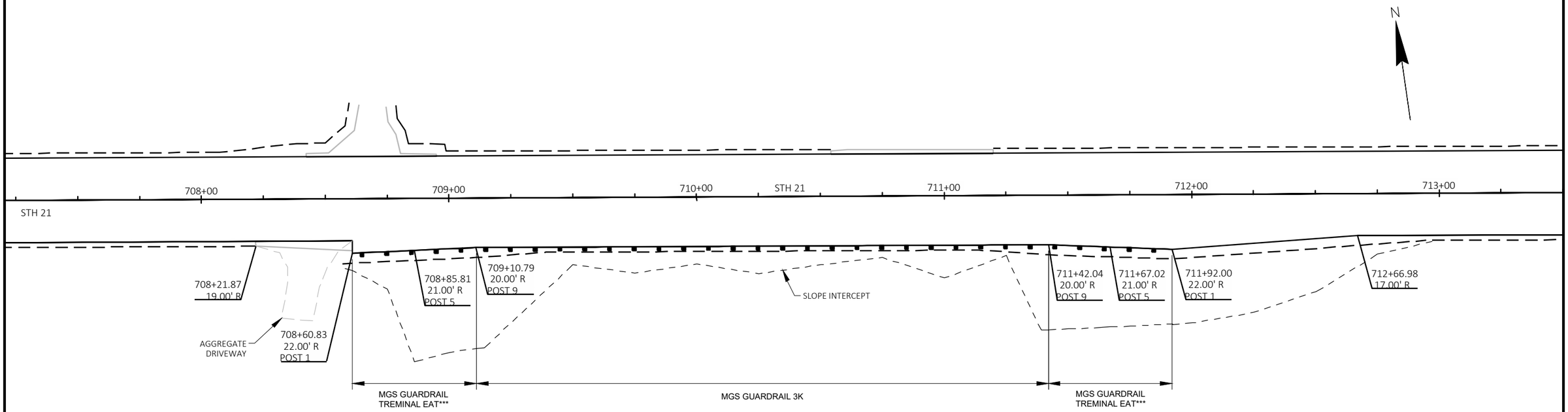
2



GUARDRAIL LAYOUT

SCALE, FEET

0 20 40



GUARDRAIL LAYOUT

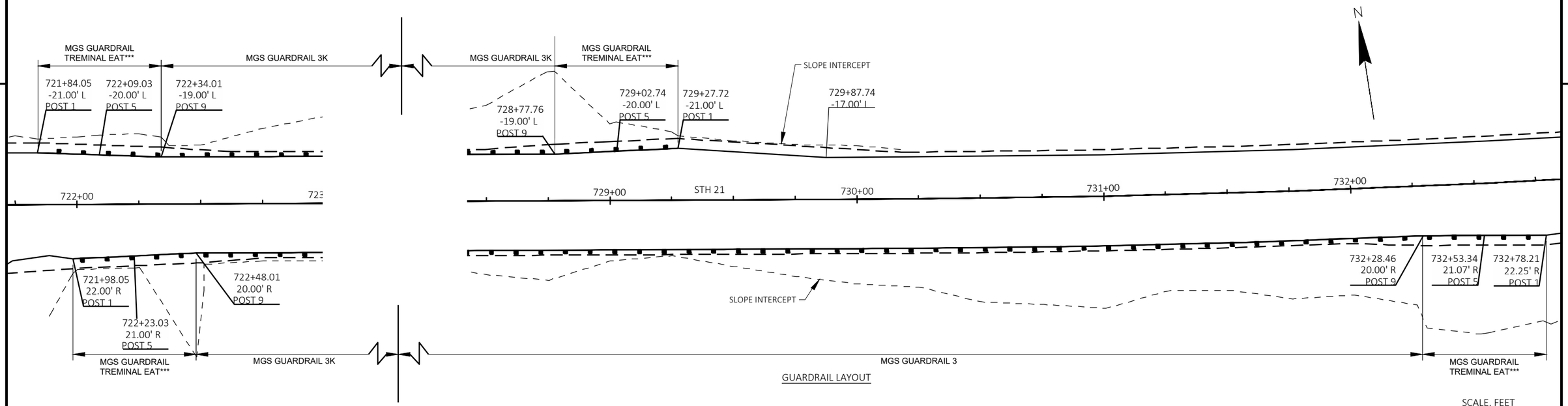
SCALE, FEET

0 20 40

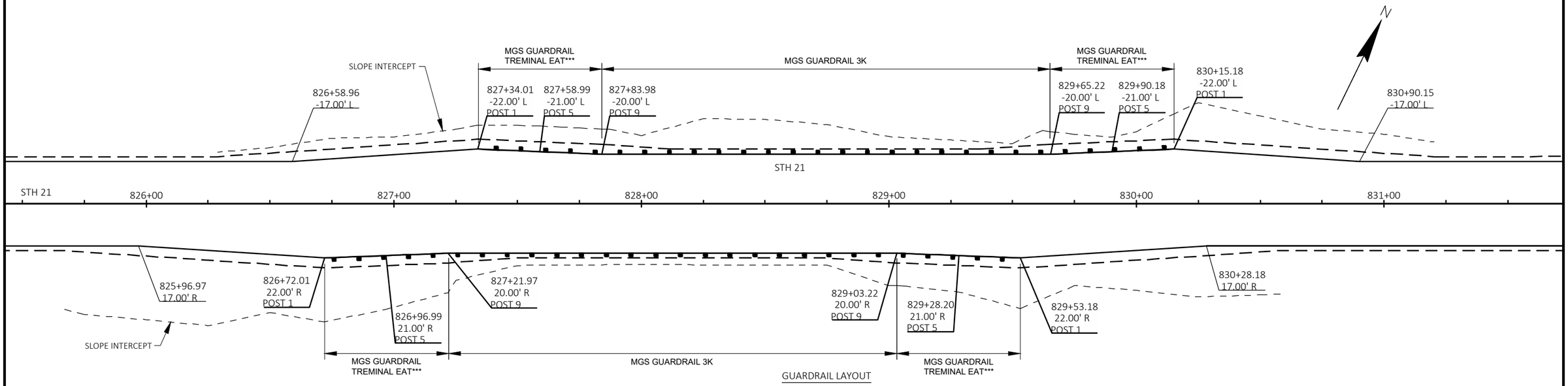
NOTES:
*** MODIFIED GRADING REQ'D SEE CONSTRUCTION DETAIL FOR BARRIER SYSTEM GRADING, SHAPING AND FINISHING

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CONSTRUCTION DETAILS	SHEET 24	E

2



GUARDRAIL LAYOUT



GUARDRAIL LAYOUT

NOTES:
*** MODIFIED GRADING REQ'D SEE CONSTRUCTION DETAIL FOR BARRIER SYSTEM GRADING, SHAPING AND FINISHING

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CONSTRUCTION DETAILS	SHEET 25	E

2

PI STA = 2+10.02
Y = 402710.363
X = 653147.477
DELTA = 71°24'01"
D = 67°24'24"
T = 61.08'
L = 105.92'
R = 85.00'
PC STA = 1+48.94
Y = 402652.198
X = 653166.118
PT STA = 2+54.87
Y = 402711.247
X = 653086.404
BK = N17°46'12.5"W
AH = N89°10'13.5"W

BUCKLEY CT

3+00. A

EP: 3+20.13
Y=402712.1920
X=653021.1470

2+00. A

ASPHALTIC FLUMES

ASPHALTIC FLUMES

NORTHERN NATURAL GAS
UG GAS

R40'

R70'

1.7%

4.7%

2.4%

0.6%

0.4%

3.0%

4.1%

1.5%

A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12 A13 A14

90°

340+00

345+00

12'

12'

5'

STA. 341+99.68
STA. 1+00 A
Y = 402589.637
X = 653203.238

FO

G

WE ENERGIES
UG GAS

SCALE, FEET 0 20 40

N

STATION & OFFSET TABLE

POINT	STATION	OFFSET	STATION	OFFSET	EASTING	NORTHING	RADIUS	ELEVATION
A1	341+43.87	-22.89 LT	1+22.87 - A	-55.82 LT	402610.331	653120.921		850.635
A2	341+62.18	-29.04 LT	1+29.02 - A	-37.51 LT	402621.779	653136.475		850.522
A3	341+75.47	-43.05 LT	1+43.04 - A	-24.22 LT	402639.181	653144.853		850.059
A4	341+80.65	-61.65 LT	1+65.28 - A	-18.45 LT	402658.479	653144.099		849.140
A5	341+76.51	-80.52 LT	1+89.43 - A	-16.12 LT	402675.176	653134.392		848.799
A6	341+40.67	-62.77 LT	1+91.51 - A	-56.11 LT	402647.317	653105.690	40	847.885
A7	342+84.70	-26.00 LT	1+26.04 - A	85.04 RT	402656.340	653254.087		851.740
A8	342+59.55	-29.73 LT	1+29.76 - A	59.86 RT	402652.195	653228.977		851.366
A9	342+37.37	-42.21 LT	1+42.23 - A	37.67 RT	402657.302	653204.044		850.310
A10	342+21.12	-61.80 LT	1+59.27 - A	21.53 RT	402670.985	653182.585		849.539
A11	342+13.12	-85.60 LT	1+79.39 - A	19.45 RT	402691.206	653167.686		849.432
A12	342+82.19	-96.95 LT	1+72.69 - A	88.64 RT	402723.122	653229.986	70	847.347
A13	342+07.58	-96.59 LT	1+89.43 - A	18.86 RT	402699.978	653159.056		849.447
A14	340+44.19	-17.00 LT	3+11.97 - A	-137.83 LT	402574.250	653027.810		850.267

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	INTERSECTION DETAIL - BUCKLEY CT	SHEET 26	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\021101_ID.DWG
LAYOUT NAME - Buckley Ct

PLOT DATE : 7/18/2024 9:20 AM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

STATION & OFFSET TABLE								
POINT	STATION	OFFSET	STATION	OFFSET	EASTING	NORTHING	RADIUS	ELEVATION
B1	403+81.26	45.03 RT	1+45.03 - B	47.67 RT	402608.950	659350.786		868.457
B2	403+92.03	47.39 RT	1+47.39 - B	36.91 RT	402606.536	659361.537		868.545
B3	403+95.46	49.34 RT	1+49.34 - B	33.48 RT	402604.566	659364.961		868.535
B4	403+98.63	51.90 RT	1+51.90 - B	30.30 RT	402601.992	659368.121		868.542
B5	404+04.21	59.72 RT	1+59.72 - B	24.73 RT	402594.136	659373.651		868.602
B6	404+06.43	69.90 RT	1+69.90 - B	22.51 RT	402583.949	659375.820		868.741
B7	403+81.43	70.03 RT	1+70.03 - B	47.51 RT	402583.949	659350.820	25	869.259
B8	404+51.42	73.09 RT	1+73.09 - B	22.48 LT	402580.515	659420.788		868.882
B9	404+67.89	48.91 RT	1+48.91 - B	38.95 LT	402604.604	659437.389		868.635
B10	404+64.87	51.54 RT	1+51.54 - B	35.93 LT	402601.994	659434.354		868.661
B11	404+71.09	46.52 RT	1+46.52 - B	42.15 LT	402606.986	659440.606		868.716
B12	404+84.63	41.19 RT	1+41.19 - B	55.69 LT	402613.267	659453.922		0.000
B13	405+00.63	37.95 RT	1+37.95 - B	71.69 LT	402615.396	659470.188		869.168
B14	404+99.16	87.92 RT	1+87.92 - B	70.23 LT	402565.426	659468.457	50	0.000
B15	405+59.53	33.00 RT	1+33.00 - B	130.60 LT	402620.026	659529.119		869.433

N

STA. 404+28.94
STA. 1+00 B
Y = 402653.727
X = 659398.702

STH 21

S 0° 18' 27" W
89.08'

S J ST

EP: 1+89.08
Y=402564.6454
X=659398.2234

B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12 B13 B14 B15

0.65% 0.50% 1.29% 0.55% 0.95% 1.58% 0.99%

ASPHALTIC FLUMES

ASPHALTIC FLUMES

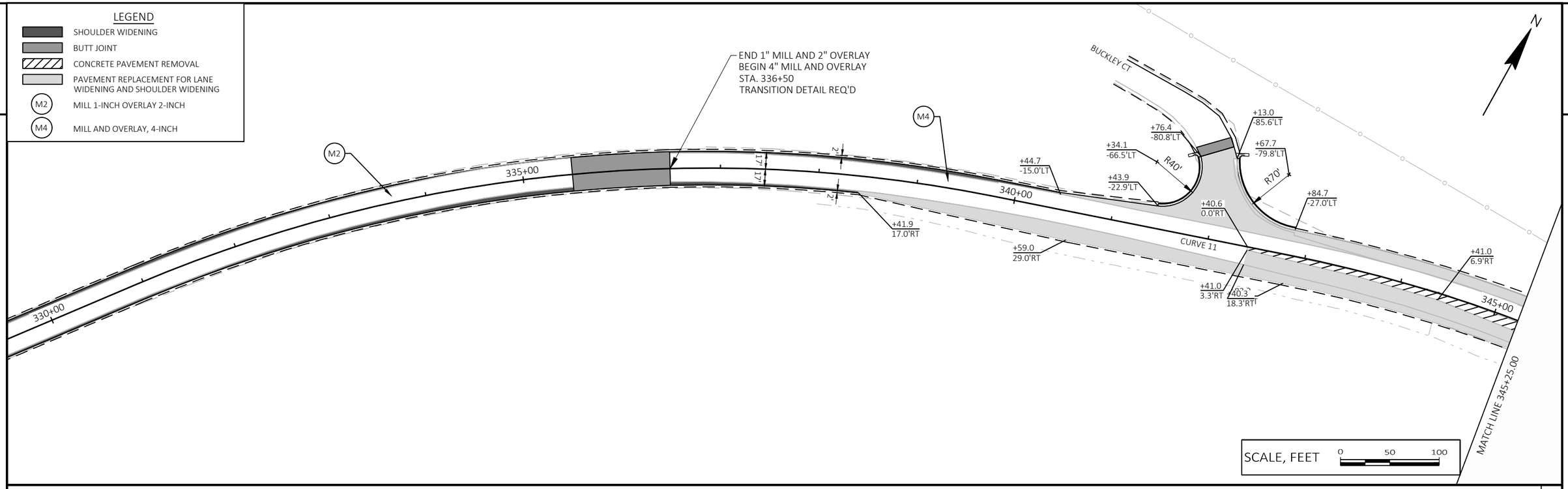
SCALE, FEET 0 10 20

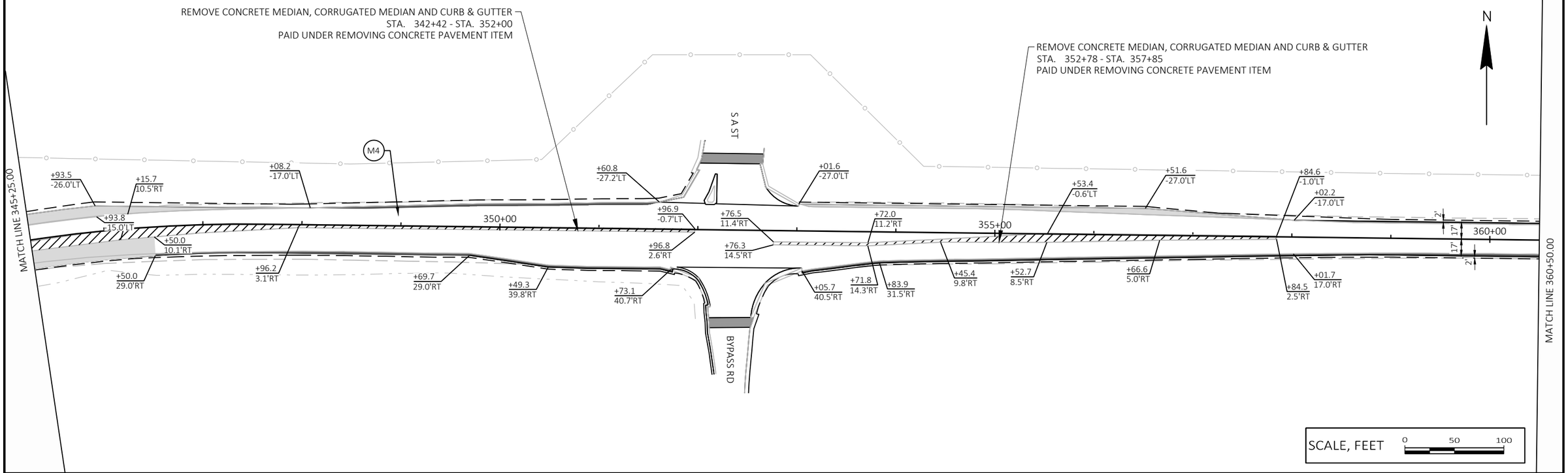
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	INTERSECTION DETAIL - S J ST	SHEET 27	E

2

LEGEND

- SHOULDER WIDENING
- BUTT JOINT
- CONCRETE PAVEMENT REMOVAL
- PAVEMENT REPLACEMENT FOR LANE WIDENING AND SHOULDER WIDENING
- (M2) MILL 1-INCH OVERLAY 2-INCH
- (M4) MILL AND OVERLAY, 4-INCH





PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PAVING DETAILS	SHEET 28	E

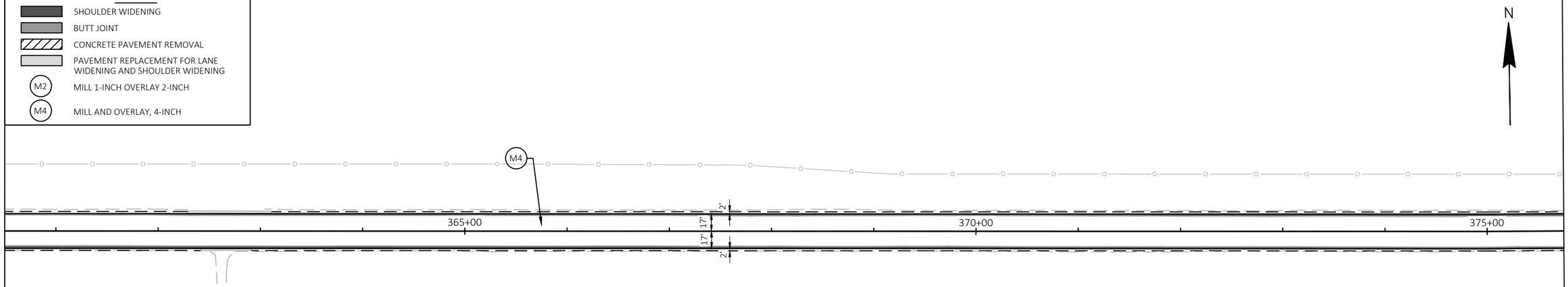
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 1
PLOT DATE : 8/1/2024 11:02 AM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

LEGEND

- SHOULDER WIDENING
- BUTT JOINT
- CONCRETE PAVEMENT REMOVAL
- PAVEMENT REPLACEMENT FOR LANE WIDENING AND SHOULDER WIDENING
- M2 — MILL 1-INCH OVERLAY 2-INCH
- M4 — MILL AND OVERLAY, 4-INCH

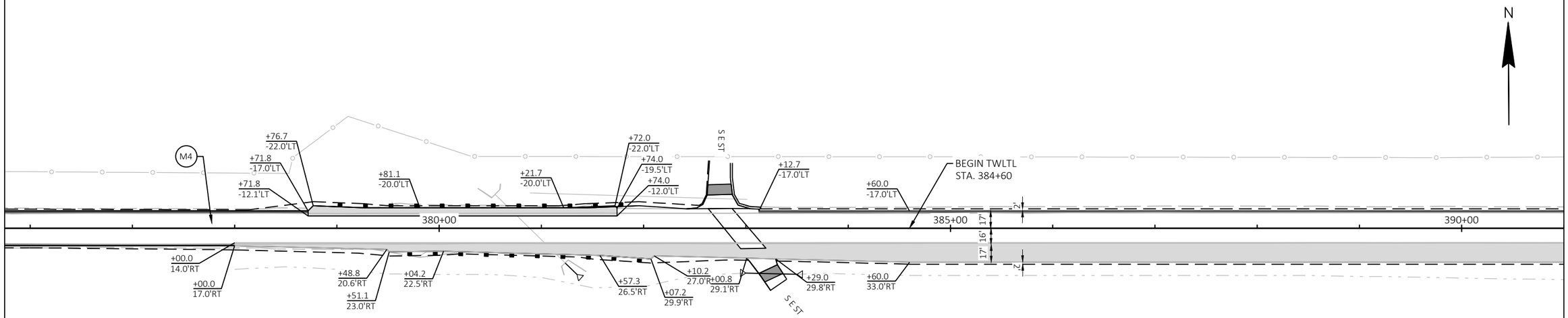
MATCH LINE 360+50.00



SCALE, FEET 0 50 100

MATCH LINE 375+75.00

2



SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PAVING DETAILS	SHEET 29	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\021201_PD.DWG
LAYOUT NAME - 2

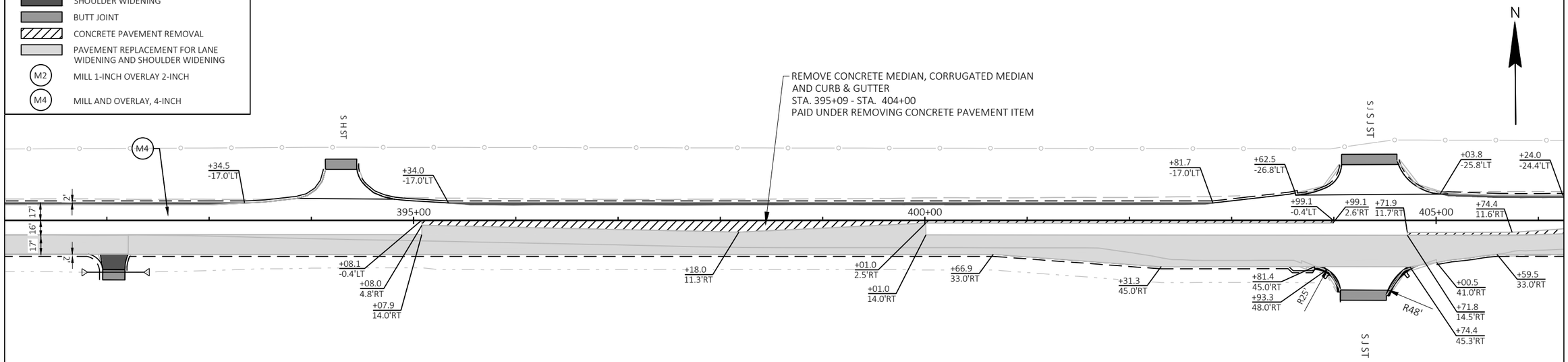
PLOT DATE : 8/1/2024 11:03 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

MATCH LINE 391+00.00

LEGEND

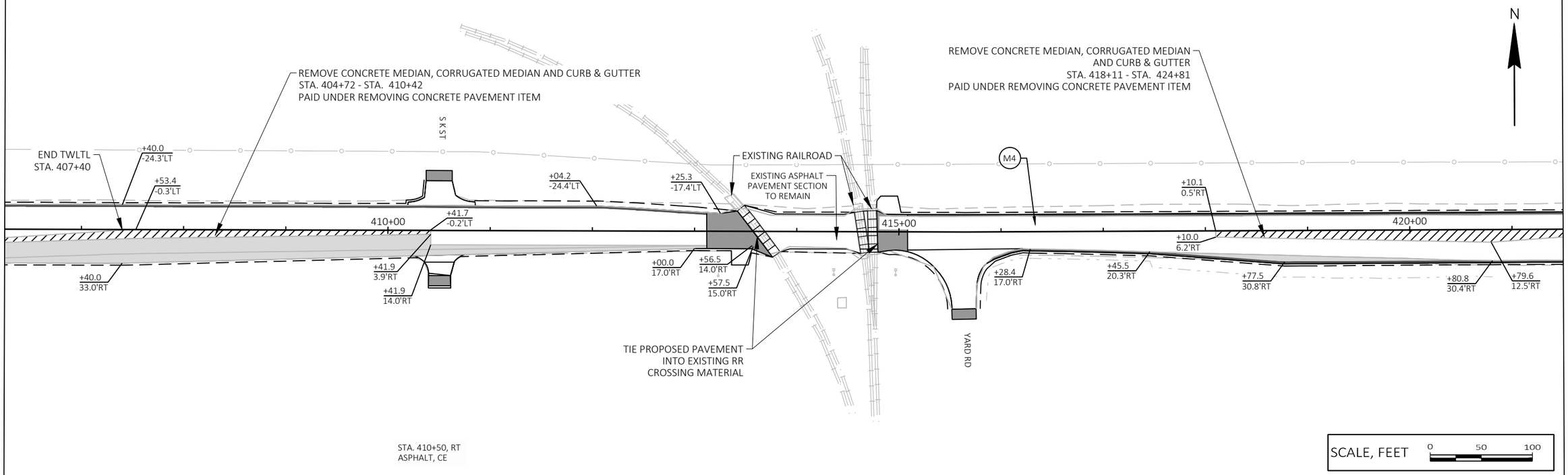
- SHOULDER WIDENING
- BUTT JOINT
- CONCRETE PAVEMENT REMOVAL
- PAVEMENT REPLACEMENT FOR LANE WIDENING AND SHOULDER WIDENING
- M2 MILL 1-INCH OVERLAY 2-INCH
- M4 MILL AND OVERLAY, 4-INCH



MATCH LINE 406+25.00

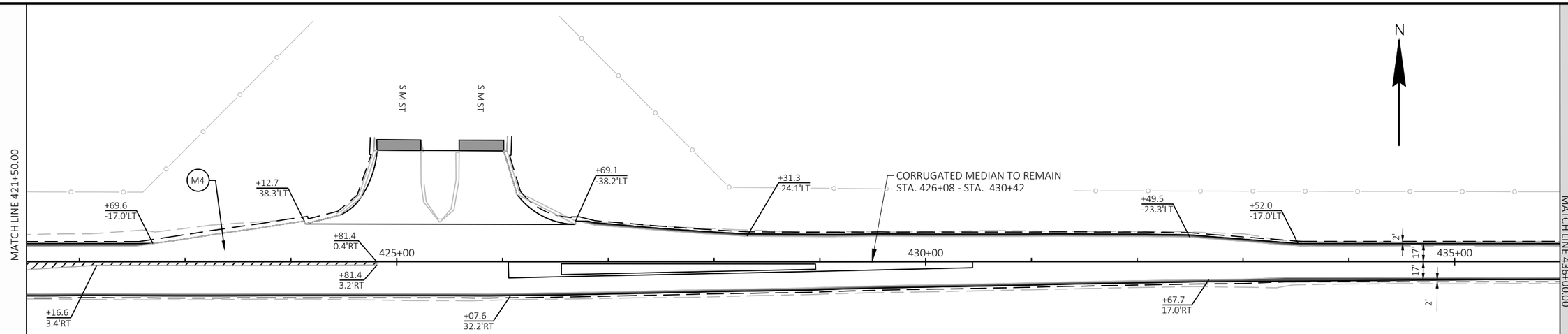
2

MATCH LINE 406+25.00



MATCH LINE 421+50.00

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PAVING DETAILS	SHEET 30	E



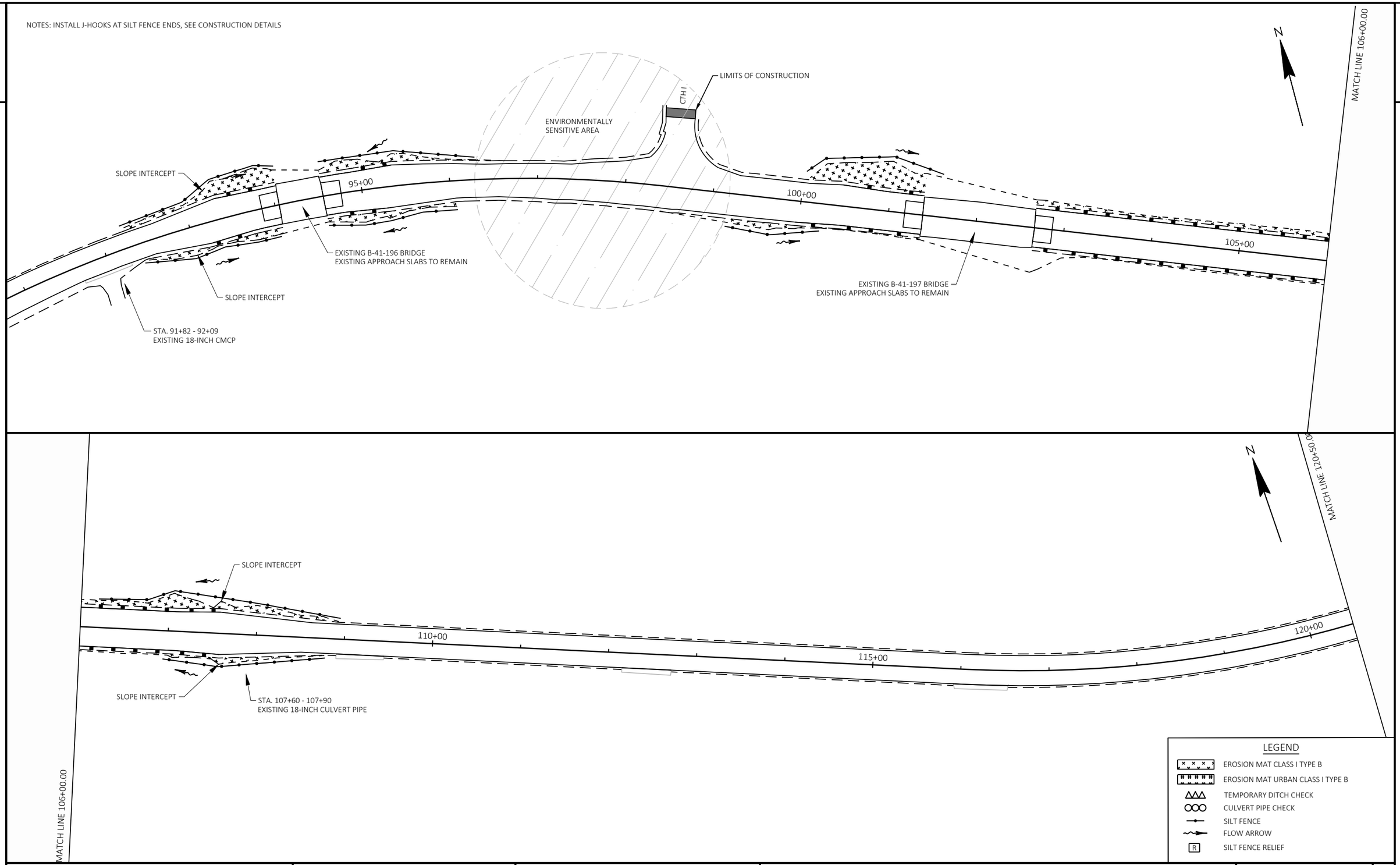
LEGEND

- SHOULDER WIDENING
- BUTT JOINT
- CONCRETE PAVEMENT REMOVAL
- PAVEMENT REPLACEMENT FOR LANE WIDENING AND SHOULDER WIDENING
- M2 MILL 1-INCH OVERLAY 2-INCH
- M4 MILL AND OVERLAY, 4-INCH

2

THIS VIEW INTENTIONALLY LEFT BLANK

NOTES: INSTALL J-HOOKS AT SILT FENCE ENDS, SEE CONSTRUCTION DETAILS



PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EROSION CONTROL	SHEET 32	E

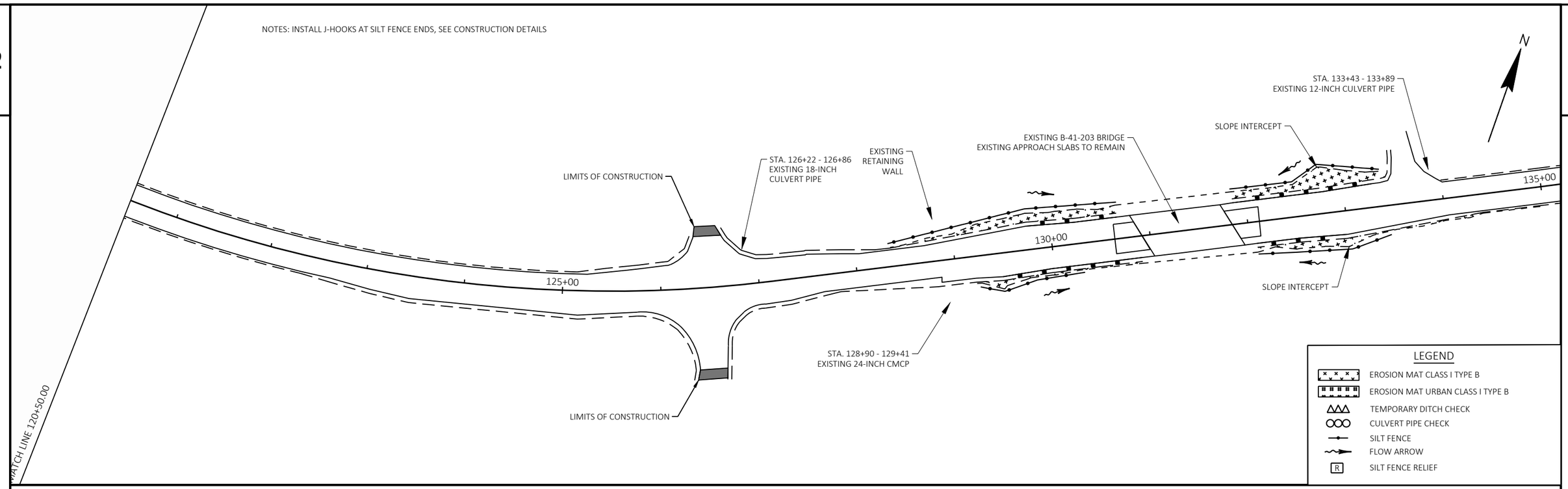
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 1

PLOT DATE : 11/22/2024 8:18 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

NOTES: INSTALL J-HOOKS AT SILT FENCE ENDS, SEE CONSTRUCTION DETAILS



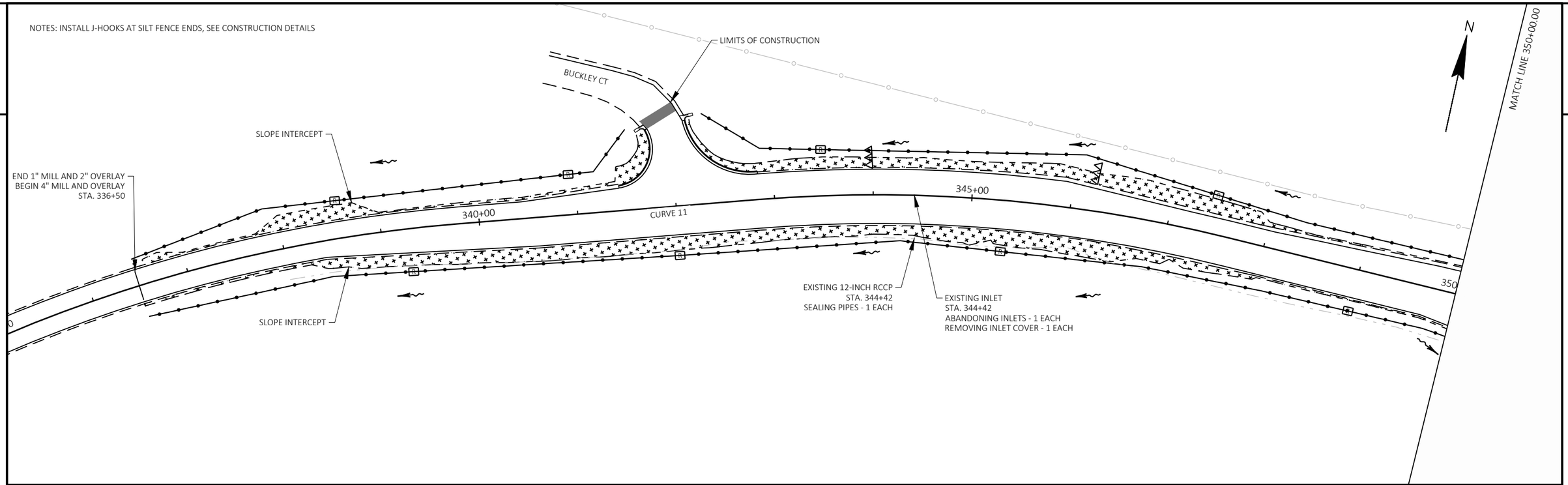
2

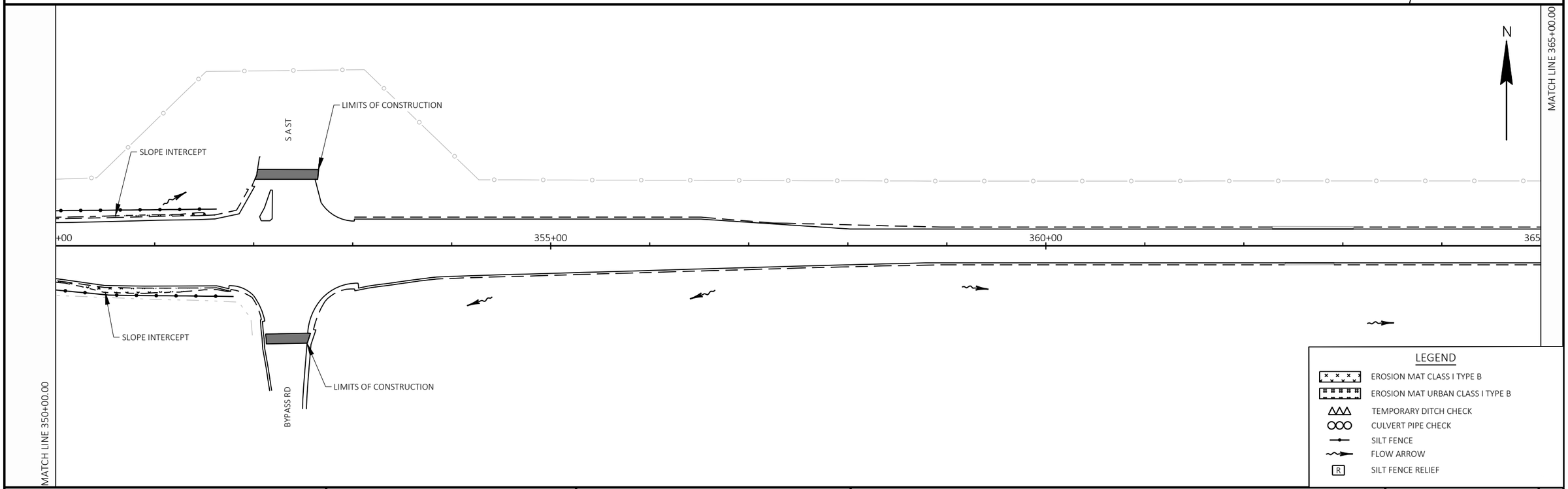
THIS VIEW INTENTIONALLY LEFT BLANK

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EROSION CONTROL	SHEET 33	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 2
PLOT DATE : 11/22/2024 8:18 AM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

NOTES: INSTALL J-HOOKS AT SILT FENCE ENDS, SEE CONSTRUCTION DETAILS





PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EROSION CONTROL	SHEET 34	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 3

PLOT DATE : 11/22/2024 8:18 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

NOTES: INSTALL J-HOOKS AT SILT FENCE ENDS, SEE CONSTRUCTION DETAILS

N

MATCH LINE 379+50.00

SLOPE INTERCEPT

+00

370+00

375+00

SLOPE INTERCEPT

MATCH LINE 365+00.00

2

MATCH LINE 394+00.00

N

LIMITS OF CONSTRUCTION

STA. 380+89 - 383+01
EXISTING 18-INCH CMCP

STILLWELL CREEK

SLOPE INTERCEPT

S E S T

380+00

385+00

390+00

S E S T

SLOPE INTERCEPT

LIMITS OF CONSTRUCTION

EXISTING 24-INCH CMCP
STA. 382+87 - 383+37
REMOVE SMALL PIPE - 1 EACH
CULVERT PIPE REINFORCED CONCRETE 24-INCH, 50 LF
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH, 2 EACH

STA. 380+89
EXISTING 60-INCH RCCP
CULVERT ENDWALL WORK REQ'D RT.
SEE PLAN FOR DETAILS.

EXISTING 24-INCH RCCP
STA. 391+80 - 392+35
REMOVE SMALL PIPE - 1 EACH
CULVERT PIPE REINFORCED CONCRETE 24-INCH, 55 LF
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH, 2 EACH

LIMITS OF CONSTRUCTION

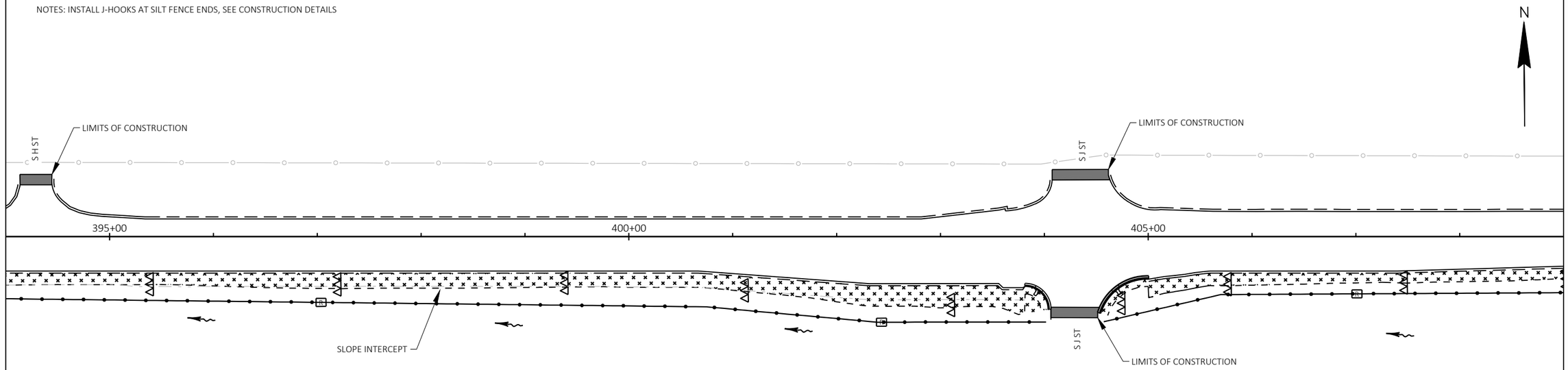
MATCH LINE 379+50.00

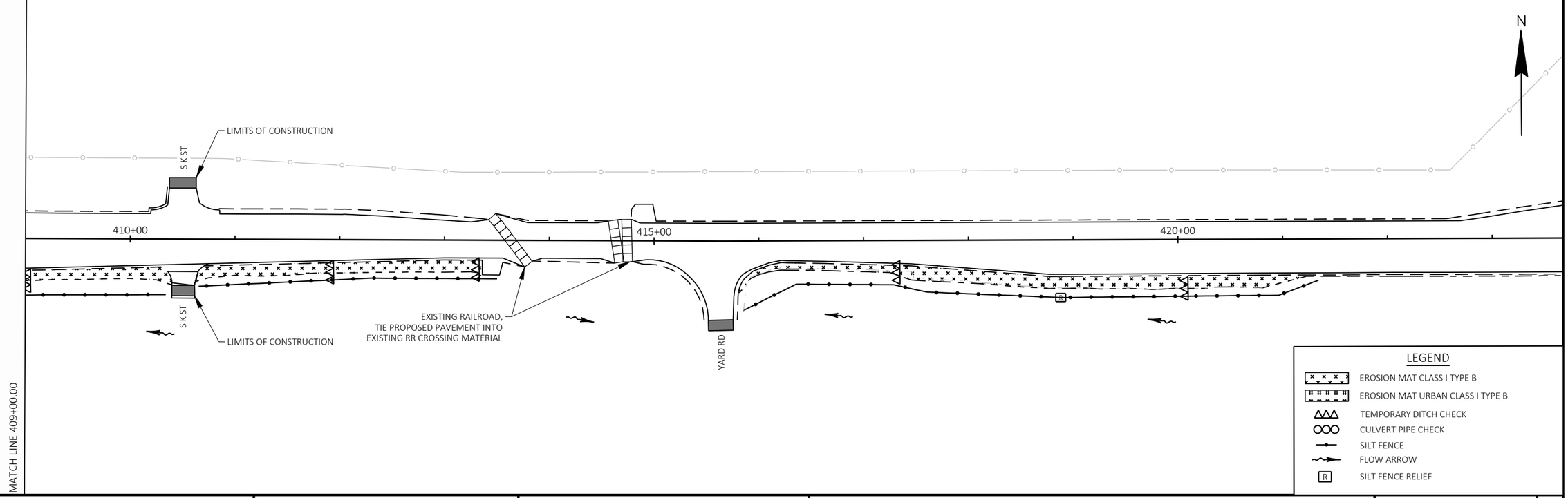
LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SILT FENCE
- FLOW ARROW
- SILT FENCE RELIEF (R)

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EROSION CONTROL	SHEET 35	E

NOTES: INSTALL J-HOOKS AT SILT FENCE ENDS, SEE CONSTRUCTION DETAILS

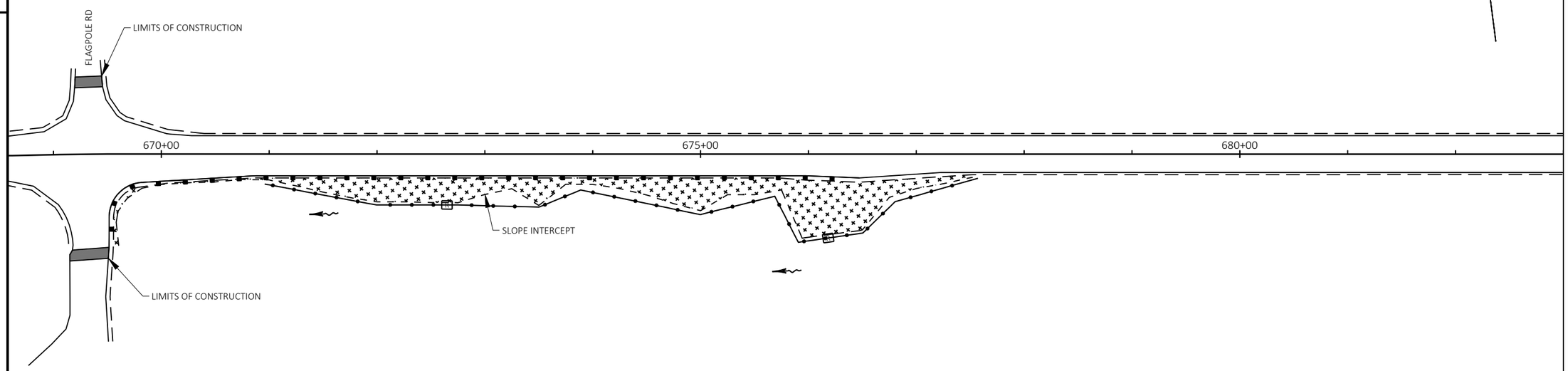




PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EROSION CONTROL	SHEET 36	E

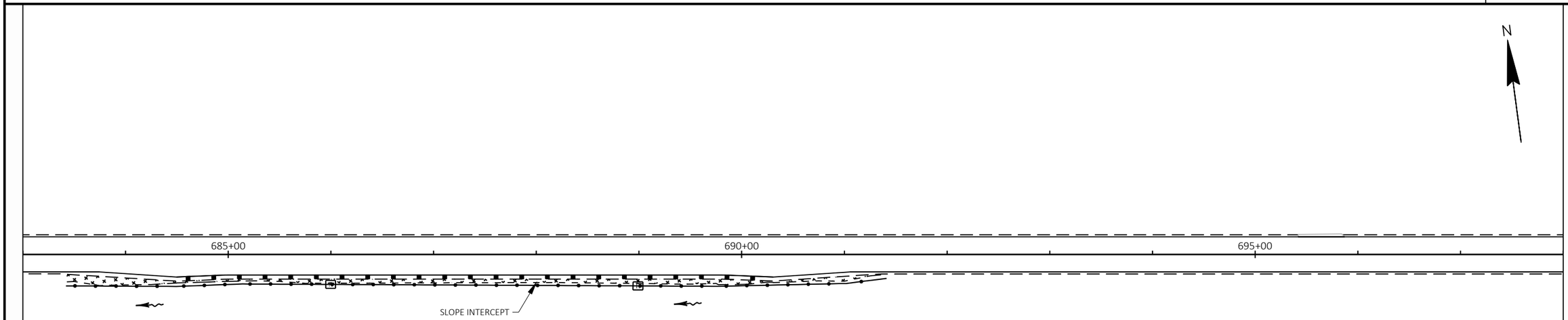
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 5
PLOT DATE : 11/22/2024 8:19 AM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

NOTES: INSTALL J-HOOKS AT SILT FENCE ENDS, SEE CONSTRUCTION DETAILS



MATCH LINE 683+00.00

MATCH LINE 683+00.00



MATCH LINE 698+00.00

LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SILT FENCE
- FLOW ARROW
- R SILT FENCE RELIEF

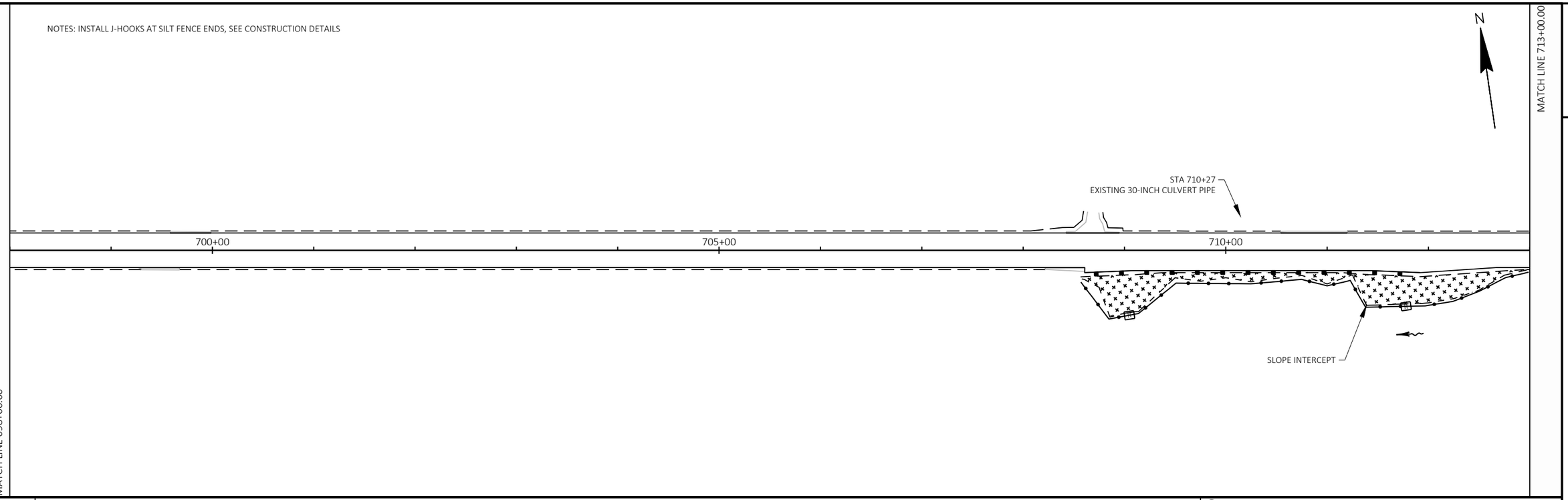
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EROSION CONTROL	SHEET 37	E

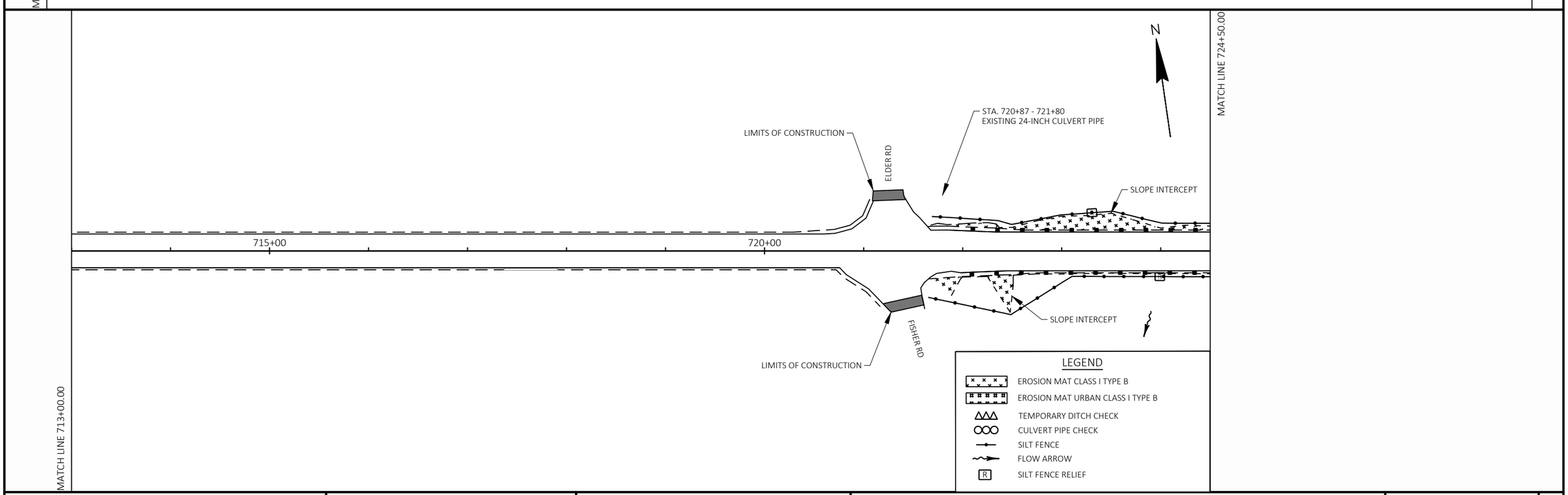
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 6

PLOT DATE : 11/22/2024 8:19 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

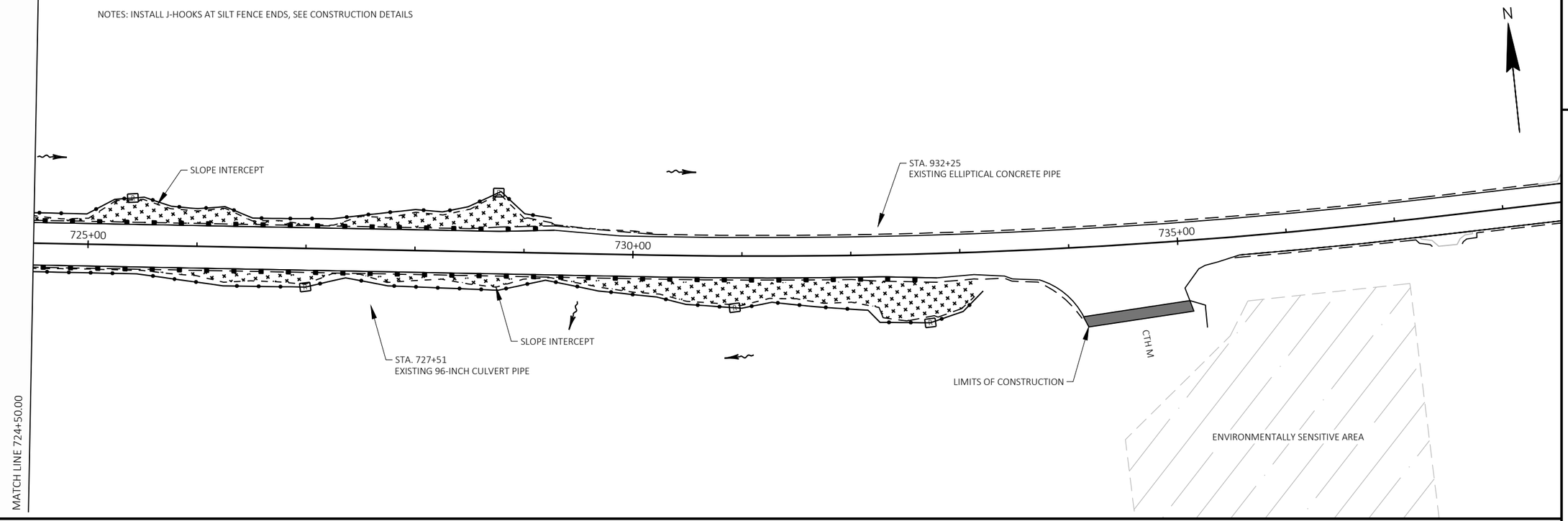
NOTES: INSTALL J-HOOKS AT SILT FENCE ENDS, SEE CONSTRUCTION DETAILS

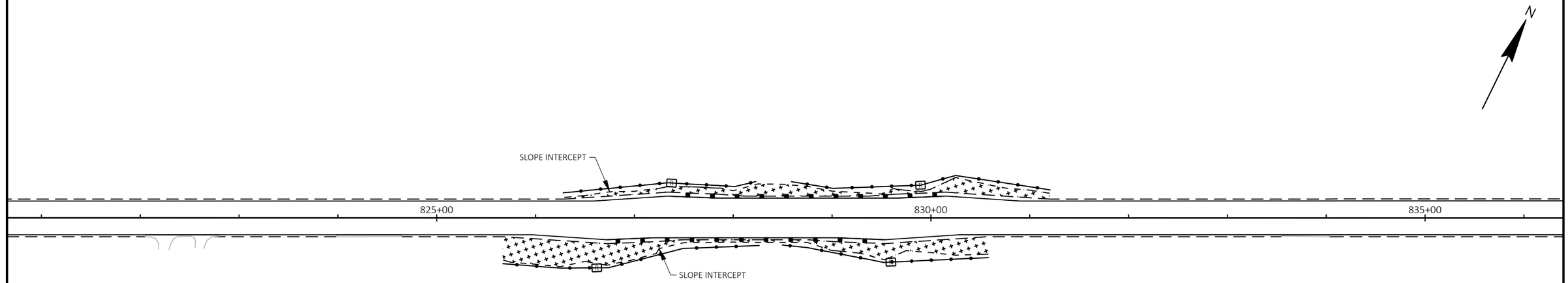




PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EROSION CONTROL	SHEET 38	E

NOTES: INSTALL J-HOOKS AT SILT FENCE ENDS, SEE CONSTRUCTION DETAILS





LEGEND

- EROSION MAT CLASS I TYPE B
- EROSION MAT URBAN CLASS I TYPE B
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SILT FENCE
- FLOW ARROW
- R — SILT FENCE RELIEF

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EROSION CONTROL	SHEET 39	E

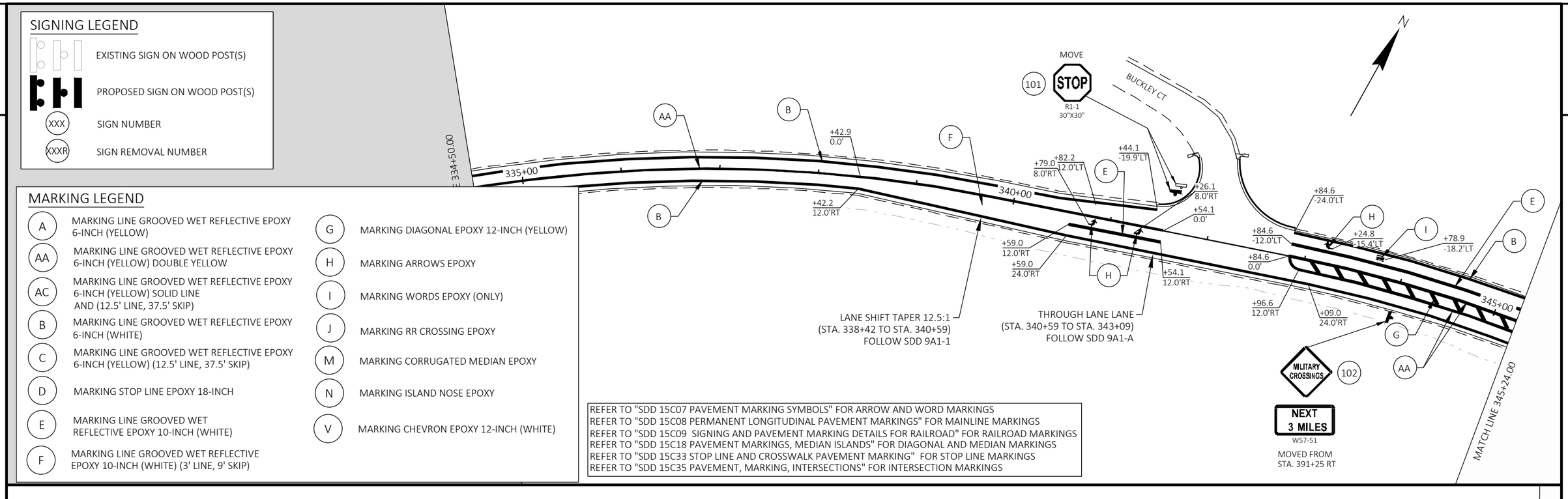
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\022001_EC.DWG
LAYOUT NAME - 8
PLOT DATE : 11/22/2024 8:19 AM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

SIGNING LEGEND

- EXISTING SIGN ON WOOD POST(S)
- PROPOSED SIGN ON WOOD POST(S)
- (XXX) SIGN NUMBER
- (XXXR) SIGN REMOVAL NUMBER

MARKING LEGEND

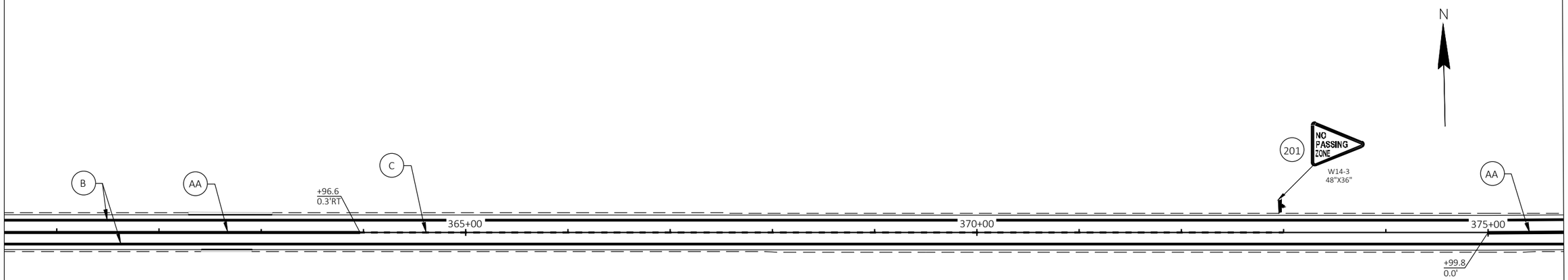
- (A) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW)
- (AA) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) DOUBLE YELLOW
- (AC) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) SOLID LINE AND (12.5' LINE, 37.5' SKIP)
- (B) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (WHITE)
- (C) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- (E) MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE)
- (F) MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE) (3' LINE, 9' SKIP)
- (G) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (H) MARKING ARROWS EPOXY
- (I) MARKING WORDS EPOXY (ONLY)
- (J) MARKING RR CROSSING EPOXY
- (M) MARKING CORRUGATED MEDIAN EPOXY
- (N) MARKING ISLAND NOSE EPOXY
- (V) MARKING CHEVRON EPOXY 12-INCH (WHITE)



REFER TO "SDD 15C07 PAVEMENT MARKING SYMBOLS" FOR ARROW AND WORD MARKINGS
REFER TO "SDD 15C08 PERMANENT LONGITUDINAL PAVEMENT MARKINGS" FOR MAINLINE MARKINGS
REFER TO "SDD 15C09 SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD" FOR RAILROAD MARKINGS
REFER TO "SDD 15C18 PAVEMENT MARKINGS, MEDIAN ISLANDS" FOR DIAGONAL AND MEDIAN MARKINGS
REFER TO "SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR STOP LINE MARKINGS
REFER TO "SDD 15C35 PAVEMENT, MARKING, INTERSECTIONS" FOR INTERSECTION MARKINGS

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PAVEMENT MARKING AND PERMANENT SIGNING	SHEET 40	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 1
PLOT DATE : 11/18/2024 1:36 PM
PLOT BY : MCKANE, RYAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

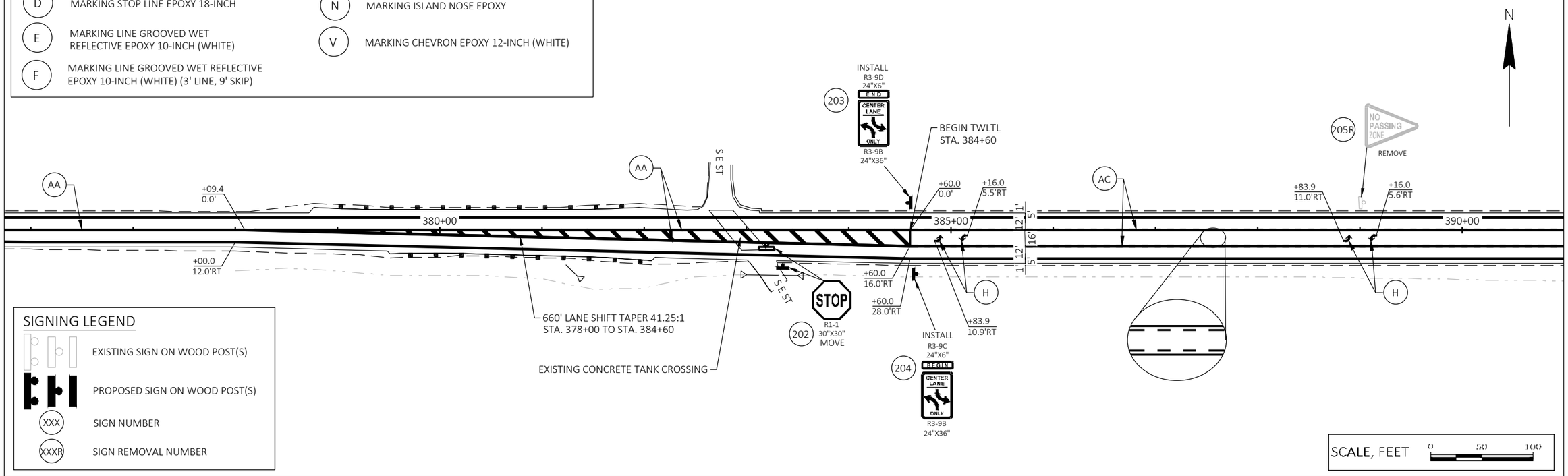


MARKING LEGEND

- A — MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW)
- AA — MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) DOUBLE YELLOW
- AC — MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) SOLID LINE AND (12.5' LINE, 37.5' SKIP)
- B — MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (WHITE)
- C — MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
- D — MARKING STOP LINE EPOXY 18-INCH
- E — MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE)
- F — MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE) (3' LINE, 9' SKIP)
- G — MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- H — MARKING ARROWS EPOXY
- I — MARKING WORDS EPOXY (ONLY)
- J — MARKING RR CROSSING EPOXY
- M — MARKING CORRUGATED MEDIAN EPOXY
- N — MARKING ISLAND NOSE EPOXY
- V — MARKING CHEVRON EPOXY 12-INCH (WHITE)

REFER TO "SDD 15C07 PAVEMENT MARKING SYMBOLS" FOR ARROW AND WORD MARKINGS
REFER TO "SDD 15C08 PERMANENT LONGITUDINAL PAVEMENT MARKINGS" FOR MAINLINE MARKINGS
REFER TO "SDD 15C09 SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD" FOR RAILROAD MARKINGS
REFER TO "SDD 15C18 PAVEMENT MARKINGS, MEDIAN ISLANDS" FOR DIAGONAL AND MEDIAN MARKINGS
REFER TO "SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR STOP LINE MARKINGS
REFER TO "SDD 15C35 PAVEMENT, MARKING, INTERSECTIONS" FOR INTERSECTION MARKINGS

SCALE, FEET 0 50 100



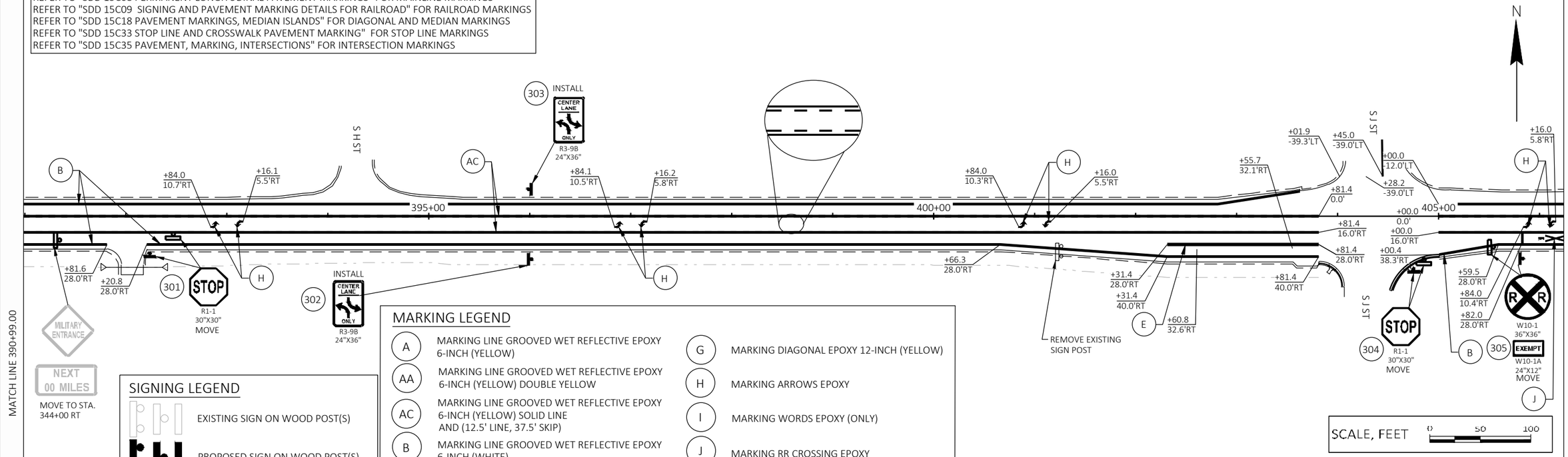
SIGNING LEGEND

- EXISTING SIGN ON WOOD POST(S)
- PROPOSED SIGN ON WOOD POST(S)
- XXX — SIGN NUMBER
- XXXR — SIGN REMOVAL NUMBER

SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PAVEMENT MARKING AND PERMANENT SIGNING	SHEET 41	E

REFER TO "SDD 15C07 PAVEMENT MARKING SYMBOLS" FOR ARROW AND WORD MARKINGS
REFER TO "SDD 15C08 PERMANENT LONGITUDINAL PAVEMENT MARKINGS" FOR MAINLINE MARKINGS
REFER TO "SDD 15C09 SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD" FOR RAILROAD MARKINGS
REFER TO "SDD 15C18 PAVEMENT MARKINGS, MEDIAN ISLANDS" FOR DIAGONAL AND MEDIAN MARKINGS
REFER TO "SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR STOP LINE MARKINGS
REFER TO "SDD 15C35 PAVEMENT, MARKING, INTERSECTIONS" FOR INTERSECTION MARKINGS

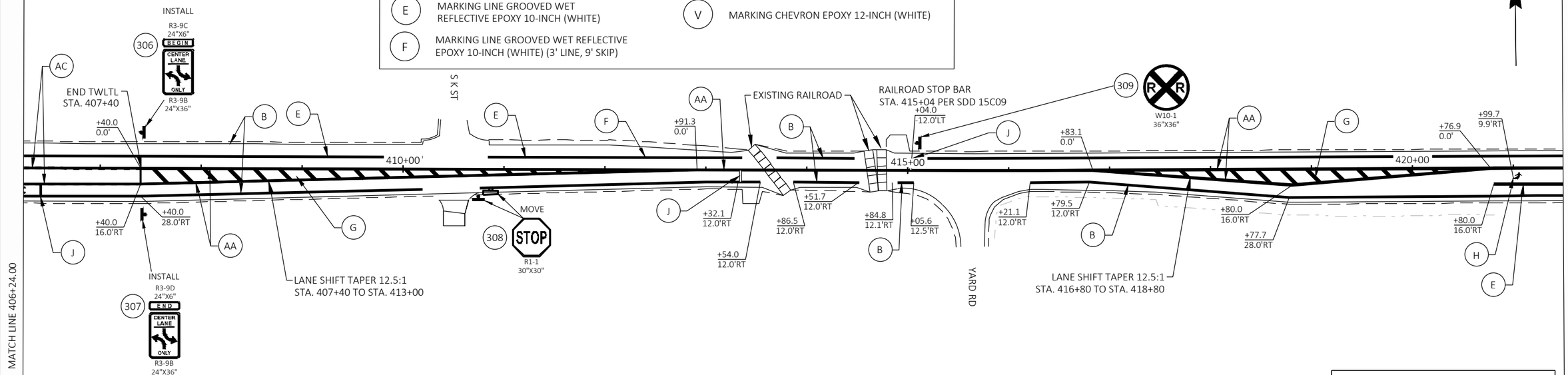


SIGNING LEGEND

- EXISTING SIGN ON WOOD POST(S)
- PROPOSED SIGN ON WOOD POST(S)
- (XXX) SIGN NUMBER
- (XXXR) SIGN REMOVAL NUMBER

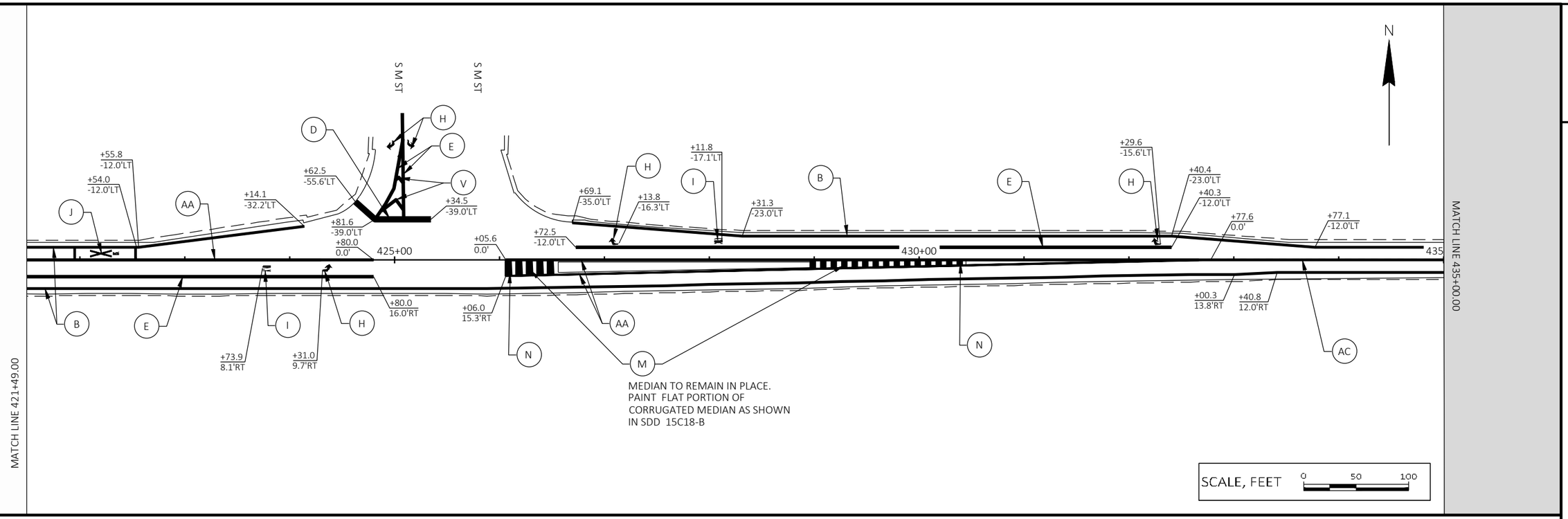
MARKING LEGEND

- (A) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW)
- (AA) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) DOUBLE YELLOW
- (AC) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) SOLID LINE AND (12.5' LINE, 37.5' SKIP)
- (B) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (WHITE)
- (C) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- (E) MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE)
- (F) MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE) (3' LINE, 9' SKIP)
- (G) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (H) MARKING ARROWS EPOXY
- (I) MARKING WORDS EPOXY (ONLY)
- (J) MARKING RR CROSSING EPOXY
- (M) MARKING CORRUGATED MEDIAN EPOXY
- (N) MARKING ISLAND NOSE EPOXY
- (V) MARKING CHEVRON EPOXY 12-INCH (WHITE)



PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PAVEMENT MARKING AND PERMANENT SIGNING	SHEET 42	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 3
PLOT DATE : 11/18/2024 1:37 PM
PLOT BY : MCKANE, RYAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



SIGNING LEGEND

- EXISTING SIGN ON WOOD POST(S)
- PROPOSED SIGN ON WOOD POST(S)
- (XXX) SIGN NUMBER
- (XXXR) SIGN REMOVAL NUMBER

MARKING LEGEND

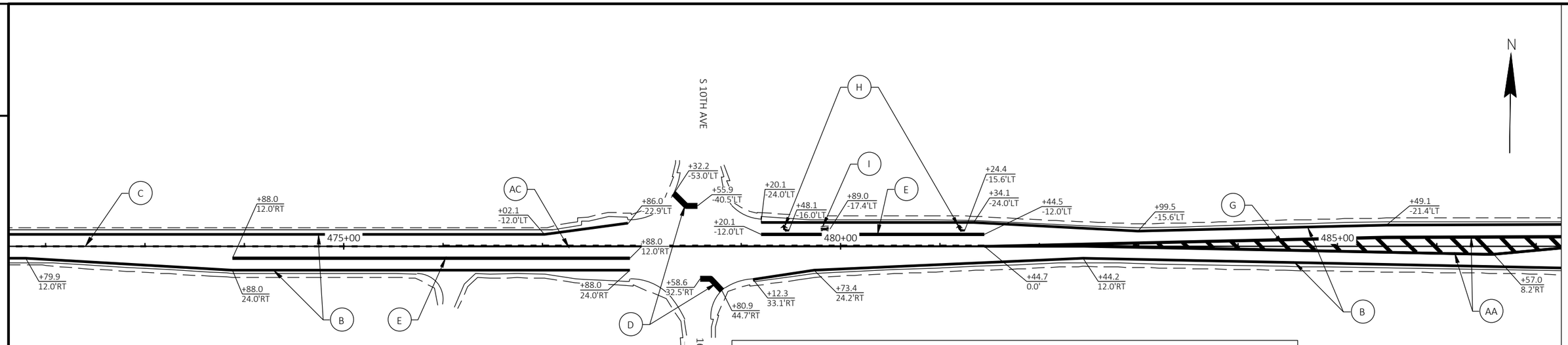
- (A) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW)
- (AA) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) DOUBLE YELLOW
- (AC) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) SOLID LINE AND (12.5' LINE, 37.5' SKIP)
- (B) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (WHITE)
- (C) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- (E) MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE)
- (F) MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE) (3' LINE, 9' SKIP)
- (G) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (H) MARKING ARROWS EPOXY
- (I) MARKING WORDS EPOXY (ONLY)
- (J) MARKING RR CROSSING EPOXY
- (M) MARKING CORRUGATED MEDIAN EPOXY
- (N) MARKING ISLAND NOSE EPOXY
- (V) MARKING CHEVRON EPOXY 12-INCH (WHITE)

REFER TO "SDD 15C07 PAVEMENT MARKING SYMBOLS" FOR ARROW AND WORD MARKINGS
REFER TO "SDD 15C08 PERMANENT LONGITUDINAL PAVEMENT MARKINGS" FOR MAINLINE MARKINGS
REFER TO "SDD 15C09 SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD" FOR RAILROAD MARKINGS
REFER TO "SDD 15C18 PAVEMENT MARKINGS, MEDIAN ISLANDS" FOR DIAGONAL AND MEDIAN MARKINGS
REFER TO "SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR STOP LINE MARKINGS
REFER TO "SDD 15C35 PAVEMENT, MARKING, INTERSECTIONS" FOR INTERSECTION MARKINGS

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PAVEMENT MARKING AND PERMANENT SIGNING	SHEET 43	E

2

MATCH LINE 497+25.00



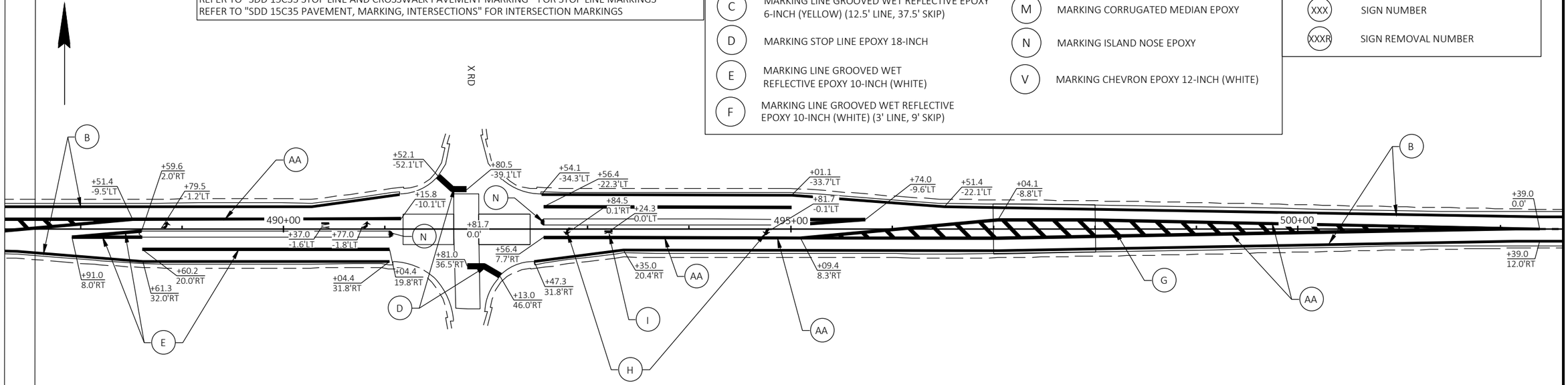
REFER TO "SDD 15C07 PAVEMENT MARKING SYMBOLS" FOR ARROW AND WORD MARKINGS
REFER TO "SDD 15C08 PERMANENT LONGITUDINAL PAVEMENT MARKINGS" FOR MAINLINE MARKINGS
REFER TO "SDD 15C09 SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD" FOR RAILROAD MARKINGS
REFER TO "SDD 15C18 PAVEMENT MARKINGS, MEDIAN ISLANDS" FOR DIAGONAL AND MEDIAN MARKINGS
REFER TO "SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR STOP LINE MARKINGS
REFER TO "SDD 15C35 PAVEMENT, MARKING, INTERSECTIONS" FOR INTERSECTION MARKINGS

MARKING LEGEND

- (A) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW)
- (AA) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) DOUBLE YELLOW
- (AC) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) SOLID LINE AND (12.5' LINE, 37.5' SKIP)
- (B) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (WHITE)
- (C) MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
- (D) MARKING STOP LINE EPOXY 18-INCH
- (E) MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE)
- (F) MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE) (3' LINE, 9' SKIP)
- (G) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- (H) MARKING ARROWS EPOXY
- (I) MARKING WORDS EPOXY (ONLY)
- (J) MARKING RR CROSSING EPOXY
- (M) MARKING CORRUGATED MEDIAN EPOXY
- (N) MARKING ISLAND NOSE EPOXY
- (V) MARKING CHEVRON EPOXY 12-INCH (WHITE)

SIGNING LEGEND

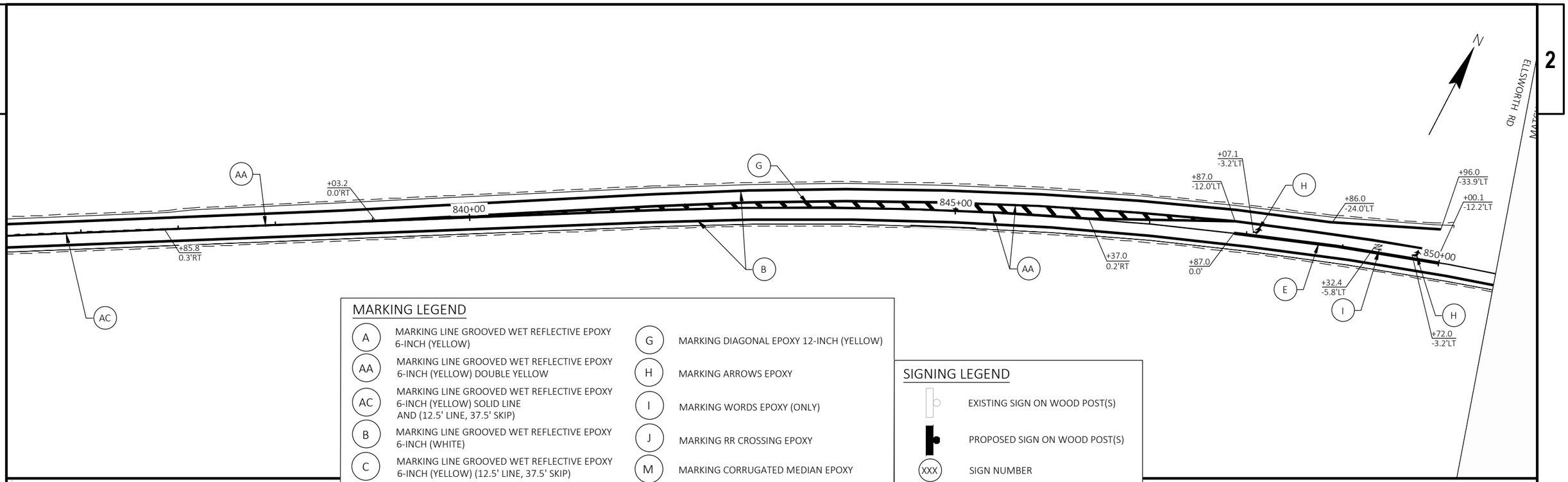
- EXISTING SIGN ON WOOD POST(S)
- PROPOSED SIGN ON WOOD POST(S)
- (XXX) SIGN NUMBER
- (XXXR) SIGN REMOVAL NUMBER



MATCH LINE 487+25.00

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PAVEMENT MARKING AND PERMANENT SIGNING	SHEET 44	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 5
PLOT DATE : 11/18/2024 1:37 PM
PLOT BY : MCKANE, RYAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



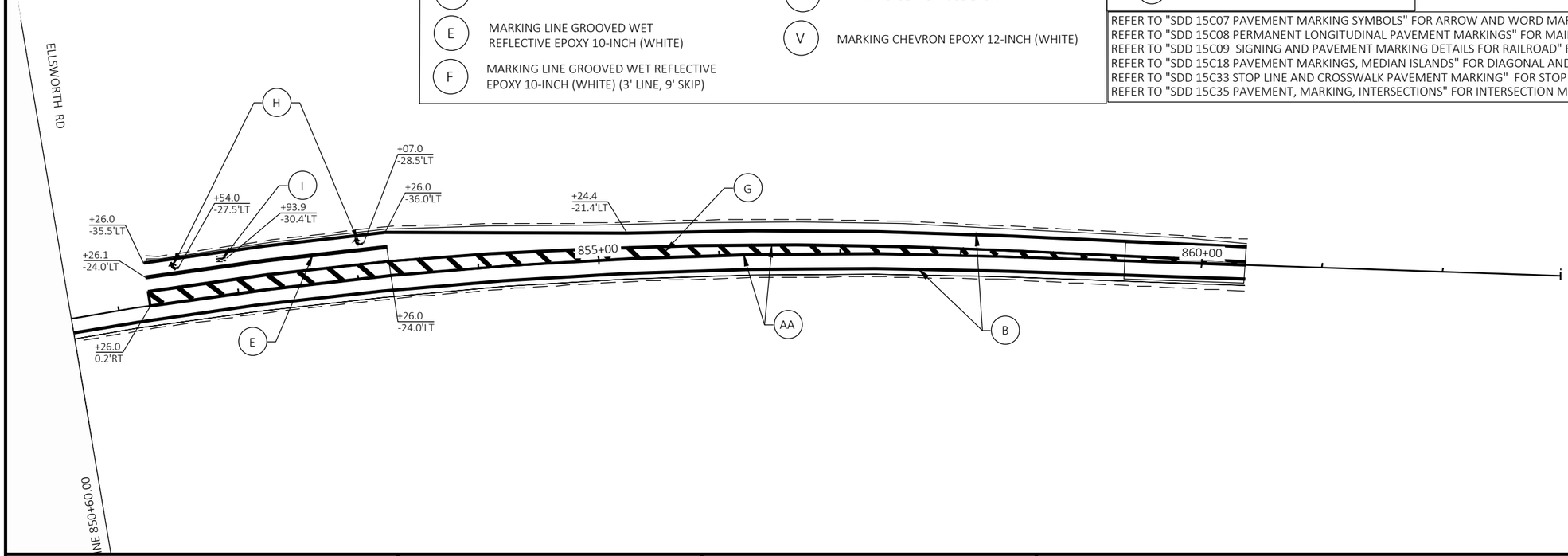
MARKING LEGEND

A	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW)
AA	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) DOUBLE YELLOW
AC	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) SOLID LINE AND (12.5' LINE, 37.5' SKIP)
B	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (WHITE)
C	MARKING LINE GROOVED WET REFLECTIVE EPOXY 6-INCH (YELLOW) (12.5' LINE, 37.5' SKIP)
D	MARKING STOP LINE EPOXY 18-INCH
E	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE)
F	MARKING LINE GROOVED WET REFLECTIVE EPOXY 10-INCH (WHITE) (3' LINE, 9' SKIP)
G	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
H	MARKING ARROWS EPOXY
I	MARKING WORDS EPOXY (ONLY)
J	MARKING RR CROSSING EPOXY
M	MARKING CORRUGATED MEDIAN EPOXY
N	MARKING ISLAND NOSE EPOXY
V	MARKING CHEVRON EPOXY 12-INCH (WHITE)

SIGNING LEGEND

	EXISTING SIGN ON WOOD POST(S)
	PROPOSED SIGN ON WOOD POST(S)
XXX	SIGN NUMBER
XXXR	SIGN REMOVAL NUMBER

REFER TO "SDD 15C07 PAVEMENT MARKING SYMBOLS" FOR ARROW AND WORD MARKINGS
REFER TO "SDD 15C08 PERMANENT LONGITUDINAL PAVEMENT MARKINGS" FOR MAINLINE MARKINGS
REFER TO "SDD 15C09 SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD" FOR RAILROAD MARKINGS
REFER TO "SDD 15C18 PAVEMENT MARKINGS, MEDIAN ISLANDS" FOR DIAGONAL AND MEDIAN MARKINGS
REFER TO "SDD 15C33 STOP LINE AND CROSSWALK PAVEMENT MARKING" FOR STOP LINE MARKINGS
REFER TO "SDD 15C35 PAVEMENT, MARKING, INTERSECTIONS" FOR INTERSECTION MARKINGS

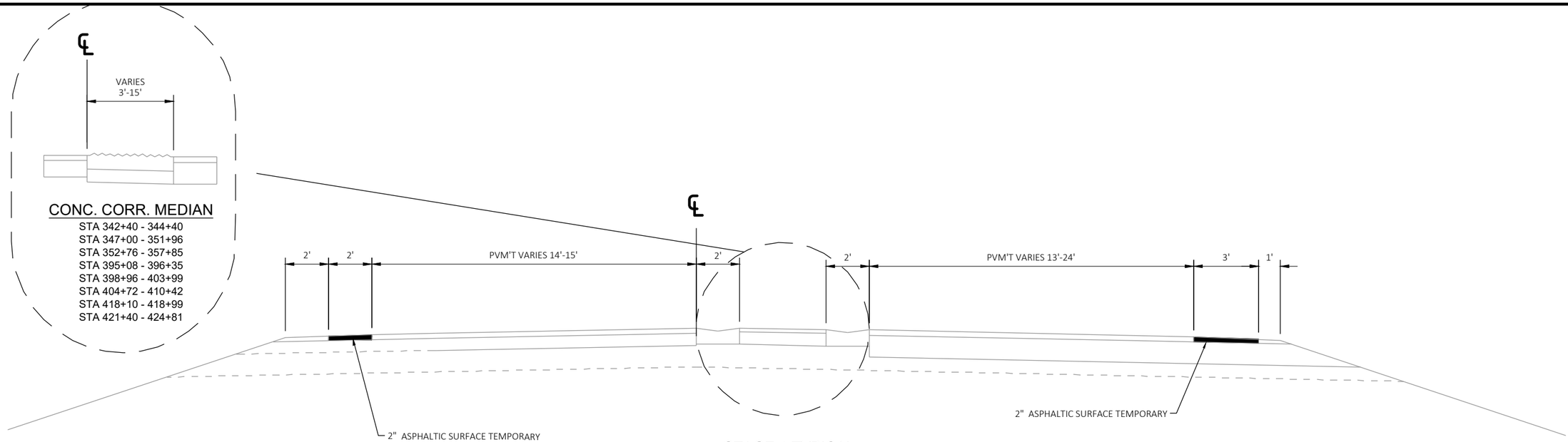


N

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PAVEMENT MARKING AND PERMANENT SIGNING	SHEET 45 E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\024501_PM.DWG
LAYOUT NAME - 6
PLOT DATE : 11/18/2024 1:37 PM
PLOT BY : MCKANE, RYAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

2



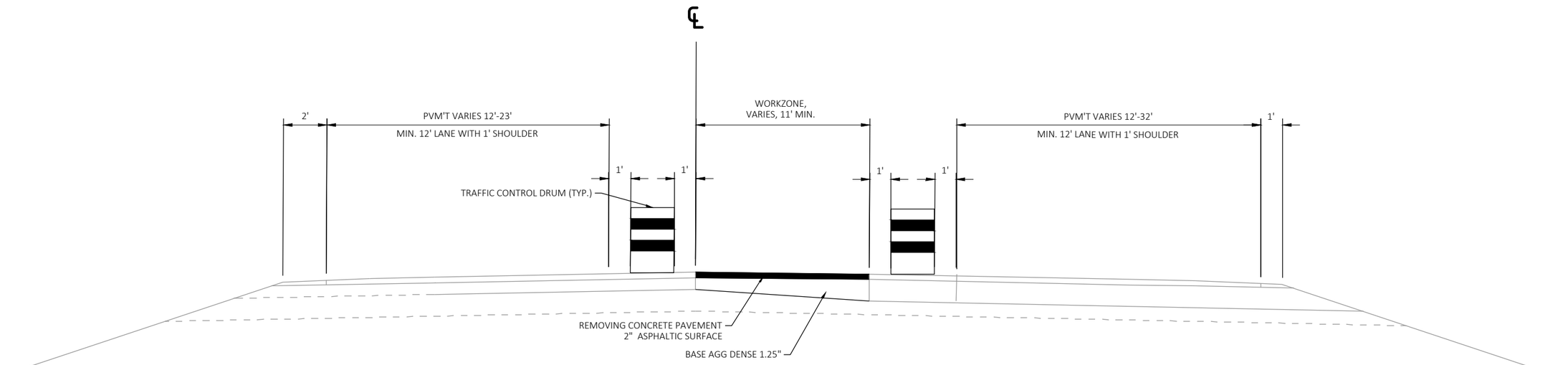
CONC. CORR. MEDIAN

STA 342+40 - 344+40
STA 347+00 - 351+96
STA 352+76 - 357+85
STA 395+08 - 396+35
STA 398+96 - 403+99
STA 404+72 - 410+42
STA 418+10 - 418+99
STA 421+40 - 424+81

STAGE 1 TYPICAL

STA 344+40 - 347+00
STA 396+35 - 398+96
STA 418+99 - 421+40

WORK TO BE DONE UNDER FLAGGING OPERATIONS



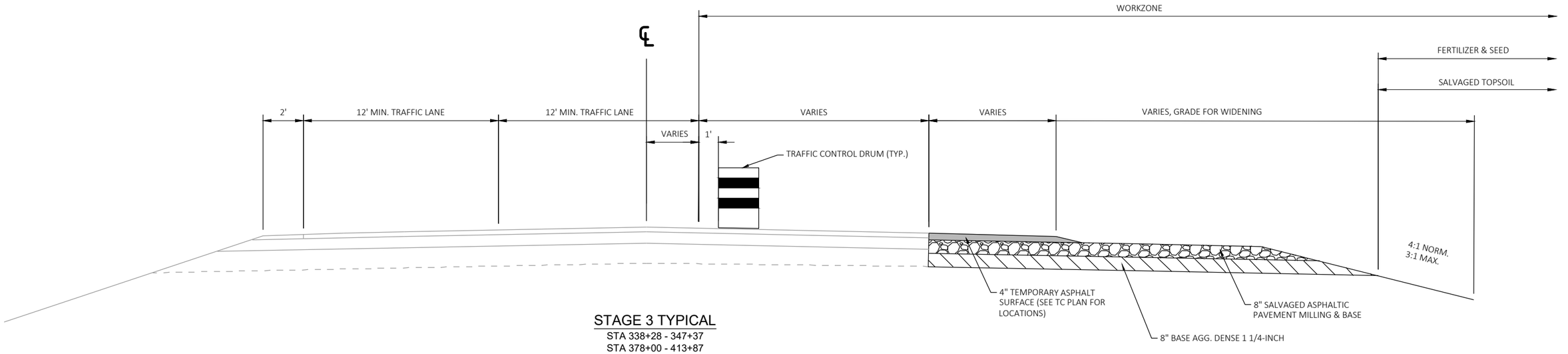
STAGE 2 TYPICAL

STA 342+40 - 351+96
STA 352+76 - 357+85
STA 395+08 - 403+99
STA 404+72 - 410+42
STA 418+10 - 424+81

WORK TO BE DONE UNDER FLAGGING OPERATIONS

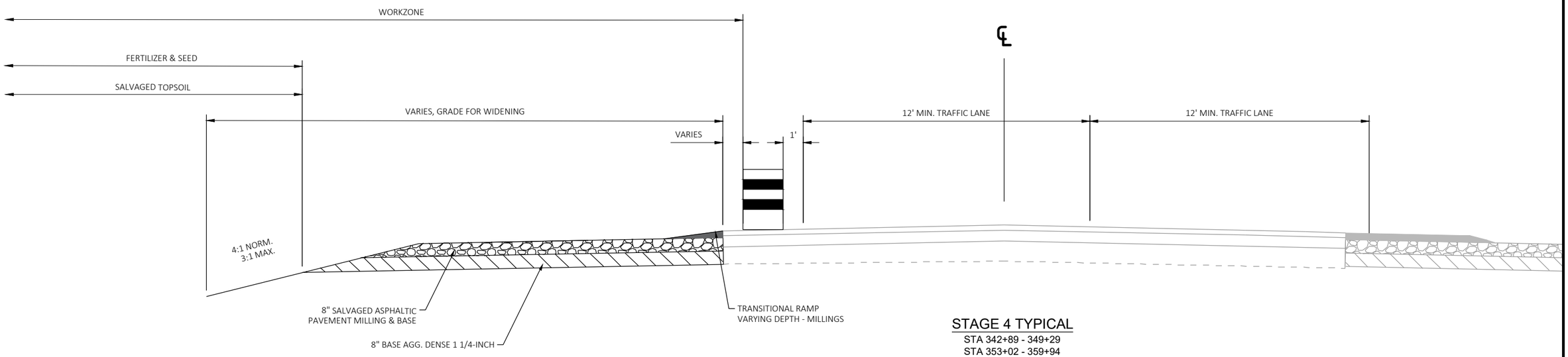
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 46	E

2



STAGE 3 TYPICAL

STA 338+28 - 347+37
STA 378+00 - 413+87
STA 416+53 - 427+19

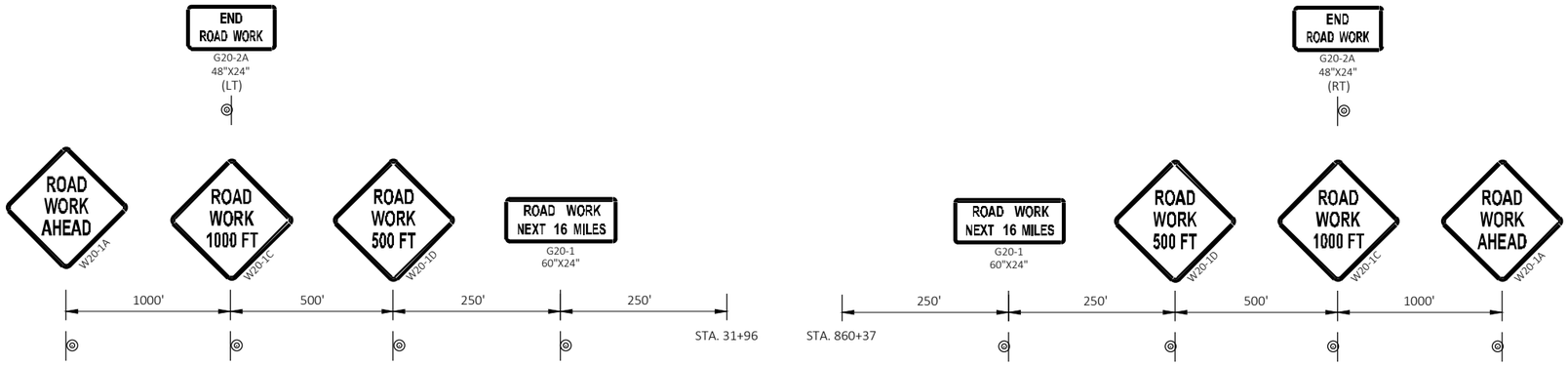


STAGE 4 TYPICAL

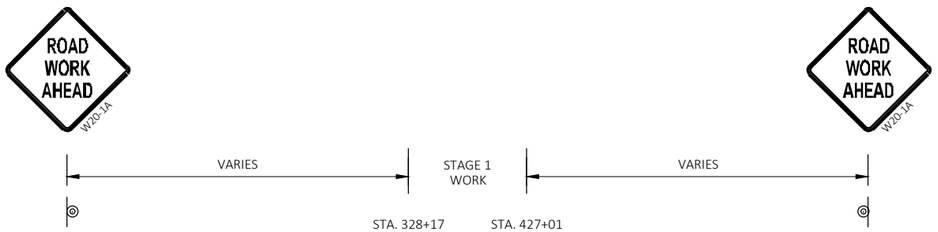
STA 342+89 - 349+29
STA 353+02 - 359+94
STA 378+12 - 382+51

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 47	E

NOTES:
- SIGNS ARE TO BE 48" X 48" UNLESS OTHERWISE NOTED.



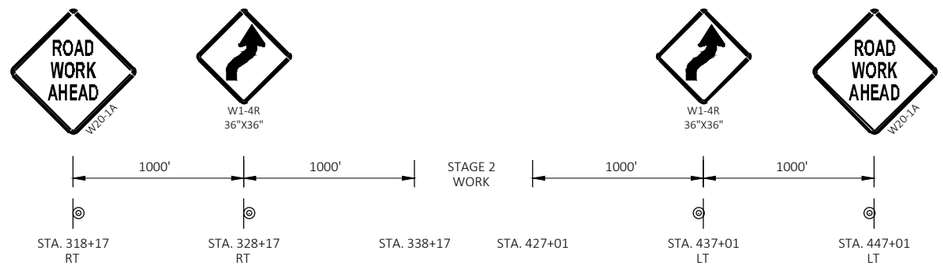
TYPICAL ADVANCED SIGNING - ALL STAGES



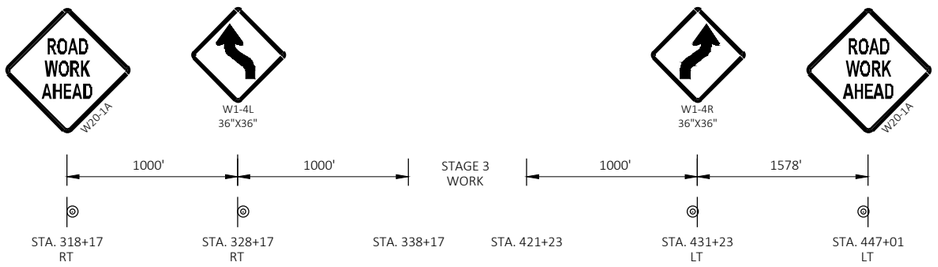
TYPICAL ADVANCED SIGNING - STAGE 1

UTILIZE SDD 15C12 - TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION FOR ADDITIONAL SIGN PLACEMENT

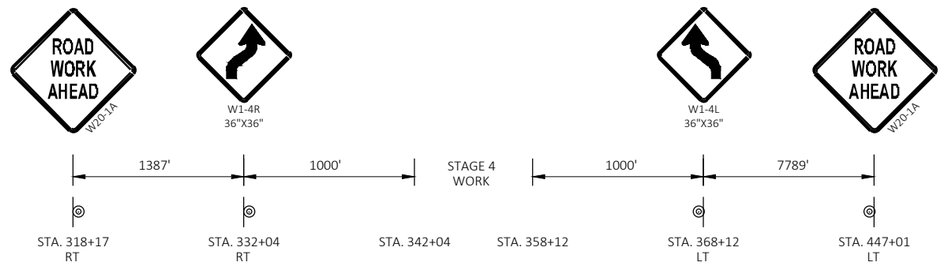
INCLUDE W20-1A SIGNS AT BOTH ENDS DUE TO WORK ZONE BEING SEPARATED BY MORE THAN 2 MILES FROM PROJECT START/END.



TYPICAL ADVANCED SIGNING - STAGE 2



TYPICAL ADVANCED SIGNING - STAGE 3



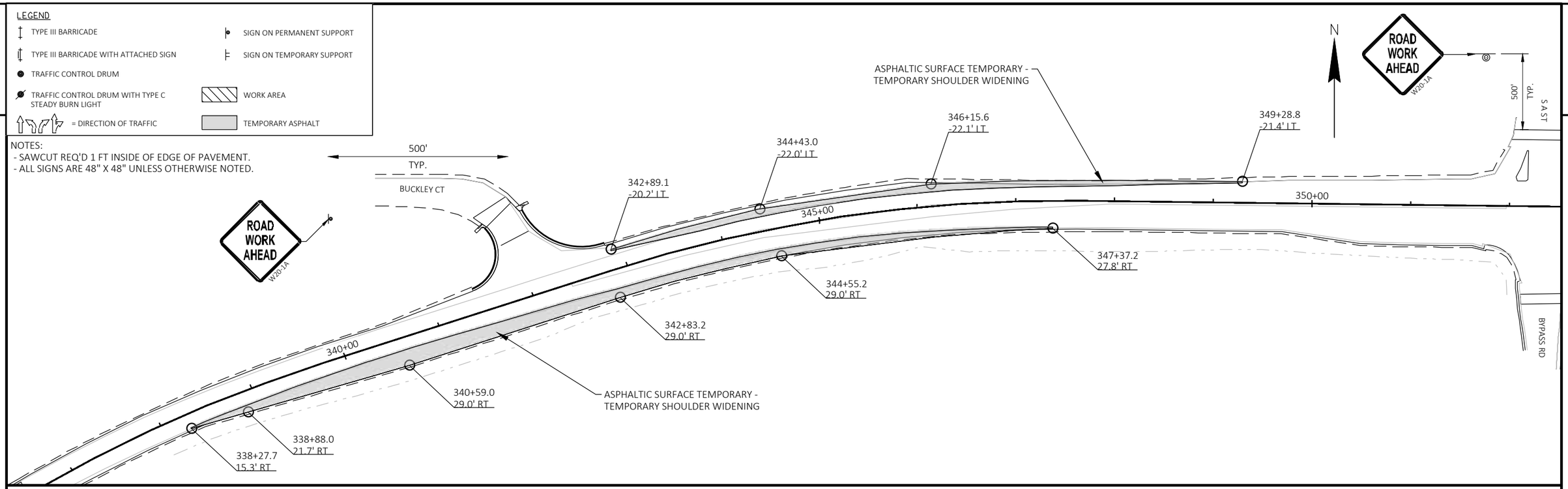
TYPICAL ADVANCED SIGNING - STAGE 4

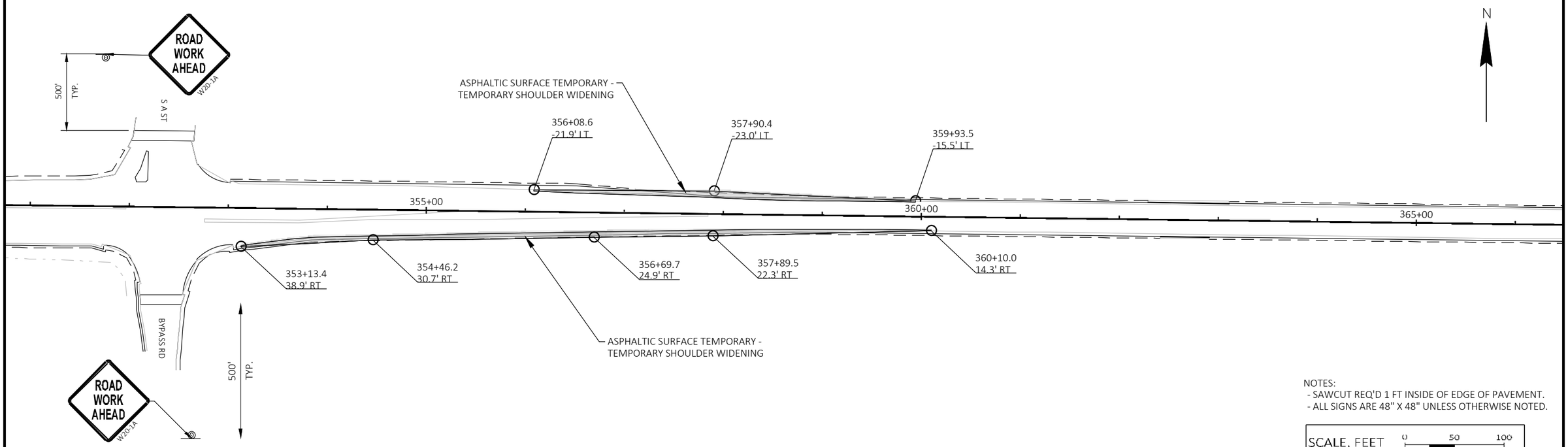
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL	SHEET 48	E

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY ASPHALT

NOTES:
- SAWCUT REQ'D 1 FT INSIDE OF EDGE OF PAVEMENT.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.





NOTES:
- SAWCUT REQ'D 1 FT INSIDE OF EDGE OF PAVEMENT.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 1	SHEET 49	E

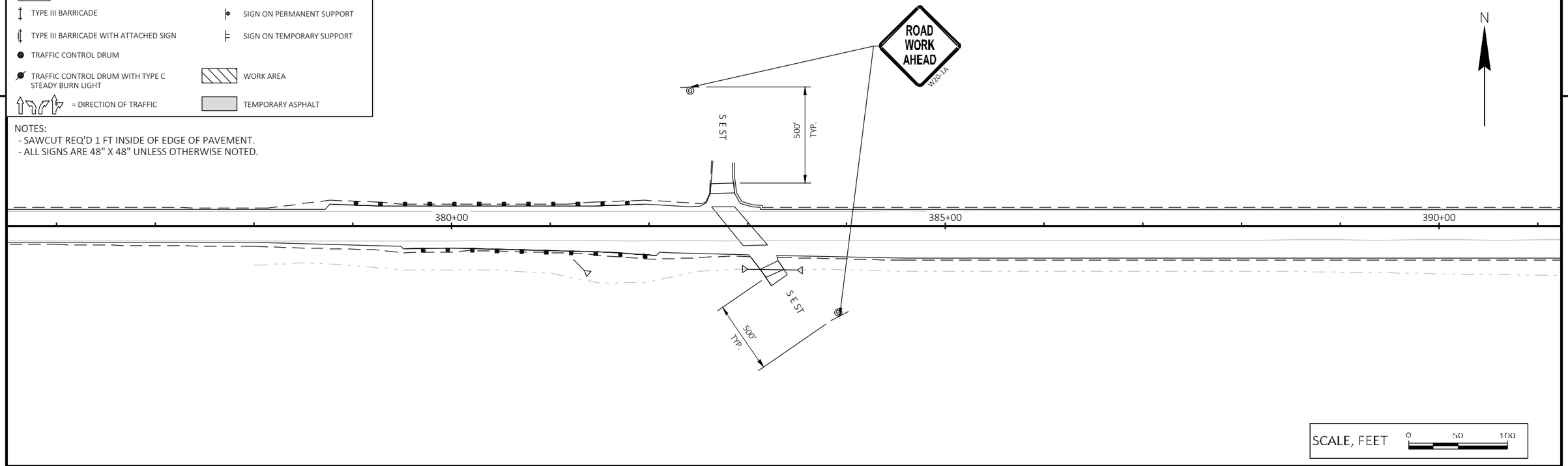
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 1.1
PLOT DATE : 11/19/2024 12:43 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : ##########

2

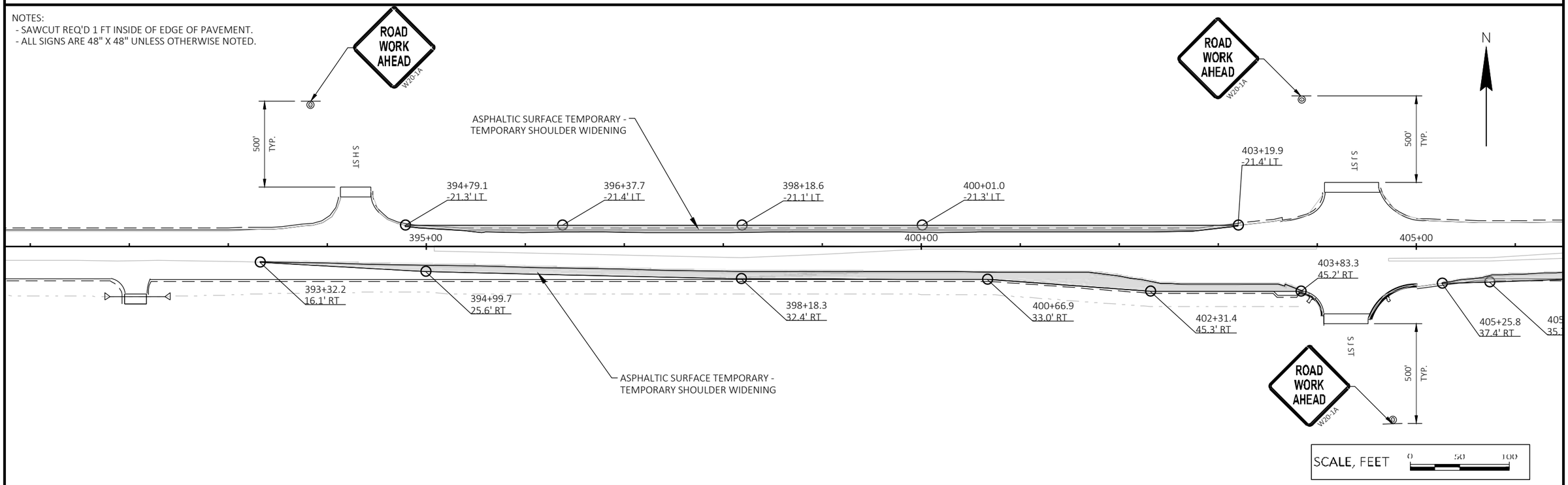
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY ASPHALT

NOTES:
- SAWCUT REQ'D 1 FT INSIDE OF EDGE OF PAVEMENT.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.



NOTES:
- SAWCUT REQ'D 1 FT INSIDE OF EDGE OF PAVEMENT.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.



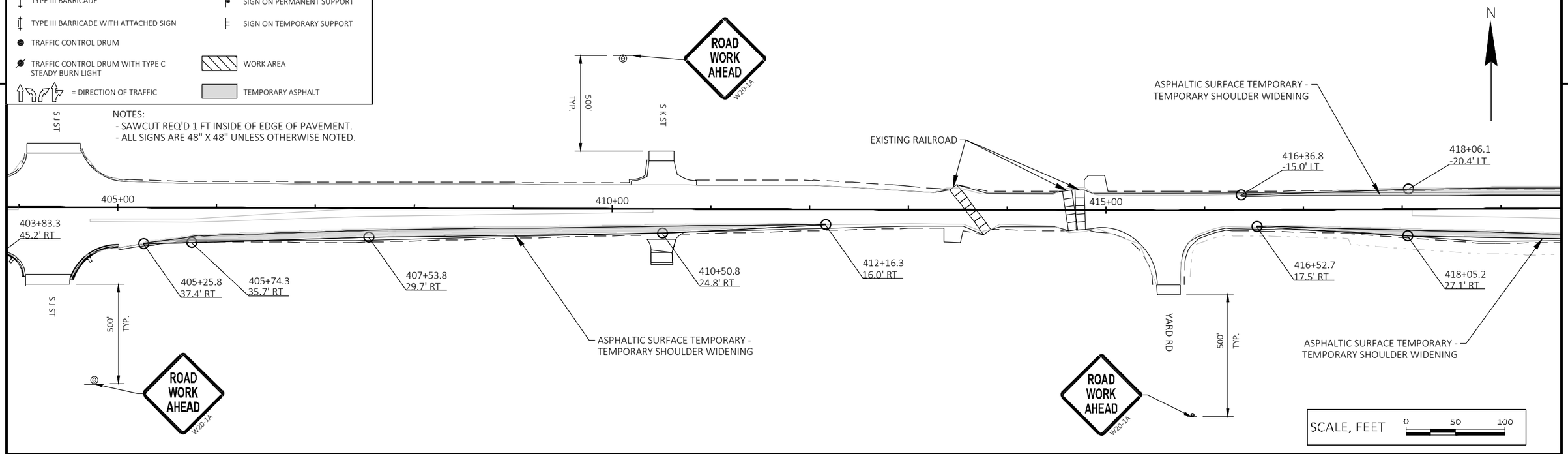
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 1	SHEET 50	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 1.2
PLOT DATE : 11/19/2024 12:43 PM
PLOT BY : MCKANE, RYAN
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

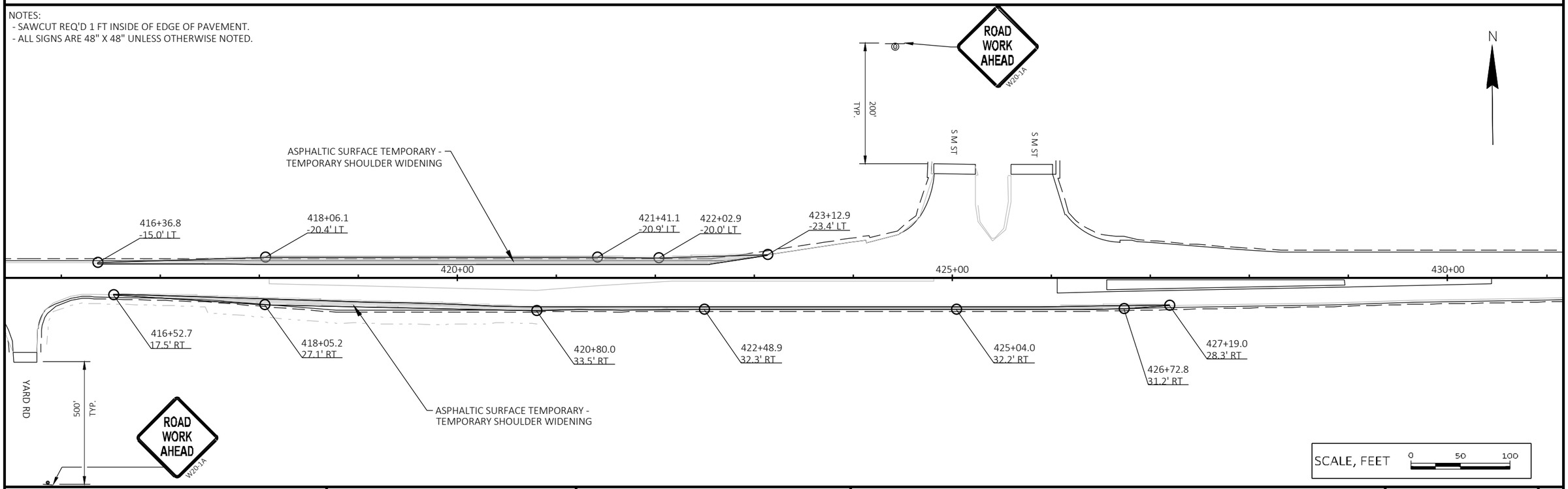
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY ASPHALT

NOTES:
- SAWCUT REQ'D 1 FT INSIDE OF EDGE OF PAVEMENT.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.



NOTES:
- SAWCUT REQ'D 1 FT INSIDE OF EDGE OF PAVEMENT.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.



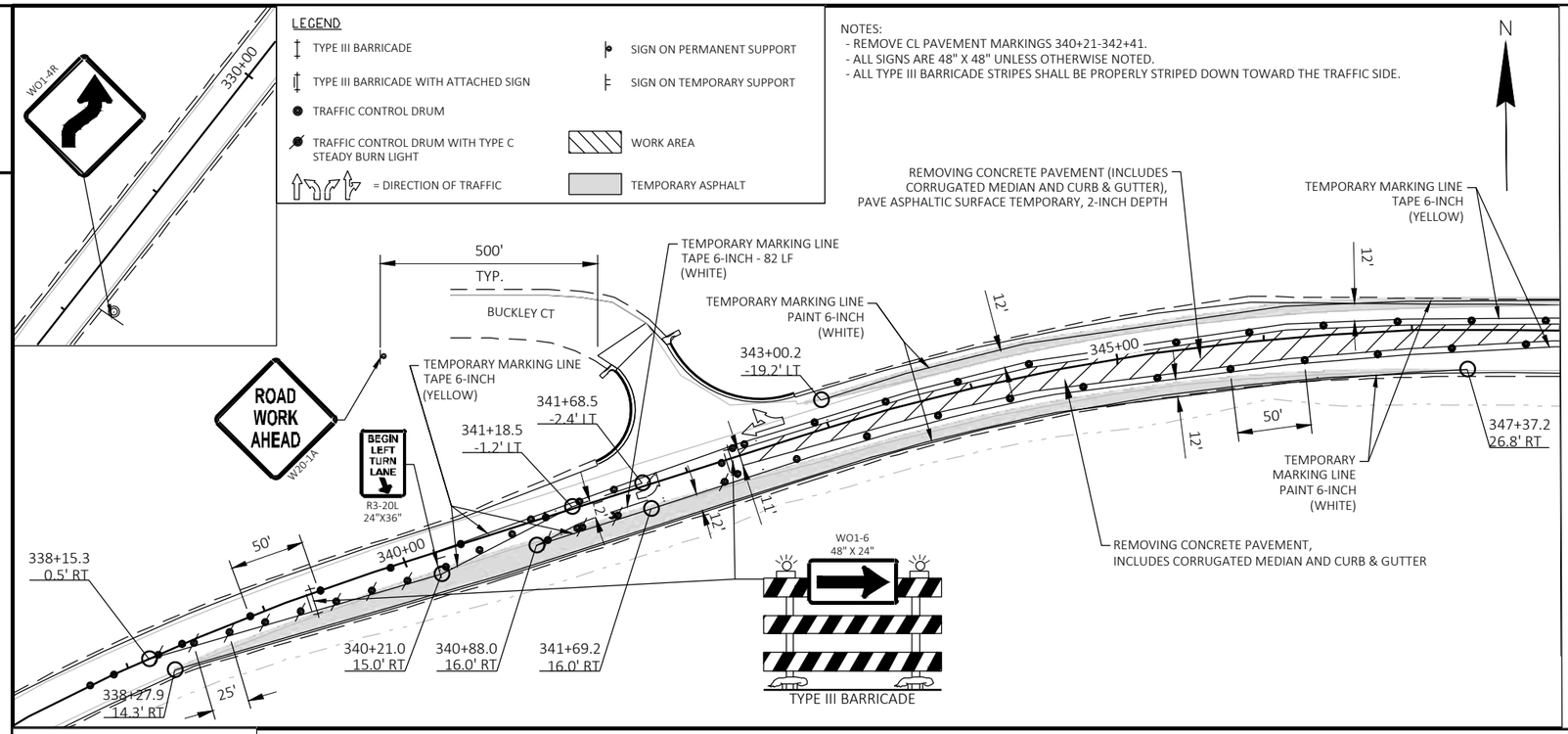
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 1	SHEET 51	E

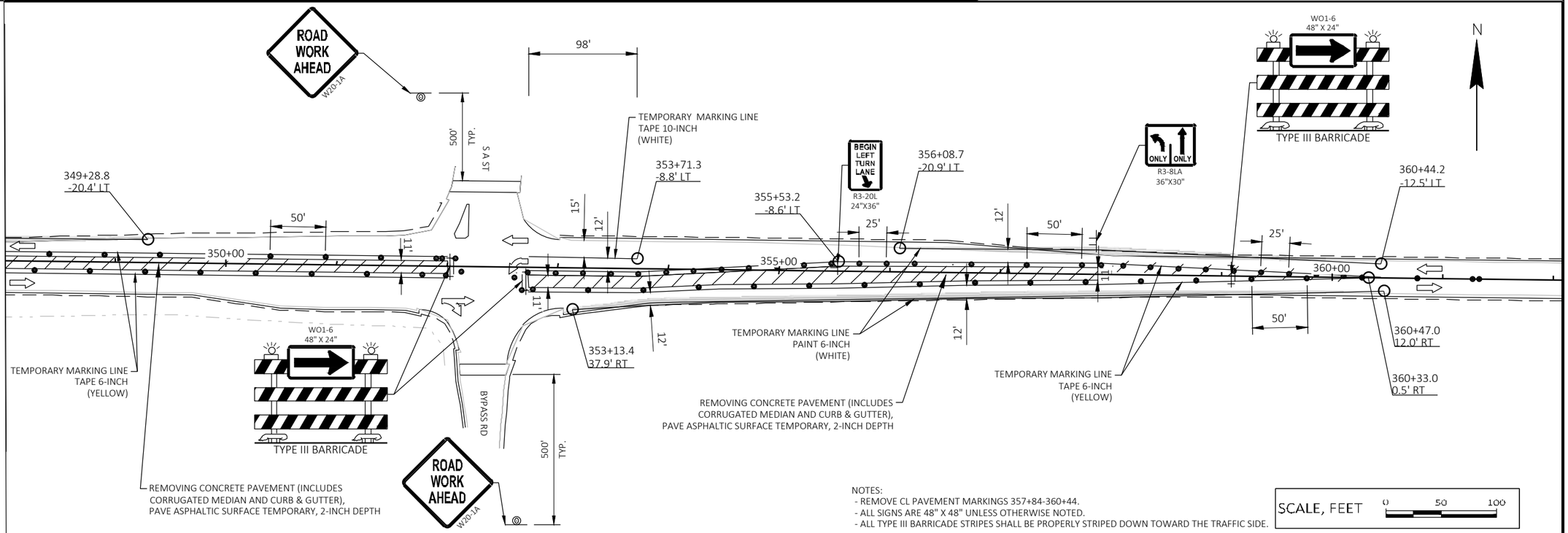
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\026001_S1.DWG
LAYOUT NAME - 1.3
PLOT DATE : 11/19/2024 12:44 PM
PLOT BY : MCKANE, RYAN
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY ASPHALT

NOTES:
- REMOVE CL PAVEMENT MARKINGS 340+21-342+41.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.





NOTES:
- REMOVE CL PAVEMENT MARKINGS 357+84-360+44.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 2	SHEET 52	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\026001_S2.DWG
LAYOUT NAME - 2.1

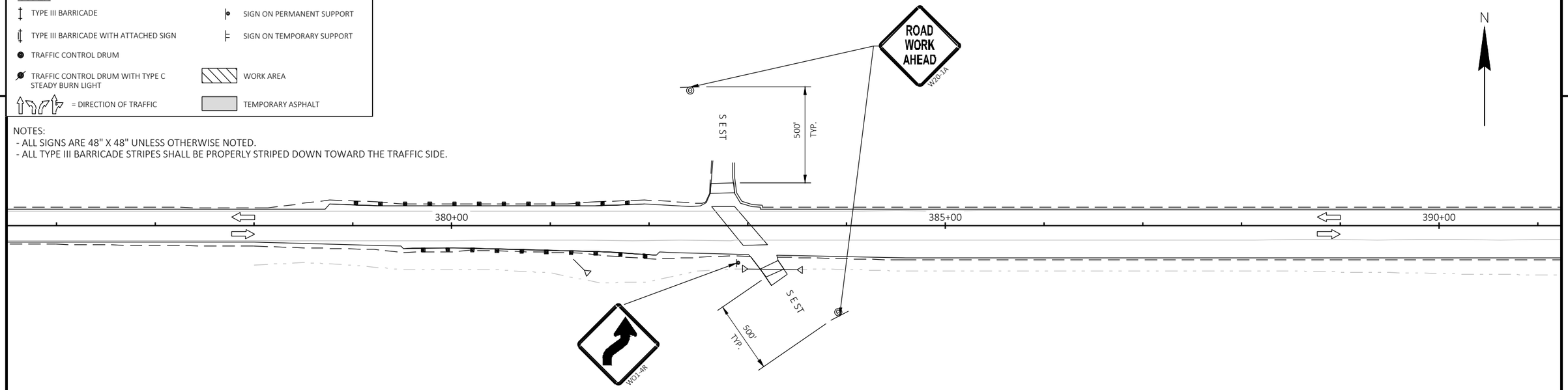
PLOT DATE : 11/19/2024 12:47 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : ##########

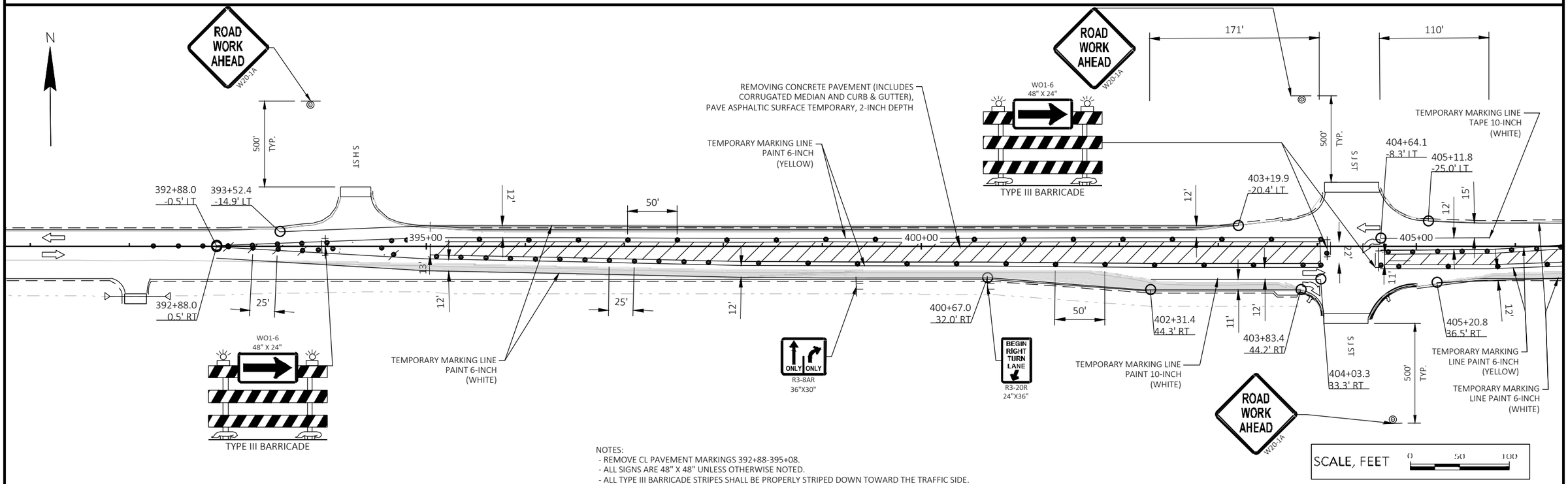
2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY ASPHALT

NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

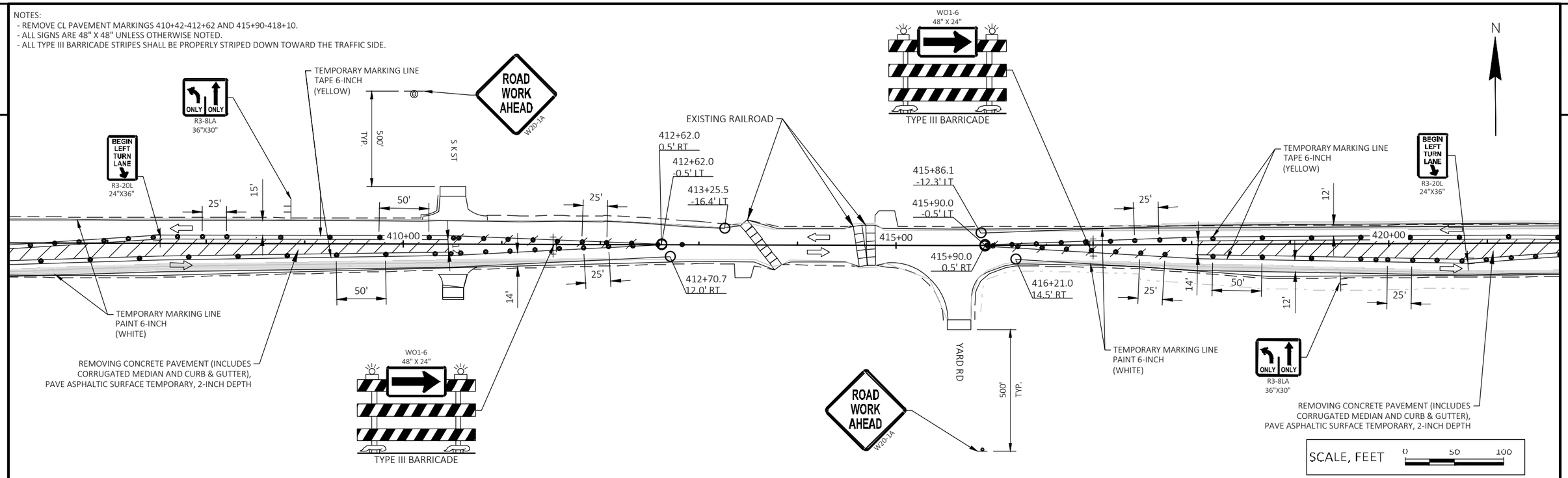


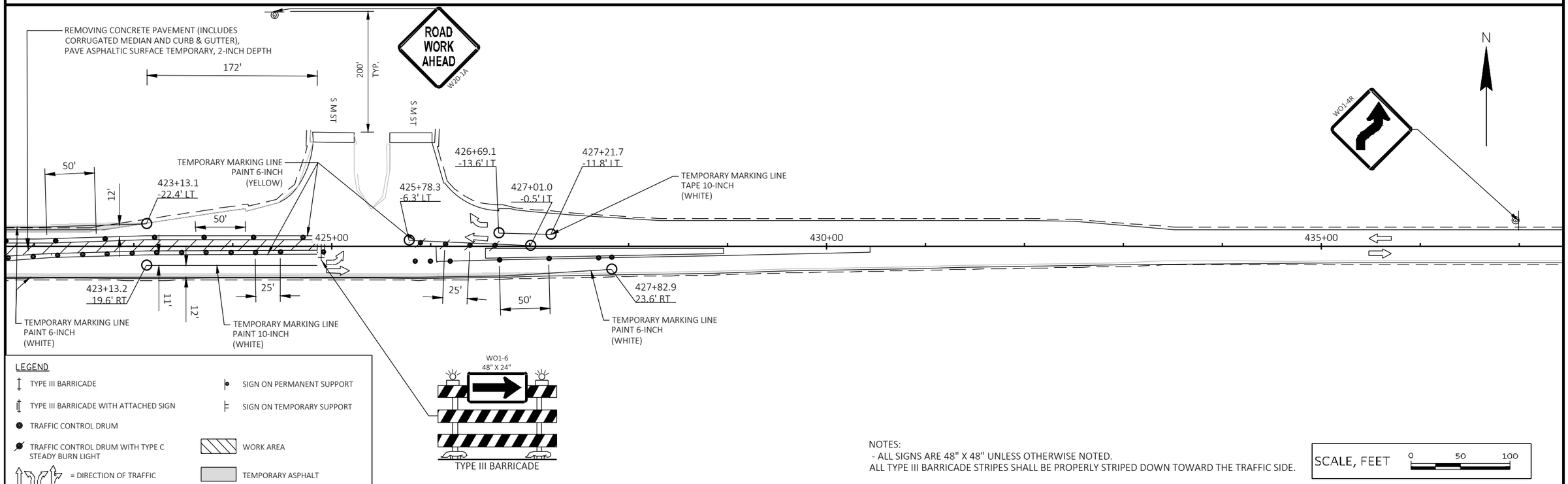


NOTES:
- REMOVE CL PAVEMENT MARKINGS 392+88-395+08.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 2	SHEET 53	E

NOTES:
- REMOVE CL PAVEMENT MARKINGS 410+42-412+62 AND 415+90-418+10.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.



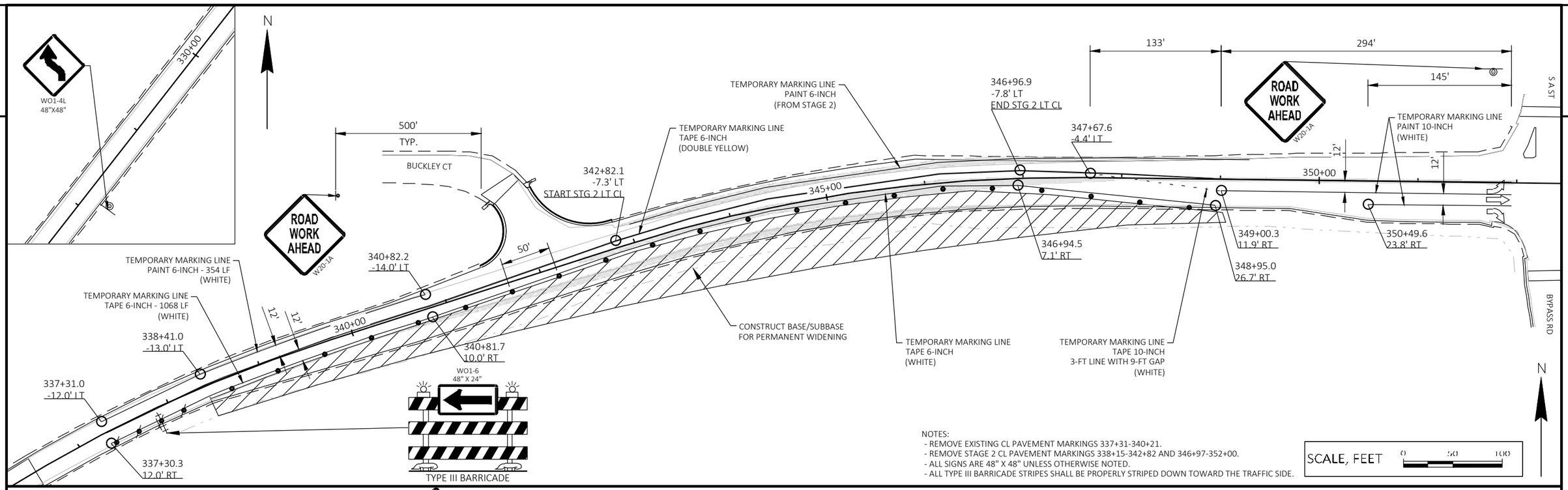


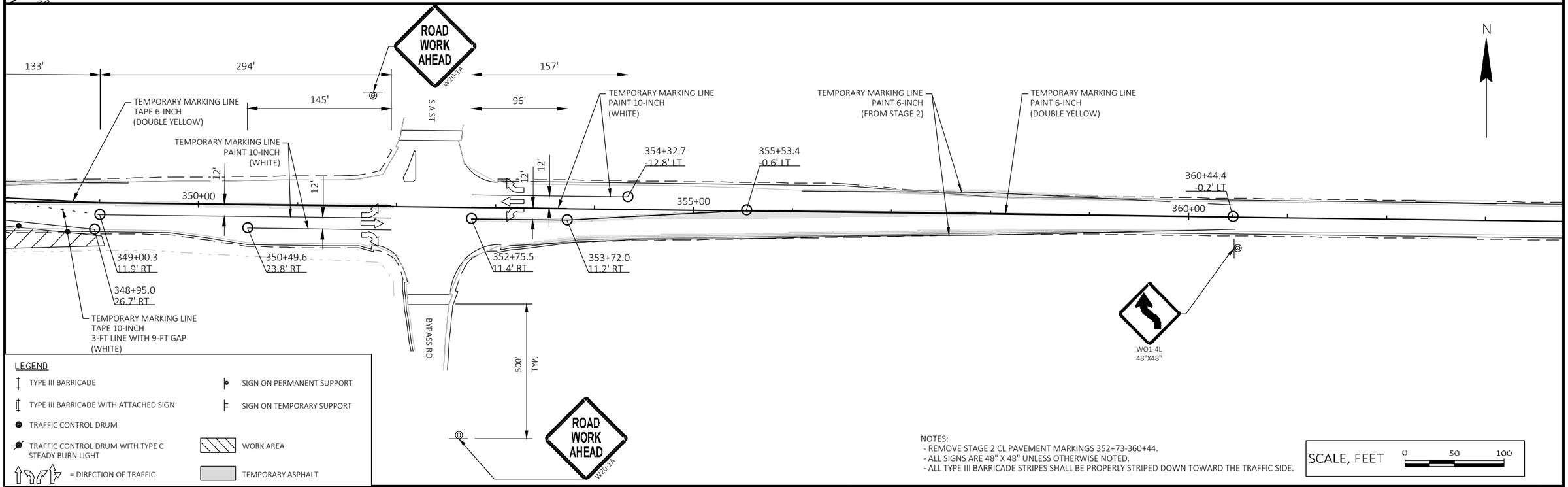
NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 2	SHEET 54	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\026001_S2.DWG
LAYOUT NAME - 2.3
PLOT DATE : 11/19/2024 12:47 PM
PLOT BY : MCKANE, RYAN
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 44





PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 3	SHEET 55	E

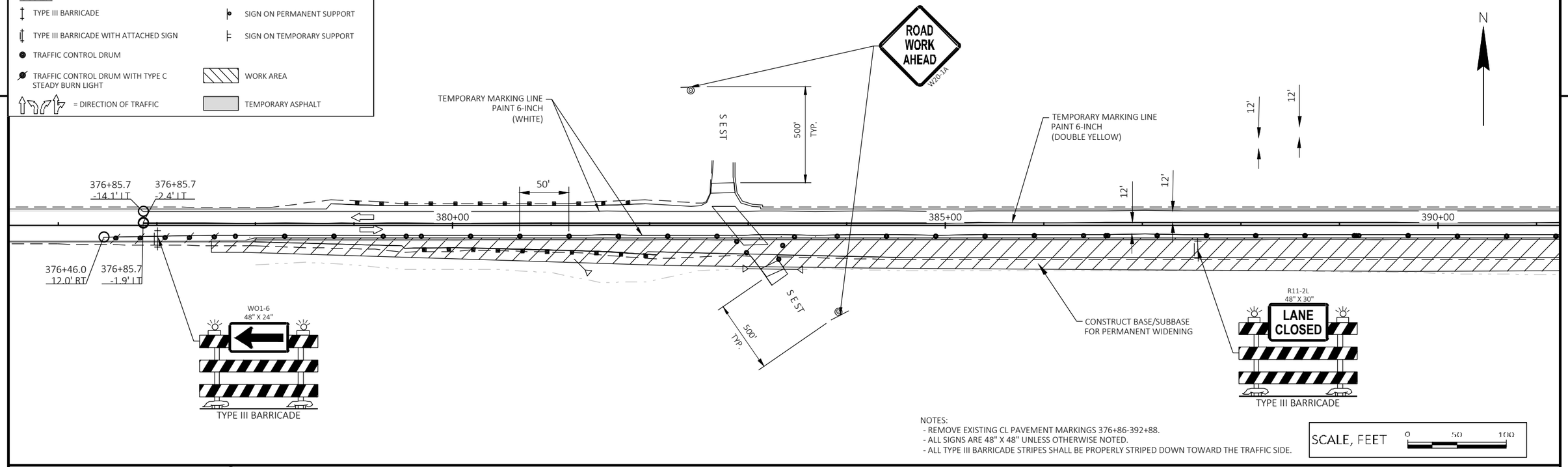
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\026001_S3.DWG
LAYOUT NAME - 3.1

PLOT DATE : 11/19/2024 12:50 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

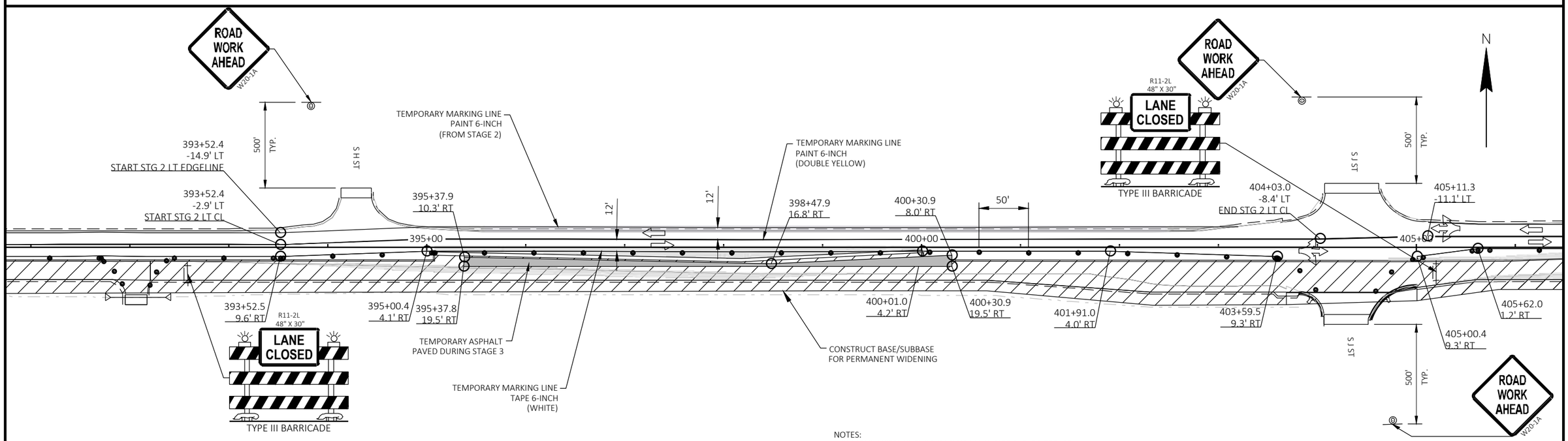
LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY ASPHALT



NOTES:
- REMOVE EXISTING CL PAVEMENT MARKINGS 376+86-392+88.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

SCALE, FEET 0 50 100



NOTES:
- REMOVE EXISTING CL PAVEMENT MARKINGS 376+86-392+88.
- REMOVE STAGE 2 CL PAVEMENT MARKINGS 392+88-393+52, 393+52-395+10 (RT ONLY), AND 404+64-410+35 (LT ONLY).
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

SCALE, FEET 0 50 100

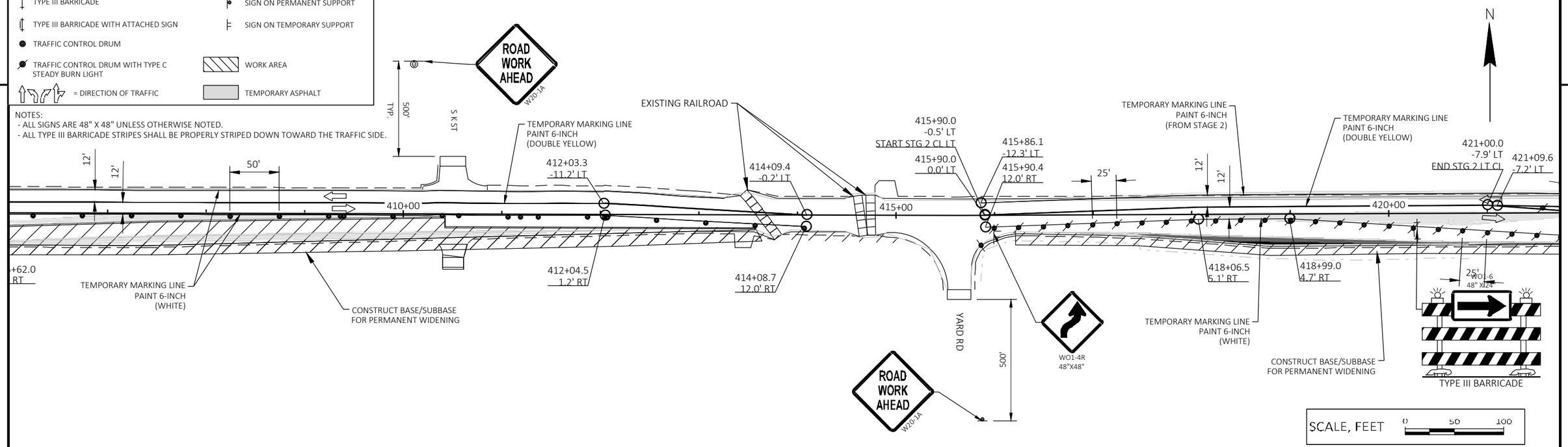
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 3	SHEET 56	E

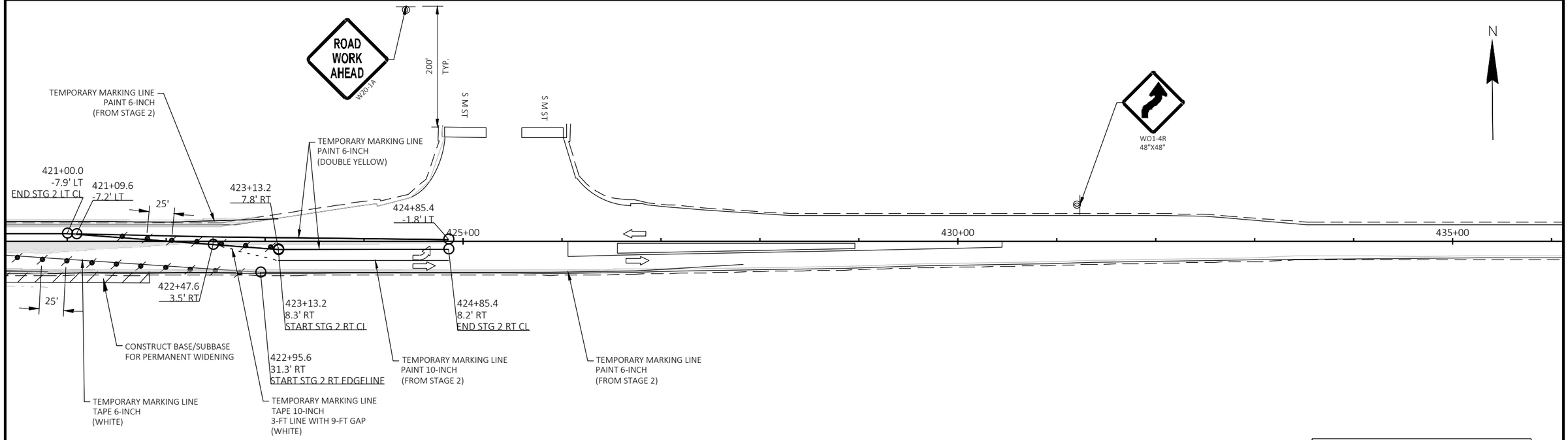
2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY ASPHALT

NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.





NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 3	SHEET 57	E

FILE NAME : W:\7545_08\CAD\| 7605-06-32\SHEETSPLAN\026001_S3.DWG
LAYOUT NAME - 3.3

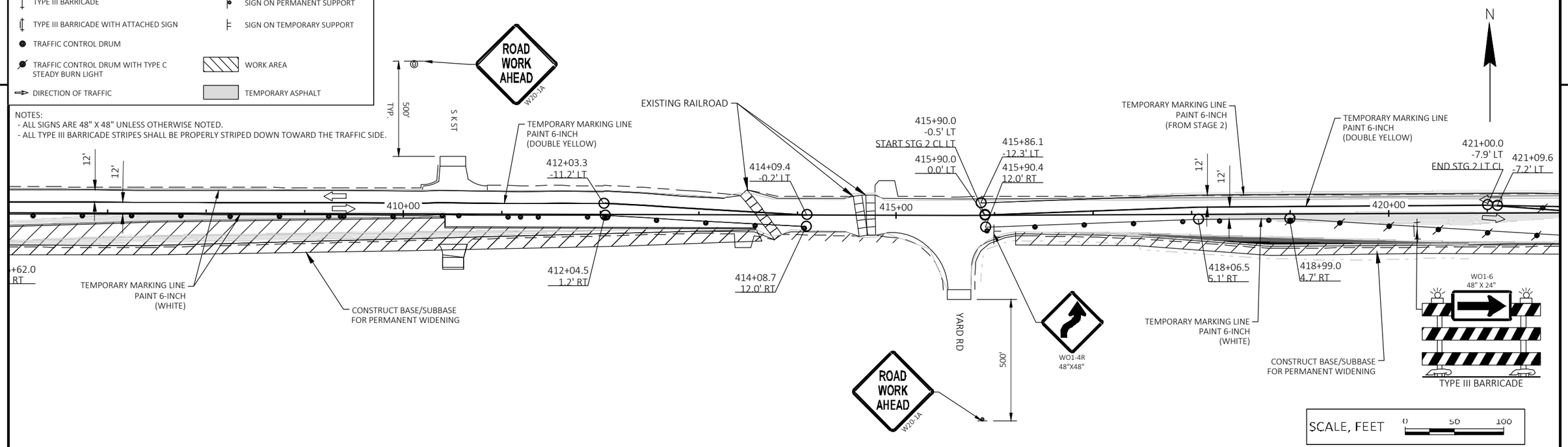
PLOT DATE : 11/19/2024 12:51 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : ##########

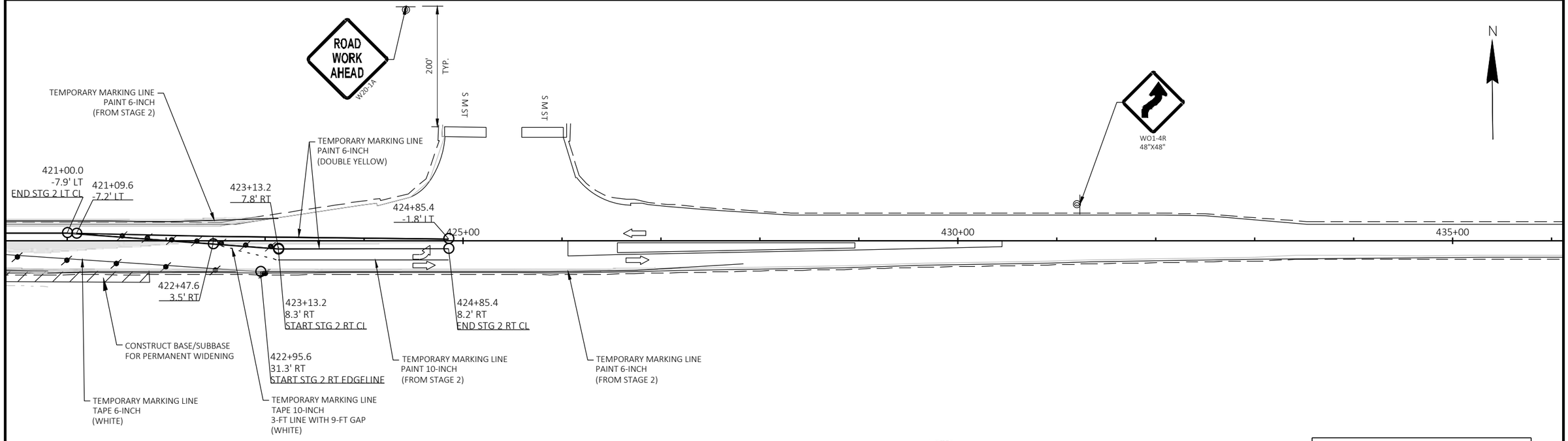
WISDOT/CADDS SHEET 44

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- TEMPORARY ASPHALT

NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

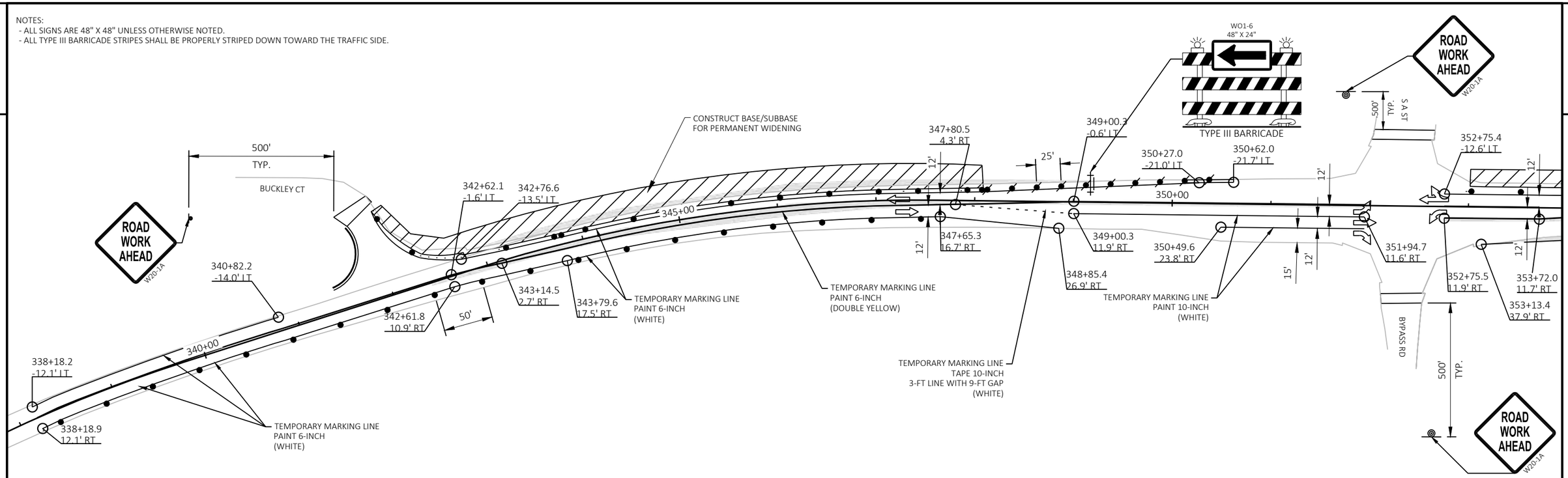


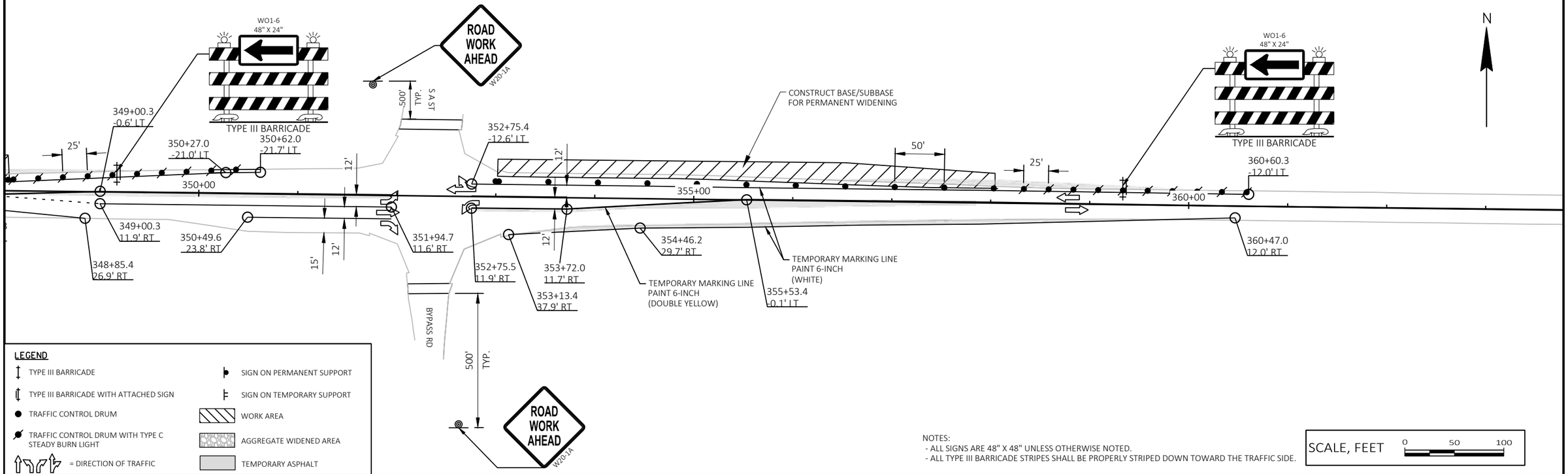


NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 3	SHEET 58	E

NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.





LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- AGGREGATE WIDENED AREA
- TEMPORARY ASPHALT

NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 4	SHEET 59	E

2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- AGGREGATE WIDENED AREA
- TEMPORARY ASPHALT

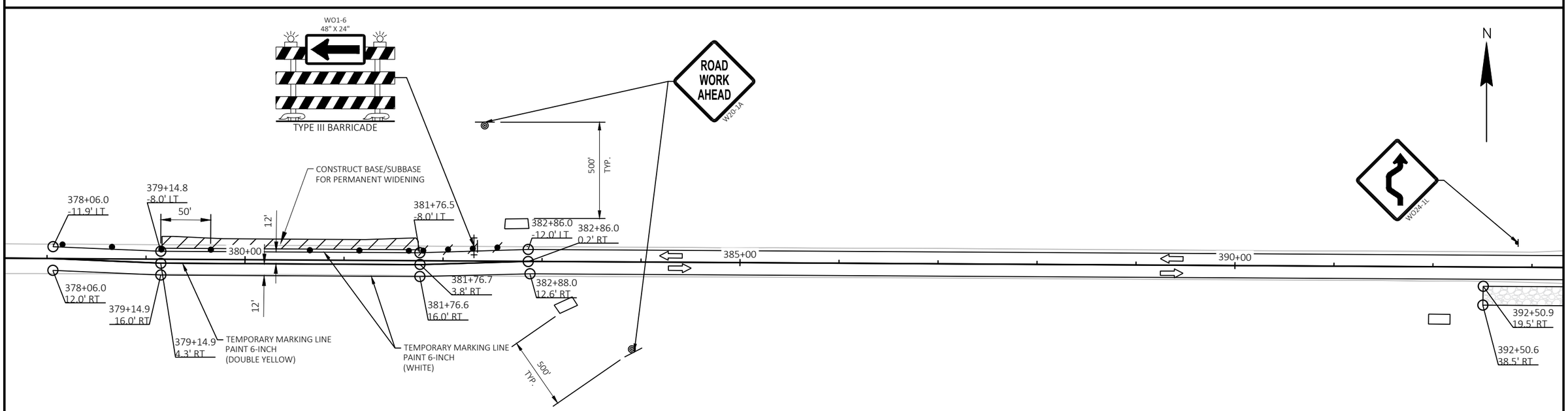
NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

N

WO1-4L
48"X48"

365+00 370+00 375+00

SCALE, FEET 0 50 100



NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 4	SHEET 60	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\026001_S4.DWG
LAYOUT NAME - 4.2

PLOT DATE : 11/19/2024 2:49 PM PLOT BY : MARZOLF, ROBBI PLOT NAME : PLOT SCALE : ##########

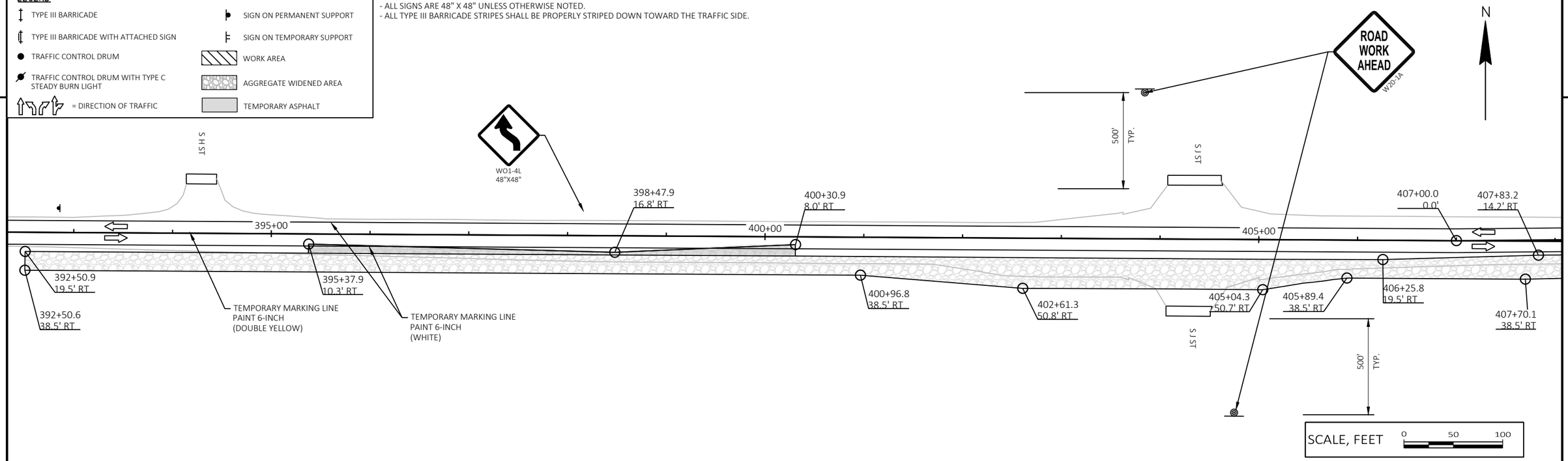
WISDOT/CADDS SHEET 44

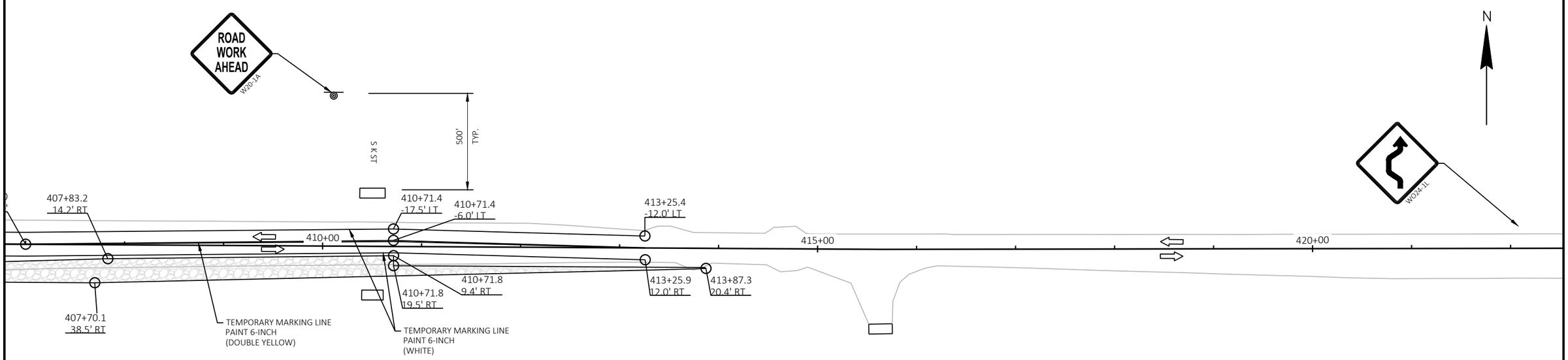
2

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE C STEADY BURN LIGHT
- = DIRECTION OF TRAFFIC
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- WORK AREA
- AGGREGATE WIDENED AREA
- TEMPORARY ASPHALT

NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

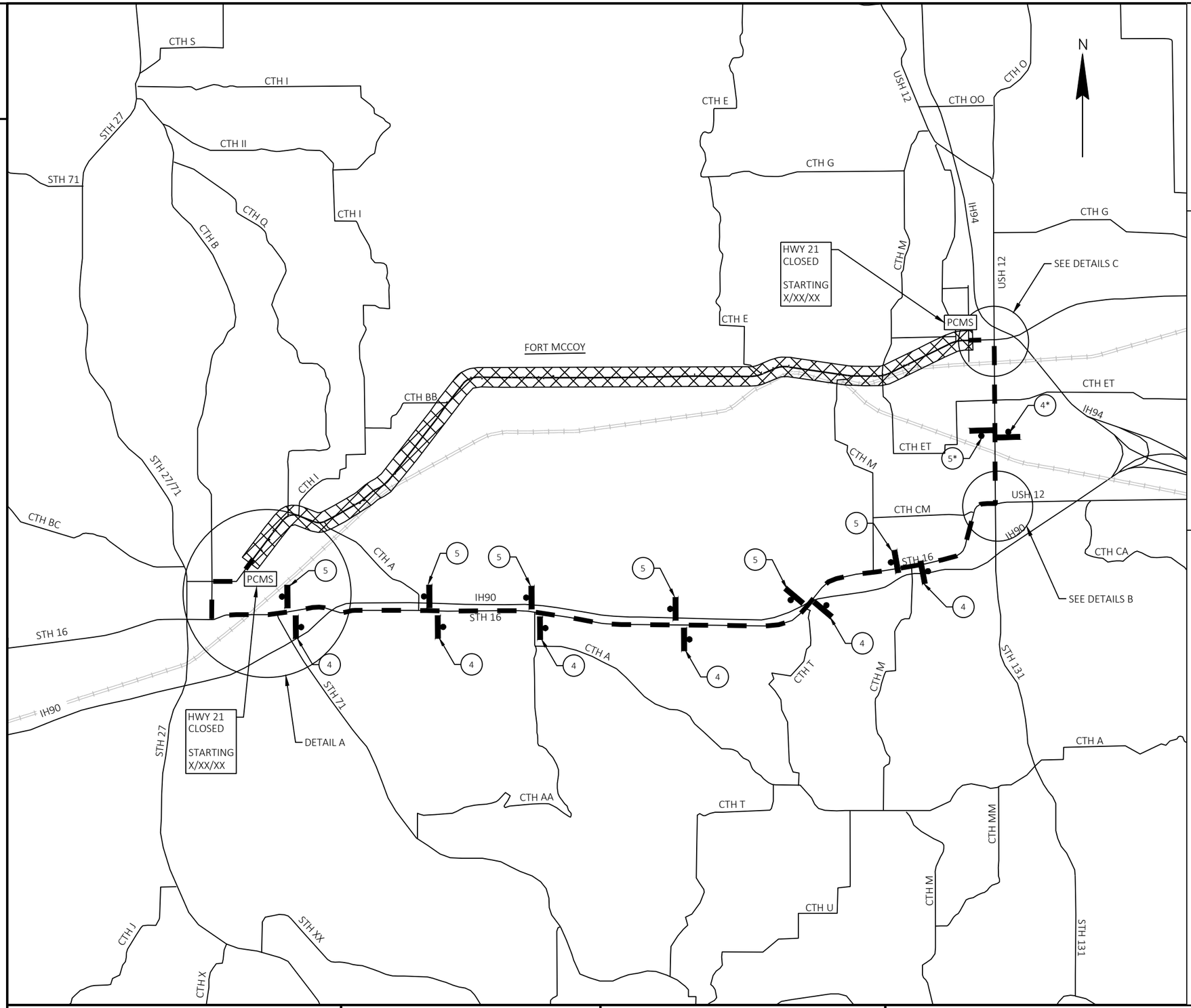




NOTES:
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	TRAFFIC CONTROL - STAGE 4	SHEET 61	E



LEGEND

- POST WITH ATTACHED SIGN
- EXISTING SIGN
- TYPE III BARRICADE WITH/WITHOUT SIGN
- COVERING SIGNS
- DETOUR ROUTE
- WORK ZONE
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- SIZE 3 SIGN REQ'D

NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. ADJUSTMENTS TO FIT FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER.

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

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

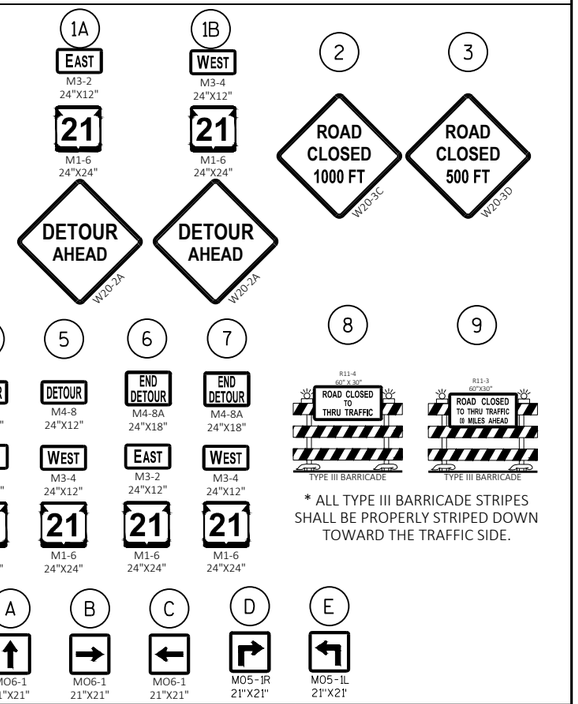
THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

PCMS POSITIONS TO BE DETERMINED BY ENGINEER.TO BE PLACED BEFORE PROJECT LIMITS-NE CORNER OF STH 21/E MONTGOMERY ST. AND NW CORNER OF STH 21/ USH 12

SEE SDD "BARRICADES AND SIGNS FOR MAINLINE CLOSURES", "BARRICADES AND SIGN FOR VARIOUS CLOSURES", "DETOUR SIGNING FOR MAINLINE CLOSURES", AND "BARRICADES AND SIGNS FOR SIDEROAD CLOSURES" FOR DETAILS ON THE LOCATIONS AND TYPE OF DEVICES. REQUIRED SIDEROAD DEVICES ARE NOT SHOWN IN PLAN.

MAP SHOWN IS NOT TO SCALE.

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



* ALL TYPE III BARRICADE STRIPES SHALL BE PROPERLY STRIPED DOWN TOWARD THE TRAFFIC SIDE.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	DETOUR PLAN	SHEET 62	E

2

STH 27/71

CTH B

N

N WATER ST/CTH B

COVER EXISTING SIGN WITH MO6-1

MO6-1 21"X21" M4-8 24"X12"

DETOUR

CTH BC

CTH B

STH 21

NO ACCESS TO FORT MCCOY MAIN GATE STATE PATROL ACADEMY GATE 20

FIXED MESSAGE SIGN 48" X 90"

STH 27/71

STH 21/S WATER ST

STH 16

STH 16/21/71

STH 16/71

STH 16

IH 90

STH 71

COVER EXISTING SIGN WITH MO6-1

MO6-1 21"X21"

M4-8 24"X12"

DETOUR

DETAIL A

LEGEND

- POST WITH ATTACHED SIGN
- EXISTING SIGN
- TYPE III BARRICADE WITH/WITHOUT SIGN
- COVERING SIGNS
- DETOUR ROUTE
- WORK ZONE
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- * SIZE 3 SIGN REQ'D

1A EAST M3-2 24"X12" 21 M1-6 24"X24" DETOUR AHEAD W20-2A

1B WEST M3-4 24"X12" 21 M1-6 24"X24" DETOUR AHEAD W20-2A

2 ROAD CLOSED 1000 FT W20-3C

3 ROAD CLOSED 500 FT W20-3D

8 R11-4 60" X 30" ROAD CLOSED TO THRU TRAFFIC TYPE III BARRICADE

9 R11-3 60"X30" ROAD CLOSED TO THRU TRAFFIC 1 MILES AHEAD TYPE III BARRICADE

4 DETOUR M4-8 24"X12" EAST M3-2 24"X12" 21 M1-6 24"X24"

5 DETOUR M4-8 24"X12" WEST M3-4 24"X12" 21 M1-6 24"X24"

6 END DETOUR M4-8A 24"X18" EAST M3-2 24"X12" 21 M1-6 24"X24"

7 END DETOUR M4-8A 24"X18" WEST M3-4 24"X12" 21 M1-6 24"X24"

A MO6-1 21"X21"

B MO6-1 21"X21"

C MO6-1 21"X21"

D MO5-1R 21"X21"

E MO5-1L 21"X21"

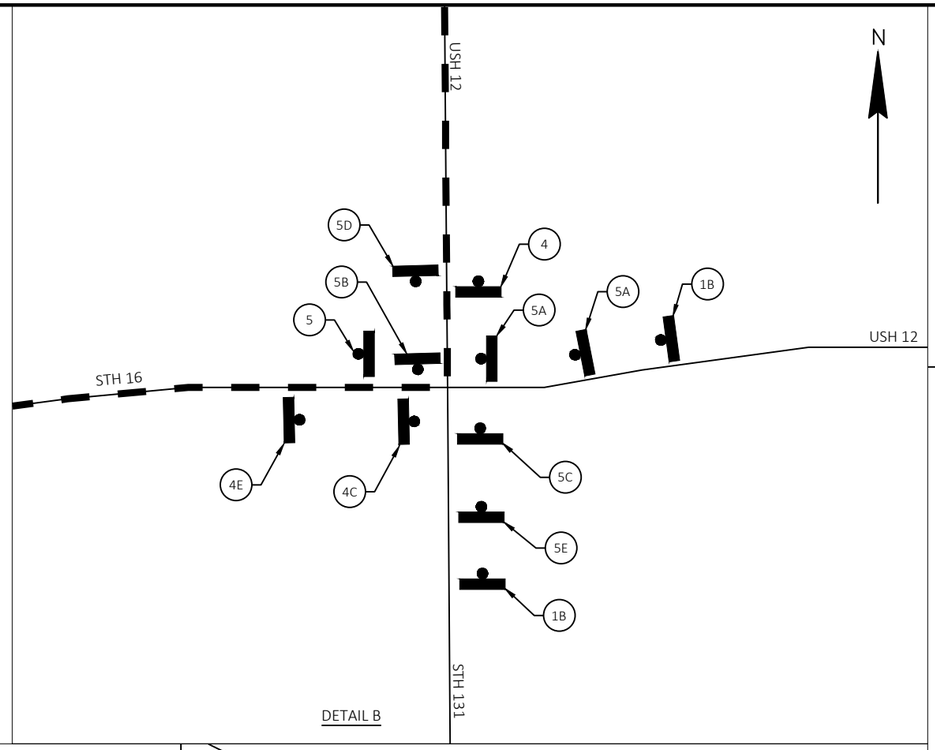
2

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	DETOUR PLAN	SHEET 63	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\027001_DT.DWG
LAYOUT NAME - A

PLOT DATE : 7/30/2024 3:43 PM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:2000 FT

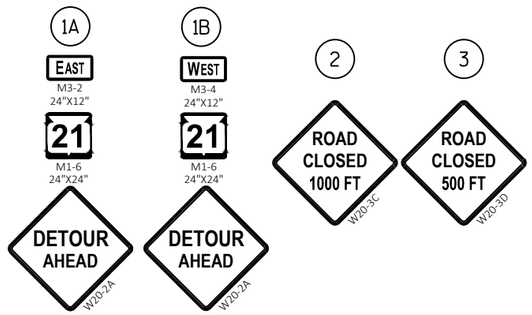
WISDOT/CADDS SHEET 42

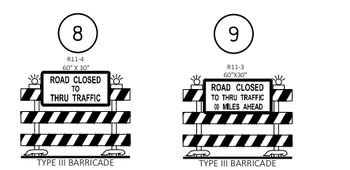


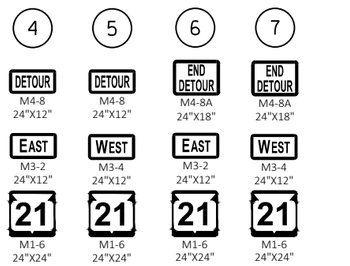
DETAIL B

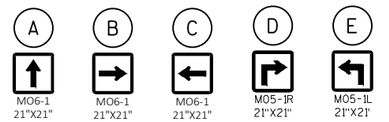
LEGEND

- POST WITH ATTACHED SIGN
- EXISTING SIGN
- TYPE III BARRICADE WITH/WITHOUT SIGN
- COVERING SIGNS
- DETOUR ROUTE
- WORK ZONE
- PCMS — PORTABLE CHANGEABLE MESSAGE SIGN
- * — SIZE 3 SIGN REQ'D



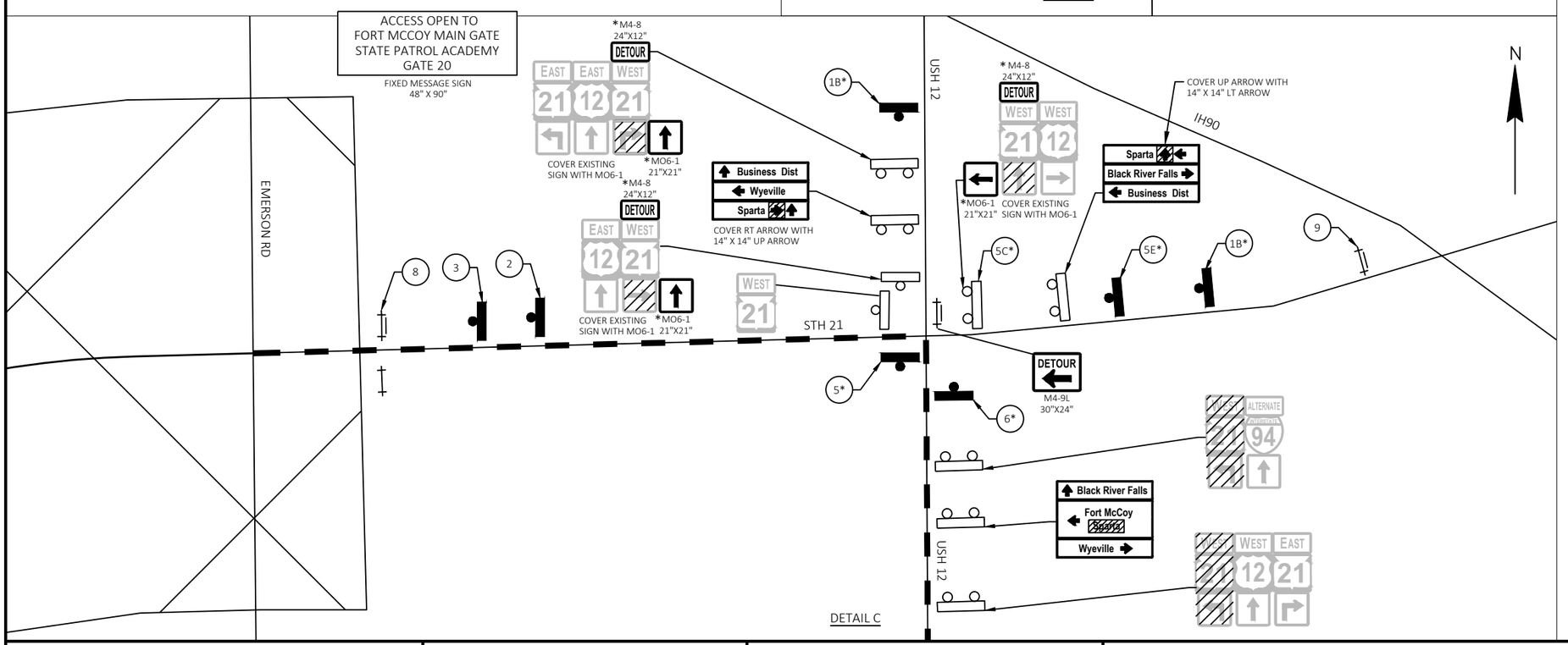






ACCESS OPEN TO
FORT MCCOY MAIN GATE
STATE PATROL ACADEMY
GATE 20

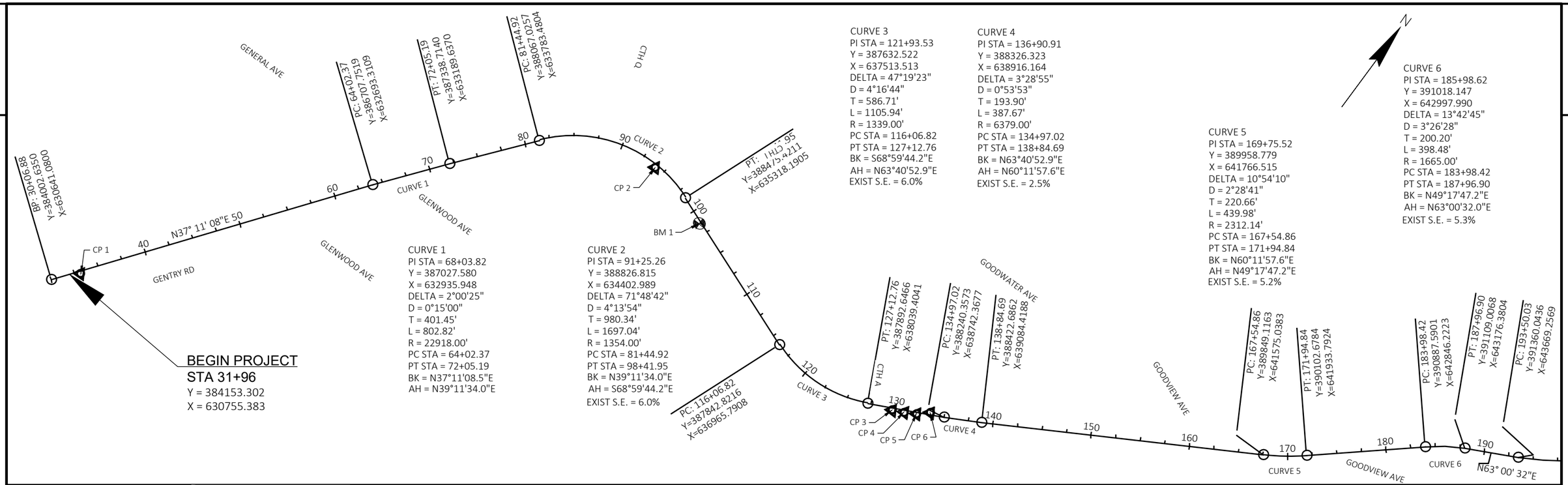
FIXED MESSAGE SIGN
48" X 90"

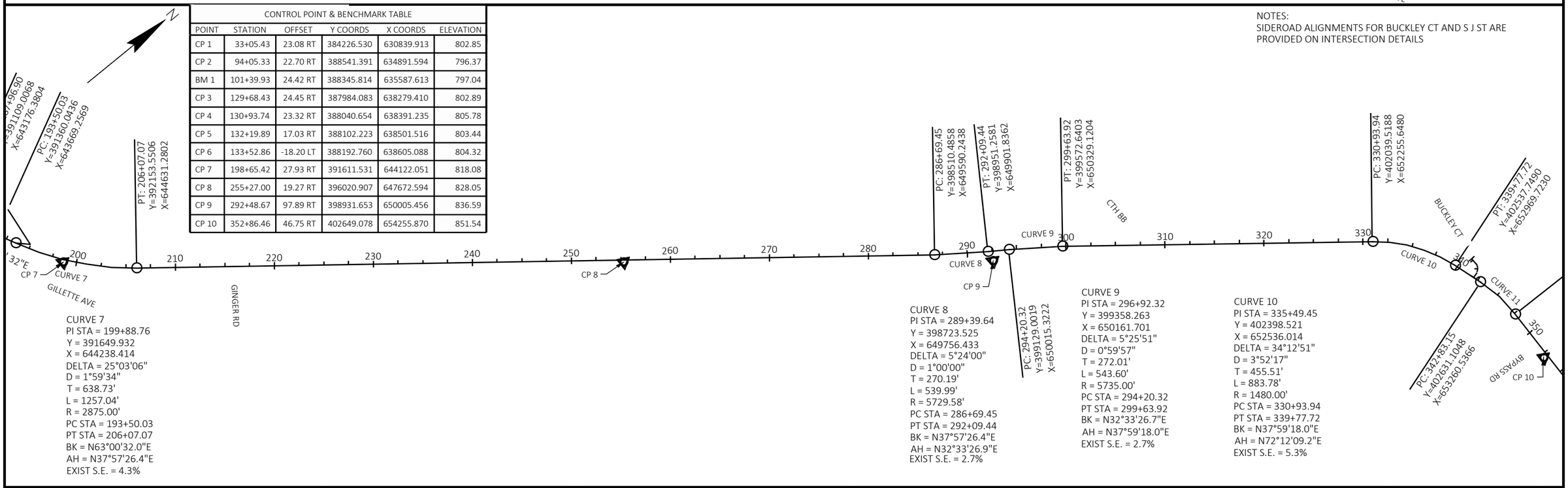


DETAIL C

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	DETOUR PLAN	SHEET 64	E

2



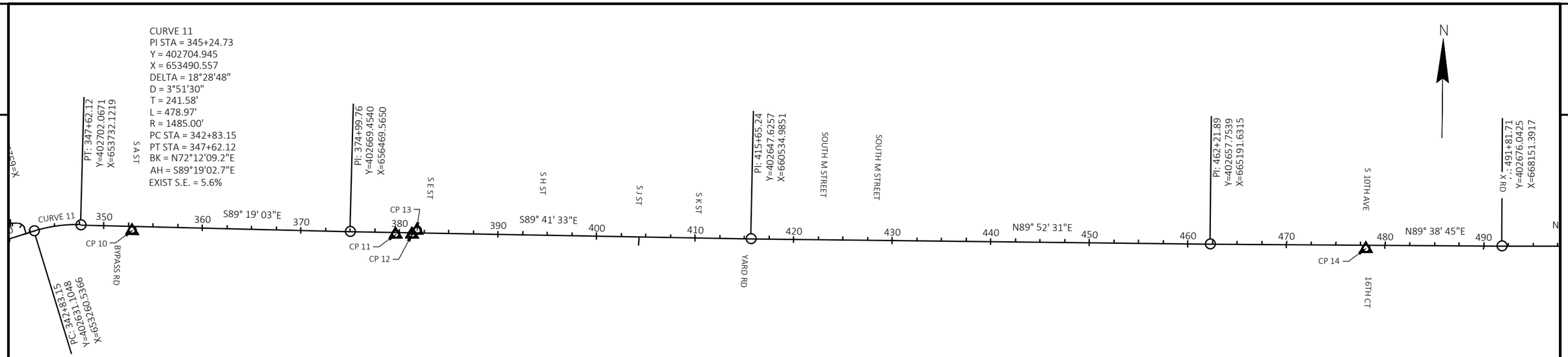


CONTROL POINT & BENCHMARK TABLE

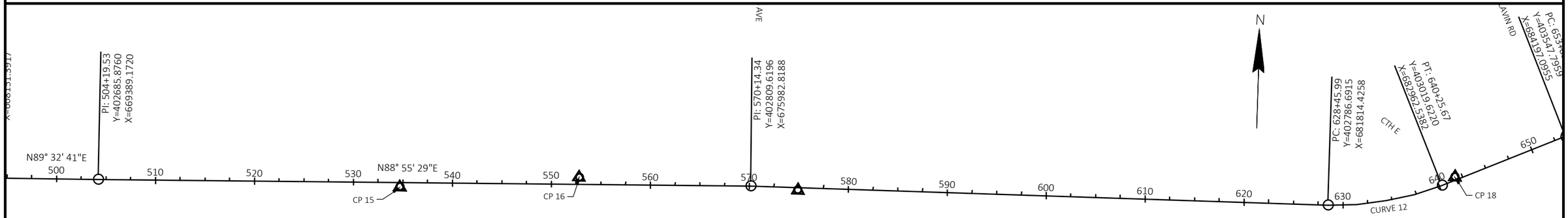
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CP 1	33+05.43	23.08 RT	384226.530	630839.913	802.85
CP 2	94+05.33	22.70 RT	388541.391	634891.594	796.37
BM 1	101+39.93	24.42 RT	388345.814	635587.613	797.04
CP 3	129+68.43	24.45 RT	387984.083	638279.410	802.89
CP 4	130+93.74	23.32 RT	388040.654	638391.235	805.78
CP 5	132+19.89	17.03 RT	388102.223	638501.516	803.44
CP 6	133+52.86	-18.20 LT	388192.760	638605.088	804.32
CP 7	198+65.42	27.93 RT	391611.531	644122.051	818.08
CP 8	255+27.00	19.27 RT	396020.907	647672.594	828.05
CP 9	292+48.67	97.89 RT	398931.653	650005.456	836.59
CP 10	352+86.46	46.75 RT	402649.078	654255.870	851.54

NOTES:
SIDEROAD ALIGNMENTS FOR BUCKLEY CT AND S J ST ARE PROVIDED ON INTERSECTION DETAILS

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	ALIGNMENT DETAILS & SURVEY CONTROL	SHEET 65	E



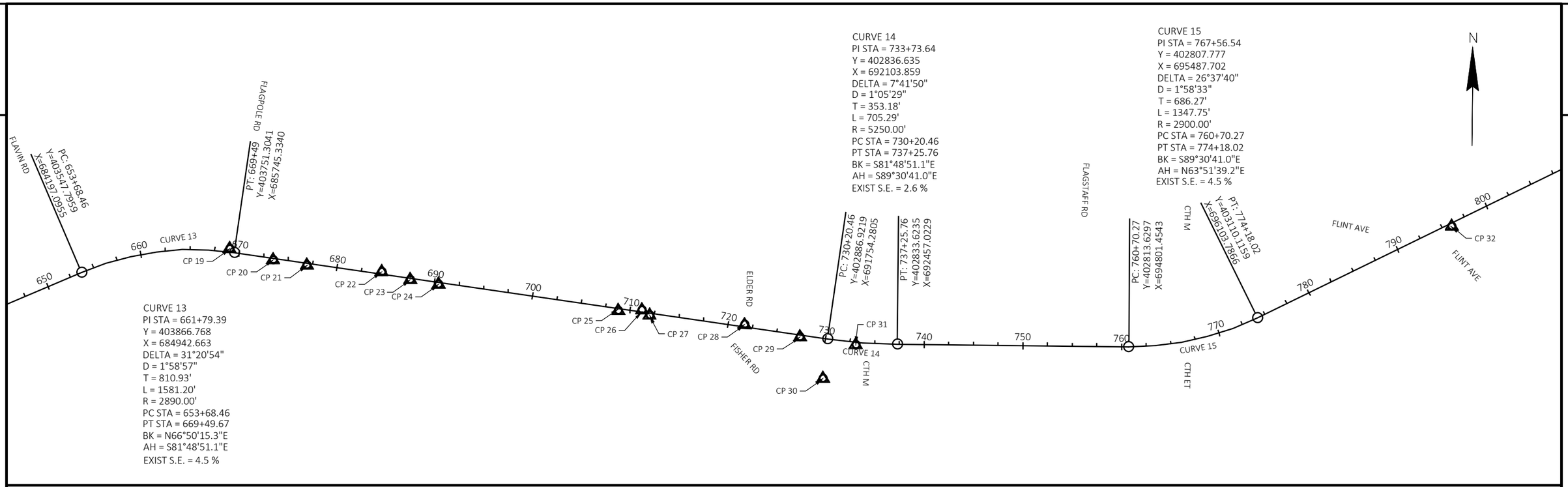
NOTES:
SIDEROAD ALIGNMENTS FOR BUCKLEY CT AND S J ST ARE
PROVIDED ON INTERSECTION DETAILS

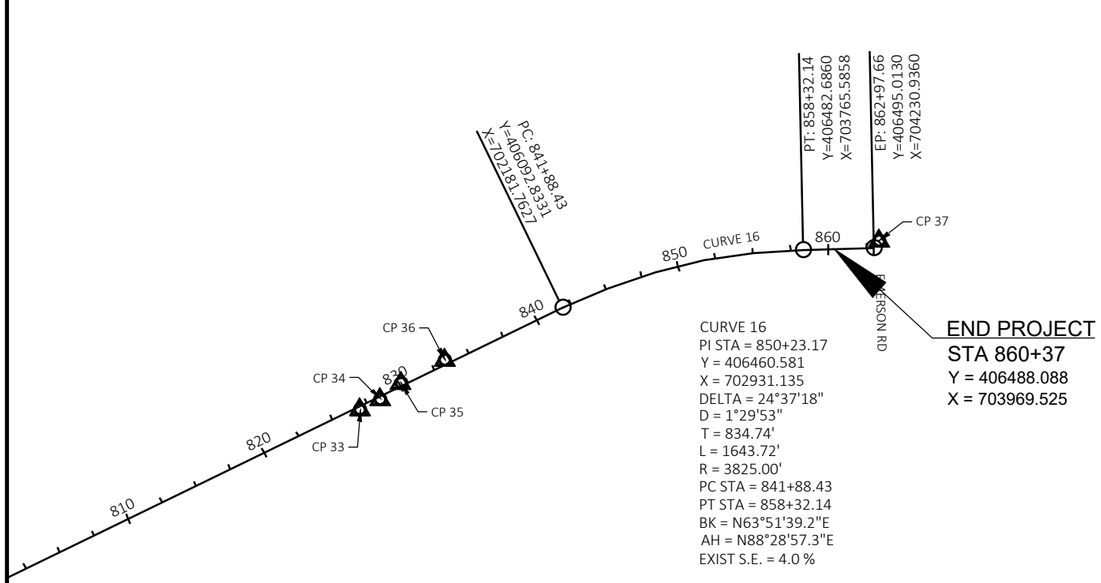


CONTROL POINT & BENCHMARK TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CP 11	379+59.28	21.59 RT	402645.394	656928.967	855.47
CP 12	381+25.37	16.43 RT	402649.667	657095.080	856.62
CP 13	381+75.20	-22.51 LT	402688.342	657145.118	856.85
CP 14	478+04.41	38.83 RT	402628.705	666774.353	900.52
CP 15	534+68.78	43.85 RT	402699.250	672438.704	919.90
CP 16	552+78.06	-72.95 LT	402849.978	674245.477	931.08
CP 17	574+91.09	25.42 RT	402782.321	676459.468	947.88
CP 18	641+76.48	-27.98 LT	403104.668	683090.192	1006.58

CURVE 12
PI STA = 634+44.16
Y = 402784.340
X = 682412.588
DELTA = 23°23'16"
D = 1°58'57"
T = 598.17'
L = 1179.68'
R = 2890.00'
PC STA = 628+45.99
PT STA = 640+25.67
BK = S89°46'29.0"E
AH = N66°50'15.3"E
EXIST S.E. = 4.5%

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	ALIGNMENT DETAILS & SURVEY CONTROL	SHEET 66	E





CONTROL POINT & BENCHMARK TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION
CP 19	668+97.43	-29.51 LT	403787.557	685697.245	1066.86
CP 20	673+48.59	16.70 RT	403677.971	686137.818	1088.54
CP 21	676+95.21	22.06 RT	403623.317	686480.145	1105.50
CP 22	684+52.26	-21.02 LT	403558.160	687235.617	1141.48
CP 23	687+50.39	17.49 RT	403477.598	687525.227	1153.46
CP 24	690+40.64	23.60 RT	403430.222	687811.650	1164.68
CP 25	708+82.00	19.53 RT	403172.071	689634.826	1147.70
CP 26	711+18.53	-17.43 LT	403174.973	689874.215	1137.15
CP 27	712+00.61	23.86 RT	403122.420	689949.574	1132.89
CP 28	721+67.95	-20.89 LT	403028.983	690913.432	1085.87
CP 29	727+40.73	19.35 RT	402907.598	691474.645	1067.42
CP 30	730+30.64	403.64 RT	402485.840	691707.667	1046.36
CP 31	733+07.81	24.59 RT	402829.318	692037.514	1069.17
CP 32	795+92.49	28.48 RT	404042.516	698068.414	991.00
CP 33	826+90.94	19.82 RT	405415.319	700846.167	968.17
CP 34	828+40.54	16.39 RT	405484.303	700978.950	967.63
CP 35	830+08.46	-20.33 LT	405591.247	701113.523	967.17
CP 36	833+36.59	-29.01 LT	405743.604	701404.268	967.76

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	ALIGNMENT DETAILS & SURVEY CONTROL	SHEET 67	E

Estimate Of Quantities

7605-06-62

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	7.000	7.000
0004	203.0100	Removing Small Pipe Culverts	EACH	2.000	2.000
0006	204.0100	Removing Concrete Pavement	SY	2,325.000	2,325.000
0008	204.0110	Removing Asphaltic Surface	SY	1,711.000	1,711.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	6,919.000	6,919.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	309,804.000	309,804.000
0014	204.0165	Removing Guardrail	LF	6,420.000	6,420.000
0016	204.0260	Abandoning Inlets	EACH	1.000	1.000
0018	204.0280	Sealing Pipes	EACH	1.000	1.000
0020	204.9060.S	Removing (item description) 01. Removing Concrete Headwall	EACH	1.000	1.000
0022	204.9060.S	Removing (item description) 02. Removing Inlet Cover	EACH	1.000	1.000
0024	205.0100	Excavation Common	CY	7,925.000	7,925.000
0026	208.0100	Borrow	CY	3,236.000	3,236.000
0028	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 7605-06-62	EACH	1.000	1.000
0030	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1,598.000	1,598.000
0032	213.0100	Finishing Roadway (project) 01. 7605-06-62	EACH	1.000	1.000
0034	305.0110	Base Aggregate Dense 3/4-Inch	TON	4,720.000	4,720.000
0036	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	8,610.000	8,610.000
0038	455.0605	Tack Coat	GAL	22,603.000	22,603.000
0040	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0042	460.6224	HMA Pavement 4 MT 58-28 S	TON	45,823.000	45,823.000
0044	465.0105	Asphaltic Surface	TON	5,575.000	5,575.000
0046	465.0110	Asphaltic Surface Patching	TON	50.000	50.000
0048	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	698.000	698.000
0050	465.0125	Asphaltic Surface Temporary	TON	1,388.000	1,388.000
0052	465.0315	Asphaltic Flumes	SY	24.000	24.000
0054	465.0520	Asphaltic Rumble Strips, Shoulder	LF	164,942.000	164,942.000
0056	465.0560	Asphaltic Rumble Strips, Centerline	LF	62,310.000	62,310.000
0058	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000
0060	522.0160	Culvert Pipe Reinforced Concrete Class III 60-Inch	LF	16.000	16.000
0062	522.1060	Apron Endwalls for Culvert Pipe Reinforced Concrete 60-Inch	EACH	1.000	1.000
0064	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	105.000	105.000
0066	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	4.000	4.000
0068	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	252.000	252.000
0070	614.0200	Steel Thrie Beam Structure Approach	LF	82.520	82.520
0072	614.0305	Steel Plate Beam Guard Class A	LF	25.000	25.000
0074	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	4.000	4.000
0076	614.2300	MGS Guardrail 3	LF	1,425.000	1,425.000
0078	614.2330	MGS Guardrail 3 K	LF	3,162.500	3,162.500
0080	614.2350	MGS Guardrail Short Radius	LF	28.000	28.000
0082	614.2500	MGS Thrie Beam Transition	LF	315.000	315.000
0084	614.2610	MGS Guardrail Terminal EAT	EACH	25.000	25.000
0086	614.2630	MGS Guardrail Short Radius Terminal	EACH	1.000	1.000
0088	618.0100	Maintenance and Repair of Haul Roads (project) 01. 7605-06-62	EACH	1.000	1.000
0090	619.1000	Mobilization	EACH	1.000	1.000
0092	624.0100	Water	MGAL	130.000	130.000
0094	625.0500	Salvaged Topsoil	SY	20,000.000	20,000.000
0096	628.1504	Silt Fence	LF	16,121.000	16,121.000
0098	628.1520	Silt Fence Maintenance	LF	16,121.000	16,121.000

7605-06-62

Line	Item	Item Description	Unit	Total	Qty
0100	628.1905	Mobilizations Erosion Control	EACH	7.000	7.000
0102	628.1910	Mobilizations Emergency Erosion Control	EACH	7.000	7.000
0104	628.2004	Erosion Mat Class I Type B	SY	17,670.000	17,670.000
0106	628.2008	Erosion Mat Urban Class I Type B	SY	2,500.000	2,500.000
0108	628.7504	Temporary Ditch Checks	LF	250.000	250.000
0110	628.7555	Culvert Pipe Checks	EACH	5.000	5.000
0112	628.7570	Rock Bags	EACH	636.000	636.000
0114	629.0210	Fertilizer Type B	CWT	12.600	12.600
0116	630.0120	Seeding Mixture No. 20	LB	900.000	900.000
0118	630.0200	Seeding Temporary	LB	288.000	288.000
0120	630.0500	Seed Water	MGAL	1,233.000	1,233.000
0122	633.5200	Markers Culvert End	EACH	2.000	2.000
0124	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	9.000	9.000
0126	637.2210	Signs Type II Reflective H	SF	51.300	51.300
0128	637.2230	Signs Type II Reflective F	SF	5.600	5.600
0130	638.2102	Moving Signs Type II	EACH	17.000	17.000
0132	638.2602	Removing Signs Type II	EACH	1.000	1.000
0134	638.3000	Removing Small Sign Supports	EACH	1.000	1.000
0136	638.4000	Moving Small Sign Supports	EACH	13.000	13.000
0138	642.5001	Field Office Type B	EACH	1.000	1.000
0140	643.0300	Traffic Control Drums	DAY	4,835.000	4,835.000
0142	643.0420	Traffic Control Barricades Type III	DAY	255.000	255.000
0144	643.0705	Traffic Control Warning Lights Type A	DAY	510.000	510.000
0146	643.0715	Traffic Control Warning Lights Type C	DAY	1,030.000	1,030.000
0148	643.0900	Traffic Control Signs	DAY	8,442.000	8,442.000
0150	643.0920	Traffic Control Covering Signs Type II	EACH	16.000	16.000
0152	643.1000	Traffic Control Signs Fixed Message	SF	60.000	60.000
0154	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0156	643.3165	Temporary Marking Line Paint 6-Inch	LF	225,913.000	225,913.000
0158	643.3180	Temporary Marking Line Removable Tape 6-Inch	LF	11,074.000	11,074.000
0160	643.3265	Temporary Marking Line Paint 10-Inch	LF	786.000	786.000
0162	643.3280	Temporary Marking Line Removable Tape 10-Inch	LF	296.000	296.000
0164	643.5000	Traffic Control	EACH	1.000	1.000
0166	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	258,545.000	258,545.000
0168	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	4,625.000	4,625.000
0170	646.5020	Marking Arrow Epoxy	EACH	42.000	42.000
0172	646.5120	Marking Word Epoxy	EACH	11.000	11.000
0174	646.5320	Marking Railroad Crossing Epoxy	EACH	2.000	2.000
0176	646.6120	Marking Stop Line Epoxy 18-Inch	LF	232.000	232.000
0178	646.7120	Marking Diagonal Epoxy 12-Inch	LF	2,250.000	2,250.000
0180	646.7320	Marking Chevron Epoxy 12-Inch	LF	47.000	47.000
0182	646.8020	Marking Corrugated Median Epoxy	SF	788.000	788.000
0184	646.8220	Marking Island Nose Epoxy	EACH	4.000	4.000
0186	648.0100	Locating No-Passing Zones	MI	15.690	15.690
0188	650.4500	Construction Staking Subgrade	LF	4,006.000	4,006.000
0190	650.5000	Construction Staking Base	LF	4,006.000	4,006.000
0192	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	252.000	252.000
0194	650.6000	Construction Staking Pipe Culverts	EACH	3.000	3.000
0196	650.8000	Construction Staking Resurfacing Reference	LF	82,841.000	82,841.000

Estimate Of Quantities

7605-06-62

Line	Item	Item Description	Unit	Total	Qty
0198	650.9911	Construction Staking Supplemental Control (project) 01. 7605-06-62	EACH	1.000	1.000
0200	650.9920	Construction Staking Slope Stakes	LF	4,006.000	4,006.000
0202	690.0150	Sawing Asphalt	LF	17,176.000	17,176.000
0204	740.0440	Incentive IRI Ride	DOL	63,080.000	63,080.000
0206	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,500.000	2,500.000
0208	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	3,520.000	3,520.000
0210	SPV.0055	Special 01. Incentive Density PWL HMA Pavement	DOL	30,445.000	30,445.000
0212	SPV.0055	Special 02. Incentive Air Voids HMA Pavement	DOL	33,660.000	33,660.000
0214	SPV.0055	Special 03. Incentive Density HMA Pavement Longitudinal Joints	DOL	33,136.000	33,136.000
0216	SPV.0060	Special 01. Landmark Reference Monuments Special	EACH	2.000	2.000
0218	SPV.0060	Special 02. Adjusting Water Valves	EACH	2.000	2.000
0220	SPV.0060	Special 03. Adjusting Sanitary Manhole Covers	EACH	1.000	1.000
0222	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	15,818.000	15,818.000
0224	SPV.0195	Special 01. Salvaged Asphaltic Pavement Base	TON	7,968.000	7,968.000

GRUBBING

CATEGORY	STA	TO	STA	LOCATION	201.0205 STA	REMARKS
0010	381+50	-	383+50	STH 21	2	RT
0010	675+00		677+00	STH 21	2	RT
0010	708+50		709+50	STH 21	1	RT
0010	711+25		712+25	STH 21	1	RT
0010	728+50		729+00	STH 21	1	LT
			PROJECT TOTAL =		**7**	

REMOVING SMALL PIPE CULVERTS

CATEGORY	STA	TO	STA	LOCATION	203.0100 EACH	REMARKS
0010	382+87	-	383+37	STH 21	1	
0010	391+80	-	392+35	STH 21	1	
			PROJECT TOTAL =		**2**	

REMOVING CONCRETE PAVEMENT

CATEGORY	STA	TO	STA	LOCATION	204.0100 SY	REMARKS
0010	344+42	-	352+00	STH 21	614	MEDIAN
0010	352+78	-	357+85	STH 21	285	MEDIAN
0010	395+09	-	404+00	STH 21	579	MEDIAN
0010	404+72	-	410+42	STH 21	365	MEDIAN
0010	418+11	-	424+81	STH 21	482	MEDIAN
			PROJECT TOTAL =		**2,325**	

ASPHALT PAVEMENT REMOVAL SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	REMOVING ASPHALTIC SURFACE 204.0110 SY	REMOVING ASPHALTIC SURFACE BUTT JOINTS 204.0115 SY	REMOVING ASPHALTIC SURFACE MILLING 204.0120 SY	REMOVED DISTRESSED PAVEMENT MILLINGS SPV.0180.01 SY	REMARKS
0010	31+96	-	336+50	STH 21	-	-	101,212	7,085	MAINLINE 1" MILL
0010	336+50		497+00	STH 21	-	-	66,108	-	MAINLINE 4" MILL
0010	497+00		859+84	STH 21	-	-	124,756	8,733	MAINLINE 1" MILL
0010	31+96	-	859+84	STH 21	-	1,898	13,207	-	SIDEROADS
0010	93+34	-	93+84	STH 21	-	274	-	-	BRIDGE
0010	94+56	-	95+28	STH 21	-	282	-	-	BRIDGE
0010	100+64	-	101+14	STH 21	-	299	-	-	BRIDGE
0010	102+83	-	103+33	STH 21	-	251	-	-	BRIDGE
0010	130+15	-	130+65	STH 21	-	287	-	-	BRIDGE
0010	132+13	-	132+63	STH 21	-	292	-	-	BRIDGE
0010	336+00	-	336+50	STH 21	-	374	-	-	TRANSITION
0010	382+13	-	382+79	STH 21	-	366	-	-	S E ST TANK CROSSING
0010	383+03	-	383+69	STH 21	-	326	-	-	S E ST TANK CROSSING
0010	413+12	-	413+57	STH 21	-	182	-	-	RAILROAD
0010	414+79	-	415+09	STH 21	-	119	-	-	RAILROAD
0010	491+15	-	491+68	STH 21	-	367	-	-	X RD TANK CROSSING
0010	491+68	-	491+92	STH 21	-	376	-	-	X RD TANK CROSSING
0010	497+00	-	497+50	STH 21	-	532	-	-	TRANSITION
0010	533+77	-	534+27	STH 21	-	167	-	-	TANK CROSSING
0010	534+53	-	535+03	STH 21	-	167	-	-	TANK CROSSING
0010	31+96	-	32+46	STH 21	-	192	-	-	PROJECT START
0010	860+17	-	860+37	STH 21	-	168	-	-	PROJECT END
0010	PROJECT LIMITS			STH 21	-	-	4,521	-	DRIVEWAYS - MILLED
0010	PROJECT LIMITS			STH 21	1,711	-	-	-	DRIVEWAYS - ASPHALT
				PROJECT TOTALS =	**1,711**	**6,919**	**309,804**	**15,818**	

REMOVING CONCRETE HEADWALL

CATEGORY	STA	LOCATION	204.9060.S.01 EACH	REMARKS
0010	381+25	STH 21	1	RT
		PROJECT TOTAL =	**1**	

ABANDONING INLETS AND SEALING PIPES

CATEGORY	STA	LOCATION	ABANDONING INLETS 204.0260 EACH	SEALING PIPES 204.0280 EACH	REMOVING INLET COVER 204.9060.S.02 EACH	REMARKS
0010	344+42	STH 21	1	1	1	
		PROJECT TOTALS =	**1**	**1**	**1**	

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/ UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	REDUCED EBS IN FILL (9) FACTOR 1.00	EXPANDED EBS BACKFILL (11) FACTOR 1.00	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.30	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT
DIVISION 1														
BRIDGE B-41-19	92+29/96+48	GUARDRAIL REPLACEMENT	0	0	0	0	0	0	94	122	-122	0	122	
DIVISION 1 SUBTOTAL			0	0	0	0	0	0	94	122	-122	0	122	
DIVISION 2														
BRIDGE B-41-197	99+67/108+92	GUARDRAIL REPLACEMENT	0	0	0	0	0	0	255	332	-332	0	332	
DIVISION 2 SUBTOTAL			0	0	0	0	0	0	255	332	-332	0	332	
DIVISION 3														
BRIDGE B-41-203	128+36/134+38	GUARDRAIL REPLACEMENT	0	0	0	0	0	0	141	183	-183	0	183	
DIVISION 3 SUBTOTAL			0	0	0	0	0	0	141	183	-183	0	183	
DIVISION 4														
STA. 338+00 - STA. 358+00	338+00/358+00	BUCKLEY CT	2,014	0	0	2,014	0	0	467	607	1,407	1,407	0	
DIVISION 4 SUBTOTAL			2,014	0	0	2,014	0	0	467	607	1,407	1,407	0	
DIVISION 5														
STA. 378+00 - STA. 425+00	378+00/425+00	FORT MCCOY TWLTL	5,911	0	0	5,911	0	0	1,275	1,658	4,254	4,254	0	
DIVISION 5 SUBTOTAL			5,911	0	0	5,911	0	0	1,275	1,658	4,254	4,254	0	
DIVISION 6														
STA. 668+82 - STA. 733+12	669+81/733+12	GUARDRAIL REPLACEMENT	0	0	0	0	0	0	1,593	2,071	-2,071	0	2,071	
DIVISION 6 SUBTOTAL			0	0	0	0	0	0	1,593	2,071	-2,071	0	2,071	
DIVISION 7														
STA. 825+67 - STA. 831+20	825+66/831+20	GUARDRAIL REPLACEMENT	0	0	0	0	0	0	406	528	-528	0	528	
DIVISION 7 SUBTOTAL			0	0	0	0	0	0	406	528	-528	0	528	
GRAND TOTAL			7,925	0	0	7,925	0	0	4,231	5,500	2,425	5,660	3,236	
TOTAL COMMON EXC			7,925											

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(3) EBS EXCAVATION TO BE BACKFILLED WITH SELECT BORROW MATERIAL. NOTE: THIS IS DESIGNERS CHOICE, CAN BE BACKFILLED WITH BORROW, OR CUT AS WELL.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL

(9) REDUCED EBS IN FILL - EXCAVATED EBS MATERIAL IS USUABLE IN FILLS OUTSIDE THE 1:1 SLOPE. EBS IN FILL REDUCTION FACTOR = X.2X

(11) EXPANDED EBS BACKFILL - THIS IS TO BE FILLED WITH SELECT BORROW MATERIAL. EBS BACKFILL FACTOR = X.4X. ITEM NUMBER 208.1100

(13) EXPANDED FILL FACTOR = 1.3

DEPENDING ON SELECTIONS: EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED EBS) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

*ALL QUANTITIES MEASURED IN CY

3

FOUNDATION/SHOULDER ITEMS

CATEGORY	STATION		TO STATION	LOCATION	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) 01.7605-06-62 211.0101 EACH	PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS 211.0400 STA	REMARKS
0020	31+96	-	336+50	STH 21	-	609	LT & RT
0020	336+50	-	338+42	STH 21	-	2	RT
0020	336+50	-	342+09	STH 21	-	6	LT
0020	346+34	-	378+00	STH 21	-	32	RT
0020	347+90	-	353+03	STH 21	-	5	LT
0020	357+62	-	379+21	STH 21	-	22	LT
0020	381+74	-	420+81	STH 21	-	39	LT
0020	413+58	-	417+45	STH 21	-	4	RT
0020	420+81	-	860+37	STH 21	-	879	LT & RT
0010	31+96	-	860+37	PROJECT	1	-	LT & RT
			PROJECT TOTALS =		**1**	**1,598**	

BASE AGGREGATE DENSE 3/4-INCH

CATEGORY	STATION		TO STATION	LOCATION	305.0110 TON	REMARKS
0020	31+96	-	338+42	STH 21	1,575	MAINLINE - MILL
0020	420+81	-	860+37	STH 21	2,259	MAINLINE - MILL
0020	338+42	-	420+81	STH 21	116	MAINLINE - MILL
0020	338+42	-	346+50	RT	99	NEW PAVEMENT
0020	340+44	-	348+08	LT	94	NEW PAVEMENT
0020	353+03	-	358+02	LT	62	NEW PAVEMENT
0020	378+00	-	413+12	RT	402	NEW PAVEMENT
0020	378+72	-	381+74	LT	37	NEW PAVEMENT
0020	417+46	-	420+81	RT	42	NEW PAVEMENT
0020	PROJECT LIMITS			STH 21	34	BEAMGUARD SECTIONS
	PROJECT TOTALS =				**4,720**	

BASE AGGREGATE DENSE AND ASPHALTIC BASE SUMMARY

CATEGORY	STATION		TO STATION	LOCATION	BAD 1 1/4-INCH 305.0120 TON	SALVAGED ASPHALTIC PAVEMENT BASE SPV.0195.01 TON	REMARKS
0010	31+96	-	338+42	STH 21	-	-	MAINLINE - MILL
0010	420+81	-	860+37	STH 21	-	-	MAINLINE - MILL
0010	338+42	-	420+81	STH 21	-	-	MAINLINE - MILL
0010	342+41	-	424+82	STH 21	1,033	955	MEDIANS
0010	338+42	-	346+50	RT	918	956	PAVEMENT REPLACEMENT
0010	340+44	-	348+08	LT	737	783	PAVEMENT REPLACEMENT
0010	353+03	-	358+02	LT	248	296	PAVEMENT REPLACEMENT
0010	378+00	-	413+12	RT	4,427	4,529	PAVEMENT REPLACEMENT
0010	378+72	-	381+74	LT	228	250	PAVEMENT REPLACEMENT
0010	417+46	-	420+81	RT	167	199	PAVEMENT REPLACEMENT
0010	PROJECT LIMITS			STH 21	281	-	EAT SECTIONS
0010	PROJECT LIMITS			STH 21	571	-	DRIVEWAYS
	PROJECT TOTALS =				**8,610**	**7,968**	

HMA PAVEMENT PWL SUMMARY

CATEGORY	LOCATION	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS 460.0105.S EACH	REMARKS
0010	PROJECT LIMITS	1	
		1	

ASPHALTIC FLUMES

CATEGORY	STATION	LOCATION	465.0315 SY	REMARKS
0010	341+75	BUCKLEY CT	6	
0010	342+12	BUCKLEY CT	6	
0010	403+95	S J ST	6	
0010	404+68	S J ST	6	
	PROJECT TOTAL =		**24**	

ASPHALT ITEMS SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	STAGE	TACK COAT 455.0605 GAL	HMA PAVEMENT 4 MT 58-28 S 460.6224 TON	ASPHALTIC SURFACE 465.0105 TON	(1) ASPHALTIC SURFACE PATCHING 465.0110 TON	(2) ASPHALTIC SURFACE DRIVEWAY AND FIELD ENTRANCES 465.0120 TON	ASPHALTIC SURFACE TEMPORARY 465.0125 TON	COMMENTS
0010	31+96	-	336+50	STH 21	5	7,450	11,919	-	-	-	-	BOP TO BUCKLEY (2-INCH)
0010	395+38	-	400+31	STH 21	3	-	-	-	-	-	78	TEMPORARY PAVEMENT (4-INCH)
0010	336+50	-	497+00	STH 21	5	3,623	14,632	-	-	-	-	BUCKLEY TO X RD (4-INCH)
0010	338+27	-	347+37	STH 21 - RT	1	104	-	-	-	-	193	TEMPORARY SHOULDER WIDENING
0010	342+89	-	349+29	STH 21 - LT	1	39	-	-	-	-	73	TEMPORARY SHOULDER WIDENING
0010	353+13	-	360+10	STH 21 - RT	1	35	-	-	-	-	65	TEMPORARY SHOULDER WIDENING
0010	356+09	-	359+94	STH 21 - LT	1	17	-	-	-	-	30	TEMPORARY SHOULDER WIDENING
0010	393+32	-	399+41	STH 21 - RT	1	37	-	-	-	-	69	TEMPORARY SHOULDER WIDENING
0010	394+79	-	403+20	STH 21 - LT	1	62	-	-	-	-	115	TEMPORARY SHOULDER WIDENING
0010	405+26	-	412+16	STH 21 - RT	1	47	-	-	-	-	88	TEMPORARY SHOULDER WIDENING
0010	416+53	-	427+19	STH 21 - RT	1	37	-	-	-	-	68	TEMPORARY SHOULDER WIDENING
0010	416+37	-	423+13	STH 21 - LT	1	47	-	-	-	-	87	TEMPORARY SHOULDER WIDENING
0010	344+42	-	352+00	STH 21	2	74	-	-	-	-	138	MEDIAN (4-INCH)
0010	352+78	-	357+85	STH 21	2	35	-	-	-	-	64	MEDIAN (4-INCH)
0010	395+09	-	404+00	STH 21	2	70	-	-	-	-	130	MEDIAN (4-INCH)
0010	404+72	-	410+42	STH 21	2	44	-	-	-	-	82	MEDIAN (4-INCH)
0010	418+11	-	424+81	STH 21	2	58	-	-	-	-	108	MEDIAN (4-INCH)
0010	497+00	-	860+37	STH 21	5	8,983	14,373	-	-	-	-	X RD TO EOP (2-INCH)
0010	31+96	-	860+37	STH 21	5	-	-	-	-	698	-	DRIVEWAYS (2-INCH)
0010	31+96	-	860+37	STH 21	5	-	-	1760	-	-	-	DISTRESSED PAVEMENT
0010				UNDISTIBUTED		-	-	500	50	-	-	
				CAT 0010 TOTALS =		**20,762**	**40,923**	**2,260**	**50**	**698**	**1,388**	
0020	31+96	-	860+37	STH 21		1,841	4,900	3,315	0	0	0	(3) HSIP PAVED SHOULDER
				CAT 0020 TOTALS =		**1,841**	**4,900**	**3,315**	**0**	**0**	**0**	
				PROJECT TOTALS =		**22,603**	**45,823**	**5,575**	**50**	**698**	**1,388**	

NOTES

(1) UNDISTRIBUTED QUANTITY FOR ASPHALTIC SURFACE PATCHING IS FOR MISCELLANOUES REPAIRS INCLUDING FILLING POTHOLES, TRAFFIC POP-OUTS, & BUTT JOINT RAMPING

(2) UNDISTRIBUTED QUANTITY FOR ASPHALTIC SURFACE IS FOR WEDGING & LEVELING, SPOT LANE FAILURES AND EDGE REPAIRS

PWL MIX USE

STATION		LOCATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICK	QUALITY MANAGEMENT PROGRAM TO BE USED FOR	
								MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
31+96	336+50	2-12FT DRIVING LANES	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	9,096	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
31+96	336+50	TURN & AUXILARY LANES	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	929	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY THE DEPT; NOT ELIGIBLE FOR INCENTIVE
31+96	336+50	5-FT PAVED SHOULDERS	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	1,895	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY THE DEPT; NOT ELIGIBLE FOR INCENTIVE
336+50	497+00	2-12FT DRIVING LANES	UPPER LAYER	LOWER BINDER SURFACE	4 MT 58-28 S	4,794	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
336+50	497+00	TURN & AUXILARY LANES	UPPER LAYER	LOWER BINDER SURFACE	4 MT 58-28 S	1,078	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY THE DEPT; NOT ELIGIBLE FOR INCENTIVE
384+60	407+40	TWLTL	UPPER LAYER	LOWER BINDER SURFACE	4 MT 58-28 S	454	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
336+50	497+00	5-FT PAVED SHOULDERS	UPPER LAYER	LOWER BINDER SURFACE	4 MT 58-28 S	1,997	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY THE DEPT; NOT ELIGIBLE FOR INCENTIVE
336+50	497+00	2-12FT DRIVING LANES	LOWER LAYER	BASE AGGREGATE	4 MT 58-28 S	4,794	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
336+50	497+00	TURN & AUXILARY LANES	LOWER LAYER	BASE AGGREGATE	4 MT 58-28 S	1,078	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY THE DEPT; NOT ELIGIBLE FOR INCENTIVE
384+60	407+40	TWLTL	LOWER LAYER	BASE AGGREGATE	4 MT 58-28 S	454	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
336+50	497+00	5-FT PAVED SHOULDERS	LOWER LAYER	BASE AGGREGATE	4 MT 58-28 S	1,997	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY THE DEPT; NOT ELIGIBLE FOR INCENTIVE
497+00	860+37	2-12FT DRIVING LANES	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	10,853	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	INCENTIVE DENSITY PWL HMA PAVEMENT SPV.0055.01
497+00	860+37	TURN & AUXILARY LANES	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	1,031	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY THE DEPT; NOT ELIGIBLE FOR INCENTIVE
497+00	860+37	5-FT PAVED SHOULDERS	UPPER LAYER	MILLED EXISTING HMA SURFACE	4 MT 58-28 S	2,261	2	INCENTIVE AIR VOIDS HMA PAVEMENT SPV.0055.02	ACCEPTANCE TESTING BY THE DEPT; NOT ELIGIBLE FOR INCENTIVE

RUMBLE STRIP SUMMARY

CATEGORY	STATION	TO STATION	LOCATION	ASPHALTIC RUMBLE STRIPS, SHOULDER 465.0520 LF	ASPHALTIC RUMBLE STRIPS, CENTERLINE 465.0560 LF	REMARKS
0010	31+96	- 860+37	STH 21	0	62,310	SEE SDD 13A11-B FOR CENTERLINE RUMBLE DETAILS
		0010 SUBTOTAL =		**0**	**62,310**	
0020	31+96	- 860+37	STH 21	164,942	0	SEE SDD 13A10-2A FOR SHOULDER RUMBLE DETAILS
		0020 SUBTOTAL =		**164,942**	**0**	
		PROJECT TOTAL =		**164,942**	**62,310**	

3

CULVERT PIPE SUMMARY

CATEGORY	STA TO STA	LOCATION	CONCRETE COLLARS FOR PIPE 520.8000 EACH	CULVERT PIPE REINFORCED CONCRETE CLASS III 60-INCH 522.0160 LF	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH 522.1060 EACH	CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH 522.2419 LF	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH 522.2619 EACH	MARKERS CULVERT END 633.5200 EACH	REMARKS
0010	381+25	STH 21, RT	1	16	1	-	-	2	PIPE EXTENSION
0010	382+87 - 383+37	STH 21	-	-	-	50	2	-	44.3' RT
0010	391+80 - 392+35	STH 21	-	-	-	55	2	-	50.6' RT
	PROJECT TOTALS =		**1**	**16**	**1**	**105**	**4**	**2**	

CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D

CATEGORY	STATION	TO STATION	LOCATION	601.0557 LF	REMARKS
0010	341+44	- 341+81	BUCKLEY CT SW	78	FLUME AS SHOWN ON PLANS
0010	342+13	- 342+85	BUCKLEY CT NE	101	FLUME AS SHOWN ON PLANS
0010	403+81	- 404+06	S J STREET SW	25	FLUME AS SHOWN ON PLANS
0010	404+51	- 405+00	S J STREET SE	48	FLUME AS SHOWN ON PLANS
		PROJECT TOTAL =		**252**	

BEAM GUARD SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	REMOVING GUARDRAIL 204.0165 LF	STEEL THRIE BEAM STRUCTURE APPROACH 614.0200 LF	** STEEL PLATE BEAM GUARD CLASS A 614.0305 LF	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL 614.0370 EACH	MGS GUARDRAIL 3 614.2300 LF	MGS GUARDRAIL 3 K 614.2330 LF	MGS GUARDRAIL SHORT RADIUS 614.2350 LF	MGS THRIE BEAM TRANSITION 614.2500 LF	MGS GUARDRAIL TERMINAL EAT 614.2610 EACH	MGS GUARDRAIL SHORT RADIUS TERMINAL 614.2630 EACH	REMARKS
0010	93+35	-	94+05	LT	73	20.63	-	1	-	-	-	-	-	-	BRIDGE B-41-19
0010	94+55	-	95+37	LT	73	20.63	12.5	1	-	-	-	-	-	-	BRIDGE B-41-19
0010	93+19	-	94+04	RT	73	20.63	12.5	1	-	-	-	-	-	-	BRIDGE B-41-19
0010	94+56	-	95+28	RT	73	20.63	-	1	-	-	-	-	-	-	BRIDGE B-41-19
0010	100+46	-	101+38	LT	132	-	-	-	-	-	-	39.38	1	-	BRIDGE B-41-197
0010	102+66	-	107+58	LT	482	-	-	-	400	-	-	39.38	1	-	BRIDGE B-41-197
0010	99+96	-	101+39	RT	132	-	-	-	50	-	-	39.38	1	-	BRIDGE B-41-197
0010	102+66	-	107+59	RT	485	-	-	-	400	-	-	39.38	1	-	BRIDGE B-41-197
0010	129+76	-	130+69	LT	82	-	-	-	-	-	-	39.38	1	-	BRIDGE B-41-203
0010	131+87	-	133+29	LT	160	-	-	-	50	-	-	39.38	1	-	BRIDGE B-41-203
0010	129+47	-	130+89	RT	100	-	-	-	50	-	-	39.38	1	-	BRIDGE B-41-203
0010	132+07	-	132+99	RT	134	-	-	-	-	-	-	39.38	1	-	BRIDGE B-41-203
0010	379+28	-	381+72	LT	202	-	-	-	-	212.5	-	-	2	-	CULVERT
0010	379+51	-	381+95	RT	202	-	-	-	-	150	-	-	2	-	CULVERT
0010	669+51	-	676+47	RT	738	-	-	-	-	612.5	28	-	1	1	***
0010	684+50	-	690+31	RT	576	-	-	-	475	-	-	-	2	-	
0010	708+61	-	711+92	RT	326	-	-	-	-	225	-	-	2	-	
0010	721+84	-	729+28	LT	742	-	-	-	-	637.5	-	-	2	-	
0010	721+98	-	732+78	RT	1080	-	-	-	-	975	-	-	2	-	
0010	826+72	-	829+53	RT	277	-	-	-	-	175	-	-	2	-	CULVERT
0010	827+34	-	830+15	LT	278	-	-	-	-	175	-	-	2	-	CULVERT
			PROJECT TOTALS		6,420	82.5	25.0	4	1,425.0	3,162.5	28	315.0	25	1	

** CLASS A LHW REQUIRED
*** 32' RADIUS, L = 48.1786

3

WATER

CATEGORY	LOCATION	624.0100 MGAL	REMARKS
0010	STH 21	130	BAD 1 1/4-INCH
PROJECT TOTAL =		**130**	

MOBILIZATION EROSION CONTROL ITEMS

CATEGORY	LOCATION	MOBILIZATIONS EROSION CONTROL 628.1905 EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL 628.1910 EACH	REMARKS
0010	PROJECT LENGTH	7	7	
PROJECT TOTALS =		**7**	**7**	

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SILT FENCE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	SILT FENCE 628.1504 LF	SILT FENCE MAINENANCE 628.1520 LF	REMARKS
0010	BOP	-	EOP	STH 21 LT	4,439	4,439	
0010	BOP	-	EOP	STH 21 RT	10,216	10,216	
				UNDISTRIBUTED	1,466	1,466	
				PROJECT TOTALS =	**16,121**	**16,121**	

EROSION CONTROL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	TEMPORARY DITCH CHECKS 628.7504 LF	CULVERT PIPE CHECKS 628.7555 EACH	ROCK BAGS 628.757 EACH	REMARKS
0010	336+50	-	352+00	BUCKLEY CT	20	-	136	
0010	375+00	-	383+00	STILLWELL CREEK	10	1	51	
0010	383+00	-	422+00	S E ST - S M ST	180	2	102	
0010	669+50	-	733+50	FLAGPOLE RD - CTH M	-	-	221	
0010	825+50	-	831+50	BEAMGUARD	-	-	68	
0010				UNDISTRIBUTED	40	2	58	
				PROJECT TOTALS =	**250**	**5**	**636**	

FINISHING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	SALVAGED TOPSOIL 625.0500 SY	EROSION MAT CLASS 1 TYPE B 628.2004 SY	EROSION URBAN MAT CLASS 1 TYPE B 628.2008 SY	FERTILIZER TYPE B 629.0210 CWT	SEEDING MIXTURE NO. 20 630.0120 LB	SEEDING TEMPORARY 630.0200 LB	SEED WATER 630.0500 MGAL	REMARKS
0010	92+00	-	96+50	STH 21	521	521	-	0.33	23.4	-	32	BRIDGE B-41-19
0010	99+20	-	109+00	STH 21	889	889	-	0.56	40.0	-	55	BRIDGE B-41-197
0010	128+25	-	134+50	STH 21	521	521	-	0.33	23.5	-	32	BRIDGE B-41-203
0010	336+50	-	352+00	STH 21	2,875	2,875	-	1.81	129.4	71.2	178	BUCKLEY CT
0010	375+00	-	422+00	STH 21	7,981	5,656	2,326	5.03	359.2	197.5	493	FORT MCCOY WIDENING
0010	669+50	-	733+50	STH 21	4,752	4,752	-	2.99	213.8	-	293	BEAMGUARD
0010	825+50	-	831+50	STH 21	1,136	1,136	-	0.72	51.1	-	70	BEAMGUARD
				UNDISTRIBUTED	1,324	1,324	174	0.83	59.6	19.3	80	
				PROJECT TOTALS =	**20,000**	**17,670**	**2,500**	**12.60**	**900.0**	**288.0**	**1,233**	

SIGNING SUMMARY

CATEGORY	LOCATION	SIGN NO.	TYPE	POSTS WOOD 4X6-INCH X 14-FT 634.0614 EACH	SIGNS TYPE II REFLECTIVE H 637.2210 SF	SIGNS TYPE II REFLECTIVE F 637.2230 SF	MOVING SIGNS TYPE II 638.2102 EACH	REMOVING SIGNS TYPE II 638.2602 EACH	REMOVING SMALL SIGN SUPPORTS 638.3000 EACH	MOVING SMALL SIGN SUPPORTS 638.4000 EACH	REMARKS
0010	BUCKLEY	101	R1-1	-	-	-	1	-	-	1	
0010	STH 21, RT	102	W54-55	-	-	-	2	-	-	1	
0010	STH 21, RT	103	R3-8LAR	2	11.3	-	-	-	-	-	
0010	STH 21, LT	201	W14-3	1	-	5.6	-	-	-	-	
0010	S E STREET	202	R1-1	-	-	-	1	-	-	1	
0010	STH 21, LT	203	R3-9B	1	6.0	-	-	-	-	-	
0010	STH 21, LT	203	R3-9D	-	1.0	-	-	-	-	-	
0010	STH 21, RT	204	R3-9B	1	6.0	-	-	-	-	-	
0010	STH 21, RT	204	R3-9C	-	1.0	-	-	-	-	-	
0010	STH 21, LT	205R	W14-3	-	-	-	-	1	1	-	
0010	STH 21, RT	301	R1-1	-	-	-	1	-	-	1	
0010	STH 21, RT	302	R3-9B	1	6.0	-	-	-	-	-	
0010	STH 21, LT	303	R3-9B	1	6.0	-	-	-	-	-	
0010	STH 21, RT	304	R1-1	-	-	-	1	-	-	1	
0010	STH 21, RT	305	W10-1	-	-	-	2	-	-	1	
0010	STH 21, LT	306	R3-9B	1	6.0	-	-	-	-	-	
0010	STH 21, LT	306	R3-9C	-	1.0	-	-	-	-	-	
0010	STH 21, RT	307	R3-9B	1	6.0	-	-	-	-	-	
0010	STH 21, RT	307	R3-9D	-	1.0	-	-	-	-	-	
0010	STH 21, RT	308	R1-1	-	-	-	1	-	-	1	
0010	STH 21, LT	309	W10-1	-	-	-	2	-	-	-	
0010	UNDISTRIBUTED			-	-	-	6	-	-	6	
PROJECT TOTAL =				**9**	**51.3**	**5.6**	**17**	**1**	**1**	**13**	

TRAFFIC CONTROL SUMMARY

CATEGORY	LOCATION	# DAYS	TRAFFIC CONTROL DRUMS 643.0300 DAY	TRAFFIC CONTROL BARRICADES TYPE III 643.0420 DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE A 643.0705 DAY	TRAFFIC CONTROL WARNING LIGHTS TYPE C 643.0715 DAY	TRAFFIC CONTROL SIGNS 643.0900 DAY	TRAFFIC CONTROL FIXED MESSAGE SIGNS 643.1000 SF	TRAFFIC CONTROL SIGNS PCMS 643.1050 DAY	STAGE	REMARKS
0010	STH 21	14	-	-	-	-	-	-	14	-	
0010	STH 21	5	-	-	-	-	10	-	-	STAGE 1	
0010	STH 21	10	2,890	110	220	500	250	-	-	STAGE 2	
0010	STH 21	10	1,570	60	120	410	120	-	-	STAGE 3	
0010	STH 21	5	375	15	30	120	40	-	-	STAGE 4	
0010	STH 21	119	-	-	-	-	1,190	-	-	STAGE 1-5	
0010	SIDEROADS	119	-	-	-	-	5,950	-	-	STAGE 1-5	
0010	DETOUR	14	-	28	56	-	196	60	14	DETOUR	
0010	DETAIL A	14	-	-	-	-	378	-	-	DETOUR	
0010	DETAIL B	14	-	-	-	-	168	-	-	DETOUR	
0010	DETAIL C	14	-	42	84	-	140	-	-	DETOUR	
PROJECT TOTAL =			**4,835**	**255**	**510**	**1,030**	**8,442**	**60**	**28**		

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TRAFFIC CONTROL COVERING SIGNS TYPE II

CATEGORY	LOCATION	643.0920 EACH	CYCLE	NUMBER OF	STAGE
0010	DETAIL A	8	1	8	DETOUR
0010	DETAIL C	8	1	8	DETOUR
PROJECT TOTAL =		**16**			

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TEMPORARY PAVEMENT MARKING LINE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	TEMPORARY MARKING LINE PAINT 6-INCH 643.3165 YELLOW LF	TEMPORARY MARKING LINE PAINT 6-INCH 643.3165 WHITE LF	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH 643.3180 YELLOW LF	TEMPORARY MARKING LINE REMOVABLE TAPE 6-INCH 643.3180 WHITE LF	TEMPORARY MARKING LINE PAINT 10-INCH 643.3265 WHITE LF	TEMPORARY MARKING LINE REMOVABLE TAPE 10-INCH 643.3280 WHITE LF	STAGE	REMARKS
0010	338+14	-	427+01	STH 21 CENTERLINE	-	-	9,924	-	-	-	2	
0010	338+28	-	427+83	STH 21 EDGELINES/TURN LANES	-	8,226	-	82	345	262	2	
0010	337+30	-	424+85	STH 21 CENTERLINE	14,055	-	-	-	-	-	3	
0010	337+30	-	427+83	STH 21 EDGELINES/TURN LANES	-	11,588	-	1,068	441	34	3	
0010	338+18	-	413+25	STH 21 CENTERLINE	10,334	-	-	-	-	-	4	
0010	338+18	-	413+25	STH 21 EDGELINES/TURN LANES		11,206	-	-	-	-	4	
0010	31+96	-	94+05	C/L, BOP TO B-41-196	10,250	-	-	-	-	-	5	(1)
0010	94+05	-	130+92	C/L, B-41-196 TO B-41-203	10,586	-	-	-	-	-	5	(1)
0010	130+92	-	199+04	C/L, B-41-203 TO GILLETTE AVE	15,734	-	-	-	-	-	5	(1)
0010	199+04	-	338+00	C/L, GILLETTE AVE TO 4" MILL SECTION	11,736	-	-	-	-	-	5	(1)
0010	338+00	-	502+39	C/L, 4" MILL SECTION	60,376	-	-	-	-	-	5	(1)
0010	502+39	-	669+00	C/L, 4" SECTION TO FLAGPOLE RD	14,780	-	-	-	-	-	5	(1)
0010	669+00	-	767+00	C/L, FLAGPOLE RD TO CTH M	24,894	-	-	-	-	-	5	(1)
0010	767+00	-	860+37	C/L, CTH M TO EOP	22,148	-	-	-	-	-	5	(1)
					194,893	**31,020**	**9,924**	**1,150**	**786**	**296**		
					=		**=**					
				PROJECT TOTALS=	**225,913**		**11,074**		**786**	**296**		

NOTES:
(1) PLACED IN TWO APPLICATIONS (MILLED/BINDER SURFACE AND FINAL SURFACE PRIOR TO RUMBLE STRIPS)

PERMANENT PAVEMENT MARKING LINE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	MARKING LINE GROOVED WET REF EPOXY 6-INCH 646.2040 YELLOW LF	MARKING LINE GROOVED WET REF EPOXY 6-INCH 646.2040 WHITE LF	MARKING LINE GROOVED WET REF EPOXY 10-INCH 646.4040 WHITE LF	MARKING STOP LINE EPOXY 18-INCH 646.6120 WHITE LF	MARKING DIAGONAL EPOXY 12-INCH 646.7120 YELLOW LF	MARKING CHEVRON EPOXY 12-INCH 646.7320 WHITE LF	REMARKS
0010	31+96	-	94+05	BOP TO B-41-196	5,934	-	-	-	-	-	CENTERLINE
0010	94+05	-	130+92	B-41-196 TO B-41-203	5,676	-	-	-	-	-	CENTERLINE
0010	130+92	-	199+04	B-41-203 TO GILLETTE AVE	8,548	-	-	-	-	-	CENTERLINE
0010	199+04	-	338+00	GILLETTE AVE TO 4" MILL SECTION	8,108	-	-	-	-	-	CENTERLINE
0010	338+00	-	502+39	4" MILL SECTION	31,944	-	-	-	-	-	CENTERLINE
0010	502+39	-	669+00	4" SECTION TO FLAGPOLE RD	10,019	-	-	-	-	-	CENTERLINE
0010	669+00	-	767+00	FLAGPOLE RD TO CTH M	13,601	-	-	-	-	-	CENTERLINE
0010	767+00	-	860+37	CTH M TO EOP	12,206	-	-	-	-	-	CENTERLINE
0010	31+96	-	860+37	PROJECT LIMITS	-	82,739	-	-	-	-	EDGELINE LT
0010	31+96	-	860+37	PROJECT LIMITS	-	79,708	-	-	-	-	EDGELINE RT
0010	86+91	-	89+45	CTH Q EB RT TURN BYPASS LANE	-	63	-	-	-	-	DASHED
0010	123+47	-	125+76	CTH A EB RT TURN LANE	-	-	231	-	-	-	
0010	340+59	-	341+54	BUCKLEY EB LT TURN LANE	-	-	95	-	-	-	
0010	342+85	-	345+85	BUCKLEY WB RT TURN LANE	-	-	303	-	-	-	
0010	347+96	-	351+97	SA ST EB LT TURN LANE	-	-	401	-	-	-	
0010	350+49	-	351+73	BYPASS RD EB RT TURN LANE	-	-	124	-	-	-	
0010	352+76	-	353+76	BYPASS RD WB LT TURN LANE			100				
0010	353+02	-	356+52	S A ST WB RT TURN LANE	-	-	350	-	-	-	
0010	402+31	-	403+81	S J ST EB RT TURN LANE	-	-	150	-	-	-	
0010	420+80	-	424+80	SOUTH M ST EB LT TURN LANE	-	-	400	-	-	-	
0010	426+72	-	432+40	SOUTH M ST WB RT TURN LANE	-	-	567	-	-	-	
0010	473+88	-	477+88	S 10TH AVE EB RT TURN LANE	-	-	400	-	-	-	
0010	479+20	-	481+45	S 10TH AVE WB RT TURN LANE	-	-	225	-	-	-	
0010	487+91	-	488+60	X RD EB LT TURN LANE	-	-	69	-	-	-	
0010	487+91	-	488+60	X RD EB LT TURN LANE	-	-	69	-	-	-	
0010	488+60	-	491+04	X RD EB RT TURN LANE	-	-	244	-	-	-	
0010	492+57	-	495+01	X RD WB RT TURN LANE	-	-	244	-	-	-	
0010	495+01	-	495+74	X RD WB LT TURN LANE	-	-	73	-	-	-	
0010	495+01	-	495+74	X RD WB LT TURN LANE	-	-	73	-	-	-	
0010	667+63	-	668+56	FLAGPOLE RD EB RT TURN LANE	-	-	92	-	-	-	
0010	847+87	-	850+00	ELLSWORTH RD EB LT TURN LANE	-	-	213	-	-	-	
0010	851+26	-	853+27	ELLSWORTH RD WB RT TURN LANE	-	-	202	-	-	-	
0010	424+63	-	425+34	SOUTH M ST	-	-	-	78	-	47	
0010	478+32	-	478+56	16TH CT	-	-	-	29	-	-	
0010	478+59	-	478+81	16TH CT	-	-	-	27	-	-	
0010	491+52	-	491+81	X RD	-	-	-	33	-	-	
0010	491+81	-	492+14	X RD	-	-	-	35	-	-	
0010	669+31	-	669+58	FLAGPOLE RD	-	-	-	29	-	-	
0010	342+85	-	347+43	BUCKLEY CT	-	-	-	-	257	-	
0010	354+45	-	357+38	S A ST	-	-	-	-	94	-	
				SUBTOTAL 1=	**96,035**	**162,510**	**4,625**	**232**	**351**	**47**	

ADDITIONAL QUANTITIES ON NEXT PAGE

ADDITIONAL QUANTITIES ON PREVIOUS PAGE

3

PERMANENT PAVEMENT MARKING LINE SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	MARKING LINE GROOVED WET REF EPOXY 6-INCH 646.2040 YELLOW LF	MARKING LINE GROOVED WET REF EPOXY 6-INCH 646.2040 WHITE LF	MARKING LINE GROOVED WET REF EPOXY 10-INCH 646.4040 WHITE LF	MARKING STOP LINE EPOXY 18-INCH 646.6120 WHITE LF	MARKING DIAGONAL EPOXY 12-INCH 646.7120 YELLOW LF	MARKING CHEVRON EPOXY 12-INCH 646.7320 WHITE LF	REMARKS
0010	379+43	-	384+59	S E ST	-	-	-	-	280	-	
0010	407+52	-	411+78	S K ST	-	-	-	-	221	-	
0010	417+20	-	420+24	SOUTH M ST	-	-	-	-	170	-	
0010	426+06	-	431+35	SOUTH M ST	-	-	-	-	271	-	
0010	482+71	-	488+16	X RD	-	-	-	-	320	-	
0010	495+48	-	501+19	X RD	-	-	-	-	352	-	
0010	840+71	-	847+45	ELLSWORTH RD	-	-	-	-	229	-	
0010	851+27	-	860+28	ELLSWORTH RD	-	-	-	-	408	-	
				SUBTOTAL 2 =	**0**	**0**	**0**	**0**	**2,250**	**0**	
				TOTAL (1+2) =	**96,035**	**162,510**	**4,625**	**232**	**2,601**	**47**	
				PROJECT TOTALS =	**258,545**		**4,625**	**232**	**2,250**	**47**	

3

ADDITIONAL PAVEMENT MARKING SUMMARY

CATEGORY	STATION	TO	STATION	LOCATION	MARKING ARROW EPOXY 646.5020 EACH	MARKING WORD EPOXY 646.5120 EACH	MARKING RAILROAD CROSSING EPOXY 646.5320 EACH	MARKING CORRUGATED MEDIAN EPOXY 646.8020 SF	MARKING ISLAND NOSE EPOXY 646.8220 EACH	REMARKS
0010	123+47	-	125+76	STH 21	2	1	-	-	-	CTH A RT TURN LANE
0010	340+59	-	341+54	STH 21	2	-	-	-	-	BUCKLEY CT LT TURN LANE
0010	342+85	-	345+85	STH 21	2	1	-	-	-	BUCKLEY CT RT TURN LANE
0010	347+96	-	351+97	STH 21	2	1	-	-	-	S A ST LEFT TURN LANE
0010	350+49	-	351+73	STH 21	2	-	-	-	-	BYPASS RD RT TURN LANE
0010	352+76	-	353+76	STH 21	2	-	-	-	-	BYPASS RD LT TURN LANE
0010	353+02	-	356+52	STH 21	2	1	-	-	-	S A ST RIGHT TURN LANE
0010	353+02	-	424+14	STH 21	-	-	1	-	-	
0010	384+00	-	407+40	STH 21	12	-	-	-	-	TWLTL
0010	405+00	-	413+54	STH 21	-	-	1	-	-	
0010	420+80	-	424+80	STH 21	2	1	-	-	-	SOUTH M STREET LT TURN LANE
0010	424+63	-	425+34	STH 21	2	-	-	-	-	SOUTH M STREET
0010	426+08	-		STH 21	-	-	-	-	1	
0010	426+72	-	432+49	STH 21	2	1	-	-	-	SOUTH M STREET RT TURN LANE
0010	425+70		430+08	STH 21	-	-	-	788	-	CORRUGATED MEDIAN
0010	430+43	-		STH 21	-	-	-	-	1	
0010	479+20	-	481+45	STH 21	2	1	-	-	-	S 10TH AVE RT TURN LANE
0010	487+91	-	491+04	STH 21	2	1	-	-	1	X RD LT TURN LANE
0010	492+57	-	495+01	STH 21	2	1	-	-	1	X RD LT TURN LANE
0010	848+07	-	849+80	STH 21	2	1	-	-	-	ELLSWORTH RD EB LT TURN LANE
0010	851+46	-	853+07	STH 21	2	1	-	-	-	ELLSWORTH RD WB RT TURN LANE
				PROJECT TOTAL =	**42**	**11**	**2**	**788**	**4**	

3

LOCATING NO-PASSING ZONES

CATEGORY	STATION TO STATION	LOCATION	648.0100 MI
0010	31+96 - 860+37	STH 21	15.69
	PROJECT TOTAL =		**15.69**

CONSTRUCTION STAKING SUMMARY

CATEGORY	STATION TO STATION	LOCATION	SUBGRADE 650.4500 LF	BASE 650.5000 LF	CURB GUTTER AND CURB & GUTTER 650.5500 LF	PIPE CULVERTS 650.6000 EACH	RESURFACING REFERENCE 650.8000 LF	SUPPLEMENTAL CONTROL (PROJECT) 01.7605-06-62 650.9911 EACH	SLOPE STAKES 650.9920 LF
0010	31+96 - 860+37	STH 21	-	-	-	-	82,841	1	-
0010	342+84 - 347+90	STH 21	506	506	-	-	-	-	506
0010	378+00 - 413+00	STH 21	3,500	3,500	-	-	-	-	3,500
0010	341+44 - 341+81	BUCKLEY CT SW	-	-	78	-	-	-	-
0010	342+13 - 342+85	BUCKLEY CT NE	-	-	101	-	-	-	-
0010	403+81 - 404+06	S J STREET SW	-	-	25	-	-	-	-
0010	404+51 - 405+00	S J STREET SE	-	-	48	-	-	-	-
0010	382+87 - 383+37	SOUTH E ST	-	-	-	1	-	-	-
0010	391+80 - 392+35	SOUTH H ST	-	-	-	1	-	-	-
0010	381+25	STH 21	-	-	-	1	-	-	-
		PROJECT TOTAL =	**4,006**	**4,006**	**252**	**3**	**82,841**	**1**	**4,006**

3

SAWING ASPHALT

CATEGORY	STATION TO STATION	LOCATION	690.0150 LF	REMARKS
0010	BOP - EOP	STH 21	872	DRIVEWAYS
0010	338+28 - 346+34	STH 21	800	RECONSTRUCT SOUTH
0010	342+41 - 351+97	STH 21	1,917	MEDIAN
0010	342+85 - 347+90	STH 21	511	RECONSTRUCT NORTH
0010	352+76 - 357+85	STH 21	1,024	MEDIAN
0010	354+83 - 357+62	STH 21	280	RECONSTRUCT NORTH
0010	378+00 - 413+56	STH 21	3588	RECONSTRUCT SOUTH
0010	395+08 - 403+99	STH 21	1,791	MEDIAN
0010	404+72 - 410+42	STH 21	1,148	MEDIAN
0010	417+56 - 420+81	STH 21	336	RECONSTRUCT SOUTH
0010	418+10 - 424+81	STH 21	1,352	MEDIAN
0010	378+00 - 413+50	STH 21	3,557	RECONSTRUCT SOUTH
	PROJECT TOTAL		**17,176**	

LANDMARK REFERENCE MONUMENTS SPECIAL

CATEGORY	STA	LOCATION	SPV.0060.01 EACH	REMARKS
0010	389+16	32.19' RT	1	STH 21
0010	597+03	6.47' LT	1	STH 21
	PROJECT TOTAL =		**2**	

ADJUSTING STRUCTURE COVERS

CATEGORY	STATION	LOCATION	ADJUSTING WATER VALVES SPV.0060.02 EACH	ADJUSTING SANITARY MANHOLE COVERS SPV.0060.03 EACH	REMARKS
0010	403+64	45' RT	-	1	RIM EL = 868.4
0010	404+64	46' LT	1	-	
0010	404+69	39' LT	1	-	
	PROJECT TOTAL =		**2**	**1**	

STA. 32+83, LT
BASE AGG., PE

STA. 35+38, LT
BASE AGG., PE

STA. 42+86, LT
ASPHALT, PE

STA. 47+00, LT
BASE AGG., PE

STA. 55+74, LT
ASPHALT, PE

BP: 30+06.88
Y=384002.6350
X=630641.0800

35+00 40+00 45+00 50+00 55+00 60+00

R/W

GENTRY RD

LIMITS OF CONSTRUCTION

GENTRY RD

LIMITS OF CONSTRUCTION

GLENWOOD AVE

LIMITS OF CONSTRUCTION

MATCH LINE 60+55.00

BEGIN PROJECT
MILL 1" AND OVERLAY 2"
STA 31+96
Y = 384153.302
X = 630755.383
MATCH EXISTING
BUTT JOINT REQ'D

STA. 32+72, RT
ASPHALT, CE

STA. 34+08, RT
ASPHALT, CE

STA. 37+36, RT
BASE AGG., CE

STA. 42+06, RT
BASE AGG., PE

STA. 43+40, RT
BASE AGG., PE

STA. 54+82, RT
ASPHALT, PE

SCALE, FEET 0 100 200

5

5

STA. 72+56, LT
BASE AGG., PE

STA. 76+51, LT
BASE AGG., PE

STA. 77+74, LT
BASE AGG., PE

STA. 84+24, LT
BASE AGG., CE

PC: 81+44.92
Y=388067.0257
X=633783.4804

PT: 72+05.19
Y=387338.7140
X=633189.6370

PC: 64+02.37
Y=386707.7519
X=632693.3109

MATCH LINE 60+55.00

GENERAL AVE

LIMITS OF CONSTRUCTION

CURVE 1

R/W

R/W

80+00 85+00 90+00

75+00 70+00 65+00

CURVE 2

CTH Q

LIMITS OF CONSTRUCTION

GLENWOOD AVE

MATCH LINE 91+05.00

LEGEND

- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

STA. 69+40, RT
ASPHALT, PE

STA. 74+66, RT
BASE AGG., PE

STA. 75+20, RT
ASPHALT, PE

STA. 78+96, RT
ASPHALT, PE

STA. 82+18, RT
BASE AGG., PE

SCALE, FEET 0 100 200

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 83	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 01

PLOT DATE : 7/30/2024 3:19 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

REMOVING GUARDRAIL STA. 94+55 - 95+37 LT
STEEL THRIE BEAM STRUCTURE APPROACH 20.63 LF
STEEL PLATE BEAMGUARD CLASS A REQ'D - 12.5 LF
STEEL PLATE BEAMGUARD TERMINAL EAT REQ'D

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 94+56 - STA. 95+26
SAWCUT REQ'D

REMOVING GUARDRAIL STA. 93+35 - 94+05 LT
STEEL THRIE BEAM STRUCTURE APPROACH - 20.63 LF
STEEL PLATE BEAMGUARD TERMINAL EAT REQ'D

CTH I
PT: 98+41.95
Y=388475.4211
X=635318.1905

LIMITS OF CONSTRUCTION

XCEL ENERGY
OH ELECTRIC

ENVIRONMENTALLY
SENSITIVE AREA

STA. 91+82 - 92+09
EXISTING 18-INCH CMCP

REMOVING GUARDRAIL STA. 100+46 - 101+38 LT,
MGS THRIE BEAM TRANSITION 39.4 LF,
MGS GUARDRAIL TERMINAL EAT REQ'D

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 102+83 - STA. 103+33
SAWCUT REQ'D

SLOPE INTERCEPT

XCEL ENERGY
OH ELECTRIC

REMOVING GUARDRAIL STA. 102+66 - 107+58 LT,
MGS THRIE BEAM TRANSITION 39.4 LF,
MGS GUARDRAIL 3 REQ'D - 400 LF,
MGS GUARDRAIL TERMINAL EAT REQ'D

95+00
100+00
105+00
110+00
115+00
120+00

OH

CAUTION

R/W

PC: 116+06.82
Y=387842.8216
X=636965.7908

MATCH LINE 91+05.00

MATCH LINE 121+55.00

CURVE 3

REMOVING GUARDRAIL STA. 94+56 - 95+28 RT
STEEL THRIE BEAM STRUCTURE APPROACH 20.63 LF
STEEL PLATE BEAMGUARD TERMINAL EAT REQ'D

WE ENERGIES
UG GAS

SPECTRUM
UG TV

STA. 107+60 - 107+90
EXISTING 18-INCH CULVERT PIPE

XCEL ENERGY
UG ELECTRIC

SLOPE INTERCEPT

EXISTING B-41-196 BRIDGE
EXISTING APPROACH SLABS TO REMAIN
NET EXCEPTION TO CENTERLINE

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 93+34 - STA. 93+84
SAWCUT REQ'D

EXISTING B-41-197 BRIDGE
EXISTING APPROACH SLABS TO REMAIN
NET EXCEPTION TO CENTERLINE

REMOVING GUARDRAIL STA. 102+66 - 107+59 RT,
MGS THRIE BEAM TRANSITION 39.4 LF,
MGS GUARDRAIL 3 REQ'D - 400 LF,
MGS GUARDRAIL TERMINAL EAT REQ'D

REMOVING GUARDRAIL STA. 93+19 - 94+04 RT
STEEL THRIE BEAM STRUCTURE APPROACH 20.63 LF
STEEL PLATE BEAMGUARD CLASS A REQ'D - 12.5 LF
STEEL PLATE BEAMGUARD TERMINAL EAT REQ'D

REMOVING GUARDRAIL STA. 99+96 - 101+39 RT,
MGS THRIE BEAM TRANSITION 39.4 LF,
MGS GUARDRAIL 3 REQ'D - 50 LF,
MGS GUARDRAIL TERMINAL EAT REQ'D

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 100+64 - STA. 101+14
SAWCUT REQ'D

STA. 91+94, RT
BASE AGG., PE

STA. 109+18, RT
BASE AGG., FE

STA. 112+44, RT
BASE AGG., FE

STA. 116+23, RT
BASE AGG., FE

SCALE, FEET 0 100 200

N

EXISTING B-41-203 BRIDGE
EXISTING APPROACH SLABS TO REMAIN
NET EXCEPTION TO CENTERLINE

STA. 133+66, LT
ASPHALT, PE

REMOVING GUARDRAIL STA. 131+87 - 133+29 LT,
MGS THRIE BEAM TRANSITION 39.4 LF,
MGS GUARDRAIL 3 REQ'D - 50 LF,
MGS GUARDRAIL TERMINAL EAT REQ'D

STA. 145+42, LT
BASE AGG., PE

STA. 133+43 - 133+89
EXISTING 12-INCH CULVERT PIPE

REMOVING GUARDRAIL STA. 129+76 - 130+69 LT,
MGS THRIE BEAM TRANSITION 39.4 LF,
MGS GUARDRAIL TERMINAL EAT REQ'D

PT: 127+12.76
Y=387892.6466
X=638039.4041

PC: 134+97.02
Y=388240.3573
X=638742.3677

PT: 138+84.69
Y=388422.6862
X=639084.4188

LIMITS OF CONSTRUCTION

STA. 126+22 - 126+86
EXISTING 18-INCH
CULVERT PIPE

EXISTING
RETAINING
WALL

BRIGHTSPEED
UG COMM.

SLOPE INTERCEPT

BRIGHTSPEED
UG COMM.

MATCH LINE 121+55.00

125+00
130+00
135+00
140+00
145+00
150+00

CURVE 4

R/W

R/W

CAUTION

G

OH

CTH A

XCEL ENERGY
OH ELECTRIC

WE ENERGIES
UG GAS

LIMITS OF CONSTRUCTION

STA. 128+90 - 129+41
EXISTING 24-INCH CMCP

SLOPE INTERCEPT

REMOVING GUARDRAIL STA. 132+07 - 132+99 RT,
MGS THRIE BEAM TRANSITION 39.4 LF,
MGS GUARDRAIL TERMINAL EAT REQ'D

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 132+13 - STA. 132+63
SAWCUT REQ'D

REMOVING GUARDRAIL STA. 129+47 - 130+89 RT,
MGS THRIE BEAM TRANSITION 39.4 LF,
MGS GUARDRAIL 3 REQ'D - 50 LF,
MGS GUARDRAIL TERMINAL EAT REQ'D

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 130+15 - STA. 130+65
SAWCUT REQ'D

STA. 129+10, RT
BASE AGG., PE

STA. 135+58, RT
ASPHALT, CE

STA. 137+52, RT
ASPHALT, CE

STA. 144+66, RT
BASE AGG., PE

STA. 147+22, RT
BASE AGG., PE

STA. 151+10, RT
BASE AGG., CE

SCALE, FEET 0 100 200

LEGEND

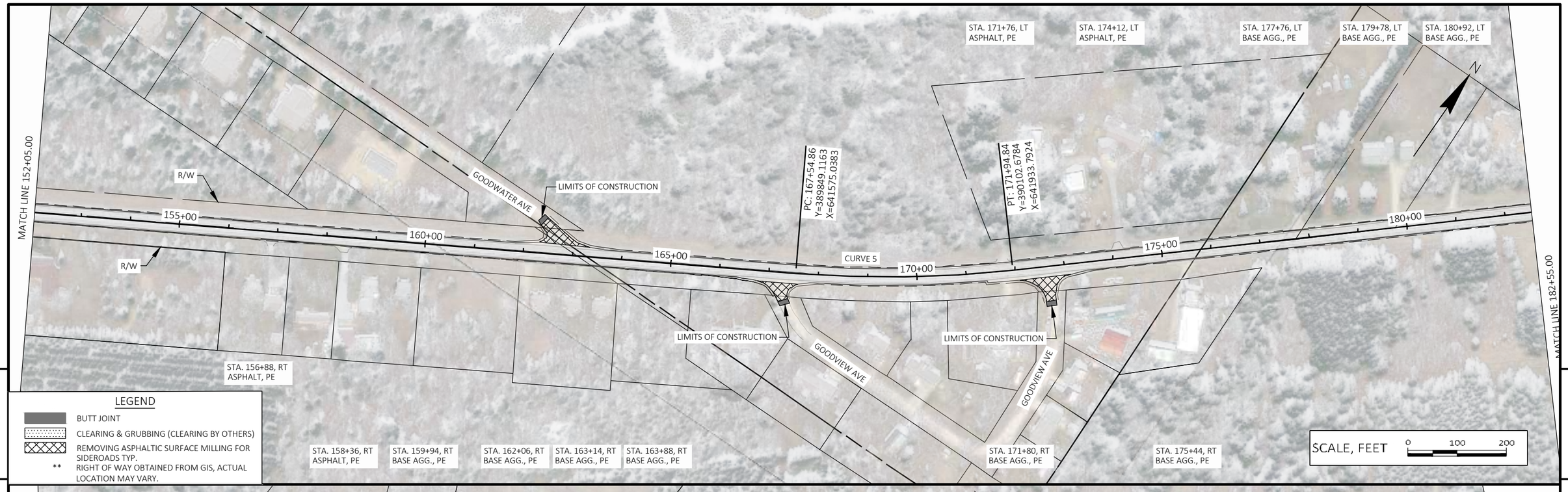
- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 84	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 02

PLOT DATE : 7/30/2024 3:20 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 85	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 03

PLOT DATE : 7/30/2024 3:21 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

MATCH LINE 213+05.00

215+00 220+00 225+00 230+00 235+00 240+00

STA. 232+95, LT
BASE AGG., FE

STA. 234+30, LT
BASE AGG., FE

LIMITS OF CONSTRUCTION

GINGER RD

STA. 226+54, RT
BASE AGG., FE

STA. 234+48, RT
BASE AGG., FE

SCALE, FEET 0 100 200

MATCH LINE 243+55.00

5

5

STA. 244+48, LT
BASE AGG., PE

STA. 253+45, LT
BASE AGG., FE

STA. 264+00, LT
BASE AGG., PE

STA. 272+96, LT
BASE AGG., FE

MATCH LINE 243+55.00

245+00 250+00 255+00 260+00 265+00 270+00

STA. 244+46, RT
BASE AGG., FE

STA. 255+46, RT
BASE AGG., FE

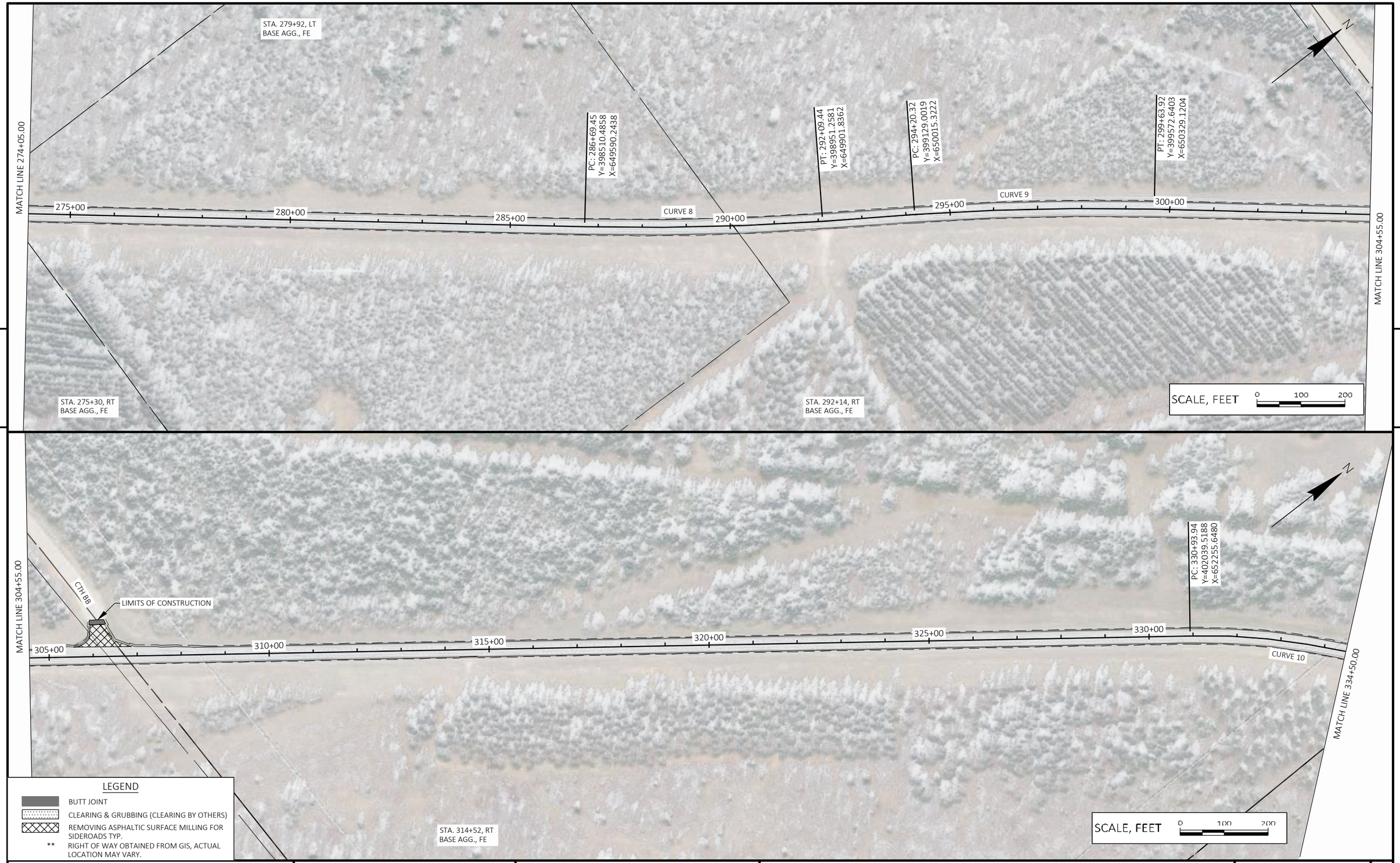
MATCH LINE 274+05.00

SCALE, FEET 0 100 200

LEGEND

- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 86 E



5

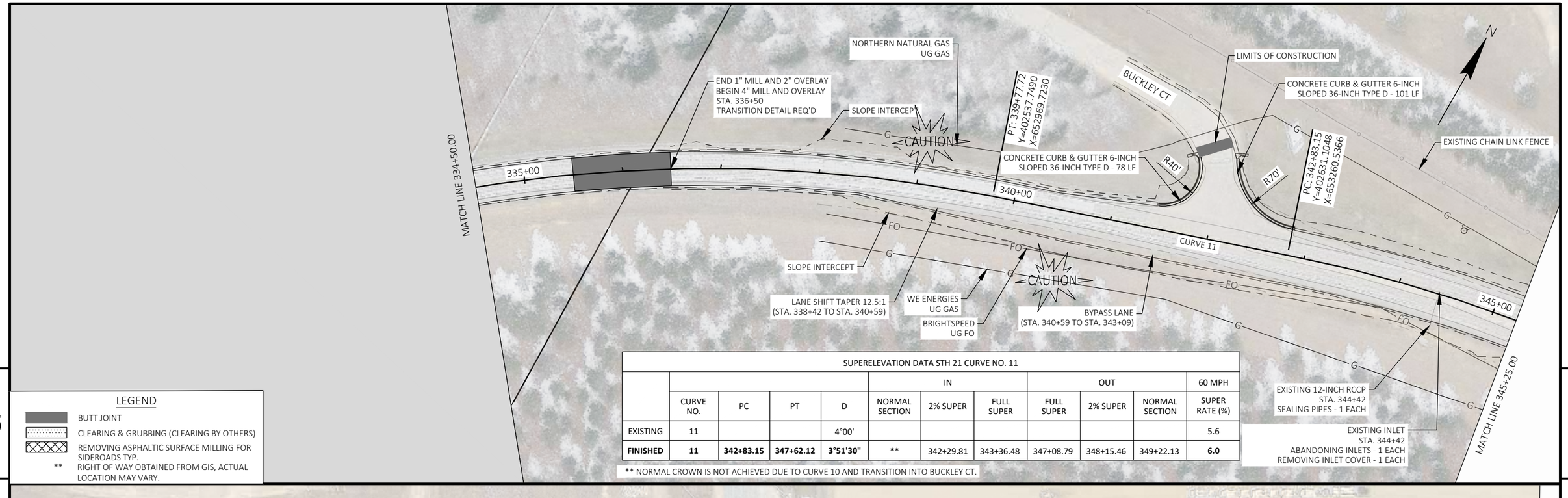
5

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 87	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 05

PLOT DATE : 7/30/2024 3:29 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44



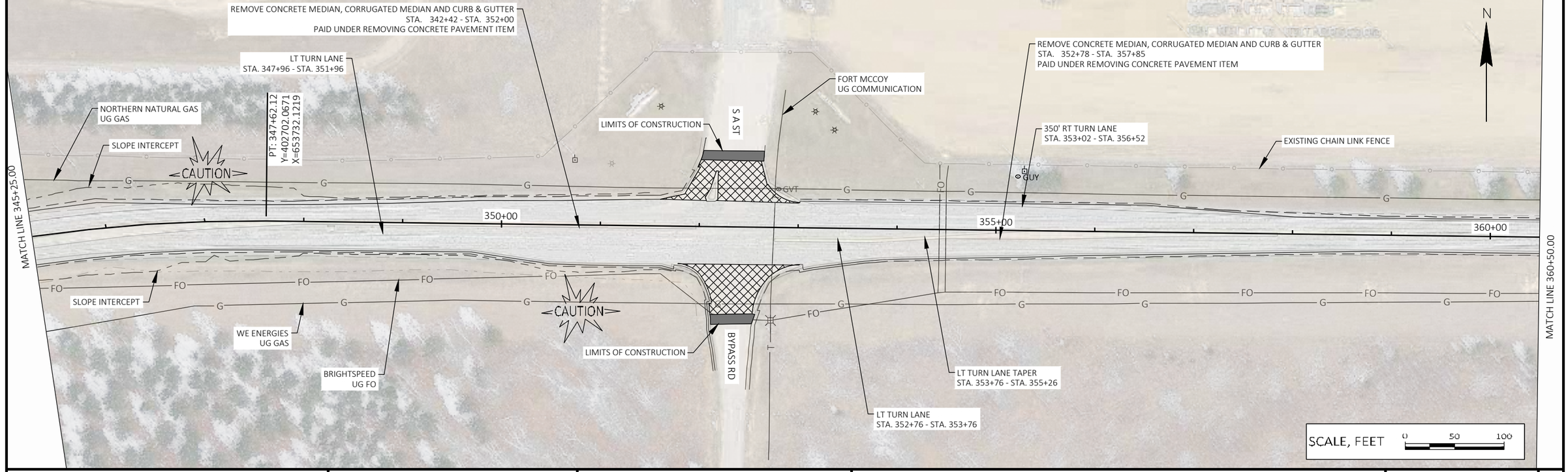
SUPERELEVATION DATA STH 21 CURVE NO. 11

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL SECTION	2% SUPER	FULL SUPER	FULL SUPER	2% SUPER	NORMAL SECTION	SUPER RATE (%)
EXISTING	11			4°00'							5.6
FINISHED	**11**	**342+83.15**	**347+62.12**	**3°51'30"**	**	342+29.81	343+36.48	347+08.79	348+15.46	349+22.13	**6.0**

** NORMAL CROWN IS NOT ACHIEVED DUE TO CURVE 10 AND TRANSITION INTO BUCKLEY CT.

LEGEND

- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.



PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 88	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 06.1

PLOT DATE : 7/30/2024 3:29 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE 360+50.00

NORTHERN NATURAL GAS
UG GAS

EXISTING CHAIN LINK FENCE

G GVT G G G G G G G G

365+00 370+00 375+00

N

PI: 374+99.76
Y=402669.4540
X=656469.5650

FO FO FO FO FO FO FO FO FO FO FO FO

G G G G G G G G G G G G

WE ENERGIES
UG GAS

BRIGHTSPEED
UG FO

SCALE, FEET 0 50 100

5

5

MATCH LINE 375+75.00

REMOVING GUARDRAIL STA. 379+28 - 381+72 LT
MGS GUARDRAIL 3K REQ'D - 212.5 LF
MGS GUARDRAIL TERMINAL EAT - 2 REQ'D

STA. 380+89
EXISTING 60-INCH RCCP

REMOVING ASPHALTIC SURFACE
BUTT JOINTS REQ'D
STA. 382+13 - STA. 382+79
SAWCUT REQ'D

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 383+03 - STA. 383+69
SAWCUT REQ'D

STA. 380+89 - 383+01
EXISTING 18-INCH CMCP

LIMITS OF
CONSTRUCTION

EXISTING 24-INCH CMCP
STA. 382+87 - 383+37
REMOVE SMALL PIPE -1 EACH

EXISTING CHAIN LINK FENCE

SLOPE INTERCEPT

NORTHERN NATURAL GAS
UG GAS

STILLWELL
CREEK

CAUTION

S E ST

BEGIN TWLTL
STA. 384+60

G G GVT G G G S89° 41' 33"E G

380+00 385+00 390+00

17'

33'

FO FO FO FO FO FO FO FO FO FO FO FO

G G G G G G G G G G G G

BRIGHTSPEED
UG FO

WE ENERGIES
UG GAS

SLOPE INTERCEPT

CAUTION

S E ST

LANDMARK REFERENCE
MONUMENT, REQ'D

MATCH LINE 391+00.00

REMOVING GUARDRAIL STA. 379+51 - 381+95 RT
MGS GUARDRAIL 3K REQ'D - 150 LF
MGS GUARDRAIL TERMINAL EAT - 2 REQ'D

660' LANE SHIFT TAPER 41.25:1
STA. 378+00 TO STA. 384+60

LIMITS OF
CONSTRUCTION

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH, 50 LF
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH, 2 EACH
STA. 383+00, 43.7' RT, EL. = 854.8'
STA. 383+50, 44.9' RT, EL. = 855.2'

EXISTING CONCRETE TANK CROSSING TO REMAIN
STA. 382+79 - STA. 383+03

REMOVING CONCRETE HEADWALL,
CULVERT PIPE REINFORCED CONCRETE CLASS III 60-INCH - 16 LF,
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH,
CONCRETE COLLARS FOR PIPE REQ'D

N

SCALE, FEET 0 50 100

LEGEND

- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 89	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 06.2

PLOT DATE : 7/30/2024 3:30 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

MATCH LINE 391+00.00

EXISTING CHAIN LINK FENCE

LIMITS OF CONSTRUCTION

S H ST

FORT MCCOY
UG WATER

NORTHERN NATURAL GAS
UG GAS

REMOVE CONCRETE MEDIAN, CORRUGATED MEDIAN AND CURB & GUTTER
STA. 395+09 - STA. 404+00
PAID UNDER REMOVING CONCRETE PAVEMENT ITEM

395+00

400+00

405+00

17'

33'

LIMITS OF CONSTRUCTION

EXISTING 24-INCH RCCP
STA. 391+80 - 392+35
REMOVE SMALL PIPE -1 EACH

SLOPE INTERCEPT

BRIGHTSPEED
UG FO

WE ENERGIES
UG GAS

ADJUSTING SANITARY MANHOLE COVERS

CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19X30-INCH, 50 LF
APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19X30-INCH, 2 EACH
STA. 383+00, 43.7' RT, EL. = 854.8'
STA. 383+50, 44.9' RT, EL. = 855.2'

CAUTION

SAN

LIMITS OF CONSTRUCTION

XCEL ENERGY
OH ELECTRIC

FORT MCCOY
UG WATER

FORT MCCOY
UG ELECTRIC

S J ST

ADJUSTING WATER VALVES

BRIGHTSPEED
UG TELEVISION

BRIGHTSPEED
UG FO

FORT MCCOY
UG WATER

FORT MCCOY
UG WATER

FORT MCCOY
UG SANITARY SEWER

WE ENERGIES
UG GAS

BRIGHTSPEED
UG FO

R50'

R25'

CONCRETE CURB & GUTTER
6-INCH SLOPED 36-INCH
TYPE D - 64 LF

LIMITS OF CONSTRUCTION

CONCRETE CURB & GUTTER 6-INCH
SLOPED 36-INCH TYPE D - 40 LF

SCALE, FEET 0 50 100

N

MATCH LINE 406+25.00

5

5

REMOVE CONCRETE MEDIAN, CORRUGATED MEDIAN AND CURB & GUTTER
STA. 404+72 - STA. 410+42
PAID UNDER REMOVING CONCRETE PAVEMENT ITEM

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 413+12 - STA. 413+57
MILL 2-INCH AND PAVE 2-INCH
TRANSITION PAVEMENT CROSS SLOPE FROM NORMAL CROWN TO SUPERELEVATED SLOPE TO MATCH RAILROAD CROSSING MATERIAL
SAWCUT REQ'D

PROPOSED RAILROAD
SIGNAL & GATE ARM
(WORK BY RAILROAD)
STA 414+87

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 414+79 - STA. 415+09
MILL 2-INCH AND PAVE 2-INCH
TRANSITION PAVEMENT CROSS SLOPE FROM NORMAL CROWN TO SUPERELEVATED SLOPE TO MATCH RAILROAD CROSSING MATERIAL
SAWCUT REQ'D

XCEL ENERGY
OH TRANSMISSION

REMOVE CONCRETE MEDIAN, CORRUGATED MEDIAN AND CURB & GUTTER
STA. 418+11 - STA. 424+81
PAID UNDER REMOVING CONCRETE PAVEMENT ITEM

N

MATCH LINE 406+25.00

EXISTING CHAIN LINK FENCE

END TWLTL
STA. 407+40

NORTHERN NATURAL GAS
UG GAS

LT ST

LIMITS OF CONSTRUCTION

FORT MCCOY
UG ELECTRIC

EXISTING RAILROAD

EXISTING ASPHALT
PAVEMENT SECTION
TO REMAIN

CAUTION

PI: 415+65.24
Y=402647.6257
X=660534.9851

LT TURN LANE
STA. 420+80 TO STA. 424+80

N89° 52' 31"E

410+00

415+00

420+00

CAUTION

CAUTION

LIMITS OF CONSTRUCTION

SLOPE INTERCEPT

LANE SHIFT TAPER 12.5:1
STA. 407+40 TO STA. 413+00

WE ENERGIES
UG GAS

RR CROSSING MATERIAL
REPLACED BY OTHERS

PROPOSED RAILROAD
SIGNAL & GATE ARM
(WORK BY RAILROAD)
STA 413+47

YARD RD

LIMITS OF
CONSTRUCTION

LT TURN LANE TAPER 12.5:1
STA. 418+80 TO STA. 420+80

LANE SHIFT TAPER 12.5:1
STA. 416+80 TO STA. 418+80

XCEL ENERGY
OH ELECTRIC

FORT MCCOY
UG WATER

STA. 410+50, RT
ASPHALT, CE

LEGEND

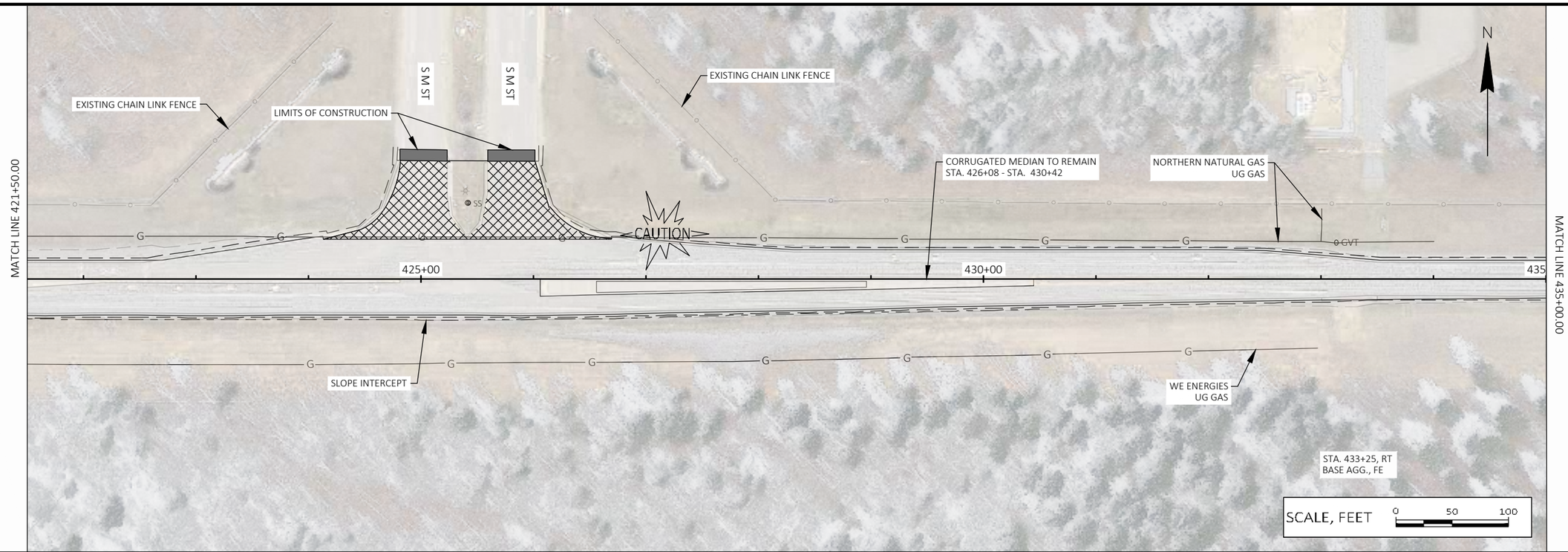
- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

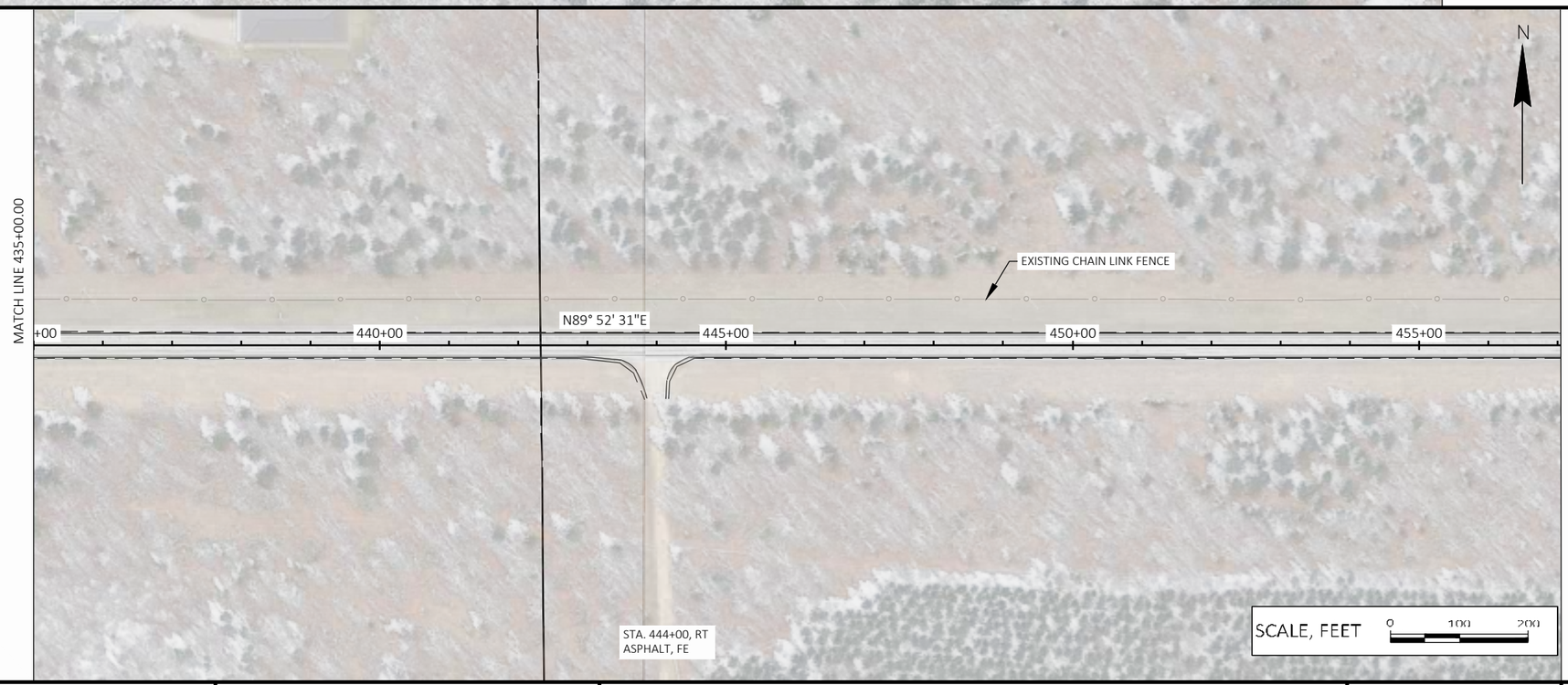
SCALE, FEET 0 50 100

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 90	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 07.1

PLOT DATE : 7/30/2024 3:30 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:100 FT





LEGEND

- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 91	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 07.2

PLOT DATE : 7/30/2024 3:32 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

MATCH LINE 457+05.00

PI: 462+21.89
Y=402657.7539
X=665191.6315

N89° 52' 31"E

N89° 38' 45"F

460+00 465+00 470+00 475+00 480+00 485+00

EXISTING CHAIN LINK FENCE

LIMITS OF CONSTRUCTION

S 10TH AVE

EXISTING CHAIN LINK FENCE

LIMITS OF CONSTRUCTION

LIMITS OF CONSTRUCTION

16TH CT

MATCH LINE 487+55.00

N

STA. 476+08, RT
ASPHALT, PE

SCALE, FEET 0 100 200

5

5

LEGEND

BUTT JOINT

CLEARING & GRUBBING (CLEARING BY OTHERS)

REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.

** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

MATCH LINE 487+55.00

X RD

PI: 491+81.71
Y=402676.0425
X=668151.3917

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 491+93 - STA. 492+43
SAWCUT REQ'D

LIMITS OF CONSTRUCTION

EXISTING CHAIN LINK FENCE

END 4" MILL AND OVERLAY
BEGIN 1" MILL AND 2" OVERLAY
STA. 497+00
TRANSITION DETAIL REQ'D

PI: 504+19.53
Y=402685.8760
X=669389.1720

490+00 N89° 38' N89° 32' 41" 495+00 500+00 505+00 510+00 N88° 55' 29"E 515+00

N

REMOVING ASPHALTIC SURFACE
BUTT JOINTS REQ'D
STA. 491+18 - STA. 491+68
SAWCUT REQ'D

EXISTING CONCRETE TANK CROSSING TO REMAIN
STA. 491+68 - STA. 491+92

LIMITS OF CONSTRUCTION

MATCH LINE 518+05.00

SCALE, FEET 0 100 200

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 92	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 08

PLOT DATE : 7/30/2024 3:33 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

MATCH LINE 518+05.00

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 533+77 - STA. 534+27
SAWCUT REQ'D

LIMITS OF CONSTRUCTION

N88° 55' 29"E

520+00 525+00 530+00 535+00 540+00 545+00

LIMITS OF CONSTRUCTION

EXISTING CONCRETE TANK CROSSING TO REMAIN
STA. 534+27 - STA. 534+53

REMOVING ASPHALTIC SURFACE BUTT JOINTS REQ'D
STA. 534+53 - STA. 535+03
SAWCUT REQ'D

MATCH LINE 548+55.00

N

STA. 519+19, RT
BASE AGG., FE

SCALE, FEET 0 100 200

5

5

STA. 553+24, LT
BASE AGG., PE

STA. 565+82, LT
ASPHALT, PE

FIREWORKS AVE

PI: 570+14.34
Y=402809.6196
X=675982.8188

LIMITS OF CONSTRUCTION

N88° 55' 29"E

550+00 555+00 560+00 565+00 570+00 575+00

LIMITS OF CONSTRUCTION

MATCH LINE 548+55.00

MATCH LINE 579+05.00

STA. 574+66, RT
ASPHALT, PE

SCALE, FEET 0 100 200

LEGEND

- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 93 E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 09

PLOT DATE : 7/30/2024 3:34 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

MATCH LINE 579+05.00

580+00 585+00 590+00 595+00 600+00 605+00

LANDMARK REFERENCE MONUMENT, REQ'D

N

SCALE, FEET 0 100 200

MATCH LINE 609+55.00

5

5

STA. 610+34, LT
BASE AGG., PE

MATCH LINE 609+55.00

610+00 615+00 620+00 625+00 630+00 635+00 640+

CURVE 12

PC: 628+45.99
Y=402786.6915
X=681814.4258

N

MATCH LINE 640+05.00

STA. 635+76, RT
BASE AGG., PE

SCALE, FEET 0 100 200

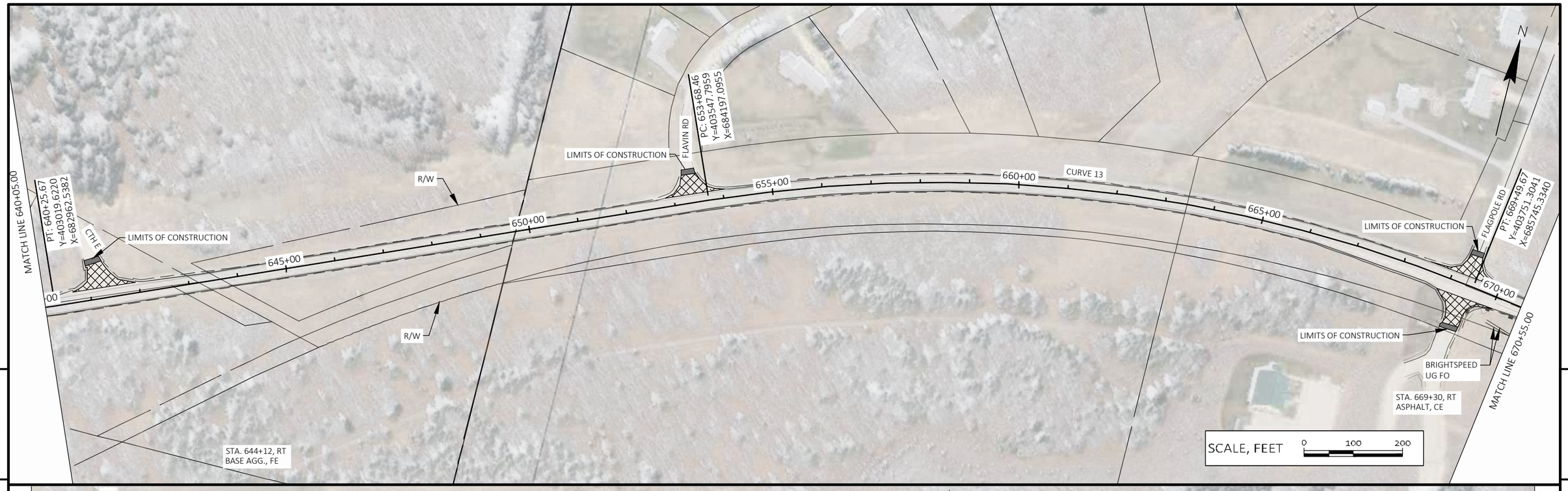
LEGEND

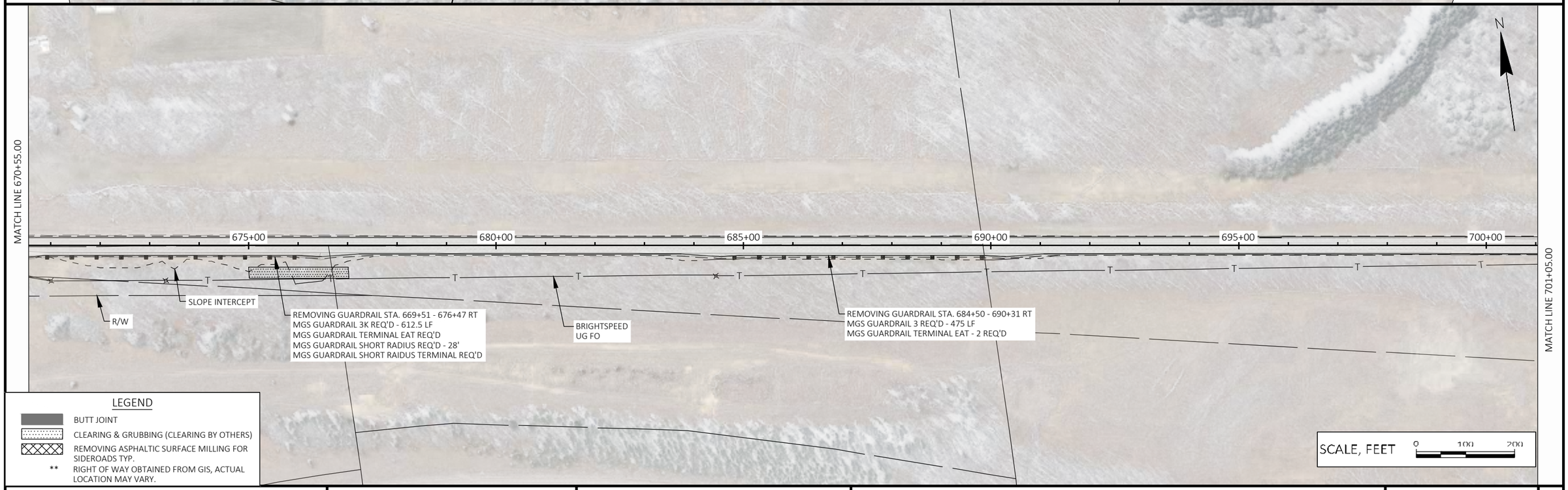
- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 94	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 10

PLOT DATE : 7/30/2024 3:36 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT





LEGEND

- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 95 E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 11

PLOT DATE : 7/30/2024 3:38 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 44

STA. 708+70, LT
ASPHALT, CE

STA. 710+90, LT
BASE AGG., FE

MATCH LINE 701+05.00

OAKDALE ELECTRIC
UG ELECTRIC

705+00

710+00

715+00

720+00

725+00

730+00

BRIGHTSPEED
UG FO

SLOPE INTERCEPT

STA. 710+27
EXISTING 30-INCH CULVERT PIPE

R/W

REMOVING GUARDRAIL STA. 708+61 - 711+92 RT
MGS GUARDRAIL 3K REQ'D - 225 LF
MGS GUARDRAIL TERMINAL EAT - 2 REQ'D

LIMITS OF CONSTRUCTION

ELDER RD

STA. 720+87 - 721+80
EXISTING 24-INCH CULVERT PIPE

BRIGHTSPEED
UG FO

WE ENERGIES
UG GAS

SLOPE INTERCEPT

R/W

REMOVING GUARDRAIL STA. 721+84 - 729+28 LT
MGS GUARDRAIL 3K REQ'D - 637.5 LF
MGS GUARDRAIL TERMINAL EAT - 2 REQ'D

CAUTION

PC: 730+20.46
Y=402886.9219
X=691754.2805

LIMITS OF CONSTRUCTION

FISHER RD

BRIGHTSPEED
UG FO

STA. 727+51
EXISTING 96-INCH CULVERT PIPE

REMOVING GUARDRAIL STA. 721+98 - 732+78 RT
MGS GUARDRAIL 3K REQ'D - 975 LF
MGS GUARDRAIL TERMINAL EAT - 2 REQ'D

MATCH LINE 731+55.00

N

SCALE, FEET 0 100 200

STA. 708+44, RT
BASE AGG., PE

STA. 717+64, RT
BASE AGG., PE

5

5

LEGEND

- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

STA. 738+64, LT
ASPHALT, PE

STA. 743+08, LT
BASE AGG., FE

STA. 748+82, LT
BASE AGG., FE

SLOPE INTERCEPT

STA. 732+25
EXISTING ELLIPTICAL CONCRETE PIPE

WE ENERGIES
UG GAS

PT: 737+25.76
Y=402833.6235
X=692457.0229

BRIGHTSPEED
UG FO

R/W

CURVE 14

MATCH LINE 731+55.00

735+00

740+00

745+00

750+00

755+00

760+00

BRIGHTSPEED
UG FO

R/W

ENVIRONMENTALLY
SENSITIVE AREA

CTH M

LIMITS OF CONSTRUCTION

FLAGSTAFF RD

PC: 760+70.27
Y=402813.6297
X=694801.4543

ENVIRONMENTALLY
SENSITIVE AREA

MATCH LINE 762+05.00

N

SCALE, FEET 0 100 200

STA. 737+46, RT
ASPHALT, PE

STA. 743+04, RT
ASPHALT, PE

STA. 744+64, RT
BASE AGG., PE

STA. 745+14, RT
BASE AGG., PE

STA. 746+72, RT
ASPHALT, PE

STA. 750+02, RT
BASE AGG., PE

STA. 752+06, RT
BASE AGG., PE

STA. 754+48, RT
BASE AGG., PE

STA. 757+20, RT
ASPHALT, PE

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 96	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 12

PLOT DATE : 7/30/2024 3:42 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

MATCH LINE 762+05.00

CTH M

LIMITS OF CONSTRUCTION

CURVE 15

765+00

770+00

775+00

PT: 774+18.02
Y=403110.1159
X=696103.7866

STA. 776+98, LT
CONCRETE, FE

R/W

780+00

785+00

790+00

FLINT AVE

LIMITS OF CONSTRUCTION

MATCH LINE 792+55.00

R/W

CTH ET

LIMITS OF CONSTRUCTION

STA. 776+96, RT
ASPHALT, CE

STA. 784+82, RT
BASE AGG., PE

SCALE, FEET 0 100 200

5

5

LEGEND

BUTT JOINT

CLEARING & GRUBBING (CLEARING BY OTHERS)

REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.

** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

STA. 800+24, LT
BASE AGG., PE

STA. 807+74, LT
ASPHALT, PE

STA. 812+26, LT
BASE AGG., PE

STA. 820+04, LT
BASE AGG., PE

MATCH LINE 792+55.00

R/W

795+00

800+00

805+00

810+00

815+00

820+00

MATCH LINE 823+05.00

LIMITS OF CONSTRUCTION

R/W

FLINT AVE

STA. 820+10, RT
BASE AGG., PE

STA. 822+24, RT
ASPHALT, PE

STA. 822+62, RT
ASPHALT, PE

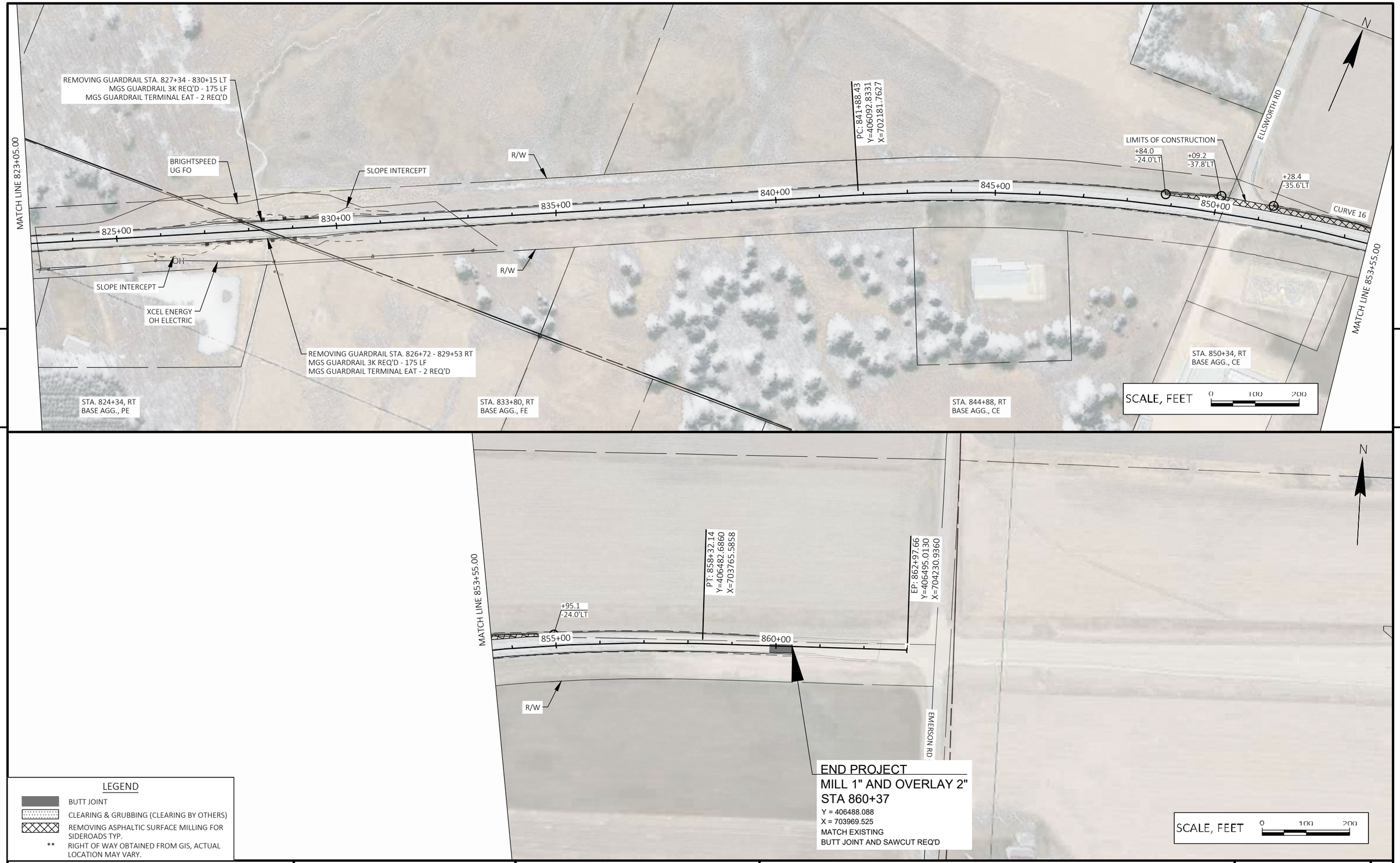
STA. 803+40, RT
ASPHALT, PE

SCALE, FEET 0 100 200

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 97	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 13

PLOT DATE : 7/30/2024 3:46 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT



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LEGEND

- BUTT JOINT
- CLEARING & GRUBBING (CLEARING BY OTHERS)
- REMOVING ASPHALTIC SURFACE MILLING FOR SIDEROADS TYP.
- ** RIGHT OF WAY OBTAINED FROM GIS, ACTUAL LOCATION MAY VARY.

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	PLAN	SHEET 98	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\050201_PN.DWG
LAYOUT NAME - 14

PLOT DATE : 7/30/2024 3:47 PM PLOT BY : MCKANE, RYAN PLOT NAME : PLOT SCALE : 1 IN:200 FT

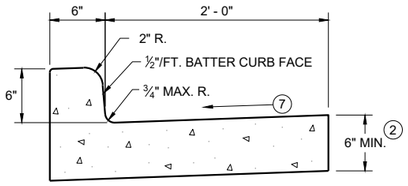
Standard Detail Drawing List

08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A10-03A	SHOULDER RUMBLE STRIPS - ASPHALT
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13B01-11A	PAVEMENT DETAILS FOR RAILROAD APPROACH
13B01-11B	TYPICAL SECTIONS FOR RAILWAY APPROACH
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B20-12A	STEEL THRIE BEAM STRUCTURE APPROACH
14B20-12E	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" AND "W"
14B20-12F	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPE "M"
14B20-12G	STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL
14B20-12H	STEEL THRIE BEAM STRUCTURE APPROACH, SINGLE SLOPE ATTACHMENT
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B45-05A	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05B	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05C	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05D	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05E	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05F	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05G	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05H	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05I	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05J	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05K	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B45-05L	MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION (MGS)
14B53-02A	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02B	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02C	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02D	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02E	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02F	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02G	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02H	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
14B53-02I	SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C09-13A	SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSINGS
15C11-10A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

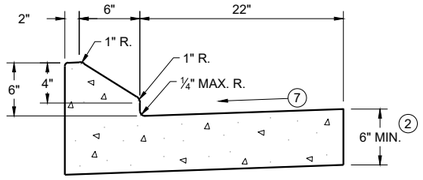
6

Standard Detail Drawing List

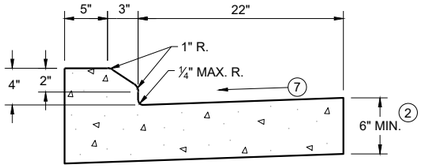
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE
15C19-09A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY



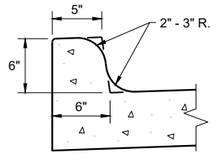
TYPES A (1) & D



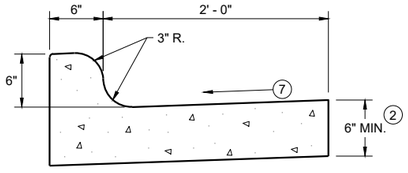
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

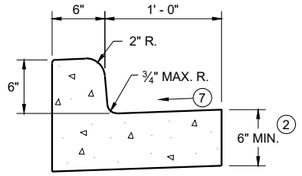


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



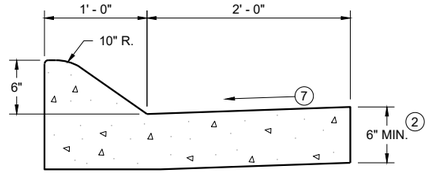
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

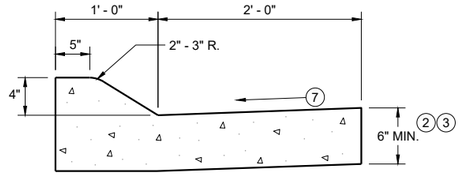


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

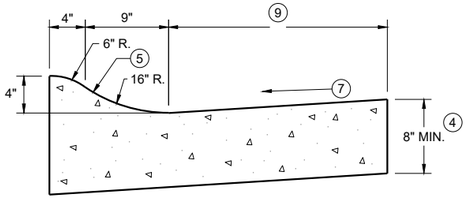


6" SLOPED CURB TYPES A (1) & D



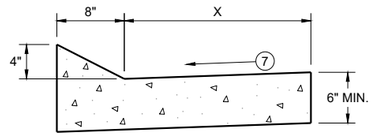
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

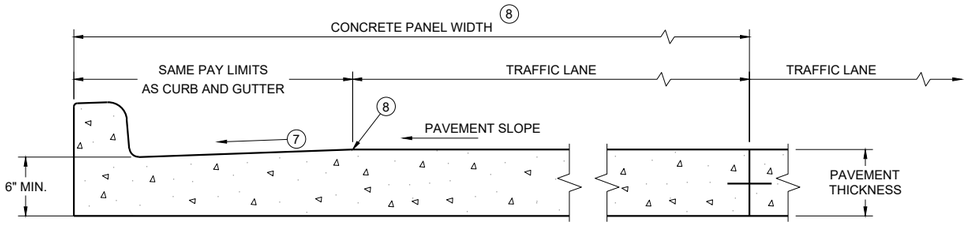


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

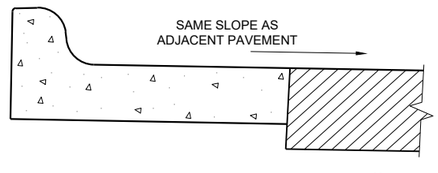
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER *

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(3) USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.

(4) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(5) UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.

(6) WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.

(7) USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.

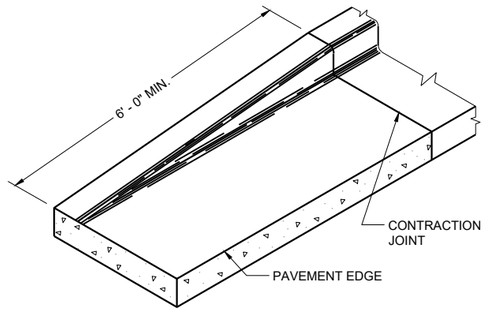
(8) INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

(9) CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES

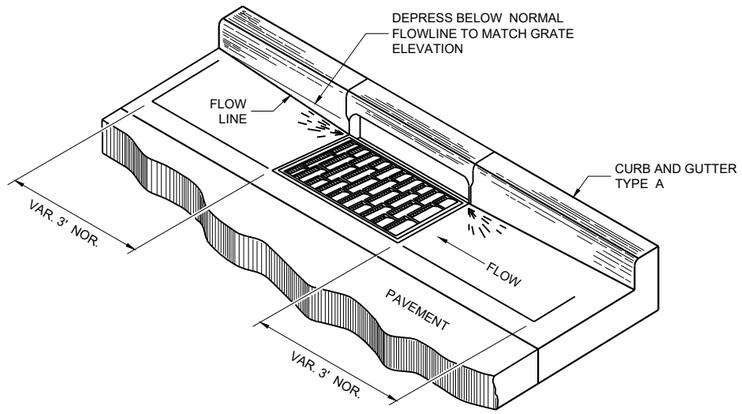
CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D01-23a



END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

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

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

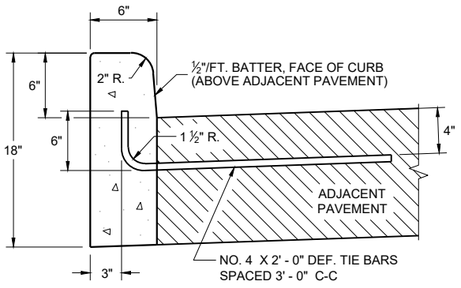
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

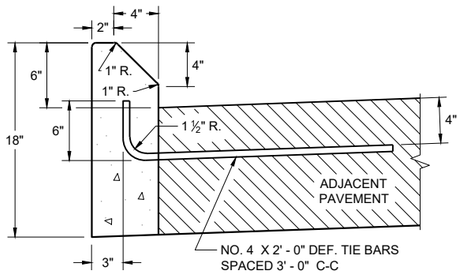
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

(10) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

(11) PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.

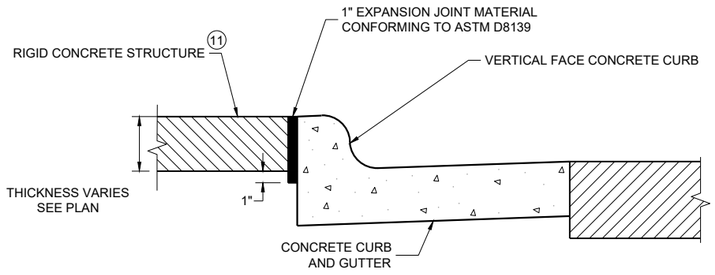


TYPES A (1) & D

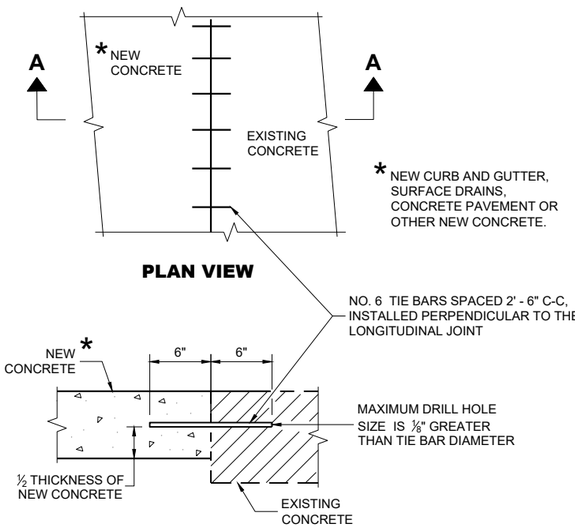


TYPES G (1) & J

CONCRETE CURB



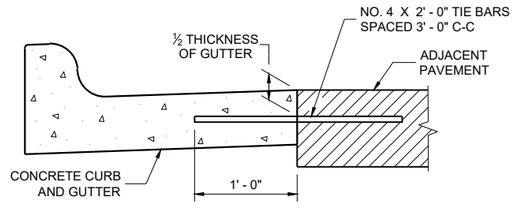
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



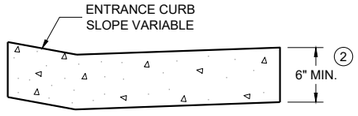
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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SDD 08D01-23b

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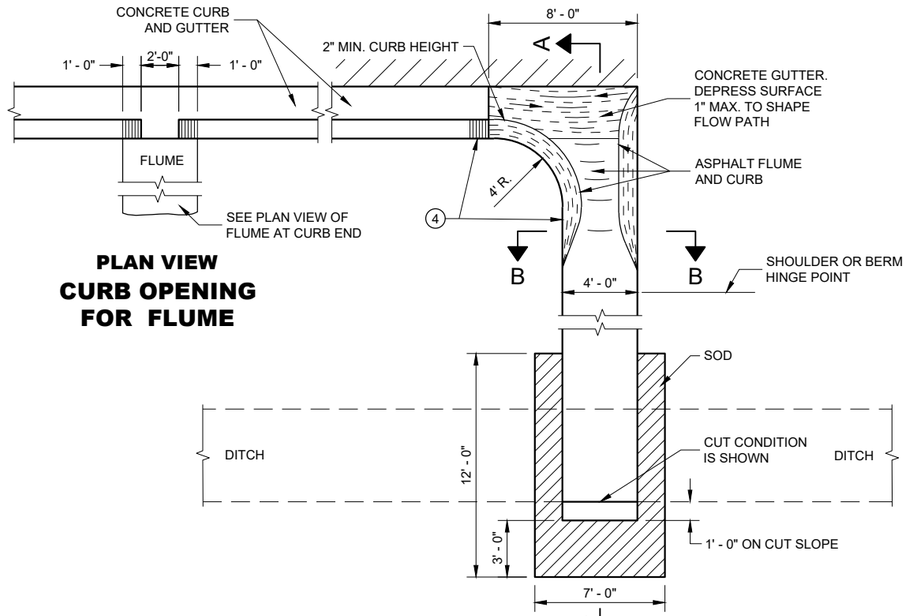
SDD 08D01-23b

NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME

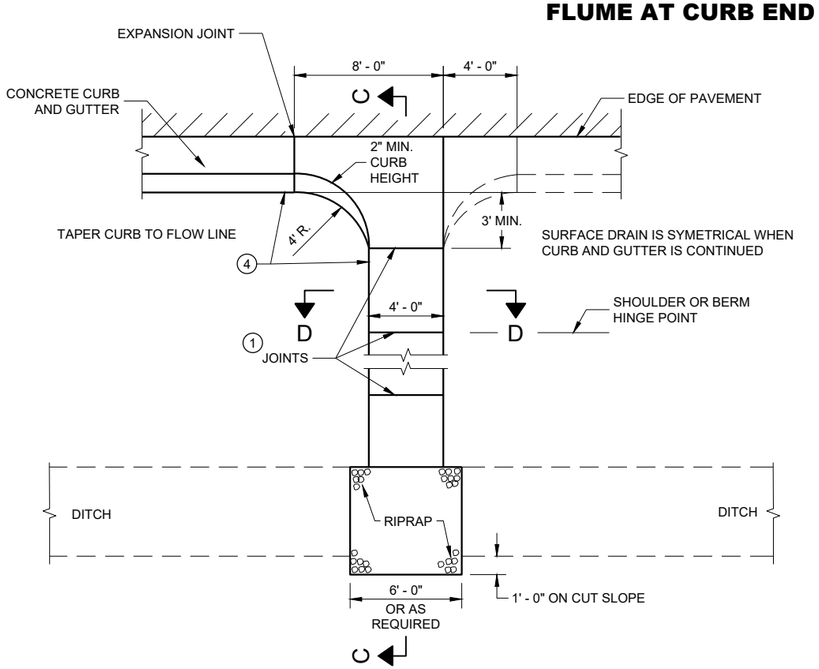


PLAN VIEW

CURB OPENING FOR FLUME

PLAN VIEW

FLUME AT CURB END



PLAN VIEW

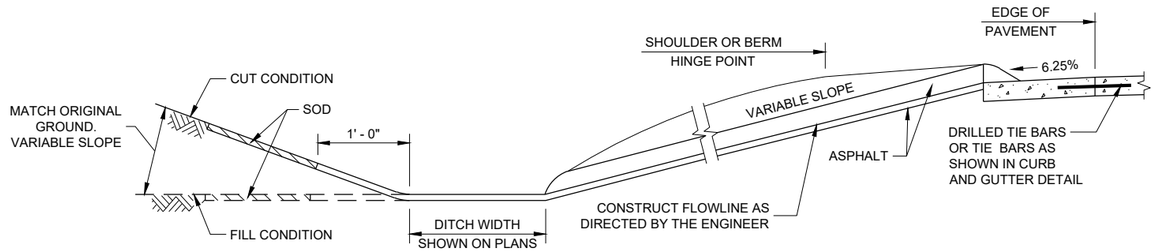
CONCRETE SURFACE DRAIN

GENERAL NOTES

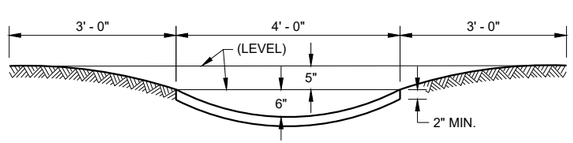
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

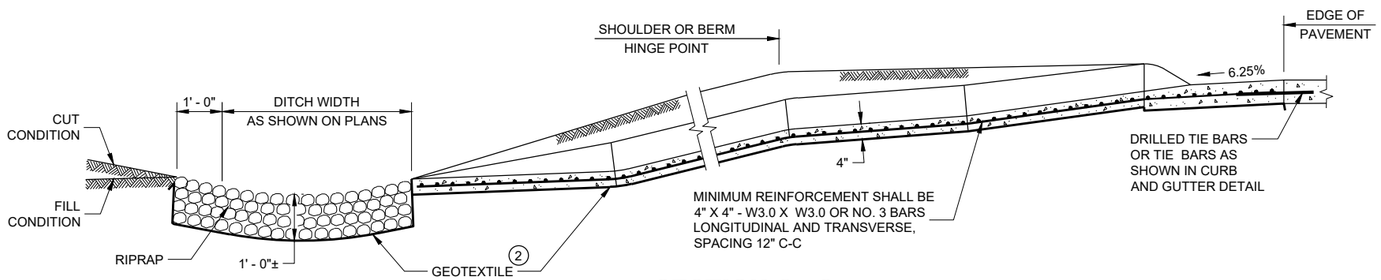
1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.



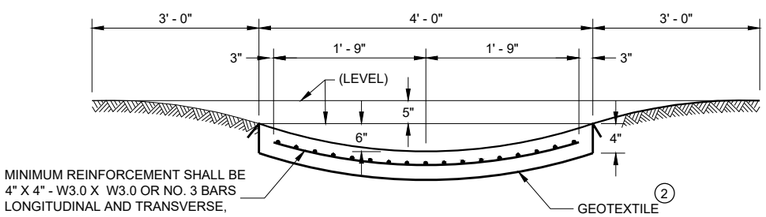
SECTION A - A



SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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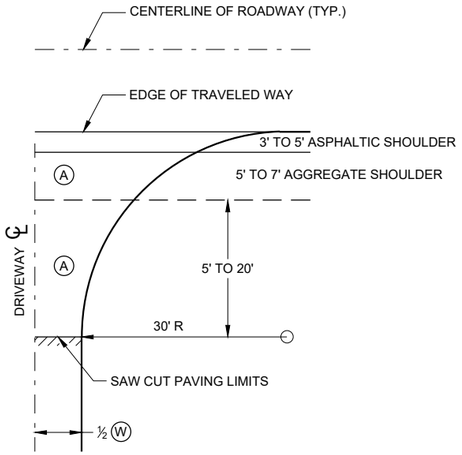
SDD 08D04 - 07

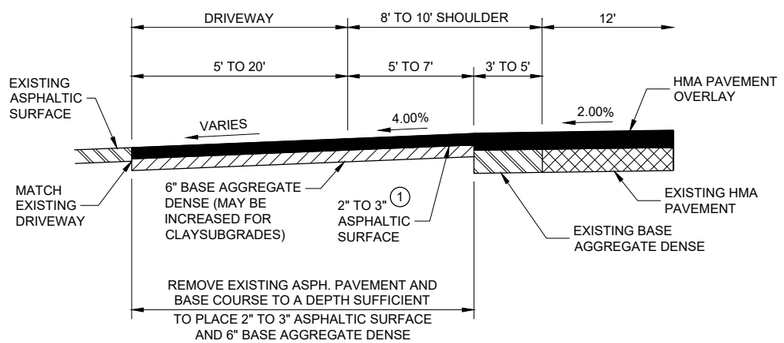
GENERAL NOTES

(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PLAN VIEW

HALF SECTION



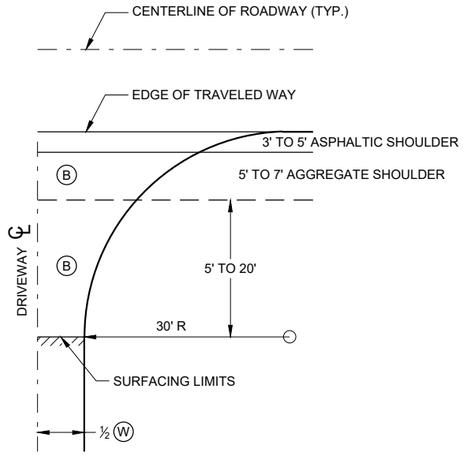
PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

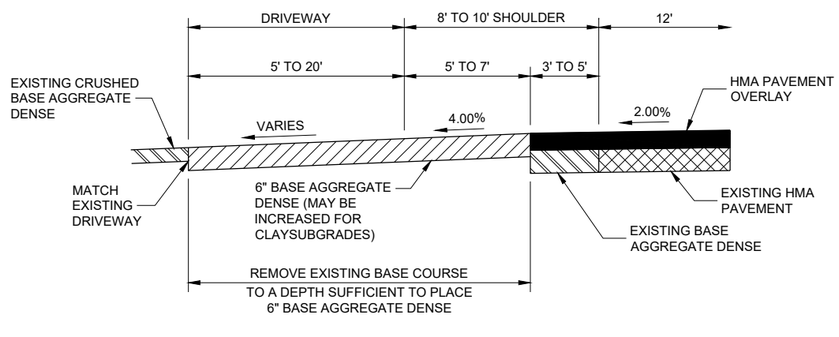
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



PLAN VIEW

HALF SECTION



PROFILE VIEW

RURAL ENTRANCE
WITH AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS

DRIVEWAYS WITHOUT CURB AND GUTTER RESURFACING PROJECTS RURAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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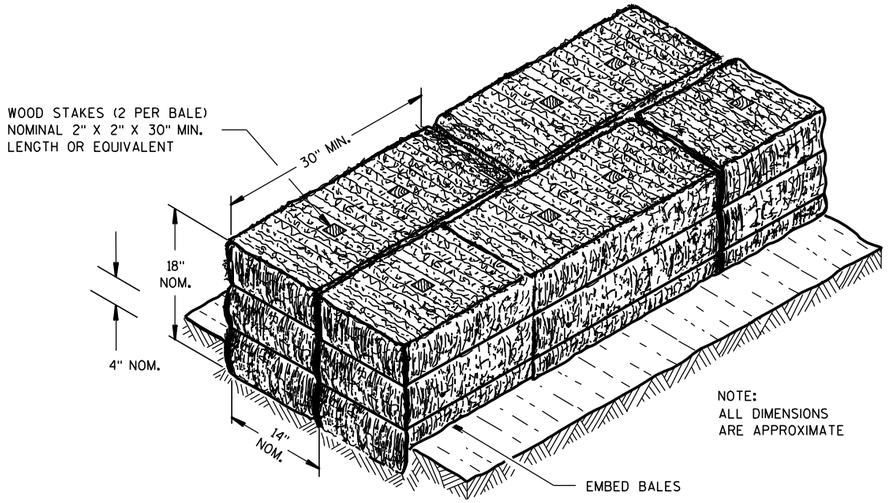
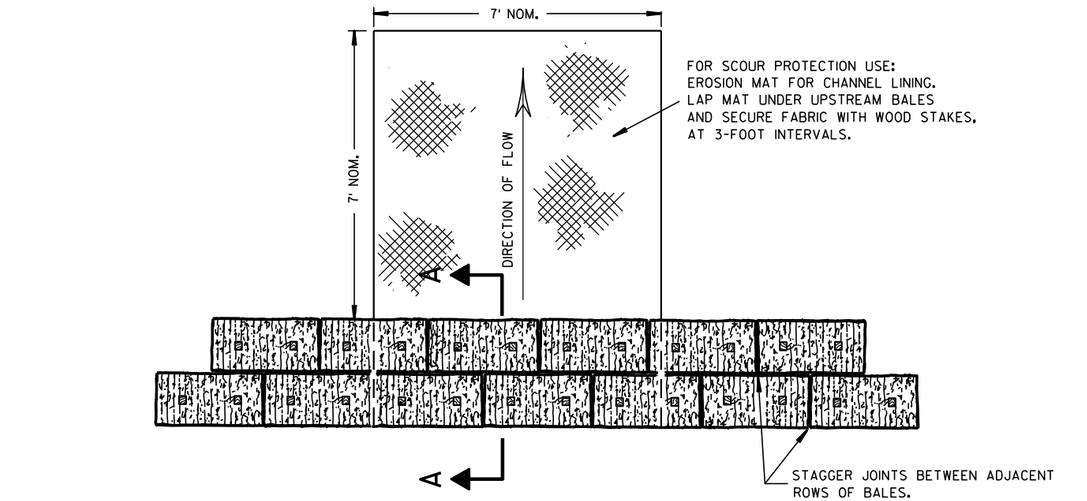
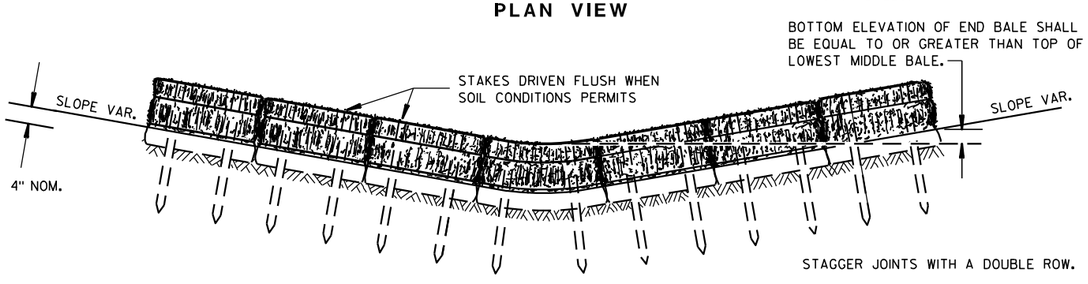
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



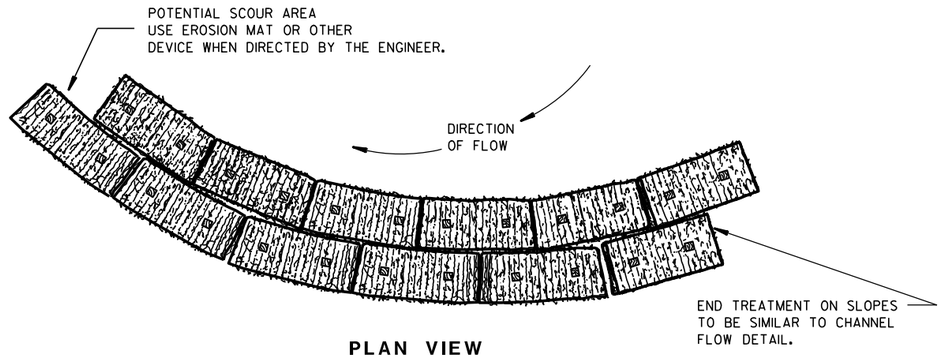
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

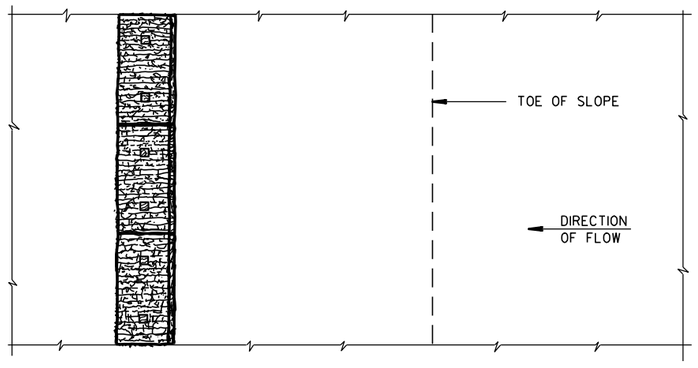
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(1) TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

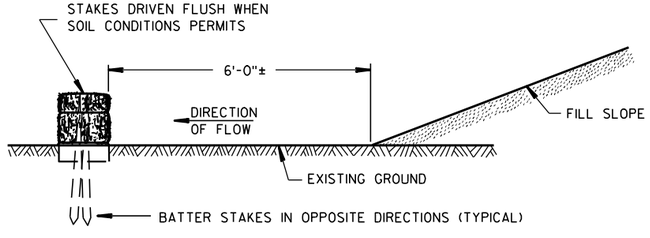


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

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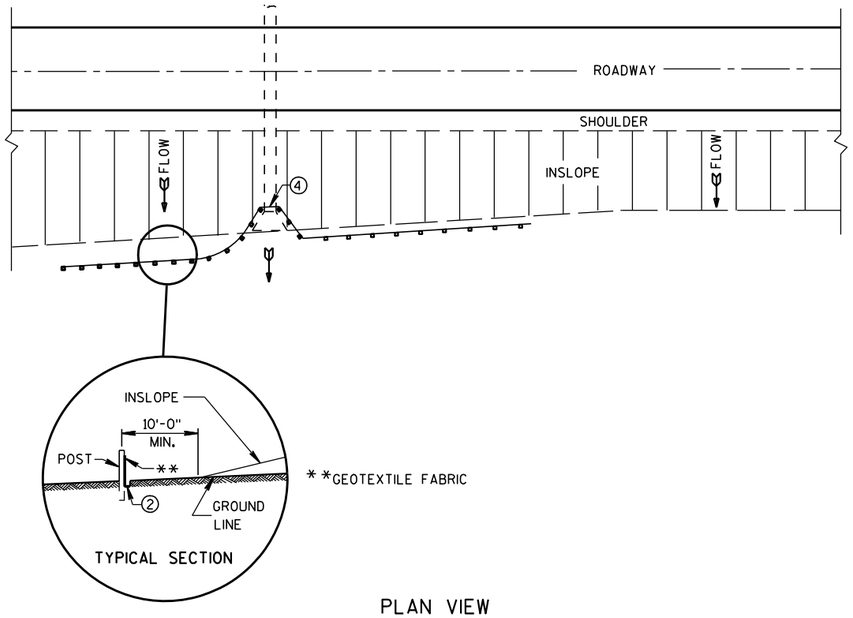
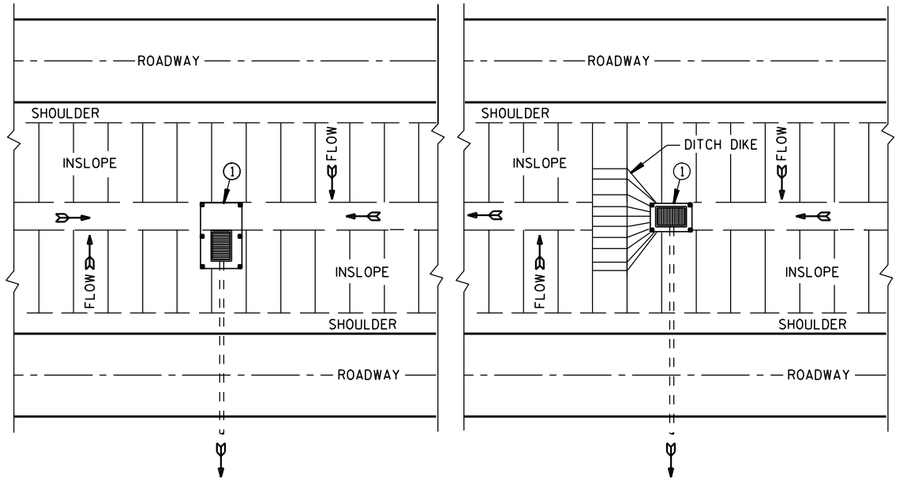
S.D.D. 8 E 8-3



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.

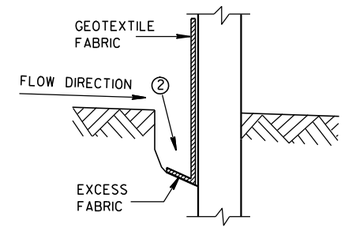
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

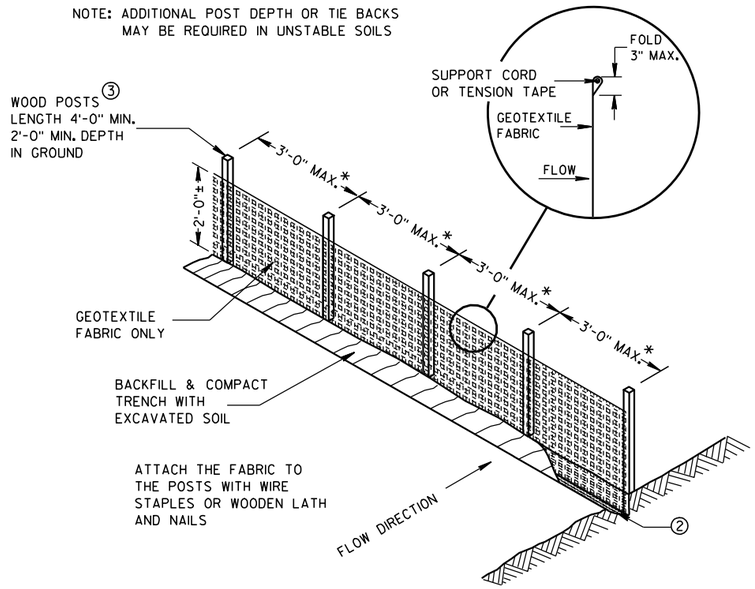
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.

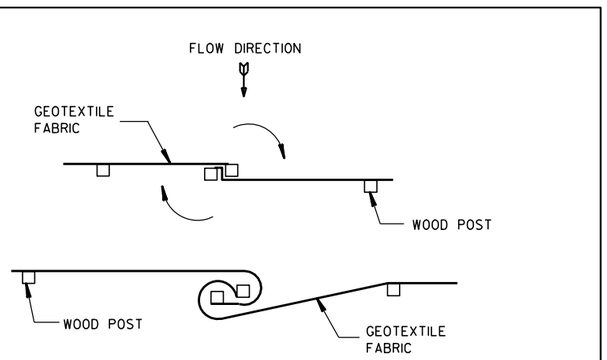
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



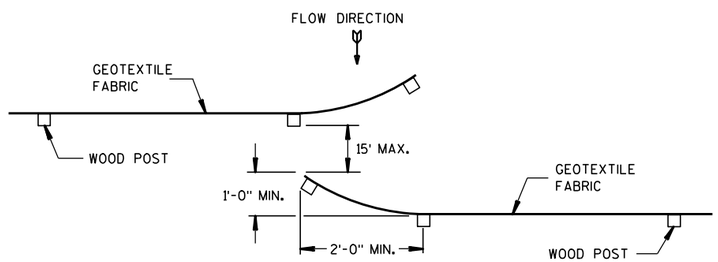
TRENCH DETAIL



SILT FENCE

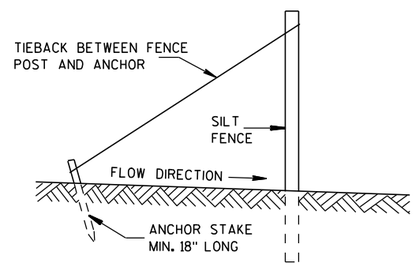


TWIST METHOD



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

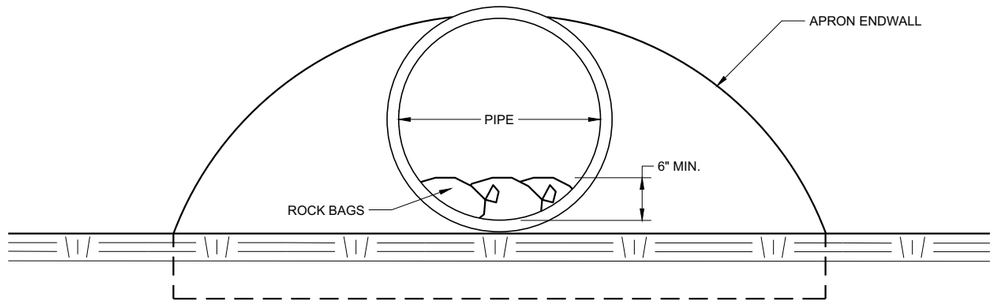
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

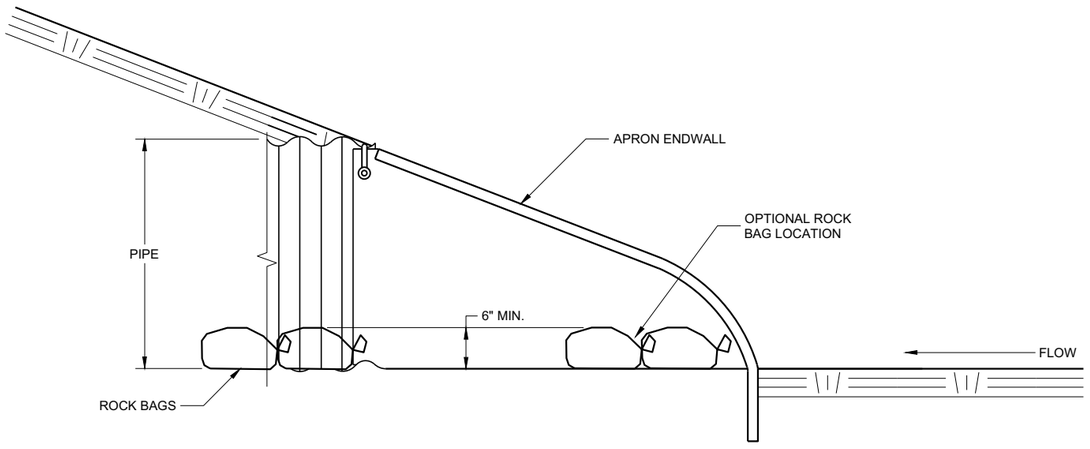
S.D.D. 8 E 9-6

6

S.D.D. 8 E 9-6



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 — DATE
/S/ Daniel Schave — EROSION CONTROL ENGI
FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

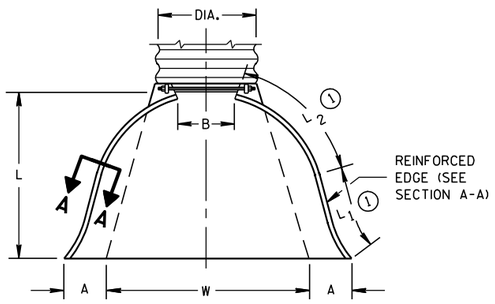
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.
60	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

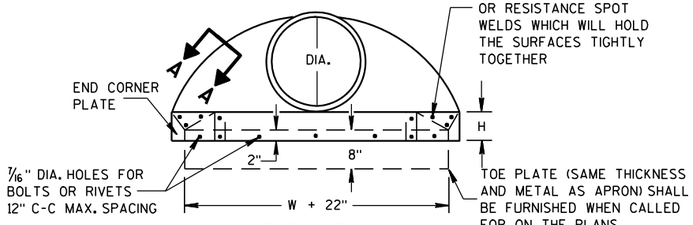
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	24	2	3 to 1
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 1/2	27	65	* 33 1/4 - ** 35	* 98 1/4 - ** 100	90	5 1/2	2 2/5 to 1
60	6	* 30 - ** 35	60	39	99	96	5	2 to 1
66	6 1/2	* 24 - ** 30	* 72 - ** 78	* 21 - ** 27	99	102	5 1/2	2 to 1
72	7	* 24 - ** 36	78	21	99	108	6	2 to 1
78	7 1/2	* 24 - ** 36	78	21	99	114	6 1/2	2 to 1
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1

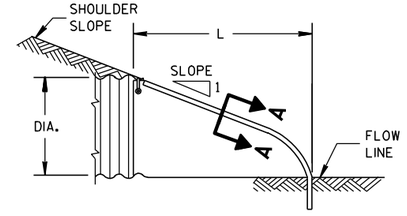
*MINIMUM
**MAXIMUM



PLAN VIEW

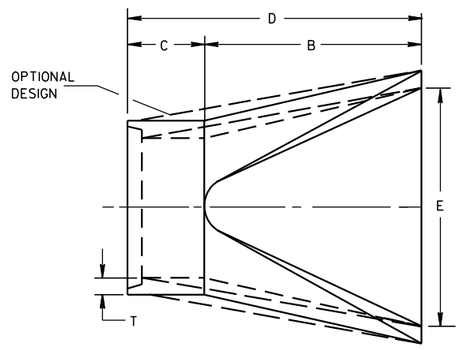


END VIEW

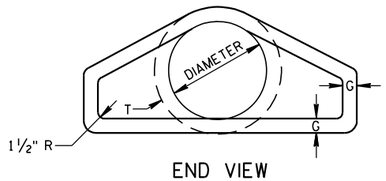


SIDE ELEVATION

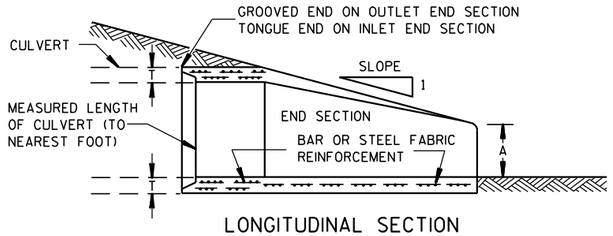
METAL ENDWALLS



PLAN

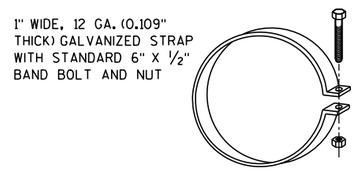


END VIEW



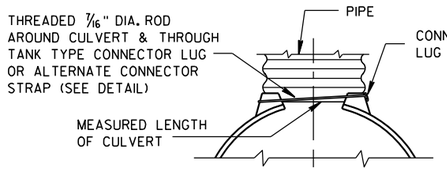
LONGITUDINAL SECTION

CONCRETE ENDWALLS

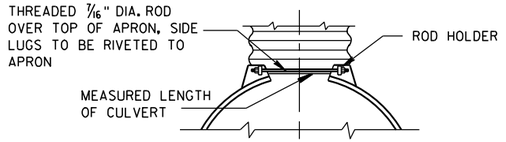


ALTERNATE FOR TYPE 1 CONNECTION

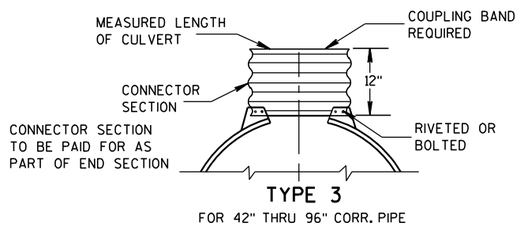
END SECTION CONNECTOR STRAP



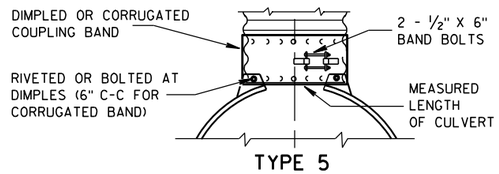
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

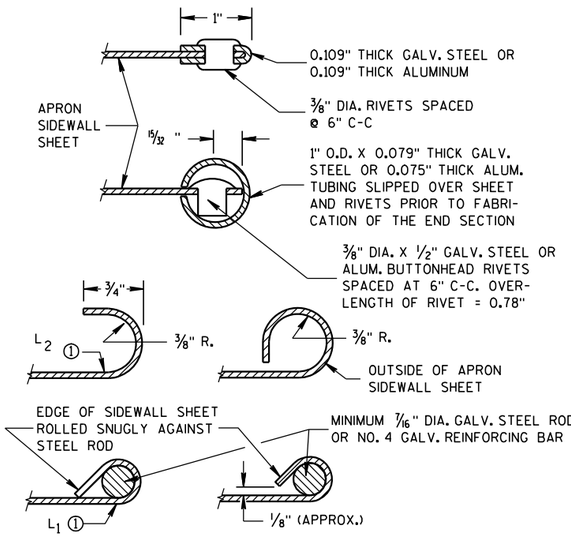
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

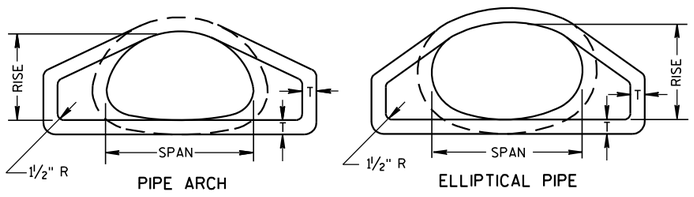
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

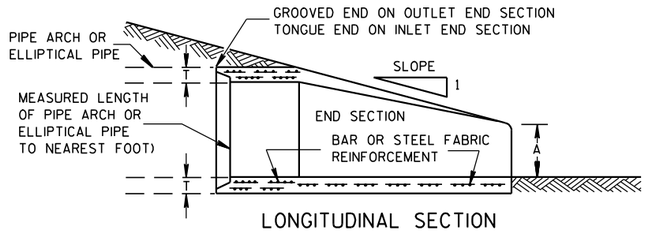
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

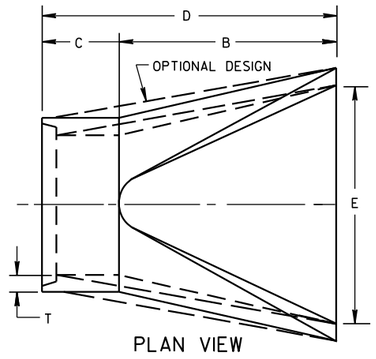
6
S.D.D. 8 F 1-11



END VIEW

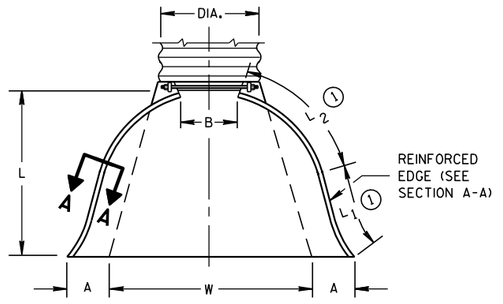


LONGITUDINAL SECTION

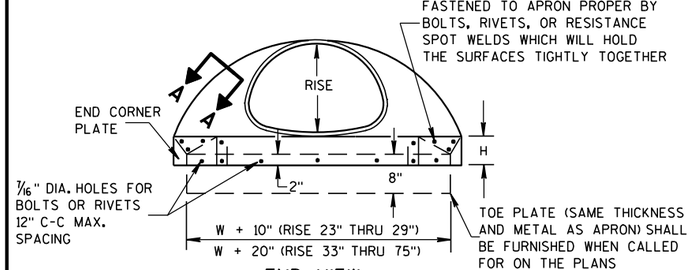


PLAN VIEW

CONCRETE ENDWALLS

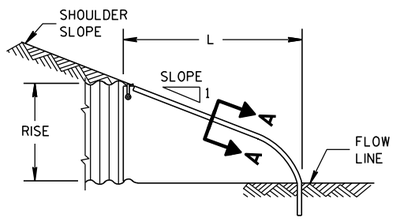


PLAN VIEW



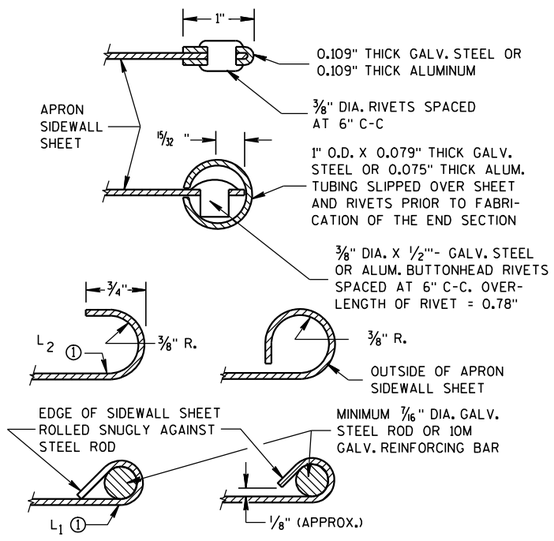
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
15	17	13	.064	.060	7	9	6	19	14	16	30	2½ to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19⅜	36	2½ to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21¾	42	2½ to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27½	48	2½ to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37⅝	60	2½ to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45⅜	75	2½ to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54¾	85	2½ to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2½ to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72¾	102	2¼ to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82¼	114	2¼ to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches) SPAN	(Inches) RISE	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
48	53	41	.109	.105	18	26	12	63	24	72¾	90	2½ to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82¼	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1½ to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1½ to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1½ to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1½ to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1½ to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1½ to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

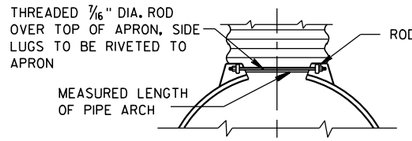
REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	29	18	3	8½	39	33	72	48	3 to 1
30	36	22	3½	9½	50	46	96	60	3 to 1
36	44	27	4	11⅛	60	36	96	72	3 to 1
42	51	31	4½	15 13/16	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5½	25½	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28½	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

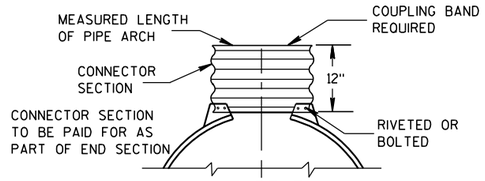
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48	6½	30	60	36	96	96	2½ to 1

**NOMINAL SIZE



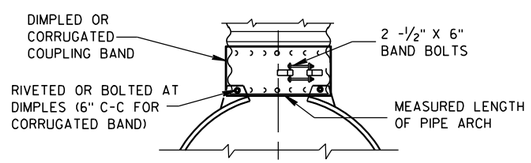
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

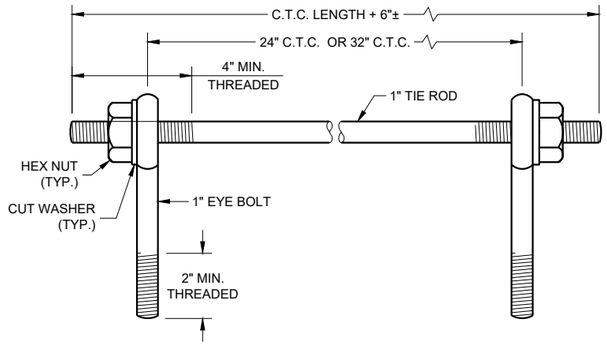
11/30/94 — DATE

/S/ Rory L. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER

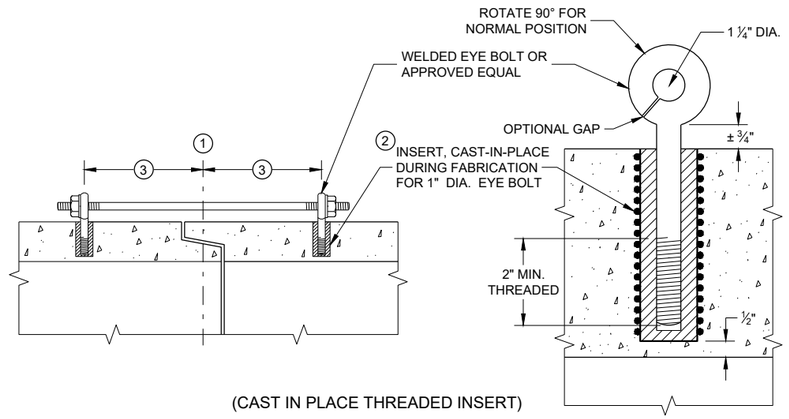
FHWA

6

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

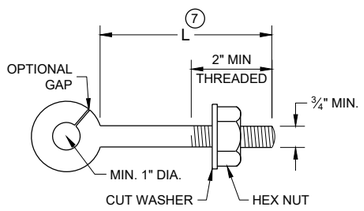
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

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

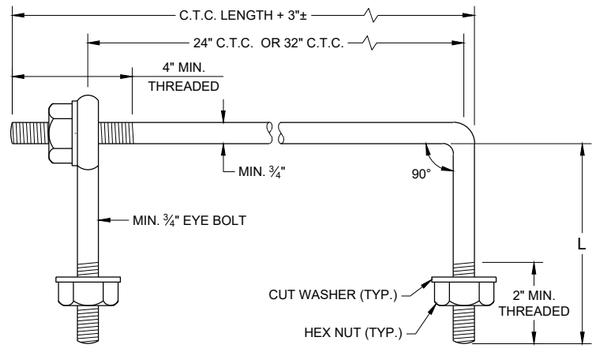
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

1. CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
2. THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
3. HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
4. BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
5. OPENING TO BE ROD DIAMETER PLUS 1 INCH.
6. LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.
7. EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

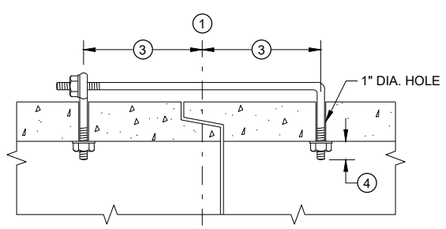


EYE BOLT 7

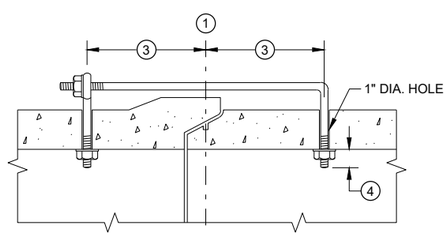
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

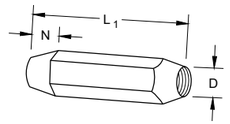
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12 - 60	⅝	⅝	5	½
66 - 84	¾	¾	5	½
90 - 144	1	1	7	1 7/16

DIMENSIONS SHOWN ARE IN INCHES



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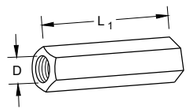
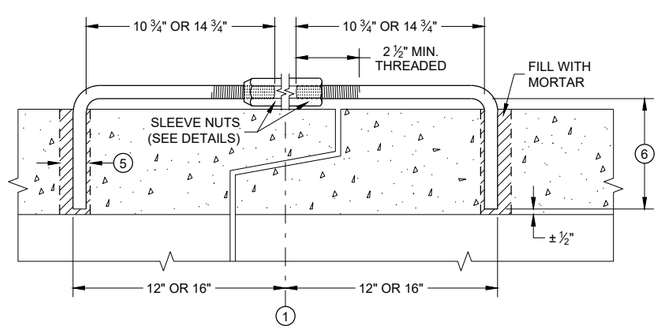


PLAIN

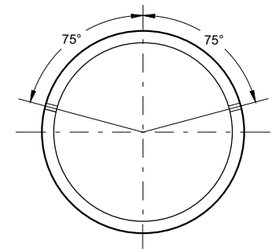
RIGHT AND LEFT THREADS

SLEEVE NUTS



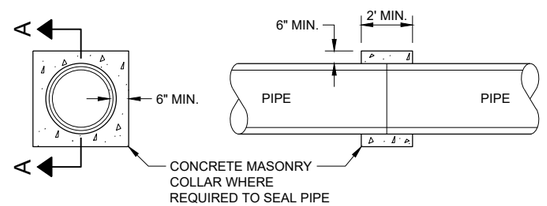
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

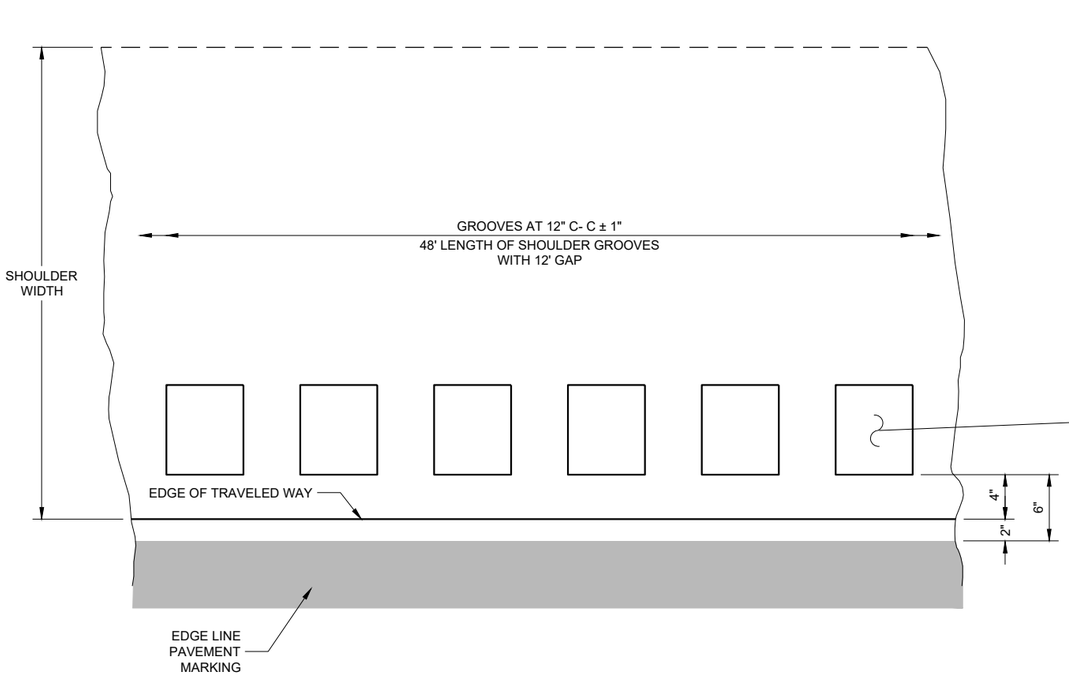
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

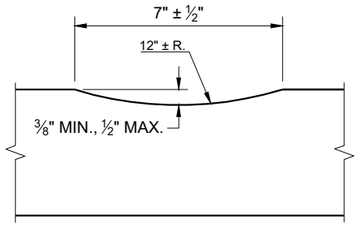
FHWA

SDD 08F04 - 08

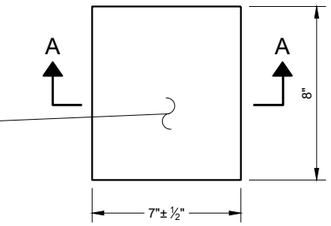
SDD 08F04 - 08



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

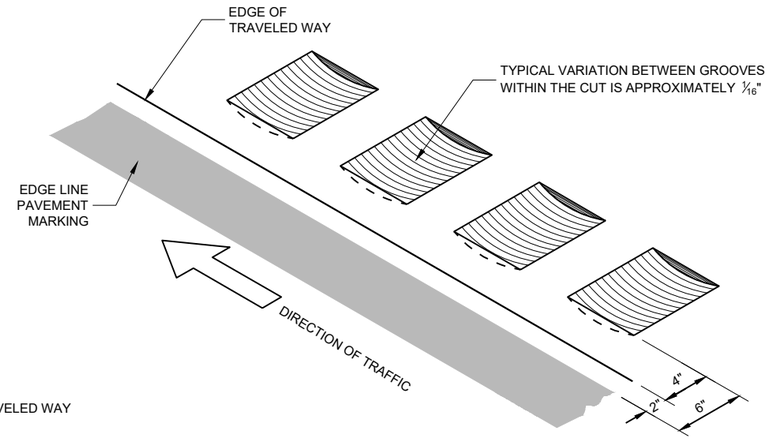


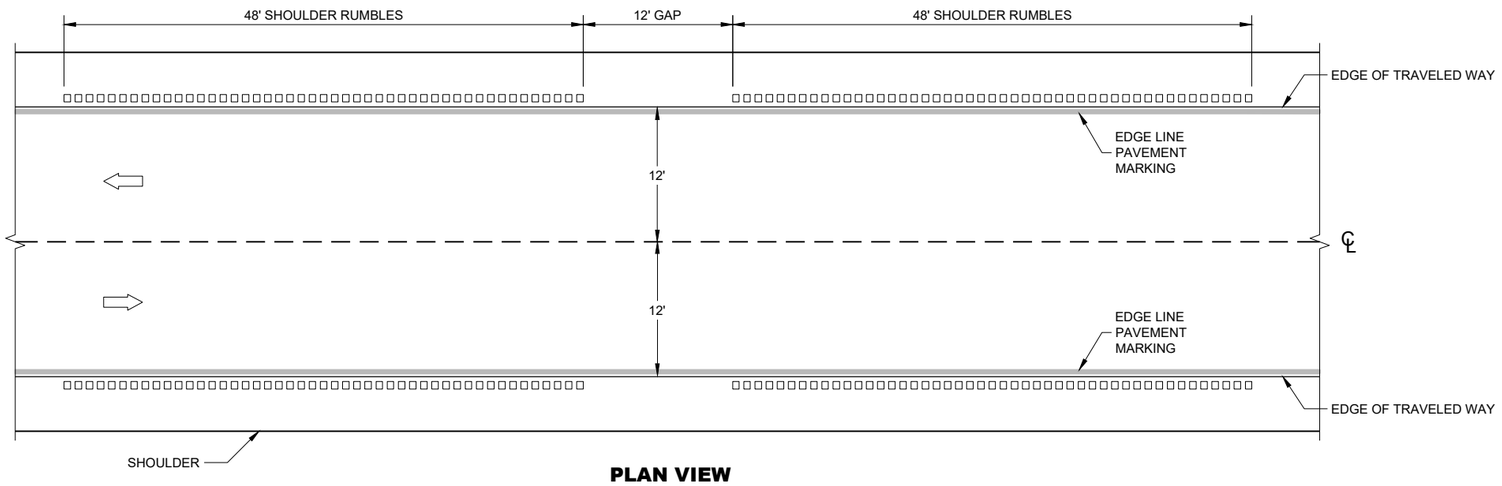
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.





PLAN VIEW

SHOULDER RUMBLE STRIPS - ASPHALT

6

SDD 13A10 - 03a

SHOULDER RUMBLE STRIPS ASPHALT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

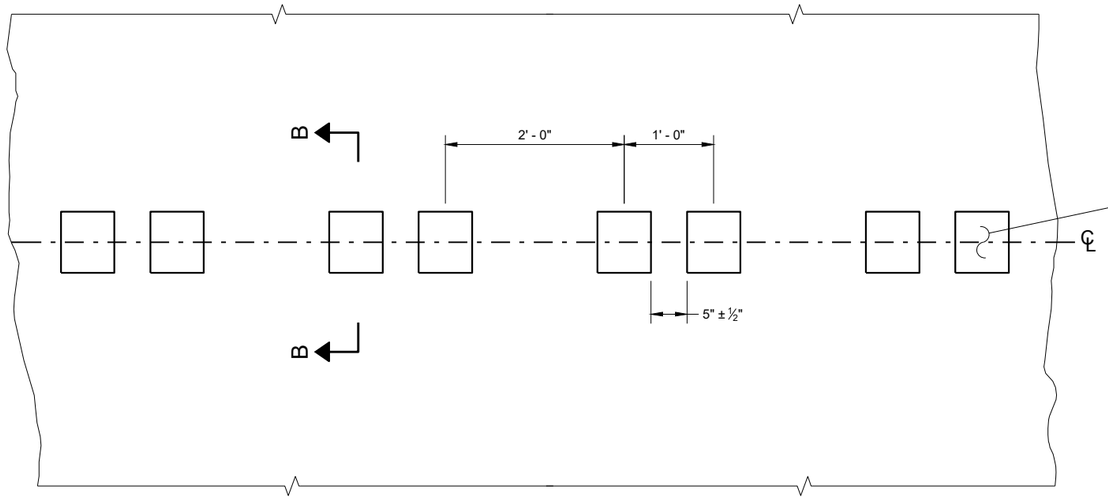
6

SDD 13A10 - 03a

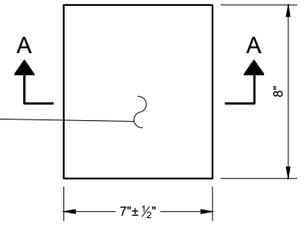
GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

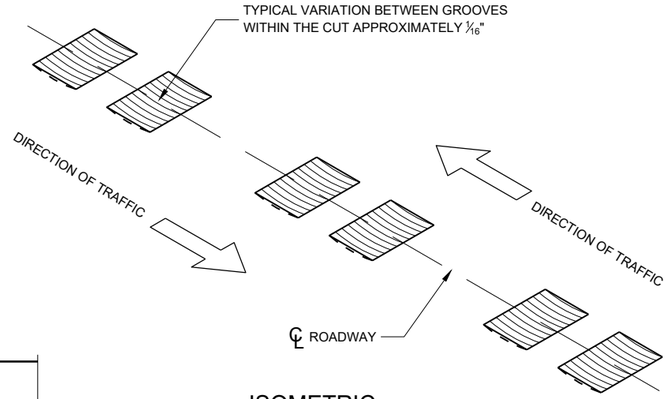
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



PLAN DETAIL VIEW



PLAN VIEW
(SINGLE GROOVE)



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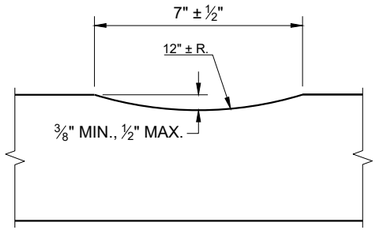
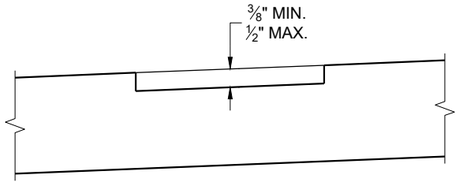
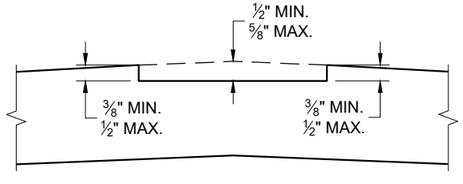


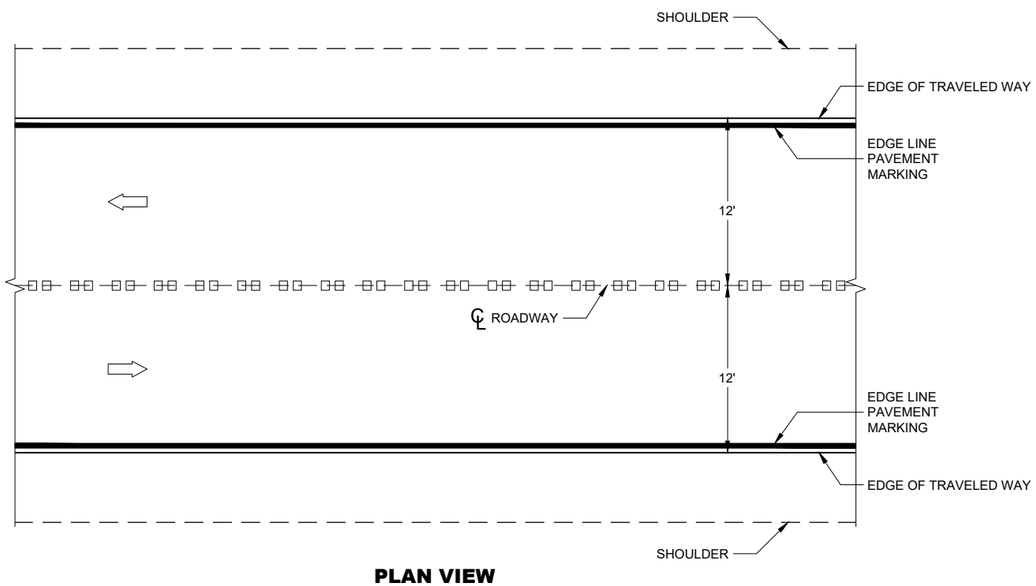
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

6

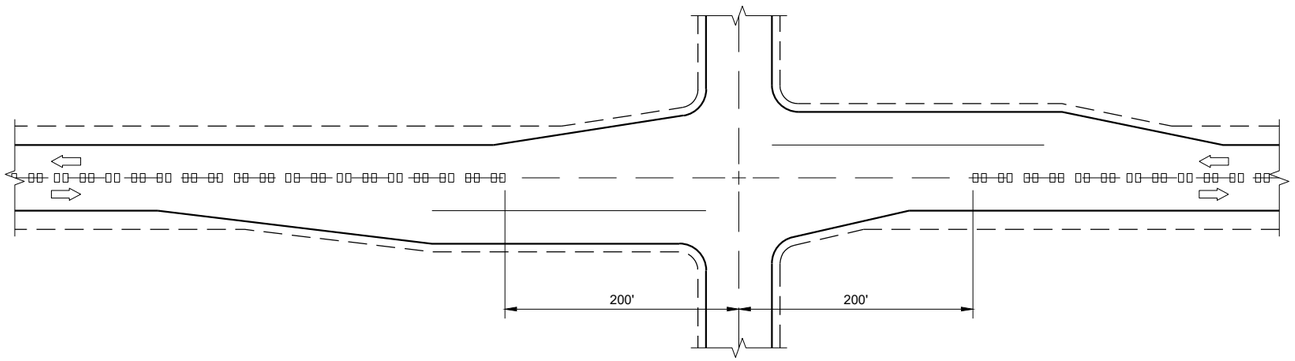
SDD 13A11 - 04a

6

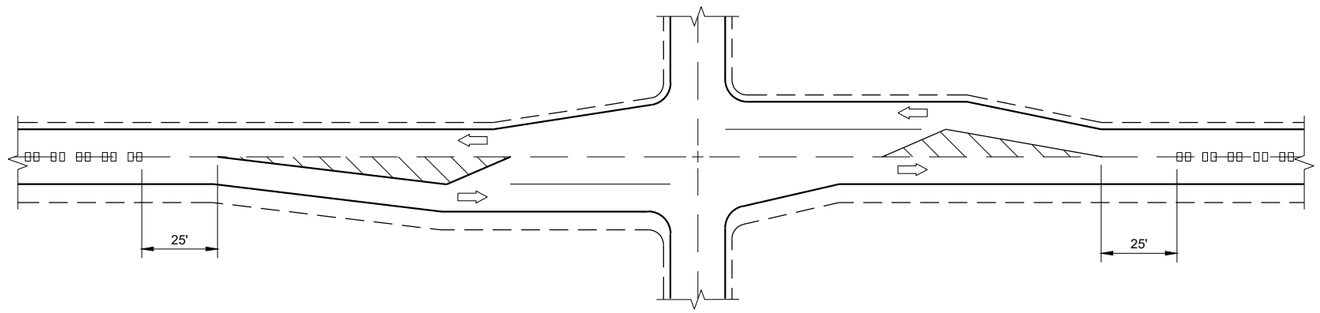
SDD 13A11 - 04a

CENTERLINE RUMBLE STRIPS - ASPHALT

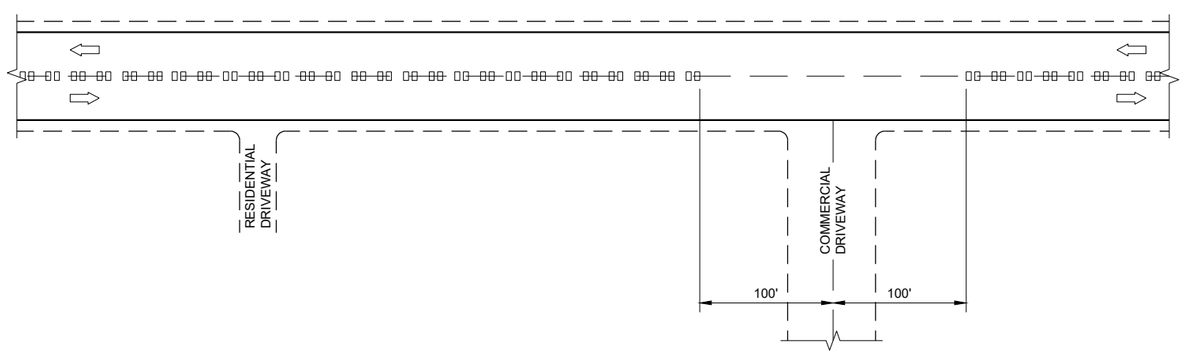
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



CENTERLINE GROOVES AT INTERSECTIONS



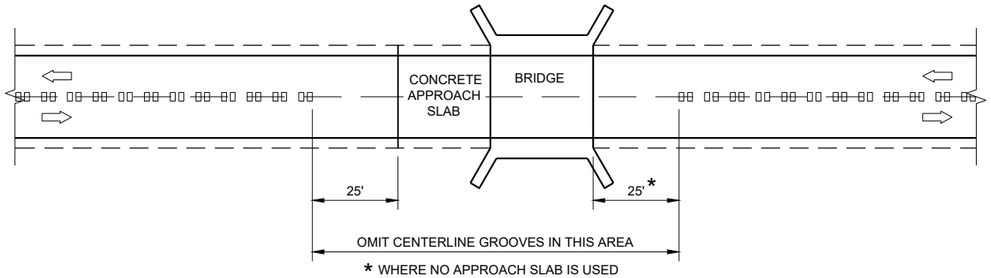
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



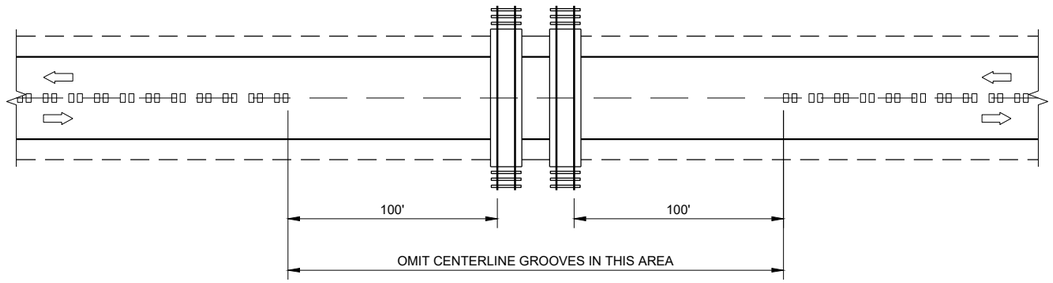
CENTERLINE GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

CENTER LINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAIL ROADS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

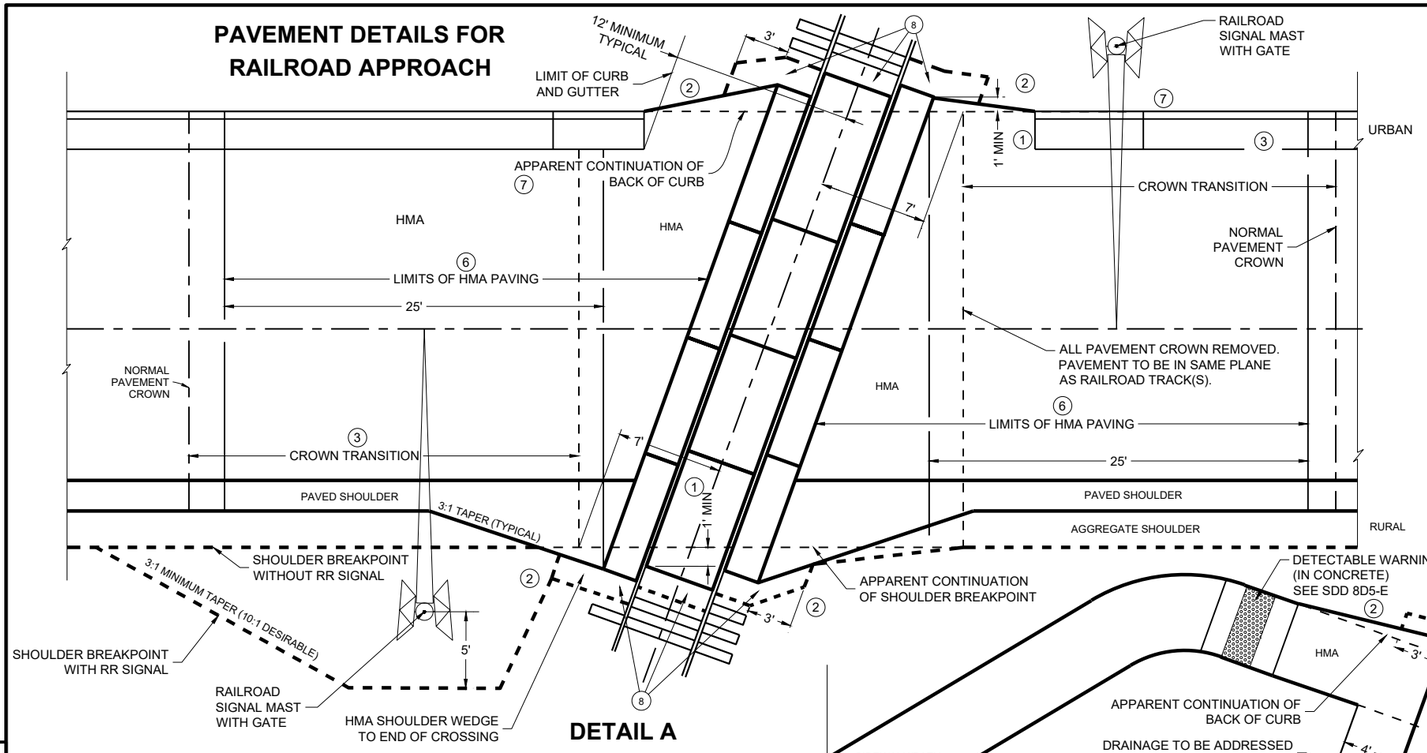
APPROVED
May 2023 — DATE
/S/ John Jenkins — ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 13A11 - 04d

PAVEMENT DETAILS FOR RAILROAD APPROACH

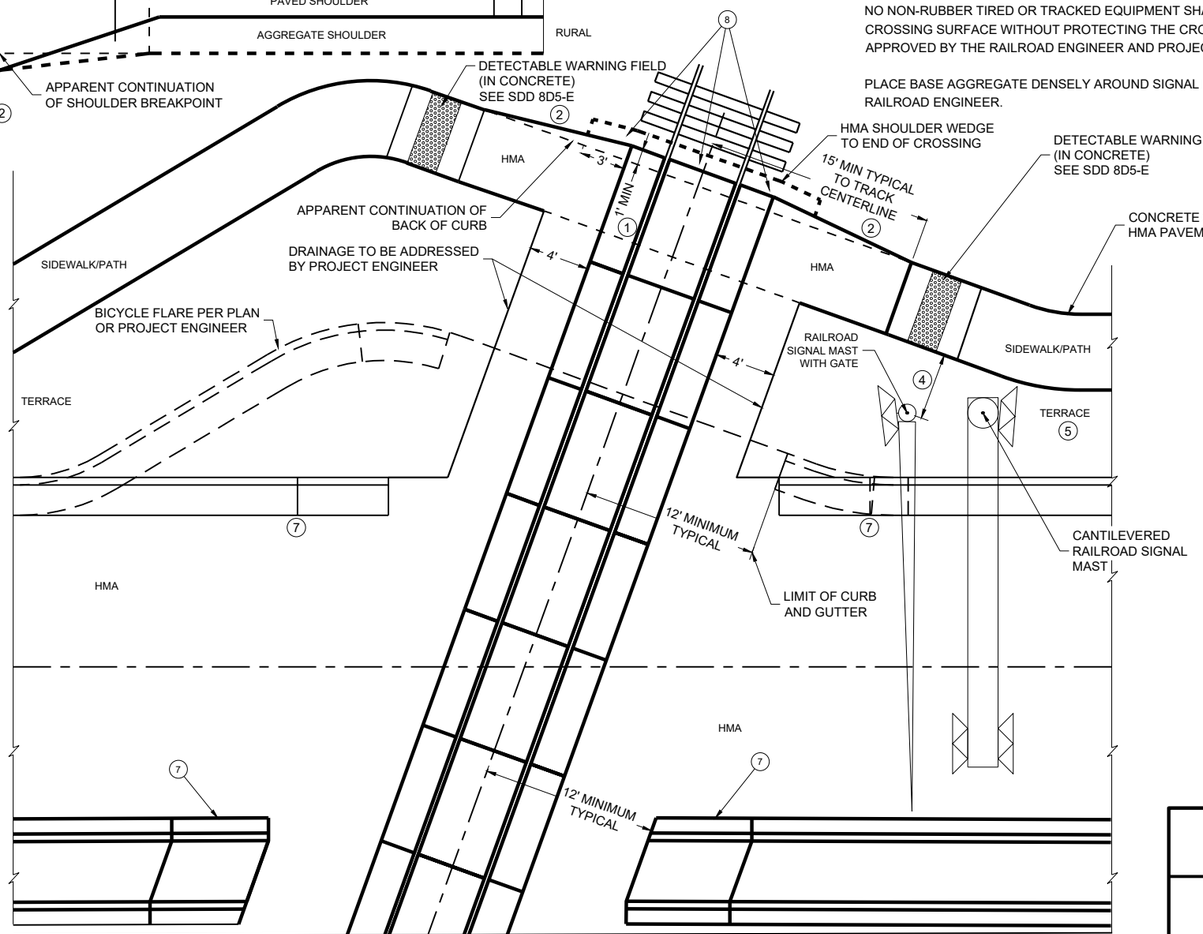


DETAIL A

RAILROAD APPROACH

GENERAL NOTES CONTINUED

1. 1' MINIMUM CROSSING SURFACE COVERAGE PAST THE APPARENT CONTINUATION OF SHOULDER BREAKPOINT, BACK OF CURB, OR OUTSIDE EDGE OF SIDEWALK/PATH. INDIVIDUAL RAILROADS MAY HAVE DIFFERENT MINIMUM STANDARDS.
2. HMA FLARE FROM OUTSIDE EDGE OF SIDEWALK/PATH, BACK OF CURB, OR AGGREGATE SHOULDER BREAKPOINT TO THE END OF CROSSING SURFACE MATERIAL.
3. CROWN TRANSITION LENGTH SHOWN ELSEWHERE IN THE PLAN.
4. NEAR EDGE OF PATH TO THE CENTER OF SIGNAL OR GATE MAST SHOULD BE A MINIMUM OF 5'-0". FOR SIDEWALK, THE NEAR EDGE SHOULD BE A MINIMUM OF 3'-0" TO THE CENTER OF SIGNAL OR GATE. NEAR EDGE OF SIDEWALK TO A NON-GATED MAST OR CANTILEVER SHOULD BE A MINIMUM OF 2'-6". SEE PLAN FOR RAILROAD SIGNAL AND GATE LOCATION IF THEY ARE NOT ALREADY INSTALLED.
5. TERRACE WIDTH VARIES. SEE PLAN FOR RAILROAD SIGNAL AND GATE LOCATIONS. PER PLAN OR PROJECT ENGINEER THE TERRACE AND SIDEWALK/PATH GRADES SHALL BE TRANSITIONED TO MATCH THE GRADE OF THE TRACK. FIELD FIT TO AVOID PONDING.
6. 25' MINIMUM HMA PAVING MEASURED PARALLEL TO THE ROAD OR 10' MINIMUM MEASURED PERPENDICULAR TO THE TRACK FROM THE EDGE OF THE CROSSING SURFACE, WHICHEVER IS GREATER.
7. REFERENCE SDD 8-D-01 END SECTION CURB AND GUTTER. MEDIAN END NEAR THE TRACK SHOULD BE PARALLEL TO THE TRACK. 6'-0" TAPER FOR A MEDIAN SHOULD BE REDUCED TO GET FULL HEIGHT CURB WHERE THE GATE COMES DOWN. DESIGN OPTION TO POUR MEDIAN TAPER IN ONE PIECE. BUILD PER PLAN UNLESS OTHERWISE APPROVED BY THE RAILROAD ENGINEER AND THE PROJECT ENGINEER.
8. IF METAL END PLATES ARE NOT INSTALLED BY THE RAILROAD THEN HMA PAVEMENT WEDGE SHALL BE PLACED AT THE END OF THE LAST PANEL TAPERED TO BACK EDGE OF NEXT TIE AND THOROUGHLY COMPACTED. SEE DETAIL G.



DETAIL B

MEDIAN AND SIDEWALK/SHARED-USE PATH APPROACH

GENERAL NOTES

PLANS AND SECTIONS ARE TYPICAL. DIMENSIONS VARY PER PROJECT.

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

CROSSING SURFACE MATERIAL, RAILS, TIES, BALLAST, AND CROSSING DRAINAGE SYSTEM BY OTHERS UNLESS DIRECTED OTHERWISE. IF THE FINAL GRADES DON'T MATCH TO THE PLAN GRADES THEN GRADE ADJUSTMENTS WILL BE NECESSARY. CONFIRM NEW GRADES WITH PROJECT ENGINEER.

HMA PAVEMENT APPROACHES, HMA PAVEMENT CROSSING SURFACES, AND HMA FLANGEWAY/FIELD FILLERS TO BE REPLACED BY ROADWAY CONTRACTOR UNLESS DIRECTED OTHERWISE BY THE PLANS, SPECIAL PROVISIONS, RAILROAD ENGINEER, OR PROJECT ENGINEER.

HMA PAVEMENT SHALL BE ROLLED PARALLEL TO THE TRACK.

WHEN THERE IS A SIDEWALK OR SHARED-USE PATH, ADD DETECTABLE WARNING FIELDS PER CURRENT STANDARD DETAIL DRAWING 8D5-E.

THE CROSSING SHALL NOT BE OPENED TO ANY TYPE OF TRAFFIC UNTIL IT IS FULLY PAVED AND COOLED SUFFICIENTLY UNLESS OTHERWISE APPROVED BY THE RAILROAD ENGINEER AND THE PROJECT ENGINEER.

NO NON-RUBBER TIRED OR TRACKED EQUIPMENT SHALL CROSS OR SIT ON THE CROSSING SURFACE WITHOUT PROTECTING THE CROSSING SURFACE WITH A METHOD APPROVED BY THE RAILROAD ENGINEER AND PROJECT ENGINEER.

PLACE BASE AGGREGATE Ddensely AROUND SIGNAL BASE. COORDINATE WITH THE RAILROAD ENGINEER.

PAVEMENT DETAILS FOR RAILROAD APPROACH

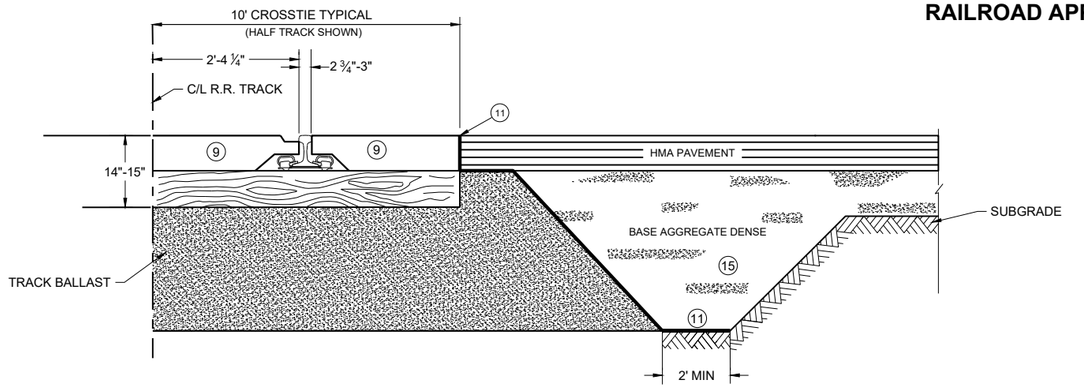
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

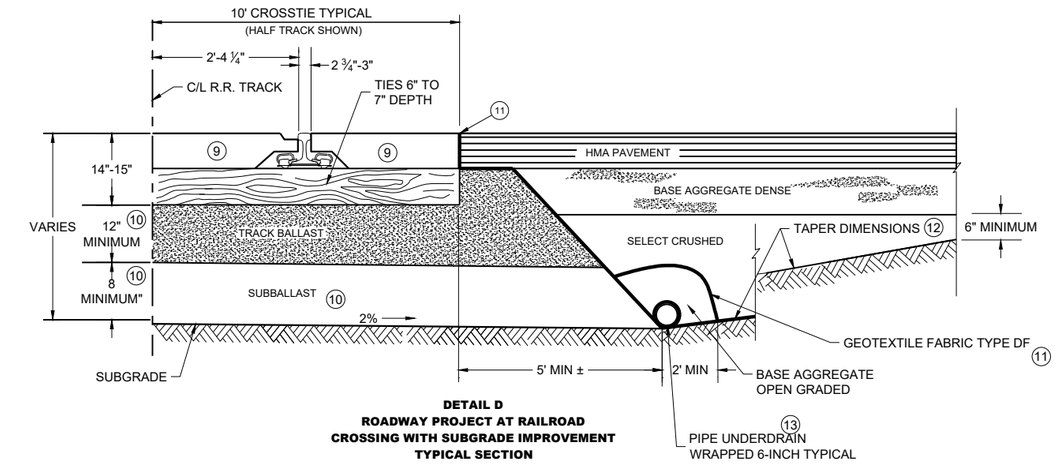
/S/ Kristen Sommers
STATE RAILROAD ENGINEERING AND SAFETY SUPERVISOR

FHWA

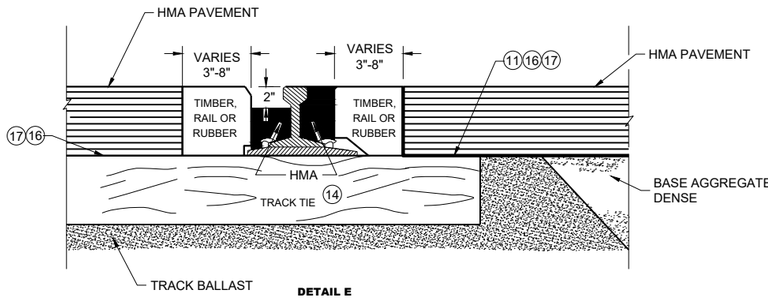
TYPICAL SECTIONS FOR RAILROAD APPROACH



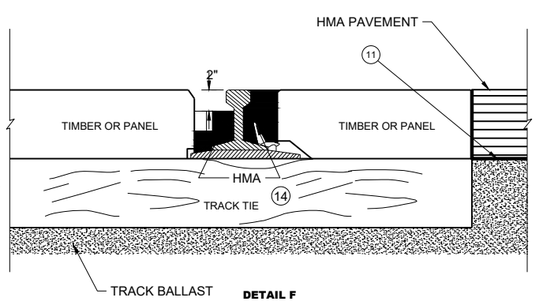
DETAIL C
ROADWAY PROJECT AT RAILROAD
CROSSING WITHOUT SUBGRADE IMPROVEMENT
TYPICAL SECTION



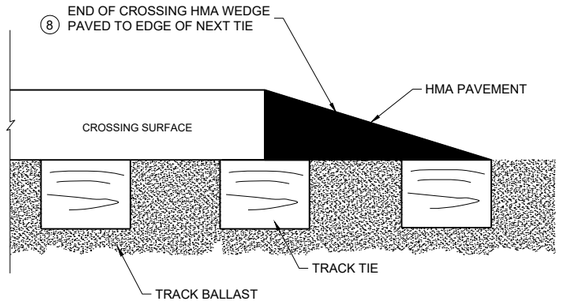
DETAIL D
ROADWAY PROJECT AT RAILROAD
CROSSING WITH SUBGRADE IMPROVEMENT
TYPICAL SECTION



DETAIL E
TIMBER, RAIL OR RUBBER SECTION
HMA FLANGEWAY
AND FIELD FILLERS



DETAIL F
PANEL SECTION
HMA FLANGEWAY
AND FIELD FILLERS



DETAIL G
END OF CROSSING HMA WEDGE

GENERAL NOTES

(8) IF METAL END PLATES ARE NOT INSTALLED BY THE RAILROAD THEN HMA PAVEMENT WEDGE SHALL BE PLACED AT THE END OF THE LAST PANEL TAPERED TO BACK EDGE OF NEXT TIE AND THOROUGHLY COMPACTED. SEE DETAIL A AND B.

(9) MATCH THE CROSSING TYPE THAT IS INSTALLED UNLESS OTHERWISE DIRECTED BY PROJECT ENGINEER.

(10) TRACK BALLAST AND SUBBALLAST REQUIRED 12" AND 8" MINIMUM DEPTHS RESPECTIVELY. DIMENSION FROM BOTTOM OF TRACK TIE TO HIGH SIDE OF 2% SLOPE. THE 2% SLOPE IS REQUIRED ON RAILROAD SUBBALLAST. SEE PLAN FOR CROWN, MATERIAL THICKNESS, AND SLOPE DIRECTION. SUBBALLAST CAN BE HMA, 1 1/2" BASE AGGREGATE DENSE, SELECT CRUSHED, OR A COMBINATION OF THEM.

(11) GEOTEXTILE FABRIC TYPE SAS PLACED IN ORDER TO PROVIDE STABILIZATION AND SEPARATION ON TOP OF THE TRACK BALLAST WHERE IT IS UNDER HMA PAVEMENT, BASE AGGREGATE DENSE OR SELECT CRUSHED MATERIAL AND THE FIELD SIDE BALLAST CRIBS. GEOTEXTILE FABRIC TYPE DF PLACED IN ORDER TO PROVIDE STABILIZATION AND SEPARATION UNDER AND AROUND THE PIPE UNDERDRAIN. PLACING GEOTEXTILE FABRIC OR GEOGRID UNDER THE SUBBALLAST IS OPTIONAL.

(12) TAPER DIMENSIONS PROVIDED BY PLAN OR BY PROJECT ENGINEER.

(13) IF SHOWN ON THE PLAN, TYPICAL 6-INCH PERFORATED PVC SCHEDULE 80 PIPE UNDERDRAIN TO BE PLACED ALONG THE TOE OF SLOPE, GRADED TO DRAIN AND DAYLIGHT OR INTO STORM SEWER. BASE AGGREGATE OPEN GRADED OVER PIPE UNDERDRAIN AND THEN WRAPPED IN GEOTEXTILE FABRIC TYPE DF SCHEDULE A IN ORDER TO STABILIZE AND SEPARATE FROM SELECT CRUSHED.

(14) HMA FLANGEWAY AND FIELD FILLERS ARE TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR, WHEN NOT PROVIDED BY OTHERS AS PART OF THE CROSSING SURFACE MATERIAL. IF THE CROSSING SURFACE IS NOT BEING REPLACED, THEN REMOVE AND REPLACE THE HMA FLANGEWAY AND FIELD FILLERS AS DIRECTED BY THE RAILROAD OR PROJECT ENGINEER.

(15) GRADE TO MATCH EXISTING OR PROPOSED TYPICAL SECTION OF ROADWAY. SEE PLAN OR PROJECT ENGINEER FOR MORE DETAIL. IF NOT NOTED OTHERWISE IN THE PLAN, BACKFILL ANY REMOVED BASE AND SUBGRADE WITH BASE AGGREGATE DENSE.

(16) IF THE CROSSING IS NOT BEING REPLACED, REMOVE AND REPLACE HMA AS DIRECTED BY RAILROAD AND PROJECT ENGINEER. CARE MUST BE TAKEN TO NOT DAMAGE CROSSING PANELS, TIES, RAIL, PLATES AND SPIKES.

(17) PLACE HMA FULL DEPTH. AGGREGATE IS NOT TO BE PLACED BETWEEN THE RAILROAD TIES AND THE HMA PAVEMENT.

TYPICAL SECTIONS FOR RAILWAY APPROACH

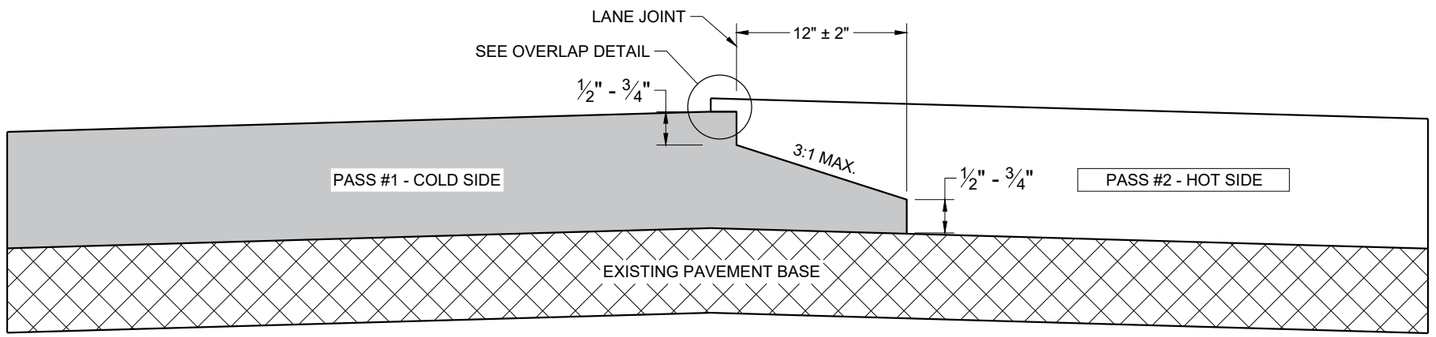
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

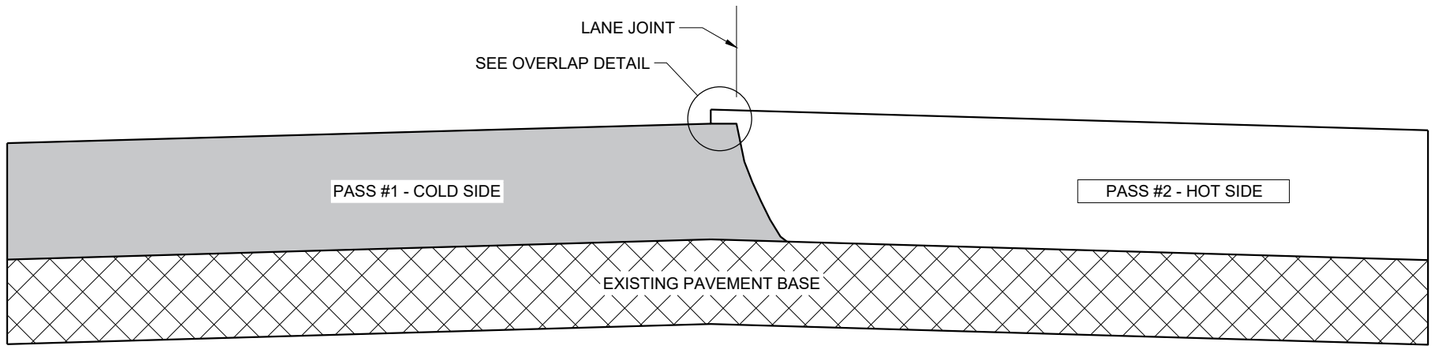
/S/ Kristen Sommers
STATE RAILROAD ENGINEERING AND SAFETY SUPERVISOR

FHWA

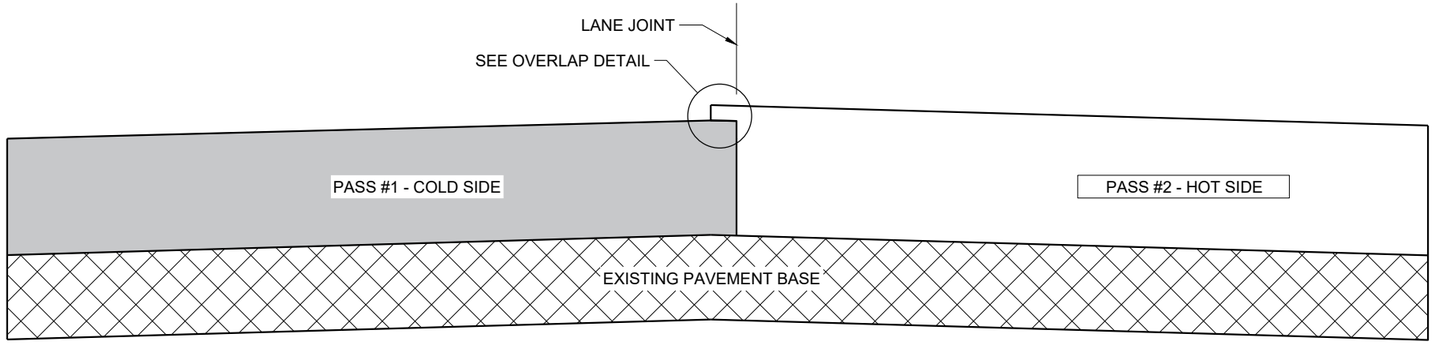
6
SDD 13B01-11b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

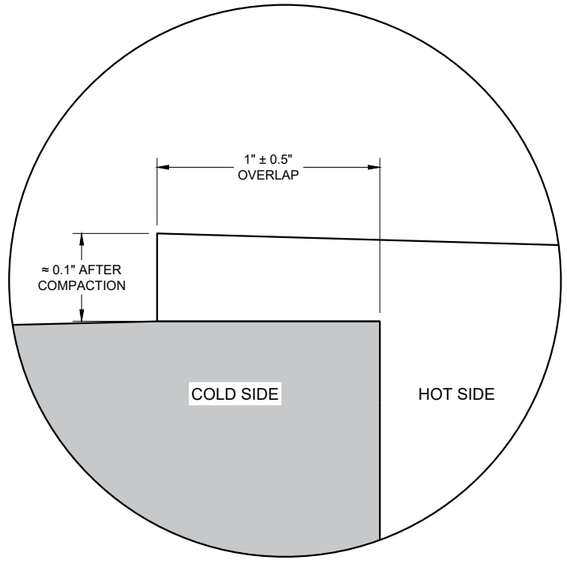
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



OVERLAP DETAIL (TYPICAL)

6

6

SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

GENERAL NOTES

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

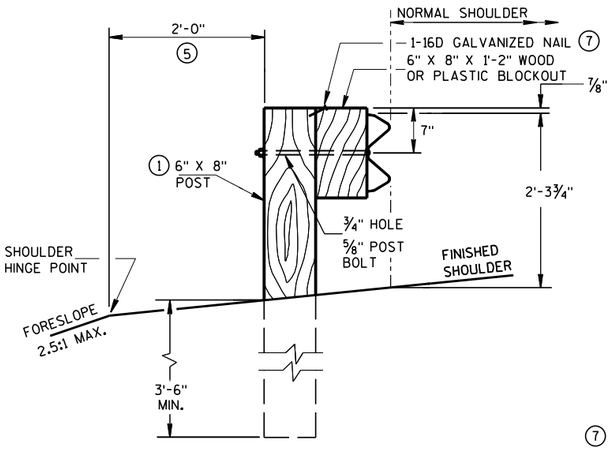
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

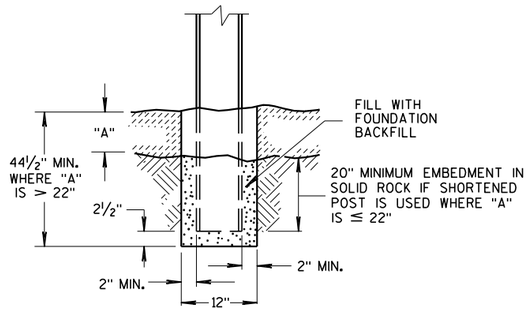
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

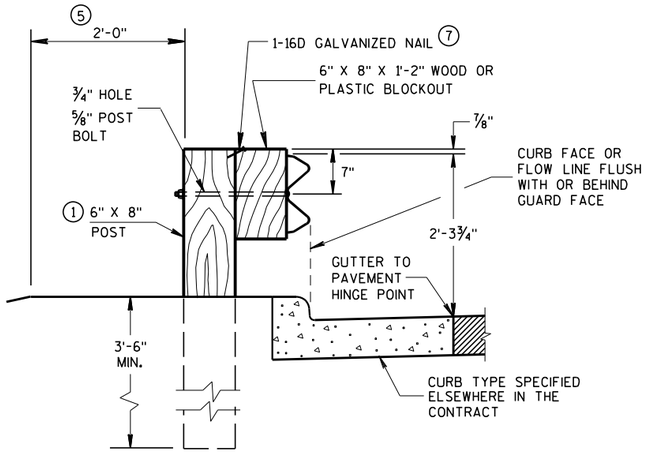
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



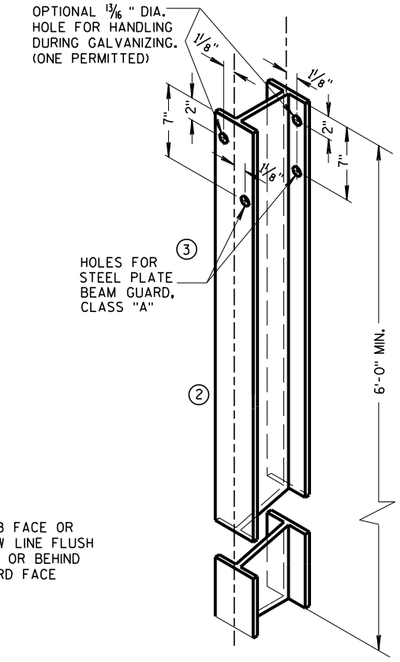
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)

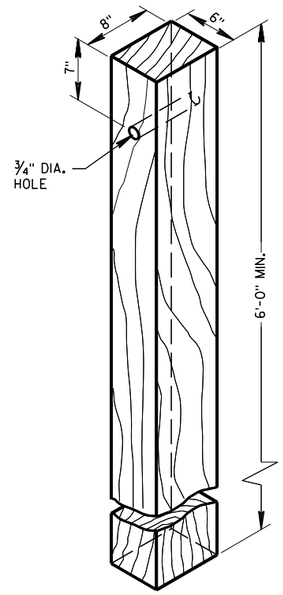


END VIEW
LOCATED ALONG A CURBED ROADWAY

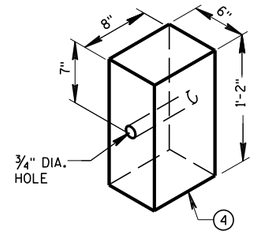


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

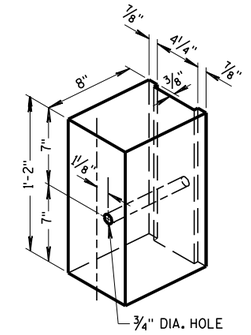
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



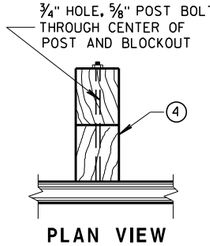
WOOD POST
(6"X8") NOMINAL



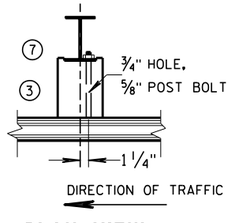
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



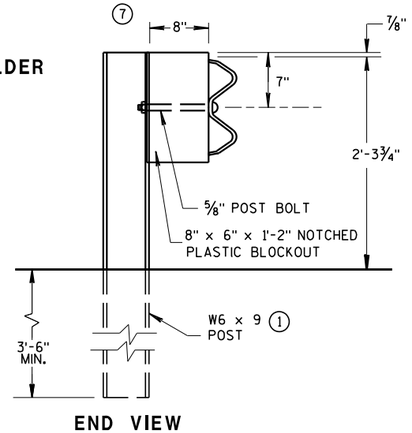
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



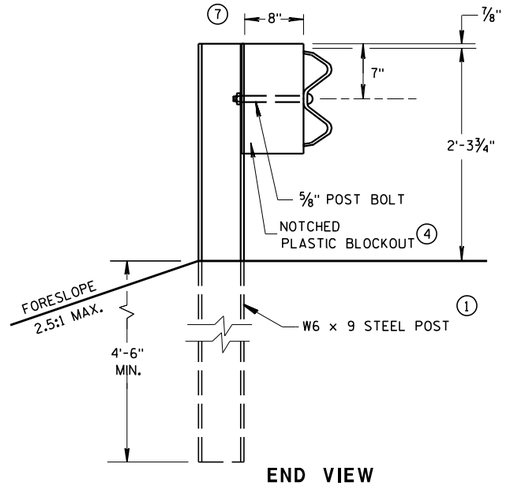
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



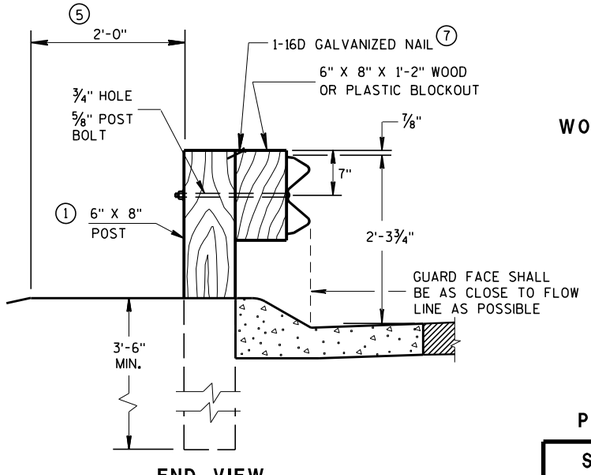
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



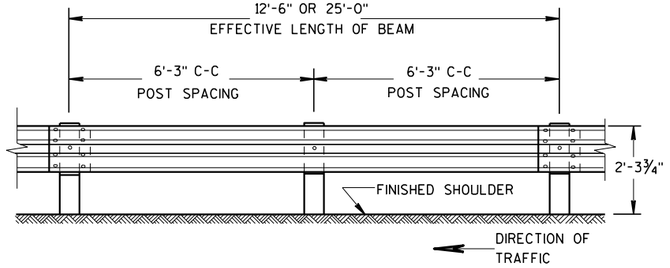
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

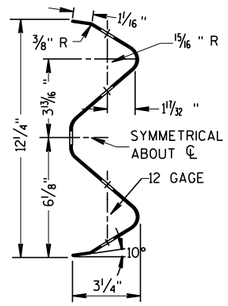
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
S.D.D. 14 B 15-11a

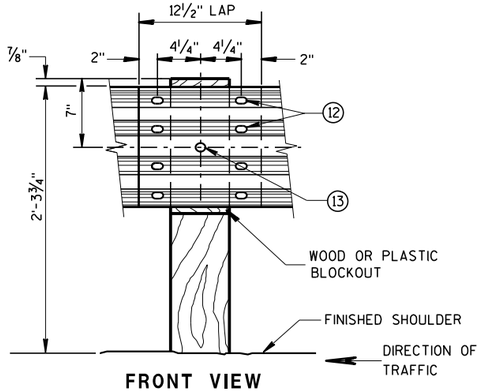


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

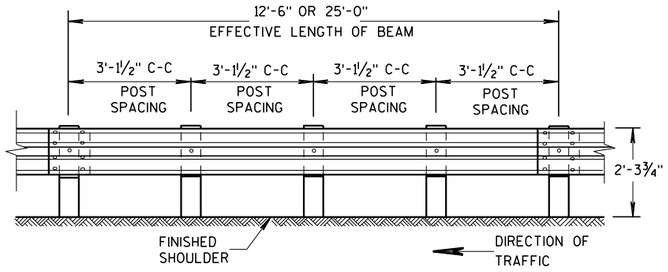
GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINA. START REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 100 FEET (MAX.) TO THE END OF GUARDRAIL RUN, USING A MINIMUM OF 3 REFLECTORS.

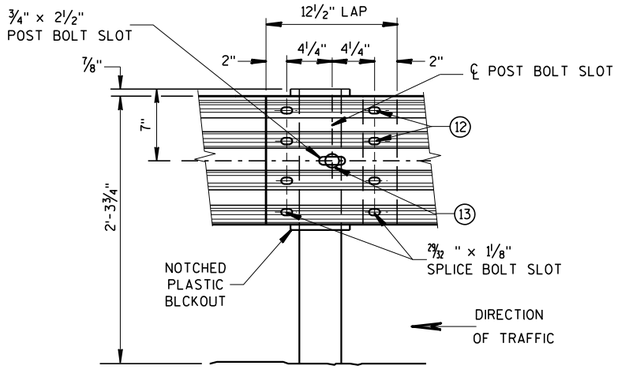
(12) 8 -5/8" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.



FRONT VIEW

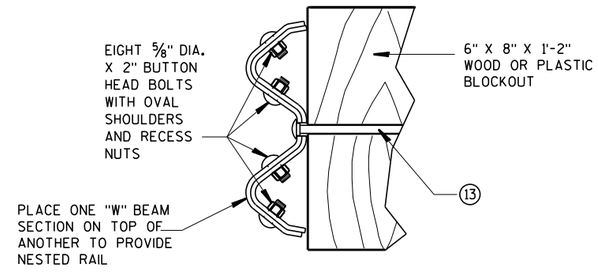
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

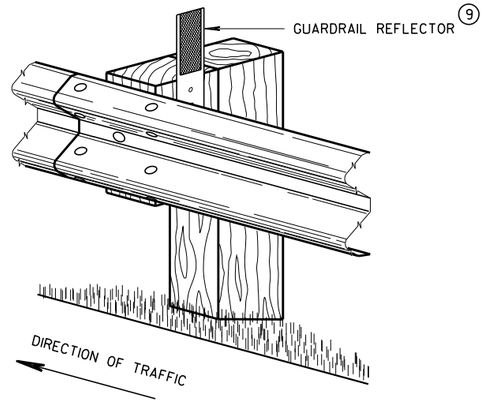
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD



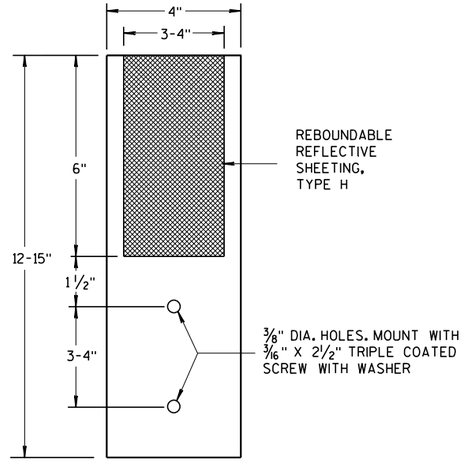
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

* USE DOUBLE SIDED WHITE GUADRAIL REFLECTORS ON ROADWAYS WITH BI-DIRECTIONAL TRAFFIC (NO MEDIAN). USE SINGLE SIDED WHITE (RIGHT SIDE) AND SINGLE SIDED YELLOW (LEFT SIDE) ON ROADWAYS WITH MEDIAN SEPARATION.



4" X 12" GUARDRAIL REFLECTOR DETAIL AND TYPICAL INSTALLATION *



4"x 12" GUARDRAIL REFLECTOR

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCO 118
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 15-11b

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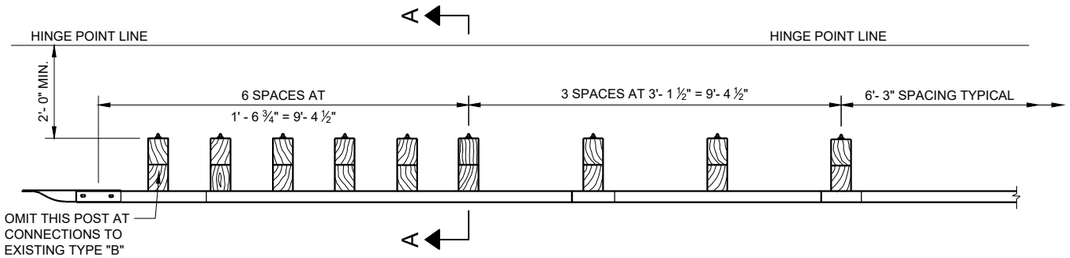
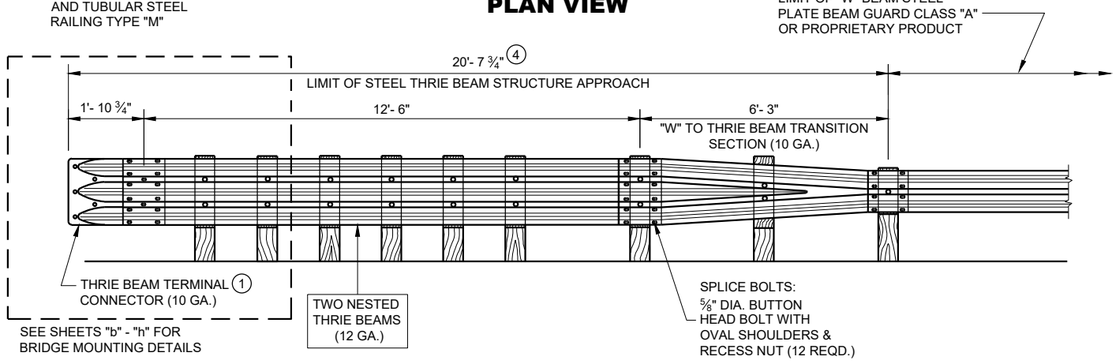
S.D.D. 14 B 15-11b



PLAN VIEW



FRONT VIEW

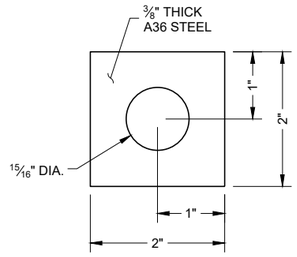


PLATE WASHER DETAIL

GENERAL NOTES

BOLT THE THRIE BEAM TO ALL POSTS AND BLOCKOUTS. DRILL OR PUNCH BOLT HOLES IN THE BEAM IF THE POST SPACING IS LESS THAN 6'-3".

DO NOT USE STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS IN THE STEEL THRIE BEAM STRUCTURAL APPROACH AND THE TRANSITION SECTION OF STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATIONS.

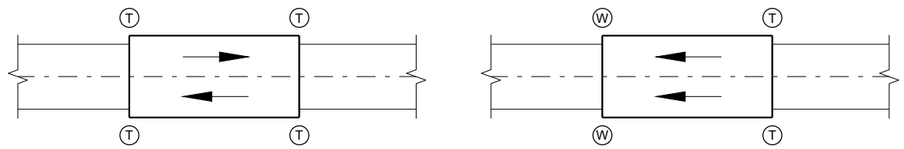
IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2 ½" , AND 12" DIAMETER AROUND POST. SEE 14B15 FOR MORE DETAILS.

(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) MINIMUM EMBEDMENT SHALL BE 4'- 0".

(3) POST BOLTS ARE ⅝" DIAMETER ASTM A307 BUTTON HEAD BOLT. A POST BOLT REQUIRES A ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX AND A ⅝" DIAMETER F844 FLAT WASHER. LENGTH OF POST BOLT MAY VARY.

(4) ALL WOOD POSTS MUST BE 6" X 8" AND AT LEAST 7'-0" LONG.



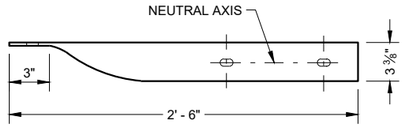
TWO WAY TRAFFIC

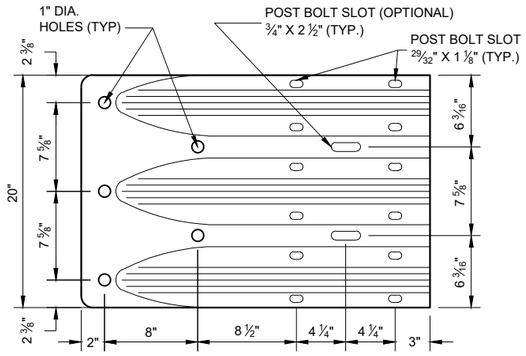
ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

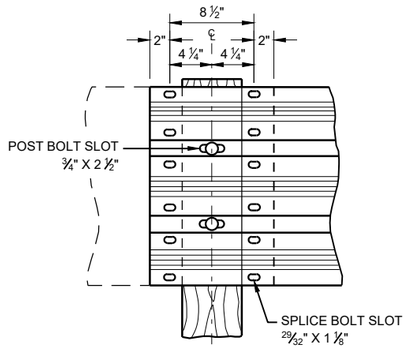
(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

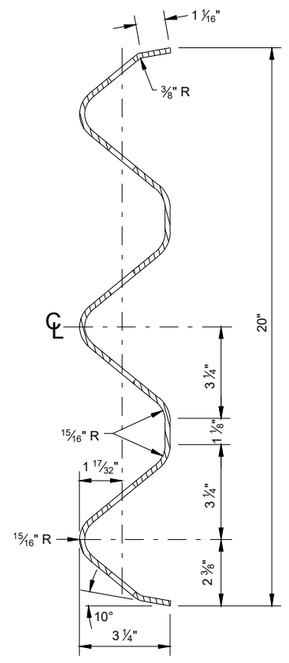




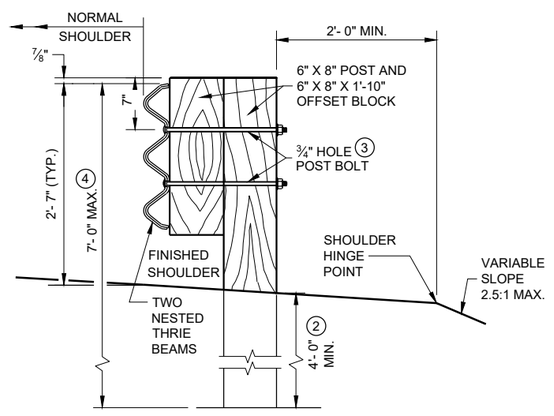
THRIE BEAM TERMINAL CONNECTOR



THRIE BEAM SPLICE



SECTION THRU BEAM RAIL ELEMENT



SECTION A-A

STEEL THRIE BEAM STRUCTURE APPROACH

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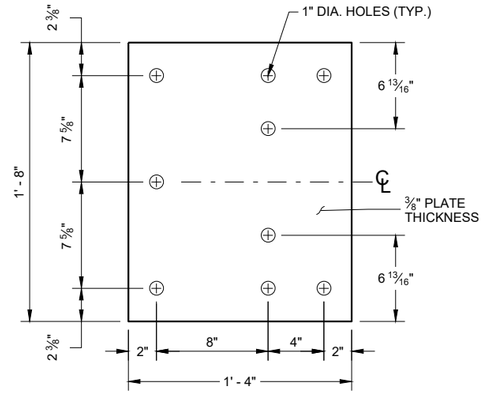
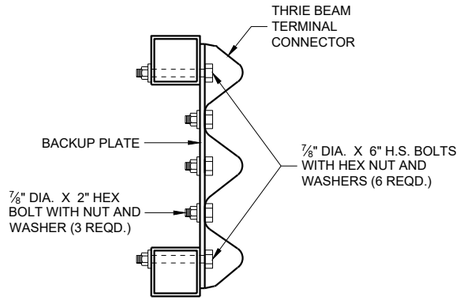
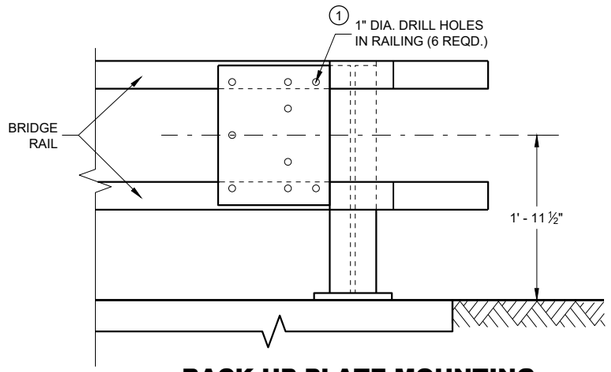


BACK-UP PLATE DETAIL



SECTION G - G



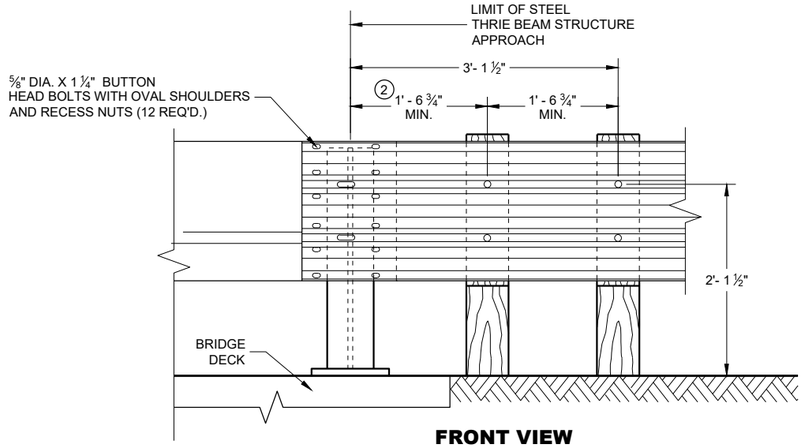
BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

BOLTS, PLATES, NUTS AND WASHERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION A 325 AND BE GALVANIZED IN ACCORDANCE WITH ASTM A 153.

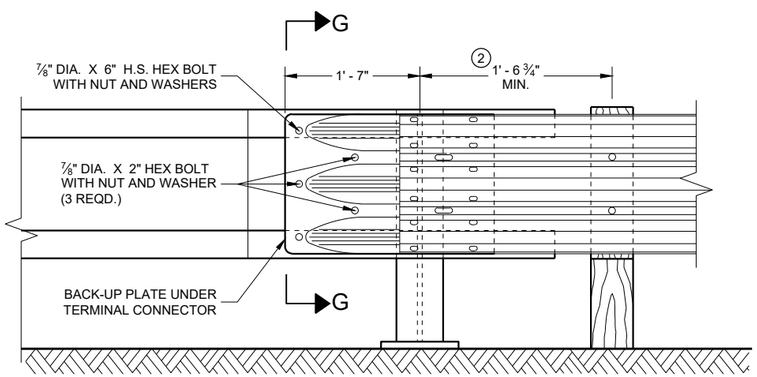
(1) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL AS CLOSE AS FEASIBLE TO THE STEEL END POST.

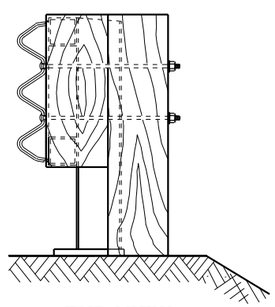


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



END VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPES "F" & "W"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

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6

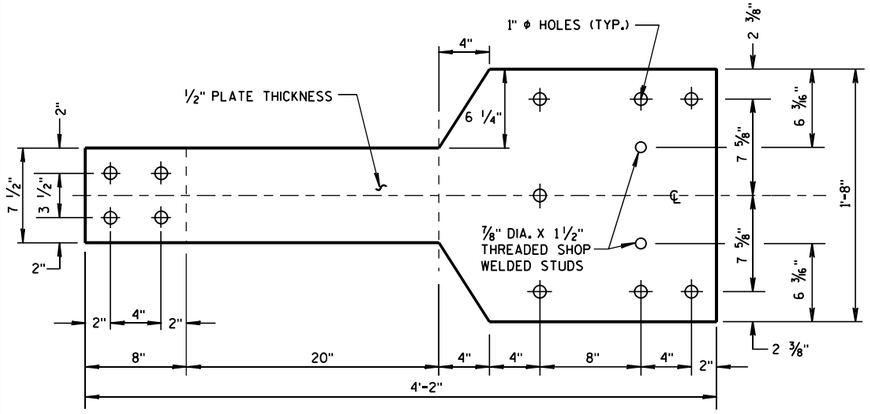
SDD 14B20 - 12e

6

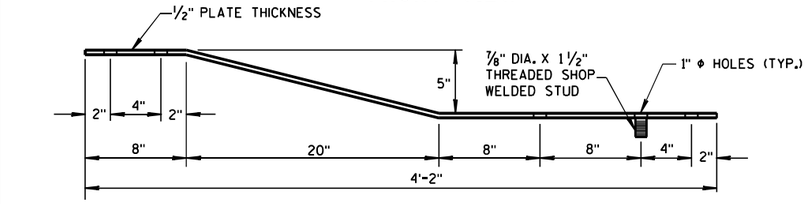
SDD 14B20 - 12e

GENERAL NOTES

① VARY THIS DIMENSION DEPENDING ON ABUTMENT TYPE, WINGWALL DETAILS, AND ANGLE OF SKEW. PLACE THE FIRST WOOD POST OFF THE BRIDGE SHALL BE AS CLOSE AS FEASIBLE TO THE STEEL END POST.

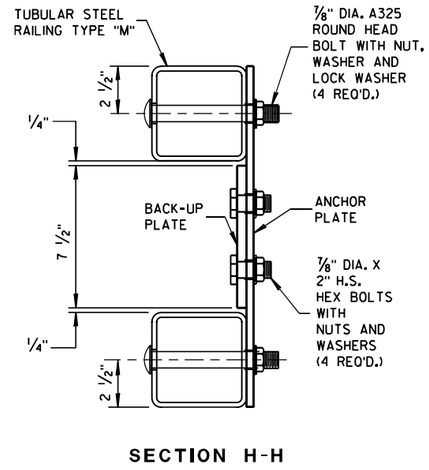


FRONT VIEW

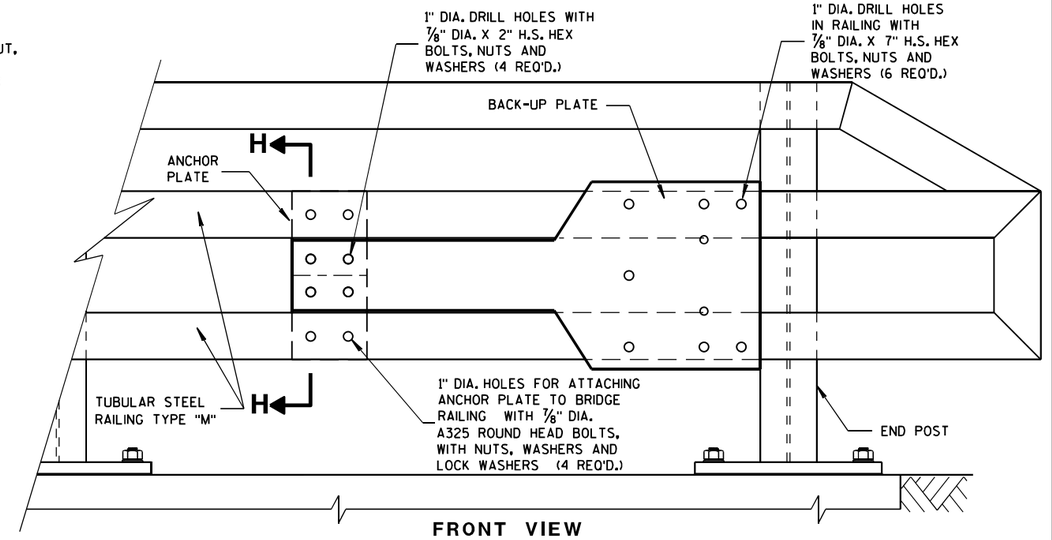


PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

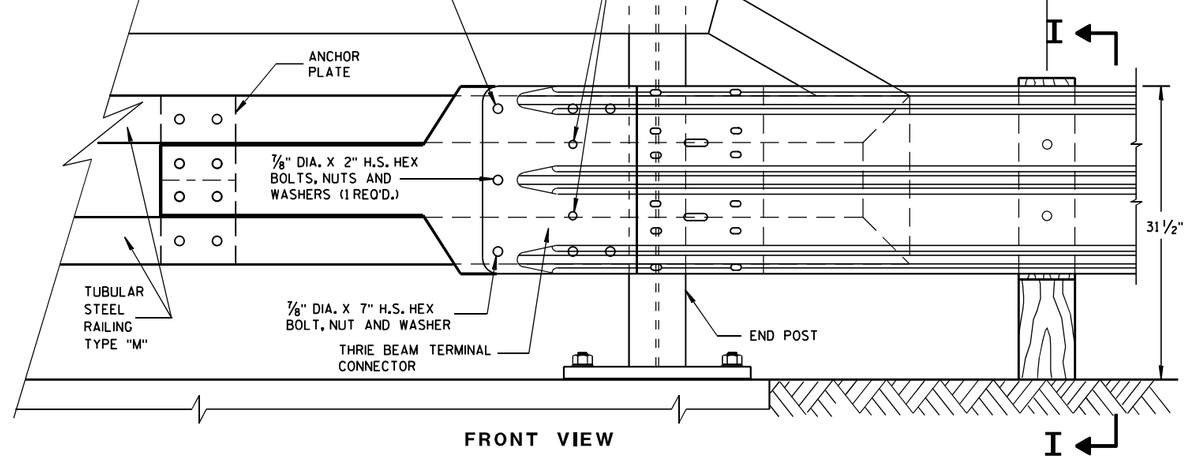


SECTION H-H

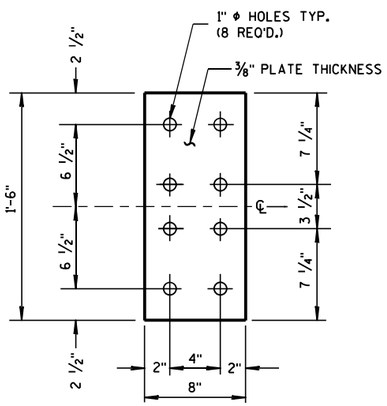


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"

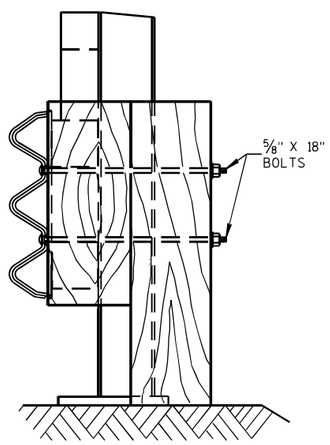


FRONT VIEW

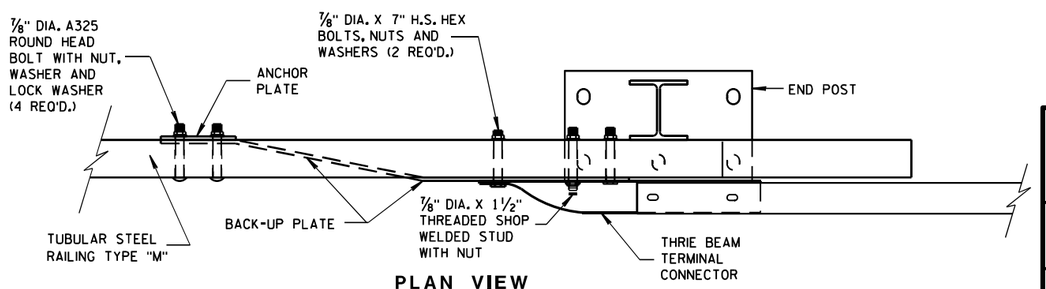


FRONT VIEW

ANCHOR PLATE DETAIL, TYPE "M"



SECTION I-I



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTION TO BRIDGE RAILING TYPE "M"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2022 — DATE
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6

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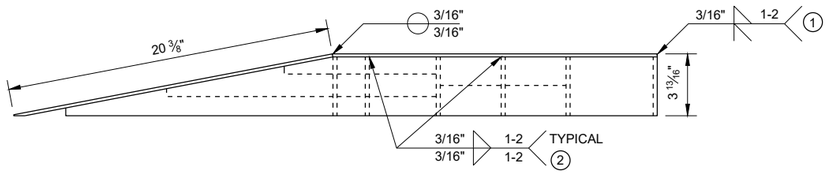

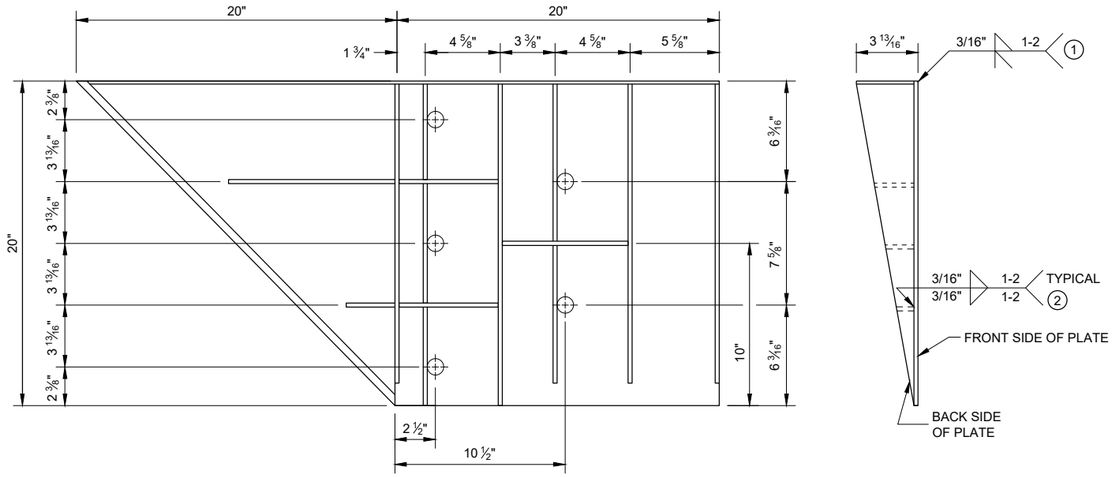

WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

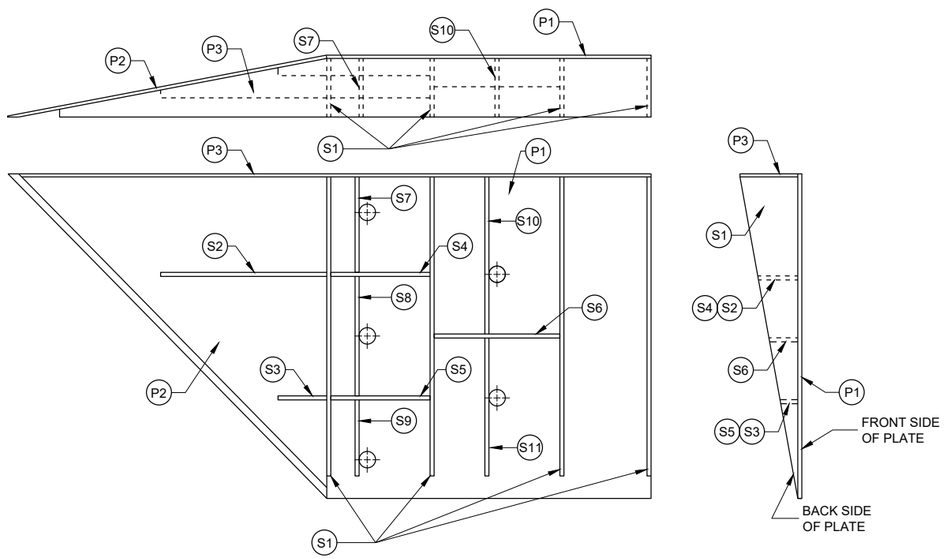

PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION, MIRROR DRAWINGS.

(1) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(2) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".

CONNECTOR PLATED DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 1/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

STEEL THRIE BEAM STRUCTURE APPROACH

STEEL THRIE BEAM STRUCTURE APPROACH, CONNECTOR PLATE DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
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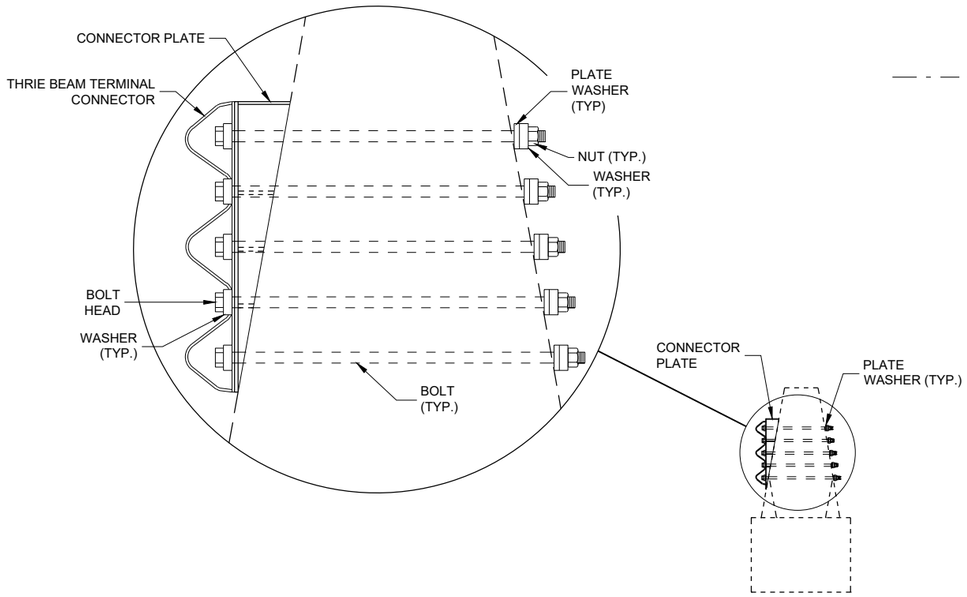
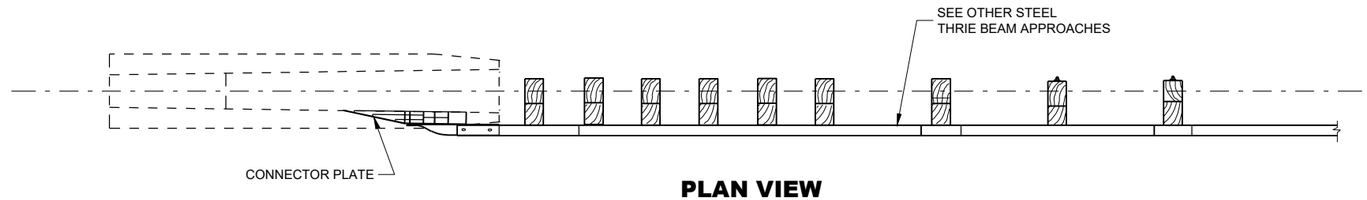
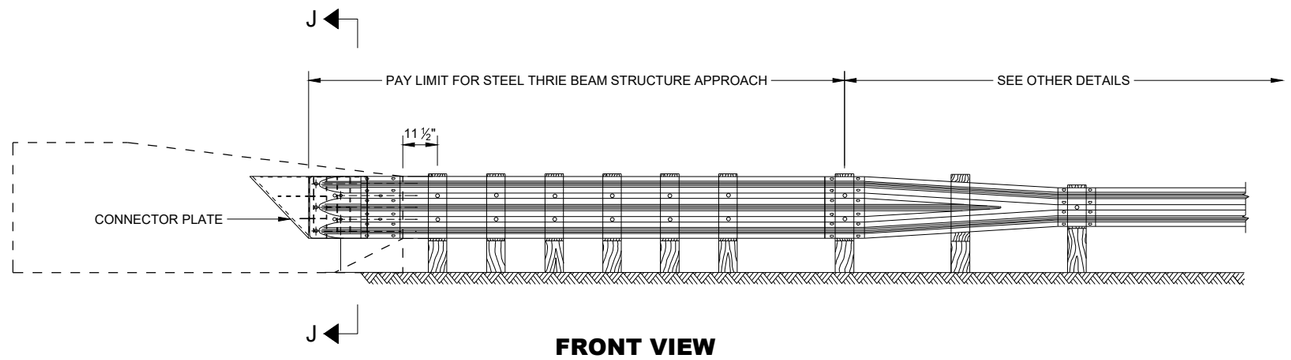
SDD 14B20 - 12g



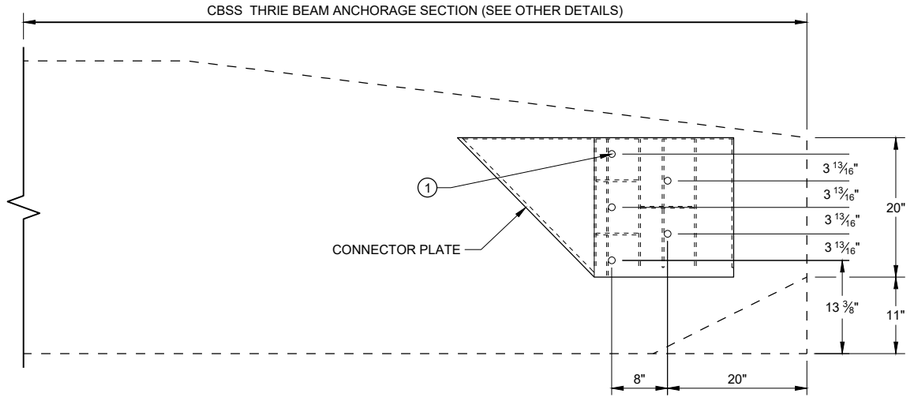
SECTION J - J



PLAN VIEW



FRONT VIEW



CONNECTOR PLATE PLACEMENT

GENERAL NOTES

CONSTRUCT PER STANDARD SPECIFICATION 614.

CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(1) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM TERMINAL CONNECTOR. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X ⅝" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

STEEL THRIE BEAM STRUCTURE APPROACH

MIDWEST GUARDRAIL SYSTEM (MGS) THRIE BEAM TRANSITION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

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6

SDD 14B20 - 12h

6

SDD 14B20 - 12h

BILL OF MATERIALS

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

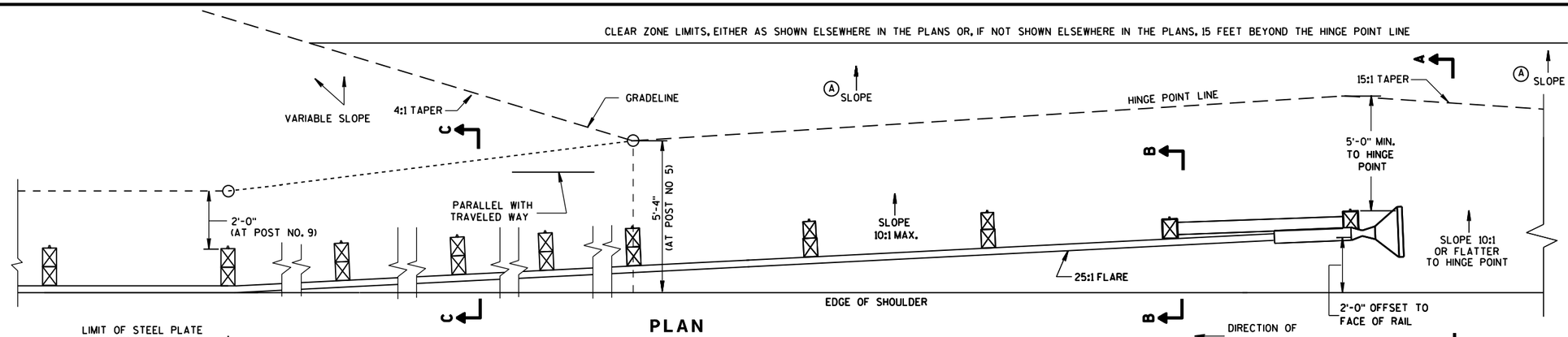
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

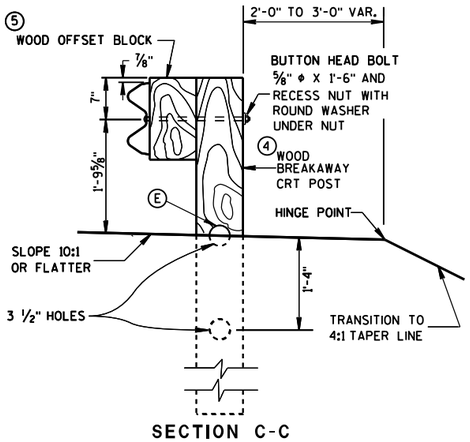
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

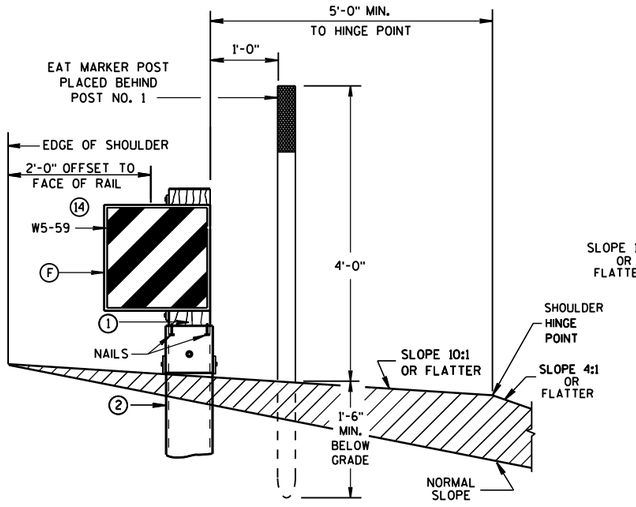
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

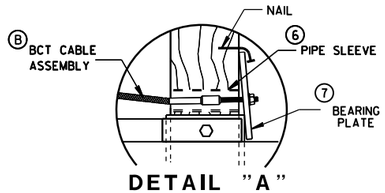




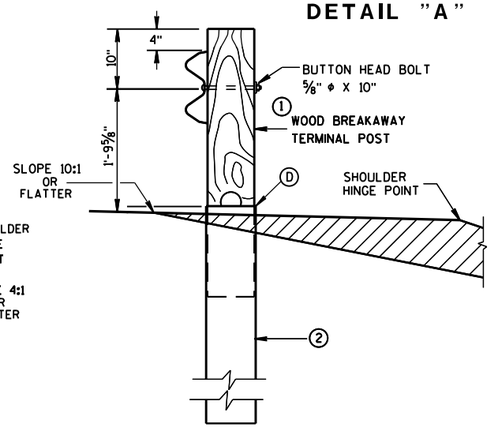
SECTION C-C
TYPICAL AT POST NOS. 6, 8



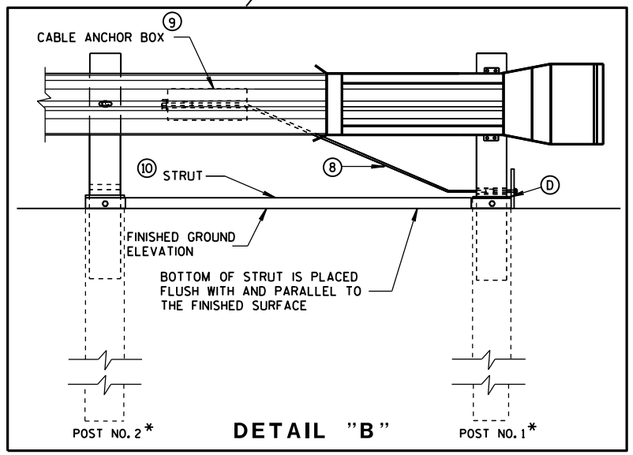
SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



SECTION B-B
TYPICAL AT POST NO. 2*



DETAIL "B"

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

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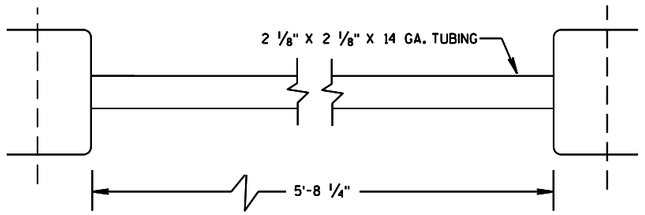
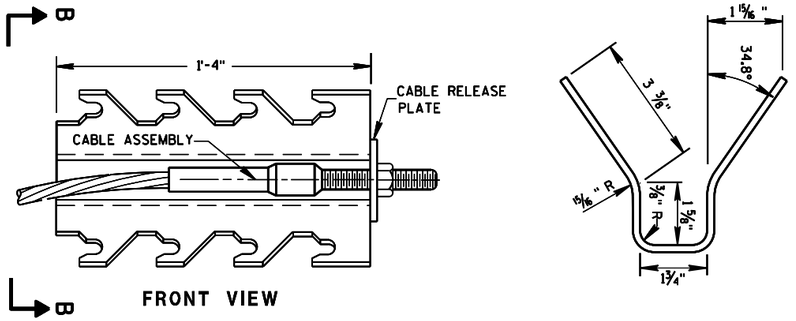
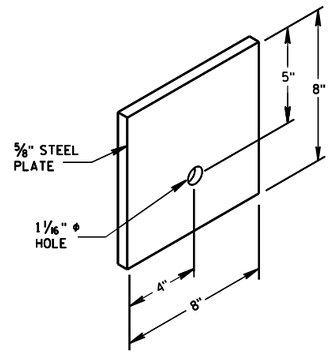


⑩ STRUT DETAIL



⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

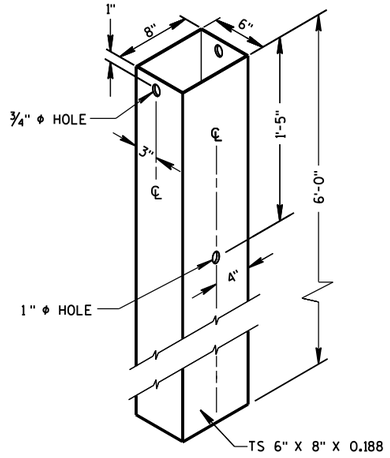
6

S.D.D. 14 B 24-9b

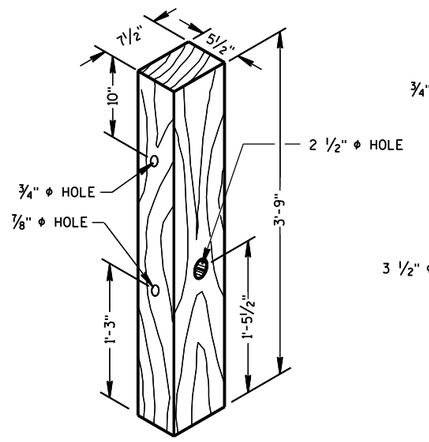
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

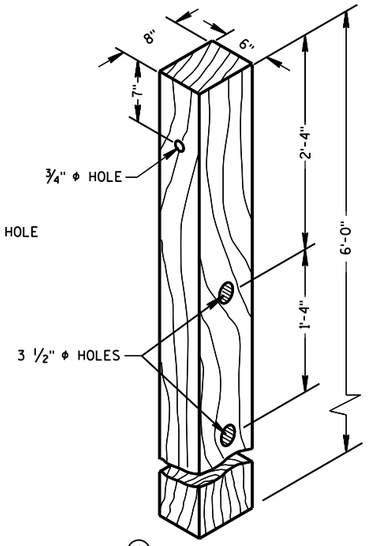
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

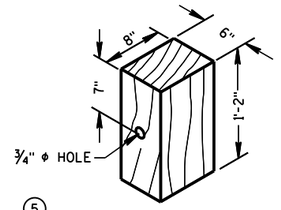


④ CRT POST
(POSTS NO'S 5-8

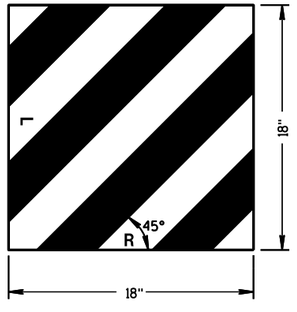
WOOD BREAKAWAY POSTS

GENERAL NOTES

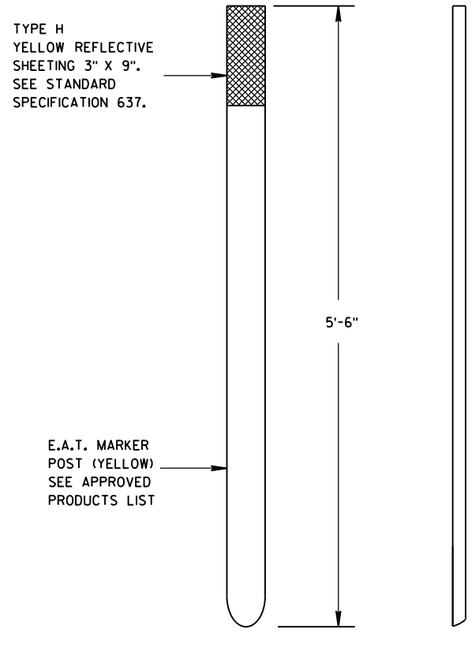
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV...

ENT

6

S.D.D. 14 B 24-9c

6

S.D.D. 14 B 24-9c

(1) WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(2) USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.

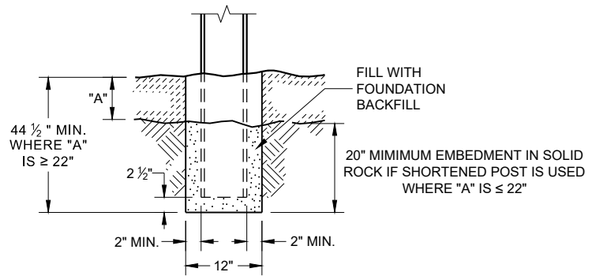
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.

(4) WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).

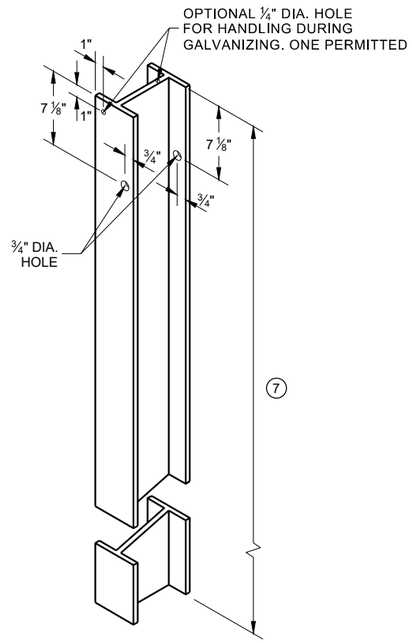
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(6) WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

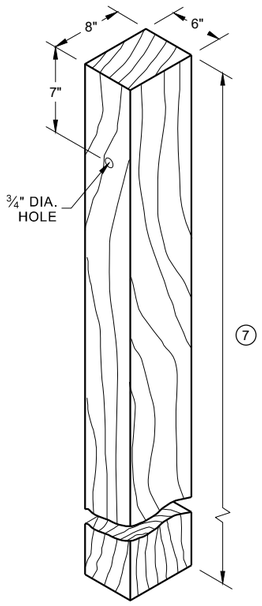
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



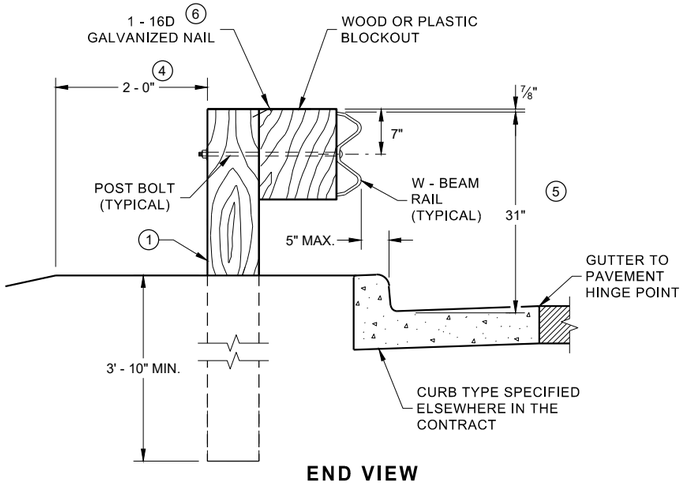
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



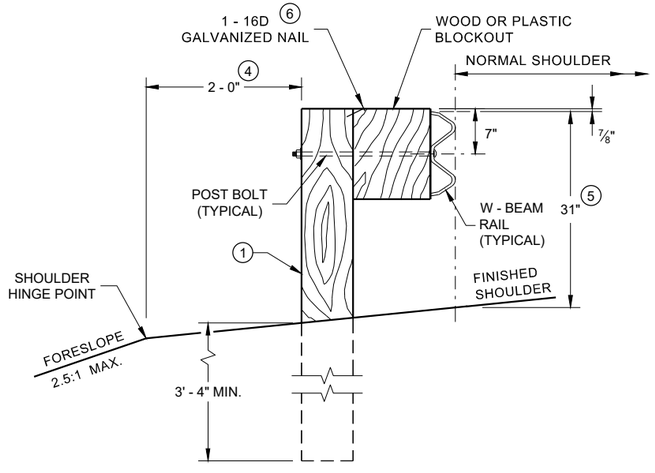
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



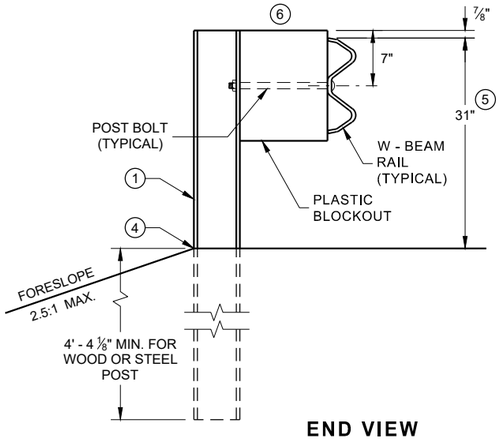
WOOD POST (6" X 8") NOMINAL (1)



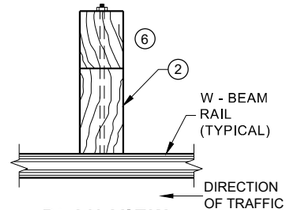
END VIEW
LOCATED ALONG A CURBED ROADWAY



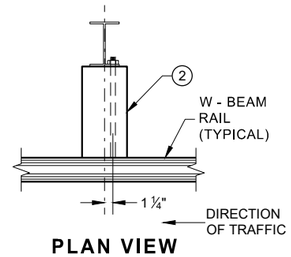
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



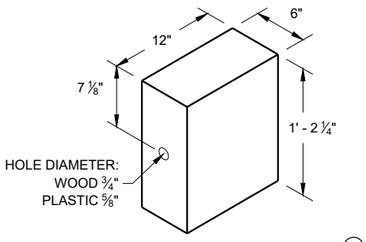
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

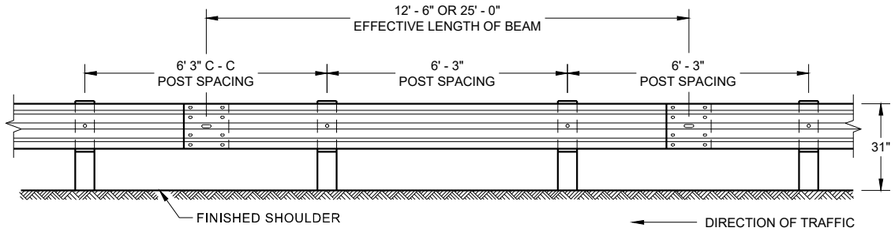
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

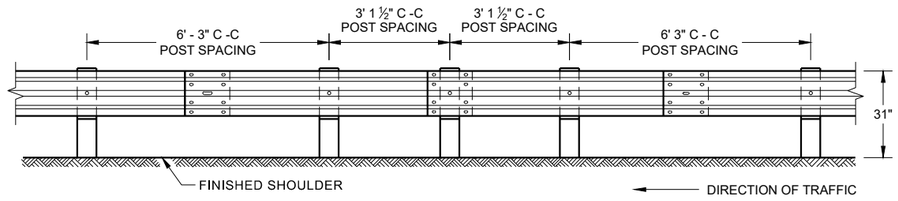
SDD 14B42 - 07a

6

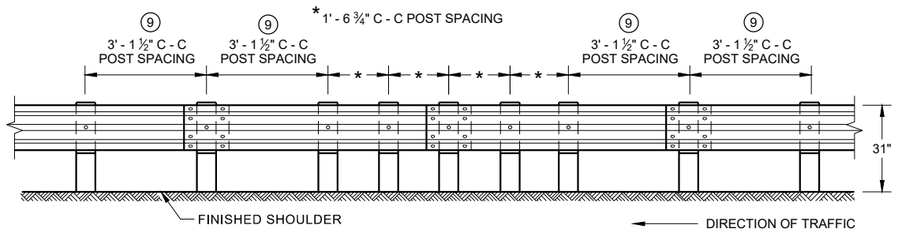
SDD 14B42 - 07a



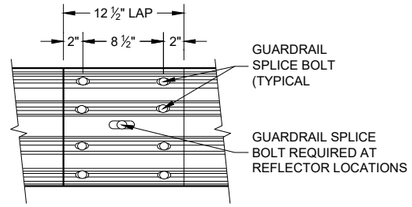
FRONT VIEW
POST SPACING STANDARD INSTALLATION



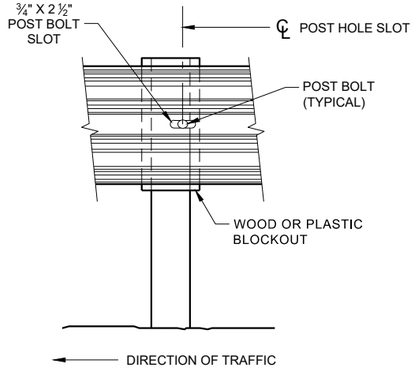
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



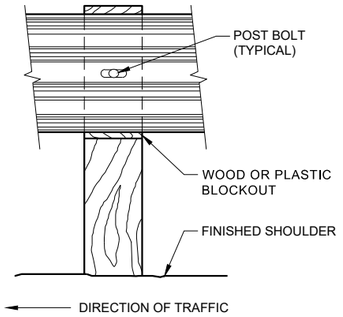
FRONT VIEW
QUARTER POST SPACING (QS)



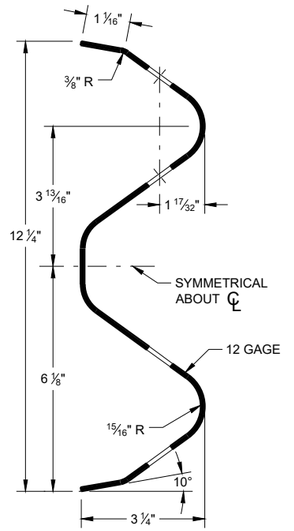
FRONT VIEW
MID-SPAN BEAM SPLICE



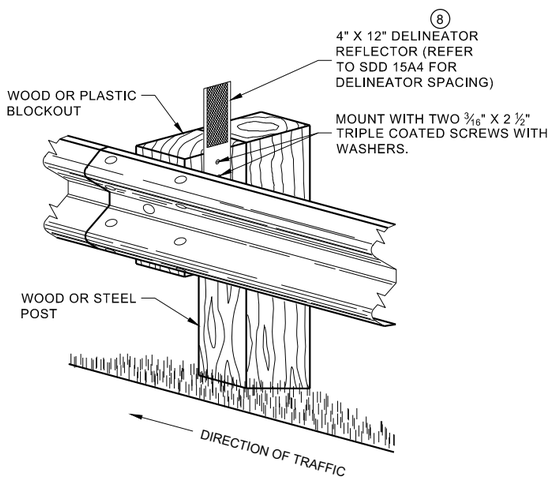
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

GENERAL NOTES

⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND ⅝" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.

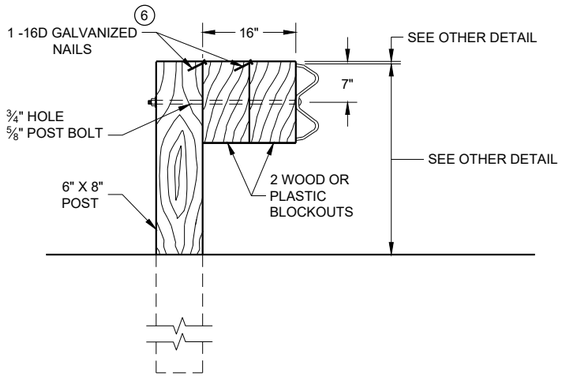
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

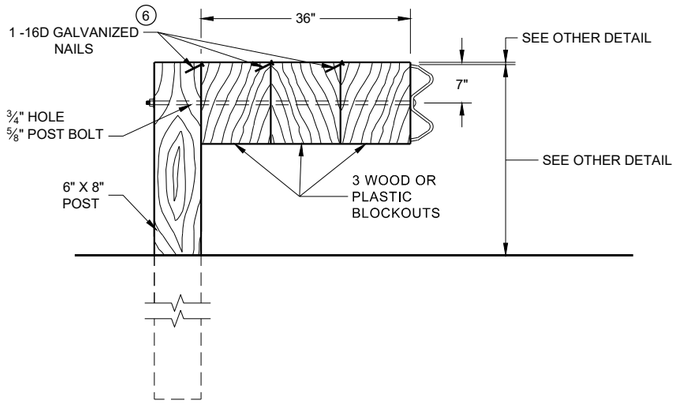
6

SDD 14B42 - 07b
SDD 14B42 - 07b



DETAIL FOR 16" BLOCKOUT DEPTH

IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



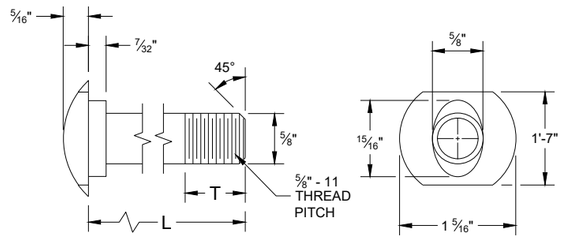
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

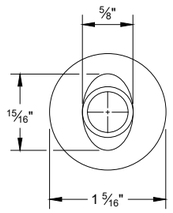
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

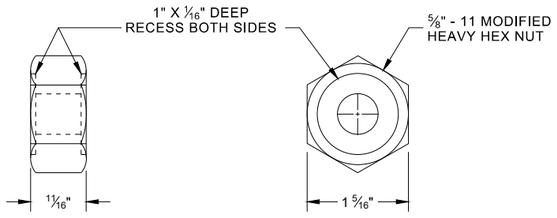


POST BOLT TABLE

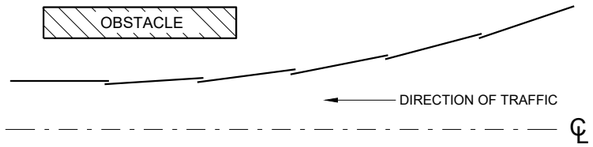
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



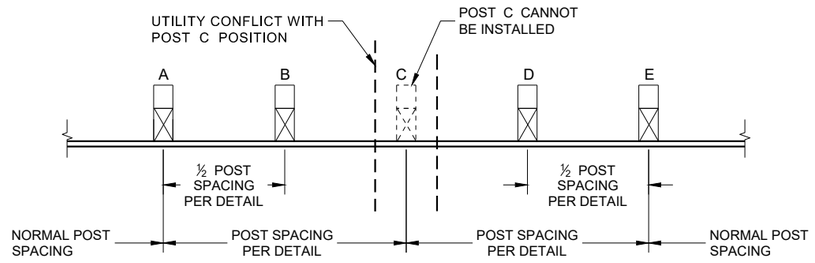
ALTERNATE BOLT HEAD



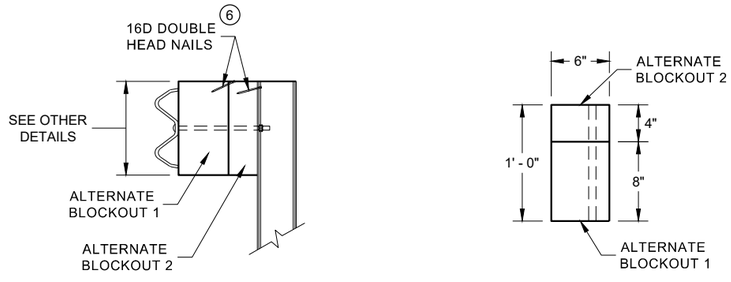
POST BOLT, SPLICE BOLT AND RECESS NUT



PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

(6) WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

6
SDD 14B42 - 07c

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

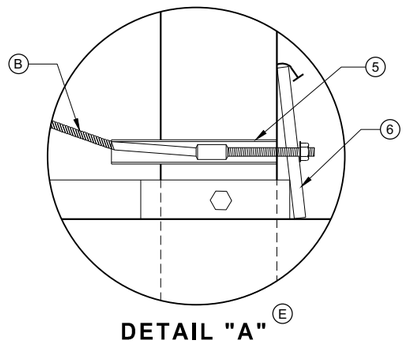
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

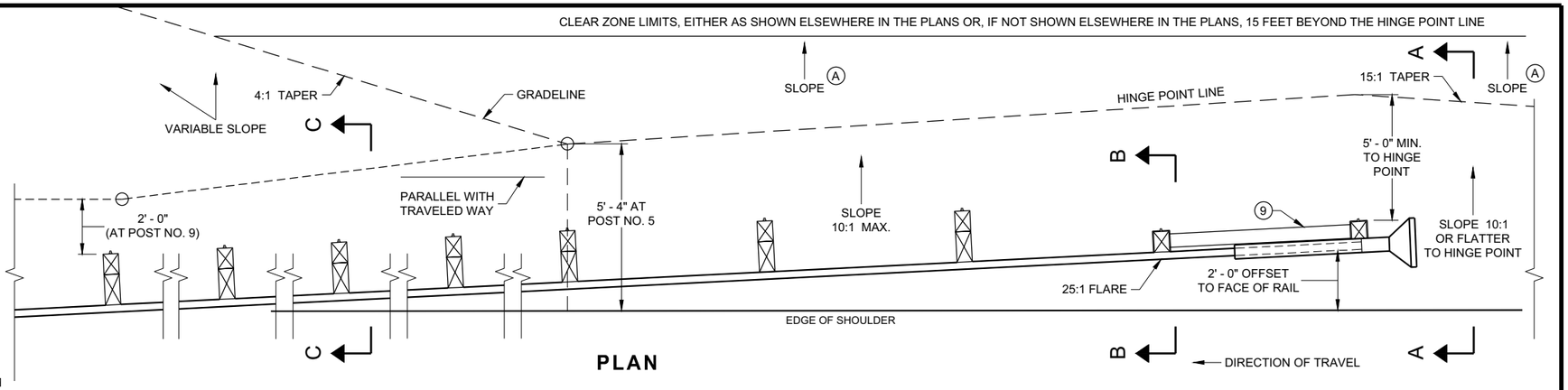
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

SEE MANUFACTURER'S DRAWING FOR SPLICE LOCATION, HARDWARE DIMENSIONS AND INSTALLATION INSTRUCTIONS.

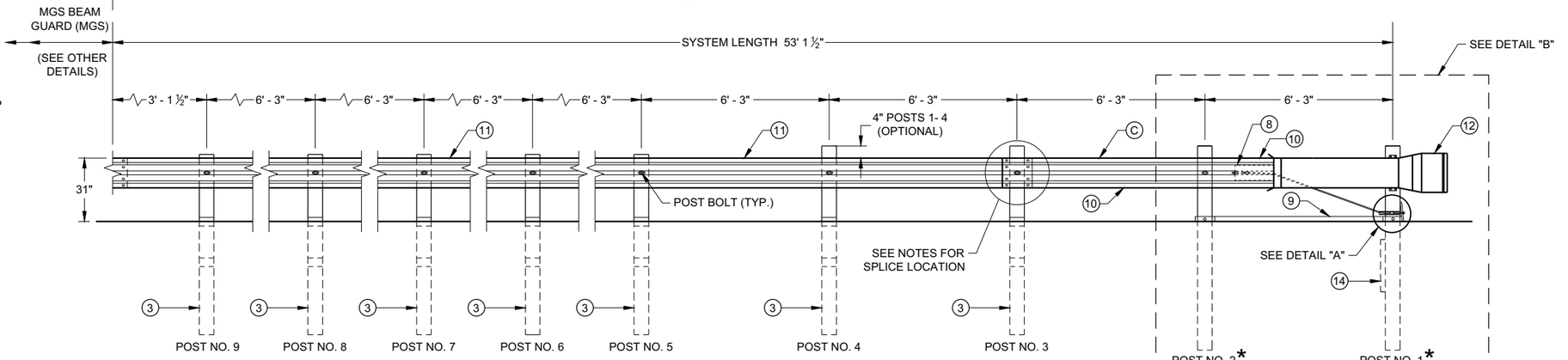
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



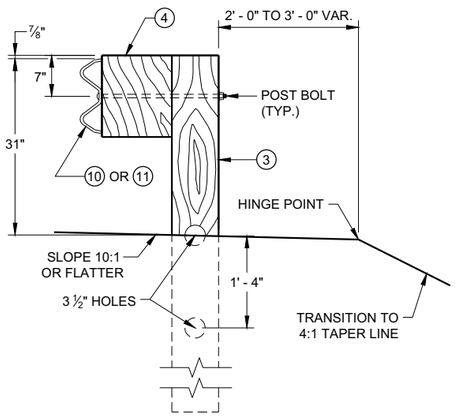
DETAIL "A" (E)



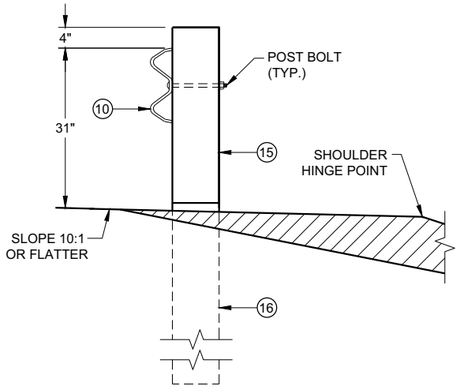
PLAN



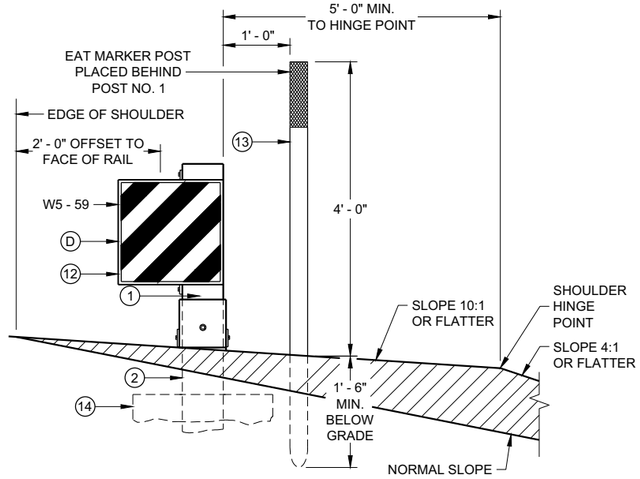
ELEVATION



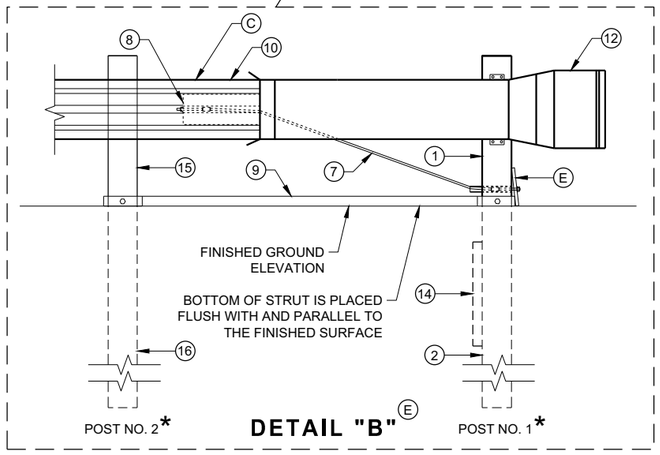
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

SDD 14B44 - 04a

6

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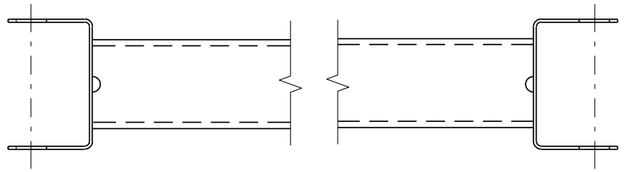
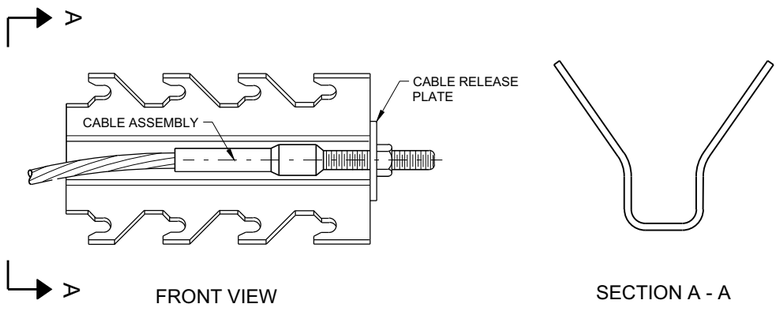


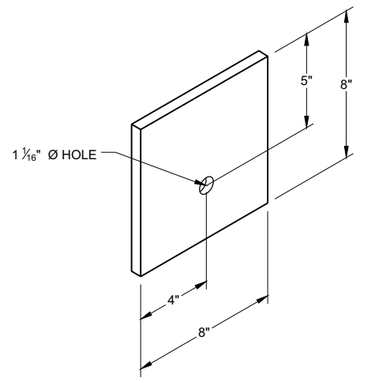
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑧ Ⓔ



BEARING PLATE ⑥ Ⓔ

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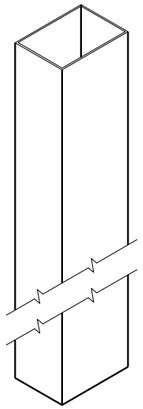
SDD 14B44 - 04b

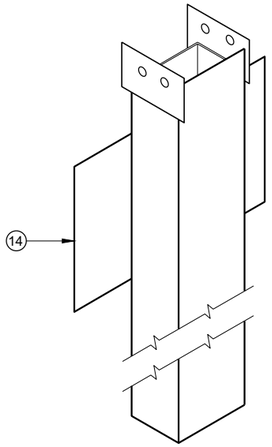
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

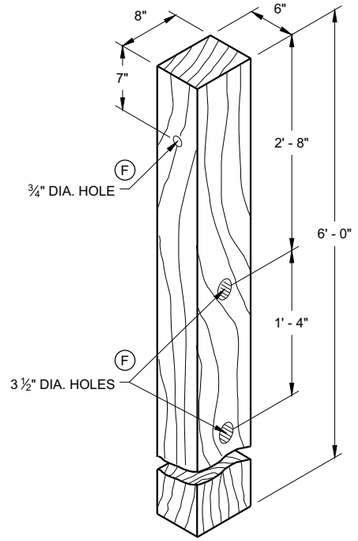
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



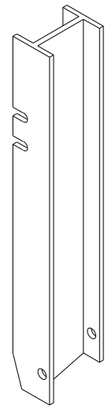
UPPER POST NO. 1 ① Ⓔ



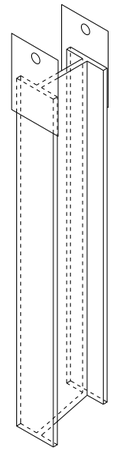
LOWER POST NO. 1 ② Ⓔ



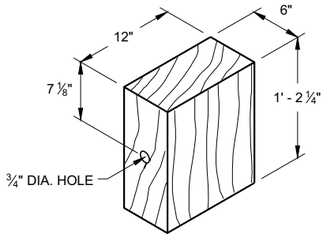
WOOD CRT POST ③ Ⓔ
POSTS NUMBER 3-9



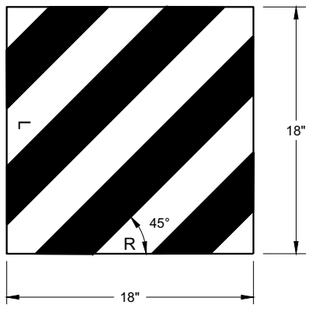
UPPER POST NO. 2 ⑮ Ⓔ



LOWER POST NO. 2 ⑯ Ⓔ

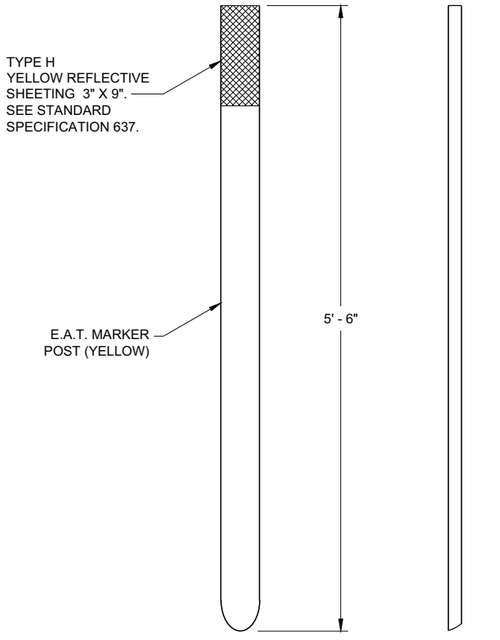


WOOD BLOCKOUT ④
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



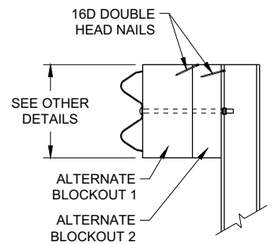
W5 - 59

REFLECTIVE SHEETING DETAIL Ⓔ

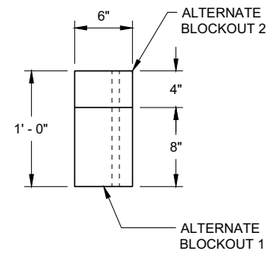


FRONT VIEW SIDE VIEW

E.A.T. MARKER POST ⑬



SIDE VIEW



TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

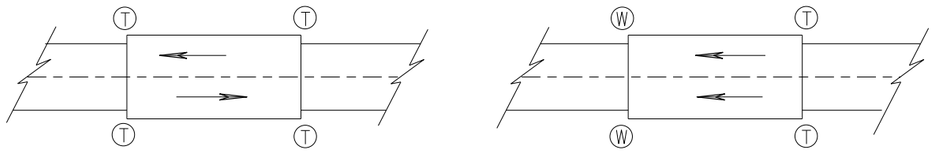
MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR
FHWA

6

SDD 14B44 - 04c



TWO WAY TRAFFIC

ONE WAY TRAFFIC

(T) THRIE BEAM CONNECTION

(W) W-BEAM CONNECTION WHEN REQUIRED

TYPICAL LOCATIONS OF THRIE BEAM AND W-BEAM CONNECTIONS TO BRIDGE

GENERAL NOTES

IF ROCK IS ENCOUNTERED, REMOVE ROCK TO FULL DEPTH OF POST PLUS 2½", AND 12" DIAMETER AROUND POST. SEE 14B42 FOR MORE DETAILS.

TRANSITION USES STEEL POSTS ONLY.

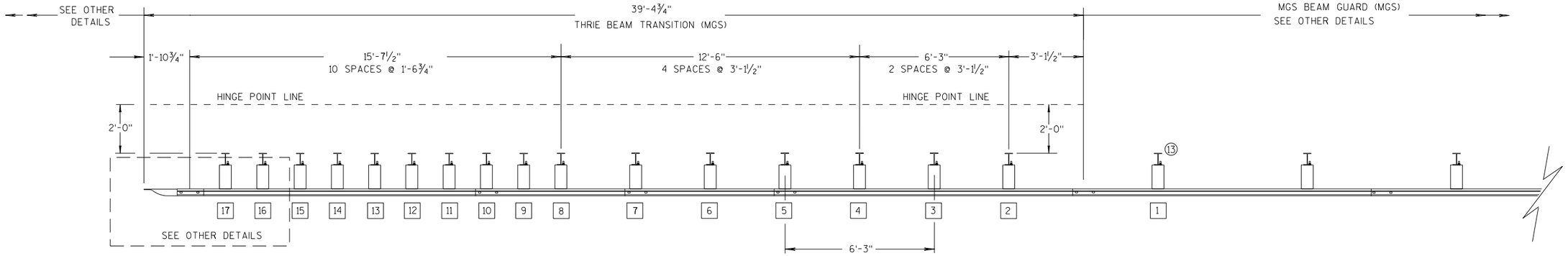
SEE STANDARD DETAIL DRAWING 14 B 42 FOR MORE INFORMATION.

POST 2 THROUGH 17 USES STEEL POST ONLY

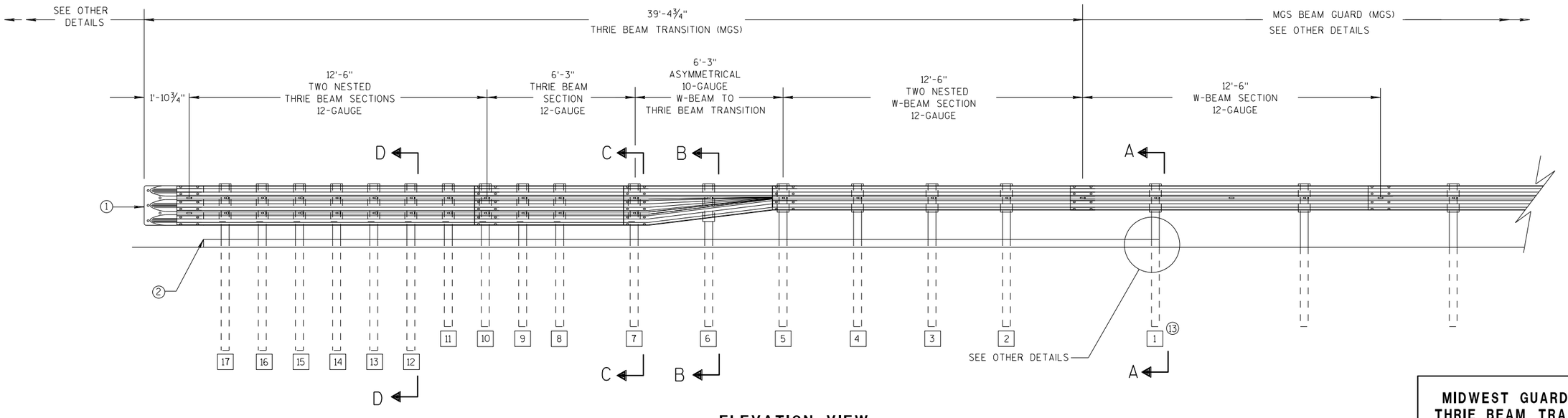
(1) BRIDGE RAILING TYPE "W" DOES NOT REQUIRE A TERMINAL CONNECTOR.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD14B42



PLAN VIEW



ELEVATION VIEW

MIDWEST GUARDRAIL SYSTEM THRIE BEAM TRANSITION

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 14 B 45-5a

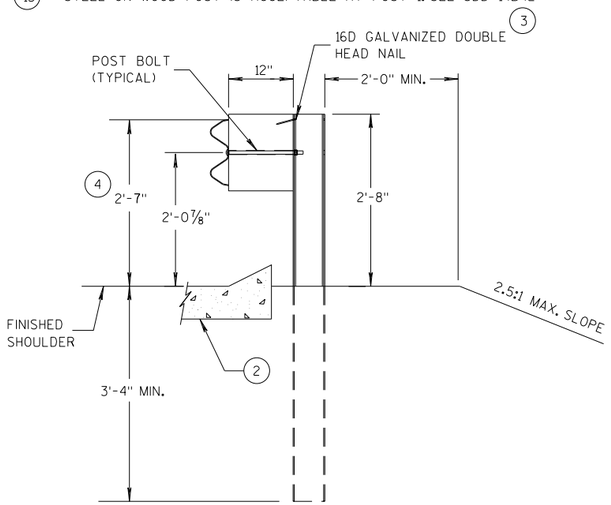
GENERAL NOTES

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 10D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

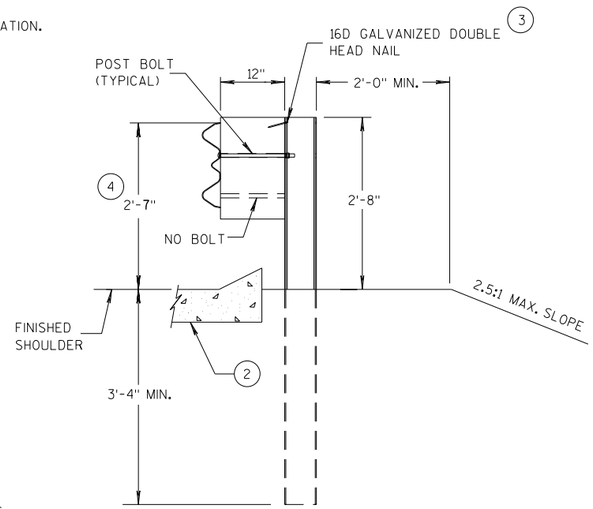
(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42



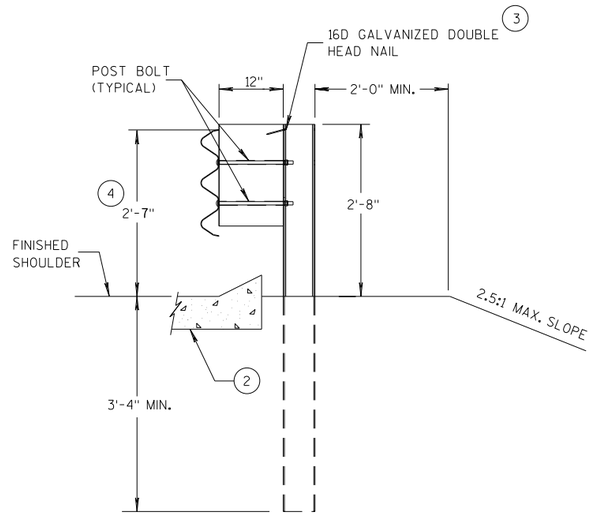
SECTION A-A (13)

POSTS 1-5



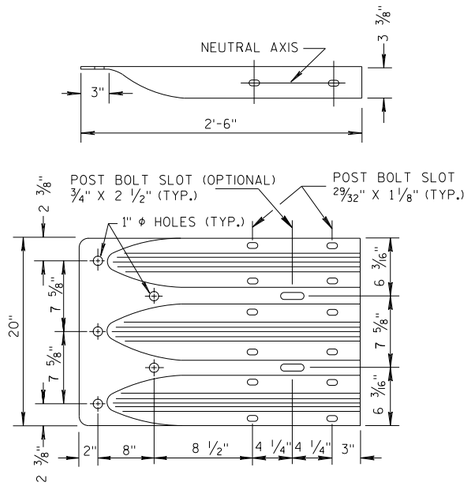
SECTION B-B

POST 6

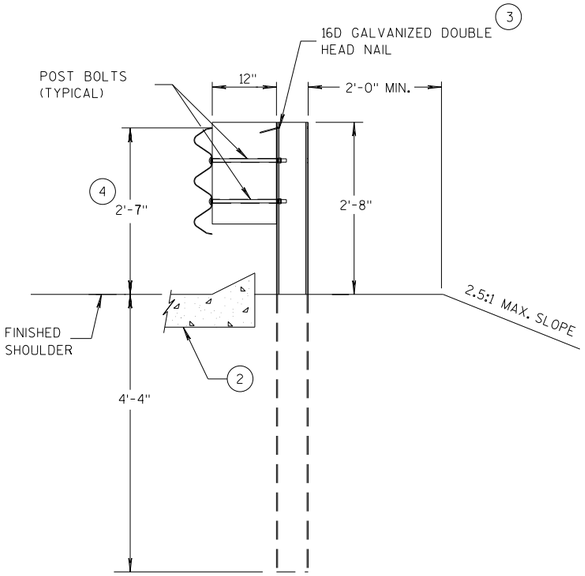


SECTION C-C

POSTS 7-11

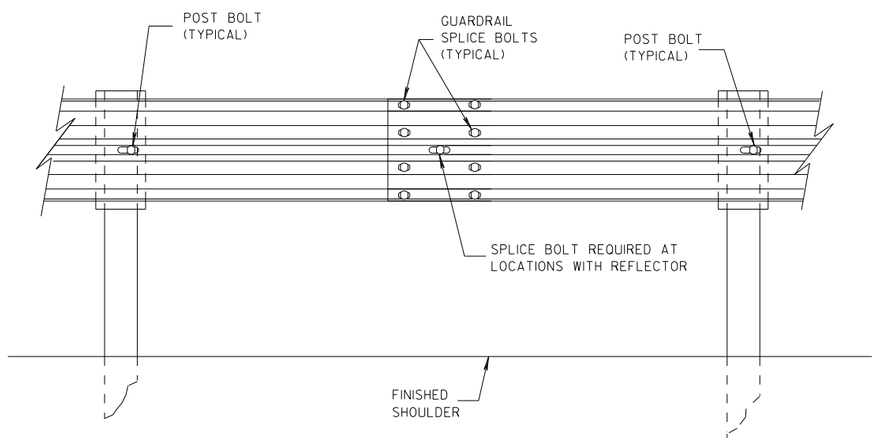


THRIE BEAM TERMINAL CONNECTOR



SECTION D-D

POSTS 12-17



SPLICE DETAIL

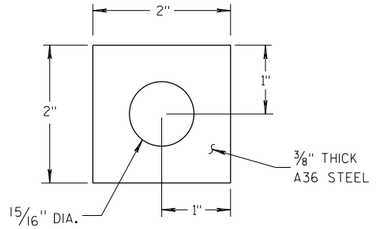
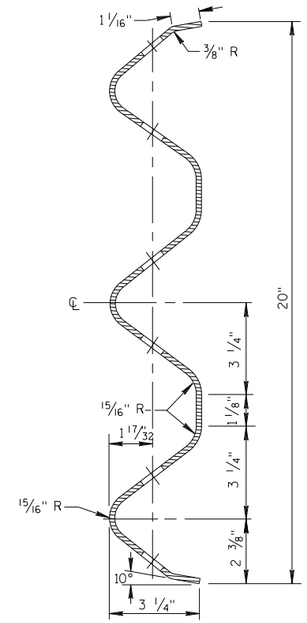


PLATE WASHER DETAIL



SECTION THRU THRIE BEAM RAIL ELEMENT

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

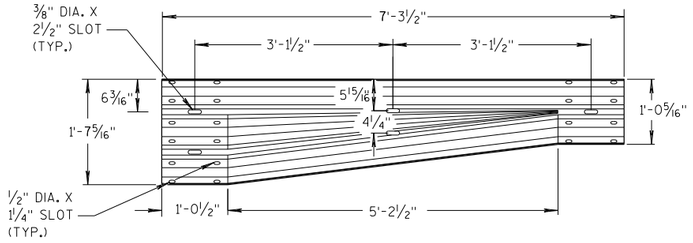
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR 134

6

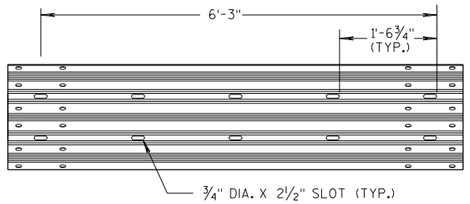
S.D.D. 14 B 45-5b

6

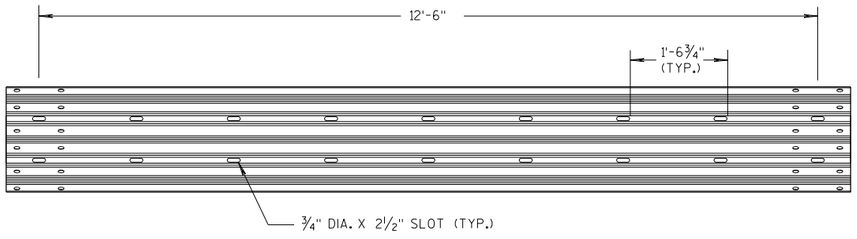
S.D.D. 14 B 45-5b



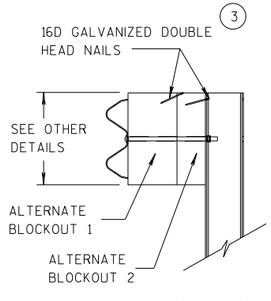
W-BEAM TO THRIE BEAM TRANSITION SECTION



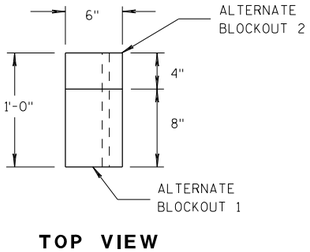
6'-3" THRIE BEAM SECTION



12'-6" THRIE BEAM SECTION

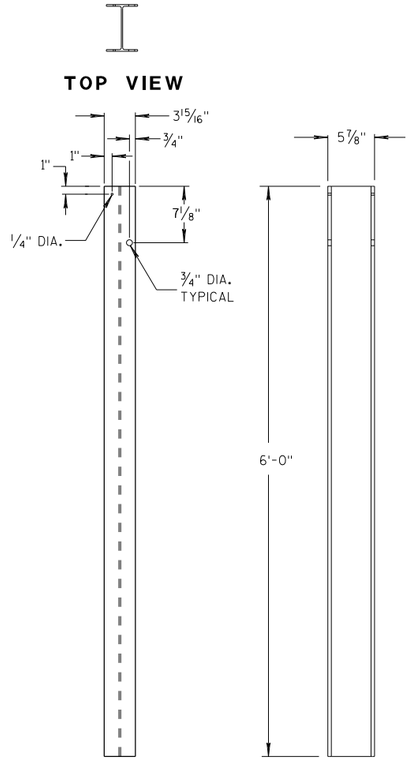


SIDE VIEW



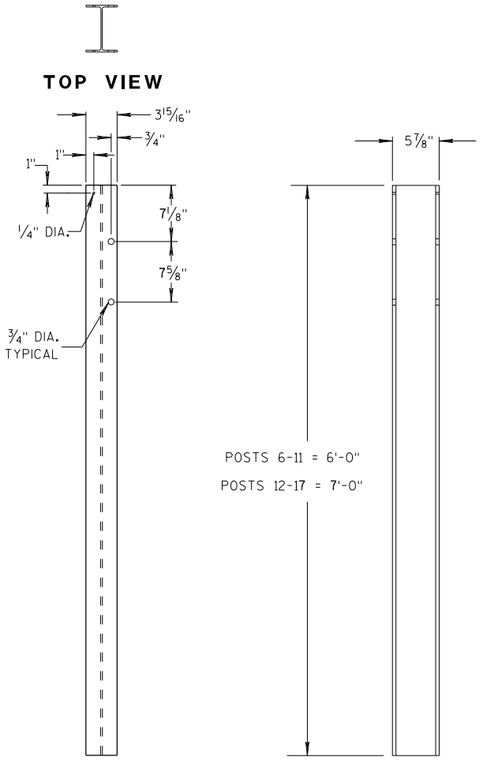
TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL



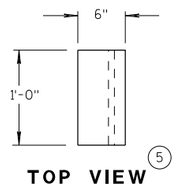
FRONT VIEW SIDE VIEW

STEEL POSTS 1-5 (13)

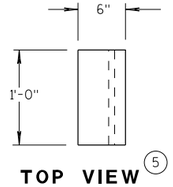


FRONT VIEW SIDE VIEW

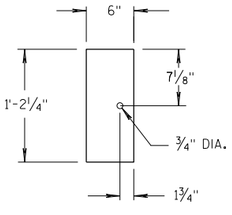
STEEL POSTS 6-17



TOP VIEW (5)

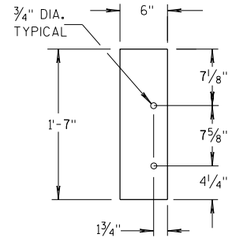


TOP VIEW (5)



FRONT VIEW

BLOCKOUT POSTS 1-5



FRONT VIEW

BLOCKOUT POSTS 6-17

GENERAL NOTES

STEEL POSTS ARE W6X9 OR W6X8.5.

BOLT HOLES FOR POST ARE ON FRONT AND OF SIDE OF POST.

(3) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

(5) WOOD BLOCKS MAY BE CONSTRUCTED OUT OF 2 WOOD BLOCKS. SEE ALTERNATE WOOD BLOCK DETAIL.

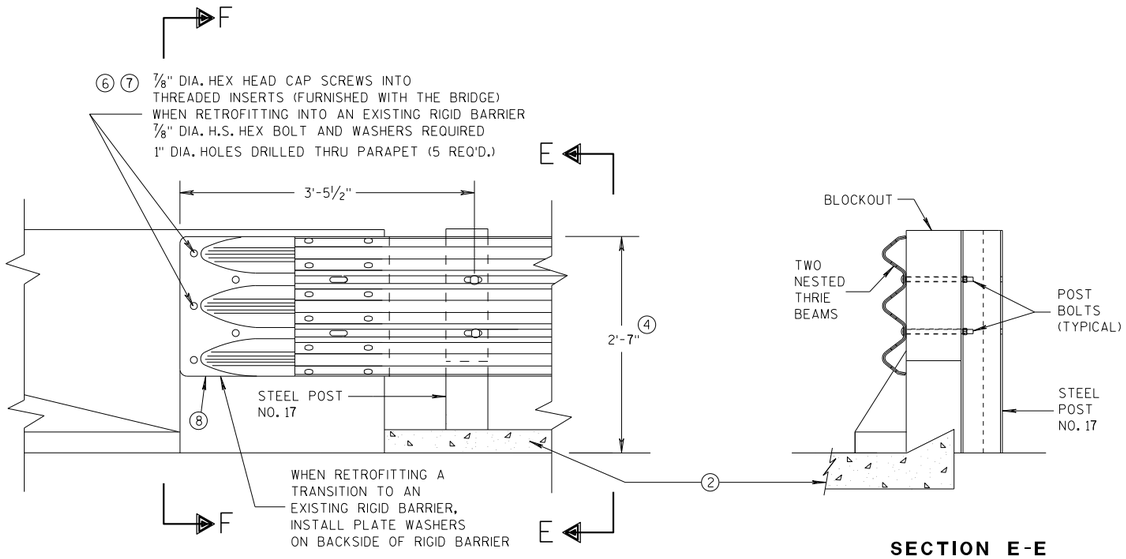
(13) STEEL OR WOOD POST IS ACCEPTABLE AT POST 1. SEE SDD 14B42.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOF

6

S.D.D. 14 B 45-5c



FRONT VIEW

SECTION E-E

THRIE BEAM CONNECTION TO BRIDGE PARAPET WITH SQUARE ENDS

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

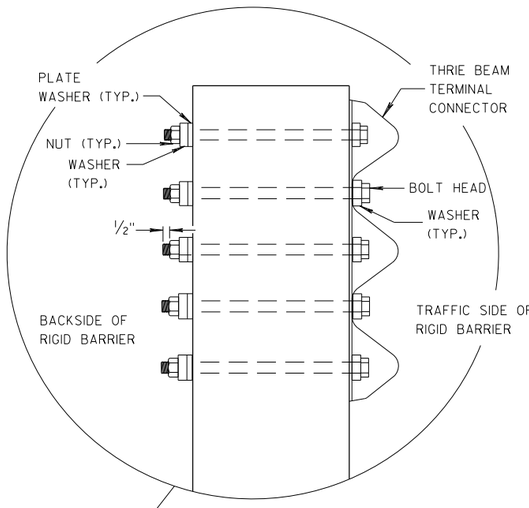
② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

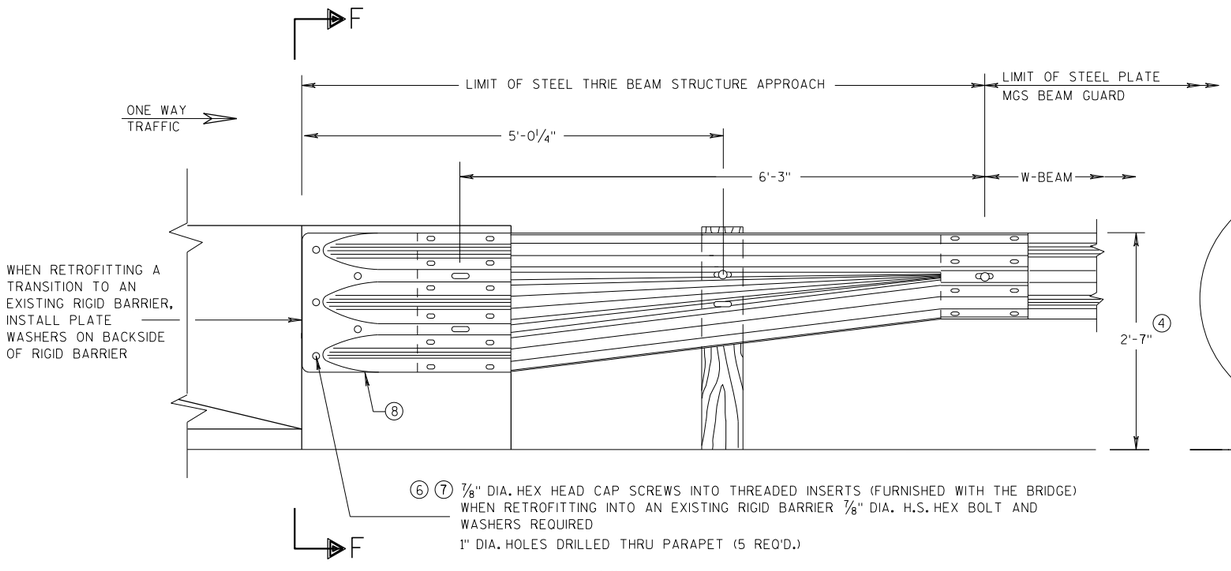
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

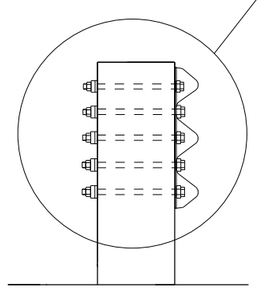
⑦ BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

⑧ THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 1/2".

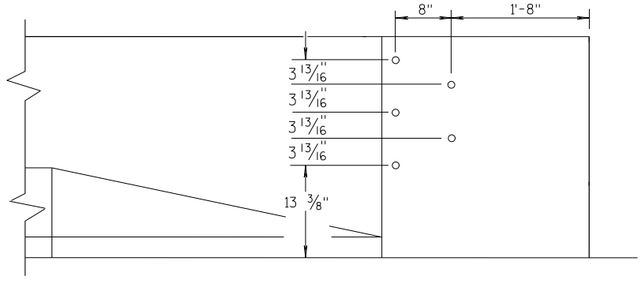




FRONT VIEW



SECTION F-F



DRILL HOLE LOCATION

W BEAM TRANSITION AND CONNECTION TO BRIDGE PARAPETS WITH SQUARE ENDS

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
07/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS D[illegible] UNIT SUPERVIS[illegible]NT
FHWA

6

S.D.D. 14 B 45-5d

GENERAL NOTES

THESE ARE TYPICAL CONNECTION DETAILS. ADJUST THE POSTION OF CONNECTIONS TO EXISTING BRIDGES TO FIT THE ACTUAL BRIDGE AND SITE DIMENSIONS.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

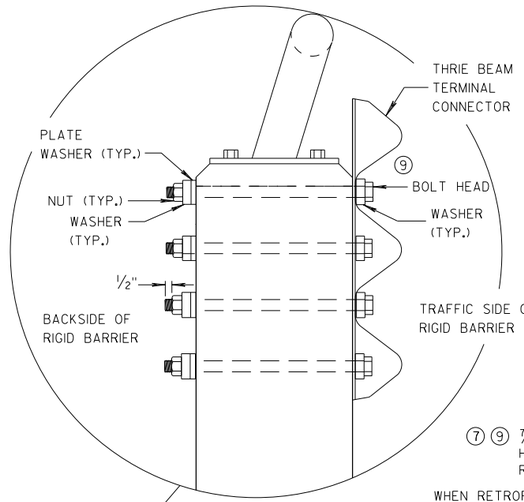
(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

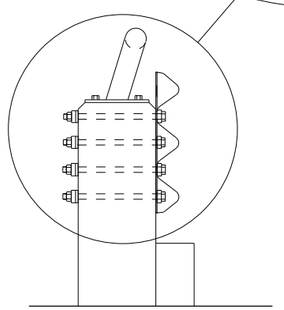
(6) DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.

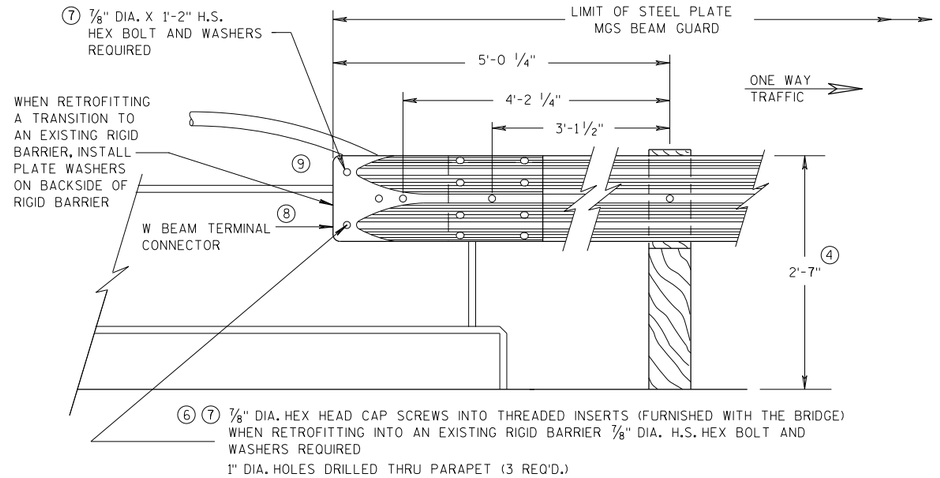
(8) THE RECESS FOR A W-BEAM CONNECTION, WHICH EXISTS ON SOME PARAPETS OF THIS TYPE, SHALL BE FILLED WITH A TREATED TIMBER BLOCKOUT. BLOCKOUT SIZE IS 1'-6" X 2'-0" X 3 ½".

(9) BOLT, NUT AND WASHERS NOT REQUIRED FOR THIS LOCATION WHEN RETROFITTING AN EXISTING PAPAPET AND THE HOLE IS EITHER ABOVE PARAPET OR WITHIN 4 INCHES OF THE EDGE OF PARAPET.





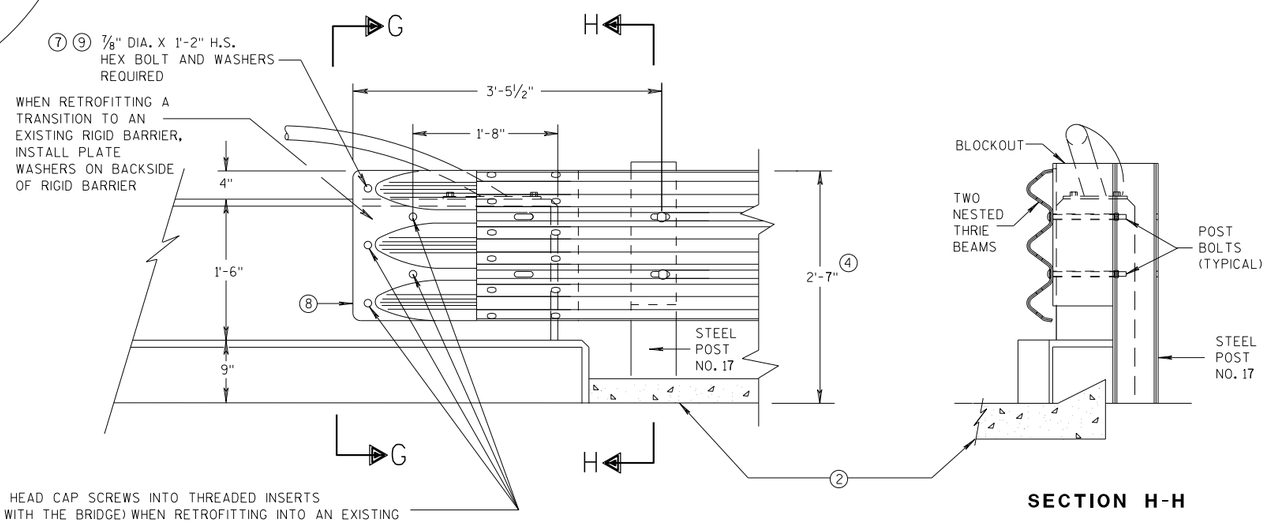
SECTION G-G



FRONT VIEW

W BEAM CONNECTION TO VERTICAL FACE PARAPET

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)



FRONT VIEW

SECTION H-H

THRIE BEAM CONNECTION TO VERTICAL FACED PARAPETS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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07/2018
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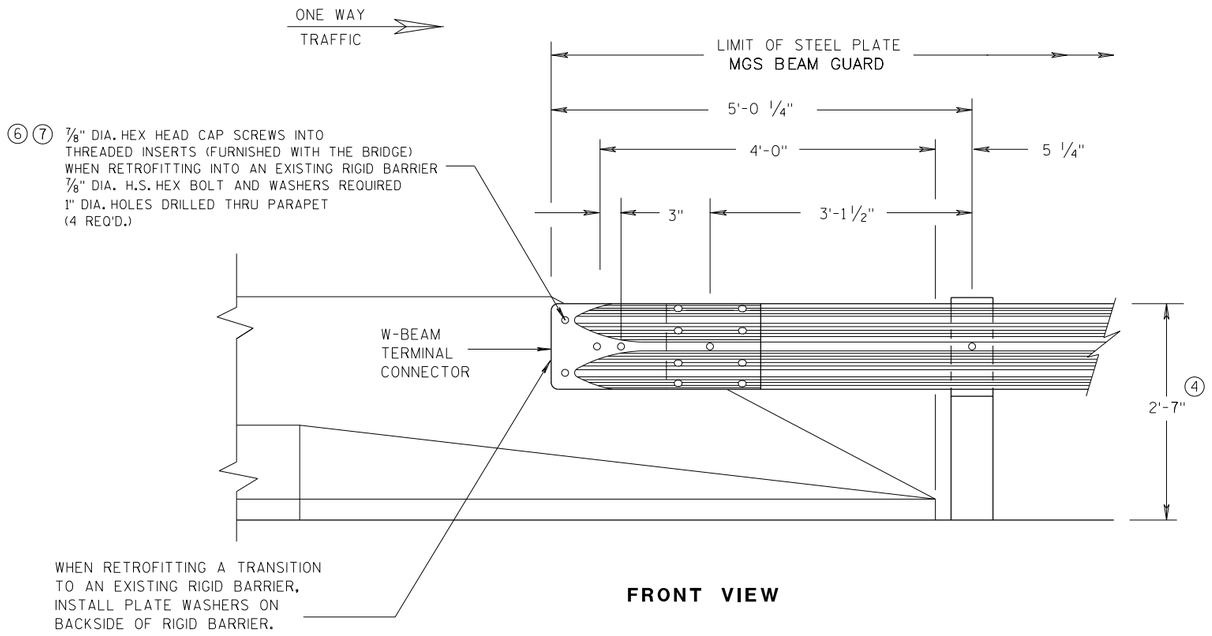

FRONT VIEW

W BEAM CONNECTION TO PARAPETS WITH SLOPED ENDS

(USE ONLY AT TRAFFIC EXIT END OF ONE WAY BRIDGE)

GENERAL NOTES

② OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

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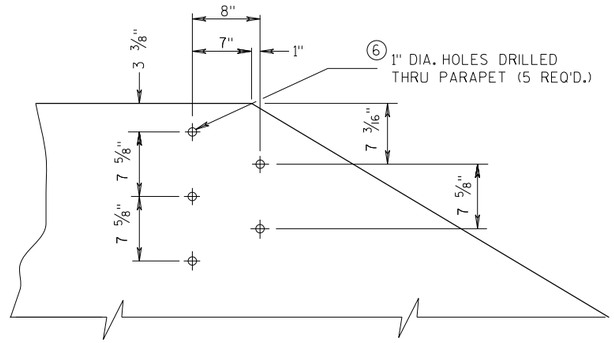
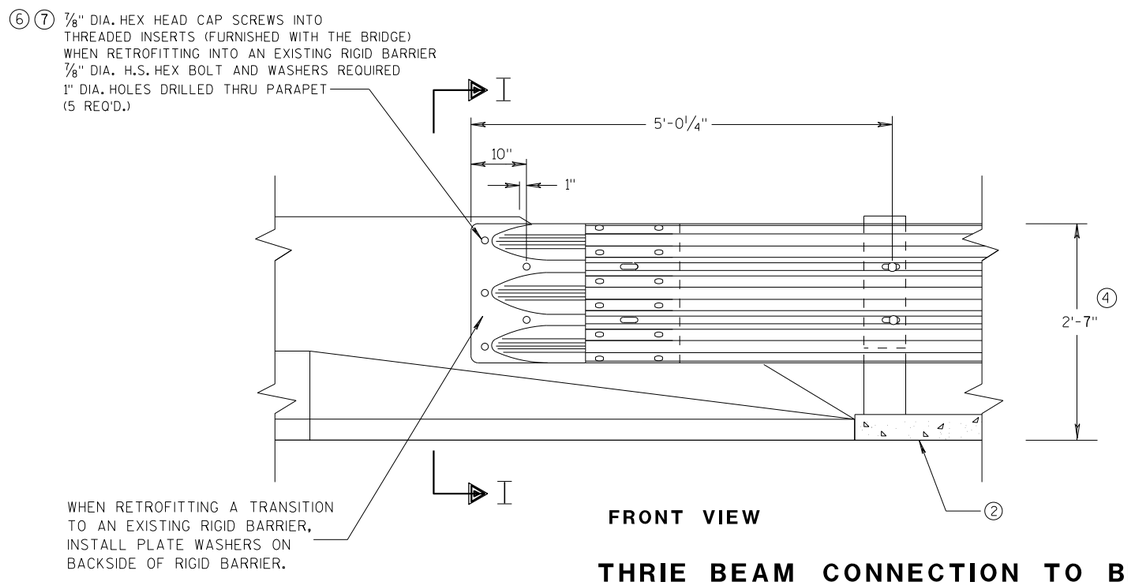
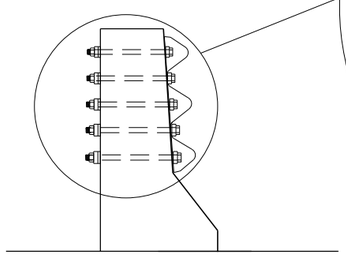


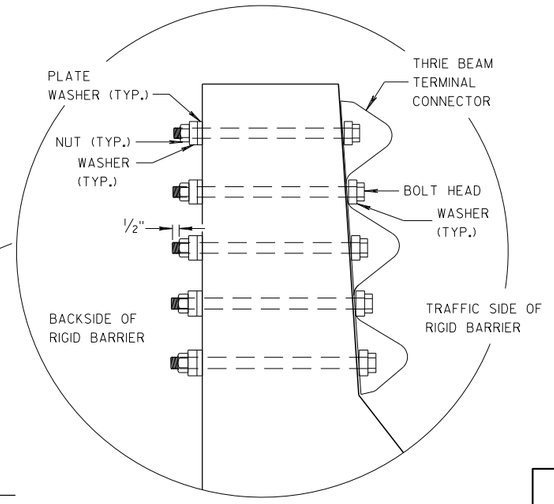
DRILL HOLE LOCATION AND PATTERN FOR THRIE BEAM CONNECTION



FRONT VIEW



SECTION I-I



THRIE BEAM CONNECTION TO BRIDGE PARAPETS WITH SLOPED ENDS

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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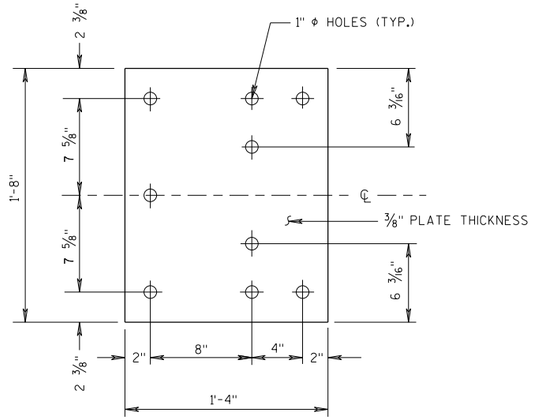
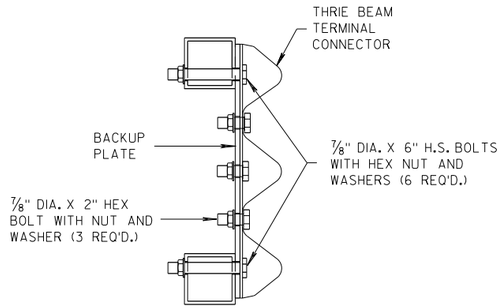
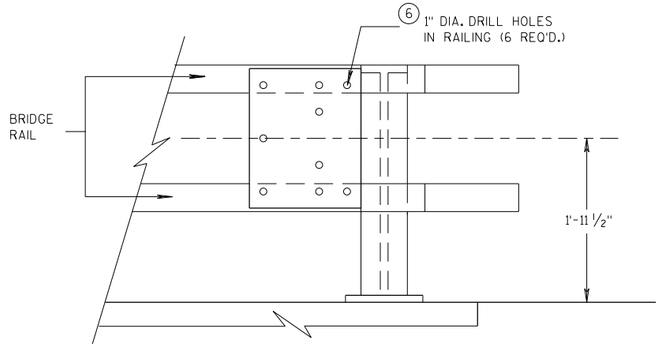


BACK-UP PLATE DETAIL



SECTION J-J

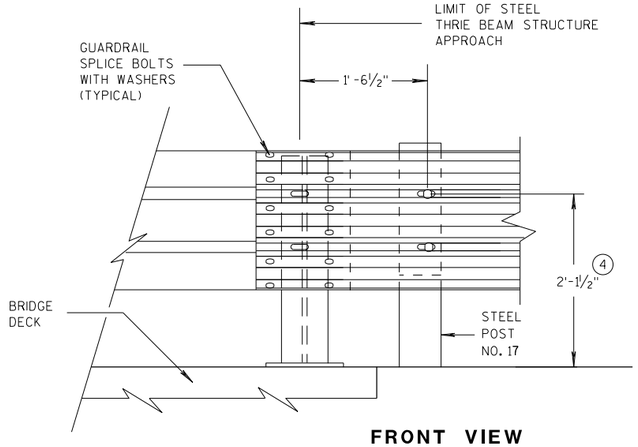


BACK-UP PLATE MOUNTING ONTO BRIDGE RAILING

GENERAL NOTES

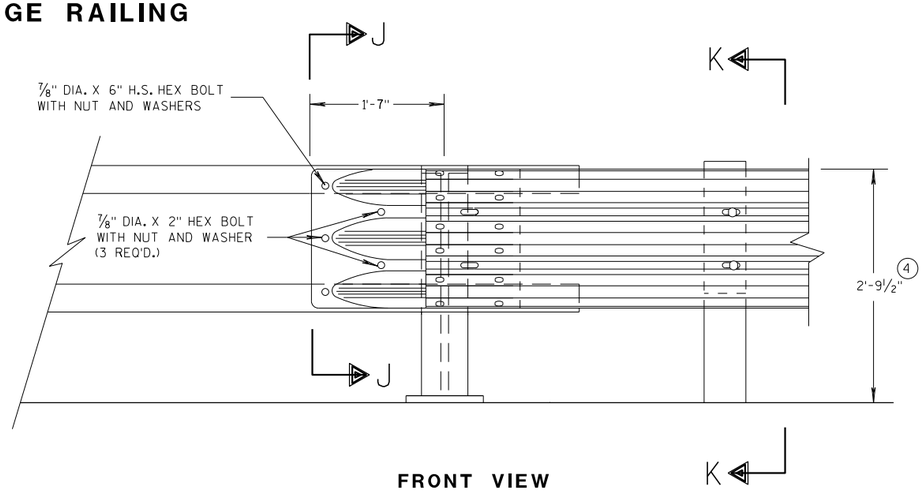
④ TOLERANCE FOR TOP OF BEAM IS ± 1".

⑥ DRILLING HOLES THROUGH THE PAPRPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

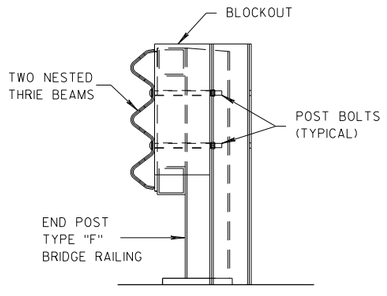


FRONT VIEW

THRIE BEAM CONNECTION TO STEEL RAILING TYPE "W"



FRONT VIEW



SECTION K-K

THRIE BEAM CONNECTION TO TUBULAR RAILING TYPE "F"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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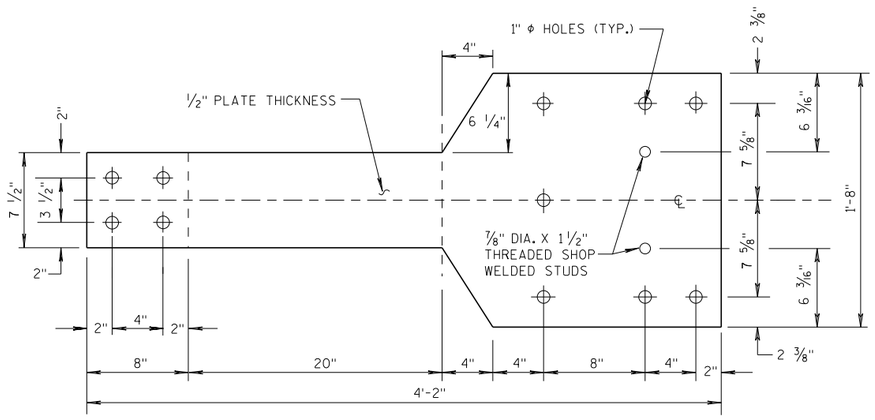
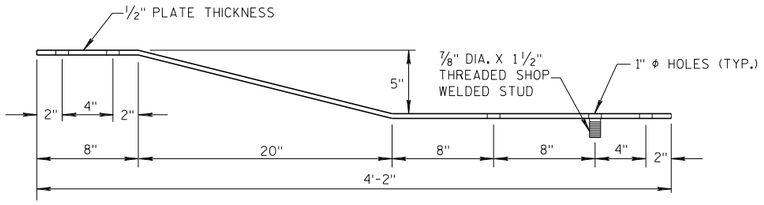
GENERAL NOTES

(4) TOLERANCE FOR TOP OF W-BEAM RAIL IS ± 1".

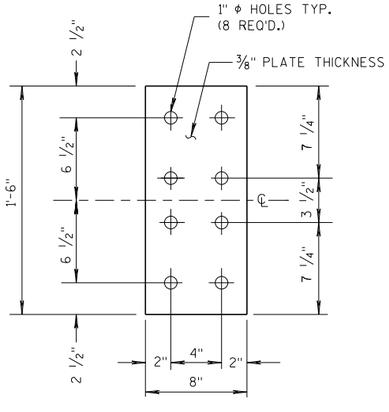


FRONT VIEW



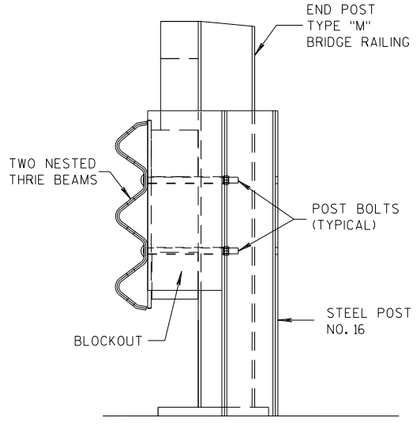
PLAN VIEW

BACK-UP PLATE DETAIL, TYPE "M"

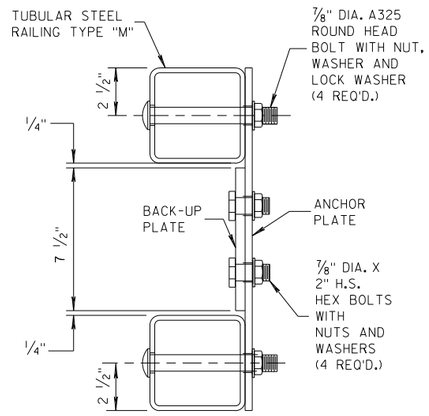


FRONT VIEW

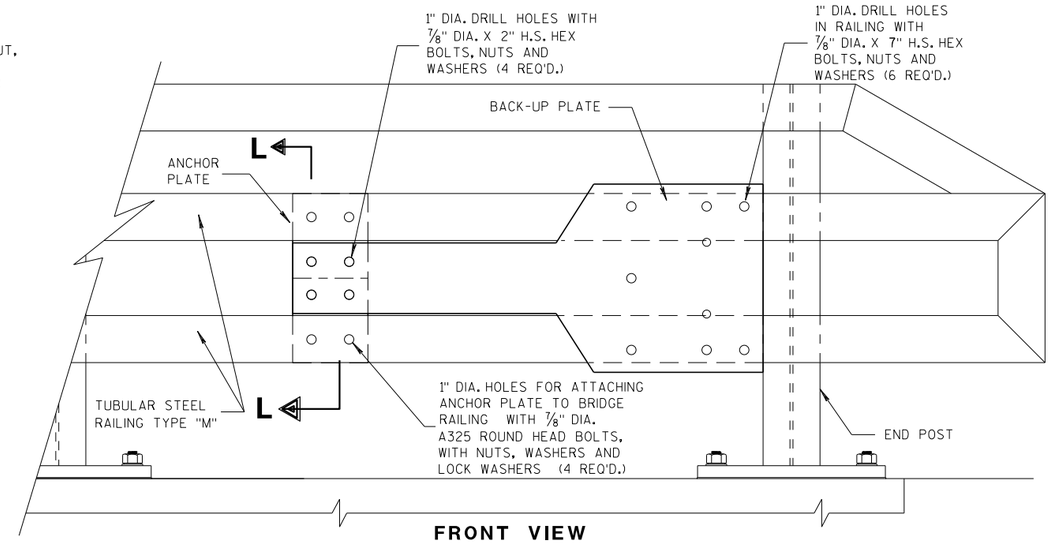
ANCHOR PLATE DETAIL, TYPE "M"



SECTION M-M

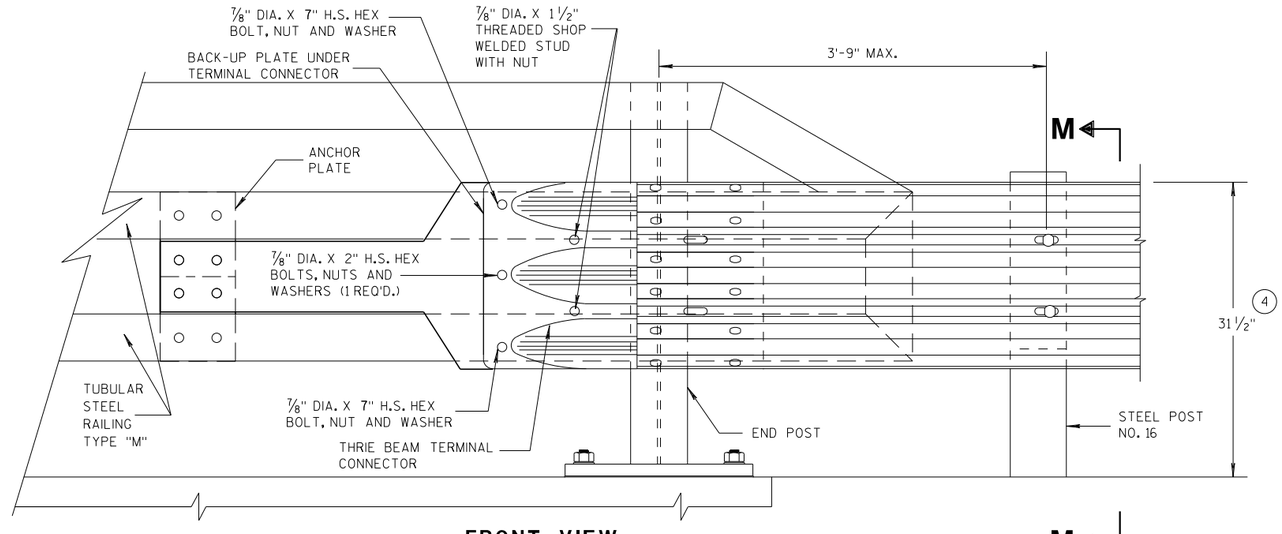


SECTION L-L

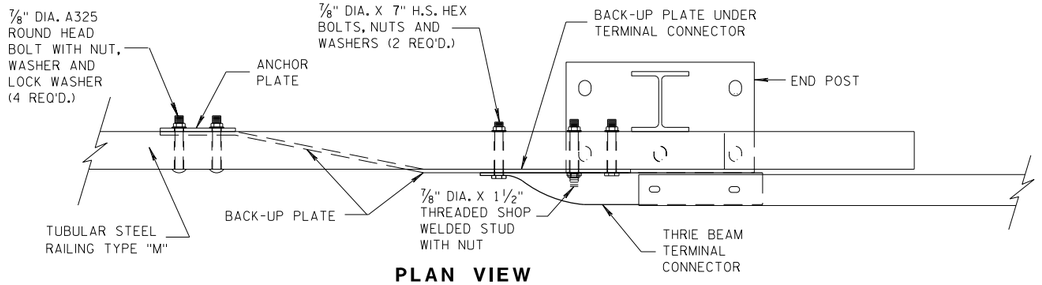


FRONT VIEW

ANCHOR AND BACK-UP PLATE MOUNTING TO BRIDGE RAILING, TYPE "M"



FRONT VIEW



PLAN VIEW

THRIE BEAM CONNECTION TO TUBULAR RAILING, TYPE "M"

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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GENERAL NOTES

COVER PLATE PANELS ARE 3/16" THICK.

ALL STIFFENERS ARE 1/4" THICK.

CONNECTOR PLATE SHALL BE FABRICATED FROM ASTM GRADE A36 STEEL AND GALVANIZED.

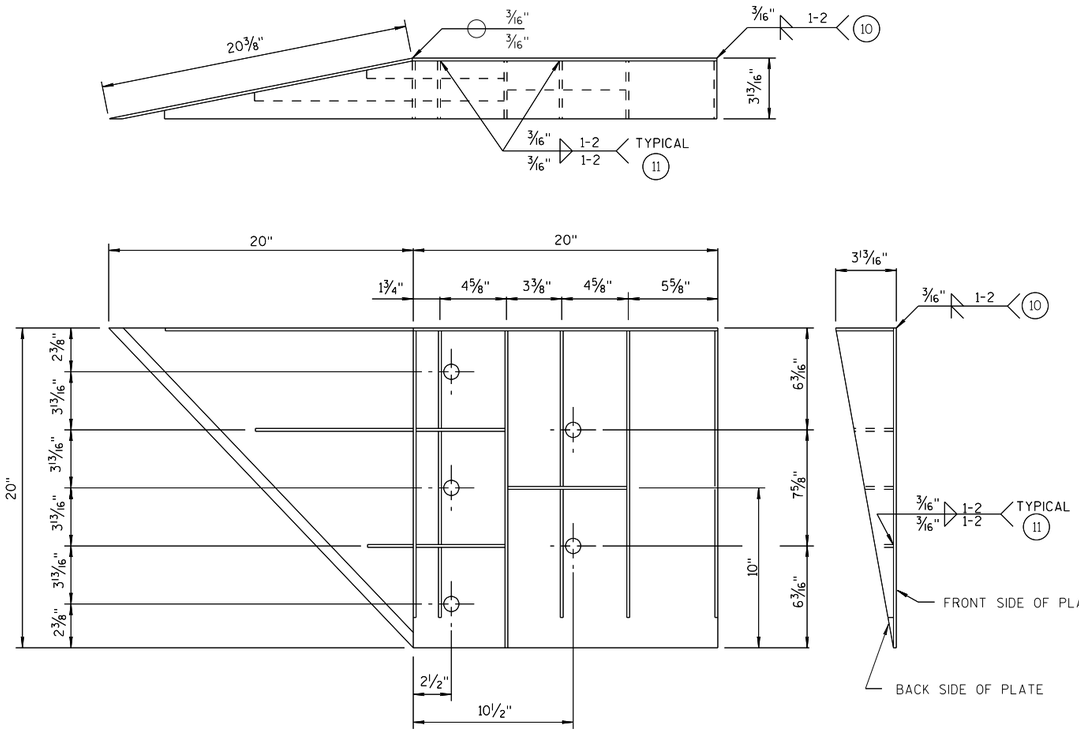
FOR GALVANIZED REQUIREMENTS, SEE SECTION 614 OF THE STANDARD SPECIFICATIONS.

ALL HOLE DIAMETERS SHALL BE 1".

FOR OPPOSITE SIDE INSTALLATION MIRROR DRAWINGS.

(10) STIFFENERS LOCATED AT THE OUTSIDE EDGES OF THE COVER PLATES SHALL BE WELDED AS FOLLOWS:
SINGLE BEVEL GROOVE WELD ON EXTERNAL SIDES AND 3/16" FILLET WELD BY 1" LONG SPACED AT 2" ON INTERNAL SIDES.

(11) STIFFENERS LOCATED ON THE INSIDE OF THE COVER PLATE SHALL BE WELDED AS FOLLOWS:
3/16" FILLET WELD BY 1" LONG SPACED AT 2".



WELDING INSTRUCTION

(VIEWED FROM BACK SIDE OF PLATE)

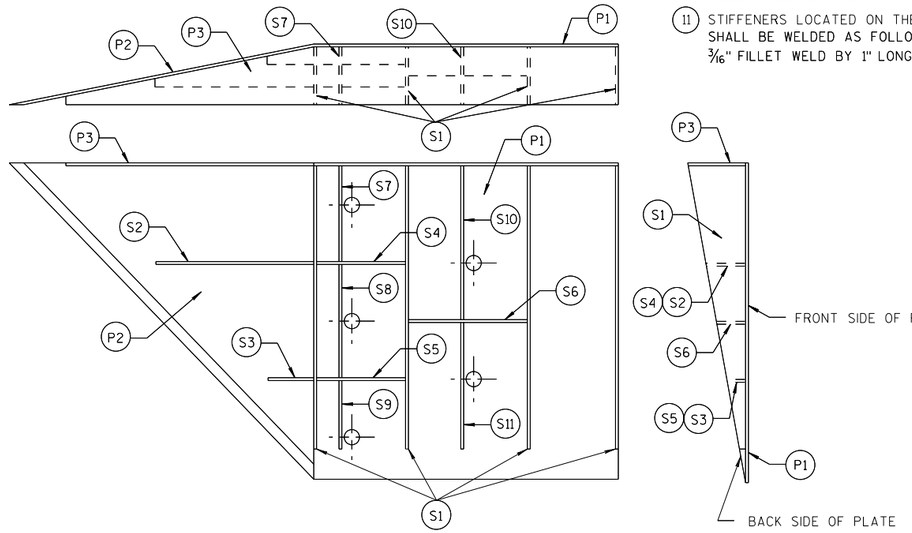


PLATE AND STIFFENER IDENTIFICATION

(VIEWED FROM BACK SIDE OF PLATE)

CONNECTOR PLATE DIMENSION (PER ASSEMBLY)

PLATE	QUANTITY	SHAPE	SIZE (A x B x C x D)	THICKNESS
P1	1		20" x 20"	3/16"
P2	1		20" x 20" x 28 9/16"	3/16"
P3	1		39" x 3 5/8" x 20" x 19 5/16"	3/16"
S1	4		18 7/16" x 3 5/8" x 18 3/4"	1/4"
S2	1		10 1/4" x 2 7/16" x 10 3/8" x 1/2"	1/4"
S3	1		3" x 1 1/16" x 3 1/8" x 1/2"	1/4"
S4	1		6 1/8" x 2 7/16"	1/4"
S5	1		6 1/8" x 1 1/16"	1/4"
S6	1		7 3/4" x 1 3/4"	1/4"
S7	1		2 9/16" x 6" x 3 5/8" x 5 7/8"	1/4"
S8	1		1 5/32" x 7 1/2" x 2 1/2" x 7 3/8"	1/4"
S9	1		6 1/16" x 6 3/16" x 1 3/32"	1/4"
S10	1		1 7/8" x 9 7/8" x 3 5/8" x 9 11/16"	1/4"
S11	1		8 1/2" x 8 3/4" x 1 13/16"	1/4"

SINGLE SLOPE CONNECTION PLATE

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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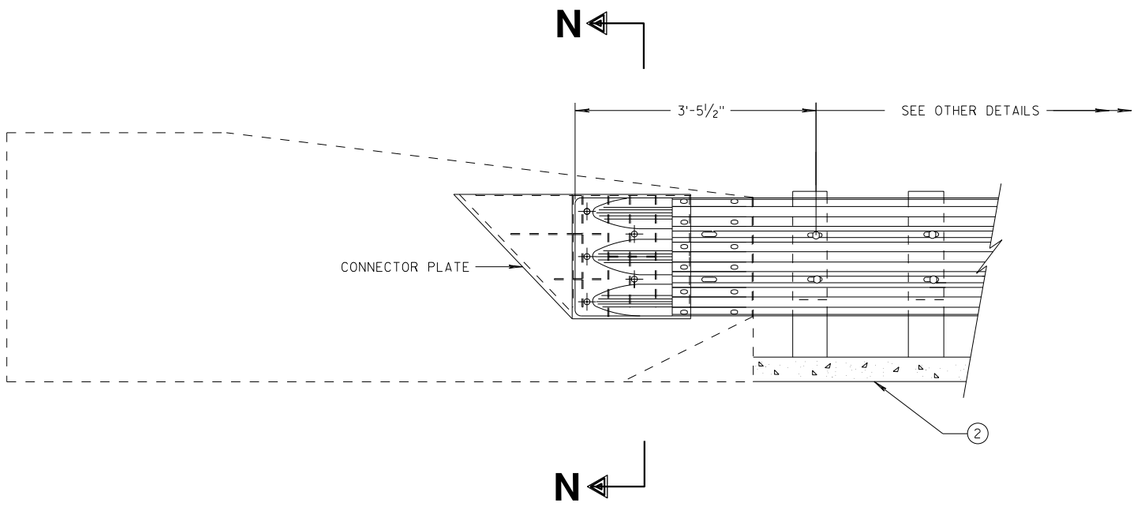
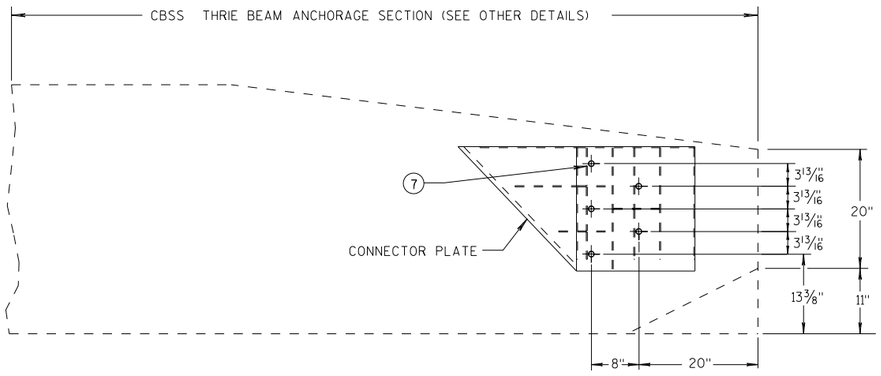


THRIE BEAM CONNECTION TO SINGLE SLOPE BARRIER



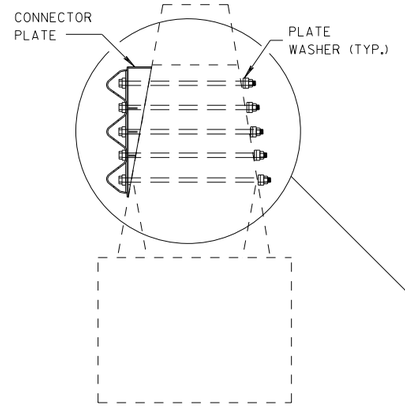
SINGLE SLOPE CONNECTION PLATE PLACEMENT

GENERAL NOTES

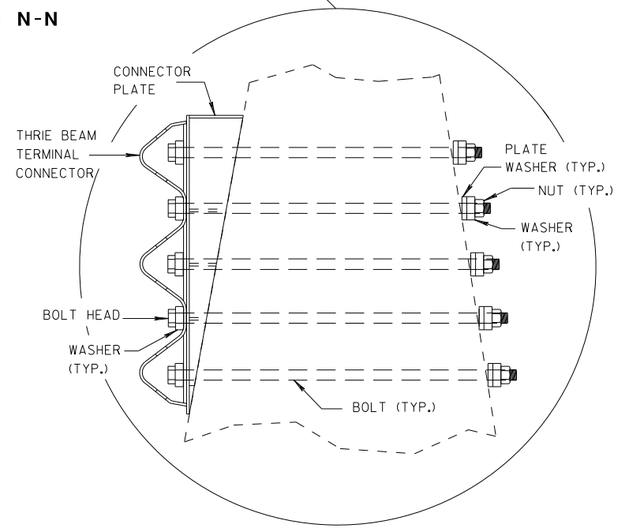
CONNECTOR PLATE, DRILLING BOLT HOLES THROUGH THE PARAPET, BOLTS, NUTS, WASHERS AND REPAIRING DAMAGED CONCRETE ARE INCIDENTAL TO THE CONTRACT.

(2) OPTIONAL CURB AND GUTTER OR DRAINAGE FEATURE SEE PLAN FOR INFORMATION.

(7) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. BOLTS THAT EXTEND THROUGH THE PARAPET AND OUT THE BACK FACE REQUIRE A HARDENED ROUND STEEL WASHER THAT IS 2" O.D. X 5/32" THICK AND ONE PLATE WASHER. REPAIR ANY DAMAGED CONCRETE FROM BOLT INSTALLATION.



SECTION N-N



MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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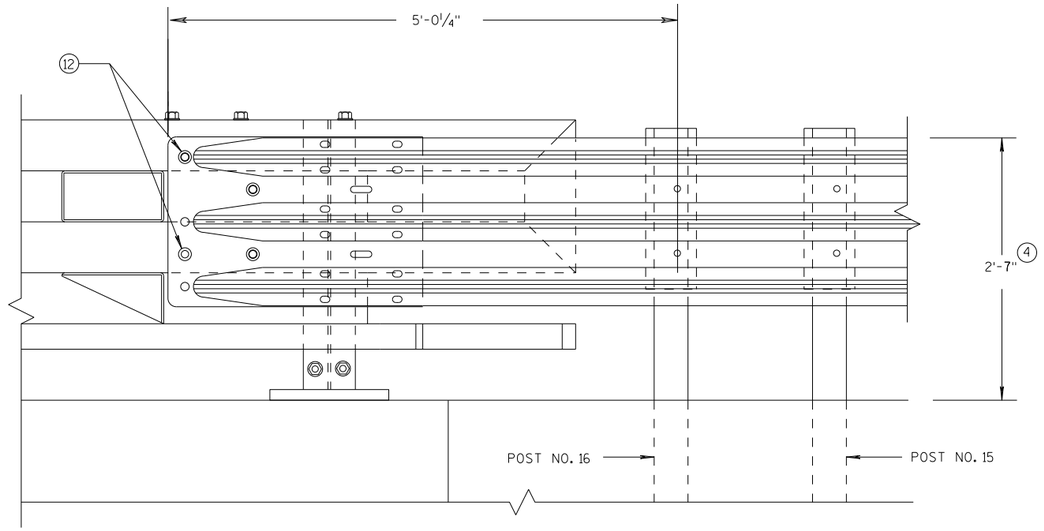
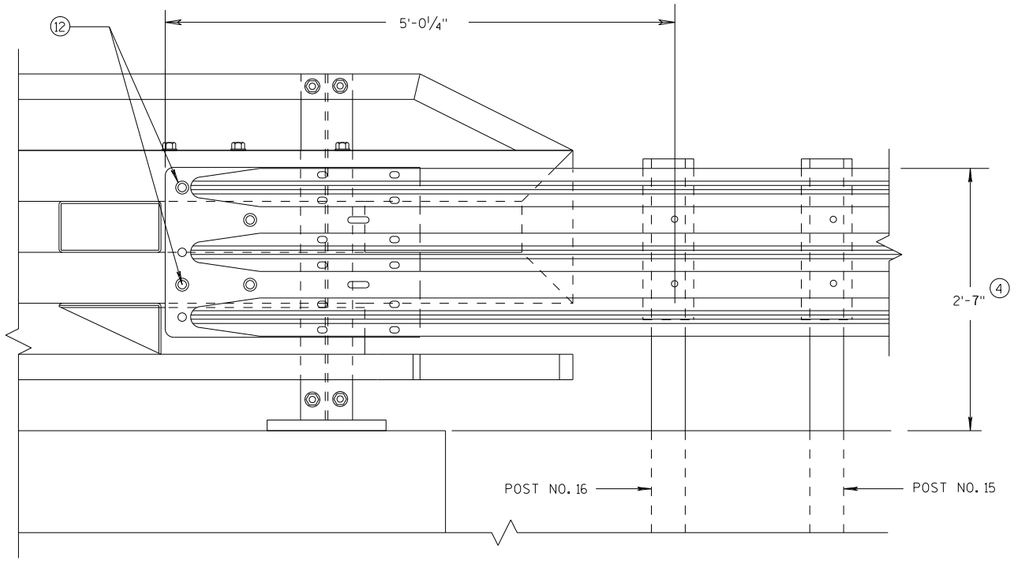


ELEVATION OF DETAIL AT NY3 END POST

THRIE BEAM RAIL ATTACHMENT



ELEVATION OF DETAIL AT NY4 END POST

THRIE BEAM RAIL ATTACHMENT

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

STATE OF WISCONSIN
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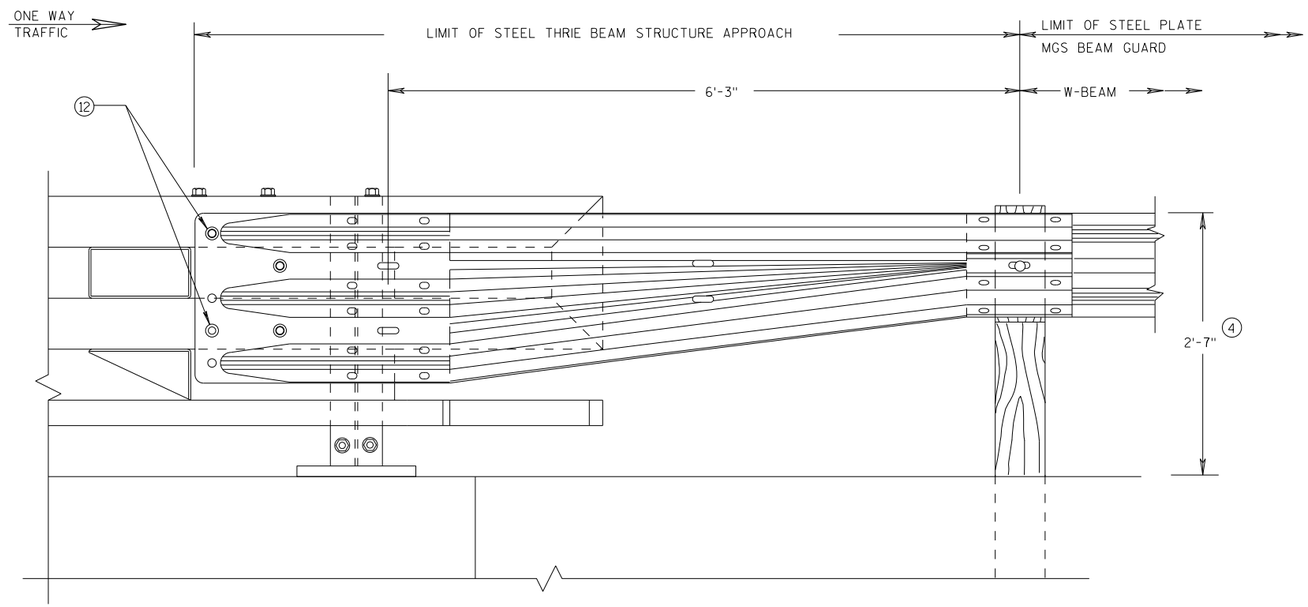


FRONT VIEW

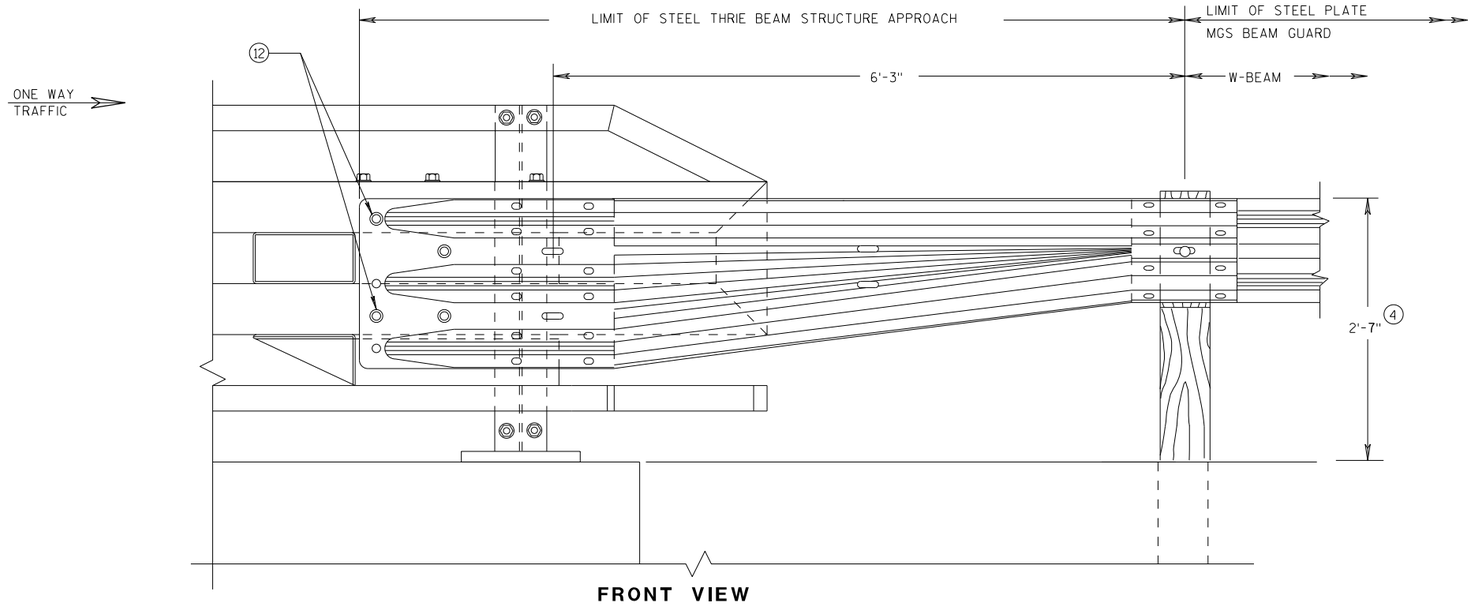
W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY3"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

GENERAL NOTES

(4) TOLERANCE FOR TOP OF BEAM IS ± 1".

(12) BOLTS MAY BE A325 BOLTS OR A449 BOLTS. BOLT LENGTH AND THREADING LENGTH ARE TO ALLOW FOR A TIGHT CONNECTION BETWEEN RIGID BARRIER AND THRIE BEAM CONNECTION PLATE. CONTRACTOR IS TO FIELD VERIFY BOLT LENGTH AND THREAD LENGTH. ONE ROUND WASHER REQUIRED BETWEEN BOLT HEAD AND THRIE BEAM CONNECTOR PLATE. ON BACKSIDE OF PARAPET ONE ROUND WASHER, AND NUT REQUIRED. BOLT THREAD IS TO EXTEND 1/2-INCH BEYOND NUT.



FRONT VIEW

W BEAM TRANSITION AND CONNECTION TO BRIDGE RAILING TYPE "NY4"

(USE ONLY ON THE TRAFFIC EXIT END OF ONE WAY BRIDGES)

MIDWEST GUARDRAIL SYSTEM
THRIE BEAM TRANSITION (MGS)

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7/2018 DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS D
UNIT SUPERVIS

NT

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S.D.D. 14 B 45-5L

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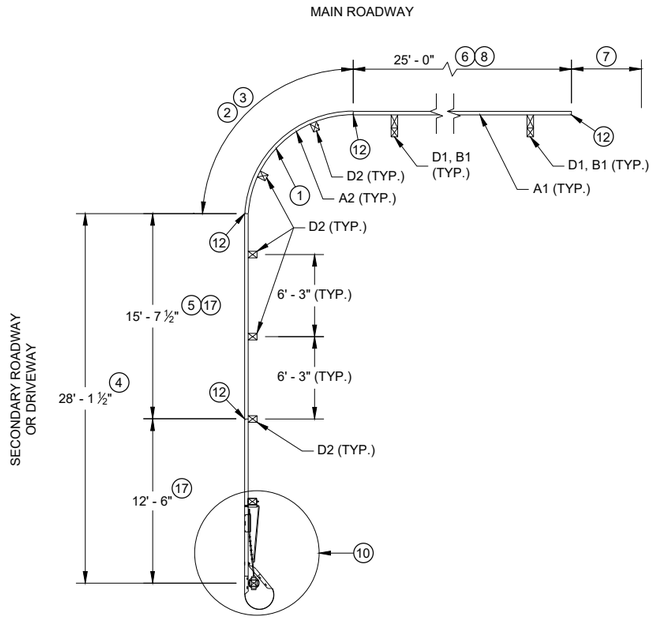
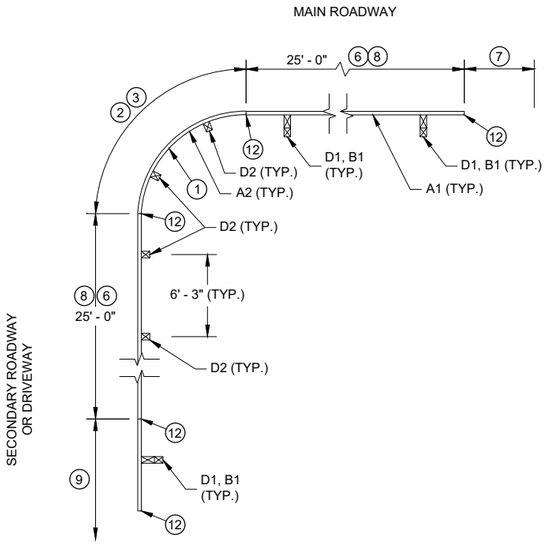
S.D.D. 14 B 45-5L



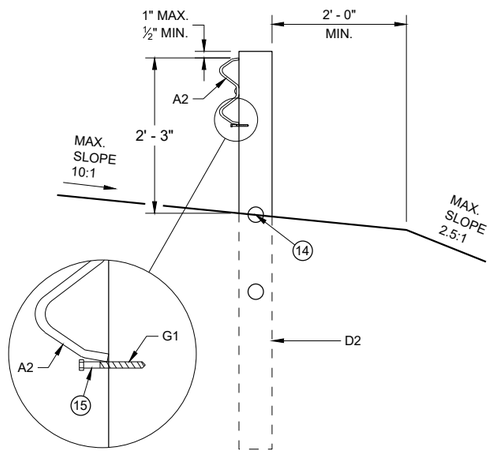
PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

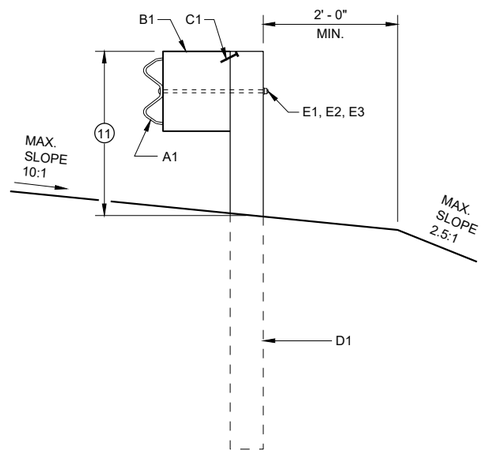


PLAN VIEW

SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY



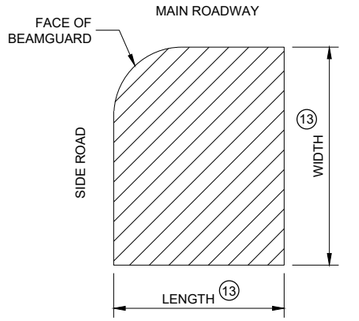
CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



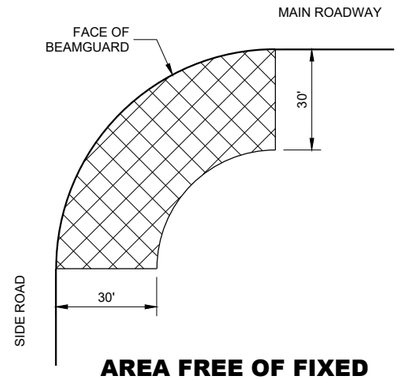
BEAM GUARD POSTS IN HEIGHT TRANSITION

TABLE FOR RADIUS OF 32' AND LESS

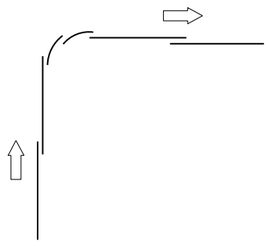
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



AREA FREE OF FIXED OBJECTS FOR RADIUS 32' AND LESS (16)



AREA FREE OF FIXED OBJECTS FOR RADIUS GREATER THAN 32'



LAP SPLICE DETAIL

GENERAL NOTES

SEE PLANS FOR OTHER BARRIER SYSTEM AND LOCATION SPECIFICS.

SEE SDD 14B42 FOR MORE INFORMATION ON BEAM GUARD INSTALLATION, PARTS, MATERIALS, AND INSTALLATION INFORMATION.

GALVANIZE PARTS AFTER FABRICATION.

WELDING TO FOLLOW CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI / AWS D1.1.

UNLESS NOTED OTHERWISE, ALL PLATES ARE FLAT AND FREE OF WARP.

UNLESS NOTED OTHERWISE, ALL EDGES ARE SMOOTH, STRAIGHT AND VERTICAL.

ALL CUTS AND HOLES, EXCEPT IN BEAM GUARD RAIL ARE TO BE MACHINED OR MACHINE FLAME CUT.

UNLESS NOTED OTHERWISE, CUT OR PROVIDE BOLTS THAT ARE ¼" TO ½" BEYOND THE NUT.

DRAWINGS ARE NOT TO SCALE.

(1) RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.

(2) CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE USED IN THE RADIUS. CONTROLLED RELEASE TERMINAL (CRT) POSTS ARE SPACED 6' - 3". SEE PLAN FOR NUMBER OF CONTROLLED RELEASE (CRT) POSTS.

(3) WITHIN RADIUS BEAM GUARD RAILS ARE NOT BOLTED TO POSTS. BEAM GUARD RAIL IS RESTED ON TOP OF LAG SCREW.

(4) MINIMUM LENGTH OF BEAM GUARD ALONG SIDE ROAD OR DRIVEWAY TO INSTALL SHORT RADIUS TERMINAL. BEAM GUARD IS PAID WITH BEAM GUARD ITEM.

(5) ODD LENGTH OF BEAM GUARD REQUIRED TO INSTALL SHORT RADIUS TERMINAL.

(6) MINIMUM AMOUNT OF BEAM GUARD TO BE INSTALLED PRIOR TO TRANSITION TO RIGID BARRIER. ADDITIONAL BEAM GUARD, OR EAT. BEAM GUARD PAID FOR WITH BEAM GUARD ITEM. SEE PLANS FOR MORE DETAIL.

(7) BEAM GUARD, EAT, OR TRANSITION TO RIGID BARRIER. SEE PLAN.

(8) TOP OF BEAM GUARD BY THE RADIUS IS 27". HEIGHT OF BEAM GUARD IS 31" BY TRANSITION TO RIGID BARRIER, ADDITIONAL BEAM GUARD OR EAT.

(9) ADDITIONAL BEAM GUARD, EAT OR TRANSITION TO RIGID BARRIER. BEAM GUARD SHOWN. SEE PLAN FOR DETAILS.

(10) SHORT RADIUS TERMINAL (SEE OTHER DETAILS).

(11) HEIGHT VARIES. SEE NOTE (8) AND (8).

(12) BEAM GUARD RAIL SPLICE LOCATION. SPLICE LOCATION REQUIRES PART F1 AND F2. SEE SDD 14B42 FOR DETAILS.

(13) SEE TABLE FOR VALUES.

(14) MAXIMUM HEIGHT FOR CENTER OF HOLE IS ¾" ABOVE FINISHED GROUND ±1".

(15) DRILL POST $^{15}/_{64}$" DIA. PILOT HOLE. DO NOT HAMMER LAG SCREW INTO POST.

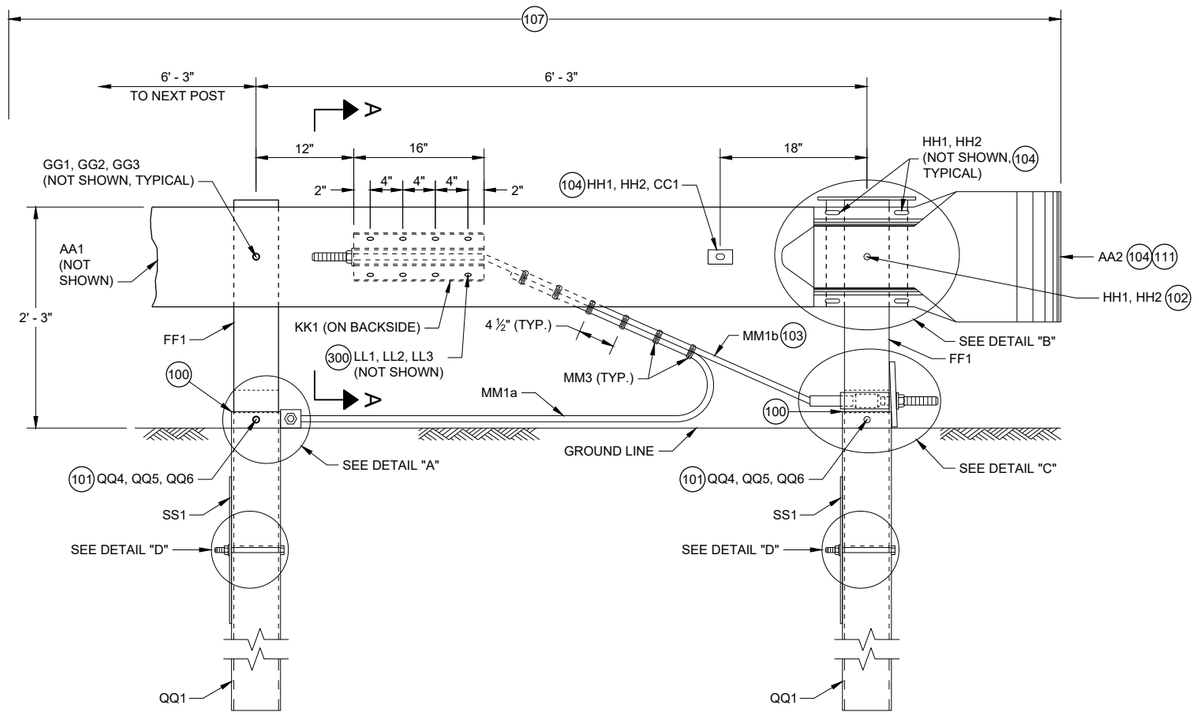
(16) SMALL SIGNS ON BREAKAWAY HARDWARE ARE ACCEPTABLE.

(17) TOP OF RAIL HEIGHT IS 27" WHEN USING A SHORT RADIUS TERMINAL (CRT).

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

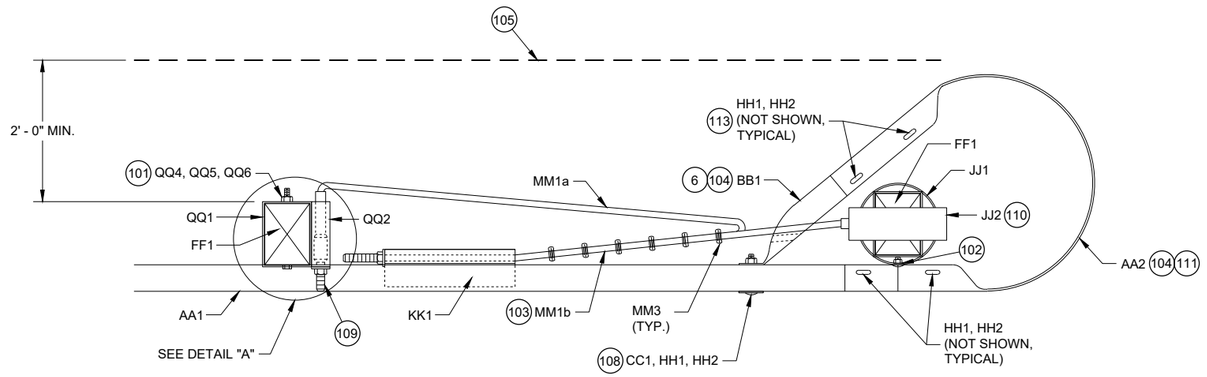
6

SDD 14B53 - 02a



PROFILE VIEW

SHORT RADIUS TERMINAL



TOP VIEW

SHORT RADIUS TERMINAL

GENERAL NOTES

100 TOP OF FOUNDATION TUBE 2 INCHES MAXIMUM ABOVE FINISHED GROUND.

101 WASHERS REQUIRED BETWEEN BOLT HEAD AND FOUNDATION TUBE AND BETWEEN NUT AND FOUNDATION TUBE.

102 SPLICE BOLT AND NUT CONNECTS BEAM GUARD RAIL, W-BEAM SECTION BUFFER, AND STEEL PIPE ASSEMBLY. NO WASHER REQUIRED. SEE DETAIL "B".

103 CABLE IS TAUT.

104 ADJUST AA2 AND BB1 TO FIT.

105 BREAK POINT OF SHOULDER.

106 TACK WELD CABLE CONNECTOR TUBE PLATE TO CABLE CONNECTION TUBE. SEE DETAIL "A" PROFILE VIEW.

107 PAY LIMIT FOR BEAM GUARD.

108 SQUARE WASHER BETWEEN HEAD OF BOLT AND TRAFFIC FACE OF BEAM GUARD. ROUND WASHER REQUIRED BETWEEN NUT AND BB1.

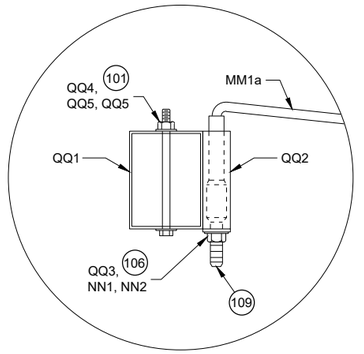
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

110 SEE STEEL PIPE ASSEMBLY DETAILS.

111 ATTACH UU2 WITH UU3. SHOP APPLY UU1 TO UU2.

112 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA1 TO AA2.

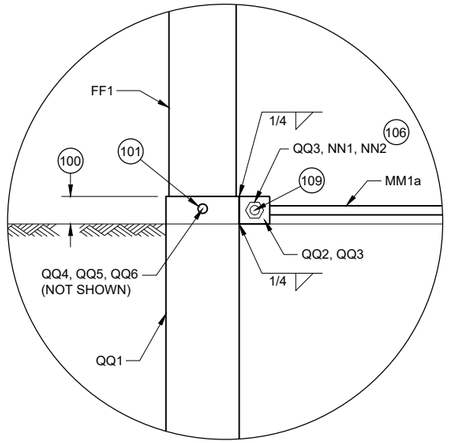
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



TOP VIEW

DETAIL "A"

(WOOD BREAKAWAY AND BEAM GUARD RAIL POSTS NOT SHOWN)



PROFILE VIEW

DETAIL "A"

6

SDD 14B53 - 02b

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

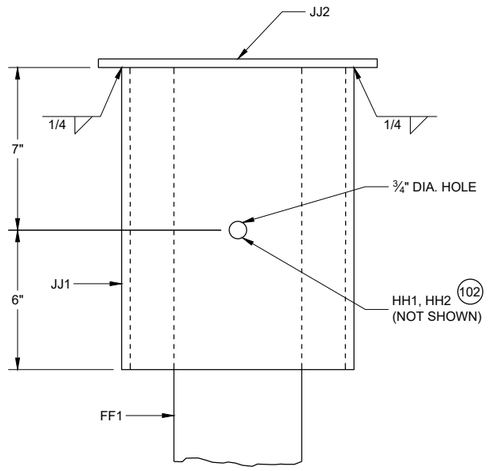
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B53 - 02b

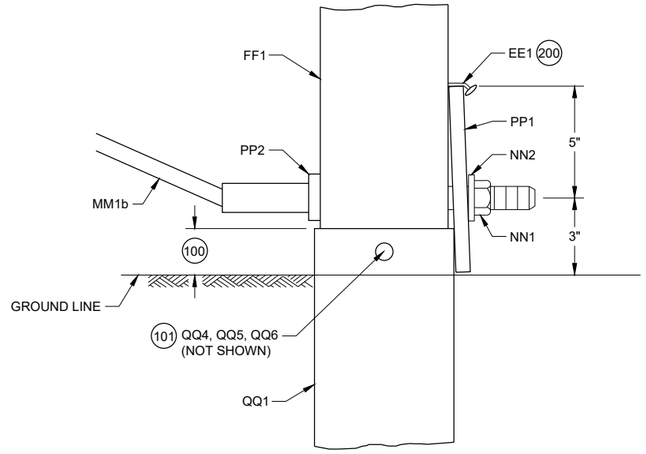
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



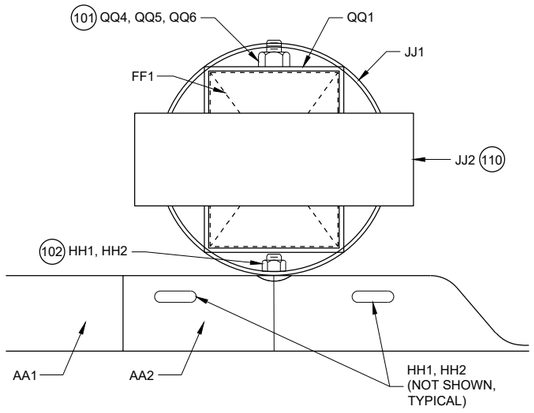
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



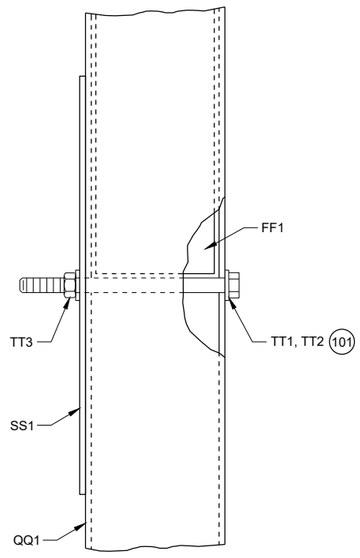
PROFILE VIEW

DETAIL "C"



PLAN VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY



PROFILE VIEW

DETAIL "D"

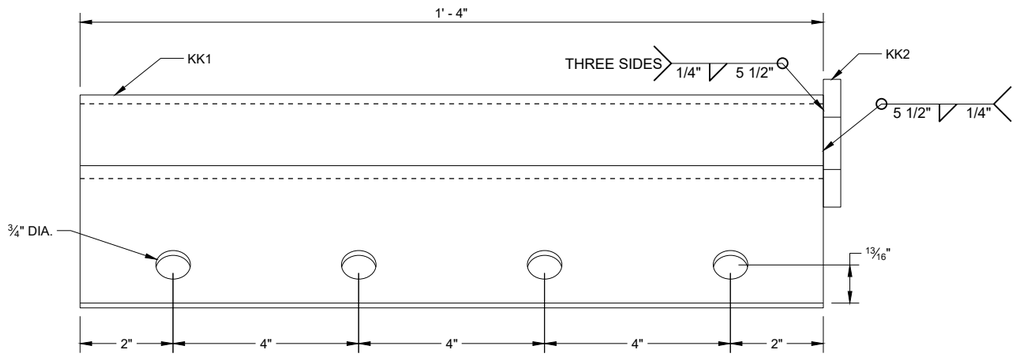
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

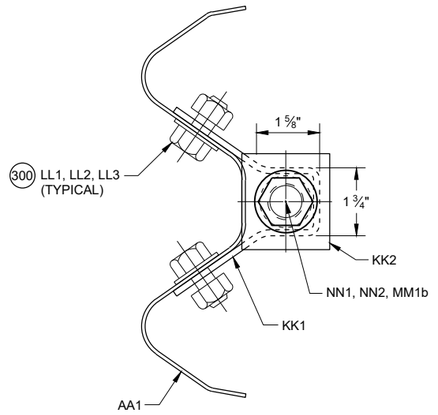
6

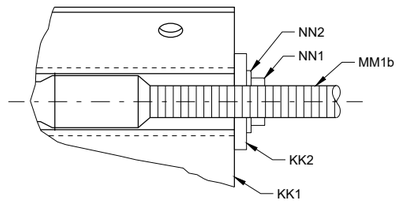
SDD 14B53 - 02c

GENERAL NOTES

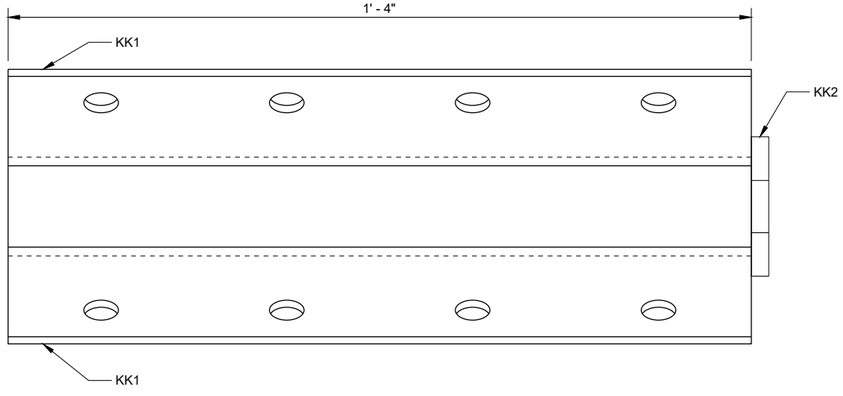
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

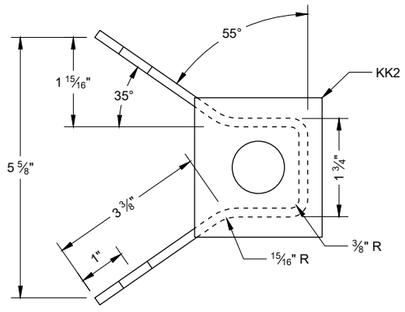




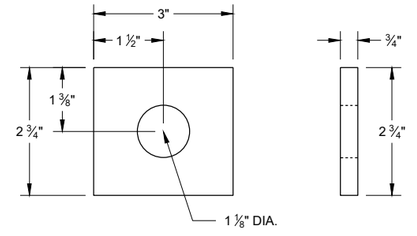


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

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SDD 14B53 - 02d

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

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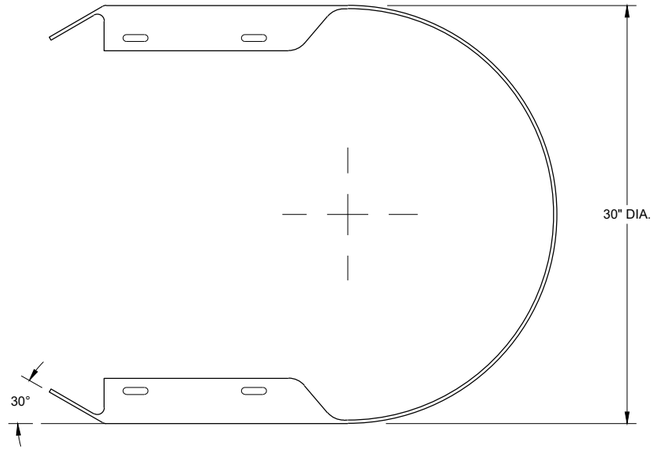
SDD 14B53 - 02d

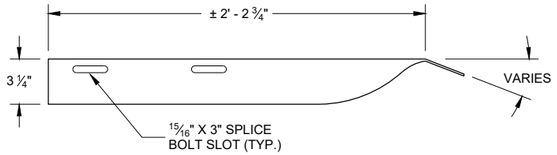
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

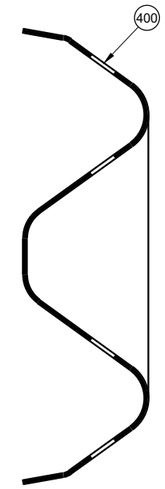
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



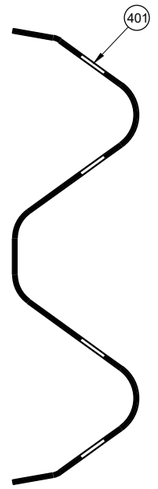
TOP VIEW



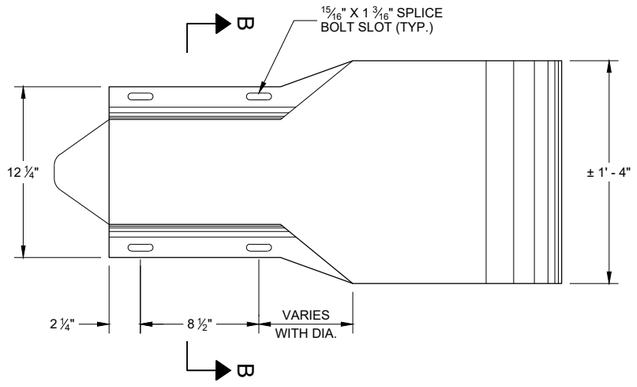
TOP VIEW



SECTION B -B

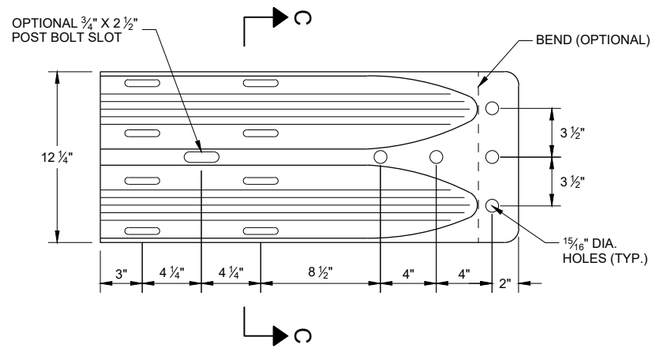


SECTION C -C



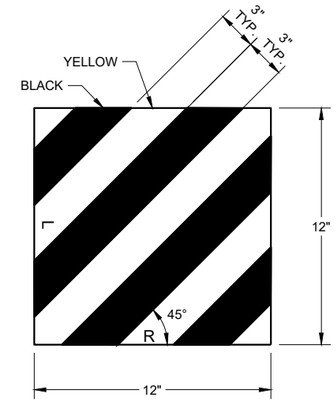
PROFILE VIEW

W BEAM
END SECTION BUFFER (AA2)



PROFILE VIEW

W BEAM
TERMINAL CONNECTOR (BB1)



REFLECTIVE SHEETING (UU1, UU2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

SDD 14B53 - 02e

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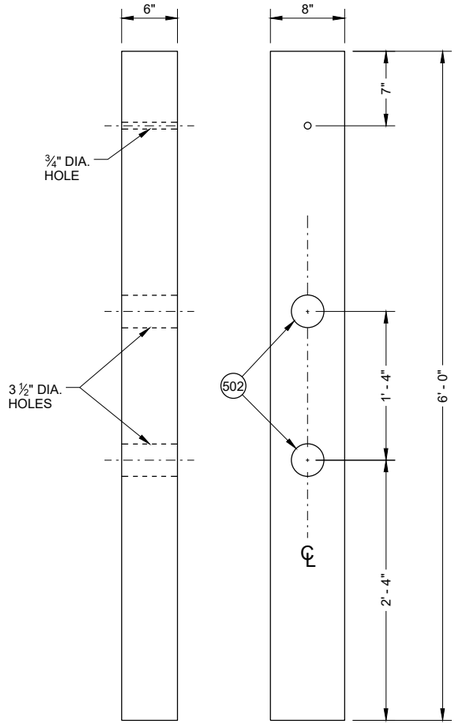
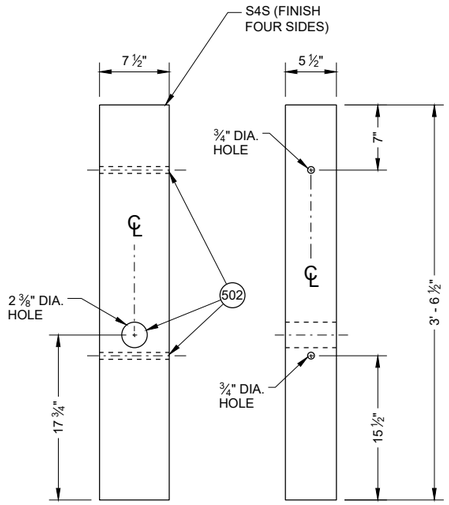


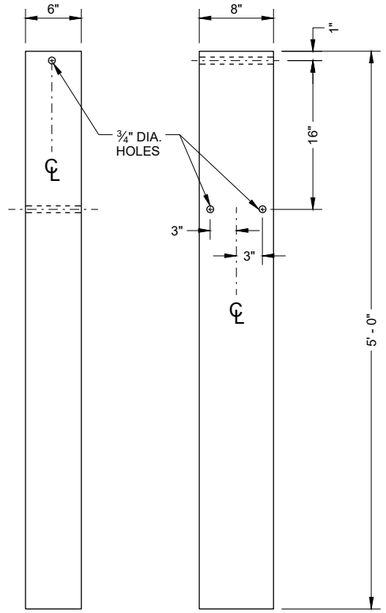
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) (500)

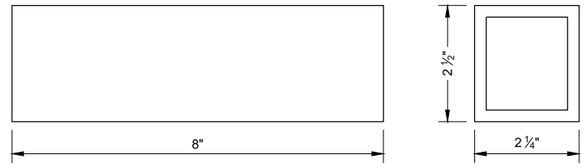
GENERAL NOTES

(500) SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

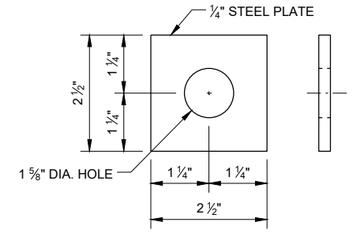
(501) FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

(502) LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

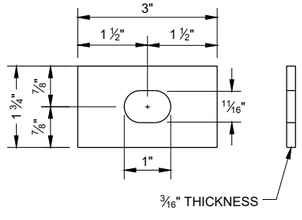
(503) MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE (109).



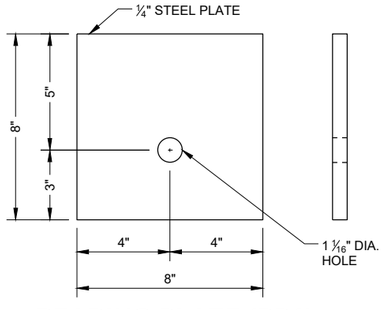
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



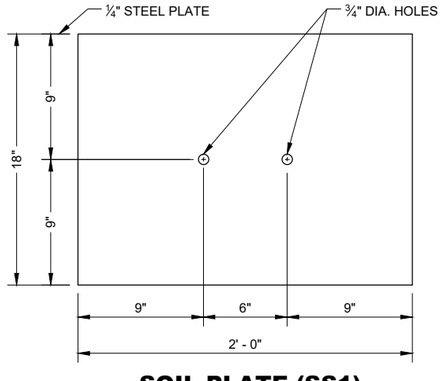
ANCHOR CABLE TUBE END PLATE (QQ3)



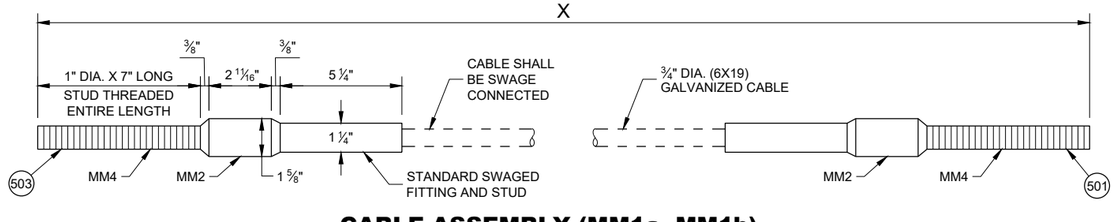
RECTANGULAR PLATE WASHER (CC1)



BEARING PLATE (PP1)



SOIL PLATE (SS1)



CABLE ASSEMBLY (MM1a, MM1b)

"X" LENGTH

MM1b	9' - 0"
MM1b	6' - 8"

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B53 - 02f

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	BEAM GUARD RAIL	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
A2	BEAM GUARD RAIL - SHOP BENT	INDICATE ON BACK OF RAIL THE RADIUS THAT RAIL WAS BENT TO. SHOP BEND RADIUS IS TO THE NEAREST FOOT. FOLLOW AASHTO M180 ON HOW TO MARK RADIUS INFORMATION.	
		AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
B1	BLOCK - WOOD	WISDOT SPEC. 614	SEE SDD 14B42
C1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEAD)	
D1	POST-STRONG POST-WOOD	WISDOT SPEC. 614	SEE SDD 14B42
D2	POST-CRT-WOOD	WISDOT SPEC. 614	
E1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
E2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	5/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
E3	POST BOLT - NUT	AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
F1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
F2	SPLICE BOLT - NUT	ASTM A563 GRADE A	5/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
G1	LAG SCREW	ASTM A308 GRADE A ASTM A153 CLASS D	1/2" DIA. 6" LONG
H1	DELINEATOR - BEAM GUARD		SEE SDD 14B42 FOR MORE INFORMATION
H2	DELINEATION - SHEETING	YELLOW OR WHITE	
		WISDOT SPEC 637 TYPE SH	
		APPROVED PRODUCT LIST	
J1	FOUNDATION BACKFILL	STANDARD SPEC. 614	
AA1	BEAM GUARD RAIL - PUNCHED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
AA2	BEAM GUARD RAIL - END SECTION BUFFER	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
BB1	BEAM GUARD RAIL - TERMINAL CONNECTOR MODIFIED	AASHTO M180, CLASS A, TYPE 2	
		APPROVED PRODUCER	
CC1	SHORT RADIUS - SQUARE WASHER	AASHTO M180	
		GALV. AASHTO M111 / ASTM A123	
EE1	NAIL	ASTM A153 HOT DIP CLASS D	
		ASTM F1667 TYPE 1 STYLE 12 (16 DOUBLE HEADED)	
FF1	POST - BCT - WOOD	S4S FINISH ON 4 SIDES	
		WISDOT SPEC. 614	
GG1	POST BOLT	ASTM A307 GRADE A OR SAE J429 GRADE 2	3/8" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180	
		GALV. HOT DIP TO AASHTO M232 CLASS C/ASTM A153 CLASS C/ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1/ASTM B695 CLASS 50, TYPE 1	
		UNC	
GG2	POST BOLT - WASHER	ASTM F436 TYPE 1 (HARDEN TYPICALLY USED WITH STEEL) OR ASTM F844 (UNHARDENED TYPICALLY WITH WOOD)	3/8" DIA.
		GALV. AASHTO M111 / ASTM A 123 OR GALV. HOT DIP. TO AASHTO M232 CLASS C/ASTM A153 CLASS C / ASTM F2329	

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SDD 14B53 - 02g

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE 14B42 FOR GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		ASTM A563 GRADE A HEAVY HEX HEAD	
HH1	SPLICE BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		ASTM A307 GRADE A OR SAE J429 GRADE 2	
		UNC	
		AASHTO M180 HEAD GEOMETRY	
HH2	SPLICE BOLT - NUT	ASTM A563 GRADE A	⅜" DIA. SEE SDD 14B42 FOR BOLT GEOMETRY
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
JJ1	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	10" O.D.
JJ2	TOP PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS ⅜" X 4" X 1' - 0"
		GALV. AASHTO M111 / ASTM A123	
KK1	ANCHOR BRACKET	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
KK2	ANCHOR BRACKET - BEARING PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
LL1	ANCHOR BRACKET - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	⅝" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
LL3	ANCHOR BRACKET - NUT	ASTM A563 GRADE A	⅝" DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
MM1a	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM1b	ANCHOR CABLE	AASHTO M30 / ASTM A741 INDEPENDENT WIRE CORE (IWRC) OR WIRE STRAND CORE (WCS), IMPROVED PLOW STEEL (IPS), 6X19, TYPE II OR IIc CLASS C ZINC COATED	
MM2	ANCHOR CABLE - SWAGE FITTING	ASTM A576 GRADE 1035	
		SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. WITH A BREAKING STRENGTH 40,000 LBS.	
		GALV. AASHTO M111 / ASTM A123	
		ASME B30.26 FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING INTO CONNECTION: NAME OF MANUFACTURER OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE.	
MM3	WIRE ROPE CABLE CLAMPS	FF-C-450D TYPE 1 CLASS 1	¾"
		ASTM A153 HOT DIP CLASS D	
MM4	ANCHOR CABLE - SWAGE FITTING - STUD	ASTM F3125 GRADE A325 TYPE 1 OR SAE GRADE 5 OR ASTM A449 TYPE 1 HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
NN1	ANCHOR CABLE - NUT	ASTM A563 GRADE A	1" DIA.
		AASHTO M180 DOUBLE RECESSED HEAVY HEX HEAD	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		OVER TAPPED NUTS OVER-SIZE AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		UNC	
NN2	ANCHOR CABLE - NUT - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	1" DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

6

SDD 14B53 - 02h

BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
PP1	BEARING PLATE AT POST	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / ASTM A123	
PP2	PIPE - STEEL	ASTM A53 GALVANIZED GRADE B SCHEDULE 40	2" DIA. x 6" LONG
QQ1	FOUNDATION TUBE	ASTM A500 GRADE B	8" X 6" X 3/16"
		GALV. AASHTO M111 / ASTM A123	
QQ2	SHORT RADIUS - FOUNDATION TUBE - ANCHOR CABLE - TUBE	ASTM A500 GRADE B	DIMENSIONS 2 1/2" X 2 1/4" X 1/4" X 8"
		GALV. AASHTO M111 / ASTM A123	
QQ3	SHORT RADIUS - SOIL TUBE - ANCHOR CABLE - TUBE - END PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	DIMENSIONS 2 1/2" X 2 1/2" X 1/4"
		GALV. AASHTO M111 / ASTM A123	
QQ4	GROUND STRUT AND YOKE - BOLT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
		ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	
		UNC	
QQ5	GROUND PLATE AND YOKE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
QQ6	GROUND STRUT AND YOKE - NUT	HEAVY HEX	5/8 DIA.
		UNC	
		ASTM A563 GRADE A	
		OVER TAPPED NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563	
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
SS1	SOIL PLATE	ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI OR ASTM A709 MAX STRENGTH 50 KSI OR ASTM A992 MAX STRENGTH 50 KSI	
		GALV. AASHTO M111 / A123	
TT1	SOIL PLATE - BOLT	ASTM A307 GRADE B HEAVY HEX HEAD OR SAE J429 GRADE 2 HEAVY HEX HEAD	5/8 DIA.
		GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	
		UNC	
TT2	SOIL PLATE - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	5/8 DIA.
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	
TT3	SOIL PLATE - NUT	GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329 OR GALV. MECHANICALLY TO AASHTO M298 CLASS 50, TYPE 1 / ASTM B695 CLASS 50, TYPE 1	5/8 DIA.
UU1	OBJECT MARKER - SHEETING	MUTCD / WISDOT OBJECT MARKER TYPE 3	PATTERN AND COLOR FOR SHEETING. SHEETING TYPE FOR MARKER.
		WISDOT SPEC 637 TYPE F	
		APPROVED PRODUCT LIST	
UU2	OBJECT MARKER - ALUMINUM PLATE	WISDOT SPEC 637 ALUMINUM PLATE	MATERIAL AND THICKNESS OF MATERIALS
UU3	OBJECT MARKER - SCREWS	STAINLESS SELF-TAPPING SCREWS	
VV1	FOUNDATION BACKFILL	WISDOT SPEC 614	

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SDD 14B53 - 02i

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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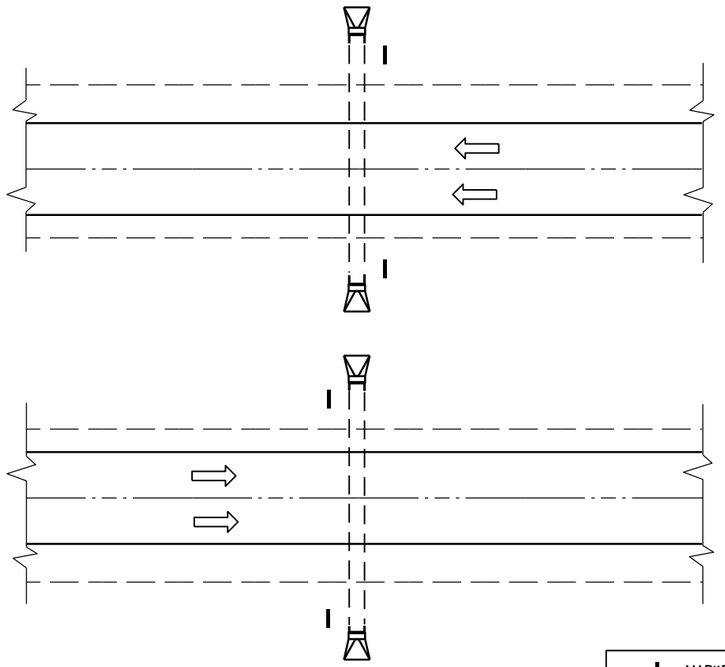
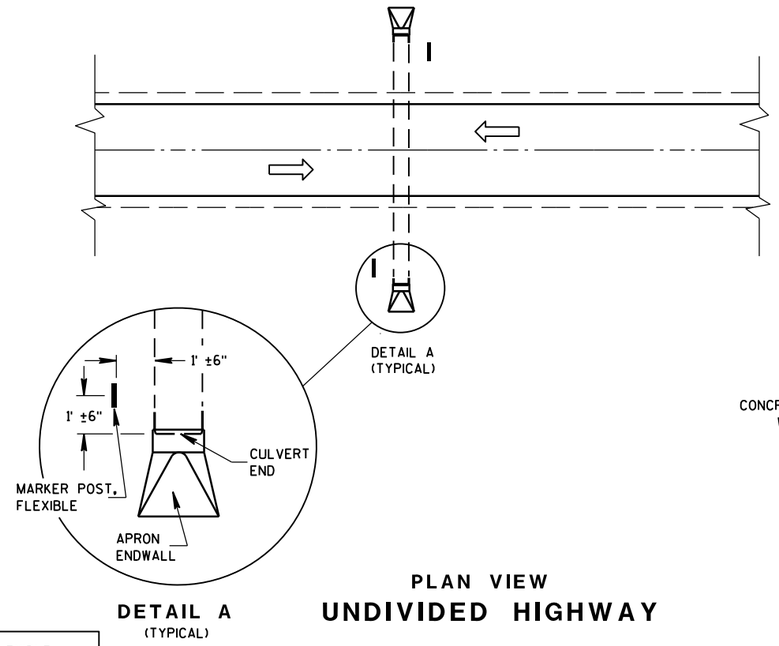
SDD 14B53 - 02i



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

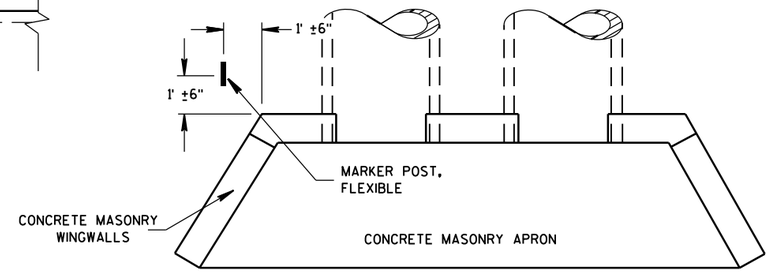
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

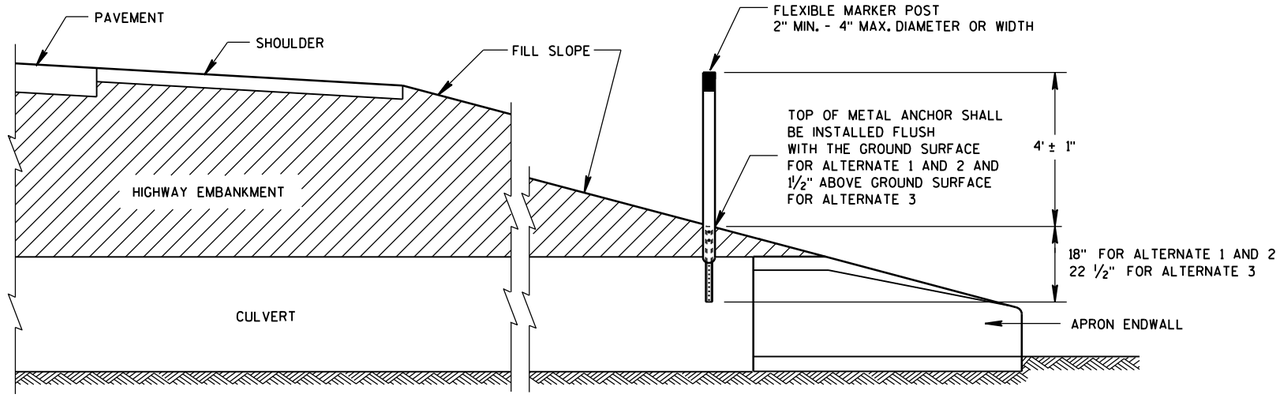
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW

CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH

FLEXIBLE MARKER POST LOCATION



CROSS SECTION

FLEXIBLE MARKER POST

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 15 A 3-2a

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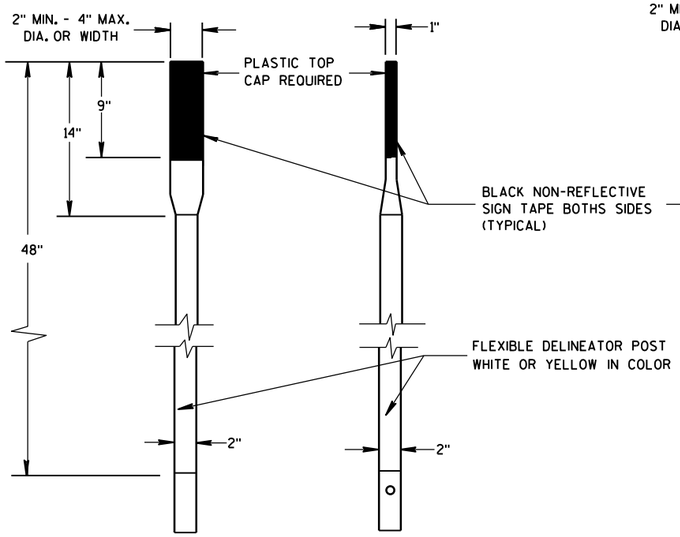
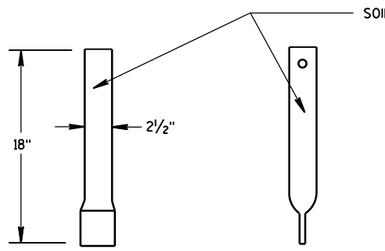
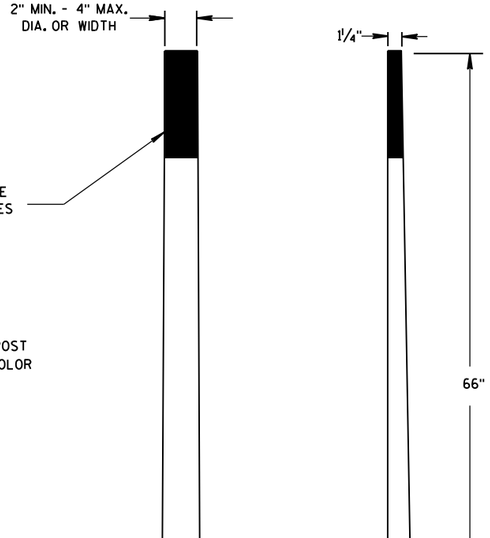
S.D.D. 15 A 3-2a





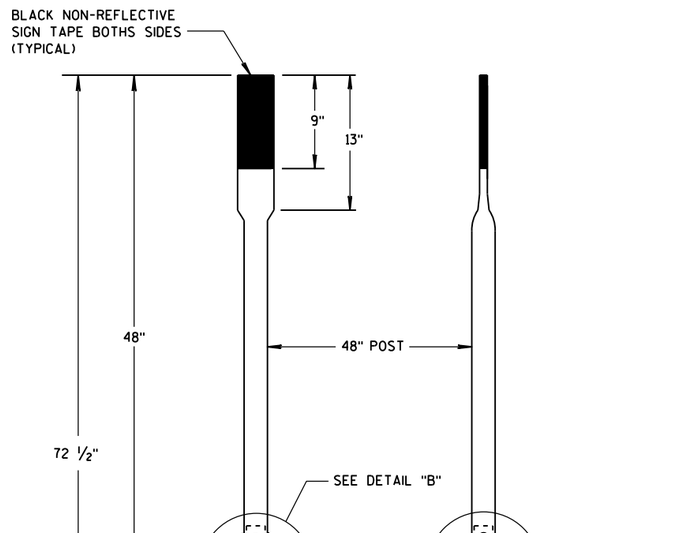
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

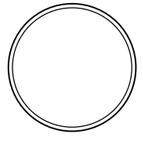
ALTERNATE 2



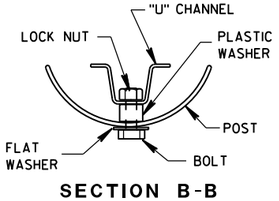
FRONT VIEW SIDE VIEW

ALTERNATE 3

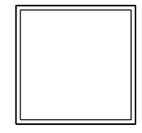
FLEXIBLE MARKER POSTS



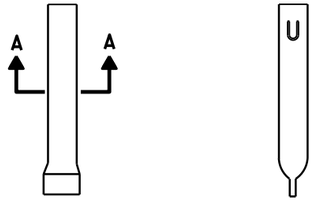
SECTION A-A



SECTION B-B

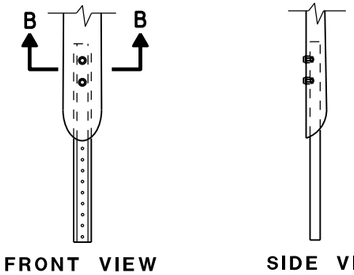


SECTION C-C



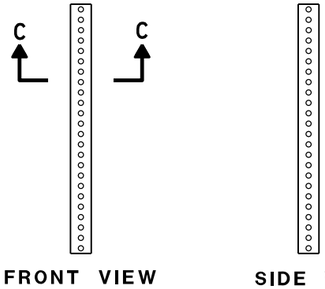
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

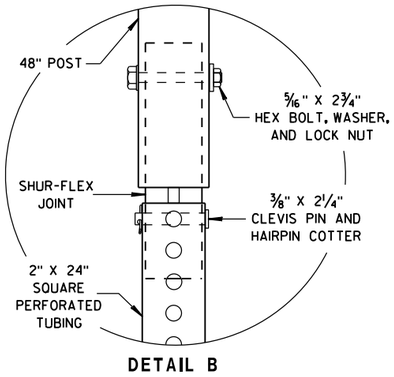
ALTERNATE 2



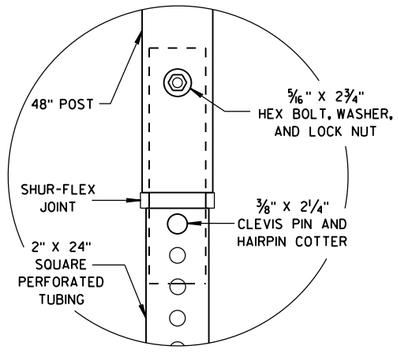
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER

FHWA

IGN

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S.D.D. 15 A 3-2b

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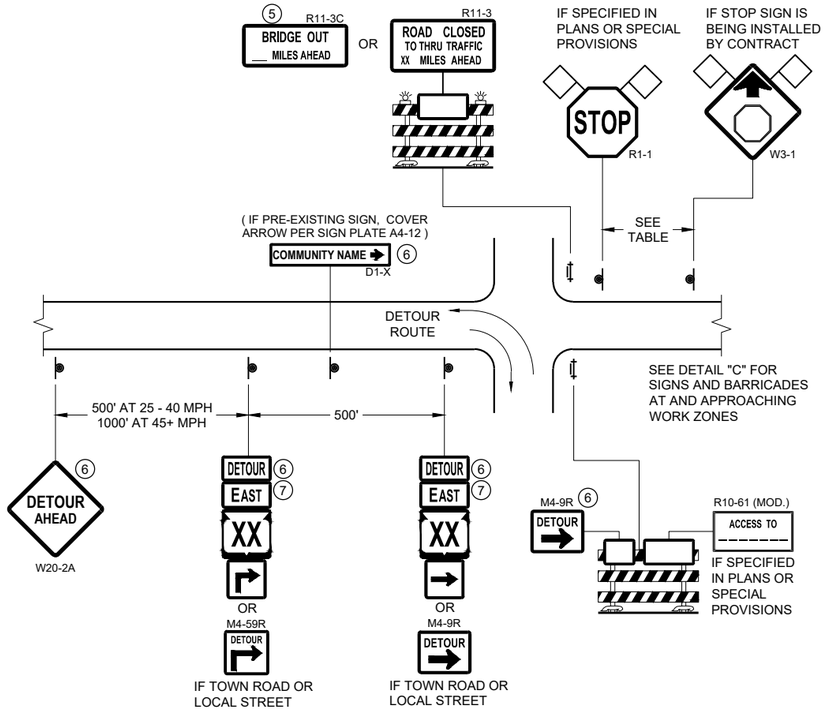
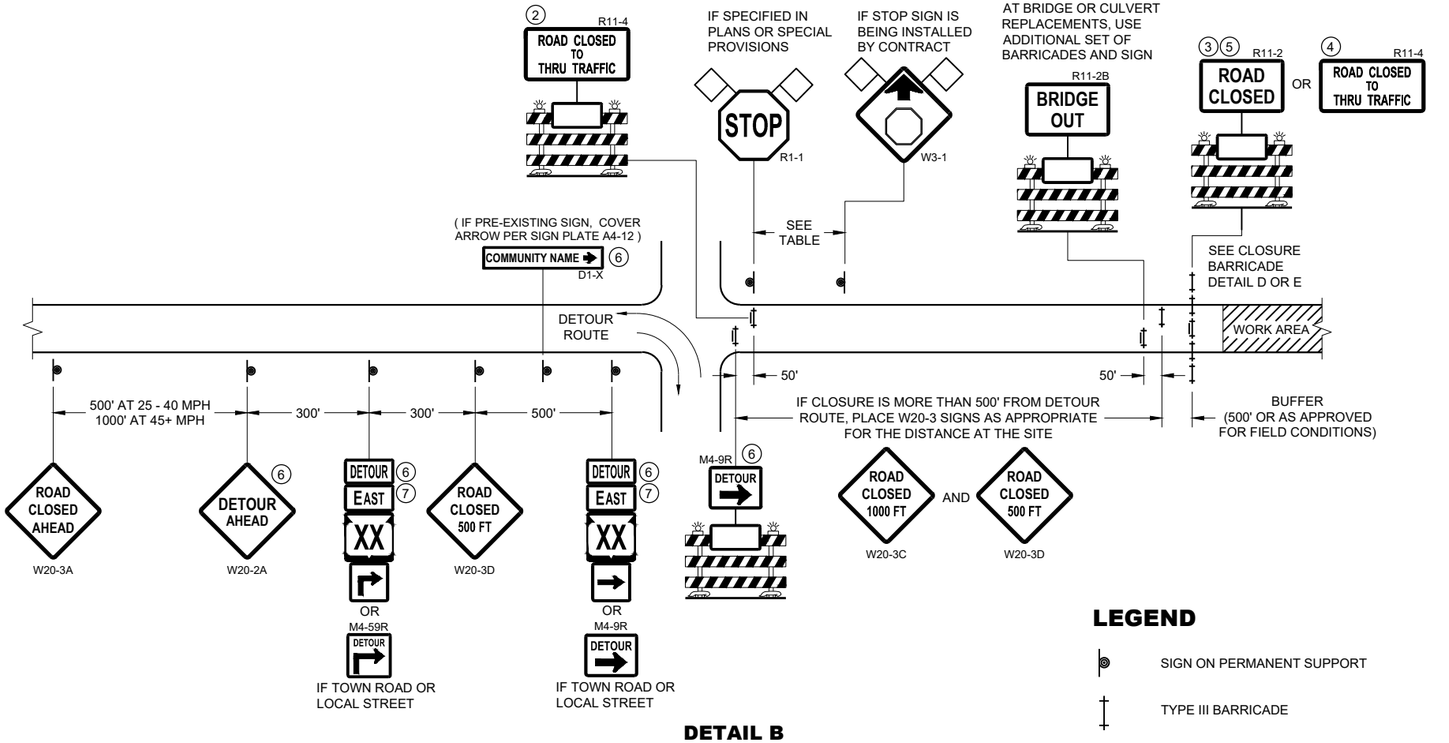
S.D.D. 15 A 3-2b



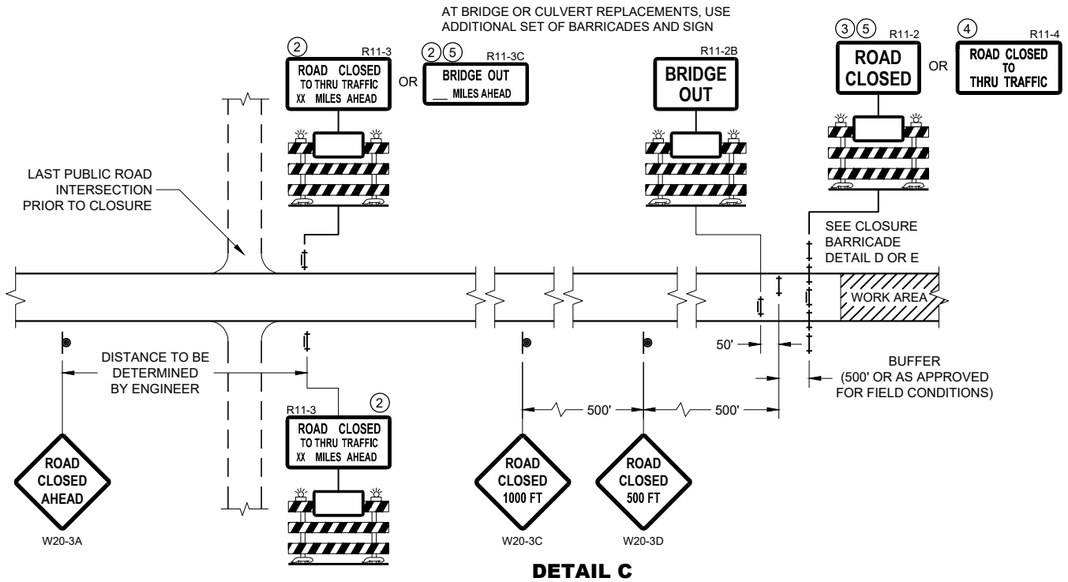
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

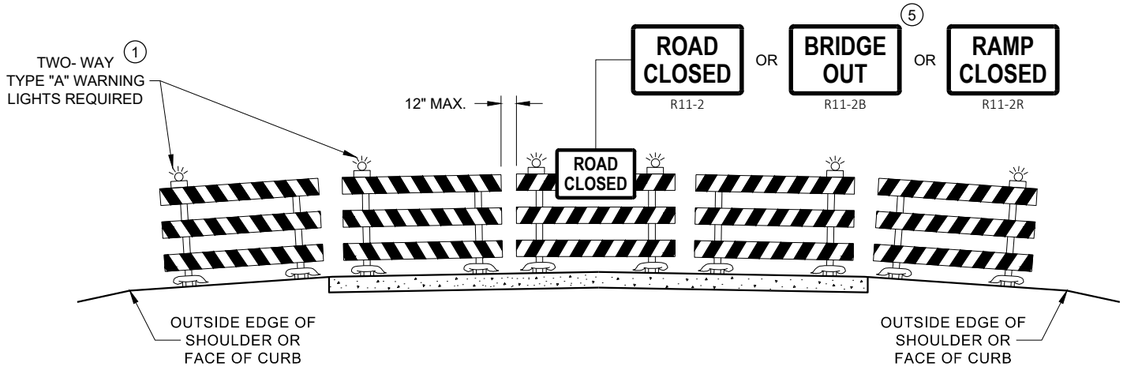
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

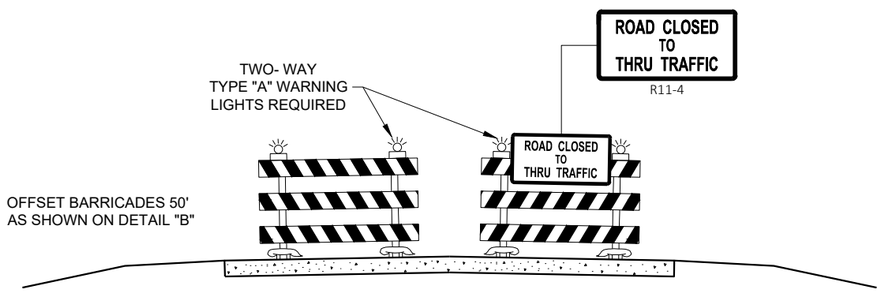
FHWA

6

SDD 15C02 - 09a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

(2) THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.

(3) FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".

(4) FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".

(5) FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.

(6) INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.

(7) "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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SDD 15C02 - 09b

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SDD 15C02 - 09b

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR — M4 - 8
- EAST — M3 - X
- XX — M1 - 4 OR XX — M1 - 6 OR COUNTY X — M1 - 5A
- M05 - 1 OR M06 - 1 OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

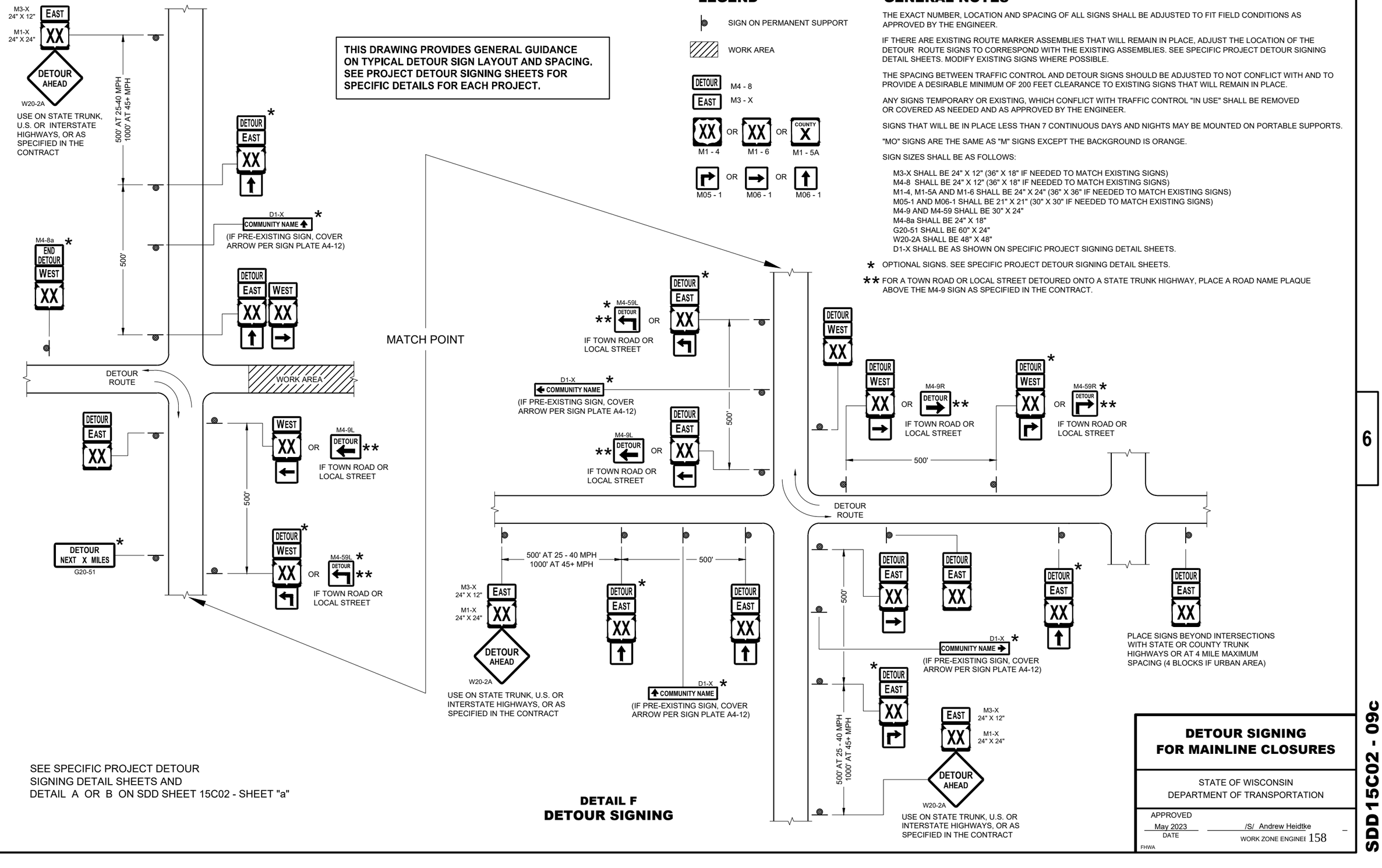
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

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

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



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

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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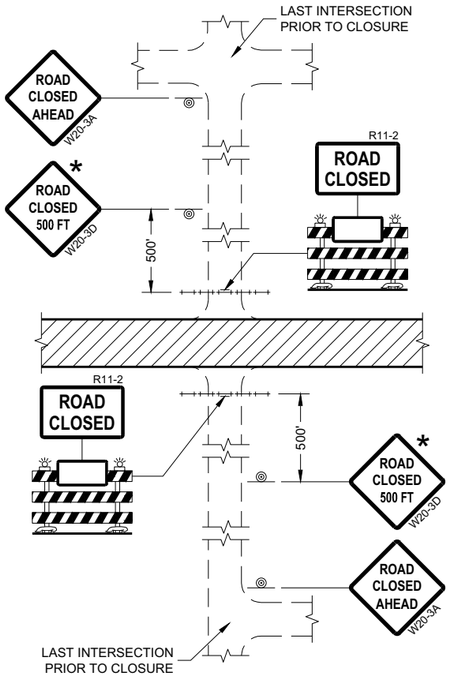
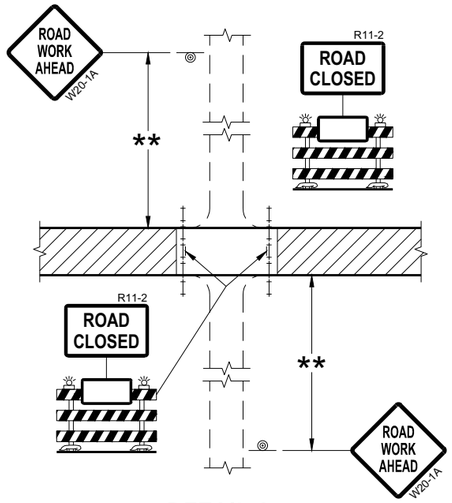
SDD 15C02 - 09c



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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.

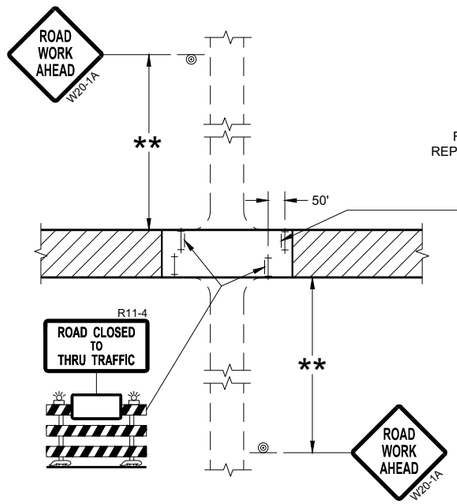
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

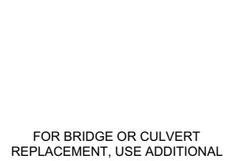
THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

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".

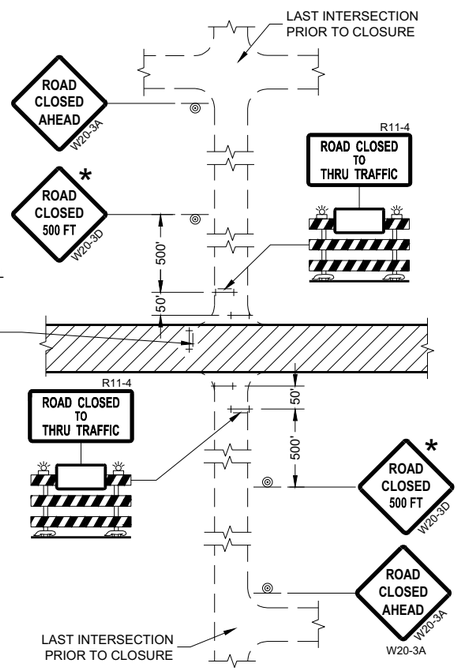
* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

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





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



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

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
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

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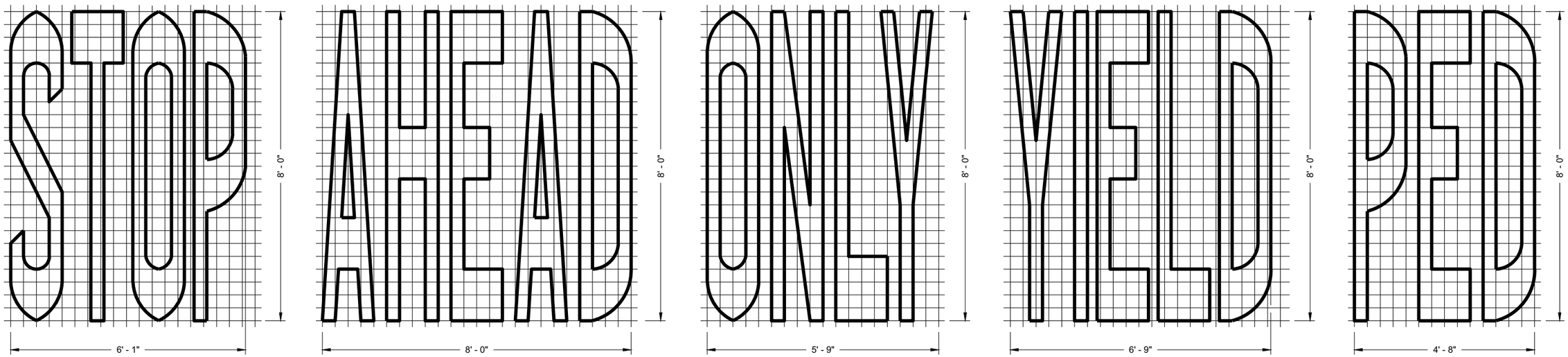
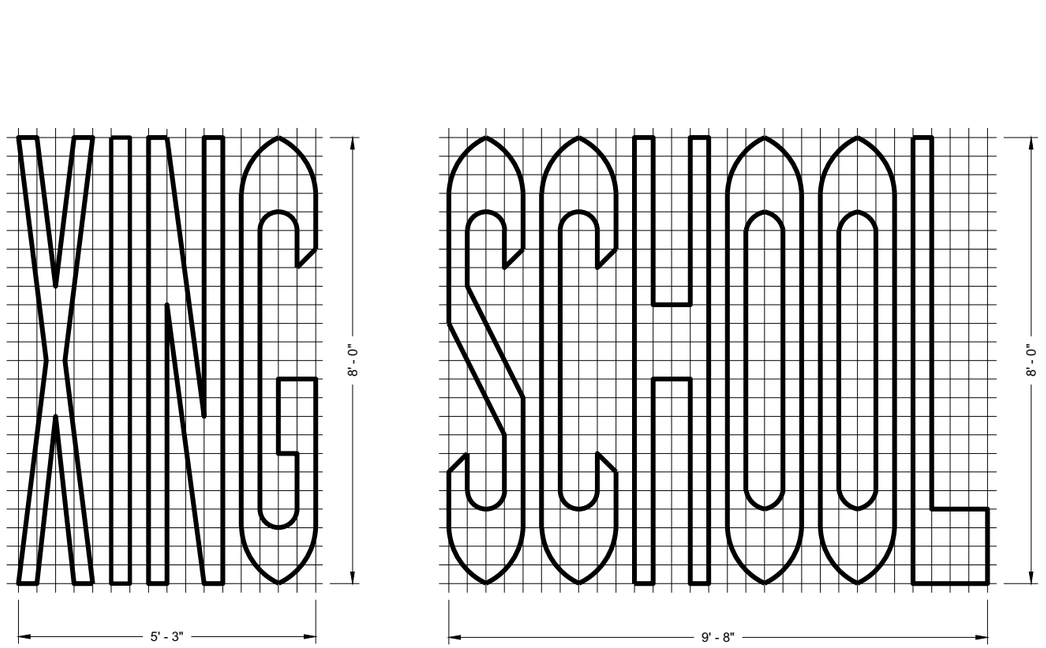
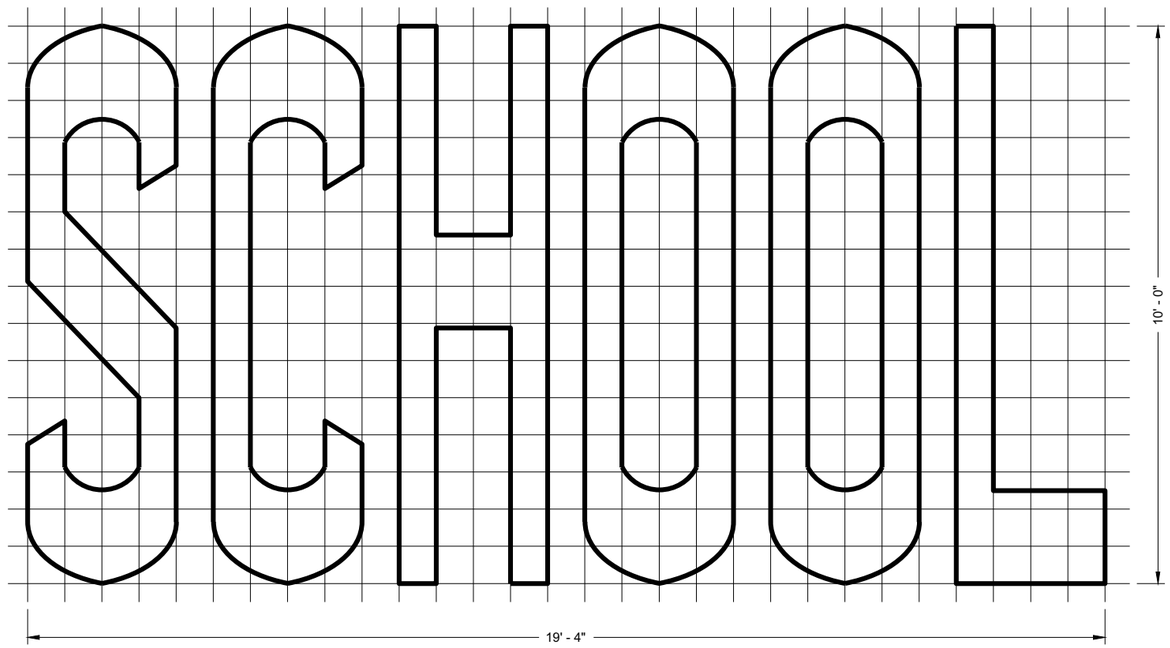
SDD 15C03 - 05

SDD 15C03 - 05





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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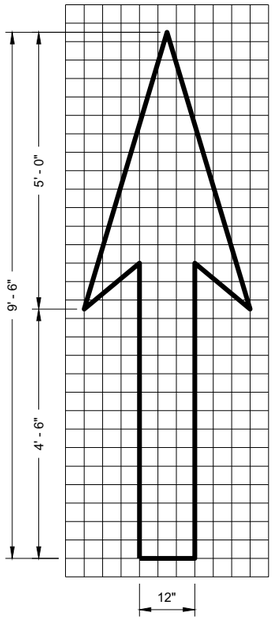
SDD 15C07 - 15b

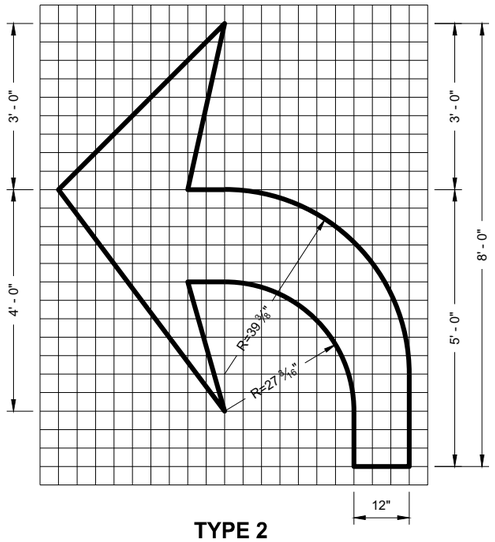
SDD 15C07 - 15b

GENERAL NOTES

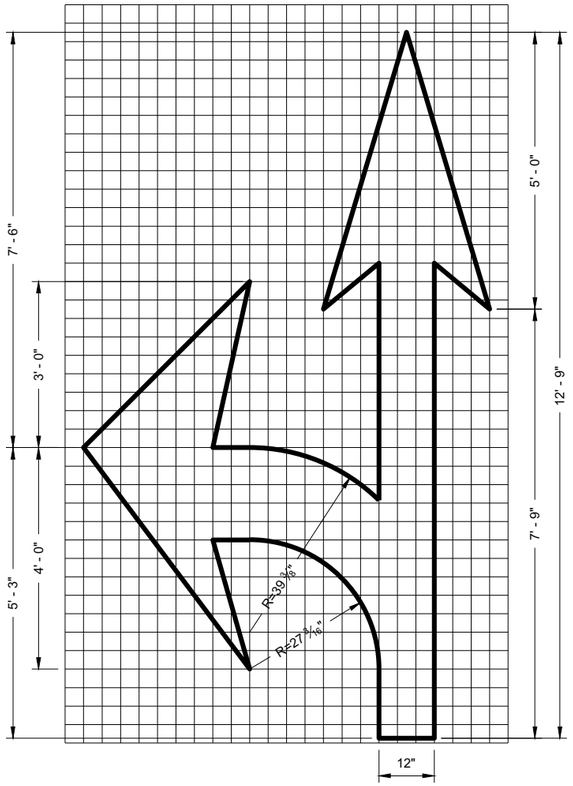
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



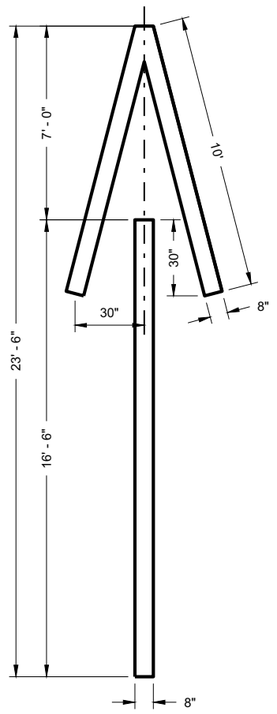
TYPE 1



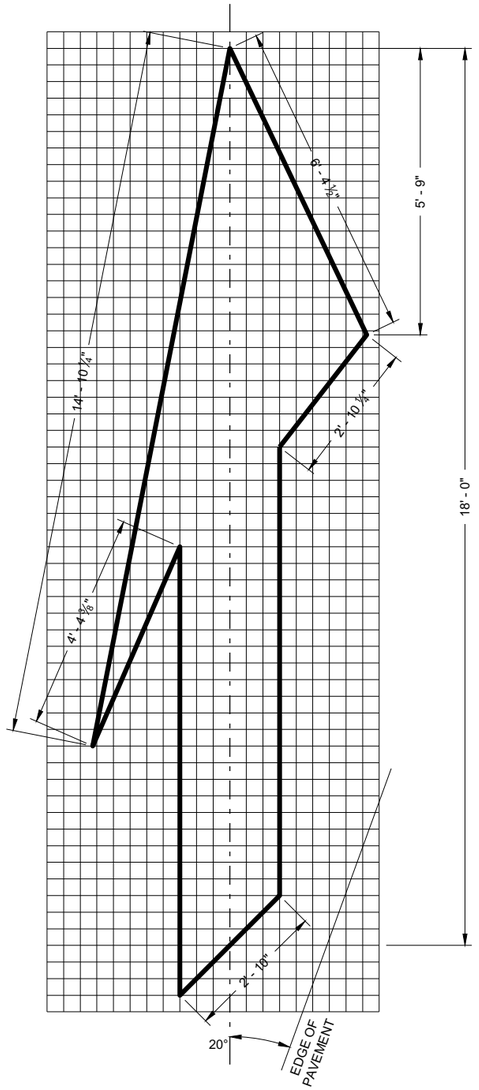
TYPE 2



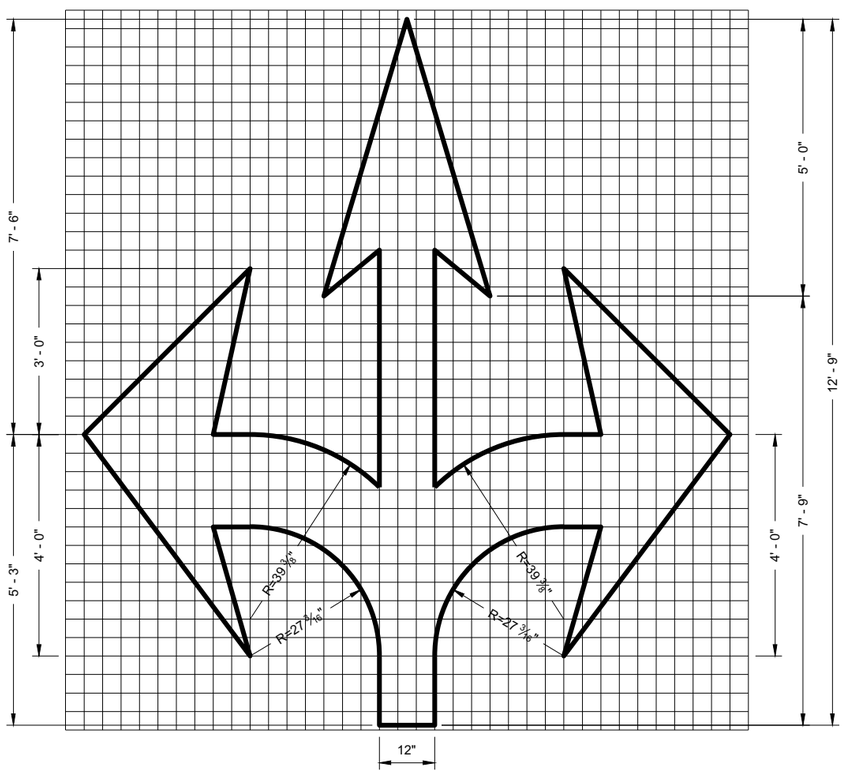
TYPE 3



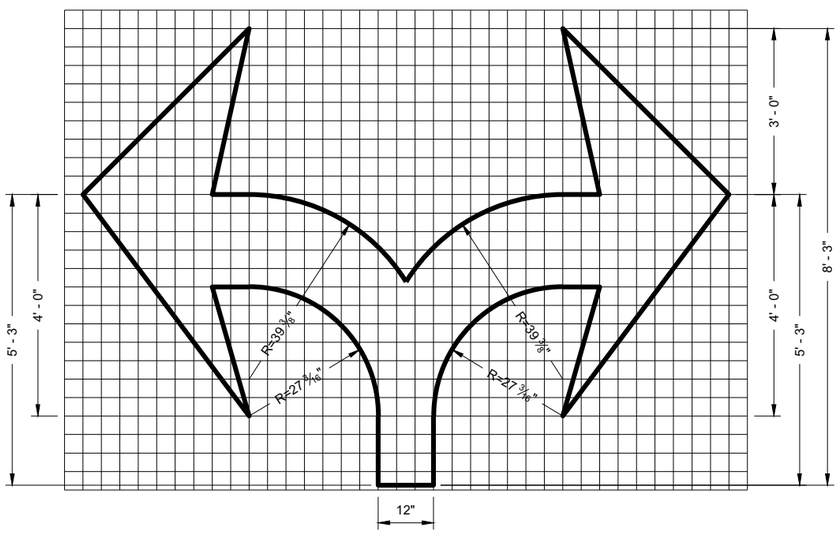
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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SDD 15C07 - 15c

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SDD 15C07 - 15c

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.

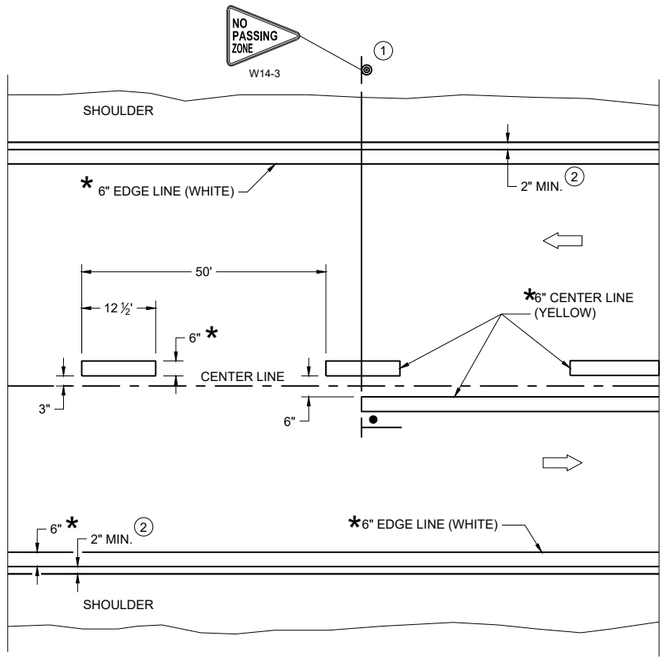
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

LEGEND

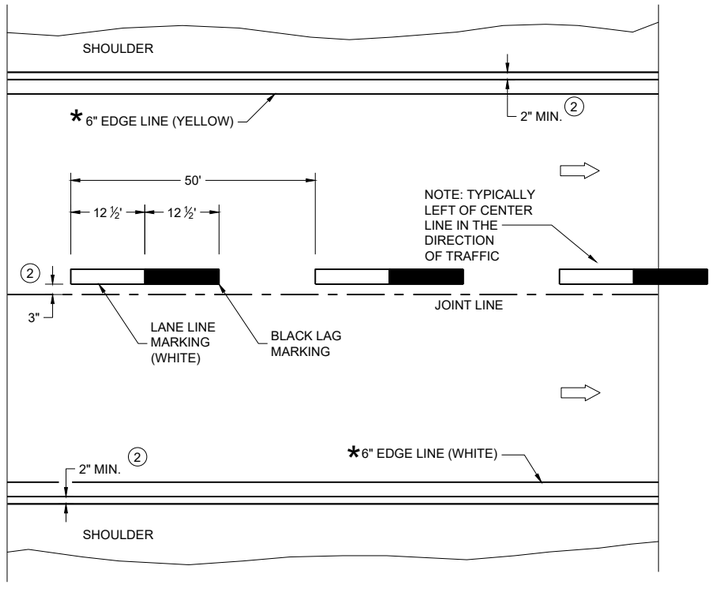
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

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PERMANENT LONGITUDINAL PAVEMENT MARKINGS

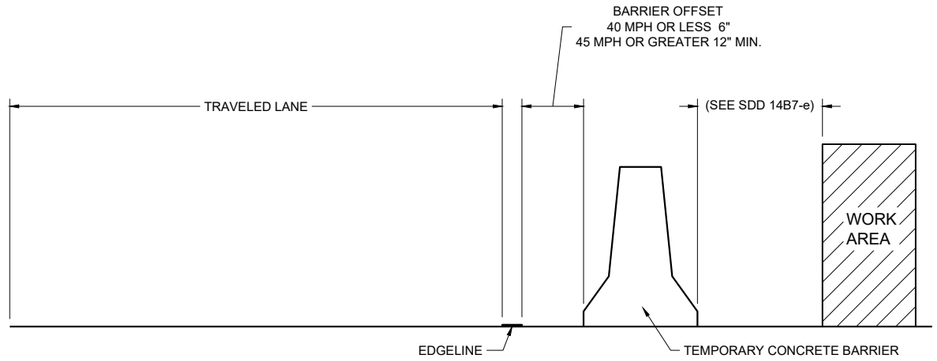
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ Jeannie Silver
Statewide Pavement Marking Engineer

FHWA



TEMPORARY BARRIER OFFSET FROM EDGELINE

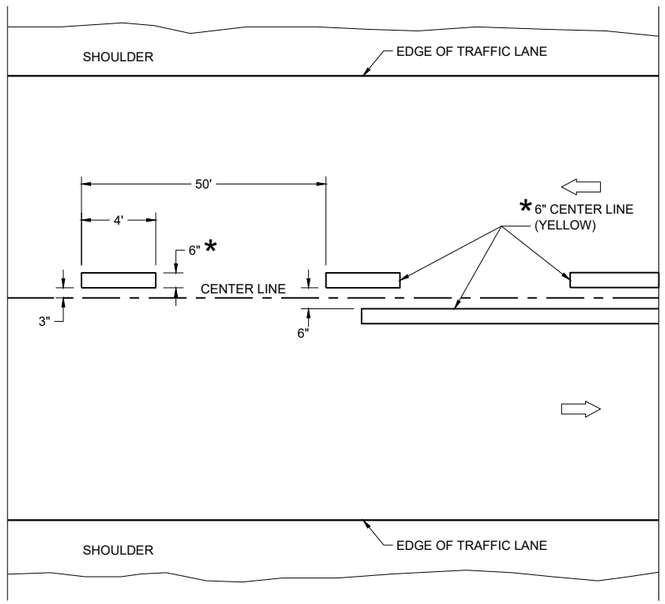
GENERAL NOTES

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

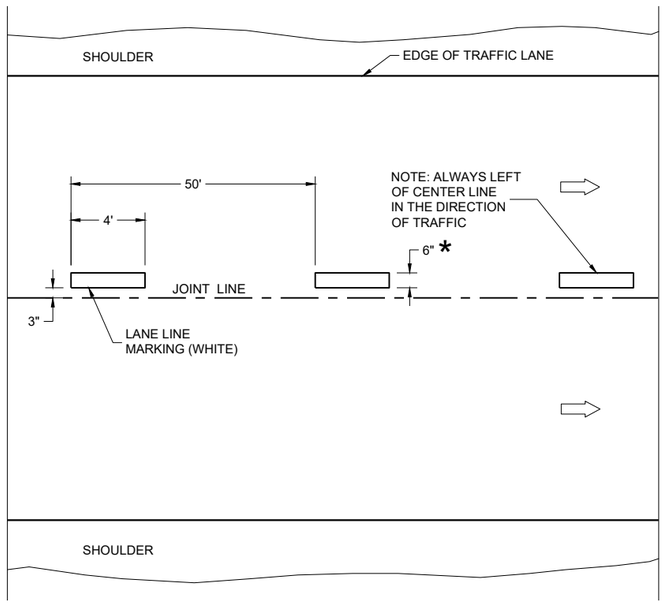
LEGEND

DIRECTION OF TRAFFIC

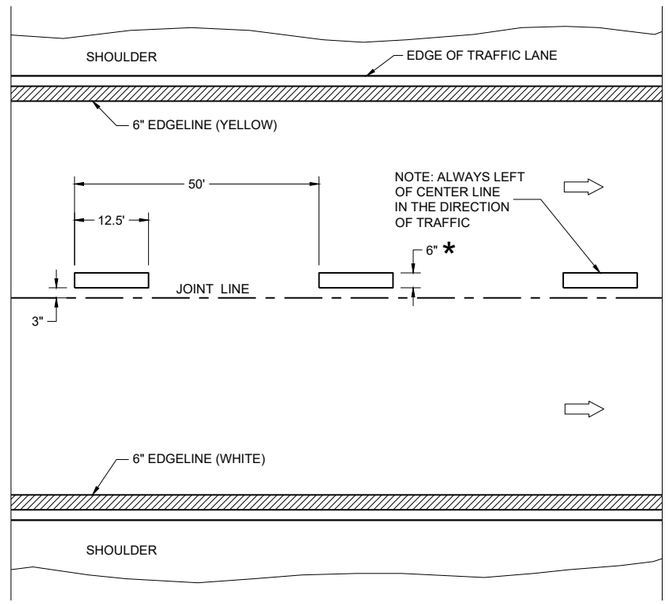
*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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

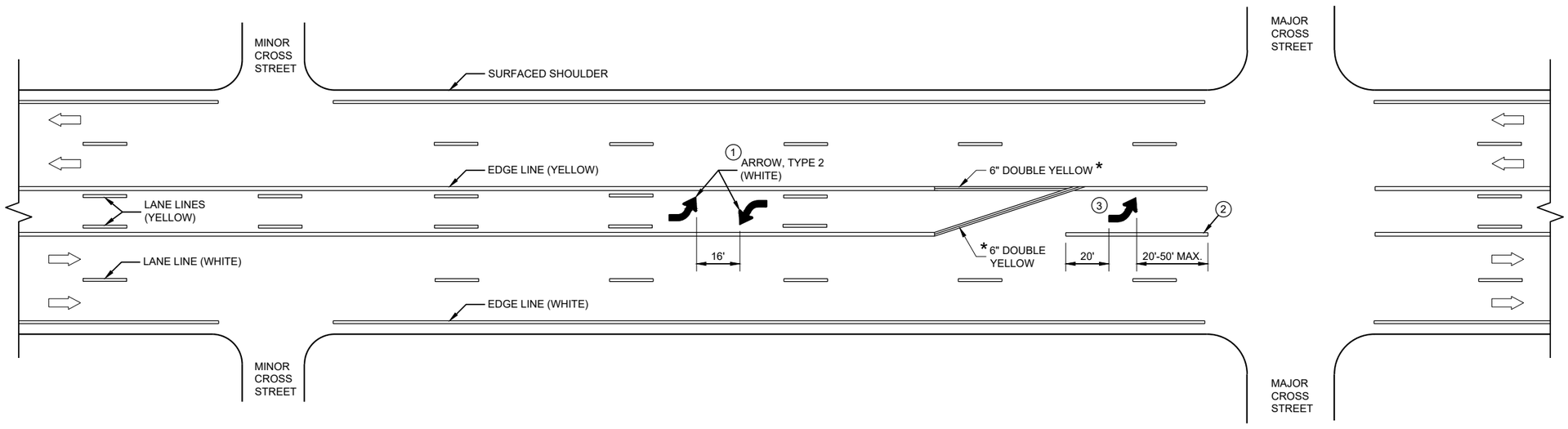
SDD 15C08-23b

GENERAL NOTES

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

⇨ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 164

SDD 15C08-23c

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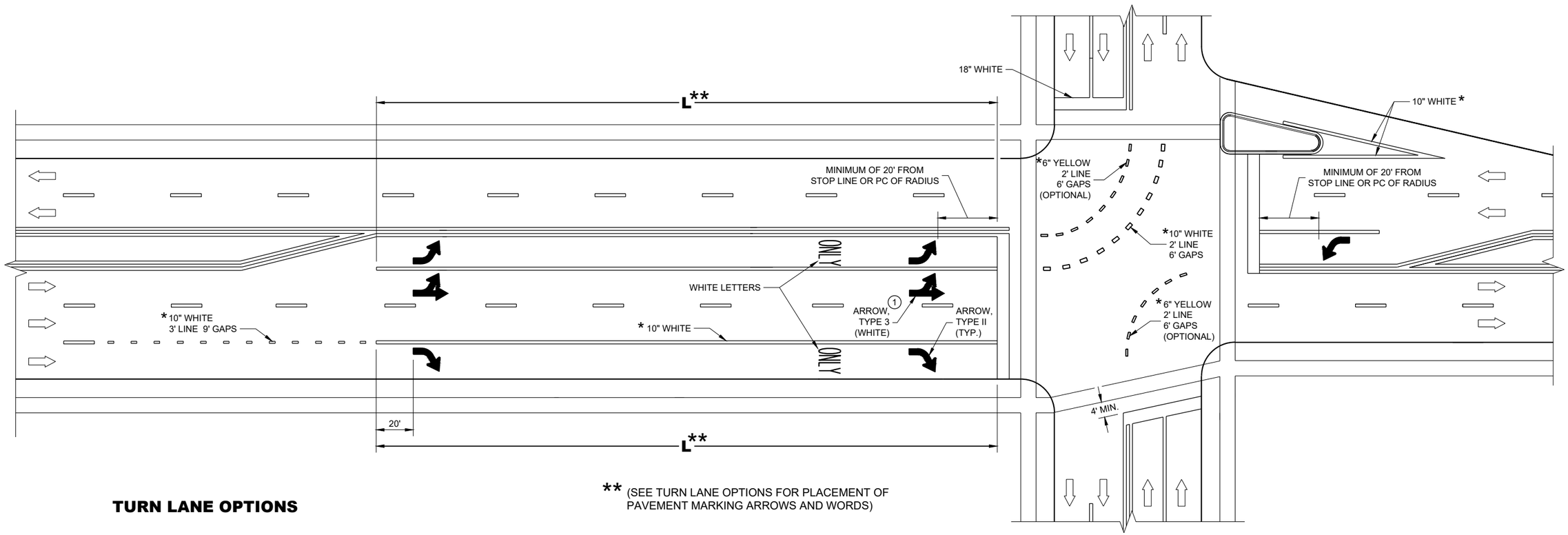
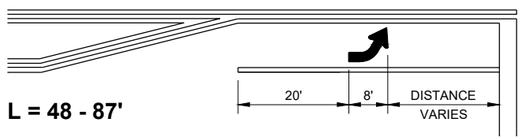


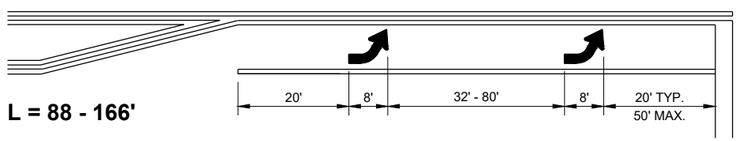
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

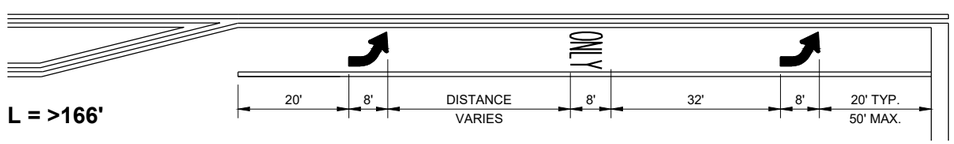
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

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

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15C08-23d

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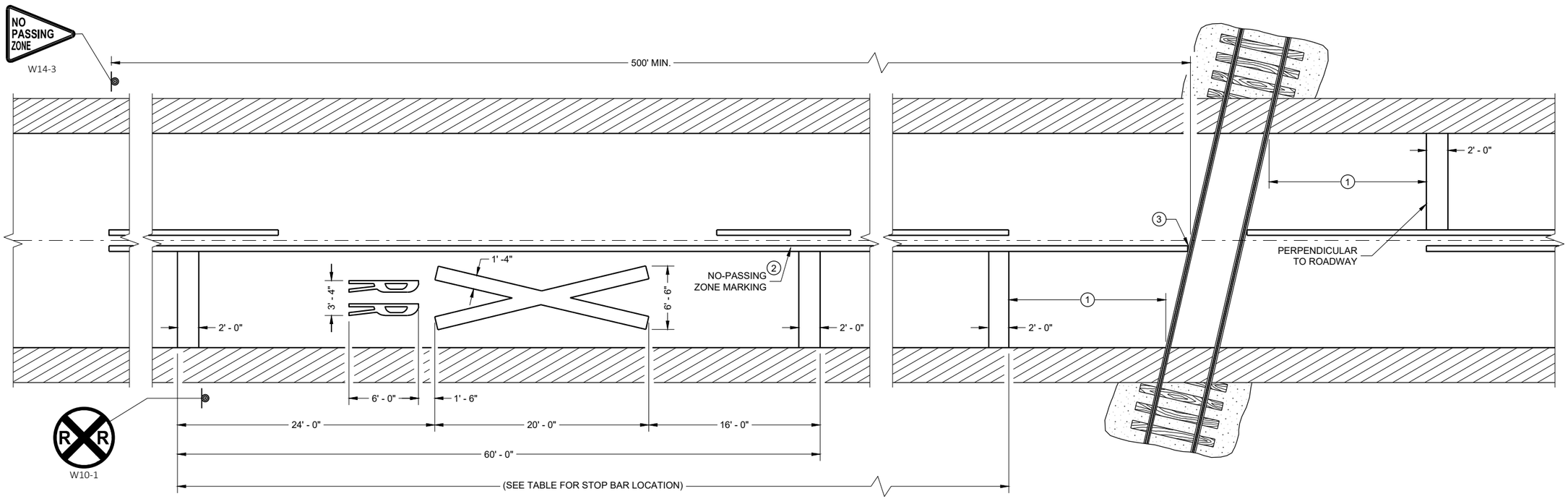
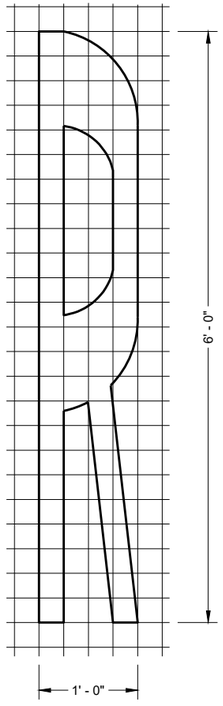


PAVEMENT MARKING



LEGEND

SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

ON MULTI-LANE ROADS THE TRANSVERSE BANDS SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.

CENTER OR LANE LINES AND NO-PASSING ZONE MARKINGS SHOWN ON THIS DRAWING ARE REQUIRED AND PAID FOR UNDER OTHER ITEMS IN THE CONTRACT.

TRACE EXISTING SYMBOL WHERE EXISTING SYMBOLS ARE PLACED.

(1) PLACE STOP BAR APPROXIMATELY 8 FEET IN ADVANCE OF THE GATE (IF PRESENT), BUT NO CLOSER THAN 15 FEET IN ADVANCE OF THE NEAREST RAIL. FIELD-FIT STOP BAR TO MAXIMIZE VIEW OF APPROACHING TRAIN.

(2) 500' MINIMUM. MARKING LIMITS MAY BE EXTENDED AS DIRECTED BY THE ENGINEER TO MEET ADJACENT NO-PASSING ZONE MARKINGS.

(3) FOR MULTIPLE TRACK CROSSINGS, THE BARRIER LINE SHALL EXTEND TO THE NEAR RAIL OF THE FURTHEST TRACK IN THE DIRECTION OF HIGHWAY TRAVEL.

DISTANCE TABLE

TABLE BASED UPON 2C-4 WISCONSIN SUPPLEMENT OF MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

POSTED SPEED (M.P.H.)	DIMENSION RANGE (FEET)
25	150* - 250'
30	200* - 300'
35	250* - 450'
40	300* - 500'
45	400* - 650'
50	550* - 800'
55	750* - 1000'
60	1000* - 1250'
65	1000* - 1250'

* THE MINIMUM DISTANCES IN THE TABLE ARE DESIRABLE AND SHOULD BE USED. THE DISTANCES MAY BE INCREASED UP TO THE MAXIMUM TO ALLOW FOR FIELD CONDITIONS SUCH AS THE CLOSED PROXIMITY OF DRIVEWAYS, BRIDGES, SIDE ROADS OR OTHER FEATURES THAT WOULD PROHIBIT THE MINIMUM DISTANCES FROM BEING USED.

SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Matthew R. Rauch — STATE SIGNING AND MAR ENGINEER

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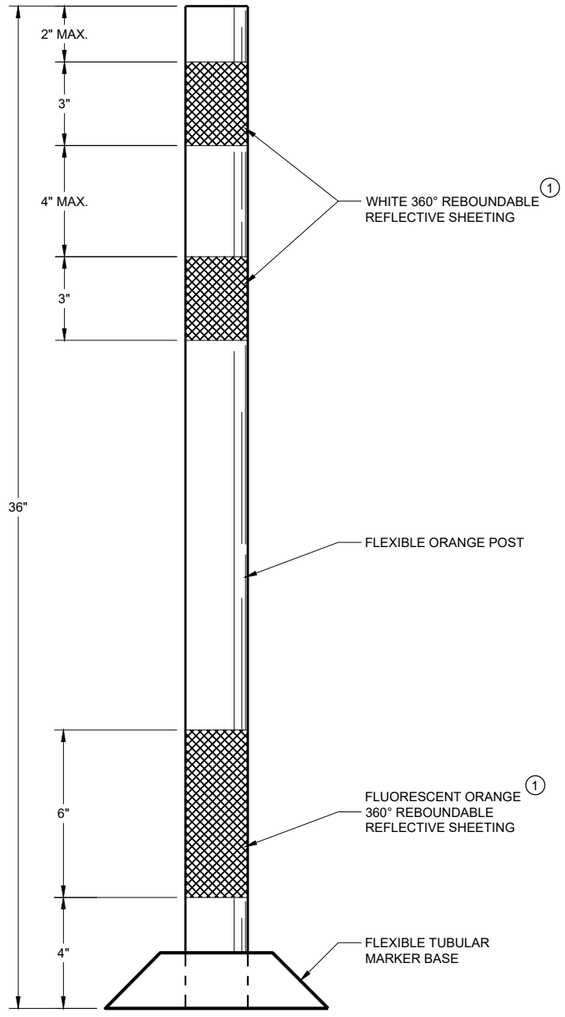

FLEXIBLE TUBULAR MARKER POST WORK ZONE

GENERAL NOTES

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

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

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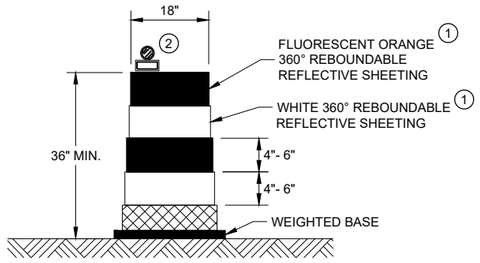
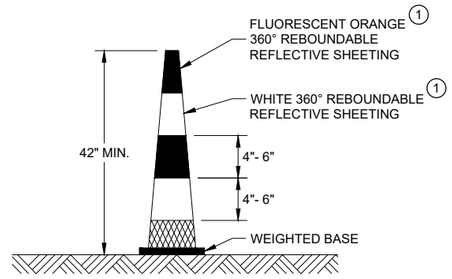
GENERAL NOTES

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

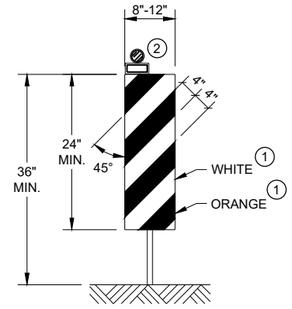
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

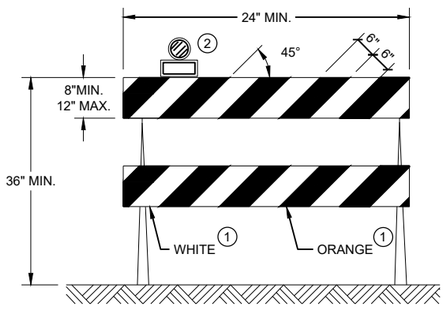
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



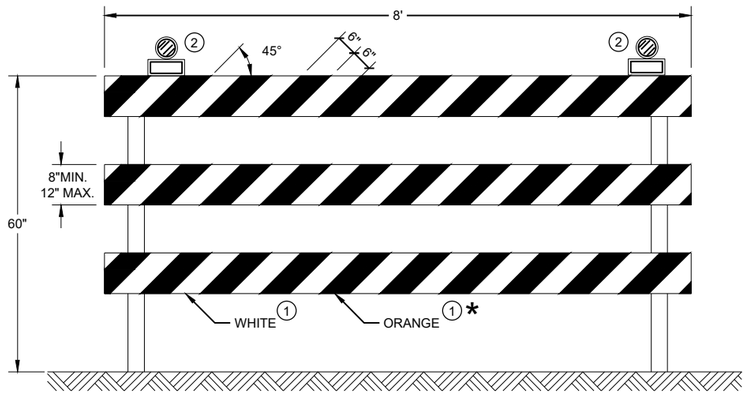
VERTICAL PANEL

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

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LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

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

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

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

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

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

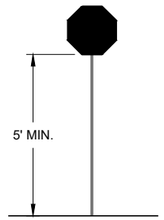
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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



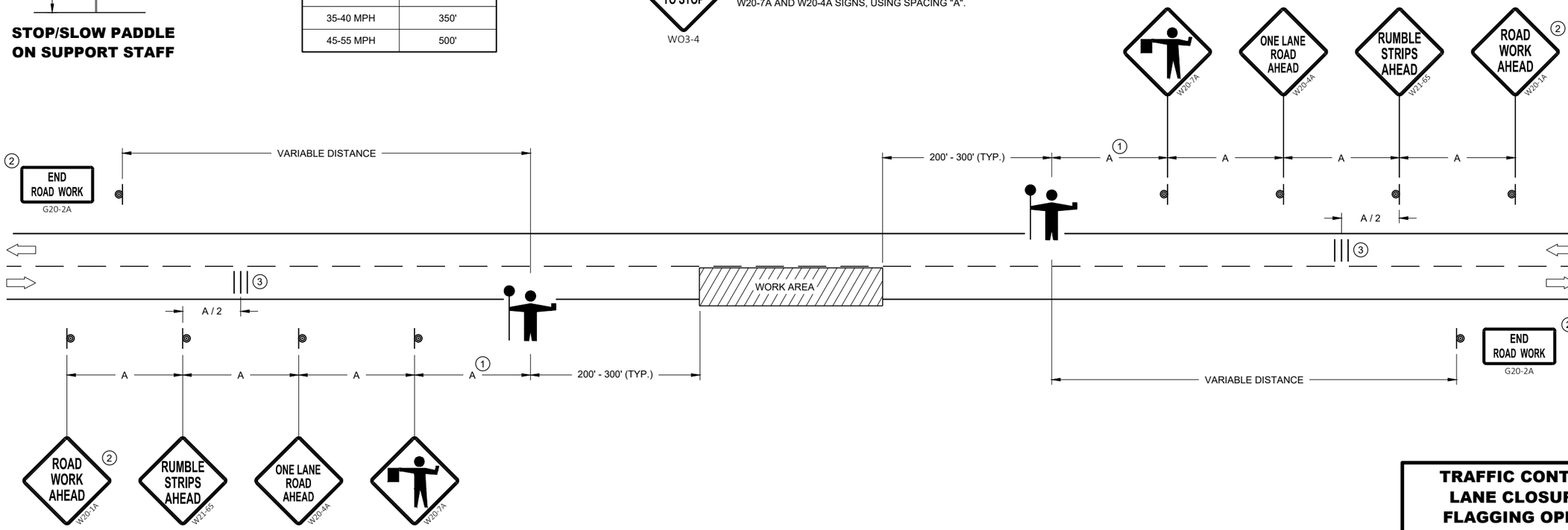
STOP/SLOW PADDLE ON SUPPORT STAFF

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

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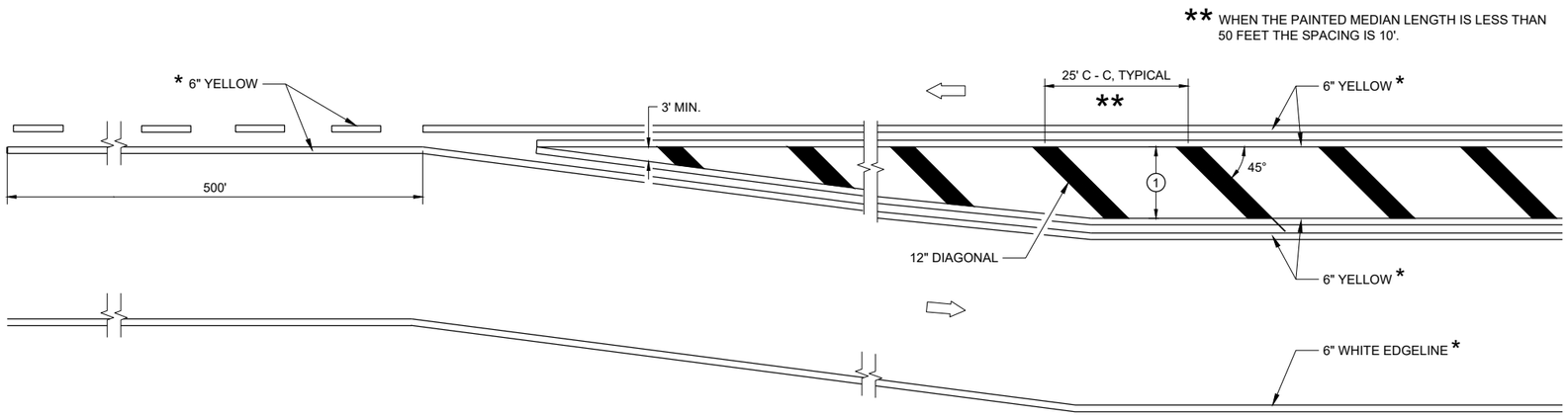


MEDIAN ISLAND DETAIL

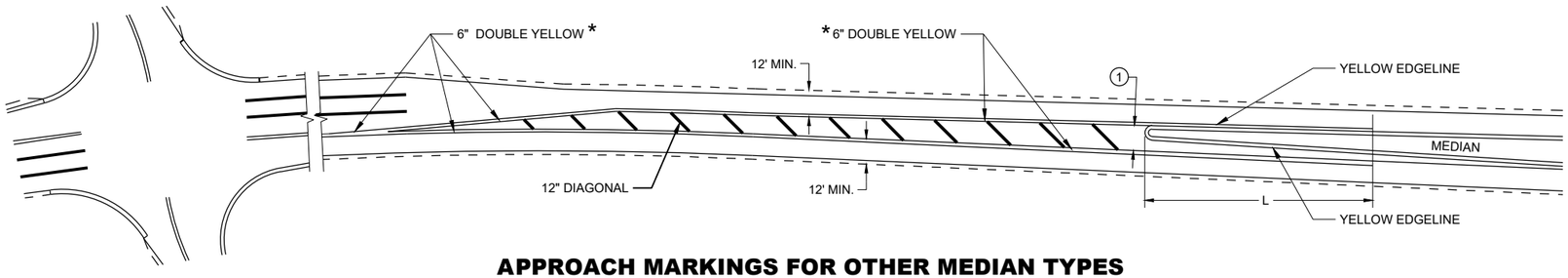
GENERAL NOTES

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

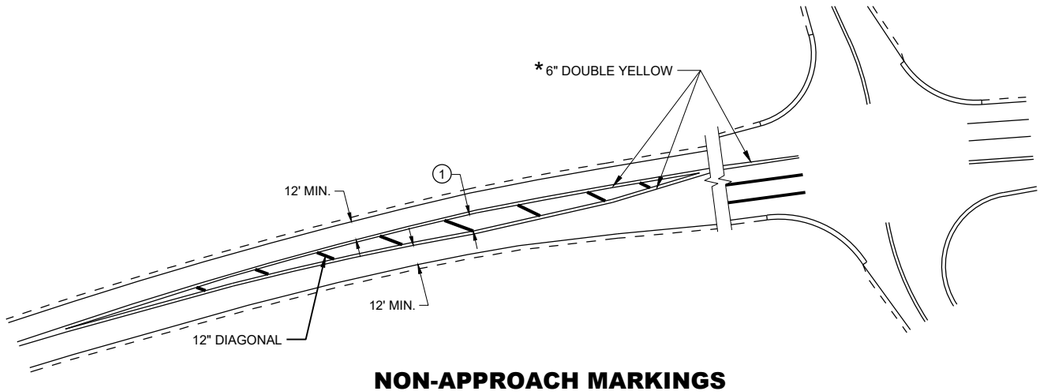
DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR

FHWA

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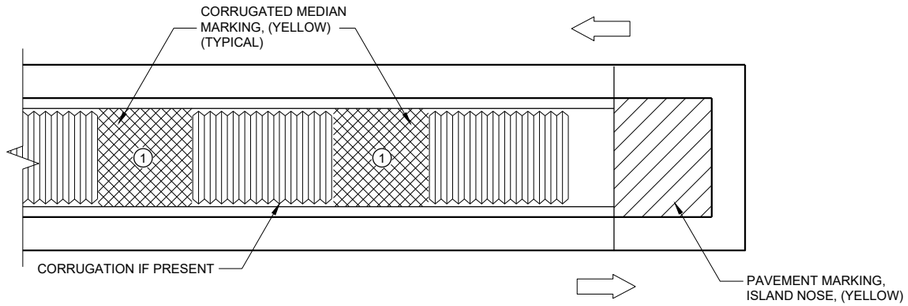
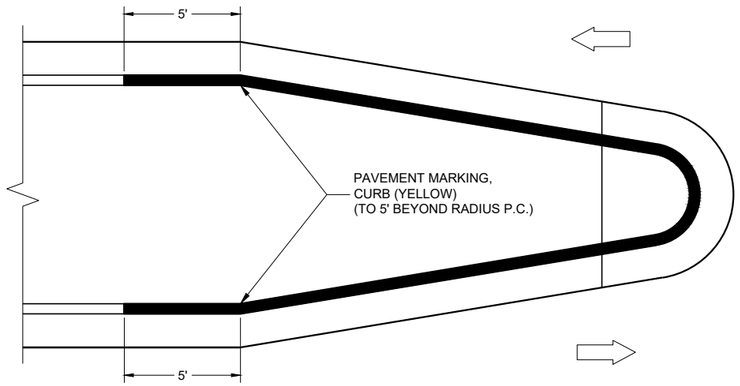
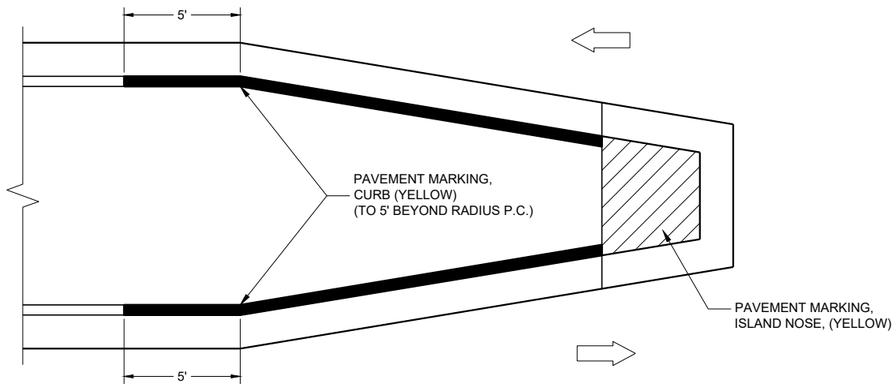


MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

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

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

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Jeannie Silver — ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
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SDD 15C18-08b

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.

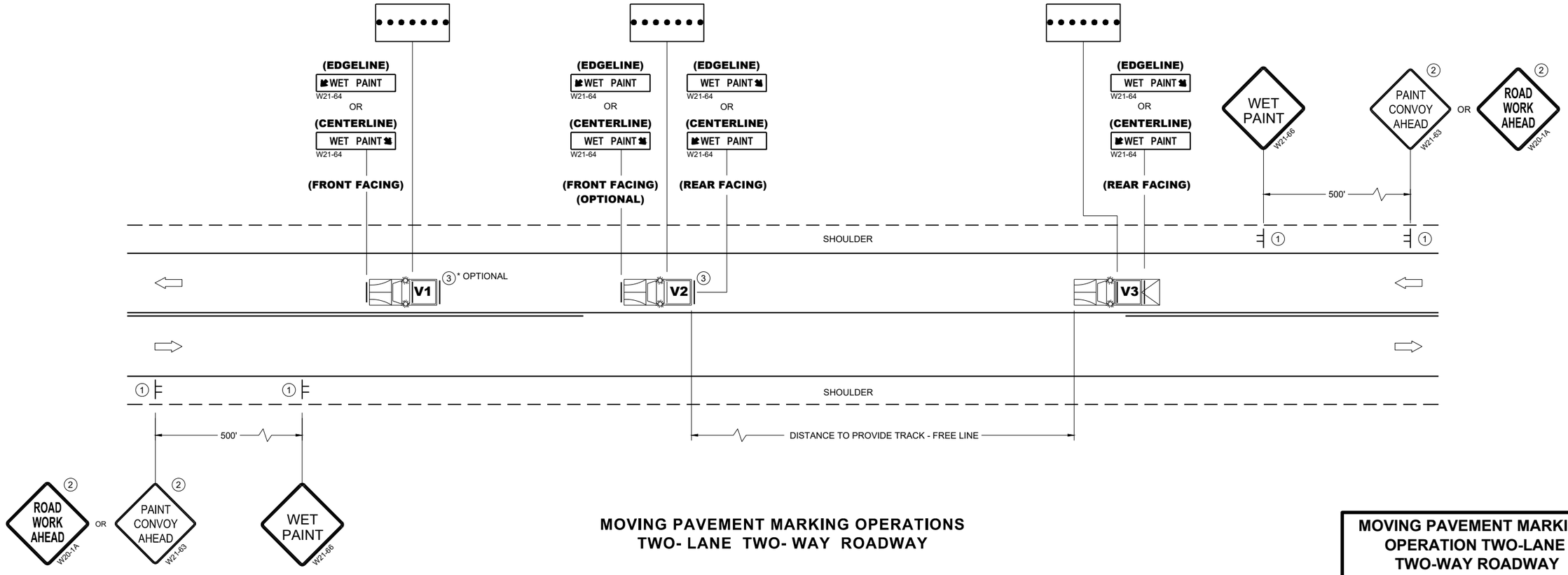
CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

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

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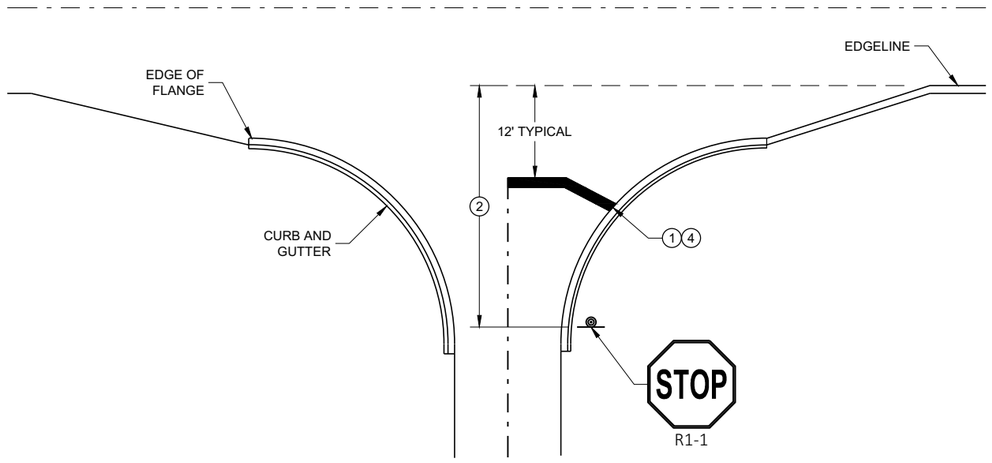
SDD 15C19-9a

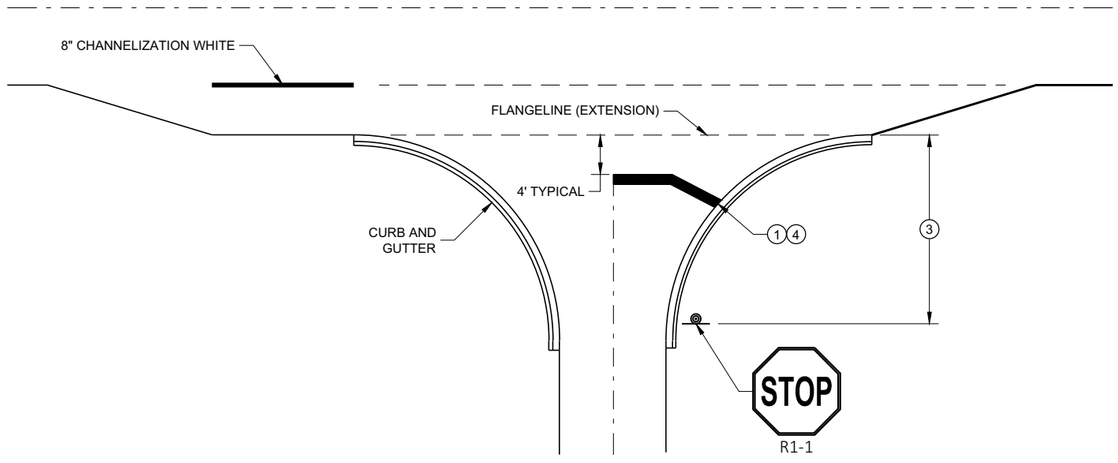
GENERAL NOTES

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

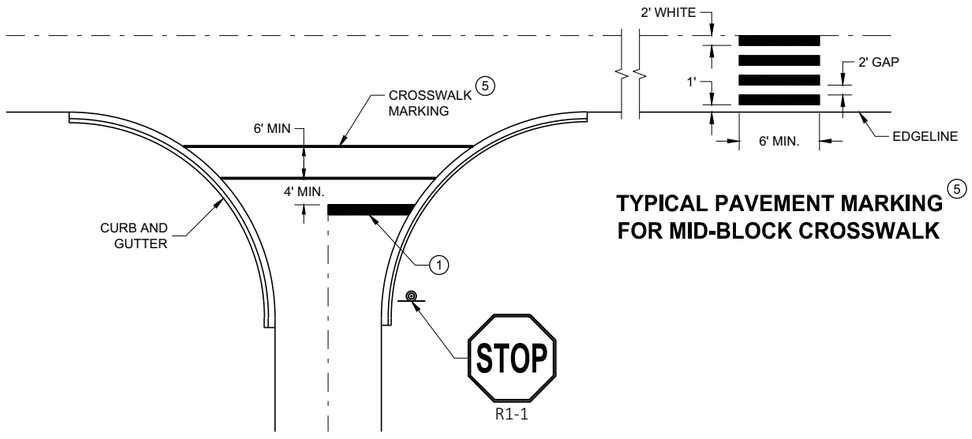
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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

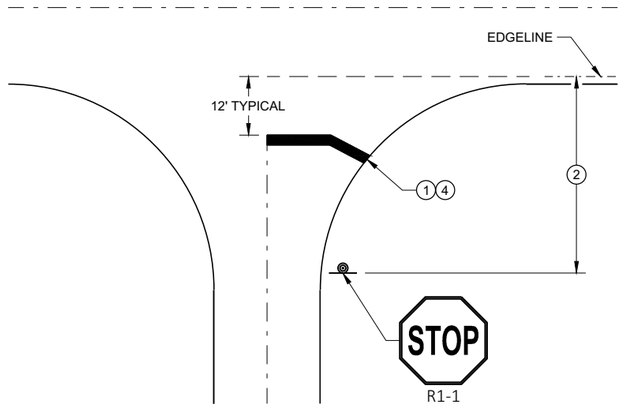


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

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 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

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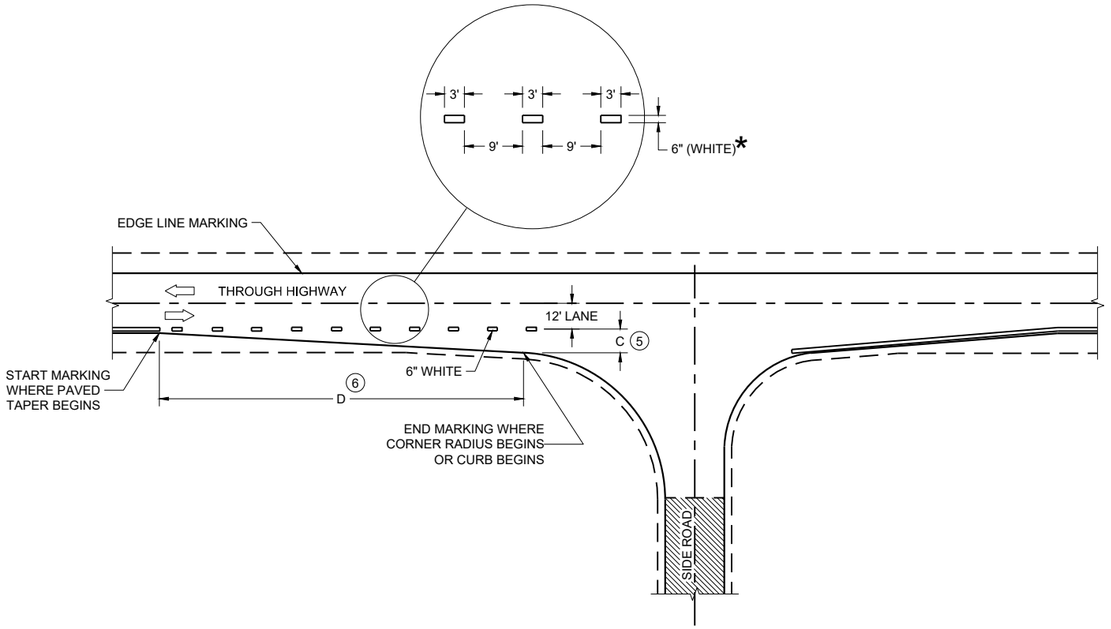
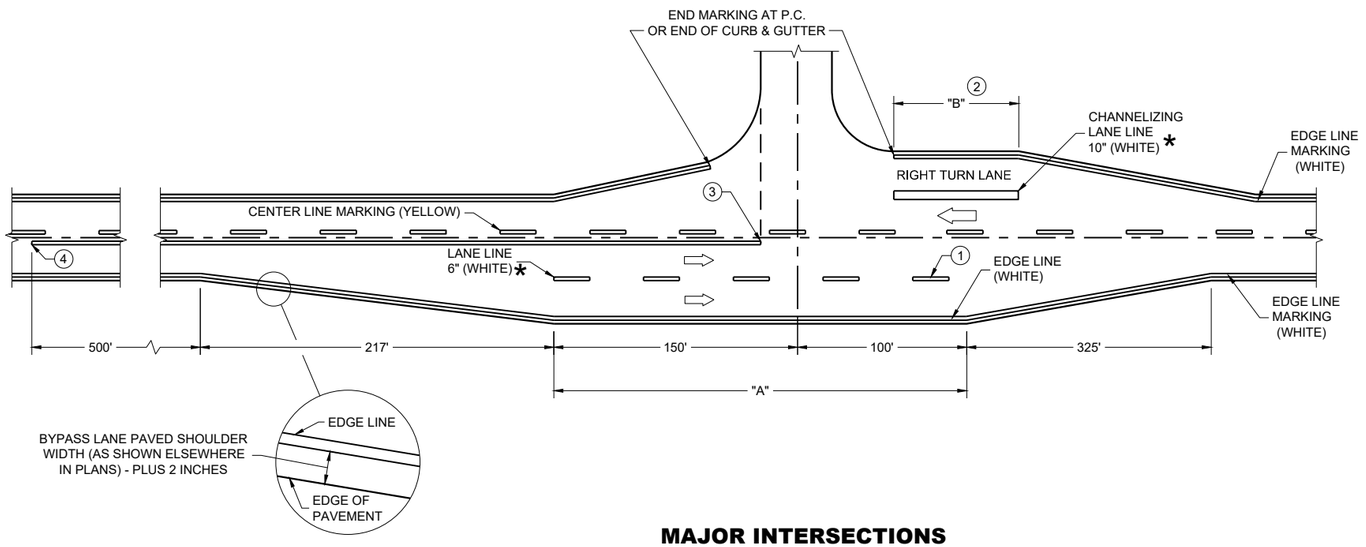


MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

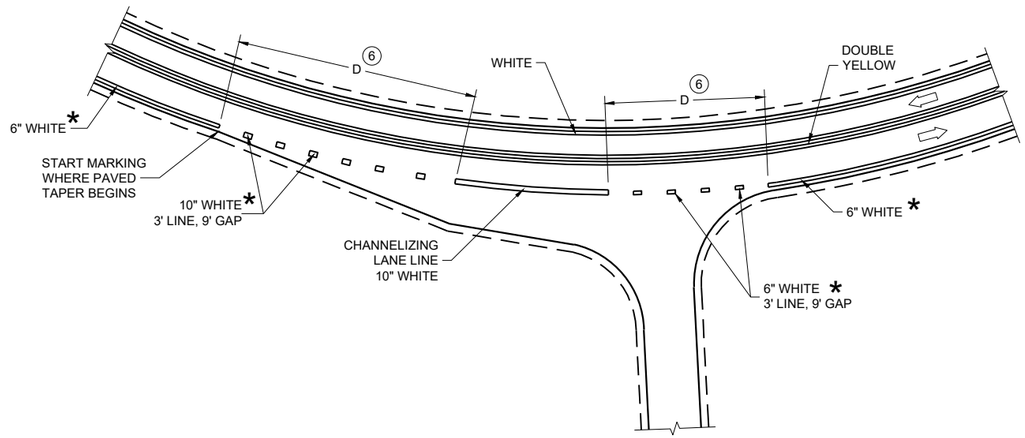
GENERAL NOTES

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.

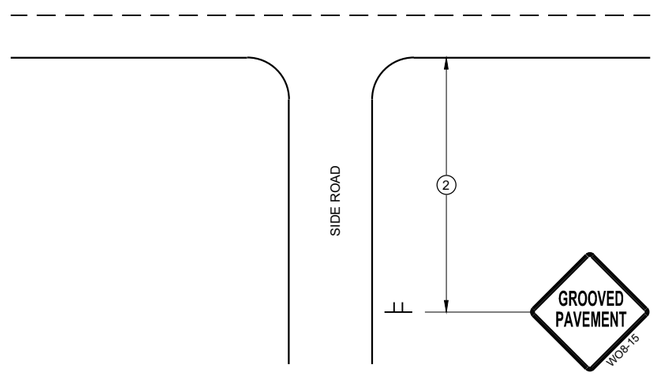
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

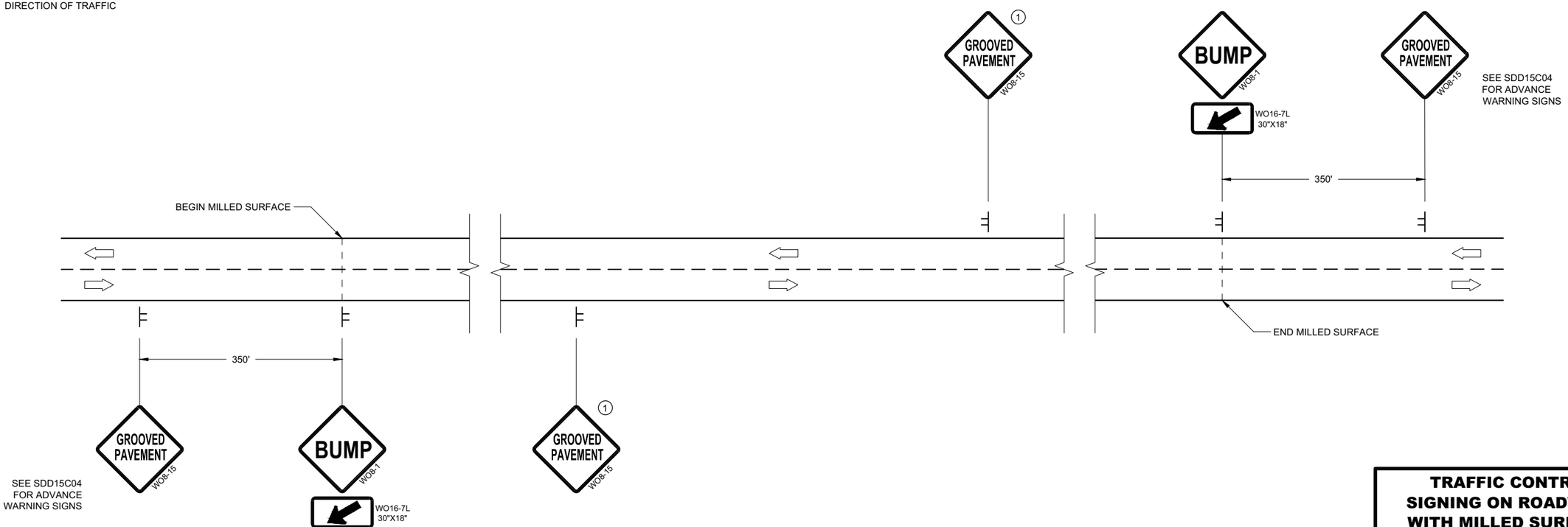
LEGEND

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

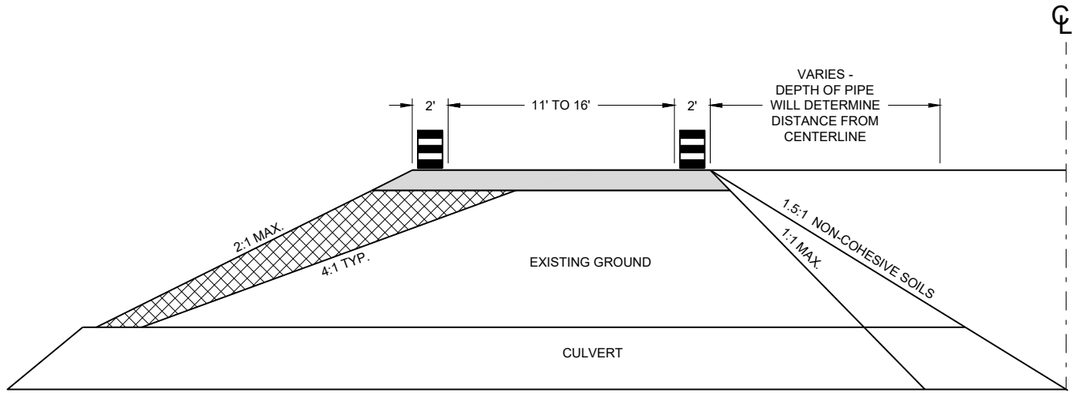
APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

SDD 15D44 - 02

SDD 15D44 - 02



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

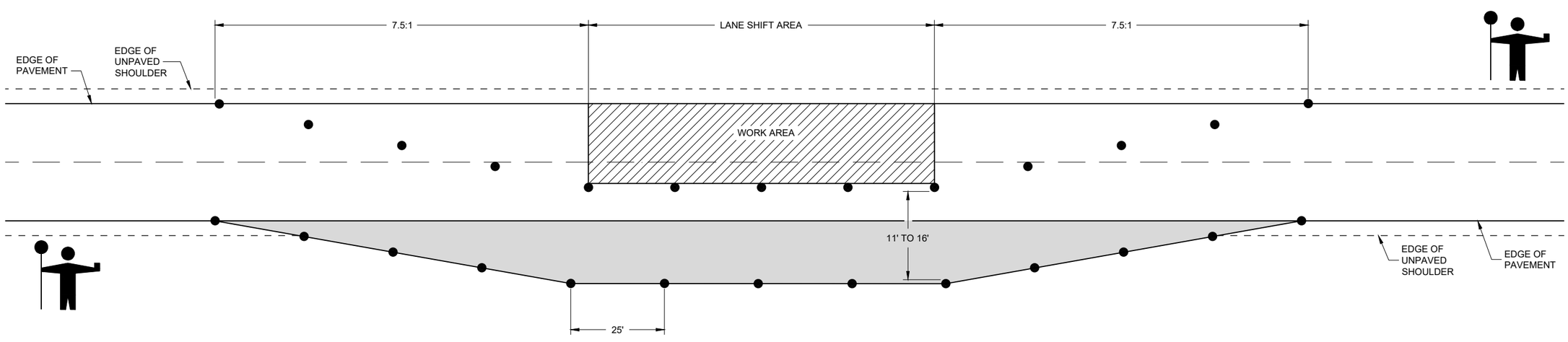
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D48 - 01

6

SDD 15D48 - 01

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

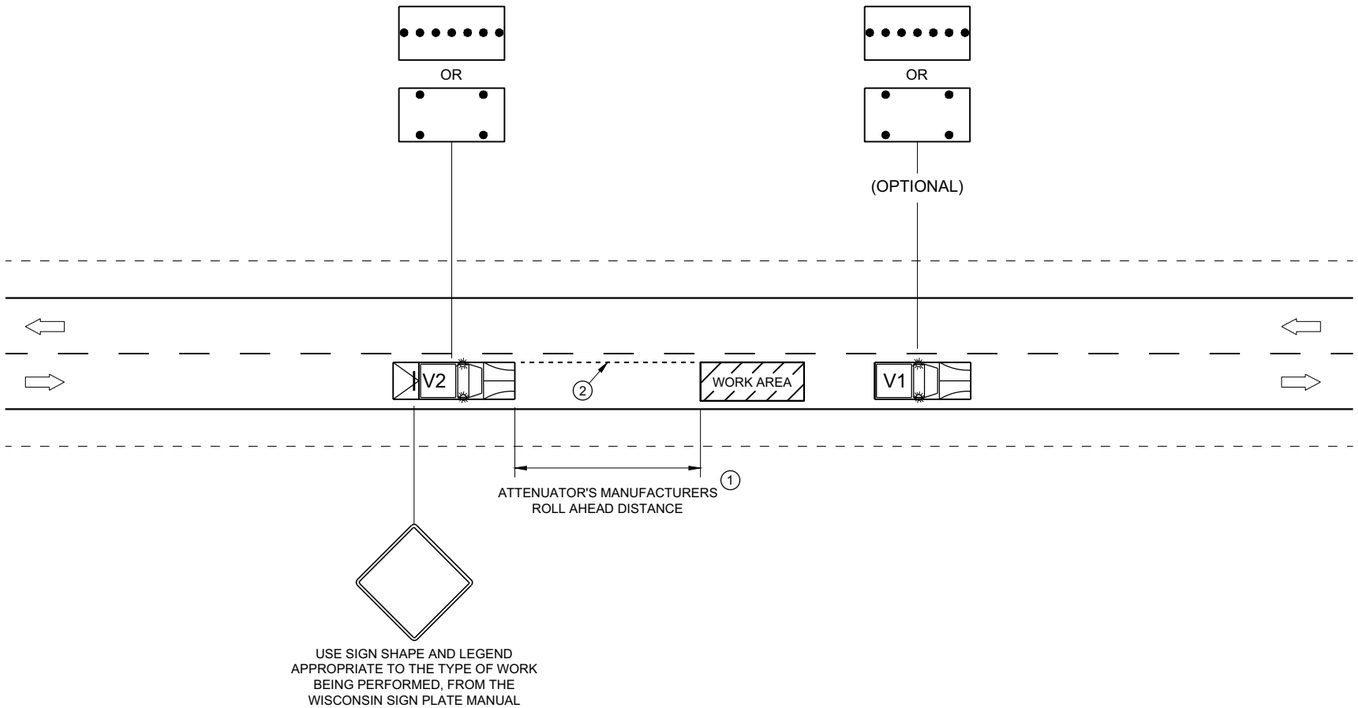
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, 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 OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

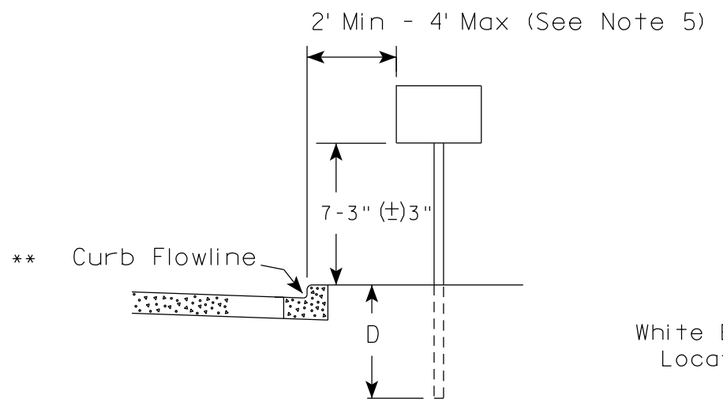
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER
FHWA

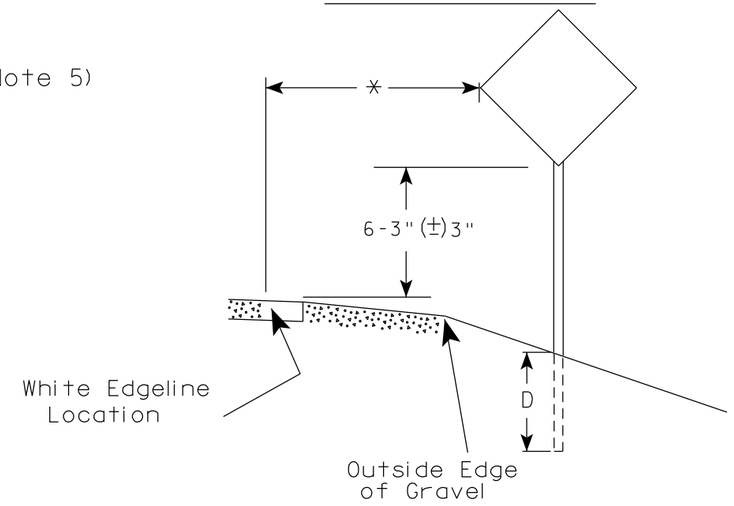
6

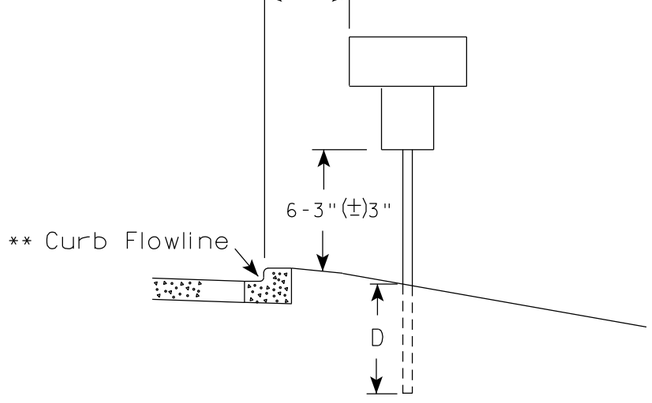
SDD 15D51 - 01

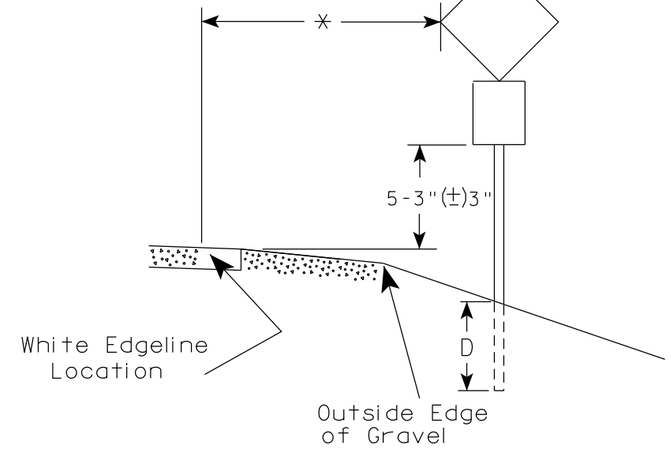
URBAN AREA



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.

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" (±) 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.

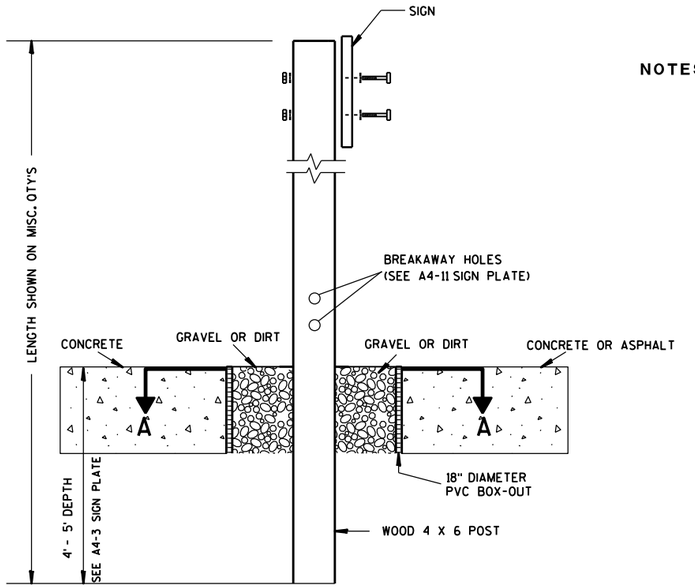
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

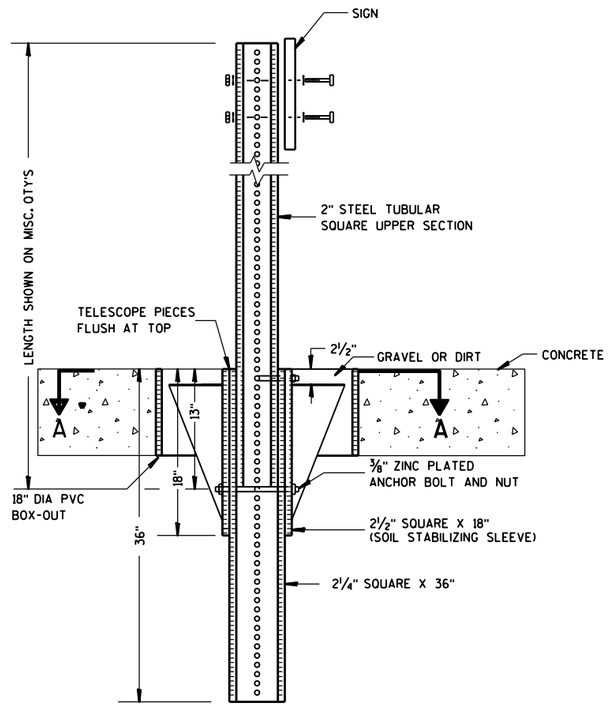
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 178	E



ELEVATION VIEW

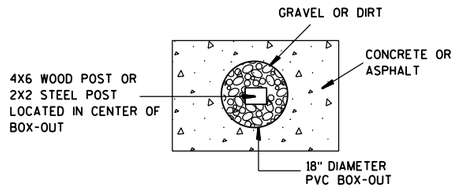
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

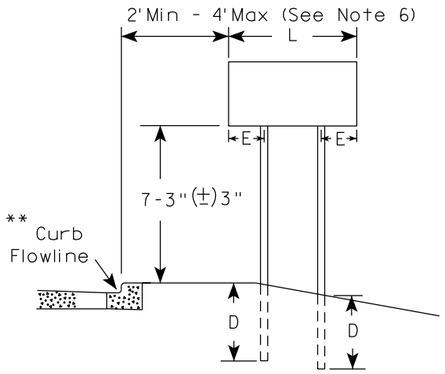
APPROVED Matthew R Rauch
for State Traffic Engineer

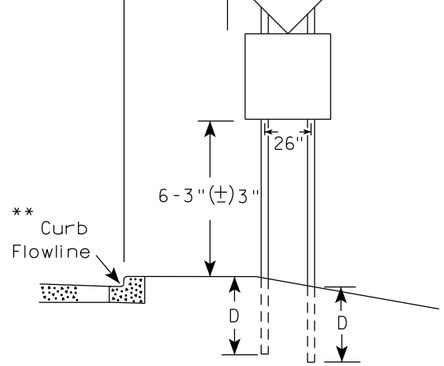
DATE 1/27/14 PLATE NO. A4-3B.1

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

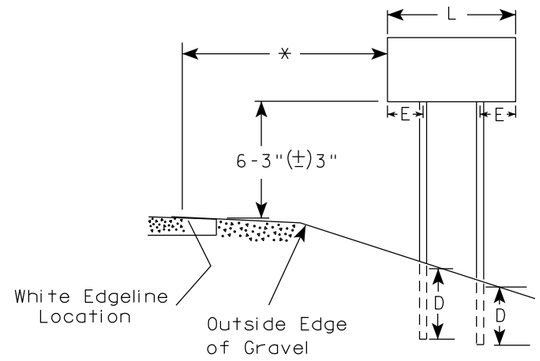
URBAN AREA

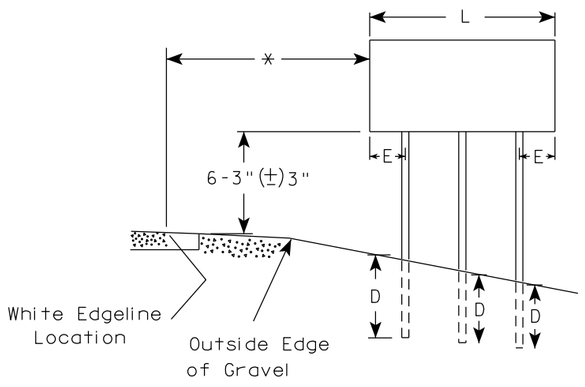


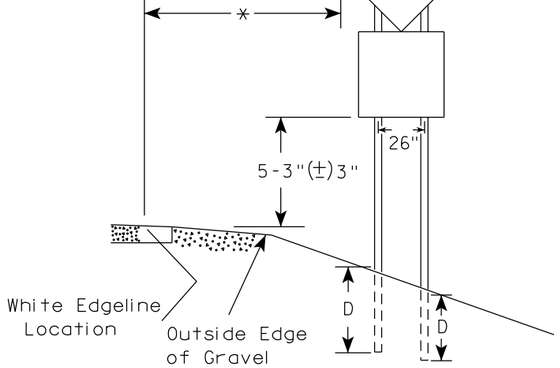


48" DIAMOND WARNING SIGN

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'

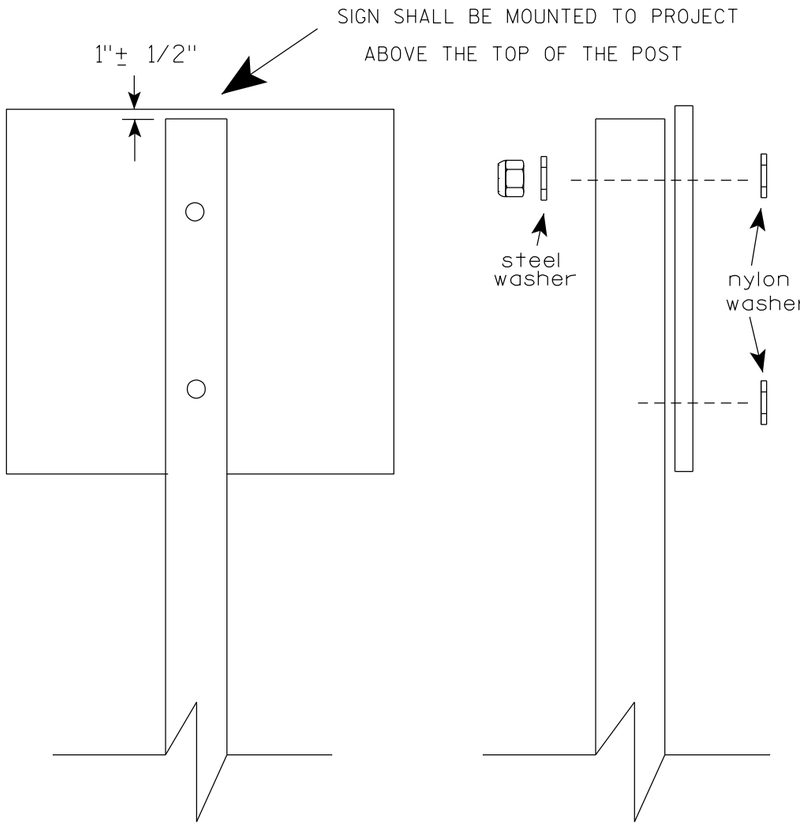
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

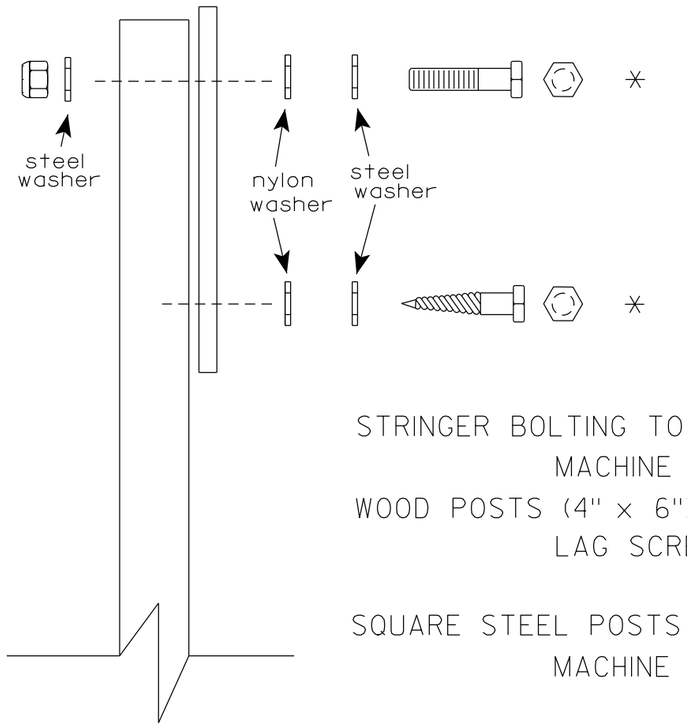
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 180	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:

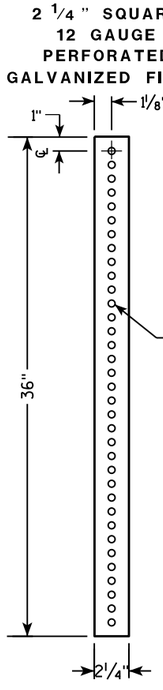
SHEET NO: 181 E

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

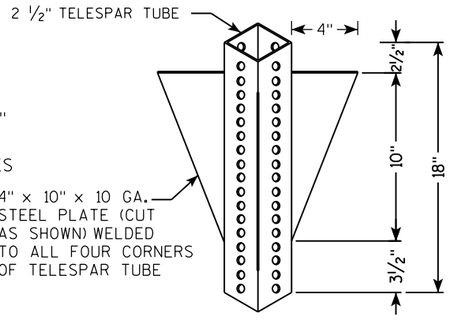
WISDOT/CADDS SHEET 42

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

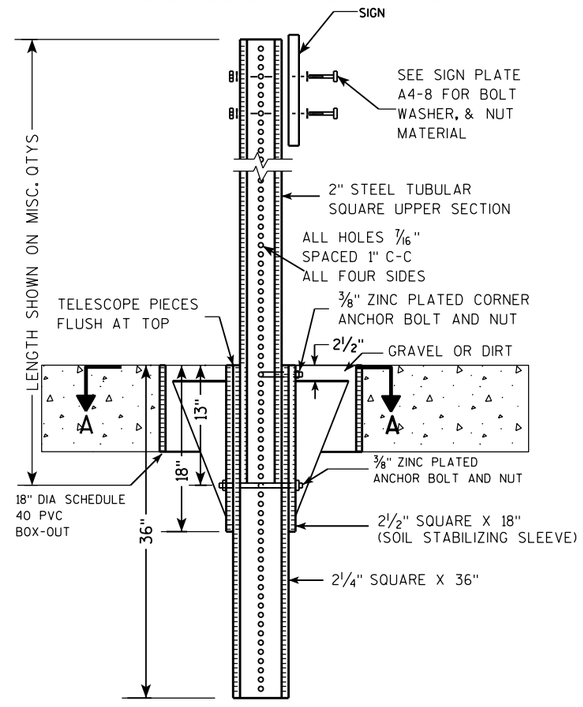
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



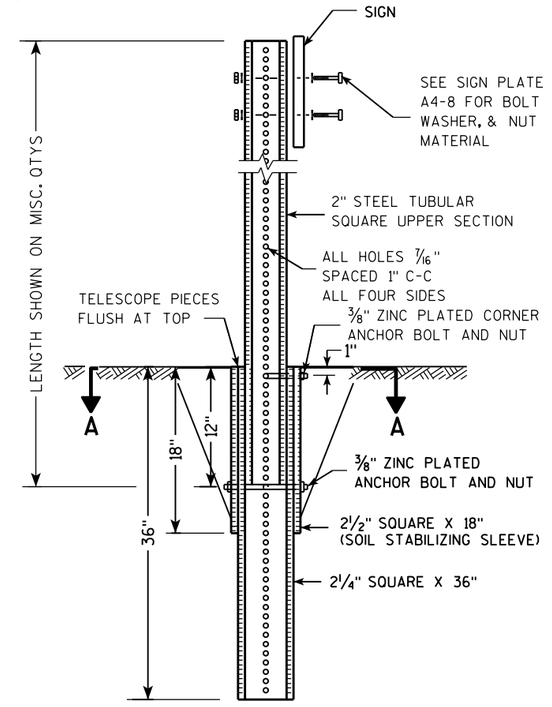
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

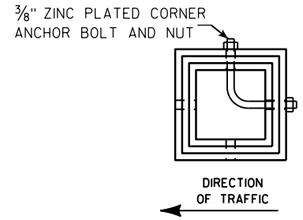


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

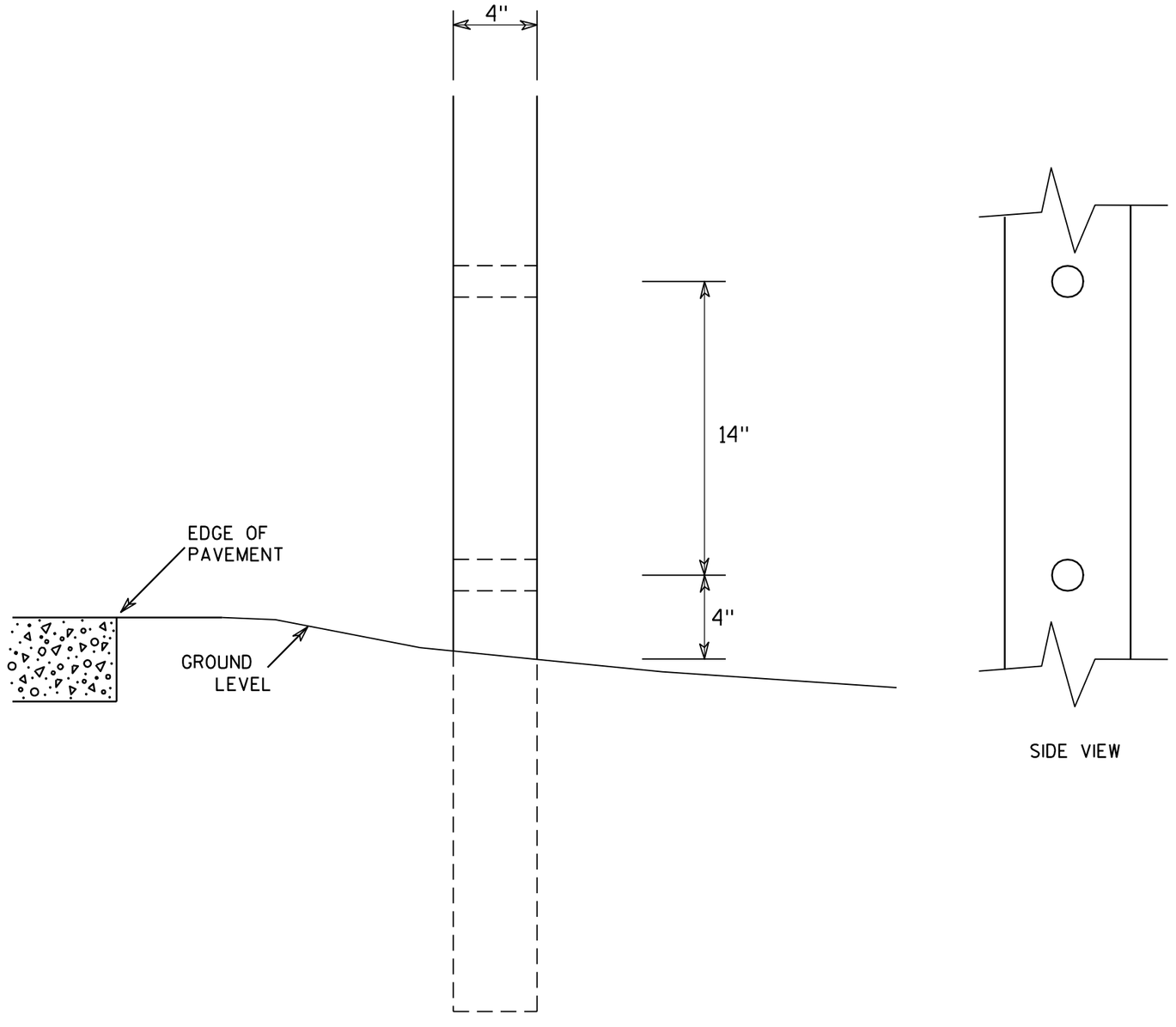
WISCONSIN DEPT OF TRANSPORTATION

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

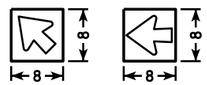
WISCONSIN DEPT OF TRANSPORTATION

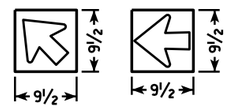
APPROVED Chester J Spang for State Traffic Engineer

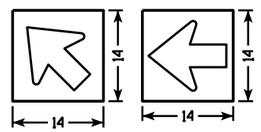
DATE 3/27/97 PLATE NO. A4-11.2

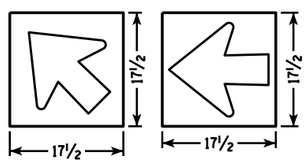
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 183	E

SIGN LAYOUT WITH VARIOUS SIZED MESSAGES







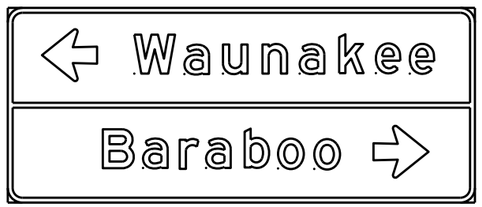


GENERAL NOTES

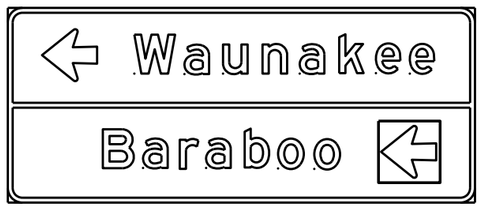
1. Materials shall conform to Standard Specification Section 637.
   Base - Sheet Aluminum 0.040" Thickness
   Sheeting - Orange Type F Reflective
   Arrow - Black Non-Reflective
2. Arrow signs shall be fastened to permanent sign by either aluminum rivets or aluminum self-tapping sheet metal screws. There shall be a minmum of 2 fasteners used per arrow sign.
3. There shall be a spacer consisting of a 0.08" nylon washer between the back of the arrow sign and the face of the permanent sign.
4. Arrows are per standard plate A1-2
5. Use separate arrow sign for each destination
6. Tilt arrow is always at 45 degrees
7. Arrow is centered on arrow sign

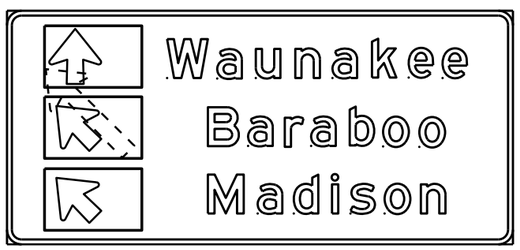
Lower Case Copy Size	Standard Width (Single Arrow)	2 Line Tilt Arrow Cover Width	3 Line Tilt Arrow Cover Width	Height
3¾" Series C	8	9 ½	14 ½	8
4½" Series D & E	9 ½	10	15	9 ½
6" Series D & E	14	16	20 ½	14
8" Series E	17 ½	20 ½	25	17 ½

BEFORE



AFTER





DESTINATION DIRECTIONAL ARROW FOR DETOUR SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/08/14

A4-12.2

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A412.DGN PLOT DATE : 08-OCT-2014 11:50 PLOT BY : mscsja

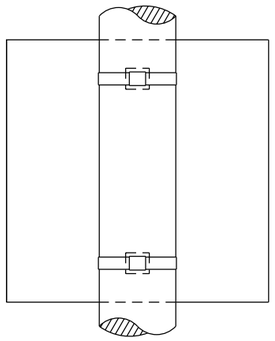
WISDOT/CADDS SHEET 42

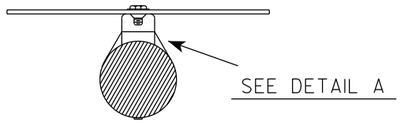
7

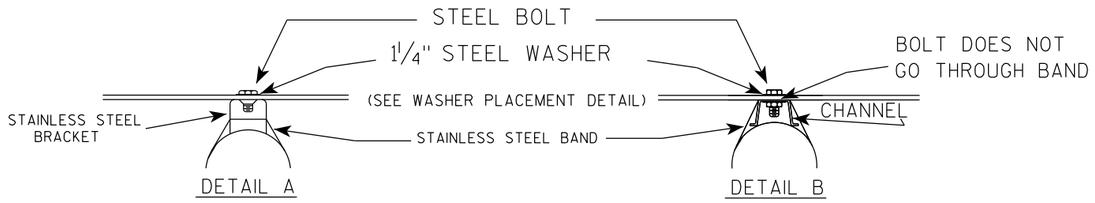
7

BANDING

SINGLE SIGN



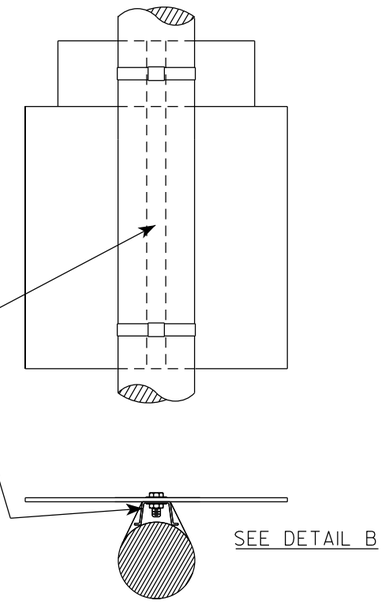




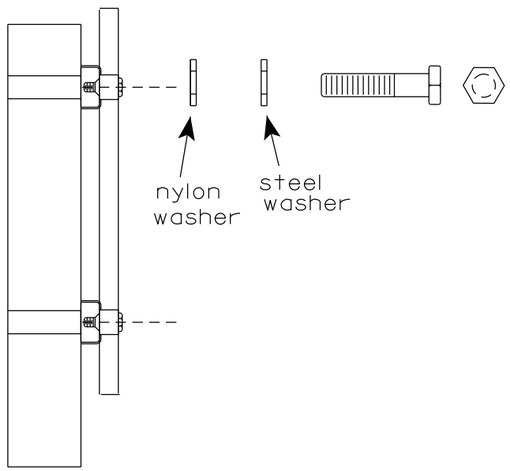
GENERAL NOTES

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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

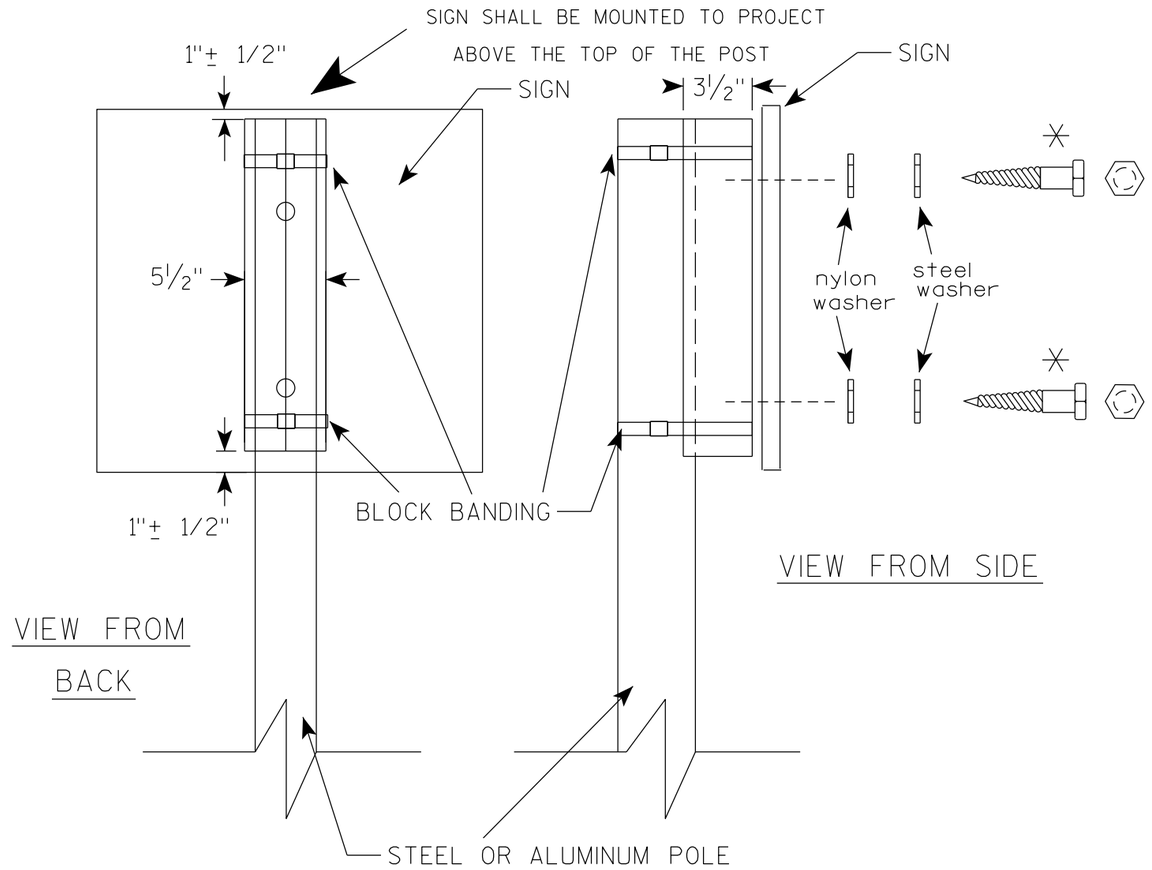
WISCONSIN DEPT OF TRANSPORTATION

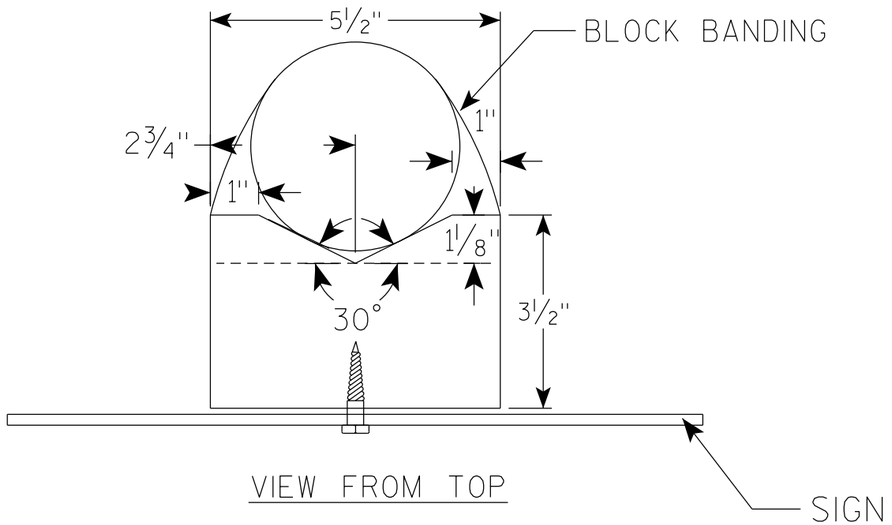
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 185	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)

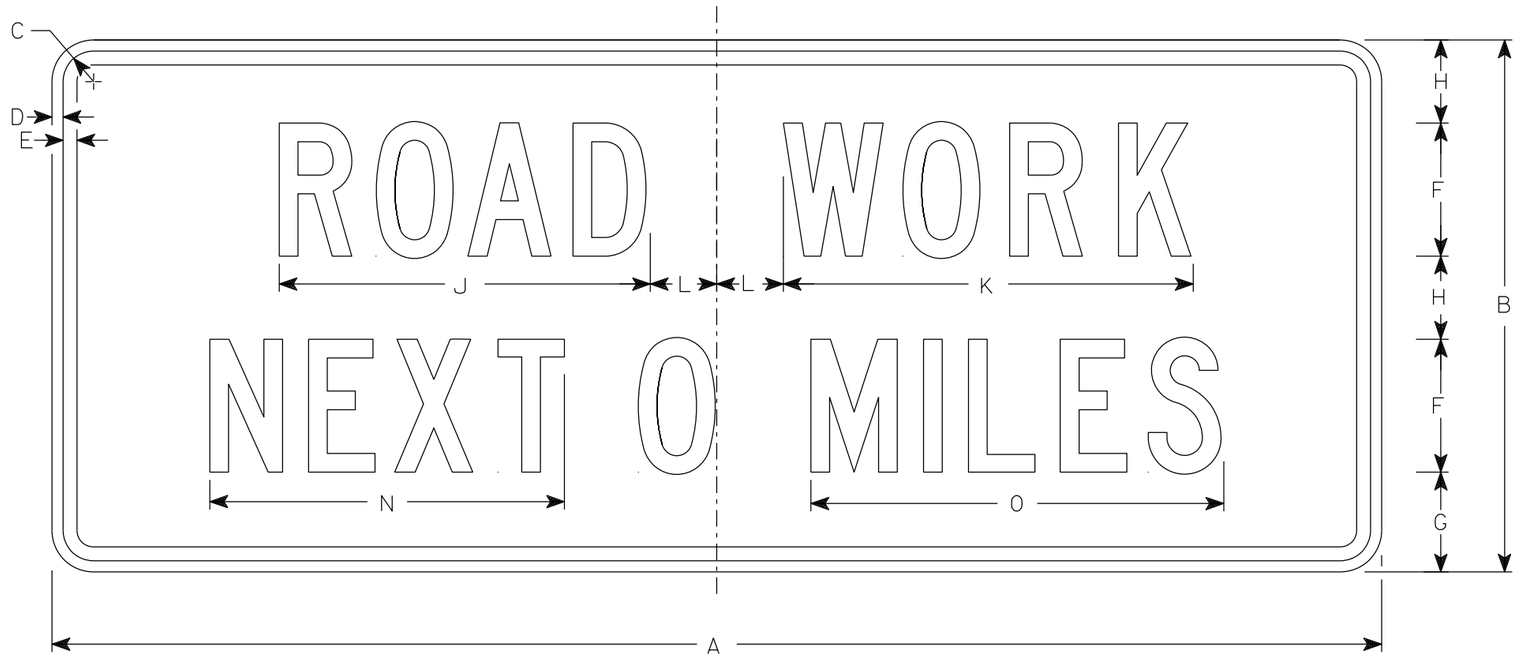
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:

SHEET NO: 186 E



G20-1

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.
5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

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	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
2M	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
3	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
4	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0
5	60	24	1 7/8	1/2	5/8	6	4 1/2	3 3/4		16 3/4	18 1/2	3		16	18 5/8												10.0

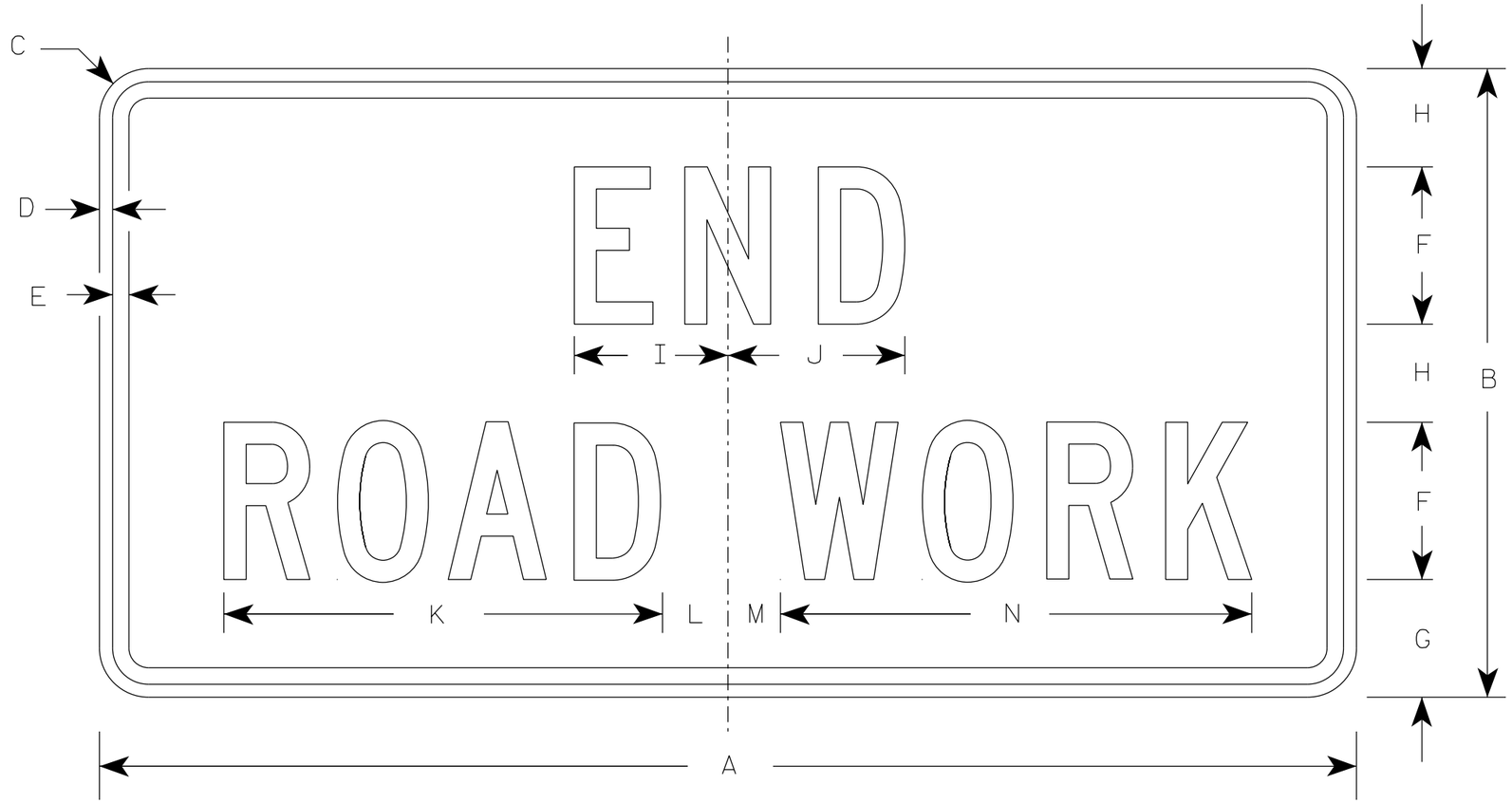
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/26/2023 PLATE NO. G20-1.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 187	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

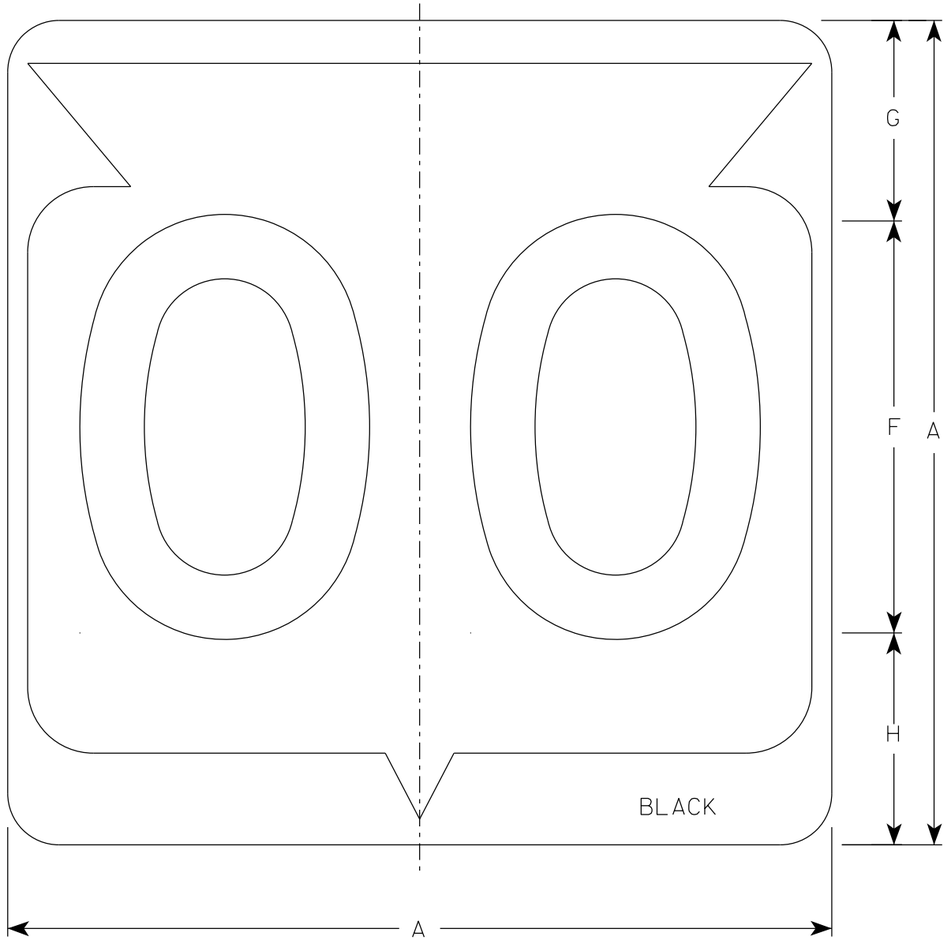
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

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

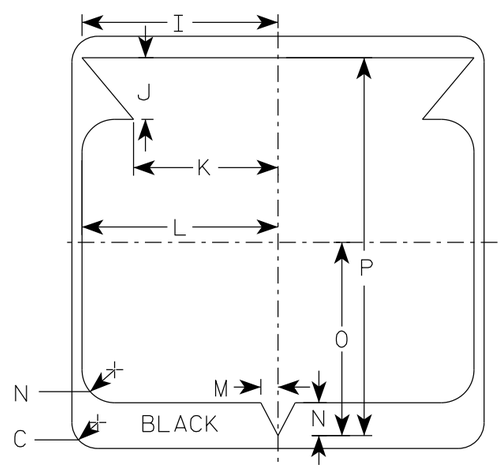
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\G202A.dgn PLOT DATE : 26-JAN 2023 8:27 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs Series C



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
2M	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

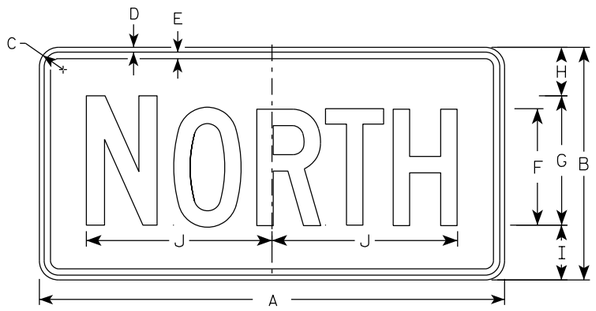
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

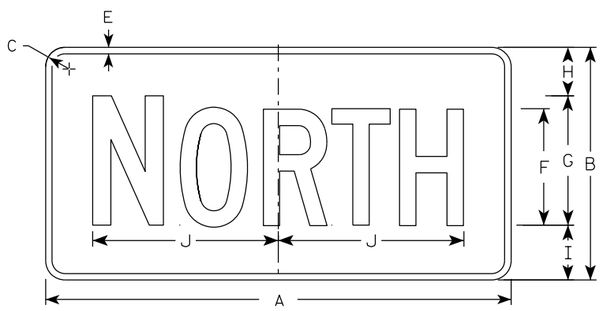
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

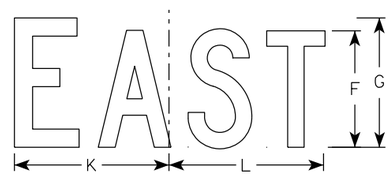
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 189	E



M3-1
MM3-1
MP3-1

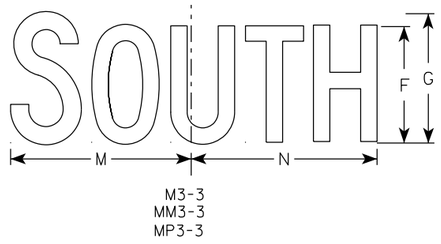


MB3-1
MK3-1
MN3-1

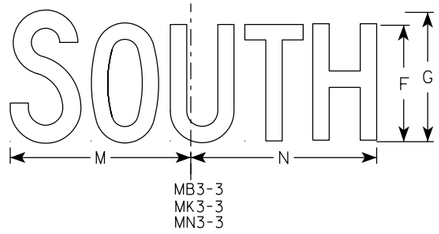


M3-2
MM3-2
MP3-2

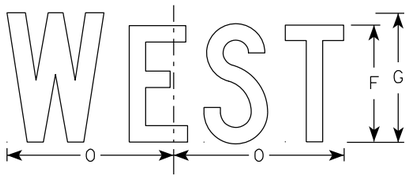
MB3-2
MK3-2
MN3-2



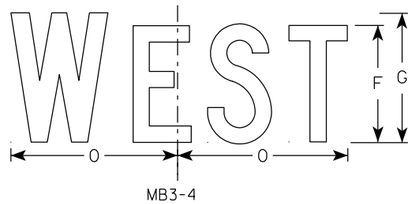
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

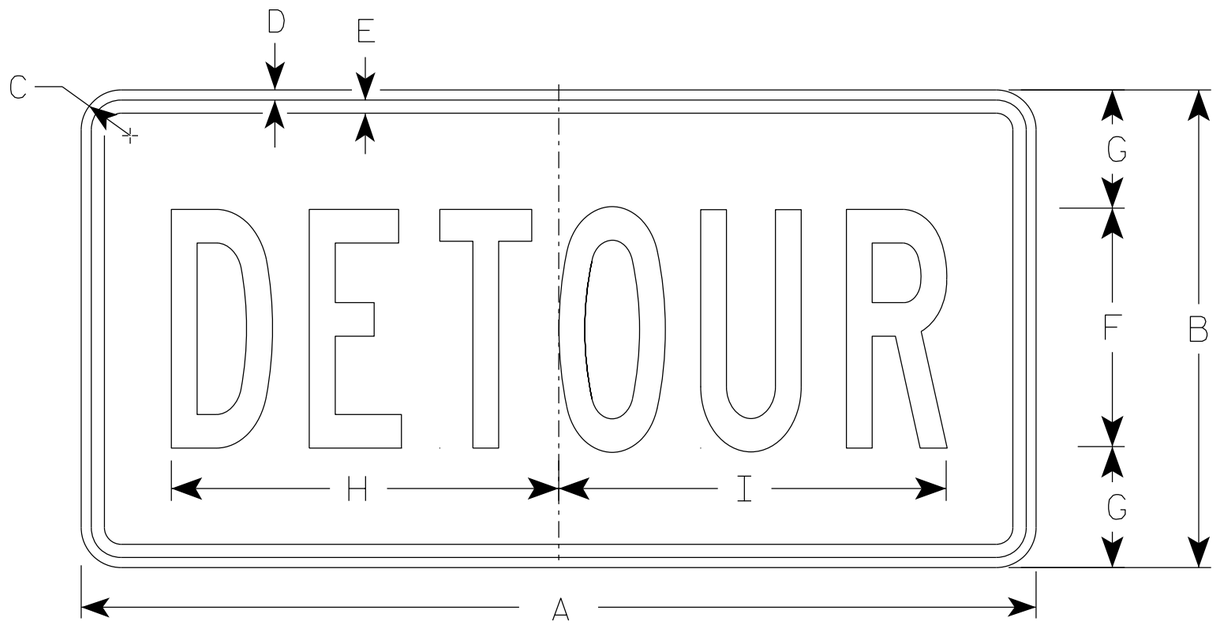
STANDARD SIGNS
M3-1 THRU M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/8/2023 PLATE NO. M3-1.15

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 190 | E



M4-8

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
2M	24	12	1 1/2	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
5	36	18	1 1/2	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5

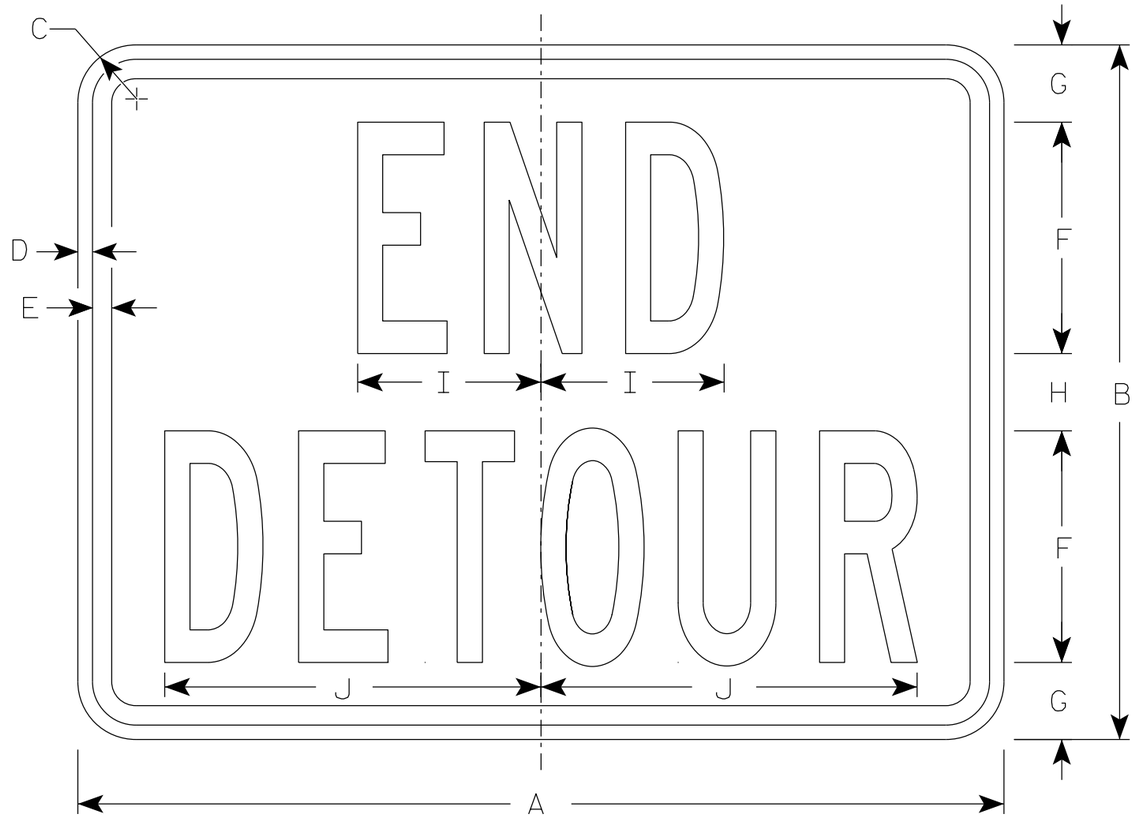
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M4-8A

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
2M	24	18	1 ½	⅜	½	6	2	2	4 ¾	9 ¾																	3.0
3	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
4	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0
5	30	24	1 ½	⅜	½	8	2 ½	3	6 ¾	13																	5.0

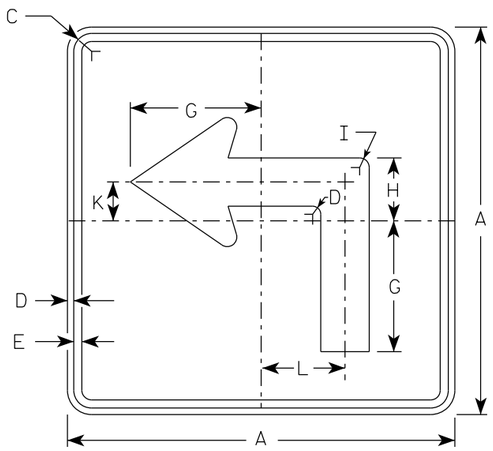
STANDARD SIGN
M4-8A

WISCONSIN DEPT OF TRANSPORTATION

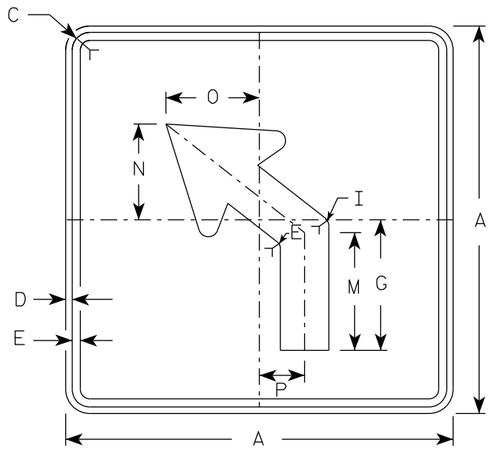
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8A.4

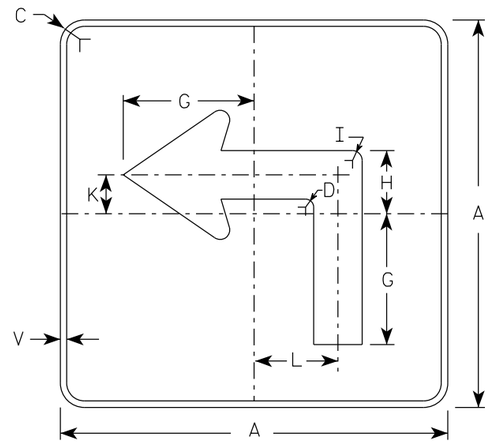
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 192 | E



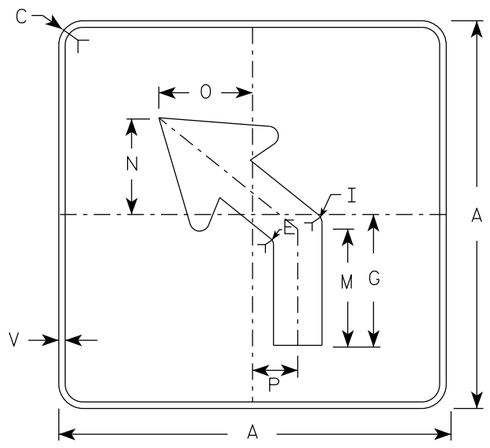
M5-1L
MM5-1L
MO5-1L
MP5-1L



M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L

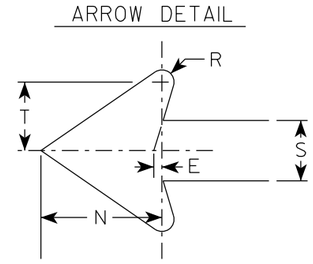


MB5-2L
MK5-2L
MN5-2L
MR5-2L

NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
4	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25
5	30		1 7/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4		1/2					6.25

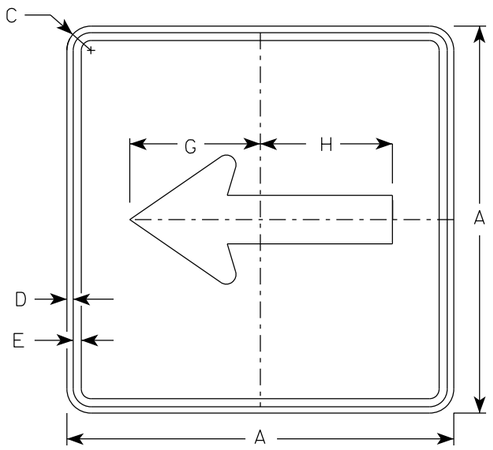
STANDARD SIGN
M5-1 & M5-2

WISCONSIN DEPT OF TRANSPORTATION

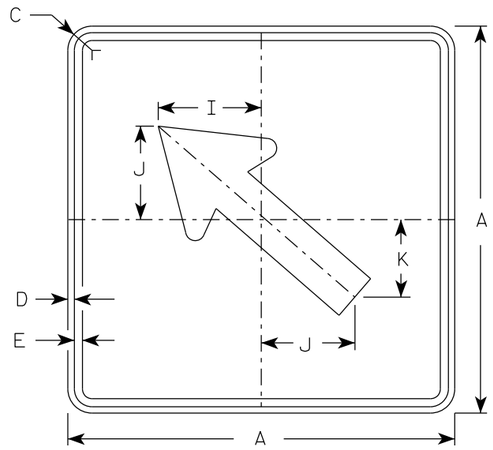
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/13/2023 PLATE NO. M5-1.15

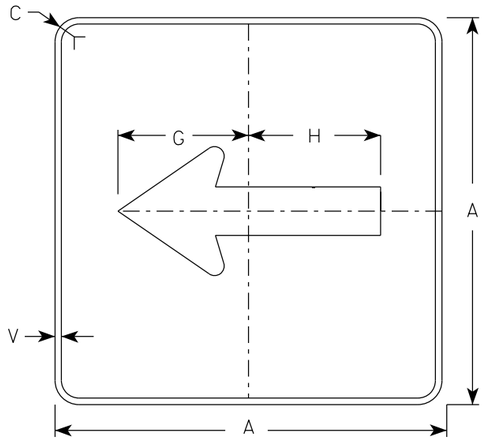
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 193 | E



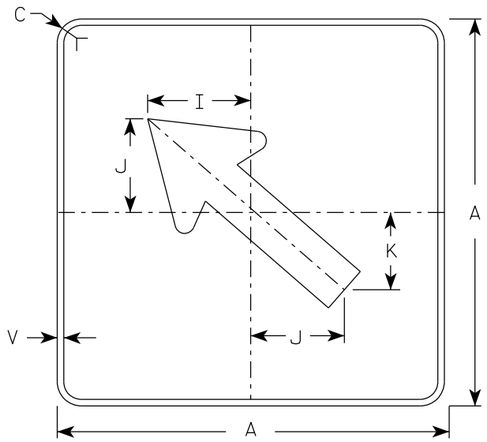
M6-1
MM6-1
MO6-1
MP6-1



M6-2
MM6-2
MO6-2
MP6-2



MB6-1
MK6-1
MN6-1
MR6-1

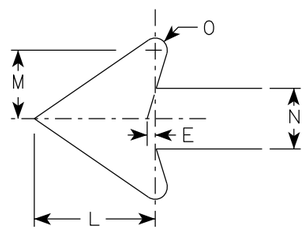


MB6-2
MK6-2
MN6-2
MR6-2

NOTES

1. Signs are Type II - Type H Reflective except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow

ARROW DETAIL



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

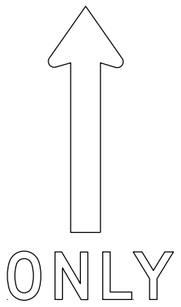
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/13/2023 PLATE NO. M6-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 194 | E

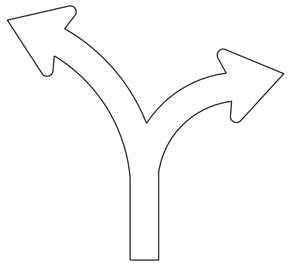
7

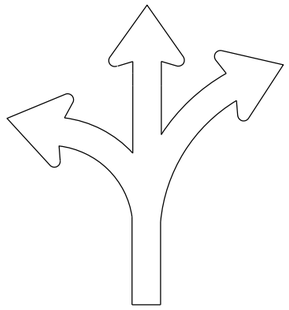
7

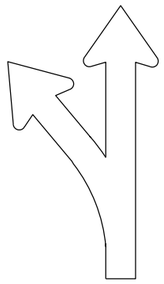


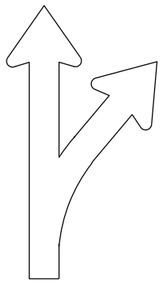
(A)

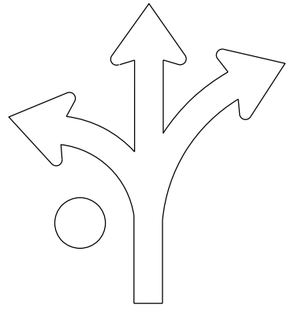
(B)

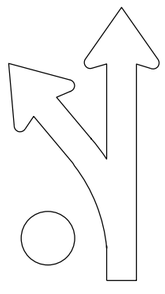

(C)

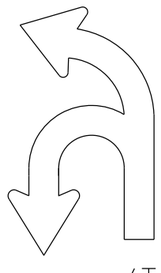

(D)

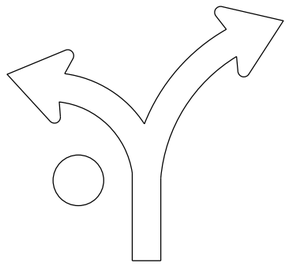

(E)

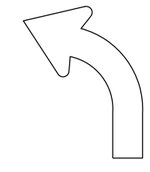

(F)


(G)

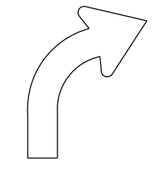

(H)


(I)


(J)



(L)



(R)

NOTES

1. Sigs are Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D
4. Use appropriate Letter for Sign Code
   Each letter added makes sign wider. Example R3-8EAR
5. Square footage of sign varies by letters

1	Letter =	3.75 sq ft for Size 2
		6.0 sq ft for Size 3
		10.0 sq ft for Size 4 or 5
2	Letters =	7.5 sq ft for Size 2
		12.0 sq ft for Size 3
		20.0 sq ft for Size 4 or 5
3	Letters =	11.25 sq ft for Size 2
		18.0 sq ft for Size 3
		30.0 sq ft for Size 4 or 5
4	Letters =	15.0 sq ft for Size 2
		24.0 sq ft for Size 3
		40.0 sq ft for Size 4 or 5
5	Letters =	18.75 sq ft for Size 2
		30.0 sq ft for Size 3
		50.0 sq ft for Size 4 or 5
6	Letters =	22.5 sq ft for Size 2
		36.0 sq ft for Size 3
		60.0 sq ft for Size 4 or 5

6. When letters C,D,G,J are used on the Left or Right end of the sign the Sq. Ft. changes.
   Add the amounts when these letters are used:
   1.25 sq ft for Size 2
   1.5 sq ft for Size 3
   2.0 sq ft for Size 4 or 5

STANDARD SIGN
R3-8 Series

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

7

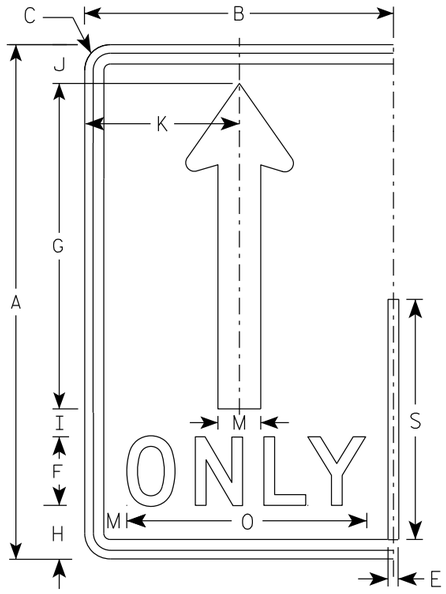
7

PROJECT NO:

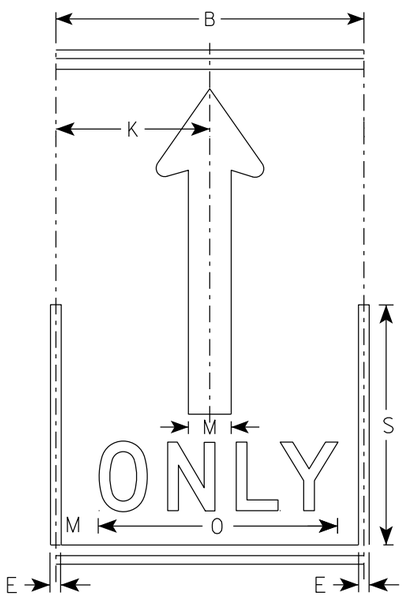
SHEET NO: 195 E

NOTES

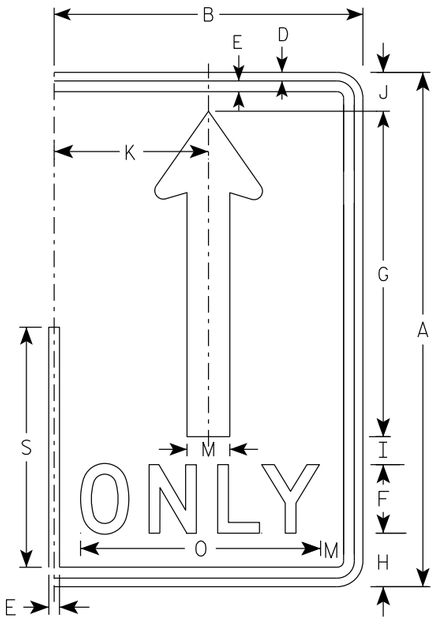
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



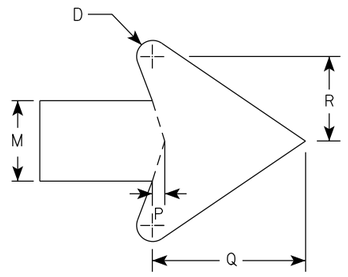
(A)



(A)



(A)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8	4	19	3 1/8	1 5/8	2 1/4	9		2 1/2		14	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8	5	22 3/4	3 3/4	1 3/4	2 3/4	12		3		17 5/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1	6	30 3/8	5 1/8	2 7/8	3 5/8	15		4		21 3/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (A) Arrow

WISCONSIN DEPT OF TRANSPORTATION

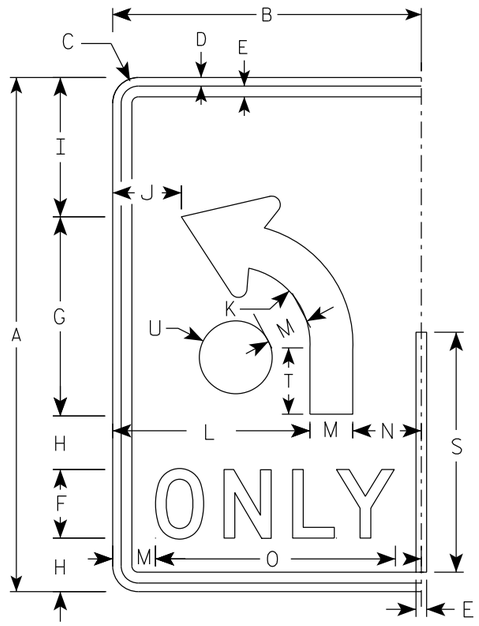
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

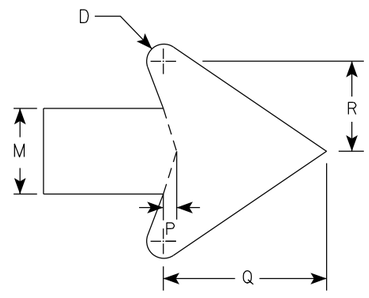
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 196 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
   Message Series - D



(B)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8	2 1/8						3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8	2 1/2						6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4	3 3/8						10.0

STANDARD SIGN

R3-8 (B) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

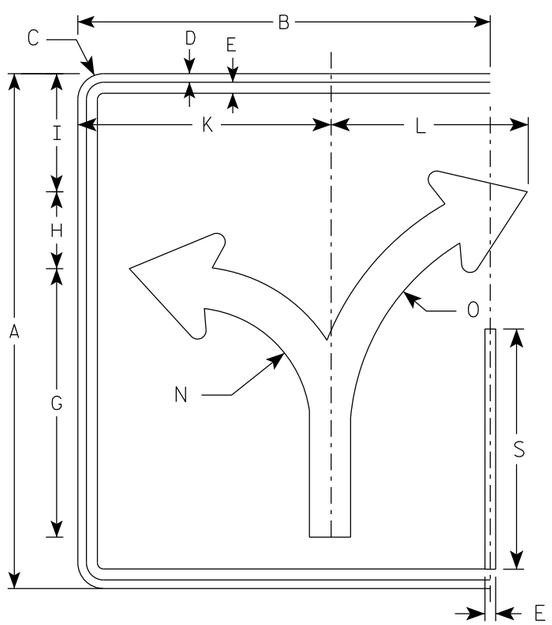
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

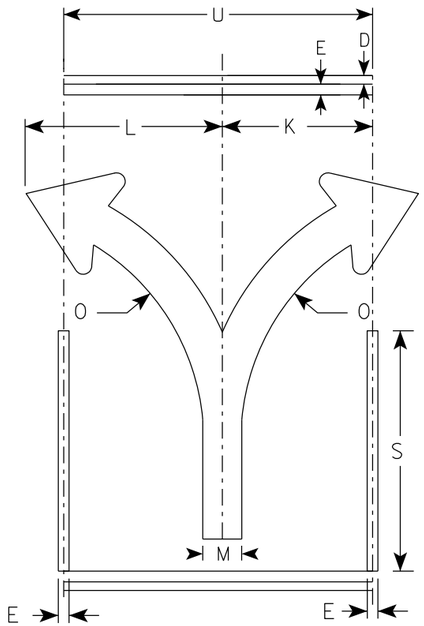
SHEET NO: 197 E

NOTES

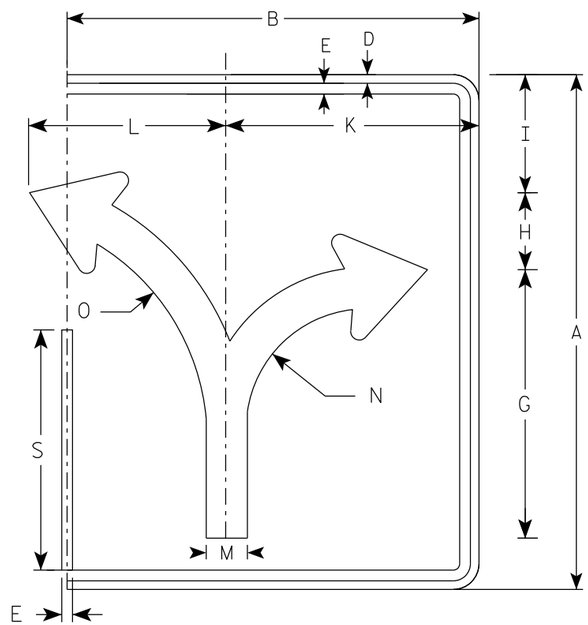
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



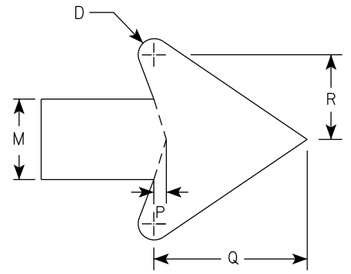
(C)



(C)



(C)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (C) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

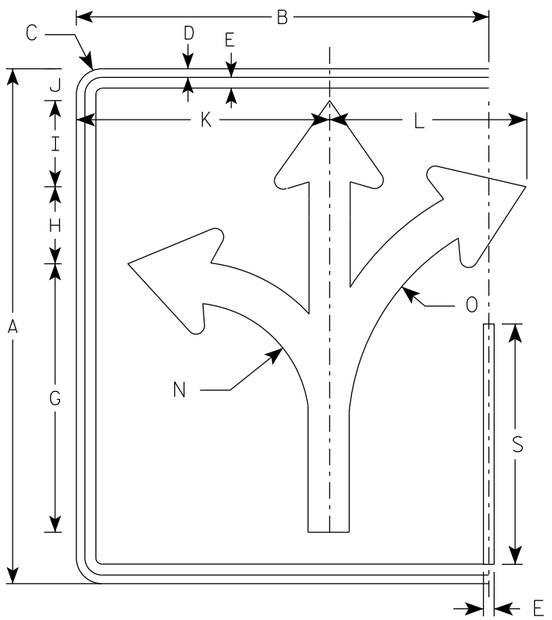
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 198 E

7

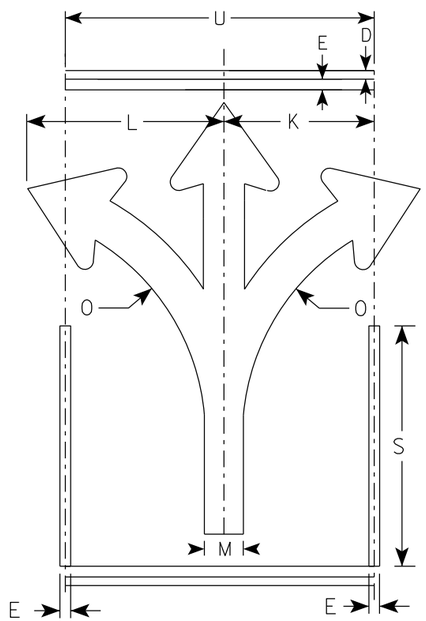
7

NOTES

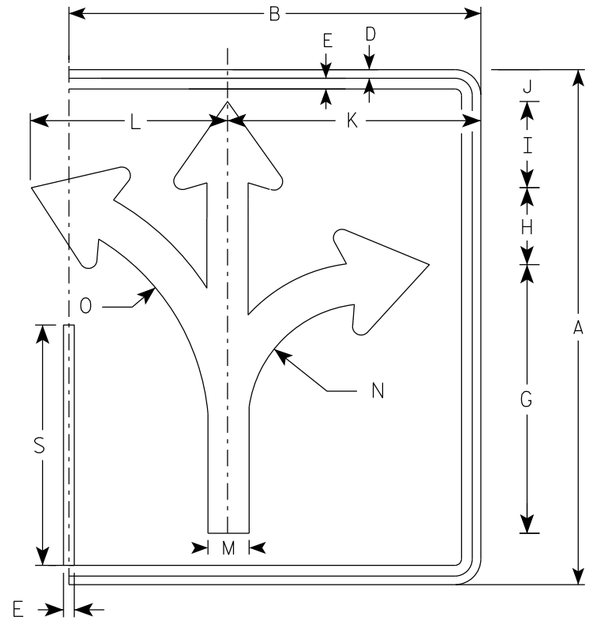
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



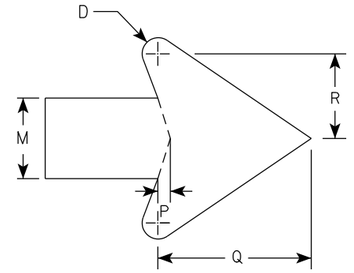
(D)



(D)



(D)



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	ENDS Area sq. ft.	MIDDLE Area sq. ft.
1																												
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		18						5.0	3.75
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	2 1/4	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		24						7.5	6.0
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		30						12.0	10.0

STANDARD SIGN
R3-8 (D) Arrow

WISCONSIN DEPT OF TRANSPORTATION

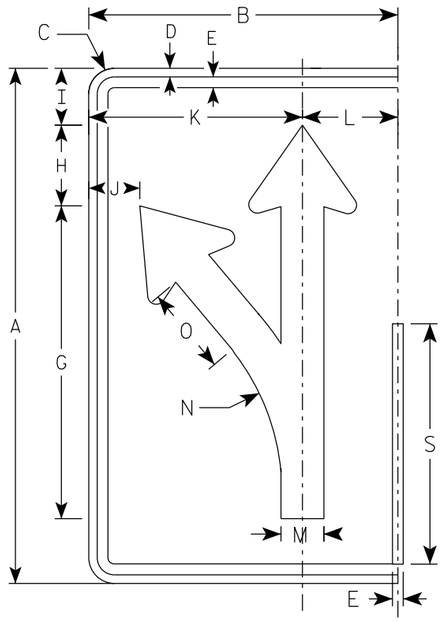
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

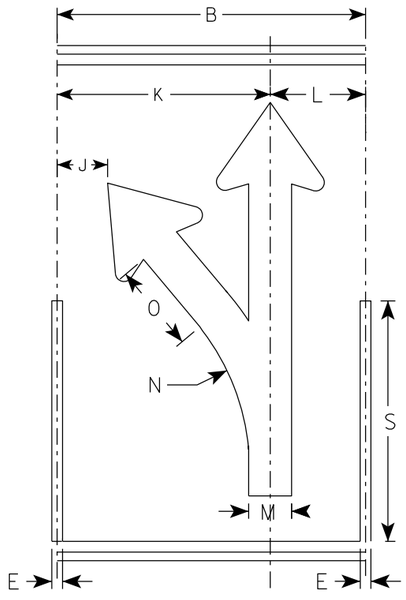
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 199 | E

NOTES

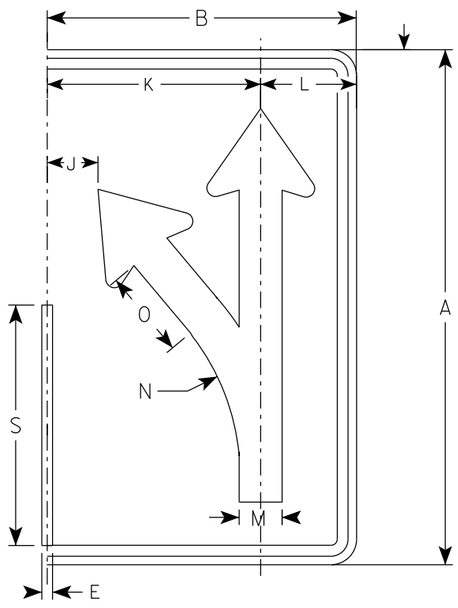
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



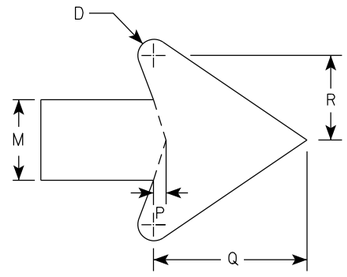
(E)



(E)



(E)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (E) Arrow

WISCONSIN DEPT OF TRANSPORTATION

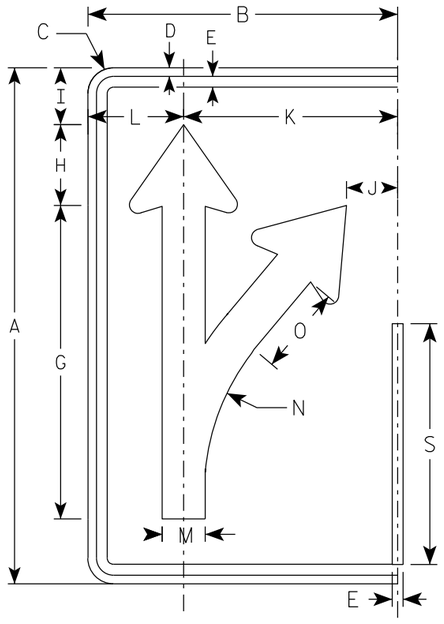
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

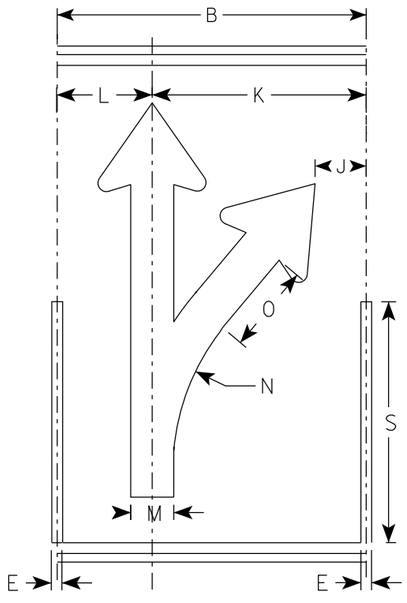
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 200 | E

NOTES

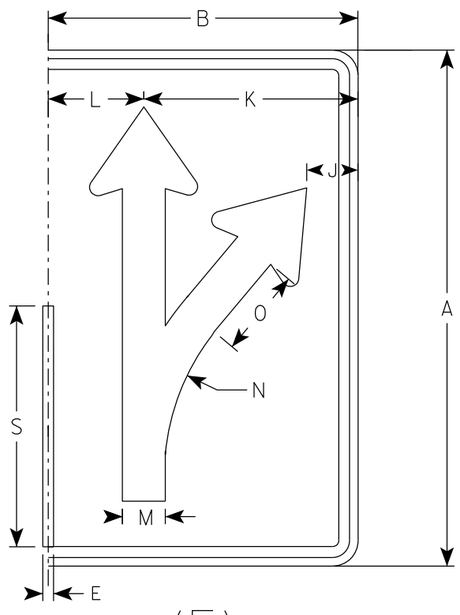
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



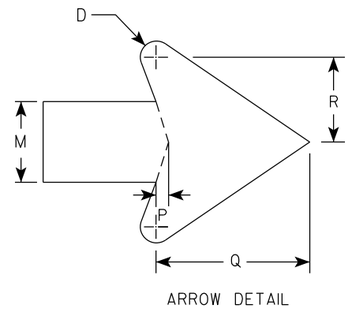
(F)



(F)



(F)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14								3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4								6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8								10.0

STANDARD SIGN
R3-8 (F) Arrow

WISCONSIN DEPT OF TRANSPORTATION

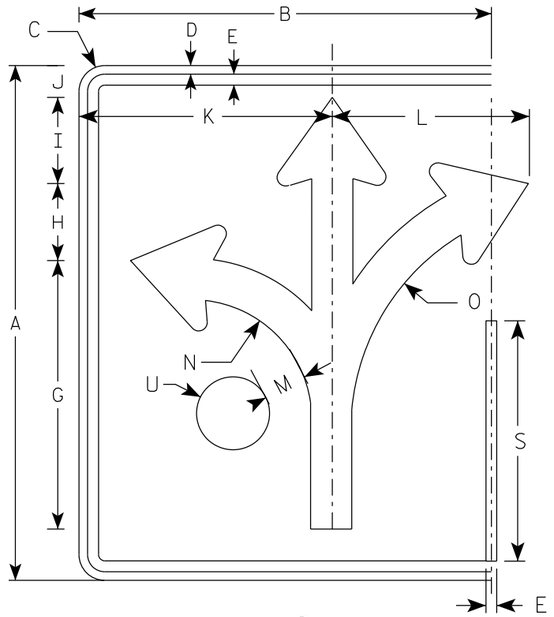
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

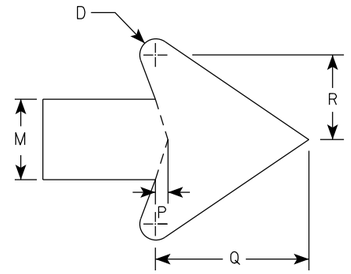
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 201 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(G)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	5	1 7/8	14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	6	3 1/8	17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	7 7/8	3 1/8	23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (G) Arrow

WISCONSIN DEPT OF TRANSPORTATION

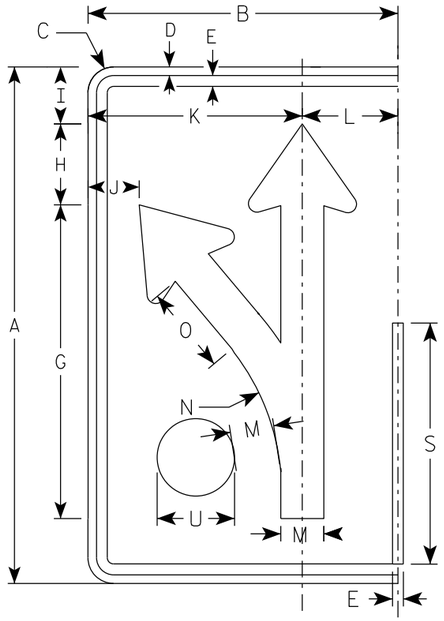
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

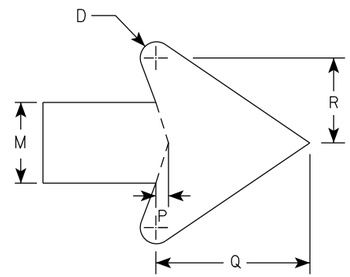
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 202	E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(H)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
2M	30	18	1 1/2	1/2	5/8		18 1/4	4 3/4	3 1/4	3	12 1/2	5 1/2	2 1/2	13 1/4	5 1/8	3/8	4 3/4	2 5/8	14		2 1/8						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	5 5/8	4	4 7/8	16 1/8	7 3/4	3	15 7/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4		2 1/2						6.0
4	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0
5	48	30	2 1/4	3/4	1		29 1/8	7 1/2	5 1/4	5 3/8	20 1/2	9 1/2	4	21 1/4	8 1/4	5/8	7 5/8	4 1/4	22 3/8		3 3/8						10.0

STANDARD SIGN
R3-8 (H) Arrow

WISCONSIN DEPT OF TRANSPORTATION

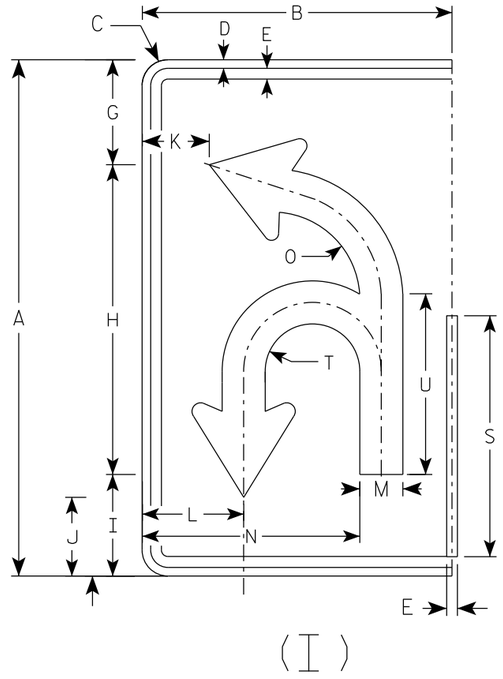
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

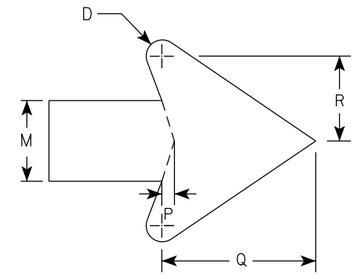
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 203 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(I)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
2M	30	18	1 1/2	1/2	5/8		6 1/8	18	5 7/8	4 5/8	3 7/8	5 7/8	2 1/2	12 5/8	5 1/8	3/8	4 3/4	2 5/8	14	2 3/4	10 1/2						3.75
3	36	24	1 1/2	1/2	5/8		21 7/8	21 5/8	7 1/8	5 1/2	5 7/8	8 1/4	3	16 3/8	6 1/8	1/2	5 3/4	3 1/8	16 3/4	3 1/4	12 5/8						6.0
4	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0
5	48	30	2 1/4	3/4	1		29 1/8	28 3/4	9 3/8	7 1/4	6 7/8	10	4	20 7/8	8 1/8	5/8	7 5/8	4 1/4	22 3/8	4 3/8	16 3/4						10.0

STANDARD SIGN
R3-8 (I) Arrow

WISCONSIN DEPT OF TRANSPORTATION

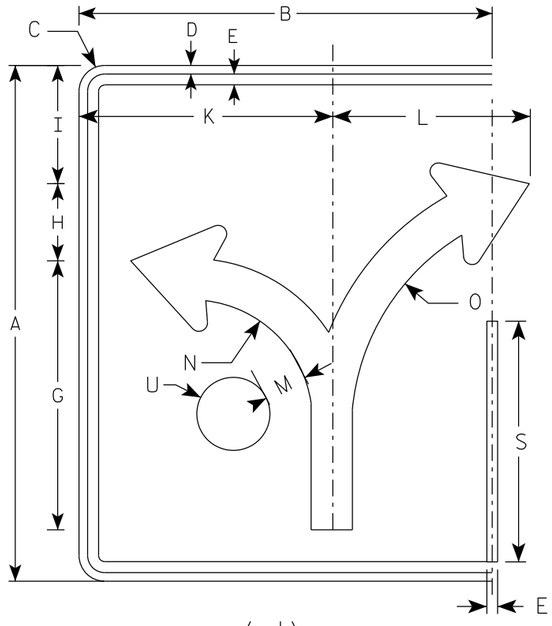
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

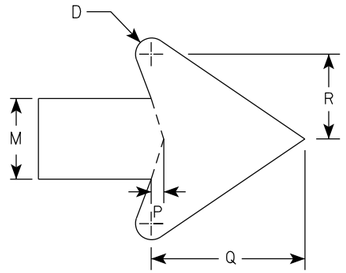
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 204 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - None



(J)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
2M	30	24	1 1/2	1/2	5/8		15 5/8	4 1/2	6 7/8		14 3/4	11 1/2	2 3/8	7	13 1/4	3/8	4 1/2	2 1/2	14		2 1/8						5.0
3	36	30	1 1/2	1/2	5/8		18 3/4	5 1/2	8 1/4		17 1/4	17 1/4	2 7/8	8 3/8	16	1/2	5 1/2	3	16 3/4		2 1/2						7.5
4	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0
5	48	36	2 1/4	3/4	1		24 7/8	7 1/4	11		23 1/8	18	3 3/4	11 1/8	21 1/4	5/8	7 1/8	4	22 3/8		3 3/8						12.0

STANDARD SIGN
R3-8 (J) Arrow

WISCONSIN DEPT OF TRANSPORTATION

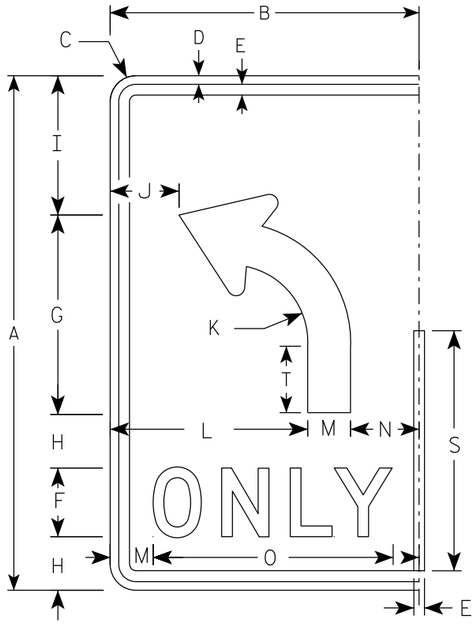
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

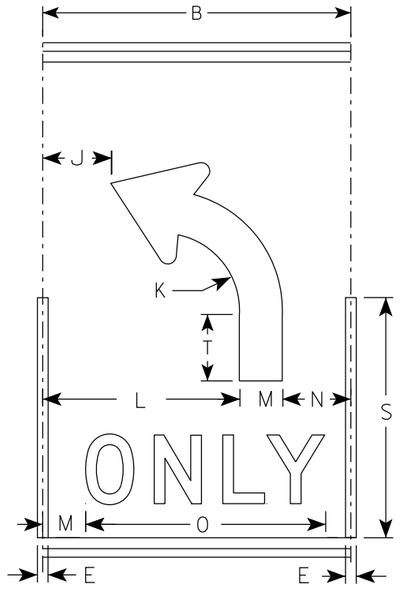
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 205 | E

NOTES

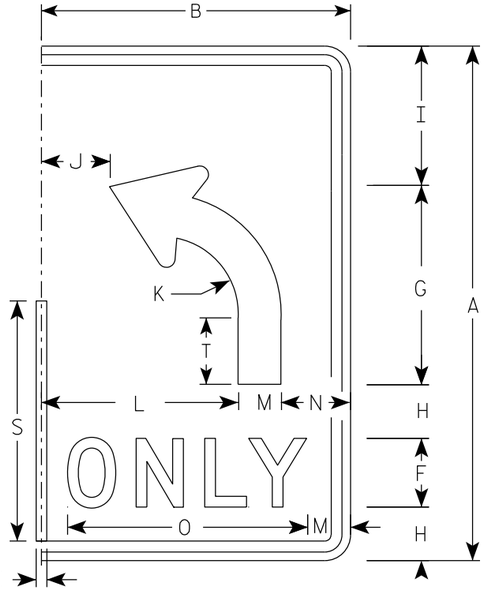
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



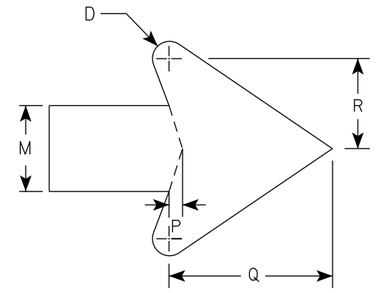
(L)



(L)



(L)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
2M	30	18	1 ½	½	⅝	4	11 ⅝	3 ⅛	8 ⅛	4	4 ½	11 ½	2 ½	4	14	⅜	4 ¾	2 ⅝	14	3 ⅞							3.75
3	36	24	1 ½	½	⅝	5	14	3 ½	9 ¾	6	5 ⅜	15	3	6	17 ⅝	½	5 ¾	3 ⅛	16 ¾	4 ⅝							6.0
4	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0
5	48	30	2 ¼	¾	1	6	18 ⅝	5 ⅛	13 ⅛	6 ⅛	7 ¼	18	4	8	21 ¾	⅝	7 ⅝	4 ¼	22 ⅜	6 ¼							10.0

STANDARD SIGN

R3-8 (L) Arrow

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

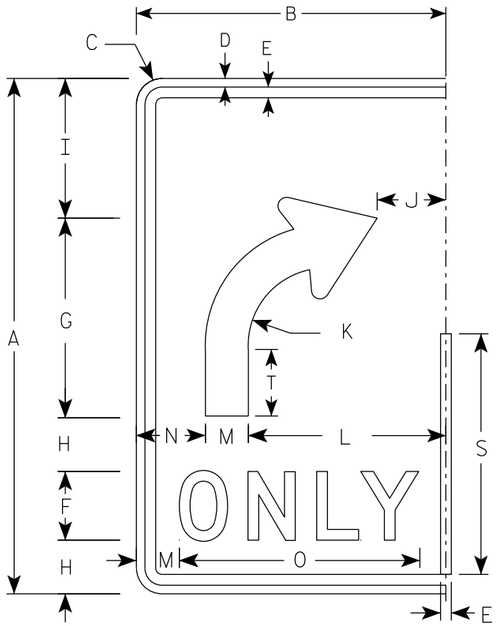
DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

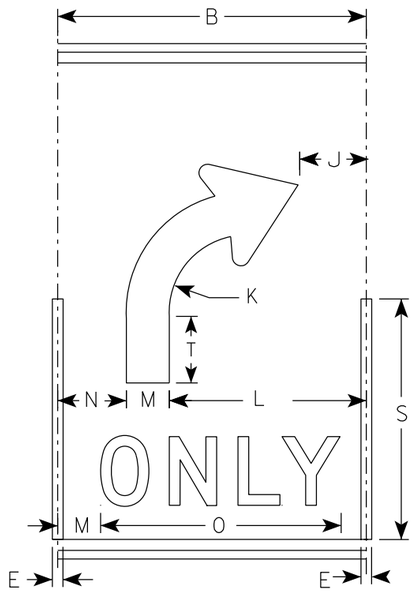
SHEET NO: 206 E

NOTES

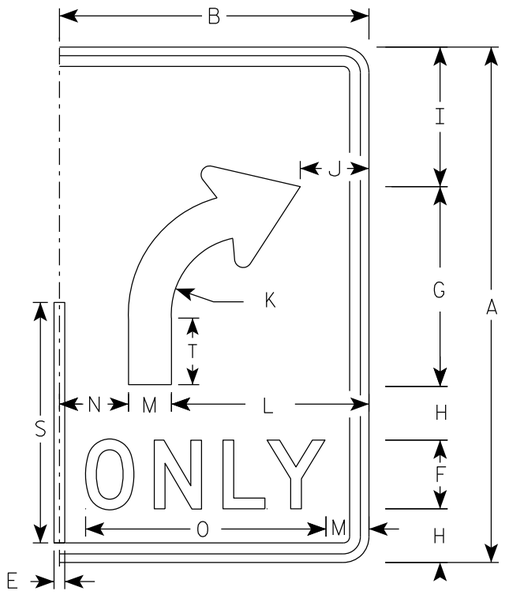
1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D



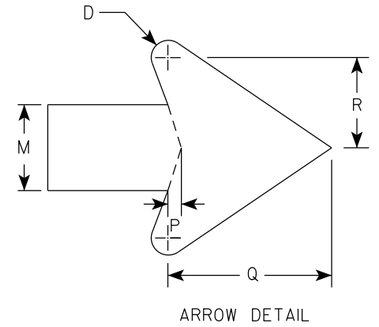
(R)



(R)



(R)



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
2M	30	18	1 1/2	1/2	5/8	4	11 5/8	3 1/8	8 1/8	4	4 1/2	11 1/2	2 1/2	4	14	3/8	4 3/4	2 5/8	14	3 7/8							3.75
3	36	24	1 1/2	1/2	5/8	5	14	3 1/2	9 3/4	6	5 3/8	15	3	6	17 5/8	1/2	5 3/4	3 1/8	16 3/4	4 5/8							6.0
4	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0
5	48	30	2 1/4	3/4	1	6	18 5/8	5 1/8	13 1/8	6 1/8	7 1/4	18	4	8	21 3/4	5/8	7 5/8	4 1/4	22 3/8	6 1/4							10.0

STANDARD SIGN

R3-8 (R) Arrow

WISCONSIN DEPT OF TRANSPORTATION

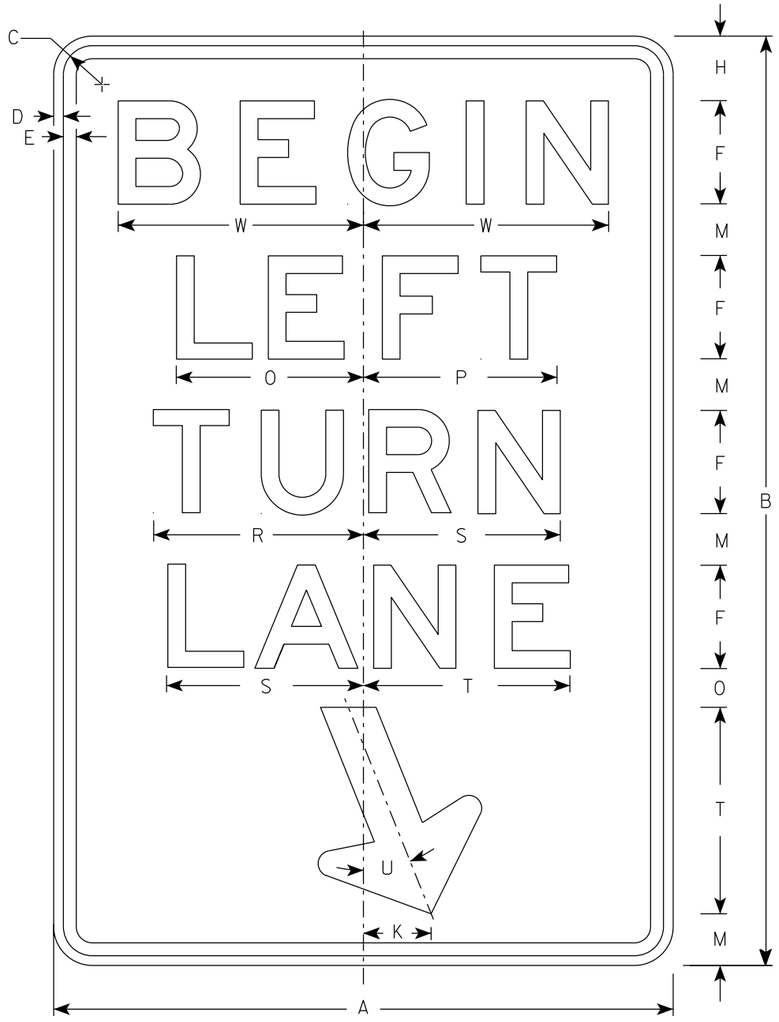
APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 2/14/23 PLATE NO. R3-8.2

PROJECT NO:

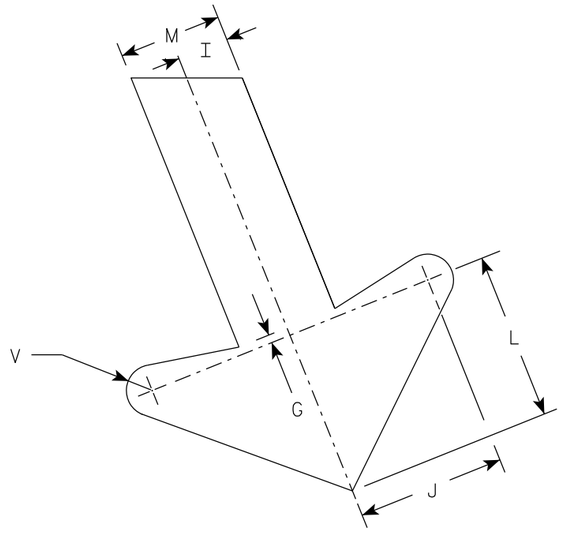
SHEET NO: 207 **E**



R3-20L

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - E



ARROW DETAIL

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

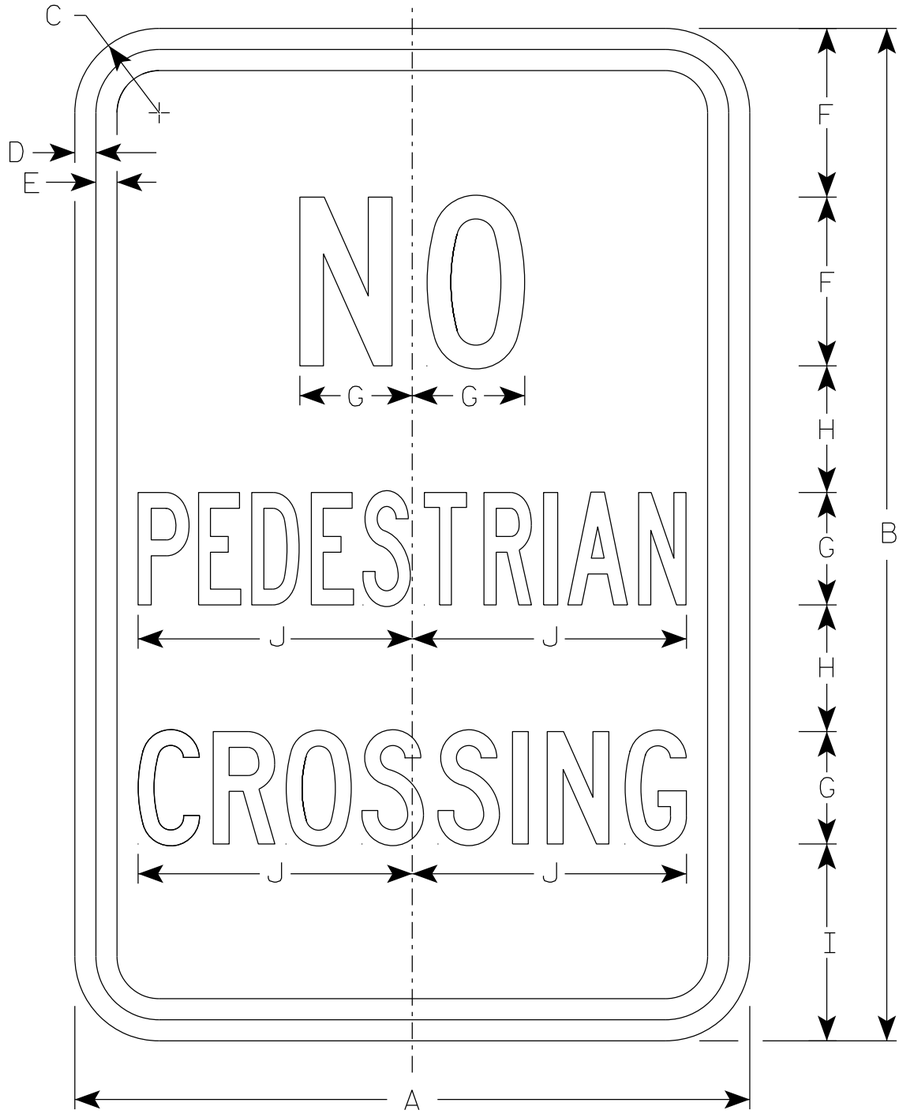
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/23/23 PLATE NO. R3-20L.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 208 | E



R9-3

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - Lines 1 & 3 are Series C
   Line 2 is Series B

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	12	18	1 1/2	3/8	3/8	3	2	2 1/4	3 1/2	4 7/8																	1.5
2M	12	18	1 1/2	3/8	3/8	3	2	2 1/4	3 1/2	4 7/8																	1.5
3																											
4																											
5																											

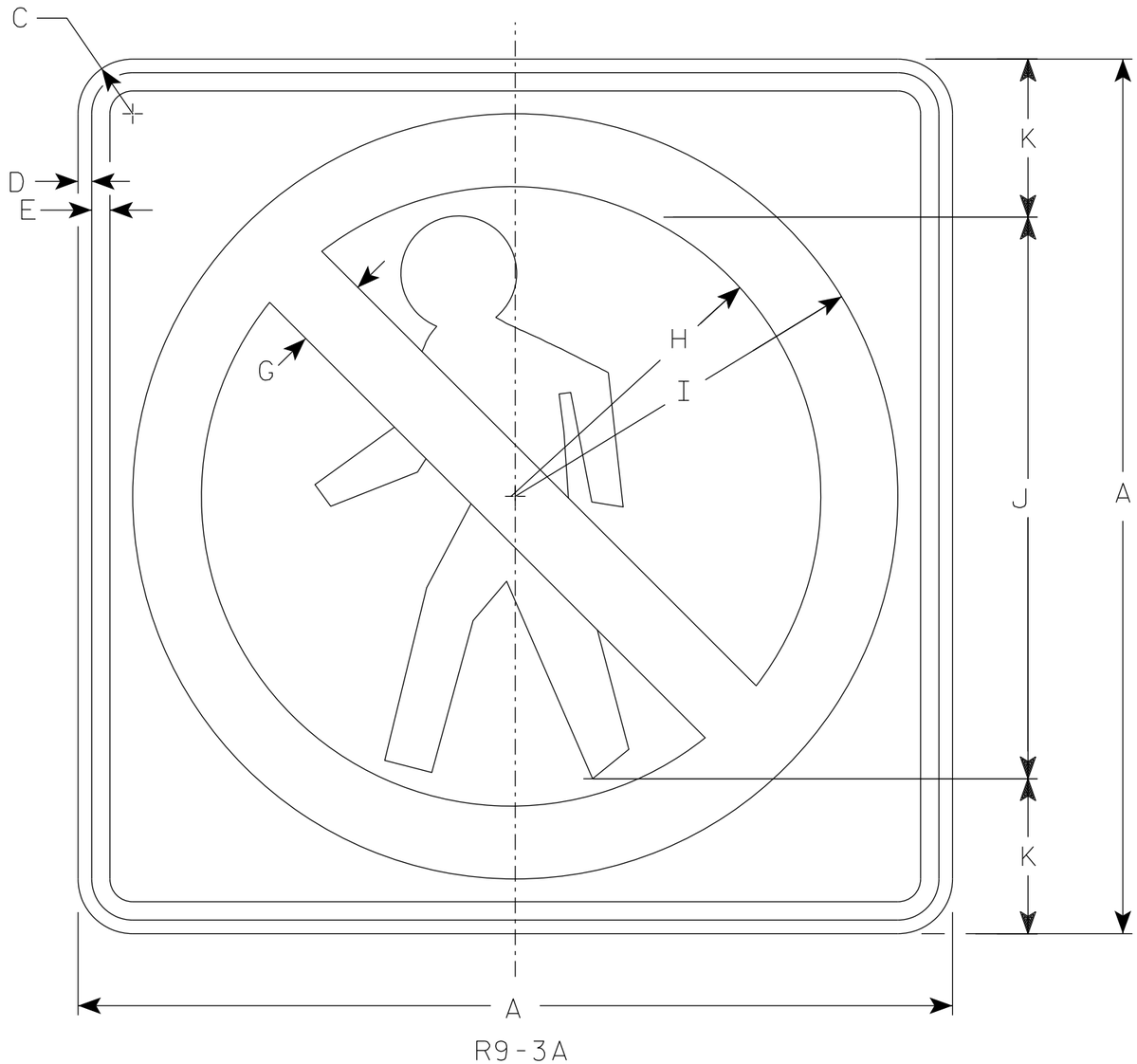
STANDARD SIGN
R9-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 209 | E



R9-3A

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - See note 3
3. Border & Pedestrian are non-reflective black. Circle with diagonal bar is reflective red.

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		1 1/2	6 1/4	7 7/8	12	3																2.25
2S	24		1 1/2	3/8	1/2		2	8 1/2	10 1/2	15	4																4.00
2M	24		1 1/2	3/8	1/2		2	8 1/2	10 1/2	15	4																4.00
3																											
4																											
5																											

STANDARD SIGN
R9-3A

WISCONSIN DEPT OF TRANSPORTATION

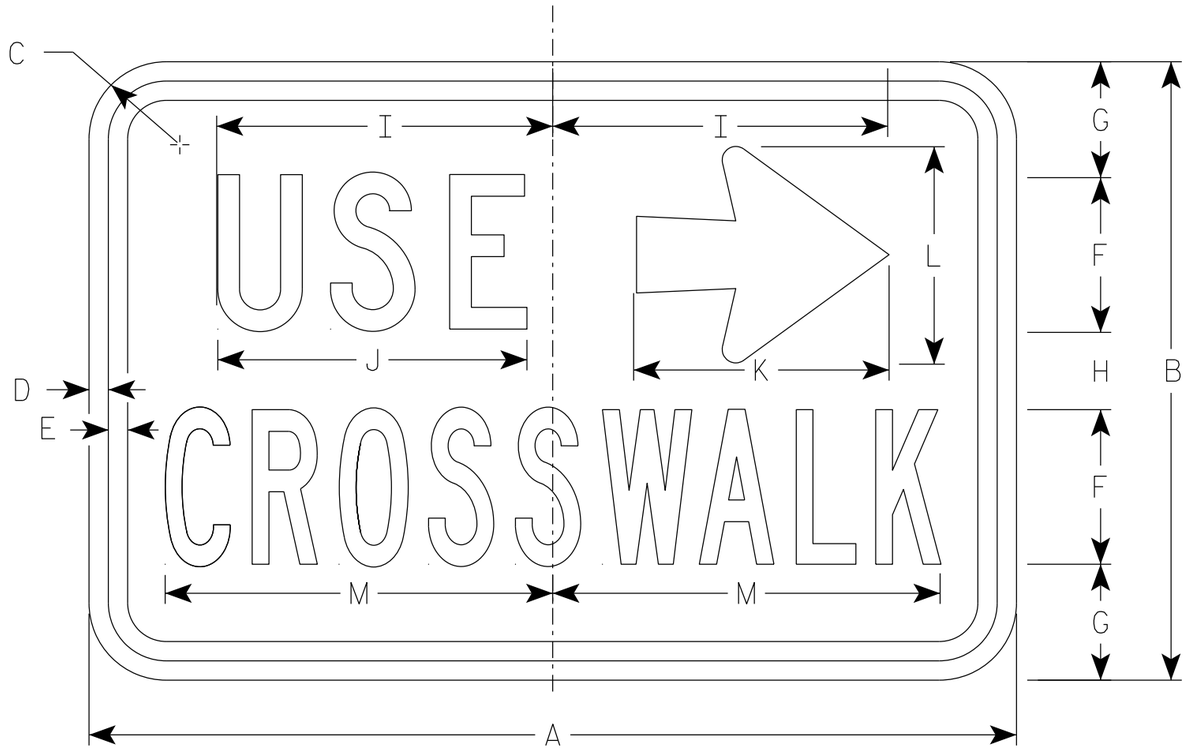
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3A.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 210 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C Line 1, Series B Line 2



R9-3B

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	18	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	6 1/2	6	5	4 1/4	7 1/2														1.5
2M	18	12	1 1/2	3/8	3/8	3	2 1/4	1 1/2	6 1/2	6	5	4 1/4	7 1/2														1.5
3																											
4																											
5																											

STANDARD SIGN
R9-3B

WISCONSIN DEPT OF TRANSPORTATION

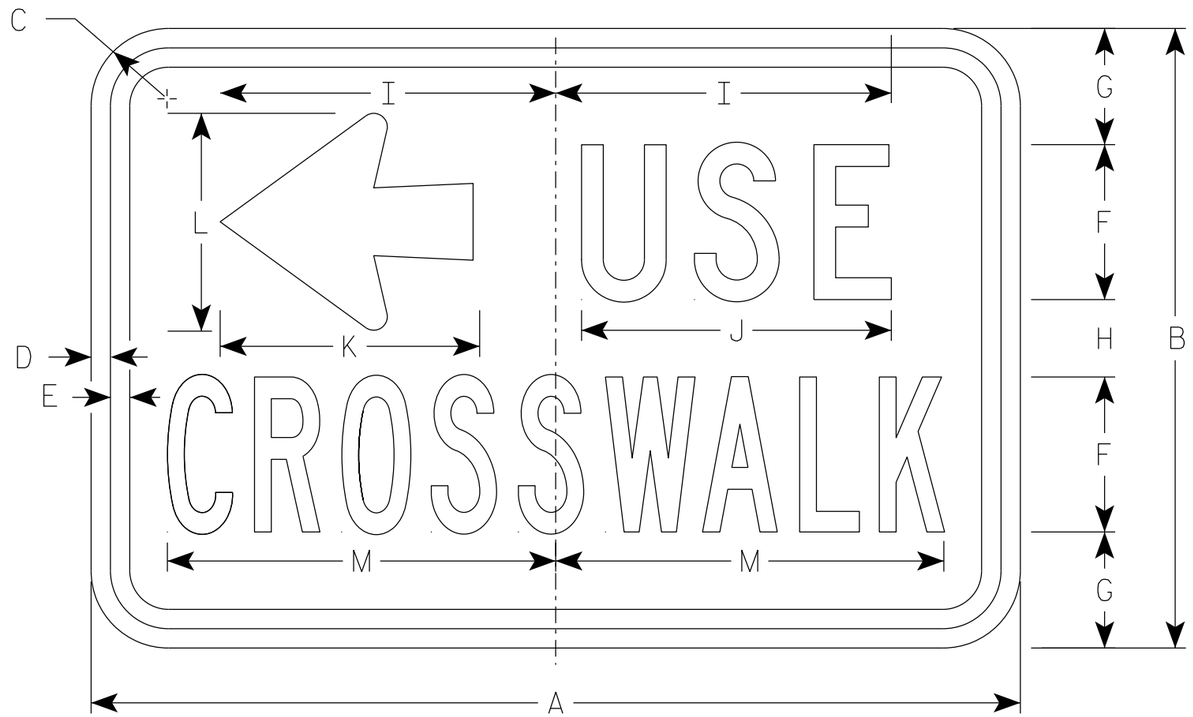
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3B.3

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 211 | E

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C Line 1, Series B Line 2



R9-3BL

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	18	12	1 ½	⅜	⅜	3	2 ¼	1 ½	6 ½	6	5	4 ¼	7 ½														1.5
2M	18	12	1 ½	⅜	⅜	3	2 ¼	1 ½	6 ½	6	5	4 ¼	7 ½														1.5
3																											
4																											
5																											

STANDARD SIGN
R9-3BL

WISCONSIN DEPT OF TRANSPORTATION

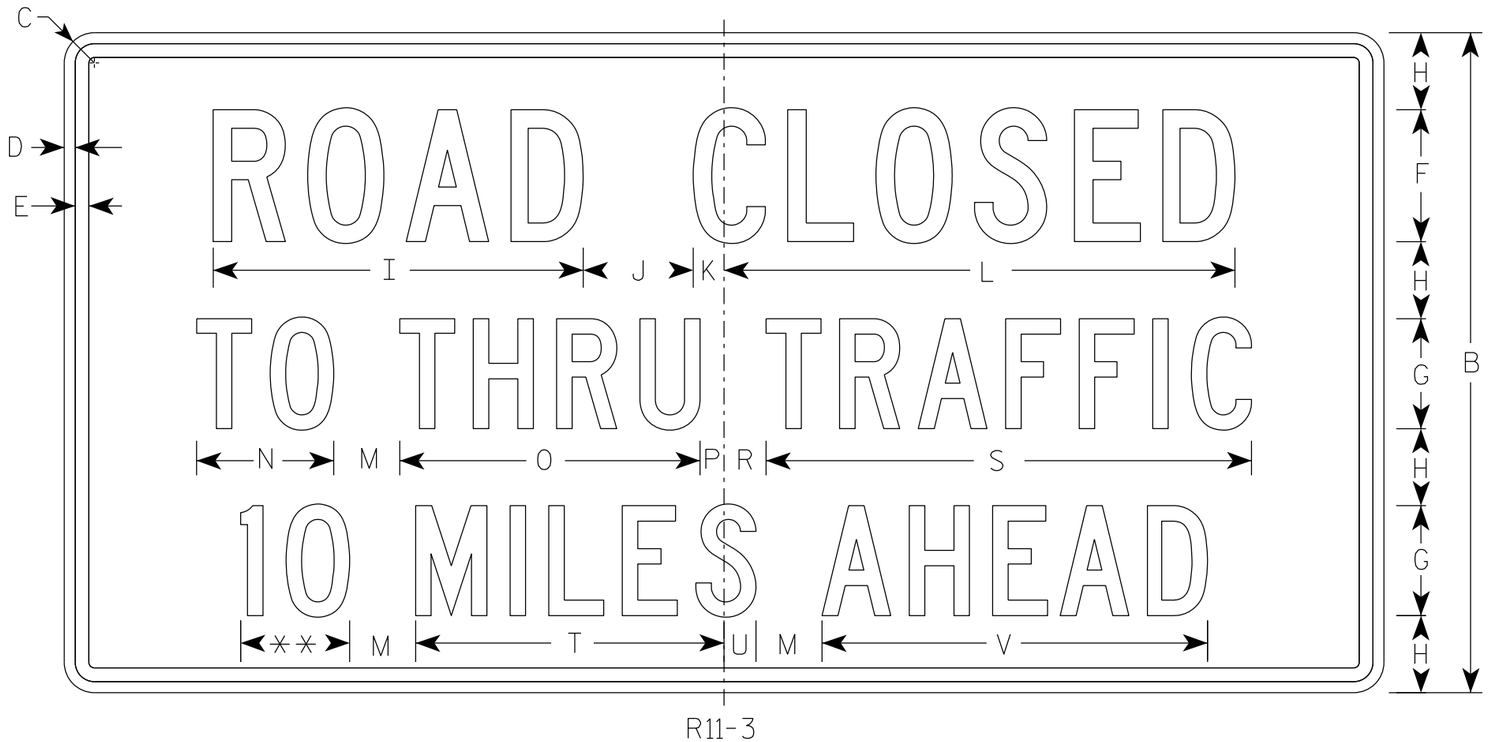
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/23/24 PLATE NO. R9-3BL.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 212	E

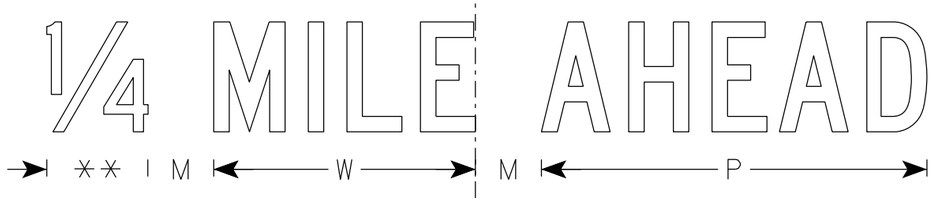
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



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	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

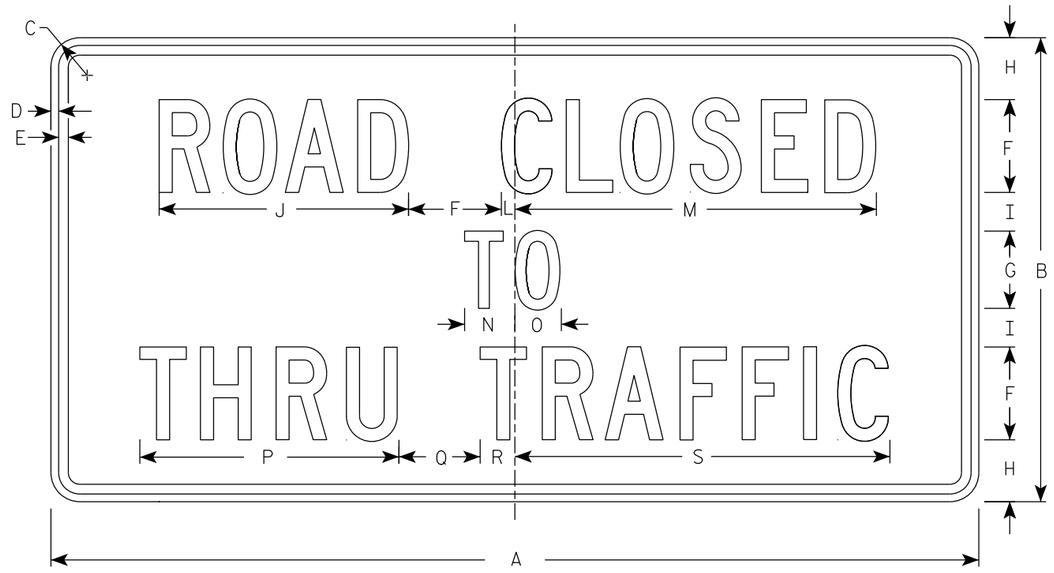
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-3.10

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 213 | E



R11-4

NOTES

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

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

STANDARD SIGN
R11 - 4

WISCONSIN DEPT OF TRANSPORTATION

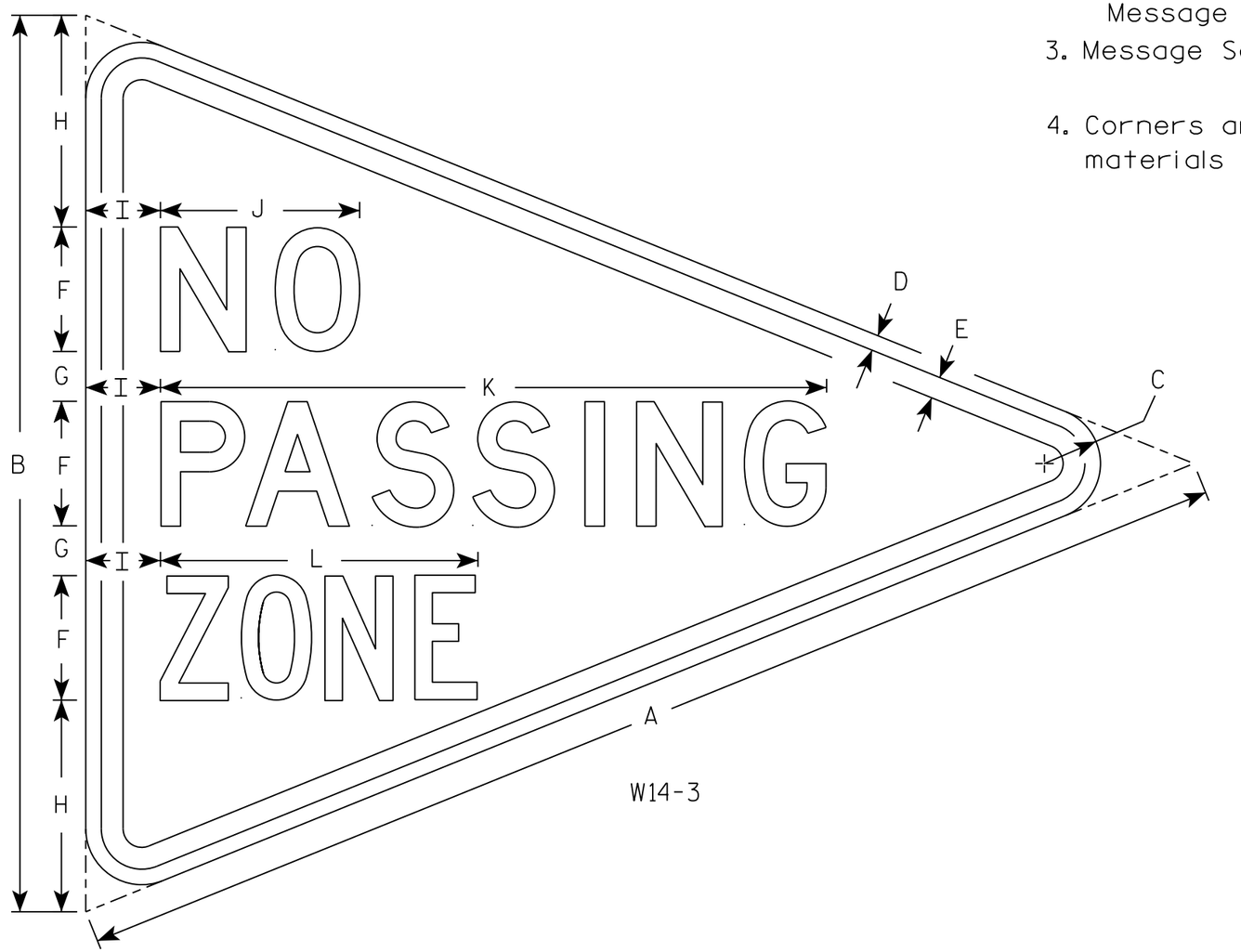
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/5/24 PLATE NO. R11-4.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 214 | E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

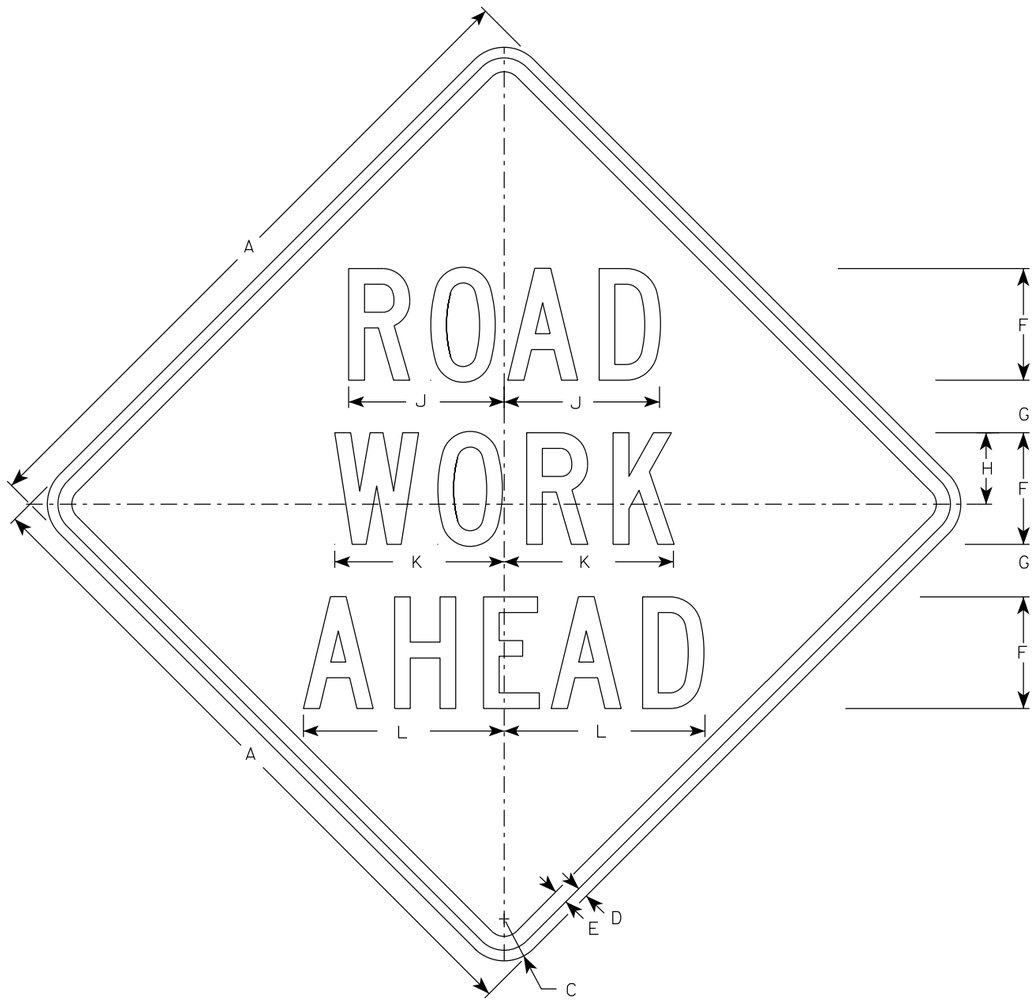
STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

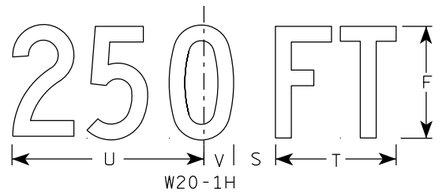
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10

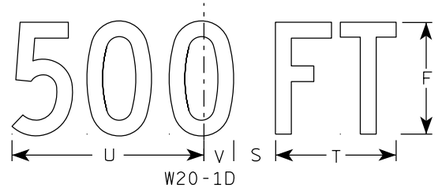
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 215 | E



W20-1A

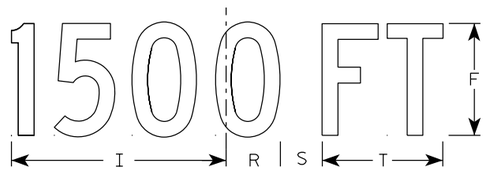


W20-1H



W20-1D

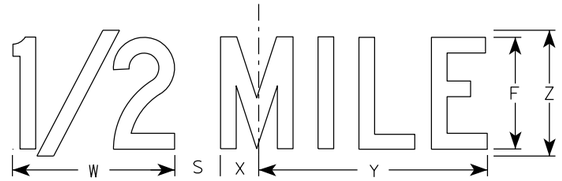
W20-1C



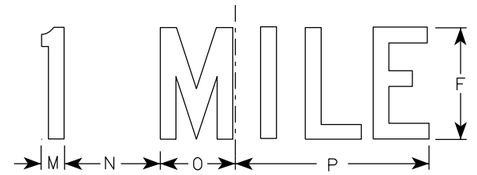
W20-1B

NOTES

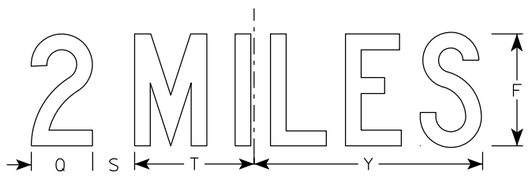
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1G



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:

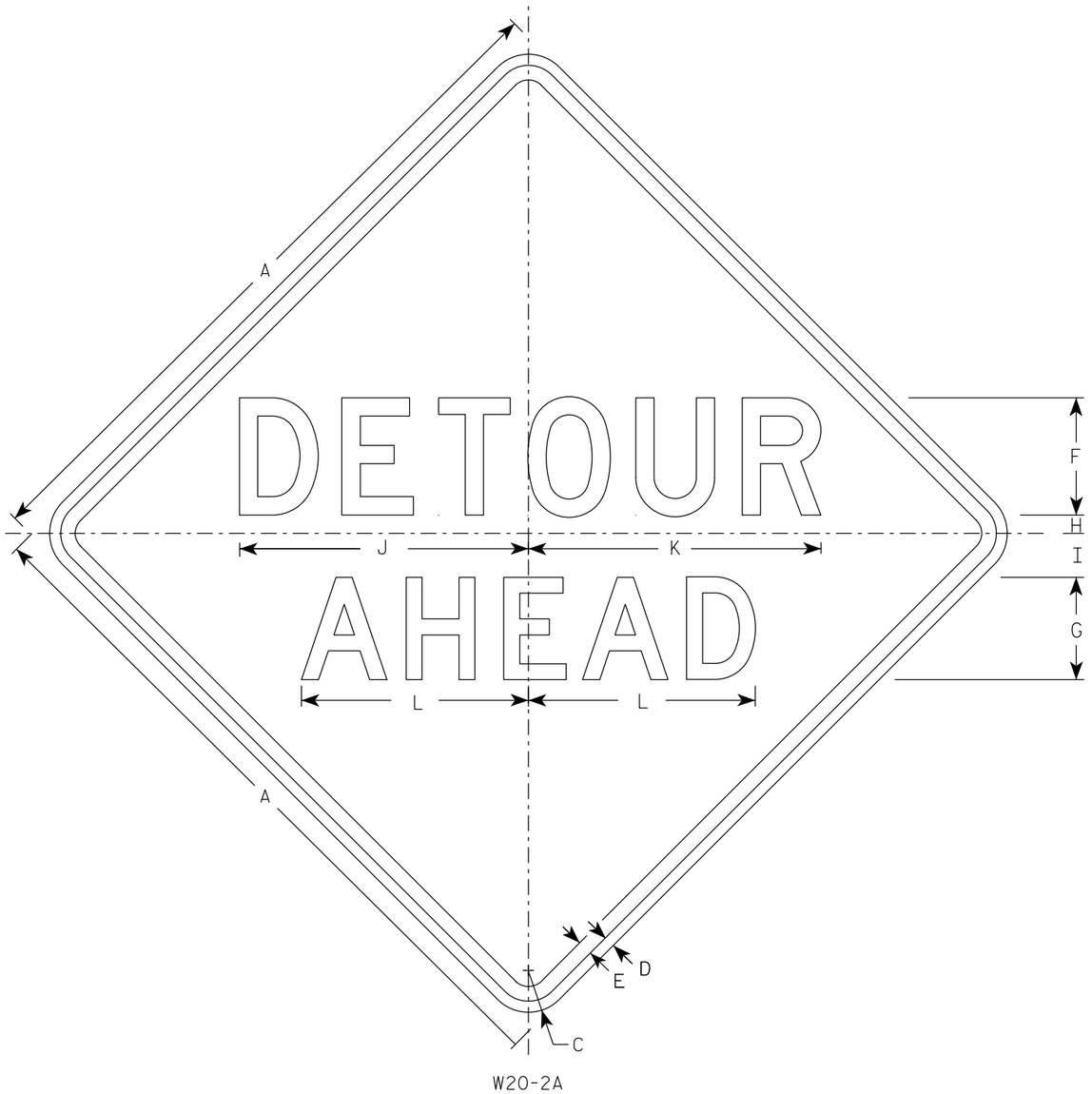
SHEET NO: 216 E

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

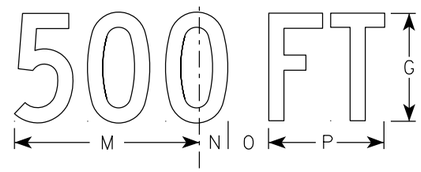
WISDOT/CADDS SHEET 42

7

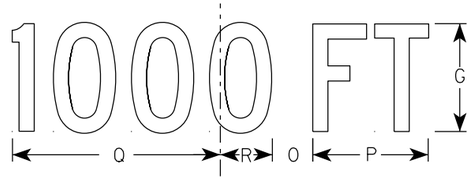
7



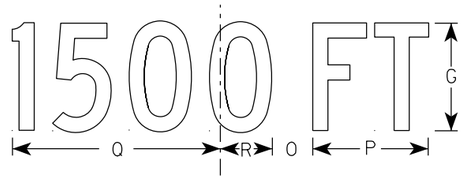
W20-2A



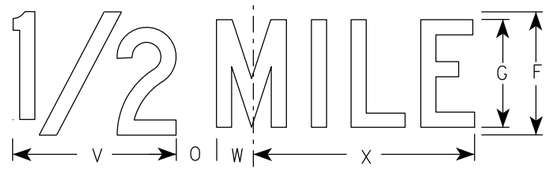
W20-2D



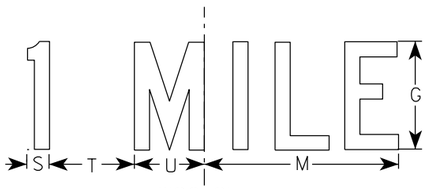
W20-2C



W20-2B



W20-2G



W20-2F

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
   Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		2 1/4	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		3	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

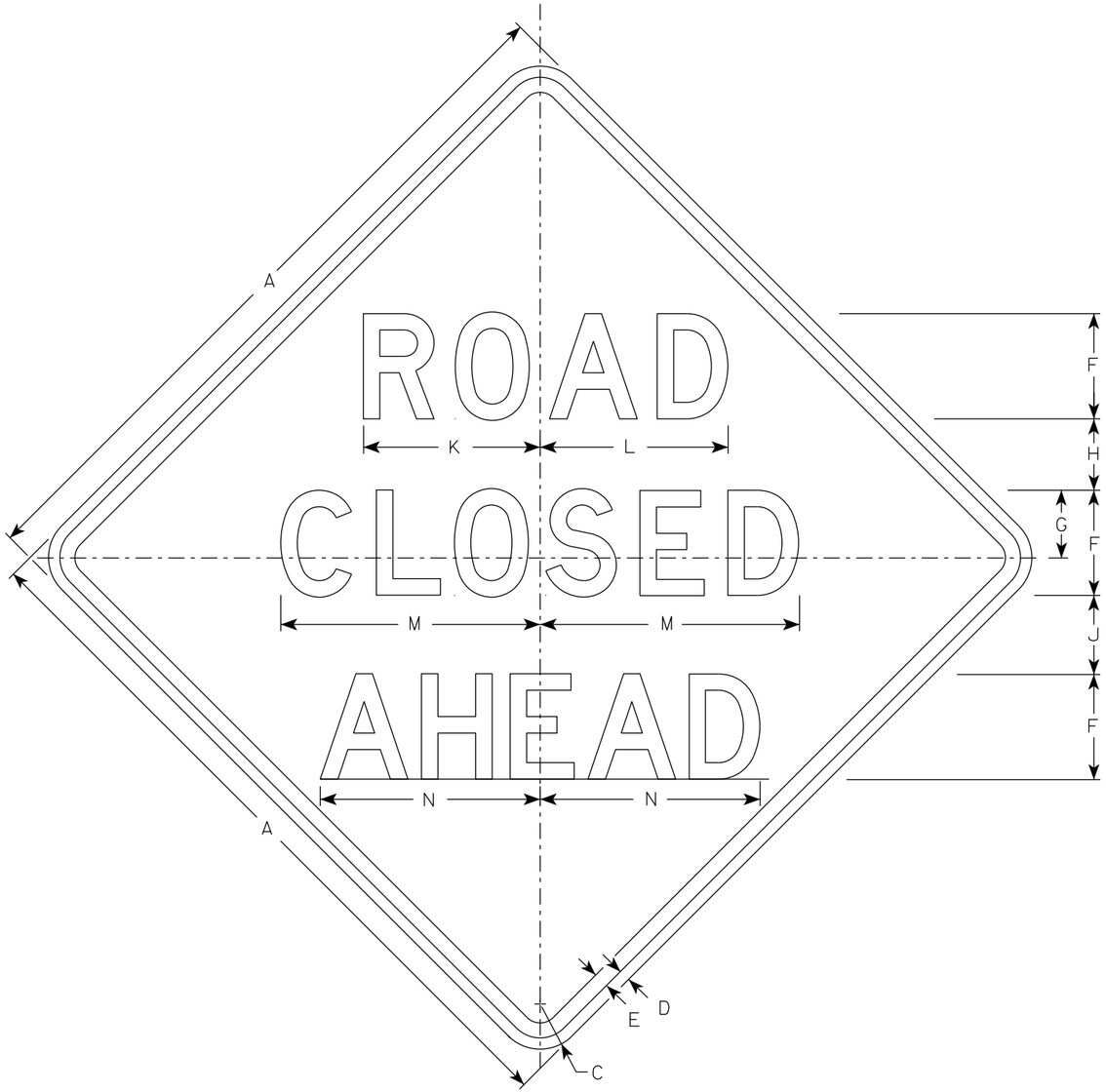
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

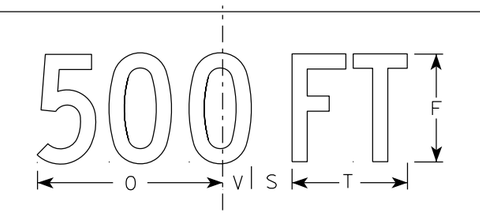
DATE 1/10/2024 PLATE NO. W20-2.7

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

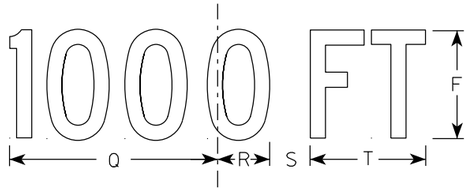
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W202.DGN PLOT DATE : 10-JAN 2024 11:36 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



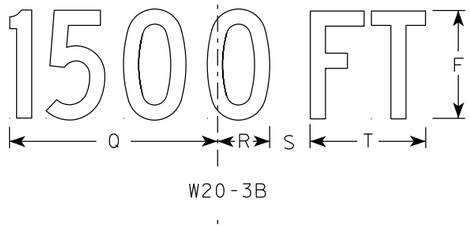
W20-3A



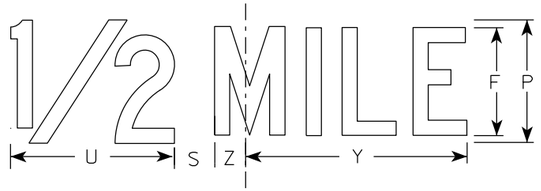
W20-3D



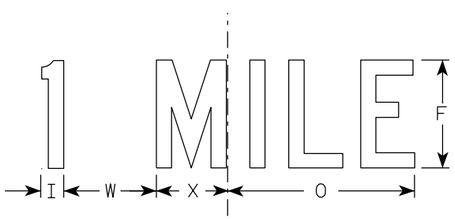
W20-3C



W20-3B



W20-3G



W20-3F

NOTES

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

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

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

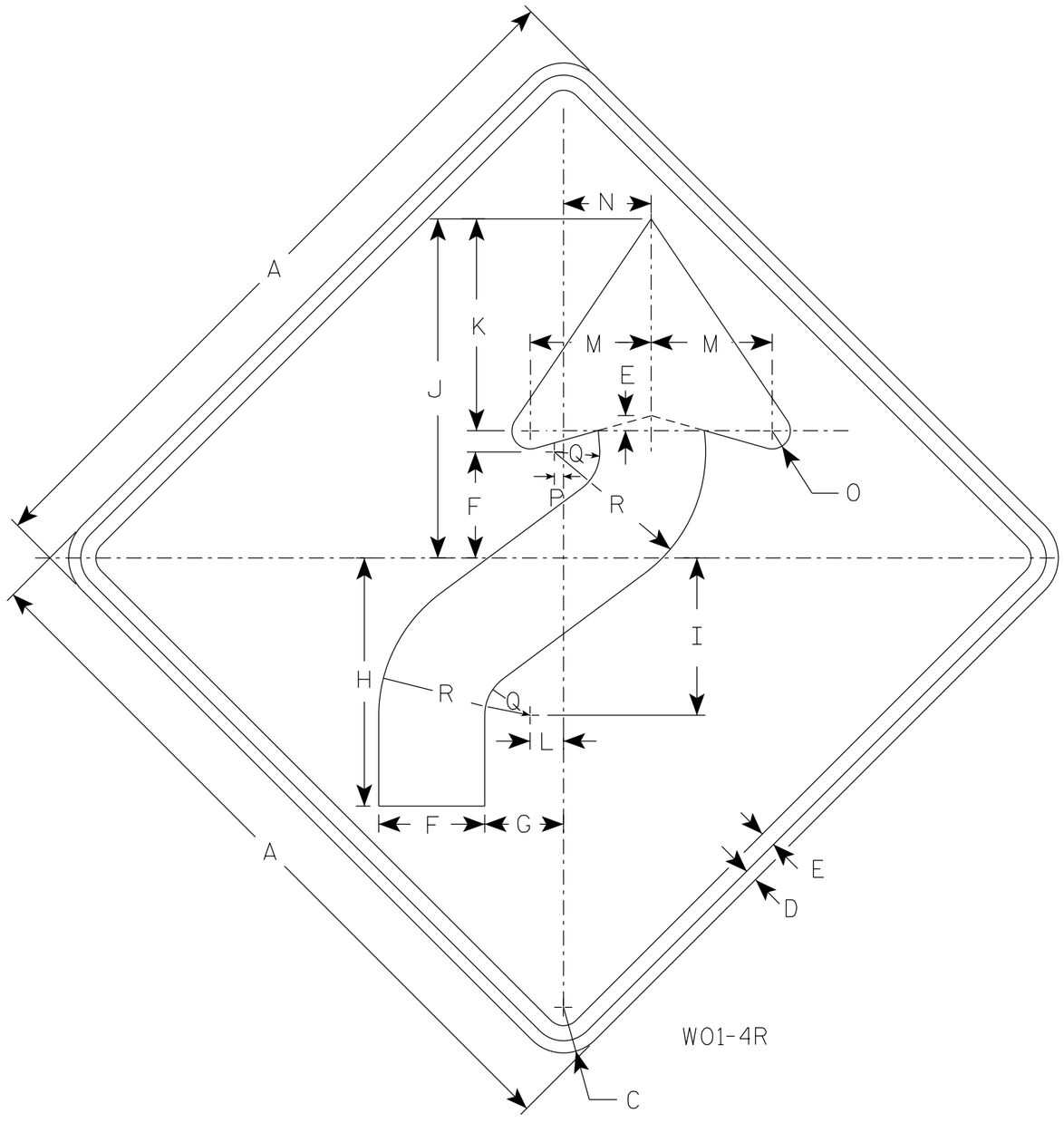
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-3.8

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W203.DGN PLOT DATE : 10-JAN 2024 12:02 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42



W01-4R

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W01-4L is the same as W01-4R except the arrow is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		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
2S	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
2M	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
3	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
4	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
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

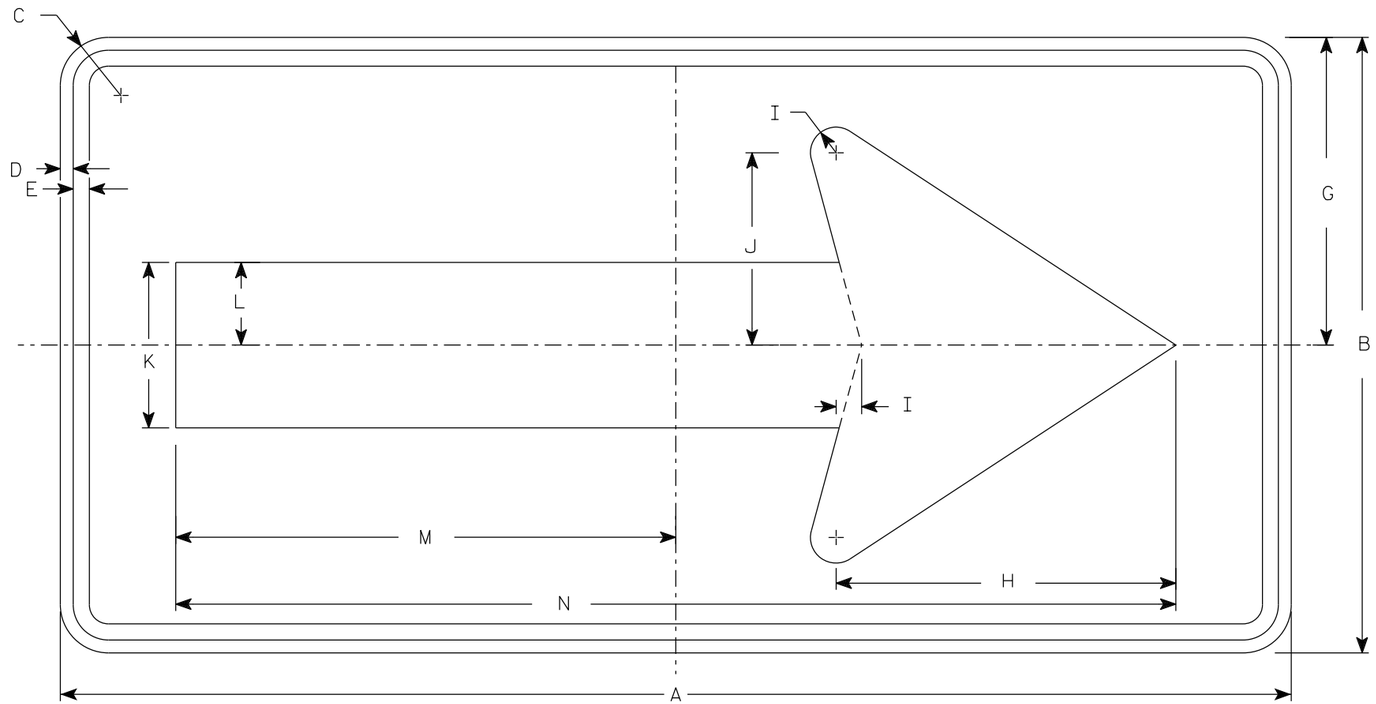
STANDARD SIGN
W01-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 1/24/2024 PLATE NO. W01-4.2

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 219 | E



WO1-6

NOTES

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

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

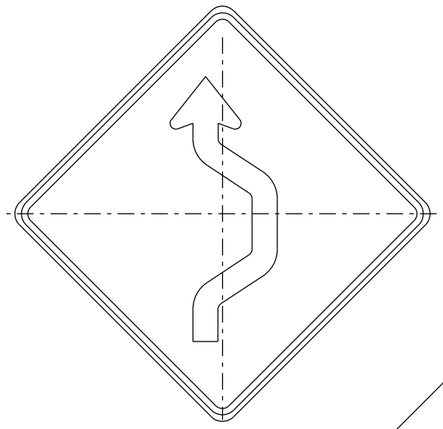
STANDARD SIGN
WO1-6

WISCONSIN DEPT OF TRANSPORTATION

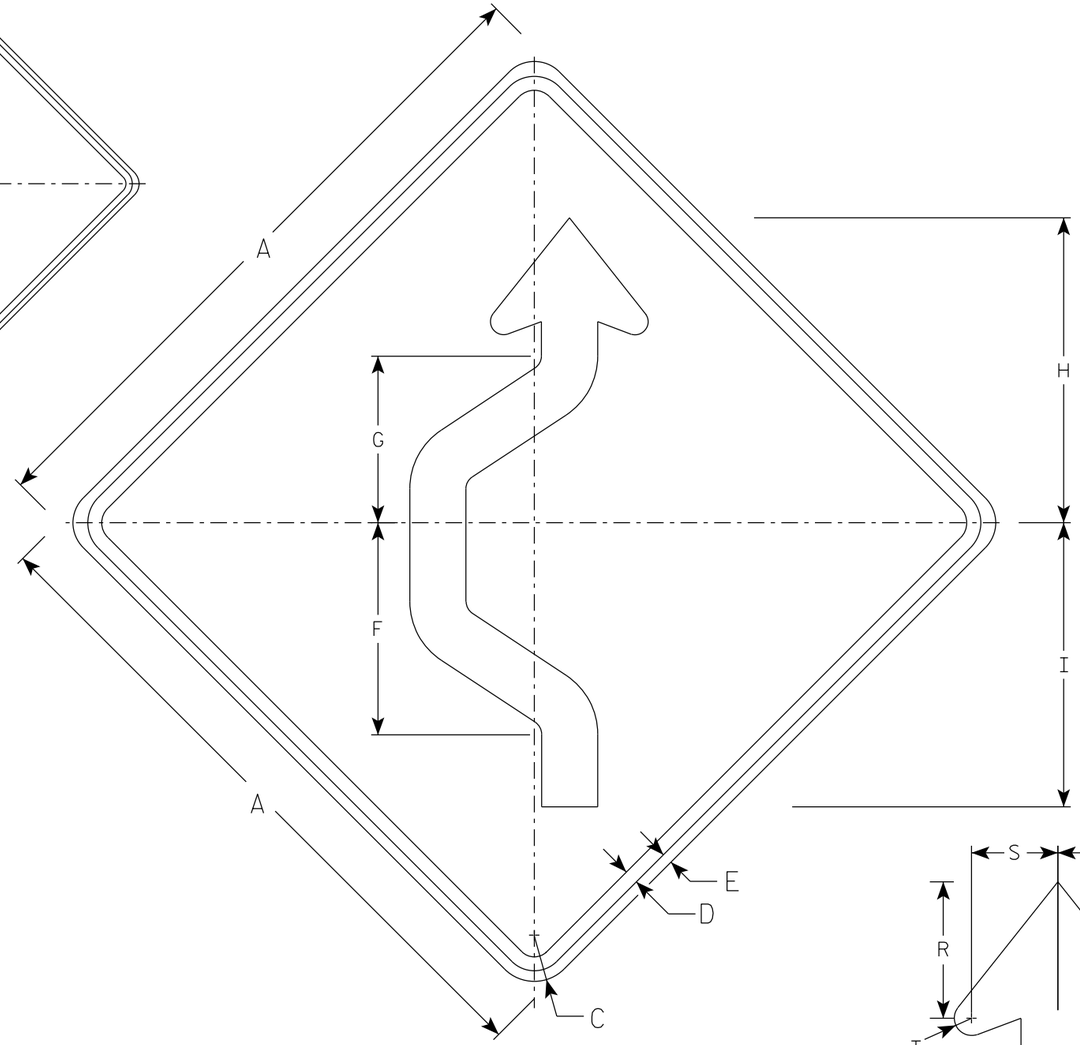
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/24/2024 PLATE NO. WO1-6.2

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



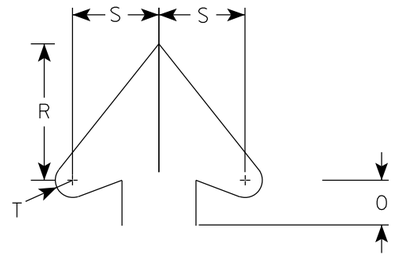
W024-1R



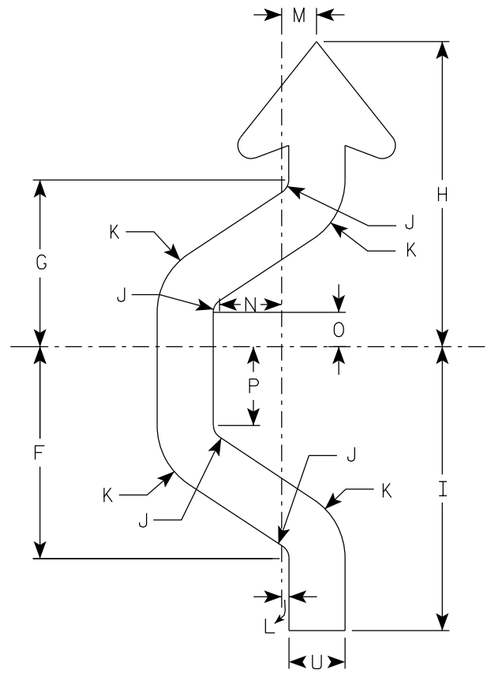
W024-1L

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W024-1R is the same as W024-1L except reversed along the vertical centerline.



Arrowhead Detail



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	36		2 1/4	5/8	1/2	11 3/8	8 7/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 7/8	4 1/4		5 1/2	3 1/2	5/8	3						9.0
2S	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
2M	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
3	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
4	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0
5	48		3	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16.0

STANDARD SIGN
W024-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

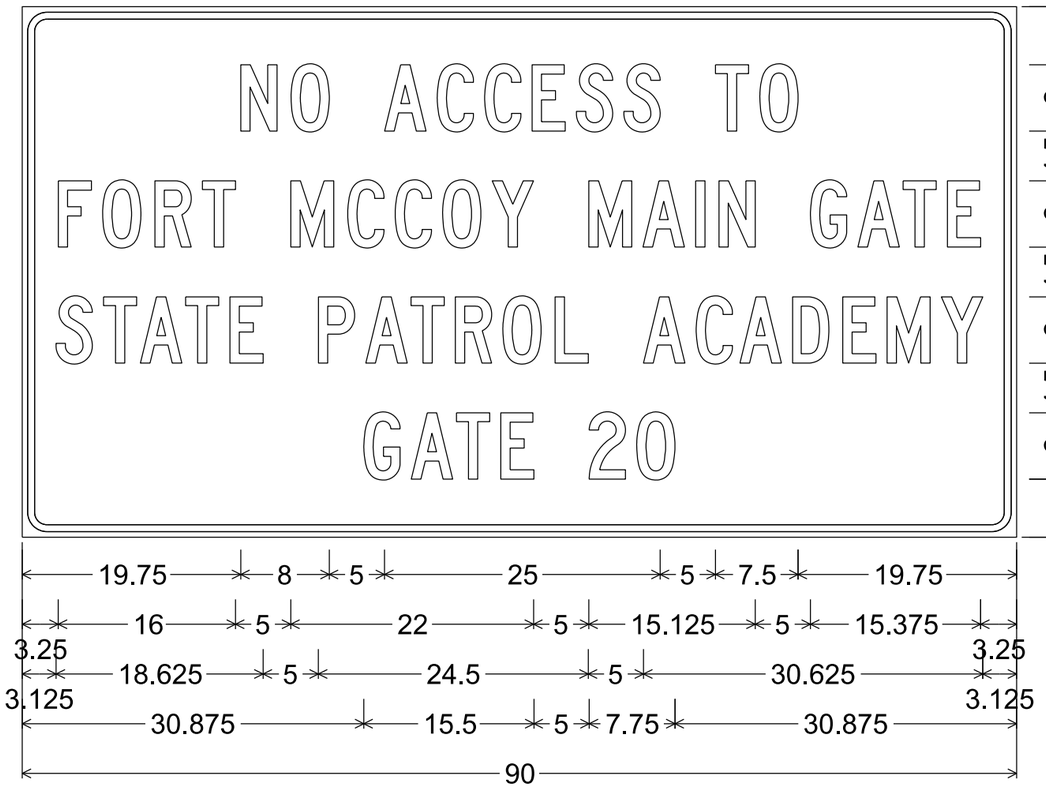
DATE 2/1/2024 PLATE NO. W024-1.2

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W0241.dgn PLOT DATE : 1-FEB 2024 10:32 PLOT BY : dotc4c PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

NOTES

1. Fixed Message Sign Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



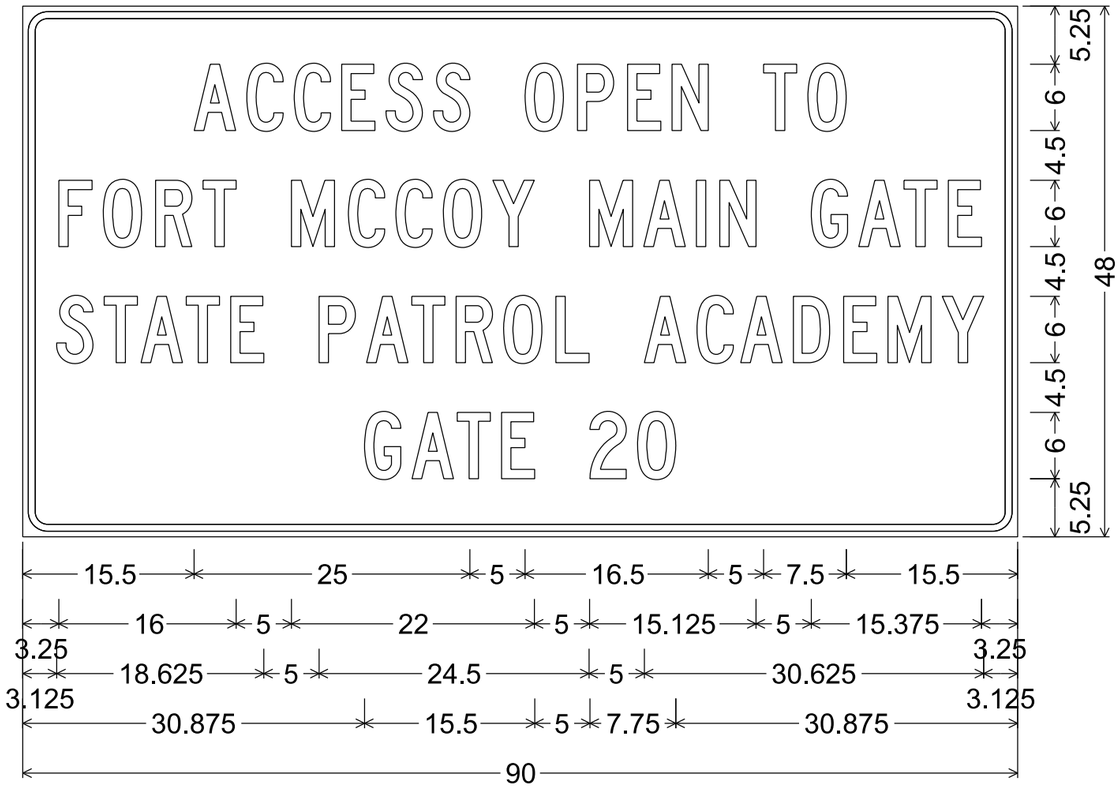
2.250" Radius, 0.625" Border, 0.500" Indent

7

7

NOTES

1. Fixed Message Sign Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C



2.250" Radius, 0.625" Border, 0.500" Indent

DIVISION 1 - STH 21

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
92+29	9229.18	0.00	0.00	0.00	3.79	0.00	0	0	0	0	0	0	0	0	0
92+44	9244.46	15.27	0.00	0.00	3.81	0.00	0	0	2	0	0	3	0	0	-3
92+50	9250.00	5.54	0.00	0.00	3.88	0.00	0	0	1	0	0	4	0	0	-4
93+00	9300.00	50.00	0.00	0.00	6.87	0.00	0	0	10	0	0	17	0	0	-17
93+19.1	9319.10	19.10	0.00	0.00	6.24	0.00	0	0	5	0	0	23	0	0	-23
93+35	9335.35	16.25	0.00	0.00	11.57	0.00	0	0	5	0	0	30	0	0	-30
93+50	9350.00	14.65	0.00	0.00	7.20	0.00	0	0	5	0	0	36	0	0	-36
94+00	9400.00	50.00	0.00	0.00	14.86	0.00	0	0	20	0	0	62	0	0	-62
94+03	9403.60	3.60	0.00	0.00	14.24	0.00	0	0	2	0	0	65	0	0	-65
94+50	9450.00	46.40	0.00	0.00	0.00	0.00	0	0	12	0	0	81	0	0	-81
94+56	9456.24	6.24	0.00	0.00	3.11	0.00	0	0	0	0	0	81	0	0	-81
95+00	9500.00	43.76	0.00	0.00	8.82	0.00	0	0	10	0	0	94	0	0	-94
95+50	9550.00	50.00	0.00	0.00	5.09	0.00	0	0	13	0	0	111	0	0	-111
96+00	9600.00	50.00	0.00	0.00	2.52	0.00	0	0	7	0	0	120	0	0	-120
96+48	9648.03	48.03	0.00	0.00	0.13	0.00	0	0	2	0	0	122	0	0	-122

DIVISION 2 - STH 21

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
99+67	9967.04	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0
100+00	10000.00	32.96	0.00	0.00	1.39	0.00	0	0	1	0	0	1	0	0	-1
100+07	10007.38	7.38	0.00	0.00	0.17	0.00	0	0	0	0	0	1	0	0	-1
100+50	10050.00	42.62	0.00	0.00	32.50	0.00	0	0	26	0	0	35	0	0	-35
101+00	10100.00	50.00	0.00	0.00	6.51	0.00	0	0	36	0	0	82	0	0	-82
101+38	10138.40	38.40	0.00	0.00	49.31	0.00	0	0	40	0	0	134	0	0	-134
101+50	10150.00	11.60	0.00	0.00	0.00	0.00	0	0	11	0	0	148	0	0	-148
102+00	10200.00	50.00	0.00	0.00	0.00	0.00	0	0	0	0	0	148	0	0	-148
102+50	10250.00	50.00	0.00	0.00	0.00	0.00	0	0	0	0	0	148	0	0	-148
102+66	10266.34	16.34	0.00	0.00	49.09	0.00	0	0	15	0	0	168	0	0	-168
103+00	10300.00	33.66	0.00	0.00	7.04	0.00	0	0	35	0	0	213	0	0	-213
103+50	10350.00	50.00	0.00	0.00	2.88	0.00	0	0	9	0	0	225	0	0	-225
104+00	10400.00	50.00	0.00	0.00	1.49	0.00	0	0	4	0	0	230	0	0	-230
104+50	10450.00	50.00	0.00	0.00	3.74	0.00	0	0	5	0	0	237	0	0	-237
105+00	10500.00	50.00	0.00	0.00	4.88	0.00	0	0	8	0	0	247	0	0	-247
105+50	10550.00	50.00	0.00	0.00	5.33	0.00	0	0	9	0	0	259	0	0	-259
106+00	10600.00	50.00	0.00	0.00	4.95	0.00	0	0	10	0	0	272	0	0	-272
106+50	10650.00	50.00	0.00	0.00	7.47	0.00	0	0	11	0	0	286	0	0	-286
107+00	10700.00	50.00	0.00	0.00	3.09	0.00	0	0	10	0	0	299	0	0	-299
107+50	10750.00	50.00	0.00	0.00	0.83	0.00	0	0	4	0	0	304	0	0	-304
108+00	10800.00	50.00	0.00	0.00	7.85	0.00	0	0	8	0	0	315	0	0	-315
108+50	10850.00	50.00	0.00	0.00	1.66	0.00	0	0	9	0	0	326	0	0	-326
108+75	10875.00	25.00	0.00	0.00	3.91	0.00	0	0	3	0	0	330	0	0	-330
108+92	10892.81	17.81	0.00	0.00	0.13	0.00	0	0	1	0	0	332	0	0	-332

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

DIVISION 3 - STH 21

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
128+36	12836.43	0.00	0.00	0.00	0.23	0.00	0	0	0	0	0	0	0	0	0
128+50	12850.00	13.57	0.00	0.00	0.20	0.00	0	0	0	0	0	0	0	0	0
129+00	12900.00	50.00	0.00	0.00	4.22	0.00	0	0	4	0	0	5	0	0	-5
129+50	12950.00	50.00	0.00	0.00	14.76	0.00	0	0	18	0	0	29	0	0	-29
129+76	12976.13	26.13	0.00	0.00	12.96	0.00	0	0	13	0	0	46	0	0	-46
130+00	13000.00	23.87	0.00	0.00	5.72	0.00	0	0	8	0	0	56	0	0	-56
130+50	13050.00	50.00	0.00	0.00	10.38	0.00	0	0	15	0	0	75	0	0	-75
130+68	13068.59	18.59	0.00	0.00	16.28	0.00	0	0	9	0	0	87	0	0	-87
130+89	13089.42	20.84	0.00	0.00	0.00	0.00	0	0	6	0	0	95	0	0	-95
131+00	13100.00	10.58	0.00	0.00	0.00	0.00	0	0	0	0	0	95	0	0	-95
131+50	13150.00	50.00	0.00	0.00	0.00	0.00	0	0	0	0	0	95	0	0	-95
131+87	13187.01	37.01	0.00	0.00	7.30	0.00	0	0	5	0	0	101	0	0	-101
132+00	13200.00	12.99	0.00	0.00	6.98	0.00	0	0	3	0	0	105	0	0	-105
132+06	13206.90	6.90	0.00	0.00	9.80	0.00	0	0	2	0	0	108	0	0	-108
132+50	13250.00	43.10	0.00	0.00	7.34	0.00	0	0	14	0	0	126	0	0	-126
133+00	13300.00	50.00	0.00	0.00	19.60	0.00	0	0	25	0	0	159	0	0	-159
133+38	13338.01	38.01	0.00	0.00	5.27	0.00	0	0	18	0	0	182	0	0	-182
133+50	13350.00	11.99	0.00	0.00	0.00	0.00	0	0	1	0	0	183	0	0	-183
134+00	13400.00	50.00	0.00	0.00	0.00	0.00	0	0	0	0	0	183	0	0	-183
134+38	13438.61	38.61	0.00	0.00	0.00	0.00	0	0	0	0	0	183	0	0	-183

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EARTHWORK SUMMARY	SHEET NO: 225	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 4 - STH 21

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
338+00	33800.00	0.00	2.68	0.00	8.74	0.00	0	0	0	0	0	0	0	0	0
338+50	33850.00	50.00	19.56	0.00	5.27	0.00	21	0	13	0	21	17	0	0	4
339+00	33900.00	50.00	19.22	0.00	1.58	0.00	36	0	6	0	57	25	0	0	32
339+50	33950.00	50.00	18.24	0.00	5.94	0.00	35	0	7	0	92	34	0	0	58
340+00	34000.00	50.00	15.22	0.00	14.63	0.00	31	0	19	0	123	59	0	0	65
340+50	34050.00	50.00	13.89	0.00	27.61	0.00	27	0	39	0	150	109	0	0	41
341+00	34100.00	50.00	12.29	0.00	27.86	0.00	24	0	51	0	174	176	0	0	-2
341+50	34150.00	50.00	15.07	0.00	30.74	0.00	25	0	54	0	199	246	0	0	-47
342+00	34200.00	50.00	30.82	0.00	23.89	0.00	42	0	51	0	241	312	0	0	-71
342+50	34250.00	50.00	46.24	0.00	18.21	0.00	71	0	39	0	312	363	0	0	-51
343+00	34300.00	50.00	70.01	0.00	5.92	0.00	108	0	22	0	420	391	0	0	29
343+50	34350.00	50.00	76.81	0.00	4.43	0.00	136	0	10	0	556	404	0	0	152
344+00	34400.00	50.00	77.96	0.00	1.05	0.00	143	0	5	0	699	411	0	0	288
344+50	34450.00	50.00	77.83	0.00	1.60	0.00	144	0	2	0	843	413	0	0	430
345+00	34500.00	50.00	74.56	0.00	0.37	0.00	141	0	2	0	984	416	0	0	568
345+50	34550.00	50.00	73.40	0.00	4.09	0.00	137	0	4	0	1,121	421	0	0	700
346+00	34600.00	50.00	79.23	0.00	12.84	0.00	141	0	16	0	1,262	442	0	0	820
346+50	34650.00	50.00	37.06	0.00	12.51	0.00	108	0	23	0	1,370	472	0	0	898
347+00	34700.00	50.00	33.92	0.00	25.47	0.00	66	0	35	0	1,436	517	0	0	919
347+50	34750.00	50.00	26.03	0.00	9.95	0.00	56	0	33	0	1,492	560	0	0	932
348+00	34800.00	50.00	5.14	0.00	0.00	0.00	29	0	9	0	1,521	572	0	0	949
348+50	34850.00	50.00	4.53	0.00	0.09	0.00	9	0	0	0	1,530	572	0	0	958
349+00	34900.00	50.00	6.65	0.00	0.00	0.00	10	0	0	0	1,540	572	0	0	968
349+50	34950.00	50.00	7.59	0.00	0.00	0.00	13	0	0	0	1,553	572	0	0	981
350+00	35000.00	50.00	4.93	0.00	0.00	0.00	12	0	0	0	1,565	572	0	0	993
350+50	35050.00	50.00	4.54	0.00	2.21	0.00	9	0	2	0	1,574	575	0	0	999
351+00	35100.00	50.00	5.61	0.00	1.91	0.00	9	0	4	0	1,583	580	0	0	1,003
351+50	35150.00	50.00	6.54	0.00	0.22	0.00	11	0	2	0	1,594	582	0	0	1,012
352+00	35200.00	50.00	-0.14	0.00	0.00	0.00	6	0	0	0	1,600	582	0	0	1,018
352+50	35250.00	50.00	-1.52	0.00	0.00	0.00	-2	0	0	0	1,598	582	0	0	1,016
353+00	35300.00	50.00	-0.49	0.00	0.00	0.00	-2	0	0	0	1,596	582	0	0	1,014
353+05	35305.71	5.71	11.91	0.00	0.90	0.00	1	0	0	0	1,597	582	0	0	1,015
353+50	35350.00	44.29	19.62	0.00	0.08	0.00	26	0	1	0	1,623	584	0	0	1,039
354+00	35400.00	50.00	20.69	0.00	0.00	0.00	37	0	0	0	1,660	584	0	0	1,076
354+50	35450.00	50.00	24.70	0.00	0.00	0.00	42	0	0	0	1,702	584	0	0	1,118
355+00	35500.00	50.00	29.58	0.00	0.00	0.00	50	0	0	0	1,752	584	0	0	1,168
355+50	35550.00	50.00	29.80	0.00	0.29	0.00	55	0	0	0	1,807	584	0	0	1,223
356+00	35600.00	50.00	26.61	0.00	1.97	0.00	52	0	2	0	1,859	586	0	0	1,273
356+50	35650.00	50.00	24.78	0.00	4.26	0.00	48	0	6	0	1,907	594	0	0	1,313
357+00	35700.00	50.00	24.15	0.00	3.01	0.00	45	0	7	0	1,952	603	0	0	1,349
357+50	35750.00	50.00	13.73	0.00	0.23	0.00	35	0	3	0	1,987	607	0	0	1,380
358+00	35800.00	50.00	15.24	0.00	0.00	0.00	27	0	0	0	2,014	607	0	0	1,407

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

DIVISION 5 - STH 21

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
378+00	37800.00	0.00	15.42	0.00	36.90	0.00	0	0	0	0	0	0	0	0	0
378+50	37850.00	50.00	24.95	0.00	73.20	0.00	37	0	102	0	37	133	0	0	-96
379+00	37900.00	50.00	23.83	0.00	115.28	0.00	45	0	175	0	82	360	0	0	-278
379+50	37950.00	50.00	31.38	0.00	51.73	0.00	51	0	155	0	133	562	0	0	-429
380+00	38000.00	50.00	16.58	0.00	28.36	0.00	44	0	74	0	177	658	0	0	-481
380+50	38050.00	50.00	14.86	0.00	19.89	0.00	29	0	45	0	206	716	0	0	-510
381+00	38100.00	50.00	17.83	0.00	13.37	0.00	30	0	31	0	236	757	0	0	-521
381+50	38150.00	50.00	8.24	0.00	59.39	0.00	24	0	67	0	260	844	0	0	-584
382+00	38200.00	50.00	16.26	0.00	85.10	0.00	23	0	134	0	283	1,018	0	0	-735
382+50	38250.00	50.00	17.80	0.00	48.64	0.00	32	0	124	0	315	1,179	0	0	-864
383+00	38300.00	50.00	60.61	0.00	0.00	0.00	73	0	45	0	388	1,238	0	0	-850
383+50	38350.00	50.00	30.92	0.00	10.34	0.00	85	0	10	0	473	1,251	0	0	-778
384+00	38400.00	50.00	22.11	0.00	10.20	0.00	49	0	19	0	522	1,275	0	0	-753
384+50	38450.00	50.00	27.71	0.00	1.41	0.00	46	0	11	0	568	1,290	0	0	-722
385+00	38500.00	50.00	25.65	0.00	5.62	0.00	49	0	7	0	617	1,299	0	0	-682
385+50	38550.00	50.00	31.12	0.00	3.11	0.00	53	0	8	0	670	1,309	0	0	-639
386+00	38600.00	50.00	28.90	0.00	2.99	0.00	56	0	6	0	726	1,317	0	0	-591
386+50	38650.00	50.00	26.61	0.00	3.40	0.00	51	0	6	0	777	1,325	0	0	-548
387+00	38700.00	50.00	19.43	0.00	5.69	0.00	43	0	8	0	820	1,335	0	0	-515
387+50	38750.00	50.00	21.90	0.00	3.57	0.00	38	0	9	0	858	1,347	0	0	-489
388+00	38800.00	50.00	18.34	0.00	4.51	0.00	37	0	7	0	895	1,356	0	0	-461
388+50	38850.00	50.00	18.14	0.00	4.71	0.00	34	0	9	0	929	1,368	0	0	-439
389+00	38900.00	50.00	28.65	0.00	2.12	0.00	43	0	6	0	972	1,375	0	0	-403
389+50	38950.00	50.00	28.37	0.00	1.92	0.00	53	0	4	0	1,025	1,381	0	0	-356
390+00	39000.00	50.00	27.71	0.00	3.10	0.00	52	0	5	0	1,077	1,387	0	0	-310
390+50	39050.00	50.00	28.71	0.00	2.92	0.00	52	0	6	0	1,129	1,395	0	0	-266
391+00	39100.00	50.00	29.32	0.00	2.73	0.00	54	0	5	0	1,183	1,401	0	0	-218
391+50	39150.00	50.00	26.51	0.00	9.00	0.00	52	0	11	0	1,235	1,416	0	0	-181
392+00	39200.00	50.00	6.56	0.00	0.00	0.00	31	0	8	0	1,266	1,426	0	0	-160
392+50	39250.00	50.00	23.24	0.00	17.56	0.00	28	0	16	0	1,294	1,447	0	0	-153
393+00	39300.00	50.00	20.58	0.00	15.32	0.00	41	0	30	0	1,335	1,486	0	0	-151
393+50	39350.00	50.00	21.85	0.00	18.58	0.00	39	0	31	0	1,374	1,526	0	0	-152
394+00	39400.00	50.00	26.45	0.00	13.85	0.00	45	0	30	0	1,419	1,565	0	0	-146
394+50	39450.00	50.00	30.02	0.00	9.26	0.00	52	0	21	0	1,471	1,593	0	0	-122
395+00	39500.00	50.00	28.89	0.00	7.17	0.00	55	0	15	0	1,526	1,612	0	0	-86
395+50	39550.00	50.00	51.97	0.00	4.15	0.00	75	0	10	0	1,601	1,625	0	0	-24
396+00	39600.00	50.00	56.96	0.00	0.46	0.00	101	0	4	0	1,702	1,630	0	0	72
396+50	39650.00	50.00	64.23	0.00	0.00	0.00	112	0	0	0	1,814	1,630	0	0	184
397+00	39700.00	50.00	65.80	0.00	0.00	0.00	120	0	0	0	1,934	1,630	0	0	304
397+50	39750.00	50.00	68.73	0.00	0.00	0.00	125	0	0	0	2,059	1,630	0	0	429
398+00	39800.00	50.00	72.02	0.00	0.00	0.00	130	0	0	0	2,189	1,630	0	0	559
398+50	39850.00	50.00	71.37	0.00	0.00	0.00	133	0	0	0	2,322	1,630	0	0	692
399+00	39900.00	50.00	67.38	0.00	0.00	0.00	128	0	0	0	2,450	1,630	0	0	820
399+50	39950.00	50.00	62.96	0.00	0.00	0.00	121	0	0	0	2,571	1,630	0	0	941
400+00	40000.00	50.00	54.97	0.00	0.00	0.00	109	0	0	0	2,680	1,630	0	0	1,050
400+50	40050.00	50.00	55.52	0.00	0.00	0.00	102	0	0	0	2,782	1,630	0	0	1,152

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EARTHWORK SUMMARY	SHEET NO: 227	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

DIVISION 5 - STH 21

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
401+00	40100.00	50.00	56.09	0.00	0.00	0.00	103	0	0	0	2,885	1,630	0	0	1,255
401+50	40150.00	50.00	62.77	0.00	0.00	0.00	110	0	0	0	2,995	1,630	0	0	1,365
402+00	40200.00	50.00	90.19	0.00	0.00	0.00	142	0	0	0	3,137	1,630	0	0	1,507
402+50	40250.00	50.00	106.65	0.00	0.00	0.00	182	0	0	0	3,319	1,630	0	0	1,689
403+00	40300.00	50.00	98.32	0.00	0.00	0.00	190	0	0	0	3,509	1,630	0	0	1,879
403+50	40350.00	50.00	96.57	0.00	0.00	0.00	180	0	0	0	3,689	1,630	0	0	2,059
404+00	40400.00	50.00	19.48	0.00	0.00	0.00	107	0	0	0	3,796	1,630	0	0	2,166
404+50	40450.00	50.00	12.03	0.00	0.00	0.00	29	0	0	0	3,825	1,630	0	0	2,195
405+00	40500.00	50.00	48.63	0.00	0.00	0.00	56	0	0	0	3,881	1,630	0	0	2,251
405+50	40550.00	50.00	60.25	0.00	0.00	0.00	101	0	0	0	3,982	1,630	0	0	2,352
406+00	40600.00	50.00	58.12	0.00	0.00	0.00	110	0	0	0	4,092	1,630	0	0	2,462
406+50	40650.00	50.00	60.86	0.00	0.00	0.00	110	0	0	0	4,202	1,630	0	0	2,572
407+00	40700.00	50.00	60.26	0.00	0.00	0.00	112	0	0	0	4,314	1,630	0	0	2,684
407+50	40750.00	50.00	55.49	0.00	0.00	0.00	107	0	0	0	4,421	1,630	0	0	2,791
408+00	40800.00	50.00	51.24	0.00	0.00	0.00	99	0	0	0	4,520	1,630	0	0	2,890
408+50	40850.00	50.00	52.20	0.00	0.00	0.00	96	0	0	0	4,616	1,630	0	0	2,986
409+00	40900.00	50.00	50.90	0.00	0.00	0.00	95	0	0	0	4,711	1,630	0	0	3,081
409+50	40950.00	50.00	48.37	0.00	0.00	0.00	92	0	0	0	4,803	1,630	0	0	3,173
410+00	41000.00	50.00	39.97	0.00	0.00	0.00	82	0	0	0	4,885	1,630	0	0	3,255
410+50	41050.00	50.00	43.44	0.00	0.00	0.00	77	0	0	0	4,962	1,630	0	0	3,332
411+00	41100.00	50.00	23.61	0.00	0.17	0.00	62	0	0	0	5,024	1,630	0	0	3,394
411+50	41150.00	50.00	22.06	0.00	0.57	0.00	42	0	1	0	5,066	1,632	0	0	3,435
412+00	41200.00	50.00	24.32	0.00	0.00	0.00	43	0	1	0	5,109	1,633	0	0	3,476
412+50	41250.00	50.00	26.62	0.00	0.00	0.00	47	0	0	0	5,156	1,633	0	0	3,523
413+00	41300.00	50.00	32.01	0.00	0.00	0.00	54	0	0	0	5,210	1,633	0	0	3,577
413+50	41350.00	50.00	0.00	0.00	0.00	0.00	30	0	0	0	5,240	1,633	0	0	3,607
414+00	41400.00	50.00	0.00	0.00	0.00	0.00	0	0	0	0	5,240	1,633	0	0	3,607
414+50	41450.00	50.00	0.00	0.00	0.00	0.00	0	0	0	0	5,240	1,633	0	0	3,607
415+00	41500.00	50.00	-10.97	0.00	0.00	0.00	-10	0	0	0	5,230	1,633	0	0	3,597
415+50	41550.00	50.00	12.47	0.00	0.00	0.00	1	0	0	0	5,231	1,633	0	0	3,598
416+00	41600.00	50.00	9.07	0.00	0.17	0.00	20	0	0	0	5,251	1,633	0	0	3,618
416+50	41650.00	50.00	9.32	0.00	0.00	0.00	17	0	0	0	5,268	1,633	0	0	3,635
417+00	41700.00	50.00	12.62	0.00	0.00	0.00	20	0	0	0	5,288	1,633	0	0	3,655
417+50	41750.00	50.00	30.48	0.00	0.00	0.00	40	0	0	0	5,328	1,633	0	0	3,695
418+00	41800.00	50.00	29.24	0.00	0.00	0.00	55	0	0	0	5,383	1,633	0	0	3,750
418+50	41850.00	50.00	37.27	0.00	0.00	0.00	62	0	0	0	5,445	1,633	0	0	3,812
419+00	41900.00	50.00	30.58	0.00	3.88	0.00	63	0	4	0	5,508	1,638	0	0	3,870
419+50	41950.00	50.00	29.86	0.00	4.12	0.00	56	0	7	0	5,564	1,647	0	0	3,917
420+00	42000.00	50.00	31.37	0.00	1.89	0.00	57	0	6	0	5,621	1,655	0	0	3,966
420+50	42050.00	50.00	33.38	0.00	0.03	0.00	60	0	2	0	5,681	1,658	0	0	4,024
421+00	42100.00	50.00	19.83	0.00	0.05	0.00	49	0	0	0	5,730	1,658	0	0	4,073
421+50	42150.00	50.00	15.32	0.00	0.00	0.00	33	0	0	0	5,763	1,658	0	0	4,106
422+00	42200.00	50.00	10.36	0.00	0.00	0.00	24	0	0	0	5,787	1,658	0	0	4,130
422+50	42250.00	50.00	10.29	0.00	0.00	0.00	19	0	0	0	5,806	1,658	0	0	4,149
423+00	42300.00	50.00	11.76	0.00	0.00	0.00	20	0	0	0	5,826	1,658	0	0	4,169
423+50	42350.00	50.00	11.54	0.00	0.00	0.00	22	0	0	0	5,848	1,658	0	0	4,191
424+00	42400.00	50.00	12.79	0.00	0.08	0.00	23	0	0	0	5,871	1,658	0	0	4,214
424+50	42450.00	50.00	6.29	0.00	0.00	0.00	18	0	0	0	5,889	1,658	0	0	4,232
425+00	42500.00	50.00	17.50	0.00	0.00	0.00	22	0	0	0	5,911	1,658	0	0	4,254

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

DIVISION 6 - STH 21

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
669+81	66981.80	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0
670+00	67000.00	18.20	0.00	0.00	1.72	0.00	0	0	1	0	0	1	0	0	-1
670+50	67050.00	50.00	0.00	0.00	1.06	0.00	0	0	3	0	0	5	0	0	-5
671+00	67100.00	50.00	0.00	0.00	0.58	0.00	0	0	2	0	0	8	0	0	-8
671+50	67150.00	50.00	0.00	0.00	5.88	0.00	0	0	6	0	0	16	0	0	-16
672+00	67200.00	50.00	0.00	0.00	21.51	0.00	0	0	25	0	0	48	0	0	-48
672+50	67250.00	50.00	0.00	0.00	25.44	0.00	0	0	43	0	0	104	0	0	-104
673+00	67300.00	50.00	0.00	0.00	16.29	0.00	0	0	39	0	0	155	0	0	-155
673+50	67350.00	50.00	0.00	0.00	26.47	0.00	0	0	40	0	0	207	0	0	-207
674+00	67400.00	50.00	0.00	0.00	2.33	0.00	0	0	27	0	0	242	0	0	-242
674+50	67450.00	50.00	0.00	0.00	14.50	0.00	0	0	16	0	0	263	0	0	-263
675+00	67500.00	50.00	0.00	0.00	14.48	0.00	0	0	27	0	0	298	0	0	-298
675+50	67550.00	50.00	0.00	0.00	7.21	0.00	0	0	20	0	0	324	0	0	-324
676+00	67600.00	50.00	0.00	0.00	61.23	0.00	0	0	63	0	0	406	0	0	-406
676+50	67650.00	50.00	0.00	0.00	30.58	0.00	0	0	85	0	0	516	0	0	-516
677+00	67700.00	50.00	0.00	0.00	4.03	0.00	0	0	32	0	0	558	0	0	-558
677+50	67750.00	50.00	0.00	0.00	0.80	0.00	0	0	4	0	0	563	0	0	-563
677+52	67752.27	2.27	0.00	0.00	0.77	0.00	0	0	0	0	0	563	0	0	-563
678+00	67800.00	47.73	0.00	0.00	0.00	0.00	0	0	1	0	0	564	0	0	-564
683+00	68300.00	500.00	0.00	0.00	0.00	0.00	0	0	0	0	0	564	0	0	-564
683+42	68342.68	42.68	0.00	0.00	2.72	0.00	0	0	2	0	0	567	0	0	-567
683+50	68350.00	7.32	0.00	0.00	2.59	0.00	0	0	1	0	0	568	0	0	-568
684+00	68400.00	50.00	0.00	0.00	6.60	0.00	0	0	9	0	0	580	0	0	-580
684+50	68450.00	50.00	0.00	0.00	1.66	0.00	0	0	8	0	0	590	0	0	-590
685+00	68500.00	50.00	0.00	0.00	1.06	0.00	0	0	3	0	0	594	0	0	-594
685+50	68550.00	50.00	0.00	0.00	2.18	0.00	0	0	3	0	0	598	0	0	-598
686+00	68600.00	50.00	0.00	0.00	4.31	0.00	0	0	6	0	0	606	0	0	-606
686+50	68650.00	50.00	0.00	0.00	5.08	0.00	0	0	9	0	0	618	0	0	-618
687+00	68700.00	50.00	0.00	0.00	5.75	0.00	0	0	10	0	0	631	0	0	-631
687+50	68750.00	50.00	0.00	0.00	5.73	0.00	0	0	11	0	0	645	0	0	-645
688+00	68800.00	50.00	0.00	0.00	5.81	0.00	0	0	11	0	0	659	0	0	-659
688+50	68850.00	50.00	0.00	0.00	6.37	0.00	0	0	11	0	0	673	0	0	-673
689+00	68900.00	50.00	0.00	0.00	8.15	0.00	0	0	13	0	0	690	0	0	-690
689+50	68950.00	50.00	0.00	0.00	6.21	0.00	0	0	13	0	0	707	0	0	-707
690+00	69000.00	50.00	0.00	0.00	2.07	0.00	0	0	8	0	0	718	0	0	-718
690+50	69050.00	50.00	0.00	0.00	0.05	0.00	0	0	2	0	0	720	0	0	-720
691+00	69100.00	50.00	0.00	0.00	0.45	0.00	0	0	0	0	0	720	0	0	-720
691+35	69135.81	35.81	0.00	0.00	0.13	0.00	0	0	0	0	0	720	0	0	-720
691+50	69150.00	14.19	0.00	0.00	0.00	0.00	0	0	0	0	0	720	0	0	-720
708+00	70800.00	1650.00	0.00	0.00	0.00	0.00	0	0	0	0	0	720	0	0	-720
708+50	70850.00	50.00	0.00	0.00	0.00	0.00	0	0	0	0	0	720	0	0	-720
708+60	70860.00	10.00	0.00	0.00	0.86	0.00	0	0	0	0	0	720	0	0	-720
709+00	70900.00	40.00	0.00	0.00	111.11	0.00	0	0	83	0	0	828	0	0	-828

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

DIVISION 6 - STH 21

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
709+50	70950.00	50.00	0.00	0.00	0.61	0.00	0	0	103	0	0	962	0	0	-962
710+00	71000.00	50.00	0.00	0.00	1.76	0.00	0	0	2	0	0	965	0	0	-965
710+50	71050.00	50.00	0.00	0.00	1.76	0.00	0	0	3	0	0	969	0	0	-969
711+00	71100.00	50.00	0.00	0.00	3.54	0.00	0	0	5	0	0	975	0	0	-975
711+50	71150.00	50.00	0.00	0.00	80.25	0.00	0	0	78	0	0	1,076	0	0	-1,076
712+00	71200.00	50.00	0.00	0.00	46.26	0.00	0	0	117	0	0	1,229	0	0	-1,229
712+50	71250.00	50.00	0.00	0.00	4.38	0.00	0	0	47	0	0	1,290	0	0	-1,290
712+97	71297.00	47.00	0.00	0.00	0.00	0.00	0	0	4	0	0	1,295	0	0	-1,295
713+00	71300.00	3.00	0.00	0.00	0.00	0.00	0	0	0	0	0	1,295	0	0	-1,295
713+50	71350.00	50.00	0.00	0.00	0.00	0.00	0	0	0	0	0	1,295	0	0	-1,295
721+50	72150.00	800.00	0.00	0.00	0.00	0.00	0	0	0	0	0	1,295	0	0	-1,295
721+67	72167.88	17.88	0.00	0.00	0.30	0.00	0	0	0	0	0	1,295	0	0	-1,295
722+00	72200.00	32.12	0.00	0.00	1.97	0.00	0	0	1	0	0	1,296	0	0	-1,296
722+50	72250.00	50.00	0.00	0.00	4.82	0.00	0	0	6	0	0	1,304	0	0	-1,304
723+00	72300.00	50.00	0.00	0.00	12.30	0.00	0	0	16	0	0	1,325	0	0	-1,325
723+50	72350.00	50.00	0.00	0.00	13.61	0.00	0	0	24	0	0	1,356	0	0	-1,356
724+00	72400.00	50.00	0.00	0.00	1.50	0.00	0	0	14	0	0	1,374	0	0	-1,374
724+50	72450.00	50.00	0.00	0.00	2.83	0.00	0	0	4	0	0	1,379	0	0	-1,379
725+00	72500.00	50.00	0.00	0.00	2.10	0.00	0	0	5	0	0	1,386	0	0	-1,386
725+50	72550.00	50.00	0.00	0.00	17.00	0.00	0	0	18	0	0	1,409	0	0	-1,409
726+00	72600.00	50.00	0.00	0.00	7.04	0.00	0	0	22	0	0	1,438	0	0	-1,438
726+50	72650.00	50.00	0.00	0.00	6.76	0.00	0	0	13	0	0	1,455	0	0	-1,455
727+00	72700.00	50.00	0.00	0.00	3.91	0.00	0	0	10	0	0	1,468	0	0	-1,468
727+50	72750.00	50.00	0.00	0.00	7.85	0.00	0	0	11	0	0	1,482	0	0	-1,482
728+00	72800.00	50.00	0.00	0.00	20.53	0.00	0	0	26	0	0	1,516	0	0	-1,516
728+50	72850.00	50.00	0.00	0.00	12.26	0.00	0	0	30	0	0	1,555	0	0	-1,555
729+00	72900.00	50.00	0.00	0.00	4.78	0.00	0	0	16	0	0	1,576	0	0	-1,576
729+50	72950.00	50.00	0.00	0.00	0.79	0.00	0	0	5	0	0	1,582	0	0	-1,582
730+00	73000.00	50.00	0.00	0.00	7.54	0.00	0	0	8	0	0	1,593	0	0	-1,593
730+17	73017.76	17.76	0.00	0.00	5.29	0.00	0	0	4	0	0	1,598	0	0	-1,598
730+50	73050.00	32.24	0.00	0.00	15.99	0.00	0	0	13	0	0	1,615	0	0	-1,615
731+00	73100.00	50.00	0.00	0.00	18.22	0.00	0	0	32	0	0	1,656	0	0	-1,656
731+50	73150.00	50.00	0.00	0.00	13.08	0.00	0	0	29	0	0	1,694	0	0	-1,694
732+00	73200.00	50.00	0.00	0.00	19.67	0.00	0	0	30	0	0	1,733	0	0	-1,733
732+50	73250.00	50.00	0.00	0.00	106.50	0.00	0	0	117	0	0	1,885	0	0	-1,885
733+00	73300.00	50.00	0.00	0.00	37.03	0.00	0	0	133	0	0	2,058	0	0	-2,058
733+12	73312.16	12.16	0.00	0.00	9.07	0.00	0	0	10	0	0	2,071	0	0	-2,071

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

DIVISION 7 - STH 21

STATION	REAL STATION	DISTANCE	AREA (SF)				INCREMENTAL VOL (CY) (UNADJUSTED)				CUMULATIVE VOL (CY)				
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	EBS	CUT	EXPANDED FILL	EXPANDED EBS BACKFILL	REDUCED EBS IN FILL	MASS ORDINATE
											1.00	1.30	1.00	1.00	
							NOTE 1	NOTE 2	NOTE 3		NOTE 1		NOTE 5	NOTE 7	NOTE 8
825+66	82566.95	0.00	0.00	0.00	18.18	0.00	0	0	0	0	0	0	0	0	0
826+00	82600.00	33.05	0.00	0.00	39.34	0.00	0	0	35	0	0	46	0	0	-46
826+50	82650.00	50.00	0.00	0.00	33.06	0.00	0	0	67	0	0	133	0	0	-133
827+00	82700.00	50.00	0.00	0.00	11.41	0.00	0	0	41	0	0	186	0	0	-186
827+50	82750.00	50.00	0.00	0.00	7.43	0.00	0	0	17	0	0	208	0	0	-208
828+00	82800.00	50.00	0.00	0.00	12.82	0.00	0	0	19	0	0	233	0	0	-233
828+50	82850.00	50.00	0.00	0.00	47.25	0.00	0	0	56	0	0	306	0	0	-306
829+00	82900.00	50.00	0.00	0.00	14.07	0.00	0	0	57	0	0	380	0	0	-380
829+50	82950.00	50.00	0.00	0.00	11.20	0.00	0	0	23	0	0	410	0	0	-410
830+00	83000.00	50.00	0.00	0.00	17.07	0.00	0	0	26	0	0	443	0	0	-443
830+50	83050.00	50.00	0.00	0.00	23.88	0.00	0	0	38	0	0	493	0	0	-493
831+00	83100.00	50.00	0.00	0.00	3.33	0.00	0	0	25	0	0	525	0	0	-525
831+20	83120.13	20.13	0.00	0.00	2.78	0.00	0	0	2	0	0	528	0	0	-528

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE PAVEMENT MATERIAL
2 - SALVAGED/UNUSABLE PAVEMENT MATERIAL	THIS DOES NOT SHOW UP IN CROSS SECTIONS
3 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
4 - EXPANDED MARSH BACKFILL	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
5 - EXPANDED EBS	WILL BE BACKFILLED WITH GRANULAR BACKFILL (OR CUT, OR BORROW)
6 - REDUCED MARSH IN FILL	REDUCED MARSH EXCAVATION THAT CAN BE USED IN FILL
7 - REDUCED EBS IN FILL	REDUCED EBS EXCAVATION THAT CAN BE USED IN FILL
8 - MASS ORDINATE	IF MARSH OR EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - REDUCED MARSH IN FILL - REDUCED EBS IN FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH COMMON OR BORROW: [(CUT - SALVAGED PAVT - EXPANDED MARSH EXC - EXPANDED EBS) - ((FILL - EXPANDED ROCK) * FILL FACTOR)]
8 - MASS ORDINATE	IF MARSH AND EBS TO BE BACKFILLED WITH GRANULAR: [CUT - SALVAGED PAVT - ((FILL - EXPANDED ROCK) * FILL FACTOR)]

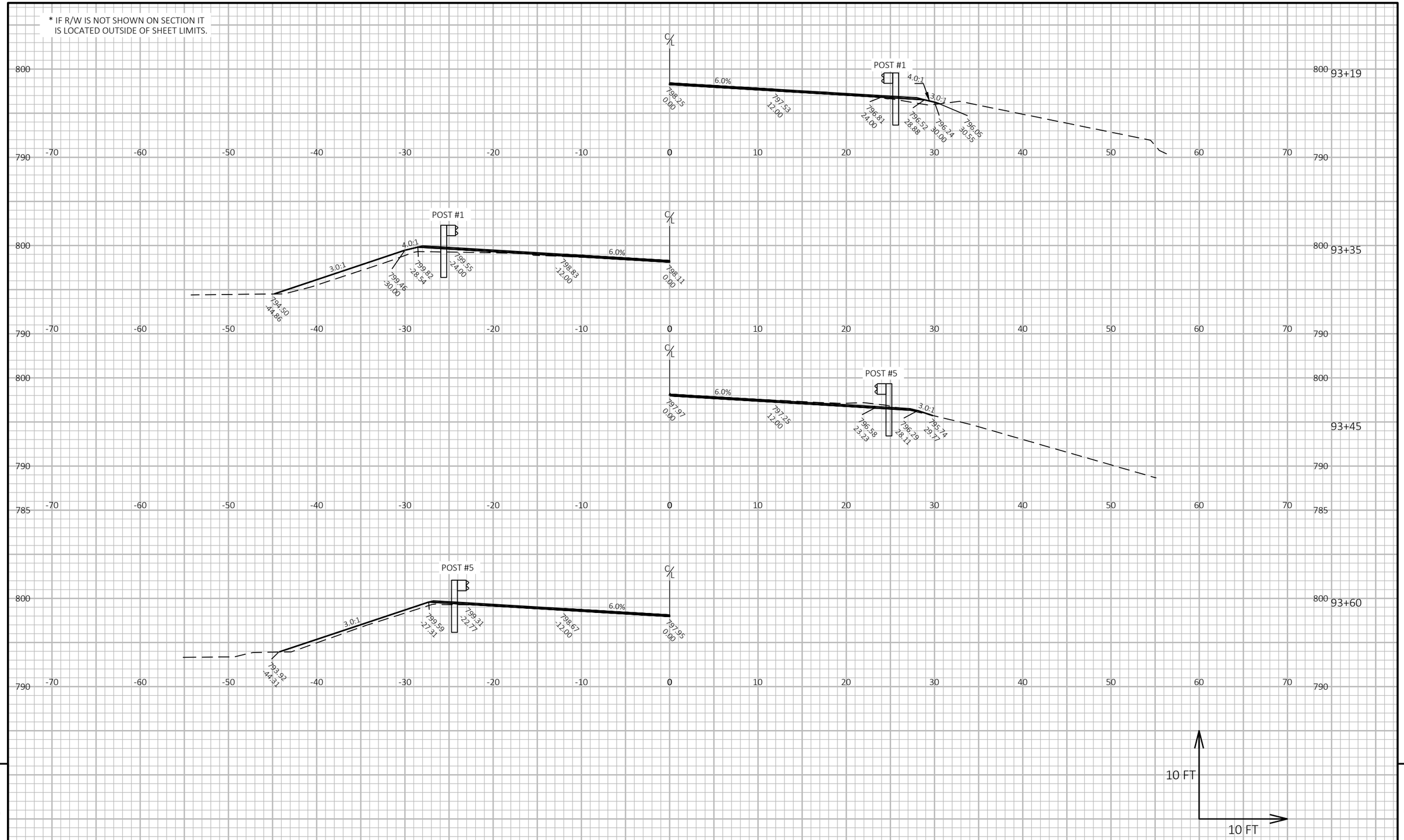
9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	EARTHWORK SUMMARY	SHEET NO: 231	E

FILE NAME : _____ PLOT DATE : _____ PLOT BY : _____ PLOT NAME : _____ ORIGINATOR : DIST _ PLOT SCALE : 1:1

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



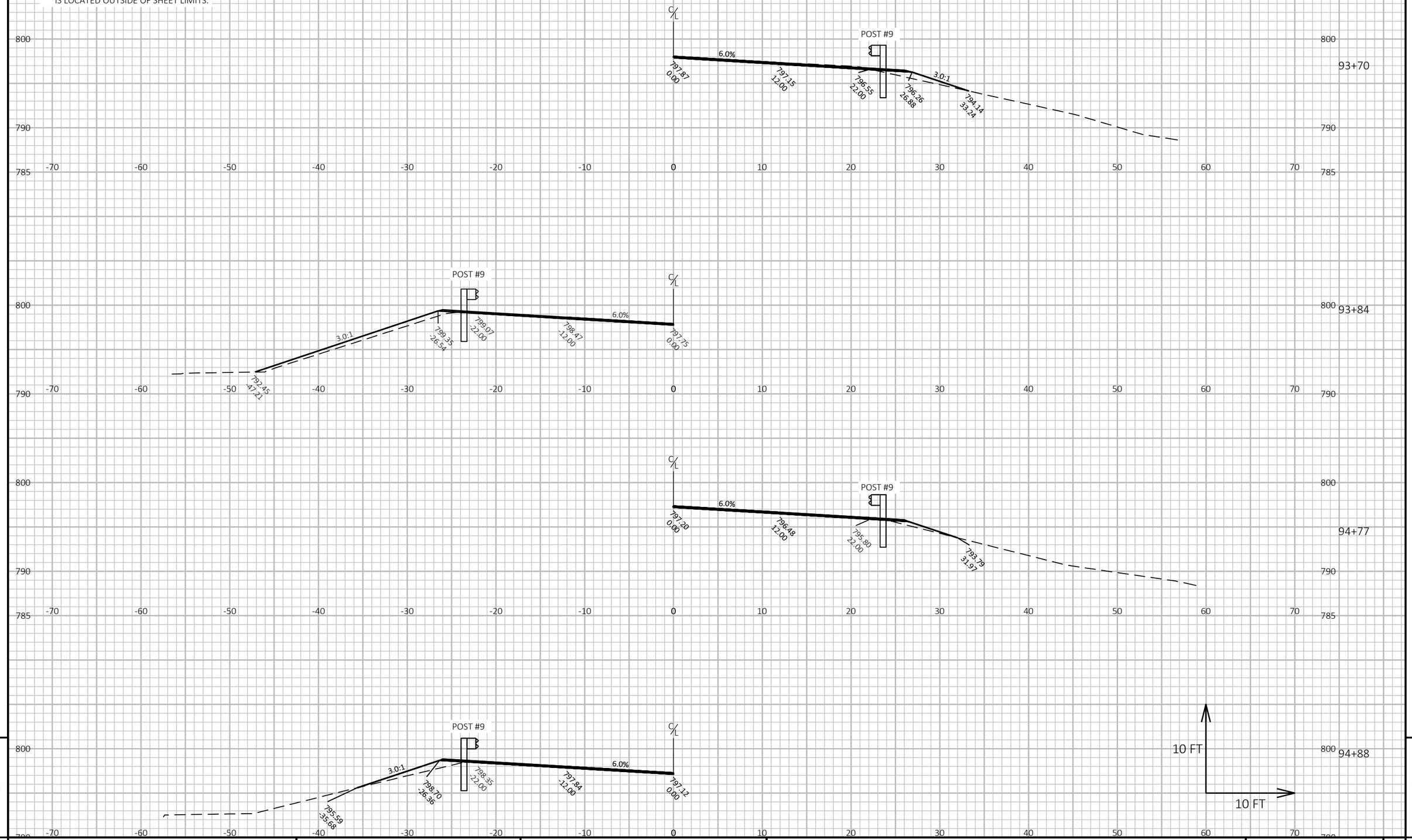
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 232	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 01

PLOT DATE : 11/22/2024 9:44 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9

9

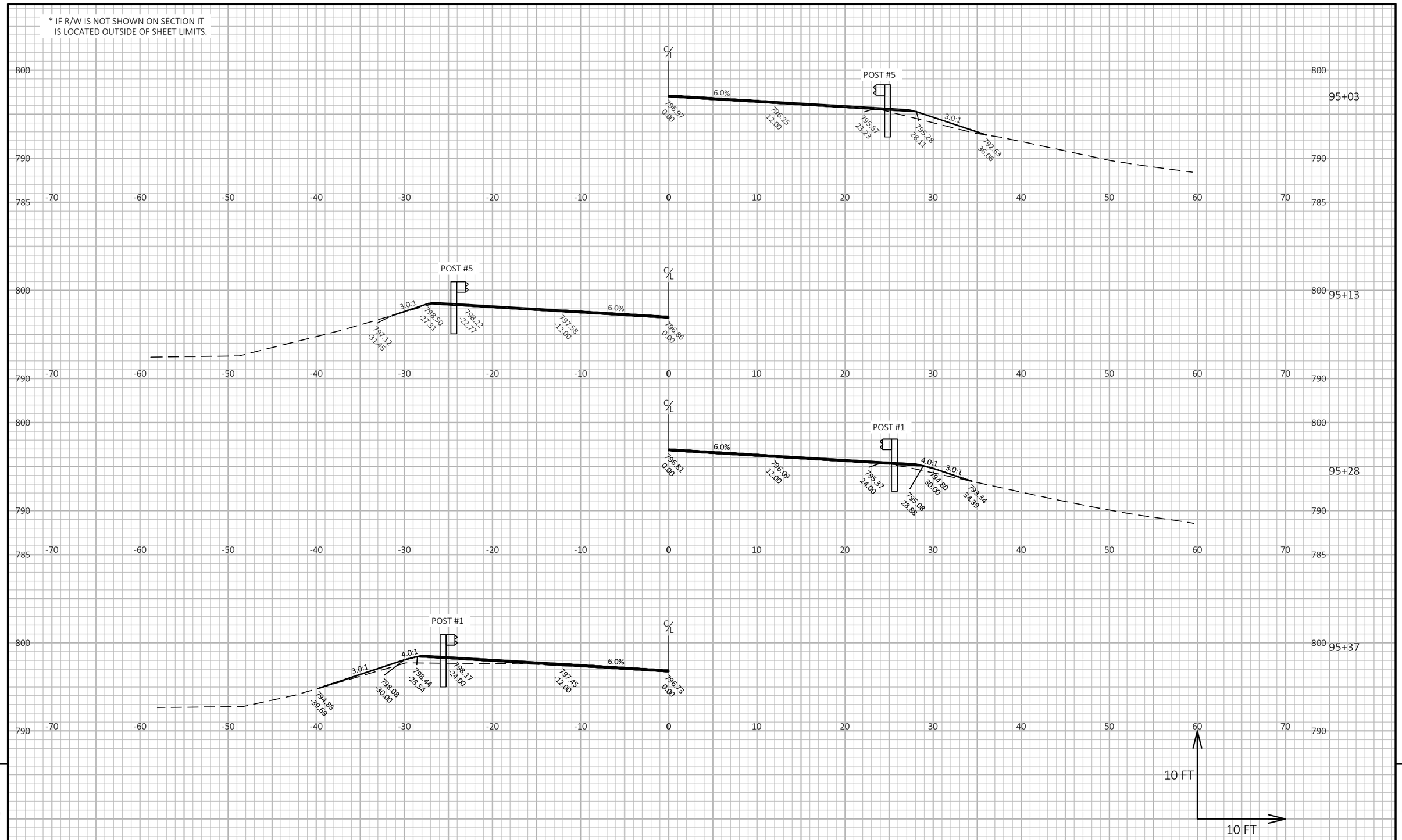
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 233	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 02

PLOT DATE : 11/22/2024 9:44 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



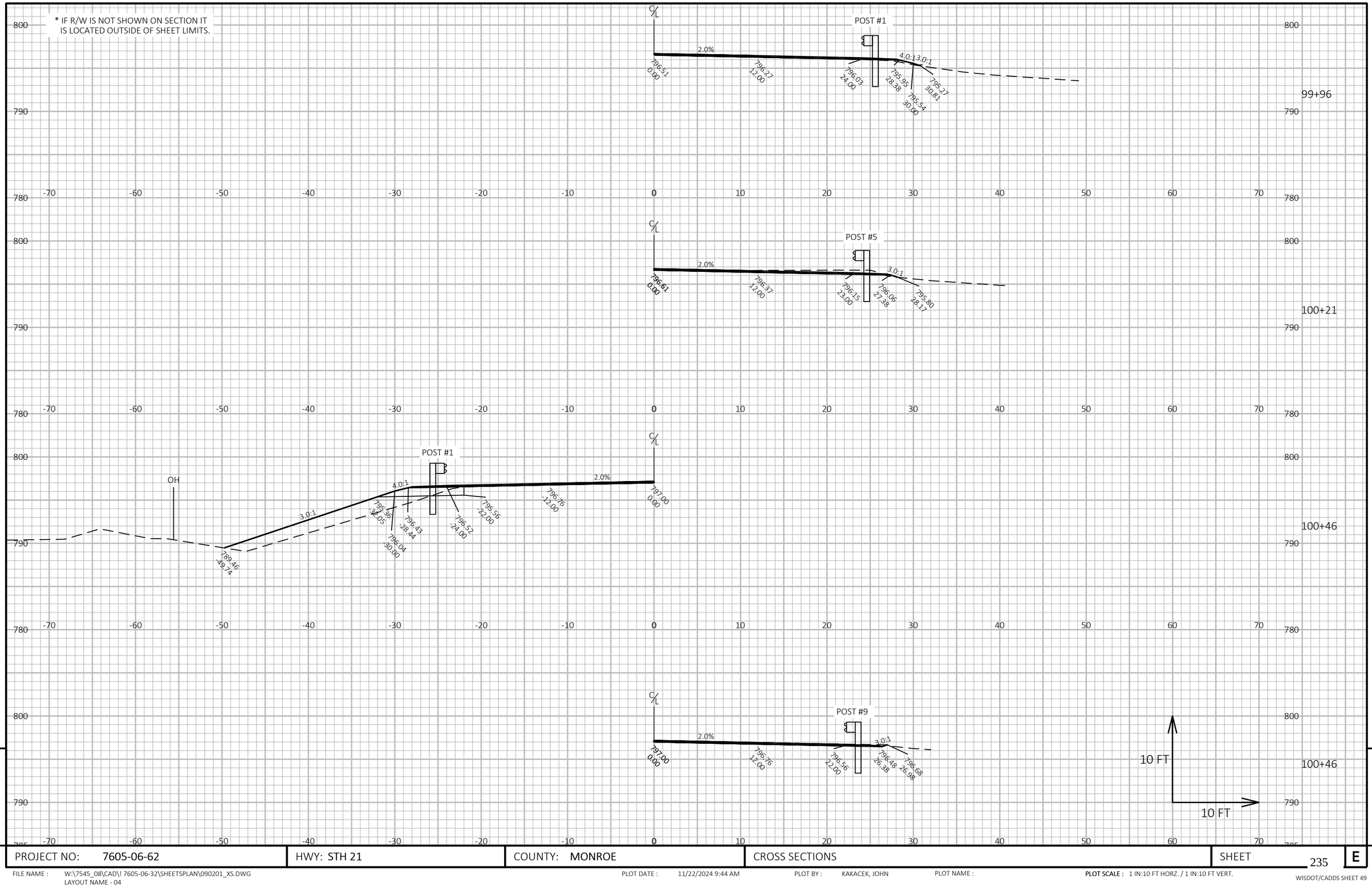
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 234	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 03

PLOT DATE : 11/22/2024 9:44 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



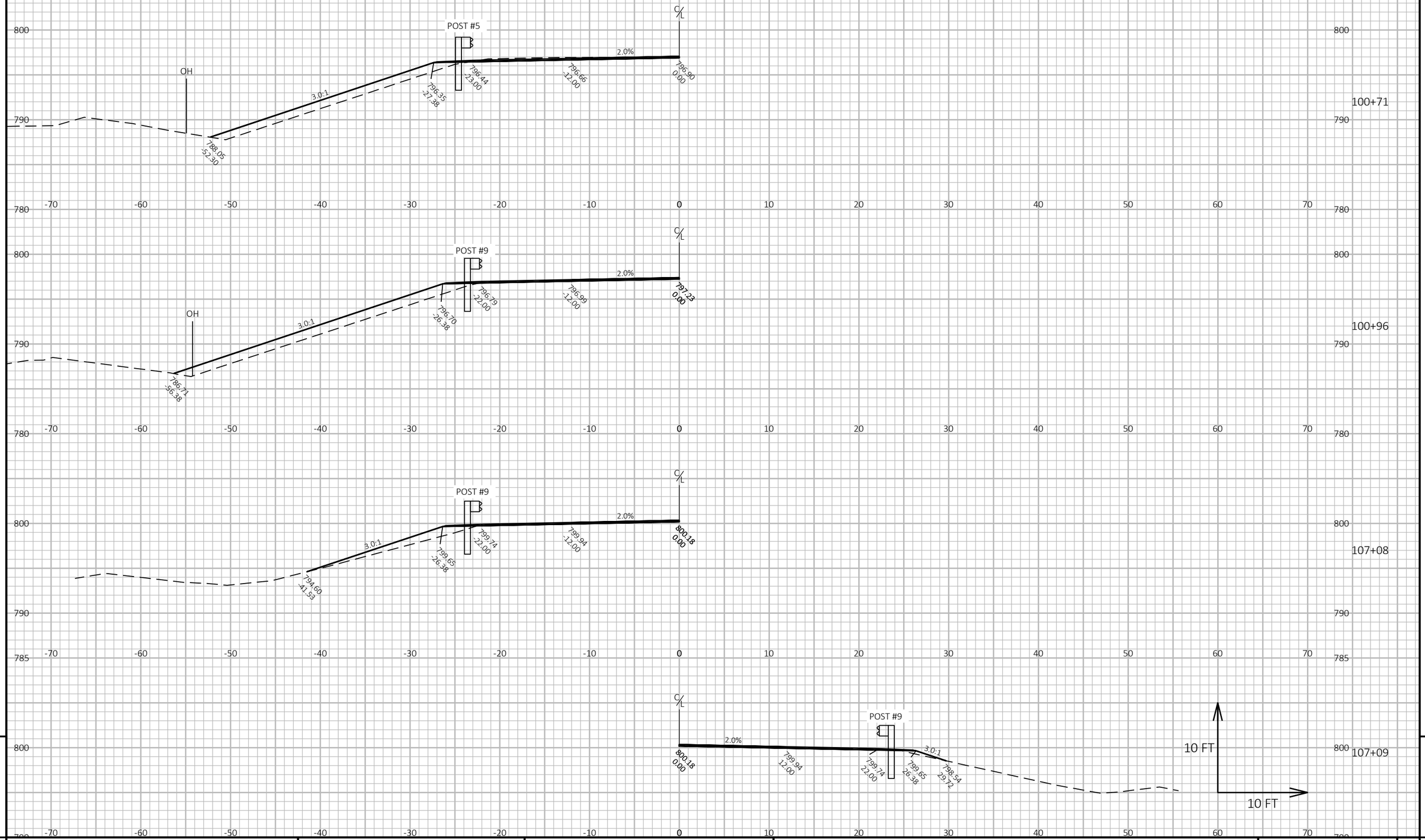
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 235	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 04

PLOT DATE : 11/22/2024 9:44 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



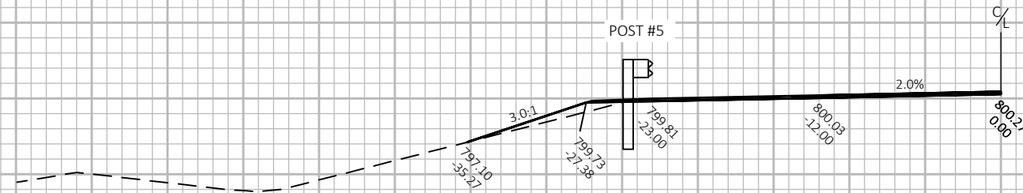
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 236	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 05

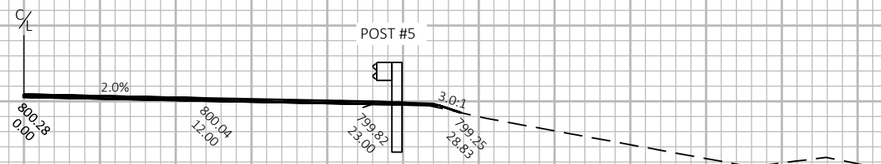
PLOT DATE : 11/22/2024 9:45 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

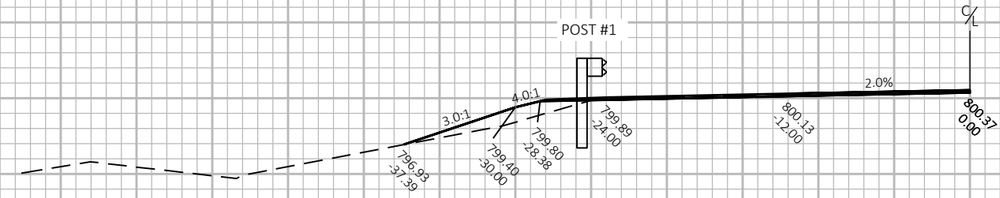
* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



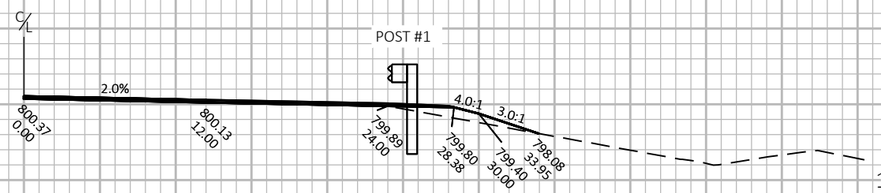
107+33



107+34



107+58



107+59

10 FT

10 FT

9

9

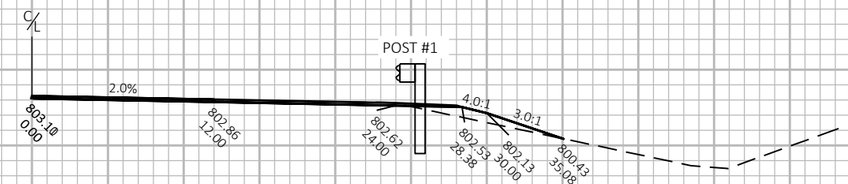
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 237	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 06

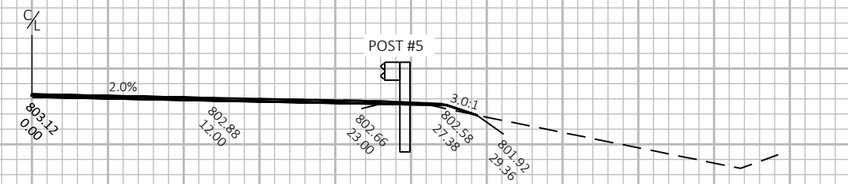
PLOT DATE : 11/22/2024 9:45 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

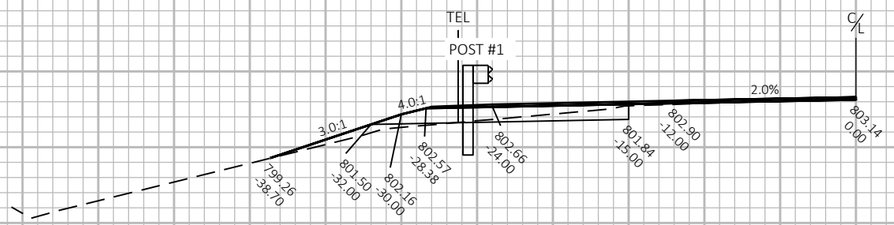
* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



129+47



129+72



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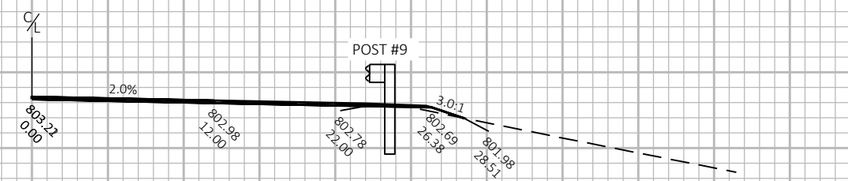
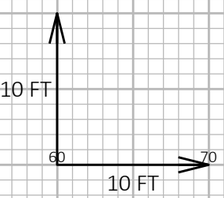


129+97



9 9

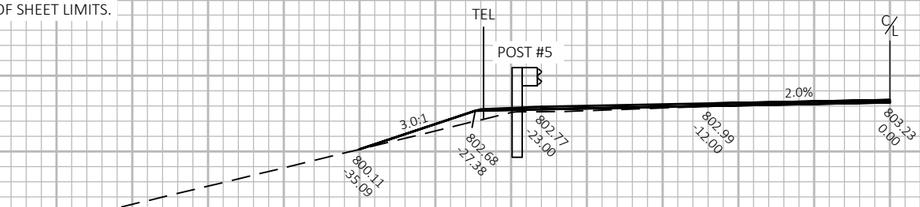
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 238	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 07

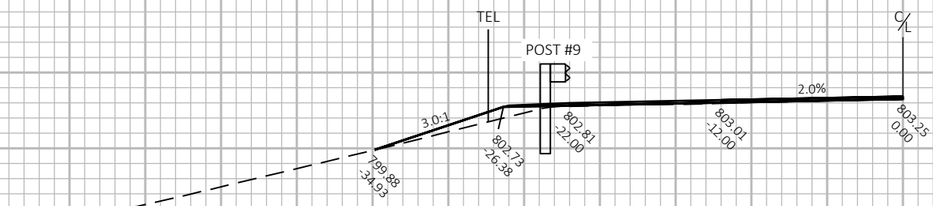
PLOT DATE : 11/22/2024 9:45 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

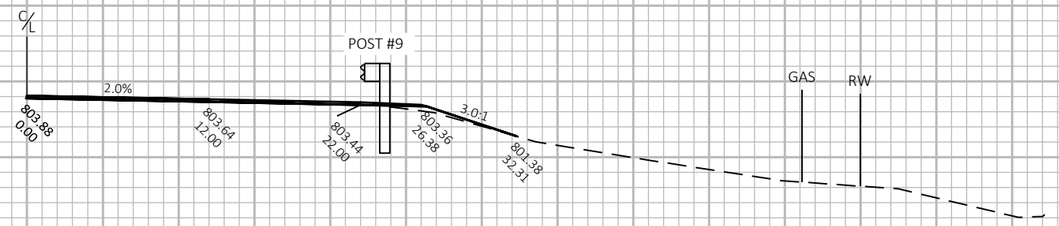
* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



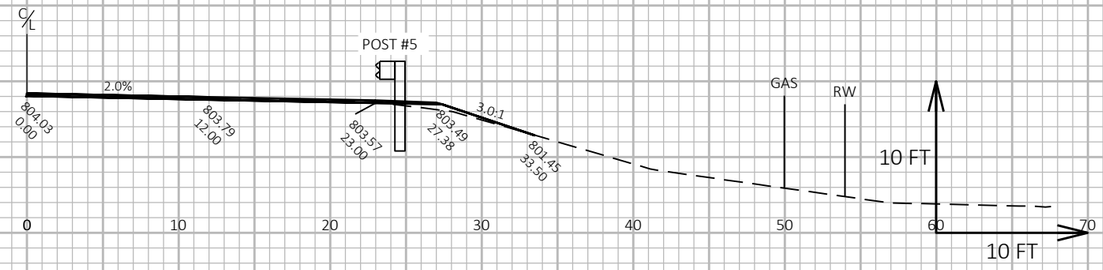
130+01



130+26



132+49



132+74

9

9

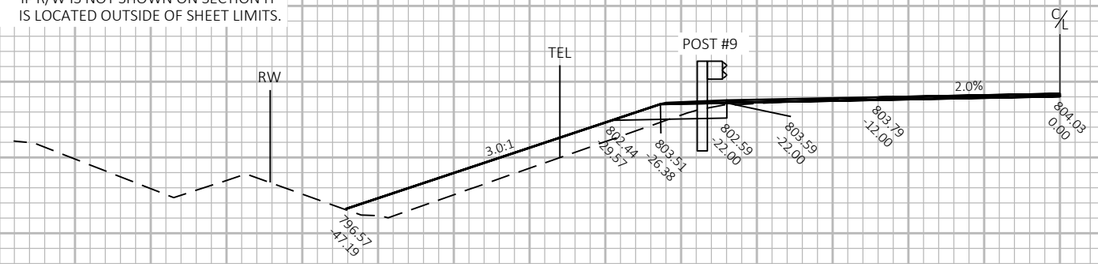
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 239	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 08

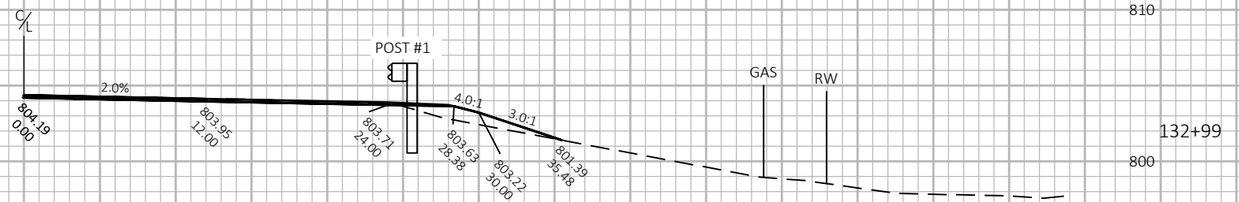
PLOT DATE : 11/22/2024 9:45 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

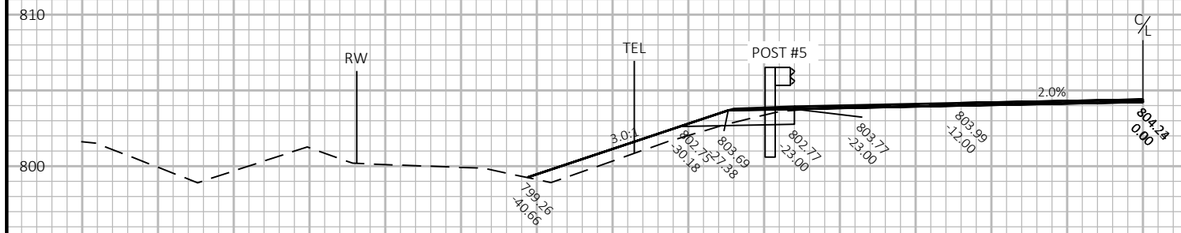
* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



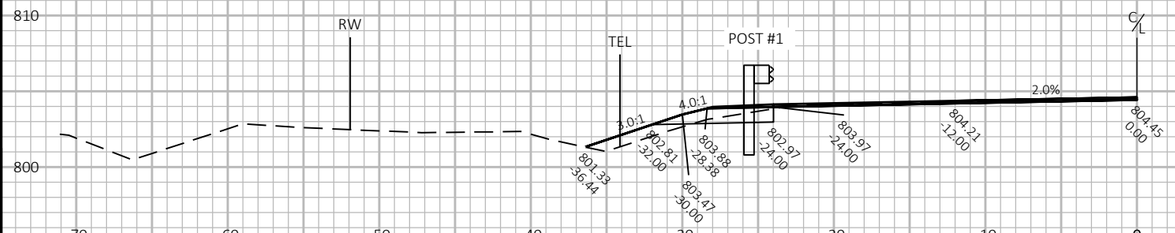
132+80



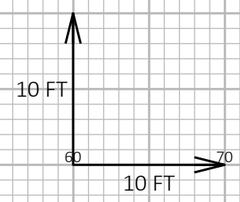
132+99



133+04



133+29



9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 240	E

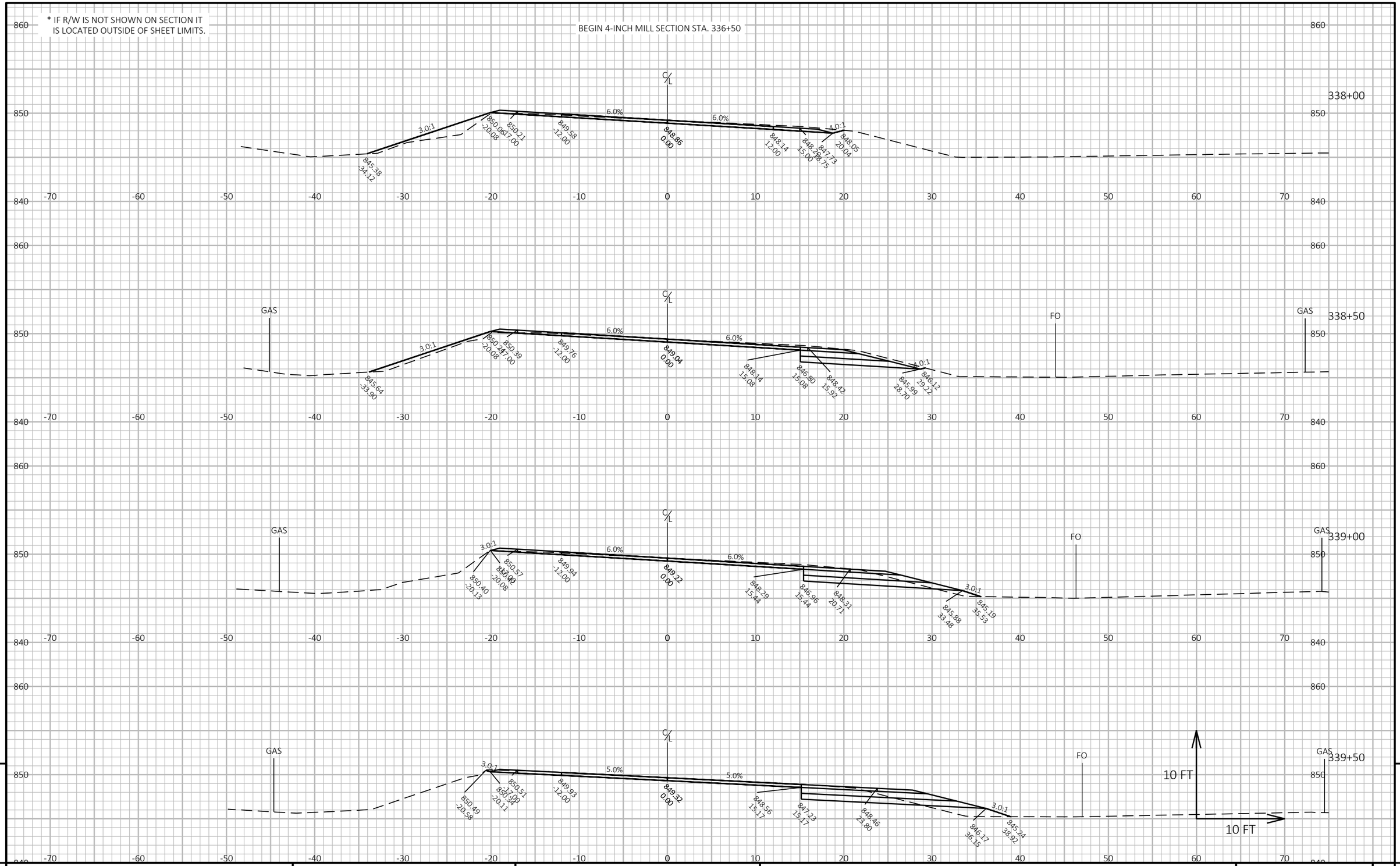
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 09

PLOT DATE : 11/22/2024 9:45 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.

BEGIN 4-INCH MILL SECTION STA. 336+50



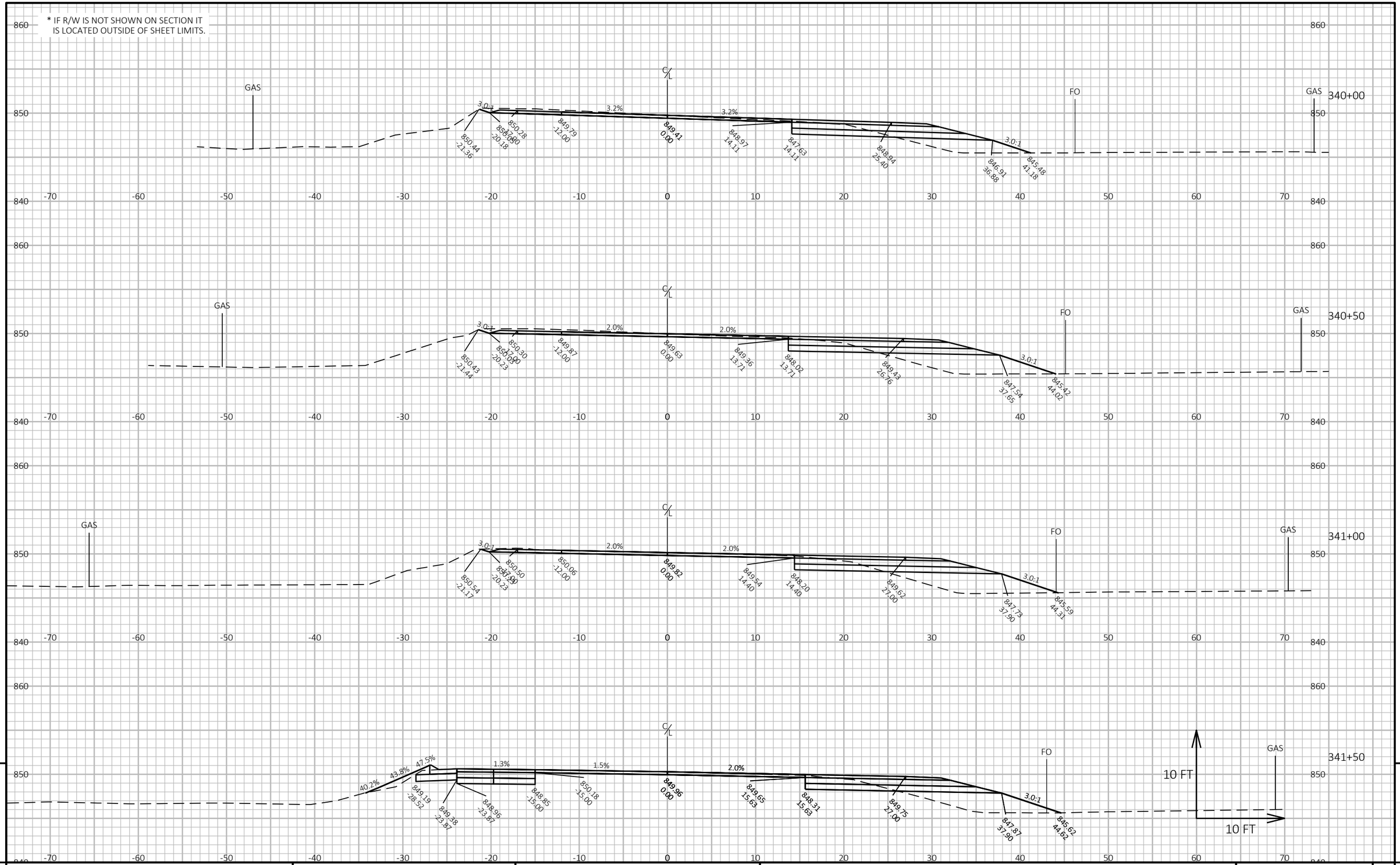
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 241 E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 01

PLOT DATE : 8/1/2024 9:48 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



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PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 242	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 02

PLOT DATE : 8/1/2024 9:48 AM

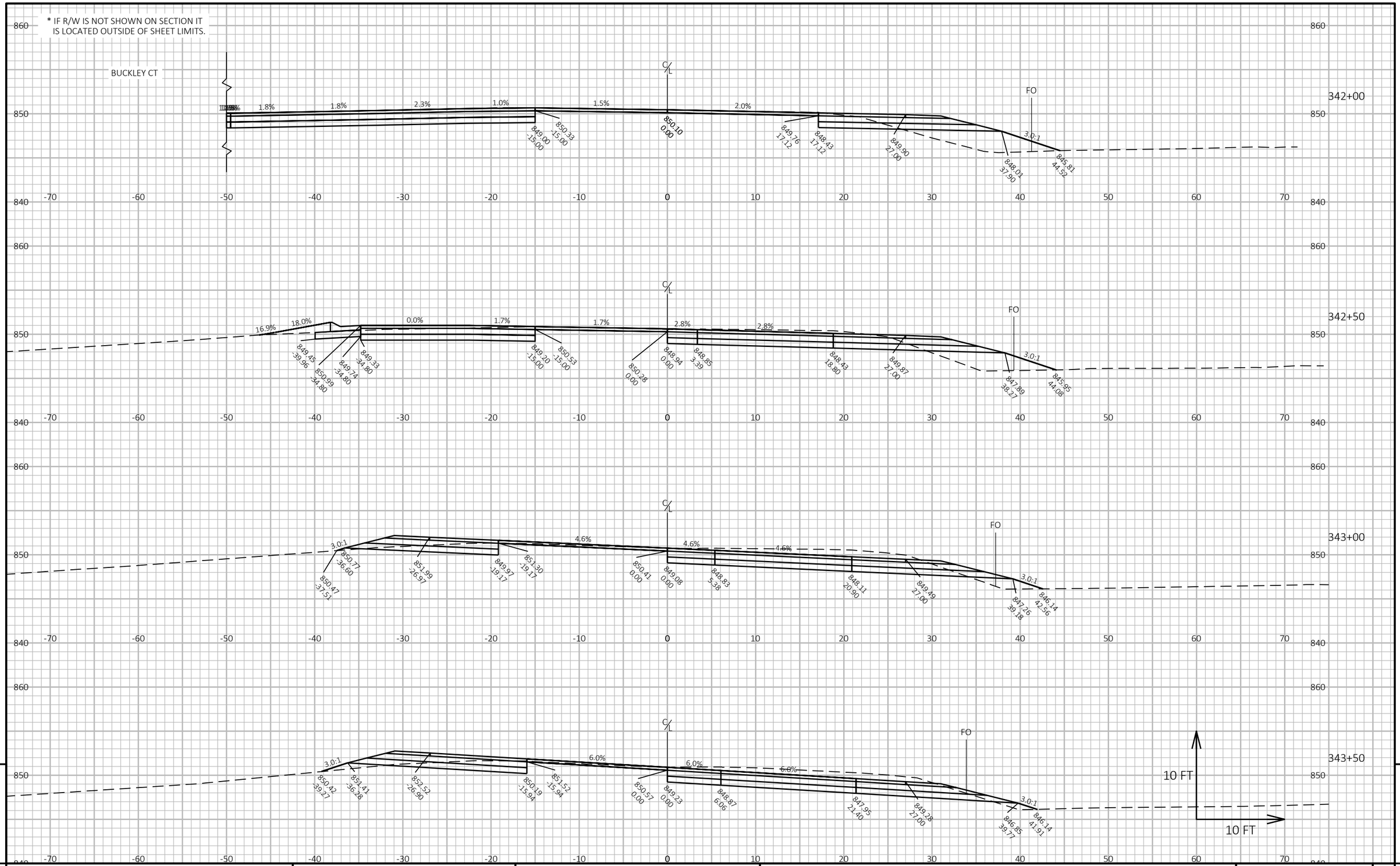
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 243 E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 03

PLOT DATE : 8/1/2024 9:48 AM

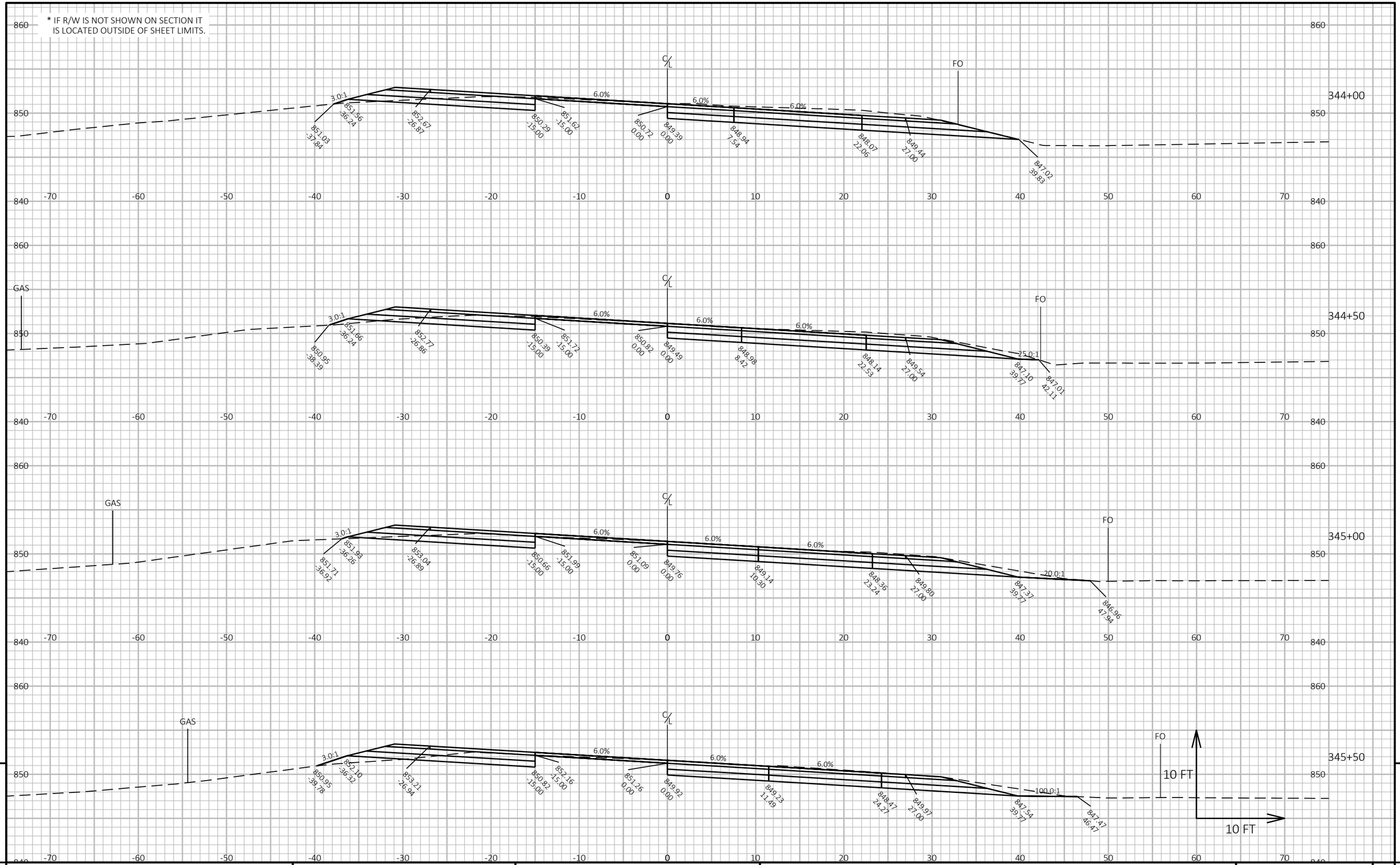
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.

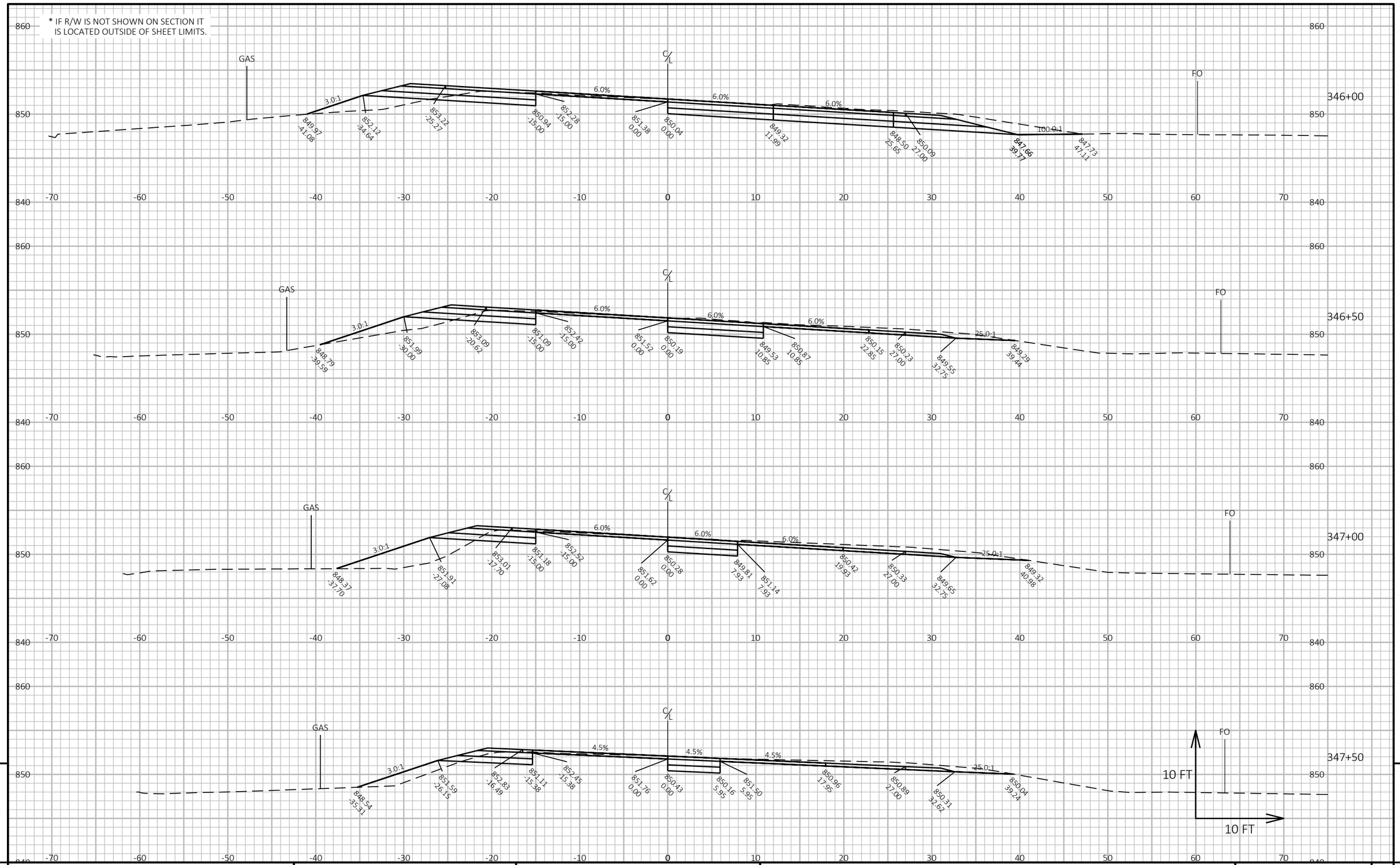


PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 244 E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 04

PLOT DATE : 8/1/2024 9:48 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 245	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 05

PLOT DATE : 8/1/2024 9:49 AM

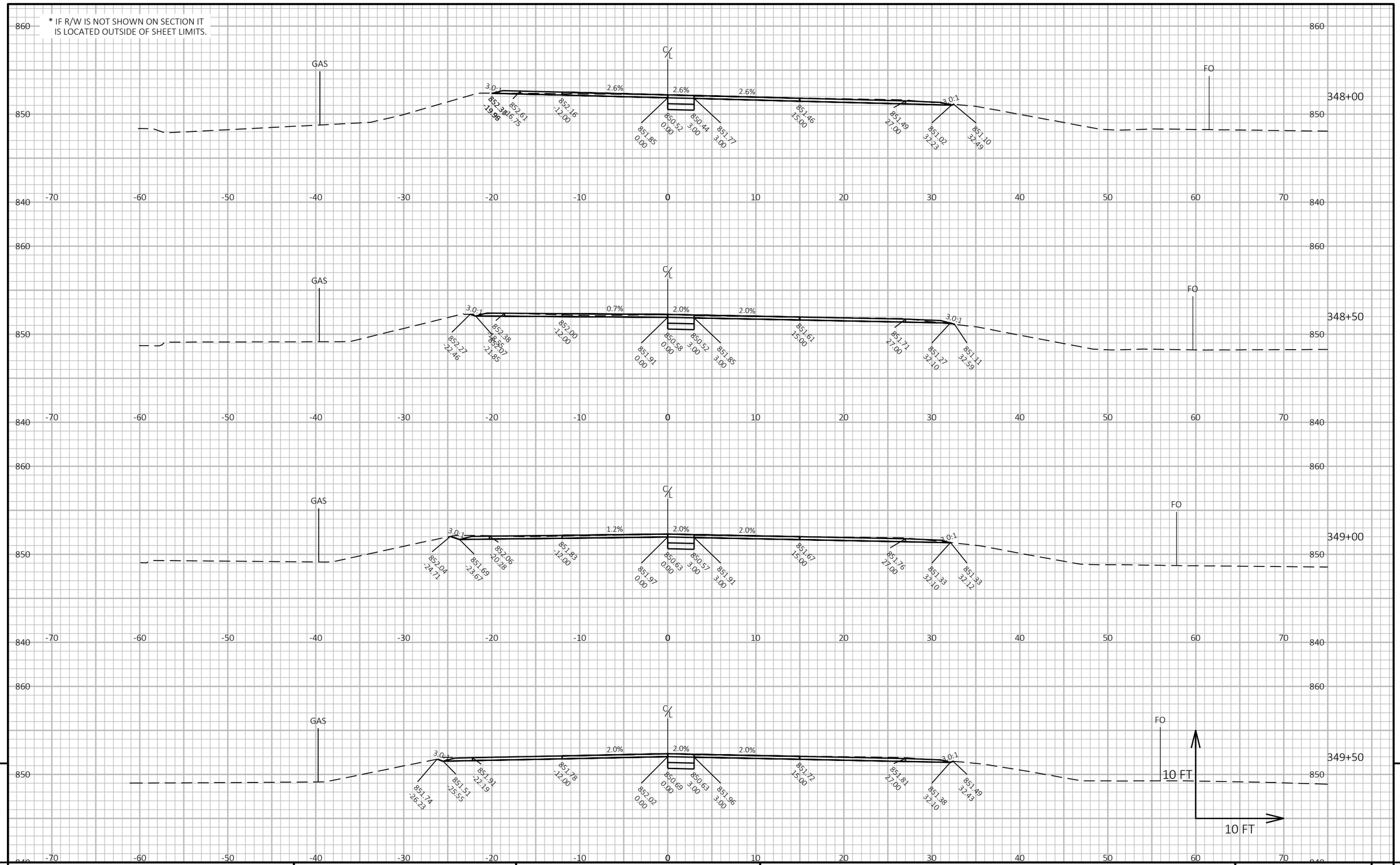
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



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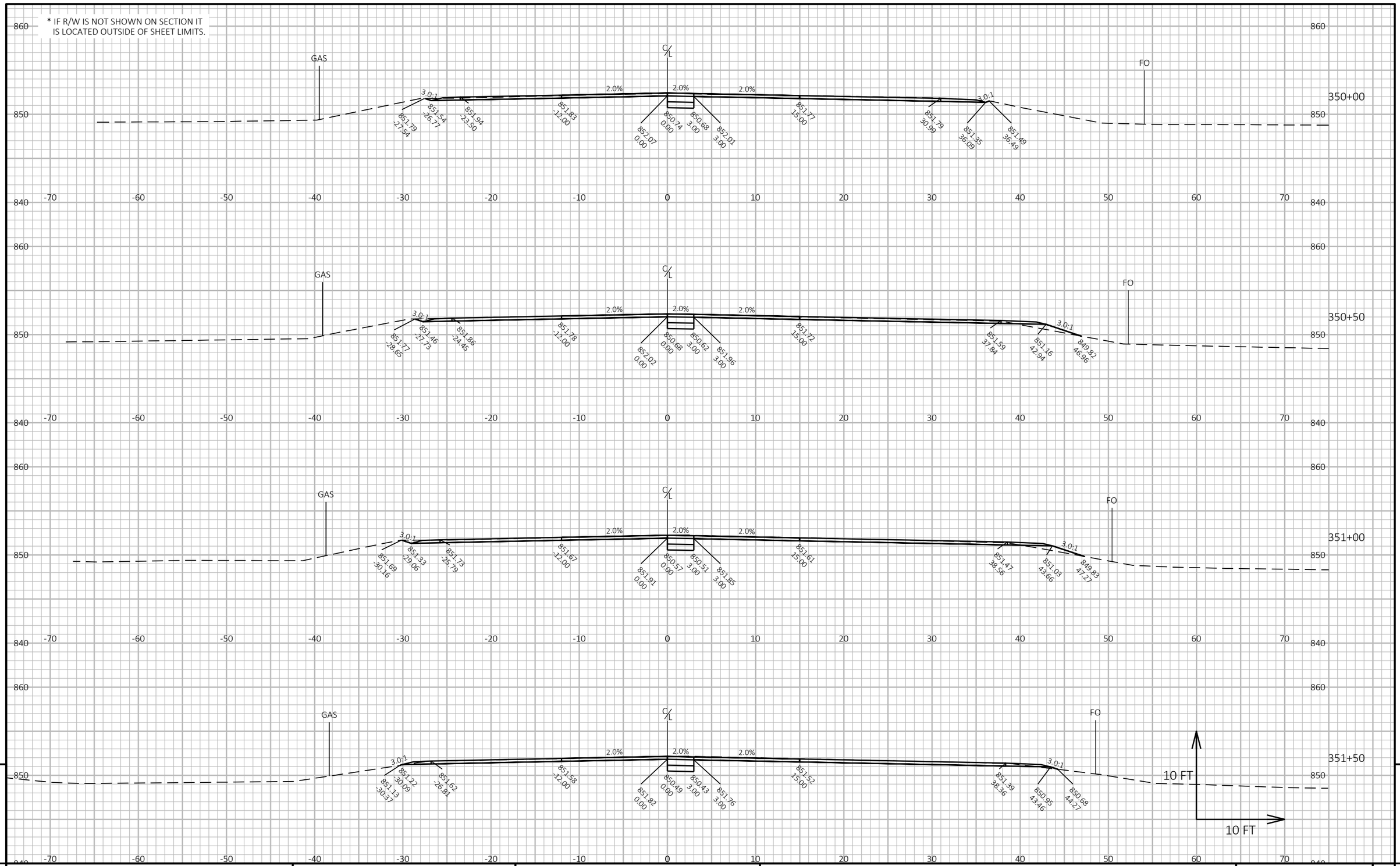
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 246	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 06

PLOT DATE : 8/1/2024 9:49 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



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PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 247	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 07

PLOT DATE : 8/1/2024 9:49 AM

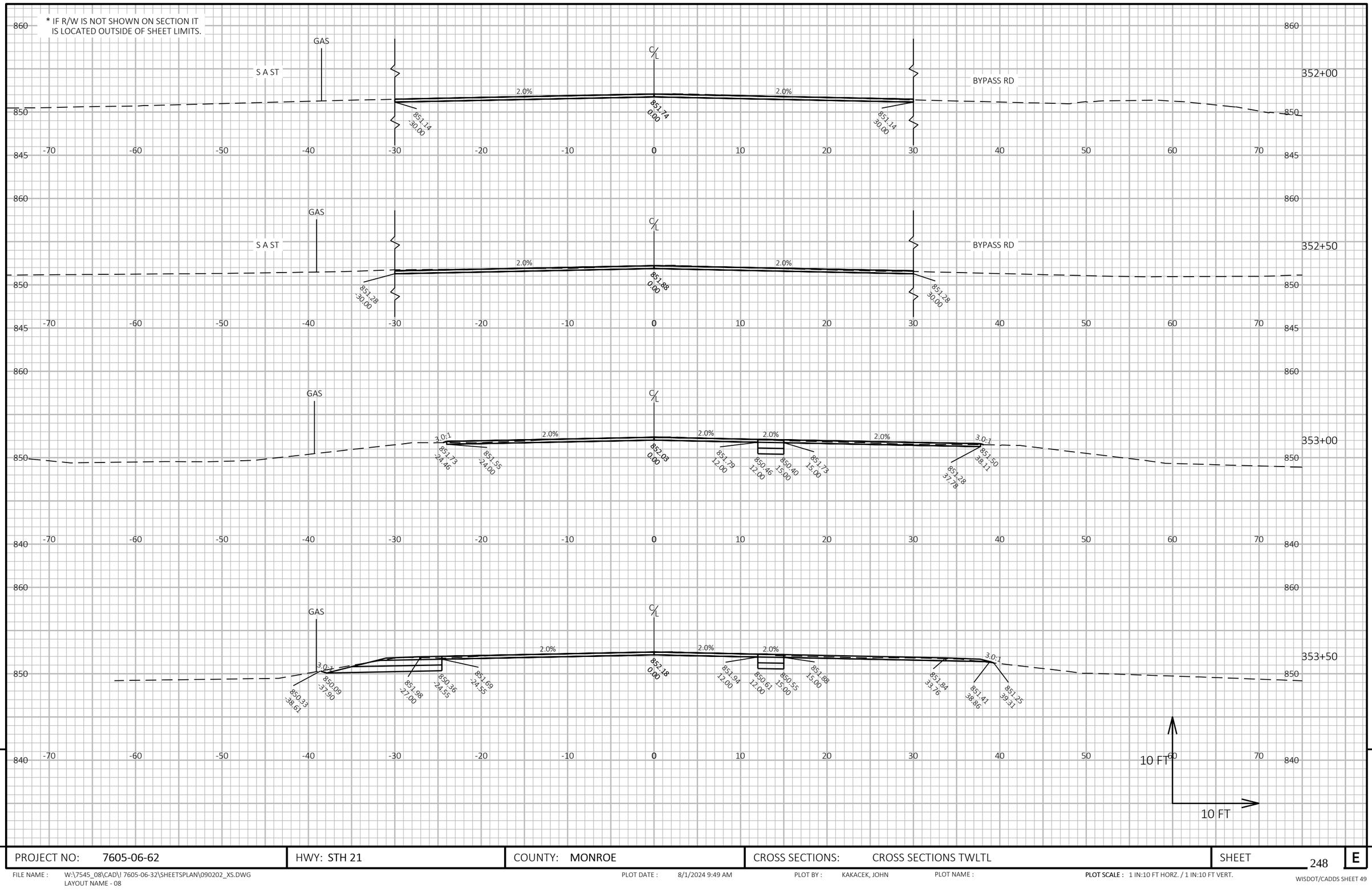
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 248	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 08

PLOT DATE : 8/1/2024 9:49 AM

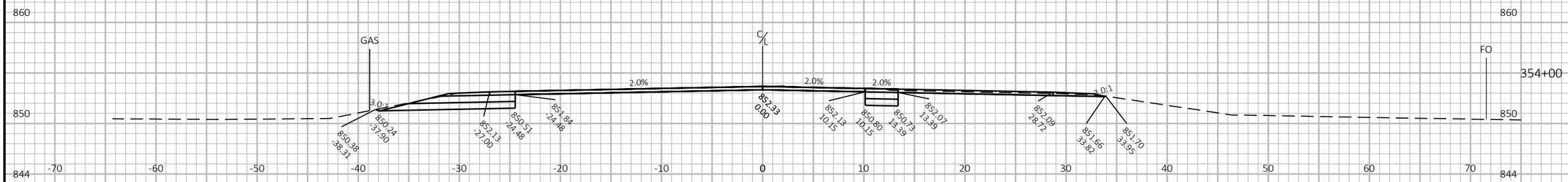
PLOT BY : KAKACEK, JOHN

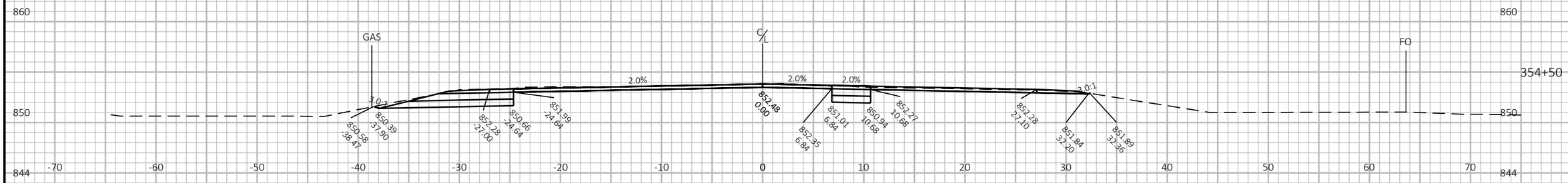
PLOT NAME :

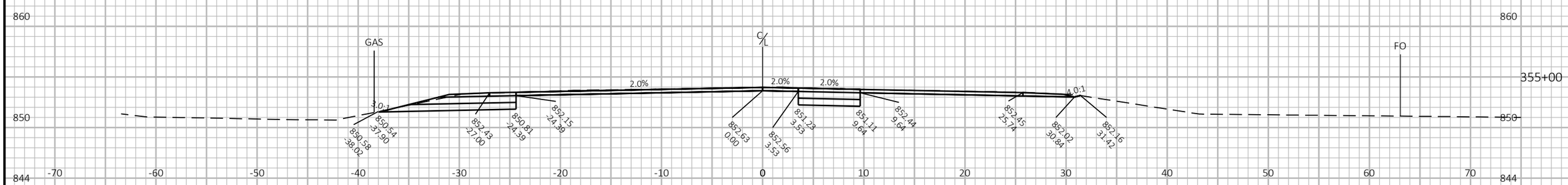
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

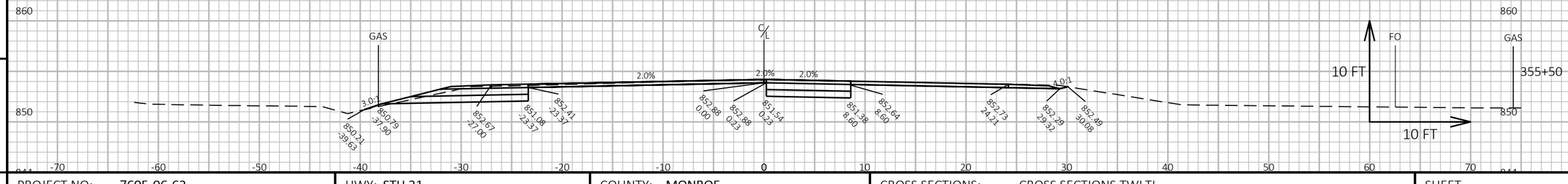
WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.









9

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PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 249	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 09

PLOT DATE : 8/1/2024 9:50 AM

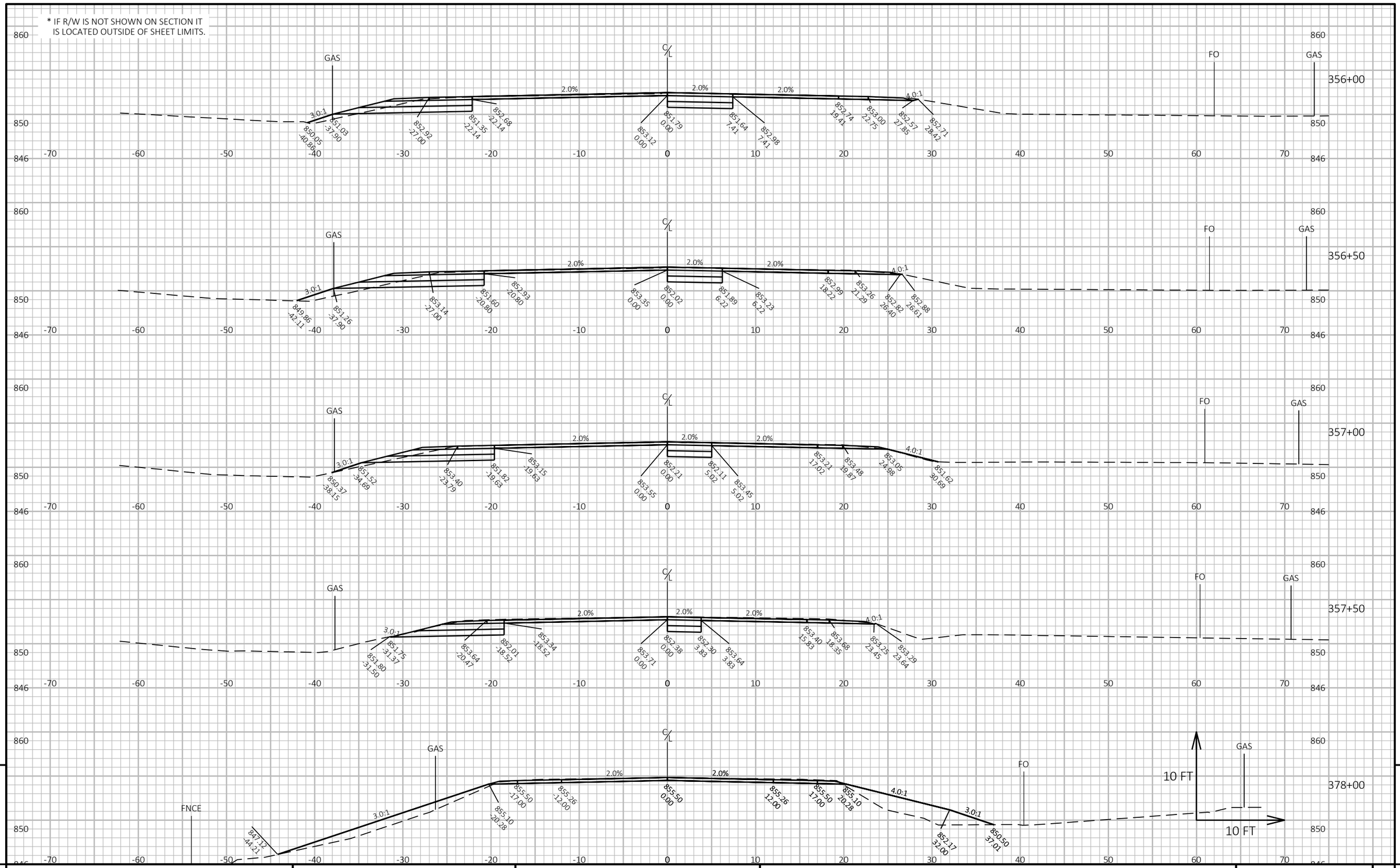
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



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9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 250	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 10

PLOT DATE : 8/1/2024 9:50 AM

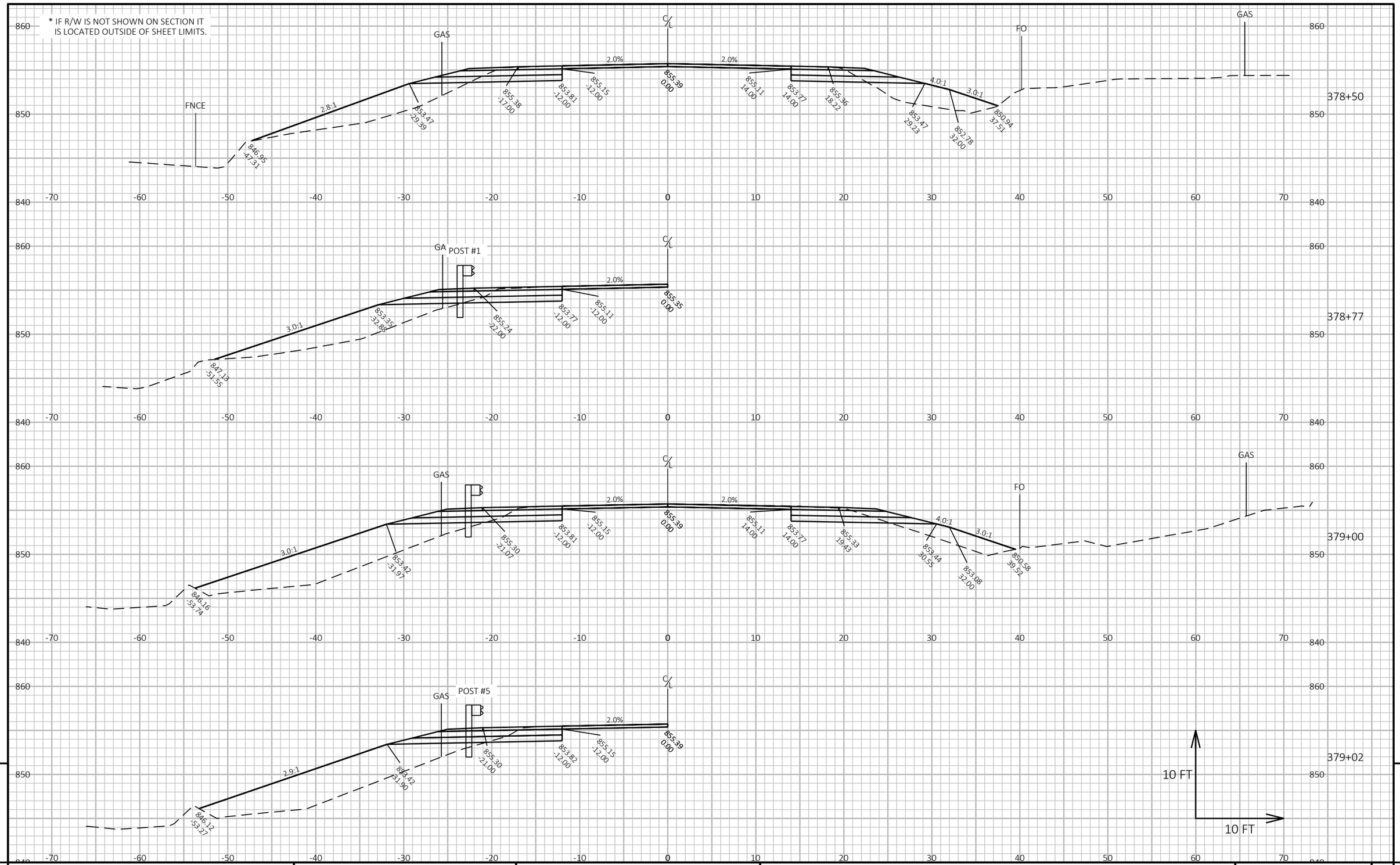
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9

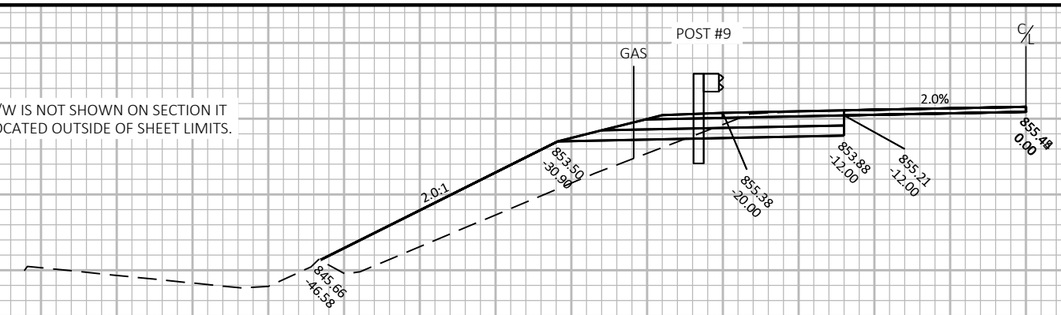
9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 251	E

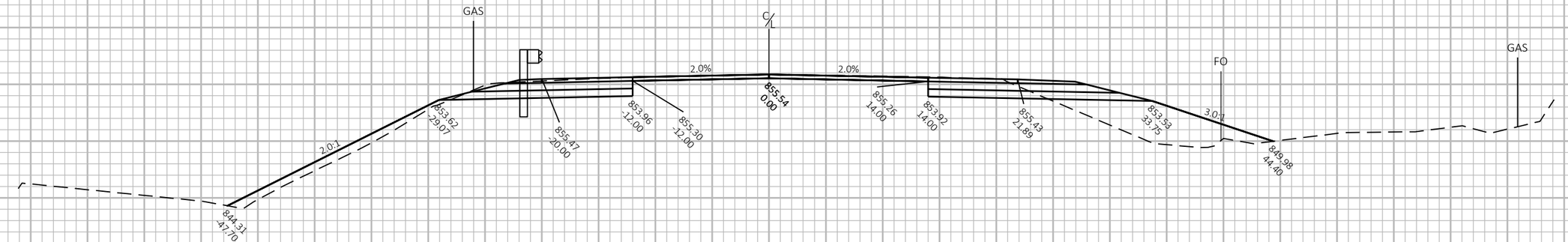
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 11

PLOT DATE : 8/1/2024 9:50 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.

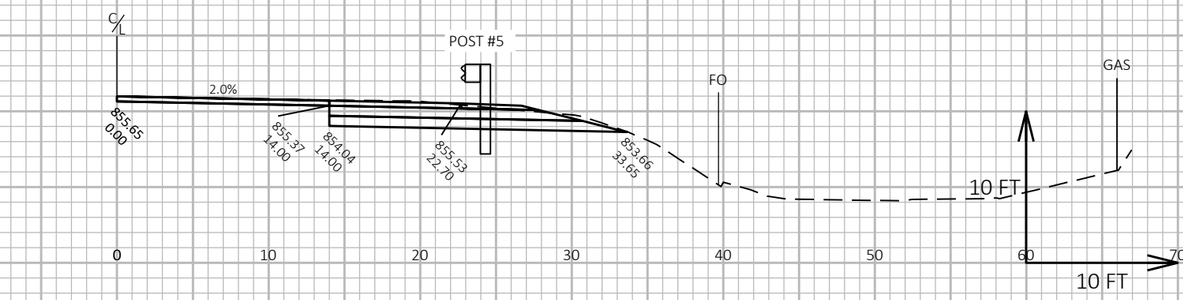


379+27



379+50

379+51



379+76

9

9

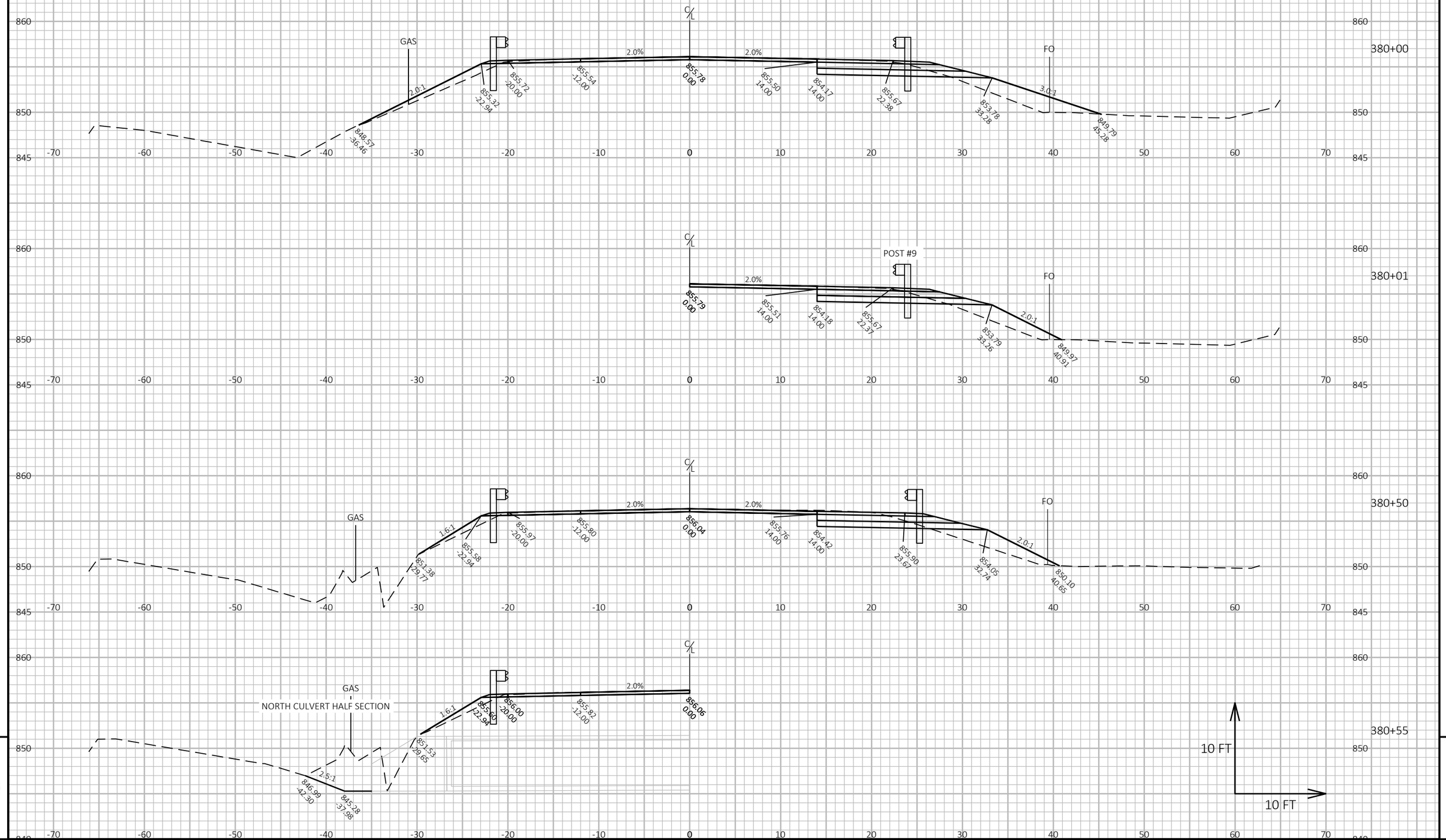
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 252	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 12

PLOT DATE : 8/1/2024 9:50 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 253	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 13

PLOT DATE : 8/1/2024 9:51 AM

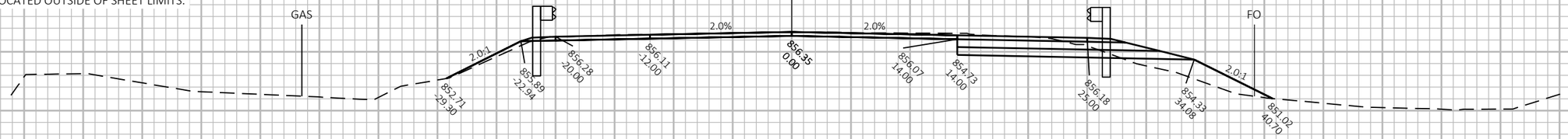
PLOT BY : KAKACEK, JOHN

PLOT NAME :

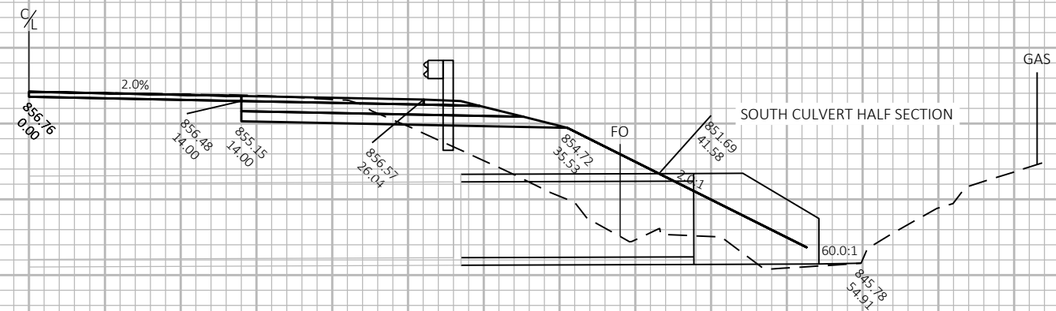
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

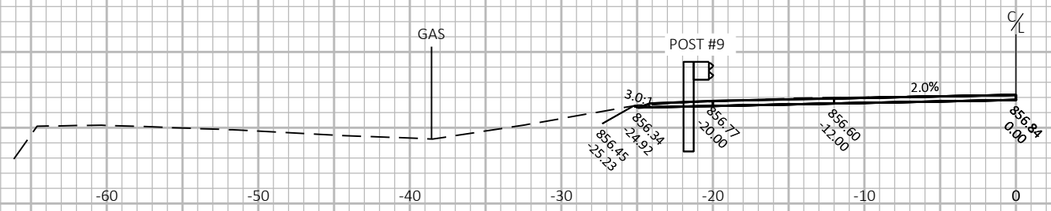
* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



381+00



381+39



381+45

10 FT

10 FT

9

9

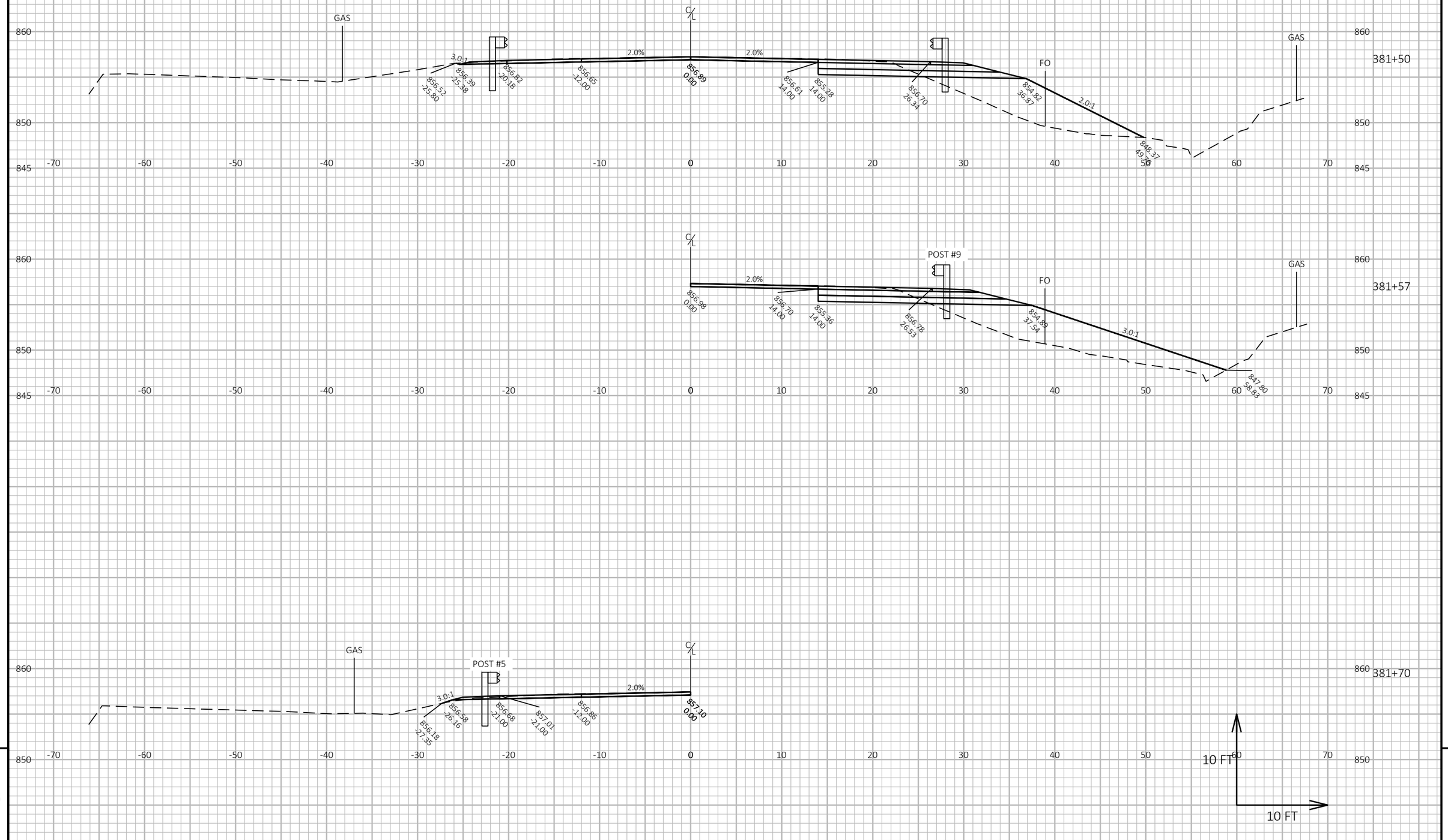
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 254	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 14

PLOT DATE : 8/1/2024 9:51 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 255	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 15

PLOT DATE : 8/1/2024 9:51 AM

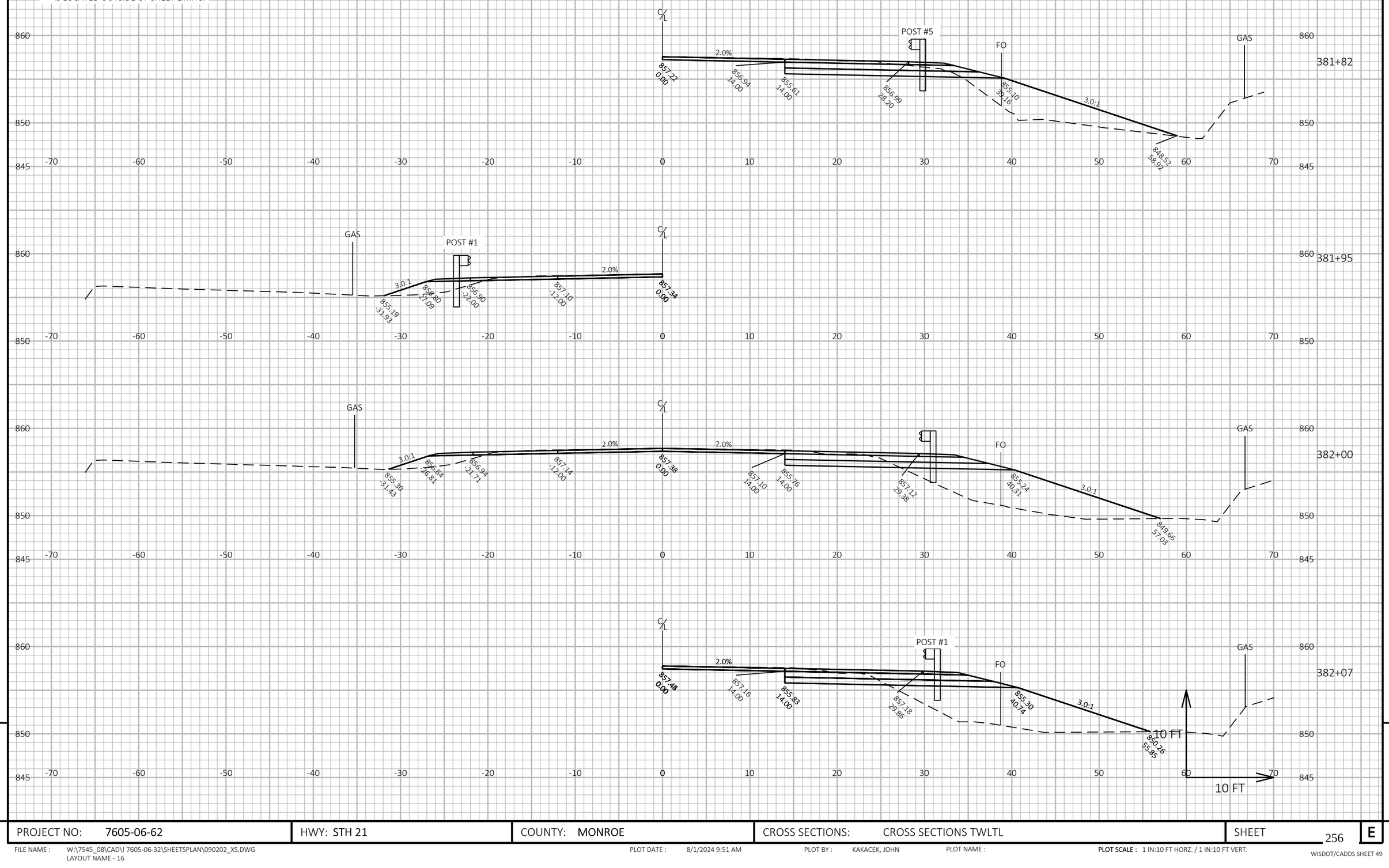
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 256	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 16

PLOT DATE : 8/1/2024 9:51 AM PLOT BY : KAKACEK, JOHN PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.

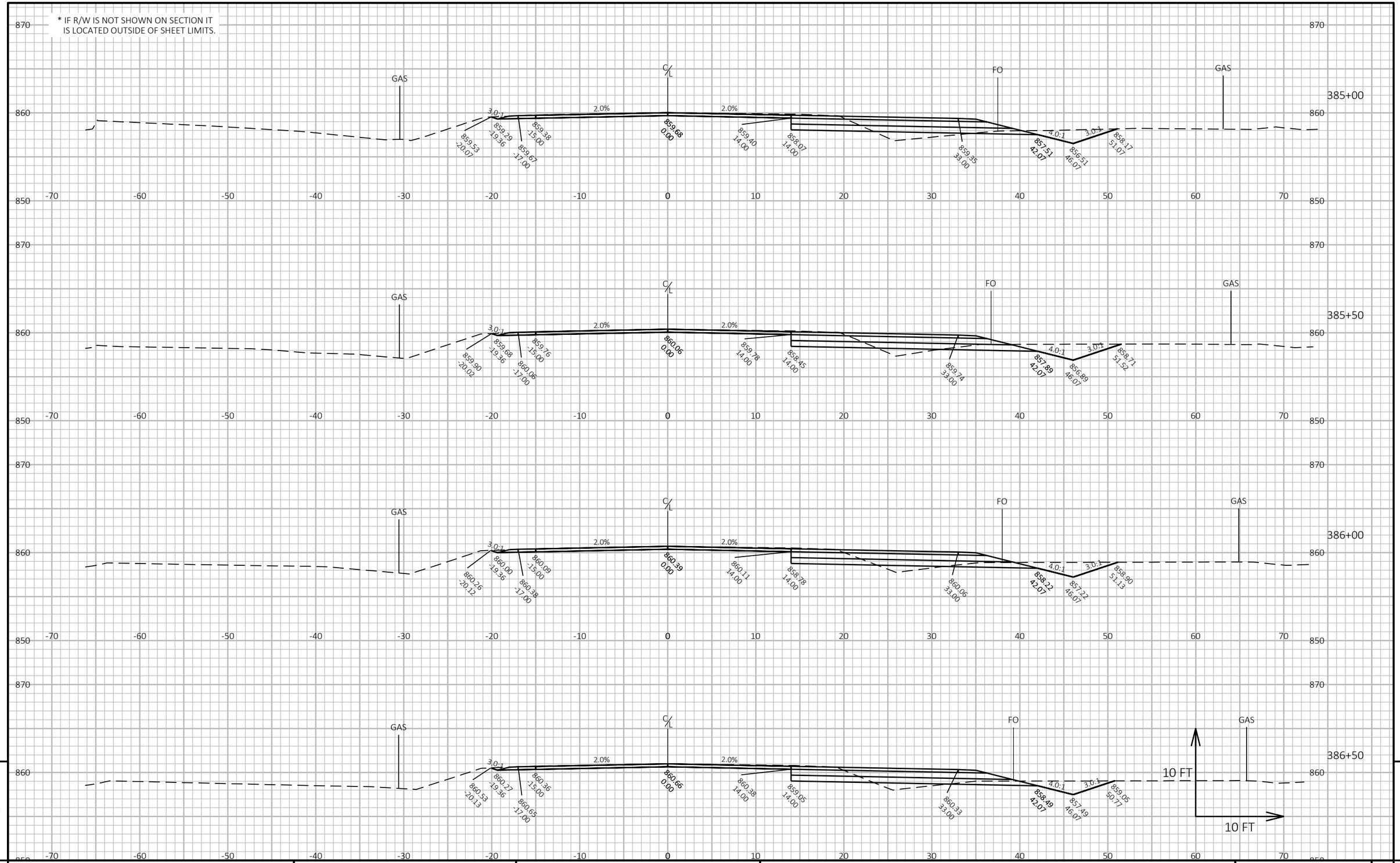
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 257

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 17

PLOT DATE : 8/1/2024 9:52 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9 9

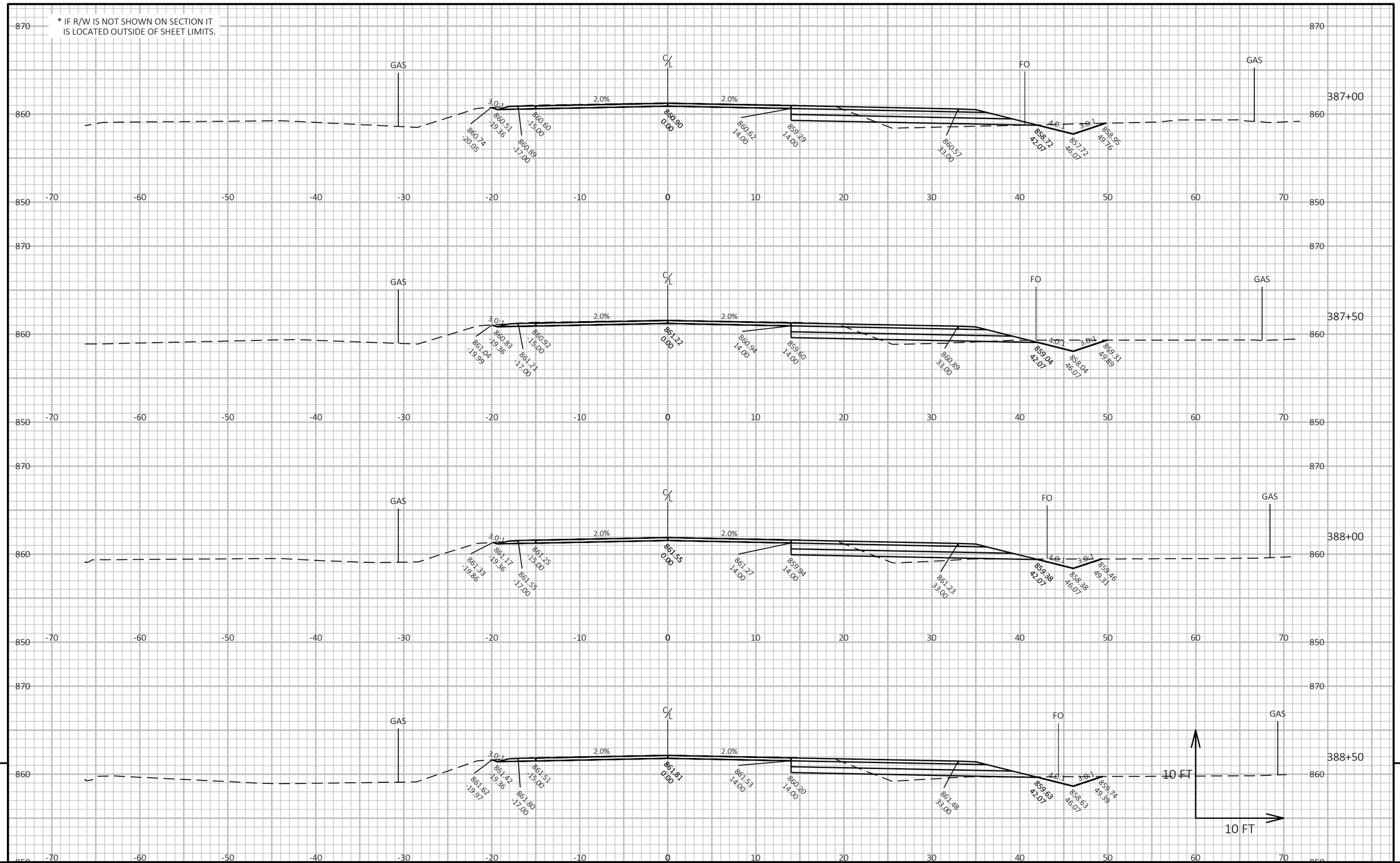
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 258	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 18

PLOT DATE : 8/1/2024 9:52 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9 9

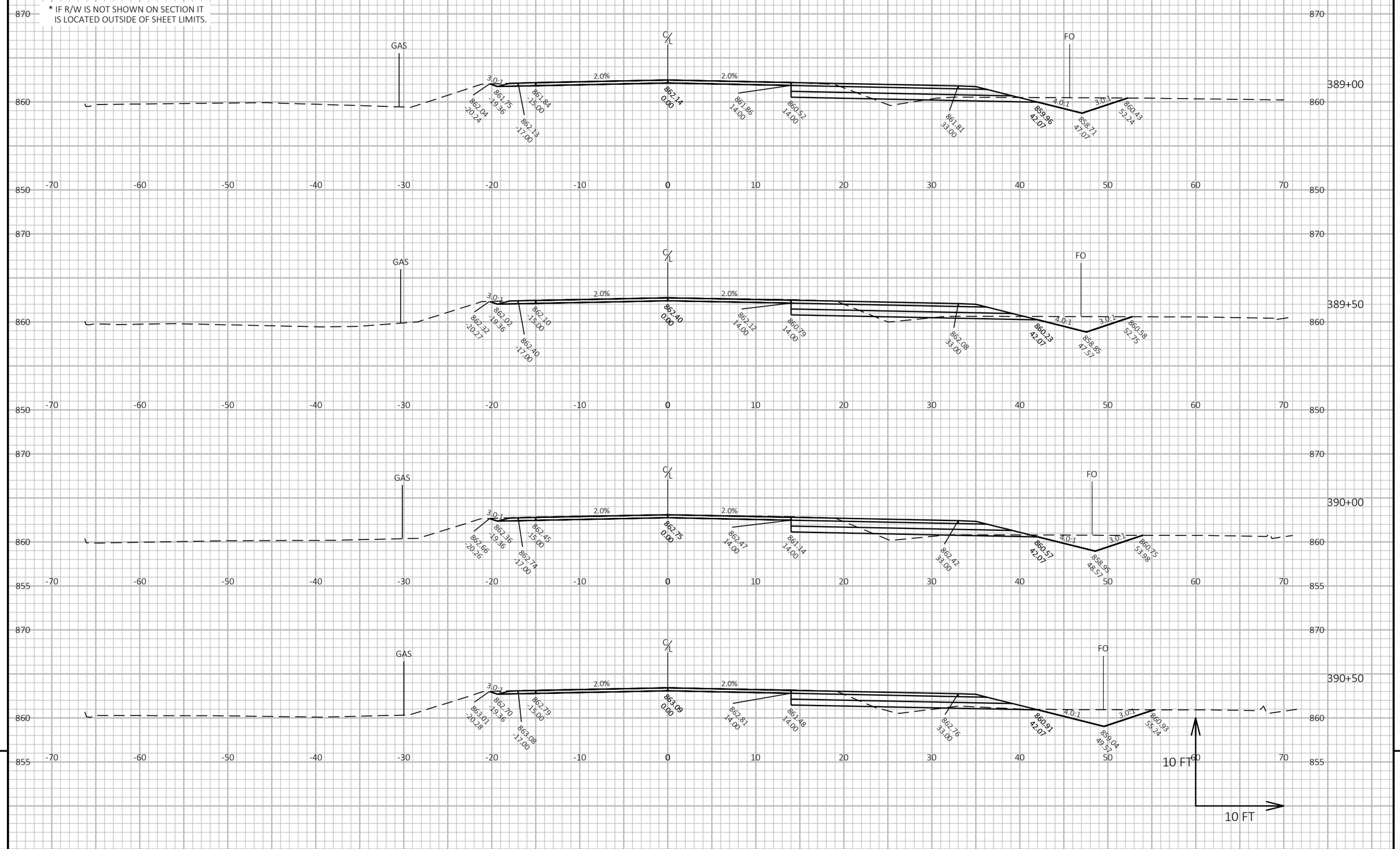
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 259	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 19

PLOT DATE : 8/1/2024 9:52 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 260	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 20

PLOT DATE : 8/1/2024 9:52 AM

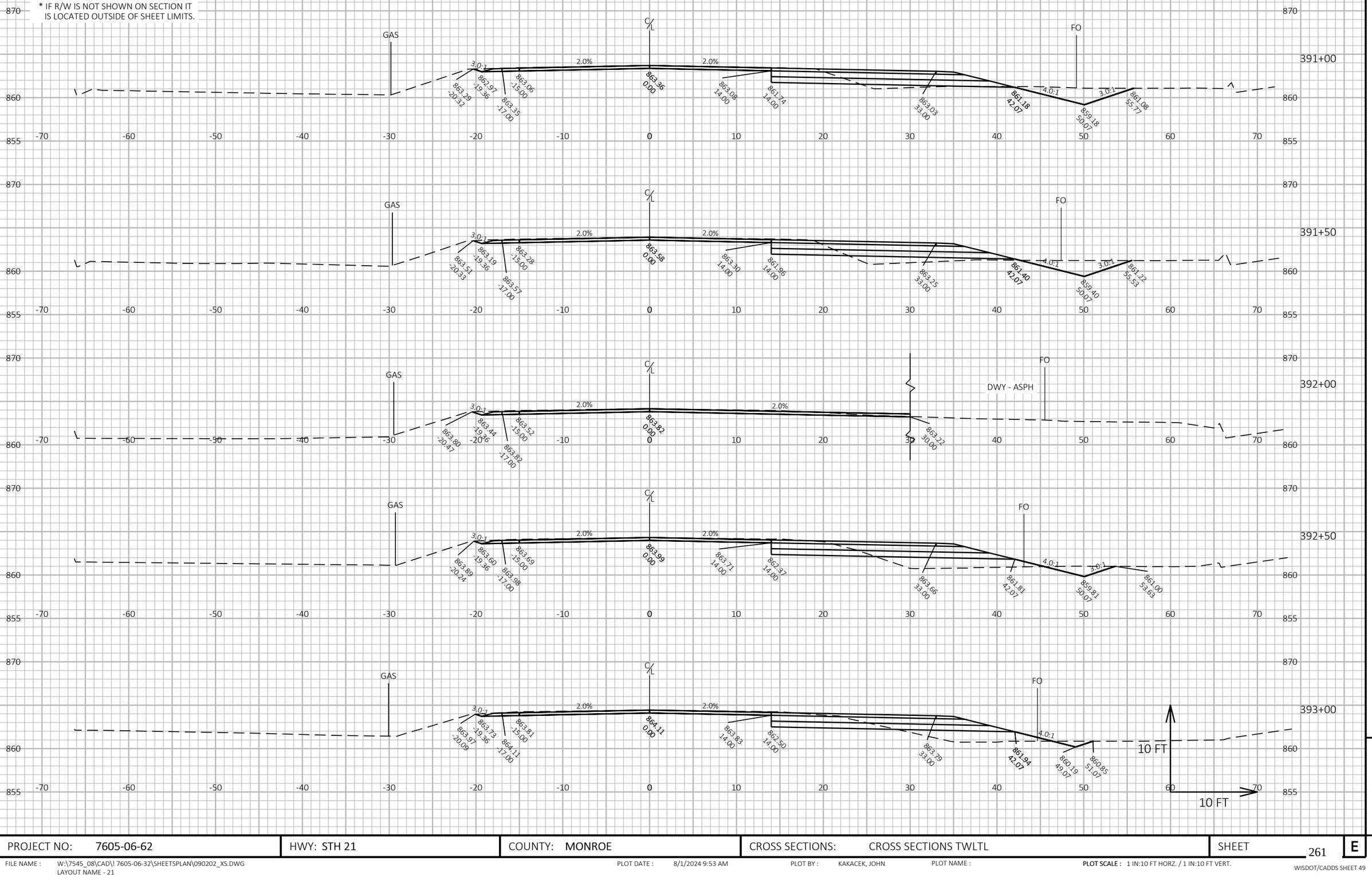
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



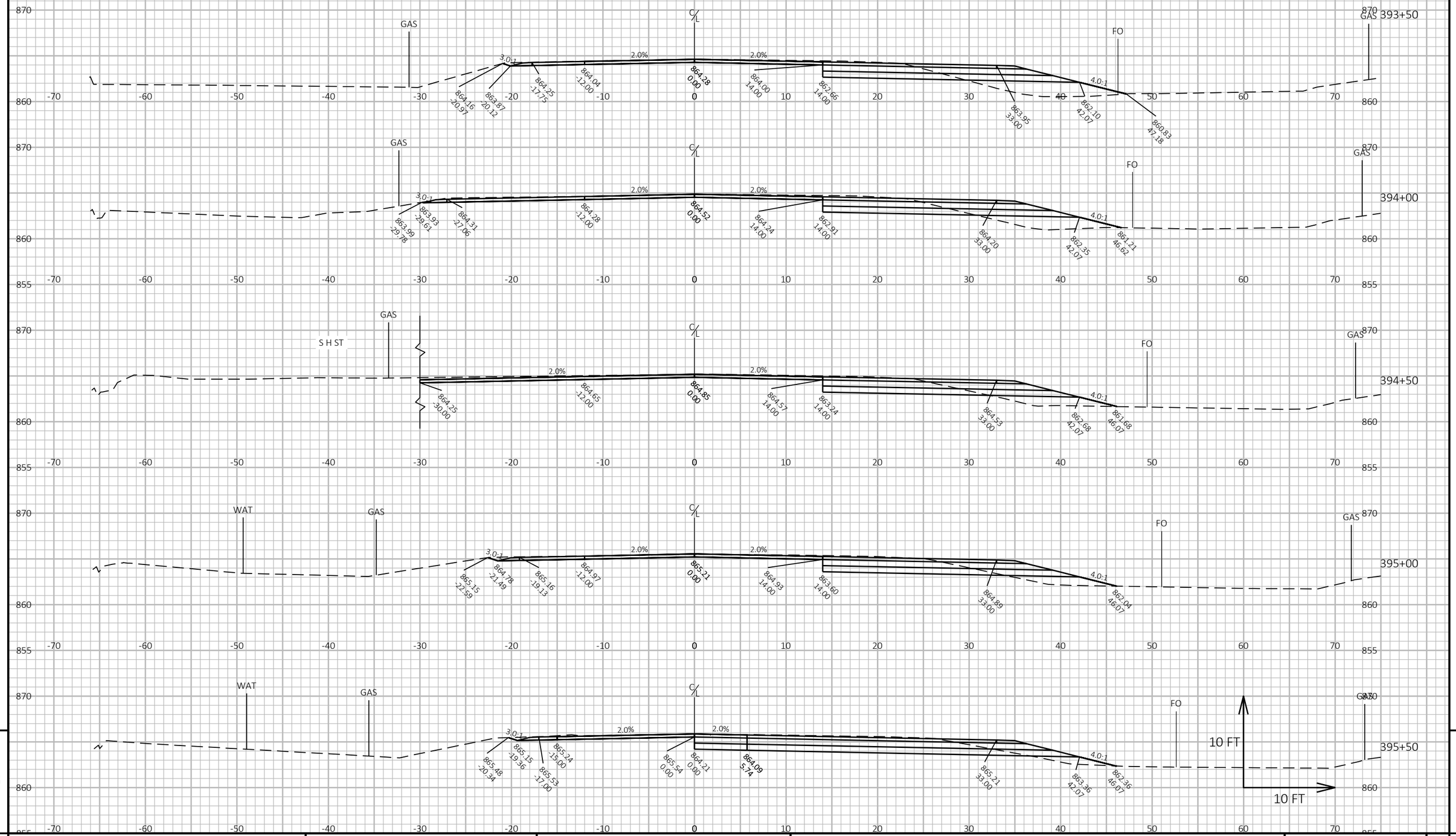
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 261 E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 21

PLOT DATE : 8/1/2024 9:53 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9

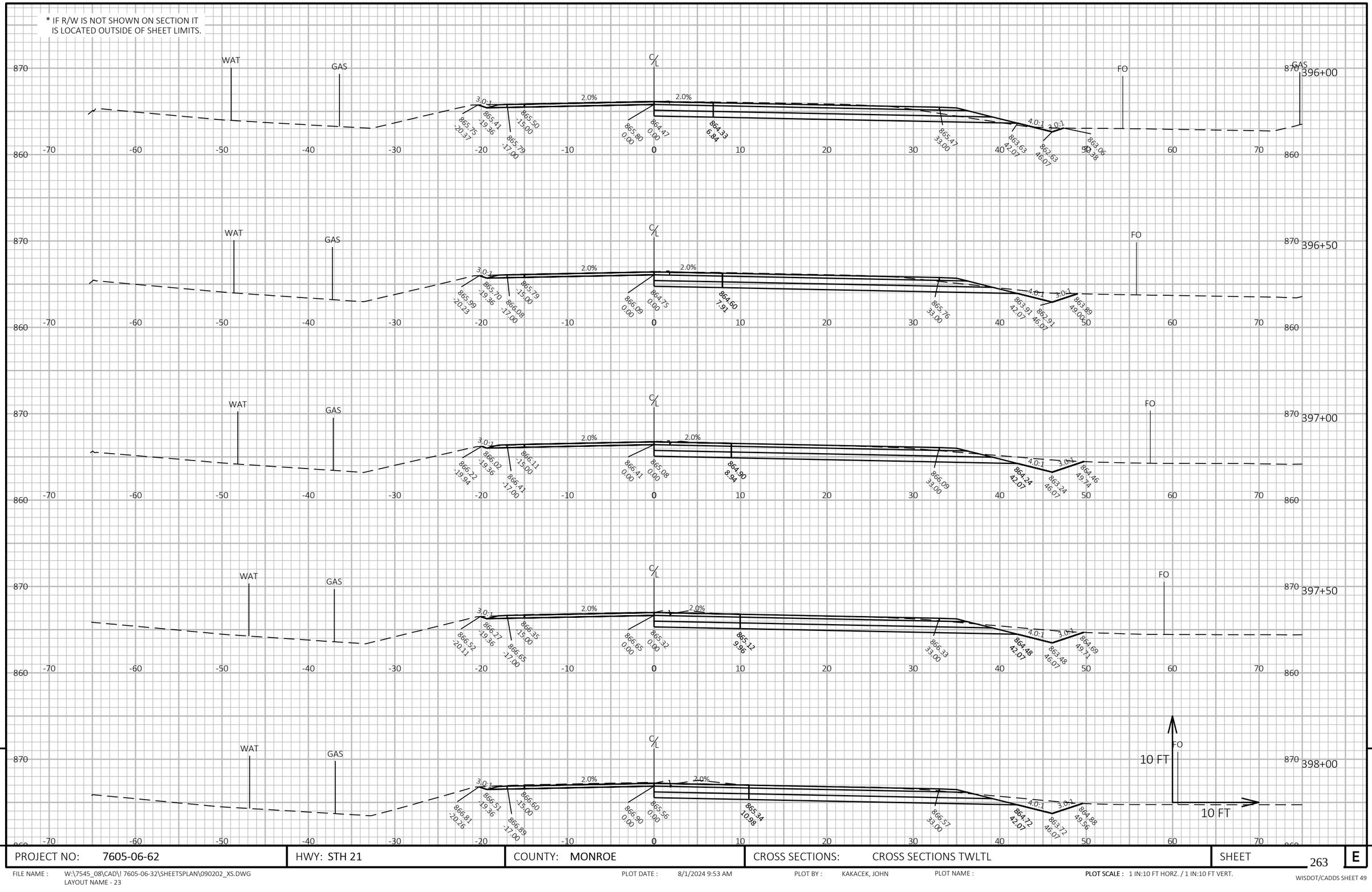
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 262	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 22

PLOT DATE : 8/1/2024 9:53 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



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PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 263	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 23

PLOT DATE : 8/1/2024 9:53 AM

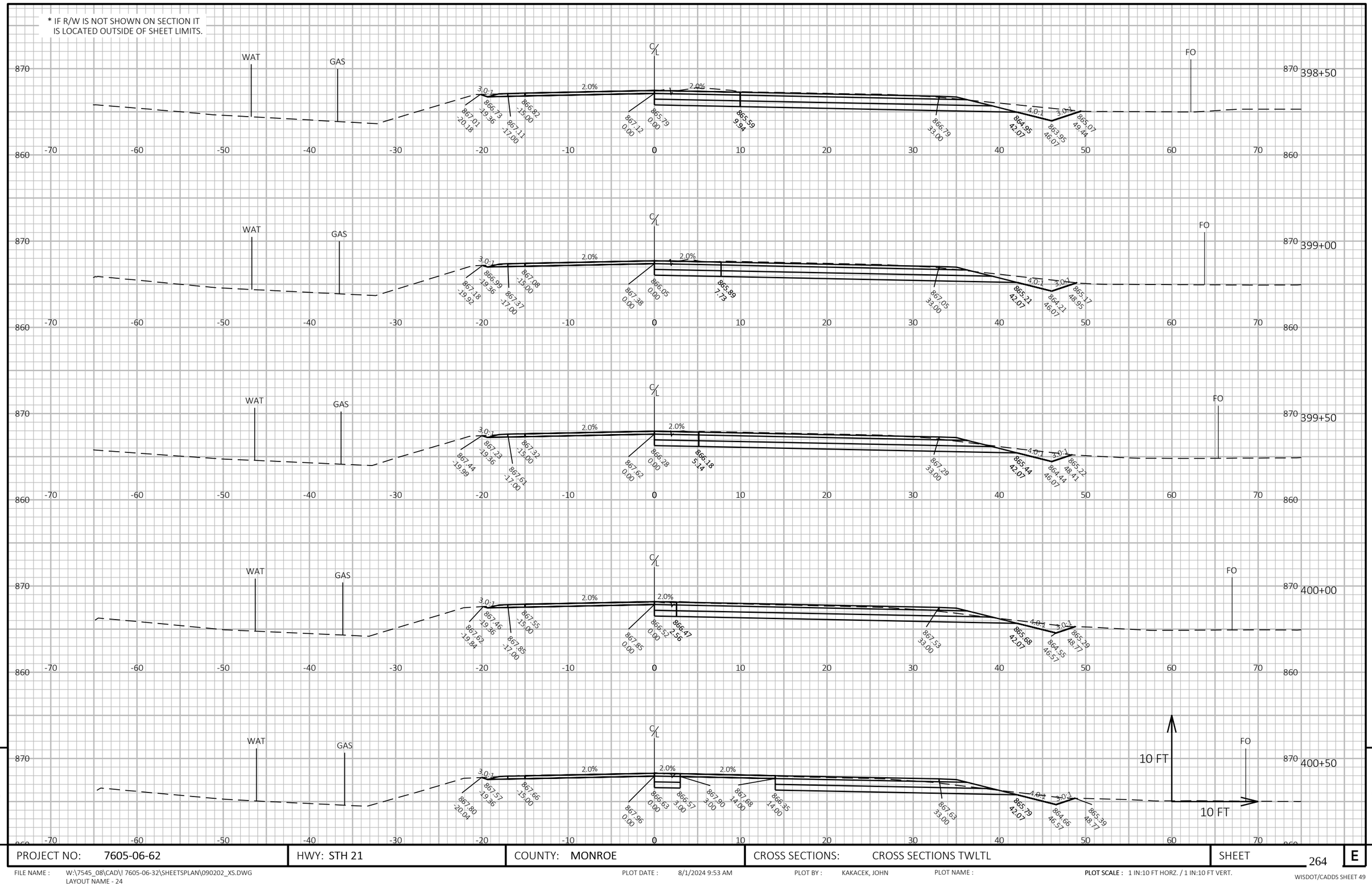
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



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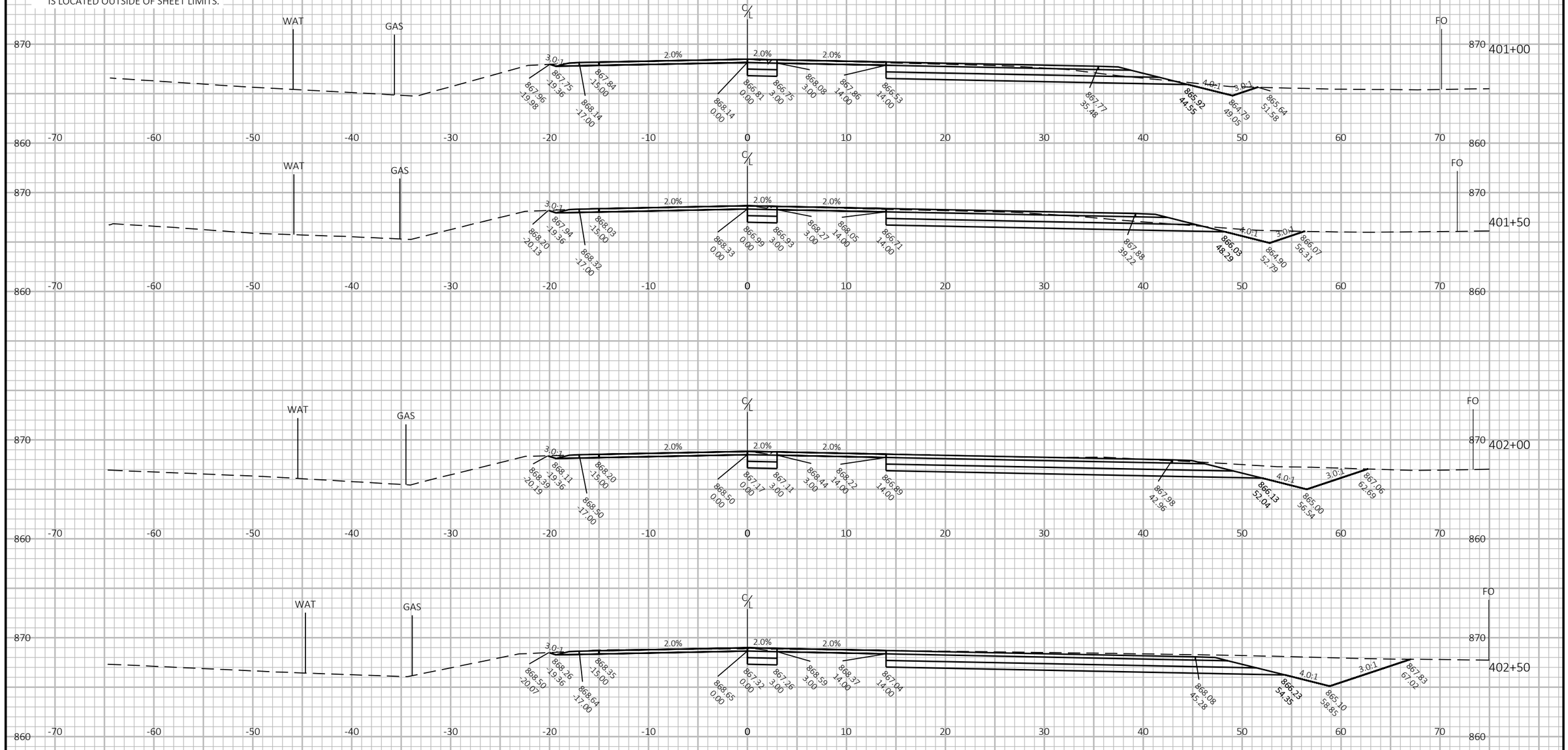
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 264	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 24

PLOT DATE : 8/1/2024 9:53 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



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9

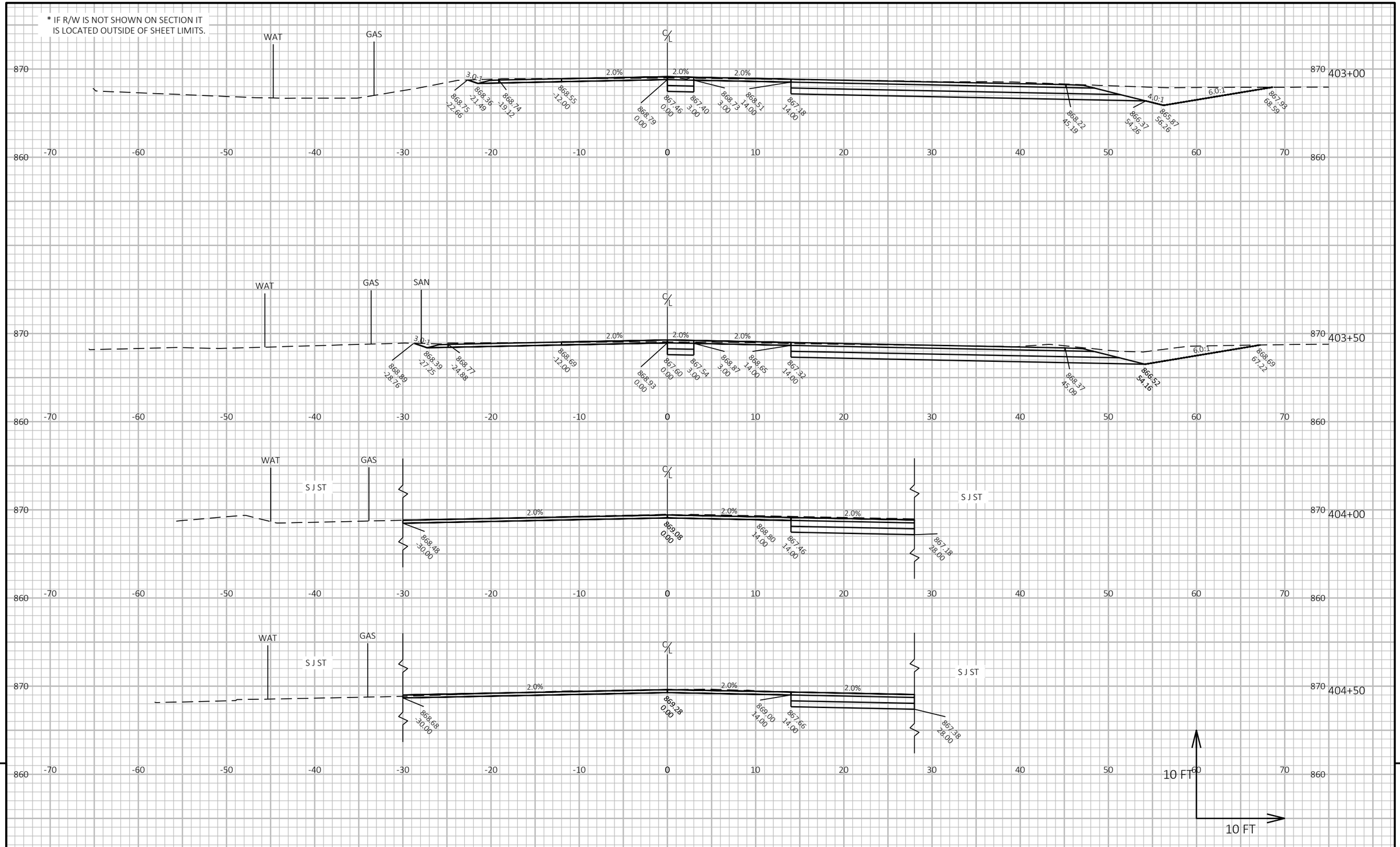
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 265	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 25

PLOT DATE : 8/1/2024 9:54 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



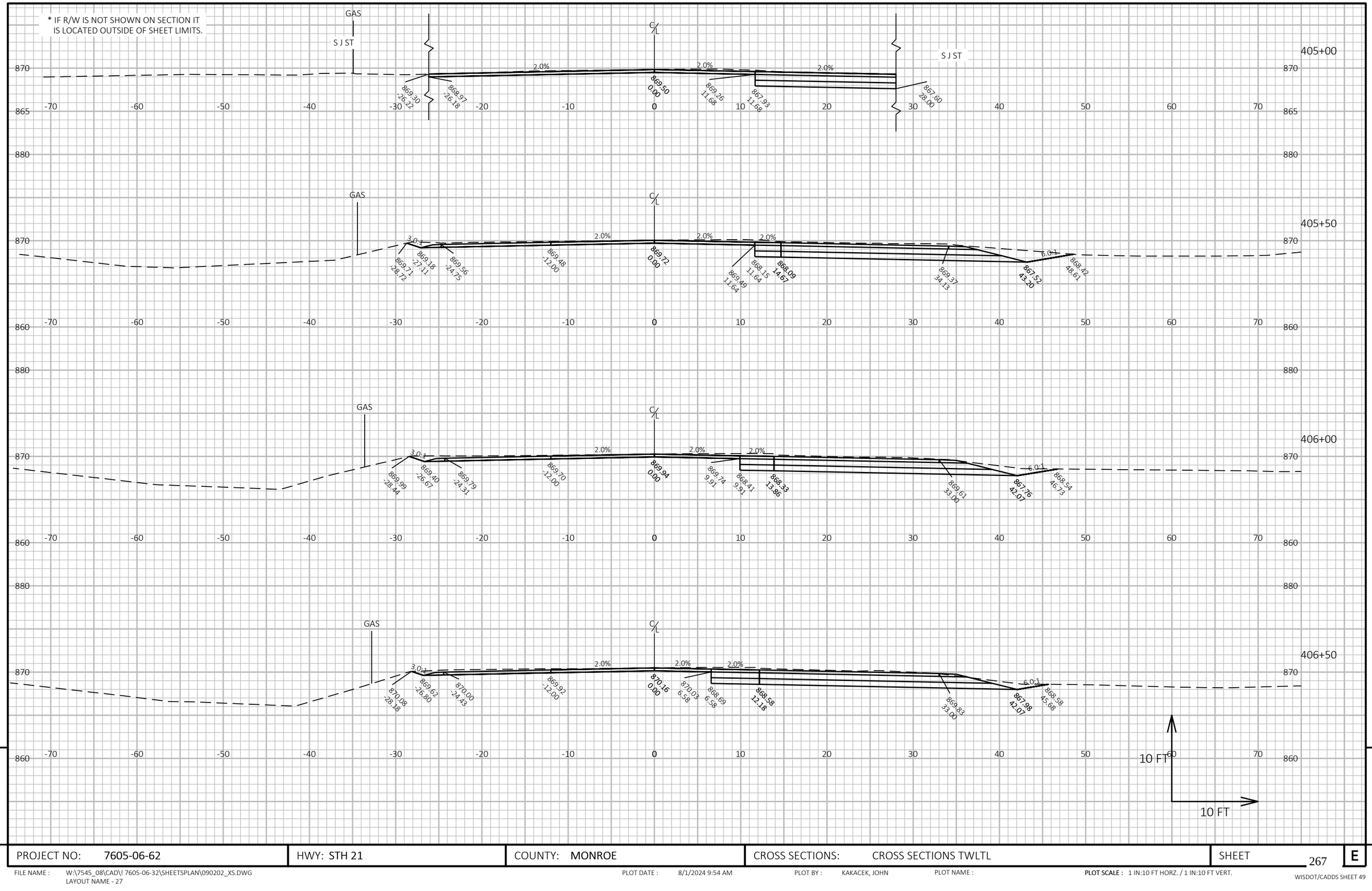
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 266	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 26

PLOT DATE : 8/1/2024 9:54 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9 9

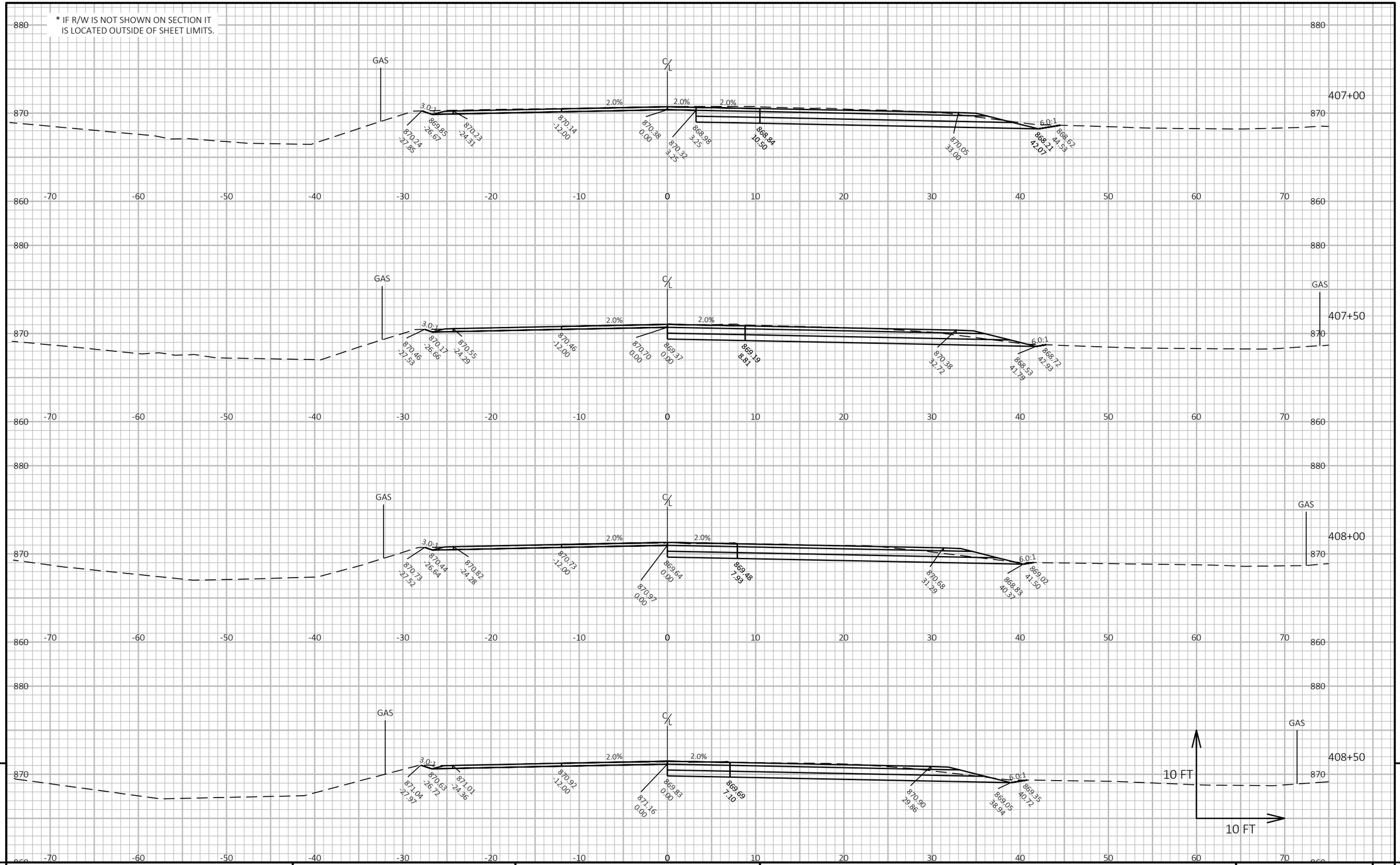
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 267	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 27

PLOT DATE : 8/1/2024 9:54 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



9

9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 268	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 28

PLOT DATE : 8/1/2024 9:54 AM

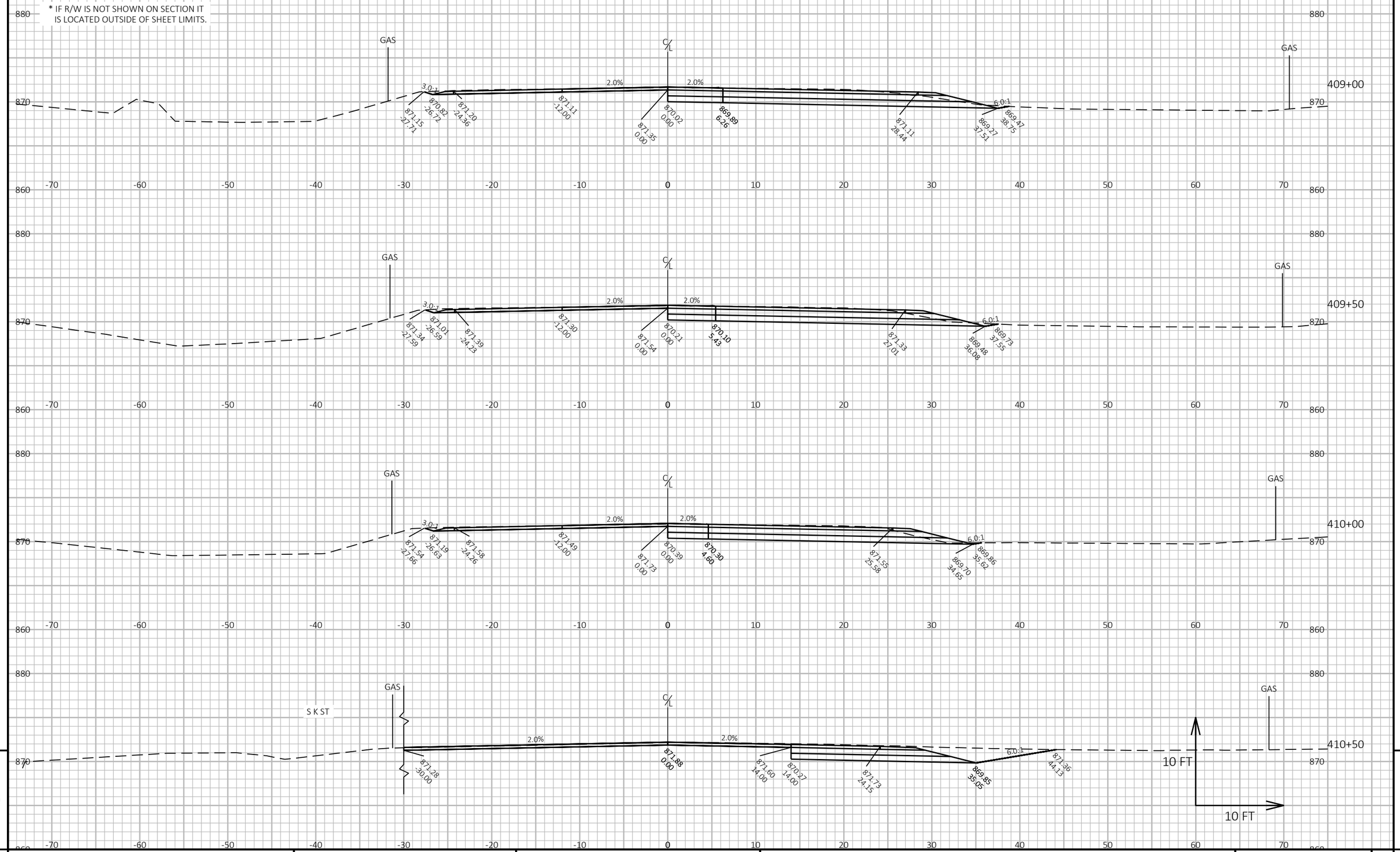
PLOT BY : KAKACEK, JOHN

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



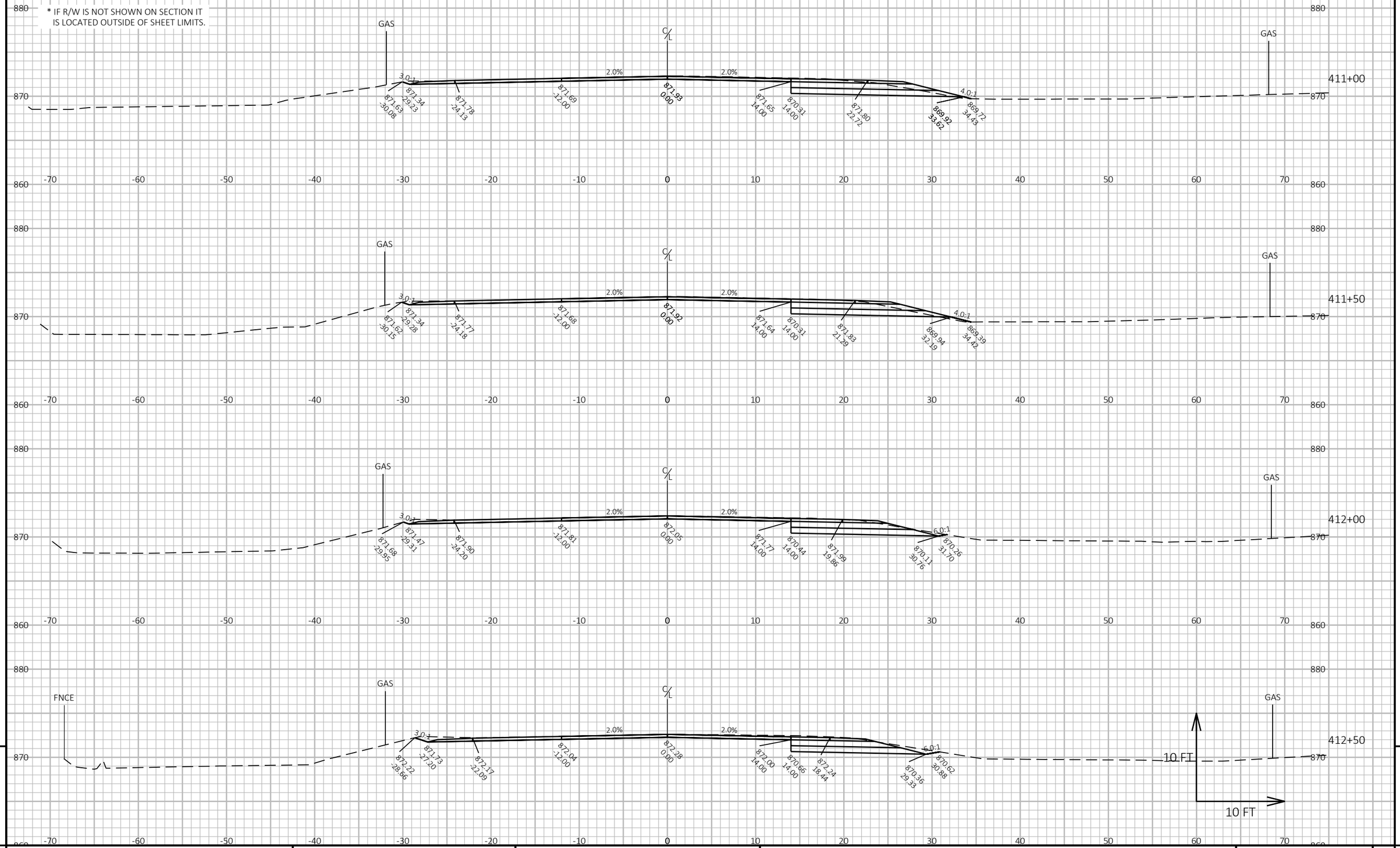
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 269 E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 29

PLOT DATE : 8/1/2024 9:55 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



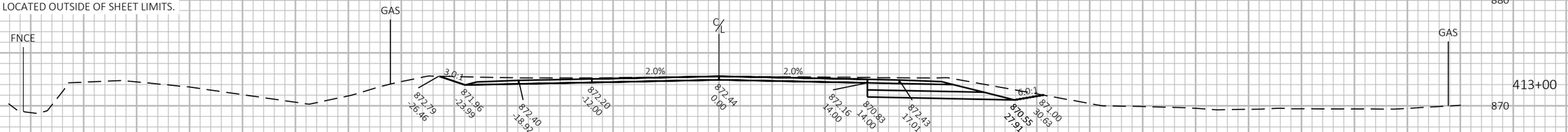
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 270 E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 30

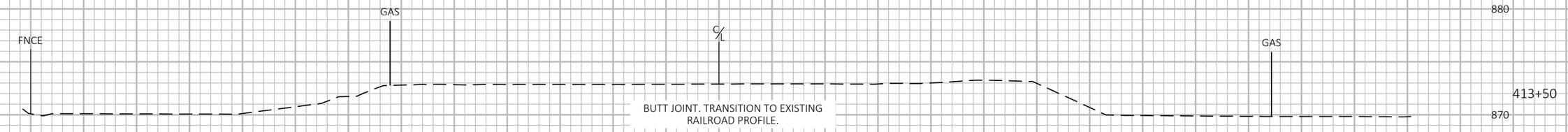
PLOT DATE : 8/1/2024 9:55 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.

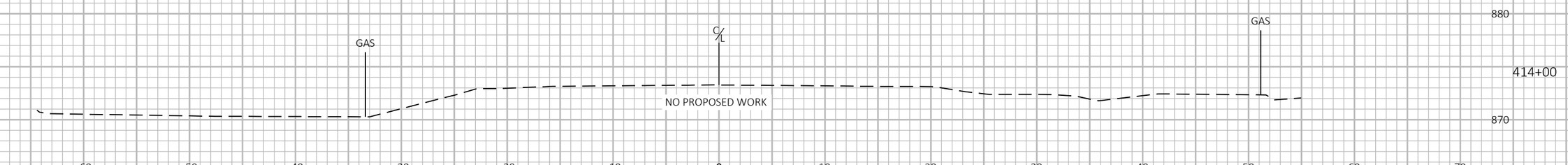


413+00



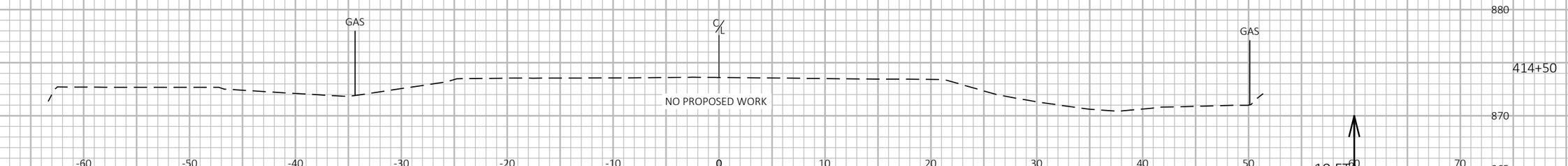
413+50

BUTT JOIN. TRANSITION TO EXISTING RAILROAD PROFILE.



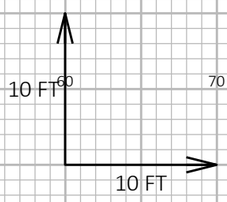
414+00

NO PROPOSED WORK



414+50

NO PROPOSED WORK

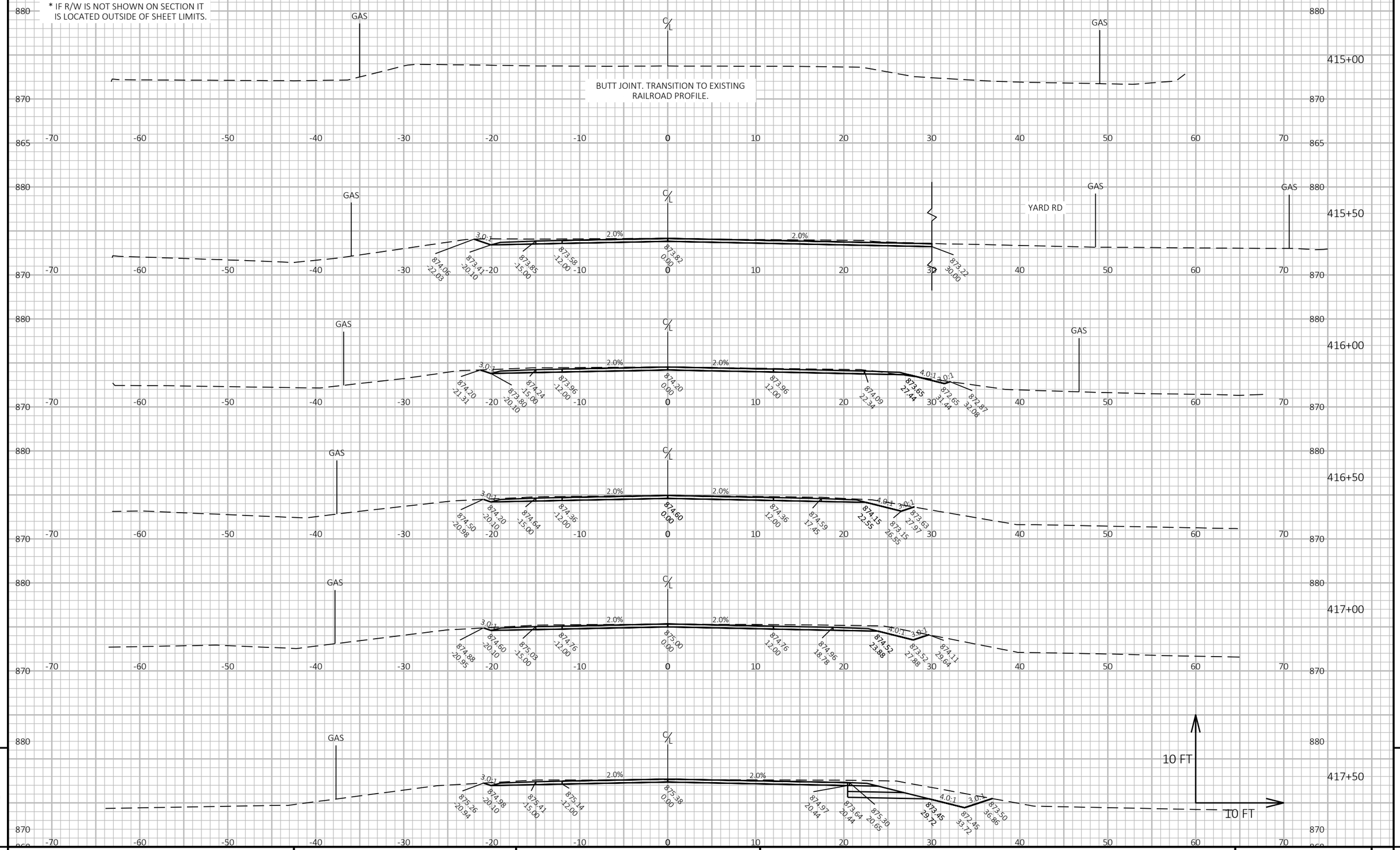


9 9

PROJECT NO: 7605-06-62 | HWY: STH 21 | COUNTY: MONROE | CROSS SECTIONS: CROSS SECTIONS TWLTL | SHEET 271 | E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 31
PLOT DATE : 8/1/2024 9:55 AM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.

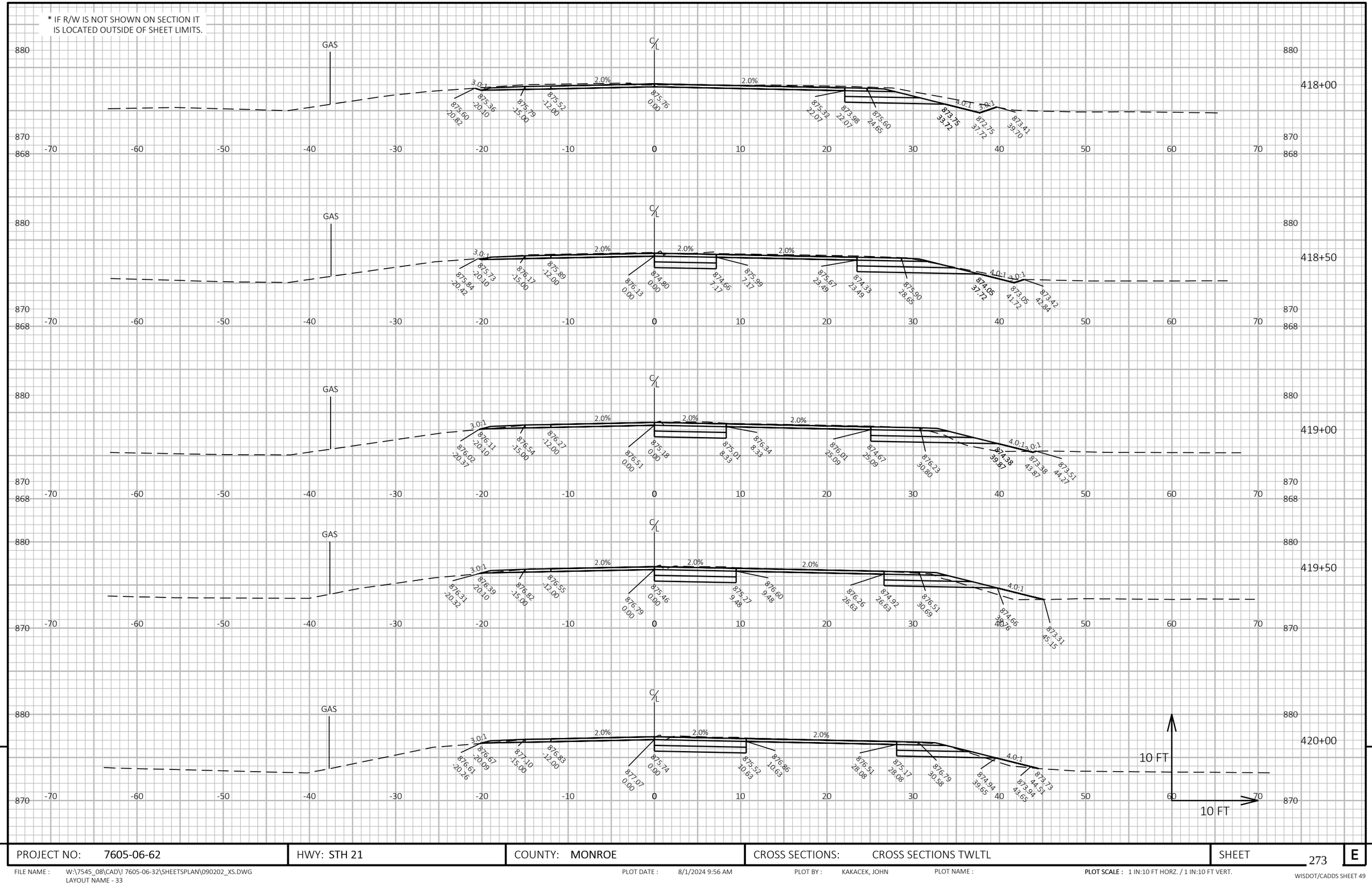


9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 272	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 32
PLOT DATE : 8/1/2024 9:55 AM
PLOT BY : KAKACEK, JOHN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



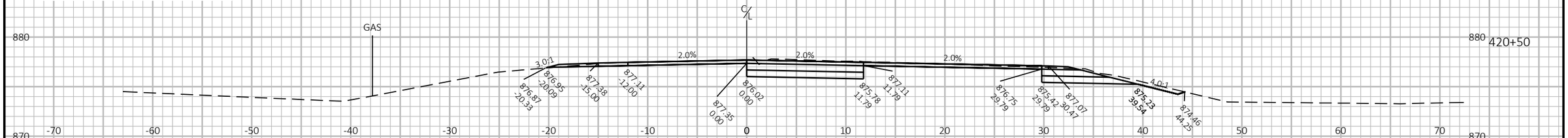
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 273	E

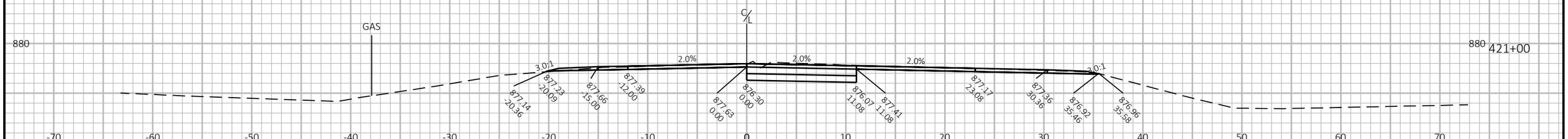
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 33

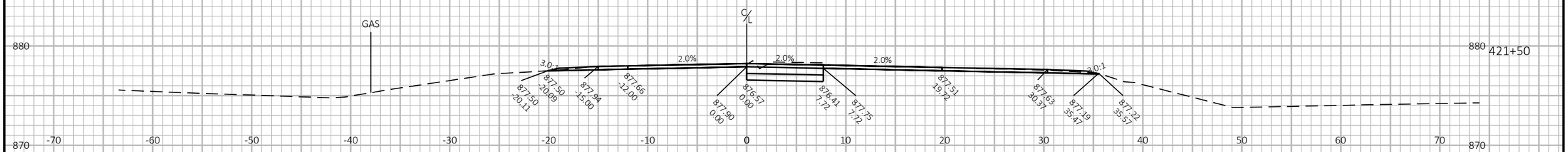
PLOT DATE : 8/1/2024 9:56 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

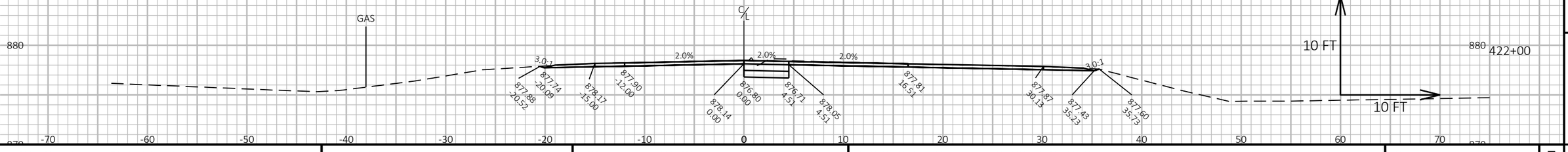
WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.









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9

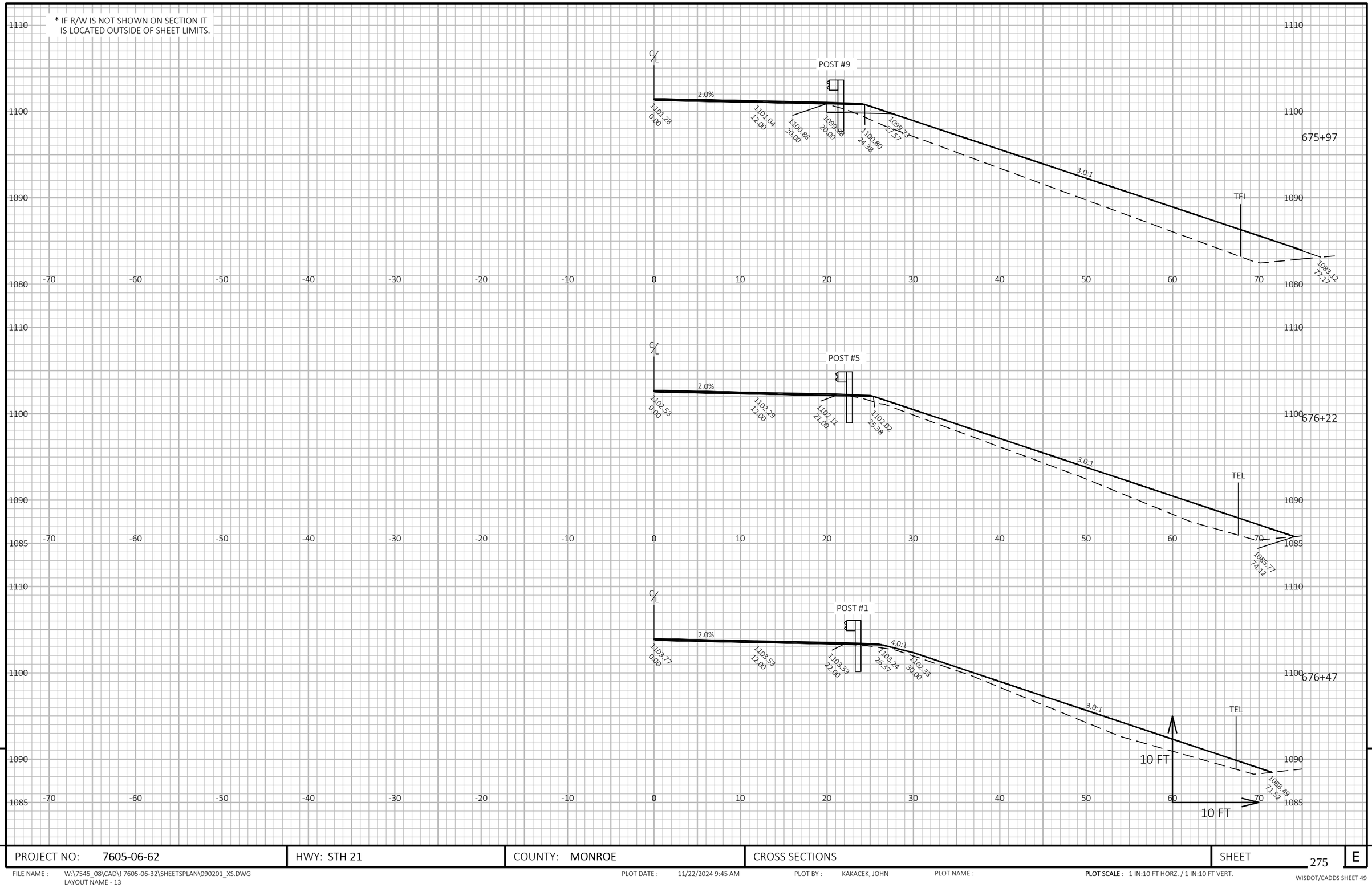
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS: CROSS SECTIONS TWLTL	SHEET 274	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090202_XS.DWG
LAYOUT NAME - 34

PLOT DATE : 8/1/2024 9:56 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



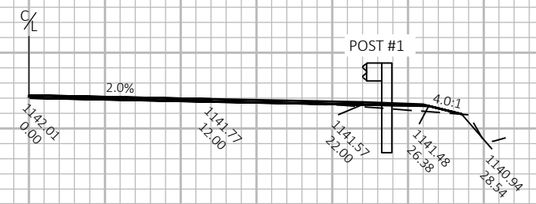
9 9

PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 275	E

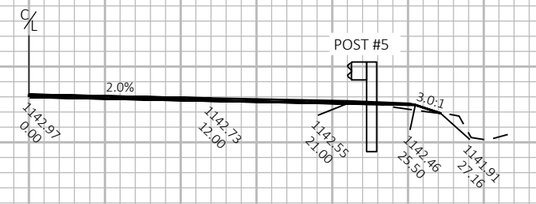
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 13

PLOT DATE : 11/22/2024 9:45 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

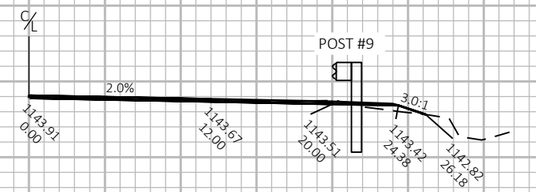
* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



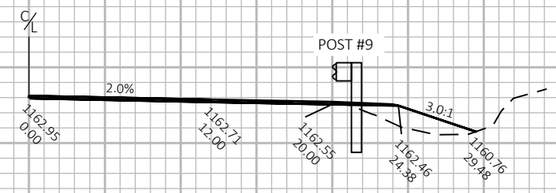
684+50



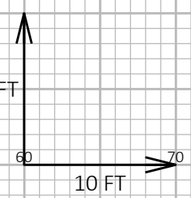
684+74



684+99



689+81



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9

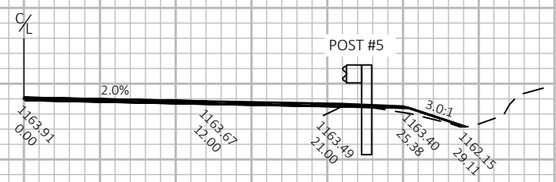
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 276	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 14

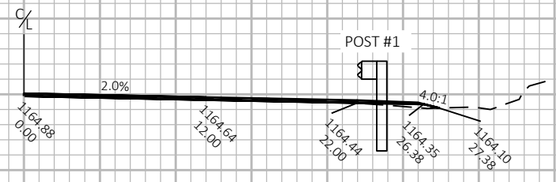
PLOT DATE : 11/22/2024 9:46 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

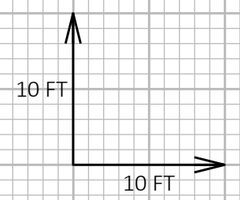
* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



690+06



690+31



9

9

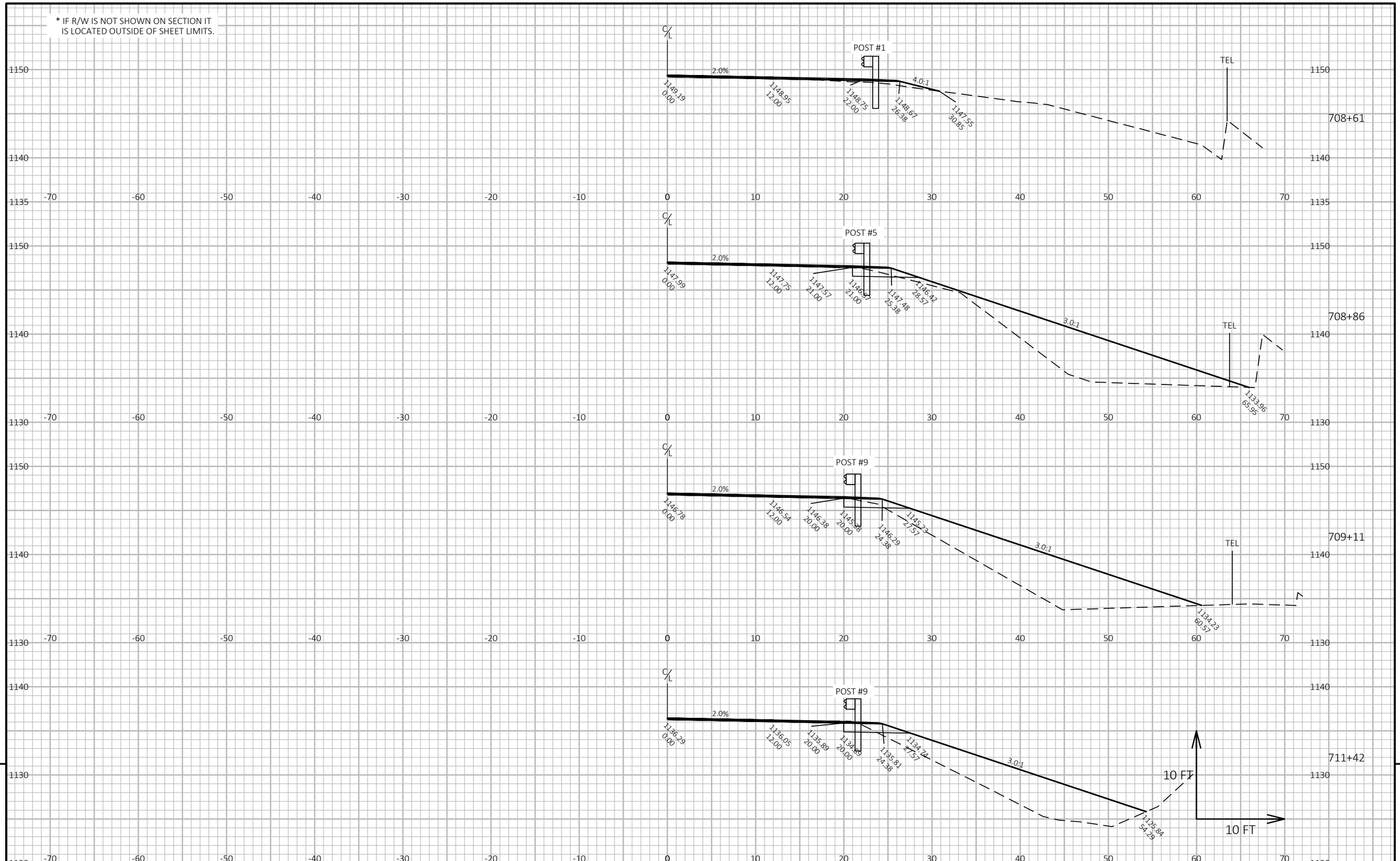
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 277	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 15

PLOT DATE : 11/22/2024 9:46 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



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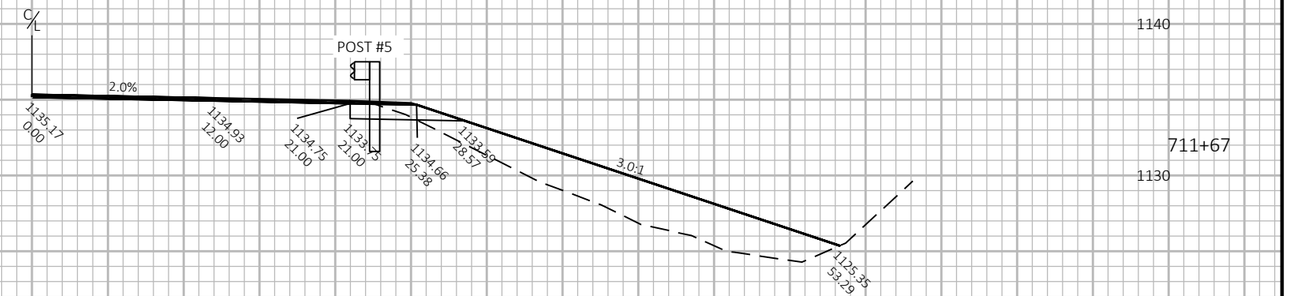
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 278	E

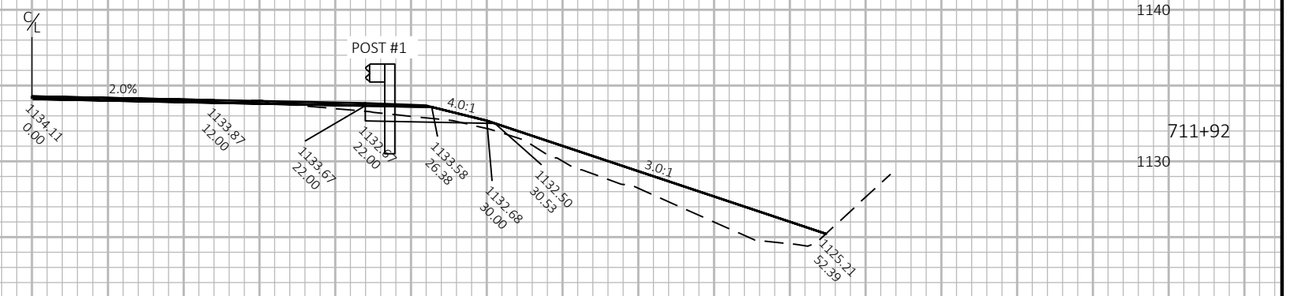
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 16

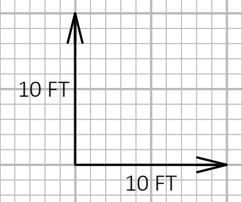
PLOT DATE : 11/22/2024 9:46 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.







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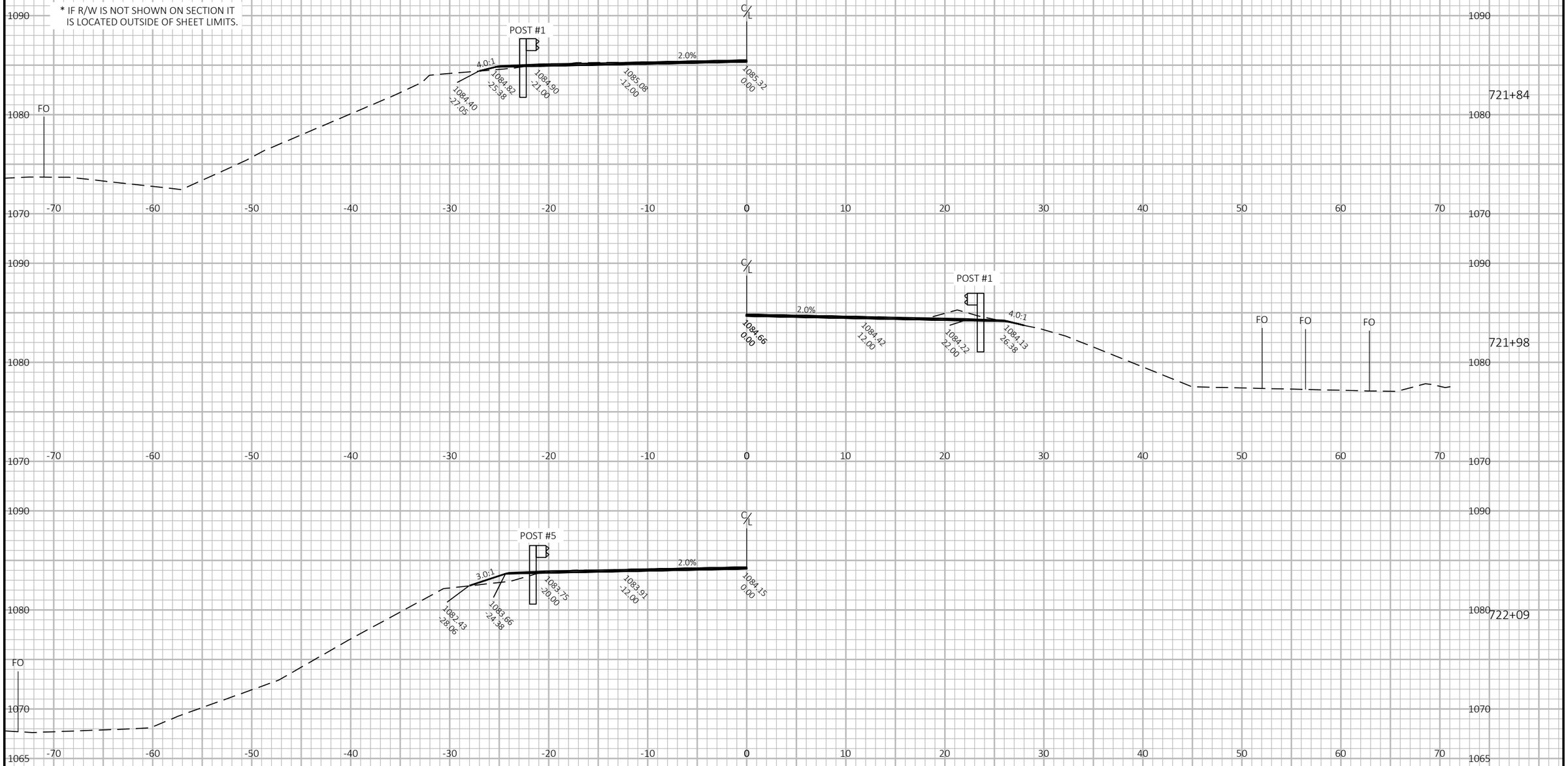
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 279	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 17

PLOT DATE : 11/22/2024 9:46 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



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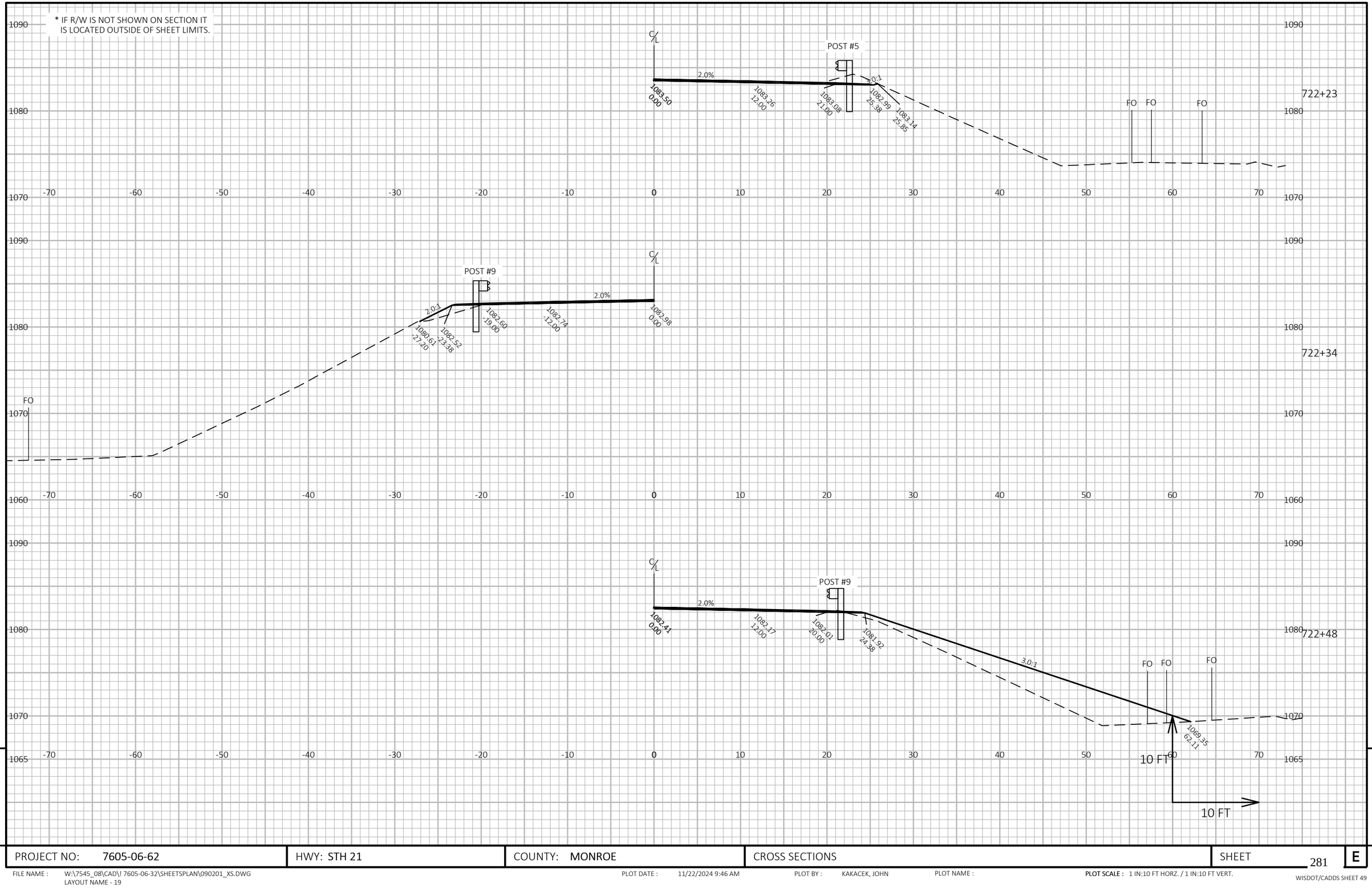
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 280	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 18

PLOT DATE : 11/22/2024 9:46 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



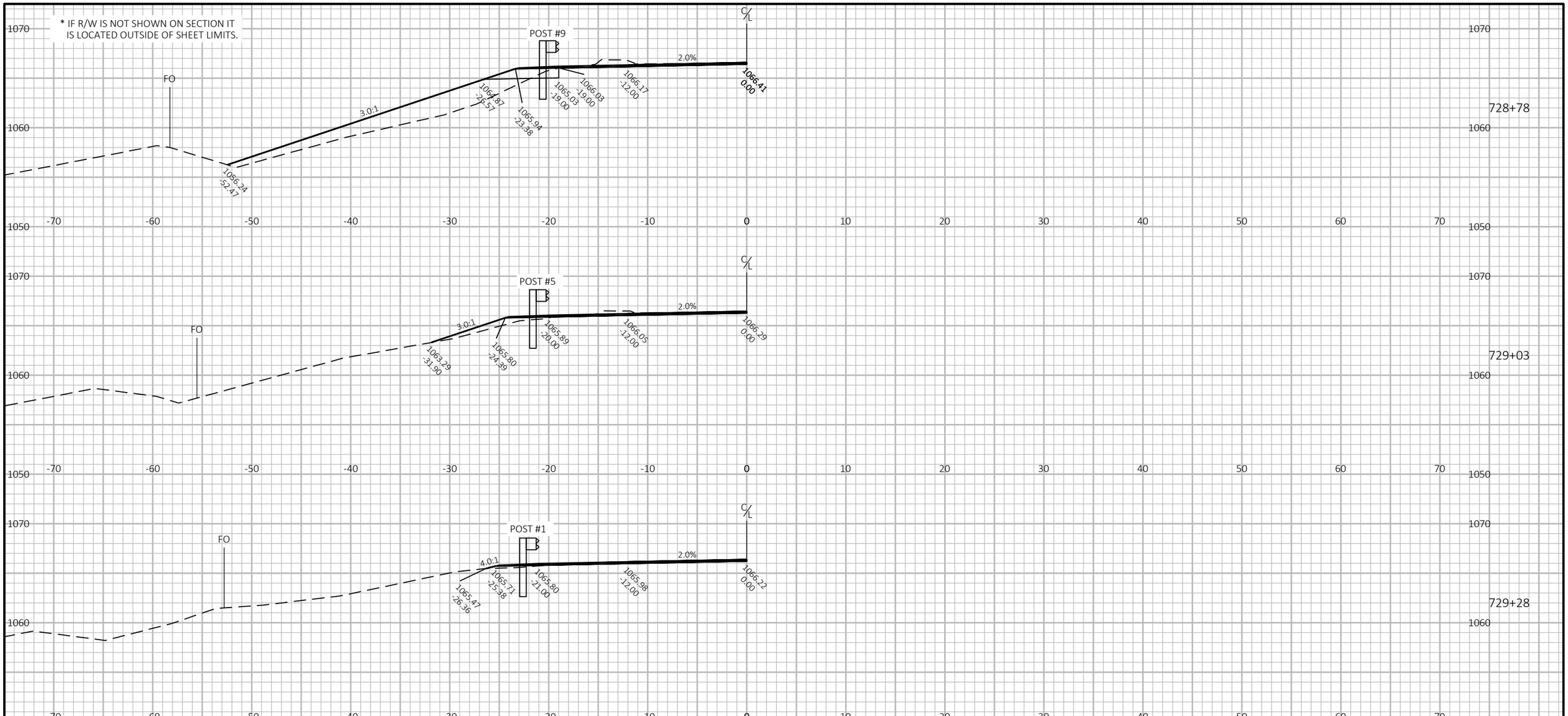
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 281	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 19

PLOT DATE : 11/22/2024 9:46 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



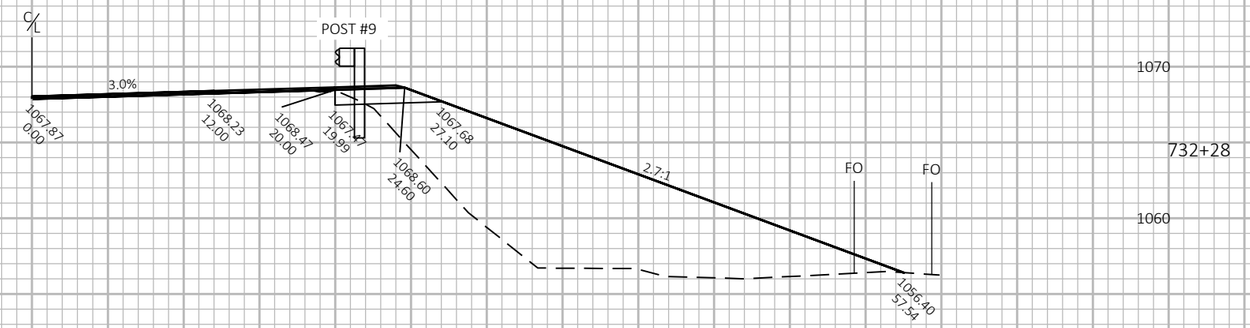
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 282	E

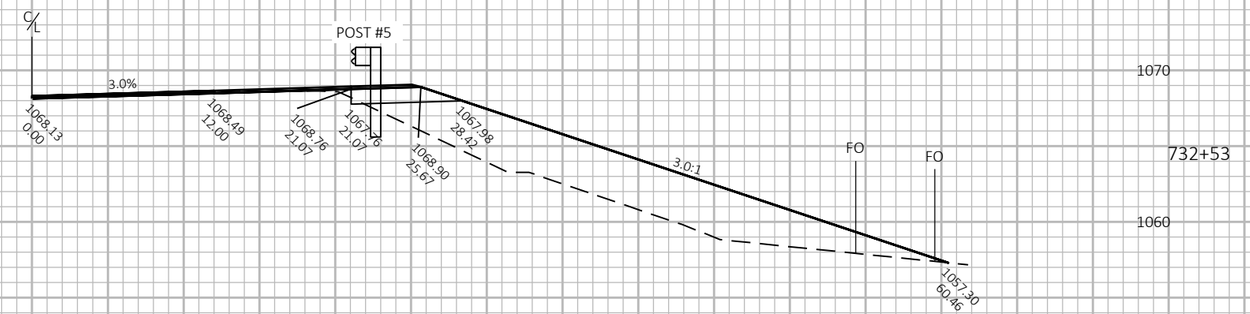
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 20

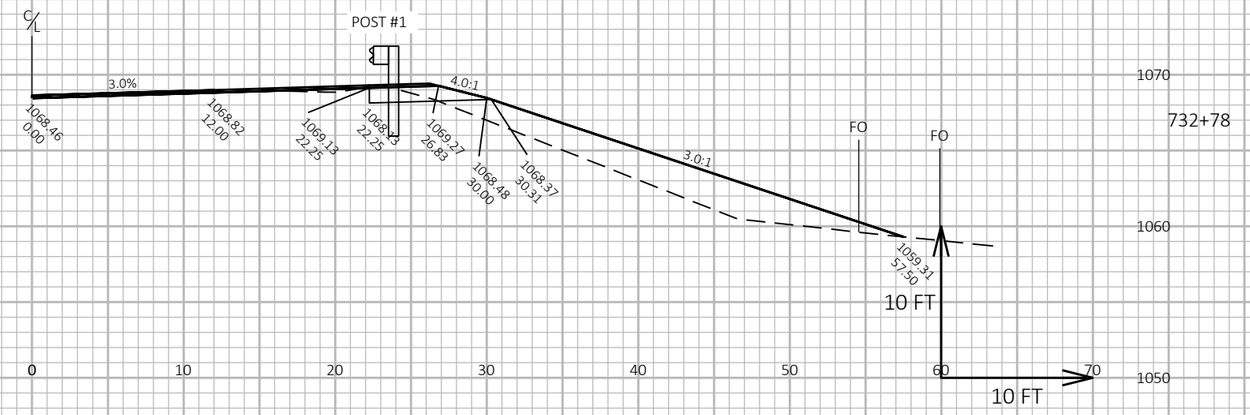
PLOT DATE : 11/22/2024 9:47 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.







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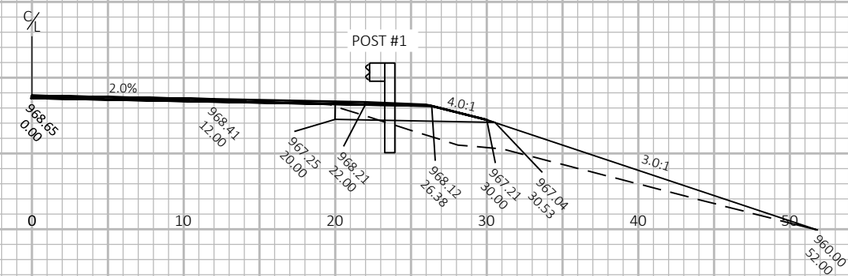
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 283	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 21

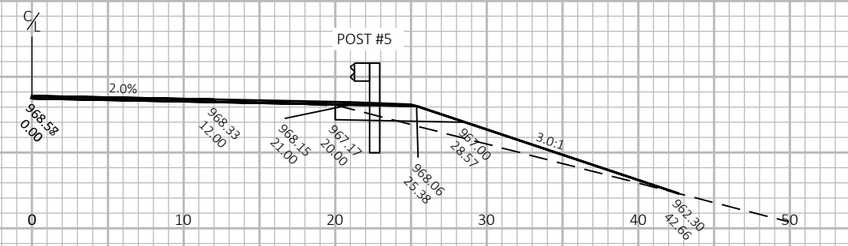
PLOT DATE : 11/22/2024 9:47 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

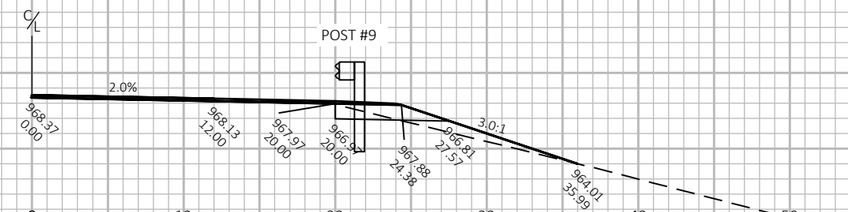
* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



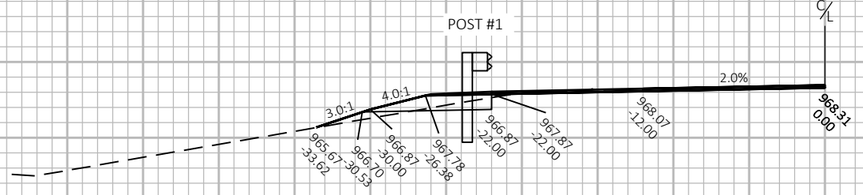
826+72



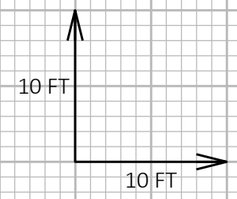
826+97



827+22



827+34



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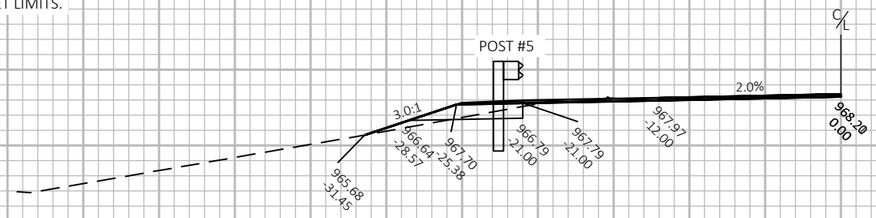
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 284	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 22

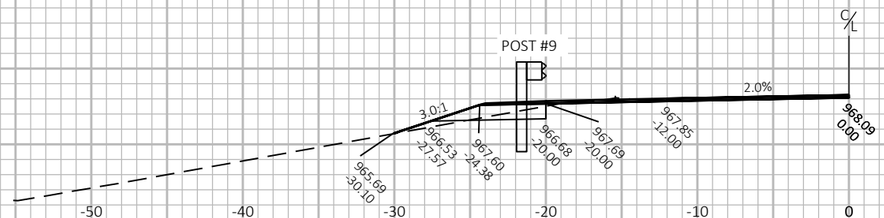
PLOT DATE : 11/22/2024 9:47 AM PLOT BY : KAKACEK, JOHN PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

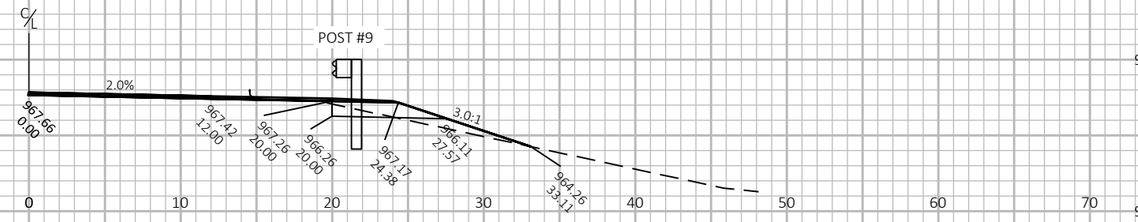
* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.



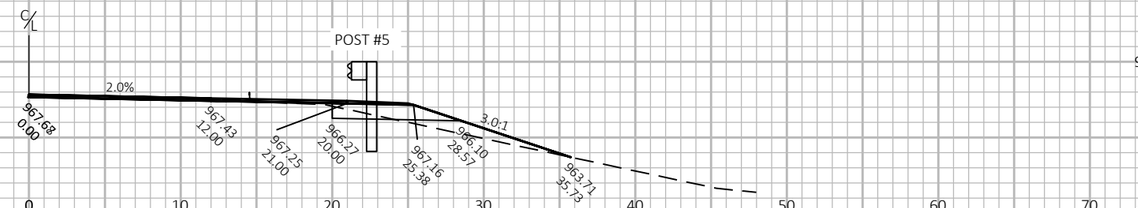
827+59



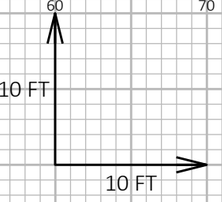
827+84



829+03



829+28



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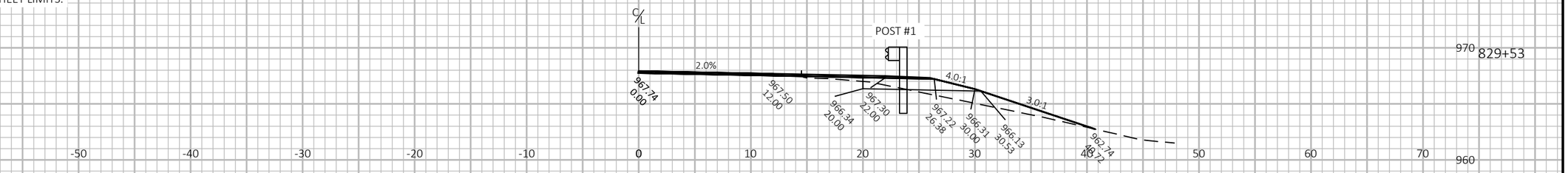
PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 285	E

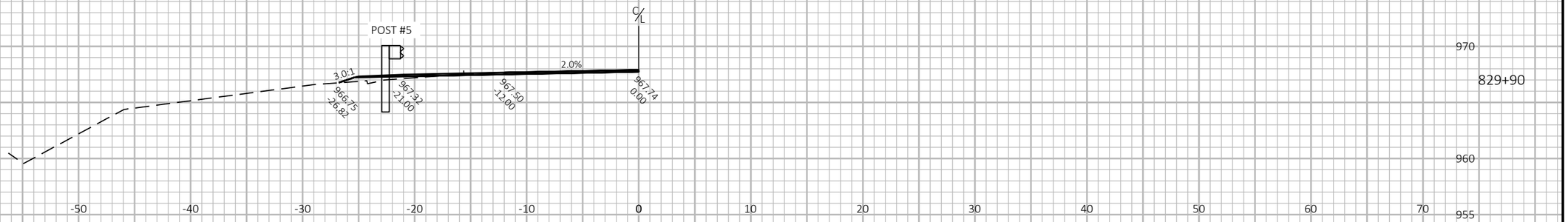
FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 23

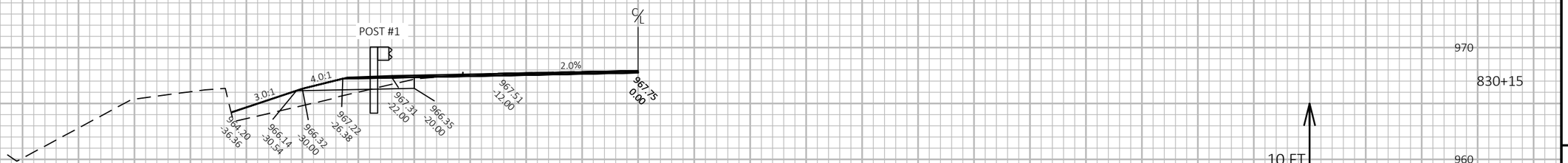
PLOT DATE : 11/22/2024 9:47 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

* IF R/W IS NOT SHOWN ON SECTION IT IS LOCATED OUTSIDE OF SHEET LIMITS.







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PROJECT NO: 7605-06-62	HWY: STH 21	COUNTY: MONROE	CROSS SECTIONS	SHEET 286	E

FILE NAME : W:\7545_08\CAD\! 7605-06-32\SHEETSPLAN\090201_XS.DWG
LAYOUT NAME - 24

PLOT DATE : 11/22/2024 9:47 AM PLOT BY : KAKACEK, JOHN PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov