EAU

MARCH 2022

PROJECT ID: 7220-00-78

WITH: N/A

COUNTY: DUNN

ORDER OF SHEETS

TOTAL SHEETS = 174

39

N

DESIGN DESIGNATION 7220-00-78

A.A.D.T.	2022	=	4,780
A.A.D.T.	2042	=	5,420
D.H.V.		=	T.B.D.
D.D.		=	60/40
T.		=	15.7%
DESIGN SPEED		=	35 MPH/ 45 MPH/ 55 MPH
ESALS		=	1,300,000

CONVENTIONAL SYMBOLS

PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	ROCK
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	LABEL
EXISTING RIGHT OF WAY		GRADE ELEVATION	95.36
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE	300'EB'	ELECTRIC	E
EXISTING CULVERT		FIBER OPTIC	FO
PROPOSED CULVERT (Box or Pipe)		GAS	G
COMBUSTIBLE FLUIDS	CAUTION	SANITARY SEWER	SAN
		STORM SEWER	SS
		TELEPHONE	T
MARSH AREA		WATER	W
		UTILITY PEDESTAL	
		POWER POLE	
WOODED OR SHRUB AREA		TELEPHONE POLE	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

DURAND - MENOMONIE

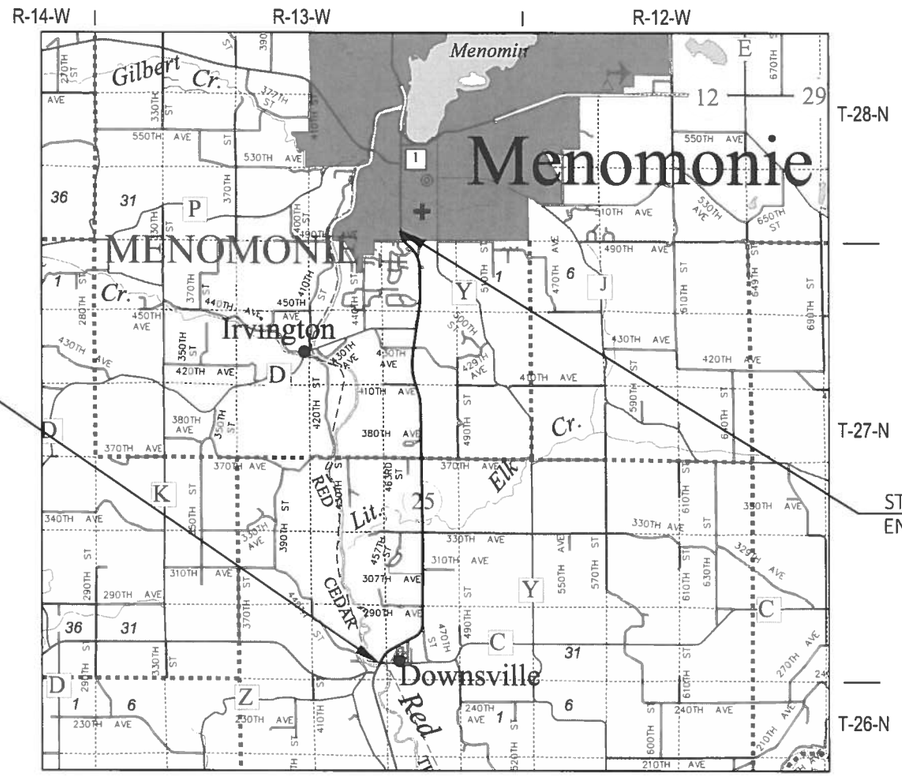
RED CEDAR RIVER to 490TH STREET

STH 25

DUNN COUNTY

STATE PROJECT NUMBER
7220-00-78

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7220-00-78	WISC 2022255	1



LAYOUT

SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 6.273 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), DUNN 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

AECOM

WISCONSIN
ZACHARY R. LARSON
E-43030
MADISON
WI
PROFESSIONAL ENGINEER

11/1/2021 (Date)

(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	WISDOT
Designer	AECOM
Project Manager	CHAD SCHROEDER
Regional Examiner	NW REGION
Regional Supervisor	TYLER RONGSTAD

APPROVED FOR THE DEPARTMENT

DATE 11/1/21 (Signature)

E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\010101 TI.DWG

PLOT DATE : 9/16/2021 8:09 AM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

GENERAL NOTES

SALVAGED TOPSOIL, SEEDING, AND FERTILIZER HAVE BEEN COMPUTED BY A DIRECT MEASUREMENT ON THE CROSS SECTIONS PLUS FIVE (5) FEET BEYOND THE TOE OF SLOPE.

RADII, ELEVATIONS, AND DIMENSIONS ARE GIVEN AT THE PAVEMENT EDGES, UNLESS OTHERWISE NOTED IN THE PLANS.

THE CONTRACTOR SHALL NOT OPERATE BEYOND THE SLOPE INTERCEPTS AS SHOWN IN THE PLANS WHEN ADJACENT TO WETLANDS OR ENVIRONMENTALLY SENSITIVE AREAS.

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

EXISTING AS-BUILT SUPERELEVATIONS OF CURVE INFORMATION IN PLAN ARE FOR INFORMATION ONLY. EXISTING SUPERELEVATIONS ARE TO BE MAINTAINED WITH MILLING AND PAVING OPERATIONS.

ADJUST TRAFFIC CONTROL DEVICE LOCATIONS TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

EROSION CONTROL ITEMS SHOWN IN THE MISCELLANEOUS QUANTITIES ARE AT SUGGESTED LOCATIONS. THE ENGINEER MAY MODIFY LOCATIONS TO FIT FIELD CONDITIONS.

WETLANDS, WATERWAYS, AND OTHER ENVIRONMENTALLY SENSITIVE AREAS SHALL BE PROTECTED AT ALL TIMES. DO NOT STORE EQUIPMENT OR MATERIALS NEAR THESE SITES UNLESS APPROVED BY THE ENGINEER.

THE BASE AGGREGATE DENSE (BAD) CALCULATIONS ARE BASED ON A UNIT WEIGHT OF 2.1 TONS/CY FOR 3/4-INCH BAD, AND 2.0 TONS/CY FOR 1 1/4-INCH BAD.

THE HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON A UNIT WEIGHT OF 112 LBS/SY/IN OF DEPTH. THE TACK COAT CALCULATIONS ARE BASED ON AN APPLICATION RATE OF 0.07 GAL/SY FOR MILLED SURFACES AND 0.05 GAL/SY FOR NEW HMA SURFACES.

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

WISDOT

WisDOT DESIGN PROJECT MANAGER
CHAD SCHROEDER
2101 WRIGHT STREET
MADISON, WI 53704
PHONE: 608-246-7935
EMAIL: chada.schroeder@dot.wi.gov

WISDNR

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
(NORTHERN REGION)
AMY CRONK
810 W MAPLE STREET
SPOONER, WI 54801
PHONE: (715) 635-4229
EMAIL: amy.cronk@wisconsin.gov

DESIGN CONTACT (ROADWAY)

AECOM
ZACH LARSON
1350 DEMING WAY, STE. 100
MIDDLETON, WI 53562
PHONE: (608) 828-8165
EMAIL: zachary.larson@aecom.com

COMMUNICATIONS

24-7 TELCOM INC
BRADLEY SCHMIDTKNECHT
5808 OLD MILL PLAZA
EAU CLAIRE, WI 54703
PHONE: (715) 231-0504
EMAIL: brads@wwt.net

WEST WISCONSIN TELCOM
BRADLEY SCHMIDTKNECHT
5808 OLD MILL PLAZA
EAU CLAIRE, WI 54703
PHONE: (715) 231-0504
EMAIL: brads@wwt.coop

AT&T WISCONSIN
RICK PODOLAK
4TH FLOOR, 304 S DEWEY ST
EAU CLAIRE, WI 54701
PHONE: (715) 839-5565
EMAIL: rp4514@att.com

CHARTER COMMUNICATIONS
RYAN LUCKEN
1201 MCCANN DR
ALTOONA, WI 54720
PHONE: (715) 831-8940
EMAIL: ryan.lucken@charter.com

ELECTRICITY

XCEL ENERGY - ELECTRICITY - TRANSMISSION
MITCHELL DIENGER
414 NICOLLET MALL 5TH FLOOR
MINNEAPOLIS, MN 55401
PHONE: (612) 321-3109
EMAIL: mitchell.a.dienger@xcelenergy.com

XCEL ENERGY - ELECTRICITY
MEGAN BOLDIG
320 HELLER ROAD
MENOMONIE, WI 54751
PHONE: (715) 308-6211
EMAIL: megan.m.boldig@xcelenergy.com

DUNN ENERGY COOPERATIVE - ELECTRICITY
MIKE ANDRASCHKO
N5725 600TH ST
P.O. BOX 220
MENOMONIE, WI 54751-0220
PHONE: (715) 232-6240
EMAIL: mandra@dunnenergy.com

SEWER & WATER

DOWNSVILLE SANITARY DISTRICT NO 1 - SEWER
MIKE SPIRL
P.O. BOX 37
DOWNSVILLE, WI 54735-0037
PHONE: (715) 664-8622
EMAIL: dvlsandist@wwt.net

CITY OF MENOMONIE - SEWER & WATER
RANDY EIDE
800 WILSON AVE
MENOMONIE, WI 54751
PHONE: (715) 232-2207
EMAIL: reide@menomonie-wi.gov

GAS/PETROLEUM

XCEL ENERGY - GAS/PETROLEUM
BRADY GARDOW
1414 W HAMILTON AVE
P.O. BOX 8
EAU CLAIRE, WI 54702-0008
PHONE: (715) 577-0445
EMAIL: brady.p.gardow@xcelenergy.com

MAGELLAN PIPELINE - GAS/PETROLEUM
CLAIR MADSEN
2728 PATTON RD
ST PAUL, MN 55113
PHONE: (651) 633-1519

ORDER OF SECTION 2 SHEETS

3.25-INCH HMA PAVEMENT

LAYER	THICKNESS	BID ITEM
TOP	1.5-INCHES	5MT 58-34V
BOTTOM	1.75-INCHES	4MT 58-34V

5.0-INCH ASPHALTIC SURFACE
(MUST MEET 5MT 58-34V OR HIGHER)

LAYER	THICKNESS	BID ITEM
TOP	2.0-INCHES	ASPHALTIC SURFACE
BOTTOM	3.0-INCHES	ASPHALTIC SURFACE

6.0-INCH HMA PAVEMENT

LAYER	THICKNESS	BID ITEM
TOP	1.5-INCHES	5MT 58-34V
MIDDLE	1.75-INCHES	5MT 58-34V
BOTTOM	2.75-INCHES	4MT 58-34V

CONVENTIONAL ABBREVIATIONS

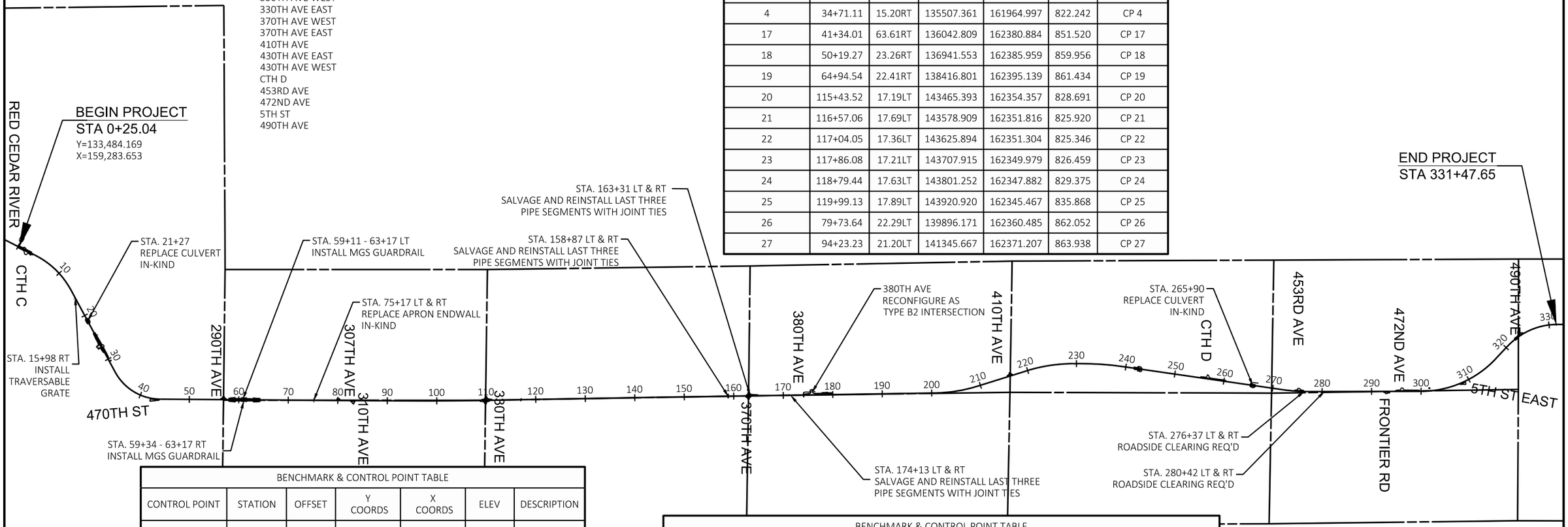
AHEAD	AH
APRON ENDWALL	AEW
BACK	BK
CENTERLINE	C/L
CONCRETE	CONC
CULVERT PIPE CORRUGATED STEEL	CPCS
CULVERT PIPE REINFORCED CONCRETE	CPRC
COUNTY TRUNK HIGHWAY	CTH
EXISTING	EX
GAS VALVE	GV
GRID NORTH	GN
LEFT	LT
POINT OF TANGENCY	PT
PROPERTY LINE	PL
REFERENCE LINE	R/L
POINT OF CURVATURE	PC
POINT OF INTERSECTION	PI
RIGHT	RT
RIGHT OF WAY	R/W
SEPTIC VENT	SEPV
SQUARE FEET	SF
STATE TRUNK HIGHWAY	STH
STATION	STA
TELEPHONE PEDESTAL	TP
VOLUME	V

2

MILL AND OVERLAY SIDEROADS:
CTH C WEST
CTH C EAST
460TH ST
TOWN OF DUNN TOWNHALL ENTRANCE
470TH ST
290TH AVE
307TH AVE
310TH AVE
330TH AVE WEST
330TH AVE EAST
370TH AVE WEST
370TH AVE EAST
410TH AVE
430TH AVE EAST
430TH AVE WEST
CTH D
453RD AVE
472ND AVE
5TH ST
490TH AVE

BENCHMARK & CONTROL POINT TABLE						
CONTROL POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEV	DESCRIPTION
1	6+25.72	15.14LT	134020.843	159556.463	754.354	CP 1
2	13+58.04	18.99LT	134520.948	160093.595	753.394	CP 2
3	27+35.34	41.74RT	135121.505	161335.166	786.286	CP 3
4	34+71.11	15.20RT	135507.361	161964.997	822.242	CP 4
17	41+34.01	63.61RT	136042.809	162380.884	851.520	CP 17
18	50+19.27	23.26RT	136941.553	162385.959	859.956	CP 18
19	64+94.54	22.41RT	138416.801	162395.139	861.434	CP 19
20	115+43.52	17.19LT	143465.393	162354.357	828.691	CP 20
21	116+57.06	17.69LT	143578.909	162351.816	825.920	CP 21
22	117+04.05	17.36LT	143625.894	162351.304	825.346	CP 22
23	117+86.08	17.21LT	143707.915	162349.979	826.459	CP 23
24	118+79.44	17.63LT	143801.252	162347.882	829.375	CP 24
25	119+99.13	17.89LT	143920.920	162345.467	835.868	CP 25
26	79+73.64	22.29LT	139896.171	162360.485	862.052	CP 26
27	94+23.23	21.20LT	141345.667	162371.207	863.938	CP 27

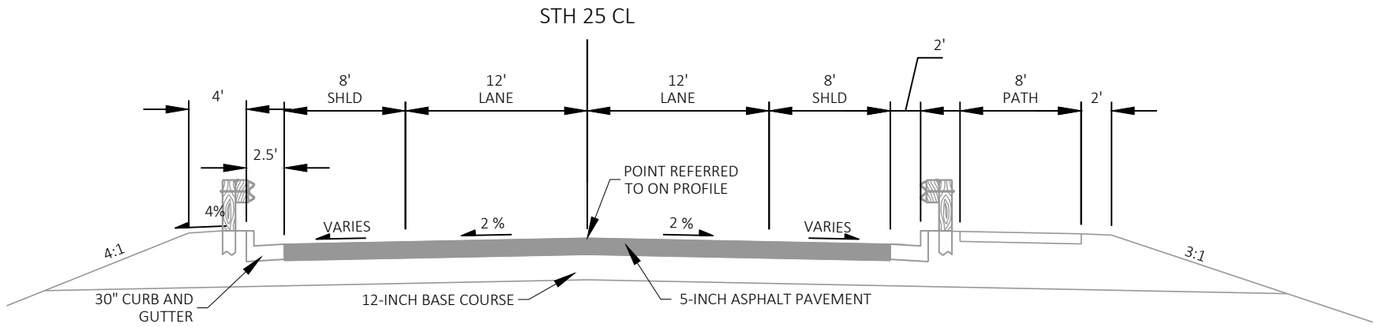
N



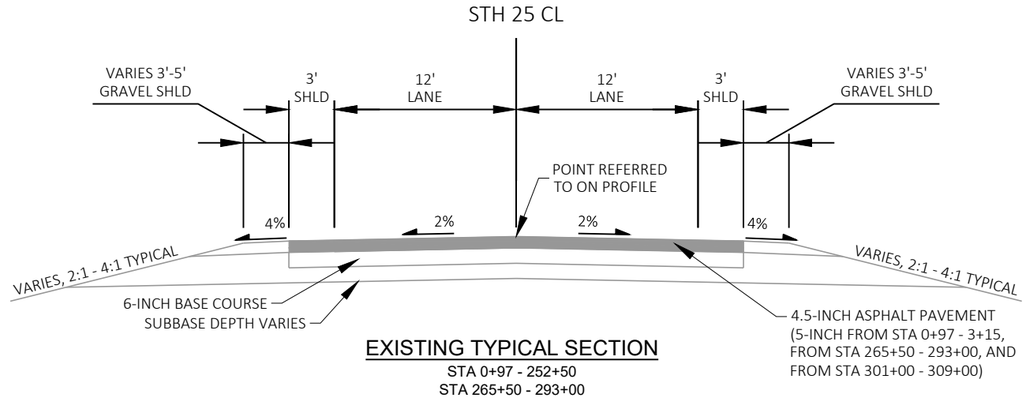
BENCHMARK & CONTROL POINT TABLE						
CONTROL POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEV	DESCRIPTION
28	109+31.78	25.00RT	142854.494	162407.525	858.220	CP 28
29	126+11.77	22.11LT	144533.381	162330.236	875.515	CP 29
30	135+52.01	22.24RT	145474.266	162357.679	911.859	CP 30
31	144+09.90	21.31LT	146331.295	162298.871	921.831	CP 31
32	162+60.42	34.81RT	148182.463	162326.508	880.866	CP 32
33	176+19.56	39.54LT	149540.292	162231.260	872.434	CP 33
34	181+68.24	21.16LT	150089.193	162241.190	886.528	CP 34
35	188+63.63	22.95RT	150785.182	162274.596	918.804	CP 35
36	199+74.66	20.44RT	151896.042	162254.991	926.515	CP 36
37	210+91.08	21.40RT	152997.343	162070.920	951.904	CP 37
38	217+33.33	19.67LT	153597.890	161839.585	947.387	CP 38
39	229+64.69	23.07LT	154809.201	161617.309	945.252	CP 39
40	237+87.94	20.89LT	155633.469	161658.886	943.457	CP 40
41	244+84.17	21.13RT	156317.322	161798.226	930.744	CP 41
42	257+24.05	34.01LT	157552.352	161920.807	969.280	CP 42

BENCHMARK & CONTROL POINT TABLE						
CONTROL POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEV	DESCRIPTION
43	266+18.23	20.90RT	158429.518	162102.916	957.803	CP 43
44	275+99.47	20.84RT	159405.131	162222.763	918.212	CP 44
45	288+06.36	23.82RT	160612.798	162225.936	952.755	CP 45
46	301+56.05	26.41RT	161964.388	162219.179	965.052	CP 46
47	311+16.61	24.35RT	162881.061	161921.880	978.457	CP 47
48	324+26.08	42.29LT	163830.914	161009.308	924.568	CP 48
49	332+64.13	37.49LT	164654.074	160810.426	890.816	CP 49
60	309+39.38	22.42RT	162722.861	162006.001	980.764	CP 60
1141	0+12.47	22.37LT	133483.065	159258.020	767.602	MON /ALUM CAP
6101	109+85.49	0.20LT	142907.761	162381.375	858.653	MON /SECTION CORNER SURVEY SPIKE
6102	162+99.01	0.06LT	148220.510	162291.048	882.048	MON /SECTION CORNER SURVEY SPIKE
6135	322+83.70	25.70LT	163719.309	161104.421	927.094	MON /PLASTIC CAP

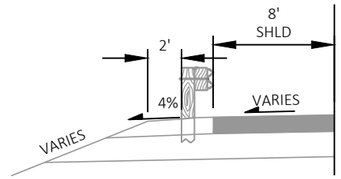
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PROJECT OVERVIEW	SHEET 3	E



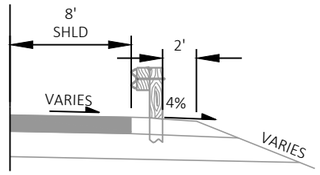
EXISTING TYPICAL SECTION
STA 0+25 - 0+97



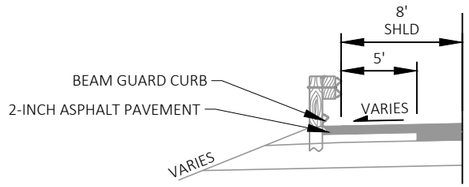
EXISTING TYPICAL SECTION
STA 0+97 - 252+50
STA 265+50 - 293+00
STA 301+00 - 309+00



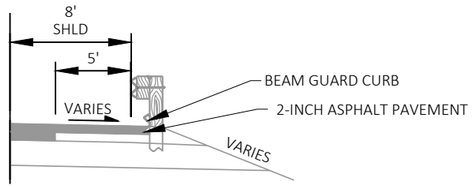
EXISTING BEAM GUARD TYPICAL HALF SECTION
STA 3+02 - 6+77
STA 59+11 - 63+15



EXISTING BEAM GUARD TYPICAL HALF SECTION
STA 29+92 - 35+77
STA 59+54 - 63+13



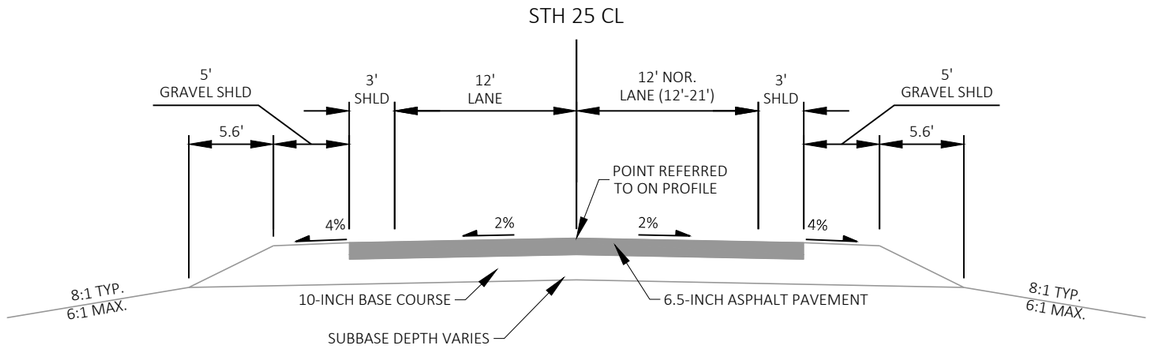
EXISTING BEAM GUARD TYPICAL HALF SECTION
STA 29+96 - 35+42
STA 114+50 - 120+79
STA 241+68 - 242+67



EXISTING BEAM GUARD TYPICAL HALF SECTION
STA 113+89 - 121+00
STA 241+81 - 242+78

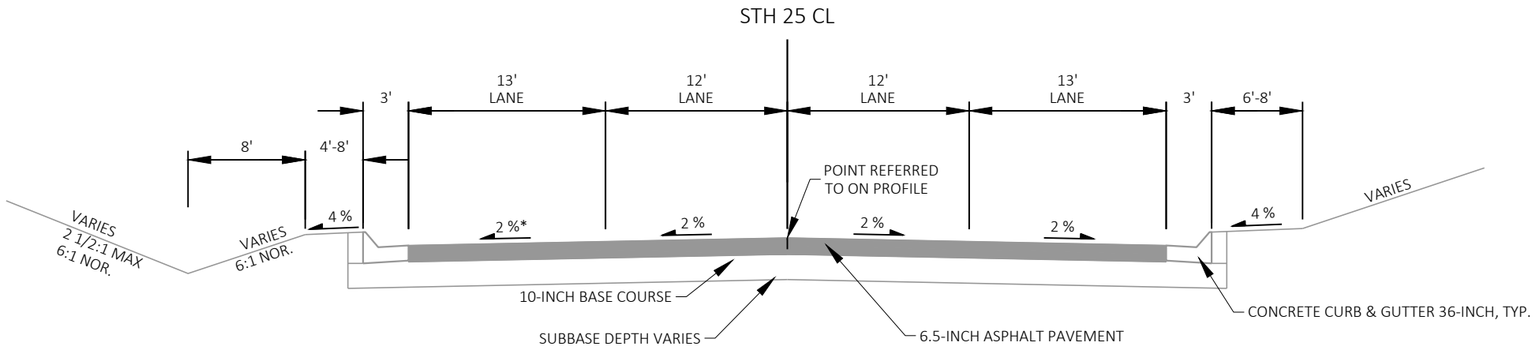
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN: TYPICAL SECTION	SHEET 4	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 01
PLOT DATE : 1/3/2022 9:16 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



EXISTING TYPICAL SECTION

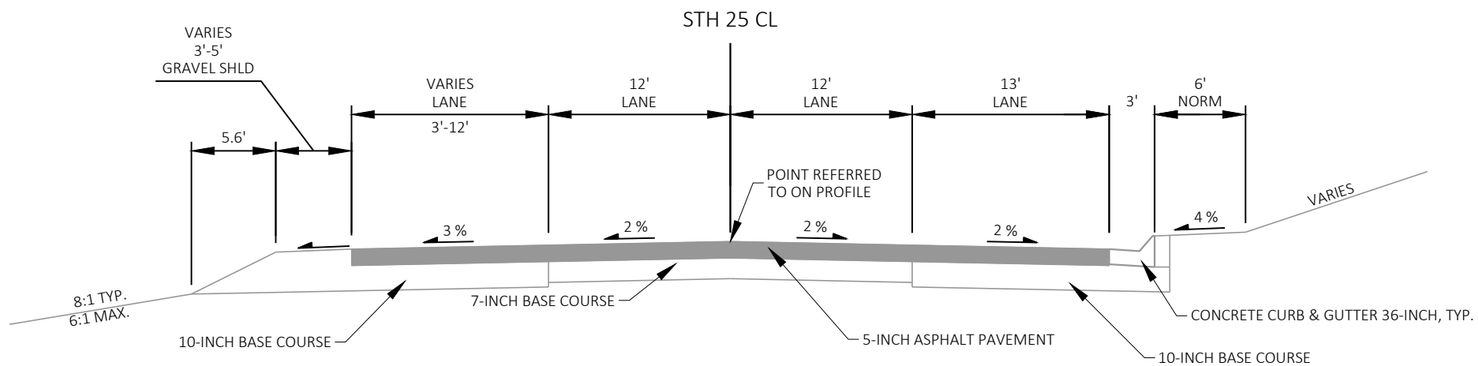
STA 252+50 - 255+00
STA 261+97 - 265+50
STA 298+24 - 301+00



*3% FROM STA 293+00 - 301+00

EXISTING TYPICAL SECTION

STA 255+00 - 261+97

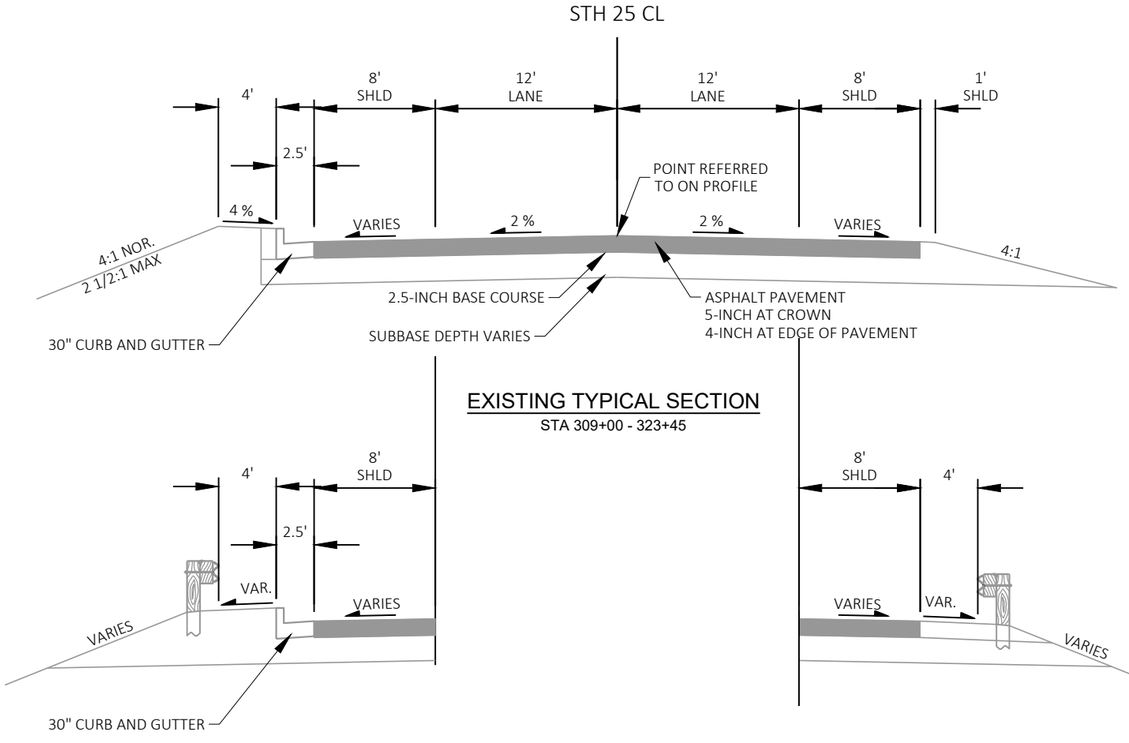


EXISTING TYPICAL SECTION

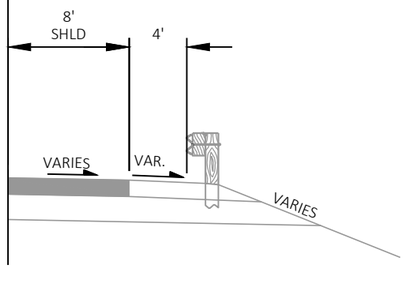
STA 293+00 - 298+24

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN: TYPICAL SECTION	SHEET 5	E

2

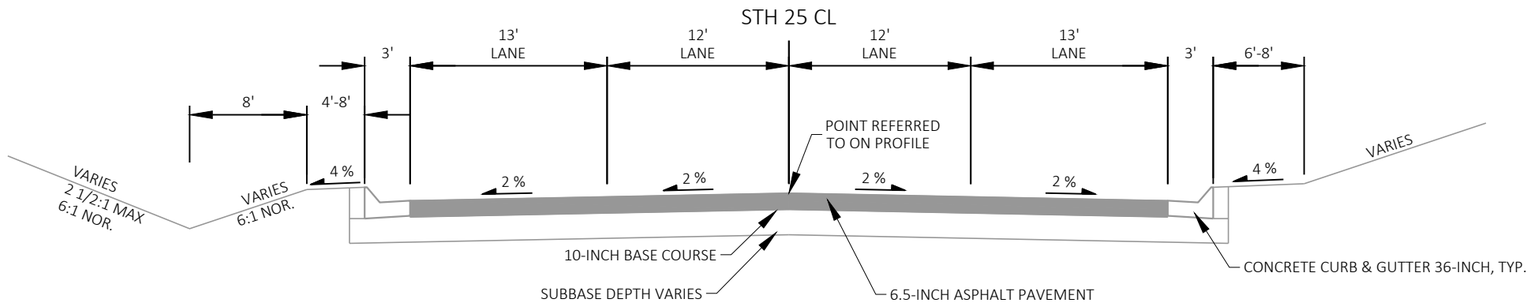


EXISTING TYPICAL SECTION
STA 309+00 - 323+45



EXISTING BEAM GUARD TYPICAL HALF SECTION
STA 322+20 - 323+37

EXISTING BEAM GUARD TYPICAL HALF SECTION
STA 321+96 - 323+11

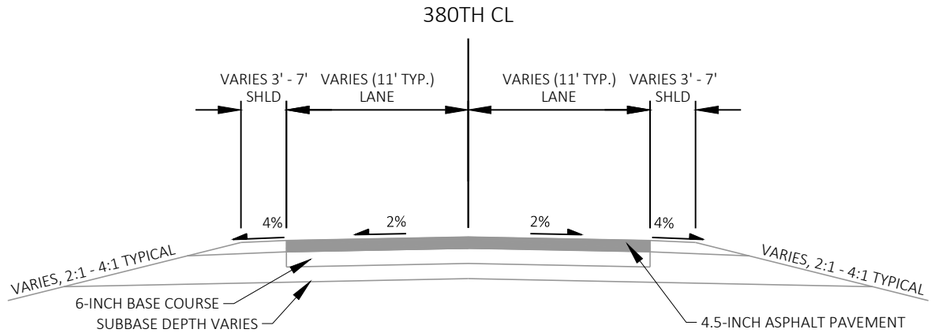


EXISTING TYPICAL SECTION
STA 323+45 - 331+48

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN: TYPICAL SECTION	SHEET 6	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 03
PLOT DATE : 1/3/2022 9:16 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



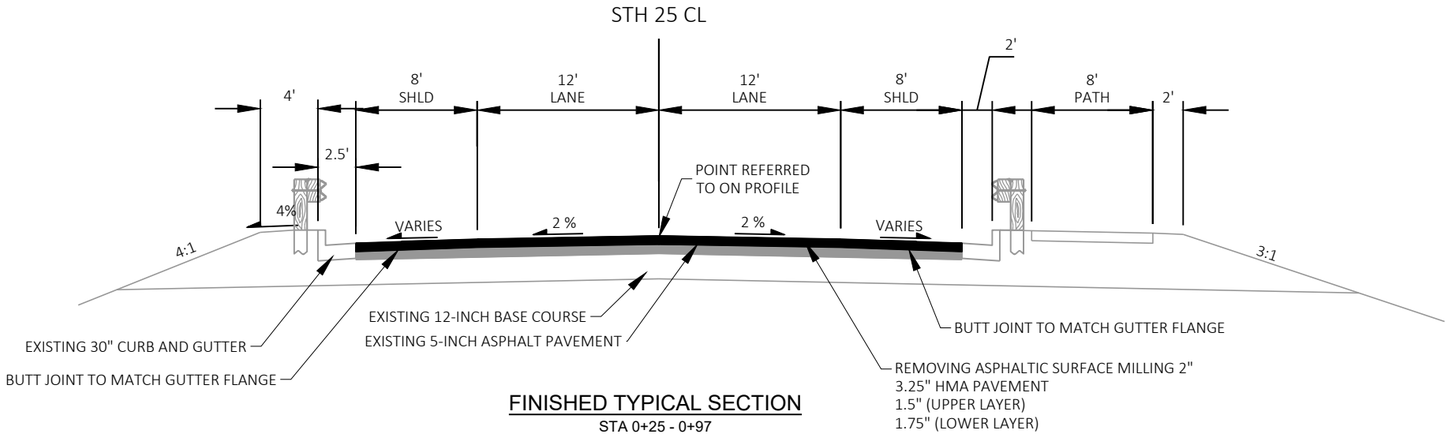
EXISTING TYPICAL SECTION

STA 8+90'A' - 10+00'A'

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN: TYPICAL SECTION	SHEET 7	E

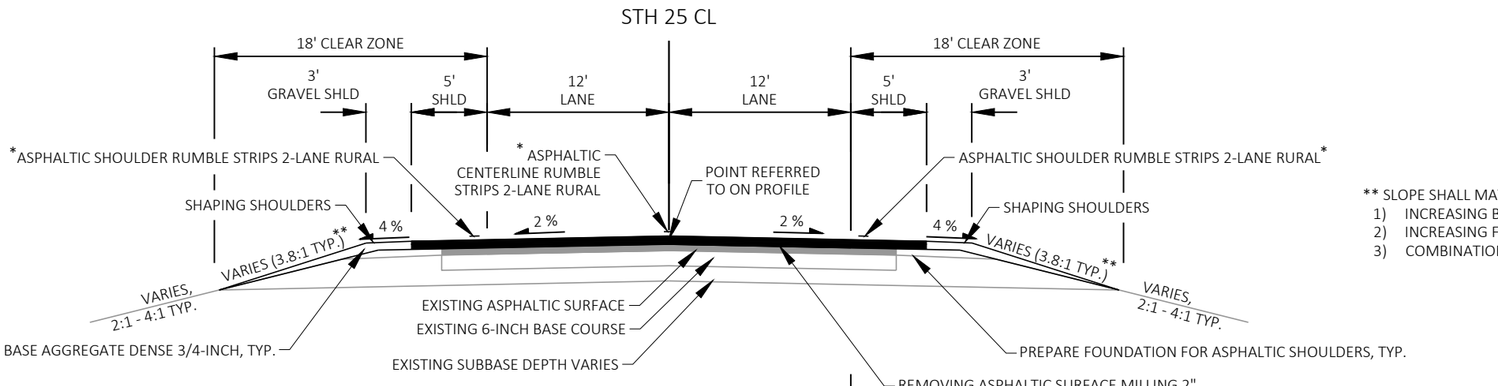
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 04
PLOT DATE : 1/3/2022 9:16 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



FINISHED TYPICAL SECTION

STA 0+25 - 0+97

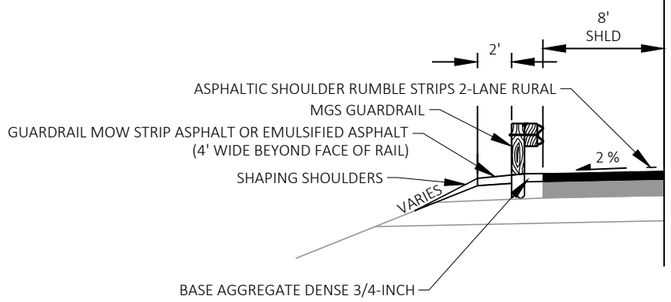


*START AT 4+00

** SLOPE SHALL MATCH INTO SUBGRADE SHOULDER POINT BY:
1) INCREASING BASE AGGREGATE DENSE SHOULDER SLOPE UP TO 10%
2) INCREASING FORESLOPE
3) COMBINATION OF BOTH

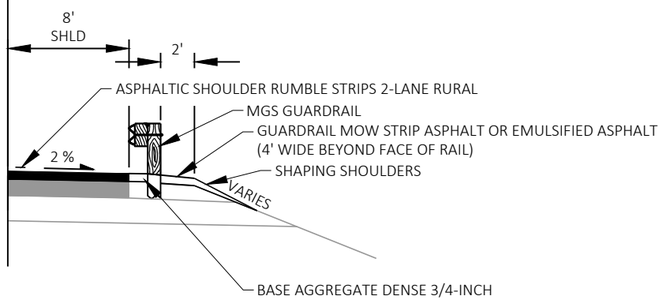
FINISHED TYPICAL SECTION

STA 0+97 - 174+18
STA 179+97 - 255+00
STA 261+97 - 293+00
STA 298+24 - 309+00



FINISHED BEAM GUARD TYPICAL HALF SECTION

STA 59+11 - 63+15

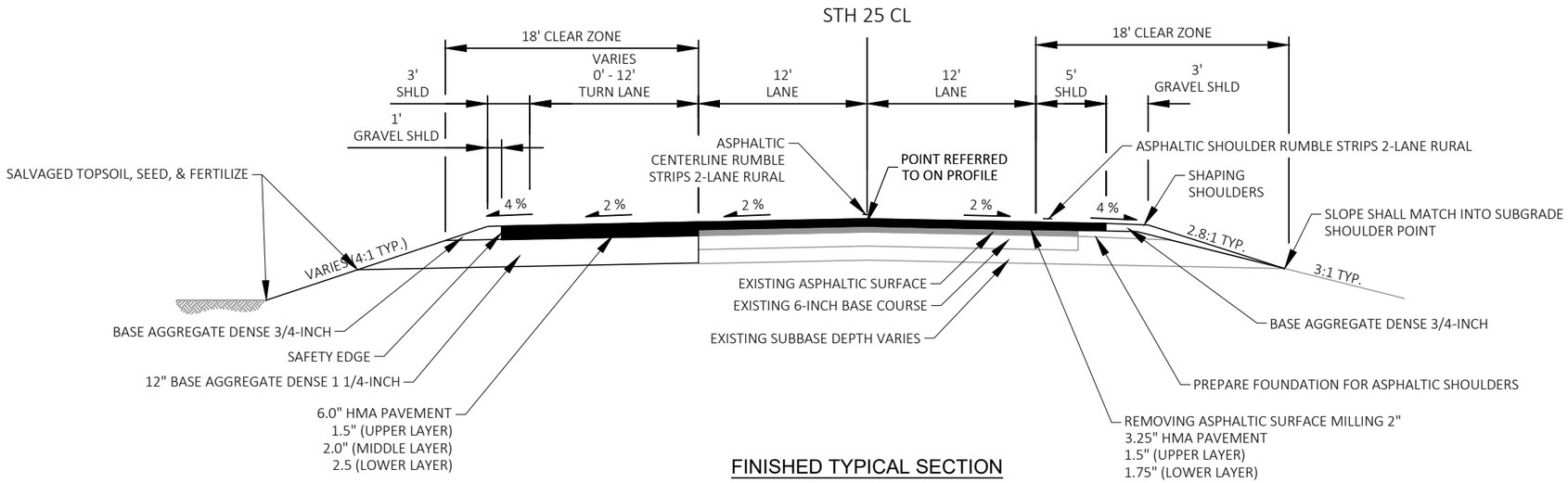


FINISHED BEAM GUARD TYPICAL HALF SECTION

STA 59+54 - 63+13

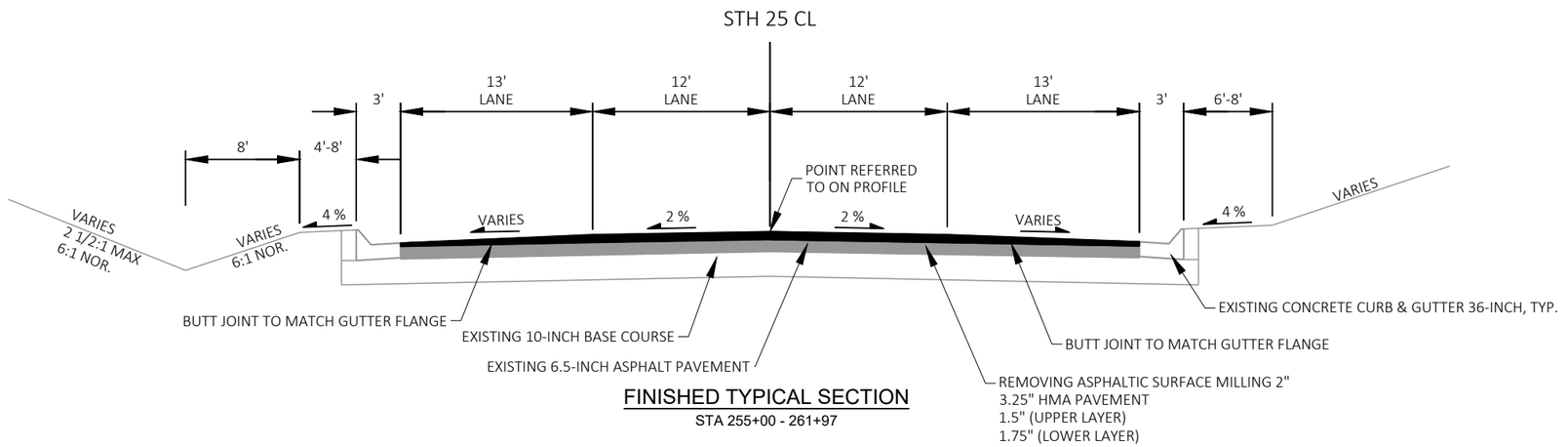
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN: TYPICAL SECTION	SHEET 8	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 05
PLOT DATE : 1/3/2022 9:16 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT



FINISHED TYPICAL SECTION

STA 174+18 - 179+97

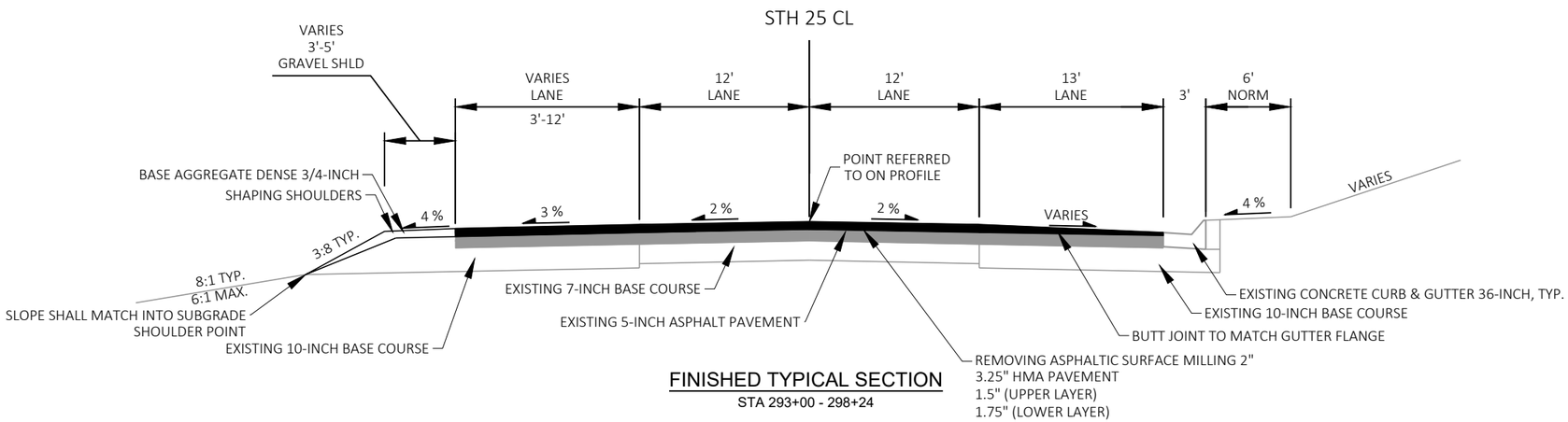


FINISHED TYPICAL SECTION

STA 255+00 - 261+97

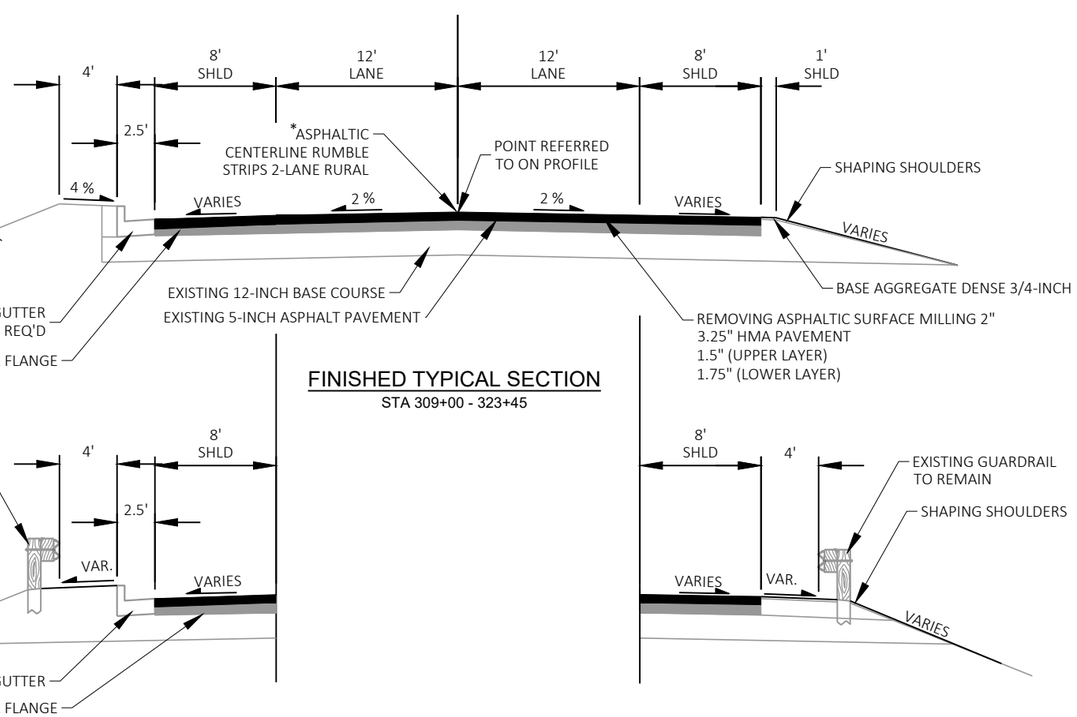
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN: TYPICAL SECTION	SHEET 9	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 06
PLOT DATE : 1/3/2022 9:16 AM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:10 FT



FINISHED TYPICAL SECTION

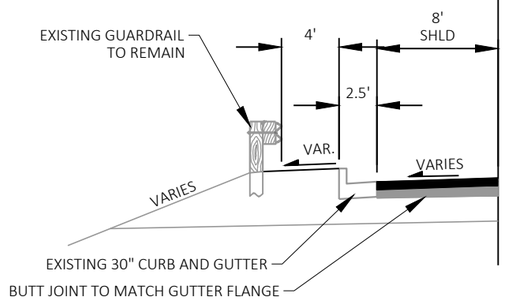
STA 293+00 - 298+24



*END AT 305+50

FINISHED TYPICAL SECTION

STA 309+00 - 323+45



FINISHED BEAM GUARD TYPICAL HALF SECTION

STA 322+20 - 323+37

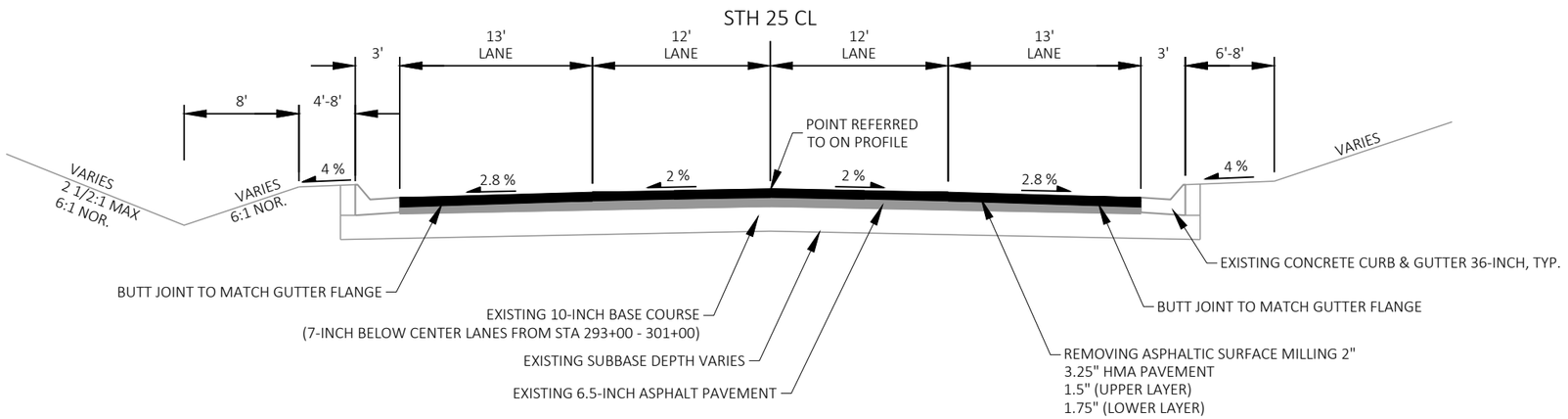
FINISHED BEAM GUARD TYPICAL HALF SECTION

STA 321+96 - 323+11

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN: TYPICAL SECTION	SHEET 10	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 07
PLOT DATE : 1/3/2022 9:16 AM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:10 FT

2

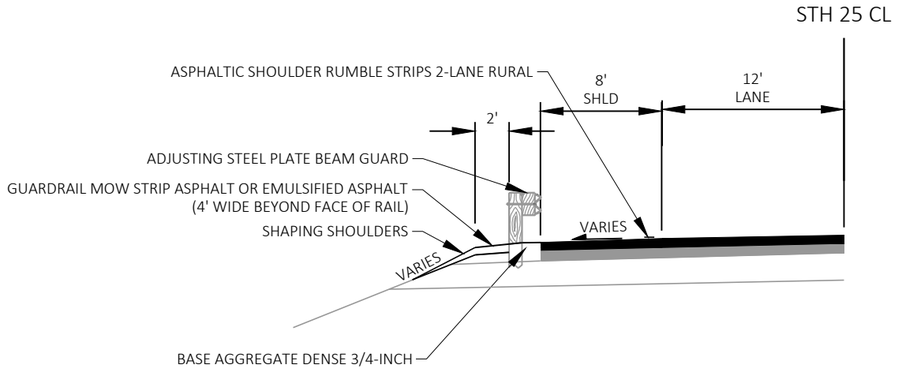


FINISHED TYPICAL SECTION

STA 323+45 - 331+48

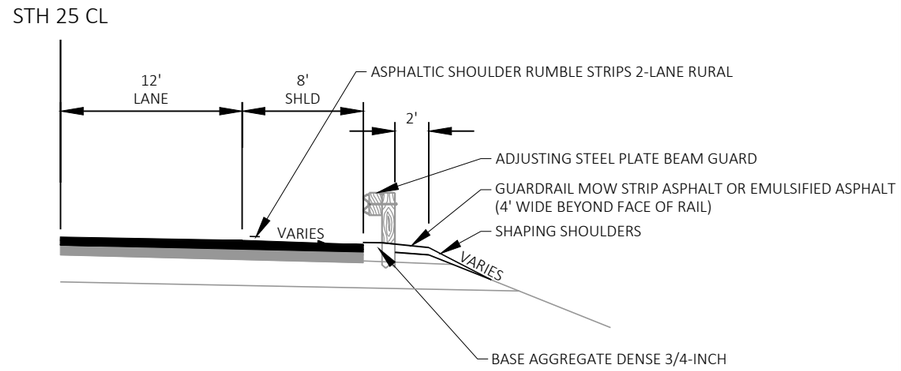
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN: TYPICAL SECTION	SHEET 11	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 08
PLOT DATE : 1/3/2022 9:16 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



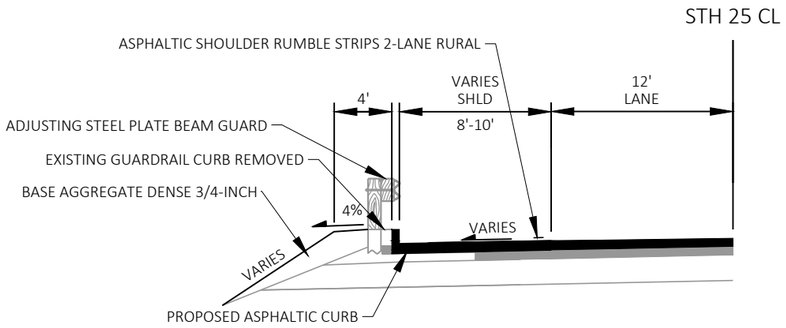
FINISHED BEAM GUARD TYPICAL HALF SECTION

STA 3+02 - 6+77



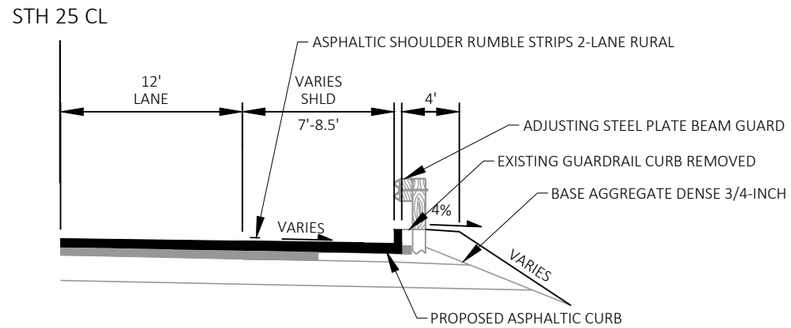
FINISHED BEAM GUARD TYPICAL HALF SECTION

STA 29+92 - 35+77



FINISHED BEAM GUARD TYPICAL HALF SECTION

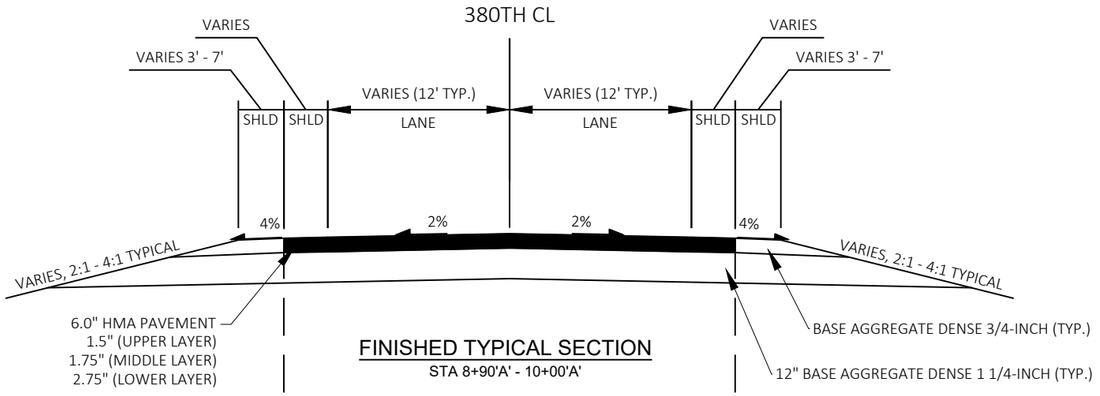
STA 29+96 - 35+42
STA 114+50 - 120+79
STA 241+68 - 242+67



FINISHED BEAM GUARD TYPICAL HALF SECTION

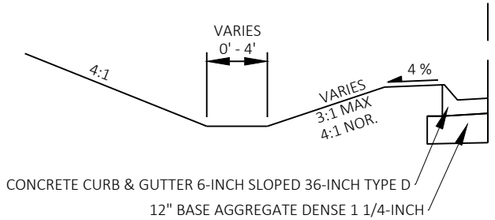
STA 113+89 - 121+00
STA 241+81 - 242+78

2

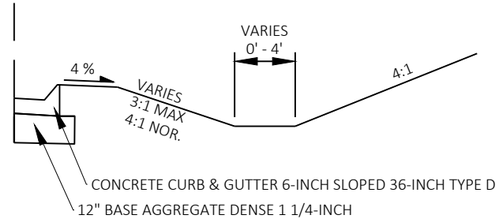


FINISHED TYPICAL SECTION

STA 8+90'A' - 10+00'A'



STA. 9+20'A' - 9+80'A'



STA. 9+32'A' - 9+70'A'

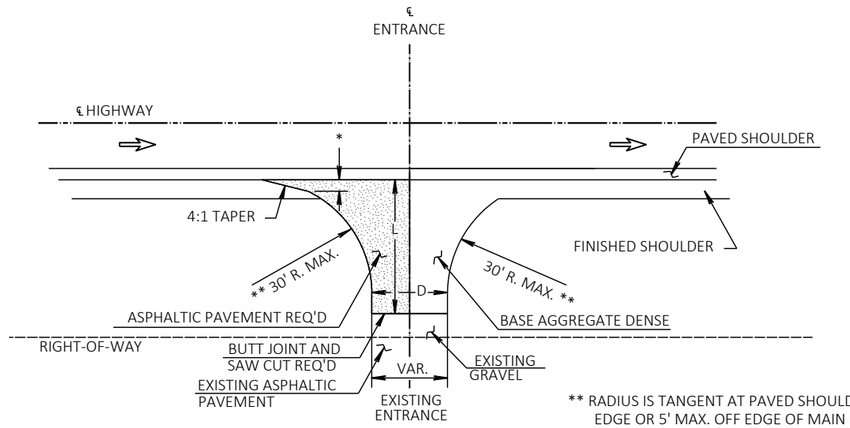
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN: TYPICAL SECTION	SHEET 13	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 10
PLOT DATE : 1/3/2022 9:16 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

RUNOFF COEFFICIENT TABLE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN 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 = 31.92 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.543 ACRES



** RADIUS IS TANGENT AT PAVED SHOULDER EDGE OR 5' MAX. OFF EDGE OF MAIN LINE PAVEMENT WHICH EVER IS LESS.

* 3' MAX. OR TO FINISHED SHOULDER WHICH EVER IS LESS.

L= 6-FT TYPICAL, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER. BLEND BACK ON THE ENTRANCE FAR ENOUGH TO GET A SMOOTH PROFILE.

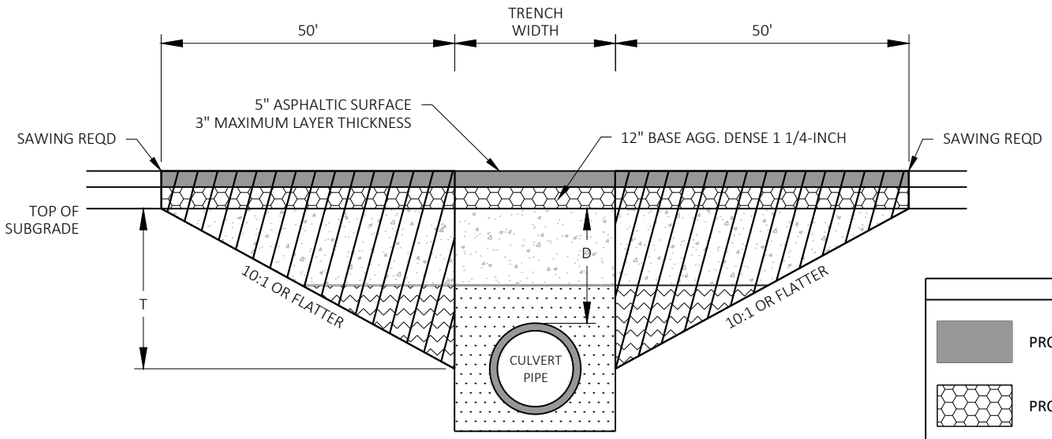
D=DRIVEWAY WIDTH (MATCH EXISTING)

PLAN VIEW

RURAL DRIVEWAY INTERSECTION DETAIL

(PE's, FE's & CE'S)

19+46 LT
44+57 LT
50+30 RT
57+00 RT
64+75 RT
66+50 LT
120+93 LT
121+43 RT
126+10 RT
135+36 RT
137+10 LT
142+22 RT
145+85 RT
150+00 LT
152+65 RT
154+82 RT
155+86 LT
157+68 RT
157+94 LT
161+80 LT
171+68 RT
178+84 LT
181+68 RT
184+28 RT
188+66 LT
188+88 RT
190+48 LT
190+55 RT
196+42 RT
202+13 LT
202+50 RT
208+82 LT
216+05 RT
217+55 LT
223+38 RT
227+12 LT
227+55 RT
238+76 LT
239+00 RT
251+30 LT
263+66 RT
266+68 RT
268+05 RT
277+37 RT
286+70 RT
288+68 RT
293+92 RT
301+20 RT
308+20 LT
308+40 LT
312+89 RT
313+87 RT
315+50 RT
323+28 RT
331+20 RT
332+45 RT
332+45 LT
333+25 RT

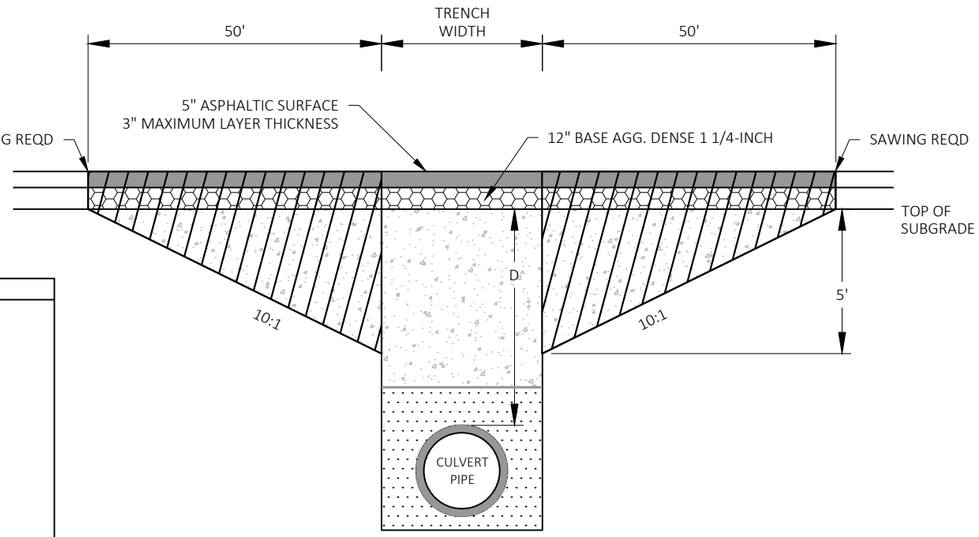


DEPTH D < 6 FT

TRANSITION CUT DEPTH (T) = THE LESSER OF DEPTH TO CENTER OF PIPE OR 5 FT.
DO NOT EXTEND TRANSITION CUT BELOW HORIZONTAL CENTER OF PIPE.

KEY

- PROPOSED SURFACE
- PROPOSED BASE
- TRENCH BACKFILL
- TRENCH OR FOUNDATION BACKFILL
- FOUNDATION BACKFILL
- TRANSITION CUT



DEPTH D ≥ 6 FT

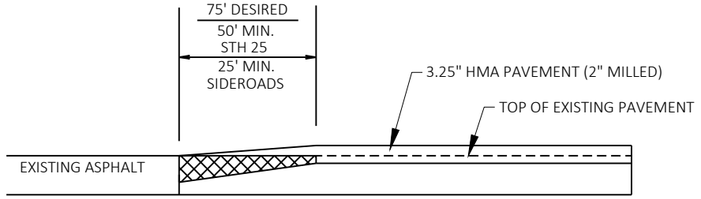
2

NOTES:

TRANSITION CUT IS PAID AS EXCAVATION COMMON.
TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.
BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.
PERFORM CULVERT PIPE INSTALLATION BEFORE MILLING AND PAVING.
PLACE 2 LAYERS OF (3-INCH MAX LAYER THICKNESS) ASPHALTIC SURFACE AFTER CULVERT PIPE INSTALLATION AND BEFORE MILLING AND PAVING OVERLAY.

CULVERT PIPE TRANSITION

ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIA (IN)
STH 25	21+27	3.0	30
STH 25	265+92	6.0	30

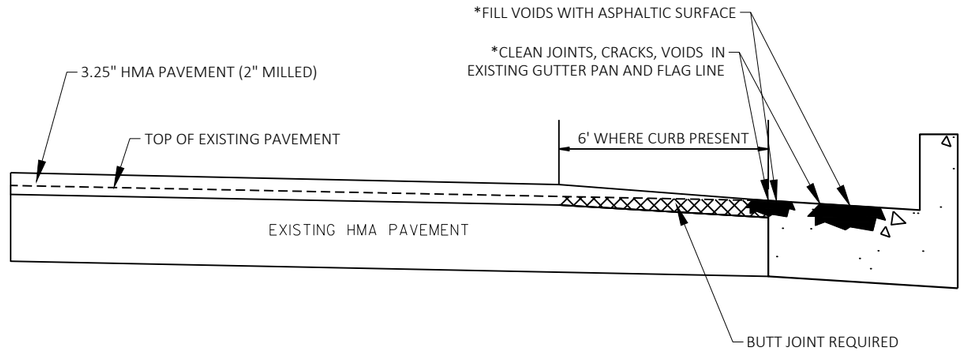


BUTT JOINT

REQUIRED AT BEGIN AND END PAVING LOCATIONS

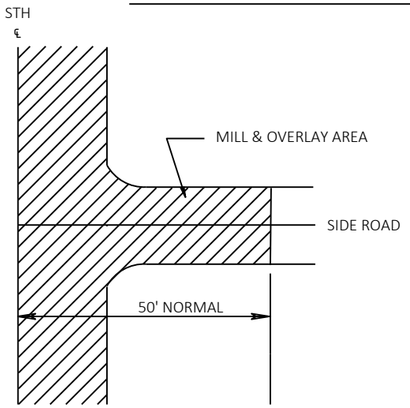
PAID FOR AS REMOVING ASPHALTIC SURFACE BUTT JOINTS

NOTE: ANY SAWCUT USED IN THIS OPERATION CONSIDERED INCIDENTAL TO THIS ITEM



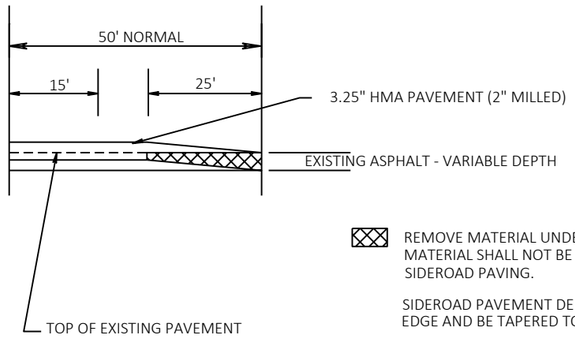
BUTT JOINT WITH CURB AND GUTTER PRESENT / CURB AND GUTTER REPAIR DETAIL

SIDE ROAD DETAIL - NO CURB & GUTTER



NOTE: IF THE EXISTING SIDEROAD CONSISTS OF A BASE COURSE SURFACE, THE NEW ASPHALT SHALL BE PLACED TO THE ENDS OF THE EXISTING SIDEROAD RADIUS'.

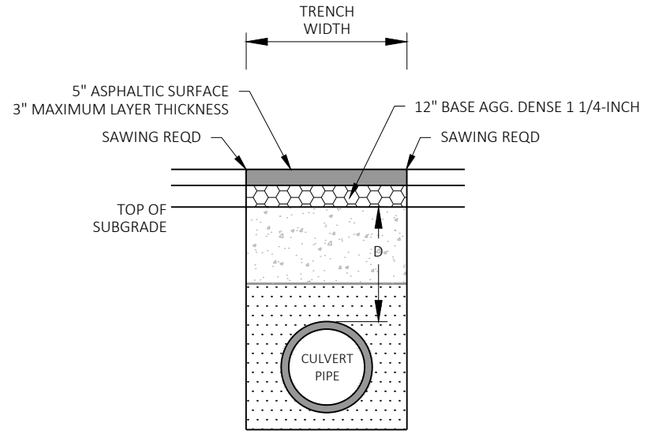
NOT TO SCALE



REMOVE MATERIAL UNDER ITEM 'REMOVING ASPHALTIC SURFACE BUTT JOINTS' MATERIAL SHALL NOT BE REMOVED UNDER THIS ITEM UNTIL 24 HOURS BEFORE SIDEROAD PAVING.

SIDEROAD PAVEMENT DEPTH SHALL MATCH AT MAINLINE PAVEMENT EDGE AND BE TAPERED TO 3" MINIMUM AT JOINT

NOTE: ANY SAWCUT USED WILL BE CONSIDERED INCIDENTAL TO THE ITEM "REMOVING ASPHALTIC SURFACE, BUTT JOINTS."



DEPTH D < 6 FT

NOTES:

BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.

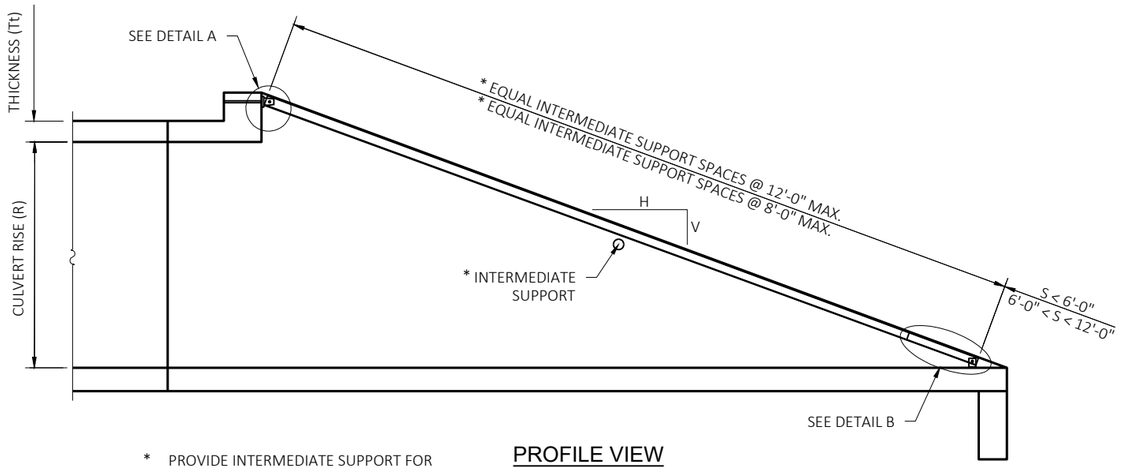
PERFORM CULVERT PIPE INSTALLATION BEFORE MILLING AND PAVING.

PLACE 2 LAYERS OF (3-INCH MAX LAYER THICKNESS) ASPHALTIC SURFACE AFTER CULVERT PIPE INSTALLATION AND BEFORE MILLING AND PAVING OVERLAY.

SALVAGE AND REINSTALL LAST THREE PIPES WITH JOINT TIES - BACKFILL DETAIL

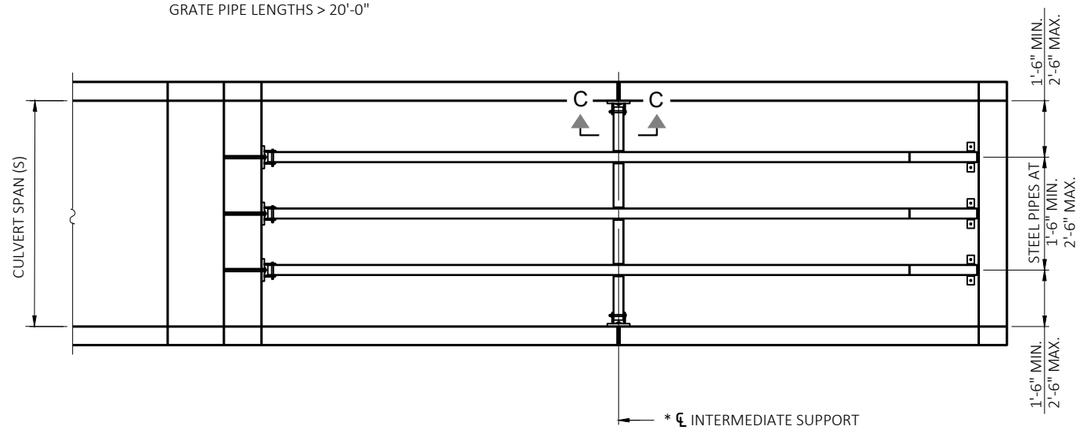
ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIA (IN)
STH 25	158+87 LT*	3.0	36
STH 25	158+87 RT*	3.0	36
STH 25	163+31 LT	3.0	30
STH 25	163+31 RT	3.0	30
STH 25	174+13 LT	3.0	36
STH 25	174+13 RT	3.0	36

* BACKFILL WITH SAME MATERIAL AND DEPTH OF ADJACENT PAVEMENT STRUCTURE WHEN OUTSIDE ROADWAY

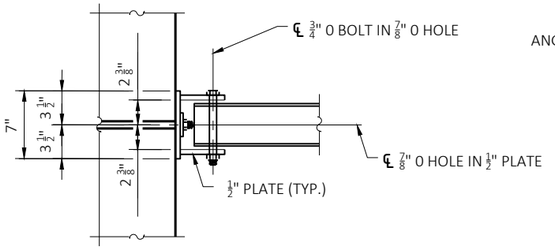


PROFILE VIEW

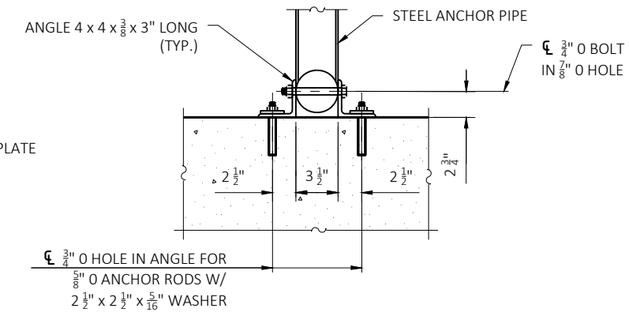
* PROVIDE INTERMEDIATE SUPPORT FOR GRATE PIPE LENGTHS > 20'-0"



PLAN VIEW



VIEW A-A



SECTION B-B

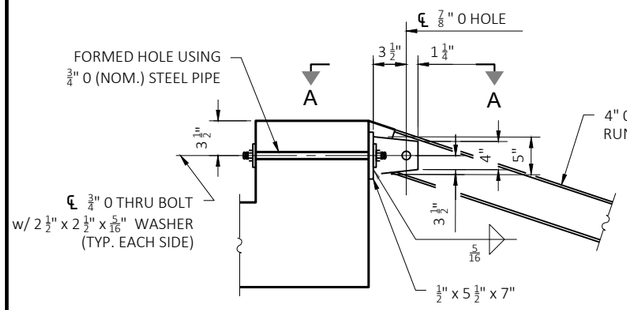
GENERAL NOTES

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.

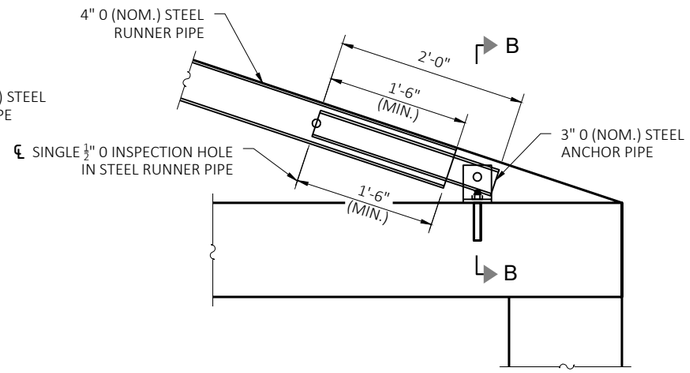
PIPE GRATES SHALL BE FABRICATED FROM 3-INCH DIAMETER GALVANIZED PIPE MEETING THE REQUIREMENTS OF ASTM A-53, GRADE B, SCHEDULE 40 OR APPROVED EQUAL. THE LONGITUDINAL BAR SHALL BE WELDED TO THE TRANSVERSE BARS WHERE THE BARS CROSS. THE NUMBER OF TRANSVERSE BARS REQUIRED WILL VARY DEPENDING ON THE LENGTH OF THE END SECTION.

SLOPED STEEL ENDWALLS LOCATED AT THE ENDS OF CONCRETE CULVERT PIPE SHALL BE FURNISHED WITH STEEL ADAPTER SLEEVES.

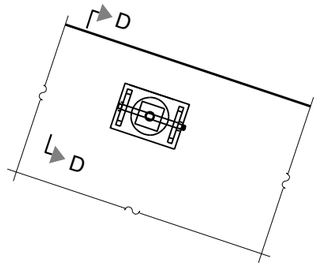
CONTRACTOR TO VERIFY SIZE PRIOR TO MANUFACTURING.
APPROXIMATE SIZE IS 5.0 FT-WIDE BY 4.5-FT LONG.



DETAIL A

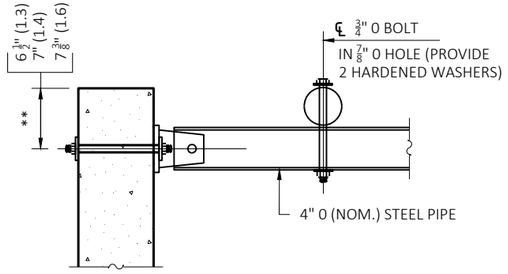


DETAIL B



VIEW C-C

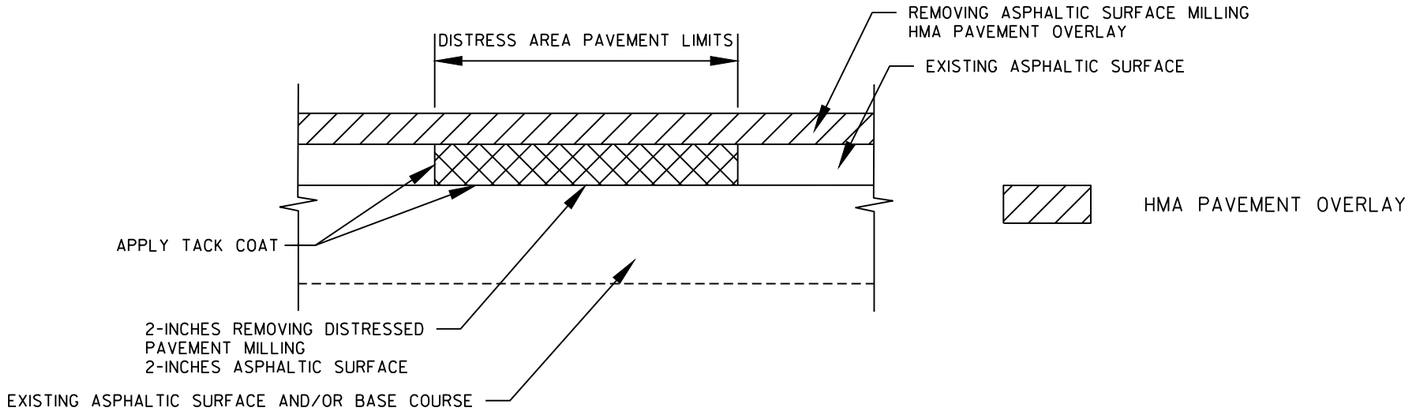
(SEE DETAIL A FOR DIMENSIONS AND DETAILS NOT SHOWN)



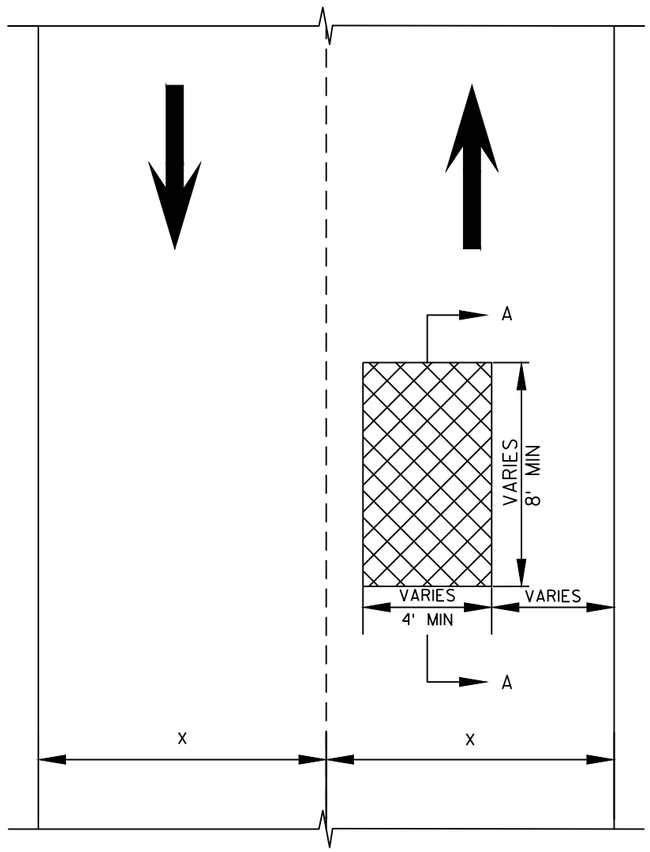
SECTION D-D

** MEASURED PERPENDICULAR TO TOP OF CULVERT WALL. IN ADDITION, FORMED HOLE SHALL BE LOCATED A MINIMUM OF 6" MEASURED HORIZONTALLY FROM ANY VERTICAL JOINTS NECESSARY FOR CONSTRUCTION OF THE CULVERT END SECTION.

2



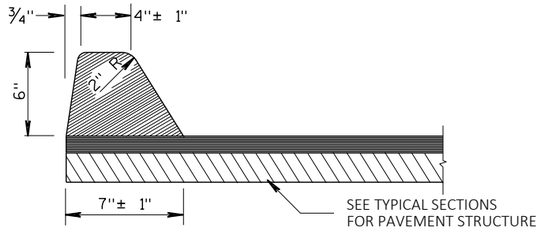
REMOVING DISTRESSED PAVEMENT MILLING
SECTION A-A



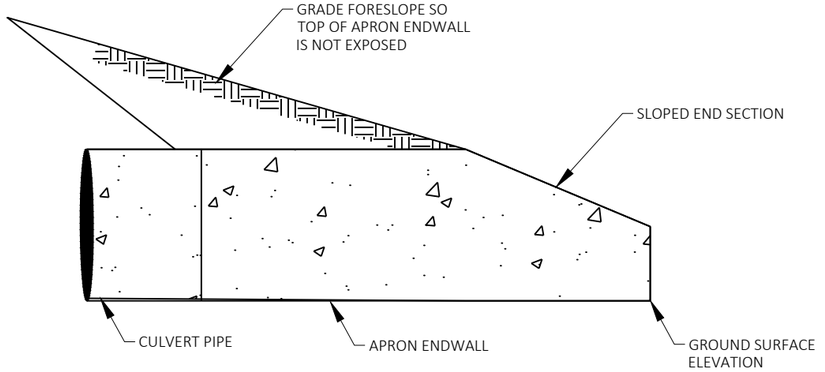
PLAN VIEW

EXACT LOCATION AND LIMITS OF REMOVING DISTRESSED PAVEMENT MILLING TO BE DETERMINED BY THE ENGINEER IN THE FIELD

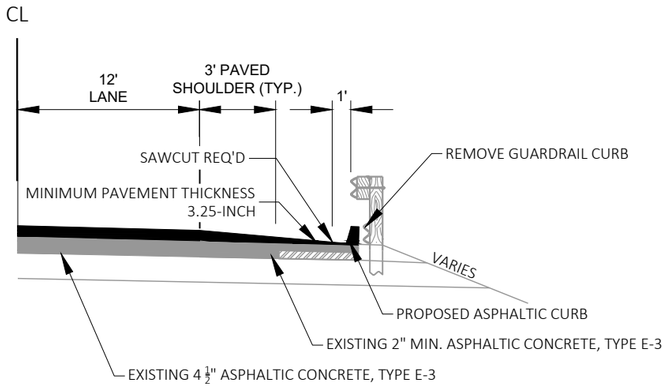
2



ASPHALTIC CURB DETAIL

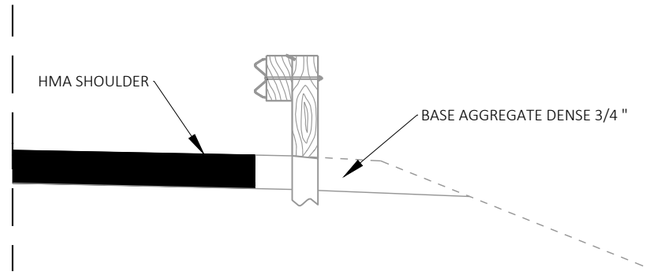


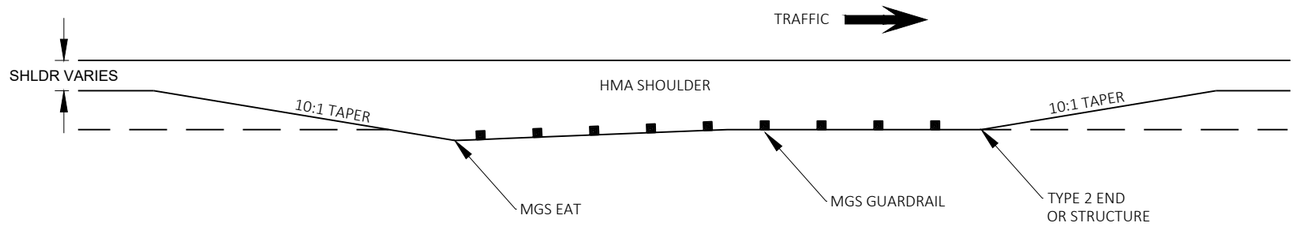
GRADING FOR NEW APRON ENDWALLS DETAIL



GUARDRAIL CURB REMOVAL / ASPHALTIC CURB DETAIL

2





DETAIL FOR HMA SHOULDER AT BEAMGUARD

STA 3+00 - 7+00 LT
STA 30+00 - 36+00 LT/RT
STA 59+00 - 64+00 LT/RT
STA 114+00 - 121+00 LT/RT
STA 241+00 - 242+50 LT/RT

2

2

RED CEDAR RIVER

* = MATCH EXISTING
WING ELEVATION

STA 0+14.55 - STA 0+32.52
IF GUARDRAIL NEEDS TO BE REMOVED AND
REINSTALLED, IT IS INCIDENTAL TO THE ITEM
'CURB AND GUTTER 30-INCH TYPE D'

REMOVE CURB AND GUTTER
SAWCUT REQ'D

CONCRETE CURB AND GUTTER
30-INCH TYPE D

DOWNSVILLE SANITARY
DISTRICT 1

N

STH 25

* +14.55
-19.93'LT
764.80

2%

+32.52
-20.92'LT
764.40

0+00

24-7 TELCOM INC

BEGIN PROJECT
STA 0+25.04
Y=133,484.169
X=159,283.653

BUTT JOINT REQ'D

DOWNSVILLE SANITARY
DISTRICT 1

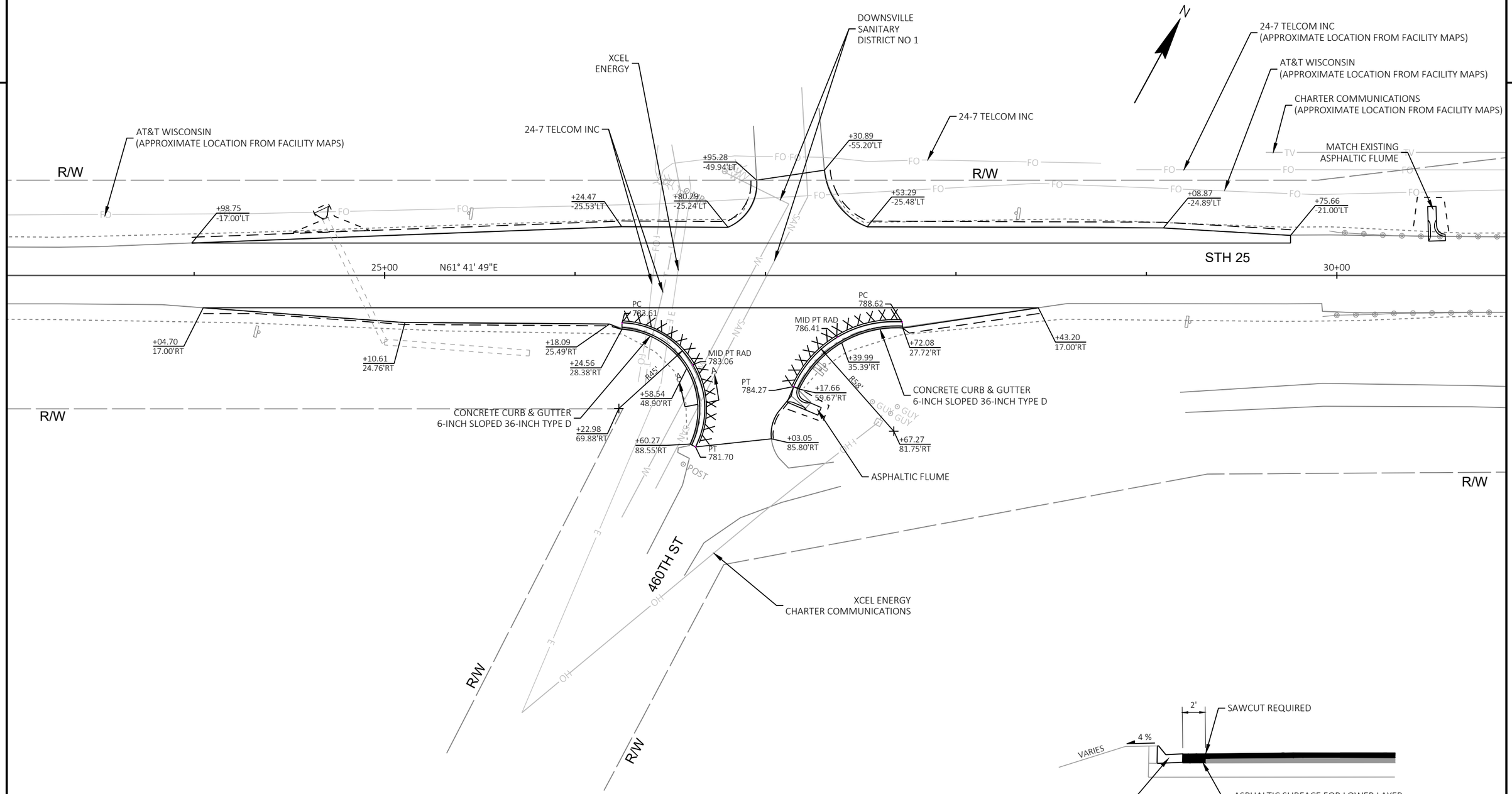
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CONSTRUCTION DETAILS	SHEET 21	E

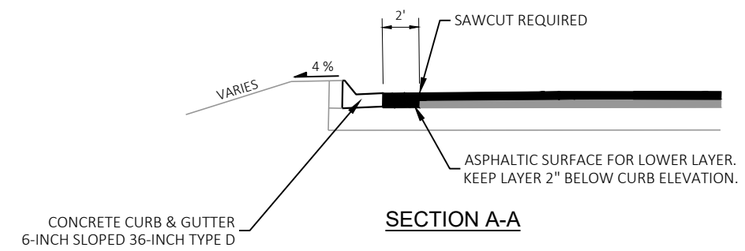
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\021002-CD.DWG
LAYOUT NAME - (1)

PLOT DATE : 6/29/2021 5:12 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT

WISDOT/CADDS SHEET 42

2





PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	INTERSECTION DETAIL - 460TH ST	SHEET 22	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 460TH

PLOT DATE : 10/20/2021 2:21 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

370TH AVE

+91.60
-67.83'LT

+16.59
-66.81'LT

AT&T WISCONSIN

CULVERT IMPROVEMENTS
SEE PLAN SHEETS (TYP.)

AT&T WISCONSIN

CHARTER COMMUNICATIONS

CHARTER COMMUNICATIONS

+65.49
-24.40'LT

+51.42
-17.00'LT

POST

AT&T WISCONSIN

STH 25

+41.46
0.00'
881.94

+97.79
0.00'
881.92

+50.00
0.00'
882.16

BP: 10+00.00'B'
X = 162,291.132
Y = 148,219.286

+41.46
17.00'RT
881.60

2%

+97.79
17.00'RT
881.75

1%

+50.00
17.00'RT
881.82

2%

+25.95'B'
-28.18'LT
881.48
LOW PT

+30.19'B'
0.00'
882.08

N89° 07' 06"E

CULVERT IMPROVEMENTS
SEE PLAN SHEETS (TYP.)

+40.05'B'
22.02'RT
881.39
LOW PT

+50.19'B'
0.00'
882.57

24-7 TELCOM INC

DUNN
ENERGY

NOTES:
ADDITIONAL PAVEMENT MILLING DEPTH REQUIRED FROM STA 162+41 RT - STA 163+50 RT.

SUPERELEVATION TRANSITIONS ARE REQUIRED TO AND FROM 2% TO 1% ON STH 25 AT THE LOCATIONS SHOWN.

WEDGING OF LOWER HMA LAYERS WILL BE REQUIRED.

STAKING REQUIRED FOR THIS LOCATION IS QUANTIFIED UNDER THE ITEM 'CONSTRUCTION STAKING BASE'.

+69.63'B'
11.95'RT
882.80

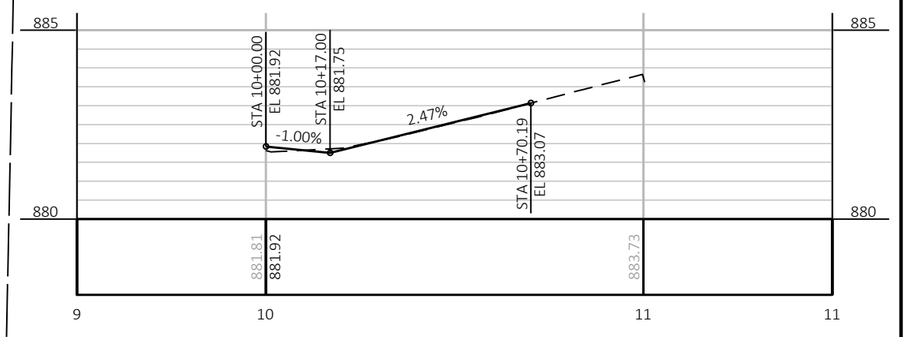
+70.19'B'
0.00'LT
883.07

+70.77'B'
-12.51'LT
882.81

370TH AVE

EP: 11+00.48'B'
X = 162,391.599
Y = 148,220.832

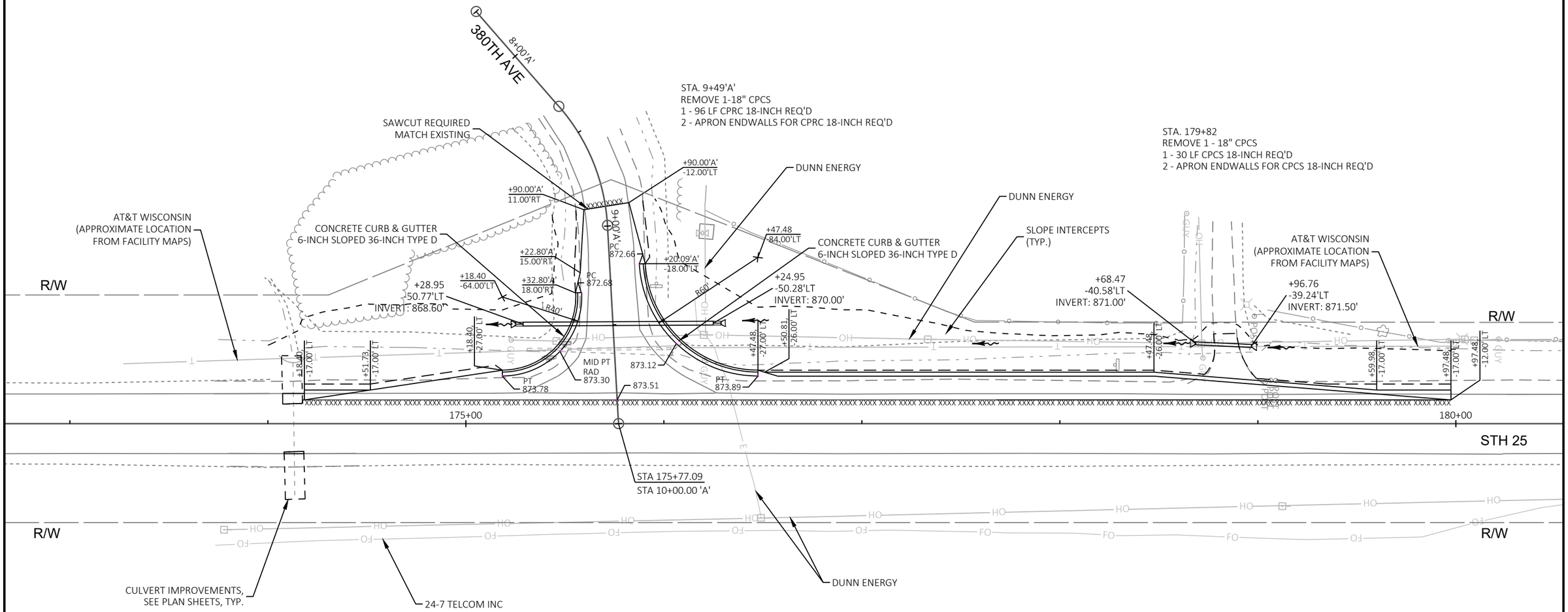
370TH AVE 'B' PROFILE VIEW



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	INTERSECTION DETAIL - 370TH AVE	SHEET 23	E

2

N



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	INTERSECTION DETAIL - 380TH AVE	SHEET 24	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 380TH
PLOT DATE : 10/20/2021 2:21 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

N

380TH AVE

9+00 'A'

R/W

R/W

869
867
868
869
870
871
872
873

873
872
871
870
871
872

HO
OH
T
E

175+00

STH 25

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CONTOUR MAP - 380TH AVE	SHEET 25	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\021701-CM.DWG
LAYOUT NAME - 380TH

PLOT DATE : 7/1/2021 11:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

RED CEDAR RIVER

BP: 3+88.30

N26° 51' 27"E

0+00

STH 25

5+00

PC: 3+94.92

PI: 9+18.90

10+00.14

WETLAND

ASPH

CTH C

WETLAND

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

WETLAND

PT: 14+10.39

15+00

STH 25

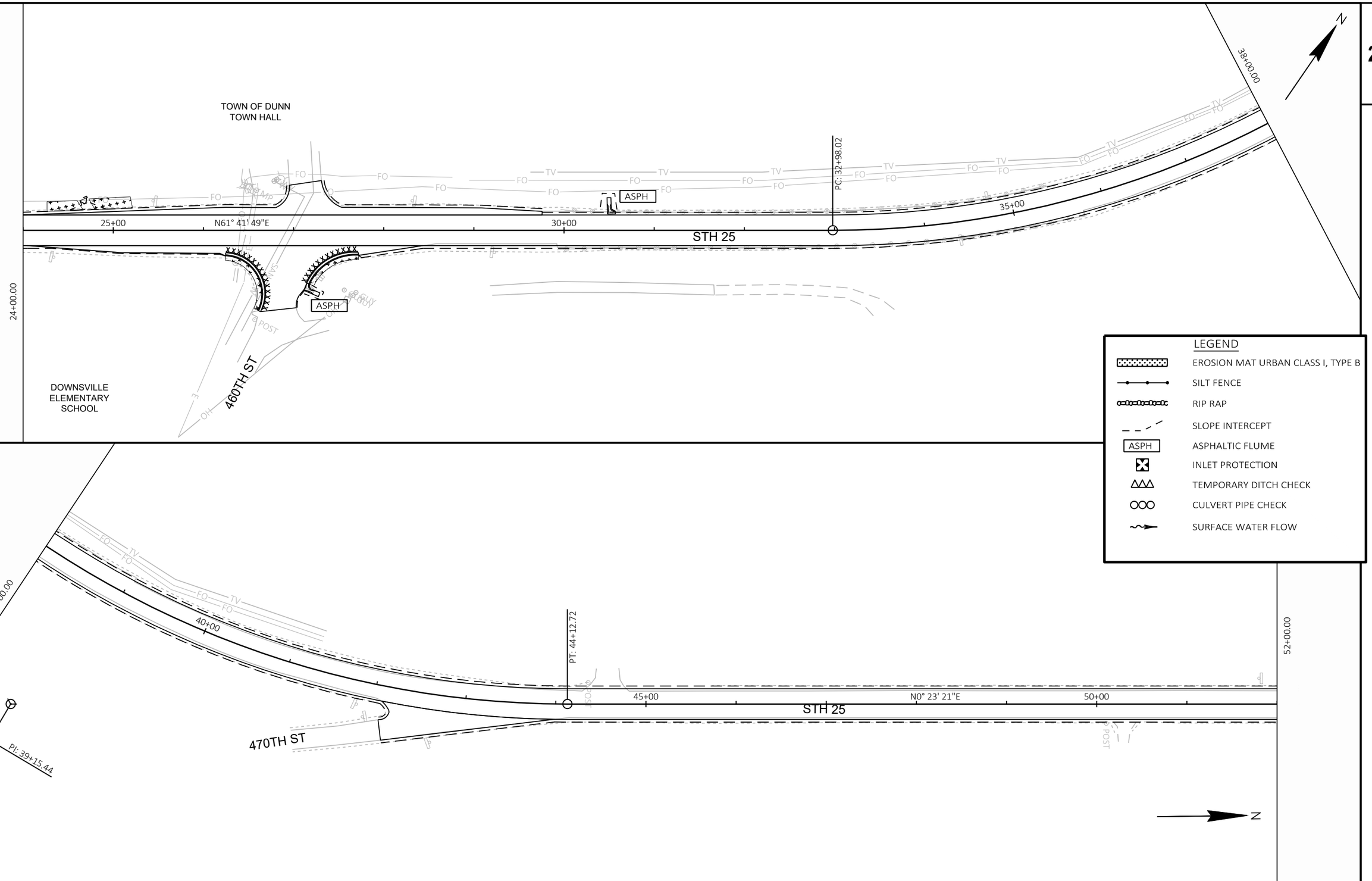
20+00

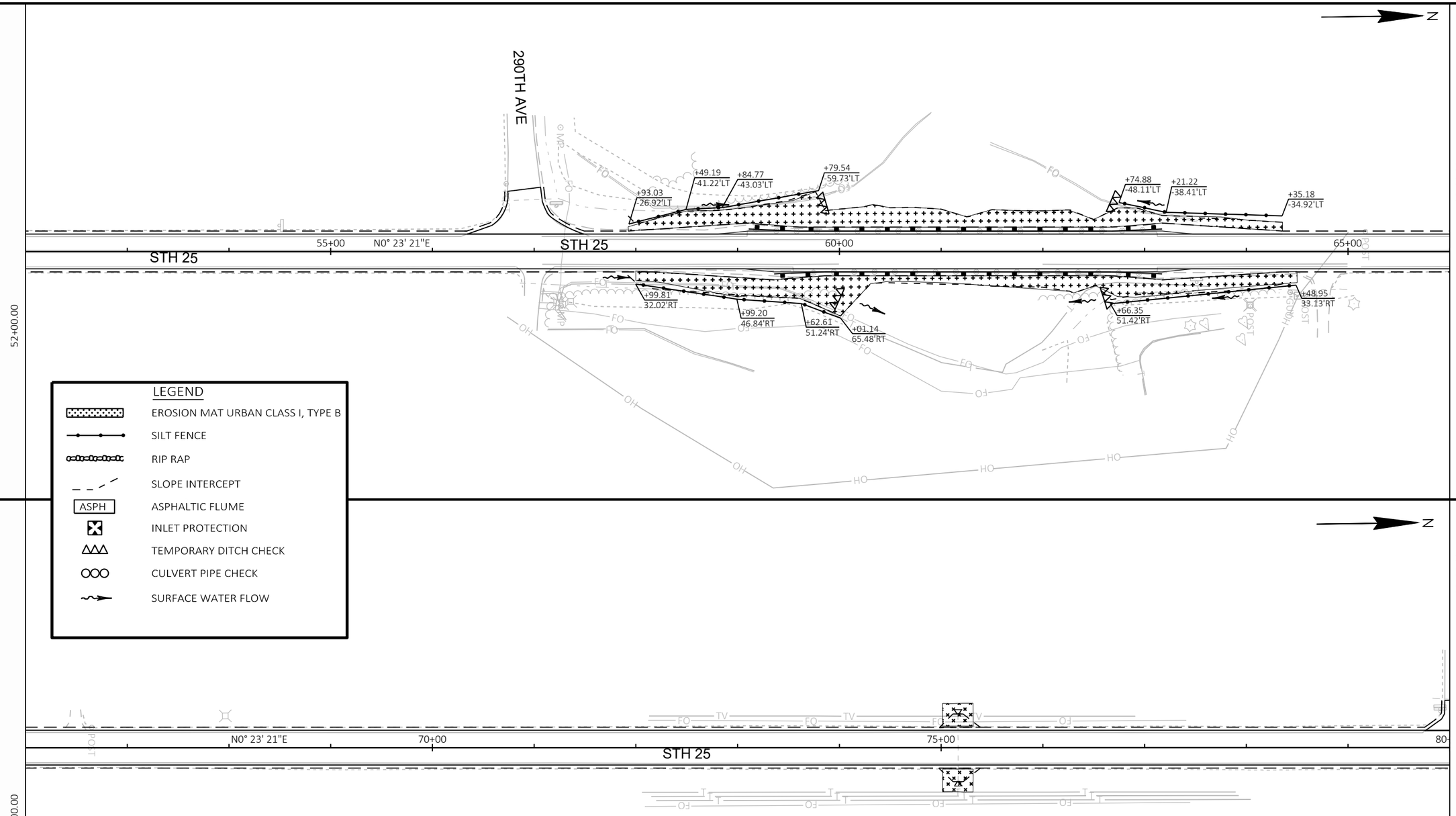
N61° 41' 49"E

WETLAND, RESTORE TO EXISTING CONDITION

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 26	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (1)
PLOT DATE : 1/3/2022 9:25 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

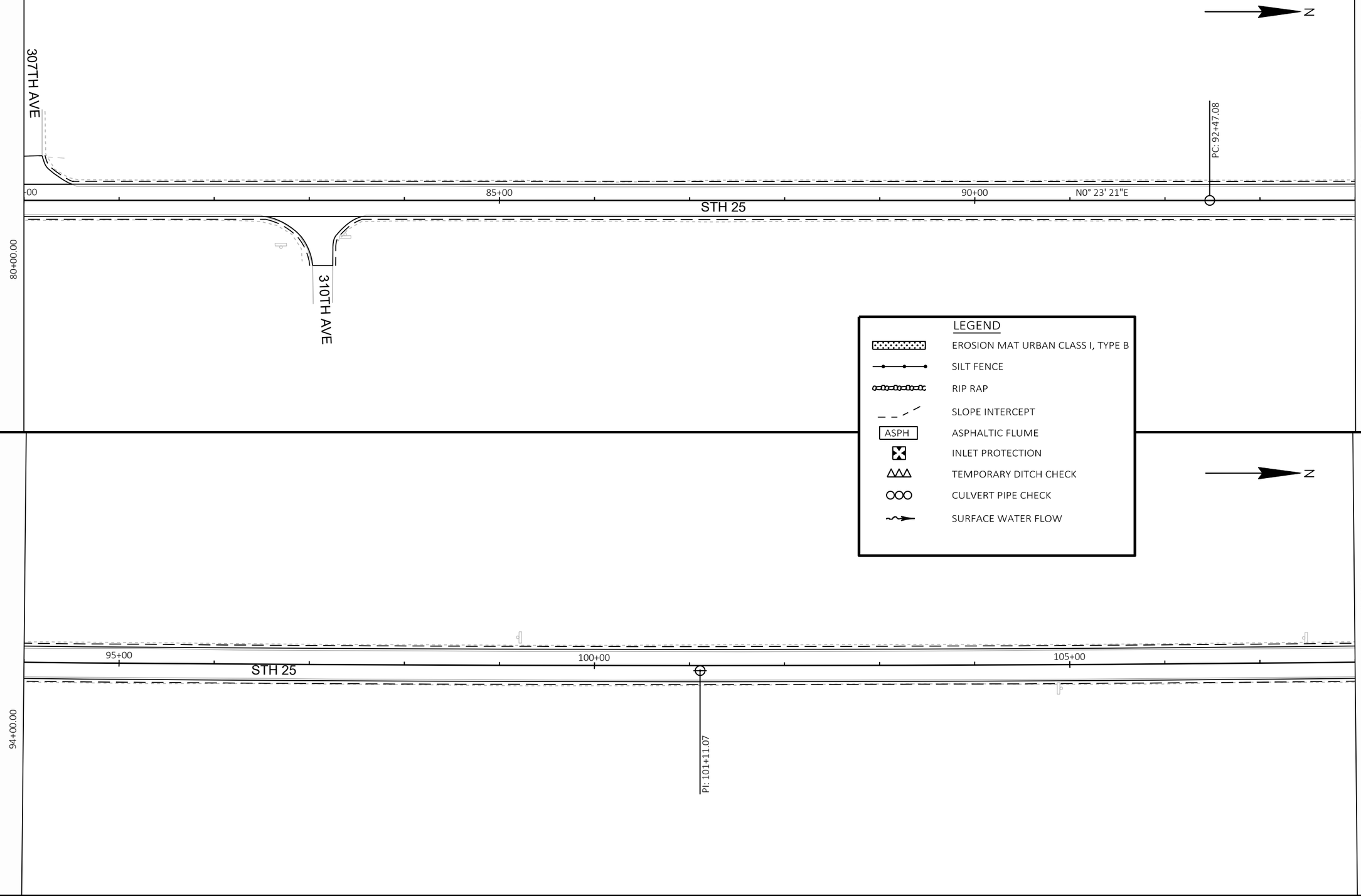

TOWN OF DUNN
TOWN HALL
DOWNSVILLE
ELEMENTARY
SCHOOL
460TH ST
470TH ST
STH 25
N61° 41' 49"E
N0° 23' 21"E
25+00
30+00
35+00
38+00.00
24+00.00
40+00
45+00
50+00
52+00.00
PC: 32+98.02
PT: 44+12.72
PI: 39+15.44
ASPH
FO
TV
LEGEND
EROSION MAT URBAN CLASS I, TYPE B
SILT FENCE
RIP RAP
SLOPE INTERCEPT
ASPHALTIC FLUME
INLET PROTECTION
TEMPORARY DITCH CHECK
CULVERT PIPE CHECK
SURFACE WATER FLOW



2

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 28	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (3)
PLOT DATE : 1/3/2022 9:25 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



2

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 29	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (4)
PLOT DATE : 1/3/2022 9:25 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

330TH AVE

PT: 109+74.97

WETLAND

LITTLE ELK CREEK

N

ASPH

110+00

115+00

N1° 01' 48"W

120+00

STH 25

122+00.00

108+00.00

330TH AVE

ASPH

WETLAND

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

136+00.00

125+00

N1° 01' 48"W

130+00

135+00

STH 25

122+00.00

N

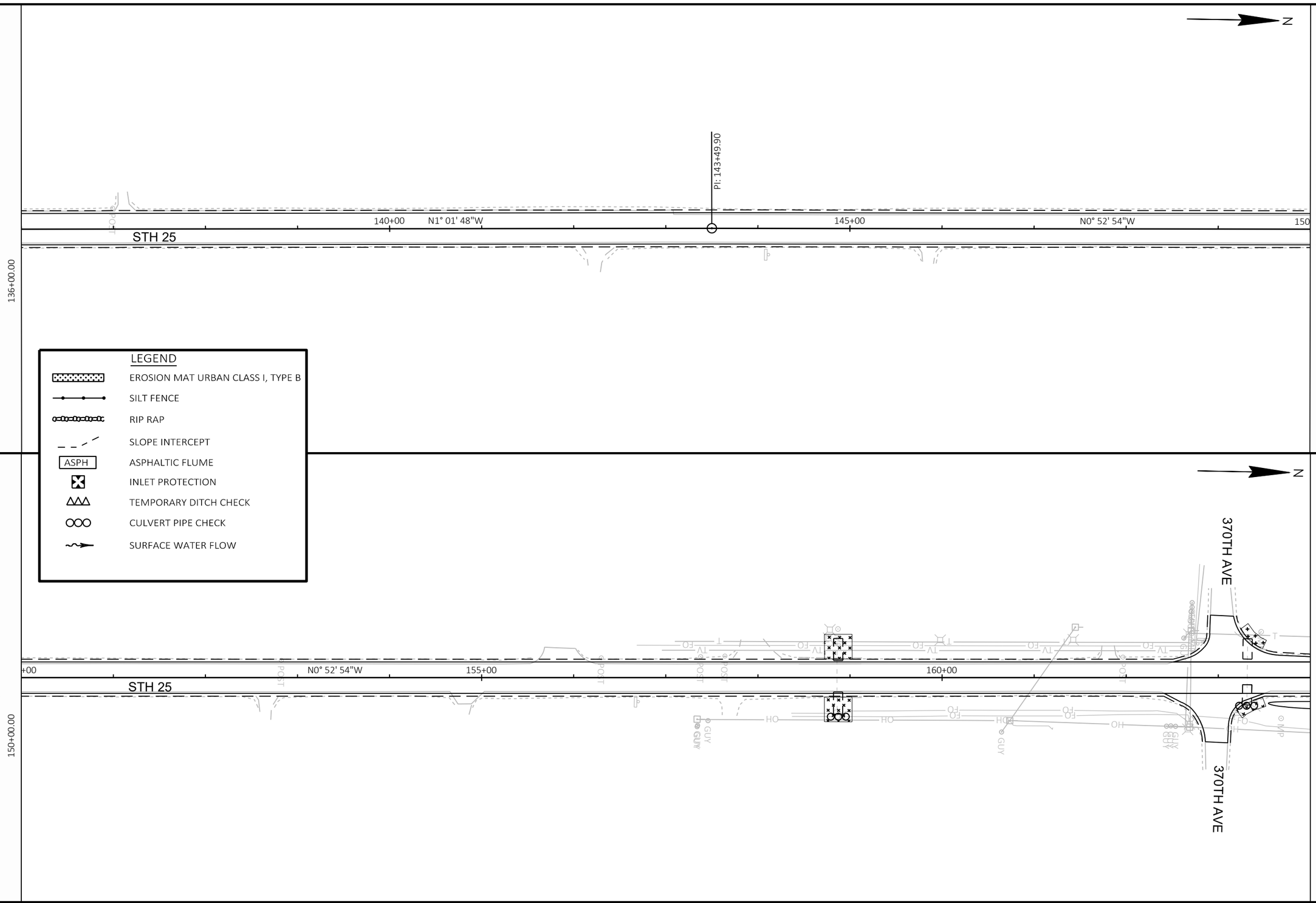
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 30	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (5)

PLOT DATE : 1/3/2022 9:25 AM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

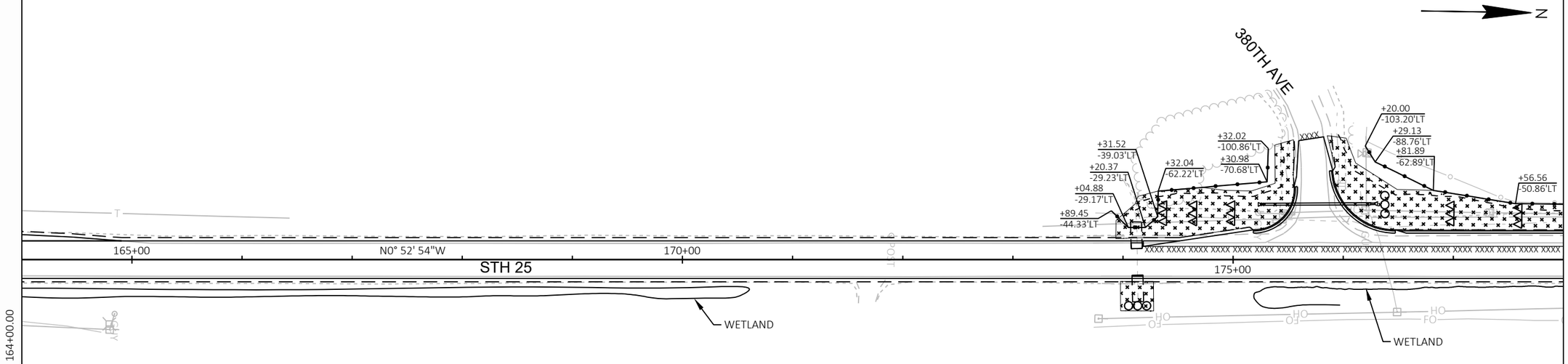
2



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 31	E

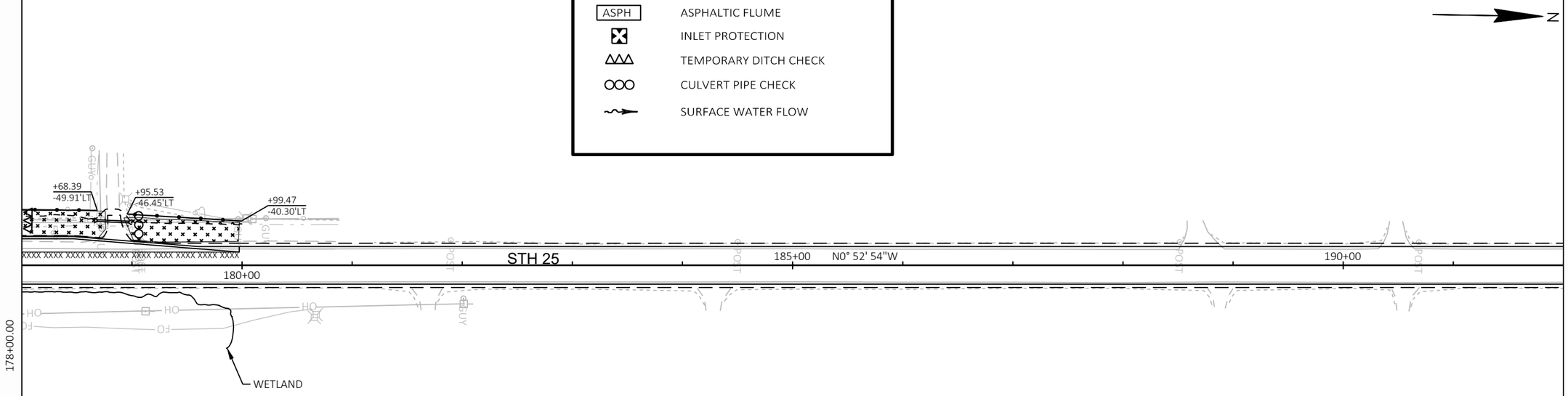
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (6)

PLOT DATE : 1/3/2022 9:25 AM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:100 FT



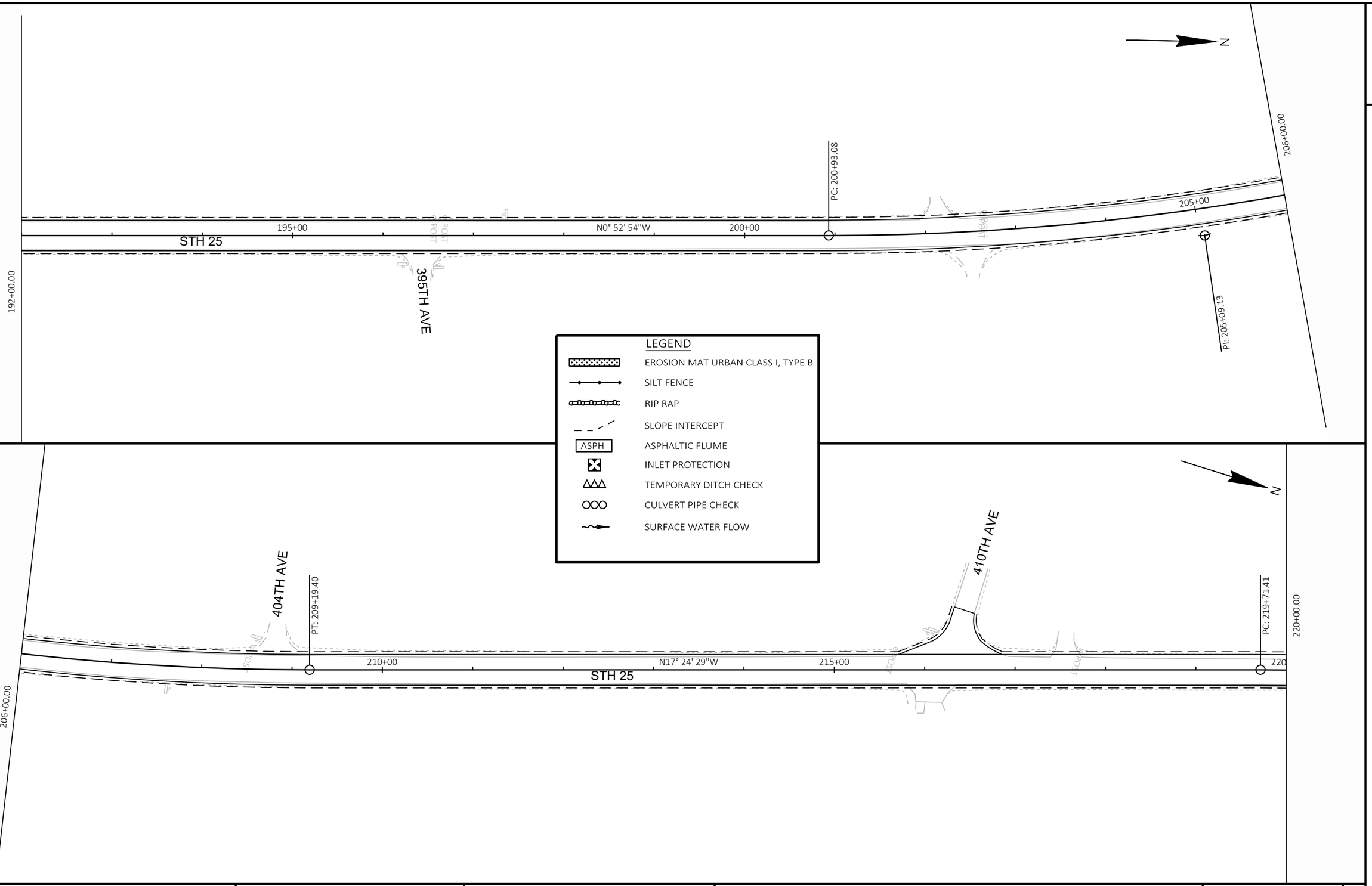
LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 32	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (7)
PLOT DATE : 1/3/2022 9:25 AM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:100 FT


N
206+00.00
PC: 200+93.08
205+00
195+00
N0° 52' 54"W
200+00
STH 25
192+00.00
395TH AVE
PI: 205+09.13
LEGEND
EROSION MAT URBAN CLASS I, TYPE B
SILT FENCE
RIP RAP
SLOPE INTERCEPT
ASPH
ASPHALTIC FLUME
INLET PROTECTION
TEMPORARY DITCH CHECK
CULVERT PIPE CHECK
SURFACE WATER FLOW
N
404TH AVE
PT: 209+19.40
410TH AVE
PC: 219+71.41
220+00.00
210+00
N17° 24' 29"W
215+00
STH 25
206+00.00

2

2

N

PI: 224+51.83

PT: 229+25.12

PC: 230+77.35

225+00

230+00

N0° 19' 55"W

STH 25

220+00.00

234+00.00

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

430TH AVE

PI: 235+05.48

PT: 239+32.02

ASPH

240+00

245+00

N8° 12' 53"E

235+00

STH 25

234+00.00

248+00.00

ASPH

430TH AVE

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 34	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (9)

PLOT DATE : 1/3/2022 9:25 AM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

2

N

CTH D

469TH ST

262+00.00

250+00

255+00

N8° 12' 53"E

260+00

STH 25

248+00.00

NOTE:
ADJUST EROSION CONTROL BASED ON TEMPORARY LANE SHIFT FOR CULVERT REPLACEMENT.

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

HAWK RIDGE DR

WETLAND

WETLAND, RESTORE TO EXISTING CONDITION

276+00.00

PC: 272+14.13

+07.93
-51.55'LT

+72.35
-47.22'LT

+16.67
-58.38'LT

+61.79
-60.03'LT

+04.37
-33.28'LT

265+00

270+00

N8° 12' 53"E

275+00

STH 25

262+00.00

+74.26
78.04'RT

+57.40
73.55'RT

+57.93
78.74'RT

+79.14
69.27'RT

+87.30
49.25'RT

PI: 274+76.35

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 35	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (10)
PLOT DATE : 1/3/2022 9:25 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

2

WETLAND, RESTORE TO EXISTING CONDITION

PT: 277+37.65

280+00

285+00

N0° 07' 03"W

290

STH 25

290+00.00

276+00.00

471ST ST

N

LEGEND

- EROSION MAT URBAN CLASS I, TYPE B
- SILT FENCE
- RIP RAP
- SLOPE INTERCEPT
- ASPH — ASPHALTIC FLUME
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

472ND AVE

PC: 299+91.50

HEAVY RIPRAP WITH GEOTEXTILE TYPE HR (10' X 10')

304+00.00

+00

N0° 07' 03"W

295+00

300+00

STH 25

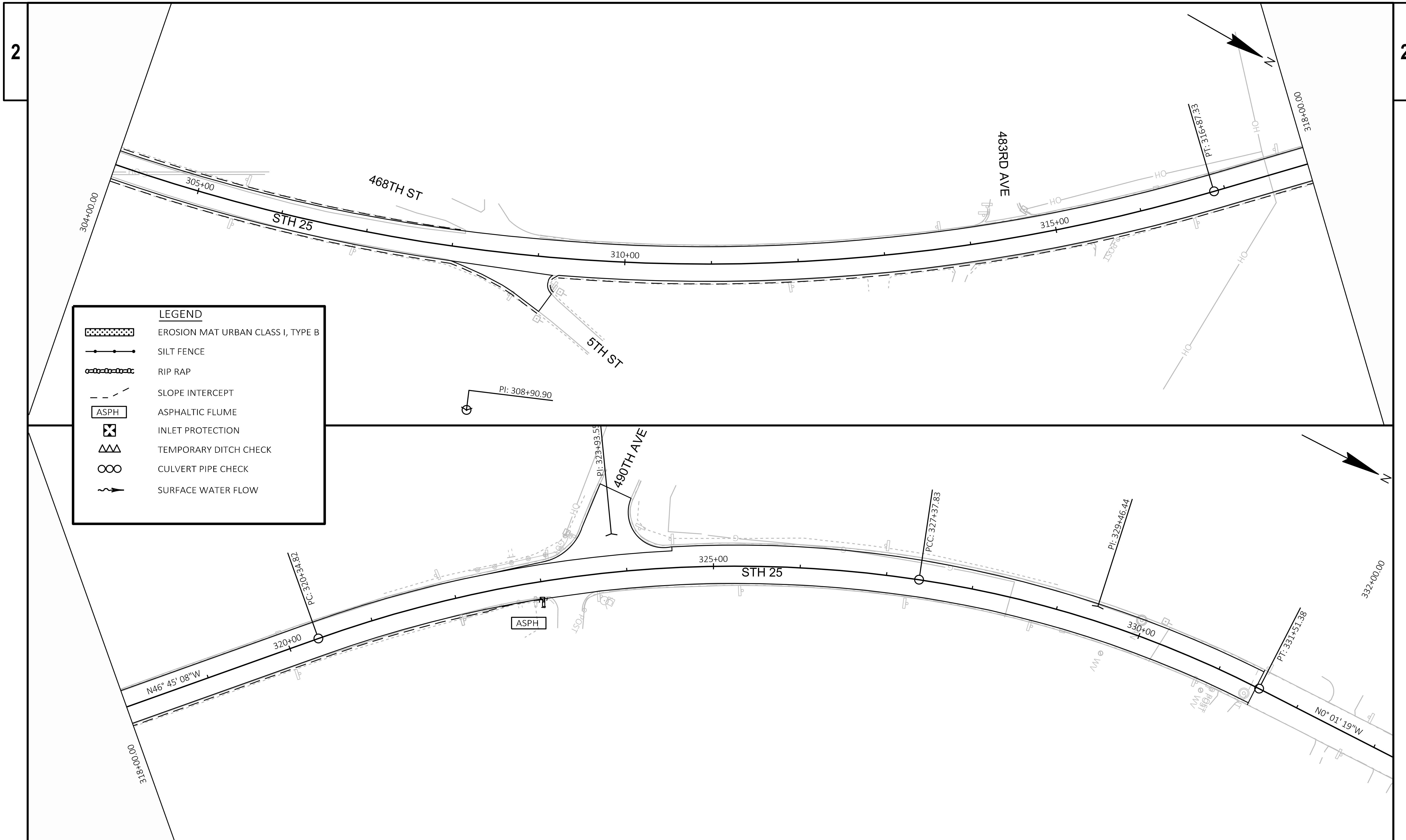
290+00.00

FRONTIER RD

N

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 36	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (11)
PLOT DATE : 1/3/2022 9:25 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	EROSION CONTROL	SHEET 37	E

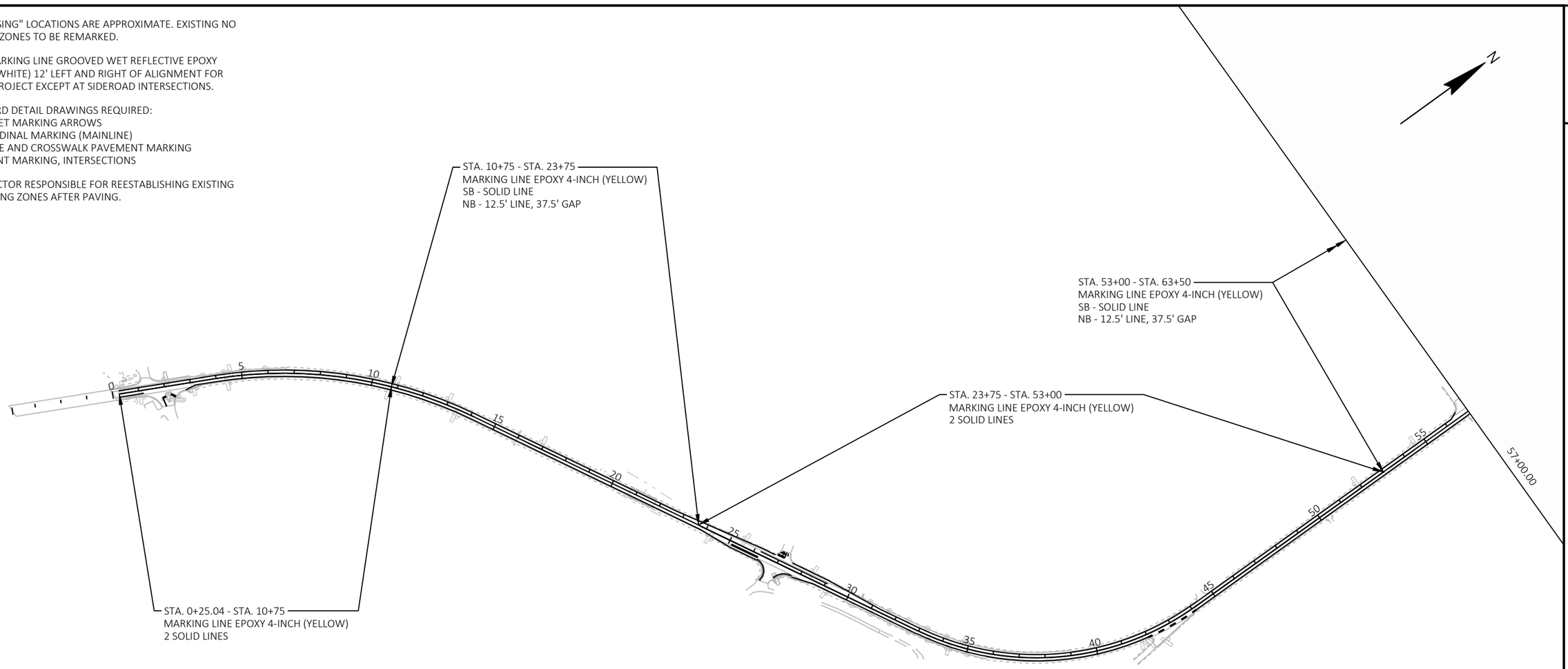
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - (12)
PLOT DATE : 1/3/2022 9:25 AM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 38	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 1
PLOT DATE : 1/4/2022 3:18 PM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

N

STA. 53+00 - STA. 63+50
MARKING LINE EPOXY 4-INCH (YELLOW)
SB - SOLID LINE
NB - 12.5' LINE, 37.5' GAP

STA. 109+55 - STA. 145+85
MARKING LINE EPOXY 4-INCH (YELLOW)
2 SOLID LINES

57+00.00

118+00.00

STA. 63+50 - STA. 99+15
MARKING LINE EPOXY 4-INCH (YELLOW)
12.5' LINE, 37.5' GAP

STA. 99+15 - STA. 109+55
MARKING LINE EPOXY 4-INCH (YELLOW)
SB - 12.5' LINE, 37.5' GAP
NB - SOLID LINE

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 39	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 2
PLOT DATE : 1/4/2022 3:18 PM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

N

STA. 178+65 - STA. 182+00
MARKING LINE EPOXY 4-INCH (YELLOW)
SB - 12.5' LINE, 37.5' GAP
NB - SOLID LINE

STA. 109+55 - STA. 145+85
MARKING LINE EPOXY 4-INCH (YELLOW)
2 SOLID LINES

STA. 156+70 - STA. 178+65
MARKING LINE EPOXY 4-INCH (YELLOW)
12.5' LINE, 37.5' GAP

118+00.00

120 125 130 135 140 145 150 155 160 165 170 175

179+00.00

STA. 145+85 - STA. 156+70
MARKING LINE EPOXY 4-INCH (YELLOW)
SB - SOLID LINE
NB - 12.5' LINE, 37.5' GAP

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 40	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 3
PLOT DATE : 1/4/2022 3:18 PM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

N

STA. 178+65 - STA. 182+00
MARKING LINE EPOXY 4-INCH (YELLOW)
SB - 12.5' LINE, 37.5' GAP
NB - SOLID LINE

STA. 182+00 - STA. 238+55
MARKING LINE EPOXY 4-INCH (YELLOW)
2 SOLID LINES

179+00.00

180 185 190 195 200 205 210 215 220 225 230 235

240+00.00

STA. 238+55 - STA. 244+30
MARKING LINE EPOXY 4-INCH (YELLOW)
SB - SOLID LINE
NB - 12.5' LINE, 37.5' GAP

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 41	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 4
PLOT DATE : 1/4/2022 3:18 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:400 FT
WISDOT/CADDS SHEET 42

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

N

STA. 238+55 - STA. 244+30
MARKING LINE EPOXY 4-INCH (YELLOW)
SB - SOLID
NB - 12.5' LINE, 37.5' GAP

STA. 256+00 - STA. 331+48
MARKING LINE EPOXY 4-INCH (YELLOW)
2 SOLID LINES

240+00.00

245 250 255 260 265 270 275 280 285 290 295 300

301+00.00

STA. 244+30 - STA. 244+85
MARKING LINE EPOXY 4-INCH (YELLOW)
2 SOLID LINES

STA. 244+85 - STA. 256+00
MARKING LINE EPOXY 4-INCH (YELLOW)
SB - 12.5' LINE, 37.5' GAP
NB - SOLID LINE

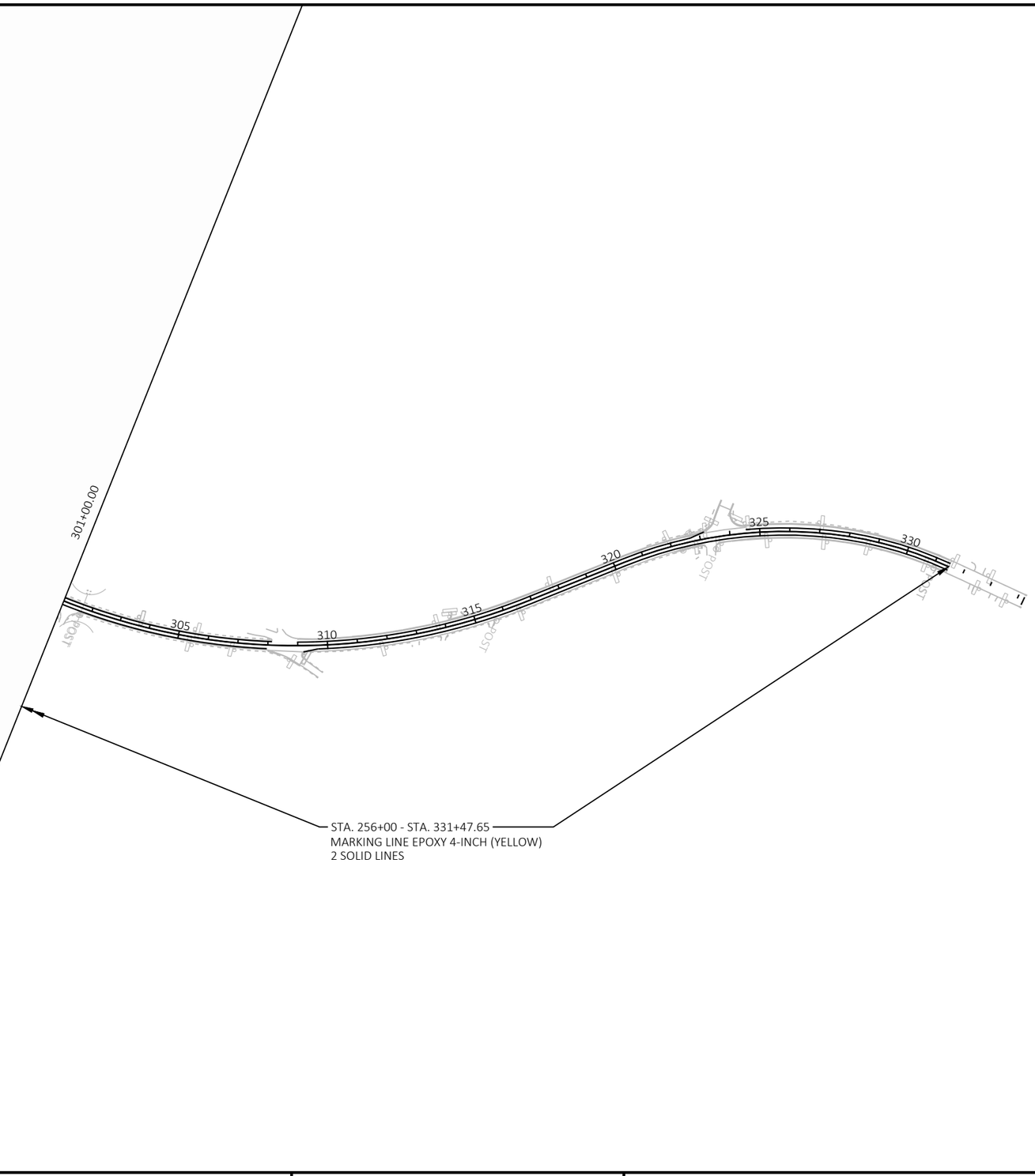
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 42	E

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.



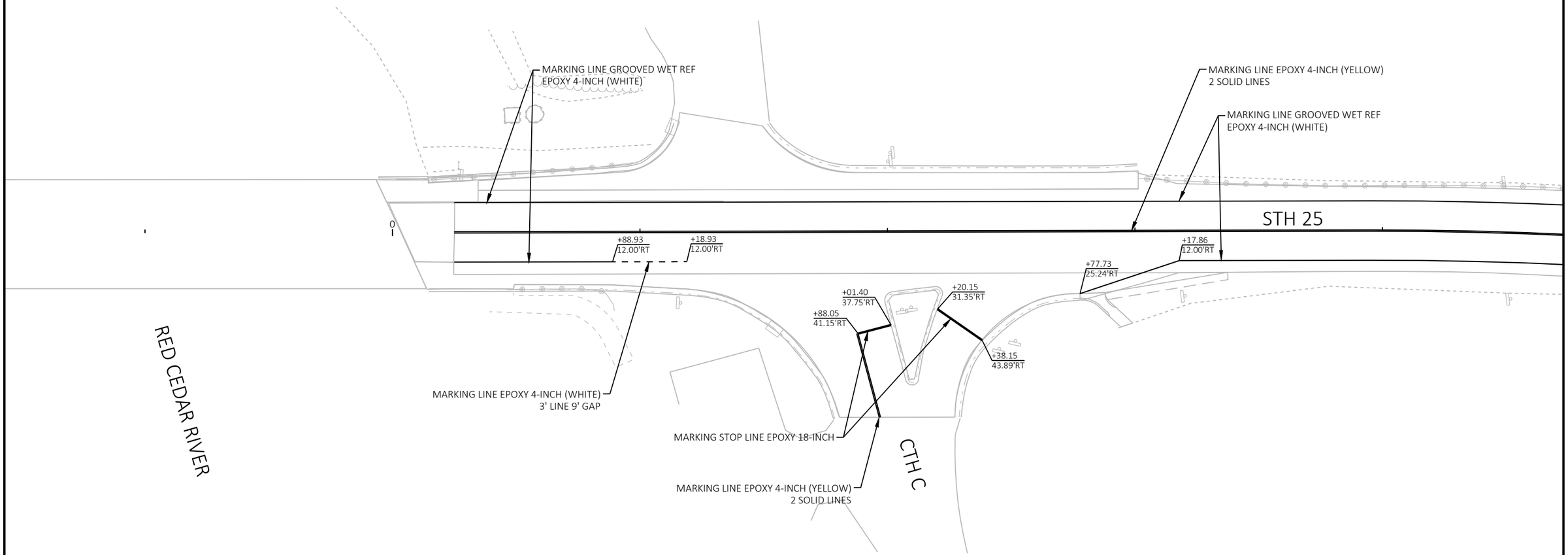
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 43	E

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 44	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - CTH C
PLOT DATE : 1/4/2022 3:18 PM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

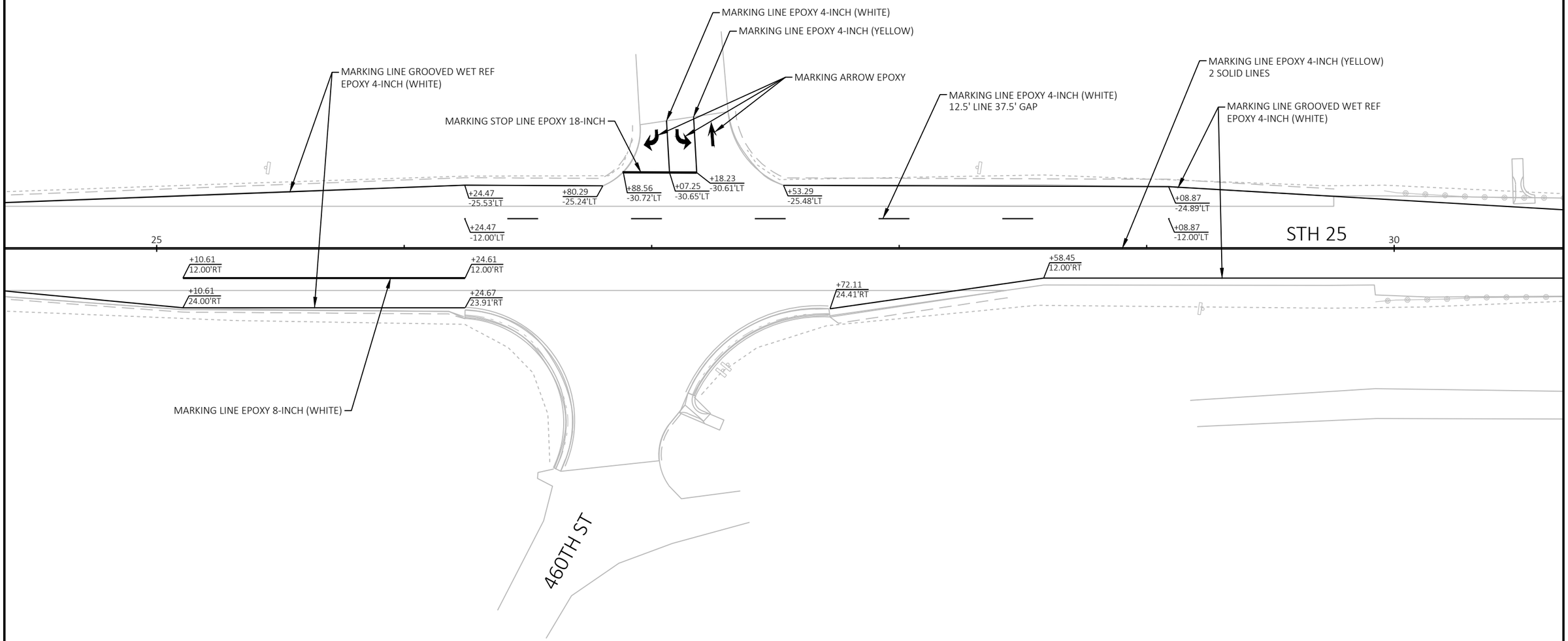
"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVEMENT MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

2



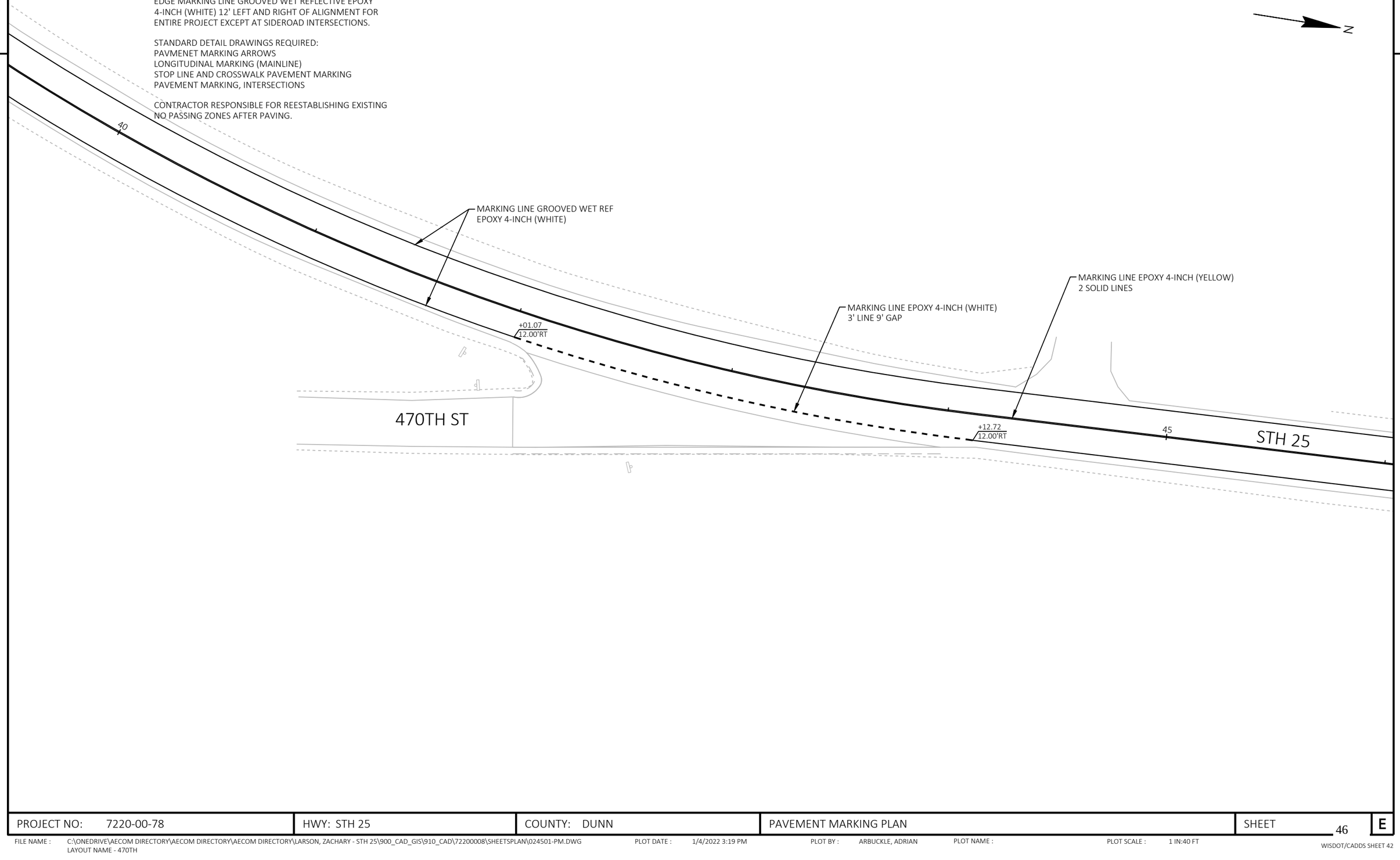
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 45	E

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.



2

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 46	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 470TH
PLOT DATE : 1/4/2022 3:19 PM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

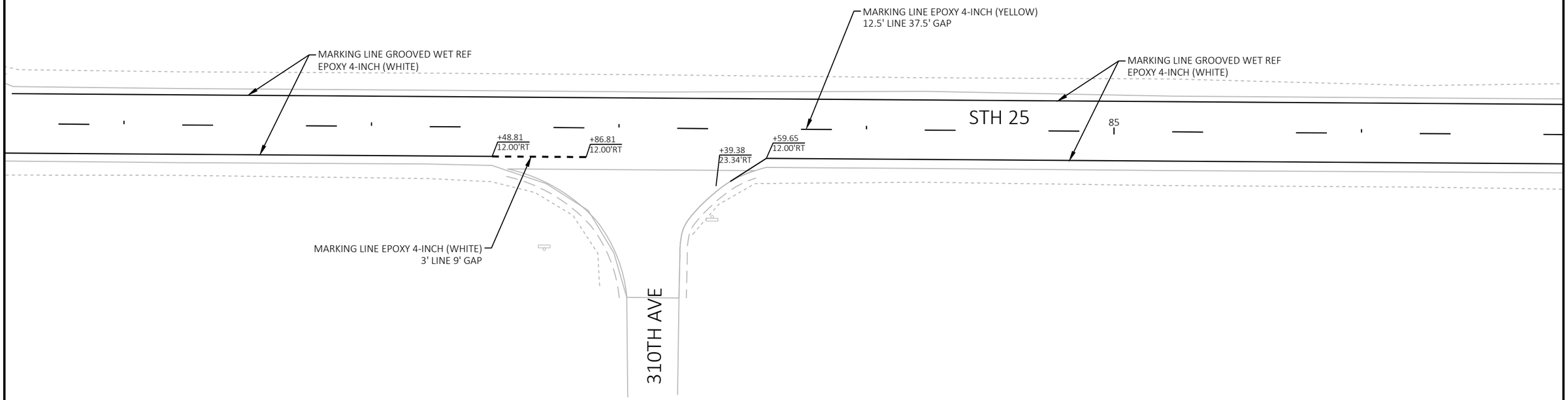
"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

N



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 47	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 310TH
PLOT DATE : 1/4/2022 3:19 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

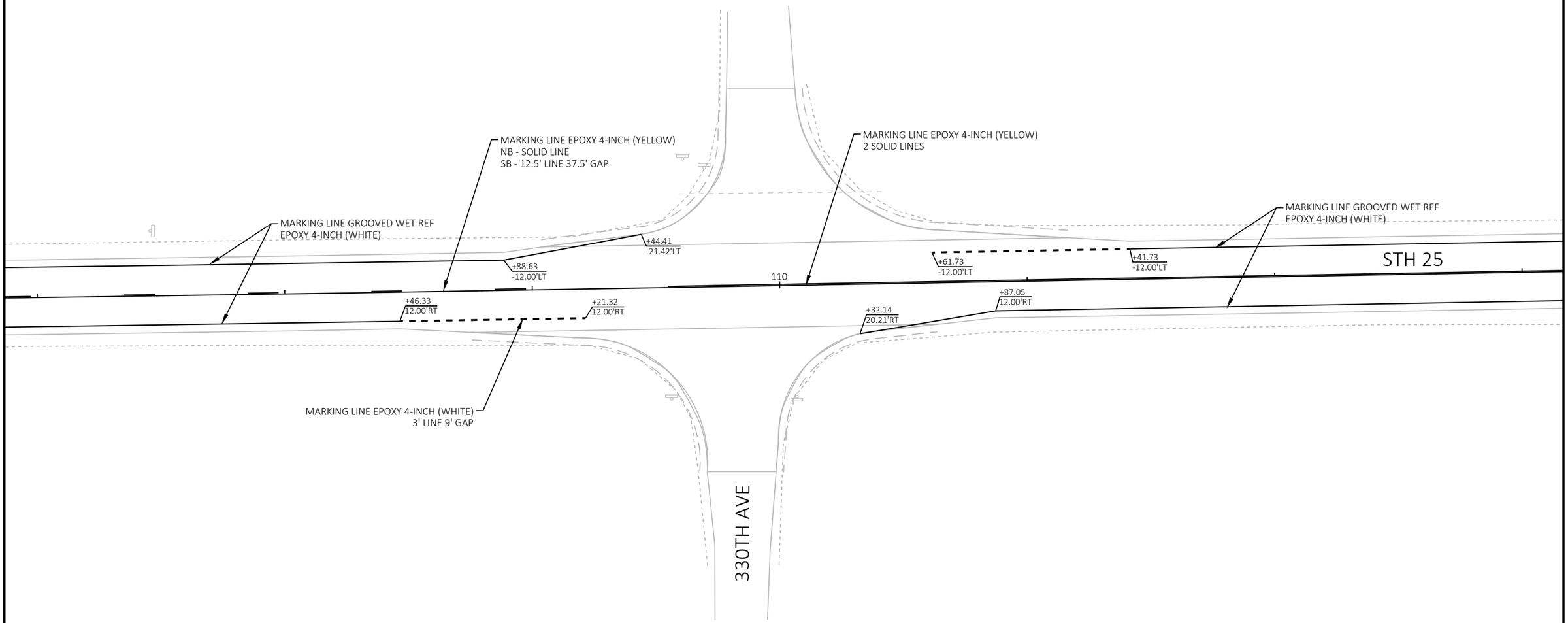
"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

N



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 48	E

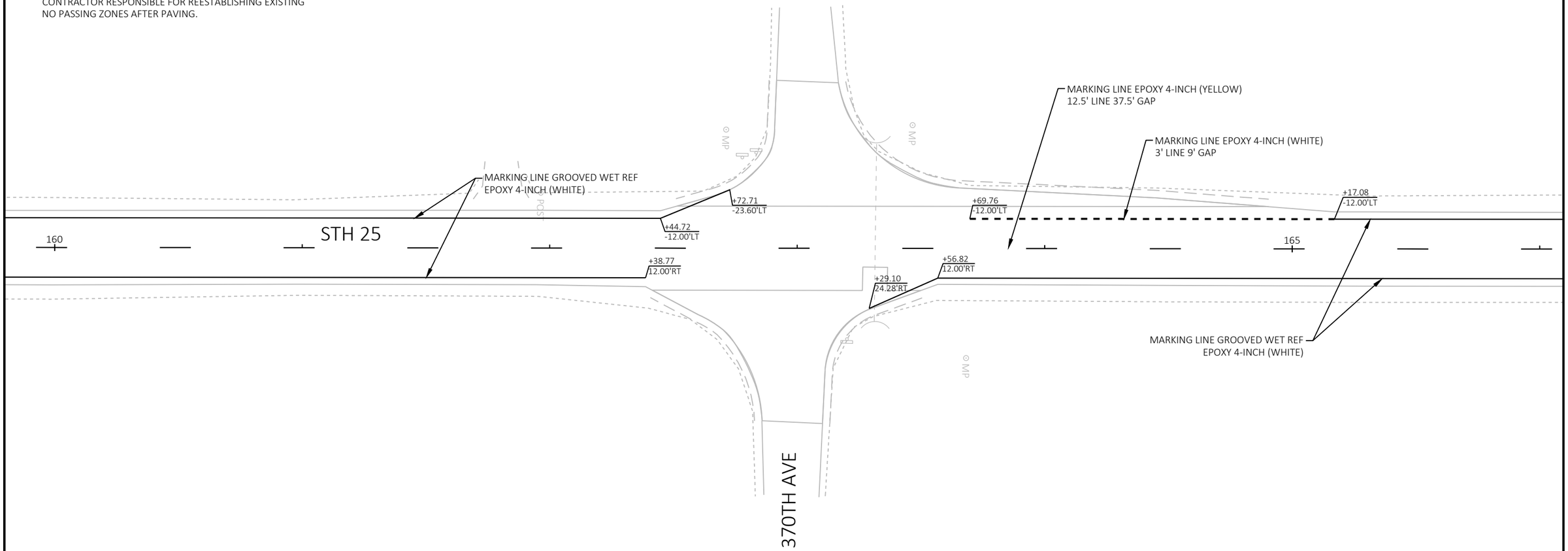
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 330TH
PLOT DATE : 1/4/2022 3:19 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 49	E

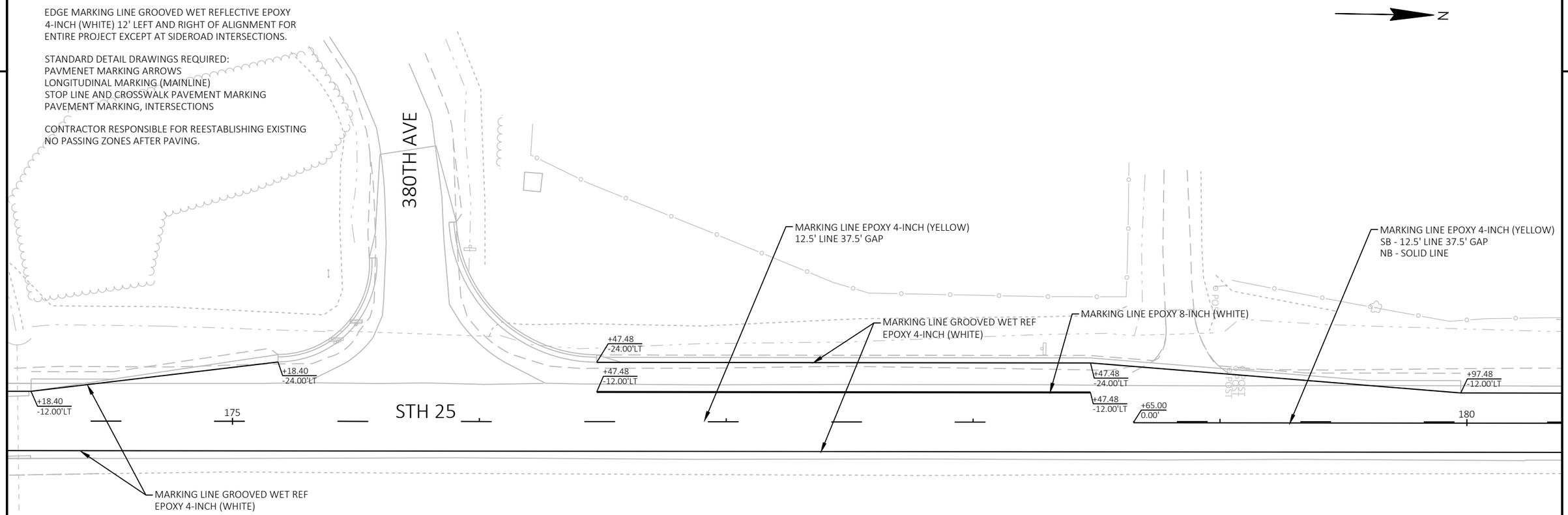
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 370TH
PLOT DATE : 1/4/2022 3:19 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 50	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 380TH
PLOT DATE : 1/4/2022 3:19 PM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

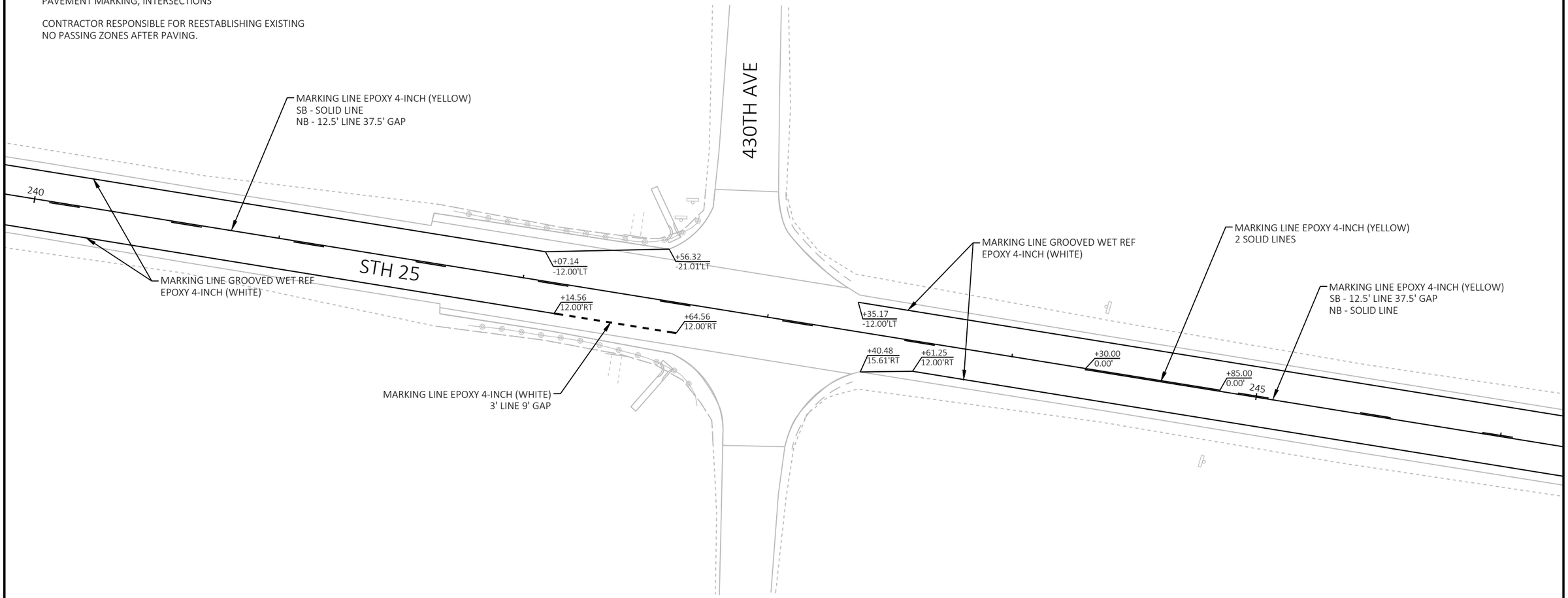
"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

2



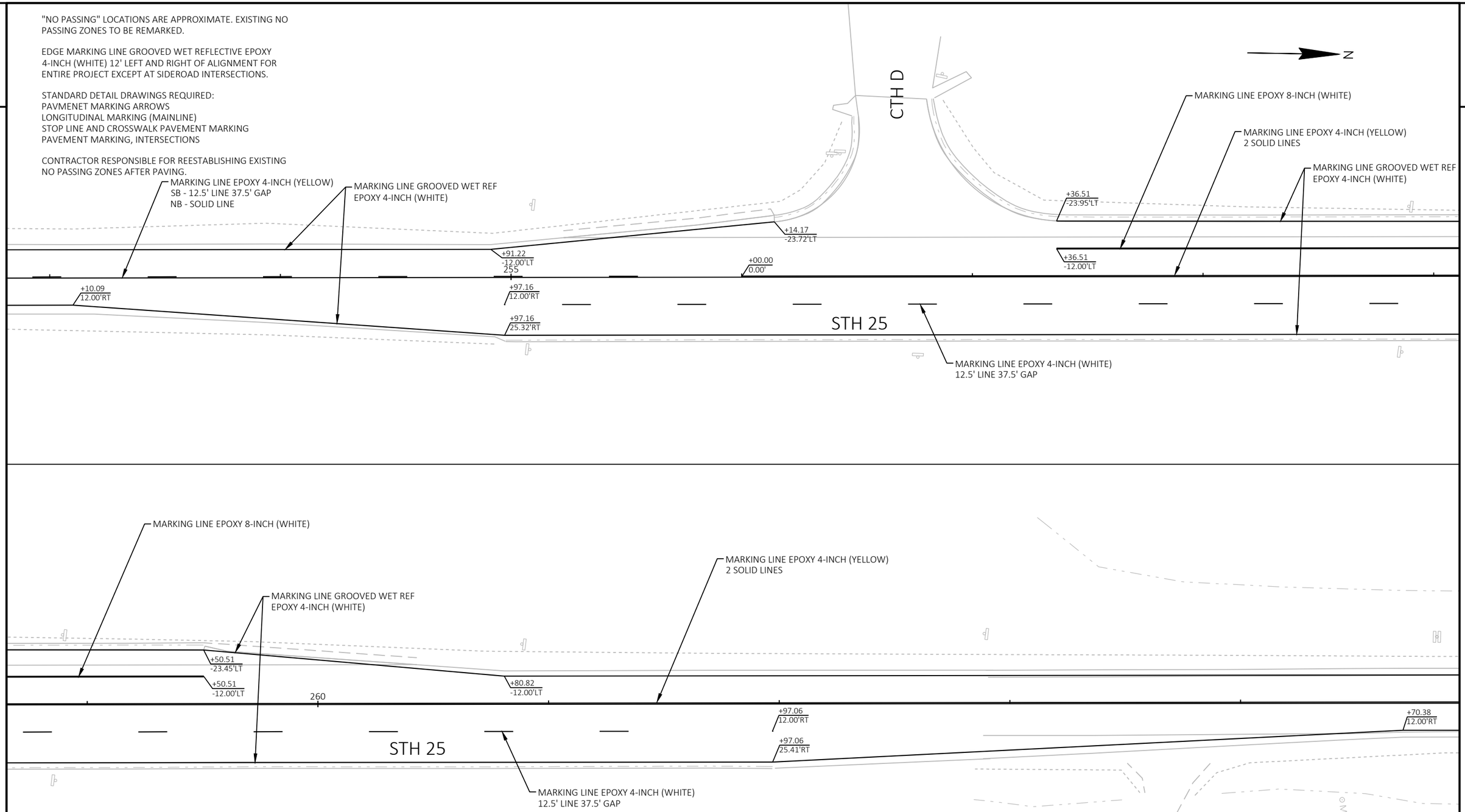
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 51	E

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 52	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - CTH D
PLOT DATE : 1/4/2022 3:19 PM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

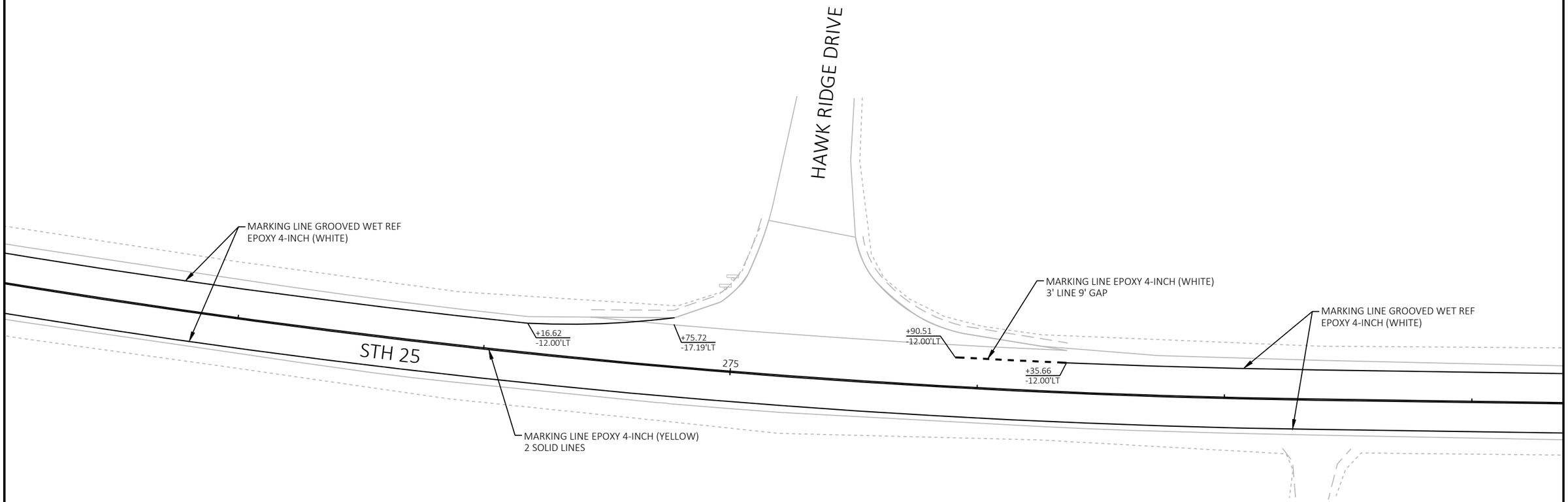
"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

N



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 53	E

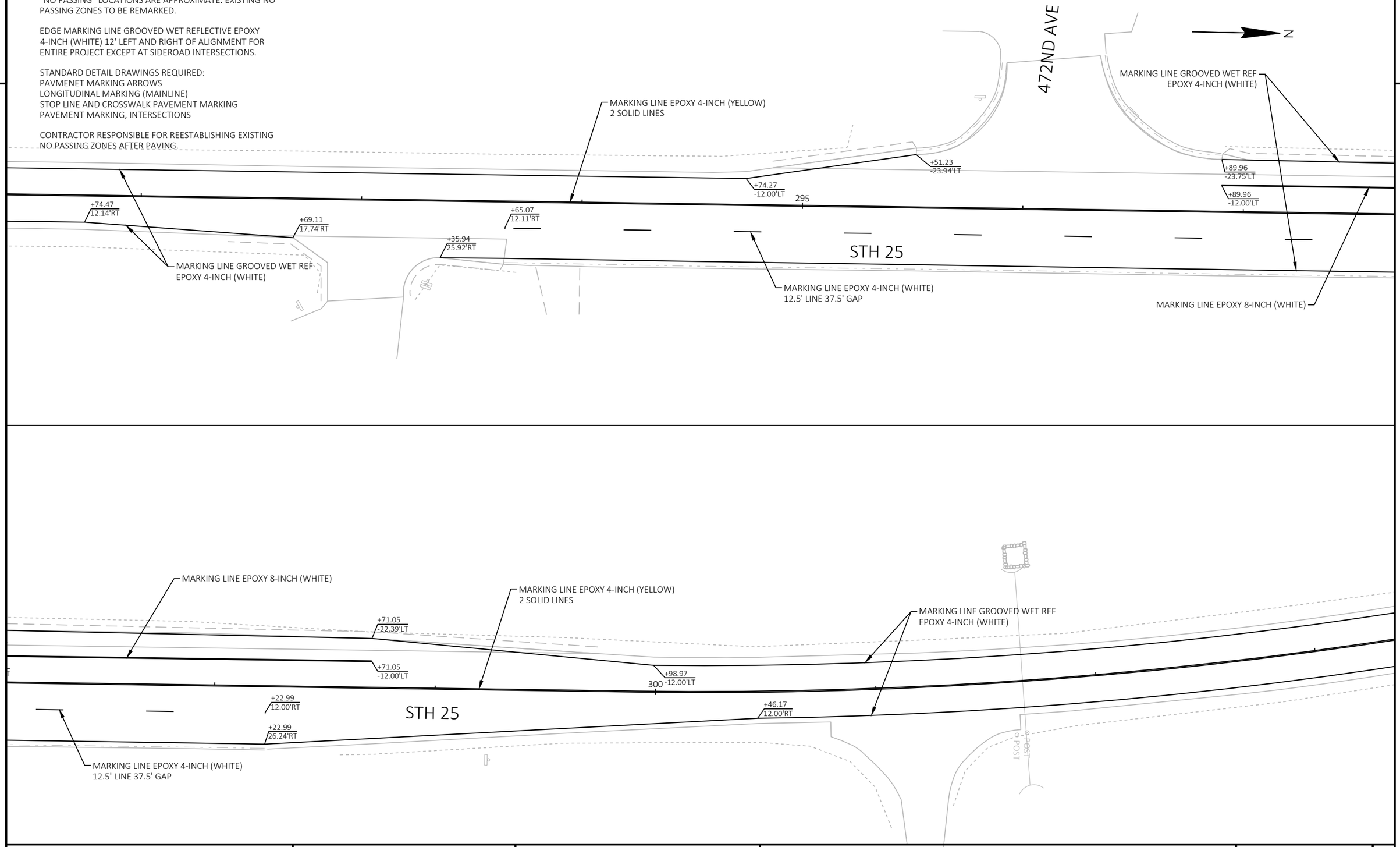
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - Hawk Ridge
PLOT DATE : 1/4/2022 3:19 PM
PLOT BY : ARBUCKLE, ADRIAN
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 42

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.



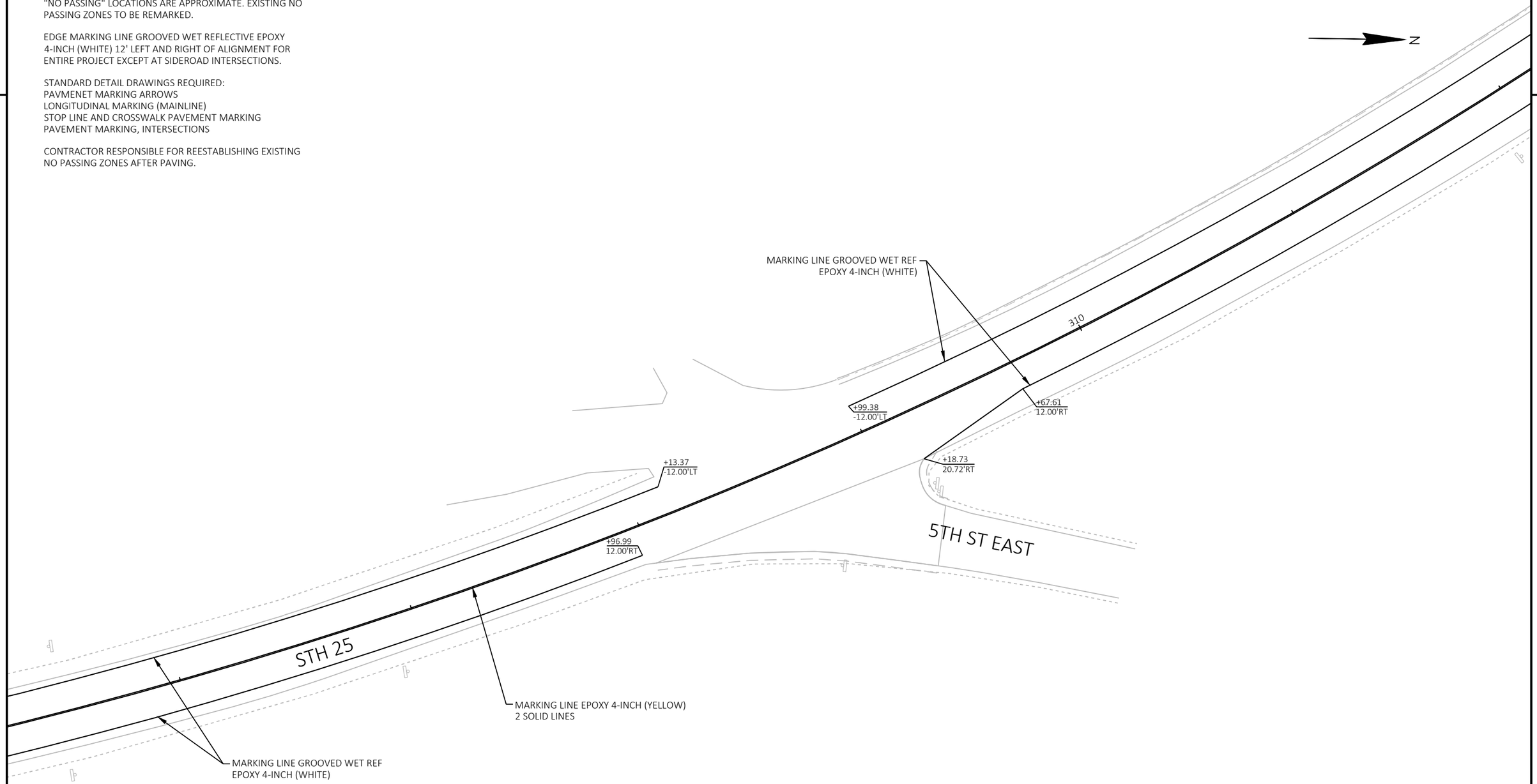
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 54	E

"NO PASSING" LOCATIONS ARE APPROXIMATE. EXISTING NO PASSING ZONES TO BE REMARKED.

EDGE MARKING LINE GROOVED WET REFLECTIVE EPOXY 4-INCH (WHITE) 12' LEFT AND RIGHT OF ALIGNMENT FOR ENTIRE PROJECT EXCEPT AT SIDEROAD INTERSECTIONS.

STANDARD DETAIL DRAWINGS REQUIRED:
PAVMENET MARKING ARROWS
LONGITUDINAL MARKING (MAINLINE)
STOP LINE AND CROSSWALK PAVEMENT MARKING
PAVEMENT MARKING, INTERSECTIONS

CONTRACTOR RESPONSIBLE FOR REESTABLISHING EXISTING NO PASSING ZONES AFTER PAVING.

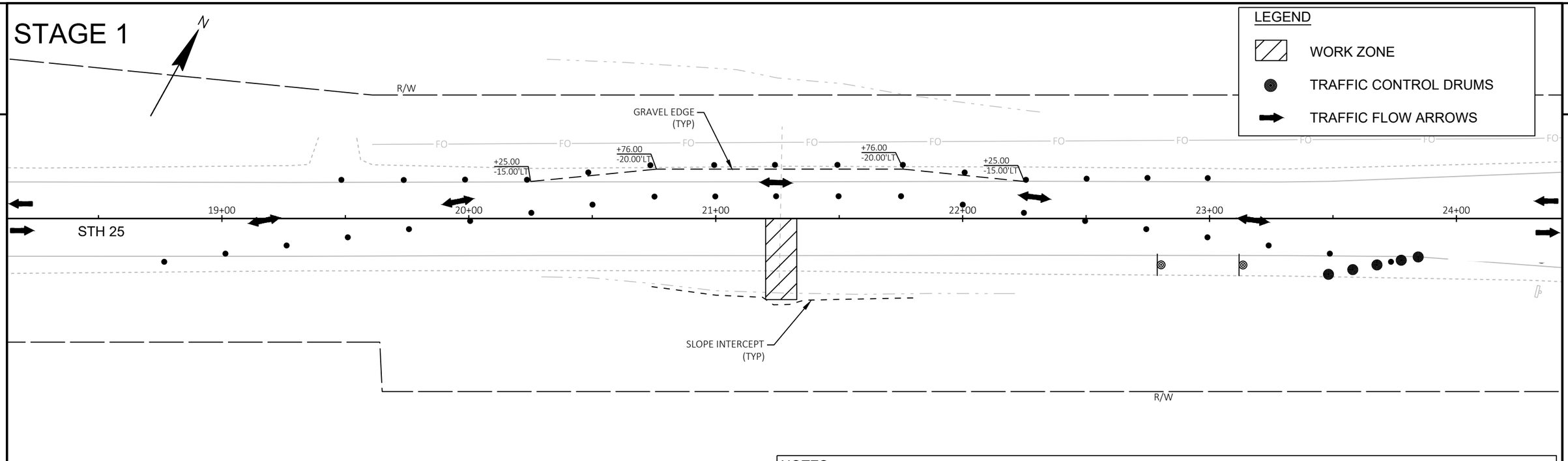


PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PAVEMENT MARKING PLAN	SHEET 55	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\AECOM DIRECTORY\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 5TH ST East
PLOT DATE : 1/4/2022 3:19 PM PLOT BY : ARBUCKLE, ADRIAN PLOT NAME : PLOT SCALE : 1 IN:40 FT

2

STAGE 1



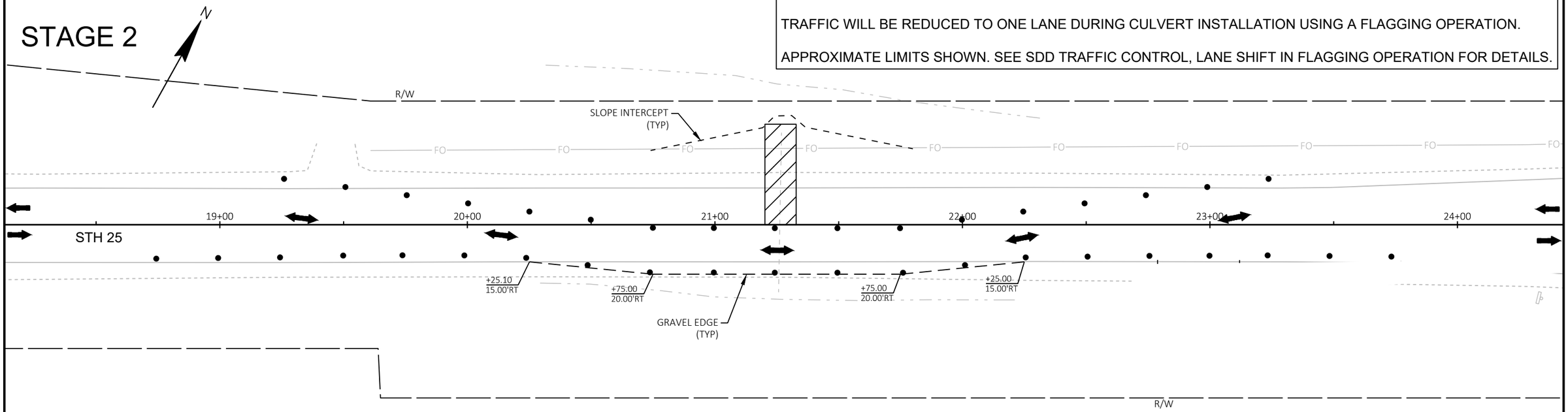
NOTES:

TEMPORARY FILL TO BE REMOVED AFTER CULVERT IS INSTALLED.

TRAFFIC WILL BE REDUCED TO ONE LANE DURING CULVERT INSTALLATION USING A FLAGGING OPERATION.

APPROXIMATE LIMITS SHOWN. SEE SDD TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION FOR DETAILS.

STAGE 2



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	LANE SHIFT (REPLACING CULVERT AT STA 21+27)	SHEET 56	E

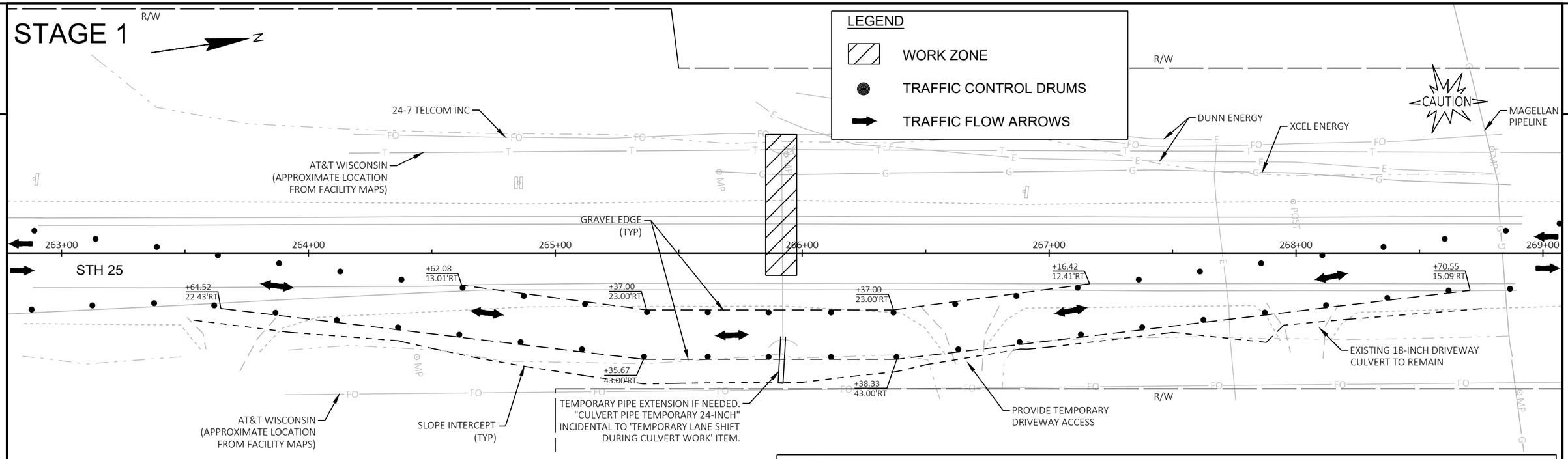
FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - LaneShift1

PLOT DATE : 9/28/2021 11:13 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

2

STAGE 1



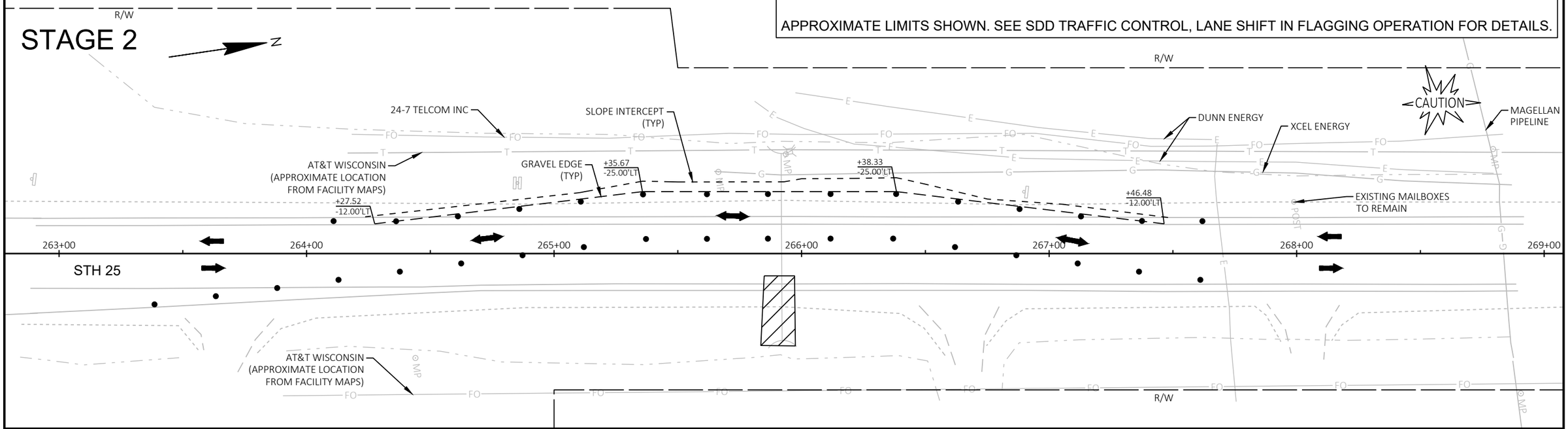
NOTES:

TEMPORARY FILL TO BE REMOVED AFTER CULVERT IS INSTALLED.

TRAFFIC WILL BE REDUCED TO ONE LANE DURING CULVERT INSTALLATION USING A FLAGGING OPERATION.

APPROXIMATE LIMITS SHOWN. SEE SDD TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION FOR DETAILS.

STAGE 2



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	LANE SHIFT (REPLACING CULVERT AT STA 265+92)	SHEET 57	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - LaneShift2

PLOT DATE : 9/28/2021 11:13 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

NOTES:

TRAFFIC CONTROL TO BE PLACED IN CONFIGURATION SHOWN WHEN FLAGGING OPERATION NOT IN USE.
TRAFFIC CONTROL DEVICES TO CONFORM TO WISDOT SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY".

LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUMS
- TRAFFIC FLOW ARROWS

N

R/W

5 DRUMS IN TAPER

STH 25

23+00 24+00 25+00 26+00 27+00 28+00 29+00 30+00

500' 500' 100' 335' 50'

+40.55
17.70'RT

+45.04
17.95'RT

+50.00
15.00'RT

15' 15' 26'

TRAFFIC CONTROL DRUM (TYP.)

WORK ZONE FOR C&G REPLACEMENT

WORK ZONE FOR C&G REPLACEMENT

STOP
R1-1
30"X30"

PLACE SIGN ON TEMPORARY SUPPORT

ROAD WORK AHEAD
W20-1A

SHOULDER WORK
W21-5

460TH ST

R/W

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	TRAFFIC CONTROL AT 460TH ST	SHEET 58	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - 460th

PLOT DATE : 9/28/2021 11:13 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 42

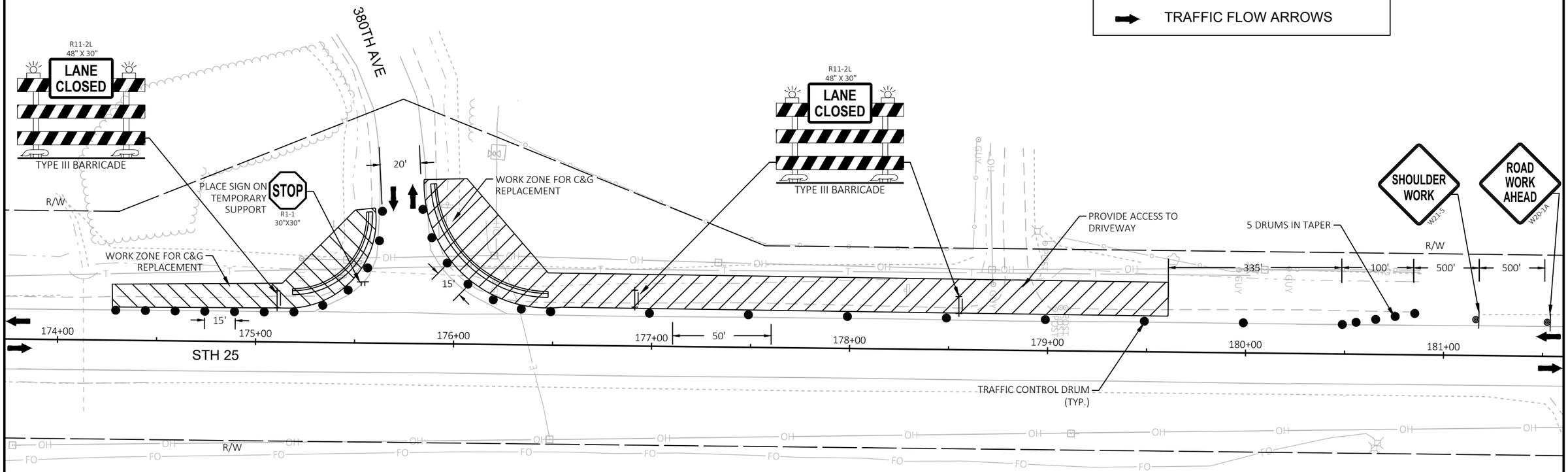
NOTES:

TRAFFIC CONTROL TO BE PLACED IN CONFIGURATION SHOWN WHEN FLAGGING OPERATION NOT IN USE.
TRAFFIC CONTROL DEVICES TO CONFORM TO WISDOT SDD "TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY".

LEGEND

- WORK ZONE
- TRAFFIC CONTROL DRUMS
- TRAFFIC FLOW ARROWS

N



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	TRAFFIC CONTROL AT 380TH AVE	SHEET 59	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\025100-TC.DWG
LAYOUT NAME - 380th
PLOT DATE : 9/28/2021 11:13 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

Estimate Of Quantities

7220-00-78

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0205	Grubbing	STA	2.000	2.000
0006	202.0105	Roadside Clearing	STA	3.000	3.000
0008	203.0100	Removing Small Pipe Culverts	EACH	4.000	4.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	6,622.000	6,622.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	127,400.000	127,400.000
0014	204.0150	Removing Curb & Gutter	LF	172.000	172.000
0016	204.0165	Removing Guardrail	LF	760.000	760.000
0018	204.9090.S	Removing (item description) 01. Guardrail Curb	LF	1,670.000	1,670.000
0020	205.0100	Excavation Common	CY	2,206.000	2,206.000
0022	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	2.000	2.000
0024	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	608.000	608.000
0026	213.0100	Finishing Roadway (project) 01. 7220-00-78	EACH	1.000	1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	5,180.000	5,180.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,920.000	1,920.000
0032	305.0500	Shaping Shoulders	STA	608.000	608.000
0034	455.0605	Tack Coat	GAL	19,520.000	19,520.000
0036	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	2.000	2.000
0038	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0040	460.2005	Incentive Density PWL HMA Pavement	DOL	16,098.000	16,098.000
0042	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	16,580.000	16,580.000
0044	460.2010	Incentive Air Voids HMA Pavement	DOL	25,521.000	25,521.000
0046	460.6644	HMA Pavement 4 MT 58-34 V	TON	13,686.000	13,686.000
0048	460.6645	HMA Pavement 5 MT 58-34 V	TON	11,835.000	11,835.000
0050	460.9000.S	Material Transfer Vehicle	EACH	1.000	1.000
0052	465.0105	Asphaltic Surface	TON	440.000	440.000
0054	465.0110	Asphaltic Surface Patching	TON	50.000	50.000
0056	465.0310	Asphaltic Curb	LF	1,603.000	1,603.000
0058	465.0315	Asphaltic Flumes	SY	67.000	67.000
0060	465.0425	Asphaltic Shoulder Rumble Strips 2-Lane Rural	LF	50,780.000	50,780.000
0062	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	25,390.000	25,390.000
0064	520.8000	Concrete Collars for Pipe	EACH	2.000	2.000
0066	520.8700	Cleaning Culvert Pipes	EACH	5.000	5.000
0068	521.1018	Apron Endwalls for Culvert Pipe Steel 18-Inch	EACH	2.000	2.000
0070	521.1036	Apron Endwalls for Culvert Pipe Steel 36-Inch	EACH	1.000	1.000
0072	521.3118	Culvert Pipe Corrugated Steel 18-Inch	LF	30.000	30.000
0074	522.0118	Culvert Pipe Reinforced Concrete Class III 18-Inch	LF	96.000	96.000
0076	522.0130	Culvert Pipe Reinforced Concrete Class III 30-Inch	LF	136.000	136.000
0078	522.1018	Apron Endwalls for Culvert Pipe Reinforced Concrete 18-Inch	EACH	2.000	2.000
0080	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	6.000	6.000
0082	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	18.000	18.000
0084	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	303.000	303.000
0086	606.0300	Riprap Heavy	CY	6.000	6.000
0088	611.9800.S	Pipe Grates	EACH	1.000	1.000
0090	614.0010	Barrier System Grading Shaping Finishing	EACH	2.000	2.000
0092	614.0396	Guardrail Mow Strip Asphalt	SY	255.000	255.000
0094	614.0397	Guardrail Mow Strip Emulsified Asphalt	SY	1,495.000	1,495.000
0096	614.0400	Adjusting Steel Plate Beam Guard	LF	3,087.000	3,087.000
0098	614.2300	MGS Guardrail 3	LF	50.000	50.000

7220-00-78

Line	Item	Item Description	Unit	Total	Qty
0100	614.2330	MGS Guardrail 3 K	LF	525.000	525.000
0102	614.2610	MGS Guardrail Terminal EAT	EACH	4.000	4.000
0104	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7220-00-78	EACH	1.000	1.000
0106	619.1000	Mobilization	EACH	1.000	1.000
0108	621.0100	Landmark Reference Monuments	EACH	2.000	2.000
0110	624.0100	Water	MGAL	104.000	104.000
0112	625.0500	Salvaged Topsoil	SY	5,930.000	5,930.000
0114	628.1504	Silt Fence	LF	2,698.000	2,698.000
0116	628.1520	Silt Fence Maintenance	LF	2,698.000	2,698.000
0118	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0120	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0122	628.2008	Erosion Mat Urban Class I Type B	SY	9,800.000	9,800.000
0124	628.7010	Inlet Protection Type B	EACH	2.000	2.000
0126	628.7015	Inlet Protection Type C	EACH	2.000	2.000
0128	628.7504	Temporary Ditch Checks	LF	90.000	90.000
0130	628.7555	Culvert Pipe Checks	EACH	41.000	41.000
0132	629.0205	Fertilizer Type A	CWT	4.000	4.000
0134	630.0120	Seeding Mixture No. 20	LB	160.000	160.000
0136	630.0200	Seeding Temporary	LB	160.000	160.000
0138	630.0500	Seed Water	MGAL	107.000	107.000
0140	633.5200	Markers Culvert End	EACH	27.000	27.000
0142	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	5.000	5.000
0144	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	2.000	2.000
0146	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	1.000	1.000
0148	638.2102	Moving Signs Type II	EACH	12.000	12.000
0150	638.3000	Removing Small Sign Supports	EACH	7.000	7.000
0152	642.5001	Field Office Type B	EACH	1.000	1.000
0154	643.0300	Traffic Control Drums	DAY	1,744.000	1,744.000
0156	643.0420	Traffic Control Barricades Type III	DAY	30.000	30.000
0158	643.0705	Traffic Control Warning Lights Type A	DAY	60.000	60.000
0160	643.0900	Traffic Control Signs	DAY	4,770.000	4,770.000
0162	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0164	643.5000	Traffic Control	EACH	1.000	1.000
0166	645.0120	Geotextile Type HR	SY	18.000	18.000
0168	646.1020	Marking Line Epoxy 4-Inch	LF	51,823.000	51,823.000
0170	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	63,800.000	63,800.000
0172	646.3020	Marking Line Epoxy 8-Inch	LF	710.000	710.000
0174	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	48,420.000	48,420.000
0176	646.5020	Marking Arrow Epoxy	EACH	3.000	3.000
0178	646.6120	Marking Stop Line Epoxy 18-Inch	LF	66.000	66.000
0180	649.0105	Temporary Marking Line Paint 4-Inch	LF	48,420.000	48,420.000
0182	650.4500	Construction Staking Subgrade	LF	922.000	922.000
0184	650.5000	Construction Staking Base	LF	977.000	977.000
0186	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	318.000	318.000
0188	650.6000	Construction Staking Pipe Culverts	EACH	4.000	4.000
0190	650.8000	Construction Staking Resurfacing Reference	LF	33,251.000	33,251.000
0192	650.9910	Construction Staking Supplemental Control (project) 01. 7220-00-78	LS	1.000	1.000
0194	650.9920	Construction Staking Slope Stakes	LF	1,623.000	1,623.000
0196	690.0150	Sawing Asphalt	LF	2,513.000	2,513.000

Estimate Of Quantities

7220-00-78

Line	Item	Item Description	Unit	Total	Qty
0198	690.0250	Sawing Concrete	LF	6.000	6.000
0200	740.0440	Incentive IRI Ride	DOL	12,553.000	12,553.000
0202	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,500.000	1,500.000
0204	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	330.000	330.000
0206	SPV.0060	Special 01. Salvage and Reinstall Last Three Pipe Segments with Joint Ties	EACH	6.000	6.000
0208	SPV.0060	Special 02. Grading For New Apron Endwalls	EACH	3.000	3.000
0210	SPV.0090	Special 01. Concrete Curb And Gutter Repair	LF	1,420.000	1,420.000
0212	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	1,200.000	1,200.000

3

CLEARING & GRUBBING

STATION	-	STATION	LOCATION	201.0105 CLEARING (STA)	201.0205 GRUBBING (STA)	202.0105 ROADSIDE CLEARING (STA)
59+00	-	60+00	RT	1	1	--
158+00	-	159+00	RT	--	--	1
174+00	-	175+00	LT	1	1	--
276+00	-	277+00	LT/RT	--	--	1
280+00	-	281+00	LT/RT	--	--	1
			PROJECT TOTALS	2	2	3

REMOVING SMALL PIPE CULVERTS

STATION	-	STATION	LOCATION	203.0100 REMOVING SMALL PIPE CULVERTS (EACH)	NOTES
	-	21+27	LT/RT	1	64 LF - 30" CPCS
175+31	-	176+31	LT/RT	1	66 LF - 18" CPCS
178+67	-	178+99	LT/RT	1	30 LF - 18" CPCS
	-	265+90	LT/RT	1	75 LF - 30" CPRC
			PROJECT TOTALS	4	

REMOVING ASPHALTIC SURFACE

STATION	-	STATION	LOCATION	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS (SY)	204.0120 REMOVING ASPHALTIC SURFACE MILLING (SY)	SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILLING (SY)	NOTES
0+00	-	0+25	LT/RT	--	43	--	CURB SETTLEMENT AREA
0+25	-	174+00	LT/RT	1,815	66,457	--	
174+00	-	180+00	LT/RT	--	1,800	--	
180+00	-	331+41	LT/RT	4,807	59,100	--	
			UNDISTRIBUTED	--	--	1,200	
			PROJECT TOTALS	6,622	127,400	1,200	

REMOVING GUARDRAIL AND CURB & GUTTER

STATION	-	STATION	SIDE	204.0150 REMOVING CURB & GUTTER LF	204.0165 REMOVING GUARDRAIL LF	204.9090.S REMOVING GUARDRAIL CURB LF
0+15	-	0+33	LT	18	--	--
26+24	-	27+72	RT	154	--	--
29+96	-	35+42	LT	--	--	380
59+10	-	63+15	LT	--	405	--
59+52	-	63+07	RT	--	355	--
113+89	-	121+00	RT	--	--	590
114+50	-	120+79	LT	--	--	560
241+68	-	242+67	LT	--	--	70
241+81	-	242+78	RT	--	--	70
			PROJECT TOTALS	172	760	1,670

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

3

EARTHWORK SUMMARY (PROJECT 7220-00-78)

Division	From/To Station	Location	205.0100 Excavation Common (1) CY		Salvaged/ Unusable Pavement Material (3)	Available Material (4)	Unexpanded Fill	Expanded Fill (5)	Mass Ordinate +/- (6)
			Cut (2)	Transition Cut				Factor 1.3	
1	20+74 - 21+80	STH 25 CULVERT REPLACEMENT	339	324	52.5	287	37	48	291
	8+90'A' - 10+00'A'	380TH AVE INTERSECTION	242			242	17	22	219
	174+08 - 179+97	STH 25 @ 380TH AVE INTERSECTION	449			449	163	212	237
	265+37 - 266+42	STH 25 CULVERT REPLACEMENT	389	463	52.5	336	16	21	368
Division 1 Subtotal			1,419	787	105	1,314	234	304	1,902
Grand Total			1,419	787	105	1,314	234	304	1,902
			Total Common Exc	2,206					

1) Common Excavation is the sum of the Cut and EBS Excavation columns. Item number 205.0100.
2) Salvaged/Unsuable Pavement Material is included in Cut.
3) Salvaged/Unusable Pavement Material.
4) Available Material = Cut - Salvaged/Unusuable Pavement Material.
5) Expanded Fill = Unexpanded Fill * Fill Factor
6) Mass Ordinate + or - Quantity Calculated for the Division. Plus Quantity indicates an excess of material. Minus indicates a shortage of material.

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

BASE AGGREGATE & HMA PAVEMENT

STATION - STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS (STA)	305.0110 BASE AGGREGATE DENSE 3/4-INCH (TON)	305.0120 BASE AGGREGATE DENSE 1-1/4-INCH (TON)	305.0500 SHAPING SHOULDERS (STA)	460.6644 HMA PAVEMENT 4 MT 58-34 V (TON)	460.6645 HMA PAVEMENT 5 MT 58-34 V (TON)	465.0105 ASPHALTIC SURFACE (TON)	465.0110 ASPHALTIC SURFACE PATCHING (TON)	455.0605 TACK COAT (GAL)	460.0105.S TEST STRIP VOLUMETRICS (EACH)	460.0110.S TEST STRIP DENSITY (EACH)	624.0100 WATER (MGAL)	NOTES
0+00 - 0+25	LT/RT	--	--	--	--	5	5	--	--	15	--	--	--	CURB SETTLEMENT AREA
0+25 - 174+00	LT/RT	345	2,810	--	345	7,050	6,040	--	--	10,065	--	--	40	
20+74 - 21+80	LT/RT	--	--	380	--	--	--	120	--	30	--	--	6	CULVERT REPLACEMENT
8+90'A' - 10+00'A'	LT/RT	1	20	1,160	1	181	208	--	--	160	--	--	20	
174+00 - 180+00	LT/RT	6	110	--	6	190	163	--	--	280	--	--	2	
180+00 - 331+41	LT/RT	256	2,090	--	256	6,260	5,360	--	--	8,940	--	--	30	
265+37 - 266+42	LT/RT	--	--	380	--	--	--	120	--	30	--	--	6	CULVERT REPLACEMENT
PROJECT LIMITS	TEST STRIP	--	--	--	--	--	--	--	--	--	2	--	--	ONE PER HMA MIX TYPE
PROJECT LIMITS	TEST STRIP	--	--	--	--	--	--	--	--	--	--	2	--	ONE PER MAT OF HMA
	UNDISTRIBUTED	--	--	--	--	--	--	--	50	--	--	--	--	POT HOLES, POP OUTS, RAMPING
	UNDISTRIBUTED	--	--	--	--	--	--	200	--	--	--	--	--	WEDGING/LOWER LAYER PAVEMENT REPAIR
	UNDISTRIBUTED	--	150	--	--	--	59	--	--	--	--	--	--	DRIVEWAYS
	CATEGORY 0010 TOTAL	--	5,180	1,920	608	12,316	10,665	440	50	17,566	2	2	104	
	CATEGORY 0020 TOTAL	608	--	--	--	1,370	1,170	--	--	1,954	--	--	--	
	PROJECT TOTALS	608	5,180	1,920	608	13,686	11,835	440	50	19,520	2	2	104	

NOTE: 'A' LINE INCLUDES TURN LANE QUANTITIES ALONG STH 25 MAINLINE

RUMBLE STRIPS

STATION - STATION	465.0425 ASPHALTIC SHOULDER RUMBLE STRIPS 2-LANE RURAL (TYPE 1) LF	465.0475 ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL LF
04+00 - 11+00	1,400	700
11+00 - 25+00	2,800	1,400
29+00 - 41+00	2,400	1,200
45+00 - 55+00	2,000	1,000
59+00 - 78+00	3,800	1,900
85+00 - 108+00	4,600	2,300
112+00 - 161+00	9,800	4,900
165+00 - 174+00	1,800	900
178+00 - 214+00	7,200	3,600
218+00 - 241+00	4,600	2,300
245+00 - 250+00	1,000	500
252+00 - 255+00	600	300
259+00 - 273+25	2,860	1,430
277+25 - 291+00	2,760	1,380
302+00 - 305+50	700	350
305+50 - 306+50	200	100
310+50 - 321+75	2,260	1,130
CATEGORY 0010 TOTAL	3,860	25,390
CATEGORY 0020 TOTAL	46,920	--
PROJECT TOTALS	50,780	25,390

ASPHALTIC CURB & FLUME

STATION - STATION	LOCATION	465.0310 ASPHALTIC CURB LF	465.0315 ASPHALTIC FLUMES SY
2+85	RT	--	11
27+12	RT	--	11
29+96 - 35+42	LT	430	--
30+50	LT	--	16
113+89 - 121+00	RT	555	--
114+50 - 120+79	LT	550	--
117+00	LT/RT	--	11
241+68 - 242+67	LT	38	--
241+81 - 242+78	RT	30	--
242+56	LT	--	7
242+64	RT	--	7
323+00	RT	--	4
PROJECT TOTALS		1,603	67

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

PWL MIXTURE USE TABLE

LOCATION	STATION	MIXTURE USE	UNDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	0+25 - 331+41	UPPER LAYER	5 MT 58-34V	5 MT 58-34V	7,454	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
12 FOOT DRIVING LANE	0+25 - 331+41	LOWER LAYER	EXISTING MILLED SURFACE	4 MT 58-34V	8,644	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
CULVERT REPLACEMENT	20+74 - 21+80 & 265+37 - 266+42	UPPER LAYER	ASPHALTIC SURFACE	ASPHALTIC SURFACE	100	2"	QMP AS PER SS 465	ACCEPTANCE TESTING BY ORDINARY COMPACTION
CULVERT REPLACEMENT	20+74 - 21+80 & 265+37 - 266+42	LOWER LAYER	BASE AGGREGATE	ASPHALTIC SURFACE	140	3"	QMP AS PER SS 465	ACCEPTANCE TESTING BY ORDINARY COMPACTION
SHOULDERS	0+00 - 331+41	UPPER LAYER	5 MT 58-34V	5 MT 58-34V	3,445	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
SHOULDERS	0+00 - 331+41	LOWER LAYER	EXISTING MILLED SURFACE / BASE AGGREGATE	4 MT 58-34V	4,019	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
SIDE ROADS / INTERSECTIONS	0+25 - 331+41	UPPER LAYER	5 MT 58-34V	5 MT 58-34V	724	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
SIDE ROADS / INTERSECTIONS	0+25 - 331+41	LOWER LAYER	EXISTING MILLED SURFACE	4 MT 58-34V	844	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
380TH AVE IMPROVEMENTS	174+00 - 180+00	UPPER LAYER	5 MT 58-34V	5 MT 58-34V	98	1.5"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
380TH AVE IMPROVEMENTS	174+00 - 180+00	MIDDLE LAYER	5 MT 58-34V	5 MT 58-34V	114	1.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
380TH AVE IMPROVEMENTS	174+00 - 180+00	LOWER LAYER	BASE AGGREGATE	4 MT 58-34V	179	2.75"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE
WEDGING / LOWER LAYER PAVEMENT REPAIR, POT HOLES	0+25 - 331+41	LOWER LAYER	EXISTING MILLED SURFACE / EXISTING SURFACE	ASPHALTI C SURFACE / ASPHALTIC SURFACE PATCHING	250	VARIES	QMP AS PER SS 465	ACCEPTANCE TESTING BY ORDINARY COMPACTION

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

DRAINAGE ITEMS

STATION		STATION	SIDE	520.8000 CONCRETE COLLARS FOR PIPE (EACH)	520.8700 CLEANING CULVERT PIPES (EACH)	521.1018 APRON ENDWALLS FOR CULVERT PIPE STEEL 18-INCH (EACH)	521.1036 APRON ENDWALLS FOR CULVERT PIPE STEEL 36-INCH (EACH)	521.3118 CULVERT PIPE CORRUGATED STEEL 18-INCH (LF)*	522.0118 CULVERT PIPE REINFORCED CONCRETE CLASS III 18-INCH (LF)	522.1018 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 18-INCH (LF)	522.0130 CULVERT PIPE REINFORCED CONCRETE CLASS III 30-INCH (LF)	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH (LF)	SPV.0060.02 GRADING FOR NEW APRON ENDWALLS (EACH)
	-	15+98	LT/RT	--	1	--	--	--	--	--	--	--	--
	-	21+27	LT/RT	--	--	--		--	--	--	64	2	--
	-	24+75	LT/RT	--	1	--	1	--	--	--	--	--	1
	-	75+17	LT/RT	2	--	--	--	--	--	--	--	2	2
	-	158+87	LT/RT	--	1	--	--	--	--	--	--	--	--
	-	163+31	LT/RT	--	1	--	--	--	--	--	--	--	--
	-	174+13	LT/RT	--	1	--	--	--	--	--	--	--	--
175+23	-	176+31	LT/RT	--	--	--	--	--	96	2	--	--	--
178+67	-	178+99	LT/RT	--	--	2	--	30	--	--	--	--	--
	-	265+90	LT/RT	--	--	--	--	--	--	--	72	2	--
	-	301+68	LT/RT	--	--	--	--	--	--	--	--	--	--
		PROJECT TOTALS		2	5	2	1	30	96	2	136	6	3

* MINIMUM PIPE THICKNESS FOR STEEL = 0.064-INCH
NOTE: SEE PLAN SHEETS FOR HOW DRAINAGE ITEM QUANTS WERE OBTAINED

DRAINAGE ITEMS CONTINUED

STATION		STATION	SIDE	208.1500.S TEMPORARY LANE SHIFT DURING CULVERT WORK (EACH)	606.0300 RIPRAP HEAVY (CY)	645.0120 GEOTEXTILE TYPE HR (SY)	611.9800.S PIPE GRATE (EACH)	SPV.0060.01 SALVAGE AND REINSTALL LAST THREE PIPE SEGMENTS WITH JOINT TIES (EACH)
	-	15+98	RT	--	--	--	1	--
	-	21+27	LT/RT	1	--	--	--	--
	-	158+87	LT/RT	--	--	--	--	2
	-	163+31	LT/RT	--	--	--	--	2
	-	174+13	LT/RT	--	--	--	--	2
	-	265+90	LT/RT	1	--	--	--	--
	-	301+68	LT	--	6	18	--	--
		PROJECT TOTALS		2	6	18	1	6

NOTE: REFER TO EARTHWORK DATA SHEETS FOR APPROXIMATE EARTHWORK QUANTITIES FOR ITEM 208.1500.S

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

3

CONCRETE CURB & GUTTER

STATION	-	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30-INCH TYPE D LF	601.0557 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D LF	SPV.0090.01 CONCRETE CURB AND GUTTER REPAIR LF
0+15	-	0+33	LT	18	--	--
26+25	-	27+72	RT	--	153	--
175+18	-	176+48	LT	--	150	--
309+00		323+20	LT	--	--	1,420
			PROJECT TOTALS	18	303	1,420

MOW STRIP

STATION	-	STATION	LOCATION	614.0396 GUARDRAIL MOW STRIP ASPHALT (SY)	614.0397 GUARDRAIL MOW STRIP EMULSIFIED ASPHALT (SY)
2+87	-	3+37	RT	--	28
3+02	-	6+77	LT	--	168
29+92	-	35+77	RT	--	262
29+96	-	35+42	LT	--	241
59+11	-	63+17	LT	133	48
59+36	-	63+17	RT	122	48
113+89	-	121+00	RT	--	318
114+50	-	120+79	LT	--	290
241+68	-	242+67	LT	--	46
241+81	-	242+78	RT	--	46
			PROJECT TOTALS	255	1,495

MGS GUARDRAIL AND TERMINALS

STATION	-	STATION	LOCATION	614.0400 ADJUSTING STEEL PLATE BEAM GUARD (LF)	614.2300 MGS GUARDRAIL 3 (LF)	614.2330 MGS GUARDRAIL 3 K (LF)	614.2610 MGS GUARDRAIL TERMINAL EAT (EACH)	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING (EACH)
3+02	-	6+77	LT	379	--	--	--	--
29+92	-	35+77	RT	590	--	--	--	--
29+96	-	35+42	LT	542	--	--	--	--
59+11	-	63+17	LT	--	25.0	275	2	1
59+36	-	63+17	RT	--	25.0	250	2	1
113+89	-	121+00	RT	715	--	--	--	--
114+50	-	120+79	LT	653	--	--	--	--
241+68	-	242+67	LT	104	--	--	--	--
241+81	-	242+78	RT	104	--	--	--	--
			PROJECT TOTALS	3,087	50	525	4	2

BARRIER SYSTEM GRADING SHAPING FINISHING, ITEM 614.0010 *

STATION	-	STATION	LOCATION	EXCAVATION COMMON (CY)	SALVAGED TOPSOIL (SY)	FERTILIZER TYPE A (CWT)	SEEDING MIXTURE NO. 20 (LB)	SEEDING TEMPORARY (LB)	SEED WATER (MGAL)
57+92	-	64+36	LT	365	1,075	1	29	29	24
57+92	-	64+36	RT	400	1,025	1	28	28	23
			TOTALS	765	2,100	1	57	57	47

* ITEMS AND QUANTITIES IN THIS TABLE LISTED FOR BID INFORMATION ONLY

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

SALVAGED TOPSOIL, FERTILIZER, SEEDING, & TEMPORARY SEEDING

STATION	-	STATION	LOCATION	625.0500 SALVAGED TOPSOIL (SY)	629.0205 FERTILIZER TYPE A (CWT)	630.0120 SEEDING MIXTURE NO. 20 (LB)	630.0200 SEEDING TEMPORARY (LB)	630.0500 SEED WATER (MGAL)
20+74	-	21+80	LT/RT	260	0.2	7	7	6
24+26	-	25+18	LT	100	0.1	3	3	2
26+25	-	27+75	RT	80	0.0	2	2	2
75+00	-	75+30	LT/RT	150	0.1	4	4	3
158+72	-	159+00	LT/RT	180	0.1	5	5	4
163+20	-	163+50	LT/RT	70	0.0	2	2	2
174+00	-	180+00	LT/RT	1,230	0.8	33	33	28
263+70	-	268+00	LT/RT	2,670	1.7	72	72	60
			UNDISTRIBUTED	1,190	0.9	32	32	--
			PROJECT TOTALS	5,930	4	160	160	107

EROSION CONTROL ITEMS

STATION	-	STATION		628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)	628.2008 EROSION MAT URBAN CLASS I TYPE B (SY)	628.7010 INLET PROTECTION TYPE B (EACH)	628.7015 INLET PROTECTION TYPE C (EACH)	628.7504 TEMPORARY DITCH CHECKS (LF)	628.7555 CULVERT PIPE CHECKS (EACH)	628.1905 MOBILIZATIONS EROSION CONTROL (EACH)	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL (EACH)
0+25	-	2+00		--	--	--	1	1	--	--	--	--
20+74	-	21+80		--	--	330	--	--	--	5	--	--
24+26	-	25+18		--	--	220	--	--	--	--	--	--
26+25	-	27+75		--	--	80	--	--	--	--	--	--
57+92	-	64+36		740	740	2100	--	--	28	--	--	--
75+00	-	75+30		--	--	150	--	--	--	5	--	--
158+72	-	159+00		--	--	180	--	--	--	5	--	--
163+20	-	163+50		--	--	70	--	--	--	2	--	--
174+00	-	180+00		573	573	2040	--	--	44	9	--	--
263+70	-	268+00		845	845	2670	--	--	--	7	--	--
			UNDISTRIBUTED	540	540	1960	1	1	18	8	3	3
			PROJECT TOTALS	2,698	2,698	9,800	2	2	90	41	3	3

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

3

SIGNING ITEMS

STATION	LOCATION	633.5200 MARKERS CULVERT END (EACH)	634.0614 POSTS WOOD 4X6-INCH 14 FT (EACH)	634.0616 POSTS WOOD 4X6-INCH 16 FT (EACH)	634.0618 POSTS WOOD 4X6-INCH 18 FT (EACH)	638.2102 MOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)	DESCRIPTION
4+41	LT	1	--	--	--	--	--	
4+50	LT	--	--	1	--	1	1	JCT 72
15+98	LT/RT	2	--	--	--	--	--	
21+27	LT/RT	2	--	--	--	--	--	
23+75	LT	--	--	--	--	1	--	NO PASSING ZONE
24+75	LT/RT	2	--	--	--	--	--	
34+40	RT	--	1	--	--	1	1	END SCHOOL ZONE
34+70	LT	--	--	--	1	1	1	SCHOOL CROSSING AHEAD FINES HIGHER
35+50	RT	--	2	--	--	1	1	NIGHT ARROW (LEFT)
60+53	LT/RT	2	--	--	--	--	--	
75+17	LT/RT	2	--	--	--	--	--	
114+38	LT	1	--	--	--	--	--	
114+75	RT	--	1	--	--	1	1	ADOPT A HIGHWAY
139+71	LT	1	--	--	--	--	--	
158+87	LT	1	--	--	--	--	--	
163+31	LT/RT	2	--	--	--	--	--	
174+13	LT/RT	2	--	--	--	--	--	
175+40	LT	--	--	--	--	1	--	380TH AVE
175+50	LT	--	--	--	--	1	--	STOP SIGN
175+96	LT	--	--	--	--	1	--	DEAD END
178+28	LT	--	--	--	--	1	--	NO PASSING ZONE
197+40	LT	1	--	--	--	--	--	
222+44	RT	1	--	--	--	--	--	
242+42	RT	1	--	--	--	--	--	
243+38	LT/RT	2	--	--	--	--	--	
265+90	LT/RT	2	--	--	--	--	--	
301+68	LT	1	--	--	--	--	--	
322+00	RT	--	--	1	--	1	1	NO ENGINE BRAKING EXCEPT IN EMERGENCIES WITHIN CITY LIMITS
322+72	LT	1	--	--	--	--	--	
322+95	RT	--	1	--	--	1	1	SPEED LIMIT 35
	PROJECT TOTALS	27	5	2	1	12	7	

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

PAVEMENT MARKING

STATION	-	STATION	646.1020 MARKING LINE EPOXY 4-INCH YELLOW (LF)	646.1020 MARKING LINE EPOXY 4-INCH WHITE (LF)	646.1040 MARKING LINE GROOVED WET REF EPOXY 4-INCH WHITE (LF)	646.3020 MARKING LINE EPOXY 8-INCH WHITE (LF)	646.4520 MARKING LINE SAME DAY EPOXY 4-INCH YELLOW (LF)	646.5020 MARKING ARROW EPOXY (EACH)	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE (LF)	649.0105 TEMPORARY MARKING LINE PAINT 4-INCH YELLOW (LF)
0+25	-	174+00	22,125	216	33,300	115	20,315	3	66	20,315
174+00	-	180+00	290	--	1,100	200	183	--	--	183
180+00	-	331+41	28,878	314	29,400	395	27,922	--	--	27,922
		PROJECT TOTALS	51,823		63,800	710	48,420	3	66	48,420

TRAFFIC CONTROL - DRUMS, BARRICADES, WARNING LIGHTS, AND SIGNS

ROADWAY	DAYS IN SERVICE	643.0300 TRAFFIC CONTROL DRUMS NO.	643.0300 TRAFFIC CONTROL DRUMS (DAYS)	643.0420 TRAFFIC CONTROL BARRICADES TYPE III NO.	643.0420 TRAFFIC CONTROL BARRICADES TYPE III (DAYS)	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A NO.	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A (DAYS)	643.0900 TRAFFIC CONTROL SIGNS NO.	643.0900 TRAFFIC CONTROL SIGNS (DAYS)	643.1050 TRAFFIC CONTROL SIGNS PCMS NO.	643.1050 TRAFFIC CONTROL SIGNS PCMS (DAYS)	COMMENTS
STH 25	92	0	0	0	0	0	0	50	4,600	2	14	ADVANCE WARNING MAINLINE & SIDE ROADS PCMS MESSAGE: ROAD WORK BEGINS XXDAY X/X/XX
460TH ST	20	30	600	0	0	0	0	1	20	0	0	SEE PLAN SHEETS FOR MORE INFO
380TH AVE	10	32	320	3	30	6	60	4	40	0	0	SEE PLAN SHEETS FOR MORE INFO
CULVERT REPLACEMENTS	10	50	500	0	0	0	0	8	80	0	0	SEE PLAN SHEETS FOR MORE INFO
GUARDRAIL SHOULDER WORK	3	108	324	0	0	0	0	10	30	0	0	FOR REPLACEMENT AND ADJUSTMENT AREAS
PROJECT TOTALS			1,744		30		60		4,770		14	

***ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.

CONSTRUCTION STAKING

STATION	-	STATION	650.4500 CONSTRUCTION STAKING SUBGRADE (LF)	650.5000 CONSTRUCTION STAKING BASE (LF)	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER (LF)	650.6000 CONSTRUCTION STAKING PIPE CULVERTS (EACH)	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE (LF)	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (LS)	650.9920 CONSTRUCTION STAKING SLOPE STAKES (LF)
0+25	-	174+00	106	106	168	--	17,400	--	750
10+00'B'	-	11+00'B'	--	55	--	--	--	--	--
8+90'A'	-	10+00'A'	110	110	150	--	110	--	110
174+00	-	180+00	600	600	--	--	600	--	600
180+00	-	331+41	106	106	--	--	15,141	--	163
		UNDISTRIBUTED	--	--	--	4	--	1	--
		PROJECT TOTALS	922	977	318	4	33,251	1	1,623

LANDMARK REFERENCE MONUMENTS

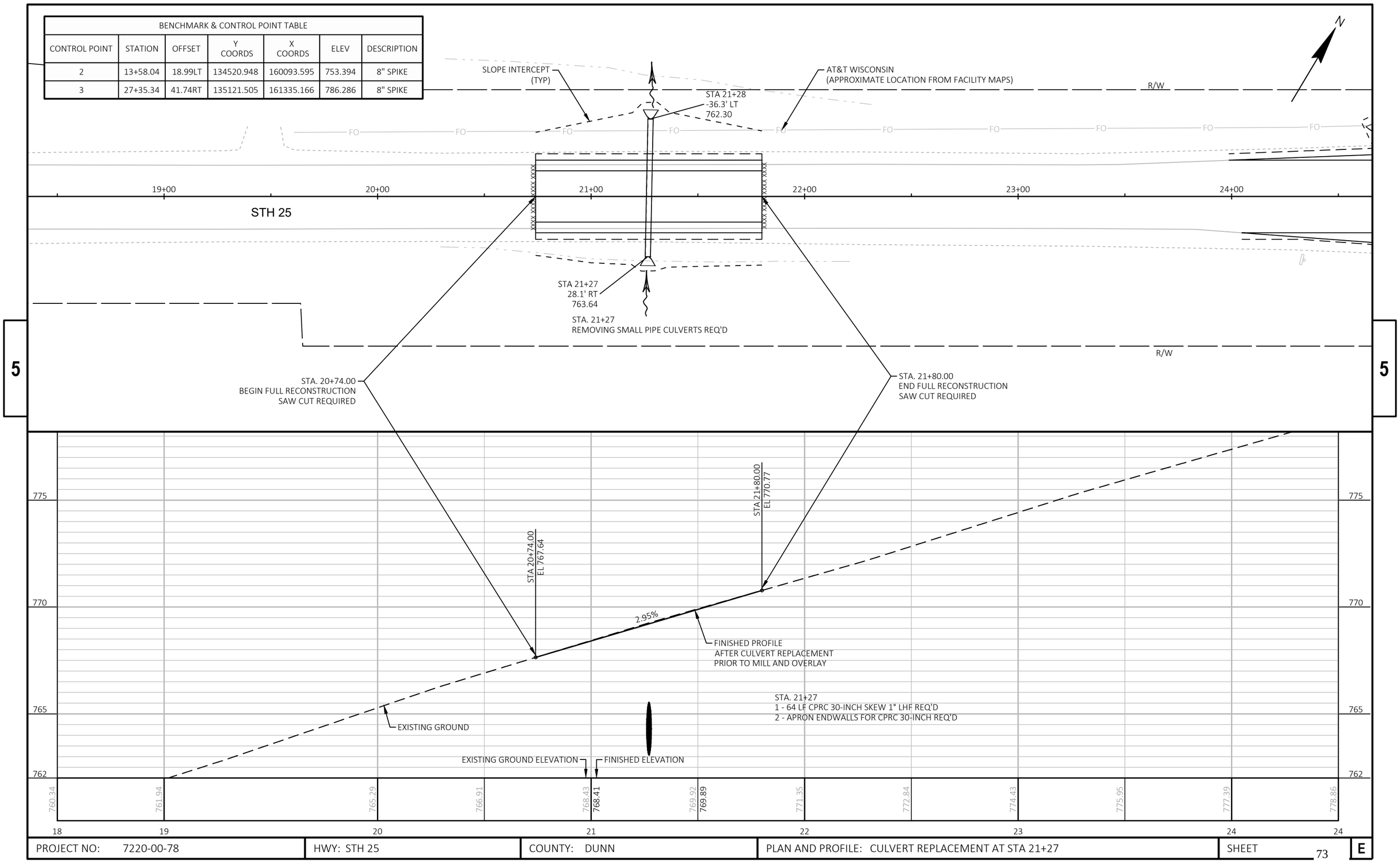
ROADWAY	STATION	OFFSET	621.0100 LANDMARK REFERENCE MONUMENTS (EACH)	NOTES
STH 25	109+85	0.10' LT	1	BORDER OF SECTION 26 AND SECTION 23, T-27-N, R-13-W
STH 25	162+99	0.00'	1	BORDER OF SECTION 23 AND SECTION 14, T-27-N, R-13-W
		PROJECT TOTALS	2	

SAWING PAVEMENT

STATION	-	STATION	LOCATION	690.0150 SAWING ASPHALT (LF)	690.0250 SAWING CONCRETE (LF)	COMMENTS
0+12	-	0+35	LT	25	6	CURB AND GUTTER
	-	20+74	LT/RT	34	--	FULL RECON
	-	21+80	LT/RT	34	--	FULL RECON
26+25	-	27+72	LT/RT	160	--	CURB AND GUTTER
30+56	-	34+91	LT	430	--	ASPHALTIC CURB
114+82	-	120+48	RT	565	--	ASPHALTIC CURB
115+00	-	120+60	LT	560	--	ASPHALTIC CURB
174+08	-	174+18	RT	12	--	
174+08	-	179+98	LT	625	--	380TH AVE
	-	265+37	LT/RT	34	--	FULL RECON
	-	266+42	LT/RT	34	--	FULL RECON
			PROJECT TOTALS	2,513	6	

*****ALL ITEMS CATEGORY 0010 UNLESS OTHERWISE NOTED.**

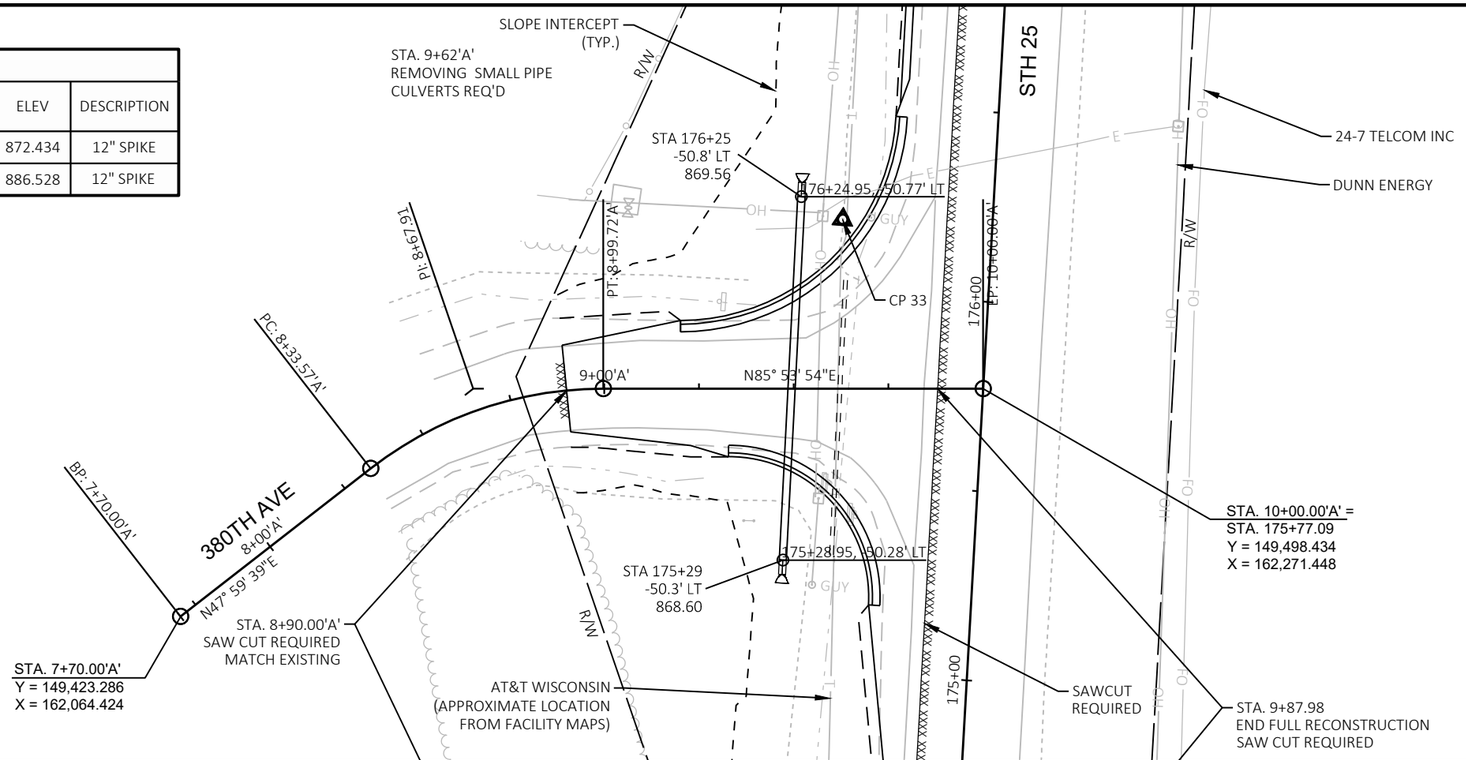
BENCHMARK & CONTROL POINT TABLE						
CONTROL POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEV	DESCRIPTION
2	13+58.04	18.99LT	134520.948	160093.595	753.394	8" SPIKE
3	27+35.34	41.74RT	135121.505	161335.166	786.286	8" SPIKE

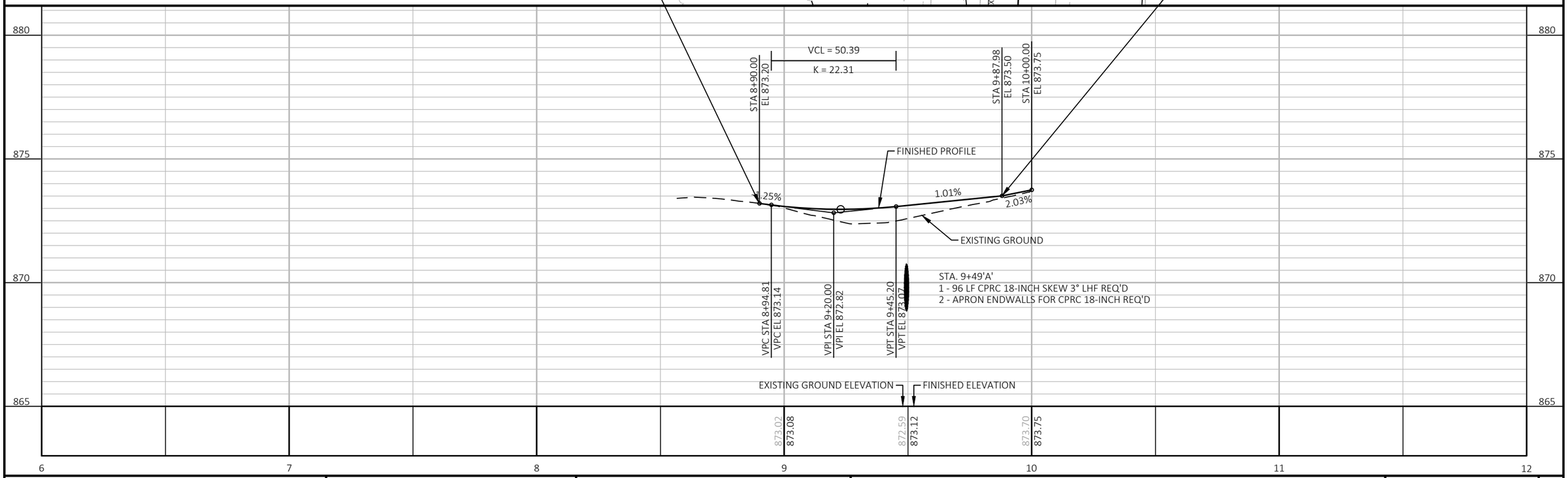


PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN AND PROFILE: CULVERT REPLACEMENT AT STA 21+27	SHEET 73	E

BENCHMARK & CONTROL POINT TABLE						
CONTROL POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEV	DESCRIPTION
33	176+19.56	39.54LT	149540.292	162231.260	872.434	12" SPIKE
34	181+68.24	21.16LT	150089.193	162241.190	886.528	12" SPIKE

PI STA = 8+67.91'A'
Y = 149488.806
X = 162137.176
DELTA = 37°54'15"
D = 57°17'45"
T = 34.37'
L = 66.16'
R = 100.00'
PC STA = 8+33.57'A'
Y = 149465.826
X = 162111.660
PT STA = 8+99.72'A'
Y = 149491.262
X = 162171.428
BK = N47°59'39"E
AH = N85°53'54"E

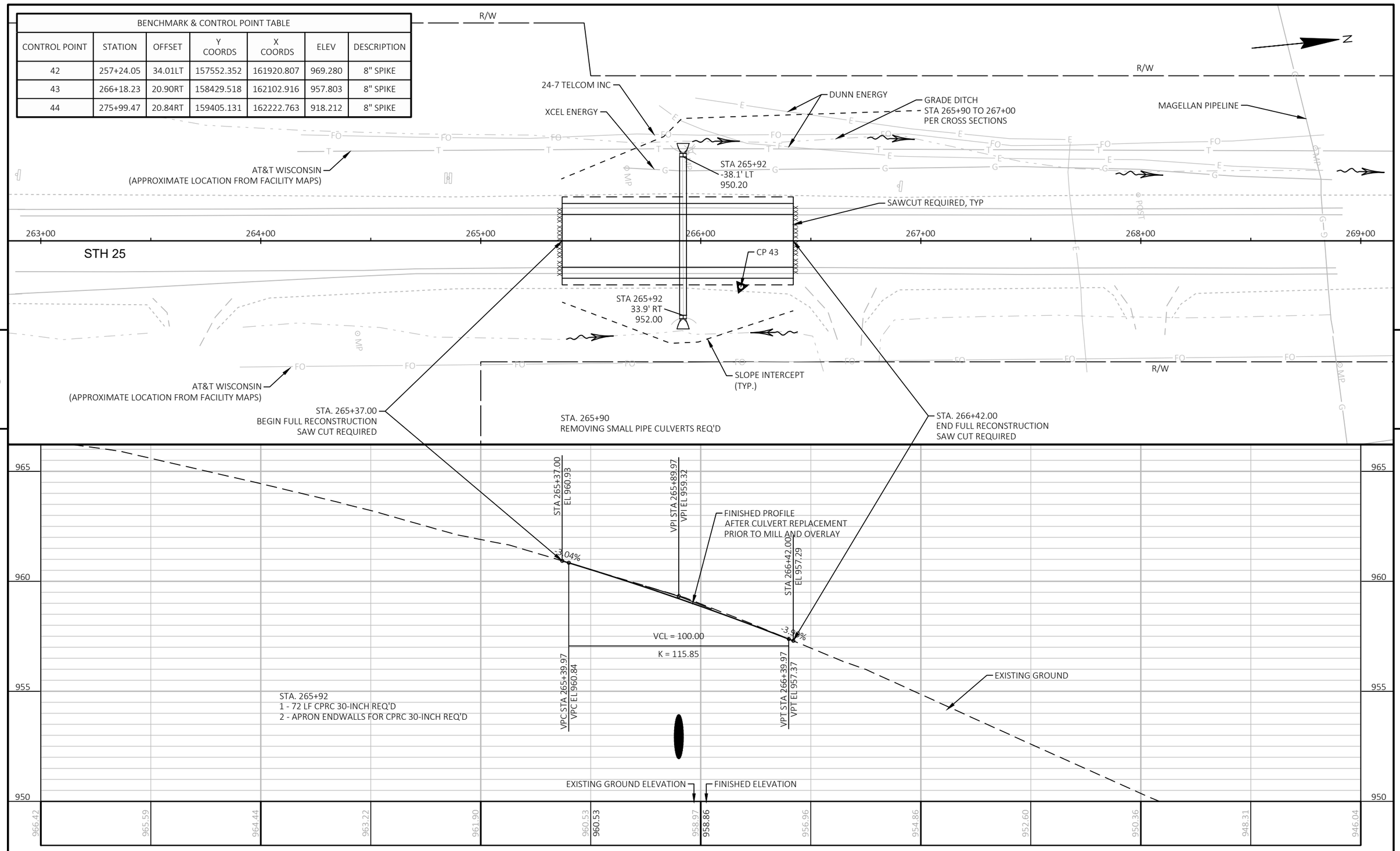




PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN AND PROFILE: 380TH AVE AT STH 25 INTERSECTION	SHEET 74	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - (3)
PLOT DATE : 9/20/2021 1:47 PM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

BENCHMARK & CONTROL POINT TABLE						
CONTROL POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEV	DESCRIPTION
42	257+24.05	34.01LT	157552.352	161920.807	969.280	8" SPIKE
43	266+18.23	20.90RT	158429.518	162102.916	957.803	8" SPIKE
44	275+99.47	20.84RT	159405.131	162222.763	918.212	8" SPIKE



5

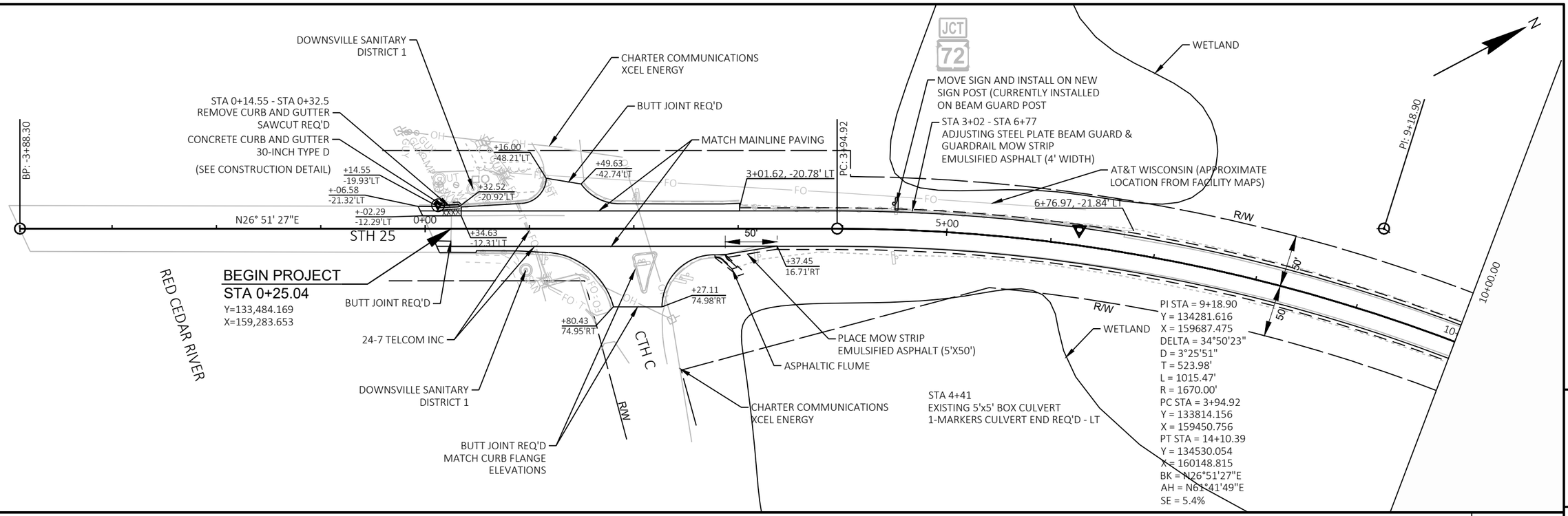
5

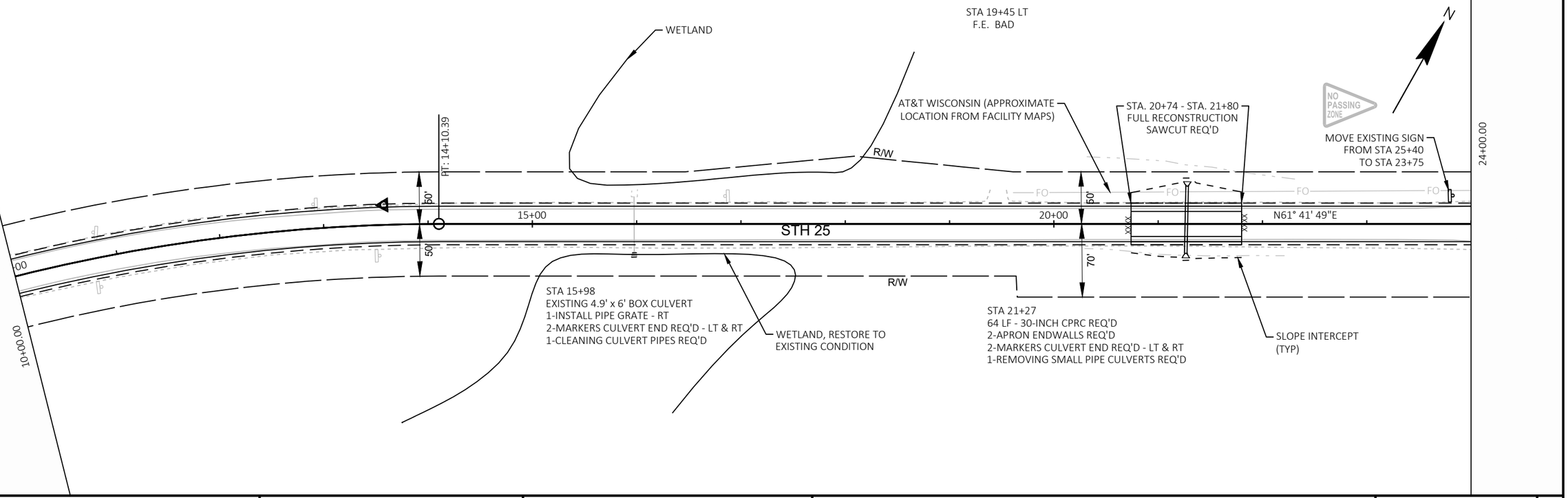
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN AND PROFILE: CULVERT REPLACEMENT AT STA 265+90	SHEET 75	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - (4)

PLOT DATE : 9/20/2021 1:47 PM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 76	E

STA 24+75
EXISTING 36" CPCS
1-APRON ENDWALL REQ'D - LT
2-MARKERS CULVERT END REQ'D - LT & RT
1-CLEANING CULVERT PIPES REQ'D

TOWN OF DUNN
TOWN HALL

CHARTER COMMUNICATIONS
(APPROXIMATE LOCATION FROM
FACILITY MAPS)

AT&T WISCONSIN (APPROXIMATE
LOCATION FROM FACILITY MAPS)

STA 29+96 - STA 35+42
ADJUSTING STEEL PLATE BEAM GUARD,
GUARDRAIL MOW STRIP EMULSIFIED
ASPHALT (4' WIDTH),
REMOVING GUARDRAIL CURB &
CONSTRUCT ASPHALTIC CURB
SAWCUT REQ'D

MOVE SIGN AND INSTALL ON NEW
SIGN POST (CURRENTLY INSTALLED
ON BEAM GUARD POST)

DOWNSVILLE SANITARY
DISTRICT 1

ASPHALTIC FLUME
(MATCH EXISTING)

BUTT JOINT REQUIRED

MATCH MAINLINE PAVING

MOVE EXISTING SIGN
FROM STA 25+40
TO STA 23+75

XCEL ENERGY

GRADING FOR
NEW APRON
ENDWALLS REQ'D

24-7 TELCOM INC

24-7 TELCOM INC (APPROXIMATE
LOCATION FROM FACILITY MAPS)

+95.28
49.94'LT

+30.89
55.20'LT

29+95.88, -23.00' LT

+56.87
20.36'LT

PC: 32+98.02

35+42.17, -22.12' LT

+90.86
21.32'LT

35+77.43, 21.97' RT

29+91.81, 21.36' RT

N61° 41' 49"E

STH 25

SAWCUT REQ'D

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

REMOVING CURB & GUTTER

+63.22
90.03'RT

+03.05
85.80'RT

ASPHALTIC FLUME

BUTT JOINT REQUIRED

460TH ST

CHARTER COMMUNICATIONS
XCEL ENERGY

DOWNSVILLE
ELEMENTARY
SCHOOL

STA 29+92 - STA 35+77
ADJUSTING STEEL PLATE BEAM GUARD
& GUARDRAIL MOW STRIP
EMULSIFIED ASPHALT (4' WIDTH)

MOVE SIGNS AND INSTALL ON
NEW SIGN POSTS (CURRENTLY
INSTALLED ON BEAM GUARD POST)

24+00.00

38+00.00

25+00

30+00

35+00

70'

80'

50'

R/W

PI STA = 39+15.44
Y = 135717.781
X = 162354.389
DELTA = 61°18'28"
D = 5°30'00"
T = 617.41'
L = 1114.70'
R = 1041.75'
PC STA = 32+98.02
Y = 135425.045
X = 161810.787
PT STA = 44+12.72
Y = 136335.178
X = 162358.583
BK = N61°41'49"E
AH = N00°23'21"E
SE = 6.0%

STA 44+60 LT
P.E. HMA

CHARTER COMMUNICATIONS
(APPROXIMATE LOCATION FROM
FACILITY MAPS)

AT&T WISCONSIN (APPROXIMATE
LOCATION FROM FACILITY MAPS)

24-7 TELCOM INC (APPROXIMATE
LOCATION FROM FACILITY MAPS)

PT: 44+12.72

52+00.00

50+00

45+00

40+00

N0° 23' 21"E

STH 25

+08.94
37.98'RT

+15.47
59.81'RT

470TH ST

MATCH MAINLINE PAVING

BUTT JOINT REQUIRED

PI: 39+15.44

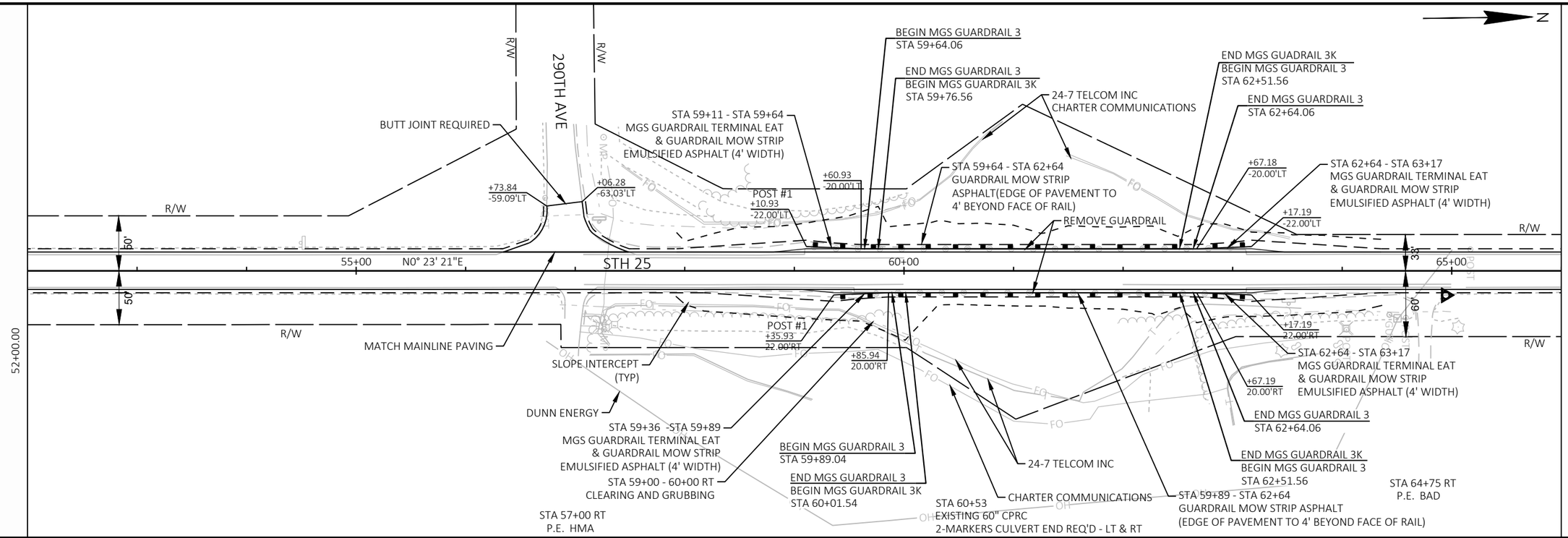
STA 50+30 RT
P.E. BAD

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 77	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - (2)

PLOT DATE : 10/26/2021 7:20 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

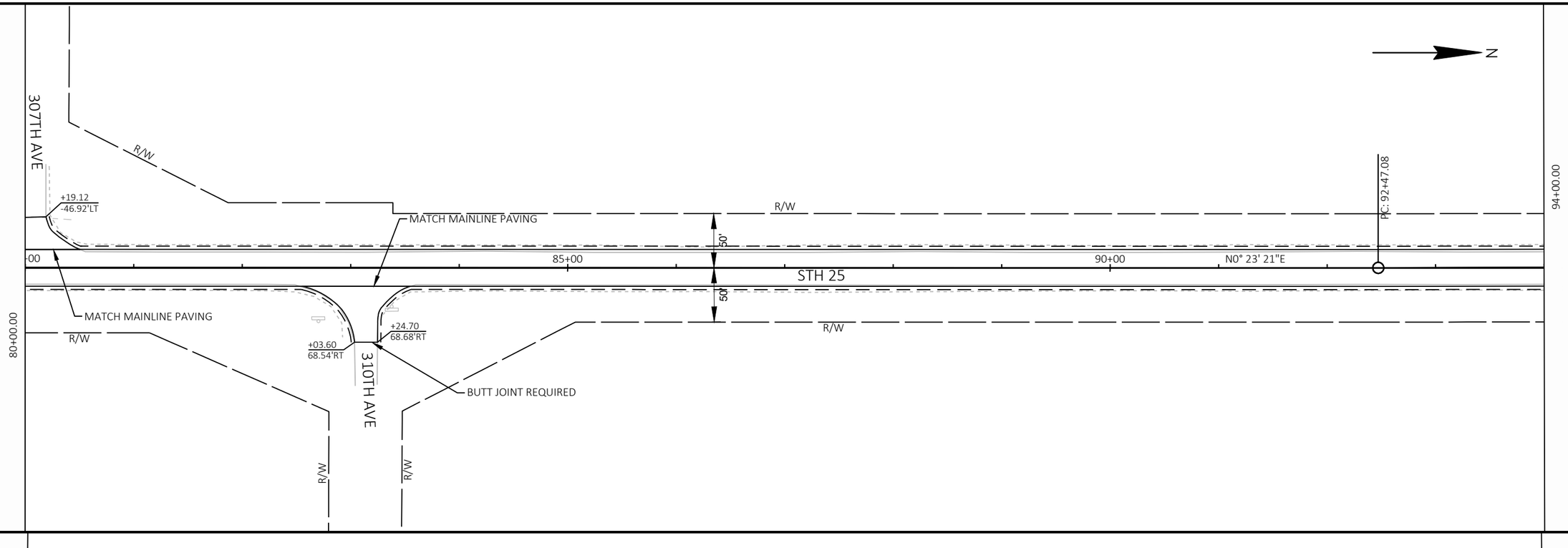


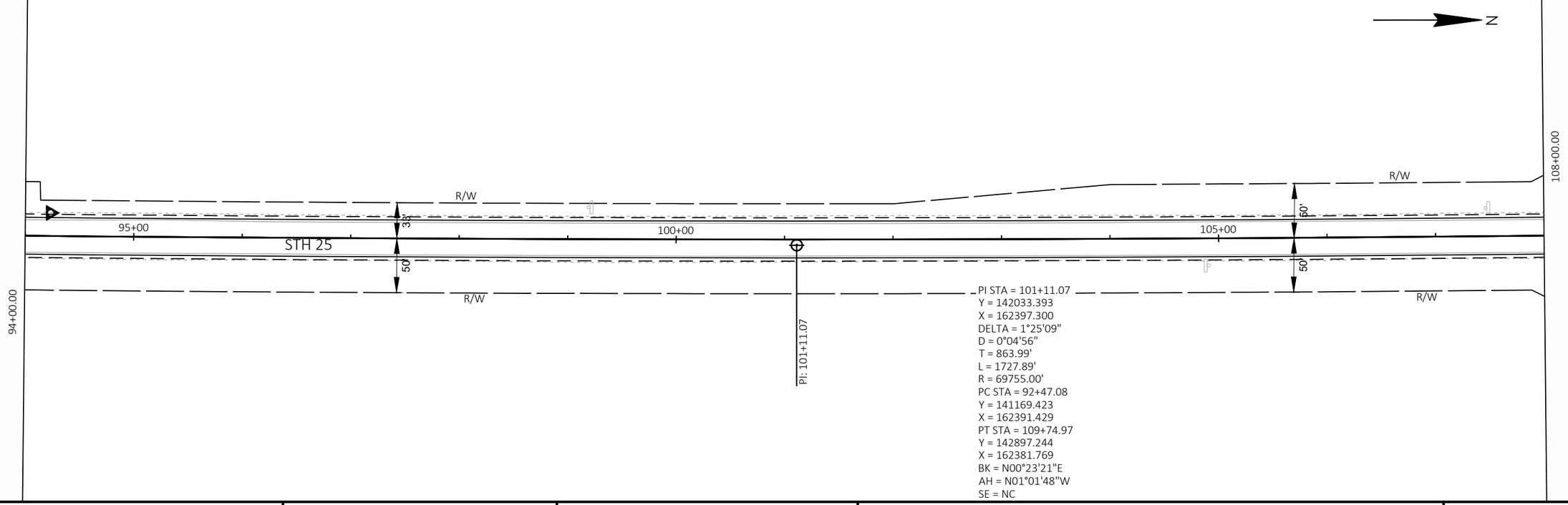
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 78	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - (3)

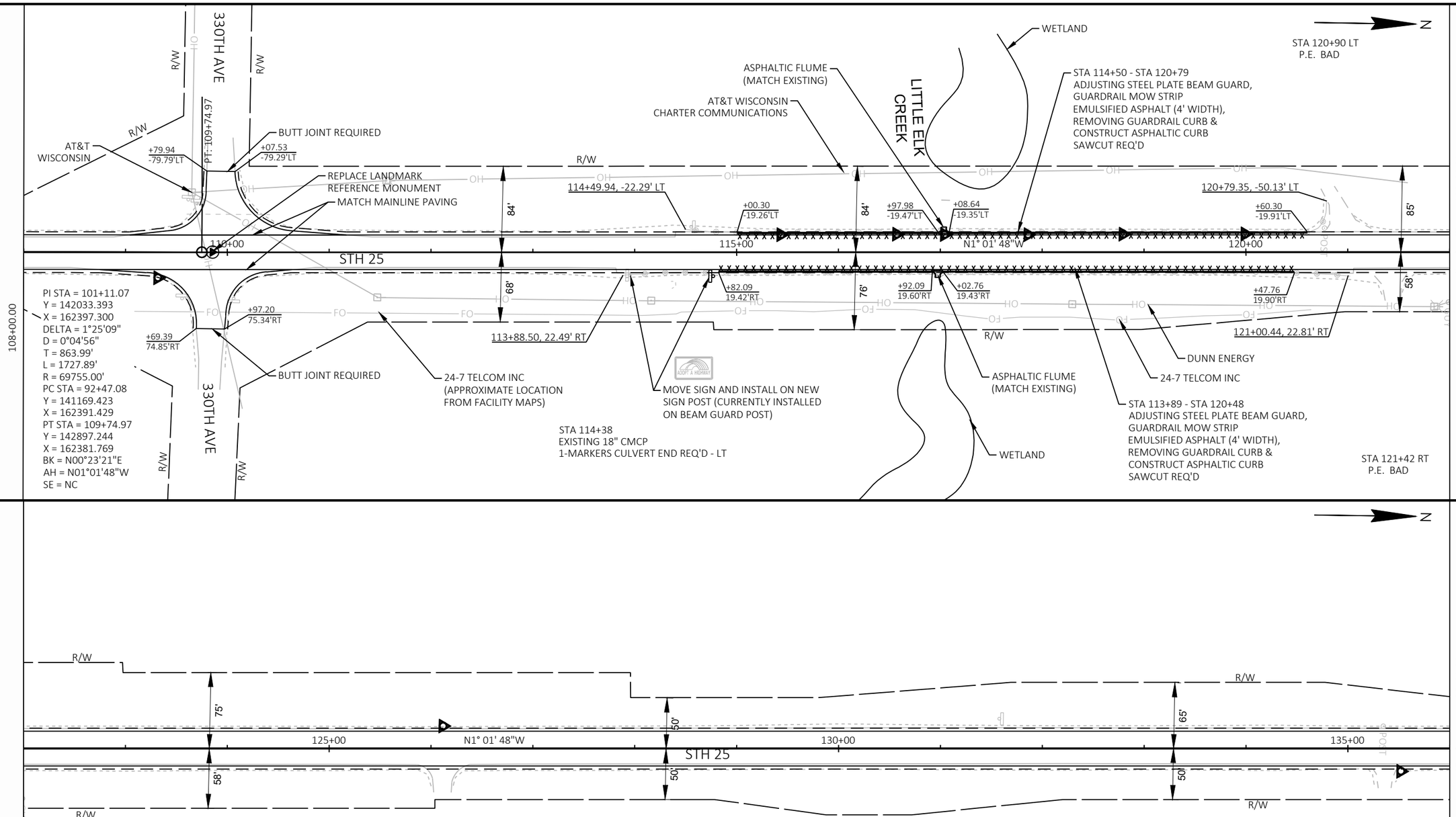
PLOT DATE : 10/26/2021 7:20 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44





PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 79	E



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 80 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - (5)
PLOT DATE : 10/26/2021 7:20 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:100 FT

STA 137+11 LT
P.E. HMA

N

R/W

R/W

33'

50'

140+00 N1° 01' 48"W 145+00 N0° 52' 54"W 150

STH 25

50

50

136+00.00

150+00.00

R/W

R/W

Pt 143+49.90

STA 139+71
EXISTING 24" CMCP
1-MARKERS CULVERT END REQ'D - LT

PI STA. 143+49.90
Y = 146271.630
X = 162321.103

STA 142+25 RT
P.E. BAD

STA 145+85 RT
F.E. BAD

5

5

STA 150+05 LT
F.E. BAD

STA 155+85 LT
P.E. HMA

STA 157+95 LT
P.E. BAD

STA 161+80 LT
P.E. BAD

N

AT&T WISCONSIN
(APPROXIMATE LOCATION FROM FACILITY MAPS)

CHARTER COMMUNICATIONS
(APPROXIMATE LOCATION FROM FACILITY MAPS)

R/W

R/W

370TH AVE

R/W

R/W

BUTT JOINT REQUIRED

+91.60
-67.83'LT

+16.59
-66.81'LT

REPLACE LANDMARK
REFERENCE MONUMENT

164+00.00

R/W

50'

+00 N0° 52' 54"W 155+00 160+00

STH 25

50

150+00.00

R/W

MATCH MAINLINE PAVING

24-7 TELCOM INC

DUNN ENERGY

+85.84
69.63'RT

+10.30
70.77'RT

BUTT JOINT REQUIRED

SLOPE INTERCEPT
(TYP)

370TH AVE

R/W

R/W

STA 158+87
EXISTING 36" CPRC
1-MARKERS CULVERT END REQ'D - LT
2-SALVAGE AND REINSTALL LAST THREE PIPE SEGMENTS
WITH JOINT TIES- LT & RT
STA 158+00 - 159+00 RT - ROADSIDE CLEARING REQ'D
1-CLEANING CULVERT PIPES REQ'D

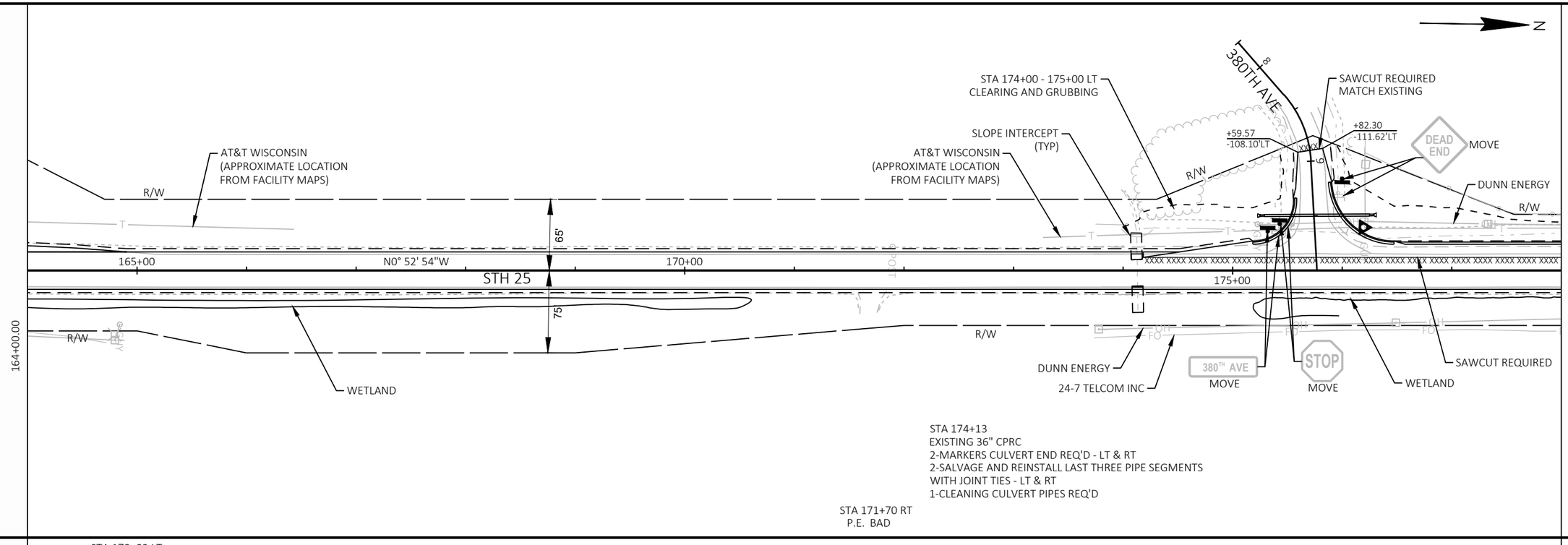
STA 163+31
EXISTING 30" CPRC
2-MARKERS CULVERT END REQ'D - LT & RT
2-SALVAGE AND REINSTALL LAST THREE PIPE SEGMENTS
WITH JOINT TIES - LT & RT
1-CLEANING CULVERT PIPES REQ'D

STA 152+65 RT
P.E. BAD

STA 154+80 RT
P.E. HMA

STA 157+70 RT
F.E. BAD

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 81	E



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 82 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - (7)
PLOT DATE : 10/26/2021 7:20 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

STA 202+12 LT
P.E. HMA

N

R/W

206+00.00

205+00

PC: 200+93.08

R/W

50'

195+00

N0° 52' 54"W

200+00

STH 25

50'

R/W

192+00.00

395TH AVE

PI: 205+09.13

R/W

STA 197+40
EXISTING 3.5' x 6' BOX CULVERT
1-MARKERS CULVERT END REQ'D - LT

STA 202+50 RT
P.E. BAD

STA 208+80 LT
P.E. BAD

STA 217+55 LT
P.E. HMA

N

R/W

404TH AVE

R/W

410TH AVE

MATCH MAINLINE PAVING

BUTT JOINT REQUIRED

+32.95
-69.65'LT

+54.73
-62.49'LT

PI: 209+19.40

R/W

PC: 219+71.41

220+00.00

50'

210+00

N17° 24' 29"W

215+00

220

STH 25

50'

206+00.00

R/W

R/W

PI STA = 205+09.13
Y = 152430.130
X = 162226.335
DELTA = 16°31'36"
D = 2°00'00"
T = 416.05'
L = 826.32'
R = 2864.75'
PC STA = 200+93.08
Y = 152014.132
X = 162232.736
PT STA = 209+19.40
Y = 152827.121
X = 162101.863
BK = N00°52'54"W
AH = N17°24'29"W
SE = 4.4%

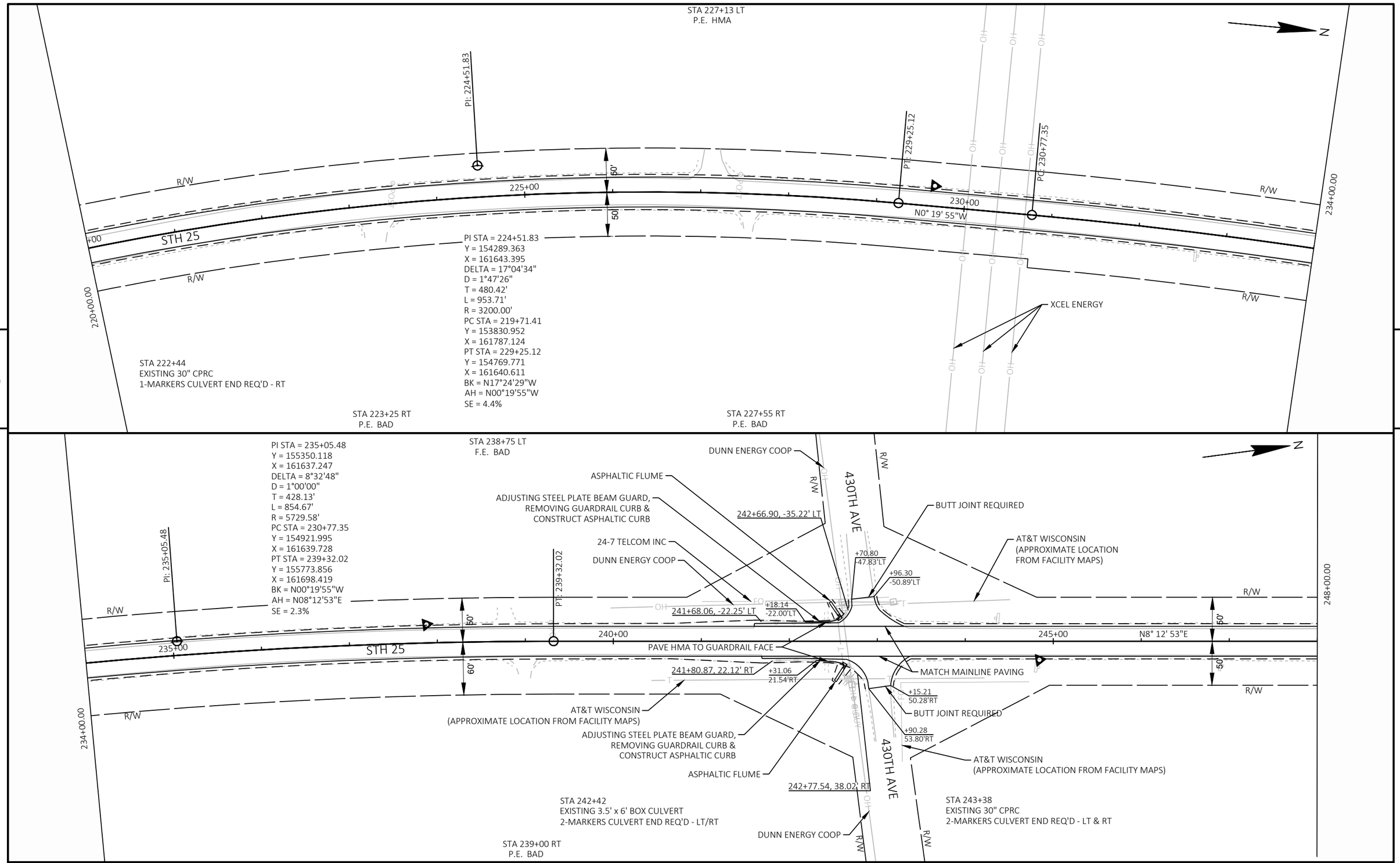
STA 216+05 RT
P.E. HMA

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 83	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - (8)

PLOT DATE : 10/26/2021 7:20 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 84	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\050201-PN.DWG
LAYOUT NAME - (9)
PLOT DATE : 10/26/2021 7:21 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

STA 251+30 LT
C.E. BAD

N

R/W

CTH D

R/W

469TH ST

BUTT JOINT REQUIRED

+49.48
-78.48'LT

+80.26
-76.94'LT

MATCH MAINLINE PAVING

R/W

R/W

99'

262+00.00

R/W

50'

250+00

255+00

N8° 12' 53"E

260+00

STH 25

50'

65'

248+00.00

R/W

R/W

5

5

N

453RD AVE

24-7 TELCOM INC

AT&T WISCONSIN
(APPROXIMATE LOCATION
FROM FACILITY MAPS)

STA. 265+37 - STA. 266+42
FULL RECONSTRUCTION
SAWCUT REQ'D

MAGELLAN
PIPELINE

WETLAND, RESTORE TO
EXISTING CONDITION

BUTT JOINT REQUIRED

MATCH MAINLINE PAVING

WETLAND

+10.82
-62.16'LT

+46.89
-57.93'LT

276+00.00

R/W

XCEL ENERGY

CAUTION

R/W

PC: 272+14.13

75'

60'

265+00

270+00

N8° 12' 53"E

275+00

STH 25

55'

50'

PI STA = 274+76.35
Y = 159281.822
X = 162204.840
DELTA = 8°19'55"
D = 1°35'30"
T = 262.22'
L = 523.52'
R = 3600.00'
PC STA = 272+14.13
Y = 159022.291
X = 162167.373
PT STA = 277+37.65
Y = 159544.043
X = 162204.302
BK = N08°12'53"E
AH = N00°07'03"W
SE = 3.6%

262+00.00

R/W

R/W

PI: 274+76.35

SLOPE INTERCEPT
(TYP)

AT&T WISCONSIN
(APPROXIMATE LOCATION
FROM FACILITY MAPS)

STA 265+90
74 LF - 30-INCH CPRC REQ'D
2-APRON ENDWALLS REQ'D
2-MARKERS CULVERT END REQ'D - LT & RT
1-REMOVING SMALL PIPE CULVERTS REQ'D

STA 263+68 RT
P.E. BAD

STA 266+68 RT
P.E. BAD

STA 268+04 RT
P.E. BAD

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 85	E

STA 276+00 - 277+00
ROADSIDE CLEARING REQ'D TO 49' LT & 48' RT

STA 280+00 - 281+00
ROADSIDE CLEARING REQ'D TO 64' LT & 55' RT

N

24-7 TELCOM INC
(APPROXIMATE LOCATION FROM FACILITY MAPS)

AT&T WISCONSIN
(APPROXIMATE LOCATION FROM FACILITY MAPS)

CHARTER COMMUNICATIONS
(APPROXIMATE LOCATION FROM FACILITY MAPS)

WETLAND, RESTORE TO
EXISTING CONDITION

XCEL ENERGY
(GAS LINES FROM
FACILITY MAPS)

PT: 277+37.65

R/W

70'

50'

280+00

285+00

N0° 07' 03"W

290

290+00.00

STH 25

64'

50'

276+00.00

PI STA = 274+76.35
Y = 159281.822
X = 162204.840
DELTA = 8°19'55"
D = 1°35'30"
T = 262.22'
L = 523.52'
R = 3600.00'
PC STA = 272+14.13
Y = 159022.291
X = 162167.373
PT STA = 277+37.65
Y = 159544.043
X = 162204.302
BK = N08°12'53"E
AH = N00°07'03"W
SE = 3.6%

AT&T WISCONSIN
(APPROXIMATE LOCATION FROM FACILITY MAPS)

471ST ST

STA 277+40 RT
F.E. BAD

STA 286+70 RT
C.E. HMA

STA 288+65 RT
C.E. HMA

5

5

N

STA 301+68
EXISTING 30" CPRC
1-MARKERS CULVERT END REQ'D - LT

CHARTER COMMUNICATIONS
(APPROXIMATE LOCATION FROM FACILITY MAPS)

AT&T WISCONSIN
(APPROXIMATE LOCATION FROM FACILITY MAPS)

HEAVY RIPRAP WITH
GEOTEXTILE TYPE HR
10' X 10'

AT&T WISCONSIN

24-7 TELCOM INC

AT&T WISCONSIN

CHARTER COMMUNICATIONS

472ND AVE

+91.81
-66.13'LT

BUTT JOINT REQUIRED

+34.24
-69.97'LT

24-7 TELCOM INC
(APPROXIMATE LOCATION
FROM FACILITY MAPS)

XCEL ENERGY
(GAS LINES FROM
FACILITY MAPS)

PC 299+91.50

R/W

62'

50'

MATCH MAINLINE PAVING

+00

N0° 07' 03"W

295+00

300+00

STH 25

304+00.00

290+00.00

+85.26
46.23'RT

+19.66
43.96'RT

FRONTIER RD

BUTT JOINT REQUIRED

MATCH MAINLINE PAVING

XCEL ENERGY
(GAS LINES FROM FACILITY MAPS)

AT&T WISCONSIN
(APPROXIMATE LOCATION FROM FACILITY MAPS)

PI STA = 308+89.55
Y = 162695.935
X = 162197.844
DELTA = 46°38'05"
D = 2°45'00"
T = 898.05'
L = 1695.83'
R = 2083.50'
PC STA = 299+91.50
Y = 161797.889
X = 162199.684
PT STA = 316+87.33
Y = 163311.236
X = 161543.709
BK = N00°07'03"W
AH = N46°45'08"W
SE = 4.5%

STA 293+92 RT
P.E. BAD

STA 301+20 RT
C.E. HMA

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 86	E

STA 308+50 LT
P.E. HMA

PI STA = 308+89.55
Y = 162695.935
X = 162197.844
DELTA = 46°38'05"
D = 2°45'00"
T = 898.05'
L = 1695.83'
R = 2083.50'
PC STA = 299+91.50
Y = 161797.889
X = 162199.684
PT STA = 316+87.33
Y = 163311.236
X = 161543.709
BK = N00°07'03"W
AH = N46°45'08"W
SE = 4.5%

XCEL ENERGY
(GAS LINES FROM
FACILITY MAPS)

R/W

468TH ST

305+00

304+00.00

STH 25

310+00

315+00

483RD AVE

XCEL ENERGY

PI: 316+87.33

318+00.00

70'

50'

MATCH MAINLINE PAVING

BUTT JOINT REQUIRED

+06.00
63.43'RT

+18.82
42.00'RT

XCEL ENERGY

AT&T WISCONSIN

5TH ST

PI: 308+90.90

STA 286+70 RT
F.E. BAD

STA 286+70 RT
P.E. BAD

STA 286+70 RT
P.E. BAD

5

5

STA 322+72
EXISTING 3.5' x 6' BOX CULVERT
1-MARKERS CULVERT END REQ'D - LT

+79.55
-102.89'LT

PI: 323+93.55

490TH AVE

XCEL ENERGY

BUTT JOINT REQUIRED

+11.57
-83.18'LT

XCEL ENERGY
(APPROXIMATE LOCATION
FROM FACILITY MAPS)

R/W

PCC: 327+37.83

CAUTION

XCEL
ENERGY

PI: 329+46.44

MILL AROUND
MANHOLE COVER

CITY OF
MENOMONIE

XCEL ENERGY

XCEL ENERGY

CAUTION

PT: 331+51.38

BUTT JOINT REQUIRED

PC: 320+34.82

325+00

STH 25

MATCH MAINLINE PAVING

320+00

330+00

50'

60'

R/W

N46° 45' 08"W

N0° 01' 19"W

24-7 TELCOM
INC.

CITY OF
MENOMONIE

CITY OF
MENOMONIE

CITY OF
MENOMONIE

CITY OF
MENOMONIE

MILL AROUND
MANHOLE COVER

NO
ENGINE
BRAKING
EXCEPT IN
EMERGENCIES
WITHIN
CITY
LIMITS

MOVE SIGN AND INSTALL ON NEW
SIGN POST (CURRENTLY INSTALLED
ON BEAM GUARD POST

MOVE SIGN AND INSTALL ON NEW
SIGN POST (CURRENTLY INSTALLED
ON BEAM GUARD POST

SPEED
LIMIT
35

STA 323+25 RT
C.E. HMA

PI STA = 323+93.55
Y = 163795.111
X = 161029.294
DELTA = 28°07'15"
D = 4°00'00"
T = 358.74'
L = 703.02'
R = 1432.39'
PC STA = 320+34.82
Y = 163549.320
X = 161290.599
PT STA = 327+37.83
Y = 164135.050
X = 160914.685
BK = N46°45'08"W
AH = N18°37'53"W
SE = 4.0%

PI STA = 329+46.44
Y = 164332.728
X = 160848.038
DELTA = 18°36'35"
D = 4°30'00"
T = 208.61'
L = 413.55'
R = 1273.24'
PC STA = 327+37.83
Y = 164135.050
X = 160914.685
PT STA = 331+51.38
Y = 164541.339
X = 160847.958
BK = N18°37'53"W
AH = N00°01'19"W
SE = 4.0%

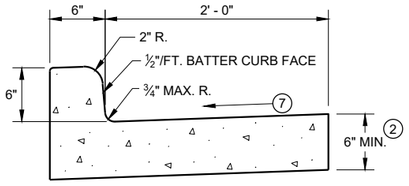
END PROJECT
STA 331+47.65
MATCH EXISTING
SAWCUT REQUIRED

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	PLAN SHEET	SHEET 87	E

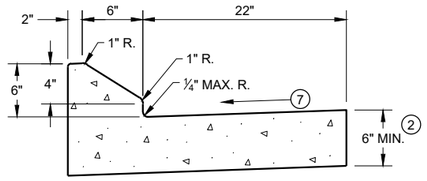
Standard Detail Drawing List

08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
13A10-02A	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02B	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02C	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A10-02D	2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
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
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B28-04A	GUARDRAIL MOW STRIP
14B28-04B	GUARDRAIL MOW STRIP
14B29-01	SAFETY EDGE
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	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)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C07-15A	PAVEMENT MARKING SYMBOLS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
16A01-07	LANDMARK REFERENCE MONUMENTS AND COVERS

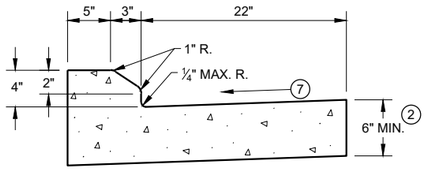
6



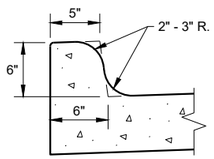
TYPES A[1] & D



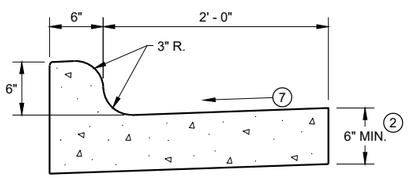
6" SLOPED CURB TYPES G[1] & J



4" SLOPED CURB TYPES G[1] & J

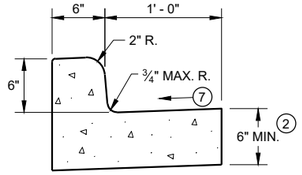


TYPES K[1] & L
(OPTIONAL CURB SHAPE)



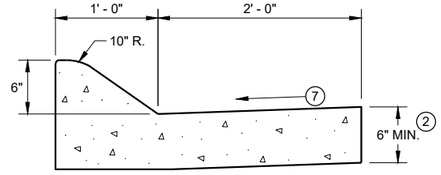
TYPES K[1] & L

CONCRETE CURB AND GUTTER 30"

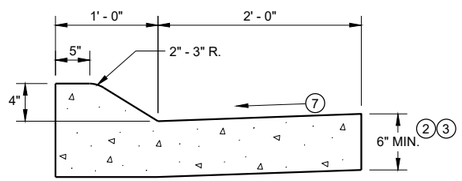


TYPES A[1] & D

CONCRETE CURB AND GUTTER 18"

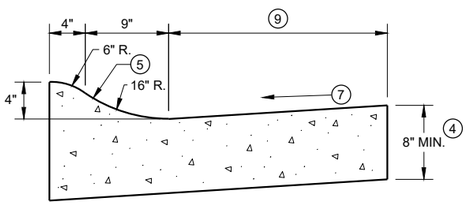


6" SLOPED CURB TYPES A[1] & D



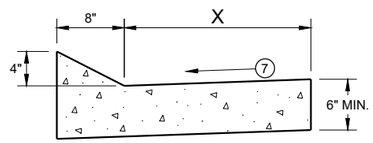
4" SLOPED CURB TYPES A[1] & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R[1] & T

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

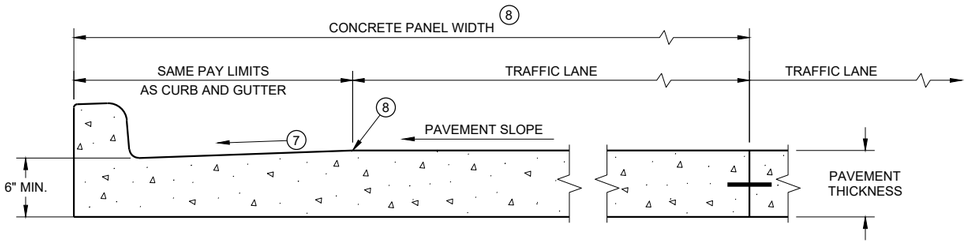


TYPES TBT & TBTT[1]

CONCRETE CURB AND GUTTER

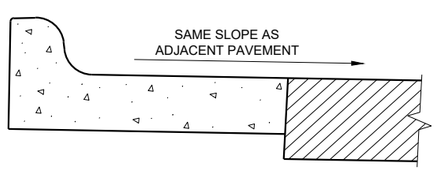
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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.

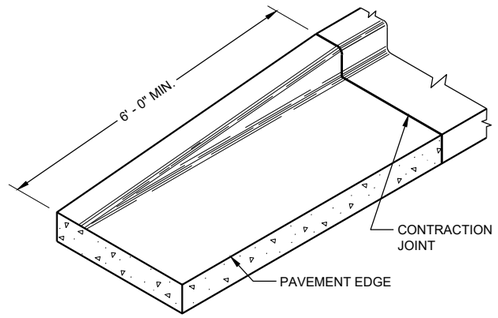
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

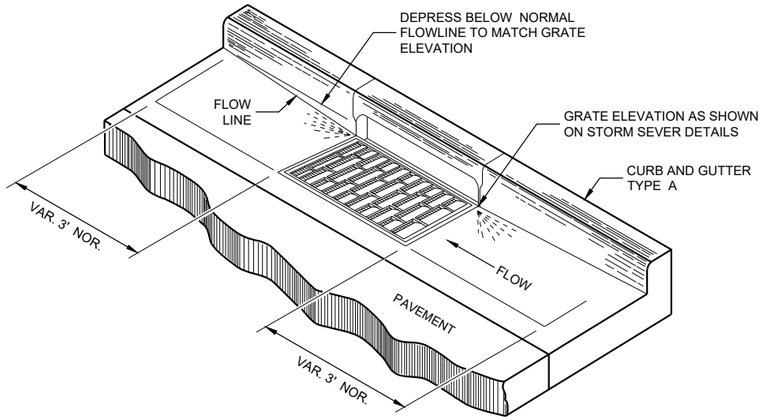
1. TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
3. USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH 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

SDD 08D01 - 22a
6



END SECTIONCURB 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.

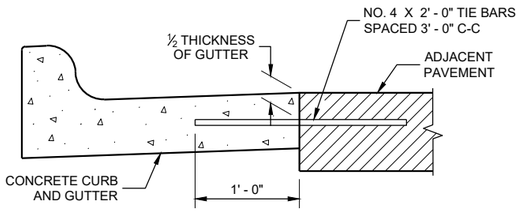
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

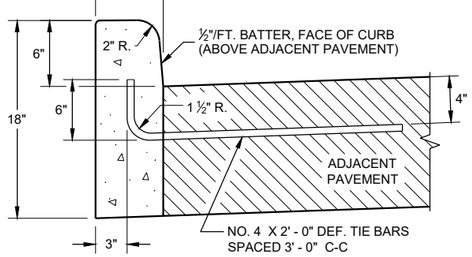
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(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.

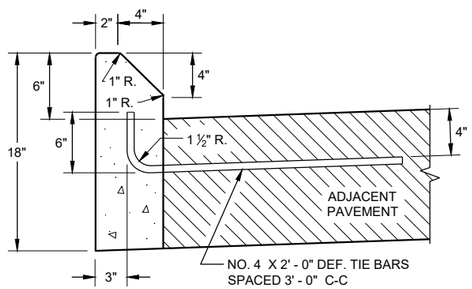
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

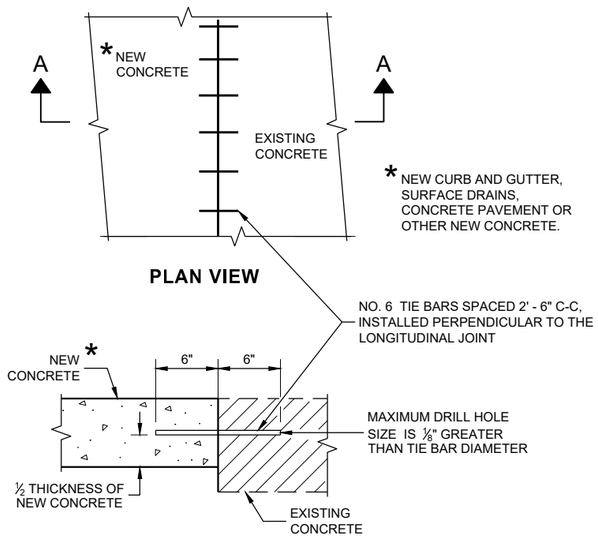


TYPES A (1) & D

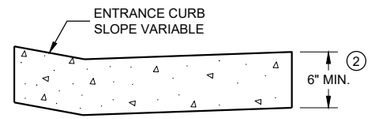


TYPES G (1) & J

CONCRETE CURB



TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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SDD08D01 - 22b

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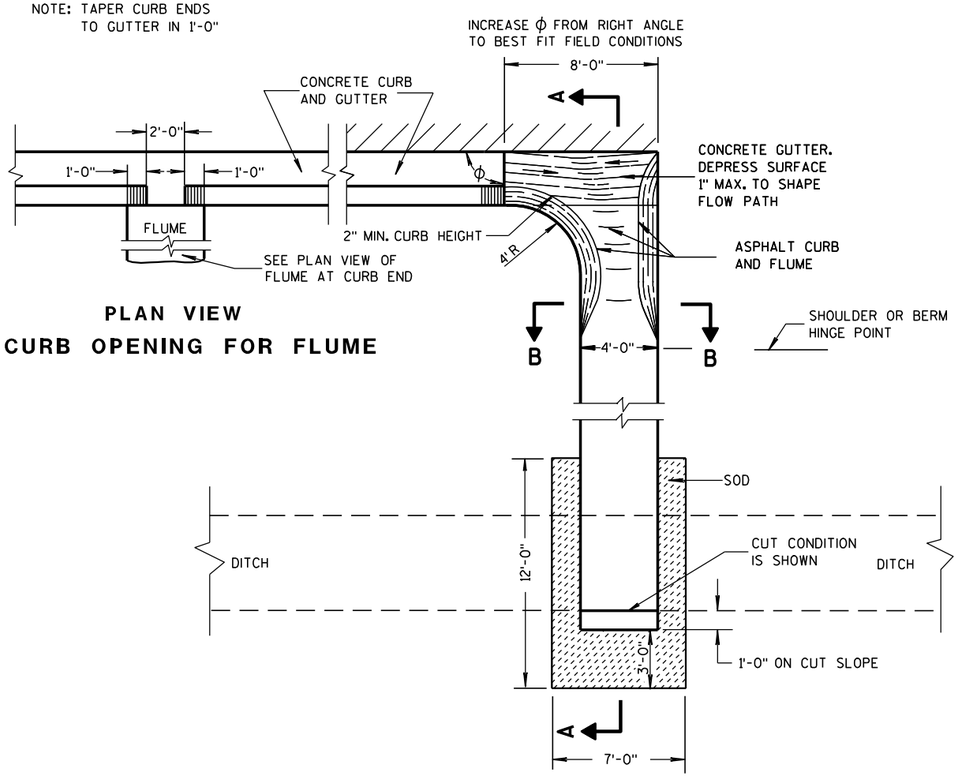
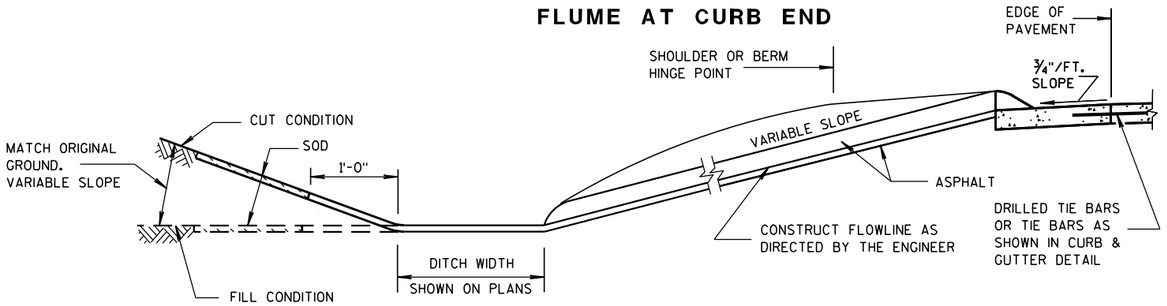
SDD08D01 - 22b

ASPHALTIC FLUME

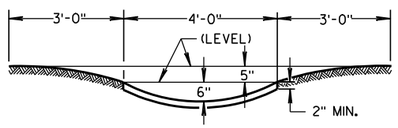


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

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.

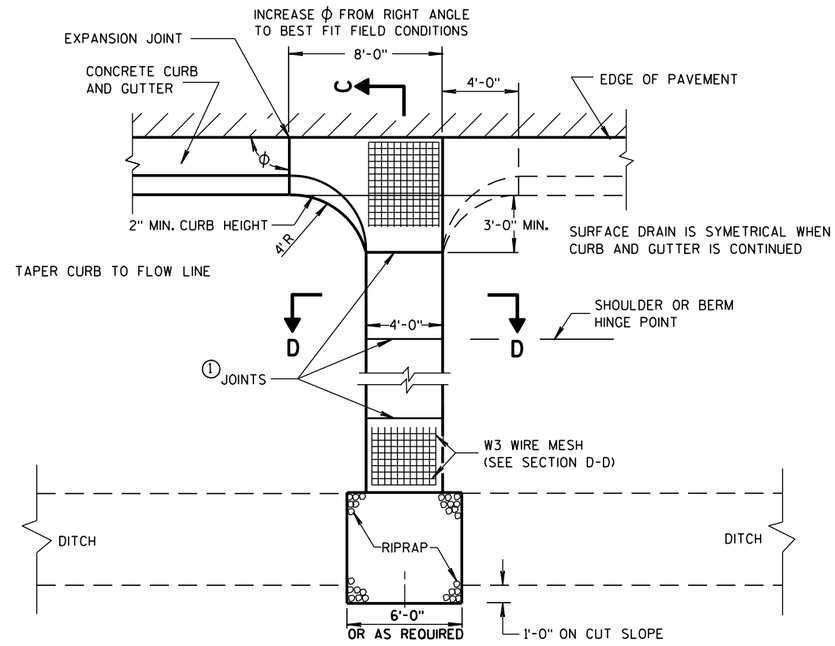
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE $\frac{1}{8}$ TO $\frac{1}{4}$ INCH WIDE BY $1\frac{1}{2}$ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

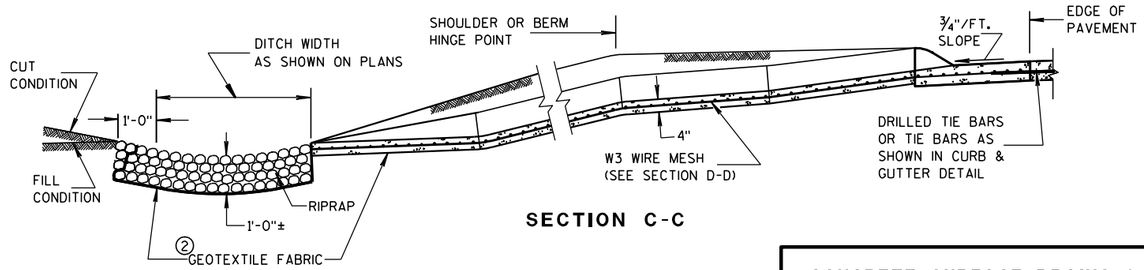
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

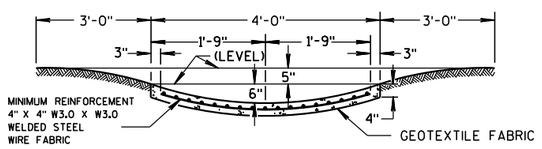
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
MENT

FHWA

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S.D.D. 8 D 4-5

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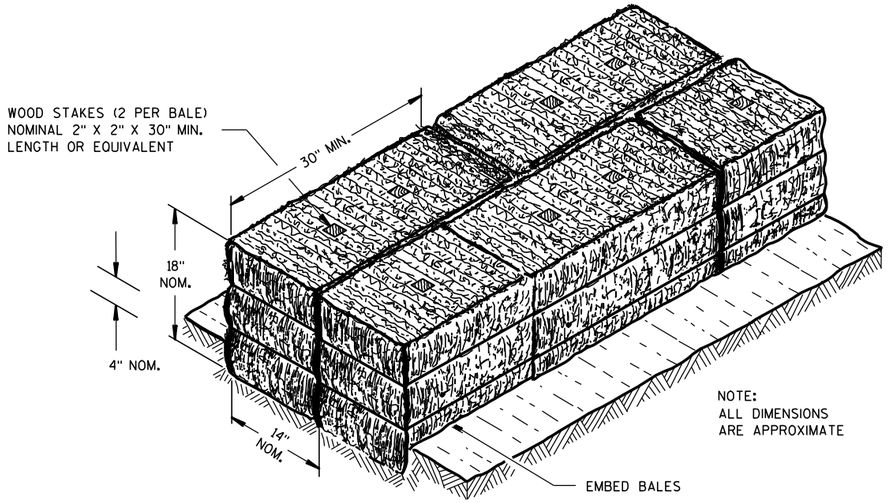
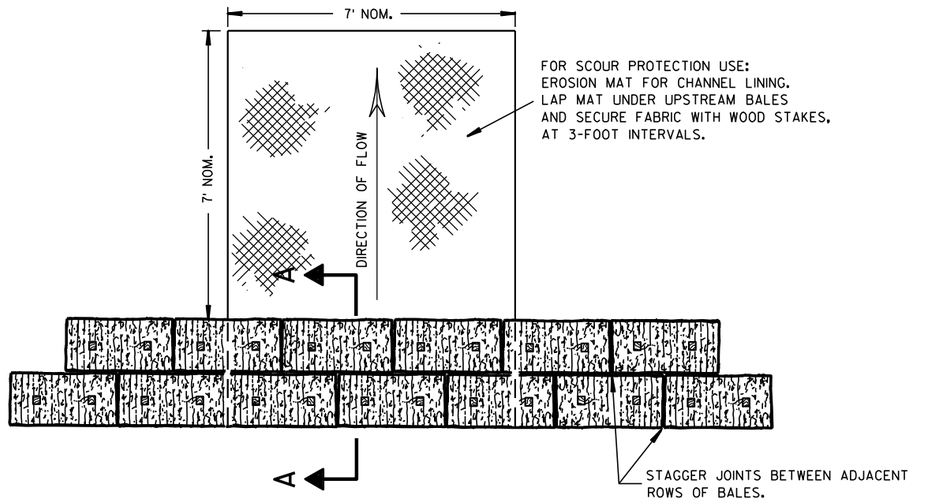
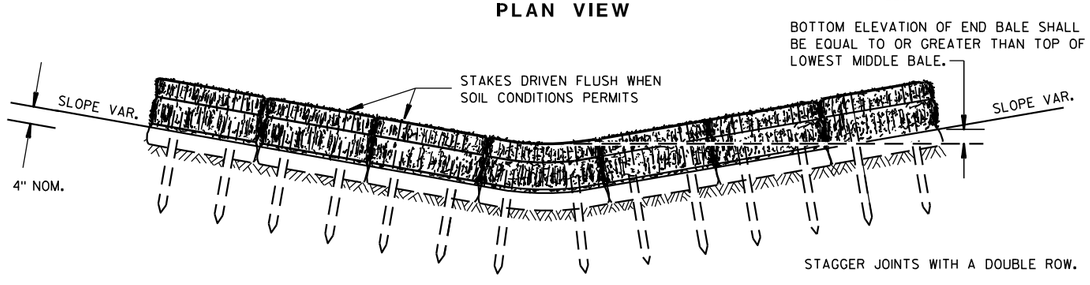
S.D.D. 8 D 4-5



SECTION A-A



PLAN VIEW



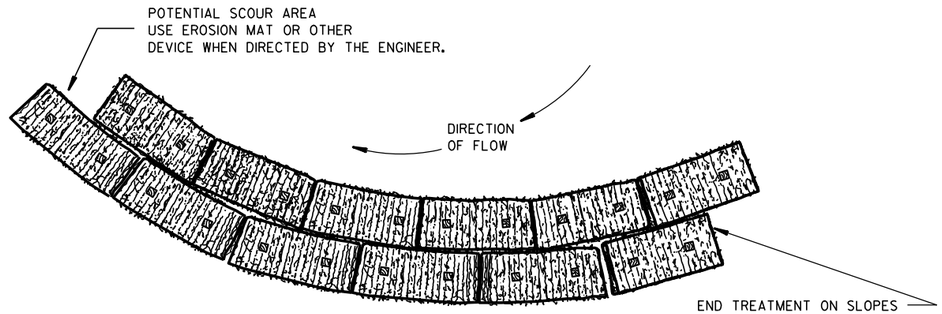
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

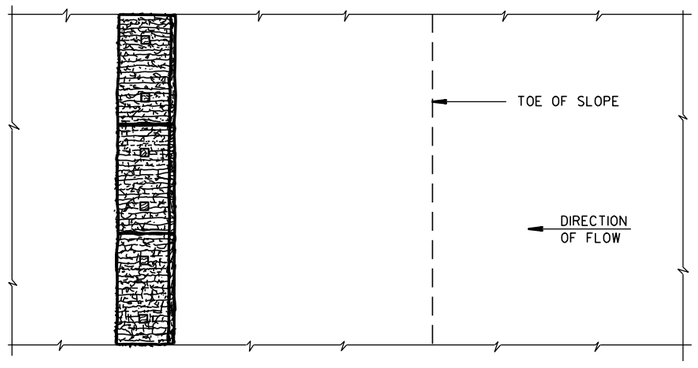
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

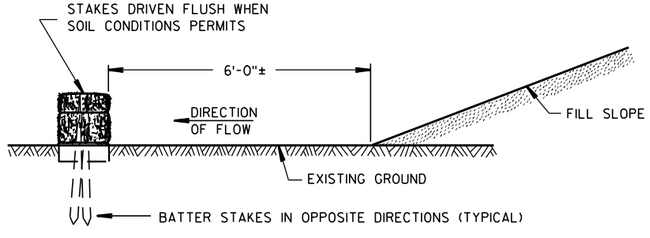


PLAN VIEW

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

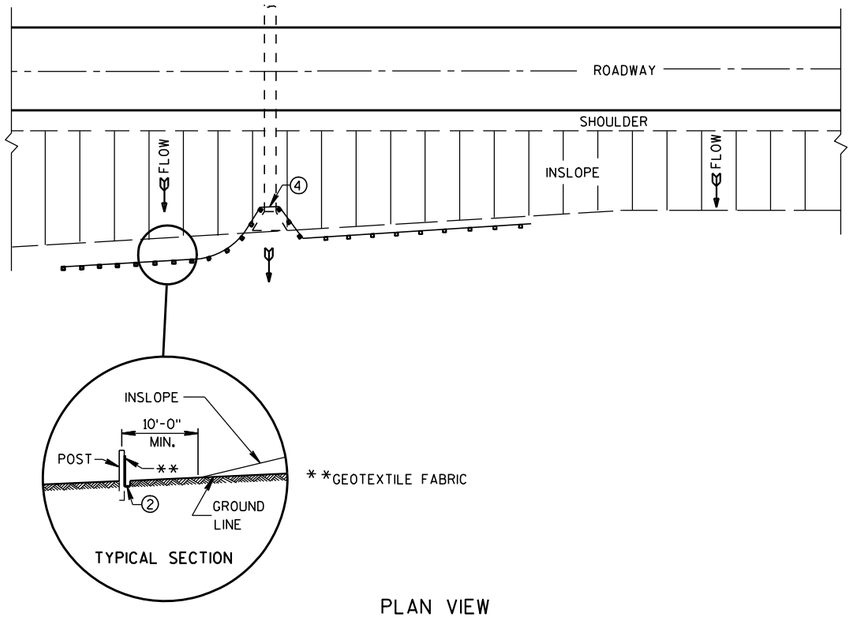
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

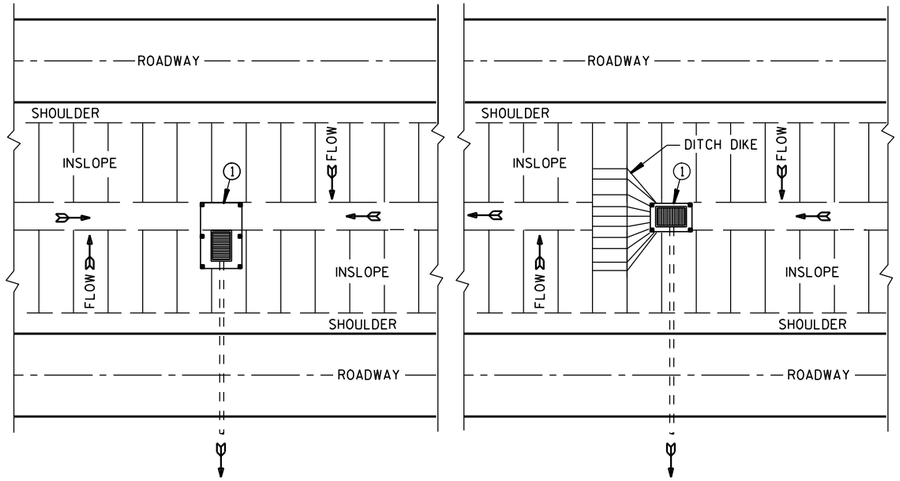
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



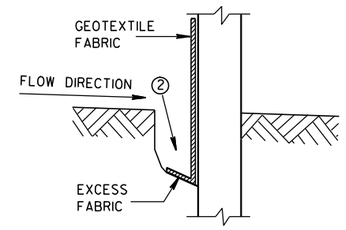
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

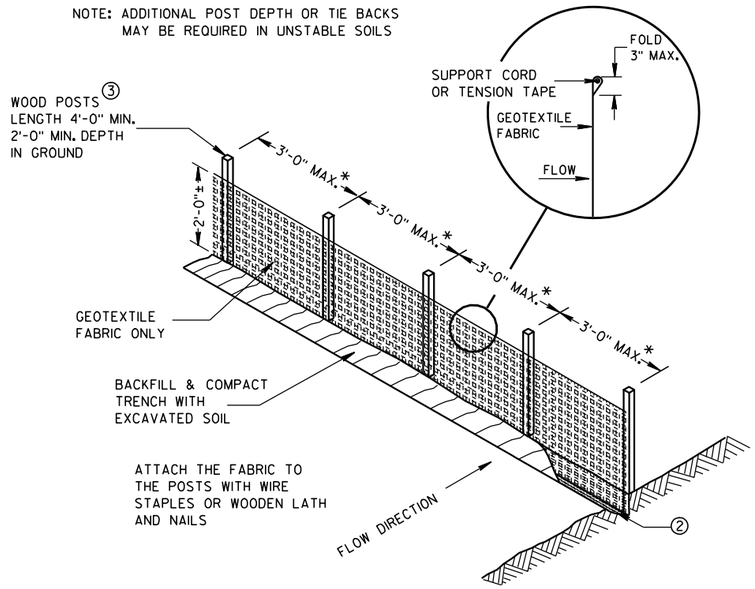
GENERAL NOTES

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

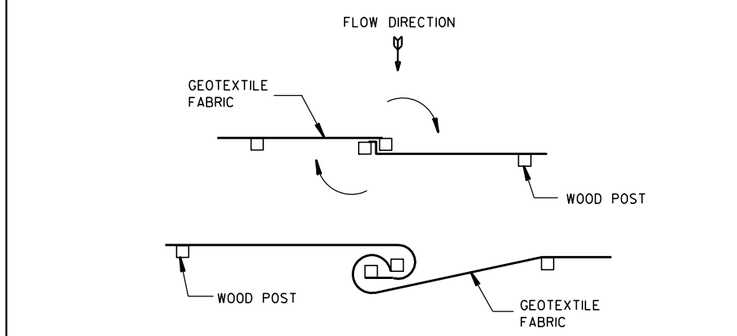
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



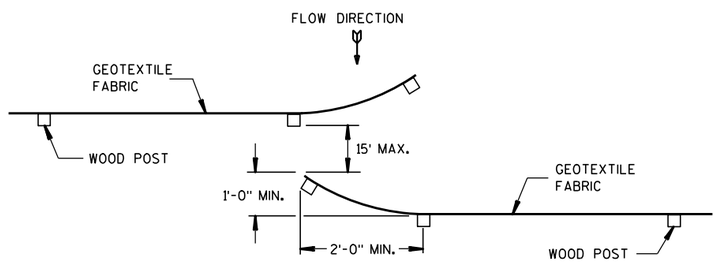
TRENCH DETAIL



SILT FENCE

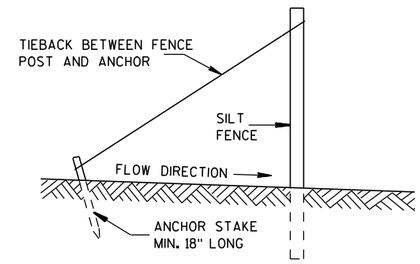


TWIST METHOD



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

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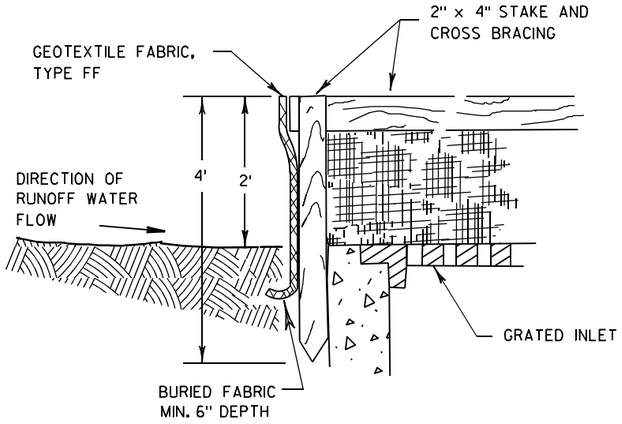
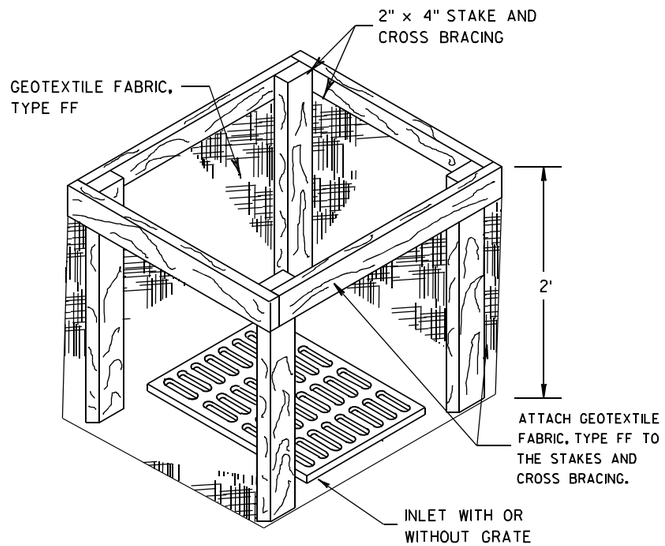
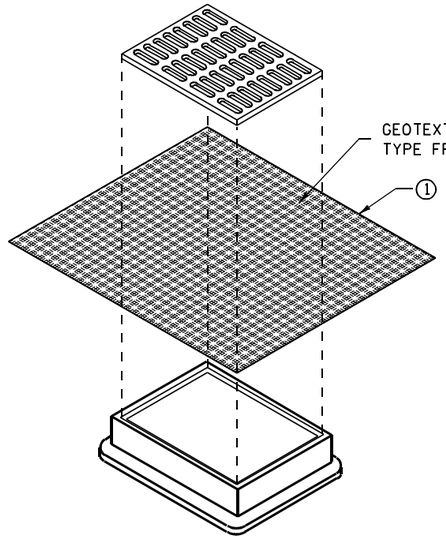
S.D.D. 8 E 9-6



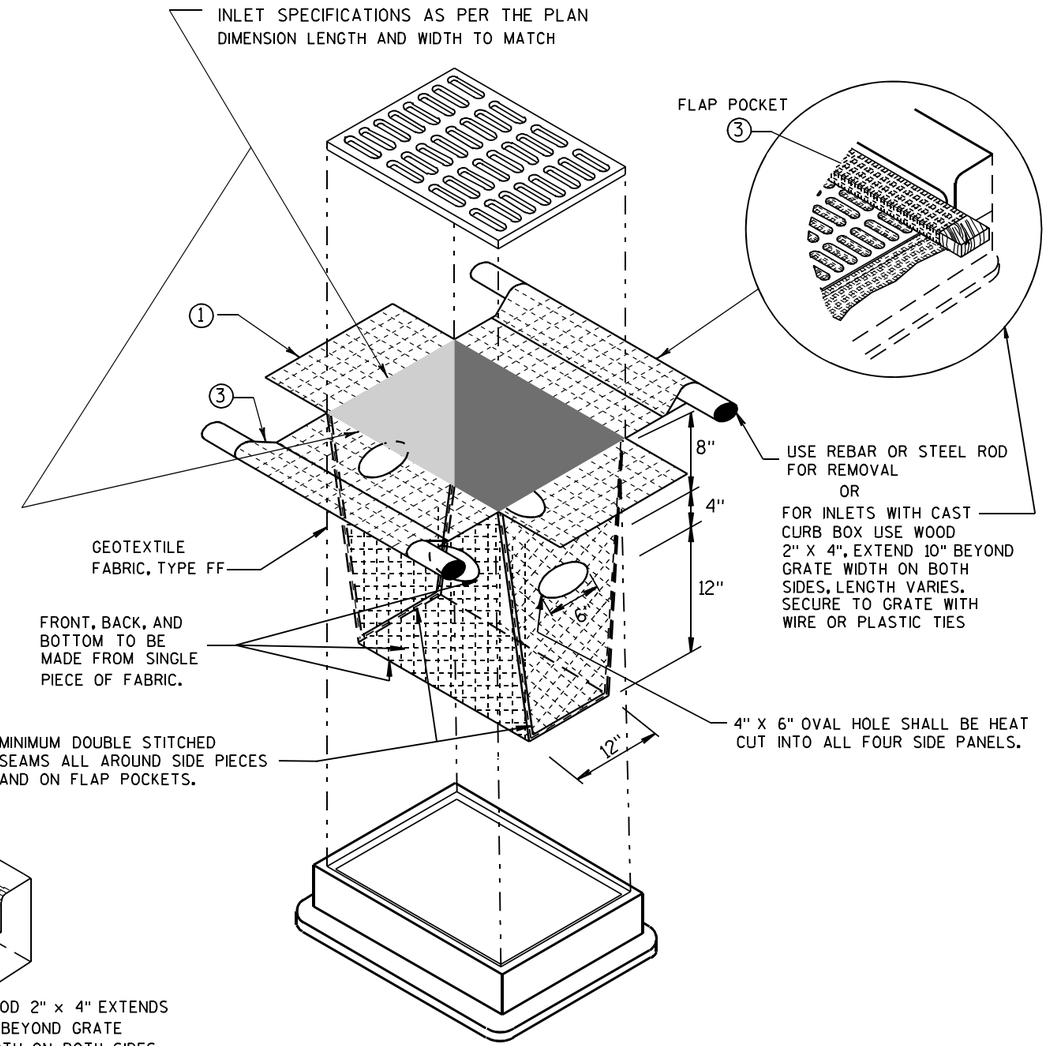


INLET PROTECTION, TYPE A



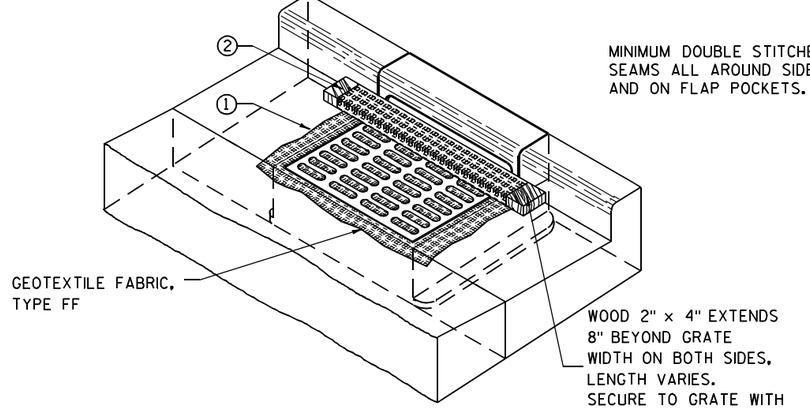
INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE D

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



INLET PROTECTION, TYPE C (WITH CURB BOX)

GENERAL NOTES

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

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

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

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

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

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

TYPE D

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

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

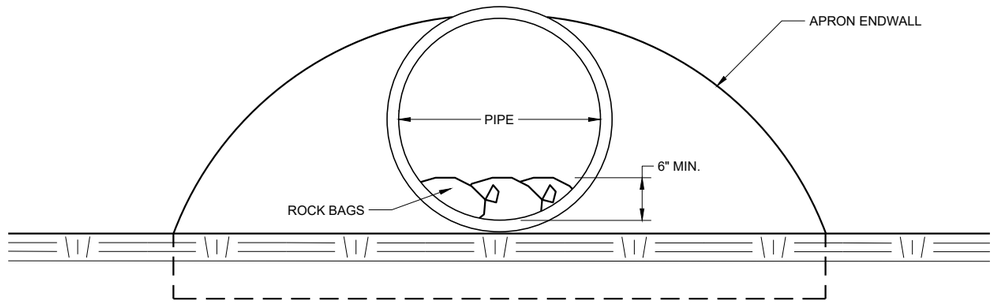
THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE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

INLET PROTECTION
TYPE A, B, C, AND D

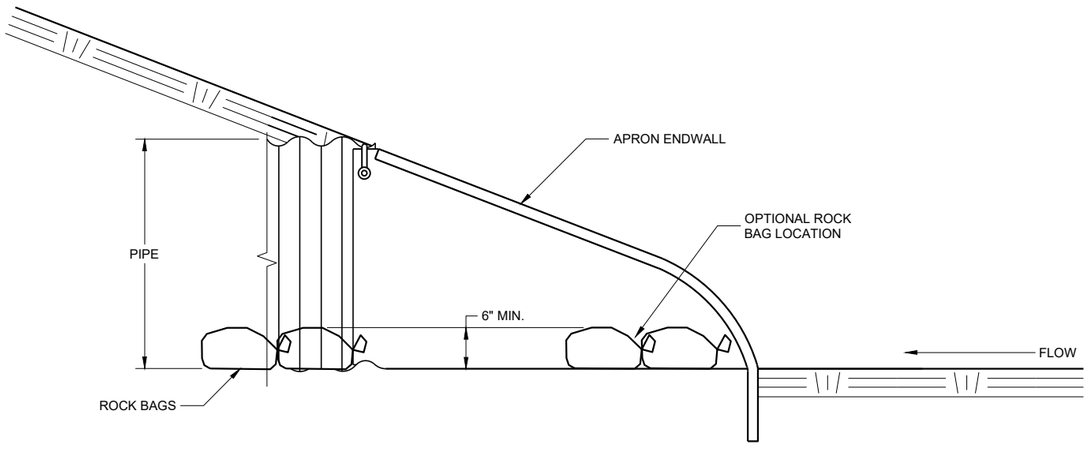
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6
S.D.D. 8 E 10-2



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	

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SDD 08E15 - 01

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SDD 08E15 - 01

METAL APRON ENDWALLS

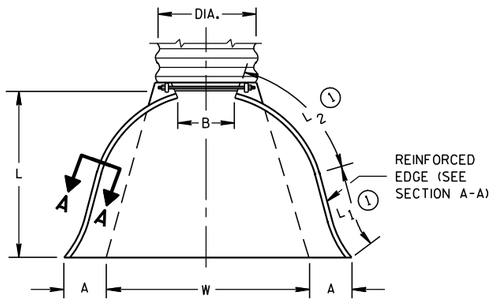
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

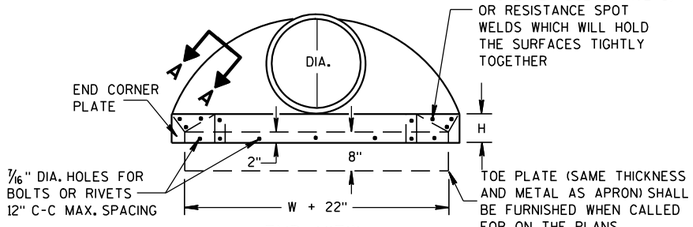
REINFORCED CONCRETE APRON ENDWALLS

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

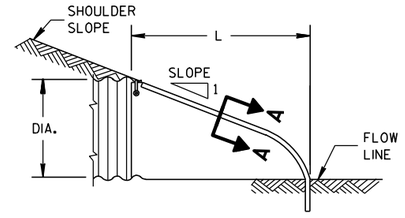
*MINIMUM
**MAXIMUM



PLAN VIEW

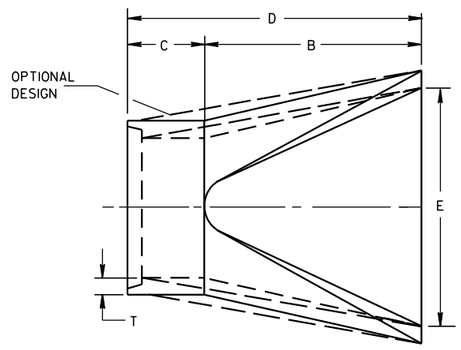


END VIEW

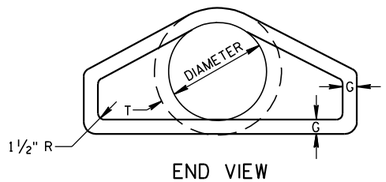


SIDE ELEVATION

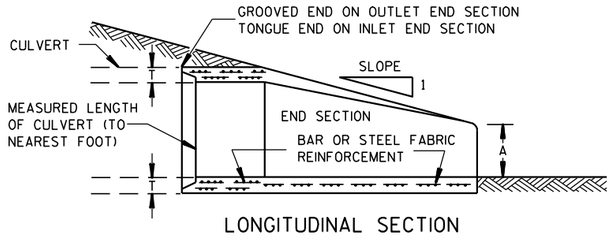
METAL ENDWALLS



PLAN

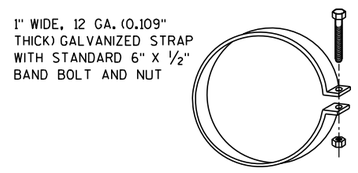


END VIEW



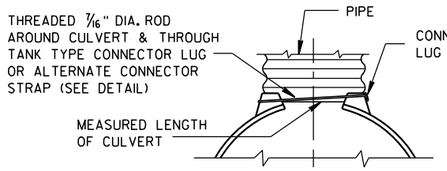
LONGITUDINAL SECTION

CONCRETE ENDWALLS

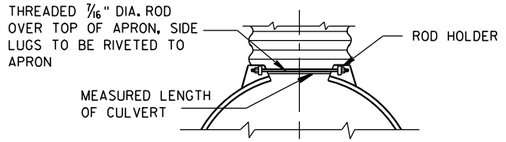


ALTERNATE FOR TYPE 1 CONNECTION

END SECTION CONNECTOR STRAP

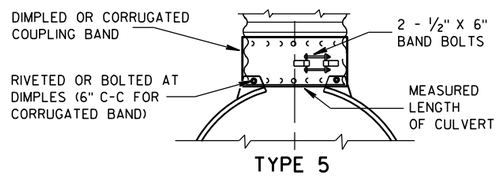


TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

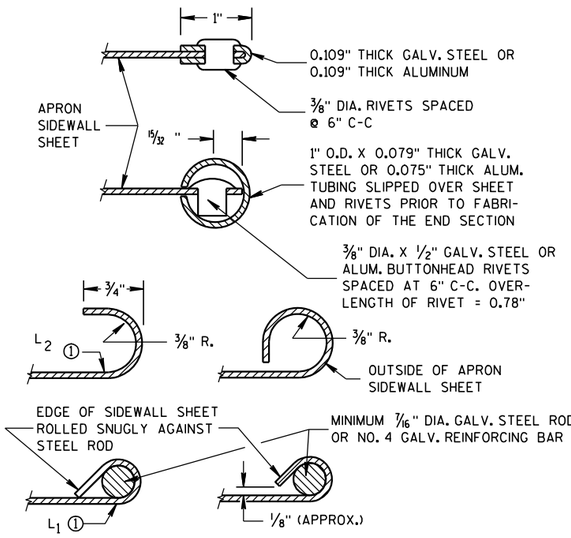
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

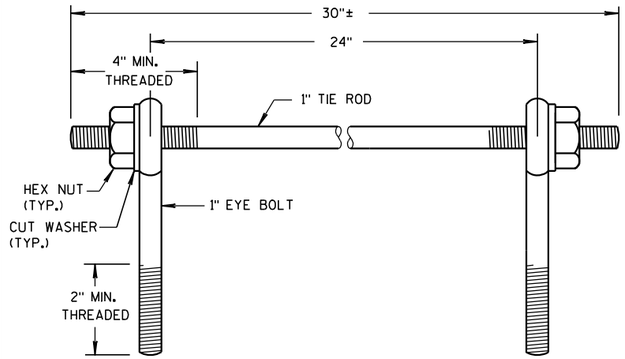
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

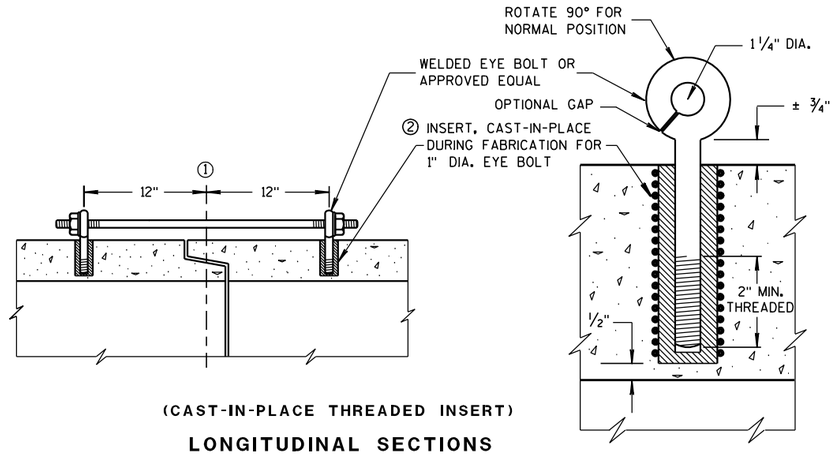
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



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 ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

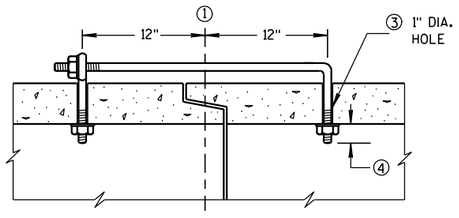
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

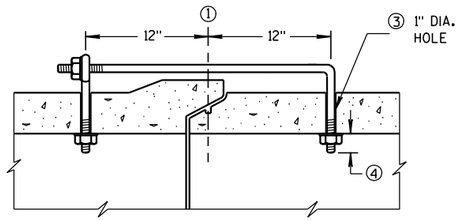
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

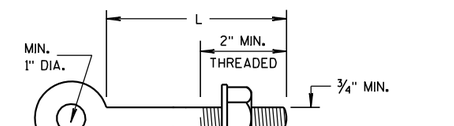


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

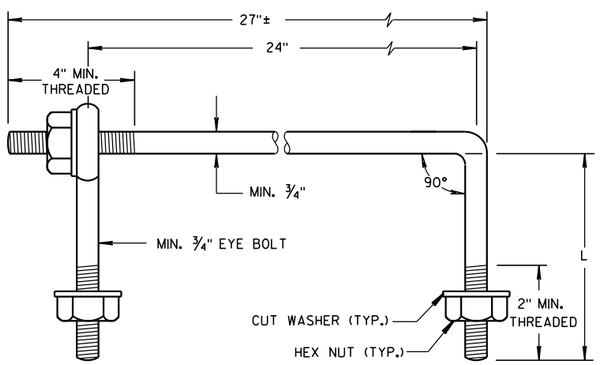
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

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



EYE BOLT AND TIE ROD

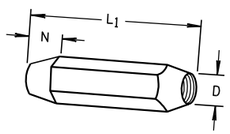
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES



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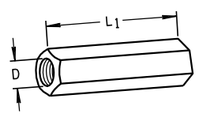
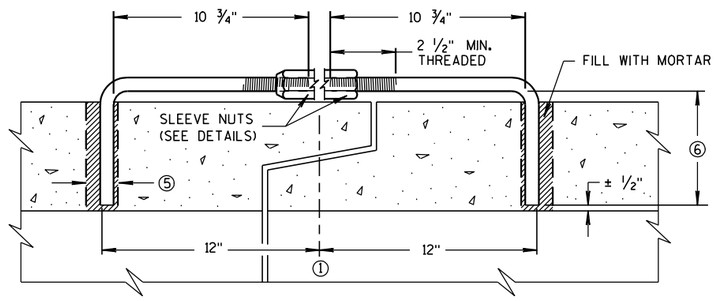


PLAIN

RIGHT AND LEFT THREADS

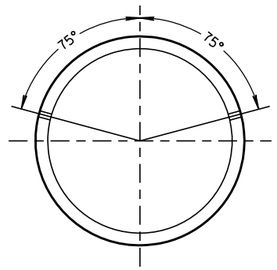
SLEEVE NUTS



LONGITUDINAL SECTION

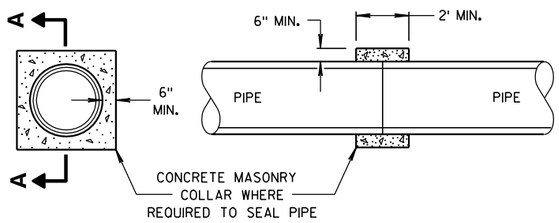
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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
6/5/2012 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
97 — MENT

FHWA

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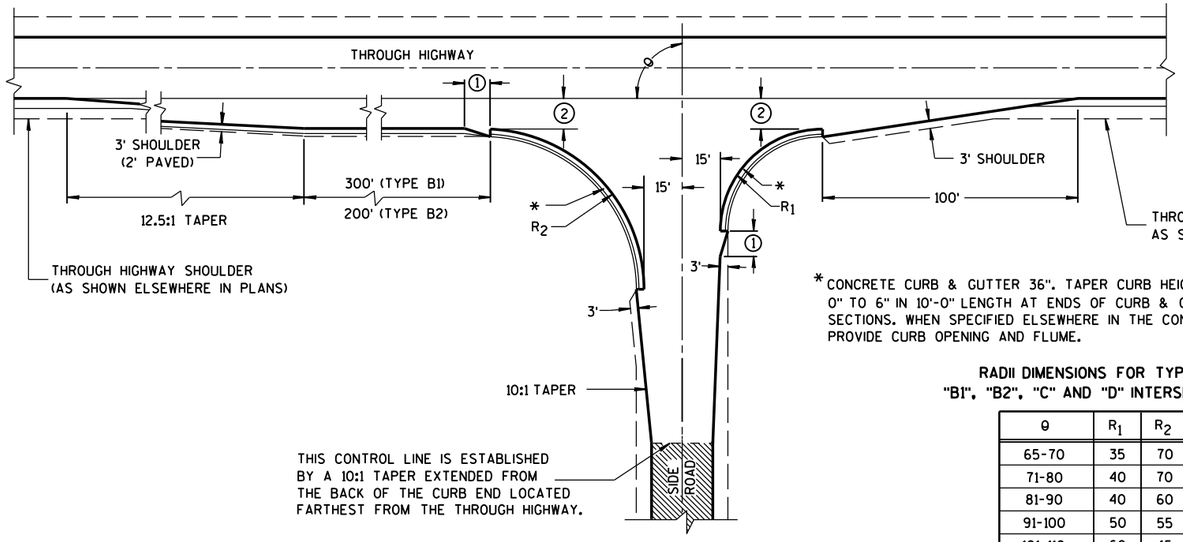
S.D.D. 8 F 4-7

6

S.D.D. 8 F 4-7

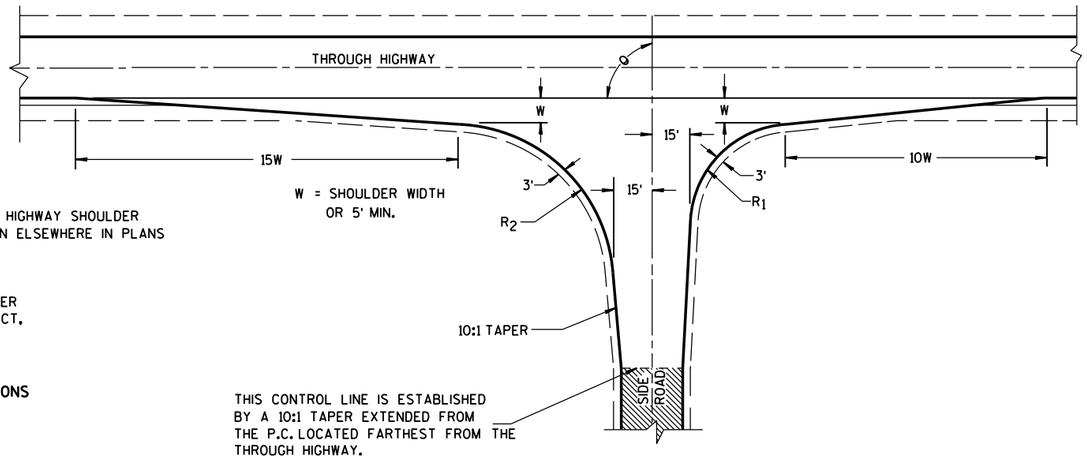


TYPE "B1" AND "B2"

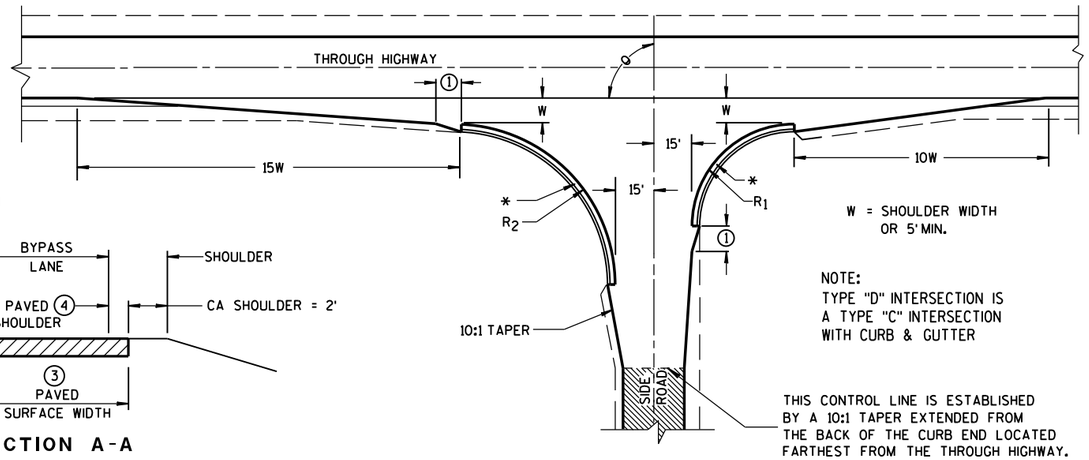
*CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R_1	R_2
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45



TYPE "C"



TYPE "D"

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

BYPASS LANE

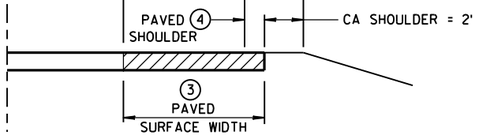
(1) 10-FT TYPICAL.

(2) 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

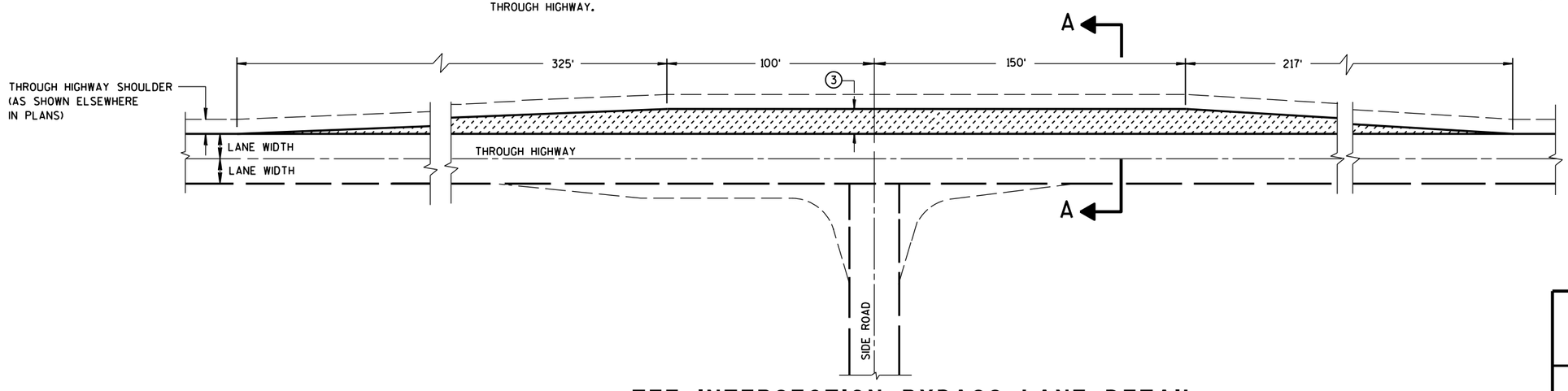
**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.

(3) BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.

(4) BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



SECTION A-A
(SHOWING BYPASS LANE AND SHOULDER)



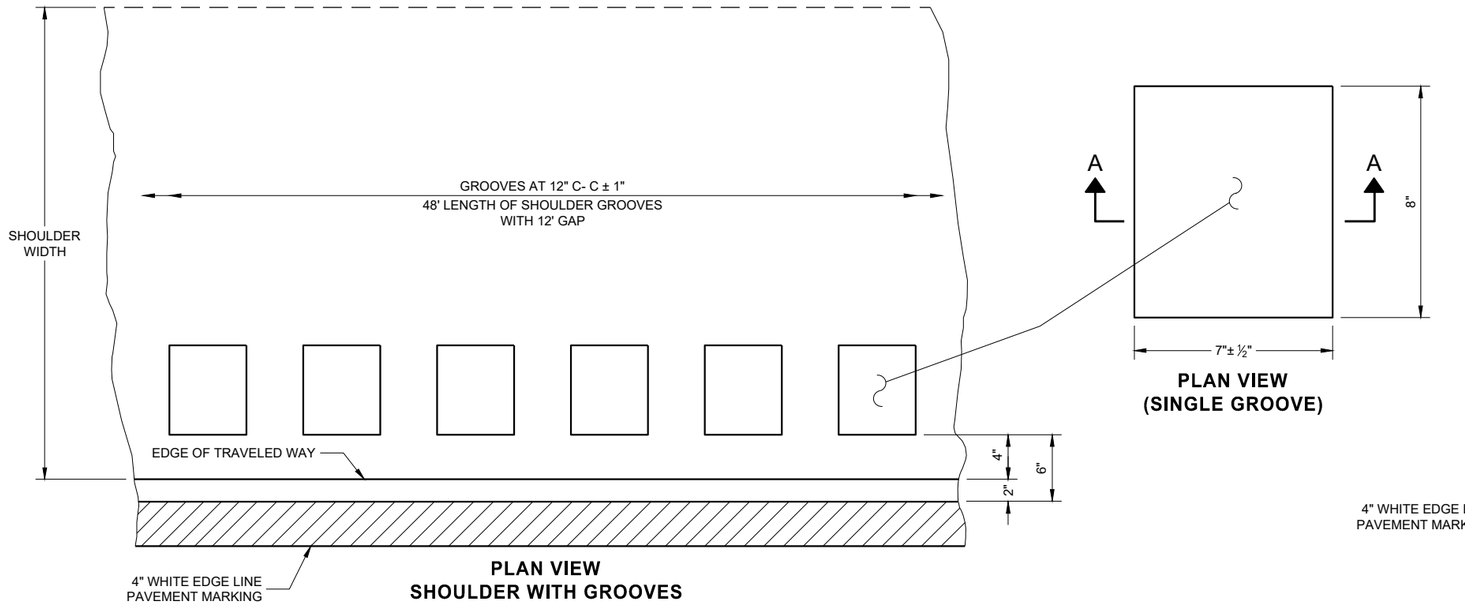
TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPO

6

S.D.D. 9 A 1-13a



PLAN VIEW
SHOULDER WITH GROOVES

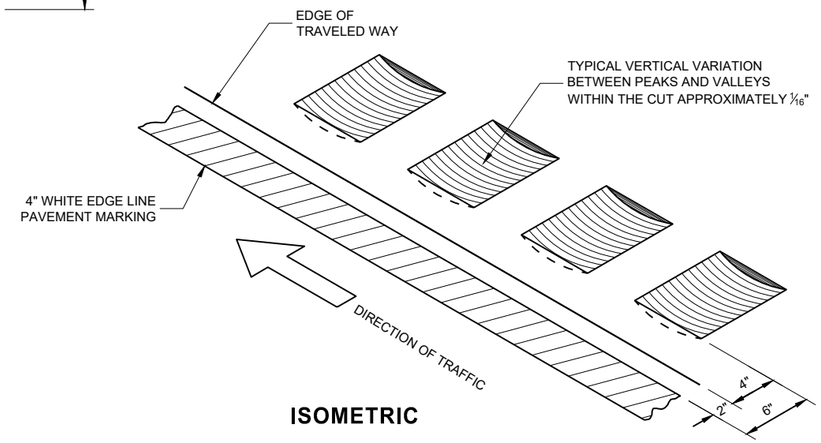
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

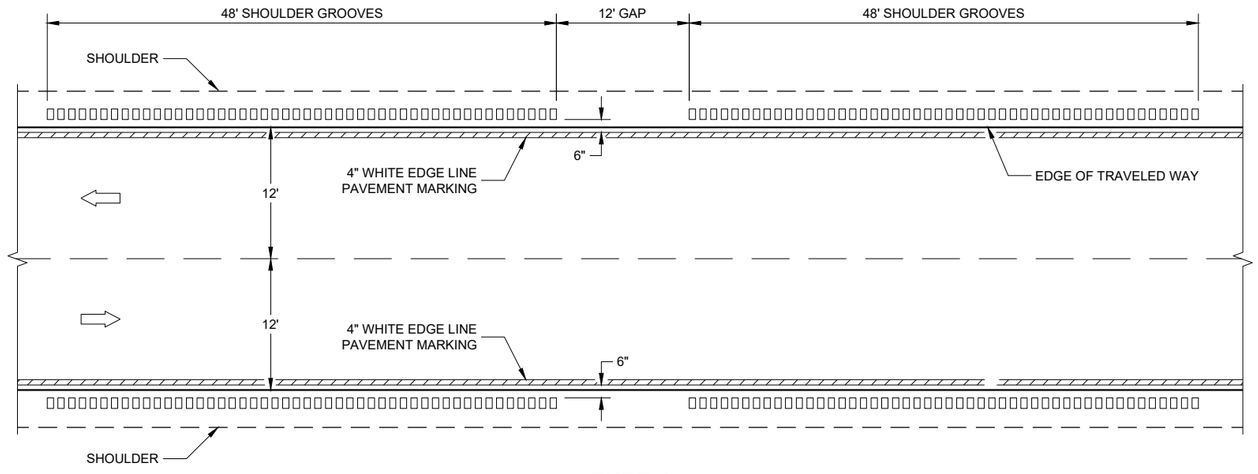
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

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

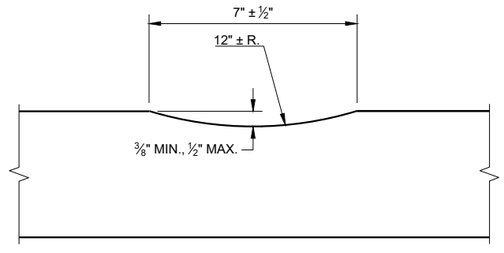


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



TYPE 1
2 - LANE SHOULDER RUMBLE STRIP



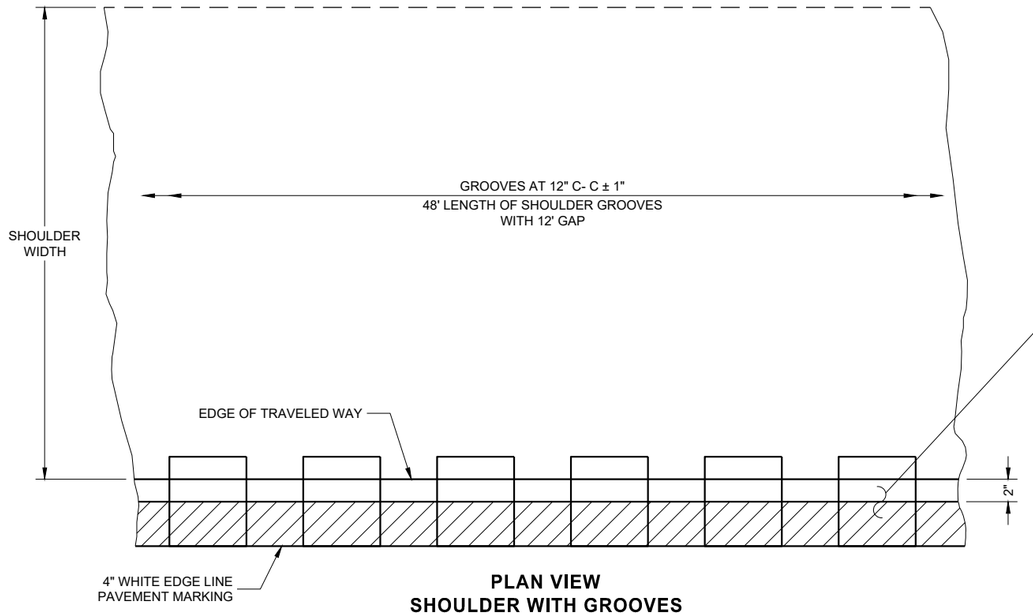
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

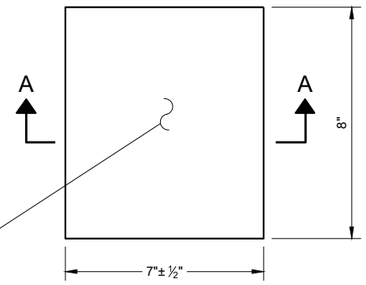
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A10 - 02a
SDD 13A10 - 02a



PLAN VIEW
SHOULDER WITH GROOVES



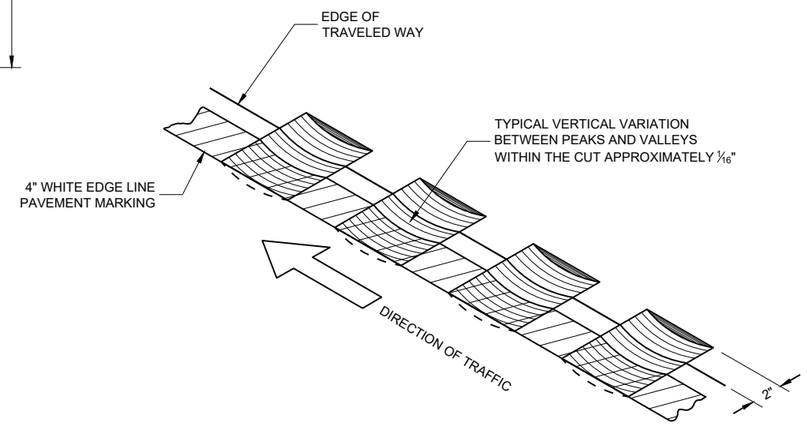
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

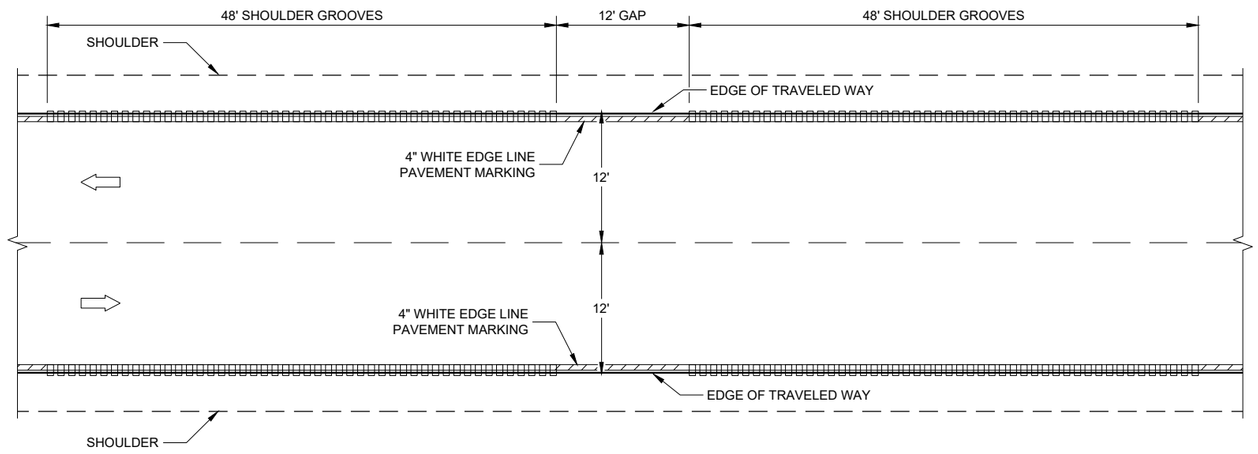
DO NOT MILL SHOULDER GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

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

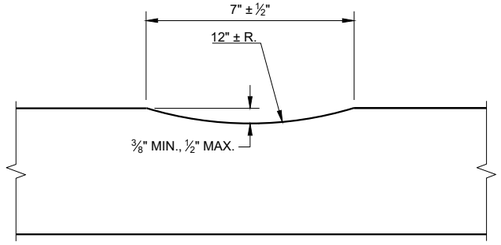


ISOMETRIC

PLACEMENT DETAIL FOR TYPE 2 MILLED RUMBLE STRIP



TYPE 2
2 - LANE SHOULDER RUMBLE STRIP



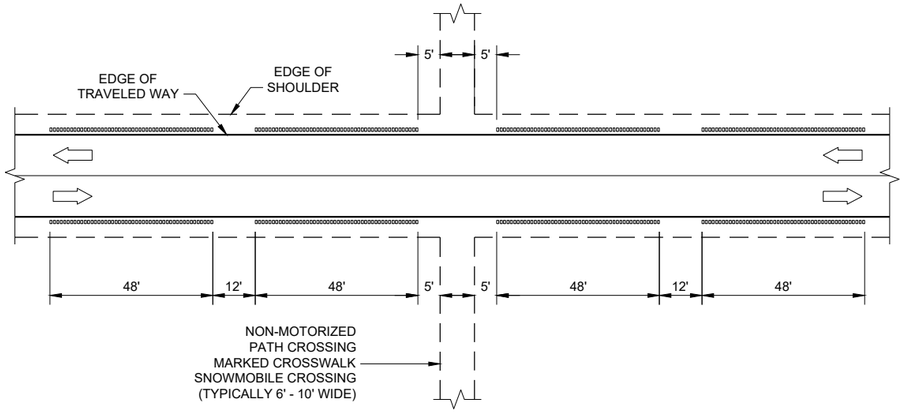
SECTION A - A

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

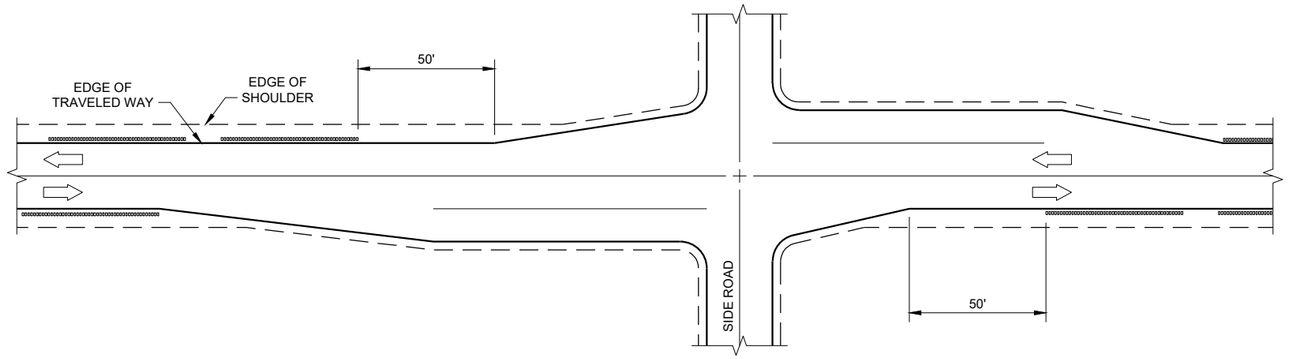
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 13A10 - 02b

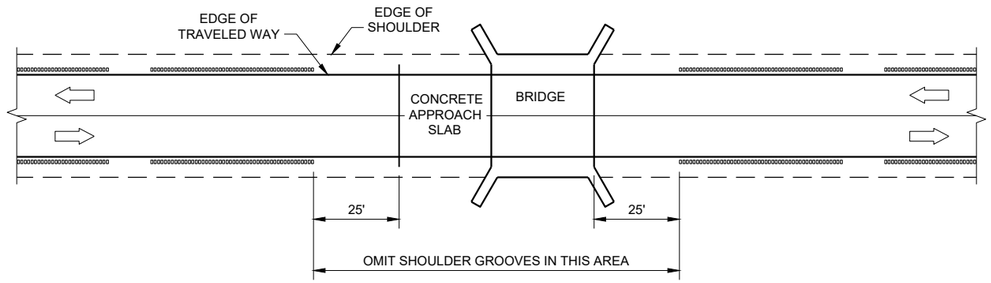
SDD 13A10 - 02b



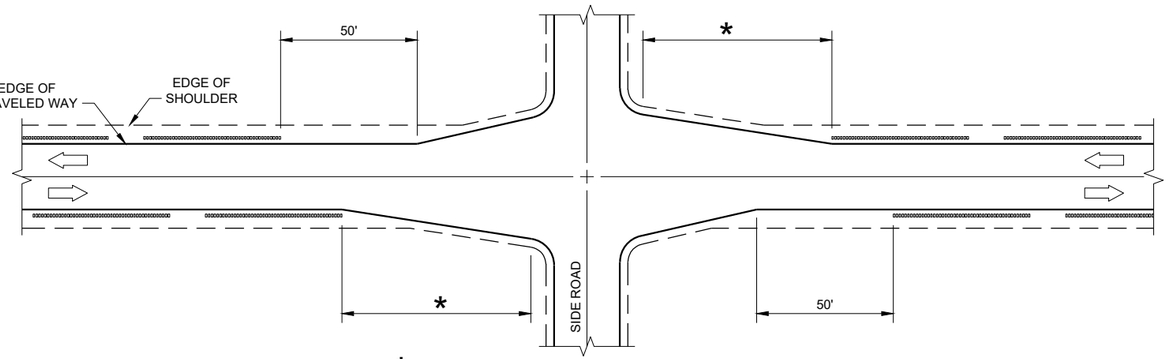
SHOULDER GROOVES AT MISCELLANEOUS CROSSINGS



SHOULDER GROOVES AT RIGHT TURN LANE

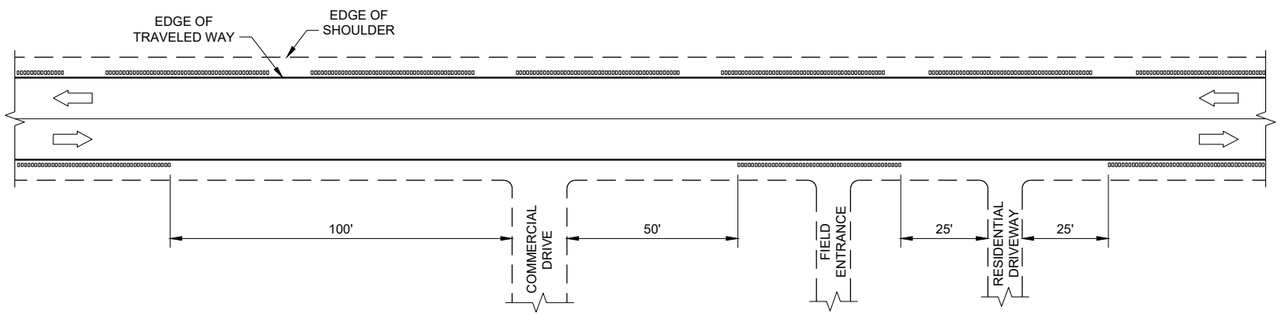


SHOULDER GROOVES AT BRIDGES



* GREATER OF 100' OR APPROACH TAPER LENGTH

SHOULDER GROOVES AT INTERSECTIONS WITH APPROACH TAPER



SHOULDER GROOVES AT DRIVEWAYS (1)

GENERAL NOTES

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

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA

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SDD 13A10 - 02c

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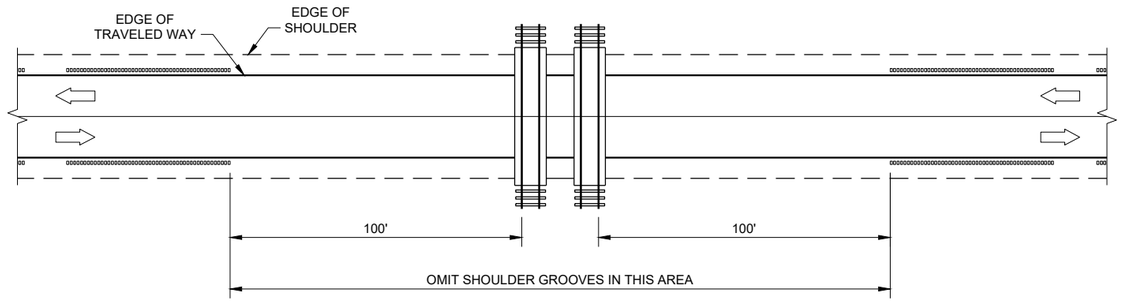
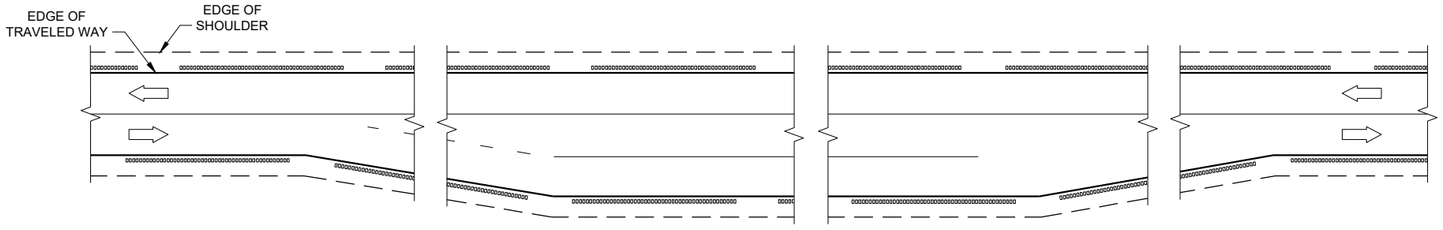
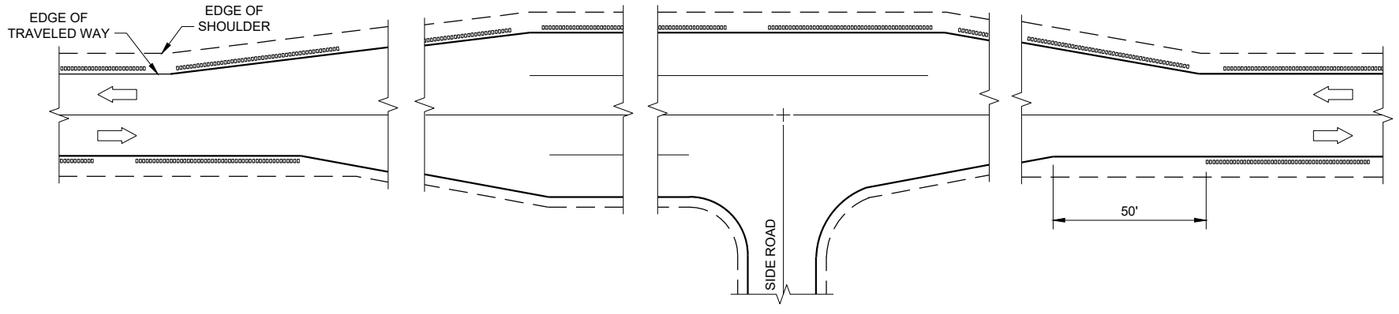
SDD 13A10 - 02c



SHOULDER GROOVES AT RAILROADS



SHOULDER GROOVES AT PASSING AND CLIMBING LANES



SHOULDER GROOVES AT BYPASS LANES

6

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SDD 13A10 - 02d

SDD13A10 - 02d

2-LANE RURAL SHOULDER RUMBLE STRIP, MILLING

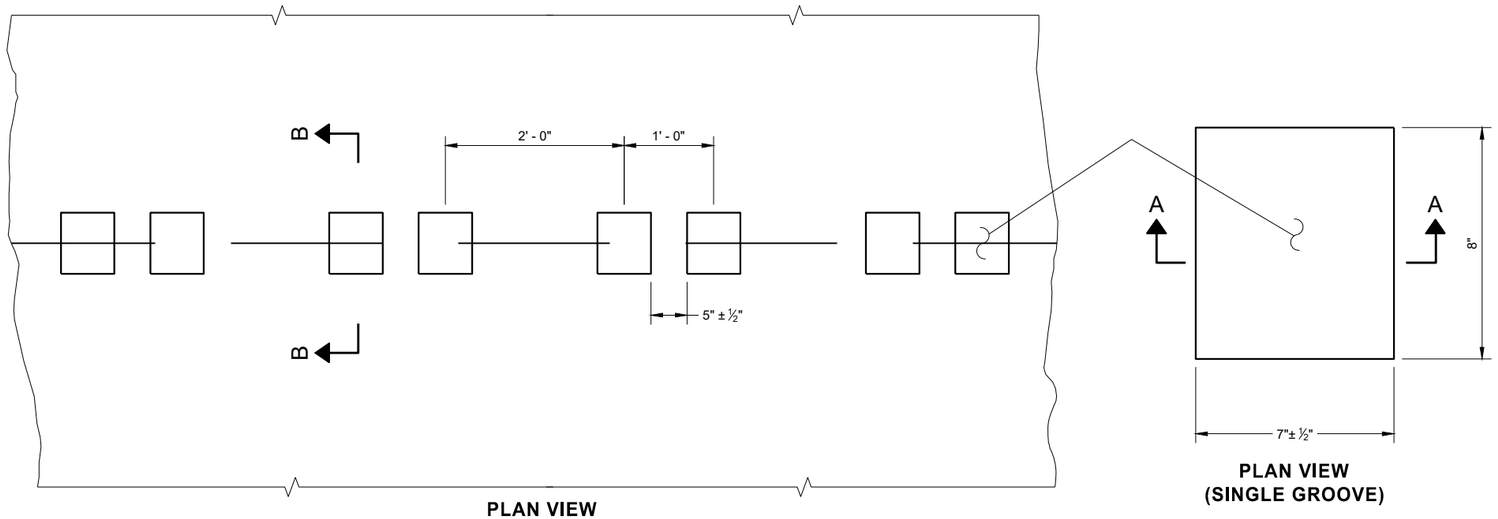
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP

GENERAL NOTES

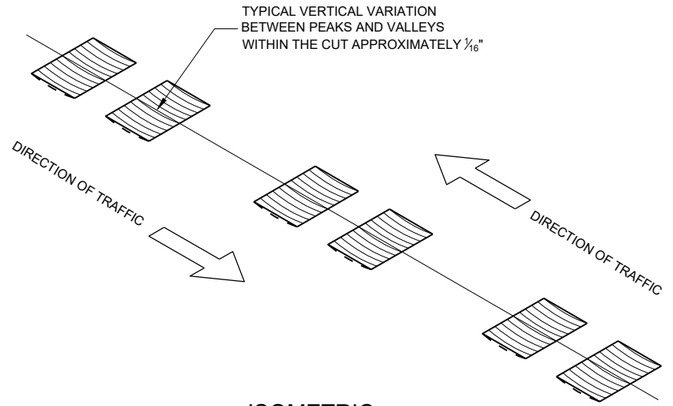
DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

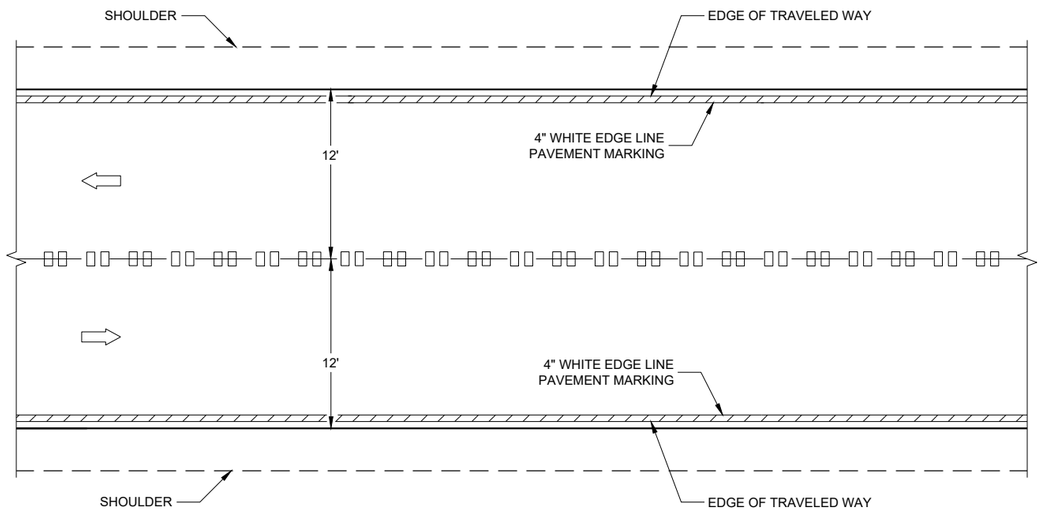
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

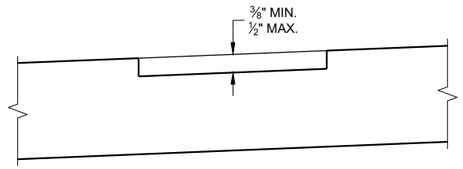
(1) CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



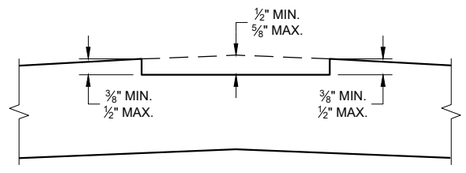
ISOMETRIC



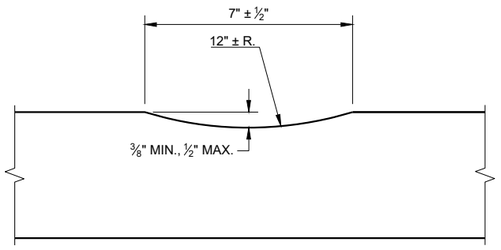
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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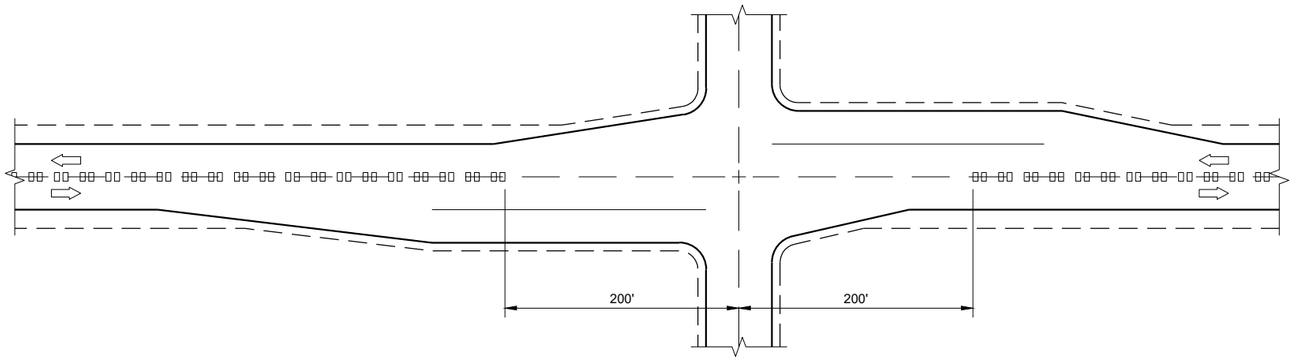
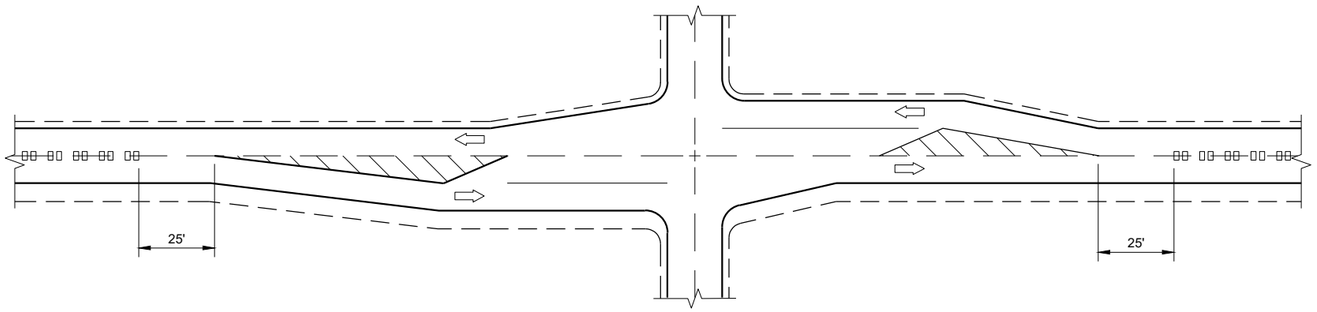
SDD 13A11 - 03a

6

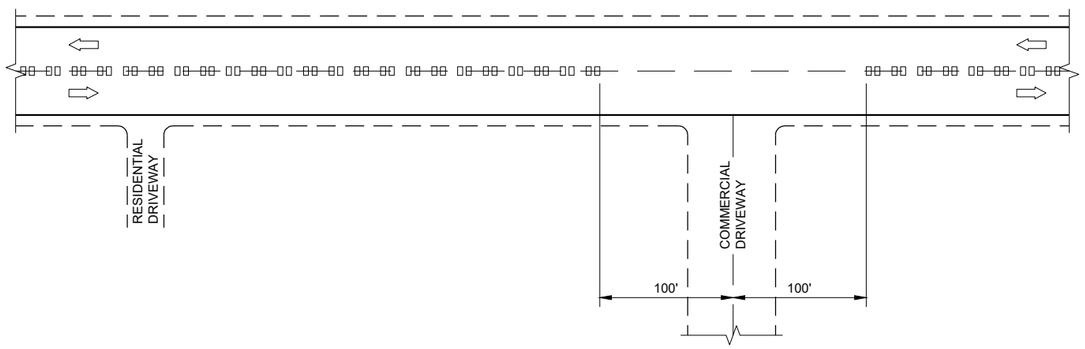
SDD 13A11 - 03a



CENTERLINE GROOVES AT INTERSECTIONS



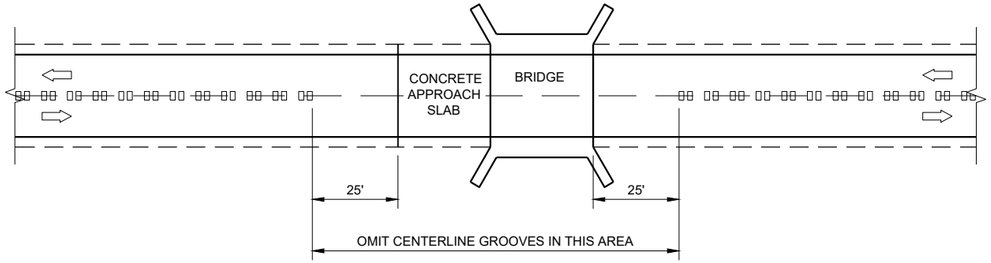
CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



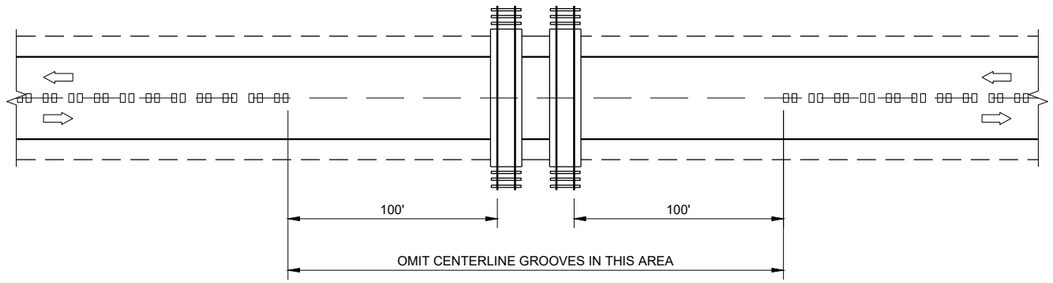
CENTERLINE GROOVES AT DRIVEWAYS (1)

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

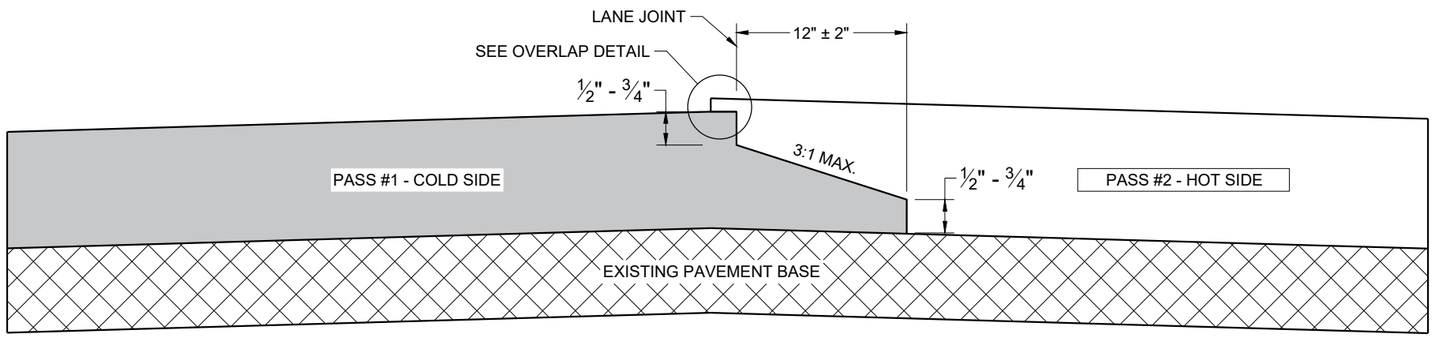
2-LANE RURAL CENTERLINE RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

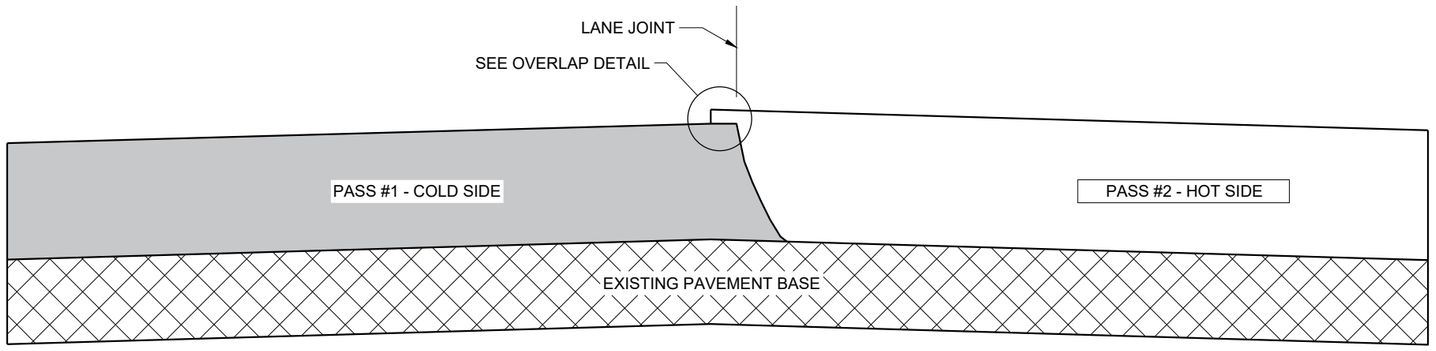
APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

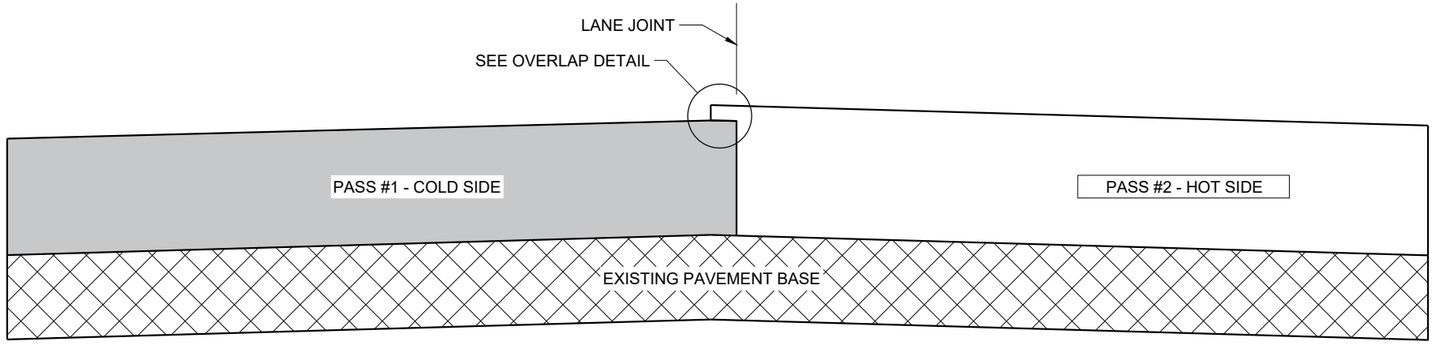
6
SDD 13A11 - 03b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

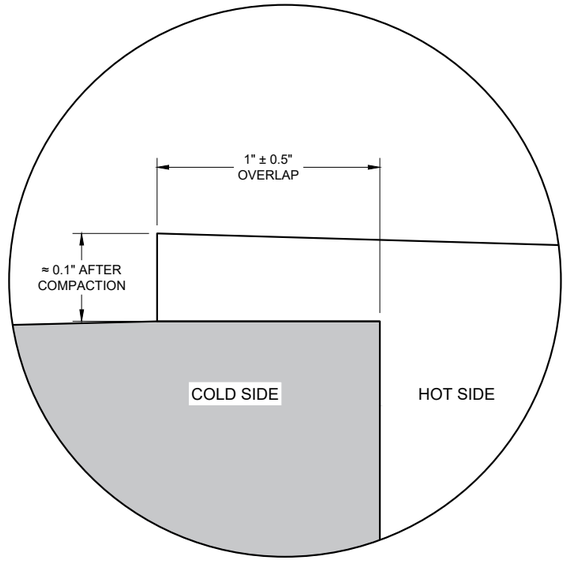
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

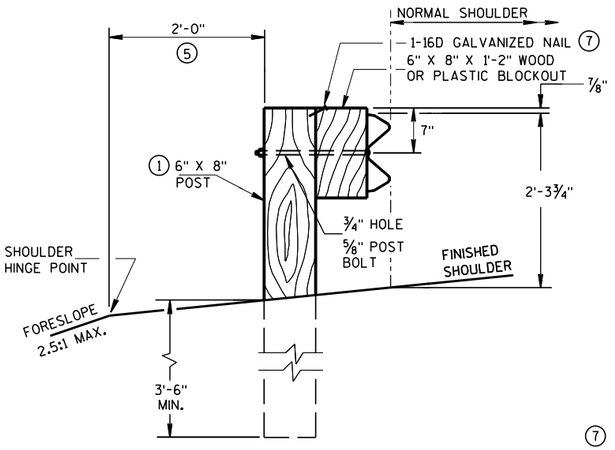
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(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.

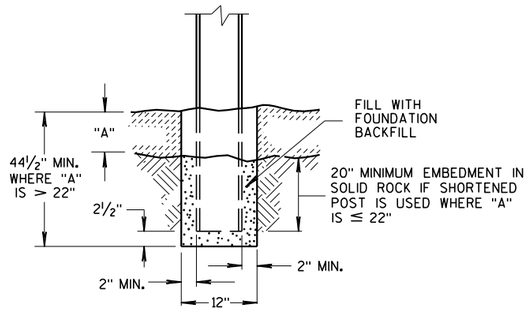
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

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

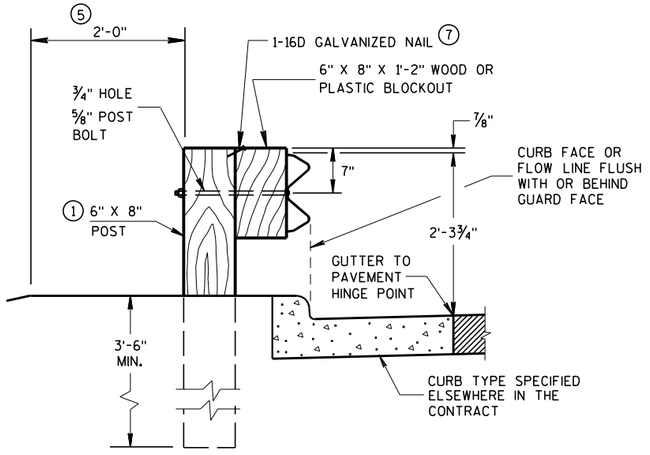
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



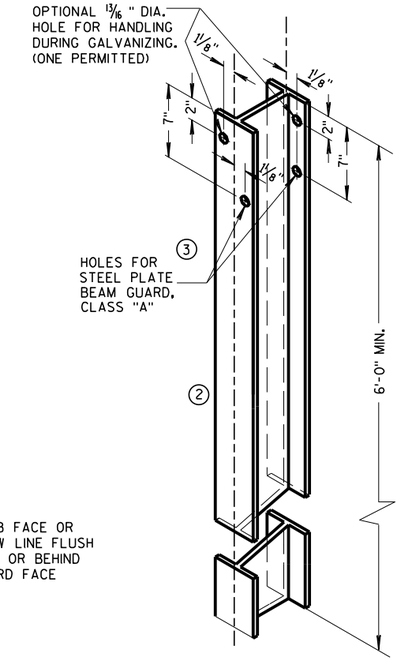
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



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

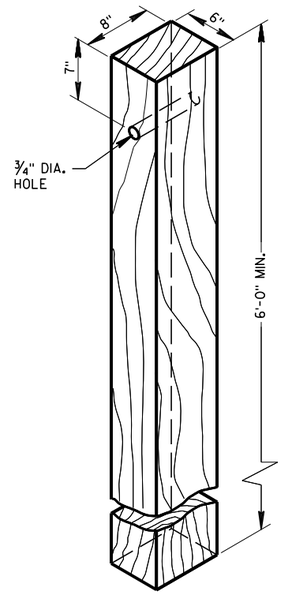


END VIEW
LOCATED ALONG A CURBED ROADWAY

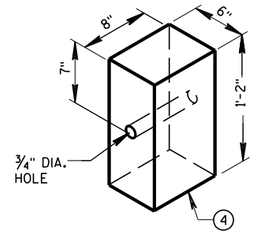


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

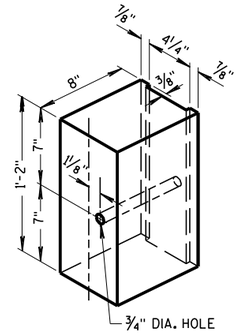
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



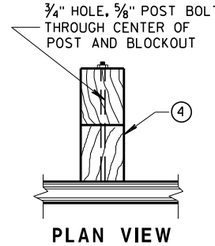
WOOD POST
(6"X8") NOMINAL



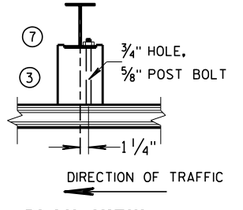
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



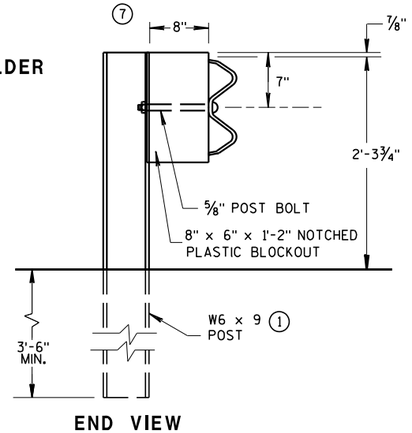
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



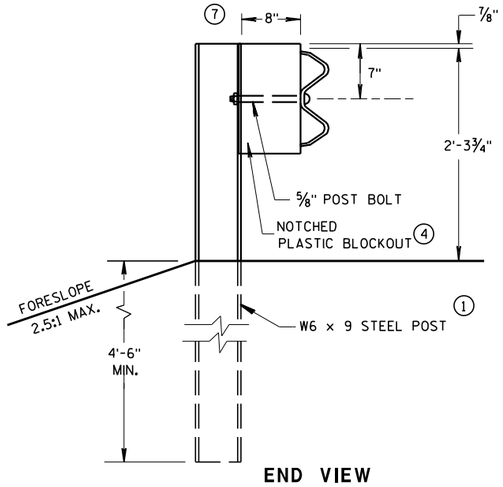
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



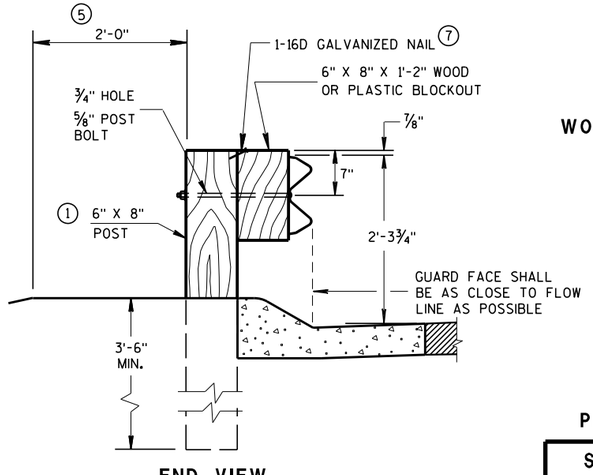
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



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



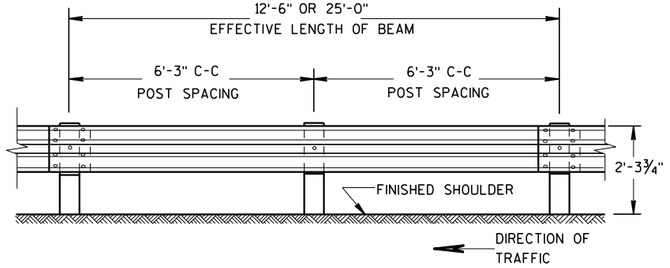
END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

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

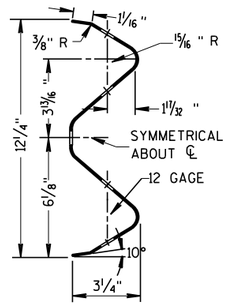
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

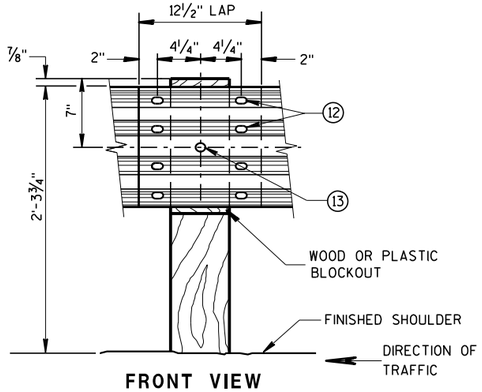


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

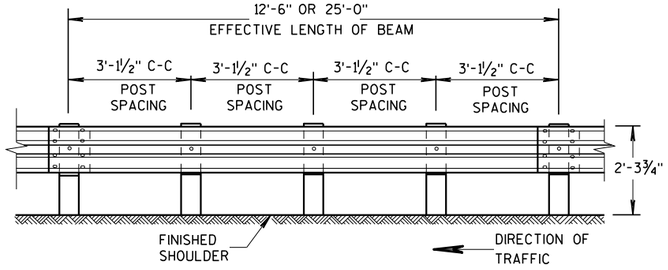
GENERAL NOTES

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.

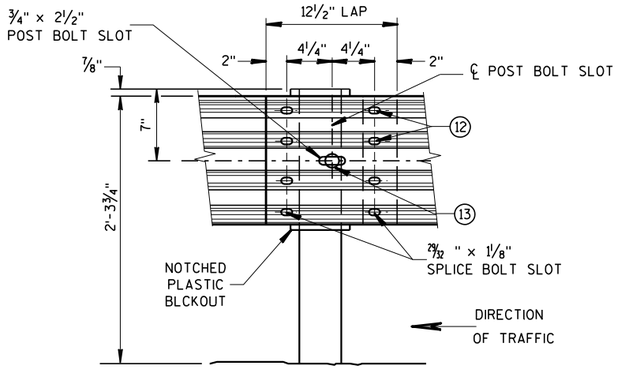
(12) 8 -⅝" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) ⅝" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH ⅝" DIA. F844 FLAT WASHER UNDER NUT.



FRONT VIEW

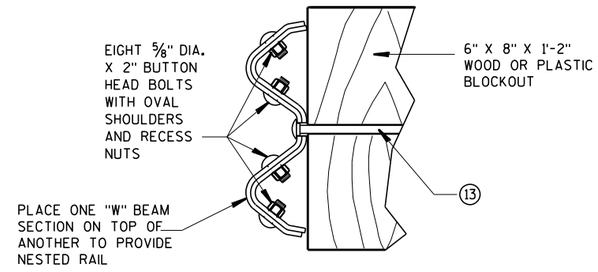
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

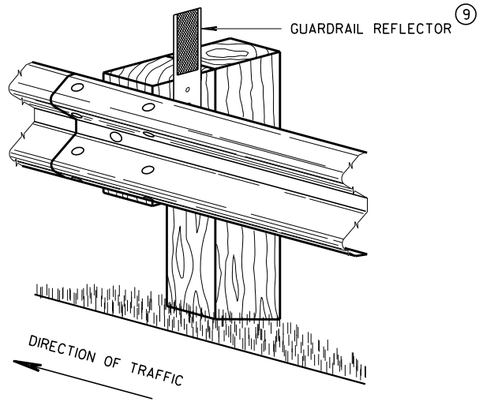
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD



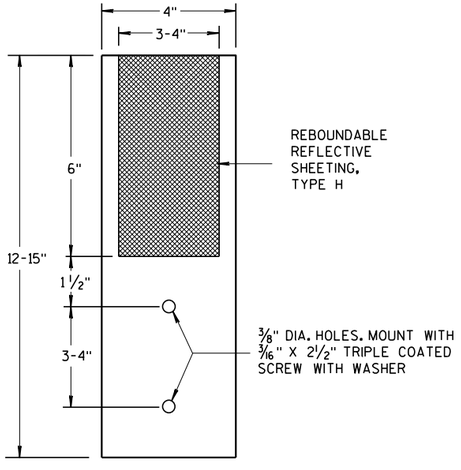
NESTED W BEAM (NW)

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 107
DEPARTMENT OF TRANSPORTATION

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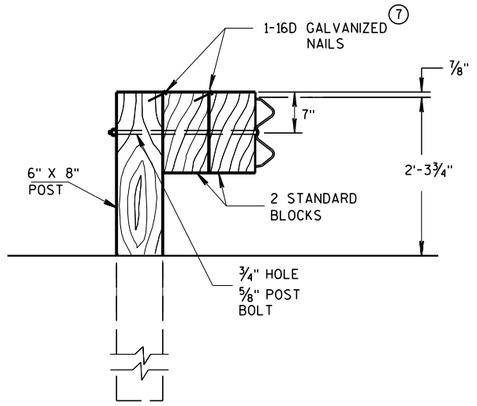
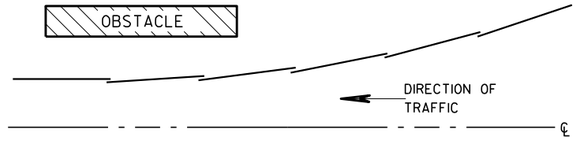
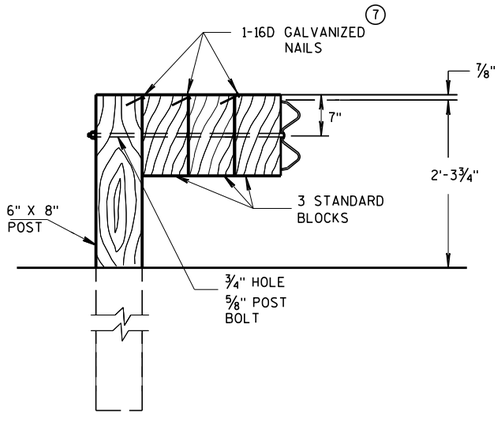


DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

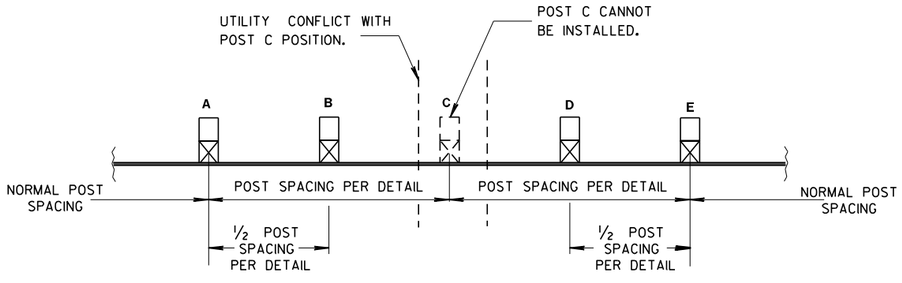


PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS

TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA 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.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

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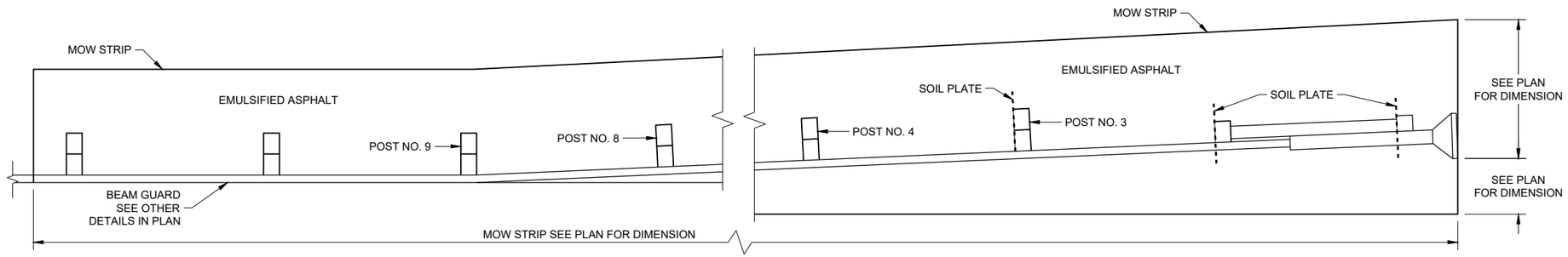
S.D.D. 14 B 15-11c



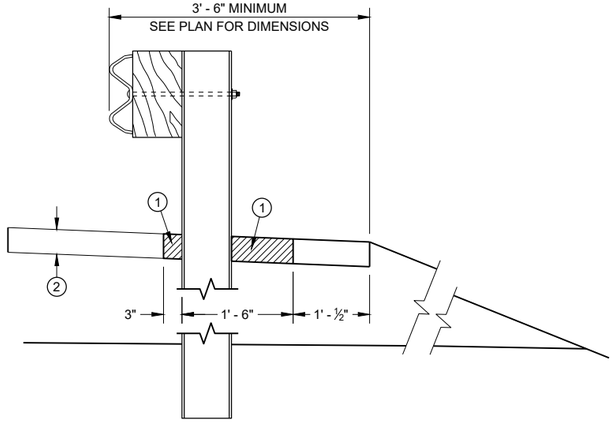
PLAN VIEW

MOW STRIP LAYOUT FOR ENERGY ABSORBING TERMINAL

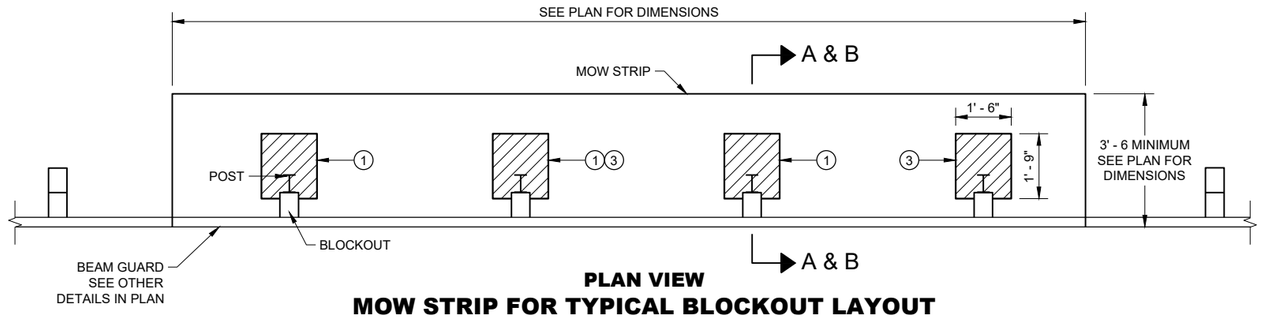
GENERAL NOTES

ONLY USE STEEL POSTS IN CONCRETE AND ASPHALT MOW STRIPS.

1. CONTROLLED LOW-STRENGTH BACKFILL OR EMULSIFIED ASPHALT.
2. DEPTH OF MOW STRIP:
   ASPHALT - 4"
   CONCRETE - 4"
   EMULSIFIED ASPHALT - 1" OR LESS
3. FOR EMULSIFIED ASPHALT, MOW STRIP STRIP LEAVE OUTS NOT REQUIRED. (TYPICAL FOR ALL POSTS)

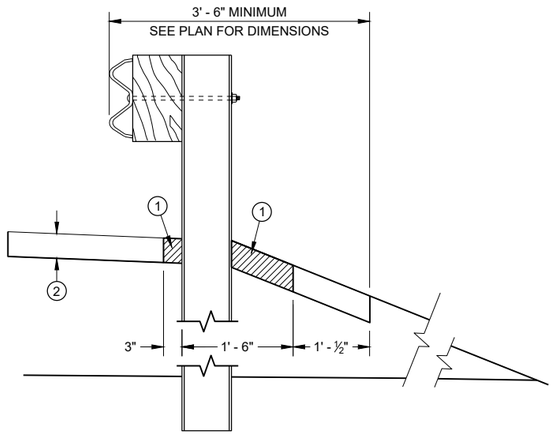


SECTION A - A

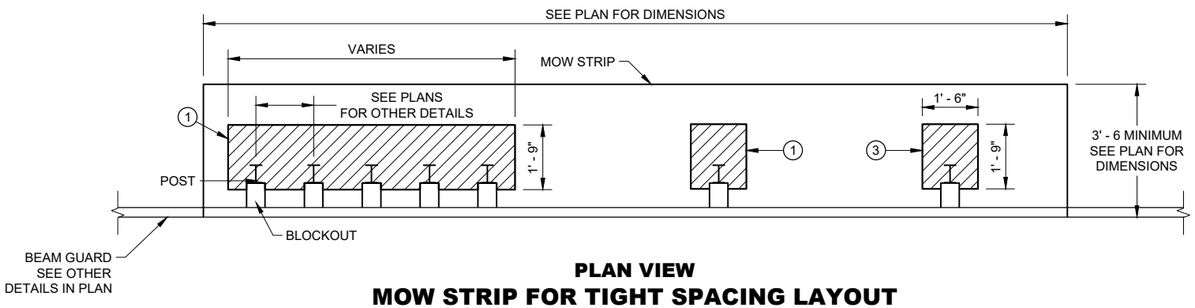


PLAN VIEW

MOW STRIP FOR TYPICAL BLOCKOUT LAYOUT

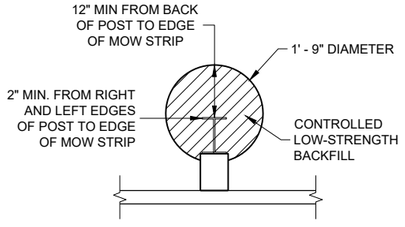


SECTION B - B

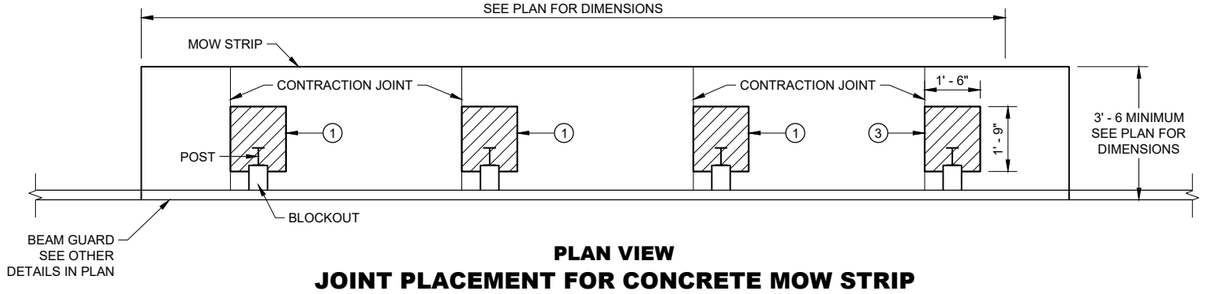


PLAN VIEW

MOW STRIP FOR TIGHT SPACING LAYOUT



ALTERNATIVE HMA MOW STRIP DESIGN



PLAN VIEW

JOINT PLACEMENT FOR CONCRETE MOW STRIP

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 14B28 - 04a

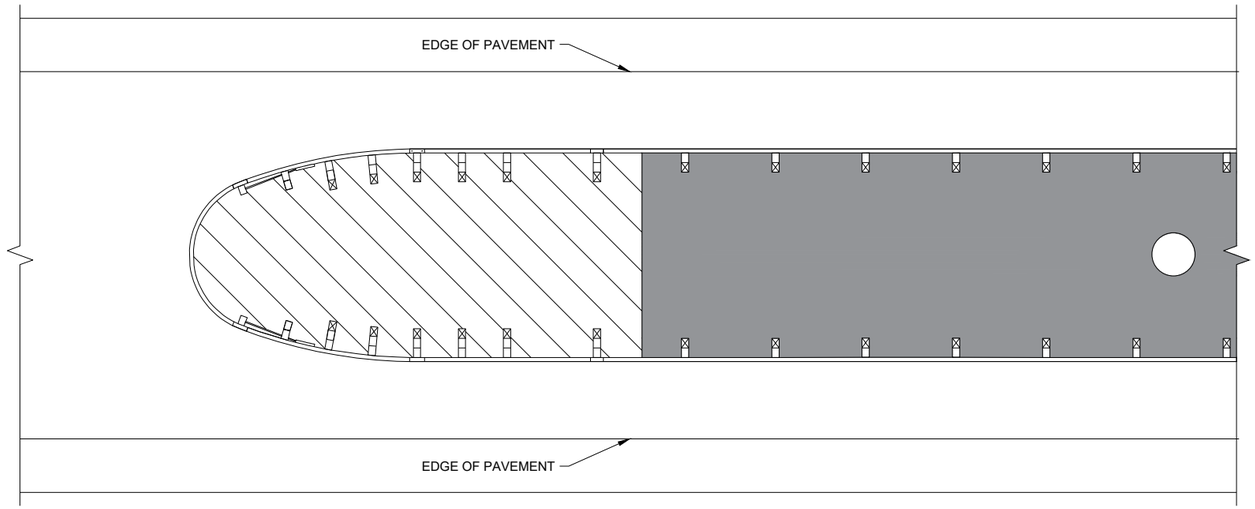
LEGEND

CONCRETE, ASPHALT, OR EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

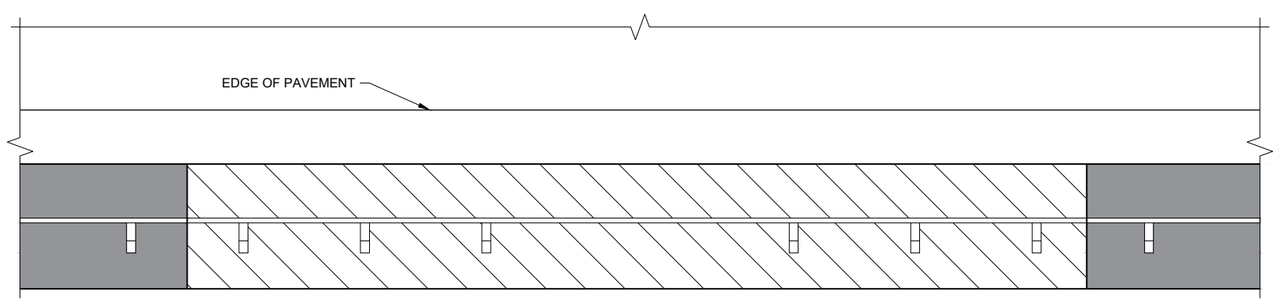
EMULSIFIED ASPHALT MOW STRIP (SEE OTHER DETAILS)

GENERAL NOTES

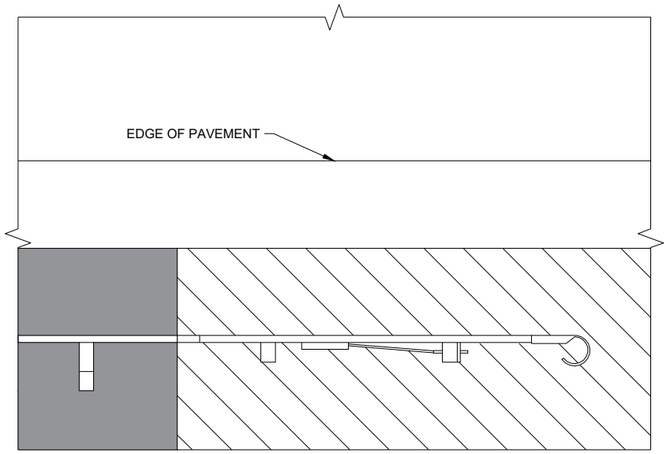
EXISTING THRIE BEAM BULLNOSES MAY HAVE WOOD POSTS. NEW THRIE BEAM BULLNOSE WILL HAVE STEEL POSTS.



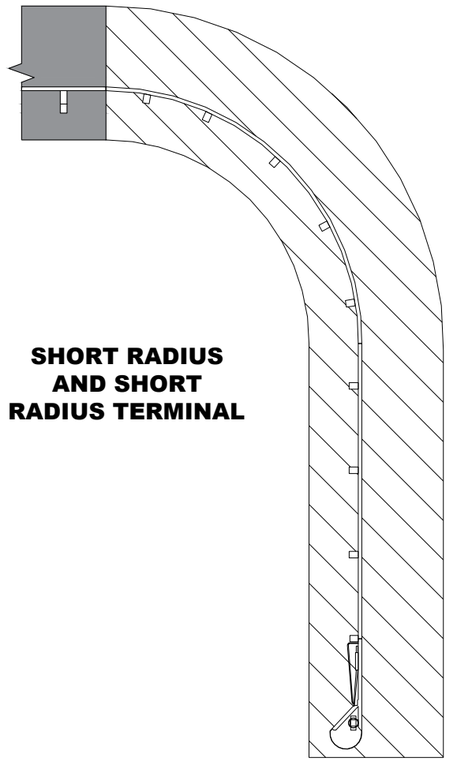
THRIE BEAM BULLNOSE



LONG - SPAN



TYPE 2 TERMINAL



SHORT RADIUS AND SHORT RADIUS TERMINAL

GUARDRAIL MOW STRIP

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2020
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

6

SDD 14B28 - 04b

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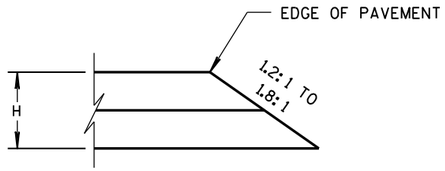
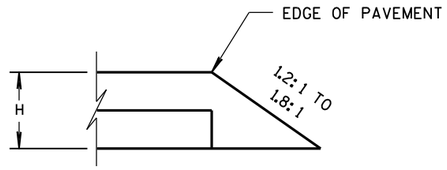


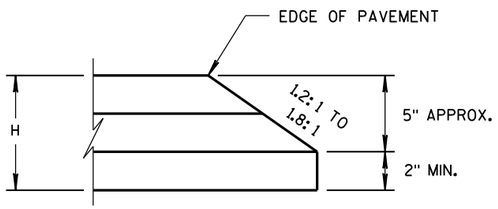
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



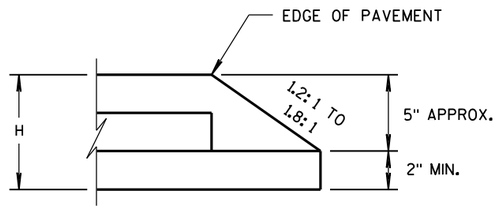
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

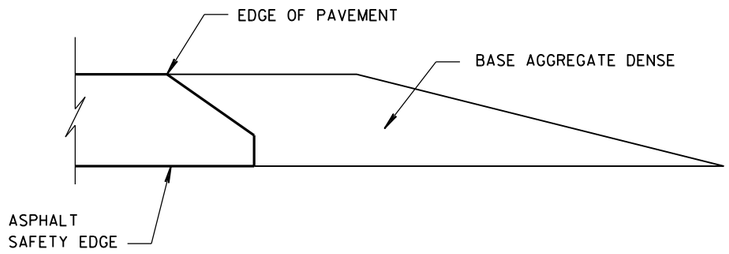
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

6

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

(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.

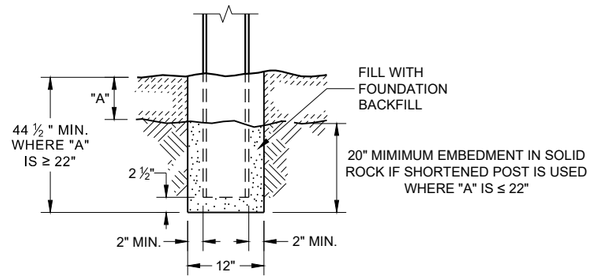
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

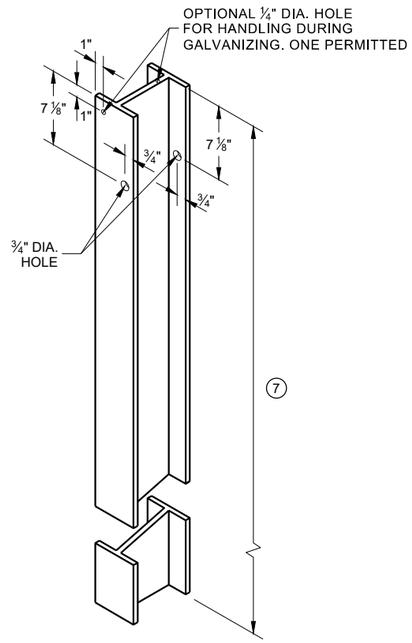
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

(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.

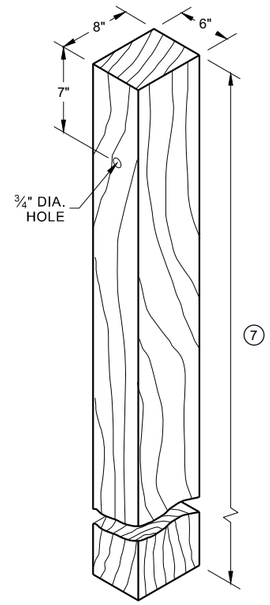
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



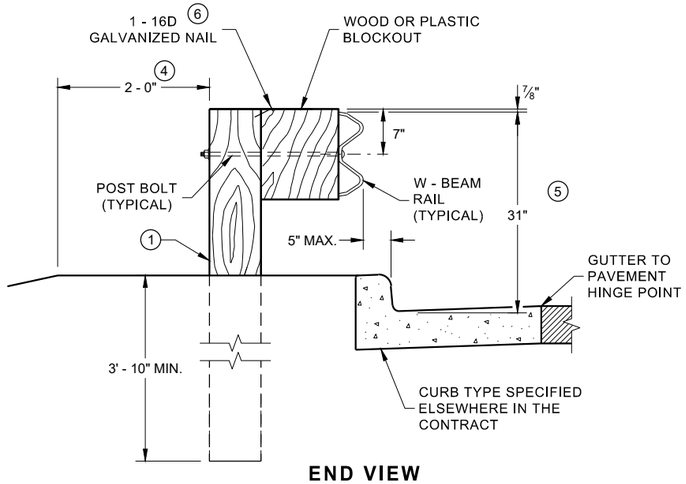
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



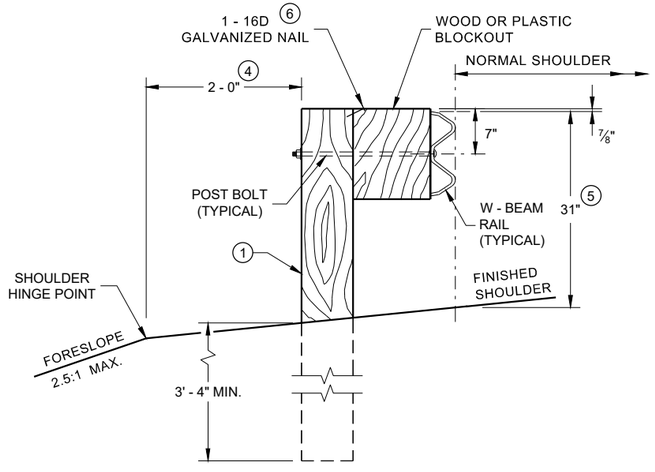
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



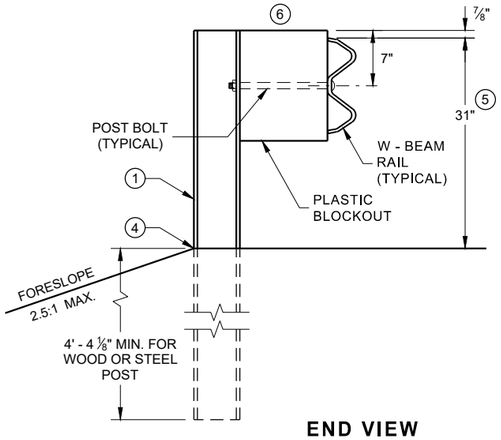
WOOD POST (6" X 8") NOMINAL (1)



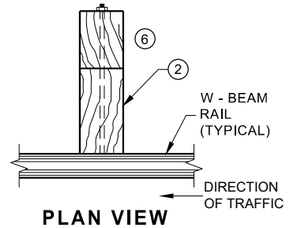
END VIEW
LOCATED ALONG A CURBED ROADWAY



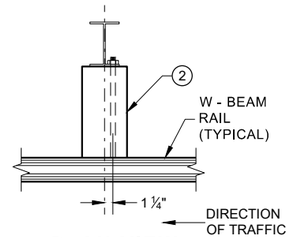
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



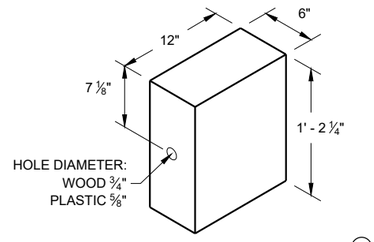
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



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

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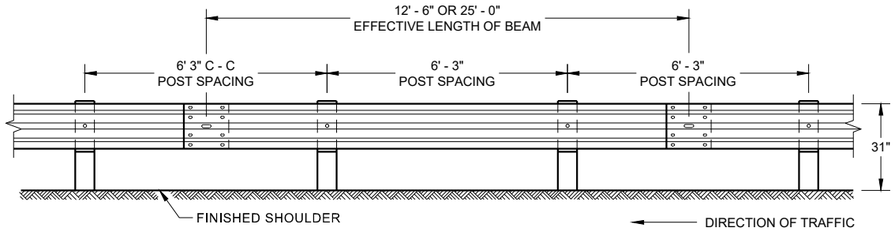
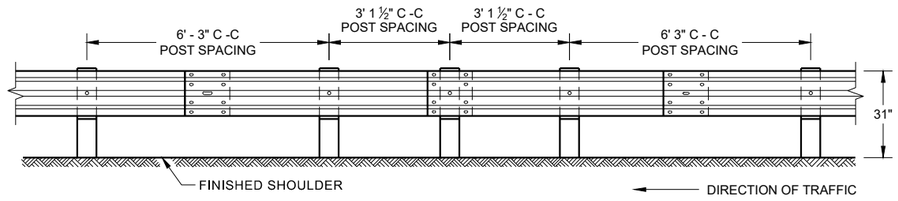
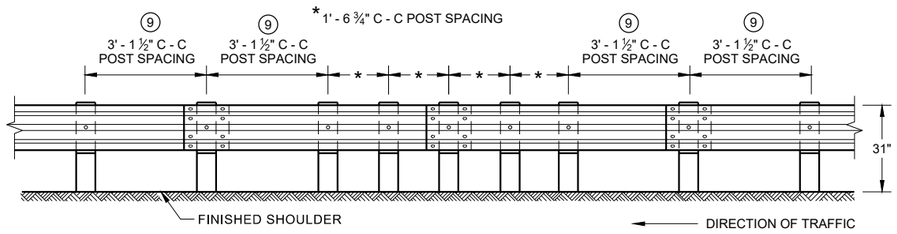


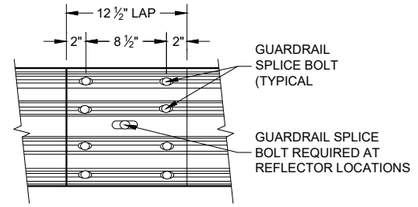
FRONT VIEW
POST SPACING STANDARD INSTALLATION



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

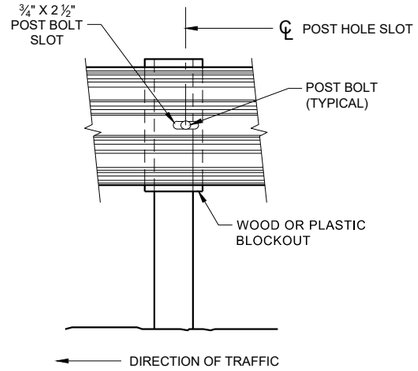
GENERAL NOTES

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

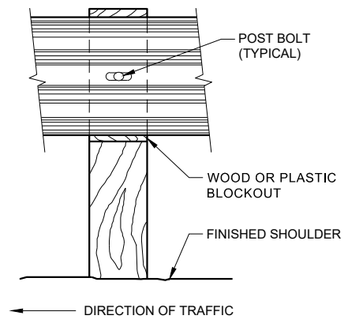
⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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.

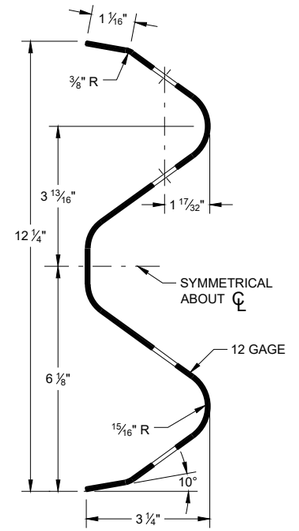
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



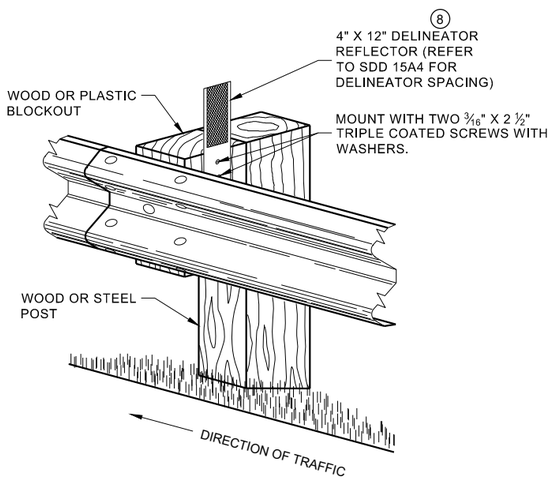
FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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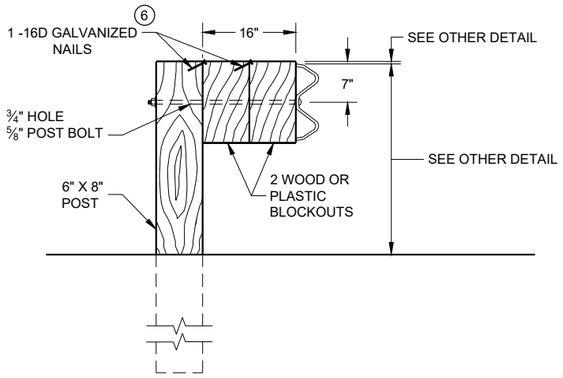
SDD 14B42 - 07b

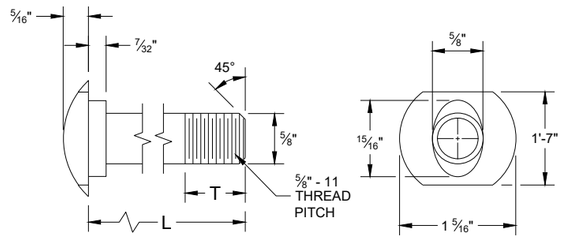


DETAIL FOR 16" BLOCKOUT DEPTH

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.

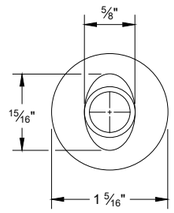
NOTE:

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.

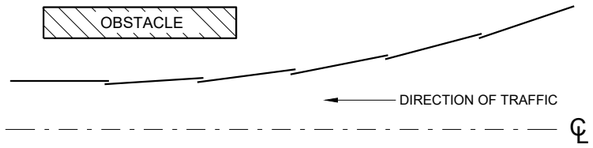


POST BOLT TABLE

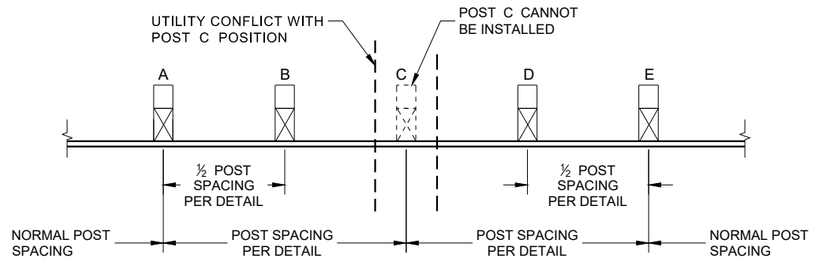
L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



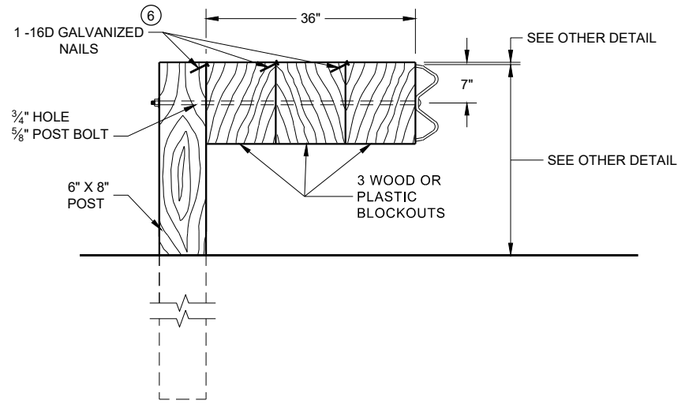
ALTERNATE BOLT HEAD



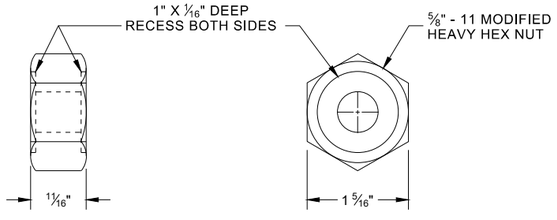
PLAN VIEW
BEAM LAPPING DETAIL



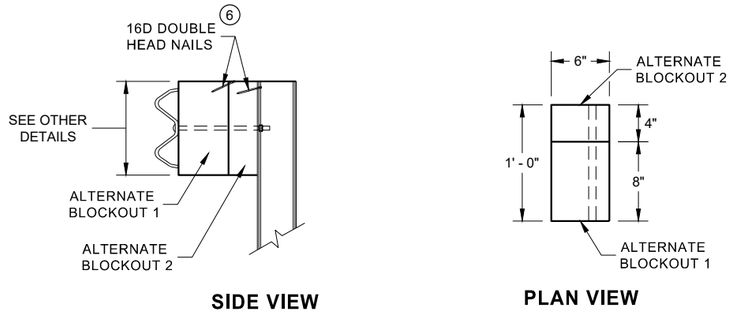
POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



DETAIL FOR 36" BLOCKOUT DEPTH



POST BOLT, SPLICE BOLT AND RECESS NUT



SIDE VIEW

PLAN VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

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.

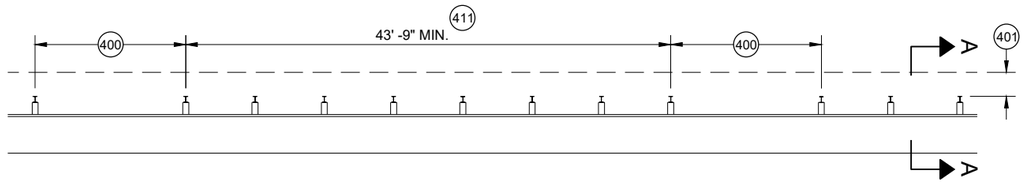
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.

(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.

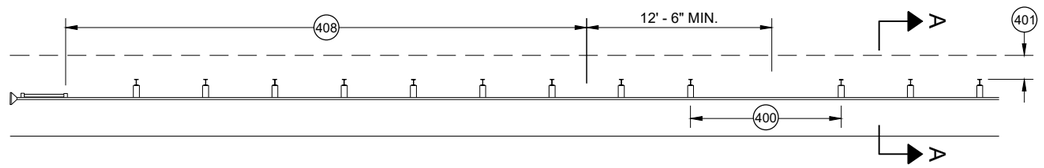
6

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

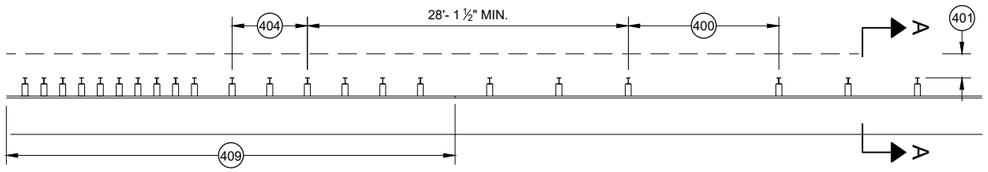
SDD 14B42 - 07c



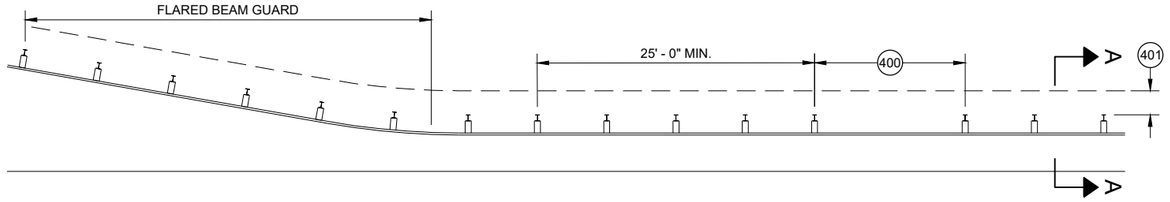
MISSING POST IN MGS GUARDRAIL



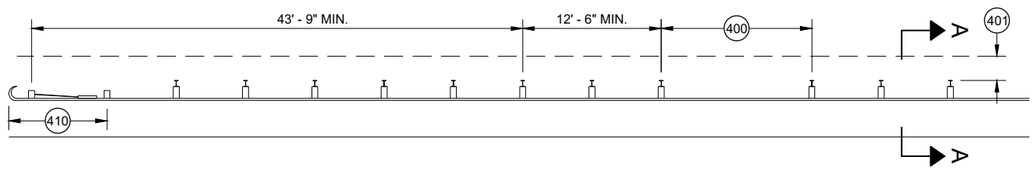
MISSING POST IN MGS GUARDRAIL NEAR EAT



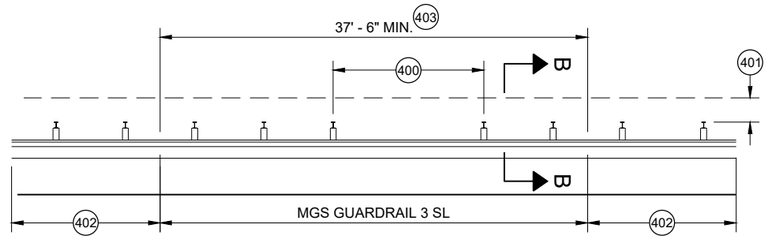
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

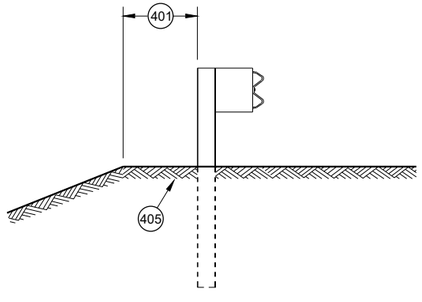


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

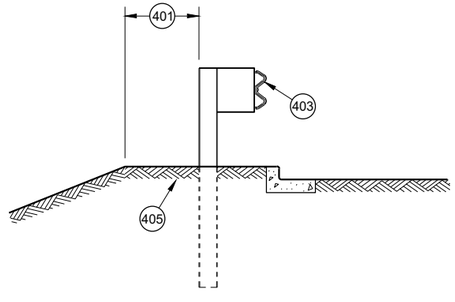


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

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SDD 14B42 - 07d

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.

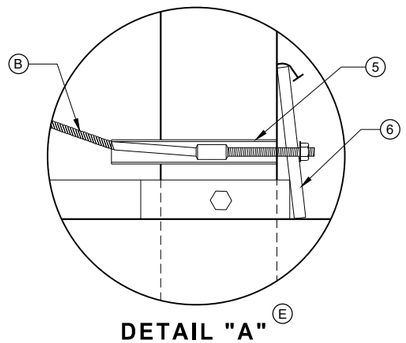
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

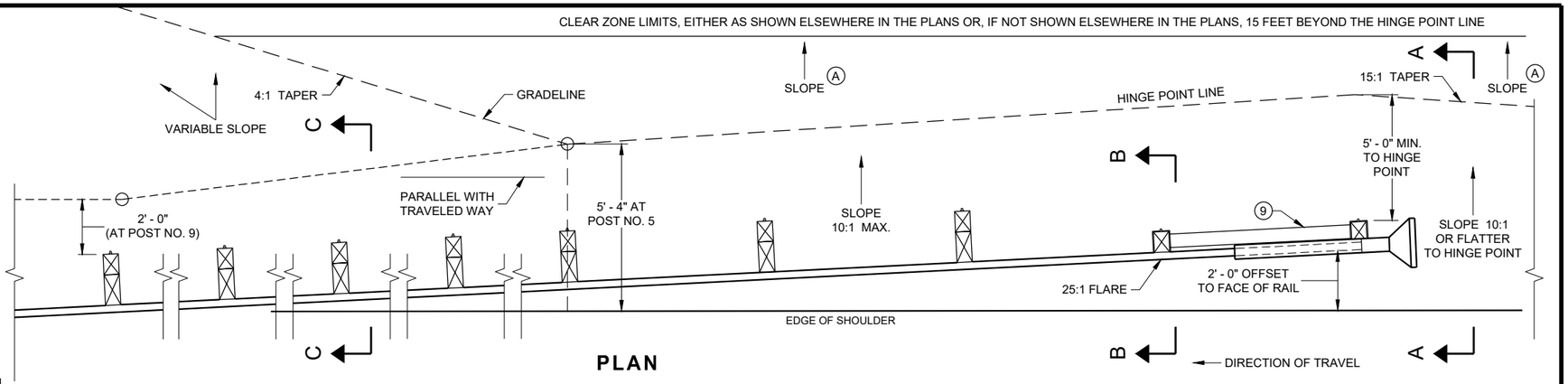
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

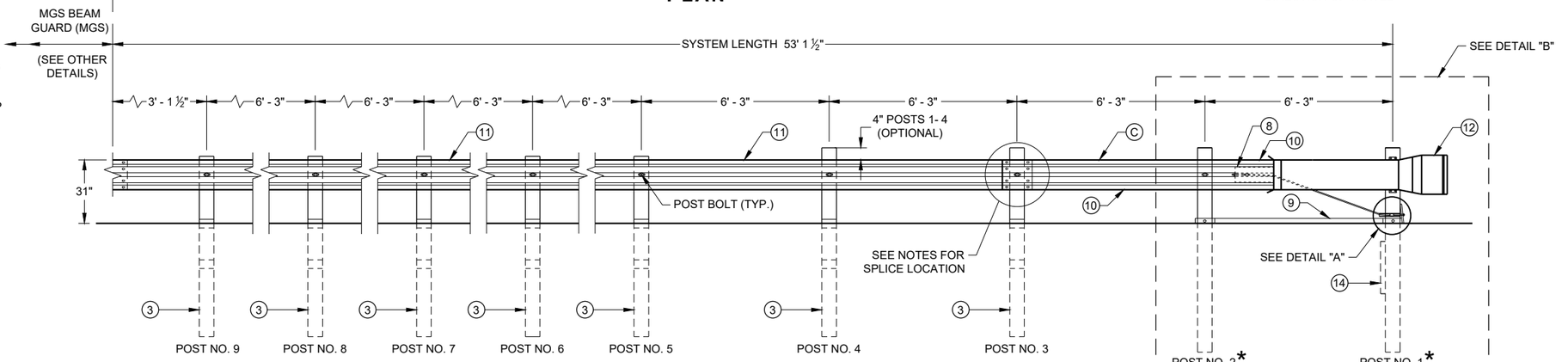
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



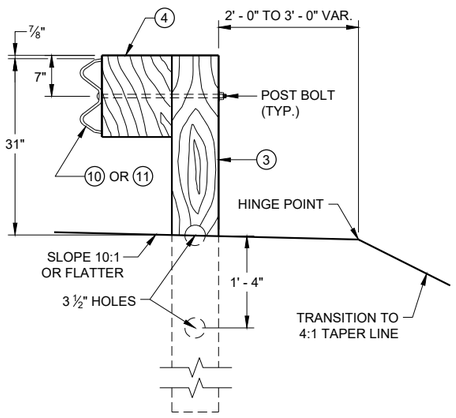
DETAIL "A" (E)



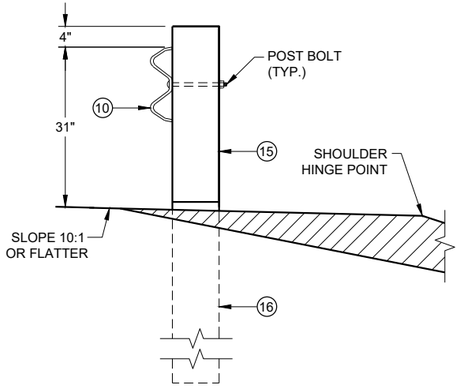
PLAN



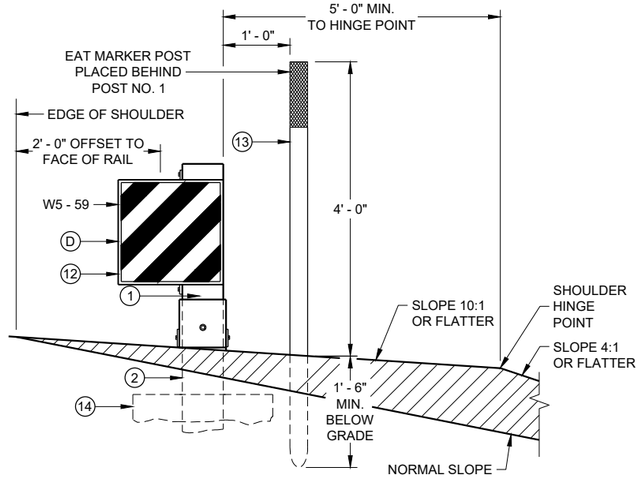
ELEVATION



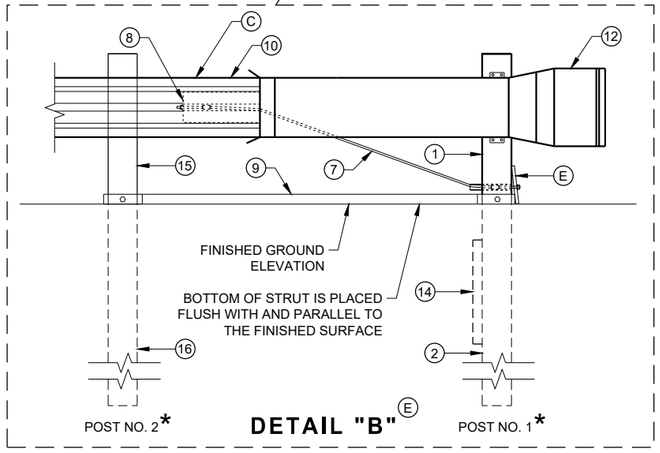
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



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

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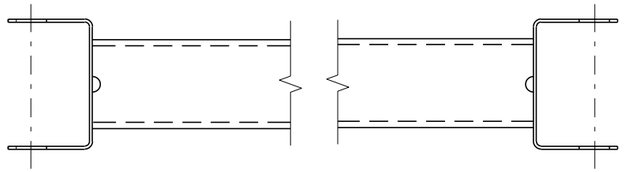
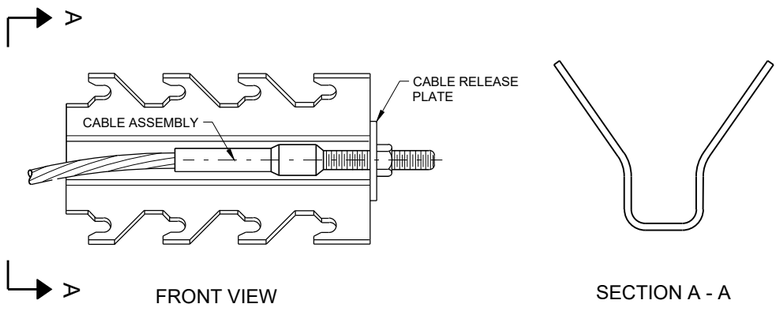


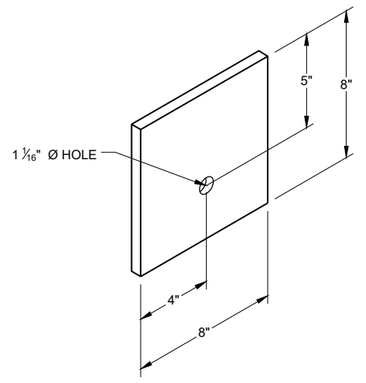
GENERIC GROUND STRUT ⑨ Ⓔ

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 ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

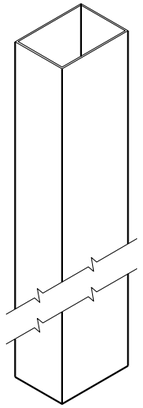
6

SDD 14B44 - 04b

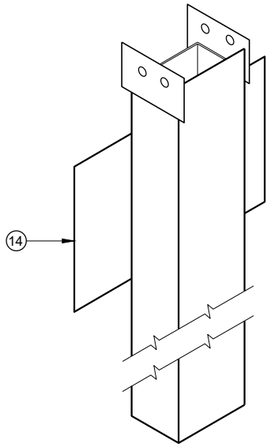
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

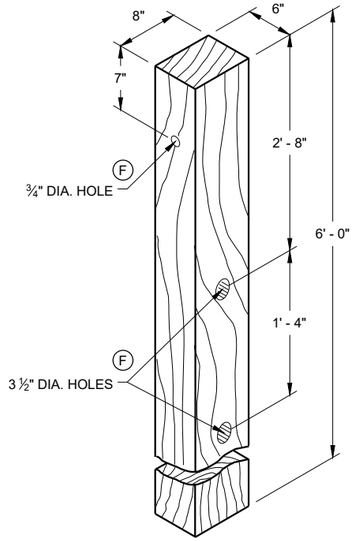
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



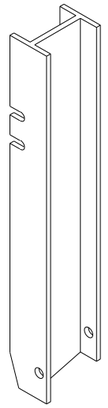
UPPER POST NO. 1 (1) (E)



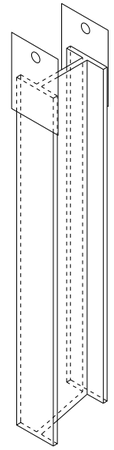
LOWER POST NO. 1 (2) (E)



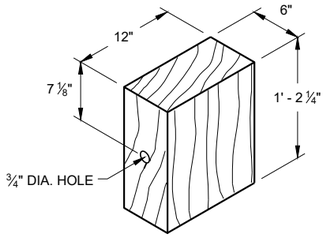
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



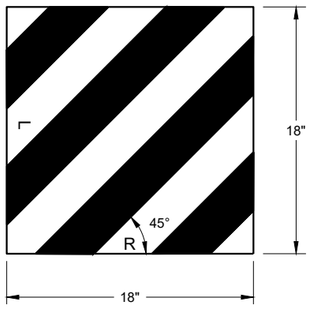
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

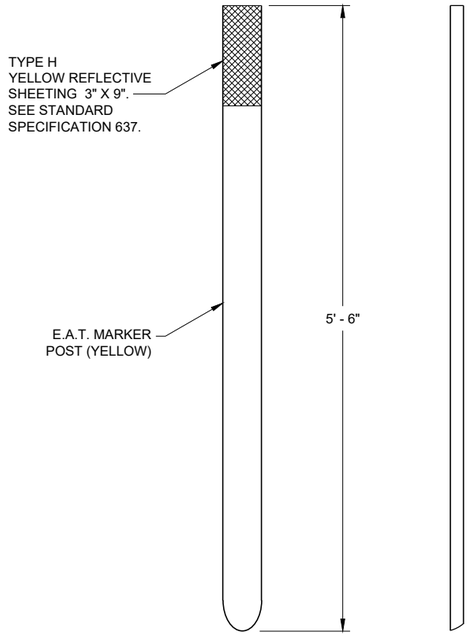


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



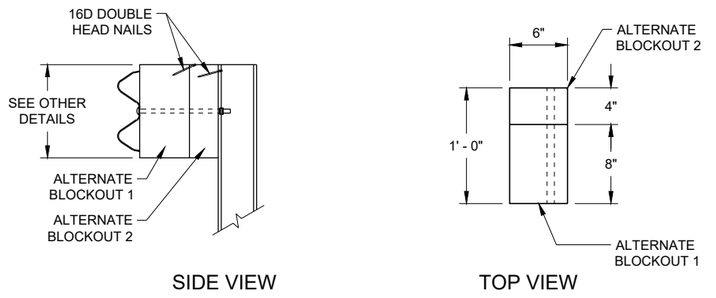
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



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)

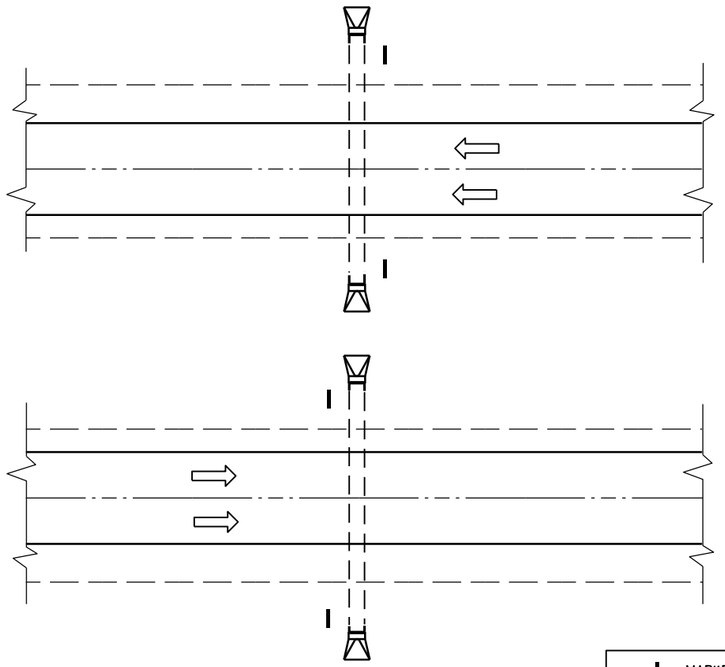
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

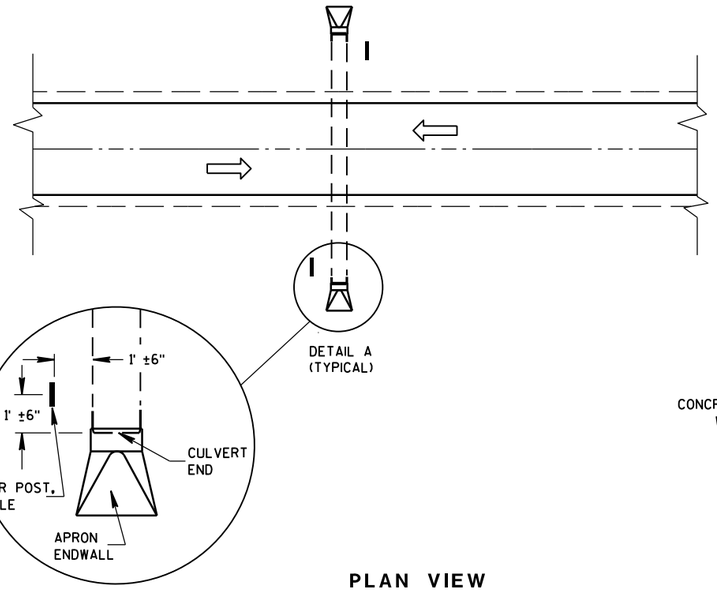
6

SDD 14B44 - 04c



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

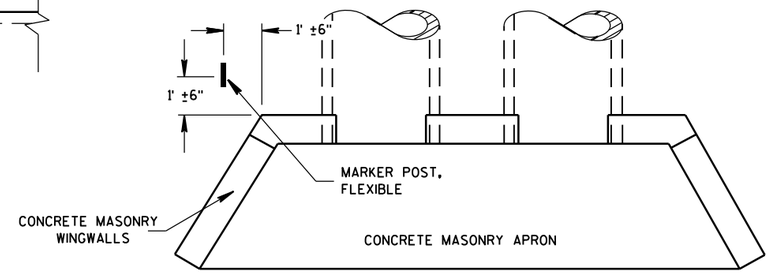
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

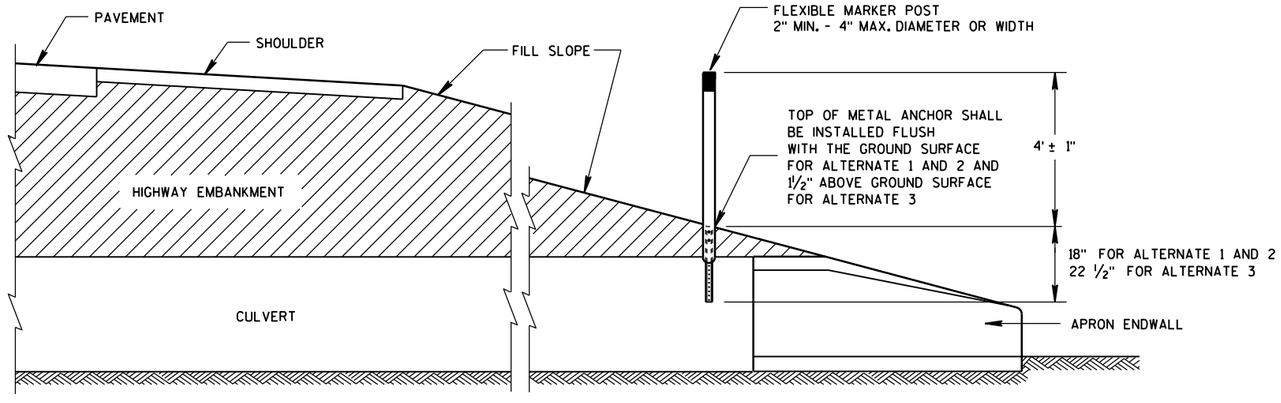
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

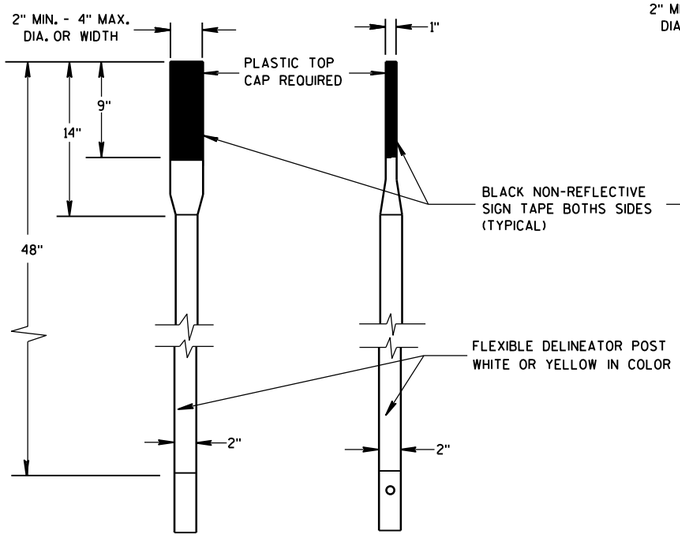
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

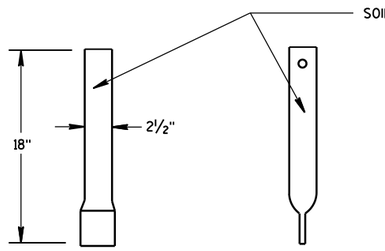
6

S.D.D. 15 A 3-2a

6

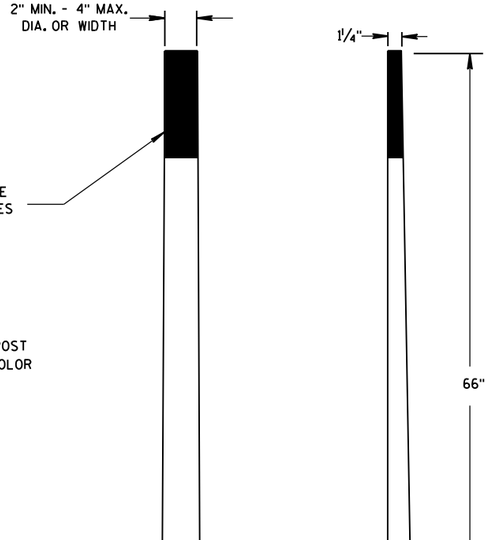
S.D.D. 15 A 3-2a





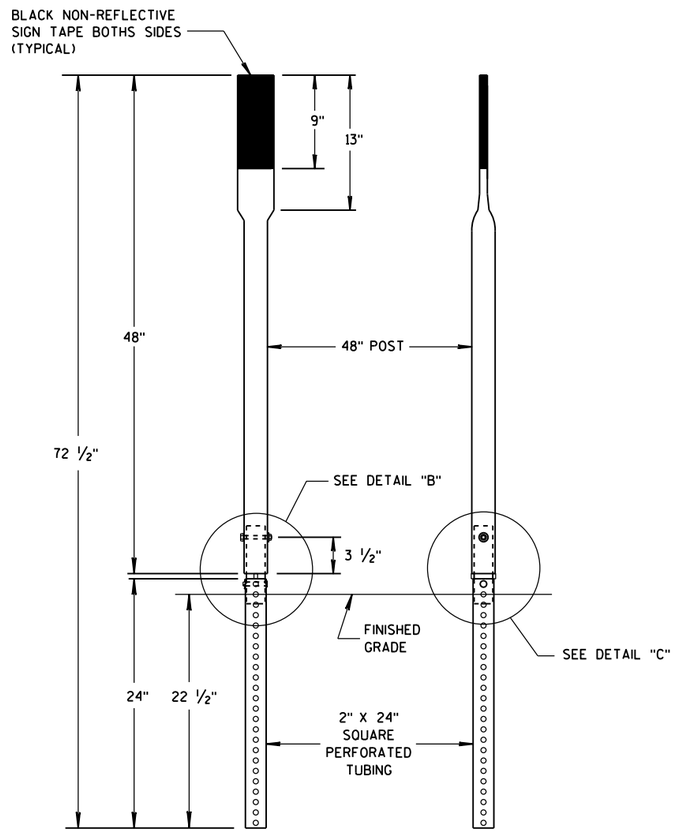
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

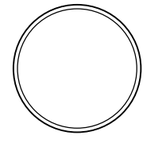
ALTERNATE 2



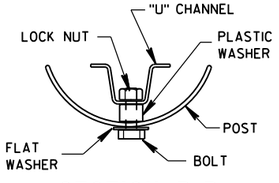
FRONT VIEW SIDE VIEW

ALTERNATE 3

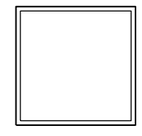
FLEXIBLE MARKER POSTS



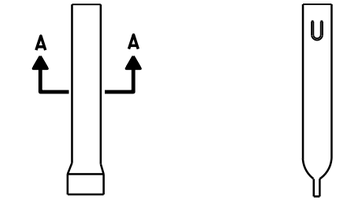
SECTION A-A



SECTION B-B

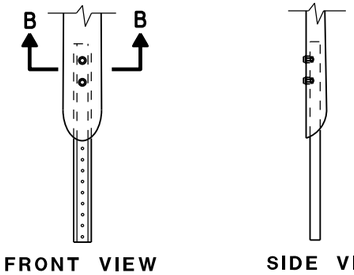


SECTION C-C



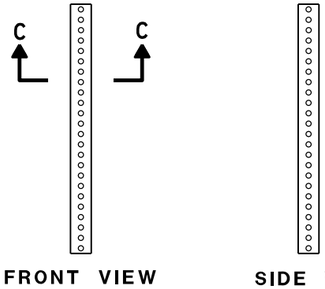
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

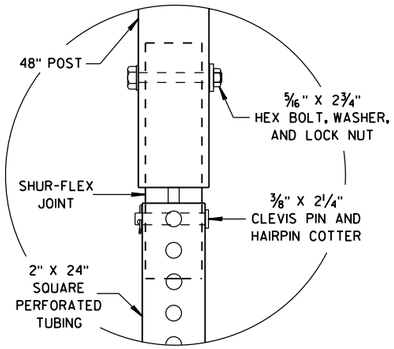
ALTERNATE 2



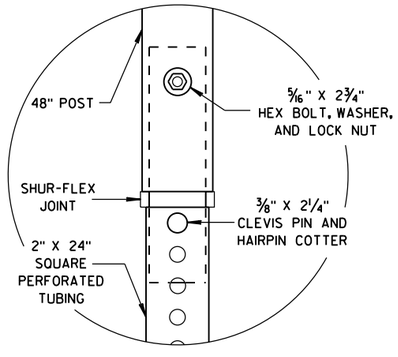
FRONT VIEW SIDE VIEW

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

6

S.D.D. 15 A 3-2b

6

S.D.D. 15 A 3-2b

GENERAL NOTES

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

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

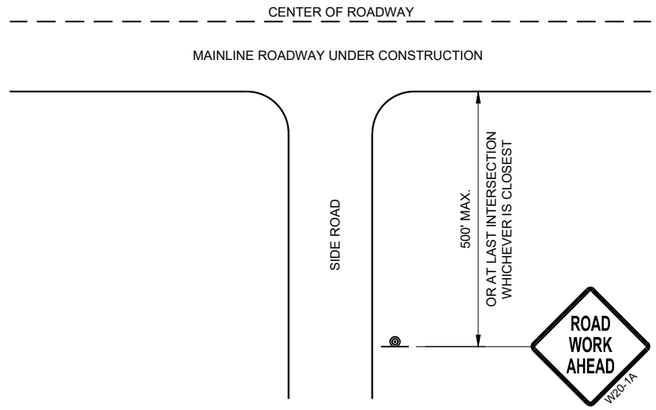
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



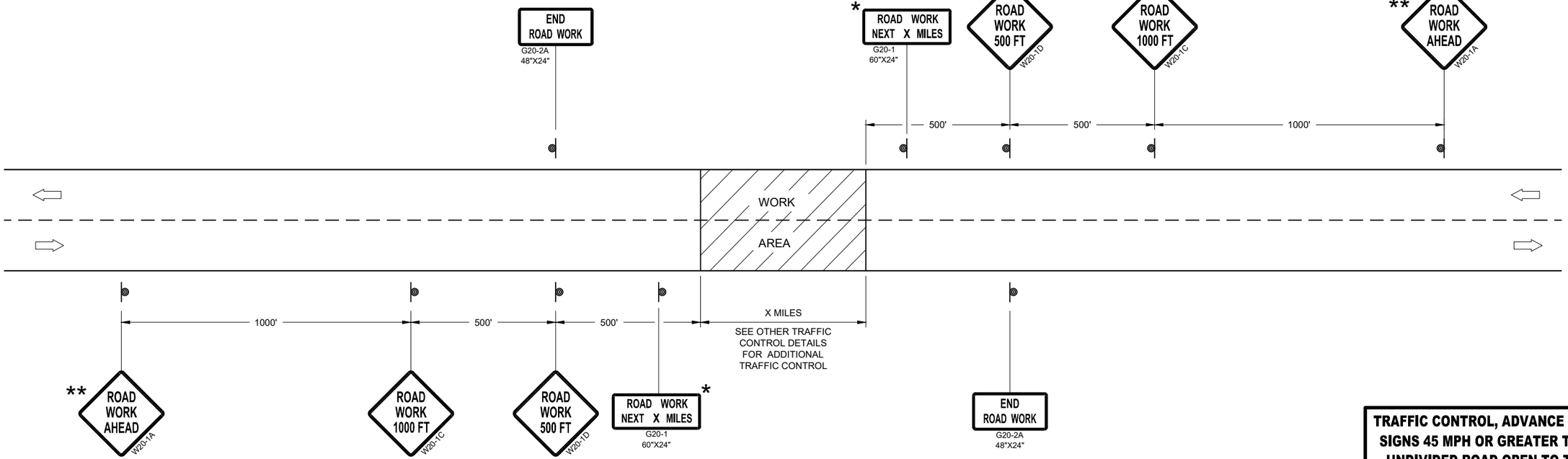
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

6

SDD 15C04 - 05

GENERAL NOTES

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

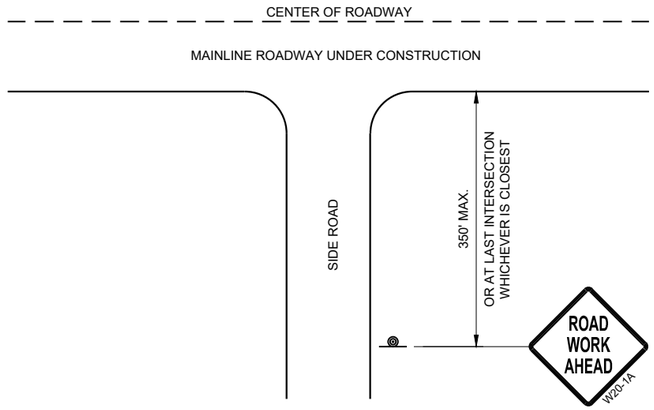
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

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

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

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



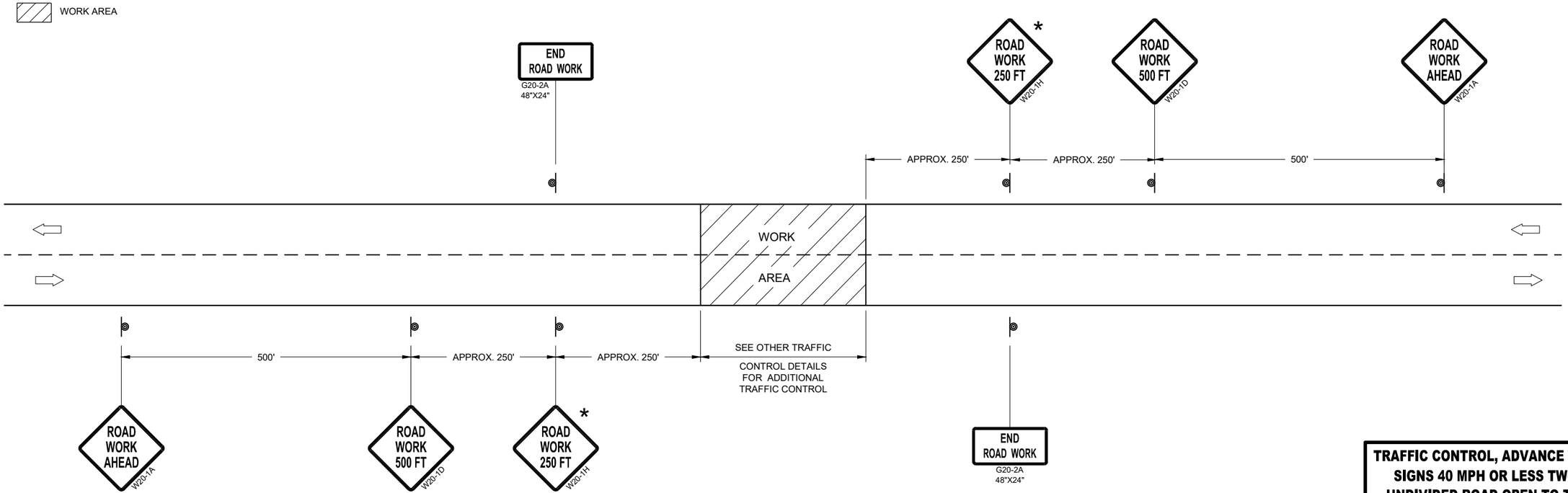
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 MPH OR LESS TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

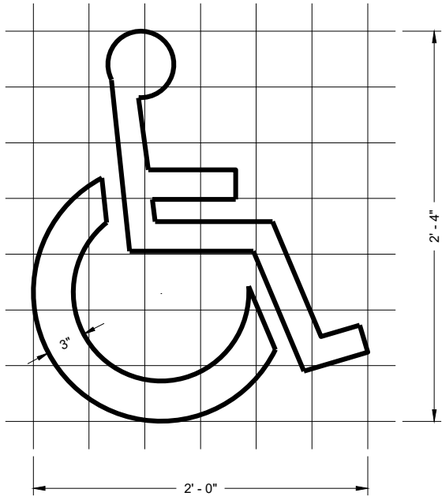
FHWA

6

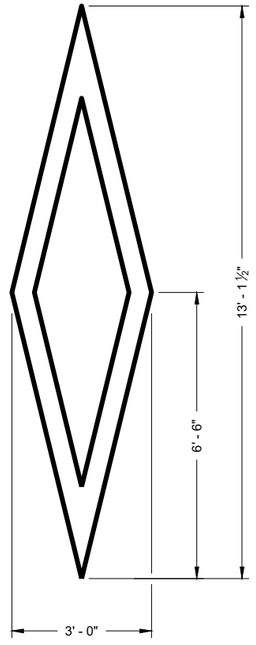
SDD 15C05 - 05

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.



HANDICAP SYMBOL



PREFERENTIAL LANE SYMBOL

6

6

SDD 15C07 - 15a

SDD 15C07 - 15a

PAVEMENT MARKING SYMBOLS

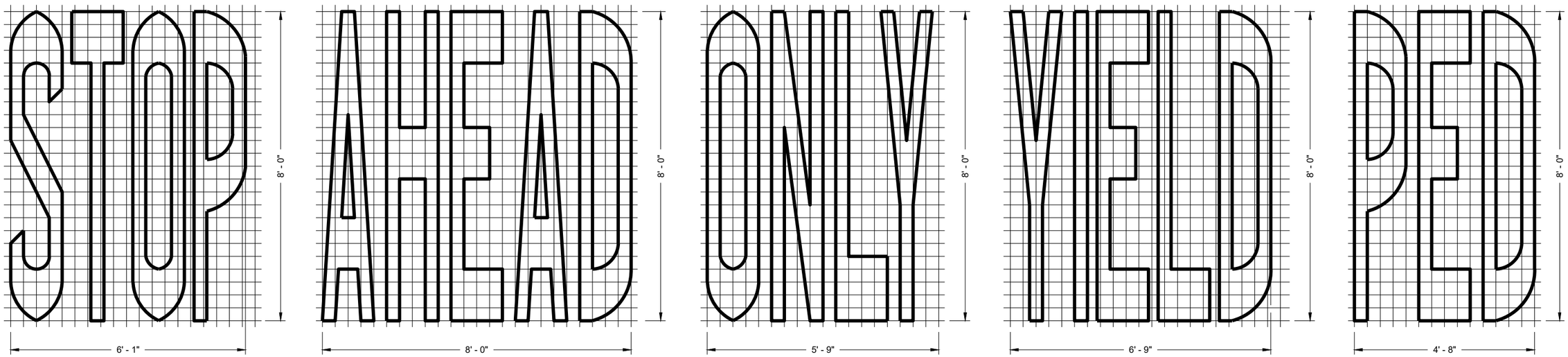
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

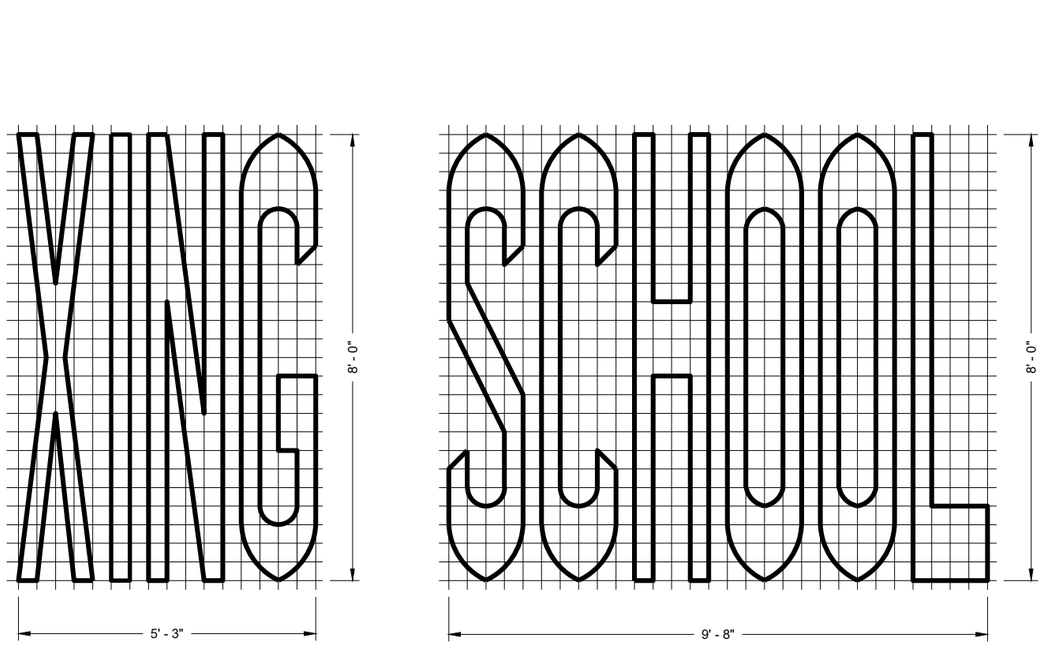
APPROVED

November 2019
DATE

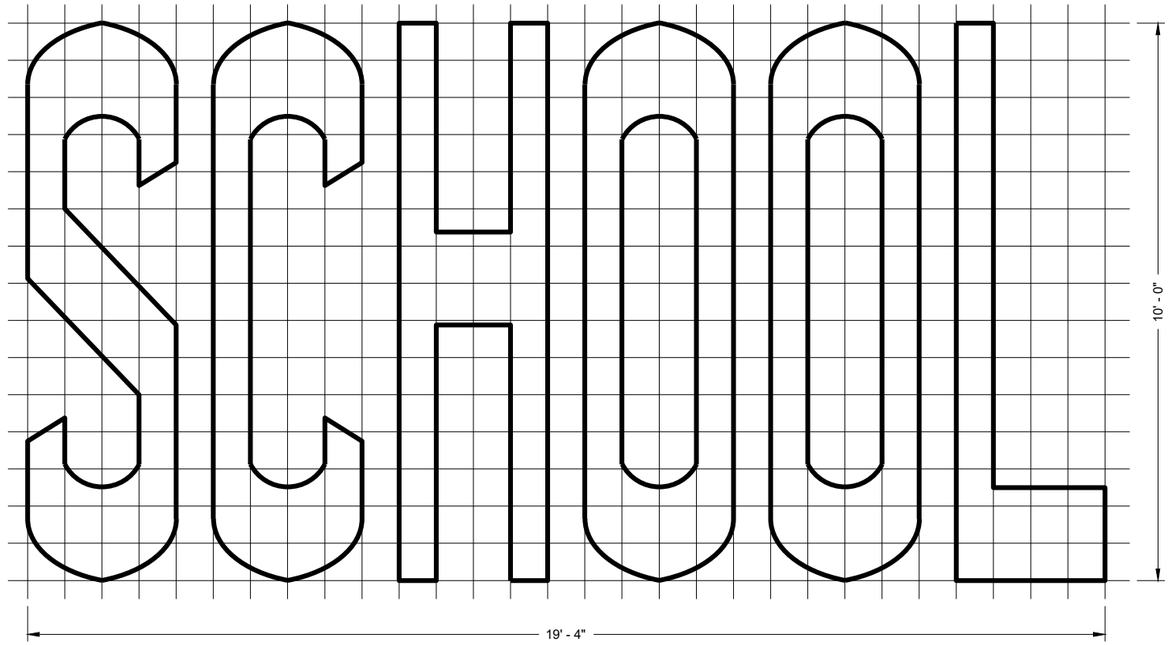
/S/ Matthew Rauch
STATE SIGNING AND MAR ENGINEER

FHWA





SINGLE LANE



TWO - LANE

GENERAL NOTES

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

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

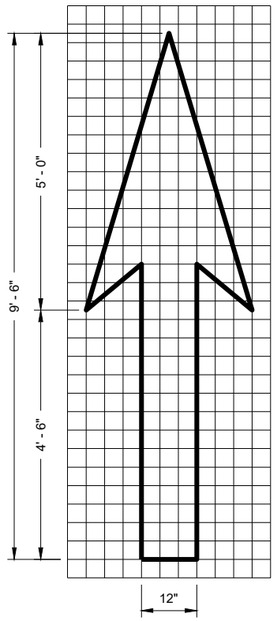
FHWA

6

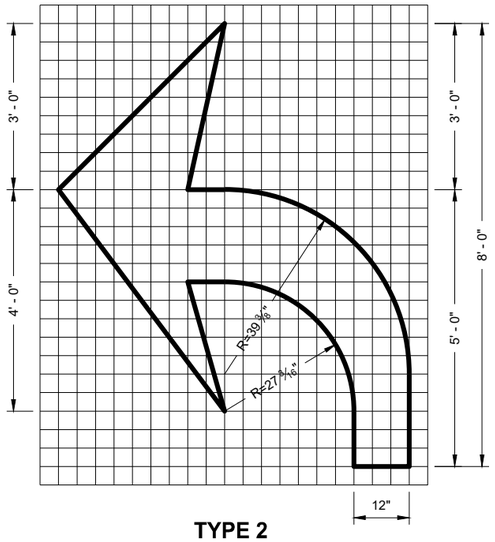
SDD 15C07 - 15b

6

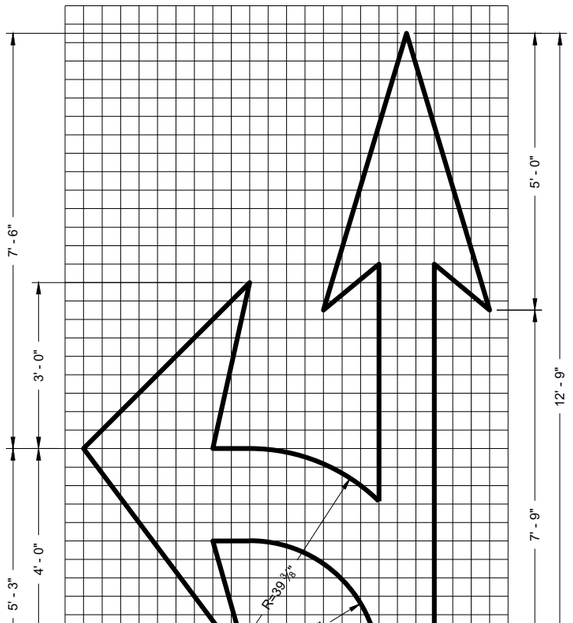
SDD 15C07 - 15b



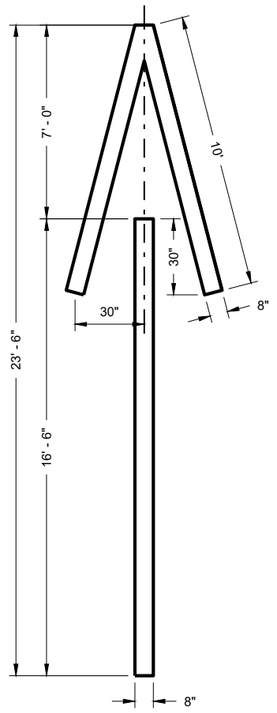
TYPE 1



TYPE 2



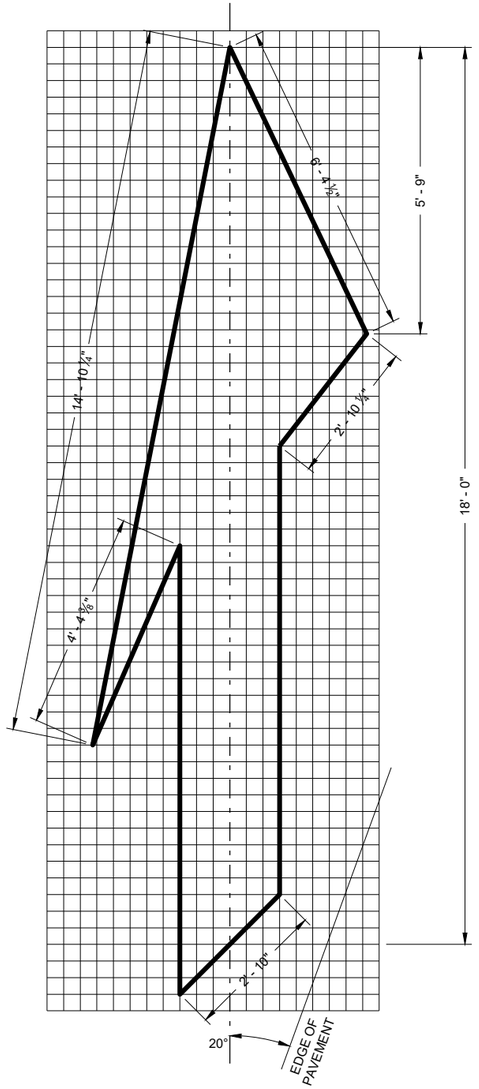
TYPE 3



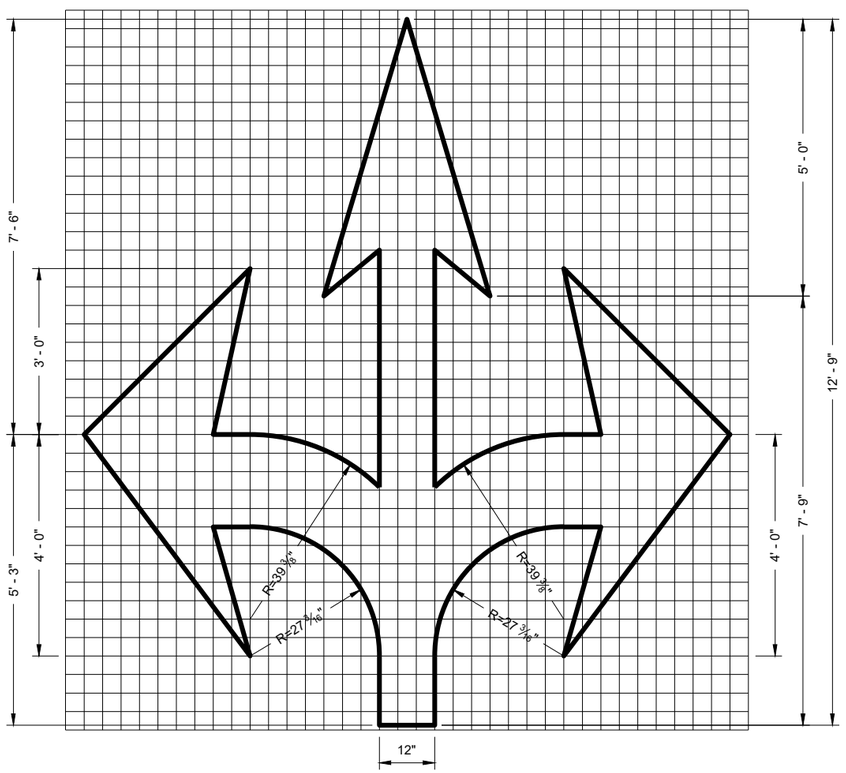
TYPE 4

GENERAL NOTES

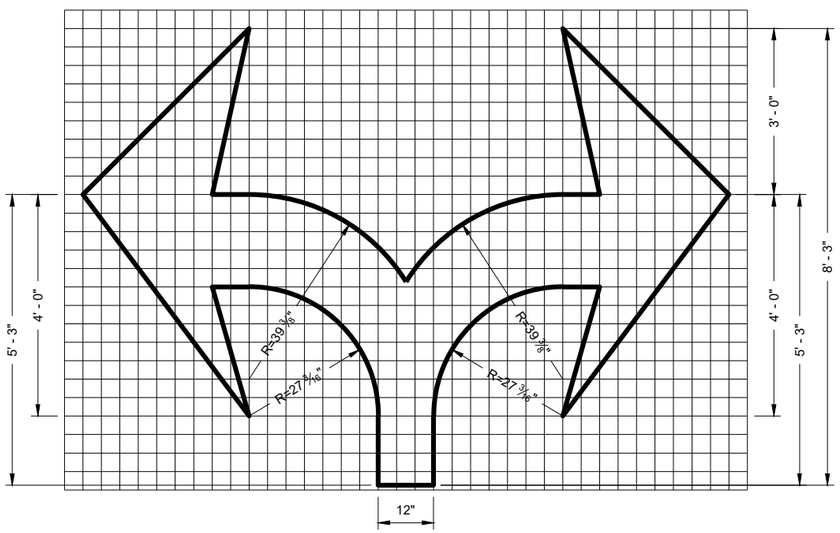
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



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 MAF ENGINEER

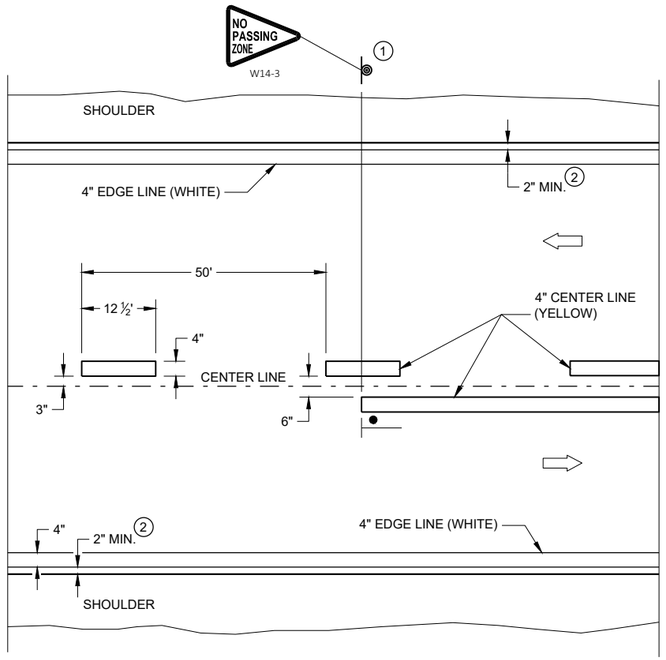
FHWA

6

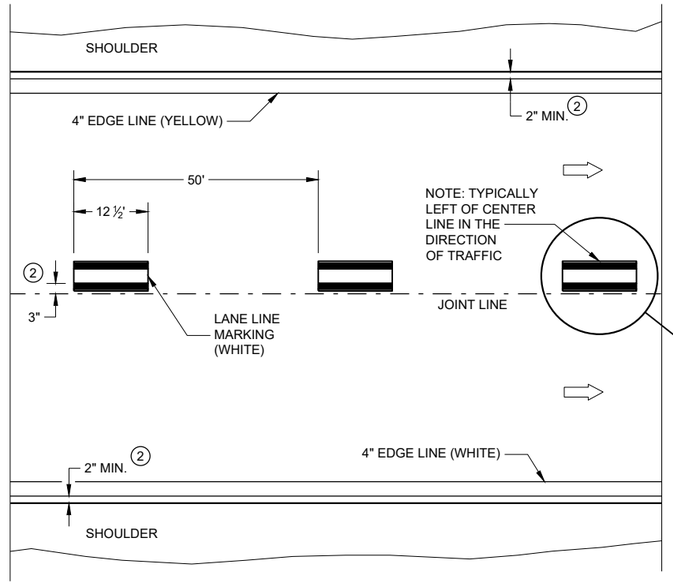
SDD 15C07 - 15c

6

SDD 15C07 - 15c

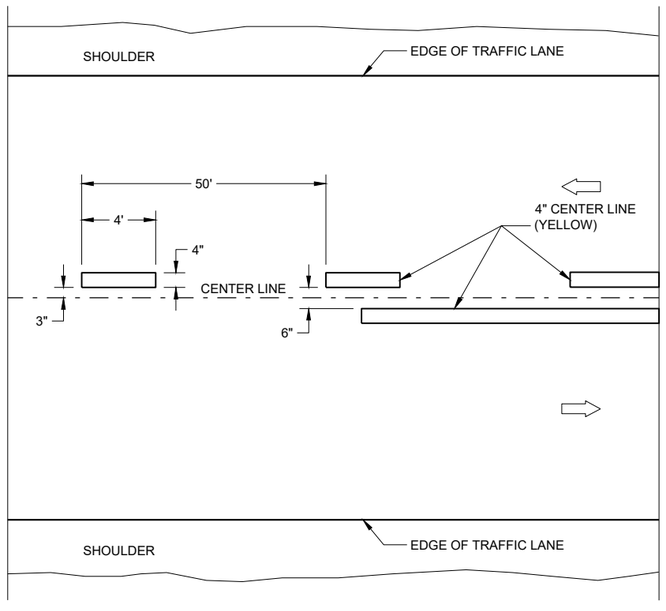


TWO WAY TRAFFIC

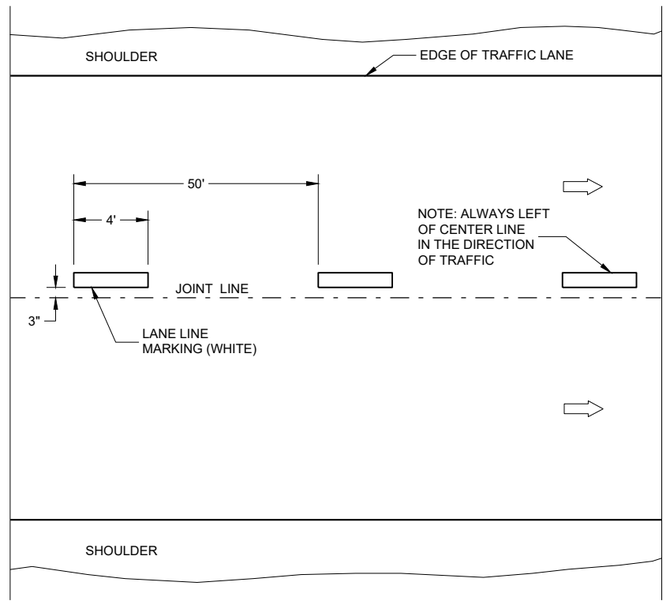


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

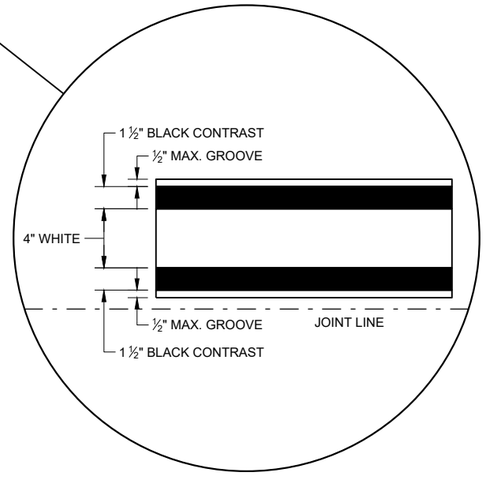
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

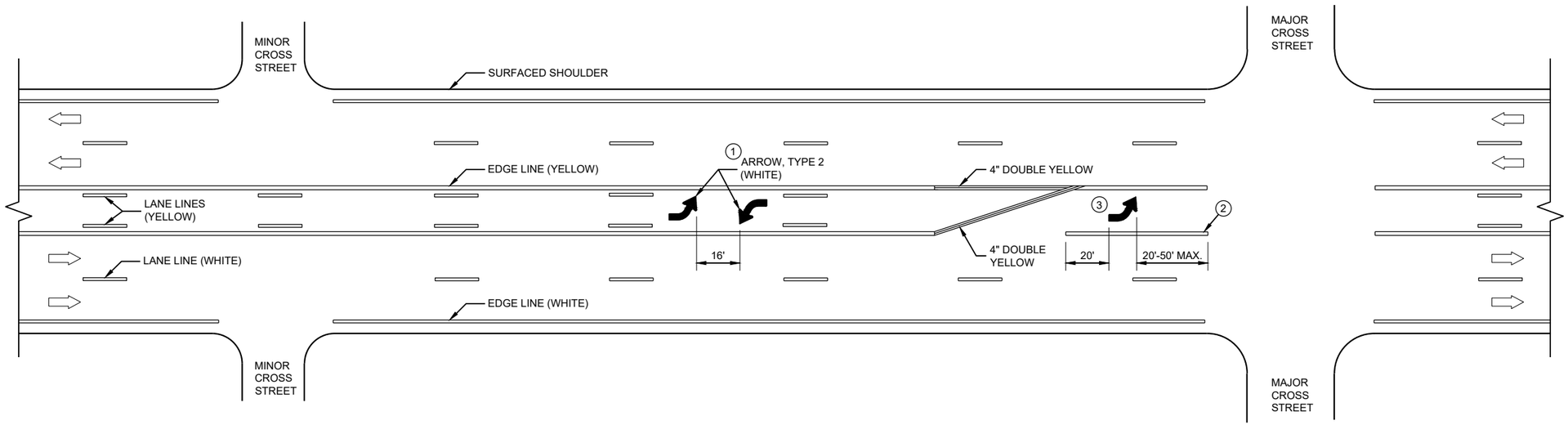
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

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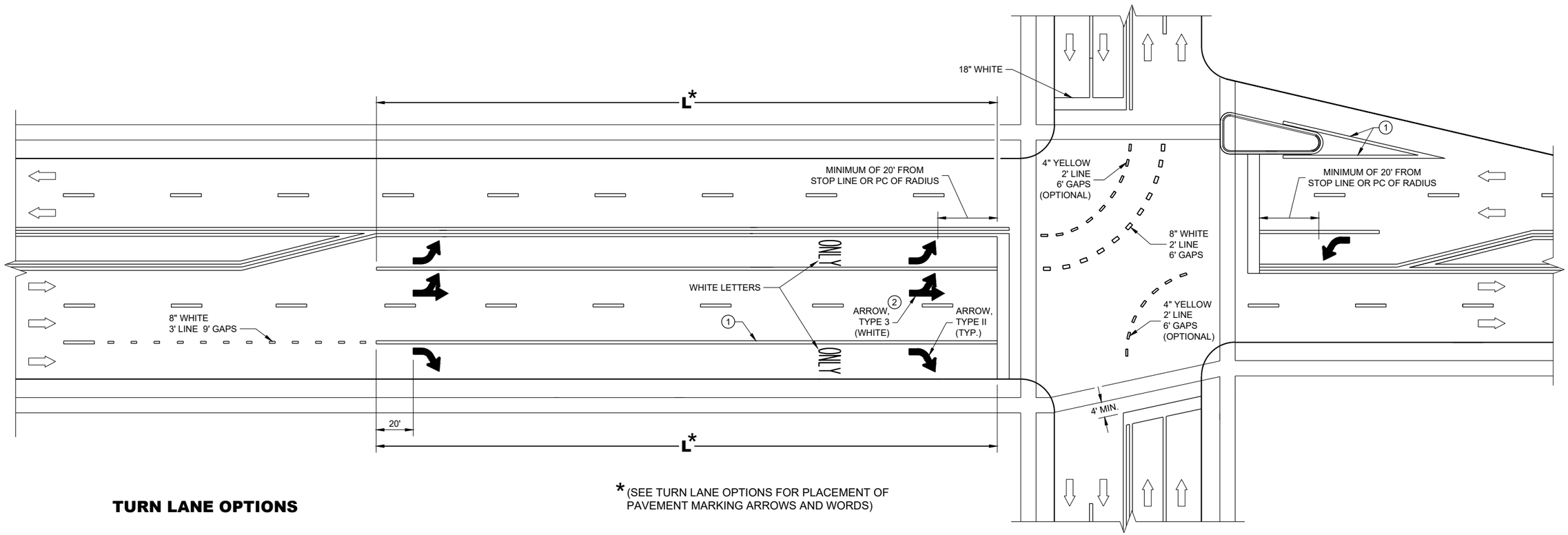
SDD 15C08 - 20b

SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

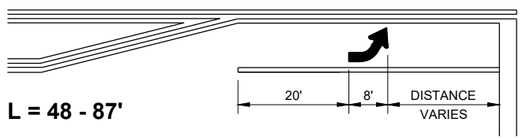
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA



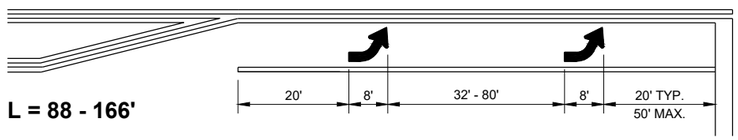
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

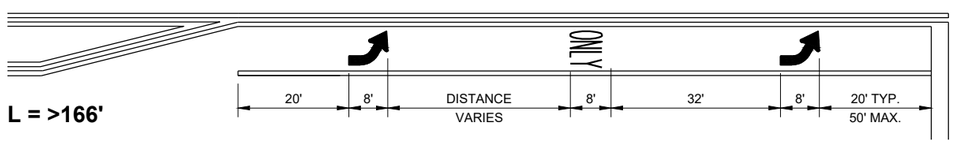
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

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

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

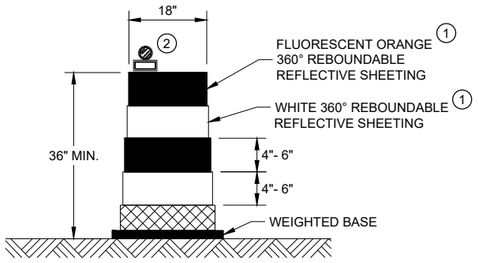
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

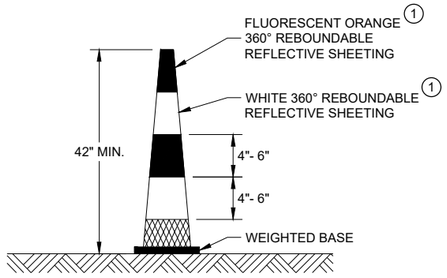
SDD 15C08 - 20c

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.

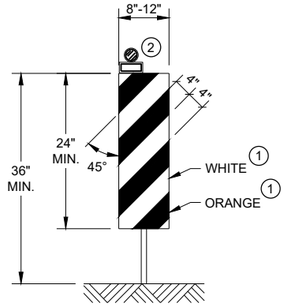


DRUM



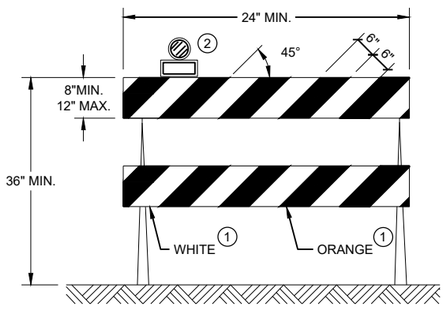
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



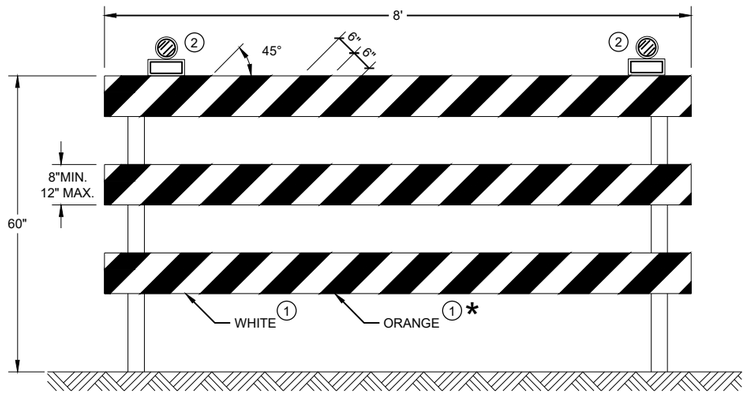
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

6

SDD 15C11 - 09b

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SDD 15C11 - 09b

LEGEND

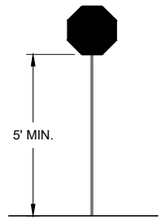
SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

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



STOP/SLOW PADDLE 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 SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

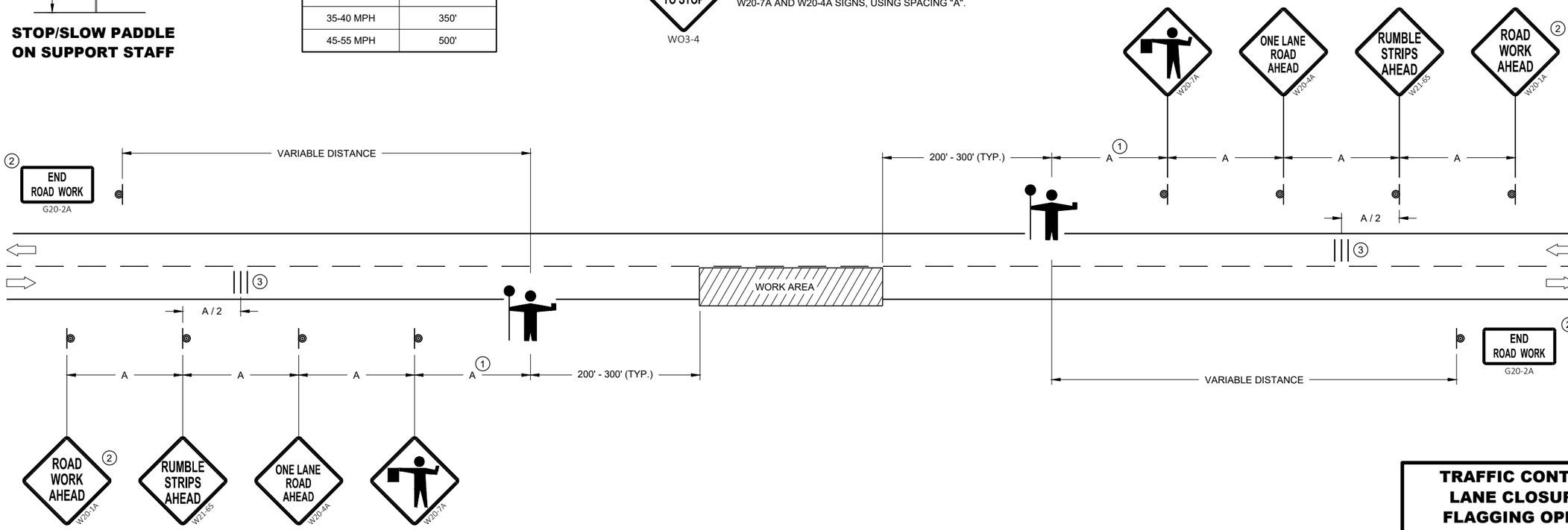
DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

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

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C12 - 07

SDD 15C12 - 07

LEGEND

V1 LEAD VEHICLE

V2 MARKING VEHICLE

V3 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC

FLASHING ARROW PANEL (CAUTION)

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.

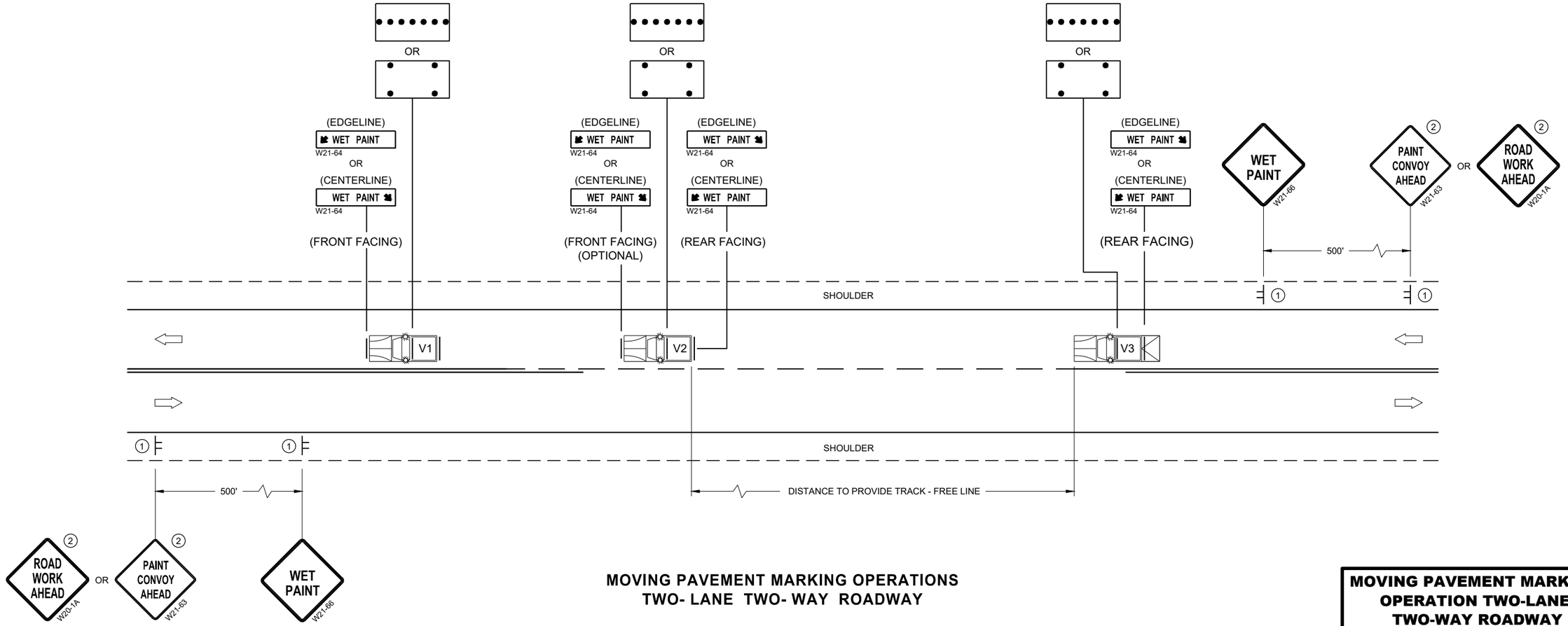
WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

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.

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



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
November 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

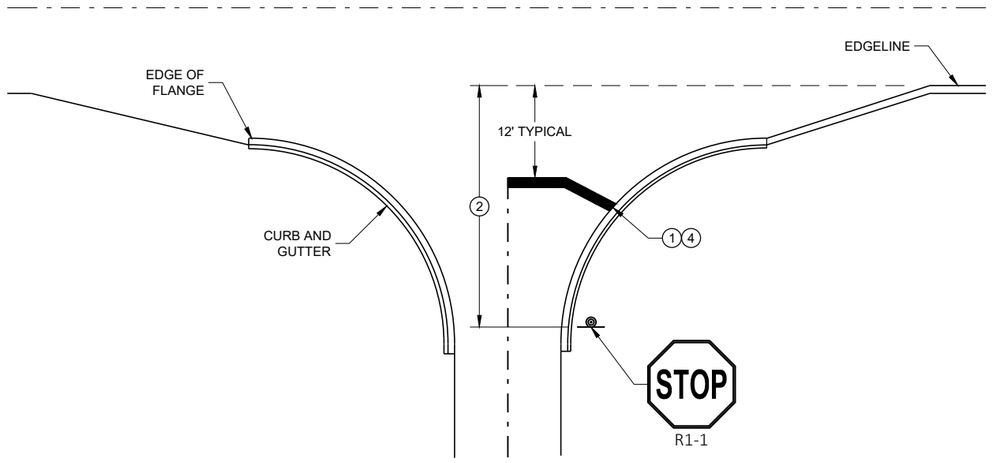
SDD 15C19 - 06a

SDD 15C19 - 06a

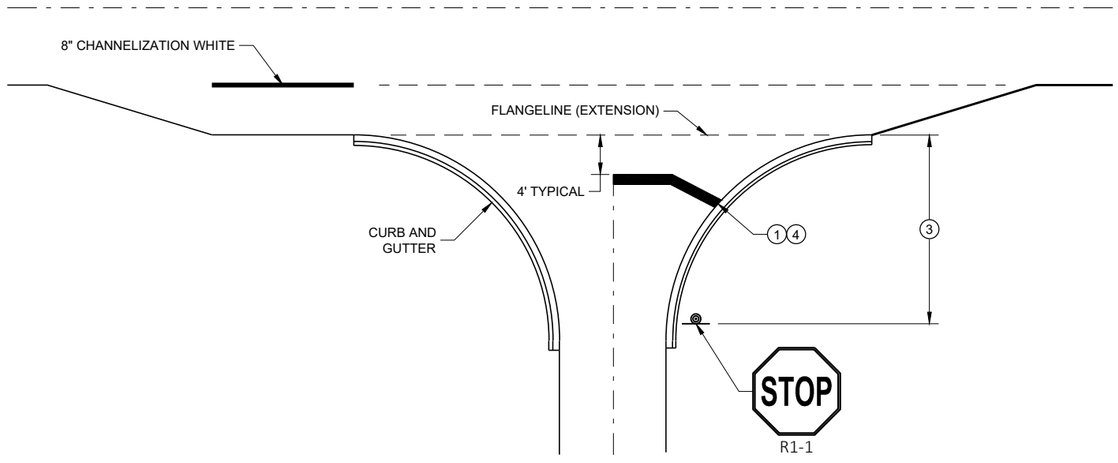
GENERAL NOTES

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

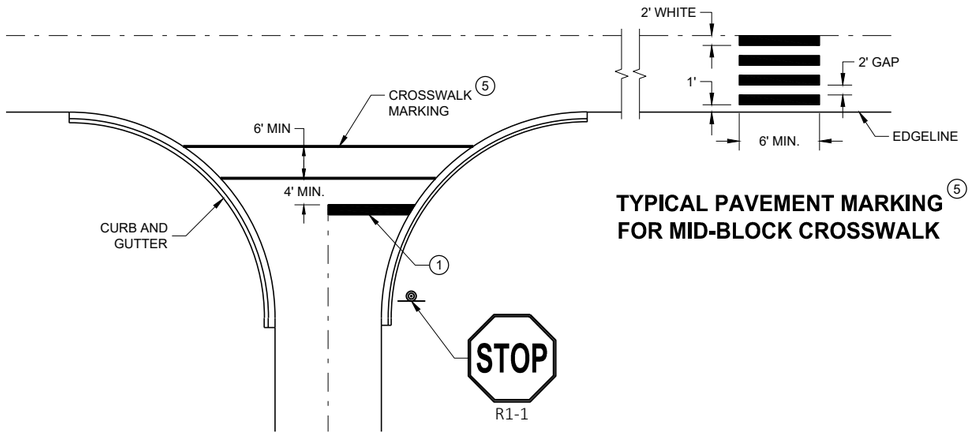
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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

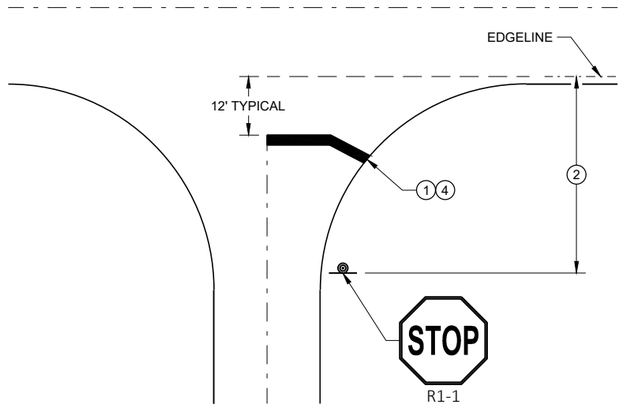


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



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

FHWA

6

SDD 15C33 - 04

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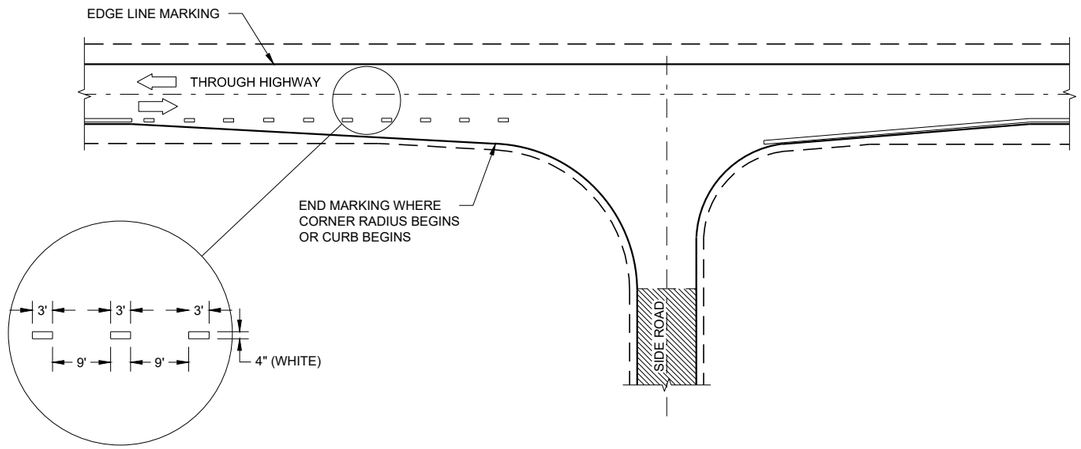
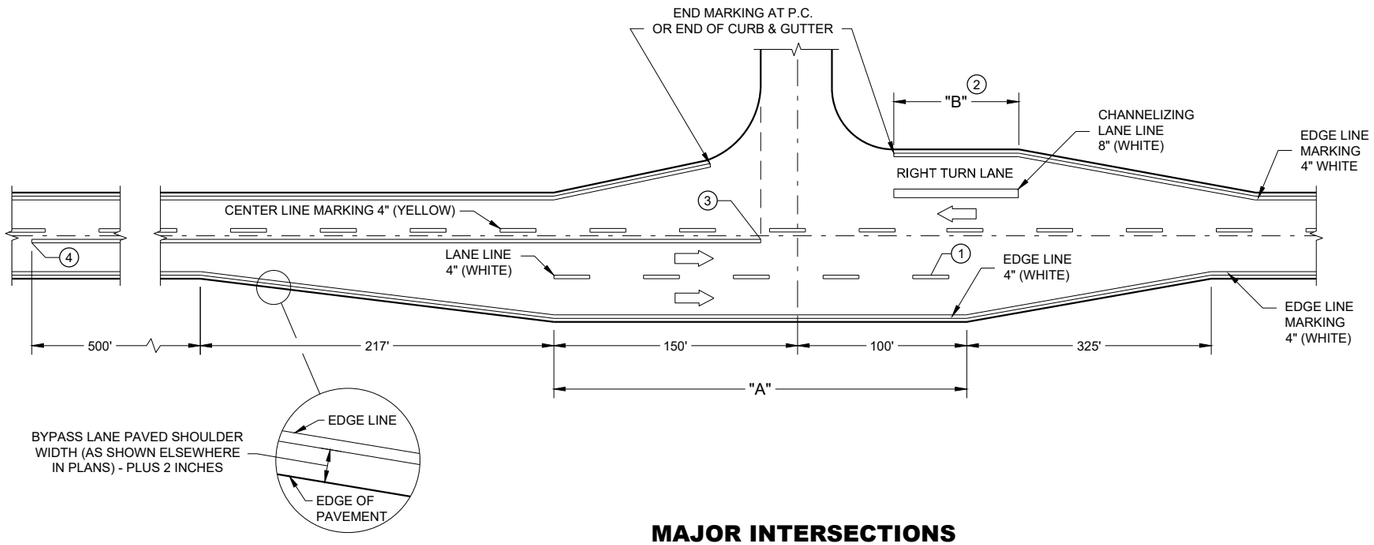
SDD 15C33 - 04



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

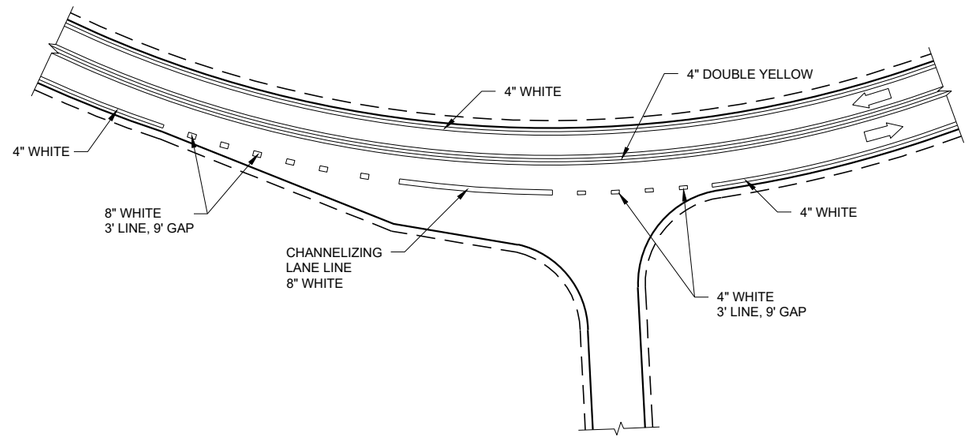
GENERAL NOTES

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.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C35 - 04a

6

SDD 15C35 - 04a

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

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

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

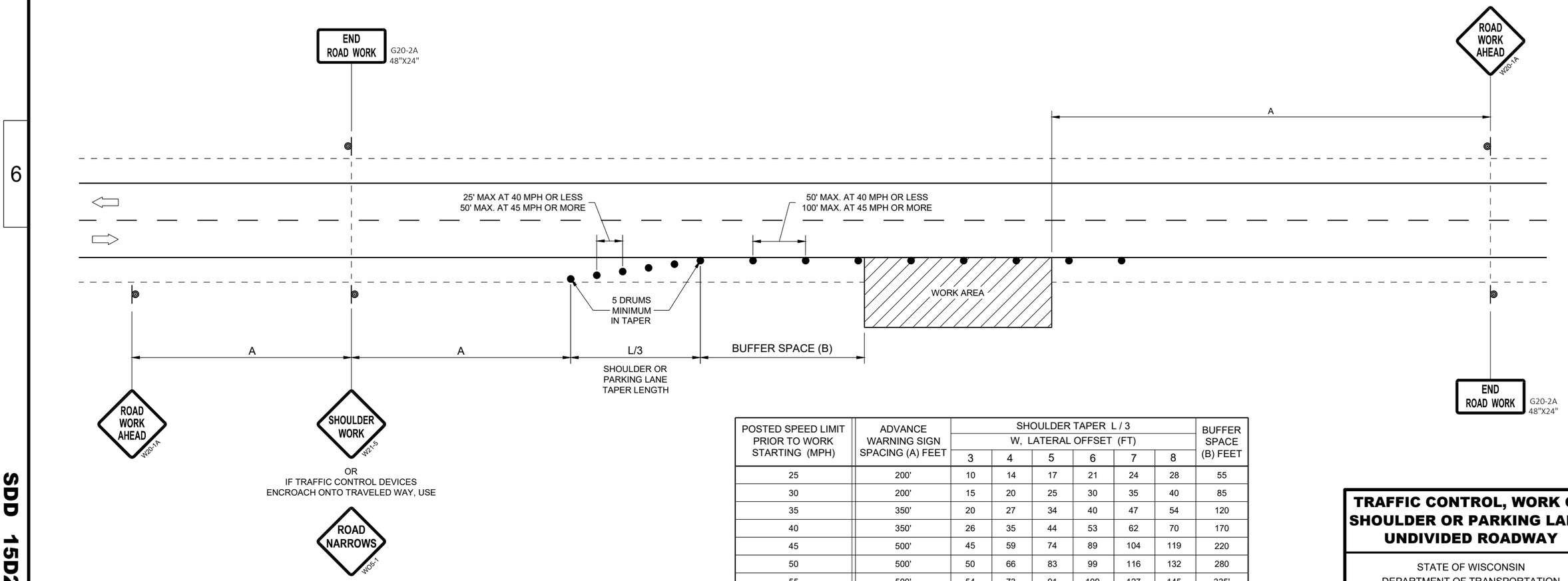
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

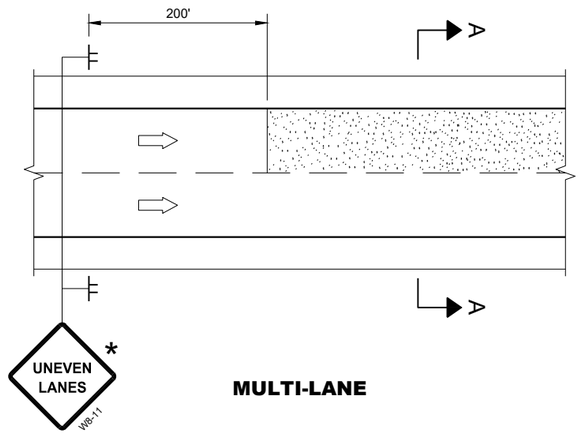
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T SAFETY ENGINEER

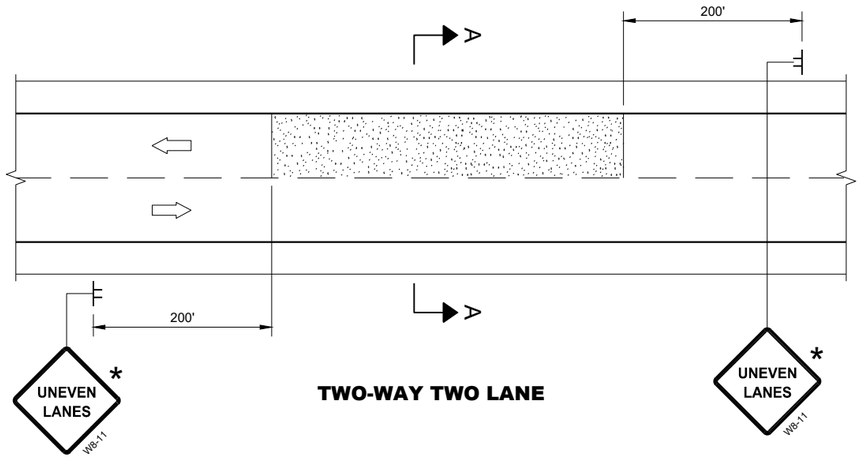
FHWA

SDD 15D28 - 04

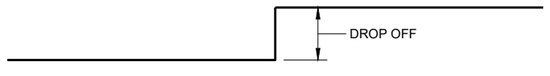
SDD 15D28 - 04



MULTI-LANE

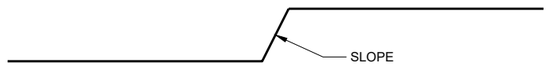


TWO-WAY TWO LANE

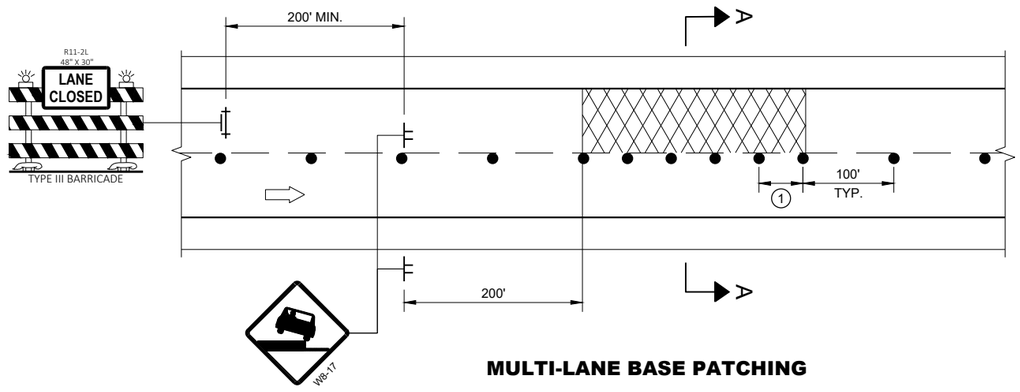


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

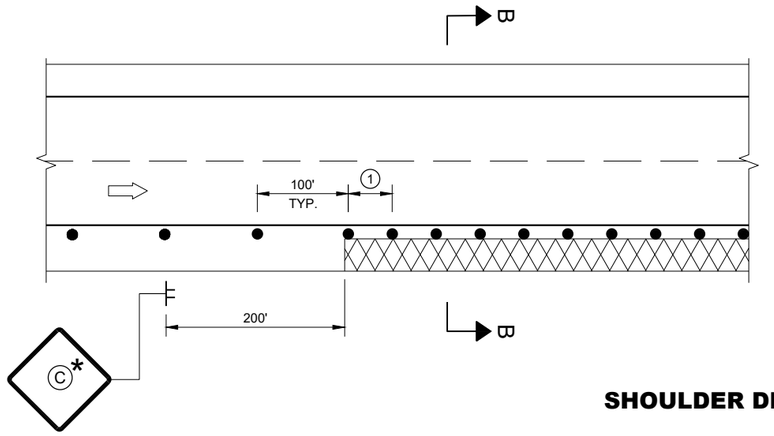
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

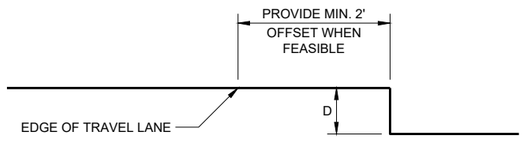
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

GENERAL NOTES

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

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

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

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

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

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

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

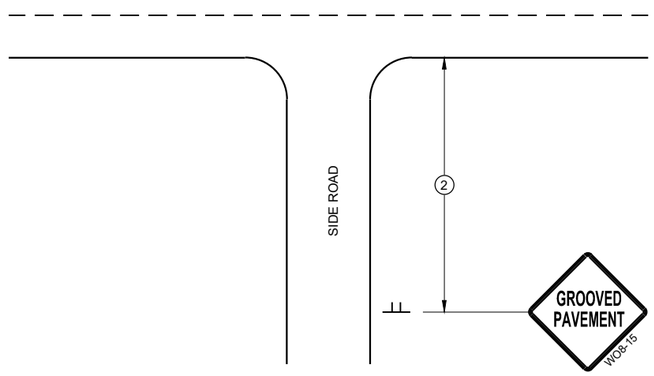
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

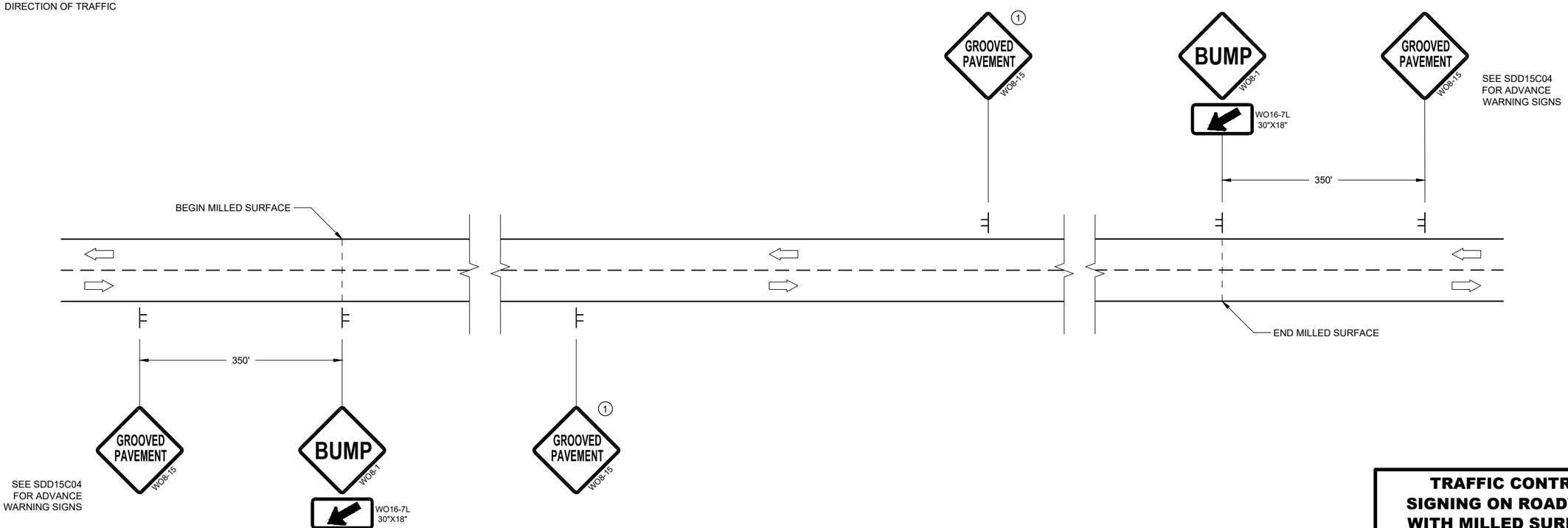
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6
SDD 15D44 - 02

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 CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

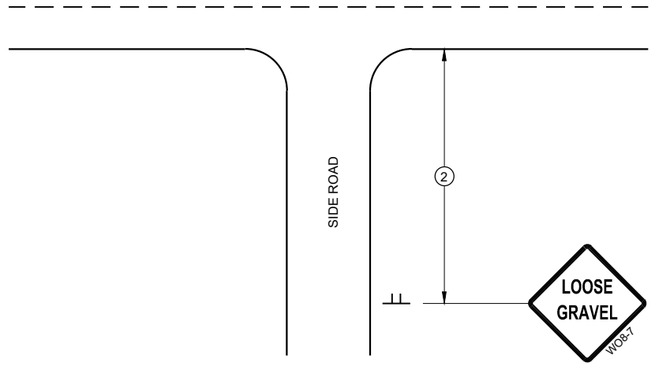
(2) PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

(3) ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

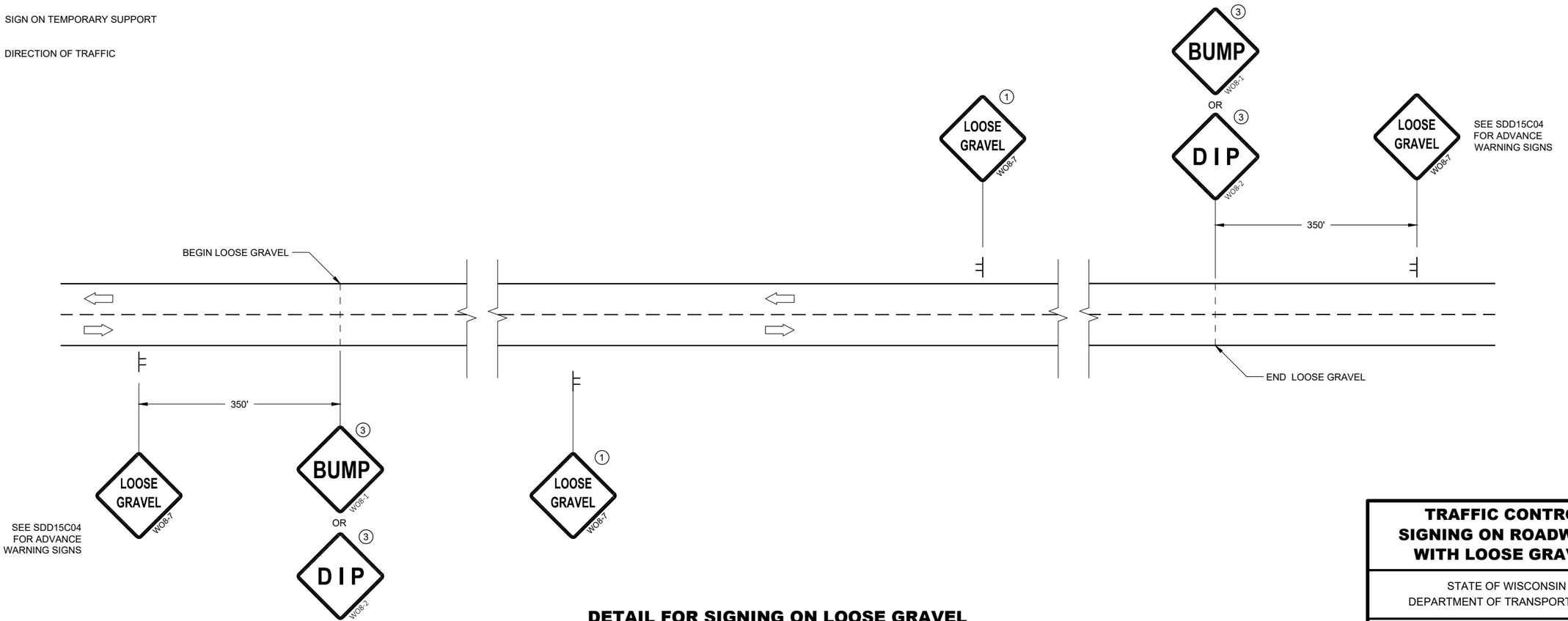
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON LOOSE GRAVEL OR CHIP SEALED SURFACES

TRAFFIC CONTROL SIGNING ON ROADWAYS WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

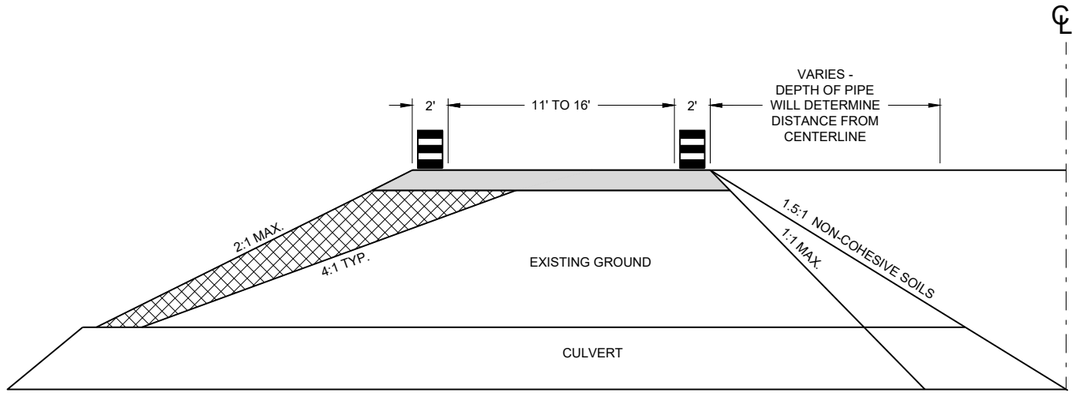
FHWA

6

SDD 15D45 - 03

6

SDD 15D45 - 03



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.

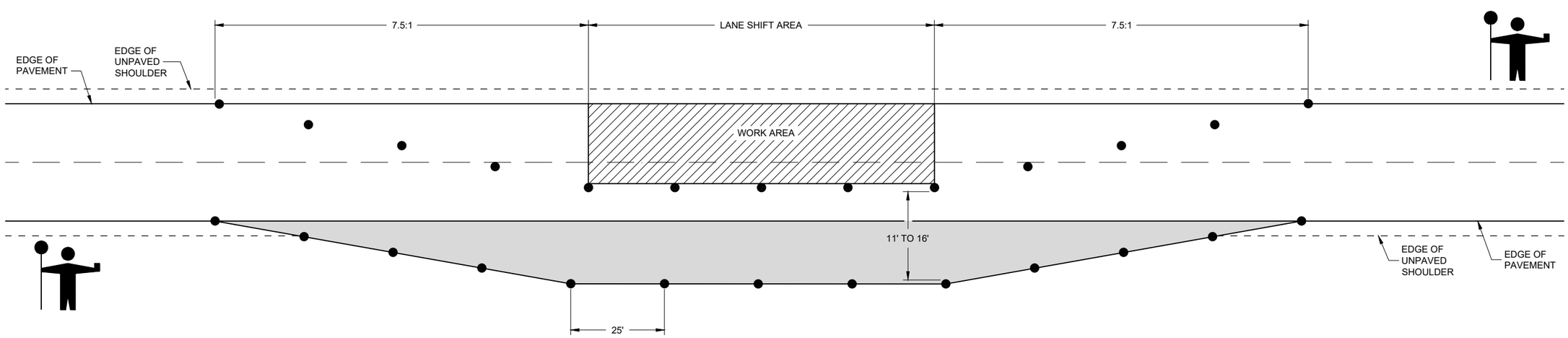
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

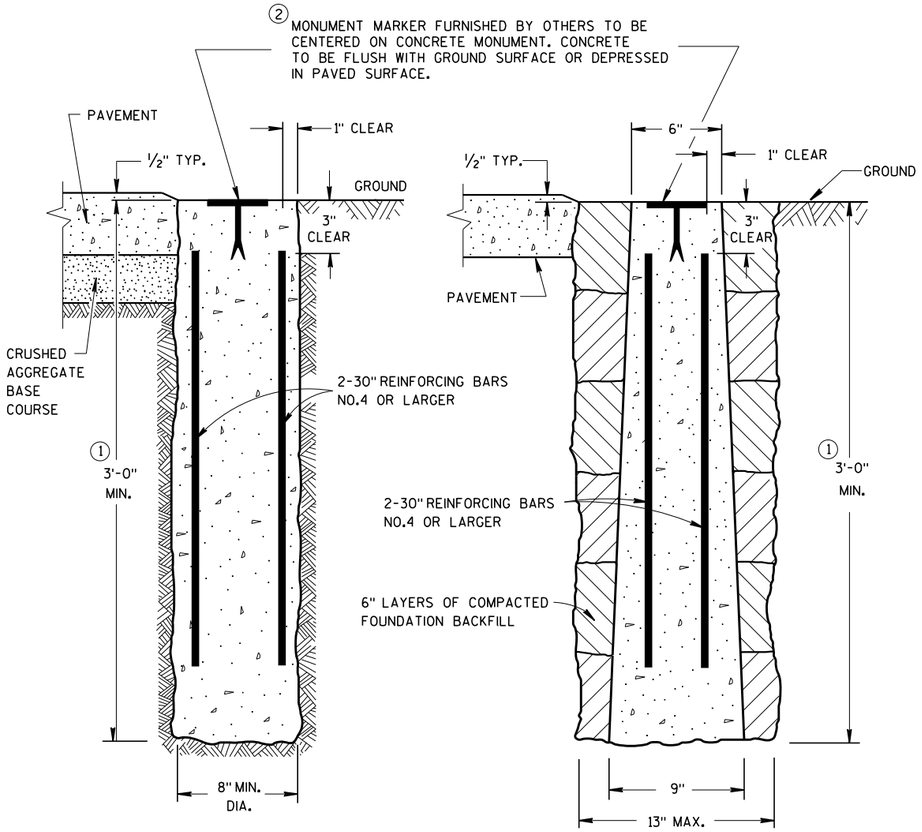
FHWA

6

SDD 15D48 - 01

6

SDD 15D48 - 01

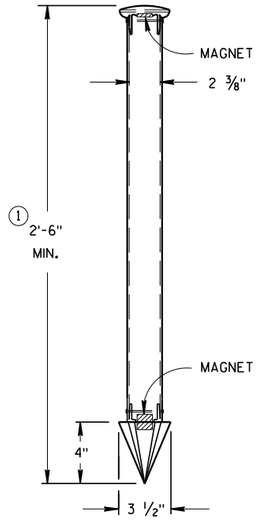


CAST-IN-PLACE

PRECAST

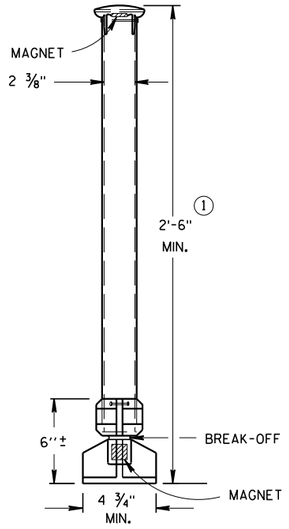
CONCRETE MONUMENTS

TYPE A



TYPE C

DRIVE-IN MONUMENT



TYPE D
NON-DRIVEN
BREAK-OFF MONUMENT

ALUMINUM MONUMENTS

(INCLUDES MARKER)

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.

DETAILED DRAWINGS OF PROPOSED ALTERNATE DESIGNS FOR METAL MONUMENTS OR MONUMENT COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

PERMANENT MAGNETS SHALL BE INSERTED NEAR THE TOP AND BOTTOM OF ALL ALUMINUM MONUMENTS SO THE MONUMENT CAN EASILY BE DETECTED BY A METAL DETECTOR.

THE CAST IRON MONUMENT COVER SHALL BE A "NON-ROCKING" TYPE. ADJUSTMENT OF THE COVER TO GRADE MAY BE ACCOMPLISHED BY THE USE OF MORTAR AND BRICK, OR BY EITHER PRECAST OR CAST-IN-PLACE REINFORCED CONCRETE GRADE RINGS.

MONUMENTS SHALL BE LOCATED AND PLACED AT THE DIRECTION OF THE ENGINEER.

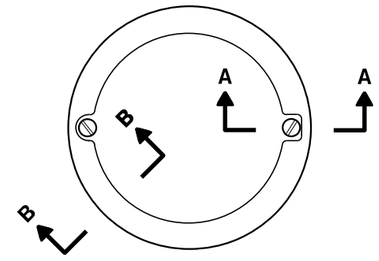
ALUMINUM MONUMENTS AND MONUMENT COVERS SHALL BE MADE FROM AN ALUMINUM AND MAGNESIUM ALLOY AS DETERMINED BY THE MANUFACTURER.

THE MONUMENT COVERS DETAILED ON THIS DRAWING ARE NOT EQUAL ALTERNATES. MONUMENT COVERS SHALL BE CAST IRON UNLESS ALUMINUM IS SPECIFIED ELSEWHERE IN THE CONTRACT.

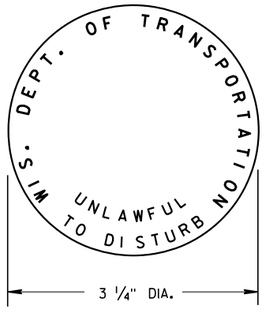
MONUMENT SHALL BE CAST-IN-PLACE CONCRETE UNLESS PRECAST CONCRETE OR ALUMINUM MONUMENTS ARE SPECIFIED IN THE CONTRACT OR PERMITTED BY THE ENGINEER

① MINIMUM LENGTH SHALL BE 4'-0" FOR MONUMENTS INSTALLED IN PAVED AREAS.

② AN OFFICIAL COUNTY MONUMENT MARKER SUPPLIED BY A COUNTY MAY BE REQUIRED FOR SOME SECTION CORNERS AND WITNESS MONUMENTS INSTEAD OF THIS WIS DOT MARKER.

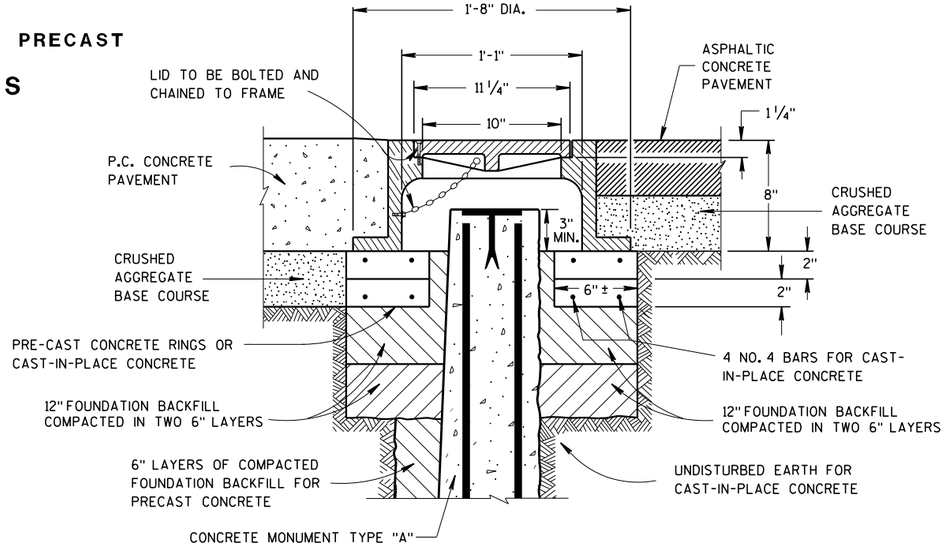


TOP VIEW



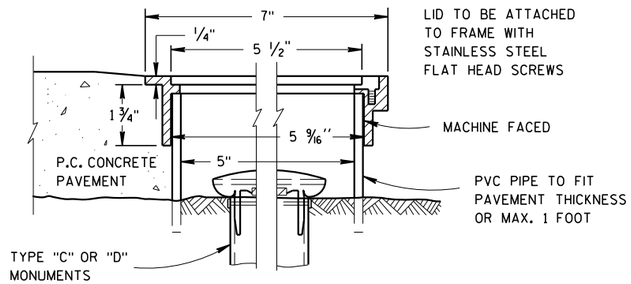
② WIS DOT MONUMENT MARKER LOGO

FOR TYPES "A", "C", & "D"



CAST IRON MONUMENT COVER

(APPROXIMATE WEIGHT 95 LBS)



SECTION B-B SECTION A-A

ALUMINUM MONUMENT COVER

(APPROXIMATE WEIGHT 2 LBS)
(FOR CONCRETE PAVEMENT ONLY)

LANDMARK REFERENCE MONUMENTS AND COVERS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Raymond A. Kumagai — CHIEF SURVEYING AND MAPPING ENGINEER
FHWA

6

S.D.D. 16 A 1-7

STH 25 - STA. 20+74 TO STA. 21+80

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
20+74	0	58	3	0	0	0	0	0
21+22	48	94	15	167	27	167	27	140
21+27	5	94	13	17	3	184	29	155
21+32	5	95	6	17	2	202	31	171
21+80	48	60	1	138	6	339	37	302
				339	37			

STH 25 - STA. 174+08 TO STA. 179+97

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
174+08	0	12	3	0	0	0	0	0
174+50	42	46	3	72	4	72	4	68
174+52	2	46	3	3	0	75	4	70
175+00	48	37	9	74	11	148	15	133
175+18	18	30	16	22	8	170	23	147
175+18	1	0	0	1	0	171	23	147
175+50	32	0	0	0	0	171	23	147
176+00	50	0	0	0	0	171	23	147
176+47	47	0	0	0	0	171	23	147
176+48	0	52	14	0	0	171	23	147
176+50	3	52	13	5	1	176	25	151
176+57	7	51	11	14	3	190	28	162
177+00	43	41	14	73	20	263	48	215
177+50	50	18	17	55	28	318	76	242
178+00	50	14	17	30	31	348	107	241
178+47	47	12	22	23	34	371	141	230
178+50	3	12	22	1	2	372	143	229
178+82	32	19	0	18	13	390	156	235
179+00	18	16	4	11	1	402	157	244
179+50	50	13	0	27	4	428	161	267
179+60	10	12	1	5	0	433	161	272
179+97	38	10	2	16	2	449	163	286
				449	163			

Note 1: Mass Ordinate = Cut - Fill

380TH AVE - STA. 8+90'A' TO STA. 9+50'A'

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
8+90	0	75	0	0	0	0	0	0
9+00	10	79	0	29	0	29	0	29
9+50	50	150	18	212	17	242	17	224
				242	17			

STH 25 - STA. 265+37 TO STA. 267+00

STATION	Distance	AREA (SF)		Incremental Vol (CY)		Cumulative Vol (CY)		Mass Ordinate Note 1
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
265+37	0	68	0	0	0	0	0	0
265+50	13	70	0	34	0	34	0	34
265+92	42	98	7	131	6	165	6	159
266+00	8	91	1	28	1	193	7	186
266+42	42	77	4	130	4	324	11	312
266+50	8	40	2	17	1	341	12	329
267+00	50	12	3	48	4	389	16	373
				389	16			

Note 1: Mass Ordinate = Cut - Fill

STH 25 - TEMPORARY WIDENING, LEFT SIDE OF ROADWAY

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut	Incremental Vol (CY) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Fill 1.00	Mass Ordinate Note 1
263+00	0	0	0	0	0	0	0	0
263+36	36	0	0	0	0	0	0	0
263+88	52	0	0	0	0	0	0	0
264+00	12	0	0	0	0	0	0	0
264+50	50	0	0	0	0	0	0	0
264+50	0	3	0	0	0	0	0	0
265+00	50	1	0	4	0	4	0	4
265+50	50	2	3	3	3	8	3	4
265+92	42	3	2	4	4	11	7	4
266+00	8	2	4	1	1	12	8	4
266+50	50	2	3	3	7	15	15	1
267+00	50	2	0	4	3	19	18	1
267+23	23	4	0	3	0	21	18	4
267+50	27	0	0	2	0	23	18	6
268+00	50	0	0	0	0	23	18	6
268+50	50	0	0	0	0	23	18	6
268+71	21	0	0	0	0	23	18	6
				23	18			

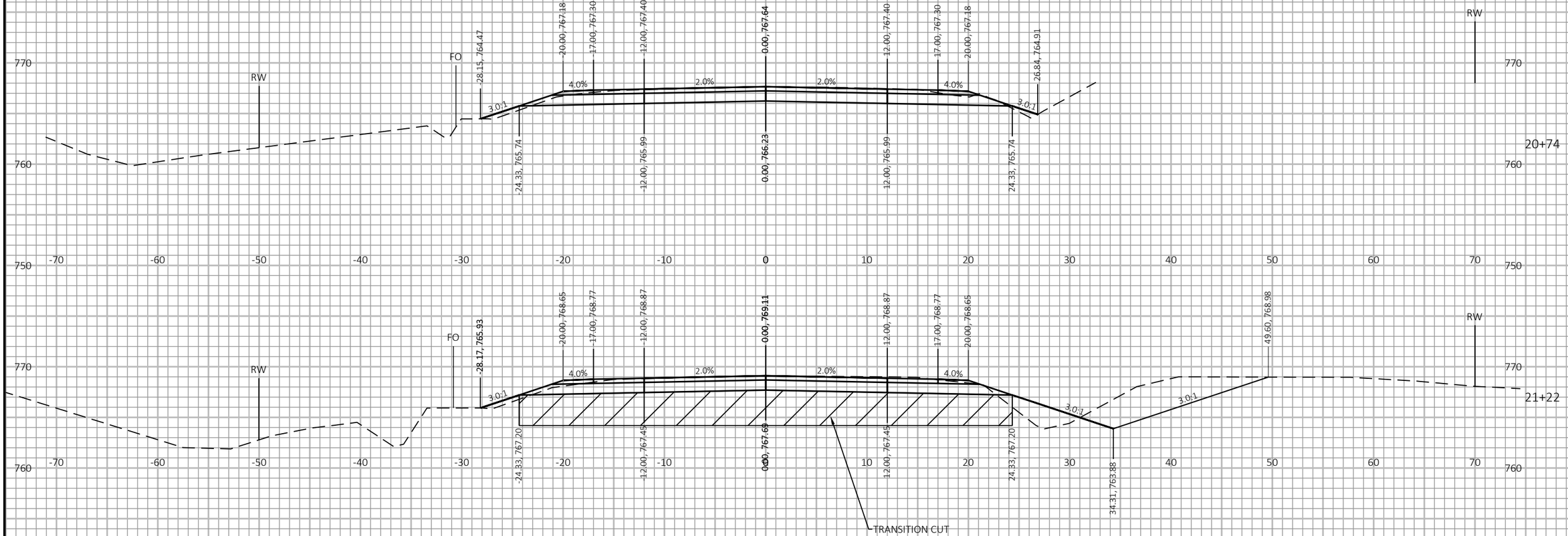
Note 2: For Information Only.
Quantities are incidental to "
Temporary Lane Shift During Culvert Work" Item

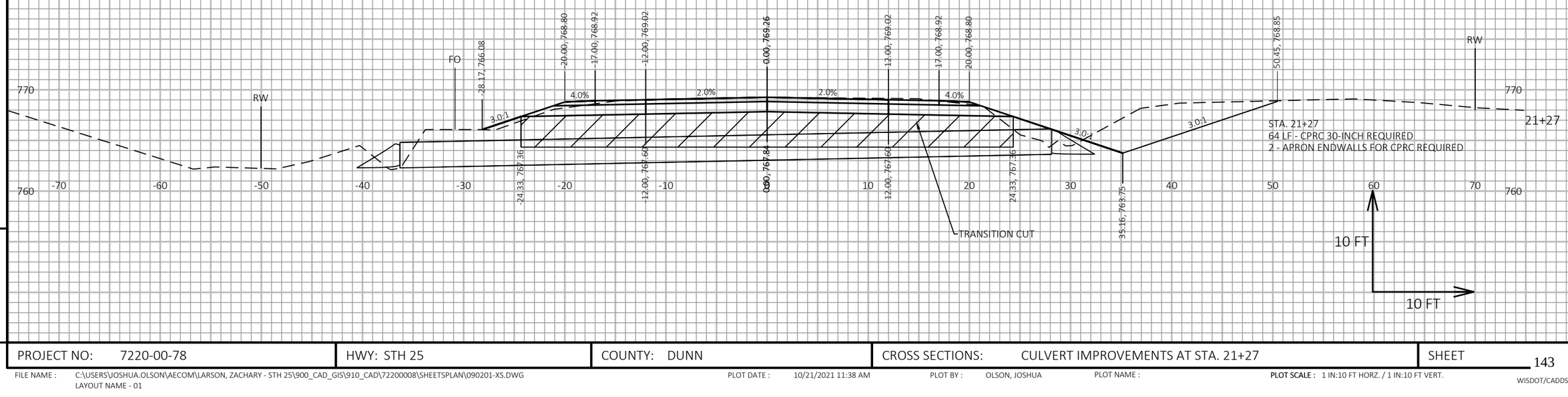
STH 25 - TEMPORARY WIDENING, RIGHT SIDE OF ROADWAY

STATION	Distance	AREA (SF) Cut	AREA (SF) Fill	Incremental Vol (CY) Cut	Incremental Vol (CY) Fill	Cumulative Vol (CY) Cut 1.00	Cumulative Vol (CY) Fill 1.00	Mass Ordinate Note 1
263+00	0	0	0	0	0	0	0	0
263+36	36	0	0	0	0	0	0	0
263+88	52	7	0	7	0	7	0	7
264+00	12	3	8	2	2	9	2	8
264+50	50	3	9	5	16	14	18	-3
264+50	0	3	9	0	0	14	18	-3
265+00	50	3	34	6	40	20	57	-37
265+50	50	3	46	6	74	26	131	-106
265+92	42	4	48	5	73	31	204	-174
266+00	8	3	40	1	13	32	217	-186
266+50	50	4	9	6	46	37	263	-226
267+00	50	3	7	6	15	44	279	-235
267+23	23	3	4	3	5	46	284	-237
267+50	27	4	2	3	3	50	287	-237
268+00	50	6	0	9	2	59	288	-230
268+50	50	8	0	13	0	71	288	-217
268+71	21	9	0	6	0	78	288	-210
				78	288			

Note 1: Mass Ordinate = Cut - Fill

BEGIN FULL RECONSTRUCTION
STA. 20+74

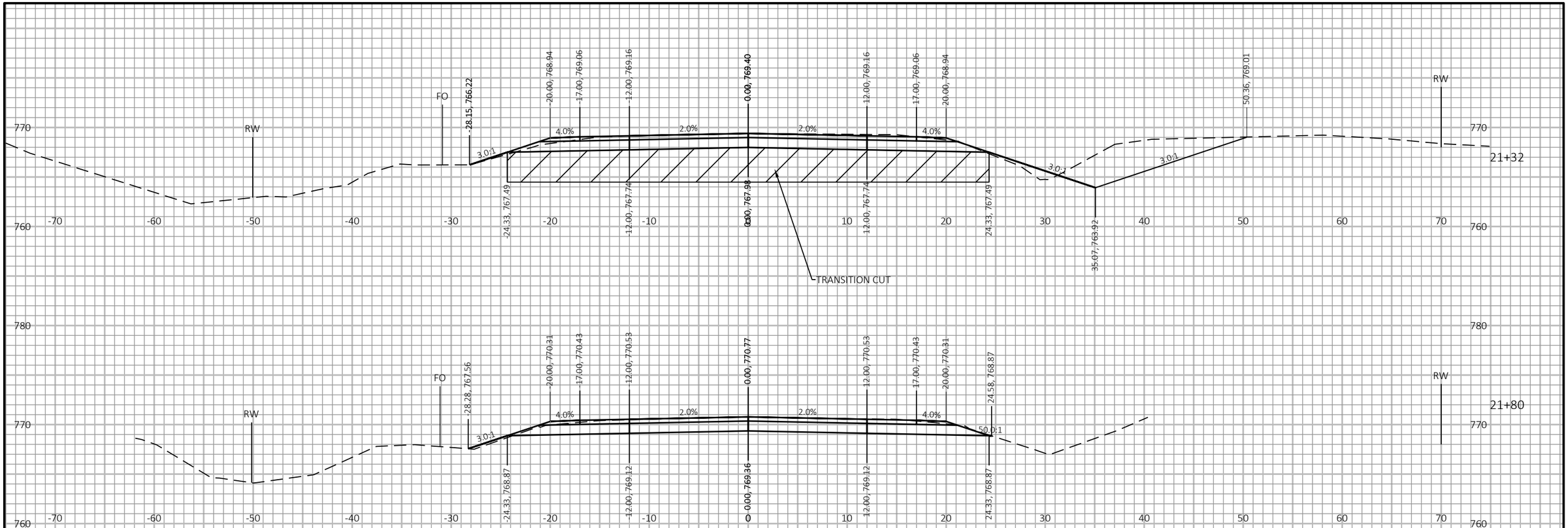




9

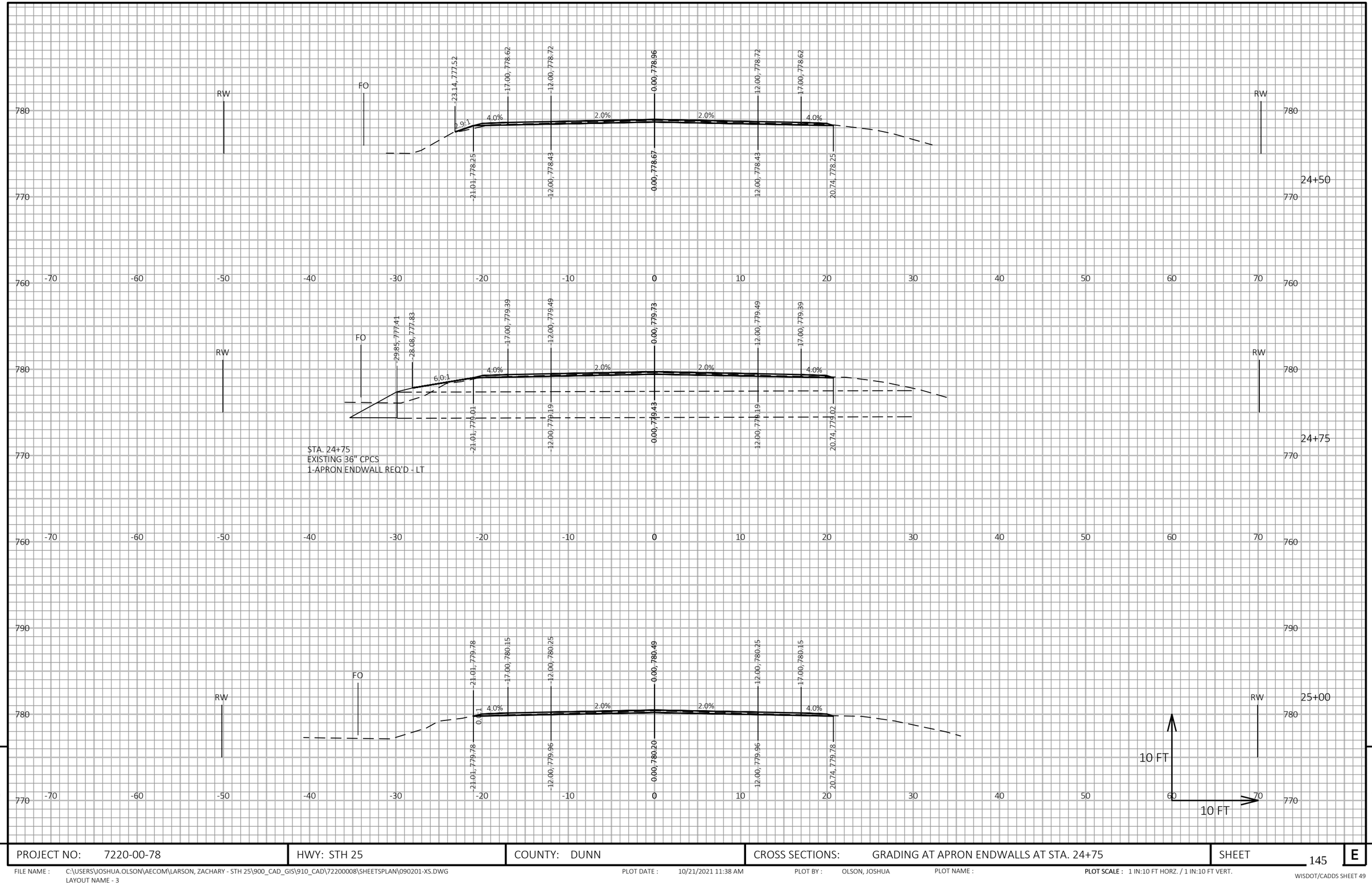
9

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: CULVERT IMPROVEMENTS AT STA. 21+27	SHEET 143	E



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: CULVERT IMPROVEMENTS AT STA. 21+27	SHEET 144	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02
PLOT DATE : 10/21/2021 11:38 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

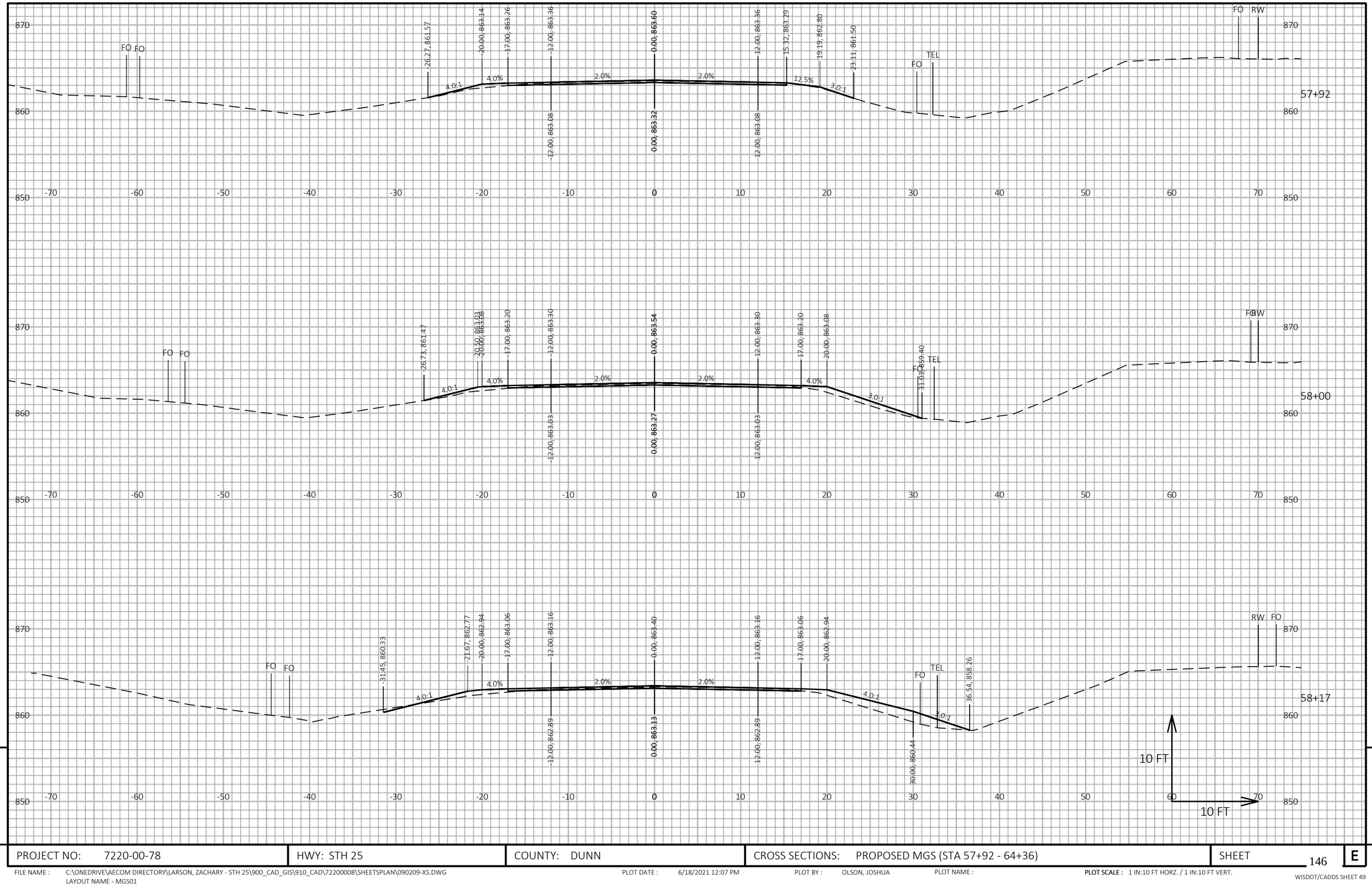
9

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: GRADING AT APRON ENDWALLS AT STA. 24+75	SHEET 145	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 3

PLOT DATE : 10/21/2021 11:38 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

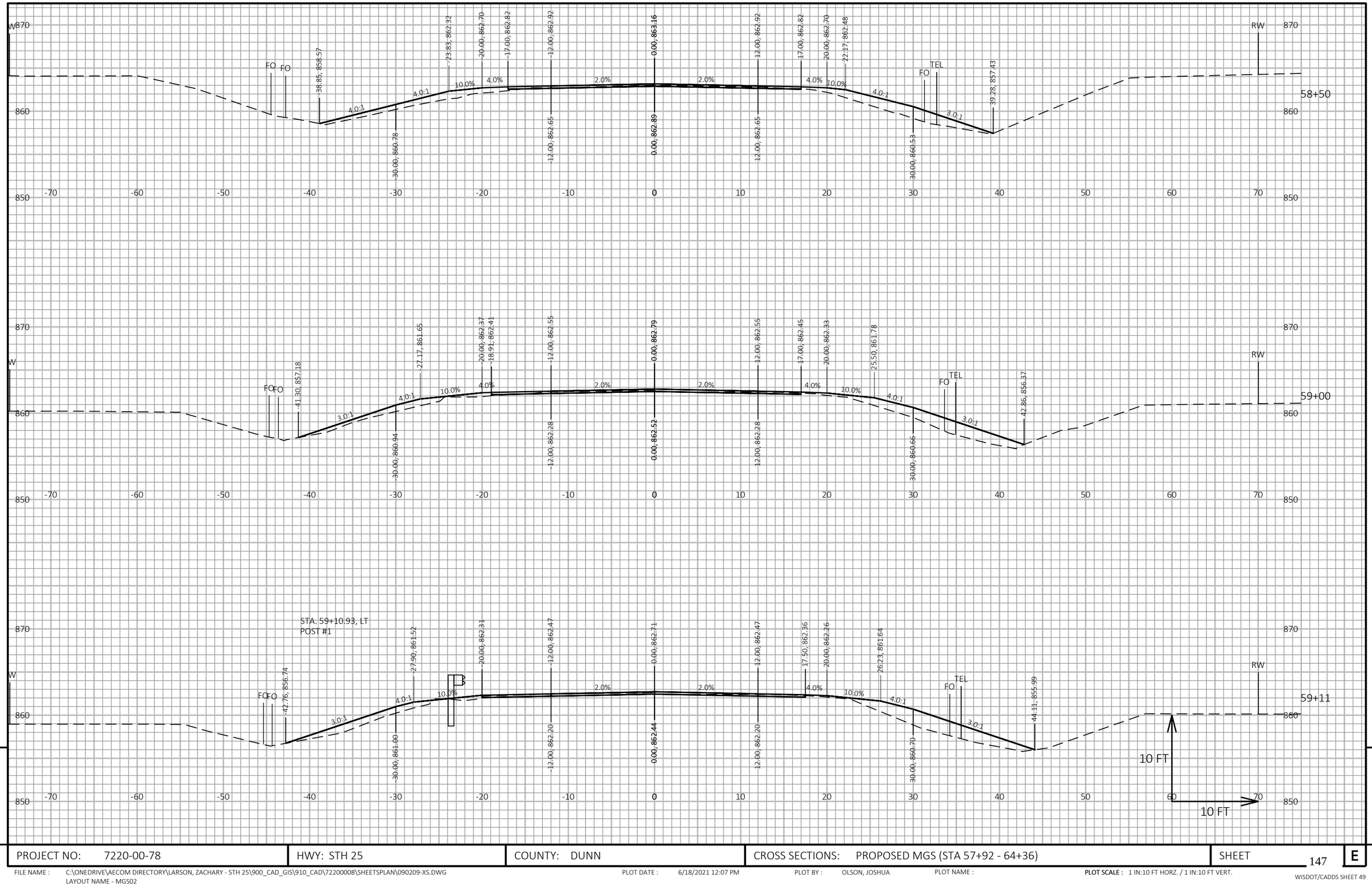


PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: PROPOSED MGS (STA 57+92 - 64+36)	SHEET 146	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090209-XS.DWG
LAYOUT NAME - MGS01

PLOT DATE : 6/18/2021 12:07 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

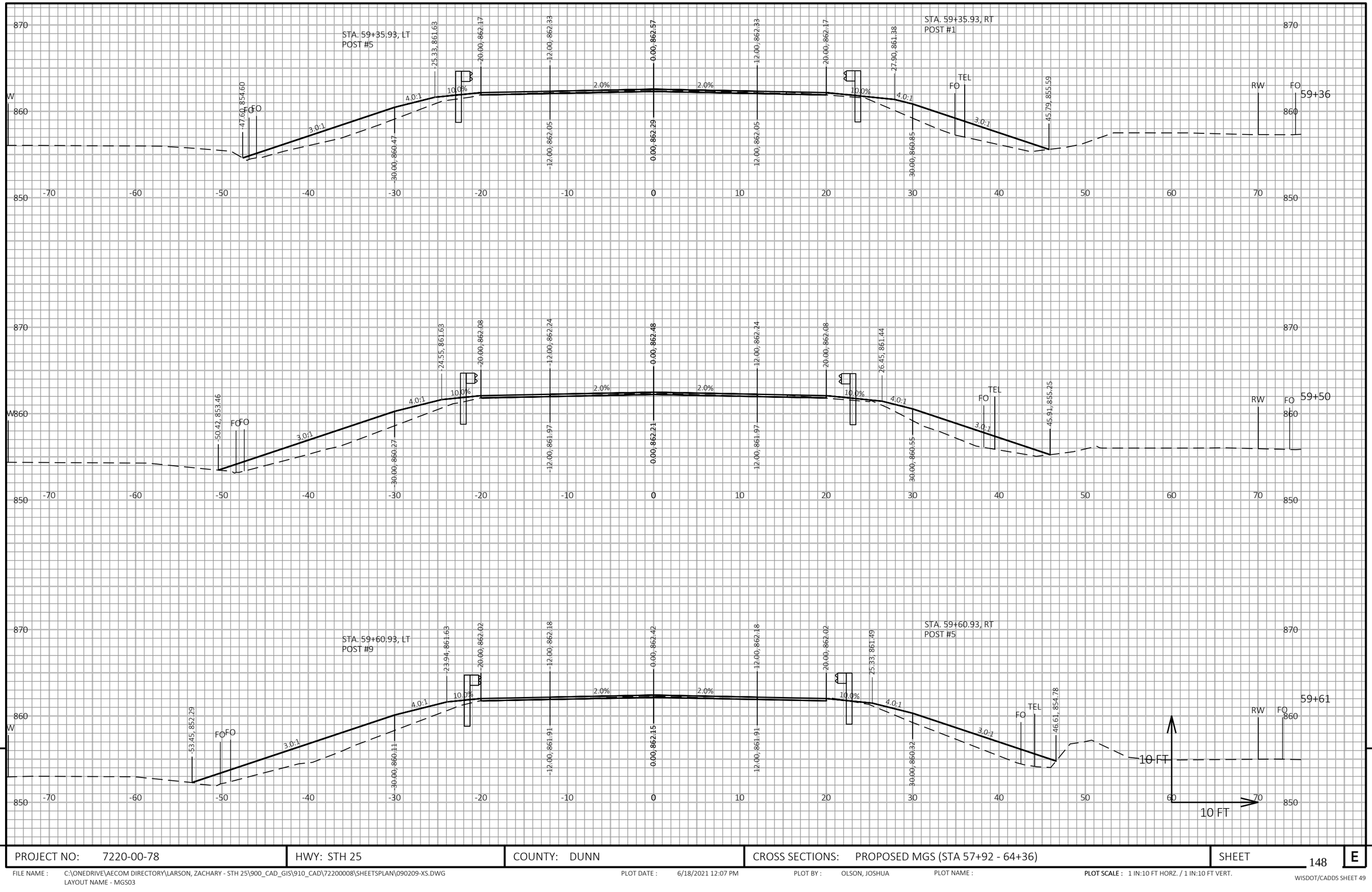


PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: PROPOSED MGS (STA 57+92 - 64+36)	SHEET 147 E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090209-XS.DWG
LAYOUT NAME - MGS02

PLOT DATE : 6/18/2021 12:07 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

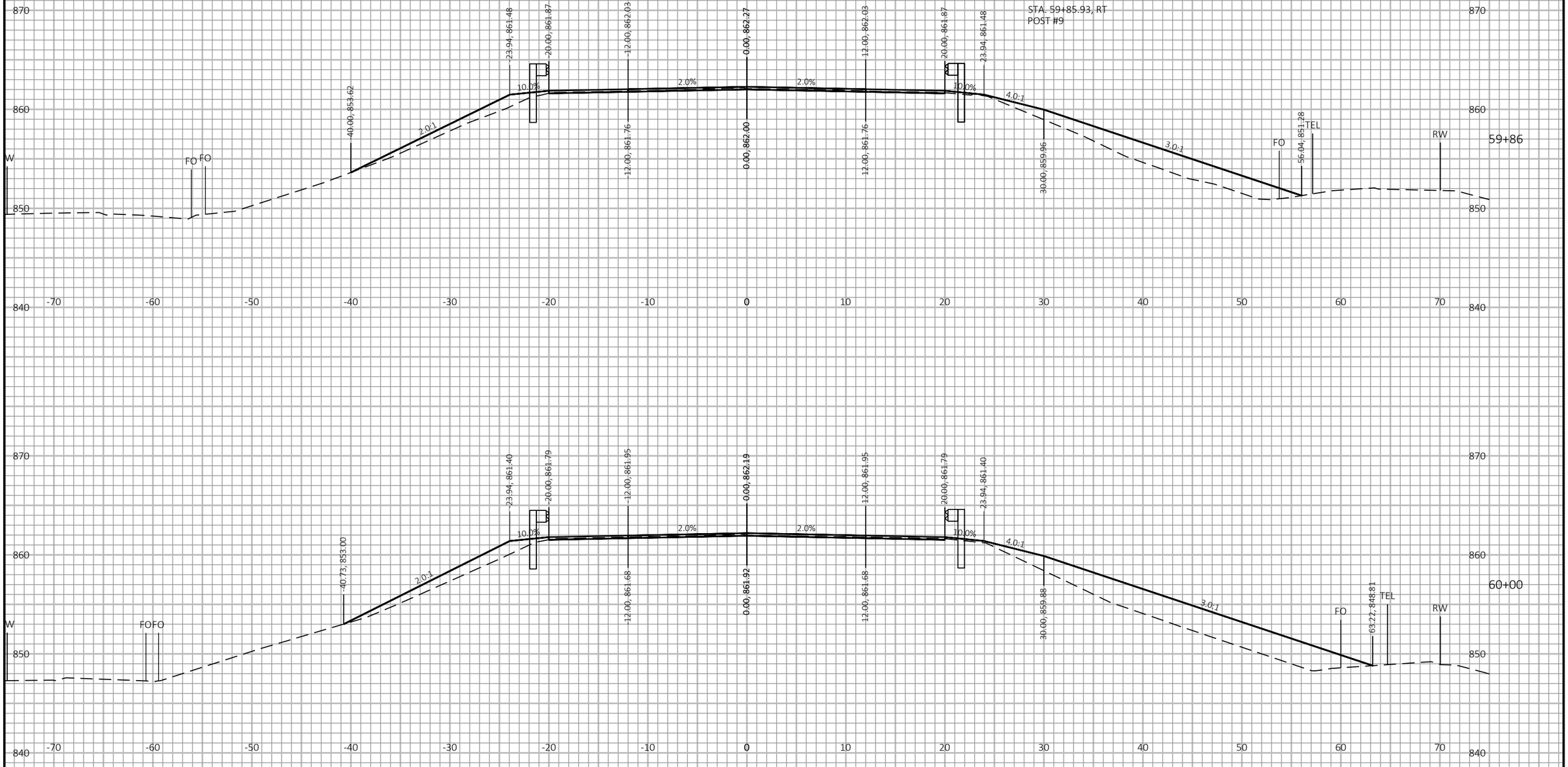
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: PROPOSED MGS (STA 57+92 - 64+36)	SHEET 148	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090209-XS.DWG
LAYOUT NAME - MGS03

PLOT DATE : 6/18/2021 12:07 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

STA. 59+85.93, RT
POST #9



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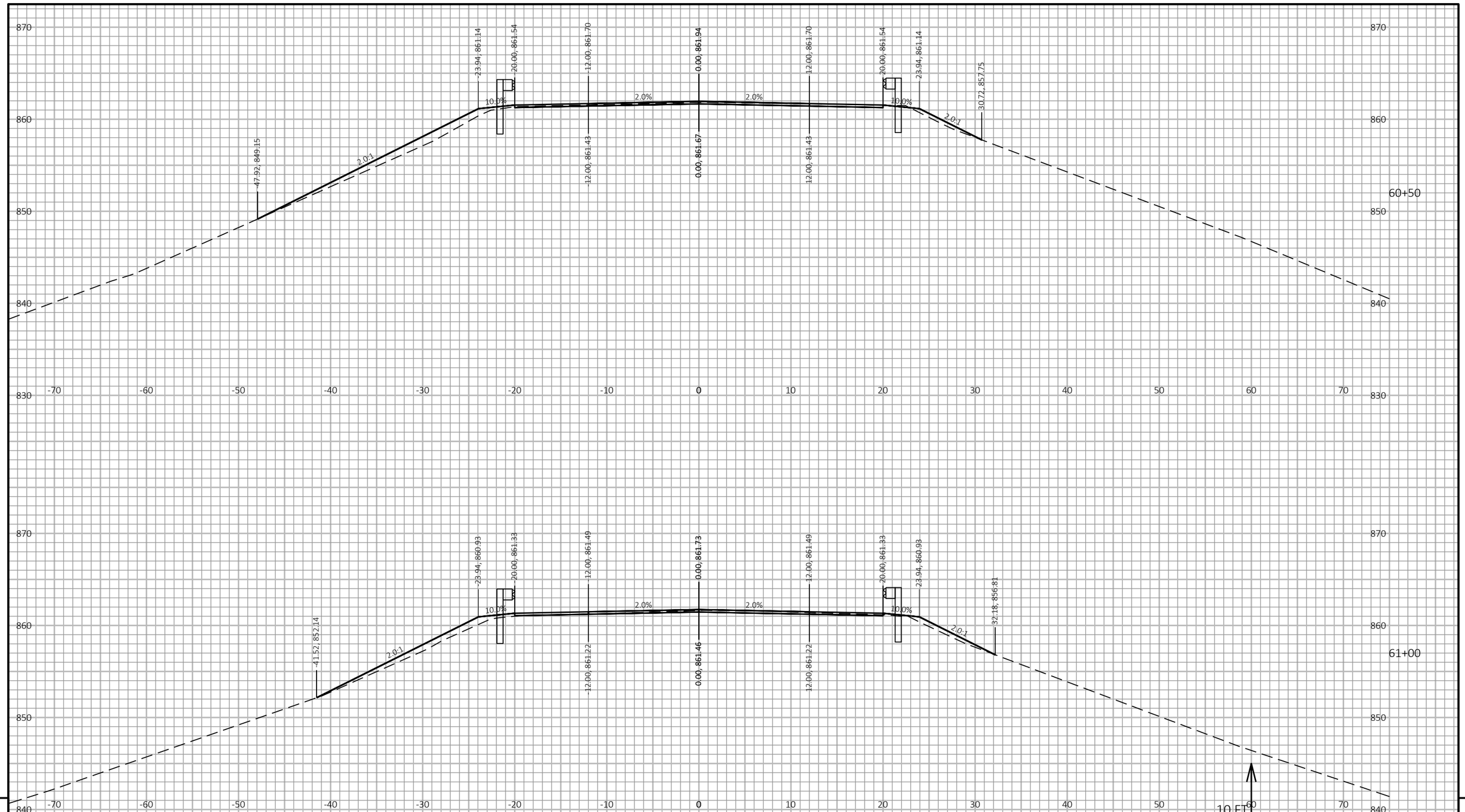
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: PROPOSED MGS (STA 57+92 - 64+36)	SHEET 149	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090209-XS.DWG
LAYOUT NAME - MGS04

PLOT DATE : 6/18/2021 12:07 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

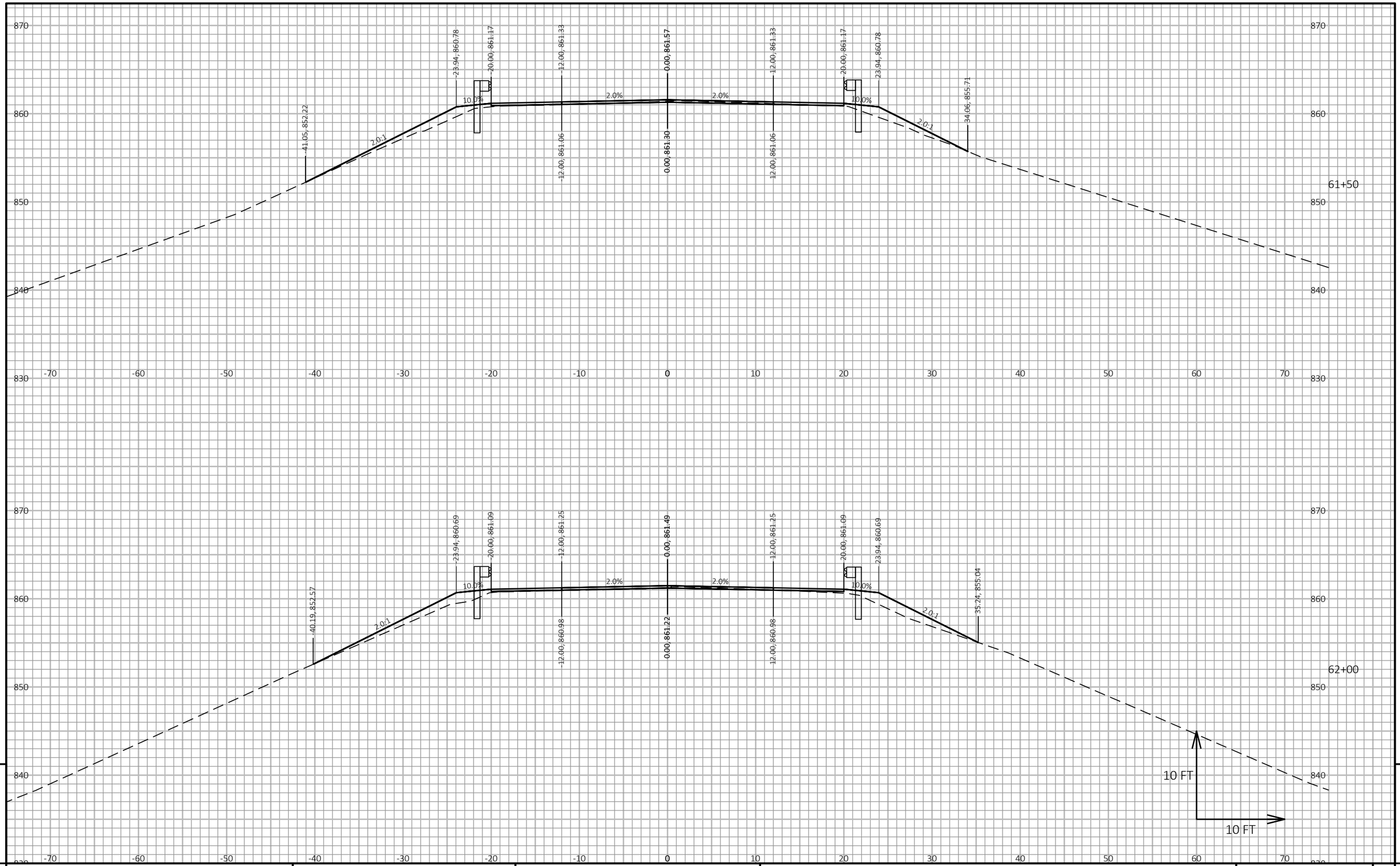


PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: PROPOSED MGS (STA 57+92 - 64+36)	SHEET 150	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090209-XS.DWG
LAYOUT NAME - MGS05

PLOT DATE : 6/18/2021 12:07 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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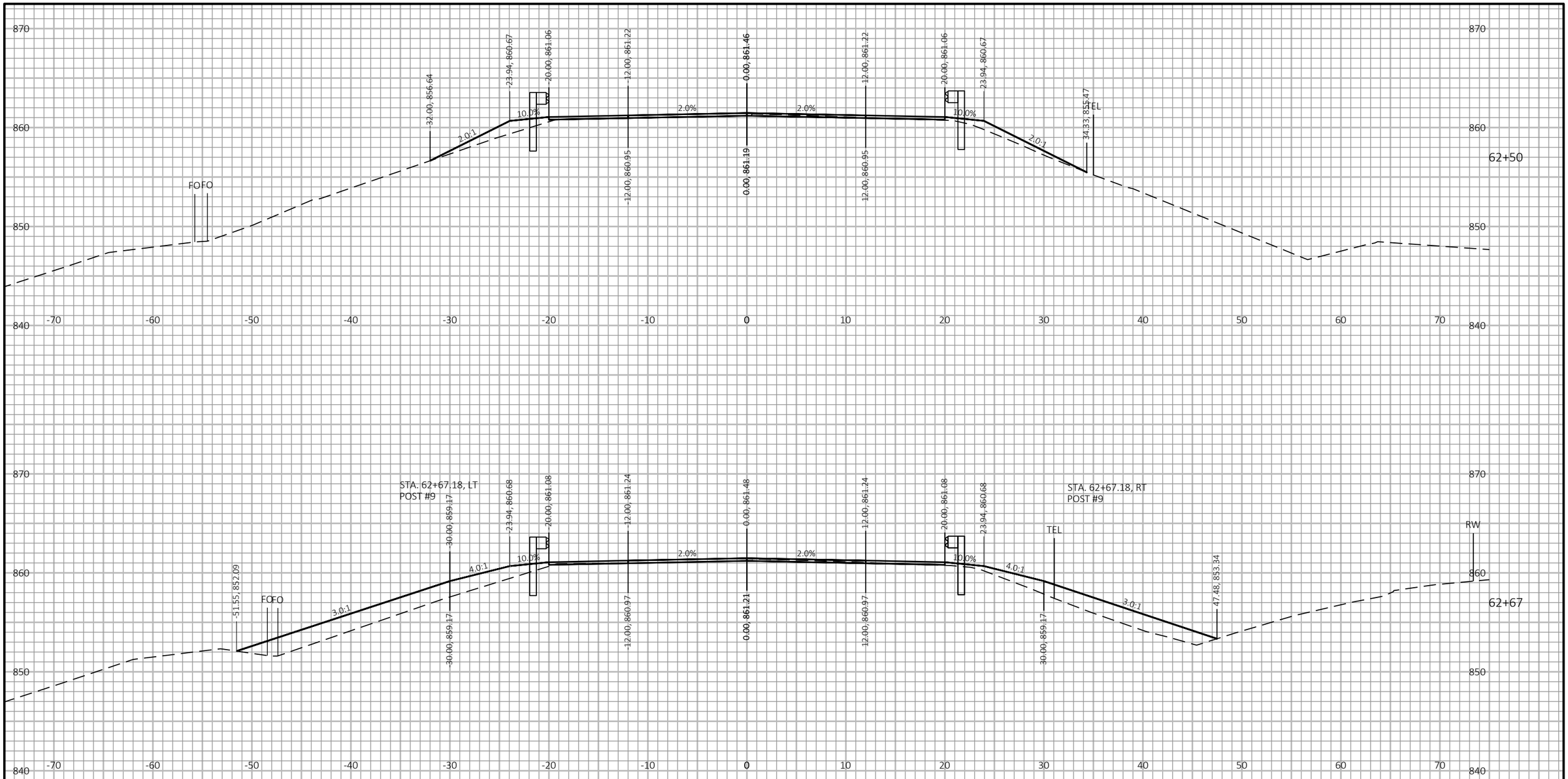
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: PROPOSED MGS (STA 57+92 - 64+36)	SHEET 151	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090209-XS.DWG
LAYOUT NAME - MGS06

PLOT DATE : 6/18/2021 12:07 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: PROPOSED MGS (STA 57+92 - 64+36)	SHEET 152	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090209-XS.DWG
LAYOUT NAME - MGS07

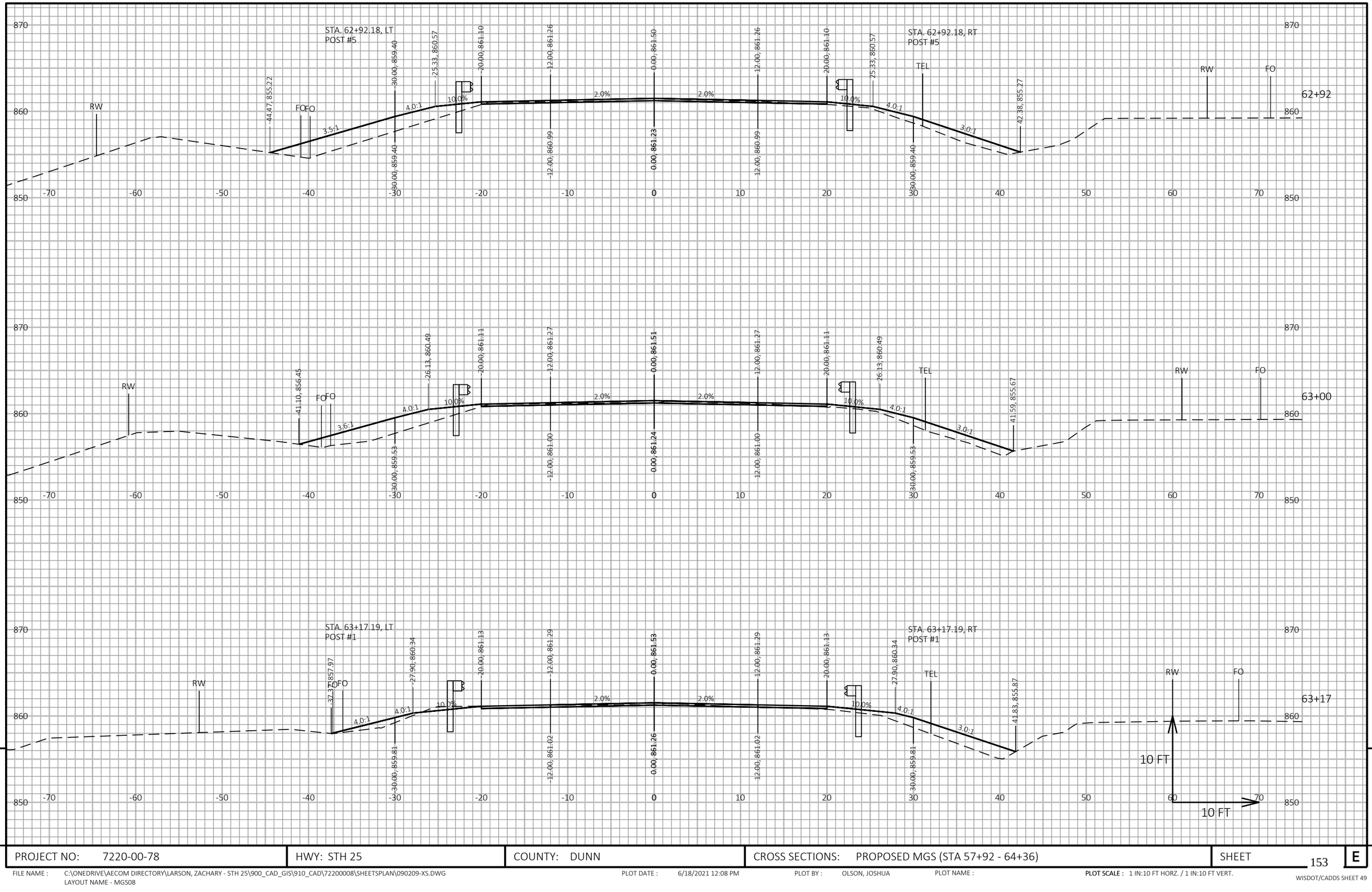
PLOT DATE : 6/18/2021 12:07 PM

PLOT BY : OLSON, JOSHUA

PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

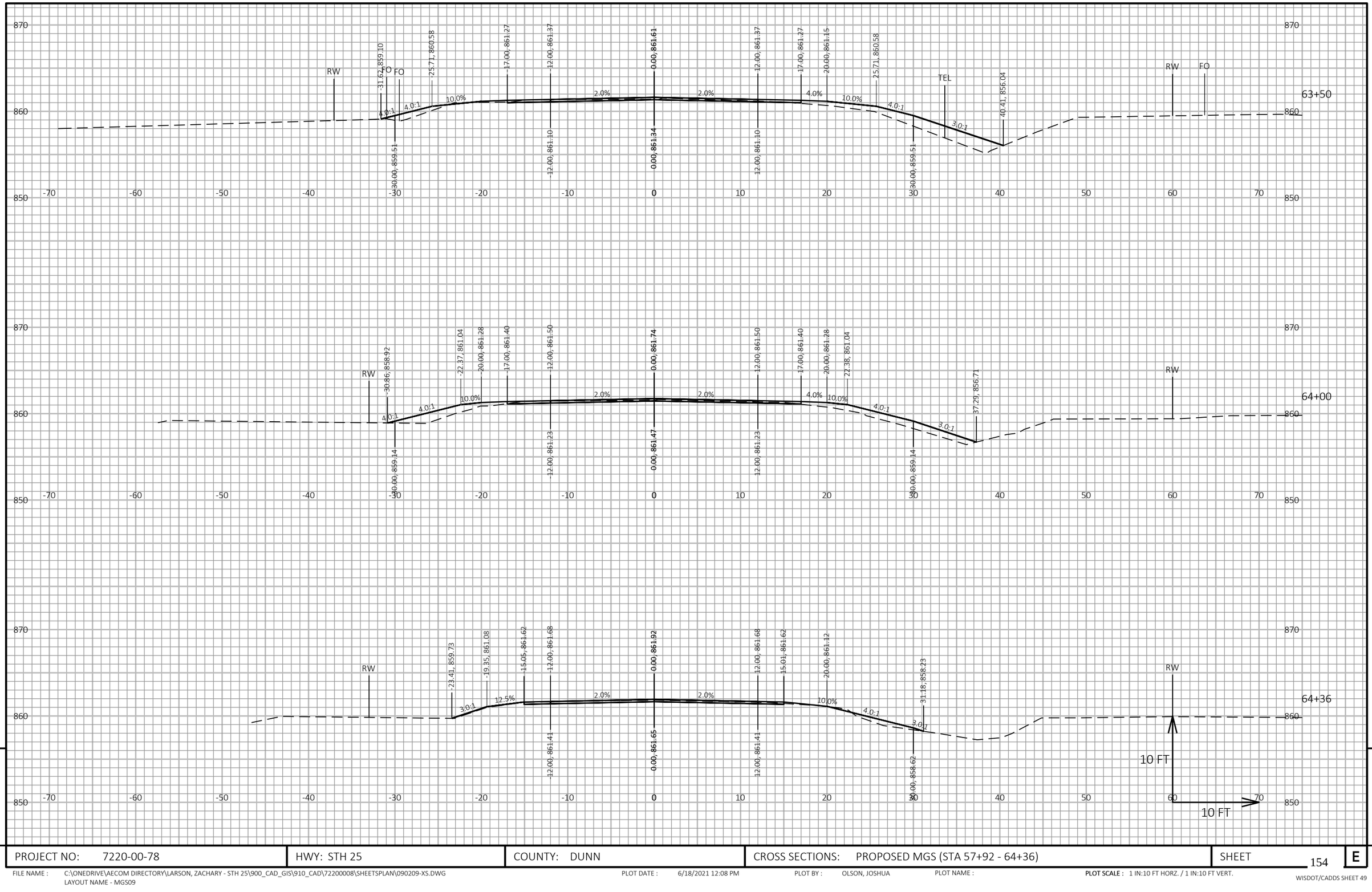


9 9

PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: PROPOSED MGS (STA 57+92 - 64+36)	SHEET 153	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090209-XS.DWG
LAYOUT NAME - MGS08

PLOT DATE : 6/18/2021 12:08 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: PROPOSED MGS (STA 57+92 - 64+36)	SHEET 154 E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090209-XS.DWG
LAYOUT NAME - MGS09

PLOT DATE : 6/18/2021 12:08 PM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

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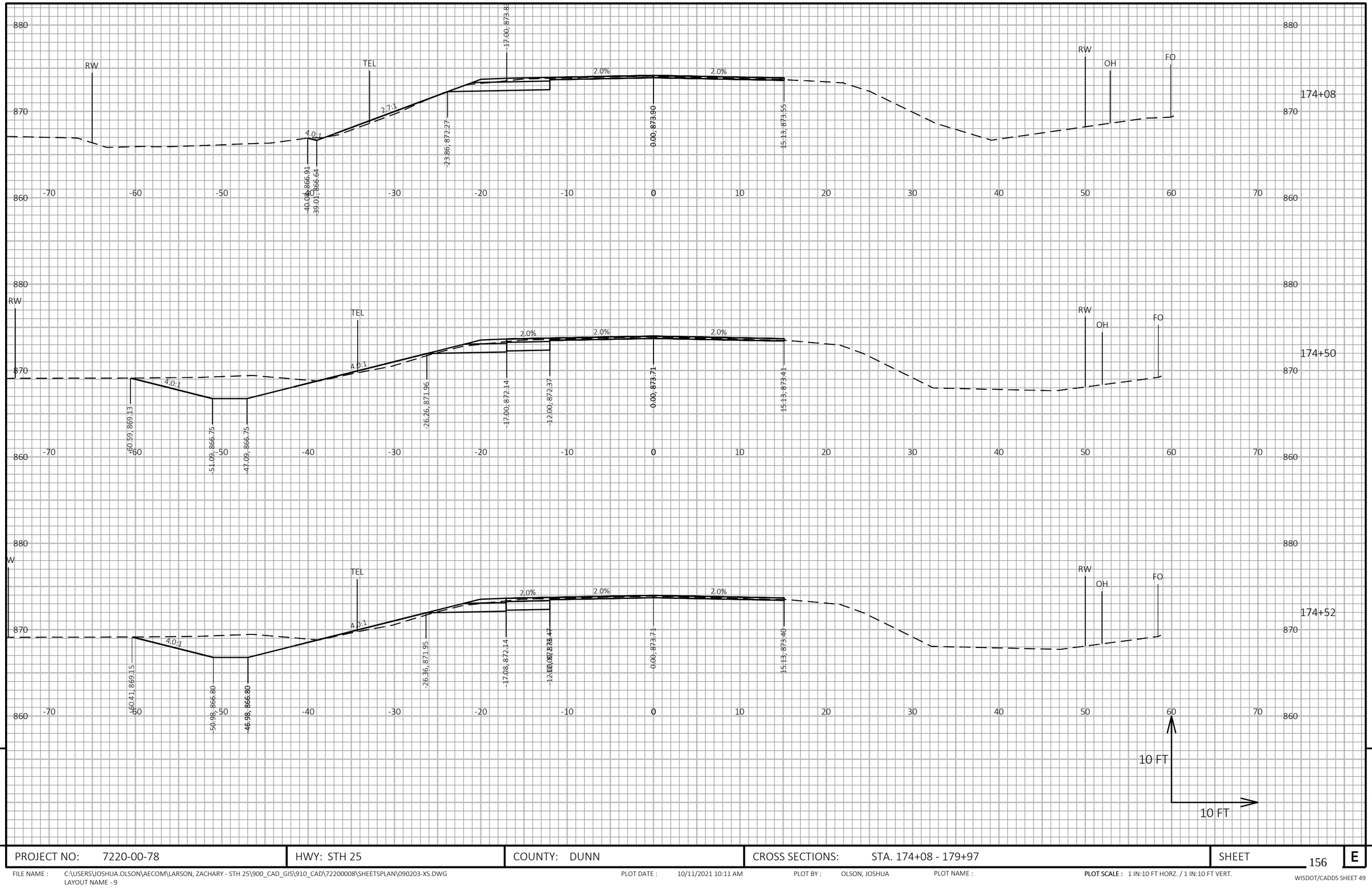
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: GRADING AT APRON ENDWALLS AT STA 75+17	SHEET 155	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 4

PLOT DATE : 10/21/2021 11:38 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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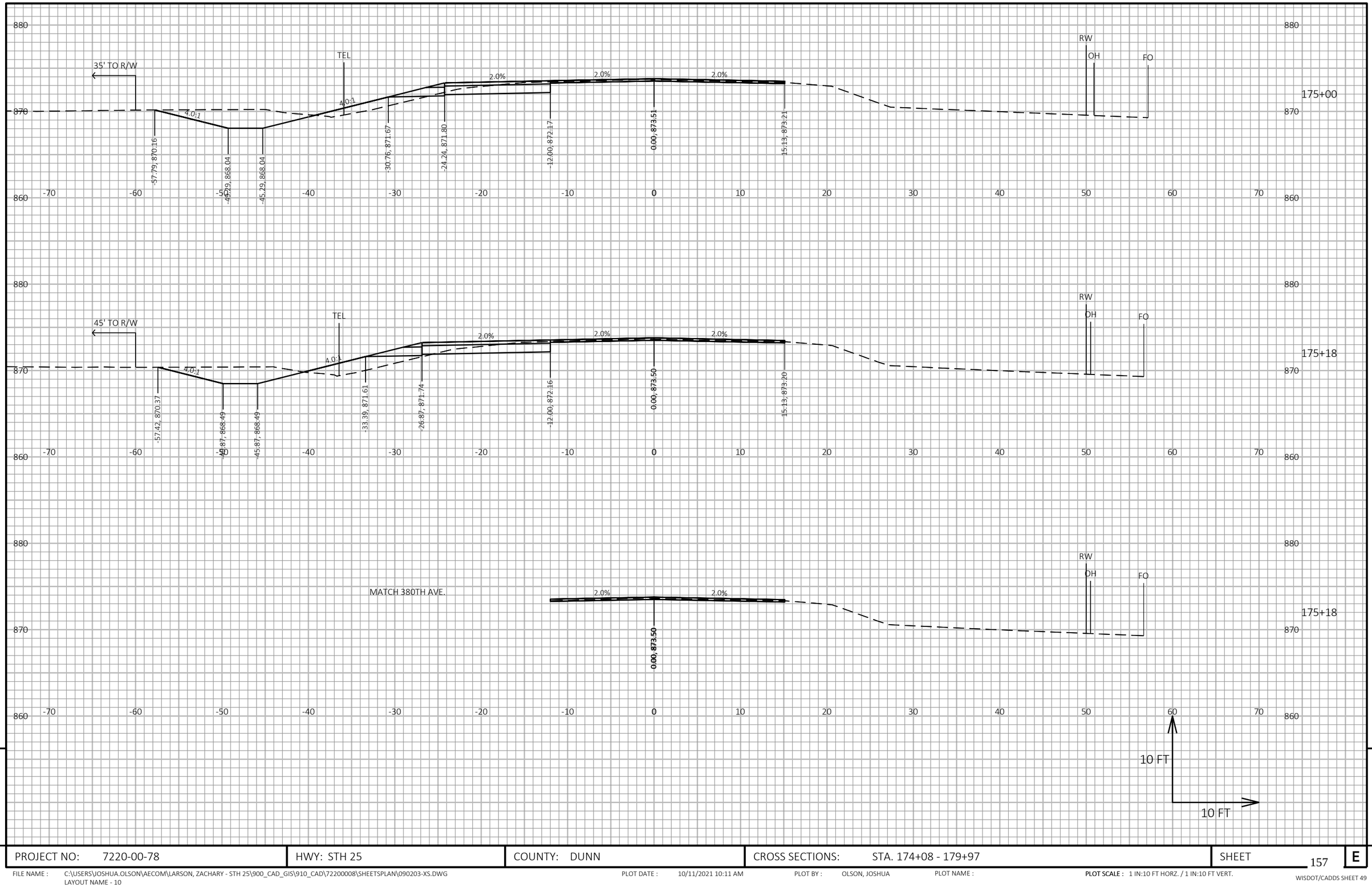
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA. 174+08 - 179+97	SHEET 156	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 9

PLOT DATE : 10/11/2021 10:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

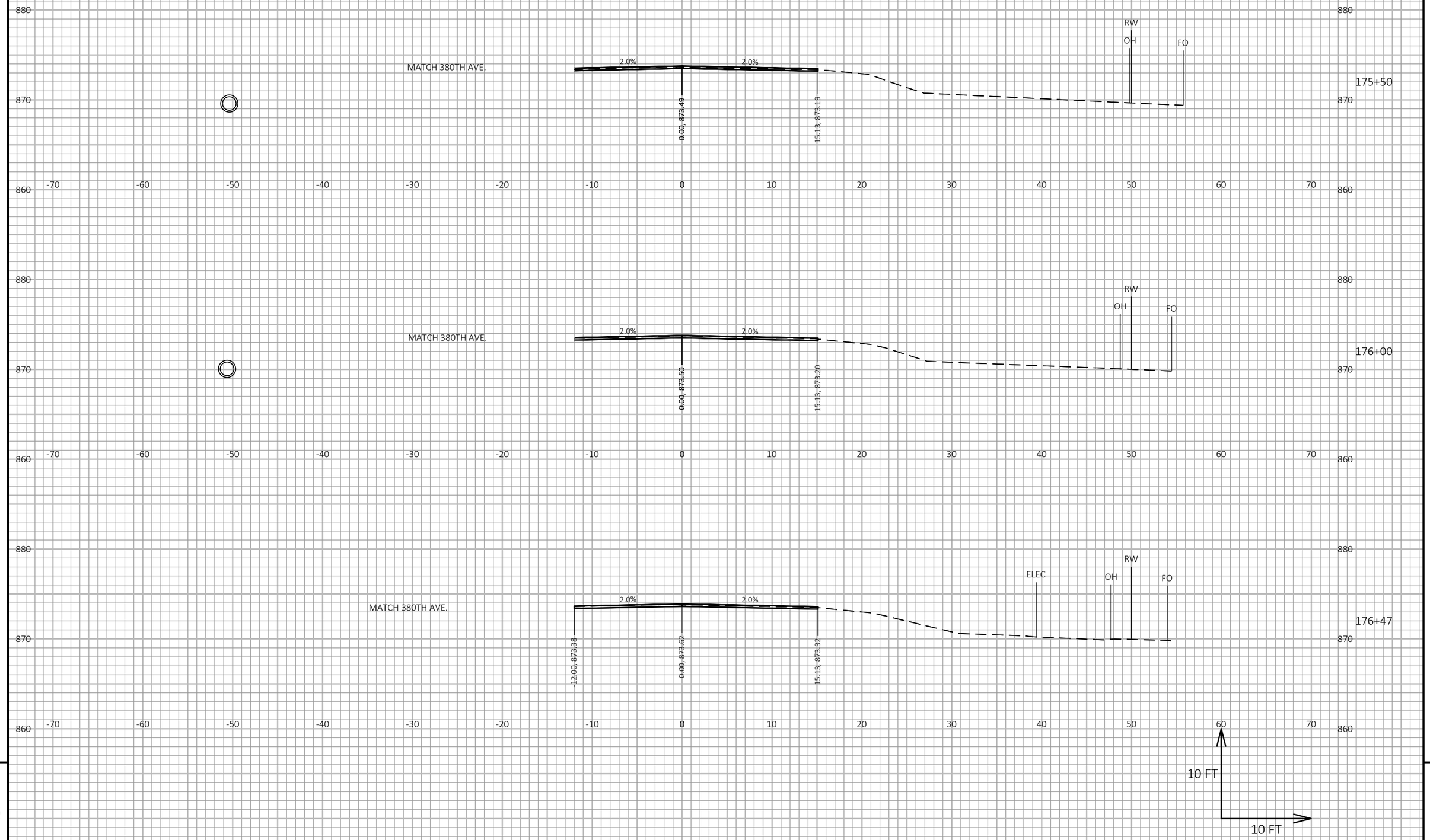


PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA. 174+08 - 179+97	SHEET 157 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 10/11/2021 10:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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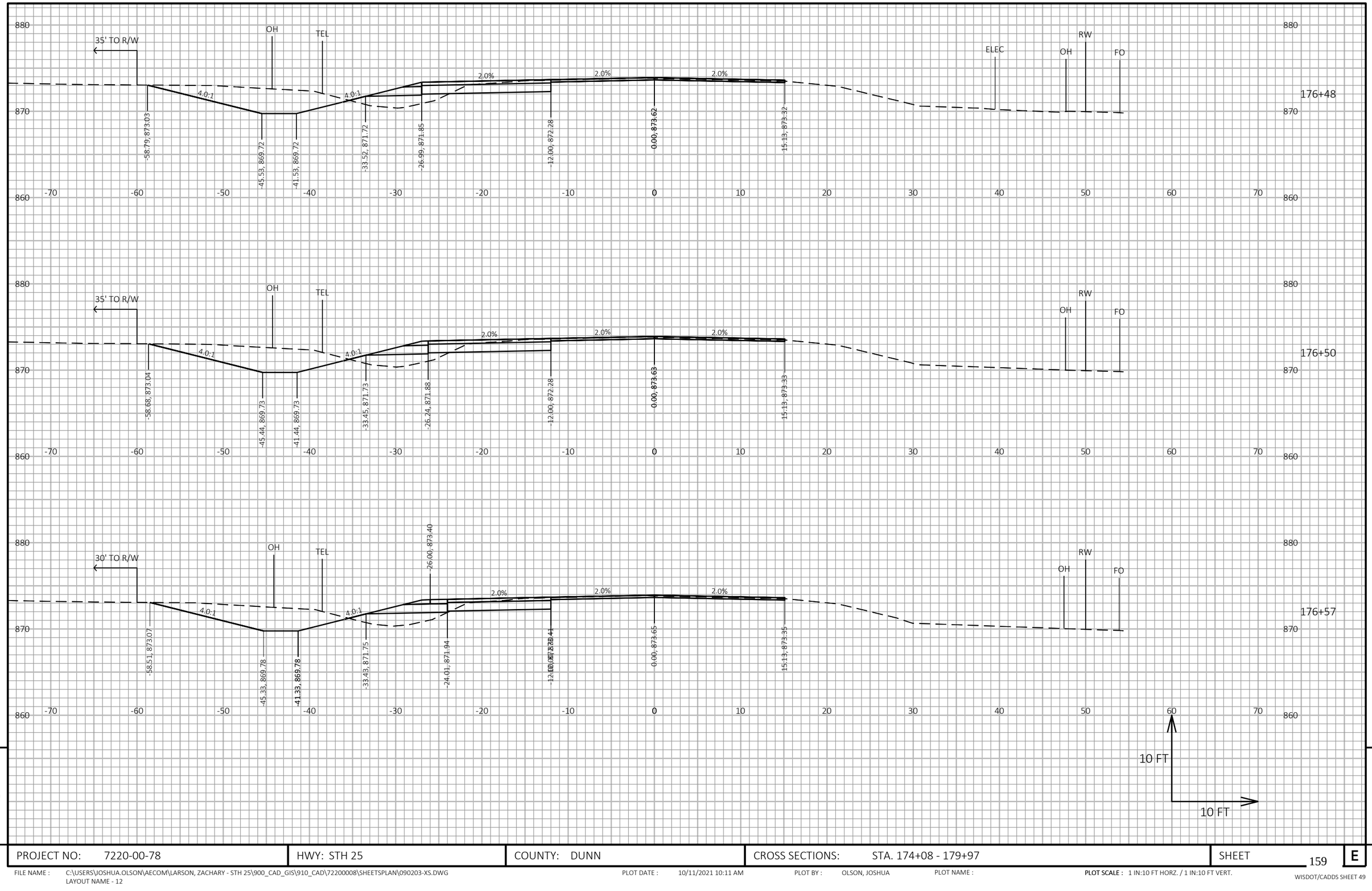
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA. 174+08 - 179+97	SHEET 158	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 10/11/2021 10:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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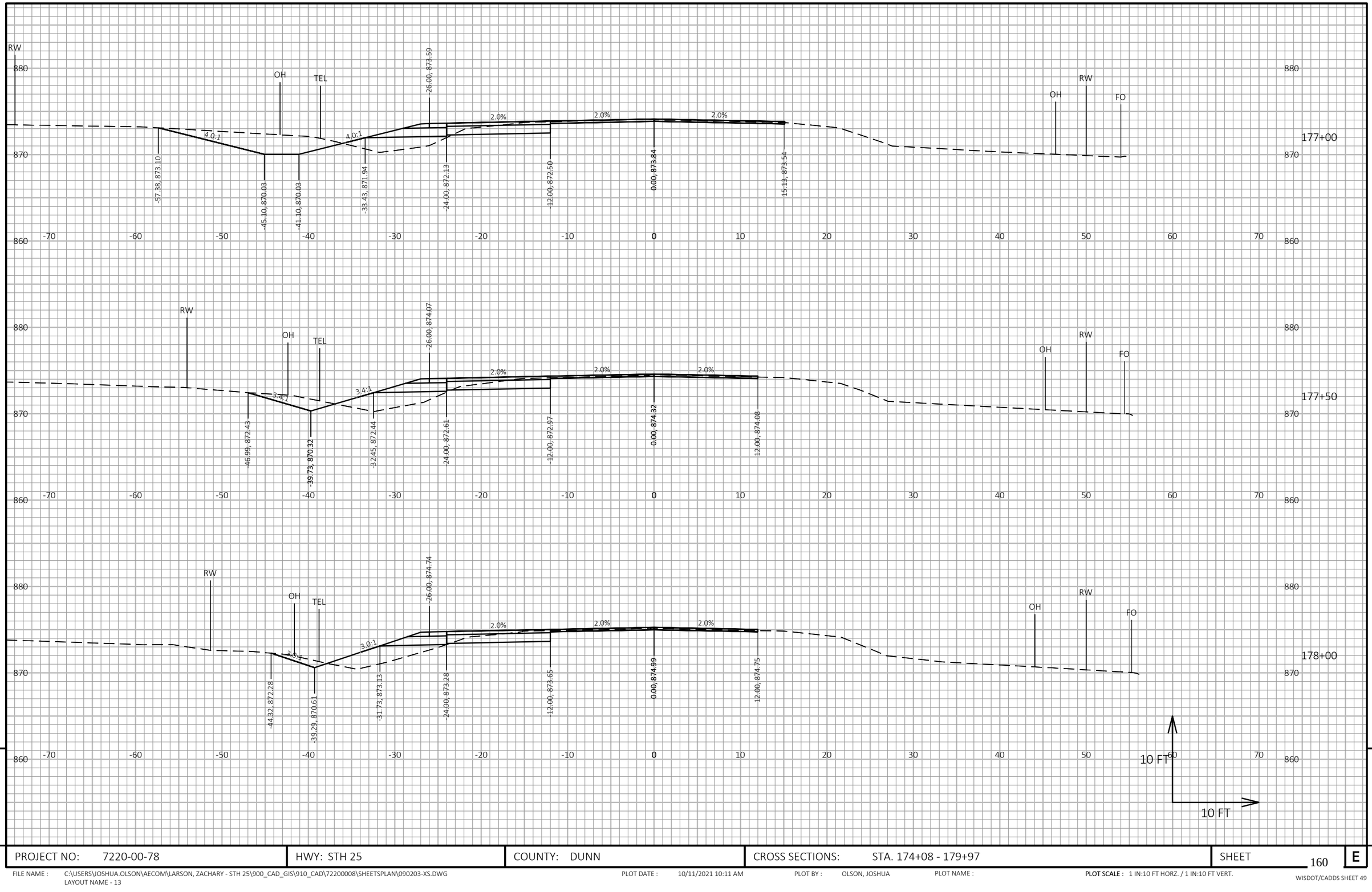
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA. 174+08 - 179+97	SHEET 159	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 12

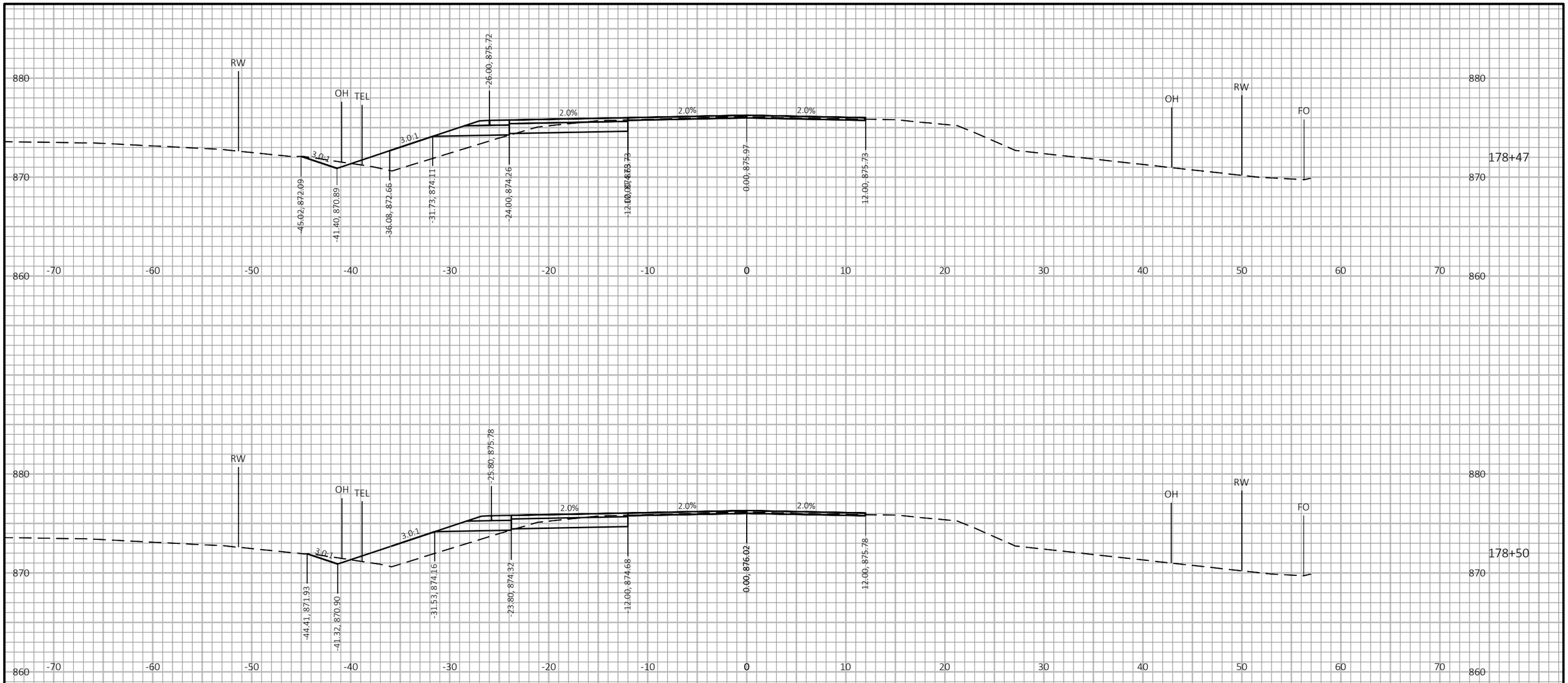
PLOT DATE : 10/11/2021 10:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA. 174+08 - 179+97	SHEET 160 E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 13
PLOT DATE : 10/11/2021 10:11 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



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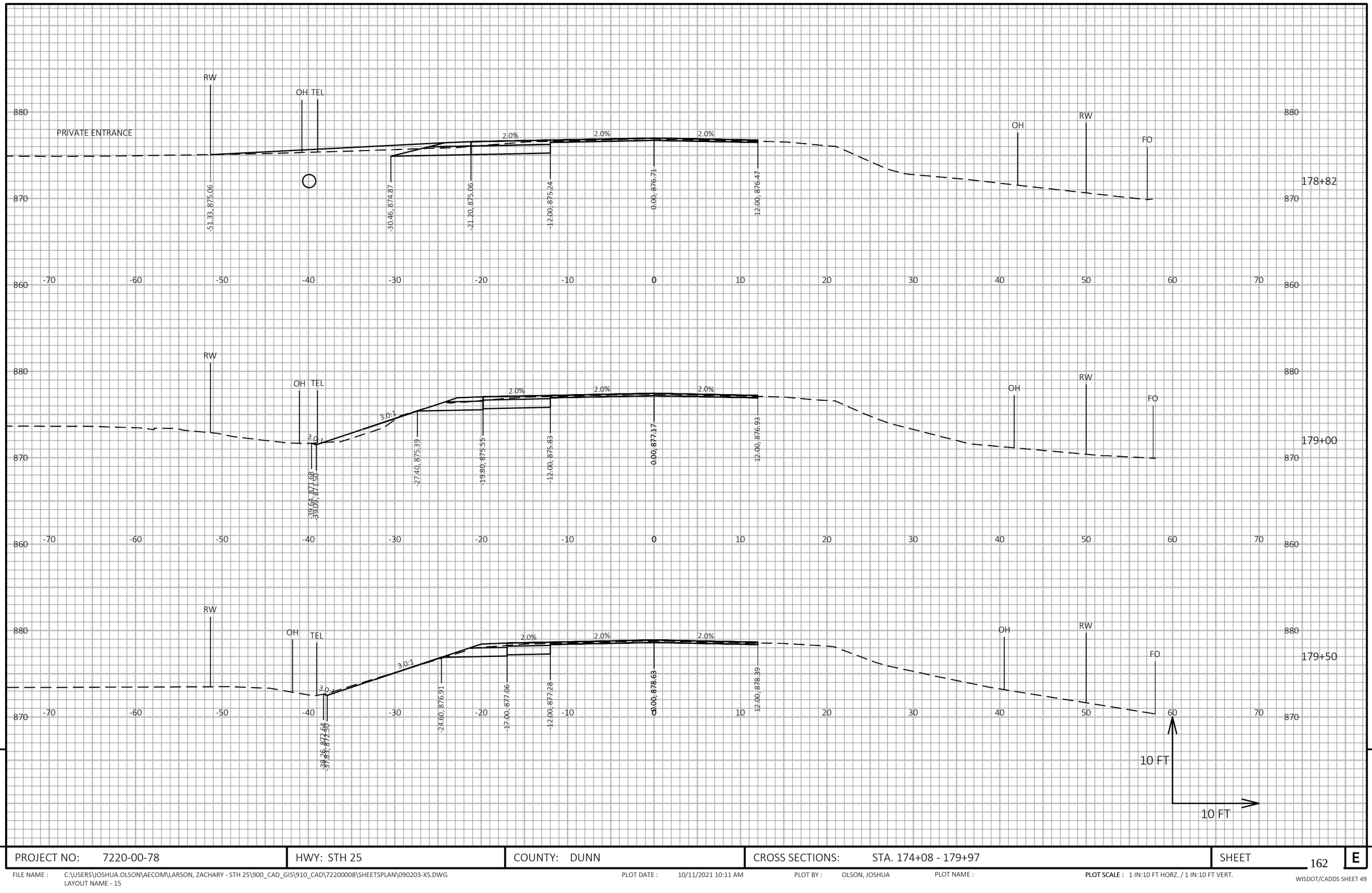
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA. 174+08 - 179+97	SHEET 161	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 10/11/2021 10:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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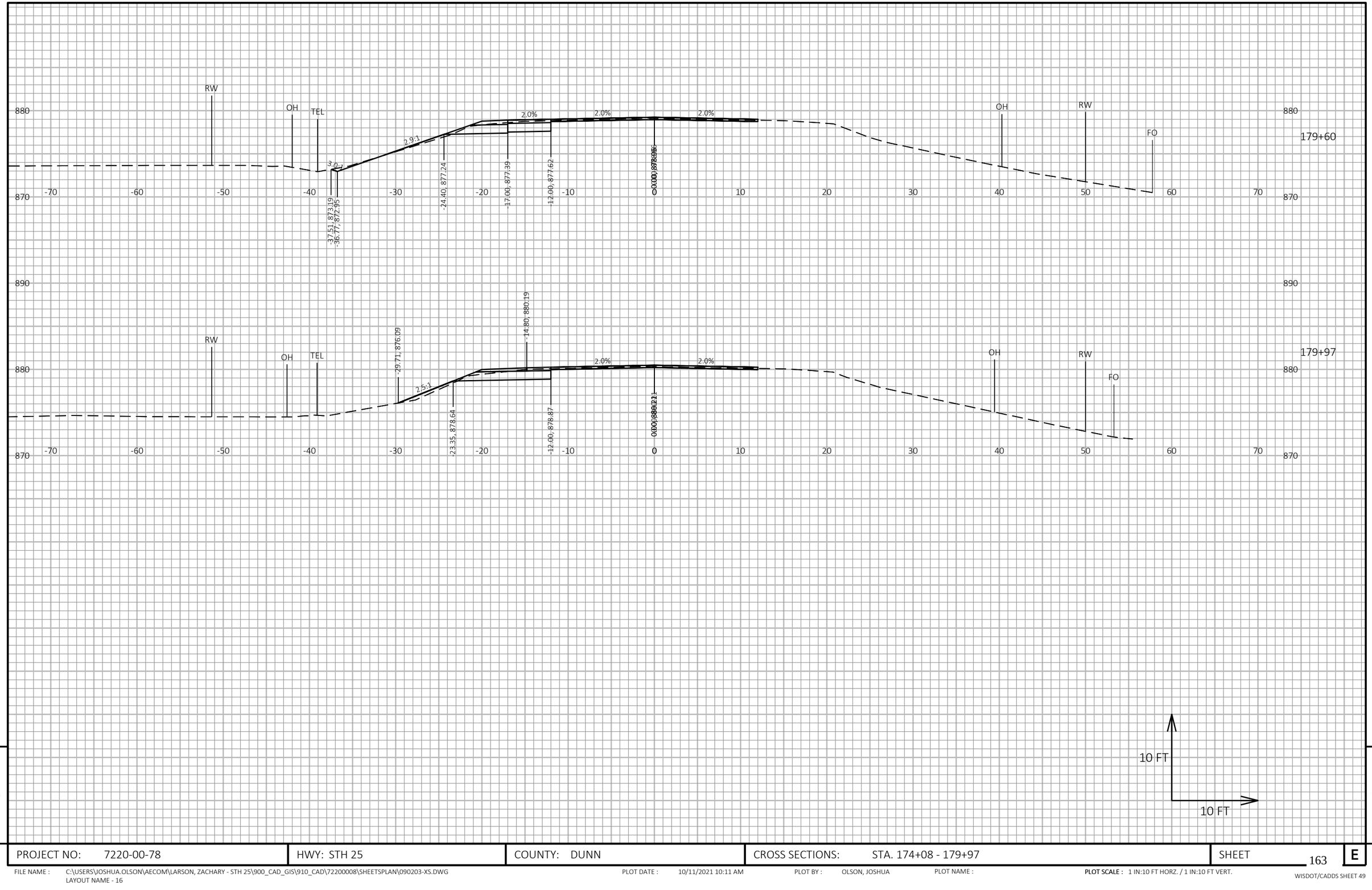
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA. 174+08 - 179+97	SHEET 162	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 15

PLOT DATE : 10/11/2021 10:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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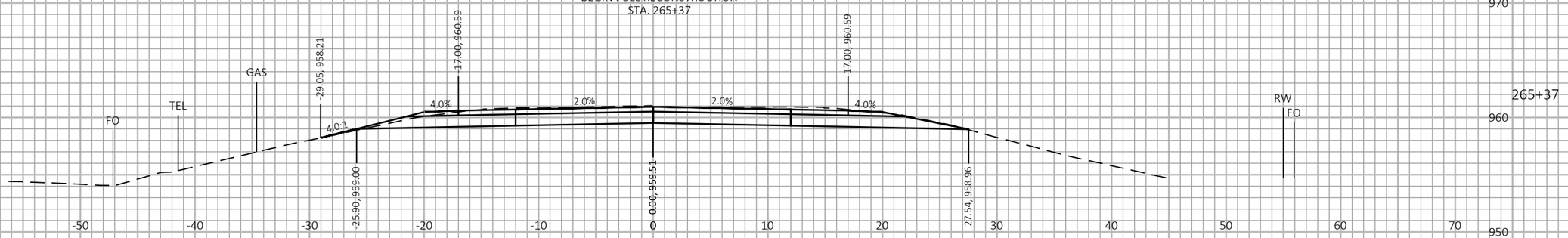
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA. 174+08 - 179+97	SHEET 163	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 16

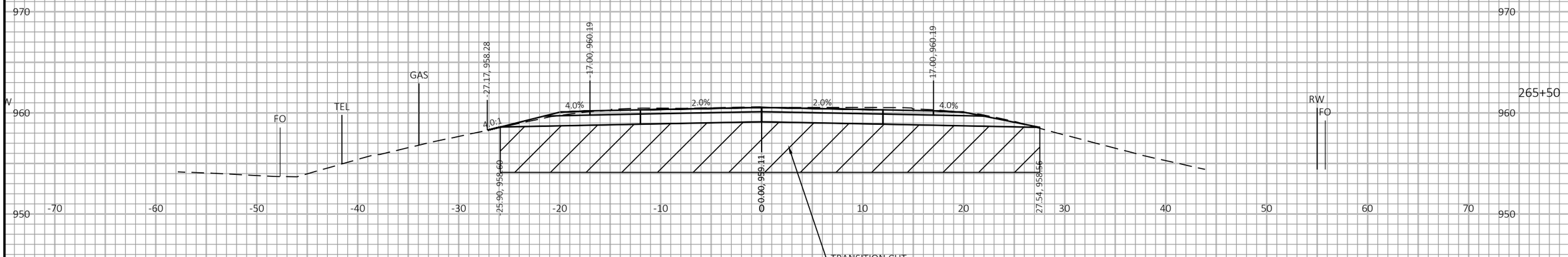
PLOT DATE : 10/11/2021 10:11 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

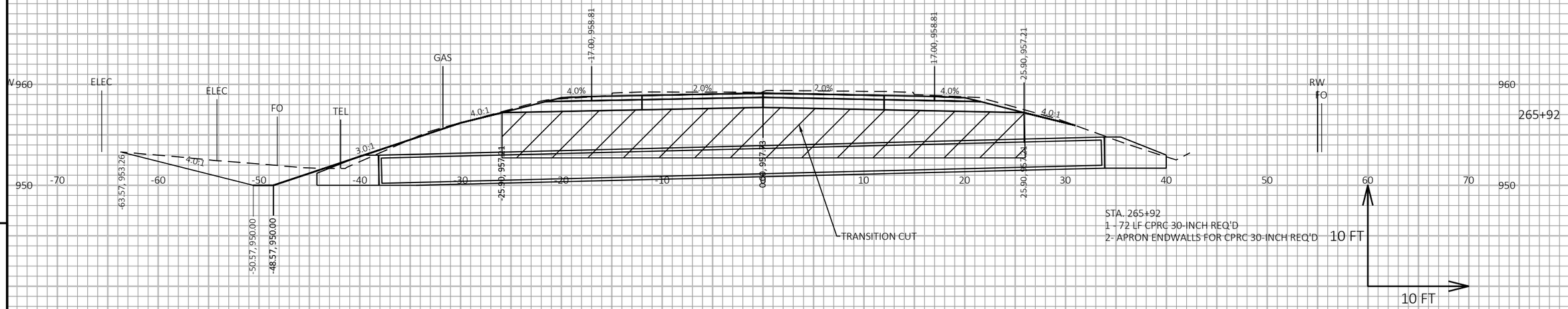
BEGIN FULL RECONSTRUCTION
STA. 265+37



265+37



265+50



265+92

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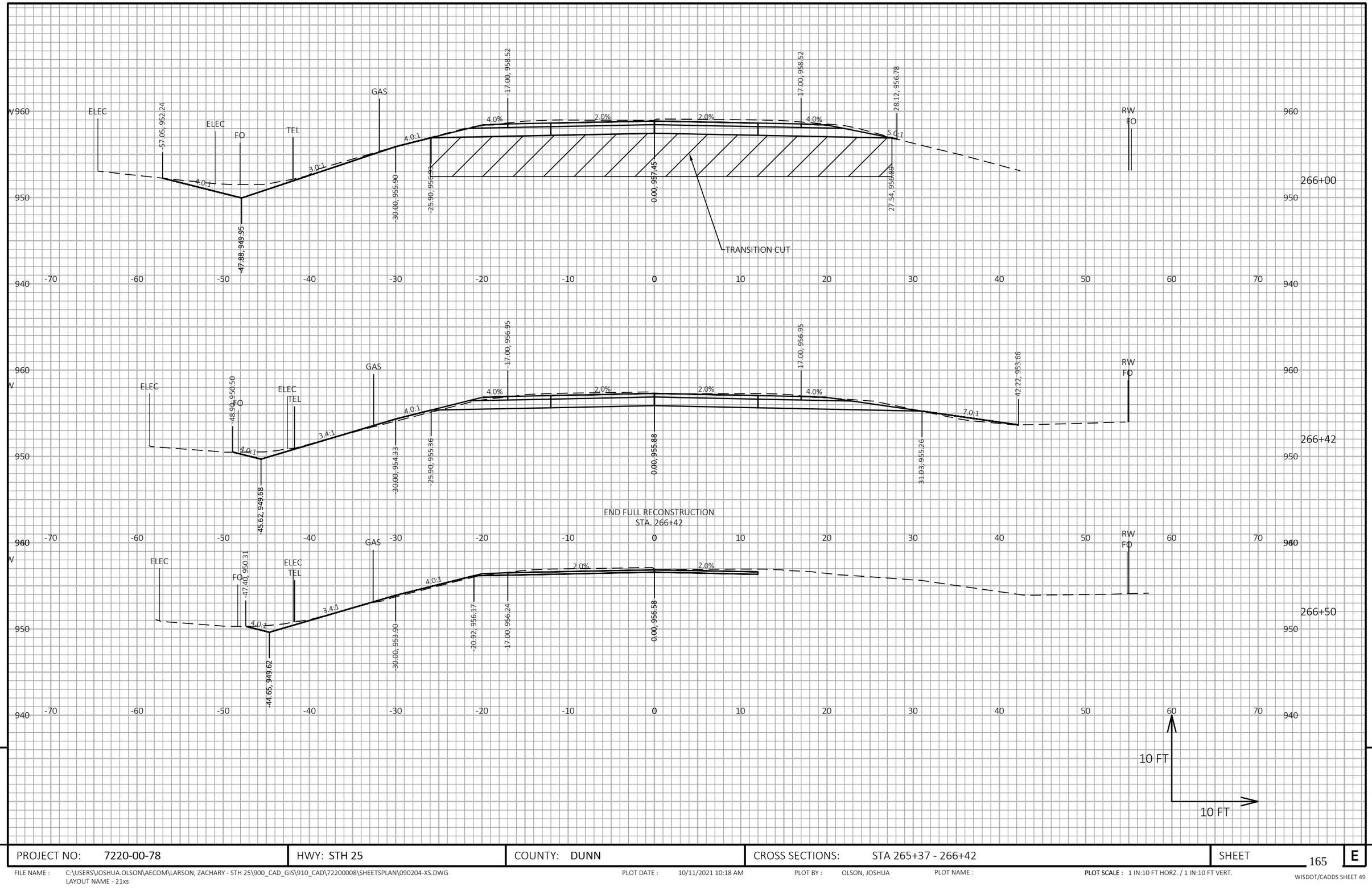
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA 265+37 - 266+42	SHEET 164	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 20xs

PLOT DATE : 10/11/2021 10:18 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

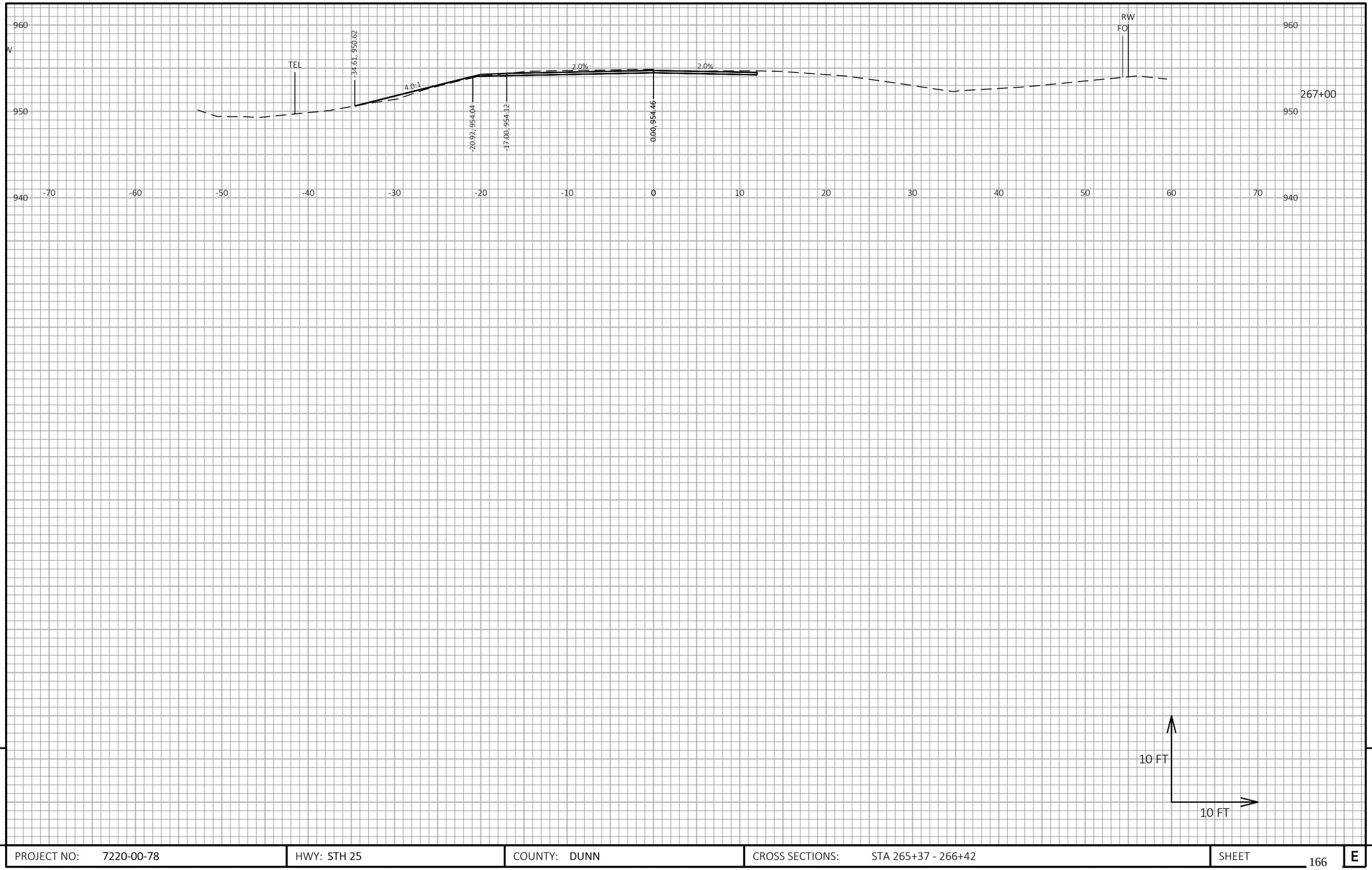


PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA 265+37 - 266+42	SHEET 165	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 21xs

PLOT DATE : 10/11/2021 10:18 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



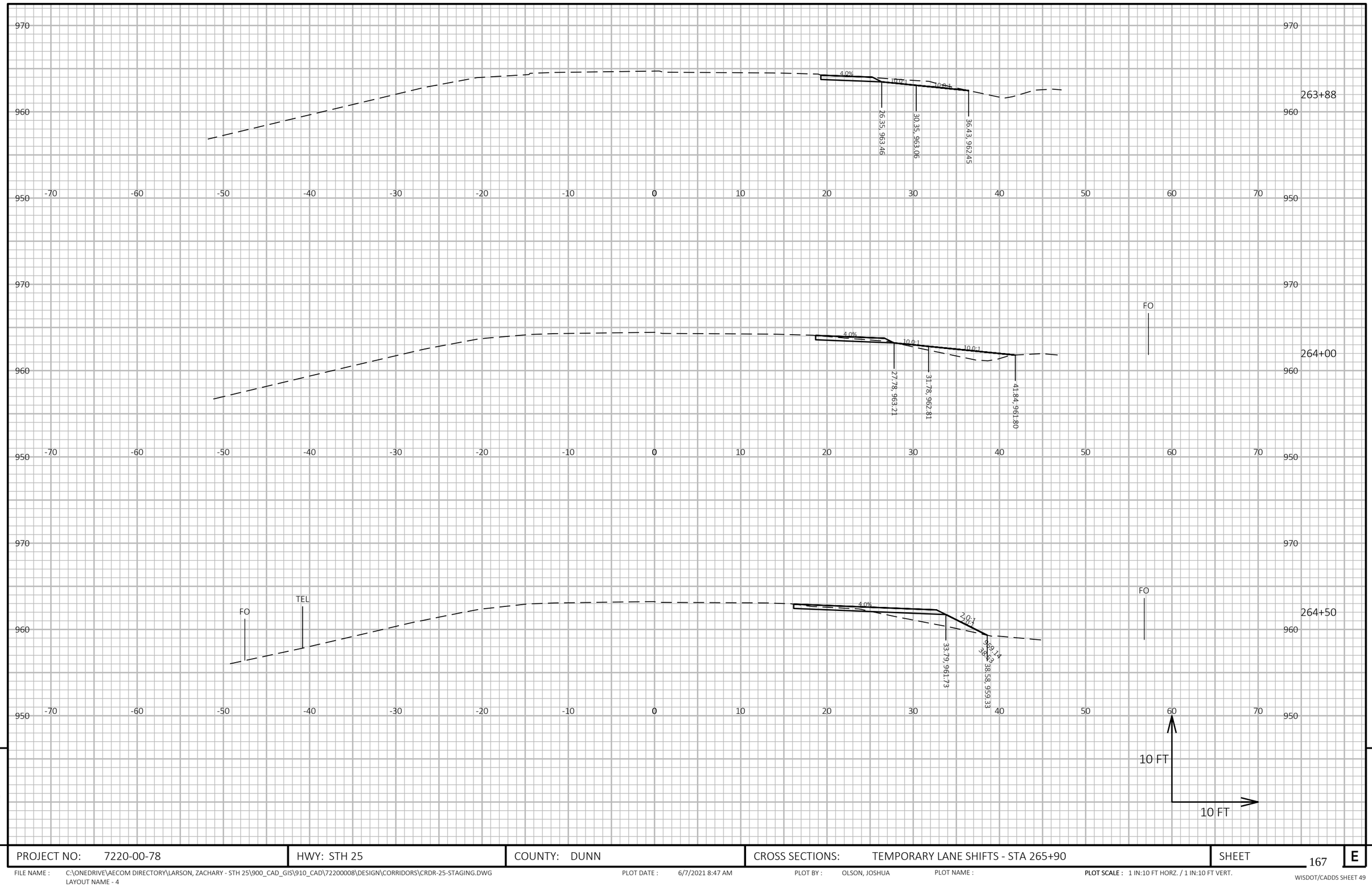
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: STA 265+37 - 266+42	SHEET 166	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090204-XS.DWG
LAYOUT NAME - 22xs

PLOT DATE : 10/11/2021 10:18 AM PLOT BY : OLSON, JOSHUA PLOT NAME :

PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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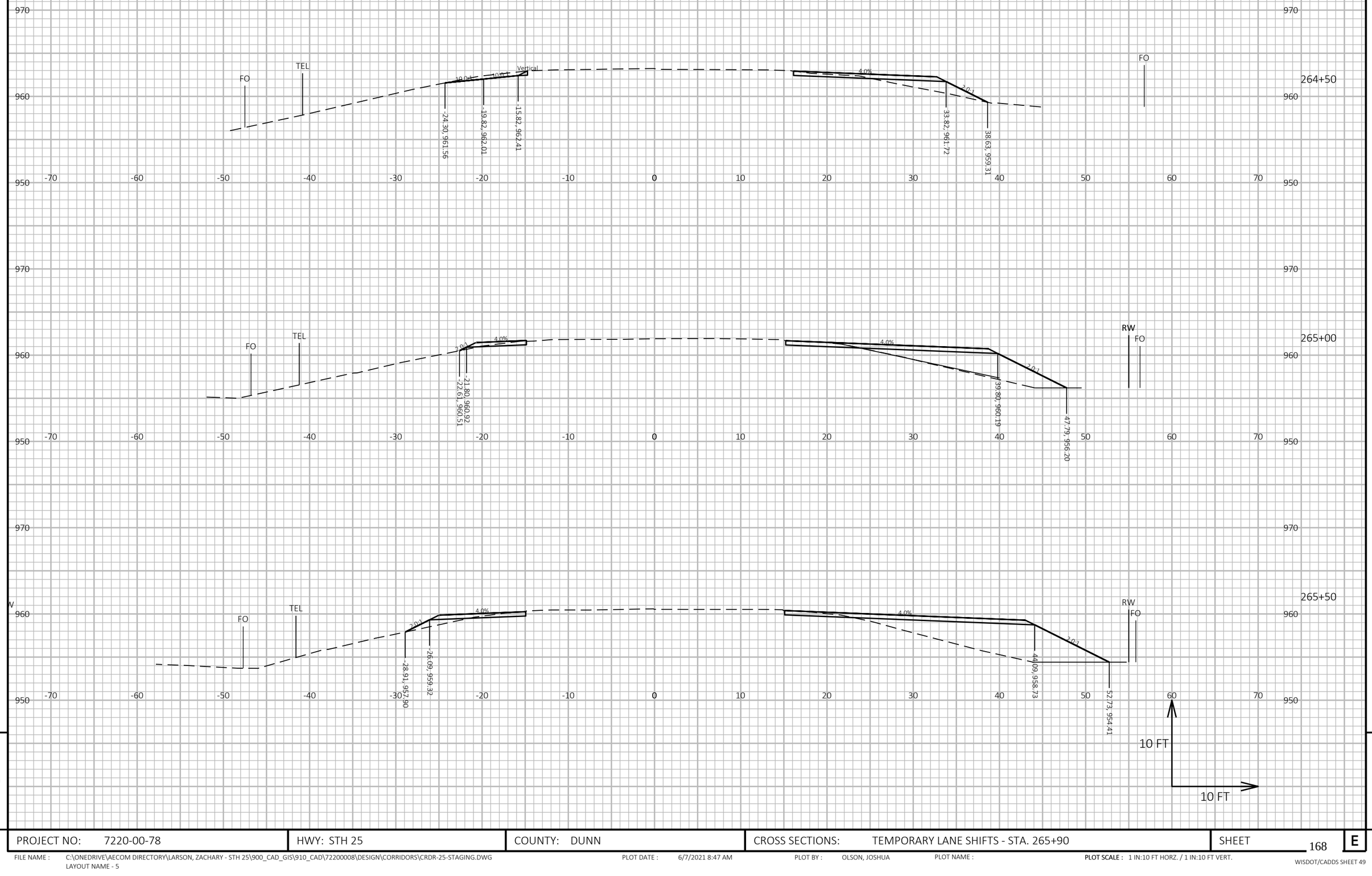
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: TEMPORARY LANE SHIFTS - STA 265+90	SHEET 167	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\DESIGN\CORRIDORS\CRDR-25-STAGING.DWG
LAYOUT NAME - 4

PLOT DATE : 6/7/2021 8:47 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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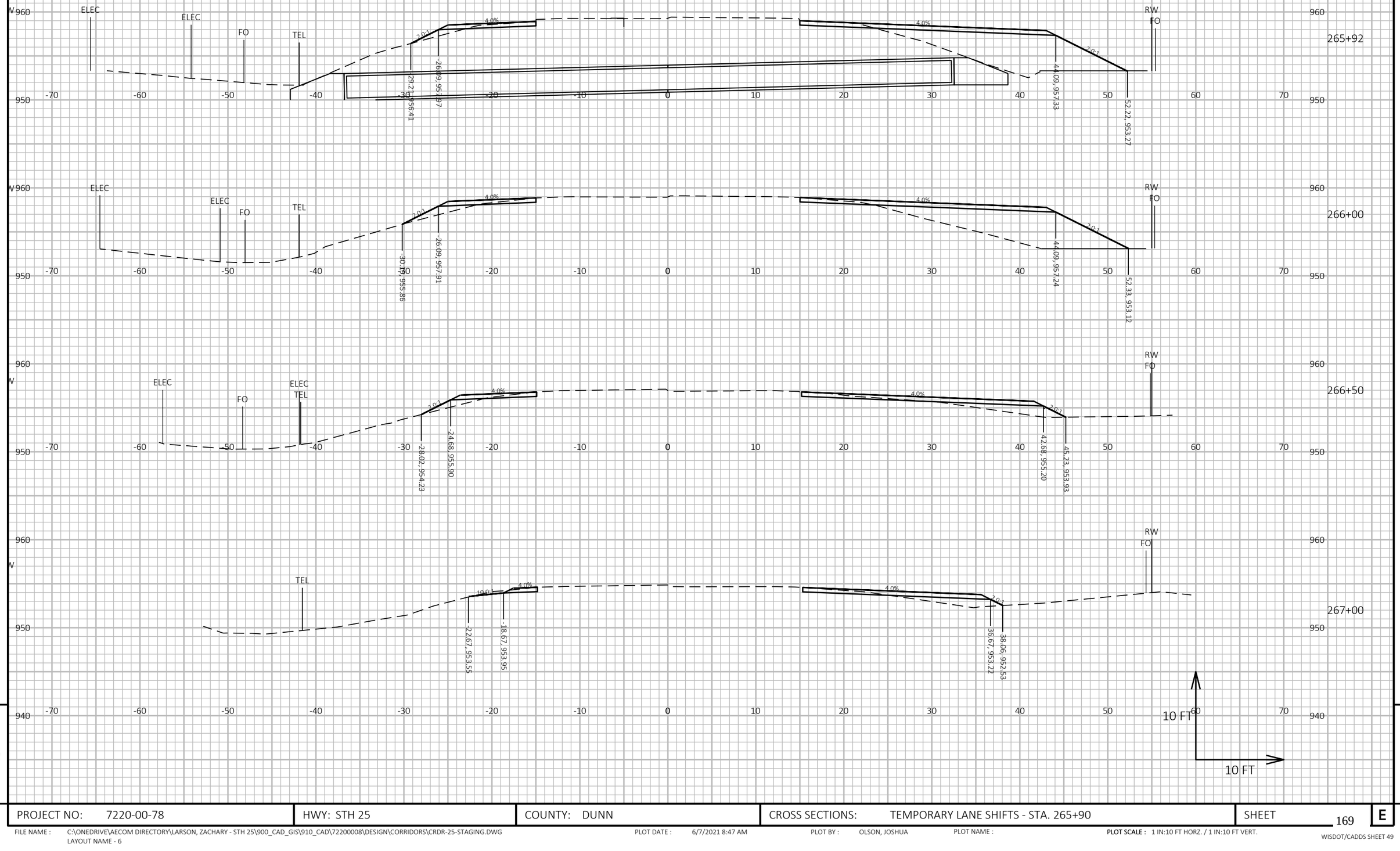
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: TEMPORARY LANE SHIFTS - STA. 265+90	SHEET 168	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\DESIGN\CORRIDORS\CRDR-25-STAGING.DWG
LAYOUT NAME - 5

PLOT DATE : 6/7/2021 8:47 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

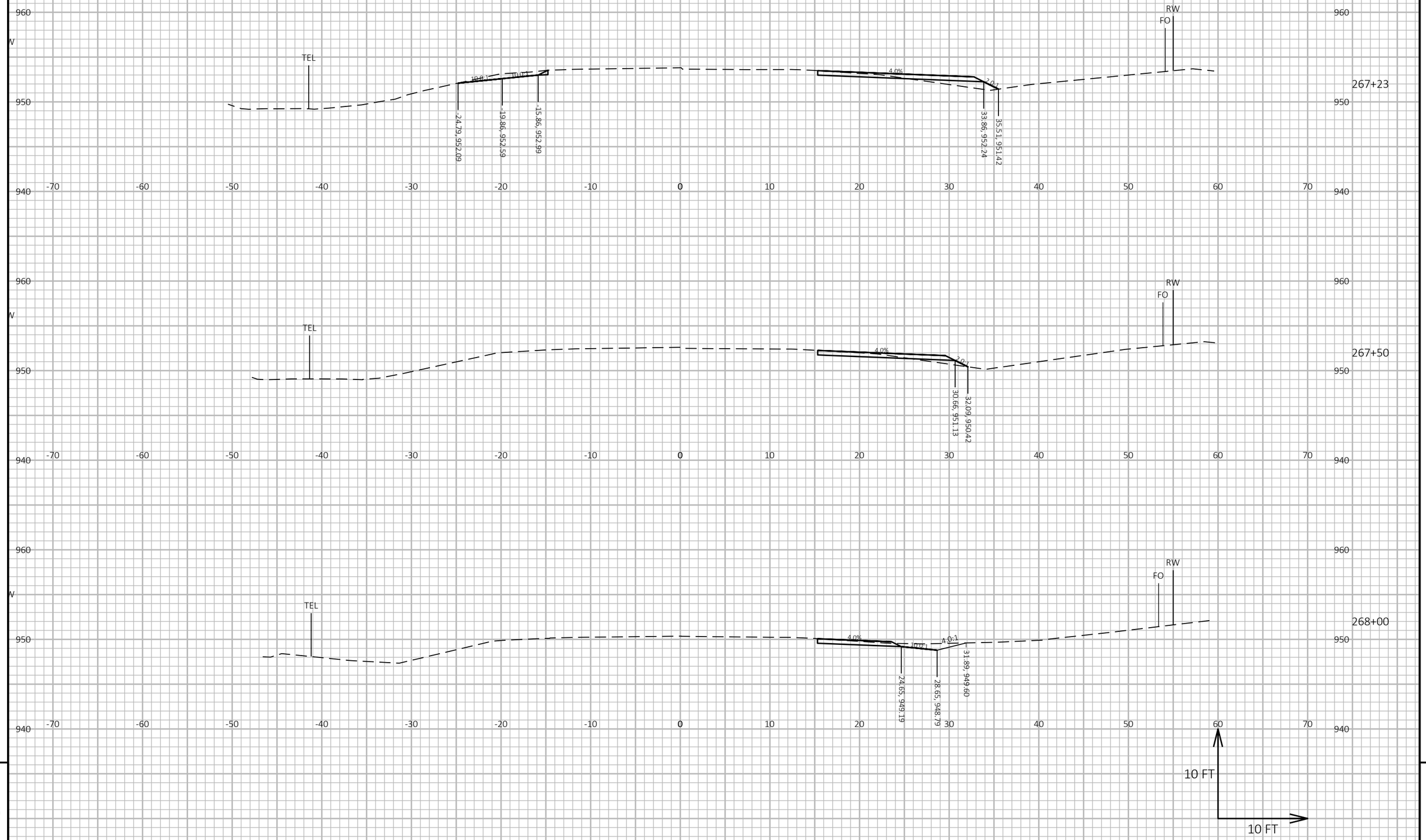


PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: TEMPORARY LANE SHIFTS - STA. 265+90	SHEET 169	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\DESIGN\CORRIDORS\CRDR-25-STAGING.DWG
LAYOUT NAME - 6

PLOT DATE : 6/7/2021 8:47 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

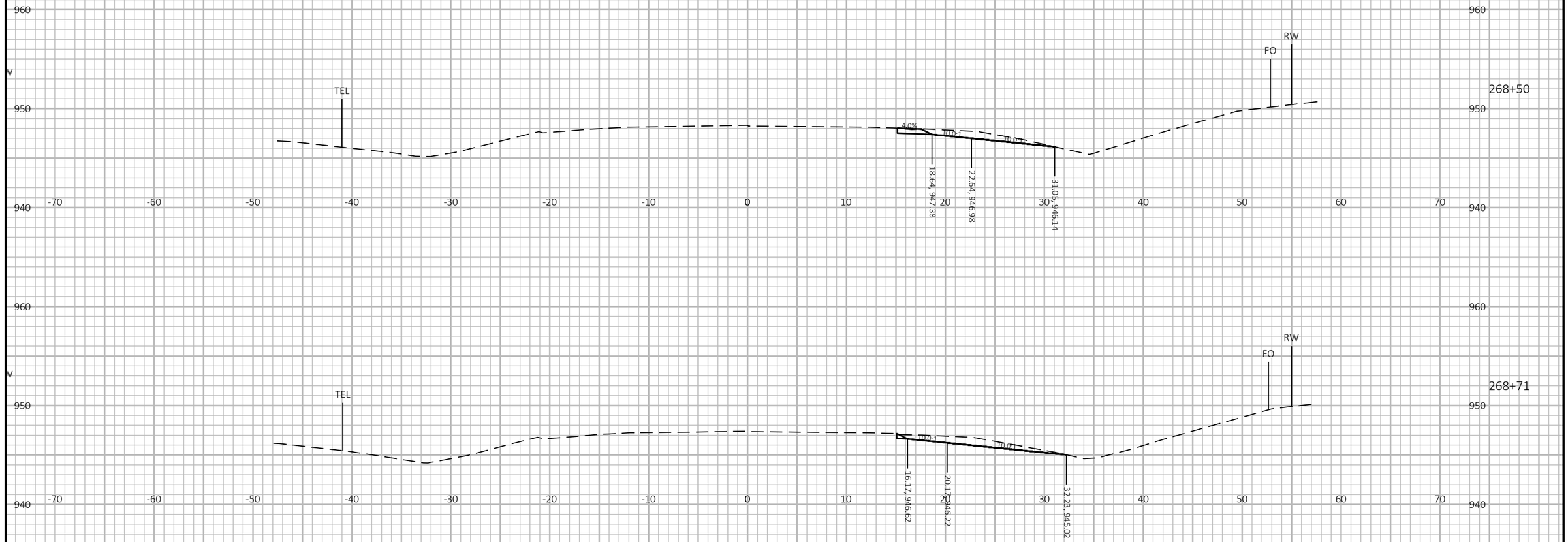


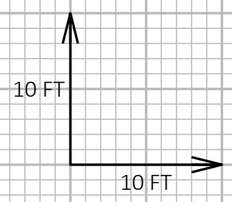
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: TEMPORARY LANE SHIFTS - STA. 265+90	SHEET 170	E

FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\DESIGN\CORRIDORS\CRDR-25-STAGING.DWG
LAYOUT NAME - 7

PLOT DATE : 6/7/2021 8:47 AM PLOT BY : OLSON, JOSHUA PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49





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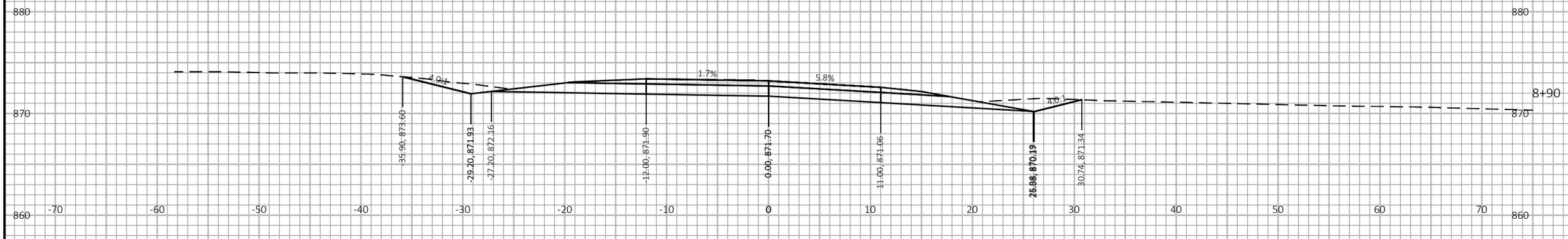
PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: TEMPORARY LANE SHIFTS - STA. 265+90	SHEET 171	E

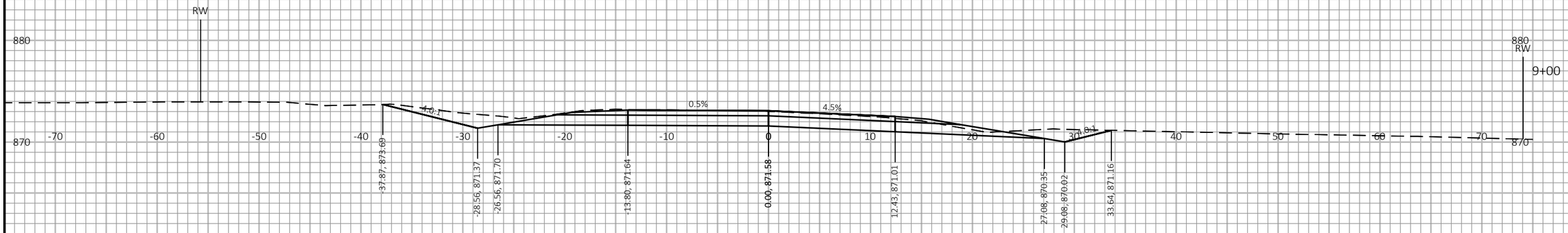
FILE NAME : C:\ONEDRIVE\AECOM DIRECTORY\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\DESIGN\CORRIDORS\CRDR-25-STAGING.DWG
LAYOUT NAME - 8

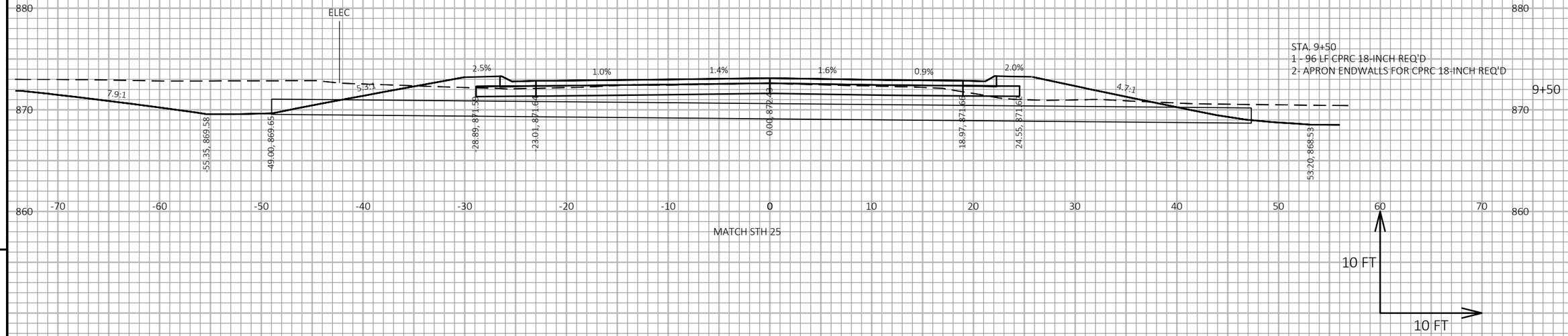
PLOT DATE : 6/7/2021 8:47 AM PLOT BY : OLSON, JOSHUA PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

BEGIN FULL RECONSTRUCTION
STA 8+90







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PROJECT NO: 7220-00-78	HWY: STH 25	COUNTY: DUNN	CROSS SECTIONS: 380TH AVE	SHEET 172	E

FILE NAME : C:\USERS\JOSHUA.OLSON\AECOM\LARSON, ZACHARY - STH 25\900_CAD_GIS\910_CAD\72200008\SHEETSPLAN\090203-XS.DWG
LAYOUT NAME - 30
PLOT DATE : 10/11/2021 10:11 AM
PLOT BY : OLSON, JOSHUA
PLOT NAME :
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

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