EAU

NOVEMBER 2023

PROJECT ID: 8944-04-71

WITH: N/A

COUNTY: ST CROIX

ORDER OF SHEETS

TOTAL SHEETS = 158

N

46

DESIGN DESIGNATION

A.A.D.T.	2024	=	12,938
A.A.D.T.	2044	=	18,852
D.H.V.		=	N/A
D.D.		=	60/40
T.		=	4.5%
DESIGN SPEED		=	15 MPH - 50 MPH
ESALS		=	1,400,000

CONVENTIONAL SYMBOLS

PLAN

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

PROFILE

- GRADE LINE
- ORIGINAL GROUND
- MARSH OR ROCK PROFILE (To be noted as such) (ROCK)
- SPECIAL DITCH (LABEL)
- GRADE ELEVATION (955.36)
- CULVERT (Profile View)

UTILITIES

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HUDSON - NEW RICHMOND

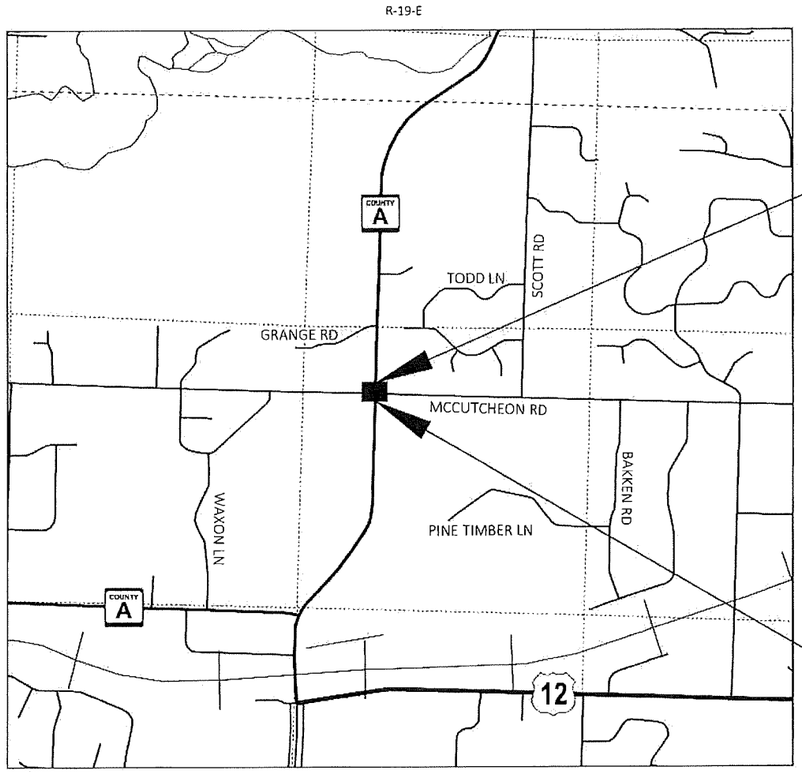
MCCUTCHEN ROAD INTERSECTION

CTH A
ST CROIX COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
8944-04-71	WISC 2024044	1

STATE PROJECT NUMBER

8944-04-71



END PROJECT
STA 61'NB'+09.50
Y=353304.88
X=532106.95

BEGIN PROJECT
STA 46'NB'+81.51
Y=351884.33
X=532115.15

R-19-E
LAYOUT

SCALE 0 0.5 MI

TOTAL NET LENGTH OF CENTERLINE = 0.270 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), ST CROIX 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 18.

ACCEPTED FOR
ST CROIX COUNTY
DATE: 7/17/2023 (Signature and Title of Official)

ORIGINAL PLANS PREPARED BY
JT ENGINEERING, INC

WISCONSIN JEDIDIAH J. MUNROE PE-39156 MADISON, WI PROFESSIONAL ENGINEER

DATE: 7/12/2023 (Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	JT ENGINEERING, INC.
Designer	JT ENGINEERING, INC.
Project Manager	MATTHEW BERG
Regional Examiner	TOU YANG
Regional Supervisor	TYLER RONGSTAD

APPROVED FOR THE DEPARTMENT
DATE: 7/18/2023 (Signature)

E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\010101-TI.DWG

PLOT DATE : 7/11/2023 2:05 PM PLOT BY : JACI BRADY PLOT NAME :

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 = 6.530 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 5.481 ACRES

ABBREVIATIONS

AADT	AVERAGE ANNUAL DAILY TRAFFIC
ASPH	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
CE	COMMERCIAL ENTRANCE
CP	CULVERT PIPE
CPCS	CULVERT PIPE CORRUGATED STEEL
CPRC	CULVERT PIPE REINFORCED CONCRETE
DHV	DESIGN HOURLY VOLUME
D	DEGREE OF CURVE
DIA	DIAMETER
E	EAST
EAT	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
EL	ELEVATION
ESALS	EQUIVALENT SINGLE AXLE LOADS
EOP	EDGE OF PAVEMENT
EXIST	EXISTING
FE	FIELD ENTRANCE
G	GARAGE
H	HOUSE
HES	HIGH EARLY STRENGTH
IP	IRON PIN
L	LENGTH (OF CURVE)
LHF	LEFT HAND FORWARD
LC	LONG CHORD
NOM	NOMINAL
N	NORTH
PCC	POINT OF COMPOUND CURVATURE
PE	PRIVATE ENTRANCE
PL	PROPERTY LINE
RCPA	REINFORCED CONCRETE PIPE ARCH
RHF	RIGHT HAND FORWARD
RD	ROAD
RT	RIGHT
R/W	RIGHT OF WAY
SDD	STANDARD DETAIL DRAWING
SHR	SHRINKAGE
T	PERCENT TRUCKS
TEL	TELEPHONE
TN	TOWN
TC	TOP OF CURB
TRANS	TRANSITION
VOL	VOLUME
W	WEST
V	DESIGN SPEED

SECTION 2 ORDER OF SHEETS

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE ARE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGER'S HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.

A VERTICAL SAWCUT SHALL BE MADE THROUGH EXISTING DRIVEWAYS, SIDEROADS, AND MAINLINE PAVEMENT AT FULL DEPTH REMOVAL LIMITS.

RESHAPE, SEED, AND FERTILIZE ANY PREVIOUSLY GRASSED AREAS THAT ARE DISTURBED BY OPERATIONS OUTSIDE THE NORMAL CONSTRUCTION LIMITS.

ALL CURB AND GUTTER RADII, PAVEMENT DIMENSIONS, AND STATIONS ARE SHOWN TO THE FLANGE OF GUTTER UNLESS NOTED OTHERWISE.

THE EXACT LOCATIONS OF DRIVEWAYS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER. DRIVEWAYS ARE TO BE REPLACES IN KIND UNLESS OTHERWISE DIRECTED IN THE PLANS BY THE ENGINEER.

PIPE ELEVATIONS, LENGTHS, AND LOCATIONS AS SHOWN ON THE PLANS, MAY BE ADJUSTED TO FIT EXISTING FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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

PAVEMENT LOWER LAYER SHALL BE 4 MT 58-28 S, THE MIDDLE LAYER SHALL BE 4 MT 58-28 S, AND THE UPPER LAYER OF CTH A AND MCCUTCHEON RD SHALL BE 4 MT 58-34 S. THE UPPER LAYER IN THE INTERSECTION SHALL BE 4 HT 58-34 H.

HMA PAVEMENT SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYER THICKNESSES:

PAVEMENT THICKNESS (INCH)	LOWER LAYER (INCH)	MIDDLE LAYER (INCH)	UPPER LAYER (INCH)
6	2.25	2	1.75
4.5	2.50		2

UTILITY CONTACTS

RICK PODOLAK
AT&T - COMMUNICATION LINE
304 S DEWEY STREET
EAU CLAIRE, WI 54701
(715) 839-5565
RP4514@ATT.COM

MATT KNEGENDORF
BALDWIN TELECOM - COMMUNICATION LINE
930 MAPLE ST
BALDWIN, WI 54002
(715) 684-3346
MKNEGENDORF@LSWI.NET

ROB DOOLEY
ST. CROIX ELECTRIC COOPERATIVE - ELECTRICITY
1925 RIDGEWAY ST.
P.O. BOX 160
HAMMOND, WI 54015
(715) 796-5637
ROBD@SCECNET.NET

DAWN SCHULTZ
XCEL ENERGY - ELECTRICITY & GAS
1414 W HAMILTON AVENUE
P.O. BOX 8
EAU CLAIRE, WI 54702
(715) 559-4578
DAWN.SCHULTZ@XCELENERGY.COM

WISCONSIN DNR LIAISON

AMY LESIK
DNR NORTHWEST
1300 WEST CLAIREMONT AVENUE
EAU CLAIRE, WI 54701
(715) 836-6571
(715) 495-1903
AMYL.LESIK@WISCONSIN.GOV

DESIGN CONTACT

JEDIDIAH MUNROE, P.E.
JT ENGINEERING, INC.
281 W. NETHERWOOD ROAD
SUITE 1
OREGON, WI 53575
(608) 515-5331
JEDM@JT-ENGINEERING.COM

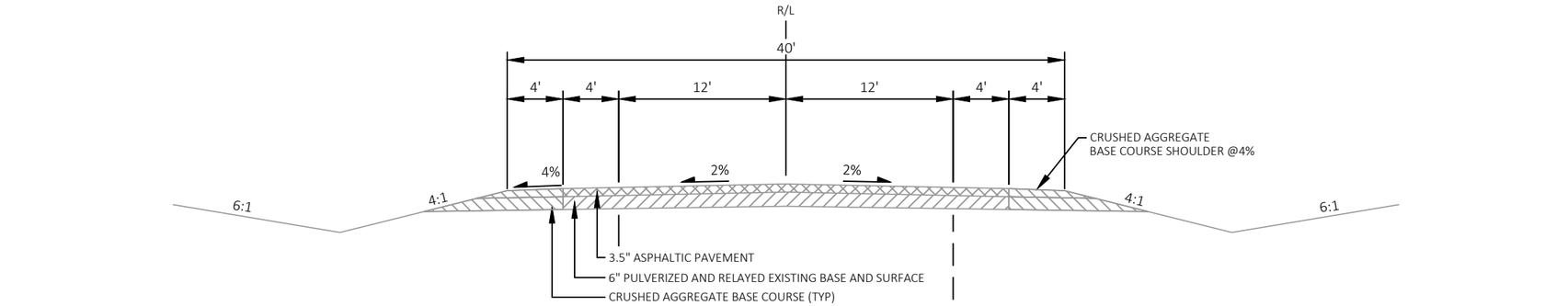
DIGGERS HOTLINE
Dial 811 or (800)242-8511
www.DiggersHotline.com

2

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PROJECT OVERVIEW	SHEET 3	E

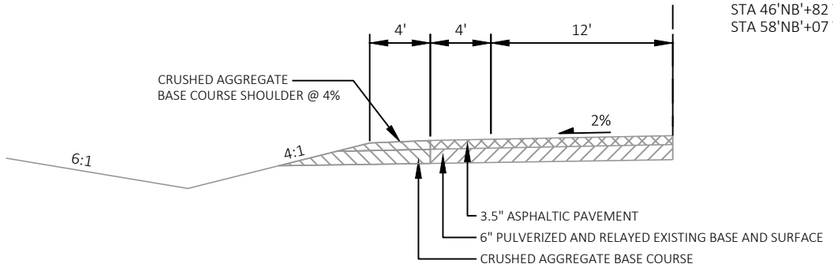
FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\020201-PO.DWG
LAYOUT NAME - Plan 1 IN 40 FT
PLOT DATE : 8/14/2023 11:08 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:200 FT
WISDOT/CADDS SHEET 42

2



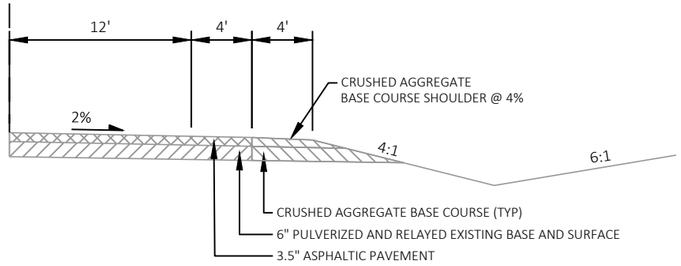
TYPICAL EXISTING SECTION

CTH A
STA 46'NB'+82 TO STA 50'NB'+12
STA 58'NB'+07 TO STA 61'NB'+10



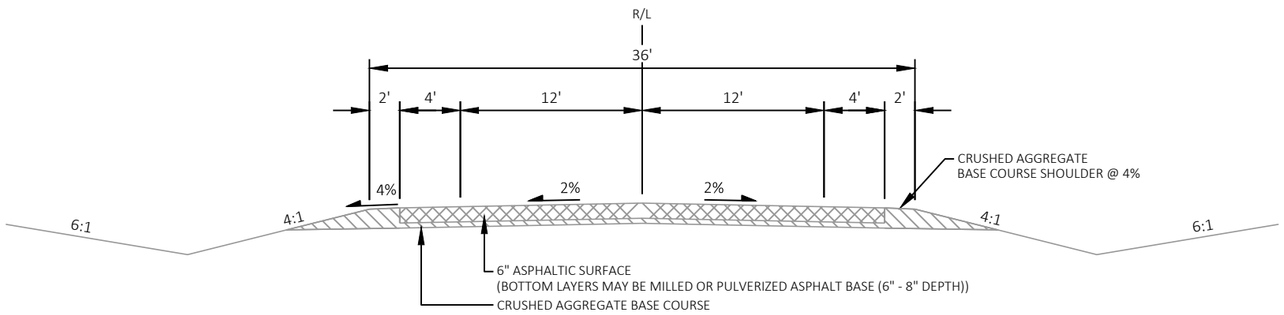
TYPICAL EXISTING SECTION - RIGHT TURN LANE

CTH A
STA 54'NB'+85 TO STA 58'NB'+07



TYPICAL EXISTING SECTION - RIGHT TURN LANE

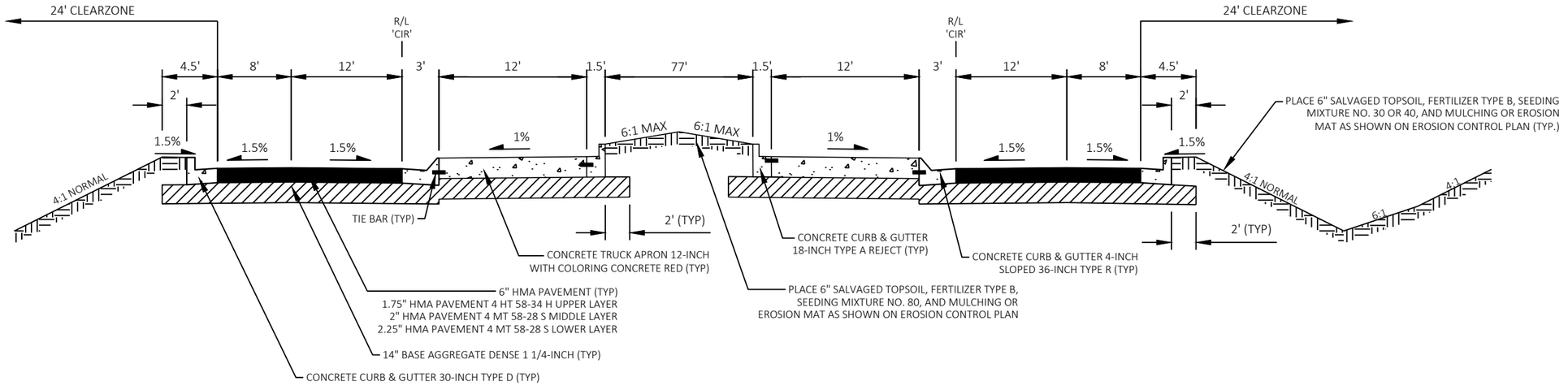
CTH A
STA 50'NB'+12 TO STA 53'NB'+39



TYPICAL EXISTING SECTION

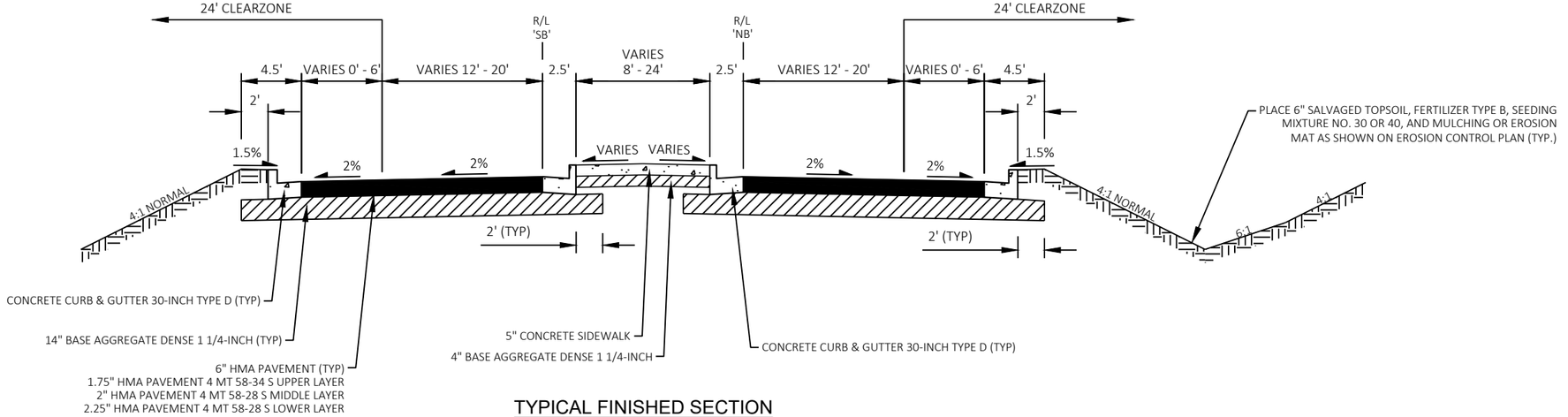
MCCUTCHEON RD
STA 78'EB'+80 TO STA 83'EB'+81
STA 87'EB'+58 TO STA 92'EB'+63

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	TYPICAL SECTIONS	SHEET 4	E



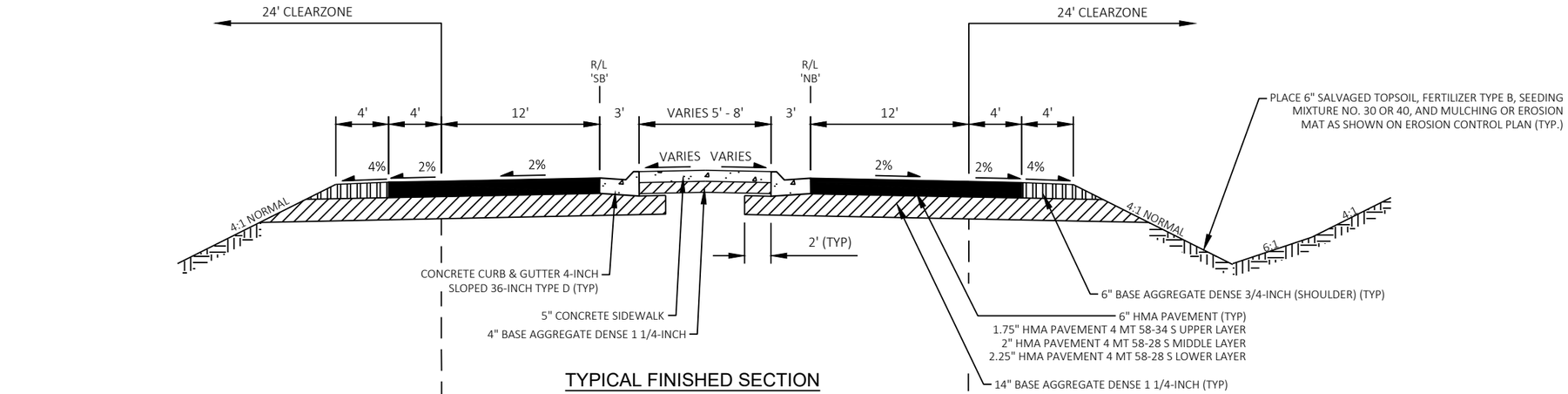
TYPICAL FINISHED SECTION

CIRCLE
STA. 500'CIR'+00 TO STA. 503'CIR'+46



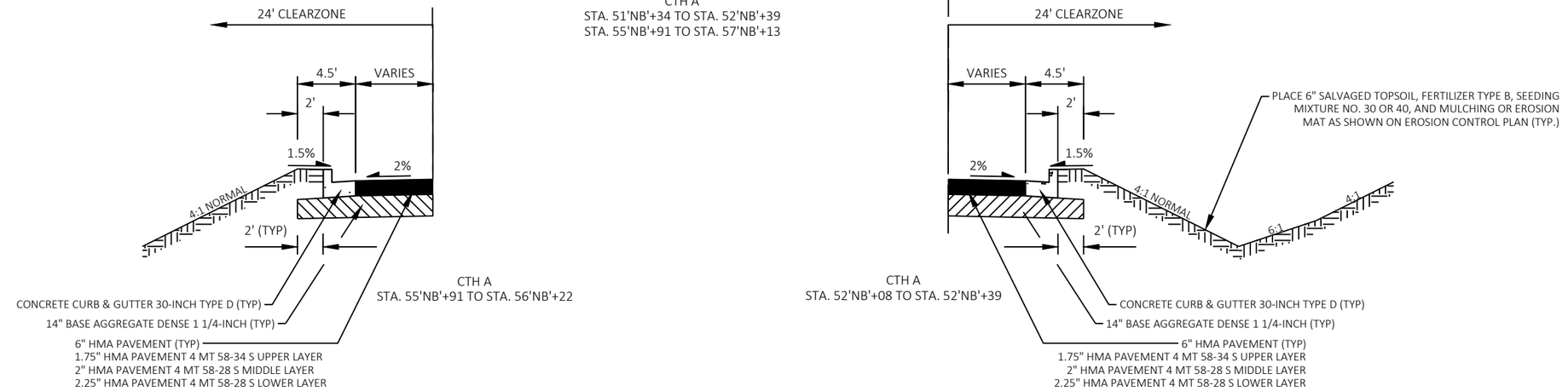
TYPICAL FINISHED SECTION

CTH A
STA. 52'NB'+39 TO STA. 53'NB'+39
STA. 54'NB'+85 TO STA. 55'NB'+91



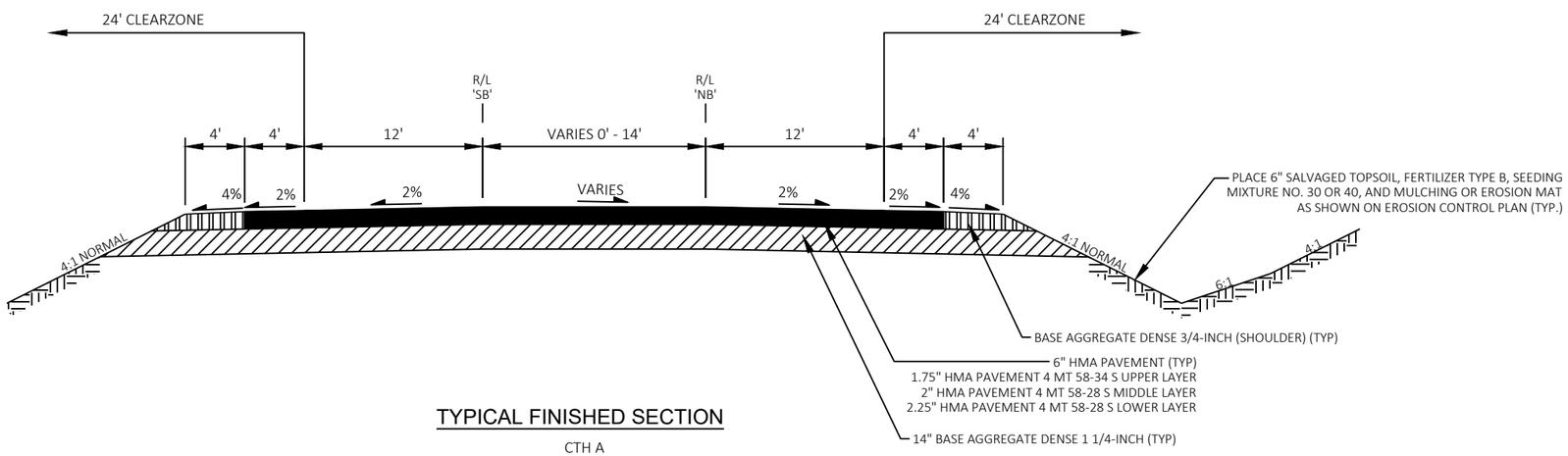
TYPICAL FINISHED SECTION

CTH A
STA. 51'NB'+34 TO STA. 52'NB'+39
STA. 55'NB'+91 TO STA. 57'NB'+13



CTH A
STA. 55'NB'+91 TO STA. 56'NB'+22

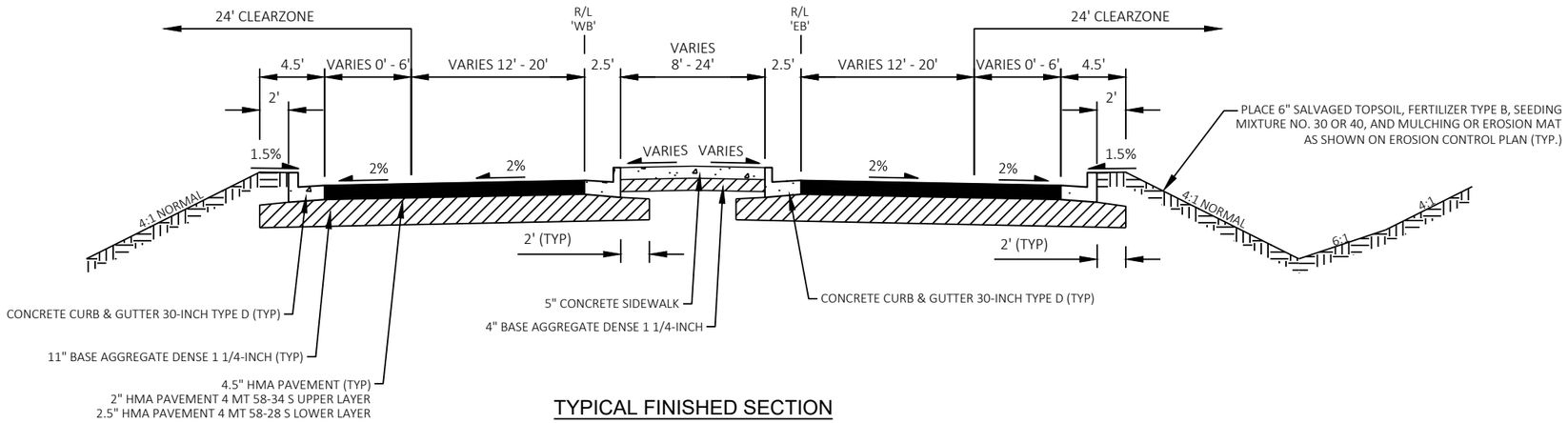
CTH A
STA. 52'NB'+08 TO STA. 52'NB'+39



TYPICAL FINISHED SECTION

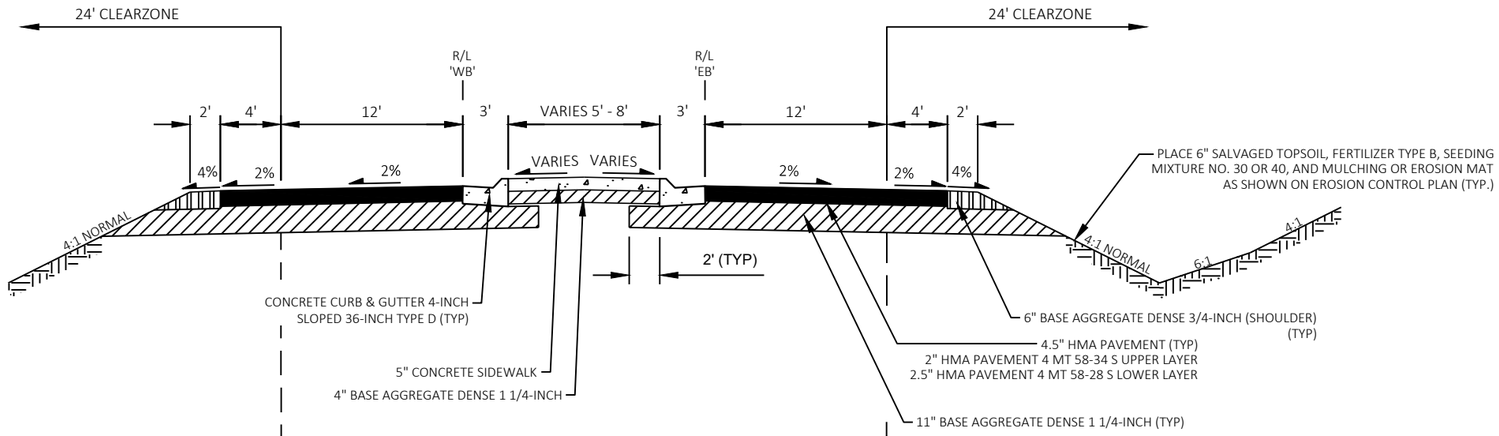
CTH A
STA. 46'NB'+82 TO STA. 51'NB'+34
STA. 57'NB'+13 TO STA. 61'NB'+10

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	TYPICAL SECTIONS	SHEET 6	E



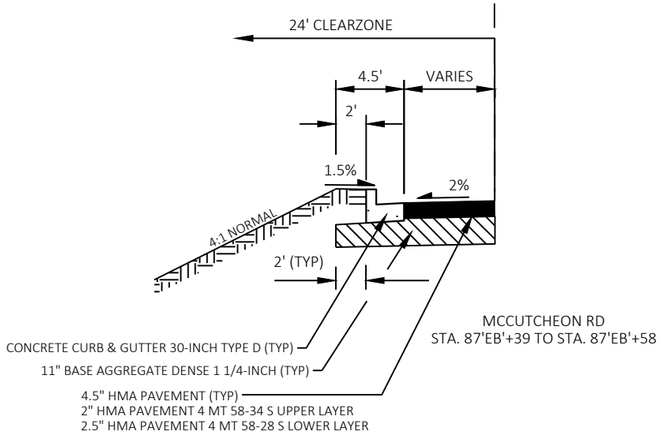
TYPICAL FINISHED SECTION

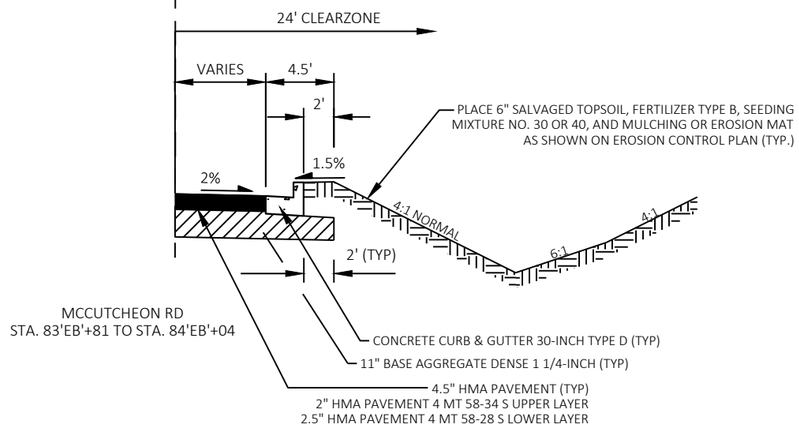
MCCUTCHEON RD
STA. 84'EB'+04 TO STA. 84'EB'+95
STA. 86'EB'+42 TO STA. 87'EB'+39



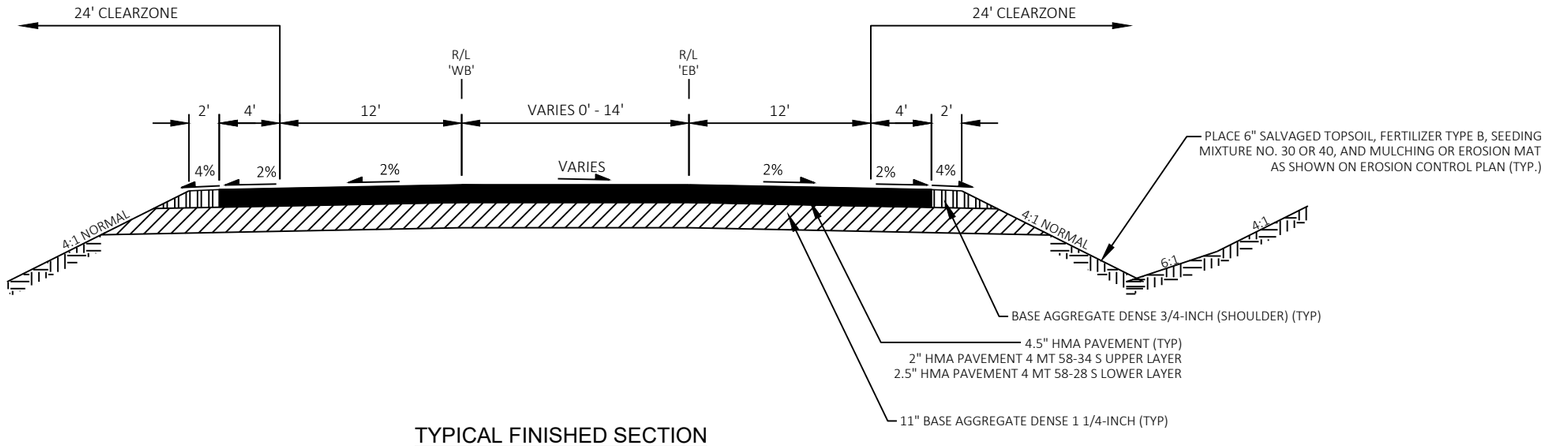
TYPICAL FINISHED SECTION

MCCUTCHEON RD
STA. 83'EB'+41 TO STA. 84'EB'+04
STA. 87'EB'+39 TO STA. 88'EB'+00





PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	TYPICAL SECTIONS	SHEET 7	E

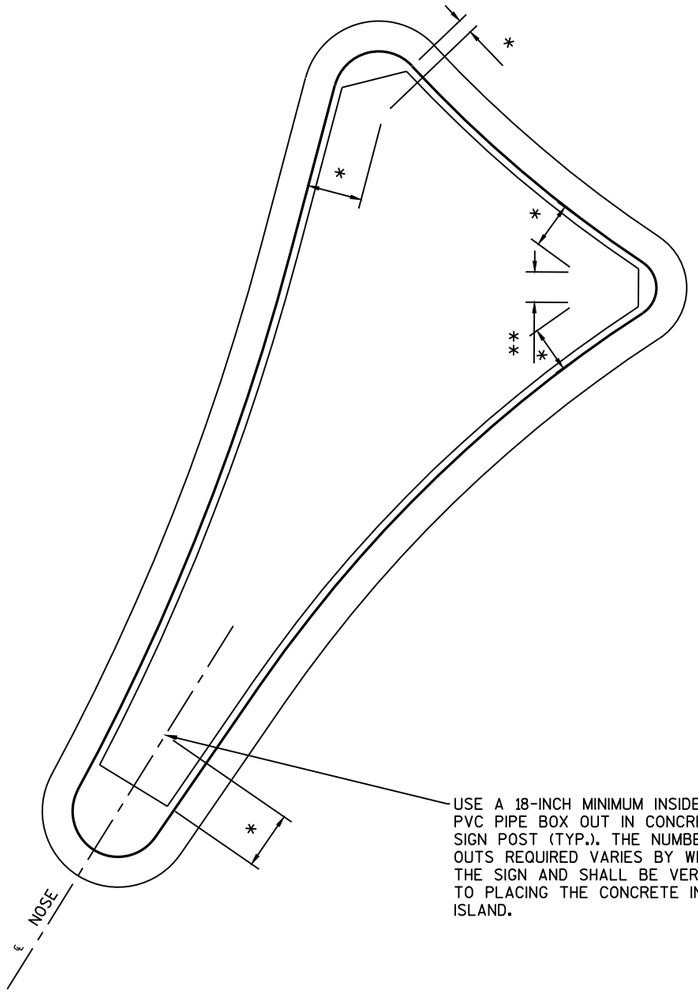


TYPICAL FINISHED SECTION

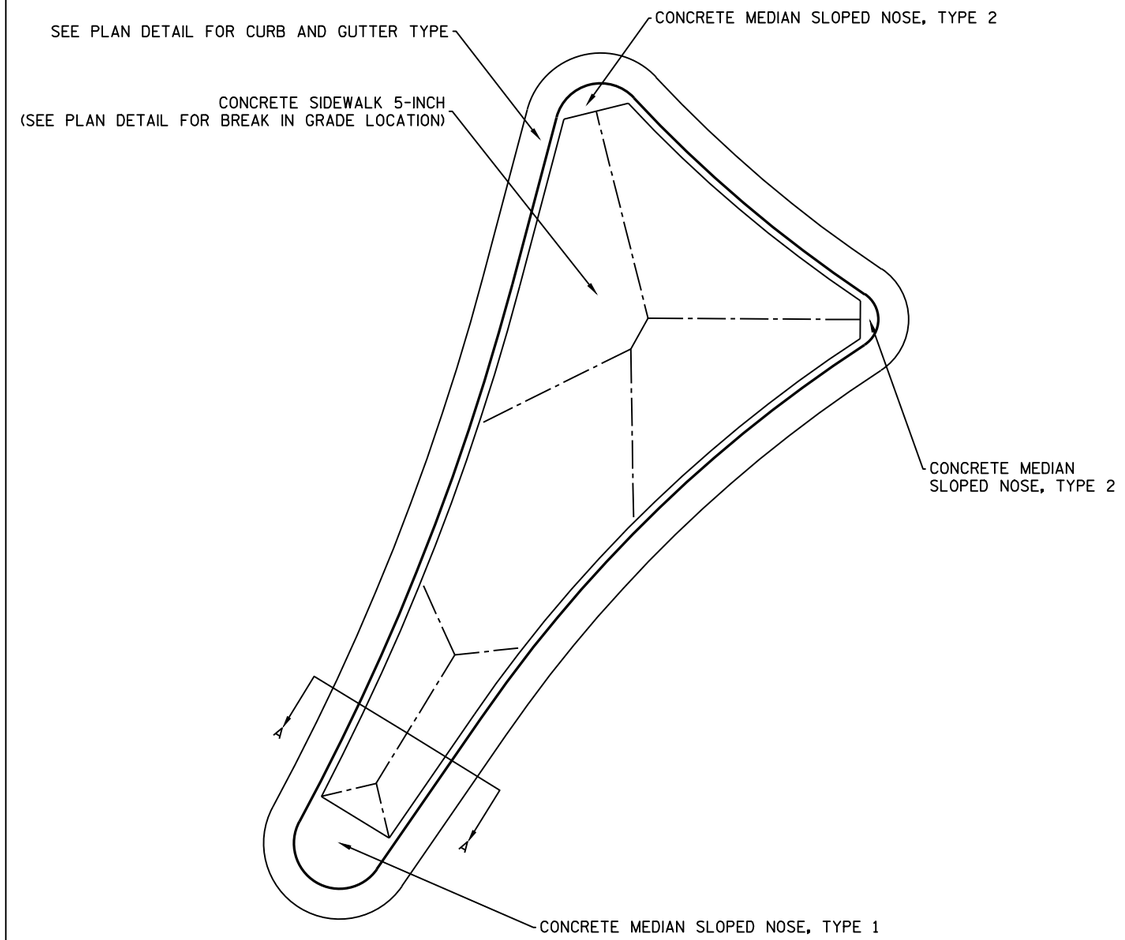
MCCUTCHEON RD
STA. 78'EB'+80 TO STA. 83'EB'+41
STA. 88'EB'+00 TO STA. 92'EB'+63

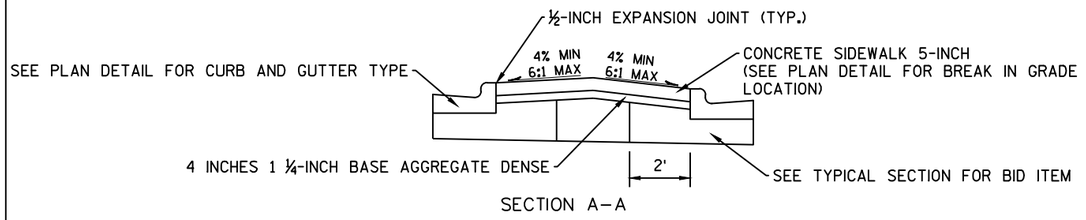
* DISTANCE TO BE LAID OUT IN THE FIELD BASED ON SIGN SIZE. TWO FOOT MINIMUM CLEARANCE BETWEEN THE EDGE OF SIGN AND THE FACE OF CURB.

** SEE SIGN DETAILS FOR POST SPACING.

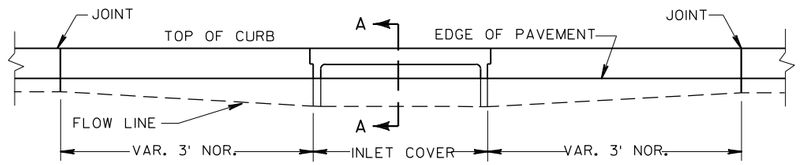


ISLAND SIGN LOCATION DETAIL (TYP.)

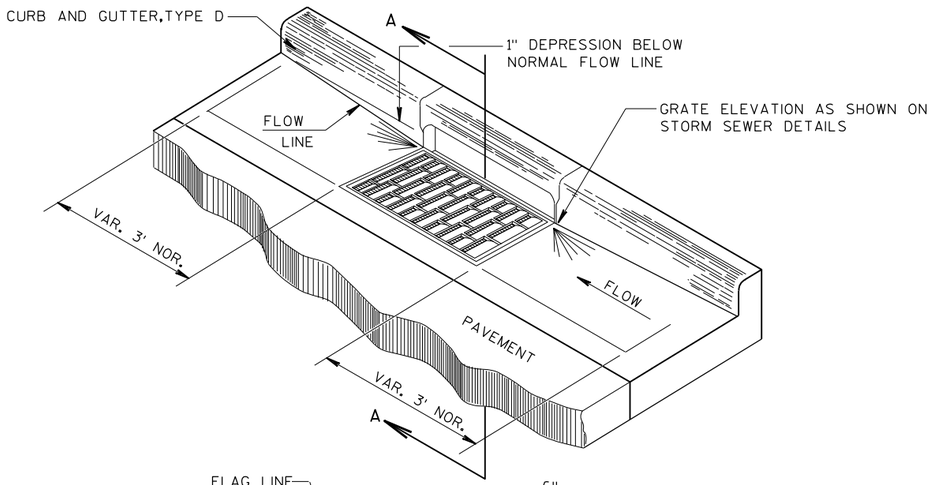


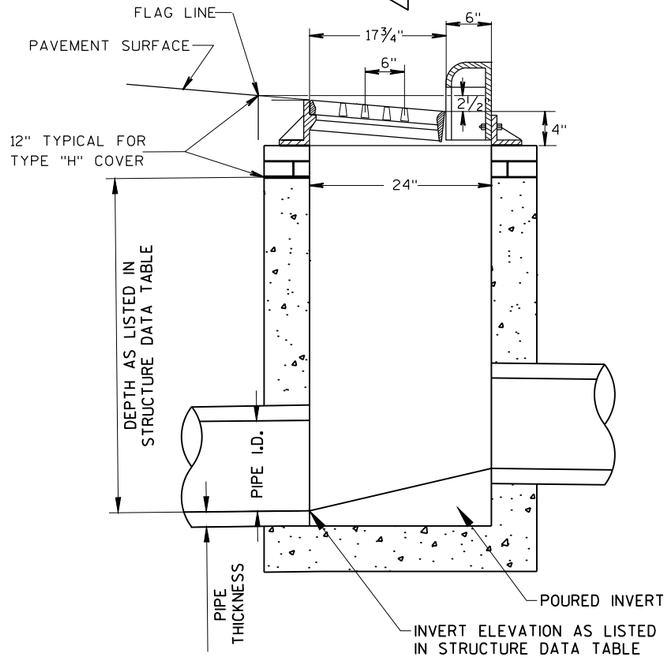


SPLITTER ISLAND DETAIL (TYP.)



ELEVATION

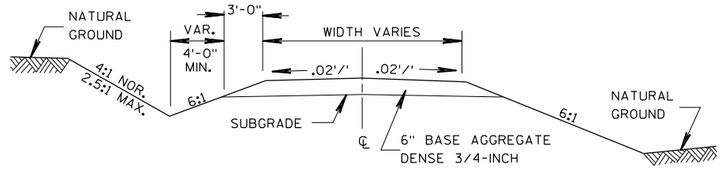




SECTION A-A

DETAIL OF CURB AND GUTTER AT INLETS AT SAG LOCATIONS

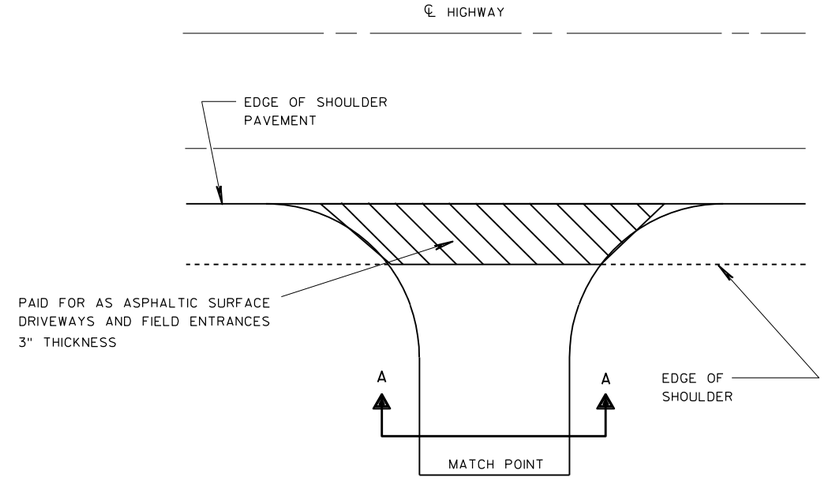
(INLET TYPE 2X3-H SHOWN)



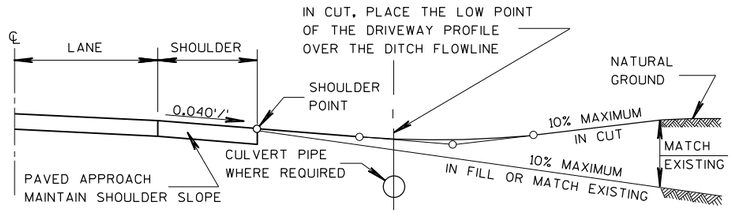
IN CUT

SECTION A-A

IN FILL



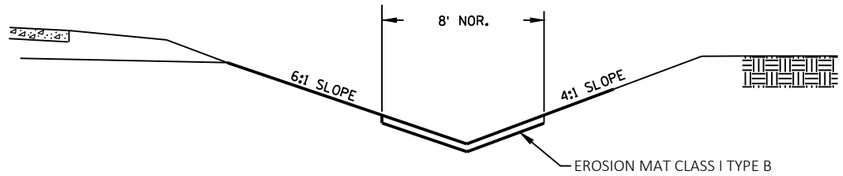
PLAN



PROFILE

DETAIL FOR RURAL DRIVEWAY

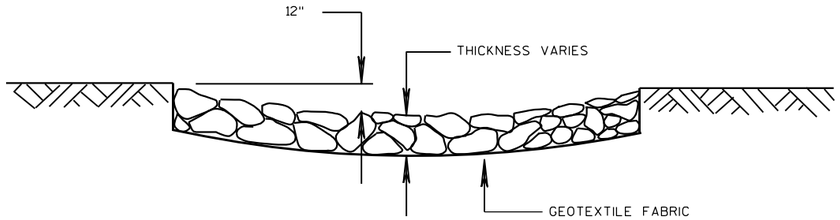
2



DITCH LOCATIONS

DETAIL FOR EROSION MAT PLACEMENT

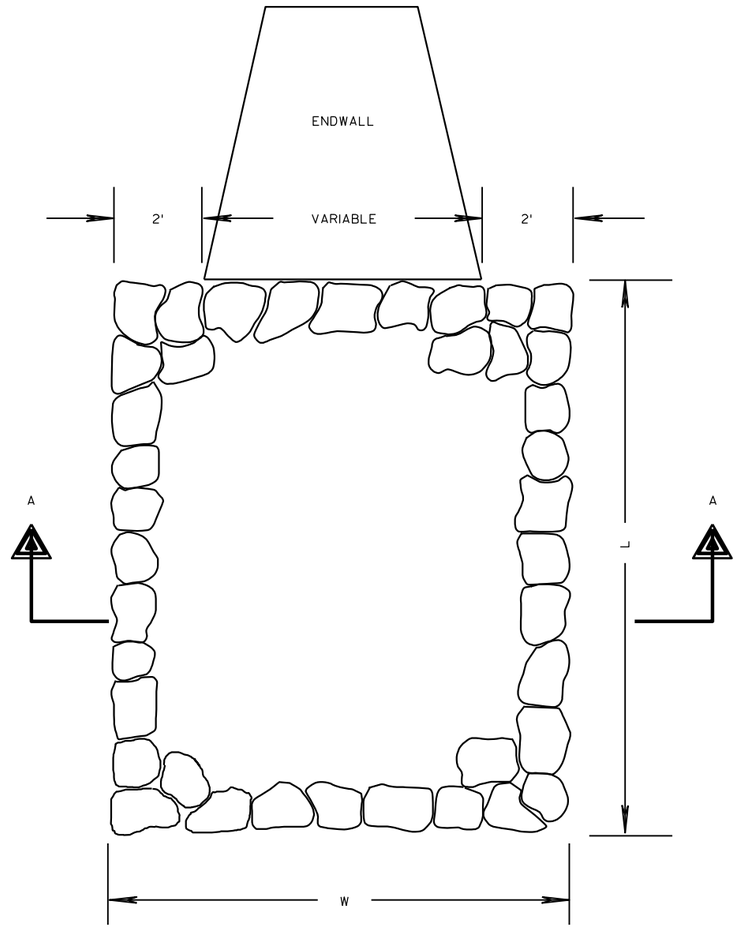
LOCATIONS SHOWN ON EROSION CONTROL PLAN



SECTION A-A

RIPRAP TYPE	THICKNESS	GEOTEXTILE FABRIC TYPE
MEDIUM	18 INCHES	HR

NOTE: L = 2W



RIPRAP TREATMENT AT CULVERTS

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CONSTRUCTION DETAILS	SHEET 11	E

2

ID POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	83+43.68	11.94' LT	923.42	352617.73	531886.90
101	83+43.03	1.97' LT	923.55	352607.75	531887.33
102	83+59.10	27.73' LT	923.32	352635.13	531900.18
103	83+71.50	16.65' RT	923.32	352592.66	531917.97
104	83+81.28	19.01' RT	923.42	352591.64	531928.12
105	83+78.29	0.00'	923.76	352610.06	531922.54
106	83+83.94	0.00'	923.84	352610.84	531928.13
107	84+04.19	28.93' LT	923.95	352642.33	531944.12
108	84+47.22	25.55' LT	924.72	352644.61	531990.34
109	84+36.35	0.00'	924.63	352618.20	531980.03
110	84+29.45	15.07' RT	924.22	352602.31	531975.31
111	84+82.13	25.30' LT	925.65	352636.68	532034.12
112	84+86.93	22.49' LT	925.71	352631.75	532038.65
113	84+91.69	5.71' LT	925.57	352614.25	532036.35
114	84+88.03	0.01' LT	925.40	352610.78	532030.46

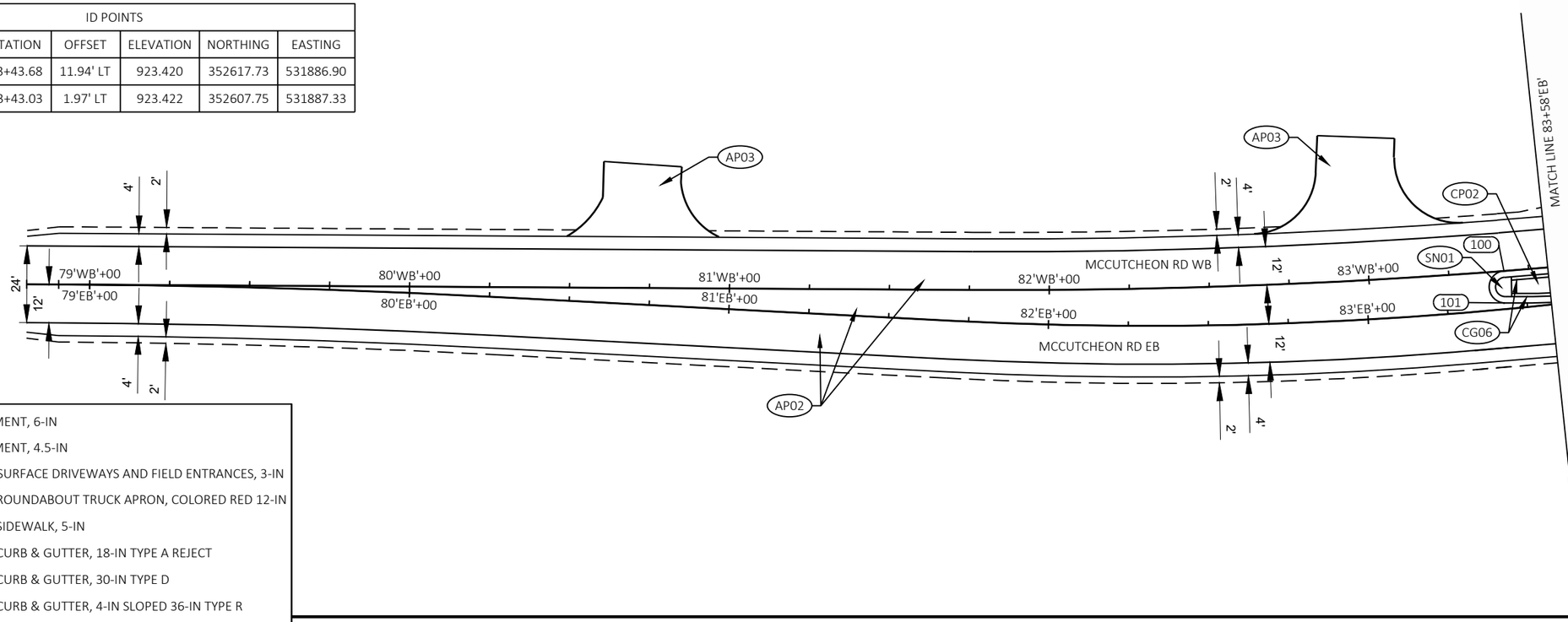
AP01	HMA PAVEMENT, 6-IN
AP02	HMA PAVEMENT, 4.5-IN
AP03	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-IN
CP01	CONCRETE ROUNDABOUT TRUCK APRON, COLORED RED 12-IN
CP02	CONCRETE SIDEWALK, 5-IN
CG01	CONCRETE CURB & GUTTER, 18-IN TYPE A REJECT
CG02	CONCRETE CURB & GUTTER, 30-IN TYPE D
CG03	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE R
CG04	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE D
CG05	CONCRETE CURB & GUTTER, 30-IN TYPE D REJECT
CG06	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE D REJECT
AF01	ASPHALTIC FLUME
SN01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
SN02	CONCRETE MEDIAN SLOPED NOSE TYPE 2

ID POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
130	87+38.75	18.00' RT	921.15	352584.47	532280.43
131	87+83.69	16.00' RT	919.91	352590.62	532324.60
132	87+97.16	9.98' LT	920.22	352617.57	532335.96
133	87+96.71	0.00'	919.90	352607.59	532336.27
134	51+36.53	12.00' LT	925.79	352338.30	532110.11
135	51+35.94	2.03' LT	925.69	352338.37	532120.09
136	51+73.68	27.76' LT	925.23	352373.43	532091.43
137	51+71.73	0.00'	925.31	352374.17	532119.25
138	51+98.57	16.10' RT	924.81	352402.75	532132.38
139	52+08.34	20.28' RT	924.68	352413.11	532135.33
140	52+39.69	30.76' LT	924.79	352436.95	532080.47
141	52+43.91	0.00'	924.90	352445.78	532110.22
142	52+91.23	24.64' LT	924.65	352492.48	532079.25
143	52+77.78	0.00'	924.73	352479.24	532104.98
144	52+71.89	15.11' RT	924.45	352475.76	532120.82

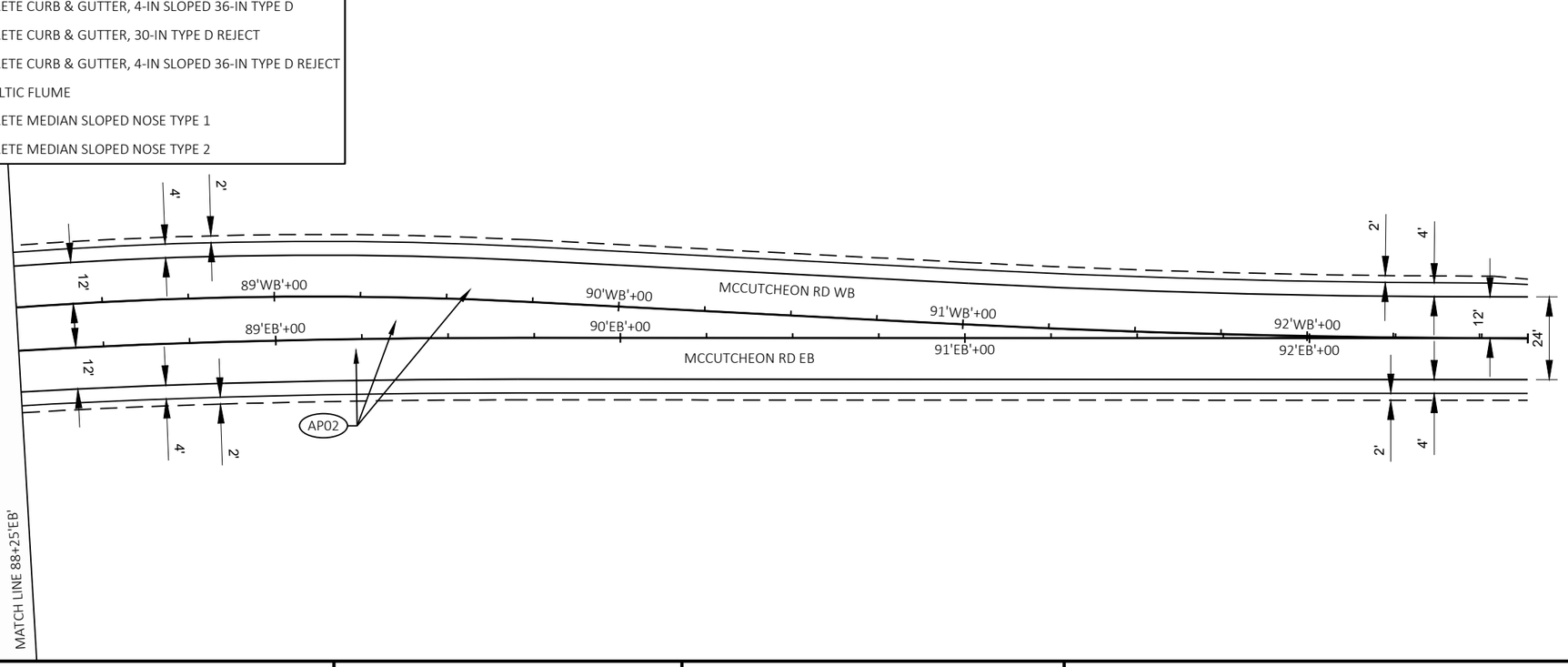
ID POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
115	54+63.52	75.08' LT	925.69	352673.17	532061.90
116	53+50.05	64.52' LT	924.84	352559.48	532054.16
117	54+73.78	31.91' RT	925.13	352666.17	532169.16
118	53+61.77	42.38' RT	924.20	352553.94	532161.56
119	86+55.23	23.63' LT	924.40	352615.30	532192.24
120	86+48.95	21.10' LT	924.55	352611.86	532186.33
121	86+45.03	6.80' LT	924.45	352597.13	532184.58
122	86+49.69	0.00'	924.18	352591.10	532190.20
123	86+90.40	14.68' RT	922.66	352582.19	532232.41
124	87+10.48	24.38' LT	922.33	352623.43	532247.57
125	87+04.18	9.17' LT	922.83	352607.57	532243.08
126	87+57.93	29.72' LT	920.81	352633.87	532294.81
127	87+67.79	27.73' LT	920.57	352632.81	532304.96
128	87+50.62	10.50' LT	921.43	352614.03	532289.32
129	87+61.54	10.92' LT	921.10	352615.50	532300.21

ID POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
145	53+24.92	27.21' LT	924.70	352535.38	532084.55
146	53+30.98	23.69' LT	924.59	352541.16	532090.83
147	53+35.97	5.73' LT	924.46	352538.32	532109.48
148	53+32.55	0.00'	924.45	352532.57	532112.98
149	55+01.92	26.71' LT	925.82	352694.21	532110.22
150	54+95.56	24.47' LT	925.71	352688.26	532113.59
151	54+89.56	7.22' LT	925.57	352685.49	532131.65
152	54+94.02	0.00'	925.57	352691.22	532137.92
153	55+35.34	13.08' RT	925.67	352734.01	532143.74
154	55+59.10	24.98' LT	926.08	352751.76	532102.48
155	55+52.38	9.91' LT	926.32	352747.28	532118.39
156	55+91.31	20.01' RT	926.03	352789.87	532142.62
157	56+22.21	31.75' LT	926.52	352814.51	532087.56
158	56+23.29	11.33' LT	926.94	352817.83	532107.73
159	56+44.17	11.86' LT	927.08	352838.69	532105.03

ID POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
100	83+43.68	11.94' LT	923.420	352617.73	531886.90
101	83+43.03	1.97' LT	923.422	352607.75	531887.33



- AP01 HMA PAVEMENT, 6-IN
- AP02 HMA PAVEMENT, 4.5-IN
- AP03 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-IN
- CP01 CONCRETE ROUNDABOUT TRUCK APRON, COLORED RED 12-IN
- CP02 CONCRETE SIDEWALK, 5-IN
- CG01 CONCRETE CURB & GUTTER, 18-IN TYPE A REJECT
- CG02 CONCRETE CURB & GUTTER, 30-IN TYPE D
- CG03 CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE R
- CG04 CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE D
- CG05 CONCRETE CURB & GUTTER, 30-IN TYPE D REJECT
- CG06 CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE D REJECT
- AF01 ASPHALTIC FLUME
- SN01 CONCRETE MEDIAN SLOPED NOSE TYPE 1
- SN02 CONCRETE MEDIAN SLOPED NOSE TYPE 2

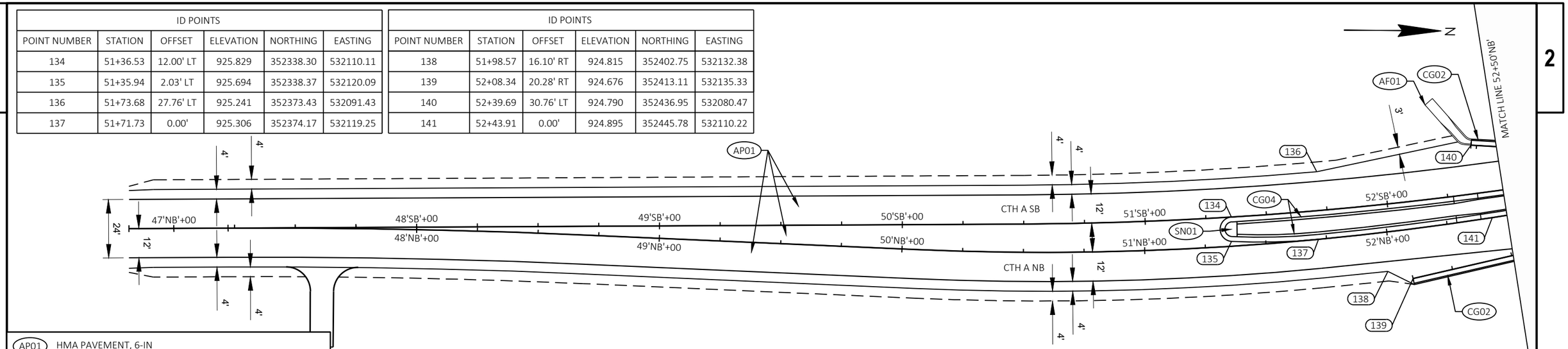


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	INTERSECTION DETAILS	SHEET 13	E

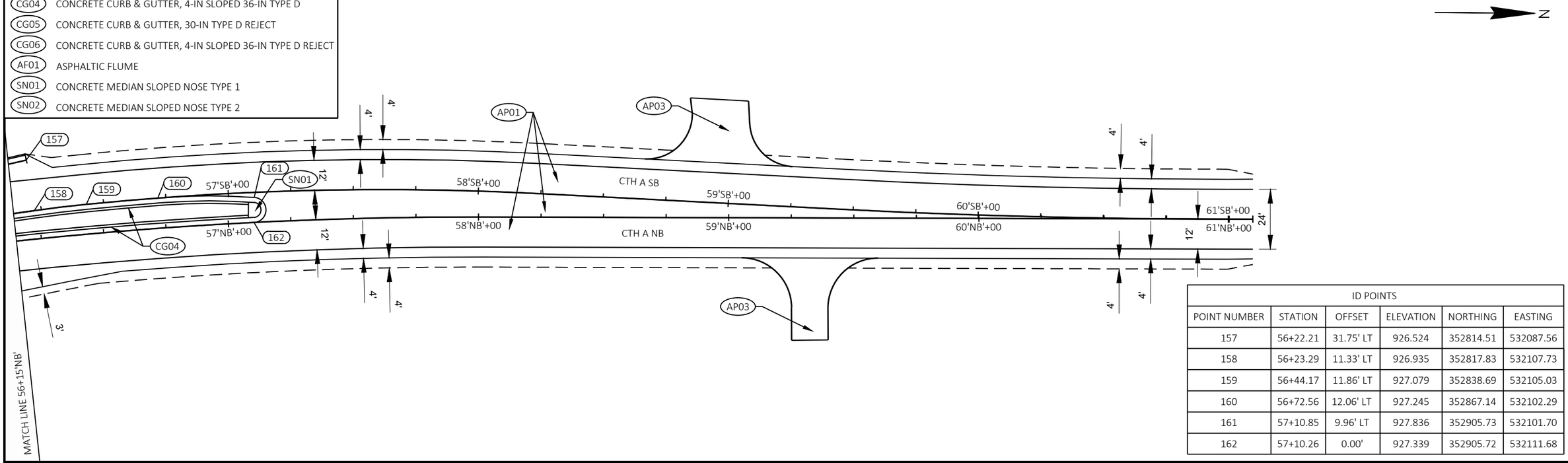
FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 021101-id (2)
PLOT DATE : 8/14/2023 11:09 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

ID POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
134	51+36.53	12.00' LT	925.829	352338.30	532110.11
135	51+35.94	2.03' LT	925.694	352338.37	532120.09
136	51+73.68	27.76' LT	925.241	352373.43	532091.43
137	51+71.73	0.00'	925.306	352374.17	532119.25

ID POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
138	51+98.57	16.10' RT	924.815	352402.75	532132.38
139	52+08.34	20.28' RT	924.676	352413.11	532135.33
140	52+39.69	30.76' LT	924.790	352436.95	532080.47
141	52+43.91	0.00'	924.895	352445.78	532110.22



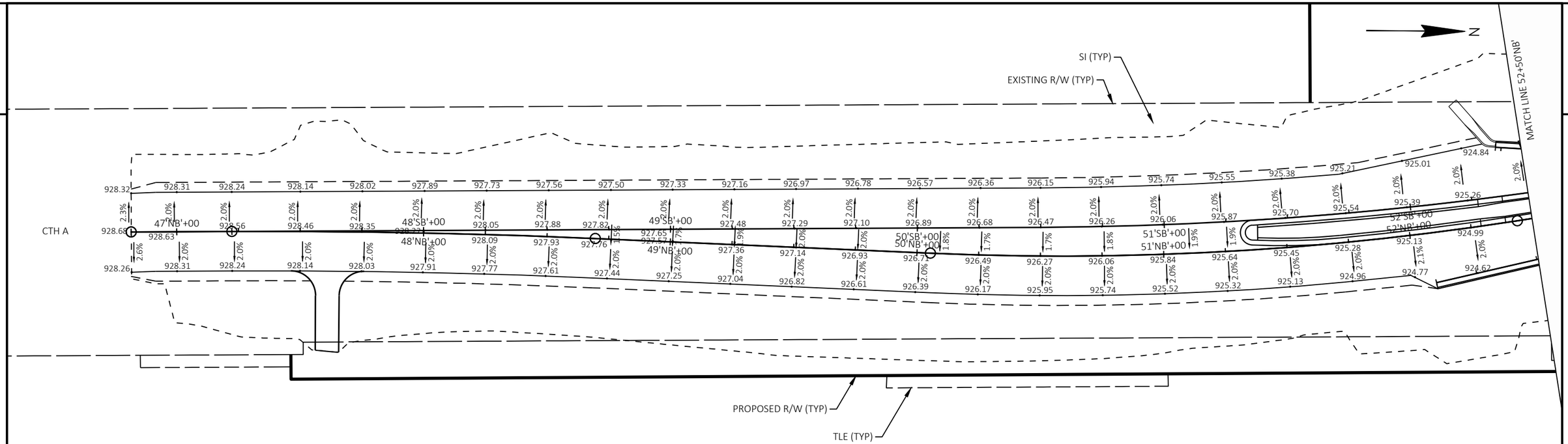
AP01	HMA PAVEMENT, 6-IN
AP02	HMA PAVEMENT, 4.5-IN
AP03	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES, 3-IN
CP01	CONCRETE ROUNDABOUT TRUCK APRON, COLORED RED 12-IN
CP02	CONCRETE SIDEWALK, 5-IN
CG01	CONCRETE CURB & GUTTER, 18-IN TYPE A REJECT
CG02	CONCRETE CURB & GUTTER, 30-IN TYPE D
CG03	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE R
CG04	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE D
CG05	CONCRETE CURB & GUTTER, 30-IN TYPE D REJECT
CG06	CONCRETE CURB & GUTTER, 4-IN SLOPED 36-IN TYPE D REJECT
AF01	ASPHALTIC FLUME
SN01	CONCRETE MEDIAN SLOPED NOSE TYPE 1
SN02	CONCRETE MEDIAN SLOPED NOSE TYPE 2

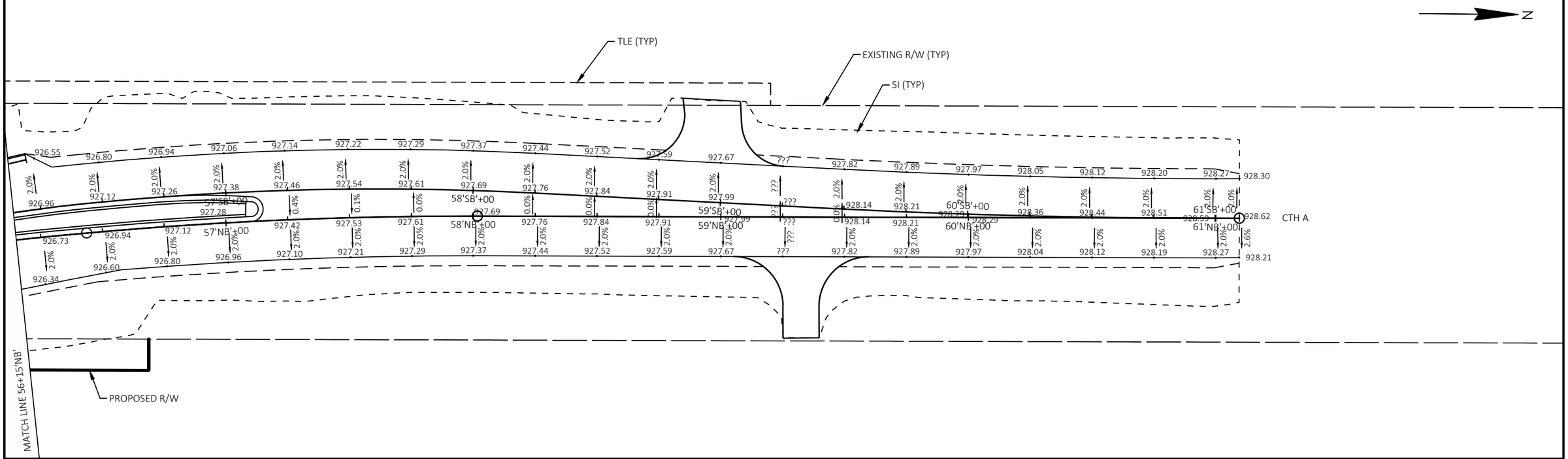


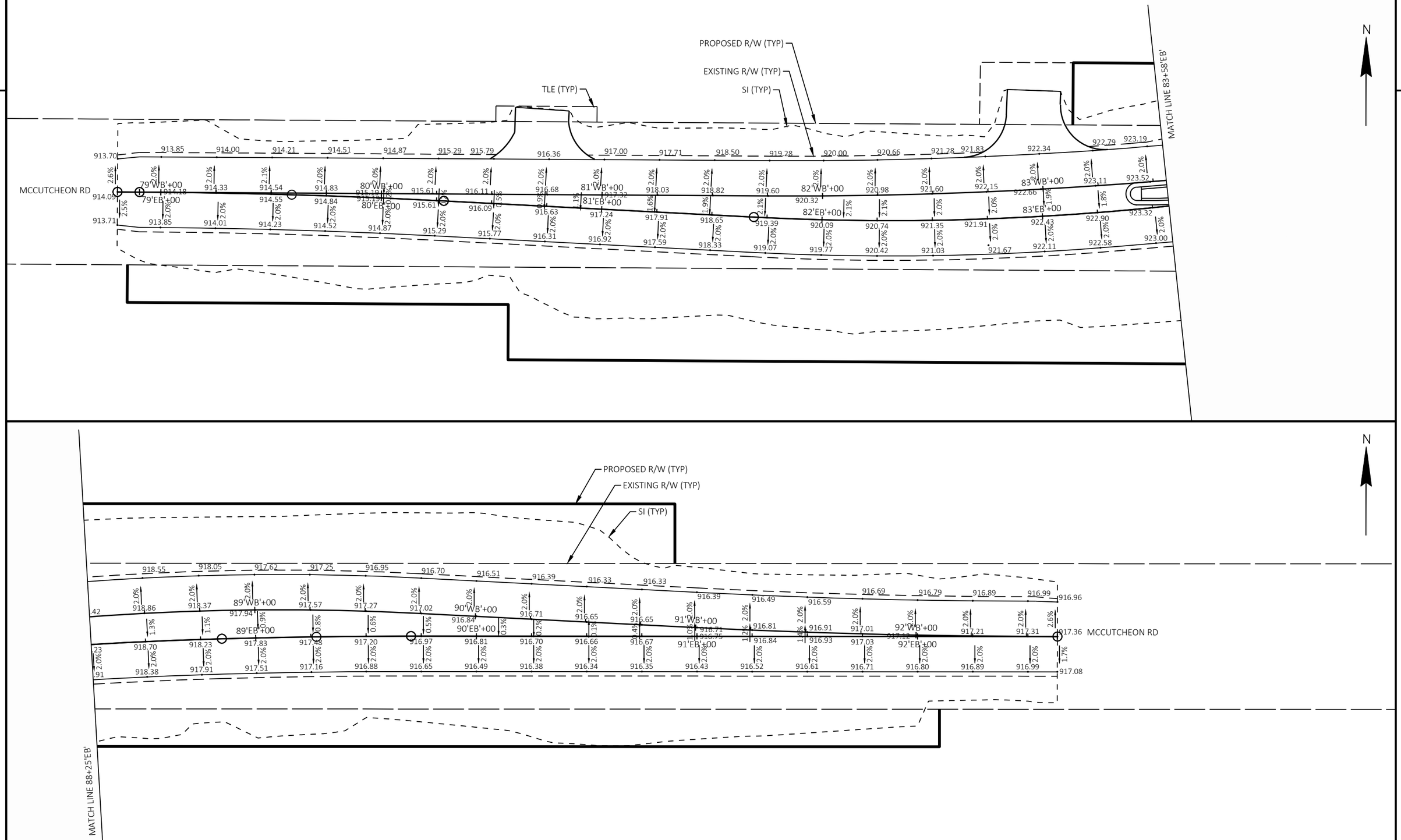
ID POINTS					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
157	56+22.21	31.75' LT	926.524	352814.51	532087.56
158	56+23.29	11.33' LT	926.935	352817.83	532107.73
159	56+44.17	11.86' LT	927.079	352838.69	532105.03
160	56+72.56	12.06' LT	927.245	352867.14	532102.29
161	57+10.85	9.96' LT	927.836	352905.73	532101.70
162	57+10.26	0.00'	927.339	352905.72	532111.68

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	INTERSECTION DETAILS	SHEET 14	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\021101-ID.DWG
LAYOUT NAME - 021101-id (3)
PLOT DATE : 8/14/2023 11:09 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44


N
SI (TYP)
EXISTING R/W (TYP)
MATCH LINE 52+50'NB'
CTH A
47'NB'+00
48'SB'+00
48'NB'+00
49'SB'+00
49'NB'+00
50'SB'+00
50'NB'+00
51'SB'+00
51'NB'+00
52'SB'+00
52'NB'+00
PROPOSED R/W (TYP)
TLE (TYP)


N
TLE (TYP)
EXISTING R/W (TYP)
SI (TYP)
57'SB'+00
57'NB'+00
58'SB'+00
58'NB'+00
59'SB'+00
59'NB'+00
60'SB'+00
60'NB'+00
61'SB'+00
61'NB'+00
CTH A
MATCH LINE 56+15'NB'
PROPOSED R/W



PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN DETAILS	SHEET 16	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021202-pd

PLOT DATE : 8/14/2023 11:09 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

2

N

MATCH LINE 56+15'NB'

MATCH LINE 88+25'EB'

MATCH LINE 83+58'EB'

MATCH LINE 52+50'NB'

TLE (TYP)

LOW POINT
STA 85'NWR'+61.10

EXISTING R/W (TYP)

SI (TYP)

HIGH POINT
STA 85'NWR'+29.91

PROPOSED R/W (TYP)

HIGH POINT
STA 500'CIR'+82.30

LOW POINT
STA 502'CIR'+53.15

HIGH POINT
STA 84'SWR'+91.53

LOW POINT
STA 85'SWR'+56.28

MCCUTCHEON RD

CTH A

85 NWR +00

85 NER +00

85 SER +00

85 SWR +00

84 WB +00

84 EB +00

87 WB +00

87 EB +00

84 SWR +00

84 SER +00

500 CIR +00

502 CIR +00

503 CIR +00

926.39 926.76 926.51 926.07 926.22 926.55 926.28 925.94 926.02 926.31 926.06 925.78 925.78 926.08 925.84 925.60 925.55 925.85 925.66 925.62 925.43 925.54 925.68 925.84 925.78 925.32 925.28 925.65 925.87 925.60 925.44 925.40 925.81 925.03 924.32 924.72 925.26 924.89 925.06 924.56 919.10 923.95 924.88 924.02 923.53 925.75 925.87 925.41 925.04 920.81 921.06 920.37 919.71 923.88 924.26 924.64 925.69 921.85 924.60 924.54 924.42 924.67 923.67 922.93 922.17 921.42 920.03 924.08 924.46 924.83 925.21 925.60 925.48 925.42 923.71 923.73 923.34 924.15 924.52 924.88 923.42 925.07 925.17 925.19 924.33 924.51 924.17 923.42 922.67 921.92 921.17 920.46 919.82 919.50 920.13 920.79 924.39 922.37 921.59 921.15 923.77 923.11 924.72 925.04 924.29 924.24 924.42 924.84 924.78 924.90 924.47 924.65 924.47 924.36 924.18 924.24 924.53 924.75 924.49 924.56 924.34 924.88 924.64 924.61 924.39 925.01 924.74 924.45 924.72 924.87 924.53 924.78 925.14

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN DETAILS	SHEET 17	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\021201-PD.DWG
LAYOUT NAME - 021201-pd
PLOT DATE : 8/14/2023 11:09 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42

2

MATCH LINE 56+15'NB'

PLACE NO. 40 SEED AROUND
HUDSON TOWN HALL PROPERTY

MCCUTCHEON RD

MATCH LINE 88+25'EB'

MATCH LINE 83+58'EB'

CTH A

84'WB'+00
84'EB'+00
84'SWR'+00
85'SWR'+00
86'SSWR'+00
53'SB'+00
53'NB'+00
53'SER'+00
54'SER'+00
55'SB'+00
56'NB'+00
56'SNER'+00
58'NER'+00
87'WB'+00
87'EB'+00
88'WB'+00
88'EB'+00

N

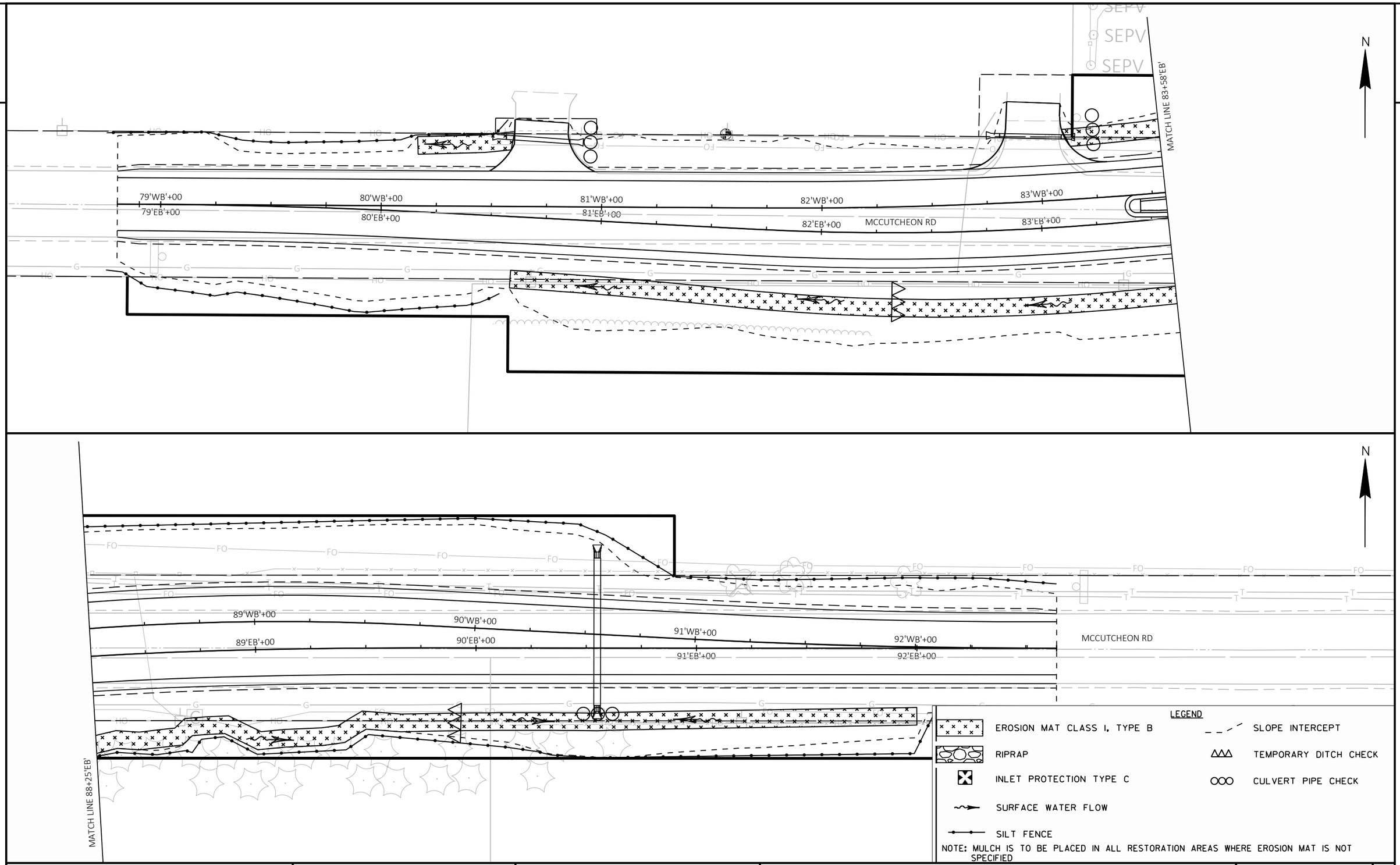
LEGEND

- EROSION MAT CLASS I, TYPE B
- RIPRAP
- INLET PROTECTION TYPE C
- SURFACE WATER FLOW
- SILT FENCE
- SLOPE INTERCEPT
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK

NOTE: MULCH IS TO BE PLACED IN ALL RESTORATION AREAS WHERE EROSION MAT IS NOT SPECIFIED

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	EROSION CONTROL	SHEET 18	E

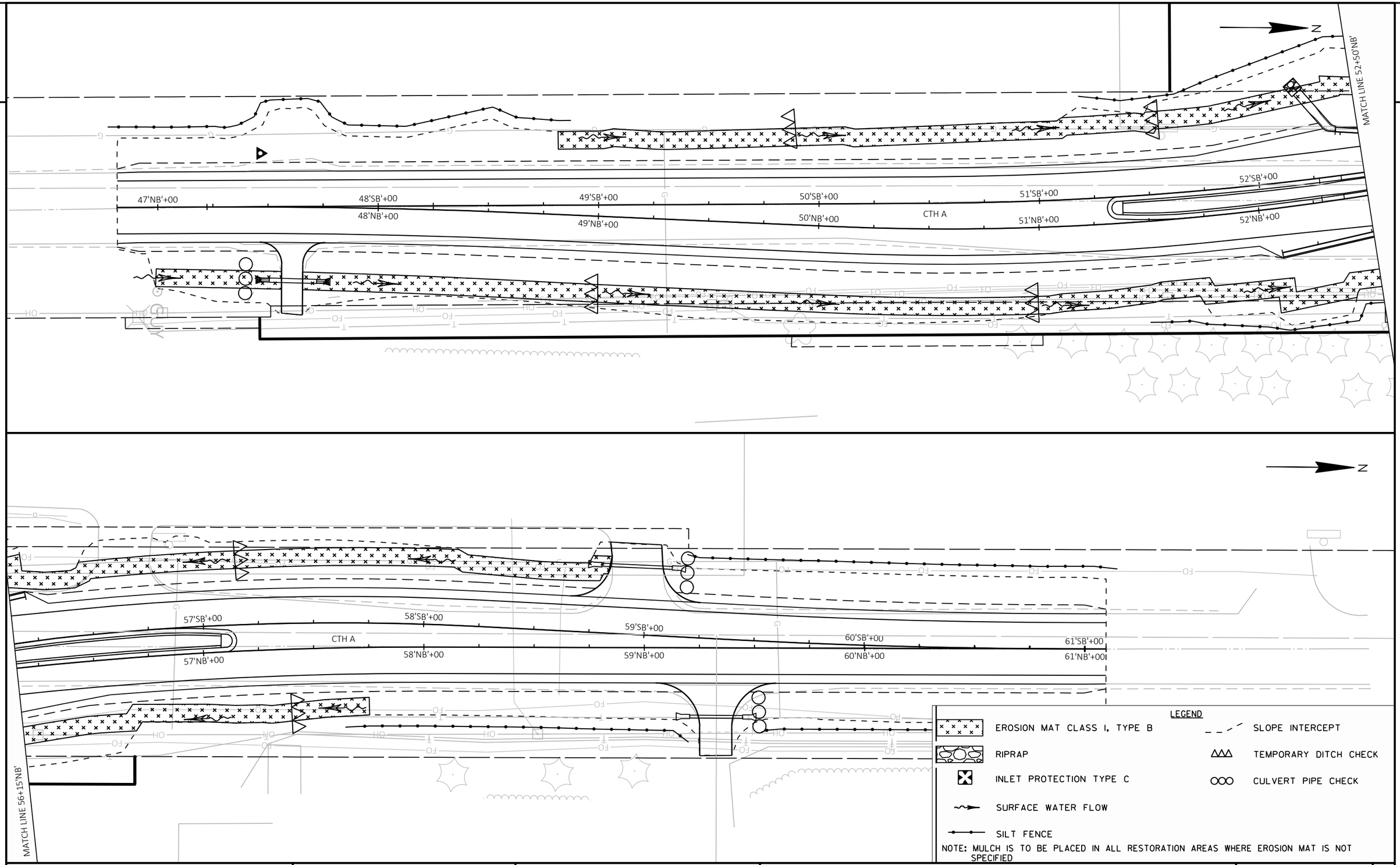
FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec
PLOT DATE : 8/14/2023 11:10 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : ##########
WISDOT/CADDS SHEET 42



PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	EROSION CONTROL	SHEET 19	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022002-ec

PLOT DATE : 8/14/2023 11:10 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

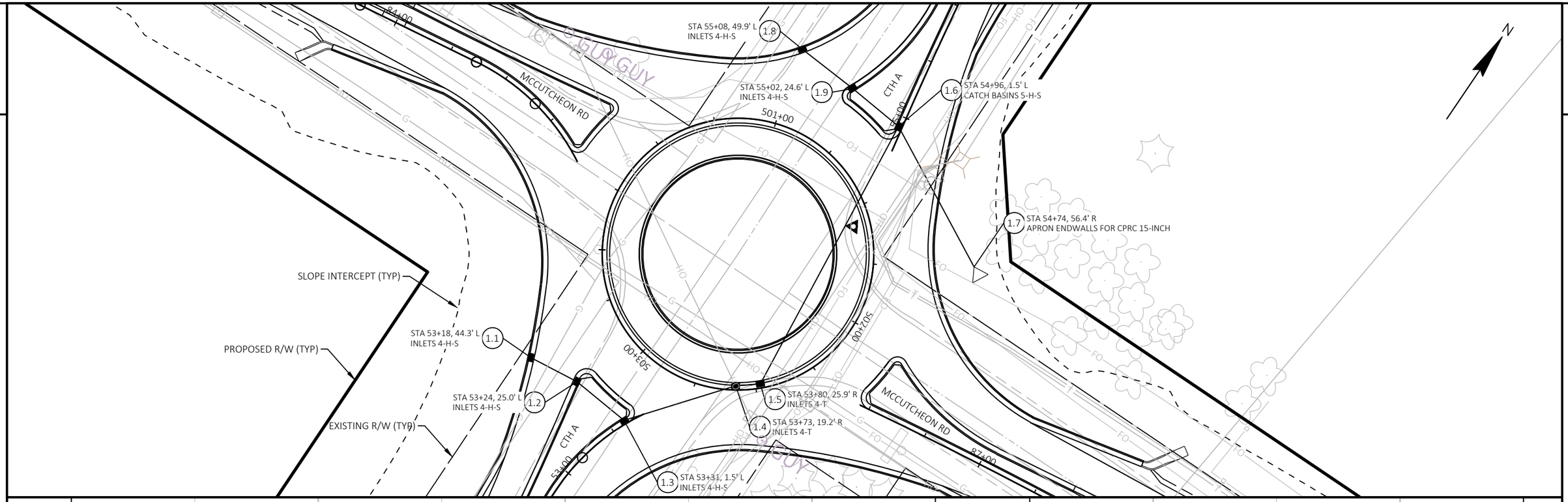


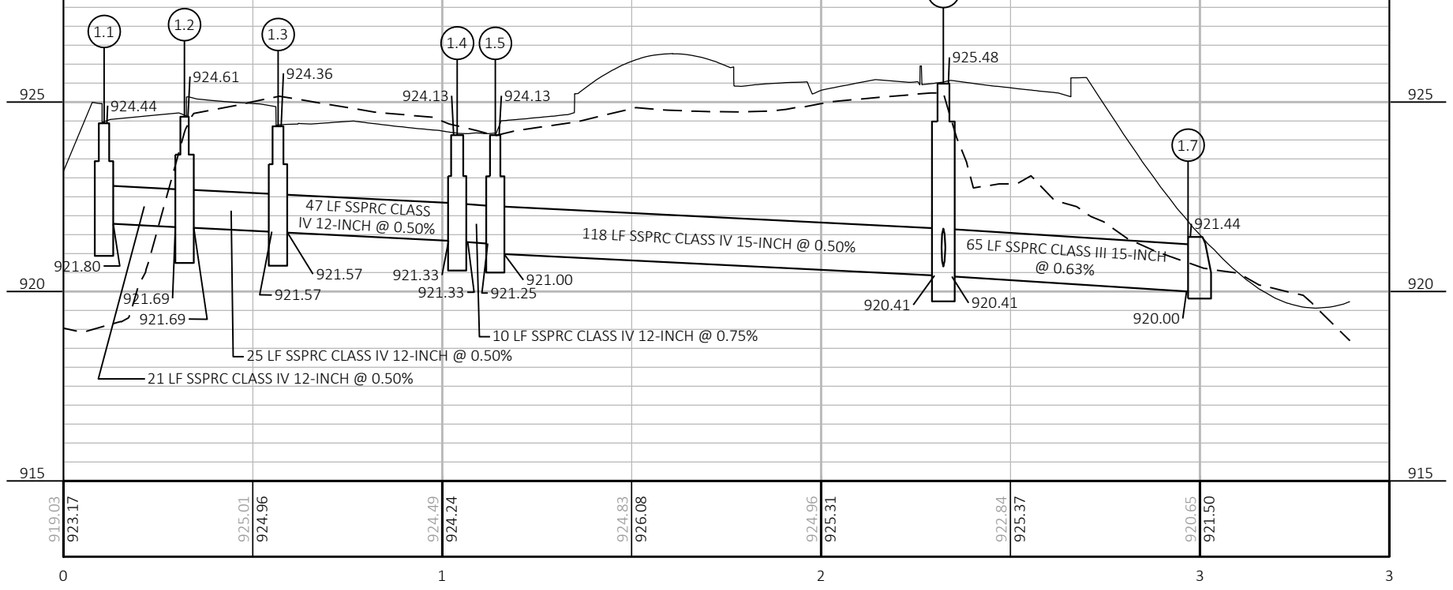
2

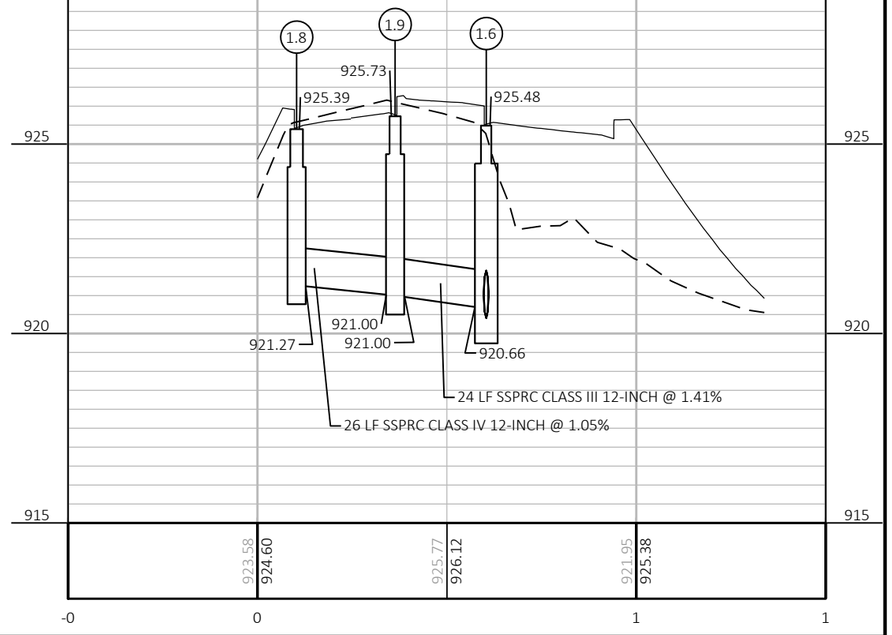
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	EROSION CONTROL	SHEET 20	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022003-ec

PLOT DATE : 8/14/2023 11:10 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT







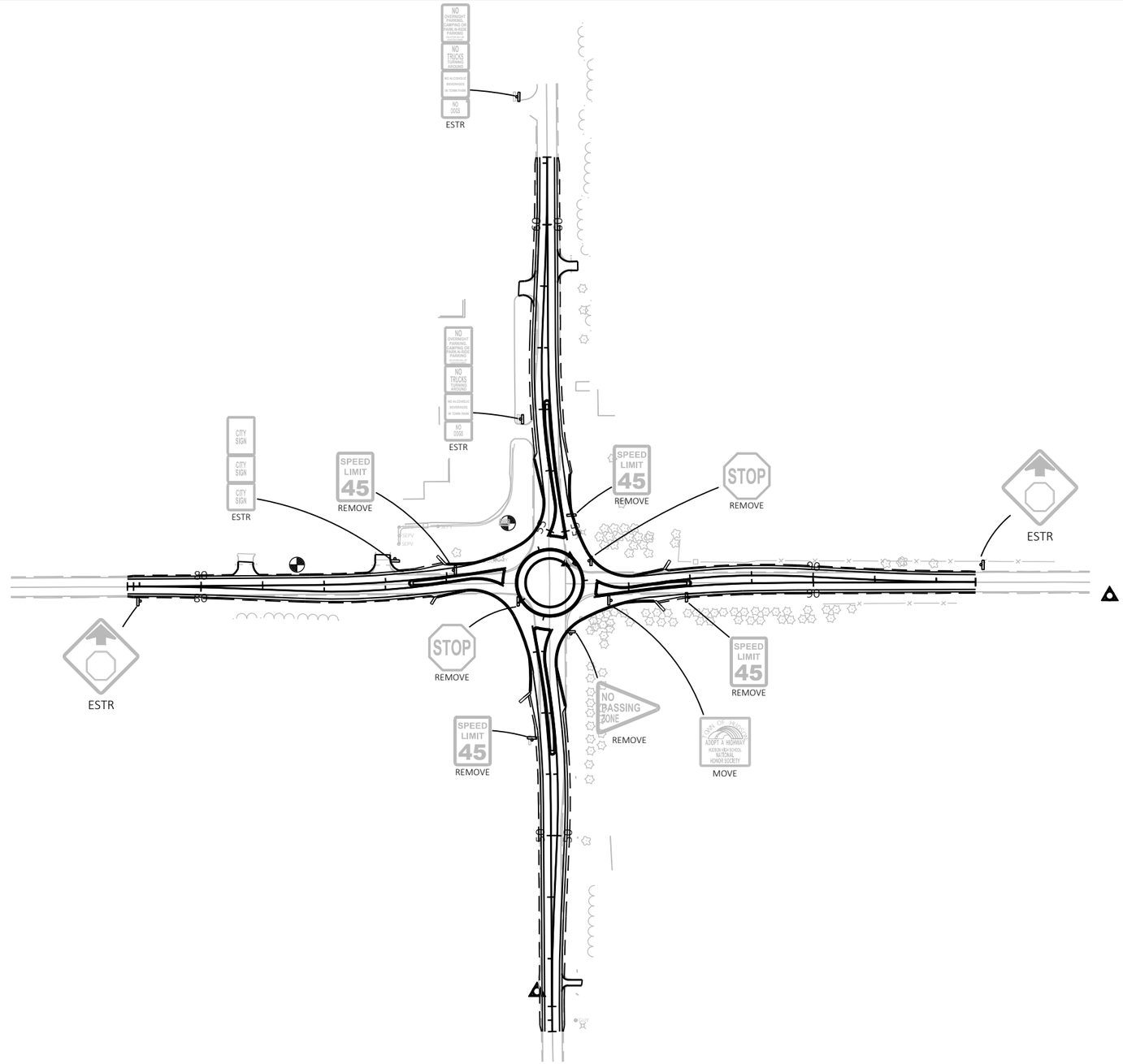
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	STORM SEWER	SHEET 21	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\022501-SS.DWG
LAYOUT NAME - 022501-ss
PLOT DATE : 8/14/2023 11:11 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 41

2

LEGEND

EXISTING SIGN MOUNTED ON POST(S)



2

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	SIGNING REMOVALS	SHEET 22	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\023201-PS.DWG
LAYOUT NAME - 023201-ps

PLOT DATE : 8/14/2023 11:12 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:200 FT

WISDOT/CADDS SHEET 42

LIGHTING PLAN LEGEND

- LIGHTING CABINET
- PULL BOX - 24"X48" NON-CONDUCTIVE UNLESS OTHERWISE NOTED
- CONDUIT - 2" NON-CONDUCTIVE UNLESS OTHERWISE NOTED
- LIGHT POLE, ARM MOUNTED LUMINAIRE

16'EB'+25 - 25' RT - LB01
LED A - 6 - 5 - 5 - A
- LUMINAIRE TYPE
- MAST ARM LENGTH (FT)
- BASE TYPE
- POLE TYPE
- CIRCUIT

NOTE: ALL CIRCUITS SHALL BE WIRED FOR 240V

N

MCCUTCHEON RD

83'EB'+00
83'WB'+00
84'EB'+00
84'WB'+00

83'EB'+34 - 26.0' RT - LB-7
LED A - 6 - 5 - 5 - B

84'EB'+48 - 27.4' RT - LB-6
LED A - 6 - 5 - 5 - A

500'CIR'+78 - 33.3' LT - LB-8
LED A - 6 - 5 - 5 - D

503'CIR'+32 - 35.3' LT - LB-5
LED A - 6 - 5 - 5 - B

55'NB'+42 - 37.9' LT - LB-9
LED A - 6 - 5 - 5 - C

56'NB'+36 - 39.5' LT - LB-10
LED A - 6 - 5 - 5 - D

57'NB'+21 - 39.6' LT - LB-11
LED A - 6 - 5 - 5 - C

PB-2
PB-3
PB-1
PB-5
PB-4

3"

53'SB'+00
53'NB'+00
52'SB'+00
52'NB'+00
51'SB'+00
51'NB'+00
CTH A

503'CIR'+00
501'CIR'+00
502'CIR'+00

55'SB'+00
56'SB'+00
56'NB'+00
57'SB'+00
57'NB'+00
58'SB'+00
58'NB'+00

53'NB'+05 - 28.4' RT - LB-2
LED A - 6 - 5 - 5 - A

52'NB'+27 - 28.7' RT - LB-3
LED A - 6 - 5 - 5 - B

51'NB'+31 - 27.9' RT - LB-4
LED A - 6 - 5 - 5 - A

LIGHTING CABINET

502'CIR'+42 - 38.2 LT - LB-1
LED A - 6 - 5 - 5 - D

501'CIR'+70 - 31.9' LT - LB-12
LED A - 6 - 5 - 5 - C

87'WB'+04 - 25.6 LT - LB-13
LED A - 6 - 5 - 5 - D

87'EB'+99 - 37.7' LT - LB-14
LED A - 6 - 5 - 5 - D

MATCHLINE 87'EB'+50
MATCHLINE 87'EB'+50

87'EB'+88
87'WB'+88

ROUNDABOUT LIGHTING
CTH A & MCCUTCHEON RD
TOWN OF HUDSON
ST. CROIX COUNTY

LIGHTING NO.

COUNTY CONTACT:
DESIGNED BY: JT ENGINEERING, INC.
REVISED BY:

PAGE 1 OF 1

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	LIGHTING PLAN	SHEET 23	E

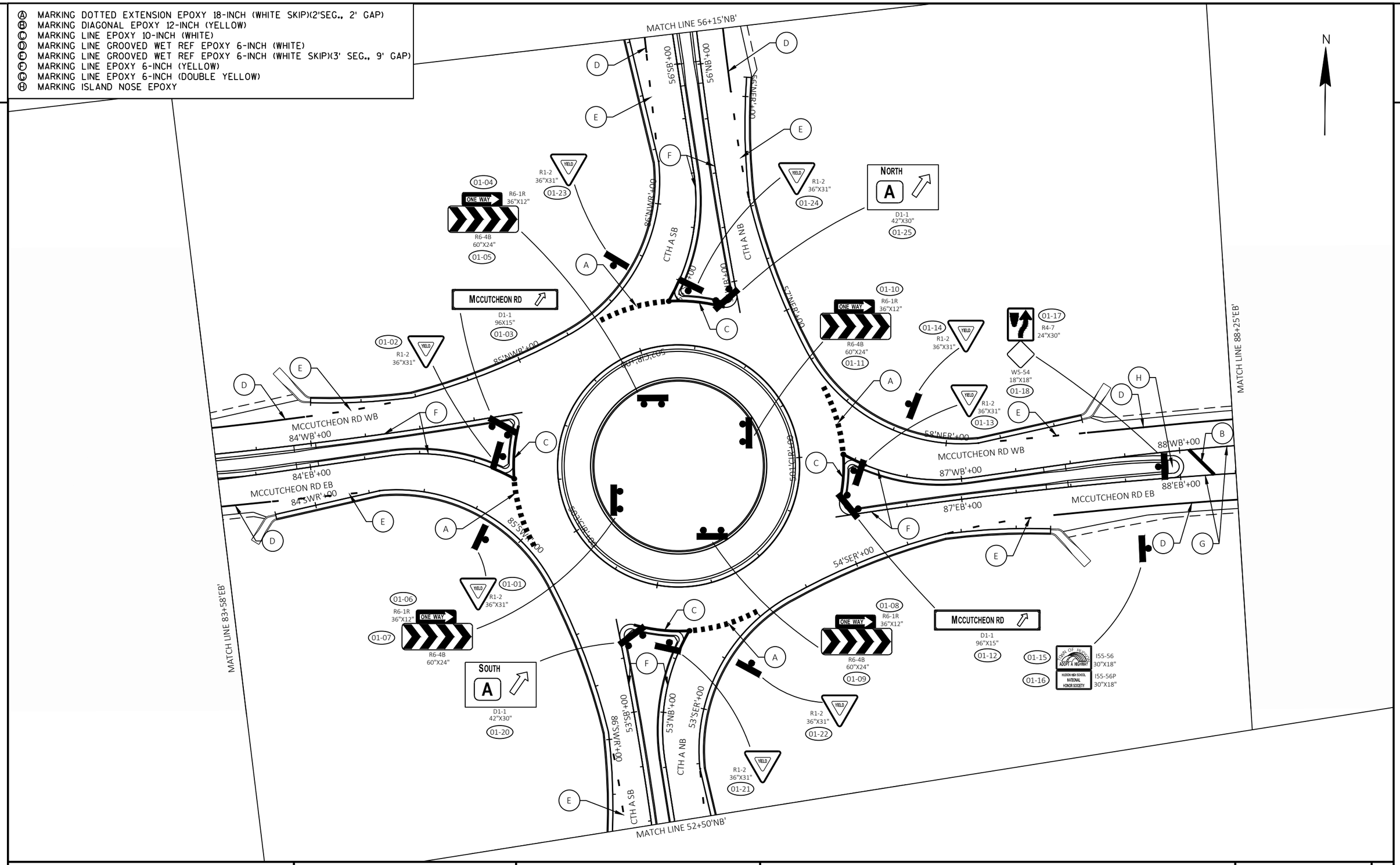
FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\023601-LP.DWG
LAYOUT NAME - 023601-lp

PLOT DATE : 8/14/2023 11:12 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

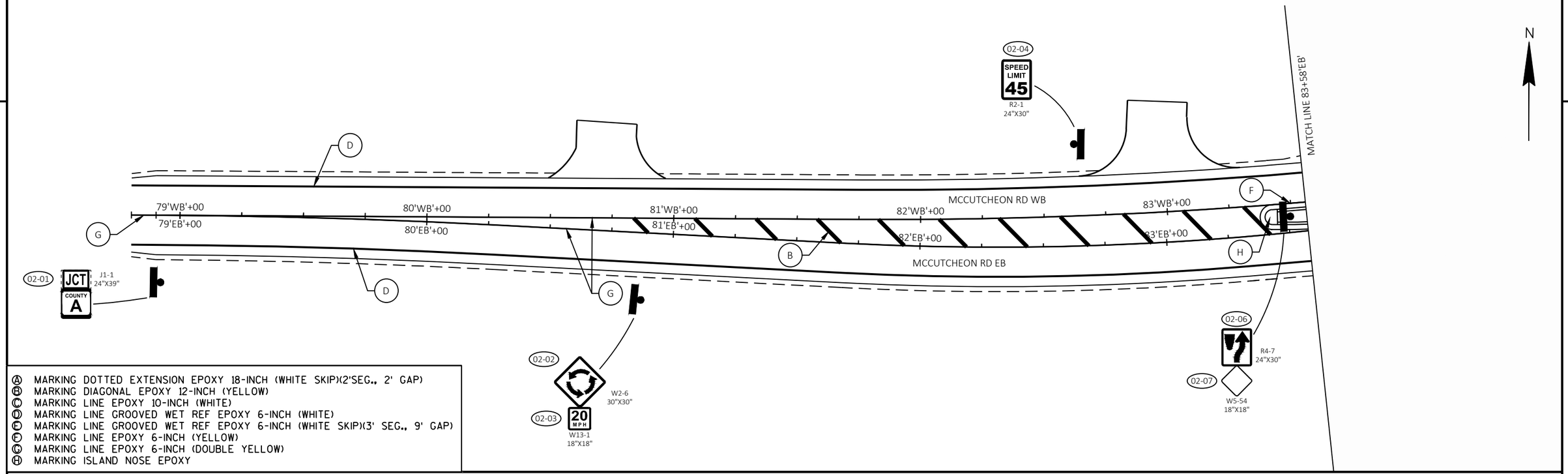
2

- Ⓐ MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE SKIP)(2'SEG., 2' GAP)
- Ⓑ MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
- Ⓒ MARKING LINE EPOXY 10-INCH (WHITE)
- Ⓓ MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- Ⓔ MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE SKIP)(3' SEG., 9' GAP)
- Ⓕ MARKING LINE EPOXY 6-INCH (YELLOW)
- Ⓖ MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
- Ⓗ MARKING ISLAND NOSE EPOXY

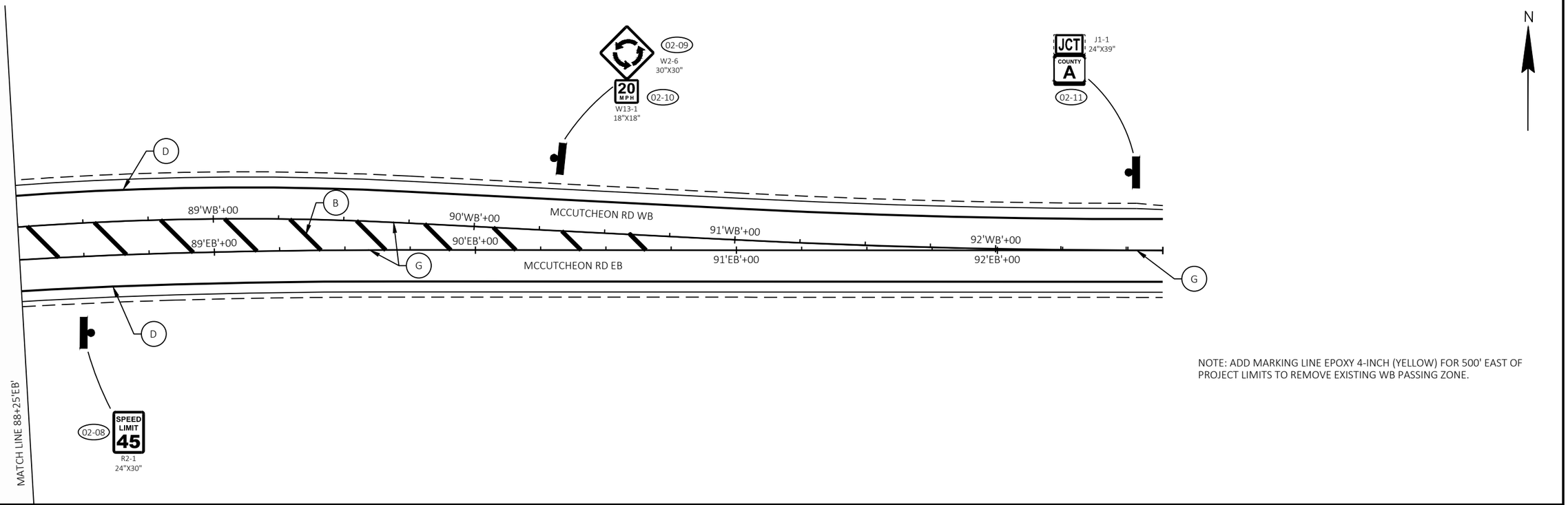


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PAVEMENT MARKING & SIGNING	SHEET 24	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\024501-PM.DWG
LAYOUT NAME - 024501-pm
PLOT DATE : 8/14/2023 11:13 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : ##########



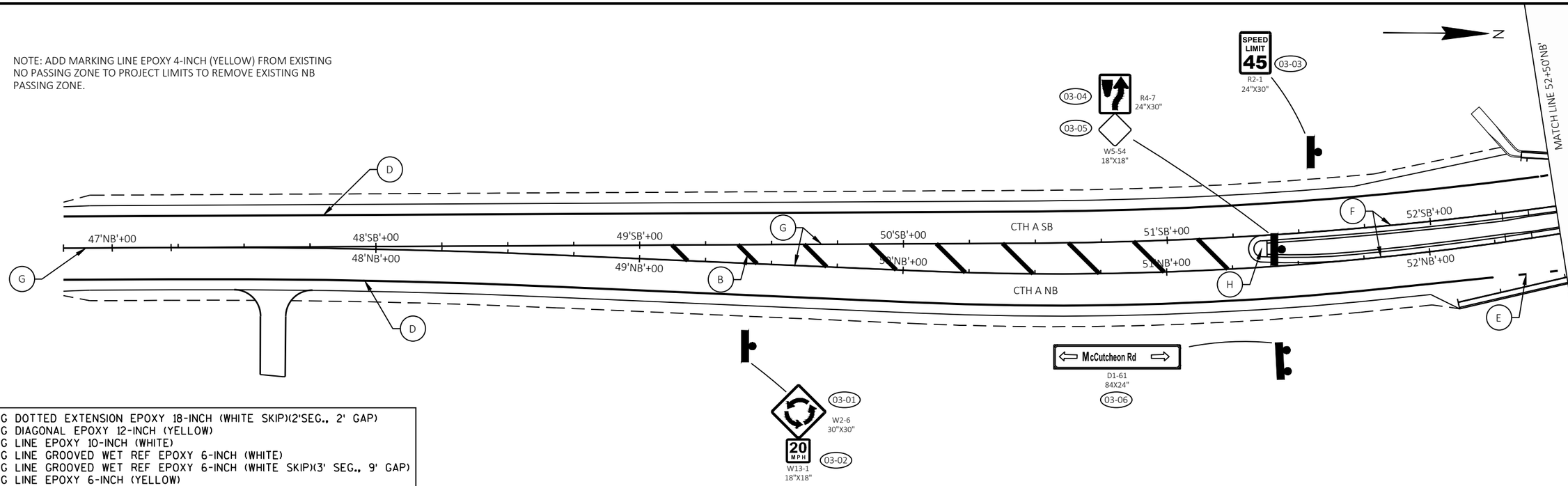
Ⓐ MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE SKIP)(2'SEG., 2' GAP)
Ⓑ MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
Ⓒ MARKING LINE EPOXY 10-INCH (WHITE)
Ⓓ MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
Ⓔ MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE SKIP)(3' SEG., 9' GAP)
Ⓕ MARKING LINE EPOXY 6-INCH (YELLOW)
Ⓖ MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
Ⓗ MARKING ISLAND NOSE EPOXY



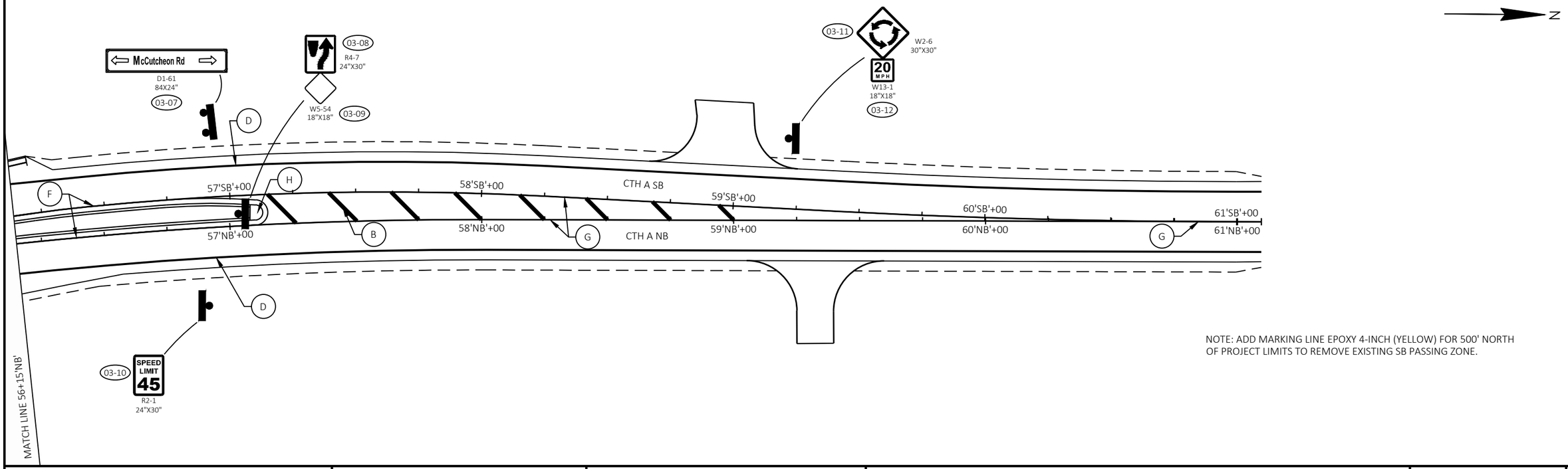
NOTE: ADD MARKING LINE EPOXY 4-INCH (YELLOW) FOR 500' EAST OF PROJECT LIMITS TO REMOVE EXISTING WB PASSING ZONE.

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PAVEMENT MARKING & SIGNING	SHEET 25	E

NOTE: ADD MARKING LINE EPOXY 4-INCH (YELLOW) FROM EXISTING NO PASSING ZONE TO PROJECT LIMITS TO REMOVE EXISTING NB PASSING ZONE.



Ⓐ	MARKING DOTTED EXTENSION EPOXY 18-INCH (WHITE SKIP)(2'SEG., 2' GAP)
Ⓑ	MARKING DIAGONAL EPOXY 12-INCH (YELLOW)
Ⓒ	MARKING LINE EPOXY 10-INCH (WHITE)
Ⓓ	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
Ⓔ	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE SKIP)(3' SEG., 9' GAP)
Ⓕ	MARKING LINE EPOXY 6-INCH (YELLOW)
Ⓖ	MARKING LINE EPOXY 6-INCH (DOUBLE YELLOW)
Ⓗ	MARKING ISLAND NOSE EPOXY



NOTE: ADD MARKING LINE EPOXY 4-INCH (YELLOW) FOR 500' NORTH OF PROJECT LIMITS TO REMOVE EXISTING SB PASSING ZONE.

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PAVEMENT MARKING & SIGNING	SHEET 26	E

2

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- TYPE III BARRICADE
- NEW SIGN
- EXISTING SIGN
- COVERING SIGNS TYPE II
- DETQUR ROUTE

GENERAL NOTES

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

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL MO5 AND MO6 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

N

END PROJECT

SEE SDD BARRICADES AND SIGNS FOR VARIOUS CLOSURES

SEE SDD BARRICADES AND SIGNS FOR VARIOUS CLOSURES

BEGIN PROJECT

DETAIL A

DETAIL B

DETAIL C

DETAIL D

DETAIL E

DETAIL F

DETOUR NORTH M4-8 24"X12" M3-1 24"X12" COUNTY A M1-5A 24"X24"

DETOUR SOUTH M4-8 24"X12" M3-3 24"X12" COUNTY A M1-5A 24"X24"

ST. JOSEPH

Boardman

WARREN

HUDSON

Roberts

HAMMO

Bass L.

Perch L.

Tenmile Cr.

Lundy Pond

Three Lakes

Dry Dam L.

Lit. Falls L.

Twin Lks

Willow River

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX COUNTY	DETOUR	SHEET 27	E

2

CTH A

CTH U

USH 12/CTH U

USH 12

NORTH M3-1 24"X12"
COUNTY A M1-5A 24"X24"
DETOUR AHEAD W20-2A

END DETOUR M4-8A 24"X18"
SOUTH M3-3 24"X12"
COUNTY A M1-5A 24"X24"

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
COUNTY A COUNTY U
M06-1 21"X21"

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
COUNTY A M1-5A 24"X24"
M05-1R 21"X21"

R11-3 3
ROAD CLOSED 3/4 MILES AHEAD LOCAL TRAFFIC ONLY
TYPE III BARRICADE

DETOUR M4-9L 30"X24"

SOUTH COUNTY U

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
COUNTY A M1-5A 24"X24"
M05-1L 21"X21"

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
COUNTY A M1-5A 24"X24"

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
COUNTY A M1-5A 24"X24"
M05-1L 21"X21"

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
COUNTY A M1-5A 24"X24"

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
COUNTY A M1-5A 24"X24"
M06-1 21"X21"

EAST 12 WEST 12 SOUTH COUNTY U

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
COUNTY A M1-5A 24"X24"
M06-1 21"X21"

Willow River State Park

WEST ALT AUSTRIA 12 94 COUNTY U

DETOUR M4-8 24"X12"
SOUTH M3-3 24"X12"
COUNTY A M1-5A 24"X24"
M05-1R 21"X21"

WEST ALT AUSTRIA 12 94

EAST ALT AUSTRIA 12 94

DETOUR M4-8 24"X12"
NORTH M3-1 24"X12"
COUNTY A M1-5A 24"X24"

R11-3 3
ROAD CLOSED 1 MILES AHEAD LOCAL TRAFFIC ONLY
TYPE III BARRICADE

EAST ALT AUSTRIA 12 94

DETOUR M4-8 36"X18"
NORTH M3-1 36"X18"
COUNTY A M1-5A 36"X36"
M06-1 30"X30"

DETOUR M4-8 36"X18"
NORTH M3-1 36"X18"
COUNTY A M1-5A 36"X36"
M05-1R 30"X30"

Willow River State Park
14"X14" ARROW PER SIGN DETAIL A4-12

NORTH M3-1 36"X18"
COUNTY A M1-5A 36"X36"
DETOUR AHEAD W20-2A

EAST ALT AUSTRIA COUNTY U 12 94

500'

LOT 1 LOT 4 LOT 5 LOT 6 LOT 7 LOT 8 LOT 9 OUTLOT OL 1

N

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- TYPE III BARRICADE
- NEW SIGN
- EXISTING SIGN
- COVERING SIGNS TYPE II
- DETQUR ROUTE

GENERAL NOTES

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

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL MO5 AND MO6 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX COUNTY	DETOUR - DETAIL A	SHEET 28	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\027101-DT.DWG
LAYOUT NAME - 027102
PLOT DATE : 8/14/2023 11:13 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42

2

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- TYPE III BARRICADE
- NEW SIGN
- EXISTING SIGN
- COVERING SIGNS TYPE II
- DETQUR ROUTE

GENERAL NOTES

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

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL MO5 AND MO6 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

N

120TH STREET

USH 12

USH 12

STH 65

ALT WEST 12 94

DETOUR SOUTH COUNTY A M4-8 24"X12" M3-3 24"X12" M1-5A 24"X24"

DETOUR SOUTH COUNTY A M4-8 24"X12" M3-3 24"X12" M1-5A 24"X24" M6-2 21"X21"

DETOUR NORTH COUNTY A M4-8 24"X12" M3-1 24"X12" M1-5A 24"X24" M6-2 21"X21"

DETOUR SOUTH COUNTY A M4-8 24"X12" M3-3 24"X12" M1-5A 24"X24" M6-2 21"X21"

DETOUR NORTH COUNTY A M4-8 24"X12" M3-1 24"X12" M1-5A 24"X24" M6-2 21"X21"

ALT WEST 94

DETOUR SOUTH COUNTY A M4-8 24"X12" M3-3 24"X12" M1-5A 24"X24" M06-1 21"X21"

ALT EAST 94

DETOUR NORTH COUNTY A M4-8 24"X12" M3-1 24"X12" M1-5A 24"X24" M06-1 21"X21"

EAST NORTH ALT 12 65 94

DETOUR NORTH COUNTY A M4-8 24"X12" M3-1 24"X12" M1-5A 24"X24"

DETOUR NORTH COUNTY A M4-8 24"X12" M3-1 24"X12" M1-5A 24"X24" M06-1 21"X21"

ALT WEST ALT EAST 94 94

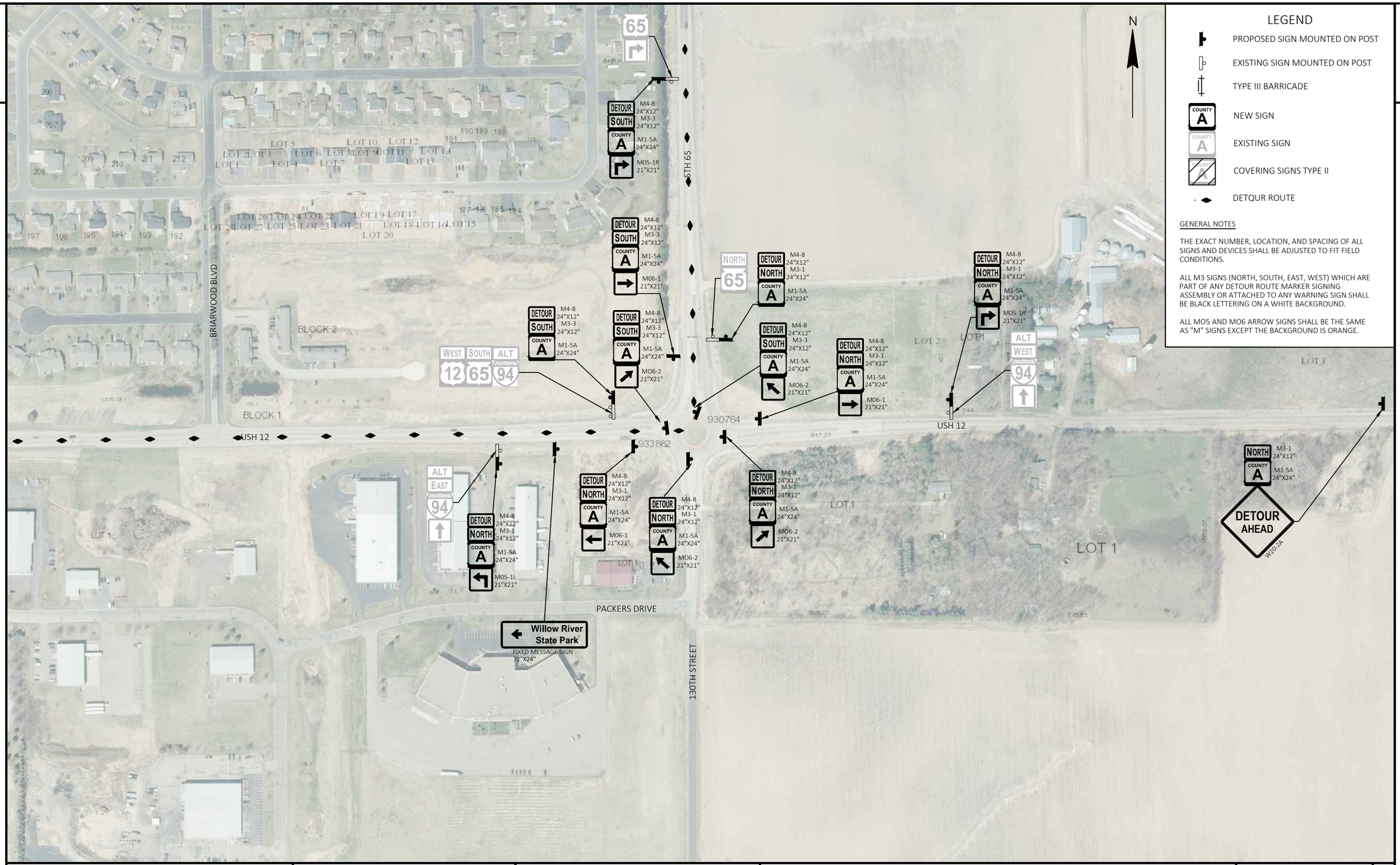
ALT WEST ALT EAST 94 94

DETOUR NORTH COUNTY A M4-8 24"X12" M3-1 24"X12" M1-5A 24"X24" M05-1R 21"X21"

NORTH COUNTY A M3-1 24"X12" M1-5A 24"X24"

DETOUR AHEAD W20-2A

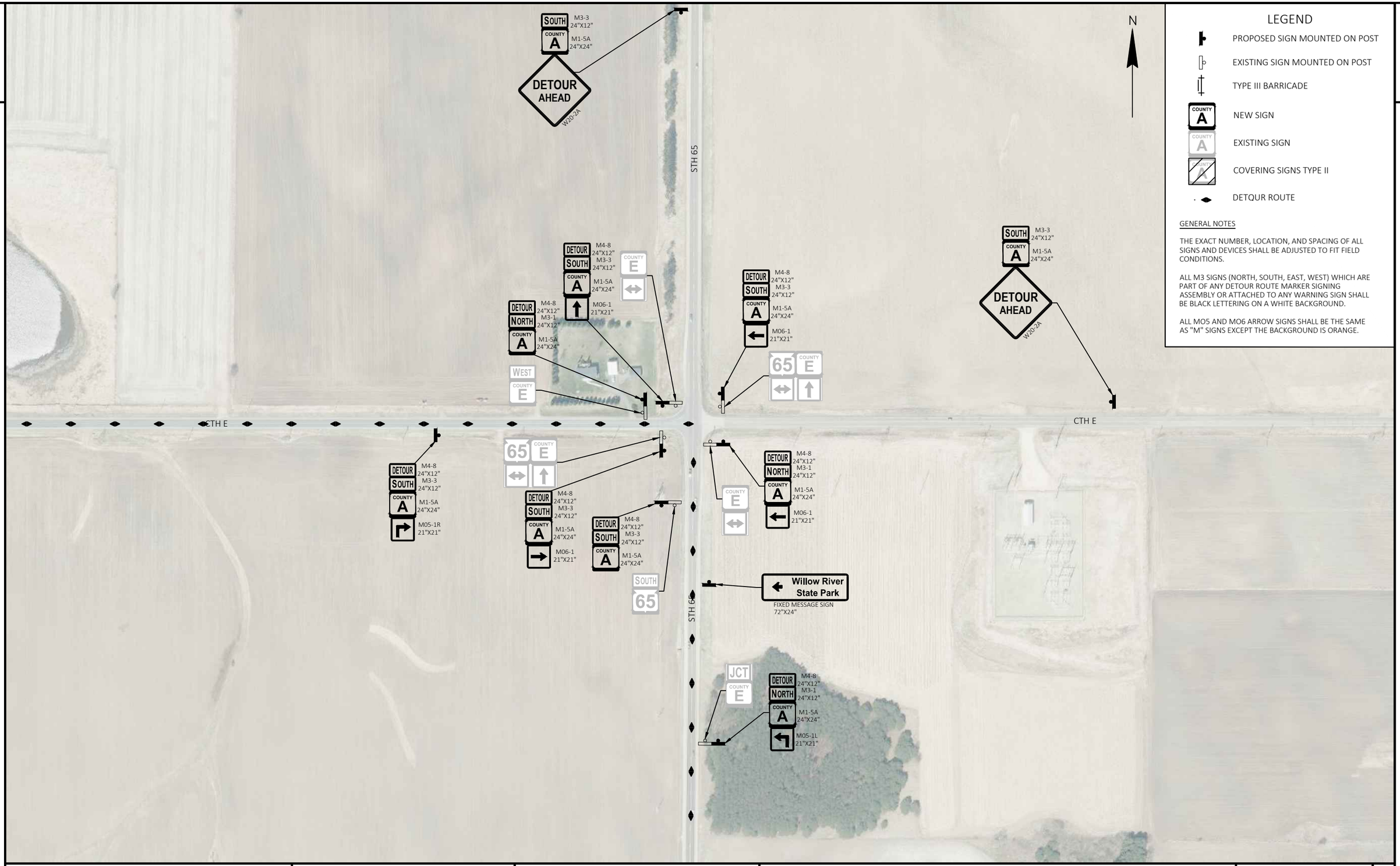
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX COUNTY	DETOUR - DETAIL B	SHEET 29	E



PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX COUNTY	DETOUR - DETAIL C	SHEET 30 E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\027101-DT.DWG
LAYOUT NAME - 027104
PLOT DATE : 8/14/2023 11:14 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:1 MI
WISDOT/CADDS SHEET 42

2



PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX COUNTY	DETOUR - DETAIL D	SHEET 31	E

2

N

BASS LAKE ROAD

LOT 1

LOT 2

CTH E

CTH E/CTH A

CTH A

DETOUR AHEAD W20-2A

M4-8 24"X12" / M3-3 24"X12" / M1-5A 24"X24"

M4-9L 30"X24" / R11-3 60"X30" / ROAD CLOSED 3 MILES AHEAD LOCAL TRAFFIC ONLY

TYPE III BARRICADE

M06-1 21"X21"

M05-1L 21"X21"

M05-1R 21"X21"

M4-8A 24"X18" / M3-1 24"X12" / M1-5A 24"X24"

Willow River State Park

FIXED MESSAGE SIGNSIGN SIZE 72"X24"

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- TYPE III BARRICADE
- NEW SIGN
- EXISTING SIGN
- COVERING SIGNS TYPE II
- DETQUR ROUTE

GENERAL NOTES

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

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL MO5 AND MO6 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX COUNTY	DETOUR - DETAIL E	SHEET 32	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\027101-DT.DWG
LAYOUT NAME - 027106

PLOT DATE : 8/14/2023 11:14 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:1 MI

2

LEGEND

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- TYPE III BARRICADE
- NEW SIGN
- EXISTING SIGN
- COVERING SIGNS TYPE II
- DETQUR ROUTE

GENERAL NOTES

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

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL MO5 AND MO6 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

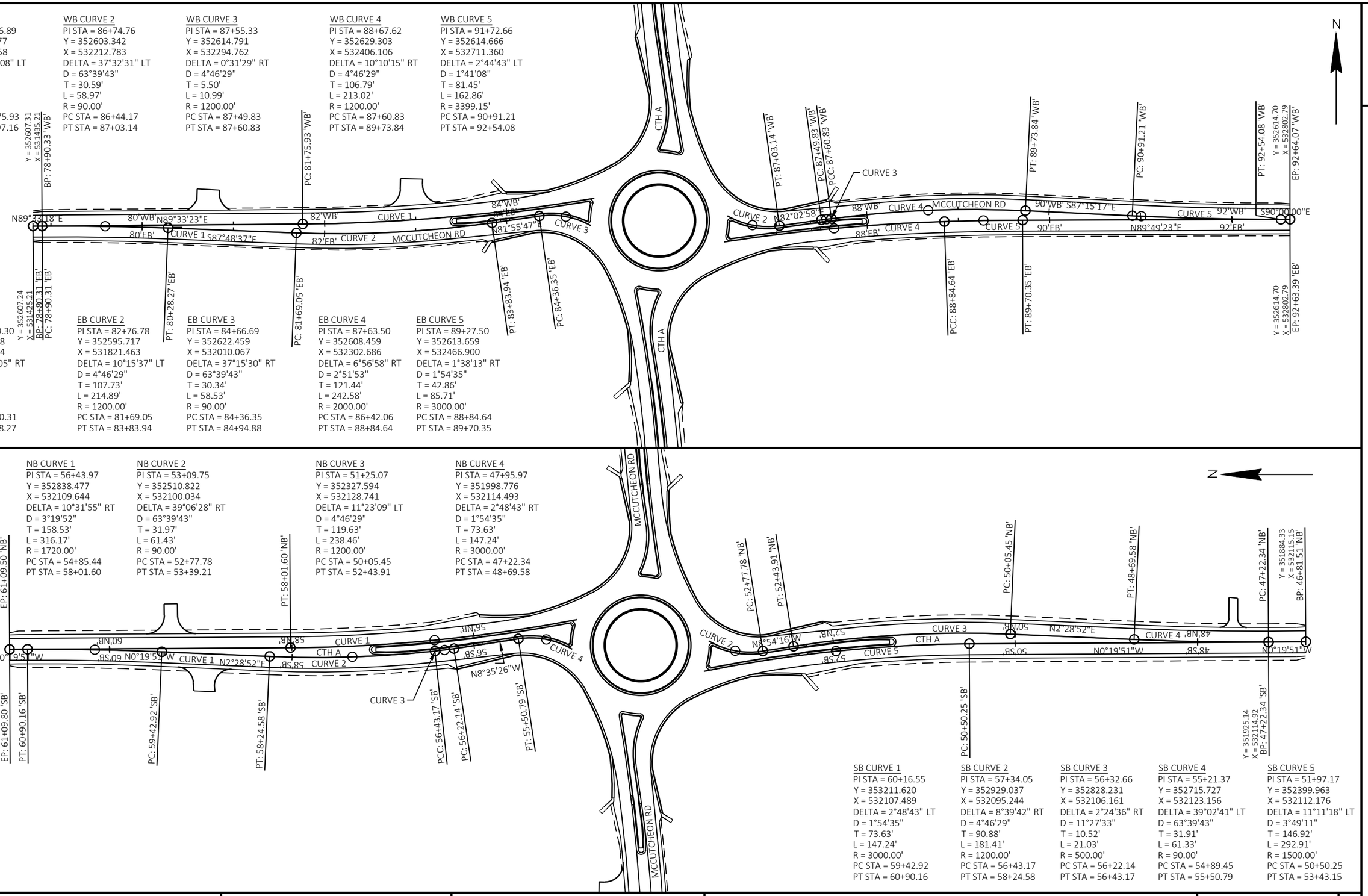
2

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX COUNTY	DETOUR - DETAIL F	SHEET 33	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\027101-DT.DWG
LAYOUT NAME - 027107

PLOT DATE : 8/14/2023 11:14 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:1 MI

2



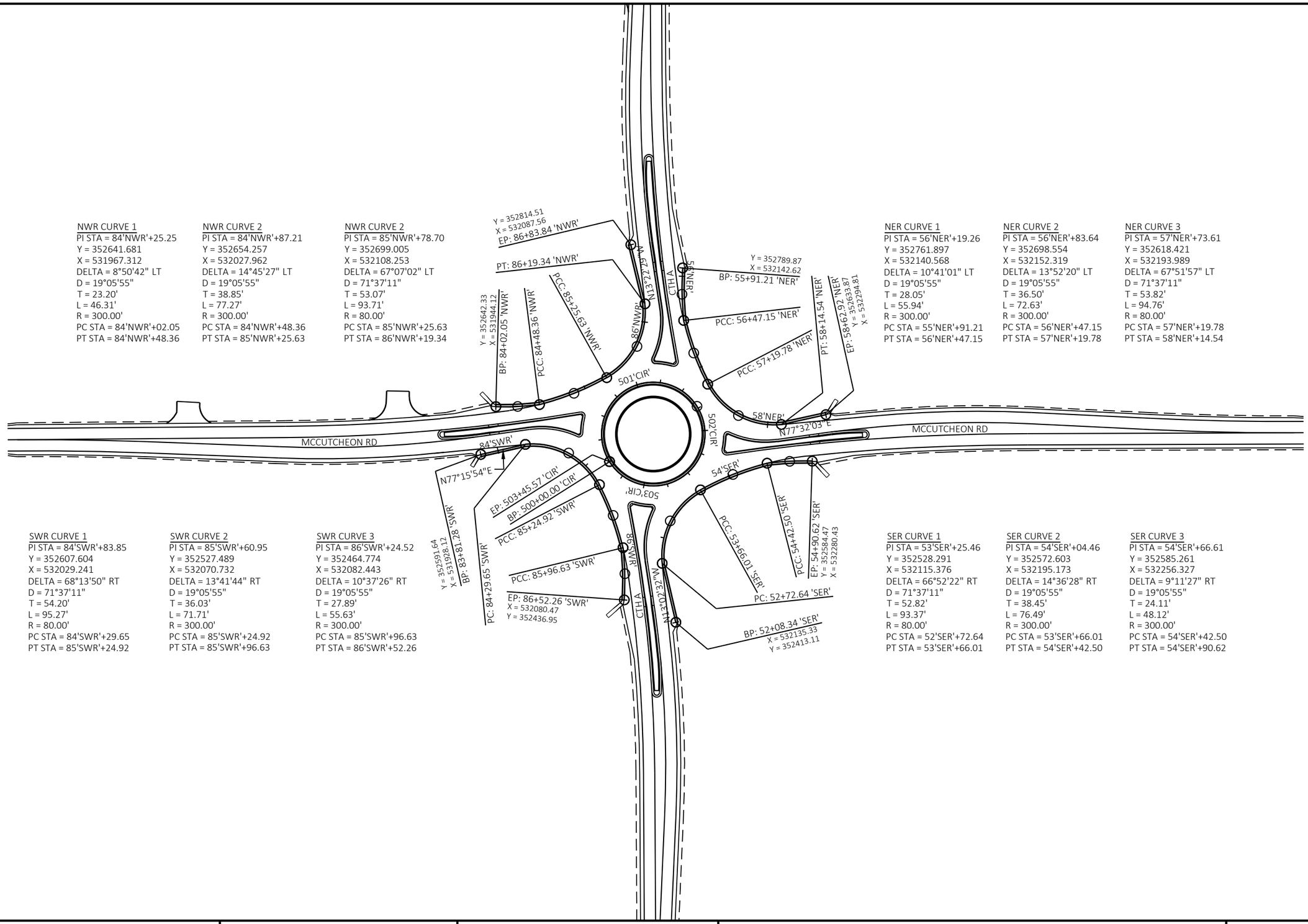
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	ALIGNMENT DETAILS	SHEET 34	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\027201-AD.DWG
LAYOUT NAME - 027201-ad

PLOT DATE : 8/14/2023 11:14 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2



NWR CURVE 1
PI STA = 84'NWR'+25.25
Y = 352641.681
X = 531967.312
DELTA = 8°50'42" LT
D = 19°05'55"
T = 23.20'
L = 46.31'
R = 300.00'
PC STA = 84'NWR'+02.05
PT STA = 84'NWR'+48.36

NWR CURVE 2
PI STA = 84'NWR'+87.21
Y = 352654.257
X = 532027.962
DELTA = 14°45'27" LT
D = 19°05'55"
T = 38.85'
L = 77.27'
R = 300.00'
PC STA = 84'NWR'+48.36
PT STA = 85'NWR'+25.63

NWR CURVE 2
PI STA = 85'NWR'+78.70
Y = 352699.005
X = 532108.253
DELTA = 67°07'02" LT
D = 71°37'11"
T = 53.07'
L = 93.71'
R = 80.00'
PC STA = 85'NWR'+25.63
PT STA = 86'NWR'+19.34

NER CURVE 1
PI STA = 56'NER'+19.26
Y = 352761.897
X = 532140.568
DELTA = 10°41'01" LT
D = 19°05'55"
T = 28.05'
L = 55.94'
R = 300.00'
PC STA = 55'NER'+91.21
PT STA = 56'NER'+47.15

NER CURVE 2
PI STA = 56'NER'+83.64
Y = 352698.554
X = 532152.319
DELTA = 13°52'20" LT
D = 19°05'55"
T = 36.50'
L = 72.63'
R = 300.00'
PC STA = 56'NER'+47.15
PT STA = 57'NER'+19.78

NER CURVE 3
PI STA = 57'NER'+73.61
Y = 352618.421
X = 532193.989
DELTA = 67°51'57" LT
D = 71°37'11"
T = 53.82'
L = 94.76'
R = 80.00'
PC STA = 57'NER'+19.78
PT STA = 58'NER'+14.54

SWR CURVE 1
PI STA = 84'SWR'+83.85
Y = 352607.604
X = 532029.241
DELTA = 68°13'50" RT
D = 71°37'11"
T = 54.20'
L = 95.27'
R = 80.00'
PC STA = 84'SWR'+29.65
PT STA = 85'SWR'+24.92

SWR CURVE 2
PI STA = 85'SWR'+60.95
Y = 352527.489
X = 532070.732
DELTA = 13°41'44" RT
D = 19°05'55"
T = 36.03'
L = 71.71'
R = 300.00'
PC STA = 85'SWR'+24.92
PT STA = 85'SWR'+96.63

SWR CURVE 3
PI STA = 86'SWR'+24.52
Y = 352464.774
X = 532082.443
DELTA = 10°37'26" RT
D = 19°05'55"
T = 27.89'
L = 55.63'
R = 300.00'
PC STA = 85'SWR'+96.63
PT STA = 86'SWR'+52.26

SER CURVE 1
PI STA = 53'SER'+25.46
Y = 352528.291
X = 532115.376
DELTA = 66°52'22" RT
D = 71°37'11"
T = 52.82'
L = 93.37'
R = 80.00'
PC STA = 52'SER'+72.64
PT STA = 53'SER'+66.01

SER CURVE 2
PI STA = 54'SER'+04.46
Y = 352572.603
X = 532195.173
DELTA = 14°36'28" RT
D = 19°05'55"
T = 38.45'
L = 76.49'
R = 300.00'
PC STA = 53'SER'+66.01
PT STA = 54'SER'+42.50

SER CURVE 3
PI STA = 54'SER'+66.61
Y = 352585.261
X = 532256.327
DELTA = 9°11'27" RT
D = 19°05'55"
T = 24.11'
L = 48.12'
R = 300.00'
PC STA = 54'SER'+42.50
PT STA = 54'SER'+90.62

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	ALIGNMENT DETAILS	SHEET 35	E

Estimate Of Quantities

8944-04-71

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	2.000	2.000
0004	201.0120	Clearing	ID	22.000	22.000
0006	201.0205	Grubbing	STA	2.000	2.000
0008	201.0220	Grubbing	ID	22.000	22.000
0010	203.0100	Removing Small Pipe Culverts	EACH	3.000	3.000
0012	205.0100	Excavation Common	CY	7,867.000	7,867.000
0014	211.0500	Prepare Foundation for Base Aggregate	STA	27.000	27.000
0016	213.0100	Finishing Roadway (project) 01. 8944-04-71	EACH	1.000	1.000
0018	305.0110	Base Aggregate Dense 3/4-Inch	TON	541.000	541.000
0020	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	11,151.000	11,151.000
0022	405.0100	Coloring Concrete WisDOT Red	CY	128.000	128.000
0024	415.2010	Concrete Truck Apron 12-inch	SY	385.000	385.000
0026	455.0605	Tack Coat	GAL	1,007.000	1,007.000
0028	460.2000	Incentive Density HMA Pavement	DOL	2,090.000	2,090.000
0030	460.6224	HMA Pavement 4 MT 58-28 S	TON	2,108.000	2,108.000
0032	460.6244	HMA Pavement 4 MT 58-34 S	TON	1,067.000	1,067.000
0034	460.7444	HMA Pavement 4 HT 58-34 H	TON	89.000	89.000
0036	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	43.000	43.000
0038	465.0315	Asphaltic Flumes	SY	12.000	12.000
0040	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	4.000	4.000
0042	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	6.000	6.000
0044	520.3312	Culvert Pipe Class III-A 12-Inch	LF	56.000	56.000
0046	520.3318	Culvert Pipe Class III-A 18-Inch	LF	79.000	79.000
0048	522.1015	Apron Endwalls for Culvert Pipe Reinforced Concrete 15-Inch	EACH	1.000	1.000
0050	522.2419	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-IV 19x30-Inch	LF	68.000	68.000
0052	522.2619	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 19x30-Inch	EACH	2.000	2.000
0054	601.0405	Concrete Curb & Gutter 18-Inch Type A	LF	245.000	245.000
0056	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	1,937.000	1,937.000
0058	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	718.000	718.000
0060	601.0580	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type R	LF	333.000	333.000
0062	602.0410	Concrete Sidewalk 5-Inch	SF	5,044.000	5,044.000
0064	606.0200	Riprap Medium	CY	18.000	18.000
0066	608.0312	Storm Sewer Pipe Reinforced Concrete Class III 12-Inch	LF	24.000	24.000
0068	608.0315	Storm Sewer Pipe Reinforced Concrete Class III 15-Inch	LF	65.000	65.000
0070	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	129.000	129.000
0072	608.0415	Storm Sewer Pipe Reinforced Concrete Class IV 15-Inch	LF	118.000	118.000
0074	611.0639	Inlet Covers Type H-S	EACH	7.000	7.000
0076	611.0652	Inlet Covers Type T	EACH	2.000	2.000
0078	611.1005	Catch Basins 5-FT Diameter	EACH	1.000	1.000
0080	611.3004	Inlets 4-FT Diameter	EACH	8.000	8.000
0082	618.0100	Maintenance And Repair of Haul Roads (project) 01. 8944-04-71	EACH	1.000	1.000
0084	619.1000	Mobilization	EACH	1.000	1.000
0086	620.0300	Concrete Median Sloped Nose	SF	140.000	140.000
0088	624.0100	Water	MGAL	175.000	175.000
0090	625.0500	Salvaged Topsoil	SY	14,594.000	14,594.000
0092	627.0200	Mulching	SY	10,421.000	10,421.000
0094	628.1504	Silt Fence	LF	3,861.000	3,861.000
0096	628.1520	Silt Fence Maintenance	LF	3,861.000	3,861.000
0098	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000

Estimate Of Quantities

8944-04-71

Line	Item	Item Description	Unit	Total	Qty
0100	628.1910	Mobilizations Emergency Erosion Control	EACH	1.000	1.000
0102	628.2004	Erosion Mat Class I Type B	SY	4,173.000	4,173.000
0104	628.7015	Inlet Protection Type C	EACH	8.000	8.000
0106	628.7504	Temporary Ditch Checks	LF	16.000	16.000
0108	628.7555	Culvert Pipe Checks	EACH	26.000	26.000
0110	629.0210	Fertilizer Type B	CWT	10.000	10.000
0112	630.0130	Seeding Mixture No. 30	LB	210.000	210.000
0114	630.0140	Seeding Mixture No. 40	LB	40.000	40.000
0116	630.0180	Seeding Mixture No. 80	LB	13.000	13.000
0118	633.5200	Markers Culvert End	EACH	2.000	2.000
0120	634.0612	Posts Wood 4x6-Inch X 12-FT	EACH	8.000	8.000
0122	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	19.000	19.000
0124	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	10.000	10.000
0126	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	1.000	1.000
0128	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	4.000	4.000
0130	637.2210	Signs Type II Reflective H	SF	248.000	248.000
0132	637.2230	Signs Type II Reflective F	SF	43.000	43.000
0134	638.2602	Removing Signs Type II	EACH	8.000	8.000
0136	638.3000	Removing Small Sign Supports	EACH	8.000	8.000
0138	642.5001	Field Office Type B	EACH	1.000	1.000
0140	643.0420	Traffic Control Barricades Type III	DAY	2,492.000	2,492.000
0142	643.0705	Traffic Control Warning Lights Type A	DAY	3,382.000	3,382.000
0144	643.0900	Traffic Control Signs	DAY	23,852.000	23,852.000
0146	643.0920	Traffic Control Covering Signs Type II	EACH	1.000	1.000
0148	643.1000	Traffic Control Signs Fixed Message	SF	36.000	36.000
0150	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0152	643.5000	Traffic Control	EACH	1.000	1.000
0154	645.0120	Geotextile Type HR	SY	24.000	24.000
0156	646.2020	Marking Line Epoxy 6-Inch	LF	9,084.000	9,084.000
0158	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	4,273.000	4,273.000
0160	646.4020	Marking Line Epoxy 10-Inch	LF	144.000	144.000
0162	646.6320	Marking Dotted Extension Epoxy 18-Inch	LF	72.000	72.000
0164	646.7120	Marking Diagonal Epoxy 12-Inch	LF	554.000	554.000
0166	646.8220	Marking Island Nose Epoxy	EACH	4.000	4.000
0168	648.0100	Locating No-Passing Zones	MI	0.250	0.250
0170	650.4000	Construction Staking Storm Sewer	EACH	9.000	9.000
0172	650.4500	Construction Staking Subgrade	LF	2,519.000	2,519.000
0174	650.5000	Construction Staking Base	LF	2,519.000	2,519.000
0176	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,233.000	3,233.000
0178	650.6000	Construction Staking Pipe Culverts	EACH	7.000	7.000
0180	650.8501	Construction Staking Electrical Installations (project) 01. 8944-04-71	EACH	1.000	1.000
0182	650.9911	Construction Staking Supplemental Control (project) 01. 8944-04-71	EACH	1.000	1.000
0184	650.9920	Construction Staking Slope Stakes	LF	2,519.000	2,519.000
0186	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	740.000	740.000
0188	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	525.000	525.000
0190	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	5.000	5.000
0192	654.0105	Concrete Bases Type 5	EACH	14.000	14.000
0194	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0196	655.0610	Electrical Wire Lighting 12 AWG	LF	7,460.000	7,460.000

Estimate Of Quantities

8944-04-71

Line	Item	Item Description	Unit	Total	Qty
0198	655.0615	Electrical Wire Lighting 10 AWG	LF	1,680.000	1,680.000
0200	656.0201	Electrical Service Meter Breaker Pedestal (location) 01. L-51-RW	EACH	1.000	1.000
0202	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	14.000	14.000
0204	657.0322	Poles Type 5-Aluminum	EACH	14.000	14.000
0206	657.0610	Luminaire Arms Single Member 4 1/2-Inch Clamp 6-FT	EACH	14.000	14.000
0208	659.1115	Luminaires Utility LED A	EACH	14.000	14.000
0210	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0212	690.0150	Sawing Asphalt	LF	223.000	223.000
0214	715.0720	Incentive Compressive Strength Concrete Pavement	DOL	500.000	500.000
0216	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	300.000	300.000
0218	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	300.000	300.000

3

REMOVING SMALL CULVERT PIPES

STATION	OFFSET	LOCATION	SIZE	MATERIAL	LENGTH	203.0100 REMOVING SMALL CULVERT PIPES EACH
59'NB'+33	RT	CTH A	18 IN	CMP	26 LF	1
80'EB'+70	LT	MCCUTCHEON RD	18 IN	CMP	30 LF	1
83'EB'+00	LT	MCCUTCHEON RD	18 IN	CMP	30 LF	1
				TOTAL		**3**

WATER SUMMARY

LOCATION	624.0100 WATER MGAL
CTH A/MCCUTCHEON RD	175
TOTAL	**175**

3

BASE AGGREGATE SUMMARY

STATION		STATION	LOCATION		305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	211.0500 PREPARE FOUNDATION FOR BASE AGGREGATE STA	REMARKS
46'NB'+82	-	53'NB'+39	CTH A	SOUTH LEG	203	2,926	7	
54'NB'+85	-	61'NB'+10	CTH A	NORTH LEG	176	2,795	7	
78'EB'+80	-	84'NB'+95	MCCUTCHEON RD	WEST LEG	78	2,092	6	
86'NB'+42	-	92'NB'+63	MCCUTCHEON RD	EAST LEG	79	2,063	6	
500'CIR'+00	-	503'CIR'+46	CTH A/MCCUTCHEON RD	CIRCLE	--	1,165	--	
				UNDISTRIBUTED	5	110	--	
				TOTAL	**541**	**11,151**	**27**	

CONCRETE PAVEMENT SUMMARY

STATION		STATION	HWY	LOCATION	405.0100 COLORING CONCRETE WISDOT RED CY	415.2010 CONCRETE TRUCK APRON 12-INCH SY	REMARKS
46'NB'+81	-	61'NB'+10	CTH A	CTH A/MCCUTCHEON RD RAB	128	385	
				TOTAL	**128**	**385**	

3

ASPHALT PAVEMENT SUMMARY

STATION		STATION	HWY	LOCATION	AREA SY	UPPER LAYER DEPTH IN	MIDDLE LAYER DEPTH IN	LOWER LAYER DEPTH IN	455.0605 TACK COAT GAL	460.6224 HMA PAVEMENT 4 MT 58-28 S TON	460.6244 HMA PAVEMENT 4 MT 58-34 S TON	460.7444 HMA PAVEMENT 4 HT 58-34 H TON	465.0315 ASPHALTIC FLUMES SY	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
46'NB'+82	-	51'NB'+31	CTH A	SOUTH LEG	1885	1.75	2	2.25	226	449	185	--	--	--
51'NB'+31	-	53'NB'+39	CTH A	SOUTH LEG	848	1.75	2	2.25	102	202	83	--	2	--
54'NB'+85	-	57'NB'+15	CTH A	NORTH LEG	460	1.75	2	2.25	55	110	45	--	--	--
57'NB'+15	-	61'NB'+10	CTH A	NORTH LEG	1641	1.75	2	2.25	197	391	161	--	--	14
78'EB'+80	-	83'EB'+39	MCCUTCHEON RD	WEST LEG	1959	2	0	2.5	118	274	219	--	--	30
83'EB'+39	-	84'EB'+95	MCCUTCHEON RD	WEST LEG	666	2	0	2.5	40	93	75	--	5	--
86'EB'+42	-	88'EB'+01	MCCUTCHEON RD	EAST LEG	668	2	0	2.5	40	94	75	--	5	--
88'EB'+01	-	92'EB'+63	MCCUTCHEON RD	EAST LEG	2003	2	0	2.5	120	280	224	--	--	--
500'CIR'+00	-	503'CIR'+46	CTH A/MCCUTCHEON RD	CIRCLE	908	1.75	2	2.25	109	216	--	89	--	--
				TOTAL					**1,007**	**2,108**	**1,067**	**89**	**12**	**43**

CULVERT PIPES

STATION	INLET OFFSET	ELEVATION	STATION	OUTLET OFFSET	ELEVATION	520.3312 CULVERT PIPE CLASS III-A 12-IN LF	520.3318 CULVERT PIPE CLASS III-A 18-INCH LF	522.2419 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-IV 19x30-INCH LF	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	522.2619 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 19x30-INCH EACH	633.5200 MARKERS CULVERT END EACH	REMARKS
47'NB'+48	33.2' RT	924.73	47'NB'+76	33.6' RT	924.48	--	22	--	--	2	--	--	DRIVEWAY
59'NB'+13	34.2' LT	924.77	58'NB'+82	35.7' LT	924.73	32	--	--	2	--	--	--	DRIVEWAY
59'NB'+45	31.3' RT	924.81	59'NB'+21	31.2' RT	924.79	24	--	--	2	--	--	--	DRIVEWAY
80'EB'+84	37.2' LT	914.11	80'EB'+55	35.7' LT	912.47	--	29	--	--	2	--	--	DRIVEWAY
83'EB'+11	40.9' LT	920.08	82'EB'+83	43.0' LT	919.82	--	28	--	--	2	--	--	DRIVEWAY
90'EB'+55	26.0' RT	911.98	90'EB'+55	40.8' LT	910.24	--	--	68	--	--	2	2	
				TOTAL		**56**	**79**	**68**	**4**	**6**	**2**	**2**	

STORM SEWER STRUCTURES

							522.1015	611.0639	611.0652	611.3004	611.1005	
STRUC. NO.	STATION	OFFSET**	LOCATION	RIM*** ELEV.	INVERT**** ELEV.	DEPTH*****	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 15-INCH EACH*	INLET COVERS TYPE H-S EACH	INLET COVERS TYPE T EACH	INLETS 4-FT DIAMETER EACH	CATCH BASINS 5-FT DIAMETER EACH	REMARKS
1.1	53'NB'18	44.3' LT	CTH A	924.44	921.8	1.64	--	1	--	1	--	
1.2	53'NB'+24	25.0' LT	CTH A	924.61	921.69	1.92	--	1	--	1	--	
1.3	53'NB'+31	1.5' LT	CTH A	924.36	921.57	1.79	--	1	--	1	--	
1.4	53'NB'+73	19.2' RT	CTH A	924.13	921.33	1.72	--	--	1	1	--	
1.5	53'NB'+80	25.9' RT	CTH A	924.13	921.00	2.05	--	--	1	1	--	
1.6	54'NB'+96	1.5' LT	CTH A	925.48	920.41	4.07	--	1	--	--	1	
1.7	54'NB'+74	56.4' RT	CTH A	ENDWALL	920.00	--	1	--	--	--	--	
1.8	55'NB'+08	49.9' LT	CTH A	925.39	921.27	3.12	--	1	--	1	--	
1.9	55'NB'+02	24.6' LT	CTH A	925.73	921.00	3.65	--	2	--	2	--	
						TOTAL	**1**	**7**	**2**	**8**	**1**	

REMARKS

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

** STATIONS AND OFFSETS ARE TO CENTER OF STRUCTURE

*** RIM ELEVATIONS ARE TO THE FLANGE OF THE CASTING

**** FOR STRUCTURES WITH SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE SUMP. FOR STRUCTURES WITHOUT SUMPS, THE INVERT ELEVATION IS THE ELEVATION OF THE LOWEST PIPE FLOW LINE

***** DEPTH = RIM ELEV - LOWEST PIPE INVERT - COVER HEIGHT - 6-INCH ADJUSTMENT RING HEIGHT

STORM SEWER PIPE

						608.0312	608.0315	608.0412	608.0415		
FROM STRUCTURE		TO STRUCTURE	INLET ELEV.	DISCHARGE ELEV.	SLOPE (%)	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 12-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 15-INCH	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 15-INCH LF	JOINT TIES* EACH	REMARKS
1.1	-	1.2	921.8	921.69	0.52%	--	--	21	--	--	
1.2	-	1.3	921.69	921.57	0.48%	--	--	25	--	--	
1.3	-	1.4	921.57	921.33	0.51%	--	--	47	--	--	
1.4	-	1.5	921.33	921.25	0.80%	--	--	10	--	--	
1.5	-	1.6	921.00	920.41	0.50%	--	--	--	118	--	
1.6	-	1.7	920.41	920.00	0.63%	--	65	--	--	6	
1.8	-	1.9	921.27	921.00	1.04%	--	--	26	--	--	
1.9	-	1.6	921.00	920.66	1.42%	24	--	--	--	--	
					TOTAL	**24**	**65**	**129**	**118**	**6**	

* NON-BID ITEM: FOR INFORMATION ONLY

PERMANENT SIGNS

SIGN NO.	STATION	OFFSET	SIGN WORDING AND PICTORIALS	CODE	SIGN WIDTH (IN)	SIGN HEIGHT (IN)	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	634.0612 POSTS WOOD 4X6-IN X 12-FT EACH	634.0614 POSTS WOOD 4X6-IN X 14-FT EACH	634.0616 POSTS WOOD 4X6-IN X 16-FT EACH	634.0618 POSTS WOOD 4X6-IN X 18-FT EACH	635.0620 POSTS WOOD 4X6-IN X 20-FT EACH	REMARKS
01-01			YIELD	R1-2	36	31	7.75	--	--	1	--	--	--	
01-02			YIELD	R1-2	36	31	7.75	--	--	1	--	--	--	
01-03			MCCUTCHEON RD - RIGHT	D1-1	96	15	10.00	--	--	2	--	--	--	
01-04			ONE WAY	R6-1R	36	12	3.00	--	2	--	--	--	--	
01-05			CHEVRON RIGHT	R6-4B	60	24	10.00	--	--	--	--	--	--	SAME POSTS AS 01-04
01-06			ONE WAY	R6-1R	36	12	3.00	--	2	--	--	--	--	
01-07			CHEVRON RIGHT	R6-4B	60	24	10.00	--	--	--	--	--	--	SAME POSTS AS 01-06
01-08			ONE WAY	R6-1R	36	12	3.00	--	2	--	--	--	--	
01-09			CHEVRON RIGHT	R6-4B	60	24	10.00	--	--	--	--	--	--	SAME POSTS AS 01-08
01-10			ONE WAY	R6-1R	36	12	3.00	--	2	--	--	--	--	
01-11			CHEVRON RIGHT	R6-16	60	24	10.00	--	--	--	--	--	--	SAME POSTS AS 01-10
01-12			MCCUTCHEON RD - RIGHT	D1-2	84	30	17.50	--	--	2	--	--	--	
01-13			YIELD	R1-2	36	31	7.75	--	--	1	--	--	--	
01-14			YIELD	R1-2	36	31	7.75	--	--	1	--	--	--	
01-15			ADOPT A HIGHWAY	I55-56	30	18	3.75	--	--	1	--	--	--	
01-16			HUDSON HIGH SCHOOL NATIONAL HONOR SOCIETY	I55-56P	30	18	3.75	--	--	--	--	--	--	SAME POST AS 01-15
01-17			KEEP RIGHT	R4-7	24	30	5.00	--	--	1	--	--	--	
01-18			CLEARANCE MARKER	W5-54	18	18	--	2.25	--	--	--	--	--	SAME POST AS 01-17
01-20			COUNTY A SOUTH RIGHT	D1-1	42	30	8.75	--	--	2	--	--	--	
01-21			YIELD	R1-2	36	31	7.75	--	--	1	--	--	--	
01-22			YIELD	R1-2	36	31	7.75	--	--	--	1	--	--	
01-23			YIELD	R1-2	36	31	7.75	--	--	1	--	--	--	
01-24			YIELD	R1-2	36	31	7.75	--	--	--	1	--	--	
01-25			COUNTY A NORTH RIGHT	D1-1	42	30	8.75	--	--	2	--	--	--	
02-01			JUNCTION COUNTY A	J1-1	24	39	6.50	--	--	--	1	--	--	
02-02			CIRCULAR INTERSECTION SIGN	W2-6	30	30	--	6.25	--	--	1	--	--	
02-03			20 MPH	W13-1	18	18	--	2.25	--	--	--	--	--	SAME POST AS 02-02
02-04			SPEED LIMIT 45	R2-1	24	30	5.00	--	--	1	--	--	--	
02-06			KEEP RIGHT	R4-7	24	30	5.00	--	--	--	1	--	--	
02-07			CLEARANCE MARKER	W5-54	18	18	--	2.25	--	--	--	--	--	SAME POST AS 02-06
02-08			SPEED LIMIT 45	R2-1	24	30	5.00	--	--	--	--	--	--	
02-09			CIRCULAR INTERSECTION SIGN	W2-6	30	30	--	6.25	--	--	1	--	--	
02-10			20 MPH	W13-1	18	18	--	2.25	--	--	--	--	--	SAME POST AS 02-09
02-11			JUCTION COUNTY A	J1-1	24	39	6.50	--	--	--	1	--	--	
03-01			CIRCULAR INTERSECTION SIGN	W2-6	30	30	--	6.25	--	--	1	--	--	
03-02			20 MPH	W13-1	18	18	--	2.25	--	--	--	--	--	SAME POST AS 03-01
03-03			SPEED LIMIT 45	R2-1	24	30	5.00	--	--	1	--	--	--	
03-04			KEEP RIGHT	R4-7	24	30	5.00	--	--	1	--	--	--	
03-05			CLEARANCE MARKER	W5-54	18	18	--	2.25	--	--	--	--	--	SAME POST AS 03-04
03-06			MCCUTCHEON RD W/ARROWS	D1-61	84	24	14.00	--	--	--	--	--	2	
03-07			MCCUTCHEON RD W/ARROWS	D1-61	84	24	14.00	--	--	--	--	--	2	
03-08			KEEP RIGHT	R4-7	24	30	5.00	--	--	--	--	1	--	
03-09			CLEARANCE MARKER	W5-54	18	18	--	2.25	--	--	--	--	--	SAME POST AS 03-08
03-10			SPEED LIMIT 45	R2-1	24	30	5.00	--	--	--	1	--	--	
03-11			CIRCULAR INTERSECTION SIGN	W2-6	30	30	--	6.25	--	--	1	--	--	
03-12			20 MPH	W13-1	18	18	--	2.25	--	--	--	--	--	SAME POST AS 03-11
				TOTAL			**248**	**43**	**8**	**19**	**10**	**1**	**4**	

3

REMOVING SIGNS

SIGN NO.	LOCATION	SIGN WORDING AND PICTORIALS	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORTS EACH
R01-01	MCCUTCHEON RD	SPEED LIMIT 45	1	1
R01-02	CTH A	SPEED LIMIT 45	1	1
R01-03	CTH A	SPEED LIMIT 45	1	1
R01-04	CTH A	NO PASSING ZONE	1	1
R01-05	MCCUTCHEON RD	ADOPT A HIGHWAY	1	1
R01-06	MCCUTCHEON RD	SPEED LIMIT 45	1	1
R01-07	MCCUTCHEON RD	STOP	1	1
R01-08	MCCUTCHEON RD	STOP	1	1
			8	**8**

SAWING ASPHALT SUMMARY

STATION		STATION	HWY	LOCATION	690.0150 SAWING ASPHALT LF	REMARKS
46'NB'+82	-	53'NB'+39	CTH A	SOUTH LEG	32	
54'NB'+85	-	61'NB'+10	CTH A	NORTH LEG	81	
78'EB'+80	-	84'NB'+95	MCCUTCHEON RD	WEST LEG	78	
86'NB'+42	-	92'NB'+63	MCCUTCHEON RD	EAST LEG	32	
				TOTAL	**223**	

3

SIDEWALK SUMMARY

STATION		STATION	HWY	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	REMARKS
46'NB'+82	-	53'NB'+39	CTH A	SOUTH LEG	1,463	
54'NB'+85	-	61'NB'+10	CTH A	NORTH LEG	1,530	
78'EB'+80	-	84'NB'+95	MCCUTCHEON RD	WEST LEG	1,077	
86'NB'+42	-	92'NB'+63	MCCUTCHEON RD	EAST LEG	974	
				TOTAL	**5,044**	

CLEARING AND GRUBBING ITEMS

STATION		STATION	LOCATION	201.0105 CLEARING STA	201.0120 CLEARING ID	201.0205 GRUBBING STA	201.0220 GRUBBING ID	REMARKS
84'WB'+00	-	85'WB'+00	LT	--	22	--	22	Tree
86'WB'+00	-	88'WB'+00	RT	2	--	2	--	Tree
			TOTAL	**2**	**22**	**2**	**22**	

CURB AND GUTTER SUMMARY

STATION	STATION	HWY	LOCATION	601.0405 CONCRETE CURB AND GUTTER 18-INCH TYPE A REJECT LF	601.0411 CONCRETE CURB AND GUTTER 30-INCH TYPE D LF	601.0411 CONCRETE CURB AND GUTTER 30-INCH TYPE D REJECT LF	601.0553 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-IN TYPE D LF	602.0553 CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-IN TYPE D REJECT LF	601.0580 CONRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE R LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF	REMARKS
500'CIR'+00	503'CIR'+46		CIRCLE	245	--	--	--	--	333	--	
54'NB'+85	61'NB'+10		NORTH LEG MEDIAN	--	221	--	248	--	--	35	
86'EB'+42	92'EB'+63		EAST LEG MEDIAN	--	--	202	--	126	--	35	
46'NB'+82	53'NB'+39		SOUTH LEG MEDIAN	--	221	--	214	--	--	35	
78'EB'+80	84'EB'+95		WEST LEG MEDIAN	--	--	201	--	130	--	35	
55'NER'+91	58'NER'+63		NORTHEAST RADIUS	--	268	--	--	--	--	--	
52'SER'+08	54'SER'+91		SOUTHEAST RADIUS	--	279	--	--	--	--	--	
83'SWR'+81	86'SWR'+52		SOUTHWEST RADIUS	--	267	--	--	--	--	--	
84'NWR'+02	86'NWR'+84		NORTHWEST RADIUS	--	278	--	--	--	--	--	
			SUBTOTALS	245	1,534	403	462	256	333	140	
			TOTAL	**245**	**1,937**		**718**		**333**	**140**	

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PAVEMENT MARKING SUMMARY

STATION	STATION	LOCATION	646.2020 MARKING LINE EPOXY 6-INCH (YELLOW) LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) LF	646.4020 MARKING LINE EPOXY 10-INCH (WHITE) LF	646.6320 MARKING DOTTED LINE EXTENSION EPOXY 18-INCH (WHITE) LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH (YELLOW) LF	646.8220 MARKING ISLAND NOSE EPOXY (YELLOW) EACH	648.0100 LOCATING NO-PASSING ZONES MI	REMARKS
		NORTH LEG	2,482	1,051	38	18	107	1	0.12	
		EAST LEG	2,490	1,053	33	18	165	1	0.09	
		SOUTH LEG	2,147	1,126	37	18	125	1	0.04	
		WEST LEG	1,965	1,043	36	18	157	1	--	
		SUBTOTALS	9,084	4,273	144	72	554	4	0.25	
		TOTAL	**9,084**	**4,273**	**144**	**72**	**554**	**4**	**0.25**	

RIPRAP SUMMARY

STATION	OFFSET	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY	REMARKS
52'NB'+23	LT	3	4	
83'EB'+69	RT	3	4	
83'EB'+89	LT	3	4	
86'EB'+71	LT	3	4	
87'EB'+56	RT	3	4	
87'EB'+72	LT	3	4	
TOTAL		**18**	**24**	

LANDSCAPING SUMMARY

LOCATION	625.0500 SALVAGED TOPSOIL SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIXTURE NO. 30 LB	630.0140 SEEDING MIXTURE NO. 40 LB	630.0180 SEEDING MIXTURE NO. 80 LB	627.0200 MULCHING SY	628.2004 EROSION MAT CLASS I TYPE B	REMARKS
CTH A/MCCUTCHEON RD ROUNDABOUT	11,675	8	170	32	10	8,337	3,338	
UNDISTRIBUTED	2,919	2	40	8	3	2,084	835	
TOTAL	**14,594**	**10**	**210**	**40**	**13**	**10,421**	**4,173**	

EROSION CONTROL SUMMARY

LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.7015 INLET PROTECTION TYPE C LF	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	REMARKS
CTH A/MCCUTCHEON RD ROUNDABOUT	3,089	3,089	8	13	21	3	1	
UNDISTRIBUTED	772	772	--	3	5	--	--	
TOTAL	**3,861**	**3,861**	**8**	**16**	**26**	**3**	**1**	

TRAFFIC CONTROL

		643.0420		643.0705		643.0900		643.0920	643.1000	643.1050		
		TRAFFIC CONTROL BARRICADES TYPE III		TRAFFIC CONTROL WARNING LIGHTS TYPE A		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL COVERING SIGNS TYPE II	TRAFFIC CONTROL SIGNS FIXED MESSAGE	TRAFFIC CONTROL PCMS		
	APPROXIMATE SERVICE DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	NO. IN SERVICE	DAYS	EACH	SF	NO. IN SERVICE	DAYS	REMARKS
PRE-WARNING												
PRIOR TO CONST	7	--	--	--	--	--	--	--	--	2	14	
PRE-WARNING SUBTOTAL										**2**	**14**	
DETOUR OVERVIEW	89	--	--	--	--	18	1,602	--	--	--	--	DETOUR
DETOUR OVERVIEW	89	20	1,780	24	2,136	4	356	--	--	--	--	ROAD CLOSED
DETAIL "A"	89	3	267	6	534	58	5,162	1	--	--	--	
DETAIL "B"	89	--	--	--	--	41	3,649	--	--	--	--	
DETAIL "C"	89	--	--	--	--	49	4,361	--	12	--	--	
DETAIL "D"	89	--	--	--	--	36	3,204	--	12	--	--	
DETAIL "E"	89	3	267	4	356	46	4,094	--	12	--	--	
DETAIL "F"	89	2	178	4	356	16	1,424	--	--	--	--	
	TOTAL	**28**	**2,492**	**38**	**3,382**	**268**	**23,852**	**1**	**36**	**2**	**14**	

* ADDITIONAL QUANTITIES LISTED ELSEWHERE

NOTE: ALL CORVERING SIGNS ITEMS INCLUDE ONE COVER/UNCOVER CYCLE PER SIGN

LIGHTING STRUCTURES

			654.0105	655.0610*	657.0255	657.0322	657.0610	659.1115	
			CONCRETE BASES TYPE 5	ELECTRICAL WIRE LIGHTING 12 AWG	TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	POLES TYPE 5-ALUMINUM	LUMINAIRE ARMS SINGLE MEMBER 4 1/2-INCH CLAMP 6-FT	LUMINAIRES UTILITY LED A	
STATION	OFFSET	LOCATION	EACH	LF	EACH	EACH	EACH	EACH	REMARKS
502'CIR'+42	38.2' LT	LB-1	1	135	1	1	1	1	
53'NB'+05	28.4' RT	LB-2	1	135	1	1	1	1	
52'NB'+27	28.7' RT	LB-3	1	135	1	1	1	1	
51'NB'+31	27.9' RT	LB-4	1	135	1	1	1	1	
503'CIR'+32	35.3' LT	LB-5	1	135	1	1	1	1	
84'EB'+48	27.4' RT	LB-6	1	135	1	1	1	1	
83'EB'+34	26.0' RT	LB-7	1	135	1	1	1	1	
500'CIR'+78	33.3' LT	LB-8	1	135	1	1	1	1	
55'NB'+42	37.9' LT	LB-9	1	135	1	1	1	1	
56'NB'+36	39.5' LT	LB-10	1	135	1	1	1	1	
57'NB'+21	39.6' LT	LB-11	1	135	1	1	1	1	
501'CIR'+70	31.9' LT	LB-12	1	135	1	1	1	1	
87'WB'+04	25.6' LT	LB-13	1	135	1	1	1	1	
87'EB'+99	37.7' LT	LB-14	1	135	1	1	1	1	
		TOTAL	**14**	**1,890**	**14**	**14**	**14**	**14**	

* - SEE UNDERGROUND WIRING FOR ADDITIONAL QUANTITY

3

CONDUIT

FROM	TO	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH LF	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH LF	REMARKS
CABINET	PB-1	--	10	
PB-1	LB-2	15	--	
LB-2	LB-3	70	--	
LB-3	LB-4	10	--	
PB-1	PB-2	--	95	
PB-2	LB-5	5	--	
PB-2	LB-6	75	--	
LB-6	LB-7	110	--	
PB-2	PB-3	--	140	
PB-3	LB-8	15	--	
PB-3	LB-9	55	--	
LB-9	LB-10	95	--	
LB-10	LB-11	95	--	
PB-3	PB-4	--	130	
PB-4	LB-12	15	--	
PB-4	LB-13	65	--	
LB-13	LB-14	100	--	
PB-4	PB-5	--	105	
PB-5	LB-1	15	--	
PB-5	CABINET	--	45	
TOTAL		**740**	**525**	

UNDERGROUND WIRING

CIRCUITS	FROM	TO	655.0610* ELECTRICAL WIRE LIGHTING 12 AWG LF (CIRCUIT) (A,B,C,D)	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG LF (GROUND) (G)	REMARKS
A,B,G	CABINET	LB-2	240	60	
A,B,G	LB-2	LB-3	340	85	
A,G	LB-3	LB-4	220	110	
A,B,G	LB-2	LB-5	620	155	
A,B,G	LB-5	LB-6	440	110	
B,G	LB-6	LB-7	250	125	
C,D,G	CABINET	LB-1	380	95	
C,D,G	LB-1	LB-13	840	210	
C,G	LB-13	LB-14	220	110	
C,G	LB-13	LB-12	190	95	
C	LB-12	LB-9	490	--	
G	LB-12	LB-8	--	205	
D	LB-13	LB-8	480	--	
D,G	LB-8	LB-9	220	110	
C,D,G	LB-9	LB-10	440	110	
C,G	LB-10	LB-11	200	100	
TOTAL			**5,570**	**1,680**	

* - SEE LIGHTING STRUCTURES FOR ADDITIONAL QUANTITY

PULL BOXES

STATION	OFFSET	LOCATION	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH EACH	REMARKS
53'NB'+23	29.2' RT	PB-1	1	
503'CIR'+32	54.2' LT	PB-2	1	
500'CIR'+88	30.4' LT	PB-3	1	
507'CIR'+80	32.1' LT	PB-4	1	
502'CIR'+48	30.9' LT	PB-5	1	
TOTAL			**5**	

LIGHTING CABINET

STATION	OFFSET	LOCATION	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30 EACH	656.0201 ELECTRICAL SERVICE METER BREAKER PEDESTAL (LOCATION) CTH A & MCCUTCHEON RD EACH	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH EACH	REMARKS
53'NB'+33	33.8' RT	CABINET	1	1	1	
TOTAL			**1**	**1**	**1**	

EARTHWORK SUMMARY

STATION TO STATION	LOCATION	205.0100 EXCAVATION COMMON (1) CUT (2) CY	205.0100 EXCAVATION COMMON (1) EBS EXCAV. (3) CY	SALVAGED/UNUSABLE PAVEMENT MATERIAL (2) CY	AVAILABLE MATERIAL (4) CY	EXPANDED EBS BACKFILL (5) FACTOR 0.6 CY	205.0200 EXCAVATION ROCK (5) CY	EXPANDED ROCK (6) FACTOR 1.10 CY	UNEXPANDED FILL CY	EXPANDED FILL (7) FACTOR 1.25 CY	MASS ORDINATE +/- (8) CY	WASTE CY	208.0100 BORROW CY	REMARKS
53+50 TO 59+41 "NB"	CIRCLE	575	--	100	475	--	--	--	1,915	2,394	-1,919	--	0	
21+50 TO 30+12 "EB"	EAST LEG	1,015	--	366	649	--	--	--	1,581	1,976	-1,327	--	0	
44+61 TO 50+50 "NB"	WEST LEG	2,101	--	332	1,769	--	--	--	319	399	1,370	1,370	0	
10+00 TO 19+00 "EB"	NORTH LEG	2,128	--	486	1,642	--	--	--	161	201	1,440	1,440	0	
90+00 TO 94+00 "CIR"	SOUTH LEG	2,048	--	504	1,544	--	--	--	665	831	713	713	0	
	SUBTOTAL	7,867	0	1,788	6,079	0	0	0	4,641	5,801	278	278	0	
	TOTAL	**7,867**			**6,079**	**0**	**0**	**0**	**4,641**	**5,801**	**278**	**278**	0	

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

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

3) EBS EXCAVATION IS TO BE BACKFILLED WITH SELECT CRUSHED MATERIAL. MATERIAL EXCAVATED FROM EBS IS NOT TO BE USED AS FILL ELSEWHERE ON THE PROJECT.

4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSABLE PAVEMENT MATERIAL.

5) ROCK EXCAVATION ITEM NUMBER 205.0200.

6) EXPANDED ROCK: FACTOR = 1.00

7) EXPANDED FILL: FACTOR = 1.00; EXPANDED FILL = (UNEXPANDED FILL - ROCK * ROCK FACTOR) * FILL FACTOR

8) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION.

CONSTRUCTION STAKING SUMMARY

LOCATION	650.4000 CONSTRUCTION STAKING STORM SEWER EACH	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	650.8500 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (PROJECT) 8944-04-71 LS	650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) 8944-04-71 LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
CTH A/MCCUTCHEON RD ROUNDABOUT	9	2,519	2,519	3,233	7	1	1	2,519
TOTAL	**9**	**2,519**	**2,519**	**3,233**	**7**	**1**	**1**	**2,519**

RIGHT-OF-WAY PLAT COUNTY TRUNK HIGHWAY "A"
(McCUTCHEON ROAD INTERSECTION)

R/W PROJECT NUMBER	SHEET NUMBER	TOTAL SHEETS
8944-04-01	4.01	4

PLAT OF RIGHT-OF-WAY REQUIRED FOR
TOWN OF HUDSON
McCUTCHEON ROAD INTERSECTION
C.T.H. "A" ST. CROIX COUNTY

DATE: 04-04-2023

CONVENTIONAL SYMBOLS

PUBLIC LAND SURVEY SYSTEM CORNER FOUND AND MONUMENTED AS LABELED	T29N 9 10 16 15 R19W
1-5/16" DIAMETER X 18" IRON PIPE SET, WEIGHING 1.68 LBS. PER LINEAR FOOT	○
3/4" DIAMETER IRON REBAR FOUND	▲
1-5/16" DIAMETER IRON PIPE FOUND	●
ALIGNMENT OR RIGHT-OF-WAY POINT NUMBER	(500)
PREVIOUS HIGHWAY RIGHT-OF-WAY RECORD	} {
QUARTER SECTION OR QUARTER-QUARTER SECTION LINE AS LABELED	———
HIGHWAY CENTERLINE ALIGNMENT WITH STATION VALUE	88+00
EXISTING PROPERTY LINE	PL
EXISTING HIGHWAY/ROAD RIGHT-OF-WAY	———
PROPOSED HIGHWAY/ROAD RIGHT-OF-WAY	———
PROPOSED/DESIGNED SLOPE INTERCEPT	— — — — —
PROPOSED HIGHWAY EASEMENT (HATCHING VARIES BY LANDOWNER)	▨
TEMPORARY LIMITED EASEMENT	TLE
PROPOSED TEMORARY LIMITED EASEMENT	▨
INDEXED LANDOWNER INTEREST	(10)
INDEXED UTILITY OWNER INTEREST	(25)
DENOTES ST. CROIX COUNTY COORDINATE VALUE (Y: NORTHING AND X: EASTING)	Y 352600.0000 X 532100.0000
DENOTES CENTERLINE	CL
DENOTES POINT OF INTERSECTION	PI
DENOTES POINT OF CURVATURE	PC
DENOTES POINT OF TANGENCY	PT
DENOTES POINT ON CURVE	POC
DENOTES POINT ON TANGENT	POT
DENOTES DEGREE OF CURVE (ARC DEFINITION)	D
DENOTES RADIUS LENGTH	R
DENOTES CENTRAL ANGLE	Δ
DENOTES CHORD BEARING	CB
DENOTES CHORD LENGTH	C
DENOTES ARC LENGTH	A
TANGENT BEARING INTO CURVE	TAN IN
TANGENT BEARING OUT OF CURVE	TAN OUT
EXISTING ELECTRICAL POWER POLE	PP
EXISTING GUY ANCHOR	↙
EXISTING OVERHEAD ELECTRIC LINE	OH
EXISTING UNDERGROUND ELECTRIC LINE	E
EXISTING UTILITY JUNCTION BOX	□
EXISTING UNDERGROUND TELEPHONE LINE	T
EXISTING UNDERGROUND FIBER-OPTIC LINE	FO
EXISTING UNDERGROUND GAS LINE	G
EXISTING PRIVATE SIGN	
COMPENSABLE ELECTRICAL POWER POLE	PP
COMPENSABLE GUY ANCHOR	↙
COMPENSABLE UTILITY JUNCTION BOX	■
COMPENSABLE PRIVATE SIGN	

PLAT NOTES

HORIZONTAL POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN, ST. CROIX COUNTY COORDINATES, NAD83 (1991), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

RIGHT-OF-WAY MONUMENTS FOUND OR PLACED ARE DENOTED IN THE CONVENTIONAL SYMBOLS AND MAPPED OR SHOWN ON THE DETAIL SHEETS OF THIS PLAT. RIGHT-OF-WAY MONUMENTS PLACED, SHALL BE PLACED FOLLOWING THE CONSTRUCTION OF THIS PROJECT.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS, REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM, AS MAPPED OR SHOWN ON THE DETAIL SHEETS OF THIS PLAT.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM PLATS, MAPS AND DOCUMENTS OF PUBLIC RECORD.

DETERMINATION OF EXISTING HIGHWAY RIGHT-OF-WAY AND ALIGNMENT, AS SHOWN ON THIS PLAT, WAS BASED ON THE FOLLOWING:

~ '1955' HIGHWAY CONVEYANCE AND PLATTED ALIGNMENT FROM STATE HIGHWAY COMMISSION OF WISCONSIN, PROJECT S0553(6) FOR COUNTY TRUNK HIGHWAY "A".

~ '1986' HIGHWAY CONVEYANCES AND '1985' PLAN DIMENSIONING FROM ST. CROIX COUNTY, HIGHWAY PROJECT 85-A-1 FOR COUNTY TRUNK HIGHWAY "A".

~ '2006' PERMANENT LIMITED EASEMENT FOR McCUTCHEON ROAD INTERSECTION FROM TOWN OF HUDSON ROAD PROJECT I.D. 18.1075.

~ THE COMPILATION OF RECORDED PLATS, RECORDED CERTIFIED SURVEY MAPS AND FILED MAPS OF SURVEY IN ST. CROIX COUNTY.

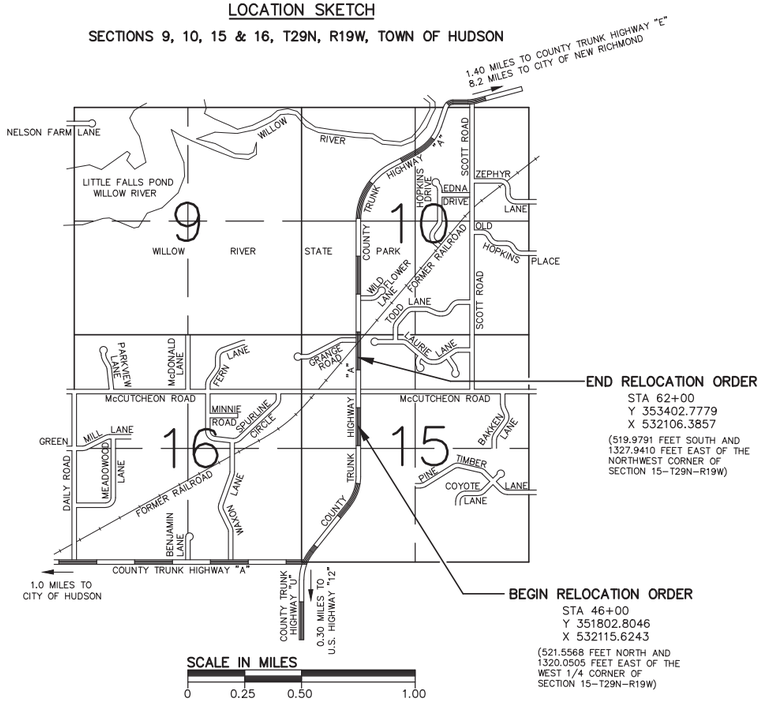
~ VERIFIED WITH THE EXISTING AND TRAVELED CENTERLINE OF COUNTY TRUNK HIGHWAY "A".

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREON, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM NECESSARY OR DESIRABLE. ALL TEMPORARY LIMITED EASEMENTS EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

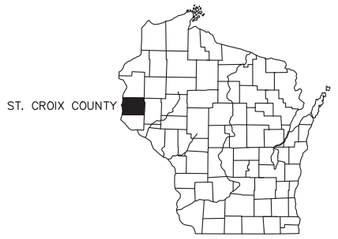
DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE EXISTING CENTERLINE ALIGNMENT, AS SHOWN ON THIS PLAT.

LOCATION SKETCH

SECTIONS 9, 10, 15 & 16, T29N, R19W, TOWN OF HUDSON



LENGTH OF PROJECT CENTERLINE= 1,600.00 FEET OR 0.3030 MILES



STATE OF WISCONSIN

N

PLAT REVISIONS:

DATE: 04-04-2023
REVISED LANDOWNER INTEREST (4)
AND ADDED LANDOWNER INTEREST (5)

ACCEPTED FOR ST. CROIX COUNTY

04/04/2023 Robbie Krejci
DATE ROBBIE KREJCI, PE
COUNTY HIGHWAY COMMISSIONER

PLAT PREPARED BY:

WISCONSIN FRANCIS W. BLESKACEK S-2418 ST. CROIX COUNTY WI LAND SURVEYOR

04/04/2023 Francis W Bleskacek
DATE FRANCIS W. BLESKACEK, PLS

PREPARED BY:

SURVEYOR	ST. CROIX COUNTY HIGHWAY DEPARTMENT
DESIGNER	JT ENGINEERING, INC.
REVIEW AUTHORITY	WISCONSIN DEPARTMENT OF TRANSPORTATION NORTHWEST REGION
REAL ESTATE CONSULTANT	CORRE, INC.

E

INTEREST KEY

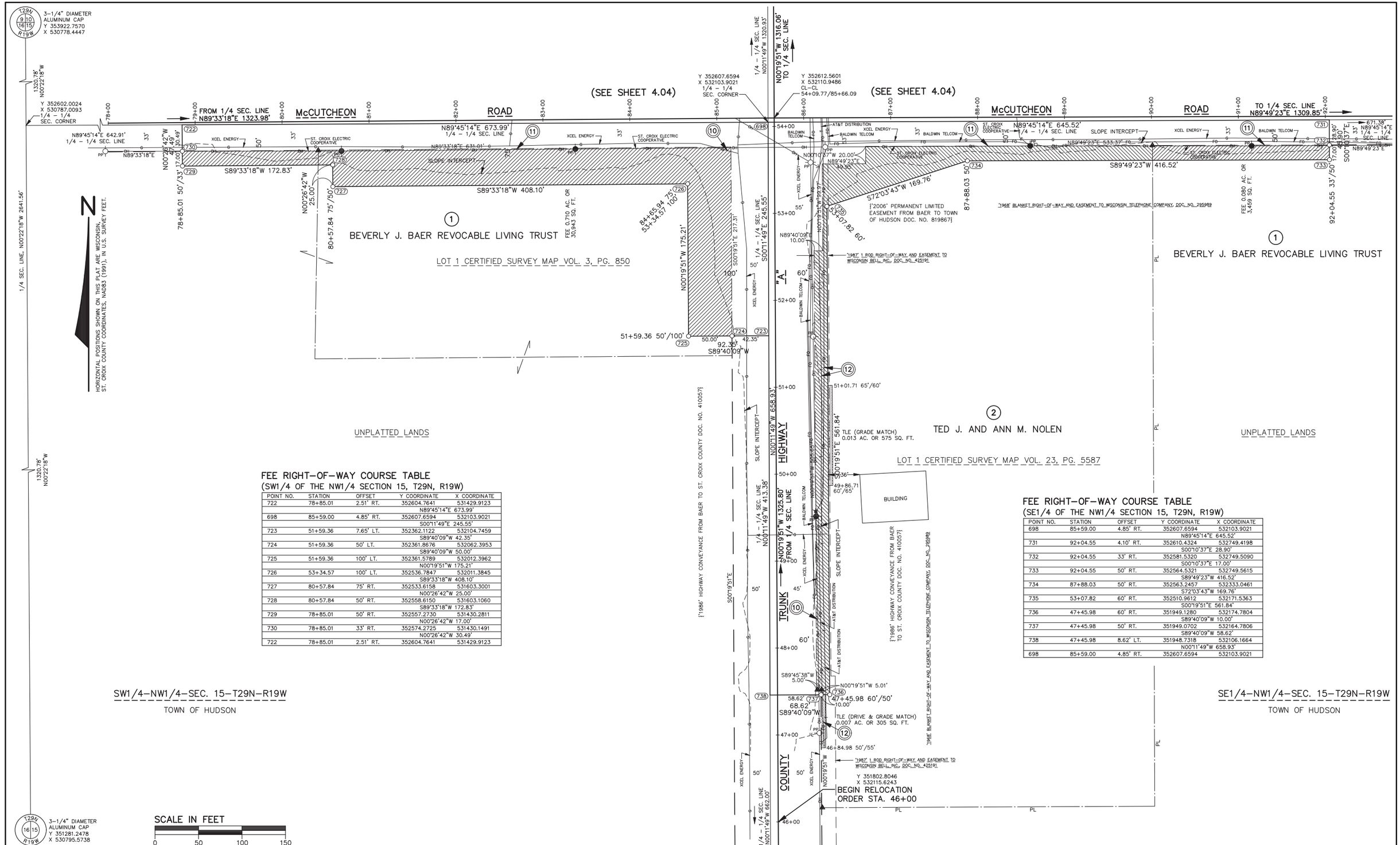
FEE TITLE	FEE
TEMPORARY LIMITED EASEMENT	TLE
CONVEYANCE OF RIGHTS	COR
TEMPORARY CONSTRUCTION EASEMENT	TCE

SCHEDULE OF LANDOWNER INTERESTS

PARCEL NUMBER	SHEET NUMBER	OWNER(S)	INTEREST REQUIRED	FEE RIGHT-OF-WAY REQUIRED			TEMPORARY LIMITED EASEMENT
				NEW RIGHT-OF-WAY	EXISTING RIGHT-OF-WAY	TOTAL ACQUIRED	
1	4.03	BEVERLY J. BAER REVOCABLE LIVING TRUST	FEE	0.790 ACRES OR 34,402 SQ. FT.	0.800 ACRES OR 34,877 SQ. FT.	1.590 ACRES OR 69,279 SQ. FT.	
2	4.03	TED J. AND ANN M. NOLEN	FEE & TLE	0.409 ACRES OR 17,798 SQ. FT.	1.104 ACRES OR 48,126 SQ. FT.	1.513 ACRES OR 65,924 SQ. FT.	0.020 ACRES OR 880 SQ. FT.
3	4.04	TOWN OF HUDSON	FEE & TLE	0.176 ACRES OR 7,682 SQ. FT.	0.268 ACRES OR 11,684 SQ. FT.	0.444 ACRES OR 19,366 SQ. FT.	0.119 ACRES OR 5,209 SQ. FT.
4	4.04	GORDON J. KELLER	FEE	0.168 ACRES OR 7,309 SQ. FT.	0.466 ACRES OR 20,291 SQ. FT.	0.634 ACRES OR 27,600 SQ. FT.	
5	4.04	GORDON J. AND DANA M. KELLER	FEE	0.194 ACRES OR 8,464 SQ. FT.	0.273 ACRES OR 11,869 SQ. FT.	0.467 ACRES OR 20,333 SQ. FT.	

SCHEDULE OF UTILITY OWNER INTERESTS

UTILITY NUMBER	UTILITY OWNER	INTEREST REQUIRED	SHEET NUMBER
10	XCEL ENERGY	COR	4.03 & 4.04
		TCE	4.04
11	ST. CROIX ELECTRIC COOPERATIVE	COR	4.03 & 4.04
12	AT&T DISTRIBUTION	COR	4.03 & 4.04
		TCE	4.03
13	BALDWIN TELCOM	COR	4.04



FEE RIGHT-OF-WAY COURSE TABLE
(SW1/4 OF THE NW1/4 SECTION 15, T29N, R19W)

POINT NO.	STATION	OFFSET	Y COORDINATE	X COORDINATE
722	78+85.01	2.51' RT.	352604.7641	531429.9123
			N89°45'14"E 673.99'	
698	85+59.00	4.85' RT.	352607.6594	532103.9021
			S00°11'49"E 245.55'	
723	51+59.36	7.65' LT.	352362.1122	532104.7459
			S89°40'09"W 42.35'	
724	51+59.36	50' LT.	352361.8676	532062.3953
			S89°40'09"W 50.00'	
725	51+59.36	100' LT.	352361.5789	532012.3962
			N00°19'51"W 175.21'	
726	53+34.57	100' LT.	352536.7847	532011.3845
			S89°33'18"W 408.10'	
727	80+57.84	75' RT.	352533.6158	531603.3001
			N00°26'42"W 25.00'	
728	80+57.84	50' RT.	352558.6150	531603.1060
			S89°33'18"W 172.83'	
729	78+85.01	50' RT.	352557.2730	531430.2811
			N00°26'42"W 17.00'	
730	78+85.01	33' RT.	352574.2725	531430.1491
			N00°26'42"W 30.49'	
722	78+85.01	2.51' RT.	352604.7641	531429.9123

FEE RIGHT-OF-WAY COURSE TABLE
(SE1/4 OF THE NW1/4 SECTION 15, T29N, R19W)

POINT NO.	STATION	OFFSET	Y COORDINATE	X COORDINATE
698	85+59.00	4.85' RT.	352607.6594	532103.9021
			N89°45'14"E 645.52'	
731	92+04.55	4.10' RT.	352610.4324	532749.4198
			S00°10'37"E 28.90'	
732	92+04.55	33' RT.	352581.5320	532749.5090
			S00°10'37"E 17.00'	
733	92+04.55	50' RT.	352564.5321	532749.5615
			S89°49'23"W 416.52'	
734	87+88.03	50' RT.	352563.2457	532333.0461
			S72°03'43"W 169.76'	
735	53+07.82	60' RT.	352510.9612	532171.5363
			S00°19'51"E 561.84'	
736	47+45.98	60' RT.	351949.1280	532174.7804
			S89°40'09"W 10.00'	
737	47+45.98	50' RT.	351949.0702	532164.7806
			S89°40'09"W 58.62'	
738	47+45.98	8.62' LT.	351948.7318	532106.1664
			N00°11'49"W 658.93'	
698	85+59.00	4.85' RT.	352607.6594	532103.9021

SW1/4-NW1/4-SEC. 15-T29N-R19W
TOWN OF HUDSON

SE1/4-NW1/4-SEC. 15-T29N-R19W
TOWN OF HUDSON

PROJECT NUMBER: 8944-04-01	HIGHWAY: C.T.H. "A"	ST. CROIX COUNTY, WISCONSIN	DETAIL SHEET	DATE: 04-04-2023	SHEET 4.03	E

3-1/4" DIAMETER
ALUMINUM CAP
Y 353922.7570
X 530778.4447

NW1/4–NW1/4–SEC. 15–T29N–R19W

TOWN OF HUDSON

N

HORIZONTAL POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN, ST. CROIX COUNTY COORDINATES, NAD83 (1991), IN U.S. SURVEY FEET.

FEE RIGHT–OF–WAY COURSE TABLE
(NW1/4 OF THE NW1/4 SECTION 15, T29N, R19W)

POINT NO.	STATION	OFFSET	Y COORDINATE	X COORDINATE
739	83+13.16	3.99' RT.	352606.6033	531858.0608
			N89°45'14"E 245.84'	
698	85+59.00	4.85' RT.	352607.6594	532103.9021
			N00°11'49"W 103.00'	
740	55+07.91	6.83' LT.	352710.6584	532103.5482
			S89°40'09"W 38.17'	
741	55+07.91	45' LT.	352710.4380	532065.3827
			S67°54'23"W 98.20'	
742	84+30.01	62' LT.	352673.5015	531974.3906
			S89°33'18"W 116.71'	
743	83+13.30	62' LT.	352672.5953	531857.6879
			S00°19'26"E 29.00'	
744	83+13.24	33' LT.	352643.5957	531857.8518
			S00°19'26"E 36.99'	
739	83+13.16	3.99' RT.	352606.6033	531858.0608

Y 353402.7779
X 532106.3857
END RELOCATION ORDER STA. 62+00

{'1986' HIGHWAY CONVEYANCE FROM KATNER TO ST. CROIX COUNTY DOC. NO. 409549}

N00°19'51"W 1316.06' TO 1/4 SEC. LINE

{'1955' HIGHWAY CONVEYANCE FROM KATNER TO ST. CROIX COUNTY DOC. NO. 246504}

'1982' 1 ROD RIGHT-OF-WAY AND EASEMENT TO WISCONSIN BELL, INC., DOC. NO. 425190 ?

'1982' 1 ROD RIGHT-OF-WAY AND EASEMENT TO WISCONSIN BELL, INC., DOC. NO. 422043 ?

'1986' 1 ROD RIGHT-OF-WAY AND EASEMENT TO WISCONSIN BELL, INC., DOC. NO. 425893

TLE (DRIVE & GRADE MATCH)
0.084 AC. OR 3,659 SQ. FT.

TLE (DRIVE & GRADE MATCH)
0.028 AC. OR 1,228 SQ. FT.

TLE (DRIVE & GRADE MATCH)
0.007 AC. OR 322 SQ. FT.

{'1986' HIGHWAY PLAT FROM TOWN OF HUDSON TO ST. CROIX COUNTY}

LOT 1
CERTIFIED SURVEY MAP
VOL. 5, PG. 1418

LOT 2 CERTIFIED SURVEY MAP VOL. 6, PG. 1761

CERTIFIED SURVEY MAP VOL. 22, PG. 5399

LOT 2
GORDON J. KELLER
4

LOT 3
GORDON J. AND DANA M. KELLER
5

TOWN HALL BUILDING

GAR.
HOUSE

SLOPE INTERCEPT

McCUTCHEON ROAD

FROM 1/4 SEC. LINE N89°33'18"E 1323.98'

TO 1/4 SEC. LINE N89°49'23"E 1309.85'

N89°45'14"E 1071.06'
1/4 – 1/4 SEC. LINE

N89°45'14"E 245.84'
1/4 – 1/4 SEC. LINE

N89°45'14"E 525.52'
1/4 – 1/4 SEC. LINE

N89°45'14"E 791.38'
1/4 – 1/4 SEC. LINE

1/4 – 1/4 SEC. LINE N00°11'49"W 1320.93'

FROM 1/4 SEC. LINE N00°19'51"W 1325.80'

1/4 SEC. LINE, N00°22'18"W 2641.56'

1320.78' N00°22'18"W

1320.78' N00°22'18"W

(SEE SHEET 4.03)

(SEE SHEET 4.03)

CL–CL
54+09.77/85+66.09
Y 352612.5601
X 532110.9486

1/4 – 1/4 SEC. CORNER
Y 352607.6594
X 532103.9021

Y 352602.0024
X 530787.0093
1/4 – 1/4 SEC. CORNER

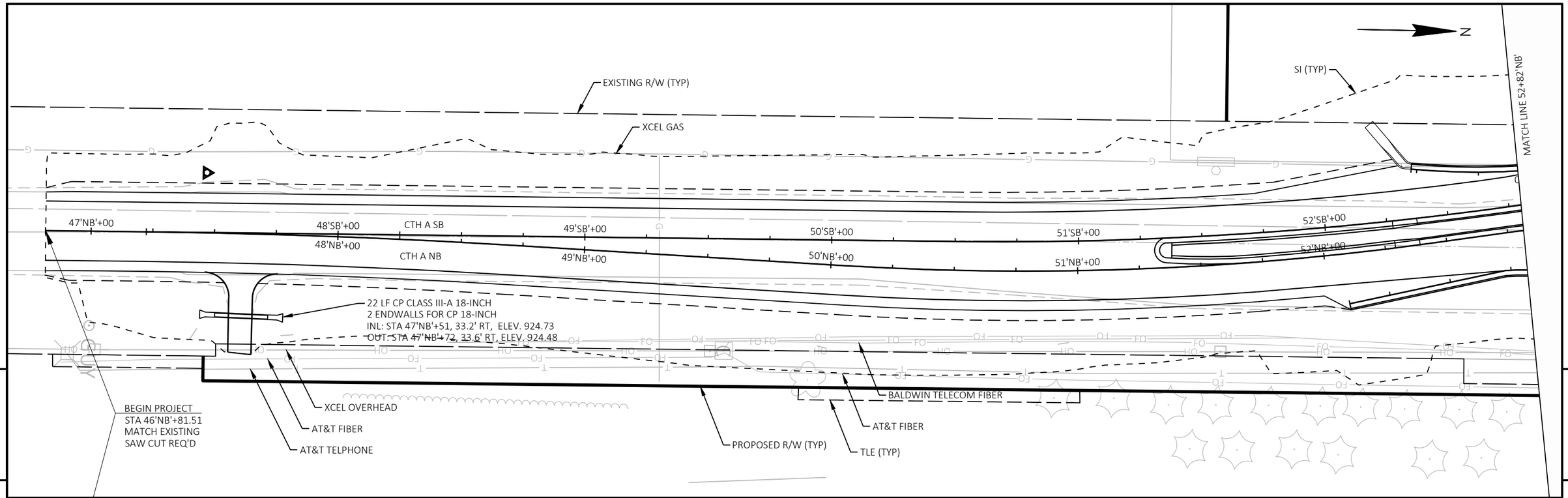
3-1/4" DIAMETER
ALUMINUM CAP
Y 351281.2478
X 530795.5738

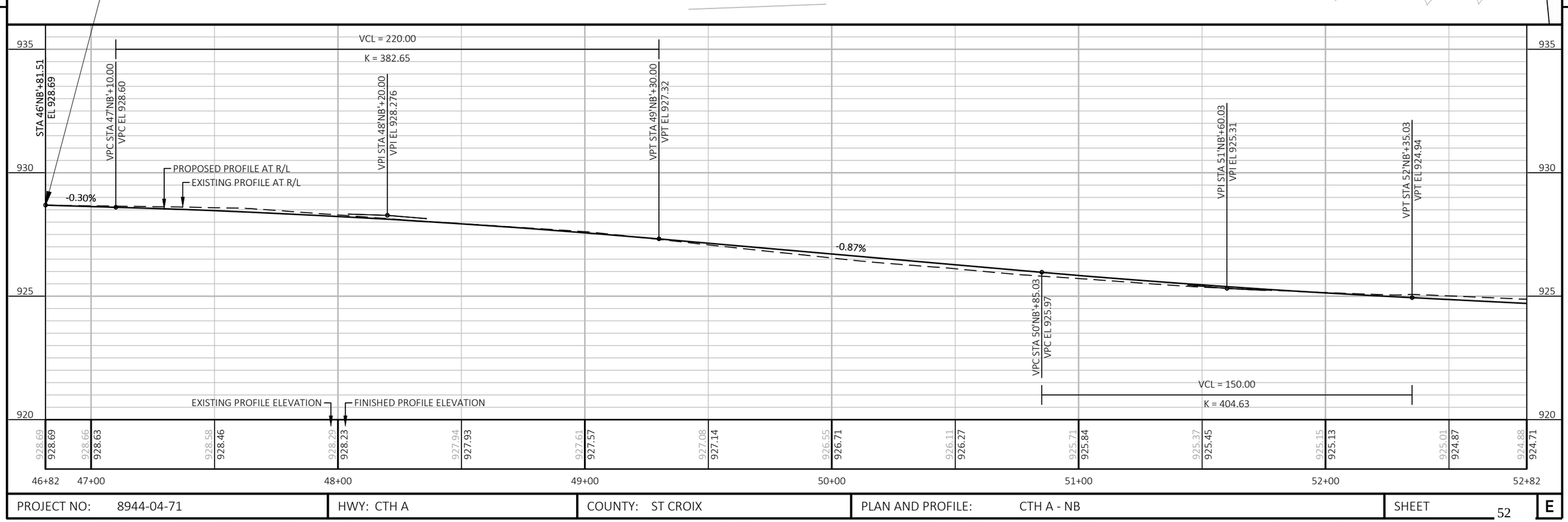
SCALE IN FEET
0 50 100 150

FEE RIGHT–OF–WAY COURSE TABLE
(NE1/4 OF THE NW1/4 SECTION 15, T29N, R19W)

POINT NO.	STATION	OFFSET	Y COORDINATE	X COORDINATE
698	85+59.00	4.85' RT.	352607.6594	532103.9021
			N89°45'14"E 525.52'	
745	90+84.55	4.24' RT.	352609.9169	532629.4208
			N00°10'37"W 37.24'	
746	90+84.55	33' LT.	352647.1611	532629.3058
			N00°10'37"W 27.00'	
747	90+84.55	60' LT.	352674.1609	532629.2224
			S89°49'23"W 424.70'	
748	86+59.85	60' LT.	352672.8494	532204.5288
			N37°41'52"W 50.96'	
749	55+10.02	63' RT.	352713.1690	532173.3687
			N00°19'51"W 151.63'	
750	56+61.64	63' RT.	352864.7929	532172.4932
			S89°40'09"W 13.00'	
751	56+61.64	50' RT.	352864.7178	532159.4934
			S89°40'09"W 56.47'	
752	56+61.64	6.47' LT.	352864.3917	532103.0199
			S00°11'49"E 256.73'	
698	85+59.00	4.85' RT.	352607.6594	532103.9021

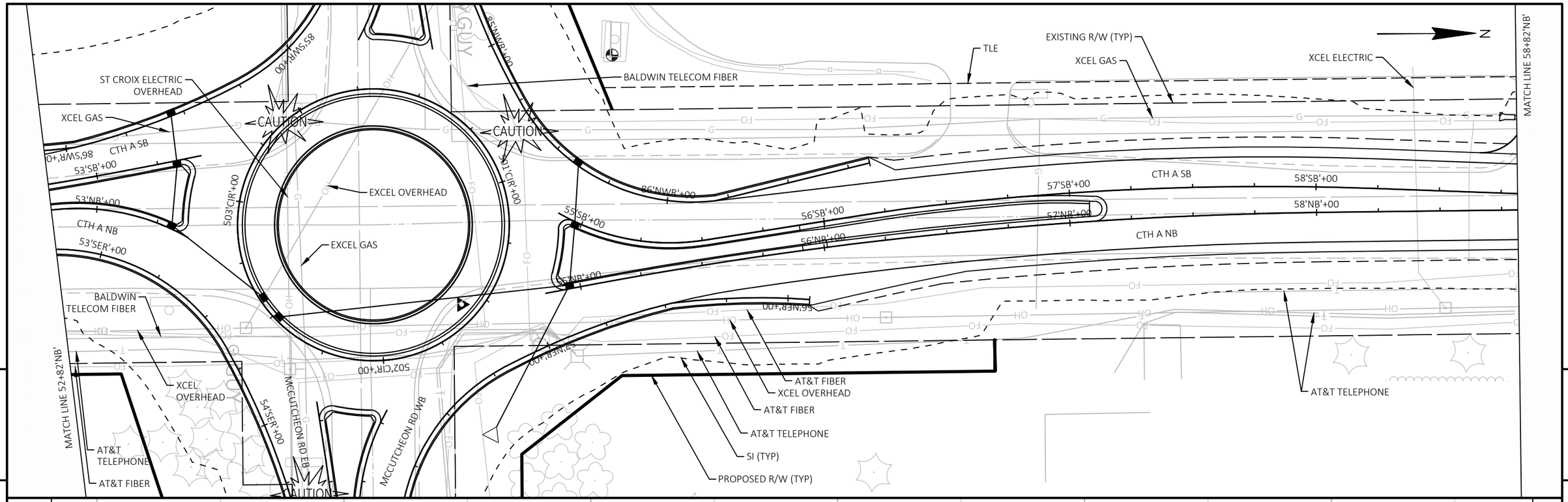
PROJECT NUMBER: 8944–04–01	HIGHWAY: C.T.H. "A"	ST. CROIX COUNTY, WISCONSIN	DETAIL SHEET	DATE: 04–04–2023	SHEET 4.04	E

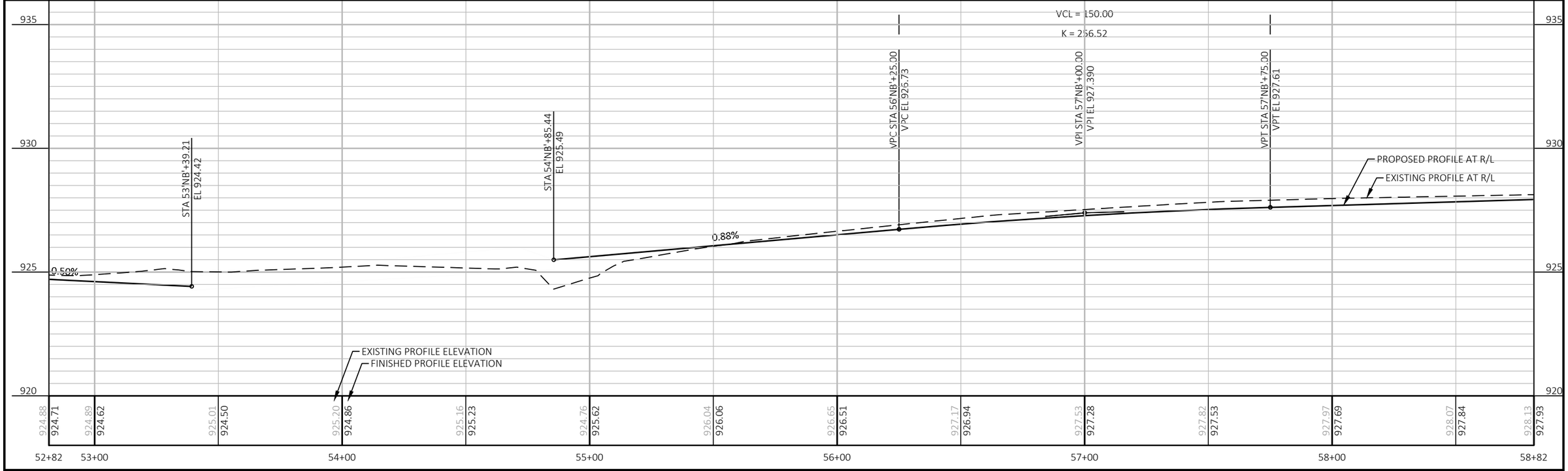




PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: CTH A - NB	SHEET 52	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (1)
PLOT DATE : 8/14/2023 11:14 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

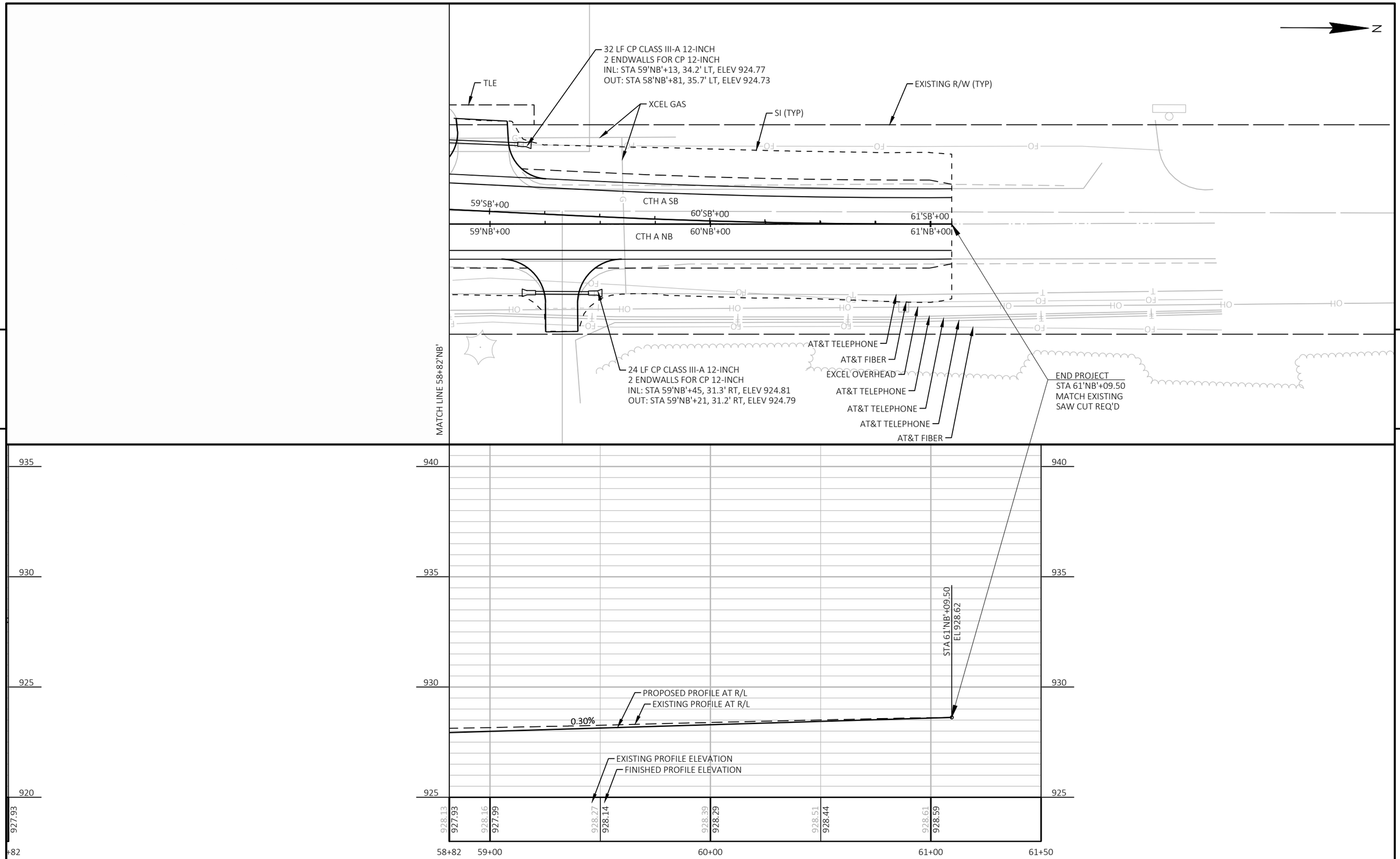




PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: CTH A - NB	SHEET 53	E

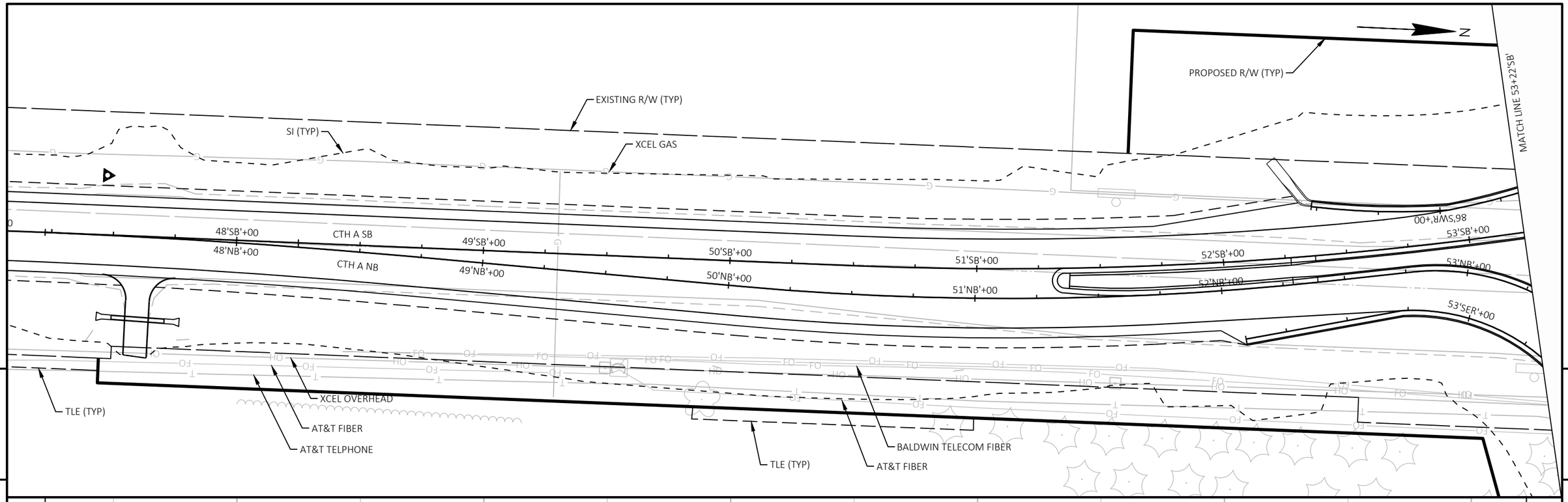
FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (2)

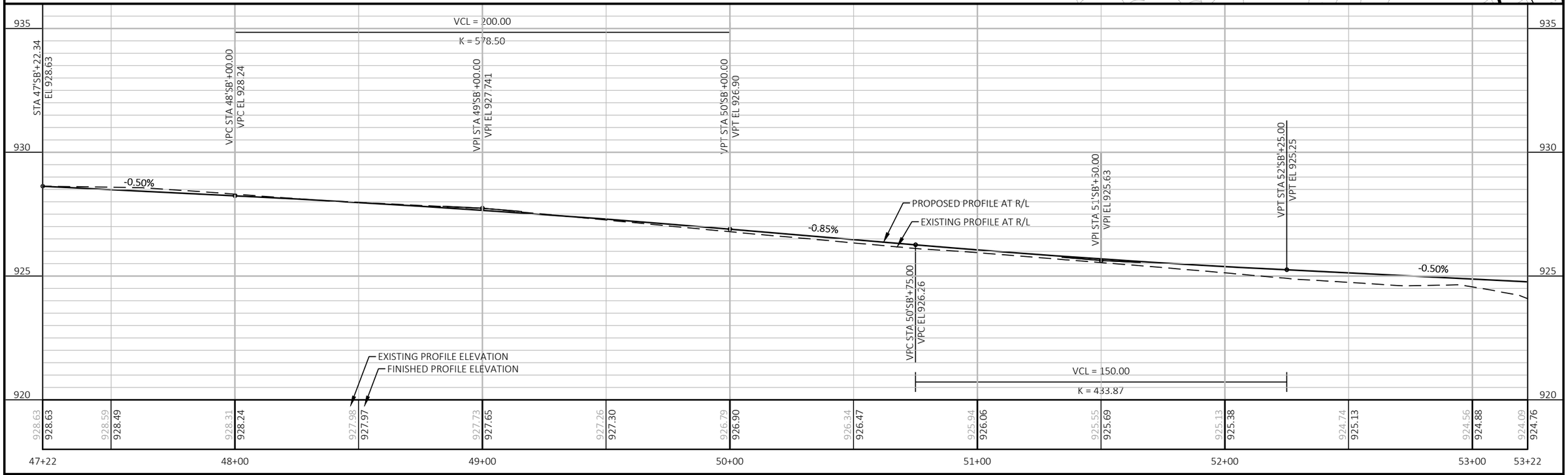
PLOT DATE : 8/14/2023 11:14 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: CTH A - NB	SHEET 54	E

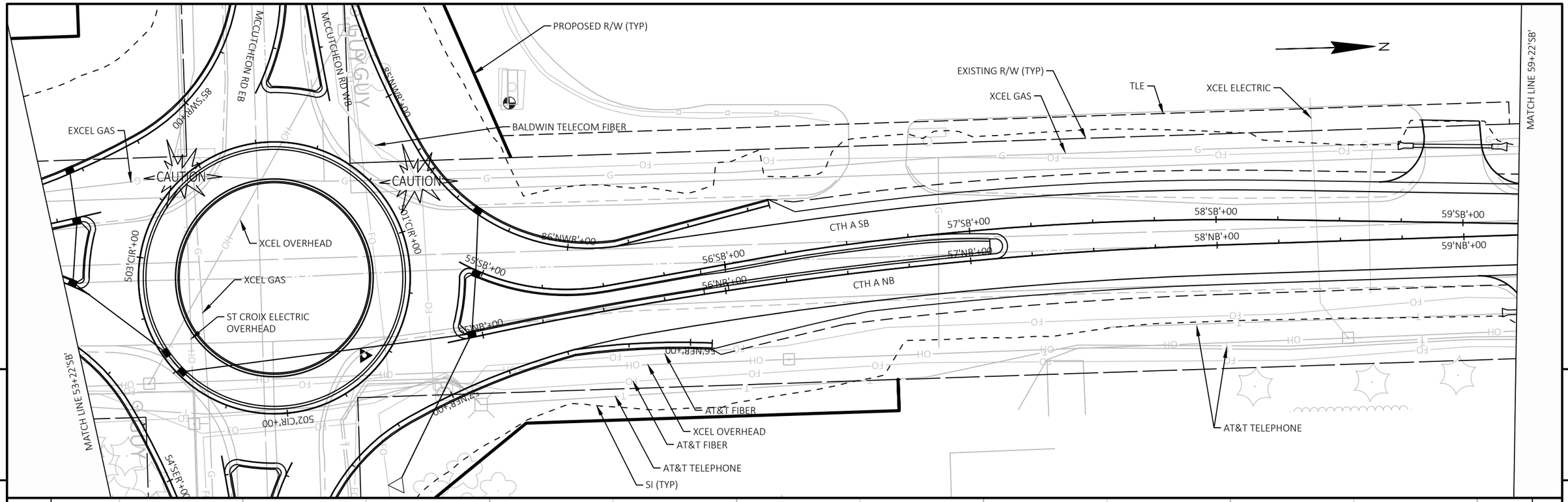
FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (3)
PLOT DATE : 8/14/2023 11:14 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT





PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: CTH A - SB	SHEET 55	E

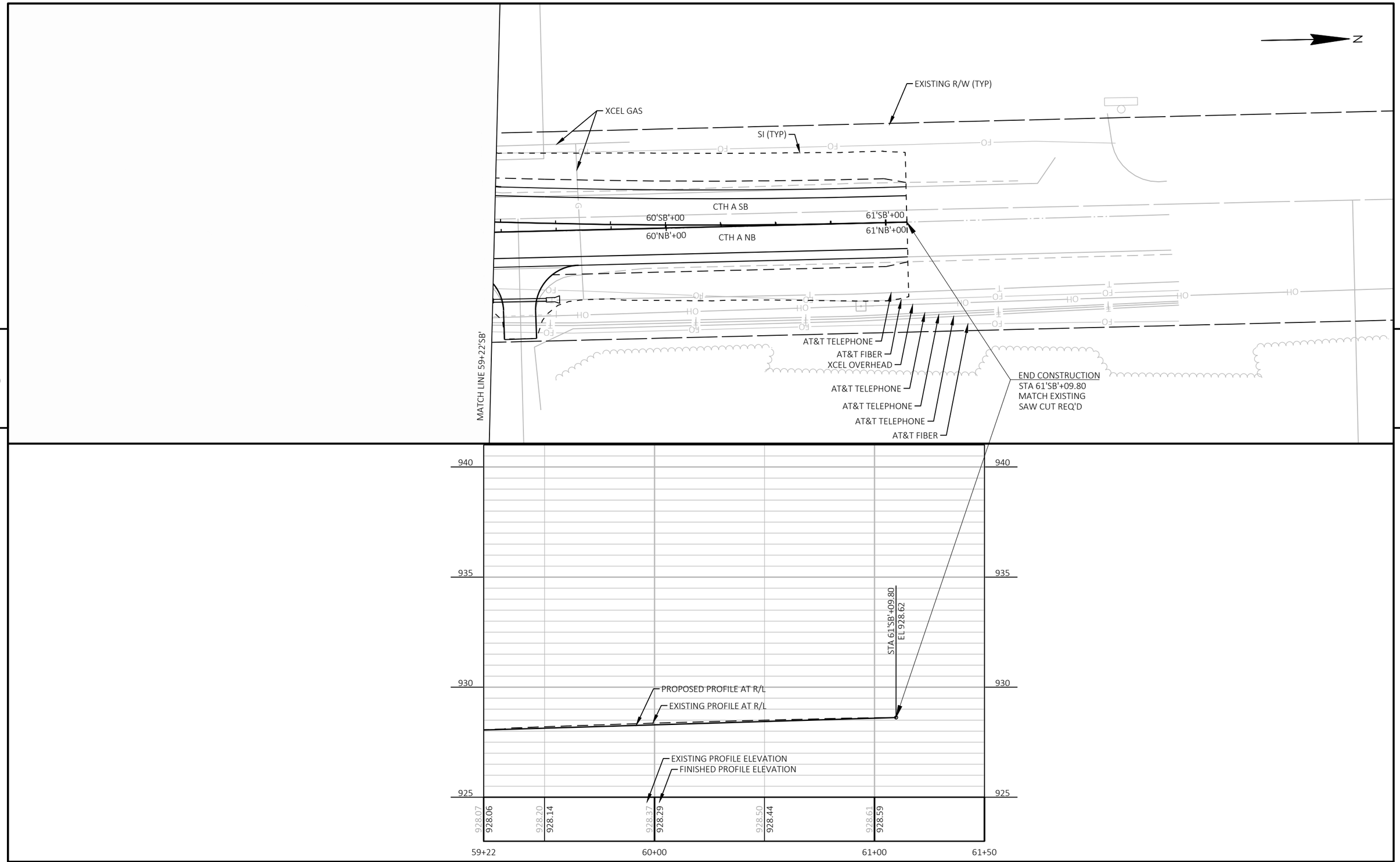
FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (4)
PLOT DATE : 8/14/2023 11:14 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44



PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: CTH A - SB	SHEET 56	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (5)

PLOT DATE : 8/14/2023 11:14 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: CTH A - SB	SHEET 57	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (6)

PLOT DATE : 8/14/2023 11:14 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

29 LF CP CLASS III-A 18-INCH
2 ENDWALLS FOR CP 18-INCH
INL: STA 80'EB'+84, 37.2' LT, ELEV 914.11
OUT: STA 80'EB'+55, 35.7' LT, ELEV 912.47

28 LF CP CLASS III-A 18-INCH
2 ENDWALLS FOR CP 18-INCH
INL: STA 83'EB'+11, 40.9' LT, ELEV 920.08
OUT: STA 82'EB'+83, 43.0' LT, ELEV 919.82

TLE

XCEL OVERHEAD

BALDWIN TELECOM FIBER

MCCUTCHEON RD WB

MCCUTCHEON RD EB

79'WB'+00
79'EB'+00
80'WB'+00
80'EB'+00
81'WB'+00
81'EB'+00
82'WB'+00
82'EB'+00
83'WB'+00
83'EB'+00
84'WB'+00
84'EB'+00

EXISTING R/W (TYP)

SI (TYP)

PROPOSED R/W (TYP)

XCEL GAS

ST CROIX ELECTRIC OVERHEAD

BEGIN CONSTRUCTION
STA 78'EB'+80.31
MATCH EXISTING
SAW CUT REQ'D

VCL = 210.00
K = 137.34

VCL = 250.00
K = 96.86

PROPOSED PROFILE AT R/L
EXISTING PROFILE AT R/L

STA 78'EB'+80.31
EL 914.09

VPC STA 78'EB'+95.00
VPC EL 914.15

VPI STA 80'EB'+20.00
VPI EL 914.71

VPC STA 81'EB'+55.00
VPC EL 918.80

VPT STA 81'EB'+45.00
VPT EL 918.50

VPI STA 82'EB'+60.00
VPI EL 921.982

VPT STA 83'EB'+65.00
VPT EL 923.56

0.45%
3.03%
1.50%

EXISTING PROFILE ELEVATION
FINISHED PROFILE ELEVATION

925
920
915
910

914.09 914.09 914.26 914.18 914.77 914.55 915.56 915.19 916.68 916.09 918.12 917.24 919.38 918.65 920.57 920.09 921.50 921.35 922.28 922.43 922.90 923.32 923.34 924.08 923.52 924.83 923.99 925.29

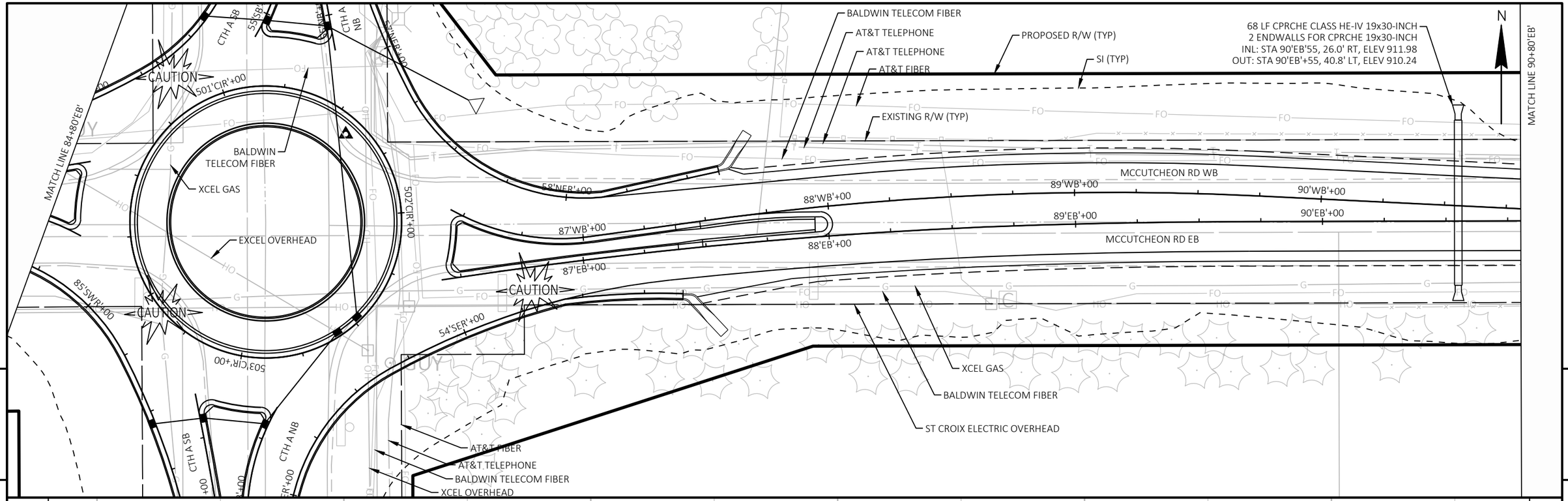
78+80 79+00 80+00 81+00 82+00 83+00 84+00 84+80

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: MCCUTCHEON RD - EB	SHEET 58	E

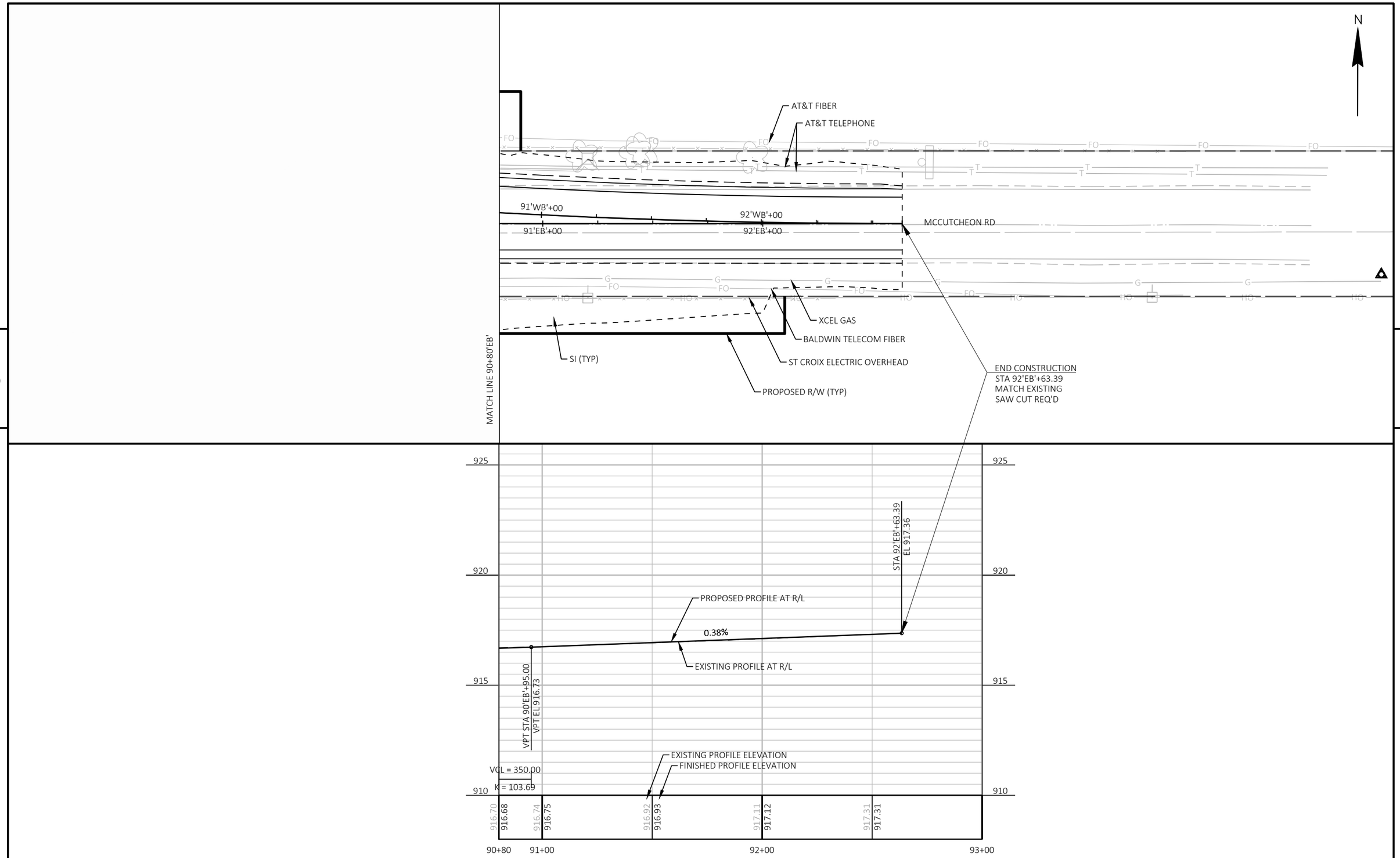
FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (7)

PLOT DATE : 8/14/2023 11:14 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

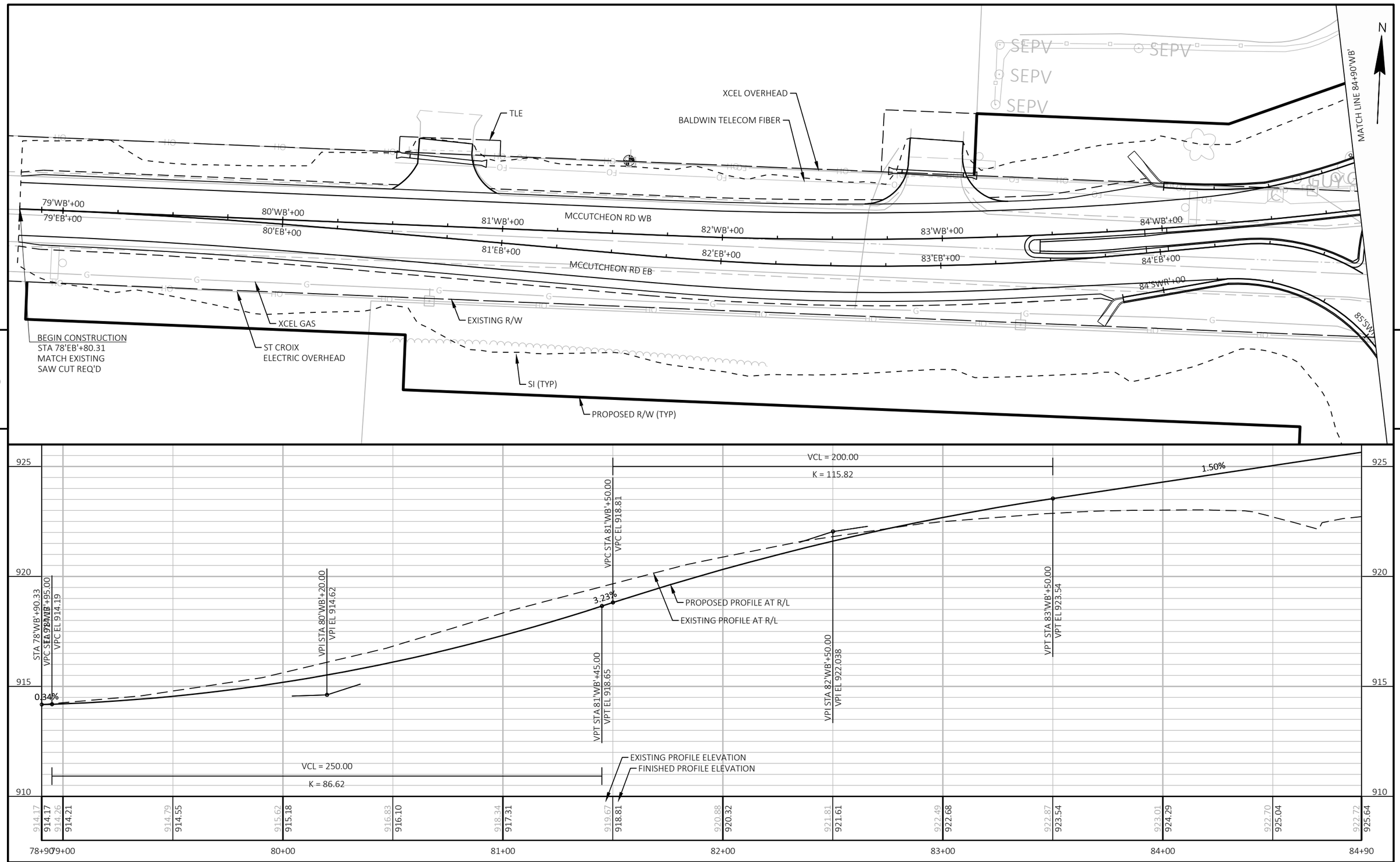


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: MCCUTCHEON RD - EB	SHEET 59	E



PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: MCCUTCHEON RD - EB	SHEET 60	E

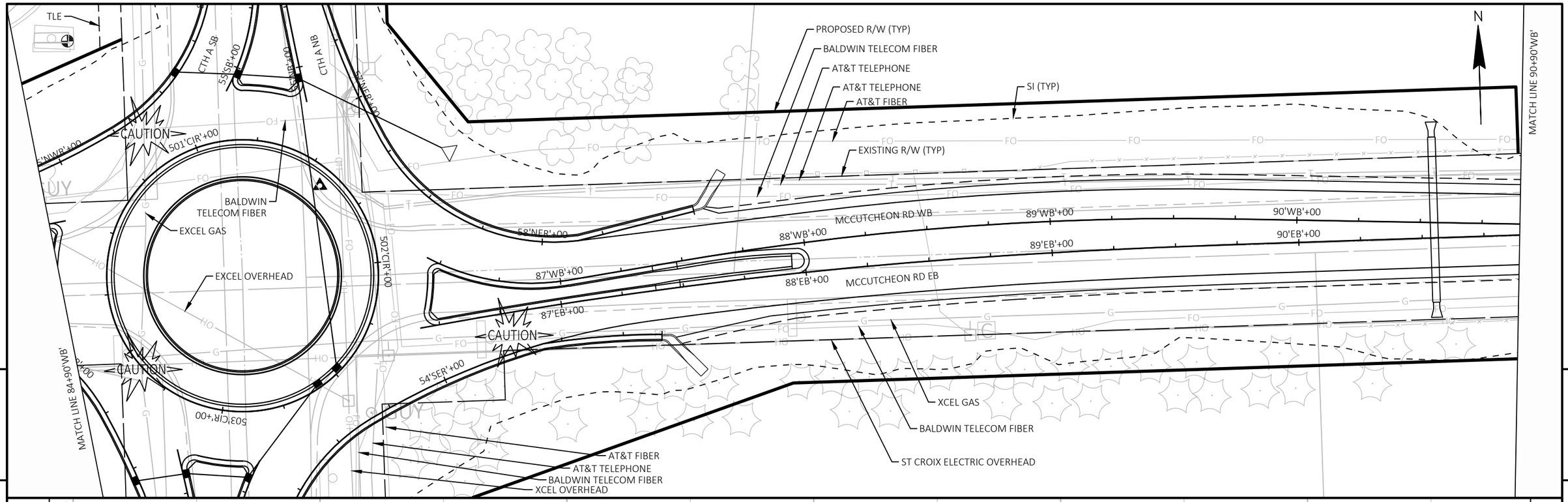
FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (9)
PLOT DATE : 8/14/2023 11:15 AM
PLOT BY : KYLE WILLIAMS
PLOT NAME :
PLOT SCALE : 1 IN:40 FT
WISDOT/CADDS SHEET 44

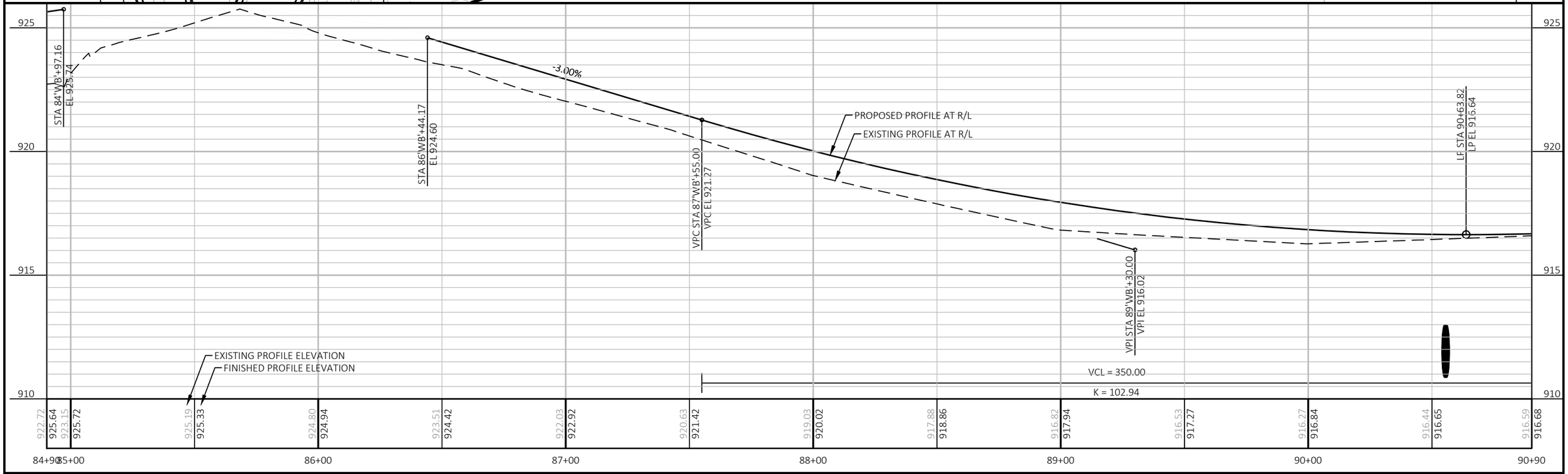


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: MCCUTCHEON RD - WB	SHEET 61	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (10)

PLOT DATE : 8/14/2023 11:15 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT



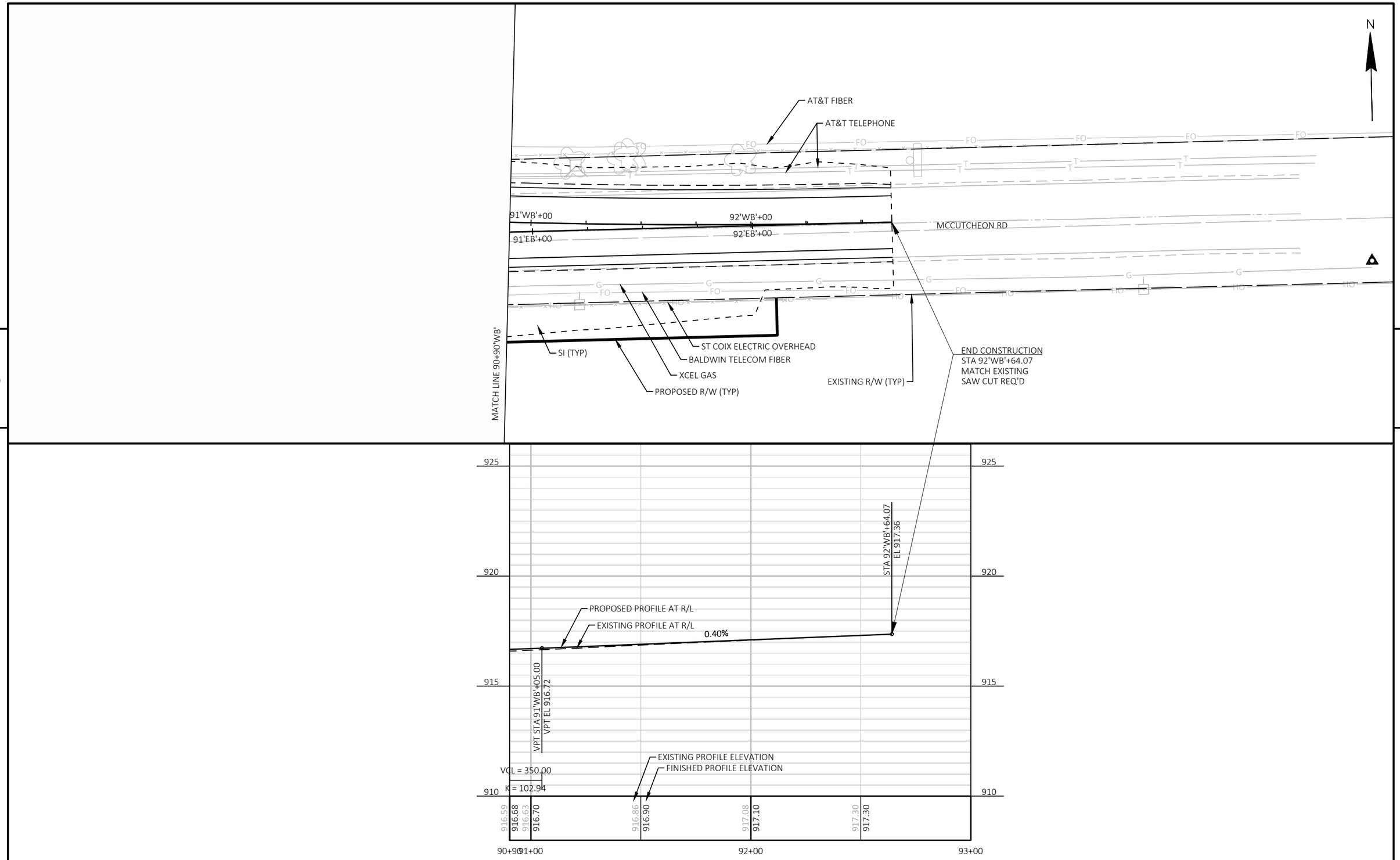


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: MCCUTCHEON RD - WB	SHEET 62	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (11)

PLOT DATE : 8/14/2023 11:15 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

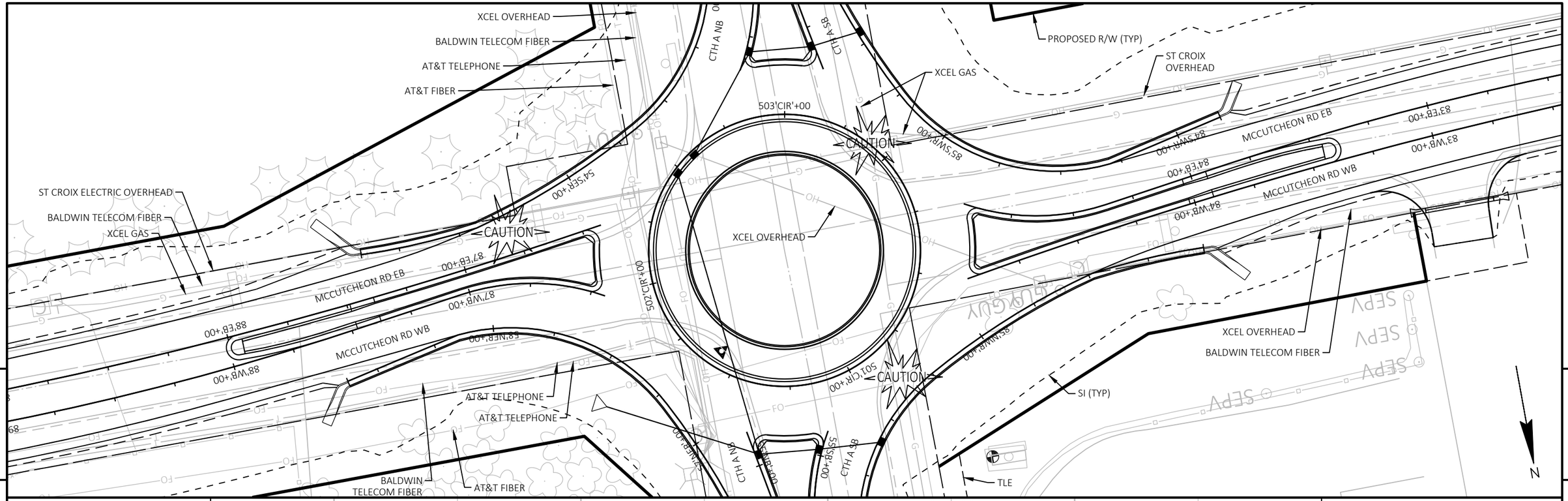
WISDOT/CADDS SHEET 44

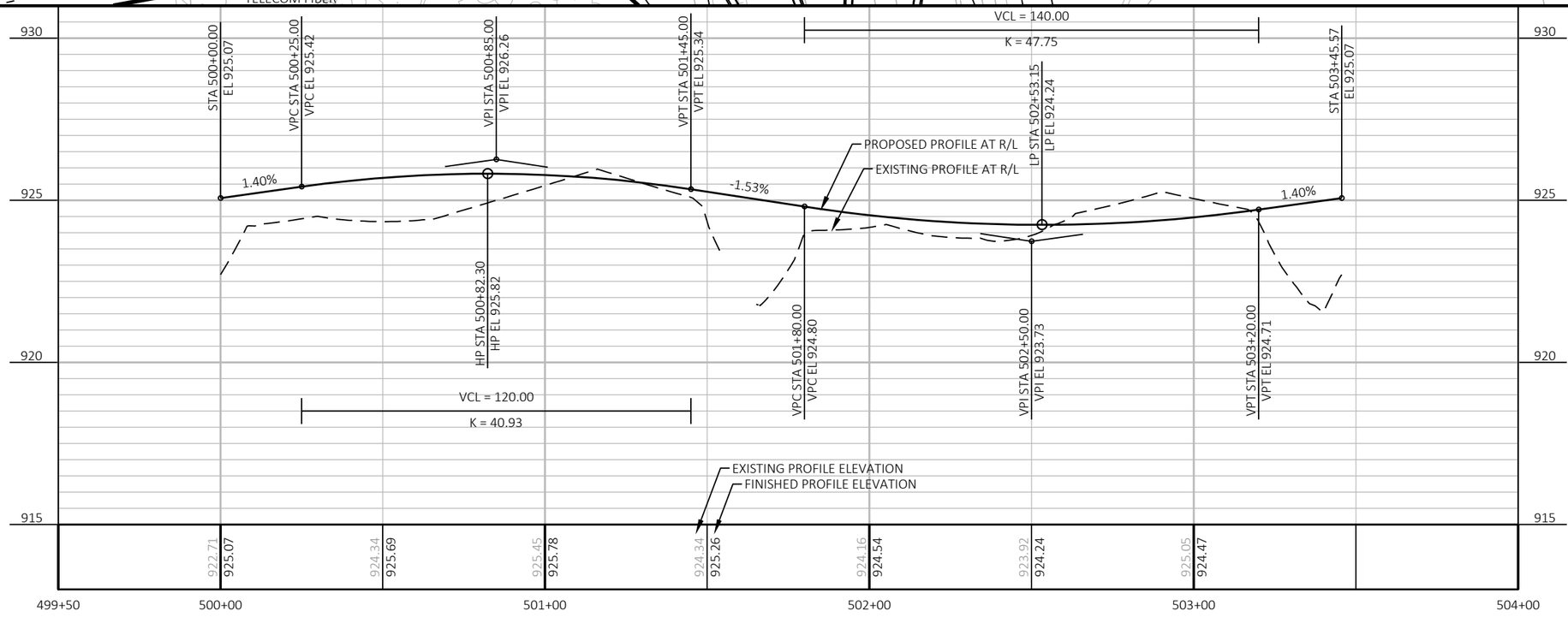


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: MCCUTCHEON RD - WB	SHEET 63	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (12)

PLOT DATE : 8/14/2023 11:15 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

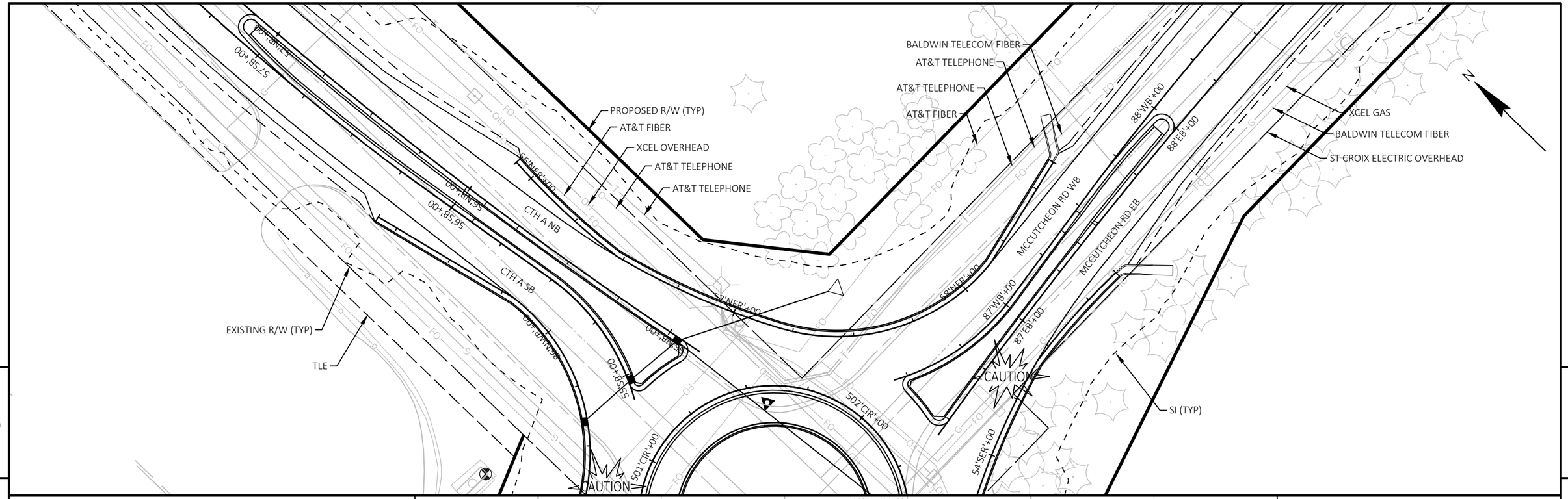


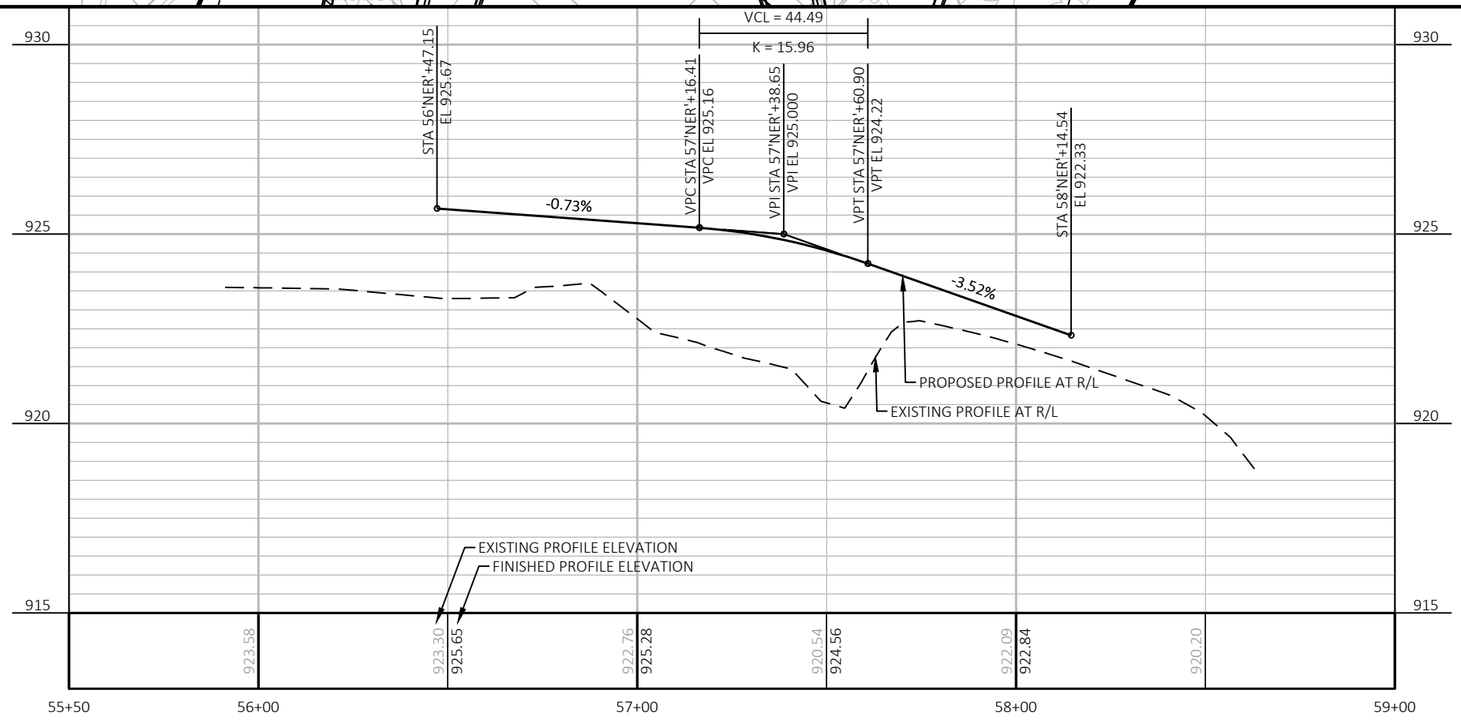


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: CIRCLE	SHEET 64	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (13)

PLOT DATE : 8/14/2023 11:15 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT



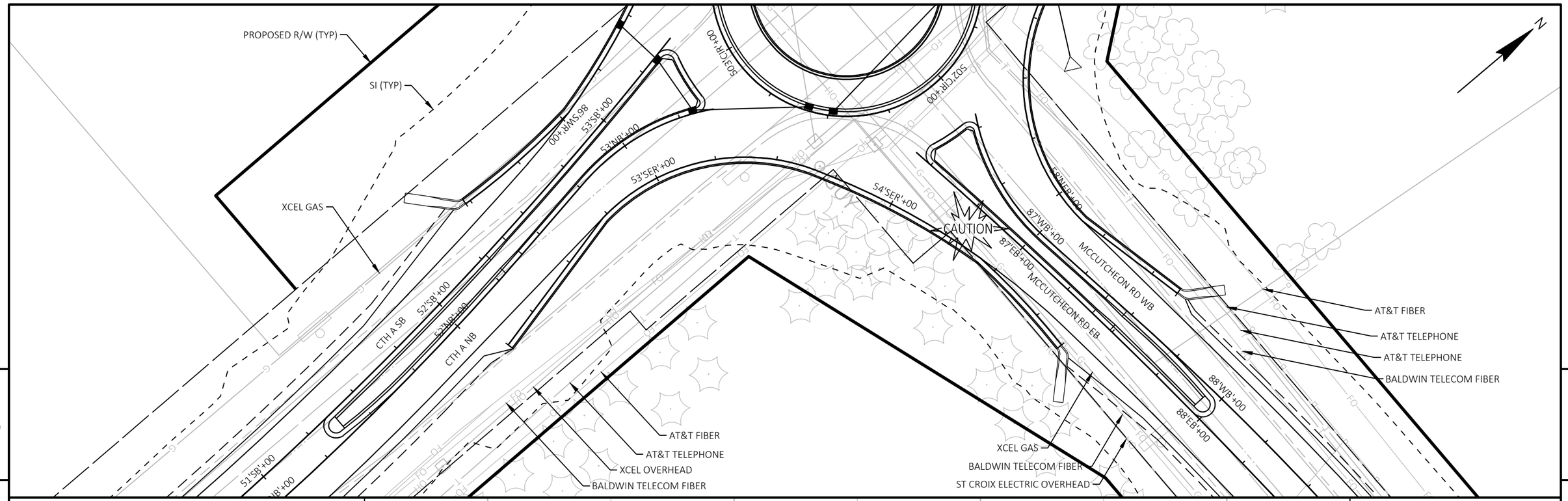


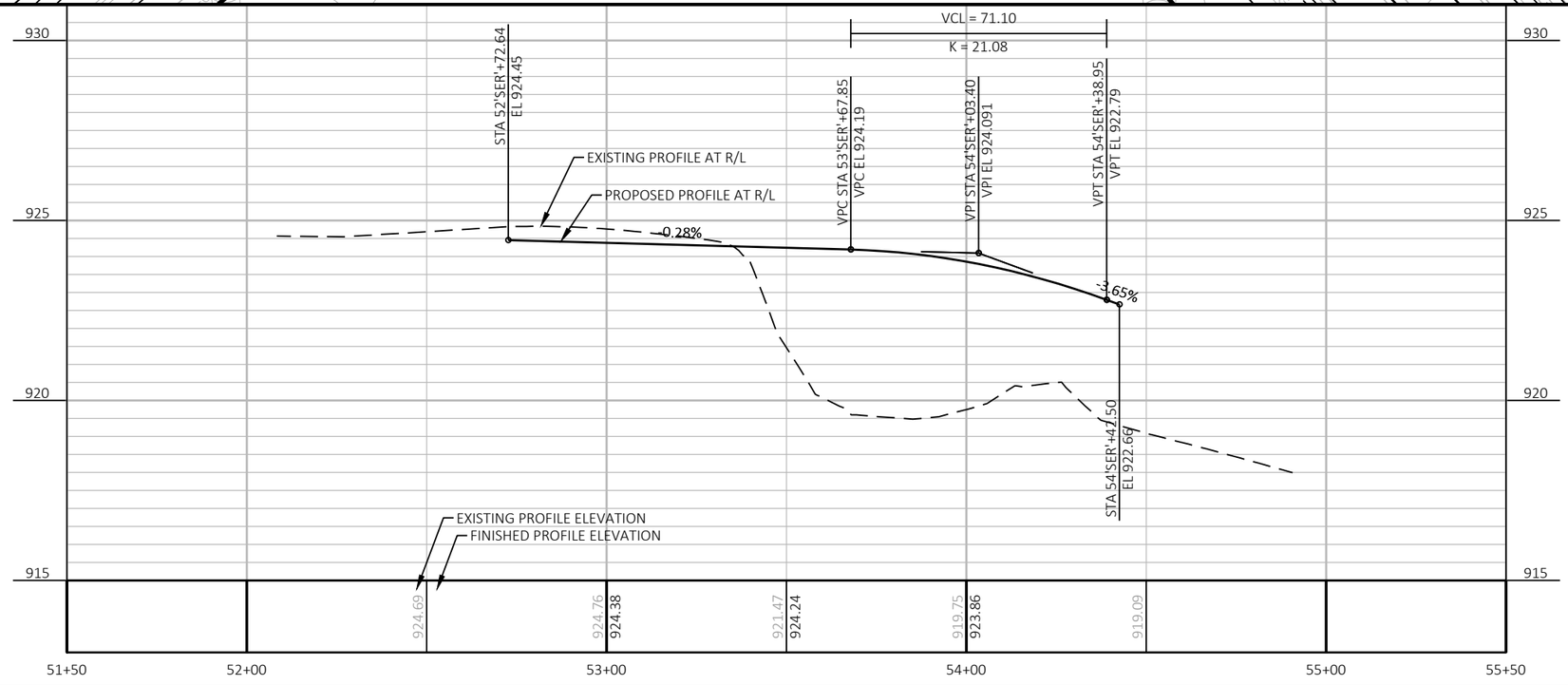
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: NE RADIUS	SHEET 65	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (14)

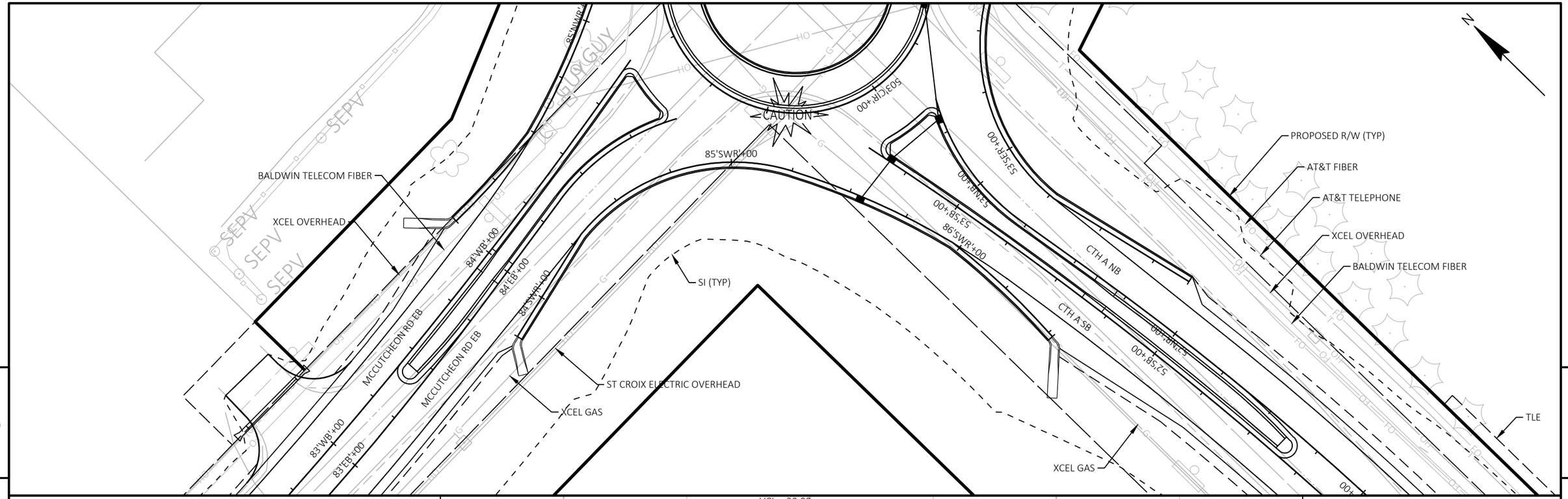
PLOT DATE : 8/14/2023 11:15 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

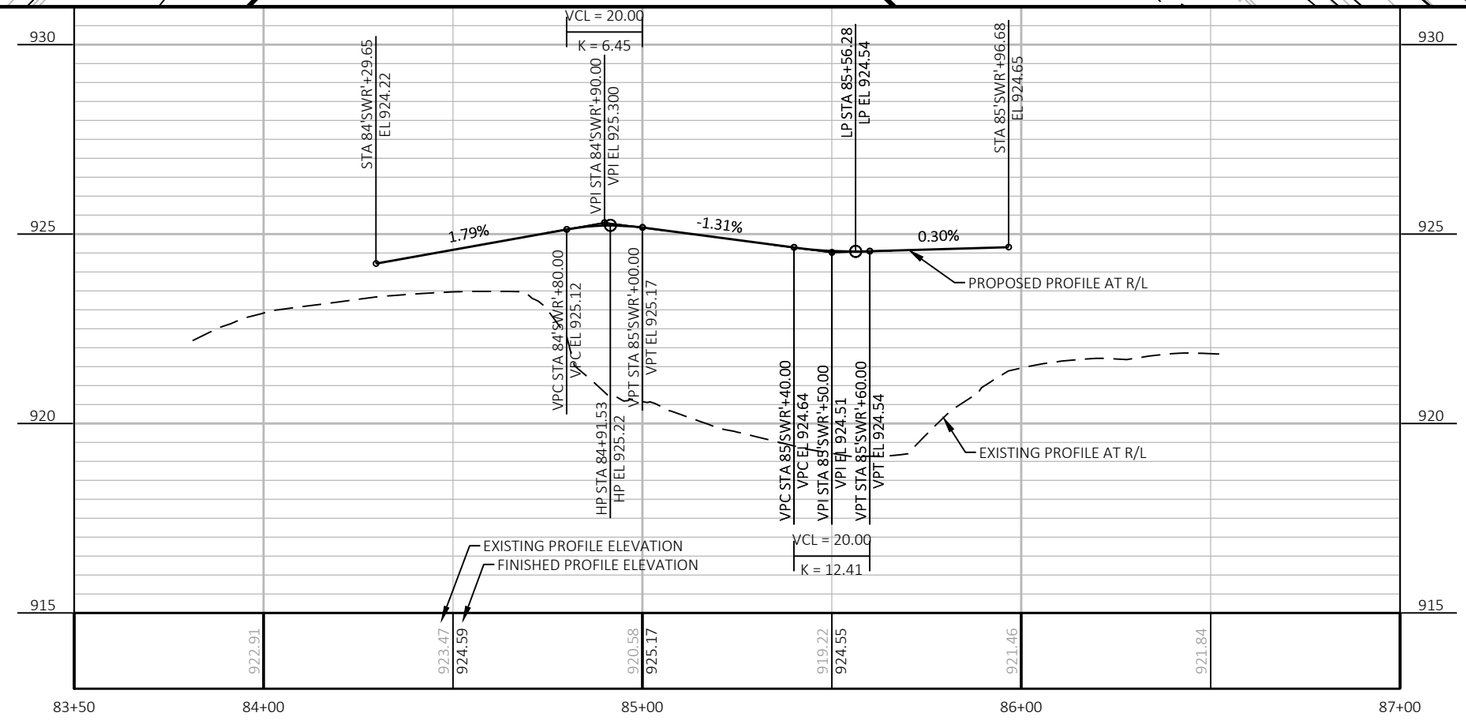
WISDOT/CADDS SHEET 44





PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: SE RADIUS	SHEET 66	E



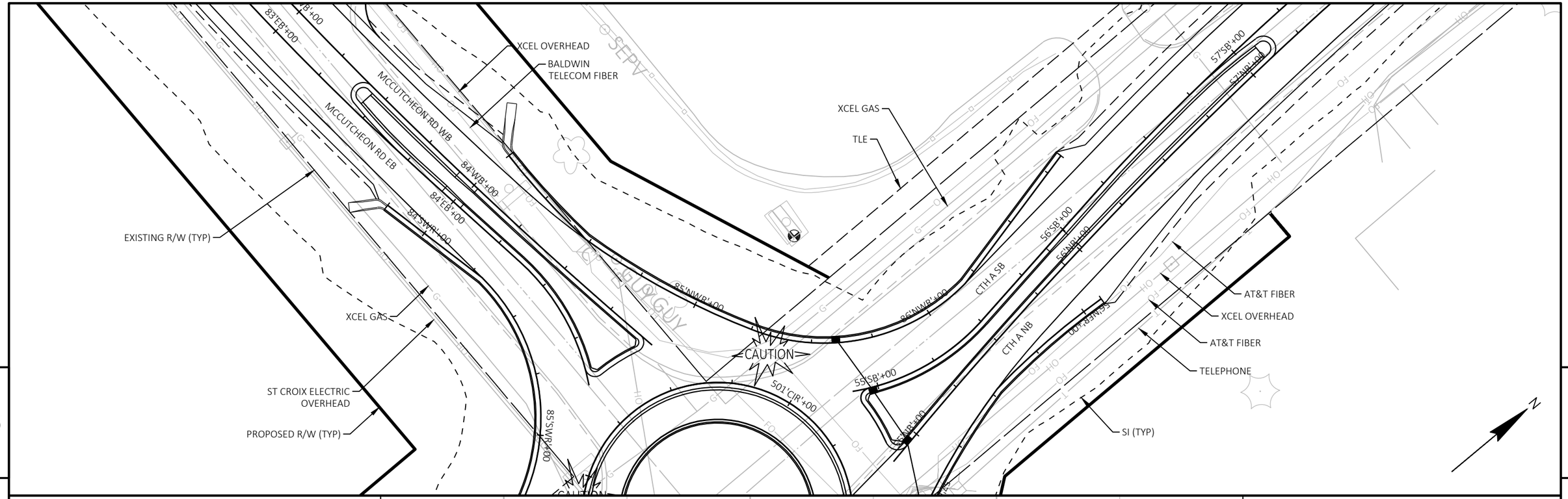


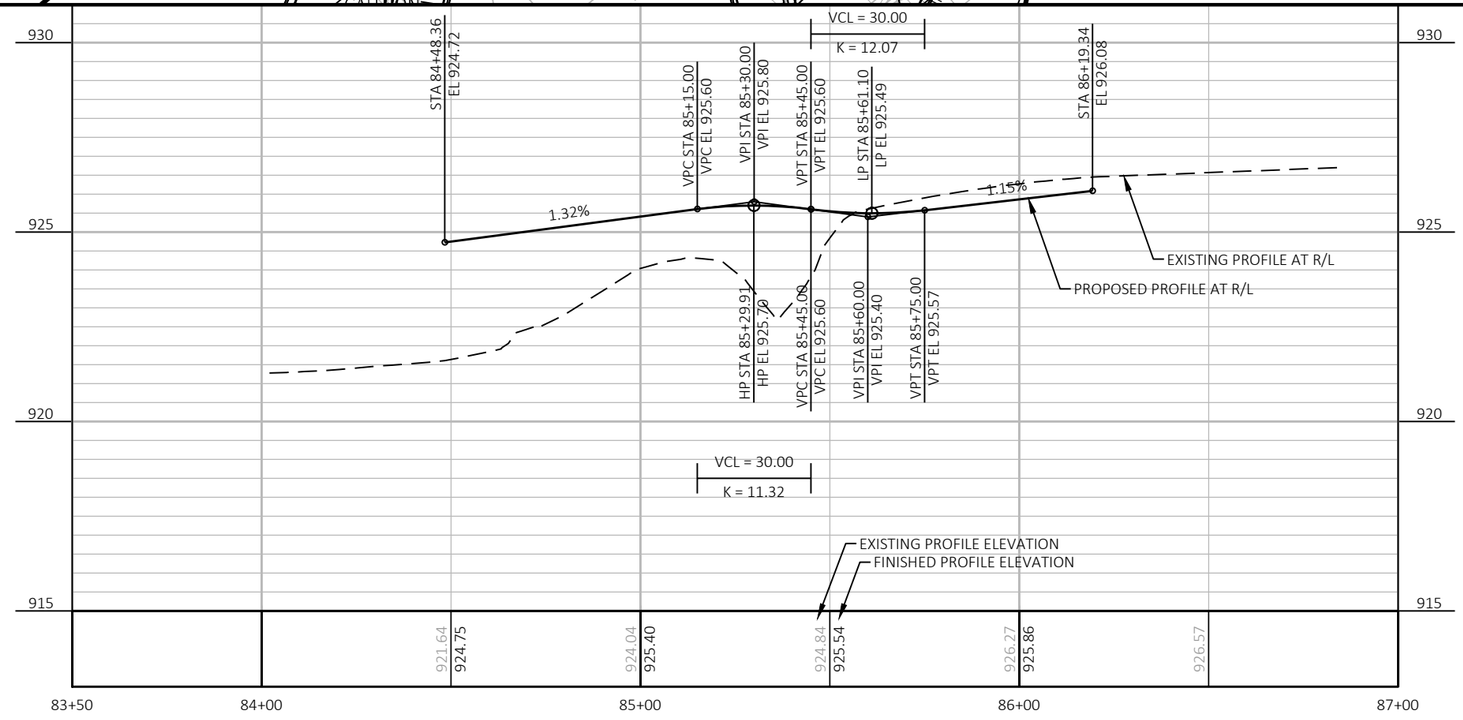
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PLOTTING: SW RADIUS	SHEET 67	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\050101-PP.DWG
LAYOUT NAME - 050101-pp (17)

PLOT DATE : 8/14/2023 11:15 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 44

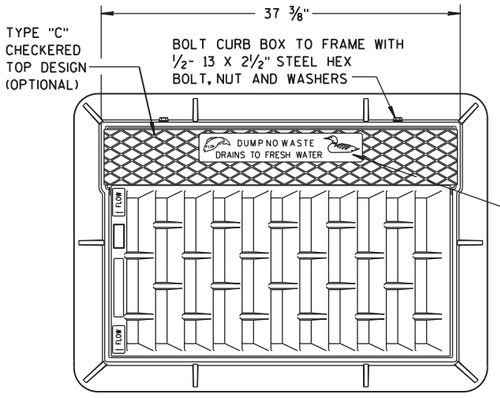




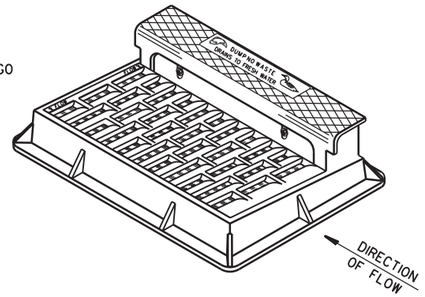
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	PLAN AND PROFILE: NW RADIUS	SHEET 68	E

Standard Detail Drawing List

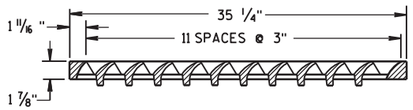
08A05-19A	INLET COVERS TYPE A, H, A-S, H-S & Z
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08A08-02	CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D16-11	CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
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
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09B02-10	CONDUIT
09B16-02	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D01-05	CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
09E01-15G	HARDWARE DETAILS FOR POLE MOUNTINGS
11B02-02	CONCRETE MEDIAN NOSE
13C18-08E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C18-08A	MEDIAN ISLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN ISLAND MARKING MEDIAN ISLAND NOSE

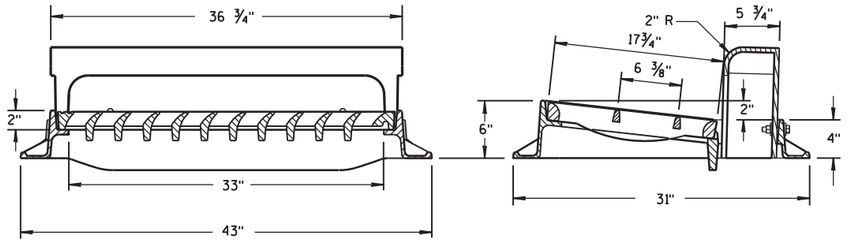


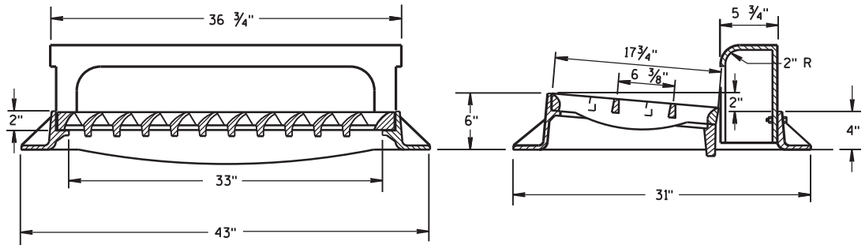
NOTE:
GRATE IS REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

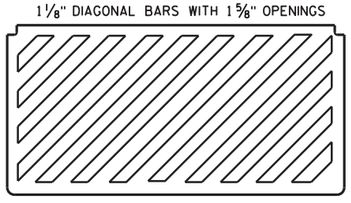






TYPE "H"

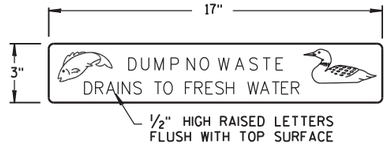
NOTE: EITHER CASTING IS ACCEPTABLE



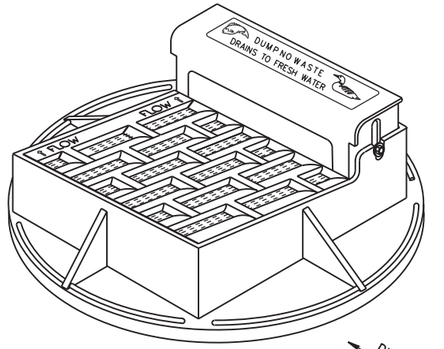
SPECIAL GRATE FOR TYPE "H" COVER

(MEASURES 35 1/4" X 17 3/4" X 2")

(NOTED AS TYPE H-S ON DRAINAGE TABLE)

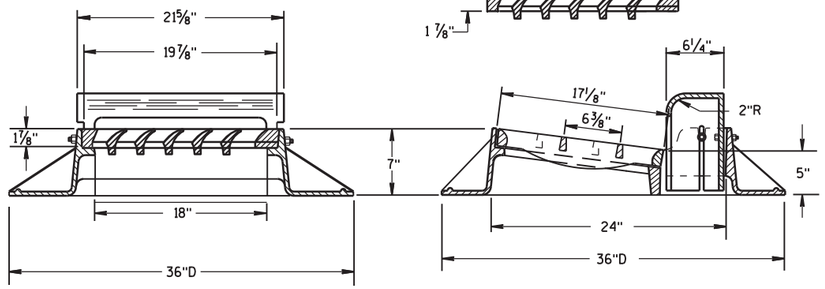


LOGO DETAIL



NOTE: CURB BOX ADJUSTABLE 4" TO 9"

NOTE:
GRATE IS REVERSIBLE.



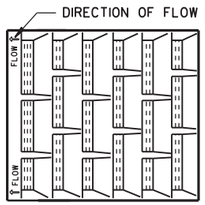
TYPE "A"

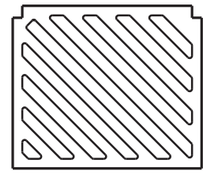
GENERAL NOTES

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.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

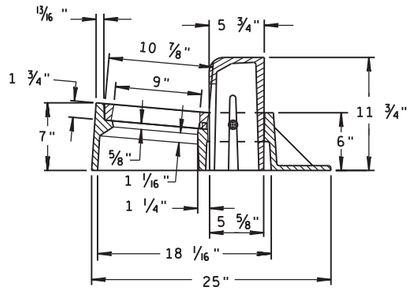


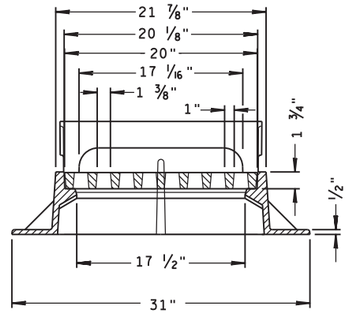


SPECIAL GRATE FOR TYPE "A" COVER

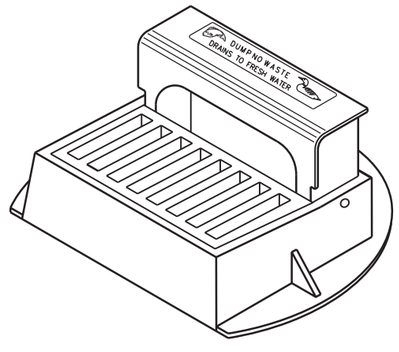
(MEASURES 19 3/4" X 17" X 1 7/8")

(NOTED AS TYPE A-S ON DRAINAGE TABLE)





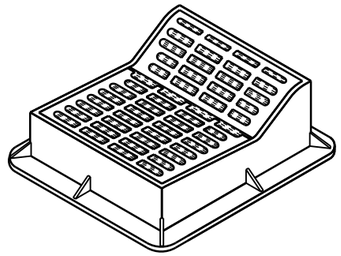
TYPE "Z"

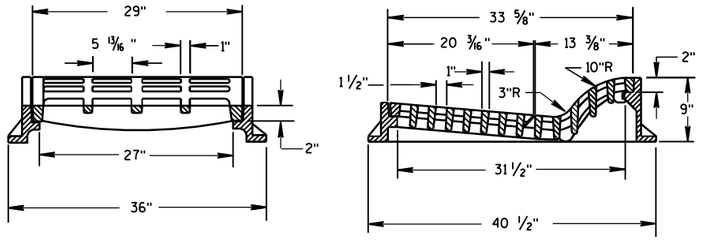


INLET COVERS TYPE A, H, A-S, H-S & Z

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

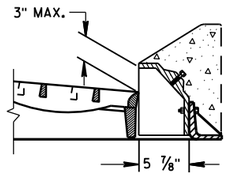
APPROVED
11-27-13 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

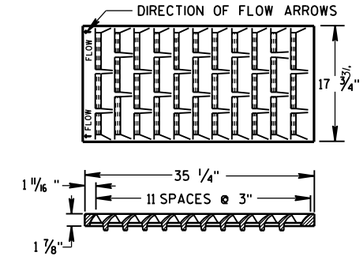
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

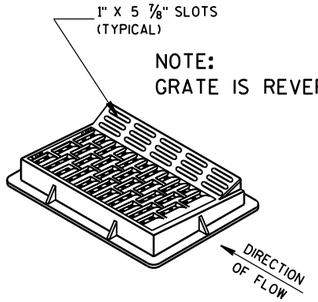
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

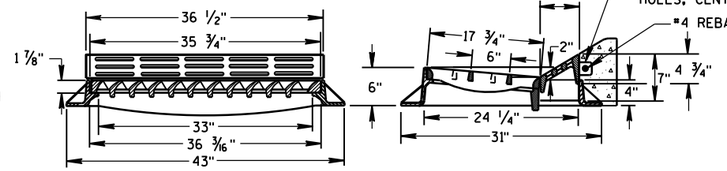
GENERAL NOTES

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.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.



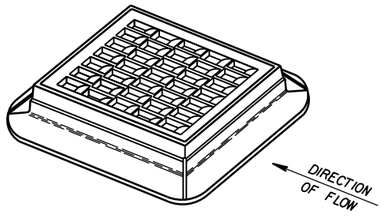


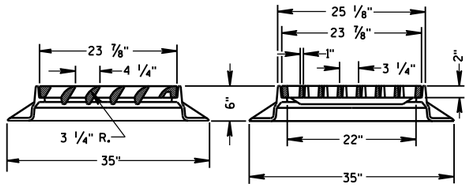


TYPE "HM"

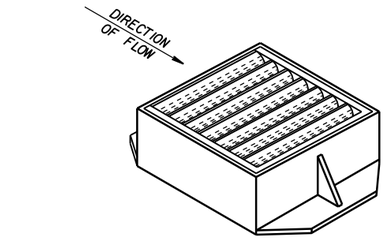
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

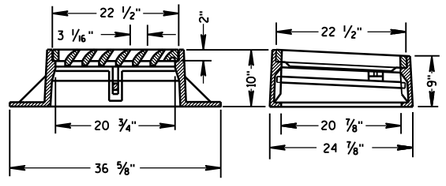
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



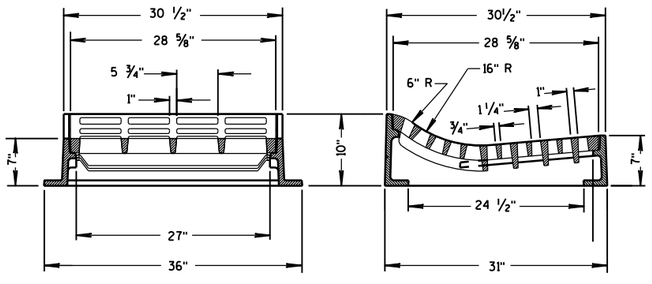


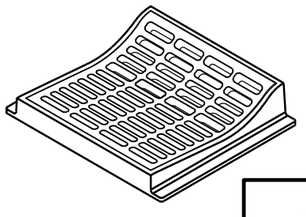
TYPE "S"





TYPE "V"





TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

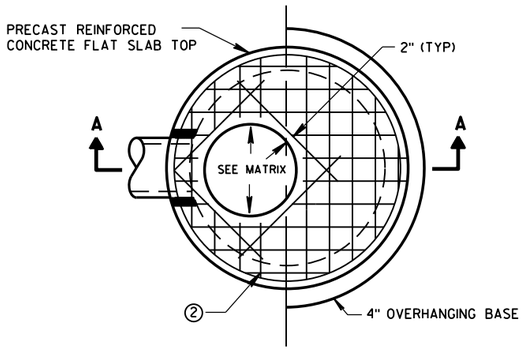
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

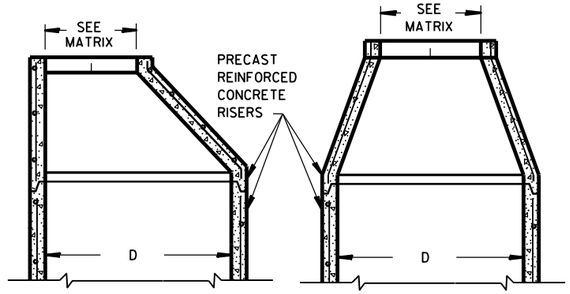
FHWA

6

S.D.D. 8 A 5-19c

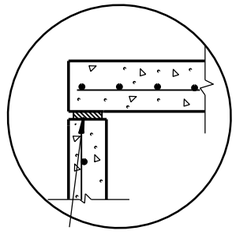


PLAN VIEW CIRCULAR OPENING

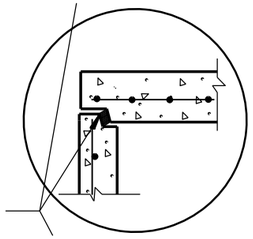


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

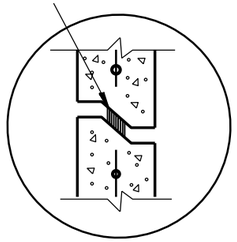
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT

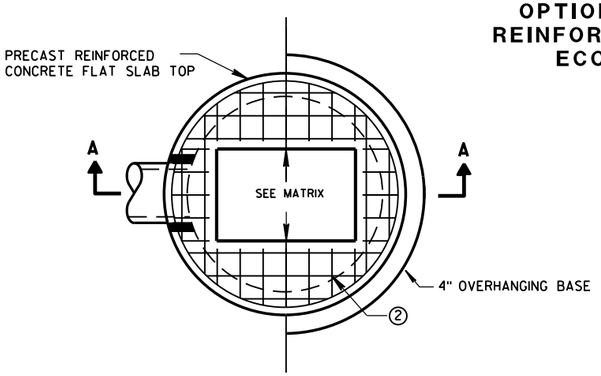


TOP WITH TONGUE AND GROOVE JOINT

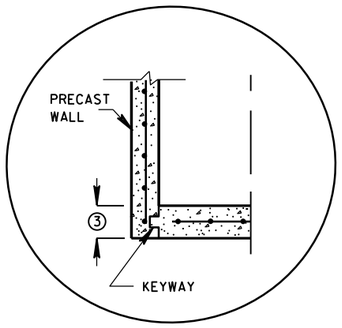


RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

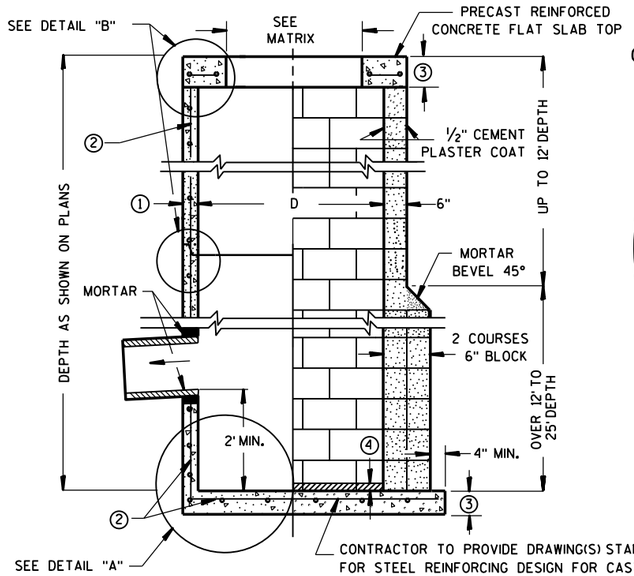


PLAN VIEW RECTANGULAR OPENING



JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)

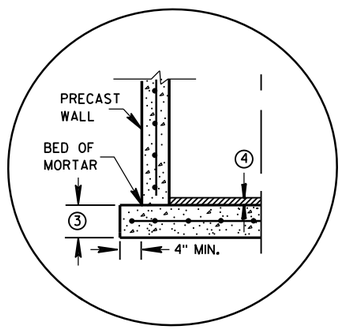
PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SECTION A-A

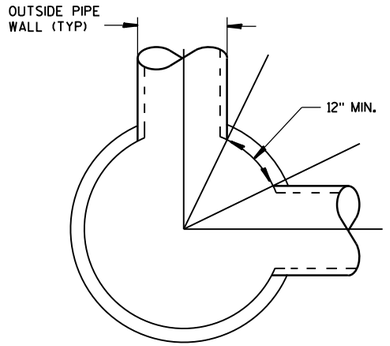
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

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.

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST CATCH BASIN UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONCRETE CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED CONCRETE FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½ INCH AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

CONCRETE BLOCK WILL NOT BE PERMITED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT AND 7 INCHES FOR 6-FT DIAMETER PRECAST CATCH BASINS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

④ 1" CONCRETE KEY POURED AFTER INSTALLATION. 2' SUMP MEASURED FROM TOP OF KEY.

CATCH BASIN COVER OPENING MATRIX

CATCH BASIN SIZE	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
	OPENING SIZE (FT)											
3-FT	2X2	X	X					X		X		
	2 DIA.				X							X
4-FT-6-FT	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2 DIA.				X							X
	2X3						X					
	2.5X3					X						

PIPE MATRIX

CATCH BASIN SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	30

CATCH BASINS 3-FT, 4-FT, 5-FT AND 6-FT DIAMETER

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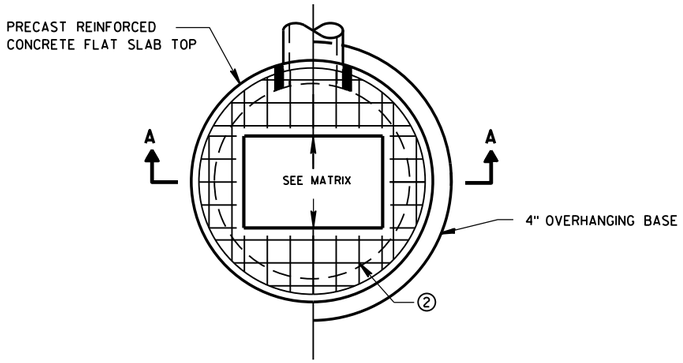
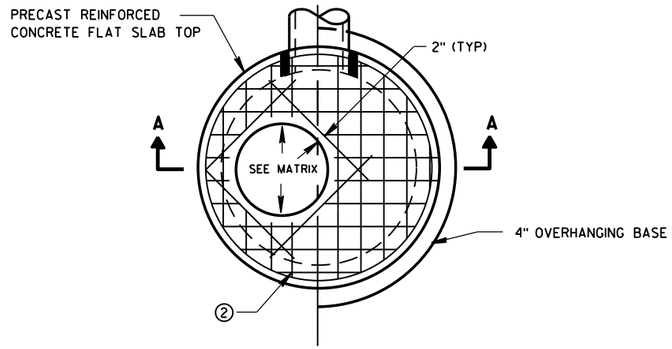
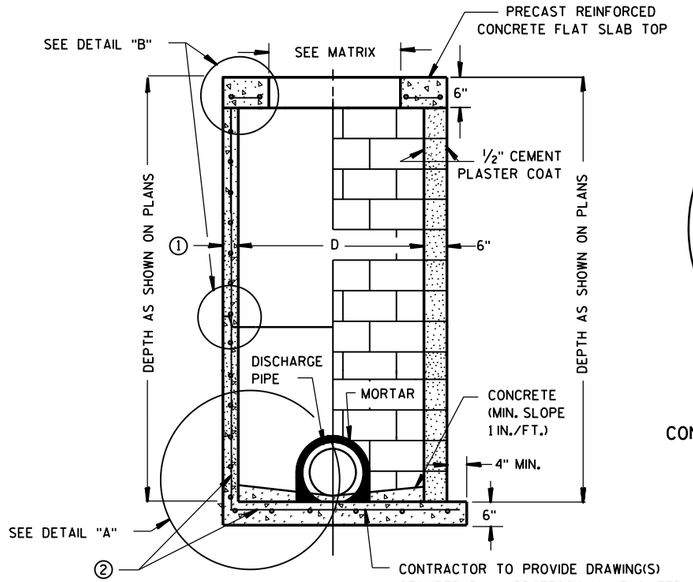


PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

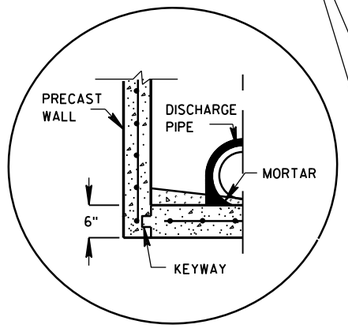


SECTION A-A

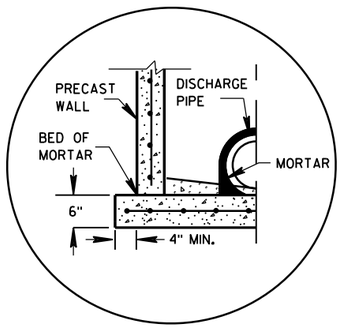
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

CIRCULAR INLETS W/ FLAT TOP

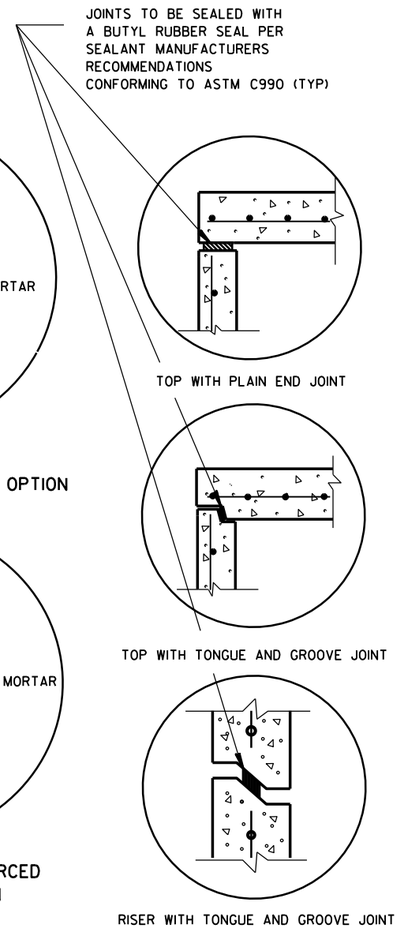


PRECAST REINFORCED
CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED
CONCRETE BASE OPTION

DETAIL "A"



DETAIL "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 THE APPLICABLE SPECIAL PROVISIONS.

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BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

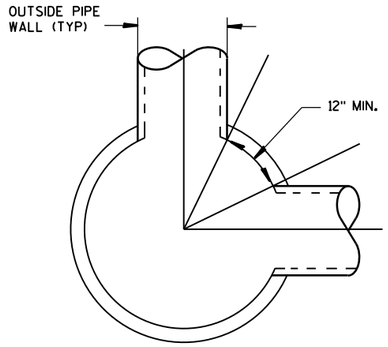
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

② FOR PRECAST CATCH BASINS PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

INLETS 3-FT
AND 4-FT DIAMETER

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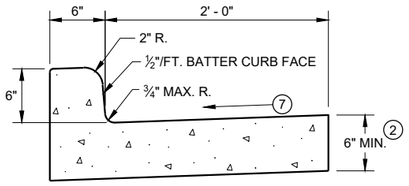
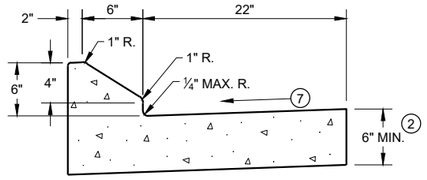
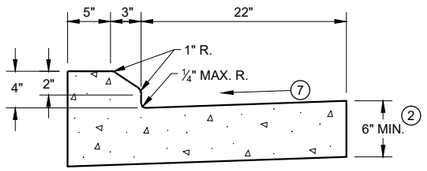


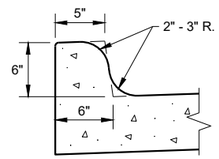
TYPES A (1) & D



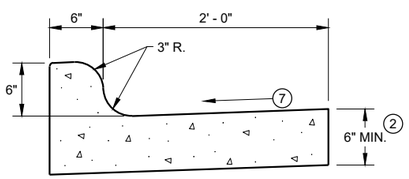
6" SLOPED CURB TYPES G (1) & J



4" SLOPED CURB TYPES G (1) & J

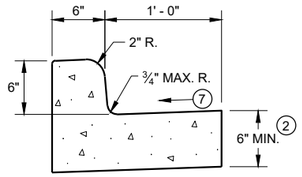


TYPES K (1) & L
(OPTIONAL CURB SHAPE)



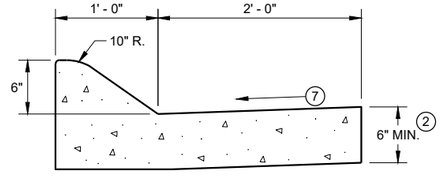
TYPES K (1) & L

CONCRETE CURB AND GUTTER 30"

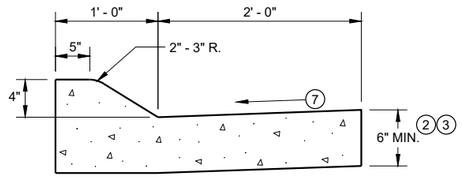


TYPES A (1) & D

CONCRETE CURB AND GUTTER 18"

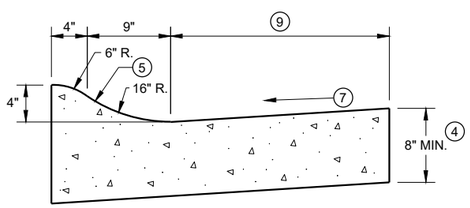


6" SLOPED CURB TYPES A (1) & D



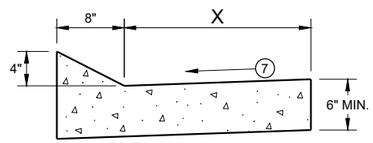
4" SLOPED CURB TYPES A (1) & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R (1) & T

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

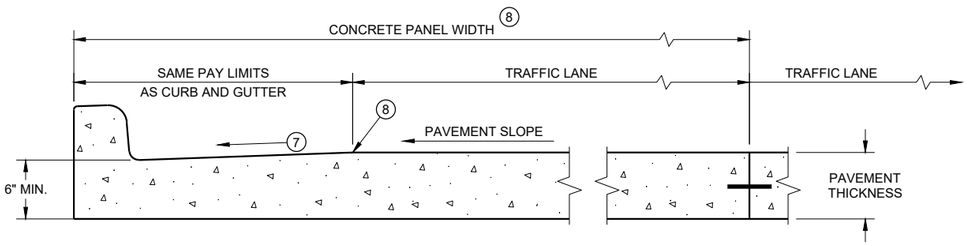


TYPES TBT & TBTT (1)

CONCRETE CURB AND GUTTER

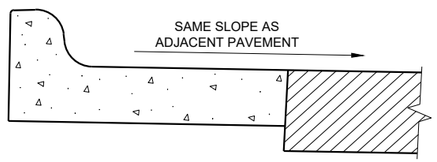
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

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

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

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

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

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

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

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

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

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

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

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

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
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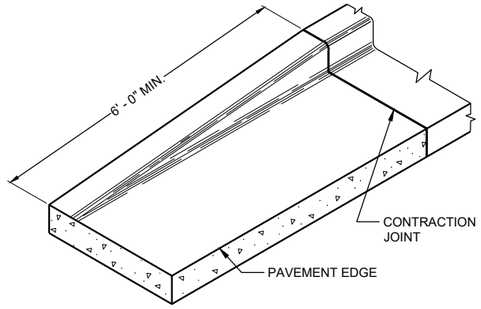
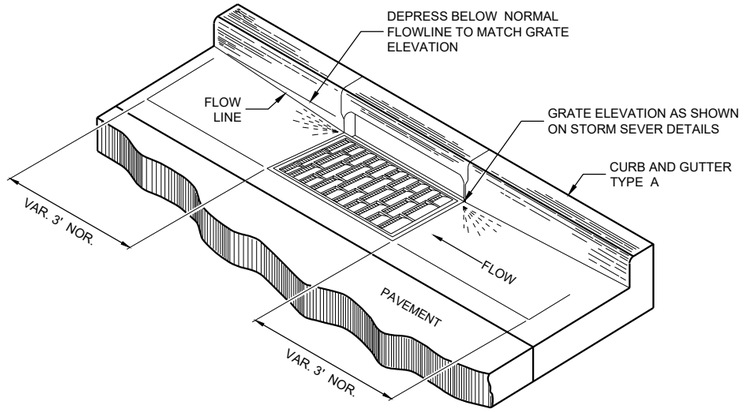
6
SDD 08D01 - 23a



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.

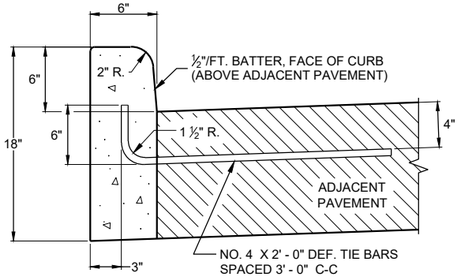
UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

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

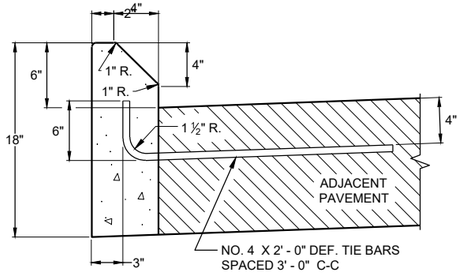
(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

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

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

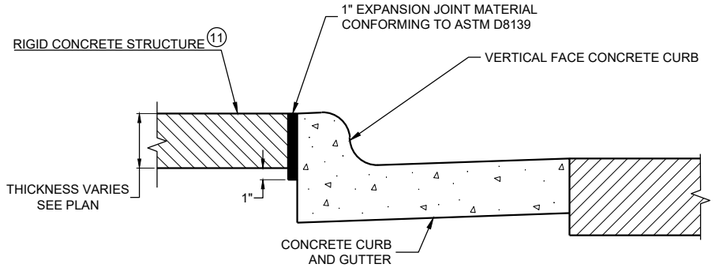


TYPES A (1) & D

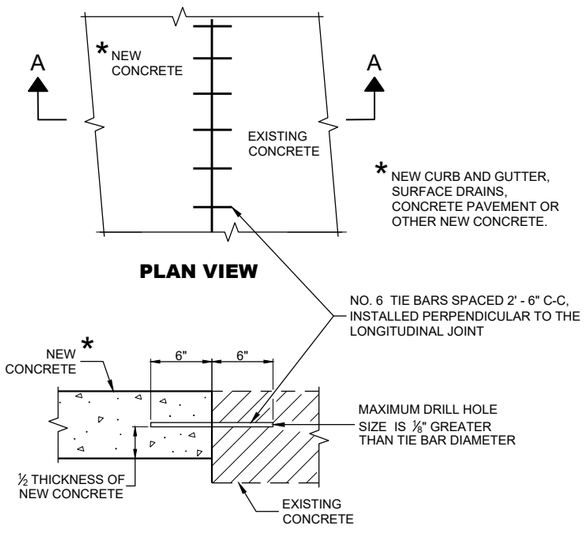


TYPES G (1) & J

CONCRETE CURB



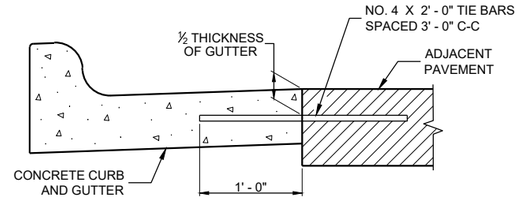
EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE (11)



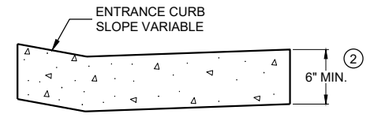
PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



TYPICAL TIE BAR LOCATION (1)



DRIVEWAY ENTRANCE CURB (10)

(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 — DATE
/S/ Rodnery Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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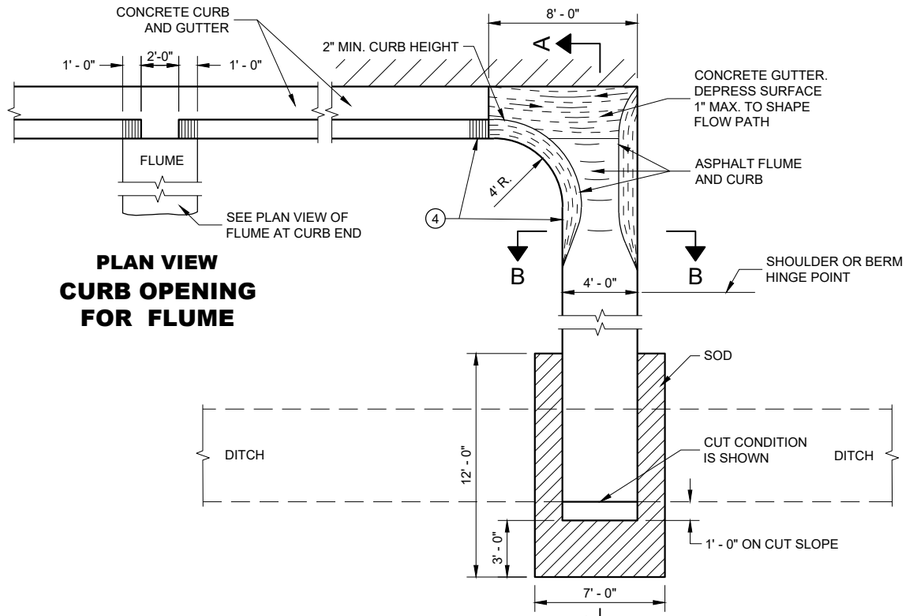
SDD08D01 - 23b

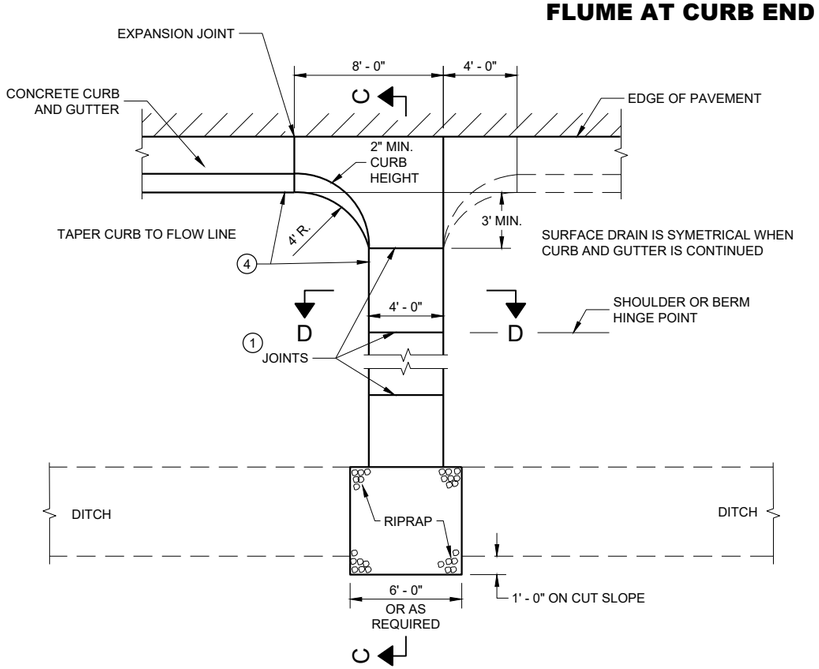
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



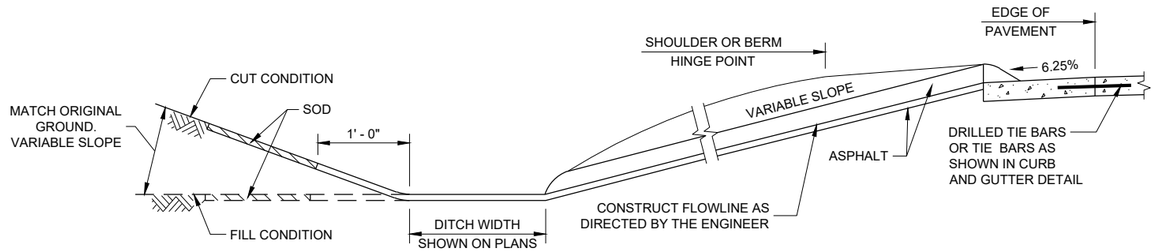
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

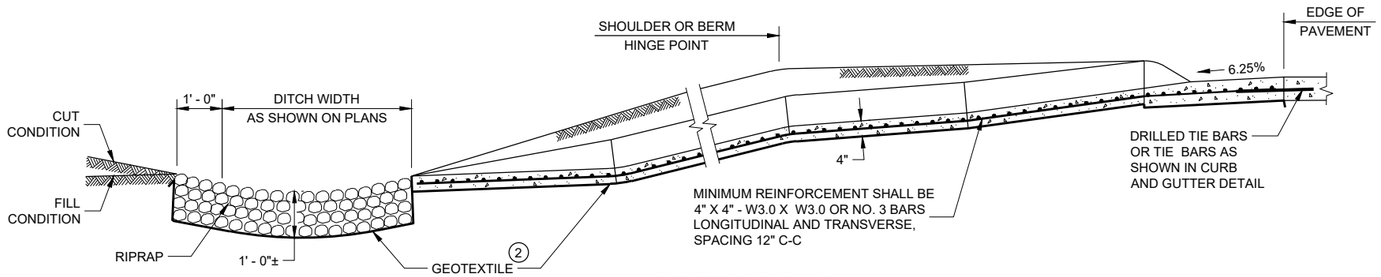
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

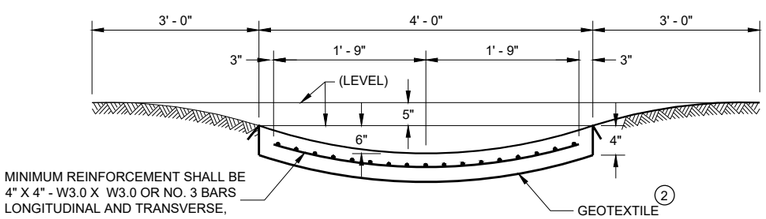


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 08D04 - 07

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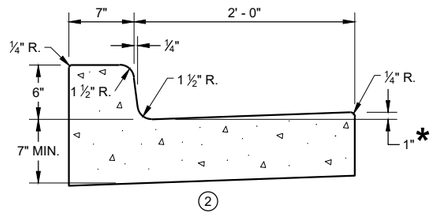
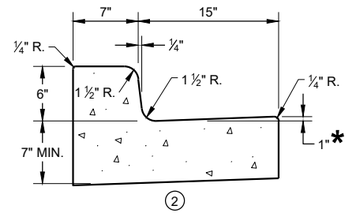
SDD 08D04 - 07

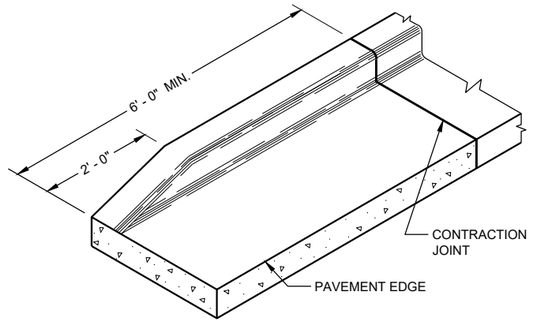


CONCRETE CURB AND GUTTER 31" ①

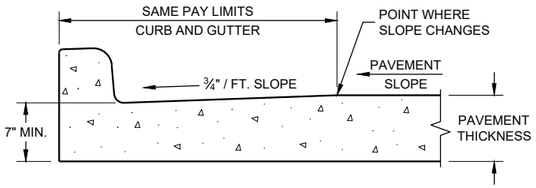
*TO BE MEASURED TO A MAXIMUM OF 3" WHERE DRAINAGE PROBLEMS EXIST.



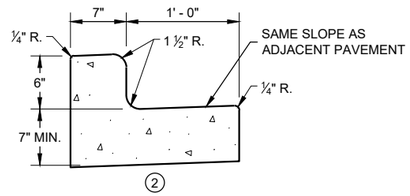
CONCRETE CURB AND GUTTER 22" ①



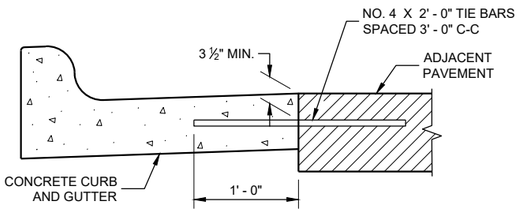
END SECTIONCURB AND GUTTER



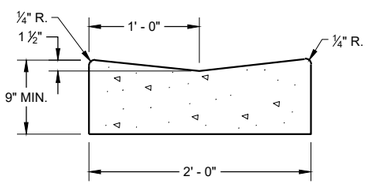
PARTIAL SECTION OF PAVEMENT WITH INTEGRAL CURB AND GUTTER



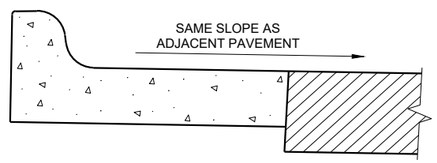
CONCRETE CURB AND GUTTER 19" ①



TYPICAL TIE BAR LOCATION ①



CONCRETE GUTTER 24" ①



HIGH SIDE SECTION ③

(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.

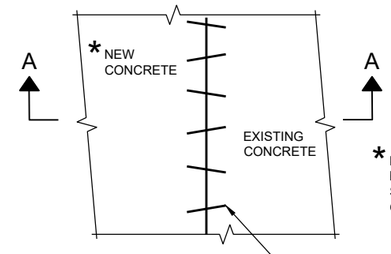
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE. A LONGITUDINAL CONSTRUCTION JOINT IS NOT REQUIRED WITH INTEGRAL CURB AND GUTTER.

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

① WHEN PLACED ADJACENT TO NEW CONCRETE, TIE BARS ARE REQUITED FOR CURB AND GUTTER 31", 22", 19" AND CONCRETE GUTTER 24".

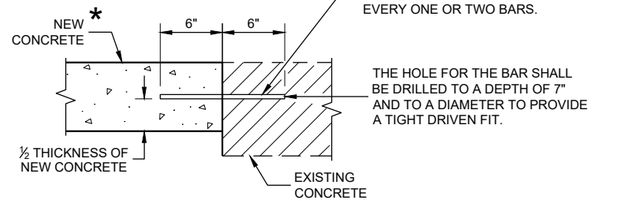
② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE COURSE PROVIDED A 7" MINIMUM GUTTER THICKNESS IS MAINTAINED.

③ WHEN HIGH SIDE CURB SECTION IS REQUIRED, THE LOCATION(S) WILL BE NOTED ON THE PLANS



PLAN VIEW

* EXISTING AND NEW CONCRETE MAY BE CURB AND GUTTER, SURFACE DRAINS, PAVEMENT OR OTHER CONCRETE STRUCTURE.



SECTION A - A

PAVEMENT TIES

CONCRETE GUTTER, CURB AND GUTTER AND PAVEMENT TIES

(For Optional use in Milwaukee Co. Only)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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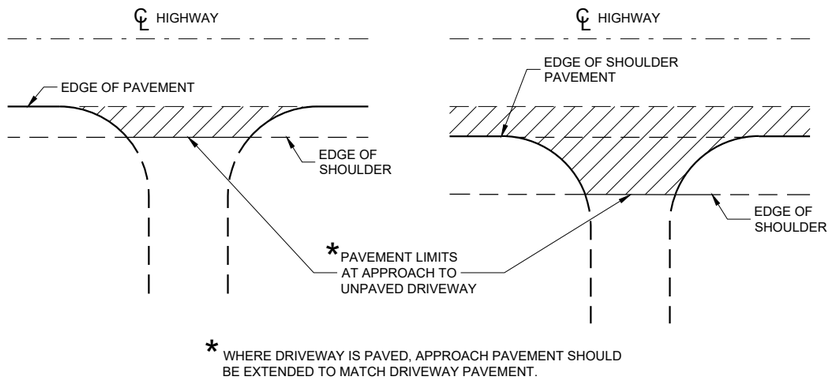
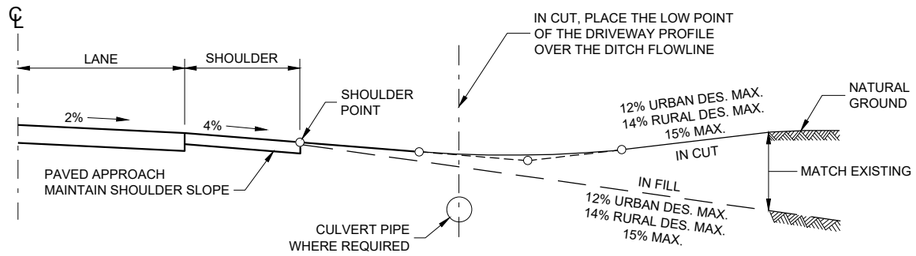
SDD 08D16 - 11
SDD 08D16 - 11



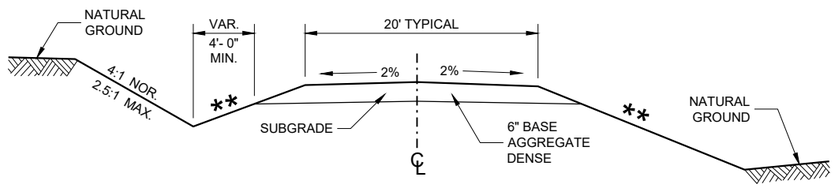
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

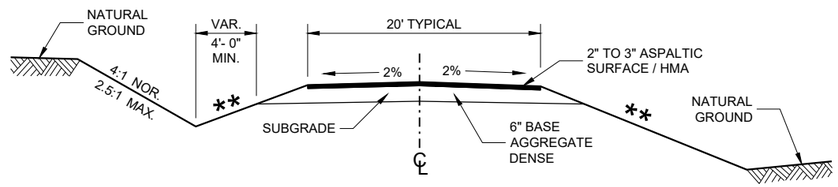


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

DRIVEWAYS WITHOUT CURB AND GUTTER

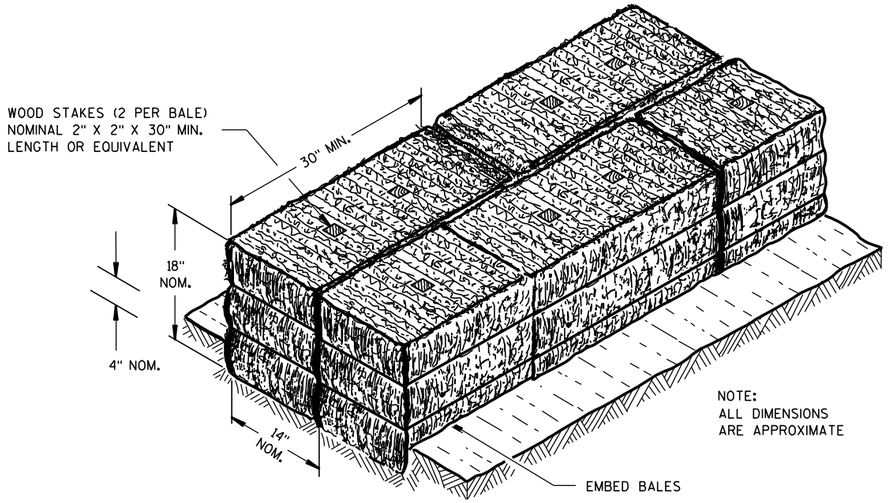
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

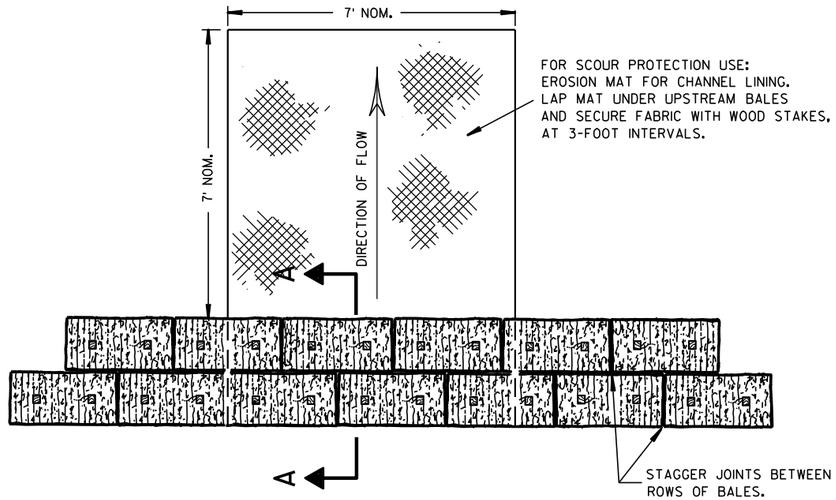
FHWA

6

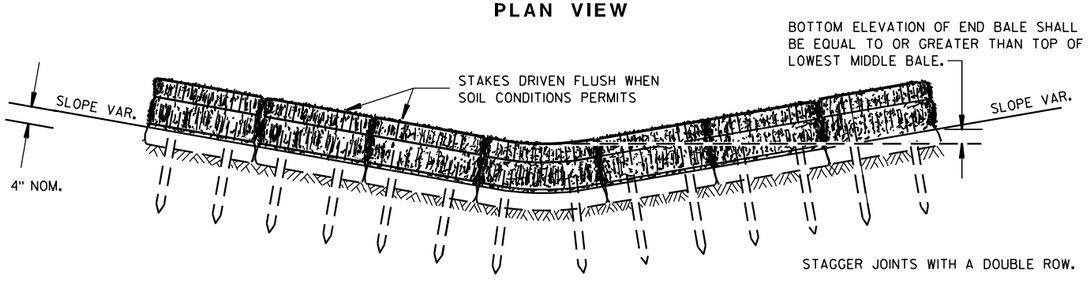
SDD 08D21 - 01



SECTION A-A



PLAN VIEW



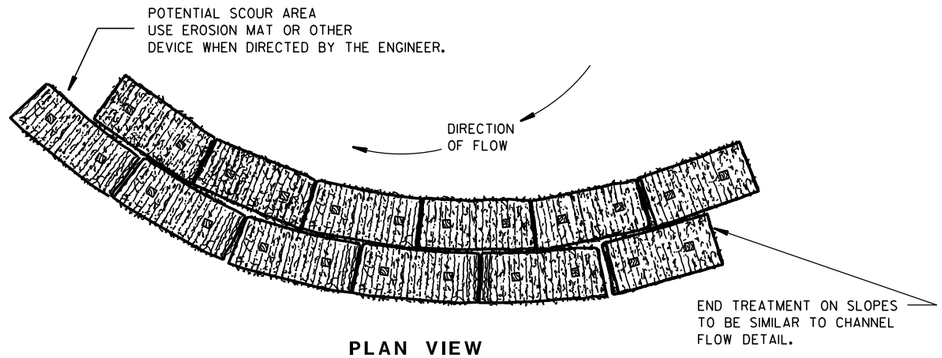
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

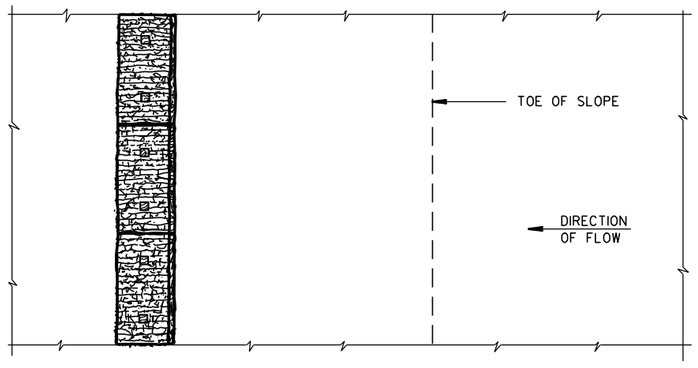
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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

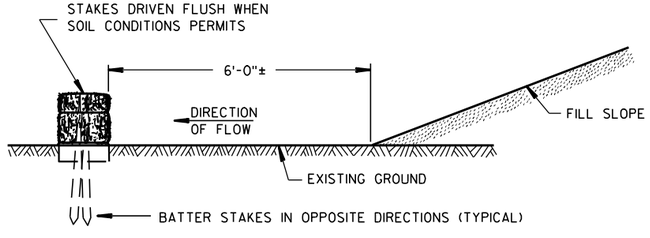


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

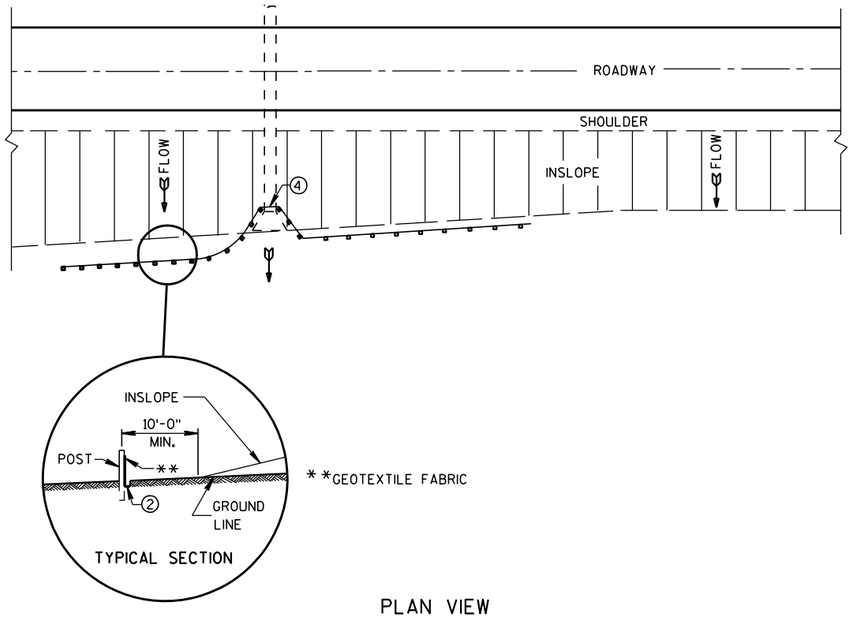
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

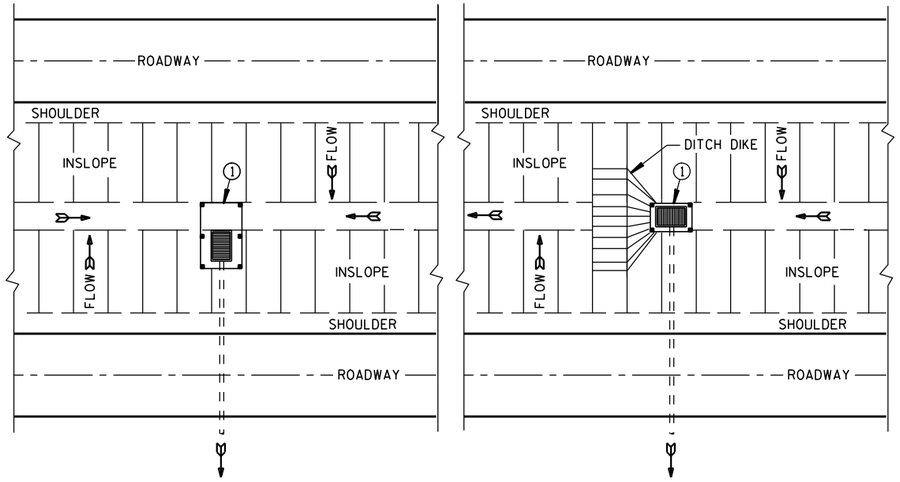
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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.

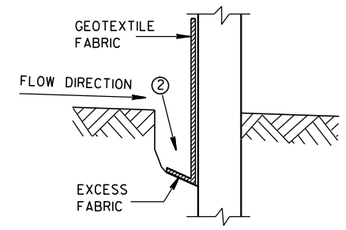
① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.

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.

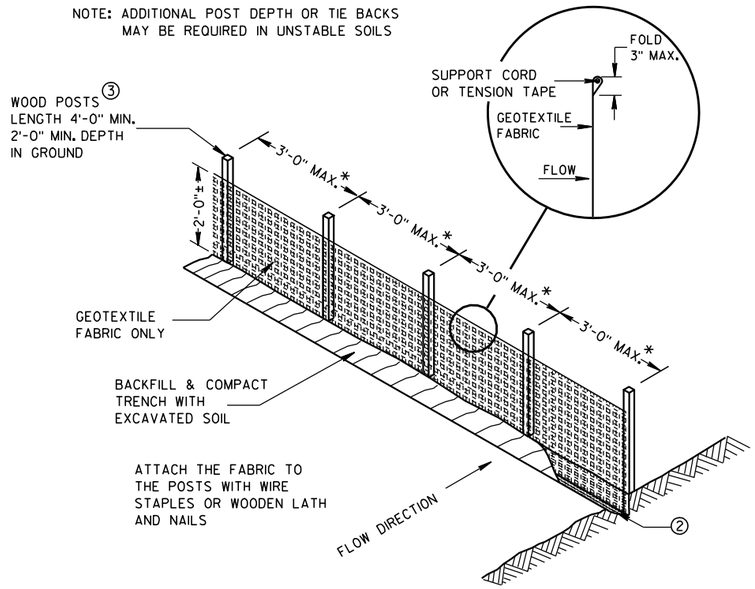
③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.

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

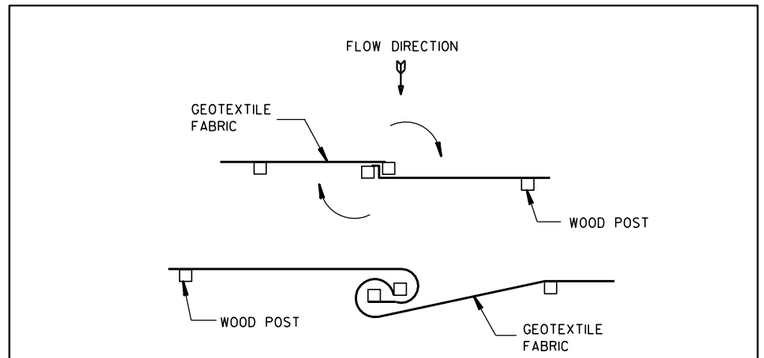
⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



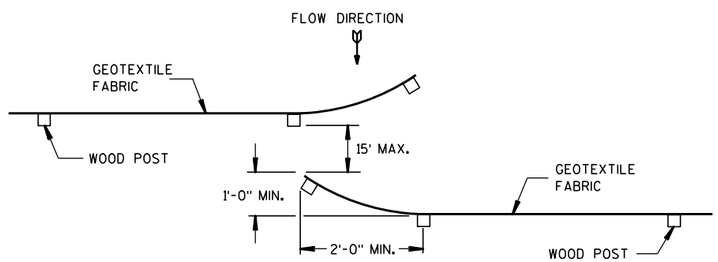
TRENCH DETAIL



SILT FENCE

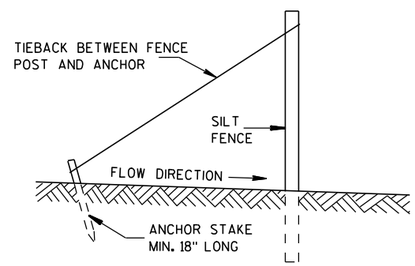


TWIST METHOD



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

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S.D.D. 8 E 9-6

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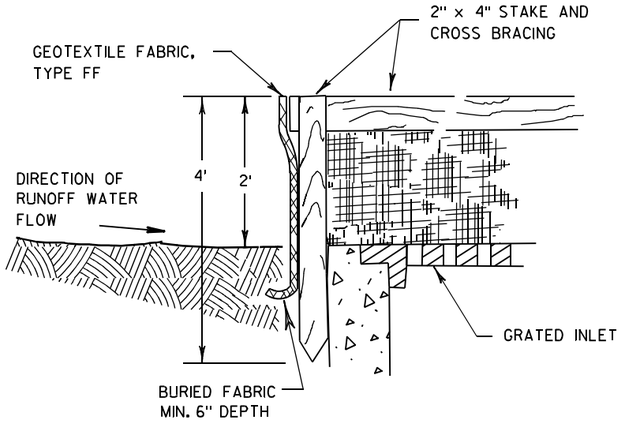
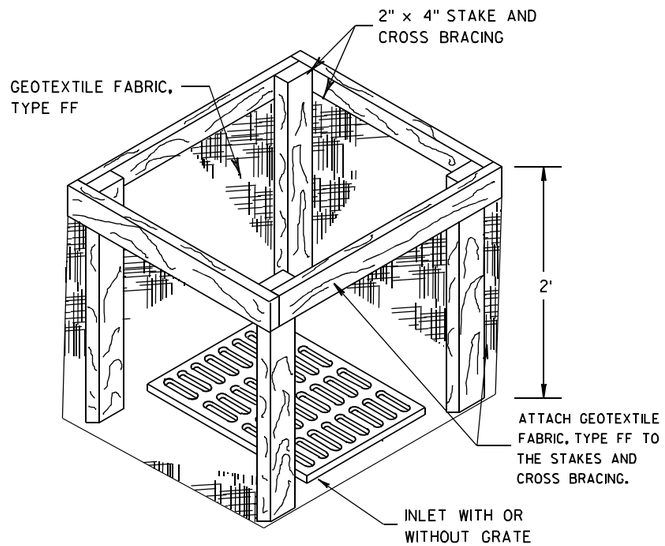
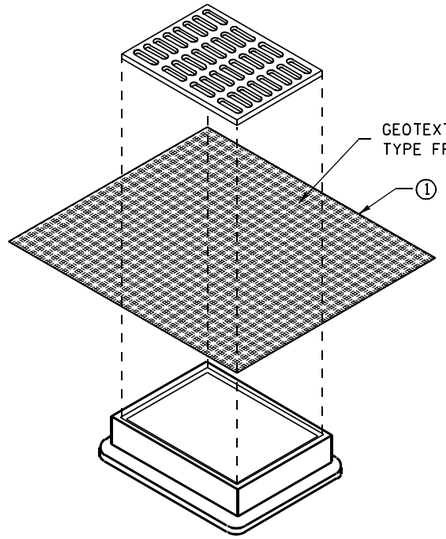
S.D.D. 8 E 9-6



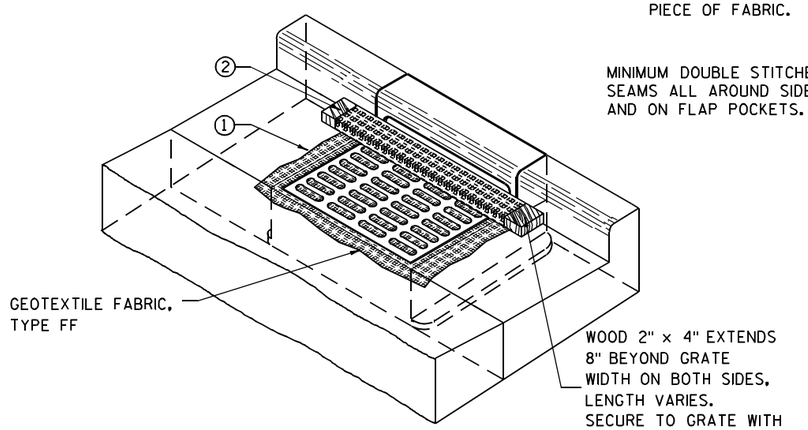


INLET PROTECTION, TYPE A

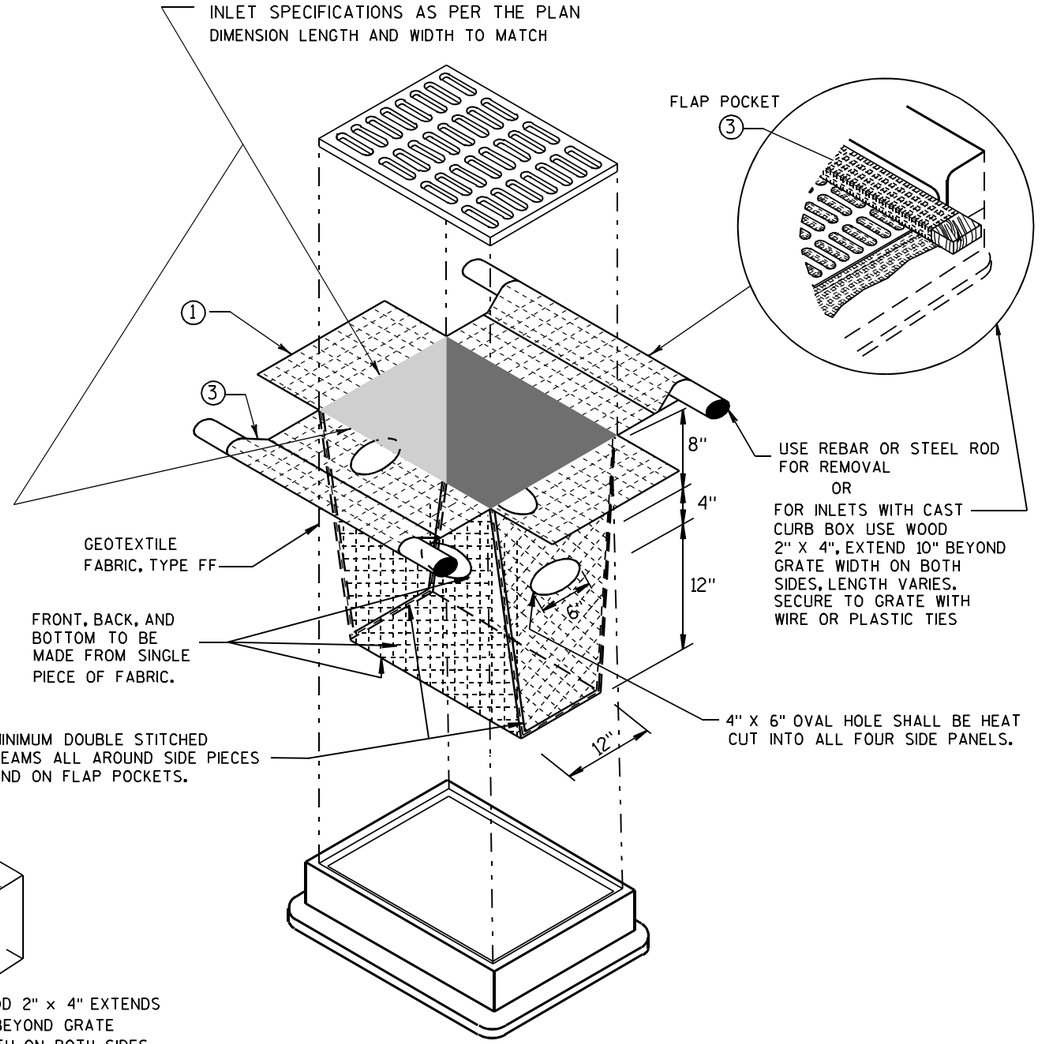


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

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



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

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

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

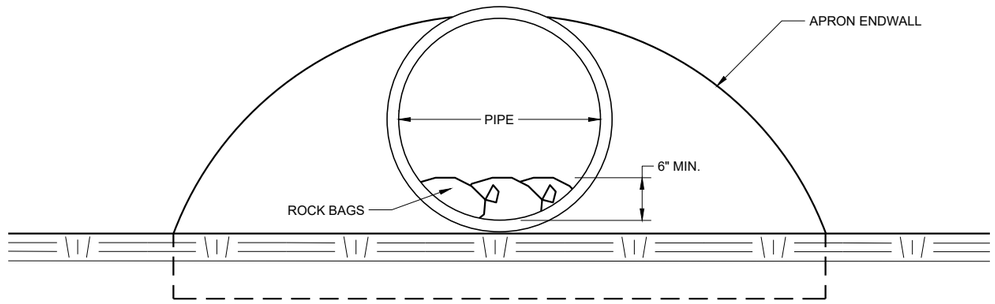
10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

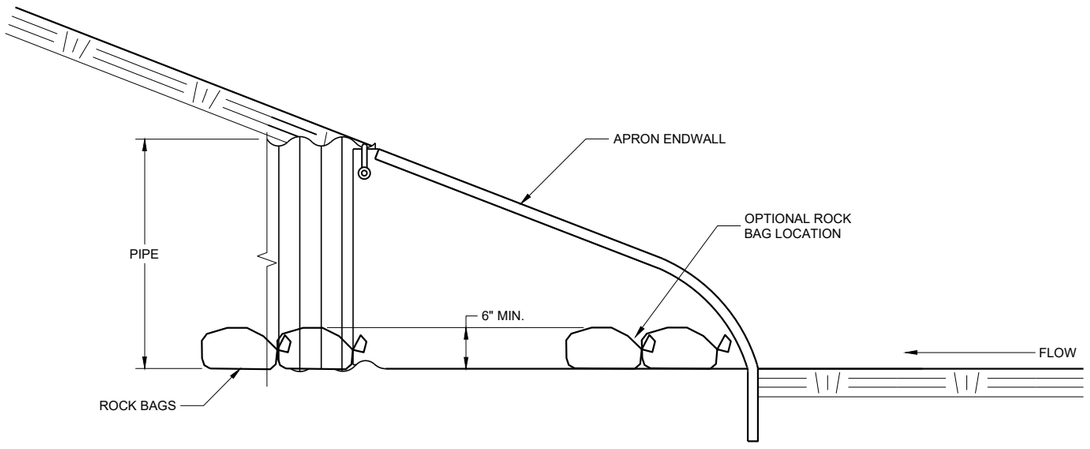
FHWA

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

METAL APRON ENDWALLS

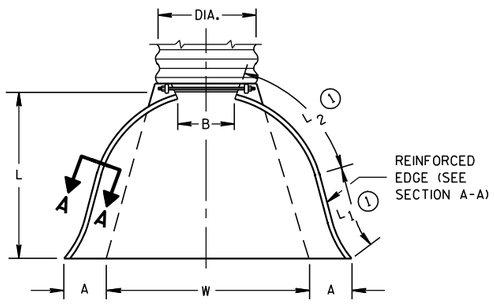
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

× EXCEPT CENTER PANEL SEE GENERAL NOTES

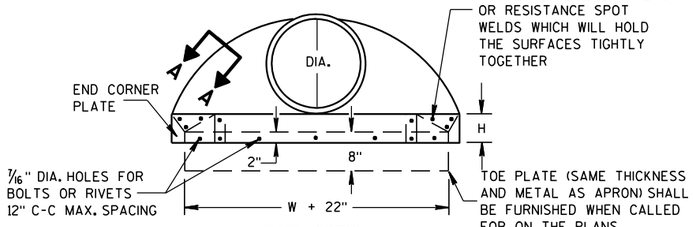
REINFORCED CONCRETE APRON ENDWALLS

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

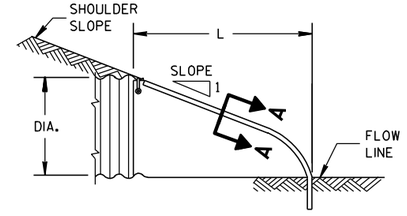
*MINIMUM
**MAXIMUM



PLAN VIEW

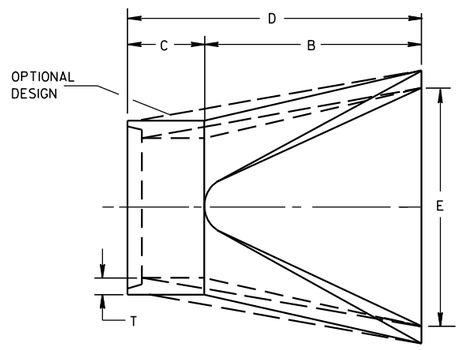


END VIEW

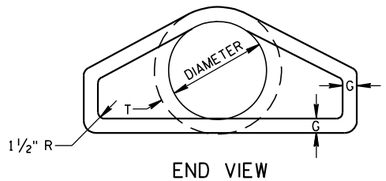


SIDE ELEVATION

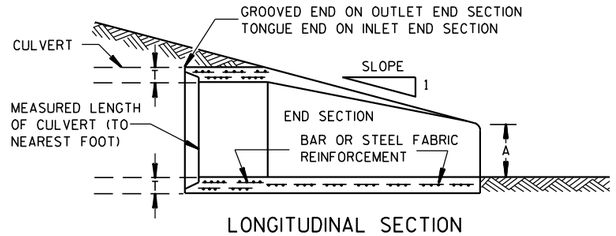
METAL ENDWALLS



PLAN

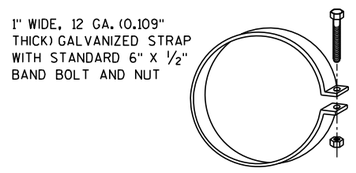


END VIEW



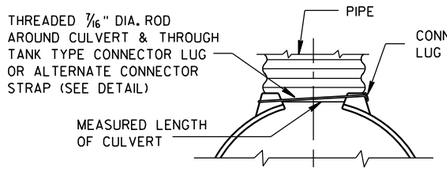
LONGITUDINAL SECTION

CONCRETE ENDWALLS

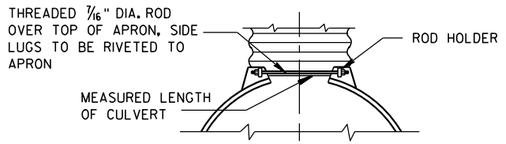


ALTERNATE FOR TYPE 1 CONNECTION

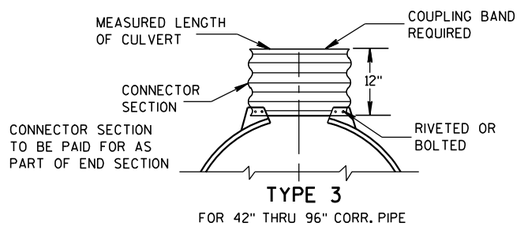
END SECTION CONNECTOR STRAP



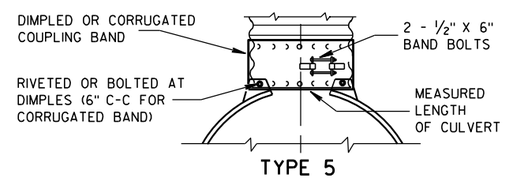
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

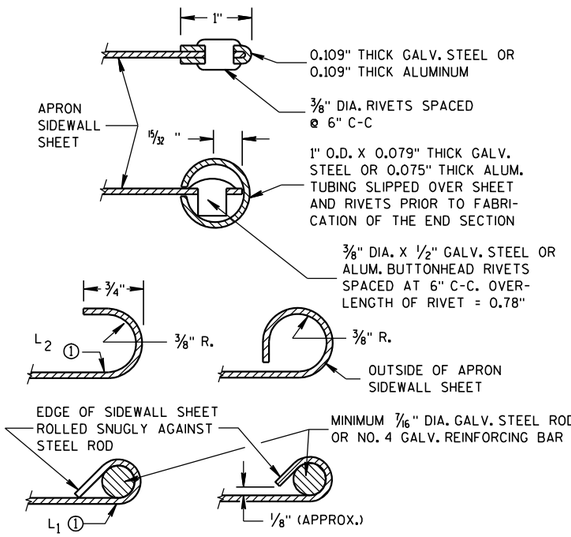
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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

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

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

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

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

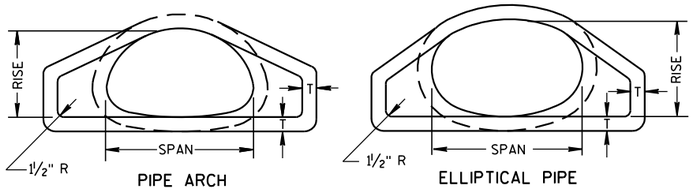
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

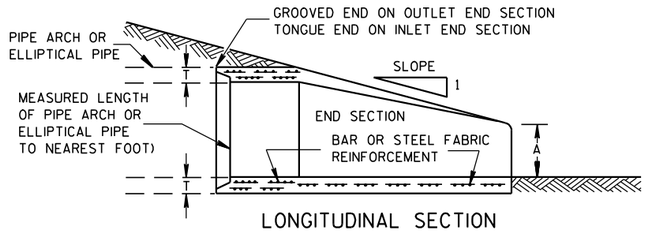
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

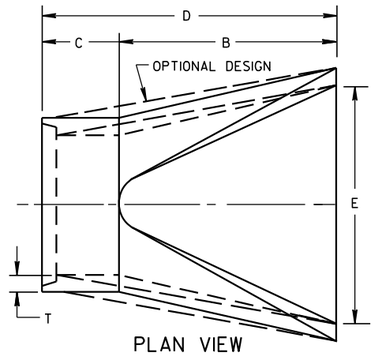
6
S.D.D. 8 F 1-11



END VIEW

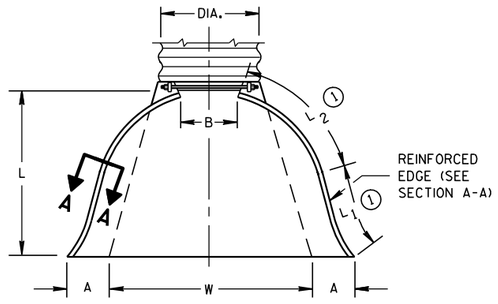


LONGITUDINAL SECTION

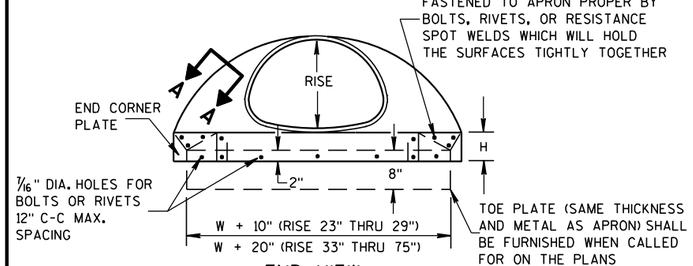


PLAN VIEW

CONCRETE ENDWALLS

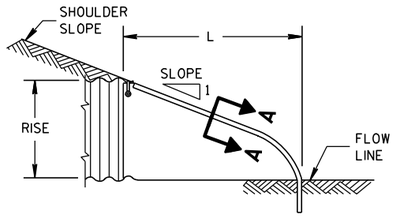


PLAN VIEW



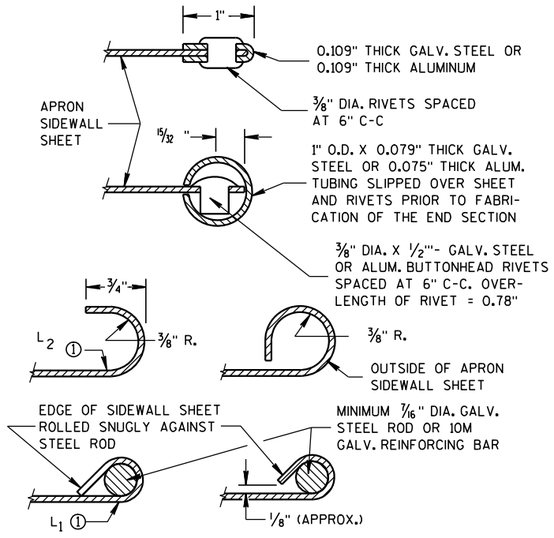
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER

END VIEW



SIDE ELEVATION

METAL ENDWALLS



SECTION A-A

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

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

3" X 1" CORRUGATIONS

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

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL SEE GENERAL NOTES

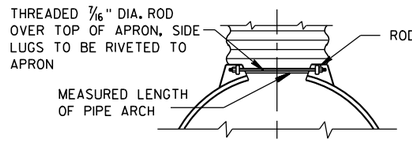
REINFORCED CONCRETE PIPE ARCH

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

REINFORCED CONCRETE ELLIPTICAL PIPE

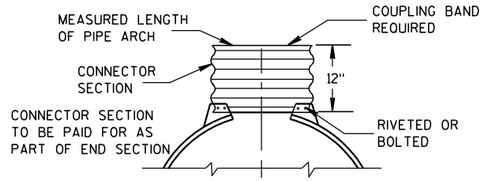
EQUIV. DIA. (Inches)	DIMENSIONS (Inches) ** SPAN	** RISE	T	A	B	C	D	E	APPROX. SLOPE
24	30	19	3¼	8½	39	33	72	48	3 to 1
30	38	24	3¾	9½	54	18	72	60	3 to 1
36	45	29	4½	11⅛	60	24	84	72	2½ to 1
42	53	34	5	15¾	60	36	96	78	2½ to 1
48	60	38	5½	21	60	36	96	84	2½ to 1
54	68	43	6	25½	60	36	96	90	2½ to 1
60	76	48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

**NOMINAL SIZE



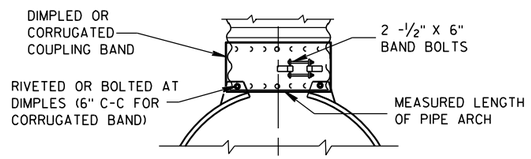
TYPE 2

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



TYPE 3

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



TYPE 5

ALTERNATE FOR:

ALL SIZES CORRUGATED PIPE ARCHES

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

CONNECTION DETAILS

GENERAL NOTES

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

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

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

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

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

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

APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

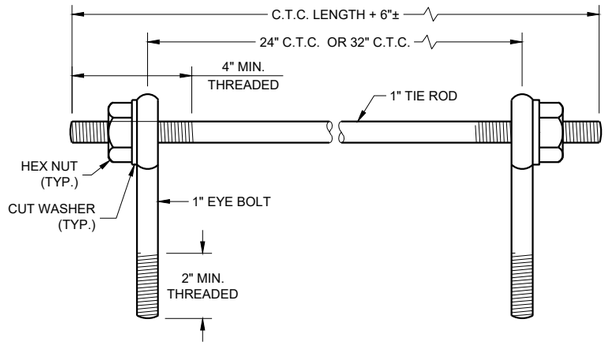
11/30/94 — DATE

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

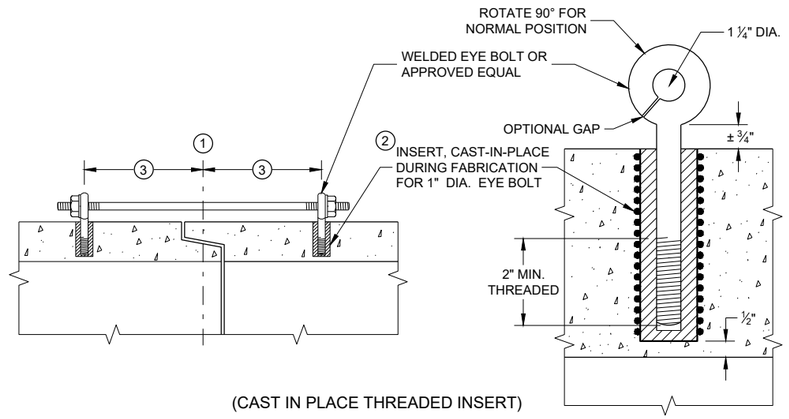
FHWA

6

S.D.D. 8 F 2-1



EYE BOLTS AND TIE ROD



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

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

GENERAL NOTES

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

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

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

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

(1) CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

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

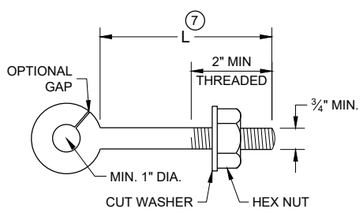
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

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

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

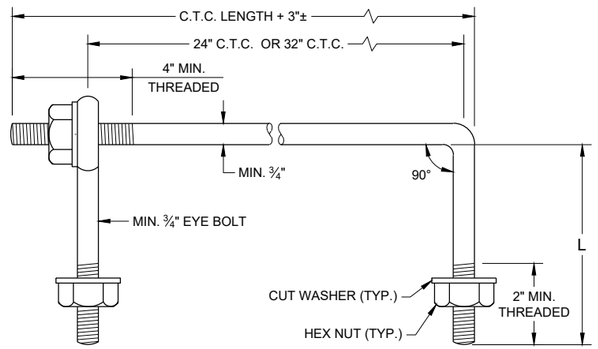
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

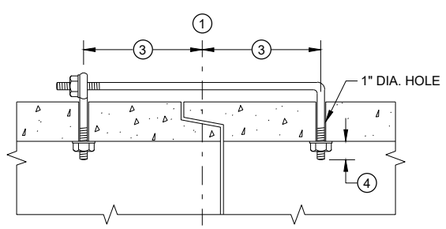


EYE BOLT (7)

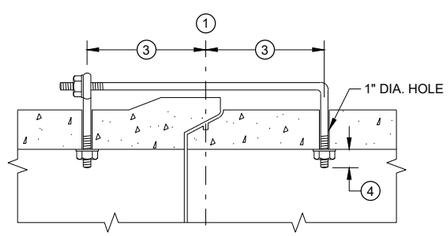
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

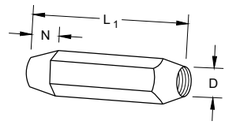
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

ADJUSTABLE TIE ROD TABLE

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

DIMENSIONS SHOWN ARE IN INCHES



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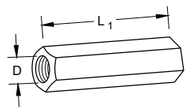
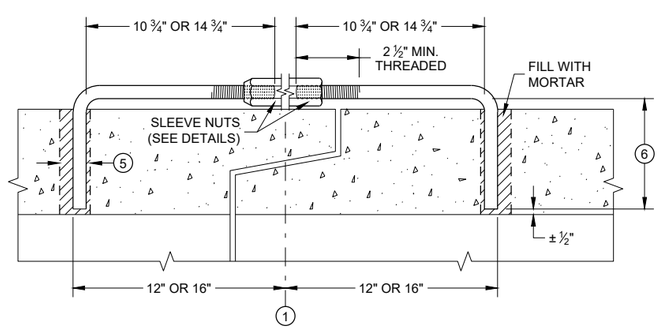


PLAIN

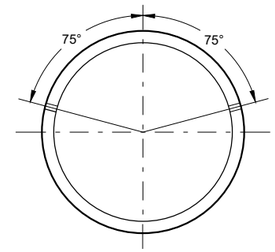
RIGHT AND LEFT THREADS

SLEEVE NUTS



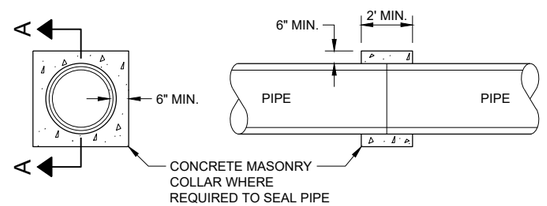
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



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

TRANSVERSE SECTION



SECTION A - A

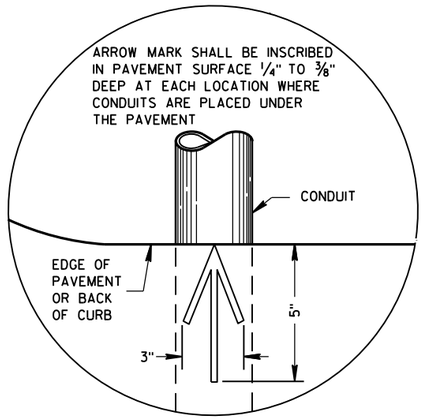
CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

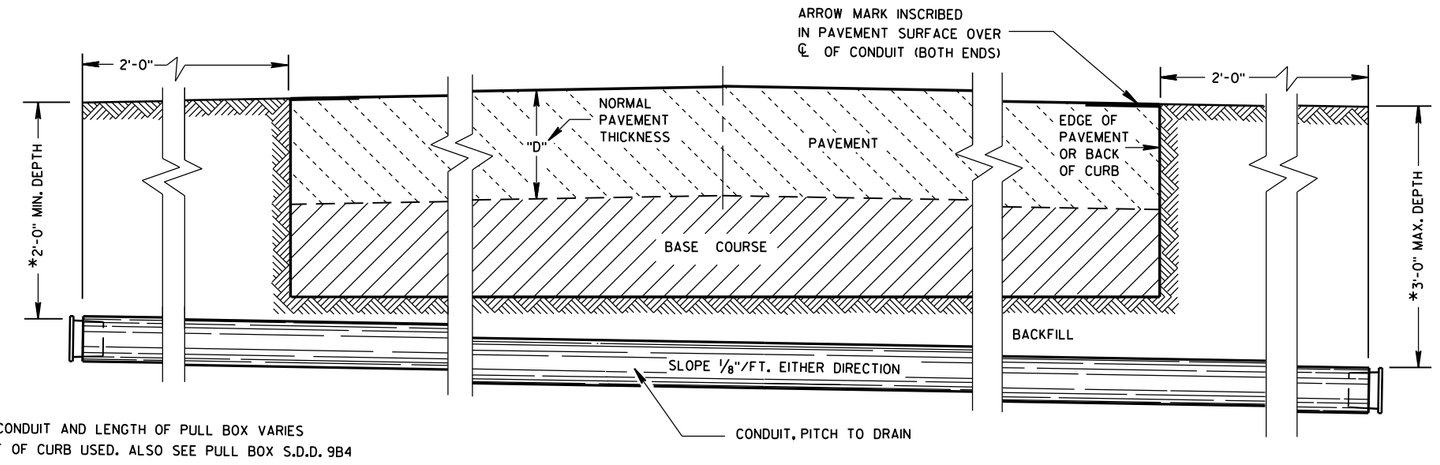
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

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

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

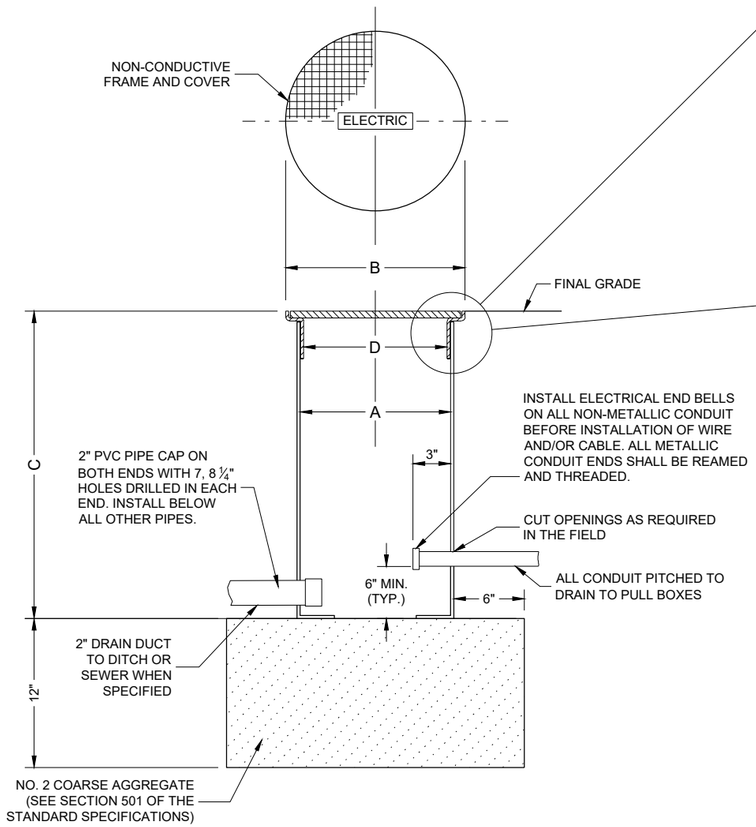
S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

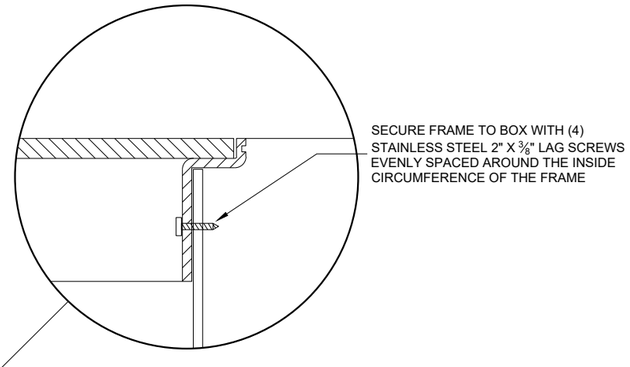
DIMENSION IN INCHES		NON- CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 ½	22 ½
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

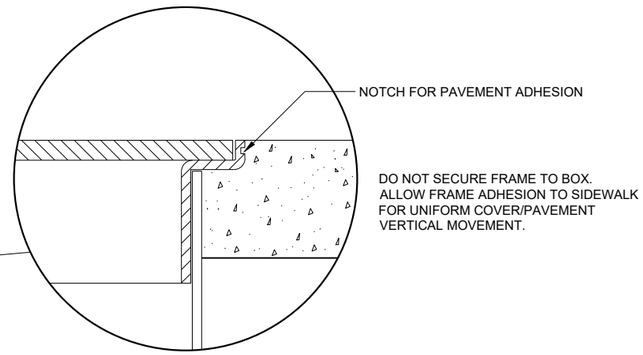
** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE.



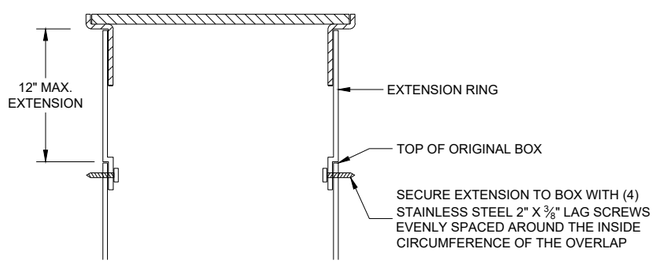
NON-CONDUCTIVE PULL BOX



INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



BOX EXTENSION

GENERAL NOTES

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

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN ½" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN ¼".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN ¼".

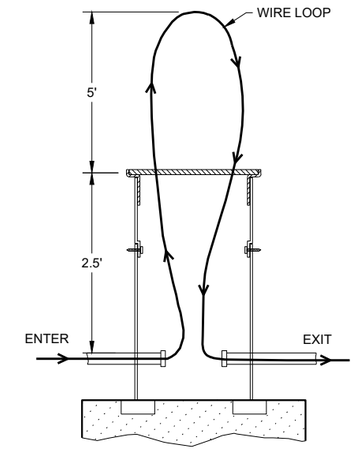
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE.

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.



MEASUREMENT DETAIL FOR WIRE/CABLE IN THE PULL BOX

PULL BOXES NON-CONDUCTIVE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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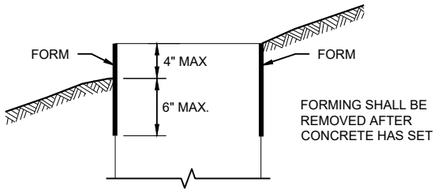
SDD 09B16 - 02

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

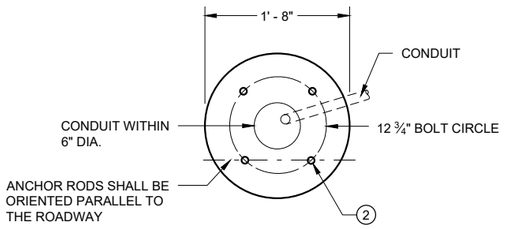
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

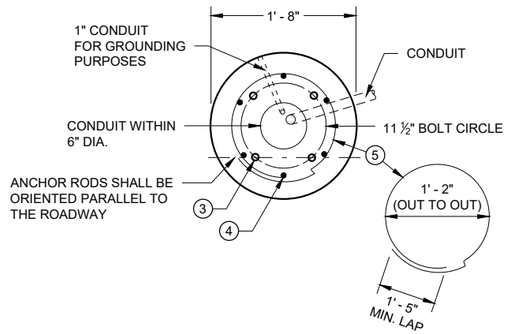
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

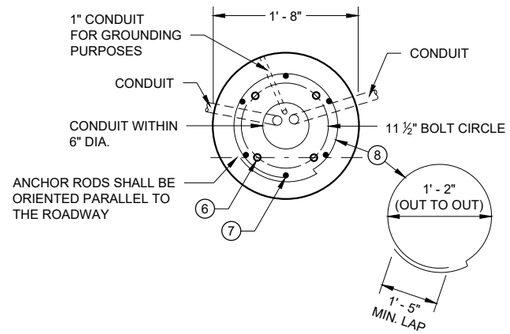
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







1 THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

2 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

3 (4) 1" DIA. X 5' - 0" ANCHOR RODS.

4 (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

5 (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

6 (4) 1" DIA. X 3' - 6" ANCHOR RODS.

7 (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

8 (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

9 EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

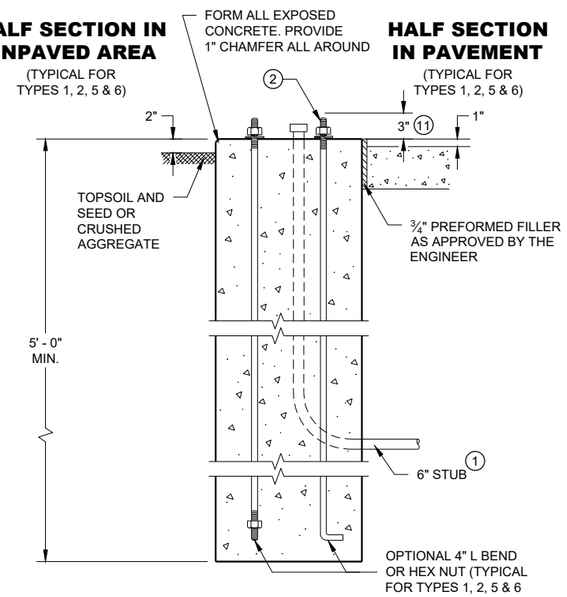
10 ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

11 ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

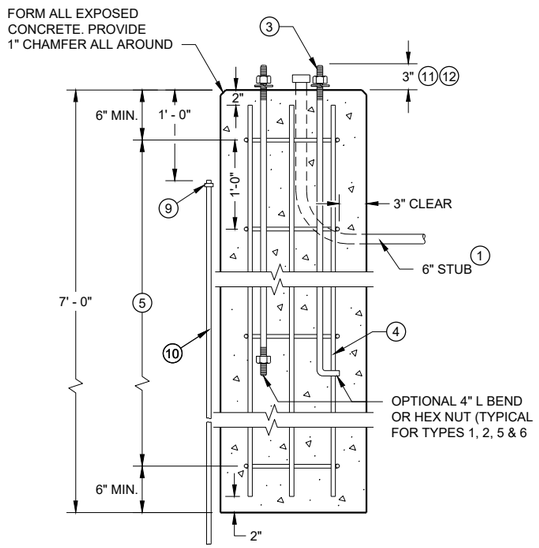
12 FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

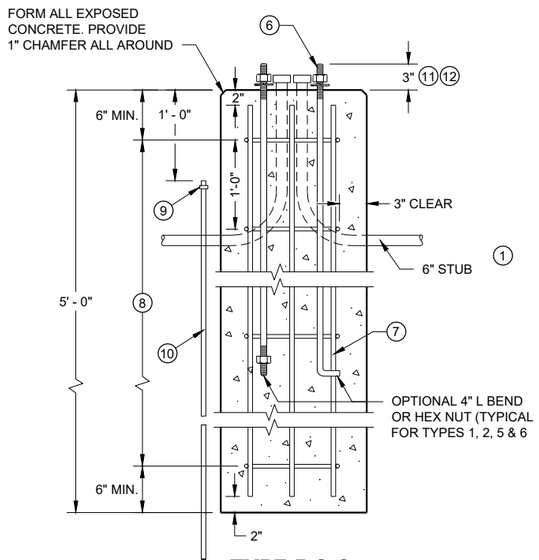
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI
FHWA

GENERAL NOTES

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

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

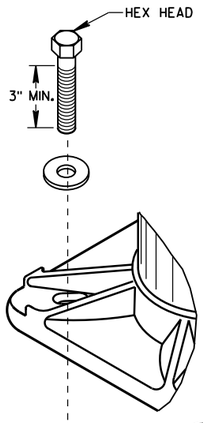
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

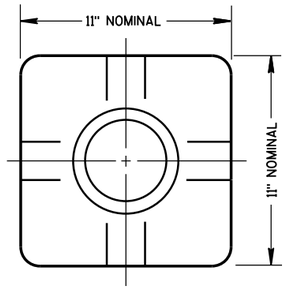
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

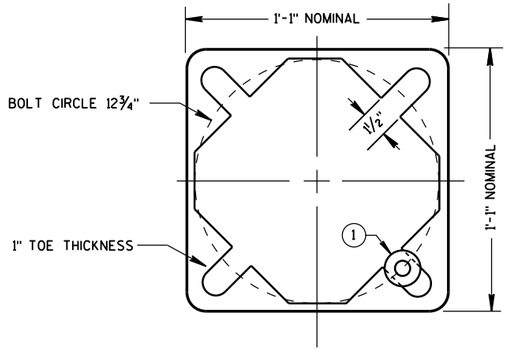
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

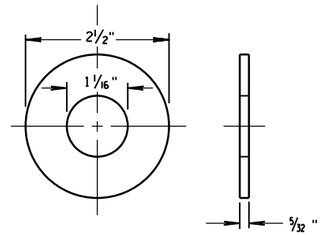




TOP VIEW
(PEDESTAL BASE)

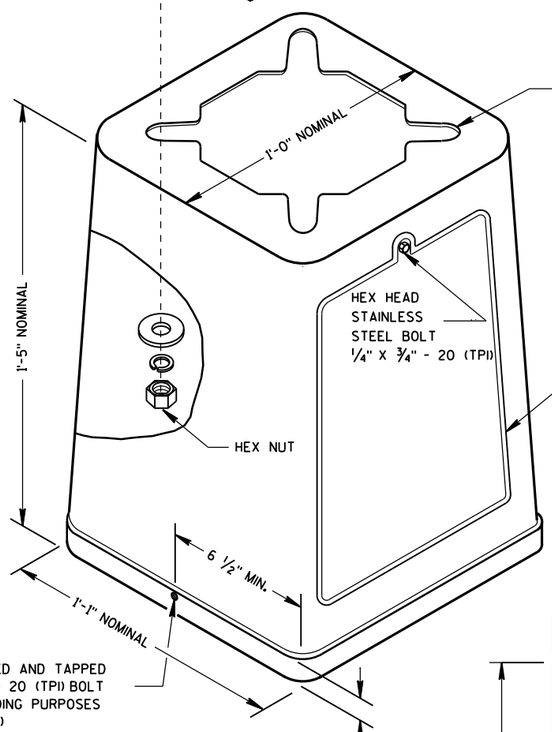


BOTTOM VIEW
(PEDESTAL BASE)

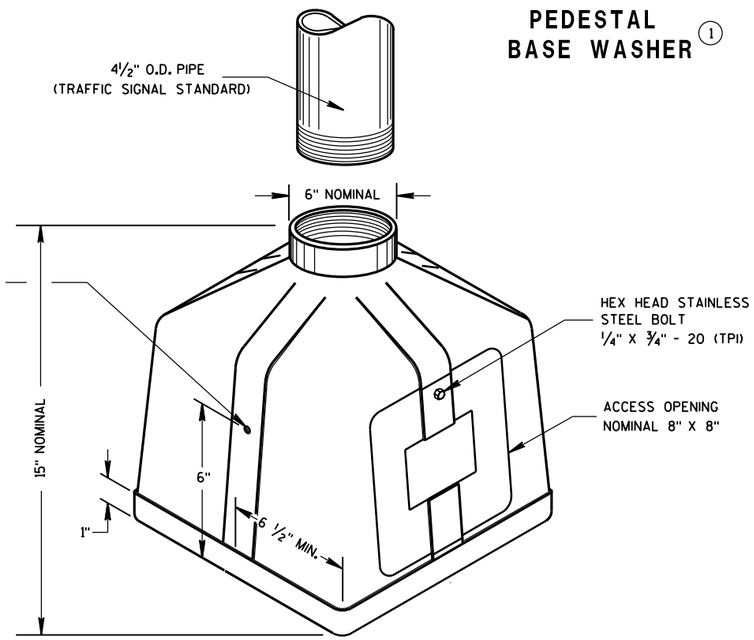


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

PEDESTAL BASE WASHER (1)

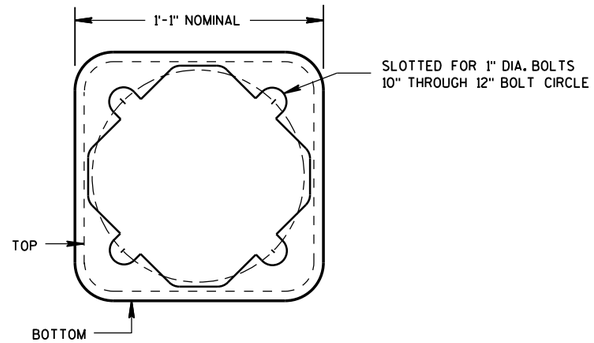


ISOMETRIC VIEW

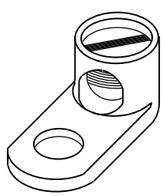


ISOMETRIC VIEW

PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

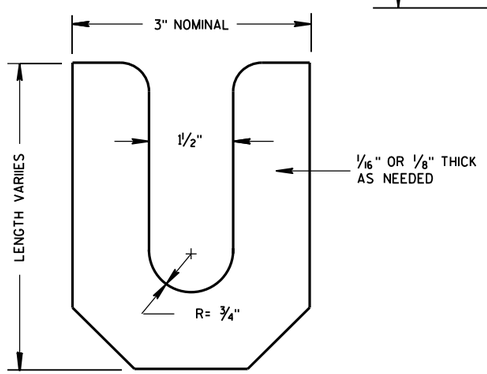


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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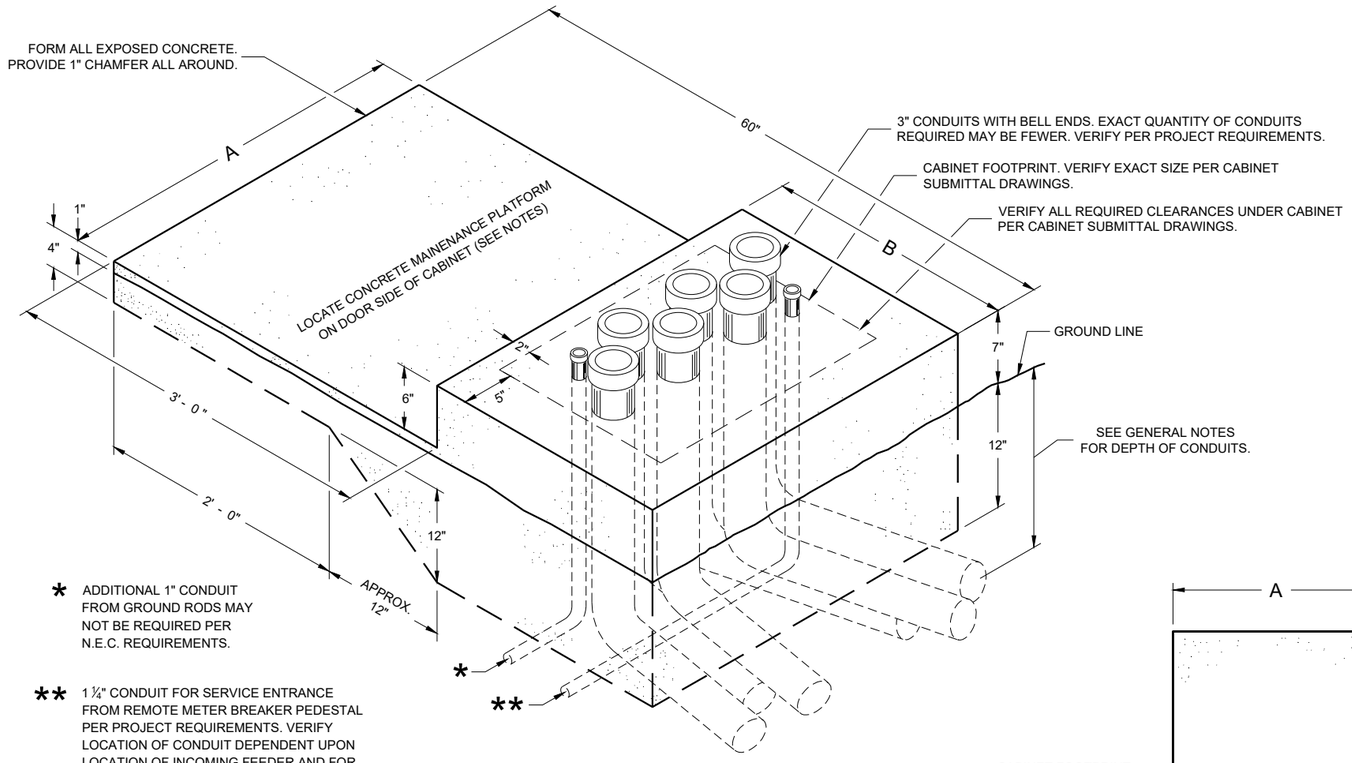


* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

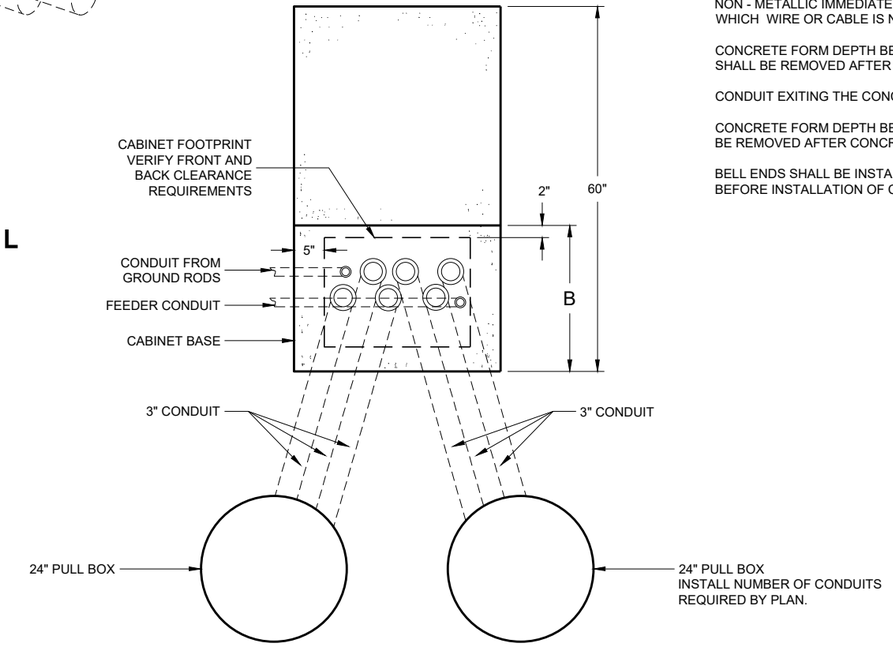
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

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

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

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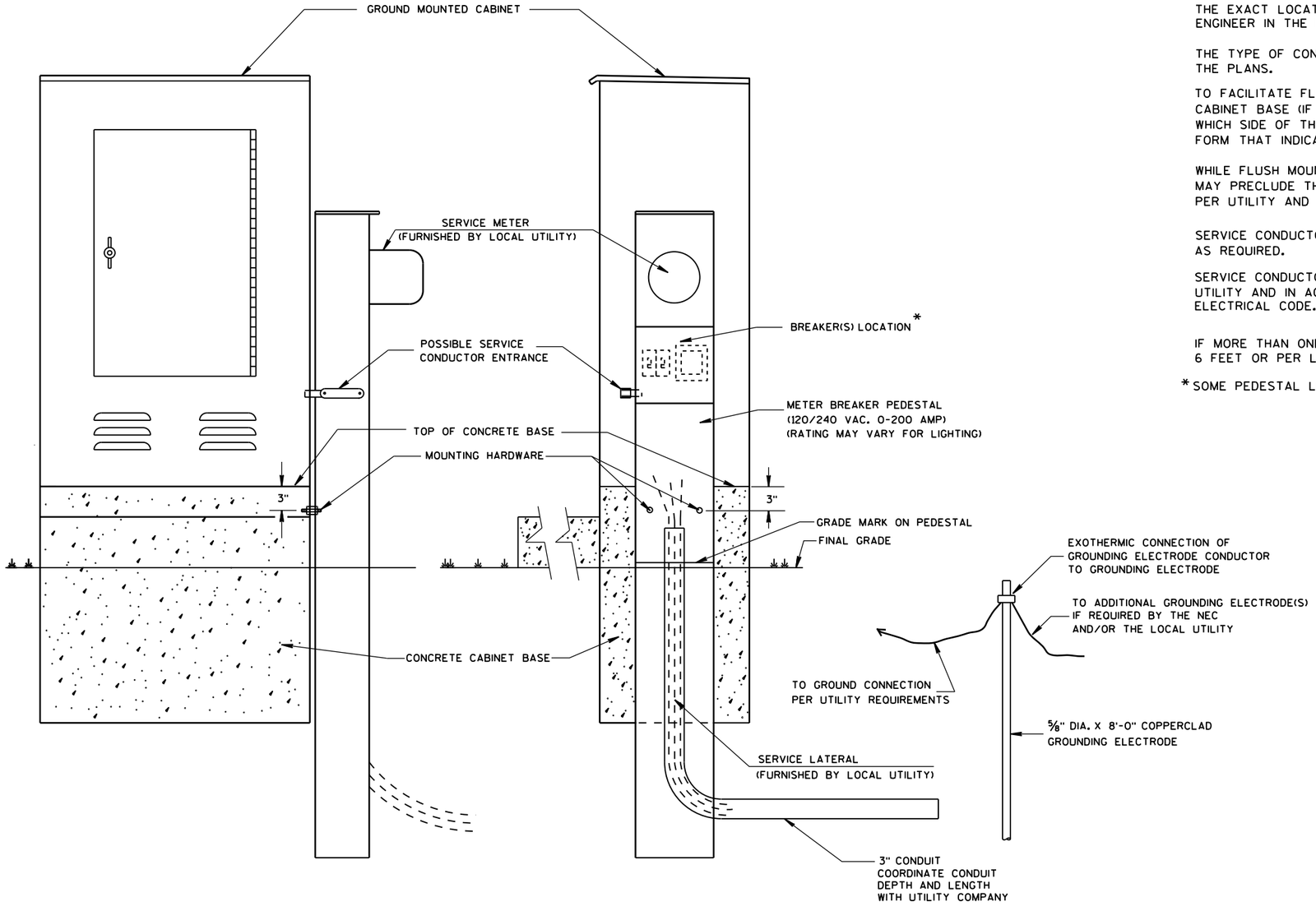

TYPICAL CABINET SERVICE INSTALLATION

GENERAL NOTES

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

THE EXACT LOCATION OF THE METER BREAKER PEDESTAL SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.

THE TYPE OF CONCRETE CABINET BASE TO BE INSTALLED SHALL BE AS CALLED FOR IN THE PLANS.

TO FACILITATE FLUSH MOUNTING OF THE METER BREAKER PEDESTAL AGAINST THE SIDE OF THE CABINET BASE (IF FLUSH MOUNTING POSSIBLE. CONFER WITH THE LOCAL UTILITY TO DETERMINE WHICH SIDE OF THE CONCRETE BASE THE ELECTRICAL SERVICE LATERAL WILL APPROACH. THEN FORM THAT INDICATED SIDE FOR FULL SIDE DEPTH.

WHILE FLUSH MOUNTING IS THE MOST DESIRABLE MOUNTING CONFIGURATION UTILITY REQUIREMENTS MAY PRECLUDE THIS OPTION. CONTRACTOR MUST PROVIDE UTILITY APPROVED PEDESTAL AND INSTALL PER UTILITY AND MANUFACTURERS REQUIREMENTS.

SERVICE CONDUCTOR ENTRANCES SHALL BE RIGID METALLIC CONDUIT, NIPPLES AND/OR CONDULETS AS REQUIRED.

SERVICE CONDUCTOR ENTRANCES SHALL BE SIZED AND LOCATED AS REQUIRED BY THE LOCAL UTILITY AND IN ACCORDANCE WITH APPROPRIATE ARTICLES OF THE LATEST ACCEPTED NATIONAL ELECTRICAL CODE.

IF MORE THAN ONE GROUNDING ELECTRODE IS REQUIRED, THE DISTANCE APART SHALL BE 6 FEET OR PER LOCAL UTILITY REGULATIONS.

*SOME PEDESTAL LIGHTING PLANS SHOW MAIN LUGS ONLY.

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S.D.D. 9 D 1-5

CABINET SERVICE INSTALLATION (METER BREAKER PEDESTAL)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

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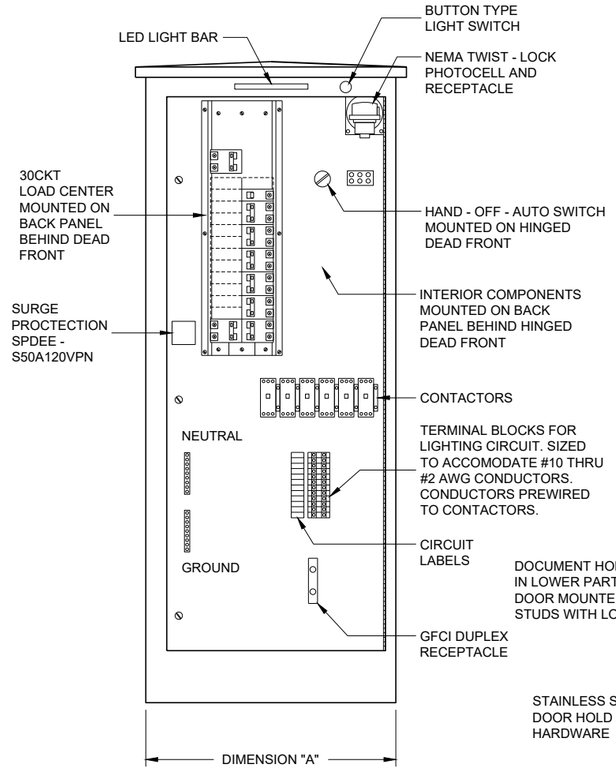
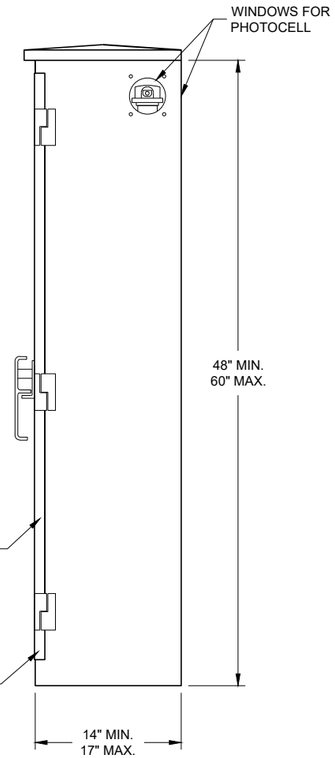
FRONT INTERIOR ELEVATION



SIDE VIEW



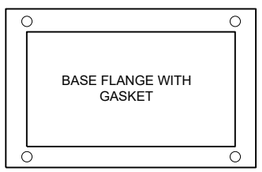
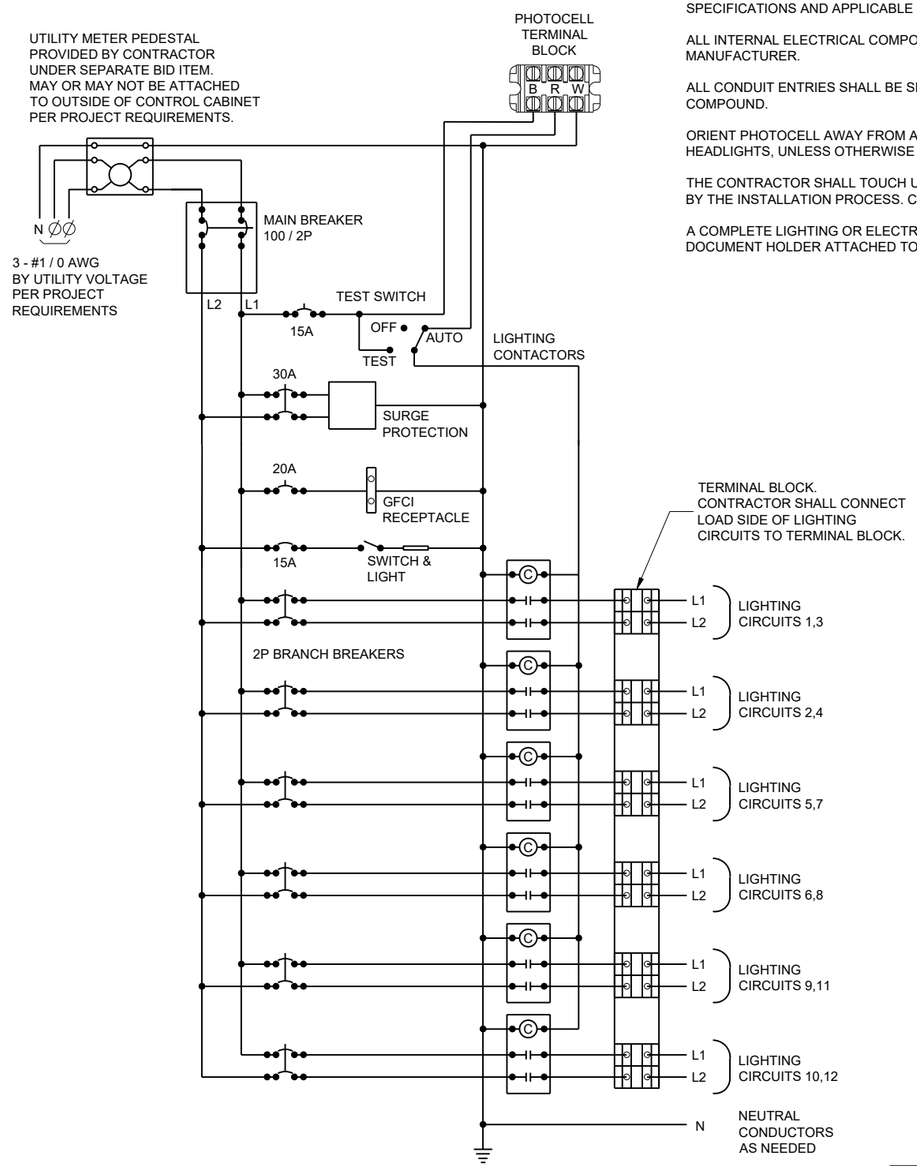


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

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.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

LIGHTING CONTROL CABINET
120 / 240 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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November 2018
DATE

/S/ Ahmet Demirbilek
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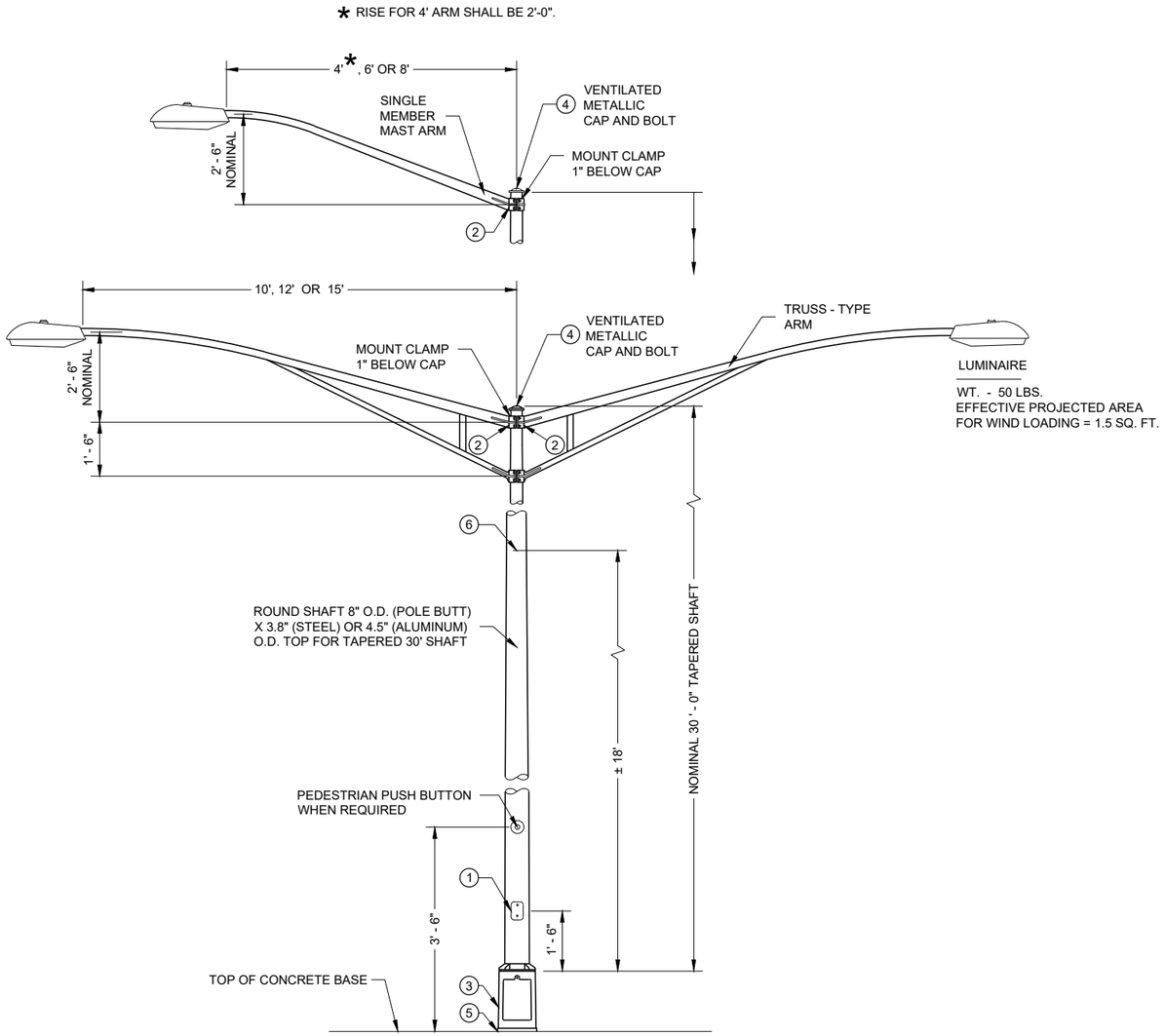


TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

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

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

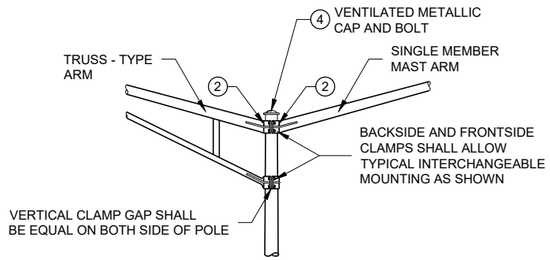
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

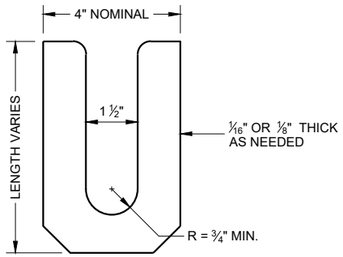
(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

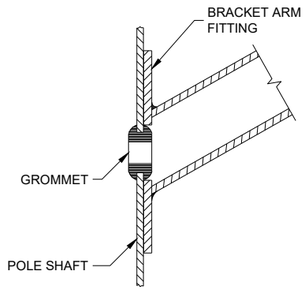


INTERCHANGEABLE MOUNTING DETAIL

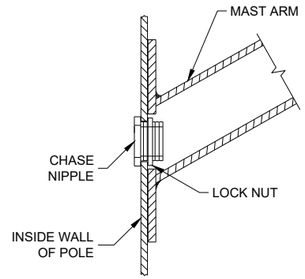
POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)



LEVELING SHIM (1)
SHALL BE ALUMINUM



TYPICAL APPLICATION OF GROMMET IN POLE SHAFT



TYPICAL APPLICATION OF CHASE NIPPLE IN POLE SHAFT

GENERAL NOTES

CLAMP BOLT-NUT TIGHTENING TORQUE SHALL BE INDICATED BY INDENT STAMPING (1/2 INCH NUMERALS AND LETTERS) OR WEATHERPROOF PRINTING ON THE INSIDE OF THE CLAMP THAT IS WELDED TO THE ARM MEMBER.

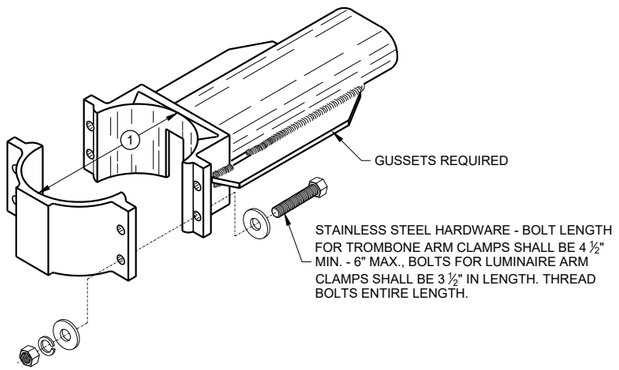
(1) 4.5" I.D. FOR LUMINAIRE MAST ARM CLAMP. 6.625" I.D. FOR TROMBONE MAST ARM CLAMP.

(2) INDIVIDUAL BASE PLATE ANCHOR ROD COVERS. (4 REQUIRED)

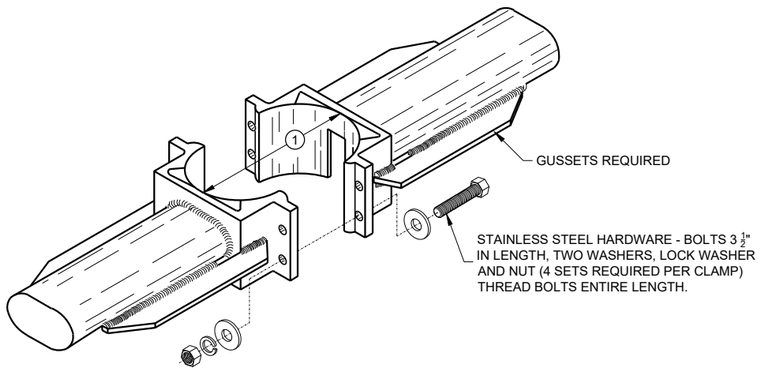
(3) BASE PLATE SLOTTED TO ACCEPT 11" THROUGH 12" BOLT CIRCLE USING 1" DIAMETER ANCHOR RODS.

(4) LEVELING SHIMS, DESIGNED FOR THE PURPOSE, SHALL BE USED WHEN PLUMBING POLES. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE. LEVELING SHIMS SHALL BE USED ONLY BETWEEN THE TOP OF THE CONCRETE BASE AND A METALLIC BASE PLATE.

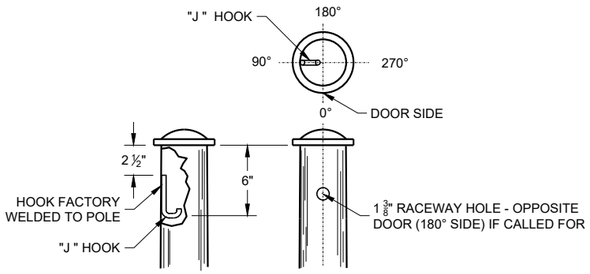
SHIMS SHALL BE LONG ENOUGH AND WIDE ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.



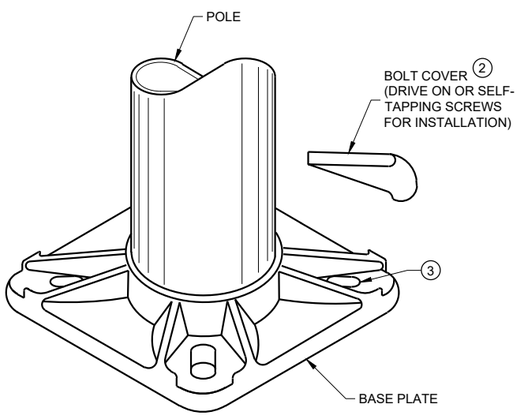
TYPICAL TROMBONE MAST ARM AND SINGLE LUMINAIRE MAST ARM MOUNTING CLAMP



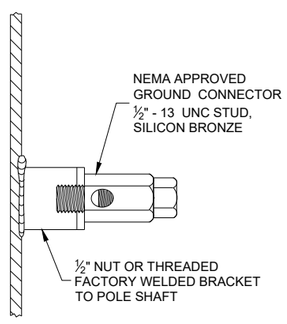
TYPICAL LUMINAIRE MAST ARM (DOUBLE) MOUNTING BRACKETS

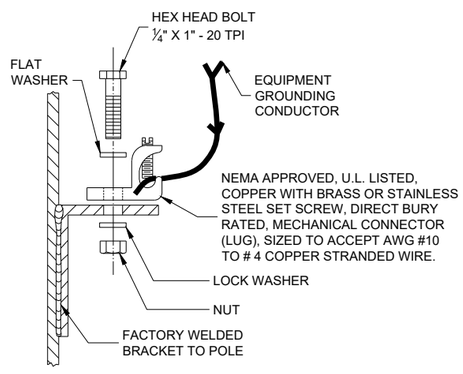


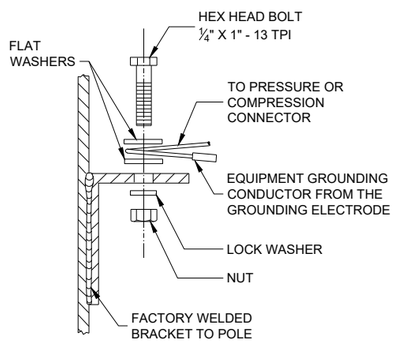
TYPICAL "J" HOOK LOCATION



BASE PLATE







TYPICAL GROUNDING CONNECTIONS

NUT, BOLT AND WASHERS SHALL BE STAINLESS STEEL

HARDWARE DETAILS FOR POLE MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

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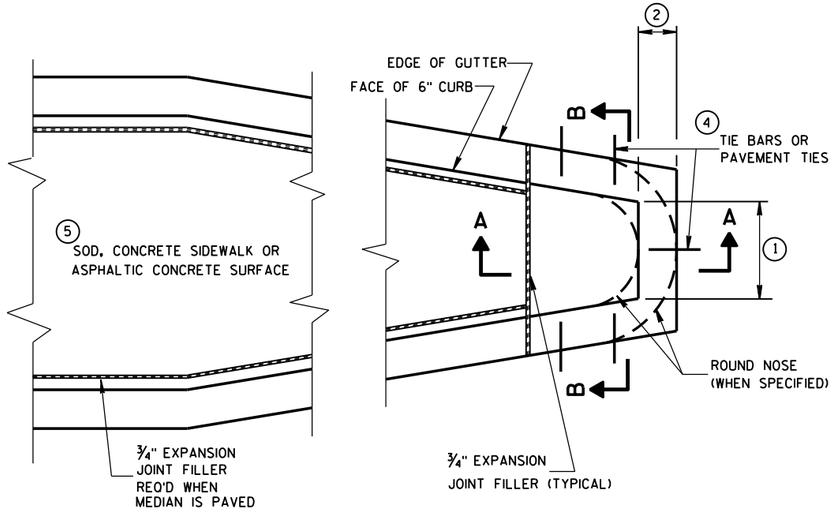
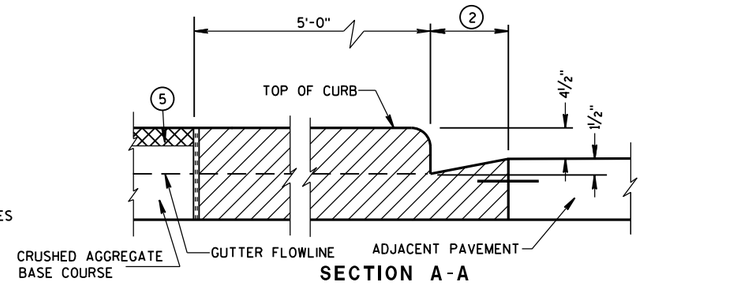
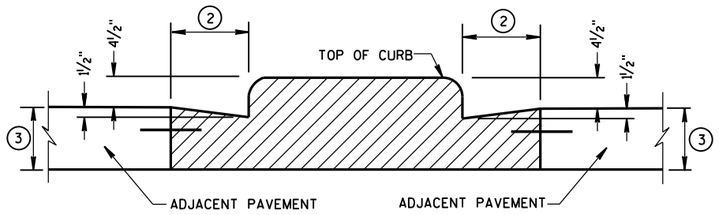
SDD09E01 - 15g





SECTION A-A



SECTION B-B

CONCRETE MEDIAN BLUNT NOSE DETAIL

GENERAL NOTES

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

(1) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

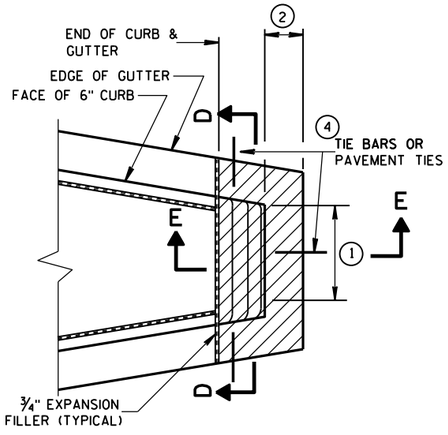
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

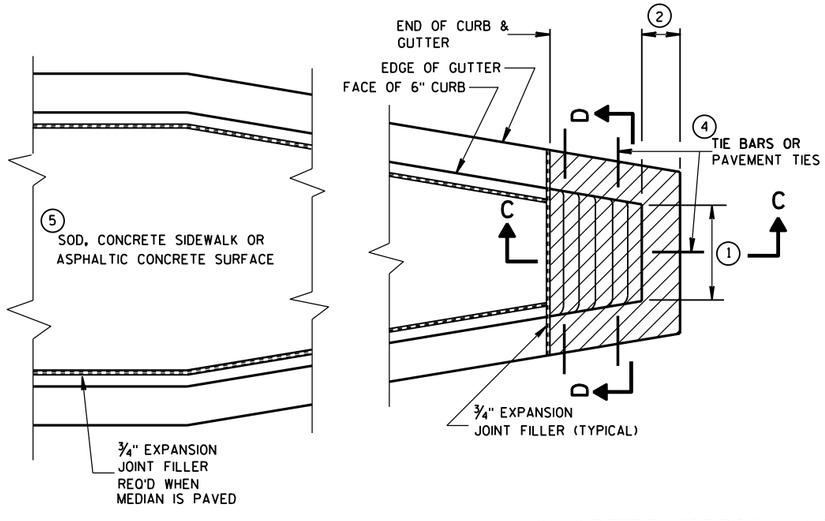
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

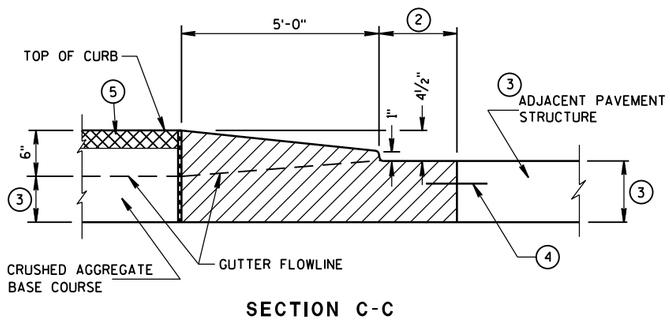
PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

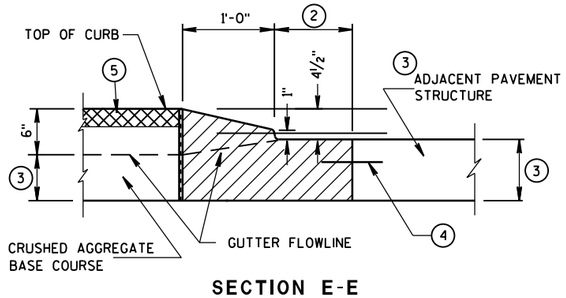




CONCRETE MEDIAN SLOPED NOSE TYPE 1

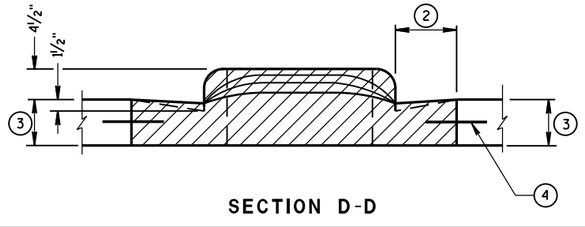


SECTION C-C



SECTION E-E

CONCRETE MEDIAN SLOPED NOSE TYPE 2



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/8/2006
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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S.D.D. 11 B 2-2

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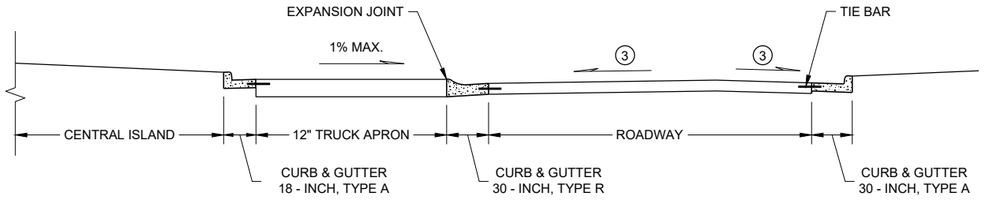
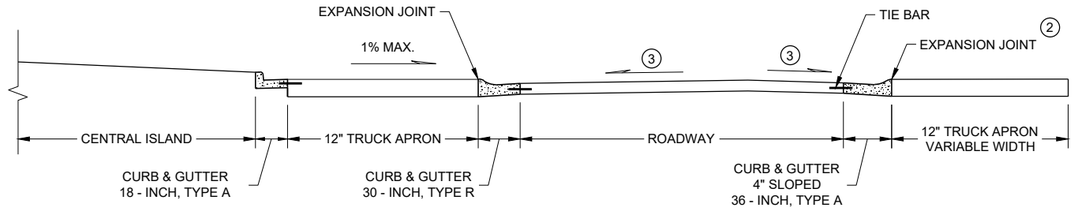
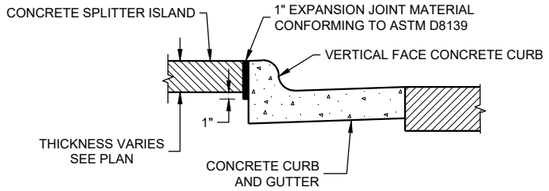
S.D.D. 11 B 2-2



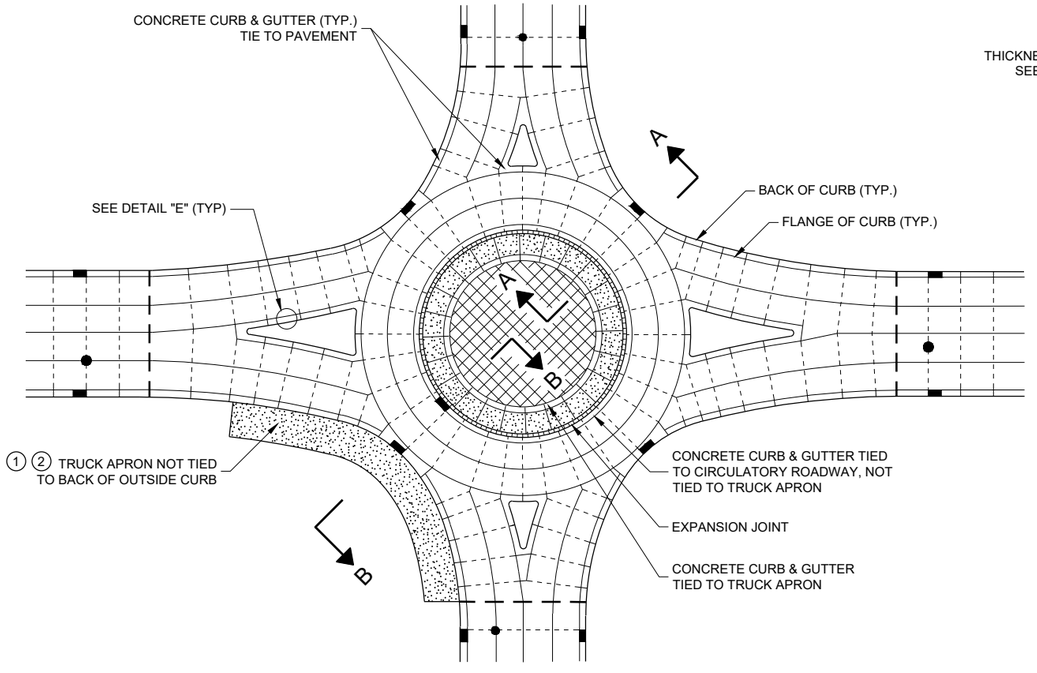
SECTION A - A



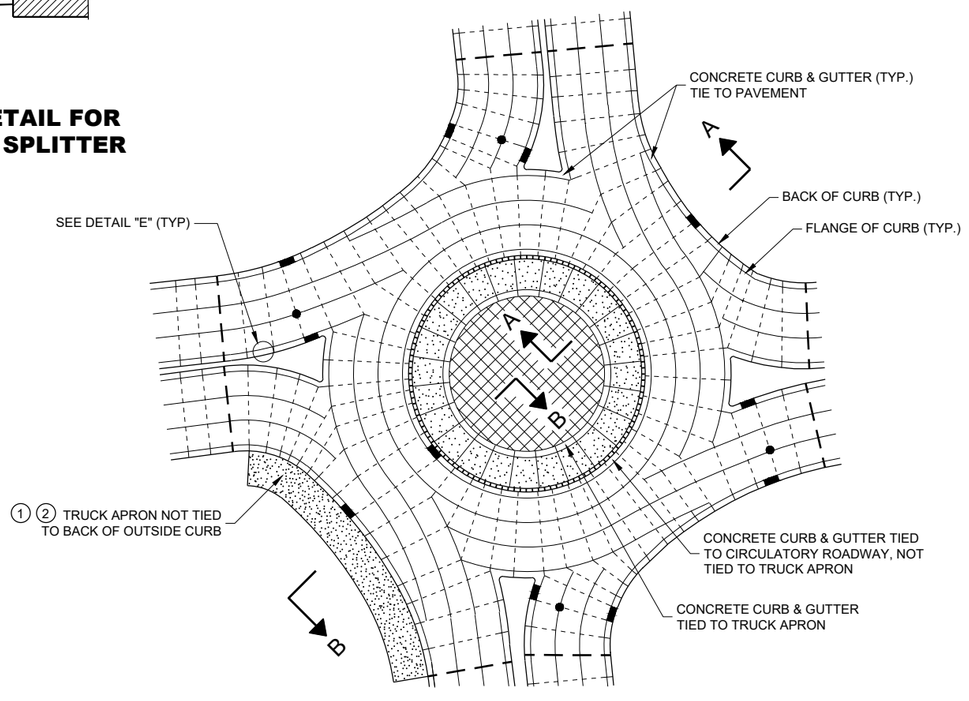
SECTION B - B



DETAIL 'E'
EXPANSION JOINT DETAIL FOR VERTICAL CURB AT A SPLITTER ISLAND



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 - SHEET "a"

USE EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

(1) DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMMODATE TRACKING OF OVERSIZE / OVERWEIGHT VEHICLES.

(2) TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON IS LESS THAN 3 FEET.

(3) CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES

CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

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SDD 13C18 - 08e

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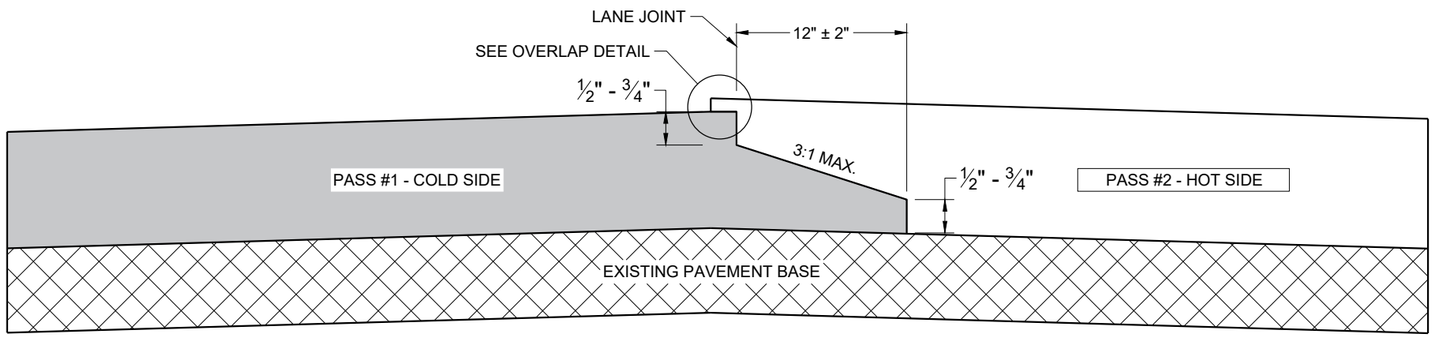
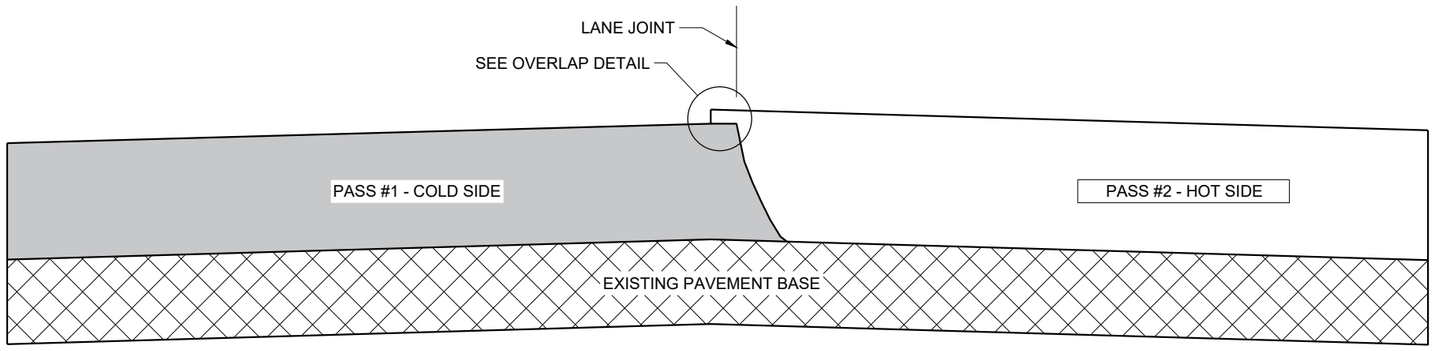
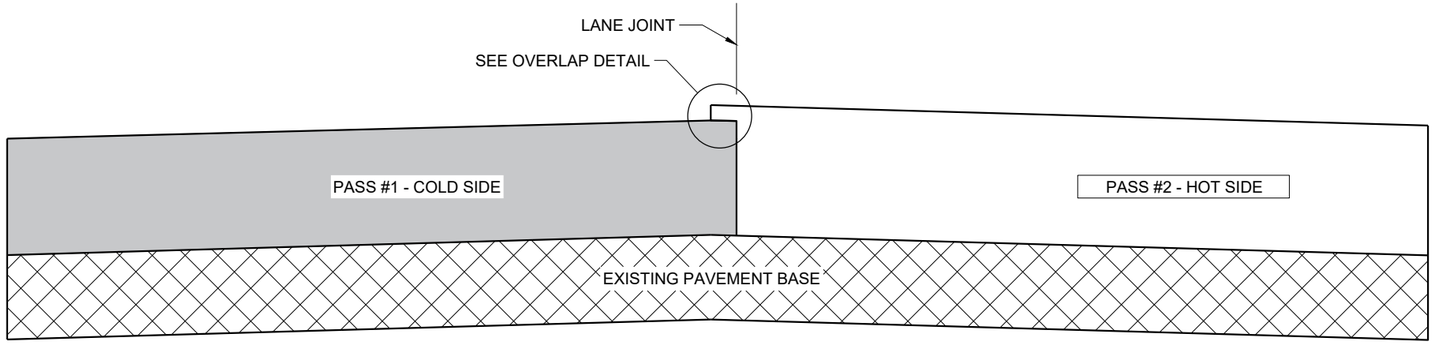
SDD 13C18 - 08e



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

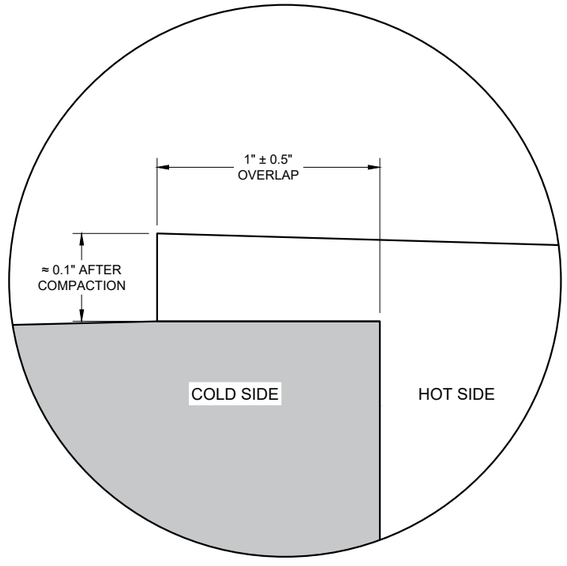
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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)

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SDD 13C19 - 03

SDD 13C19 - 03

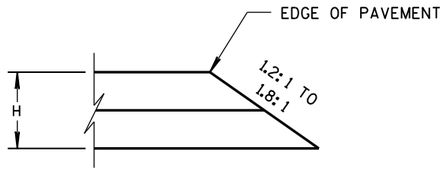
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

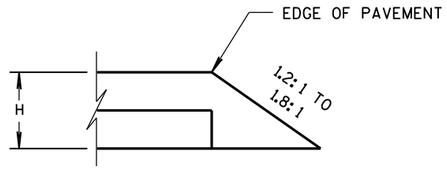
/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA



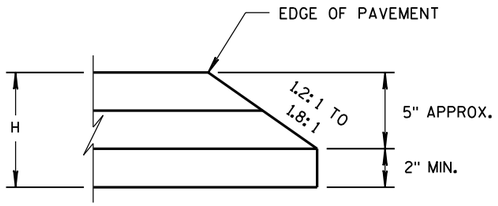
CONSTRUCTED WITH FINAL TWO LAYERS

FOR H 5" OR LESS



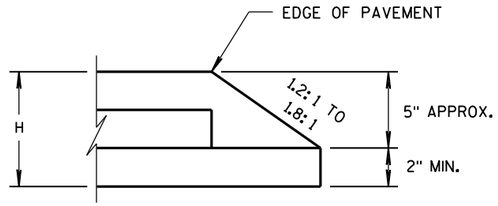
CONSTRUCTED WITH FINAL LAYER

FOR H 5" OR LESS



CONSTRUCTED WITH FINAL TWO LAYERS

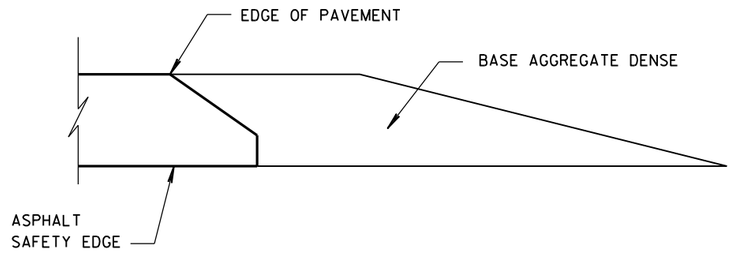
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER

FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

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S.D.D. 14 B 29-1

S.D.D. 14 B 29-1

SAFETY EDGE SM

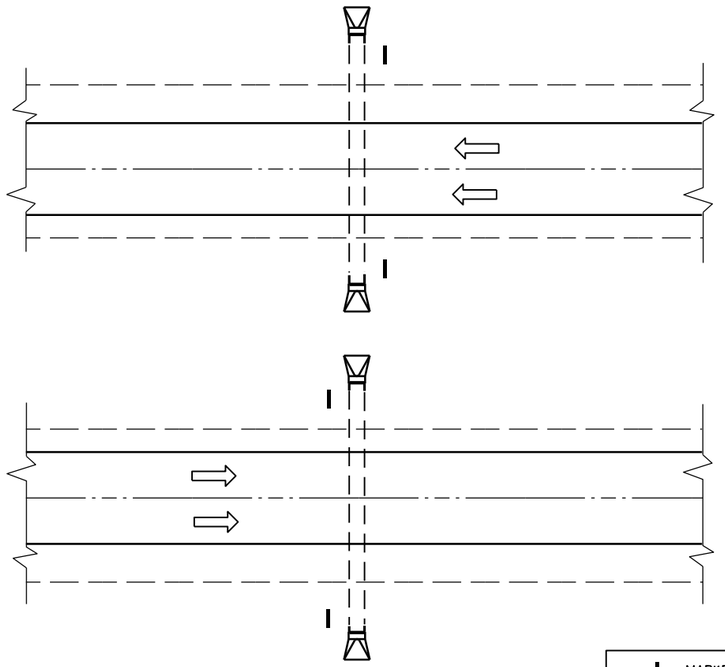
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/30/2012
DATE

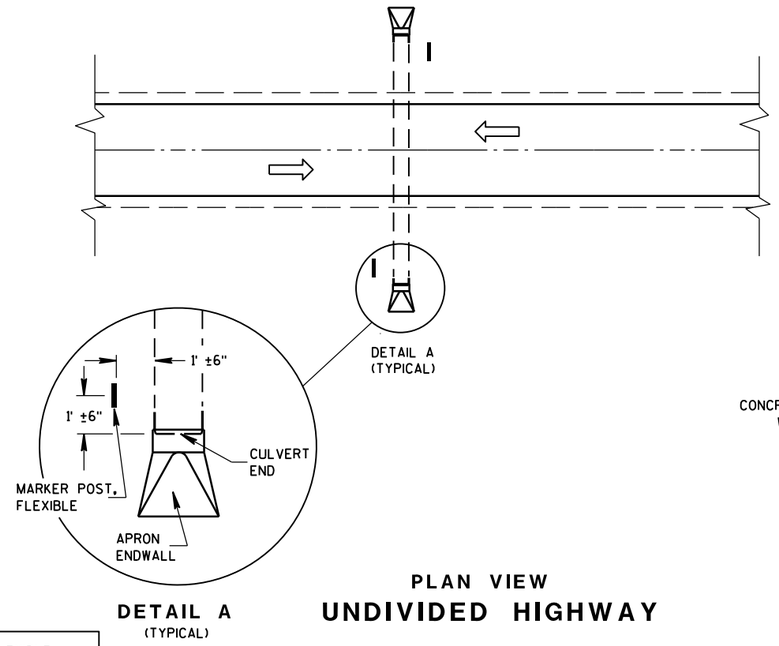
/S/ Jerry H. Zoda
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

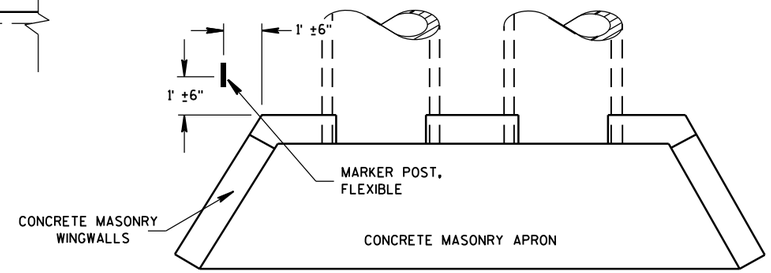
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

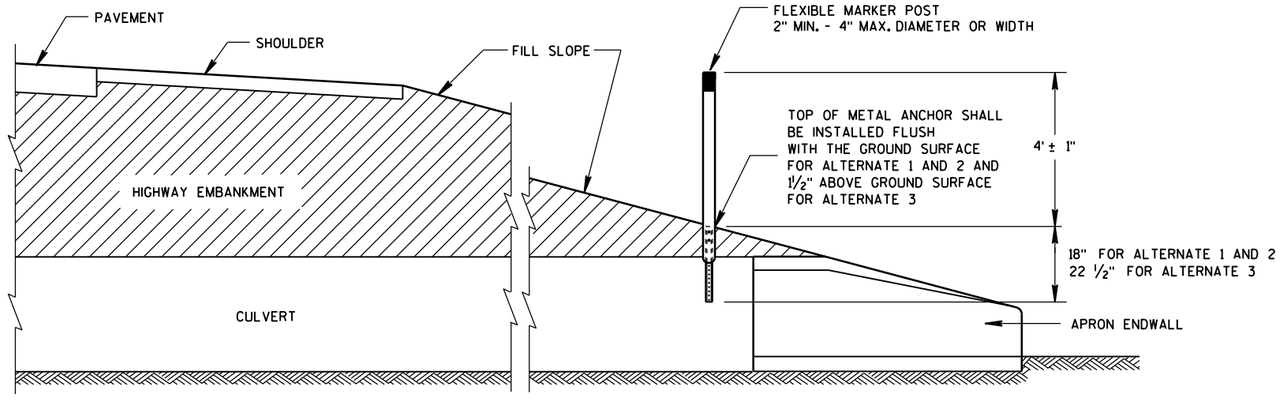
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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 TRANSPOR

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

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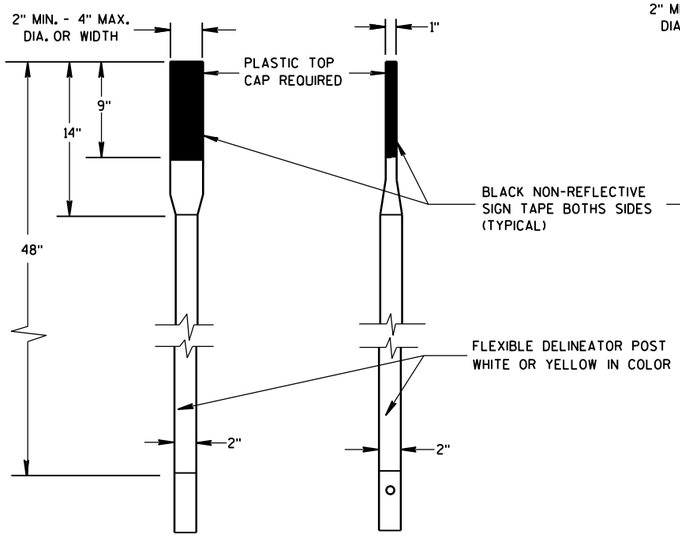
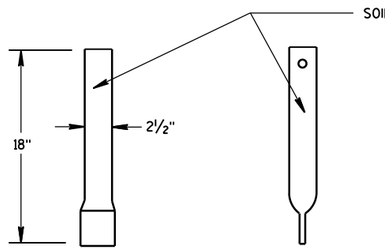
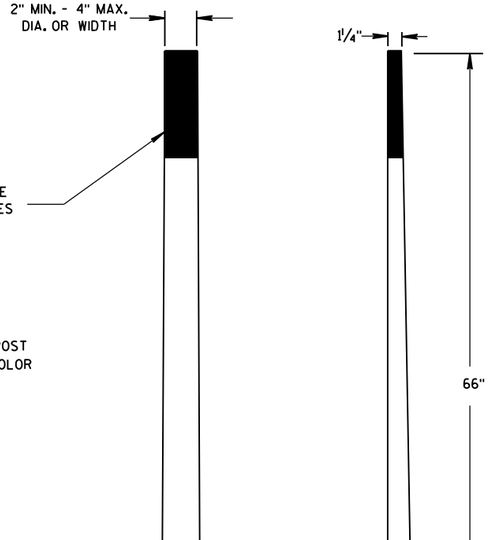
S.D.D. 15 A 3-2a





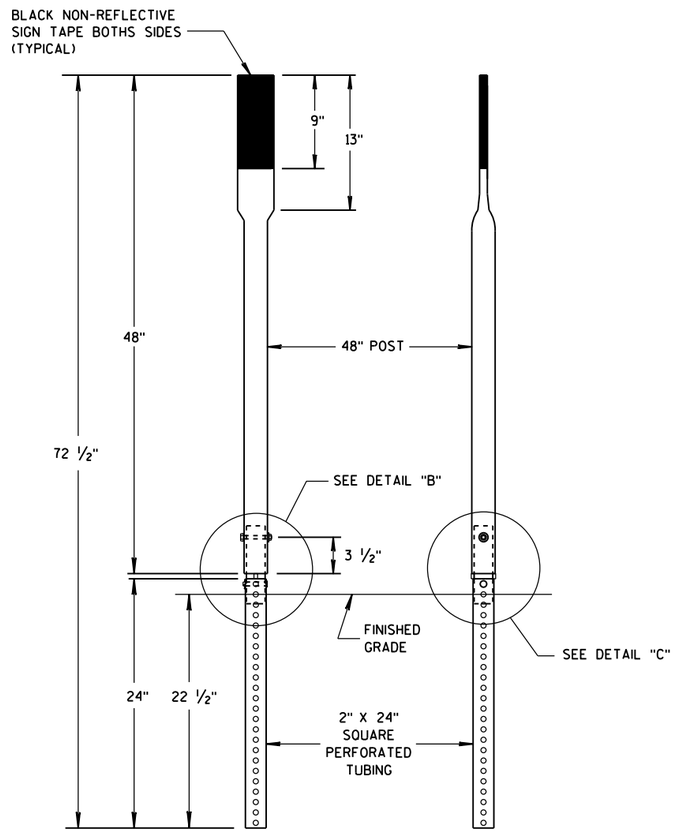
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

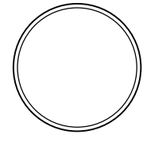
ALTERNATE 2



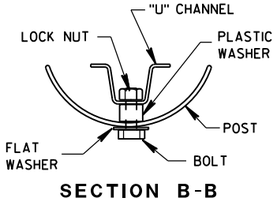
FRONT VIEW SIDE VIEW

ALTERNATE 3

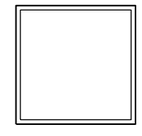
FLEXIBLE MARKER POSTS



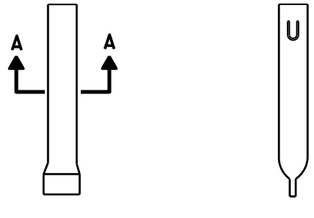
SECTION A-A



SECTION B-B

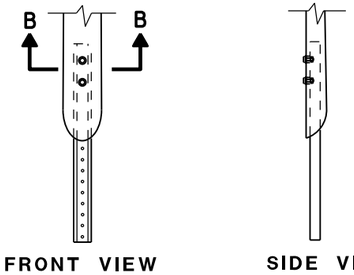


SECTION C-C



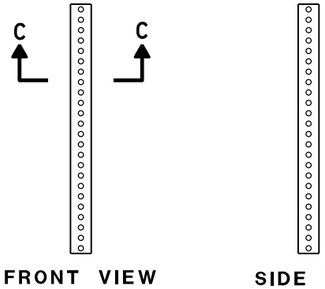
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

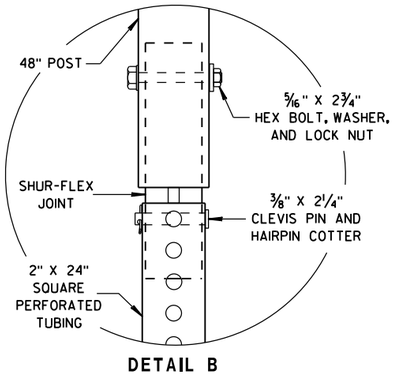
ALTERNATE 2



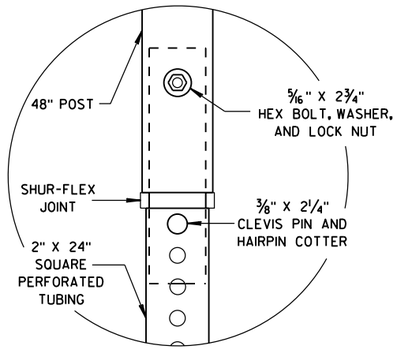
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

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

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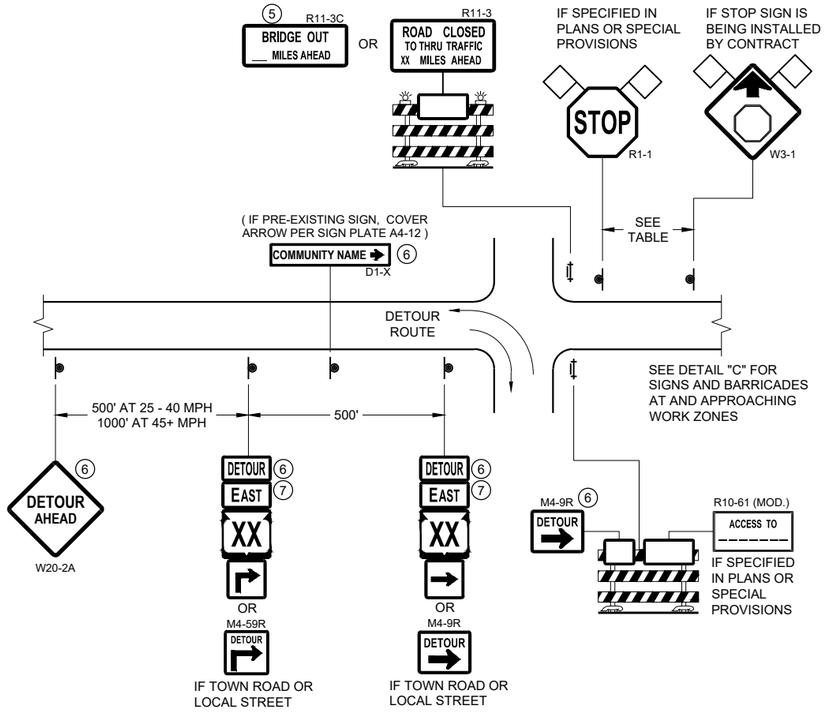
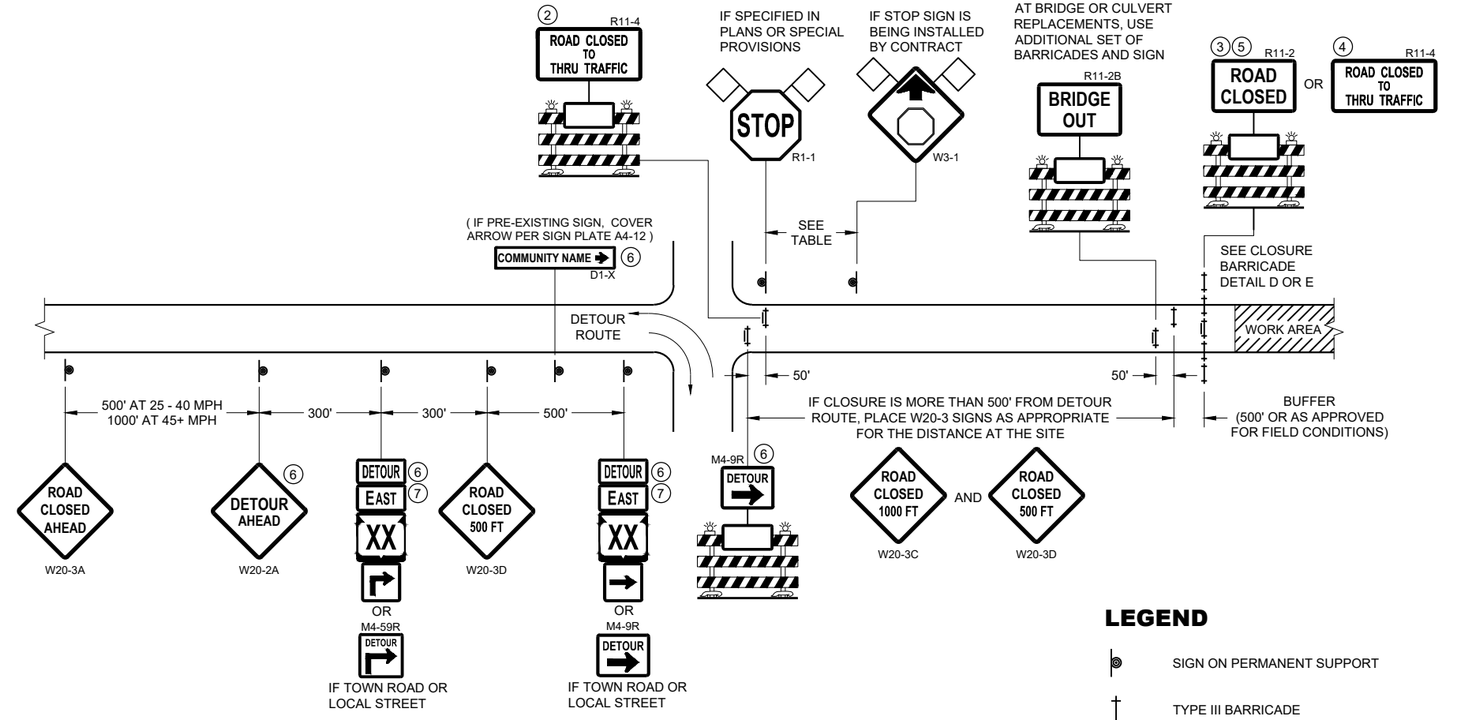
S.D.D. 15 A 3-2b



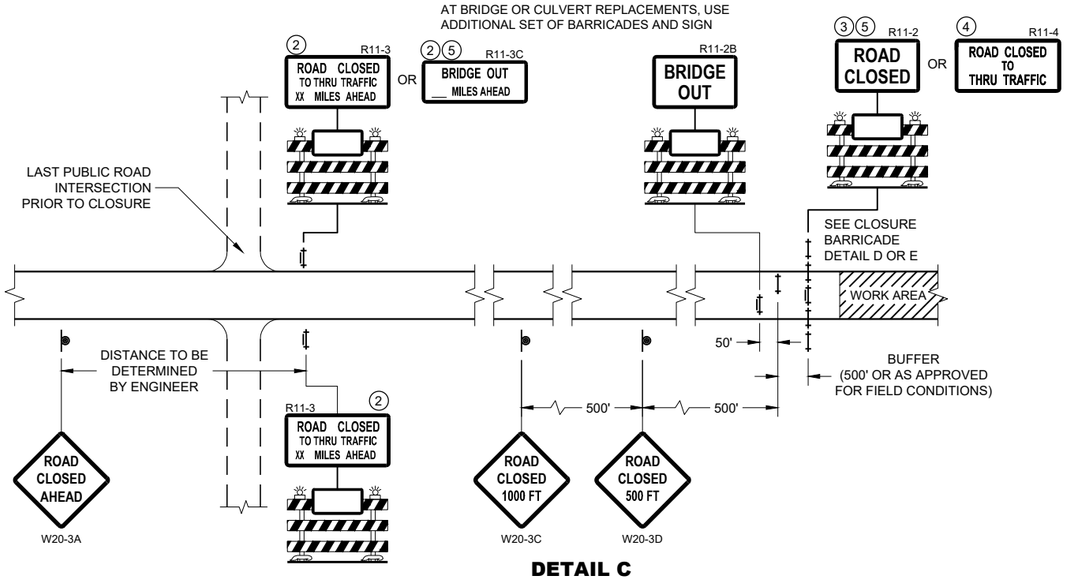
DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

LEGEND

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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C02 - 09a

SDD 15C02 - 09a

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

LEGEND

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR / EAST — M4 - 8, M3 - X
- XX — M1 - 4; OR XX — M1 - 6; OR COUNTY X — M1 - 5A
- M05 - 1; OR M06 - 1; OR M06 - 1

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

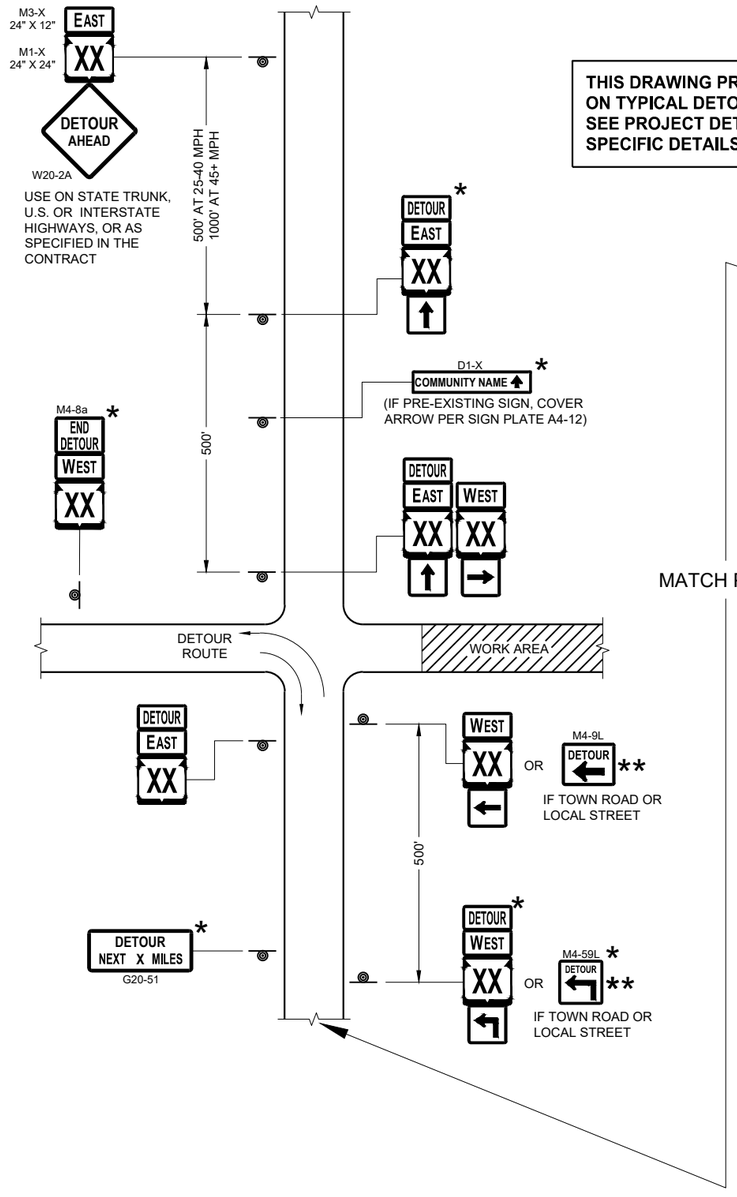
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

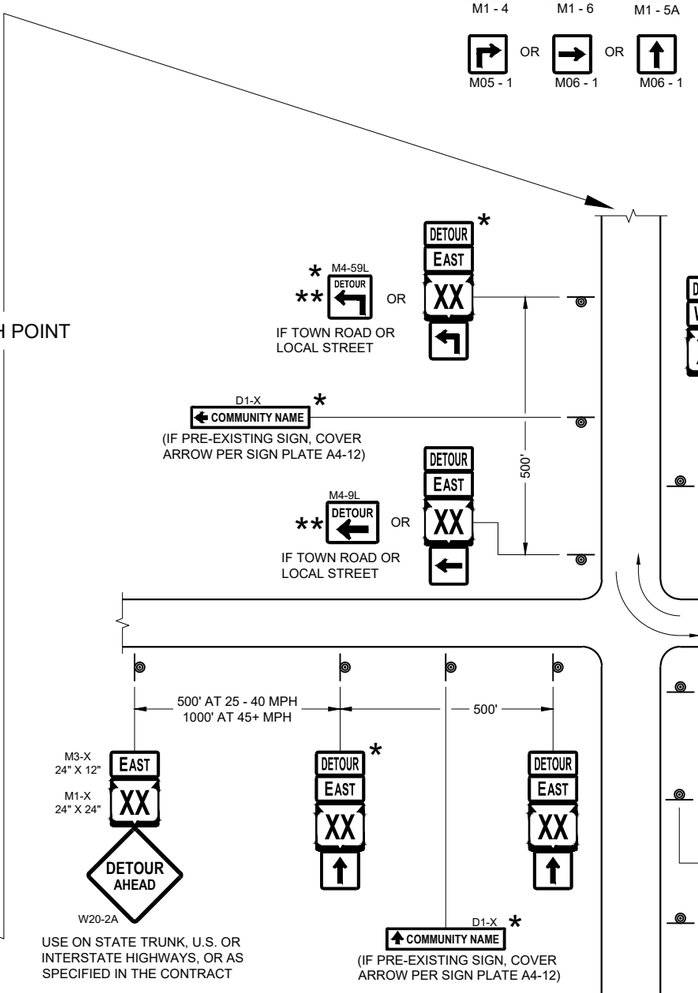
SIGN SIZES SHALL BE AS FOLLOWS:

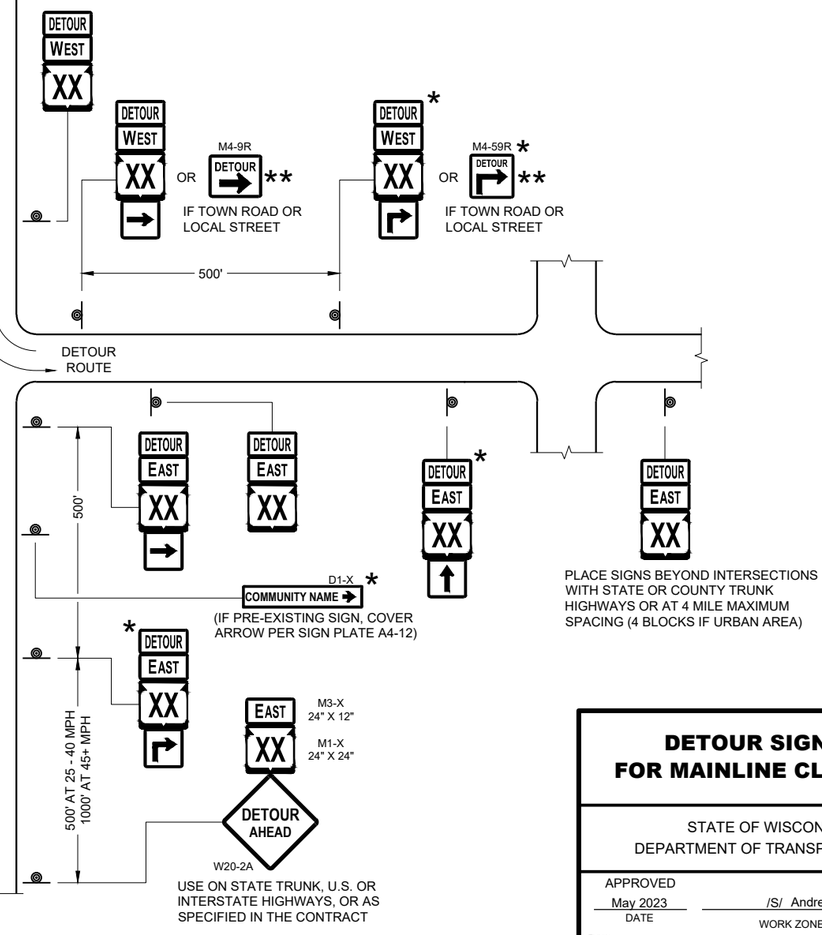
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.







SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

DETAIL F
DETOUR SIGNING

DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

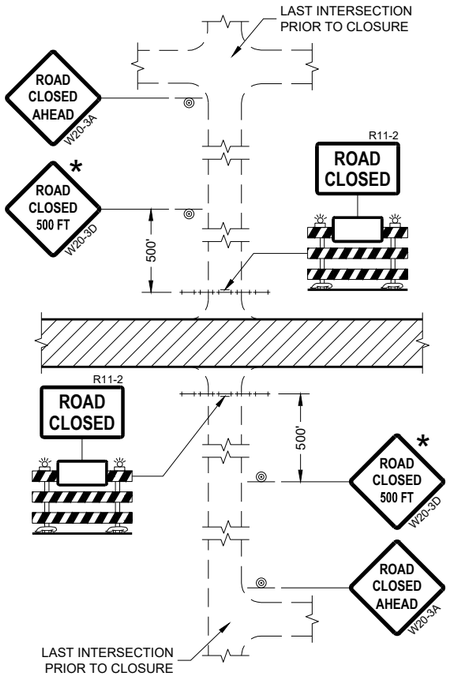
APPROVED
May 2023
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

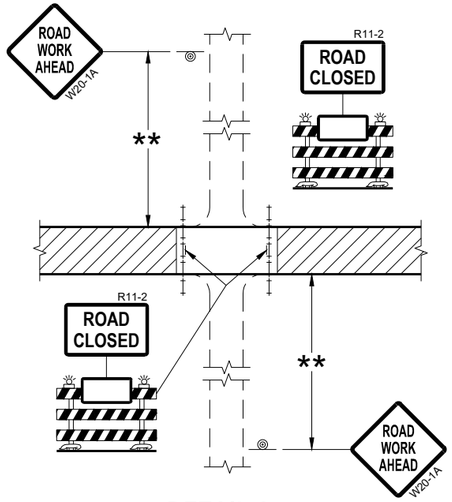
FHWA

6

SDD 15C02 - 09c



DETAIL 1
(NO ACCESS TO PROJECT)



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

GENERAL NOTES

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

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

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

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

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

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

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

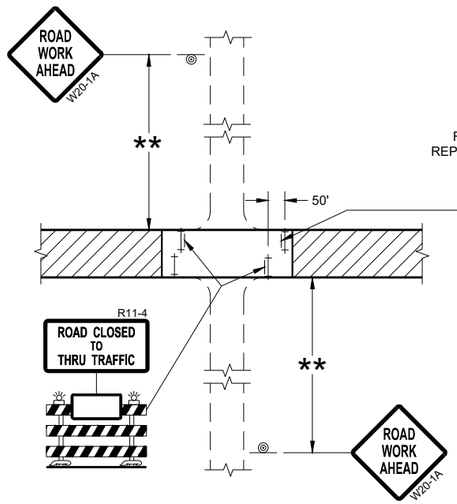
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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

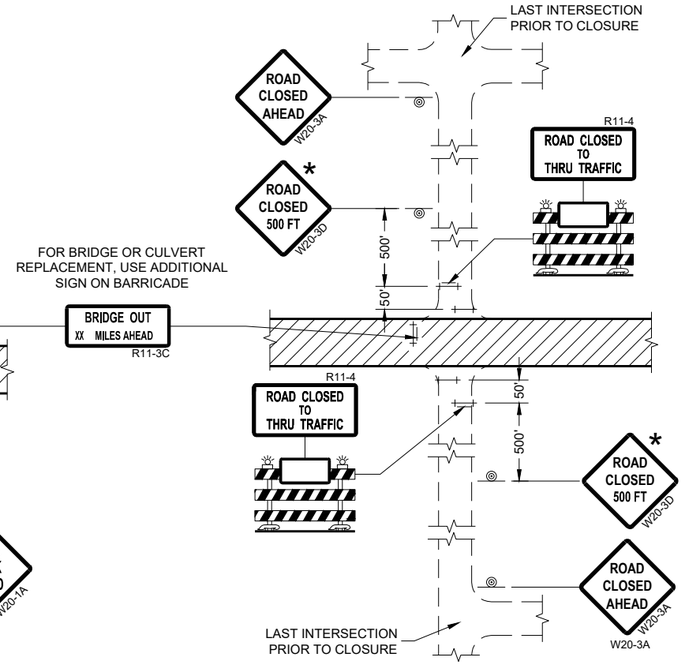
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

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

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



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



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

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

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SDD 15C03 - 05

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

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

(1) LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING

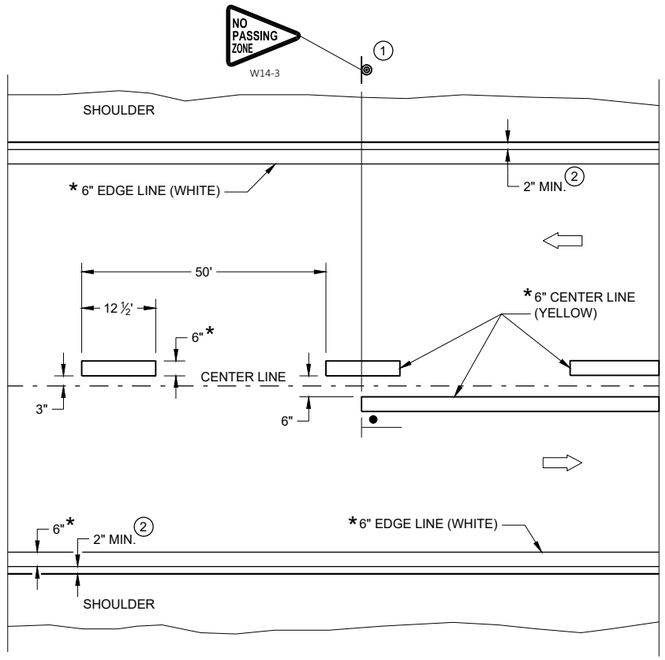
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

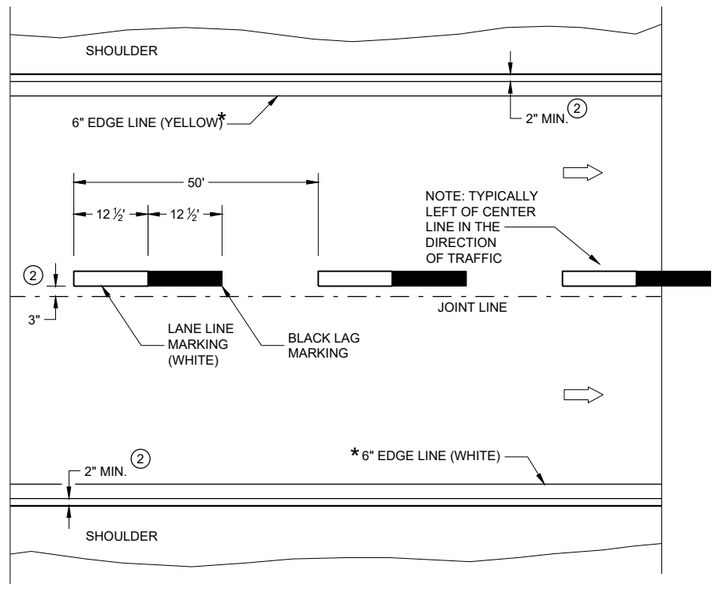
"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

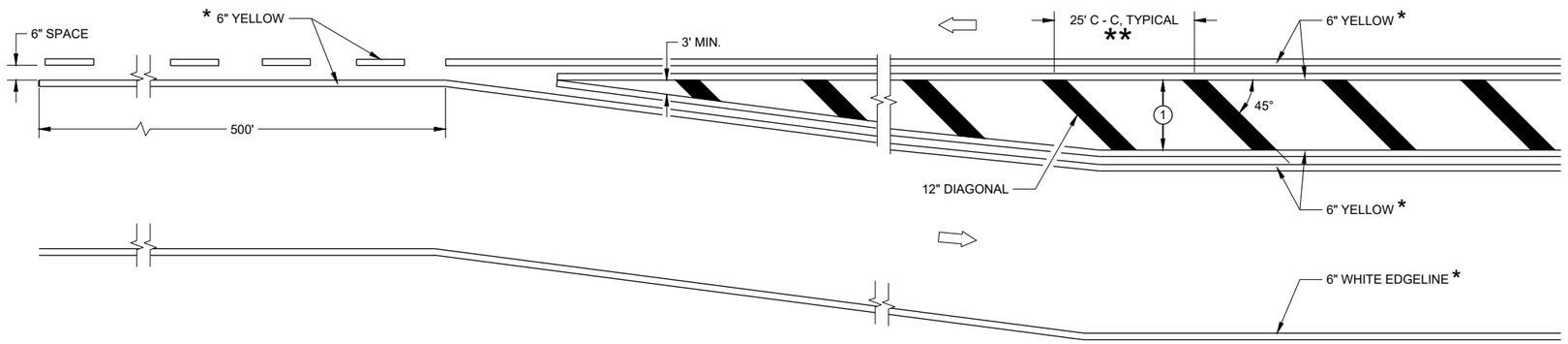
APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATEWIDE SIGNING AND M ENGINEER

FHWA

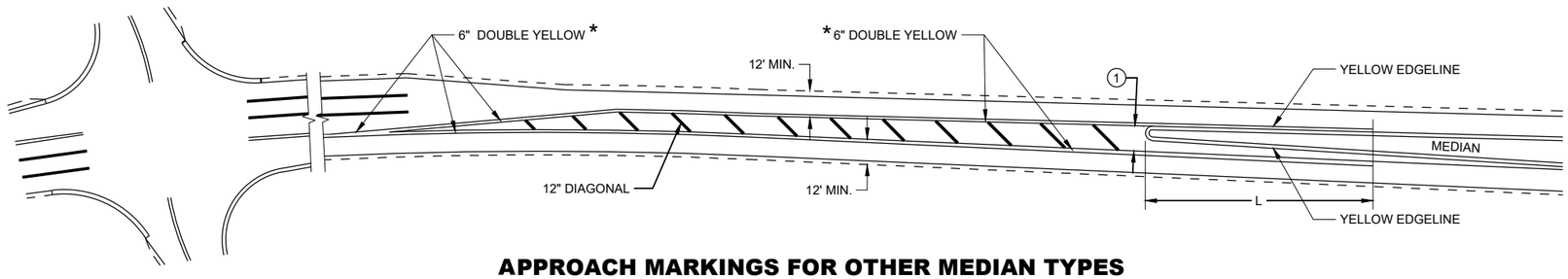
6

SDD 15C08-23a

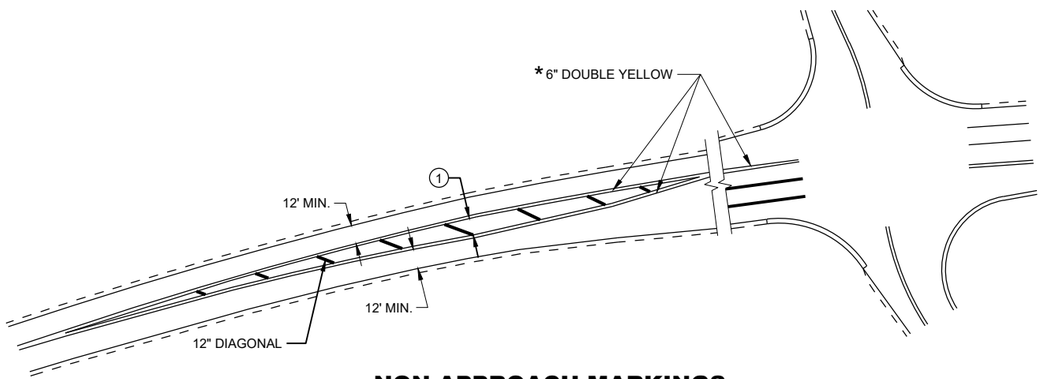
SDD 15C08-23a



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

GENERAL NOTES

1. DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

⇨ DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'

MEDIAN ISLAND PAVEMENT MARKINGS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

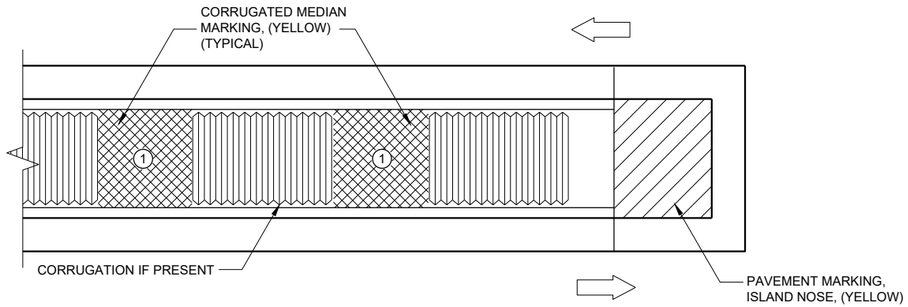
APPROVED
May 2023 — DATE
/S/ Jeannie Silver — STATE SIGNING AND MAF ENGINEER
FHWA

6

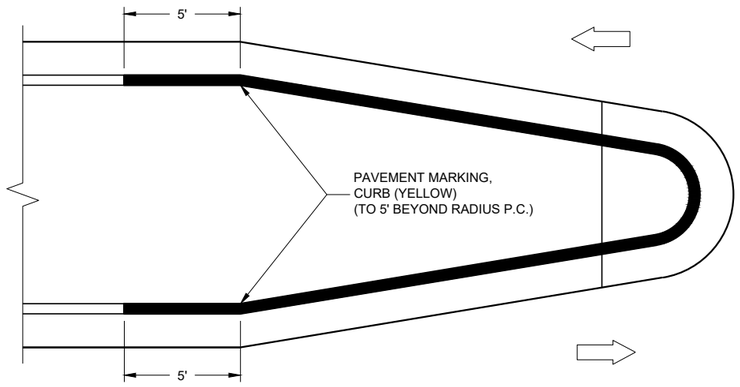
SDD 15C18-08a

6

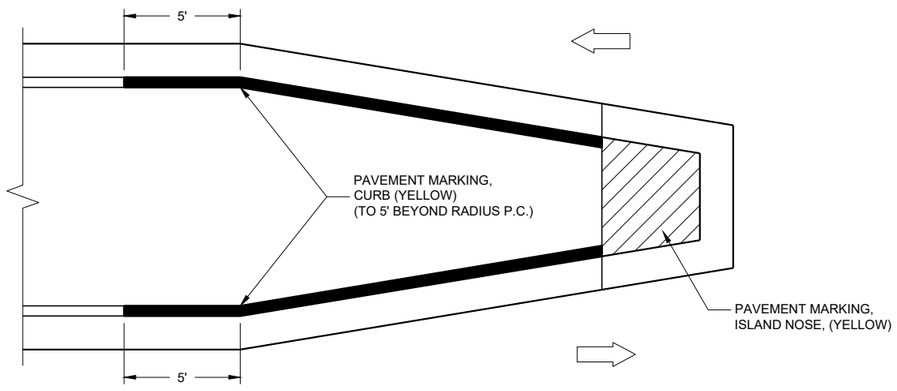
SDD 15C18-08a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

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

(1) APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

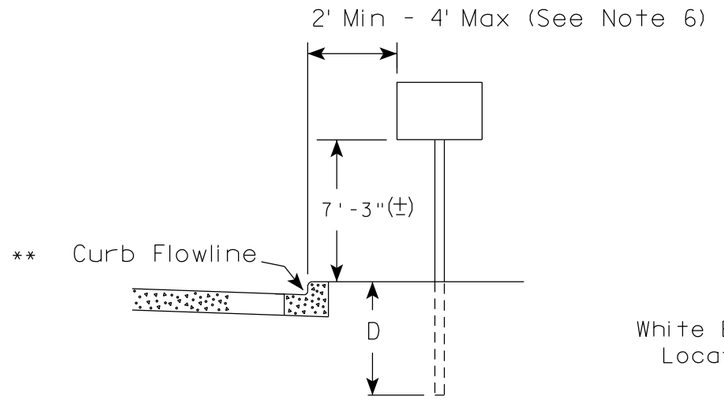
/S/ Jeannie Silver
STATE SIGNING AND MAF
ENGINEER

FHWA

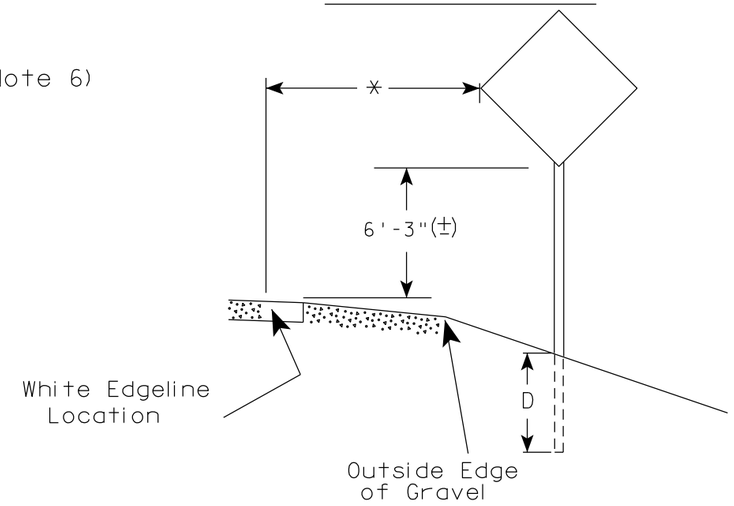
6

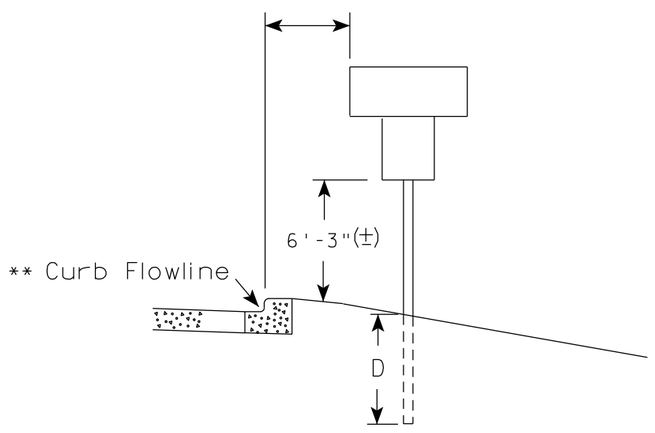
SDD 15C18-08b

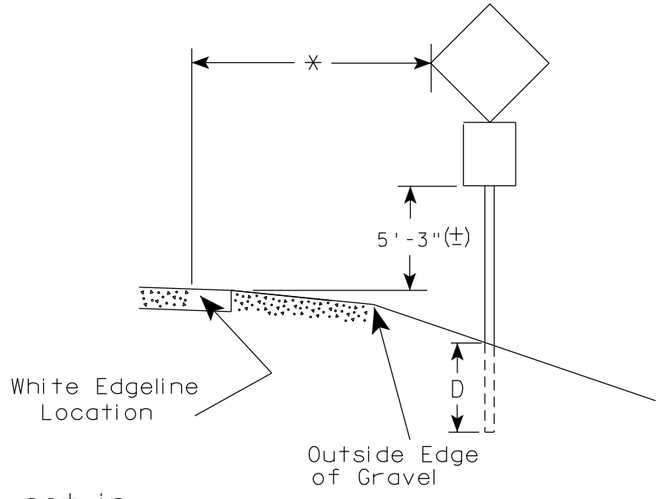
URBAN AREA



RURAL AREA (See Note 2)







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

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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

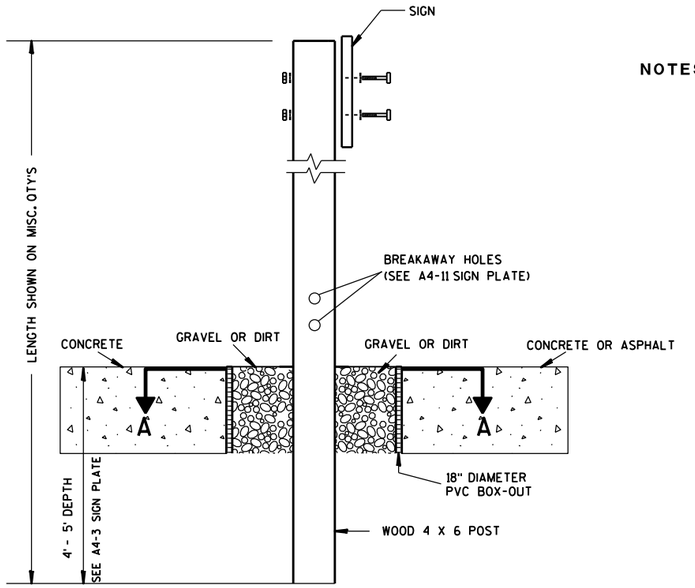
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

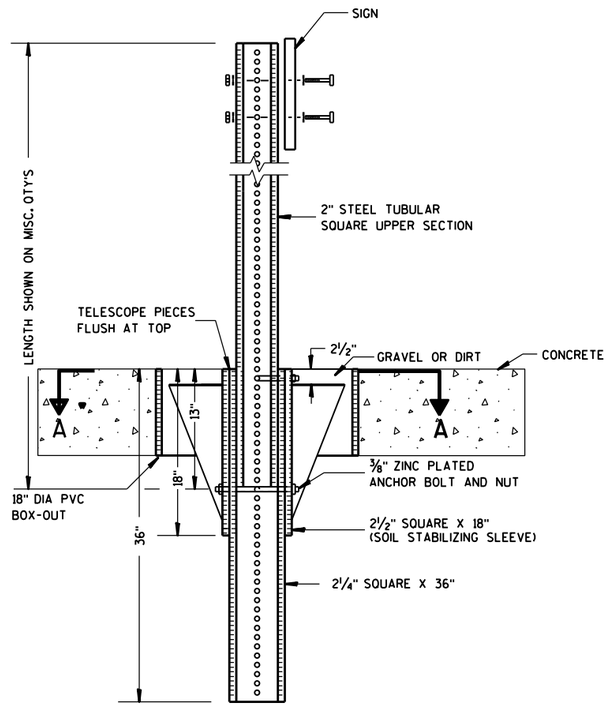
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 107	E



ELEVATION VIEW

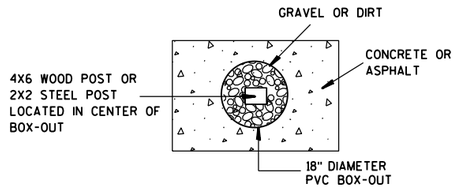
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST BOX-OUTS A4-3B

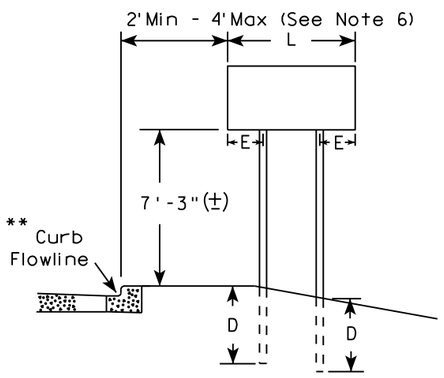
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

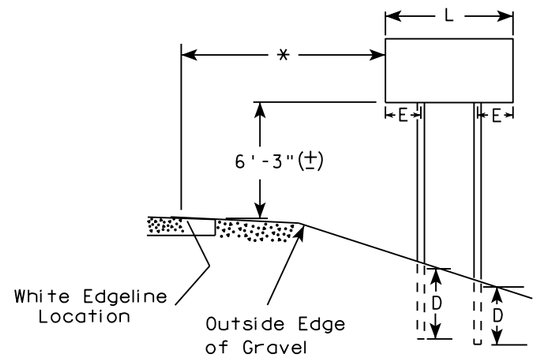
DATE 1/27/14 PLATE NO. A4-3B.1

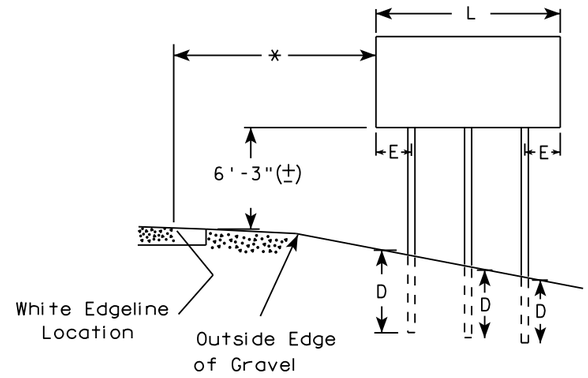
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

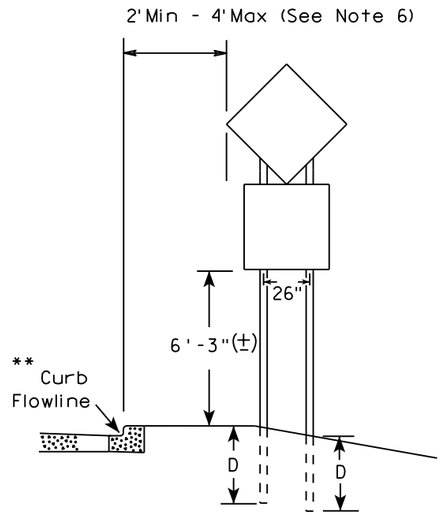
URBAN AREA



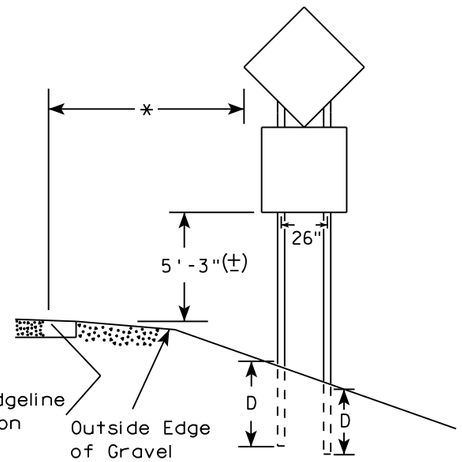
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

GENERAL NOTES

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

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

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

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

POST EMBEDMENT DEPTH

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

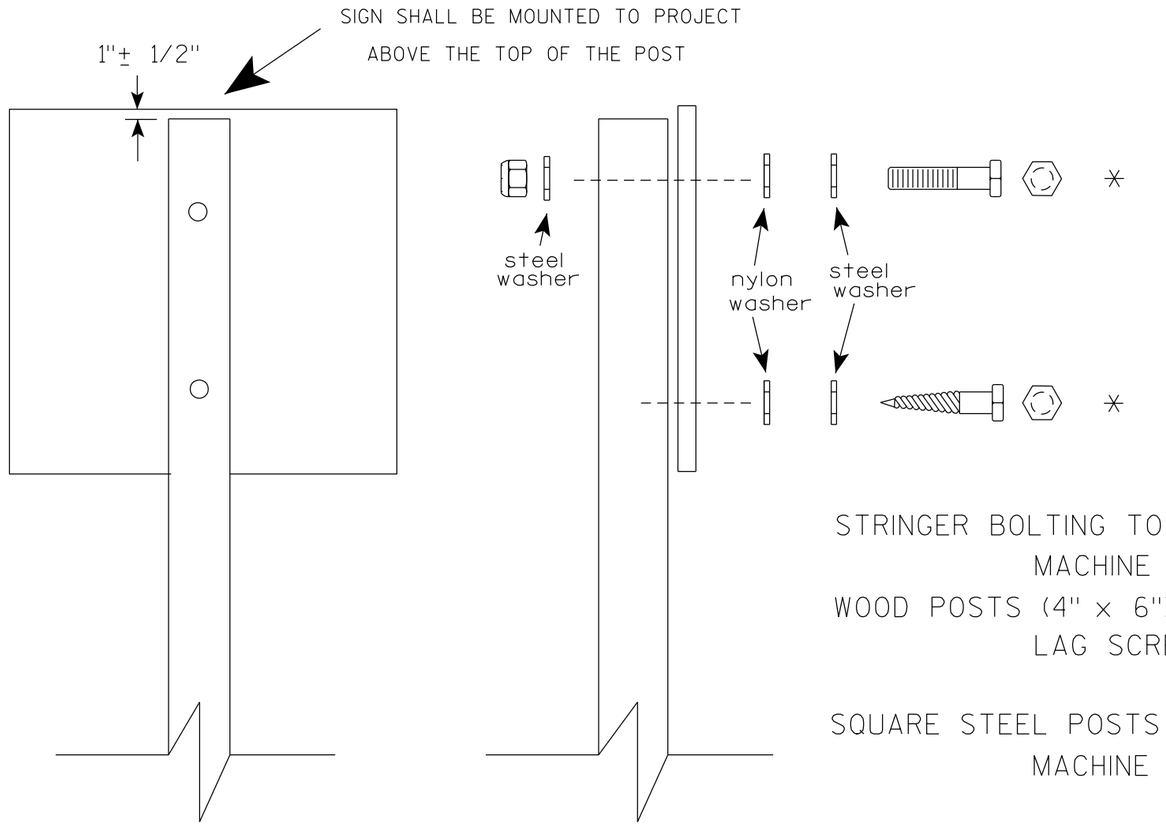
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 109	E



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

a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3

b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

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

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

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

WOOD POSTS (4" x 6")

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

SQUARE STEEL POSTS (2" x 2")

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

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

WASHERS (ALL POSTS) -

1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON

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

ATTACHMENT OF SIGNS TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

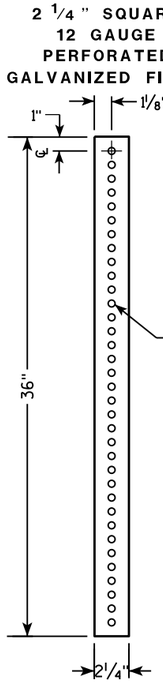
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

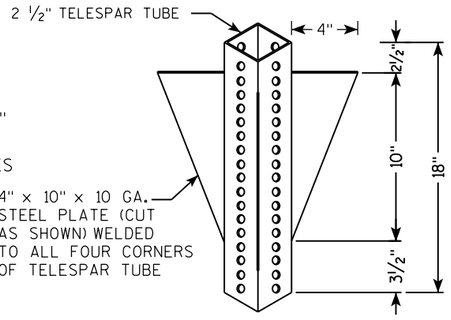
SHEET NO: 110 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

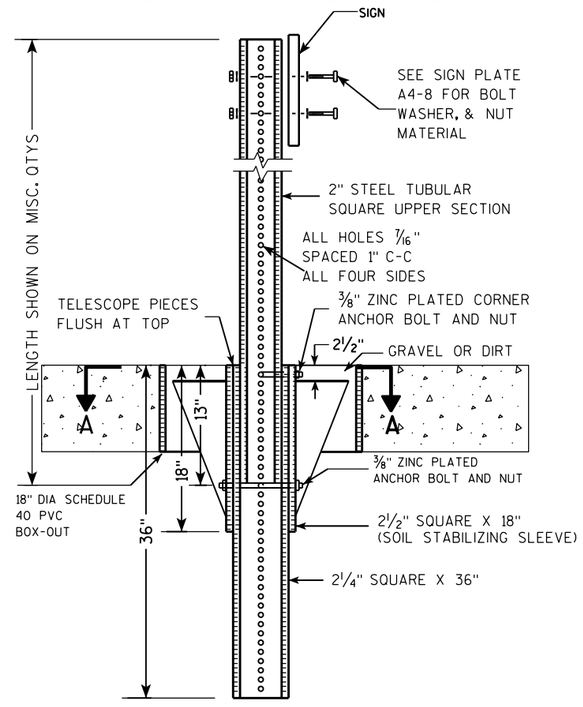
2 ¼ " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



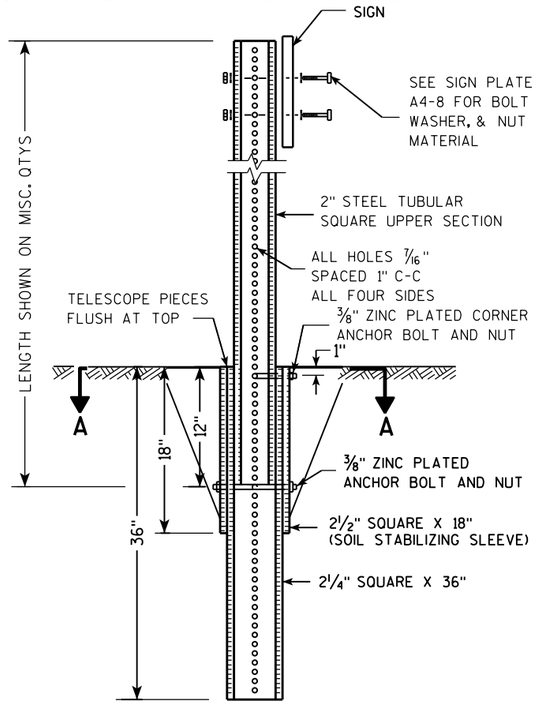
2 ½ " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

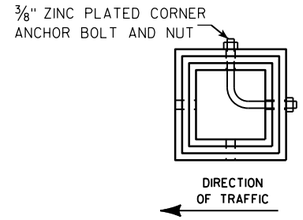


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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





SECTION A-A

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

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

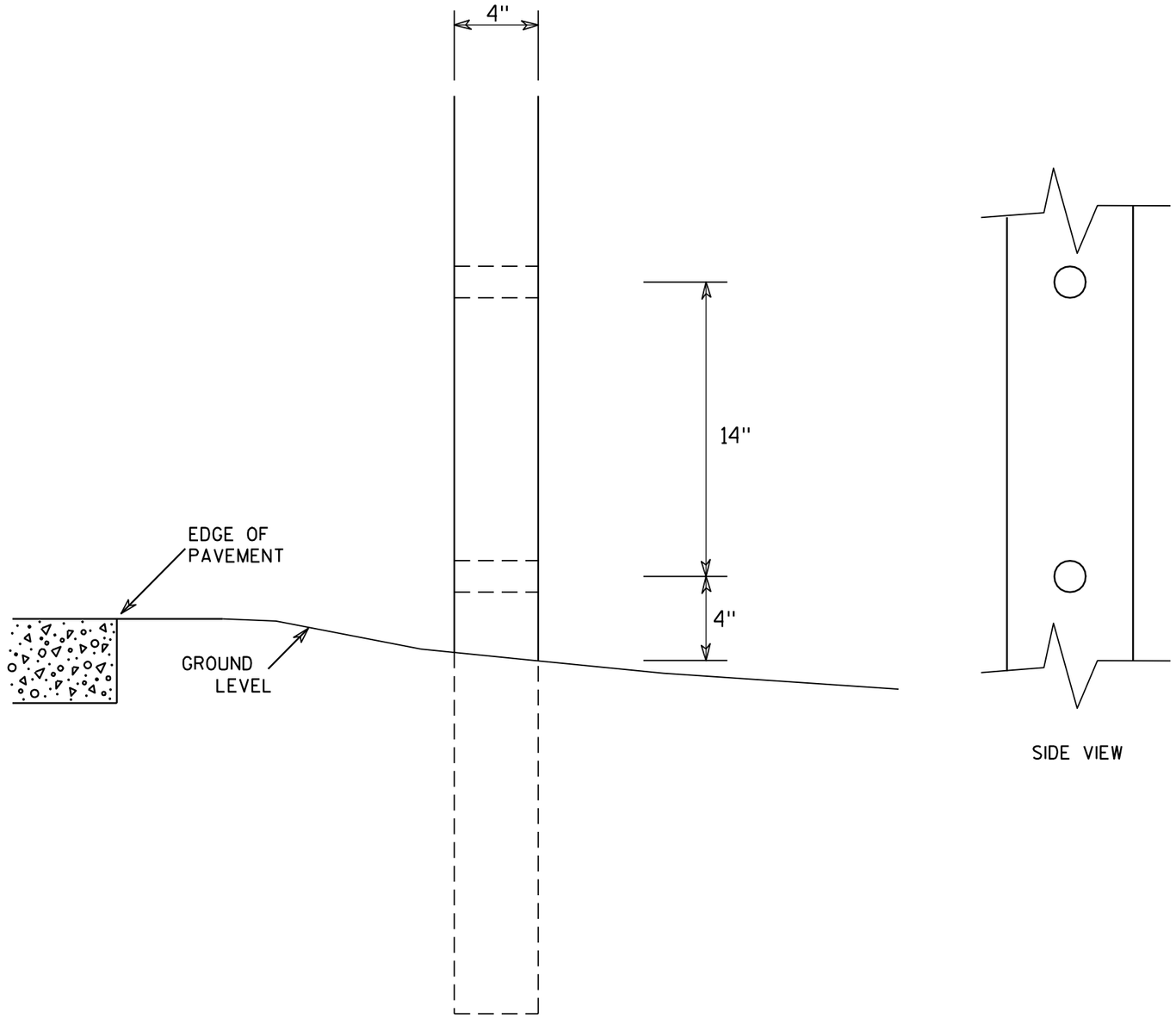
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



SIDE VIEW

GENERAL NOTES

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

7

7

4 X 6 WOOD POST MODIFICATIONS

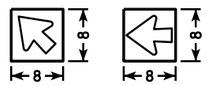
WISCONSIN DEPT OF TRANSPORTATION

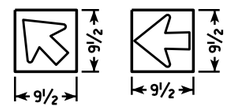
APPROVED Chester J Spang for State Traffic Engineer

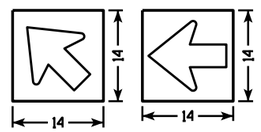
DATE 3/27/97 PLATE NO. A4-11.2

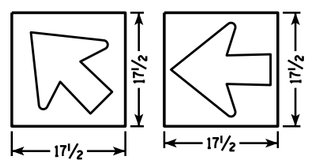
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 112	E

SIGN LAYOUT WITH VARIOUS SIZED MESSAGES







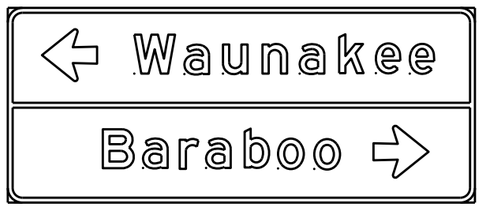


GENERAL NOTES

1. Materials shall conform to Standard Specification Section 637.
   Base - Sheet Aluminum 0.040" Thickness
   Sheeting - Orange Type F Reflective
   Arrow - Black Non-Reflective
2. Arrow signs shall be fastened to permanent sign by either aluminum rivets or aluminum self-tapping sheet metal screws. There shall be a minmum of 2 fasteners used per arrow sign.
3. There shall be a spacer consisting of a 0.08" nylon washer between the back of the arrow sign and the face of the permanent sign.
4. Arrows are per standard plate A1-2
5. Use separate arrow sign for each destination
6. Tilt arrow is always at 45 degrees
7. Arrow is centered on arrow sign

Lower Case Copy Size	Standard Width (Single Arrow)	2 Line Tilt Arrow Cover Width	3 Line Tilt Arrow Cover Width	Height
3¾" Series C	8	9 ½	14 ½	8
4½" Series D & E	9 ½	10	15	9 ½
6" Series D & E	14	16	20 ½	14
8" Series E	17 ½	20 ½	25	17 ½

BEFORE



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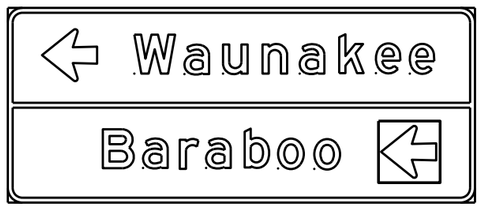
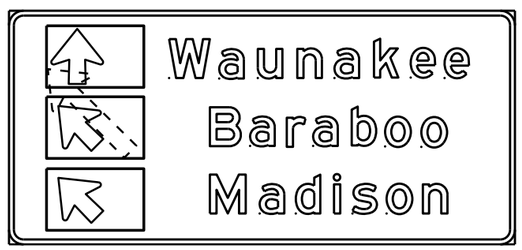




DESTINATION DIRECTIONAL ARROW FOR DETOUR SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/08/14

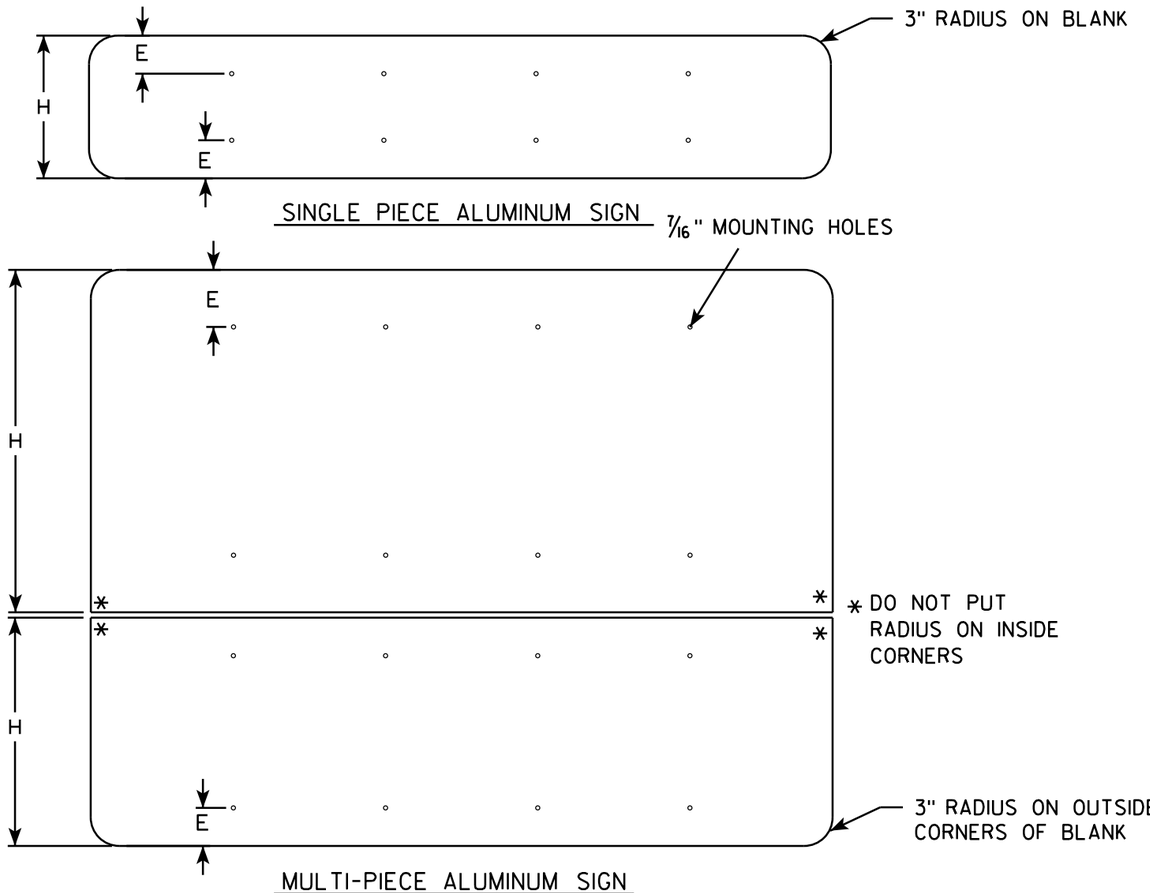
A4-12.2

PROJECT NO:

SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A412.DGN PLOT DATE : 08-OCT-2014 11:50 PLOT BY : mscsja

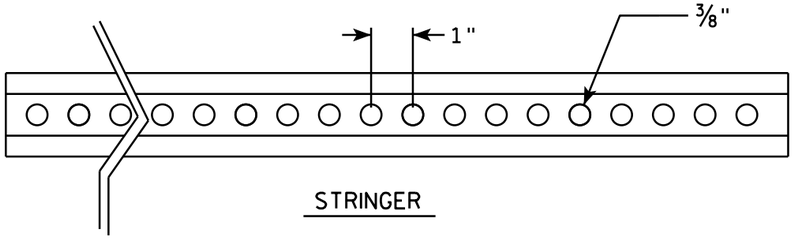
WISDOT/CADDS SHEET 42



GENERAL NOTES

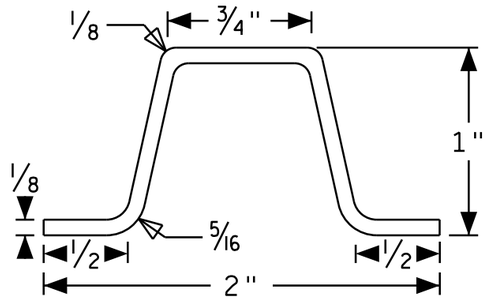
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

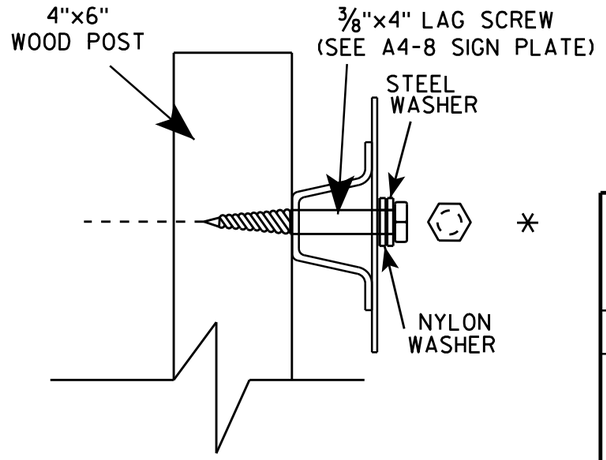


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

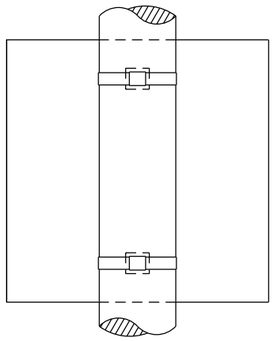
DATE 4/26/16 PLATE NO A4-18.1

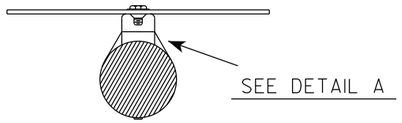
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

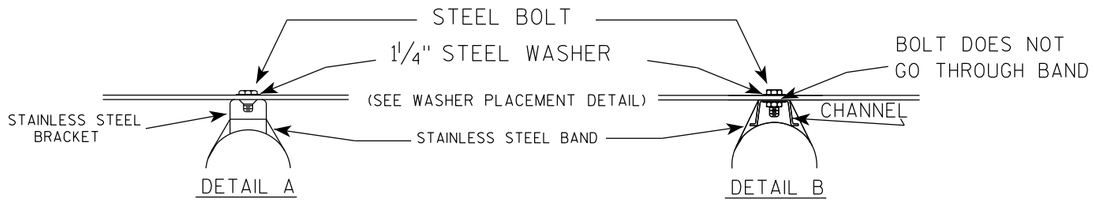
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000

BANDING

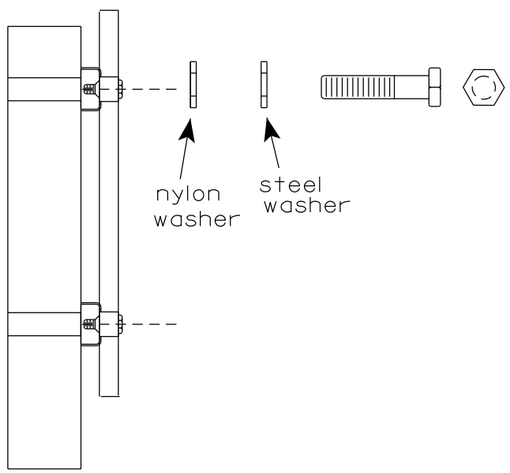
SINGLE SIGN







WASHER PLACEMENT

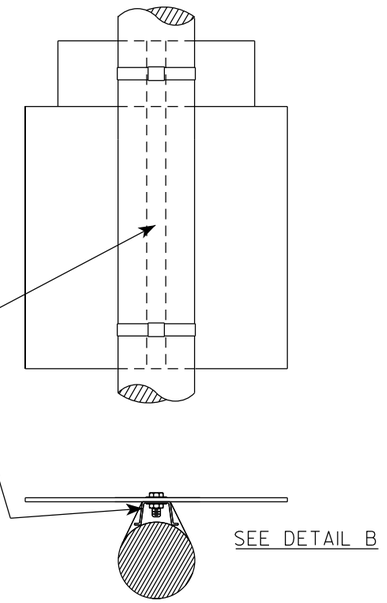


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

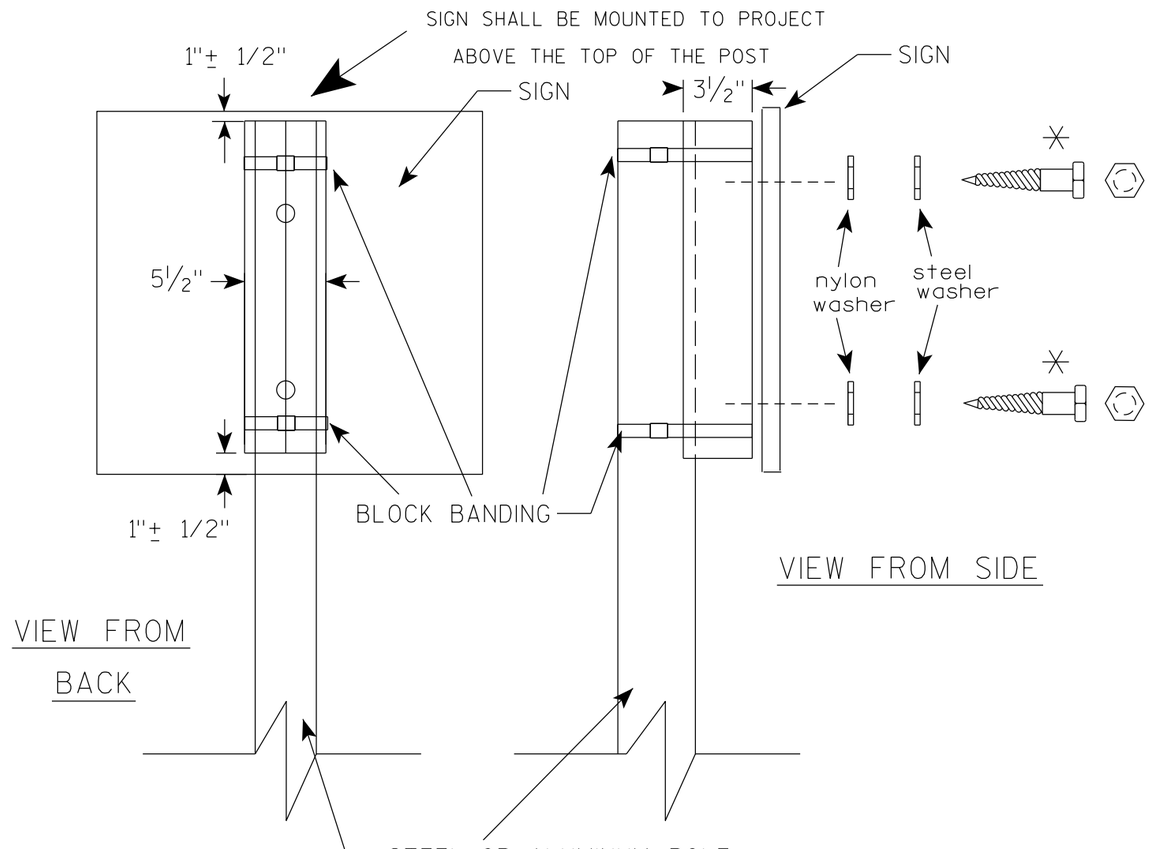
DATE 6/10/19 PLATE NO. A5-9.4

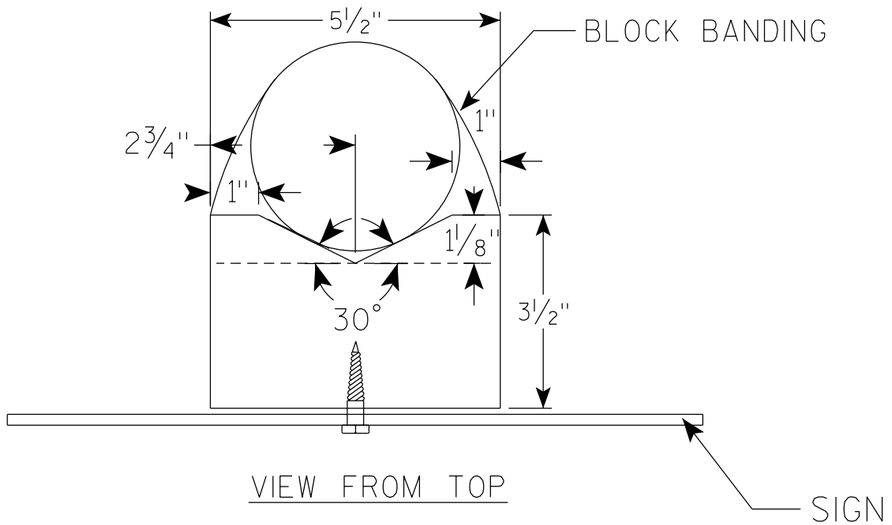
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 115	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

BLOCK BANDING DETAIL (V-BLOCK OPTION)

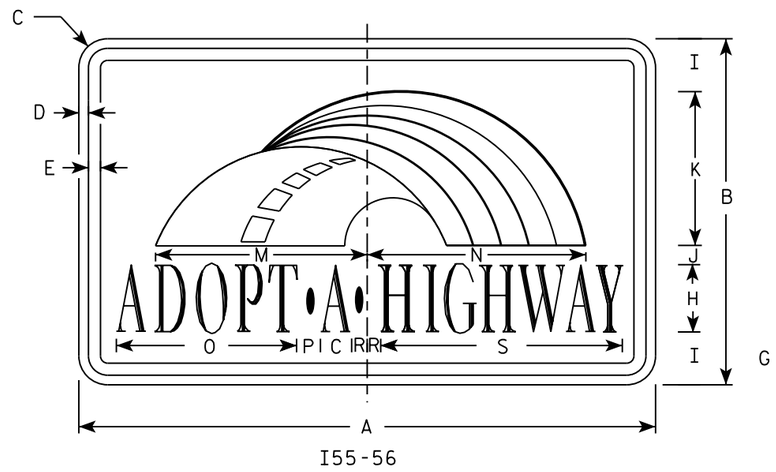
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

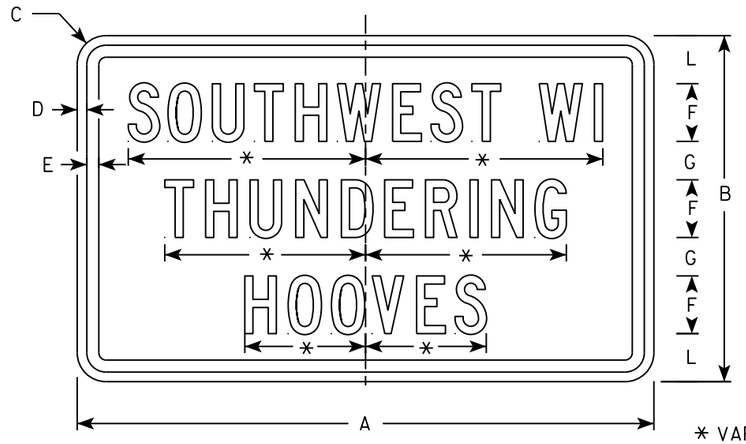
DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

SHEET NO: 116 E



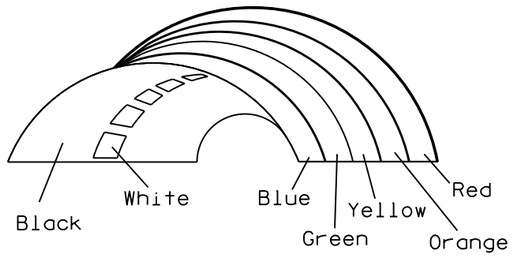
I55-56



I55-56P

* VARIES

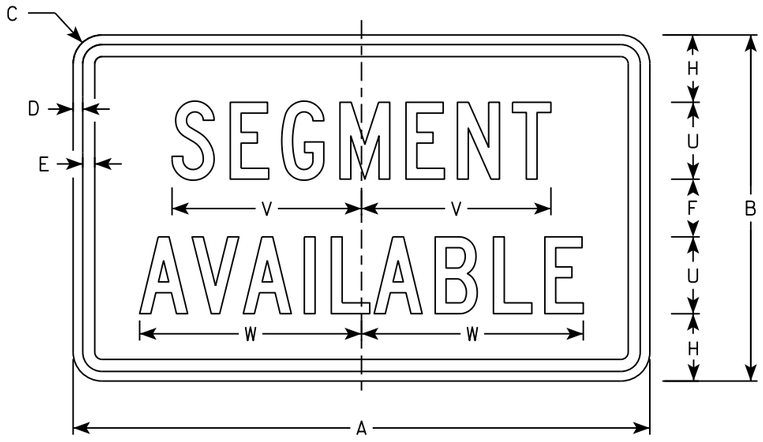
Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - (See Note 4)
3. Message Series - (See Note 5)
4. Border - Blue
   Adopt a Highway - Red
   All other Text - Blue
5. Adopt a Highway - Dutch 8011L
   All other Text - Series C
6. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.



I55-56S

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	18	1 1/2	1/2	5/8	3	2	3 1/2	2 3/4	1	8	2 1/2	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2	4	9 7/8	11 1/2				3.75
3																											
4																											
5																											

STANDARD SIGN
I55-56

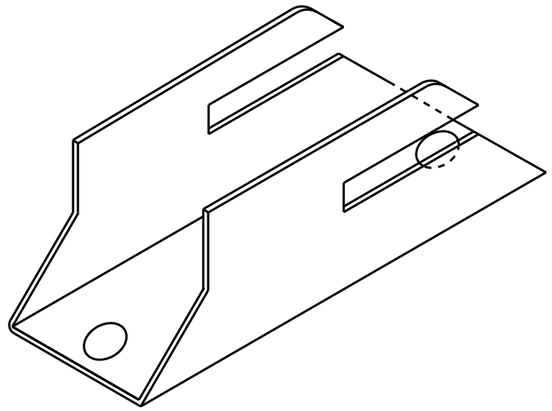
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

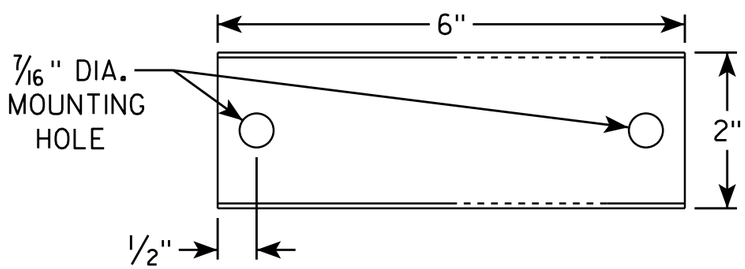
DATE 2/20/18 PLATE NO. I55-56.4

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 117 | E

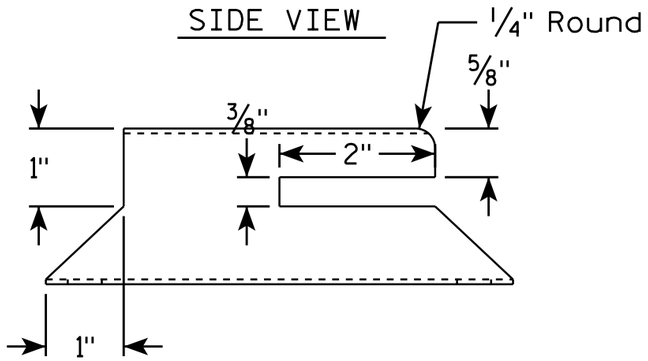
ISOMETRIC VIEW



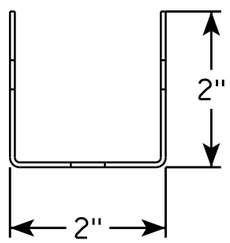
TOP VIEW



SIDE VIEW



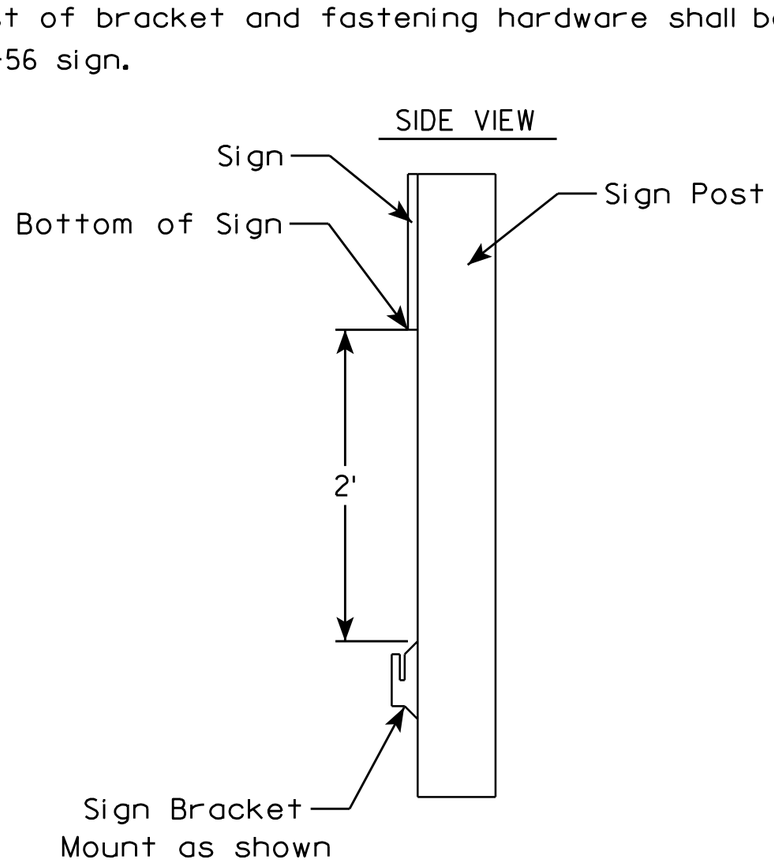
END VIEW



NOTES

1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW



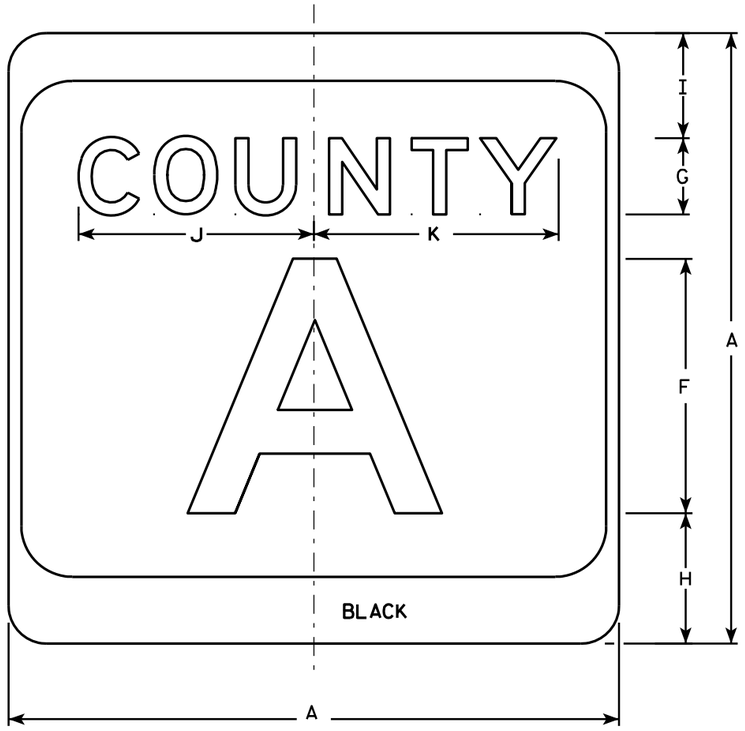
ROLLUP SIGN BRACKET
I55-56B

WISCONSIN DEPT OF TRANSPORTATION

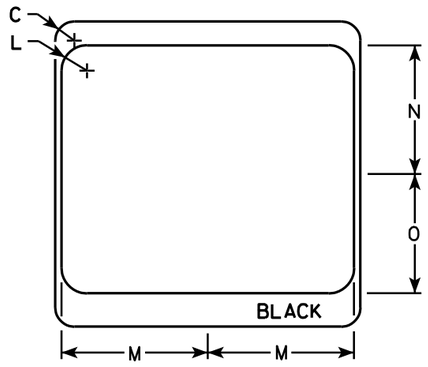
APPROVED Matthew R Rauch
for State Traffic Engineer

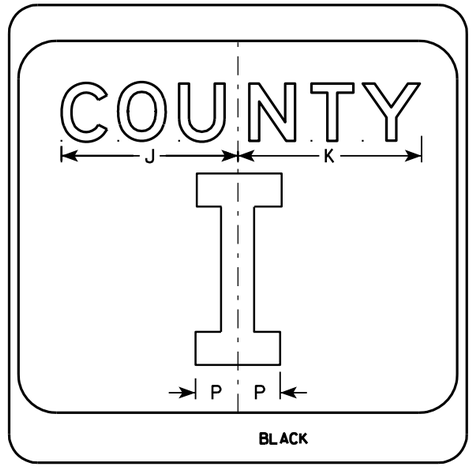
DATE 4/26/16 PLATE I55-56B.2

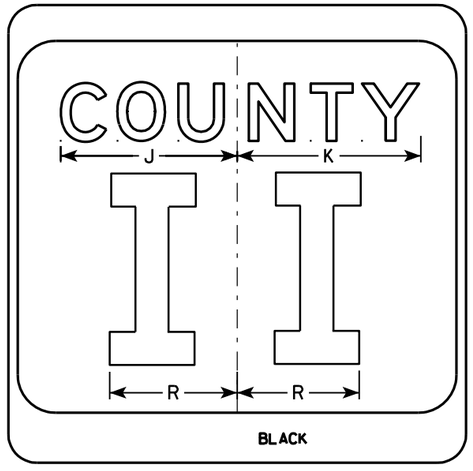
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



M1-5A







NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White & Black - See Note 7
   Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
   Message Series D for 2 letters unless message is too big then Series C.
   Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
   Background - Type H Reflective
   Detour or temporary Signs
   Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

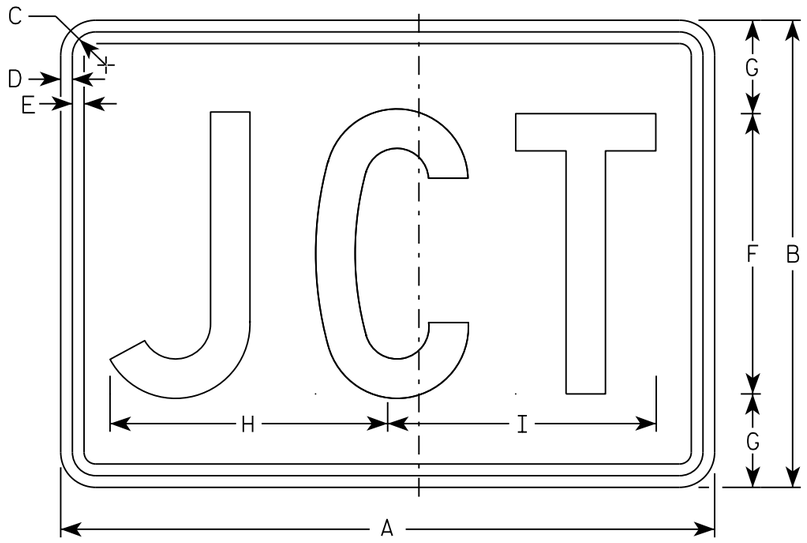
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

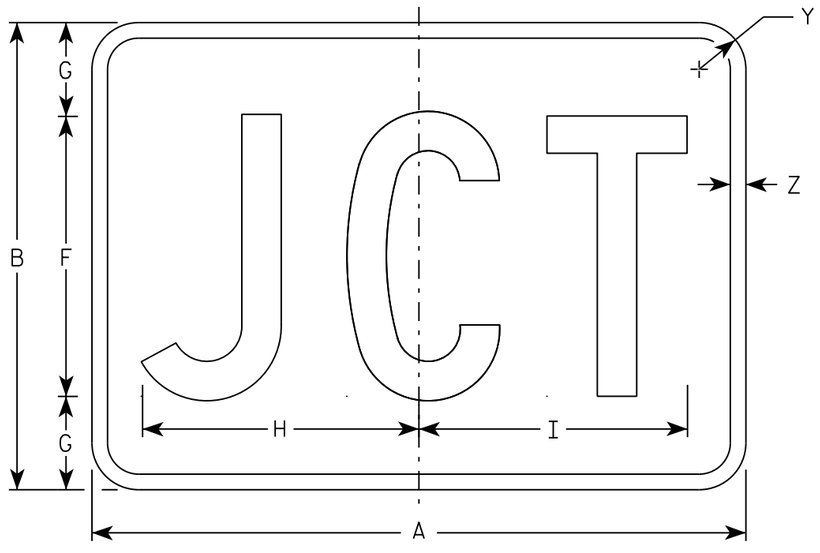
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 119 | E



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

1. Sign is Type II - Type H
2. Color:
   Background - See note 5
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M2-1 Background - White
   Message - Black
   MB2-1 Background - Blue
   Message - White
   MK2-1 Background - Green
   Message - White
   MM2-1 Background - White
   Message - Green
   MN2-1 Background - Brown
   Message - White
   MP2-1 Background - White
   Message - Blue
   MR2-1 Background - Brown
   Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

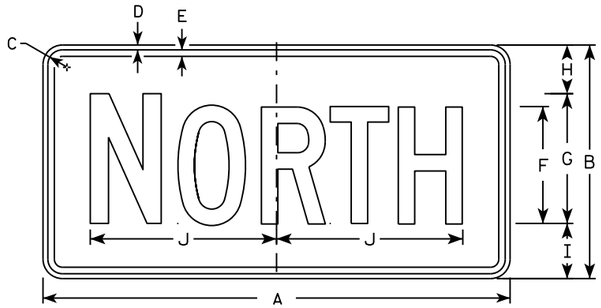
STANDARD SIGN
M2-1

WISCONSIN DEPT OF TRANSPORTATION

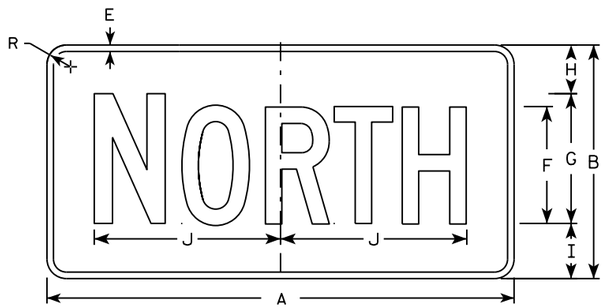
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 120 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



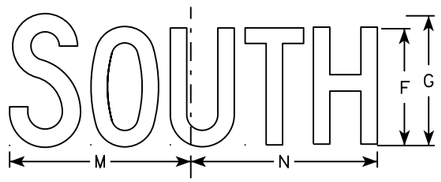
M3-1
MM3-1
MP3-1



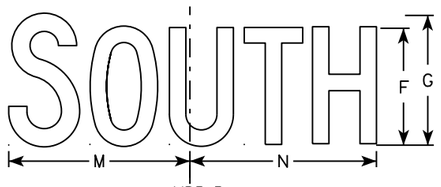
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

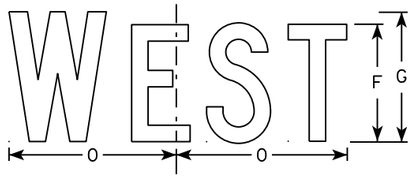
MB3-2
MK3-2
MN3-2



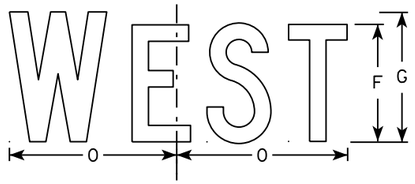
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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

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

STANDARD SIGNS
M3-1 thur M3-4
SERIES

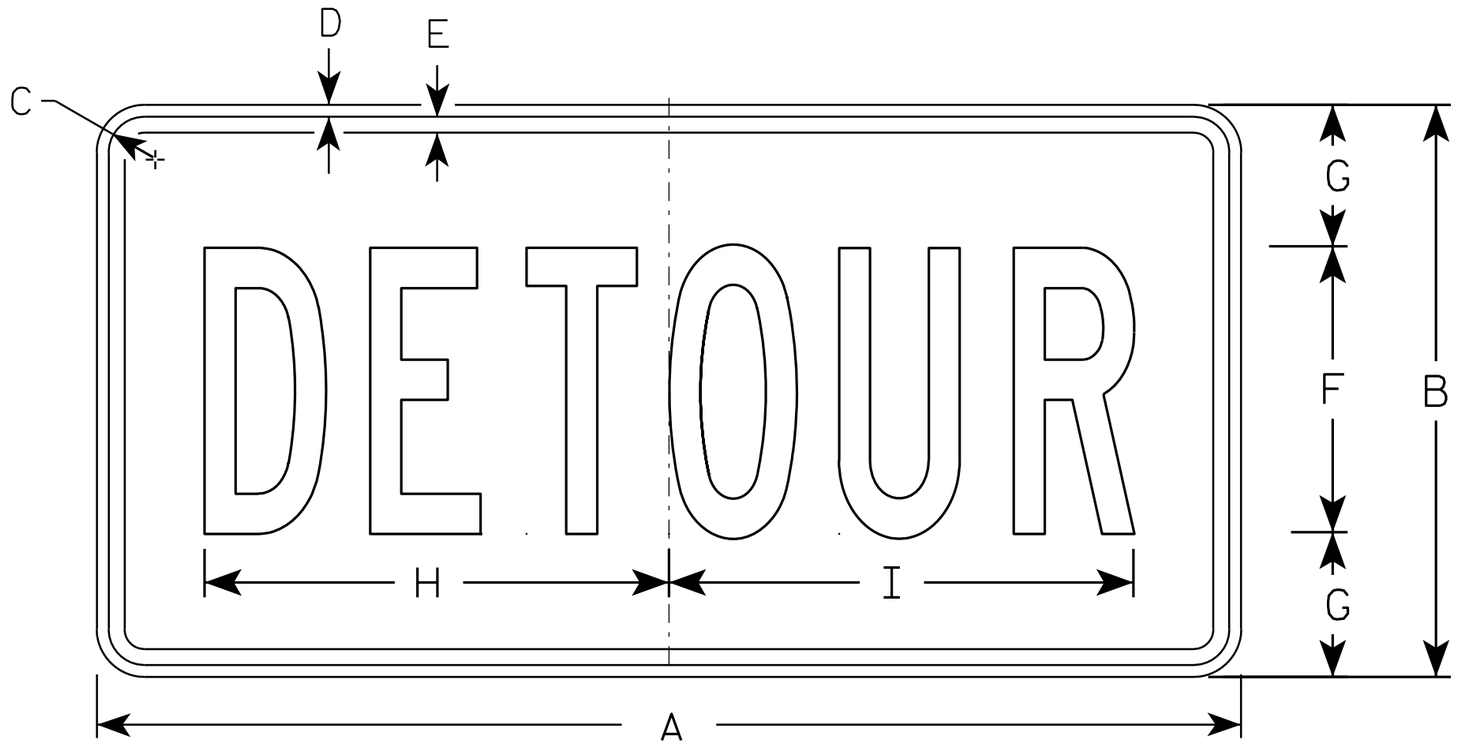
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



M4-8

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

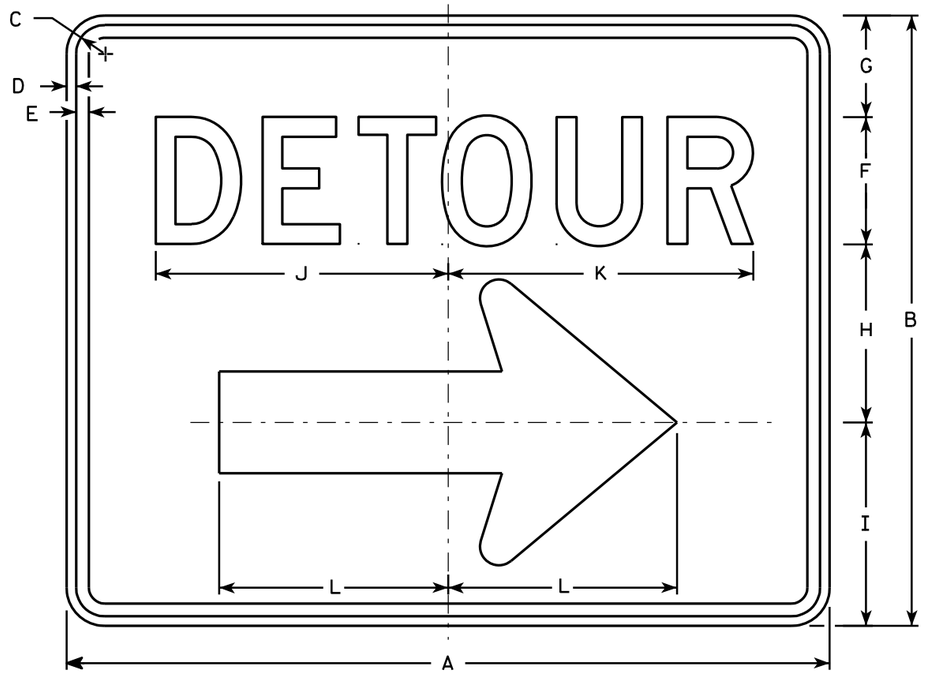
STANDARD SIGN
M4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

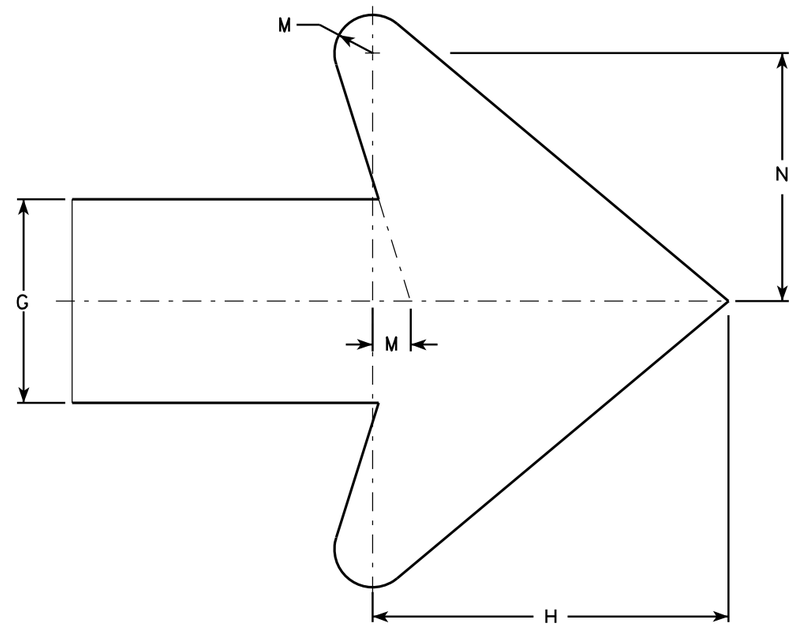
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 122	E



M4-9R

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M4-9L is the same as M4-9R except the arrow is reversed.



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
3	30	24	1 1/8	3/8	1/2	5	4	7	8	11 1/2	12	9	3/4	4 7/8													5.00
4	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0
5	48	36	1 3/8	1/2	5/8	8	6	10 1/2	11 5/8	20 5/8	20 1/2	13 1/4	1 1/8	6 7/8													12.0

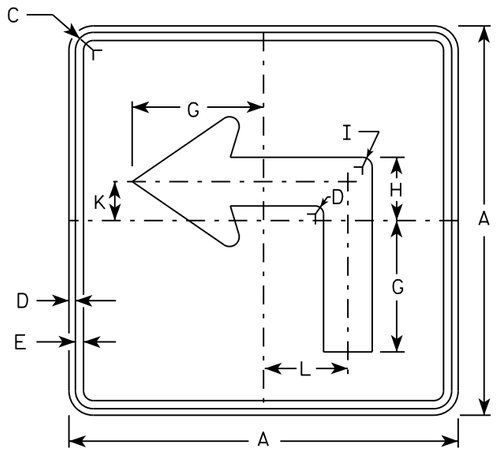
STANDARD SIGN
M4-9 R & L

WISCONSIN DEPT OF TRANSPORTATION

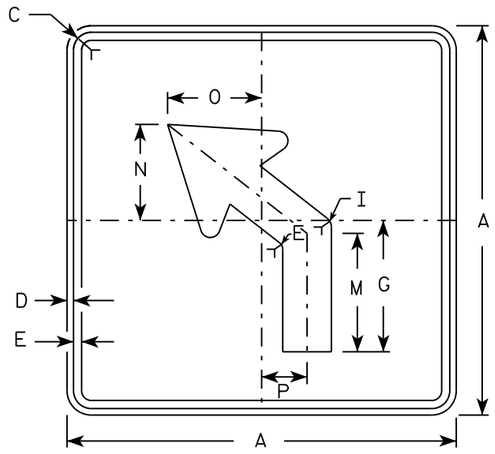
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/9/11 PLATE NO. M4-9R.4

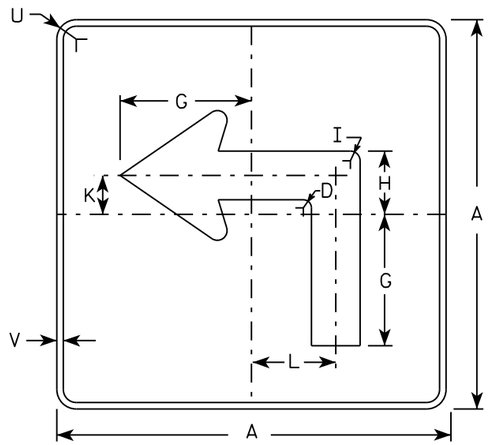
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 123 | E



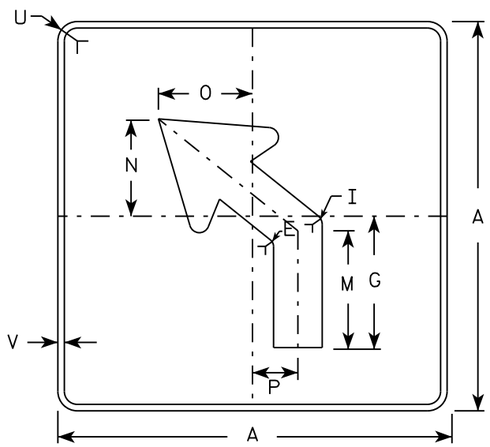
M5-1L
MM5-1L
MO5-1L
MP5-1L



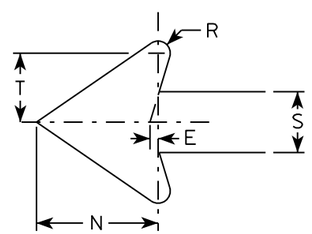
M5-2L
MM5-2L
MO5-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

1. Signs are Type II - Type H reflective except as shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M5-1 and M5-2 Background - White
   Message - Black
   MB5-1 and MB5-2 Background - Blue
   Message - White
   MK5-1 and MK5-2 Background - Green
   Message - White
   MM5-1 and MM5-2 Background - White
   Message - Green
   MN5-1 and MN5-2 Background - Brown
   Message - White
   MO5-1 and MO5-2 Background - Orange - Type F Reflective
   Message - Black
   MP5-1 and MP5-2 Background - White - Type H Reflective
   Message - Blue
   MR5-1 and MR5-2 Background - Brown
   Message - Yellow
5. M5-1R same as M5-1L except arrow points right.
6. M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

STANDARD SIGN
M5-1 & M5-2

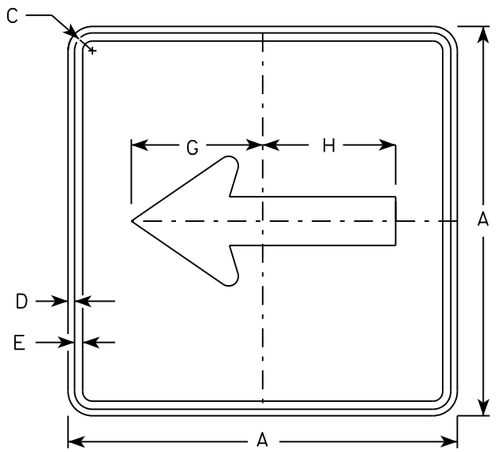
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

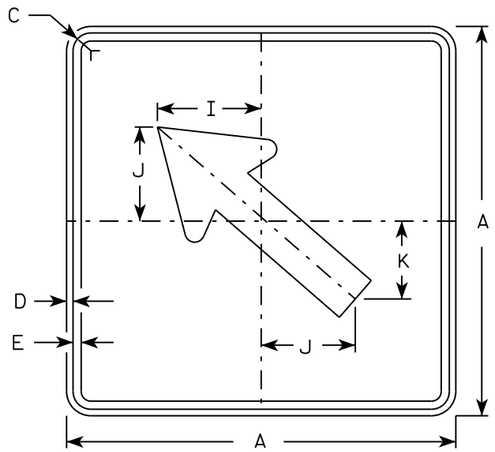
DATE 10/15/15 PLATE NO. M5-1.13

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M51.DGN PLOT DATE : 01-DEC-2015 18:07 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



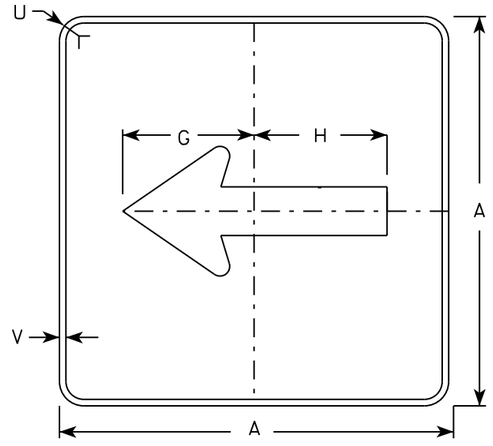
M6-1
MM6-1
MO6-1
MP6-1



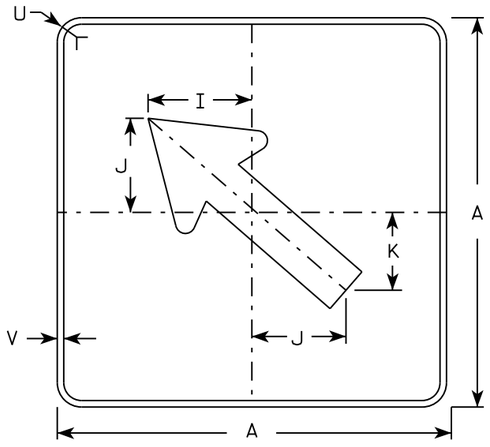
M6-2
MM6-2
MO6-2
MP6-2

NOTES

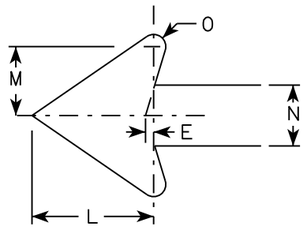
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - White
   Message - Black
   MB6-1 and MB6-2 Background - Blue
   Message - White
   MK6-1 and MK6-2 Background - Green
   Message - White
   MM6-1 and MM6-2 Background - White
   Message - Green
   MN6-1 and MN6-2 Background - Brown
   Message - White
   MO6-1 and MO6-2 Background - Orange - Type F Reflective
   Message - Black
   MP6-1 and MP6-2 Background - White
   Message - Blue
   MR6-1 and MR6-2 Background - Brown
   Message - Yellow



MB6-1
MK6-1
MN6-1
MR6-1



MB6-2
MK6-2
MN6-2
MR6-2



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2						3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2						6.25

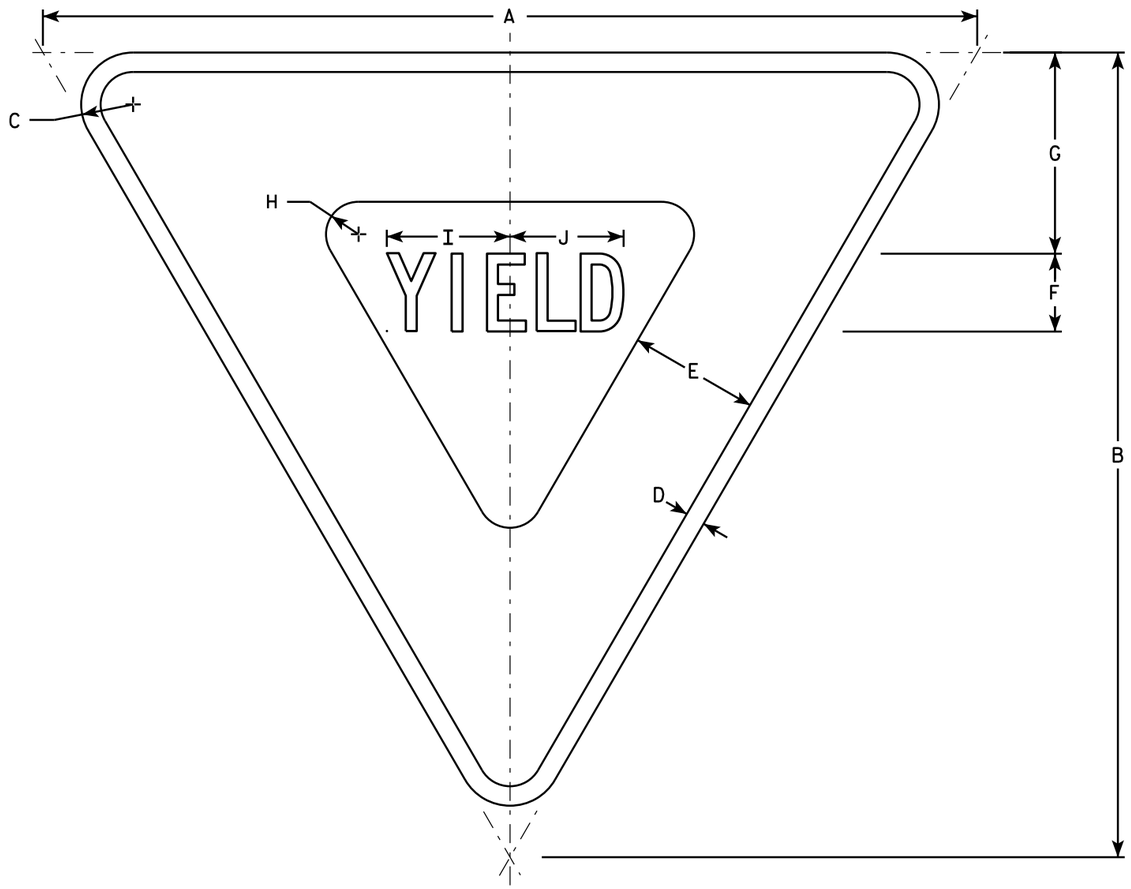
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 125 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



R1-2

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. The border strip and word message are reflectorized red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

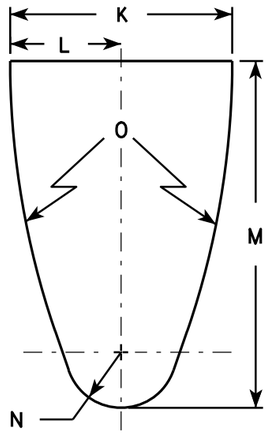
WISCONSIN DEPT OF TRANSPORTATION

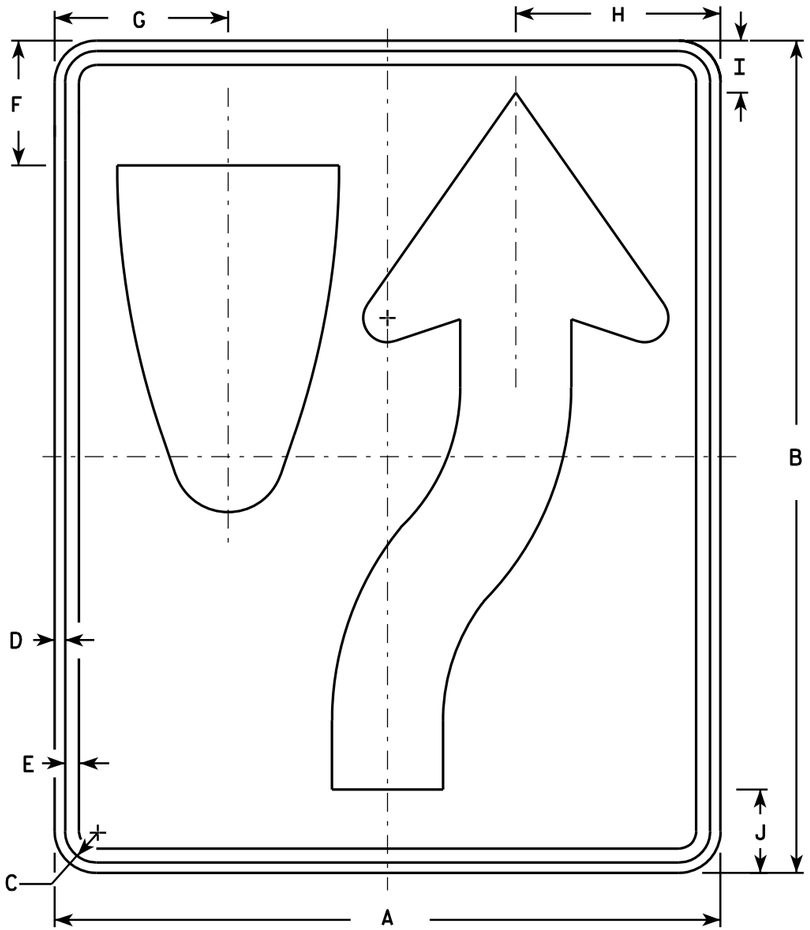
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE P1-2.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42

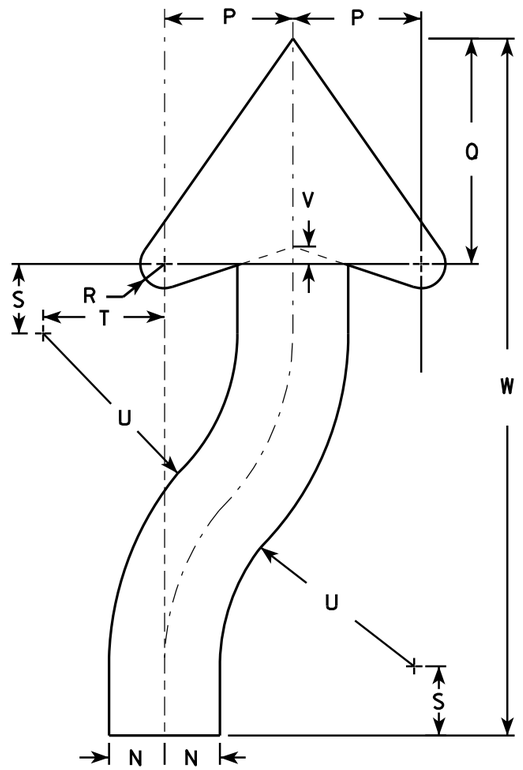




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

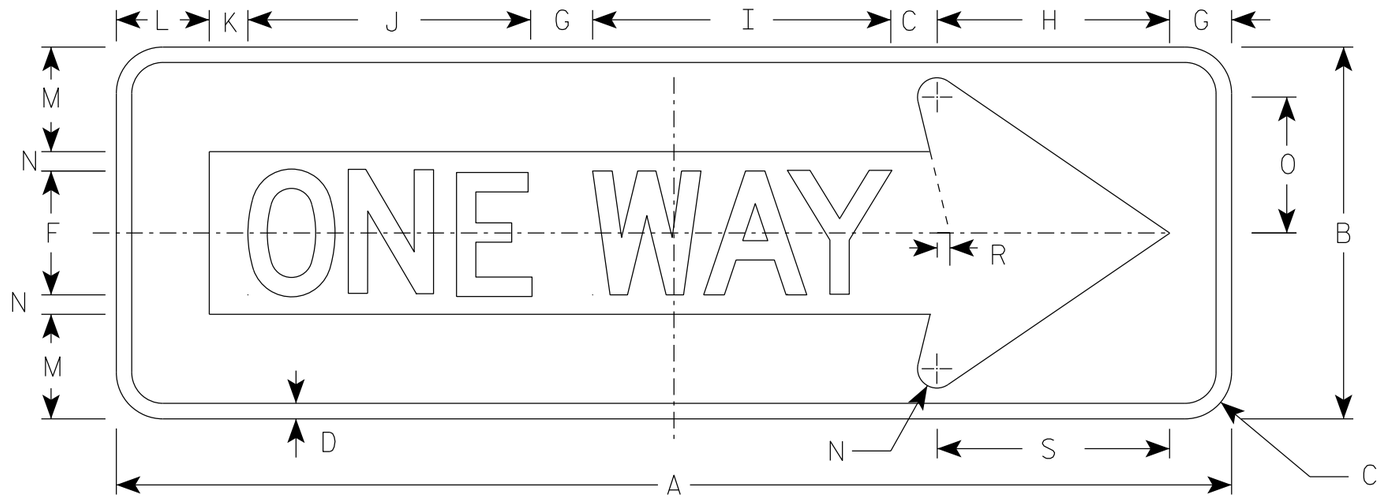
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

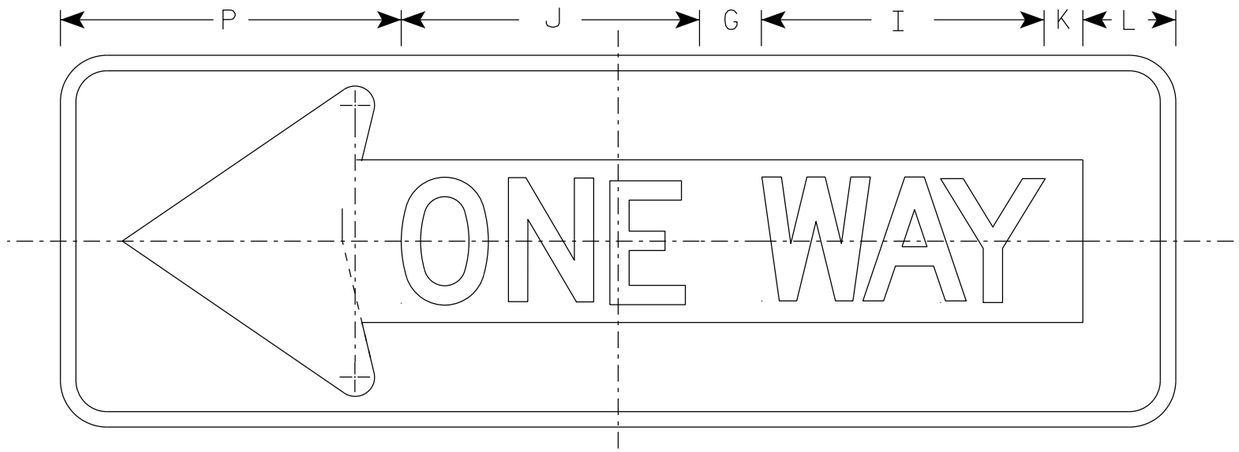
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 127	E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L & R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

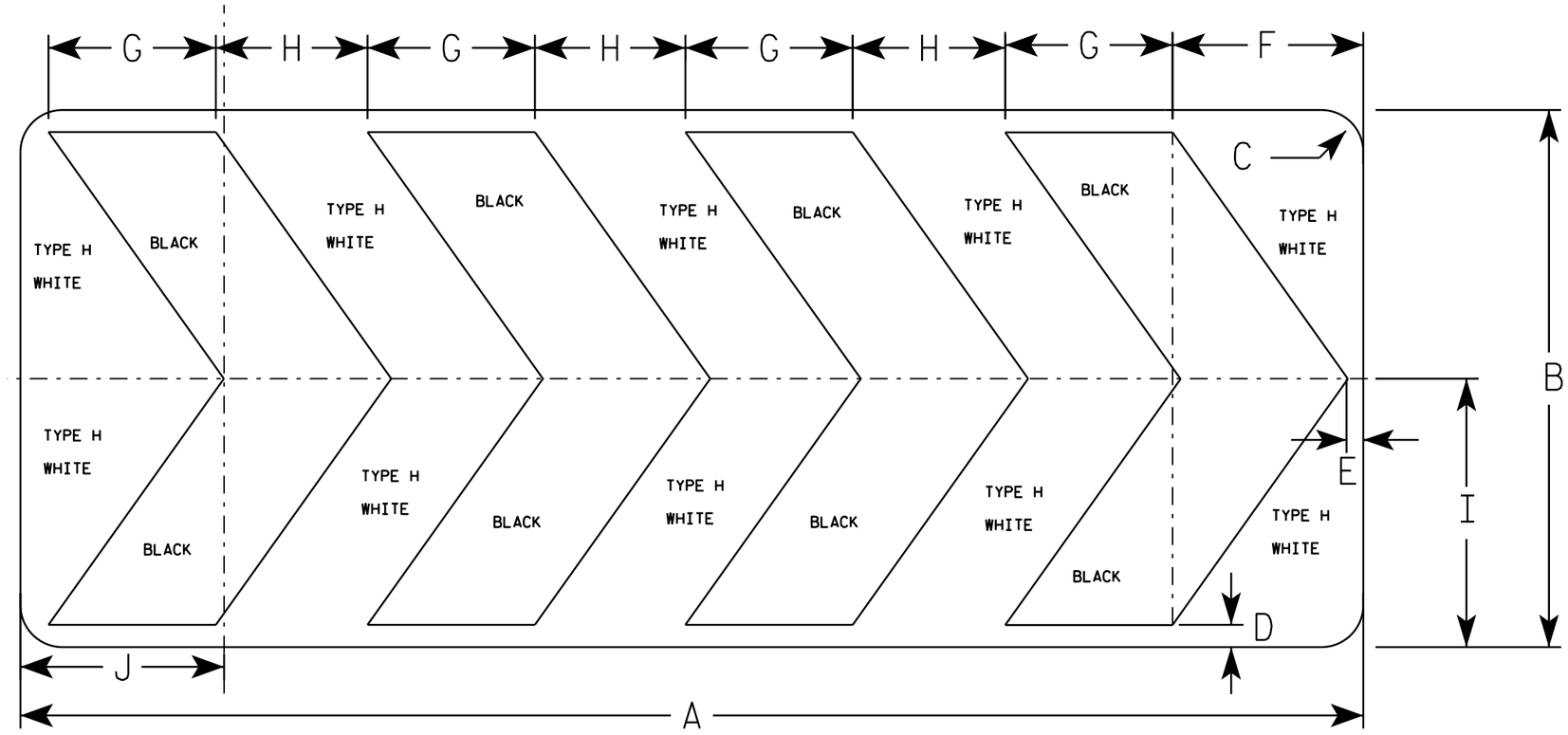
DATE 07/11/18 PLATE NO. R6-1.3

PROJECT NO:

SHEET NO: 128 E

NOTES

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



R6-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
2M	60	24	1 7/8	1	3/4	8 1/2	7 1/2	6 3/4	12	9 1/8																	10.0
3																											
4																											
5																											

STANDARD SIGN
R6-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 8/21/14 PLATE NO. R6-4.3

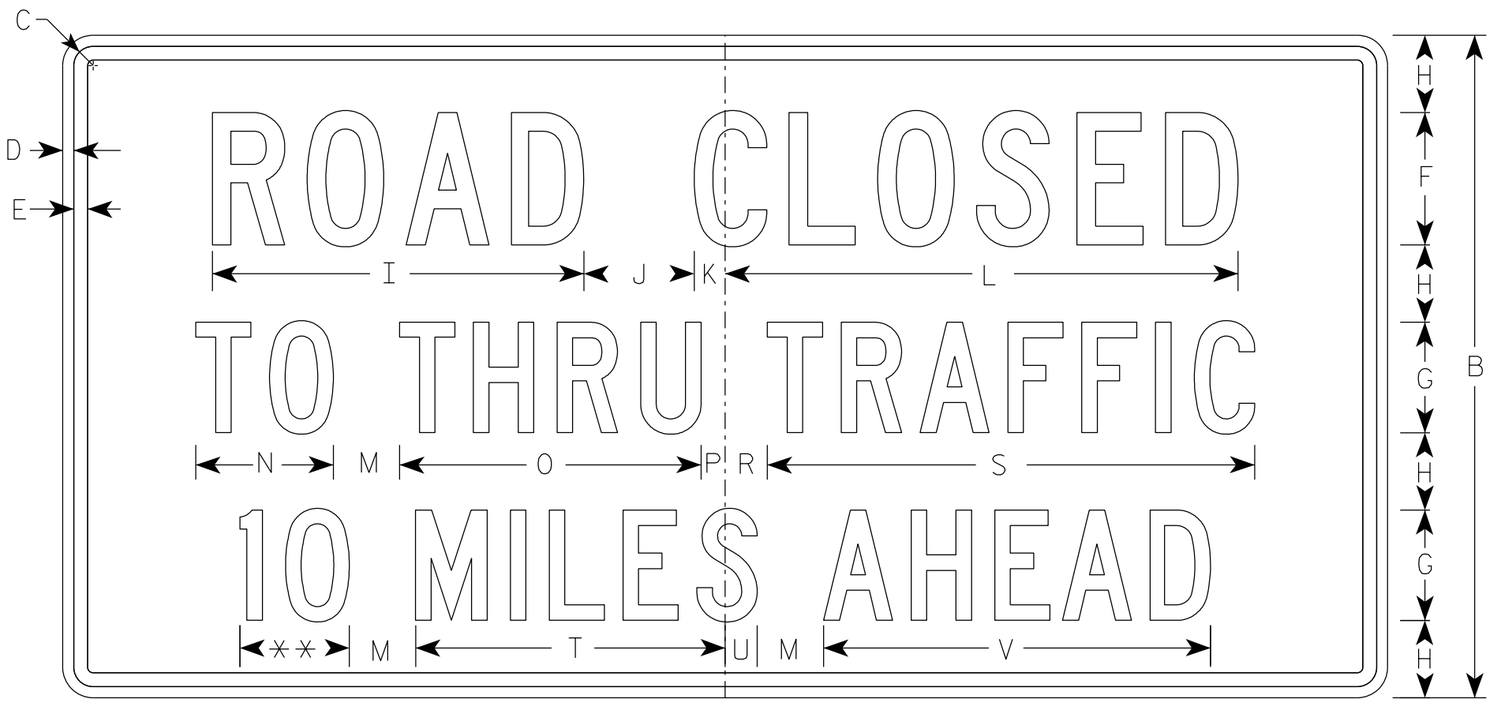
PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R64B.DGN PLOT DATE : 21-AUG-2014 15:01 PLOT BY : mscsja

WISDOT/CADDS SHEET 42

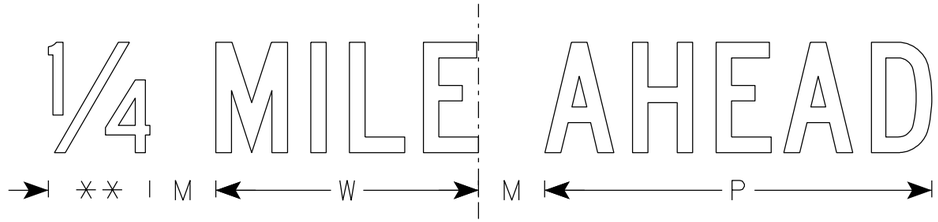
NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



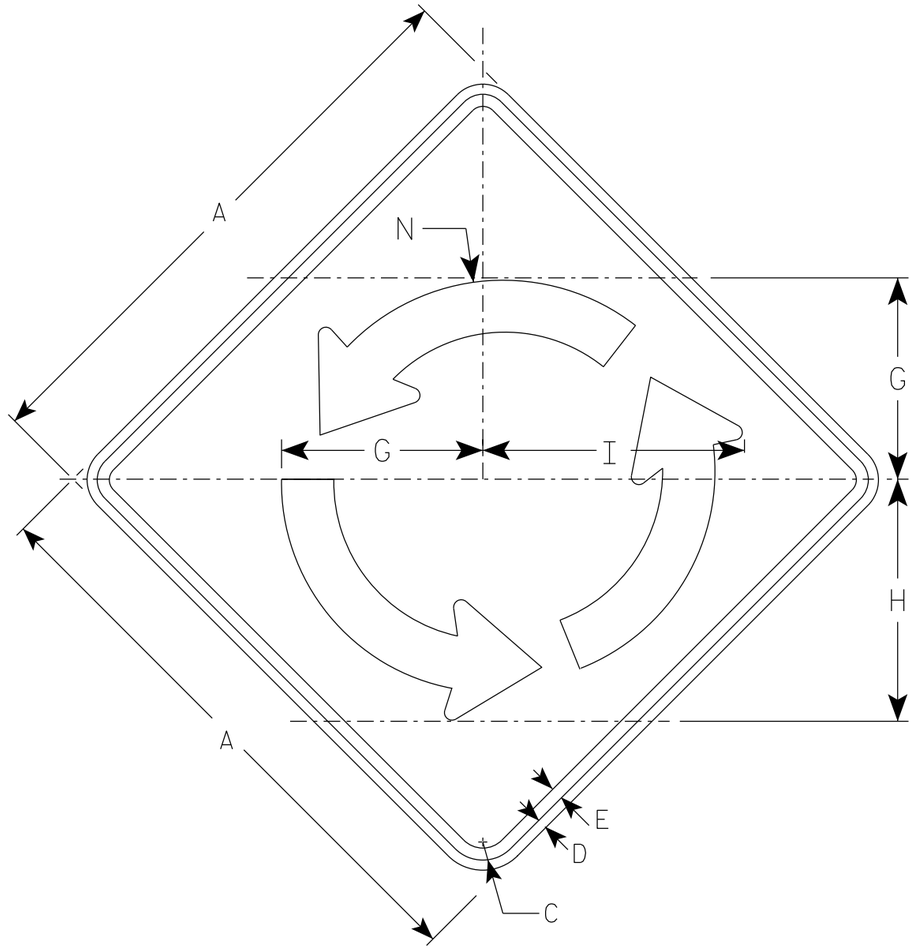
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/4	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 6/14/2021 PLATE NO. R11-3.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 130	E

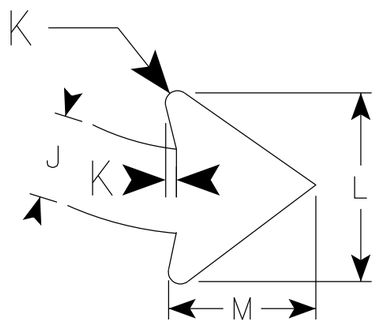


W2-6

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Yellow
   Message - Black

Arrow Detail



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Area sq. ft.
1																									
2S	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
2M	30		1 3/8	1/2	5/8		10 3/8	12 1/2	13 1/2	2 3/4	3/8	6	4 3/4	11 1/8											6.25
3	36		1 5/8	5/8	3/4		12 1/2	15	16 1/4	3 1/4	1/2	7 3/8	5 3/4	13 3/8											9.00
4	48		2 1/4	3/4	1		16 5/8	20	16 1/4	4 3/8	5/8	9 3/4	7 5/8	17 7/8											16.0
5																									

STANDARD SIGN
W2-6

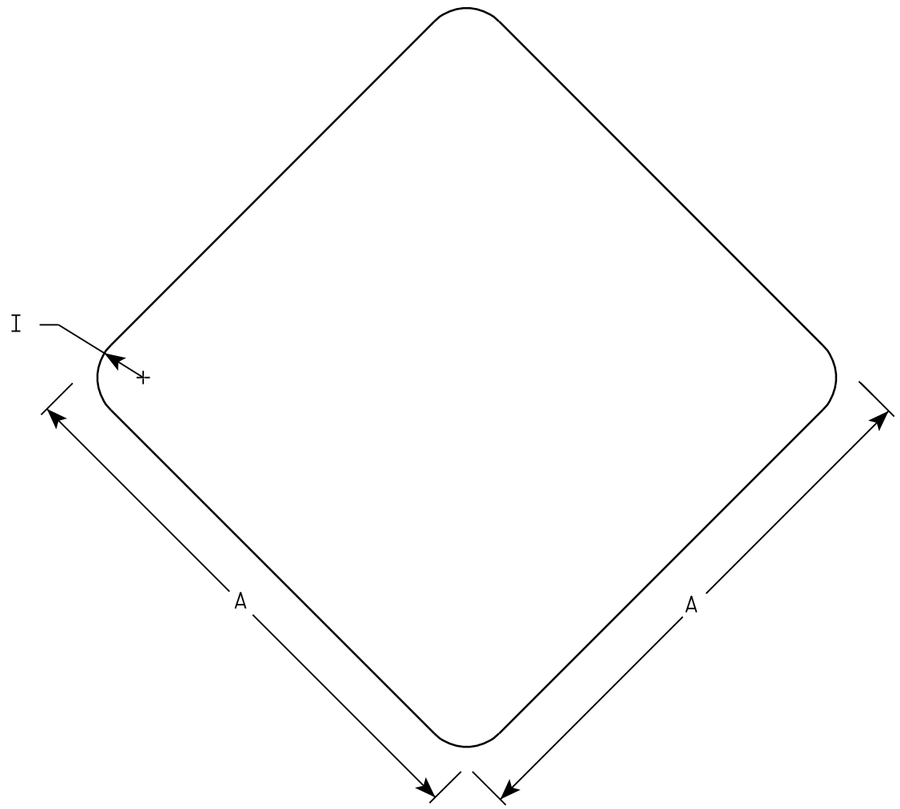
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/21 PLATE NO. W2-6.7

PROJECT NO:

SHEET NO: 131 E



W5-54

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12								1																		1.0
2S	18								1 ½																		2.25
2M	18								1 ½																		2.25
3																											
4																											
5																											

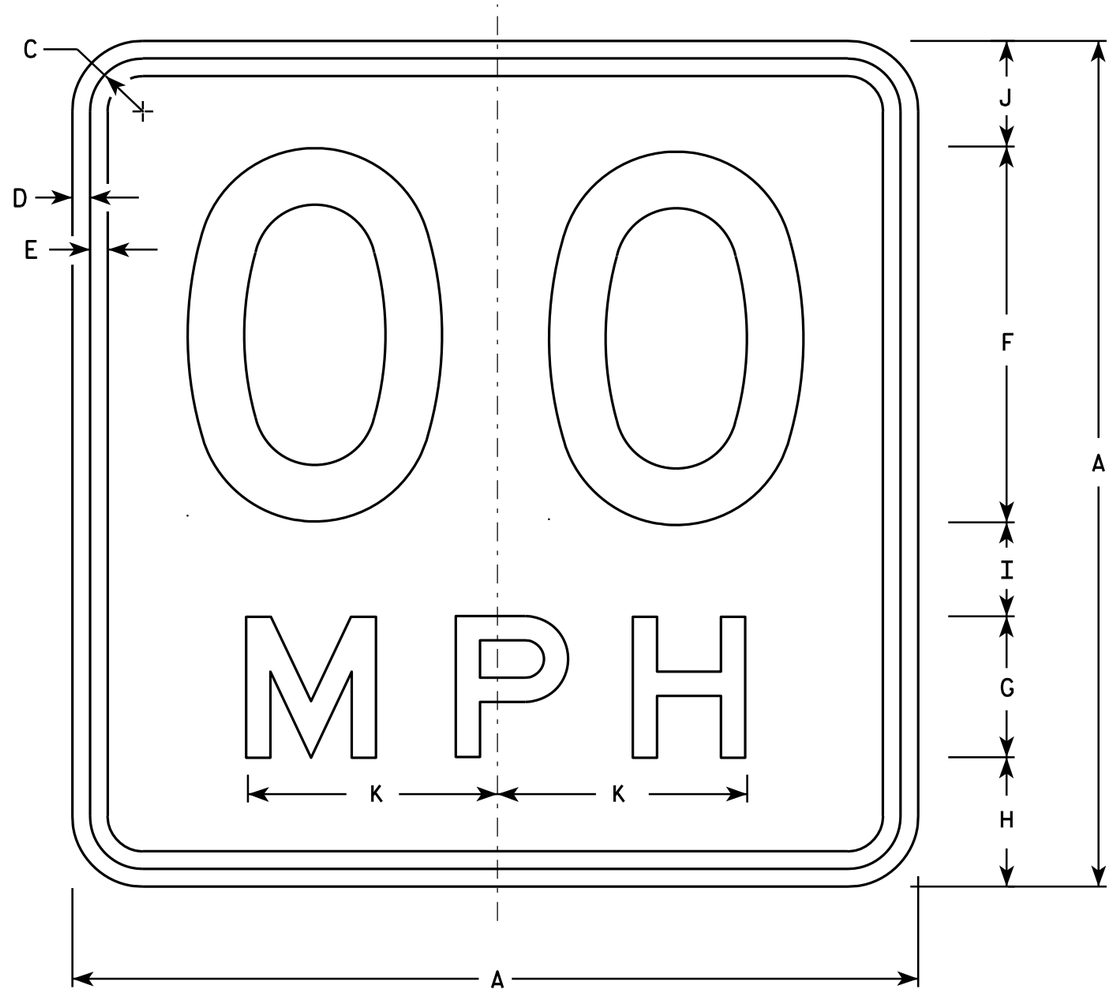
STANDARD SIGN
W5-54

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/3/10 PLATE NO. W5-54.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 132 | E



W13-1

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

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
   Line 2 is Series E

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

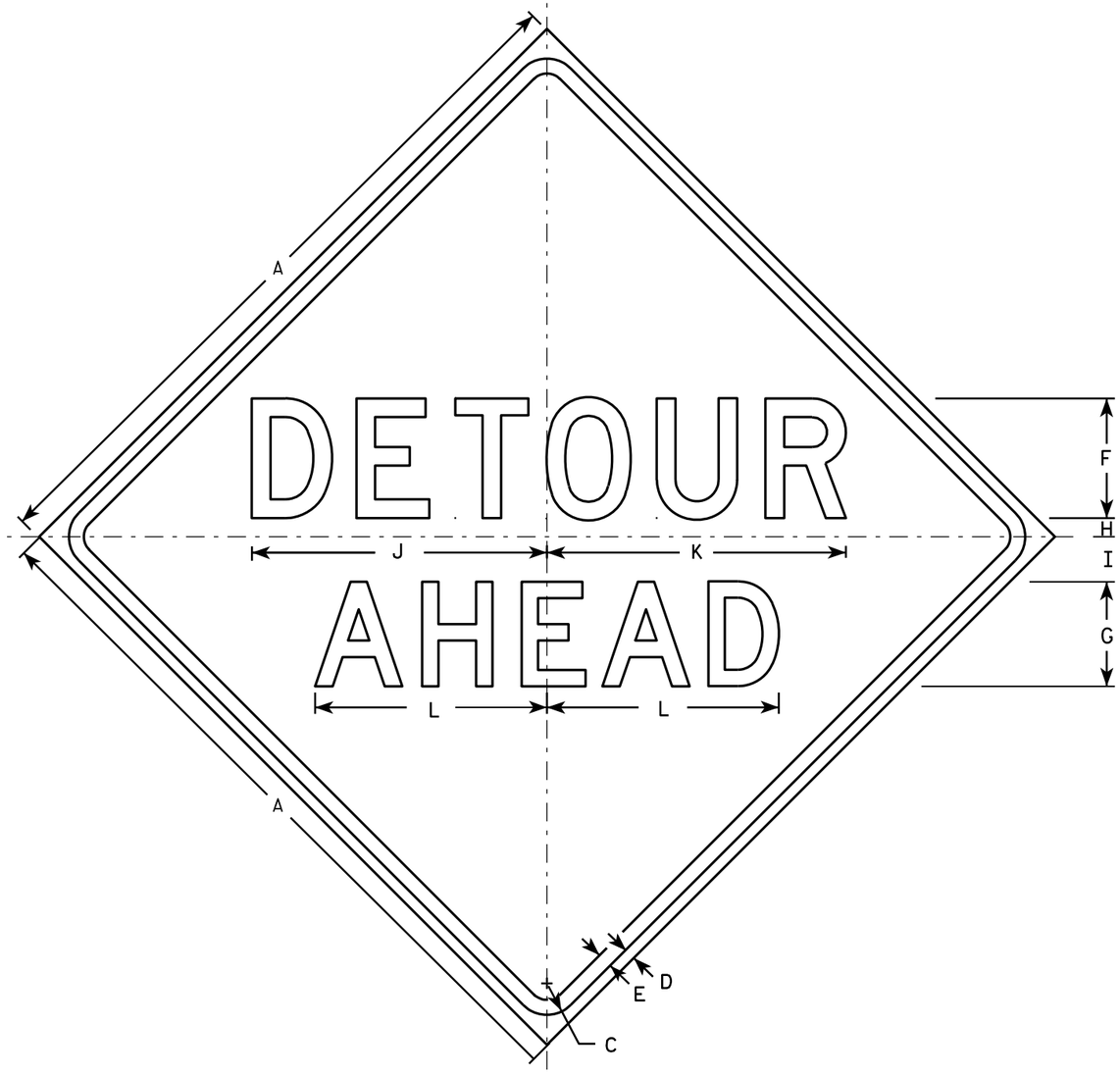
STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

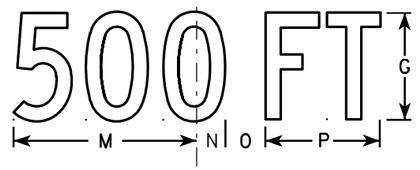
APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

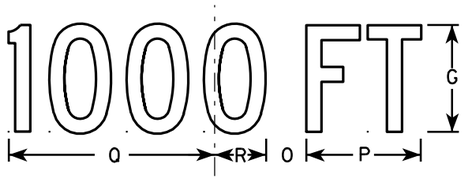
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 133 | E



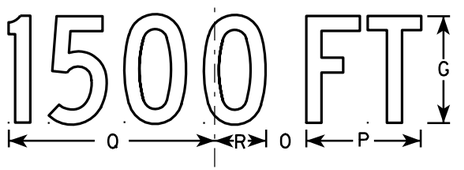
W20-2A



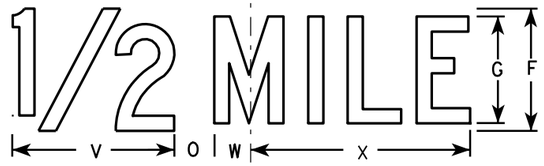
W20-2D



W20-2C



W20-2B



W20-2G

W20-2F

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

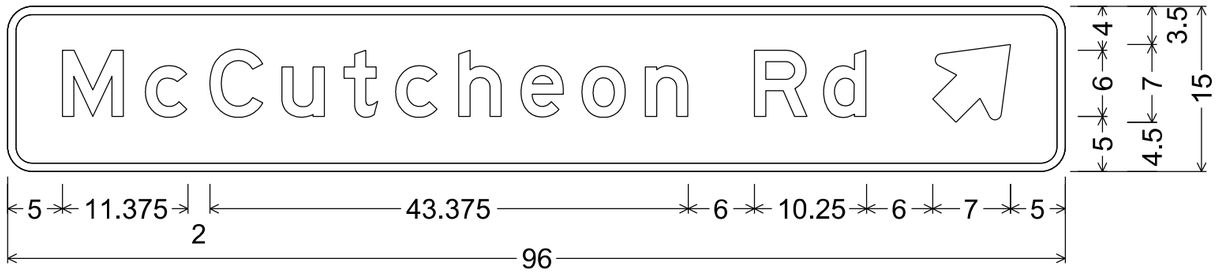
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 134 | E

7

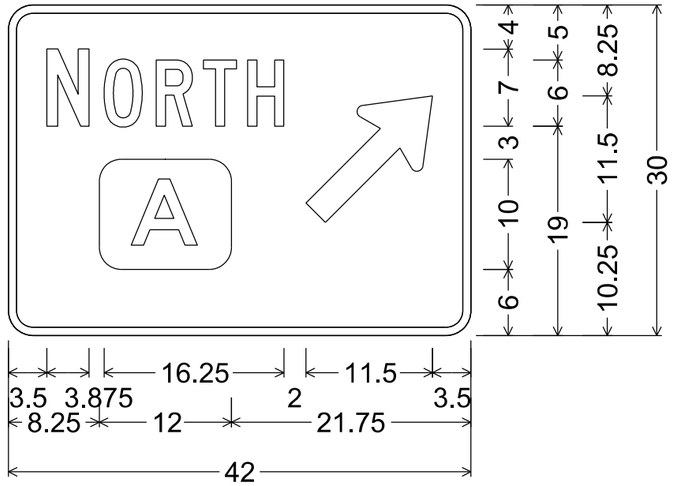
FILE NAME : C:\Users\PROJECTS\tr_stdplate\W202.DGN PLOT DATE : 18-MAR-2011 10:00 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



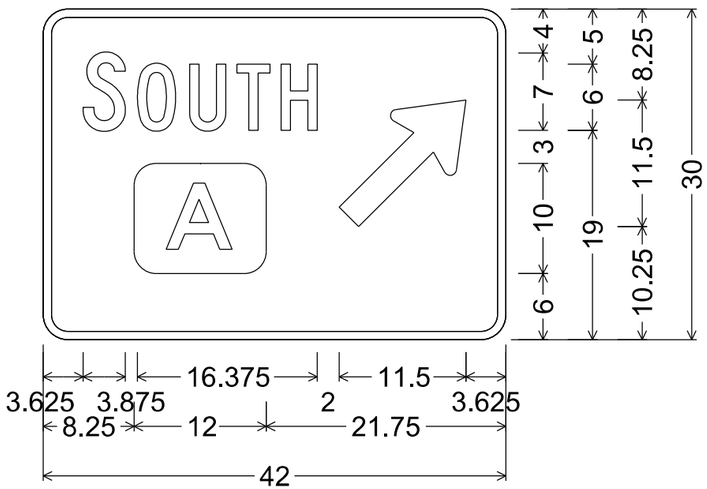
D1-1; 2.250" Radius, 0.750" Border

NOTES

1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E or as noted



D1-1; 2.250" Radius, 0.750" Border
"NORTH", C



D1-1; 2.250" Radius, 0.750" Border
"SOUTH", C

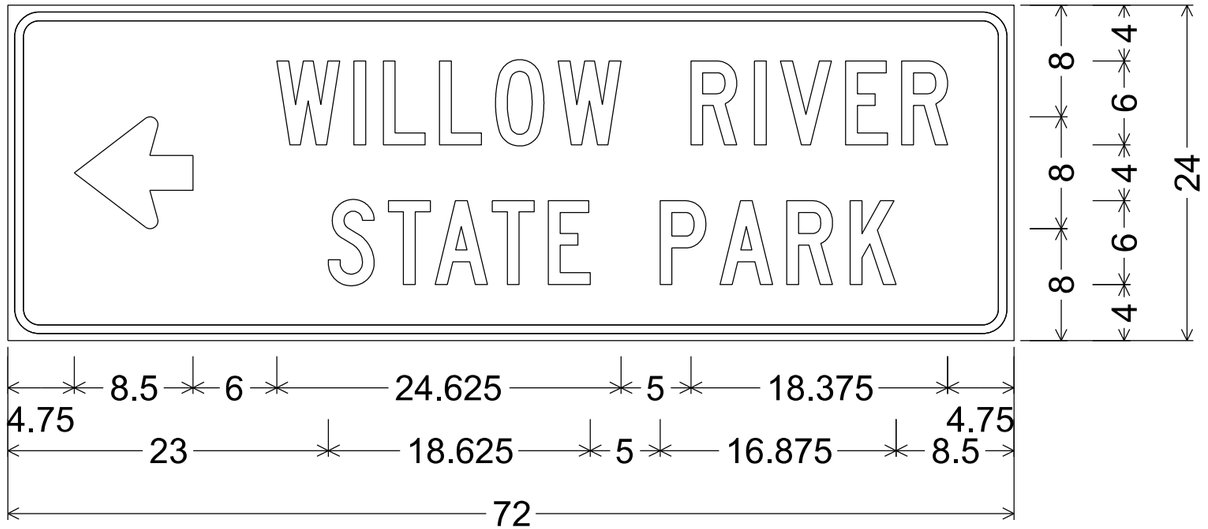
D1-61; 2.250" Radius, 0.750" Border

7

7

NOTES

1. Fixed Message Sign Type II- Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C



2.250" Radius, 0.625" Border, 0.500" Indent

7

7

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST. CROIX	TEMPORARY SIGNING	SHEET NO: 136	E

CIRCLE

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
									NOTE 1	NOTE 2	NOTE 3				1.00 NOTE 1	1.25	1.50 NOTE 4	1.10	0.60 NOTE 5	0.80 NOTE 6	1.00 NOTE 7	NOTE 8
500+00	50000.00	0.00	16.64	15.60	321.48	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
500+25	50025.00	25.00	24.68	15.60	123.28	0.00	0.00	0.00	19	7	206	0	0	0	19	258	0	0	0	0	0	-246
500+50	50050.00	25.00	11.62	15.60	164.63	0.00	0.00	0.00	17	7	133	0	0	0	36	424	0	0	0	0	0	-402
500+75	50075.00	25.00	19.39	15.60	142.58	0.00	0.00	0.00	14	7	142	0	0	0	50	601	0	0	0	0	0	-573
501+00	50100.00	25.00	57.95	15.60	115.24	0.00	0.00	0.00	36	7	119	0	0	0	86	750	0	0	0	0	0	-693
501+25	50125.00	25.00	76.43	15.60	109.29	0.00	0.00	0.00	62	7	104	0	0	0	148	880	0	0	0	0	0	-768
501+50	50150.00	25.00	27.61	15.60	168.81	0.00	0.00	0.00	48	7	129	0	0	0	196	1,041	0	0	0	0	0	-889
501+75	50175.00	25.00	20.30	15.60	155.15	0.00	0.00	0.00	22	7	150	0	0	0	218	1,229	0	0	0	0	0	-1,061
502+00	50200.00	25.00	47.82	15.60	107.88	0.00	0.00	0.00	32	7	122	0	0	0	250	1,381	0	0	0	0	0	-1,189
502+25	50225.00	25.00	37.85	15.60	131.30	0.00	0.00	0.00	40	7	111	0	0	0	290	1,520	0	0	0	0	0	-1,295
502+50	50250.00	25.00	40.29	15.60	221.24	0.00	0.00	0.00	36	7	163	0	0	0	326	1,724	0	0	0	0	0	-1,470
502+75	50275.00	25.00	119.15	15.60	97.20	0.00	0.00	0.00	74	7	147	0	0	0	400	1,908	0	0	0	0	0	-1,587
503+00	50300.00	25.00	96.65	15.60	97.89	0.00	0.00	0.00	100	7	90	0	0	0	500	2,020	0	0	0	0	0	-1,607
503+25	50325.00	25.00	27.75	15.60	190.43	0.00	0.00	0.00	58	7	133	0	0	0	558	2,186	0	0	0	0	0	-1,722
503+45.575	50345.57	20.57	16.64	15.60	244.20	0.00	0.00	0.00	17	6	166	0	0	0	575	2,394	0	0	0	0	0	-1,919

EAST LEG

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL	EXPANDED MARSH BACKFILL	EXPANDED ROCK	EXPANDED EBS BACKFILL	REDUCED MARSH IN FILL	REDUCED EBS IN FILL	MASS ORDINATE
									NOTE 1	NOTE 2	NOTE 3				1.00 NOTE 1	1.25	1.50 NOTE 4	1.10	0.60 NOTE 5	0.80 NOTE 6	1.00 NOTE 7	NOTE 8
86+50	8650.00	0.00	21.44	32.20	239.95	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86+75	8675.00	25.00	16.82	32.20	105.39	0.00	0.00	0.00	18	15	160	0	0	0	18	200	0	0	0	0	0	-197
87+00	8700.00	25.00	22.84	32.20	54.97	0.00	0.00	0.00	18	15	74	0	0	0	36	293	0	0	0	0	0	-286
87+25	8725.00	25.00	24.58	32.20	63.00	0.00	0.00	0.00	22	15	55	0	0	0	58	361	0	0	0	0	0	-348
87+50	8750.00	25.00	28.06	32.20	81.94	0.00	0.00	0.00	24	15	67	0	0	0	82	445	0	0	0	0	0	-423
87+75	8775.00	25.00	18.17	32.20	84.30	0.00	0.00	0.00	21	15	77	0	0	0	103	541	0	0	0	0	0	-513
88+00	8800.00	25.00	16.17	32.20	104.71	0.00	0.00	0.00	16	15	88	0	0	0	119	651	0	0	0	0	0	-622
88+25	8825.00	25.00	21.96	32.20	125.89	0.00	0.00	0.00	18	15	107	0	0	0	137	785	0	0	0	0	0	-752
88+50	8850.00	25.00	19.99	32.20	139.32	0.00	0.00	0.00	19	15	123	0	0	0	156	939	0	0	0	0	0	-902
88+75	8875.00	25.00	19.11	32.20	125.91	0.00	0.00	0.00	18	15	123	0	0	0	174	1,093	0	0	0	0	0	-1,053
89+00	8900.00	25.00	17.86	32.20	114.56	0.00	0.00	0.00	17	15	111	0	0	0	191	1,231	0	0	0	0	0	-1,189
89+25	8925.00	25.00	25.89	32.20	109.65	0.00	0.00	0.00	20	15	104	0	0	0	211	1,361	0	0	0	0	0	-1,314
89+50	8950.00	25.00	30.36	32.20	108.89	0.00	0.00	0.00	26	15	101	0	0	0	237	1,488	0	0	0	0	0	-1,429
89+75	8975.00	25.00	36.28	32.20	103.34	0.00	0.00	0.00	31	15	98	0	0	0	268	1,610	0	0	0	0	0	-1,536
90+00	9000.00	25.00	43.57	32.20	93.43	0.00	0.00	0.00	37	15	91	0	0	0	305	1,724	0	0	0	0	0	-1,627
90+25	9025.00	25.00	64.84	32.20	76.98	0.00	0.00	0.00	50	15	79	0	0	0	355	1,823	0	0	0	0	0	-1,691
90+50	9050.00	25.00	93.51	32.20	47.86	0.00	0.00	0.00	73	15	58	0	0	0	428	1,895	0	0	0	0	0	-1,706
90+75	9075.00	25.00	101.83	32.20	9.63	0.00	0.00	0.00	90	15	27	0	0	0	518	1,929	0	0	0	0	0	-1,664
91+00	9100.00	25.00	96.79	32.20	8.68	0.00	0.00	0.00	92	15	8	0	0	0	610	1,939	0	0	0	0	0	-1,597
91+25	9125.00	25.00	88.03	32.20	6.14	0.00	0.00	0.00	86	15	7	0	0	0	696	1,948	0	0	0	0	0	-1,535
91+50	9150.00	25.00	78.19	32.20	5.60	0.00	0.00	0.00	77	15	5	0	0	0	773	1,954	0	0	0	0	0	-1,479
91+75	9175.00	25.00	69.71	32.20	4.95	0.00	0.00	0.00	68	15	5	0	0	0	841	1,960	0	0	0	0	0	-1,432
92+00	9200.00	25.00	60.59	32.20	2.70	0.00	0.00	0.00	60	15	4	0	0	0	901	1,965	0	0	0	0	0	-1,392
92+25	9225.00	25.00	45.23	32.20	4.78	0.00	0.00	0.00	49	15	3	0	0	0	950	1,969	0	0	0	0	0	-1,362
92+50	9250.00	25.00	45.67	32.20	3.56	0.00	0.00	0.00	42	15	4	0	0	0	992	1,974	0	0	0	0	0	-1,340
92+63.391	9263.39	13.39	46.39	32.20	2.72	0.00	0.00	0.00	23	8	2	0	0	0	1,015	1,976	0	0	0	0	0	-1,327

WEST LEG

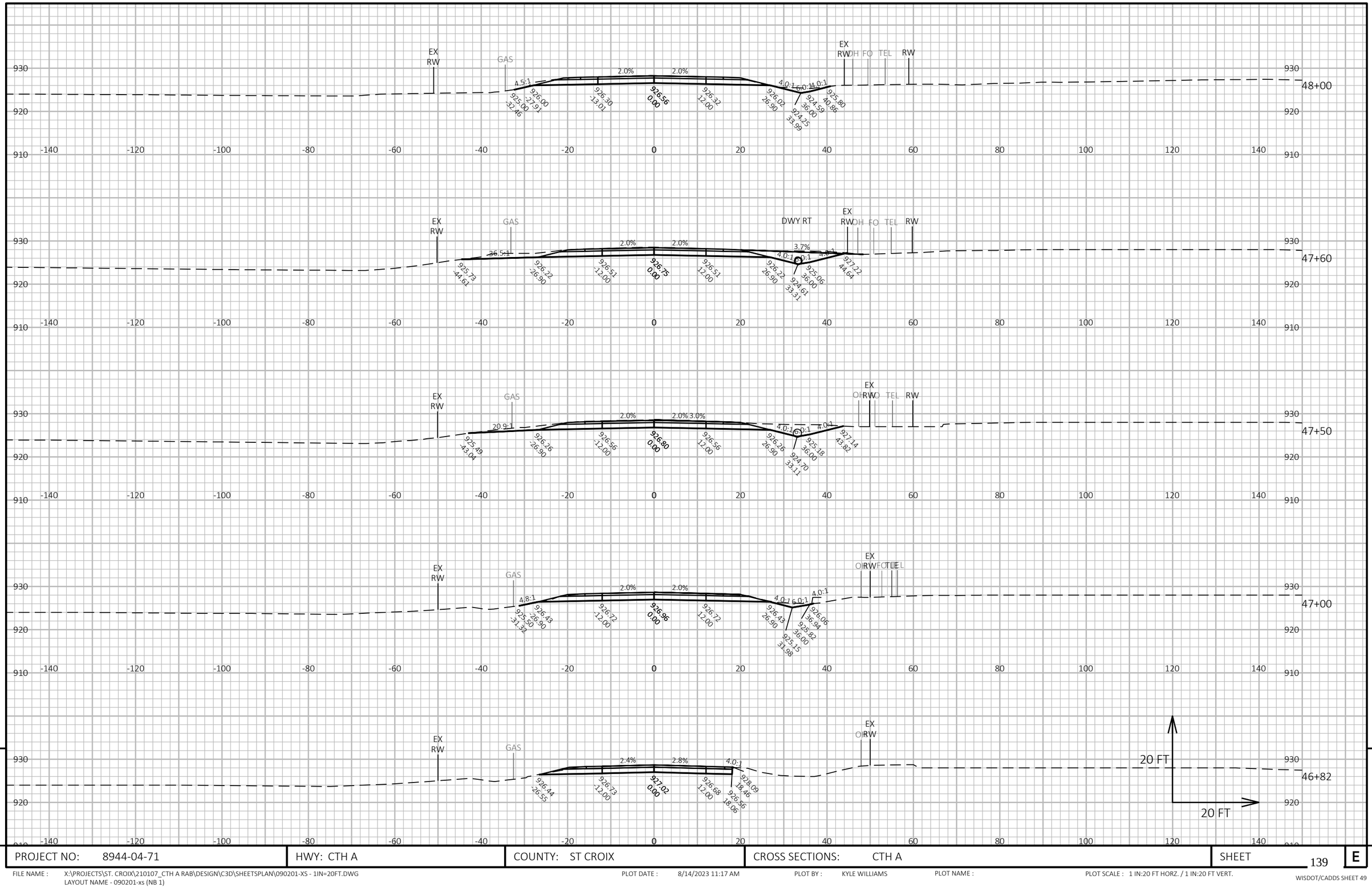
STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL 1.25	EXPANDED MARSH BACKFILL 1.50	EXPANDED ROCK 1.10	EXPANDED EBS BACKFILL 0.60	REDUCED MARSH IN FILL 0.80	REDUCED EBS IN FILL 1.00	MASS ORDINATE
				NOTE 1	NOTE 2	NOTE 3									NOTE 1		NOTE 4		NOTE 5	NOTE 6	NOTE 7	NOTE 8
78+80.314	7880.31	0.00	46.05	30.14	0.17	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79+00	7900.00	19.69	50.73	30.14	3.37	0.00	0.00	0.00	35	11	1	0	0	0	35	1	0	0	0	0	0	23
79+50	7950.00	50.00	55.80	30.14	9.00	0.00	0.00	0.00	99	28	11	0	0	0	134	15	0	0	0	0	0	80
80+00	8000.00	50.00	64.16	30.14	23.49	0.00	0.00	0.00	111	28	30	0	0	0	245	53	0	0	0	0	0	126
80+50	8050.00	50.00	83.93	30.14	2.77	0.00	0.00	0.00	137	28	24	0	0	0	382	83	0	0	0	0	0	205
81+00	8100.00	50.00	171.99	30.14	0.00	0.00	0.00	0.00	237	28	3	0	0	0	619	86	0	0	0	0	0	410
81+50	8150.00	50.00	156.27	30.14	0.00	0.00	0.00	0.00	304	28	0	0	0	0	923	86	0	0	0	0	0	686
82+00	8200.00	50.00	151.87	30.14	0.00	0.00	0.00	0.00	285	28	0	0	0	0	1,208	86	0	0	0	0	0	943
82+50	8250.00	50.00	132.56	30.14	0.12	0.00	0.00	0.00	263	28	0	0	0	0	1,471	86	0	0	0	0	0	1,178
83+00	8300.00	50.00	118.58	30.14	1.71	0.00	0.00	0.00	233	28	2	0	0	0	1,704	89	0	0	0	0	0	1,381
83+50	8350.00	50.00	85.69	30.14	12.28	0.00	0.00	0.00	189	28	13	0	0	0	1,893	105	0	0	0	0	0	1,526
84+00	8400.00	50.00	53.45	30.14	36.21	0.00	0.00	0.00	129	28	45	0	0	0	2,022	161	0	0	0	0	0	1,571
84+50	8450.00	50.00	17.22	30.14	77.98	0.00	0.00	0.00	65	28	106	0	0	0	2,087	294	0	0	0	0	0	1,475
84+75	8475.00	25.00	13.54	30.14	103.15	0.00	0.00	0.00	14	14	84	0	0	0	2,101	399	0	0	0	0	0	1,370

NORTH LEG

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL 1.25	EXPANDED MARSH BACKFILL 1.50	EXPANDED ROCK 1.10	EXPANDED EBS BACKFILL 0.60	REDUCED MARSH IN FILL 0.80	REDUCED EBS IN FILL 1.00	MASS ORDINATE
				NOTE 1	NOTE 2	NOTE 3									NOTE 1		NOTE 4		NOTE 5	NOTE 6	NOTE 7	NOTE 8
55+00	5500.00	0.00	142.94	43.10	43.17	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
55+50	5550.00	50.00	95.71	43.10	13.05	0.00	0.00	0.00	221	40	52	0	0	0	221	65	0	0	0	0	0	116
56+00	5600.00	50.00	106.47	43.10	7.01	0.00	0.00	0.00	187	40	19	0	0	0	408	89	0	0	0	0	0	239
56+50	5650.00	50.00	107.24	43.10	5.28	0.00	0.00	0.00	198	40	11	0	0	0	606	103	0	0	0	0	0	384
57+00	5700.00	50.00	97.71	43.10	4.15	0.00	0.00	0.00	190	40	9	0	0	0	796	114	0	0	0	0	0	523
57+50	5750.00	50.00	97.15	43.10	7.44	0.00	0.00	0.00	180	40	11	0	0	0	976	128	0	0	0	0	0	649
58+00	5800.00	50.00	85.98	43.10	7.23	0.00	0.00	0.00	170	40	14	0	0	0	1,146	145	0	0	0	0	0	762
58+50	5850.00	50.00	80.46	43.10	7.55	0.00	0.00	0.00	154	40	14	0	0	0	1,300	163	0	0	0	0	0	858
59+00	5900.00	50.00	115.67	43.10	0.00	0.00	0.00	0.00	182	40	7	0	0	0	1,482	171	0	0	0	0	0	992
59+50	5950.00	50.00	87.34	43.10	2.58	0.00	0.00	0.00	188	40	2	0	0	0	1,670	174	0	0	0	0	0	1,137
60+00	6000.00	50.00	76.95	43.10	3.13	0.00	0.00	0.00	152	40	5	0	0	0	1,822	180	0	0	0	0	0	1,243
60+50	6050.00	50.00	74.36	43.10	4.50	0.00	0.00	0.00	140	40	7	0	0	0	1,962	189	0	0	0	0	0	1,334
61+00	6100.00	50.00	75.36	43.10	5.43	0.00	0.00	0.00	139	40	9	0	0	0	2,101	200	0	0	0	0	0	1,422
61+09.501	6109.50	9.50	77.26	43.10	1.14	0.00	0.00	0.00	27	8	1	0	0	0	2,128	201	0	0	0	0	0	1,440

SOUTH LEG

STATION	REAL STATION	DISTANCE	AREA (SF)						INCREMENTAL VOL (CY) (UNADJUSTED)						CUMULATIVE VOL (CY)							
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	MARSH EXC	ROCK EXC	EBS	CUT	EXPANDED FILL 1.25	EXPANDED MARSH BACKFILL 1.50	EXPANDED ROCK 1.10	EXPANDED EBS BACKFILL 0.60	REDUCED MARSH IN FILL 0.80	REDUCED EBS IN FILL 1.00	MASS ORDINATE
				NOTE 1	NOTE 2	NOTE 3									NOTE 1		NOTE 4		NOTE 5	NOTE 6	NOTE 7	NOTE 8
46+81.51	4681.51	0.00	66.90	42.29	0.18	0.00	0.00	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47+00	4700.00	18.49	81.66	42.29	0.20	0.00	0.00	0.00	51	14	0	0	0	0	51	0	0	0	0	0	0	37
47+50	4750.00	50.00	125.51	42.29	0.00	0.00	0.00	0.00	192	39	0	0	0	0	243	0	0	0	0	0	0	189
48+00	4800.00	50.00	88.40	42.29	0.22	0.00	0.00	0.00	198	39	0	0	0	0	441	0	0	0	0	0	0	348
48+50	4850.00	50.00	79.81	42.29	7.17	0.00	0.00	0.00	156	39	7	0	0	0	597	9	0	0	0	0	0	456
49+00	4900.00	50.00	81.88	42.29	8.08	0.00	0.00	0.00	150	39	14	0	0	0	747	26	0	0	0	0	0	550
49+50	4950.00	50.00	83.70	42.29	9.04	0.00	0.00	0.00	153	39	16	0	0	0	900	46	0	0	0	0	0	643
50+00	5000.00	50.00	83.07	42.29	9.14	0.00	0.00	0.00	154	39	17	0	0	0	1,054	68	0	0	0	0	0	737
50+50	5050.00	50.00	84.37	42.29	9.75	0.00	0.00	0.00	155	39	17	0	0	0	1,209	89	0	0	0	0	0	832
51+00	5100.00	50.00	80.56	42.29	13.08	0.00	0.00	0.00	153	39	21	0	0	0	1,362	115	0	0	0	0	0	919
51+50	5150.00	50.00	77.58	42.29	13.99	0.00	0.00	0.00	146	39	25	0	0	0	1,508	146	0	0	0	0	0	995
52+00	5200.00	50.00	76.52	42.29	46.26	0.00	0.00	0.00	143	39	56	0	0	0	1,651	216	0	0	0	0	0	1,029
52+50	5250.00	50.00	78.94	42.29	98.90	0.00	0.00	0.00	144	39	134	0	0	0	1,795	384	0	0	0	0	0	966
53+00	5300.00	50.00	99.51	42.29	130.90	0.00	0.00	0.00	165	39	213	0	0	0	1,960	650	0	0	0	0	0	826
53+25	5325.00	25.00	89.53	42.29	182.15	0.00	0.00	0.00	88	20	145	0	0	0	2,048	831	0	0	0	0	0	713



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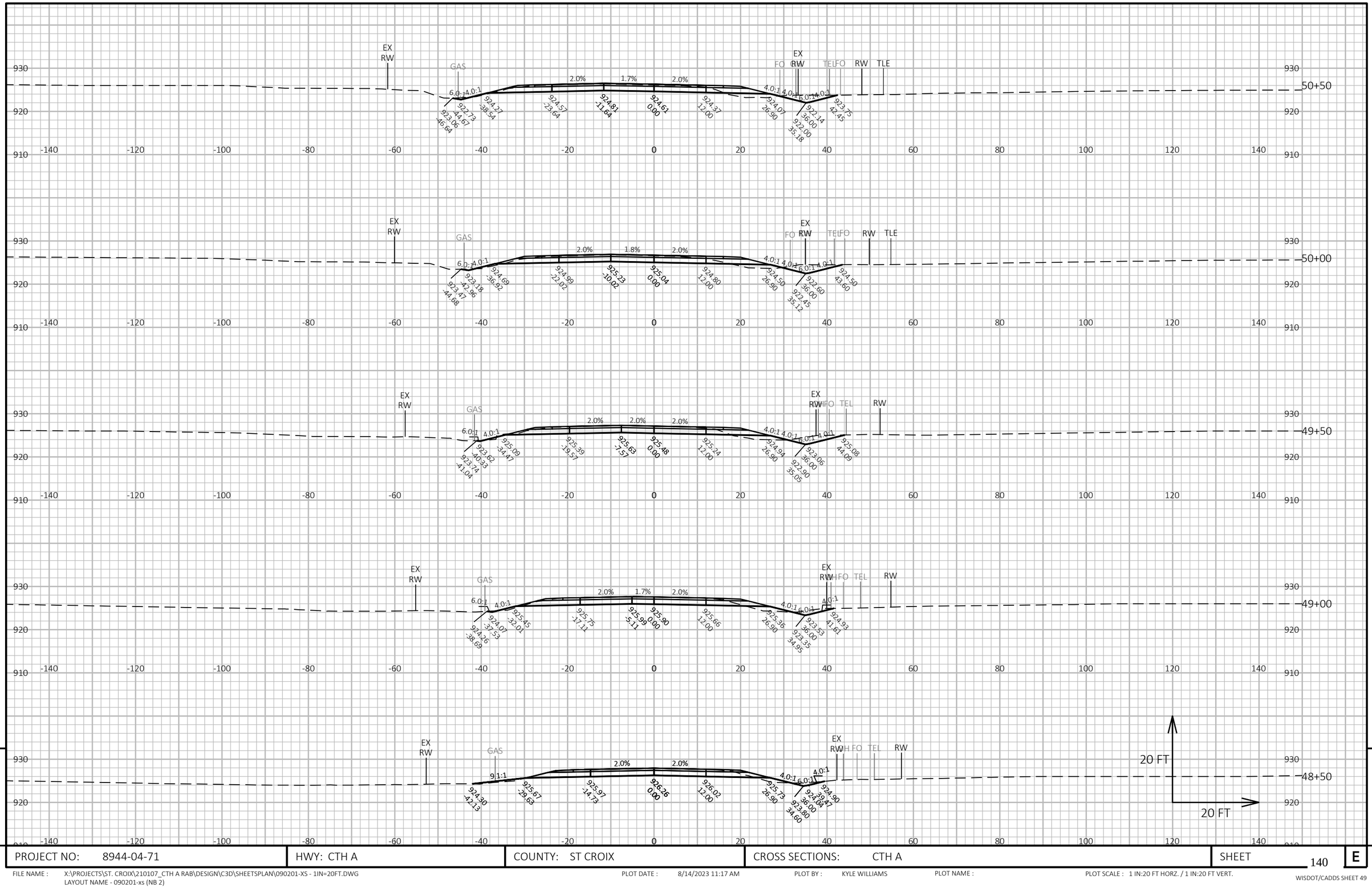
9

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CTH A	SHEET 139	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (NB 1)

PLOT DATE : 8/14/2023 11:17 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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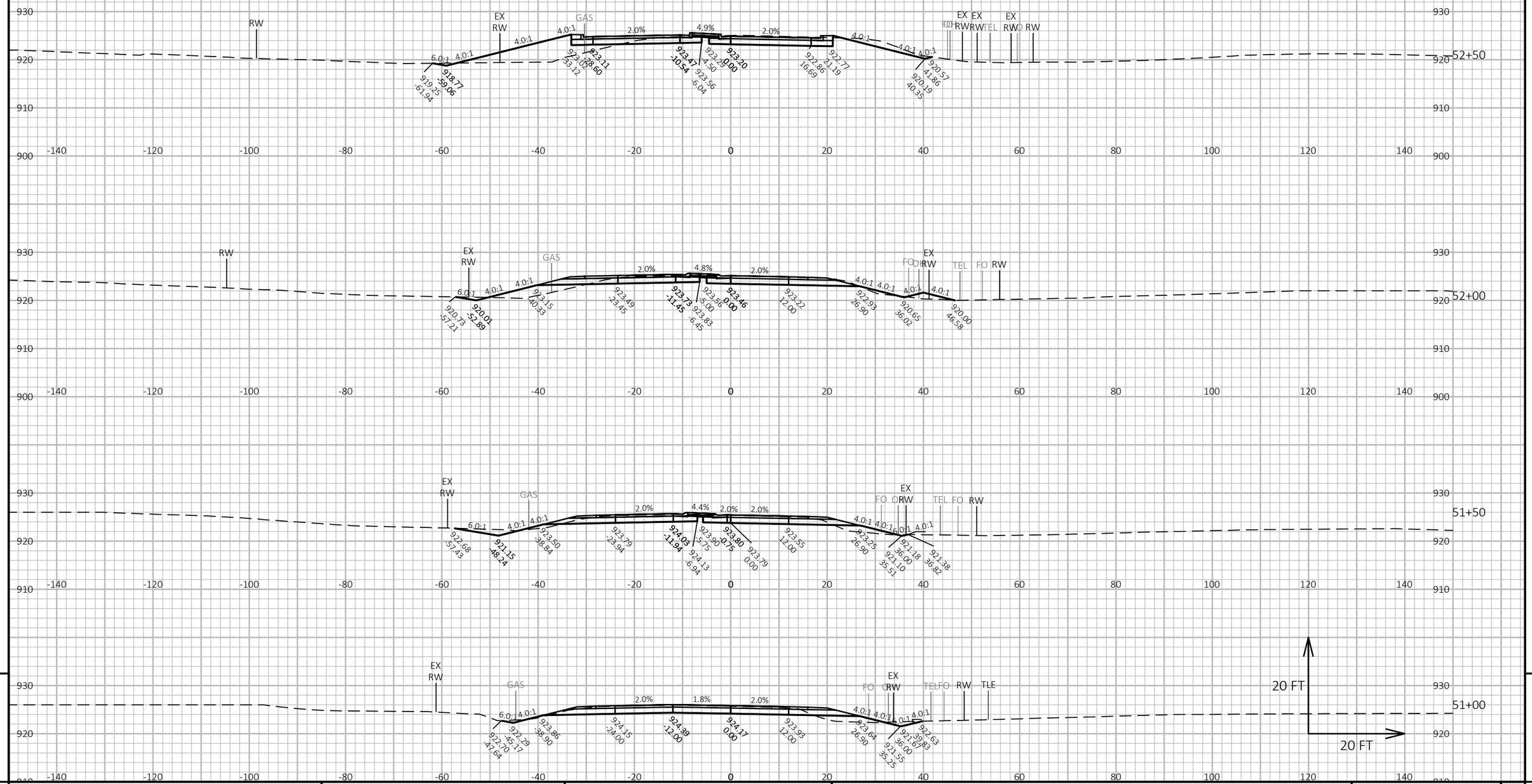
9

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CTH A	SHEET 140	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (NB 2)

PLOT DATE : 8/14/2023 11:17 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

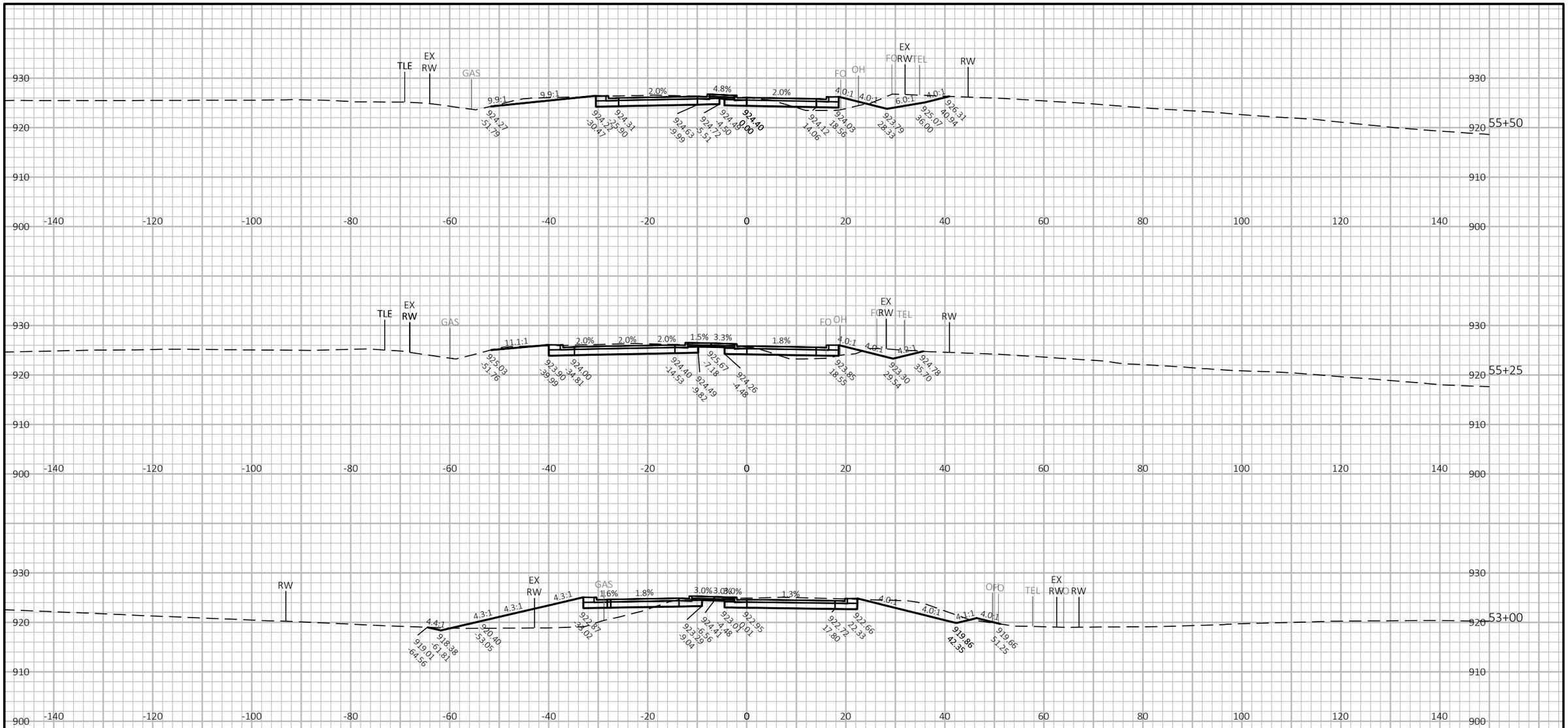


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CTH A	SHEET 141 E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (NB 3)

PLOT DATE : 8/14/2023 11:17 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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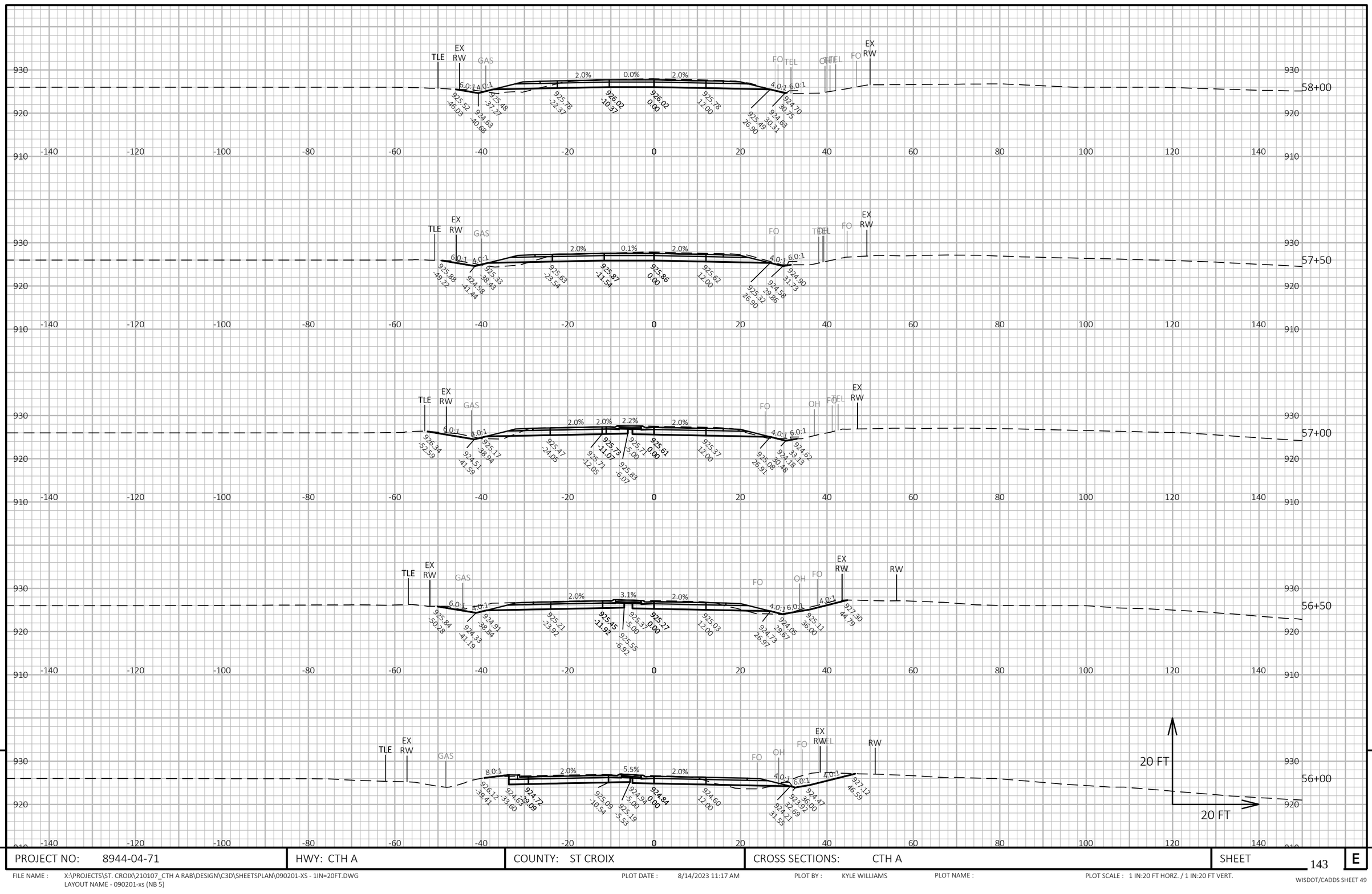
9

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CTH A	SHEET 142	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (NB 4)

PLOT DATE : 8/14/2023 11:17 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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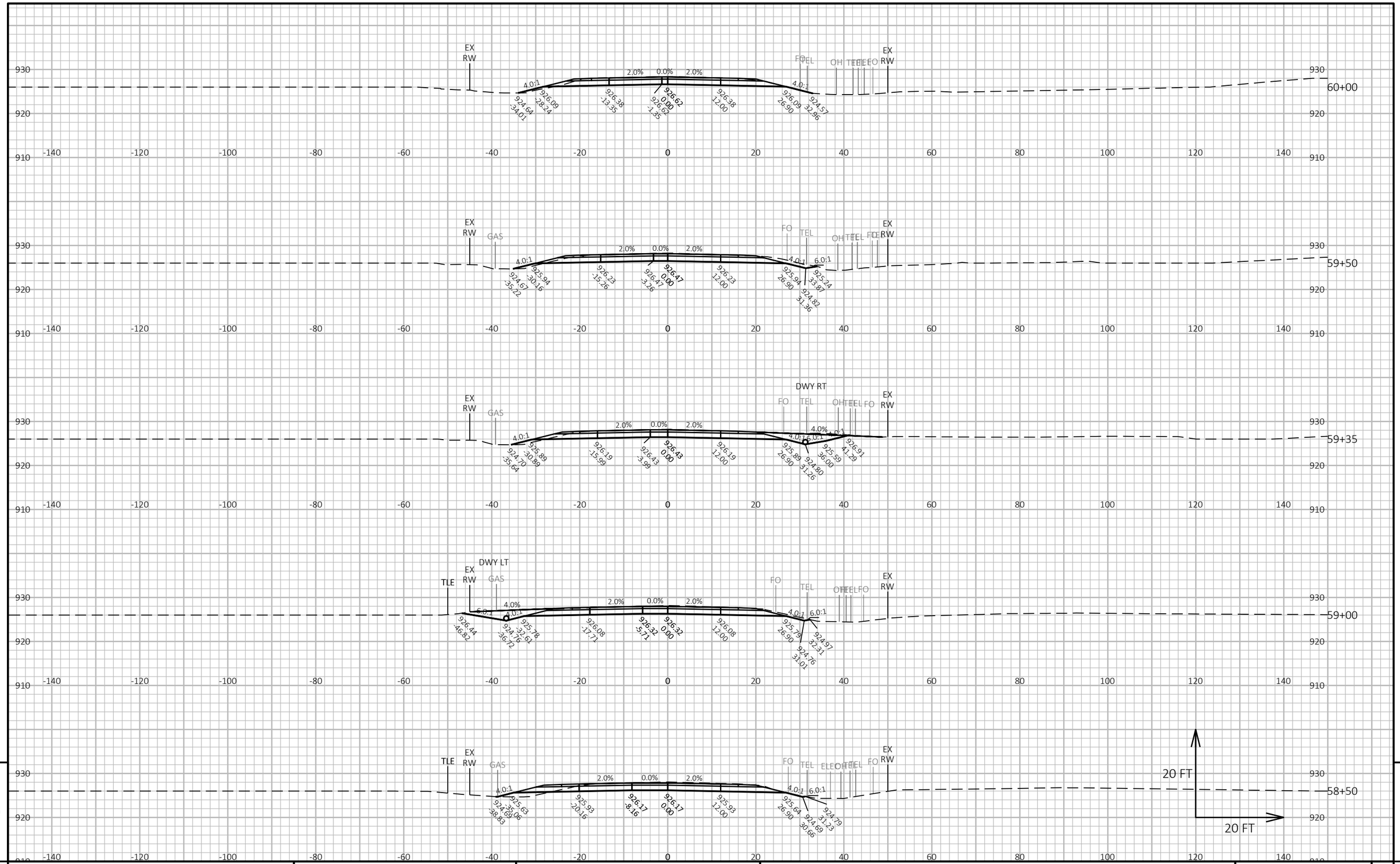
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CTH A	SHEET 143	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (NB 5)

PLOT DATE : 8/14/2023 11:17 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

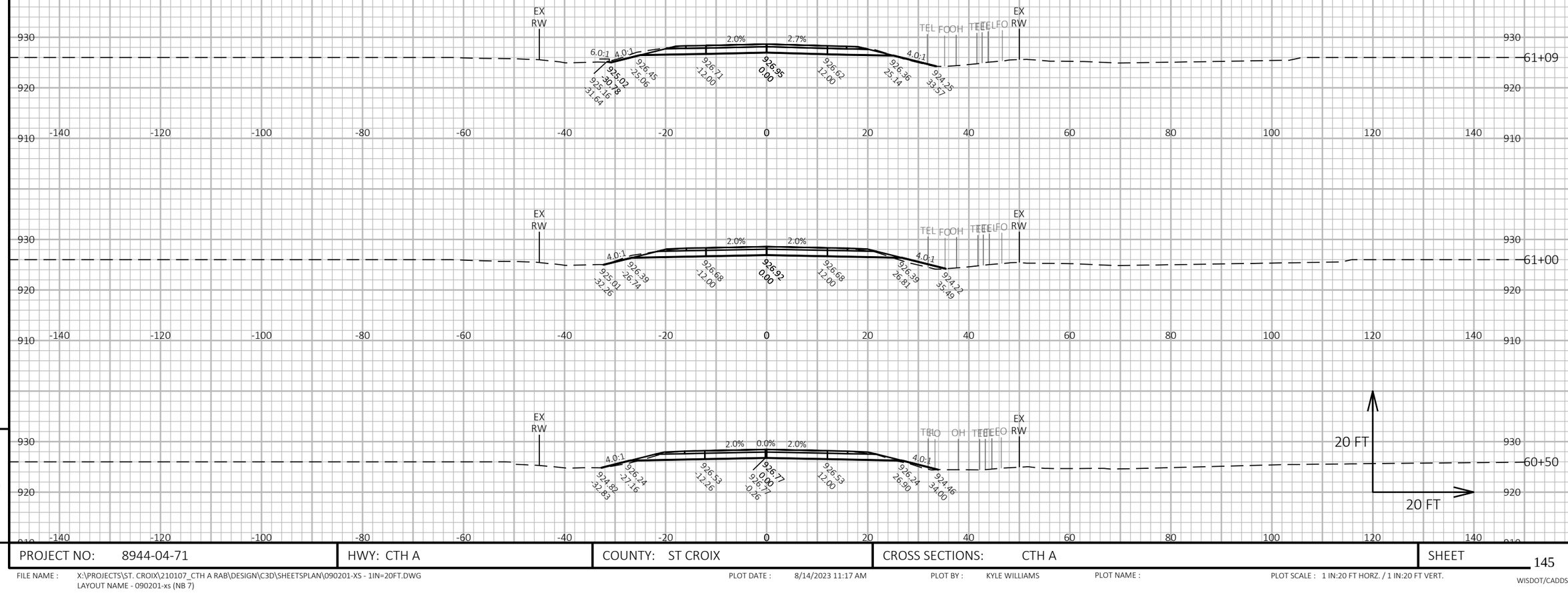


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CTH A	SHEET 144 E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (NB 6)

PLOT DATE : 8/14/2023 11:17 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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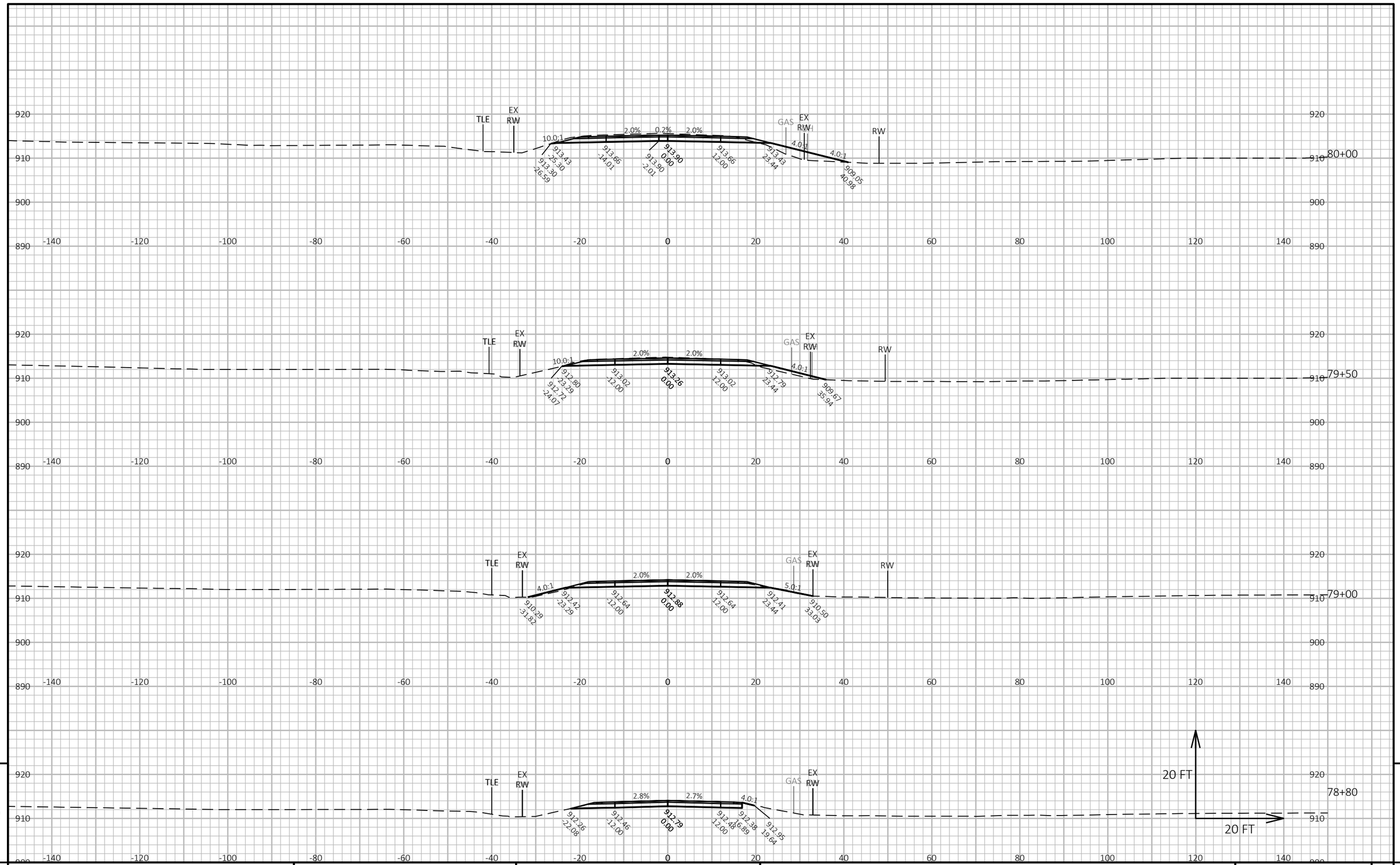
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CTH A	SHEET 145	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (NB 7)

PLOT DATE : 8/14/2023 11:17 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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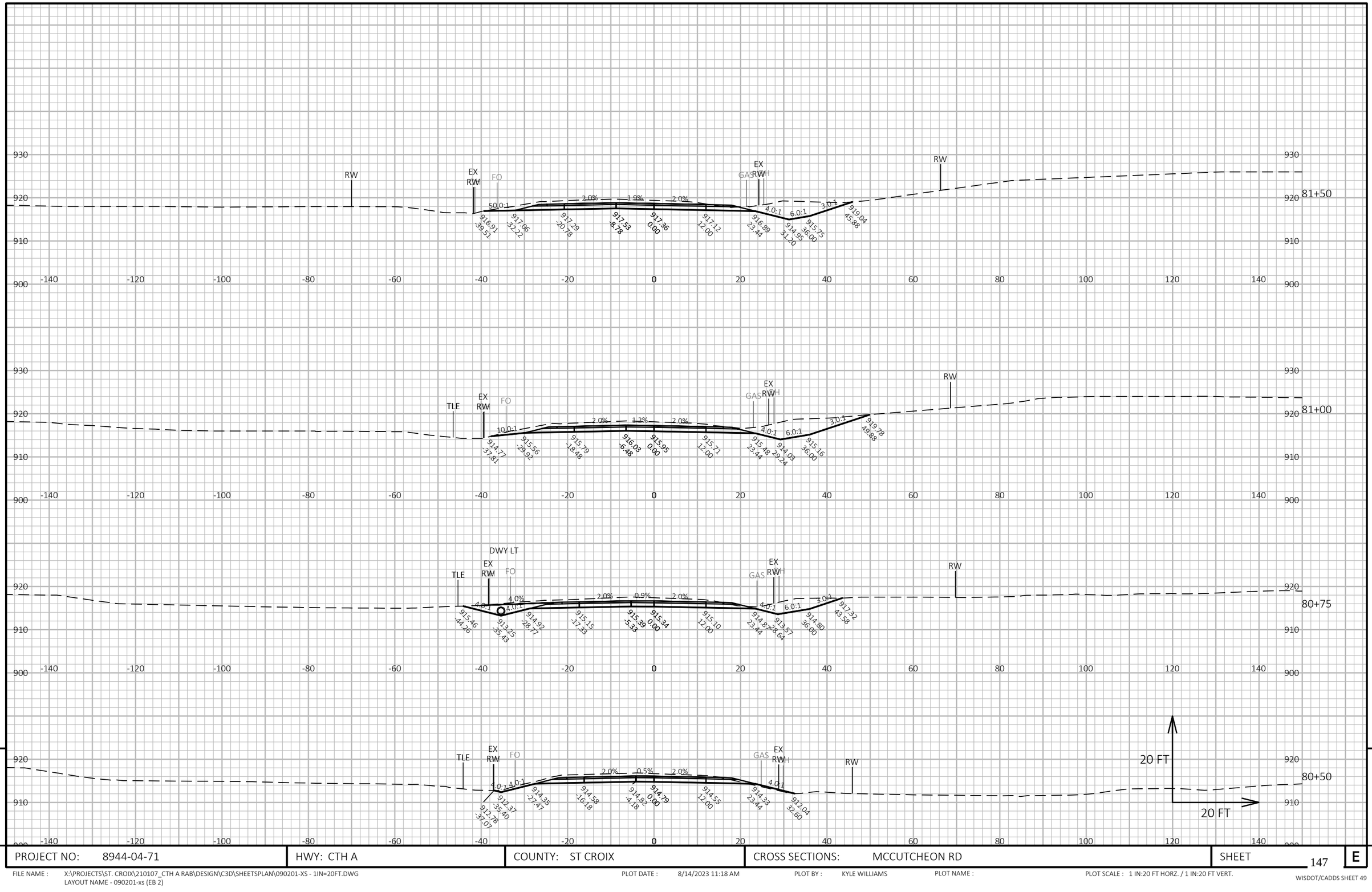
9

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: MCCUTCHEON RD	SHEET 146	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (EB 1)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



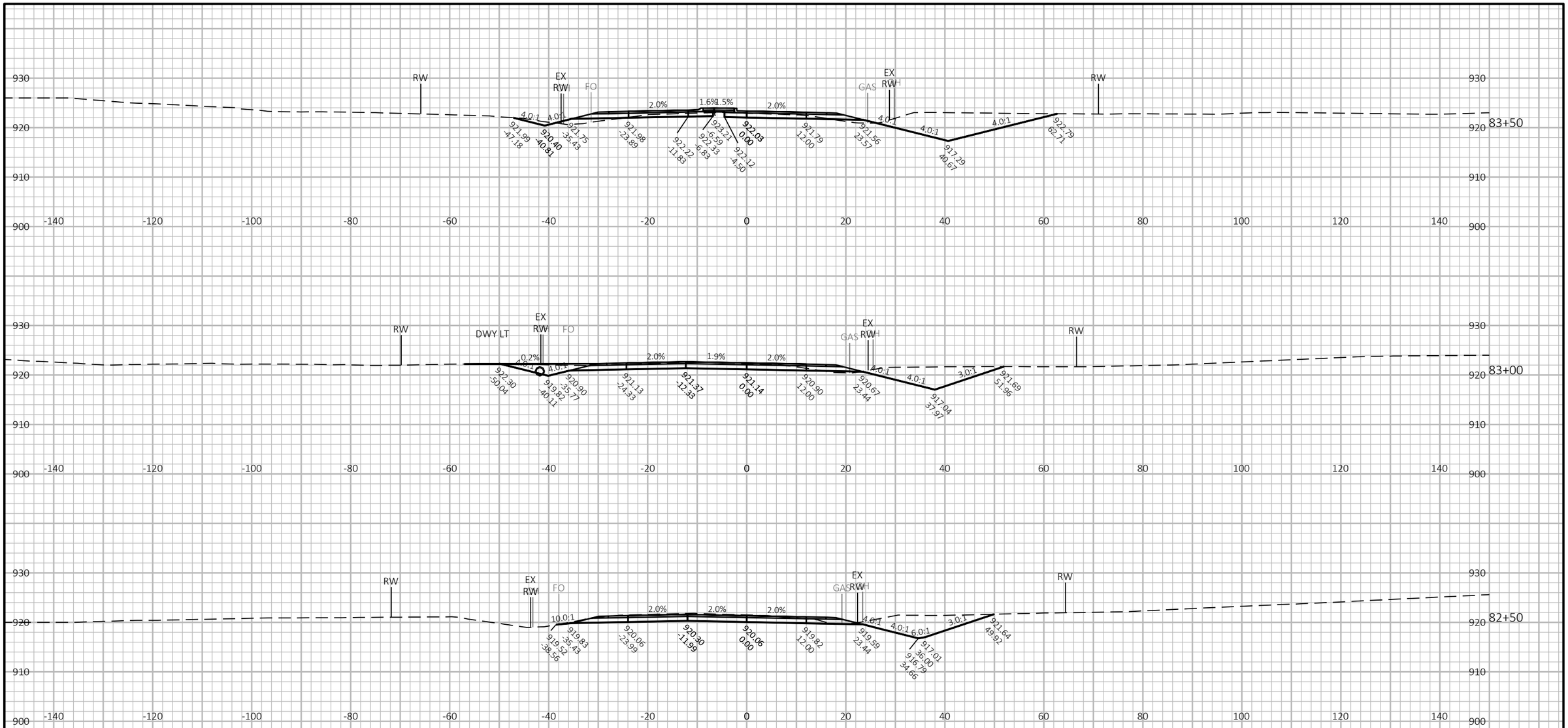
9

9

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: MCCUTCHEON RD	SHEET 147	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (EB 2)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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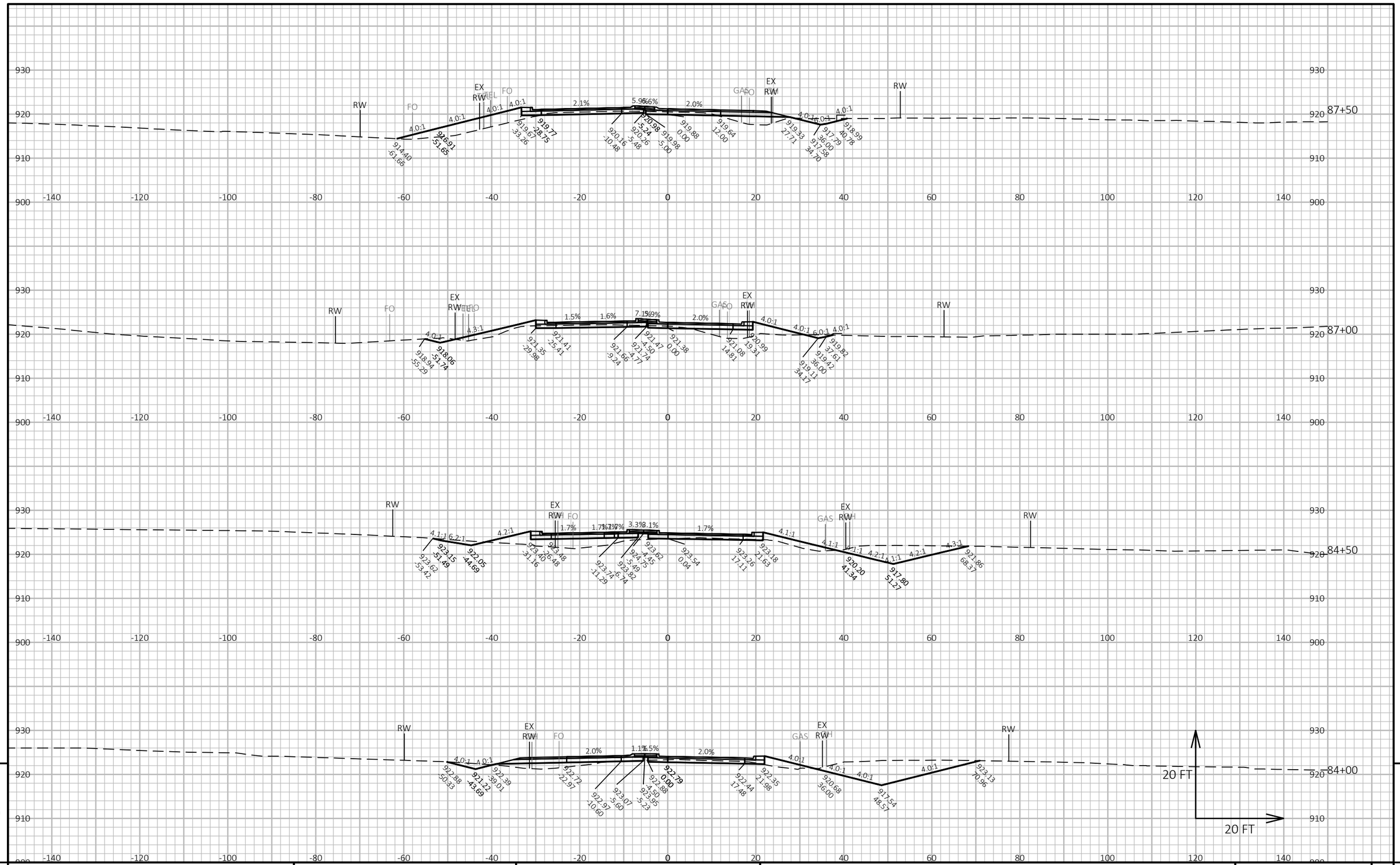
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: MCCUTCHEON RD	SHEET 148	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (EB 3)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

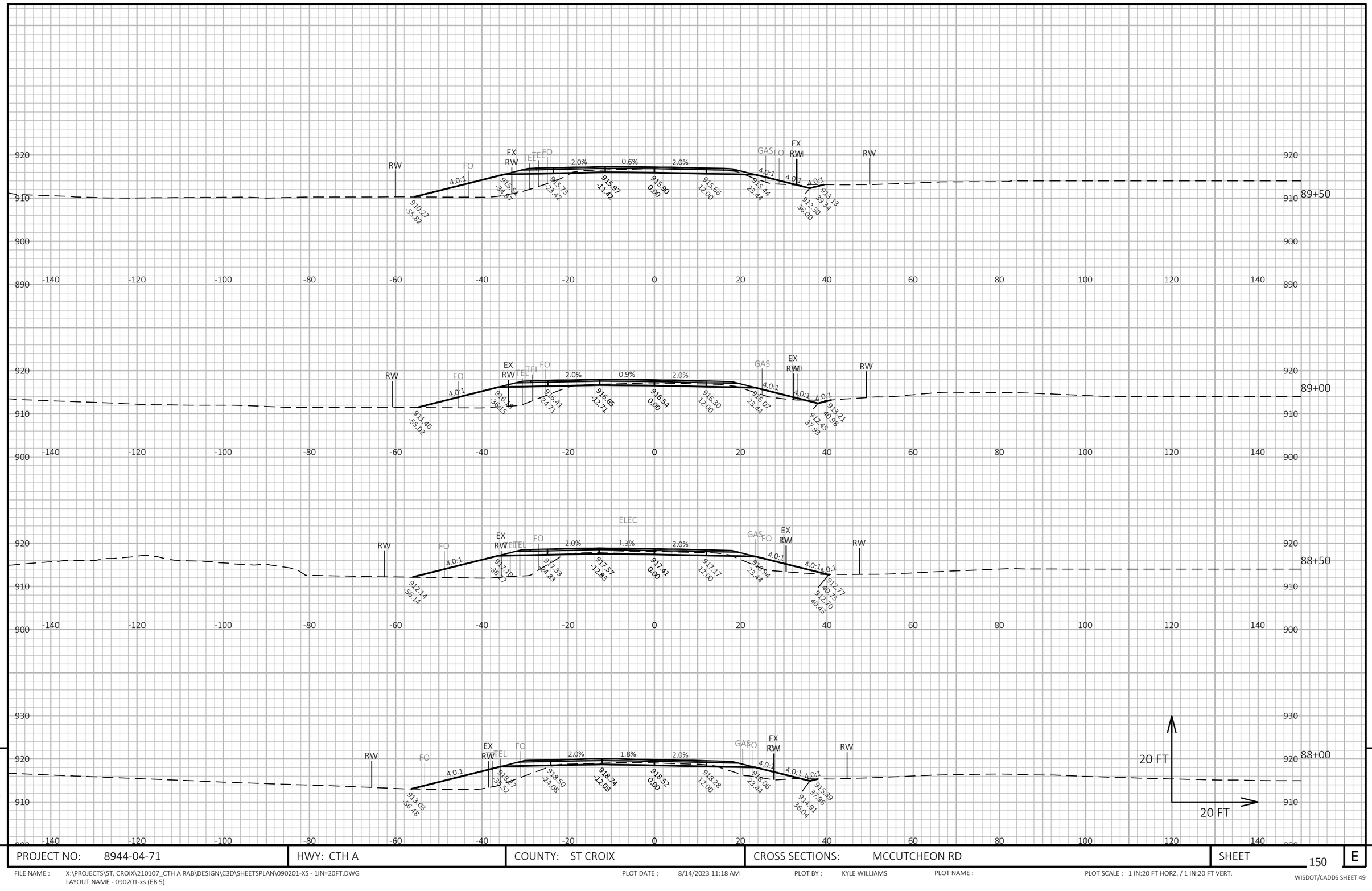


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: MCCUTCHEON RD	SHEET 149 E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (EB 4)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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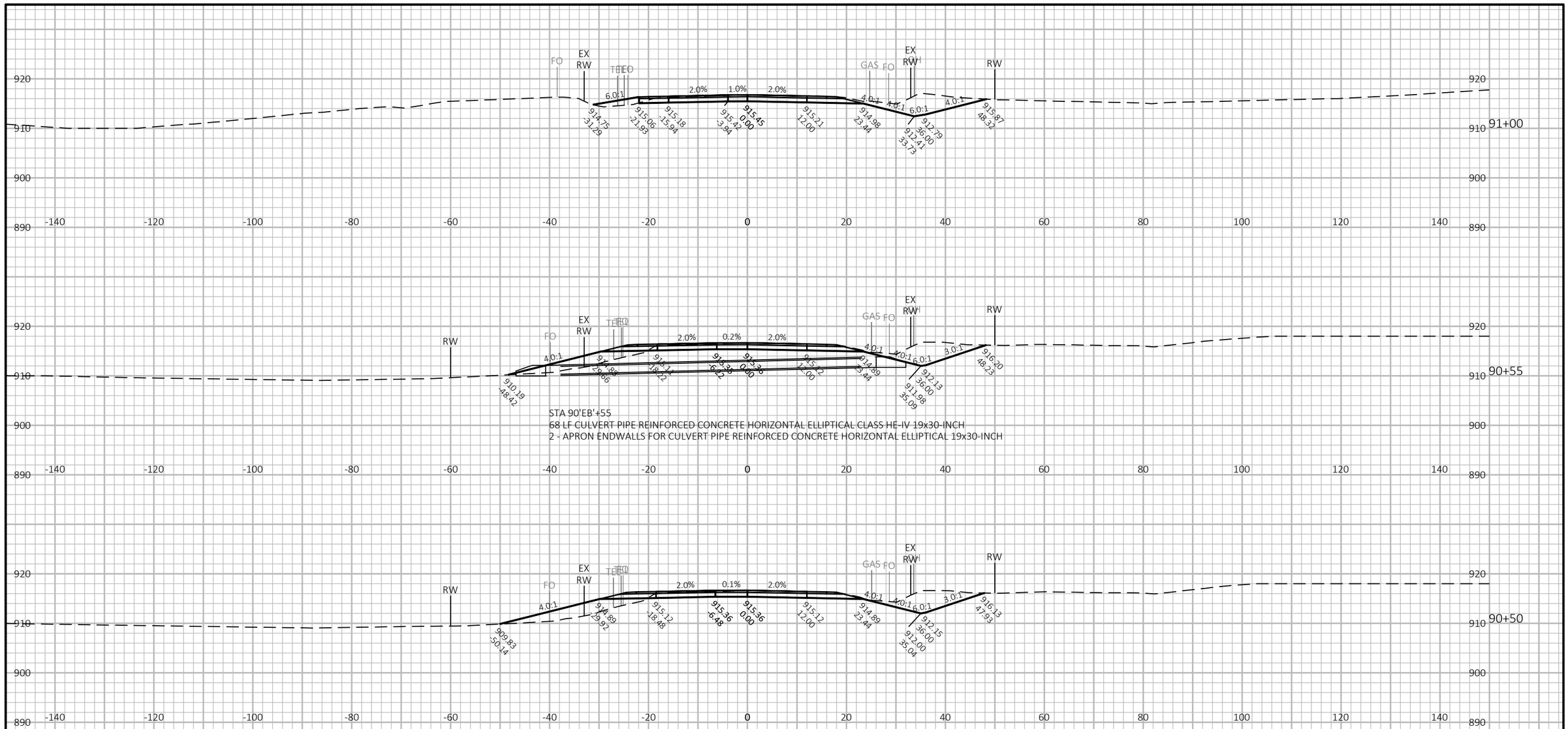
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: MCCUTCHEON RD	SHEET 150	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (EB 5)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

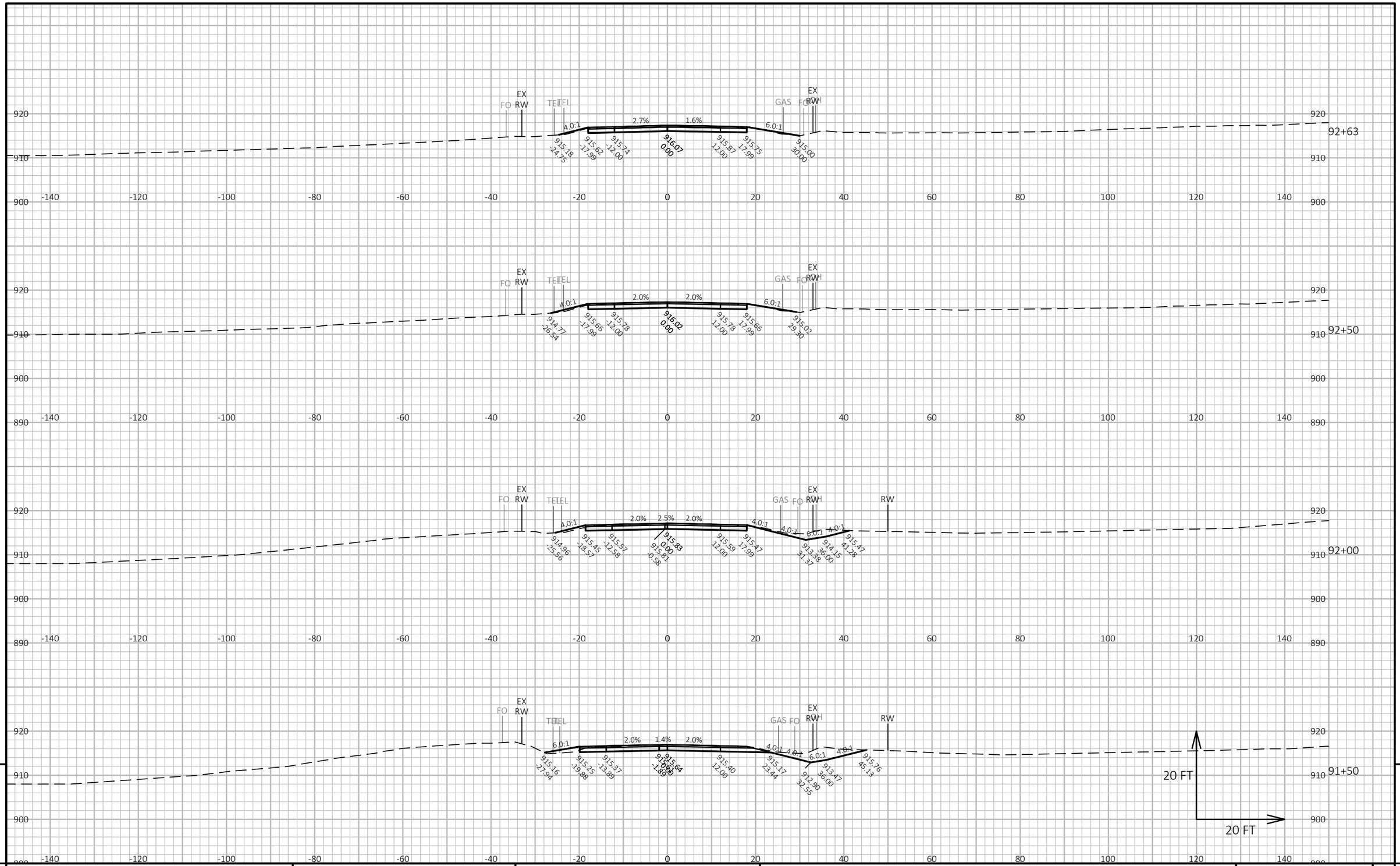


PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: MCCUTCHEON RD	SHEET 151 E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (EB 6)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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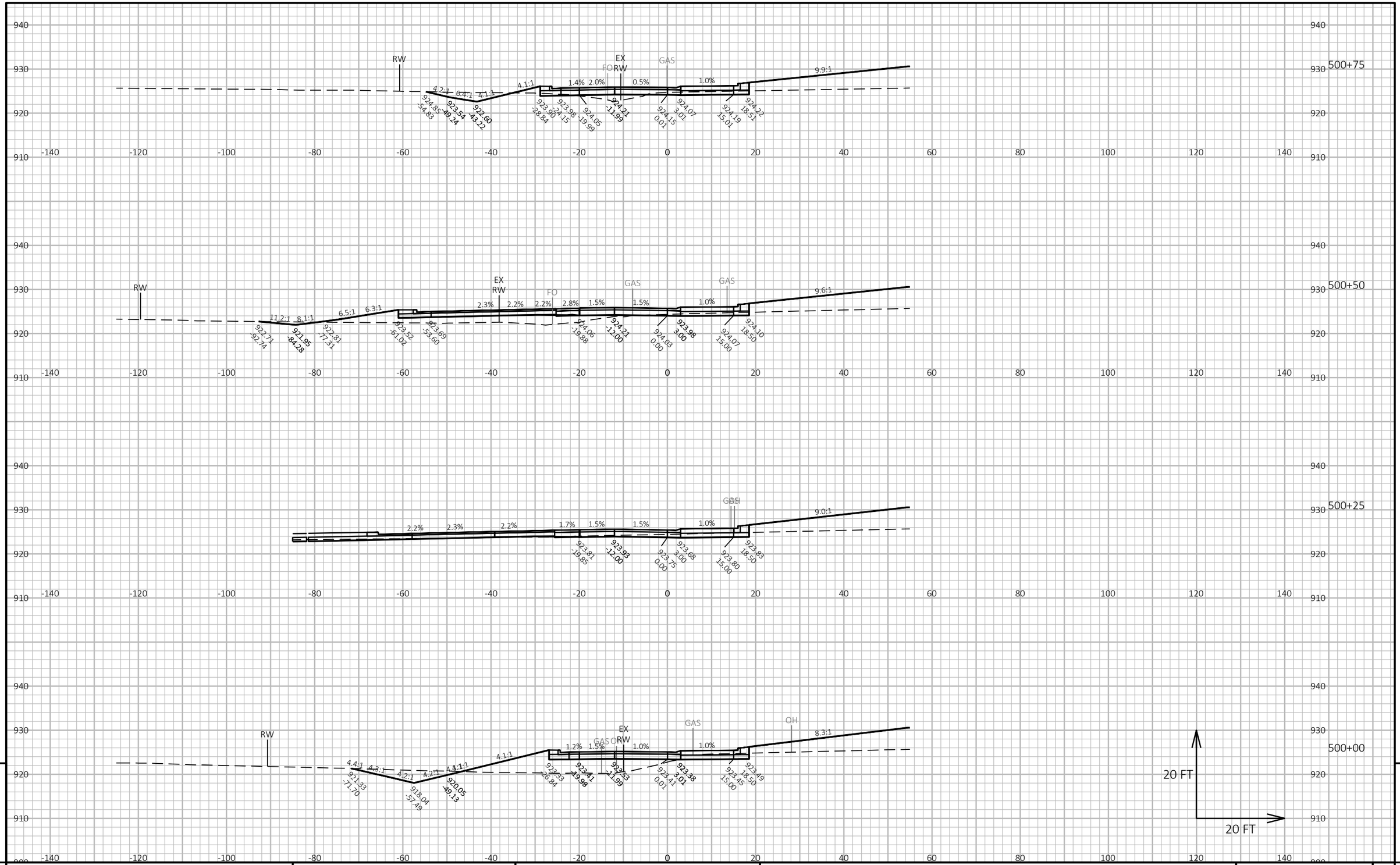
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: MCCUTCHEON RD	SHEET 152	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (EB 7)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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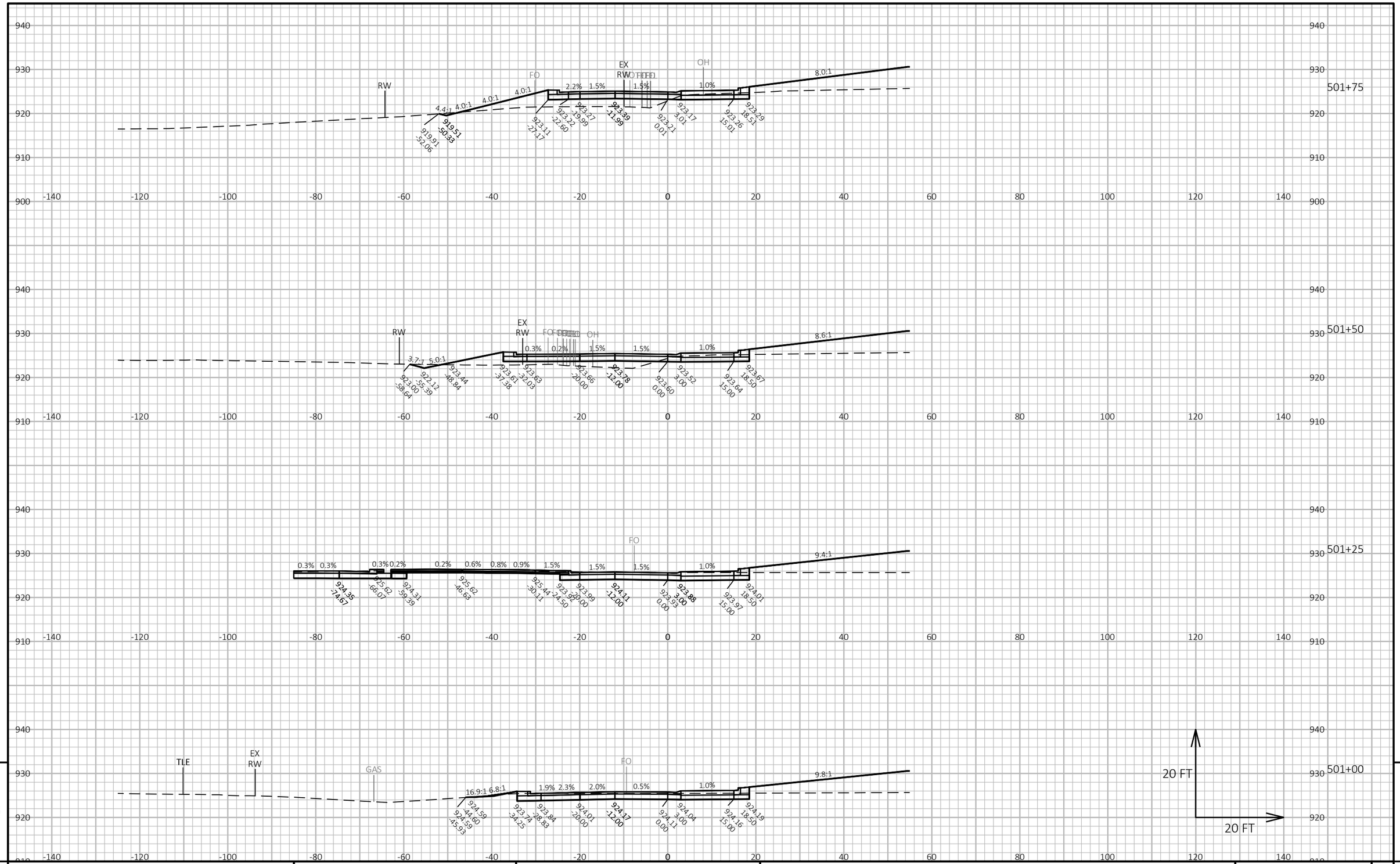
9

PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CIRCLE	SHEET 153	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (CIR 1)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49



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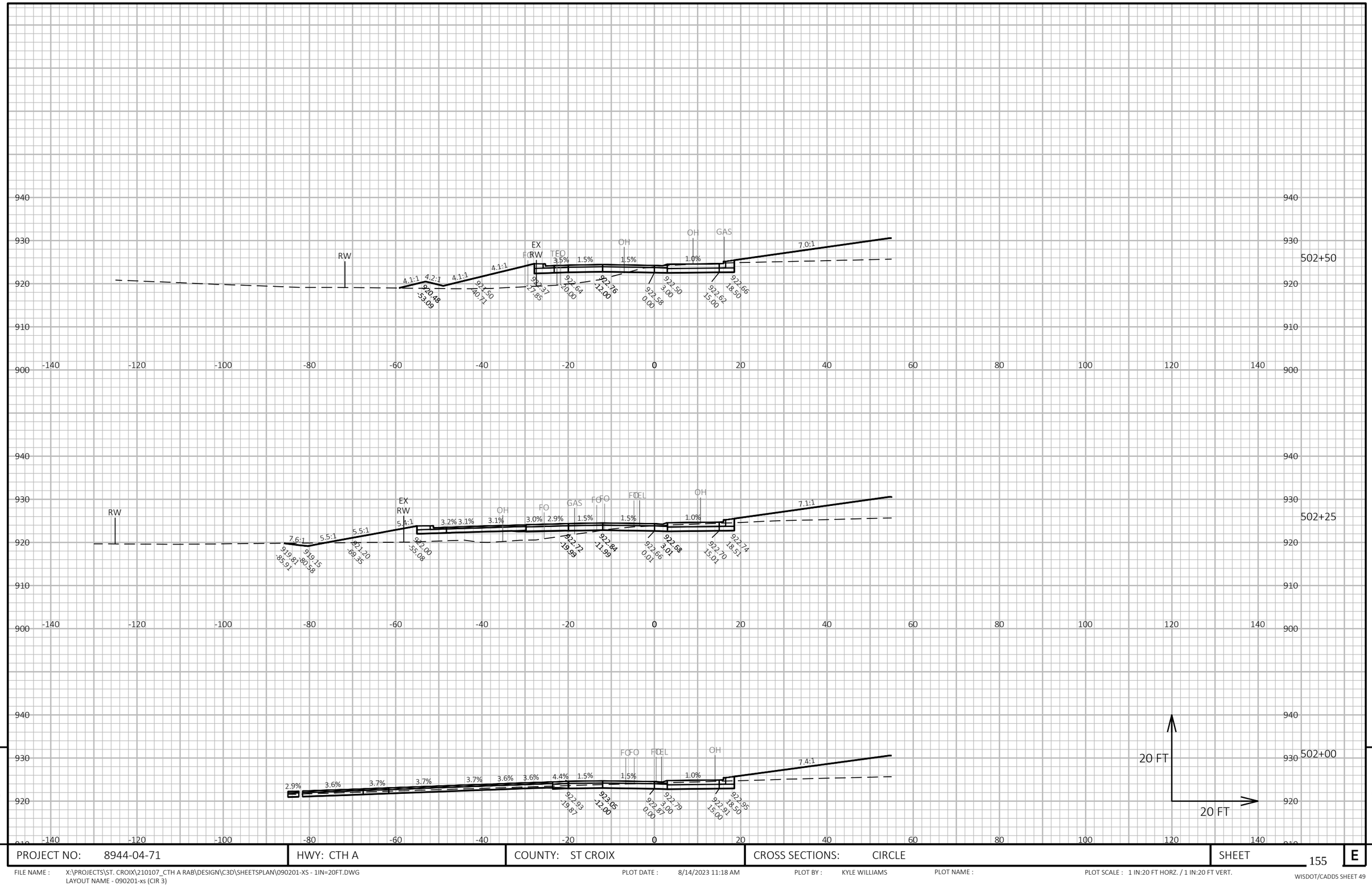
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CIRCLE	SHEET 154	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (CIR 2)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



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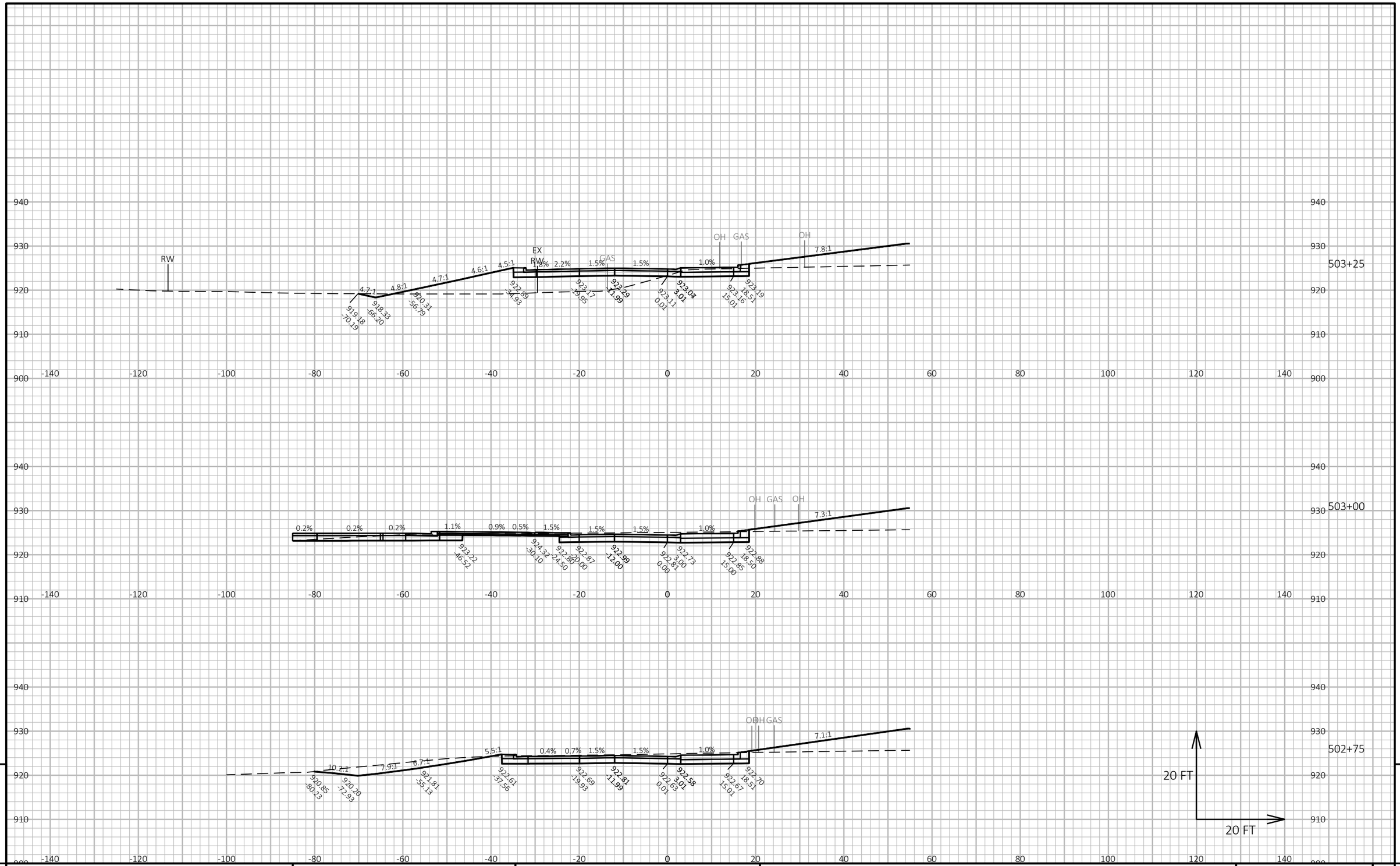
PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CIRCLE	SHEET 155	E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (CIR 3)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.



PROJECT NO: 8944-04-71	HWY: CTH A	COUNTY: ST CROIX	CROSS SECTIONS: CIRCLE	SHEET 156 E

FILE NAME : X:\PROJECTS\ST. CROIX\210107_CTH A RAB\DESIGN\C3D\SHEETSPLAN\090201-XS - 1IN=20FT.DWG
LAYOUT NAME - 090201-xs (CIR 4)

PLOT DATE : 8/14/2023 11:18 AM PLOT BY : KYLE WILLIAMS PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:20 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov